

CERTIFICATION

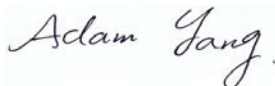
Applicant : American Power Conversion Holding Inc. Taiwan Branch
Address : 3F., No. 205, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan R.O.C.
Manufacturer : American Power Conversion Holding Inc. Taiwan Branch
Address : 3F., No. 205, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan R.O.C.
Description of EUT : Uninterruptible Power System
Trade Name : APC
Model Number : BN675M1
Product Series : BN675XXXXXXXXXX, BN650XXXXXXXXXX, BE600XXXXXXXXXX ("X" can be 0-9, A-Z, "-" or blank)
Type of Test : FCC Part 15 Subpart B
Technical Standard : **Emission**
FCC Part 15 : Subpart B Class B
CISPR 22 : 2008 Class B
Report Number : HA150717-FD
Receipt Date : 01-OCT-2015
Issue Date : 23-OCT-2015
Test Result : **Compliance**

The above equipment was tested by *HongAn TECHNOLOGY CO., LTD.*, for compliance with the requirement set forth in the FCC Rules and Regulation Part 15, Subpart B and the measurement procedures were based on ANSI C63.4.

Note :

1. The results of the test report relate only to the sample tested.
2. The test report shall not be reproduced without the written approval of *HongAn TECHNOLOGY CO., LTD.*

Approved by:



Adam Yang / Section Manager



HongAn TECHNOLOGY CO., LTD.

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BSMI Registration No. : SL2-IN-E-0023, SL2-IS-E-0023,
SL2-A1-E-0023, SL2-R1-E-0023,
SL2-R2-E-0023, SL2-L1-E-0023

FCC Designation No. : TW1071

TAF Accreditation No. : 1163

VCCI Registration No. : R-2156, C-2329, T-219, G-696



Declaration of Conformity

We, the undersigned, certify and declare under our sole responsibility that the product designated in this Declaration complies with the following specifications and bears FCC mark in accordance with the following specifications:

Test Standards:

**FCC PART 15 SUBPART B AND CISPR 22
Class B**

Applicant	: American Power Conversion Holding Inc. Taiwan Branch
Address	: 3F., No. 205, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan R.O.C.
Declaration Product	: Uninterruptible Power System
Model Number	: BN675M1
Product Series	: BN675XXXXXXXXXX, BN650XXXXXXXXXX, BE600XXXXXXXXXX ("X" can be 0-9, A-Z, "-" or blank)
Issue Date	: 23-OCT-2015

Representative's Name : _____ **/ Title :** _____

Signature and Stamp : _____



FCC COMPLIANCE TEST REPORT

Technical Statement of Conformity
in accordance with FCC Part 15 Subpart B

The Product

Equipment Under Test	: Uninterruptible Power System
Model Number	: BN675M1
Product Series	: BN675XXXXXXXXXX, BN650XXXXXXXXXX, BE600XXXXXXXXXX ("X" can be 0-9, A-Z, "-" or blank)
Report Number	: HA150717-FD
Issue Date	: 23-OCT-2015
Test Result	: Compliance

is produced by

American Power Conversion Holding Inc. Taiwan Branch
3F., No. 205, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan R.O.C.



HongAn TECHNOLOGY CO., LTD.

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SL2-R2-E-0023, SL2-L1-E-0023

FCC Designation No.: TW1071
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Verification

Applicant :	American Power Conversion Holding Inc. Taiwan Branch
Manufacturer :	American Power Conversion Holding Inc. Taiwan Branch
Equipment Under Test :	Uninterruptible Power System
Model Number :	BN675M1
Product Series :	BN675XXXXXXXXXX, BN650XXXXXXXXXX, BE600XXXXXXXXXX ("X" can be 0-9, A-Z, "-" or blank)
Sample Received Date :	01-OCT-2015
Test Standards :	☒ FCC Part 15 Subpart B and CISPR 22 Class B

Remark

This report details the results of the test carried out on one sample. The test results are contained in this test report and HongAn Technology Co., Ltd. assumes full responsibility for the accuracy and completeness of these tests. This report shows the EUT is technically compliant with FCC Part 15 Subpart B and CISPR 22 Class B official requirements. This report applies to the above sample only and shall not be reproduced in part without written approval of HongAn Technology Co., Ltd..

Documented by:

Date: 23-OCT-2015

Cherry Chi / ADM. Dept. Staff

Tested by:

Date: 22-OCT-2015

Cait Liu / ENG. Dept. Staff

Approved by:

Date: 23-OCT-2015

Adam Yang / SEC. Manager

Summary of Test Result

Emission			
Test Standard	Test Item	Test Result	Remark
FCC Part15 Subpart B CISPR22 Class B	Conducted Emission	Pass	Highest Emission (LINE Mode) L: 0.20MHz, A.V.48.48dBuV, Margin -5.19dBuV N: 0.20MHz, A.V.49.25dBuV, Margin -4.33dBuV
			Highest Emission (Battery Mode) L: 2.20MHz, A.V.43.10dBuV, Margin -2.90dBuV N: 2.85MHz, A.V.40.32dBuV, Margin -5.68dBuV
FCC Part15 Subpart B CISPR22 Class B	Radiated Emission (Below 1GHz)	Pass	Highest Emission (LINE Mode) H: 155.53MHz, 24.55dBuV, Margin -5.45dB Antenna Height 396 cm, Turntable Angle 226° V: 82.94MHz, 26.75dBuV, Margin -3.25dB Antenna Height 108 cm, Turntable Angle 158°
			Highest Emission (Battery Mode) H: 38.52MHz, 24.18dBuV, Margin -5.82dB Antenna Height 396 cm, Turntable Angle 201° V: 119.90MHz, 25.64dBuV, Margin -4.36dB Antenna Height 115 cm, Turntable Angle 315°
FCC Part15 Subpart B CISPR22 Class B	Radiated Emission (1 to 6 GHz)	N/A	The highest frequency of the internal sources of the EUT is less than 108MHz, the measurement shall only be made up to 1GHz. Hence, the test item is not required.

Measurement Uncertainty – Emission

The following measurement uncertainty has been calculated for Emission Tests performed on the EUT as specified in CISPR 16-4-2:

Test Item		Uncertainty
Conducted Emission		± 4.34dB
Radiated Emission	Below 1GHz	± 5.87dB
	Above 1GHz	± 4.03dB

This reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of $k = 2$, providing a level of confidence of approximately 95%.

