



Interocean EMC Technology Corp. Filing No.:11A120103E-E-01

Verification of Conformity

Applicant : **MEAN WELL ENTERPRISES CO., LTD.**

No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248,
Taiwan (R.O.C.)

Product : **Switching Power Supply**

Model No. : RKP-6K1Uy-CMU1-X; RKP-1Uy-CMU1-X; RKP-CMU1
(y=I or T; X=12, 24, 48)

On the basis of the tests undertaken, the sample(s) of the above product have been found to comply with the essential requirements of the referenced specifications at the time the tests were carried out.

The holder of the verification is authorized to use this document in connecting with the EC declaration of conformity is according to the Directives.

The CE marking may only be used if all relevant and effective EC Directives are complied with. Together with the manufacturer's own documented production control, the manufacturer (or his European authorized representative) can in his EC Declaration of Conformity verify compliance with the Directives.

Harmonized Standards

EN 55022: 2010 (Class A)

EN 55032: 2015+AC: 2016 (Class A)

EN 55024: 2010+A1: 2015

EN 61000-3-2: 2014

EN 61000-3-3: 2013

Note: The equipment covered by this document is subject to mandatory compliance with – the European Council Directive (2014/30/EU)

Issued By:

Date: **Mar. 31, 2017**

Mike Huang / President



Test Report



(Declaration of Conformity)

for

Electromagnetic Compatibility

of

Product : **Switching Power Supply**

Trade Name : MEAN WELL

Model Number : RKP-6K1Uy-CMU1-X; RKP-1Uy-CMU1-X; RKP-CMU1
(y=l or T; X=12, 24, 48)

Prepared for

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Remark:

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The test result in this report is only subjected to the test sample.

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Statement of Compliance

Applicant: MEAN WELL ENTERPRISES CO., LTD.

Manufacturer: 1. MEAN WELL Enterprises Co., Ltd.
2. MEAN WELL (GUANGZHOU) Electronics Co., Ltd HUADU BRANCH
3. SuZhou MEAN WELL Technology Co., Ltd.

Product: Switching Power Supply

Model No.: RKP-6K1Uy-CMU1-X; RKP-1Uy-CMU1-X; RKP-CMU1
(y=l or T; X=12, 24, 48)

Tested Power Voltage: 230 Vac, 50 Hz

Date of Final Test: Mar. 22, 2017

Revision of Report: Rev. 01

Measurement Procedures and Standards Used :

Emission:

- EN 55022: 2010
- EN 55032: 2015+AC: 2016
- EN 61000-3-2: 2014
- EN 61000-3-3: 2013

Immunity:

- EN 55024: 2010+A1: 2015
- EN 61000-4-2: 2009
- EN 61000-4-3: 2006+A1: 2008+A2: 2010
- EN 61000-4-4: 2012
- EN 61000-4-5: 2014
- EN 61000-4-6: 2014
- EN 61000-4-8: 2010
- EN 61000-4-11: 2004

The measurement results in this test report were performed at Interocean EMC Technology Corp. the responsibility of measurement result is only subjected to the tested sample. This report shows the EUT is technically compliance with the above official standards. This report shall not be partial reproduced without written approval by Interocean EMC Technology Corporation.

Report Issued: 2017/03/31

Project Engineer: Ceres Cheng
Ceres Cheng

Approved: Roy Chiang
Roy Chiang

1 General Information

1.1 Description of Equipment Under Test

- Product** : Switching Power Supply
- Model Number** : RKP-6K1Uy-CMU1-X; RKP-1Uy-CMU1-X; RKP-CMU1
(y=l or T; X=12, 24, 48)
- Applicant** : **MEAN WELL ENTERPRISES CO., LTD.**
No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248,
Taiwan (R.O.C.)
- Manufacturer** : **1. MEAN WELL Enterprises Co., Ltd.**
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2. MEAN WELL (GUANGZHOU) Electronics Co., Ltd HUADU BRANCH
No.11 Jingu South Road, Huadong Town, Huadu District, Guangzhou,
China.
3. SuZhou MEAN WELL Technology Co., Ltd.
No. 77, Jian-min Road, Dong-qiao, Pan-yang Ind. Park, Huang-dai Town,
Xiang-cheng District, Suzhou, Jiangsu 215152, P.R. China
- Product Information** : **EUT:**
Input & Output: The detailed specification, please see “Specifications” as below.
- Date of Test** : Mar. 22, 2017 (For 11A120103E-E-01)
- Additional Description** : **(For 11A120103E-E)**
- 1.) The Model Number “**RKP-6K1UI-CMU1-12; RKP-6K1UI-CMU1-24; RKP-6K1UI-CMU1-48; RKP-6K1UT-CMU1-12; RKP-6K1UT-CMU1-24; RKP-6K1UT-CMU1-48; RKP-CMU1**” are representative selected in the test and included in this report.
 - 2.) RKP-6K1Uy-CMU1-X; RKP-1Uy-CMU1-X; RKP-CMU1
y=l (AC Inlet) or T (Terminal Block).
X=12, 24, 48; stand for output voltage.
 - 3.) RKP-6K1Uy-CMU1-X (y=l or T) are use only RCP-2000 series x 2 & RKP-CMU1 power supplies of the same output voltage rating.
 - 4.) RKP-1Uy-CMU1-X (y=l or T) are use multiple power sources which according to client’s requirement.
- (For 11A120103E-E-01)**
- 1.) 11A120103E-E-01 is a multiple report of 11A120103E-E, the differences are updated the standard, added the standard of EN 55032, removed standards of EN 55011, EN 61000-6-1, EN 61000-6-4 & EN 61204-3 and changed the information of GUANGZHOU Manufacturer, therefore re-measured radiation test (For the standard of EN 55032), the rest parts are identical.
 - 2.) The test model is “**RKP-6K1UT-CMU1-24**” and included in this report.
 - 3.) Correct the test levels table about EN 61000-4-5 (Original information was shown in section 11.3 for report of 11A120103E-E).

1.2 Specifications

Model No.	Input		Output	
	Voltage (Vac)	Current (A)	Voltage (Vdc)	Current (A)
RKP-1UI-CMU1-12; RKP-1UT-CMU1-12; RKP-6K1UI-CMU1-12; RKP-6K1UT-CMU1-12	100-109	12.6	12	80
	110-199	12.8		90
	200-240	7.8		100
RKP-1UI-CMU1-24; RKP-1UT-CMU1-24; RKP-6K1UI-CMU1-24; RKP-6K1UT-CMU1-24	100-109	15.8	24	52
	110-199	16.5		60
	200-240	11.9		80
RKP-1UI-CMU1-48; RKP-1UT-CMU1-48; RKP-6K1UI-CMU1-48; RKP-6K1UT-CMU1-48	100-109	16.4	48	27.3
	110-199	17.1		31.5
	200-240	12.3		42

1.3 Details of Tested Supporting System

- 1.3.1 Load 1 + Load 2 (RKP-6K1UT-CMU1-24)
Full Load Watt : 1920 W (24 Vdc, 80 A)
- 1.3.2 AC/DC Switching Adaptor (For M/N: RKP-CMU1)
Model Number : FRA018-S15-I
Manufacturer : MEAN WELL
Input Power : 100-240Vac, 50-60Hz, 0.7A
Output Power : 15Vdc, 1.2A
Power Cable : Non-shielded, Un-detachable, 1.8 m, w/o core
- 1.3.3 Power Cord (For Emission Measurement)
Power Cord *2 : Non-shielded, Detachable, 2 m, with core *2
Information of Core : KING CORE ELECTRONICS INC., M/N: KCF-130-B
- 1.3.4 Power Cable
Power Cable : Non-shielded, Detachable, 0.2 m, w/o core
- 1.3.5 Test Cable
RJ45 Cable (Loop Back) : Non-shielded, Detachable, 0.1 m, w/o core
RJ45 Cable (Link PC) : Non-shielded, Detachable, 1.8 m, with core
Information of Core : KING CORE ELECTRONICS INC., M/N: K5B-RC16X28X9-M2
- 1.3.6 Link PC
PC31
Model Number : SGH017PFWL
CPU Speed : Intel Core 2 Duo E5400
RAM : 2GB DDR3 1333MHz
EMC Compliance : CE, TUV, NCC, BSMI: R33275
Hard Disk Driver : 250GB Serial ATA2 3.0Gb/s 7200rpm
Manufacturer : HP
Switching Power Supply : LiteOn, PS-4321-9HP, 320W
Power Cord : Non-shielded, Detachable, 1.8 m, w/o core

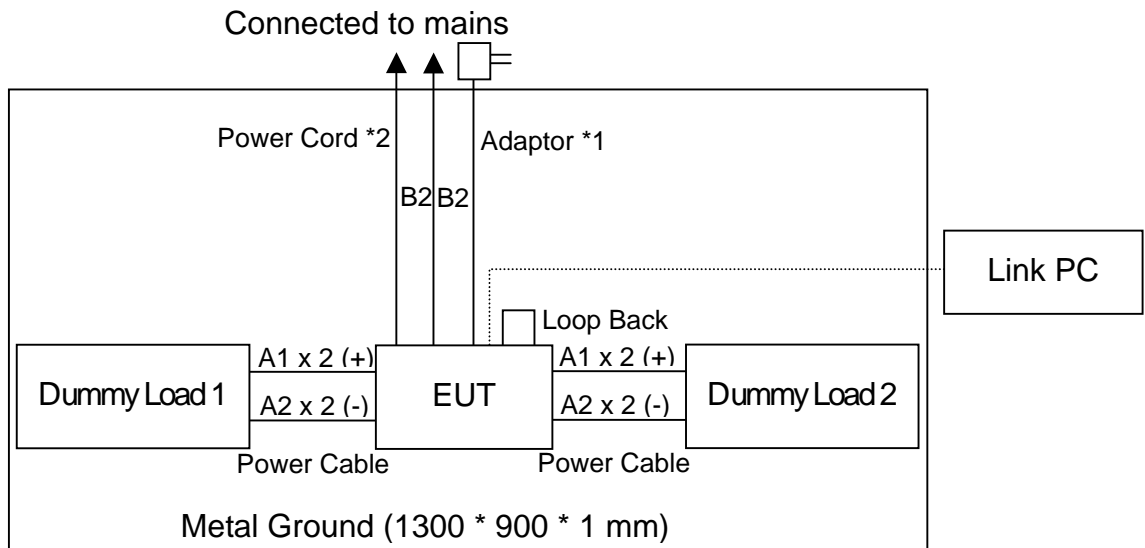
1.4 Test Facility

- Site Description** : ☒OATS 1
- Name of Firm** : Interocean EMC Technology Corp.
- Company web** : <http://www.ietc.com.tw>
- Location** : No. 5-2, Lin 1, Tin-Fu, Lin-Kou Dist., New Taipei City, Taiwan 244, R.O.C.
- Site Filing** :
- Federal Communication Commissions – USA
Designation No.: TW1020 (Test Firm Registration #: 651092)
Designation No.: TW1113 (Test Firm Registration #: 959554)
 - Industry Canada (IC)
OUR FILE: 46405-4437
Registration No. (OATS 1): Site# 4437A-1
Registration No. (OATS 3): Site# 4437A-3
Registration No. (Chamber 3): Site# 4437A-5
Registration No. (OATS 5): Site# 4437A-6
 - Voluntary Control Council for Interference by Information Technology Equipment (VCCI) – Japan
Member No.: 1349
Registration No. (Conducted Room): C-1094
Registration No. (Conducted Room): T-1562
Registration No. (OATS 1): R-1040; G-10274
- Site Accreditation** :
- Bureau of Standards and Metrology and Inspection (BSMI) – Taiwan, R.O.C.
Accreditation No.:
SL2-IN-E-0026 for CNS 13438 / CISPR 22
SL2-R1-E-0026 for CNS 13439 / CISPR 13
SL2-R2-E-0026 for CNS 13439 / CISPR 13
SL2-L1-E-0026 for CNS 14115 / CISPR 15
 - Taiwan Accreditation Foundation (TAF)
Accreditation No.: 1113
 - Vehicle Safety Certification Center (VSCC)
Approval No.: TW16-11
 - TÜV NORD
Certificate No: TNTW0801R

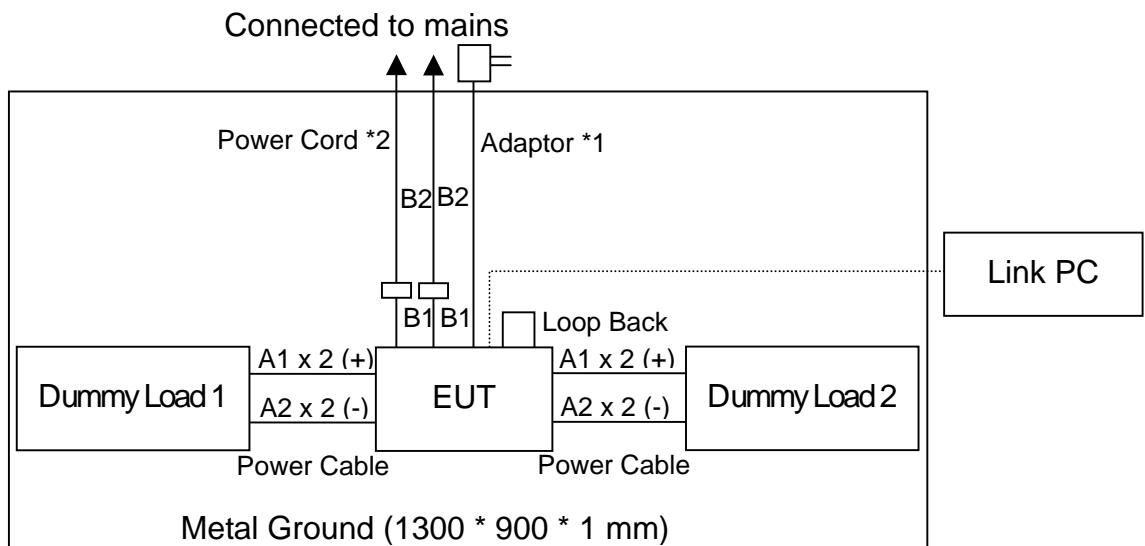
1.5 Measurement Uncertainty

Item	Value
Conduction 1:	
Conducted Emission - AMN (9 kHz to 30 MHz)	2.98 dB
Conducted Emission - AAN (ISN-T4) (150 kHz to 30 MHz)	3.70 dB
Conducted Emission - AAN (ISN-T8) (150 kHz to 30 MHz)	3.70 dB
Conducted Emission - CP (9 kHz to 30 MHz)	3.06 dB
Conducted Emission - VP (9 kHz to 30 MHz)	2.42 dB
Radiated Emission - LAS (2 m Loop) (9 kHz to 30 MHz)	3.26 dB
Conduction 2:	
Disturbance Power (30 MHz to 300 MHz)	4.04 dB
OATS 1:	
Radiated Emission Test (30 MHz to 1 GHz)	4.84 dB
Radiated Emission Test (1 GHz to 6 GHz)	4.84 dB
OATS 3:	
Radiated Emission Test (30 MHz to 1 GHz)	4.70 dB
OATS 5:	
Radiated Emission Test (30 MHz to 1 GHz)	4.70 dB
Chamber 3:	
Radiated Emission Test (9 kHz to 30 MHz)	3.12 dB
Radiated Emission Test (30 MHz to 1 GHz)	4.86 dB
Radiated Emission Test (1 GHz to 6 GHz)	4.78 dB
Induced Current Density (20 kHz to 10 MHz)	1.82 dB
Conducted Immunity Room:	
Conducted Immunity Test / CDN-M2	1.30 dB
Conducted Immunity Test / CDN-M3	1.30 dB
Conducted Immunity Test / EM Clamp	3.16 dB

**1.6 Configuration of EUT Setup
(For test of EN 55022 Standard)**



(For test of EN 55032 Standard)



- Remark: 1. For Conducted Emission Measurement: The length of power cord is 2 m long (For EN 55022 Standard).
 2. For Radiated Emission Measurement: The length of power cord is 2 m long, which shall drape to the ground reference plane, and shall then be routed to the mains power outlet (For EN 55022 Standard).
 3. For Radiated Emission Measurement: The length of power cord is 1.1 m long, which shall drape to the insulation on ground reference plane, and then shall plug to the mains power outlet (For EN 55032 Standard).
 4. The length of power cable is 0.2 m long.

Connecting Cables:

No.	Cable	Length	Shielded	Shielded Backshell	Supported by lab.	Note
A1	Power Cable (+)	0.2 m				
A2	Power Cable (-)	0.2 m				
B1	Power Cord (Inlet) (For EN 55022)	N/A				
B1	Power Cord (Inlet) (For EN 55032)	0.1 m				
B2	Power Cord (For Conduction test)	2 m			✓	
B2	Power Cord (For Radiation test of EN 55022)	2 m			✓	
B2	Power Cord (For Radiation test of EN 55032)	1 m			✓	

2 Radiated Emission Measurement (Below 1 GHz)

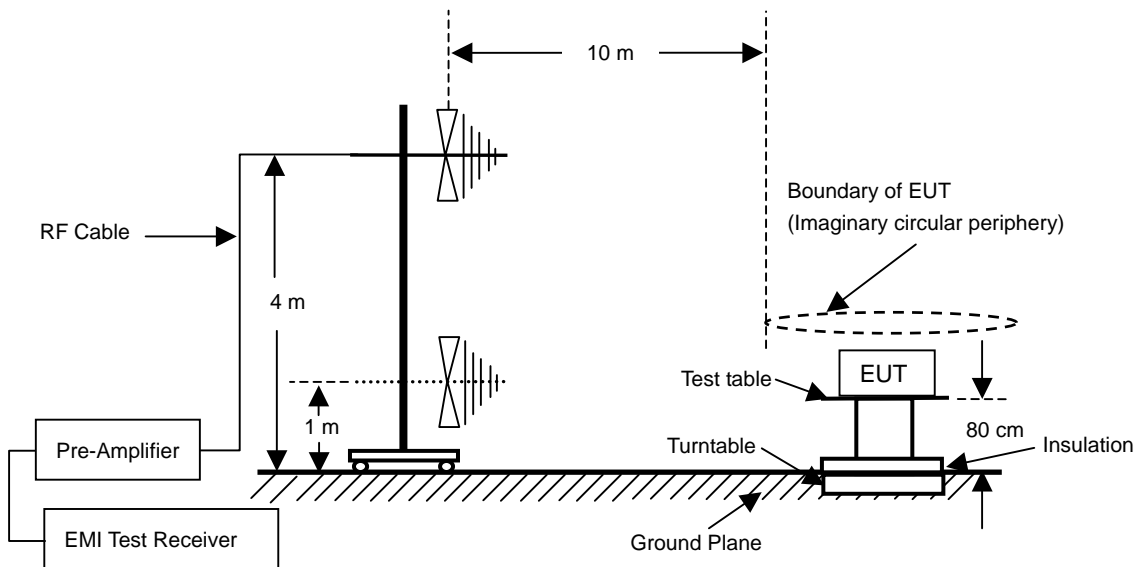
2.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESVS10	826148/011	2017/10/19
Biconical Antenna	Schwarzbeck	VHA 9103 & BBA 9106	VHA 9103-2418	2017/07/13
Log Antenna	Schwarzbeck	UHALP 9108-A	9108-A 0739	2017/07/13
Pre-Amplifier	Agilent	8447D	2944A09703	2017/08/02
RF Cable	EMCI	EMC8D-NM-NM-25000	140105	2017/08/02
RF Cable	Mini-Circuits	CBL-3FL-NMNM	CBL56	2017/08/02
Measurement Software	AUDIX-e3			

Note: The above equipments are within the valid calibration period.

2.2 Block Diagram of Test Configuration

For EN 55032



2.3 Radiated Limit

Frequency (MHz)	<input checked="" type="checkbox"/> Class A	<input type="checkbox"/> Class B
	Quasi-Peak dB(μ V/m)	Quasi-Peak dB(μ V/m)
30 to 230	40.0	30.0
230 to 1000	47.0	37.0

2.4 Instrument Configuration

- 2.4.1 Set the EMI test receiver frequency range from 30 MHz to 1000 MHz.
- 2.4.2 Set the EMI test receiver bandwidth at 120 kHz.
- 2.4.3 Set the EMI test receiver detector as Quasi-Peak (Q.P.).

2.5 Configuration of Measurement

- 2.5.1 The EUT was placed on a non-conductive table whose total height equaled 80 cm. The turntable can rotate 360 degree to determine the position of the maximum emission level.
- 2.5.2 The EUT was set 10 meters away from the receiving antenna that was mounted on a non-conductive mast. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level.
- 2.5.3 The initial testing identified the frequency that has the highest disturbance relative to the limit while operating the EUT in typical modes of operation and cable positions in a test setup representative of typical system configuration.
- 2.5.4 The identification of the frequency of highest emission with respect to the limit was found by investigating emissions at a number of significant frequencies. The probable frequency of maximum emission had been found and that the associated cable and EUT configuration and mode of operation had been identified.

2.6 Test Result

PASS.

The final test data is shown as following pages.

Factor = Antenna Factor + Cable Loss - Preamplifier Gain

Level = Reading + Factor

Margin = Level - Limit

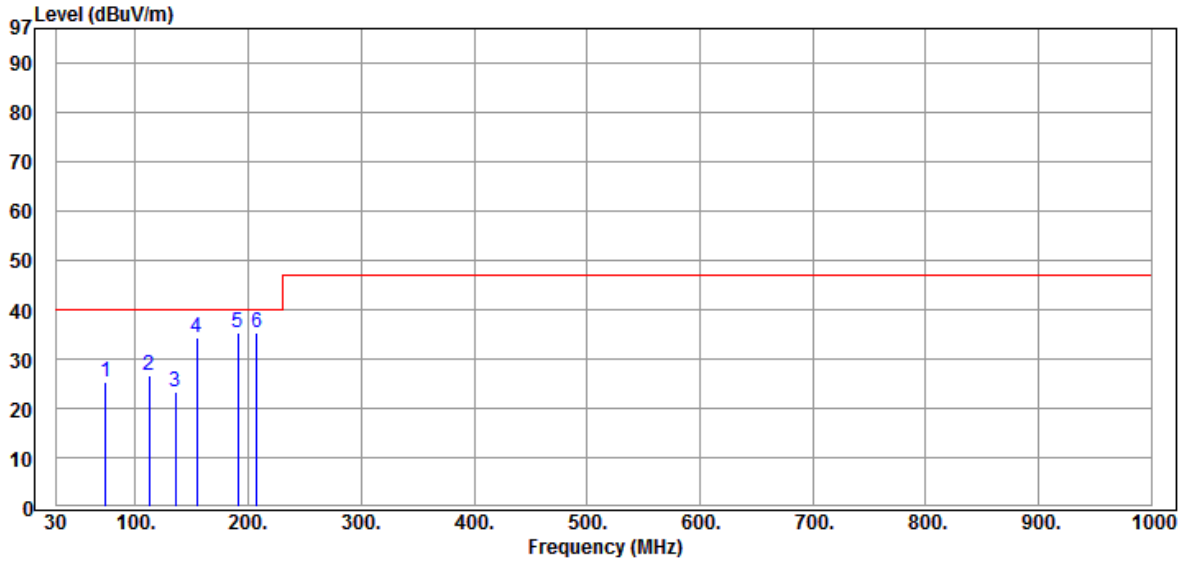
Radiated Emission Measurement Data

CLIENT: MEAN WELL ENTERPRISES CO., LTD.
 EUT: Switching Power Supply
 MODEL: RKP-6K1UT-CMU1-24
 RATING: 230 Vac / 50 Hz
 COMMENT: Test Mode: Full Load (RKP-6K1UT-CMU1-24) (230 V) (For EN 55032)

OPERATOR : Ceres
 TEST SITE : OATS 1
 TEST DISTANCE : 10 m
 POLARIZATION : HORIZONTAL
 TEMP/HUM : 24.6°C / 56%

Data:91

2017-03-22



Item Mark	Freq. MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark
1	73.720	49.99	-24.63	25.36	40.00	-14.64	QP
2	111.960	45.50	-18.94	26.56	40.00	-13.44	QP
3	135.650	40.19	-16.89	23.30	40.00	-16.70	QP
4	154.090	50.31	-16.13	34.18	40.00	-5.82	QP
5	190.890	49.80	-14.35	35.45	40.00	-4.55	QP
6	207.800	49.50	-14.13	35.37	40.00	-4.63	QP

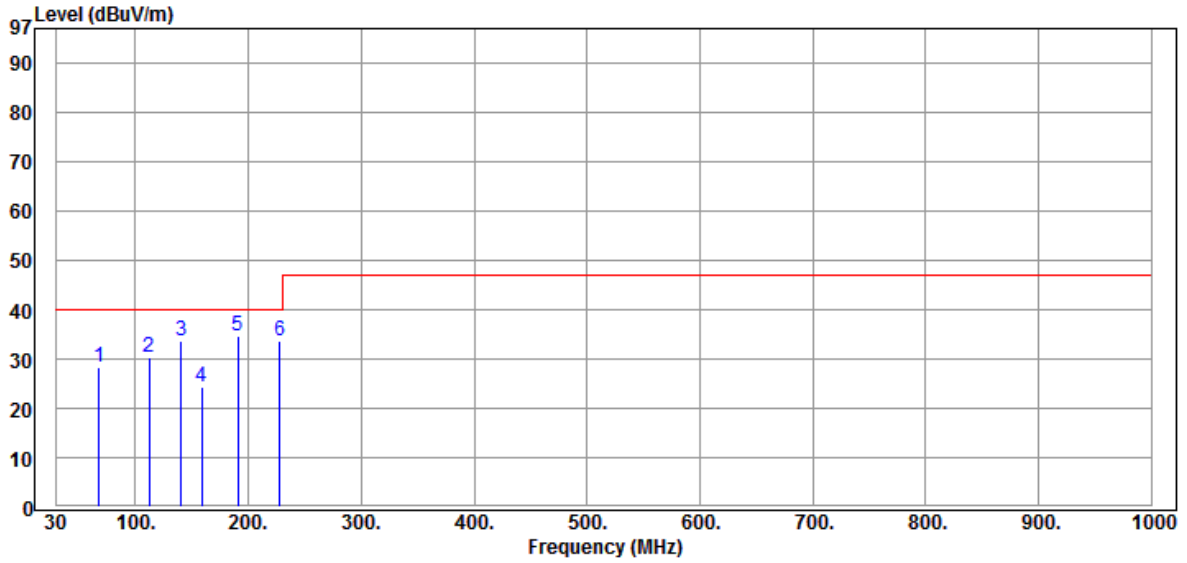
Radiated Emission Measurement Data

CLIENT: MEAN WELL ENTERPRISES CO., LTD.
 EUT: Switching Power Supply
 MODEL: RKP-6K1UT-CMU1-24
 RATING: 230 Vac / 50 Hz
 COMMENT: Test Mode: Full Load (RKP-6K1UT-CMU1-24) (230 V) (For EN 55032)

OPERATOR : Ceres
 TEST SITE : OATS 1
 TEST DISTANCE : 10 m
 POLARIZATION : VERTICAL
 TEMP/HUM : 24.6°C / 56%

Data:90

2017-03-22



Item Mark	Freq. MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Remark
1	67.620	52.70	-24.21	28.49	40.00	-11.51	QP
2	112.140	49.39	-18.91	30.48	40.00	-9.52	QP
3	140.840	50.41	-16.66	33.75	40.00	-6.25	QP
4	158.850	40.20	-15.98	24.22	40.00	-15.78	QP
5	190.800	49.10	-14.35	34.75	40.00	-5.25	QP
6	227.900	47.49	-13.80	33.69	40.00	-6.31	QP

3 Surge Immunity Test (EN 61000-4-5)

3.1 Test Levels

Level	Open-circuit test voltage (kV)	
	Line-to-line	Line-to-ground ^b
1	---	0.5
2	0.5	1
3	1	2
4	2	4
X ^a	Special	Special

^a "X" can be any level, above, below or in between the others. The level shall be specified in the dedicated equipment specification.

^b For symmetrical interconnection lines the test can be applied to multiple lines simultaneously with respect to ground, i.e. "lines to ground".

4 Photographs of Test

4.1 Radiated Emission Measurement



Front View (For EN 55032 Standard)



Rear View (For EN 55032 Standard)

Test Report



(Declaration of Conformity)

for

Electromagnetic Compatibility

of

Product : **Switching Power Supply**

Trade Name : MEAN WELL

Model Number : RKP-6K1Uy-CMU1-X; RKP-1Uy-CMU1-X ; RKP-CMU1
(y=l or T; X=12, 24, 48)

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Statement of Compliance

Applicant: MEAN WELL ENTERPRISES CO., LTD.

Manufacturer: 1. Mean Well Enterprises Co., Ltd.
2. MEAN WELL (GUANGZHOU) ELECTRONICS CO., LTD.
3. SuZhou Mean Well Technology Co., Ltd.

Product: Switching Power Supply

Model No.: RKP-6K1Uy-CMU1-X; RKP-1Uy-CMU1-X ; RKP-CMU1
(y=I or T; X=12, 24, 48)

Tested Power Supply: 230Vac, 50Hz

Date of Final Test: Dec. 28, 2011

Revision of Report: Rev. 02

Measurement Procedures and Standards Used :

Emission:


- EN 55011: 2009+A1: 2010
- EN 55022: 2010
- EN 61000-6-4: 2007
- EN 61000-3-2: 2006+A1: 2009+A2: 2009
- EN 61000-3-3: 2008

Immunity:

- EN 55024: 2010
- EN 61204-3: 2000
- EN 61000-6-1: 2007
- EN 61000-4-2: 2009
- EN 61000-4-3: 2006+A1: 2008+A2: 2010
- EN 61000-4-4: 2004+A1: 2010
- EN 61000-4-5: 2006
- EN 61000-4-6: 2009
- EN 61000-4-8: 2010
- EN 61000-4-11: 2004

The measurement results in this test report were performed at Interocean EMC Technology Corp. the responsibility of measurement result is only subjected to the tested sample. This report shows the EUT is technically compliance with the above official standards. This report shall not be partial reproduced without written approval by Interocean EMC Technology Corporation.

Report Issued: 2012/01/10

Project Engineer: 
Fox Chen

Approved: 
Benson Tsai

1 General Information

1.1 Description of Equipment Under Test

- Product** : Switching Power Supply
- Model Number** : RKP-6K1Uy-CMU1-X; RKP-1Uy-CMU1-X ; RKP-CMU1
(y=I or T; X=12, 24, 48)
- Applicant** : **MEAN WELL ENTERPRISES CO., LTD.**
No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248,
Taiwan (R.O.C.)
- Manufacturer** : **1. Mean Well Enterprises Co., Ltd.**
No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 248,
Taiwan (R.O.C.)
2. MEAN WELL (GUANGZHOU) ELECTRONICS CO., LTD.
2nd Floor, No.A Building, Yuean Ind. Park, Dongpu Town, TianHe
District, Guangzhou City, P.R. China
3. SuZhou Mean Well Technology Co., Ltd.
No. 77, Jian-min Road, Dong-qiao, Pan-yang Ind. Park, Huang-dai Town,
Xiang-cheng District, Suzhou, Jiangsu 215152, P.R. China
- Product Information** : **EUT:**
Input & Output: The detailed specification, please see “Specifications” as below.
- Date of Test** : Nov. 04 ~ Dec. 28, 2011
- Additional Description** : 1.) The Model Number “**RKP-6K1UI-CMU1-12; RKP-6K1UI-CMU1-24;
RKP-6K1UI-CMU1-48; RKP-6K1UT-CMU1-12; RKP-6K1UT-CMU1-24;
RKP-6K1UT-CMU1-48; RKP-CMU1**” are representative selected in
the test and included in this report.
2.) RKP-6K1Uy-CMU1-X; RKP-1Uy-CMU1-X; RKP-CMU1
y=I (AC Inlet) or T (Terminal Block).
X=12, 24, 48; stand for output voltage.
3.) RKP-6K1Uy-CMU1-X (y=I or T) are use only RCP-2000 series x 2 &
RKP-CMU1 power supplies of the same output voltage rating.
4.) RKP-1Uy-CMU1-X (y=I or T) are use multiple power sources which
according to client’s requirement.

1.2 Specifications

Model No.	Input		Output	
	Voltage (Vac)	Current (A)	Voltage (Vdc)	Current (A)
RKP-1UI-CMU1-12; RKP-1UT-CMU1-12; RKP-6K1UI-CMU1-12; RKP-6K1UT-CMU1-12	100-109	12.6	12	80
	110-199	12.8		90
	200-240	7.8		100
RKP-1UI-CMU1-24; RKP-1UT-CMU1-24; RKP-6K1UI-CMU1-24; RKP-6K1UT-CMU1-24	100-109	15.8	24	52
	110-199	16.5		60
	200-240	11.9		80
RKP-1UI-CMU1-48; RKP-1UT-CMU1-48; RKP-6K1UI-CMU1-48; RKP-6K1UT-CMU1-48	100-109	16.4	48	27.3
	110-199	17.1		31.5
	200-240	12.3		42

1.3 Details of Tested Supporting System

- 1.3.1 LOAD (RKP-6K1UI-CMU1-12; RKP-6K1UT-CMU1-12)
FULL LOAD WATT : 1200W (12Vdc, 100A)
HALF LOAD WATT : 600W (12Vdc, 50A)
- 1.3.2 LOAD (RKP-6K1UI-CMU1-24; RKP-6K1UT-CMU1-24)
FULL LOAD WATT : 1920W (24Vdc, 80A)
HALF LOAD WATT : 960W (24Vdc, 40A)
- 1.3.3 LOAD (RKP-6K1UI-CMU1-48; RKP-6K1UT-CMU1-48)
FULL LOAD WATT : 2016W (48Vdc, 42A)
HALF LOAD WATT : 1008W (48Vdc, 21A)
- 1.3.4 AC/DC Switching Adaptor (For M/N: RKP-CMU1)
Model Number : FRA018-S15-I
Manufacturer : MEAN WELL
Input Power : 100-240Vac, 50-60Hz, 0.7A
Output Power : 15Vdc, 1.2A
Power Cable : Non-shielded, Un-detachable, 1.8 m, w/o core
- 1.3.5 Power Cord (For Emission Measurement)
Power Cord *2 : Non-shielded, Detachable, 2m, with core *2
Information of Core : KING CORE ELECTRONICS INC., M/N: KCF-130-B
- 1.3.6 Power Cable
Power Cable : Non-shielded, Detachable, 0.2m, w/o core
- 1.3.7 Test Cable
RJ45 Cable (Loop Back) : Non-shielded, Detachable, 0.1m, w/o core
RJ45 Cable (Link PC) : Non-shielded, Detachable, 1.8m, with core
Information of Core : KING CORE ELECTRONICS INC., M/N: K5B-RC16X28X9-M2

1.3.8 Link PC

PC31

Model Number : SGH017PFWL
CPU Speed : Intel Core 2 Duo E5400
RAM : 2GB DDR3 1333MHz
EMC Compliance : CE, TUV, NCC, BSMI: R33275
Hard Disk Driver : 250GB Serial ATA2 3.0Gb/s 7200rpm
Manufacturer : HP
Switching Power Supply : LiteOn, PS-4321-9HP, 320W
Power Cord : Non-shielded, Detachable, 1.8m, w/o core

1.4 Test Facility

- Site Description** : Conduction 1 OATS 1 EMS Site
- Name of Firm** : Interocean EMC Technology Corp.
- Company web** : <http://www.ietc.com.tw>
- Site 1, 2, 3 Location** : No.5-2, Lin 1, Tin-Fu Tsun, Lin-Kou Hsiang, Taipei County, Taiwan, R.O.C.
- Site Filing** :
- Federal Communication Commissions – USA
Registration No.: 96399 (OATS 1 & 2)
Registration No.: 518958 (OATS 3)
Designation No.: TW1020
 - Voluntary Control Council for Interference by Information Technology Equipment (VCCI) – Japan
Member No.: 1349
Registration No. (Conducted Room): C-1094
Registration No. (Conducted Room): T-1562
Registration No. (OATS 1): R-1040; G-274
Registration No. (OATS 2): R-1041
 - Industry Canada (IC)
OUR FILE: 46405-4437 Submission: 145171
Registration No. (OATS 1): Site# 4437A-1
Registration No. (OATS 2): Site# 4437A-2
Registration No. (OATS 3): Site# 4437A-3
- Site Accreditation** :
- Bureau of Standards and Metrology and Inspection (BSMI) – Taiwan, R.O.C.
Accreditation No.:
SL2-IN-E-0026 for CNS13438 / CISPR22
SL2-R1-E-0026 for CNS13439 / CISPR13
SL2-R2-E-0026 for CNS13439 / CISPR13
SL2-A1-E-0026 for CNS13783-1 / CISPR14-1
SL2-L1-E-0026 for CNS 14115 / CISPR 15
 - Taiwan Accreditation Foundation (TAF)
Accrditation No.: 1113
 - TÜV NORD
Certificate No: TNTW0801R-04



1.5 Measurement Uncertainty

Item	Value
Conduction 1:	
Power Line Conducted Emission (9kHz~30MHz)	2.4 dB
Telecom. Port Conducted Emission / ISN-T4 (150kHz~30MHz)	2.6 dB
Telecom. Port Conducted Emission / ISN-T8 (150kHz~30MHz)	2.6 dB
Telecom. Port Conducted Emission / Current Probe (150kHz~30MHz)	2.8 dB
Radiated Electromagnetic disturbance / Loop Antenna (9kHz~30MHz)	4.8 dB
Conduction 2:	
Power Line Conducted Emission (9kHz~30MHz)	2.4 dB
Telecom. Port Conducted Emission / ISN-T4 (150kHz~30MHz)	2.6 dB
Telecom. Port Conducted Emission / ISN-T8 (150kHz~30MHz)	2.6 dB
Telecom. Port Conducted Emission / Current Probe (150kHz~30MHz)	2.8 dB
Disturbance Power Emission (30MHz~300MHz)	3.1 dB
Click disturbances Emission (150kHz~30MHz)	2.4 dB
OATS 1:	
Radiated Emission Test (30MHz~1GHz)	4.2 dB
Radiated Emission Test (1GHz~6GHz)	3.2 dB
OATS 2:	
Radiated Emission Test (30MHz~1GHz)	4.2 dB
Radiated Emission Test (1GHz~6GHz)	3.2 dB
OATS 3:	
Radiated Emission Test (30MHz~1GHz)	4.2 dB
Radiated Emission Test (1GHz~6GHz)	3.2 dB
Conducted Immunity Room:	
Conducted Immunity Test / CDN-M2	1.3 dB
Conducted Immunity Test / CDN-M3	1.3 dB
Conducted Immunity Test / EM Clamp	3.2 dB

1.6 Measured Mode

1.6.1 The test modes for preliminary test are as following:

- Mode 1: FULL LOAD (RKP-6K1UI-CMU1-12) (Power A)
- Mode 2: FULL LOAD (RKP-6K1UI-CMU1-12) (Power B)
- Mode 3: FULL LOAD (RKP-6K1UI-CMU1-24) (Power A)
- Mode 4: FULL LOAD (RKP-6K1UI-CMU1-24) (Power B)
- Mode 5: FULL LOAD (RKP-6K1UI-CMU1-48) (Power A)
- Mode 6: FULL LOAD (RKP-6K1UI-CMU1-48) (Power B)

- Mode 7: FULL LOAD (RKP-6K1UT-CMU1-12) (Power A)
- Mode 8: FULL LOAD (RKP-6K1UT-CMU1-12) (Power B)
- Mode 9: FULL LOAD (RKP-6K1UT-CMU1-24) (Power A)
- Mode 10: FULL LOAD (RKP-6K1UT-CMU1-24) (Power B)
- **Mode 11: FULL LOAD (RKP-6K1UT-CMU1-48) (Power A)**
- **Mode 12: FULL LOAD (RKP-6K1UT-CMU1-48) (Power B)**

- Mode 13: FULL LOAD (RKP-6K1UI-CMU1-12) (Power for RKP-CMU1)
- Mode 14: FULL LOAD (RKP-6K1UI-CMU1-24) (Power for RKP-CMU1)
- Mode 15: FULL LOAD (RKP-6K1UI-CMU1-48) (Power for RKP-CMU1)
- Mode 16: FULL LOAD (RKP-6K1UT-CMU1-12) (Power for RKP-CMU1)
- Mode 17: FULL LOAD (RKP-6K1UT-CMU1-24) (Power for RKP-CMU1)
- **Mode 18: FULL LOAD (RKP-6K1UT-CMU1-48) (Power for RKP-CMU1)**

- Mode 19: FULL LOAD (RKP-6K1UI-CMU1-12)
- Mode 20: FULL LOAD (RKP-6K1UI-CMU1-24)
- Mode 21: FULL LOAD (RKP-6K1UI-CMU1-48)
- Mode 22: FULL LOAD (RKP-6K1UT-CMU1-12)
- Mode 23: FULL LOAD (RKP-6K1UT-CMU1-24)
- **Mode 24: FULL LOAD (RKP-6K1UT-CMU1-48)**

1.6.2 For conduction test, selected the worst-case **modes 1~18** after preliminary test for final test.

1.6.3 For radiation test, selected the worst-case **modes 19~24** after preliminary test for final test.

1.6.4 For EN 61000-3-2 and EN 61000-3-3 tests, selected the **modes 11, 18** for final test.

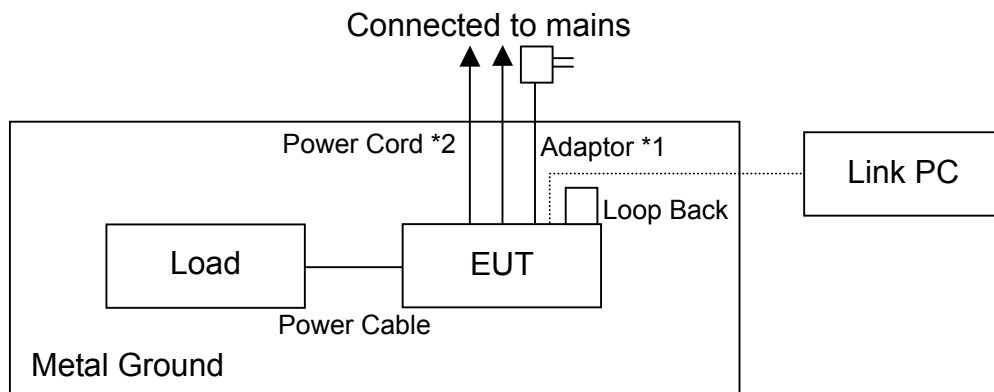
1.6.5 For EN 61000-4-2, EN 61000-4-3 and EN 61000-4-8 tests, selected the **mode 24** for final test.

1.6.6 For EN 61000-4-4, EN 61000-4-5, EN 61000-4-6 and EN 61000-4-11 tests, selected the **modes 11, 12, 18** for final test.

1.6.7 For Telecommunication Ports Conducted Emission Measurement, the test modes for final test are as following:

- Mode 1: LAN Mode (RKP-6K1UI-CMU1-12) (10 Mbps)
- Mode 2: LAN Mode (RKP-6K1UI-CMU1-24) (10 Mbps)
- Mode 3: LAN Mode (RKP-6K1UI-CMU1-48) (10 Mbps)
- Mode 4: LAN Mode (RKP-6K1UT-CMU1-12) (10 Mbps)
- Mode 5: LAN Mode (RKP-6K1UT-CMU1-24) (10 Mbps)
- Mode 6: LAN Mode (RKP-6K1UT-CMU1-48) (10 Mbps)

1.7 Configuration of EUT Setup



- Remark: 1. For Conducted Emission Measurement: The length of power cord is 2m long, which shall be as near to 1m as possible, the excess should be folded at the centre into a bundle no longer than 0.4m.
2. The length of power cable is 0.2m long.

1.8 Test Step of EUT

- 1.8.1 Setup the EUT and peripheral as above.
- 1.8.2 Turn on the power of all equipment.
- 1.8.3 Executed the test.

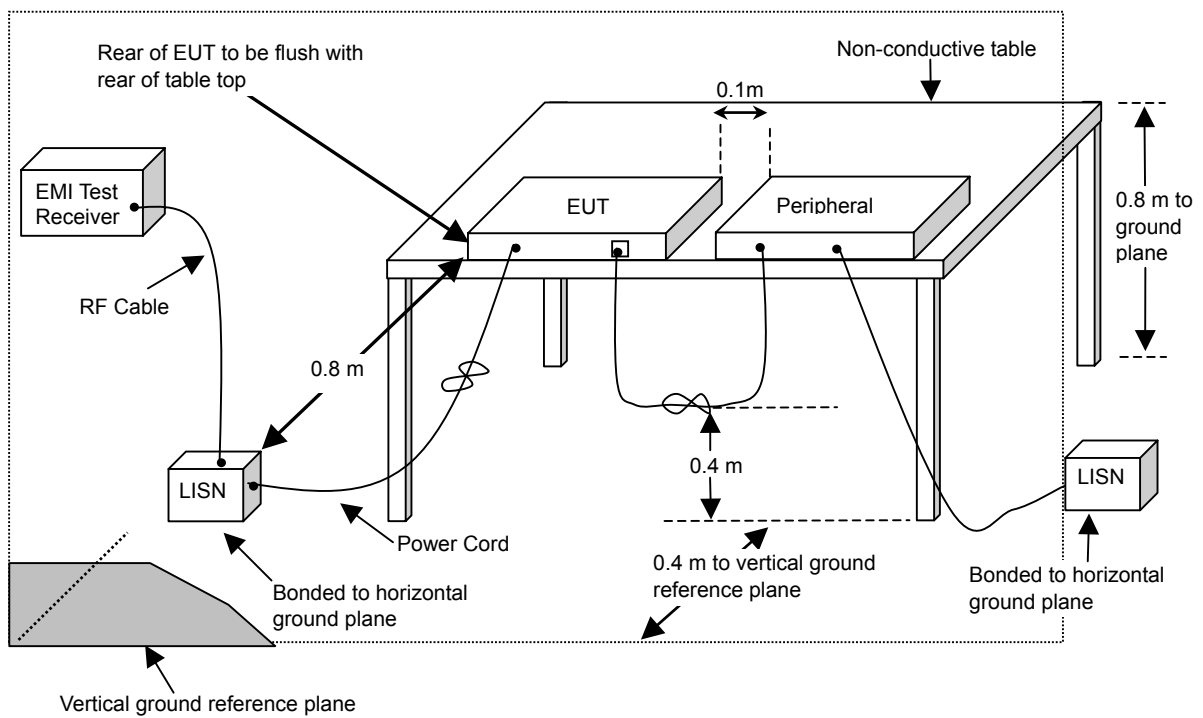
2 Power Line Conducted Emission Measurement

2.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCS 30	830245/027	2012/10/05
RF Cable	HARBOUR	RG58/U	CBL40	2012/11/09
L.I.S.N.	Schwarzbeck	NNLK8121	8121417	2012/07/16
L.I.S.N.	Rohde & Schwarz	ESH3-Z5	100176	2013/02/28

Note: The above equipments are within the valid calibration period.

2.2 Block Diagram of Test Configuration



2.3 Conducted Limit (Power Line)

EN 55011

Group 1, Class A

Frequency (MHz)	<input type="checkbox"/> Rated input power of ≤ 20 kVA (dB μ V)		<input type="checkbox"/> Rated input power of > 20 kVA (dB μ V)	
	Q.P. (Quasi-Peak)	A.V. (Average)	Q.P. (Quasi-Peak)	A.V. (Average)
0.15 ~ 0.50	79	66	100	90
0.50 ~ 5.0	73	60	86	76
5.0 ~ 30	73	60	90 to 73	80 to 60

Group 1, Class B

Frequency (MHz)	Group 1, Class B (dB μ V)	
	Q.P. (Quasi-Peak)	A.V. (Average)
0.15 ~ 0.50	66 to 56	56 to 46
0.50 ~ 5.0	56	46
5.0 ~ 30	60	50

EN 55022

Frequency (MHz)	<input type="checkbox"/> Class A (dB μ V)		<input checked="" type="checkbox"/> Class B (dB μ V)	
	Q.P. (Quasi-Peak)	A.V. (Average)	Q.P. (Quasi-Peak)	A.V. (Average)
0.15 ~ 0.50	79	66	66 to 56	56 to 46
0.50 ~ 5.0	73	60	56	46
5.0 ~ 30	73	60	60	50

EN 61000-6-4

Frequency (MHz)	Q.P. (Quasi-Peak)	A.V. (Average)
0.15 ~ 0.50	79	66
0.50 ~ 5.0	73	60
5.0 ~ 30	73	60

2.4 Instrument Configuration

2.4.1 Set the EMI test receiver frequency range from 150 kHz to 30 MHz.

2.4.2 Set the EMI test receiver bandwidth at 9kHz.

2.4.3 Set the EMI test receiver detector as Quasi-Peak (Q.P.) and Average (AV).

2.5 Configuration of Measurement

- 2.5.1 The EUT was placed on a non-conductive table whose total height equaled 80cm and vertical conducting plane located 40cm to the rear of the EUT.
- 2.5.2 The EUT was connected to the main power through Line Impedance Stabilization Networks (LISN). This setup provided a 50ohm / 50 μ H coupling impedance for the measuring equipment. The auxiliary equipment was also connected to the main power through a LISN that provided a 50ohm/50 μ H coupling impedance with 50ohm termination. (Refer to the block diagram of the test setup and photographs.)
- 2.5.3 The conducted disturbance was measured between the phase lead and the reference ground, and between the neutral lead and reference ground. The initial testing identified the frequency that has the highest disturbance relative to the limit while operating the EUT in typical modes of operation and cable positions in a test setup representative of typical system configuration.
- 2.5.4 The identification of the frequency of highest disturbance with respect to the limit was found by investigating disturbances at a number of significant frequencies. The probable frequency of maximum disturbance had been found and that the associated cable and EUT configuration and mode of operation had been identified.

2.6 Test Result

PASS.

According to customer requested, the measurement was performed by the standard of EN 61000-6-3, which is strict than EN 61000-6-4.

The final test data is shown as following pages.

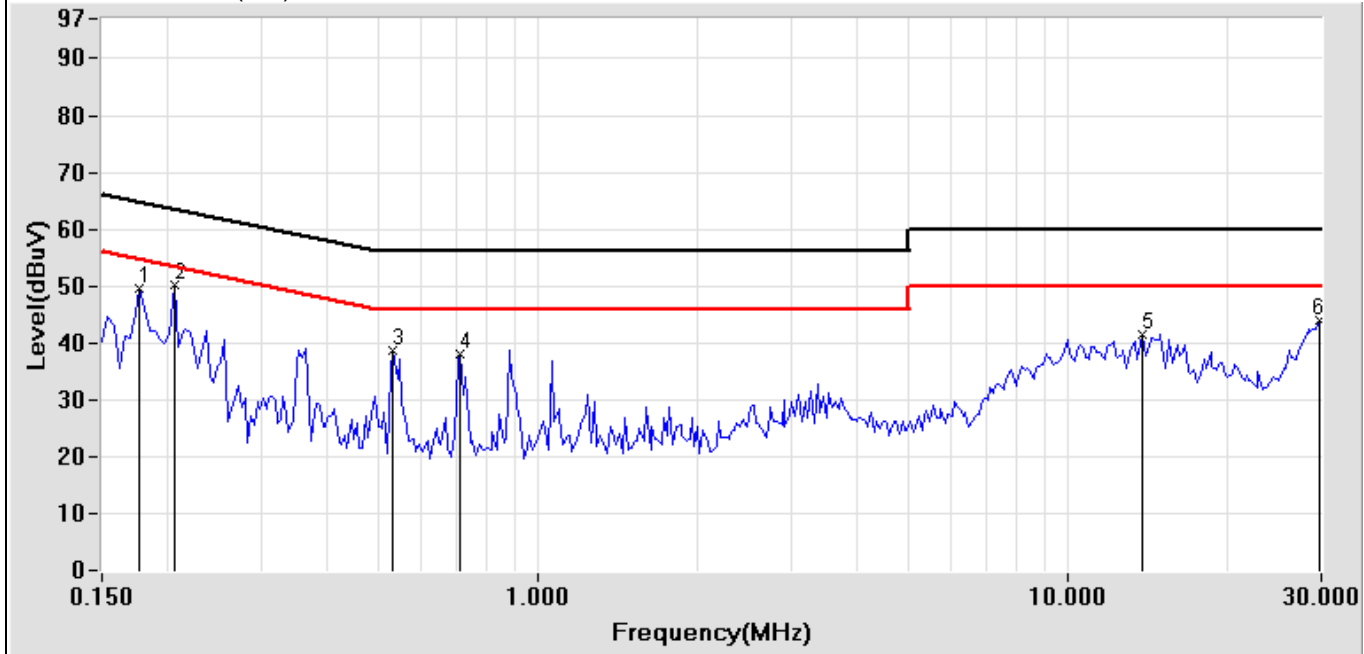
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-12 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6892 OPERATOR: Mark TEST SITE: Conduction1
---	--

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.177	0.14	46.79	43.50	46.93	43.64	64.63	54.63	-17.70	-10.99
0.205	0.14	45.16	39.23	45.30	39.37	63.41	53.41	-18.11	-14.04
0.529	0.14	38.10	37.70	38.24	37.84	56.00	46.00	-17.76	-8.16
0.709	0.15	38.32	38.00	38.47	38.15	56.00	46.00	-17.53	-7.85
13.798	0.62	38.80	34.80	39.42	35.42	60.00	50.00	-20.58	-14.58
29.705	1.14	37.09	31.06	38.23	32.20	60.00	50.00	-21.77	-17.80

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 1: FULL LOAD (RKP-6K1UI-CMU1-12) (Power A)

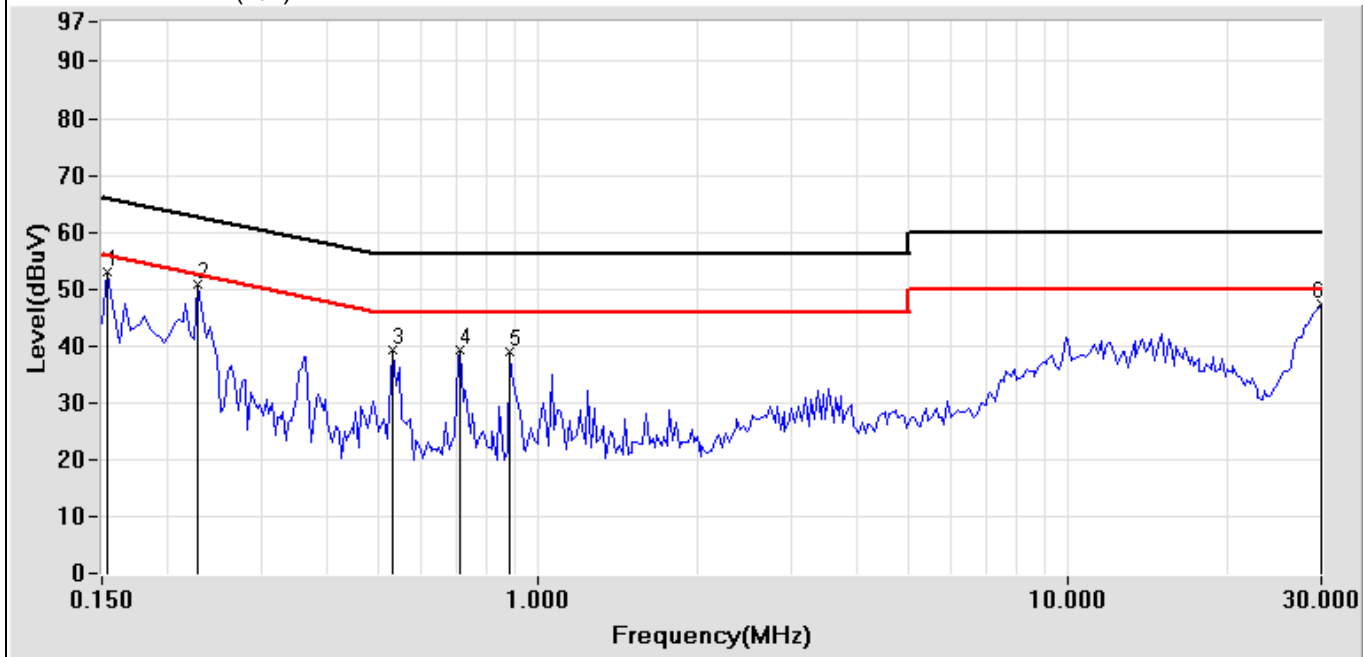
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-12 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6893 OPERATOR: Mark TEST SITE: Conduction1
---	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.154	0.13	48.42	42.04	48.55	42.17	65.78	55.78	-17.23	-13.61
0.228	0.13	45.10	36.10	45.23	36.23	62.52	52.52	-17.29	-16.29
0.529	0.13	39.00	38.40	39.13	38.53	56.00	46.00	-16.87	-7.47
0.709	0.14	39.55	39.30	39.69	39.44	56.00	46.00	-16.31	-6.56
0.884	0.14	39.00	38.70	39.14	38.84	56.00	46.00	-16.86	-7.16
29.982	1.14	41.10	35.50	42.24	36.64	60.00	50.00	-17.76	-13.36

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 1: FULL LOAD (RKP-6K1UI-CMU1-12) (Power A)

Power Line Conducted Test Data

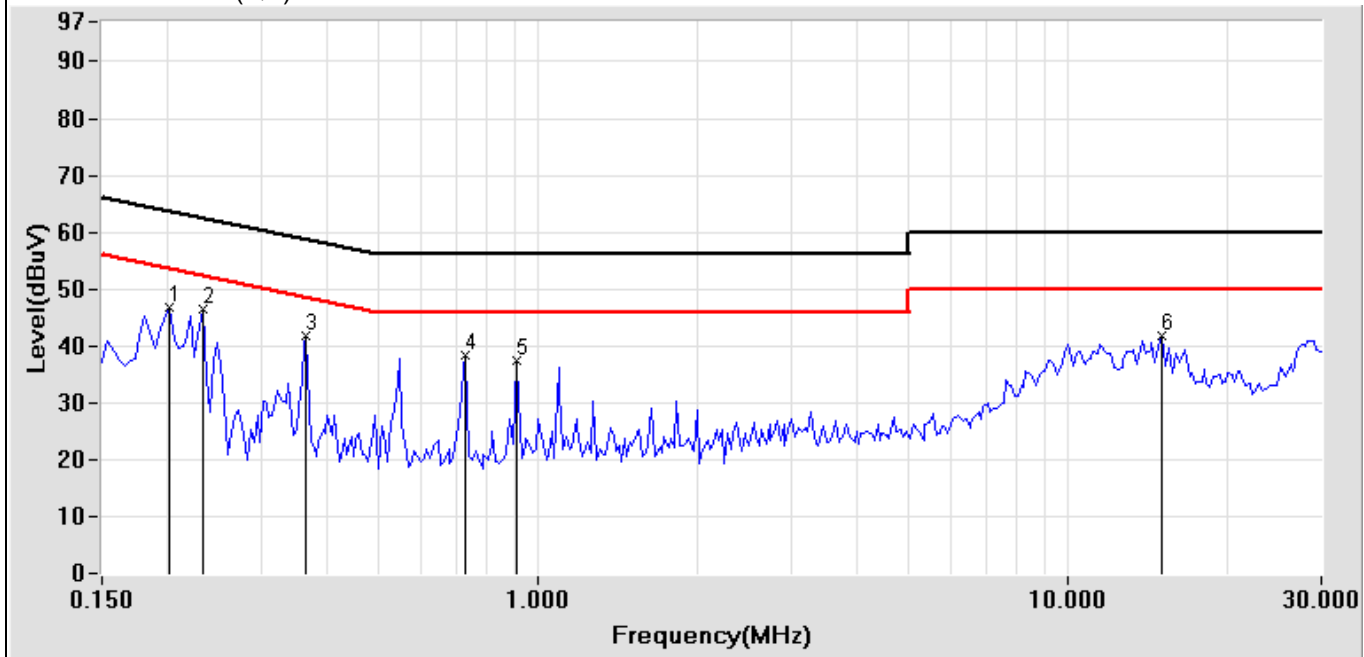
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-12 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6895 OPERATOR: Mark TEST SITE: Conduction1
---	--

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.201	0.14	44.00	37.40	44.14	37.54	63.57	53.57	-19.43	-16.03
0.232	0.14	41.40	33.05	41.54	33.19	62.38	52.38	-20.84	-19.19
0.365	0.14	41.12	40.90	41.26	41.04	58.61	48.61	-17.35	-7.57
0.728	0.15	37.82	37.50	37.97	37.65	56.00	46.00	-18.03	-8.35
0.908	0.15	38.00	37.70	38.15	37.85	56.00	46.00	-17.85	-8.15
14.978	0.70	39.30	34.30	40.00	35.00	60.00	50.00	-20.00	-15.00

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 2: FULL LOAD (RKP-6K1UI-CMU1-12) (Power B)

Power Line Conducted Test Data

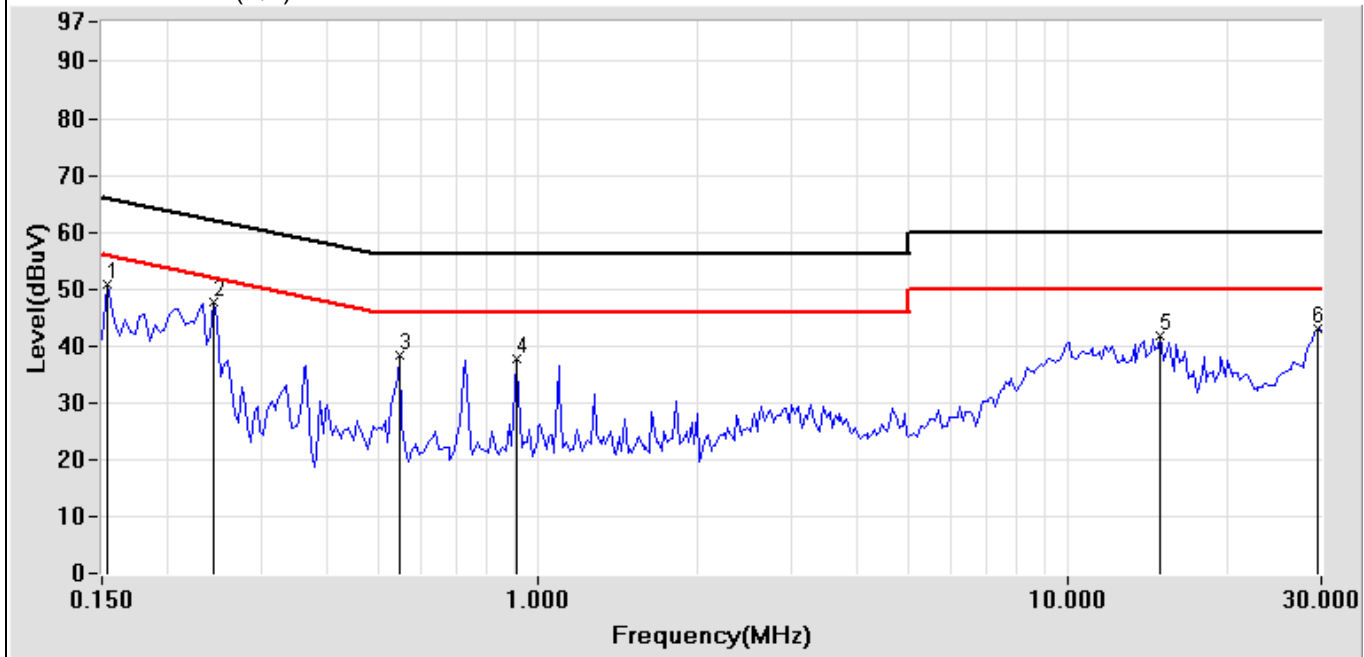
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-12 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6894 OPERATOR: Mark TEST SITE: Conduction1
---	---

Frequency (MHz)	Factor (dB)	Meter Reading (dB μ V)		Emission Level (dB μ V)		Limits (dB μ V)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.154	0.13	48.53	41.22	48.66	41.35	65.78	55.78	-17.12	-14.43
0.244	0.13	42.98	34.75	43.11	34.88	61.96	51.96	-18.85	-17.08
0.545	0.13	36.40	34.87	36.53	35.00	56.00	46.00	-19.47	-11.00
0.908	0.14	37.40	37.10	37.54	37.24	56.00	46.00	-18.46	-8.76
14.904	0.74	38.33	33.88	39.07	34.62	60.00	50.00	-20.93	-15.38
29.556	1.14	37.65	32.15	38.79	33.29	60.00	50.00	-21.21	-16.71

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 2: FULL LOAD (RKP-6K1UI-CMU1-12) (Power B)

Power Line Conducted Test Data

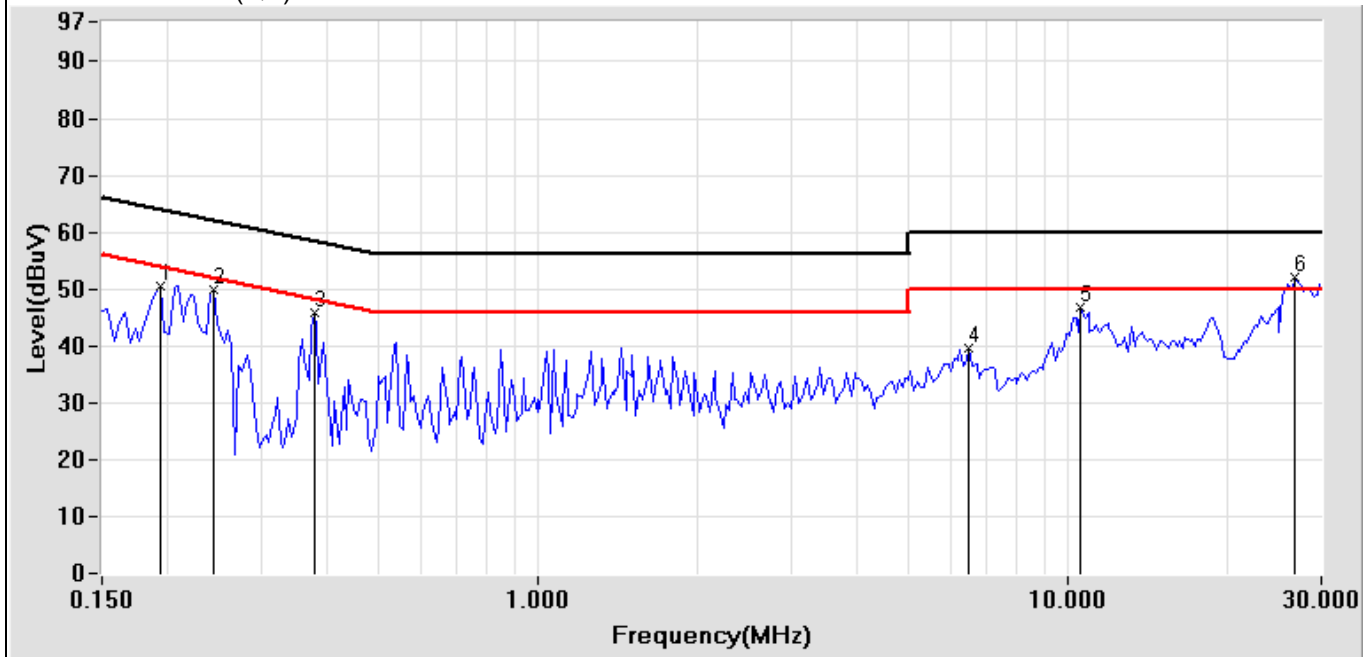
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-24 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6837 OPERATOR: Mark TEST SITE: Conduction1
---	--

