

TEST REPORT

Applicant: Zome Energy Networks, Inc.
Address: 268 Bush St., Suite 3633, San Francisco, CA, 94104, USA
Equipment Type: Zome IoT Gateway
Model Name: ZK-200
Brand Name: Zome Energy Networks
FCC ID: 2BE3K-ZK200
Test Standard: 47 CFR Part 15 Subpart C (refer to section 3.1)
Sample Arrival Date: Feb. 01, 2024
Test Date: Feb. 21, 2024 - Feb. 27, 2024
Date of Issue: Apr. 12, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Li Ganming**Checked by:** Ye Hongji**Approved by:** Liao Jianming
(Technical Director)

Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Mar. 28, 2024</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Apr. 12, 2024</u>	<u>Added the 2G Network in Section 2.4 Technical Information.</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☒ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Zome Energy Networks, Inc.
Address	268 Bush St., Suite 3633, San Francisco, CA, 94104, USA

2.2 Manufacturer Information

Manufacturer	Aimtron Electronic Limited (India HQ)
Address	1A, Wagodia Gidc Rd, GIDC Industrial Estate, Vadodara, Gujarat 391760

2.3 General Description for Equipment under Test (EUT)

EUT Name	Zome IoT Gateway
Model Name Under Test	ZK-200
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	IoT Gateway PCBA_v3.1 & Mikrobus ZW700 PCBA_v3.0
Software Version	FCC_1_0_8
Dimensions (Approx.)	180(L)x100(W)x32(H)mm
Weight (Approx.)	245g

2.4 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 4G Network FDD LTE-M1 Band 2/4/5/12/13/26 FDD NB-IoT Band 2/4/5/12/13 Z-wave 908.4MHz to 916MHz
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The requirement for the following technical information of the EUT was tested in this report:

Modulation Type	FSK
Product Type	☒ Mobile ☐ Portable ☐ Fix Location
Transfer Rate	1 Mbps
Frequency Range	The frequency range used is 908.40 MHz to 916.00 MHz.
Tested Channel	Low (908.40 MHz), Middle (908.42 MHz), High (916.00 MHz)
Antenna Type	External Whip Z-wave Antenna
Antenna Gain	2.0 dBi

2.5 Additional Instructions

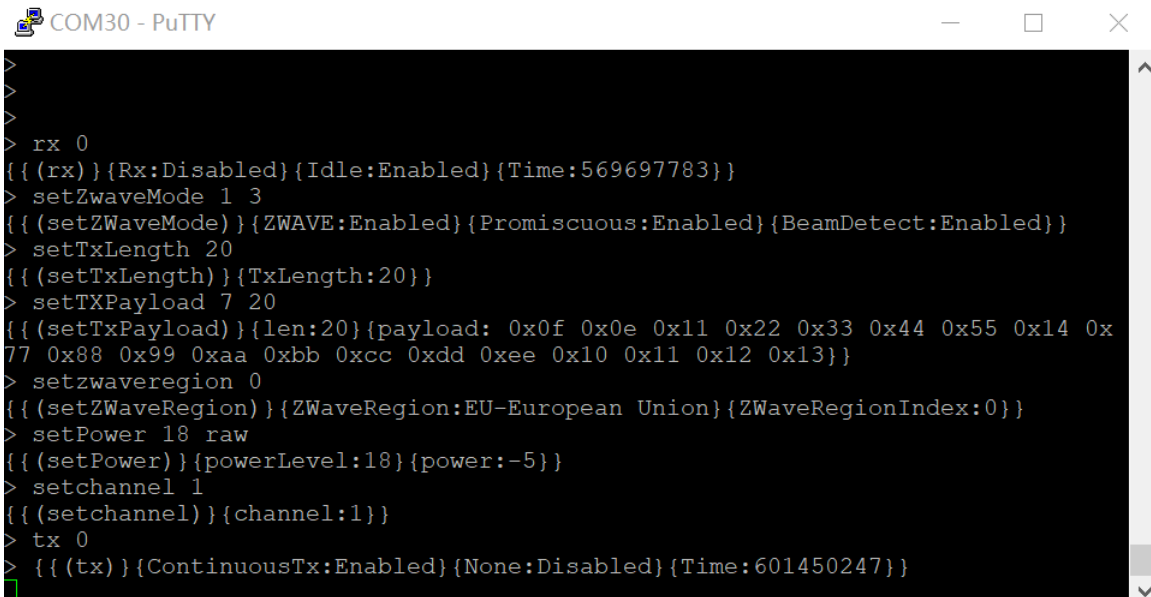
EUT Software Settings:

Mode	☒ Special software is used. The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.
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During testing. Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Power level setup in software			
Test Software Version	PUTTY		
Support Units (Software installation media)	Description	Manufacturer	Model
	Notebook	Lenovo	X220
Mode	Channel	Frequency (MHz)	Soft Set
FSK	Low	908.40	Power parameter Settings is 18
	Middle	908.42	
	High	916.00	

Run Software



```

> rx 0
{{(rx)}{Rx:Disabled}{Idle:Enabled}{Time:569697783}}
> setZwaveMode 1 3
{{(setZWaveMode)}{ZWAVE:Enabled}{Promiscuous:Enabled}{BeamDetect:Enabled}}
> setTxLength 20
{{(setTxLength)}{TxLength:20}}
> setTXPayload 7 20
{{(setTxPayload)}{len:20}{payload: 0x0f 0x0e 0x11 0x22 0x33 0x44 0x55 0x14 0x
77 0x88 0x99 0xaa 0xbb 0xcc 0xdd 0xee 0x10 0x11 0x12 0x13}}
> setzwaveregion 0
{{(setZWaveRegion)}{ZWaveRegion:EU-European Union}{ZWaveRegionIndex:0}}
> setPower 18 raw
{{(setPower)}{powerLevel:18}{power:-5}}
> setchannel 1
{{(setchannel)}{channel:1}}
> tx 0
> {{(tx)}{ContinuousTx:Enabled}{None:Disabled}{Time:601450247}}

```

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C	Miscellaneous Wireless Communications Services
2	ANSI C63.10-2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

3.2 Test Verdict

No.	Description	FCC Part No.	Test Result	Verdict	Remark
1	Antenna Requirement	15.203	--	Pass	Note ¹
2	20 dB and 99% Bandwidth	15.215(c)	ANNEX A.1	Pass	Note ²
3	AC Conducted Emission	15.207	ANNEX A.2	Pass	Note ²
4	Radiated Spurious Emission	15.249(a)	ANNEX A.3	Pass	--
5	Band Edge(Restricted-band band-edge)	15.249(a)	ANNEX A.4	Pass	--

Note ¹: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

Note ²: The RF module (Model Name: MS-ZGM130S) installed in the EUT is electronically and mechanically identical to the original certified module in the test report No. BL-SZ2141004-601, just Radiated Spurious Emission & Band Edge(Restricted-band band-edge) were retested in this report. Other test items please refer to the report No. BL-SZ2141004-601 published by Shenzhen BALUN Technology Co., Ltd. on Jul. 29, 2021.

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity	44% to 55%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+20.4°C to +24.1°C
Working Voltage of the EUT	NV (Normal Voltage)	5 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY50531259	2023.09.05	2024.09.04
Signaling Unit	ROHDE&SCHWARZ	CMW500	171150	2023.06.19	2024.06.18
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	01415	2021.03.08	2024.03.07
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	02460	2021.05.20	2024.05.19
Anechoic Chamber	RAINFORD	9m*6m*6m	140	2022.02.19	2024.08.15
Amplifier	COM-MV	ZT30-1000M	07210897	2023.09.05	2024.09.04
Amplifier	COM-MV	LSCX_LNA1-12G-01	7210214	2023.09.05	2024.09.04
Amplifier	COM-MV	XKu_LNA7-18G-01	7210209	2023.09.05	2024.09.04

4.3 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

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

Parameters	Uncertainty
Occupied Channel Bandwidth	2.8%
RF output power, conducted	1.28 dB
Power Spectral Density, conducted	1.30 dB
Unwanted Emissions, conducted	1.84 dB
All emissions, radiated	5.36 dB
Temperature	0.8°C
Humidity	4%

4.4 Description of Test Setup

4.4.1 For Antenna Port Test



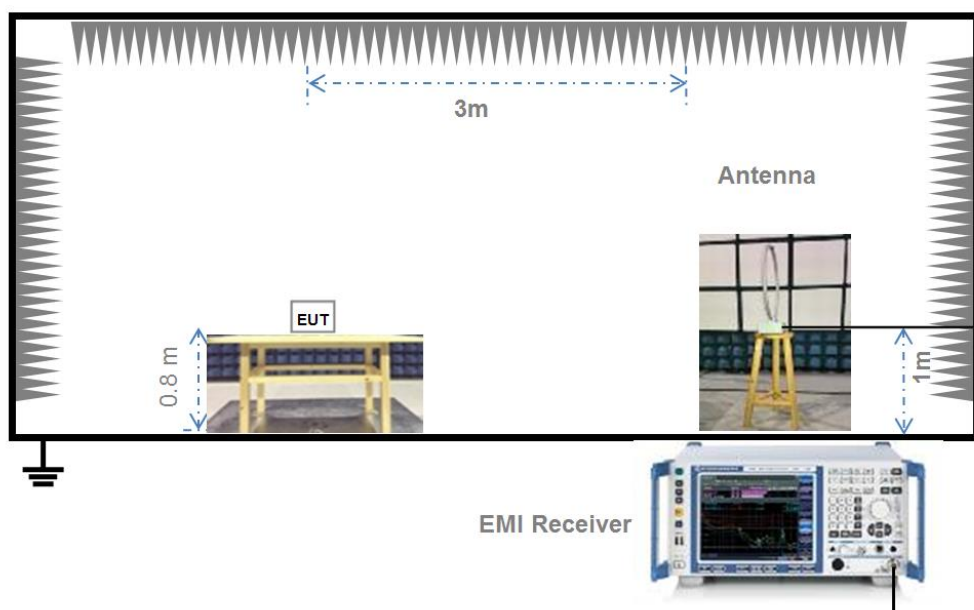
(Diagram 1)

4.4.2 For AC Power Supply Port Test



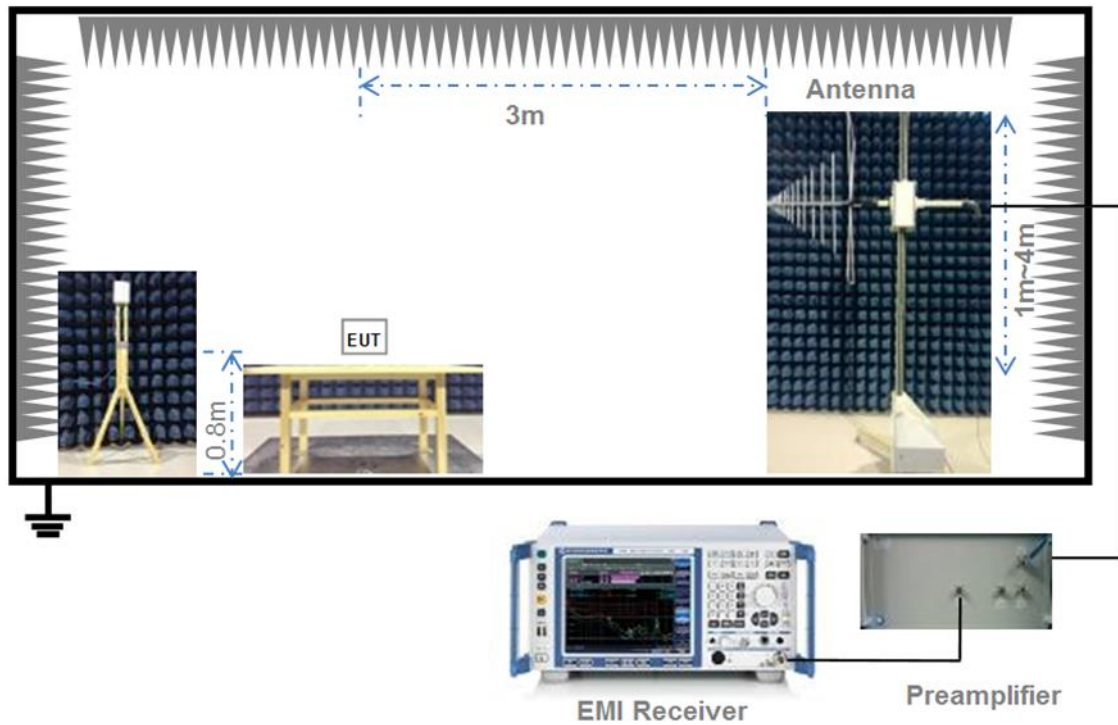
(Diagram 2)

