

FCC/ISED
RF
TESTREPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
Smart Phone

ISSUED TO
Xplore Technologies Corp.

8601 Ranch Rd. 2222, Building 2, Austin, TX 78730 USA



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Date: Apr. 25, 2018

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Date: Apr. 25, 2018

Report No.: BL-EC1830166-604
EUT Name: Smart Phone
Model Name: M6
Brand Name: xplode
Test Standard: 47 CFR Part 15 Subpart E
RSS-Gen (Issue 4, November 2014)
RSS-247 (Issue 2, February 2017)
FCC ID: Q2GIX006M1
ISED Number: 4596A-IX006M1
Test Conclusion: Pass
Test Date: Mar. 23, 2018 ~ Apr. 20, 2018
Date of Issue: Apr. 25, 2018

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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Apr. 25, 2018</u>	<u>Initial Issue</u>

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1 ADMINISTRATIVE DATA (GENERAL INFORMATION)

1.1 Identification of the Testing Laboratory

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

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196. The laboratory is a testing organization accredited by American Association for Laboratory Accreditation(A2LA) according to ISO/IEC 17025.The accreditation certificate is 4344.01. The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Laboratory Condition

Ambient Temperature	20°C to 25°C
Ambient Relative Humidity	45% to 55%
Ambient Pressure	100 kPa to 102 kPa

1.4 Announce

- (1) The test report reference to the report template version v4.2.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- (5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.
- (6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

2 PRODUCT INFORMATION

2.1 Applicant

Applicant	Xplore Technologies Corp.
Address	8601 Ranch Rd. 2222, Building 2, Austin, TX 78730 USA

2.2 Manufacturer

Manufacturer	Shenzhen UniStrong Science & Technology Co.,Ltd.
Address	B, 4-4Factory, Zhengcheng Road, FuyongBaoan District, Shenzhen, China

2.3 Factory

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	Smart Phone
Model Name Under Test	M6
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	M6_V104
Software Version	M6_V1.0
Dimensions (Approx.)	N/A

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	SJYEnergy
	Model No.	BA7800
	Serial No.	N/A
	Capacity	8000 mAh
	Rated Voltage	3.8 V
	Limit Charge Voltage	4.35 V
Ancillary Equipment 2 Note	Adapter	
	Brand Name	N/A
	Model No.	ASUC71w-050912300
	Serial No.	ASUC71z-050912300 (z= a, e, i, w)
	Rated Input	100-240 V~, 0.7 A, 50/60 Hz
	Rated Output	5 V= 3 A or 9 V= 2 A or 12 V= 1.5 A
Ancillary Equipment 3	USB Cable	
	Length (Approx.)	1.0 m
Note: All adapter are same with electrical parameters and internal circuit structure, but only differ in model name and plug type. Adapter ASUC71w-050912300 was tested in this report.		

2.6 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/900/1800/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 1/2/5/8, 4G Network FDD LTE Band 1/2/3/4/5/7/8/17/20/28 TDD LTE Band 38/40/41 CDMA2000 800 MHz Bluetooth 4.0 (BR+EDR+BLE), WIFI 802.11b, 802.11g and 802.11n (HT20), 802.11ac, GPS, GLONASS, NFC, BDS
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Frequency Range	Band I: 5150 MHz to 5250 MHz, Band IV: 5725 MHz to 5850 MHz
Product Type	☐ Mobile ☒ Portable ☐ Fix Location
Modulation technology	OFDM
Modulation Type	256QAM, 64QAM, 16QAM, BPSK, QPSK
Product Type	Indoor for IC standard Mobile and portable for FCC standard
Transfer Rate (Mbps) (Single RF path)	802.11ac: up to VHT-MCS9
Channel Bandwidth	802.11ac: 20 MHz, 40 MHz, 80 MHz
Maximum Output Power	Band I: 11.22 dBm Band IV: 13.66 dBm
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
Antenna Type	PIFA Antenna
Antenna Gain	Band I: 5150 MHz to 5250 MHz: 1.5 dBi Band IV: 5725 MHz to 5850 MHz: 1.5 dBi
About the Product	The equipment is Smart Phone, intended for used with information technology equipment.

2.7 Additional Instructions

Mode	☒ Special software is used. The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.
------	--

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.

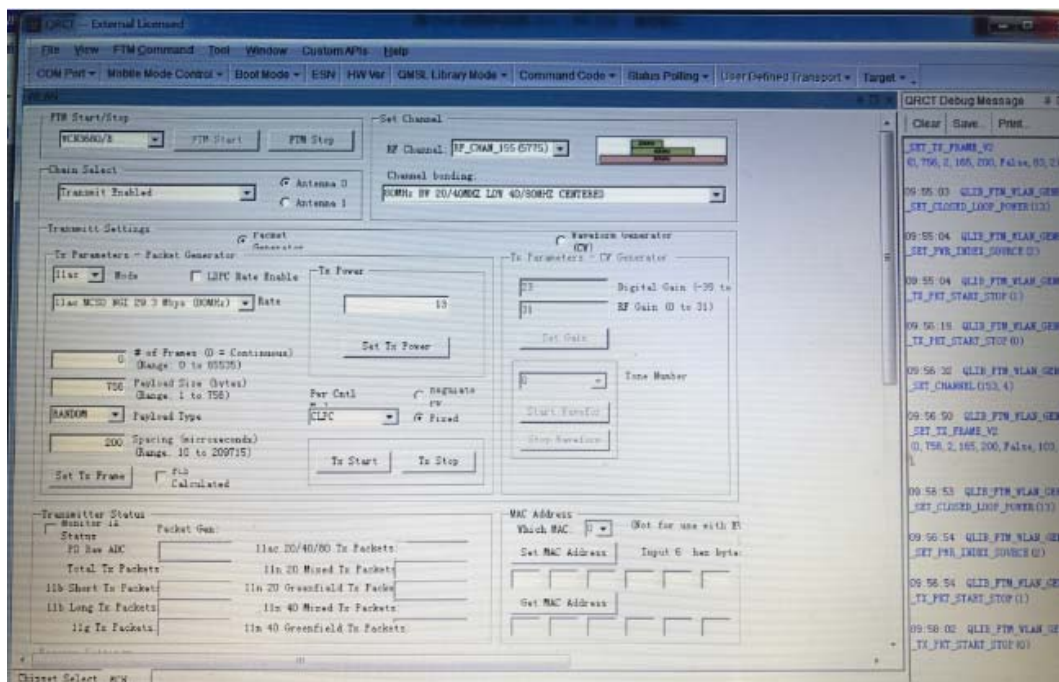
EUT Software Settings:

Test Software Version	QRCT
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Band I (5150 - 5250 MHz) Power level setup in software			
Mode	Channel	Frequency (MHz)	Soft Set
11ac (VHT20)	CH36	5180	13
11ac (VHT20)	CH44	5220	
11ac (VHT20)	CH48	5240	
11ac (VHT40)	CH38	5190	
11ac (VHT40)	CH46	5230	
11ac (VHT80)	CH42	5210	

Band IV (5725 - 5850 MHz) Power level setup in software			
Mode	Channel	Frequency (MHz)	Soft Set
11ac (VHT20)	CH149	5745	13
11ac (VHT20)	CH157	5785	
11ac (VHT20)	CH165	5825	
11ac (VHT40)	CH151	5755	
11ac (VHT40)	CH159	5795	
11ac (VHT80)	CH155	5775	

Run Software



2.8 Channel List

20 MHz		40 MHz		80 MHz	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230	155	5775
44	5220	151	5755		
48	5240	159	5795		
149	5745				
153	5765				
157	5785				
161	5805				
165	5825				

Note: Until further notice, devices subject to this section shall not be capable of transmitting in the band 5600-5650 MHz. This restriction is for the protection of weather radars operating in this band.

The Lowest frequency, the middle frequency and the highest frequency of channel were selected to perform the test, and the selected channel see below:

For 802.11ac (VHT20)

Band I (5150 - 5250 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
36	Low	5180	149	Low	5745
44	Mid	5220	157	Mid	5785
48	High	5240	165	High	5825

For 802.11ac (VHT40)

Band I (5150 - 5250 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
38	Low	5190	151	Low	5755
46	High	5230	159	High	5795

For 802.11ac (VHT80)

Band I (5150 - 5250 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
42	Low	5210	155	Low	5775

Note: Preliminary tests were performed in different data rate in above table to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Modulation Type	Band I	Band IV
				Channel	Channel
RF Output Power	11ac(20 MHz)	6.5	BPSK	48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	MCS0		42	155
Emission Bandwidth & 99% Occupied Bandwidth	11ac(20 MHz)	6.5	BPSK	48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	VHT-MCS0		42	155
6 dB bandwidth	11ac(20 MHz)	6.5	BPSK	N/A	165/157/149
	11ac(40 MHz)	13.5		N/A	159/151
	11ac(80 MHz)	MCS0		N/A	155
Power Spectral Density	11ac(20 MHz)	6.5	BPSK	48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	MCS0		42	155
Conducted Spurious Emission and Band Edge (Authorized-band)	11ac(20 MHz)	6.5	BPSK	48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	MCS0		42	155
Radiated Spurious Emissions	11ac(20 MHz)	6.5	BPSK	48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	MCS0		42	155
Band Edge (Restricted - band)	11ac(20 MHz)	6.5	BPSK	48/36	165/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	MCS0		42	155
Frequency Stability	Unmodulated	N/A	N/A	N/A	N/A

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart E (10-1-16 Edition)	Unlicensed National Information Infrastructure Devices
2	KDB Publication 789033 D02v01r04	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
3	RSS-Gen (Issue 4, Nov. 2014)	General Requirements for Compliance of Radio Apparatus
4	RSS-247 (Issue 2, February 2017)	Digital Transmission Systems (DTSS), Frequency Hopping Systems(FHSS) and Licence-Exemp Local Area Network (LE-LAN) Devices
5	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

3.2 Verdict

No.	Description	FCC Part No.	RSS Part No.	Test Result	Verdict
1	Antenna Requirement	15.203	RSS-247, 6.2	--	Pass ^{Note1}
2	RF Output Power	15.407(a)	RSS-247, 6.2	ANNEX A.1	Pass
3	Emission Bandwidth & 99% Occupied Bandwidth	15.407(a)	RSS-247, 6.2	ANNEX A.2	Pass
4	6 dB bandwidth	15.407(e)	RSS-247, 6.2	ANNEX A.3	Pass
5	Power Spectral Density	15.407(a)	RSS-247, 6.2	ANNEX A.4	Pass
6	Conducted Emission	15.207	RSS-GEN, 8.8	ANNEX A.5	Pass
7	Conducted Spurious Emission and Band Edge (Authorized-band)	15.407(b) 15.209	RSS-247, 6.2	ANNEX A.6	Pass
8	Radiated Spurious Emissions and Band Edge (Restricted-band)	15.407(b)	RSS-247, 6.2	ANNEX A.7	Pass
9	Frequency Stability	15.407(g)	--	ANNEX A.8	Pass
10	Receiver Spurious Emissions	--	RSS-Gen, 7.1.2	--	N/A ^{Note2}

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

Note ²: Only radio communication receivers operating in stand-alone mode within the band 30-960 MHz, as well as scanner receivers, are subject to Industry Canada requirements, so this test is not applicable

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

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

Relative Humidity	45% to 55%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+22°C to +25°C
	LT (Low Temperature)	-20°C
	HT (High Temperature)	+45°C
Working Voltage of the EUT	NV (Normal Voltage)	3.8 V
	LV (Low Voltage)	3.7 V
	HV (High Voltage)	4.35 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-30	103118	2017.06.12	2018.06.11
Switch Unit with OSP-B157	ROHDE&SCHWARZ	OSP120	101270	2017.06.12	2018.06.11
EMI Receiver	KEYSIGHT	N9038A	MY53220118	2017.09.07	2018.09.06
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2017.06.22	2018.06.21
LISN	SCHWARZBECK	NSLK 8127	8127-687	2017.06.22	2018.06.21
Bluetooth Tester	ROHDE&SCHWARZ	CBT	101005	2017.06.12	2018.06.11
Power Splitter	KMW	DCPD-LDC	1305003215	--	--
Power Sensor	ROHDE&SCHWARZ	NRP-Z21	103971	2017.06.12	2018.06.11
Attenuator (20 dB)	KMW	ZA-S1-201	110617091	--	--
Attenuator (6 dB)	KMW	ZA-S1-61	1305003189	--	--
DC Power Supply	ROHDE&SCHWARZ	HMP2020	018141664	2017.06.22	2018.06.21
Temperature Chamber	ANGELANTIONI SCIENCE	NTH64-40A	1310	2017.06.22	2018.06.21
Test Antenna- Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2017.06.22	2018.06.21
Test Antenna- Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	9163-624	2017.11.07	2019.11.08
Test Antenna- Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	9120D-1148	2017.07.22	2019.07.21
Test Antenna- Horn(15-26.5 GHz)	SCHWARZBECK	BBHA 9170	9170-305	2016.07.12	2018.07.11
Test Antenna- Horn (18-40 GHz)	A-INFO	LB- 180400KF	J211060273	2017.01.07	2019.01.06
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2017.02.21	2019.02.20
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60 *7.35m	N/A	2016.08.09	2018.08.08
Shielded Enclosure	ChangNing	CN-130701	130703	--	--
Signal Generator	ROHDE&SCHWARZ	SMB100A	177746	2017.06.12	2018.06.11
Power Amplifier	OPHIR RF	5225F	1037	2018.02.17	2019.02.16

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Power Amplifier	OPHIR RF	5273F	1016	2018.02.17	2019.02.16
Directional Coupler	Werlantone	C5982-10	109275	N/A	N/A
Directional Coupler	Werlantone	CHP-273E	S00801z-01	N/A	N/A
Feld Strength Meter	Narda	EP601	511WX51129	2017.05.22	2018.05.21
Mouth Simulator	B&K	4227	2423931	2017.11.16	2018.11.15
Sound Calibrator	B&K	4231	2430337	2017.11.16	2018.11.15
Sound Level Meter	B&K	NL-20	00844023	2017.11.16	2018.11.15
Ear Simulator	B&K	4185	2409449	2017.11.16	2018.11.15
Ear Simulator	B&K	4195	2418189	2017.11.16	2018.11.15
Audio analyzer	B&K	UPL 16	100129	2017.11.16	2018.11.15

4.3 Measurement Uncertainty

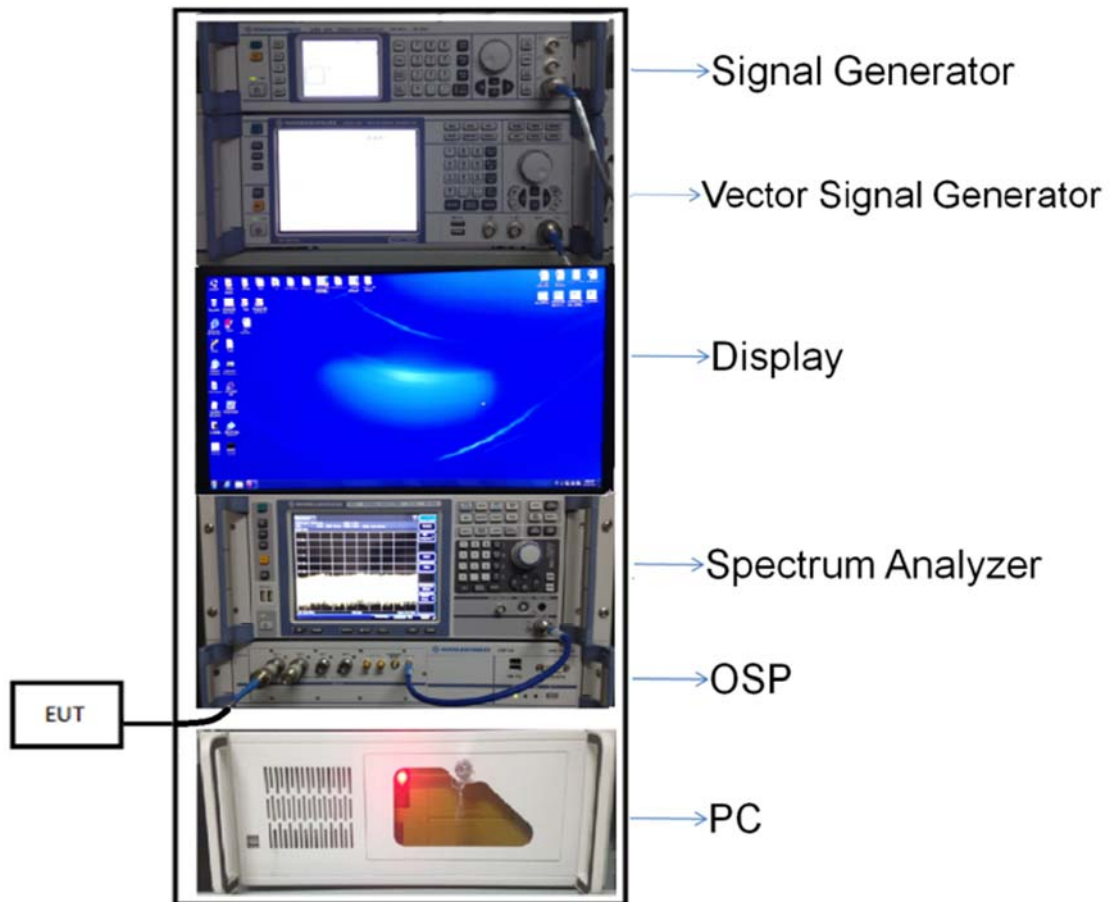
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

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

Measurement	Value
Occupied Channel Bandwidth	±4%
RF output power, conducted	±1.4 dB
Power Spectral Density, conducted	±2.5 dB
Unwanted Emissions, conducted	±2.8 dB
All emissions, radiated	±5.4 dB
Temperature	±1°C
Humidity	±4%

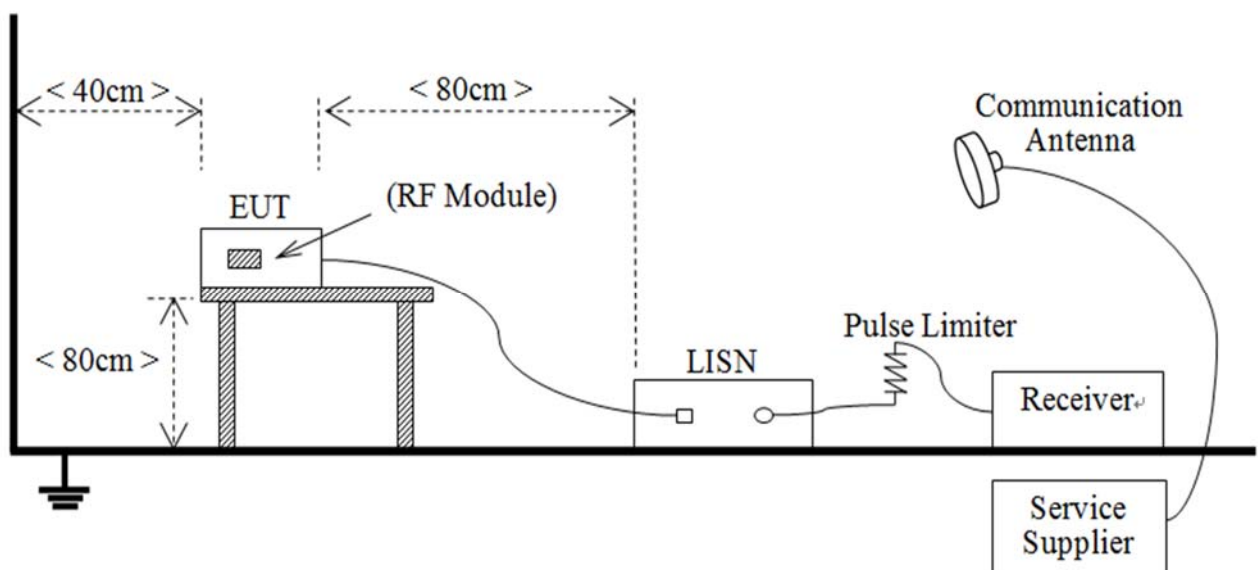
4.4 Description of Test Setup

4.4.1 For Antenna Port Test



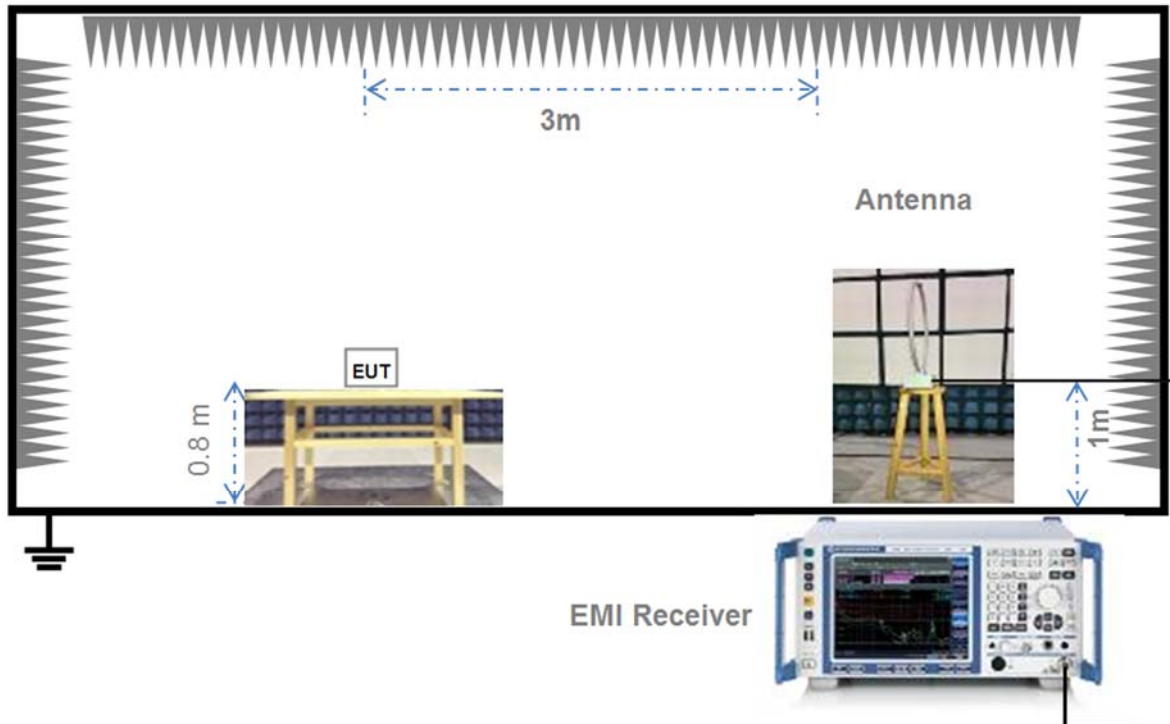
(Diagram 1)

4.4.2 For AC Power Supply Port Test



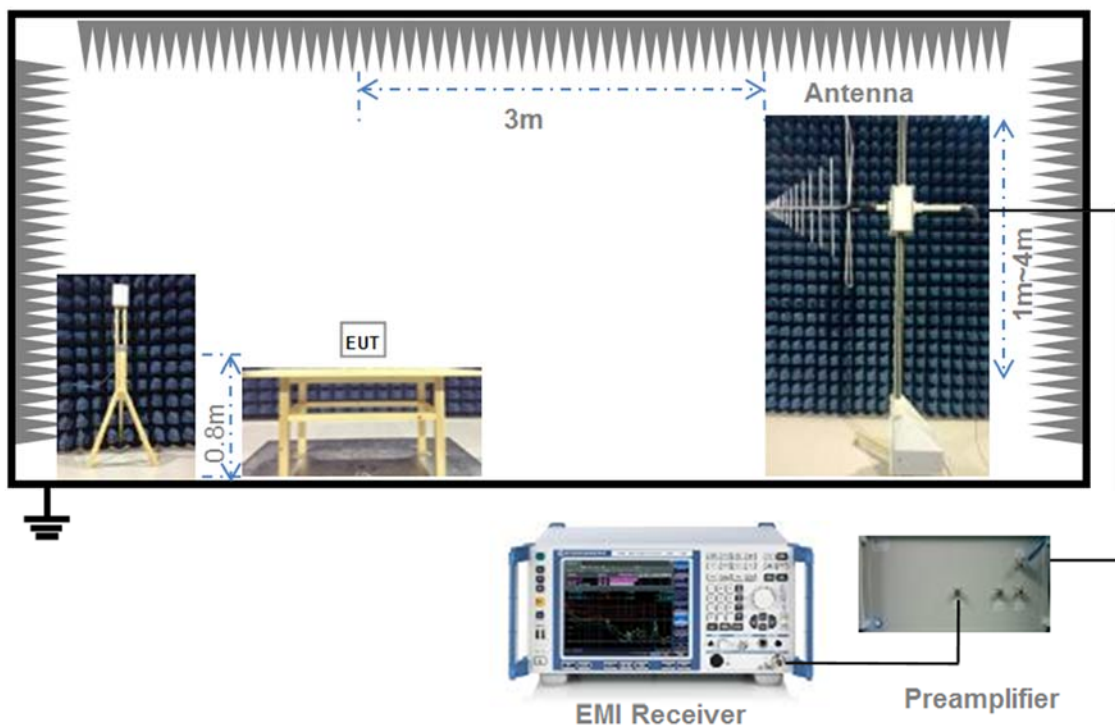
(Diagram 2)

4.4.3 For Radiated Test (Below 30 MHz)



(Diagram 3)

4.4.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

The diagram illustrates the experimental setup for EMI testing. It features a yellow EUT (Equipment Under Test) on a table, a yellow antenna on a stand, and a spectrum analyzer connected to a preamplifier. Dimensions are indicated: 3m between the EUT and antenna, 1.5m height of the EUT, and 1m~4m height of the antenna. The setup is enclosed in a shielded box with a ground symbol.

Common Antenna

Temperature Chamber

EUT

System Simulator

DC Power Supply

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5 TEST ITEMS

5.1 RF Output Power

5.1.1 Test Limit

FCC §15.407(a)

The maximum conducted output power should not exceed:

Frequency Band (MHz)	Limit
5150-5250	250 mW
5250-5350	250 mW or 11 dBm + 10log B, whichever is less.
5470-5725	250 mW or 11 dBm + 10log B, whichever is less.
5725-5850	1 W
Note: Where "B" is the 26 dB emissions bandwidth in MHz.	

RSS-247, 6.2

The maximum conducted output power shall not exceed:

Frequency Band (MHz)	Limit
5150-5250	N/A
5250-5350	250 mW or 11 dBm + 10log B, whichever is less.
5470-5725	250 mW or 11 dBm + 10log B, whichever is less.
5725-5850	1 W
Note: Where "B" is the 99% emissions bandwidth in MHz.	

The maximum e.i.r.p. shall not exceed:

Frequency Band (MHz)	Limit
5150-5250	200 mW or 10 dBm + 10log B, whichever is less.
5250-5350	1W or 17 dBm + 10log B, whichever is less.
5470-5725	1W or 17 dBm + 10log B, whichever is less.
5725-5850	N/A
Note: Where "B" is the 99% emissions bandwidth in MHz.	

5.1.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.3 Test Procedure

The maximum peak conducted output power may be measured using a broadband Average RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the emission bandwidth and utilize a fast-responding diode detector.

The E.I.R.P used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.

5.1.4 Test Result

Please refer to ANNEX A.1.

5.2 Emission Bandwidth and 6 dB Bandwidth

5.2.1 Limit

FCC §15.407(a), RSS-247, 6.2

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

5.2.2 Test Setup

The test setup photo please refer to 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

Emission bandwidth

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set VBW $\geq 3 \times$ RBW,
3. Detector = Peak.
4. Trace mode = Max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

Occupied Bandwidth

1. Set Span = 1.5 times to 5.0 times the OBW
2. Set RBW = 1% to 5% of the OBW.
3. Set VBW $\geq 3 \times$ RBW, Detector = Peak.
4. Trace mode = Max hold.
5. Use the 99% power bandwidth function of the instrument.

6 dB bandwidth

1. Set RBW = 100 kHz, VBW = 300 kHz.
2. Detector = Peak. Trace mode = Max hold.
3. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.2.4 Test Result

Please refer to ANNEX A.2 and ANNEX A.3.

5.3 Power Spectral density (PSD)

5.3.1 Limit

FCC §15.407(a)

The maximum power spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	11 dBm/MHz
5250-5350	11 dBm/MHz
5470-5725	11 dBm/MHz
5725-5850	30 dBm/500kHz

RSS-247, 6.2

The maximum power spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	N/A
5250-5350	11 dBm/MHz
5470-5725	11 dBm/MHz
5725-5850	30 dBm/500kHz

The e.i.r.p. spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	10 dBm/MHz
5250-5350	N/A
5470-5725	N/A
5725-5850	N/A

5.3.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth.

1. Set RBW = 510 kHz/1 MHz, VBW $\geq 3 \times$ RBW, Sweep time = Auto, Detector = RMS.
2. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak marker function to determine the maximum amplitude level.
4. The E.I.R.P spectral density used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.

5.3.4 Test Result

Please refer to ANNEX A.4.

5.4 Conducted Emission

5.4.1 Limit

FCC §15.207, RSS-GEN, 8.8

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

5.4.2 Test Setup

The section 4.4.2 (Diagram 2) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.4.3 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. Refer to recorded points and plots below.

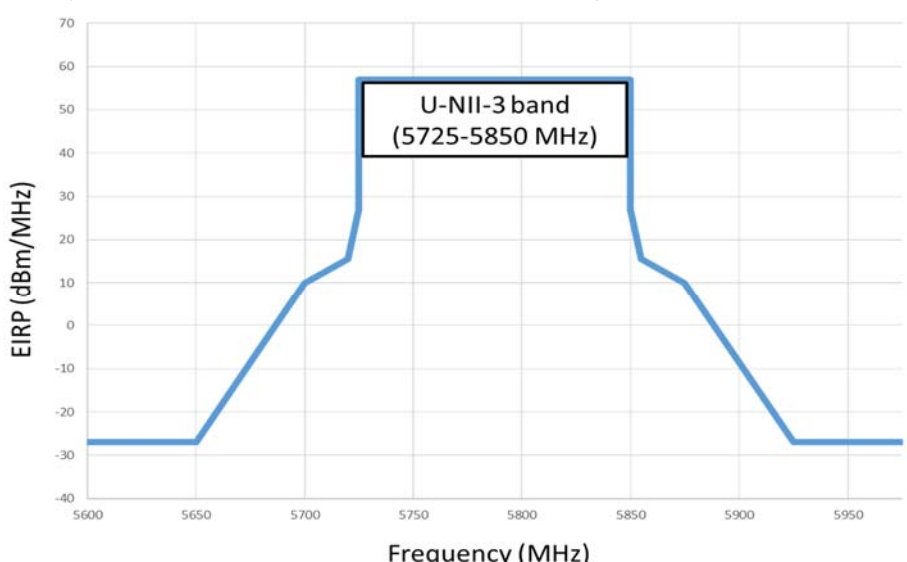
5.4.4 Test Result

Please refer to ANNEX A.5.

5.5 Conducted Spurious Emission and Band Edge (Authorized-band)

5.5.1 Limit

FCC §15.407(b)

Un-restricted band emissions	
Frequency Band (MHz)	Limit
5150 - 5250	Outside of the 5.15-5.35 GHz band: e.i.r.p. -27 dBm
5250 - 5350	Outside of the 5.15-5.35 GHz band: e.i.r.p. -27 dBm
5470 - 5725	Outside of the 5.47-5.725 GHz band: e.i.r.p. -27 dBm
5725 - 5850	All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. 

RSS-247, 6.2

Un-restricted band emissions	
Frequency Band (MHz)	Limit
5150 - 5250	Outside of the 5.15-5.35 GHz band: e.i.r.p. -27 dBm, However, any unwanted emissions that fall into the band 5250-5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz.
5250 - 5350	Outside of the 5.15-5.35 GHz band: e.i.r.p. -27 dBm. And any emissions within the band 5150-5250 MHz shall meet the power spectral density limits of 10 dBm/MHz, The device shall be labelled "for indoor use only."
5470 - 5725	Outside of the 5.47-5.725 GHz band: e.i.r.p. -27 dBm
5725 - 5850	5715 -5725 MHz: e.i.r.p. -17 dBm 5850 -5860 MHz: e.i.r.p. -17 dBm Other un-restricted band: e.i.r.p. -27 dBm

5.5.2 Test Setup

See section 4.4.2 (Diagram 2) for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.

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

Allow the trace to stabilize

5.5.4 Test Result

Please refer to ANNEX A.6.

