TEST REPORT

Applicant	Belkin International, Inc.
Address	555 S. Aviation Blvd., Suite 180, El Segundo, CA 90245, USA

Manufacturer or Supplier	Belkin International, Inc.
Address	555 S. Aviation Blvd., Suite 180, El Segundo, CA 90245, USA
Product	BoostCharge Wireless Charging Pad
Brand Name	belkin
Model	WIA012
Additional Model & Model Difference	N/A
Date of tests	Jan. 10, 2025 ~ Feb. 14, 2025

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

Prepared by Eric Fang Project Engineer / EMC Department	Approved by Glyn He Assistant Manager/ EMC Department
	 Date: Feb. 24, 2025

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF2501WDG0019	Original release	Feb. 24, 2025

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch

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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	0.15MHz ~ 30MHz	3.36 dB
Radiated emissions	9KHz ~ 30MHz	2.48dB
	30MHz ~ 1GMHz	4.56 dB

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	BoostCharge Wireless Charging Pad
MODEL NO.	WIA012
ADDITIONAL MODE	N/A
SAMPLE STATUS	Engineering sample
FCC ID	K7SWIA012
POWER SUPPLY	Input: 12Vdc 1.67A From Adapter
MODULATION TYPE	FSK
OPERATING FREQUENCY RANGE	15W Qi1.3.3 Charging Coil (BPP): 111KHz ~ 148KHz
I/O PORTS	Coil Antenna
FIELD STRENGTH	82.11dBuV/m
MAXIMUM POWER OUTPUT FROM THE CHARGING COIL	Max Power is 15W
CABLE SUPPLIED	See note 4

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.: 2501WDG0019-3) for detailed product photo.
4. Product cable information as follows：

ID	Descriptions	Qty.	Length (m)	Shielding (Y/N)	Cores (Qty.)	Remark
1	USB-C TO USB-C PVC CABLE	1	1.5	Y	0	N/A

5. Adapter information as follows：

USB-C Power Adapter		**USB-C Power Adapter**	
MODEL NO.:	CYPD20US	**MODEL NO.:**	A784-120167C-US1
BRAND NAME:	belkin	**BRAND NAME:**	belkin
INPUT:	100-240Vac 50-60Hz 0.5A	**INPUT:**	100-240Vac 50-60Hz 0.5A
OUTPUT:	5.0Vdc/3.0A, 9Vdc/2.22A,12Vdc/1.67A 5-11Vdc/1.8A	**OUTPUT:**	5.0Vdc/3.0A, 9Vdc/2.23A, 12Vdc/1.67A 5-11Vdc/2.2A 20.0W MAX
Manufacturer	Chenyang	**Manufacturer**	Aohai

Note：Adapter difference test see FCC 15B report: FS2501WDG0019. This report use the adapter A784-120167C-US1.

3.2 DESCRIPTION OF TEST MODES

The following test frequencies are provided to this EUT:

Configure	Operating Frequency Range(KHz)	
A	Standby	137.3
B	iPhone 16 Pro	125.8

3.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO			DESCRIPTION	
	RE<1G	PLC	20BW	Devices	PSU
A	√	-	√	Standby	AoHai
B	√	√	√	iPhone 16 Pro	
Remark: The PSU have 2 factories and both PSU are tested, but only the worst data is represented in the report and identified in the data.					

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

20BW: 20dB Bandwidth

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 worst final test as listed below.

EUT configure mode	Operating Frequency Range(kHz)	Test Frequency(kHz)	Modulation Type
B	111KHz ~ 148KHz	iPhone 16 Pro	FSK

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)	Test Frequency(kHz)	Modulation Type
A	111KHz ~ 148KHz	137.3	FSK
B	111KHz ~ 148KHz	125.8	FSK

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)	Test Frequency(kHz)	Modulation Type
A	111KHz ~ 148KHz	137.3	FSK
B	111KHz ~ 148KHz	125.8	FSK

TEST CONDITION:

Applicable to	Environmental conditions	Input Power	Tested by
RE<1G	22 ℃, 53% RH/25 ℃, 55% RH	AC 120V 60Hz	Albert/Ludius
PLC	25 ℃, 52RH	AC 120V 60Hz	Summer
20BW	24 ℃, 58% RH	AC 120V 60Hz	Jeffery

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.

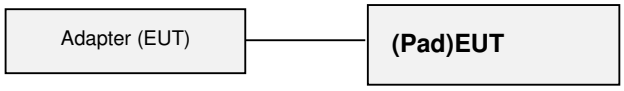
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	iPhone 16 Pro (1#)	Apple	A3083 (MYM93LL/A)	HY9H79YM6Y	BCG-E8666A

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

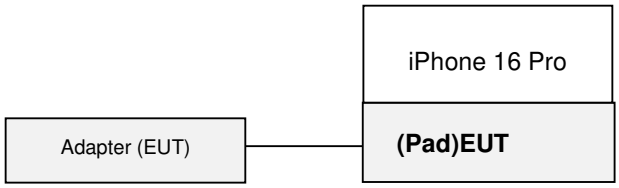
NOTE: All power cords of the above support units are non-shielded (1.8m).

3.5 CONFIGURATION OF SYSTEM UNDER TEST

Mode A: Standby



Mode B: EUT Mode with iPhone 16 Pro



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	Oct. 09, 25
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Oct. 10, 25
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Oct. 09, 25
Artificial Mains Network	SCHWARZBECK	NSLK 8122	8122-05001	Apr. 09, 25
V-LISN (CISPR 25)	SCHWARZBECK	NNBM 8124-200	8124-200 05857	Apr. 09, 25
V-LISN (CISPR 25)	SCHWARZBECK	NNBM 8124-200	8124-200 05858	Apr. 09, 25
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jul. 10, 25
Coaxial RF Cable	SUHNER	RG 223/U-CE	C2310066DG	Jun. 23, 25
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A

NOTE: 1. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.
2. The test was performed in shielding room 553.

4.1.3 TEST PROCEDURE

The basic test procedure was in accordance with ANSI C63.4:2014 (section 7).

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.

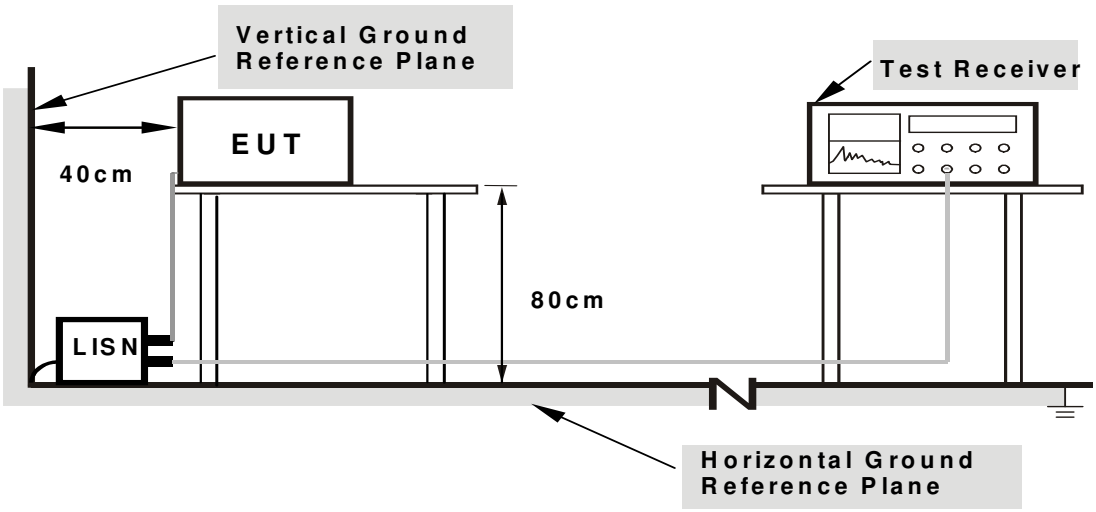
NOTE:

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. Turned on the power of all equipment.

