TEST REPORT

Applicant	MERCHSOURCE, LLC
Address	7755 Irvine Center Drive, Suite 100, Irvine, CA 92618

Manufacturer or Supplier	MERCHSOURCE, LLC
Address	7755 Irvine Center Drive, Suite 100, Irvine, CA 92618
Product	Vanity Mirror Hollywood LED 11.8x17.8inch
Brand Name	Sharper Image
Model	1016930
Additional Model & Model Difference	1017452, 101XXXX (where XXX can be digits 0000-9999 which represent different customers), See items 3.1
Date of tests	Jul. 04, 2023 ~ Jul. 18, 2023

The submitted sample of the above equipment has been tested for according to the requirements of the following standards:

☒ **FCC Part 15, Subpart C**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager/ EMC Department
	 Date: Jul. 28, 2023

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2306WDG0283	Original release	Jul. 28, 2023

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
§15.203	Antenna Requirement	PASS	No antenna connector is used.
§15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit.
§15.209	Radiated Emission	PASS	Meet the requirement of limit.
§15.215 (c)	20dB Bandwidth	PASS	Meet the requirement of limit.

2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.68dB
Radiated emissions	9KHz ~ 30MHz	2.80dB
	30MHz ~ 1GMHz	4.24dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Vanity Mirror Hollywood LED 11.8x17.8inch
MODEL NO.	1016930
ADDITIONAL MODE	1017452, 101XXXX (where XXX can be digits 0000-9999 which represent different customers)
SAMPLE STATUS	Engineering sample
FCC ID	2AEVM1016930
POWER SUPPLY	DC 15V from Adapter Input AC 100~240V 50/60Hz 1.5A; USB-C Out: DC 5V/1A; Wireless Charging:10W (Max.)
MODULATION TYPE	ASK
OPERATING FREQUENCY RANGE	111KHz ~ 205KHz
I/O PORTS	Coil Antenna
FIELD STRENGTH	78.85dBuV/m
MAXIMUM POWER OUTPUT FROM THE CHARGING COIL	Max. Power is 10W
CABLE SUPPLIED	N/A

NOTES:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. Please refer to the EUT photo document (Reference No.: 2306WDG0283-1) for detailed product photo.
4. Additional models (see above table) are identical with the test model 1016930 except the model number for trading purpose.
5. The EUT was powered by the following adapter:

ADAPTER	
BRAND:	SHARPER IMAGE
MODEL:	DZ048BHL150300U
INPUT:	AC 100~240V 50/60HZ 1.5A
OUTPUT:	DC 15V/3A 45W
TYPE-C CABLE:	Unshielded, Non-detachable, 160cm

3.2 DESCRIPTION OF TEST MODES

The following test frequencies are provided to this EUT:

Operating Frequency Range(KHz)	Tested Frequency(KHz)	Mode
111-205	127.2	Standby
111-205	127.2	Wireless charging with iPhone x

3.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE	APPLICABLE TO			DESCRIPTION
	RE<1G	PLC	20BW	
A	√	√	√	Standby
B	√	√	√	Wireless charging with iPhone x

Where **RE<1G:** Radiated Emission below 1GHz **PLC:** Power Line Conducted Emission

20BW: 20dB Bandwidth

Notes:

1. The EUT is designed to be positioned on the **X-plane** only.
2. The worst condition is when the phone is charged at 10%, so the test is performed when the phone is charged at 10%.

Radiated Emission Test (Below 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Operating Frequency Range(KHz)	Tested Frequency(KHz)	Modulation Type
A	111-205	127.2	ASK
B	111-205	127.2	ASK

Power Line Conducted Emission Test:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Operating Frequency Range(KHz)	Tested Frequency(KHz)	Modulation Type
A	111-205	127.2	ASK
B	111-205	127.2	ASK

20dB Bandwidth TEST:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Operating Frequency Range(KHz)	Tested Frequency(KHz)	Modulation Type
A	111-205	127.2	ASK
B	111-205	127.2	ASK

TEST CONDITION:

Applicable to	Environmental conditions	Input Power (Adapter)	Tested by
RE<1G	23 ℃, 56% RH/ 25 ℃, 52% RH	120Vac, 60Hz	Jay/Stalker
PLC	25 ℃, 58% RH	120Vac, 60Hz	Summer
20BW	25 ℃, 57% RH	120Vac, 60Hz	Vincent

3.4 DESCRIPTION OF SUPPORT UNITS

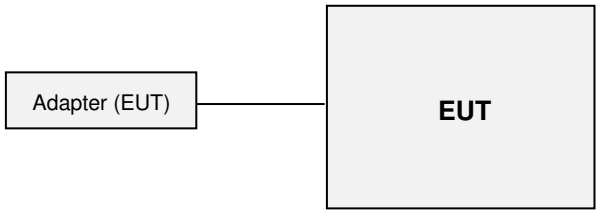
The EUT has been tested as a dependent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	iPhone X	Apple	MQA52CH/A	N/A	N/A

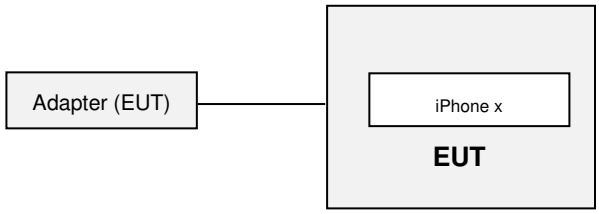
NO.	DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A

3.5 CONFIGURATION OF SYSTEM UNDER TEST

Test Mode A



Test Mode B



3.6 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C (15.207/15.209)
ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

4 EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

NOTES: (1) The lower limit shall apply at the transition frequencies.
(2) The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
(3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Jan. 10, 24
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Jan. 11, 24
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Jan. 10, 24
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jul. 27, 23
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A

NOTES: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in shielding room 553.

4.1.3 TEST PROCEDURE

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20dB) were not recorded.

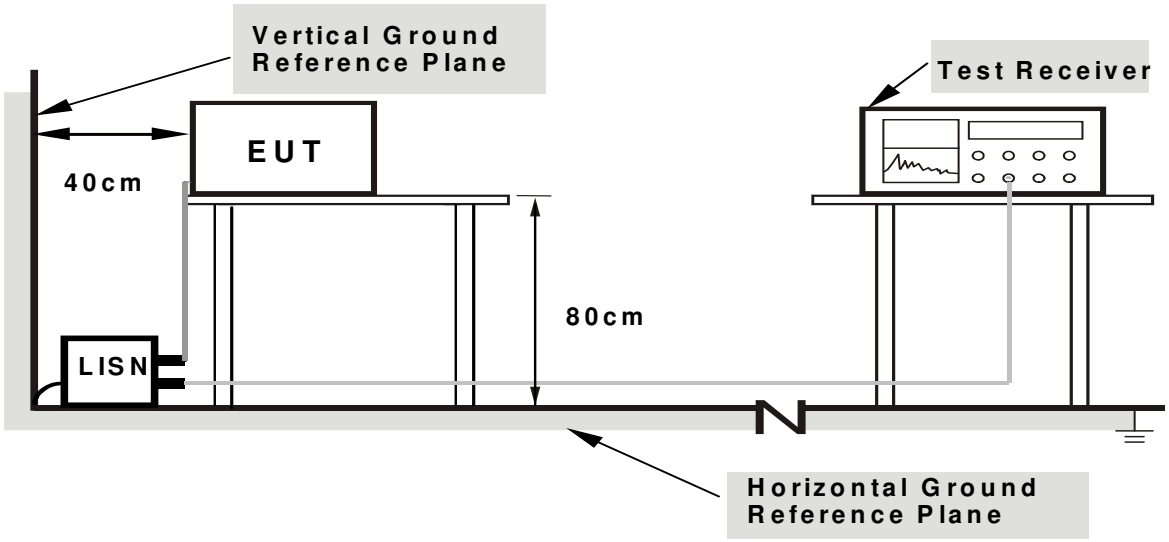
NOTES:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

4.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.

4.1.6 EUT OPERATING CONDITIONS

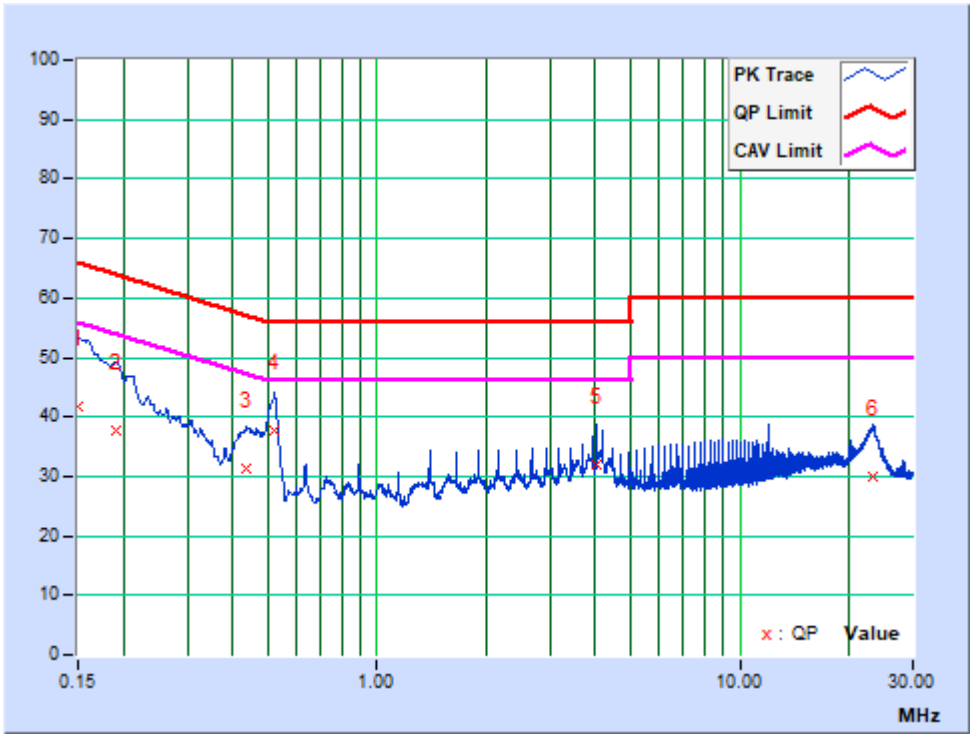
a. Turn on the EUT.
b. The EUT tested in charging mode and standby mode respectively.