5.6 Radiated Spurious Emissions and Band Edge (Restricted-band)

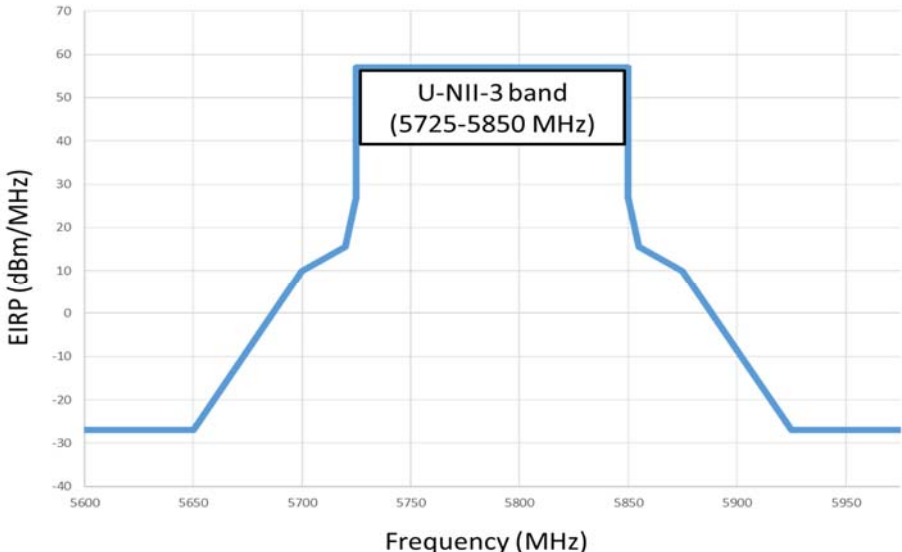
5.6.1 Limit

FCC §15.209 & 15.407(b), RSS-247, 6.2

Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	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

Note¹: The Limit for radiated test was performed according to FCC Part 15C

Note²: The tighter limit applies at the band edge.

Un-restricted band emissions	
Out Operating Band (MHz)	Limit
5150 - 5250	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5250 - 5350	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5470 - 5725	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5725 - 5850	All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. 

Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength.

5.6.2 Test Setup

The section 4.4.3-4.4.5 (Diagram 3 - Diagram 5) test setup description was used for this test. The photo of test

setup please refer to ANNEX B.

5.6.3 Test Procedure

Since the emission limits are specified in terms of radiated field strength levels, measurements performed to demonstrate compliance have traditionally relied on a radiated test configuration. Radiated measurements remain the principal method for demonstrating compliance to the specified limits; however antenna-port conducted measurements are also now acceptable to demonstrate compliance (see below for details). When radiated measurements are utilized, test site requirements and procedures for maximizing and measuring radiated emissions that are described in ANSI C63.10 shall be followed.

Antenna-port conducted measurements may also be used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case spurious emissions is required.

General Procedure for conducted measurements in restricted bands

- a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see guidance on determining the applicable antenna gain)
- c) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).
- d) For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).
- e) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

$$E = \text{EIRP} - 20 \log D + 104.8$$

where:

E = electric field strength in dB μ V/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

- f) Compare the resultant electric field strength level to the applicable limit.
- g) Perform radiated spurious emission test.

Quasi-Peak measurement procedure

The specifications for measurements using the CISPR quasi-peak detector can be found in Publication 16 of the International Special Committee on Radio Frequency Interference (CISPR) of the International Electrotechnical Commission.

As an alternative to CISPR quasi-peak measurement, compliance can be demonstrated to the applicable emission limits using a peak detector.

Peak power measurement procedure

Peak emission levels are measured by setting the instrument as follows:

- a) RBW = as specified in Table 1.
- b) VBW $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Sweep time = auto.
- e) Trace mode = max hold.
- f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be longer for low duty cycle applications).

Table 1—RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

Trace averaging across on and off times of the EUT transmissions followed by duty cycle correction

If continuous transmission of the EUT (i.e., duty cycle ≥ 98 percent) cannot be achieved and the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent), then the following procedure shall be used:

- a) The EUT shall be configured to operate at the maximum achievable duty cycle.
- b) Measure the duty cycle, x , of the transmitter output signal as described in section 6.0.
- c) RBW = 1 MHz (unless otherwise specified).
- d) VBW $\geq 3 \times$ RBW.
- e) Detector = RMS, if $\text{span}/(\# \text{ of points in sweep}) \leq (\text{RBW}/2)$. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
- f) Averaging type = power (i.e., RMS).
 - 1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
 - 2) Some instruments require linear display mode in order to use linear voltage averaging. Log or dB averaging shall not be used.
- g) Sweep time = auto.
- h) Perform a trace average of at least 100 traces.
- i) A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle. The correction factor is computed as follows:
 - 1) If power averaging (RMS) mode was used in step f), then the applicable correction factor is $10 \log(1/x)$, where x is the duty cycle.
 - 2) If linear voltage averaging mode was used in step f), then the applicable correction factor is $20 \log(1/x)$, where x is the duty cycle.
 - 3) If a specific emission is demonstrated to be continuous (≥ 98 percent duty cycle) rather than turning on and off with the transmit cycle, then no duty cycle correction is required for that emission.

NOTE: Reduction of the measured emission amplitude levels to account for operational duty factor is not permitted. Compliance is based on emission levels occurring during transmission - not on an average across on and off times of the transmitter.

Determining the applicable transmit antenna gain

A conducted power measurement will determine the maximum output power associated with a restricted band

emission; however, in order to determine the associated EIRP level, the gain of the transmitting antenna (in dBi) must be added to the measured output power (in dBm).

Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.

See KDB 662911 for guidance on calculating the additional array gain term when determining the effective antenna gain for a EUT with multiple outputs occupying the same or overlapping frequency ranges in the same band.

Radiated spurious emission test

An additional consideration when performing conducted measurements of restricted band emissions is that unwanted emissions radiating from the EUT cabinet, control circuits, power leads, or intermediate circuit elements will likely go undetected in a conducted measurement configuration. To address this concern, a radiated test shall be performed to ensure that emissions emanating from the EUT cabinet (rather than the antenna port) also comply with the applicable limits.

For these cabinet radiated spurious emission measurements the EUT transmit antenna may be replaced with a termination matching the nominal impedance of the antenna. Procedures for performing radiated measurements are specified in ANSI C63.10. All detected emissions shall comply with the applicable limits.

The measurement frequency range is from 30 MHz 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

5.6.4 Test Result

Please refer to ANNEX A.7 and Please refer to ANNEX A.9

5.7 Frequency Stability

5.7.1 Limit

FCC §15.407(g)

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

5.7.2 Test Setup

The section 4.4.6 (Diagram 6) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.7.3 Test Procedure

The EUT is installed in an environment test chamber with external power source.

Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.

A sufficient stabilization period at each temperatures is used prior to each frequency measurement.

When temperature is stabled, measure the frequency stability.

The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage.

Change setting of chamber and external power source to complete all conditions.

5.7.4 Test Result

Please refer to ANNEX A.8.

ANNEX A TEST RESULT

A.1 RF Output Power

Note ¹: For FCC standard, if transmitting antennas of directional gain greater than 6 dBi are used, all band maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note ²: For IC standard, the band IV (5725 - 5850 MHz) maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Data

Conducted Power

Band I (5150 - 5250 MHz)						
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power Total (mW)	FCC Limit (mW)	Verdict
11ac (VHT20)	CH36	5180	10.58	11.43	250	Pass
11ac (VHT20)	CH44	5220	11.22	13.24	250	Pass
11ac (VHT20)	CH48	5240	11.00	12.59	250	Pass
11ac (VHT40)	CH38	5190	10.79	11.99	250	Pass
11ac (VHT40)	CH46	5230	11.22	13.24	250	Pass
11ac (VHT80)	CH42	5210	11.09	12.85	250	Pass

Band IV (5725 - 5850 MHz)						
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power Total (mW)	FCC/IC Limit (W)	Verdict
11ac (VHT20)	CH149	5745	13.54	22.59	1	Pass
11ac (VHT20)	CH157	5785	13.26	21.18	1	Pass
11ac (VHT20)	CH165	5825	13.01	20.00	1	Pass
11ac (VHT40)	CH151	5755	13.22	20.99	1	Pass
11ac (VHT40)	CH159	5795	13.66	23.23	1	Pass
11ac (VHT80)	CH155	5775	12.99	19.91	1	Pass

EIRP Power

Band I (5150 - 5250 MHz)						
Mode	Channel	Frequency (MHz)	EIRP Power Total (dBm)	EIRP Power Total (mW)	IC Limit (mW)	Verdict
11ac (VHT20)	CH36	5180	12.08	16.14	176	Pass
11ac (VHT20)	CH44	5220	12.72	18.71	176	Pass
11ac (VHT20)	CH48	5240	12.50	17.78	176	Pass
11ac (VHT40)	CH38	5190	12.29	16.94	200	Pass
11ac (VHT40)	CH46	5230	12.72	18.71	200	Pass
11ac (VHT80)	CH42	5210	12.59	18.16	200	Pass

Band IV (5725 - 5850 MHz)					
Mode	Channel	Frequency (MHz)	EIRP Power Total (dBm)	EIRP Power Total (mW)	Verdict
11ac (VHT20)	CH149	5745	15.04	31.92	Pass
11ac (VHT20)	CH157	5785	14.76	29.92	Pass
11ac (VHT20)	CH165	5825	14.51	28.25	Pass
11ac (VHT40)	CH151	5755	14.72	29.65	Pass
11ac (VHT40)	CH159	5795	15.16	32.81	Pass
11ac (VHT80)	CH155	5775	14.49	28.12	Pass

A.2 Emission Bandwidth & 99% Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-EC1830166-604 Data Part 1.pdf".

Test Data

Band I (5150 - 5250 MHz)				
Mode	Channel	Frequency(MHz)	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11ac (VHT20)	CH36	5180	21.92	17.89
11ac (VHT20)	CH44	5220	21.84	17.83
11ac (VHT20)	CH48	5240	18.98	17.83
11ac (VHT40)	CH38	5190	43.60	36.47
11ac (VHT40)	CH46	5230	38.56	36.47
11ac (VHT80)	CH42	5210	82.20	75.25

Band IV (5725 - 5850 MHz)			
Mode	Channel	Frequency(MHz)	99% Bandwidth (MHz)
11ac (VHT20)	CH149	5745	17.83
11ac (VHT20)	CH157	5785	17.89
11ac (VHT20)	CH165	5825	17.95
11ac (VHT40)	CH151	5755	36.47
11ac (VHT40)	CH159	5795	36.35
11ac (VHT80)	CH155	5775	75.25

A.3 6 dB Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-EC1830166-604 Data Part 2.pdf".

Test Data

Band IV (5725 - 5850 MHz)					
Mode	Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (kHz)	Verdict
11ac (VHT20)	CH149	5745	17.72	500	Pass
11ac (VHT20)	CH157	5785	17.67	500	Pass
11ac (VHT20)	CH165	5825	17.82	500	Pass
11ac (VHT40)	CH151	5755	36.42	500	Pass
11ac (VHT40)	CH159	5795	34.72	500	Pass
11ac (VHT80)	CH155	5775	75.17	500	Pass

A.4 Power Spectral Density

Note: Test plots please refer to the document “Annex No.: BL-EC1830166-604 Data Part 3.pdf”.

Test Data

Band I (5150 - 5250 MHz)					
Mode	Channel	Frequency (MHz)	PSD (dBm/MHz)	FCC Limit (dBm/MHz)	Verdict
11ac (VHT20)	CH36	5180	2.31	11	Pass
11ac (VHT20)	CH44	5220	4.47	11	Pass
11ac (VHT20)	CH48	5240	2.38	11	Pass
11ac (VHT40)	CH38	5190	-1.18	11	Pass
11ac (VHT40)	CH46	5230	2.15	11	Pass
11ac (VHT80)	CH42	5210	-1.63	11	Pass

Band IV (5725 - 5850 MHz)					
Mode	Channel	Frequency (MHz)	PSD (dBm/MHz)	FCC/IC Limit (dBm/500 kHz)	Verdict
11ac (VHT20)	CH149	5745	1.98	30	Pass
11ac (VHT20)	CH157	5785	1.59	30	Pass
11ac (VHT20)	CH165	5825	1.60	30	Pass
11ac (VHT40)	CH151	5755	-16.88	30	Pass
11ac (VHT40)	CH159	5795	-16.74	30	Pass
11ac (VHT80)	CH155	5775	-7.92	30	Pass

EIRP PSD

Band I (5150 - 5250 MHz)					
Mode	Channel	Frequency (MHz)	PSD (dBm/MHz)	IC Limit (dBm/MHz)	Verdict
11ac (VHT20)	CH36	5180	3.81	10	Pass
11ac (VHT20)	CH44	5220	5.97	10	Pass
11ac (VHT20)	CH48	5240	3.88	10	Pass
11ac (VHT40)	CH38	5190	0.32	10	Pass
11ac (VHT40)	CH46	5230	3.65	10	Pass
11ac (VHT80)	CH42	5210	-0.13	10	Pass

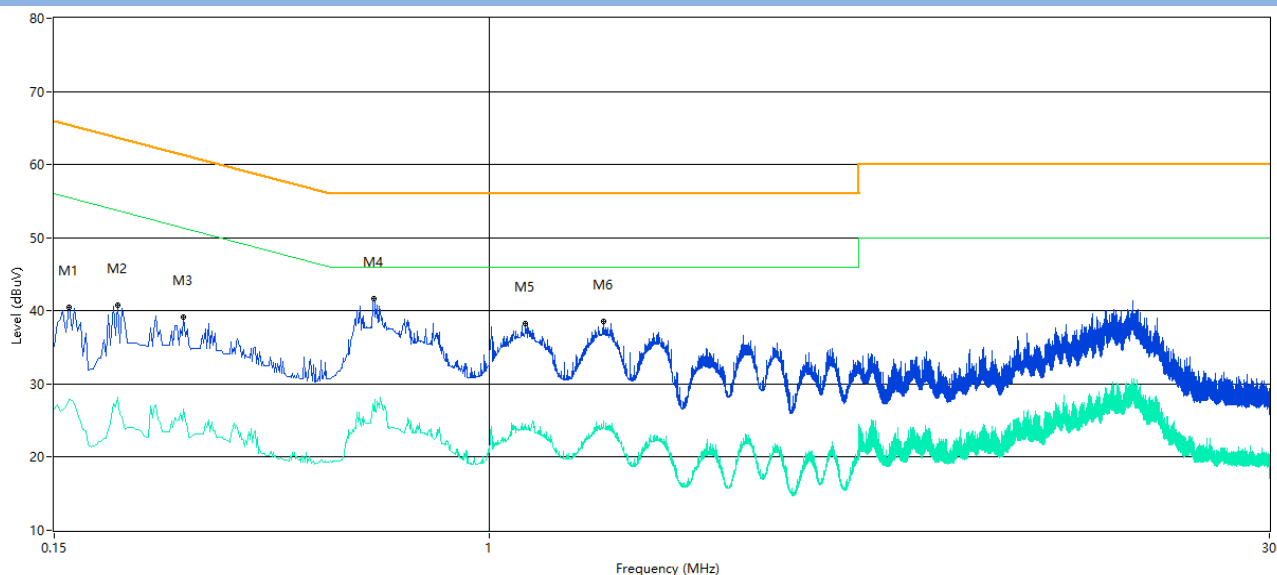
A.5 Conducted Emissions

Note ¹: The EUT is working in the Normal link mode.

Note ²: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

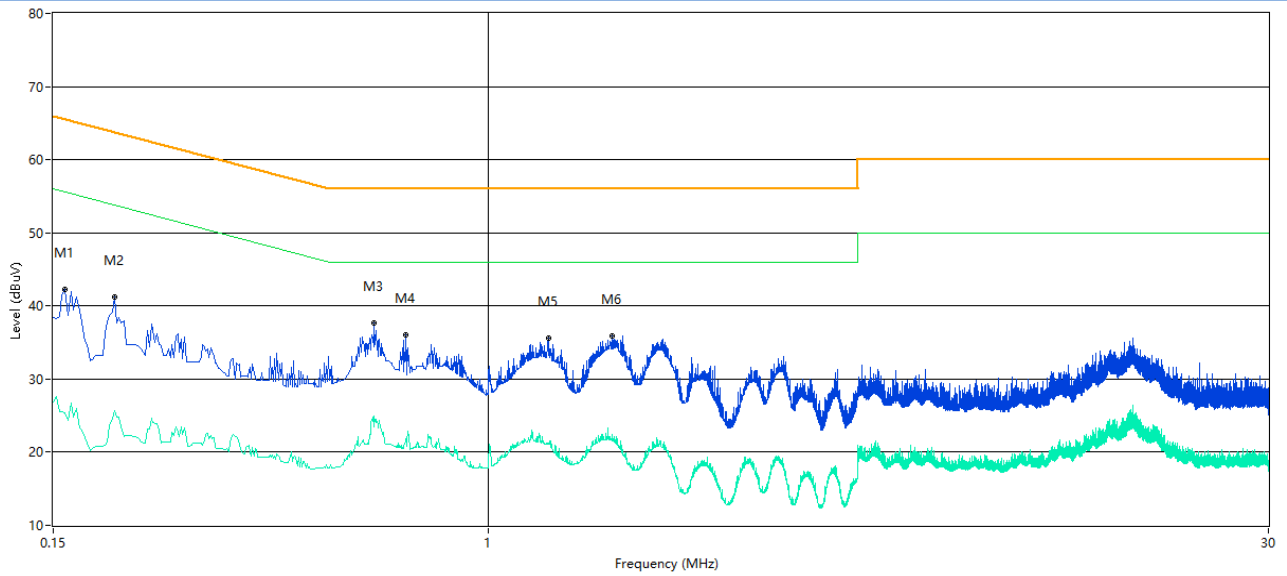
Test Data and Plots

PHASE L



Frequency (MHz)	Peak Level (dBuV)	Q-peak Level (dBuV)	Average Level (dBuV)	Factor (dB)	QP Limit (dBuV)	AV Limit (dBuV)	Margin (dB)	Line	Verdict
0.160	41.43	36.99	27.94	10.01	65.5	55.5	27.56	L Line	Pass
0.198	41.42	37.28	27.68	10.01	63.7	53.7	26.02	L Line	Pass
0.264	40.44	34.91	25.48	10.01	61.3	51.3	25.82	L Line	Pass
0.604	42.76	38.00	27.10	10.02	56.0	46.0	18.00	L Line	Pass
1.170	38.63	34.49	24.03	10.04	56.0	46.0	21.51	L Line	Pass
1.644	38.96	34.05	24.38	10.05	56.0	46.0	21.62	L Line	Pass

PHASE N



Frequency (MHz)	Peak Level (dBuV)	Q-peak Level (dBuV)	Average Level (dBuV)	Factor (dB)	QP Limit (dBuV)	AV Limit (dBuV)	Margin (dB)	Line	Verdict
0.158	42.29	38.14	25.11	10.01	65.6	55.6	27.46	N Line	Pass
0.196	40.75	36.35	25.42	10.01	63.8	53.8	27.45	N Line	Pass
0.608	39.14	32.10	24.57	10.02	56.0	46.0	21.43	N Line	Pass
0.698	36.56	30.01	21.85	10.02	56.0	46.0	24.15	N Line	Pass
1.298	37.00	30.09	21.14	10.04	56.0	46.0	24.86	N Line	Pass
1.718	36.99	31.33	22.23	10.06	56.0	46.0	23.77	N Line	Pass

A.6 Conducted Spurious Emission and Band Edge (Authorized-band)

Note: Test plots please refer to the document “Annex No.: BL-EC1830166-604 Data Part 4.pdf”.

Test Band	Mode	Channel	Verdict
Band I	802.11ac(VHT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11ac(VHT40)	Low	Pass
		High	Pass
	802.11ac(VHT80)	Low	Pass
Band IV	802.11ac(VHT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11ac(VHT40)	Low	Pass
		High	Pass
	802.11ac(VHT80)	Low	Pass

A.7 Radiated Spurious Emissions and Band Edge (Restricted-band)

Test Data

Cabinet Radiated spurious emission test

Note¹: The symbol of “--” in the table which means not application.

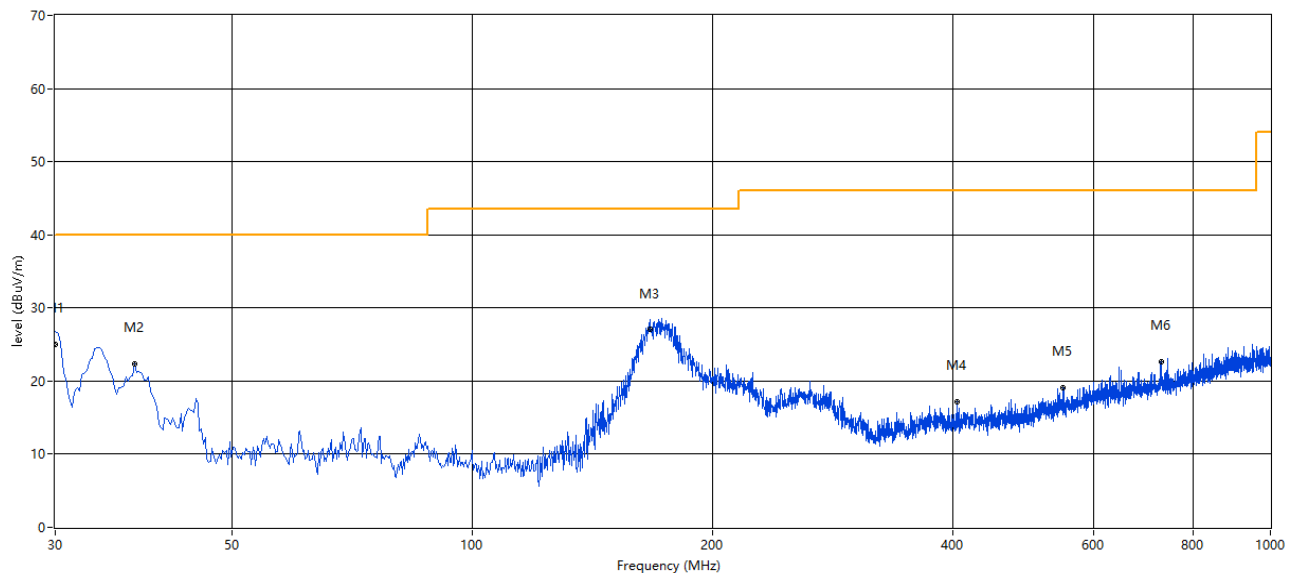
Note²: For the test data above 1 GHz, According the ANSI C63.4, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note³: 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.

Note⁴: The EUT is working in the Normal link mode below 1 GHz.

30 MHz to 1 GHz, ANT V

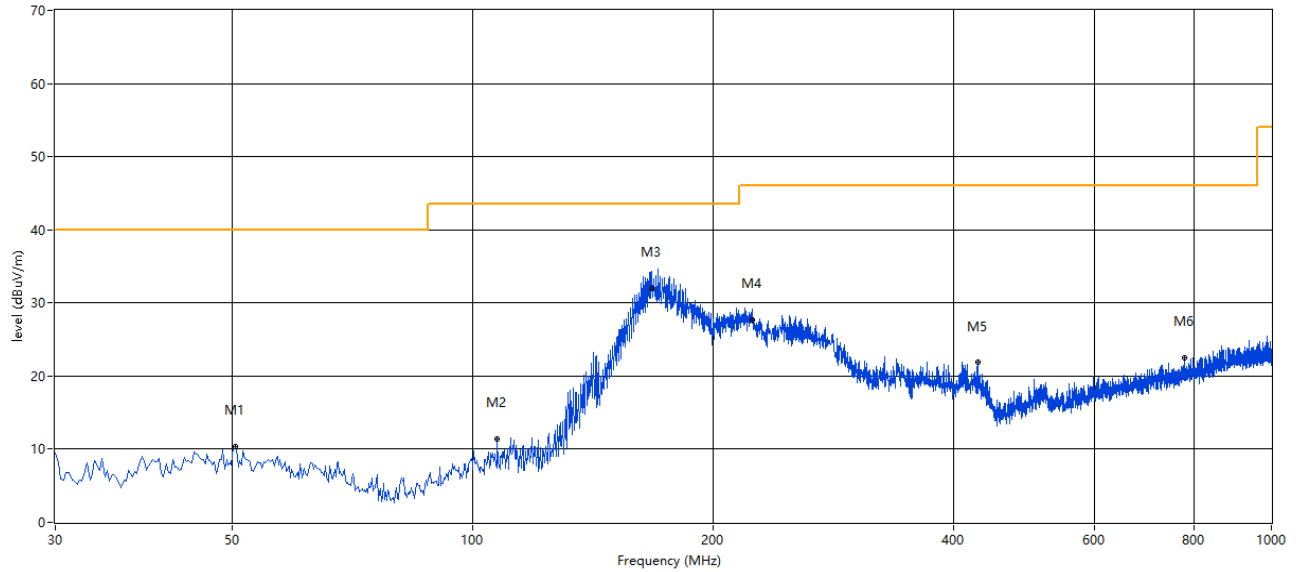
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_30MHz-1GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
30.000	26.72	24.99	--	-28.14	--	40.0	--	15.01	359.20	100	Vertical	Pass
37.758	22.34	--	--	-27.62	--	40.0	--	17.66	74.60	100	Vertical	Pass
166.736	28.47	27.09	--	-31.27	--	43.5	--	16.41	126.50	100	Vertical	Pass
405.054	17.16	--	--	-23.99	--	46.0	--	28.84	117.80	100	Vertical	Pass
549.790	19.09	--	--	-20.58	--	46.0	--	26.91	307.40	100	Vertical	Pass
729.438	22.62	--	--	-16.92	--	46.0	--	23.38	359.70	100	Vertical	Pass

30 MHz to 1 GHz, ANT H

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_30MHz-1GHz

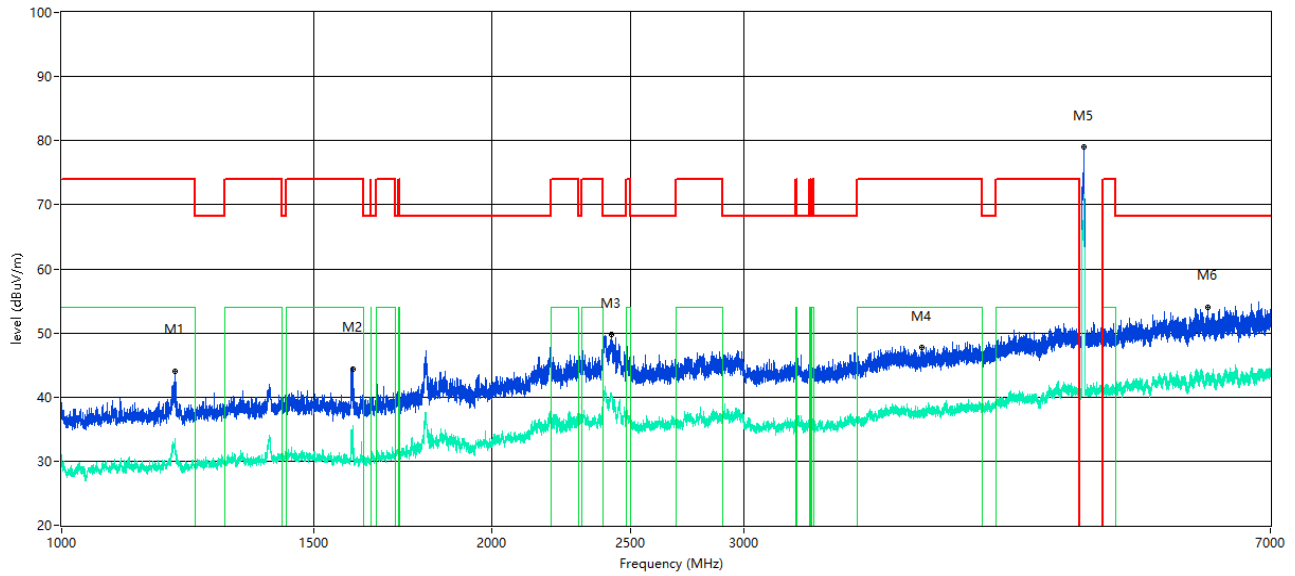


Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
50.365	10.30	--	--	-26.62	--	40.0	--	29.70	324.20	100	Horizontal	Pass
107.338	11.33	--	--	-28.72	--	43.5	--	32.17	23.50	100	Horizontal	Pass
167.706	34.37	32.04	--	-31.23	--	43.5	--	11.46	64.40	100	Horizontal	Pass
223.709	29.19	27.72	--	-28.17	--	46.0	--	18.28	76.00	100	Horizontal	Pass
429.055	21.86	--	--	-23.32	--	46.0	--	24.14	93.30	100	Horizontal	Pass
777.441	22.53	--	--	-15.94	--	46.0	--	23.47	0.40	100	Horizontal	Pass

Note: The spurious above 18G is noise only, do not show on the report.