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.193	0.14	50.70	45.80	50.84	45.94	63.91	53.91	-13.07	-7.97
0.244	0.14	45.91	36.17	46.05	36.31	61.96	51.96	-15.91	-15.65
0.377	0.14	45.40	43.13	45.54	43.27	58.35	48.35	-12.81	-5.08
6.455	0.26	34.10	29.10	34.36	29.36	60.00	50.00	-25.64	-20.64
10.548	0.41	44.55	41.00	44.96	41.41	60.00	50.00	-15.04	-8.59
26.771	1.08	44.85	39.37	45.93	40.45	60.00	50.00	-14.07	-9.55

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 3: FULL LOAD (RKP-6K1UI-CMU1-24) (Power A)

Power Line Conducted Test Data

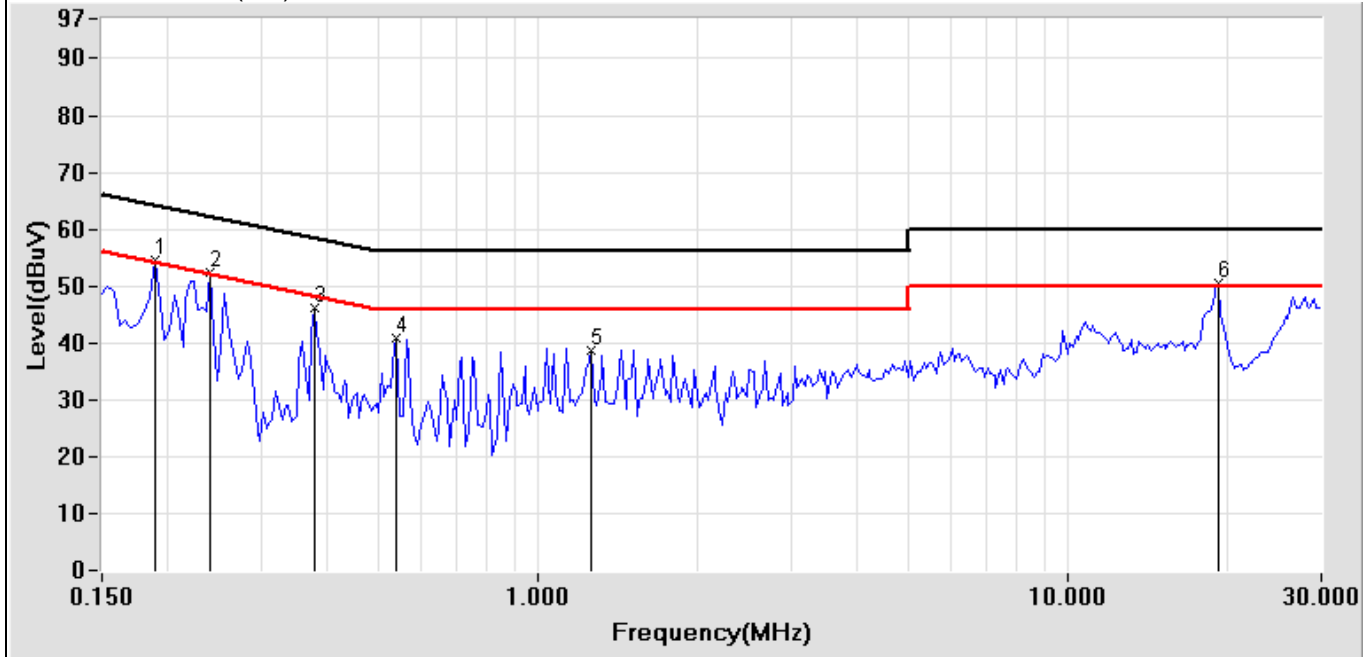
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-24 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6836 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.189	0.13	50.65	46.28	50.78	46.41	64.08	54.08	-13.30	-7.67
0.240	0.13	47.33	37.10	47.46	37.23	62.10	52.10	-14.64	-14.87
0.377	0.13	46.02	44.24	46.15	44.37	58.35	48.35	-12.20	-3.98
0.537	0.13	40.41	38.96	40.54	39.09	56.00	46.00	-15.46	-6.91
1.252	0.14	37.40	36.41	37.54	36.55	56.00	46.00	-18.46	-9.45
19.127	0.75	42.30	36.90	43.05	37.65	60.00	50.00	-16.95	-12.35

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 3: FULL LOAD (RKP-6K1UI-CMU1-24) (Power A)

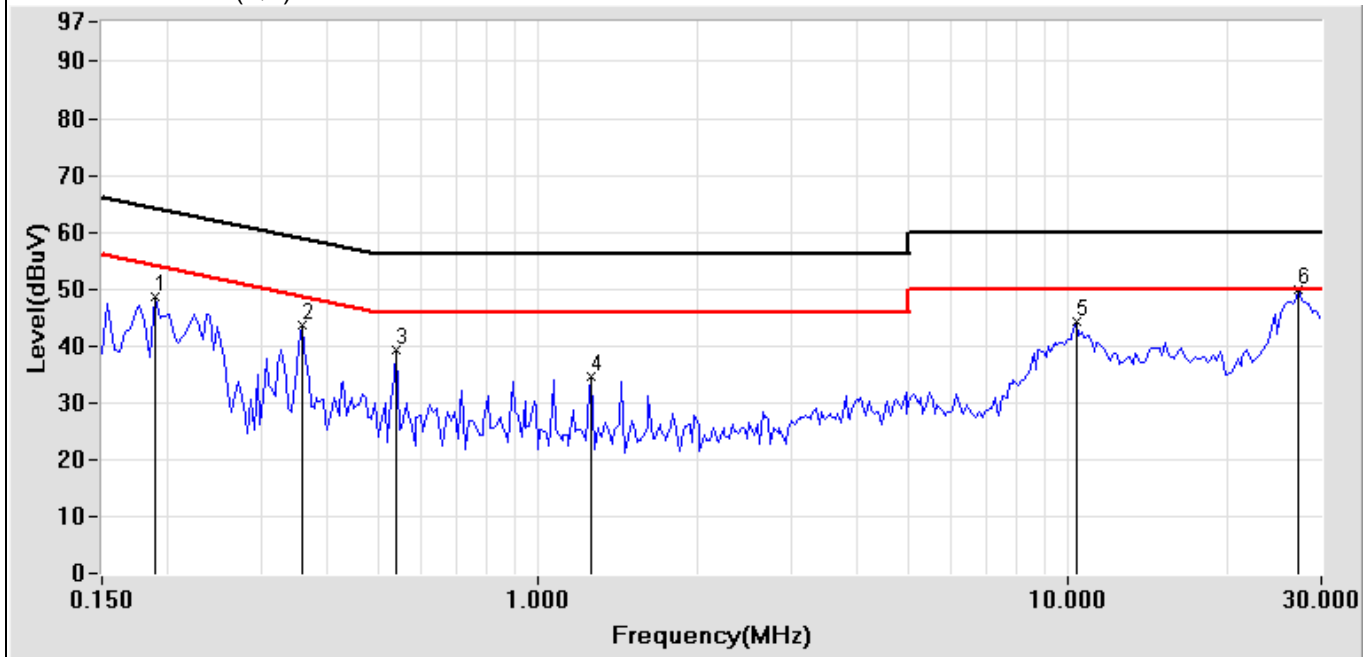
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-24 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6815 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.189	0.14	48.70	47.00	48.84	47.14	64.08	54.08	-15.24	-6.94
0.357	0.14	43.20	42.90	43.34	43.04	58.80	48.80	-15.46	-5.76
0.537	0.14	37.92	36.94	38.06	37.08	56.00	46.00	-17.94	-8.92
1.252	0.15	34.30	34.00	34.45	34.15	56.00	46.00	-21.55	-11.85
10.365	0.40	40.60	36.40	41.00	36.80	60.00	50.00	-19.00	-13.20
27.095	1.09	43.43	37.88	44.52	38.97	60.00	50.00	-15.48	-11.03

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 4: FULL LOAD (RKP-6K1UI-CMU1-24) (Power B)

Power Line Conducted Test Data

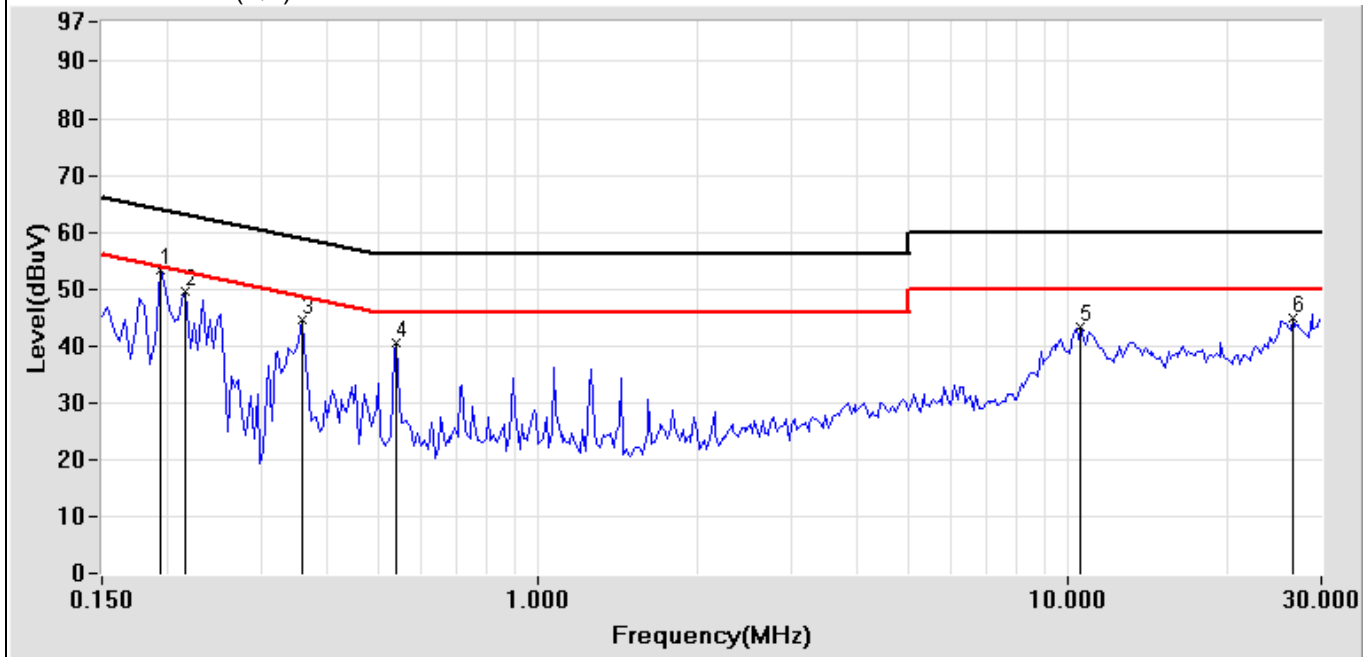
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-24 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6814 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.193	0.13	49.40	36.96	49.53	37.09	63.91	53.91	-14.38	-16.82
0.216	0.13	48.23	40.60	48.36	40.73	62.97	52.97	-14.61	-12.24
0.357	0.13	43.80	43.40	43.93	43.53	58.80	48.80	-14.87	-5.27
0.537	0.13	39.62	38.79	39.75	38.92	56.00	46.00	-16.25	-7.08
10.552	0.42	40.70	36.50	41.12	36.92	60.00	50.00	-18.88	-13.08
26.541	1.10	38.59	32.95	39.69	34.05	60.00	50.00	-20.31	-15.95

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 4: FULL LOAD (RKP-6K1UI-CMU1-24) (Power B)

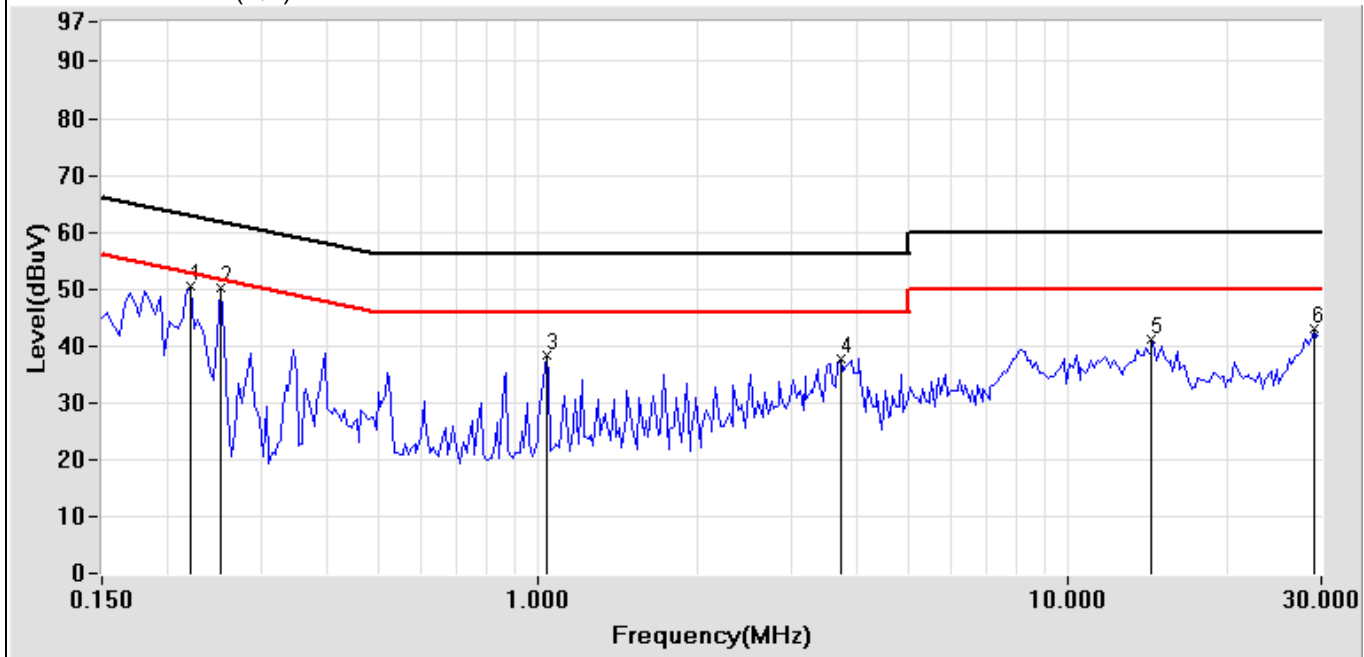
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-48 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6697 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.220	0.14	47.40	38.40	47.54	38.54	62.82	52.82	-15.28	-14.28
0.252	0.14	45.80	33.80	45.94	33.94	61.69	51.69	-15.75	-17.75
1.037	0.15	36.24	35.47	36.39	35.62	56.00	46.00	-19.61	-10.38
3.716	0.13	36.44	34.35	36.57	34.48	56.00	46.00	-19.43	-11.52
14.341	0.67	36.60	31.60	37.27	32.27	60.00	50.00	-22.73	-17.73
28.990	1.13	35.15	29.48	36.28	30.61	60.00	50.00	-23.72	-19.39

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 5: FULL LOAD (RKP-6K1UI-CMU1-48) (Power A)

Power Line Conducted Test Data

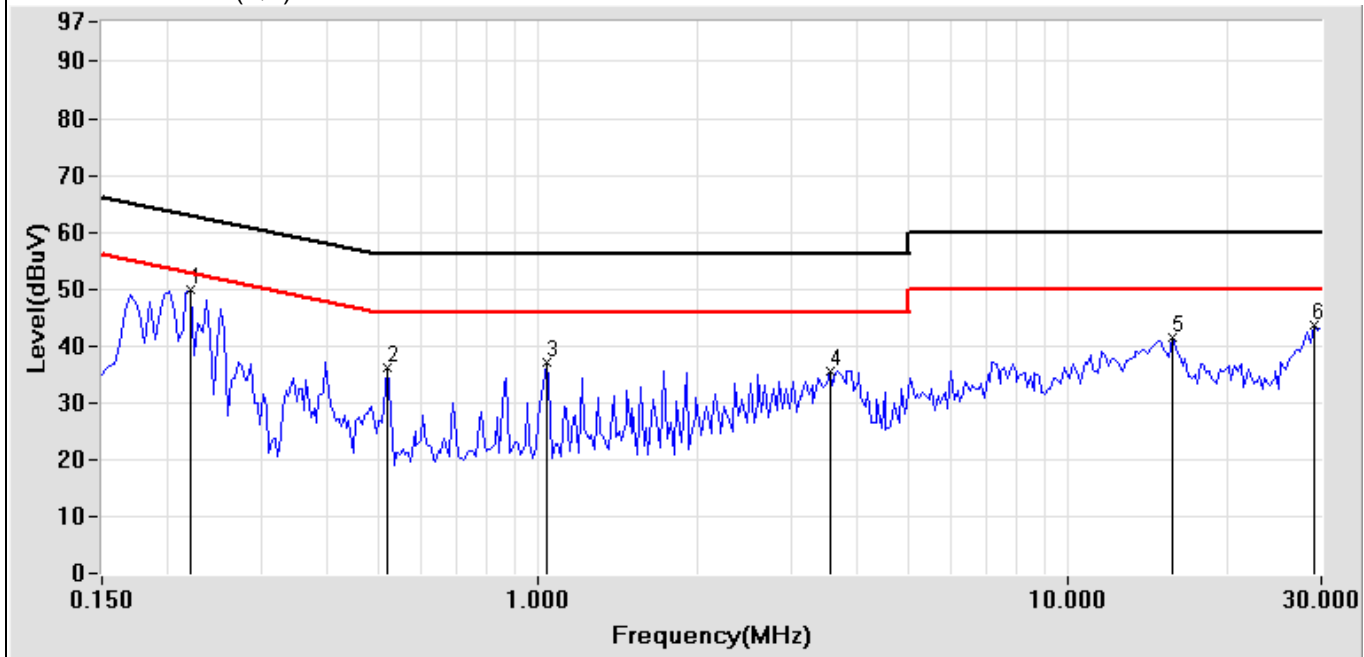
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-48 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6698 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.220	0.13	46.80	36.30	46.93	36.43	62.82	52.82	-15.89	-16.39
0.517	0.13	34.20	33.90	34.33	34.03	56.00	46.00	-21.67	-11.97
1.037	0.14	37.38	36.61	37.52	36.75	56.00	46.00	-18.48	-9.25
3.545	0.11	34.53	32.68	34.64	32.79	56.00	46.00	-21.36	-13.21
15.677	0.75	35.40	30.20	36.15	30.95	60.00	50.00	-23.85	-19.05
29.115	1.14	36.89	31.07	38.03	32.21	60.00	50.00	-21.97	-17.79

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 5: FULL LOAD (RKP-6K1UI-CMU1-48) (Power A)

Power Line Conducted Test Data

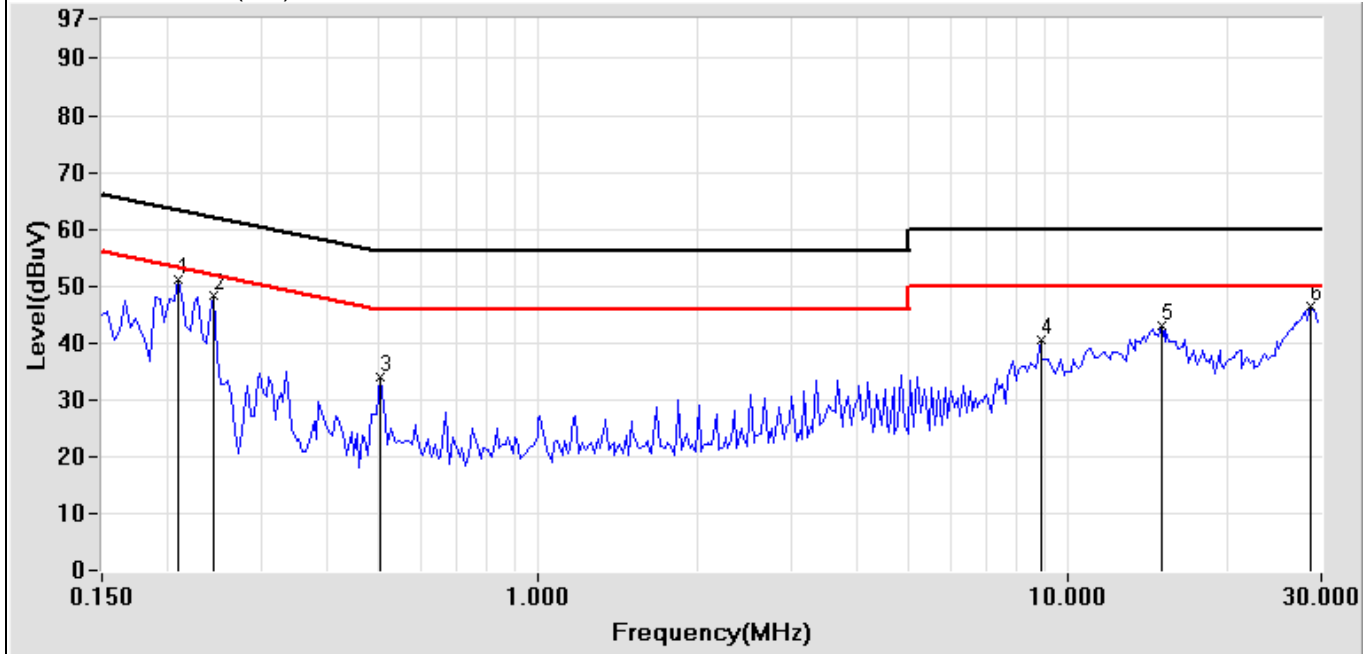
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-48 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6700 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.209	0.14	47.40	41.10	47.54	41.24	63.24	53.24	-15.70	-12.00
0.244	0.14	43.94	33.63	44.08	33.77	61.96	51.96	-17.88	-18.19
0.502	0.14	33.00	30.40	33.14	30.54	56.00	46.00	-22.86	-15.46
8.857	0.38	36.00	31.30	36.38	31.68	60.00	50.00	-23.62	-18.32
14.986	0.70	38.80	34.10	39.50	34.80	60.00	50.00	-20.50	-15.20
28.646	1.13	38.90	33.10	40.03	34.23	60.00	50.00	-19.97	-15.77

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 6: FULL LOAD (RKP-6K1UI-CMU1-48) (Power B)

Power Line Conducted Test Data

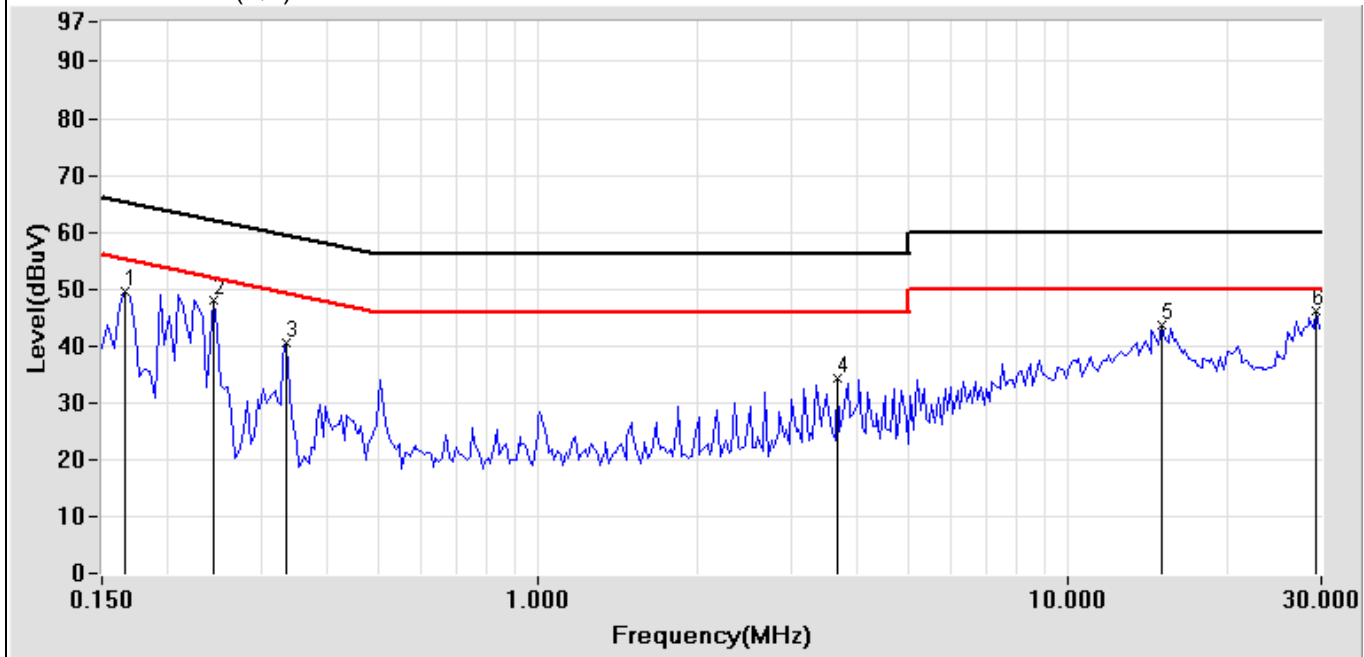
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-48 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6699 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.166	0.13	50.48	48.60	50.61	48.73	65.16	55.16	-14.55	-6.43
0.244	0.13	43.90	32.90	44.03	33.03	61.96	51.96	-17.93	-18.93
0.334	0.13	39.16	38.54	39.29	38.67	59.35	49.35	-20.06	-10.68
3.677	0.12	33.00	30.00	33.12	30.12	56.00	46.00	-22.88	-15.88
14.978	0.74	39.26	34.62	40.00	35.36	60.00	50.00	-20.00	-14.64
29.255	1.14	37.55	31.69	38.69	32.83	60.00	50.00	-21.31	-17.17

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 6: FULL LOAD (RKP-6K1UI-CMU1-48) (Power B)

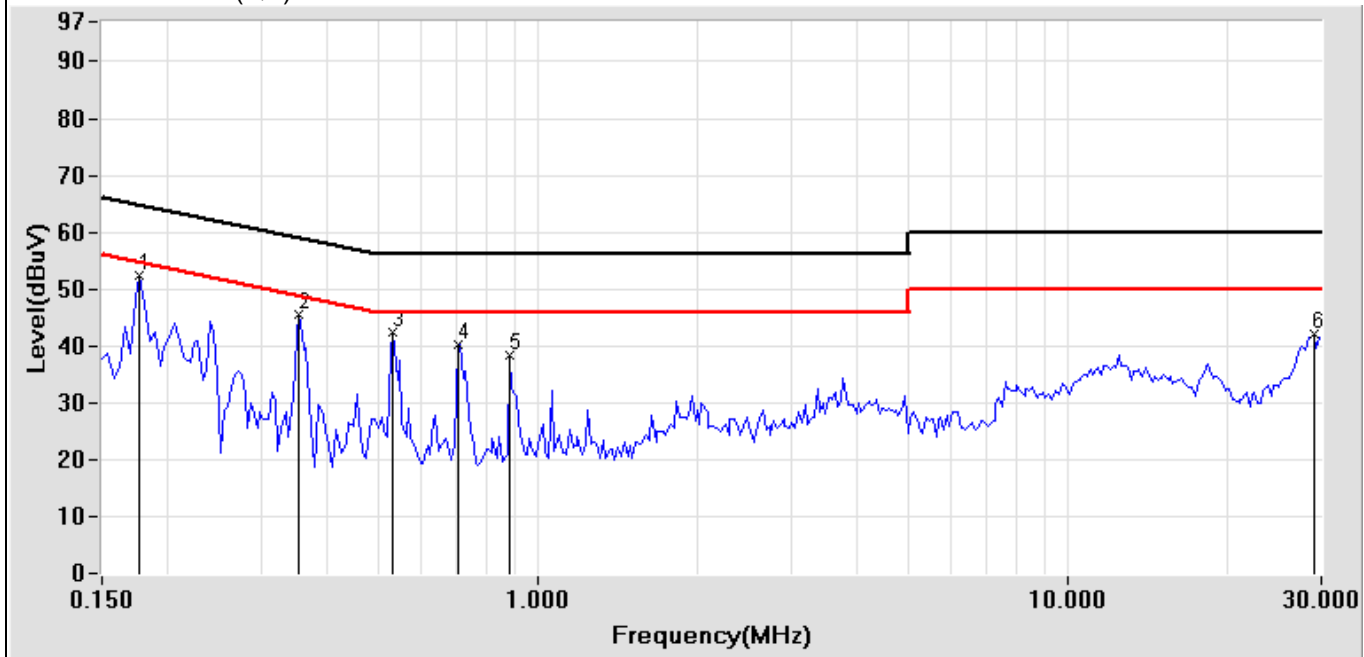
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-12 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6701 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.177	0.14	48.51	46.06	48.65	46.20	64.63	54.63	-15.98	-8.43
0.353	0.14	43.30	42.90	43.44	43.04	58.89	48.89	-15.45	-5.85
0.529	0.14	41.20	40.95	41.34	41.09	56.00	46.00	-14.66	-4.91
0.705	0.15	39.80	39.40	39.95	39.55	56.00	46.00	-16.05	-6.45
0.884	0.15	38.00	37.74	38.15	37.89	56.00	46.00	-17.85	-8.11
29.197	1.13	36.80	31.10	37.93	32.23	60.00	50.00	-22.07	-17.77

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 7: FULL LOAD (RKP-6K1UT-CMU1-12) (Power A)

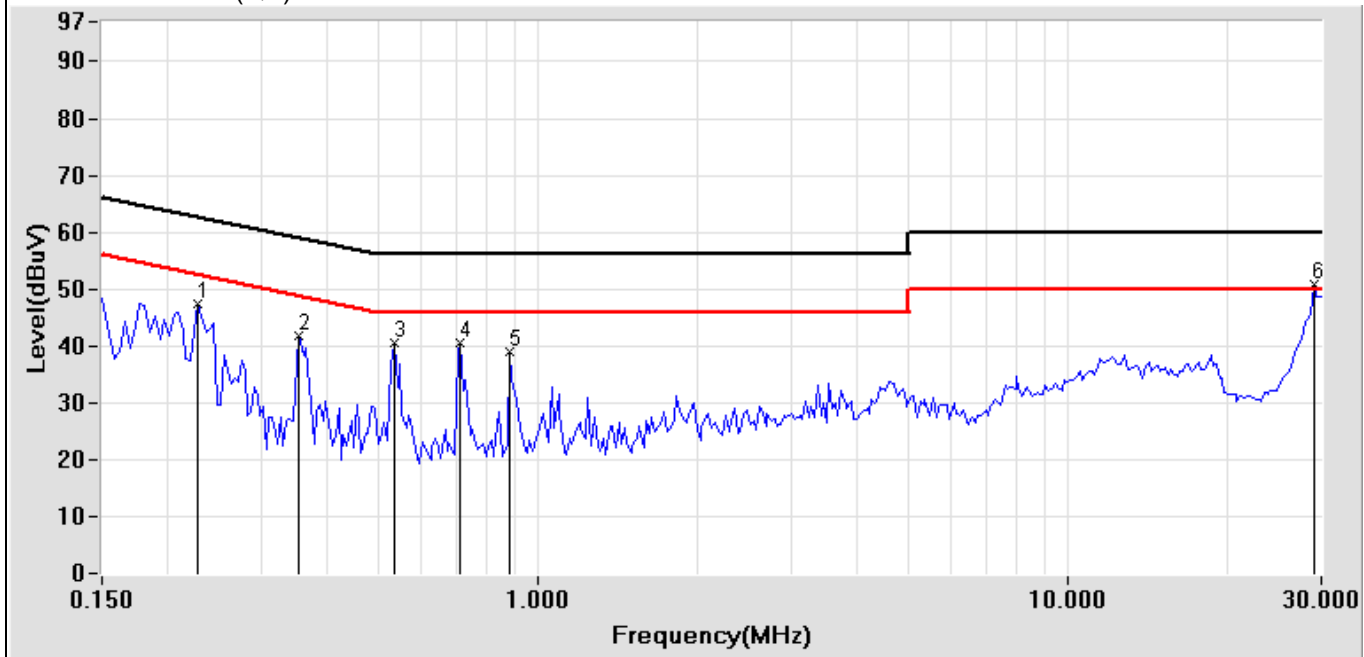
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-12 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6702 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.228	0.13	45.70	37.70	45.83	37.83	62.52	52.52	-16.69	-14.69
0.353	0.13	41.10	40.80	41.23	40.93	58.89	48.89	-17.66	-7.96
0.533	0.13	41.50	41.10	41.63	41.23	56.00	46.00	-14.37	-4.77
0.709	0.14	40.50	40.10	40.64	40.24	56.00	46.00	-15.36	-5.76
0.884	0.14	38.80	38.55	38.94	38.69	56.00	46.00	-17.06	-7.31
29.193	1.14	44.55	39.30	45.69	40.44	60.00	50.00	-14.31	-9.56

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 7: FULL LOAD (RKP-6K1UT-CMU1-12) (Power A)

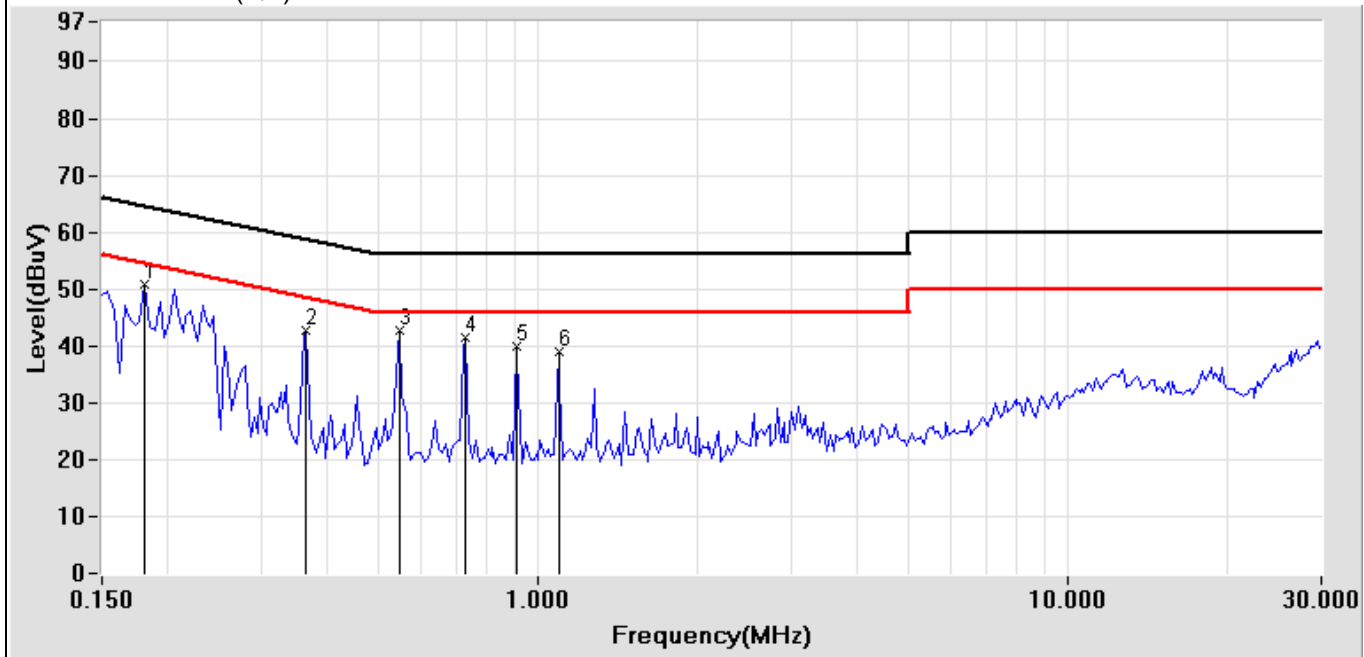
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-12 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6706 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.181	0.14	48.94	45.39	49.08	45.53	64.44	54.44	-15.36	-8.91
0.365	0.14	43.80	43.40	43.94	43.54	58.61	48.61	-14.67	-5.07
0.545	0.14	42.80	42.40	42.94	42.54	56.00	46.00	-13.06	-3.46
0.728	0.15	41.60	41.30	41.75	41.45	56.00	46.00	-14.25	-4.55
0.908	0.15	40.10	39.80	40.25	39.95	56.00	46.00	-15.75	-6.05
1.091	0.15	36.99	36.78	37.14	36.93	56.00	46.00	-18.86	-9.07

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 8: FULL LOAD (RKP-6K1UT-CMU1-12) (Power B)

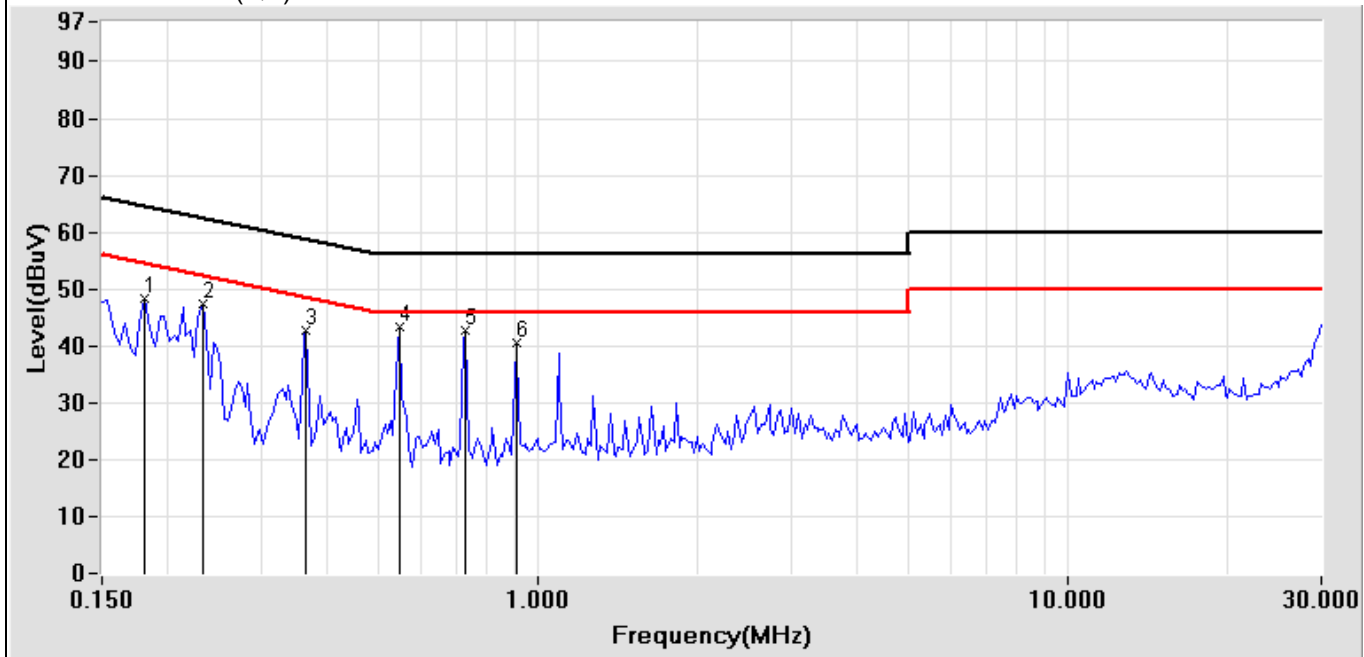
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-12 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6703 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.181	0.13	46.93	43.49	47.06	43.62	64.44	54.44	-17.38	-10.82
0.232	0.13	47.70	39.10	47.83	39.23	62.38	52.38	-14.55	-13.15
0.365	0.13	42.20	41.90	42.33	42.03	58.61	48.61	-16.28	-6.58
0.545	0.13	42.50	42.20	42.63	42.33	56.00	46.00	-13.37	-3.67
0.728	0.14	42.10	41.83	42.24	41.97	56.00	46.00	-13.76	-4.03
0.908	0.14	40.20	39.84	40.34	39.98	56.00	46.00	-15.66	-6.02

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 8: FULL LOAD (RKP-6K1UT-CMU1-12) (Power B)

Power Line Conducted Test Data

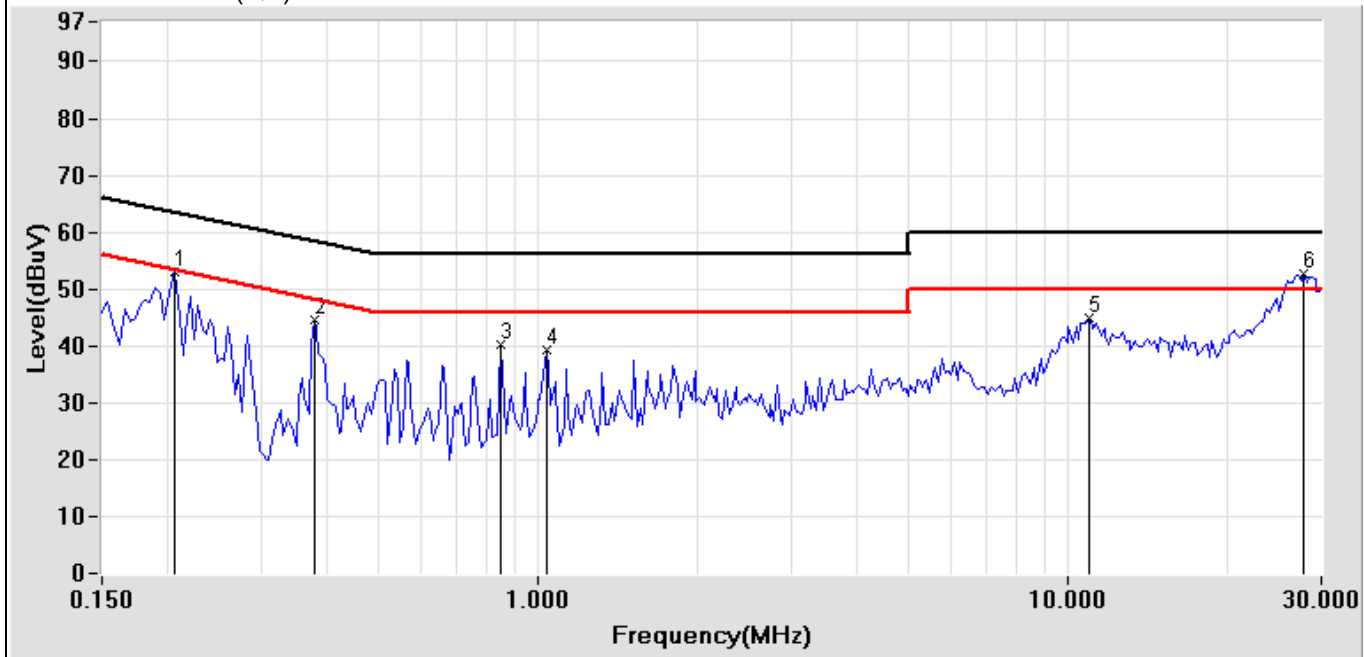
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-24 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6679 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.205	0.14	50.50	48.10	50.64	48.24	63.41	53.41	-12.77	-5.17
0.377	0.14	45.15	43.46	45.29	43.60	58.35	48.35	-13.06	-4.75
0.849	0.15	39.60	39.20	39.75	39.35	56.00	46.00	-16.25	-6.65
1.037	0.15	38.88	38.45	39.03	38.60	56.00	46.00	-16.97	-7.40
10.935	0.51	43.30	40.10	43.81	40.61	60.00	50.00	-16.19	-9.39
27.716	1.12	47.25	42.25	48.37	43.37	60.00	50.00	-11.63	-6.63

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 9: FULL LOAD (RKP-6K1UT-CMU1-24) (Power A)

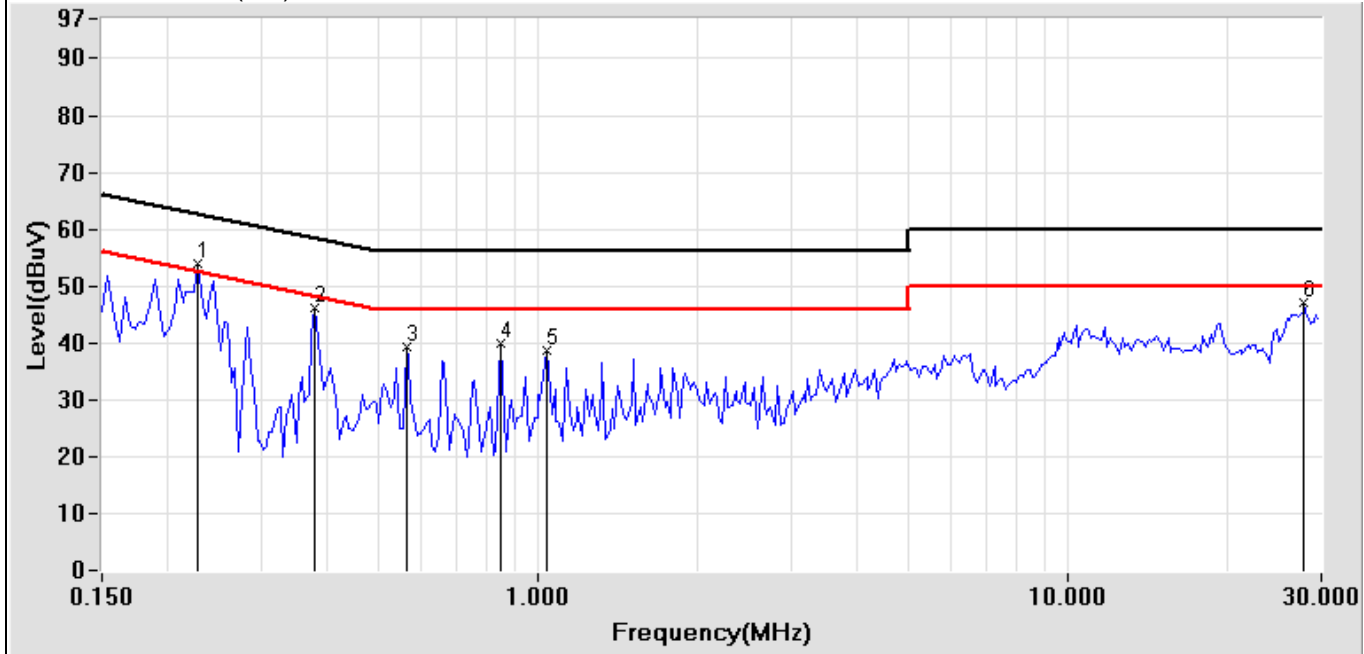
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-24 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6680 OPERATOR: Mark TEST SITE: Conduction1
---	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.228	0.13	47.89	38.90	48.02	39.03	62.52	52.52	-14.50	-13.49
0.377	0.13	46.10	44.40	46.23	44.53	58.35	48.35	-12.12	-3.82
0.564	0.13	40.20	39.90	40.33	40.03	56.00	46.00	-15.67	-5.97
0.849	0.14	38.65	38.17	38.79	38.31	56.00	46.00	-17.21	-7.69
1.037	0.14	38.23	37.53	38.37	37.67	56.00	46.00	-17.63	-8.33
27.716	1.14	40.74	34.93	41.88	36.07	60.00	50.00	-18.12	-13.93

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 9: FULL LOAD (RKP-6K1UT-CMU1-24) (Power A)

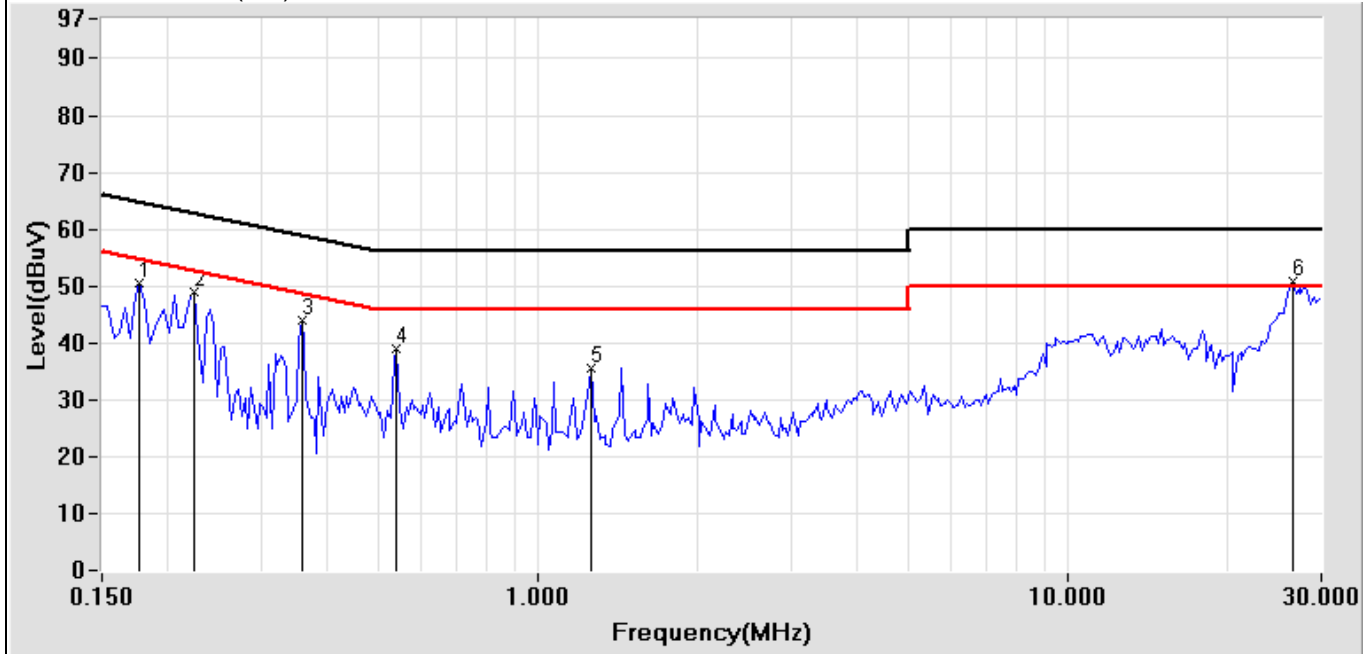
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-24 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6682 OPERATOR: Mark TEST SITE: Conduction1
---	--

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.177	0.14	49.50	47.40	49.64	47.54	64.63	54.63	-14.99	-7.09
0.224	0.14	46.50	40.00	46.64	40.14	62.67	52.67	-16.03	-12.53
0.357	0.14	44.00	43.60	44.14	43.74	58.80	48.80	-14.66	-5.06
0.537	0.14	39.06	38.39	39.20	38.53	56.00	46.00	-16.80	-7.47
1.252	0.15	35.00	34.55	35.15	34.70	56.00	46.00	-20.85	-11.30
26.564	1.11	45.21	40.13	46.32	41.24	60.00	50.00	-13.68	-8.76

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 10: FULL LOAD (RKP-6K1UT-CMU1-24) (Power B)

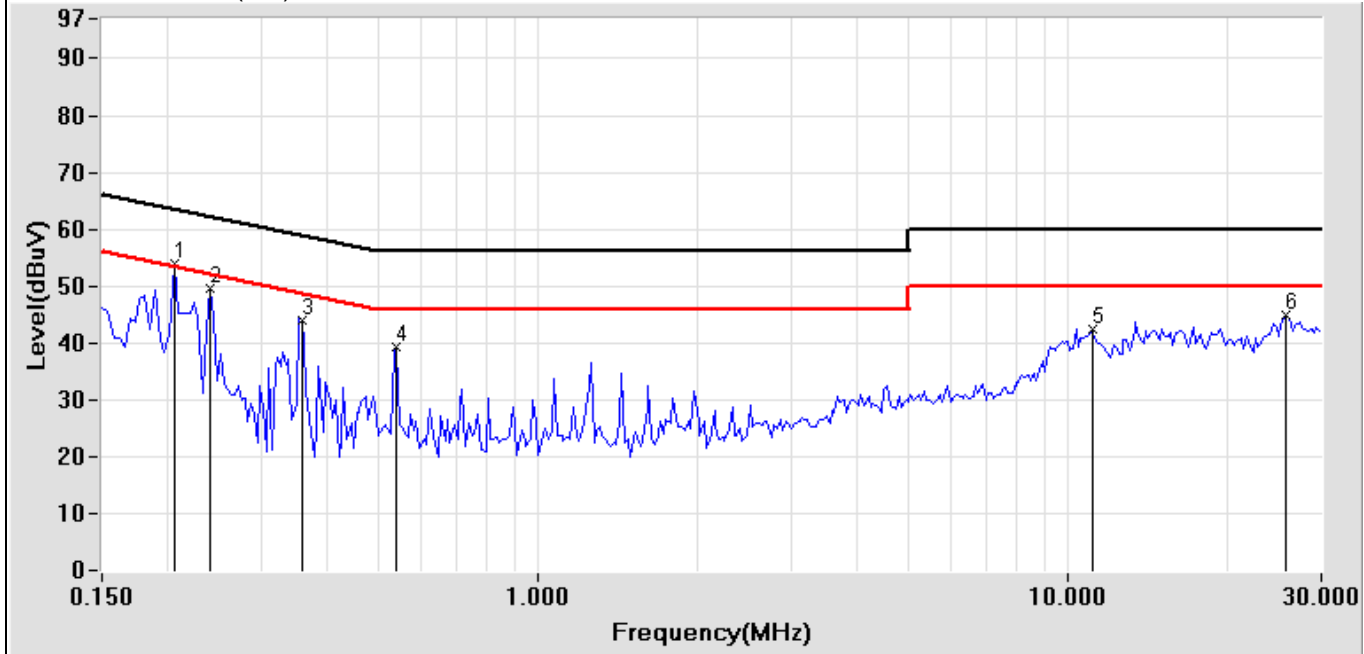
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-24 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6681 OPERATOR: Mark TEST SITE: Conduction1
---	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBµV)		Emission Level (dBµV)		Limits (dBµV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.205	0.13	49.12	42.60	49.25	42.73	63.41	53.41	-14.16	-10.68
0.240	0.13	45.90	35.00	46.03	35.13	62.10	52.10	-16.07	-16.97
0.357	0.13	44.00	43.60	44.13	43.73	58.80	48.80	-14.67	-5.07
0.537	0.13	40.26	39.70	40.39	39.83	56.00	46.00	-15.61	-6.17
11.091	0.54	38.00	33.60	38.54	34.14	60.00	50.00	-21.46	-15.86
25.666	1.13	40.35	35.29	41.48	36.42	60.00	50.00	-18.52	-13.58

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 10: FULL LOAD (RKP-6K1UT-CMU1-24) (Power B)

Power Line Conducted Test Data

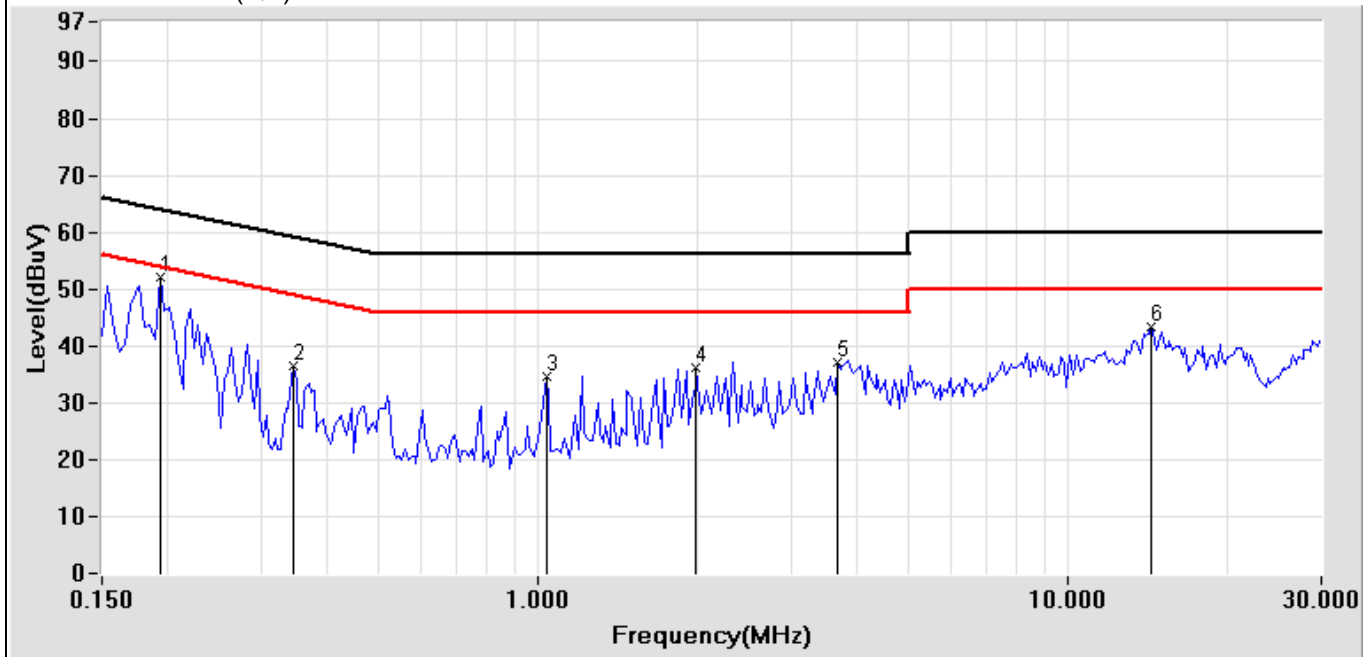
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-48 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6690 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dB μ V)		Emission Level (dB μ V)		Limits (dB μ V)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.193	0.14	49.40	38.70	49.54	38.84	63.91	53.91	-14.37	-15.07
0.345	0.14	36.68	35.64	36.82	35.78	59.08	49.08	-22.26	-13.30
1.037	0.15	34.30	33.50	34.45	33.65	56.00	46.00	-21.55	-12.35
1.986	0.12	34.80	32.90	34.92	33.02	56.00	46.00	-21.08	-12.98
3.673	0.12	35.30	32.00	35.42	32.12	56.00	46.00	-20.58	-13.88
14.353	0.67	38.96	34.37	39.63	35.04	60.00	50.00	-20.37	-14.96

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 11: FULL LOAD (RKP-6K1UT-CMU1-48) (Power A)

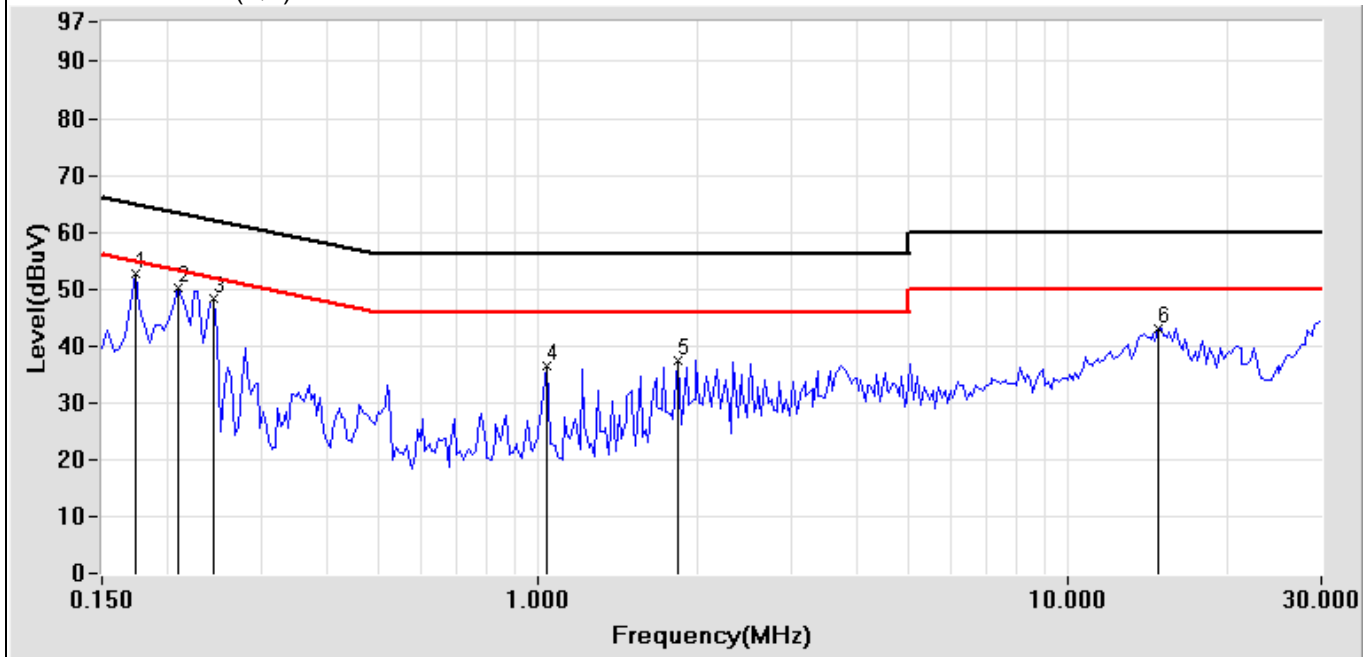
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-48 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6689 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.173	0.13	50.00	47.60	50.13	47.73	64.82	54.82	-14.69	-7.09
0.209	0.13	47.21	37.62	47.34	37.75	63.24	53.24	-15.90	-15.49
0.244	0.13	46.00	33.93	46.13	34.06	61.96	51.96	-15.83	-17.90
1.037	0.14	35.90	35.10	36.04	35.24	56.00	46.00	-19.96	-10.76
1.837	0.12	37.20	33.50	37.32	33.62	56.00	46.00	-18.68	-12.38
14.826	0.73	37.80	32.54	38.53	33.27	60.00	50.00	-21.47	-16.73

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 11: FULL LOAD (RKP-6K1UT-CMU1-48) (Power A)

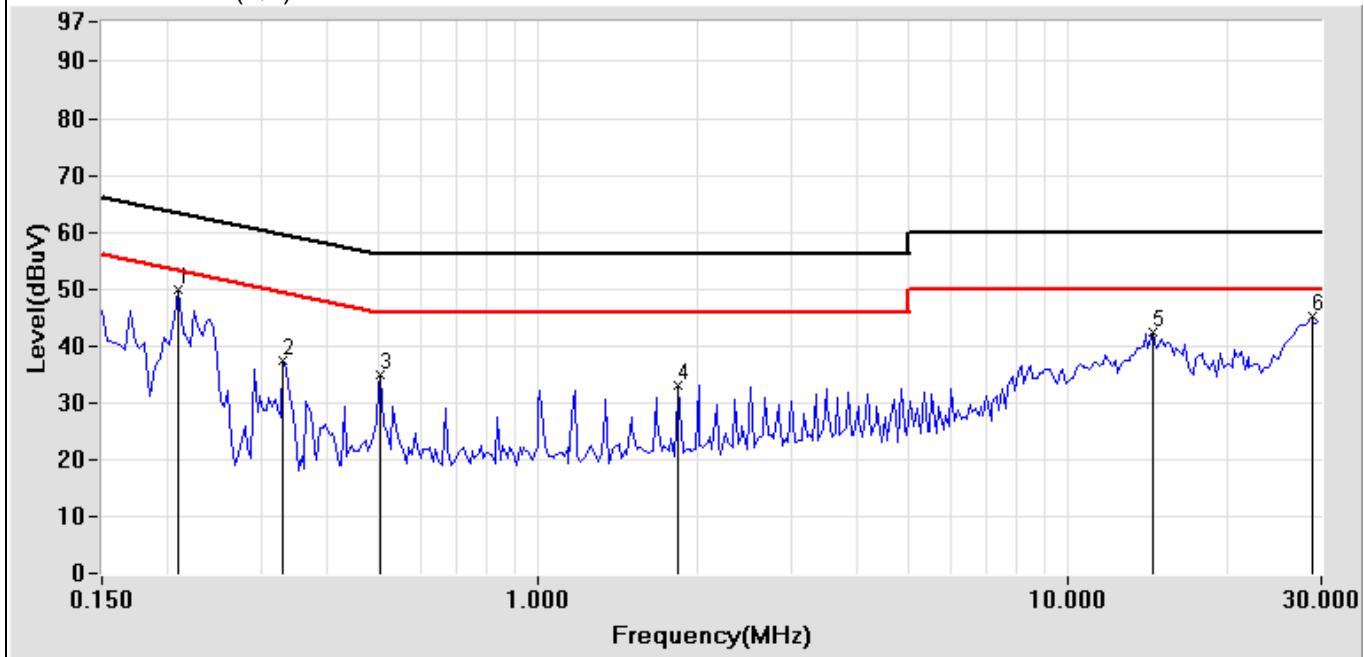
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-48 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6691 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.209	0.14	46.70	40.40	46.84	40.54	63.24	53.24	-16.40	-12.70
0.330	0.14	33.40	32.30	33.54	32.44	59.45	49.45	-25.91	-17.01
0.502	0.14	33.65	32.62	33.79	32.76	56.00	46.00	-22.21	-13.24
1.837	0.13	31.38	30.64	31.51	30.77	56.00	46.00	-24.49	-15.23
14.427	0.67	38.98	34.01	39.65	34.68	60.00	50.00	-20.35	-15.32
28.779	1.13	38.74	32.87	39.87	34.00	60.00	50.00	-20.13	-16.00