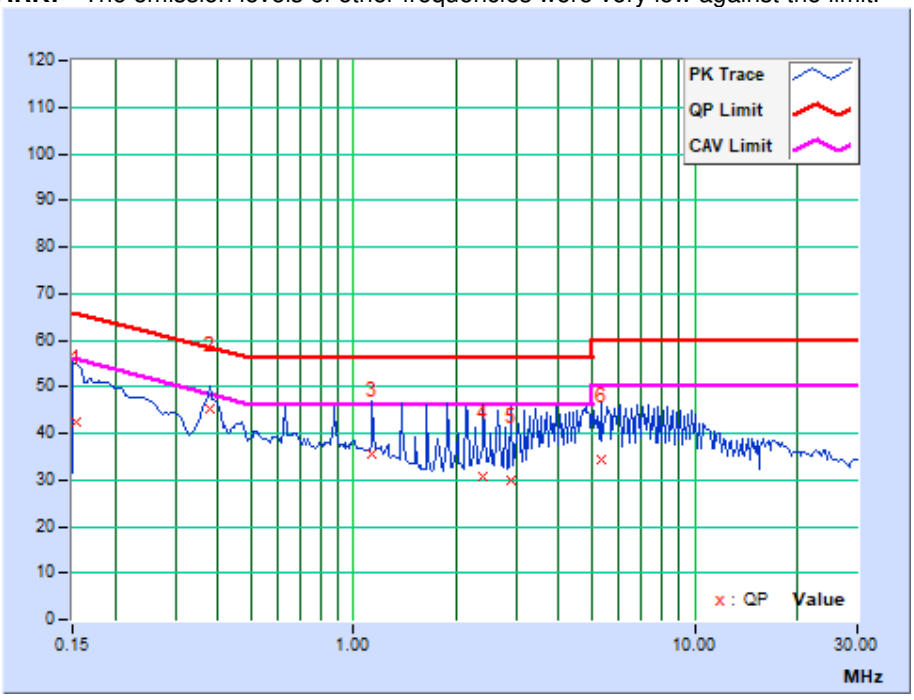
b. EUT was operated according to the type description in manufacturer's specifications or the User's Manual.

4.1.7 TEST RESULTS

TEST MODE	EUT+ iPhone 16 Pro Charging	**PSU**	A784-120167C-US1
SAMPLE NO.	1#	**6DB BANDWIDTH**	9 kHz
TEST VOLTAGE	AC 120V 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	25deg.C, 56% RH	**TESTED BY**	Summer
TEST DATE	Jan. 10, 2025		

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	0.15450	9.75	32.80	12.77	42.55	22.52	65.75	55.75	-23.21	-33.24
2	0.37725	9.82	35.58	30.99	45.40	40.81	58.34	48.34	-12.94	-7.53
3	1.13775	9.89	25.62	18.00	35.51	27.89	56.00	46.00	-20.49	-18.11
4	2.39775	9.97	20.84	13.09	30.81	23.06	56.00	46.00	-25.19	-22.94
5	2.90850	9.99	19.78	12.09	29.77	22.08	56.00	46.00	-26.23	-23.92
6	5.30700	10.11	24.09	16.61	34.20	26.72	60.00	50.00	-25.80	-23.28

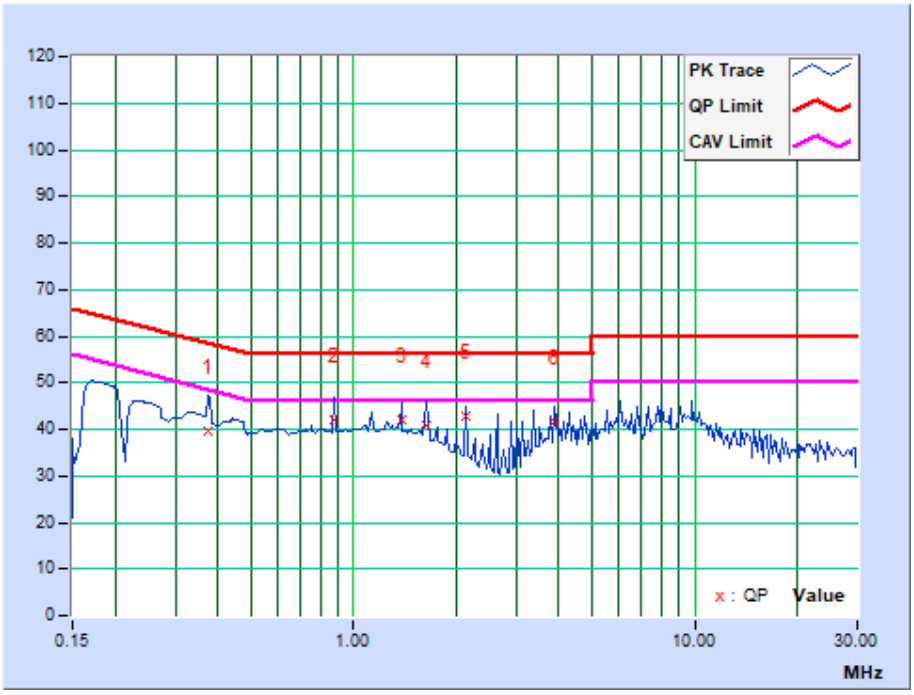
REMARK: The emission levels of other frequencies were very low against the limit.



TEST MODE	EUT+ iPhone 16 Pro Charging	PSU	A784-120167C-US1
SAMPLE NO.	1#	6DB BANDWIDTH	9 kHz
TEST VOLTAGE	AC 120V 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	25deg.C, 56% RH	TESTED BY	Summer
TEST DATE	Jan. 10, 2025		

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	0.37295	9.69	29.73	24.68	39.42	34.37	58.43	48.43	-19.02	-14.07
2	0.87675	9.70	32.39	27.80	42.09	37.50	56.00	46.00	-13.91	-8.50
3	1.38075	9.74	32.36	27.39	42.10	37.13	56.00	46.00	-13.90	-8.87
4	1.63050	9.77	31.10	26.54	40.87	36.31	56.00	46.00	-15.13	-9.69
5	**2.13450**	**9.81**	**33.05**	**29.60**	**42.86**	**39.41**	**56.00**	**46.00**	**-13.14**	**-6.59**
6	3.89400	9.91	31.66	28.01	41.57	37.92	56.00	46.00	-14.43	-8.08

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



4.2 ADIATED 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	Nov. 28, 25
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	1519B-045	Apr. 13, 25
Amplifier	Burgeon	BPA-530	100210	Feb. 21 25
Coaxial RF Cable	Yaohong	Cable below 30MHz	C2310019DG	Jun. 27, 25
Test Software	ADT	ADT_Radiated_V8.7.07	N/A	N/A