4.1.7 TEST RESULTS

TEST MODE	A	PHASE	Line(L)
TEST VOLTAGE	AC 120V/60Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	25deg. C, 58% RH	TESTED BY: Summer	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.05	31.75	13.60	41.80	23.65	66.00	56.00	-24.20	-32.35
2	0.19005	10.09	27.48	9.39	37.57	19.48	64.03	54.03	-26.46	-34.55
3	0.43775	10.20	21.24	10.74	31.44	20.94	57.10	47.10	-25.67	-26.17
4	0.52109	10.21	27.54	15.86	37.75	26.07	56.00	46.00	-18.25	-19.93
5	4.02900	10.36	21.51	12.96	31.87	23.32	56.00	46.00	-24.13	-22.68
6	23.26650	11.00	19.04	10.10	30.04	21.10	60.00	50.00	-29.96	-28.90

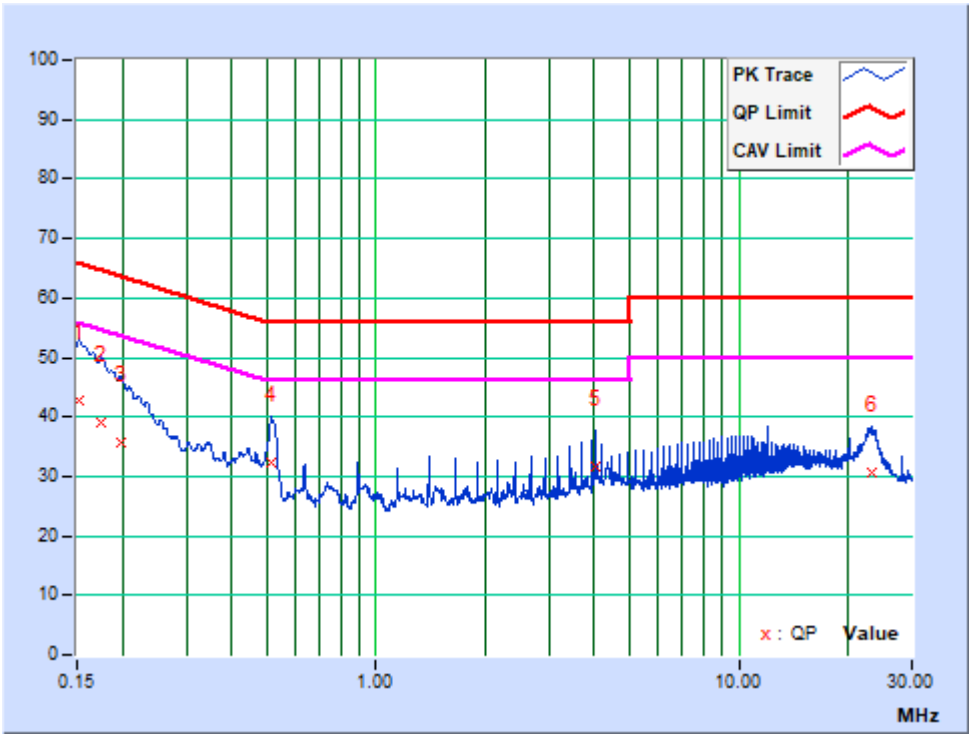
REMARKS: The emission levels of other frequencies were very low against the limit.



TEST MODE	A	PHASE	Neutral (N)
TEST VOLTAGE	AC 120V/60Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	25deg. C, 58% RH	TESTED BY: Summer	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15225	10.02	32.68	13.41	42.70	23.43	65.88	55.88	-23.17	-32.44
2	0.17466	10.05	29.00	10.49	39.05	20.54	64.74	54.74	-25.69	-34.20
3	0.19721	10.08	25.49	8.19	35.57	18.27	63.73	53.73	-28.16	-35.46
4	0.51425	10.17	22.25	11.37	32.42	21.54	56.00	46.00	-23.58	-24.46
5	4.02900	10.35	21.39	12.73	31.74	23.08	56.00	46.00	-24.26	-22.92
6	23.39925	11.18	19.40	10.39	30.58	21.57	60.00	50.00	-29.42	-28.43

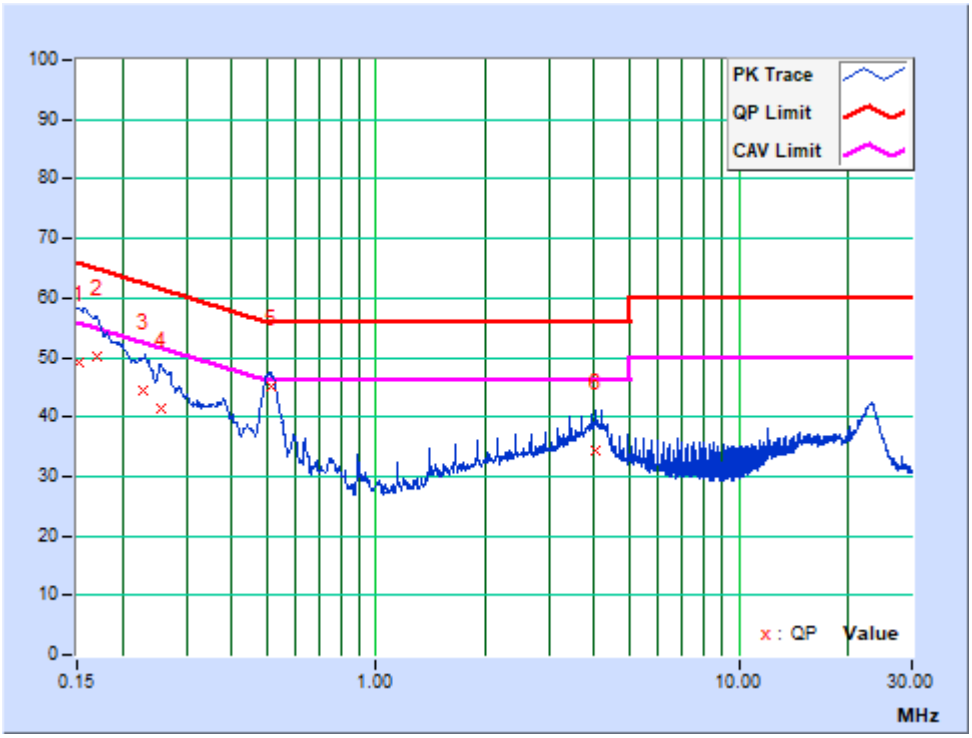
REMARKS: The emission levels of other frequencies were very low against the limit.



TEST MODE	B	PHASE	Line(L)
TEST VOLTAGE	AC 120V/60Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	25deg. C, 58% RH	TESTED BY: Summer	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15225	10.05	39.26	26.08	49.31	36.13	65.88	55.88	-16.56	-19.74
2	0.16966	10.07	40.14	24.57	50.21	34.64	64.98	54.98	-14.77	-20.34
3	0.22683	10.12	34.35	20.31	44.47	30.43	62.56	52.56	-18.09	-22.13
4	0.25478	10.14	31.35	18.38	41.49	28.52	61.60	51.60	-20.11	-23.08
5	0.51425	10.21	34.91	27.26	45.12	37.47	56.00	46.00	-10.88	-8.53
6	4.02900	10.36	23.87	16.32	34.23	26.68	56.00	46.00	-21.77	-19.32

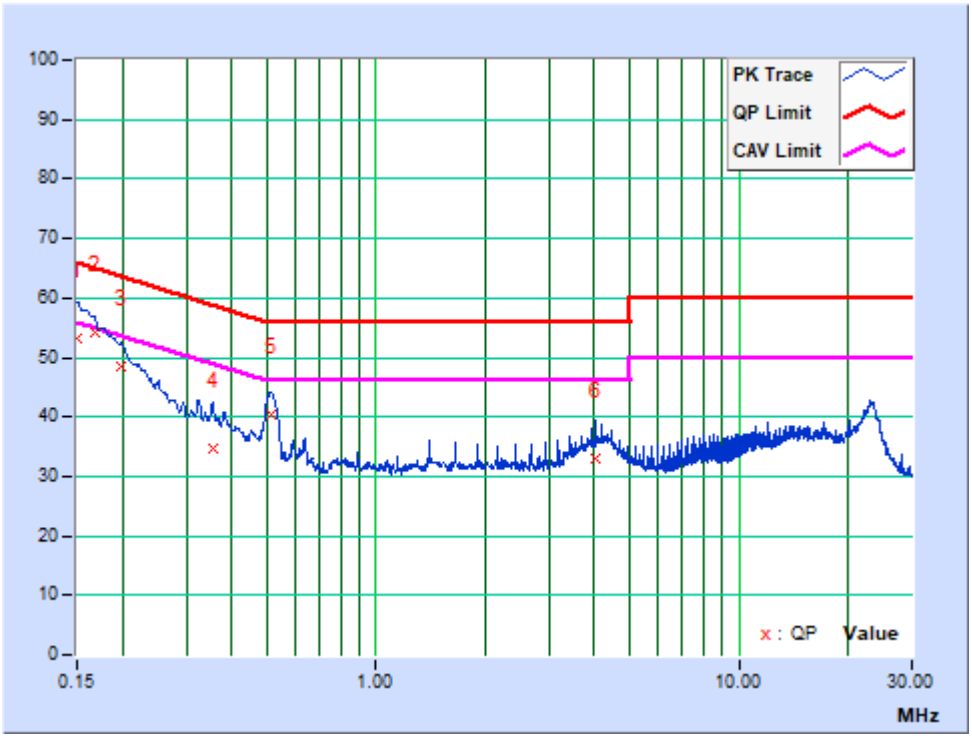
REMARKS: The emission levels of other frequencies were very low against the limit.