1 General Description

1.1 Description of Equipment Under Test

Equipment Under Test	:	Uninterruptible Power System
Model Number	:	BN675M1
Product Series	:	BN675XXXXXXXXXX, BN650XXXXXXXXXX, BE600XXXXXXXXXX ("X" can be 0-9, A-Z, "-" or blank)
Applicant	:	American Power Conversion Holding Inc. Taiwan Branch
Address of Applicant	:	3F., No. 205, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan R.O.C.
Manufacturer	:	American Power Conversion Holding Inc. Taiwan Branch
Address of Manufacturer	:	3F., No. 205, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan R.O.C.
Power Supply	:	Input: AC 120V, 12A, 50/60Hz, 1 ϕ Battery backup outlets: AC 120V, 5.4A, 50/60Hz, 650VA, 360W, , 1 ϕ Total outlet current: DC 12V USB Output: DC 5V, 1.5A ☐Shielded ☒Non-Shielded ☐Detachable ☒Un-Detachable, 1.5m ☐w Ferrite Core ☒w/o Ferrite Core
I/O Port	:	USB*1
Data Cable	:	USB Cable: Non-shielded, Detachable, 2m, With core*1 Fixture Cable: Non-shielded, Detachable, 1m, W/O core
Description of EUT	:	Dimensions : 57 cm (L) X 10 cm (W) X 11.5 cm (H) Highest Frequency of the Internal Source : <108MHz Position : ☒ Table-top / ☐ Floor-standing Intended Function : The EUT is a UPS. Product Variance : The manufacturer declares that the product series is identical to the EUT. Different model numbers are adopted to distinguish the distributing markets (countries).The EUT is the most advanced model within the series. HongAn is only responsible for the test result of the main test sample.



1.2 Test Facility

All the Conducted and Radiated Emission Tests are performed at No. 15-1, Cweishuh Keng, Cweipin Village, Linkou, New Taipei City, Taiwan, R.O.C.

1.3 Test Instruments

Instruments Used for Emission Measurement

Instrument Name	Manufacture Mode	Model Number	Serial Number	Last Cal. Date	Next Cal. Date	Test Item
LISN	EMCO	3810/2NM	9702-1819	27-Jul-2015	27-Jul-2016	Conducted Emission
LISN	Rolf Heine Hochfrequenztechnik	NNB-4/32T	00001	18-Mar-2015	18-Mar-2016	Conducted Emission
RF Current Probe	FCC	F-33-4	53	29-May-2015	29-May-2016	Conducted Emission
Impedance Stabilization Network (ISN)	Schaffner	ISN T400	16832	01-Jun-2015	01-Jun-2016	Conducted Emission
EMI Receiver	R&S	ESCI	100931	25-Jul-2015	25-Jul-2016	Conducted Emission, Radiation Emission
Spectrum Analyzer	ADVANTEST	R3172	101202158	21-Aug-2015	21-Aug-2016	Radiated Emission
Preamplifier	CHASE	CPA 9231A	0405	24-Aug-2015	24-Aug-2016	Radiated Emission
Preamplifier	HD	HD17187	004	01-Jun-2015	01-Jun-2016	Radiated Emission
Bilog Antenna	TESEQ	CBL6111D	25769	25-Feb-2015	25-Feb-2016	Radiated Emission
Bilog Antenna	TESEQ	CBL6111D	38521	04-Jun-2015	04-Jun-2016	Radiated Emission
Double-Ridged Waveguide Horn	EMCO	3115	9912-5992	01-Jun-2015	01-Jun-2016	Radiated Emission

※ The test equipments used are calibrated and can be traced to National ITRI and International Standards.

1.4 Test Methodology

All Conducted and Radiated Emission Tests were performed according to the procedures stated in FCC Part 15 Subpart B Sec. 15.31.

1.5 Auxiliary Equipments

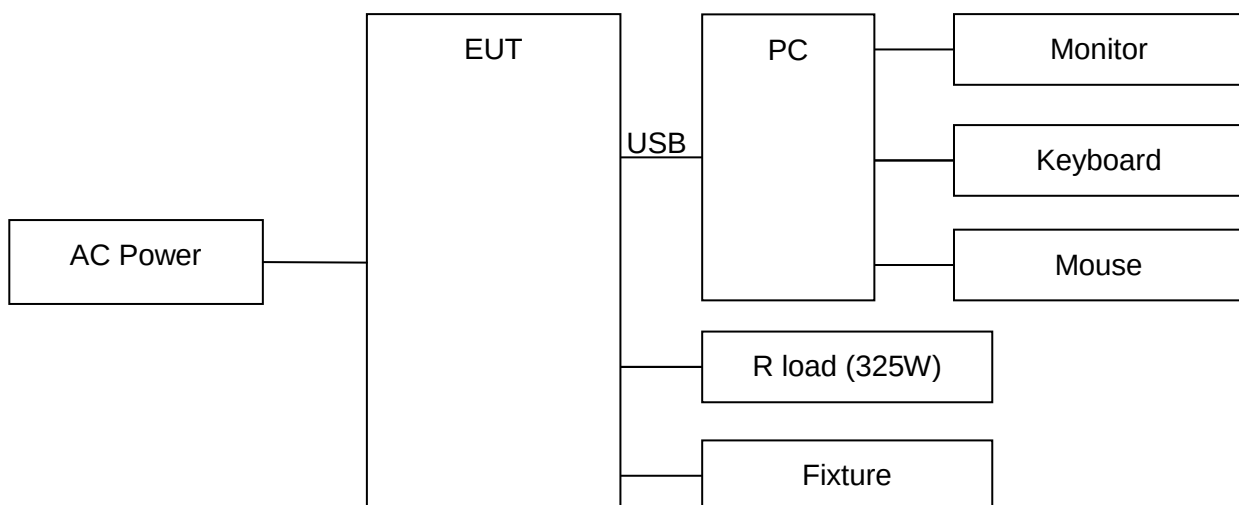
1.5.1 Provided by HongAn Technology Co., Ltd. for Emission Test.

No.	Equipment	Model No.	Serial No.	EMC Approved	Brand	Description	
						Data Cable	Power Cable
1	PC	HP Pro 3330 MT	SGH206SKS9	BSMI ID R33001	Hewlett Packard	N/A	N/A
2	Keyboard	SKB-2200	03005347	CE Mark, FCC DoC, BSMI ID T3A085	Eagle Touch	Shielded(Foil) *1.6m	N/A
3	Mouse	M-BE58	HCA34401405	Ce Mark, FCC DoC, BSMI ID T41126	Logitech	Shielded(Foil) *1.8m	N/A
4	Monitor	N/A	N/A	CE	Monita	N/A	Unshielded *1m
5	LAMP	100W	N/A	N/A	N/A	N/A	N/A
6	LAMP*2	60W	N/A	N/A	N/A	N/A	N/A
7	LAMP*2	40W	N/A	N/A	N/A	N/A	N/A
8	LAMP	25W	N/A	N/A	N/A	N/A	N/A

1.5.2 Provided by the Manufacturer

N/A

1.6 Block Diagram





1.7 Identifying the Final Test Mode

1. Line mode.
2. Battery mode.

Note:

1. After pre-test, we identified that the Battery mode was most likely to cause maximum disturbance at Conducted Emission. Therefore, the Final EMC Assessment was performed for the worst case.
2. After pre-test, we identified that the Line mode was most likely to cause maximum disturbance at Radiated Emission. Therefore, the Final EMC Assessment was performed for the worst case.