4.4.3 For Radiated Test (Below 30 MHz)



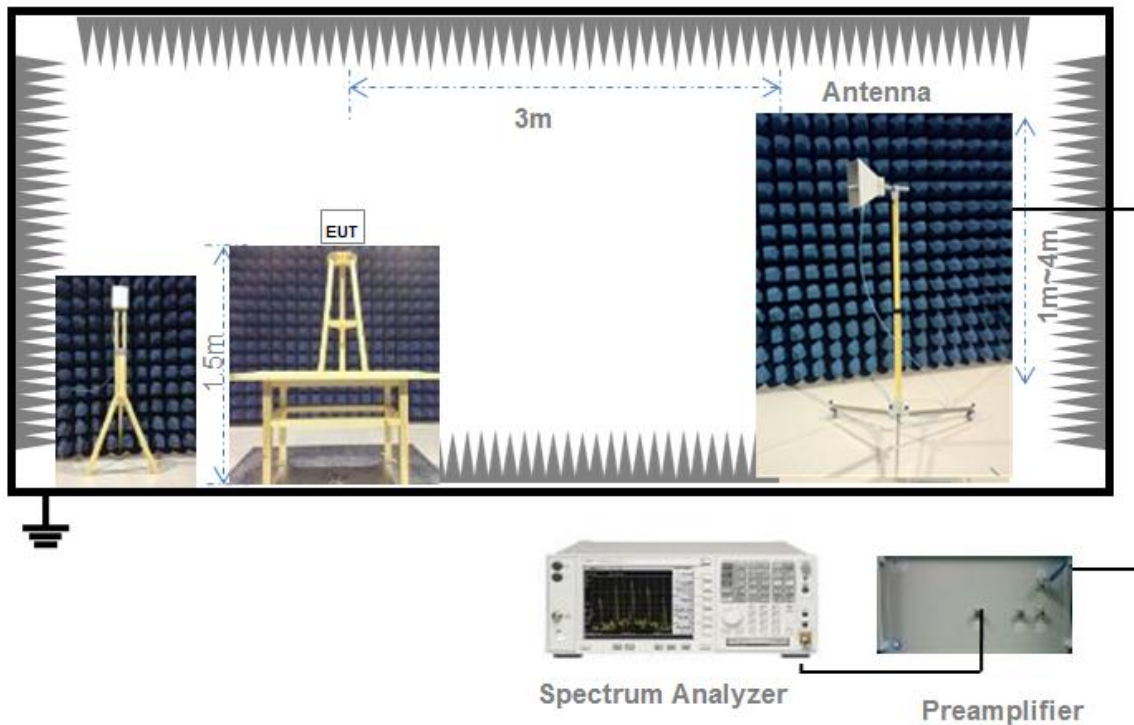
(Diagram 3)

4.4.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.4.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

5 TEST ITEMS

5.1 Antenna Requirements

5.1.1 Relevant Standards

FCC §15.203 & 15.247(b)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

If directional gain of transmitting antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

5.1.2 Antenna Anti-Replacement Construction

The Antenna Anti-Replacement as following method:

Protected Method	Description
The antenna is embedded in the product.	An embedded-in antenna design is used.

Reference Documents	Item
Photo	Please refer to the EUT Photo documents.

5.1.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

5.2 20 dB and 99% Bandwidth

5.2.1 Limit

FCC §15.215(c)

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

RSS-Gen 6.6

The emission bandwidth ($\times$ dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated $\times$ dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least $3\times$ the resolution bandwidth.

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth, as calculated or measured

5.2.2 Test Setups

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

Use the following spectrum analyzer settings:

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel

RBW $\geq$ 1% of the 20 dB bandwidth

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

5.2.4 Test Result

Please refer to ANNEX A.1.

5.3 AC Conducted Emission

5.3.1 Limit

FCC §15.207

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

5.3.2 Test Setups

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed.

Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

5.3.4 Test Result

Please refer to ANNEX A.2.

5.4 Radiated Spurious Emission

5.4.1 Limit

FCC §15.249(a)

Except as provided in paragraph (a) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Frequency (MHz)	Field Strength of Fundamental (mV/m)	Field Strength of Harmonics (μV/m)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
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

Note:

1. For Above 1000 MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.
2. For above 1000 MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).

5.4.2 Test Setups

See section 4.4.2-4.4.5 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented. The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

5.4.4 Test Result

Please refer to ANNEX A.3.

5.5 Band Edge (Restricted-band band-edge)

5.5.1 Limit

FCC §15.249(a)

Radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

5.5.2 Test Setups

See section 4.4.3 to 4.4.5 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported, Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

5.5.4 Test Result

Please refer to ANNEX A.4.

ANNEX A TEST RESULT

A.1 20 dB and 99% Bandwidth

Note: The 20 dB and 99% Bandwidth please refer to the Report No. BL-SZ2141004-601 which was issued by Shenzhen BALUN Technology Co., Ltd. on Jul. 29, 2021, **Section A.1 20 dB bandwidth and 99% bandwidth.**

A.2 AC Conducted Emissions

Note: The AC Conducted Emission please refer to the Report No. BL-SZ2141004-601 which was issued by Shenzhen BALUN Technology Co., Ltd. on Jul. 29, 2021, **Section A.2 AC Conducted Emission.**

A.3 Radiated Emission

Note ¹: The symbol of "--" in the table which means not application.

Note ²: For the test data above 1 GHz, According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note ³: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note ⁴: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

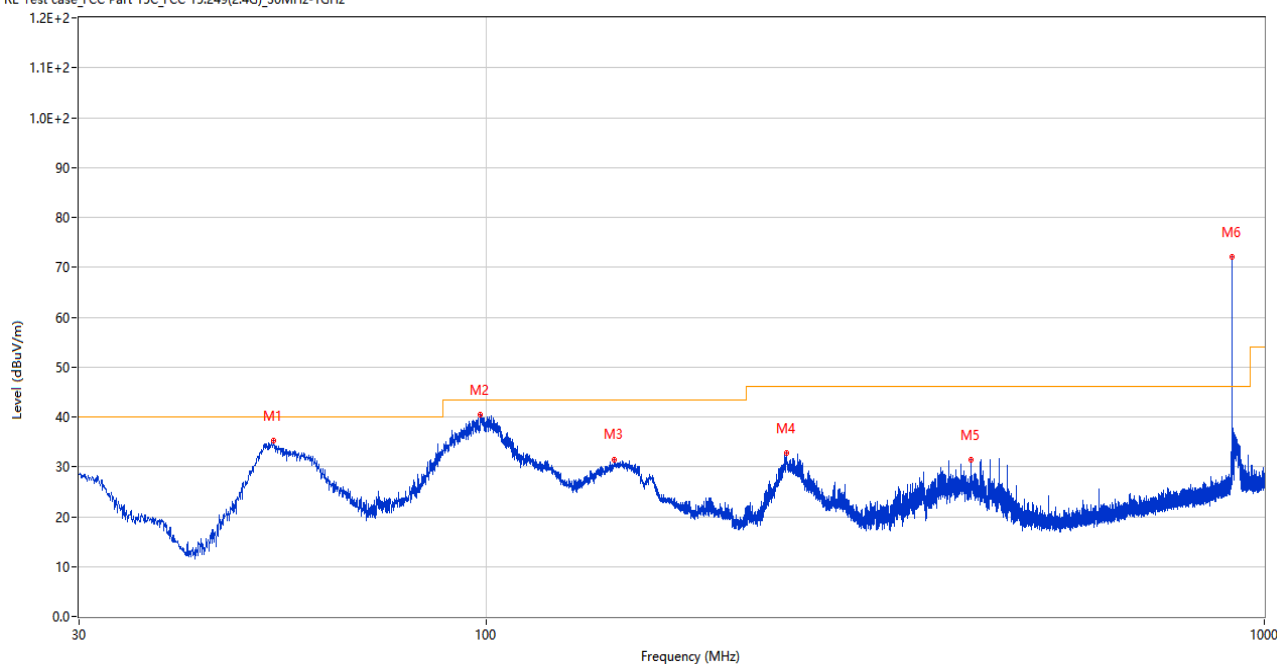
Note ⁵: The bold frequency is the fundamental.

Test Data and Plots (30 MHz ~ 1 GHz)

PoE Splitter Power Supply

Low Channel 30 MHz to 1 GHz, ANT H

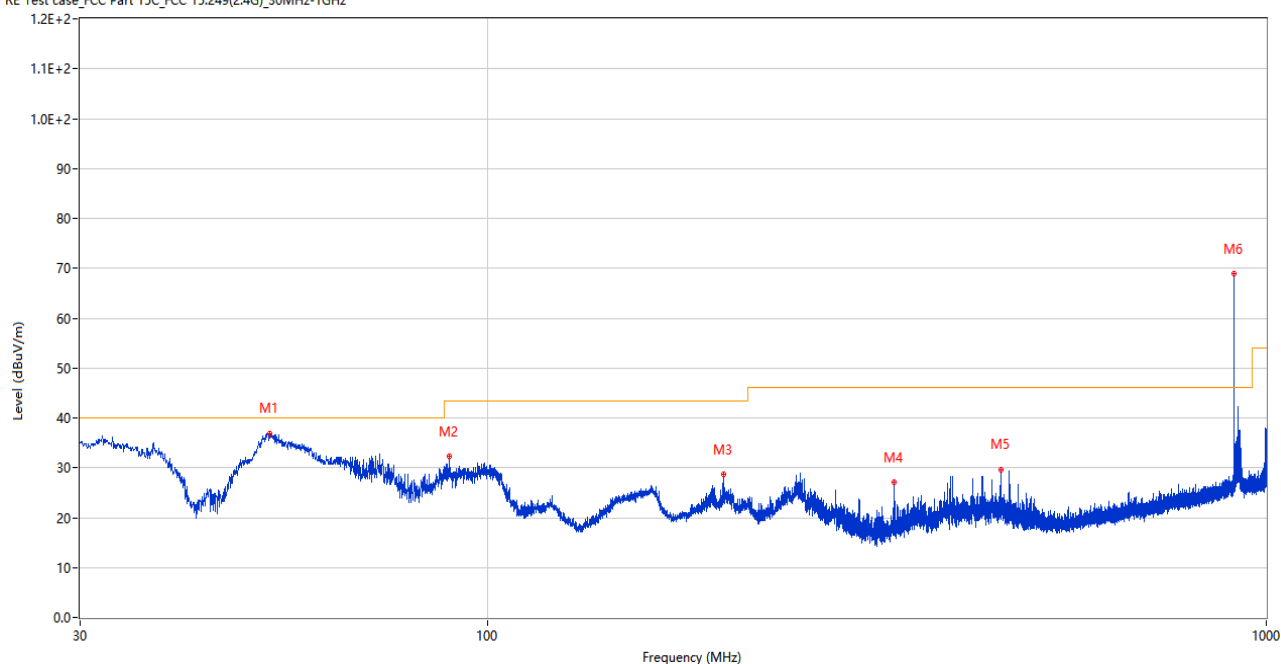
RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	53.328	35.32	-25.64	40.0	4.68	Peak	304.00	150	Horizontal	Pass
2	98.240	40.35	-27.55	43.5	3.15	Peak	99.00	150	Horizontal	Pass
3	146.060	33.02	-30.48	43.5	10.48	Peak	69.00	150	Horizontal	Pass
4	243.158	32.76	-25.50	46.0	13.24	Peak	197.00	150	Horizontal	Pass
5	419.940	31.47	-20.65	46.0	14.53	Peak	184.00	150	Horizontal	Pass
6	908.432	72.11	-10.25	94.0	21.89	Peak	136.00	200	Horizontal	Pass