TEST MODE	B	PHASE	Neutral (N)
TEST VOLTAGE	AC 120V/60Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	25deg. C, 58% RH	TESTED BY: Summer	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.02	43.30	19.97	53.32	29.99	66.00	56.00	-12.68	-26.01
2	0.16800	10.04	44.18	26.84	54.22	36.88	65.06	55.06	-10.84	-18.18
3	0.19773	10.08	38.57	22.68	48.65	32.76	63.71	53.71	-15.06	-20.95
4	0.35440	10.16	24.62	12.49	34.78	22.65	58.86	48.86	-24.08	-26.21
5	0.51155	10.17	30.21	22.90	40.38	33.07	56.00	46.00	-15.62	-12.93
6	4.02900	10.35	22.80	15.29	33.15	25.64	56.00	46.00	-22.85	-20.36

REMARKS: The emission levels of other frequencies were very low against the limit.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

TEST STANDARD: FCC Part 15, Subpart C, Section 15.209

Emissions radiated outside of the specified bands, shall be according to the general radiated limits as following:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

NOTES:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
4. The measured field strength was extrapolated to distance 30 meters, using the formula that the limit of field strength varies as the inverse distance square (40dB per decade of distance)

4.2.2 TEST INSTRUMENTS

FREQUENCY 9KHz-30MHz

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101564	Jan. 10, 24
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	1519B-045	May. 09, 24
Amplifier	Burgeon	BPA-530	100210	Mar. 06, 24
Coaxial RF Cable	/	/	/	Jul. 06, 24
Test Software	ADT	ADT_Radiated_V8.7.07	N/A	N/A

NOTES: 1. The test was performed in 10m Chamber.
2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
3. The FCC Site Registration No. is 749762.

FREQUENCY 30MHz-1GHz

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Jan. 10, 24
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-554	Jan. 08, 24
Pre-Amplifier	Burgeon	BPA-530	100220	Mar. 06, 24
3m Semi-anechoic Chamber	Burgeon	9m*6m*6m	NSEMC003	May. 20, 24
Coaxial RF Cable(3m Below 1G)	/	/	/	Jul. 03, 24
Test software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A

NOTES: 1. The test was performed in 966 Chamber
2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
3. The FCC Site Registration No. is 749762.

4.2.3 TEST PROCEDURE

< Below 30MHz >

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meters Semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1.3 meter and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

<30MHz~1GHz >

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTES:

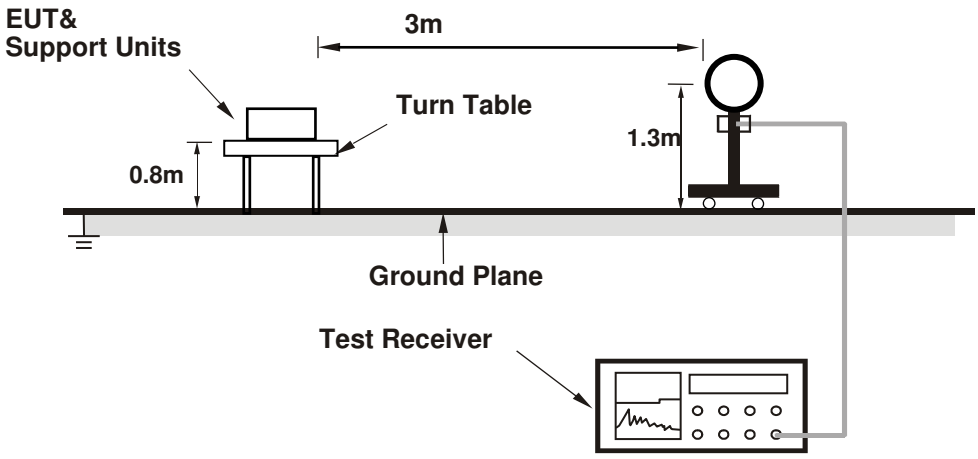
1. The resolution bandwidth of test receiver/spectrum analyzer is 200Hz for Quasi-peak detection (QP/AV) at fundamental frequency 9K-150KHz;
2. The resolution bandwidth of test receiver/spectrum analyzer is 9KHz for Quasi-peak detection (QP/AV) at fundamental frequency 150K-30MHz;
3. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at radiated spurious emission frequency 30MHz-1GHz.

4.2.4 DEVIATION FROM TEST STANDARD

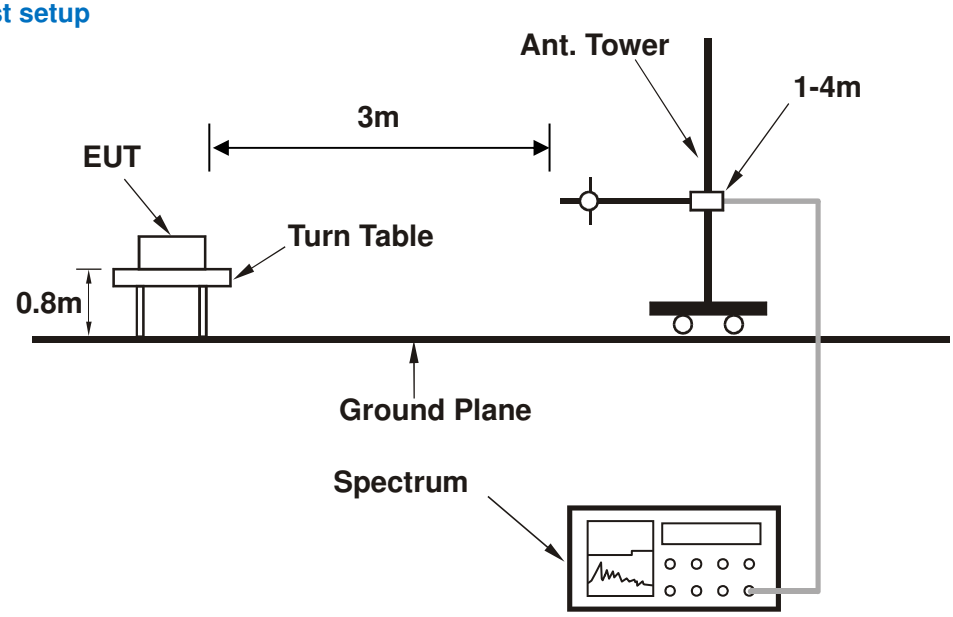
No deviation.

4.2.5 TEST SETUP

Below 30MHz test setup



Below 1GHz test setup



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT OPERATING CONDITIONS

a. Turn on the EUT.

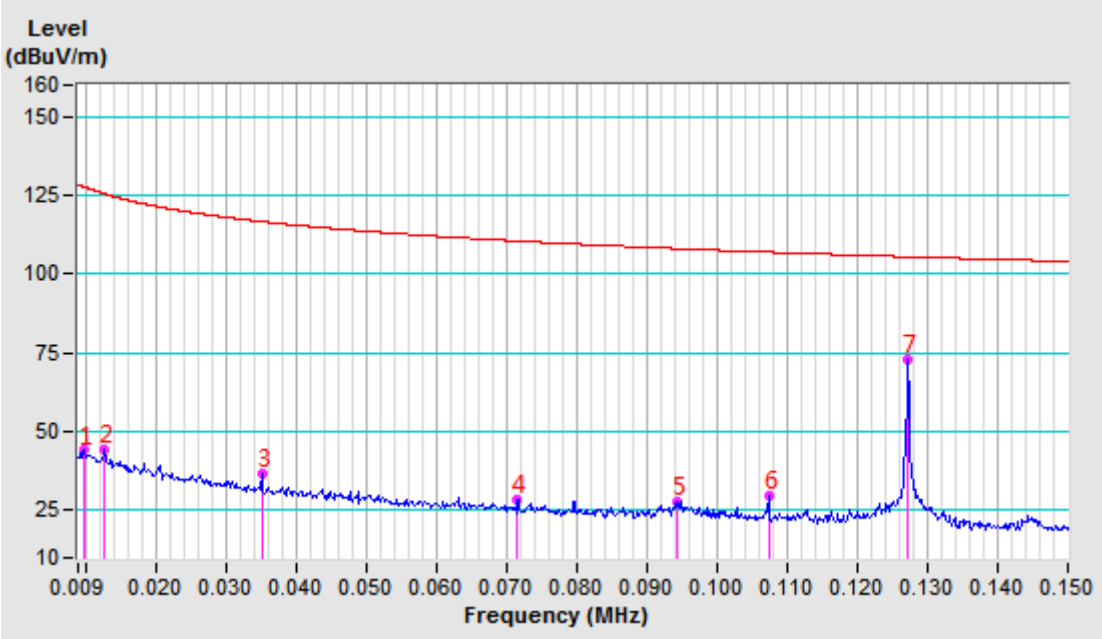
b. The EUT tested in charging mode and standby mode respectively.

4.2.7 TEST RESULTS

Standby Mode

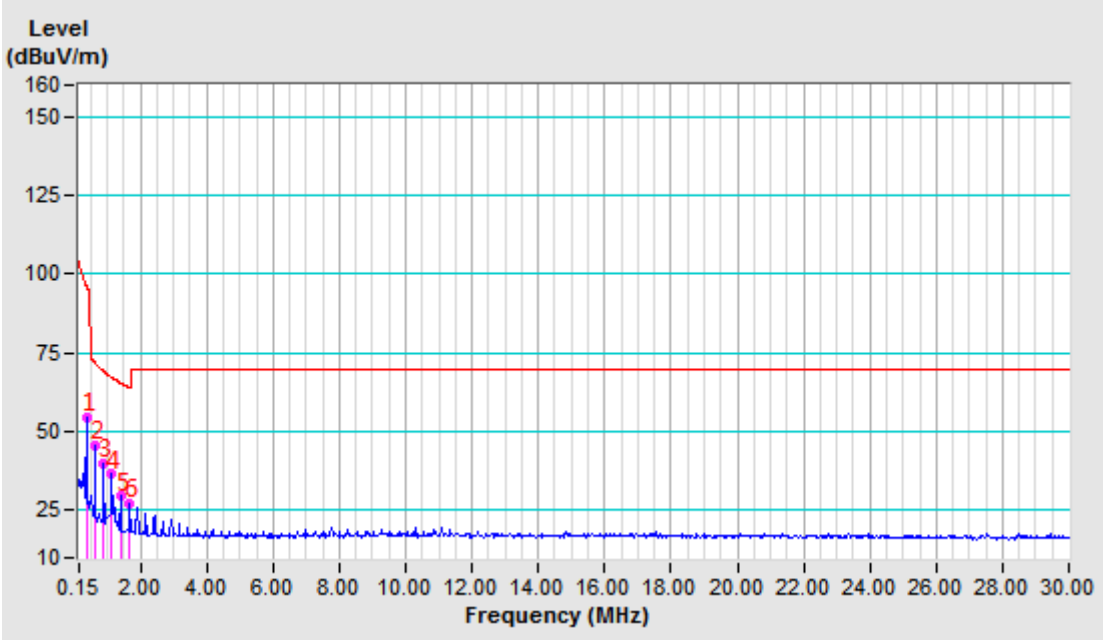
Test Mode	A	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PARALLEL AT 10m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.00980 AV	-9.41	53.44	44.03	127.78	-83.75	100	113
2	0.01280 AV	-9.70	53.79	44.09	125.46	-81.37	100	204
3	0.03520 AV	-11.33	48.01	36.68	116.67	-79.99	100	98
4	0.07160 AV	-11.54	39.98	28.44	110.50	-82.06	100	173
5	0.09420 QP	-11.52	39.32	27.80	108.12	-80.32	100	52
6	0.10740 QP	-11.53	41.26	29.73	106.98	-77.25	100	16
7	0.12730 AV	-11.56	84.29	72.73	105.51	-32.78	100	207