NOTES: 1. The test was performed in 10m Chamber.
2. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.
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	Oct. 10, 25
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-554	Dec. 25, 25
Pre-Amplifier	Burgeon	BPA-530	100220	Feb. 21, 25
3m Semi-anechoic Chamber	Burgeon	9m*6m*6m	NSEMC003	May. 20, 25
Coaxial RF Cable(3m Below 1G)	Yaohong	966 below 1GHz	C2310017DG	Jun. 23, 25
Coaxial RF Cable(3m Below 1G)	Yaohong	966 below 1GHz	C2310087DG	Jun. 23, 25
Test software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A

NOTES: 1. The test was performed in 966 Chamber
2. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.
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 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 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:

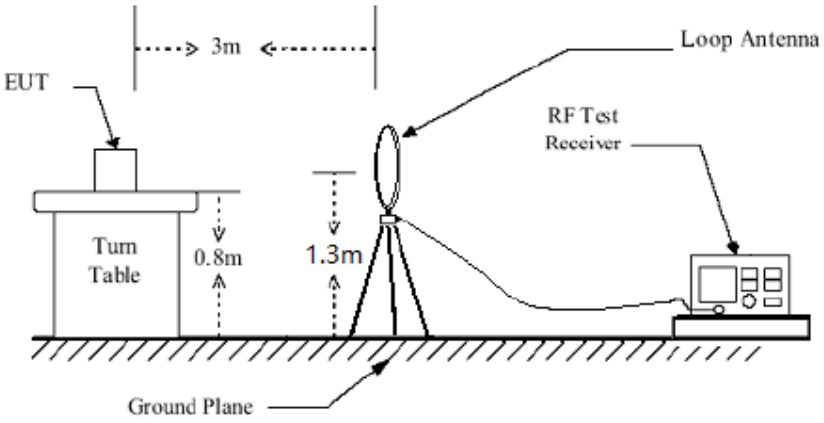
1. The resolution bandwidth of test receiver/spectrum analyzer is 200Hz for Quasi-peak detection (QP/AV) at fundamental frequency 9K-150KHz;
2. The resolution bandwidth of test receiver/spectrum analyzer is 9KHz for Quasi-peak detection (QP/AV) at fundamental frequency 150K-30MHz;
3. The resolution bandwidth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

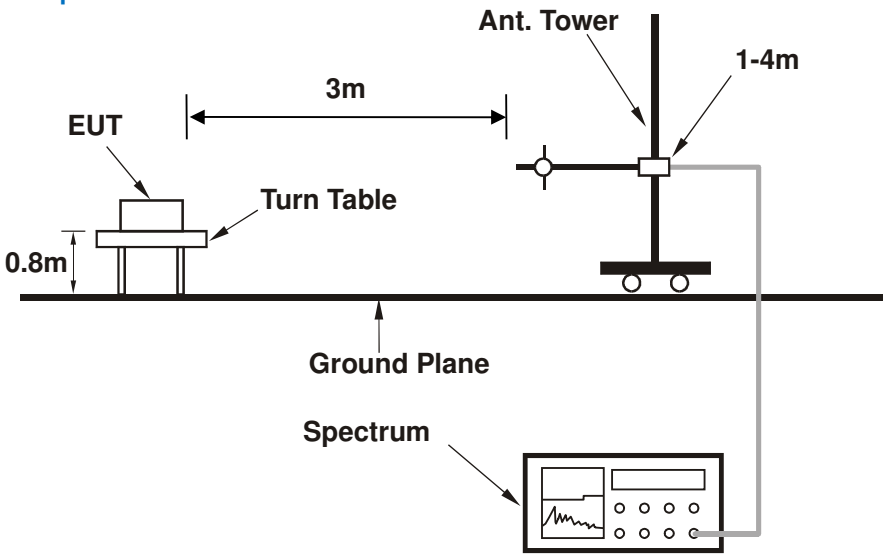
No deviation.

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.

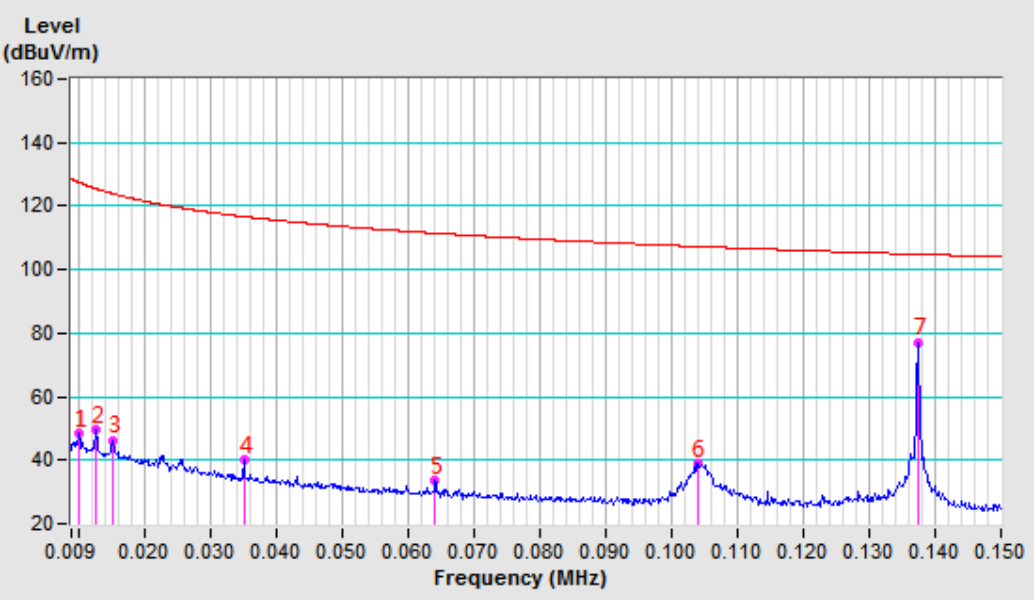
b. The EUT tested in charging mode and standby mode respectively.

4.2.7 TEST RESULTS

Standby Mode

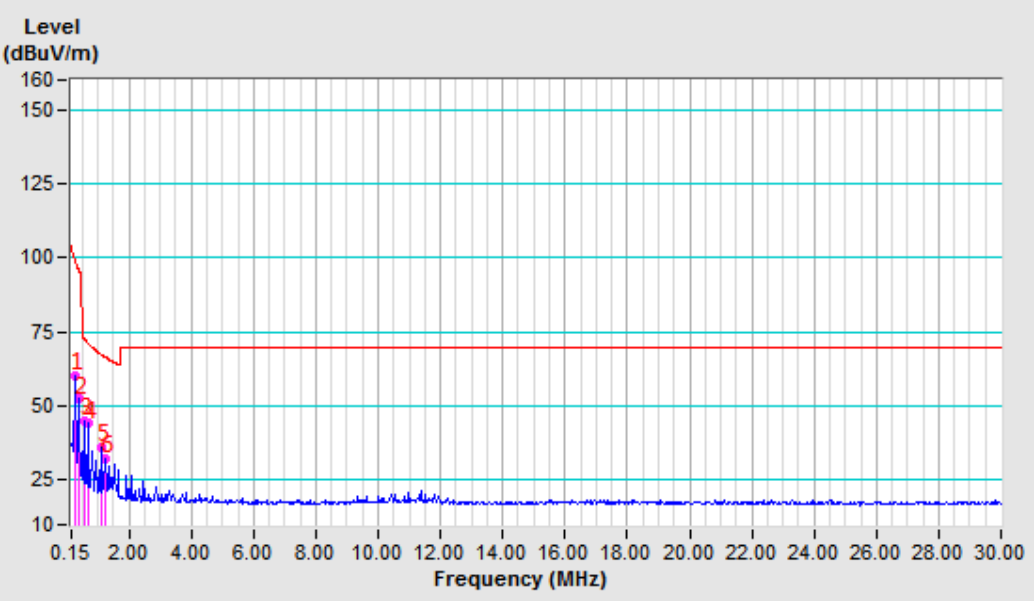
Test Mode	A	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	AC 120V 60Hz	Detector Function	QP&AV
Environmental Conditions	22deg. C, 53% R	Tested By	Albert
PSU	Aohai	Test Date	2025-01-26

