



Radio Test Report

Report No.:STS2511130W30

Issued for

LAUNCH TECH CO., LTD.

No.4012, Launch Industrial Park, North Wuhe Rd, Bantian
Street, Longgang District, Shenzhen, China

Product Name: Automotive Diagnostic Tool

Brand Name: LAUNCH

Model Name: OADD-PD1005A

Series Model(s): X-431 PAD5 ELITE V2, OADD-PD1005x
(x=A-Z, representing different configurations)

FCC ID: XUJOADDPD1005A

Test Standards: FCC Part15.407

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

**TEST REPORT**

Applicant's Name : LAUNCH TECH CO., LTD.
Address : No.4012, Launch Industrial Park, North Wuhe Rd, Bantian Street,
Longgang District, Shenzhen, China
Manufacturer's Name : LAUNCH TECH CO., LTD.
Address : No.4012, Launch Industrial Park, North Wuhe Rd, Bantian Street,
Longgang District, Shenzhen, China

Product Description

Product Name : Automotive Diagnostic Tool
Brand Name : LAUNCH
Model Name : OADD-PD1005A
Series Model(s) : X-431 PAD5 ELITE V2, OADD-PD1005x (x=A-Z, representing
different configurations)

Test Standards : FCC Part15.407

Test Procedure ANSI C63.10-2020

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

Date of Test..... :

Date of receipt of test item..... : 15 Nov. 2025

Date (s) of performance of tests..... : 15 Nov. 2025 ~ 17 Mar. 2026

Date of Issue : 17 Mar. 2026

Test Result : **Pass**

Testing Engineer :

Aaron Bu

(Aaron Bu)

Technical Manager :

Skylar Li

(Skylar Li)

Authorized Signatory :

Bovey Yang

(Bovey Yang)





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	17 Mar. 2026	STS2511130W30	ALL	Initial Issue



1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

§ 15.407, KDB 789033 D02 General U-NII Test Procedures New Rules v02r01

FCC Part 15.407		
FCC standard	Test Item	Results
15.207	AC Conducted Emission	PASS
15.407 (a) /15.407 (e)	26dB/6dB &99% Bandwidth	PASS
15.407(a)	Maximum Conducted Output Power	PASS
15.407(b)/15.209	Radiated Emission And (bandedge Emissions) Measurement	PASS
15.407(a)	Power Spectral Density	PASS
15.407(c)	Automatically Discontinue Transmission	PASS
15.203	Antenna Requirement	PASS

Note:

- (1) 'N/A' denotes test is not applicable in this Test Report.
- (2) All tests are according to ANSI C63.10-2020.



1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add.: 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95 %**.

No.	Item	Uncertainty
1	RF output power, conducted	$\pm 0.751\text{dB}$
2	Unwanted Emissions, conducted	$\pm 2.888\text{dB}$
3	All emissions, radiated 9K-30MHz	$\pm 2.48\text{dB}$
4	All emissions, radiated 30M-1GHz	$\pm 2.52\text{dB}$
5	All emissions, radiated 1G-18GHz	$\pm 3.48\text{dB}$
6	All emissions, radiated >18GHz	$\pm 4.18\text{dB}$
7	Conducted Emission (9KHz-150KHz)	$\pm 2.48\text{dB}$
8	Conducted Emission (150KHz-30MHz)	$\pm 2.52\text{dB}$
9	Occupied Channel Bandwidth	$\pm 3.6\%$
10	Power Spectral Density, conducted	$\pm 1.214\text{dB}$
11	Duty Cycle	$\pm 3.2\%$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Automotive Diagnostic Tool	
Brand Name	LAUNCH	
Model Name	OADD-PD1005A	
Series Model(s)	X-431 PAD5 ELITE V2, OADD-PD1005x (x=A-Z, representing different configurations)	
Model Difference	The models are different, and the colors of the rubber sleeves are also different. The system software, motherboard and structure of all models are exactly the same	
Product Description	The EUT is Automotive Diagnostic Tool	
	Operation Frequency:	IEEE 802.11a/ n(HT20)/ac(VHT20): 5.180GHz-5.240GHz IEEE 802.11n(HT40)/ac(VHT40): 5.190GHz-5.230GHz IEEE 802.11ac(VHT80) : 5.210GHz
		IEEE 802.11a/ n(HT20)/ac(VHT20): 5.260GHz-5.320GHz IEEE 802.11 n(HT40)/ac(VHT40): 5.270GHz-5.310GHz IEEE 802.11ac(VHT80): 5.290GHz
		IEEE 802.11a/ n(HT20)/ac(VHT20): 5.500GHz-5.700GHz IEEE 802.11 n(HT40)/ac(VHT40): 5.510GHz-5.670GHz IEEE 802.11ac(VHT80): 5.530GHz-5.610GHz
		IEEE 802.11a/ n(HT20)/ac(VHT20): 5.745GHz-5.825GHz IEEE 802.11a/ n(HT40)/ac(VHT40): 5.755GHz-5.795GHz IEEE 802.11ac(VHT80): 5.775GHz
	Modulation Type:	802.11a(OFDM): BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM): BPSK,QPSK,16-QAM,64-QAM 802.11ac(OFDM): BPSK,QPSK,16-QAM,64-QAM,256-QAM
		802.11a Support SISO 802.11n/ac Support MIMO
	Antenna Type:	FPC
	Antenna Gain:	ANT 1:0.48 ANT 2:2.63 MIMO:4.63
More details of EUT technical specification, please refer to the User Manual.		
Test Channel	Please refer to the Note 3.	
Power Rating	Input: DC15V, 3A	
Adapter	Model: XDJ481R-PDG Brand: XINDEJIA Input: 100-240V~50/60Hz 1.8A Output: 5.0V --- 3.0A 15.0W/9.0V --- 3.0A 27.0W/12.0V --- 3.0A 36.0W/15.0V---3.0A 45.0W/20.0V---2.4A 48.0W	

Battery	Model: CLP606070-2S2P Brand: N/A Rated Voltage: 7.6 V Charge Limit Voltage: 8.7 V Capacity: 7000 mAh
Hardware version number	Y40-V2A
Software version number	V2.1.2
Connecting I/O Port(s)	Please refer to the Note 1.

Note

- For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.
- The antenna details in this report are based on the manufacturer provided antenna specification documents and apply only to the tested sample identified herein.
Any discrepancies in the antenna information may affect the accuracy of the test results, and the customer assumes responsibility for any related issues.
-

Operation Frequency of channel			
5.180GHz-5.240GHz		5.500GHz-5.720GHz	
Channel	Frequency	Channel	Frequency
36	5180	100	5500
38	5190	102	5510
40	5200	104	5520
42	5210	106	5530
44	5220	108	5540
46	5230	110	5550
48	5240	112	5560
		116	5580
		118	5590
5.260GHz-5.320GHz		120	5600
Channel	Frequency	122	5610
52	5260	124	5620
54	5270	126	5630
56	5280	128	5640
58	5290	132	5660
60	5300	134	5670
62	5310	136	5680
64	5320	140	5700
5.745GHz-5.825GHz			
Channel	Frequency		
149	5745		
151	5755		
153	5765		
155	5775		
157	5785		
159	5795		
161	5805		
165	5825		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:
Carrier Frequency Channel

5GHz:

For 802.11a/n(HT20)/ac(VHT20)

Channel	Freq.(MHz)	Channel	Freq.(MHz)
36	5180	52	5260
40	5200	60	5300
48	5240	64	5320

For 802.11a/n(HT20)/ac(VHT20)

Channel	Freq.(MHz)	Channel	Freq.(MHz)
100	5500	149	5745
116	5580	157	5785
140	5700	165	5825

For 802.11 n(HT40)/ac(VHT40)

Channel	Freq.(MHz)	Channel	Freq.(MHz)
38	5190	54	5270
46	5230	62	5310

For 802.11 n(HT40)/ac(VHT40)

Channel	Freq.(MHz)	Channel	Freq.(MHz)
102	5510	151	5755
110	5550	159	5795
134	5670		

For 802.11ac (VHT80)

Channel	Freq.(MHz)	Channel	Freq.(MHz)
42	5210	58	5290

For 802.11ac (VHT80)

Channel	Freq.(MHz)	Channel	Freq.(MHz)
106	5530	155	5775
122	5610		



4. KDB 662911 D01 Multiple Transmitter Output v02r01

2) Directional Gain Calculations for In-Band Measurements

d) Unequal antenna gains, with equal transmit powers. For antenna gains given by $G_1, G_2, \dots, G_N$ dBi

☒ (i) If transmit signals are correlated, then

Directional gain = $10 \log[(10G_1/20 + 10G_2/20 + \dots + 10G_N/20)^2 / NANT]$ dBi [Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

☐ (ii) If all transmit signals are completely uncorrelated, then

Directional gain = $10 \log[(10G_1/10 + 10G_2/10 + \dots + 10G_N/10)/NANT]$ dBi

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Worst Mode	Description	Data Rate
Mode 1	TX IEEE 802.11a HT20 CH36&CH40&CH48	6 Mbps
Mode 2	TX IEEE 802.11a HT20 CH52&CH60&CH64	6 Mbps
Mode 3	TX IEEE 802.11a HT20 CH100&CH116&CH140	6 Mbps
Mode 4	TX IEEE 802.11a HT20 CH149&CH157&CH165	6 Mbps
Mode 5	TX IEEE 802.11n HT20 CH36&CH40&CH48	MCS 0
Mode 6	TX IEEE 802.11ac VHT20 CH36&CH40&CH48	NSS1 MCS0
Mode 7	TX IEEE 802.11n HT20 CH52&CH60&CH64	MCS 0
Mode 8	TX IEEE 802.11ac VHT20 CH52&CH60&CH64	NSS1 MCS0
Mode 9	TX IEEE 802.11n HT20 CH100&CH116&CH140	MCS 0
Mode 10	TX IEEE 802.11ac VHT20 CH100&CH116&CH140	NSS1 MCS0
Mode 11	TX IEEE 802.11n HT20 CH149&CH157&CH165	MCS 0
Mode 12	TX IEEE 802.11ac VHT20 CH149&CH157&CH165	NSS1 MCS0
Mode 13	TX IEEE 802.11n HT40 CH38&CH46	MCS 0
Mode 14	TX IEEE 802.11ac VHT40 CH38&CH46	NSS1 MCS0
Mode 15	TX IEEE 802.11n HT40 CH54 &CH62	MCS 0
Mode 16	TX IEEE 802.11ac VHT40 CH54 &CH62	NSS1 MCS0
Mode 17	TX IEEE 802.11n HT40 CH102&CH110&CH134	MCS 0
Mode 18	TX IEEE 802.11ac VHT40 CH102&CH110&CH134	NSS1 MCS0
Mode 19	TX IEEE 802.11n HT40 CH151&CH159	MCS 0
Mode 20	TX IEEE 802.11ac VHT40 CH151&CH159	NSS1 MCS0
Mode 21	TX IEEE 802.11ac VHT80 CH42	NSS1 MCS0
Mode 22	TX IEEE 802.11ac VHT80 CH58	NSS1 MCS0
Mode 23	TX IEEE 802.11ac VHT80 CH106&122	NSS1 MCS0
Mode 24	TX IEEE 802.11ac VHT80 CH155	NSS1 MCS0

Note: (1) The measurements are performed at the highest, middle, lowest available channels.
(2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
(3) We have been tested for all available U.S. voltage and frequencies (For 120V, 50/60Hz and 240V, 50/60Hz) for which the device is capable of operation.

AC Conducted Emission

Test Case	
AC Conducted Emission	Mode 25: Keeping TX + WLAN Link

2.3 TEST SOFTWARE AND POWER LEVEL

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

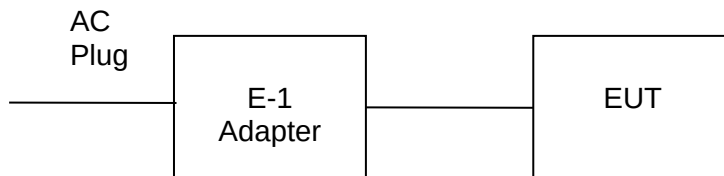
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	ANT_1 Power Class	ANT_2 Power Class	Software For Testing
WIFI(5G)	U-NII-1 (5150MHz-5250MHz)	802.11a	ANT 1:0.48 ANT 2:2.63 MIMO:4.63	14	14	CMD
		802.11n(HT20)		11	11	
		802.11n(HT40)		11	11	
		802.11ac(VHT20)		10	10	
		802.11ac(VHT40)		11	11	
		802.11ac(VHT80)		12	12	
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	ANT_A Power Class	ANT_B Power Class	Software For Testing
WIFI(5G)	U-NII-2A (5250MHz-5350MHz)	802.11a	ANT 1:0.48 ANT 2:2.63 MIMO:4.63	15	15	CMD
		802.11n(HT20)		12	12	
		802.11n(HT40)		11	11	
		802.11ac(VHT20)		11	11	
		802.11ac(VHT40)		11	11	
		802.11ac(VHT80)		10	10	
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	ANT_1 Power Class	ANT_2 Power Class	Software For Testing
WIFI(5G)	U-NII-2C (5470MHz-5725MHz)	802.11a	ANT 1:0.48 ANT 2:2.63 MIMO:4.63	15	14	CMD
		802.11n(HT20)		13	13	
		802.11n(HT40)		10	10	
		802.11ac(VHT20)		12	12	
		802.11ac(VHT40)		10	10	
		802.11ac(VHT80)		10	10	
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	ANT_1 Power Class	ANT_2 Power Class	Software For Testing
WIFI(5G)	U-NII-3 (5725MHz-5850MHz)	802.11a	ANT 1:0.48 ANT 2:2.63 MIMO:4.63	15	13	CMD
		802.11n(HT20)		14	14	
		802.11n(HT40)		11	11	
		802.11ac(VHT20)		11	11	
		802.11ac(VHT40)		11	11	
		802.11ac(VHT80)		11	11	

2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiation Test Set



Conduction Test Set



RF Conduction Test Set



2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

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

Item	Equipment	Mfr/Brand	Model/Type No.	Note
E-1	Adapter	XINDE JIA	XDJ481R-PDG	N/A

Item	Equipment	Mfr/Brand	Length	Note
N/A	N/A	N/A	N/A	N/A

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.



2.6 EQUIPMENTS LIST

RF Radiation Test Equipment					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
Temperature & Humidity	SW-108	SuWei	N/A	2025.02.24	2026.02.23
Temperature & Humidity	SW-108	SuWei	N/A	2026.02.04	2027.02.03
Pre-Amplifier(0.1 M-3GHz)	EM	EM330	060665	2025.02.22	2026.02.21
Pre-Amplifier(0.1 M-3GHz)	EM	EM330	060665	2026.02.04	2027.02.03
Pre-Amplifier(1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2025.09.25	2026.09.24
Pre-Amplifier(18G-40GHz)	SKET	LNPA_1840-50	SK2018101801	2025.02.22	2026.02.21
Pre-Amplifier(18G-40GHz)	SKET	LNPA_1840-50	SK2018101801	2026.02.04	2027.02.03
Active loop Antenna	ZHINAN	ZN30900C	16035	2025.02.25	2027.02.24
Bilog Antenna	TESEQ	CBL6111D	34678	2025.09.27	2027.09.26
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2025.09.27	2027.09.26
Horn Antenna	A-INFOMW	LB-180400-KF	J211020657	2025.09.27	2027.09.26
Positioning Controller	MF	MF-7802	MF-780208587	N/A	N/A
Signal Analyzer	R&S	FSV 40-N	101823	2025.09.26	2026.09.25
Switch Control Box	N/A	N/A	N/A	N/A	N/A
Band 5.1G-5.8G Filter	HX MICROWAVE	HXLBQ-DZA62	N/A	2025.09.23	2026.09.22
Antenna Mast	MF	MFA-440H	N/A	N/A	N/A
Turn Table	MF	SC100 1	60531	N/A	N/A
AC Power Source	APC	KDF-11010G	F214050035	N/A	N/A
DC power supply	HONGSHENGFE NG	DPS-305AF	17064939	2025.09.22	2026.09.21
Test SW	EZ-EMC	Ver.STSLAB-03A1 RE			
Conduction Test Equipment					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2025.09.25	2026.09.24
Limiter	CYBERTEK	EM5010	N/A	2025.09.25	2026.09.24
LISN	R&S	ENV216	101242	2025.09.25	2026.09.24
LISN	EMCO	3810/2NM	23625	2025.09.25	2026.09.24
Temperature & Humidity	SW-108	SuWei	N/A	2025.02.24	2026.02.23
Temperature & Humidity	SW-108	SuWei	N/A	2026.02.04	2027.02.03
Test SW	EZ-EMC	Ver.STSLAB-03A1 CE			
RF Connected Test					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Signal Analyzer	Agilent	N9020A	MY51510623	2025.02.22	2026.02.21
Signal Analyzer	Agilent	N9020A	MY51510623	2026.02.04	2027.02.03
Power detector group	Keysight	NW2021031	N/A	2025.09.23	2026.09.22
Switch control box	MW	MW100-RFCB	N/A	N/A	N/A
Temperature& Humidity test chamber	Safety test	AG80L	171200018	2025.02.22	2026.02.21
Temperature& Humidity test chamber	Safety test	AG80L	171200018	2026.02.04	2027.02.03
Temperature & Humidity	SW-108	SuWei	N/A	2025.02.24	2026.02.23
Temperature & Humidity	SW-108	SuWei	N/A	2026.02.04	2027.02.03
Test SW	MW	MTS 8310_2.0.0.0			

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class B (dBuV)		Standard
	Quasi-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	56.00	46.00	CISPR
5.0 -30.0	60.00	50.00	CISPR

0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of “ * ” marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

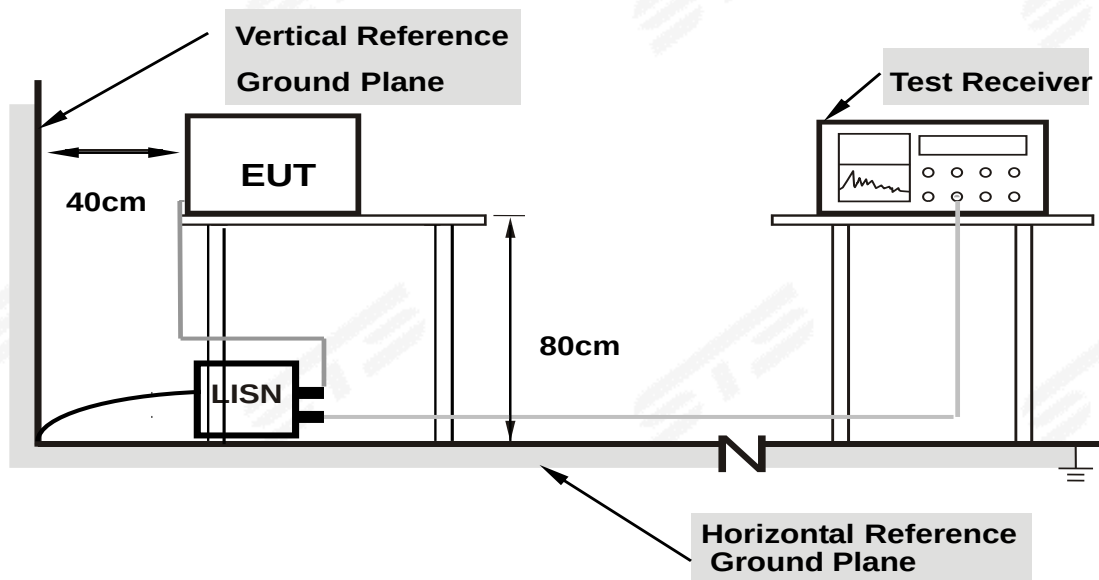
3.1.2 TEST PROCEDURE

- The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN is at least 80 cm from the nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes support units.

3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

3.1.6 TEST RESULTS

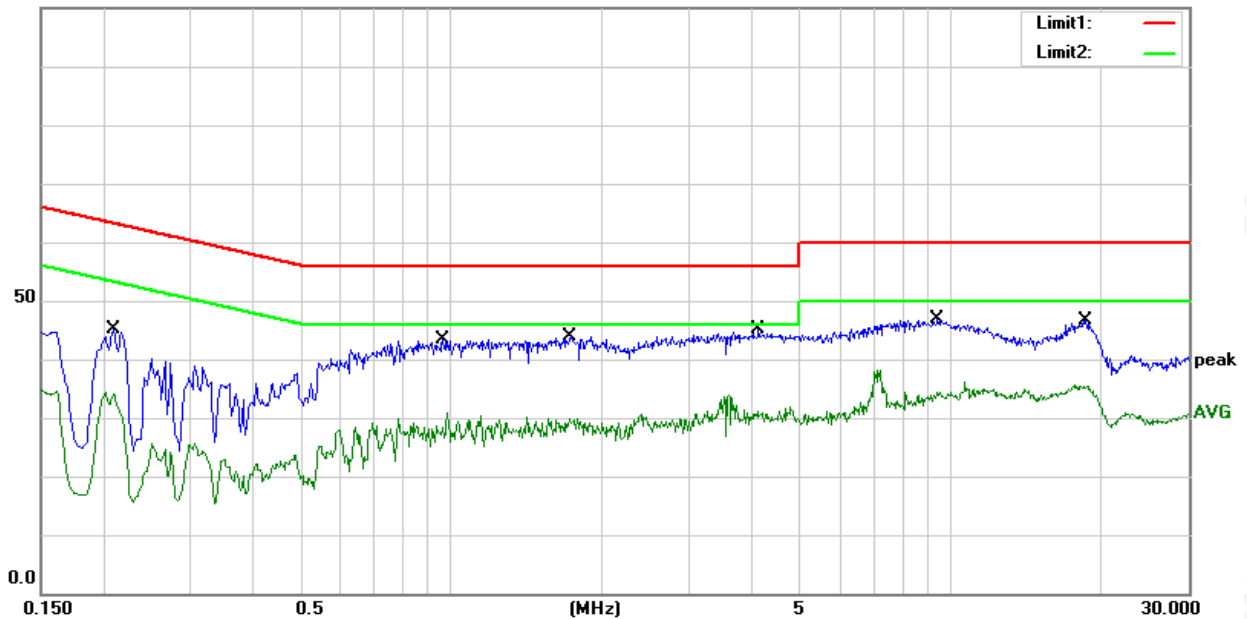
Temperature:	25.1°C	Relative Humidity:	59%
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode :	Mode 25		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2100	25.80	19.39	45.19	63.21	-18.02	QP
2	0.2100	14.94	19.39	34.33	53.21	-18.88	AVG
3	0.9620	24.05	19.35	43.40	56.00	-12.60	QP
4	0.9620	11.41	19.35	30.76	46.00	-15.24	AVG
5	1.7420	24.62	19.35	43.97	56.00	-12.03	QP
6	1.7420	10.74	19.35	30.09	46.00	-15.91	AVG
7	4.1340	25.68	19.42	45.10	56.00	-10.90	QP
8	4.1340	14.40	19.42	33.82	46.00	-12.18	AVG
9	9.4340	27.24	19.61	46.85	60.00	-13.15	QP
10	9.4340	18.63	19.61	38.24	50.00	-11.76	AVG
11	18.6380	26.87	19.77	46.64	60.00	-13.36	QP
12	18.6380	15.79	19.77	35.56	50.00	-14.44	AVG

Remark:

1. All readings are Quasi-Peak and Average values
2. Margin = Result (Result = Reading + Factor) – Limit
3. Factor=LISN factor+Cable loss+Limiter (10dB)

100.0 dBuV

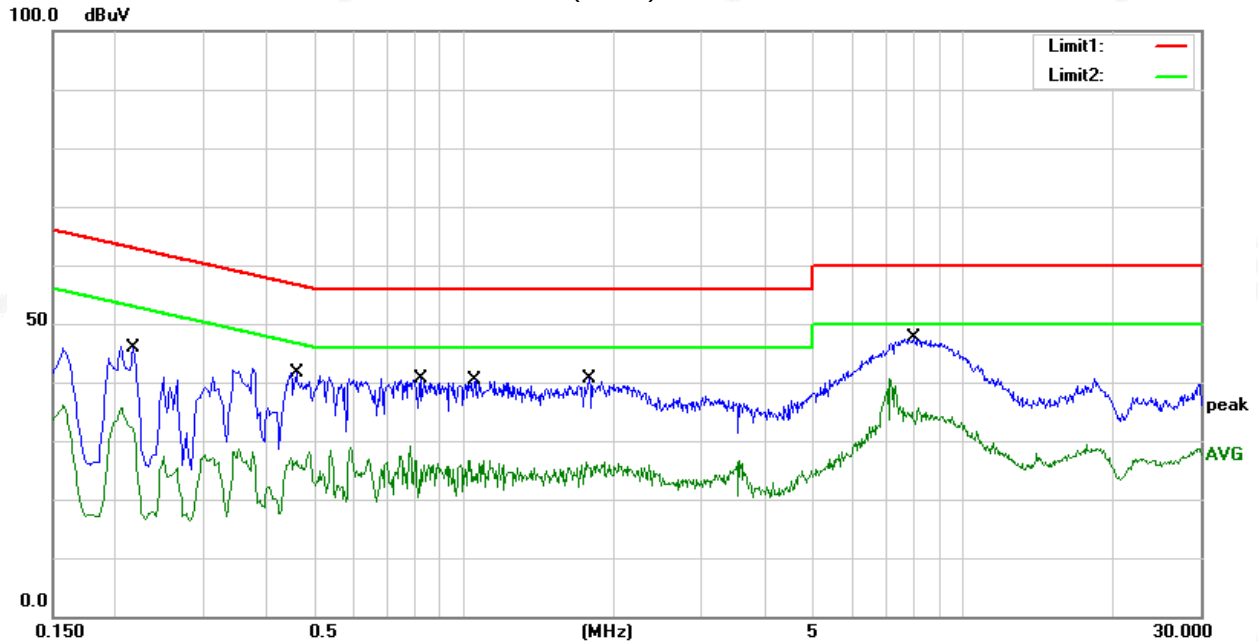


Temperature:	25.1°C	Relative Humidity:	59%
Test Voltage:	AC 120V/60Hz	Phase:	N
Test Mode :	Mode 25		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2180	26.38	19.37	45.75	62.89	-17.14	QP
2	0.2180	16.19	19.37	35.56	52.89	-17.33	AVG
3	0.4620	22.38	19.35	41.73	56.66	-14.93	QP
4	0.4620	8.90	19.35	28.25	46.66	-18.41	AVG
5	0.8180	21.17	19.40	40.57	56.00	-15.43	QP
6	0.8180	9.83	19.40	29.23	46.00	-16.77	AVG
7	1.0580	20.98	19.39	40.37	56.00	-15.63	QP
8	1.0580	7.35	19.39	26.74	46.00	-19.26	AVG
9	1.7860	21.20	19.38	40.58	56.00	-15.42	QP
10	1.7860	7.07	19.38	26.45	46.00	-19.55	AVG
11	7.9980	28.01	19.52	47.53	60.00	-12.47	QP
12	7.9980	21.02	19.52	40.54	50.00	-9.46	AVG

Remark:

1. All readings are Quasi-Peak and Average values
2. Margin = Result (Result =Reading + Factor)–Limit
3. Factor=LISN factor+Cable loss+Limiter (10dB)



3.2 RADIATED EMISSION AND MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

In case the emission fall within the restricted band specified on 15.407(b)7&209(a), then the limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15E.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			

LIMITS OF EMISSIONS OUTSIDE OF THE FREQUENCY BANDS

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
 - (i) 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: dBuV/m(at 3M) = EIRP(dBm) + 95.2.