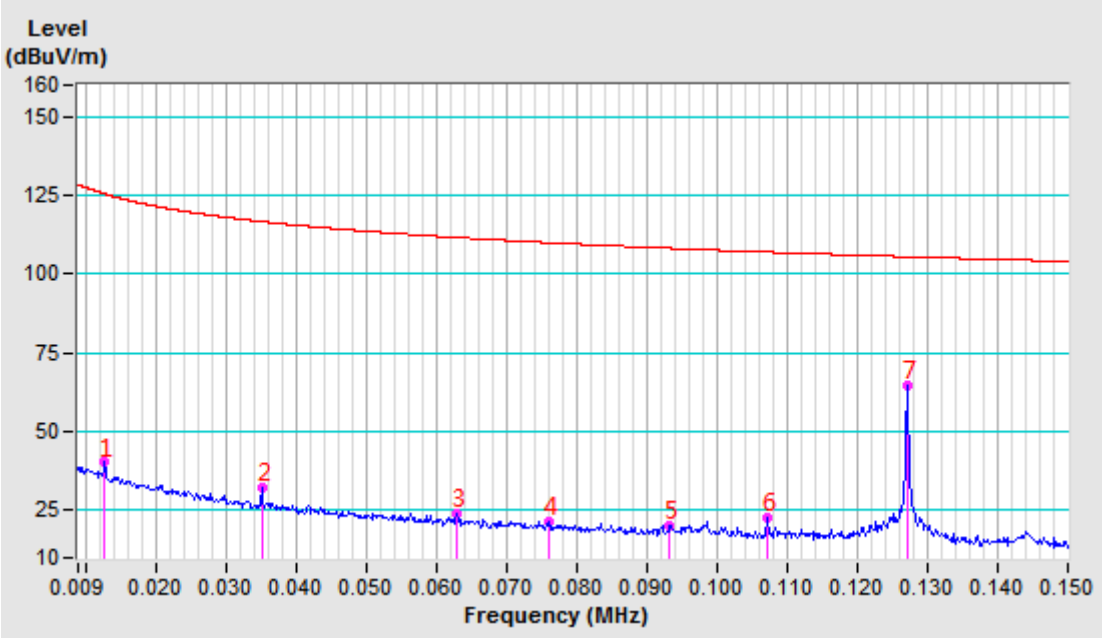
Test Mode	A	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PARALLEL AT 10m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.38130 AV	-11.65	66.13	54.48	95.98	-41.50	100	172
2	0.63510 QP	-11.65	57.15	45.50	71.76	-26.26	100	179
3	0.89030 QP	-11.68	51.47	39.79	69.09	-29.30	100	175
4	1.14410 QP	-11.65	48.09	36.44	67.12	-30.68	100	172
5	1.40080 QP	-11.65	41.09	29.44	65.52	-36.08	100	188
6	1.65450 QP	-11.65	38.98	27.33	64.21	-36.88	100	183



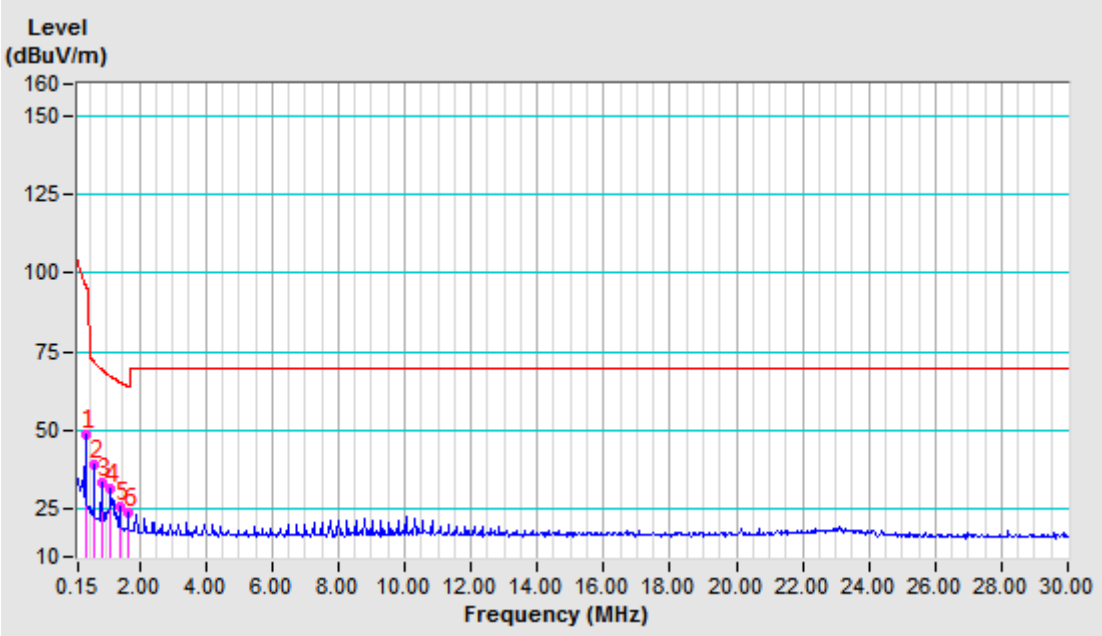
Test Mode	A	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 10m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.01280 AV	-9.70	49.92	40.22	125.46	-85.24	100	55
2	0.03520 AV	-11.33	43.36	32.03	116.67	-84.64	100	173
3	0.06300 AV	-11.53	35.36	23.83	111.62	-87.79	100	61
4	0.07600 AV	-11.53	33.00	21.47	109.99	-88.52	100	139
5	0.09330 QP	-11.52	31.85	20.33	108.20	-87.87	100	74
6	0.10730 QP	-11.53	34.32	22.79	106.99	-84.20	100	291
7	0.12720 AV	-11.56	76.00	64.44	105.51	-41.07	100	73



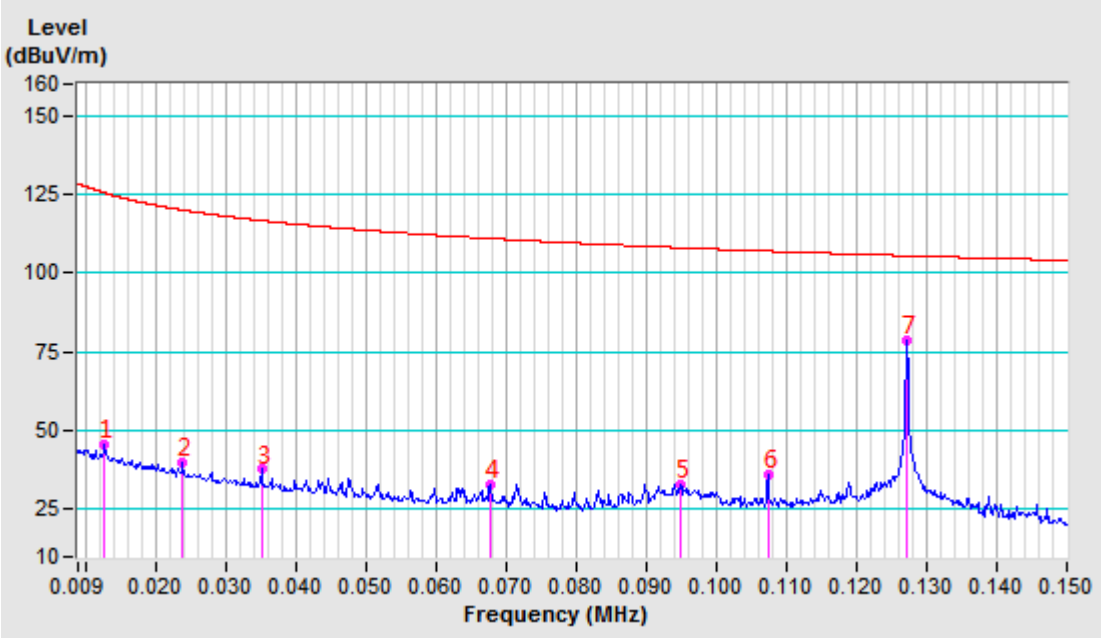
Test Mode	A	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 10m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.38130 AV	-11.65	60.40	48.75	95.98	-47.23	100	274
2	0.63510 QP	-11.65	51.16	39.51	71.76	-32.25	100	267
3	0.89030 QP	-11.68	45.37	33.69	69.09	-35.40	100	274
4	1.14410 QP	-11.65	43.18	31.53	67.12	-35.59	100	72
5	1.39930 QP	-11.65	37.67	26.02	65.53	-39.51	100	87
6	1.65300 QP	-11.65	35.65	24.00	64.21	-40.21	100	102