1.8 Final Test Mode

1. Line mode.
2. Battery mode.

1.9 Condition of Power Supply

AC 120V, 60Hz

1.10 EUT Configuration

1. Setup the EUT and peripheral as shown in Section 1.6.
2. Turn on the power of all equipments.
3. Activate the selected Final Test Mode shown in Sec. 1.8.

2 Conducted Emission Test

2.1 Test Instruments

Refer to Sec. 1.3 Test Instruments.

2.2 Test Configuration and Procedure

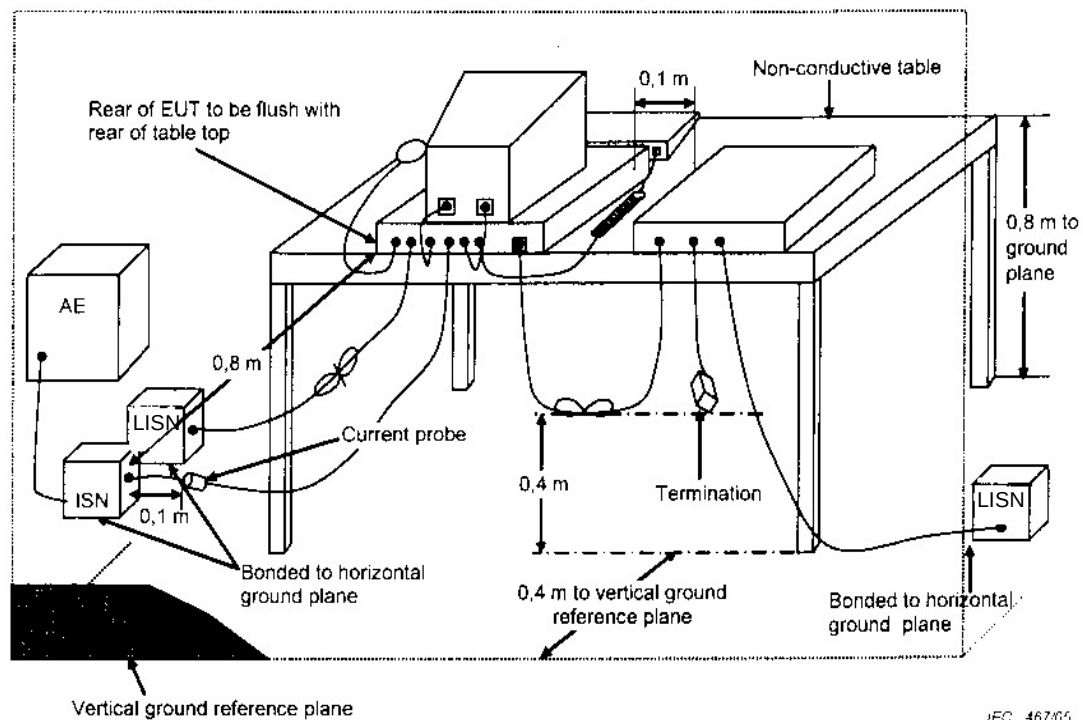


Table-top Equipment

- The EUT was placed on a non-conductive table which was 80 cm above the horizontal coupling plane. The rear of the EUT was 40 cm from the vertical coupling plane.
- The excess interface cables were folded at the cable center into a bundle no longer than 40 cm, so that the bundles were on the table.
- The EUT was connected to the main power through a L.I.S.N. This set up provided 50 ohm / 50 μ H coupling impedance for the measuring equipment.
- All auxiliary equipment received power from a second L.I.S.N.
- The conducted emissions were measured between the Line Phase and the PE ground and between the Neutral Phase and the PE ground using an EMI Receiver.
- The values were recorded.



2.3 Conducted Limit

☒ CISPR 22 / FCC Part 15 B

Frequency (MHz)	☐ Class A		☒ Class B	
	Q.P. (Quasi-Peak)	A.V. (Average)	Q.P. (Quasi-Peak)	A.V. (Average)
0.15 to 0.50	79	66	66 to 56	56 to 46
0.50 to 5.0	73	60	56	46
5.0 to 30	73	60	60	50

2.4 Test Result

PASS

The final tests data are shown on the following page(s).

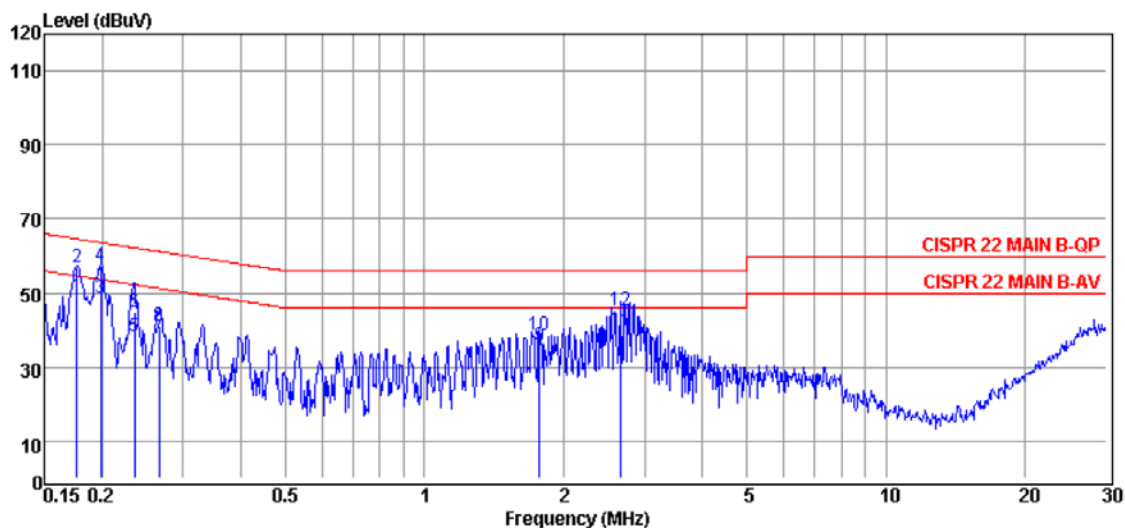
Conducted Emission Test Data-Line mode

Test Date : 22-OCT-2015

Power Line : Line

Temperature : 25°C

Humidity : 45%



No.	Freq MHz	Reading dBμV	C.F dB	Result dBμV	Limit dBμV	Margin dB	Power Line	Remark
1	0.18	38.90	9.96	48.86	54.64	-5.78	LINE	Average
2	0.18	47.07	9.96	57.03	64.64	-7.61	LINE	QP
3	0.20	38.55	9.93	48.48	53.67	-5.19	LINE	Average
4	0.20	47.51	9.93	57.44	63.67	-6.23	LINE	QP
5	0.24	28.20	9.92	38.12	52.26	-14.14	LINE	Average
6	0.24	34.76	9.92	44.68	62.26	-17.58	LINE	QP
7	0.27	28.01	9.92	37.93	61.25	-23.32	LINE	Average
8	0.27	31.30	9.92	41.22	61.25	-20.03	LINE	QP
9	1.77	25.32	10.26	35.58	46.00	-10.42	LINE	Average
10	1.77	28.54	10.26	38.80	56.00	-17.20	LINE	QP
11	2.65	29.52	10.30	39.82	46.00	-6.18	LINE	Average
12	2.65	35.06	10.30	45.36	56.00	-10.64	LINE	QP

Remark : All readings are Quasi-Peak and Average values.