Low Channel 30 MHz to 1 GHz, ANT V

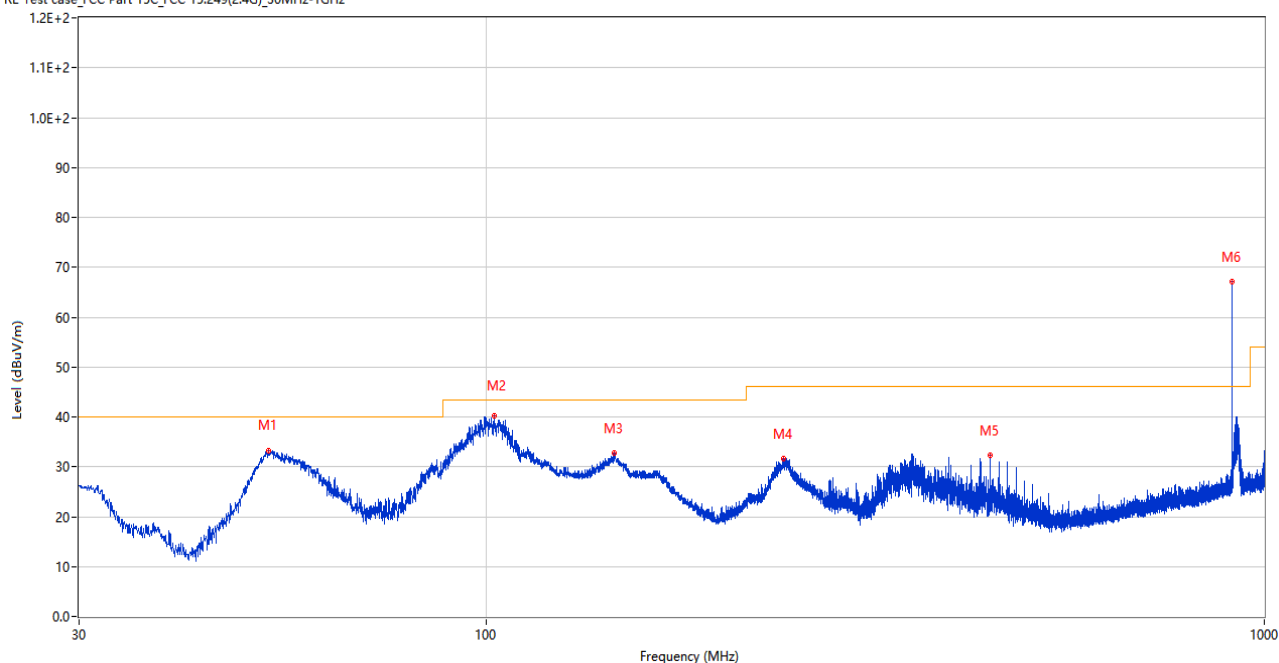
RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	52.601	36.94	-25.75	40.0	3.04	Peak	210.00	150	Vertical	Pass
2	89.461	32.26	-29.12	43.5	11.24	Peak	54.00	150	Vertical	Pass
3	200.817	28.64	-26.73	43.5	14.86	Peak	28.00	150	Vertical	Pass
4	332.689	27.10	-23.07	46.0	18.90	Peak	240.00	200	Vertical	Pass
5	456.024	29.69	-20.05	46.0	16.31	Peak	311.00	150	Vertical	Pass
6	908.432	68.88	-10.25	94.0	25.12	Peak	335.00	150	Vertical	Pass

Middle Channel 30 MHz to 1 GHz, ANT H

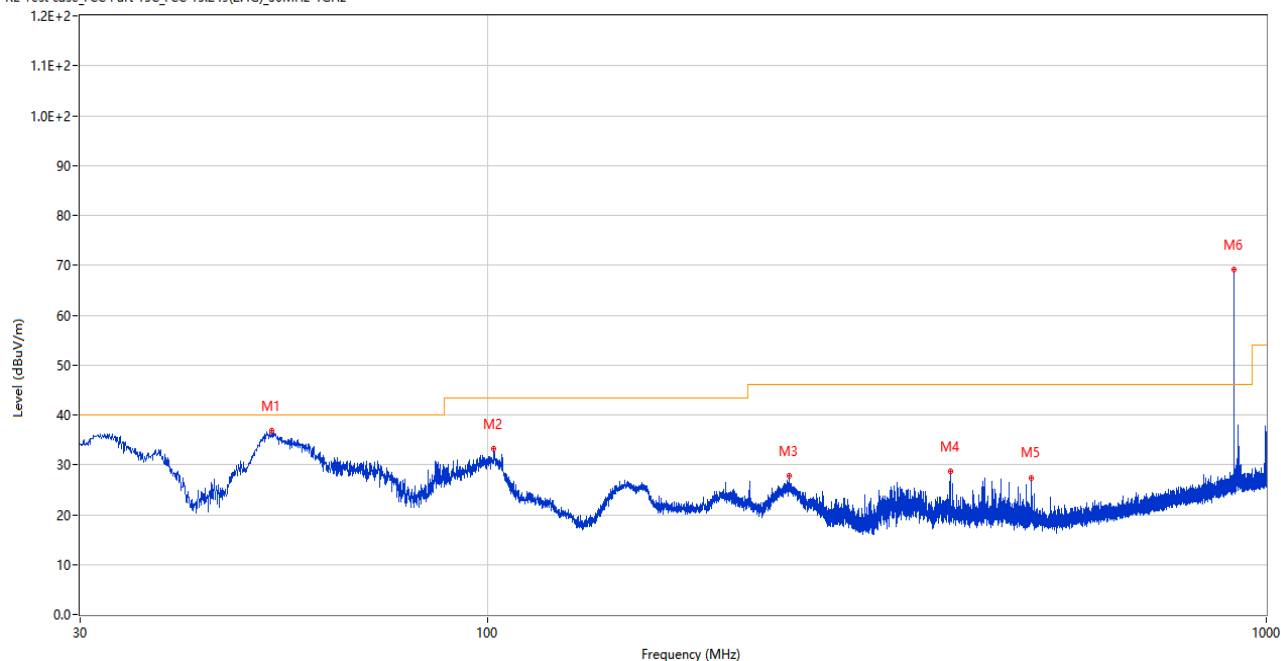
RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	52.601	33.33	-25.75	40.0	6.67	Peak	278.00	150	Horizontal	Pass
2	102.507	40.22	-27.20	43.5	3.28	Peak	91.00	200	Horizontal	Pass
3	145.964	35.18	-30.51	43.5	8.32	Peak	81.00	100	Horizontal	Pass
4	240.830	31.67	-25.51	46.0	14.33	Peak	214.00	300	Horizontal	Pass
5	443.996	32.24	-20.40	46.0	13.76	Peak	200.00	150	Horizontal	Pass
6	908.383	67.13	-10.23	94.0	26.87	Peak	127.00	200	Horizontal	Pass

Middle Channel 30 MHz to 1 GHz, ANT V

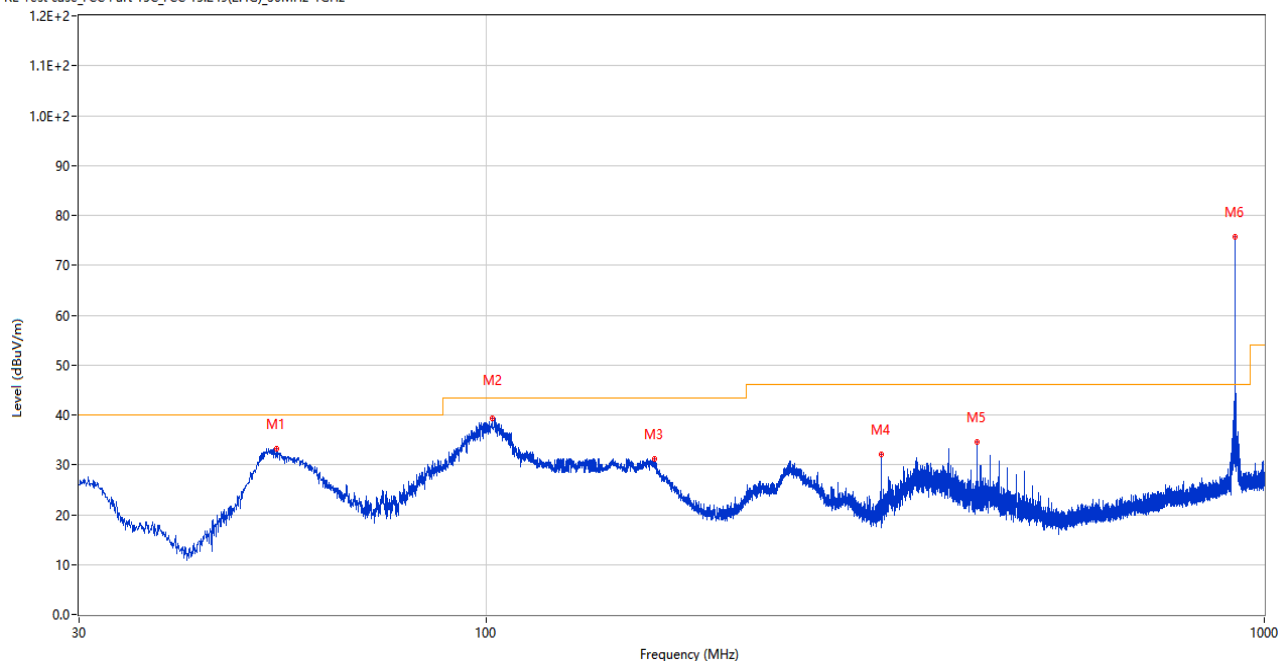
RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	52.941	36.81	-25.72	40.0	3.19	Peak	181.00	200	Vertical	Pass
2	101.828	33.20	-27.14	43.5	10.30	Peak	37.00	100	Vertical	Pass
3	244.224	27.72	-25.44	46.0	18.28	Peak	225.00	300	Vertical	Pass
4	392.877	28.67	-21.35	46.0	17.33	Peak	55.00	150	Vertical	Pass
5	498.704	27.44	-18.90	46.0	18.56	Peak	240.00	200	Vertical	Pass
6	908.432	69.07	-10.25	94.0	24.93	Peak	74.00	100	Vertical	Pass