1 GHz to 7 GHz, ANT V Band I 11ac20 Low channel

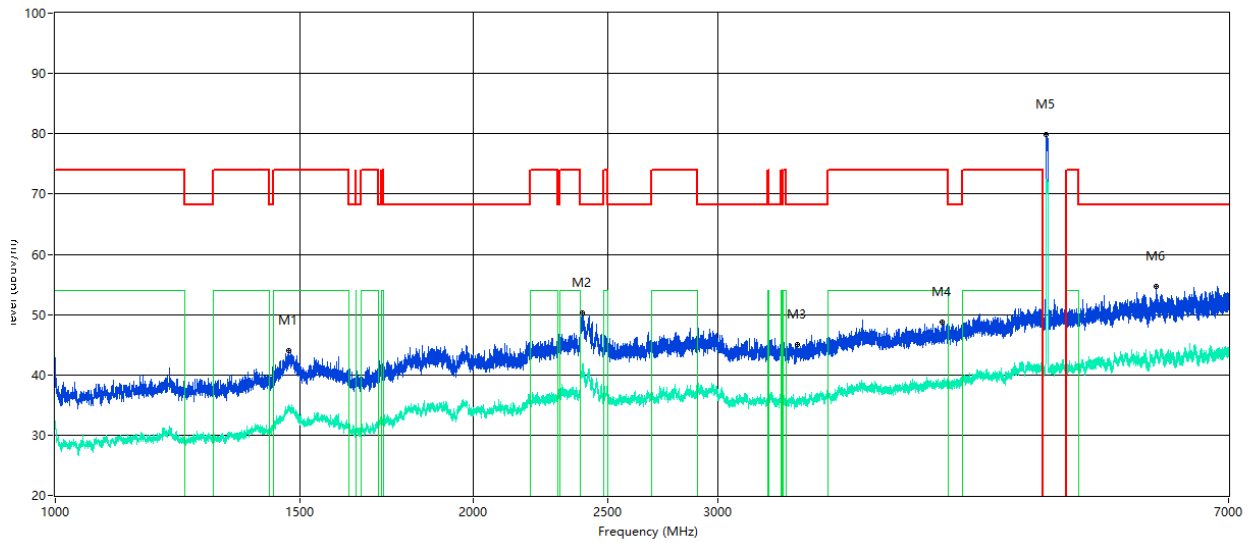
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1199.725	44.06	--	33.6	-12.23	74.0	--	54.0	20.40	315.00	100	Vertical	Pass
1598.675	44.43	--	35.5	-12.52	74.0	--	54.0	18.50	101.00	100	Vertical	Pass
2422.072	49.74	--	40.5	-0.83	68.2	--	--	18.46	91.00	100	Vertical	Pass
3995.126	47.78	--	37.7	-3.01	74.0	--	54.0	16.30	225.00	100	Vertical	Pass
5186.727	78.98	--	71.5	0.31	--	--	--	--	14.00	100	Vertical	Pass
6328.834	53.96	--	43.0	4.52	68.2	--	--	14.24	32.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band I 11ac20 Low channel

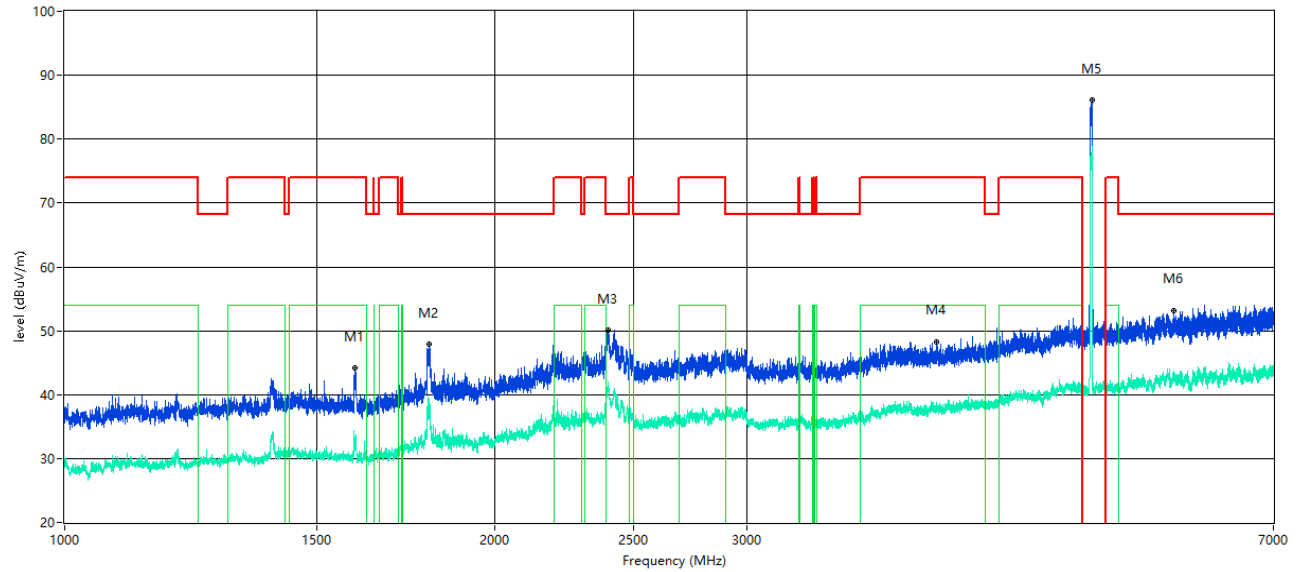
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1471.941	44.07	--	35.1	-11.37	74.0	--	54.0	18.90	36.00	100	Horizontal	Pass
2397.325	50.30	--	41.0	-0.01	68.2	--	--	17.90	40.00	100	Horizontal	Pass
3421.822	45.08	--	35.8	-5.10	68.2	--	--	23.12	108.00	100	Horizontal	Pass
4351.706	48.80	--	37.9	-1.78	74.0	--	54.0	16.10	15.00	100	Horizontal	Pass
5174.353	79.90	--	71.9	0.42	--	--	--	--	223.00	100	Horizontal	Pass
6207.724	54.65	--	43.6	4.47	68.2	--	--	13.55	14.00	100	Horizontal	Pass

1 GHz to 7 GHz, ANT V Band I 11ac20 Middle channel

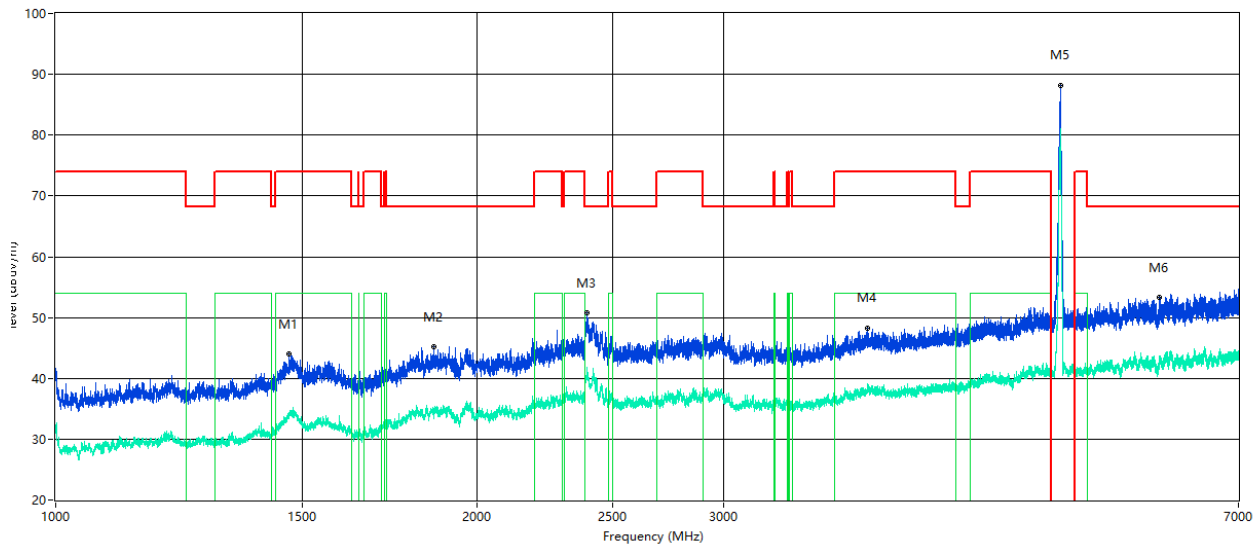
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1594.676	44.15	--	33.4	-12.10	74.0	--	54.0	20.60	105.00	100	Vertical	Pass
1798.400	47.83	--	37.9	-10.73	68.2	--	--	20.37	286.00	100	Vertical	Pass
2398.575	50.05	--	42.0	-0.05	68.2	--	--	18.15	6.00	100	Vertical	Pass
4070.491	48.25	--	37.8	-2.83	74.0	--	54.0	16.20	56.00	100	Vertical	Pass
5226.472	86.11	--	78.7	0.54	--	--	--	--	102.00	100	Vertical	Pass
5961.005	53.21	--	43.2	3.91	68.2	--	--	14.99	223.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band I 11ac20 Middle channel

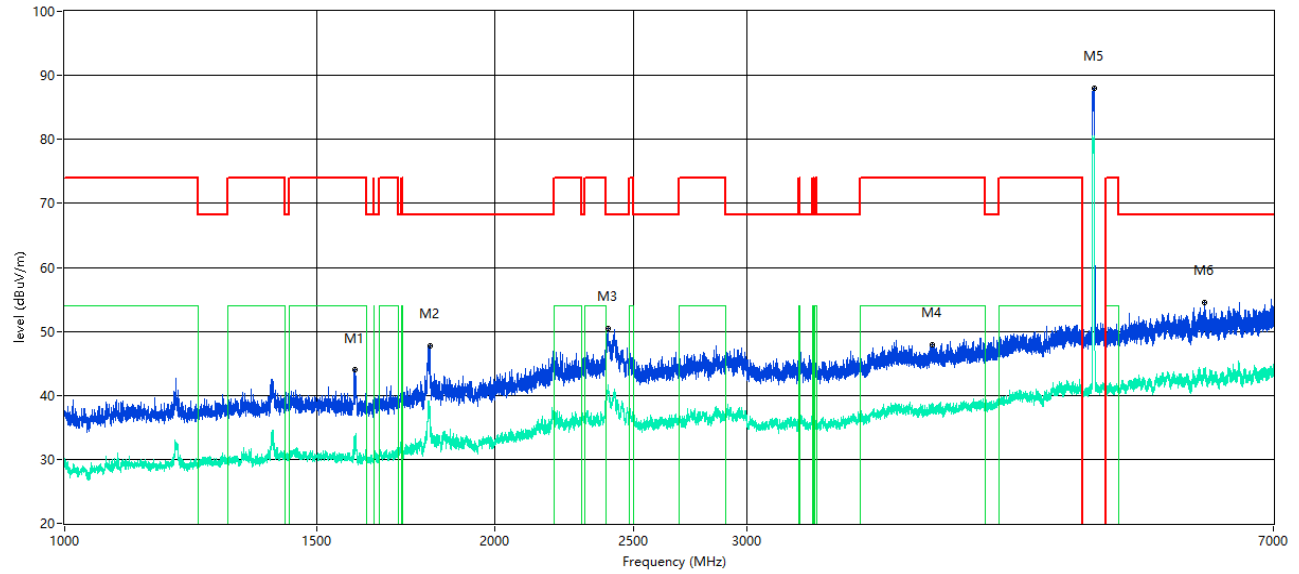
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_Band4_Bandedge 1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1468.941	44.00	--	34.3	-11.62	74.0	--	54.0	19.70	68.00	100	Horizontal	Pass
1864.142	45.18	--	35.1	-10.49	68.2	--	--	23.02	12.00	100	Horizontal	Pass
2397.325	50.73	--	41.5	-0.01	68.2	--	--	17.47	106.00	100	Horizontal	Pass
3803.900	48.24	--	38.2	-2.64	74.0	--	54.0	15.80	47.00	100	Horizontal	Pass
5224.972	88.24	--	81.0	0.63	--	--	--	--	223.00	100	Horizontal	Pass
6149.106	53.26	--	43.1	4.06	68.2	--	--	14.94	277.00	100	Horizontal	Pass

1 GHz to 7 GHz, ANT V Band I 11ac20 High channel

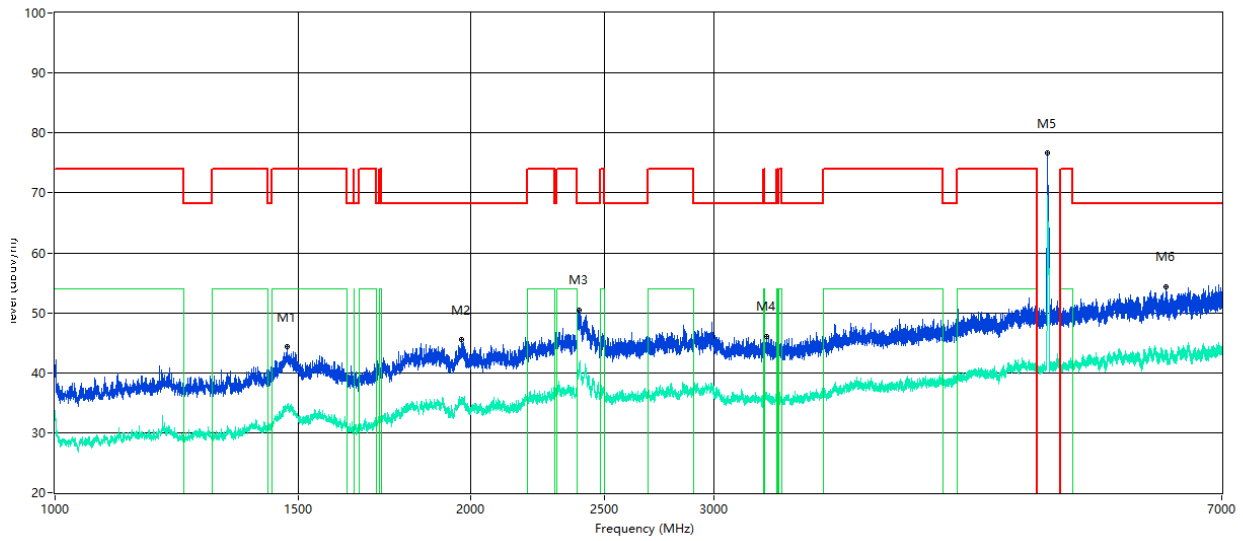
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1594.676	43.96	--	33.3	-12.10	74.0	--	54.0	20.70	37.00	100	Vertical	Pass
1800.150	47.78	--	38.2	-10.78	68.2	--	--	20.42	221.00	100	Vertical	Pass
2400.075	50.44	--	41.6	-0.08	68.2	--	--	17.76	98.00	100	Vertical	Pass
4041.245	47.93	--	38.7	-2.96	74.0	--	54.0	15.30	56.00	100	Vertical	Pass
5246.719	88.04	--	80.5	1.01	--	--	--	--	107.00	100	Vertical	Pass
6261.217	54.44	--	43.8	4.59	68.2	--	--	13.76	146.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band I 11ac20 High channel

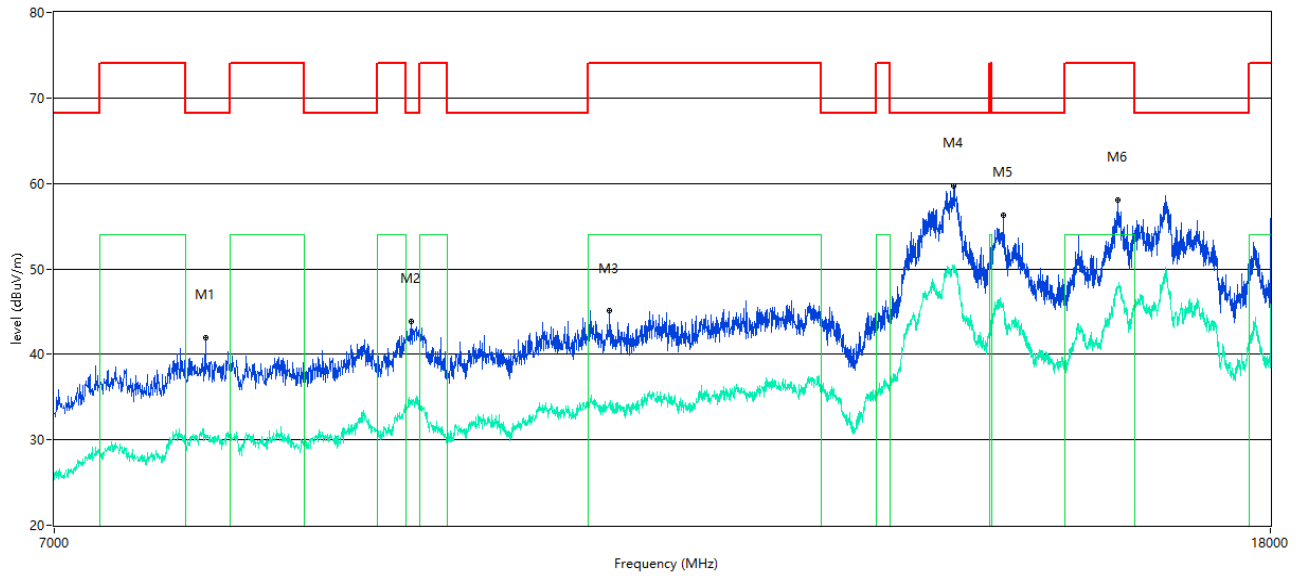
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_Band4_Bandedge 1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1472.941	44.31	--	34.3	-11.29	74.0	--	54.0	19.70	135.00	100	Horizontal	Pass
1969.879	45.49	--	35.8	-9.08	68.2	--	--	22.71	3.00	100	Horizontal	Pass
2398.325	50.48	--	41.7	-0.04	68.2	--	--	17.72	338.00	100	Horizontal	Pass
3275.591	46.09	--	36.7	-3.92	68.2	--	--	22.11	66.00	100	Horizontal	Pass
5234.346	76.58	--	68.5	0.59	--	--	--	--	22.00	100	Horizontal	Pass
6382.202	54.28	--	43.4	4.06	68.2	--	--	13.92	191.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band I 11ac20 Low channel

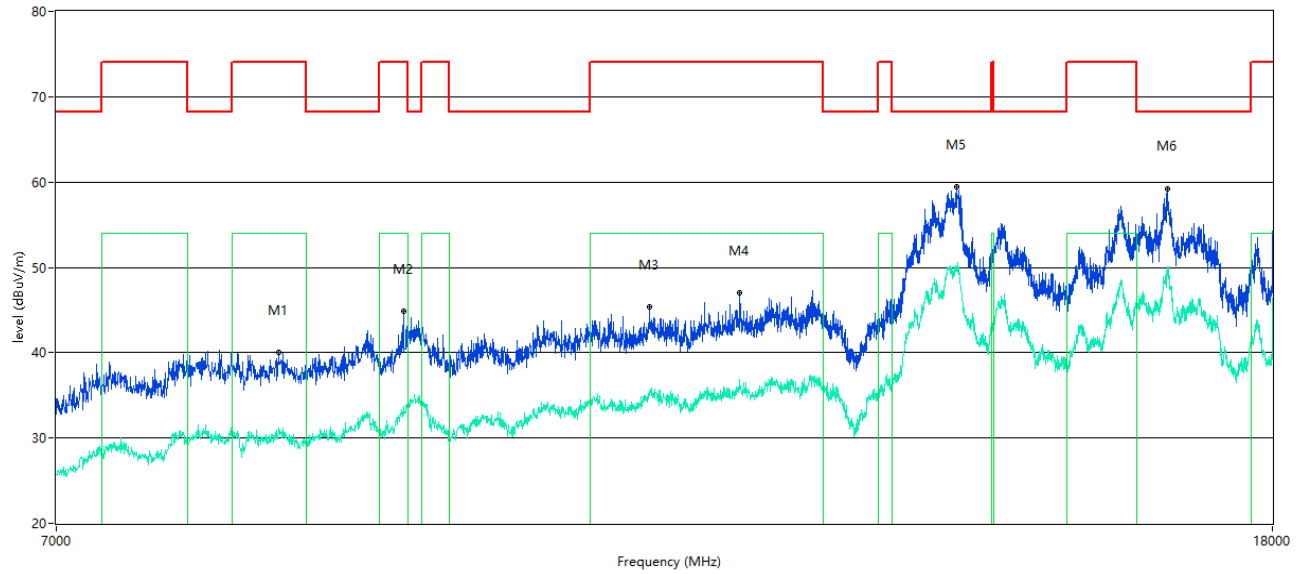
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
7871.532	41.93	--	30.6	-8.67	68.2	--	--	26.27	334.00	100	Vertical	Pass
9237.941	43.87	--	34.4	-4.58	68.2	--	--	24.33	5.00	100	Vertical	Pass
10774.806	45.07	--	34.1	-1.78	74.0	--	54.0	19.90	327.00	100	Vertical	Pass
14079.480	59.75	--	49.8	14.72	68.2	--	--	8.45	311.00	100	Vertical	Pass
14629.343	56.33	--	45.8	9.80	68.2	--	--	11.87	301.00	100	Vertical	Pass
15987.503	58.09	--	47.8	10.25	74.0	--	54.0	6.20	88.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band I 11ac20 Low channel

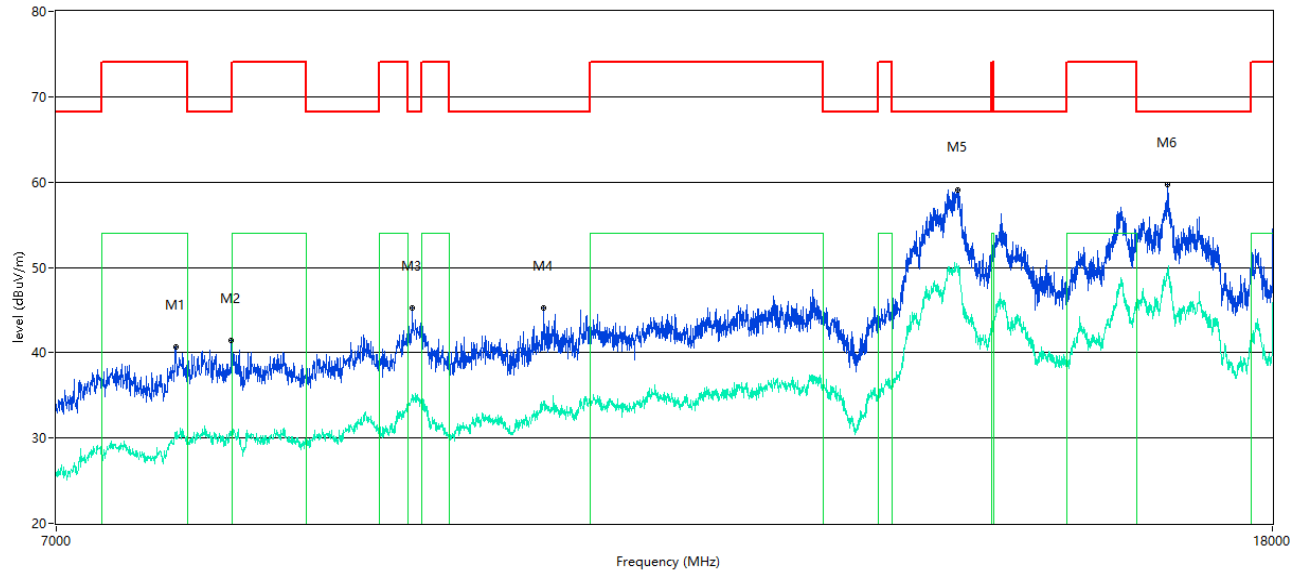
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8316.921	39.99	--	30.5	-6.92	74.0	--	54.0	23.50	51.00	100	Horizontal	Pass
9166.458	44.85	--	33.7	-5.91	74.0	--	54.0	20.30	190.00	100	Horizontal	Pass
11096.476	45.38	--	35.3	-1.70	74.0	--	54.0	18.70	332.00	100	Horizontal	Pass
11904.774	46.99	--	36.9	-0.78	74.0	--	54.0	17.10	140.00	100	Horizontal	Pass
14084.979	59.43	--	50.0	14.84	68.2	--	--	8.77	328.00	100	Horizontal	Pass
16592.352	59.15	--	50.1	11.91	68.2	--	--	9.05	8.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band I 11ac20 Middle channel

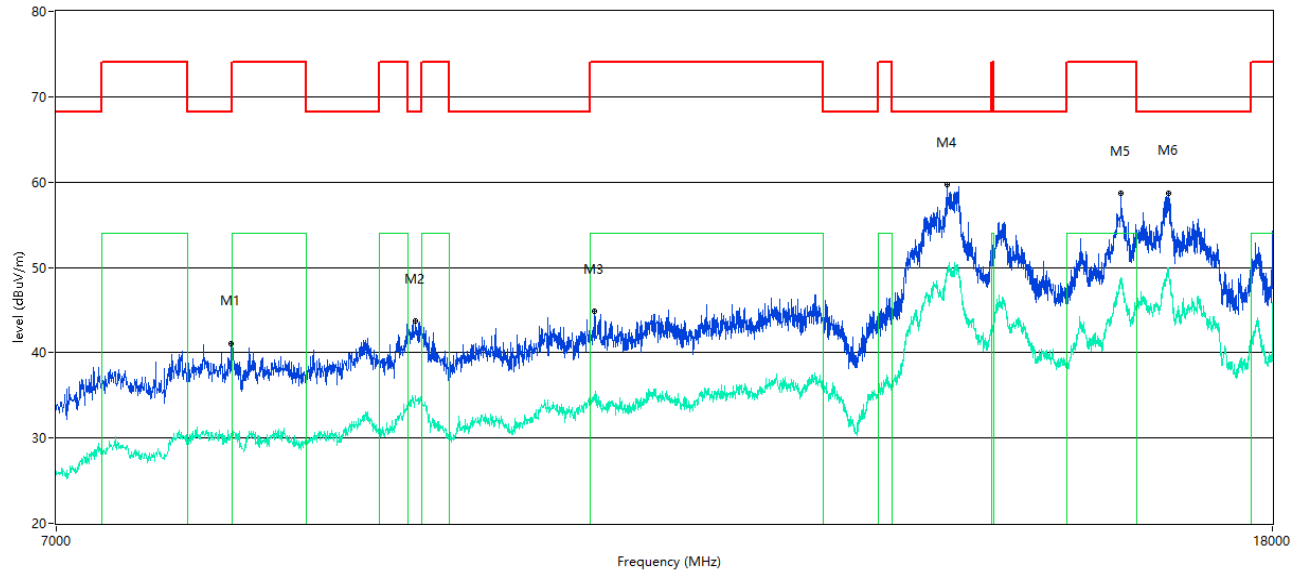
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
7679.080	40.71	--	30.1	-8.16	74.0	--	54.0	23.90	302.00	100	Vertical	Pass
8017.246	41.38	--	30.7	-9.02	68.2	--	--	26.82	323.00	100	Vertical	Pass
9229.693	45.23	--	34.7	-4.64	68.2	--	--	22.97	35.00	100	Vertical	Pass
10222.194	45.21	--	34.1	-2.48	68.2	--	--	22.99	320.00	100	Vertical	Pass
14098.725	59.02	--	50.0	14.80	68.2	--	--	9.18	121.00	100	Vertical	Pass
16592.352	59.76	--	49.4	11.91	68.2	--	--	8.44	71.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band I 11ac20 Middle channel

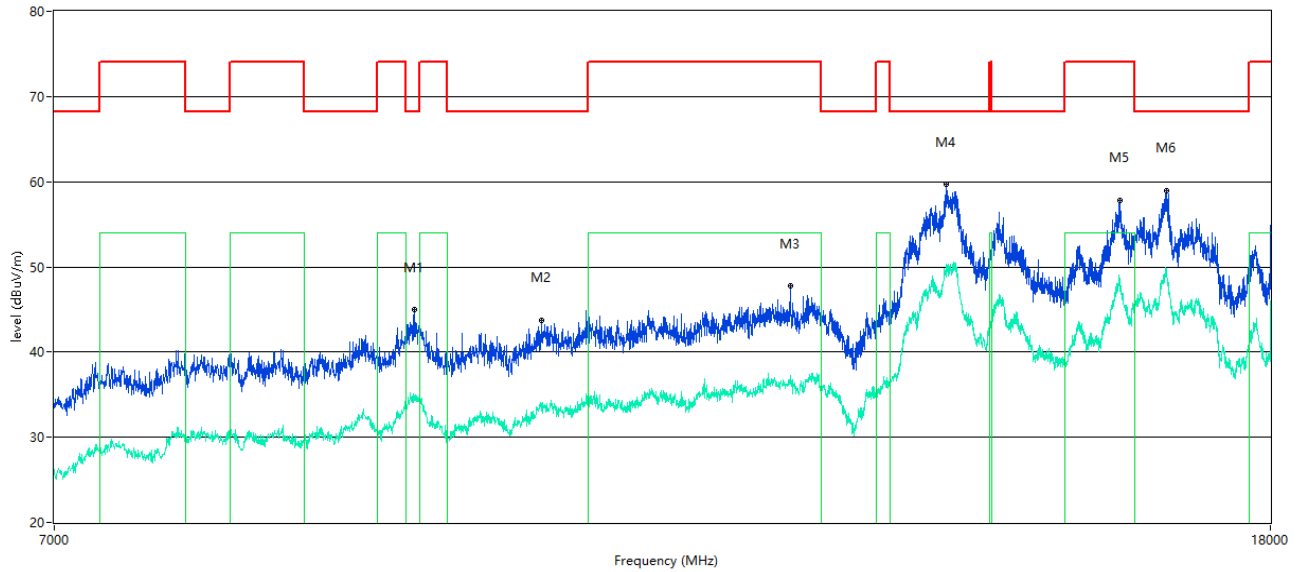
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8017.246	41.12	--	30.5	-9.02	68.2	--	--	27.08	210.00	100	Horizontal	Pass
9251.687	43.71	--	34.3	-4.36	68.2	--	--	24.49	1.00	100	Horizontal	Pass
10634.591	44.82	--	34.7	-1.62	74.0	--	54.0	19.30	103.00	100	Horizontal	Pass
13980.505	59.72	--	49.4	13.57	68.2	--	--	8.48	263.00	100	Horizontal	Pass
16001.250	58.67	--	48.3	10.71	74.0	--	54.0	5.70	287.00	100	Horizontal	Pass
16600.600	58.73	--	49.9	12.12	68.2	--	--	9.47	241.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band I 11ac20 High channel

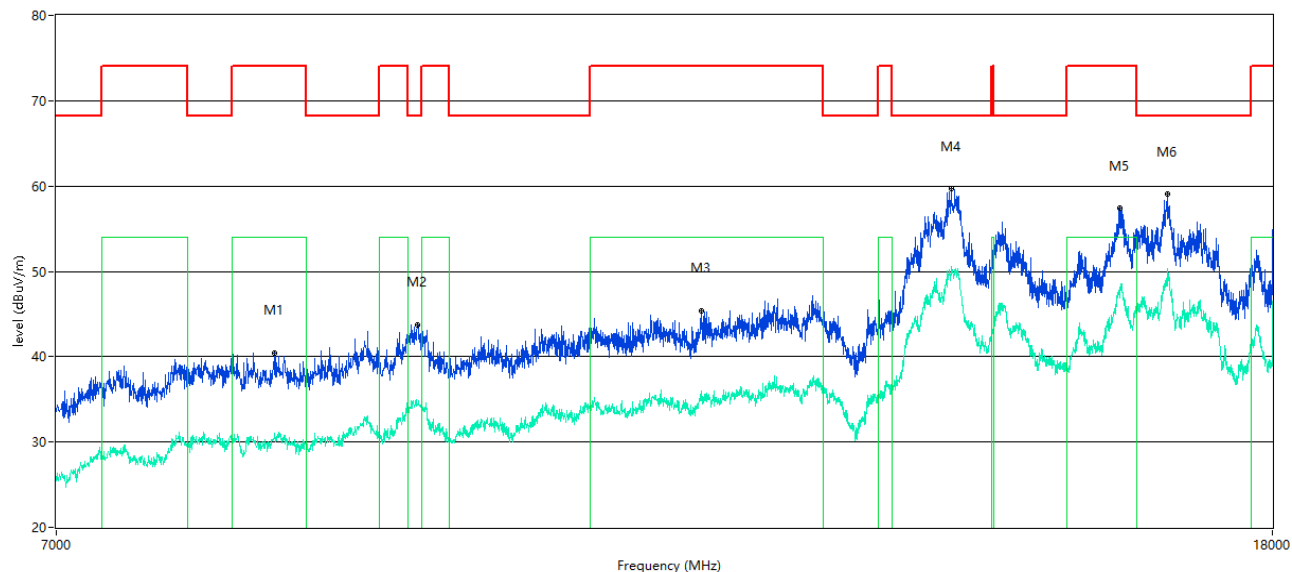
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
9257.186	44.94	--	34.5	-4.29	68.2	--	--	23.26	288.00	100	Vertical	Pass
10222.194	43.77	--	33.7	-2.48	68.2	--	--	24.43	99.00	100	Vertical	Pass
12399.650	47.75	--	37.3	-0.90	74.0	--	54.0	16.70	263.00	100	Vertical	Pass
13997.001	59.73	--	50.3	14.10	68.2	--	--	8.47	194.00	100	Vertical	Pass
16017.746	57.81	--	47.9	10.15	74.0	--	54.0	6.10	130.00	100	Vertical	Pass
16600.600	58.95	--	49.1	12.12	68.2	--	--	9.25	284.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band I 11ac20 High channel

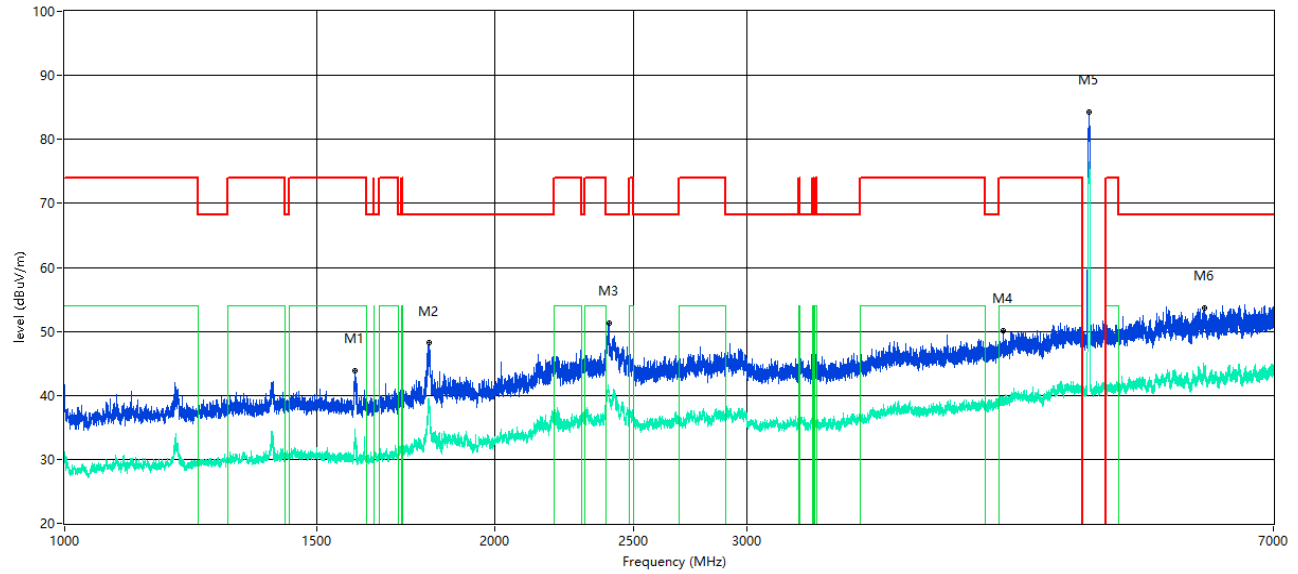
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8292.177	40.41	--	31.0	-6.82	74.0	--	54.0	23.00	342.00	100	Horizontal	Pass
9268.183	43.68	--	34.4	-4.12	68.2	--	--	24.52	293.00	100	Horizontal	Pass
11550.112	45.40	--	35.1	-0.90	74.0	--	54.0	18.90	36.00	100	Horizontal	Pass
14029.993	59.65	--	49.8	14.28	68.2	--	--	8.55	193.00	100	Horizontal	Pass
15987.503	57.39	--	48.1	10.25	74.0	--	54.0	5.90	118.00	100	Horizontal	Pass
16597.851	59.02	--	50.4	12.09	68.2	--	--	9.18	47.00	100	Horizontal	Pass