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	0.0102	-10.21	58.69	48.48	127.43	-78.95	130	338
2	0.0128	-10.38	59.91	49.53	125.46	-75.93	130	18
3	0.0153	-10.55	56.90	46.35	123.90	-77.55	130	213
4	0.0352	-11.55	51.44	39.89	116.66	-76.77	130	318
5	0.0642	-11.59	45.21	33.62	111.45	-77.83	130	165
6	0.1039	-11.48	50.49	39.01	107.27	-68.26	130	120
7	0.1373	-11.37	88.52	77.15	104.85	-27.70	130	337



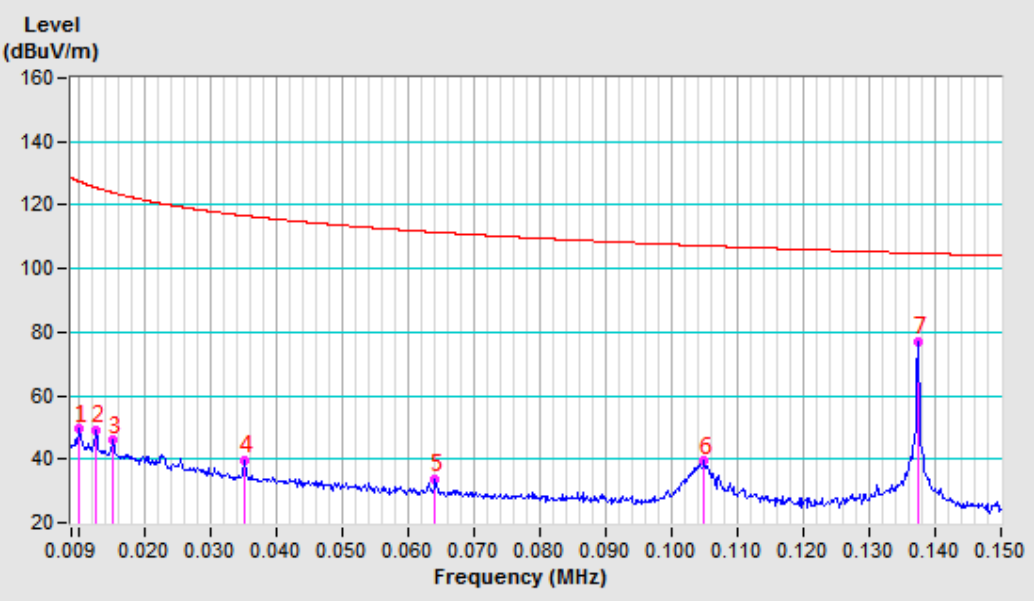
Test Mode	A	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	AC 120V 60Hz	Detector Function	QP&AV
Environmental Conditions	22deg. C, 53% R	Tested By	Albert
PSU	Aohai	Test Date	2025-01-26

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	0.2739	-11.38	71.51	60.13	98.85	-38.72	130	340
2	0.4112	-11.47	63.78	52.31	95.32	-43.01	130	360
3	0.5485	-11.50	56.34	44.84	72.91	-28.07	130	313
4	0.6858	-11.48	55.51	44.03	71.15	-27.12	130	346
5	1.0978	-11.44	47.73	36.29	67.44	-31.15	130	360
6	1.2351	-11.45	43.52	32.07	66.51	-34.44	130	360



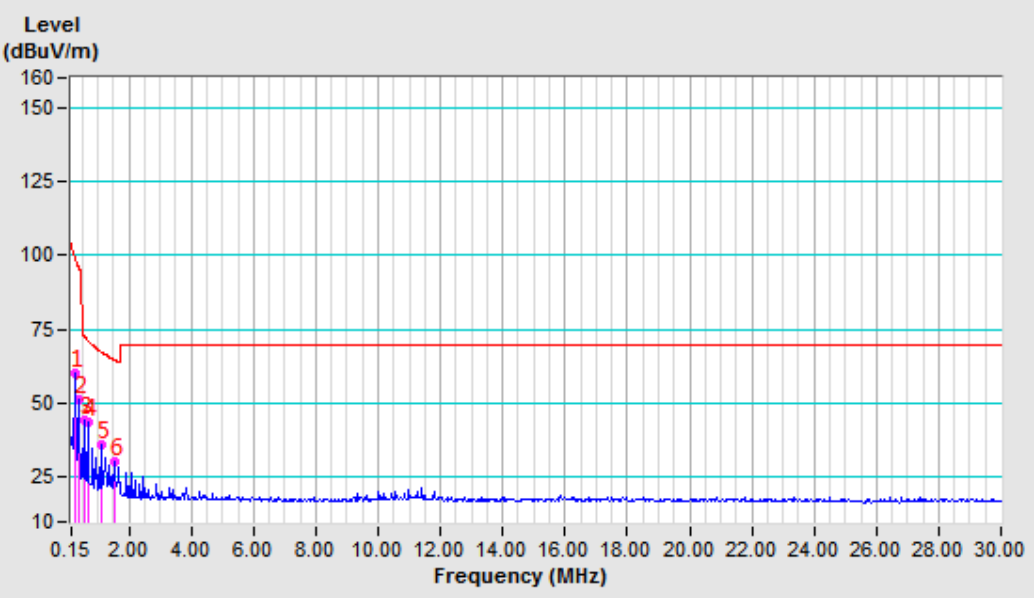
Test Mode	A	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	AC 120V 60Hz	Detector Function	QP&AV
Environmental Conditions	22deg. C, 53% R	Tested By	Albert
PSU	Aohai	Test Date	2025-01-26

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	0.0102	-10.21	59.87	49.66	127.44	-77.78	130	71
2	0.0128	-10.38	59.71	49.33	125.45	-76.12	130	334
3	0.0153	-10.55	56.63	46.08	123.89	-77.81	130	280
4	0.0352	-11.55	51.31	39.76	116.67	-76.91	130	158
5	0.0642	-11.59	45.33	33.74	111.45	-77.71	130	294
6	0.105	-11.48	50.88	39.40	107.18	-67.78	130	178
7	0.1373	-11.37	88.52	77.15	104.85	-27.70	130	345



Test Mode	A	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	AC 120V 60Hz	Detector Function	QP&AV
Environmental Conditions	22deg. C, 53% R	Tested By	Albert
PSU	Aohai	Test Date	2025-01-26