High Channel 30 MHz to 1 GHz, ANT H

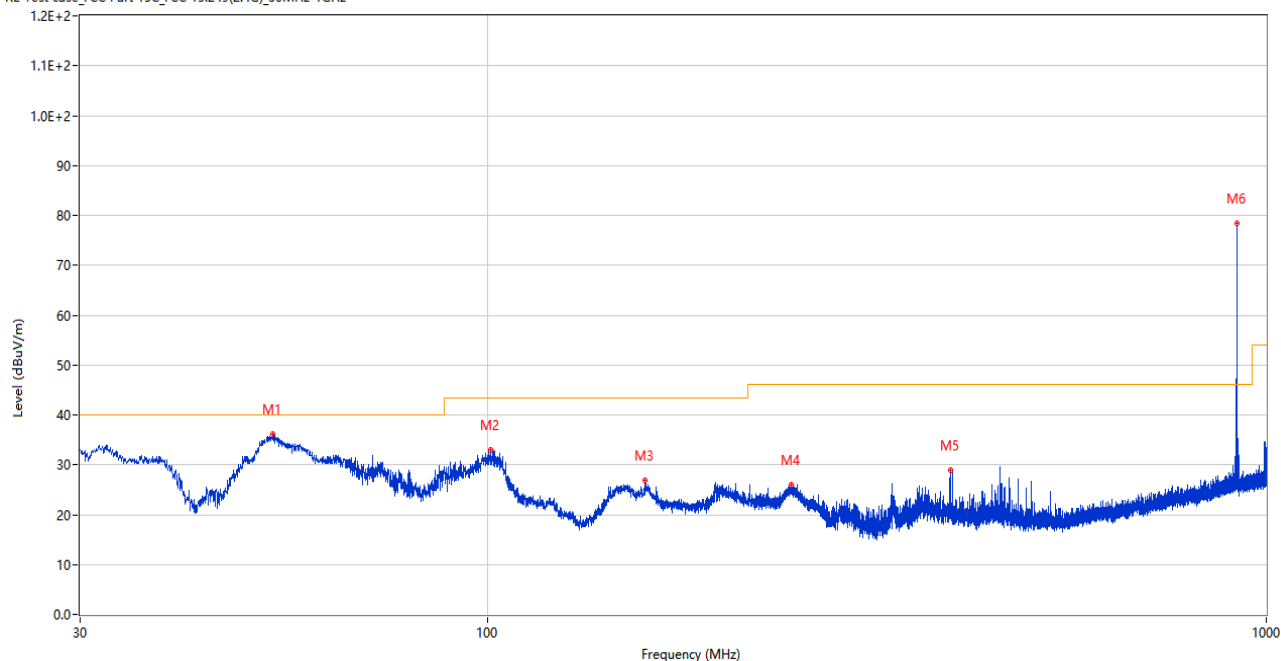
RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	53.862	33.25	-25.79	40.0	6.75	Peak	294.00	100	Horizontal	Pass
2	101.828	39.62	-27.14	43.5	3.88	Peak	111.00	300	Horizontal	Pass
3	164.442	31.17	-29.53	43.5	12.33	Peak	242.00	150	Horizontal	Pass
4	322.067	31.99	-23.60	46.0	14.01	Peak	350.00	200	Horizontal	Pass
5	427.942	34.53	-20.64	46.0	11.47	Peak	350.00	300	Horizontal	Pass
6	915.998	75.72	-10.14	94.0	18.28	Peak	354.00	150	Horizontal	Pass

High Channel 30 MHz to 1 GHz, ANT V

RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz

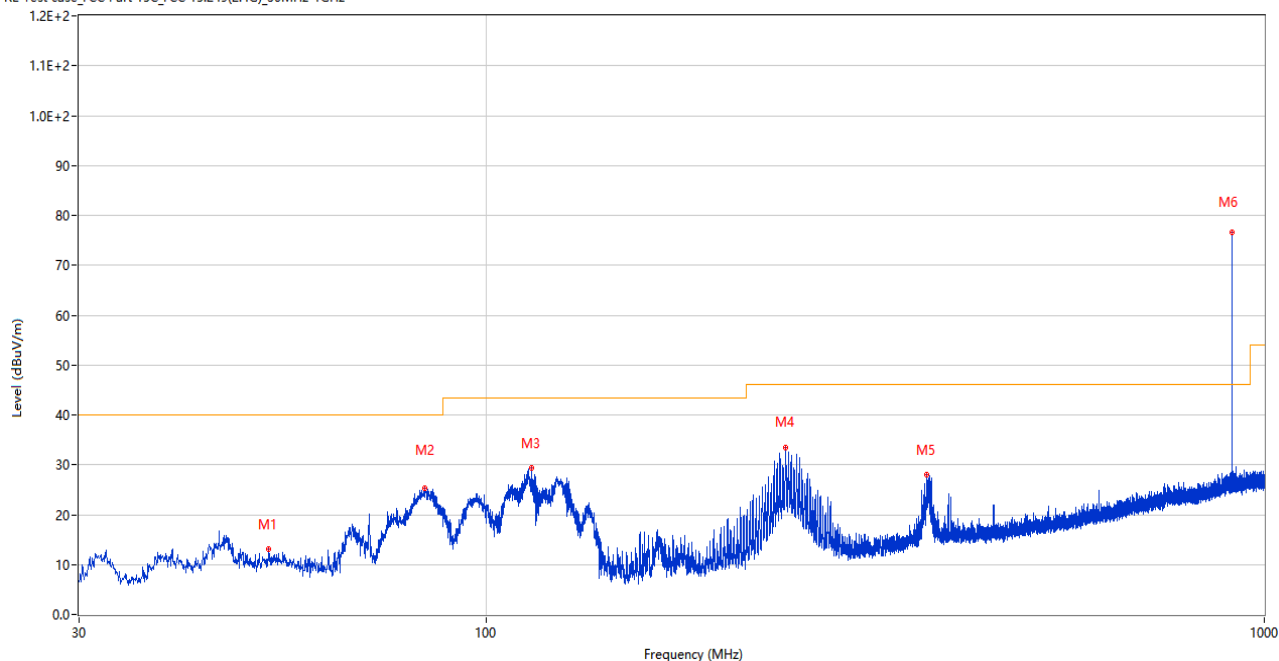


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	53.038	36.32	-25.71	40.0	3.68	Peak	197.00	300	Vertical	Pass
2	101.052	33.04	-27.30	43.5	10.46	Peak	15.00	150	Vertical	Pass
3	159.446	26.81	-30.12	43.5	16.69	Peak	20.00	100	Vertical	Pass
4	245.680	26.04	-25.67	46.0	19.96	Peak	214.00	300	Vertical	Pass
5	392.780	28.82	-21.40	46.0	17.18	Peak	163.00	150	Vertical	Pass
6	916.047	78.47	-10.14	94.0	15.53	Peak	302.00	200	Vertical	Pass

Adapter Power Supply

Low Channel 30 MHz to 1 GHz, ANT H

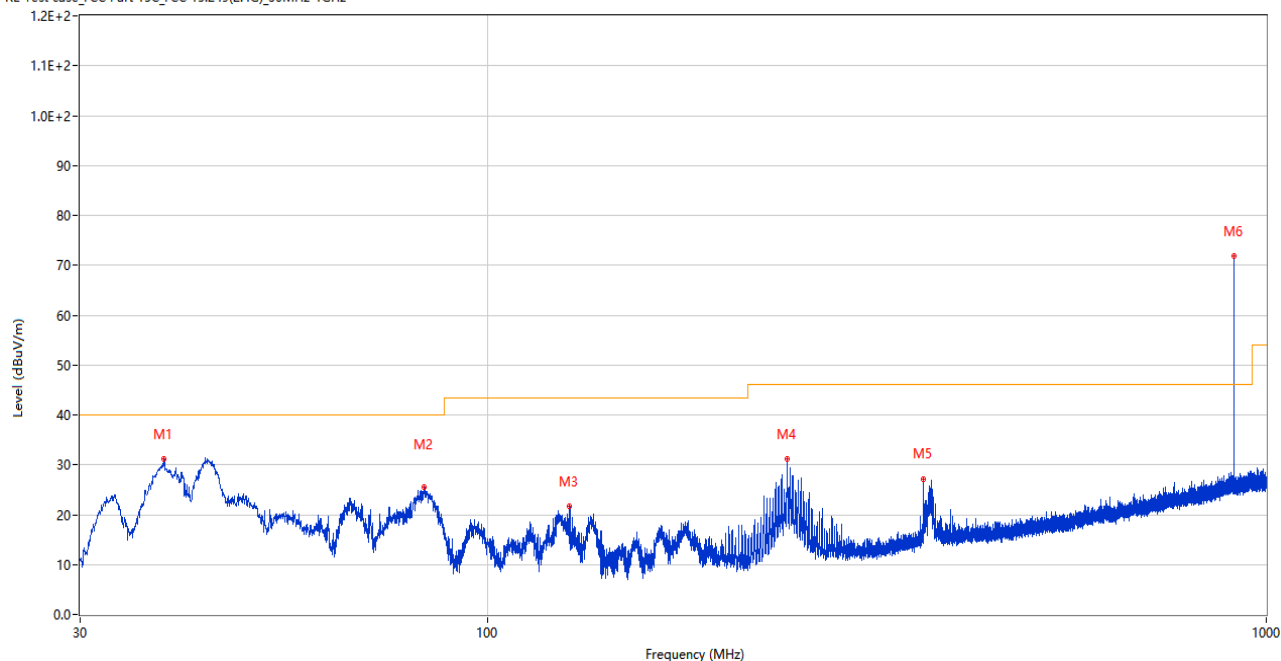
RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	52.553	13.11	-25.75	40.0	26.89	Peak	360.00	100	Horizontal	Pass
2	83.495	25.31	-30.88	40.0	14.69	Peak	154.00	150	Horizontal	Pass
3	114.535	29.30	-28.02	43.5	14.20	Peak	0.00	200	Horizontal	Pass
4	242.624	33.55	-25.48	46.0	12.45	Peak	281.00	100	Horizontal	Pass
5	368.045	28.01	-22.12	46.0	17.99	Peak	125.00	200	Horizontal	Pass
6	908.432	76.65	-10.25	94.0	17.35	Peak	116.00	100	Horizontal	Pass

Low Channel 30 MHz to 1 GHz, ANT V

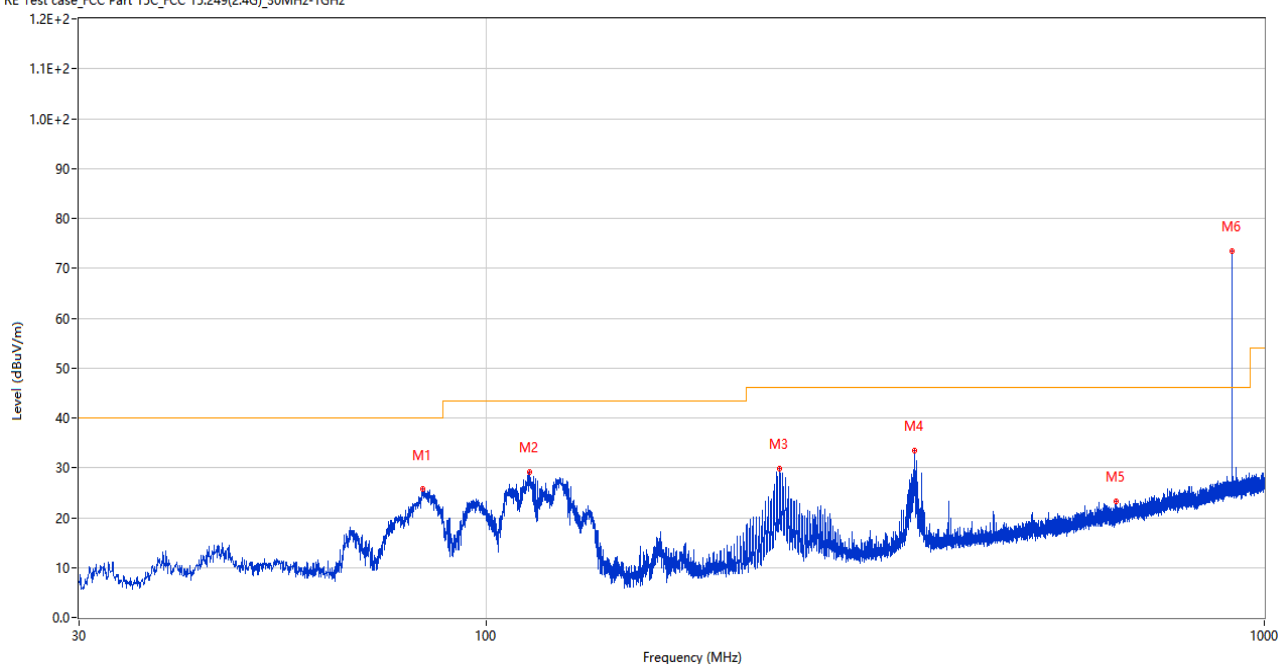
RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	38.439	31.24	-27.13	40.0	8.76	Peak	0.00	100	Vertical	Pass
2	83.010	25.51	-30.79	40.0	14.49	Peak	63.00	150	Vertical	Pass
3	127.582	21.70	-30.26	43.5	21.80	Peak	88.00	200	Vertical	Pass
4	242.527	31.17	-25.48	46.0	14.83	Peak	241.00	100	Vertical	Pass
5	363.001	27.23	-22.59	46.0	18.77	Peak	137.00	150	Vertical	Pass
6	908.432	71.83	-10.25	94.0	22.17	Peak	85.00	200	Vertical	Pass