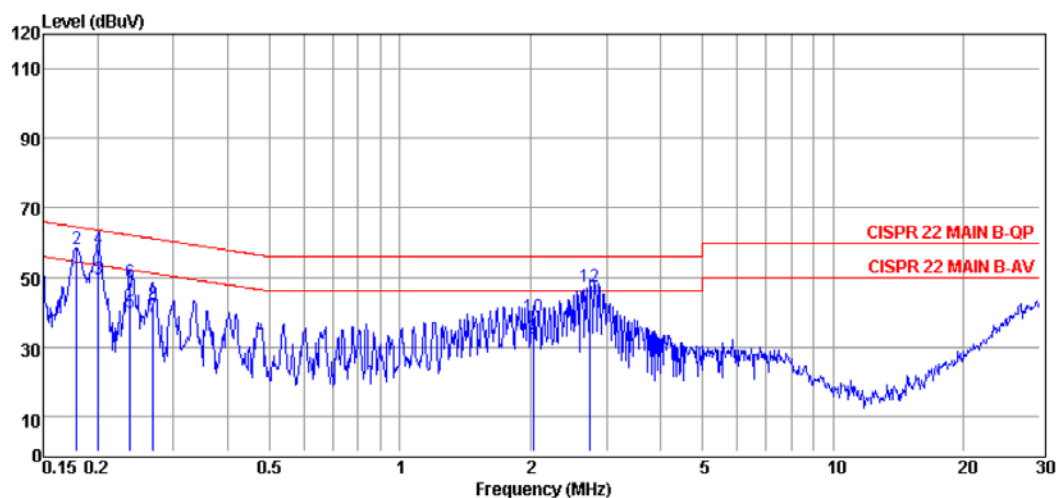
Conducted Emission Test Data-Line mode

Test Date : 22-OCT-2015

Power Line : Neutral

Temperature : 25°C

Humidity : 45%



No.	Freq MHz	Reading dBμV	C.F dB	Result dBμV	Limit dBμV	Margin dB	Power Line	Remark
1	0.18	39.74	9.97	49.71	54.50	-4.79	NEUTRAL	Average
2	0.18	48.01	9.97	57.98	64.50	-6.52	NEUTRAL	QP
3	0.20	39.31	9.94	49.25	53.58	-4.33	NEUTRAL	Average
4	0.20	48.38	9.94	58.32	63.58	-5.26	NEUTRAL	QP
5	0.24	30.12	9.92	40.04	52.17	-12.13	NEUTRAL	Average
6	0.24	38.53	9.92	48.45	62.17	-13.72	NEUTRAL	QP
7	0.27	28.52	9.91	38.43	51.16	-12.73	NEUTRAL	Average
8	0.27	32.55	9.91	42.46	61.16	-18.70	NEUTRAL	QP
9	2.03	22.20	10.28	32.48	46.00	-13.52	NEUTRAL	Average
10	2.03	28.36	10.28	38.64	56.00	-17.36	NEUTRAL	QP
11	2.75	31.11	10.29	41.40	46.00	-4.60	NEUTRAL	Average
12	2.75	37.20	10.29	47.49	56.00	-8.51	NEUTRAL	QP

Remark : All readings are Quasi-Peak and Average values.

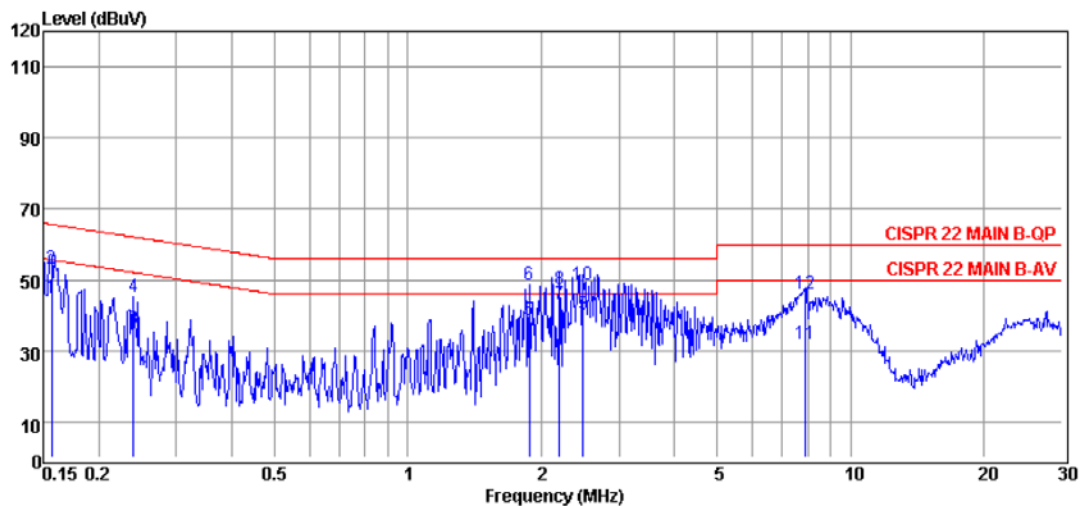
**Conducted Emission Test Data-Battery mode**

Test Date : 22-OCT-2015

Power Line : Line

Temperature : 25°C

Humidity : 45%



No.	Freq MHz	Reading dBuV	C.F dB	Result dBuV	Limit dBuV	Margin dB	Power Line	Remark
1	0.16	35.01	9.99	45.00	55.65	-10.65	LINE	Average
2	0.16	43.10	9.99	53.09	65.65	-12.56	LINE	QP
3	0.24	26.33	9.92	36.25	52.08	-15.83	LINE	Average
4	0.24	35.49	9.92	45.41	62.08	-16.67	LINE	QP
5	1.88	28.52	10.28	38.80	46.00	-7.20	LINE	Average
6	1.88	38.38	10.28	48.66	56.00	-7.34	LINE	QP
7	2.20	32.80	10.30	43.10	46.00	-2.90	LINE	Average
8	2.20	37.10	10.30	47.40	56.00	-8.60	LINE	QP
9	2.49	30.11	10.30	40.41	46.00	-5.59	LINE	Average
10	2.49	38.31	10.30	48.61	56.00	-7.39	LINE	QP
11	7.89	21.21	10.73	31.94	50.00	-18.06	LINE	Average
12	7.89	35.18	10.73	45.91	60.00	-14.09	LINE	QP

Remark : All readings are Quasi-Peak and Average values.