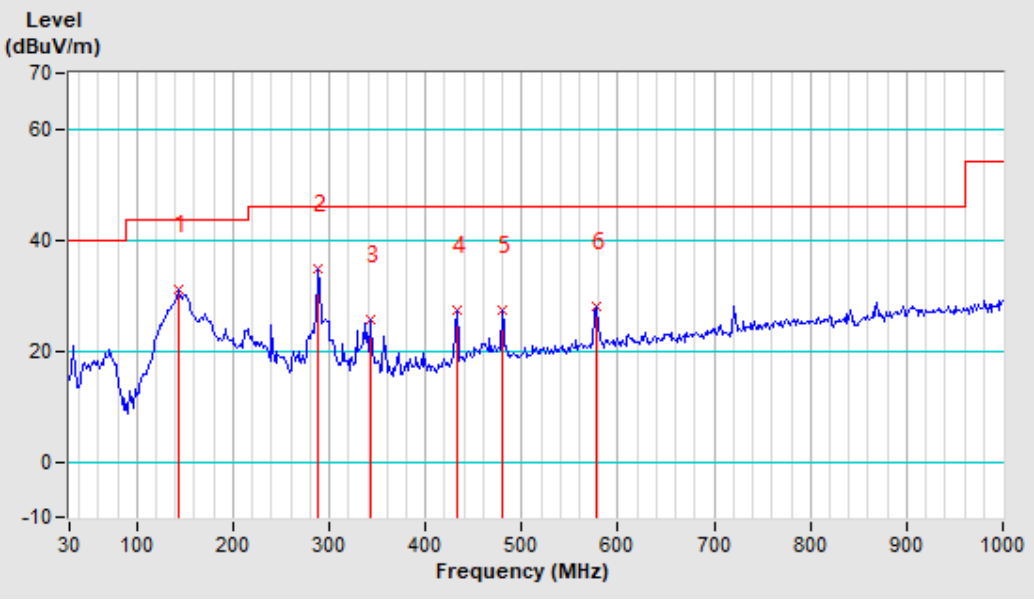
ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.2739	-11.38	71.49	60.11	98.85	-38.74	130	360
2	0.4112	-11.47	62.98	51.51	95.32	-43.81	130	189
3	0.5485	-11.50	55.90	44.40	72.91	-28.51	130	329
4	0.6858	-11.48	55.45	43.97	71.15	-27.18	130	6
5	1.0978	-11.44	47.27	35.83	67.44	-31.61	130	360
6	1.5097	-11.46	42.01	30.55	64.93	-34.38	130	360



Test Mode	A	Frequency Range	30MHz ~ 1000MHz
Test Voltage	AC 120V 60Hz	Detector Function	Quasi-Peak (QP)
Environmental Conditions	27deg. C, 58% RH	Tested By	Ludius
PSU	Aohai	Test Date	2025-01-11

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	143.48	-17.08	48.24	31.16	43.50	-12.34	130	326
2	288.04	-15.85	50.73	34.88	46.00	-11.12	130	306
3	342.45	-14.38	40.11	25.73	46.00	-20.27	130	292
4	432.61	-11.65	38.91	27.26	46.00	-18.74	130	278
5	479.25	-10.49	37.79	27.30	46.00	-18.70	130	264
6	577.18	-8.64	36.62	27.98	46.00	-18.02	130	250

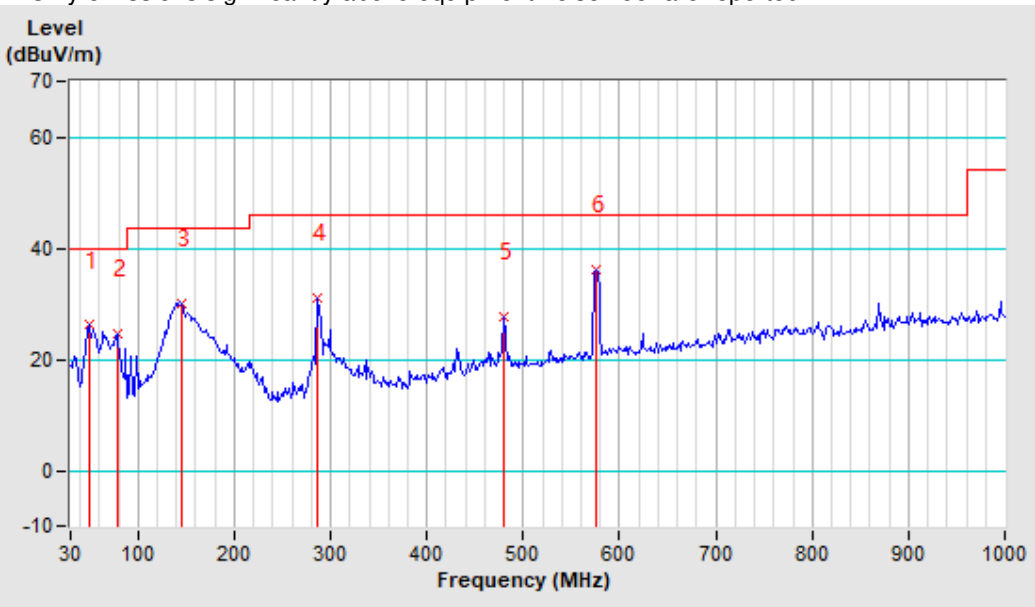
REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions 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, 55% RH	Tested By	Ludius
PSU	Aohai	Test Date	2025-01-11

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	48.65	-17.80	43.92	26.12	40.00	-13.88	130	251
2	78.19	-21.84	46.50	24.66	40.00	-15.34	130	226
3	145.03	-16.96	47.04	30.08	43.50	-13.42	130	269
4	286.49	-15.91	47.09	31.18	46.00	-14.82	130	284
5	479.25	-10.49	38.06	27.57	46.00	-18.43	130	299
6	575.62	-8.68	44.79	36.11	46.00	-9.89	130	314

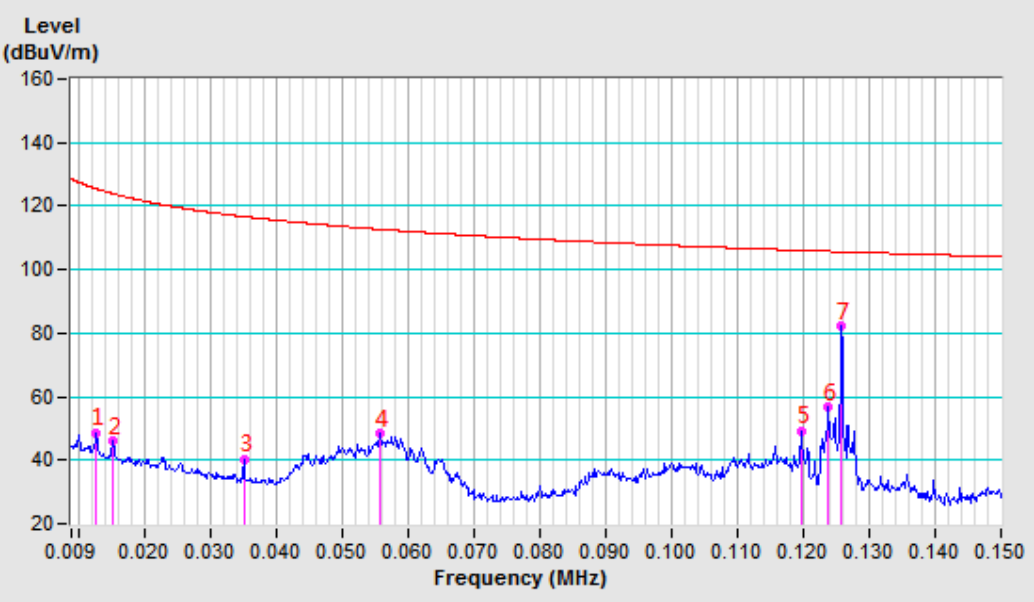
REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions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