Peak Limit = -27dBm/MHz + 95.2 = 68.2 dBuV/m.

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak
Start Frequency	1000 MHz(Peak/AV)
Stop Frequency	10th carrier harmonic (Peak/AV)
RB / VB (emission in restricted band)	1 MHz / 1 MHz, AV=1 MHz /3 MHz

For Band edge



Spectrum Parameter	Setting
Detector	Peak
RB / VB (emission in restricted band)	1 MHz / 1 MHz, AV=1 MHz /3 MHz

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

- a. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
- c. The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and QuasiPeak detector mode will be re-measured.
- e. If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

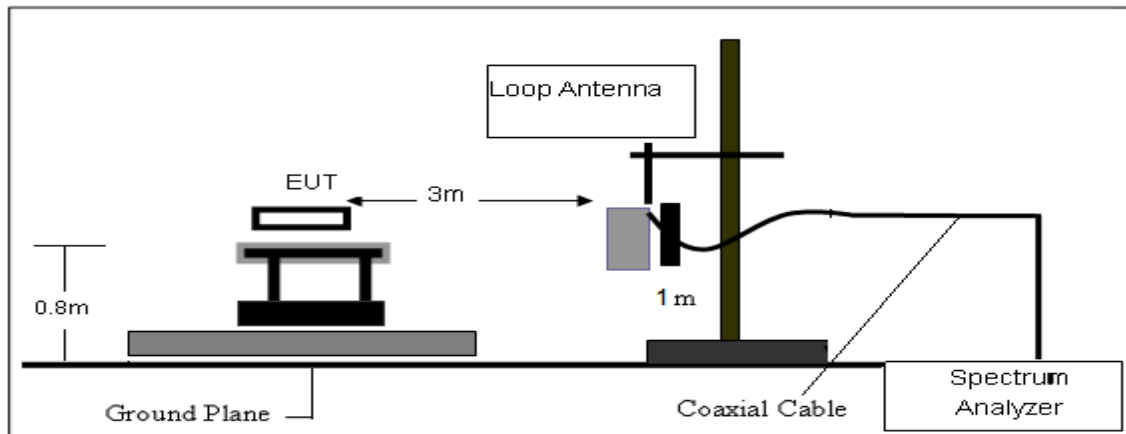
Both horizontal and vertical antenna polarities were tested with a band-stop filter and performed pretest to three orthogonal axis. The worst-case emissions were reported.

3.2.3 DEVIATION FROM TEST STANDARD

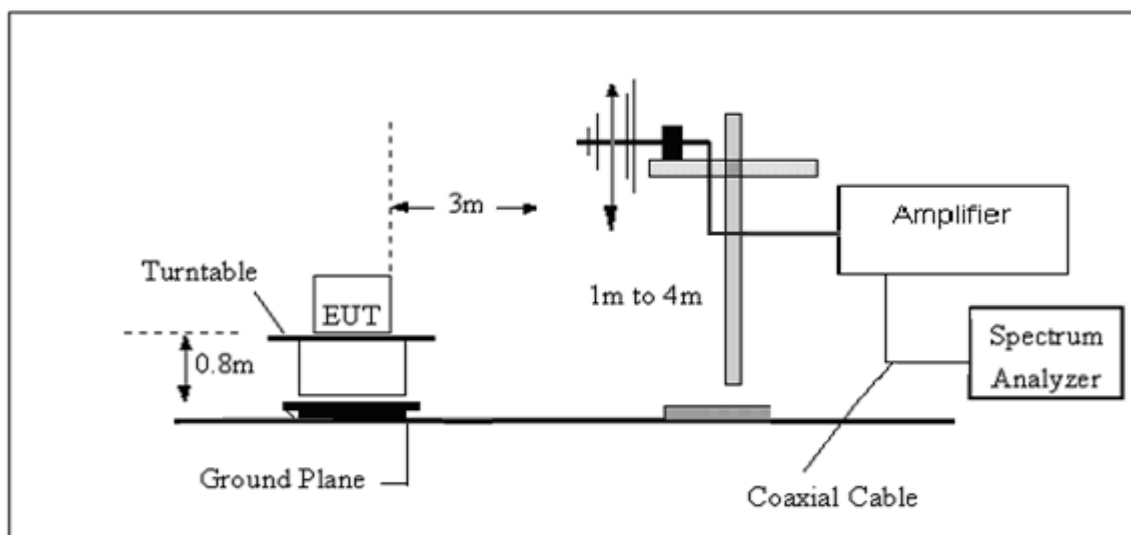
No deviation

3.2.4 TEST SETUP

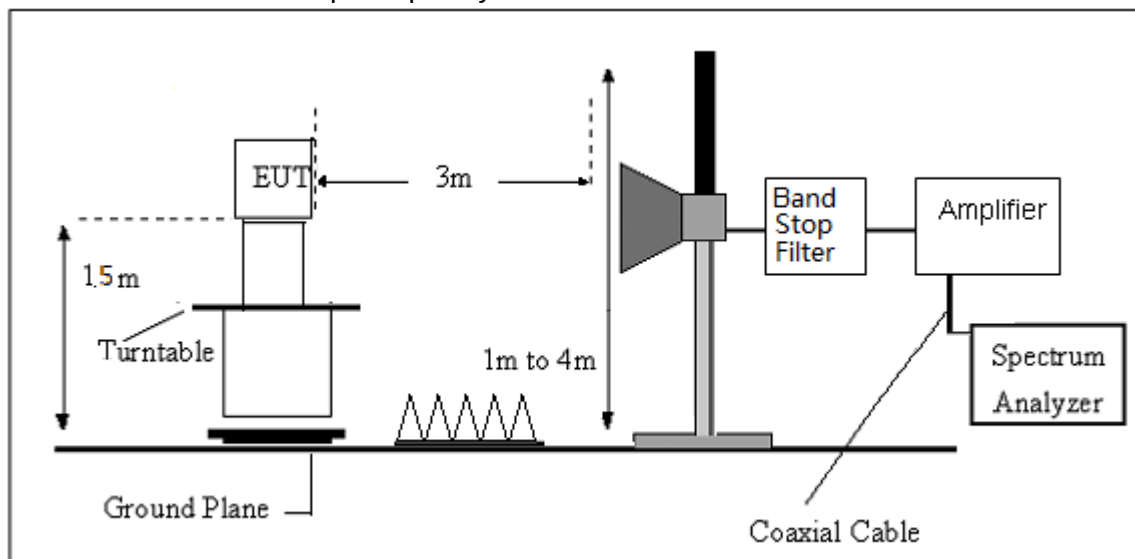
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.6 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where

FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

Frequency	FS	RA	AF	CL	AG	Factor
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dB)	(dB)	(dB)
300	40	58.1	12.2	1.6	31.9	-18.1

$$\text{Factor} = \text{AF} + \text{CL} - \text{AG}$$

3.2.7 TEST RESULTS (Between 9KHz – 30 MHz)

Temperature:	23.4 °C	Relative Humidity:	60%
Test Voltage:	DC 7.6V	Polarization :	--
Test Mode:	TX Mode		

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuV) + distance extrapolation factor.

3.2.8 TEST RESULTS (Between 30MHz – 1GHz)

UNNI-1

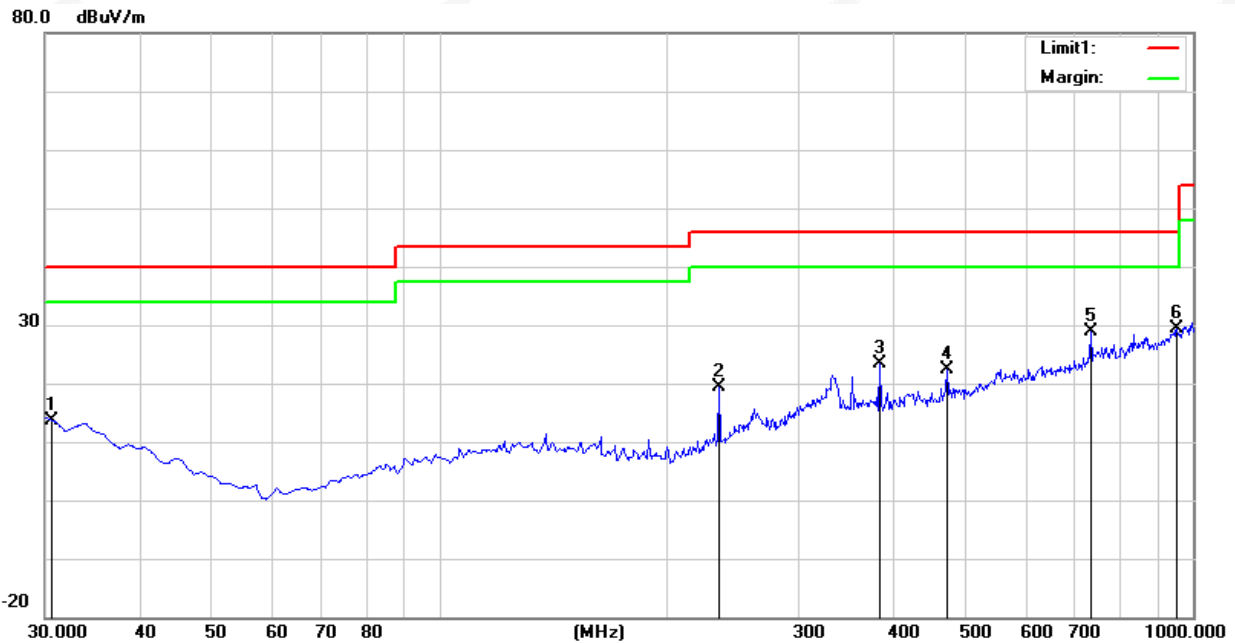
MIMO

Temperature	23.4°C	Relative Humidity:	60%
Test Voltage	DC 7.6V	Polarization:	Horizontal
Test Mode	802.11n20(Low Channel-Worst Mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.6380	26.86	-13.18	13.68	40.00	-26.32	peak
2	235.6400	37.93	-18.62	19.31	46.00	-26.69	peak
3	384.0500	35.28	-11.99	23.29	46.00	-22.71	peak
4	472.3200	31.30	-8.92	22.38	46.00	-23.62	peak
5	733.2500	31.26	-2.35	28.91	46.00	-17.09	peak
6	953.4400	27.66	1.65	29.31	46.00	-16.69	peak

Remark:

1. Margin = Result (Result =Reading + Factor)–Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain



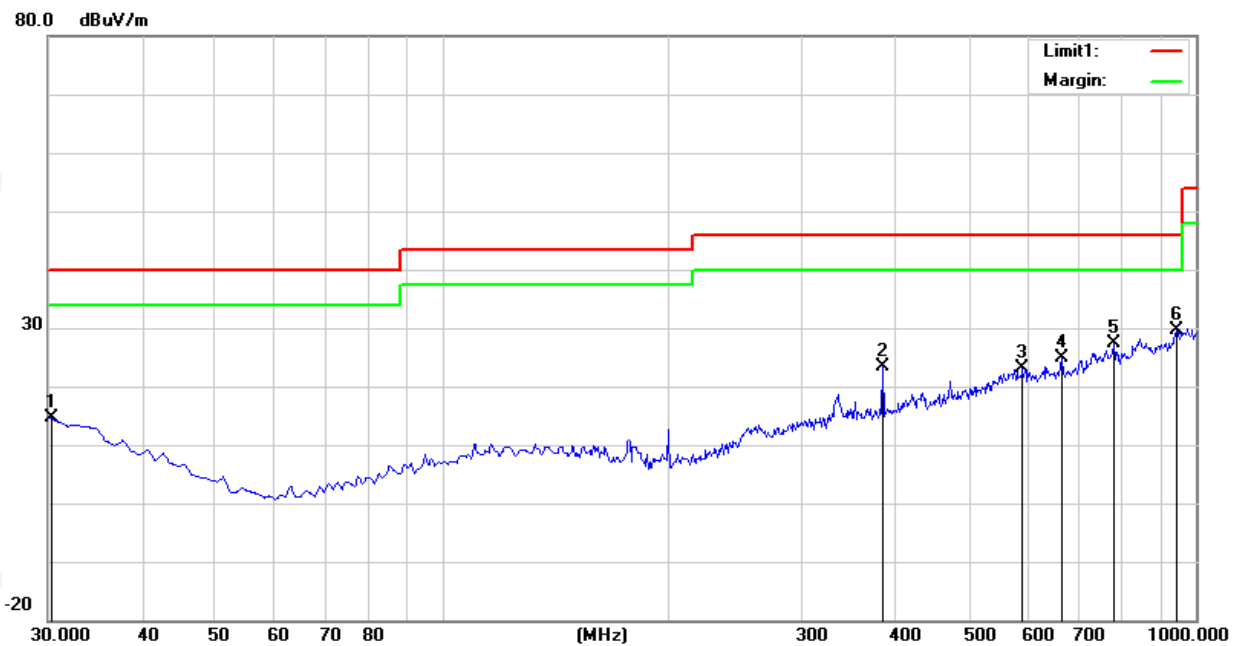
Temperature	23.4°C	Relative Humidity:	60%
Test Voltage	DC 7.6V	Polarization:	Vertical
Test Mode	802.11n20		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.3173	27.54	-13.01	14.53	40.00	-25.47	peak
2	384.0500	35.41	-11.99	23.42	46.00	-22.58	peak
3	589.6900	29.01	-5.83	23.18	46.00	-22.82	peak
4	664.3800	29.50	-4.71	24.79	46.00	-21.21	peak
5	779.8100	29.57	-2.22	27.35	46.00	-18.65	peak
6	942.7700	28.23	1.44	29.67	46.00	-16.33	peak

Remark:

3. Margin = Result (Result = Reading + Factor) – Limit

4. Factor = Antenna factor + Cable attenuation factor (cable loss) – Amplifier gain



3.2.8 TEST RESULTS (Between 30MHz – 1GHz)

UNNI-2A

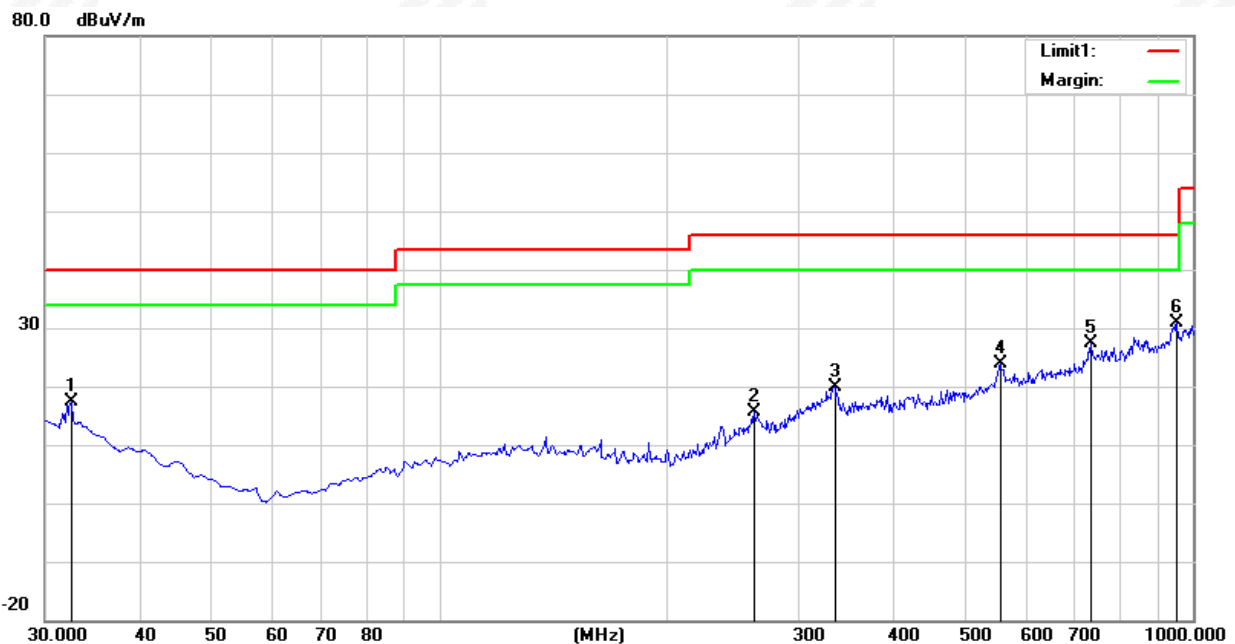
MIMO

Temperature	23.4°C	Relative Humidity:	60%
Test Voltage	DC 7.6V	Polarization:	Horizontal
Test Mode	802.11n20(Middle Channel-Worst Mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.5197	31.46	-14.14	17.32	40.00	-22.68	peak
2	262.8000	30.41	-14.76	15.65	46.00	-30.35	peak
3	335.5500	33.43	-13.54	19.89	46.00	-26.11	peak
4	556.7100	29.37	-5.58	23.79	46.00	-22.21	peak
5	733.2500	29.76	-2.35	27.41	46.00	-18.59	peak
6	953.4400	29.16	1.65	30.81	46.00	-15.19	peak

Remark:

5. $\text{Margin} = \text{Result} - (\text{Reading} + \text{Factor}) - \text{Limit}$

6. $\text{Factor} = \text{Antenna factor} + \text{Cable attenuation factor (cable loss)} - \text{Amplifier gain}$


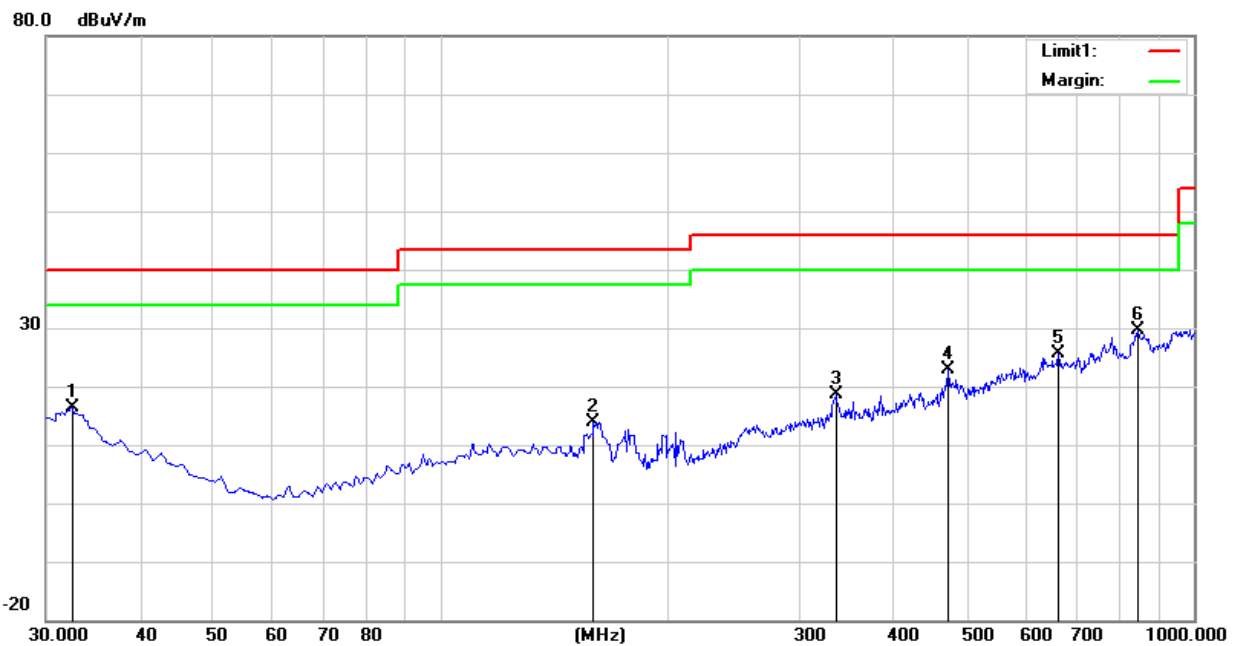
Temperature	23.4°C	Relative Humidity:	60%
Test Voltage	DC 7.6V	Polarization:	Vertical
Test Mode	802.11n20		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.5197	30.41	-14.14	16.27	40.00	-23.73	peak
2	159.9800	32.67	-18.81	13.86	43.50	-29.64	peak
3	335.5500	32.20	-13.54	18.66	46.00	-27.34	peak
4	472.3200	31.69	-8.92	22.77	46.00	-23.23	peak
5	663.4100	30.26	-4.73	25.53	46.00	-20.47	peak
6	844.8000	30.19	-0.53	29.66	46.00	-16.34	peak

Remark:

7. Margin = Result (Result = Reading + Factor) – Limit

8. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain



3.2.8 TEST RESULTS (Between 30MHz – 1GHz)

UNNI-2C

MIMO

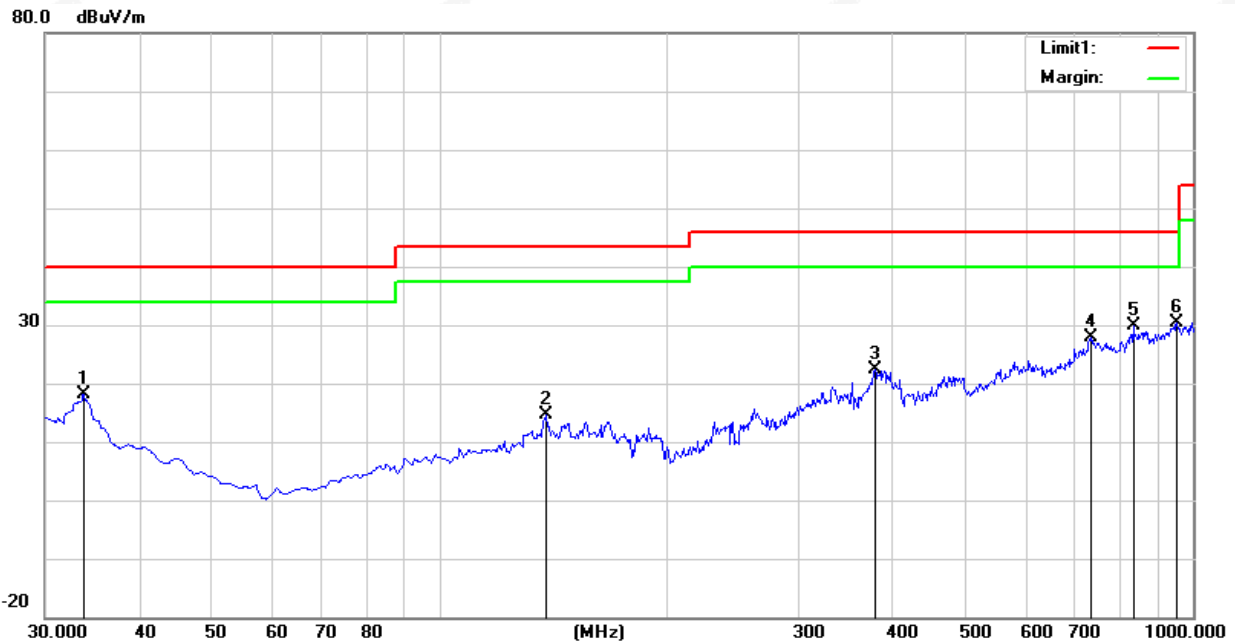
Temperature	23.4°C	Relative Humidity:	60%
Test Voltage	DC 7.6V	Polarization:	Horizontal
Test Mode	802.11n20(Middle Channel-Worst Mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.8800	33.03	-14.80	18.23	40.00	-21.77	peak
2	138.8735	32.73	-18.03	14.70	43.50	-28.80	peak
3	379.2000	34.59	-12.29	22.30	46.00	-23.70	peak
4	733.2500	30.26	-2.35	27.91	46.00	-18.09	peak
5	836.0700	30.46	-0.50	29.96	46.00	-16.04	peak
6	953.4400	28.66	1.65	30.31	46.00	-15.69	peak

Remark:

9. Margin = Result (Result =Reading + Factor)–Limit

10. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain



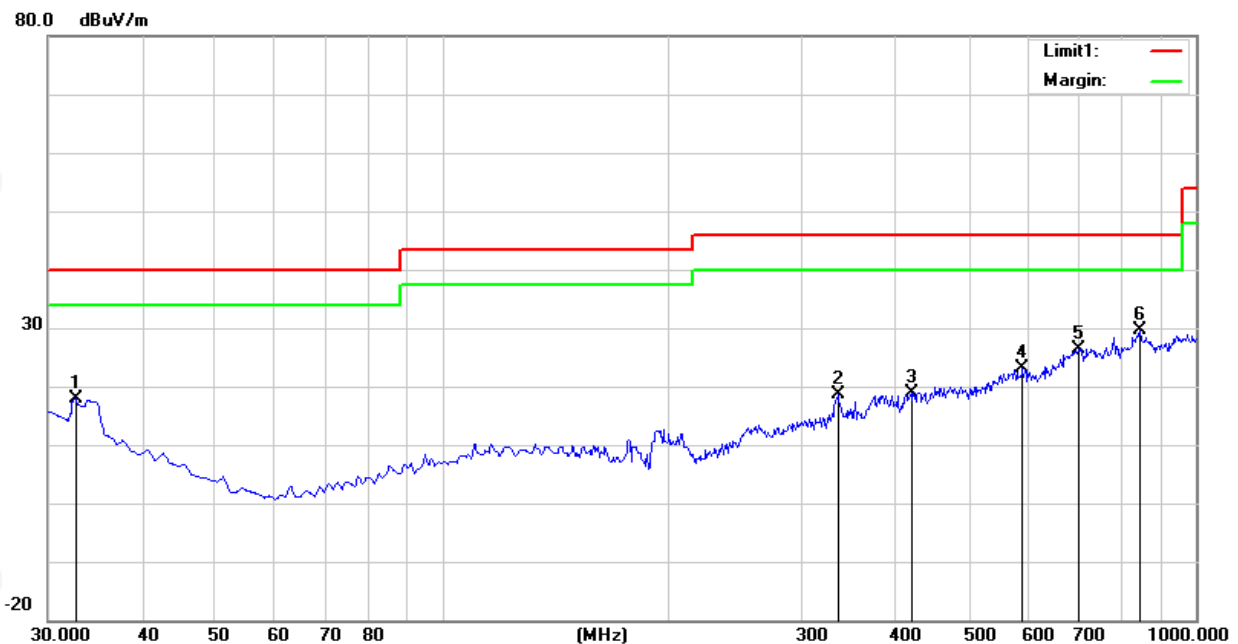
Temperature	23.4°C	Relative Humidity:	60%
Test Voltage	DC 7.6V	Polarization:	Vertical
Test Mode	802.11n20		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.7486	32.02	-14.25	17.77	40.00	-22.23	peak
2	335.5500	32.20	-13.54	18.66	46.00	-27.34	peak
3	419.9400	28.98	-10.09	18.89	46.00	-27.11	peak
4	589.6900	29.01	-5.83	23.18	46.00	-22.82	peak
5	701.2400	30.49	-4.13	26.36	46.00	-19.64	peak
6	844.8000	30.19	-0.53	29.66	46.00	-16.34	peak

Remark:

11. Margin = Result (Result = Reading + Factor) – Limit

12. Factor = Antenna factor + Cable attenuation factor (cable loss) – Amplifier gain



UNNI-3
MIMO

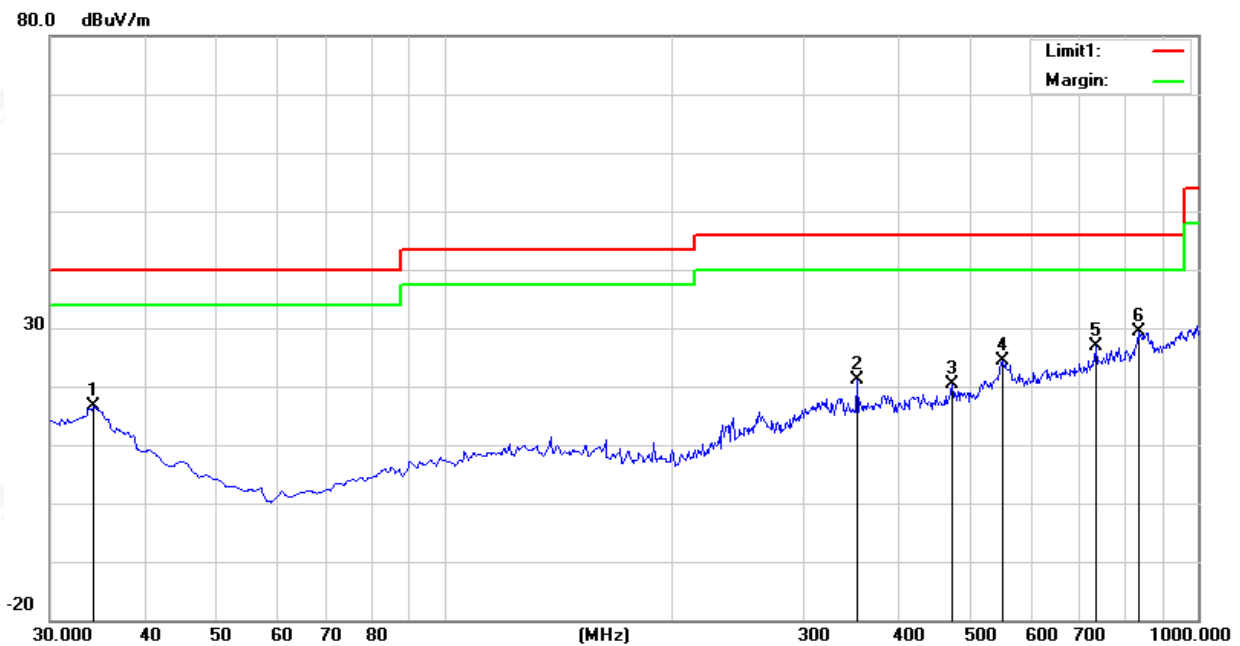
Temperature	23.4°C	Relative Humidity:	60%
Test Voltage	DC 7.6V	Polarization :	Horizontal
Test Mode	802.11n20(High Channel-Worst Mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	34.2760	31.67	-15.02	16.65	40.00	-23.35	peak
2	353.9800	34.23	-12.98	21.25	46.00	-24.75	peak
3	472.3200	29.30	-8.92	20.38	46.00	-25.62	peak
4	552.8300	30.11	-5.69	24.42	46.00	-21.58	peak
5	733.2500	29.26	-2.35	26.91	46.00	-19.09	peak
6	836.0700	29.96	-0.50	29.46	46.00	-16.54	peak

Remark:

13. Margin = Result (Result =Reading + Factor)–Limit

14. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain



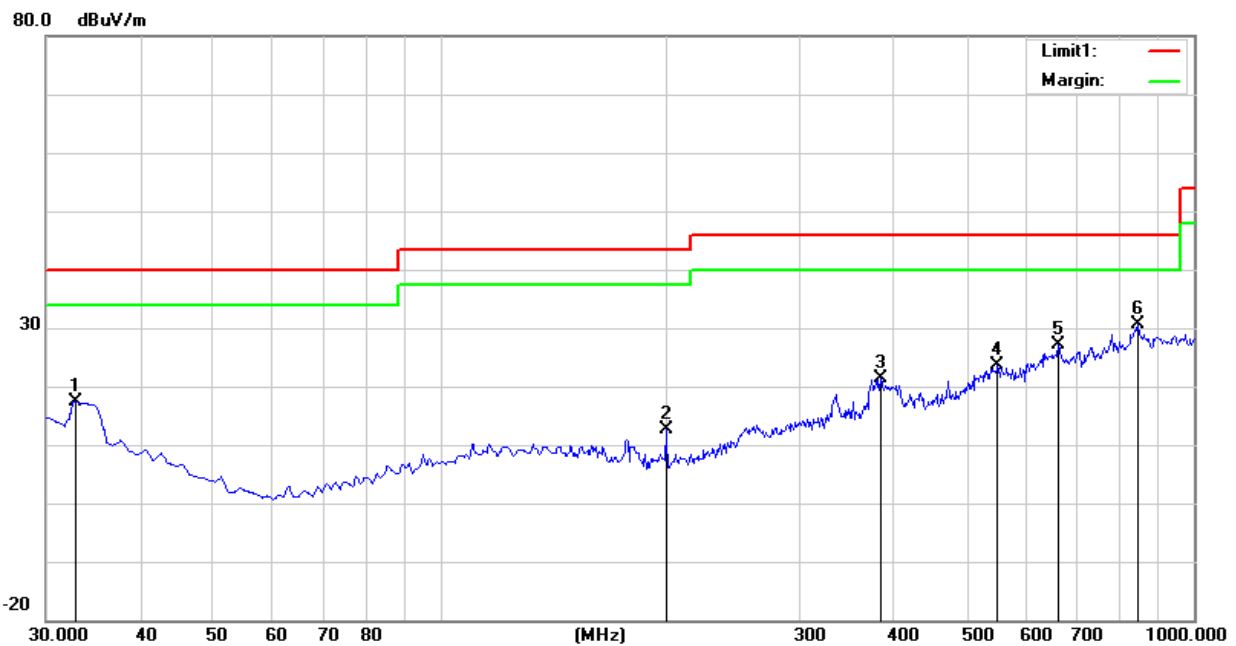
Temperature	23.4°C	Relative Humidity:	60%
Test Voltage	DC 7.6V	Polarization:	Vertical
Test Mode	802.11n20		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.9100	31.61	-14.33	17.28	40.00	-22.72	peak
2	199.7500	33.70	-21.11	12.59	43.50	-30.91	peak
3	384.0500	33.41	-11.99	21.42	46.00	-24.58	peak
4	549.9200	29.33	-5.78	23.55	46.00	-22.45	peak
5	663.4100	31.76	-4.73	27.03	46.00	-18.97	peak
6	844.8000	31.19	-0.53	30.66	46.00	-15.34	peak

Remark:

15. Margin = Result (Result = Reading + Factor) – Limit

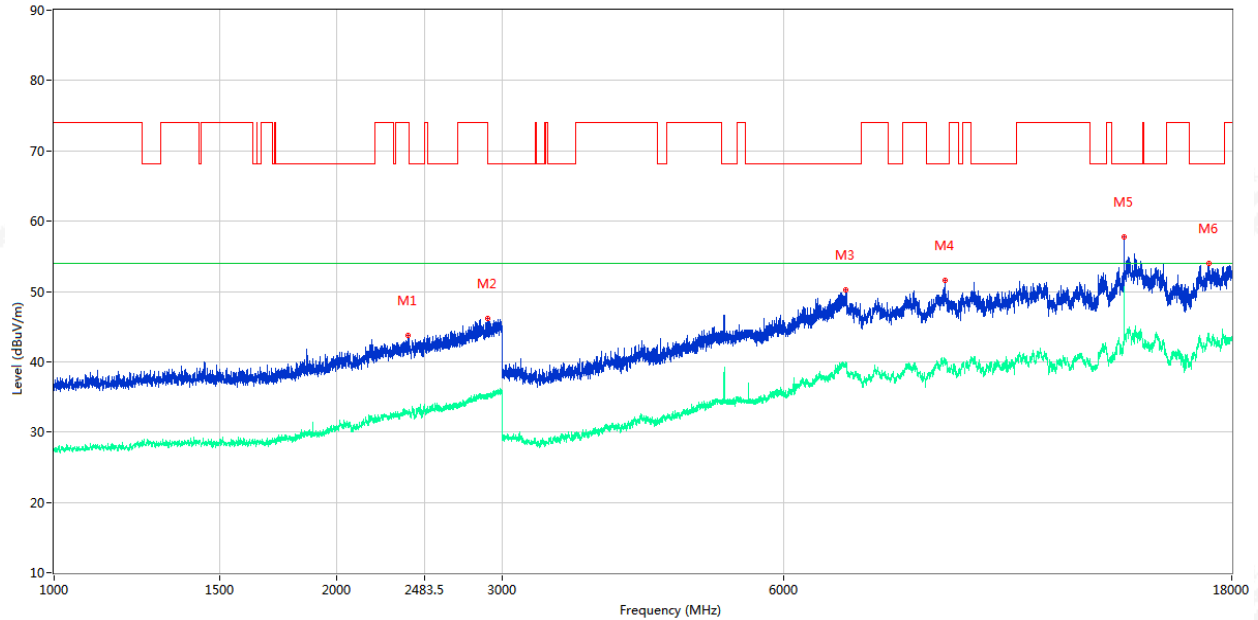
16. Factor = Antenna factor + Cable attenuation factor (cable loss) – Amplifier gain



3.2.8 TEST RESULTS (Above 1000 MHz)

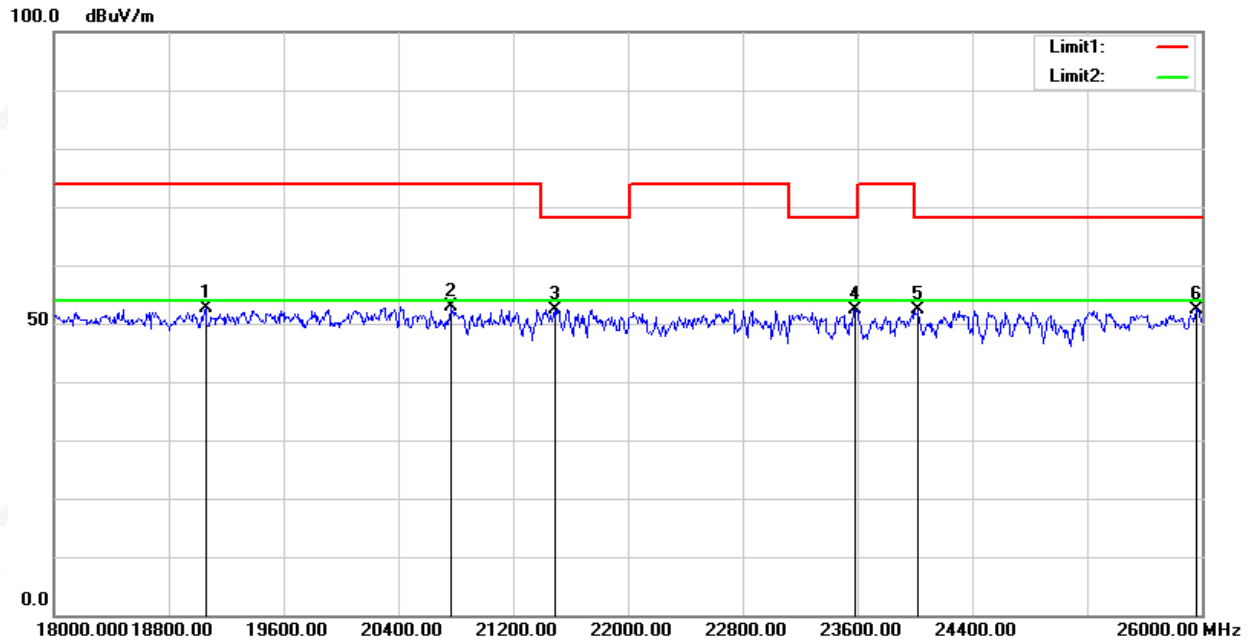
U-NII-1
MIMO
Worst mode (802.11n20)
Low
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



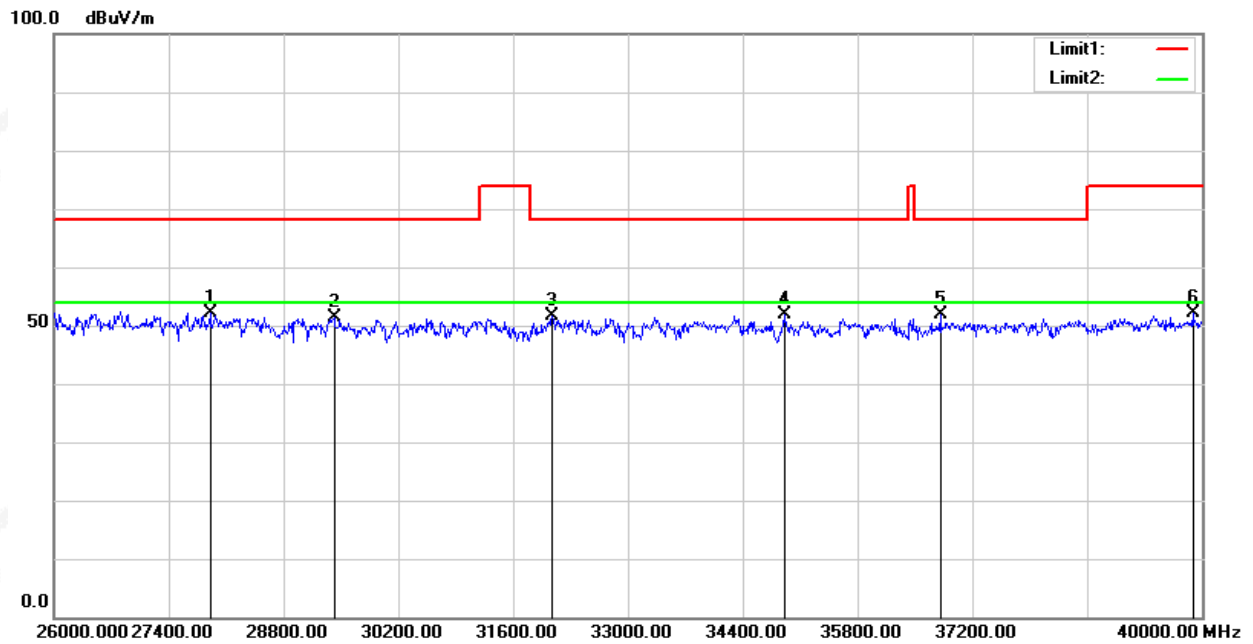
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2383.000	43.69	2.97	74.0	30.31	Peak	0.00	Horizontal	Pass
1**	2383.000	32.39	2.97	54.0	21.61	AV	0.00	Horizontal	Pass
2	2899.500	46.15	4.90	74.0	27.85	Peak	0.50	Horizontal	Pass
2**	2899.500	35.06	4.90	54.0	18.94	AV	0.50	Horizontal	Pass
3	6974.000	50.20	1.11	68.2	18.00	Peak	281.10	Horizontal	Pass
3**	6974.000	39.63	1.11	54.0	14.37	AV	281.10	Horizontal	Pass
4	8903.000	51.51	1.61	68.2	16.69	Peak	0.00	Horizontal	Pass
4**	8903.000	39.60	1.61	54.0	14.40	AV	0.00	Horizontal	Pass
5	13814.500	57.78	5.94	68.2	10.42	Peak	344.30	Horizontal	Pass
5**	13814.500	50.73	5.94	54.0	3.27	AV	344.30	Horizontal	Pass
6	17023.750	53.94	5.30	68.2	14.26	Peak	255.10	Horizontal	Pass
6**	17023.750	43.60	5.30	54.0	10.40	AV	255.10	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	19056.000	50.88	1.72	52.60	54.00	-1.40	peak
2	20768.000	50.44	2.46	52.90	54.00	-1.10	peak
3	21488.000	49.54	2.94	52.48	68.20	-15.72	peak
4	23584.000	48.14	4.22	52.36	68.20	-15.84	peak
5	24024.000	47.66	4.63	52.29	68.20	-15.91	peak
6	25960.000	46.64	5.79	52.43	68.20	-15.77	peak

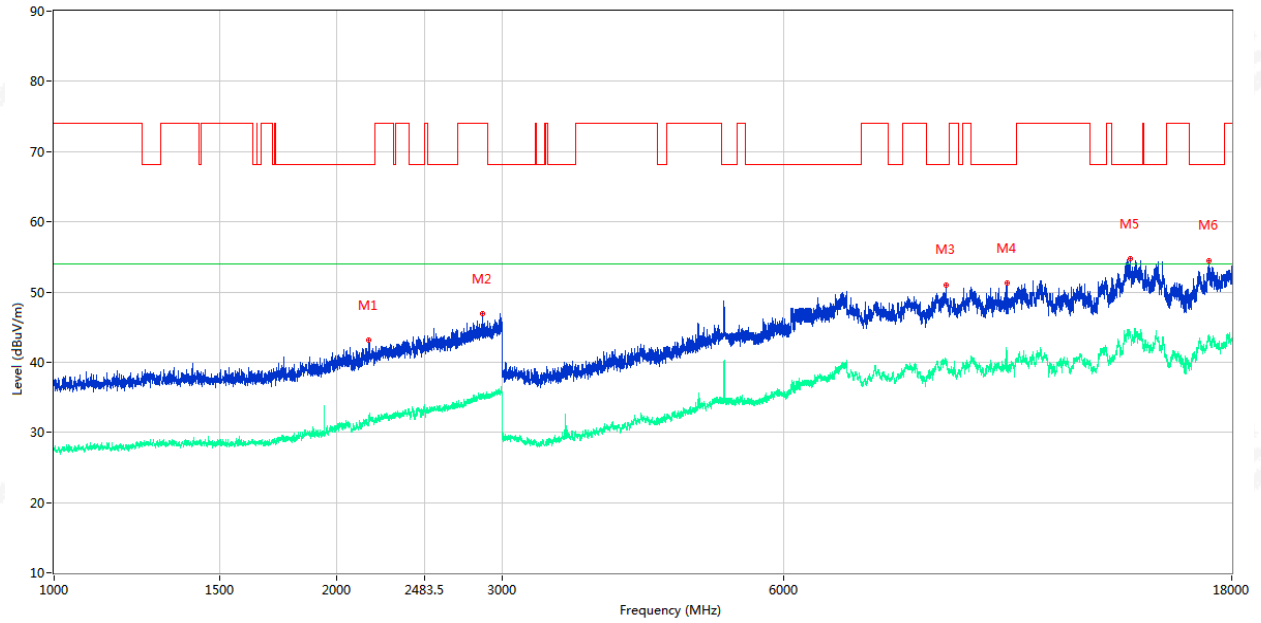
RSE-26G-40G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	27904.000	44.90	7.27	52.17	68.20	-16.03	peak
2	29416.000	42.24	9.10	51.34	68.20	-16.86	peak
3	32076.000	42.35	9.22	51.57	68.20	-16.63	peak
4	34904.000	42.09	9.68	51.77	68.20	-16.43	peak
5	36808.000	43.72	8.06	51.78	68.20	-16.42	peak
6	39888.000	43.28	8.88	52.16	54.00	-1.84	peak