Middle Channel 30 MHz to 1 GHz, ANT H

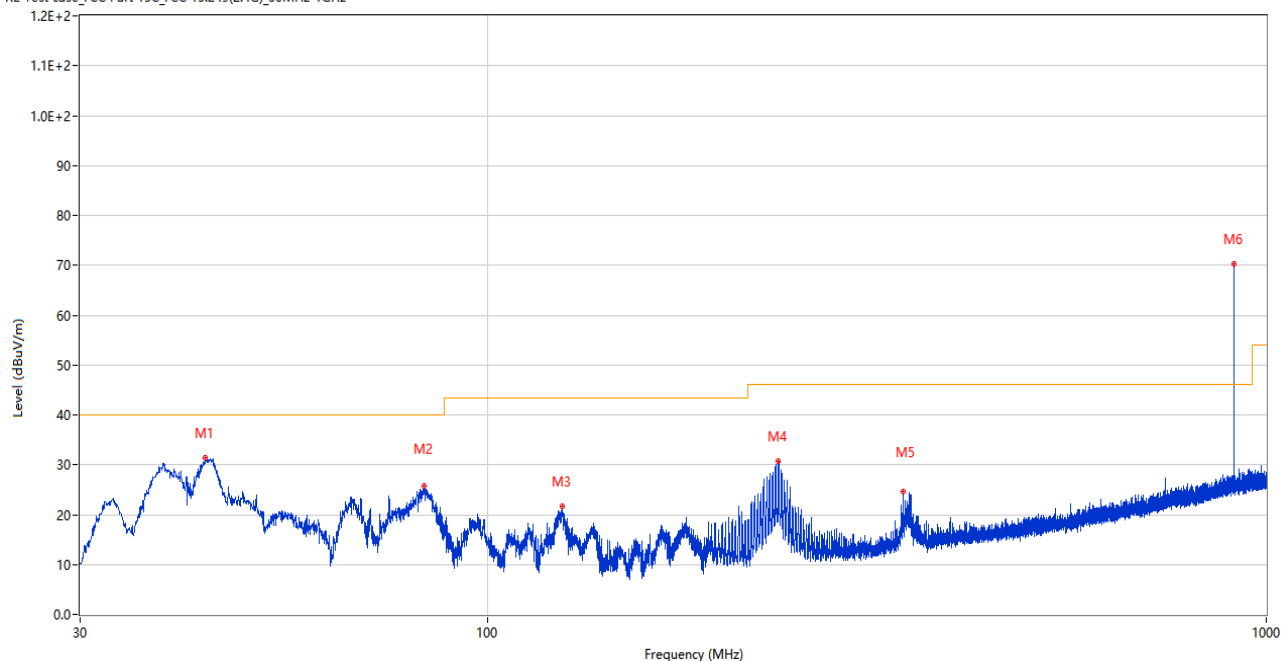
RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	82.962	25.72	-30.83	40.0	14.28	Peak	155.00	150	Horizontal	Pass
2	113.662	29.12	-27.82	43.5	14.38	Peak	177.00	150	Horizontal	Pass
3	238.647	29.90	-25.69	46.0	16.10	Peak	123.00	200	Horizontal	Pass
4	355.726	33.36	-22.28	46.0	12.64	Peak	120.00	100	Horizontal	Pass
5	644.350	23.30	-15.44	46.0	22.70	Peak	275.00	200	Horizontal	Pass
6	908.402	73.50	-10.25	94.0	20.50	Peak	272.00	100	Horizontal	Pass

Middle Channel 30 MHz to 1 GHz, ANT V

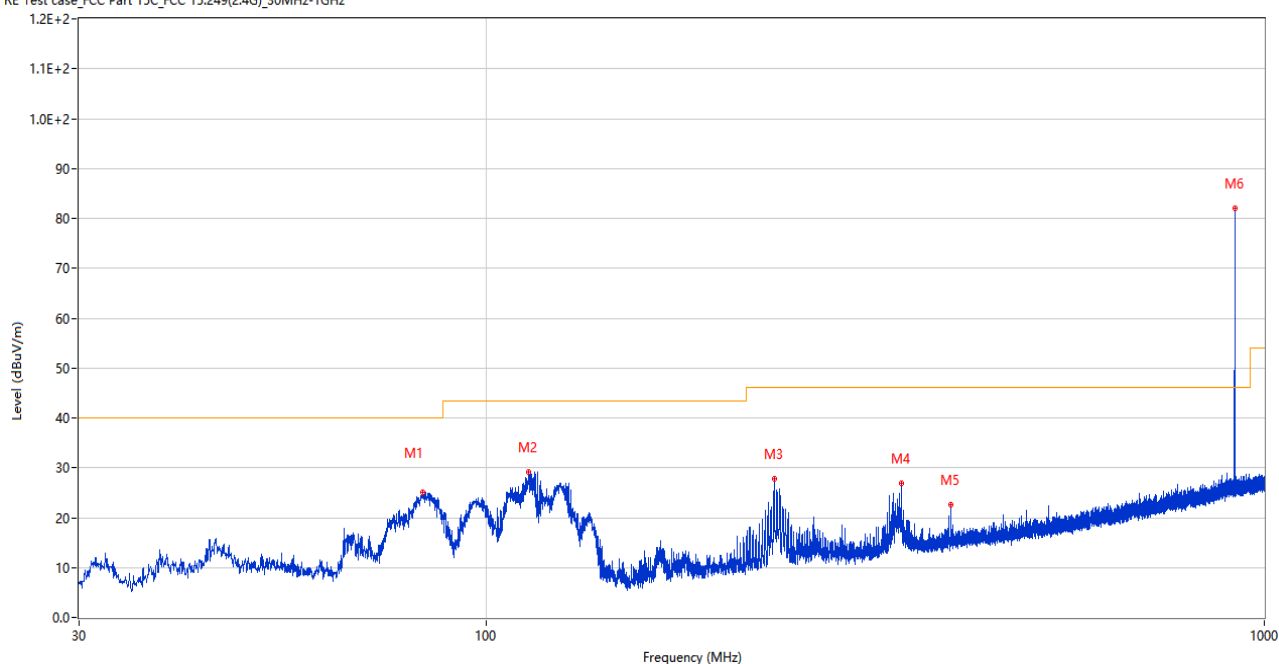
RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	43.483	31.33	-25.88	40.0	8.67	Peak	145.00	150	Vertical	Pass
2	82.962	25.86	-30.83	40.0	14.14	Peak	86.00	200	Vertical	Pass
3	124.623	21.64	-29.79	43.5	21.86	Peak	257.00	100	Vertical	Pass
4	236.513	30.72	-25.90	46.0	15.28	Peak	250.00	200	Vertical	Pass
5	341.564	24.61	-22.45	46.0	21.39	Peak	187.00	100	Vertical	Pass
6	908.402	70.32	-10.25	94.0	23.68	Peak	65.00	200	Vertical	Pass

High Channel 30 MHz to 1 GHz, ANT H

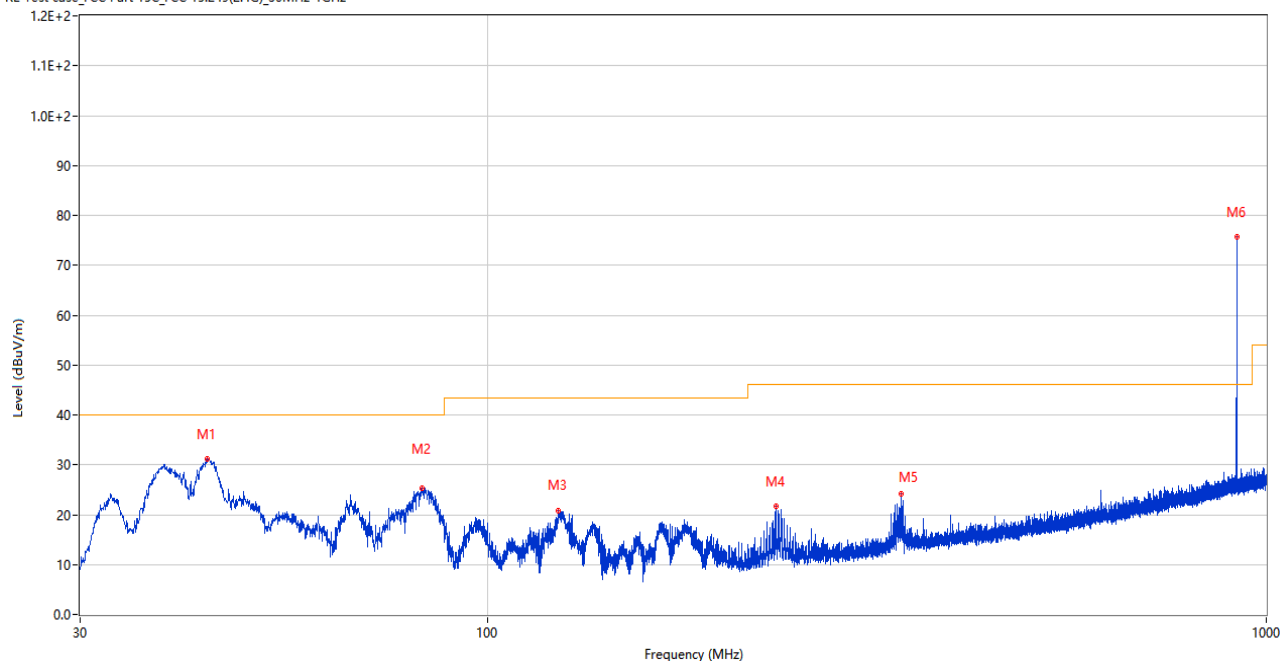
RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	82.816	25.11	-30.94	40.0	14.89	Peak	158.00	150	Horizontal	Pass
2	113.420	29.16	-27.72	43.5	14.34	Peak	356.00	150	Horizontal	Pass
3	234.476	27.79	-25.96	46.0	18.21	Peak	112.00	200	Horizontal	Pass
4	341.467	26.87	-22.44	46.0	19.13	Peak	105.00	100	Horizontal	Pass
5	396.030	22.58	-21.50	46.0	23.42	Peak	61.00	200	Horizontal	Pass
6	915.998	82.02	-10.14	94.0	11.98	Peak	278.00	100	Horizontal	Pass

High Channel 30 MHz to 1 GHz, ANT V

RE Test case_FCC Part 15C_FCC 15.249(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	43.677	31.13	-25.78	40.0	8.87	Peak	147.00	150	Vertical	Pass
2	82.525	25.30	-31.12	40.0	14.70	Peak	71.00	150	Vertical	Pass
3	123.411	20.89	-29.61	43.5	22.61	Peak	244.00	150	Vertical	Pass
4	234.525	21.74	-25.97	46.0	24.26	Peak	288.00	150	Vertical	Pass
5	339.478	24.10	-22.32	46.0	21.90	Peak	176.00	200	Vertical	Pass
6	915.998	75.61	-10.14	94.0	18.39	Peak	288.00	100	Vertical	Pass

Note: The spurious above 12.75G is noise only, do not show on the report.