Charging Mode

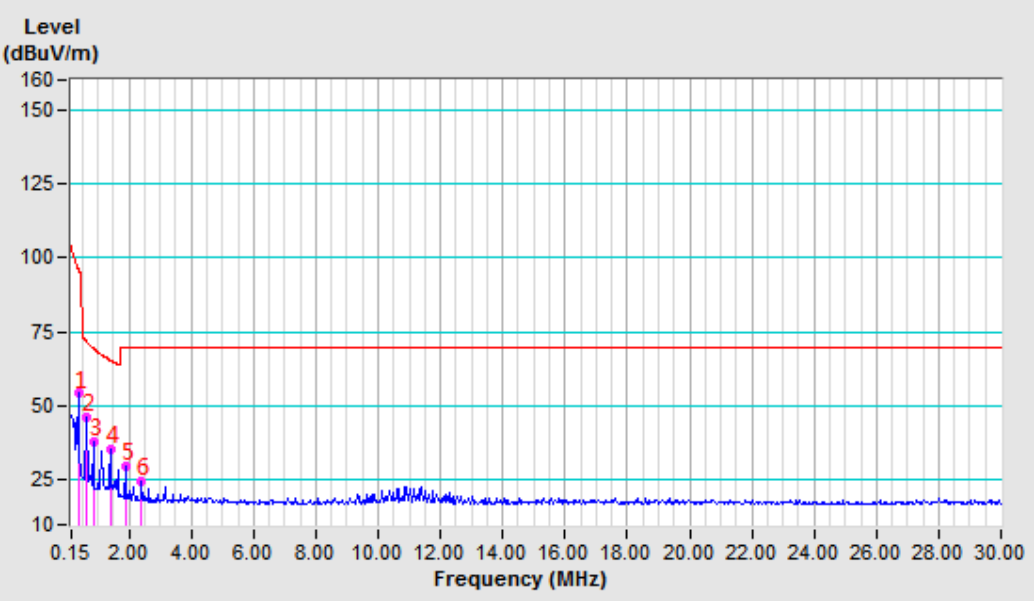
Test Mode	B	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	AC 120V 60Hz	Detector Function	QP&AV
Environmental Conditions	22deg. C, 53% R	Tested By	Albert
PSU	Aohai	Test Date	2025-01-26

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	0.0128	-10.38	59.09	48.71	125.45	-76.74	130	190
2	0.0153	-10.55	56.53	45.98	123.90	-77.92	130	71
3	0.0352	-11.55	51.81	40.26	116.67	-76.41	130	129
4	0.0558	-11.61	59.84	48.23	112.67	-64.44	130	174
5	0.1198	-11.43	60.59	49.16	106.04	-56.88	130	129
6	0.1238	-11.42	68.16	56.74	105.75	-49.01	130	131
7	**0.1258**	**-11.41**	**93.52**	**82.11**	**105.61**	**-23.50**	**130**	**133**



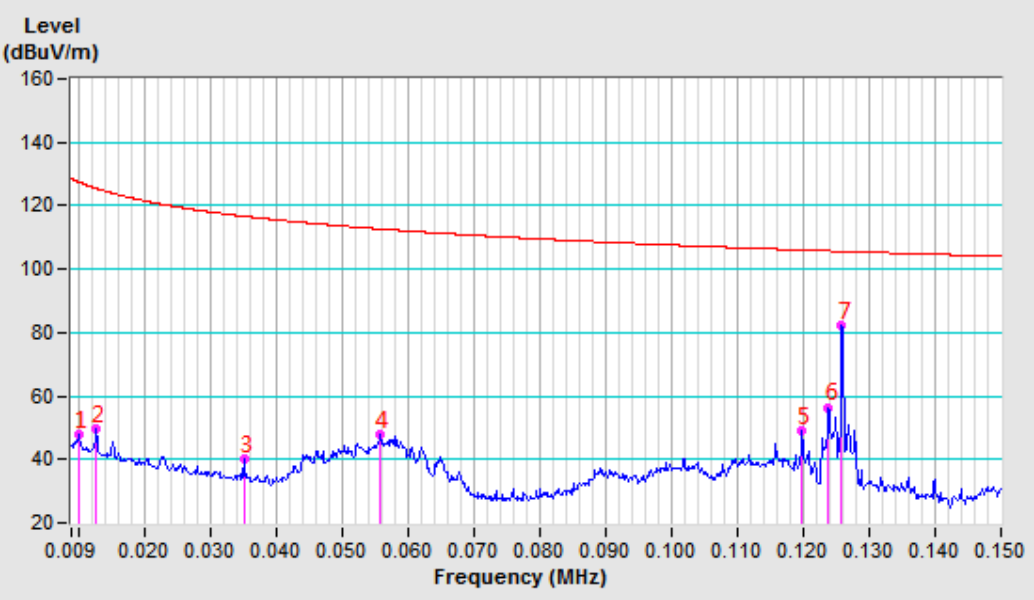
Test Mode	B	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	AC 120V 60Hz	Detector Function	QP&AV
Environmental Conditions	22deg. C, 53% R	Tested By	Albert
PSU	Aohai	Test Date	2025-01-26

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	0.3784	-11.43	65.65	54.22	96.05	-41.83	130	134
2	0.6306	-11.49	57.88	46.39	71.81	-25.42	130	299
3	0.8843	-11.46	49.59	38.13	69.15	-31.02	130	144
4	1.3903	-11.46	46.68	35.22	65.58	-30.36	130	108
5	1.8948	-11.49	40.98	29.49	69.54	-40.05	130	118
6	2.3993	-11.45	35.90	24.45	69.54	-45.09	130	166



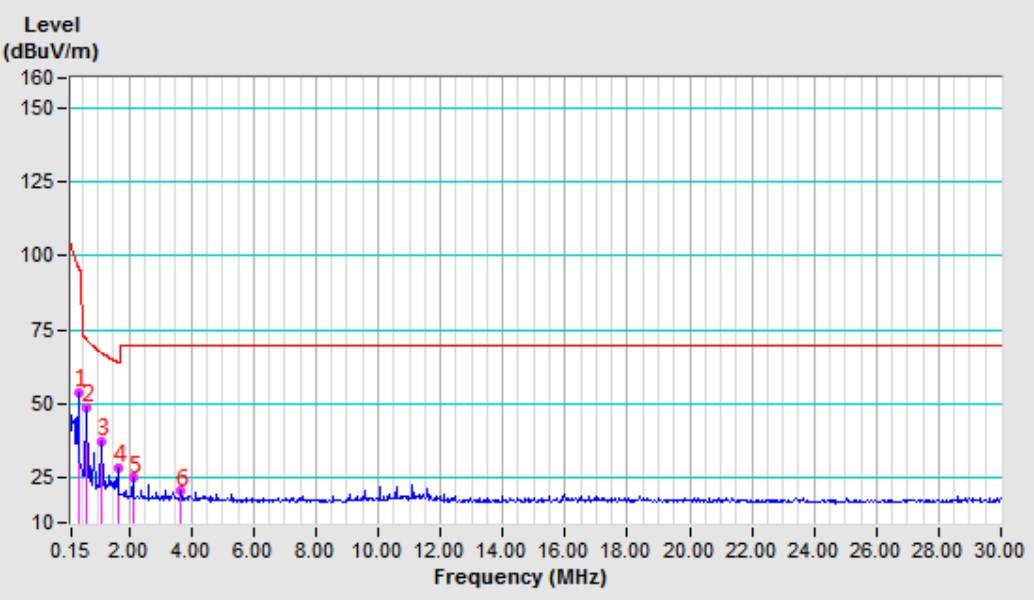
Test Mode	B	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	AC 120V 60Hz	Detector Function	QP&AV
Environmental Conditions	22deg. C, 53% R	Tested By	Albert
PSU	Aohai	Test Date	2025-01-26