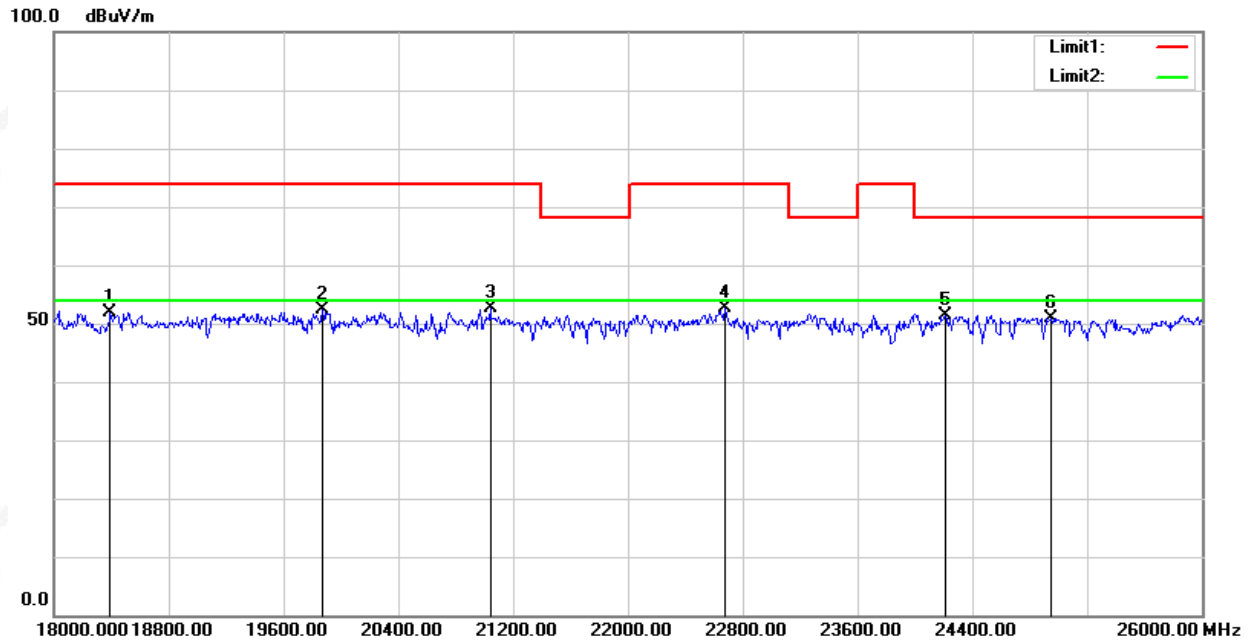
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



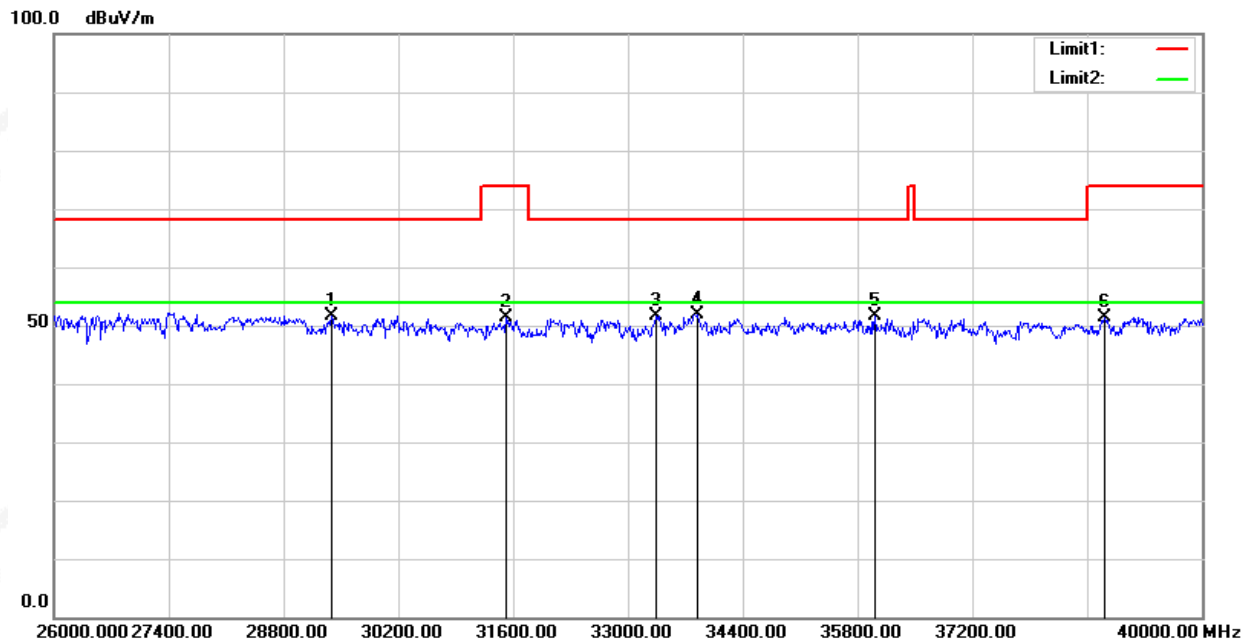
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2164.500	43.09	1.76	68.2	25.11	Peak	105.10	Vertical	Pass
1**	2164.500	31.72	1.76	54.0	22.28	AV	105.10	Vertical	Pass
2	2860.500	46.92	4.98	74.0	27.08	Peak	55.30	Vertical	Pass
2**	2860.500	35.06	4.98	54.0	18.94	AV	55.30	Vertical	Pass
3	8919.500	51.03	1.30	68.2	17.17	Peak	139.00	Vertical	Pass
3**	8919.500	40.17	1.30	54.0	13.83	AV	139.00	Vertical	Pass
4	10360.500	51.21	0.46	68.2	16.99	Peak	4.00	Vertical	Pass
4**	10360.500	41.28	0.46	54.0	12.72	AV	4.00	Vertical	Pass
5	14029.000	54.71	7.99	68.2	13.49	Peak	354.80	Vertical	Pass
5**	14029.000	44.34	7.99	54.0	9.66	AV	354.80	Vertical	Pass
6	17023.750	54.51	5.30	68.2	13.69	Peak	359.10	Vertical	Pass
6**	17023.750	43.83	5.30	54.0	10.17	AV	359.10	Vertical	Pass

RSE-18G-26G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18392.000	49.60	2.35	51.95	54.00	-2.05	peak
2	19872.000	50.62	1.72	52.34	54.00	-1.66	peak
3	21040.000	49.94	2.69	52.63	54.00	-1.37	peak
4	22680.000	48.89	3.82	52.71	54.00	-1.29	peak
5	24216.000	46.83	4.67	51.50	68.20	-16.70	peak
6	24944.000	45.72	5.23	50.95	68.20	-17.25	peak

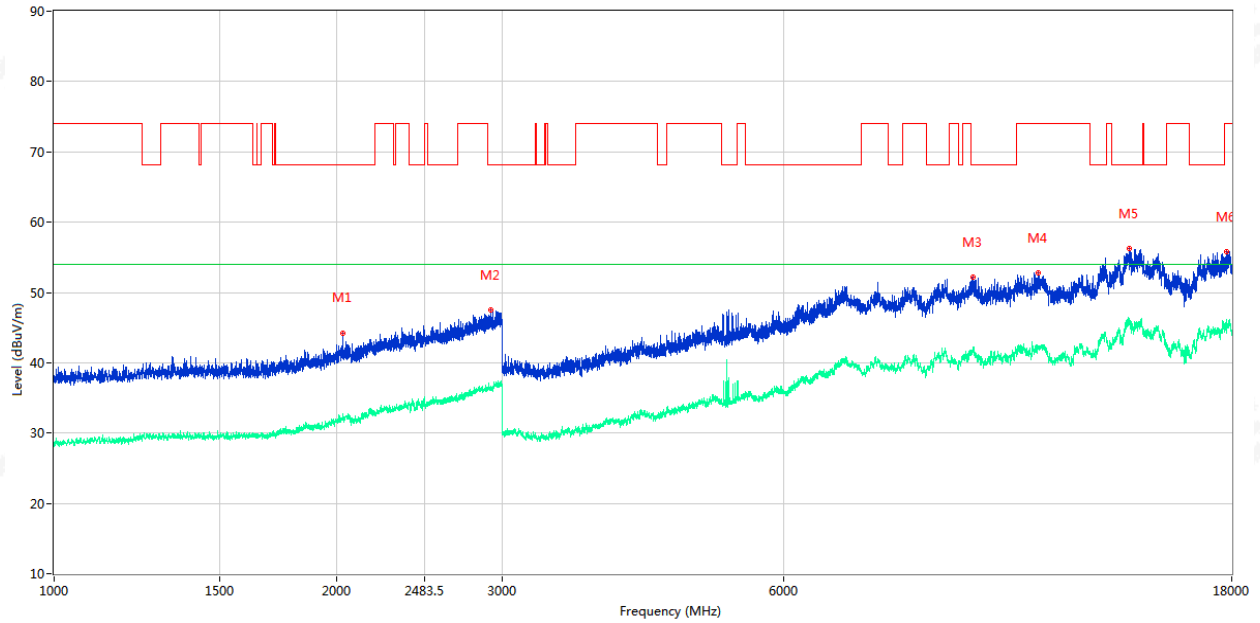
RSE-26G-40G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	29388.000	42.60	9.08	51.68	68.20	-16.52	peak
2	31516.000	42.08	9.19	51.27	54.00	-2.73	peak
3	33336.000	42.51	9.12	51.63	68.20	-16.57	peak
4	33840.000	42.66	9.32	51.98	68.20	-16.22	peak
5	36010.000	42.41	9.31	51.72	68.20	-16.48	peak
6	38810.000	44.64	6.73	51.37	54.00	-2.63	peak

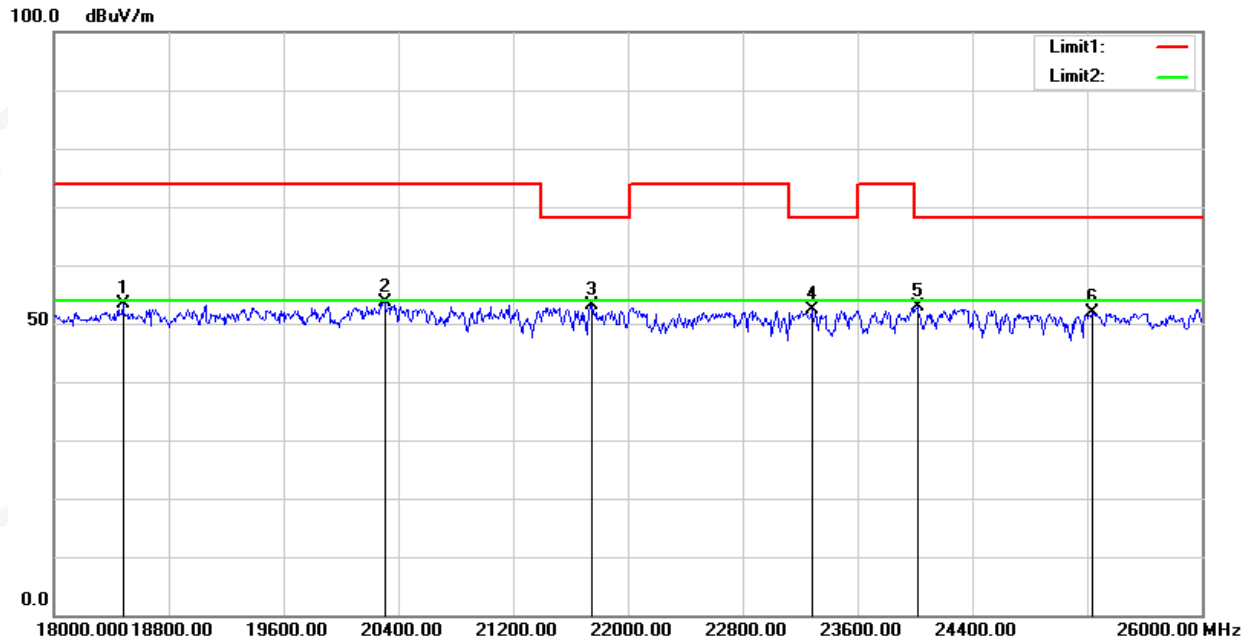
Middle
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



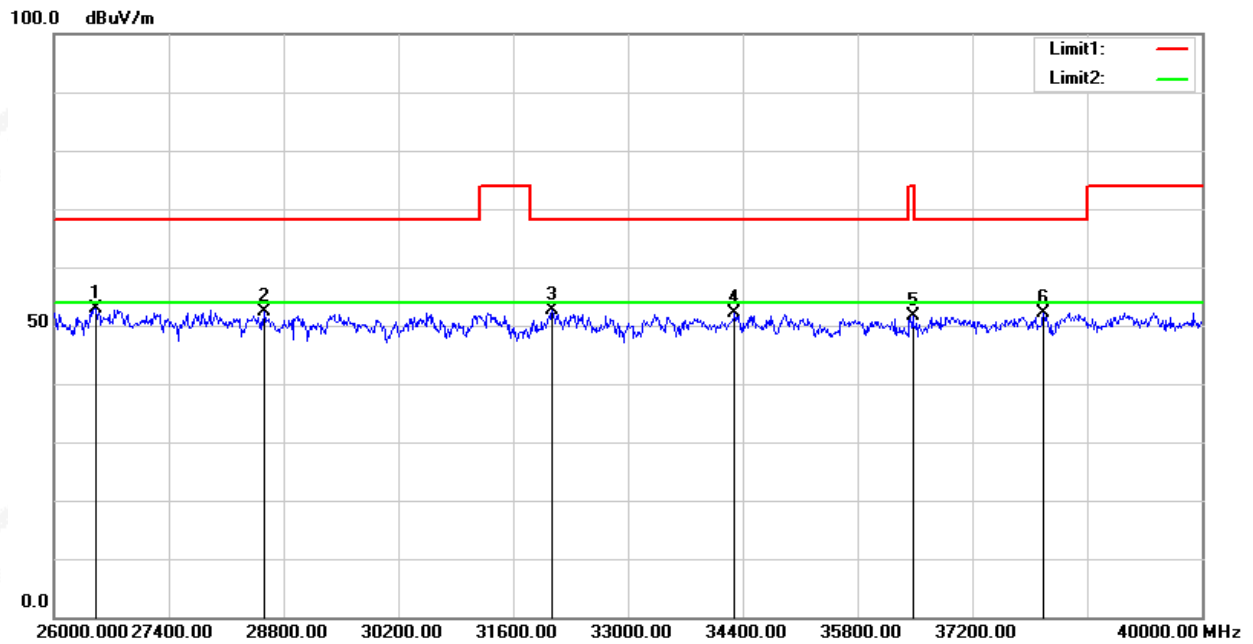
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2029.500	44.27	0.64	68.2	23.93	Peak	343.90	Horizontal	Pass
1**	2029.500	32.21	0.64	54.0	21.79	AV	343.90	Horizontal	Pass
2	2923.500	47.55	5.05	68.2	20.65	Peak	108.90	Horizontal	Pass
2**	2923.500	36.46	5.05	54.0	17.54	AV	108.90	Horizontal	Pass
3	9543.750	52.15	1.12	68.2	16.05	Peak	292.30	Horizontal	Pass
3**	9543.750	41.69	1.12	54.0	12.31	AV	292.30	Horizontal	Pass
4	11188.250	52.82	2.56	74.0	21.18	Peak	90.00	Horizontal	Pass
4**	11188.250	41.90	2.56	54.0	12.10	AV	90.00	Horizontal	Pass
5	13996.000	56.22	8.40	68.2	11.98	Peak	287.80	Horizontal	Pass
5**	13996.000	45.63	8.40	54.0	8.37	AV	287.80	Horizontal	Pass
6	17788.250	55.75	6.33	74.0	18.25	Peak	231.30	Horizontal	Pass
6**	17788.250	45.46	6.33	54.0	8.54	AV	231.30	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18480.000	51.09	2.28	53.37	54.00	-0.63	peak
2	20304.000	51.64	2.06	53.70	54.00	-0.30	peak
3	21752.000	50.03	3.17	53.20	68.20	-15.00	peak
4	23280.000	48.51	3.92	52.43	68.20	-15.77	peak
5	24016.000	48.34	4.63	52.97	68.20	-15.23	peak
6	25232.000	46.51	5.46	51.97	68.20	-16.23	peak

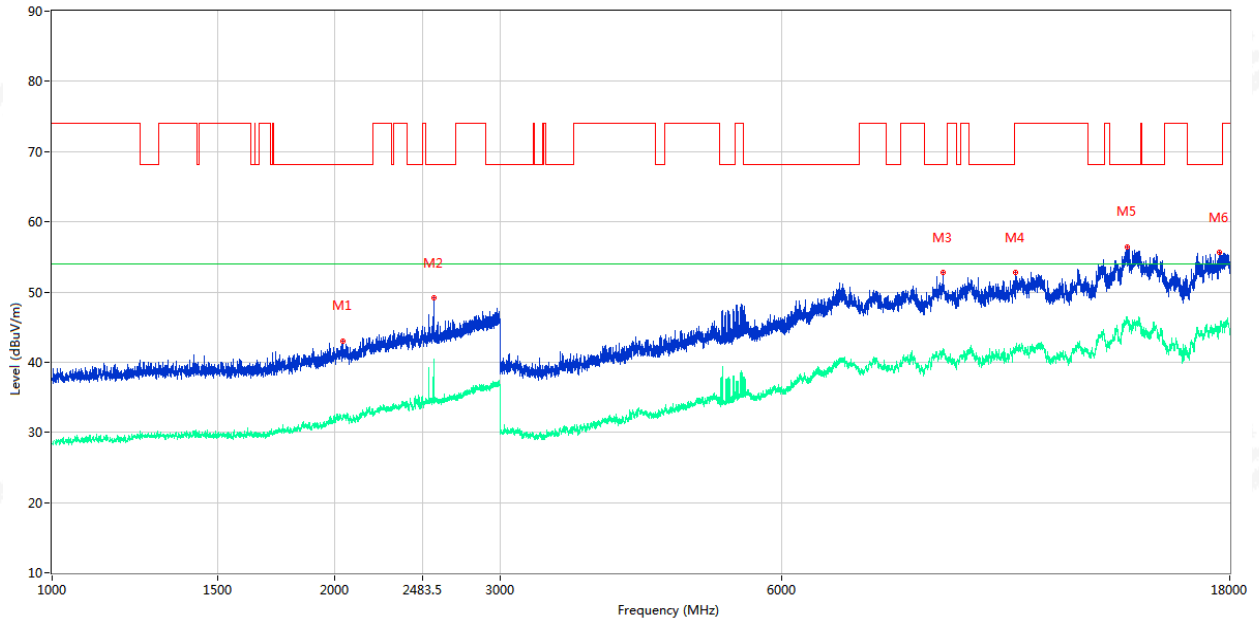
RSE-26G-40G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26518.000	46.79	6.07	52.86	68.20	-15.34	peak
2	28562.000	44.21	8.28	52.49	68.20	-15.71	peak
3	32076.000	43.35	9.22	52.57	68.20	-15.63	peak
4	34302.000	42.64	9.49	52.13	68.20	-16.07	peak
5	36472.000	43.07	8.51	51.58	54.00	-2.42	peak
6	38068.000	45.45	6.64	52.09	68.20	-16.11	peak

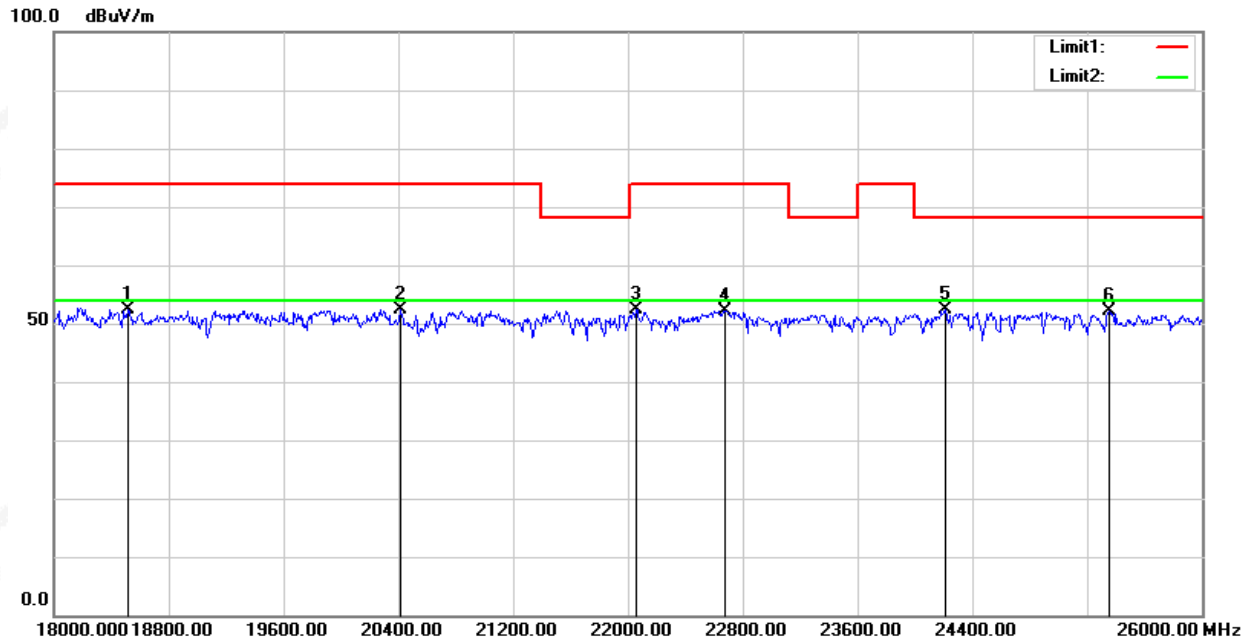
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



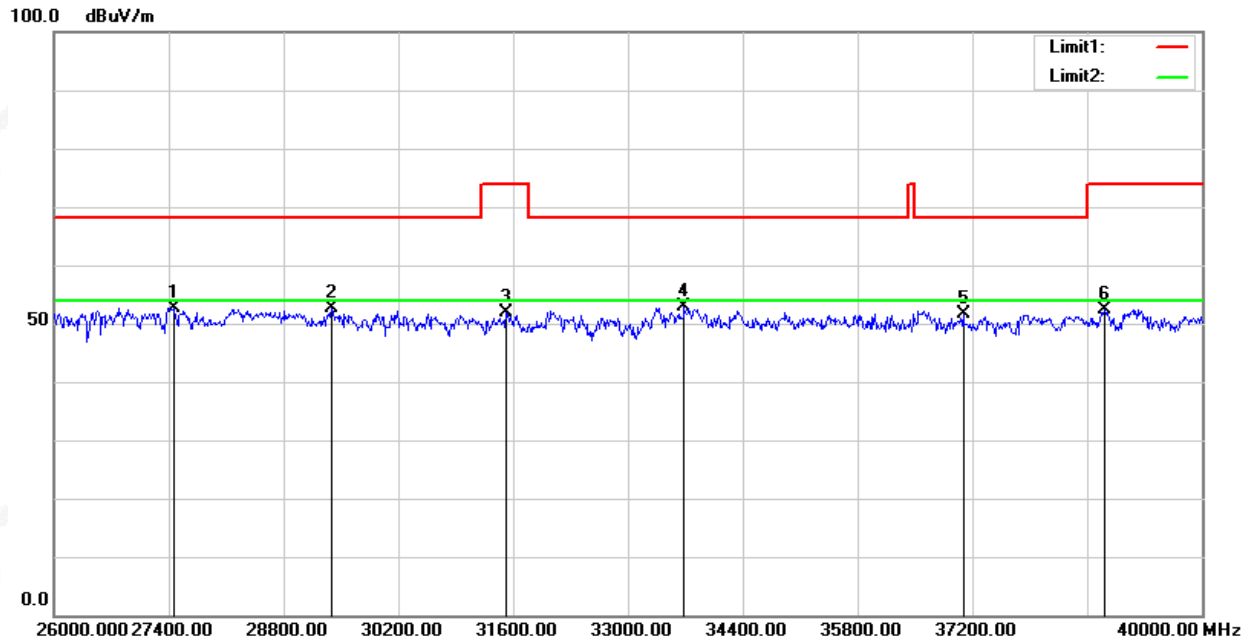
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2043.500	43.06	0.76	68.2	25.14	Peak	246.60	Vertical	Pass
1**	2043.500	32.32	0.76	54.0	21.68	AV	246.60	Vertical	Pass
2	2550.000	49.12	3.55	68.2	19.08	Peak	198.20	Vertical	Pass
2**	2550.000	40.40	3.55	54.0	13.60	AV	198.20	Vertical	Pass
3	8900.250	52.77	1.66	68.2	15.43	Peak	273.10	Vertical	Pass
3**	8900.250	41.61	1.66	54.0	12.39	AV	273.10	Vertical	Pass
4	10635.500	52.78	1.58	74.0	21.22	Peak	73.20	Vertical	Pass
4**	10635.500	41.30	1.58	54.0	12.70	AV	73.20	Vertical	Pass
5	13998.750	56.47	8.43	68.2	11.73	Peak	293.60	Vertical	Pass
5**	13998.750	45.67	8.43	54.0	8.33	AV	293.60	Vertical	Pass
6	17562.751	55.69	6.09	68.2	12.51	Peak	358.20	Vertical	Pass
6**	17562.751	44.74	6.09	54.0	9.26	AV	358.20	Vertical	Pass