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 12: FULL LOAD (RKP-6K1UT-CMU1-48) (Power B)

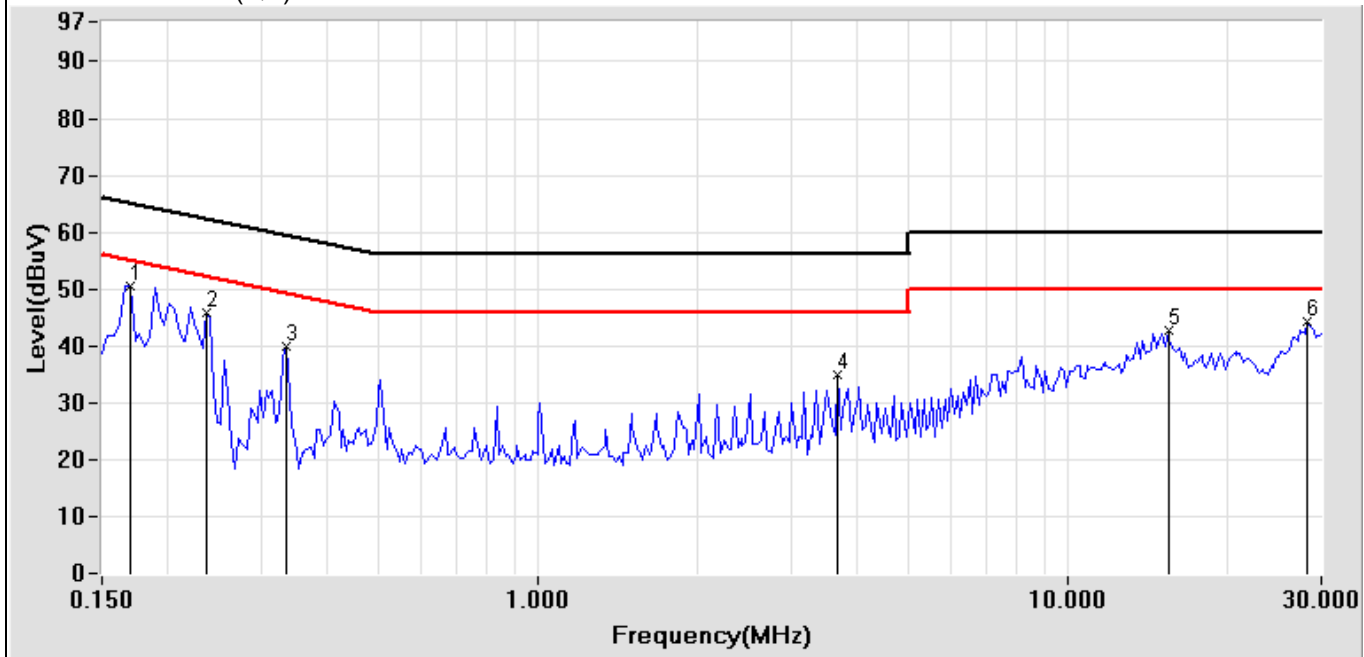
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-48 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6692 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.170	0.13	50.80	48.30	50.93	48.43	64.96	54.96	-14.03	-6.53
0.236	0.13	43.90	34.60	44.03	34.73	62.24	52.24	-18.21	-17.51
0.334	0.13	39.65	39.05	39.78	39.18	59.35	49.35	-19.57	-10.17
3.673	0.12	32.20	28.70	32.32	28.82	56.00	46.00	-23.68	-17.18
15.455	0.75	38.30	33.70	39.05	34.45	60.00	50.00	-20.95	-15.55
28.306	1.14	37.53	31.67	38.67	32.81	60.00	50.00	-21.33	-17.19

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 12: FULL LOAD (RKP-6K1UT-CMU1-48) (Power B)

Power Line Conducted Test Data

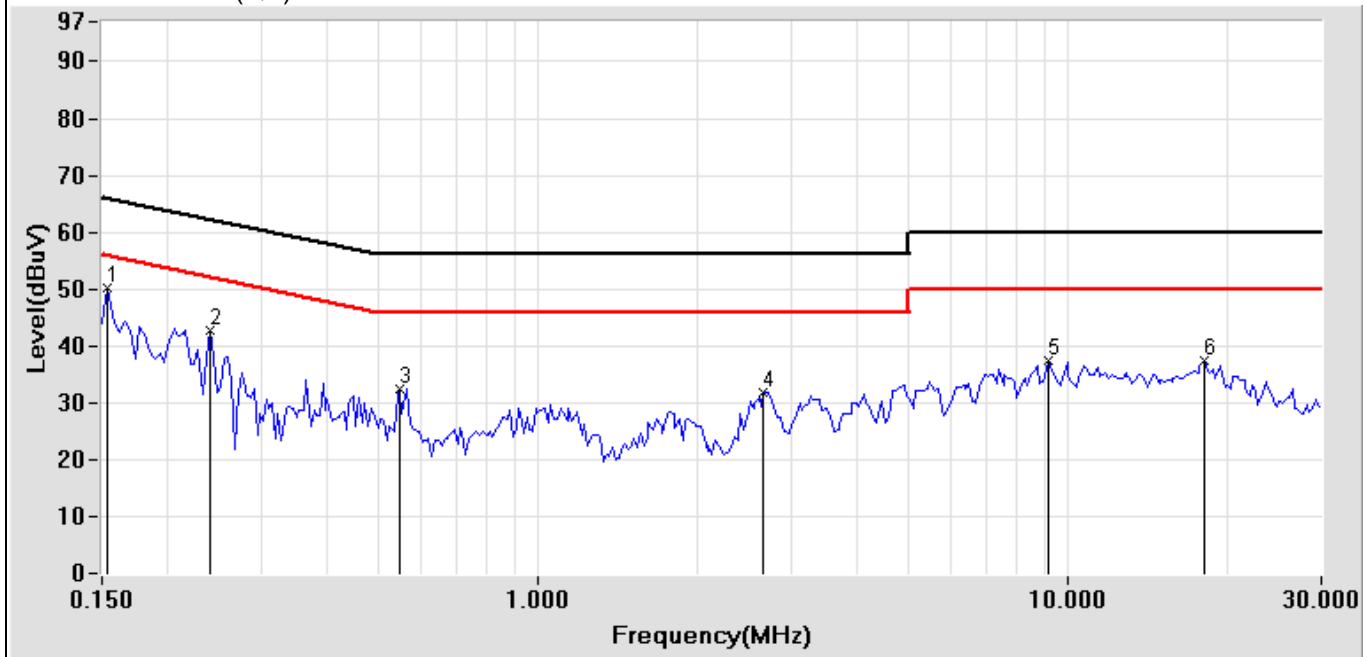
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-12 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6842 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.154	0.14	48.80	39.89	48.94	40.03	65.78	55.78	-16.84	-15.75
0.240	0.14	40.41	32.10	40.55	32.24	62.10	52.10	-21.55	-19.86
0.545	0.14	29.80	21.92	29.94	22.06	56.00	46.00	-26.06	-23.94
2.662	0.10	27.50	22.01	27.60	22.11	56.00	46.00	-28.40	-23.89
9.181	0.35	32.16	26.57	32.51	26.92	60.00	50.00	-27.49	-23.08
18.041	0.69	31.66	25.75	32.35	26.44	60.00	50.00	-27.65	-23.56

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 13: FULL LOAD (RKP-6K1UI-CMU1-12) (Power for RKP-CMU1)

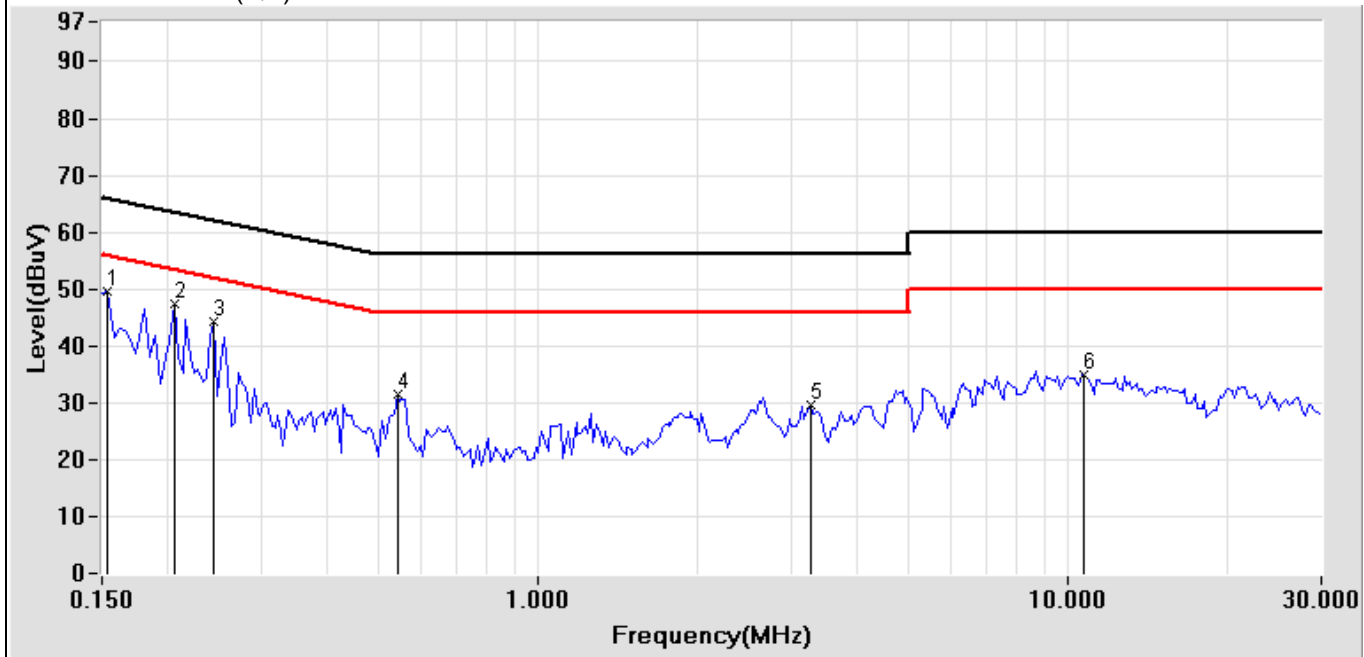
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-12 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6843 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.154	0.13	47.75	40.10	47.88	40.23	65.78	55.78	-17.90	-15.55
0.205	0.13	45.24	39.37	45.37	39.50	63.41	53.41	-18.04	-13.91
0.244	0.13	42.16	34.00	42.29	34.13	61.96	51.96	-19.67	-17.83
0.541	0.13	30.10	23.55	30.23	23.68	56.00	46.00	-25.77	-22.32
3.255	0.09	25.61	20.35	25.70	20.44	56.00	46.00	-30.30	-25.56
10.681	0.43	30.34	24.30	30.77	24.73	60.00	50.00	-29.23	-25.27

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 13: FULL LOAD (RKP-6K1UI-CMU1-12) (Power for RKP-CMU1)

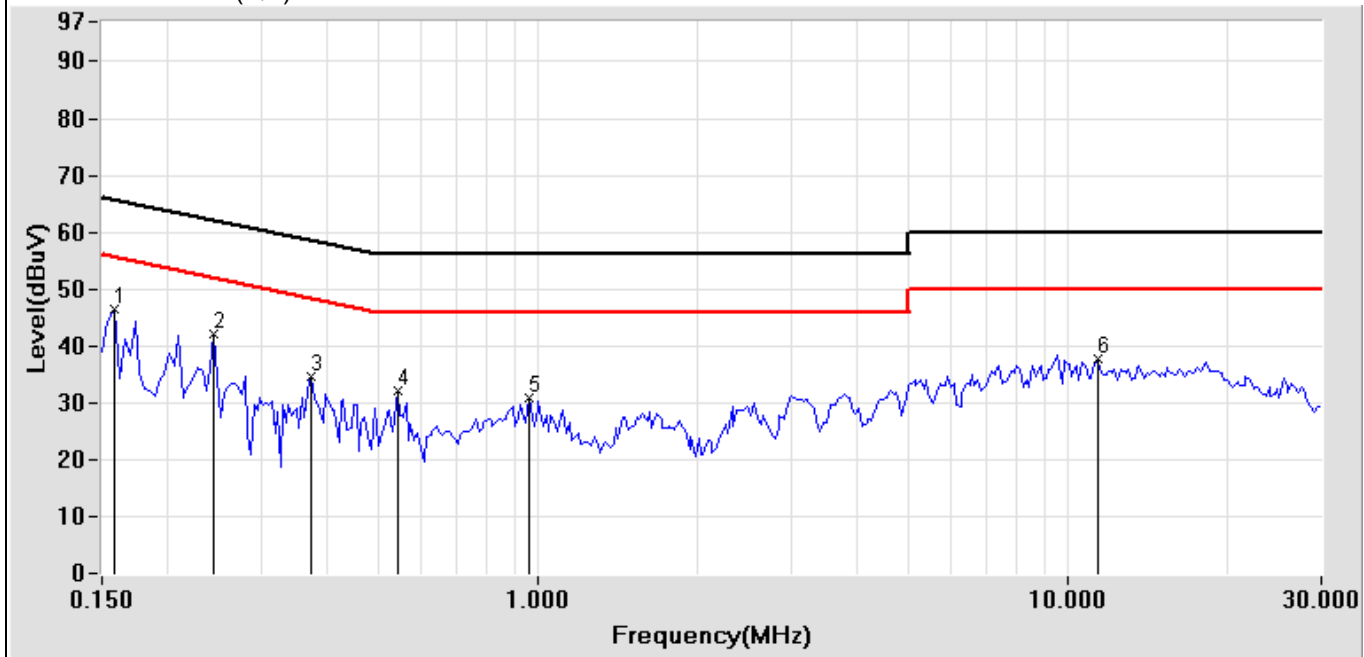
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-24 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6811 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dB μ V)		Emission Level (dB μ V)		Limits (dB μ V)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.158	0.14	46.10	35.40	46.24	35.54	65.57	55.57	-19.33	-20.03
0.244	0.14	40.00	30.27	40.14	30.41	61.96	51.96	-21.82	-21.55
0.373	0.14	30.90	22.12	31.04	22.26	58.43	48.43	-27.39	-26.17
0.541	0.14	29.52	21.62	29.66	21.76	56.00	46.00	-26.34	-24.24
0.962	0.15	26.50	20.00	26.65	20.15	56.00	46.00	-29.35	-25.85
11.373	0.46	32.27	26.08	32.73	26.54	60.00	50.00	-27.27	-23.46

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 14: FULL LOAD (RKP-6K1UI-CMU1-24) (Power for RKP-CMU1)

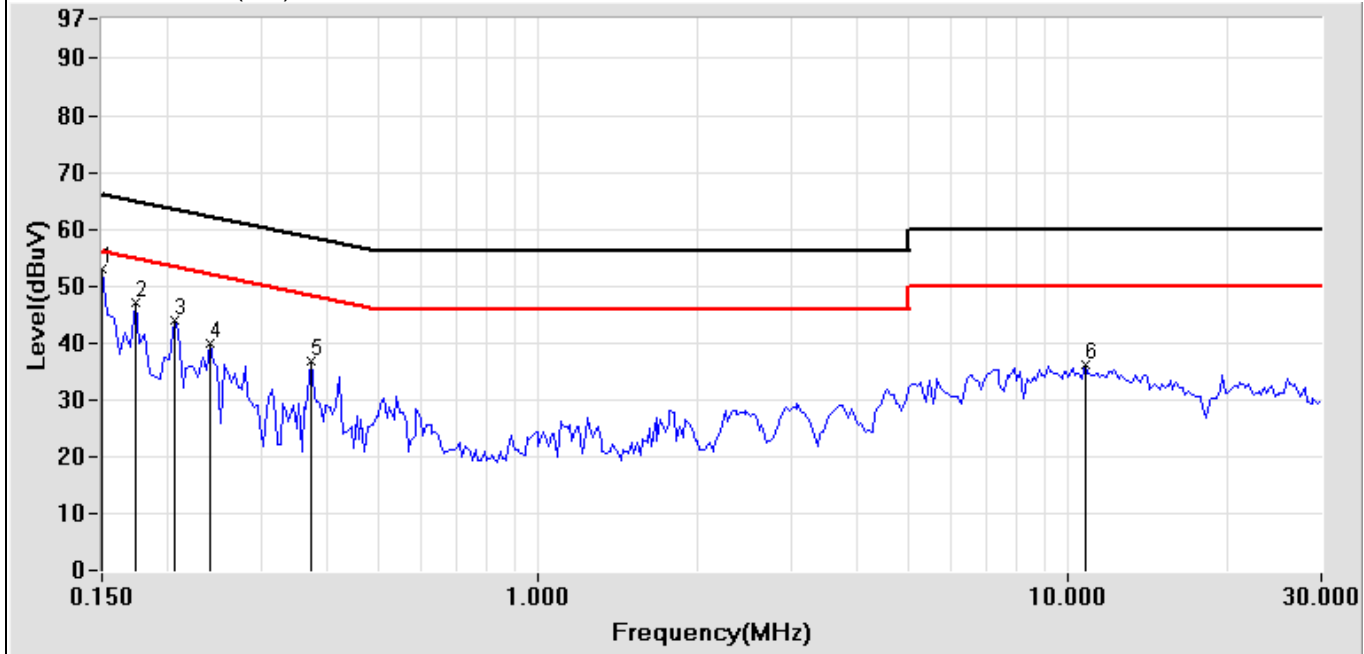
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-24 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6810 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.150	0.14	43.15	35.40	43.29	35.54	66.00	56.00	-22.71	-20.46
0.173	0.13	46.90	38.90	47.03	39.03	64.82	54.82	-17.79	-15.79
0.205	0.13	44.39	37.11	44.52	37.24	63.41	53.41	-18.89	-16.17
0.240	0.13	41.18	31.64	41.31	31.77	62.10	52.10	-20.79	-20.33
0.373	0.13	31.50	22.05	31.63	22.18	58.43	48.43	-26.80	-26.25
10.752	0.44	30.63	24.65	31.07	25.09	60.00	50.00	-28.93	-24.91

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 14: FULL LOAD (RKP-6K1UI-CMU1-24) (Power for RKP-CMU1)

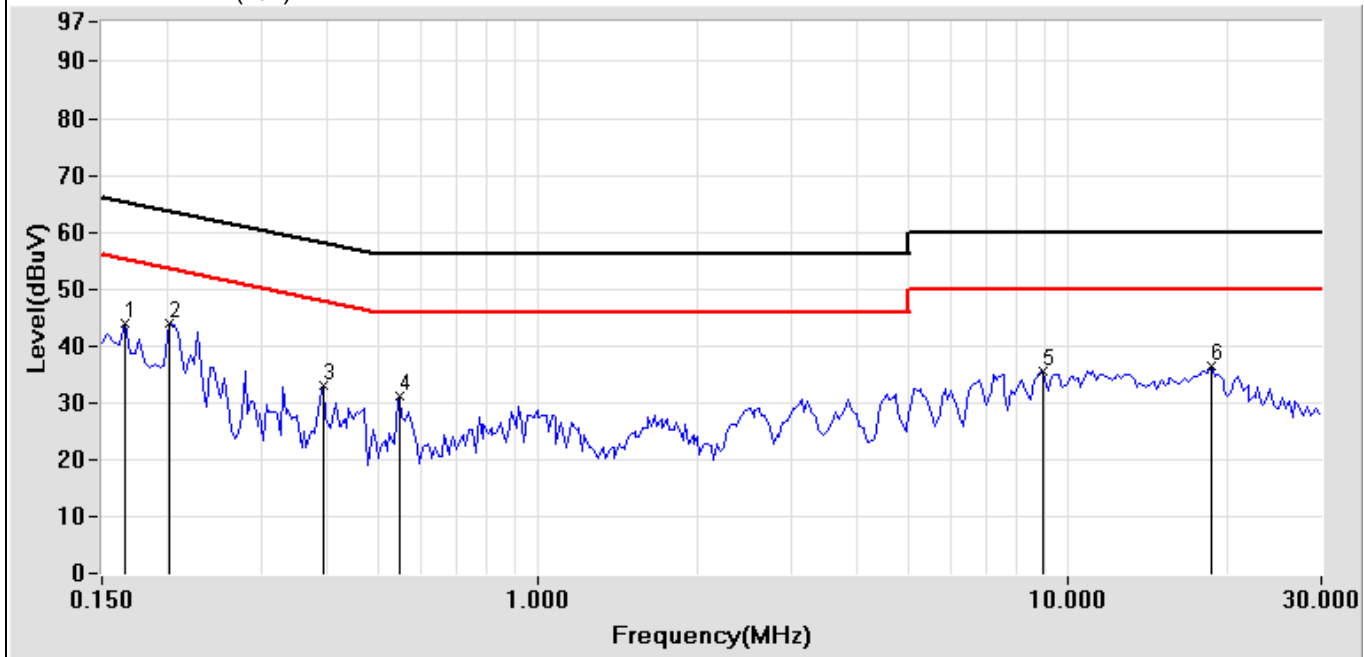
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-48 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6696 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.166	0.14	45.20	37.80	45.34	37.94	65.16	55.16	-19.82	-17.22
0.201	0.14	44.20	37.50	44.34	37.64	63.57	53.57	-19.23	-15.93
0.392	0.14	33.90	26.40	34.04	26.54	58.02	48.02	-23.98	-21.48
0.545	0.14	28.93	21.00	29.07	21.14	56.00	46.00	-26.93	-24.86
8.920	0.39	31.24	25.55	31.63	25.94	60.00	50.00	-28.37	-24.06
18.662	0.77	30.63	24.22	31.40	24.99	60.00	50.00	-28.60	-25.01

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 15: FULL LOAD (RKP-6K1UI-CMU1-48) (Power for RKP-CMU1)

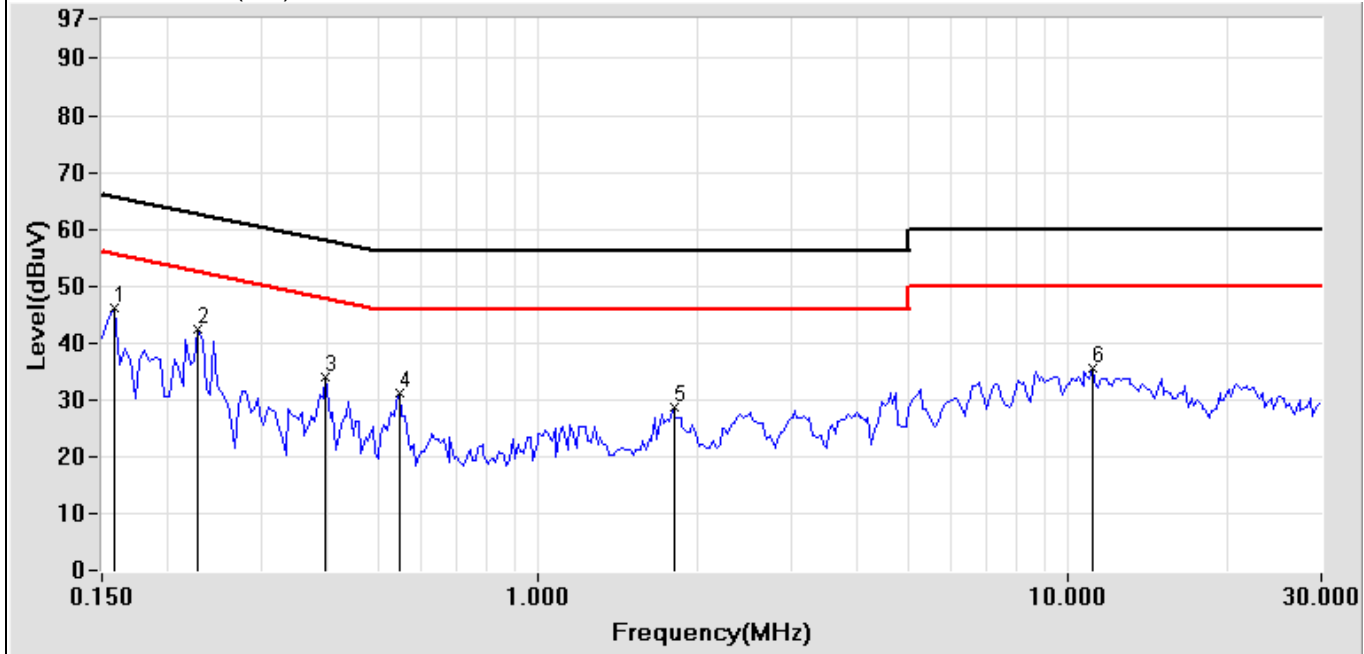
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-48 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6695 OPERATOR: Mark TEST SITE: Conduction1
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Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.158	0.13	44.77	36.60	44.90	36.73	65.57	55.57	-20.67	-18.84
0.228	0.13	39.80	32.00	39.93	32.13	62.52	52.52	-22.59	-20.39
0.396	0.13	32.40	25.00	32.53	25.13	57.94	47.94	-25.41	-22.81
0.548	0.13	29.58	22.65	29.71	22.78	56.00	46.00	-26.29	-23.22
1.806	0.12	23.33	15.93	23.45	16.05	56.00	46.00	-32.55	-29.95
11.080	0.54	29.34	22.61	29.88	23.15	60.00	50.00	-30.12	-26.85

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 15: FULL LOAD (RKP-6K1UI-CMU1-48) (Power for RKP-CMU1)

Power Line Conducted Test Data

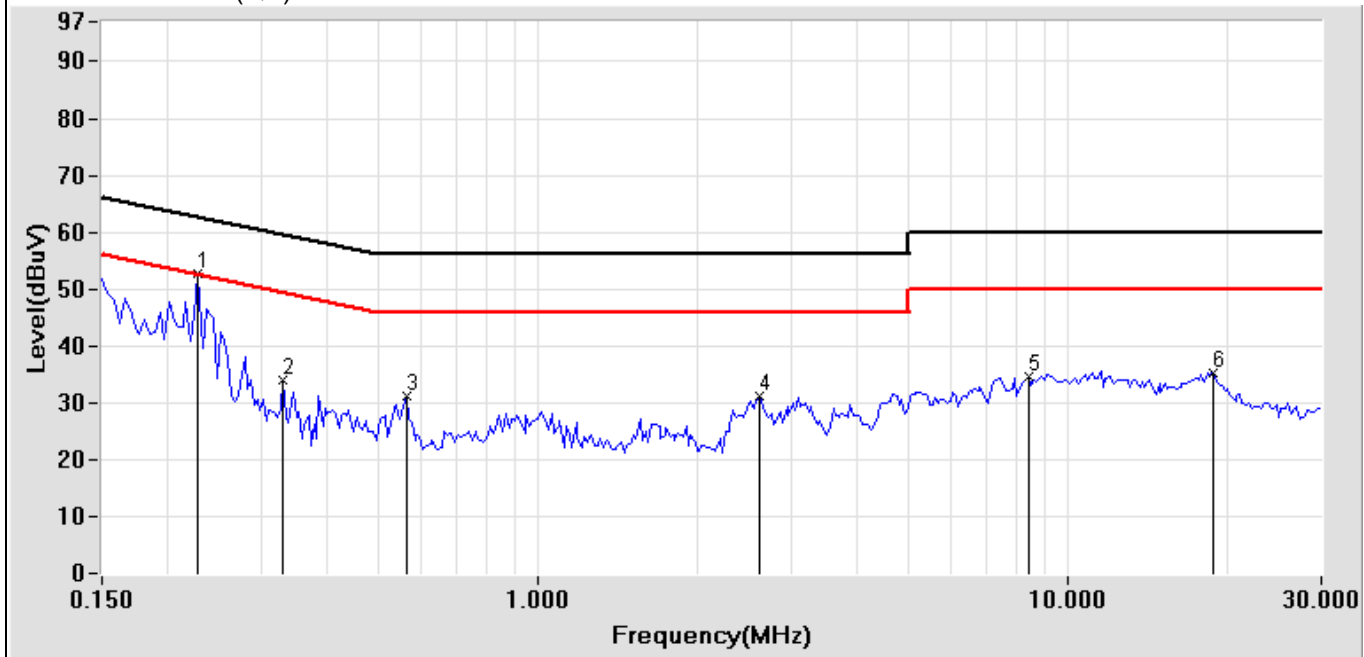
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-12 + RKP-CMU1 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6707 OPERATOR: Mark TEST SITE: Conduction1
--	--

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.228	0.14	52.06	44.06	52.20	44.20	62.52	52.52	-10.32	-8.32
0.330	0.14	29.40	20.14	29.54	20.28	59.45	49.45	-29.91	-29.17
0.564	0.14	32.20	28.10	32.34	28.24	56.00	46.00	-23.66	-17.76
2.603	0.10	26.81	21.34	26.91	21.44	56.00	46.00	-29.09	-24.56
8.392	0.34	29.40	22.71	29.74	23.05	60.00	50.00	-30.26	-26.95
18.685	0.77	29.70	23.90	30.47	24.67	60.00	50.00	-29.53	-25.33

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 16: FULL LOAD (RKP-6K1UT-CMU1-12) (Power for RKP-CMU1)

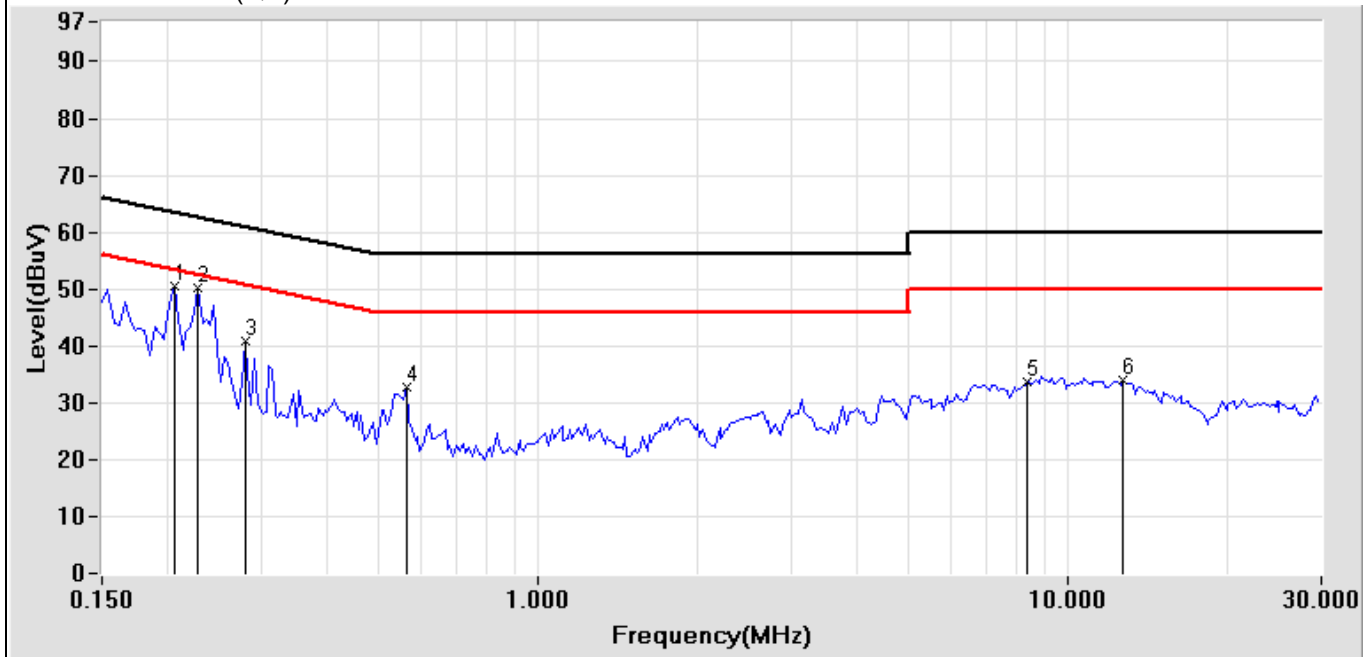
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-12 + RKP-CMU1 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6708 OPERATOR: Mark TEST SITE: Conduction1
--	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.205	0.13	46.11	40.04	46.24	40.17	63.41	53.41	-17.17	-13.24
0.228	0.13	47.00	39.00	47.13	39.13	62.52	52.52	-15.39	-13.39
0.279	0.13	35.70	28.30	35.83	28.43	60.85	50.85	-25.02	-22.42
0.564	0.13	29.10	23.70	29.23	23.83	56.00	46.00	-26.77	-22.17
8.349	0.35	28.39	21.60	28.74	21.95	60.00	50.00	-31.26	-28.05
12.685	0.62	28.20	22.30	28.82	22.92	60.00	50.00	-31.18	-27.08

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 16: FULL LOAD (RKP-6K1UT-CMU1-12) (Power for RKP-CMU1)

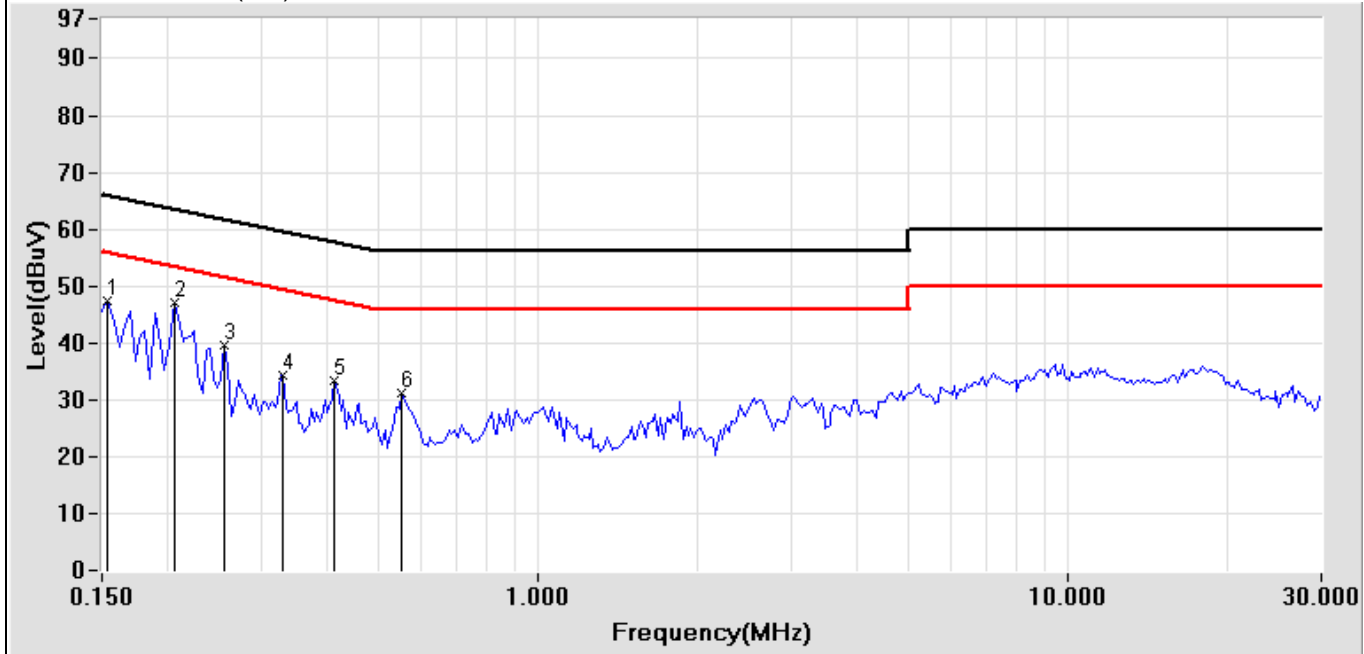
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-24 + RKP-CMU1 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6678 OPERATOR: Mark TEST SITE: Conduction1
--	--

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.154	0.14	47.15	39.85	47.29	39.99	65.78	55.78	-18.49	-15.79
0.205	0.14	45.80	39.35	45.94	39.49	63.41	53.41	-17.47	-13.92
0.255	0.14	37.03	27.92	37.17	28.06	61.59	51.59	-24.42	-23.53
0.330	0.14	30.90	20.70	31.04	20.84	59.45	49.45	-28.41	-28.61
0.412	0.14	27.75	20.07	27.89	20.21	57.61	47.61	-29.72	-27.40
0.552	0.14	28.43	21.45	28.57	21.59	56.00	46.00	-27.43	-24.41

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 17: FULL LOAD (RKP-6K1UT-CMU1-24) (Power for RKP-CMU1)

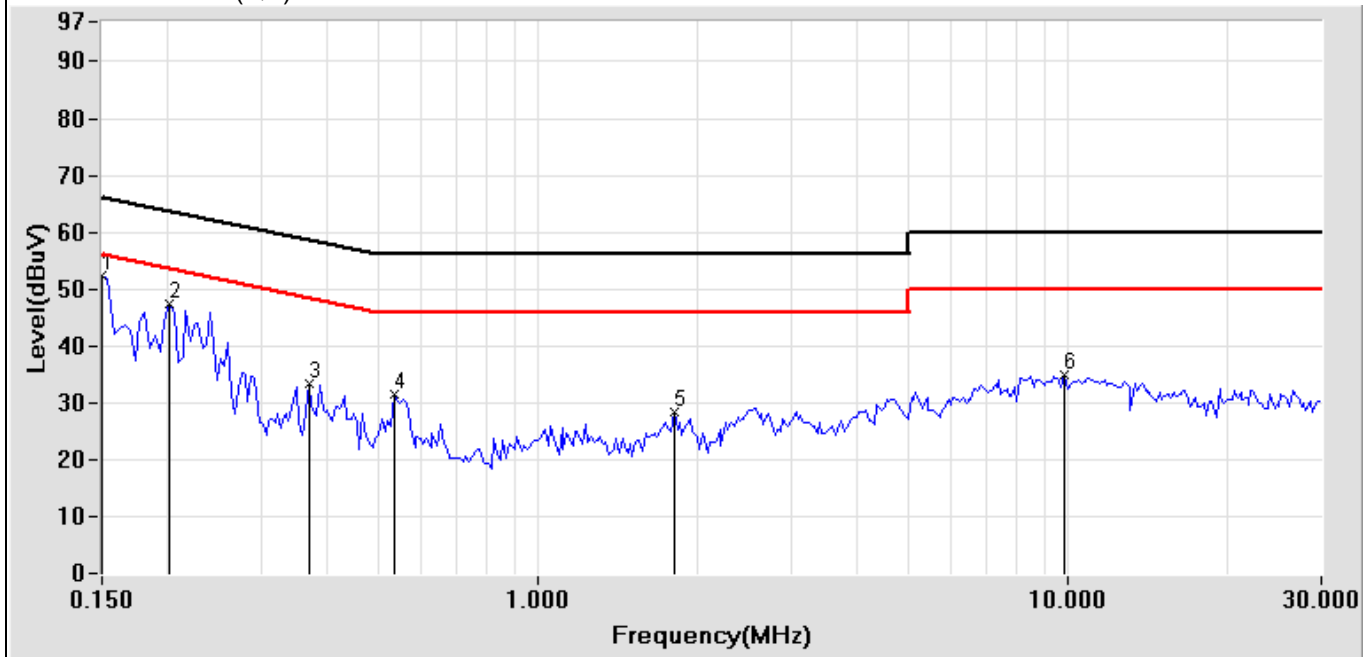
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-CMU1 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6677 OPERATOR: Mark TEST SITE: Conduction1
--	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.150	0.14	47.33	39.70	47.47	39.84	66.00	56.00	-18.53	-16.16
0.201	0.13	48.30	42.50	48.43	42.63	63.57	53.57	-15.14	-10.94
0.369	0.13	28.30	19.19	28.43	19.32	58.52	48.52	-30.09	-29.20
0.533	0.13	28.35	22.10	28.48	22.23	56.00	46.00	-27.52	-23.77
1.802	0.12	24.59	17.40	24.71	17.52	56.00	46.00	-31.29	-28.48
9.814	0.46	28.44	22.09	28.90	22.55	60.00	50.00	-31.10	-27.45

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 17: FULL LOAD (RKP-6K1UT-CMU1-24) (Power for RKP-CMU1)

Power Line Conducted Test Data

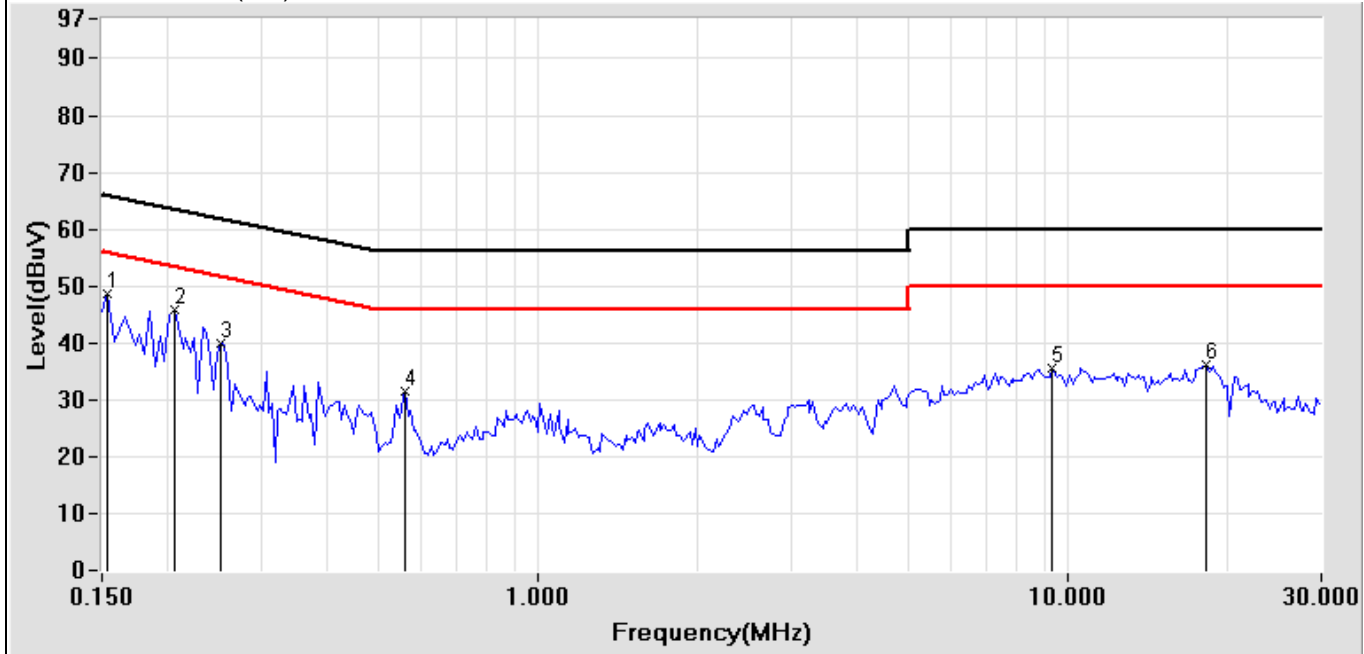
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-48 + RKP-CMU1 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Line DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6687 OPERATOR: Mark TEST SITE: Conduction1
--	--

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.154	0.14	49.14	42.31	49.28	42.45	65.78	55.78	-16.50	-13.33
0.205	0.14	48.87	42.74	49.01	42.88	63.41	53.41	-14.40	-10.53
0.252	0.14	38.80	30.10	38.94	30.24	61.69	51.69	-22.75	-21.45
0.560	0.14	28.35	21.60	28.49	21.74	56.00	46.00	-27.51	-24.26
9.318	0.42	30.19	23.02	30.61	23.44	60.00	50.00	-29.39	-26.56
18.205	0.76	30.84	25.33	31.60	26.09	60.00	50.00	-28.40	-23.91

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 18: FULL LOAD (RKP-6K1UT-CMU1-48) (Power for RKP-CMU1)

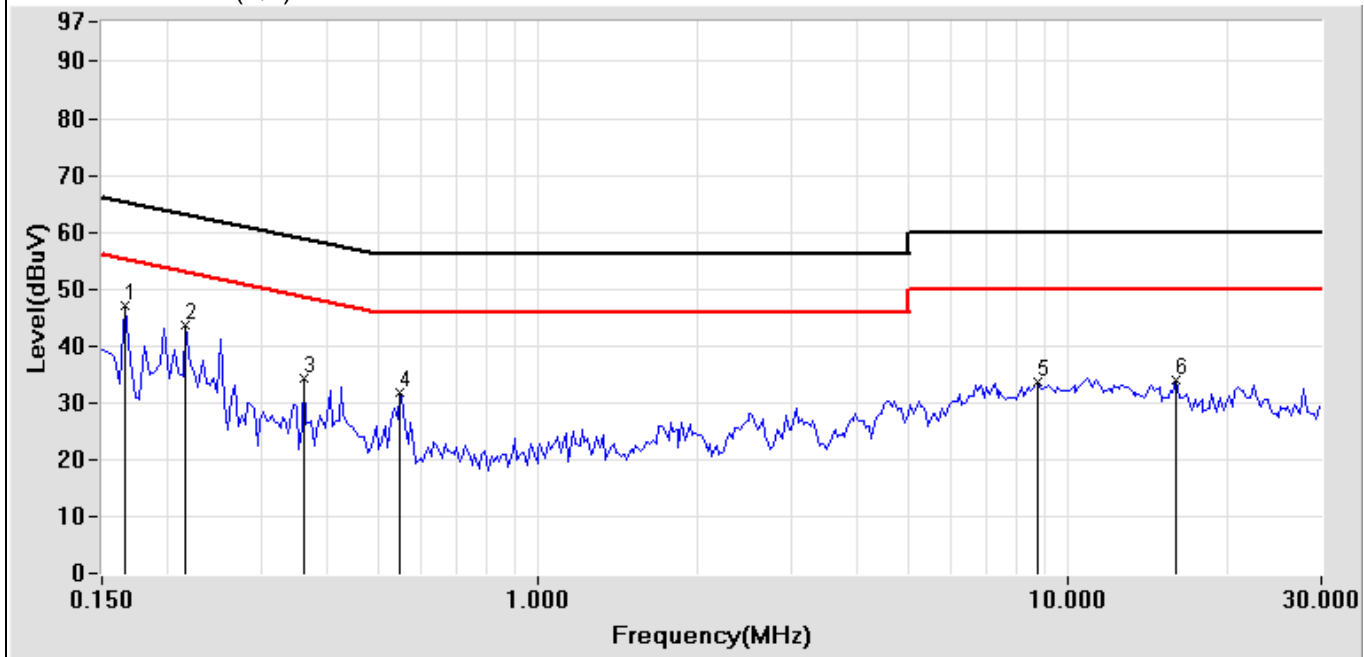
Power Line Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-48 + RKP-CMU1 RATING: 230V/50Hz Temperature: 25.4 °C Humidity: 60 %	POLARITY: Neutral DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6688 OPERATOR: Mark TEST SITE: Conduction1
--	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.166	0.13	45.10	36.30	45.23	36.43	65.16	55.16	-19.93	-18.73
0.216	0.13	40.26	32.37	40.39	32.50	62.97	52.97	-22.58	-20.47
0.361	0.13	28.47	18.12	28.60	18.25	58.71	48.71	-30.11	-30.46
0.548	0.13	28.41	21.40	28.54	21.53	56.00	46.00	-27.46	-24.47
8.759	0.38	29.05	22.02	29.43	22.40	60.00	50.00	-30.57	-27.60
15.994	0.76	26.80	21.29	27.56	22.05	60.00	50.00	-32.44	-27.95

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: CISPR 22-B(QP).LMT



Test Mode: Mode 18: FULL LOAD (RKP-6K1UT-CMU1-48) (Power for RKP-CMU1)

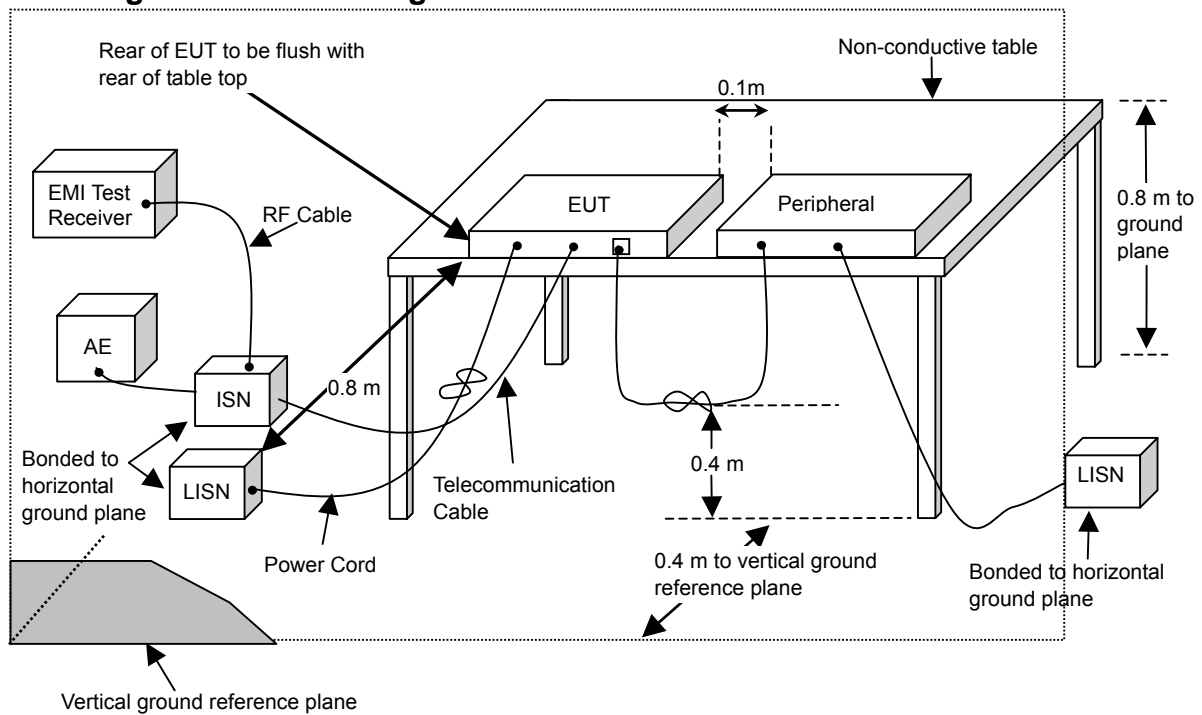
3 Telecommunication Ports Conducted Emission Measurement

3.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCS 30	830245/027	2012/10/05
RF Cable	HARBOUR	RG58/U	CBL40	2012/11/09
L.I.S.N.	Schwarzbeck	NNLK8121	8121417	2012/07/16
L.I.S.N.	Rohde & Schwarz	ESH3-Z5	100176	2013/02/28
ISN	FCC	FCC-TLISN-T8-02	20417	2012/10/06
ISN	FCC	FCC-TLISN-T4-02	20414	2012/10/06

Note: The above equipments are within the valid calibration period.

3.2 Block Diagram of Test Configuration



3.3 Conducted Limit (Telecommunication ports)

- Voltage Limits for Class A equipment
 Current Limits for Class A equipment

Frequency range (MHz)	Voltage Limits (dB μ V)		Current Limits (dB μ A)	
	Q.P. (Quasi-Peak)	A.V. (Average)	Q.P. (Quasi-Peak)	A.V. (Average)
0.15 ~ 0.50	97 to 87	84 to 74	53 to 43	40 to 30
0.50 ~ 30	87	74	43	30

NOTE 1 – The limits decrease linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.
NOTE 2 – The current and voltage disturbance limits are derived for use with an impedance stabilization network (ISN) which presents a common mode (asymmetric mode) impedance of 150 Ω to the telecommunication port under test (conversion factor is $20 \log_{10} 150 / 1 = 44$ dB).

- Voltage Limits for Class B equipment
 Current Limits for Class B equipment

Frequency range (MHz)	Voltage Limits (dB μ V)		Current Limits (dB μ A)	
	Q.P. (Quasi-Peak)	A.V. (Average)	Q.P. (Quasi-Peak)	A.V. (Average)
0.15 ~ 0.50	84 to 74	74 to 64	40 to 30	30 to 20
0.50 ~ 30	74	64	30	20

NOTE 1 – The limits decrease linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5MHz.
NOTE 2 – The current and voltage disturbance limits are derived for use with an impedance stabilization network (ISN) which presents a common mode (asymmetric mode) impedance of 150 Ω to the telecommunication port under test (conversion factor is $20 \log_{10} 150 / 1 = 44$ dB).

3.4 Instrument configuration

- 3.4.1 Set the EMI test receiver frequency range from 150 kHz to 30 MHz.
3.4.2 Set the EMI test receiver bandwidth at 9kHz.
3.4.3 Set the EMI test receiver detector as Quasi-Peak (Q.P.) and Average (AV).

3.5 Configuration of Measurement

- 3.5.1 Measurement is made at telecommunication ports using ISNs with longitudinal conversion losses (LCL) as defined in EN 55022.
- 3.5.2 The manufacturer shall demonstrate that the equipment does not exceed the Conducted limits of Telecommunication ports when tested with the ISN according to the cable category specified by the equipment documentation provided to the user.
- 3.5.3 In order to make reliable emission measurements representative of high LAN utilization it is only necessary to create a condition of LAN utilization in excess of 10% and sustain that level for a minimum of 250ms. The content of the test traffic should consist of both periodic and pseudo-random messages in order to emulate realistic types of data transmission (e.g. random: files compressed or encrypted; periodic: uncompressed graphic files, memory dumps, screen updates, disk images).
- a) Voltage measurement at balanced telecommunication ports intended for connection to unscreened balanced pairs. (See EN 55022)
 - b) Current measurements at balanced telecommunication ports intended for connection to unscreened balanced pairs. (See EN 55022)
 - c) Voltage measurements at telecommunication ports intended for connection to screened cables or to coaxial cables. (See EN 55022)
 - d) Current measurements at telecommunication ports intended for connection to screened cables or to coaxial cables. (See EN 55022)
 - e) Measurements at telecommunication ports intended for connection to cables containing more than four balanced pairs or to unbalanced cables. (See EN 55022)
- 3.5.4 Recording of measurements
- Of those disturbances above ($L-20\text{dB}$), where L is the limit level in logarithmic units, record at least the disturbance levels and the frequencies of the six highest disturbances from each mains port and each telecommunication port, which comprise the EUT. For the mains port, the current-carrying conductor for each disturbance shall be identified.

3.6 Test Result

PASS.

The final test data is shown as following pages.

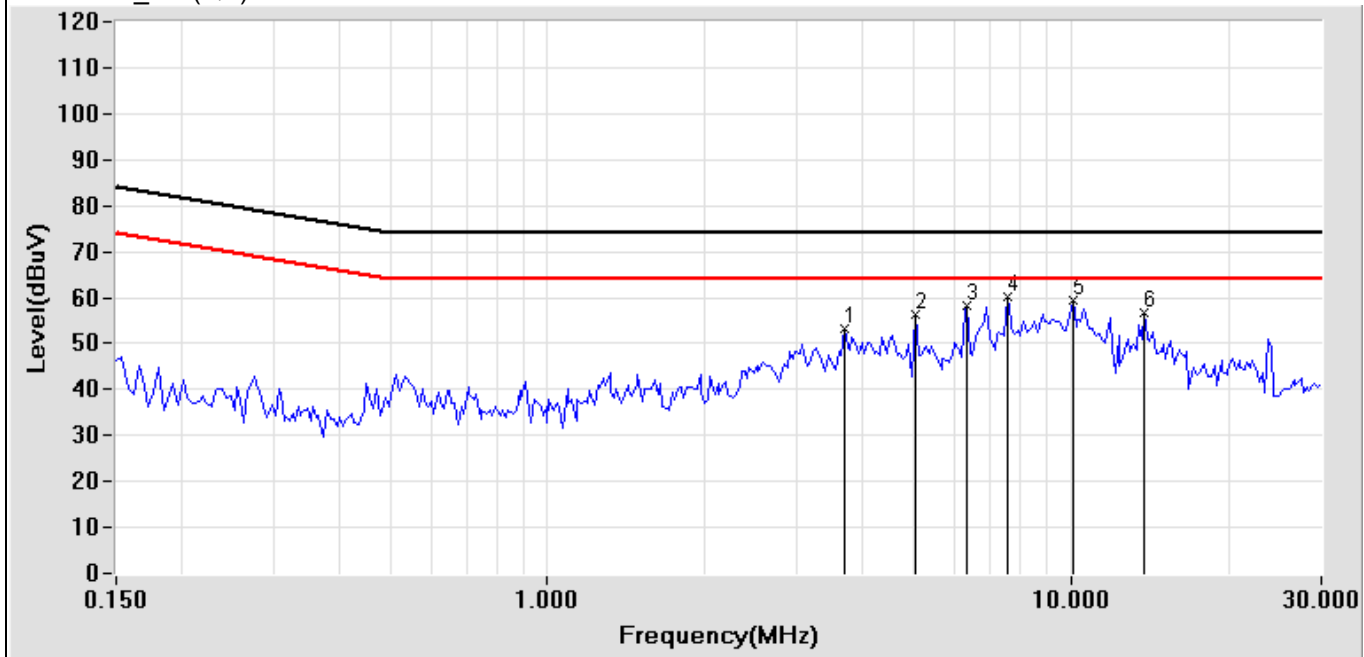
Telecommunication Ports Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-12 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6841 OPERATOR: Mark TEST SITE: Conduction1
---	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
3.693	10.04	42.50	31.50	52.54	41.54	74.00	64.00	-21.46	-22.46
5.052	10.11	45.40	30.10	55.51	40.21	74.00	64.00	-18.49	-23.79
6.302	10.12	47.90	30.90	58.02	41.02	74.00	64.00	-15.98	-22.98
7.556	10.14	49.20	36.20	59.34	46.34	74.00	64.00	-14.66	-17.66
10.041	10.16	41.32	35.30	51.48	45.46	74.00	64.00	-22.52	-18.54
13.748	10.27	46.30	34.00	56.57	44.27	74.00	64.00	-17.43	-19.73

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: ISN_V-B(QP).LMT



Test Mode: Mode 1: LAN Mode (RKP-6K1UI-CMU1-12) (10 Mbps)

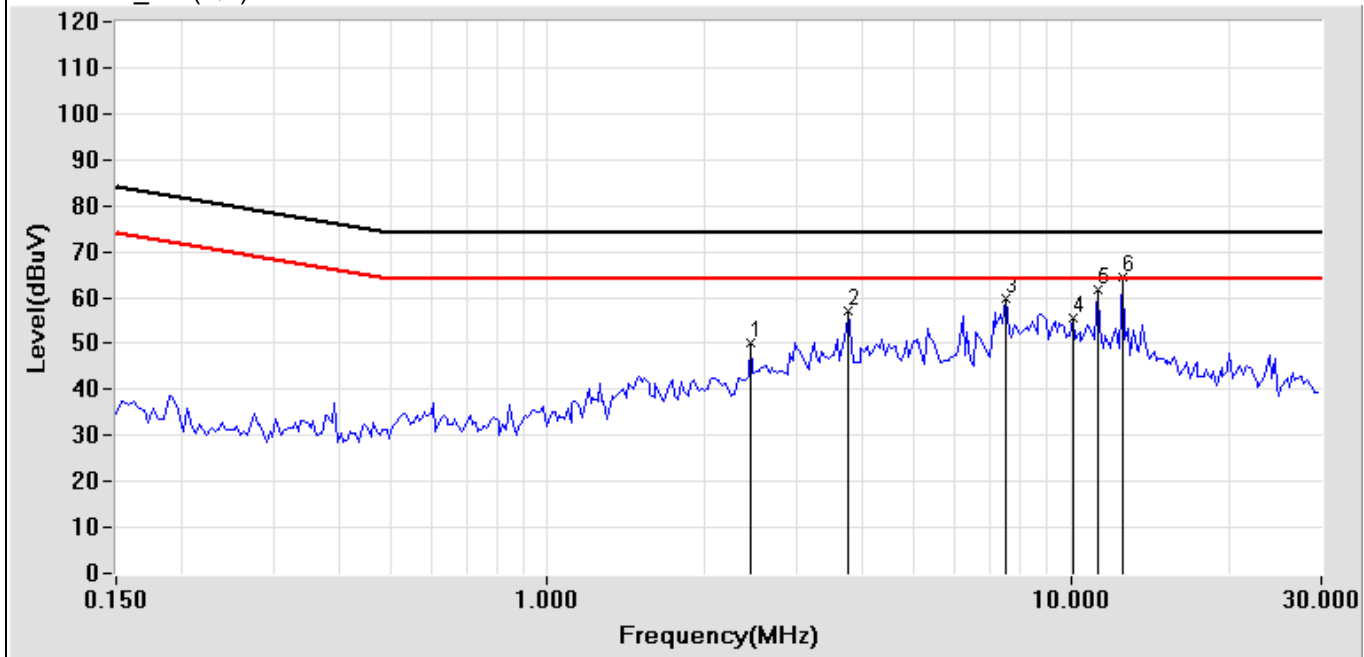
Telecommunication Ports Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-24 RATING: 230V/50Hz Temperature: 22.9 °C Humidity: 67 %	POLARITY: DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6809 OPERATOR: Mark TEST SITE: Conduction1
---	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
2.443	10.05	36.03	26.37	46.08	36.42	74.00	64.00	-27.92	-27.58
3.752	10.05	44.95	31.44	55.00	41.49	74.00	64.00	-19.00	-22.51
7.494	10.13	48.70	35.10	58.83	45.23	74.00	64.00	-15.17	-18.77
10.048	10.16	43.10	33.13	53.26	43.29	74.00	64.00	-20.74	-20.71
11.252	10.21	48.55	34.11	58.76	44.32	74.00	64.00	-15.24	-19.68
12.498	10.24	51.59	35.24	61.83	45.48	74.00	64.00	-12.17	-18.52

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: ISN_V-B(QP).LMT



Test Mode: Mode 2: LAN Mode (RKP-6K1UI-CMU1-24) (10 Mbps)

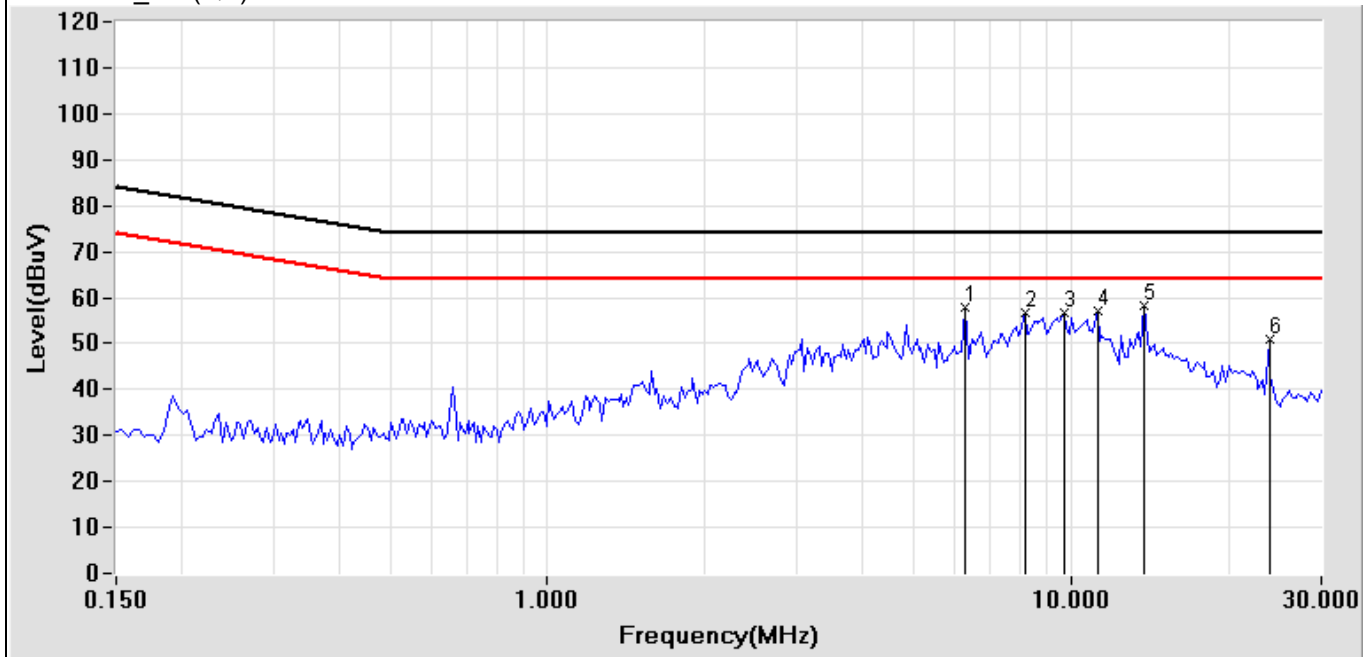
Telecommunication Ports Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-48 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6838 OPERATOR: Mark TEST SITE: Conduction1
---	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
6.252	10.12	51.40	34.20	61.52	44.32	74.00	64.00	-12.48	-19.68
8.150	10.14	45.10	35.90	55.24	46.04	74.00	64.00	-18.76	-17.96
9.677	10.16	43.60	34.90	53.76	45.06	74.00	64.00	-20.24	-18.94
11.248	10.19	49.60	35.80	59.79	45.99	74.00	64.00	-14.21	-18.01
13.752	10.29	45.90	33.30	56.19	43.59	74.00	64.00	-17.81	-20.41
23.892	10.42	38.91	22.50	49.33	32.92	74.00	64.00	-24.67	-31.08

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: ISN_V-B(QP).LMT



Test Mode: Mode 3: LAN Mode (RKP-6K1UI-CMU1-48) (10 Mbps)