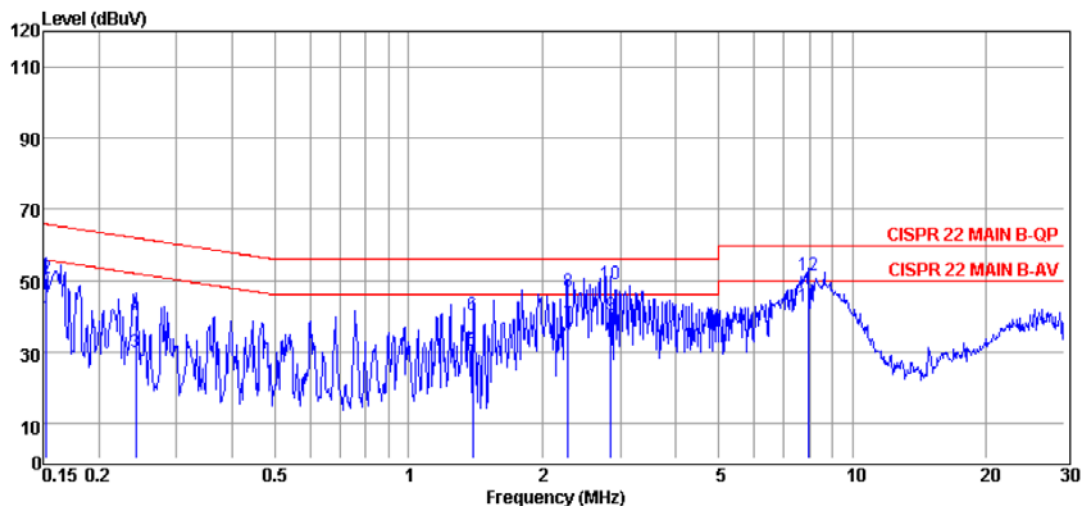
Conducted Emission Test Data-Battery mode

Test Date : 25-SEP-2015

Power Line : Neutral

Temperature : 31°C

Humidity : 44%



No.	Freq MHz	Reading dBuV	C.F dB	Result dBuV	Limit dBuV	Margin dB	Power Line	Remark
1	0.15	29.55	10.00	39.55	55.87	-16.32	NEUTRAL	Average
2	0.15	40.55	10.00	50.55	65.87	-15.32	NEUTRAL	QP
3	0.24	20.12	9.92	30.04	52.00	-21.96	NEUTRAL	Average
4	0.24	30.48	9.92	40.40	62.00	-21.60	NEUTRAL	QP
5	1.40	20.11	10.21	30.32	46.00	-15.68	NEUTRAL	Average
6	1.40	30.22	10.21	40.43	56.00	-15.57	NEUTRAL	QP
7	2.29	27.30	10.29	37.59	46.00	-8.41	NEUTRAL	Average
8	2.29	36.55	10.29	46.84	56.00	-9.16	NEUTRAL	QP
9	2.85	30.01	10.31	40.32	46.00	-5.68	NEUTRAL	Average
10	2.85	38.89	10.31	49.20	56.00	-6.80	NEUTRAL	QP
11	7.98	32.20	10.68	42.88	50.00	-7.12	NEUTRAL	Average
12	7.98	40.74	10.68	51.42	60.00	-8.58	NEUTRAL	QP

Remark : All readings are Quasi-Peak and Average values.



3 Radiated Emission Test – Below 1 GHz

3.1 Test Instruments

Refer to Sec. 1.3 Test Instruments.

3.2 Test Configuration and Procedure

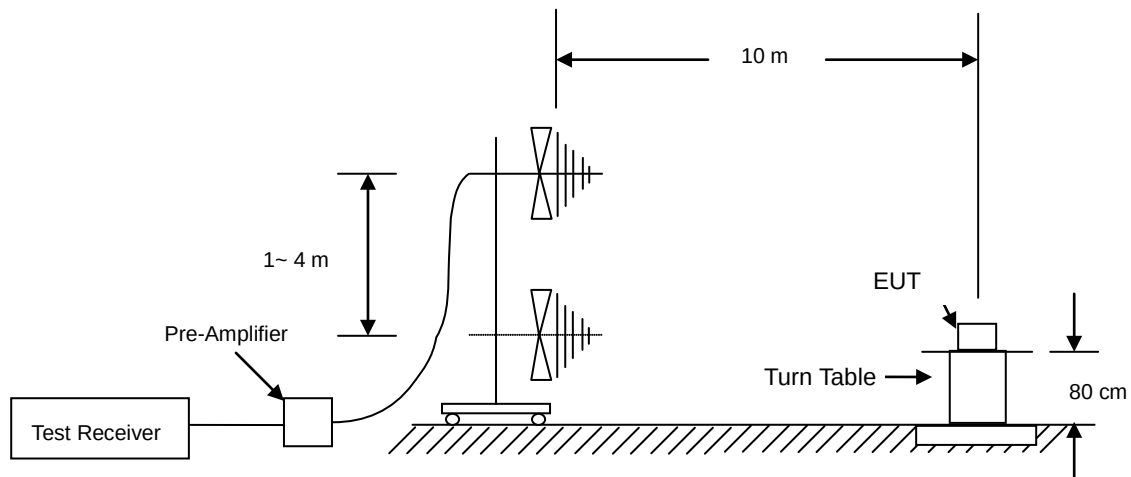


Table-top Equipment

- The EUT was placed on a non-conductive turntable which was 80cm above the horizontal ground plane. The EUT was set 10m away from the receiving antenna that was mounted on a non-conductive mast.
- Main cables draped to the ground plane and were routed to the mains power outlet. The mains power outlet was bonded to and did not protrude above the ground plane.
- The antenna was adjusted between 1m and 4m in height above the ground plane and the Antenna-to-EUT azimuth was also varied during the measurements to find the top 6 maximum meter readings within the frequency range limit as indicated in Sec 3.3.
- The radiated emissions were measured when the Antenna-to-EUT polarization was set horizontally and vertically.
- The values were recorded.



3.3 Radiated Limit

☐ FCC Part 15 B

	☐ Class A (10m)		☐ Class B (3m)	
Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Quasi-Peak ($\text{dB}\mu\text{V/m}$)	Field Strength ($\mu\text{V/m}$)	Quasi-Peak ($\text{dB}\mu\text{V/m}$)
30 to 88	90	39.08	100	40.00
88 to 216	150	43.52	150	43.52
216 to 960	210	46.44	200	46.02

Emission Level ($\text{dB}\mu\text{V/m}$) = 20 Log Emission Level ($\mu\text{V/m}$)

☒ CISPR 22

	☐ Class A (10m)	☒ Class B (10m)
Frequency (MHz)	Quasi-Peak ($\text{dB}\mu\text{V/m}$)	Quasi-Peak ($\text{dB}\mu\text{V/m}$)
30 to 230	40.0	30.0
230 to 1000	47.0	37.0

3.4 Test Result

PASS

The final tests data are shown on the following page(s).