RSE-18G-26G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18512.000	50.13	2.24	52.37	54.00	-1.63	peak
2	20416.000	50.14	2.16	52.30	54.00	-1.70	peak
3	22056.000	48.84	3.47	52.31	54.00	-1.69	peak
4	22680.000	48.39	3.82	52.21	54.00	-1.79	peak
5	24216.000	47.83	4.67	52.50	68.20	-15.70	peak
6	25352.000	46.58	5.55	52.13	68.20	-16.07	peak

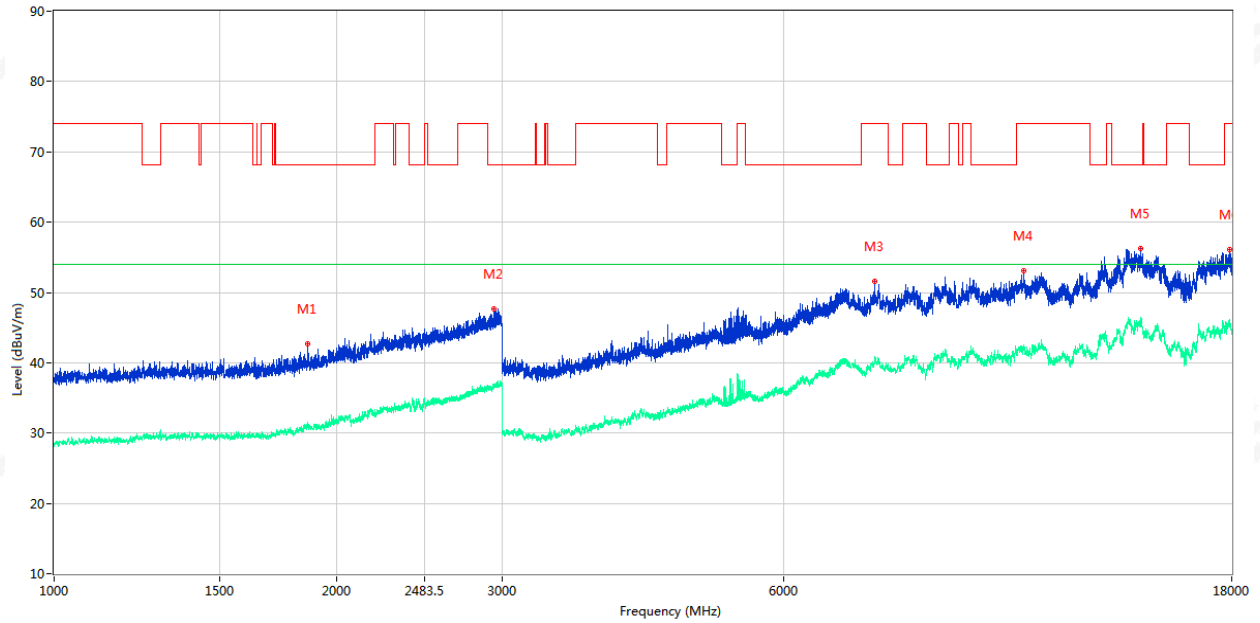
RSE-26G-40G-V



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	27456.000	45.83	6.87	52.70	68.20	-15.50	peak
2	29388.000	43.60	9.08	52.68	68.20	-15.52	peak
3	31516.000	42.58	9.19	51.77	54.00	-2.23	peak
4	33686.000	43.56	9.25	52.81	68.20	-15.39	peak
5	37088.000	43.84	7.71	51.55	68.20	-16.65	peak
6	38810.000	45.64	6.73	52.37	54.00	-1.63	peak

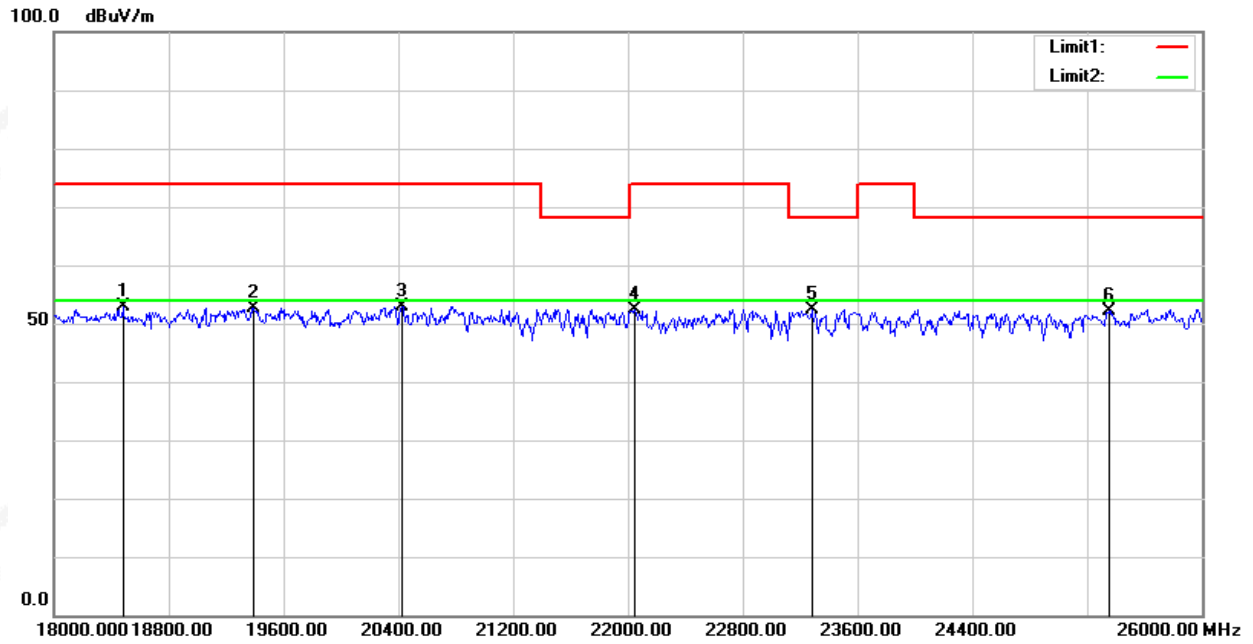
High
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



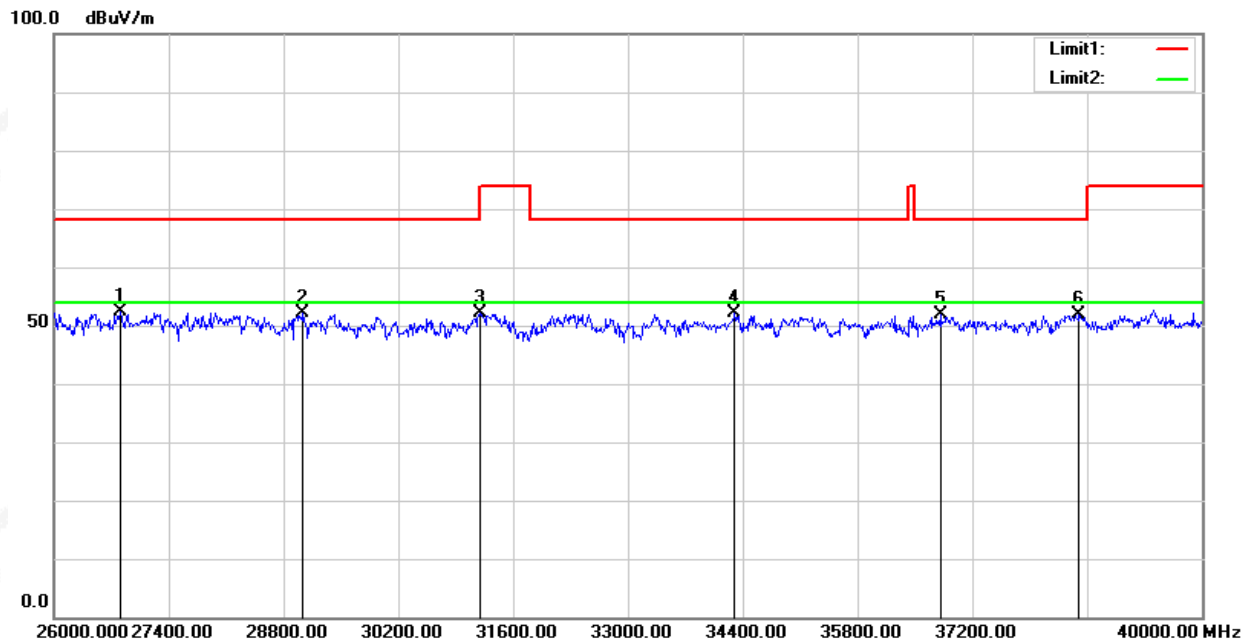
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	1865.500	42.67	-0.09	68.2	25.53	Peak	269.20	Horizontal	Pass
1**	1865.500	31.52	-0.09	54.0	22.48	AV	269.20	Horizontal	Pass
2	2945.000	47.69	5.18	68.2	20.51	Peak	2.00	Horizontal	Pass
2**	2945.000	36.74	5.18	54.0	17.26	AV	2.00	Horizontal	Pass
3	7497.750	51.61	-1.02	74.0	22.39	Peak	25.50	Horizontal	Pass
3**	7497.750	40.31	-1.02	54.0	13.69	AV	25.50	Horizontal	Pass
4	10814.250	53.10	2.00	74.0	20.90	Peak	356.80	Horizontal	Pass
4**	10814.250	41.84	2.00	54.0	12.16	AV	356.80	Horizontal	Pass
5	14394.750	56.29	6.98	68.2	11.91	Peak	326.90	Horizontal	Pass
5**	14394.750	45.56	6.98	54.0	8.44	AV	326.90	Horizontal	Pass
6	17923.000	56.13	7.06	74.0	17.87	Peak	357.40	Horizontal	Pass
6**	17923.000	45.51	7.06	54.0	8.49	AV	357.40	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18480.000	50.59	2.28	52.87	54.00	-1.13	peak
2	19392.000	51.10	1.54	52.64	54.00	-1.36	peak
3	20424.000	50.81	2.16	52.97	54.00	-1.03	peak
4	22048.000	49.02	3.46	52.48	54.00	-1.52	peak
5	23280.000	48.51	3.92	52.43	68.20	-15.77	peak
6	25352.000	46.66	5.55	52.21	68.20	-15.99	peak

RSE-26G-40G-H

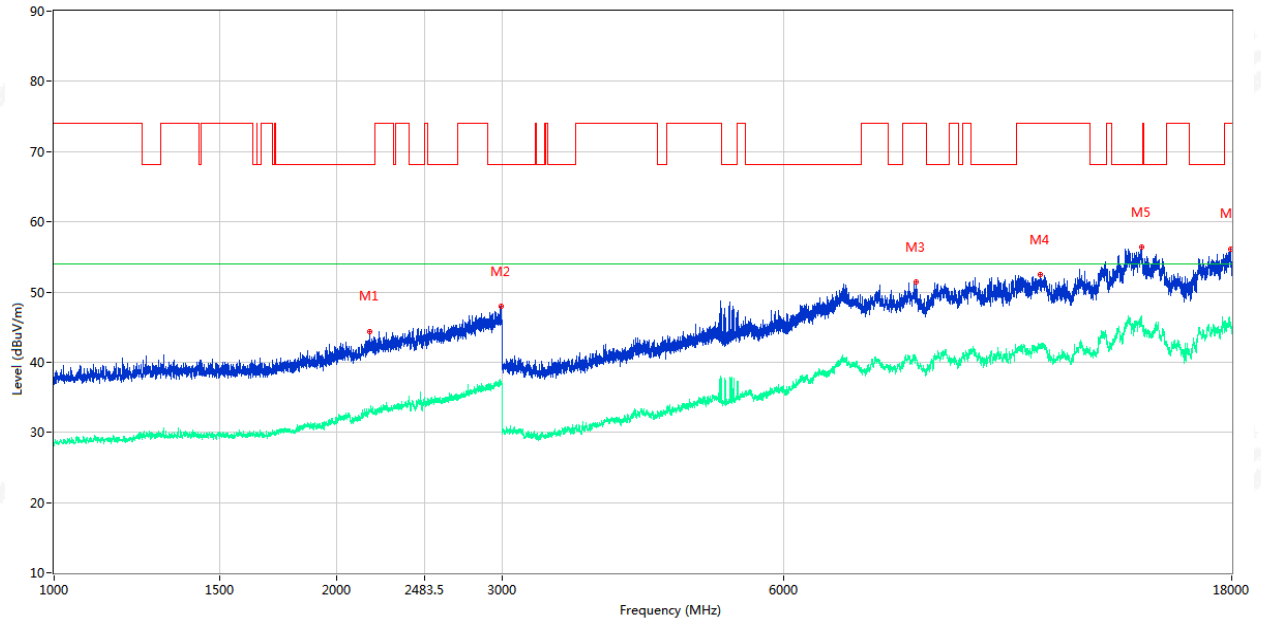


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26812.000	45.89	6.40	52.29	68.20	-15.91	peak
2	29038.000	43.05	9.00	52.05	68.20	-16.15	peak
3	31194.000	42.98	9.05	52.03	68.20	-16.17	peak
4	34302.000	42.64	9.49	52.13	68.20	-16.07	peak
5	36808.000	43.72	8.06	51.78	68.20	-16.42	peak
6	38502.000	45.41	6.35	51.76	68.20	-16.44	peak



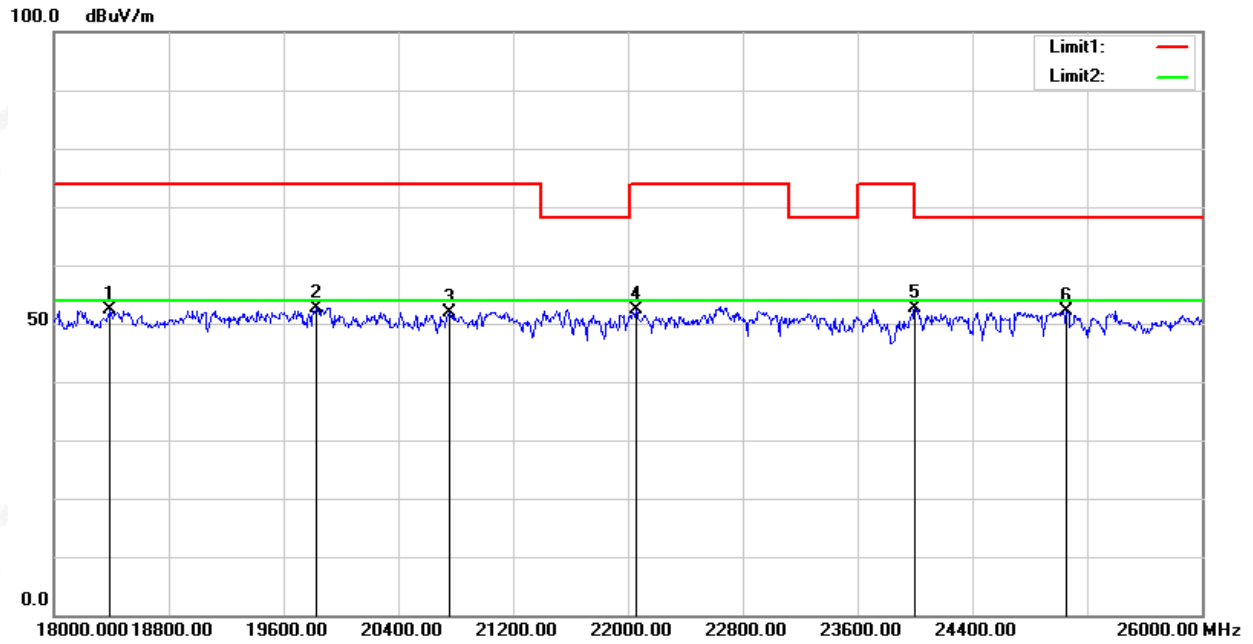
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



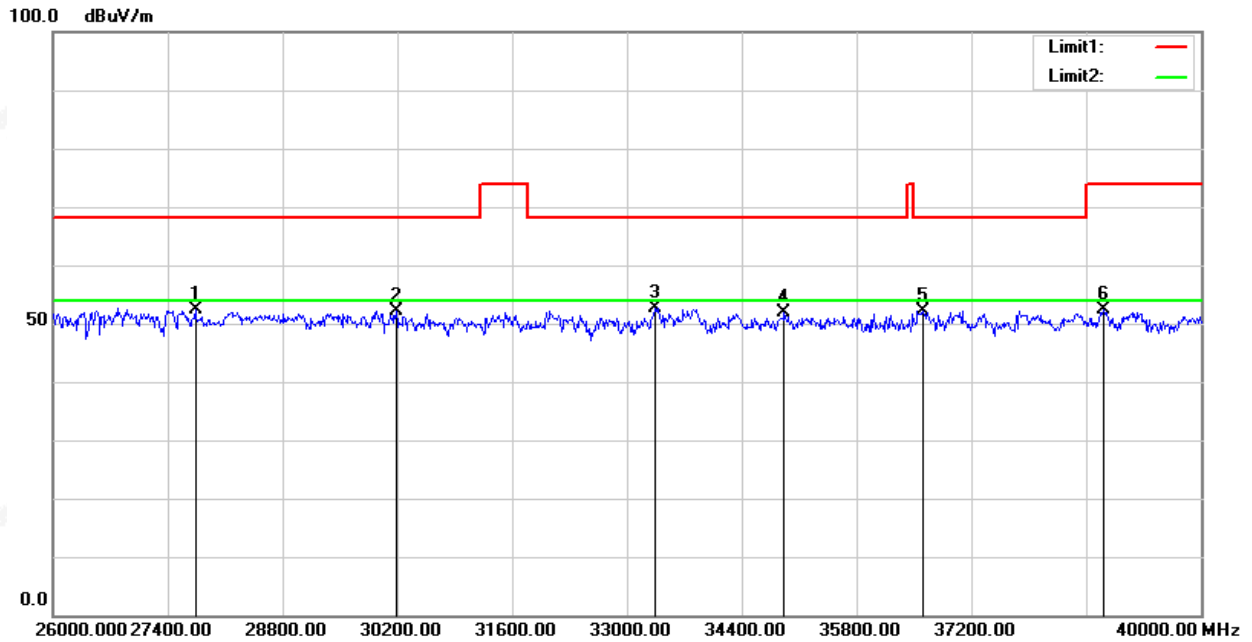
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2169.000	44.42	1.73	68.2	23.78	Peak	37.00	Vertical	Pass
1**	2169.000	32.83	1.73	54.0	21.17	AV	37.00	Vertical	Pass
2	2992.500	47.93	5.42	68.2	20.27	Peak	0.00	Vertical	Pass
2**	2992.500	37.11	5.42	54.0	16.89	AV	0.00	Vertical	Pass
3	8292.500	51.38	-0.28	74.0	22.62	Peak	242.00	Vertical	Pass
3**	8292.500	40.51	-0.28	54.0	13.49	AV	242.00	Vertical	Pass
4	11248.750	52.52	2.45	74.0	21.48	Peak	138.20	Vertical	Pass
4**	11248.750	41.97	2.45	54.0	12.03	AV	138.20	Vertical	Pass
5	14433.250	56.45	6.75	68.2	11.75	Peak	131.90	Vertical	Pass
5**	14433.250	45.96	6.75	54.0	8.04	AV	131.90	Vertical	Pass
6	17936.751	56.16	6.96	74.0	17.84	Peak	136.00	Vertical	Pass
6**	17936.751	45.29	6.96	54.0	8.71	AV	136.00	Vertical	Pass

RSE-18G-26G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18392.000	50.10	2.35	52.45	54.00	-1.55	peak
2	19832.000	50.96	1.69	52.65	54.00	-1.35	peak
3	20752.000	49.55	2.44	51.99	54.00	-2.01	peak
4	22056.000	48.84	3.47	52.31	54.00	-1.69	peak
5	24000.000	47.94	4.63	52.57	68.20	-15.63	peak
6	25056.000	46.68	5.35	52.03	68.20	-16.17	peak

RSE-26G-40G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	27736.000	45.15	7.11	52.26	68.20	-15.94	peak
2	30186.000	43.02	8.99	52.01	68.20	-16.19	peak
3	33336.000	43.51	9.12	52.63	68.20	-15.57	peak
4	34918.000	42.19	9.69	51.88	68.20	-16.32	peak
5	36612.000	43.89	8.31	52.20	68.20	-16.00	peak
6	38810.000	45.64	6.73	52.37	54.00	-1.63	peak

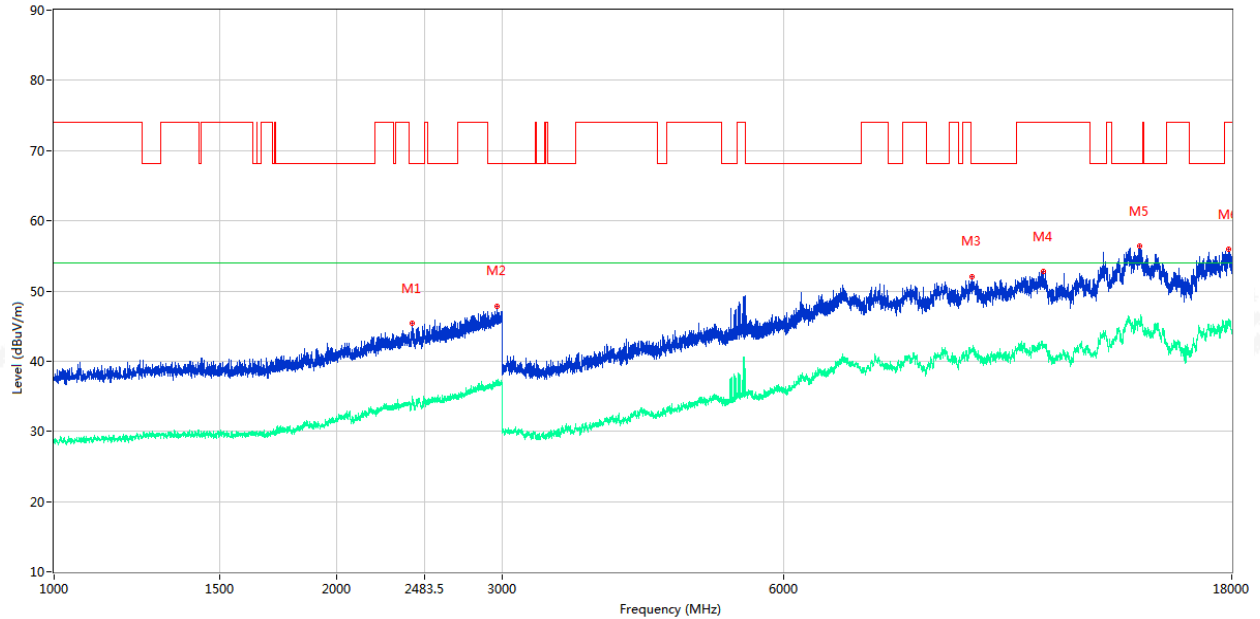
Note:

- 1) Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Emission Level = Reading + Factor.
- 2) The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.
- 3) All modes have been measured, only worst mode was reported.