1 GHz to 7 GHz, ANT V Band I 11ac40 Low channel

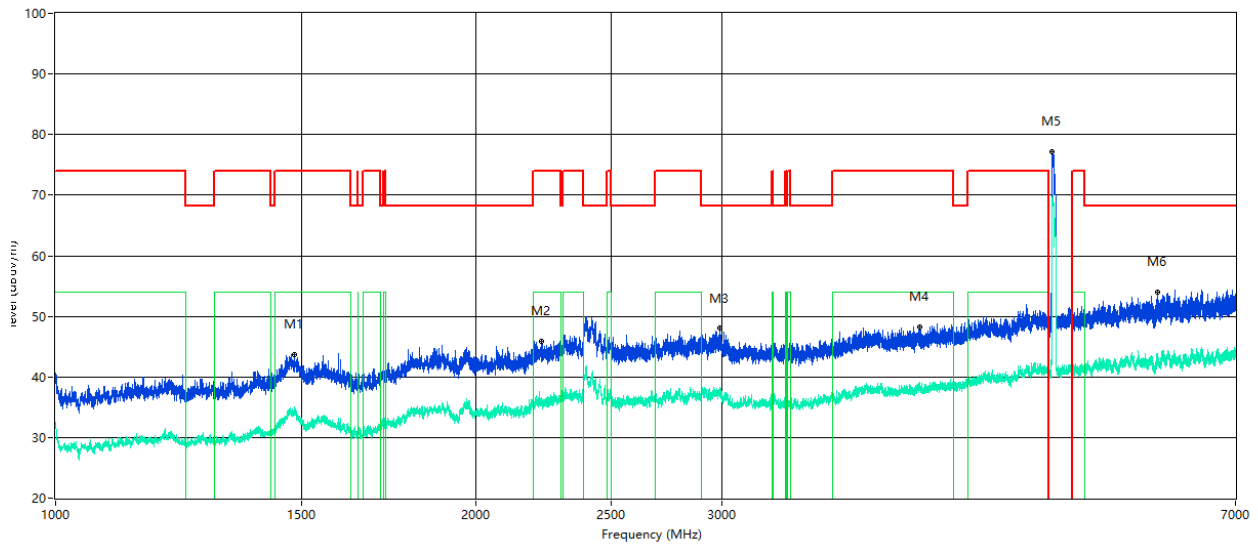
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1594.676	43.85	--	34.0	-12.10	74.0	--	54.0	20.00	47.00	100	Vertical	Pass
1797.400	48.18	--	39.4	-10.79	68.2	--	--	20.02	108.00	100	Vertical	Pass
2401.325	51.31	--	40.8	-0.11	68.2	--	--	16.89	235.00	100	Vertical	Pass
4531.309	50.16	--	39.0	-1.55	74.0	--	54.0	15.00	6.00	100	Vertical	Pass
5205.099	84.30	--	76.1	0.78	--	--	--	--	18.00	100	Vertical	Pass
6265.092	53.66	--	43.4	4.43	68.2	--	--	14.54	46.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band I 11ac40 Low channel

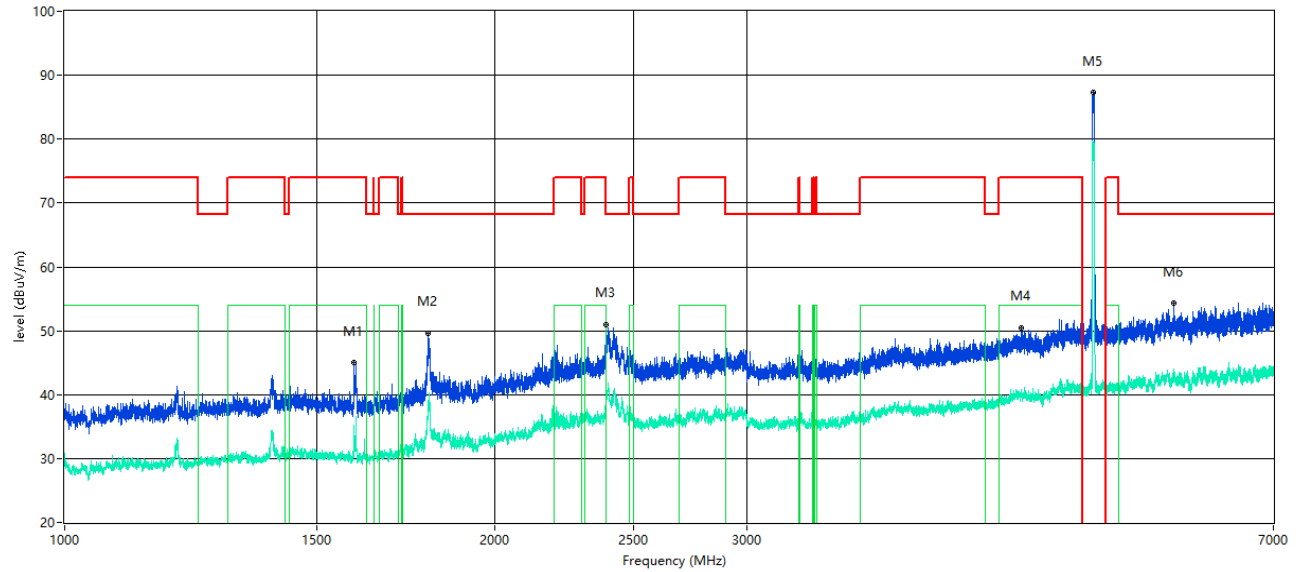
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_Band4_Bandedge 1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1483.440	43.76	--	35.0	-11.44	74.0	--	54.0	19.00	68.00	100	Horizontal	Pass
2228.596	45.91	--	36.5	-6.46	74.0	--	54.0	17.50	12.00	100	Horizontal	Pass
2990.751	48.01	--	38.2	-2.80	68.2	--	--	20.19	106.00	100	Horizontal	Pass
4161.230	48.29	--	38.6	-1.96	74.0	--	54.0	15.40	47.00	100	Horizontal	Pass
5175.853	77.19	--	69.5	0.42	--	--	--	--	223.00	100	Horizontal	Pass
6155.481	54.02	--	43.1	3.88	68.2	--	--	14.18	277.00	100	Horizontal	Pass

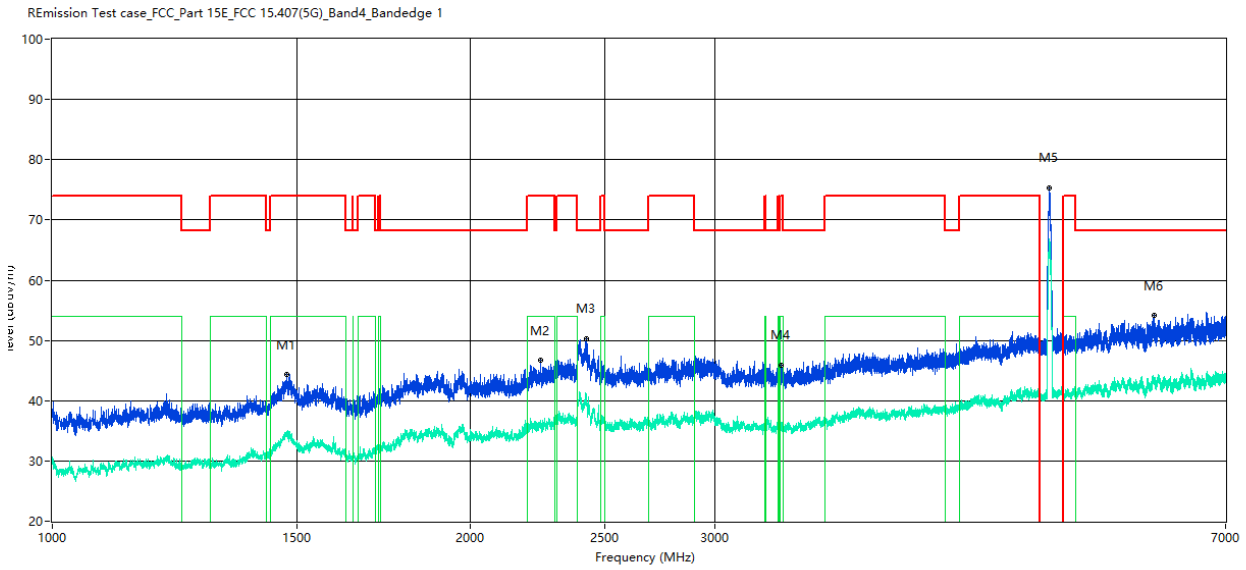
1 GHz to 7 GHz, ANT V Band I 11ac40 High channel

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1592.676	45.02	--	35.2	-12.00	74.0	--	54.0	18.80	51.00	100	Vertical	Pass
1796.400	49.67	--	39.0	-10.86	68.2	--	--	18.53	104.00	100	Vertical	Pass
2390.326	51.00	--	42.4	-1.17	68.2	--	--	17.20	273.00	100	Vertical	Pass
4665.917	50.50	--	39.9	0.07	74.0	--	54.0	14.10	13.00	100	Vertical	Pass
5234.346	87.29	--	79.3	0.59	--	--	--	--	324.00	100	Vertical	Pass
5963.255	54.27	--	43.4	3.73	68.2	--	--	13.93	8.00	100	Vertical	Pass

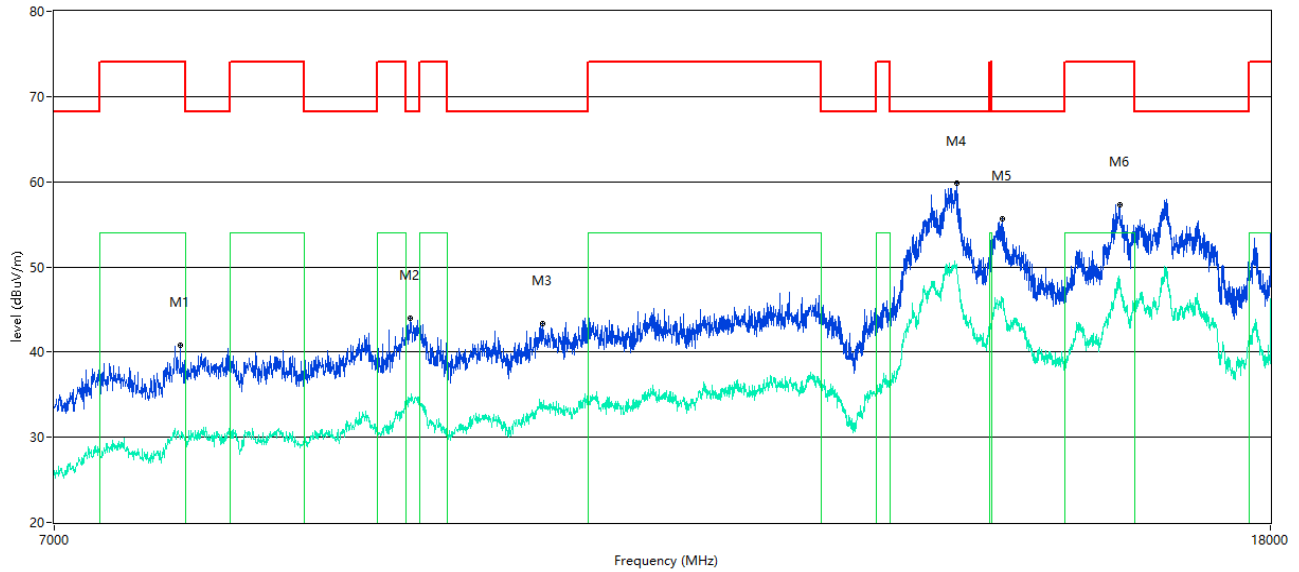
1 GHz to 7 GHz, ANT H Band I 11ac40 High channel



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1475.191	44.32	--	34.6	-11.48	74.0	--	54.0	19.40	80.00	100	Horizontal	Pass
2246.594	46.74	--	36.8	-5.72	74.0	--	54.0	17.20	3.00	100	Horizontal	Pass
2424.572	50.21	--	40.3	-0.94	68.2	--	--	17.99	26.00	100	Horizontal	Pass
3347.207	45.94	--	36.4	-5.03	74.0	--	54.0	17.60	69.00	100	Horizontal	Pass
5228.346	75.31	--	66.3	0.44	--	--	--	--	223.00	100	Horizontal	Pass
6221.972	54.15	--	43.9	4.65	68.2	--	--	14.05	16.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band I 11ac40 Low channel

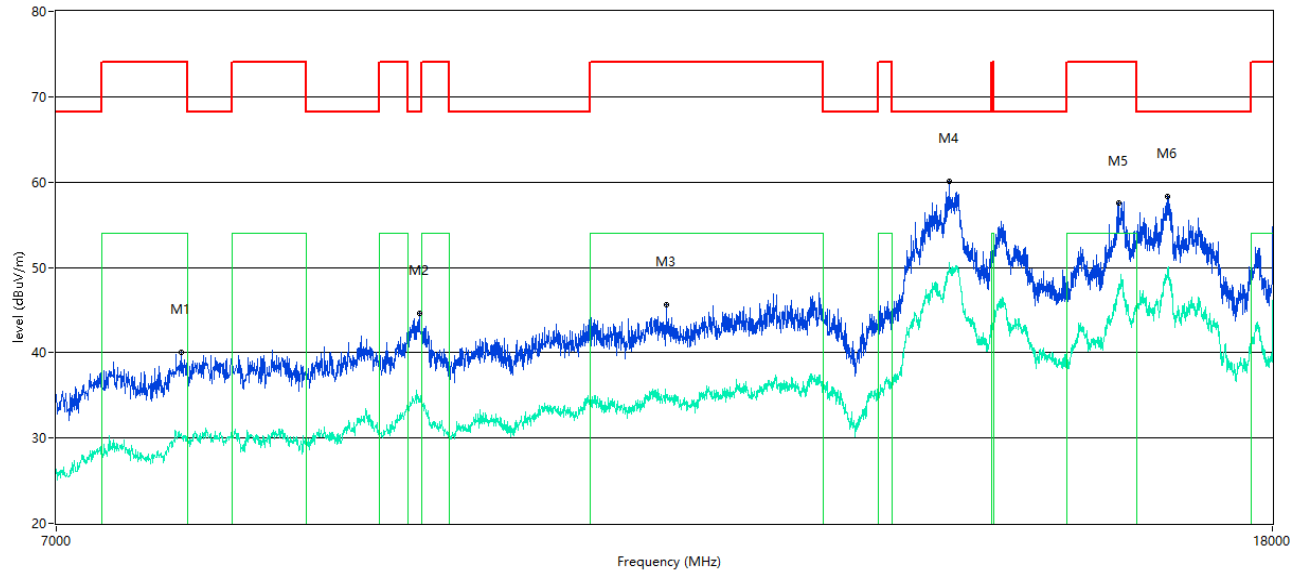
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
7720.320	40.74	--	30.2	-7.82	74.0	--	54.0	23.80	299.00	100	Vertical	Pass
9229.693	43.96	--	34.4	-4.64	68.2	--	--	24.24	105.00	100	Vertical	Pass
10224.944	43.37	--	33.8	-2.45	68.2	--	--	24.83	174.00	100	Vertical	Pass
14115.221	59.82	--	49.5	13.79	68.2	--	--	8.38	267.00	100	Vertical	Pass
14618.345	55.68	--	46.3	9.97	68.2	--	--	12.52	305.00	100	Vertical	Pass
16012.247	57.31	--	48.1	10.34	74.0	--	54.0	5.90	252.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band I 11ac40 Low channel

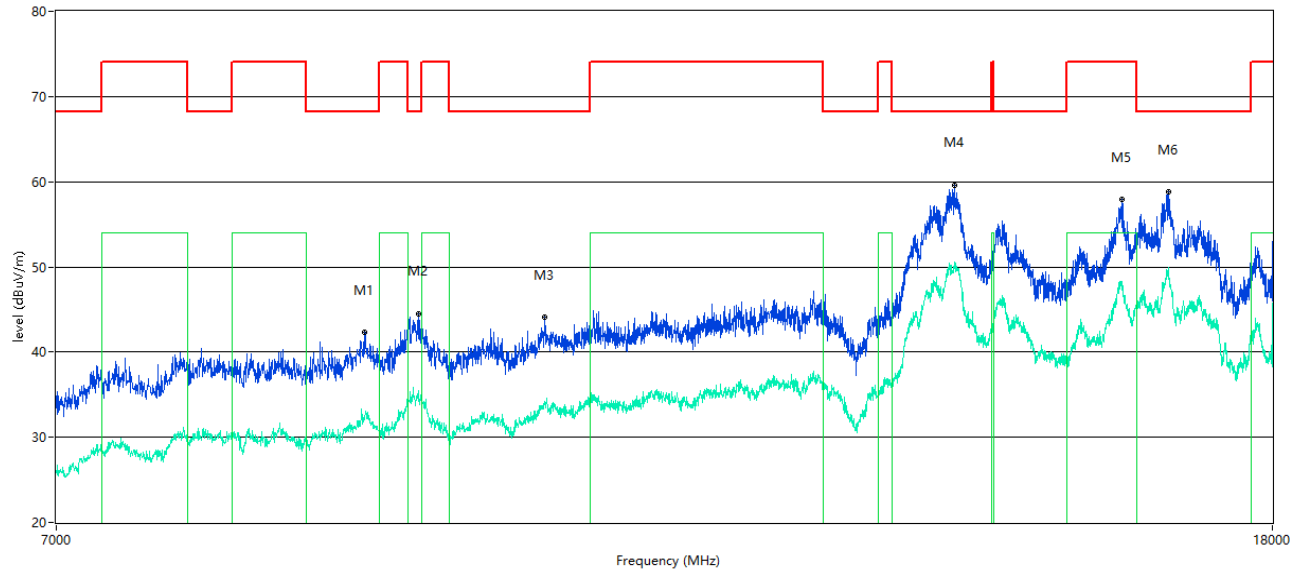
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
7712.072	40.06	--	30.5	-7.84	74.0	--	54.0	23.50	213.00	100	Horizontal	Pass
9281.930	44.55	--	34.4	-4.15	68.2	--	--	23.65	141.00	100	Horizontal	Pass
11242.189	45.60	--	35.0	-1.58	74.0	--	54.0	19.00	332.00	100	Horizontal	Pass
14005.249	60.04	--	50.6	14.24	68.2	--	--	8.16	110.00	100	Horizontal	Pass
15976.506	57.55	--	48.0	9.93	74.0	--	54.0	6.00	24.00	100	Horizontal	Pass
16586.853	58.30	--	48.8	11.78	68.2	--	--	9.90	10.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band I 11ac40 High channel

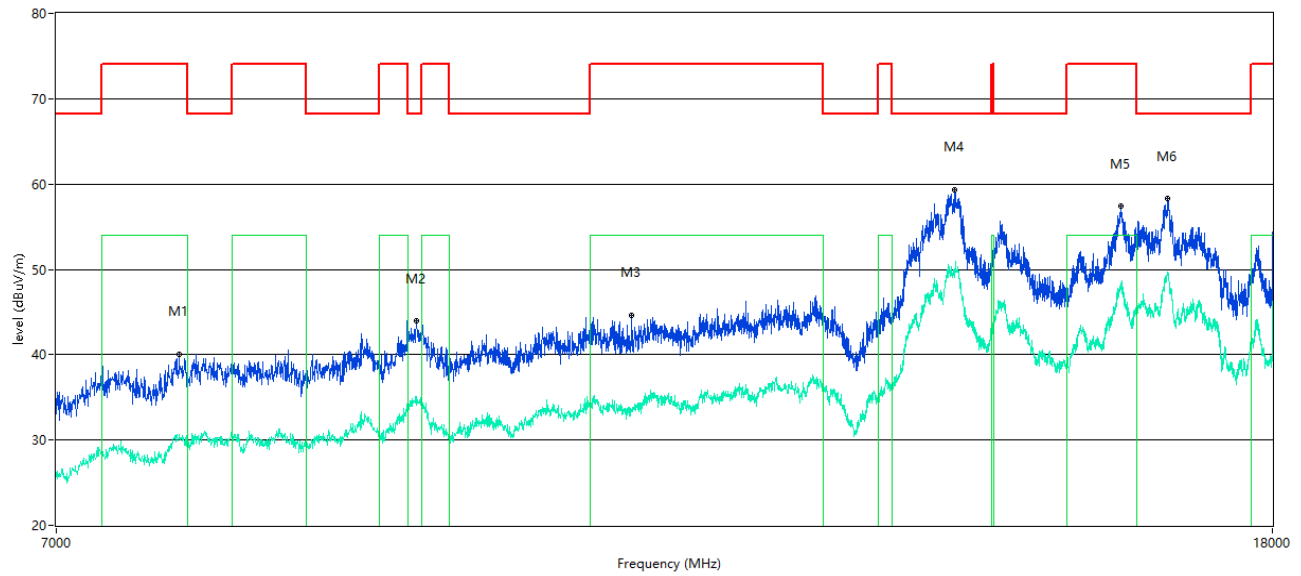
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8897.026	42.29	--	32.1	-4.94	68.2	--	--	25.91	251.00	100	Vertical	Pass
9270.932	44.50	--	34.6	-4.09	68.2	--	--	23.70	213.00	100	Vertical	Pass
10230.442	44.15	--	34.2	-2.34	68.2	--	--	24.05	345.00	100	Vertical	Pass
14062.984	59.57	--	50.2	14.50	68.2	--	--	8.63	132.00	100	Vertical	Pass
16017.746	57.94	--	48.3	10.15	74.0	--	54.0	5.70	142.00	100	Vertical	Pass
16603.349	58.76	--	49.4	12.02	68.2	--	--	9.44	343.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band I 11ac40 High channel

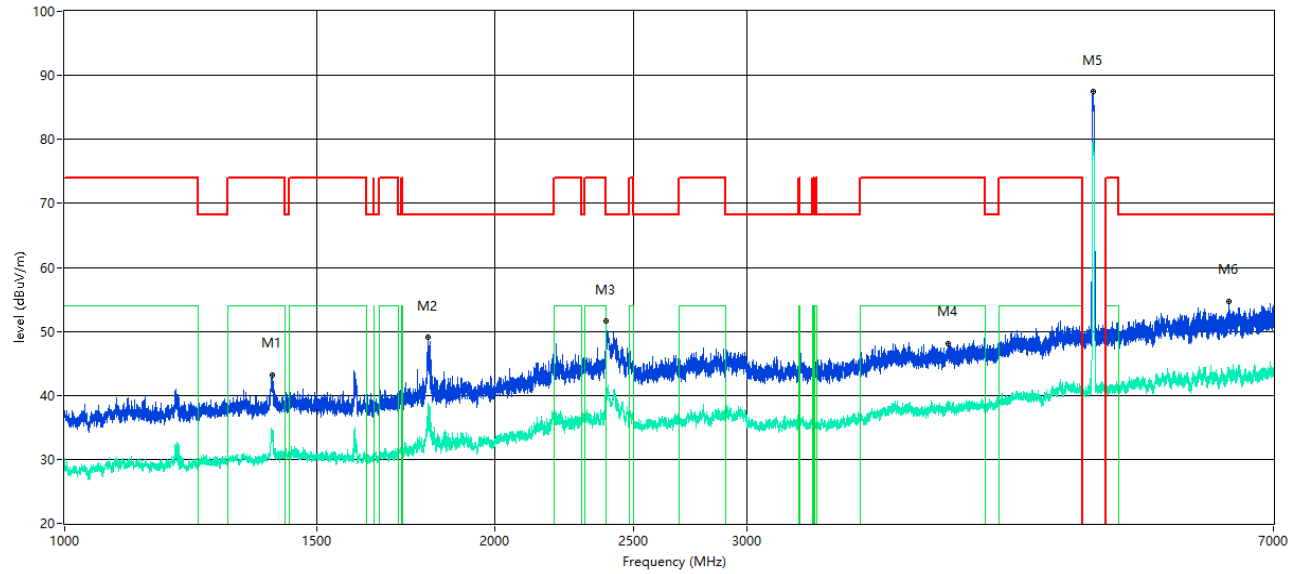
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
7701.075	40.00	--	30.7	-7.75	74.0	--	54.0	23.30	216.00	100	Horizontal	Pass
9262.684	43.92	--	35.1	-4.23	68.2	--	--	24.28	8.00	100	Horizontal	Pass
10945.264	44.65	--	33.5	-1.79	74.0	--	54.0	20.50	124.00	100	Horizontal	Pass
14057.486	59.27	--	49.3	14.42	68.2	--	--	8.93	281.00	100	Horizontal	Pass
16003.999	57.45	--	48.4	10.62	74.0	--	54.0	5.60	315.00	100	Horizontal	Pass
16597.851	58.26	--	49.4	12.09	68.2	--	--	9.94	199.00	100	Horizontal	Pass

1 GHz to 7 GHz, ANT V Band I 11ac80 Low channel

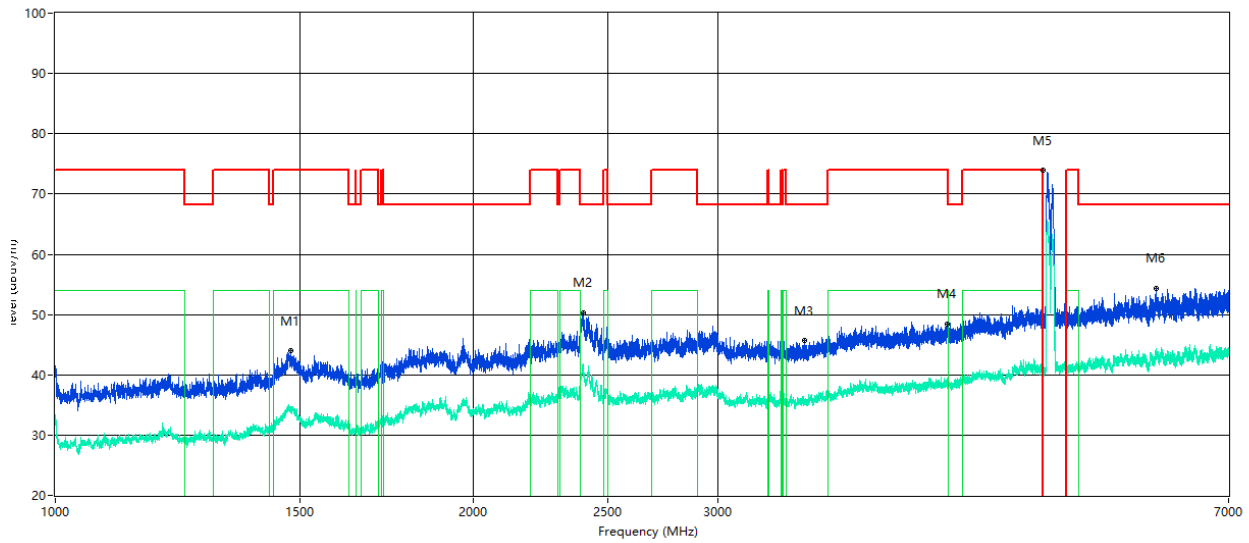
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1395.951	43.23	--	33.6	-11.98	74.0	--	54.0	20.40	81.00	100	Vertical	Pass
1793.651	49.08	--	38.1	-11.07	68.2	--	--	19.12	35.00	100	Vertical	Pass
2391.076	51.61	--	42.6	-0.71	68.2	--	--	16.59	58.00	100	Vertical	Pass
4144.357	48.13	--	37.8	-1.96	74.0	--	54.0	16.20	210.00	100	Vertical	Pass
5234.346	87.43	--	79.4	0.59	--	--	--	--	69.00	100	Vertical	Pass
6511.811	54.74	--	43.6	5.69	68.2	--	--	13.46	7.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band I 11ac80 Low channel

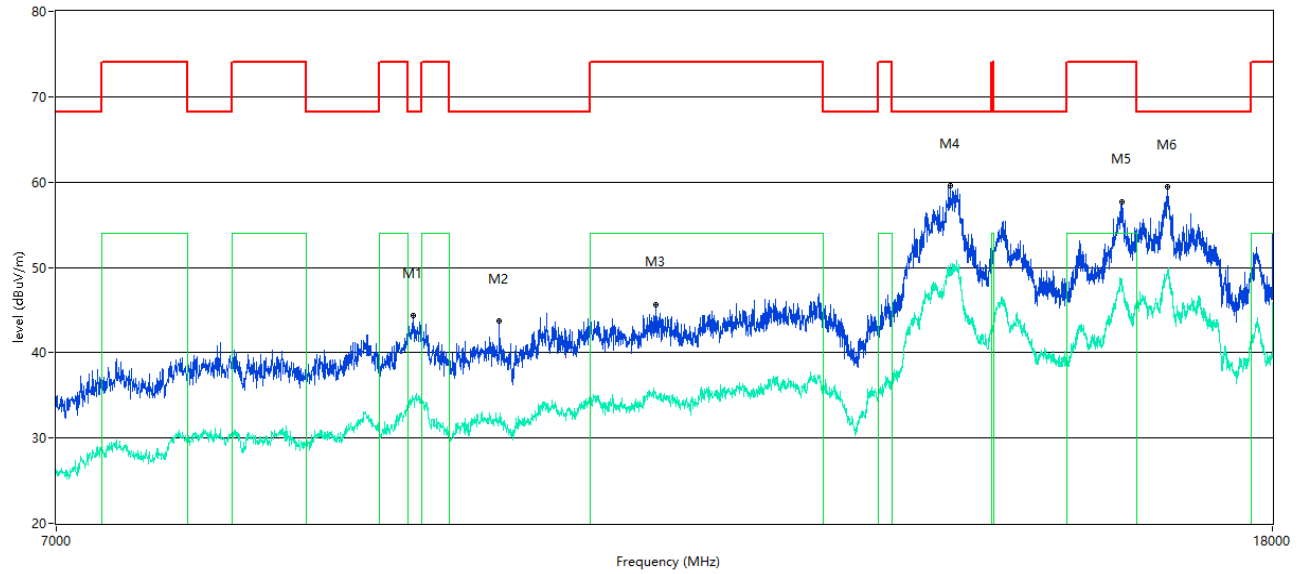
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_Band4_Bandedge 1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1477.690	43.93	--	34.1	-11.84	74.0	--	54.0	19.90	67.00	100	Horizontal	Pass
2399.325	50.23	--	41.0	-0.07	68.2	--	--	17.97	2.00	100	Horizontal	Pass
3467.567	45.69	--	35.4	-4.84	68.2	--	--	22.51	103.00	100	Horizontal	Pass
4389.201	48.48	--	38.1	-1.93	74.0	--	54.0	15.90	15.00	100	Horizontal	Pass
5185.227	73.54	--	64.9	0.34	--	--	--	--	85.00	100	Horizontal	Pass
6207.849	54.27	--	43.6	4.47	68.2	--	--	13.93	335.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band I 11ac80 Low channel

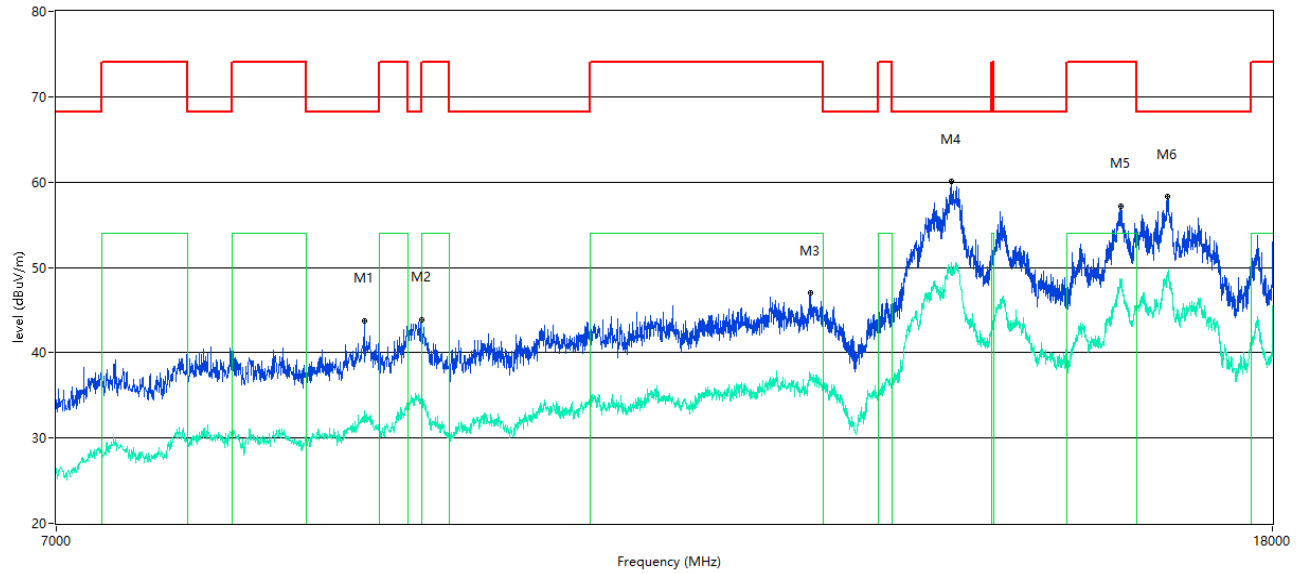
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
9235.191	44.32	--	34.7	-4.58	68.2	--	--	23.88	123.00	100	Vertical	Pass
9873.032	43.76	--	32.4	-5.94	68.2	--	--	24.44	294.00	100	Vertical	Pass
11151.462	45.63	--	35.3	-2.05	74.0	--	54.0	18.70	309.00	100	Vertical	Pass
14013.497	59.59	--	50.5	14.26	68.2	--	--	8.61	279.00	100	Vertical	Pass
16012.247	57.69	--	48.7	10.34	74.0	--	54.0	5.30	188.00	100	Vertical	Pass
16595.101	59.42	--	49.6	12.00	68.2	--	--	8.78	241.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band I 11ac80 Low channel