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	0.0102	-10.21	57.83	47.62	127.45	-79.83	130	89
2	0.0128	-10.38	60.08	49.70	125.43	-75.73	130	352
3	0.0352	-11.55	51.48	39.93	116.67	-76.74	130	124
4	0.0558	-11.61	59.43	47.82	112.66	-64.84	130	170
5	0.1198	-11.43	60.42	48.99	106.03	-57.04	130	141
6	0.1239	-11.42	67.67	56.25	105.74	-49.49	130	143
7	0.1259	-11.41	93.42	82.01	105.60	-23.59	130	136



Test Mode	B	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	AC 120V 60Hz	Detector Function	QP&AV
Environmental Conditions	22deg. C, 53% R	Tested By	Albert
PSU	Aohai	Test Date	2025-01-26

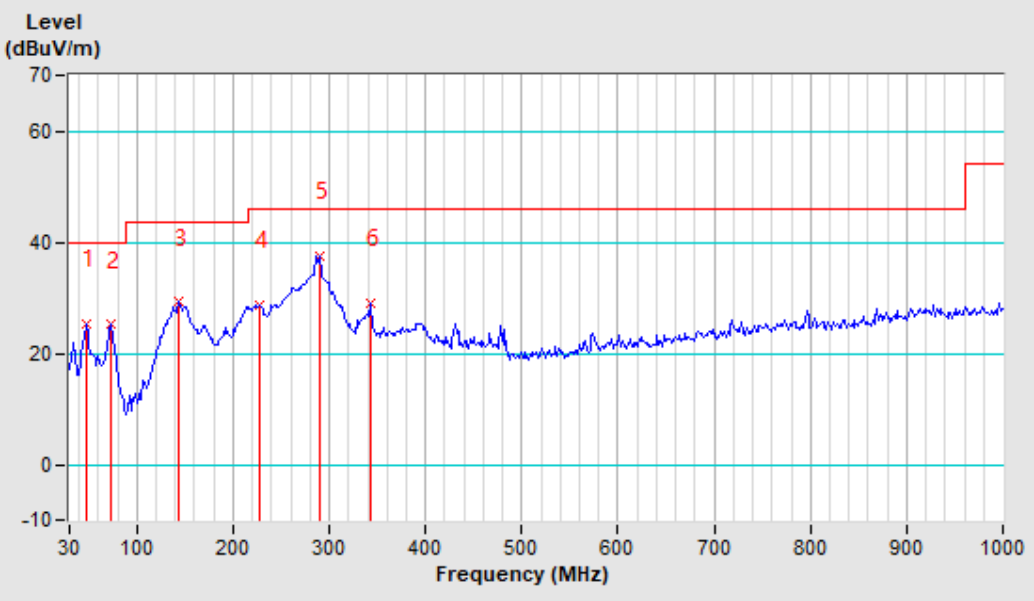
ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.3769	-11.43	65.49	54.06	96.08	-42.02	130	128
2	0.6291	-11.49	60.05	48.56	71.83	-23.27	130	134
3	1.1336	-11.45	48.83	37.38	67.19	-29.81	130	125
4	1.6366	-11.47	39.82	28.35	64.29	-35.94	130	128
5	2.1411	-11.48	36.42	24.94	69.54	-44.60	130	144
6	3.6531	-11.30	31.82	20.52	69.54	-49.02	130	140



Test Mode	B	Frequency Range	30MHz ~ 1000MHz
Test Voltage	AC 120V 60Hz	Detector Function	Quasi-Peak (QP)
Environmental Conditions	25deg. C, 55% RH	Tested By	Ludius
PSU	Aohai	Test Date	2025-01-11

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	-17.88	43.14	25.26	40.00	-14.74	113	324
2	73.53	-20.47	45.61	25.14	40.00	-14.86	131	306
3	143.48	-17.08	46.26	29.18	43.50	-14.32	146	291
4	227.42	-18.39	47.12	28.73	46.00	-17.27	200	223
5	289.60	-15.78	53.20	37.42	46.00	-8.58	163	274
6	342.45	-14.38	43.32	28.94	46.00	-17.06	179	259

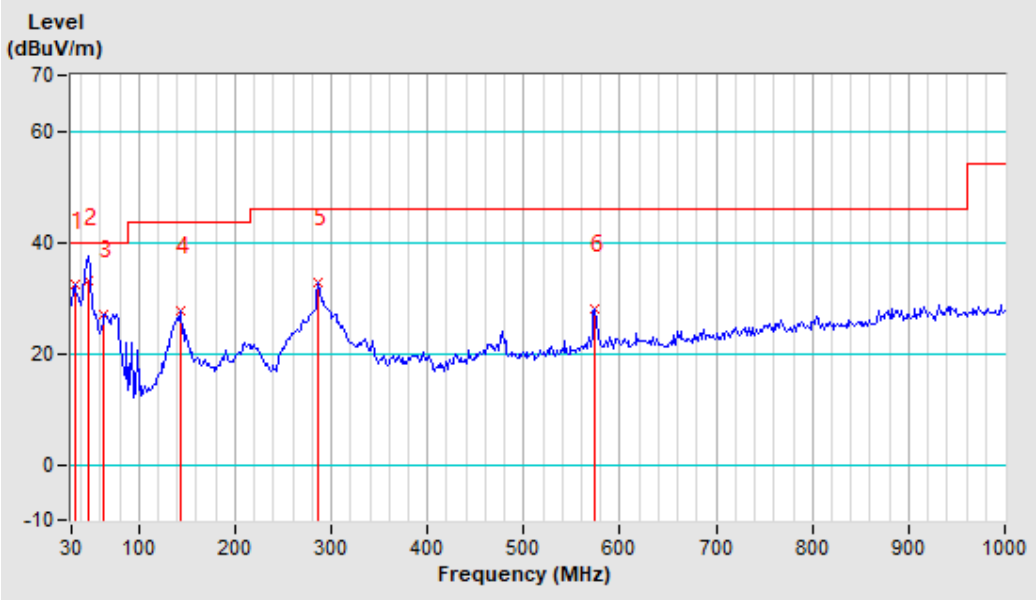
REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions 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, 55% RH	Tested By	Ludius
PSU	Aohai	Test Date	2025-01-11

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	33.11	-19.13	51.34	32.21	40.00	-7.79	160	277
2	46.98	-17.89	50.79	32.90	40.00	-7.10	123	52
3	64.20	-18.26	45.27	27.01	40.00	-12.99	200	192
4	143.48	-17.08	44.84	27.76	43.50	-15.74	125	312
5	286.49	-15.91	48.56	32.65	46.00	-13.35	142	295
6	574.07	-8.71	36.79	28.08	46.00	-17.92	178	259

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	Apr. 07, 25
Digital Multimeter	FLUKE	15B	A1220010DG	N/A
Humid & Temp Programmable Tester	Haida	HD-225T	110807201	Oct. 10, 25
Oscilloscope	Agilent	DSO9254A	MY51260160	Jul. 07, 25
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Oct. 09, 25
Signal Generator	Agilent	N5183A	MY50140980	Jul. 11, 25
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200288	Jul. 11, 25
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. Equipment are calibrated by calibration laboratory accredited to ISO/IEC 17025 by a mutually recognized Accreditation and all tests are conducted within a valid calibration cycle.
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.