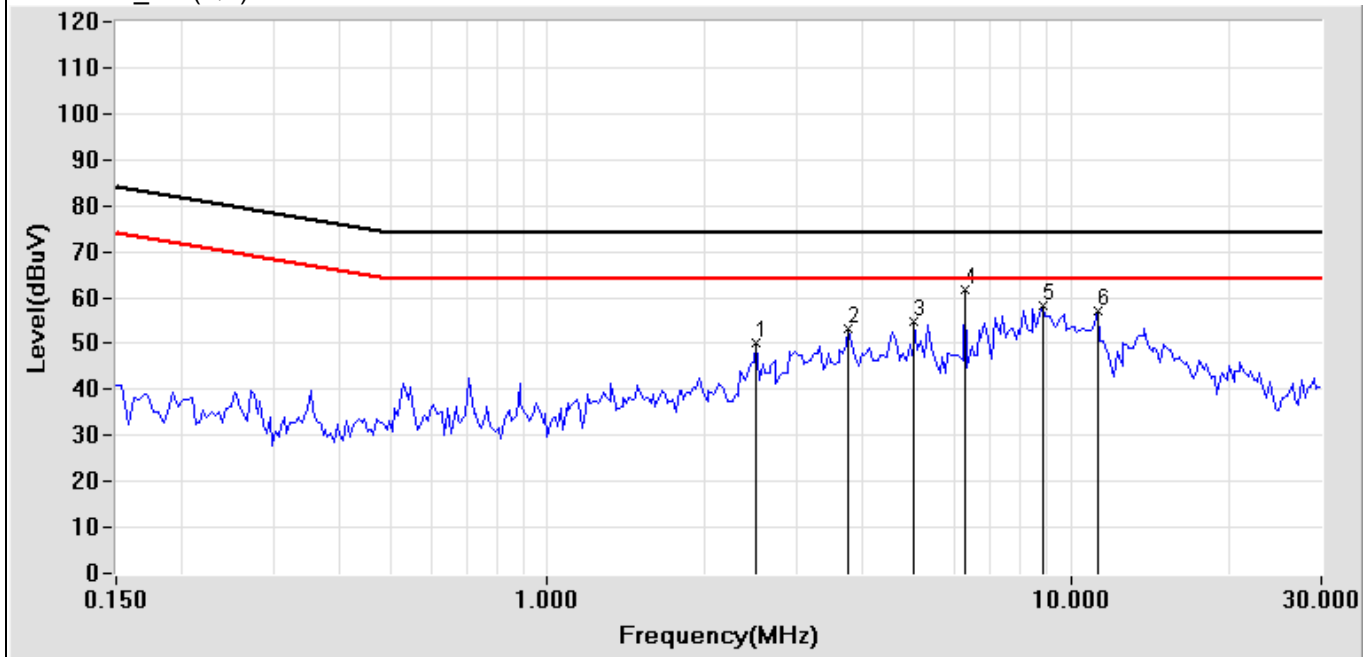
Telecommunication Ports Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-12 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6840 OPERATOR: Mark TEST SITE: Conduction1
---	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
2.505	10.04	43.70	30.80	53.74	40.84	74.00	64.00	-20.26	-23.16
3.755	10.05	44.80	32.70	54.85	42.75	74.00	64.00	-19.15	-21.25
5.002	10.11	43.20	30.08	53.31	40.19	74.00	64.00	-20.69	-23.81
6.252	10.12	50.40	35.20	60.52	45.32	74.00	64.00	-13.48	-18.68
8.802	10.15	46.80	37.00	56.95	47.15	74.00	64.00	-17.05	-16.85
11.197	10.19	44.43	33.21	54.62	43.40	74.00	64.00	-19.38	-20.60

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: ISN_V-B(QP).LMT



Test Mode: Mode 4: LAN Mode (RKP-6K1UT-CMU1-12) (10 Mbps)

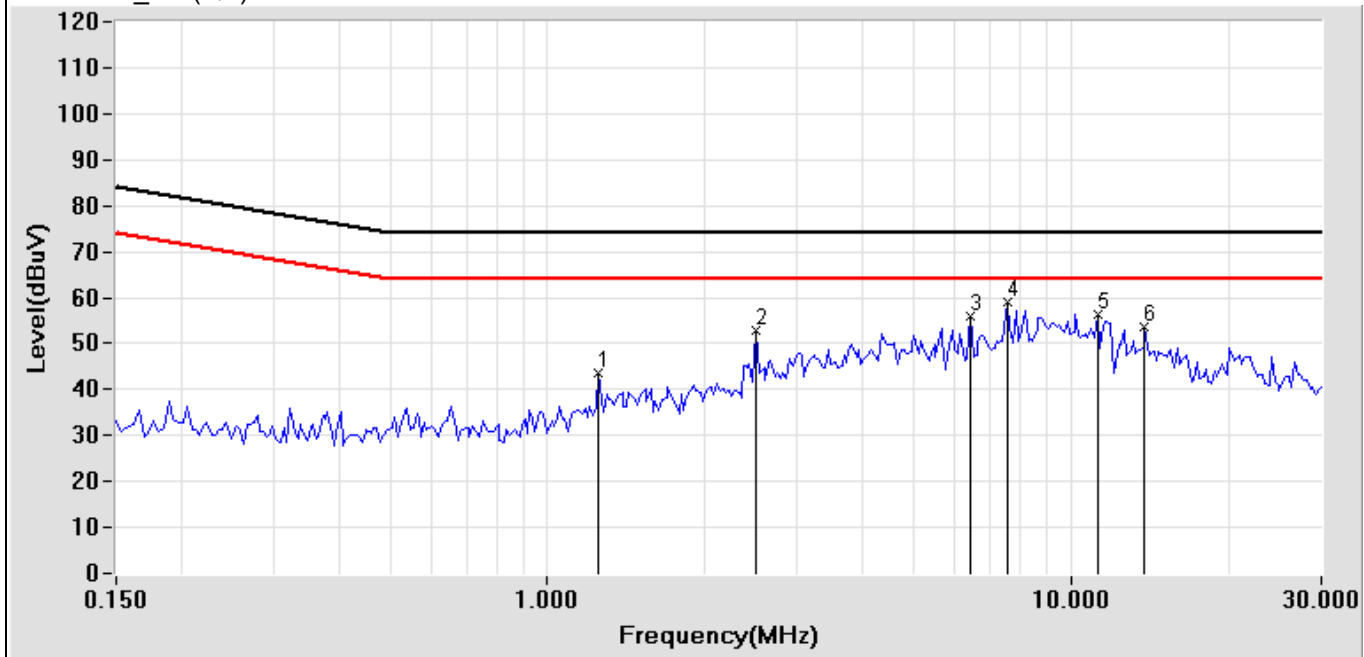
Telecommunication Ports Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-24 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6835 OPERATOR: Mark TEST SITE: Conduction1
---	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
1.252	10.10	31.90	23.96	42.00	34.06	74.00	64.00	-32.00	-29.94
2.502	10.04	42.69	29.80	52.73	39.84	74.00	64.00	-21.27	-24.16
6.412	10.12	43.30	31.90	53.42	42.02	74.00	64.00	-20.58	-21.98
7.552	10.14	48.21	35.91	58.35	46.05	74.00	64.00	-15.65	-17.95
11.197	10.19	44.59	32.97	54.78	43.16	74.00	64.00	-19.22	-20.84
13.752	10.29	44.70	33.14	54.99	43.43	74.00	64.00	-19.01	-20.57

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: ISN_V-B(QP).LMT



Test Mode: Mode 5: LAN Mode (RKP-6K1UT-CMU1-24) (10 Mbps)

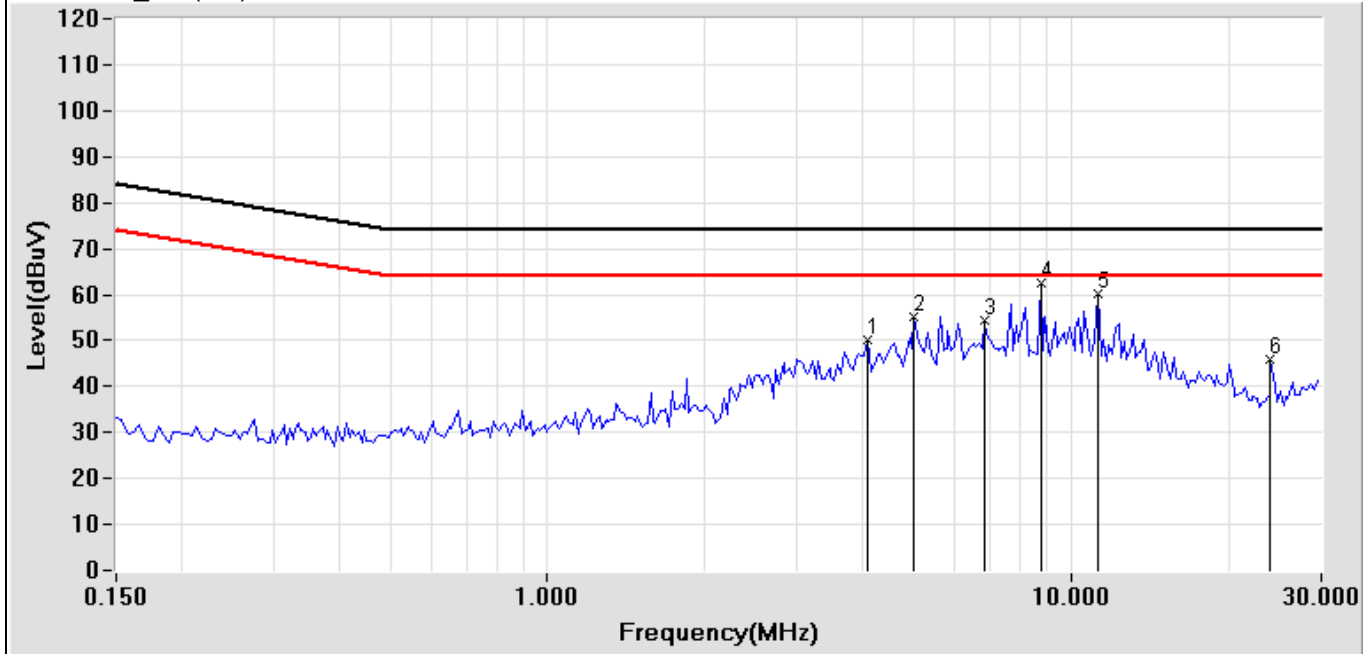
Telecommunication Ports Conducted Test Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-48 RATING: 230V/50Hz Temperature: 25.3 °C Humidity: 63 %	POLARITY: DISTANCE: Serial No.: FILE/DATA#: MEAN WELL.emi/6839 OPERATOR: Mark TEST SITE: Conduction1
---	---

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)		Emission Level (dBμV)		Limits (dBμV)		Margin (dB)	
		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
4.072	10.06	38.50	26.50	48.56	36.56	74.00	64.00	-25.44	-27.44
5.002	10.11	44.60	32.10	54.71	42.21	74.00	64.00	-19.29	-21.79
6.845	10.13	44.00	31.70	54.13	41.83	74.00	64.00	-19.87	-22.17
8.748	10.15	51.80	35.99	61.95	46.14	74.00	64.00	-12.05	-17.86
11.252	10.21	49.50	34.50	59.71	44.71	74.00	64.00	-14.29	-19.29
24.002	10.42	28.71	16.66	39.13	27.08	74.00	64.00	-34.87	-36.92

Remark:
 1. All readings are Quasi-Peak and Average values.
 2. Factor = Insertion Loss + Cable Loss.

LIMIT: ISN_V-B(QP).LMT



Test Mode: Mode 6: LAN Mode (RKP-6K1UT-CMU1-48) (10 Mbps)

4 Radiated Emission Measurement

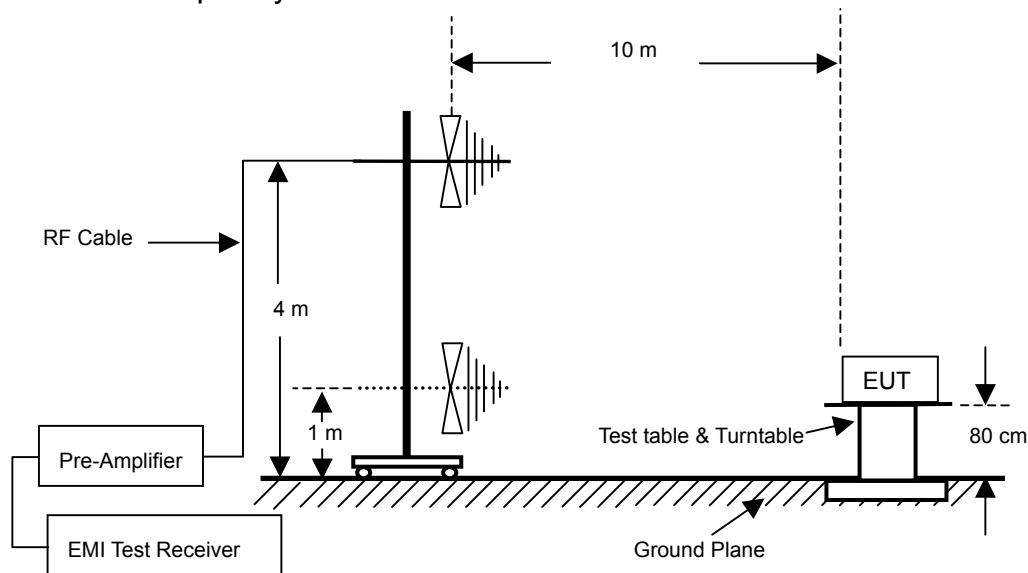
4.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCS30	100135	2011/11/24
Biconical Antenna	Schwarzbeck	BBA 9106	VHA 9103-2418	2012/03/29
Log Antenna	Schwarzbeck	UHALP 9108 A	0738	2012/03/29
Pre-Amplifier	Agilent	8447D	1937A01903	2011/12/06
RF Cable	PACIFIC	CBL41	CBL41	2011/11/18

Note: The above equipments are within the valid calibration period.

4.2 Block Diagram of Test Configuration

Measurement Frequency under 1GHz



4.3 Radiated Limit

EN 55011

Frequency (MHz)	<input checked="" type="checkbox"/> Group 1, Class A		<input type="checkbox"/> Group 1, Class B
	<input checked="" type="checkbox"/> Rated input power of ≤ 20 kVA	<input type="checkbox"/> Rated input power of > 20 kVA	
	Quasi-Peak dB(μ V/m)	Quasi-Peak dB(μ V/m)	Quasi-Peak dB(μ V/m)
30 ~ 230	40.0	50.0	30.0
230 ~ 1000	47.0	50.0	37.0

EN 55022

Frequency (MHz)	<input checked="" type="checkbox"/> Class A	<input type="checkbox"/> Class B
	Quasi-Peak dB(μ V/m)	Quasi-Peak dB(μ V/m)
30 ~ 230	40.0	30.0
230 ~ 1000	47.0	37.0

EN 61000-6-4

Frequency (MHz)	Quasi-Peak dB(μ V/m)
30 ~ 230	40.0
230 ~ 1000	47.0

4.4 Instrument Configuration

- 4.4.1 Set the EMI test receiver frequency range from 30 MHz to 1000 MHz.
- 4.4.2 Set the EMI test receiver bandwidth at 120 kHz.
- 4.4.3 Set the EMI test receiver detector as Quasi-Peak (Q.P.).

4.5 Configuration of Measurement

- 4.5.1 The EUT was placed on a non-conductive table whose total height equaled 80cm. The turntable can rotate 360 degree to determine the position of the maximum emission level.
- 4.5.2 The EUT was set 10 meters away from the receiving antenna that was mounted on a non-conductive mast. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level.
- 4.5.3 The initial testing identified the frequency that has the highest disturbance relative to the limit while operating the EUT in typical modes of operation and cable positions in a test setup representative of typical system configuration.
- 4.5.4 The identification of the frequency of highest emission with respect to the limit was found by investigating emissions at a number of significant frequencies. The probable frequency of maximum emission had been found and that the associated cable and EUT configuration and mode of operation had been identified.

4.6 Test Result

PASS.

The final test data is shown as following pages.

Radiated Emission Measurement Data

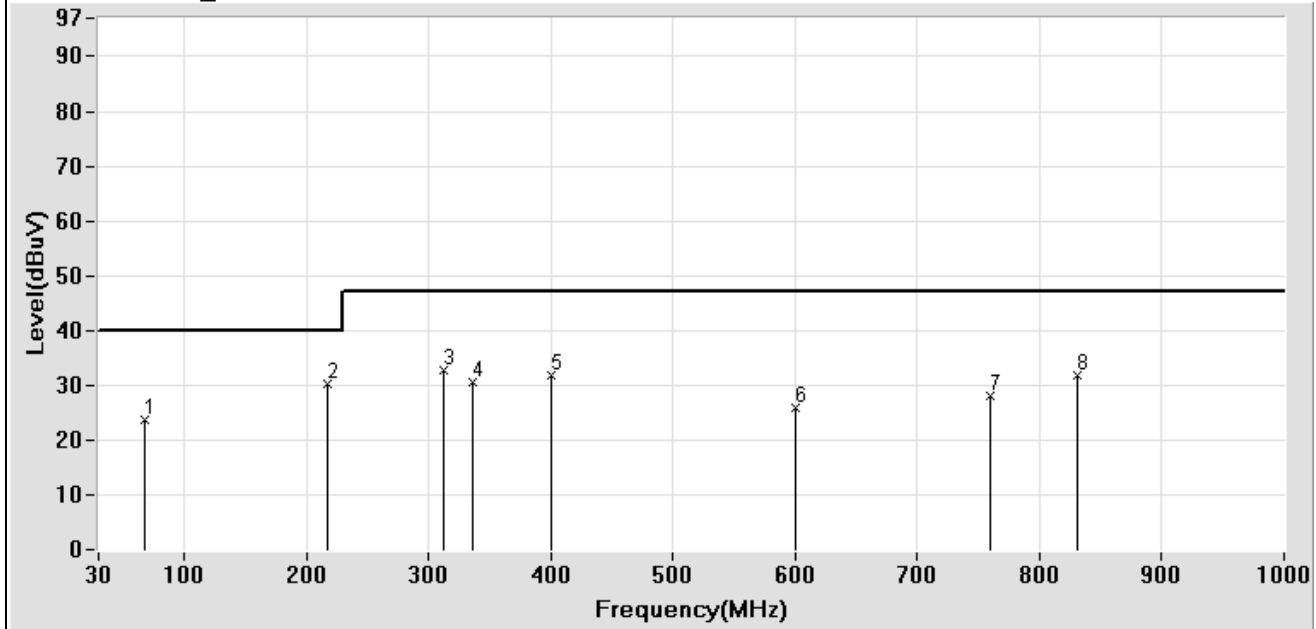
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-12 RATING: 230V/50Hz Temperature: 31.0 °C Humidity: 45 %	POLARITY: Horizontal DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5668 OPERATOR: Ivan TEST SITE: OATS 1
---	--

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)
67.050 **	-21.51	45.25	23.74	40.00	-16.26
217.600 **	-10.36	40.60	30.24	40.00	-9.76
312.190 **	-13.86	46.60	32.74	47.00	-14.26
336.210 **	-13.47	43.90	30.43	47.00	-16.57
400.000 **	-10.90	42.80	31.90	47.00	-15.10
600.000 **	-6.70	32.53	25.83	47.00	-21.17
760.000 **	-3.64	31.80	28.16	47.00	-18.84
830.500 **	-2.41	34.25	31.84	47.00	-15.16

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

LIMIT: CISPR22_A.LMT



Test Mode: Mode 19: FULL LOAD (RKP-6K1UI-CMU1-12)

Radiated Emission Measurement Data

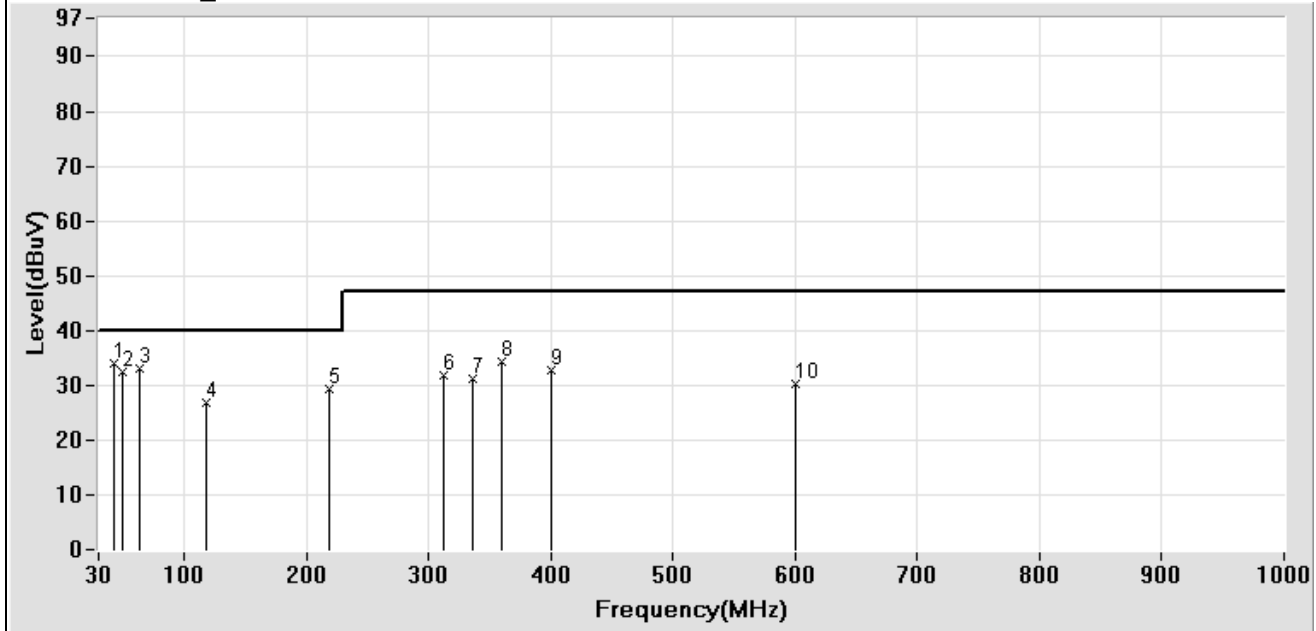
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-12 RATING: 230V/50Hz Temperature: 31.0 °C Humidity: 45 %	POLARITY: Vertical DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5669 OPERATOR: Ivan TEST SITE: OATS 1
---	--

Frequency	Factor	Meter Reading	Emission Level	Limits	Margin
(MHz)	(dB)	(dBμV)	(dBμV/m)	(dBμV/m)	(dB)
43.050 **	-15.62	49.50	33.88	40.00	-6.12
49.890 **	-17.86	50.23	32.37	40.00	-7.63
64.140 **	-21.35	54.30	32.95	40.00	-7.05
117.800 **	-15.38	42.25	26.87	40.00	-13.13
219.200 **	-10.35	39.80	29.45	40.00	-10.55
312.190 **	-13.86	45.80	31.94	47.00	-15.06
336.210 **	-13.47	44.70	31.23	47.00	-15.77
360.220 **	-12.56	46.80	34.24	47.00	-12.76
400.000 **	-10.90	43.70	32.80	47.00	-14.20
600.000 **	-6.70	37.05	30.35	47.00	-16.65

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

LIMIT: CISPR22_A.LMT



Test Mode: Mode 19: FULL LOAD (RKP-6K1UI-CMU1-12)

Radiated Emission Measurement Data

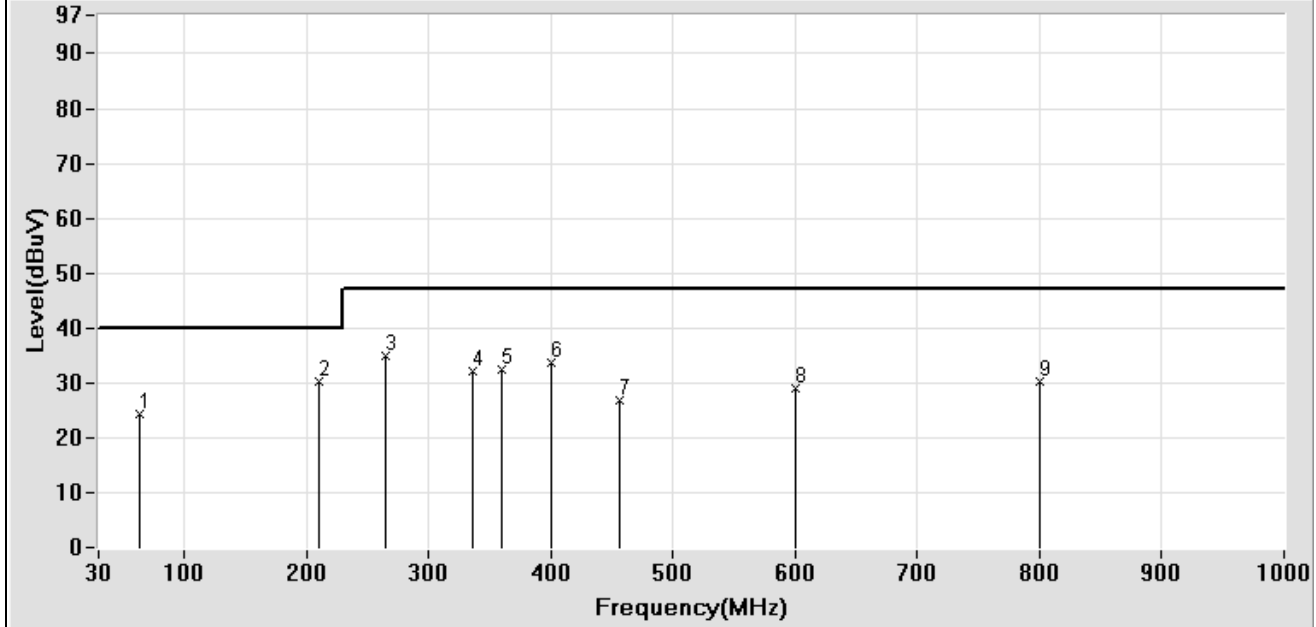
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-24 RATING: 230V/50Hz Temperature: 31.0 °C Humidity: 45 %	POLARITY: Horizontal DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5671 OPERATOR: Ivan TEST SITE: OATS 1
---	--

Frequency	Factor	Meter Reading	Emission Level	Limits	Margin
(MHz)	(dB)	(dBμV)	(dBμV/m)	(dBμV/m)	(dB)
64.200 **	-21.36	45.80	24.44	40.00	-15.56
210.300 **	-10.33	40.60	30.27	40.00	-9.73
264.170 **	-9.25	44.08	34.83	47.00	-12.17
336.200 **	-13.47	45.50	32.03	47.00	-14.97
360.230 **	-12.56	45.10	32.54	47.00	-14.46
400.000 **	-10.90	44.70	33.80	47.00	-13.20
456.290 **	-9.30	36.20	26.90	47.00	-20.10
600.000 **	-6.70	35.80	29.10	47.00	-17.90
800.000 **	-3.00	33.25	30.25	47.00	-16.75

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

LIMIT: CISPR22_A.LMT



Test Mode: Mode 20: FULL LOAD (RKP-6K1UI-CMU1-24)

Radiated Emission Measurement Data

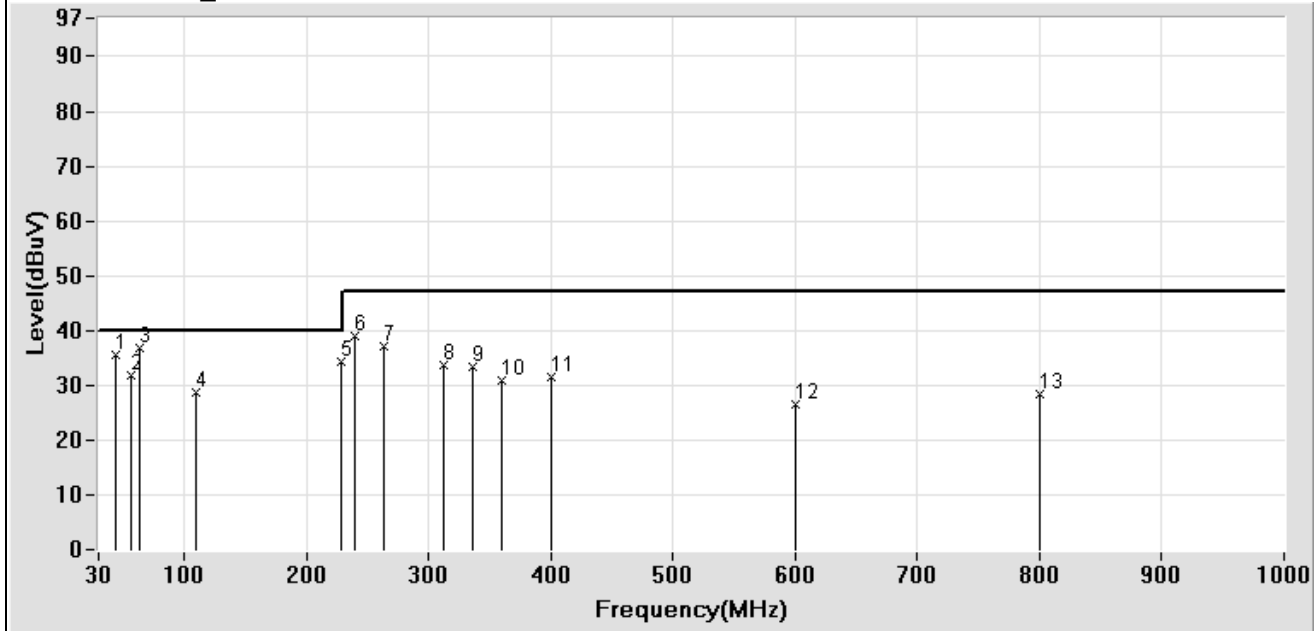
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-24 RATING: 230V/50Hz Temperature: 31.0 °C Humidity: 45 %	POLARITY: Vertical DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5670 OPERATOR: Ivan TEST SITE: OATS 1
---	--

Frequency	Factor	Meter Reading	Emission Level	Limits	Margin
(MHz)	(dB)	(dBμV)	(dBμV/m)	(dBμV/m)	(dB)
43.510 **	-15.75	51.20	35.45	40.00	-4.55
56.900 **	-20.15	51.90	31.75	40.00	-8.25
63.800 **	-21.32	58.17	36.85	40.00	-3.15
109.400 **	-16.61	45.20	28.59	40.00	-11.41
228.400 **	-10.42	44.80	34.38	40.00	-5.62
240.000 **	-9.28	48.25	38.97	47.00	-8.03
264.100 **	-9.25	46.30	37.05	47.00	-9.95
312.200 **	-13.86	47.50	33.64	47.00	-13.36
336.200 **	13.47	46.70	33.23	47.00	-13.77
360.000 **	12.56	43.29	30.73	47.00	-16.27

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

LIMIT: CISPR22_A.LMT



Test Mode: Mode 20: FULL LOAD (RKP-6K1UI-CMU1-24)

Radiated Emission Measurement Data

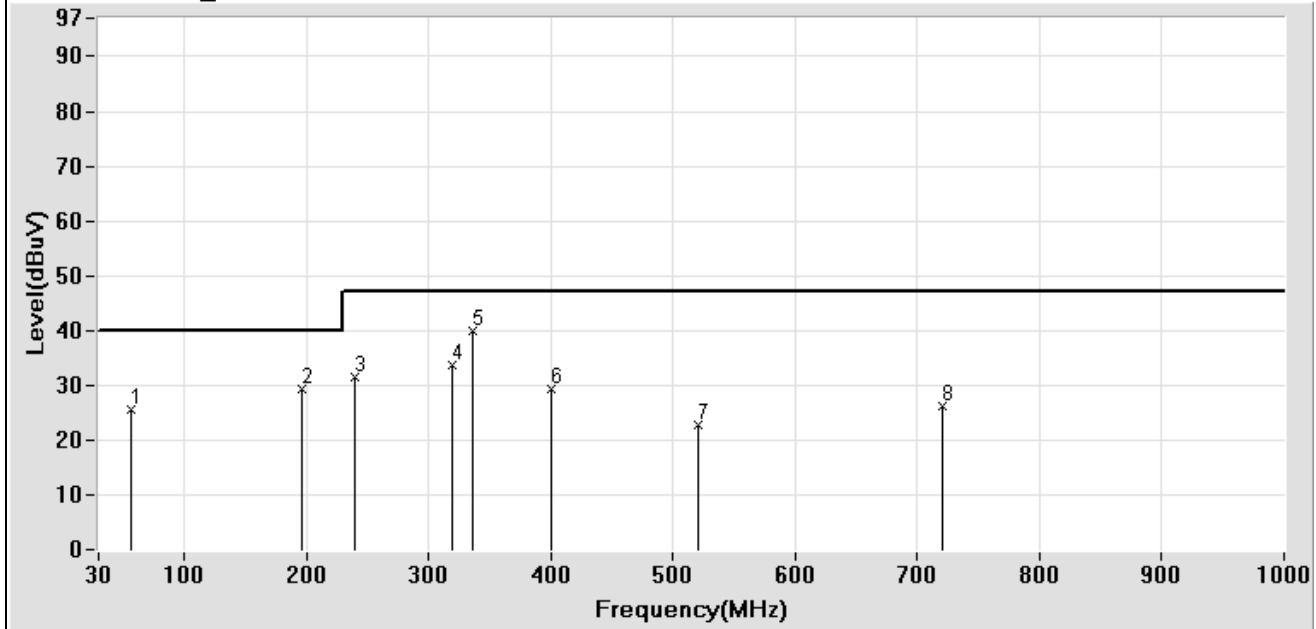
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-48 RATING: 230V/50Hz Temperature: 29.6 °C Humidity: 60 %	POLARITY: Horizontal DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5581 OPERATOR: Bill TEST SITE: OATS 1
---	--

Frequency (MHz)	Factor (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)
57.250 **	-19.93	45.50	25.57	40.00	-14.43
196.100 **	-10.78	40.20	29.42	40.00	-10.58
240.000 **	-9.24	40.70	31.46	47.00	-15.54
319.600 **	-13.01	46.80	33.79	47.00	-13.21
336.270 **	-12.57	52.40	39.83	47.00	-7.17
400.000 **	-10.10	39.55	29.45	47.00	-17.55
520.000 **	-7.82	30.60	22.78	47.00	-24.22
720.000 **	-3.92	30.20	26.28	47.00	-20.72

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

LIMIT: CISPR22_A.LMT



Test Mode: Mode 21: FULL LOAD (RKP-6K1UI-CMU1-48)

Radiated Emission Measurement Data

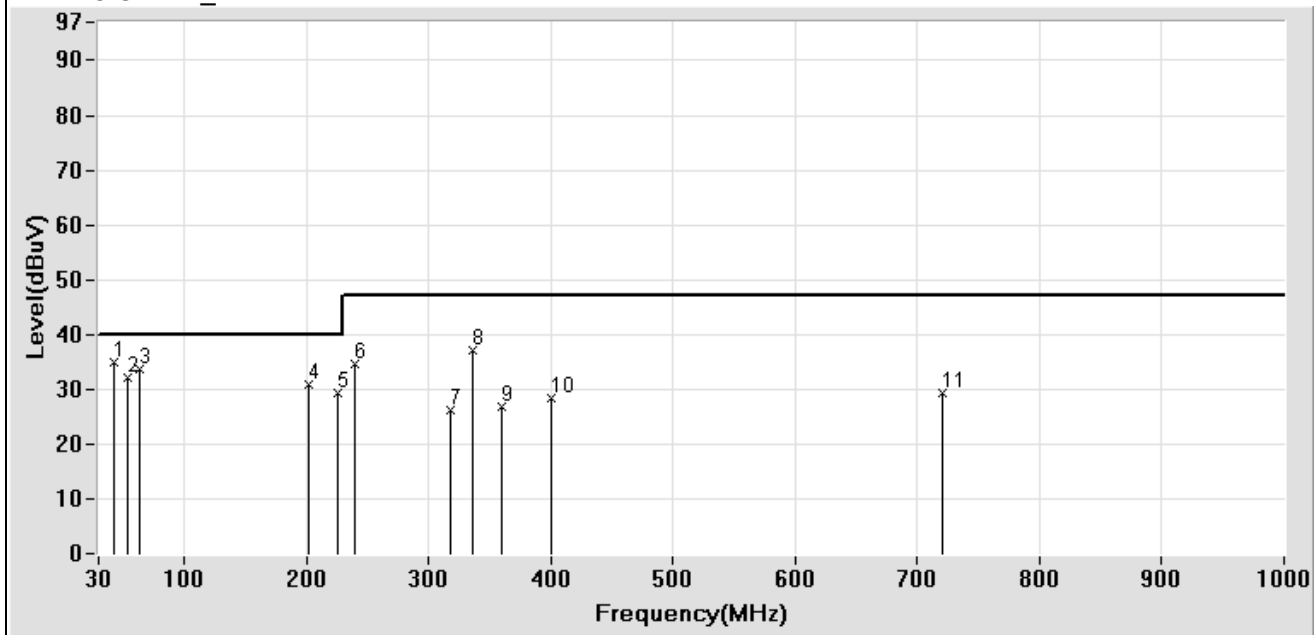
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UI-CMU1-48 RATING: 230V/50Hz Temperature: 29.6 °C Humidity: 60 %	POLARITY: Vertical DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5580 OPERATOR: Bill TEST SITE: OATS 1
---	--

Frequency	Factor	Meter Reading	Emission Level	Limits	Margin
(MHz)	(dB)	(dBμV)	(dBμV/m)	(dBμV/m)	(dB)
42.770 **	-15.73	50.60	34.87	40.00	-5.13
54.170 **	-19.05	51.20	32.15	40.00	-7.85
64.110 **	-21.60	55.30	33.70	40.00	-6.30
201.900 **	-9.98	40.82	30.84	40.00	-9.16
225.100 **	-10.33	39.60	29.27	40.00	-10.73
240.000 **	-9.64	44.30	34.66	47.00	-12.34
317.500 **	-12.62	38.80	26.18	47.00	-20.82
336.270 **	-12.42	49.50	37.08	47.00	-9.92
360.200 **	-11.51	38.25	26.74	47.00	-20.26
400.000 **	-9.50	37.80	28.30	47.00	-18.70

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

LIMIT: CISPR22_A.LMT



Test Mode: Mode 21: FULL LOAD (RKP-6K1UI-CMU1-48)

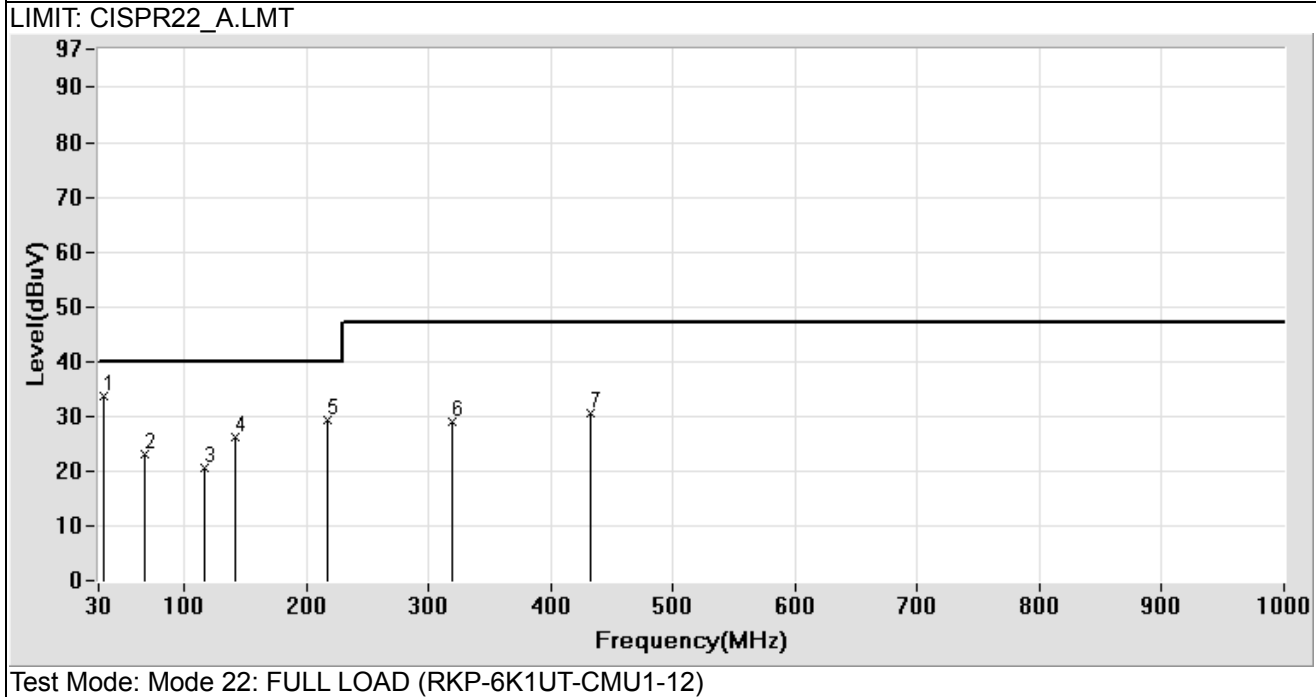
Radiated Emission Measurement Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-12 RATING: 230V/50Hz Temperature: 29.6 °C Humidity: 60 %	POLARITY: Horizontal DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5582 OPERATOR: Bill TEST SITE: OATS 1
---	--

Frequency	Factor	Meter Reading	Emission Level	Limits	Margin
(MHz)	(dB)	(dBμV)	(dBμV/m)	(dBμV/m)	(dB)
33.620 **	-12.08	45.70	33.62	40.00	-6.38
67.250 **	-21.51	44.50	22.99	40.00	-17.01
117.200 **	-15.47	35.90	20.43	40.00	-19.57
141.600 **	-13.28	39.60	26.32	40.00	-13.68
217.800 **	-10.29	39.60	29.31	40.00	-10.69
319.990 **	-13.00	42.00	29.00	47.00	-18.00
432.300 **	-9.27	39.70	30.43	47.00	-16.57

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



Radiated Emission Measurement Data

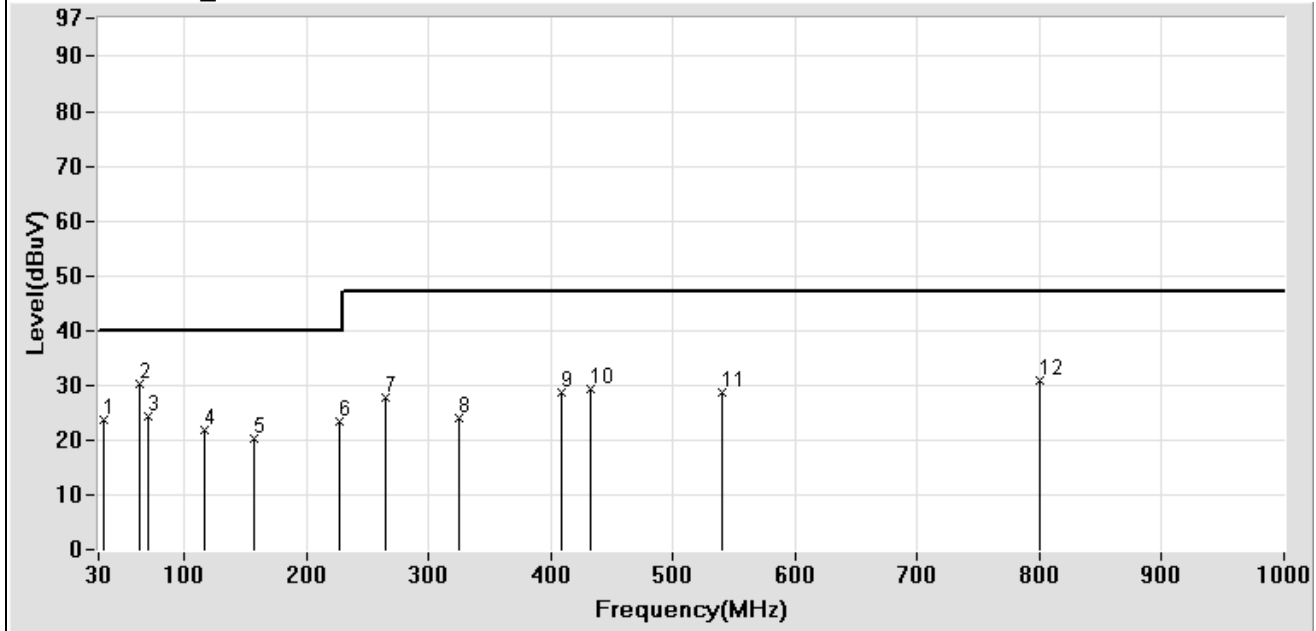
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-12 RATING: 230V/50Hz Temperature: 29.6 °C Humidity: 60 %	POLARITY: Vertical DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5583 OPERATOR: Bill TEST SITE: OATS 1
---	--

Frequency	Factor	Meter Reading	Emission Level	Limits	Margin
(MHz)	(dB)	(dBμV)	(dBμV/m)	(dBμV/m)	(dB)
33.600 **	-12.91	36.50	23.59	40.00	-16.41
64.030 **	-21.59	51.70	30.11	40.00	-9.89
70.760 **	-22.17	46.60	24.43	40.00	-15.57
116.800 **	-15.61	37.50	21.89	40.00	-18.11
157.500 **	-12.68	32.90	20.22	40.00	-19.78
227.600 **	-9.90	33.20	23.30	40.00	-16.70
264.180 **	-7.80	35.70	27.90	47.00	-19.10
325.500 **	-12.54	36.50	23.96	47.00	-23.04
408.300 **	-9.60	38.25	28.65	47.00	-18.35
432.320 **	-9.80	39.10	29.30	47.00	-17.70

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

LIMIT: CISPR22_A.LMT



Test Mode: Mode 22: FULL LOAD (RKP-6K1UT-CMU1-12)

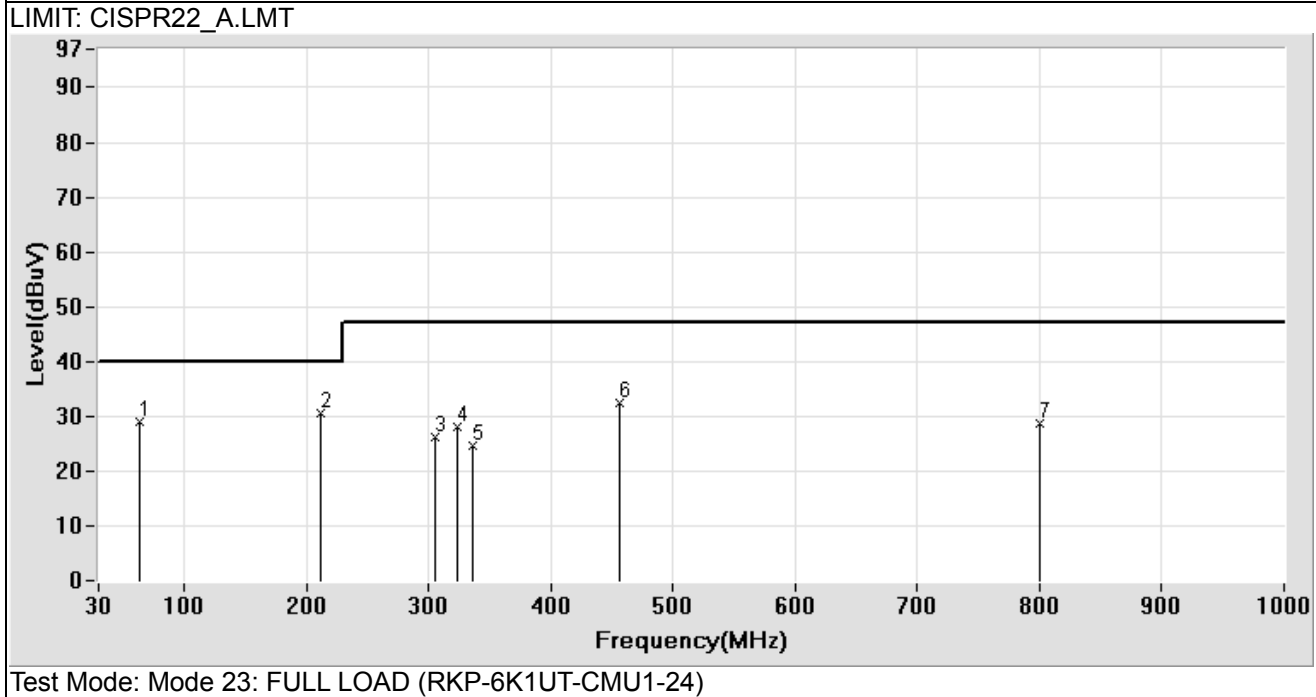
Radiated Emission Measurement Data

EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-24 RATING: 230V/50Hz Temperature: 29.6 °C Humidity: 60 %	POLARITY: Horizontal DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5585 OPERATOR: Bill TEST SITE: OATS 1
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Frequency	Factor	Meter Reading	Emission Level	Limits	Margin
(MHz)	(dB)	(dBμV)	(dBμV/m)	(dBμV/m)	(dB)
64.200 **	-21.23	50.20	28.97	40.00	-11.03
211.300 **	-10.29	40.80	30.51	40.00	-9.49
305.450 **	-13.25	39.60	26.35	47.00	-20.65
323.090 **	-12.97	41.10	28.13	47.00	-18.87
336.250 **	-12.57	37.10	24.53	47.00	-22.47
456.350 **	-9.38	41.80	32.42	47.00	-14.58
800.000 **	-3.40	32.20	28.80	47.00	-18.20

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



Radiated Emission Measurement Data

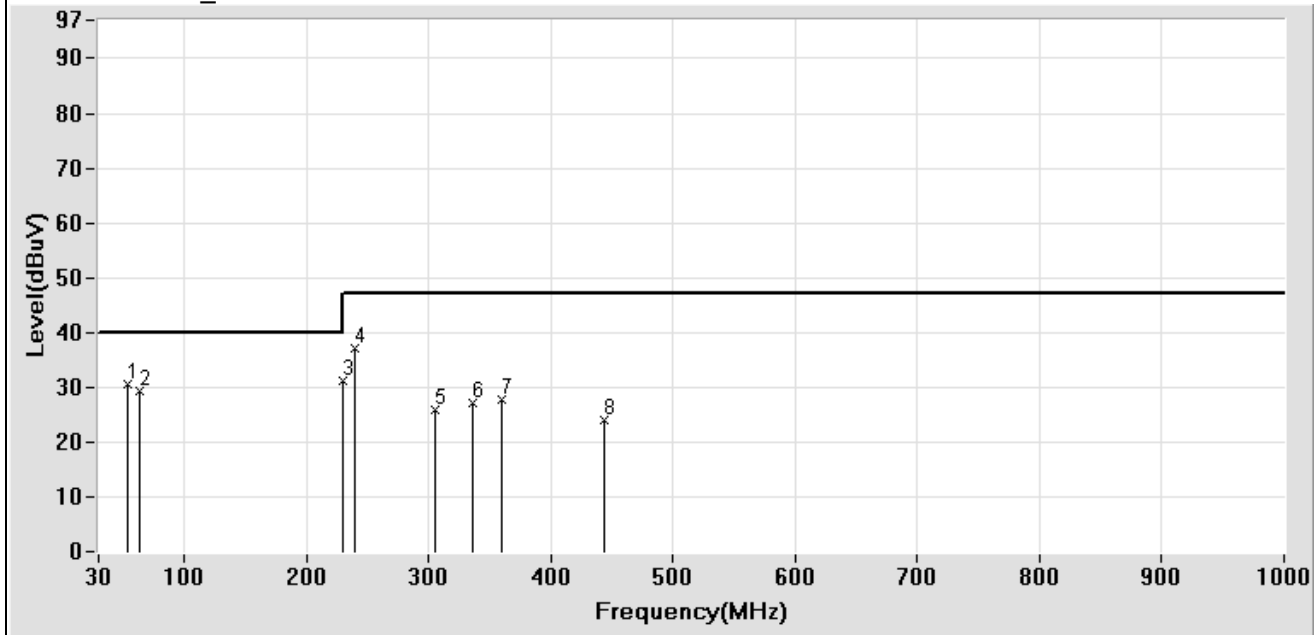
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-24 RATING: 230V/50Hz Temperature: 29.6 °C Humidity: 60 %	POLARITY: Vertical DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5584 OPERATOR: Bill TEST SITE: OATS 1
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Frequency	Factor	Meter Reading	Emission Level	Limits	Margin
(MHz)	(dB)	(dB μ V)	(dB μ V/m)	(dB μ V/m)	(dB)
53.480 **	-18.84	49.50	30.66	40.00	-9.34
63.920 **	-21.57	50.80	29.23	40.00	-10.77
230.000 **	-9.48	40.70	31.22	47.00	-15.78
240.000 **	-9.64	46.80	37.16	47.00	-9.84
305.450 **	-12.70	38.70	26.00	47.00	-21.00
336.220 **	-12.43	39.70	27.27	47.00	-19.73
360.230 **	-11.51	39.20	27.69	47.00	-19.31
444.300 **	-9.47	33.40	23.93	47.00	-23.07

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

LIMIT: CISPR22_A.LMT



Test Mode: Mode 23: FULL LOAD (RKP-6K1UT-CMU1-24)

Radiated Emission Measurement Data

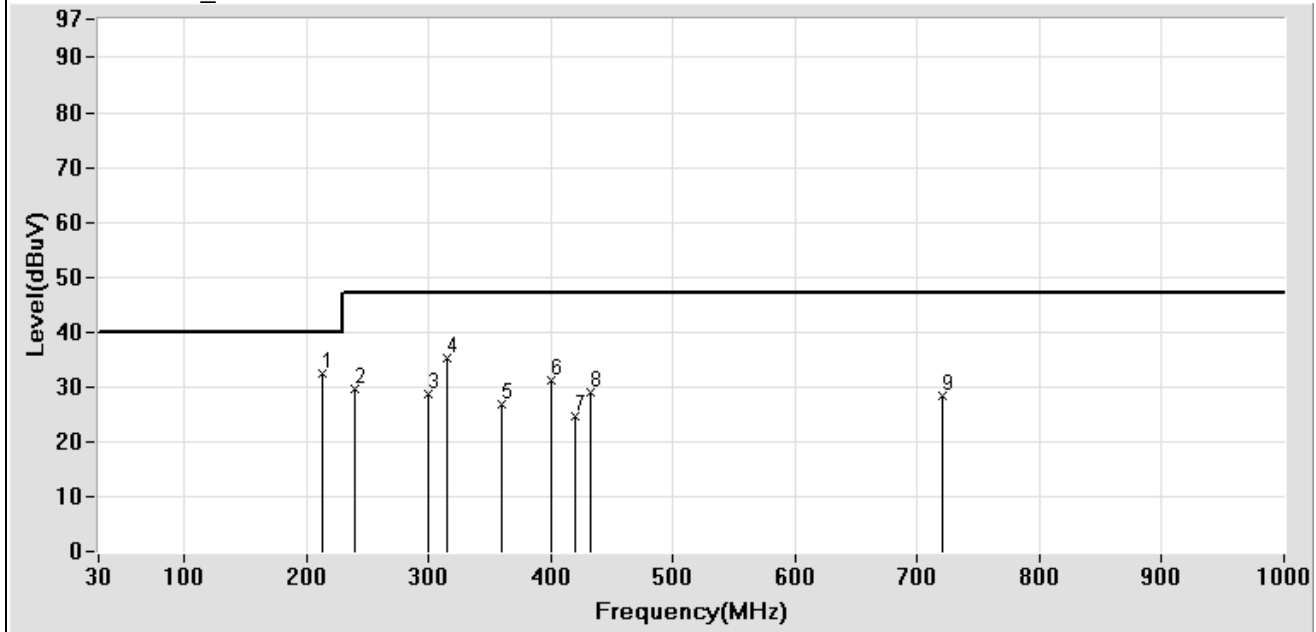
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-48 RATING: 230V/50Hz Temperature: 29.6 °C Humidity: 60 %	POLARITY: Horizontal DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5579 OPERATOR: Bill TEST SITE: OATS 1
---	--

Frequency	Factor	Meter Reading	Emission Level	Limits	Margin
(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	(dB)
213.200 **	-10.30	42.80	32.50	40.00	-7.50
240.000 **	-9.24	38.92	29.68	47.00	-17.32
300.000 **	-7.40	36.20	28.80	47.00	-18.20
315.100 **	-13.10	48.39	35.29	47.00	-11.71
360.200 **	-11.52	38.24	26.72	47.00	-20.28
400.000 **	-10.10	41.20	31.10	47.00	-15.90
420.000 **	-9.84	34.50	24.66	47.00	-22.34
432.320 **	-9.27	38.30	29.03	47.00	-17.97
720.000 **	-3.92	32.25	28.33	47.00	-18.67

Remark:

1. “ * ” Mark means readings are Peak Values.
2. “ ** ” Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

LIMIT: CISPR22_A.LMT



Test Mode: Mode 24: FULL LOAD (RKP-6K1UT-CMU1-48)

Radiated Emission Measurement Data

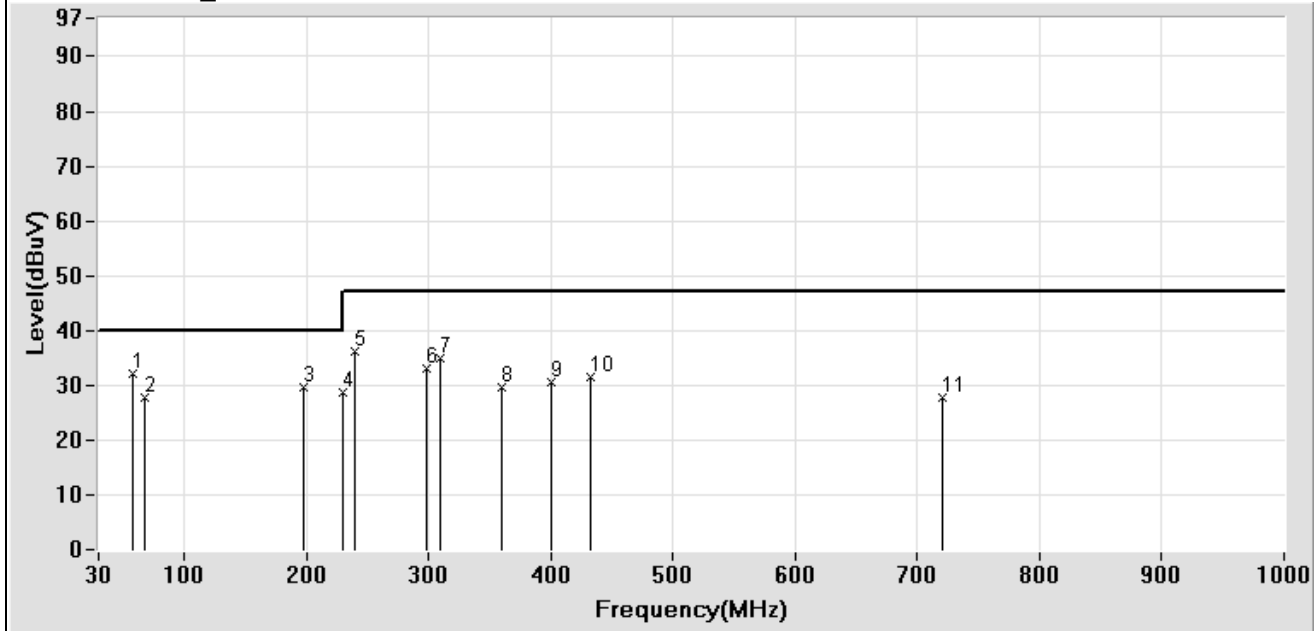
EUT: Switching Power Supply CLIENT: MEAN WELL MODEL: RKP-6K1UT-CMU1-48 RATING: 230V/50Hz Temperature: 29.6 °C Humidity: 60 %	POLARITY: Vertical DISTANCE: 10 m Serial No.: FILE/DATA#: MEAN WELL.emi/5578 OPERATOR: Bill TEST SITE: OATS 1
---	--

Frequency	Factor	Meter Reading	Emission Level	Limits	Margin
(MHz)	(dB)	(dBμV)	(dBμV/m)	(dBμV/m)	(dB)
57.990 **	-20.26	52.30	32.04	40.00	-7.96
67.340 **	-21.96	49.60	27.64	40.00	-12.36
198.200 **	-10.34	40.10	29.76	40.00	-10.24
229.500 **	-9.57	38.20	28.63	40.00	-11.37
240.100 **	-9.63	45.67	36.04	47.00	-10.96
299.050 **	-6.29	39.42	33.13	47.00	-13.87
310.000 **	-12.70	47.50	34.80	47.00	-12.20
360.000 **	-11.52	41.25	29.73	47.00	-17.27
400.000 **	-9.50	40.20	30.70	47.00	-16.30
432.330 **	-9.80	41.25	31.45	47.00	-15.55

Remark:

1. " * " Mark means readings are Peak Values.
2. " ** " Mark means readings are Quasi-Peak values.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

LIMIT: CISPR22_A.LMT



Test Mode: Mode 24: FULL LOAD (RKP-6K1UT-CMU1-48)

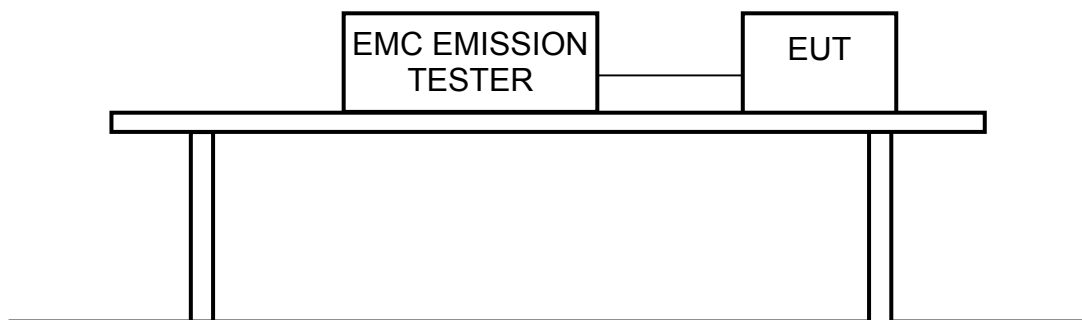
5 Harmonic Current Emission Measurement (EN 61000-3-2)

5.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
EMC EMISSION TESTER	EMC PARTMER	HARMONICS-1000	41	2012/04/14

Note: The above equipments are within the valid calibration period.

5.2 Block Diagram of Test Configuration



5.3 Test Limit

Class A Equipment

Harmonic order (n)	Maximum permissible harmonic current (A)
Odd harmonics	
3	2.30
5	1.14
7	0.77
9	0.40
11	0.33
13	0.21
$15 \leq n \leq 39$	$0.15 \cdot 15 / n$
Even harmonics	
2	1.08
4	0.43
6	0.30
$8 \leq n \leq 40$	$0.23 \cdot 8 / n$

Class B equipment

For Class B equipment, the harmonics of the input current shall not exceed the values given in Class A equipment multiplied by a factor of 1.5.

Class C equipment

Harmonic order (n)	Maximum permissible harmonic current expressed as a percentage of the input current at the fundamental frequency %
2	2
3	$30 \cdot \lambda^*$
5	10
7	7
9	5
$11 \leq n \leq 39$ (odd harmonics only)	3

* λ is the circuit power factor

Class D equipment

Harmonic order (n)	Maximum permissible harmonic current Per watt (mA/W)	Maximum permissible harmonic current (A)
3	3.4	2.30
5	1.9	1.14
7	1.0	0.77
9	0.5	0.40
11	0.35	0.33
$13 \leq n \leq 39$ (odd harmonics only)	$3.85/n$	See Class A equipment

5.4 Configuration of Measurement

- 5.4.1 The EUT with power analyzer was in series and supplied from a power source with the same nominal voltage and frequency as the rated supply voltage.
- 5.4.2 Set the output of the power analyzer to the rated voltage and frequency of EUT (230V, 50Hz).
- 5.4.3 The EUT was classified by clause 5. of EN61000-3-2.

5.5 Test Result

PASS.

The measured result is shown as following pages.