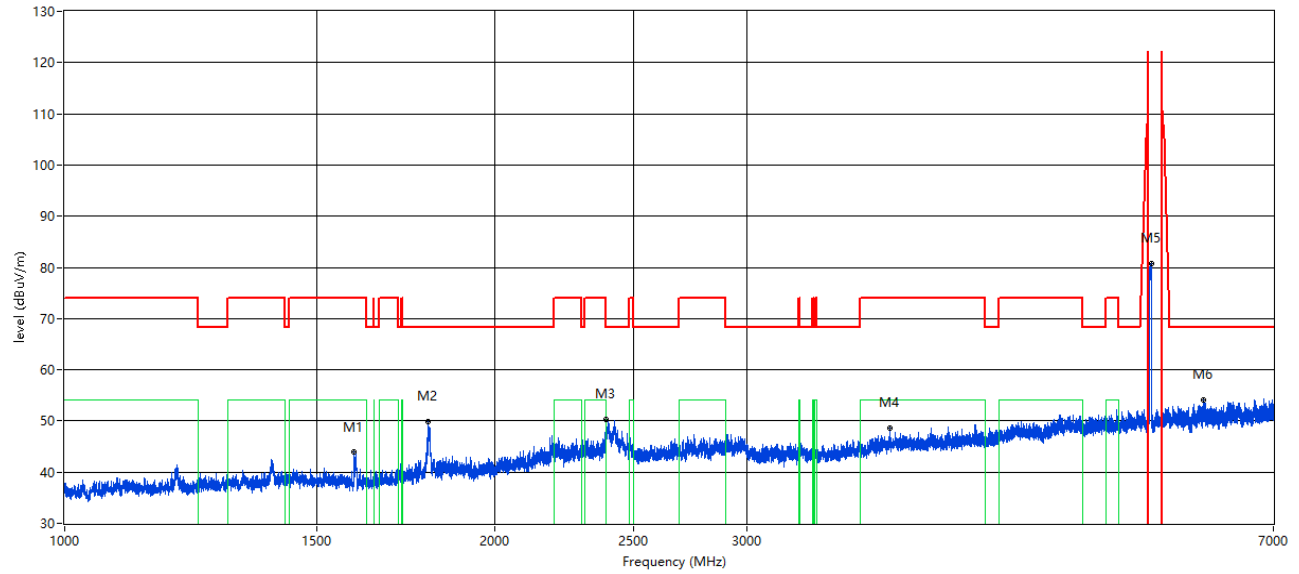
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz_B1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8891.527	43.76	--	32.8	-5.17	68.2	--	--	24.44	225.00	100	Horizontal	Pass
9295.676	43.79	--	34.2	-4.02	68.2	--	--	24.41	219.00	100	Horizontal	Pass
12570.107	47.04	--	37.4	-0.02	74.0	--	54.0	16.60	9.00	100	Horizontal	Pass
14024.494	60.07	--	50.5	14.25	68.2	--	--	8.13	137.00	100	Horizontal	Pass
16001.250	57.17	--	48.6	10.71	74.0	--	54.0	5.40	35.00	100	Horizontal	Pass
16595.101	58.30	--	49.5	12.00	68.2	--	--	9.90	156.00	100	Horizontal	Pass

1 GHz to 7 GHz, ANT V Band IV 11ac20 Low channel

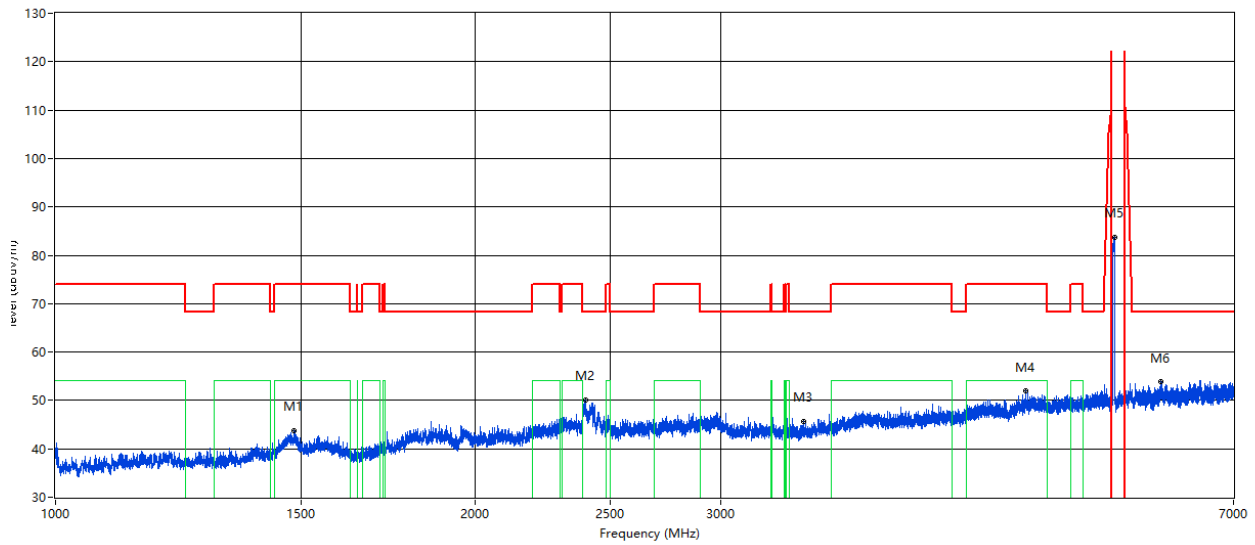
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1592.926	43.90	--	--	-11.98	74.0	--	54.0	10.10	61.00	100	Vertical	Pass
1796.150	49.96	--	--	-10.88	68.2	--	--	18.24	101.00	100	Vertical	Pass
2390.576	50.30	--	--	-1.02	68.2	--	--	17.90	231.00	100	Vertical	Pass
3777.653	48.69	--	--	-2.61	74.0	--	54.0	5.31	46.00	100	Vertical	Pass
5749.906	80.74	--	--	1.86	--	--	--	--	108.00	100	Vertical	Pass
6252.468	54.02	--	--	3.81	68.2	--	--	14.18	15.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band IV 11ac20 Low channel

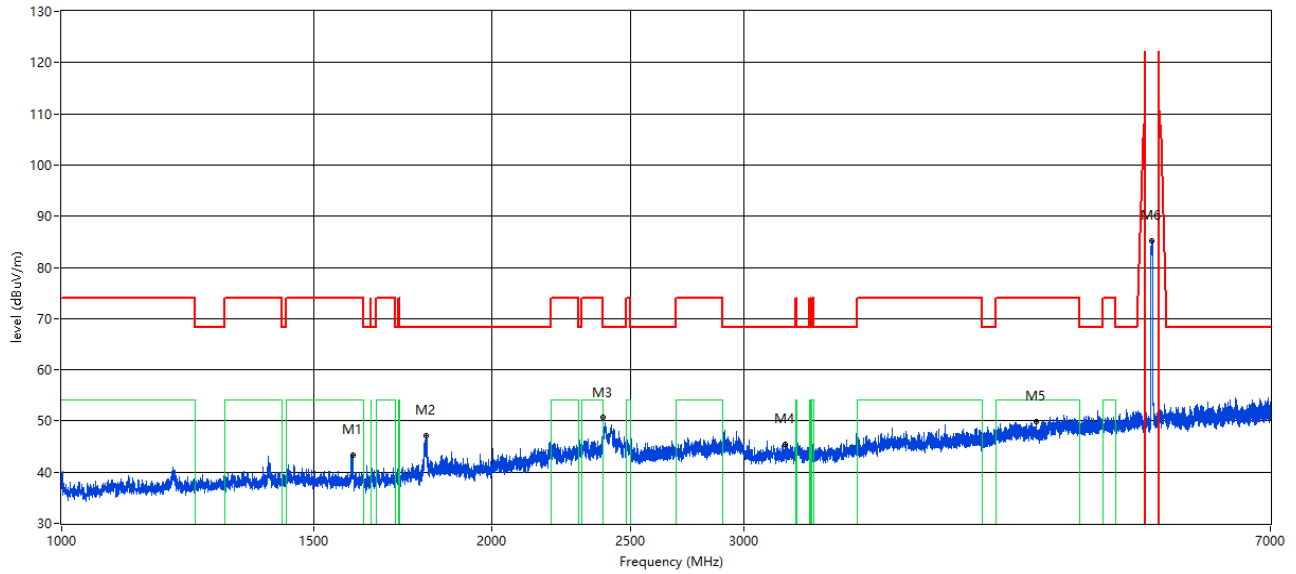
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1483.940	43.81	--	--	-11.45	74.0	--	54.0	10.19	2.00	100	Horizontal	Pass
2401.325	50.18	--	--	-0.11	68.2	--	--	18.02	136.00	100	Horizontal	Pass
3439.445	45.65	--	--	-5.01	68.2	--	--	22.55	157.00	100	Horizontal	Pass
4964.004	51.94	--	--	1.38	74.0	--	54.0	2.06	195.00	100	Horizontal	Pass
5749.906	83.68	--	--	1.86	--	--	--	--	36.00	100	Horizontal	Pass
6209.349	53.79	--	--	4.45	68.2	--	--	14.41	173.00	100	Horizontal	Pass

1 GHz to 7 GHz, ANT V Band IV 11ac20 Middle channel

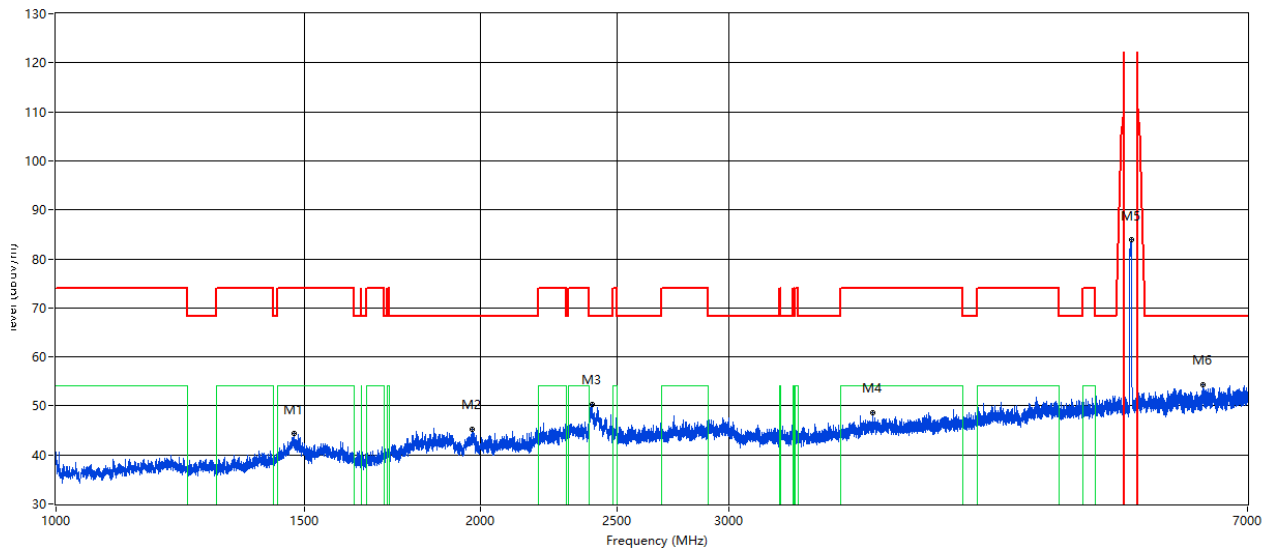
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1597.925	43.42	--	--	-12.47	74.0	--	54.0	10.58	46.00	100	Vertical	Pass
1798.400	47.11	--	--	-10.73	68.2	--	--	21.09	308.00	100	Vertical	Pass
2391.076	50.63	--	--	-0.71	68.2	--	--	17.57	155.00	100	Vertical	Pass
3203.975	45.50	--	--	-4.87	68.2	--	--	22.70	61.00	100	Vertical	Pass
4803.525	49.94	--	--	-0.36	74.0	--	54.0	4.06	323.00	100	Vertical	Pass
5780.652	85.26	--	--	2.10	--	--	--	--	6.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band IV 11ac20 Middle channel

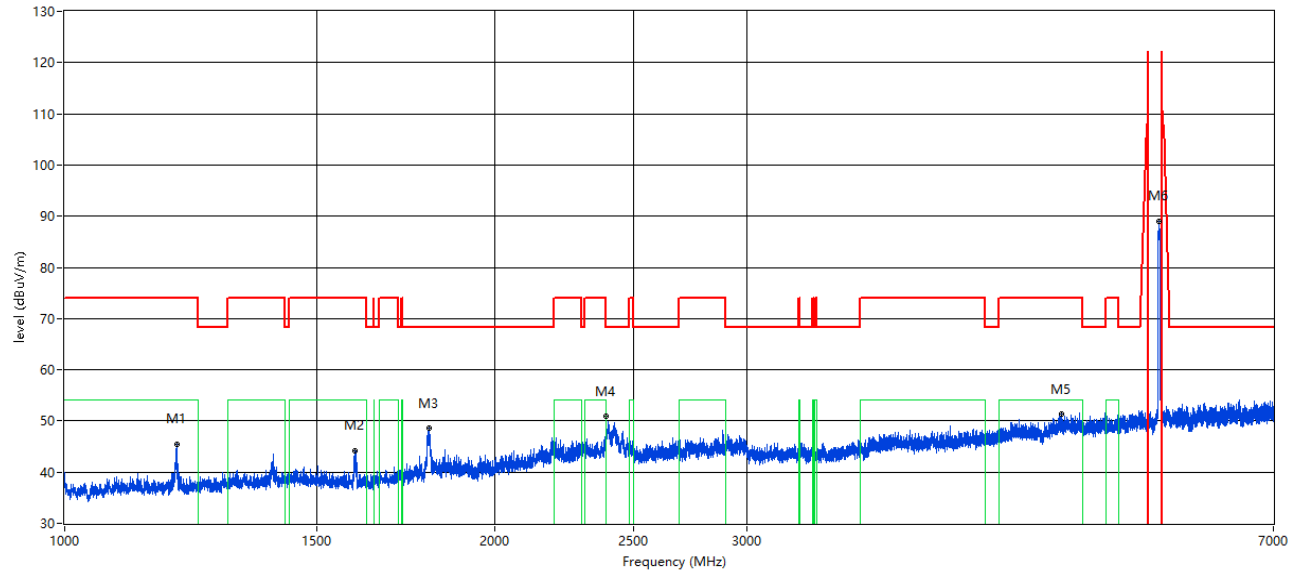
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1474.191	44.30	--	--	-11.34	74.0	--	54.0	9.70	15.00	100	Horizontal	Pass
1972.378	45.19	--	--	-9.08	68.2	--	--	23.01	48.00	100	Horizontal	Pass
2400.075	50.30	--	--	-0.08	68.2	--	--	17.90	227.00	100	Horizontal	Pass
3796.025	48.67	--	--	-2.73	74.0	--	54.0	5.33	13.00	100	Horizontal	Pass
5791.526	83.87	--	--	2.50	--	--	--	--	6.00	100	Horizontal	Pass
6511.311	54.28	--	--	5.69	68.2	--	--	13.92	40.00	100	Horizontal	Pass

1 GHz to 7 GHz, ANT V Band IV 11ac20 High channel

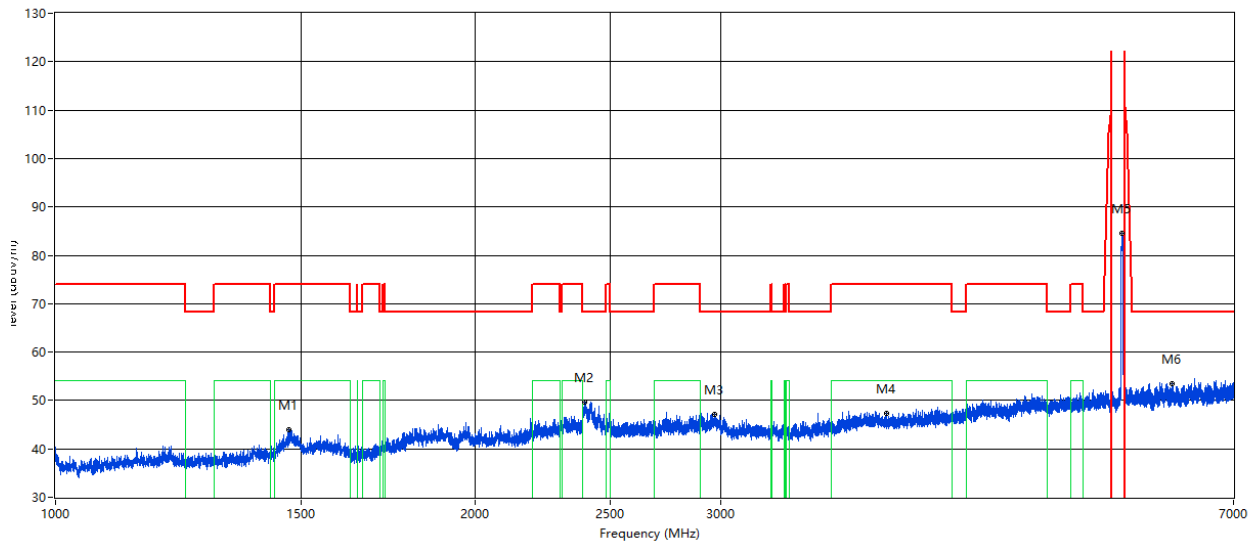
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1197.225	45.47	--	--	-12.17	74.0	--	54.0	8.53	102.00	100	Vertical	Pass
1595.426	44.21	--	--	-12.18	74.0	--	54.0	9.79	213.00	100	Vertical	Pass
1798.150	48.55	--	--	-10.73	68.2	--	--	19.65	48.00	100	Vertical	Pass
2390.576	50.88	--	--	-1.02	68.2	--	--	17.32	57.00	100	Vertical	Pass
4980.127	51.38	--	--	1.64	74.0	--	54.0	2.62	103.00	100	Vertical	Pass
5819.273	89.00	--	--	2.76	--	--	--	--	86.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band IV 11ac20 High channel

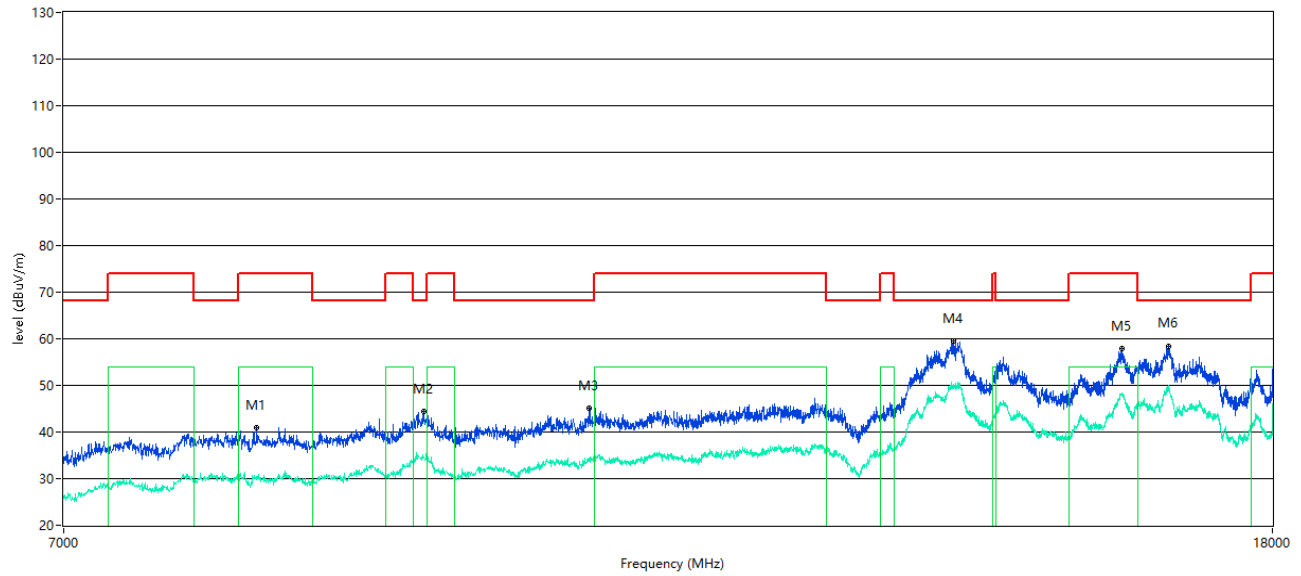
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1471.191	44.01	--	--	-11.44	74.0	--	54.0	9.99	159.00	100	Horizontal	Pass
2398.575	49.73	--	--	-0.05	68.2	--	--	18.47	181.00	100	Horizontal	Pass
2972.503	47.09	--	--	-3.12	68.2	--	--	21.11	125.00	100	Horizontal	Pass
3947.507	47.38	--	--	-3.12	74.0	--	54.0	6.62	245.00	100	Horizontal	Pass
5819.273	84.52	--	--	2.76	--	--	--	--	4.00	100	Horizontal	Pass
6326.459	53.37	--	--	4.45	68.2	--	--	14.83	95.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band IV 11ac20 Low channel

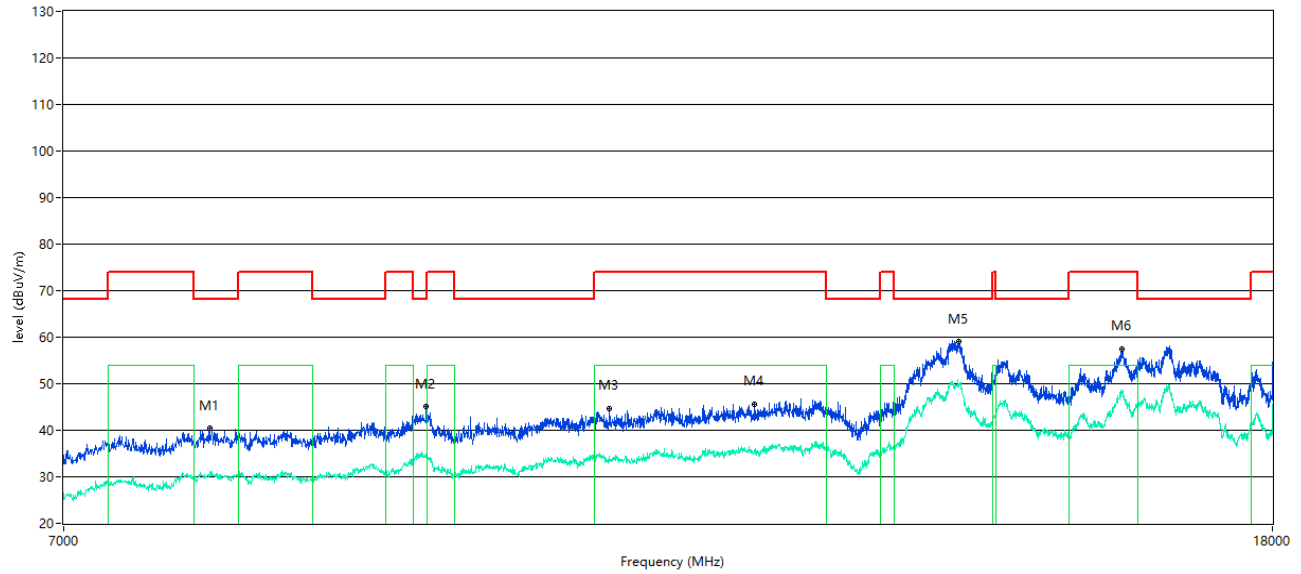
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8140.965	40.86	--	30.4	-7.83	74.0	--	54.0	23.60	190.00	100	Vertical	Pass
9273.682	44.41	--	34.4	-4.11	68.2	--	--	23.79	293.00	100	Vertical	Pass
10557.611	45.10	--	34.4	-2.17	68.2	--	--	23.10	286.00	100	Vertical	Pass
14027.243	59.50	--	50.1	14.27	68.2	--	--	8.70	202.00	100	Vertical	Pass
16009.498	57.90	--	48.3	10.44	74.0	--	54.0	5.70	93.00	100	Vertical	Pass
16597.851	58.42	--	50.0	12.09	68.2	--	--	9.78	51.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band IV 11ac20 Low channel

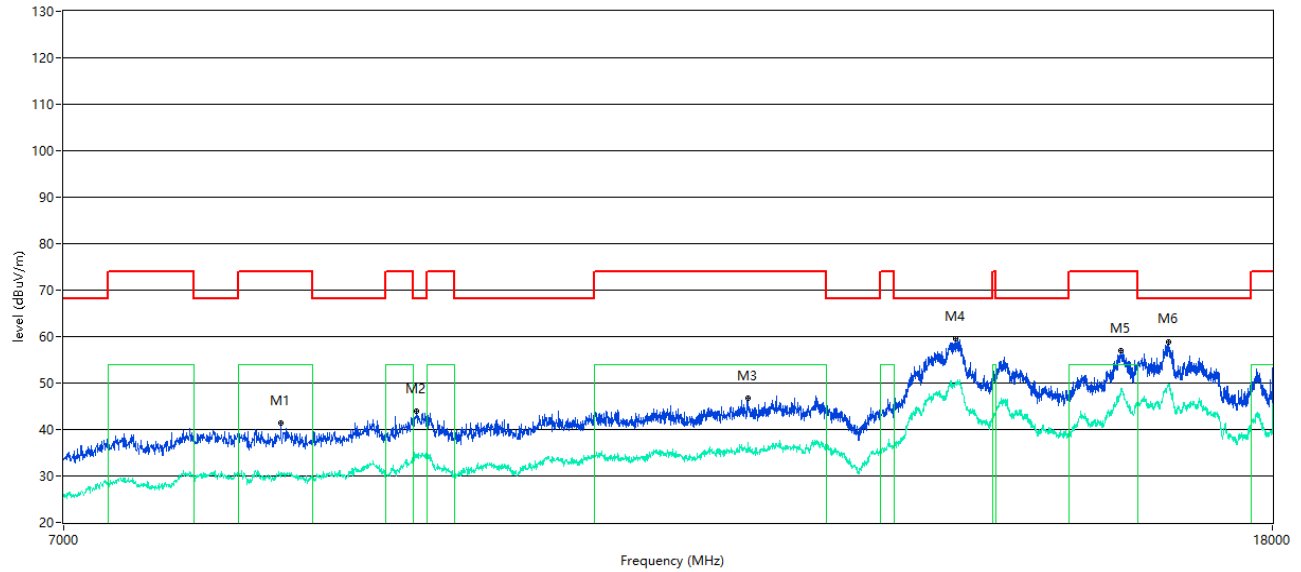
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
7844.039	40.40	--	30.4	-8.56	68.2	--	--	27.80	127.00	100	Horizontal	Pass
9290.177	45.08	--	34.8	-4.02	68.2	--	--	23.12	40.00	100	Horizontal	Pass
10719.820	44.70	--	34.5	-2.05	74.0	--	54.0	19.50	142.00	100	Horizontal	Pass
12011.997	45.47	--	35.5	-1.03	74.0	--	54.0	18.50	94.00	100	Horizontal	Pass
14087.728	59.07	--	50.0	14.85	68.2	--	--	9.13	282.00	100	Horizontal	Pass
16003.999	57.48	--	48.2	10.62	74.0	--	54.0	5.80	203.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band IV 11ac20 Middle channel

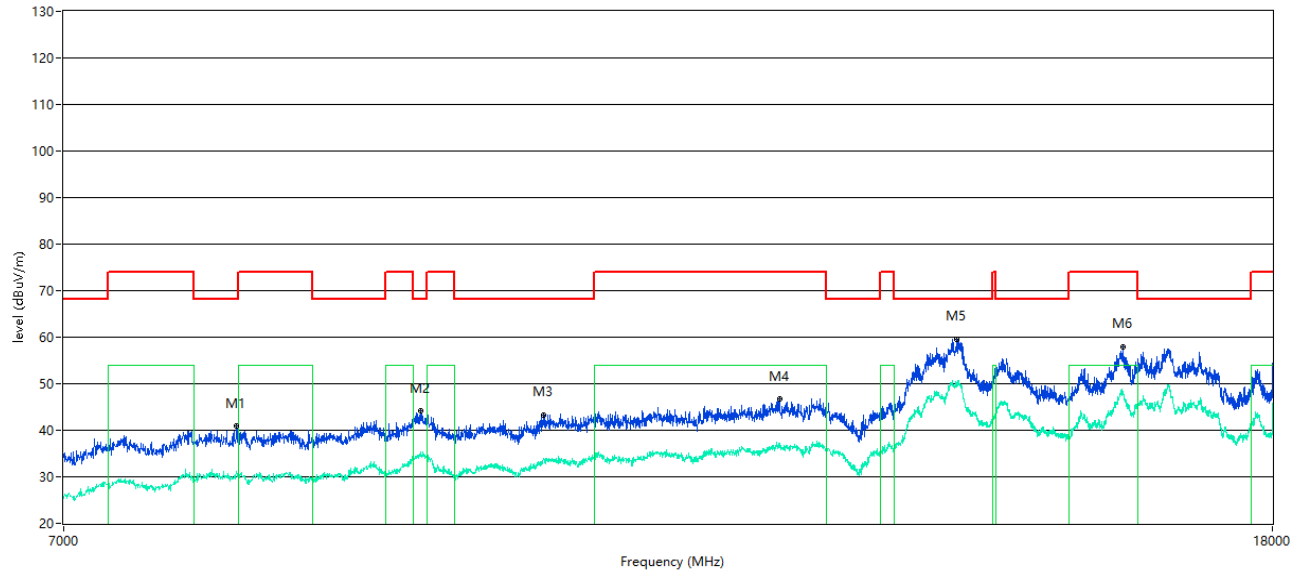
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8294.926	41.33	--	30.7	-6.76	74.0	--	54.0	23.30	300.00	100	Vertical	Pass
9224.194	43.94	--	34.7	-4.69	68.2	--	--	24.26	296.00	100	Vertical	Pass
11948.763	46.82	--	36.4	-0.78	74.0	--	54.0	17.60	52.00	100	Vertical	Pass
14051.987	59.43	--	49.7	14.38	68.2	--	--	8.77	153.00	100	Vertical	Pass
15984.754	57.00	--	47.5	10.16	74.0	--	54.0	6.50	237.00	100	Vertical	Pass
16600.600	58.88	--	49.8	12.12	68.2	--	--	9.32	308.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band IV 11ac20 Middle channel

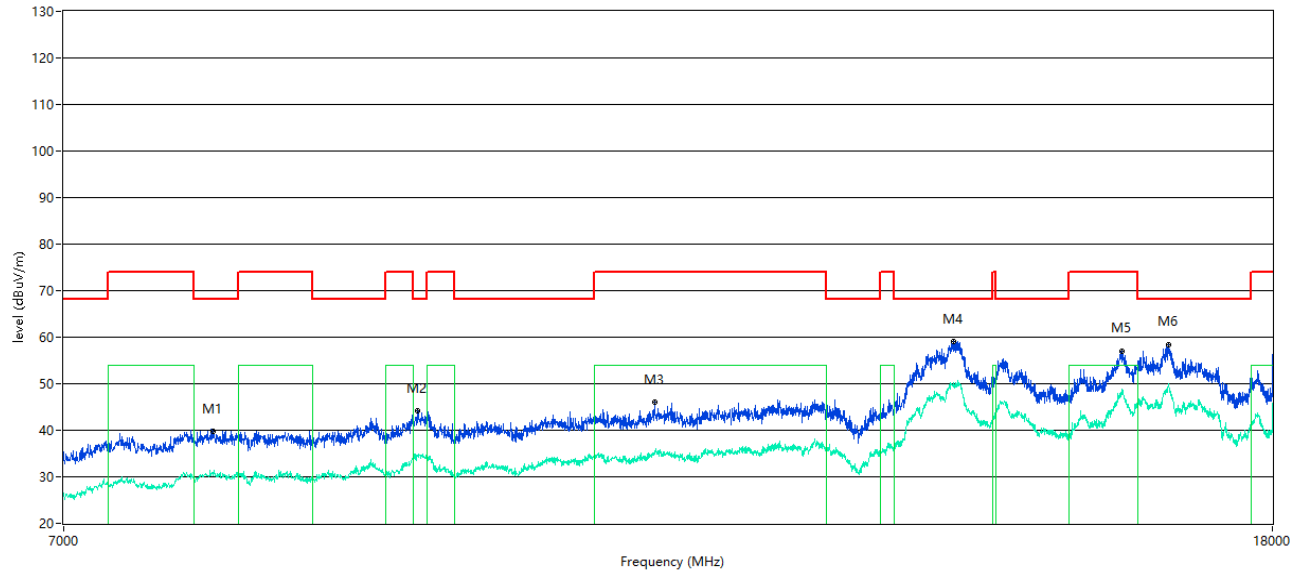
R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8011.747	40.89	--	31.1	-9.08	68.2	--	--	27.31	3.00	100	Horizontal	Pass
9248.938	44.25	--	35.4	-4.42	68.2	--	--	23.95	321.00	100	Horizontal	Pass
10186.453	43.24	--	33.9	-2.88	68.2	--	--	24.96	49.00	100	Horizontal	Pass
12251.187	46.66	--	36.3	-0.44	74.0	--	54.0	17.70	279.00	100	Horizontal	Pass
14068.483	59.44	--	50.2	14.56	68.2	--	--	8.76	300.00	100	Horizontal	Pass
16014.996	57.88	--	48.0	10.25	74.0	--	54.0	6.00	188.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band IV 11ac20 High channel