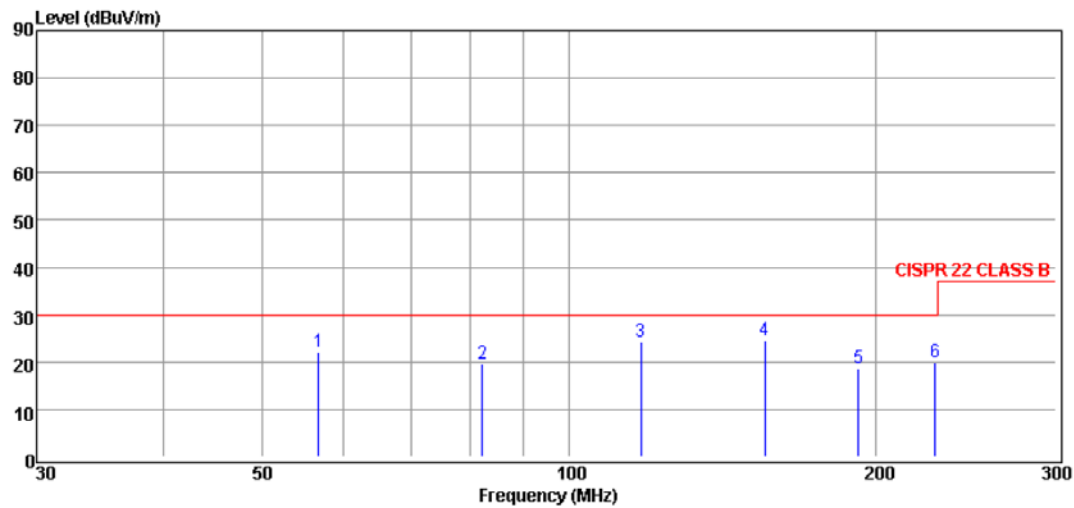
**Radiated Emission Test Data-Line mode**

Test Date : 22-OCT-2015

Polarization : Horizontal

Temperature : 25°C

Humidity : 45%



No.	Freq MHz	Reading dBμV	C.F dB	Result dBμV/m	Limit dBμV/m	Margin dB	Height cm	Angle deg	Antenna Pol.	Remark
1	56.73	44.10	-22.03	22.07	30.00	-7.93	390	126	HORIZONTAL	QP
2	82.15	40.21	-20.54	19.67	30.00	-10.33	399	128	HORIZONTAL	QP
3	117.44	41.37	-17.10	24.27	30.00	-5.73	386	302	HORIZONTAL	QP
4	155.53	42.37	-17.82	24.55	30.00	-5.45	396	226	HORIZONTAL	QP
5	192.02	38.52	-19.78	18.74	30.00	-11.26	391	252	HORIZONTAL	QP
6	228.30	38.35	-18.42	19.93	30.00	-10.07	380	125	HORIZONTAL	QP

Remark : All readings are Quasi-Peak values

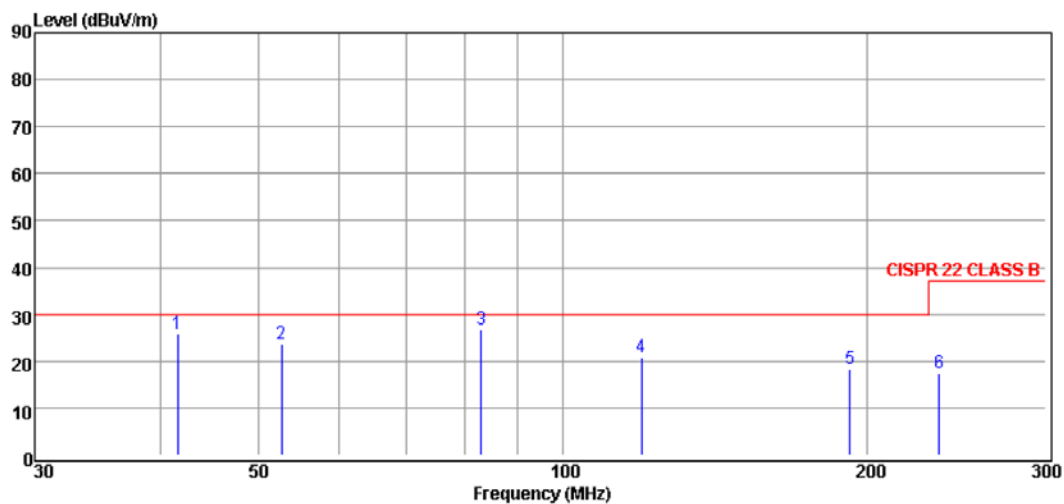
**Radiated Emission Test Data-Line mode**

Test Date : 22-OCT-2015

Polarization : Vertical

Temperature : 25°C

Humidity : 45%



No.	Freq MHz	Reading dBuV	C.F dB	Result dBuV/m	Limit dBuV/m	Margin dB	Height cm	Angle deg	Antenna Pol.	Remark
1	41.53	42.16	-16.16	26.00	30.00	-4.00	102	301	VERTICAL	QP
2	52.66	44.70	-20.99	23.71	30.00	-6.29	110	263	VERTICAL	QP
3	82.94	47.21	-20.46	26.75	30.00	-3.25	108	158	VERTICAL	QP
4	119.52	37.86	-16.97	20.89	30.00	-9.11	116	302	VERTICAL	QP
5	192.18	38.23	-19.78	18.45	30.00	-11.55	112	205	VERTICAL	QP
6	235.52	35.02	-17.47	17.55	37.00	-19.45	121	158	VERTICAL	QP

Remark : All readings are Quasi-Peak values

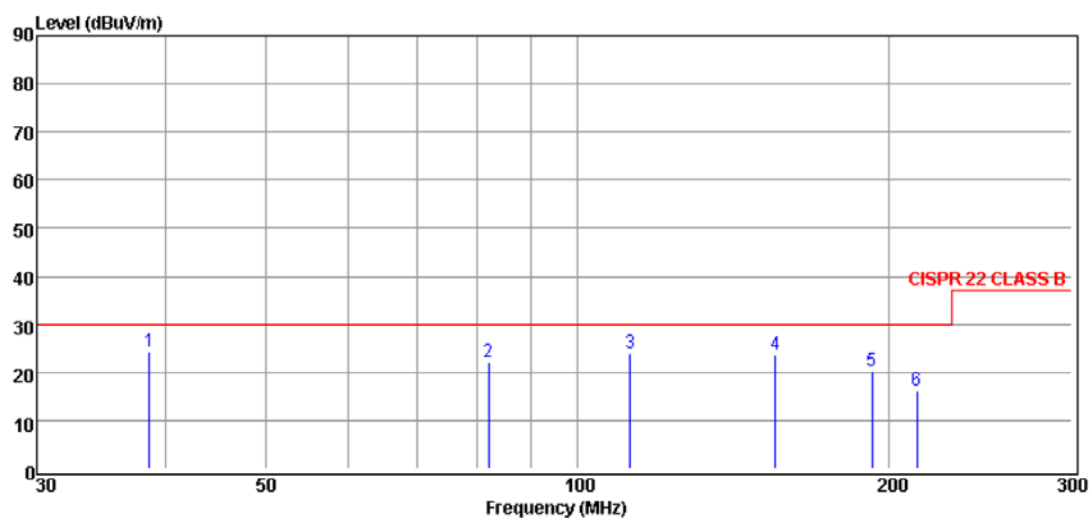
**Radiated Emission Test Data-Battery mode**