Test Mode: Mode 11: FULL LOAD (RKP-6K1UT-CMU1-48) (Power A)

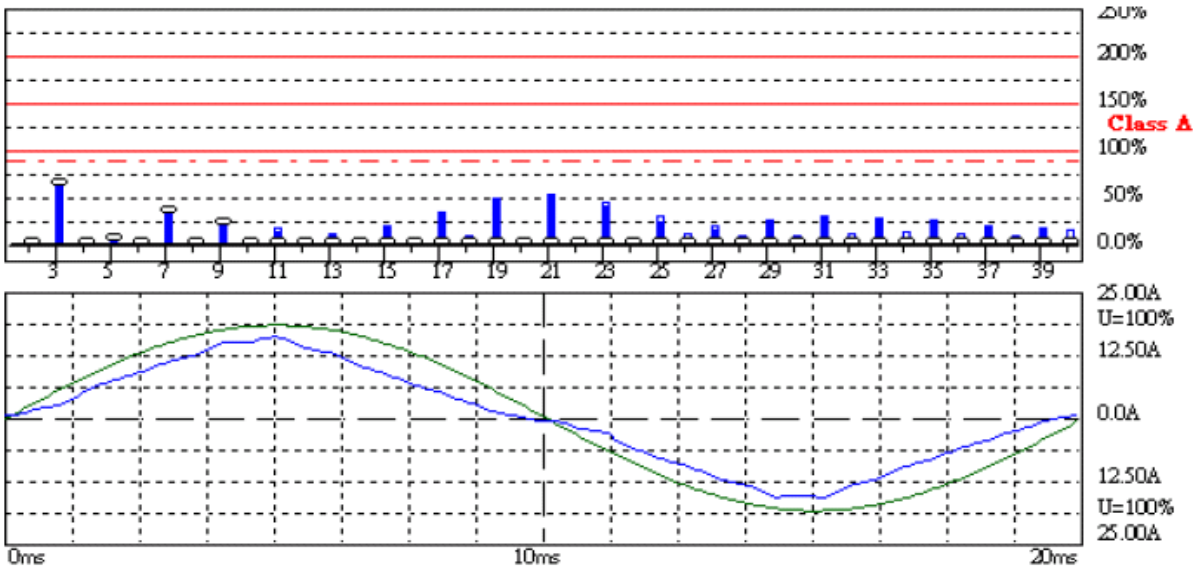
Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

Comply: IEC 61000-3-2 Ed.3.0 - IEC 61000-4-7 Ed.2.0

MEAN WELL

HARCS Setup File : [unnamed](#)
HARCS Report File : [unnamed](#)

Operator : Fox
Unit : Switching Power Supply
Serialnumber : M/N:RKP-6K1UT-CMU1-48
Remarks : T:22.9 'C & H:44%



Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

2011/12/6 下午 07:20

Urms = 227.4 V P = 2124 W THC = 1.489 A
Irms = 9.497 A pf = 0.983

Range: 25 A
V-nom: 230 V
TestTime: 10 min (100%)

Test completed, Result: PASSED

T:22.9 'C & H:44%

BAR-1088 EMC-Print

Full Bar : Actual Values
Empty Bar : Maximum Values
Blue : Current , Green : Voltage , Red : Failed

Measurement

Date : 2011/12/6 *U*E 07:20 V4.18

Urms = 227.4V Freq = 50.000 Range: 25 A
Irms = 9.497A IpK = 16.32A cf = 1.719
P = 2124W S = 2159VA pf = 0.983
THDi = 15.7 % THDu = 0.10 % Class A

Test - Time : 10min (100 %)

Test completed, Result: PASSED

Order	Freq. [Hz]	Iavg [A]	Iavg%L [%]	Imax [A]	Imax%L [%]	Limit [A]	Status
1	50	9.4119		9.5535			
2	100	0.0000	0.0000	0.0076	0.7064	1.0800	
3	150	1.4585	63.415	1.4664	63.755	2.3000	
4	200	0.0000	0.0000	0.0061	1.4194	0.4300	
5	250	0.0635	5.5680	0.0656	5.7555	1.1400	
6	300	0.0000	0.0000	0.0046	1.5259	0.3000	
7	350	0.2704	35.118	0.2747	35.670	0.7700	
8	400	0.0000	0.0000	0.0061	2.6537	0.2300	
9	450	0.0888	22.196	0.0931	23.270	0.4000	
10	500	0.0000	0.0000	0.0061	3.3171	0.1840	
11	550	0.0000	0.0000	0.0504	15.259	0.3300	
12	600	0.0000	0.0000	0.0046	2.9854	0.1533	
13	650	0.0000	0.0000	0.0198	9.4459	0.2100	
14	700	0.0000	0.0000	0.0046	3.4830	0.1314	
15	750	0.0000	0.0000	0.0244	16.276	0.1500	
16	800	0.0000	0.0000	0.0046	3.9806	0.1150	
17	850	0.0000	0.0000	0.0427	32.281	0.1324	
18	900	0.0000	0.0000	0.0061	5.9708	0.1022	
19	950	0.0000	0.0000	0.0549	46.387	0.1184	
20	1000	0.0000	0.0000	0.0046	4.9757	0.0920	
21	1050	0.0000	0.0000	0.0549	51.270	0.1071	
22	1100	0.0000	0.0000	0.0046	5.4733	0.0836	
23	1150	0.0000	0.0000	0.0427	43.674	0.0978	
24	1200	0.0000	0.0000	0.0031	3.9806	0.0767	
25	1250	0.0000	0.0000	0.0259	28.822	0.0900	
26	1300	0.0000	0.0000	0.0061	8.6245	0.0708	
27	1350	0.0000	0.0000	0.0137	16.479	0.0833	
28	1400	0.0000	0.0000	0.0046	6.9660	0.0657	
29	1450	0.0000	0.0000	0.0183	23.600	0.0776	
30	1500	0.0000	0.0000	0.0046	7.4635	0.0613	
31	1550	0.0000	0.0000	0.0214	29.433	0.0726	
32	1600	0.0000	0.0000	0.0046	7.9611	0.0575	
33	1650	0.0000	0.0000	0.0183	26.855	0.0682	
34	1700	0.0000	0.0000	0.0061	11.278	0.0541	
35	1750	0.0000	0.0000	0.0153	23.736	0.0643	
36	1800	0.0000	0.0000	0.0046	8.9562	0.0511	
37	1850	0.0000	0.0000	0.0107	17.565	0.0608	
38	1900	0.0000	0.0000	0.0031	6.3025	0.0484	
39	1950	0.0000	0.0000	0.0092	15.869	0.0577	
40	2000	0.0000	0.0000	0.0061	13.269	0.0460	

Calculation of Individual Harmonic Limits

Fixed Limits for Class A:

Order	Limits in Ampere			
	90%	100%	150%	200%
2	0.9723	1.0803	1.6205	2.1606
3	2.0695	2.2995	3.4492	4.5990
4	0.3873	0.4303	0.6454	0.8606
5	1.0258	1.1398	1.7097	2.2797

6	0.2705	0.3006	0.4509	0.6012
7	0.6935	0.7706	1.1559	1.5411
8	0.2074	0.2304	0.3456	0.4608
9	0.3598	0.3998	0.5997	0.7996
10	0.1662	0.1846	0.2769	0.3693
11	0.2966	0.3296	0.4944	0.6592
12	0.1373	0.1526	0.2289	0.3052
13	0.1895	0.2106	0.3159	0.4211
14	0.1181	0.1312	0.1968	0.2625
15	0.1346	0.1495	0.2243	0.2991
16	0.1030	0.1144	0.1717	0.2289
17	0.1195	0.1328	0.1991	0.2655
18	0.0920	0.1022	0.1534	0.2045
19	0.1071	0.1190	0.1785	0.2380
20	0.0824	0.0916	0.1373	0.1831
21 *	0.0961	0.1068	0.1602	0.2136
22	0.0755	0.0839	0.1259	0.1678
23 *	0.0879	0.0977	0.1465	0.1953
24	0.0687	0.0763	0.1144	0.1526
25 *	0.0810	0.0900	0.1350	0.1801
26	0.0632	0.0702	0.1053	0.1404
27 *	0.0755	0.0839	0.1259	0.1678
28	0.0591	0.0656	0.0984	0.1312
29 *	0.0700	0.0778	0.1167	0.1556
30	0.0549	0.0610	0.0916	0.1221
31 *	0.0659	0.0732	0.1099	0.1465
32	0.0522	0.0580	0.0870	0.1160
33 *	0.0618	0.0687	0.1030	0.1373
34	0.0481	0.0534	0.0801	0.1068
35 *	0.0577	0.0641	0.0961	0.1282
36	0.0453	0.0504	0.0755	0.1007
37 *	0.0549	0.0610	0.0916	0.1221
38	0.0439	0.0488	0.0732	0.0977
39 *	0.0522	0.0580	0.0870	0.1160
40	0.0412	0.0458	0.0687	0.0916

EUT is PASSED if:

- all Average values of the Individual Harmonic Currents (Iavg) are below 100% of the Individual Limits.
- all Maximum values of the Individual Harmonic Currents (Imax) are below 150% of the Individual Limits.

Exceptions:

These exceptions are mutually exclusive and cannot be used together.

- 1) All Maximum values of the Individual Harmonic Currents (Imax) are below 200% of the Individual Limits if :
 - EUT belongs to Class A
 - AND** excursion beyond 150% lasts less than 10% of observation time with a maximum of 10 minutes
 - AND** the average value of the corresponding harmonic current over the entire observation period is less than 90% of applicable limits

- 2)
 - Average values of some Individual Harmonic Currents (marked with "*") may be up to 150% if the Partial Harmonic Current (PHC) is lower than the PHC which is calculated from the Limit Currents:
 - Actual PHC = 0.0000A
 - PHC calculated from Limit values = 0.2518A
 - Individual Harmonic Currents less than 5mA or less than 0.6% of Irms (which is $0.006 \times 9.497 = 0.057A$) are disregaded.

Definitions of Abbreviations

Urms	***	Actual total Voltage in Volt RMS
Irms	***	Actual total Current in Ampere RMS
Ipk	***	Actual Peak value of the Current in Ampere
cf	***	Actual Crest Factor (Ipk/Irms)
P	***	Actual Active Power in Watt
S	***	Actual Apparent Power in VA (Urms*Irms)
pf	***	Actual Power Factor (P/S)
THDi	***	Actual Total Harmonic Current Distortion in %
THDu	***	Actual Total Harmonic Voltage Distortion in %
THC	***	Actual Total Harmonic Current in Ampere
PHC	***	Actual Partial Harmonic Current in Ampere

Individual measurements for 2nd to 40th order:

Iavg	Average value of the Individual Harmonic Current in Ampere RMS
Iavg%L	Average value of the Individual Harmonic Current in percentage of the applicable Limit
Imax	Maximum Individual Harmonic Current in Ampere RMS
Imax%lim	Maximum Individual Harmonic Current in percentage of the applicable Limit
Limit Irms	Individual Limit (100%) for the selected Class in Ampere RMS

General :

- Maximum and Average values are calculated over the full test-time
- The values marked with "****" are actual values which could vary during test-time and are taken at the time of protocol printout.
- The individual measurements are taken over every 200ms and smoothed with an 1,5second filter.

Test Mode: Mode 18: FULL LOAD (RKP-6K1UT-CMU1-48) (Power for RKP-CMU1)

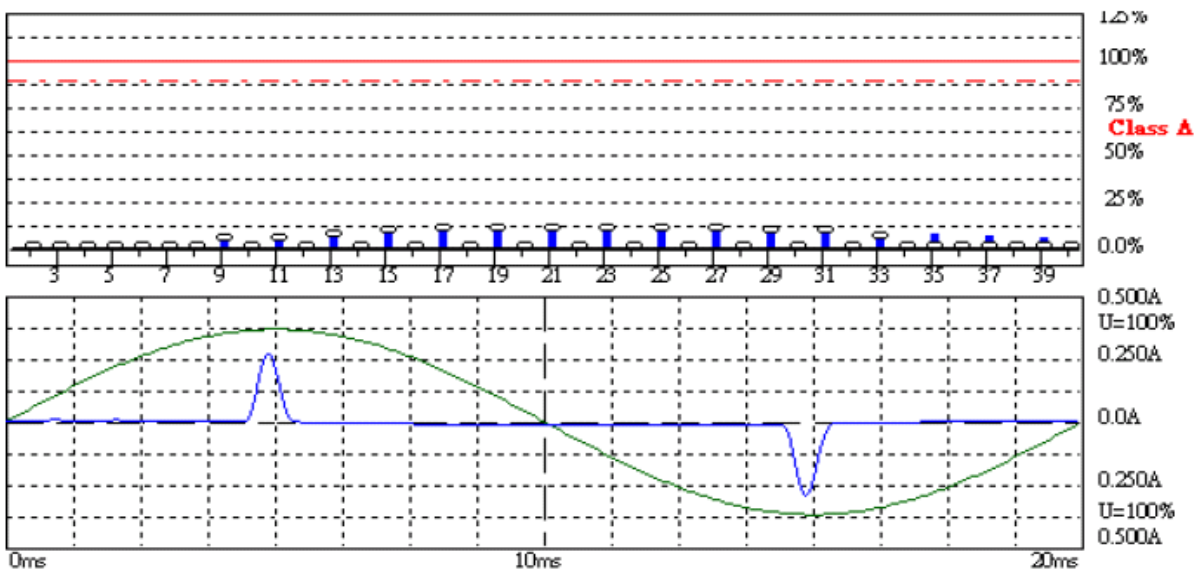
Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

Comply: IEC 61000-3-2 Ed.3.0 - IEC 61000-4-7 Ed.2.0

MEAN WELL

HARCS Setup File : [unnamed](#)
 HARCS Report File : [unnamed](#)

Operator : Fox
 Unit : Switching Power Supply
 Serialnumber : M/N:RKP-6K1UT-CMU1-48 (Power for RKP-CMU1)
 Remarks : T:22.9 'C & H:44%



Harmonic Emission - IEC 61000-3-2 , EN 61000-3-2 , (EN60555-2)

2011/12/28 上午 10:1

Urms = 227.4 V P = 4.491 W THC = 0.052 A Range: 0.5 A
 Irms = 0.052 A pf = 0.376 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

T:22.9 'C & H:44%

BAR-1000 EMC-Print

Full Bar : Actual Values
 Empty Bar : Maximum Values
 Blue : Current , Green : Voltage , Red : Failed

Measurement

Date : 2011/12/28 上午 10:1 V4.18

Urms = 227.4V Freq = 50.000 Range: 0.5 A
 Irms = 0.052A Ipk = 0.302A cf = 5.758
 P = 4.491W S = 11.93VA pf = 0.376
 THDi = 92.5 % THDu = 0.10 % Class A

Test - Time : 10min (100 %)

Test completed, Result: PASSED

Order	Freq. [Hz]	Iavg [A]	Iavg%L [%]	Imax [A]	Imax%L [%]	Limit [A]	Status
1	50	0.0214		0.0215			
2	100	0.0000	0.0000	0.0008	0.0706	1.0800	
3	150	0.0174	0.7578	0.0175	0.7629	2.3000	
4	200	0.0000	0.0000	0.0008	0.1774	0.4300	
5	250	0.0172	1.5094	0.0173	1.5205	1.1400	
6	300	0.0000	0.0000	0.0007	0.2441	0.3000	
7	350	0.0168	2.1847	0.0169	2.1957	0.7700	
8	400	0.0000	0.0000	0.0007	0.3052	0.2300	
9	450	0.0163	4.0760	0.0164	4.0894	0.4000	
10	500	0.0000	0.0000	0.0007	0.3649	0.1840	
11	550	0.0157	4.7467	0.0157	4.7626	0.3300	
12	600	0.0000	0.0000	0.0006	0.4180	0.1533	
13	650	0.0149	7.0981	0.0150	7.1353	0.2100	
14	700	0.0000	0.0000	0.0006	0.4412	0.1314	
15	750	0.0141	9.3744	0.0141	9.4198	0.1500	
16	800	0.0000	0.0000	0.0005	0.4511	0.1150	
17	850	0.0131	9.9291	0.0132	10.007	0.1324	
18	900	0.0000	0.0000	0.0005	0.4777	0.1022	
19	950	0.0122	10.272	0.0123	10.385	0.1184	
20	1000	0.0000	0.0000	0.0005	0.4976	0.0920	
21	1050	0.0111	10.406	0.0113	10.567	0.1071	
22	1100	0.0000	0.0000	0.0004	0.5108	0.0836	
23	1150	0.0101	10.339	0.0103	10.513	0.0978	
24	1200	0.0000	0.0000	0.0004	0.4777	0.0767	
25	1250	0.0091	10.079	0.0093	10.308	0.0900	
26	1300	0.0000	0.0000	0.0004	0.5175	0.0708	
27	1350	0.0080	9.6408	0.0083	9.9243	0.0833	
28	1400	0.0000	0.0000	0.0003	0.5108	0.0657	
29	1450	0.0070	9.0424	0.0073	9.3614	0.0776	
30	1500	0.0000	0.0000	0.0003	0.5473	0.0613	
31	1550	0.0060	8.3230	0.0063	8.7036	0.0726	
32	1600	0.0000	0.0000	0.0003	0.5307	0.0575	
33	1650	0.0040	5.9286	0.0054	7.9224	0.0682	
34	1700	0.0000	0.0000	0.0003	0.5639	0.0541	
35	1750	0.0000	0.0000	0.0045	7.0258	0.0643	
36	1800	0.0000	0.0000	0.0003	0.5971	0.0511	
37	1850	0.0000	0.0000	0.0037	6.0723	0.0608	
38	1900	0.0000	0.0000	0.0003	0.6303	0.0484	
39	1950	0.0000	0.0000	0.0030	5.1310	0.0577	
40	2000	0.0000	0.0000	0.0003	0.6634	0.0460	

Calculation of Individual Harmonic Limits

Fixed Limits for Class A:

Order	Limits in Ampere			
	90%	100%	150%	200%
2				
3				
4	0.3870	0.4300	0.6450	0.8600
5				

6	0.2700	0.3000	0.4500	0.6000
7				
8	0.2070	0.2300	0.3450	0.4600
9	0.3600	0.4000	0.6000	0.8000
10	0.1656	0.1840	0.2760	0.3680
11	0.2970	0.3300	0.4950	0.6600
12	0.1380	0.1533	0.2300	0.3066
13	0.1890	0.2100	0.3150	0.4200
14	0.1183	0.1314	0.1972	0.2629
15	0.1350	0.1500	0.2250	0.3000
16	0.1035	0.1150	0.1725	0.2300
17	0.1191	0.1324	0.1985	0.2647
18	0.0920	0.1022	0.1534	0.2045
19	0.1066	0.1184	0.1776	0.2368
20	0.0828	0.0920	0.1380	0.1840
21 *	0.0964	0.1071	0.1607	0.2143
22	0.0753	0.0836	0.1255	0.1673
23 *	0.0881	0.0978	0.1468	0.1957
24	0.0690	0.0767	0.1150	0.1533
25 *	0.0810	0.0900	0.1350	0.1800
26	0.0637	0.0708	0.1062	0.1415
27 *	0.0750	0.0833	0.1250	0.1667
28	0.0591	0.0657	0.0986	0.1314
29 *	0.0698	0.0776	0.1164	0.1552
30	0.0552	0.0613	0.0920	0.1227
31 *	0.0653	0.0726	0.1089	0.1451
32	0.0517	0.0575	0.0862	0.1150
33 *	0.0614	0.0682	0.1023	0.1364
34	0.0487	0.0541	0.0812	0.1082
35 *	0.0579	0.0643	0.0965	0.1286
36	0.0460	0.0511	0.0767	0.1022
37 *	0.0547	0.0608	0.0912	0.1216
38	0.0436	0.0484	0.0726	0.0969
39 *	0.0519	0.0577	0.0865	0.1154
40	0.0414	0.0460	0.0690	0.0920

EUT is PASSED if:

- all Average values of the Individual Harmonic Currents (Iavg) are below 100% of the Individual Limits.
- all Maximum values of the Individual Harmonic Currents (Imax) are below 150% of the Individual Limits.

Exceptions:

These exceptions are mutually exclusive and cannot be used together.

- 1) All Maximum values of the Individual Harmonic Currents (Imax) are below 200% of the Individual Limits if :
 - EUT belongs to Class A
 - AND** excursion beyond 150% lasts less than 10% of observation time with a maximum of 10 minutes
 - AND** the average value of the corresponding harmonic current over the entire observation period is less than 90% of applicable limits
- 2)
 - Average values of some Individual Harmonic Currents (marked with "*") may be up to 150% if the Partial Harmonic Current (PHC) is lower than the PHC which is calculated from the Limit Currents:
 - Actual PHC = 0.0218A
 - PHC calculated from Limit values = 0.2514A
 - Individual Harmonic Currents less than 5mA or less than 0.6% of Irms (which is $0.006 \times 0.052 = 0.000312$ A) are disregarded.

Definitions of Abbreviations

Urms	***	Actual total Voltage in Volt RMS
Irms	***	Actual total Current in Ampere RMS
Ipk	***	Actual Peak value of the Current in Ampere
cf	***	Actual Crest Factor (Ipk/Irms)
P	***	Actual Active Power in Watt
S	***	Actual Apparent Power in VA (Urms*Irms)
pf	***	Actual Power Factor (P/S)
THDi	***	Actual Total Harmonic Current Distortion in %
THDu	***	Actual Total Harmonic Voltage Distortion in %
THC	***	Actual Total Harmonic Current in Ampere
PHC	***	Actual Partial Harmonic Current in Ampere

Individual measurements for 2nd to 40th order:

Iavg	Average value of the Individual Harmonic Current in Ampere RMS
Iavg%L	Average value of the Individual Harmonic Current in percentage of the applicable Limit
I _{max}	Maximum Individual Harmonic Current in Ampere RMS
I _{max} %lim	Maximum Individual Harmonic Current in percentage of the applicable Limit
Limit Irms	Individual Limit (100%) for the selected Class in Ampere RMS

General :

- Maximum and Average values are calculated over the full test-time
- The values marked with "****" are actual values which could vary during test-time and are taken at the time of protocol printout.
- The individual measurements are taken over every 200ms and smoothed with an 1,5second filter.

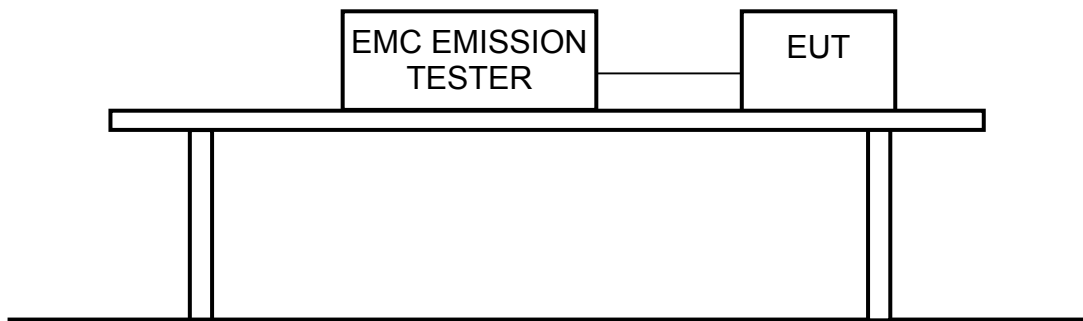
6 Voltage Fluctuations and Flicker Measurement (EN 61000-3-3)

6.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
EMC EMISSION TESTER	EMC PARTMER	HARMONICS-1000	41	2012/04/14

Note: The above equipments are within the valid calibration period.

6.2 Block Diagram of Test Configuration



6.3 Test Limit

The following limits apply:

- the value of P_{st} shall not be greater than 1.0;
- the value of P_{it} shall not be greater than 0.65;
- the relative steady-state voltage change, d_c , shall not exceed 3.3%;
- the maximum relative voltage change, d_{max} , shall not exceed 4%;
- the value of $d(t)$ during a voltage change shall not exceed 3.3% for more than 500 ms.

6.4 Configuration of Measurement

- 6.4.1 The EUT with power analyzer is in series and supplied from a power source with the same nominal voltage and frequency as the rated supply voltage.
- 6.4.2 Set the output of the power analyzer to the rated voltage and frequency of EUT (230V, 50Hz).
- 6.4.3 Select the test time of observation period for short-term ($T_p = 10$ min) and long-term ($T_p = 2$ hrs). The test result was collected and analyzed by the computer.

6.5 Test Result

PASS.

The measured result is shown as following pages.

Test Mode: Mode 11: FULL LOAD (RKP-6K1UT-CMU1-48) (Power A)

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

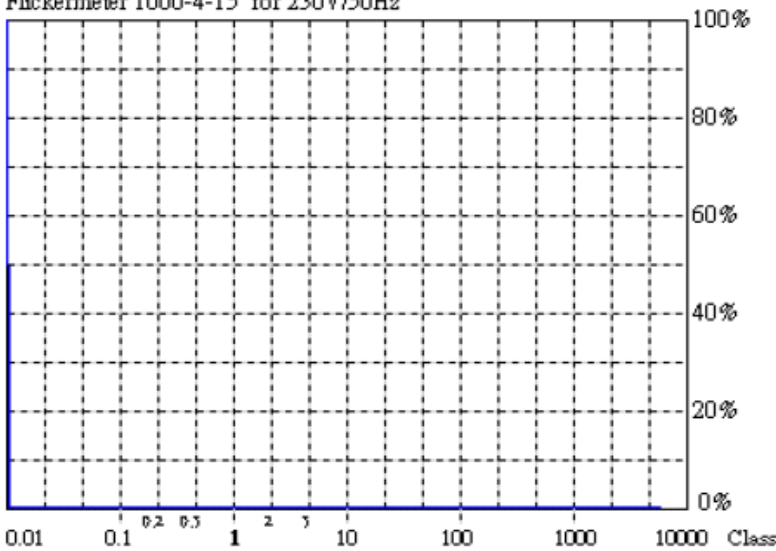
Comply: IEC 61000-3-3 Ed.1.2 - IEC 61000-4-15 Ed.1.1

MEAN WELL

HARCS Setup File : [unnamed](#)
 HARCS Report File : [unnamed](#)

Operator : Fox
 Unit : Switching Power Supply
 Serialnumber : M/N:RKP-6K1UT-CMU1-48
 Remarks : T:22.9 'C & H:44%

Flickermeter 1000-4-15 for 230V/50Hz



Actual Flicker (Fl): 0.00
Short-term Flicker (Pst): 0.07
 Limit (Pst): 1.00
Long-term Flicker (Plt): 0.07
 Limit (Plt): 0.65
Maximum Relative Volt. Change (dmax): 0.00%
 Limit (dmax): 4.00%
Relative Steady-state Voltage Change (dc): 0.02%
 Limit (dc): 3.30%
Maximum Interval exceeding 3.30% (dt): 0.00ms
 Limit (dt>Lim): 500ms

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

2011/12/6 下午 07:31

Urms = 227.4 V P = 2111 W
 Irms = 9.436 A pf = 0.984

Range: 25 A
 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

T:22.9 'C & H:44%

BAE-1000 EMC-Print

Full Bar : Actual Values
 Empty Bar : Maximum Values
 Circles : Average Values
 Blue : Current , Green : Voltage , Red : Failed

Measurement

Date : 2011/12/6 07:31 V4.18

Urms = 227.4V Freq = 49.984 Range: 25 A
 Irms = 9.436A IpK = 16.22A cf = 1.719
 P = 2111W S = 2145VA pf = 0.984

Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : SLIN 0.24ohm +j0.15ohm N:0.16ohm +j0.10ohm

Limits : Plt : 0.65 Pst : 1.00
 dmax : 4.00 % dc : 3.30 %
 dtLim: 3.30 % dt>Lim: 500ms

Test completed, Result: PASSED

1

Definitions of Abbreviations

Urms	***	Actual total Voltage in Volt RMS
Irms	***	Actual total Current in Ampere RMS
Ipk	***	Actual Peak value of the Current in Ampere
cf	***	Actual Crest Factor (Ipk/Irms)
P	***	Actual Active Power in Watt
S	***	Actual Apparent Power in VA (Urms*Irms)
pf	***	Actual Power Factor (P/S)

Plt Long term Flicker over all Pst cycles

For every Pst-cycle:

General :

- The values marked with "****" are actual values which could vary during test-time and are taken at the time of protocol printout.

Test Mode: Mode 18: FULL LOAD (RKP-6K1UT-CMU1-48) (Power for RKP-CMU1)

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

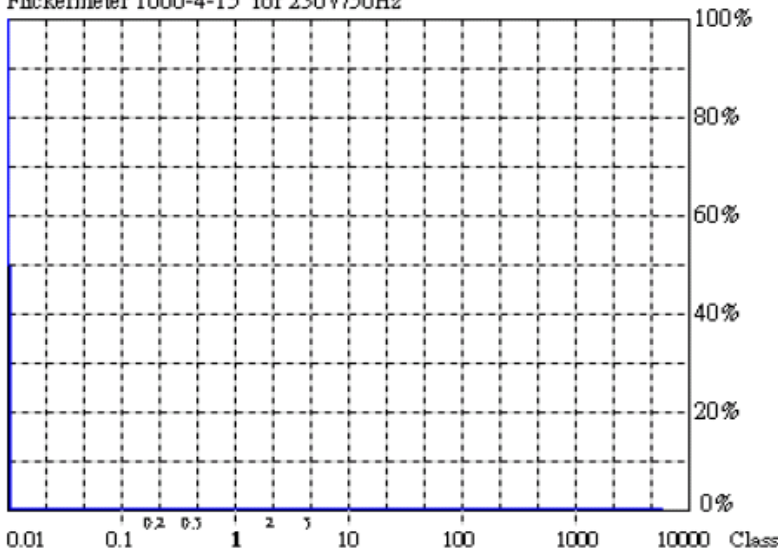
Comply: IEC 61000-3-3 Ed.1.2 - IEC 61000-4-15 Ed.1.1

MEAN WELL

HARCS Setup File : [unnamed](#)
 HARCS Report File : [unnamed](#)

Operator : Fox
 Unit : Switching Power Supply
 Serialnumber : M/N:RKP-6K1UT-CMU1-48 (Power for RKP-CMU1)
 Remarks : T:22.9 'C & H:44%

Flickermeter 1000-4-15 for 230V/50Hz



Actual Flicker (Fli): 0.00
Short-term Flicker (Pst): 0.07
 Limit (Pst): 1.00
Long-term Flicker (Plt): 0.07
 Limit (Plt): 0.65
Maximum Relative Volt. Change (dmax): 0.00%
 Limit (dmax): 4.00%
Relative Steady-state Voltage Change (dc): 0.00%
 Limit (dc): 3.30%
Maximum Interval exceeding 3.30% (dt): 0.00ms
 Limit (dt>Lim): 500ms

Flicker Emission - IEC 61000-3-3 , EN 61000-3-3 , (EN60555-3)

2011/12/28 上午 10:2

Urms = 227.8 V P = 4.491 W
 Irms = 0.053 A pf = 0.374

Range: 0.5 A
 V-nom: 230 V
 TestTime: 10 min (100%)

Test completed, Result: PASSED

T:22.9 'C & H:44%

BAR-1000 EMC-Rpt.mre

Full Bar : Actual Values
 Empty Bar : Maximum Values
 Circles : Average Values
 Blue : Current , Green : Voltage , Red : Failed

Measurement

Date : 2011/12/28 上午 10:2 V4.18

Urms = 227.8V Freq = 50.000 Range: 0.5 A
 Irms = 0.053A Ipk = 0.306A cf = 5.806
 P = 4.491W S = 12.01VA pf = 0.374

Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : SLIN 0.24ohm +j0.15ohm N:0.16ohm +j0.10ohm

Limits : Plt : 0.65 Pst : 1.00
 dmax : 4.00 % dc : 3.30 %
 dtLim: 3.30 % dt>Lim: 500ms

Test completed, Result: PASSED

1

Definitions of Abbreviations

Urms *** Actual total Voltage in Volt RMS
Irms *** Actual total Current in Ampere RMS
Ipk *** Actual Peak value of the Current in Ampere
cf *** Actual Crest Factor (Ipk/Irms)
P *** Actual Active Power in Watt
S *** Actual Apparent Power in VA (Urms*Irms)
pf *** Actual Power Factor (P/S)

Plt Long term Flicker over all Pst cycles

For every Pst-cycle:

General :

- The values marked with "****" are actual values which could vary during test-time and are taken at the time of protocol printout.

7 Performance Criterion of Immunity Test

7.1 EN 55024

General performance criteria	
Criterion	Description
A	During and after the test the EUT shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a minimum performance level specified by the manufacturer when the EUT is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the EUT if used as intended.
B	After the test, the EUT shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the EUT is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is allowed. However, no change of operating state or stored data is allowed to persist after the test. If the minimum performance level (or the permissible performance loss) is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the EUT if used as intended.
C	During and after testing, a temporary loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls or cycling of the power to the EUT by the user in accordance with the manufacturer's instructions.
Particular performance criteria	
<p>The particular performance criteria which are specified in the normative annexes B~H take precedence over the corresponding parts of the general performance criteria.</p> <p>Where particular performance criteria for specific functions are not given, then the general performance criteria shall apply.</p> <p>Annex B Data processing equipment: (Read, write and storage of data; Data display; Data input; Data printing; Data processing)</p> <p>Annex C Local area networks (LAN)</p> <p>Annex D Printers and plotters</p> <p>Annex E Copying machines</p> <p>Annex F Automatic teller machines (ATM)</p> <p>Annex G Point of sale terminals (POST)</p> <p>Annex H xDSL Terminal equipment</p>	

7.2 EN 61204-3

Criterion	Basic Specifications	Remarks
A	No loss of function or performance during the test	Operating as intended within specified tolerance
B	Temporary loss of function or performance during the test Self-recoverable	Degradation of performance shall be specified by the manufacturer PSU shall continue to operate as intended after the test
C	Loss of function or performance Not self-recoverable Not damaged	Any resettable condition allowed including shut-down

7.3 EN 61000-6-1

Criterion	Description
A	The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.
B	The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed. No change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.
C	Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

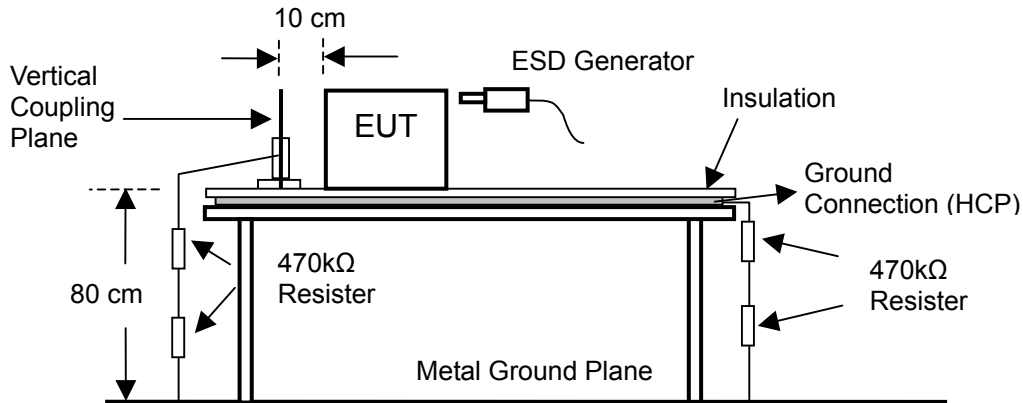
8 Electrostatic Discharge Immunity Test (EN 61000-4-2)

8.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
ESD Simulator	EMC PARTNER	ESD3000	276	2012/02/15

Note: The above equipments are within the valid calibration period.

8.2 Block Diagram of Test Configuration



8.3 Test Levels

Level	Contact discharge (kV)	Air discharge (kV)
1	2	2
2	4	4
3	6	8
4	8	15
X	Special	Special

8.4 Test Requirement

8.4.1 EN 61000-4-2 (EN 55024) require:

Air discharge: ± 8 kV

Contact discharge: ± 4 kV

Performance criterion: B

8.4.2 EN 61000-4-2 (EN 61204-3) require: (For Low Severity Levels)

Air discharge: ± 8 kV

Contact discharge: ± 4 kV

Performance criterion: B

8.4.3 EN 61000-4-2 (EN 61000-6-1) require:

Air discharge: ± 8 kV

Contact discharge: ± 4 kV

Performance criterion: B

8.5 Configuration of Measurement

- 8.5.1 Static electricity discharges shall be applied only to those points and surfaces of the EUT which are expected to be touched during usual operation, including user access, as specified in the user manual, for example for ribbon and paper roll changes.
- 8.5.2 The discharges shall be applied in two ways:
- a) Contact discharges to the conductive surfaces and to coupling planes:
The EUT shall be exposed to at least 200 discharges, 100 each at negative and positive polarity, at a minimum of four test points (a minimum of 50 discharges at each point). One of the test points shall be subjected to at least 50 indirect discharges (contact) to the center of the front edge of the horizontal coupling plane (HCP), the remaining three test points shall each receive at least 50 direct contact discharges. If no direct contact test points are available, then at least 200 indirect discharges shall be applied in the indirect mode (see EN 61000-4-2 for use of the Vertical Conducting Plane (VCP)). Tests shall be performed at a maximum repetition rate of one discharge per second.
 - b) Air discharge at slots and apertures, and insulating surfaces:
On those parts of the EUT where it is not possible to perform contact discharge testing, the equipment should be investigated to identify user accessible points where breakdown may occur; examples are openings at edges of keys, or in the covers of keyboards and telephone handsets. Such points are tested using the air discharge method. See also EN 61000-4-2 regarding painted surfaces. This investigation should be restricted to those areas normally handled by the user. A minimum of 10 single air discharges shall be applied to the selected test point for each such area.
- 8.5.3 The ESD generator (gun) was held perpendicular to the surface to which the discharge was applied. The application of electrostatic discharges to the contacts of open connectors is not required.

8.6 Test Result

Temperature: 24.1 °C ; Humidity: 49 % ; Atm pres: 101 Kpa ; Test Engineer: Fox

PASS.

(For Mode 24: FULL LOAD (RKP-6K1UT-CMU1-48))

8.6.1 The performance criterion after tested EN 61000-4-2 (EN 55024):

Air discharge ±2 kV, ±4 kV, ±8 kV: A B C

Contact discharge ±2 kV, ±4 kV: A B C

Indirect discharge (HCP) ±2 kV, ±4 kV: A B C

Indirect discharge (VCP Front, Left, Back, Right) ±2 kV, ±4 kV:
 A B C

8.6.2 The performance criterion after tested EN 61000-4-2 (EN 61204-3):

Air discharge ±2 kV, ±4 kV, ±8 kV: A B C

Contact discharge ±2 kV, ±4 kV: A B C

Indirect discharge (HCP) ±2 kV, ±4 kV: A B C

Indirect discharge (VCP Front, Left, Back, Right) ±2 kV, ±4 kV:
 A B C

8.6.3 The performance criterion after tested EN 61000-4-2 (EN 61000-6-1)

Air discharge ±2 kV, ±4 kV, ±8 kV: A B C

Contact discharge ±2 kV, ±4 kV: A B C

Indirect discharge (HCP) ±2 kV, ±4 kV: A B C

Indirect discharge (VCP Front, Left, Back, Right) ±2 kV, ±4 kV:
 A B C

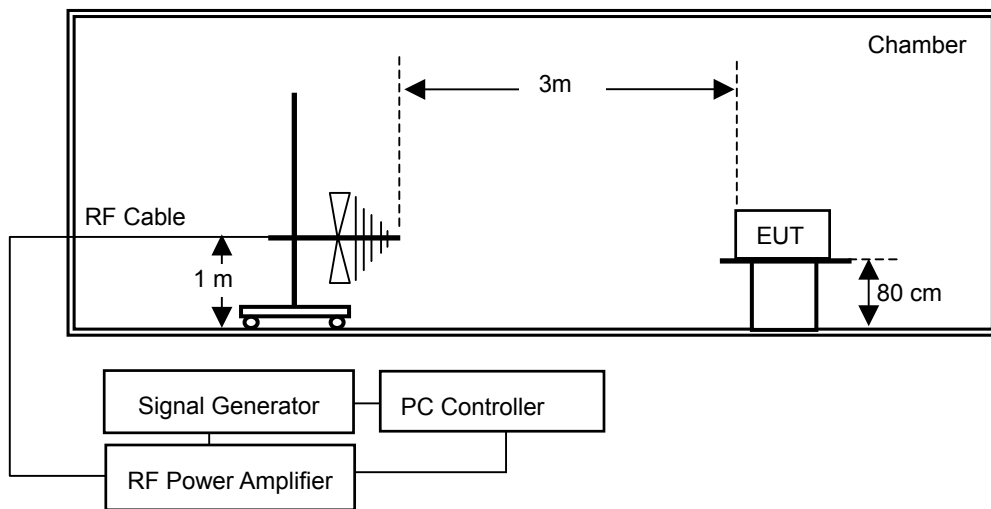
9 Radio-Frequency, Electromagnetic Field Immunity Test (EN 61000-4-3)

9.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
Signal Generator	R&S	SM300	101279	2012/10/18
RF Power Amplifier	Frankonia	FLG-200B	1038	2012/02/20
RF Power Amplifier	Frankonia	FLG-50C	1013	2012/02/20
Bilog Antenna	Frankonia	BTA-M	06012M	2012/02/20

Note: The above equipments are within the valid calibration period.

9.2 Block Diagram of Test Configuration



9.3 Test Levels

Level	Test field strength (V/m)
1	1
2	3
3	10
4	30
X	Special

9.4 Test Requirement

- 9.4.1 The frequency steps: 1%, Log sweep, Dwell time: 3.0 sec.
- 9.4.2 EN 61000-4-3 (EN 55024) require:
- Frequency range: 80 to 1000 MHz, Field strength: 3 V/m, 80%AM (1kHz),
Performance criterion: A
- 9.4.3 EN 61000-4-3 (EN 61204-3) require: (For Low Severity Levels)
- Frequency range: 80 to 1000 MHz, Field strength: 3 V/m, 80%AM (1kHz),
Performance criterion: B
 - Frequency range: 900 +/- 5 MHz, Field strength: 3 V/m, 50% duty cycle, rep.
Frequency 200Hz, Performance criterion: B
- 9.4.4 EN 61000-4-3 (EN 61000-6-1) require:
- Frequency range: 80 to 1000 MHz, Field strength: 3 V/m, 80% AM (1kHz),
 - Frequency range: 1400 to 2000 MHz, Field strength: 3 V/m, 80% AM (1kHz),
 - Frequency range: 2000 to 2700 MHz, Field strength: 1 V/m, 80% AM (1kHz),
Performance criterion: A

9.5 Configuration of Measurement

- 9.5.1 Before testing, the intensity of the established field strength was checked by placing the field sensor at a calibration grid point, and with the field generating antenna and cables in the same positions as used for the calibration, the forward and reverse power were measured. The forward power needed to give the calibrated field was evaluated.
- 9.5.2 The EUT was placed on a non-metallic table 0.8m above the reference ground plane (RGP) and was operated according to its specified operating mode.
- 9.5.3 Ferrite tiles/ absorbers were placed on the RGP between the EUT and the antenna to reduce the reflections from the RGP.
- 9.5.4 The distance between antenna and EUT is 3 meters.
- 9.5.5 During the test EUT performance has been monitoring by CCD camera.

9.6 Test Result

Temperature: 24.8 °C ; Humidity: 50 % ; Atm pres: 101 Kpa ; Test Engineer: Fox

PASS.

(For Mode 24: FULL LOAD (RKP-6K1UT-CMU1-48))

9.6.1 The performance criterion after tested EN 61000-4-3 (EN 55024):

Frequency range: **80 to 1000** MHz, Field strength: **3** V/m, 80% AM (1kHz),
Performance criterion: **A** **B** **C**

9.6.2 The performance criterion after tested EN 61000-4-3 (EN 61204-3):

Frequency range: **80 to 1000** MHz, Field strength: **3** V/m, 80% AM (1kHz),
Performance criterion: **A** **B** **C**

Frequency range: **900 +/- 5** MHz, Field strength: **3** V/m, 50% duty cycle, rep. Frequency
200Hz

Performance criterion: **A** **B** **C**

9.6.3 The performance criterion after tested EN 61000-4-3 (EN 61000-6-1):

Frequency range: **80 to 1000** MHz, Field strength: **3** V/m, 80% AM (1kHz),
Performance criterion: **A** **B** **C**

Frequency range: **1400 to 2000** MHz, Field strength: **3** V/m, 80% AM (1kHz),
Performance criterion: **A** **B** **C**

Frequency range: **2000 to 2700** MHz, Field strength: **1** V/m, 80% AM (1kHz),
Performance criterion: **A** **B** **C**

10 Electrical Fast Transient/Burst Immunity Test (EN 61000-4-4)

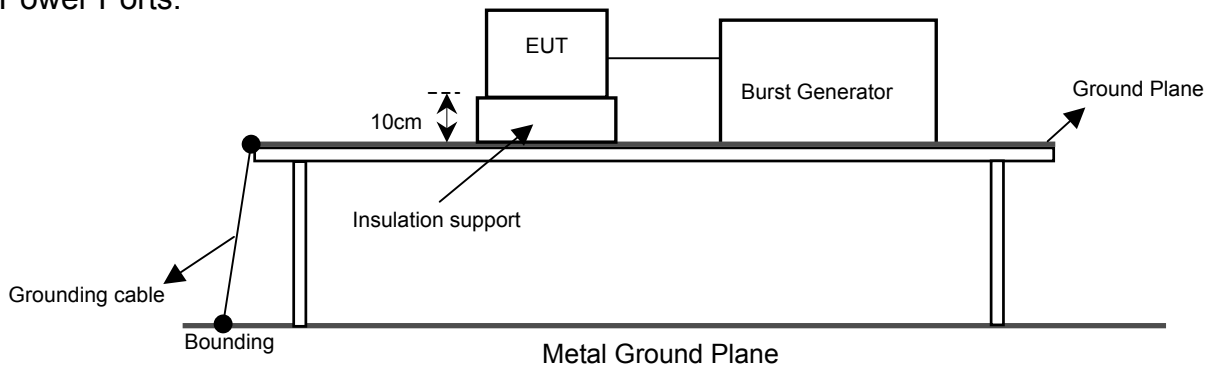
10.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
EMC Pro System	KeyTek	EMC Pro	0003231	2012/04/14
Injection Clamp	KeyTek	PRO-CCL-C	0003198	N. C. R.

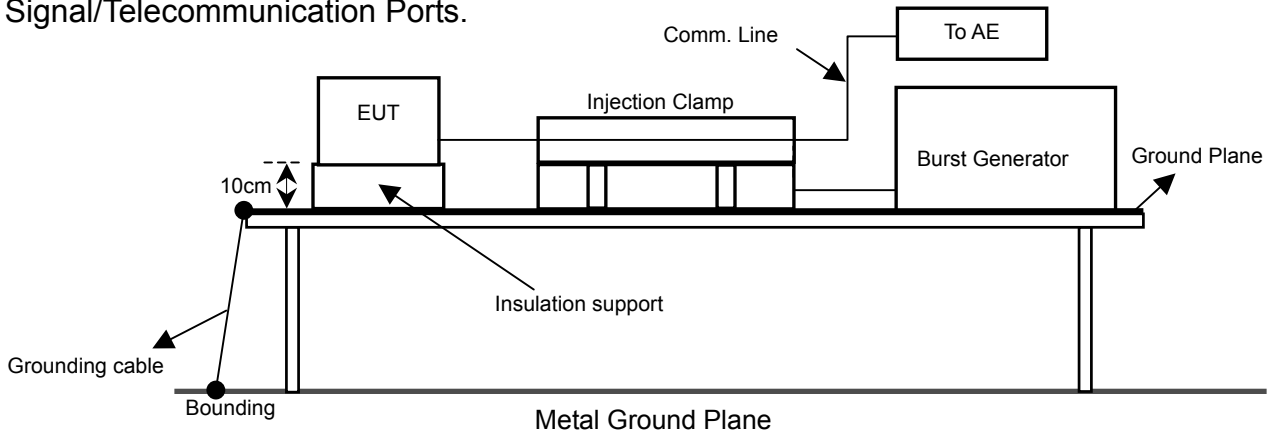
Note: The above equipments are within the valid calibration period.

10.2 Block Diagram of Test Configuration

For Power Ports.



For Signal/Telecommunication Ports.



10.3 Test Levels

Open circuit output test voltage and repetition rate of the impulses				
Level	On power port, PE		On I/O (input/output) signal, data and control ports	
	Voltage peak kV	Repetition rate kHz	Voltage peak kV	Repetition rate kHz
1	0,5	5 or 100	0,25	5 or 100
2	1	5 or 100	0,5	5 or 100
3	2	5 or 100	1	5 or 100
4	4	5 or 100	2	5 or 100
X ^a	Special	Special	Special	Special

NOTE 1: Use of 5 kHz repetition rates is traditional; however, 100 kHz is closer to reality. Product committees should determine which frequencies are relevant for specific products or product types.

NOTE 2: With some products, there may be no clear distinction between power ports and I/O ports, in which case it is up to product committees to make this determination for test purposes.

^a "X" is an open level. The level has to be specified in the dedicated equipment specification.

10.4 Test Requirement

10.4.1 5 kHz Repetition frequency

10.4.2 EN 61000-4-4 (EN 55024) require:

- ±1.0 kV input AC power ports.
- ±0.5 kV for Signal ports.
- ±0.5 kV Telecommunication ports.

Performance criterion: B

10.4.3 EN 61000-4-4 (EN 61204-3) require: (For Low Severity Levels)

- ±1.0 kV input AC power ports.
- ±0.5 kV for Signal ports.

Performance criterion: B

10.4.4 EN 61000-4-4 (EN 61000-6-1) require:

- ±1.0 kV input AC power ports.
- ±0.5 kV for Signal ports.

Performance criterion: B

10.5 Configuration of Measurement

- 10.5.1 The EUT and the auxiliary equipment were placed on a wooden table of 0.8 meters height. The size of ground plane is greater than 1m×1m and project beyond the EUT by at least 0.1m on all sides. The ground plane is connected to the protective earth.
- 10.5.2 The EUT was connected to the power mains through a coupling device that directly couples the EFT interference signal. Each of the Line, Neutral and Protective Earth (PE) conductors was impressed with burst noise for 1 minute. Both the voltage polarities were applied for each test level. The length of the signal and power lines between the coupling device and the EUT shall be 0,5m ± 0,05m.

10.6 Test Result

Temperature: 24.9 °C ; Humidity: 50 % ; Atm pres: 101 Kpa ; Test Engineer: Fox

PASS.

(For Mode 11 & 12: FULL LOAD (RKP-6K1UT-CMU1-48) (Power A & B))

- 10.6.1 The performance criterion after tested EN 61000-4-4 (EN 55024):
- ±1.0 kV input AC power port: Line + Neutral + PE
Performance criterion: **A** **B** **C**
- ±0.5 kV for Telecommunication port: RJ45
Performance criterion: **A** **B** **C**
- 10.6.2 The performance criterion after tested EN 61000-4-4 (EN 61204-3):
- ±1.0 kV input AC power port: Line + Neutral + PE
Performance criterion: **A** **B** **C**
- ±0.5 kV for Signal port: RJ45
Performance criterion: **A** **B** **C**
- 10.6.3 The performance criterion after tested EN 61000-4-4 (EN 61000-6-1):
- ±1.0 kV input AC power port: Line + Neutral + PE
Performance criterion: **A** **B** **C**
- ±0.5 kV for Signal port: RJ45
Performance criterion: **A** **B** **C**

(For Mode 18: FULL LOAD (RKP-6K1UT-CMU1-48) (Power for RKP-CMU1))

10.6.4 The performance criterion after tested EN 61000-4-4 (EN 55024):

±1.0 kV input AC power port: Line + Neutral + PE

Performance criterion: **A** **B** **C**

±0.5 kV for Telecommunication port: RJ45

Performance criterion: **A** **B** **C**

10.6.5 The performance criterion after tested EN 61000-4-4 (EN 61204-3):

±1.0 kV input AC power port: Line + Neutral + PE

Performance criterion: **A** **B** **C**

±0.5 kV for Signal port: RJ45

Performance criterion: **A** **B** **C**

10.6.6 The performance criterion after tested EN 61000-4-4 (EN 61000-6-1):

±1.0 kV input AC power port: Line + Neutral + PE

Performance criterion: **A** **B** **C**

±0.5 kV for Signal port: RJ45

Performance criterion: **A** **B** **C**

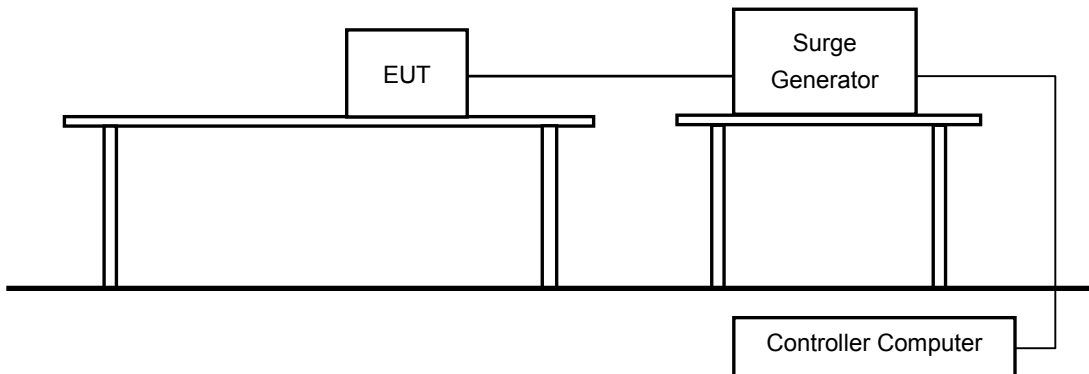
11 Surge Immunity Test (EN 61000-4-5)

11.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
EMC Pro Systems	KeyTek	EMC Pro	0003234	2012/03/20

Note: The above equipments are within the valid calibration period.

11.2 Block Diagram of Test Configuration



11.3 Test Levels

Level	Open-circuit test voltage $\pm 10\%$ (kV)
1	0.5
2	1.0
3	2.0
4	4.0
X	Special

Note: X can be any level, above, below or in between the other levels.
This level can be specified in the product standard.

11.4 Test Requirement

11.4.1 EN 61000-4-5 (EN 55024) require:

- Input AC power ports: Line to line: $\pm 1.0\text{kV}$ (peak), 1.2/50 (8/20) Tr/Th μs
 Line to earth (ground): $\pm 2.0\text{kV}$ (peak), 1.2/50 (8/20) Tr/Th μs

Input DC power ports: $\pm 0.5\text{kV}$ (peak): line to earth, 1.2/50 (8/20) Tr/Th μs

Performance criterion: **B**

Signal ports: without primary protections: $\pm 1.0\text{kV}$ (peak): 10/700 Tr/Th μs

Primary protectors: $\pm 4.0\text{kV}$ (peak): 10/700 Tr/Th μs

Telecommunication ports: without primary protections: $\pm 1.0\text{kV}$ (peak): 10/700 Tr/Th μs

Primary protectors: $\pm 4.0\text{kV}$ (peak): 10/700 Tr/Th μs

Performance criterion: **C**

11.4.2 EN 61000-4-5 (EN 61204-3) require: (For Low Severity Levels)

Input AC power ports: Line to line: $\pm 1\text{kV}$ (peak), 1.2/50 (8/20) Tr/Th μs

Line to earth (ground): $\pm 2\text{kV}$ (peak), 1.2/50 (8/20) Tr/Th μs

Performance criterion: **B**

11.4.3 EN 61000-4-5 (EN 61000-6-1):

Input AC power ports: Line to line: $\pm 1\text{kV}$ (peak), 1.2/50 (8/20) Tr/Th μs

Line to earth (ground): $\pm 2\text{kV}$ (peak), 1.2/50 (8/20) Tr/Th μs

Performance criterion: **B**

11.5 Configuration of Measurement

11.5.1 The EUT and support units were located on a wooden table 0.8 m away from ground floor.

11.5.2 The EUT was connected to the power mains through a coupling device that directly couples the Surge interference signal. The surge noise was applied synchronized to the voltage phase at the zero crossing and the peak value of the AC or DC voltage wave (positive and negative).

11.5.3 The surges were applied line to line and line(s) to earth. When testing line to earth the test voltage was applied successively between each of the lines and earth. Steps up to the test level specified increased the test voltage. All lower levels including the selected test level were tested. The polarity of each surge level included positive and negative test pulses.

11.6 Test Result

Temperature: 20.1 °C ; Humidity: 50 % ; Atm pres: 101 Kpa ; Test Engineer: Fox

PASS.

(For Mode 11 & 12: FULL LOAD (RKP-6K1UT-CMU1-48) (Power A & B))

11.6.1 The performance criterion after tested EN 61000-4-5 (EN 55024):

- ±0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ±1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ±0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ±1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ±2.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**

11.6.2 The performance criterion after tested EN 61000-4-5 (EN 61204-3):

- ±0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ±1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ±0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ±1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ±2.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**

11.6.3 The performance criterion after tested EN 61000-4-5 (EN 61000-6-1):

- ±0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ±1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ±0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ±1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ±2.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**

(For Mode 18: FULL LOAD (RKP-6K1UT-CMU1-48) (Power for RKP-CMU1))

11.6.4 The performance criterion after tested EN 61000-4-5 (EN 55024):

- ± 0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ± 1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ± 0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ± 1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ± 2.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**

11.6.5 The performance criterion after tested EN 61000-4-5 (EN 61204-3):

- ± 0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ± 1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ± 0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ± 1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ± 2.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**

11.6.6 The performance criterion after tested EN 61000-4-5 (EN 61000-6-1):

- ± 0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ± 1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to line
Performance criterion: **A** **B** **C**
- ± 0.5 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ± 1.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**
- ± 2.0 (+5 ~ -10%) kV (peak) Input AC power port: Line to earth (ground)
Performance criterion: **A** **B** **C**

12 Radio-Frequency, Conducted Disturbances Immunity Test (EN 61000-4-6)

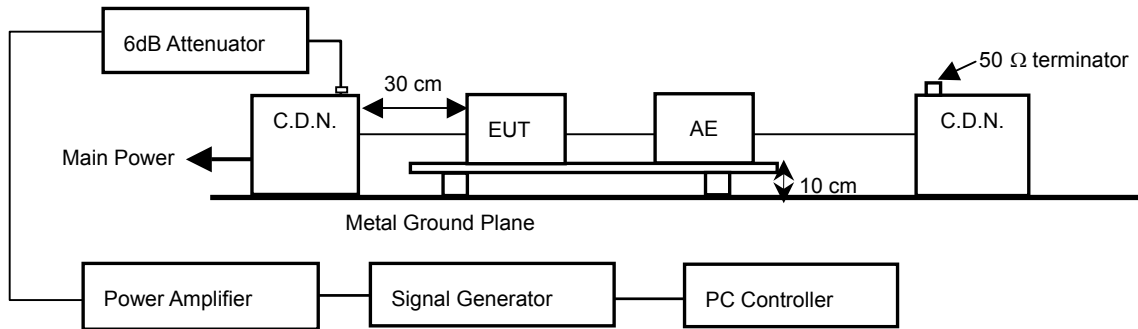
12.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
Signal Generator	R&S	SMY02	829846/013	2012/08/25
Power Amplifier	Frankonia	CIT-10	162D1278	2012/02/10
Attenuator	SCHAFFNER	ATN6075	22300	2012/02/10
C.D.N	FCC	FCC-801-M3-25A	2045	2012/02/10
C.D.N	SCHAFFNER	M216	16394	2012/02/10
EM Injection Clamp	SCHAFFNER	KEMZ 801	17037	2012/02/10

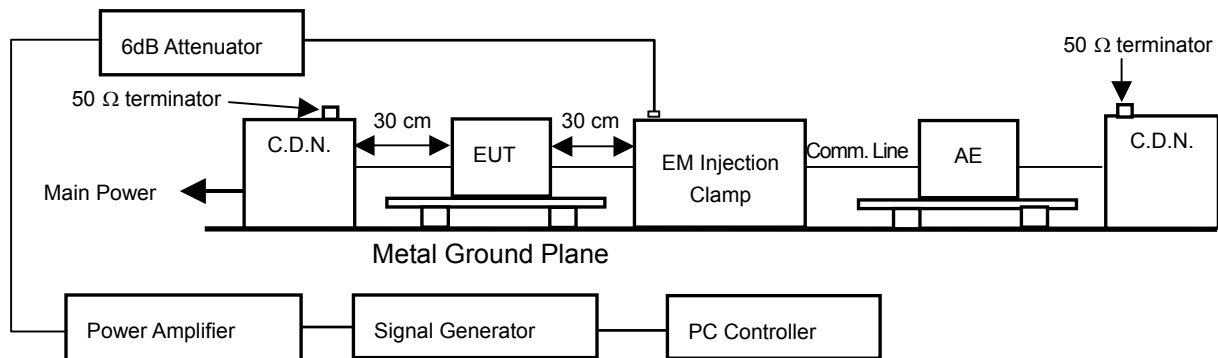
Note: The above equipments are within the valid calibration period.

12.2 Block Diagram of Test Configuration

For Power Ports.



For Signal/ Telecommunication Ports.



12.3 Test Levels

Level	Voltage Level (V)
1	1
2	3
3	10
X	Special

12.4 Test Requirement

12.4.1 The frequency steps: 1%, Log sweep, Dwell time: 3.0 sec.

Frequency Range is from 0.15 to 80MHz.

12.4.2 EN 61000-4-6 (EN 55024) require:

Field strength: **3 V**, 80% AM (1kHz)

Input AC power port.

Signal ports.

Telecommunication ports.

Performance criterion: A

12.4.3 EN 61000-4-6 (EN 61204-3) require: (For Low Severity Levels)

Field strength: **3 V**, 80% AM (1kHz)

Input AC power port.

Signal ports.

Performance criterion: B

12.4.4 EN 61000-4-6 (EN 61000-6-1) require

Field strength: **3 V**, 80% AM (1kHz)

Input AC power port.

Signal ports.

Performance criterion: A

12.5 Configuration of Measurement

- 12.5.1 The EUT was placed on a table of is 0.1 m height. In Semi-Anechoic chamber A Ground reference plane was placed on the table and a 0.1 meter insulating support was inserted between the EUT and Ground reference plane.
- 12.5.2 The EUT was connected to the power mains through a Coupling and Decoupling Networks (CDN).
- 12.5.3 The test was performed with the test generator connected to each of the coupling and decoupling devices in turn while the other non-excited RF input ports of the coupling devices were terminated by a 50Ω terminator.
- 12.5.4 The frequency range was swept from 150kHz to 80MHz.using the signal levels established during the setting process, and without the disturbance signal 80% amplitude modulated with a 1 kHz sine wave, pausing to adjust the RF signal level or to switch coupling devices as necessary. The rate of sweep was less than 1.5×10^{-3} decades/s. And the step size of the frequency sweep was also less than 1% of the start and thereafter 1% of the preceding frequency value. The dwell time at each frequency was more than the time necessary for the EUT to be excited, and able to respond.
- 12.5.5 The EUT was fully excised during the testing and all the selected excise modes were fully interrogated for susceptibility.

12.6 Test Result

Temperature: 20.1 °C ; Humidity: 50 % ; Atm pres: 101 Kpa ; Test Engineer: Fox

PASS.

(For Mode 11 & 12: FULL LOAD (RKP-6K1UT-CMU1-48) (Power A & B))

- 12.6.1 The performance criterion after tested EN 61000-4-6 (EN 55024):
Frequency range: **0.15 to 80** MHz, Field strength: **3** V, 80% AM (1kHz),
 Input AC power port.
Performance criterion: **A** **B** **C**
- Telecommunication port: RJ45
Performance criterion: **A** **B** **C**
- 12.6.2 The performance criterion after tested EN 61000-4-6 (EN 61204-3):
Frequency range: **0.15 to 80** MHz, Field strength: **3** V, 80% AM (1kHz),
 Input AC power port.
Performance criterion: **A** **B** **C**
- Signal port: RJ45
Performance criterion: **A** **B** **C**
- 12.6.3 The performance criterion after tested EN 61000-4-6 (EN 61000-6-1):
Frequency range: **0.15 to 80** MHz, Field strength: **3** V, 80% AM (1kHz),
 Input AC power port.
Performance criterion: **A** **B** **C**
- Signal port: RJ45
Performance criterion: **A** **B** **C**

(For Mode 18: FULL LOAD (RKP-6K1UT-CMU1-48) (Power for RKP-CMU1))

- 12.6.4 The performance criterion after tested EN 61000-4-6 (EN 55024):
Frequency range: **0.15 to 80** MHz, Field strength: **3** V, 80% AM (1kHz),
 Input AC power port.
Performance criterion: **A** **B** **C**
- Telecommunication port: RJ45
Performance criterion: **A** **B** **C**
- 12.6.5 The performance criterion after tested EN 61000-4-6 (EN 61204-3):
Frequency range: **0.15 to 80** MHz, Field strength: **3** V, 80% AM (1kHz),
 Input AC power port.
Performance criterion: **A** **B** **C**
- Signal port: RJ45
Performance criterion: **A** **B** **C**
- 12.6.6 The performance criterion after tested EN 61000-4-6 (EN 61000-6-1):
Frequency range: **0.15 to 80** MHz, Field strength: **3** V, 80% AM (1kHz),
 Input AC power port.
Performance criterion: **A** **B** **C**
- Signal port: RJ45
Performance criterion: **A** **B** **C**

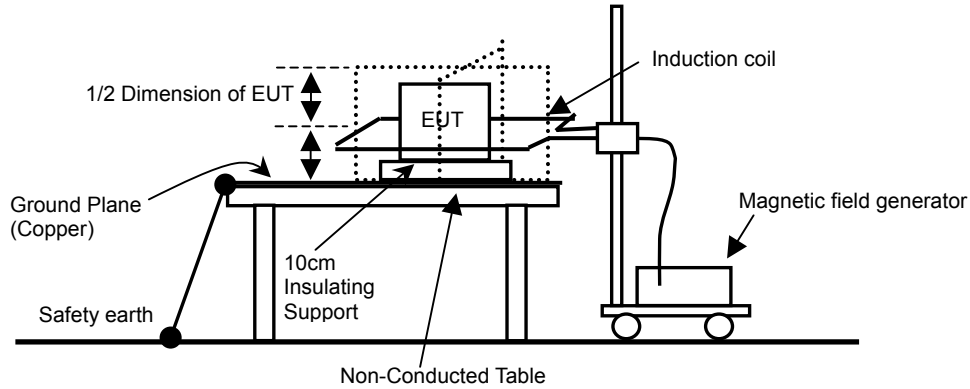
13 Power Frequency Magnetic Field Immunity Test (EN 61000-4-8)

13.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
Magnetic field generator	PMM	PMM1008	0000J00301	2012/09/09

Note: The above equipments are within the valid calibration period.

13.2 Block Diagram of Test Configuration



13.3 Test Levels

Level	Magnetic field strength (A/m)
1	1
2	3
3	10
4	30
5	100
X	Special

13.4 Test Requirement

13.4.1 EN 61000-4-8 (EN 55024) require:

Power Frequency is 50Hz.

Magnetic field strength: 1A/m

Performance criterion: **A**

13.4.2 EN 61000-4-8 (EN 61000-6-1) require:

Power Frequency is 50 or 60Hz.

Magnetic field strength: 3A/m

Performance criterion: **A**

13.5 Configuration of Measurement

13.5.1 The equipment is configured and connected to satisfy its functional requirements. It shall be placed on the GRP (1m x 1m) with the interposition of a 0.1m thickness insulating support.

13.5.2 All cables shall be exposed to the magnetic field for 1m of their length.

13.5.3 Different induction coils may be selected for testing in the different orthogonal directions.

13.5.4 Induction coils used in the vertical position (horizontal polarization of the field) can be bonded directly to the ground plane.

13.6 Test Result

Temperature: 24.9 °C ; Humidity: 50 % ; Atm pres: 101 Kpa ; Test Engineer: Fox

PASS.