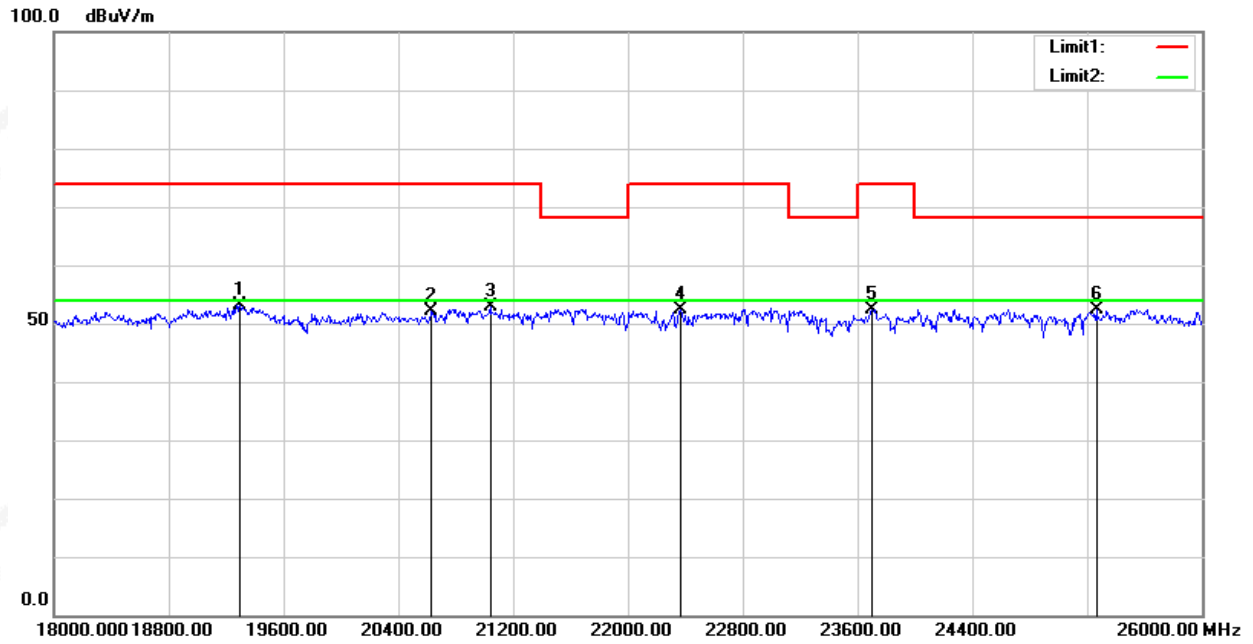
U-NII-2A
MIMO
Worst mode (802.11n20)
Low
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



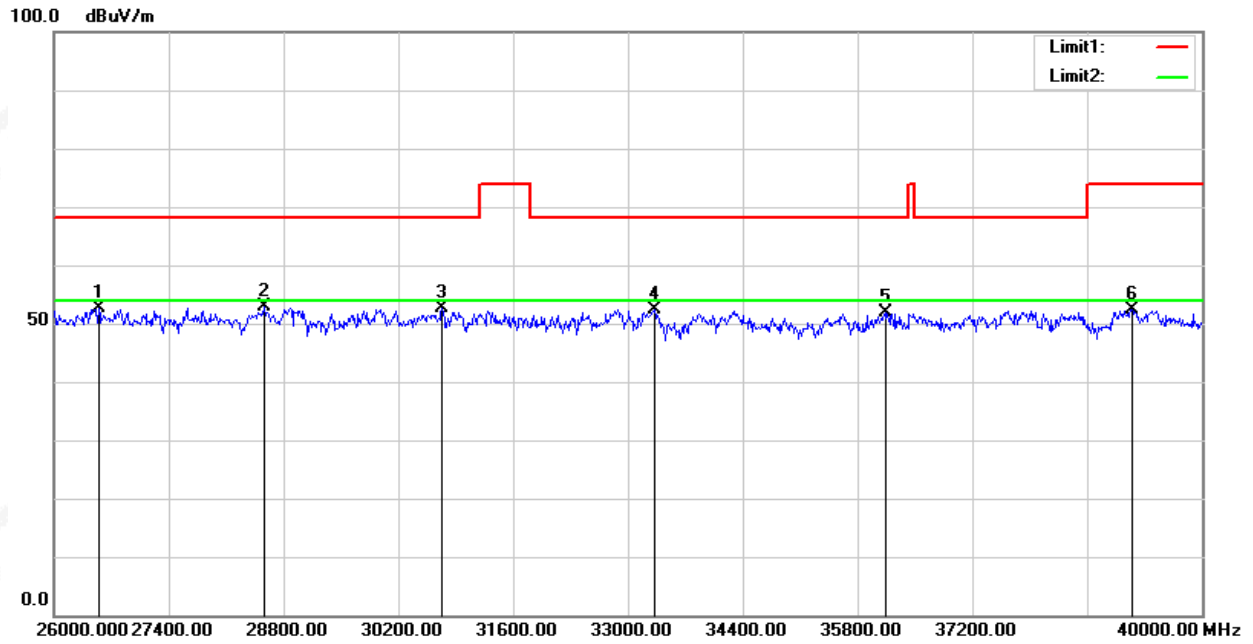
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2410.000	45.38	3.10	68.2	22.82	Peak	21.90	Horizontal	Pass
1**	2410.000	34.38	3.10	54.0	19.62	AV	21.90	Horizontal	Pass
2	2968.500	47.88	5.31	68.2	20.32	Peak	132.00	Horizontal	Pass
2**	2968.500	36.73	5.31	54.0	17.27	AV	132.00	Horizontal	Pass
3	9519.000	52.11	1.36	68.2	16.09	Peak	160.60	Horizontal	Pass
3**	9519.000	41.81	1.36	54.0	12.19	AV	160.60	Horizontal	Pass
4	11331.250	52.71	2.18	74.0	21.29	Peak	3.90	Horizontal	Pass
4**	11331.250	42.31	2.18	54.0	11.69	AV	3.90	Horizontal	Pass
5	14367.250	56.39	6.95	68.2	11.81	Peak	60.20	Horizontal	Pass
5**	14367.250	45.57	6.95	54.0	8.43	AV	60.20	Horizontal	Pass
6	17867.999	55.91	6.96	74.0	18.09	Peak	230.50	Horizontal	Pass
6**	17867.999	45.45	6.96	54.0	8.55	AV	230.50	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	19296.000	51.47	1.60	53.07	54.00	-0.93	peak
2	20632.000	49.87	2.35	52.22	54.00	-1.78	peak
3	21040.000	50.14	2.69	52.83	54.00	-1.17	peak
4	22368.000	48.62	3.78	52.40	54.00	-1.60	peak
5	23696.000	48.07	4.33	52.40	54.00	-1.60	peak
6	25264.000	46.81	5.48	52.29	68.20	-15.91	peak

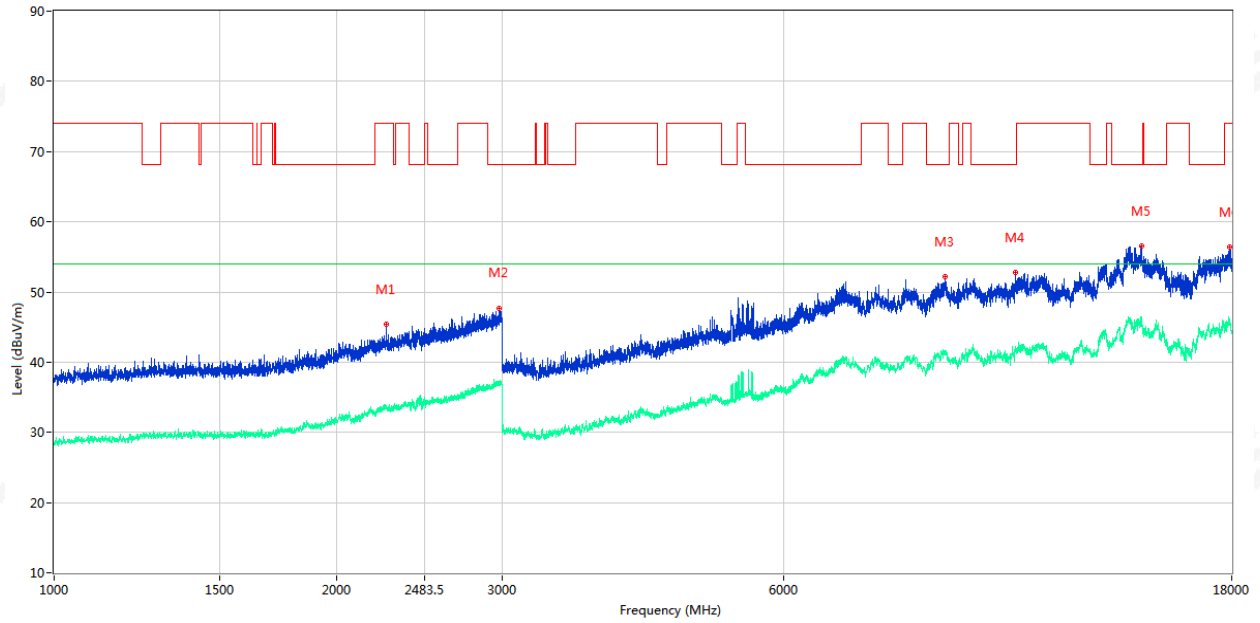
RSE-26G-40G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26546.000	46.53	6.11	52.64	68.20	-15.56	peak
2	28562.000	44.71	8.28	52.99	68.20	-15.21	peak
3	30732.000	43.65	8.92	52.57	68.20	-15.63	peak
4	33322.000	43.33	9.10	52.43	68.20	-15.77	peak
5	36150.000	42.78	9.07	51.85	68.20	-16.35	peak
6	39146.000	45.04	7.27	52.31	54.00	-1.69	peak

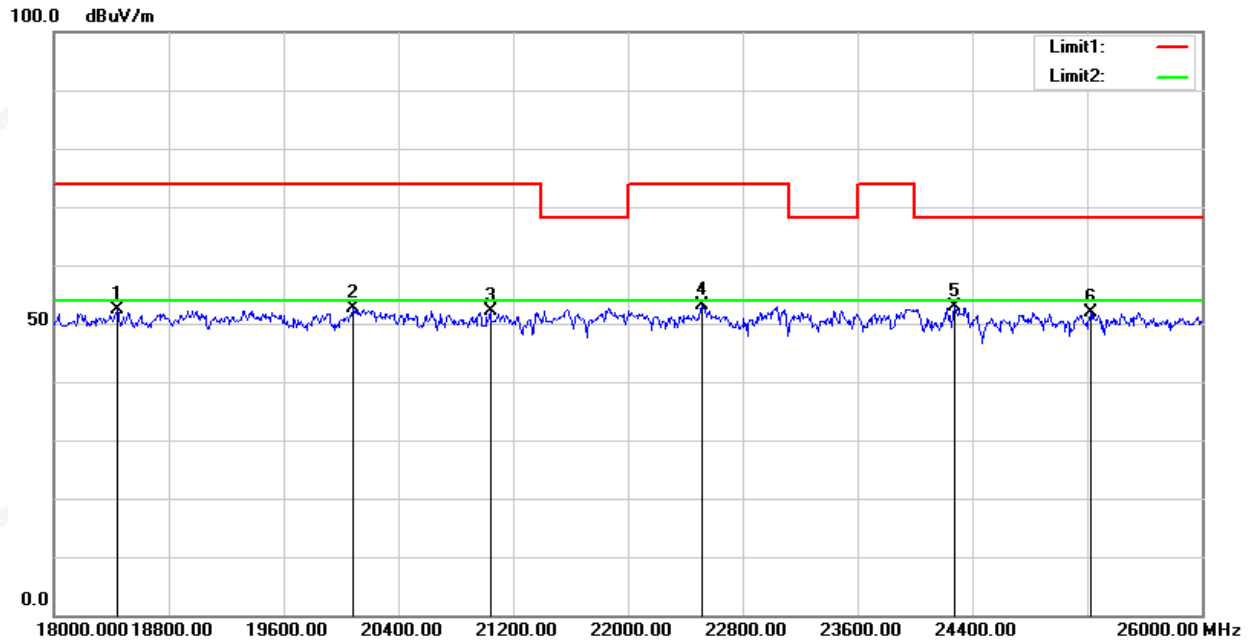
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



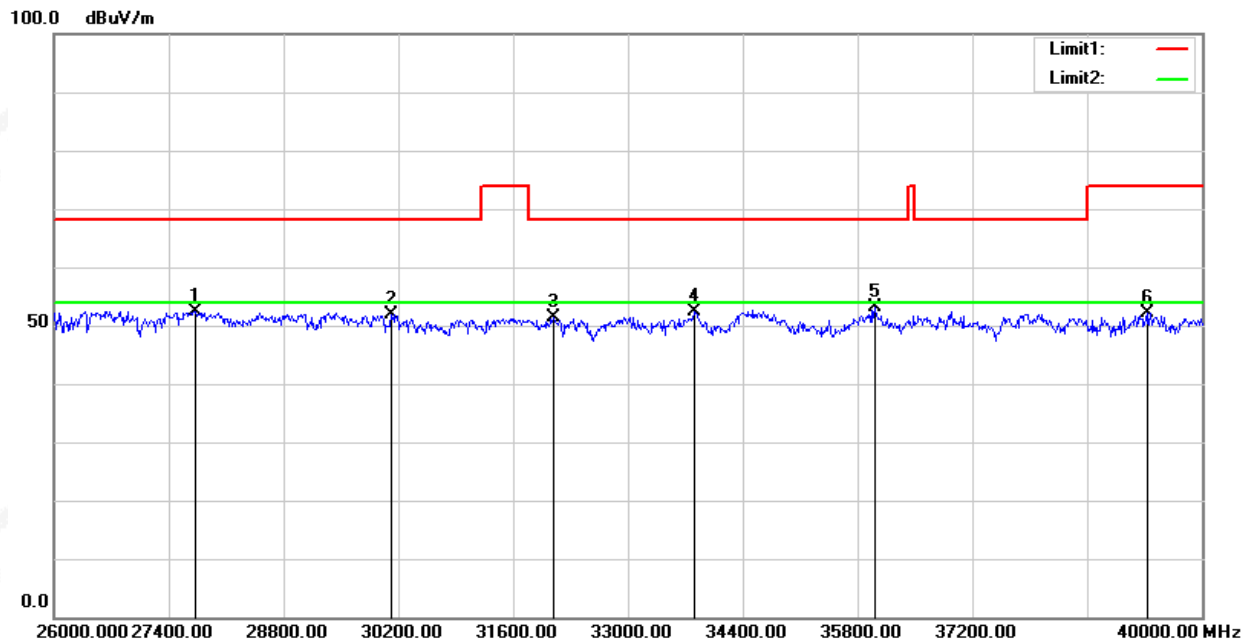
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2260.500	45.34	2.17	74.0	28.66	Peak	125.10	Vertical	Pass
1**	2260.500	33.53	2.17	54.0	20.47	AV	125.10	Vertical	Pass
2	2981.500	47.71	5.37	68.2	20.49	Peak	32.60	Vertical	Pass
2**	2981.500	37.20	5.37	54.0	16.80	AV	32.60	Vertical	Pass
3	8900.250	52.16	1.66	68.2	16.04	Peak	114.30	Vertical	Pass
3**	8900.250	41.29	1.66	54.0	12.71	AV	114.30	Vertical	Pass
4	10594.250	52.74	1.79	68.2	15.46	Peak	283.50	Vertical	Pass
4**	10594.250	42.17	1.79	54.0	11.83	AV	283.50	Vertical	Pass
5	14419.500	56.49	6.85	68.2	11.71	Peak	27.70	Vertical	Pass
5**	14419.500	46.45	6.85	54.0	7.55	AV	27.70	Vertical	Pass
6	17917.499	56.40	7.11	74.0	17.60	Peak	359.60	Vertical	Pass
6**	17917.499	45.69	7.11	54.0	8.31	AV	359.60	Vertical	Pass

RSE-18G-26G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18440.000	49.96	2.30	52.26	54.00	-1.74	peak
2	20088.000	50.73	1.88	52.61	54.00	-1.39	peak
3	21040.000	49.44	2.69	52.13	54.00	-1.87	peak
4	22512.000	49.21	3.91	53.12	54.00	-0.88	peak
5	24280.000	48.22	4.68	52.90	68.20	-15.30	peak
6	25224.000	46.49	5.46	51.95	68.20	-16.25	peak

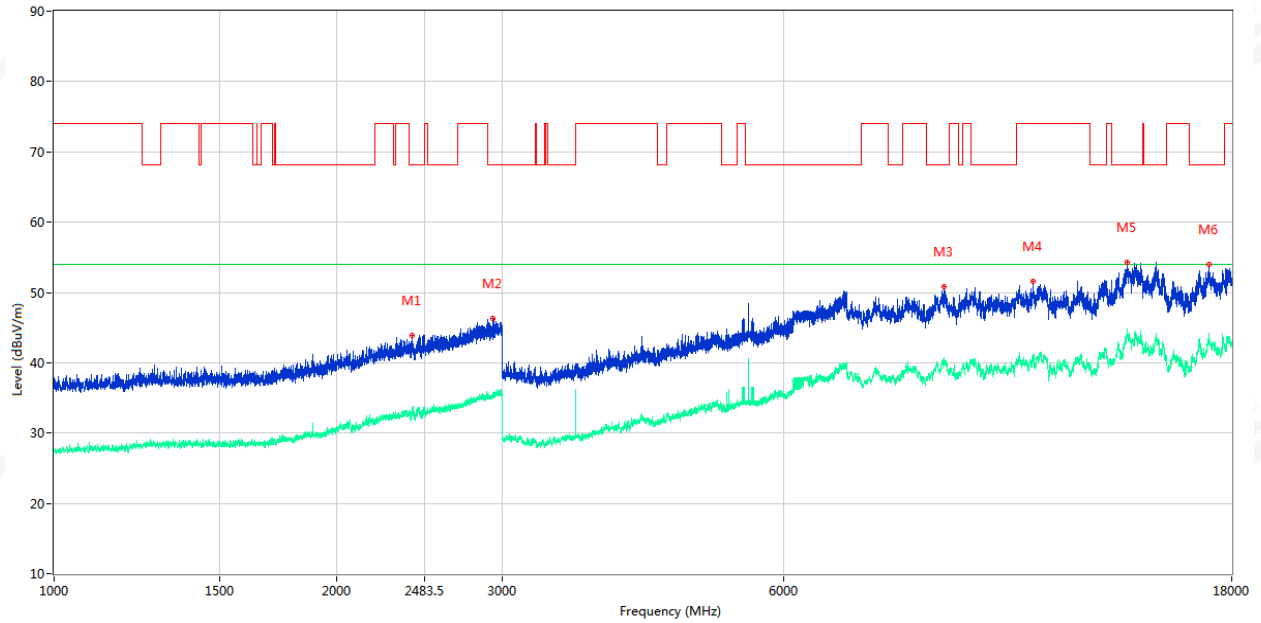
RSE-26G-40G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	27722.000	45.23	7.09	52.32	68.20	-15.88	peak
2	30116.000	42.83	9.01	51.84	68.20	-16.36	peak
3	32090.000	42.08	9.23	51.31	68.20	-16.89	peak
4	33812.000	42.96	9.31	52.27	68.20	-15.93	peak
5	36010.000	43.91	9.31	53.22	68.20	-14.98	peak
6	39328.000	44.36	7.65	52.01	54.00	-1.99	peak

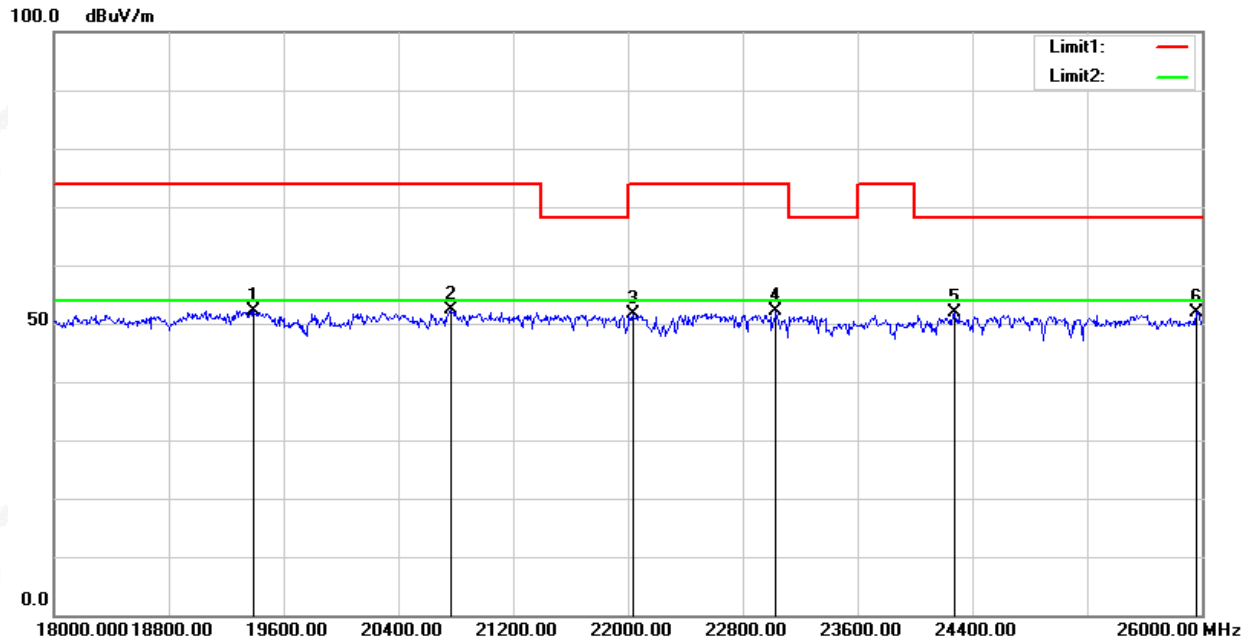
Middle
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



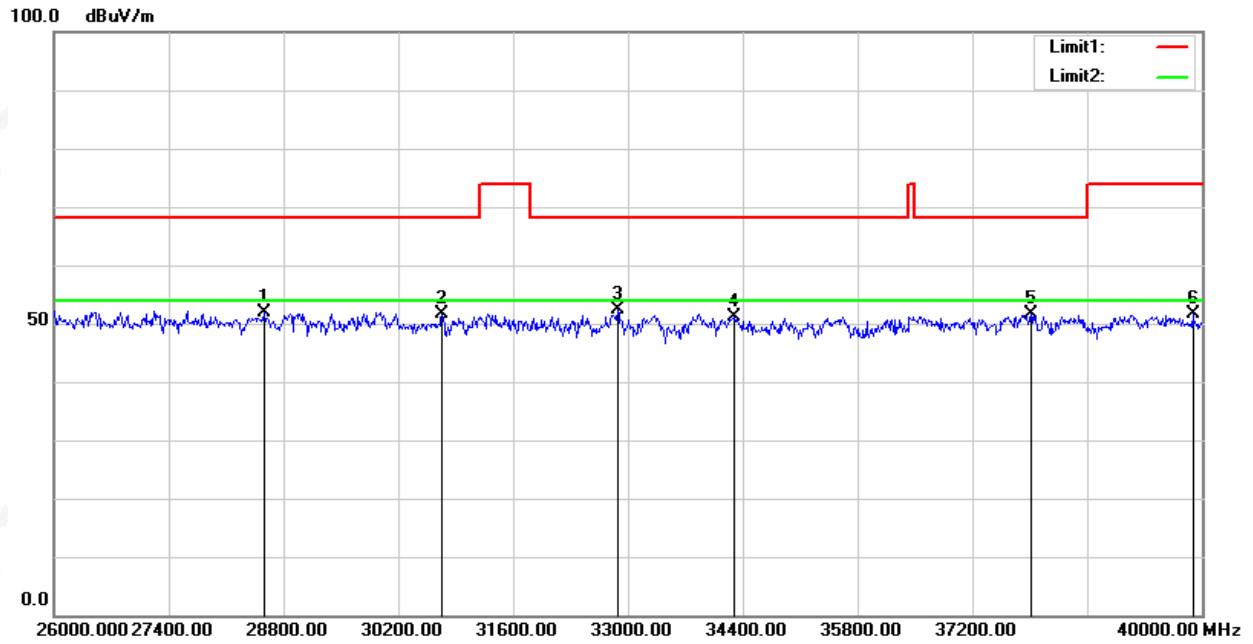
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2408.500	43.90	3.10	68.2	24.30	Peak	252.40	Horizontal	Pass
1**	2408.500	33.19	3.10	54.0	20.81	AV	252.40	Horizontal	Pass
2	2934.500	46.33	5.12	68.2	21.87	Peak	107.10	Horizontal	Pass
2**	2934.500	35.14	5.12	54.0	18.86	AV	107.10	Horizontal	Pass
3	8889.250	50.77	1.49	68.2	17.43	Peak	240.60	Horizontal	Pass
3**	8889.250	40.70	1.49	54.0	13.30	AV	240.60	Horizontal	Pass
4	11053.500	51.57	1.94	74.0	22.43	Peak	210.50	Horizontal	Pass
4**	11053.500	41.10	1.94	54.0	12.90	AV	210.50	Horizontal	Pass
5	13921.750	54.33	7.47	68.2	13.87	Peak	72.50	Horizontal	Pass
5**	13921.750	44.00	7.47	54.0	10.00	AV	72.50	Horizontal	Pass
6	17021.000	53.92	5.33	68.2	14.28	Peak	327.20	Horizontal	Pass
6**	17021.000	43.44	5.33	54.0	10.56	AV	327.20	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	19392.000	50.60	1.54	52.14	54.00	-1.86	peak
2	20768.000	49.94	2.46	52.40	54.00	-1.60	peak
3	22032.000	48.06	3.45	51.51	54.00	-2.49	peak
4	23032.000	48.49	3.67	52.16	54.00	-1.84	peak
5	24272.000	47.08	4.68	51.76	68.20	-16.44	peak
6	25960.000	46.14	5.79	51.93	68.20	-16.27	peak