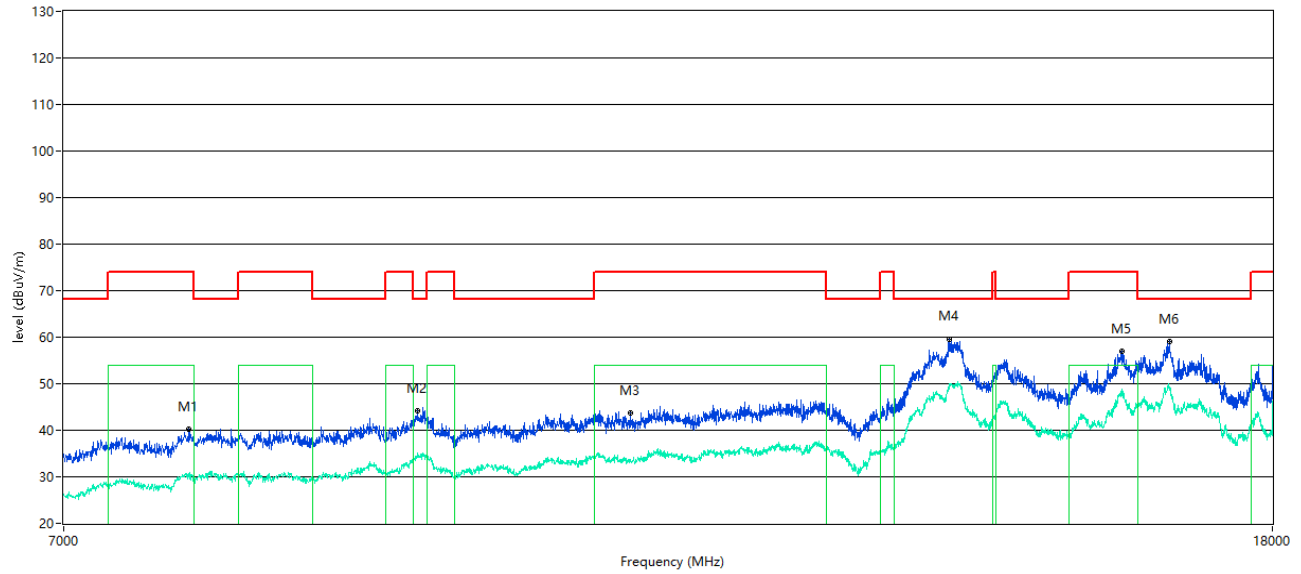
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
7868.783	39.69	--	30.0	-8.67	68.2	--	--	28.51	242.00	100	Vertical	Pass
9229.693	44.17	--	34.6	-4.64	68.2	--	--	24.03	358.00	100	Vertical	Pass
11110.222	46.13	--	35.5	-1.81	74.0	--	54.0	18.50	325.00	100	Vertical	Pass
14032.742	59.18	--	49.3	14.28	68.2	--	--	9.02	169.00	100	Vertical	Pass
16006.748	57.08	--	48.4	10.53	74.0	--	54.0	5.60	201.00	100	Vertical	Pass
16595.101	58.49	--	49.5	12.00	68.2	--	--	9.71	119.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band IV 11ac20 High channel

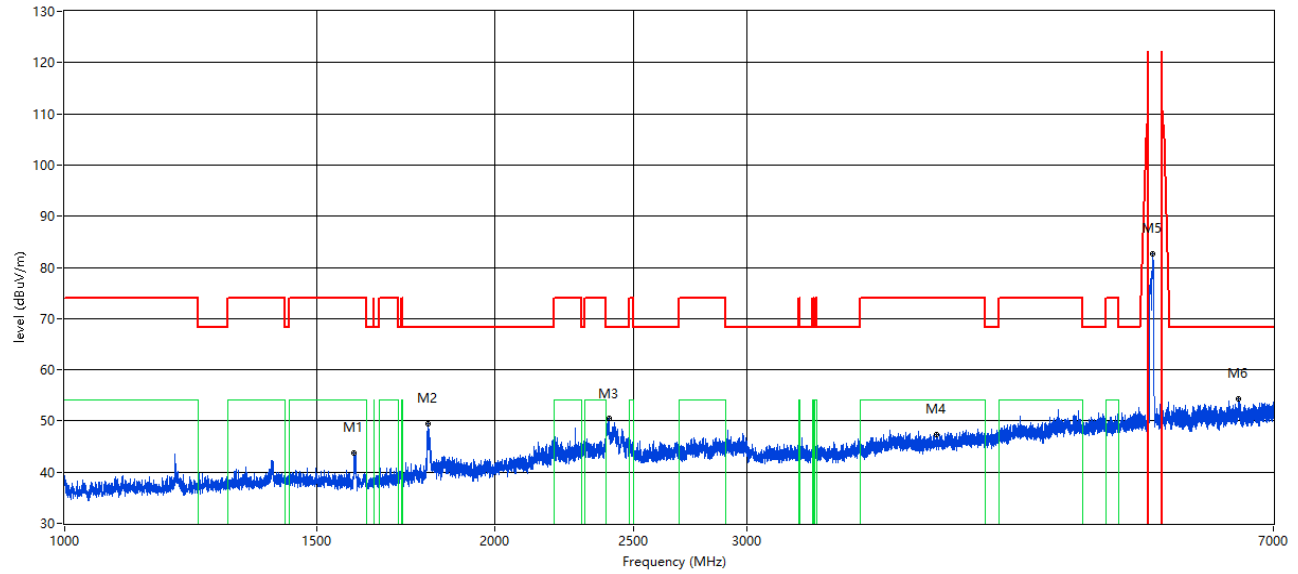
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
7720.320	40.22	--	30.5	-7.82	74.0	--	54.0	23.50	107.00	100	Horizontal	Pass
9229.693	44.18	--	33.9	-4.64	68.2	--	--	24.02	220.00	100	Horizontal	Pass
10901.275	43.70	--	33.4	-2.05	74.0	--	54.0	20.60	253.00	100	Horizontal	Pass
13988.753	59.61	--	50.0	13.92	68.2	--	--	8.59	160.00	100	Horizontal	Pass
16001.250	56.90	--	48.8	10.71	74.0	--	54.0	5.20	217.00	100	Horizontal	Pass
16606.098	59.05	--	49.4	11.92	68.2	--	--	9.15	79.00	100	Horizontal	Pass

1 GHz to 7 GHz, ANT V Band IV 11ac40 Low channel

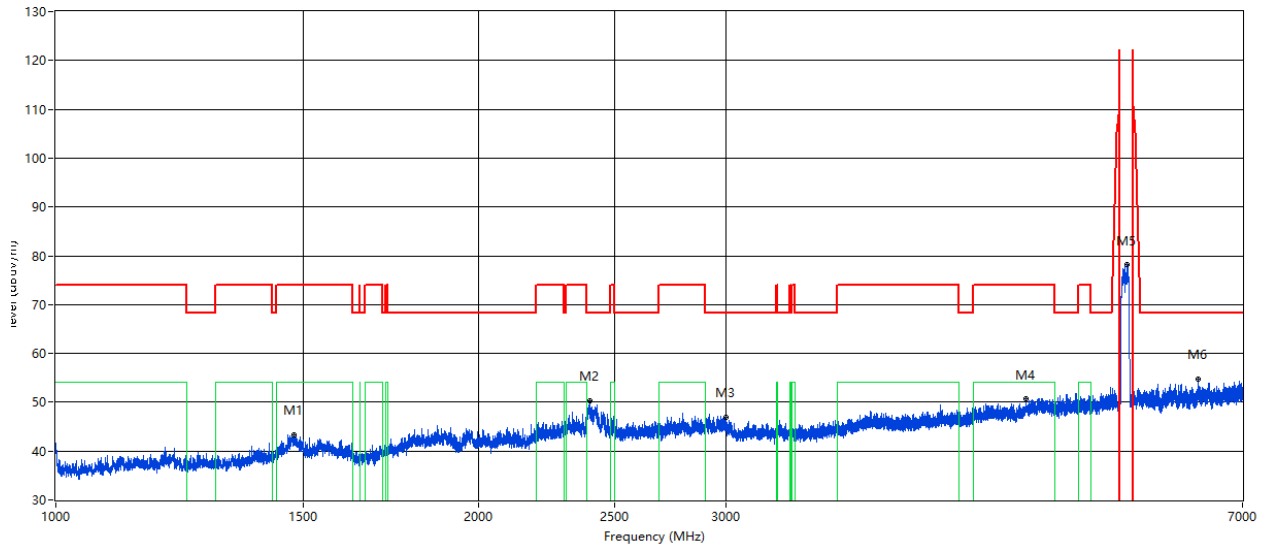
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1592.676	43.72	--	--	-12.00	74.0	--	54.0	10.28	5.00	100	Vertical	Pass
1794.901	49.55	--	--	-10.97	68.2	--	--	18.65	2.00	100	Vertical	Pass
2401.075	50.43	--	--	-0.11	68.2	--	--	17.77	15.00	100	Vertical	Pass
4068.991	47.36	--	--	-2.78	74.0	--	54.0	6.64	2.00	100	Vertical	Pass
5766.779	82.63	--	--	1.71	--	--	--	--	0.00	100	Vertical	Pass
6618.548	54.34	--	--	5.53	68.2	--	--	13.86	15.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band IV 11ac40 Low channel

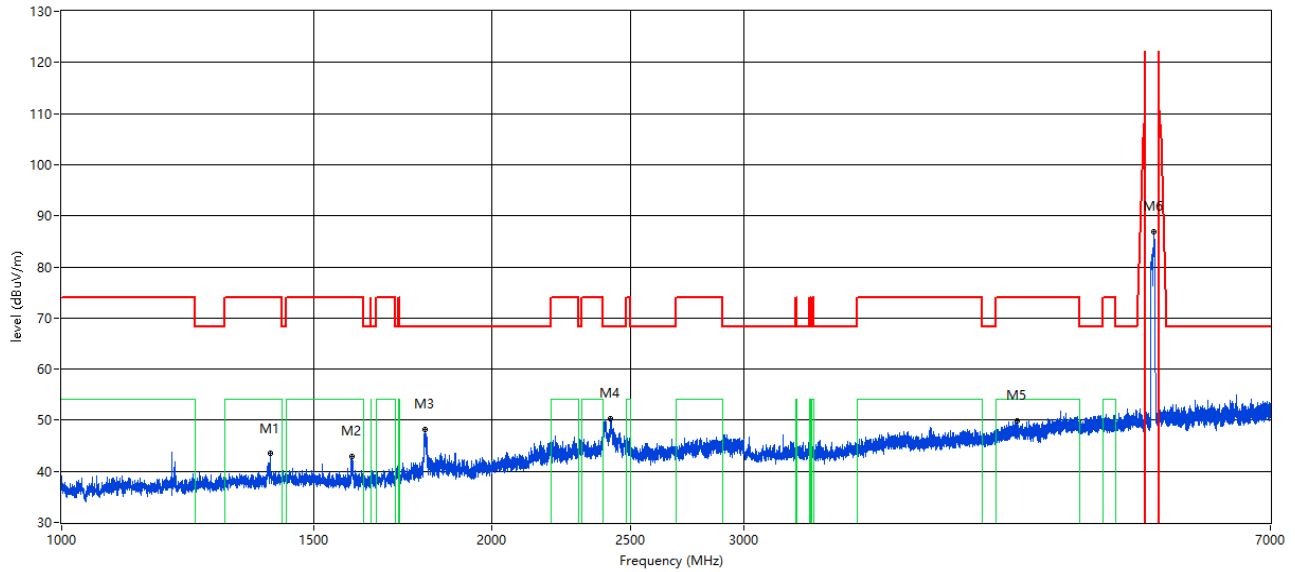
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1478.190	44.19	--	--	-11.91	74.0	--	54.0	9.81	33.00	100	Horizontal	Pass
2397.575	50.40	--	--	-0.02	68.2	--	--	17.80	247.00	100	Horizontal	Pass
3515.186	45.20	--	--	-5.11	68.2	--	--	23.00	302.00	100	Horizontal	Pass
4920.135	50.02	--	--	0.37	74.0	--	54.0	3.98	81.00	100	Horizontal	Pass
5766.779	82.73	--	--	1.71	--	--	--	--	338.00	100	Horizontal	Pass
6617.423	54.04	--	--	5.48	68.2	--	--	14.16	3.00	100	Horizontal	Pass

1 GHz to 7 GHz, ANT V Band IV 11ac40 High channel

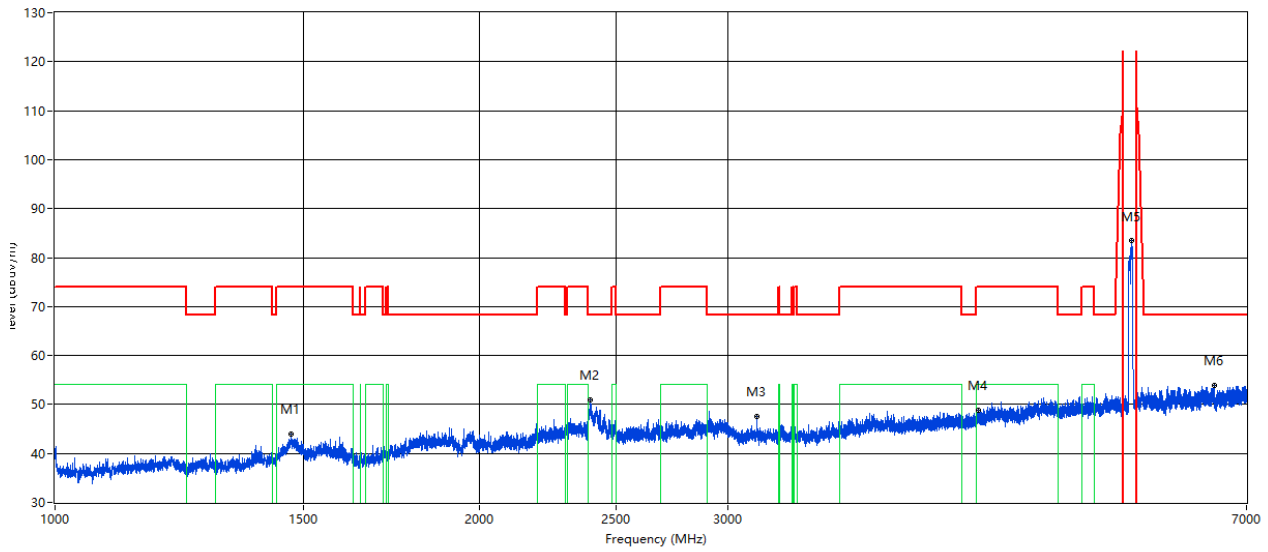
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1399.450	43.43	--	--	-11.80	74.0	--	54.0	10.57	104.00	100	Vertical	Pass
1596.425	42.90	--	--	-12.30	74.0	--	54.0	11.10	70.00	100	Vertical	Pass
1794.151	48.26	--	--	-11.03	68.2	--	--	19.94	215.00	100	Vertical	Pass
2421.072	50.39	--	--	-0.80	68.2	--	--	17.81	331.00	100	Vertical	Pass
4652.793	49.89	--	--	-0.31	74.0	--	54.0	4.11	101.00	100	Vertical	Pass
5806.899	86.85	--	--	2.49	--	--	--	--	73.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band IV 11ac40 High channel

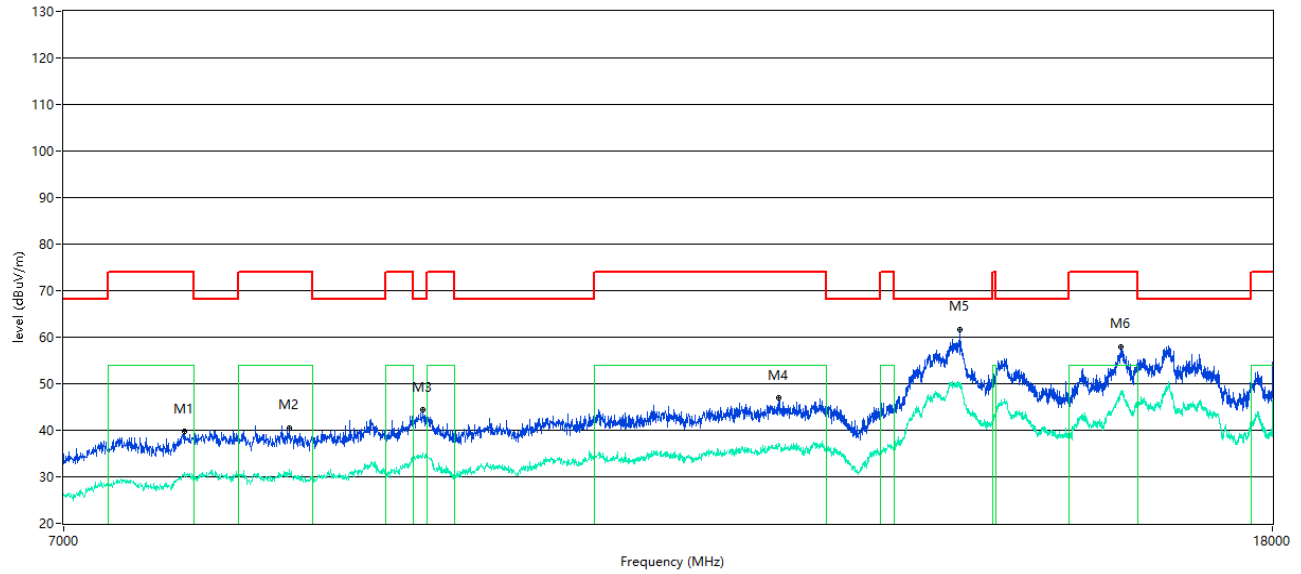
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1470.941	43.98	--	--	-11.46	74.0	--	54.0		152.00	100	Horizontal	Pass
2396.575	50.94	--	--	0.03	68.2	--	--	17.26	28.00	100	Horizontal	Pass
3148.106	47.51	--	--	-4.77	68.2	--	--	20.69	3.00	100	Horizontal	Pass
4514.436	48.87	--	--	-1.21	74.0	--	54.0	5.13	8.00	100	Horizontal	Pass
5806.899	83.41	--	--	2.49	--	--	--	--	62.00	100	Horizontal	Pass
6647.544	53.87	--	--	5.39	68.2	--	--	14.33	13.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band IV 11ac40 Low channel

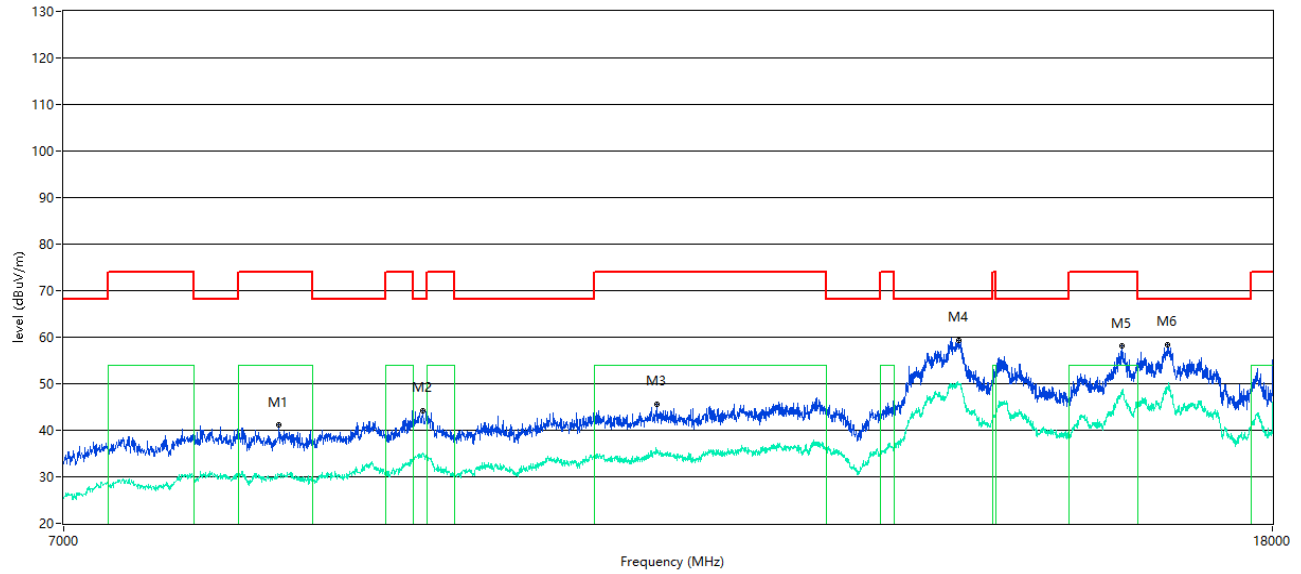
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
7695.576	39.67	--	30.9	-7.85	74.0	--	54.0	23.10	349.00	100	Vertical	Pass
8349.913	40.41	--	31.5	-6.88	74.0	--	54.0	22.50	47.00	100	Vertical	Pass
9270.932	44.42	--	34.8	-4.09	68.2	--	--	23.78	87.00	100	Vertical	Pass
12234.691	46.99	--	36.8	-0.43	74.0	--	54.0	17.20	43.00	100	Vertical	Pass
14104.224	61.59	--	49.9	14.55	68.2	--	--	6.61	297.00	100	Vertical	Pass
15984.754	57.89	--	48.2	10.16	74.0	--	54.0	5.80	9.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band IV 11ac40 Low channel

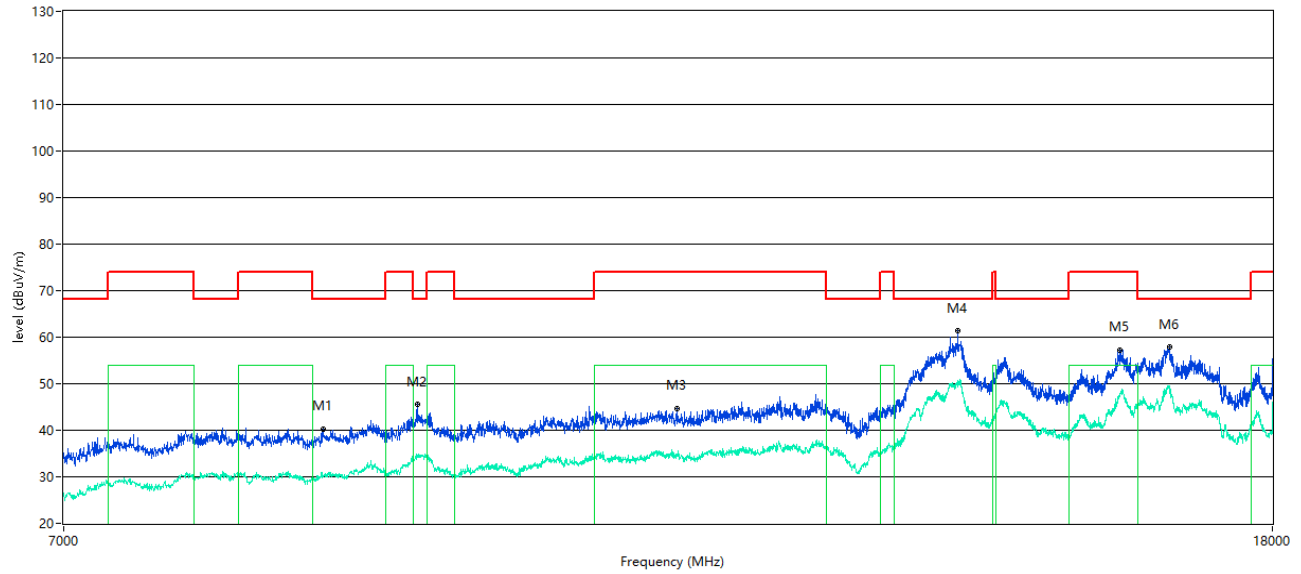
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8281.180	41.07	--	30.5	-6.93	74.0	--	54.0	23.50	30.00	100	Horizontal	Pass
9265.434	44.21	--	35.0	-4.17	68.2	--	--	23.99	299.00	100	Horizontal	Pass
11126.718	45.53	--	35.3	-1.91	74.0	--	54.0	18.70	63.00	100	Horizontal	Pass
14084.979	59.37	--	50.1	14.84	68.2	--	--	8.83	180.00	100	Horizontal	Pass
16006.748	58.14	--	48.5	10.53	74.0	--	54.0	5.50	241.00	100	Horizontal	Pass
16584.104	58.39	--	49.3	11.73	68.2	--	--	9.81	31.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band IV 11ac40 High channel

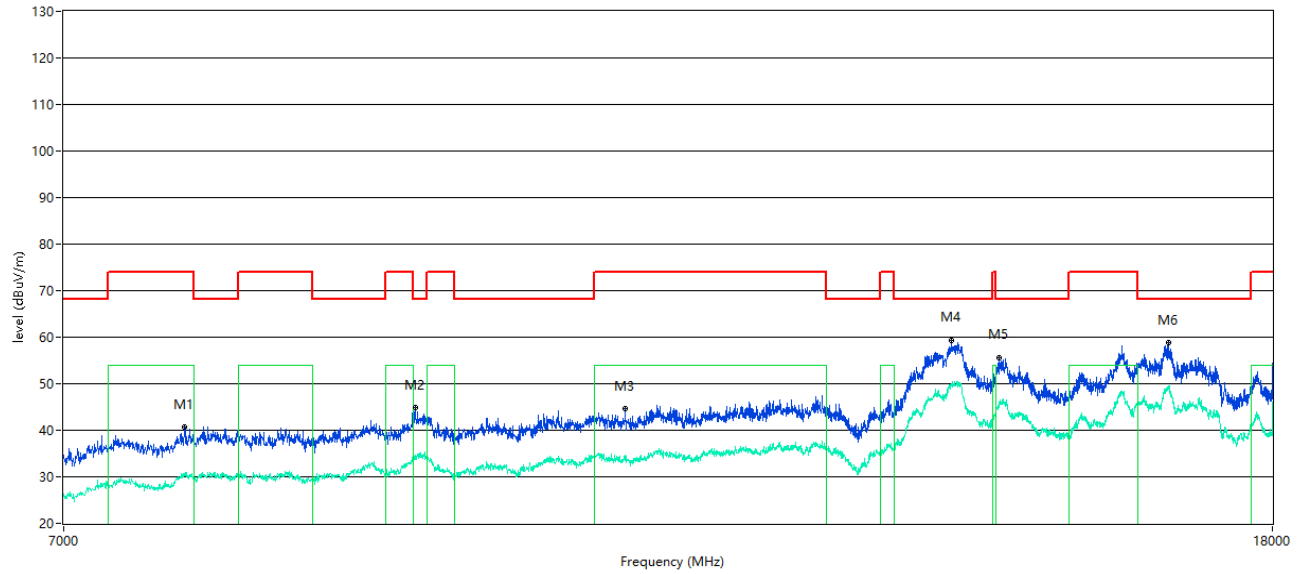
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8572.607	40.26	--	30.1	-7.30	68.2	--	--	27.94	337.00	100	Vertical	Pass
9226.943	45.48	--	34.6	-4.67	68.2	--	--	22.72	345.00	100	Vertical	Pass
11302.674	44.63	--	34.4	-1.63	74.0	--	54.0	19.60	10.00	100	Vertical	Pass
14079.480	61.29	--	50.3	14.72	68.2	--	--	6.91	306.00	100	Vertical	Pass
15976.506	57.31	--	47.7	9.93	74.0	--	54.0	6.30	211.00	100	Vertical	Pass
16611.597	57.83	--	49.4	11.76	68.2	--	--	10.37	26.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band IV 11ac40 High channel

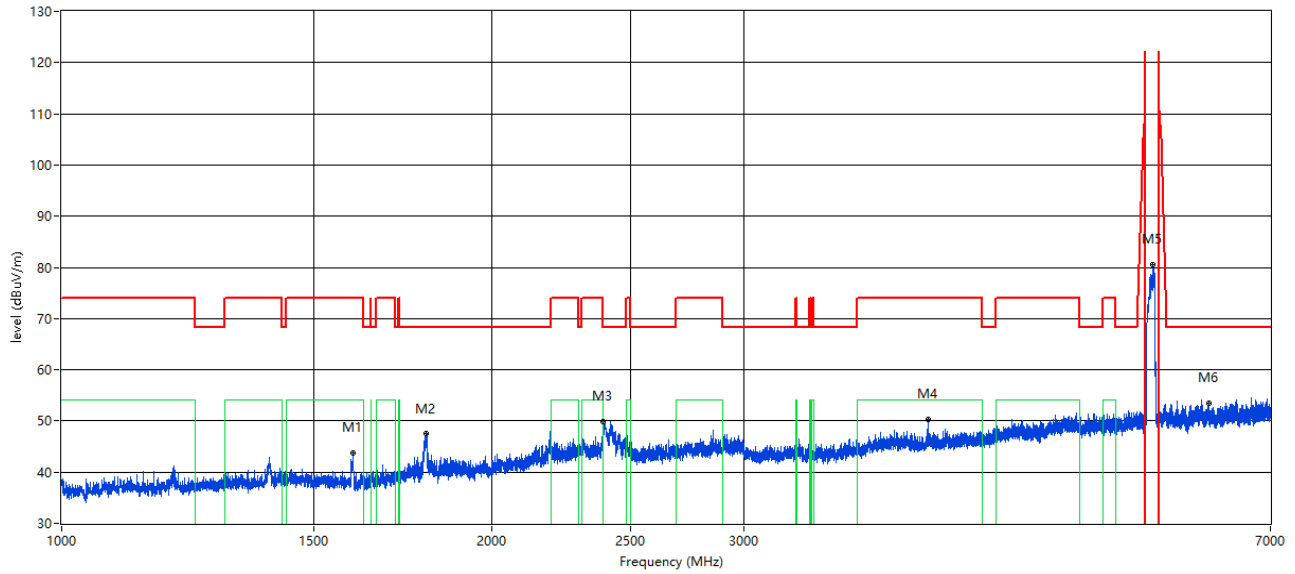
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
7695.576	40.68	--	30.8	-7.85	74.0	--	54.0	23.20	331.00	100	Horizontal	Pass
9210.447	44.84	--	34.6	-4.75	68.2	--	--	23.36	2.00	100	Horizontal	Pass
10854.536	44.62	--	34.5	-1.89	74.0	--	54.0	19.50	198.00	100	Horizontal	Pass
14005.249	59.29	--	49.9	14.24	68.2	--	--	8.91	164.00	100	Horizontal	Pass
14535.866	55.65	--	45.5	9.20	68.2	--	--	12.55	301.00	100	Horizontal	Pass
16595.101	58.88	--	49.0	12.00	68.2	--	--	9.32	42.00	100	Horizontal	Pass

1 GHz to 7 GHz, ANT V Band IV 11ac80 Low channel

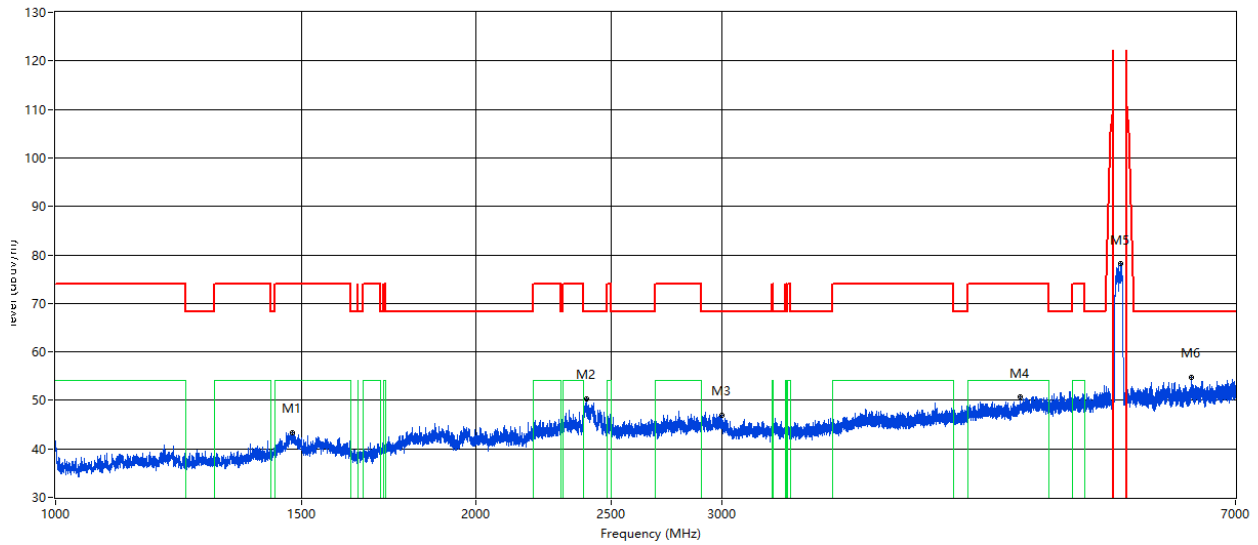
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1599.175	43.73	--	--	-12.49	74.0	--	54.0	10.27	10.00	100	Vertical	Pass
1798.150	47.59	--	--	-10.73	68.2	--	--	20.61	10.00	100	Vertical	Pass
2389.576	49.79	--	--	-1.63	74.0	--	54.0	4.21	9.00	100	Vertical	Pass
4035.996	50.26	--	--	-2.47	74.0	--	54.0	3.74	14.00	100	Vertical	Pass
5797.525	80.52	--	--	2.42	--	--	--	--	10.00	100	Vertical	Pass
6335.833	53.55	--	--	4.60	68.2	--	--	14.65	14.00	100	Vertical	Pass