(For Mode 24: FULL LOAD (RKP-6K1UT-CMU1-48))

13.6.1 The performance criterion after tested EN 61000-4-8 (EN 55024):

Power Frequency is 50Hz, Magnetic field strength: 3A/m

Performance criterion: **A** **B** **C**

13.6.2 The performance criterion after tested EN 61000-4-8 (EN 61000-6-1):

Power Frequency is 50Hz, Magnetic field strength: 3A/m

Performance criterion: **A** **B** **C**

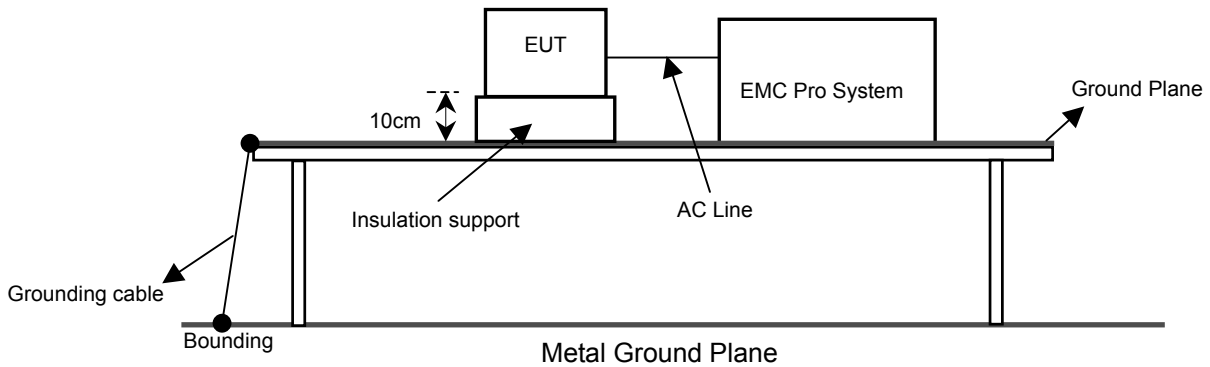
14 Voltage Dips, Short Interruptions Immunity Test (EN 61000-4-11)

14.1 Instrument

Instrument	Manufacturer	Model	Serial No.	Next Cal. Date
EMC Pro System	KeyTek	EMC Pro	0003231	2012/04/14

Note: The above equipments are within the valid calibration period.

14.2 Block Diagram of Test Configuration



14.3 Test Levels

Preferred test level and durations for voltage dips

Class ^a	Test level and durations for short interruptions (t_s) (50 Hz/60 Hz)				
Class 1	Case-by-case according to the equipment requirements				
Class 2	0 % during 1/2 cycle	0 % during 1 cycle	70 % during 25/30 ^c cycles		
Class 3	0 % during 1/2 cycle	0 % during 1 cycle	40 % during 10/12 ^c cycles	70 % during 25/30 ^c cycles	80 % during 250/300 ^c cycles
Class X ^b	X	X	X	X	X

^a Classes as per EN 61000-2-4; see Annex B.

^b To be defined by product committee. For equipment connected directly or indirectly to the public network, the levels must not be less severe than Class 2.

^c “25/30 cycles” means “25 cycles for 50 Hz test” and “30 cycles for 60 Hz test”.

Preferred test level and durations for short interruptions

Class ^a	Test level and durations for short interruptions (t_s) (50 Hz/60 Hz)
Class 1	Case-by-case according to the equipment requirements
Class 2	0 % during 250/300 ^c cycles
Class 3	0 % during 250/300 ^c cycles
Class X ^b	X

^a Classes as per EN 61000-2-4; see Annex B.

^b To be defined by product committee. For equipment connected directly or indirectly to the public network, the levels must not be less severe than Class 2.

^c “250/300 cycles” means “250 cycles for 50 Hz test” and “300 cycles for 60 Hz test”.

14.4 Test Requirement

- 14.4.1 EN 61000-4-11 (EN 55024) require:
- > 95% reduction (Voltage Dips), 0.5 period, Performance criterion: B
 - 30% reduction (Voltage Dips), 25 period, Performance criterion: C
 - > 95% reduction (Voltage Interruptions), 250 period, Performance criterion: C
- 14.4.2 EN 61000-4-11 (EN 61204-3) require: (For Low Severity Levels)
- 30% reduction (Voltage Dips), 10ms, Performance criterion: B
 - 60% reduction (Voltage Dips), 100ms, Performance criterion: C
 - > 95% reduction (Voltage Interruptions), 5000ms, Performance criterion: C
- 14.4.3 EN 61000-4-11 (EN 61000-6-1) require:
- 100% reduction (Voltage Dips), 0.5 cycle, Performance criterion: B
 - 100% reduction (Voltage Dips), 1 cycle, Performance criterion: B
 - 30% reduction (Voltage Dips), 25 cycle, Performance criterion: C
 - 100% reduction (Voltage Interruptions), 250 cycle, Performance criterion: C

14.5 Configuration of Measurement

- 14.5.1 The power cord was used as supplied by the manufacturer. The EUT was connected to the line output of the Voltage Dips and Interruption Generator.
- 14.5.2 According to EN 55024, the EUT was tested for (I) > 95% voltage dip of supplied voltage with duration of 0.5 period, (II) 30% voltage dip of supplied voltage and duration 25 period. Both of the dip tests were carried out for a sequence of three voltage dips with intervals of 10 seconds, (III) > 95% voltage interruption of supplied voltage with duration of 250 period was followed, which was a sequence of three voltage interruptions with intervals of 10 seconds.
- 14.5.3 According to EN 61204-3, the EUT was tested for (I) 30% voltage dip of supplied voltage with duration of 10ms, (II) 60% voltage dip of supplied voltage and duration 100ms. Both of the dip tests were carried out for a sequence of three voltage dips with intervals of 10 seconds. (III) > 95% voltage interruption of supplied voltage with duration of 5000ms was followed, which was a sequence of three voltage interruptions with intervals of 10 seconds.
- 14.5.4 According to EN 61000-6-1, the EUT was tested for (I) 100% voltage dip of supplied voltage with duration of 0.5 cycle, (II) 100% voltage dip of supplied voltage and duration 1 cycle, (III) 30% voltage dip of supplied voltage and duration 25 cycle. All of the dip tests were carried out for a sequence of three voltage dips with intervals of 10 seconds, (VI) 100% voltage interruption of supplied voltage with duration of 250 cycle was followed, which was a sequence of three voltage interruptions with intervals of 10 seconds.
- 14.5.5 Voltage reduction was controlled at 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° of the voltage phase angle. The performance of the EUT was checked after the voltage dip or interruption.

14.6 Test Result

Temperature: 24.9 °C ; Humidity: 50 % ; Atm pres: 101 Kpa ; Test Engineer: Fox

PASS.

(For Mode 11 & 12: FULL LOAD (RKP-6K1UT-CMU1-48) (Power A & B))

- 14.6.1 The performance criterion after tested EN 61000-4-11 (EN 55024):
- | | | | |
|---|---------------------------------------|----------------------------|----------------------------|
| > 95% reduction (Voltage Dips), 0.5 period | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| 30% reduction (Voltage Dips), 25 period | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| > 95% reduction (Voltage Interruptions), 250 period | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
- 14.6.2 The performance criterion after tested EN 61000-4-11 (EN 61204-3):
- | | | | |
|---|---------------------------------------|----------------------------|----------------------------|
| 30% reduction (Voltage Dips), 10ms | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| 60% reduction (Voltage Dips), 100ms | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| > 95% reduction (Voltage Interruptions), 5000ms | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
- 14.6.3 The performance criterion after tested EN 61000-4-11 (EN 61000-6-1):
- | | | | |
|---|---------------------------------------|----------------------------|----------------------------|
| 100% reduction (Voltage Dips), 0.5 cycle | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| 100% reduction (Voltage Dips), 1 cycle | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| 30% reduction (Voltage Dips), 25 cycle | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| 100% reduction (Voltage Interruptions), 250 cycle | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |

(For Mode 18: FULL LOAD (RKP-6K1UT-CMU1-48) (Power for RKP-CMU1))

- 14.6.4 The performance criterion after tested EN 61000-4-11 (EN 55024):
- | | | | |
|---|---------------------------------------|---------------------------------------|----------------------------|
| > 95% reduction (Voltage Dips), 0.5 period | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| 30% reduction (Voltage Dips), 25 period | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| > 95% reduction (Voltage Interruptions), 250 period | <input type="checkbox"/> A | <input checked="" type="checkbox"/> B | <input type="checkbox"/> C |
- 14.6.5 The performance criterion after tested EN 61000-4-11 (EN 61204-3):
- | | | | |
|---|---------------------------------------|---------------------------------------|----------------------------|
| 30% reduction (Voltage Dips), 10ms | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| 60% reduction (Voltage Dips), 100ms | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| > 95% reduction (Voltage Interruptions), 5000ms | <input type="checkbox"/> A | <input checked="" type="checkbox"/> B | <input type="checkbox"/> C |
- 14.6.6 The performance criterion after tested EN 61000-4-11 (EN 61000-6-1):
- | | | | |
|---|---------------------------------------|---------------------------------------|----------------------------|
| 100% reduction (Voltage Dips), 0.5 cycle | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| 100% reduction (Voltage Dips), 1 cycle | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| 30% reduction (Voltage Dips), 25 cycle | <input checked="" type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| 100% reduction (Voltage Interruptions), 250 cycle | <input type="checkbox"/> A | <input checked="" type="checkbox"/> B | <input type="checkbox"/> C |

15 Photographs of Test

15.1 Conducted Emission Measurement



Front View



Rear View

15.2 Radiated Emission Measurement



Front View

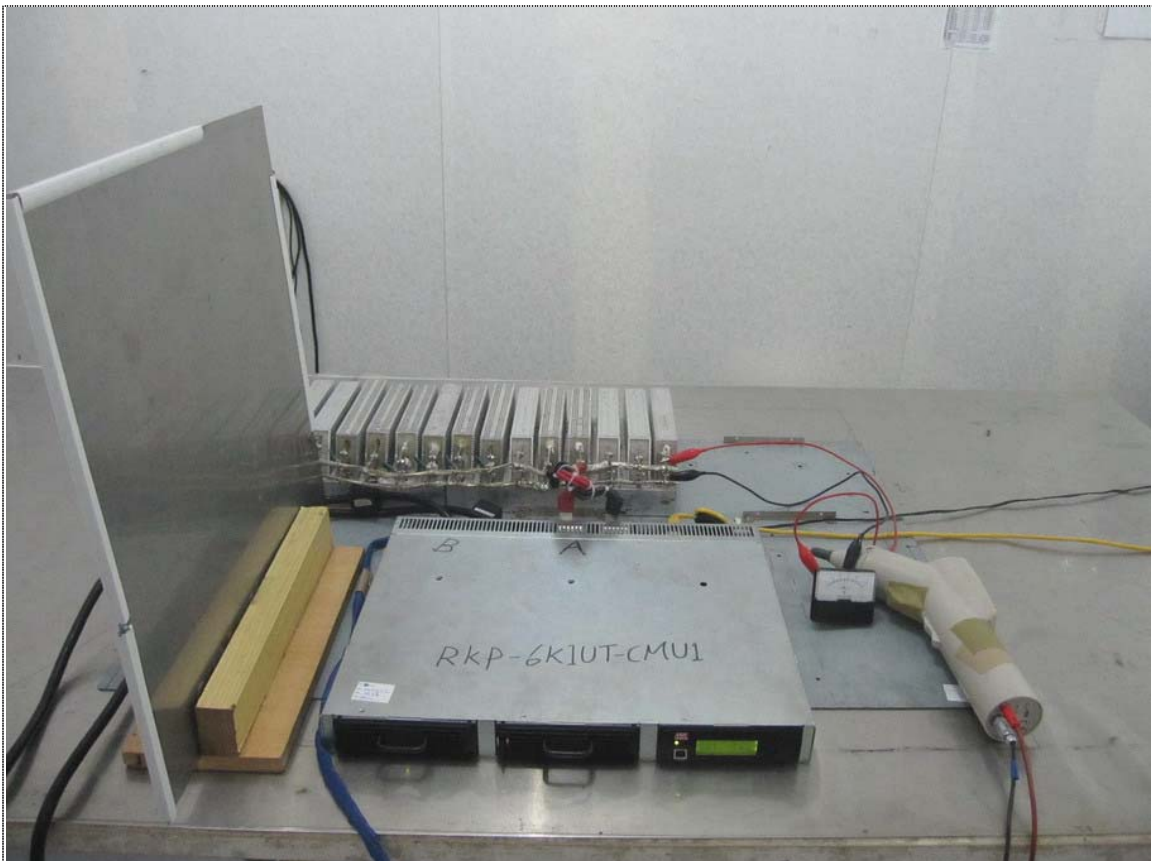


Rear View

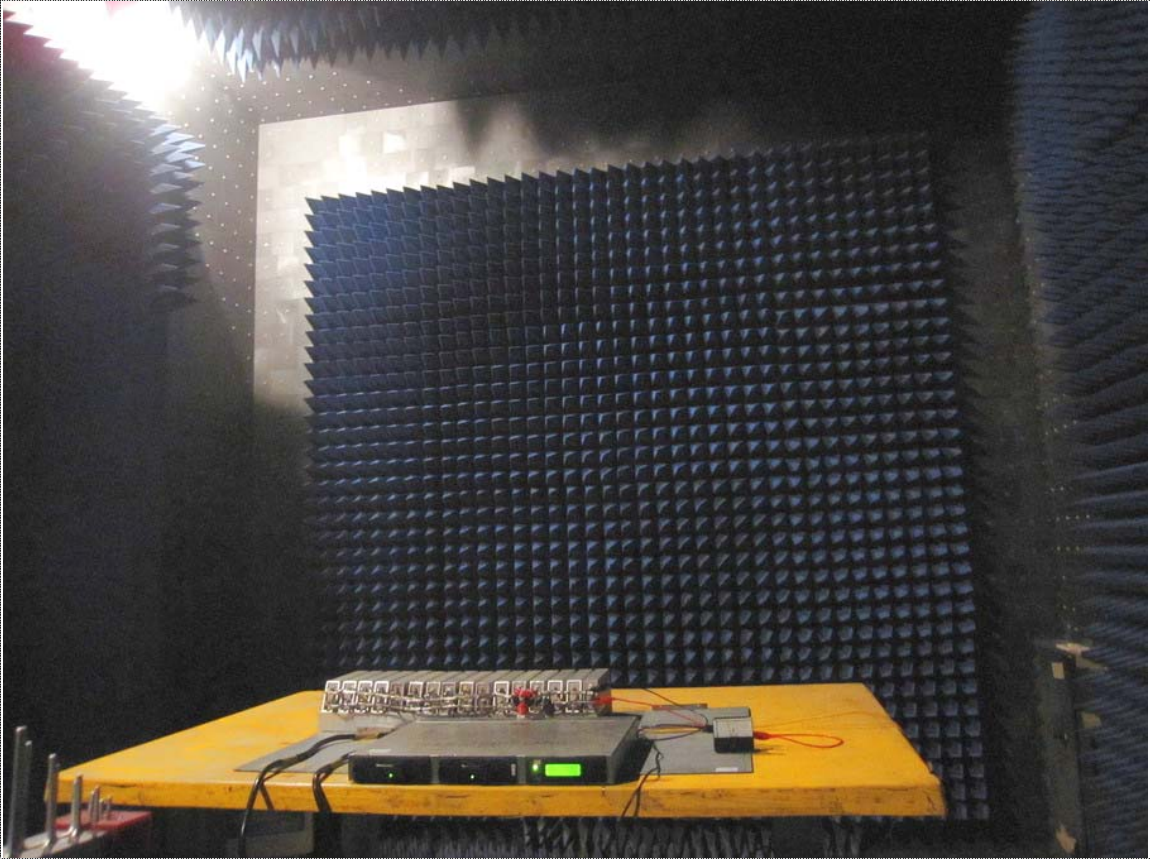
15.3 Harmonic Current & Voltage Fluctuations and Flicker Measurement



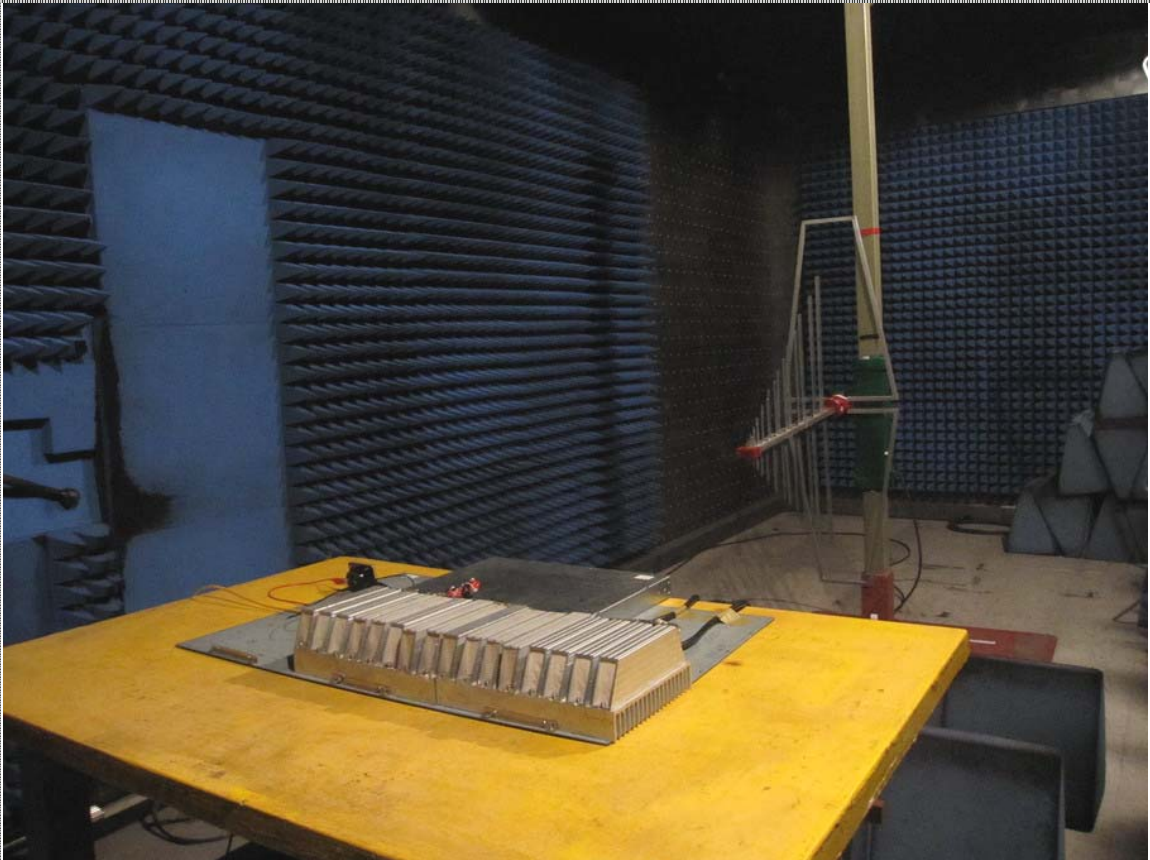
15.4 Electrostatic Discharge Immunity Test (EN 61000-4-2)



15.5 Radio-Frequency, Electromagnetic Field Immunity Test (EN 61000-4-3)



Front View



Rear View

15.6 Electrical Fast Transient/Burst Immunity Test (EN 61000-4-4)



15.7 Surge Immunity Test (EN 61000-4-5)



15.8 Radio-Frequency, Conducted Disturbances Immunity Test (EN 61000-4-6)



15.9 Power Frequency Magnetic Field Immunity Test (EN 61000-4-8)



15.10 DIP Immunity Test (EN 61000-4-11)



15.11 Electrostatic Discharge Test Point



View of Discharge Point-1 (Green: Air discharge; Red: Contact discharge)



View of Discharge Point-2 (Green: Air discharge; Red: Contact discharge)



View of Discharge Point-3 (Red: Contact discharge)



View of Discharge Point-4 (Red: Contact discharge)



View of Discharge Point-5 (Red: Contact discharge)