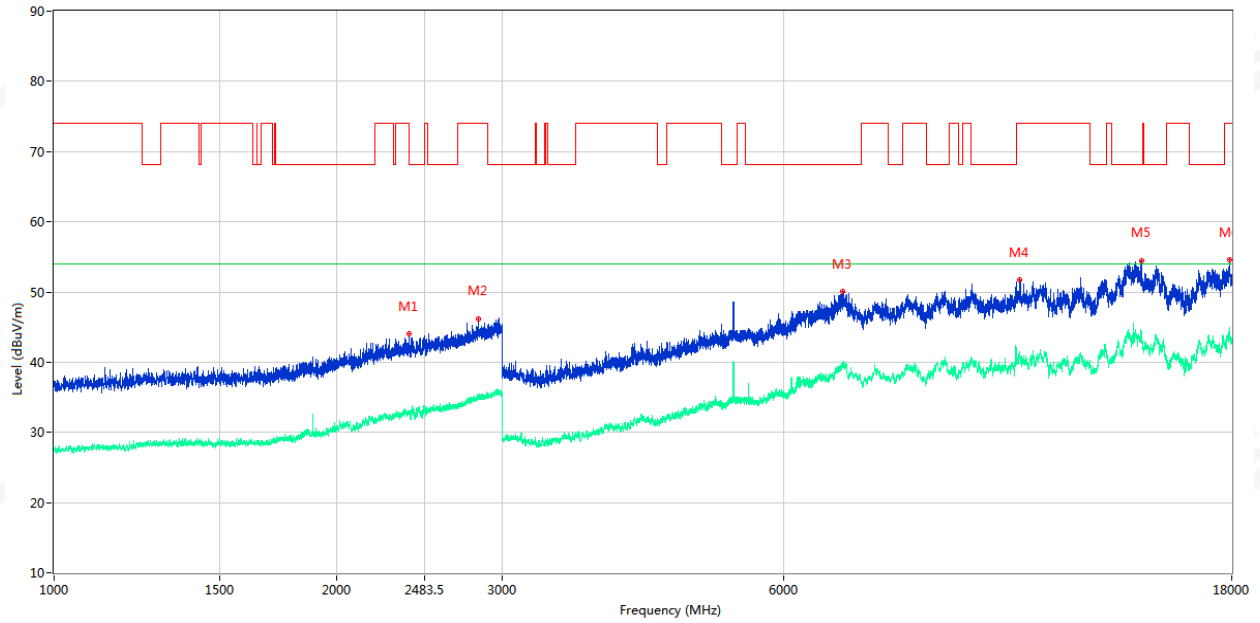
RSE-26G-40G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	28562.000	43.71	8.28	51.99	68.20	-16.21	peak
2	30732.000	42.65	8.92	51.57	68.20	-16.63	peak
3	32874.000	43.21	9.06	52.27	68.20	-15.93	peak
4	34302.000	41.64	9.49	51.13	68.20	-17.07	peak
5	37914.000	44.82	6.79	51.61	68.20	-16.59	peak
6	39888.000	42.78	8.88	51.66	54.00	-2.34	peak

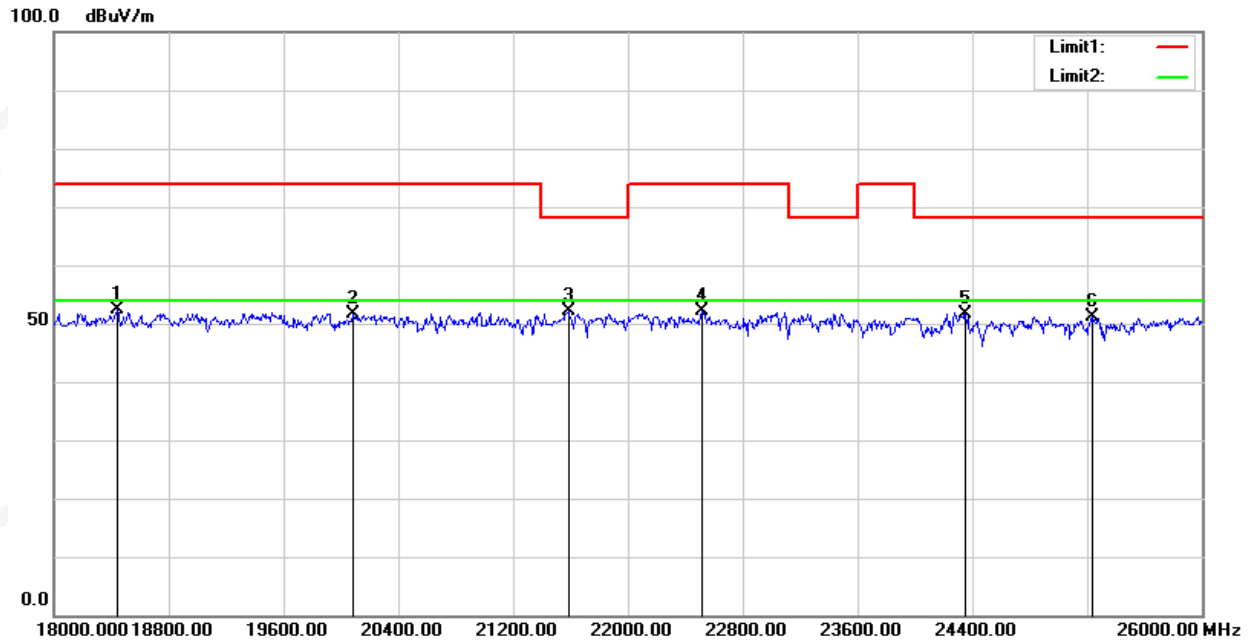
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



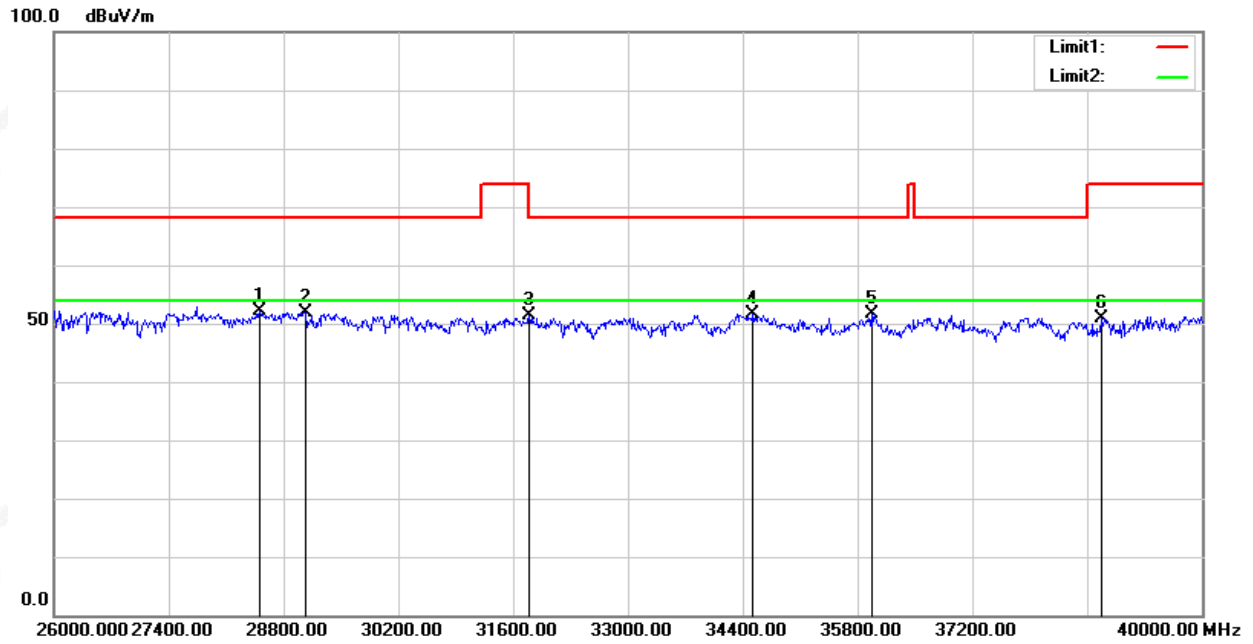
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2392.000	44.00	3.02	68.2	24.20	Peak	218.80	Vertical	Pass
1**	2392.000	33.05	3.02	54.0	20.95	AV	218.80	Vertical	Pass
2	2832.000	46.20	4.91	74.0	27.80	Peak	56.10	Vertical	Pass
2**	2832.000	34.96	4.91	54.0	19.04	AV	56.10	Vertical	Pass
3	6928.000	50.06	0.74	68.2	18.14	Peak	116.50	Vertical	Pass
3**	6928.000	39.66	0.74	54.0	14.34	AV	116.50	Vertical	Pass
4	10704.250	51.73	1.19	74.0	22.27	Peak	213.80	Vertical	Pass
4**	10704.250	40.79	1.19	54.0	13.21	AV	213.80	Vertical	Pass
5	14414.000	54.46	6.89	68.2	13.74	Peak	249.10	Vertical	Pass
5**	14414.000	44.37	6.89	54.0	9.63	AV	249.10	Vertical	Pass
6	17912.001	54.58	7.15	74.0	19.42	Peak	43.40	Vertical	Pass
6**	17912.001	44.29	7.15	54.0	9.71	AV	43.40	Vertical	Pass

RSE-18G-26G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18440.000	49.96	2.30	52.26	54.00	-1.74	peak
2	20088.000	49.73	1.88	51.61	54.00	-2.39	peak
3	21584.000	49.17	3.01	52.18	68.20	-16.02	peak
4	22512.000	48.21	3.91	52.12	54.00	-1.88	peak
5	24352.000	46.97	4.69	51.66	68.20	-16.54	peak
6	25240.000	45.72	5.47	51.19	68.20	-17.01	peak

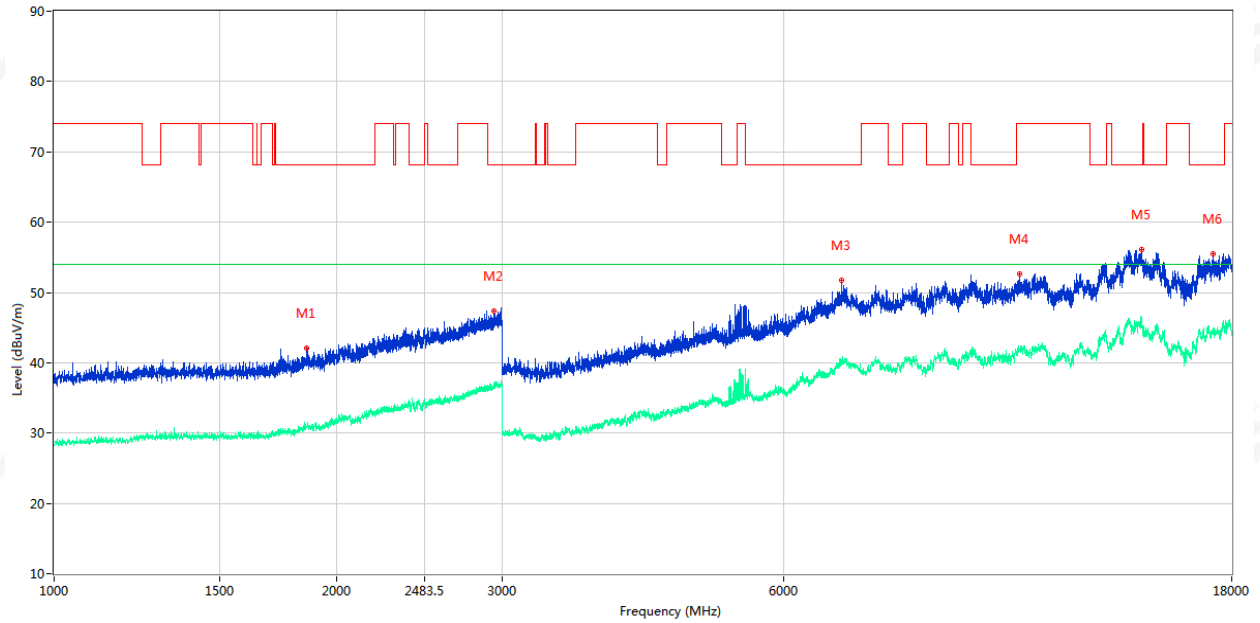
RSE-26G-40G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	28506.000	43.89	8.18	52.07	68.20	-16.13	peak
2	29066.000	42.97	9.01	51.98	68.20	-16.22	peak
3	31796.000	42.15	9.22	51.37	54.00	-2.63	peak
4	34526.000	42.07	9.56	51.63	68.20	-16.57	peak
5	35968.000	42.38	9.36	51.74	68.20	-16.46	peak
6	38768.000	44.30	6.68	50.98	54.00	-3.02	peak

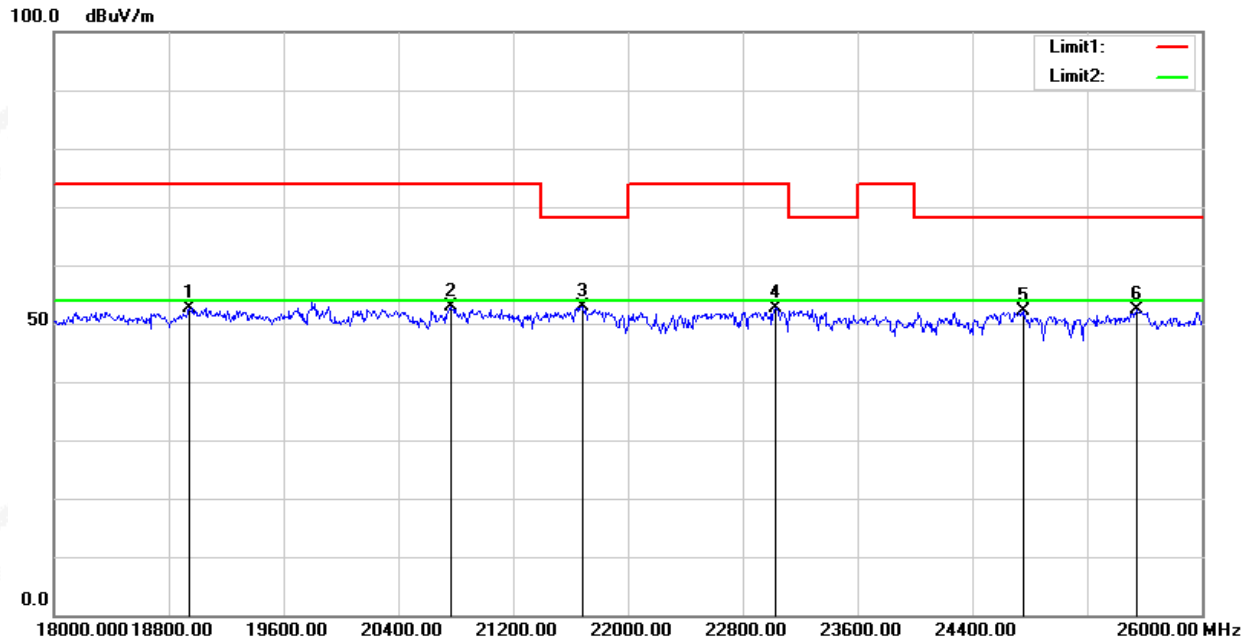
High
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



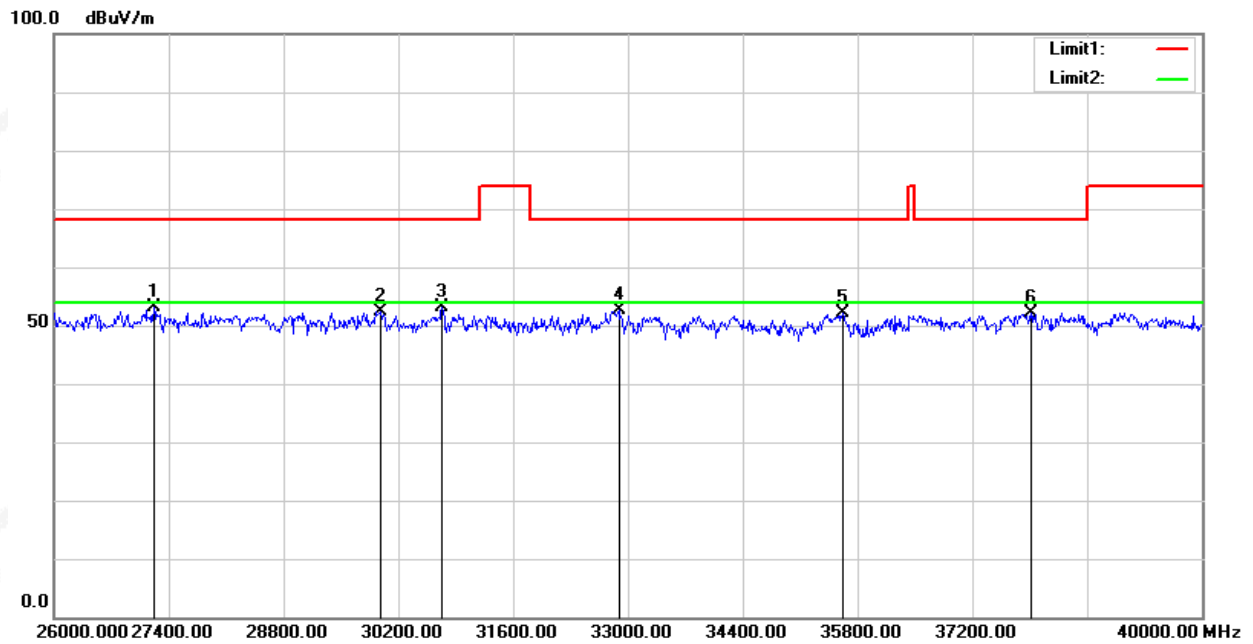
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	1860.000	42.10	-0.08	68.2	26.10	Peak	233.80	Horizontal	Pass
1**	1860.000	30.73	-0.08	54.0	23.27	AV	233.80	Horizontal	Pass
2	2946.500	47.37	5.19	68.2	20.83	Peak	359.60	Horizontal	Pass
2**	2946.500	36.32	5.19	54.0	17.68	AV	359.60	Horizontal	Pass
3	6911.000	51.71	0.60	68.2	16.49	Peak	157.50	Horizontal	Pass
3**	6911.000	40.18	0.60	54.0	13.82	AV	157.50	Horizontal	Pass
4	10687.750	52.60	1.23	74.0	21.40	Peak	202.70	Horizontal	Pass
4**	10687.750	41.78	1.23	54.0	12.22	AV	202.70	Horizontal	Pass
5	14422.250	56.05	6.83	68.2	12.15	Peak	187.40	Horizontal	Pass
5**	14422.250	46.48	6.83	54.0	7.52	AV	187.40	Horizontal	Pass
6	17208.001	55.50	5.75	68.2	12.70	Peak	336.50	Horizontal	Pass
6**	17208.001	45.00	5.75	54.0	9.00	AV	336.50	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18944.000	50.93	1.80	52.73	54.00	-1.27	peak
2	20768.000	50.44	2.46	52.90	54.00	-1.10	peak
3	21680.000	49.73	3.11	52.84	68.20	-15.36	peak
4	23024.000	49.08	3.66	52.74	54.00	-1.26	peak
5	24760.000	47.00	5.02	52.02	68.20	-16.18	peak
6	25544.000	46.67	5.67	52.34	68.20	-15.86	peak

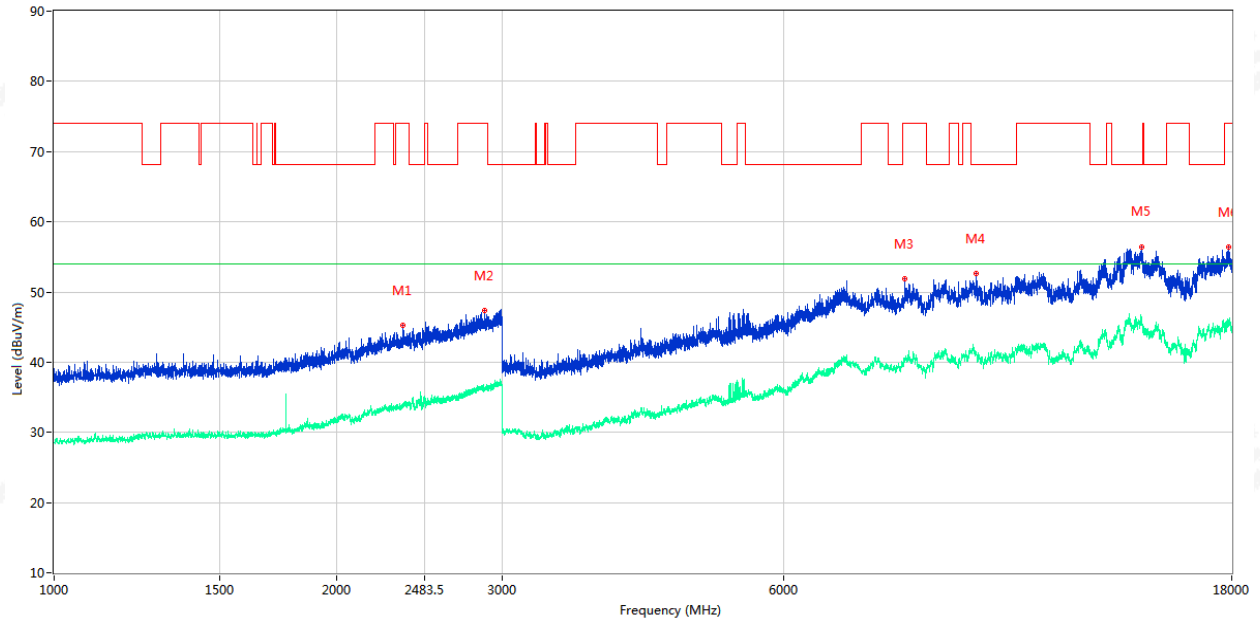
RSE-26G-40G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	27218.000	46.30	6.74	53.04	68.20	-15.16	peak
2	29990.000	43.36	9.05	52.41	68.20	-15.79	peak
3	30732.000	44.15	8.92	53.07	68.20	-15.13	peak
4	32888.000	43.49	9.05	52.54	68.20	-15.66	peak
5	35618.000	42.42	9.66	52.08	68.20	-16.12	peak
6	37914.000	45.32	6.79	52.11	68.20	-16.09	peak