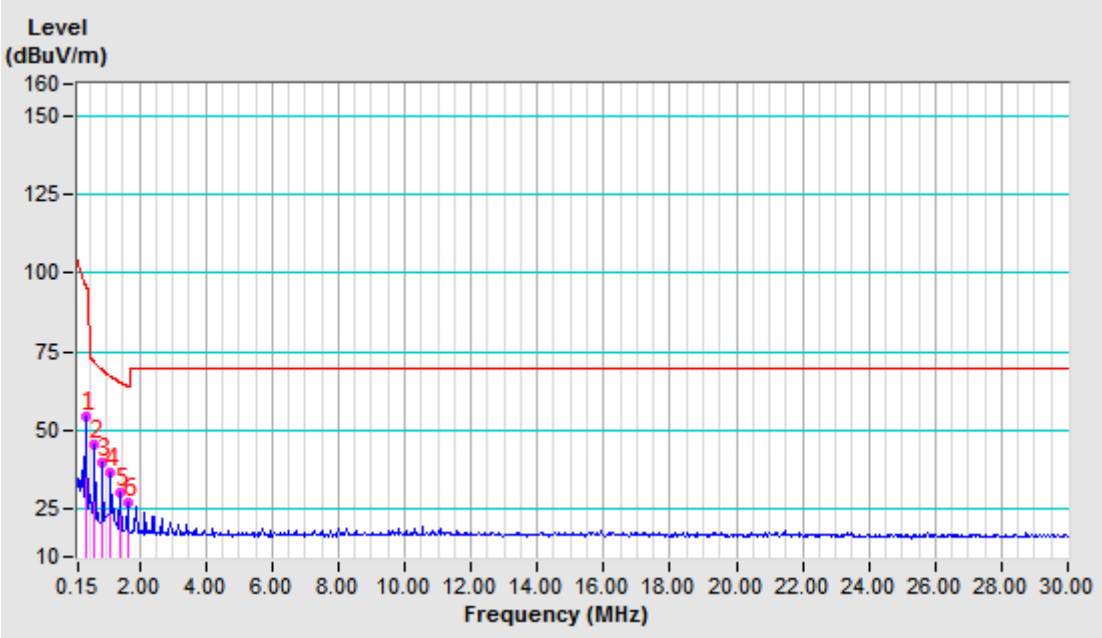
Test Mode	A	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA GROUND-PARALLEL AT 10m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.01280 AV	-9.70	55.32	45.62	125.46	-79.84	100	247
2	0.02390 AV	-10.70	50.50	39.80	120.04	-80.24	100	35
3	0.03520 AV	-11.33	49.04	37.71	116.67	-78.96	100	62
4	0.06770 AV	-11.54	44.62	33.08	110.99	-77.91	100	173
5	0.09480 QP	-11.52	44.53	33.01	108.07	-75.06	100	42
6	0.10740 QP	-11.53	47.87	36.34	106.98	-70.64	100	107
7	0.12730 AV	-11.56	90.41	78.85	105.51	-26.66	100	219



Test Mode	A	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

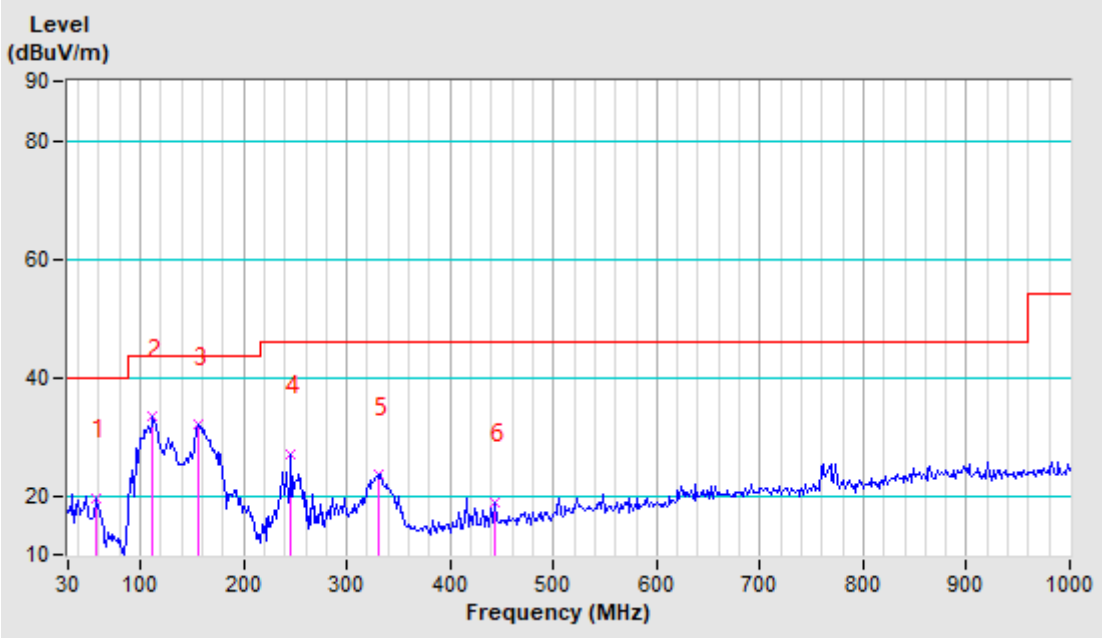
ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA GROUND-PARALLEL AT 10m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.38130 AV	-11.65	66.16	54.51	95.98	-41.47	100	171
2	0.63510 QP	-11.65	57.12	45.47	71.76	-26.29	100	178
3	0.88880 QP	-11.69	51.43	39.74	69.11	-29.37	100	182
4	1.14410 QP	-11.65	48.18	36.53	67.12	-30.59	100	178
5	1.39930 QP	-11.65	41.84	30.19	65.53	-35.34	100	195
6	1.65300 QP	-11.65	39.00	27.35	64.21	-36.86	100	200



Test Mode	A	Frequency Range	30MHz ~ 1000MHz
Test Voltage	AC 120V/60Hz	Detector Function	Quasi-Peak (QP)
Environmental Conditions	25deg. C, 52% RH	Tested By	Stalker

Antenna Polarity & Test Distance: Horizontal At 3m								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	57.98	-17.51	36.93	19.42	40.00	-20.58	100	0
2	112.39	-18.66	51.89	33.23	43.50	-10.27	100	0
3	155.91	-16.04	47.92	31.88	43.50	-11.62	100	0
4	246.07	-17.03	44.10	27.07	46.00	-18.93	100	0
5	331.57	-13.96	37.41	23.45	46.00	-22.55	100	0
6	443.49	-11.18	30.11	18.93	46.00	-27.07	100	0

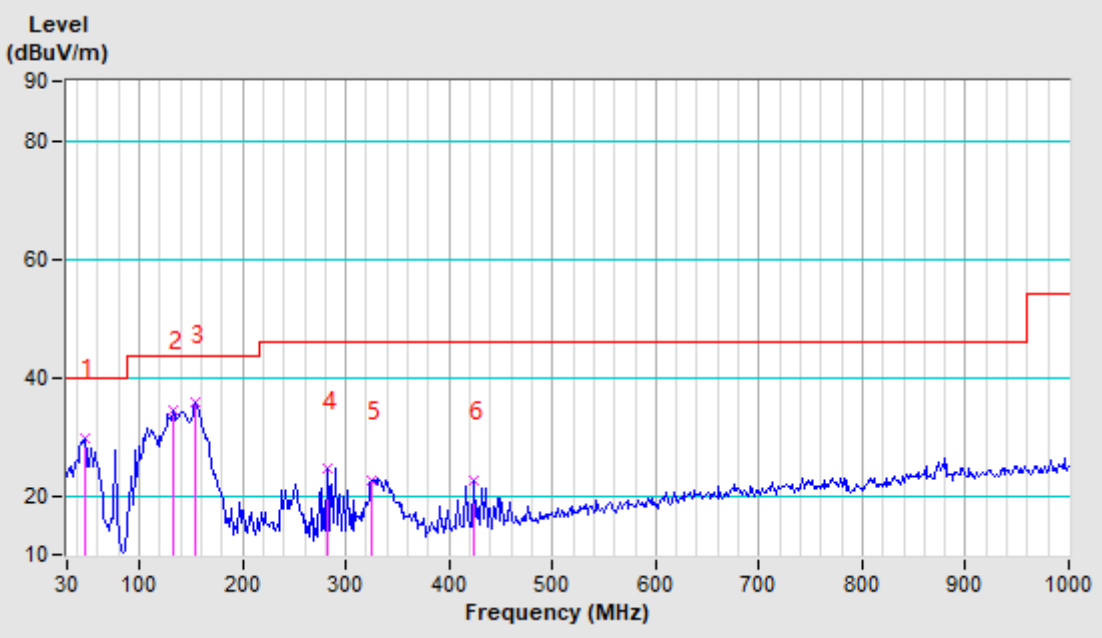
REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



Test Mode	A	Frequency Range	30MHz ~ 1000MHz
Test Voltage	AC 120V/60Hz	Detector Function	Quasi-Peak (QP)
Environmental Conditions	25deg. C, 52% RH	Tested By	Stalker

Antenna Polarity & Test Distance: Vertical At 3m								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	47.10	-16.62	46.39	29.77	40.00	-10.23	200	222
2	132.60	-16.94	51.27	34.33	43.50	-9.17	200	237
3	154.36	-16.02	51.68	35.66	43.50	-7.84	200	252
4	281.83	-15.61	40.09	24.48	46.00	-21.52	200	268
5	325.35	-14.14	36.72	22.58	46.00	-23.42	200	283
6	423.29	-11.72	34.43	22.71	46.00	-23.29	200	297

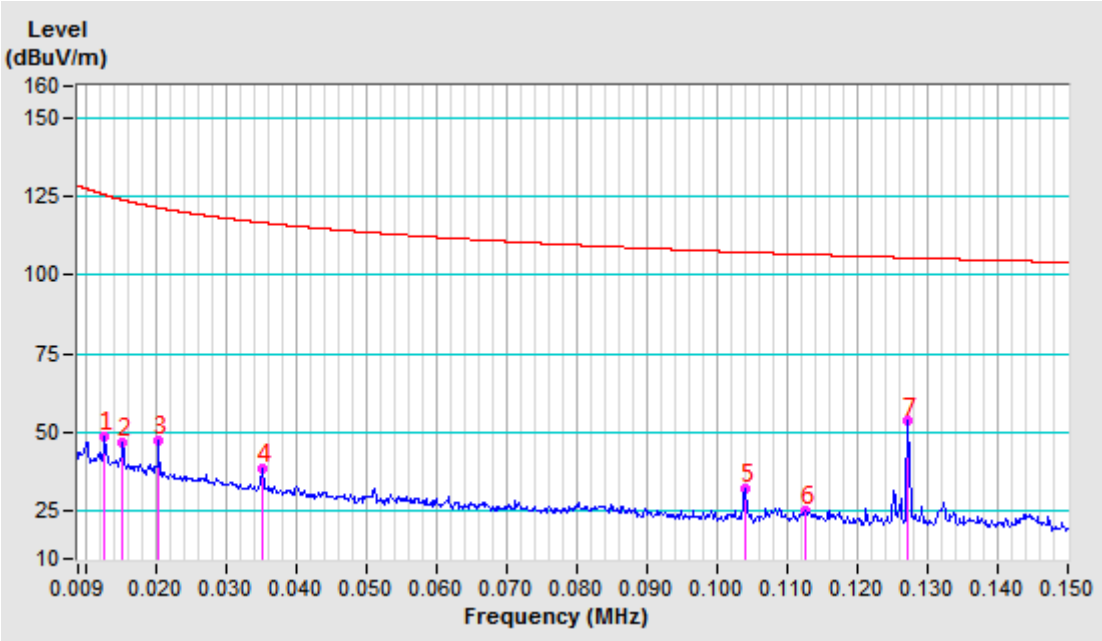
REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