16 Photographs of EUT

16.1 Model No.: RKP-6K1UI-CMU1



Front View of EUT



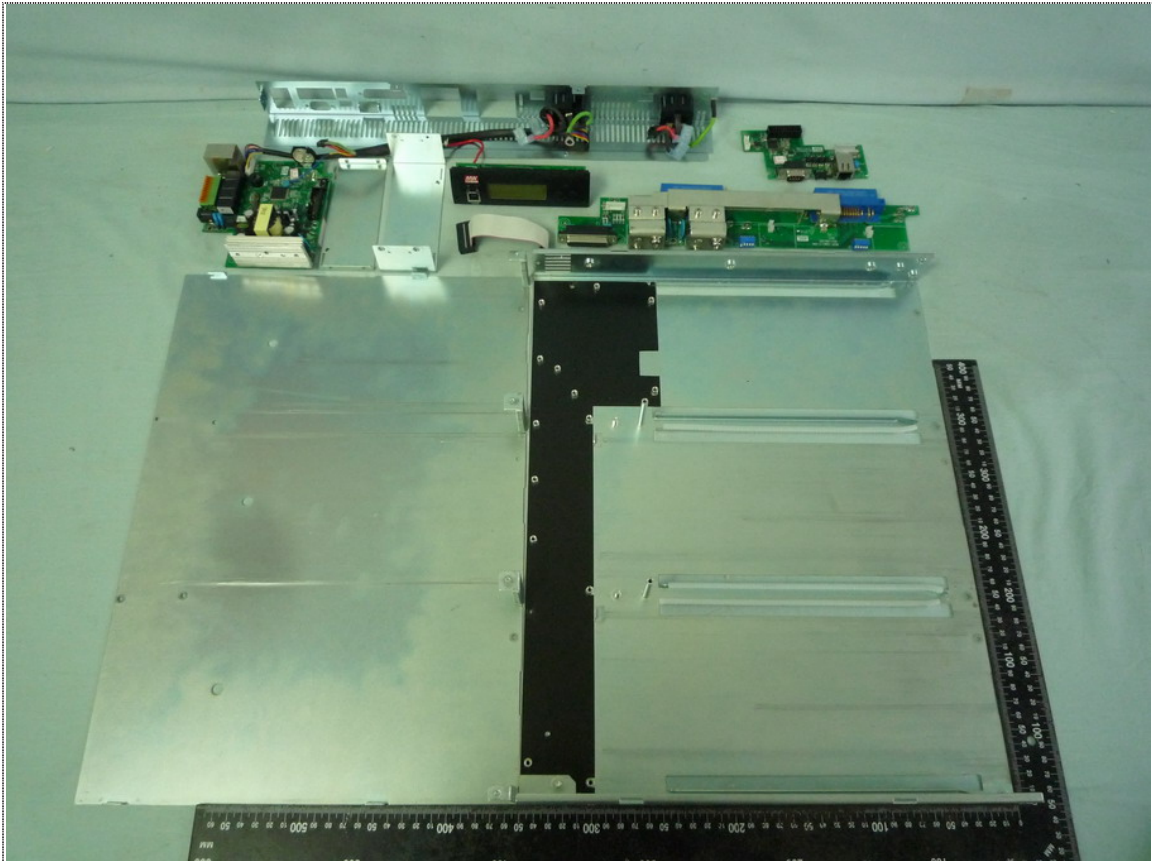
Rear View of EUT



Front View of of I/O Port



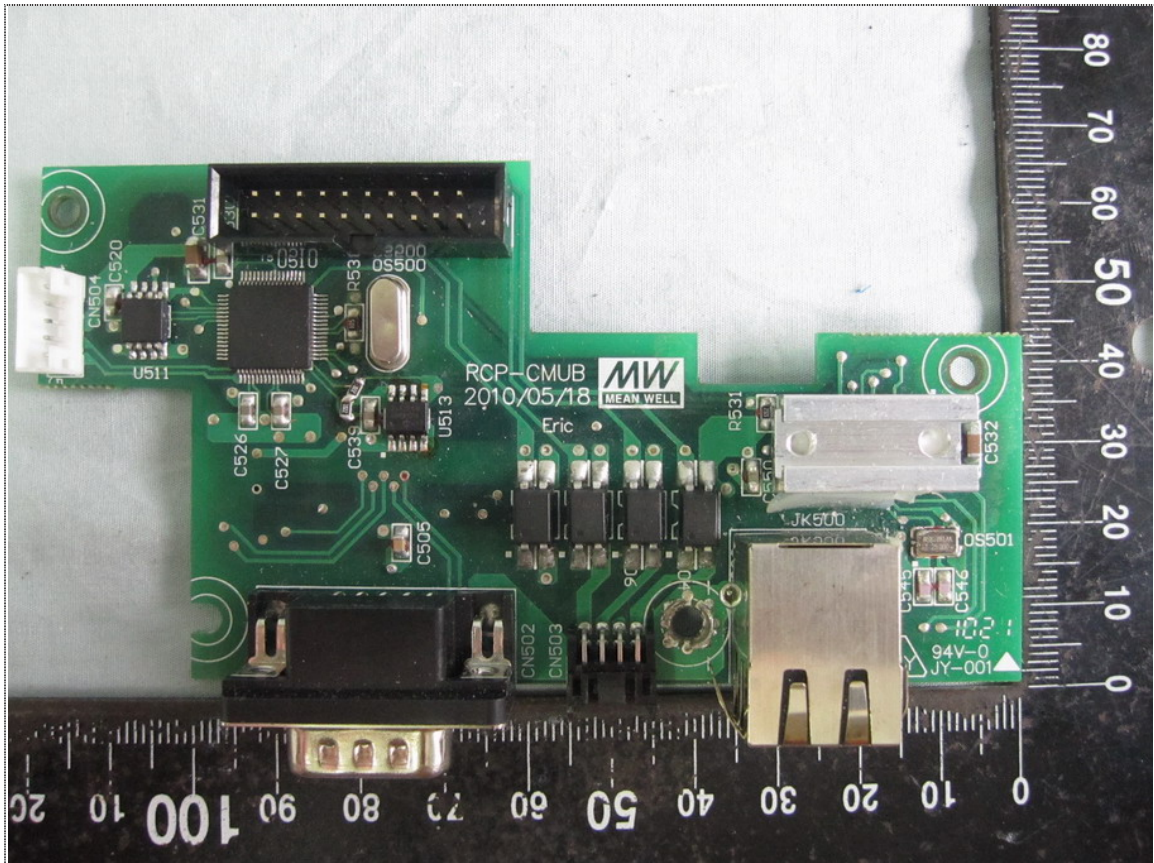
Rear View of I/O Port



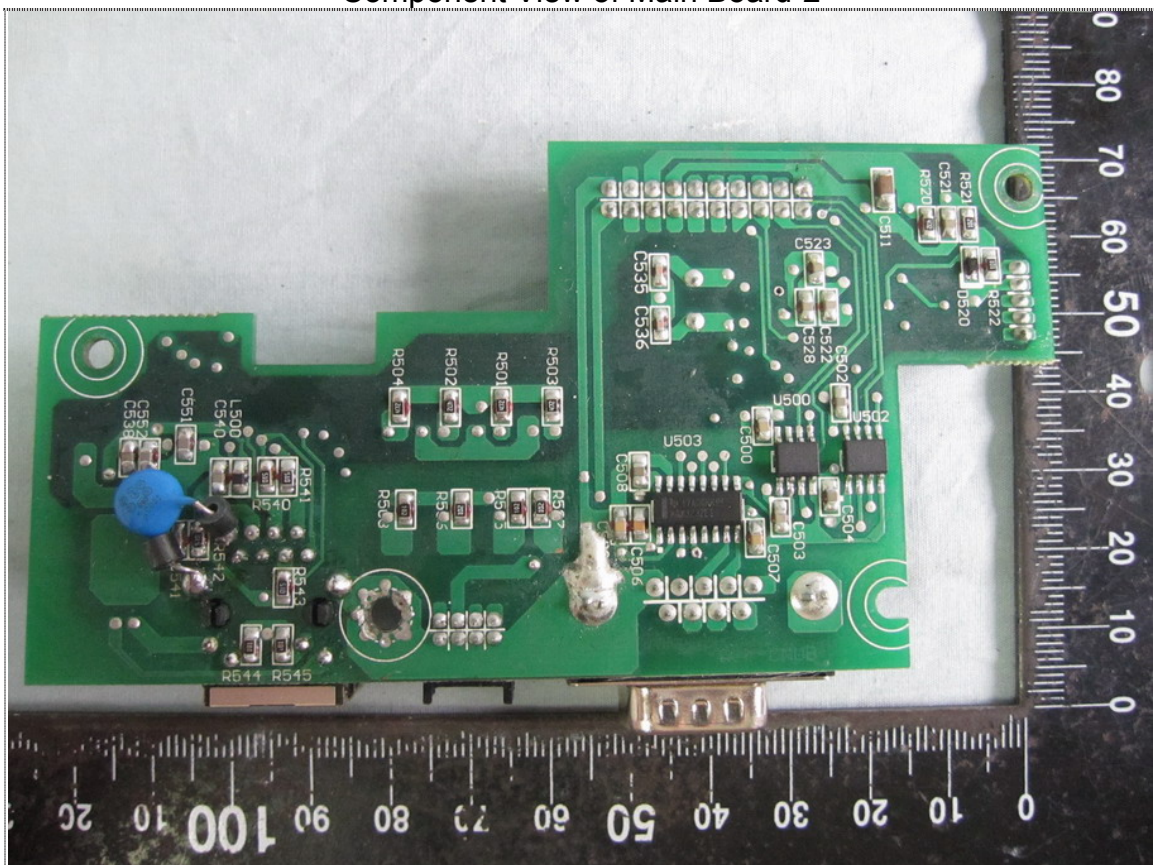
Inner View of EUT



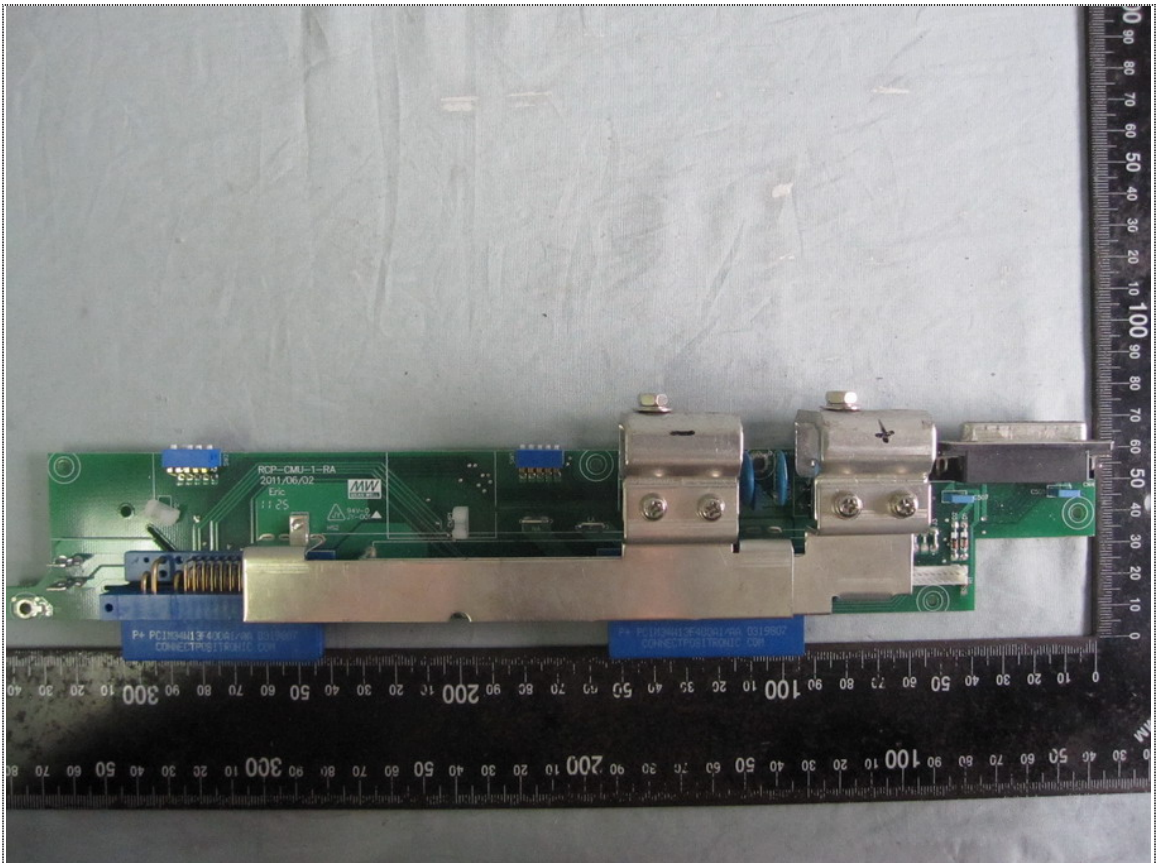
View of Label



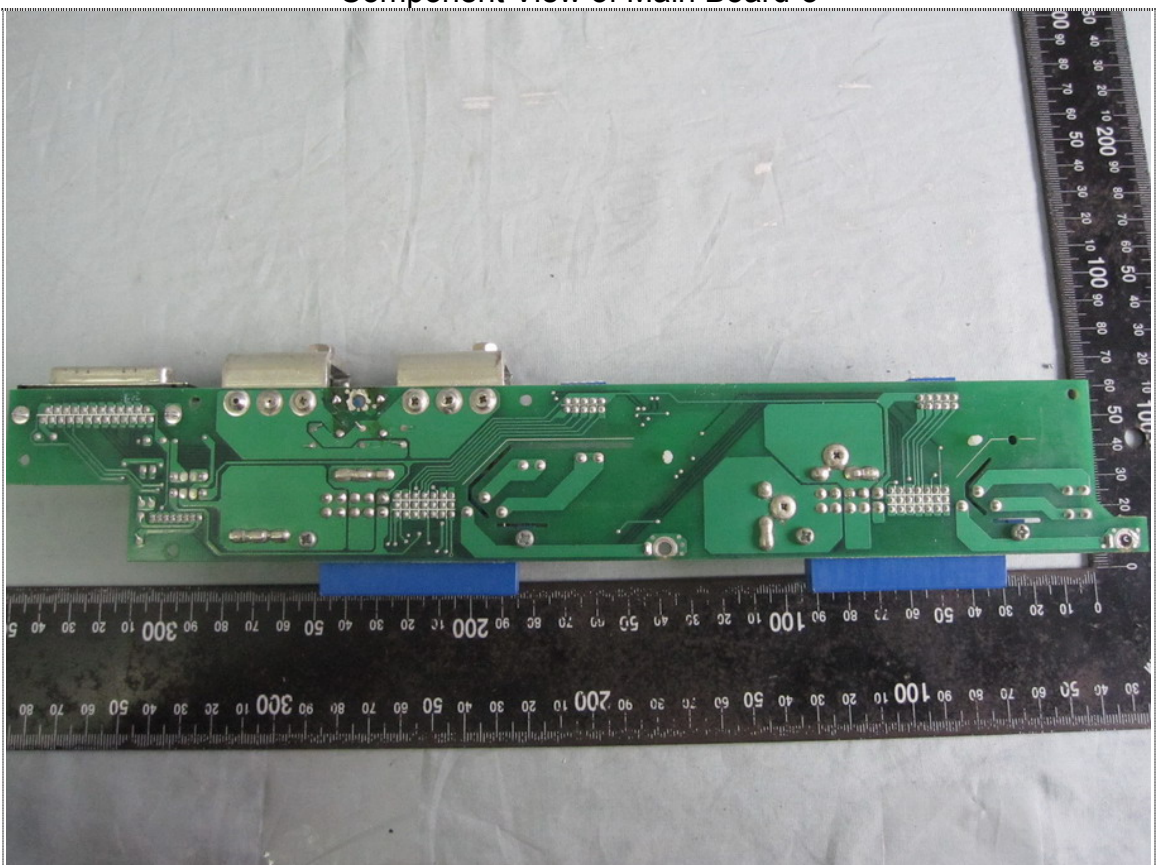
Component View of Main Board-2



Solder View of Main Board-2

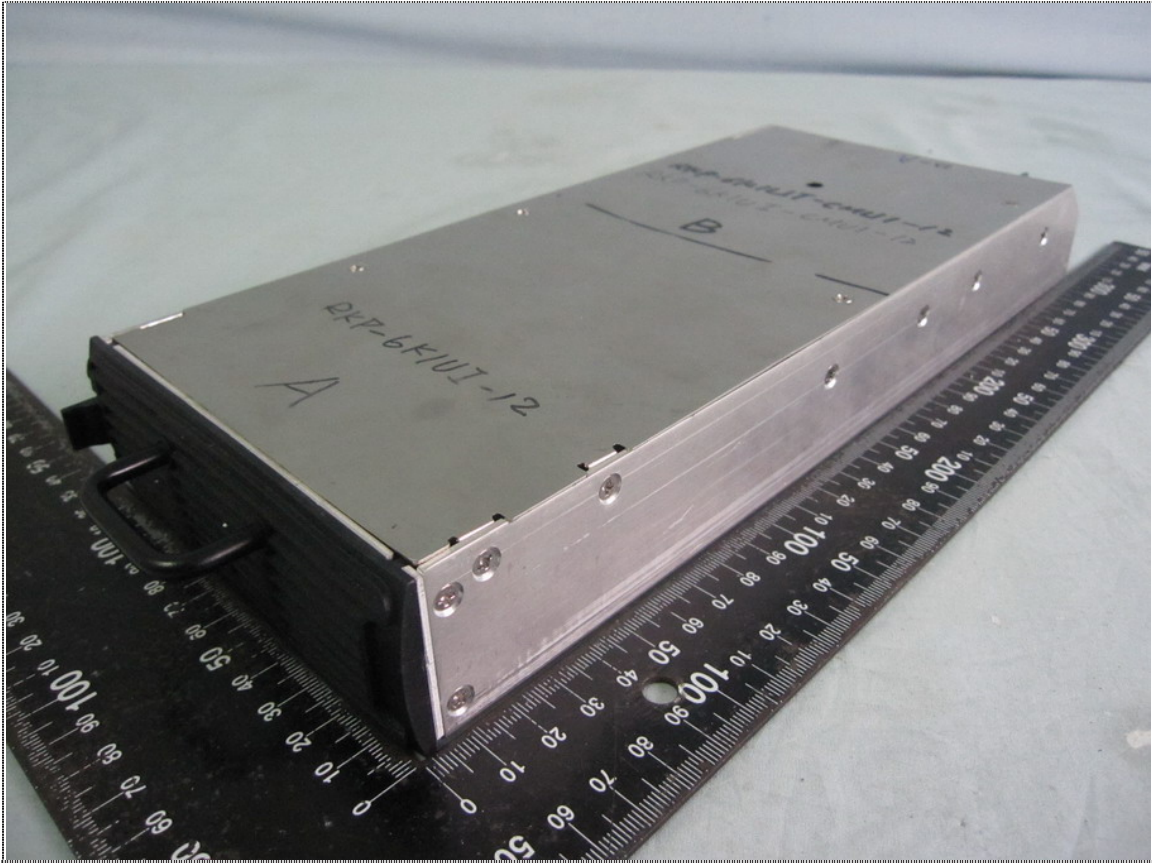


Component View of Main Board-3

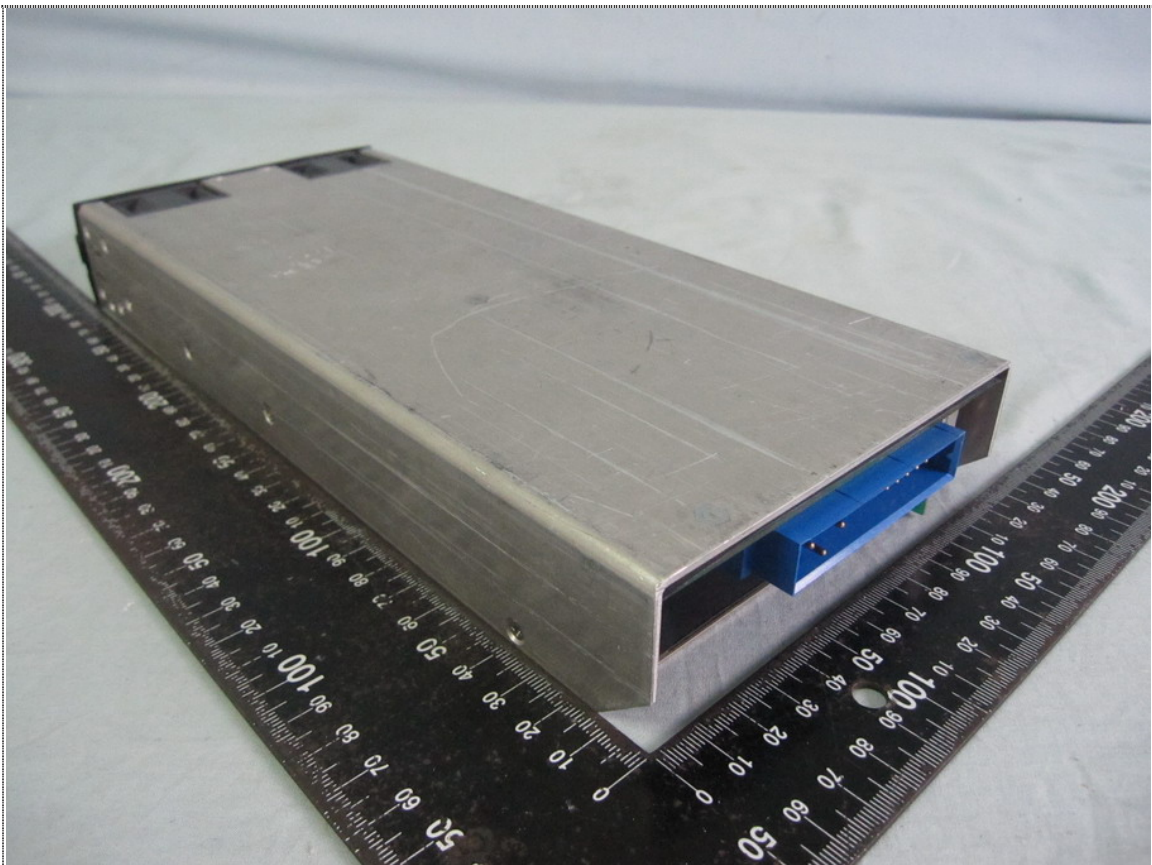


Solder View of Main Board-3

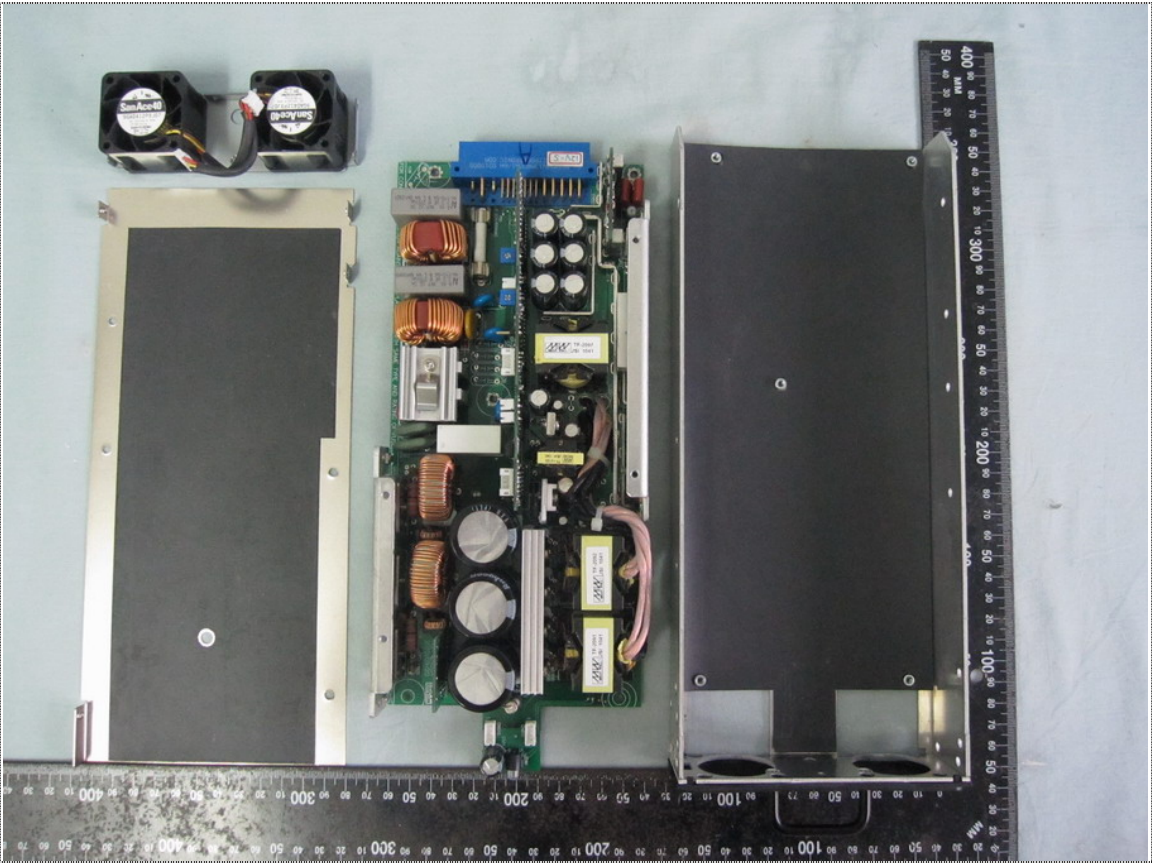
16.2 Model No.: RKP-6K1UI-CMU1-12



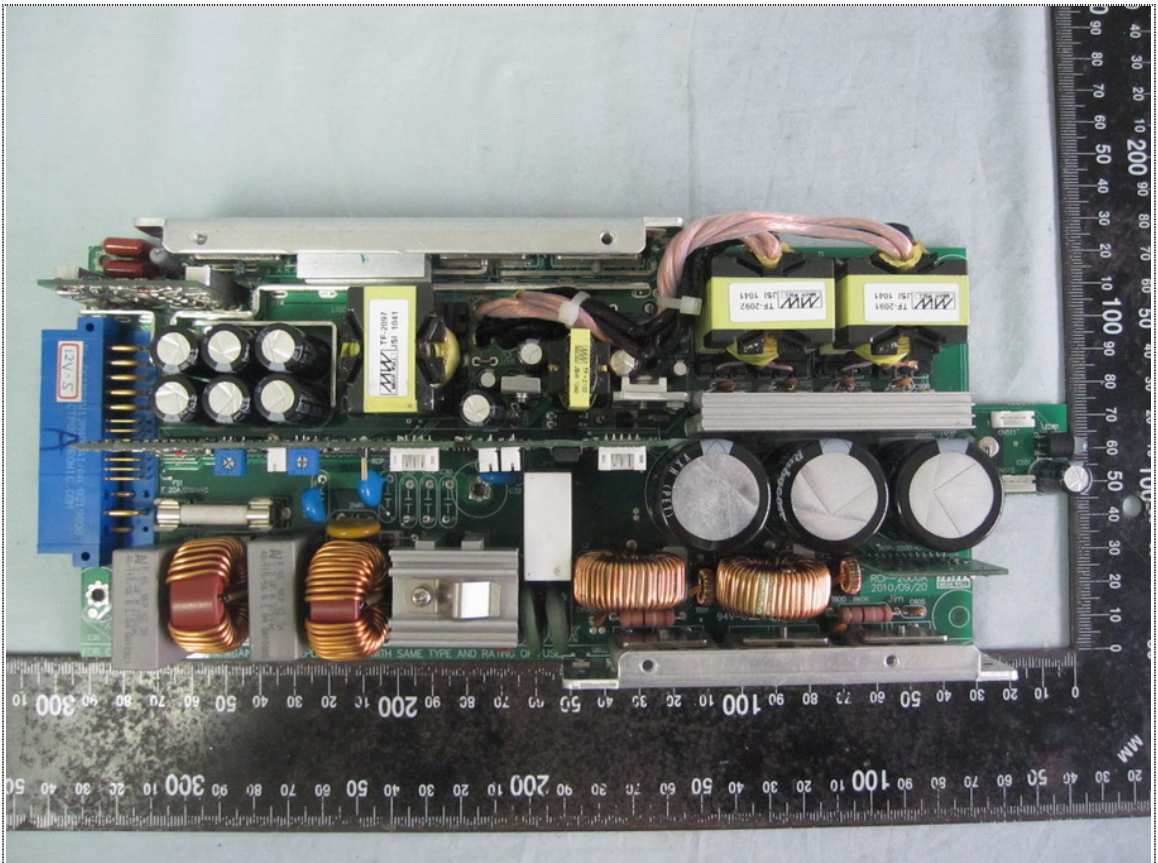
Front View of EUT



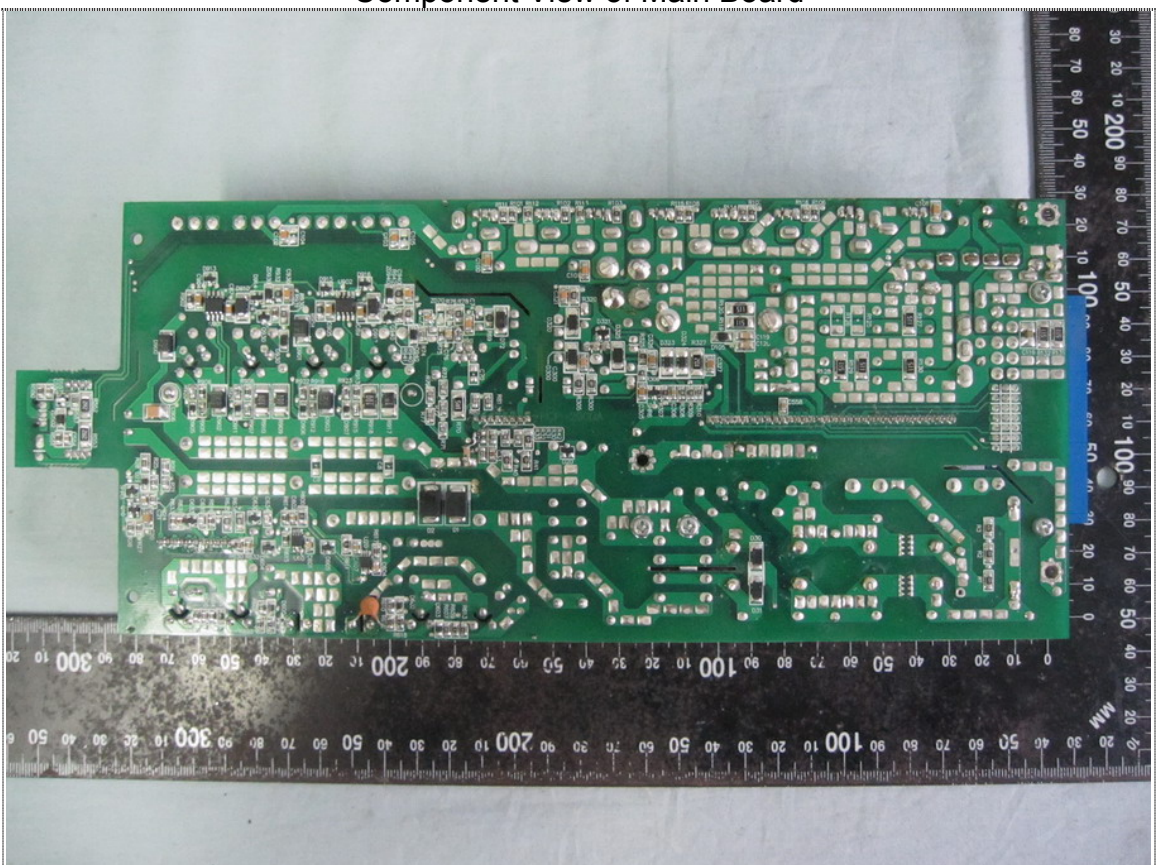
Rear View of EUT



Inner View of EUT



Component View of Main Board

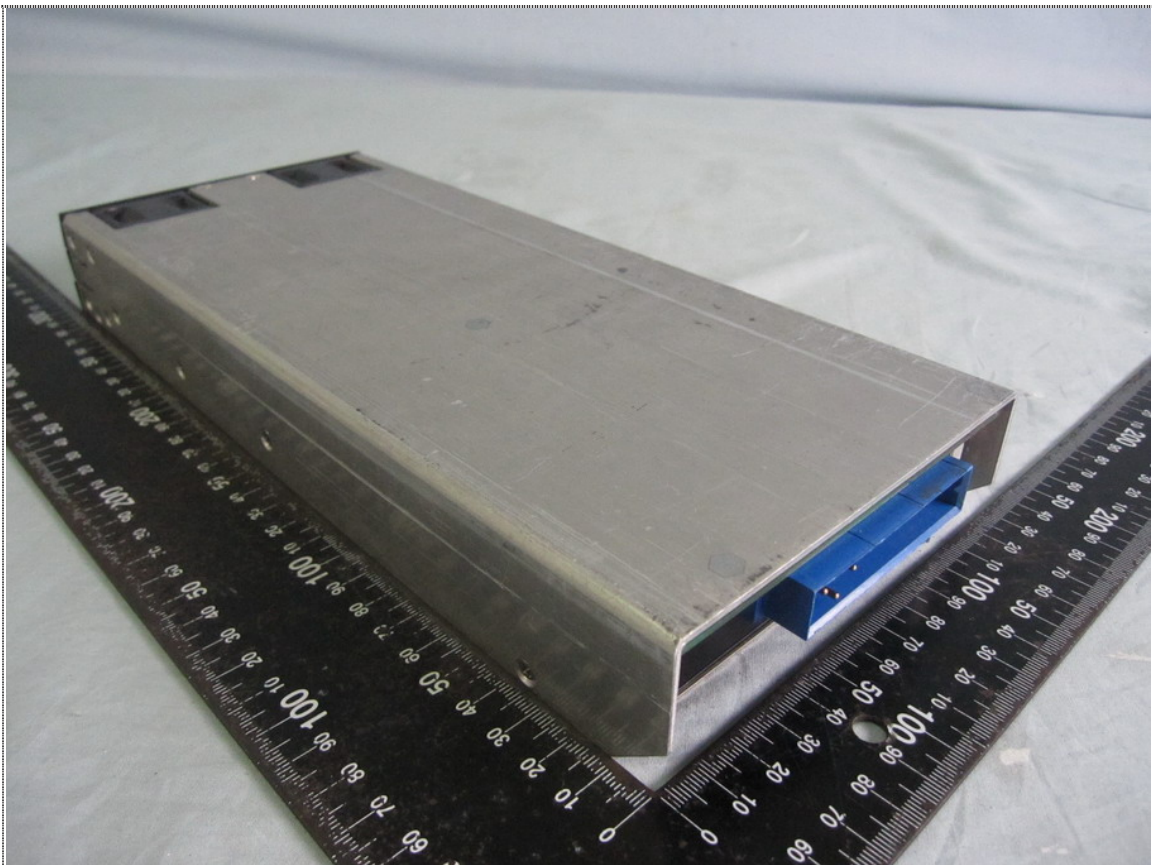


Solder View of Main Board

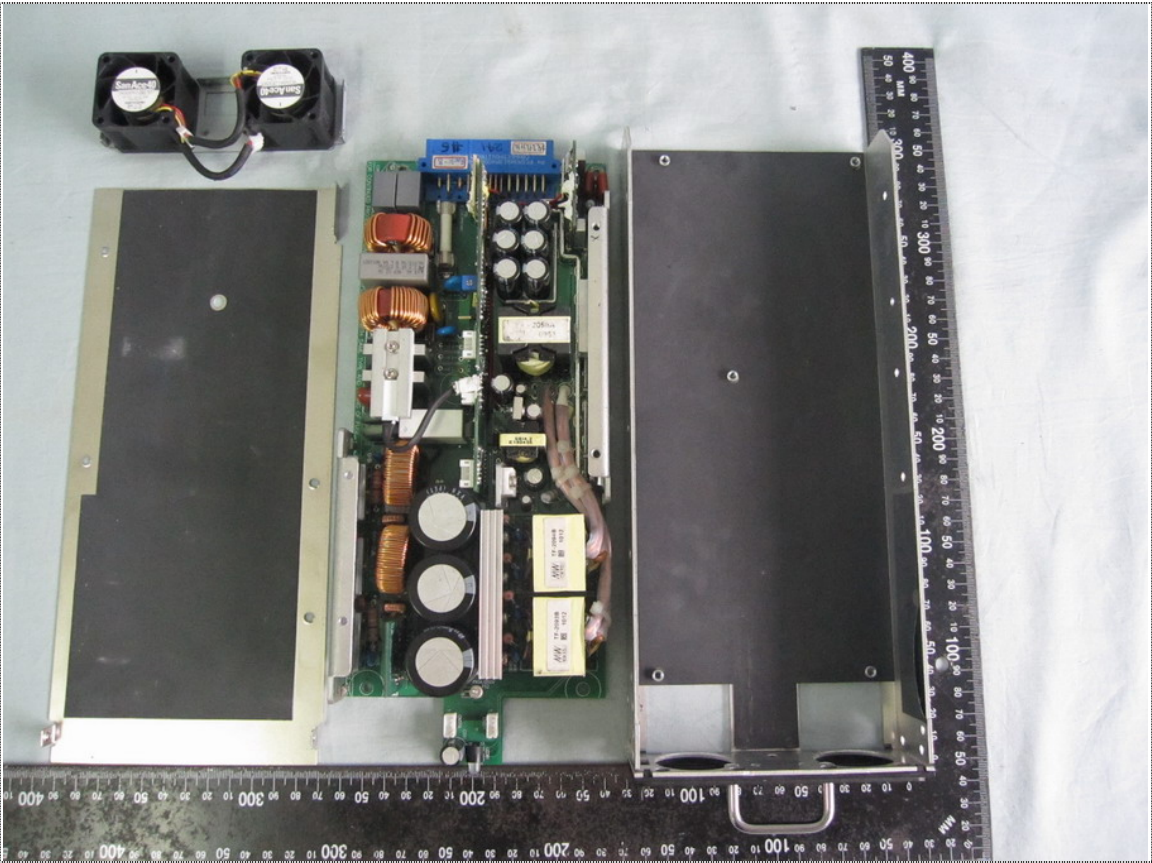
16.3 Model No.: RKP-6K1UI-CMU1-24



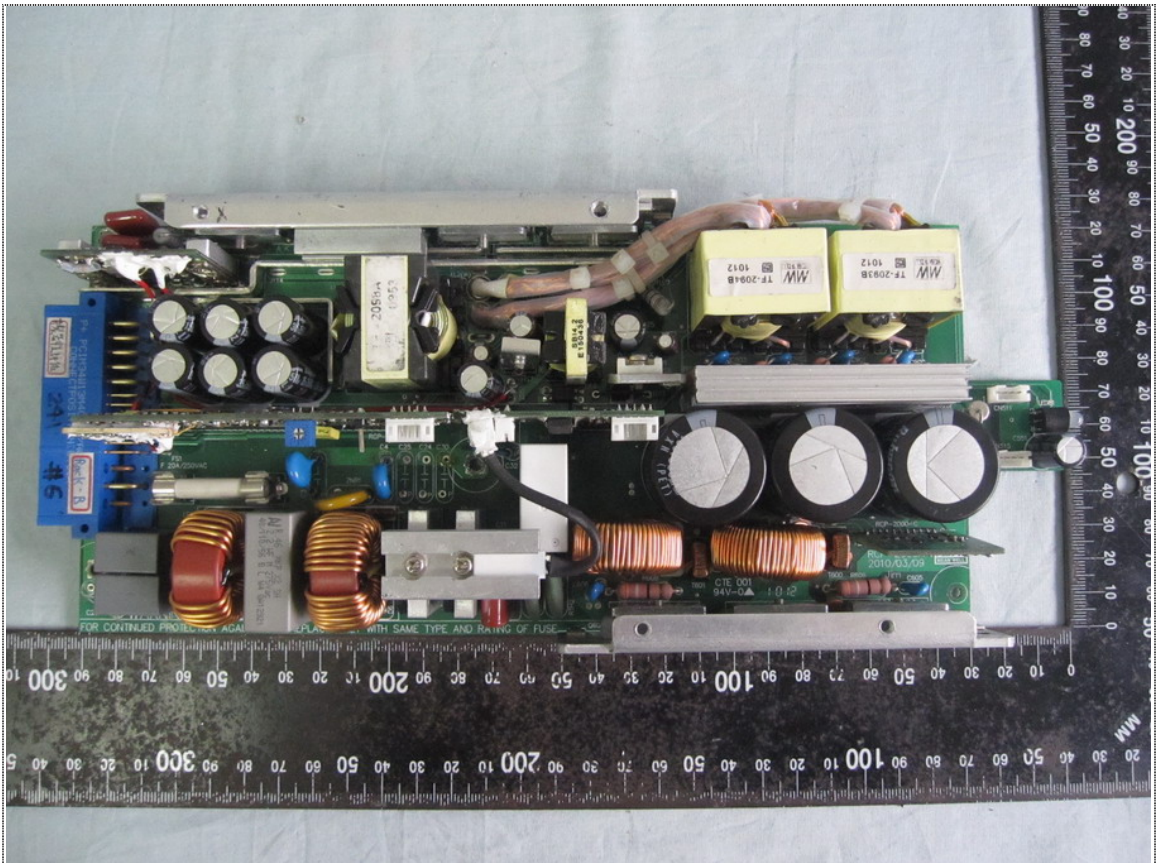
Front View of EUT



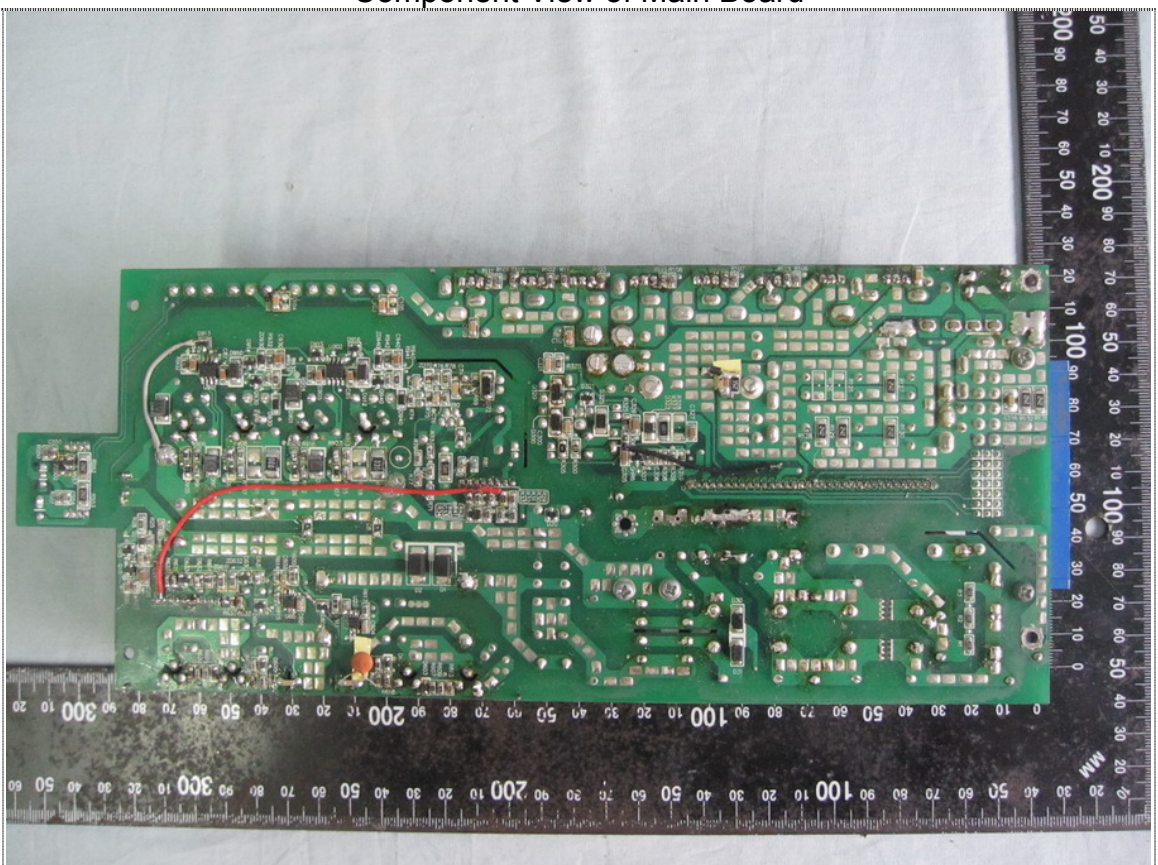
Rear View of EUT



Inner View of EUT



Component View of Main Board

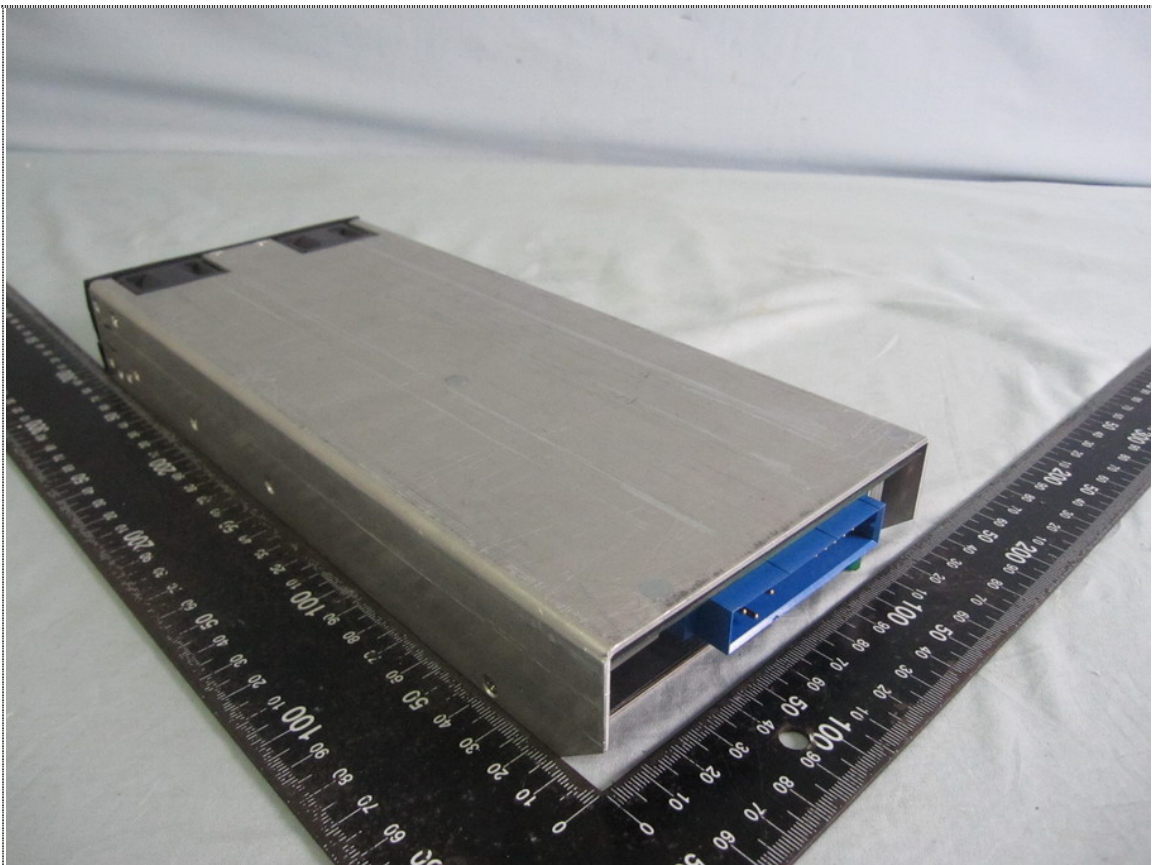


Solder View of Main Board

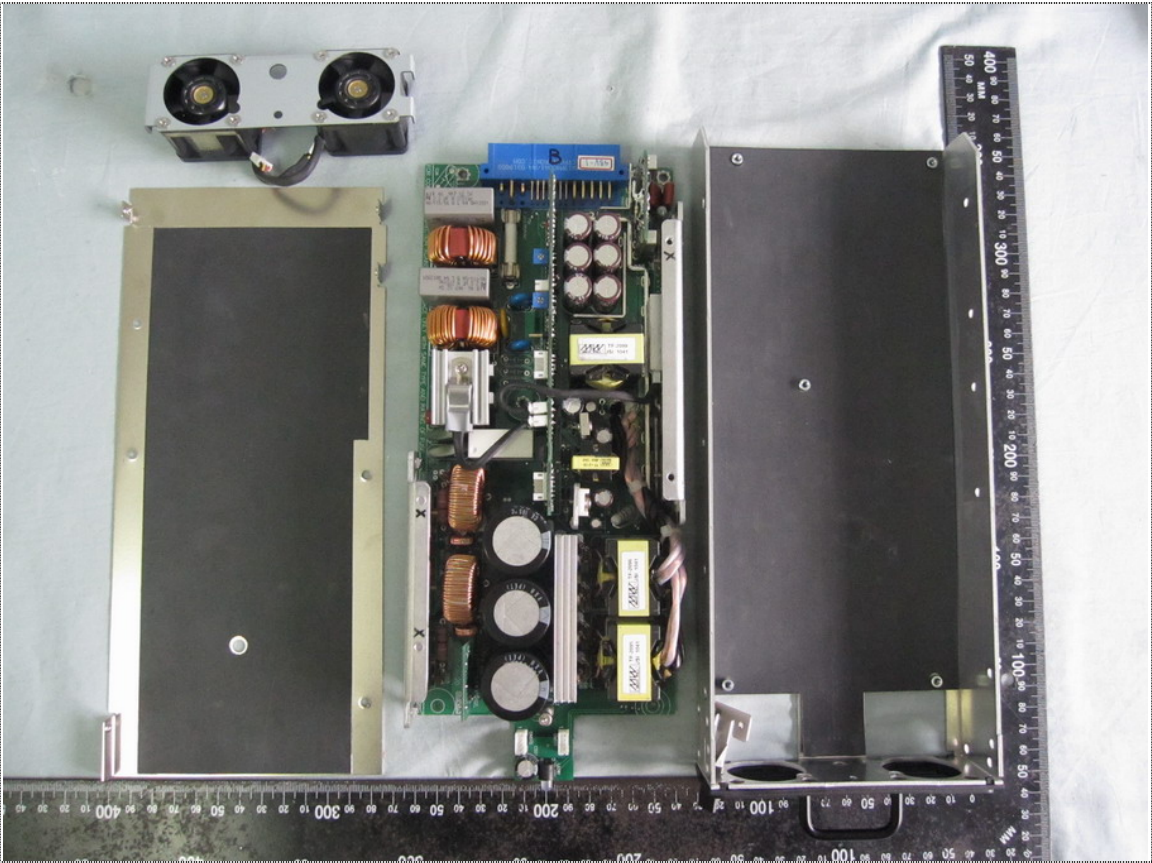
16.4 Model No.: RKP-6K1UI-CMU1-48



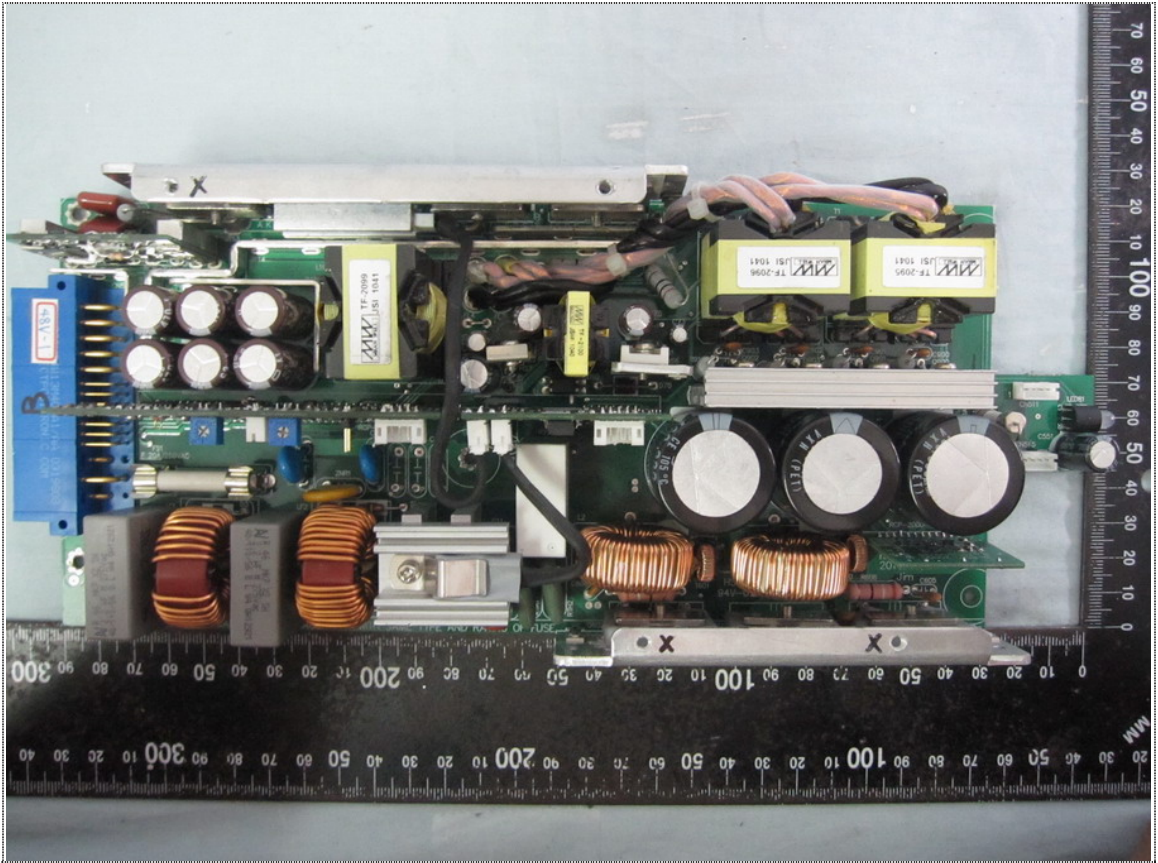
Front View of EUT



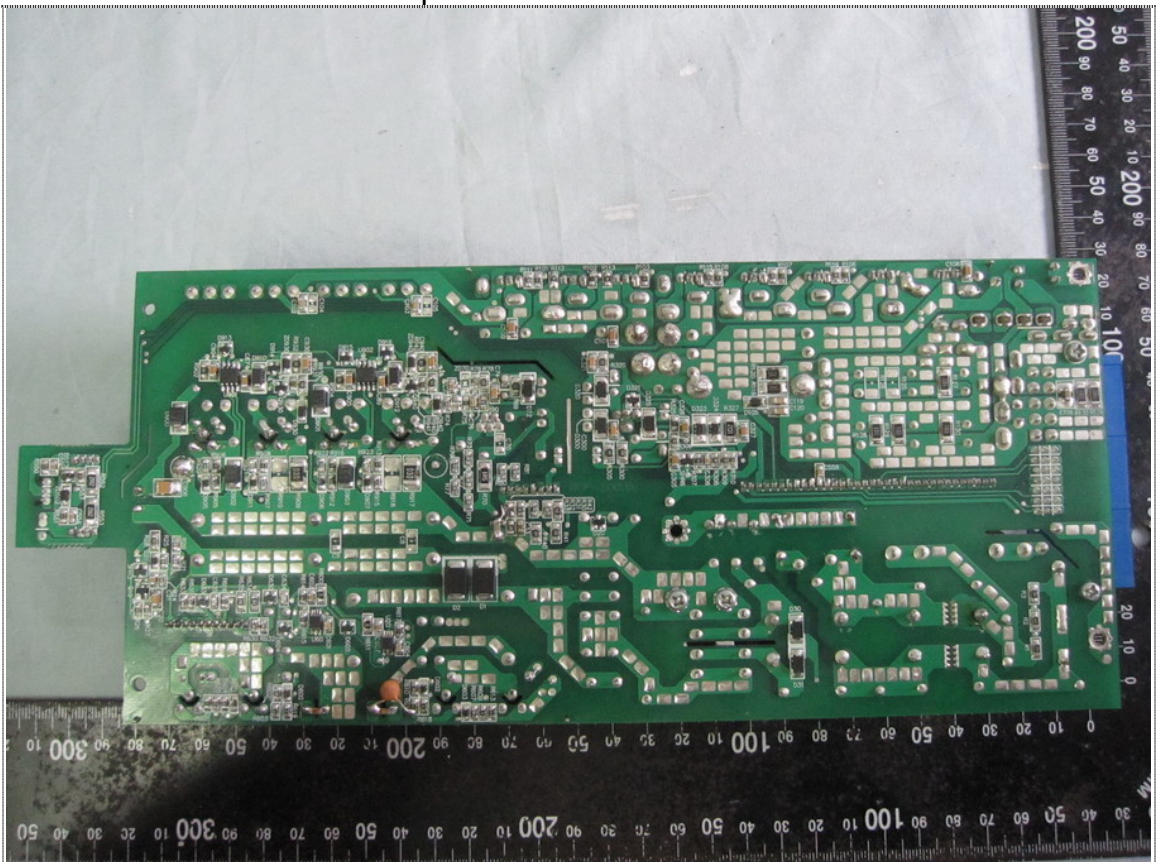
Rear View of EUT



Inner View of EUT



Component View of Main Board



Solder View of Main Board

16.5 Model No.: RKP-6K1UT-CMU1 & RKP-CMU1



Front View of EUT (RKP-6K1UT-CMU1)



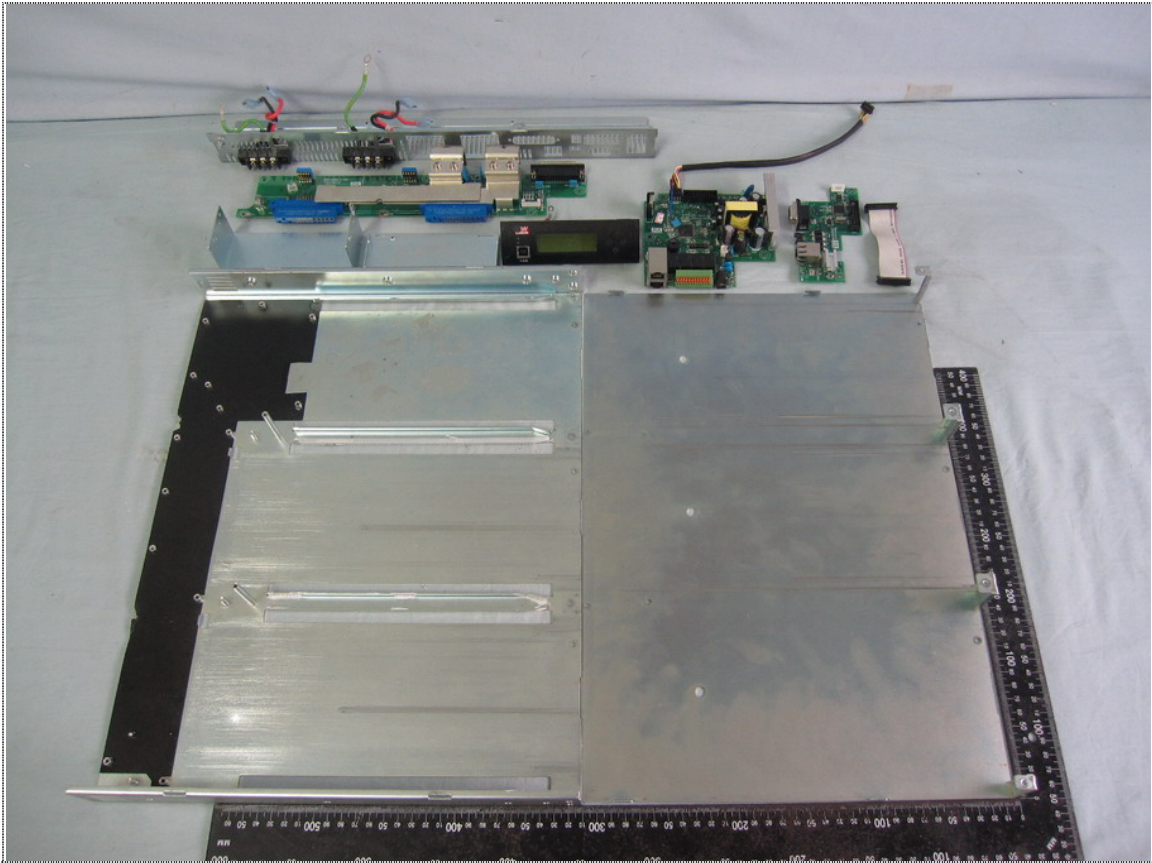
Rear View of EUT (RKP-6K1UT-CMU1)



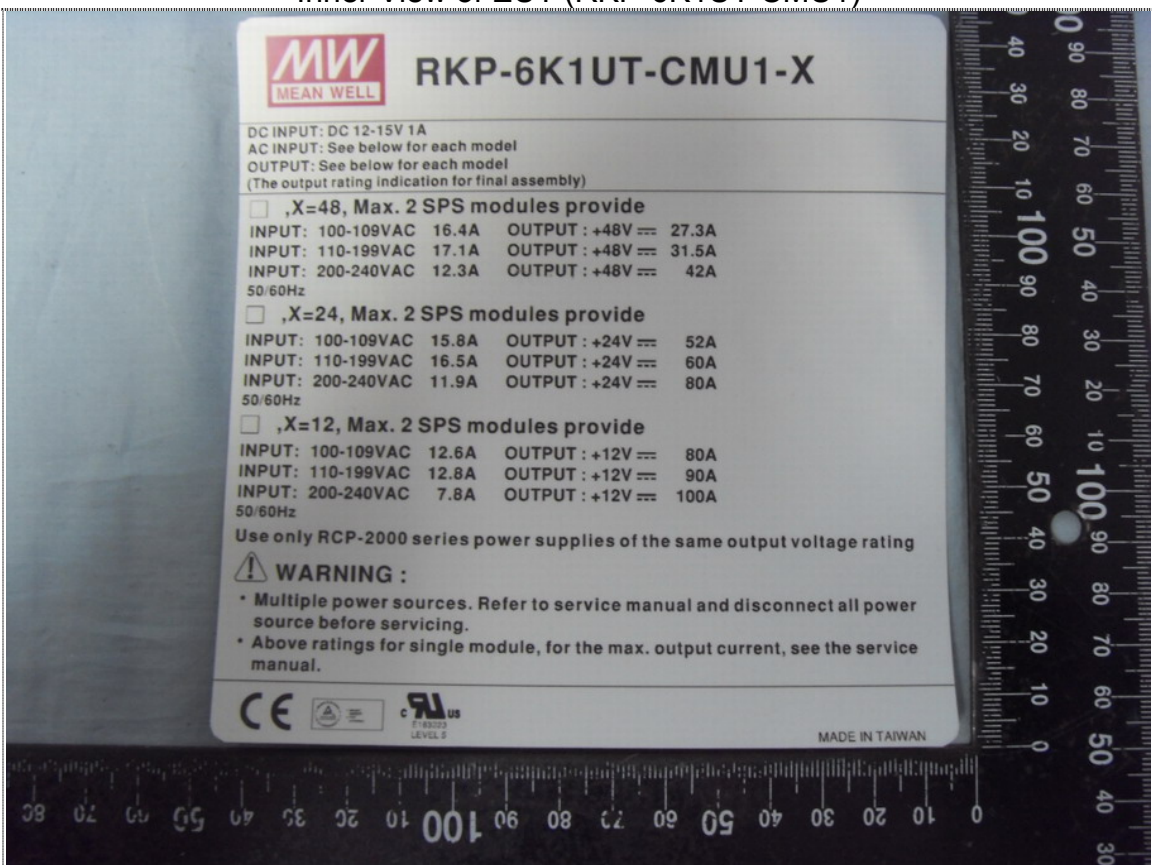
Front View of of I/O Port (RKP-6K1UT-CMU1)



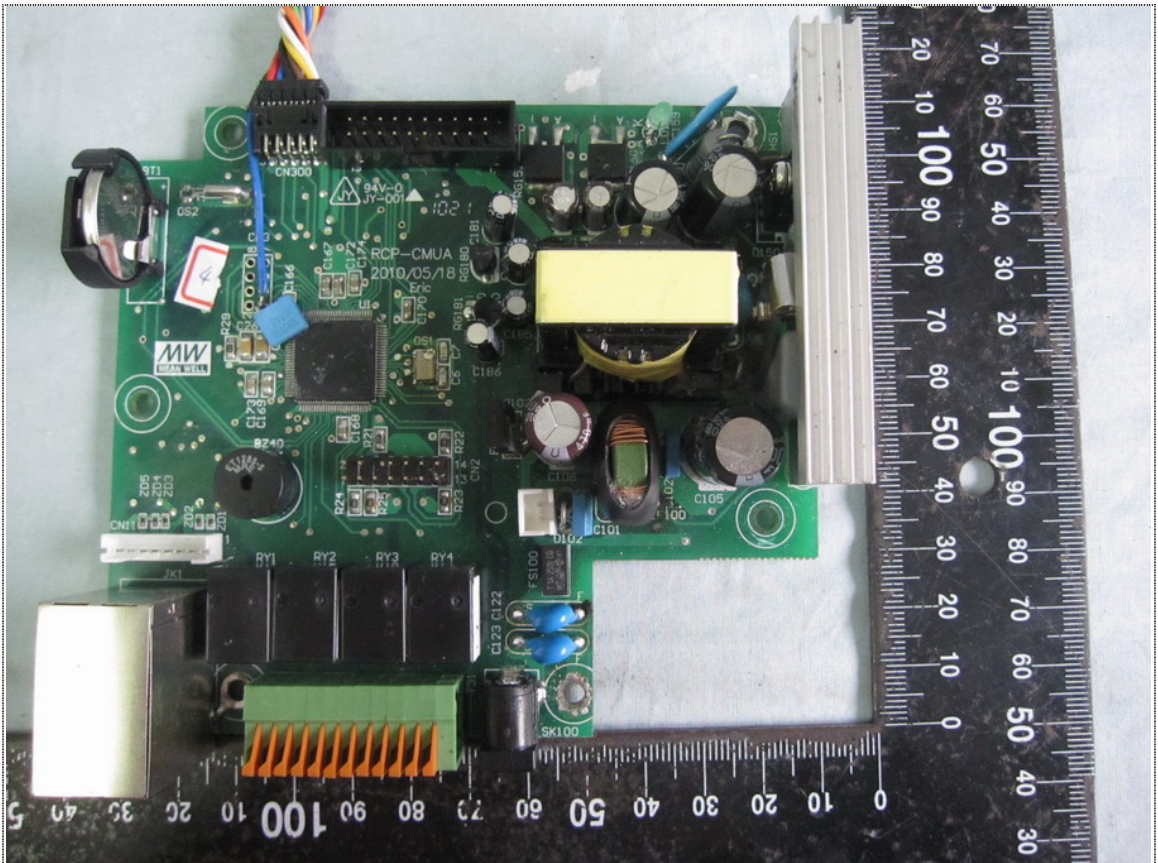
Rear View of I/O Port (RKP-6K1UT-CMU1)



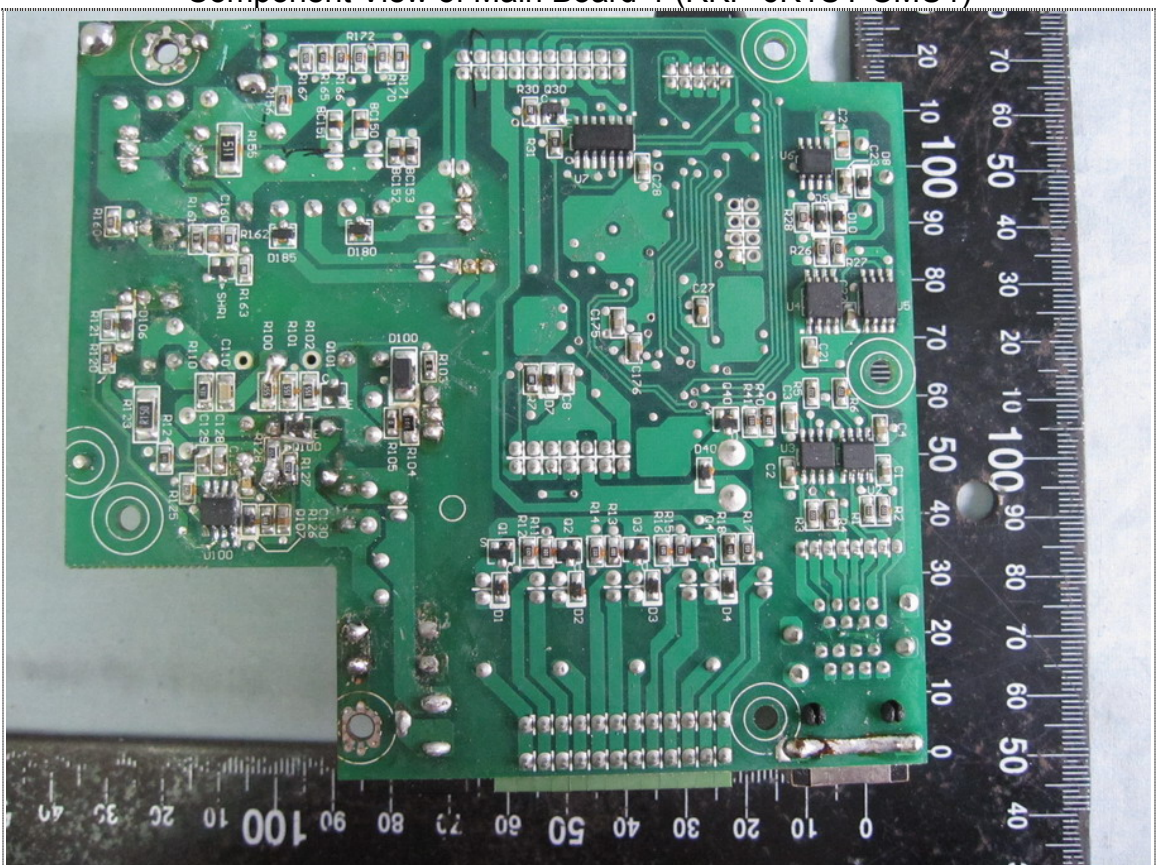
Inner View of EUT (RKP-6K1UT-CMU1)



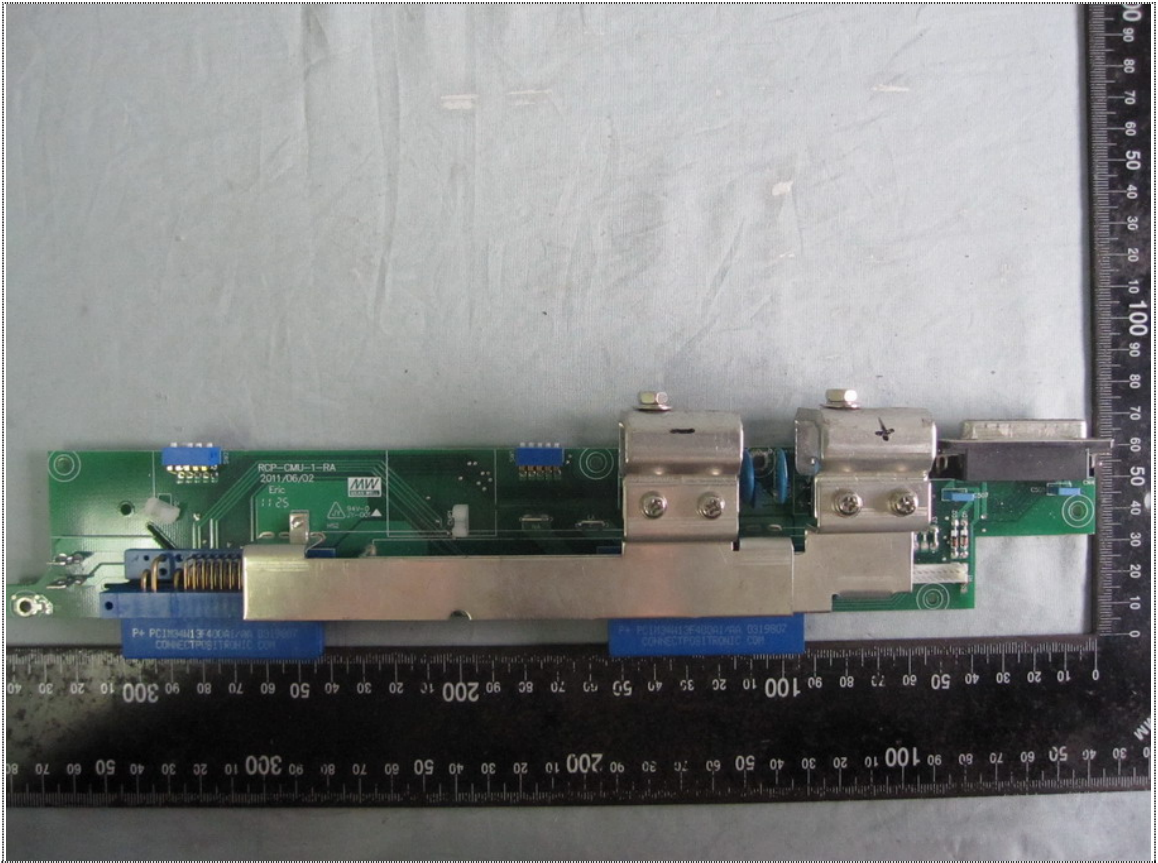
View of Label (RKP-6K1UT-CMU1)



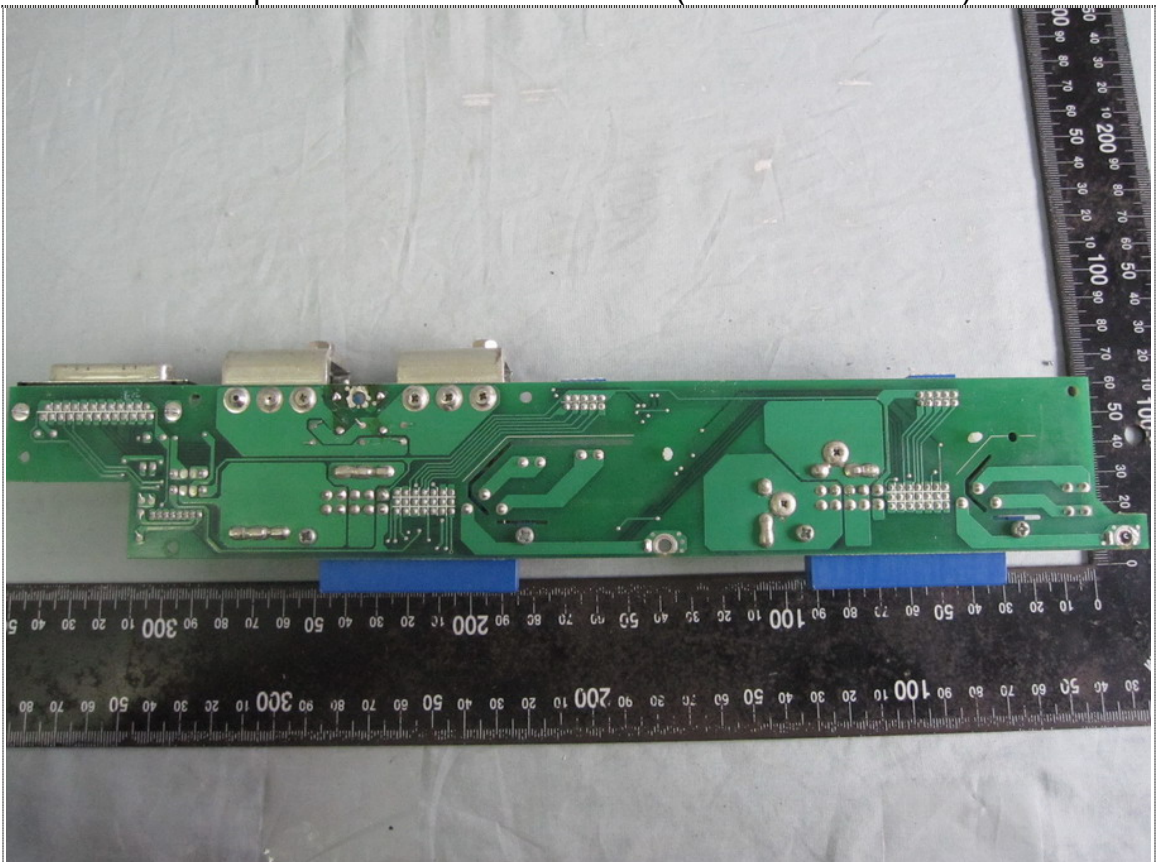
Component View of Main Board-1 (RKP-6K1UT-CMU1)



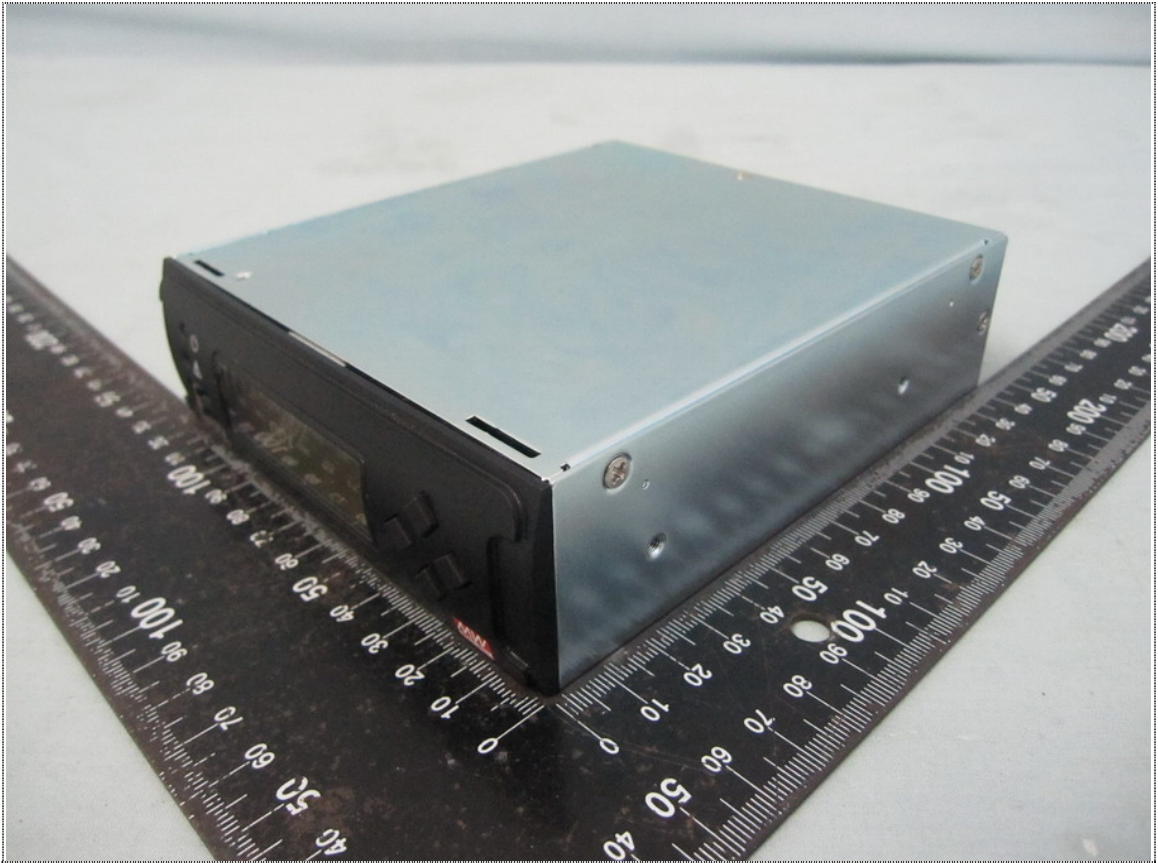
Solder View of Main Board-1 (RKP-6K1UT-CMU1)



Component View of Main Board-3 (RKP-6K1UT-CMU1)



Solder View of Main Board-3 (RKP-6K1UT-CMU1)



Front View of EUT (RKP-CMU1)



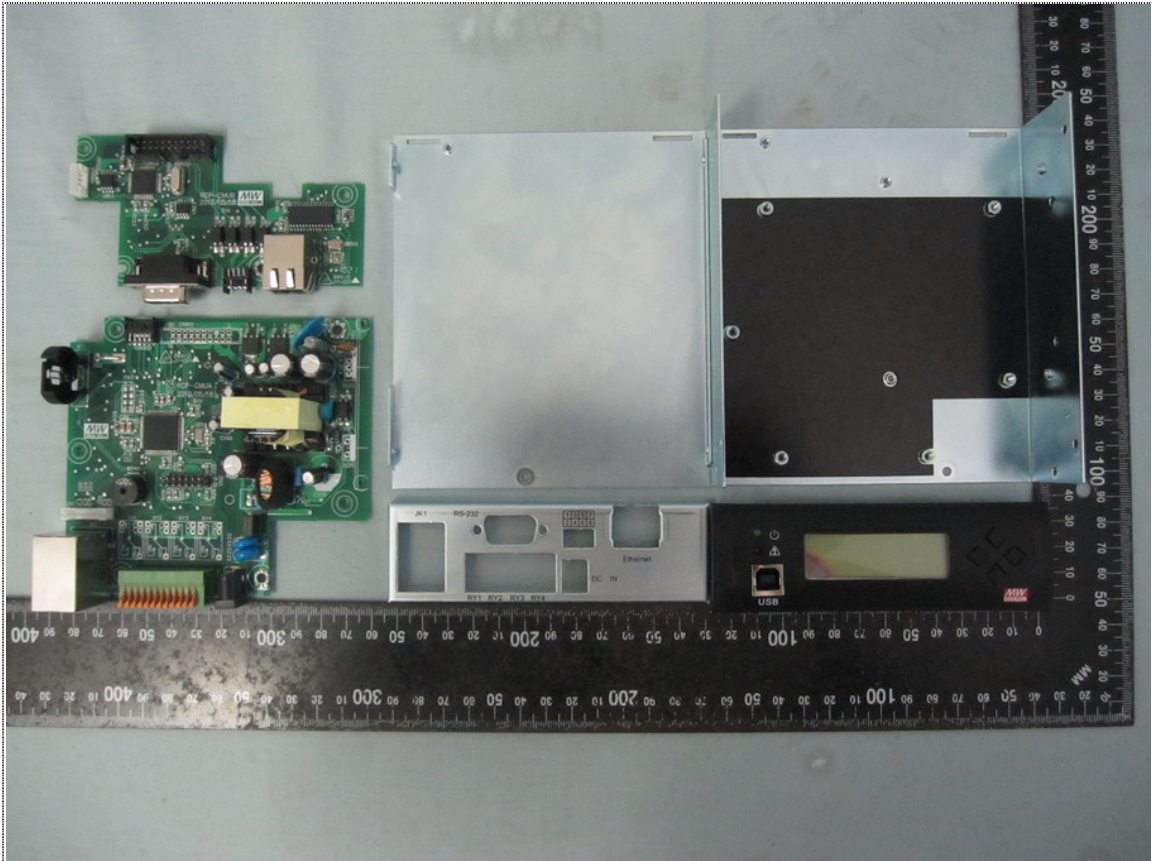
Rear View of EUT (RKP-CMU1)



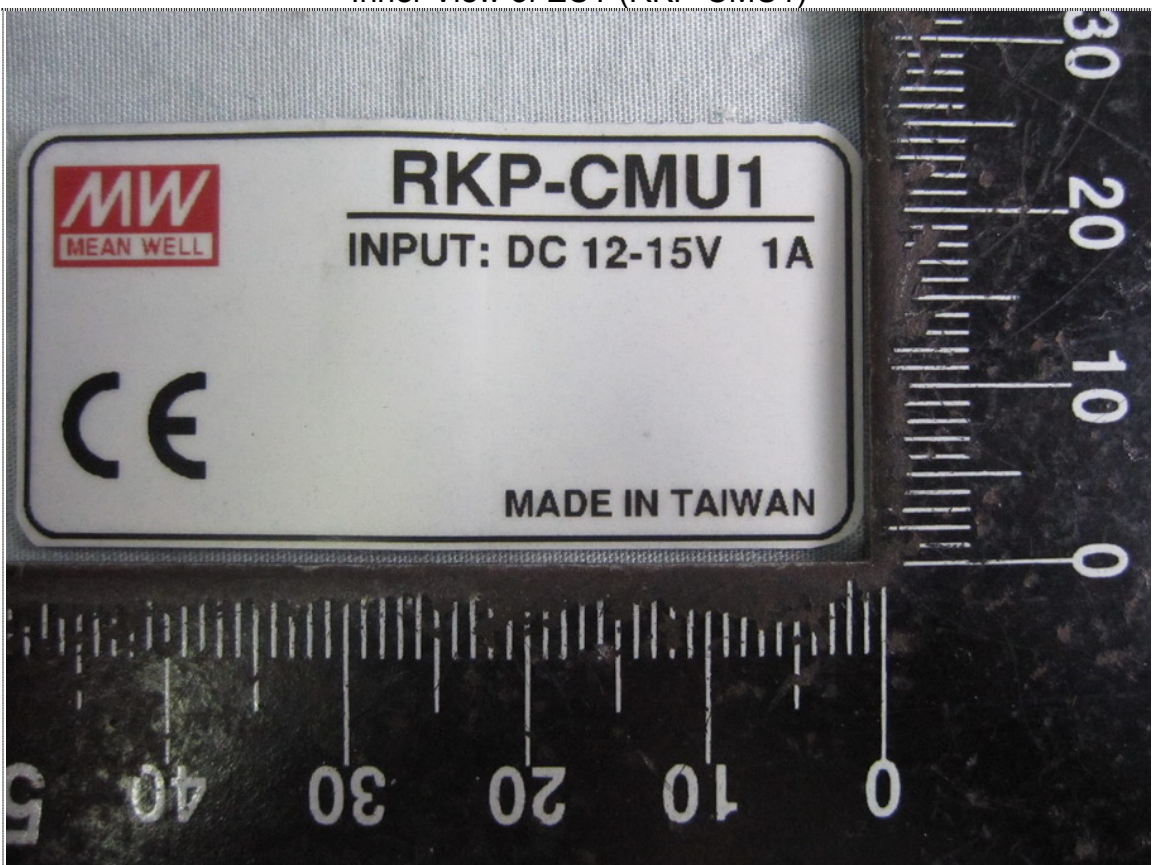
Front View of I/O Port (RKP-CMU1)



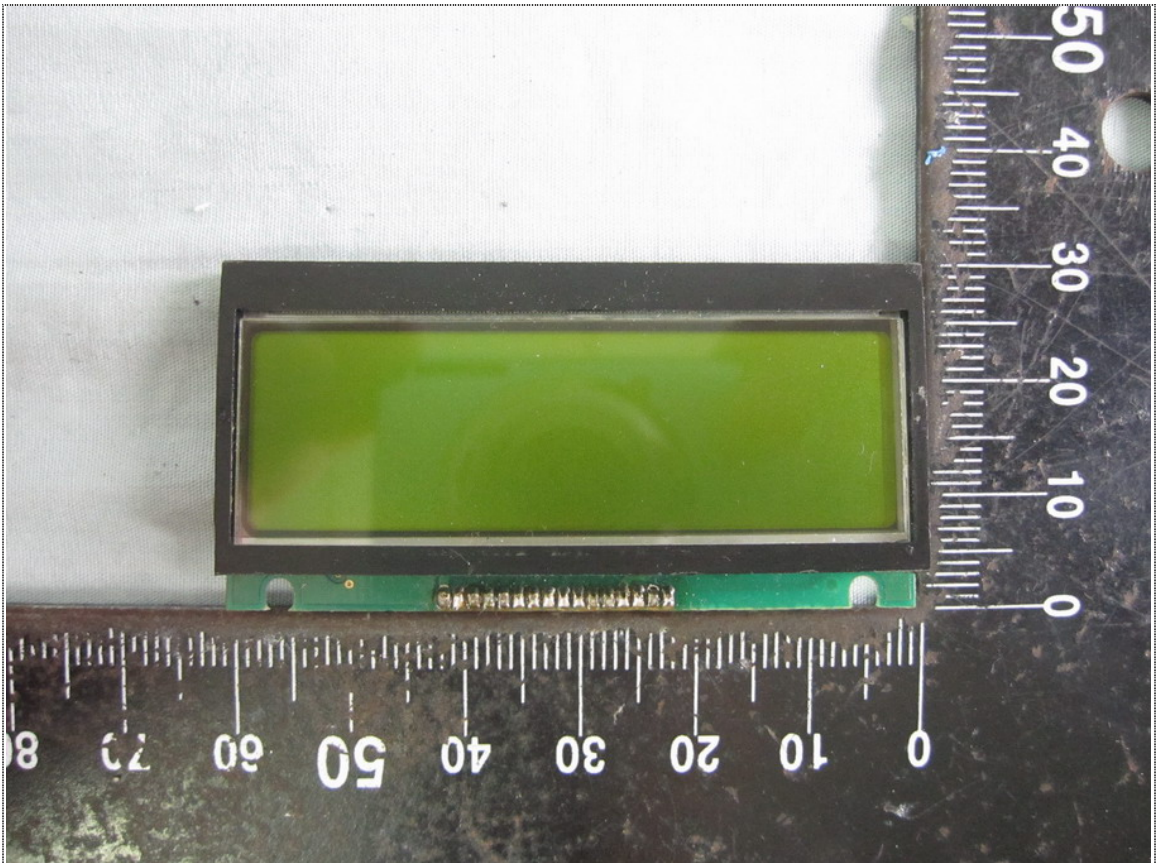
Rear View of I/O Port (RKP-CMU1)



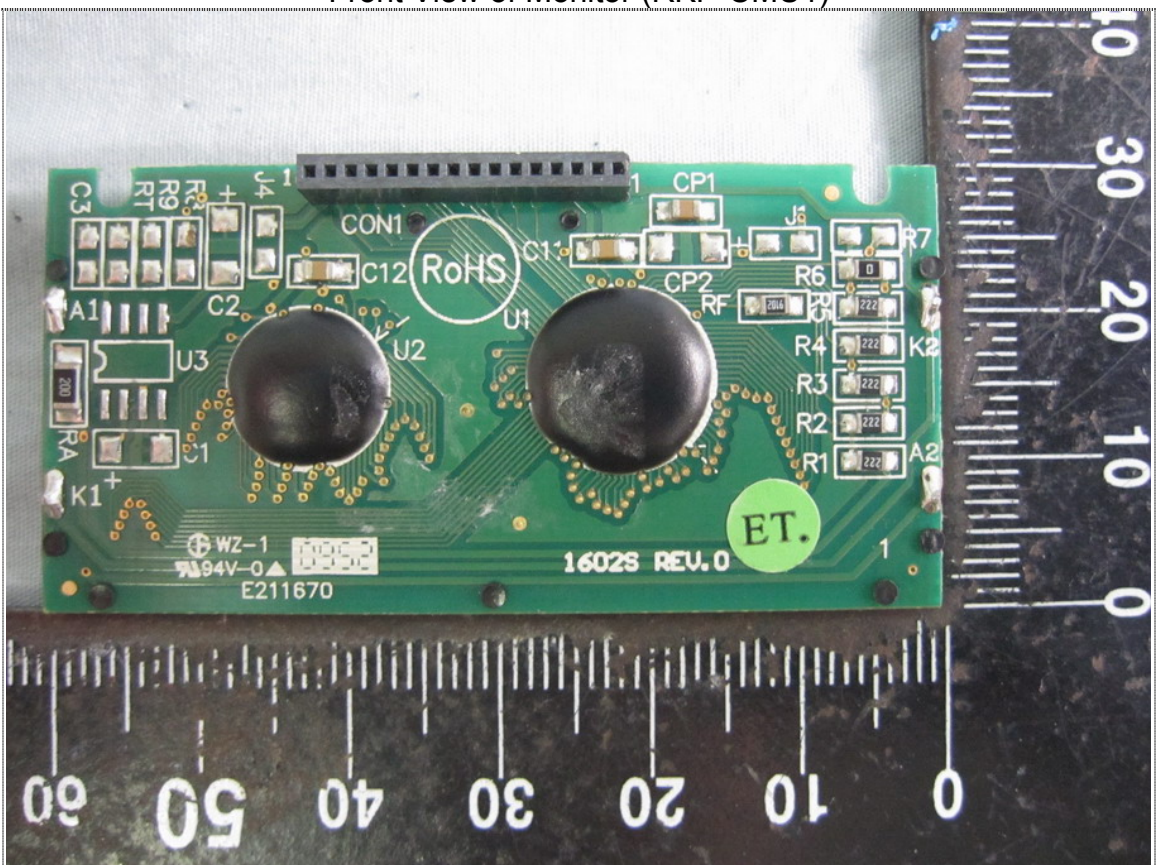
Inner View of EUT (RKP-CMU1)



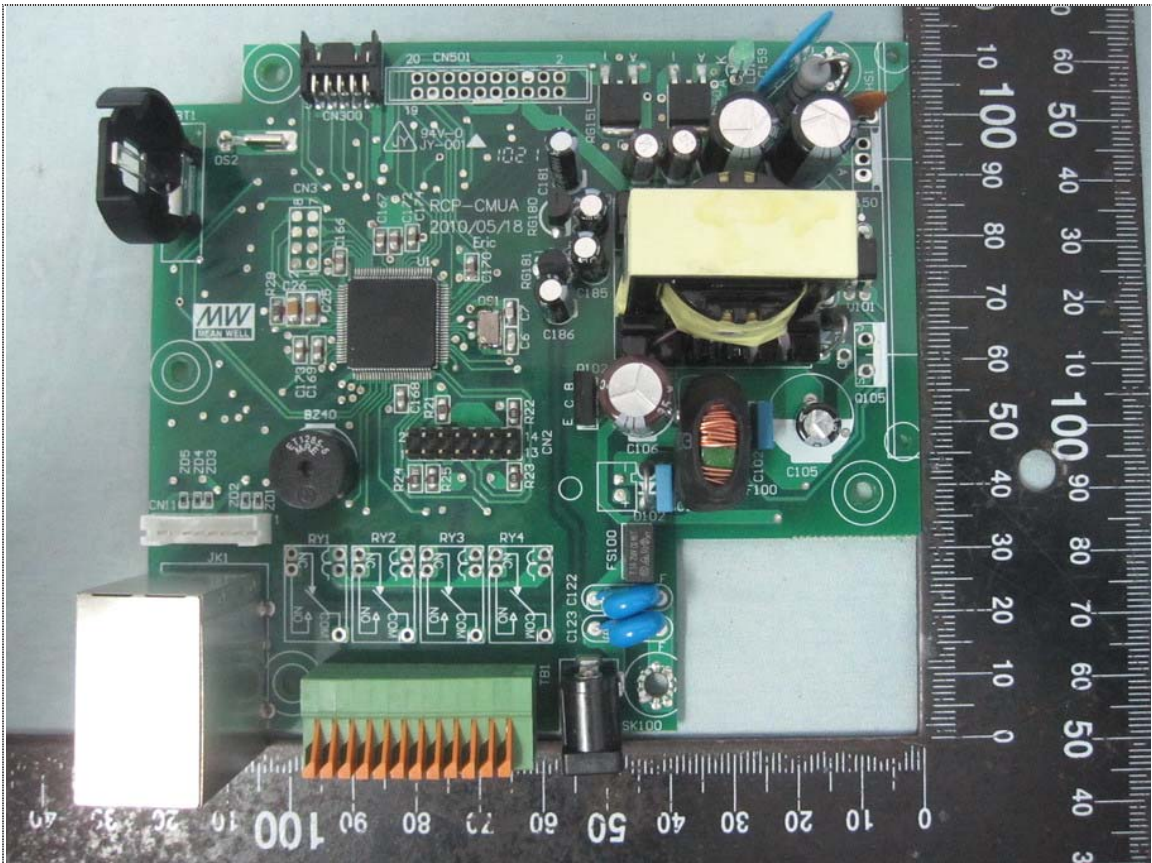
View of Label (RKP-CMU1)



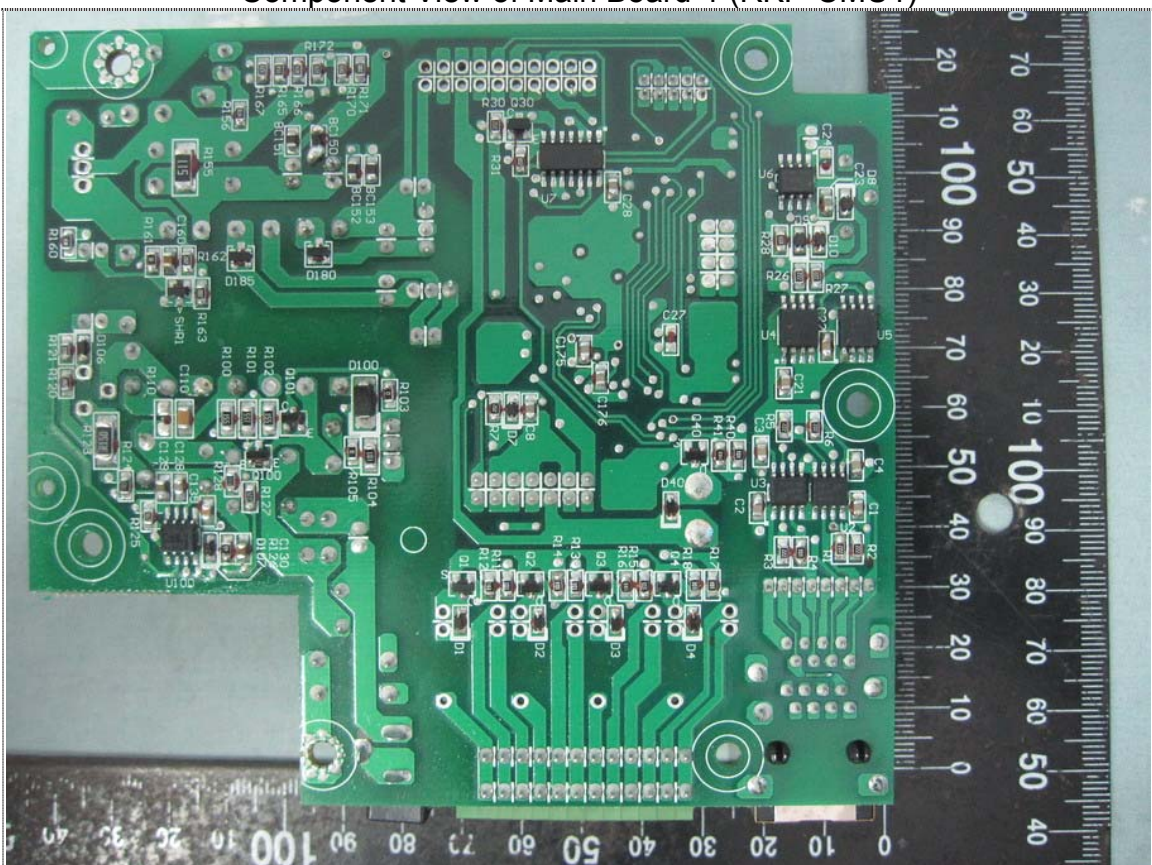
Front View of Monitor (RKP-CMU1)



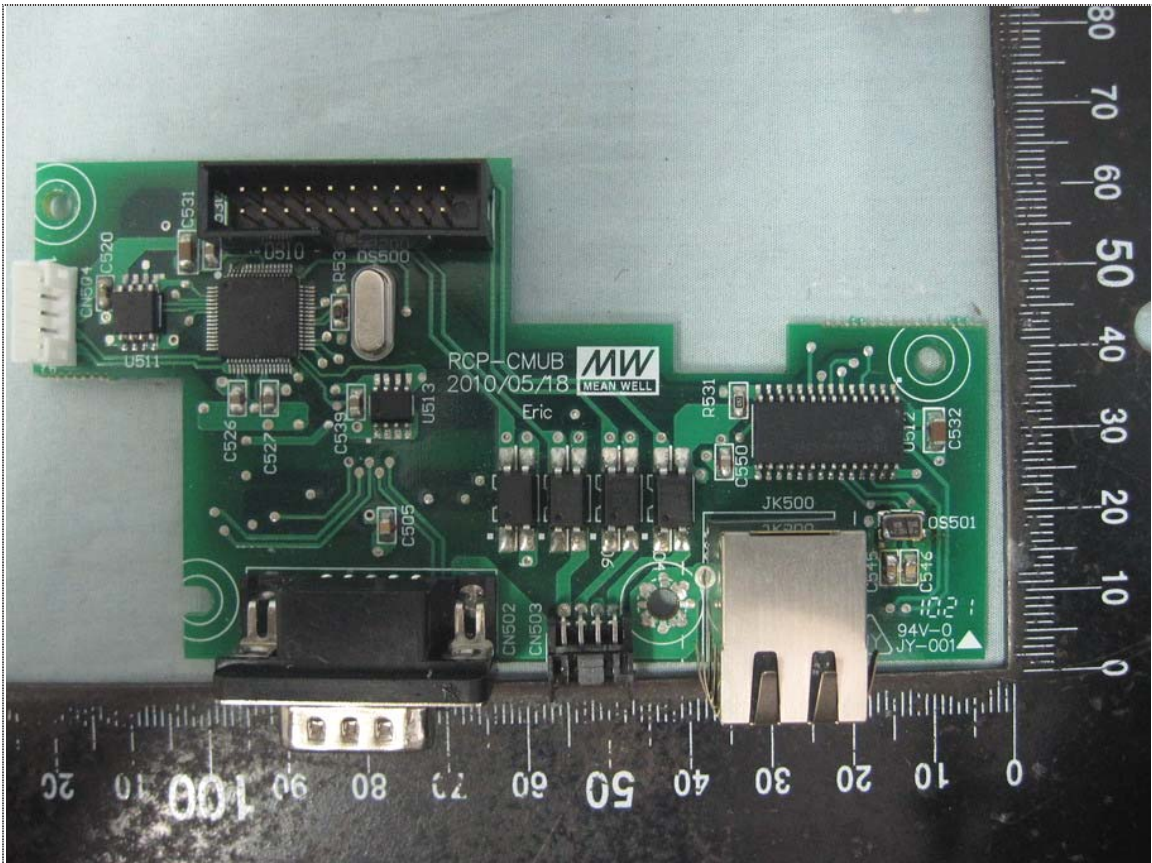
Rear View of Monitor (RKP-CMU1)



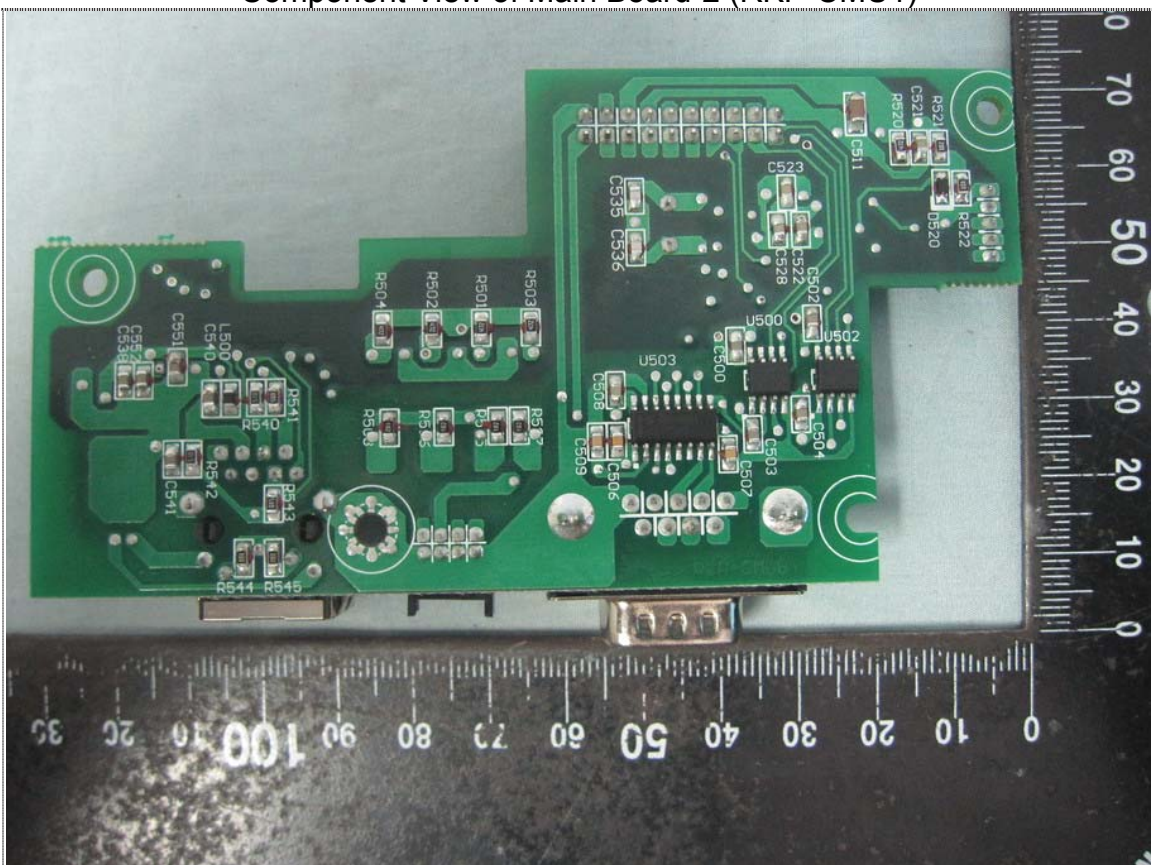
Component View of Main Board-1 (RKP-CMU1)



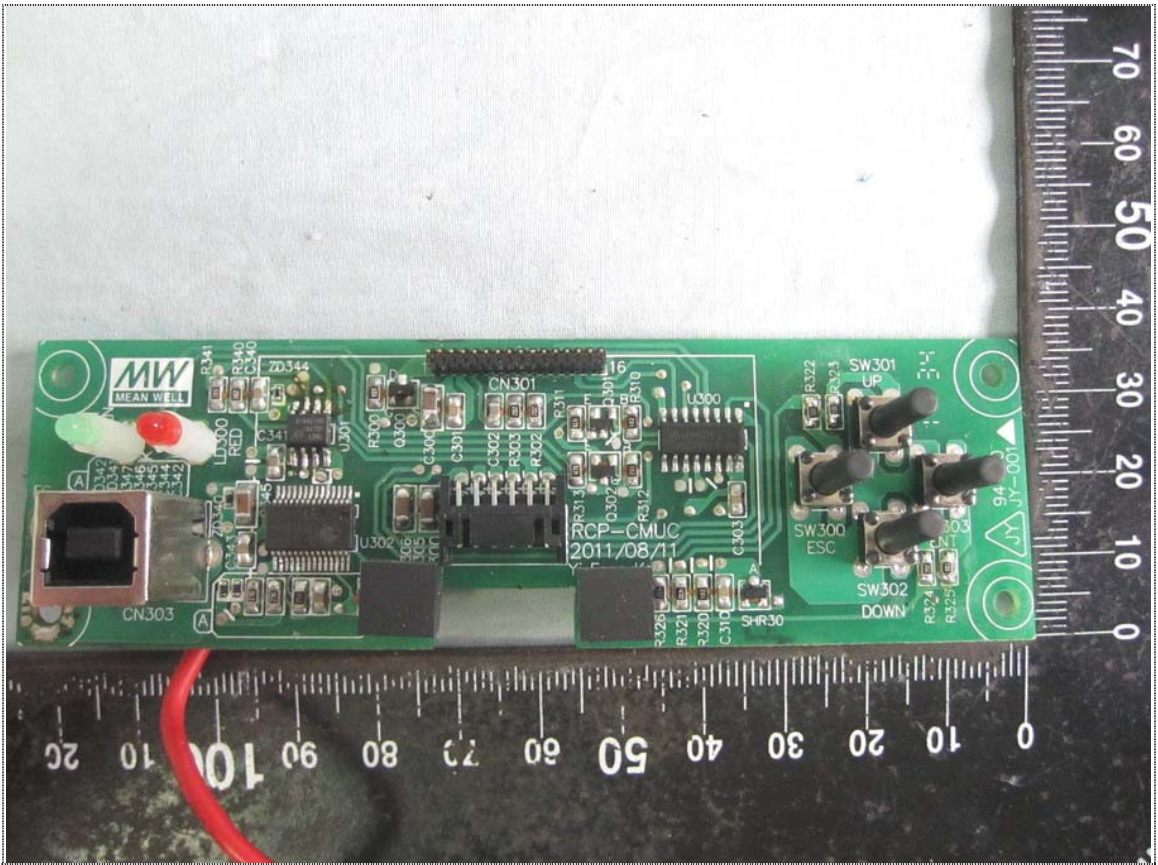
Solder View of Main Board-1 (RKP-CMU1)



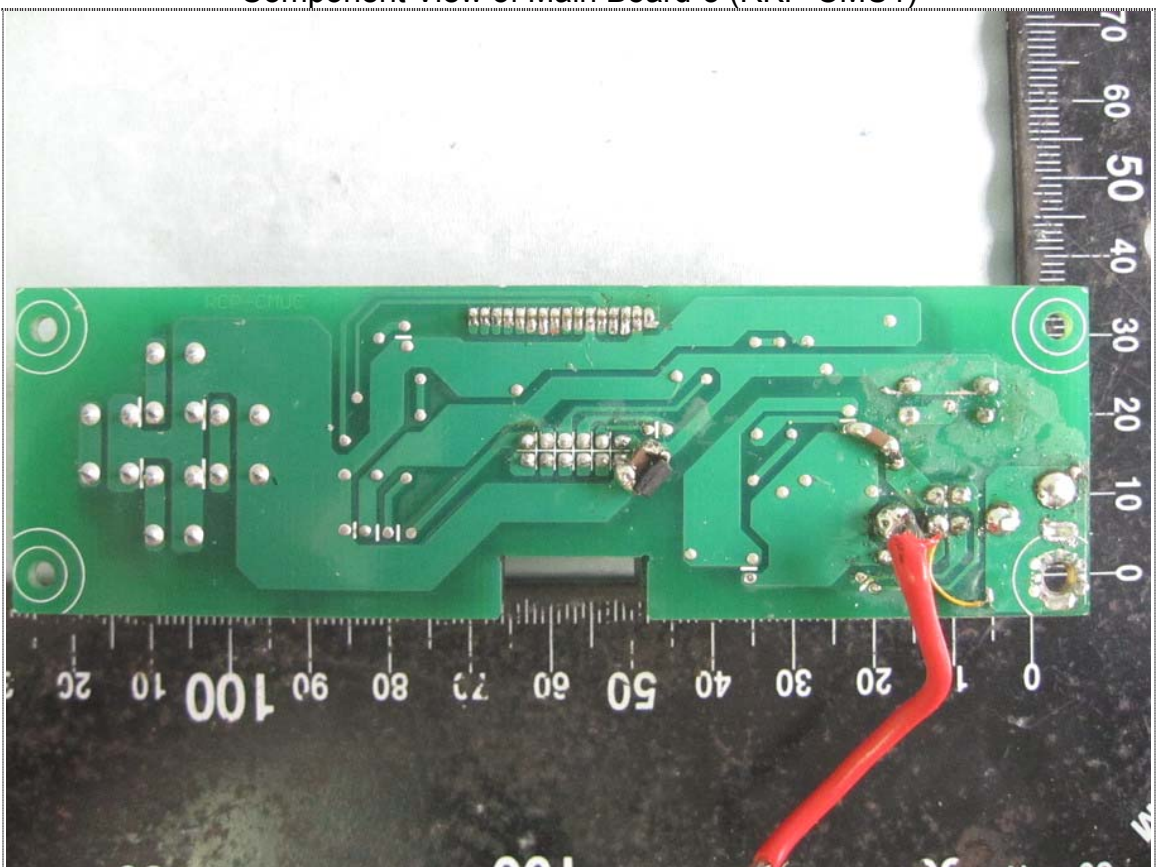
Component View of Main Board-2 (RKP-CMU1)



Solder View of Main Board-2 (RKP-CMU1)