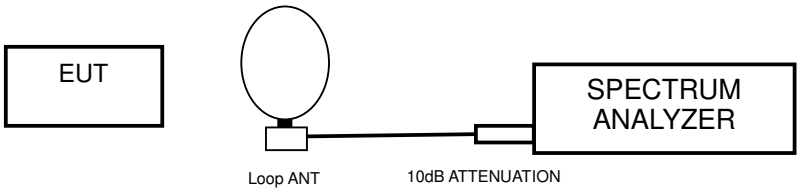
c. Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.

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

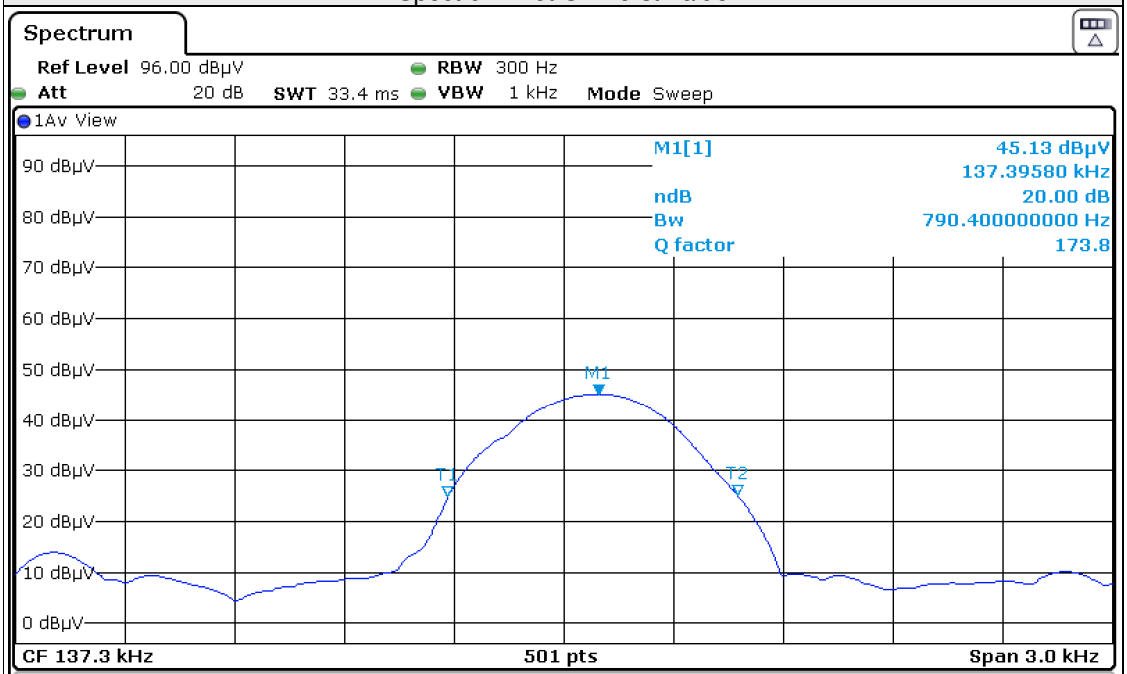
a. Turn on the EUT.
b. The EUT tested in charging mode and standby mode respectively.

4.3.7 TEST RESULTS

Test Mode	Frequency (kHz)	20dB Bandwidth (Hz)
A	137.3	790.4

Test Plot:

Spectrum Plot Of Worst Value



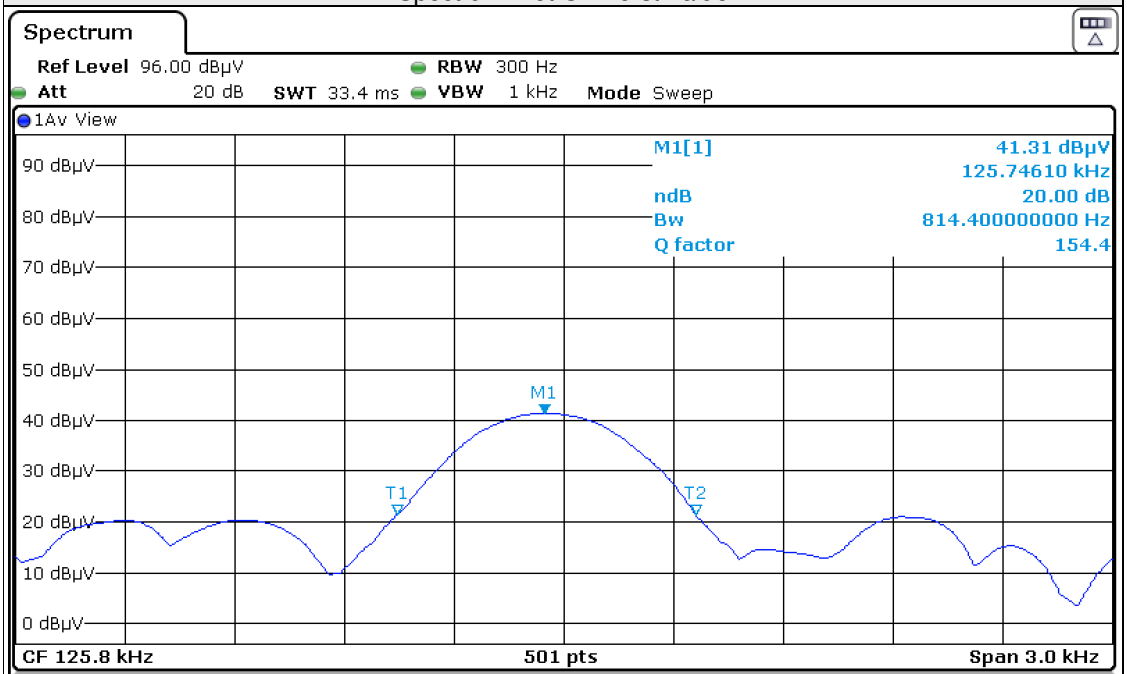
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	137.3958 kHz	45.13 dBµV	ndB down	790.4 Hz
T1		1	136.9826 kHz	24.79 dBµV	ndB	20.00 dB
T2		1	137.7731 kHz	25.14 dBµV	Q factor	173.8

Test Mode	Frequency (kHz)	20dB Bandwidth (Hz)
B	125.8	814.4

Test Plot:

Spectrum Plot Of Worst Value



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	125.7461 kHz	41.31 dBµV	ndB down	814.4 Hz
T1		1	125.3449 kHz	21.39 dBµV	ndB	20.00 dB
T2		1	126.1593 kHz	21.29 dBµV	Q factor	154.4

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---