1 GHz to 7 GHz, ANT H Band IV 11ac80 Low channel

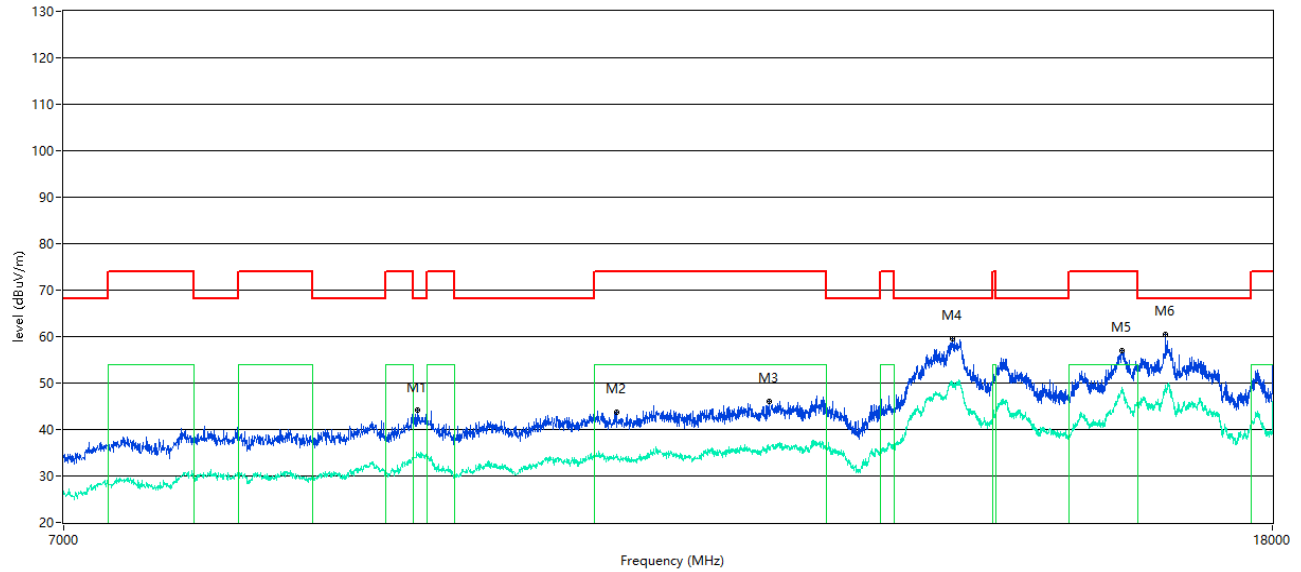
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBUV/m)	Q-peak Level (dBUV/m)	Average Level (dBUV/m)	Factor (dB)	PK Limit (dBUV/m)	QP Limit (dBUV/m)	AV Limit (dBUV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
1477.190	43.40	--	--	-11.77	74.0	--	54.0	10.60	91.00	100	Horizontal	Pass
2400.075	50.27	--	--	-0.08	68.2	--	--	17.93	158.00	100	Horizontal	Pass
2998.500	47.00	--	--	-3.66	68.2	--	--	21.20	3.00	100	Horizontal	Pass
4908.511	50.64	--	--	0.42	74.0	--	54.0	3.36	224.00	100	Horizontal	Pass
5797.150	78.12	--	--	2.43	--	--	--	--	305.00	100	Horizontal	Pass
6505.187	54.82	--	--	5.37	68.2	--	--	13.38	15.00	100	Horizontal	Pass

7 GHz to 18 GHz, ANT V Band IV 11ac80 Low channel

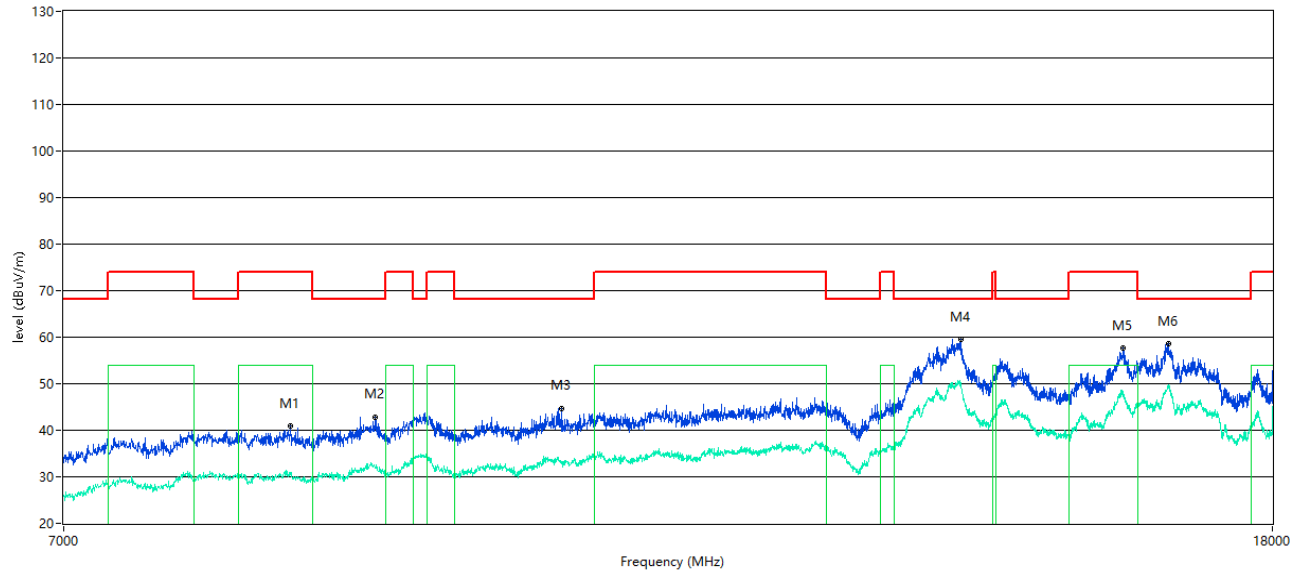
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
9232.442	44.10	--	34.4	-4.61	68.2	--	--	24.10	14.00	100	Vertical	Pass
10780.305	43.61	--	34.6	-1.76	74.0	--	54.0	19.40	157.00	100	Vertical	Pass
12146.713	46.06	--	36.3	-0.74	74.0	--	54.0	17.70	164.00	100	Vertical	Pass
14024.494	59.49	--	50.0	14.25	68.2	--	--	8.71	308.00	100	Vertical	Pass
16003.999	57.05	--	48.1	10.62	74.0	--	54.0	5.90	292.00	100	Vertical	Pass
16553.862	60.50	--	49.5	11.00	68.2	--	--	7.70	242.00	100	Vertical	Pass

7 GHz to 18 GHz, ANT H Band IV 11ac80 Low channel

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_7GHz-18GHz



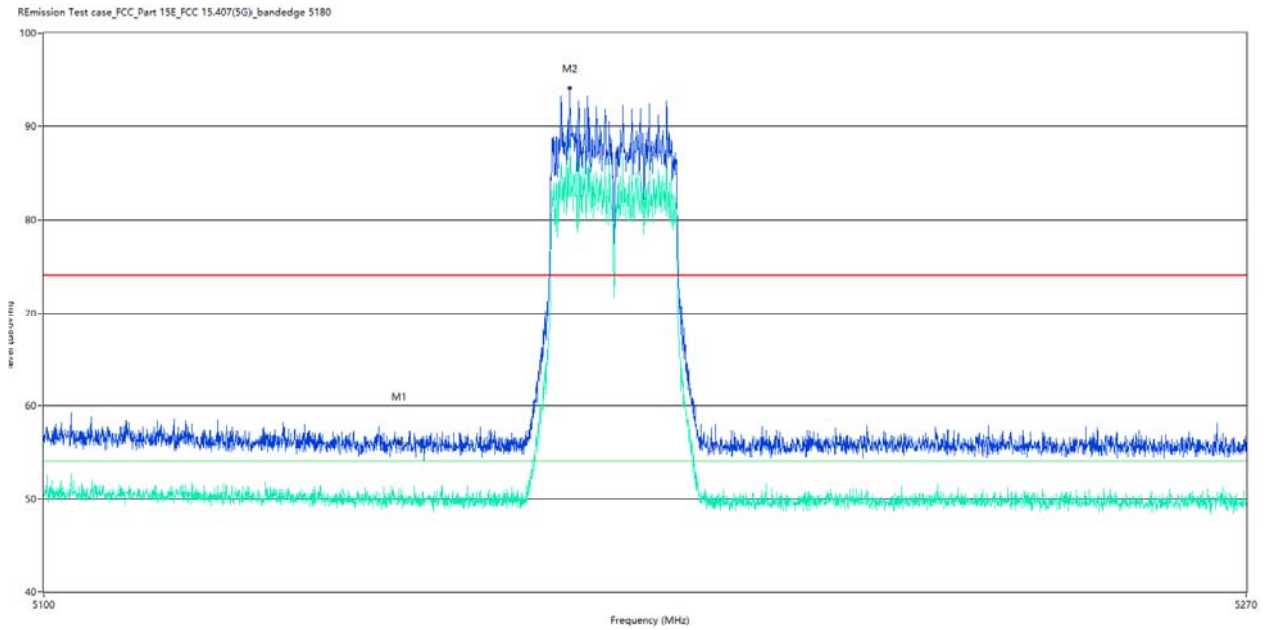
Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
8358.160	41.02	--	30.6	-7.05	74.0	--	54.0	23.40	191.00	100	Horizontal	Pass
8930.017	42.77	--	31.9	-5.65	68.2	--	--	25.43	8.00	100	Horizontal	Pass
10332.167	44.68	--	33.1	-2.44	68.2	--	--	23.52	120.00	100	Horizontal	Pass
14106.973	59.51	--	49.4	14.37	68.2	--	--	8.69	10.00	100	Horizontal	Pass
16014.996	57.70	--	48.5	10.25	74.0	--	54.0	5.50	37.00	100	Horizontal	Pass
16592.352	58.49	--	49.8	11.91	68.2	--	--	9.71	259.00	100	Horizontal	Pass

A.7.2 Band Edge (Restricted-band)

Test Band	Mode	Channel	Verdict
Band I	802.11ac(VHT20)	Low	Pass
		High	Pass
	802.11ac(VHT40)	Low	Pass
		High	Pass
	802.11ac(VHT80)	Low	Pass
		Low	Pass
Band IV	802.11ac(VHT20)	Low	Pass
		High	Pass
	802.11ac(VHT40)	Low	Pass
		High	Pass
	802.11ac(VHT80)	Low	Pass
		Low	Pass

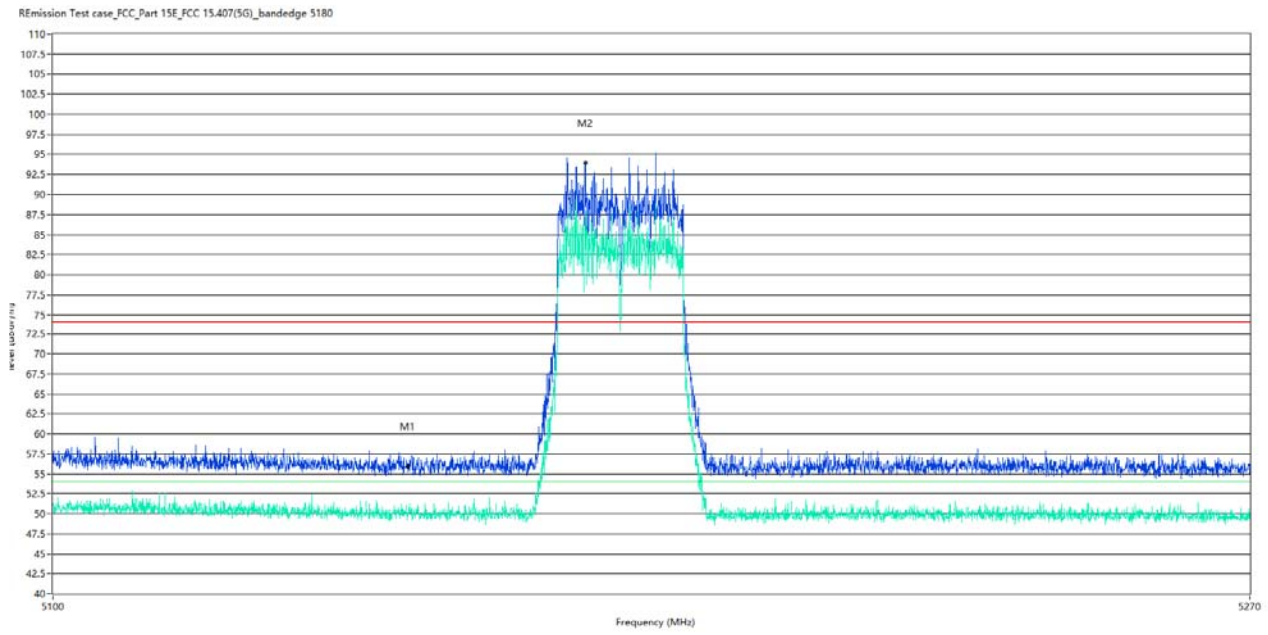
Test Plots

Band I 11ac20 CH36 ANT V



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5150.000	55.98	--	50.7	44.02	74.0	--	54.0	3.30	235.12	100	Vertical	Pass
5173.682	94.15	--	88.7	43.88	74.0	--	54.0	-34.70	218.10	100	Vertical	N.A

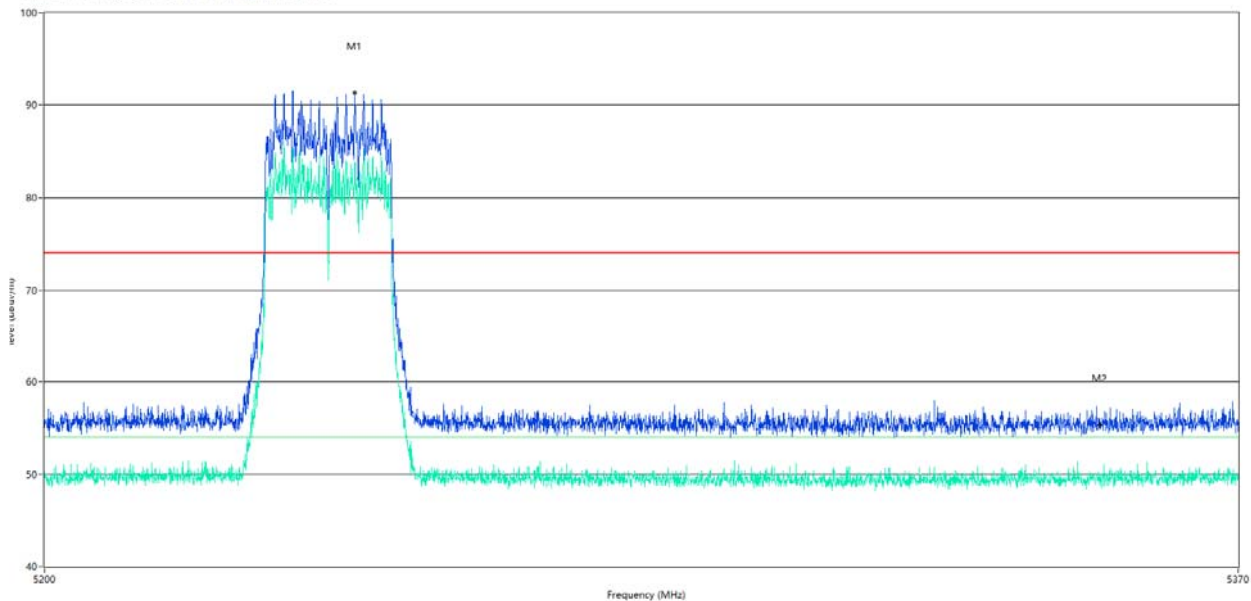
Band I 11ac20 CH36 ANT H



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5150.000	56.05	--	50.6	44.02	74.0	--	54.0	3.40	180.80	100	Horizontal	Pass
5174.931	93.94	--	88.0	43.87	74.0	--	54.0	-34.00	81.00	100	Horizontal	N.A

Band I 11ac20 CH48 ANT V

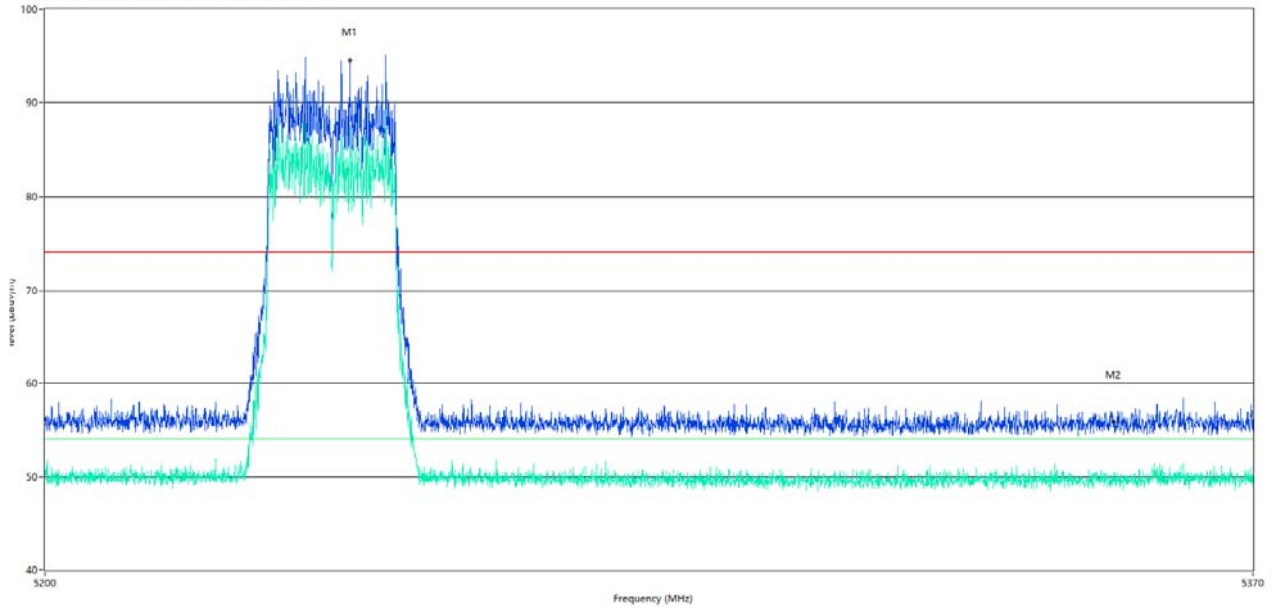
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_bandedge 5240



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5243.689	91.35	--	83.9	43.79	74.0	--	54.0	-29.90	231.80	100	Vertical	N.A
5350.000	55.52	--	49.7	43.88	74.0	--	54.0	4.30	221.87	100	Vertical	Pass

Band I 11ac20 CH48 ANT H

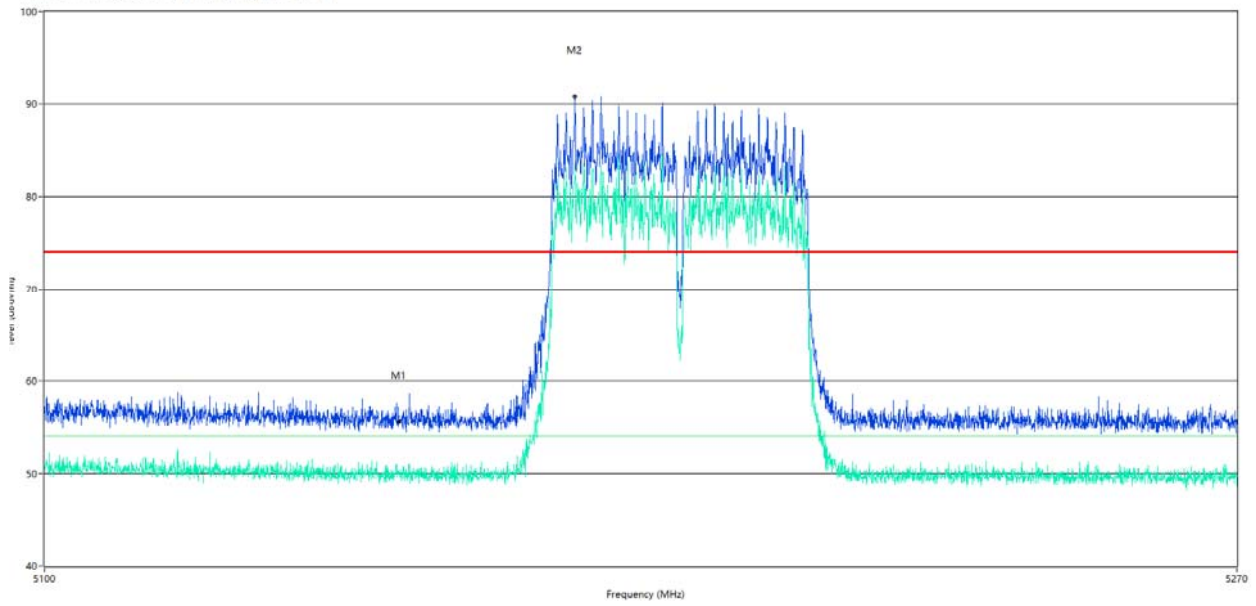
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_bandedge 5240



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5242.389	94.57	--	87.4	43.79	74.0	--	54.0	-33.40	64.80	100	Horizontal	N.A
5350.000	55.88	--	49.2	43.88	74.0	--	54.0	4.80	91.50	100	Horizontal	Pass

Band I 11ac40 CH38 ANT V

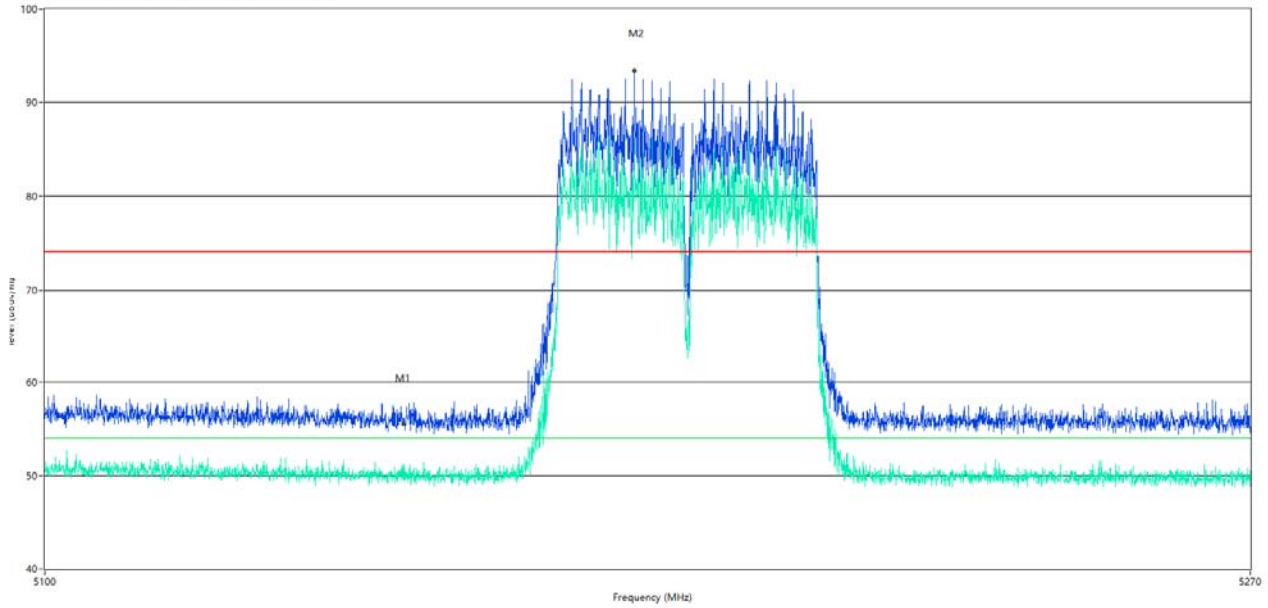
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_bandedge 5180



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5150.000	55.61	--	50.1	44.02	74.0	--	54.0	3.90	3.95	100	Vertical	Pass
5174.931	90.82	--	83.5	43.87	74.0	--	54.0	-29.50	213.30	100	Vertical	N.A

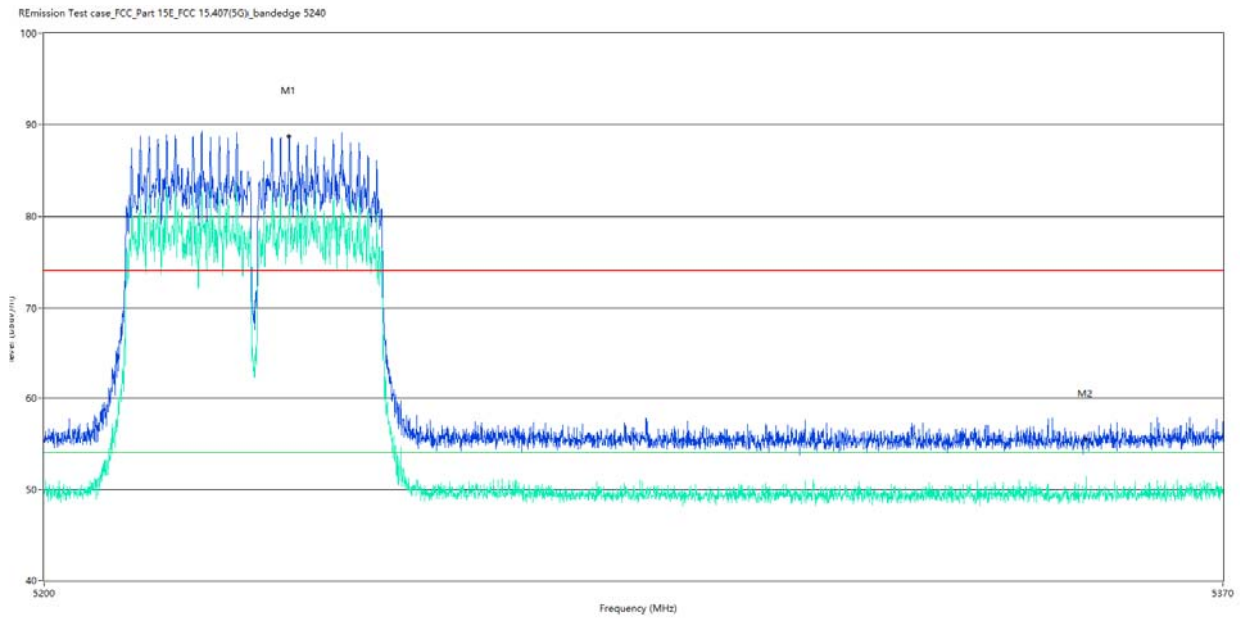
Band I 11ac40 CH38 ANT H

REmission Test case_FCC_Part 15E_FCC 15.407/5G_bandedge 5180



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5150.000	55.55	--	49.5	44.02	74.0	--	54.0	4.50	190.57	100	Horizontal	Pass
5182.429	93.44	--	86.1	43.82	74.0	--	54.0	-32.10	68.20	100	Horizontal	N.A

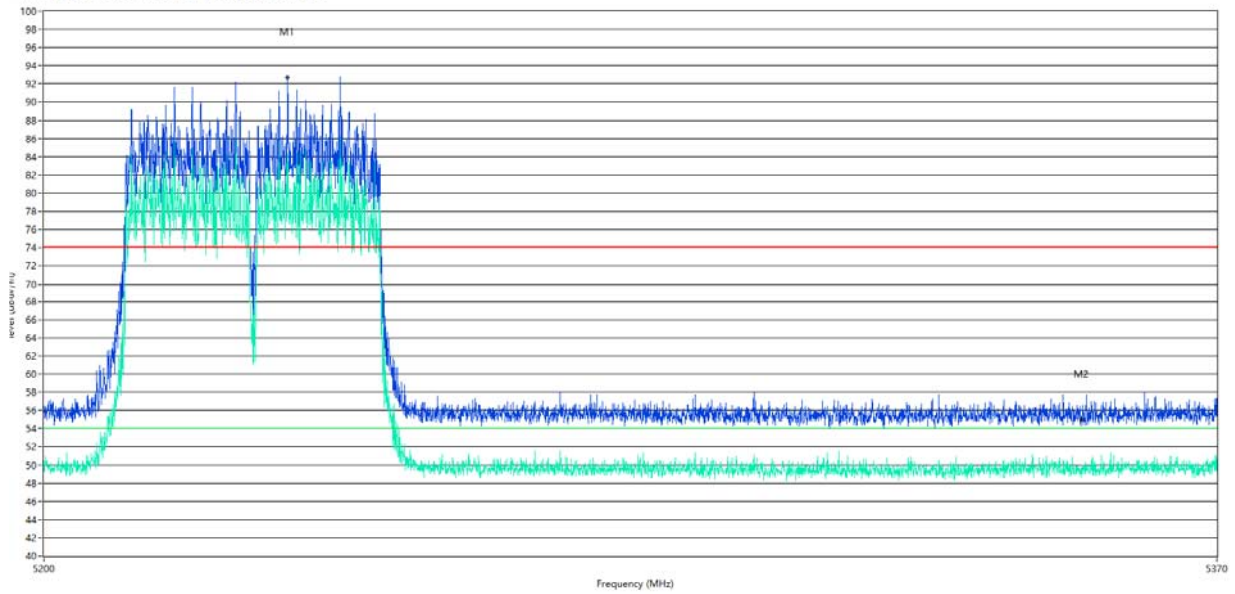
Band I 11ac40 CH46 ANT V



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5234.891	88.75	--	81.1	43.87	74.0	--	54.0	-27.10	264.60	100	Vertical	N.A
5350.000	55.35	--	49.7	43.88	74.0	--	54.0	4.30	294.70	100	Vertical	Pass

Band I 11ac40 CH46 ANT H

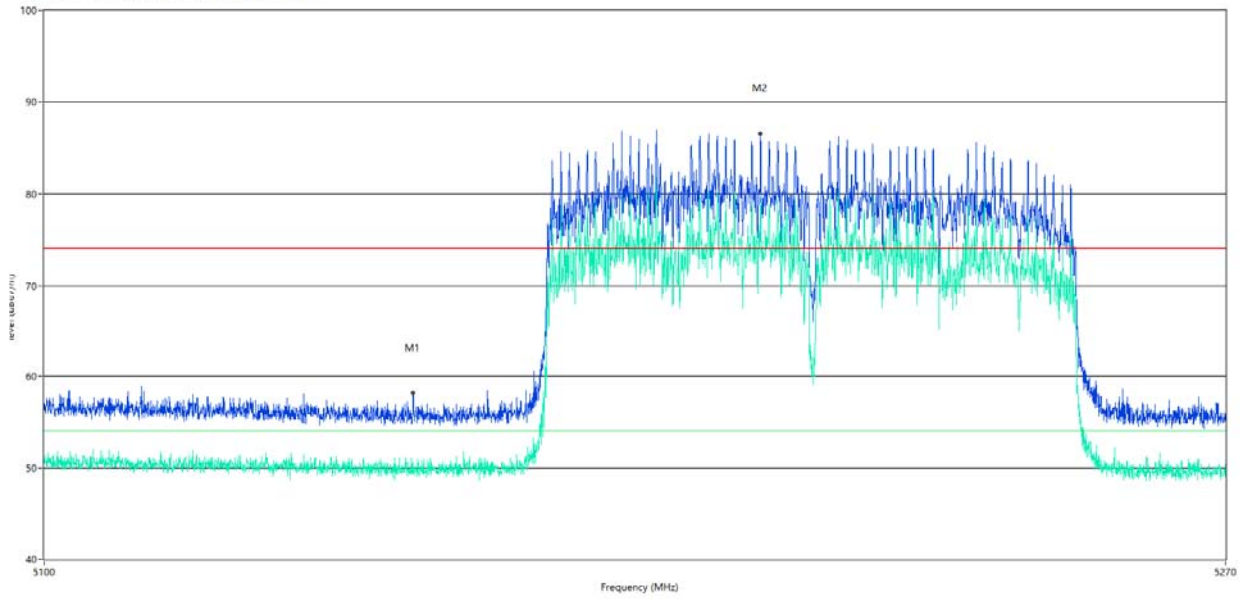
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_bandedge 5240



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5234.891	92.73	--	84.4	43.87	74.0	--	54.0	-30.40	65.70	100	Horizontal	N.A
5350.000	54.99	--	49.0	43.88	74.0	--	54.0	5.00	275.55	100	Horizontal	Pass