operating Mode

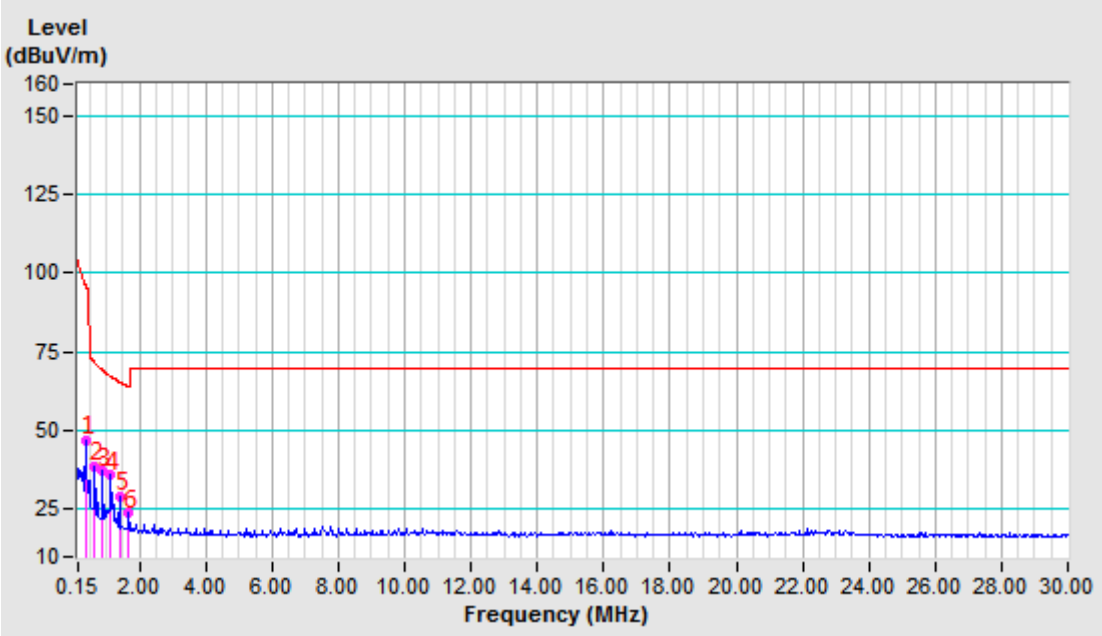
Test Mode	B	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.01280 AV	-9.70	58.55	48.85	125.46	-76.61	100	55
2	0.01540 AV	-9.94	56.79	46.85	123.85	-77.00	100	147
3	0.02050 AV	-10.40	58.01	47.61	121.37	-73.76	100	136
4	0.03520 AV	-11.33	50.21	38.88	116.67	-77.79	100	87
5	0.10400 QP	-11.53	43.67	32.14	107.26	-75.12	100	301
6	0.11250 AV	-11.54	36.99	25.45	106.58	-81.13	100	211
7	0.12720 AV	-11.56	65.14	53.58	105.51	-51.93	100	284



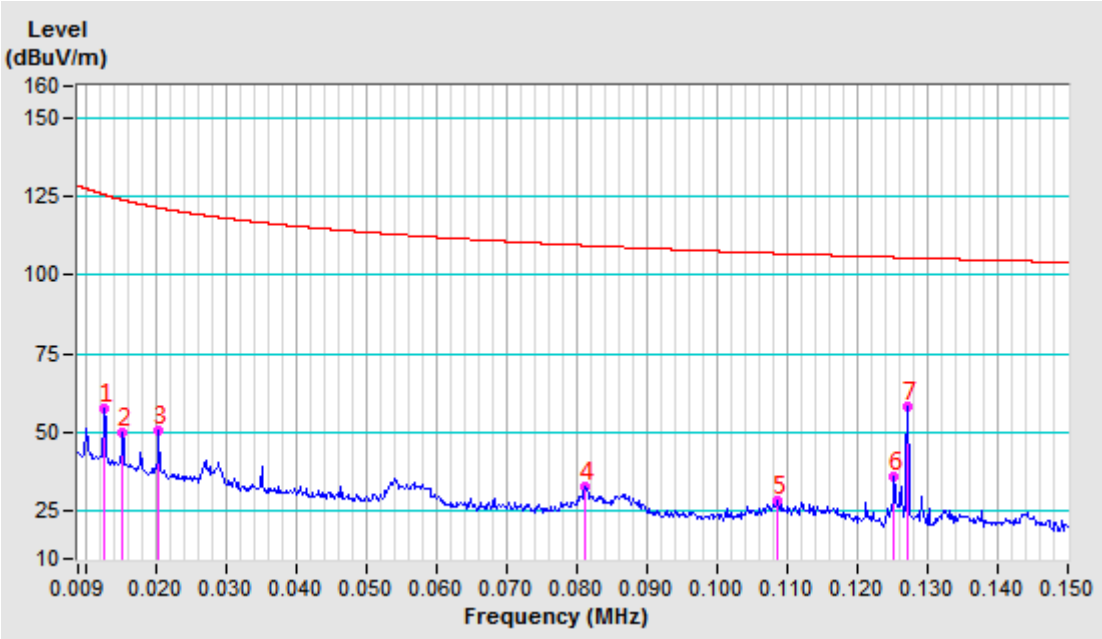
Test Mode	B	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.38130 AV	-11.65	58.31	46.66	95.98	-49.32	100	108
2	0.63510 QP	-11.65	50.54	38.89	71.76	-32.87	100	98
3	0.89030 QP	-11.68	48.76	37.08	69.09	-32.01	100	241
4	1.14410 QP	-11.65	47.43	35.78	67.12	-31.34	100	219
5	1.39930 QP	-11.65	41.00	29.35	65.53	-36.18	100	243
6	1.65300 QP	-11.65	35.32	23.67	64.21	-40.54	100	239



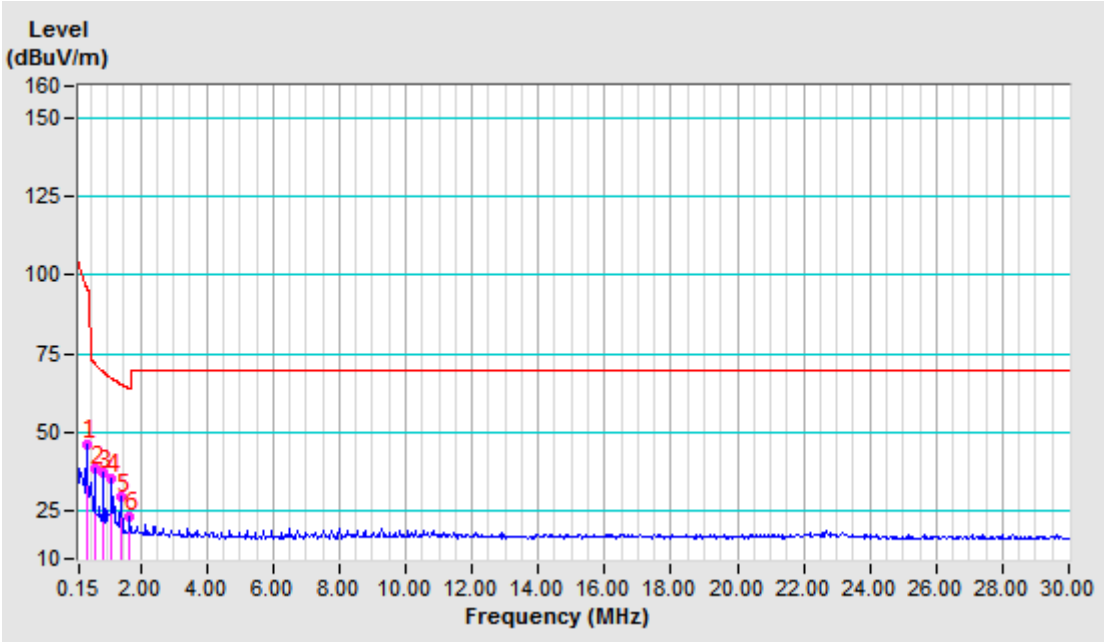
Test Mode	B	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.01280 AV	-9.70	67.16	57.46	125.46	-68.00	100	97
2	0.01540 AV	-9.94	60.28	50.34	123.85	-73.51	100	173
3	0.02050 AV	-10.40	61.38	50.98	121.37	-70.39	100	142
4	0.08130 AV	-11.52	44.29	32.77	109.40	-76.63	100	19
5	0.10870 QP	-11.53	39.74	28.21	106.88	-78.67	100	48
6	0.12520 AV	-11.56	47.75	36.19	105.65	-69.46	100	163
7	0.12720 AV	-11.56	69.91	58.35	105.51	-47.16	100	222