Test Data and Plots (1 GHz ~ 12.75 GHz)

PoE Splitter Power Supply

1 GHz to 12.75 GHz, ANT H Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2146.700	47.72	-12.77	74.0	26.28	Peak	300.00	150	Horizontal	Pass
1**	2146.700	31.94	-12.77	54.0	22.06	AV	300.00	150	Horizontal	Pass
2	2970.000	45.68	-9.74	74.0	28.32	Peak	300.00	200	Horizontal	Pass
2**	2970.000	40.42	-9.74	54.0	13.58	AV	300.00	200	Horizontal	Pass
3	4454.000	47.77	-3.70	74.0	26.23	Peak	183.00	300	Horizontal	Pass
3**	4454.000	39.70	-3.70	54.0	14.30	AV	183.00	300	Horizontal	Pass
4	5202.250	50.02	-2.58	74.0	23.98	Peak	68.00	150	Horizontal	Pass
4**	5202.250	41.15	-2.58	54.0	12.85	AV	68.00	150	Horizontal	Pass
5	7709.250	53.44	1.90	74.0	20.56	Peak	207.00	150	Horizontal	Pass
5**	7709.250	44.52	1.90	54.0	9.48	AV	207.00	150	Horizontal	Pass
6	11581.263	53.14	-0.85	74.0	20.86	Peak	135.00	200	Horizontal	Pass
6**	11581.263	42.31	-0.85	54.0	11.69	AV	135.00	200	Horizontal	Pass

1 GHz to 12.75 GHz, ANT V Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1897.000	39.61	-15.55	74.0	34.39	Peak	183.00	200	Vertical	Pass
1**	1897.000	30.79	-15.55	54.0	23.21	AV	183.00	200	Vertical	Pass
2	2969.400	44.88	-9.69	74.0	29.12	Peak	276.00	300	Vertical	Pass
2**	2969.400	36.71	-9.69	54.0	17.29	AV	276.00	300	Vertical	Pass
3	4455.500	47.88	-4.29	74.0	26.12	Peak	335.00	150	Vertical	Pass
3**	4455.500	40.13	-4.29	54.0	13.87	AV	335.00	150	Vertical	Pass
4	6163.750	51.25	-1.33	74.0	22.75	Peak	360.00	200	Vertical	Pass
4**	6163.750	41.70	-1.33	54.0	12.30	AV	360.00	200	Vertical	Pass
5	7444.000	54.16	0.70	74.0	19.84	Peak	67.00	200	Vertical	Pass
5**	7444.000	43.32	0.70	54.0	10.68	AV	67.00	200	Vertical	Pass
6	11039.050	51.20	-2.46	74.0	22.80	Peak	239.00	300	Vertical	Pass
6**	11039.050	41.24	-2.46	54.0	12.76	AV	239.00	300	Vertical	Pass

1 GHz to 12.75 GHz, ANT H Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2334.800	45.25	-9.84	74.0	28.75	Peak	276.00	300	Horizontal	Pass
1**	2334.800	36.72	-9.84	54.0	17.28	AV	276.00	300	Horizontal	Pass
2	2969.500	45.32	-9.61	74.0	28.68	Peak	30.00	150	Horizontal	Pass
2**	2969.500	39.43	-9.61	54.0	14.57	AV	30.00	150	Horizontal	Pass
3	5302.750	50.02	-2.76	74.0	23.98	Peak	188.00	150	Horizontal	Pass
3**	5302.750	40.60	-2.76	54.0	13.40	AV	188.00	150	Horizontal	Pass
4	7160.250	52.90	0.25	74.0	21.10	Peak	188.00	200	Horizontal	Pass
4**	7160.250	43.99	0.25	54.0	10.01	AV	188.00	200	Horizontal	Pass
5	7876.500	53.81	1.97	74.0	20.19	Peak	0.00	200	Horizontal	Pass
5**	7876.500	44.11	1.97	54.0	9.89	AV	0.00	200	Horizontal	Pass
6	12375.224	52.46	0.98	74.0	21.54	Peak	67.00	300	Horizontal	Pass
6**	12375.224	43.45	0.98	54.0	10.55	AV	67.00	300	Horizontal	Pass

1 GHz to 12.75 GHz, ANT V Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2243.800	43.59	-12.09	74.0	30.41	Peak	277.00	200	Vertical	Pass
1**	2243.800	33.35	-12.09	54.0	20.65	AV	277.00	200	Vertical	Pass
2	2969.500	45.71	-9.61	74.0	28.29	Peak	69.00	300	Vertical	Pass
2**	2969.500	37.42	-9.61	54.0	16.58	AV	69.00	300	Vertical	Pass
3	4447.750	48.28	-4.08	74.0	25.72	Peak	0.00	150	Vertical	Pass
3**	4447.750	38.25	-4.08	54.0	15.75	AV	0.00	150	Vertical	Pass
4	6891.500	53.32	0.27	74.0	20.68	Peak	296.00	200	Vertical	Pass
4**	6891.500	43.70	0.27	54.0	10.30	AV	296.00	200	Vertical	Pass
5	9843.951	50.53	-2.71	74.0	23.47	Peak	261.00	300	Vertical	Pass
5**	9843.951	40.93	-2.71	54.0	13.07	AV	261.00	300	Vertical	Pass
6	11712.125	52.09	-0.44	74.0	21.91	Peak	356.00	150	Vertical	Pass
6**	11712.125	42.59	-0.44	54.0	11.41	AV	356.00	150	Vertical	Pass

1 GHz to 12.75 GHz, ANT H High Channel

No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2438.400	45.33	-9.92	74.0	28.67	Peak	129.00	150	Horizontal	Pass
1**	2438.400	35.21	-9.92	54.0	18.79	AV	129.00	150	Horizontal	Pass
2	2969.700	46.78	-9.48	74.0	27.22	Peak	112.00	200	Horizontal	Pass
2**	2969.700	41.71	-9.48	54.0	12.29	AV	112.00	200	Horizontal	Pass
3	4183.750	47.97	-5.27	74.0	26.03	Peak	315.00	200	Horizontal	Pass
3**	4183.750	37.73	-5.27	54.0	16.27	AV	315.00	200	Horizontal	Pass
4	5352.750	50.86	-2.78	74.0	23.14	Peak	315.00	300	Horizontal	Pass
4**	5352.750	41.85	-2.78	54.0	12.15	AV	315.00	300	Horizontal	Pass
5	6798.000	53.43	-1.14	74.0	20.57	Peak	17.00	200	Horizontal	Pass
5**	6798.000	41.82	-1.14	54.0	12.18	AV	17.00	200	Horizontal	Pass
6	9423.575	51.06	-2.49	74.0	22.94	Peak	232.00	150	Horizontal	Pass
6**	9423.575	41.36	-2.49	54.0	12.64	AV	232.00	150	Horizontal	Pass

1 GHz to 12.75 GHz, ANT V High Channel

No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2328.000	44.96	-9.54	74.0	29.04	Peak	360.00	200	Vertical	Pass
1**	2328.000	35.61	-9.54	54.0	18.39	AV	360.00	200	Vertical	Pass
2	2969.900	45.37	-9.65	74.0	28.63	Peak	241.00	300	Vertical	Pass
2**	2969.900	38.97	-9.65	54.0	15.03	AV	241.00	300	Vertical	Pass
3	4524.500	48.14	-3.77	74.0	25.86	Peak	69.00	150	Vertical	Pass
3**	4524.500	39.62	-3.77	54.0	14.38	AV	69.00	150	Vertical	Pass
4	6455.000	51.53	-0.66	74.0	22.47	Peak	216.00	200	Vertical	Pass
4**	6455.000	42.77	-0.66	54.0	11.23	AV	216.00	200	Vertical	Pass
5	7872.500	53.34	1.62	74.0	20.66	Peak	143.00	300	Vertical	Pass
5**	7872.500	43.68	1.62	54.0	10.32	AV	143.00	300	Vertical	Pass
6	10750.963	51.82	-1.93	74.0	22.18	Peak	59.00	200	Vertical	Pass
6**	10750.963	41.95	-1.93	54.0	12.05	AV	59.00	200	Vertical	Pass

Adapter Power Supply**1 GHz to 12.75 GHz, ANT H Low Channel**

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1816.700	39.77	-16.86	74.0	34.23	Peak	283.00	400	Horizontal	Pass
1**	1816.700	34.51	-16.86	54.0	19.49	AV	283.00	400	Horizontal	Pass
2	2329.000	44.66	-9.92	74.0	29.34	Peak	2.00	200	Horizontal	Pass
2**	2329.000	35.47	-9.92	54.0	18.53	AV	2.00	200	Horizontal	Pass
3	3275.500	45.64	-8.58	74.0	28.36	Peak	95.00	150	Horizontal	Pass
3**	3275.500	34.56	-8.58	54.0	19.44	AV	95.00	150	Horizontal	Pass
4	4426.500	47.98	-4.49	74.0	26.02	Peak	360.00	150	Horizontal	Pass
4**	4426.500	38.09	-4.49	54.0	15.91	AV	360.00	150	Horizontal	Pass
5	6890.750	52.85	0.31	74.0	21.15	Peak	95.00	200	Horizontal	Pass
5**	6890.750	44.18	0.31	54.0	9.82	AV	95.00	200	Horizontal	Pass
6	11756.537	52.37	-0.19	74.0	21.63	Peak	170.00	100	Horizontal	Pass
6**	11756.537	43.91	-0.19	54.0	10.09	AV	170.00	100	Horizontal	Pass

1 GHz to 12.75 GHz, ANT V Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2616.400	45.60	-9.52	74.0	28.40	Peak	23.00	300	Vertical	Pass
1**	2616.400	36.85	-9.52	54.0	17.15	AV	23.00	300	Vertical	Pass
2	4257.250	47.37	-4.22	74.0	26.63	Peak	265.00	100	Vertical	Pass
2**	4257.250	38.25	-4.22	54.0	15.75	AV	265.00	100	Vertical	Pass
3	6154.000	51.12	-1.57	74.0	22.88	Peak	0.00	200	Vertical	Pass
3**	6154.000	42.27	-1.57	54.0	11.73	AV	0.00	200	Vertical	Pass
4	7426.250	53.15	1.29	74.0	20.85	Peak	162.00	400	Vertical	Pass
4**	7426.250	43.99	1.29	54.0	10.01	AV	162.00	400	Vertical	Pass
5	10483.299	51.66	-1.58	74.0	22.34	Peak	0.00	300	Vertical	Pass
5**	10483.299	42.38	-1.58	54.0	11.62	AV	0.00	300	Vertical	Pass
6	11493.625	52.72	-0.70	74.0	21.28	Peak	214.00	100	Vertical	Pass
6**	11493.625	42.37	-0.70	54.0	11.63	AV	214.00	100	Vertical	Pass