Test Date : 22-OCT-2015

Polarization : Horizontal

Temperature : 25°C

Humidity : 45%



No.	Freq MHz	Reading dBμV	C.F dB	Result dBμV/m	Limit dBμV/m	Margin dB	Height cm	Angle deg	Antenna Pol.	Remark
1	38.52	38.66	-14.48	24.18	30.00	-5.82	396	201	HORIZONTAL	QP
2	82.02	42.52	-20.54	21.98	30.00	-8.02	391	152	HORIZONTAL	QP
3	112.33	41.52	-17.43	24.09	30.00	-5.91	392	188	HORIZONTAL	QP
4	155.22	41.54	-17.82	23.72	30.00	-6.28	399	163	HORIZONTAL	QP
5	192.33	40.02	-19.78	20.24	30.00	-9.76	386	215	HORIZONTAL	QP
6	212.53	35.52	-19.22	16.30	30.00	-13.70	392	185	HORIZONTAL	QP

Remark : All readings are Quasi-Peak values

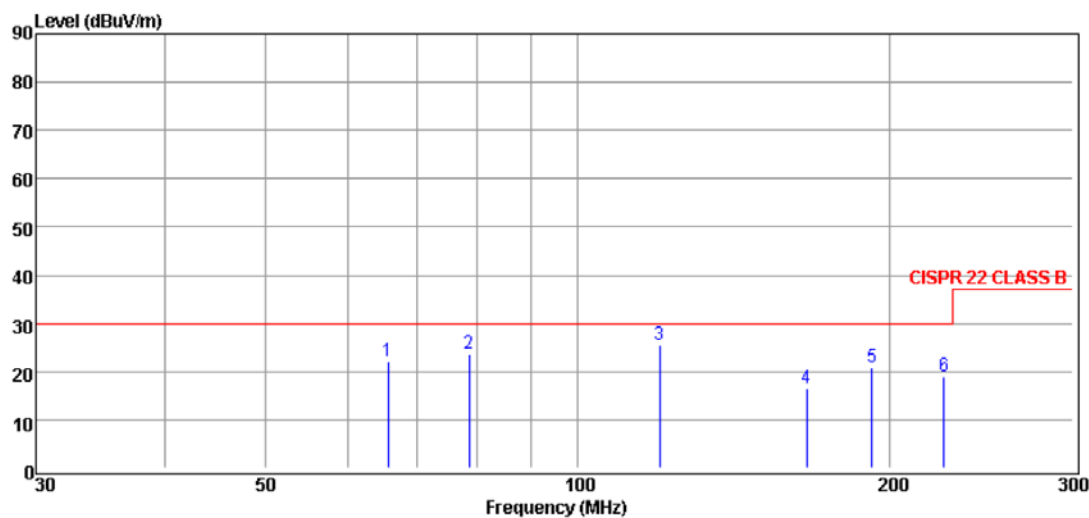
**Radiated Emission Test Data-Battery mode**

Test Date : 22-OCT-2015

Polarization : Vertical

Temperature : 25°C

Humidity : 45%



No.	Freq MHz	Reading dBμV	C.F dB	Result dBμV/m	Limit dBμV/m	Margin dB	Height cm	Angle deg	Antenna Pol.	Remark
1	65.54	44.20	-22.22	21.98	30.00	-8.02	102	156	VERTICAL	QP
2	78.47	44.50	-20.92	23.58	30.00	-6.42	110	205	VERTICAL	QP
3	119.90	42.55	-16.91	25.64	30.00	-4.36	115	315	VERTICAL	QP
4	166.32	35.25	-18.68	16.57	30.00	-13.43	123	202	VERTICAL	QP
5	192.02	40.63	-19.78	20.85	30.00	-9.15	101	158	VERTICAL	QP
6	225.52	37.64	-18.61	19.03	30.00	-10.97	133	152	VERTICAL	QP

Remark : All readings are Quasi-Peak values



4 Radiated Emission Test – 1 to 6 GHz

4.1 Test Instruments

Refer to Sec. 1.3 Test Instruments.

4.2 Test Configuration and Procedure

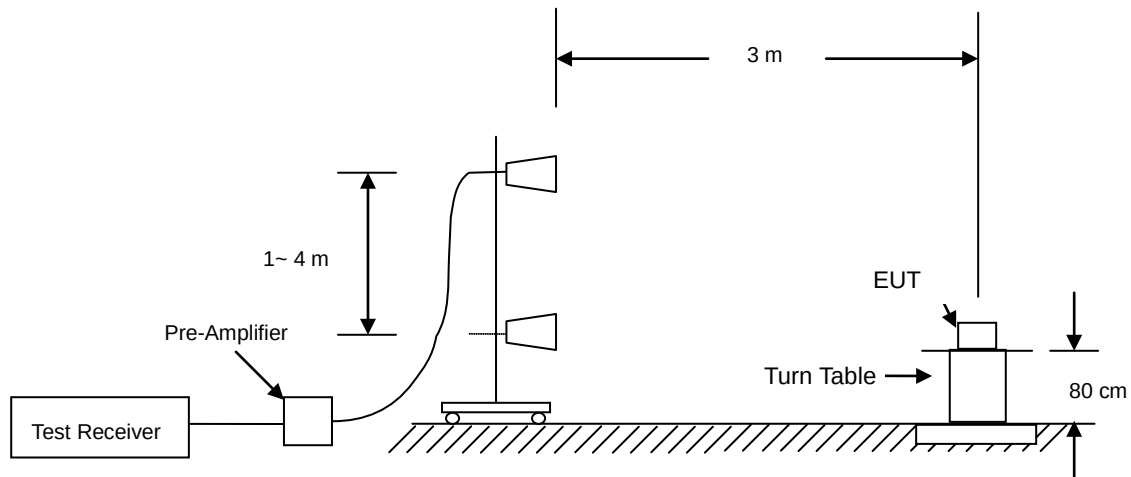


Table-top Equipment

- The EUT was placed on a non-conductive turntable which was 80cm above the horizontal ground plane. The EUT was set 3m away from the receiving antenna that was mounted on a non-conductive mast.
- Main cables draped to the ground plane and were routed to the mains power outlet. The mains power outlet was bonded to and did not protrude above the ground plane.
- The antenna was adjusted between 1m and 4m in height above the ground plane and the Antenna-to-EUT azimuth was also varied during the measurements to find the top 6 maximum meter readings within the frequency range limit as indicated in Sec 4.3.
- The radiated emissions were measured when the Antenna-to-EUT polarization was set horizontally and vertically.
- The values were recorded.

4.3 Test Limit

☐ CISPR22 Class A ITE at a measurement distance of 3m

Frequency GHz	Average limit dB(μ V/m)	Peak limit dB(μ V/m)
1 to 3	56	76
3 to 6	60	80
NOTE The lower limit applies at the transition frequency.		