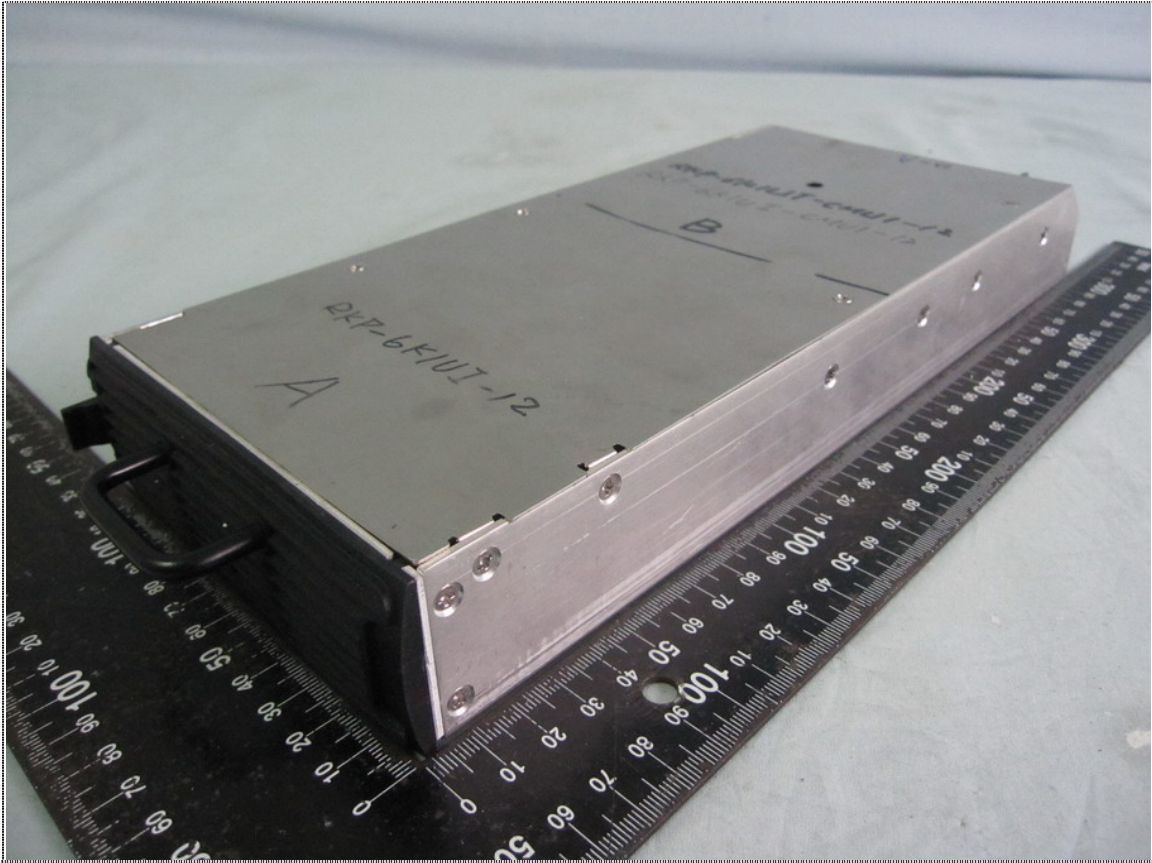


Component View of Main Board-3 (RKP-CMU1)

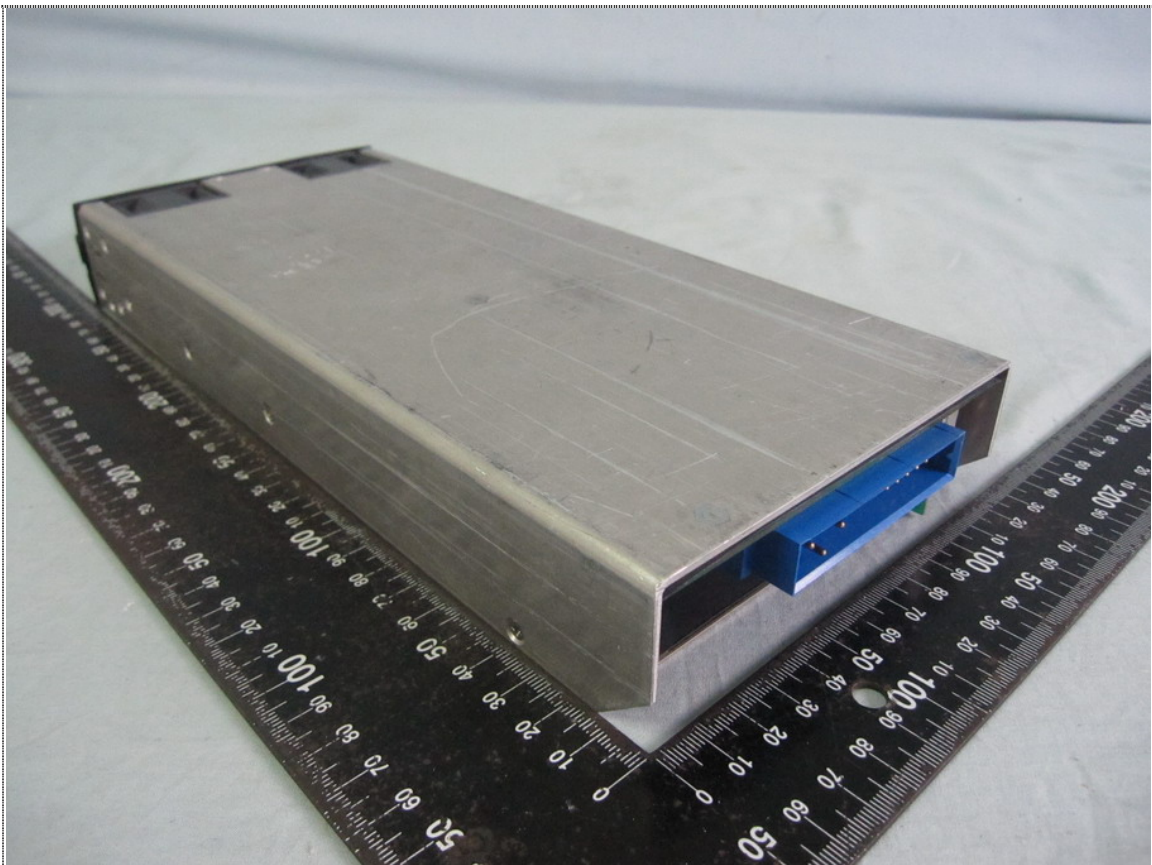


Solder View of Main Board-3 (RKP-CMU1)

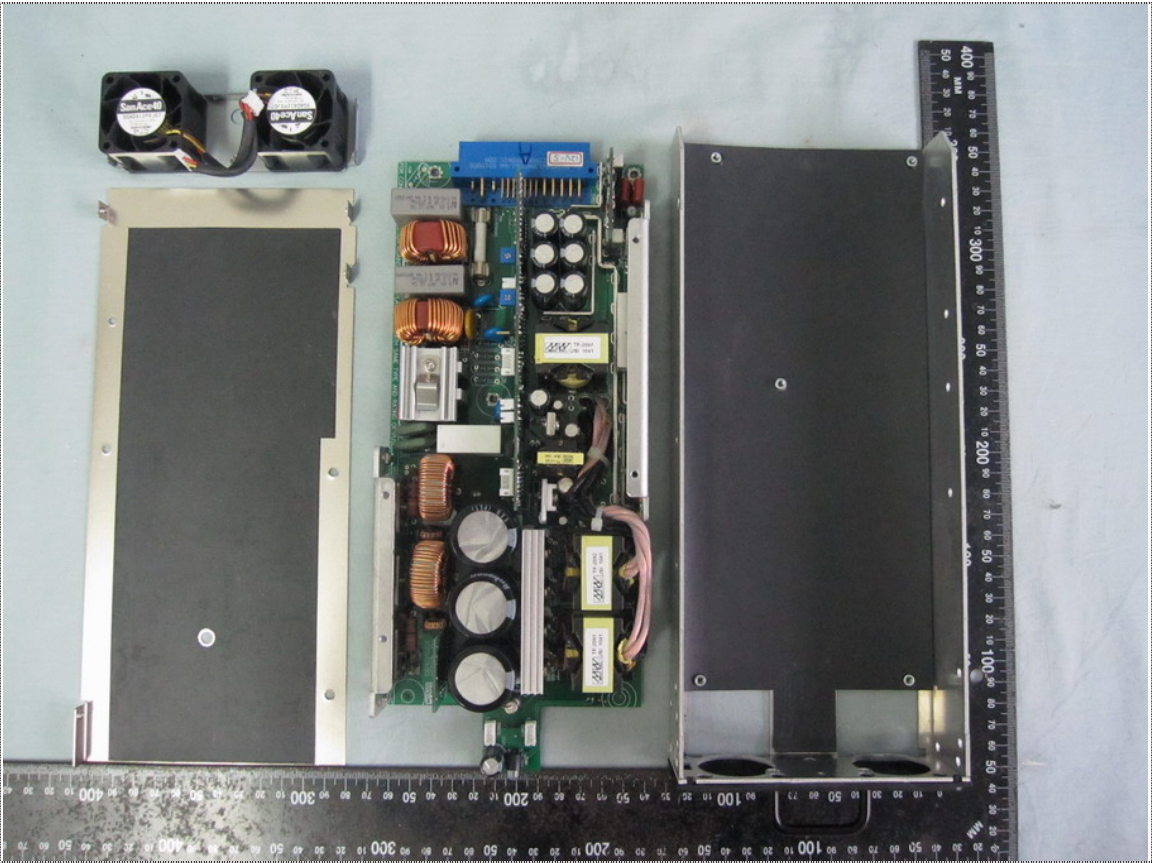
16.6 Model No.: RKP-6K1UT-CMU1-12



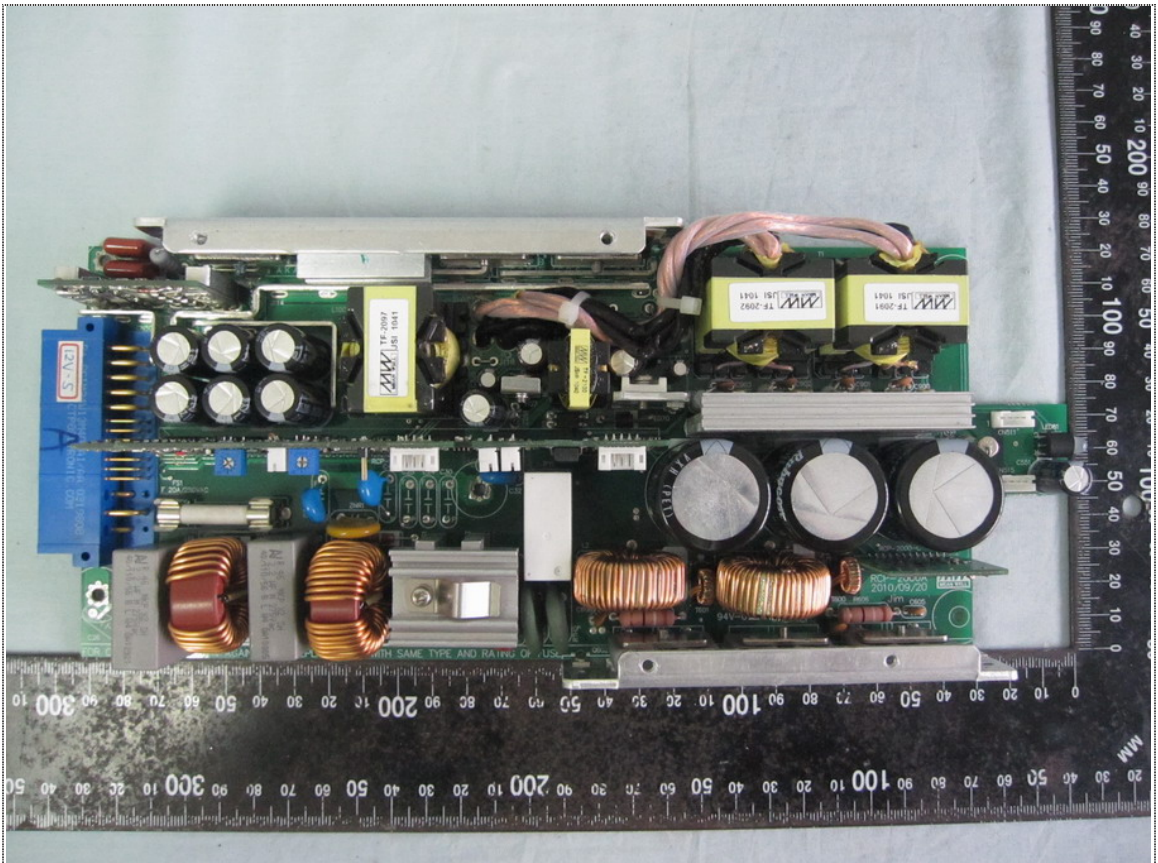
Front View of EUT



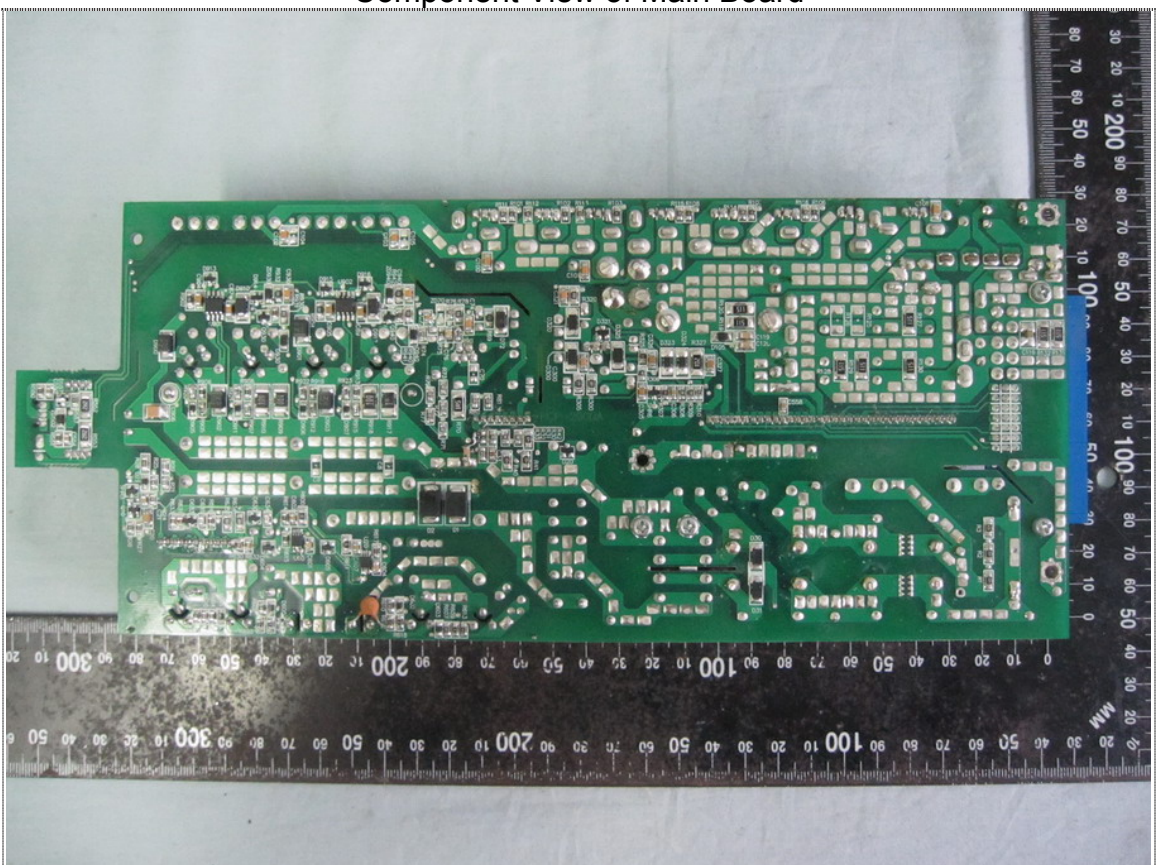
Rear View of EUT



Inner View of EUT



Component View of Main Board

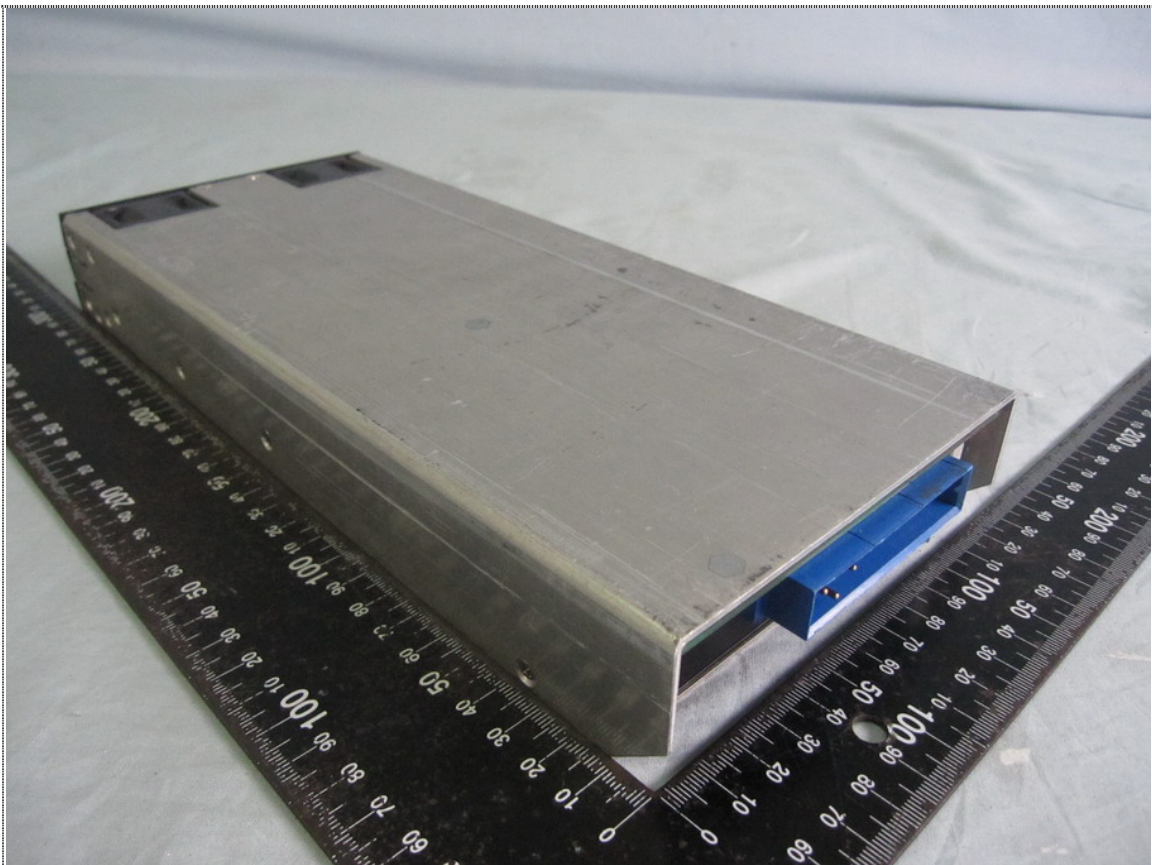


Solder View of Main Board

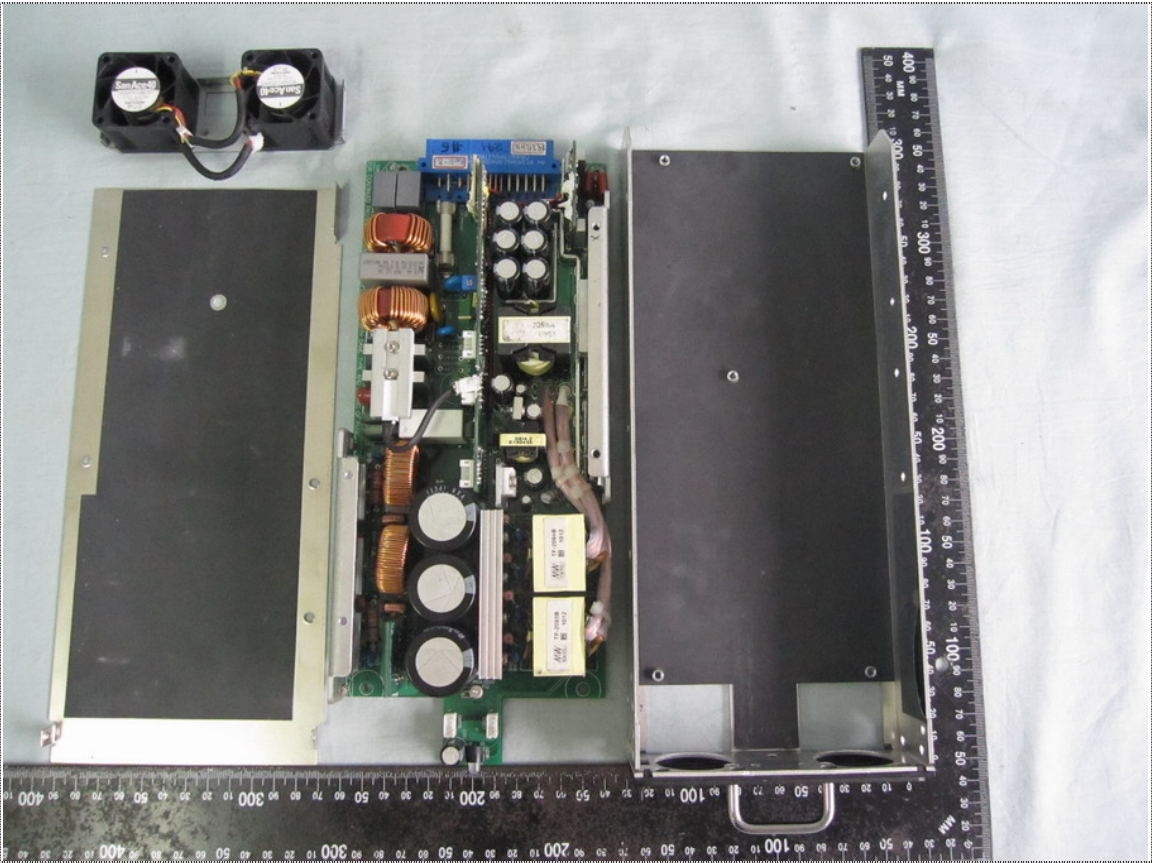
16.7 Model No.: RKP-6K1UT-CMU1-24



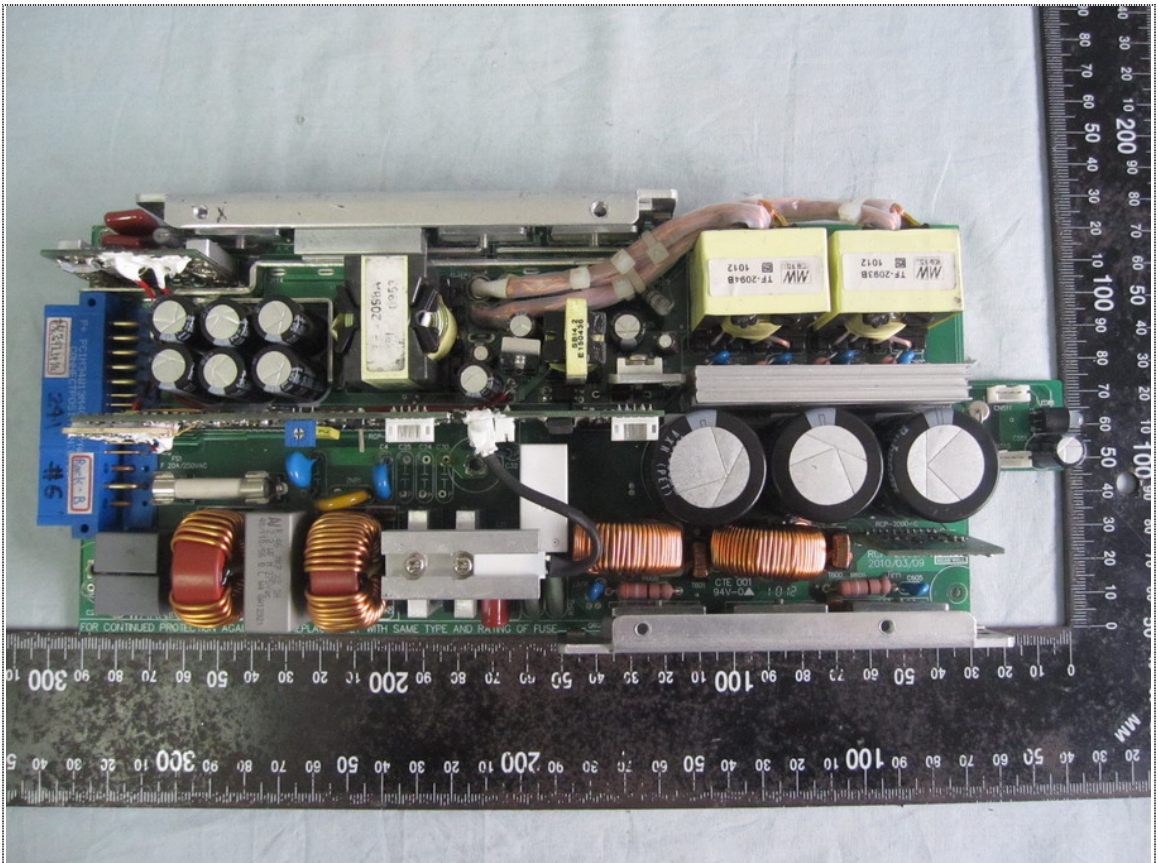
Front View of EUT



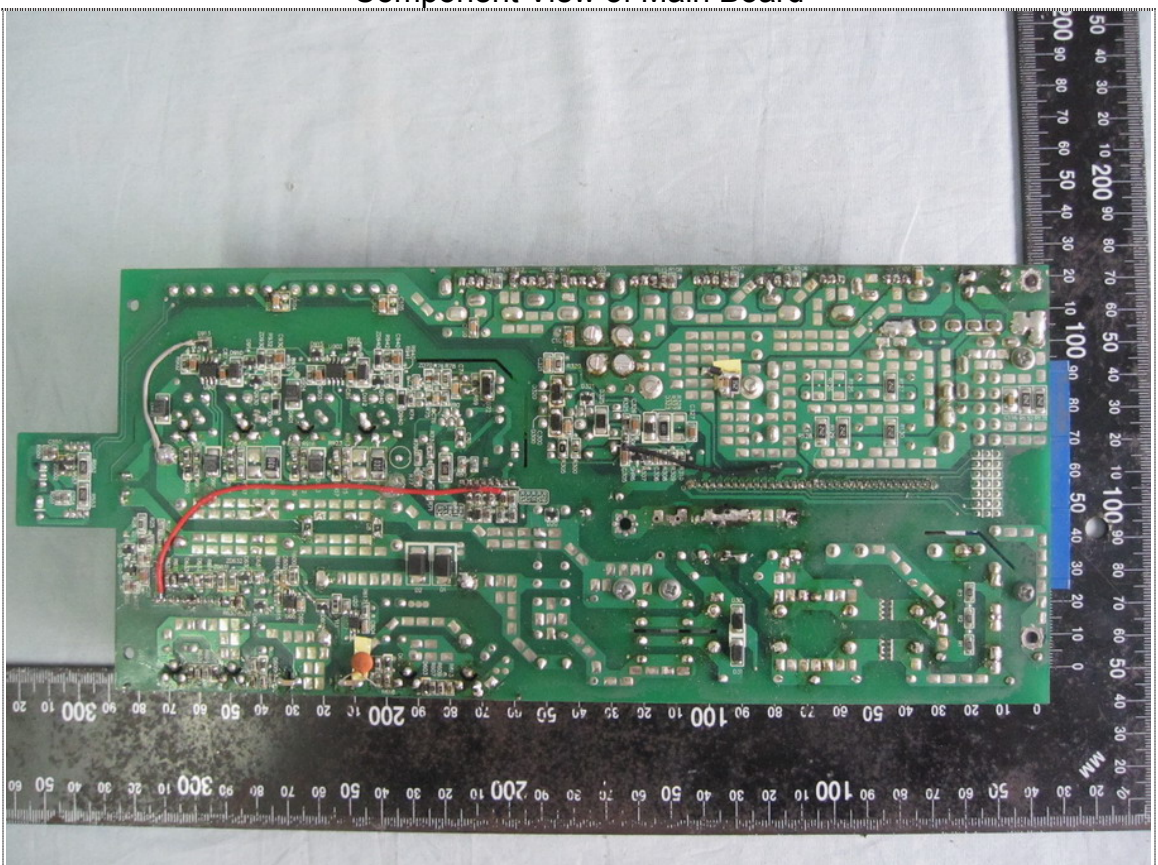
Rear View of EUT



Inner View of EUT



Component View of Main Board

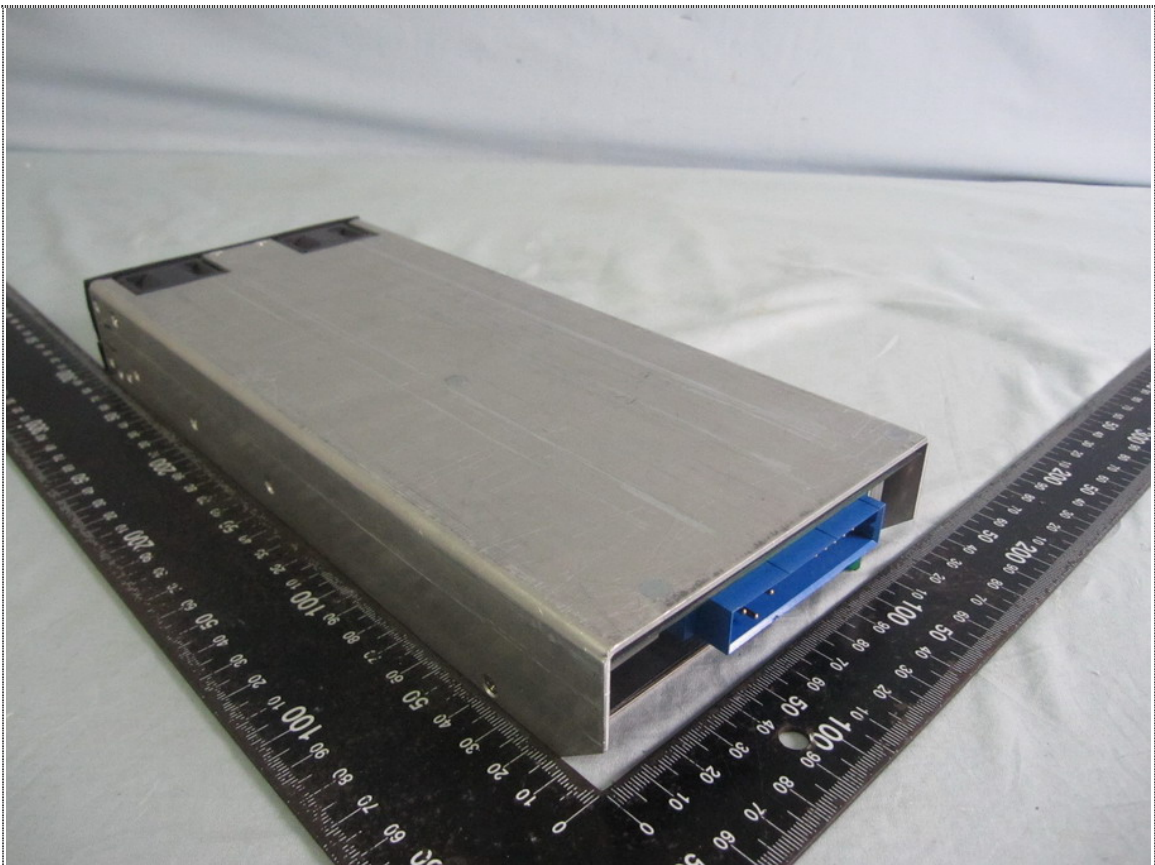


Solder View of Main Board

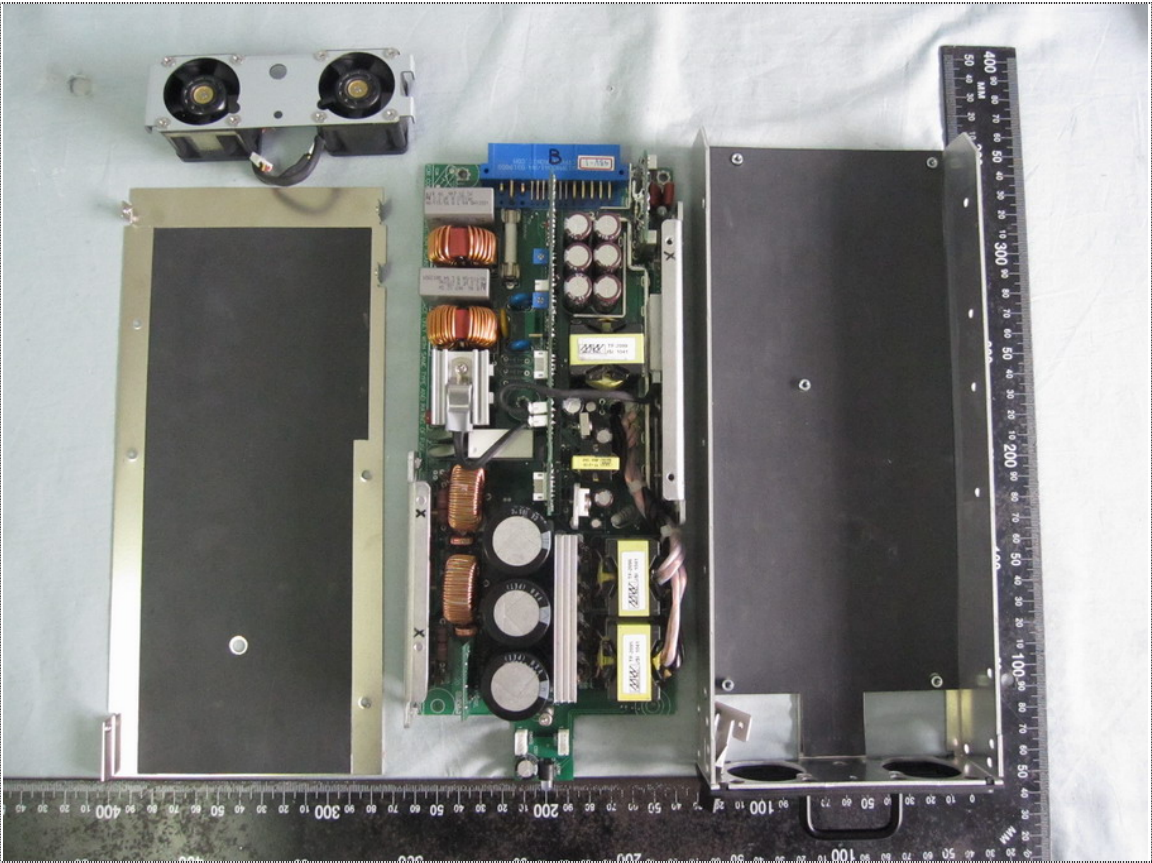
16.8 Model No.: RKP-6K1UT-CMU1-48



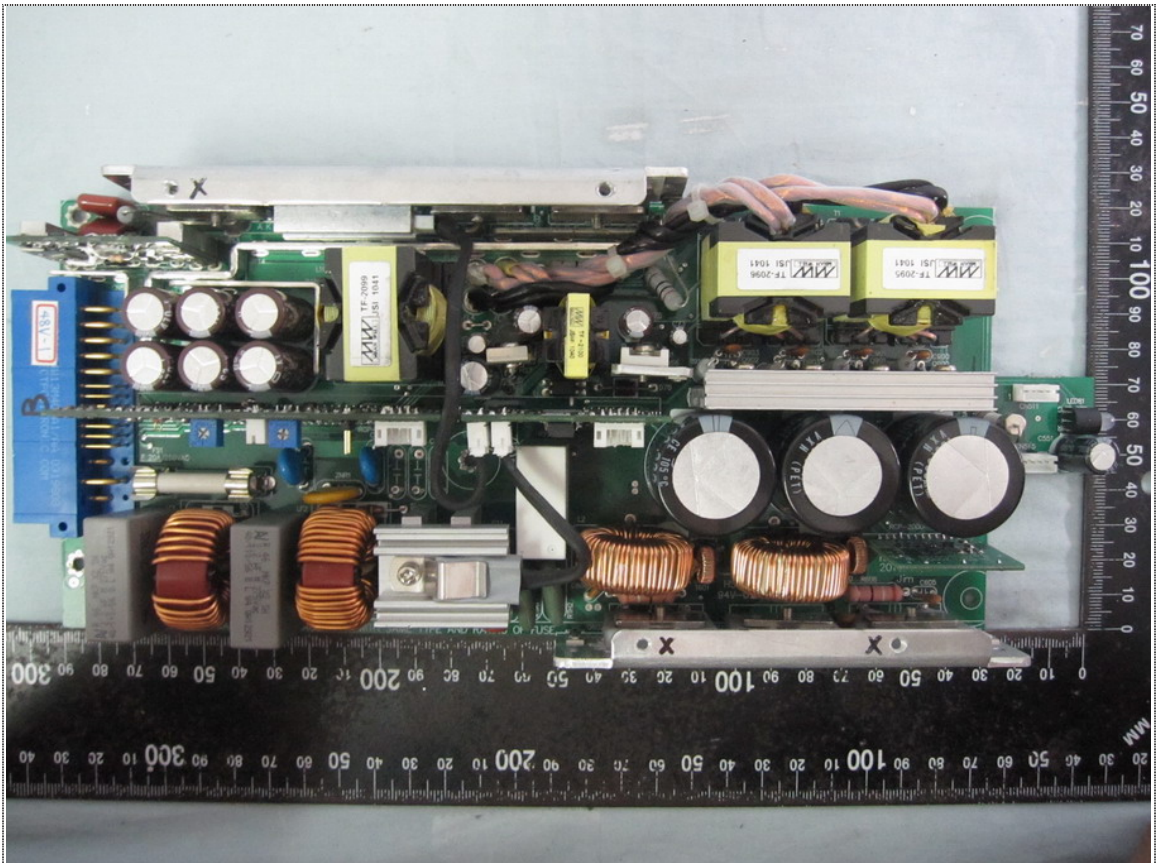
Front View of EUT



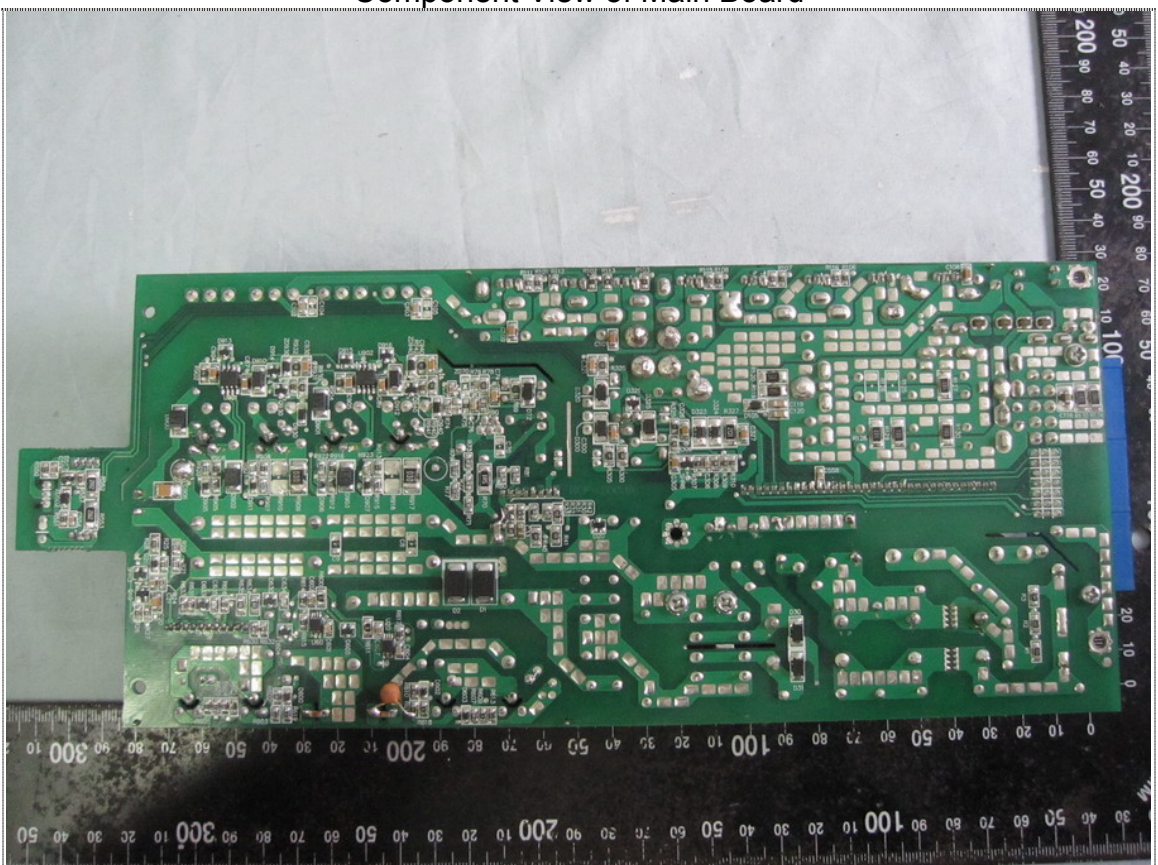
Rear View of EUT



Inner View of EUT



Component View of Main Board



Solder View of Main Board

16.9 Model No.: RKP-1UI-CMU1



View of Label

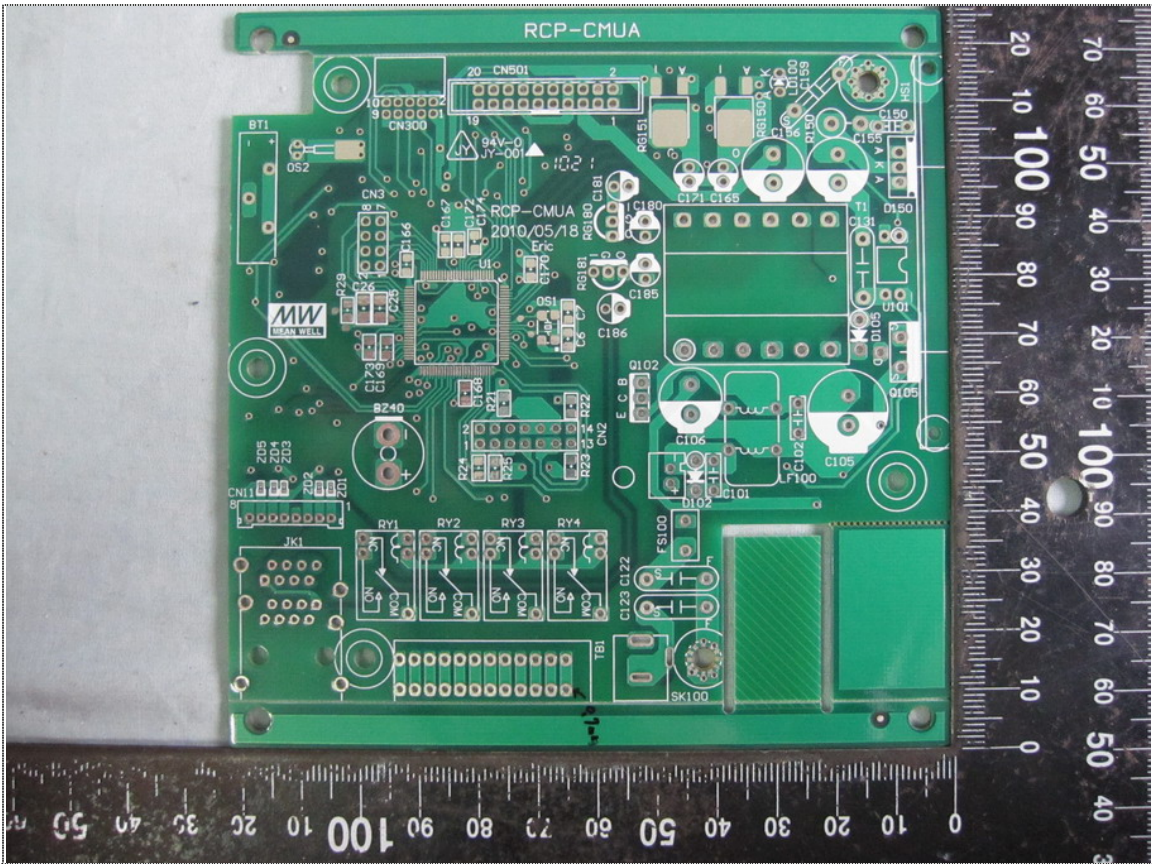
16.10 Model No.: RKP-1UT-CMU1



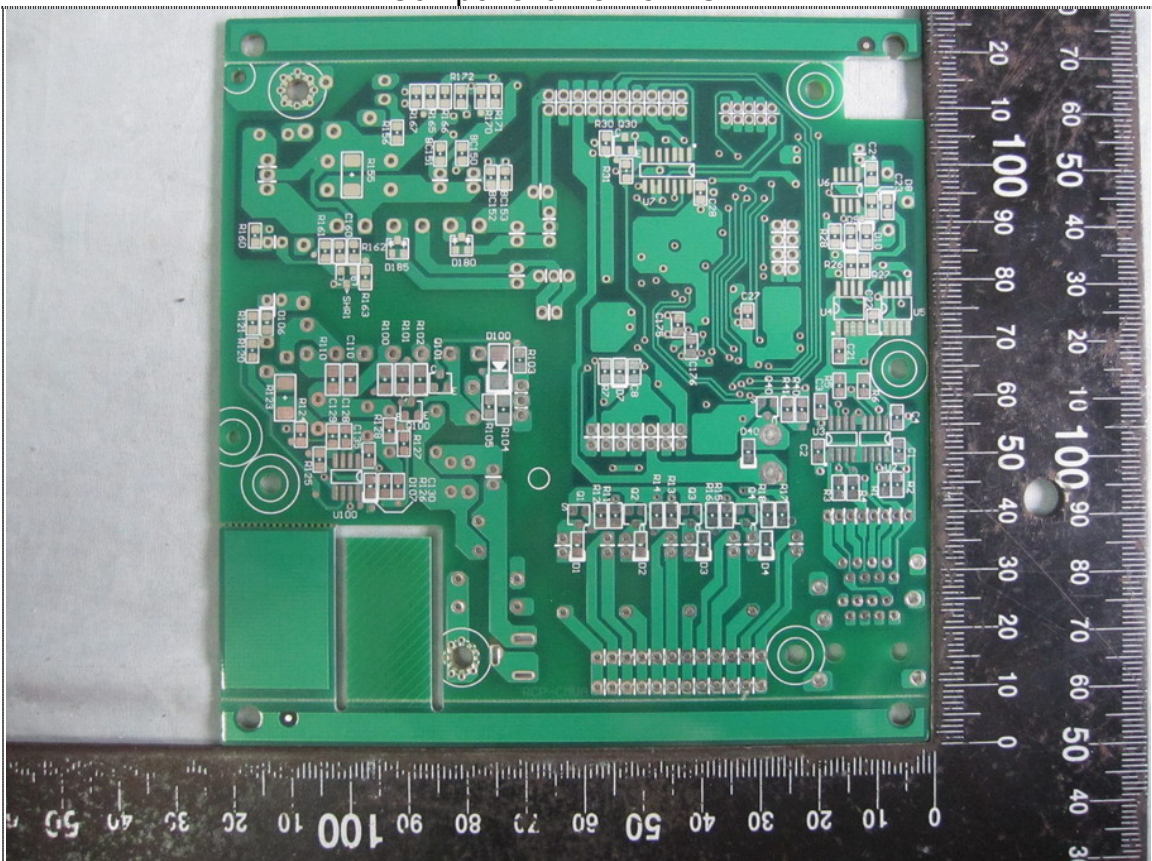
View of Label

17 Photographs of PCB

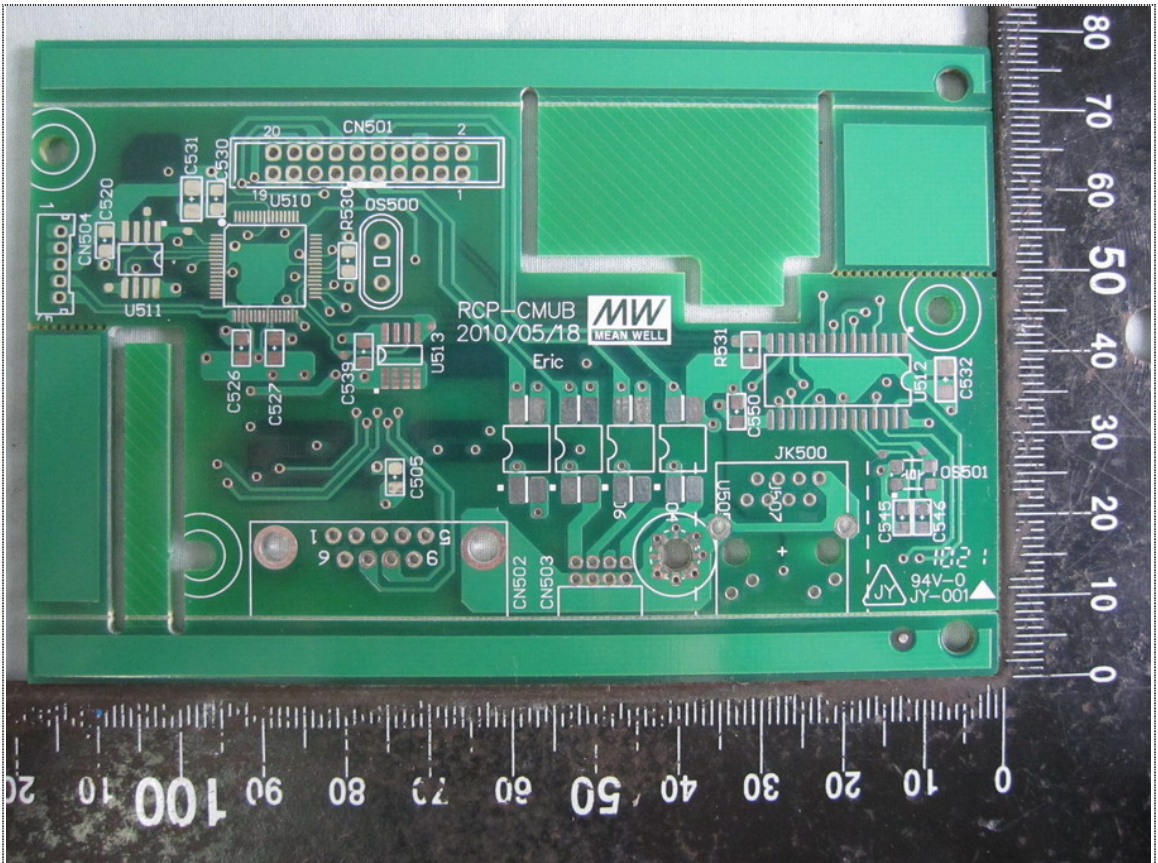
17.1 For RKP-6K1UI-CMU1 & RKP-6K1UT-CMU1



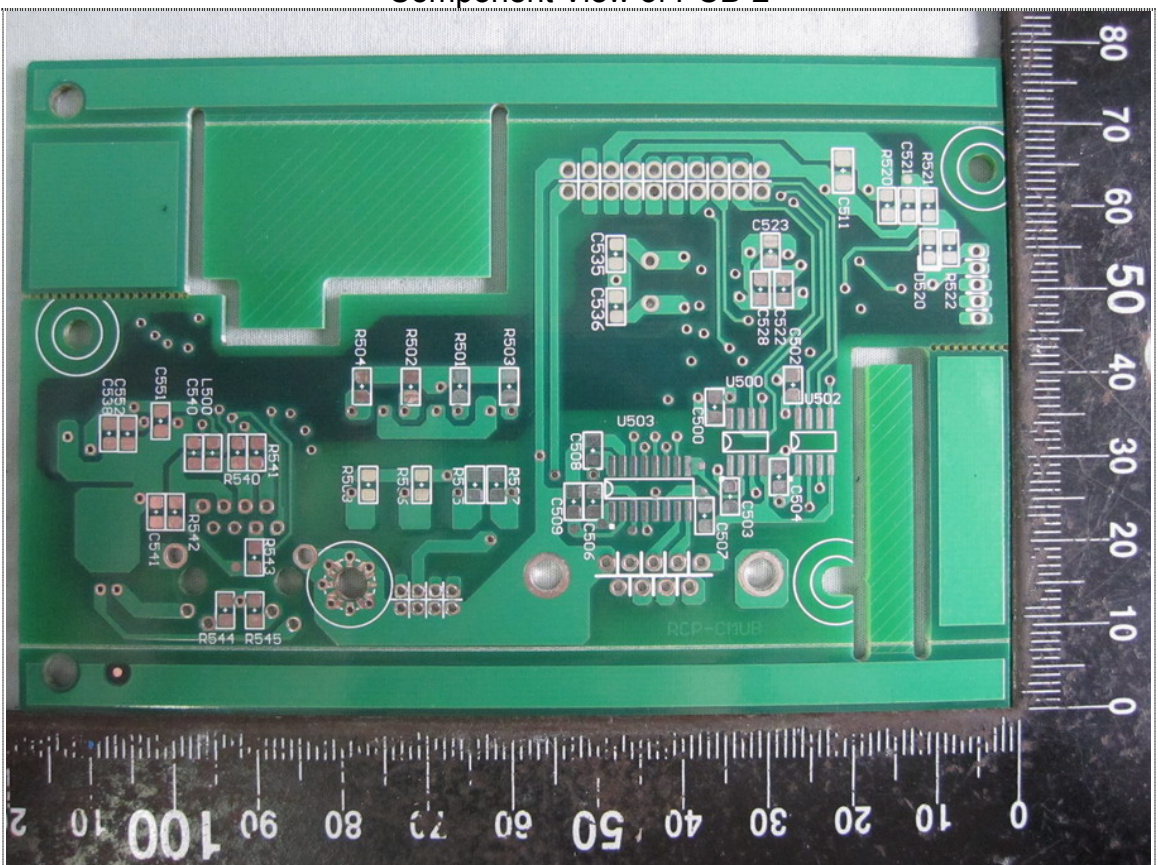
Component View of PCB-1



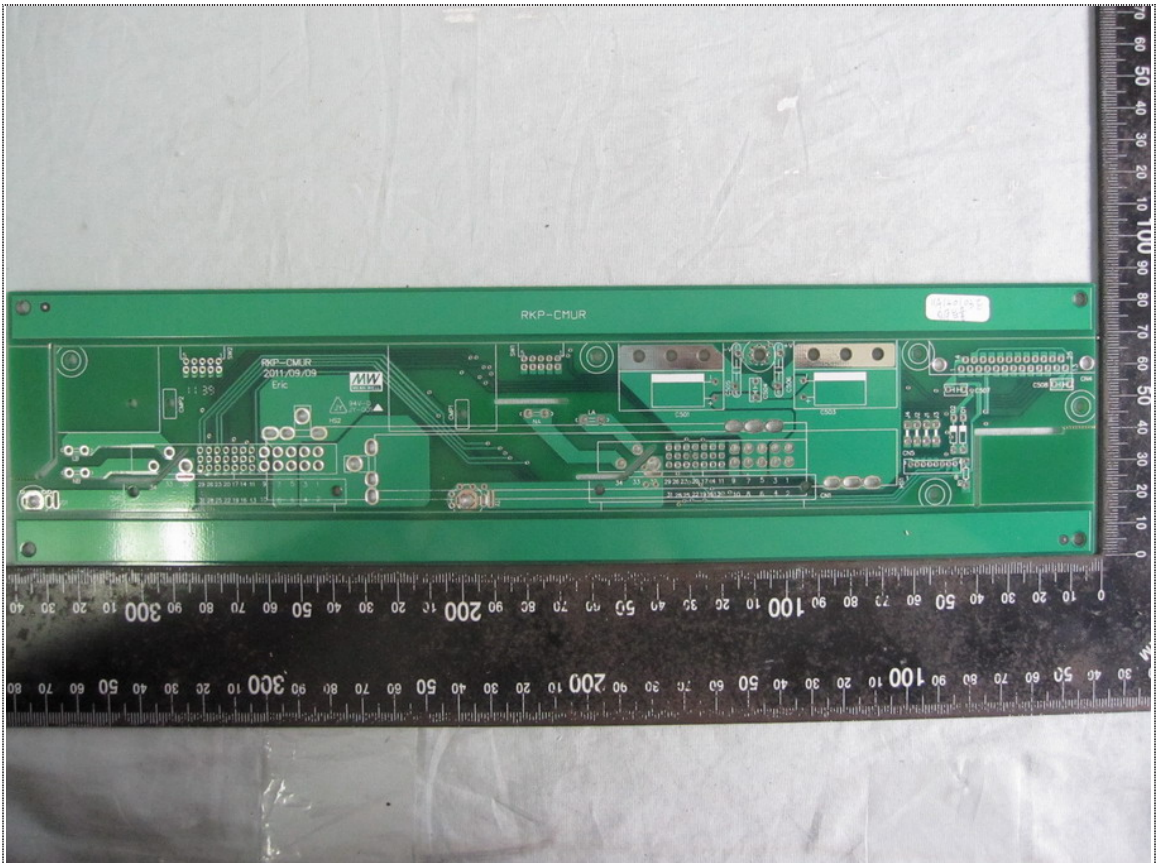
Solder View of PCB-1



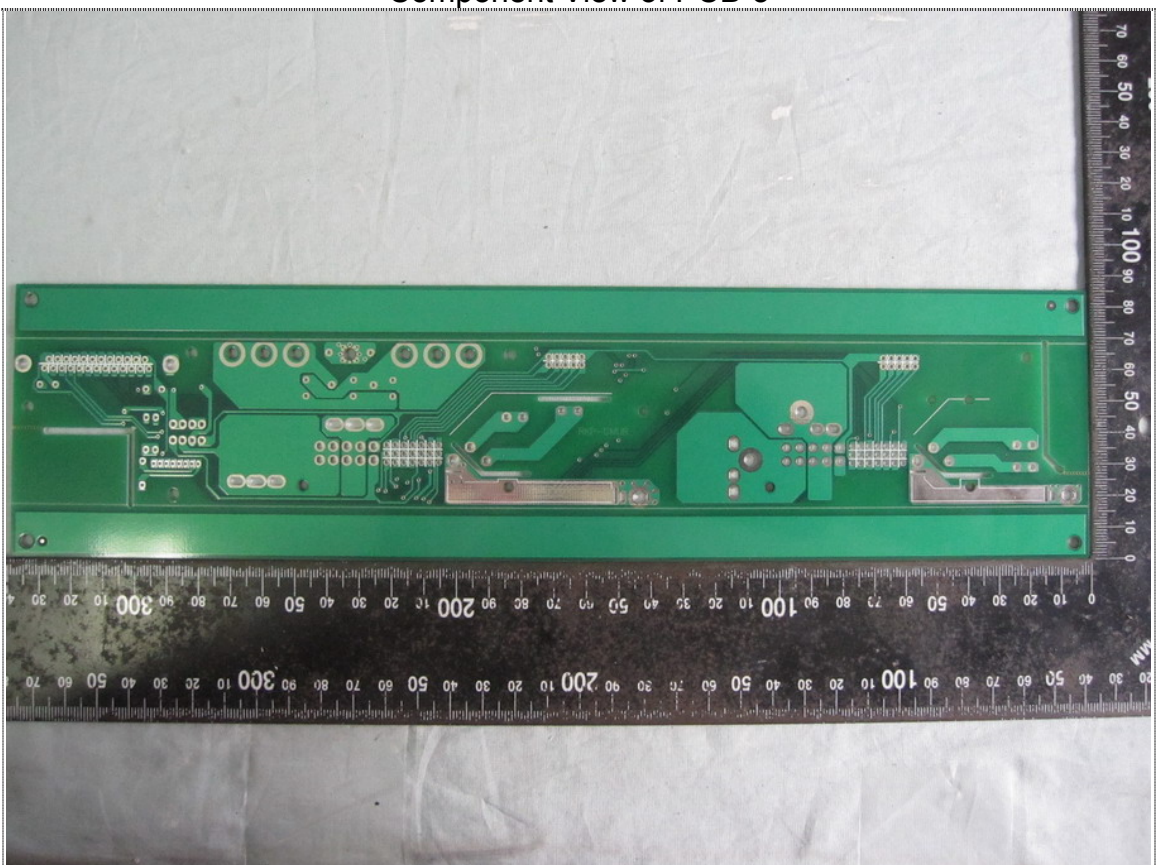
Component View of PCB-2



Solder View of PCB-2

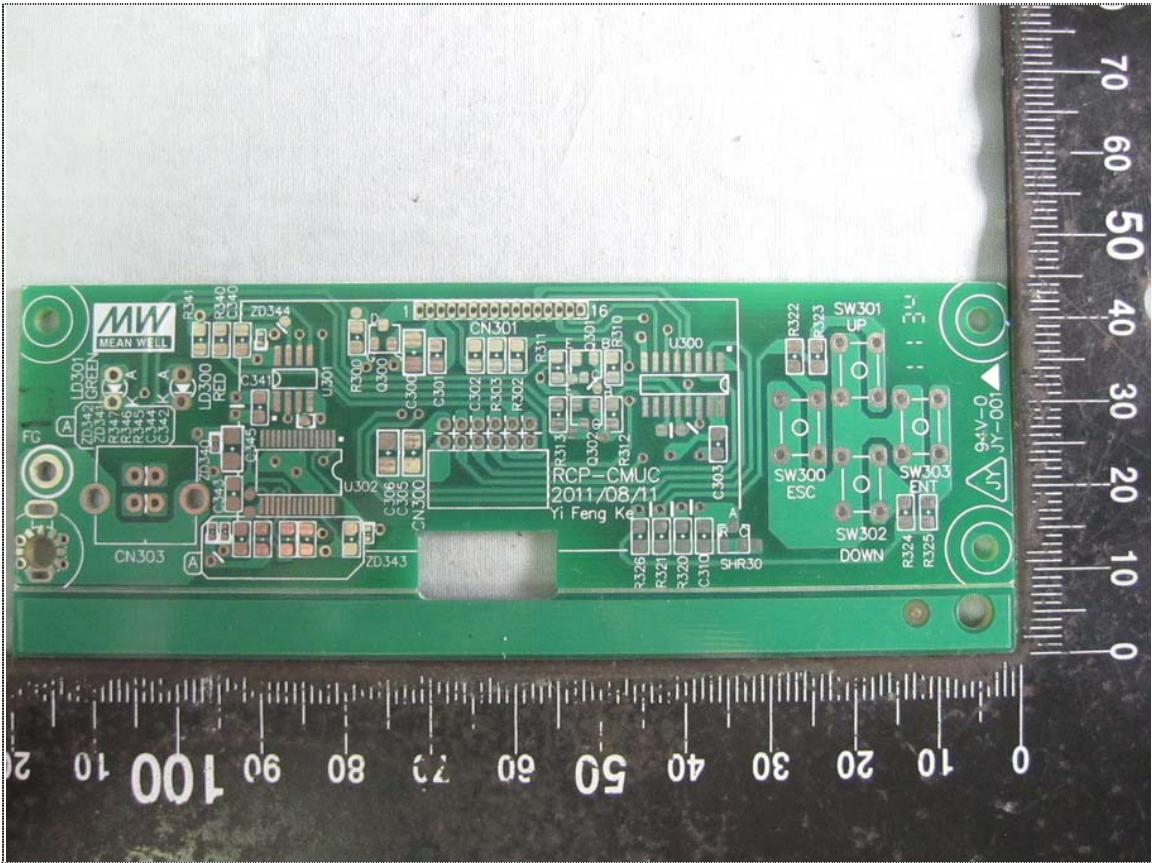


Component View of PCB-3

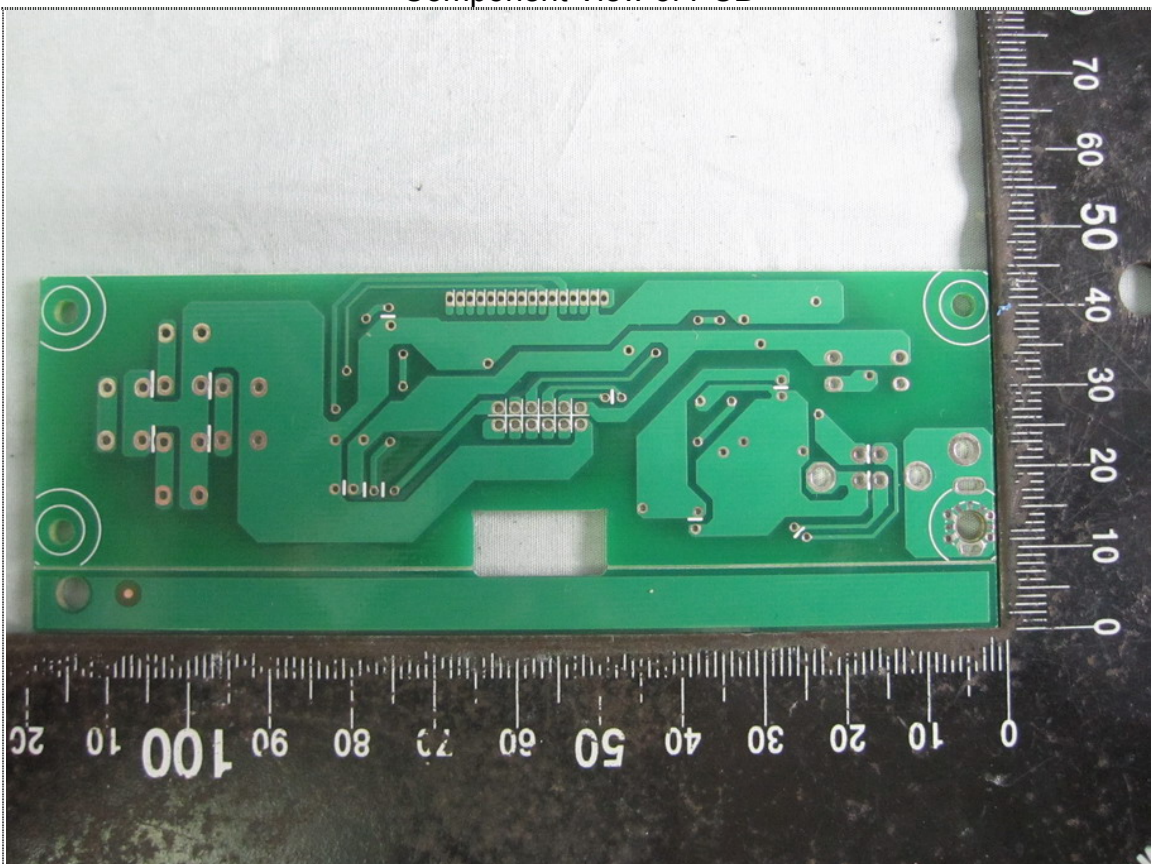


Solder View of PCB-3

17.2 For RKP-CMU1



Component View of PCB



Solder View of PCB