1 GHz to 12.75 GHz, ANT H Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1533.100	38.78	-17.15	74.0	35.22	Peak	276.00	150	Horizontal	Pass
1**	1533.100	29.52	-17.15	54.0	24.48	AV	276.00	150	Horizontal	Pass
2	2388.500	44.29	-10.79	74.0	29.71	Peak	312.00	100	Horizontal	Pass
2**	2388.500	34.23	-10.79	54.0	19.77	AV	312.00	100	Horizontal	Pass
3	3161.250	45.19	-8.19	74.0	28.81	Peak	316.00	150	Horizontal	Pass
3**	3161.250	35.06	-8.19	54.0	18.94	AV	316.00	150	Horizontal	Pass
4	4455.000	49.73	-4.50	74.0	24.27	Peak	216.00	150	Horizontal	Pass
4**	4455.000	45.27	-4.50	54.0	8.73	AV	216.00	150	Horizontal	Pass
5	7358.750	53.14	0.94	74.0	20.86	Peak	316.00	400	Horizontal	Pass
5**	7358.750	44.11	0.94	54.0	9.89	AV	316.00	400	Horizontal	Pass
6	11519.513	51.82	-0.84	74.0	22.18	Peak	250.00	200	Horizontal	Pass
6**	11519.513	42.51	-0.84	54.0	11.49	AV	250.00	200	Horizontal	Pass

1 GHz to 12.75 GHz, ANT V Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2341.900	45.02	-9.90	74.0	28.98	Peak	22.00	300	Vertical	Pass
1**	2341.900	35.61	-9.90	54.0	18.39	AV	22.00	300	Vertical	Pass
2	3067.000	45.45	-7.52	74.0	28.55	Peak	36.00	150	Vertical	Pass
2**	3067.000	36.73	-7.52	54.0	17.27	AV	36.00	150	Vertical	Pass
3	4455.250	48.79	-4.38	74.0	25.21	Peak	21.00	300	Vertical	Pass
3**	4455.250	43.05	-4.38	54.0	10.95	AV	21.00	300	Vertical	Pass
4	5324.750	51.70	-2.84	74.0	22.30	Peak	304.00	150	Vertical	Pass
4**	5324.750	40.76	-2.84	54.0	13.24	AV	304.00	150	Vertical	Pass
5	7505.000	53.87	-0.08	74.0	20.13	Peak	0.00	100	Vertical	Pass
5**	7505.000	43.56	-0.08	54.0	10.44	AV	0.00	100	Vertical	Pass
6	11752.974	52.27	-0.19	74.0	21.73	Peak	0.00	400	Vertical	Pass
6**	11752.974	43.76	-0.19	54.0	10.24	AV	0.00	400	Vertical	Pass

1 GHz to 12.75 GHz, ANT H High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1380.000	41.69	-17.16	74.0	32.31	Peak	112.00	100	Horizontal	Pass
1**	1380.000	29.24	-17.16	54.0	24.76	AV	112.00	100	Horizontal	Pass
2	2320.900	44.83	-10.01	74.0	29.17	Peak	239.00	200	Horizontal	Pass
2**	2320.900	36.07	-10.01	54.0	17.93	AV	239.00	200	Horizontal	Pass
3	3858.500	45.48	-6.73	74.0	28.52	Peak	56.00	150	Horizontal	Pass
3**	3858.500	35.69	-6.73	54.0	18.31	AV	56.00	150	Horizontal	Pass
4	4455.000	48.94	-4.50	74.0	25.06	Peak	199.00	150	Horizontal	Pass
4**	4455.000	42.19	-4.50	54.0	11.81	AV	199.00	150	Horizontal	Pass
5	7599.500	53.42	1.09	74.0	20.58	Peak	360.00	200	Horizontal	Pass
5**	7599.500	43.50	1.09	54.0	10.50	AV	360.00	200	Horizontal	Pass
6	11504.550	52.17	-0.65	74.0	21.83	Peak	189.00	100	Horizontal	Pass
6**	11504.550	43.16	-0.65	54.0	10.84	AV	189.00	100	Horizontal	Pass

1 GHz to 12.75 GHz, ANT V High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1310.800	38.56	-17.05	74.0	35.44	Peak	360.00	300	Vertical	Pass
1**	1310.800	28.09	-17.05	54.0	25.91	AV	360.00	300	Vertical	Pass
2	2348.800	44.80	-9.88	74.0	29.20	Peak	309.00	100	Vertical	Pass
2**	2348.800	34.78	-9.88	54.0	19.22	AV	309.00	100	Vertical	Pass
3	3582.250	46.16	-7.00	74.0	27.84	Peak	18.00	200	Vertical	Pass
3**	3582.250	37.43	-7.00	54.0	16.57	AV	18.00	200	Vertical	Pass
4	6183.750	51.01	-1.41	74.0	22.99	Peak	319.00	400	Vertical	Pass
4**	6183.750	42.11	-1.41	54.0	11.89	AV	319.00	400	Vertical	Pass
5	7759.000	52.86	1.62	74.0	21.14	Peak	238.00	300	Vertical	Pass
5**	7759.000	44.24	1.62	54.0	9.76	AV	238.00	300	Vertical	Pass
6	11717.588	52.29	-0.40	74.0	21.71	Peak	218.00	100	Vertical	Pass
6**	11717.588	43.94	-0.40	54.0	10.06	AV	218.00	100	Vertical	Pass

A.4 Band Edge (Restricted-band band-edge)

Note ¹: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

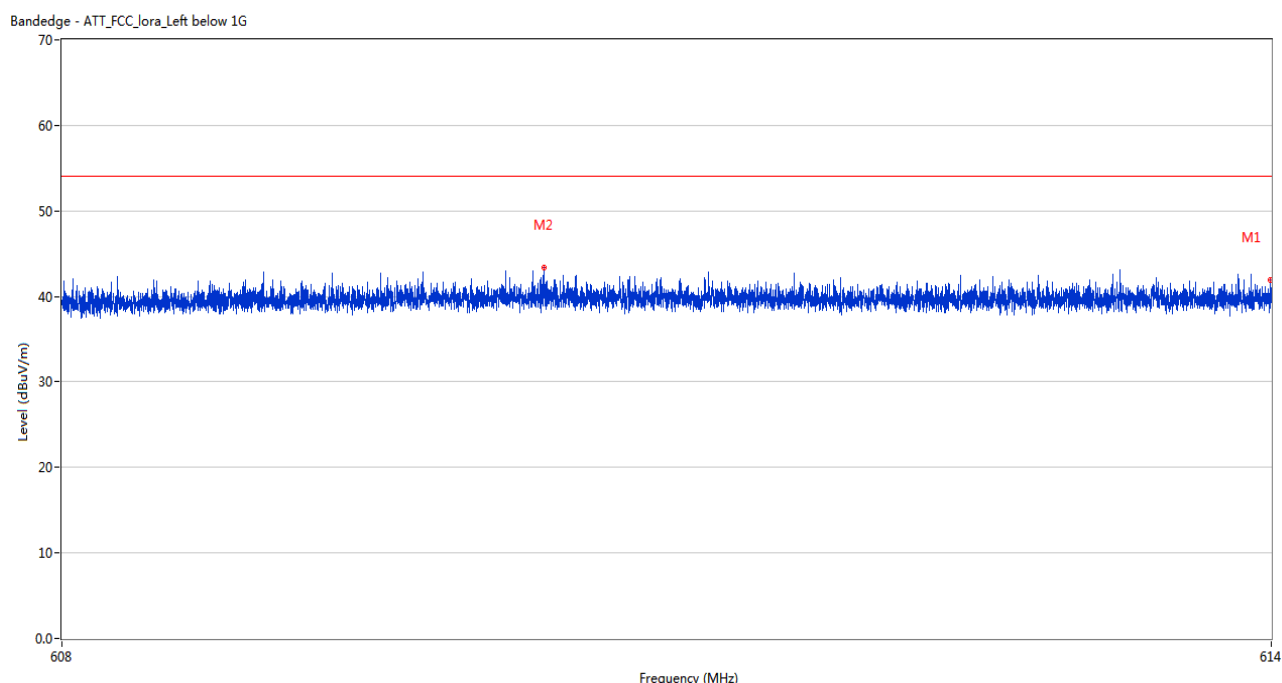
Note ²: The test data all are tested in the vertical and horizontal antenna which the trace is max hold. So these plots have shown the worst case.

Note ³: According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Test Data and Plots

PoE Splitter Power Supply

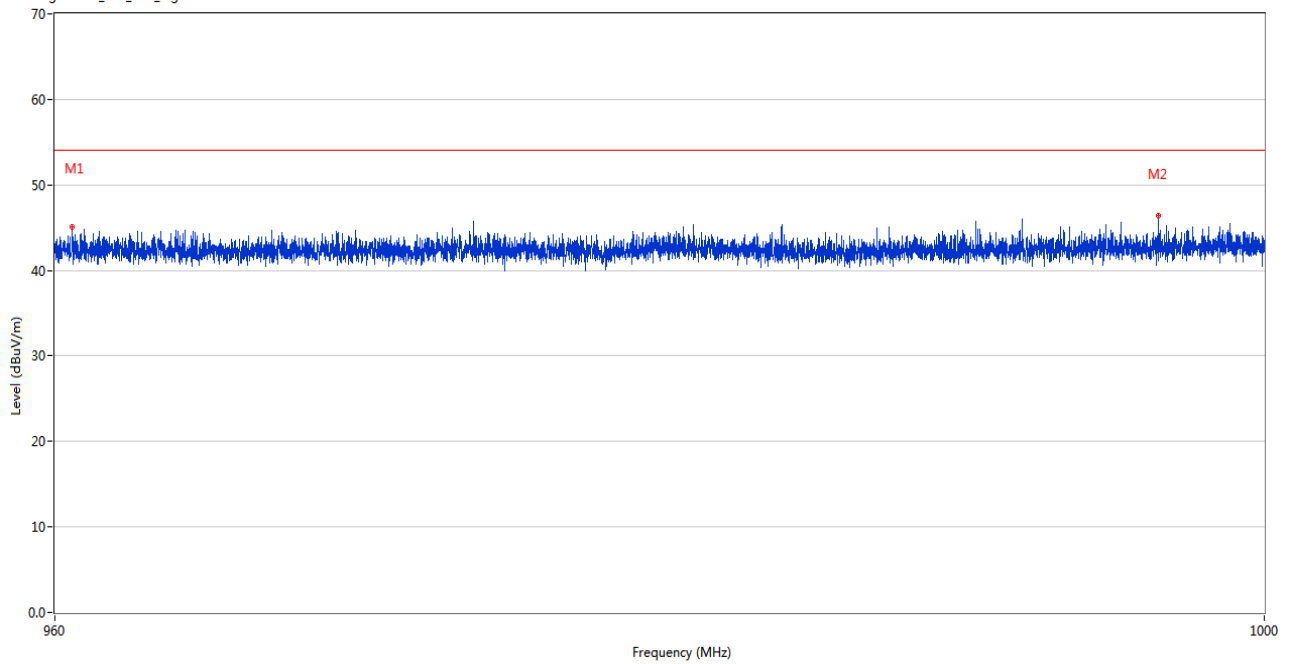
LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	613.997	41.96	6.27	54.0	12.04	Peak	32.00	100	Horizontal	Pass
2	610.383	43.36	6.46	54.0	10.64	Peak	10.00	200	Horizontal	Pass