☐ CISPR22 Class B ITE at a measurement distance of 3m

Frequency GHz	Average limit dB(μ V/m)	Peak limit dB(μ V/m)
1 to 3	50	70
3 to 6	54	74
NOTE The lower limit applies at the transition frequency.		

4.4 Test Result

Not applicable

※The highest frequency of the internal sources of the EUT is less than 108MHz. Hence, above 1GHz Radiated Measurement shall not be made.

5 Photographs of Test

5.1 Conducted Emission Test



Front View



Rear View

5.2 Radiated Emission Test – Below 1 GHz



Front View



Rear View

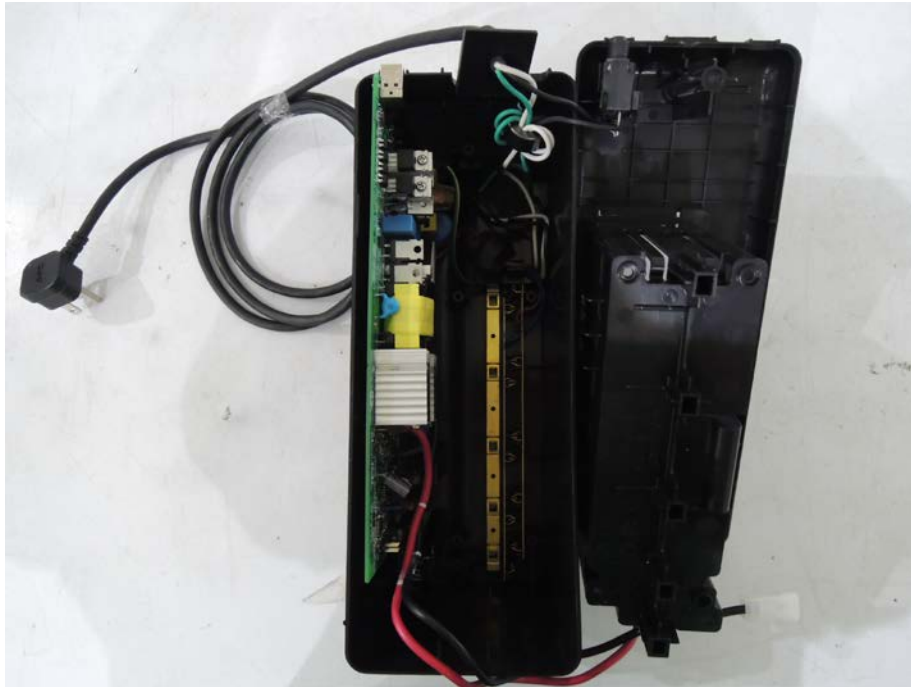
6 Photographs of EUT



Front View of EUT



Rear View of EUT



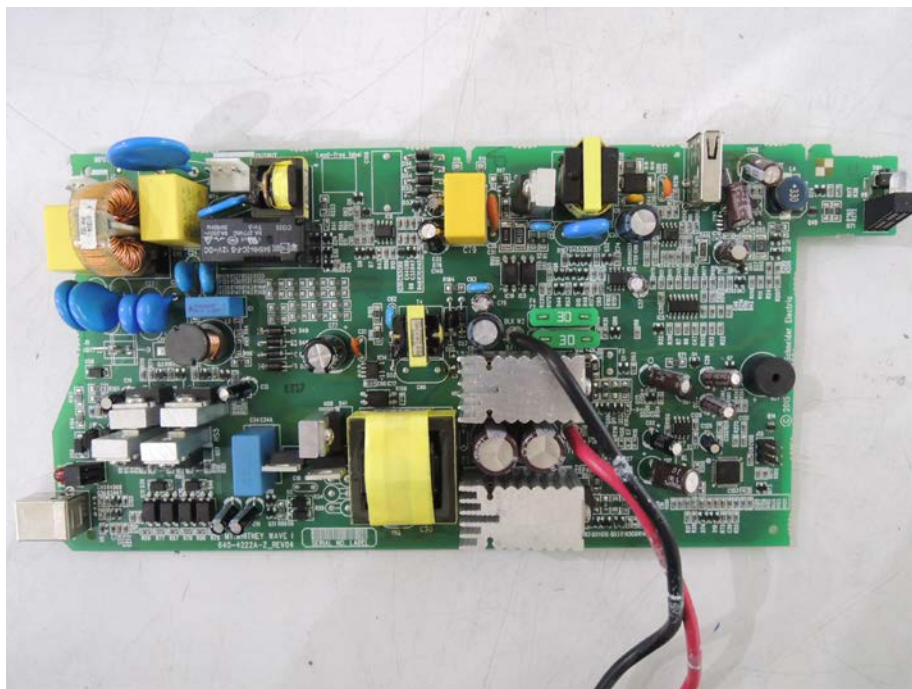
Inside View of EUT 1



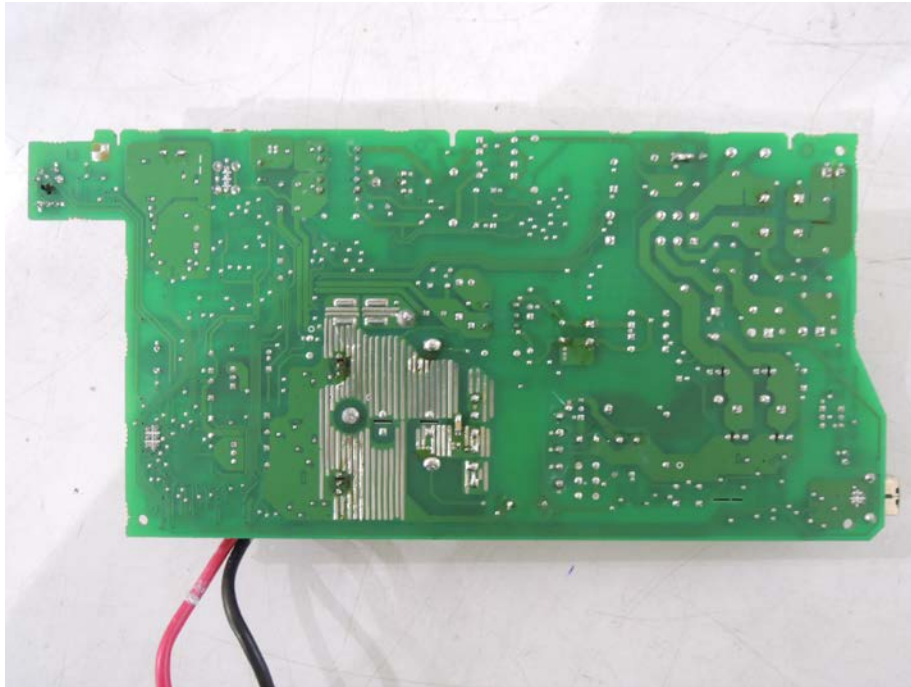
Inside View of EUT 2



View of the EUT I/O Port



Front View of the PCB



Rear View of the PCB



View of the Battery



View of the EUT Label



View of the USB Cable



View of the Fixture Cable