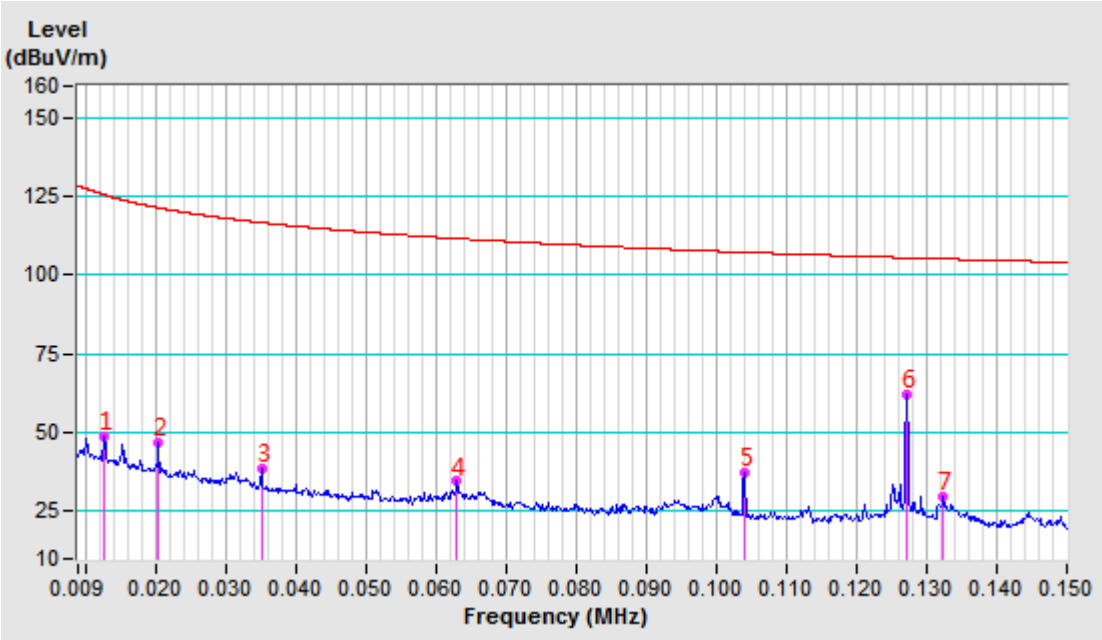
Test Mode	B	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.38130 AV	-11.65	57.85	46.20	95.98	-49.78	100	123
2	0.63510 QP	-11.65	49.98	38.33	71.76	-33.43	100	102
3	0.89030 QP	-11.68	48.70	37.02	69.09	-32.07	100	235
4	1.14410 QP	-11.65	47.26	35.61	67.12	-31.51	100	234
5	1.39930 QP	-11.65	41.11	29.46	65.53	-36.07	100	250
6	1.65300 QP	-11.65	35.03	23.38	64.21	-40.83	100	239



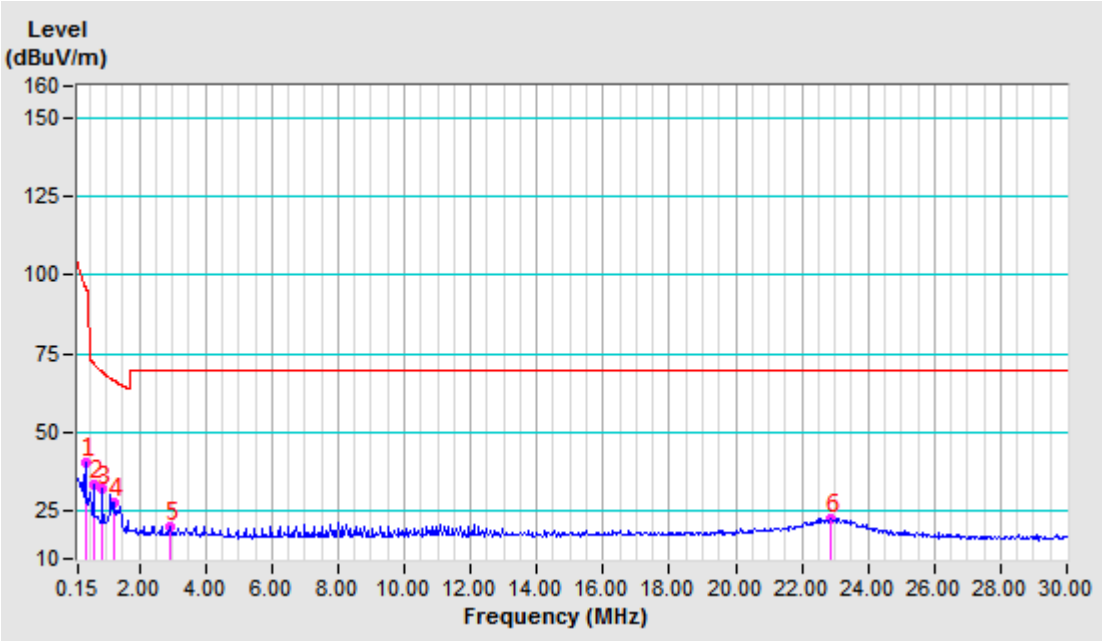
Test Mode	B	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA GROUND-PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.01280 AV	-9.70	58.57	48.87	125.46	-76.59	100	275
2	0.02050 AV	-10.40	57.55	47.15	121.37	-74.22	100	134
3	0.03520 AV	-11.33	49.75	38.42	116.67	-78.25	100	58
4	0.06300 AV	-11.53	46.05	34.52	111.62	-77.10	100	112
5	0.10400 QP	-11.53	48.75	37.22	107.26	-70.04	100	74
6	0.12720 AV	-11.56	73.83	62.27	105.51	-43.24	100	51
7	0.13240 AV	-11.57	41.14	29.57	105.16	-75.59	100	83



Test Mode	B	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	AC 120V/60Hz	Detector Function	QP&AV
Environmental Conditions	23deg. C, 56% RH	Tested By	Jay

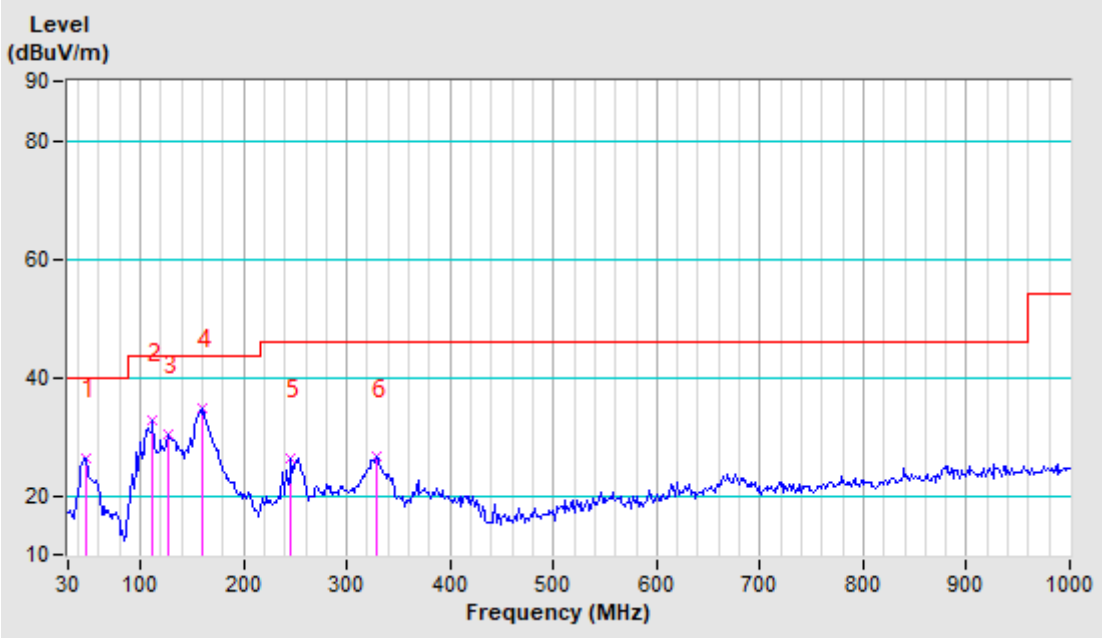
ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA GROUND-PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.38130 AV	-11.65	52.05	40.40	95.98	-55.58	100	68
2	0.63660 QP	-11.65	45.42	33.77	71.74	-37.97	100	32
3	0.89030 QP	-11.68	43.69	32.01	69.09	-37.08	100	179
4	1.22910 QP	-11.65	39.74	28.09	66.55	-38.46	100	193
5	2.92470 QP	-11.57	31.94	20.37	69.54	-49.17	100	192
6	22.87000 QP	-10.38	33.17	22.79	69.54	-46.75	100	360



Test Mode	B	Frequency Range	30MHz ~ 1000MHz
Test Voltage	AC 120V/60Hz	Detector Function	Quasi-Peak (QP)
Environmental Conditions	25deg. C, 52% RH	Tested By	Stalker

Antenna Polarity & Test Distance: Horizontal At 3m								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	47.10	-16.62	42.90	26.28	40.00	-13.72	114	201
2	112.39	-18.66	51.26	32.60	43.50	-10.90	129	187
3	127.93	-17.35	47.77	30.42	43.50	-13.08	100	268
4	160.58	-16.13	50.96	34.83	43.50	-8.67	143	173
5	246.07	-17.03	43.26	26.23	46.00	-19.77	101	219
6	328.46	-14.05	40.54	26.49	46.00	-19.51	100	236

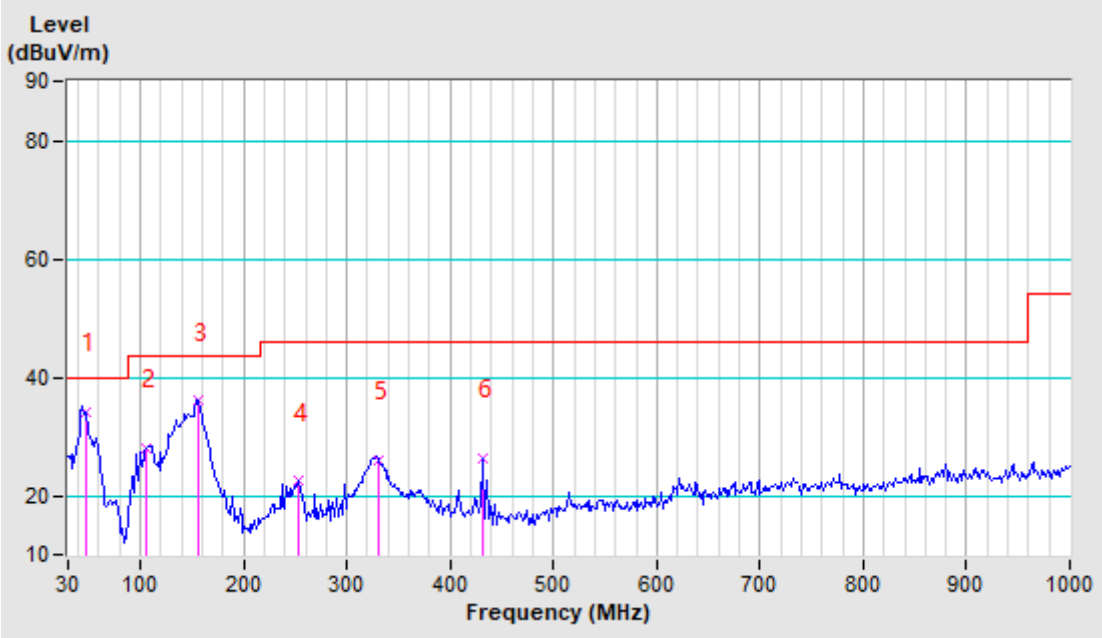
REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



Test Mode	B	Frequency Range	30MHz ~ 1000MHz
Test Voltage	AC 120V/60Hz	Detector Function	Quasi-Peak (QP)
Environmental Conditions	25deg. C, 52% RH	Tested By	Stalker

Antenna Polarity & Test Distance: Vertical At 3m								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	47.10	-16.62	50.70	34.08	40.00	-5.92	250	328
2	106.17	-19.39	47.28	27.89	43.50	-15.61	250	347
3	155.91	-16.04	52.05	36.01	43.50	-7.49	242	311
4	252.29	-16.78	39.23	22.45	46.00	-23.55	250	0
5	331.57	-13.96	39.99	26.03	46.00	-19.97	250	359
6	431.06	-11.51	37.86	26.35	46.00	-19.65	250	0

REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



4.3. 20dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 20dB BANDWIDTH MEASUREMENT

The field strength of any emissions appearing between the band edges and out of band shall be attenuated at least 20 dB below the level of the unmodulated carrier or to the general limits in Section 15.209.