HIGH CHANNEL

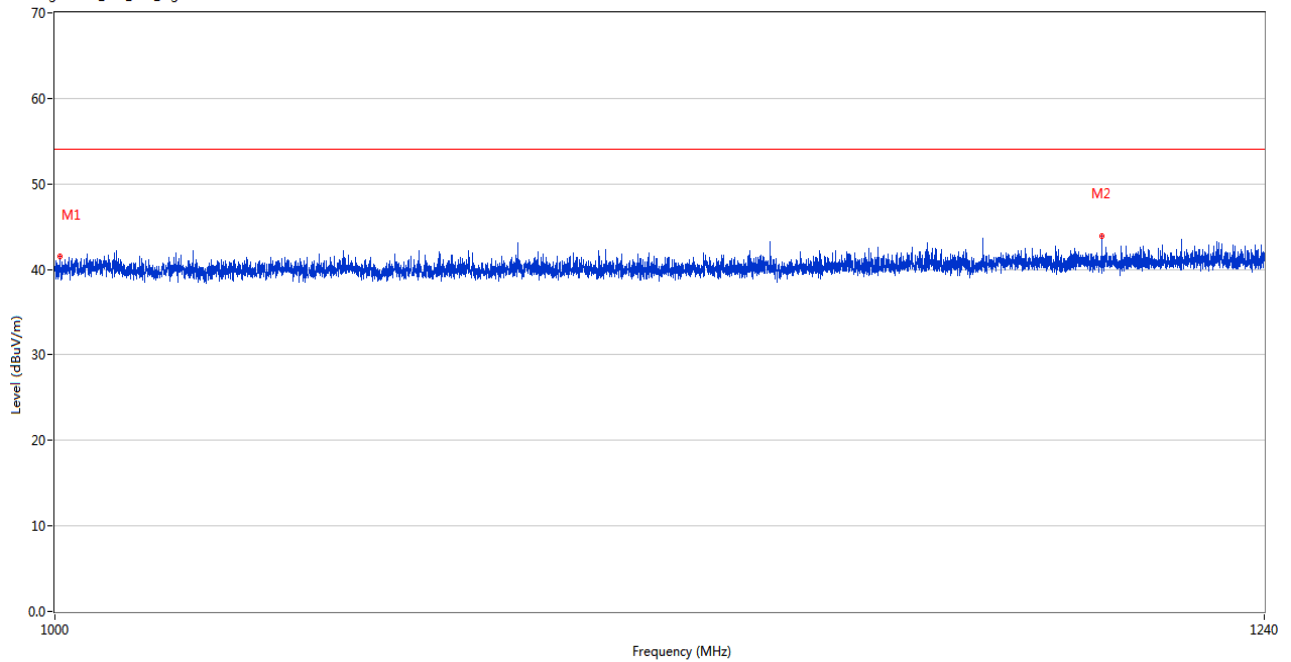
Bandedge - ATT_FCC_lora_Right below 1G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	960.547	45.06	9.56	54.0	8.94	Peak	322.00	100	Horizontal	Pass
2	996.447	46.34	9.87	54.0	7.66	Peak	231.00	150	Horizontal	Pass

HIGH CHANNEL

Bandedge - ATT_FCC_lora_Right above 1G

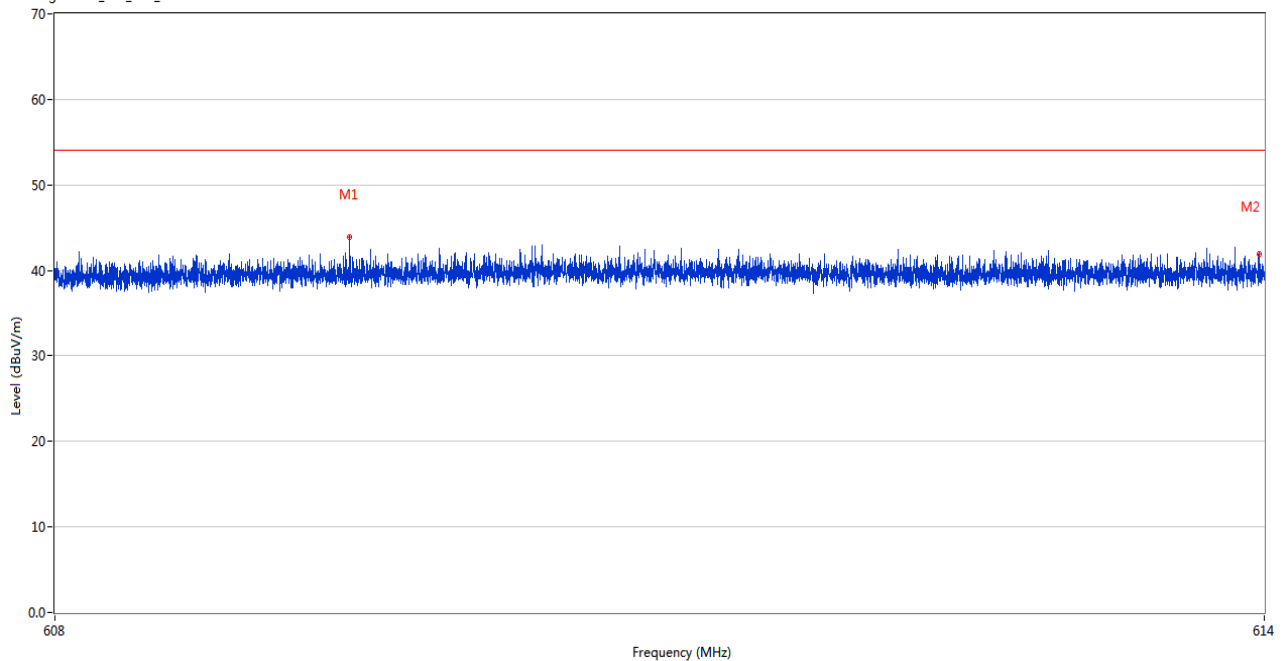


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.840	41.49	-12.56	54.0	12.51	Peak	20.00	150	Horizontal	Pass
2	1204.720	43.93	-12.44	54.0	10.07	Peak	34.00	100	Horizontal	Pass

Adapter Power Supply

LOW CHANNEL

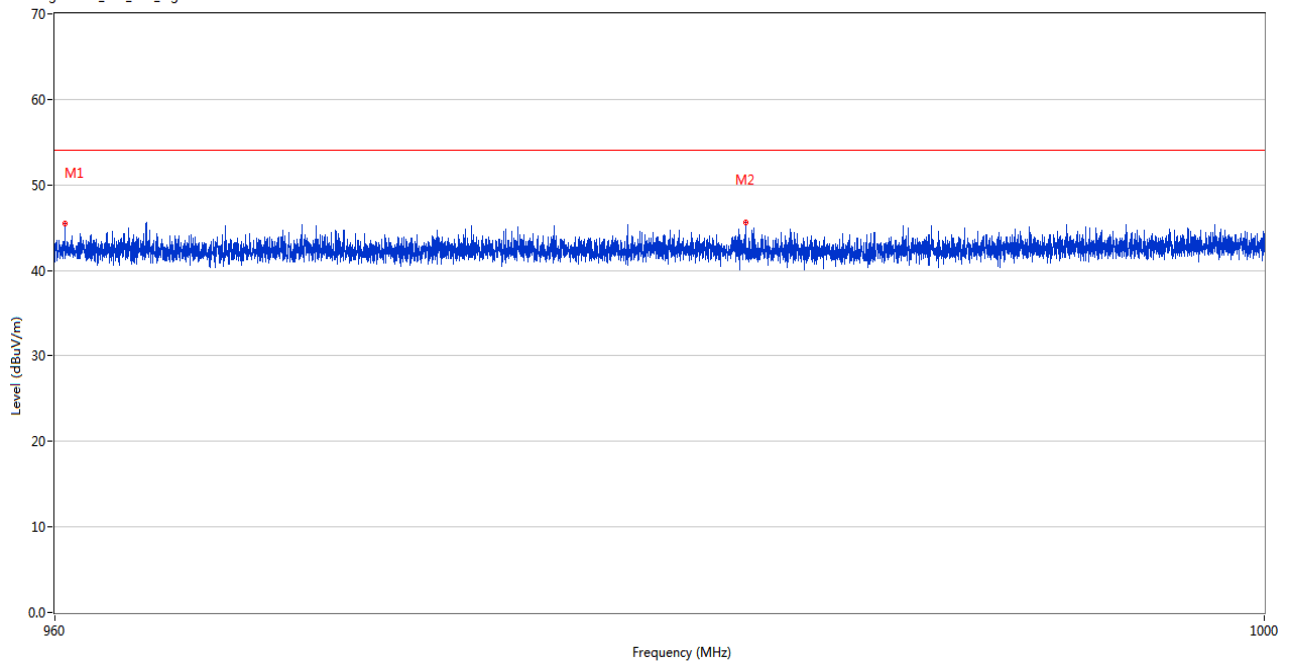
Bandedge - ATT_FCC_lora_Left below 1G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	609.458	43.86	6.24	54.0	10.14	Peak	30.00	100	Horizontal	Pass
2	613.975	41.91	6.27	54.0	12.09	Peak	60.00	150	Horizontal	Pass

HIGH CHANNEL

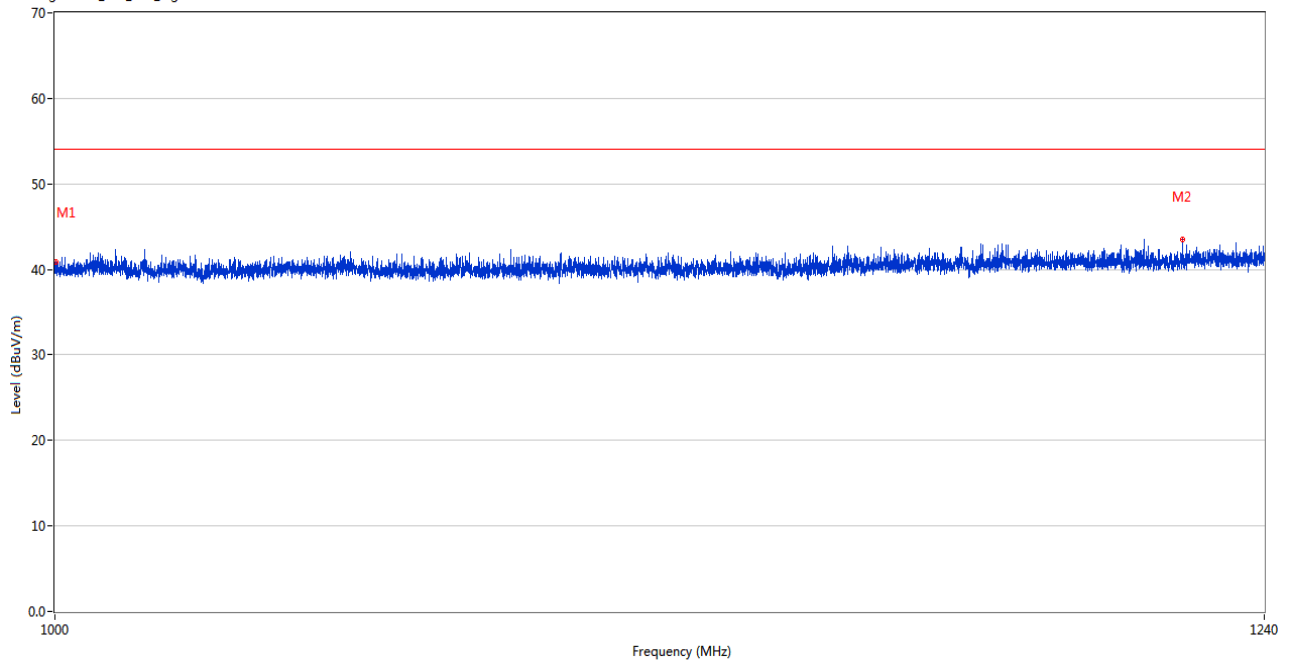
Bandedge - ATT_FCC_lora_Right below 1G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	960.327	45.47	9.58	54.0	8.53	Peak	20.00	150	Horizontal	Pass
2	982.660	45.65	9.51	54.0	8.35	Peak	31.00	100	Horizontal	Pass

HIGH CHANNEL

Bandedge - ATT_FCC_lora_Right above 1G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.200	40.81	-12.64	54.0	13.19	Peak	310.00	150	Horizontal	Pass
2	1222.160	43.54	-12.37	54.0	10.46	Peak	160.00	150	Horizontal	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2420071-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2420071-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2420071-AI.PDF”.

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