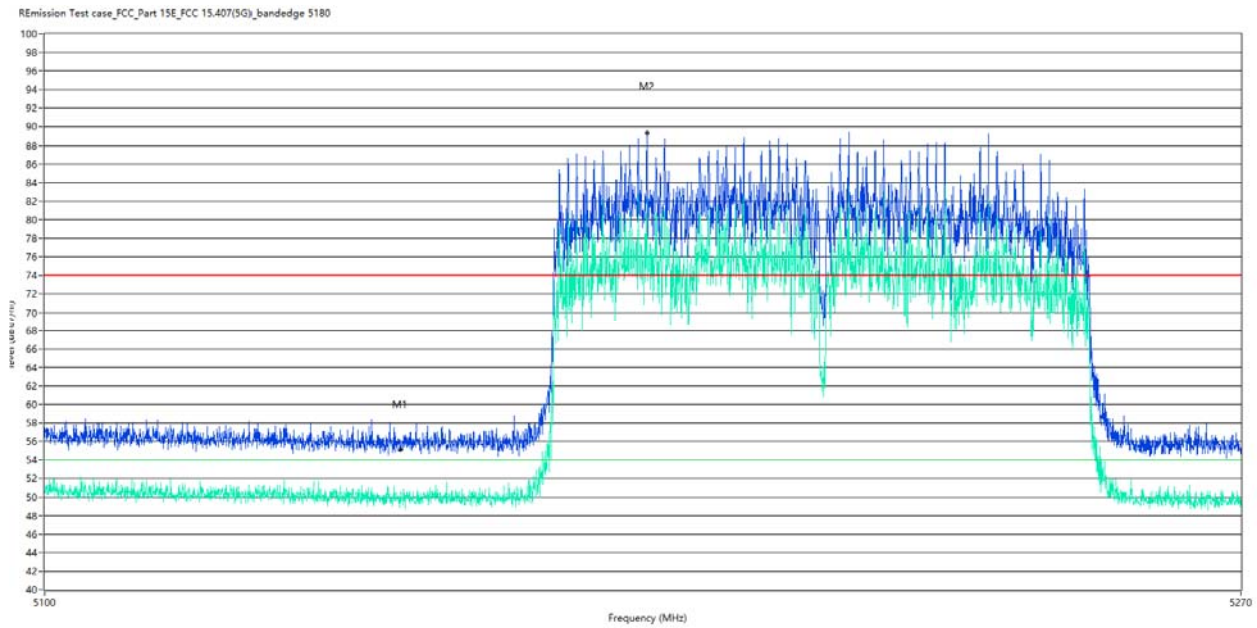
Band I 11ac80 CH42 ANT V

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_bandedge 5100



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5152.487	58.16	--	50.6	43.99	74.0	--	54.0	3.40	18.20	100	Vertical	Pass
5202.424	86.57	--	79.6	43.79	74.0	--	54.0	-25.60	214.70	100	Vertical	N.A

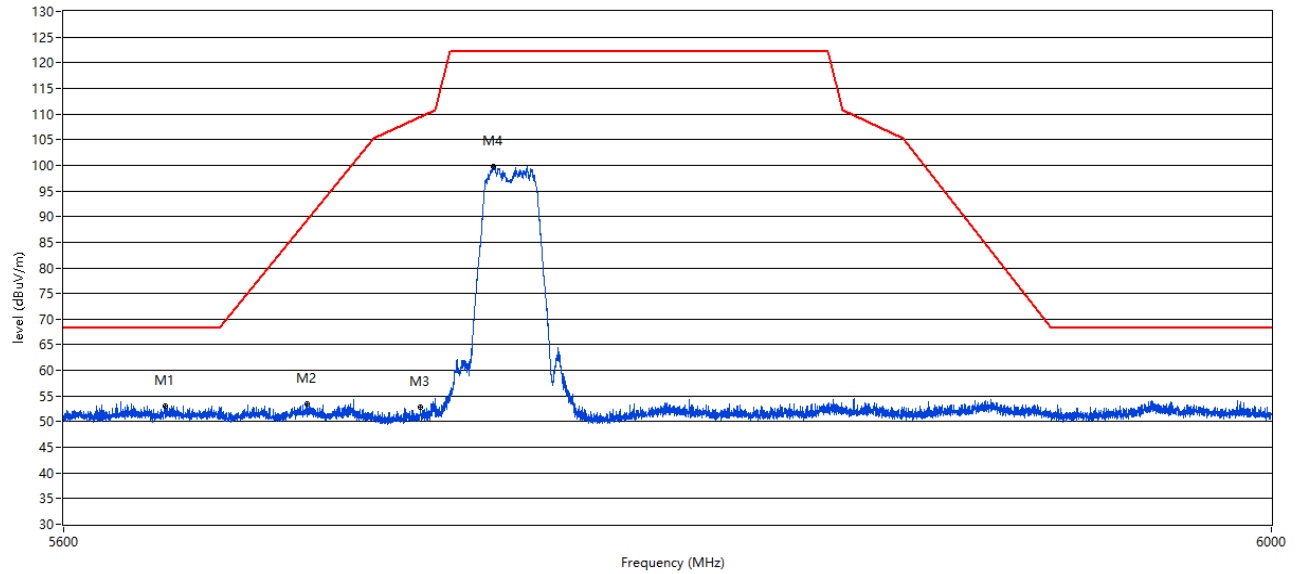
Band I 11ac80 CH42 ANT H



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5150.000	55.11	--	49.4	44.02	74.0	--	54.0	4.60	200.35	100	Horizontal	Pass
5184.879	89.33	--	82.2	43.81	74.0	--	54.0	-28.20	67.70	100	Horizontal	N.A

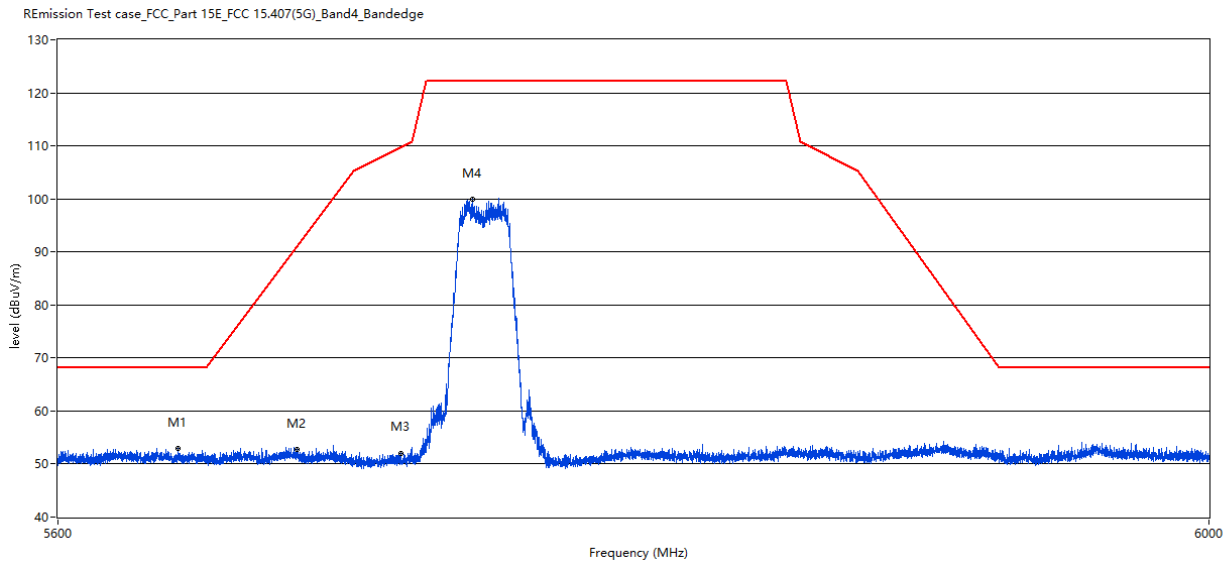
Band IV 11ac20 CH149 ANT V

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5632.596	53.11	--	--	2.74	68.2	--	--	15.09	146.00	100	Vertical	Pass
5678.340	53.54	--	--	2.76	89.2	--	--	35.66	199.60	100	Vertical	Pass
5715.436	52.89	--	--	1.60	109.5	--	--	56.61	265.10	100	Vertical	Pass
5739.233	99.82	--	--	1.87	122.2	--	--	22.38	257.40	100	Vertical	Pass

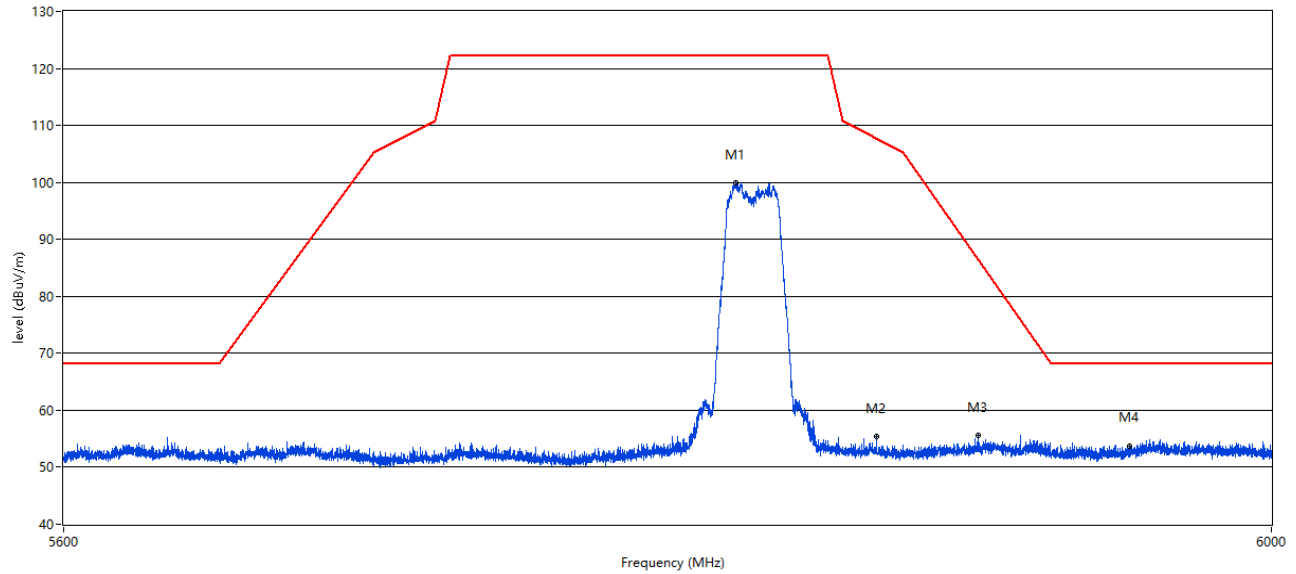
Band IV 11ac20 CH149 ANT H



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5640.595	52.87	--	--	2.17	68.2	--	--	15.33	222.40	100	Horizontal	Pass
5680.740	52.82	--	--	2.57	91.0	--	--	38.18	111.20	100	Horizontal	Pass
5716.285	52.07	--	--	1.55	109.8	--	--	57.73	3.60	100	Horizontal	Pass
5741.082	99.86	--	--	1.90	122.2	--	--	22.34	72.70	100	Horizontal	Pass

Band IV 11ac20 CH165 ANT V

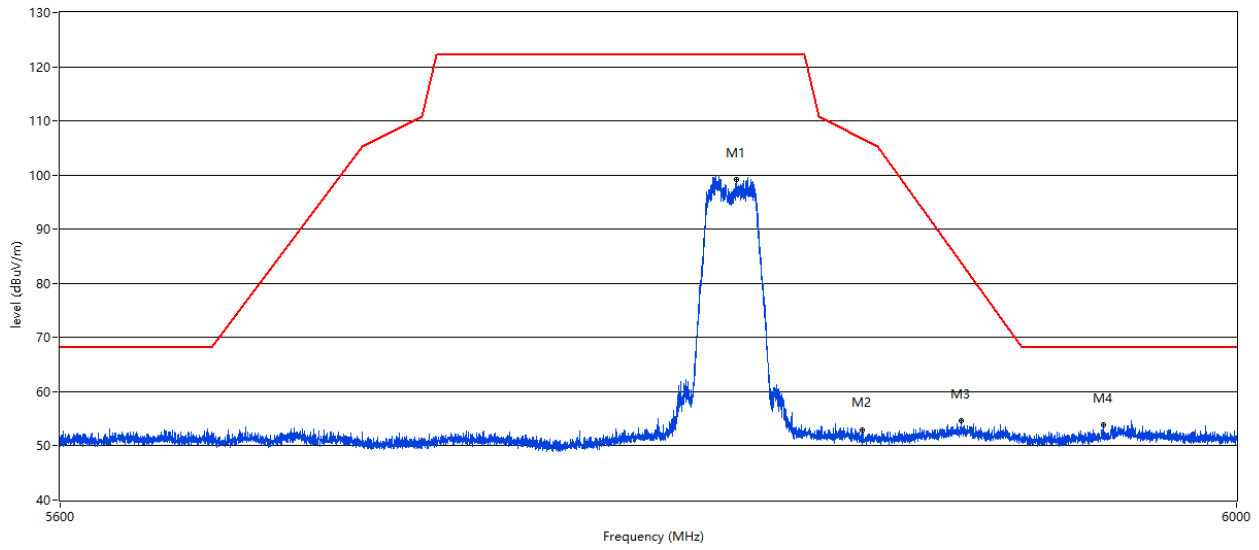
REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5819.273	99.97	--	--	2.76	122.2	--	--	22.23	256.30	100	Vertical	Pass
5866.067	55.39	--	--	2.90	107.7	--	--	52.31	264.20	100	Vertical	Pass
5900.512	55.60	--	--	3.32	86.3	--	--	30.70	201.90	100	Vertical	Pass
5951.456	53.70	--	--	2.89	68.2	--	--	14.50	276.00	100	Vertical	Pass

Band IV 11ac20 CH165 ANT H

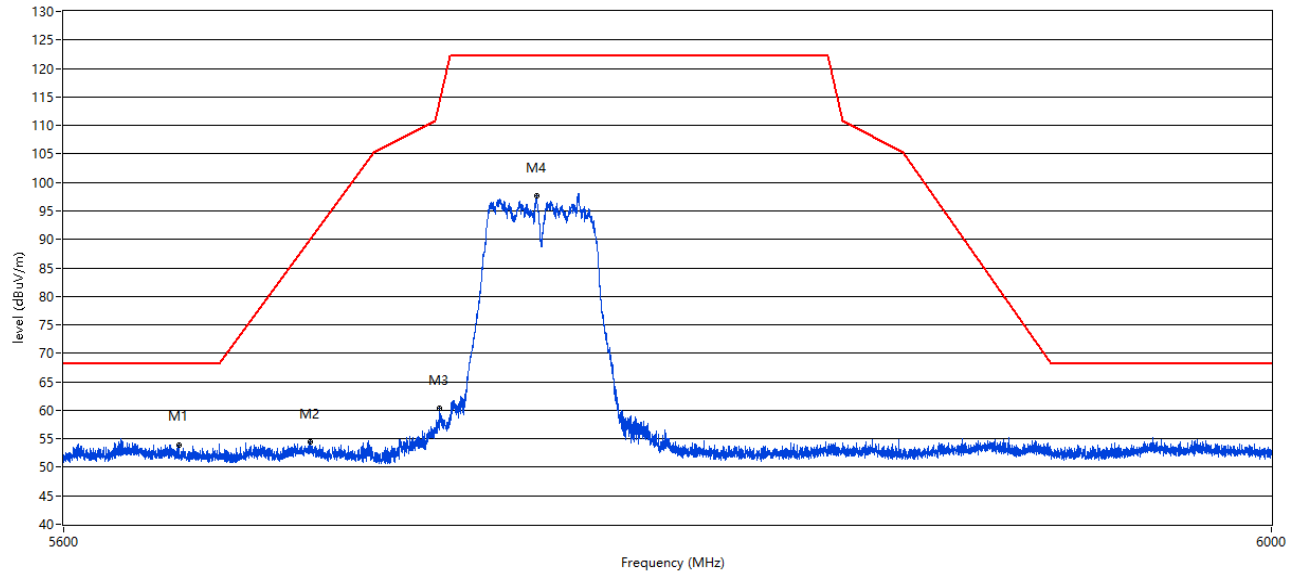
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_Band4_Bandedge



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5826.672	99.18	--	--	2.42	122.2	--	--	23.02	75.60	100	Horizontal	Pass
5869.666	52.85	--	--	2.58	106.7	--	--	53.85	346.90	100	Horizontal	Pass
5903.912	54.67	--	--	3.74	83.8	--	--	29.13	149.20	100	Horizontal	Pass
5953.356	53.83	--	--	3.01	68.2	--	--	14.37	118.10	100	Horizontal	Pass

Band IV 11ac40 CH151 ANT V

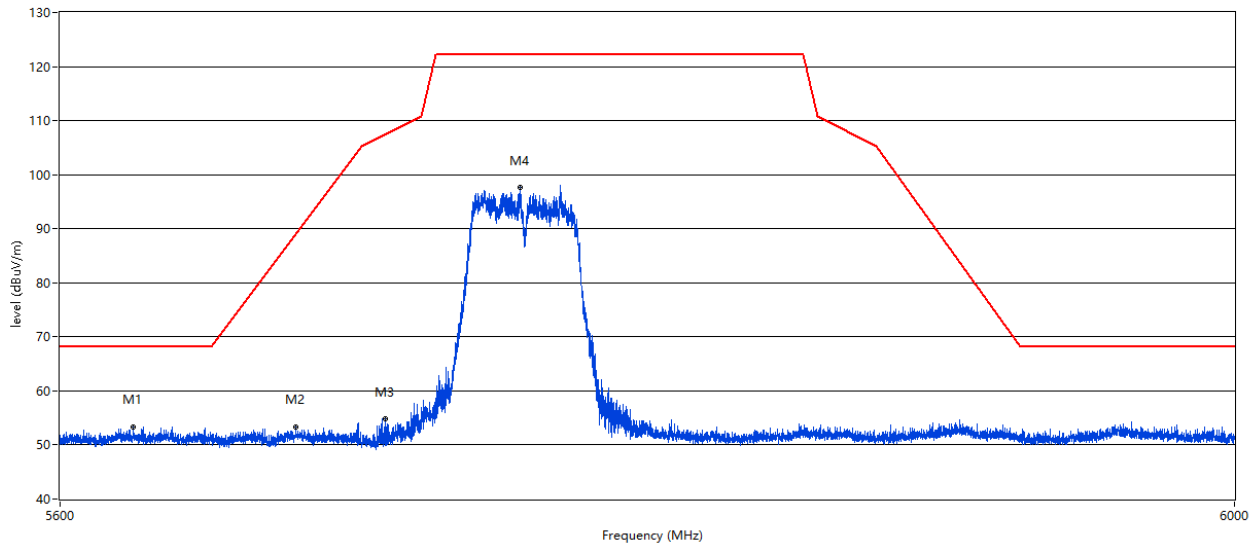
REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5636.945	53.97	--	--	2.54	68.2	--	--	14.23	227.50	100	Vertical	Pass
5679.290	54.43	--	--	2.78	89.9	--	--	35.47	169.50	100	Vertical	Pass
5721.635	60.38	--	--	1.52	114.5	--	--	54.12	200.40	100	Vertical	Pass
5753.331	97.56	--	--	1.78	122.2	--	--	24.64	266.10	100	Vertical	Pass

Band IV 11ac40 CH151 ANT H

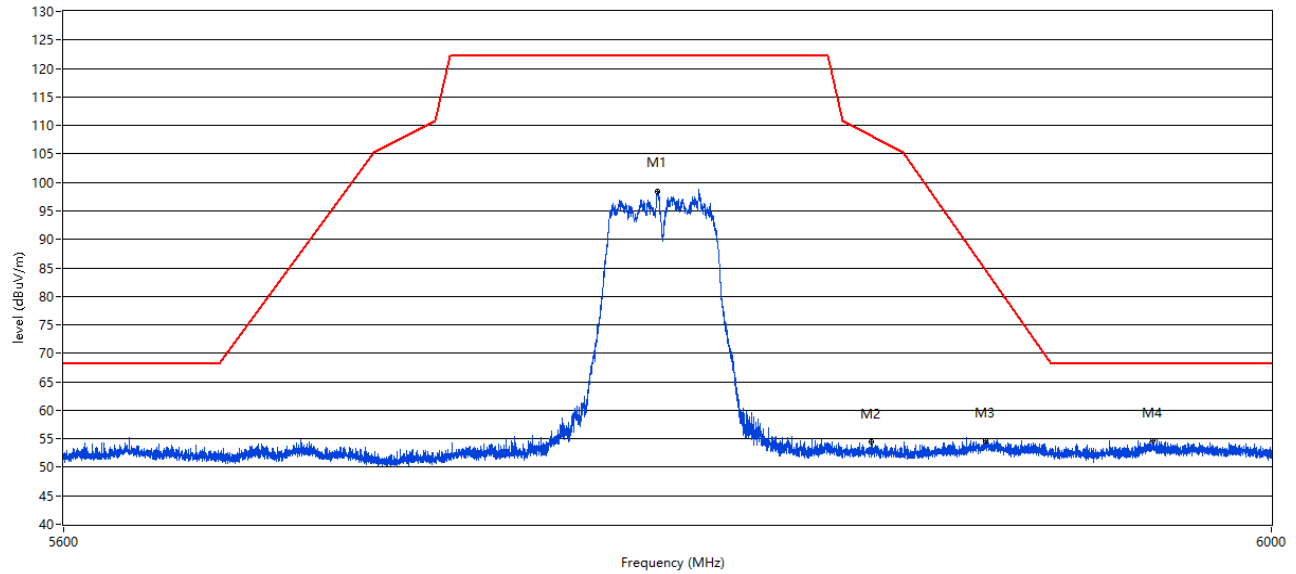
REmission Test case_FCC_Part 15E_FCC 15.407(5G)_Band4_Bandedge



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5624.247	53.39	--	--	2.91	68.2	--	--	14.81	213.80	100	Horizontal	Pass
5678.040	53.40	--	--	2.75	89.0	--	--	35.60	352.90	100	Horizontal	Pass
5708.036	54.83	--	--	1.44	107.5	--	--	52.67	71.20	100	Horizontal	Pass
5753.331	97.59	--	--	1.78	122.2	--	--	24.61	71.20	100	Horizontal	Pass

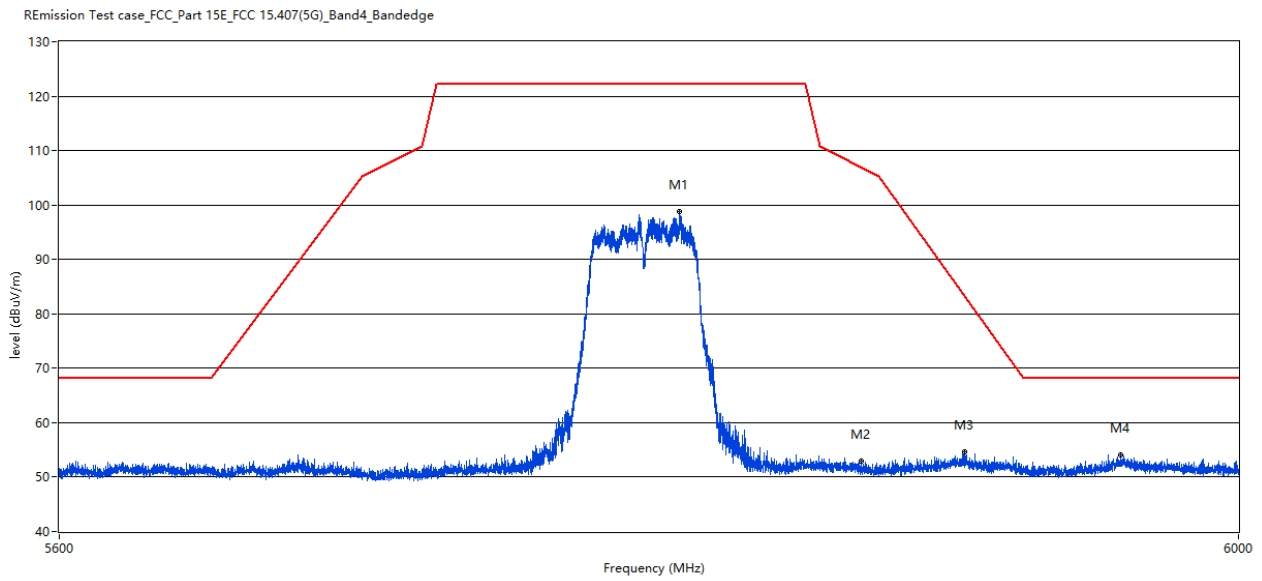
Band IV 11ac40 CH159 ANT V

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5793.326	98.51	--	--	2.54	122.2	--	--	23.69	260.00	100	Vertical	Pass
5864.517	54.44	--	--	3.04	108.1	--	--	53.66	218.00	100	Vertical	Pass
5902.712	54.63	--	--	3.59	84.7	--	--	30.07	175.70	100	Vertical	Pass
5959.505	54.61	--	--	4.04	68.2	--	--	13.59	0.00	100	Vertical	Pass

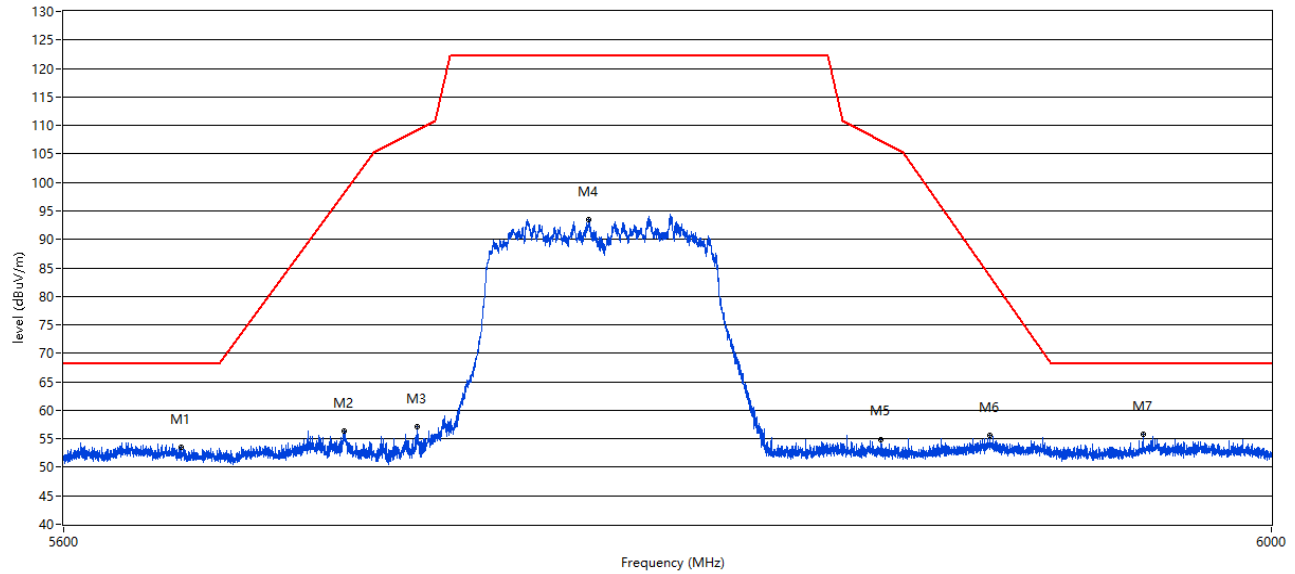
Band IV 11ac40 CH159 ANT H



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5806.974	98.79	--	--	2.50	122.2	--	--	23.41	79.80	100	Horizontal	Pass
5869.066	52.96	--	--	2.62	106.9	--	--	53.94	317.20	100	Horizontal	Pass
5904.462	54.68	--	--	3.72	83.4	--	--	28.72	30.10	100	Horizontal	Pass
5958.805	54.05	--	--	4.02	68.2	--	--	14.15	64.70	100	Horizontal	Pass

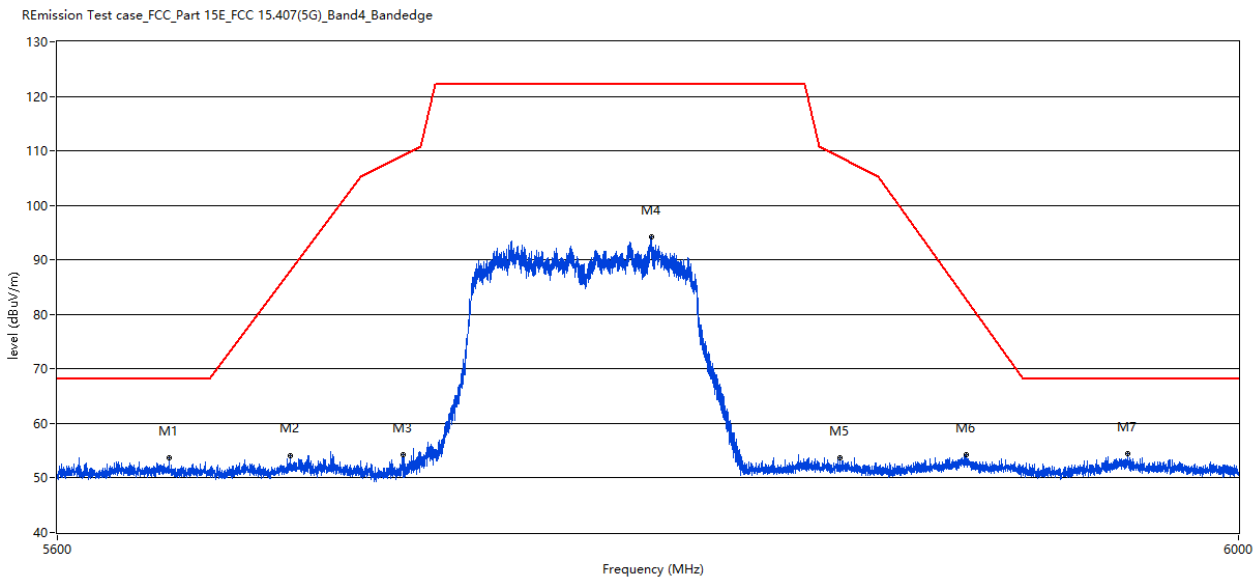
Band IV 11ac80 CH155 ANT V

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5637.645	53.58	--	--	2.43	68.2	--	--	14.62	309.10	100	Vertical	Pass
5690.289	56.40	--	--	2.35	98.0	--	--	41.60	220.10	100	Vertical	Pass
5714.336	57.12	--	--	1.67	109.2	--	--	52.08	224.10	100	Vertical	Pass
5770.379	93.54	--	--	1.83	122.2	--	--	28.66	262.60	100	Vertical	Pass
5867.517	54.82	--	--	2.76	107.3	--	--	52.48	181.30	100	Vertical	Pass
5904.212	55.65	--	--	3.75	83.5	--	--	27.85	196.90	100	Vertical	Pass
5956.105	55.81	--	--	3.47	68.2	--	--	12.39	84.20	100	Vertical	Pass

Band IV 11ac80 CH155 ANT H



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Table (o)	Height (cm)	ANT	Verdict
5636.545	53.62	--	--	2.60	68.2	--	--	14.58	128.70	100	Horizontal	Pass
5676.540	54.17	--	--	2.71	87.9	--	--	33.73	352.40	100	Horizontal	Pass
5714.136	54.31	--	--	1.67	109.2	--	--	54.89	75.10	100	Horizontal	Pass
5797.825	94.25	--	--	2.40	122.2	--	--	27.95	67.50	100	Horizontal	Pass
5861.867	53.70	--	--	2.86	108.9	--	--	55.20	75.10	100	Horizontal	Pass
5905.412	54.29	--	--	3.63	82.7	--	--	28.41	344.70	100	Horizontal	Pass
5961.155	54.49	--	--	3.90	68.2	--	--	13.71	221.40	100	Horizontal	Pass

A.8 Frequency Stability

Voltage vs. Frequency Stability (5180 MHz)

Test Conditions		Test Frequency (MHz)	0 Minute		2 Minute		5 Minute		10Minute	
TEMP. (°C)	Voltage (VDC)		Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)
20	3.7	5180	5179.963595	-7.03	5179.978493	-4.15	5179.978487	-4.15	5179.999585	-0.08
	3.8	5180	5180.026885	5.19	5180.01143	2.21	5180.024546	4.74	5180.046554	8.99
	4.35	5180	5180.019434	3.75	5180.034397	6.64	5180.038703	7.47	5180.045429	8.77

Temperature vs. Frequency Stability (5180 MHz)

Test Conditions		Test Frequency (MHz)	0 Minute		2 Minute		5 Minute		10Minute	
Voltage (VDC)	TEMP. (°C)		Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)
3.8	-20	5180	5179.993787	-1.20	5179.960785	-7.57	5179.973905	-5.04	5179.987452	-2.42
	-10	5180	5180.010264	1.98	5180.021491	4.15	5180.027003	5.21	5180.000156	0.03
	0	5180	5180.005429	1.05	5180.00878	1.69	5180.02982	5.76	5180.04619	8.92
	10	5180	5180.006895	1.33	5180.006434	1.24	5180.006708	1.29	5180.006944	1.34
	20	5180	5179.973621	-5.09	5179.952543	-9.16	5179.992403	-1.47	5179.963636	-7.02
	30	5180	5180.049189	9.50	5180.009165	1.77	5180.003199	0.62	5180.039635	7.65
	40	5180	5180.044441	8.58	5180.016013	3.09	5180.029218	5.64	5180.008312	1.60
	45	5180	5179.99488	-0.99	5179.977127	-4.42	5180.024392	4.71	5180.025795	4.98

ANNEX B TEST SETUP PHOTOS

Please refer the document "BL-EC1830166-AR.PDF".

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document "BL-EC1830166-AW.PDF".

ANNEX D EUT INTERNAL PHOTOS

Please refer the document "BL-EC1830166-AI.PDF".

--END OF REPORT--