4.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
Power Sensor	Keysight	U2021XA	MY57320002	Jan. 11, 24
Power Meter	Anritsu	ML2495A	1139001	Jul. 11, 24
Power Sensor	Anritsu	MA2411B	1531155	Aug. 22, 23
Digital Multimeter	FLUKE	15B	A1220010DG	N/A
Humid & Temp Programmable Tester	Haida	HD-225T	110807201	Nov. 02, 23
Oscilloscope	Agilent	DSO9254A	MY51260160	Jul. 11, 24
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Jan. 11, 24
Signal Generator	Agilent	N5183A	MY50140980	Jul. 20, 23
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Jul. 11, 24
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	N/A
Attenuator	MINI	BW-S10W2+	S130129FGE2	N/A
DC Source	Keysight	E3642A	MY56146098	N/A
Test software	ADT	ADT_RF Test Software V6.6.5.3	N/A	N/A

NOTES: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.

4.3.3 TEST PROCEDURE

a. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.

b. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.

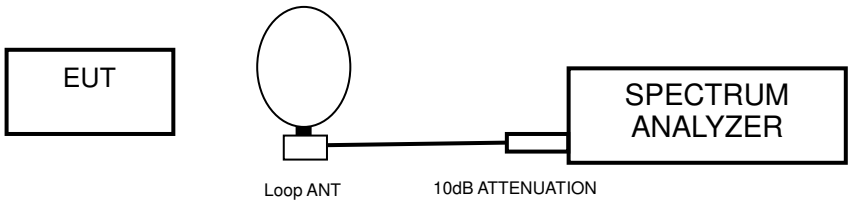
c. Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.

d. Repeat above procedures until all frequencies measured were complete.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation.

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITION

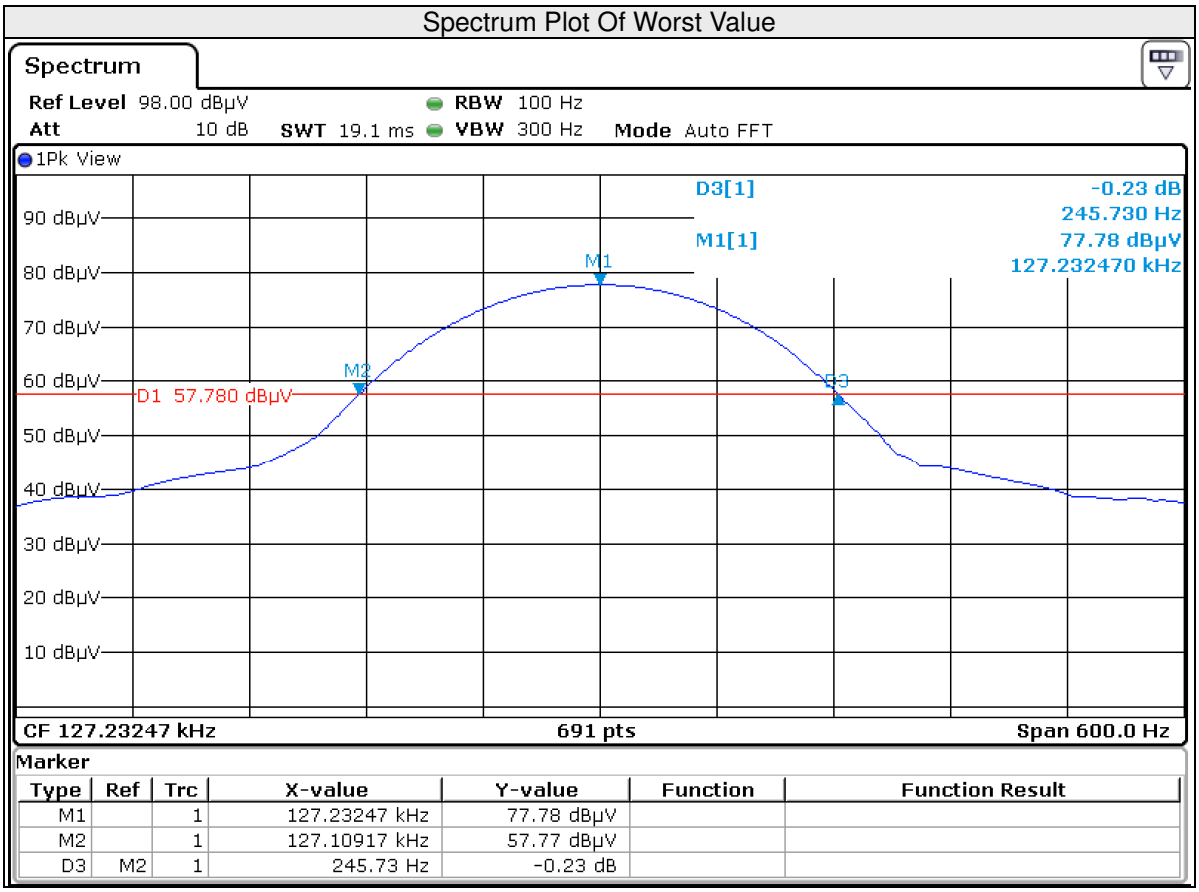
a. Turn on the EUT.
b. The EUT tested in charging mode and standby mode respectively.

4.3.7 TEST RESULTS

Test Mode	Frequency (kHz)	20dB Bandwidth (Hz)
A	127.2	245.7

Test Plot:

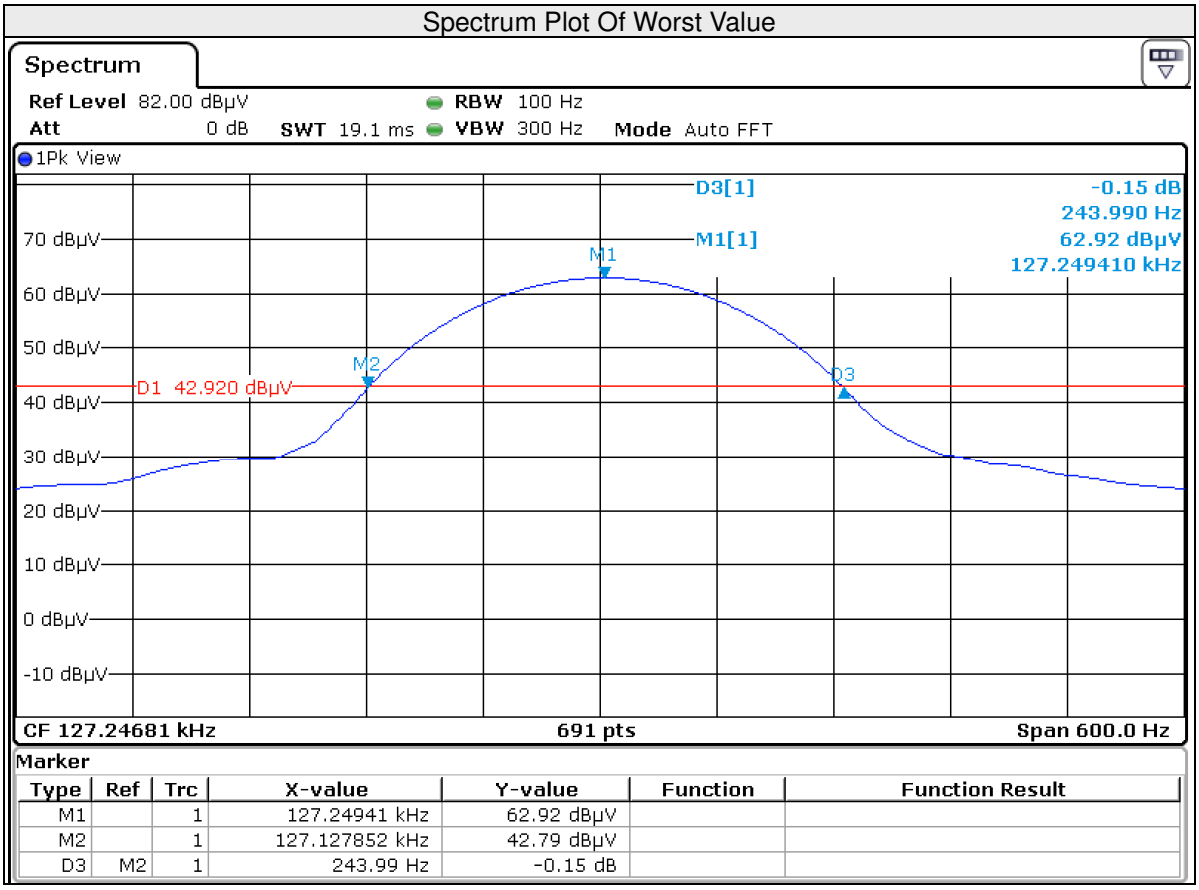
Spectrum Plot Of Worst Value



Test Mode	Frequency (kHz)	20dB Bandwidth (Hz)
B	127.2	244.0

Test Plot:

Spectrum Plot Of Worst Value



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	127.24941 kHz	62.92 dBµV		
M2		1	127.127852 kHz	42.79 dBµV		
D3	M2	1	243.99 Hz	-0.15 dB		

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

6 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications were made to the EUT by the lab during the test.

---END---