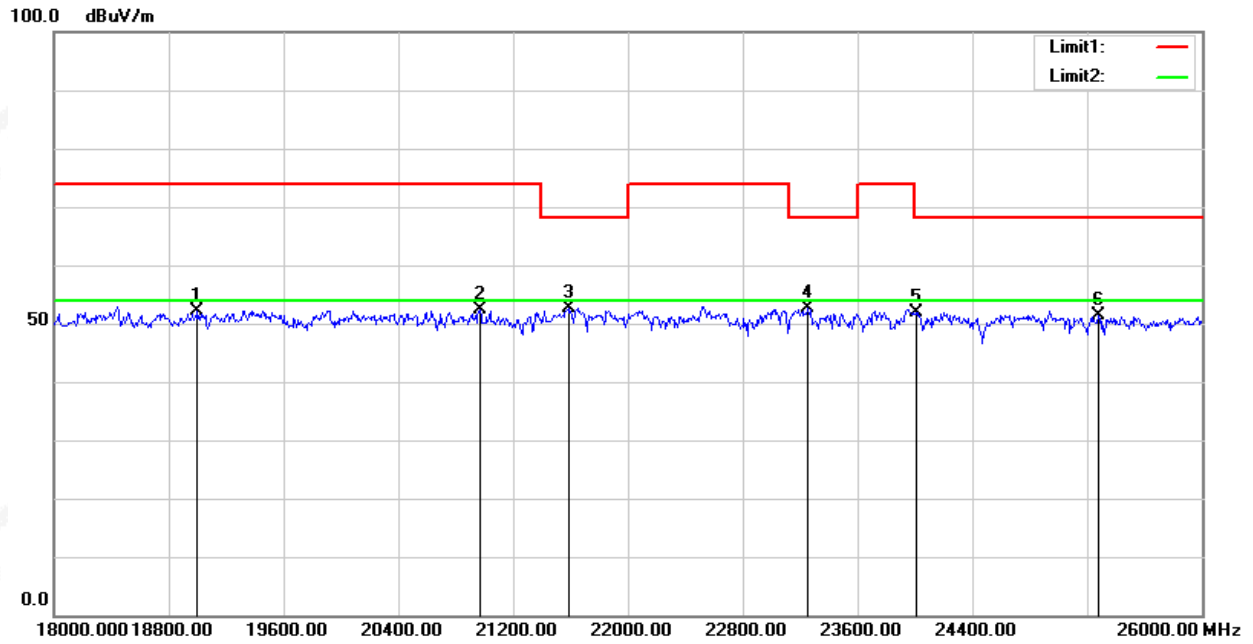
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



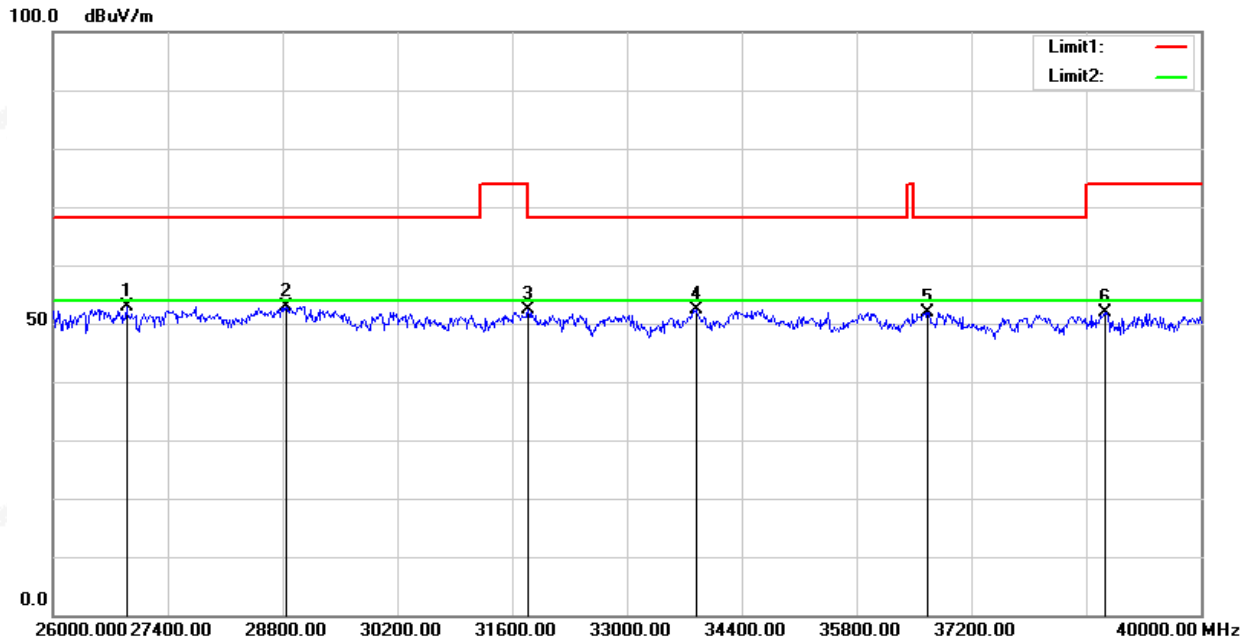
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2355.500	45.23	2.80	74.0	28.77	Peak	258.80	Vertical	Pass
1**	2355.500	34.17	2.80	54.0	19.83	AV	258.80	Vertical	Pass
2	2879.500	47.39	4.94	74.0	26.61	Peak	69.00	Vertical	Pass
2**	2879.500	36.10	4.94	54.0	17.90	AV	69.00	Vertical	Pass
3	8075.250	51.91	-0.16	74.0	22.09	Peak	130.00	Vertical	Pass
3**	8075.250	40.43	-0.16	54.0	13.57	AV	130.00	Vertical	Pass
4	9612.500	52.57	0.57	68.2	15.63	Peak	325.00	Vertical	Pass
4**	9612.500	40.99	0.57	54.0	13.01	AV	325.00	Vertical	Pass
5	14427.750	56.45	6.79	68.2	11.75	Peak	327.20	Vertical	Pass
5**	14427.750	46.22	6.79	54.0	7.78	AV	327.20	Vertical	Pass
6	17876.251	56.42	7.04	74.0	17.58	Peak	29.20	Vertical	Pass
6**	17876.251	46.08	7.04	54.0	7.92	AV	29.20	Vertical	Pass

RSE-18G-26G-V



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	19000.000	50.31	1.75	52.06	54.00	-1.94	peak
2	20968.000	49.63	2.63	52.26	54.00	-1.74	peak
3	21584.000	49.67	3.01	52.68	68.20	-15.52	peak
4	23256.000	48.76	3.89	52.65	68.20	-15.55	peak
5	24008.000	47.33	4.63	51.96	68.20	-16.24	peak
6	25280.000	45.93	5.51	51.44	68.20	-16.76	peak

RSE-26G-40G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26896.000	46.28	6.50	52.78	68.20	-15.42	peak
2	28842.000	44.25	8.74	52.99	68.20	-15.21	peak
3	31796.000	43.15	9.22	52.37	54.00	-1.63	peak
4	33840.000	43.16	9.32	52.48	68.20	-15.72	peak
5	36668.000	43.71	8.24	51.95	68.20	-16.25	peak
6	38824.000	45.24	6.75	51.99	54.00	-2.01	peak

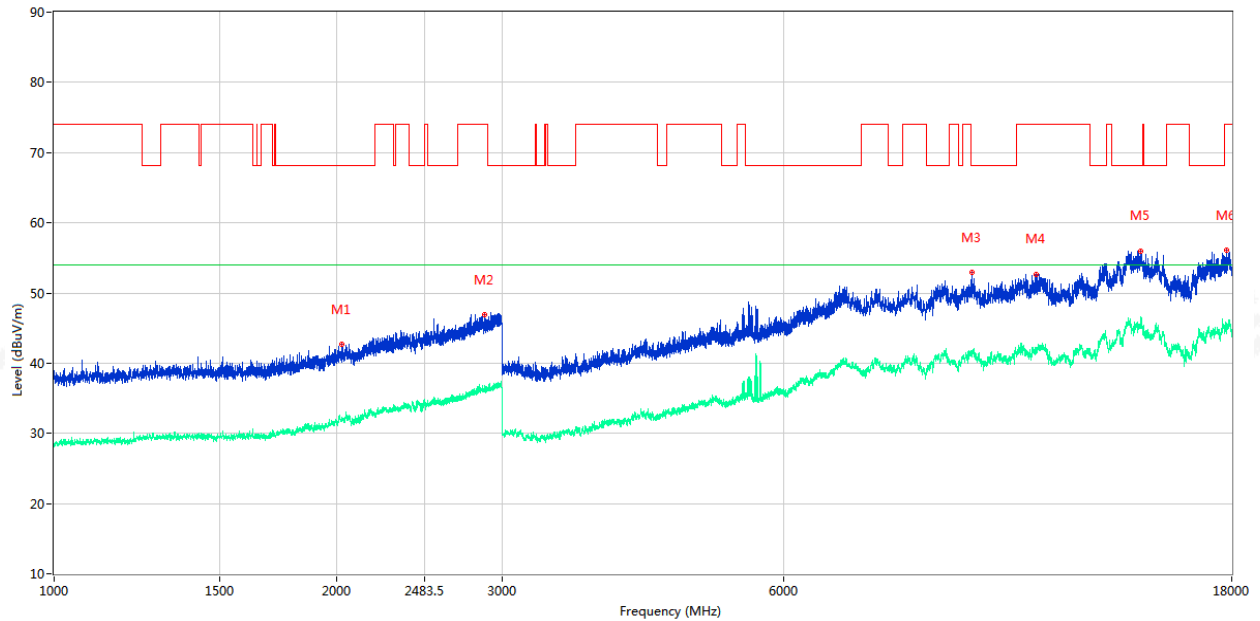
Note:

- 1) Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Emission Level = Reading + Factor.
- 2) The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.
- 3) All modes have been measured, only worst mode was reported.



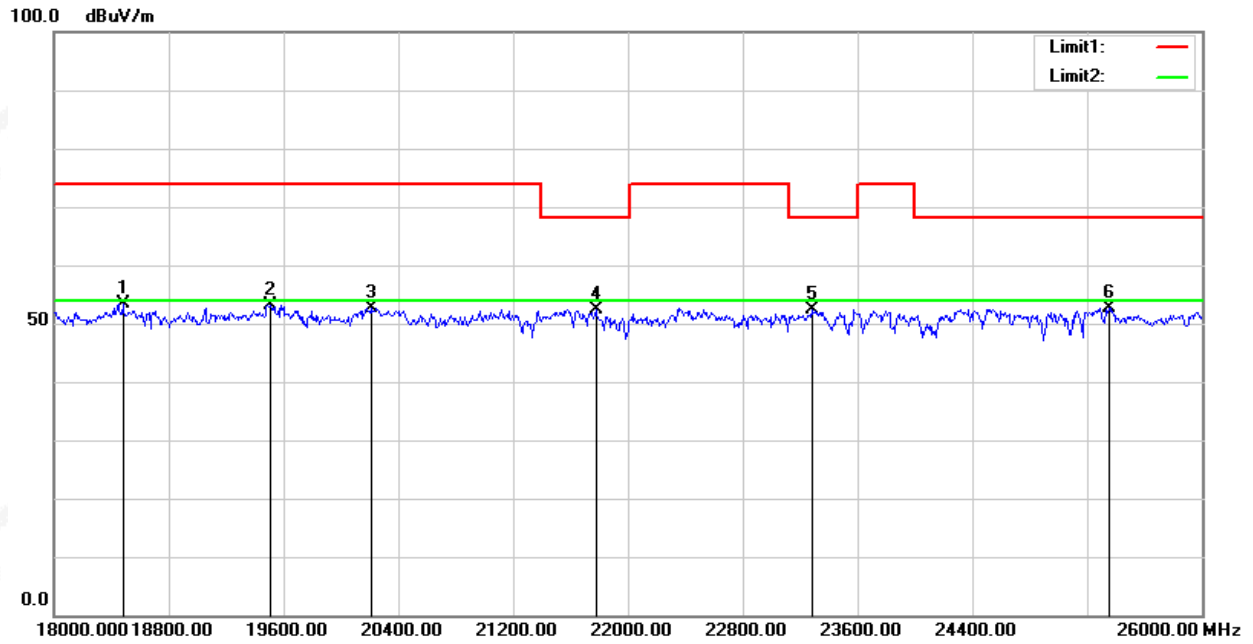
U-NII-2C
MIMO
Worst mode (802.11n20)
Low
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



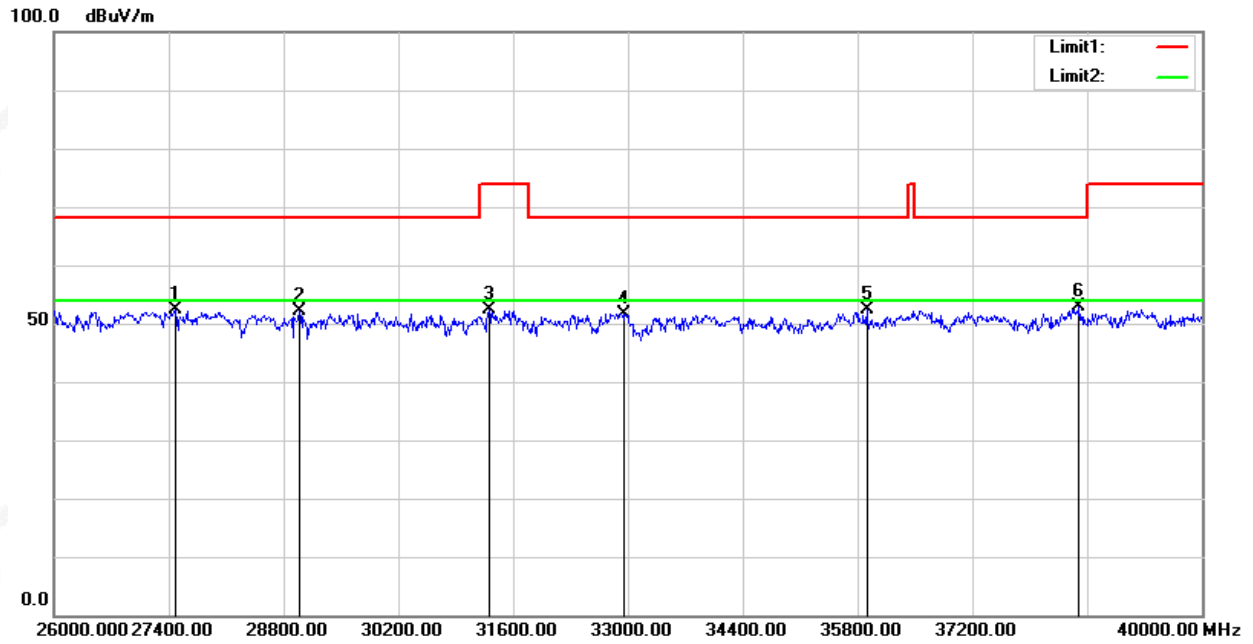
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2024.500	42.74	0.60	68.2	25.46	Peak	200.80	Horizontal	Pass
1**	2024.500	31.99	0.60	54.0	22.01	AV	200.80	Horizontal	Pass
2	2874.000	46.96	4.95	74.0	27.04	Peak	42.80	Horizontal	Pass
2**	2874.000	35.86	4.95	54.0	18.14	AV	42.80	Horizontal	Pass
3	9519.000	52.92	1.36	68.2	15.28	Peak	87.80	Horizontal	Pass
3**	9519.000	41.72	1.36	54.0	12.28	AV	87.80	Horizontal	Pass
4	11144.250	52.69	2.32	74.0	21.31	Peak	308.30	Horizontal	Pass
4**	11144.250	42.00	2.32	54.0	12.00	AV	308.30	Horizontal	Pass
5	14405.750	56.02	6.95	68.2	12.18	Peak	90.00	Horizontal	Pass
5**	14405.750	45.90	6.95	54.0	8.10	AV	90.00	Horizontal	Pass
6	17791.001	56.06	6.34	74.0	17.94	Peak	280.00	Horizontal	Pass
6**	17791.001	45.35	6.34	54.0	8.65	AV	280.00	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18480.000	51.09	2.28	53.37	54.00	-0.63	peak
2	19512.000	51.70	1.48	53.18	54.00	-0.82	peak
3	20208.000	50.63	1.98	52.61	54.00	-1.39	peak
4	21776.000	49.21	3.20	52.41	68.20	-15.79	peak
5	23280.000	48.51	3.92	52.43	68.20	-15.77	peak
6	25352.000	47.16	5.55	52.71	68.20	-15.49	peak

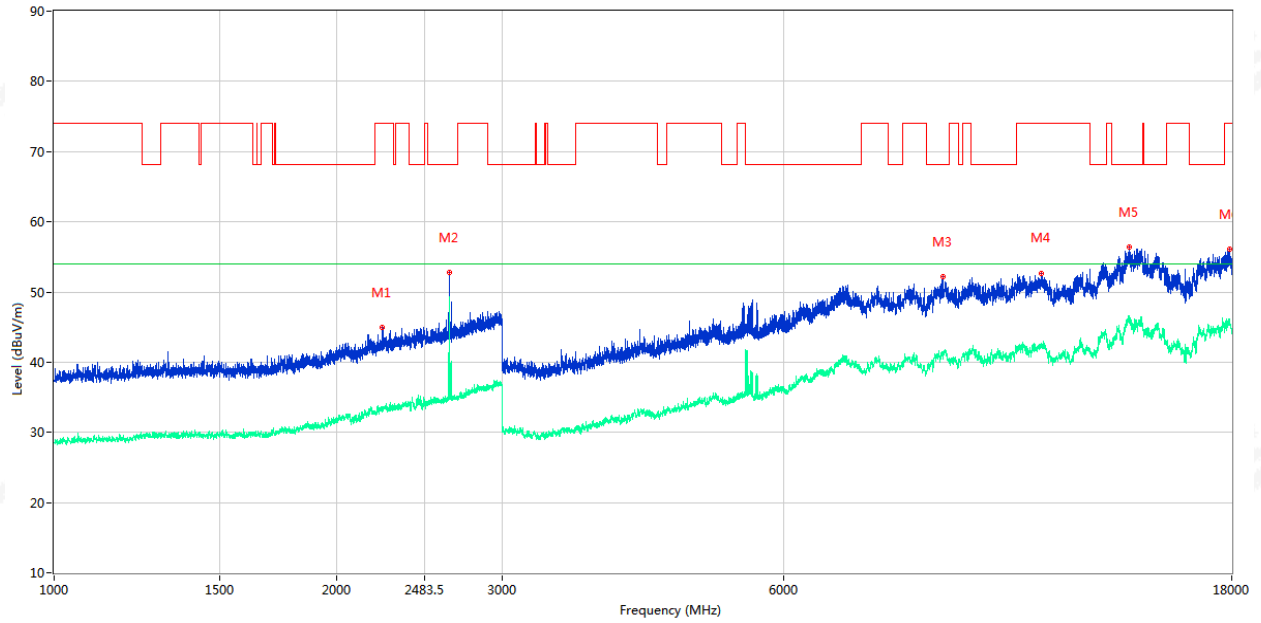
RSE-26G-40G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	27484.000	45.60	6.88	52.48	68.20	-15.72	peak
2	28996.000	43.23	8.99	52.22	68.20	-15.98	peak
3	31306.000	43.19	9.09	52.28	54.00	-1.72	peak
4	32958.000	42.71	9.03	51.74	68.20	-16.46	peak
5	35912.000	42.86	9.40	52.26	68.20	-15.94	peak
6	38502.000	46.41	6.35	52.76	68.20	-15.44	peak

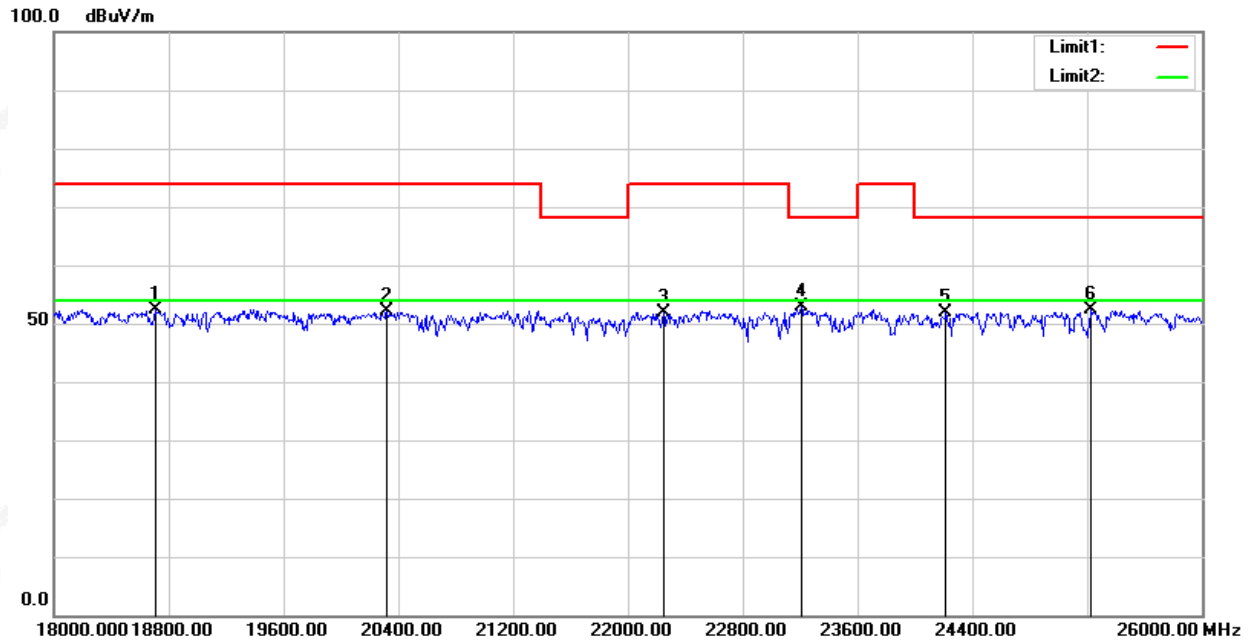
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



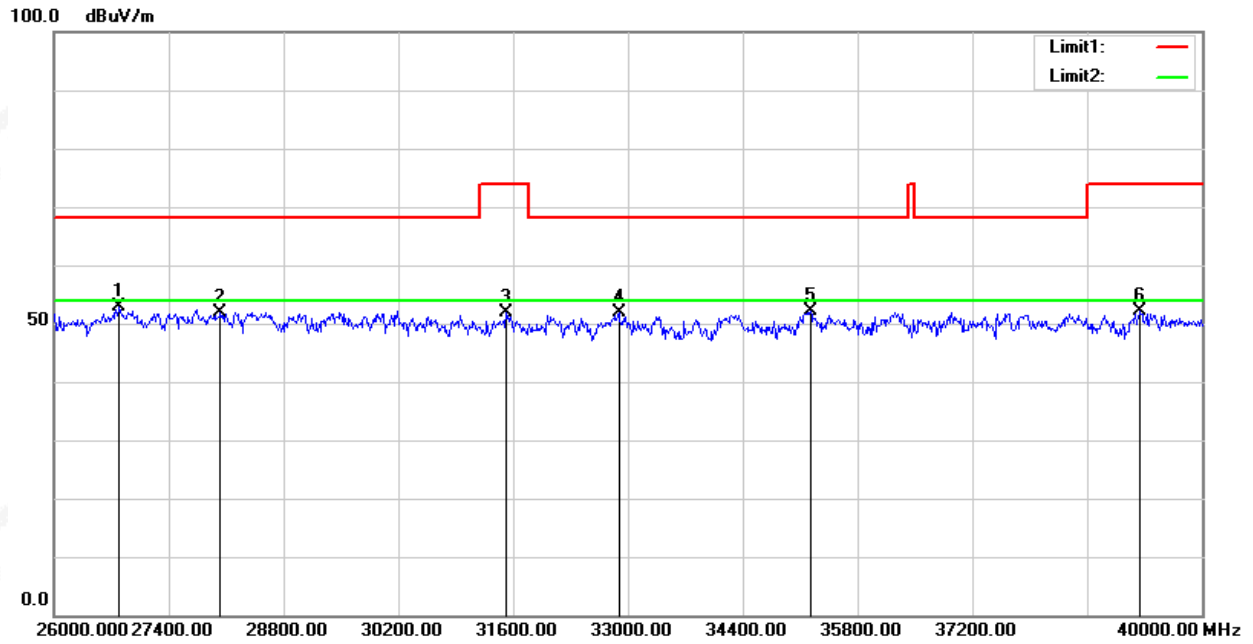
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2235.000	44.94	1.96	74.0	29.06	Peak	257.60	Vertical	Pass
1**	2235.000	33.57	1.96	54.0	20.43	AV	257.60	Vertical	Pass
2	2636.500	52.74	3.83	68.2	15.46	Peak	152.80	Vertical	Pass
2**	2636.500	49.28	3.83	54.0	4.72	AV	152.80	Vertical	Pass
3	8856.250	52.12	0.99	68.2	16.08	Peak	229.70	Vertical	Pass
3**	8856.250	41.42	0.99	54.0	12.58	AV	229.70	Vertical	Pass
4	11268.000	52.71	2.39	74.0	21.29	Peak	82.40	Vertical	Pass
4**	11268.000	42.48	2.39	54.0	11.52	AV	82.40	Vertical	Pass
5	14015.250	56.44	8.21	68.2	11.76	Peak	98.40	Vertical	Pass
5**	14015.250	45.96	8.21	54.0	8.04	AV	98.40	Vertical	Pass
6	17887.250	56.08	7.13	74.0	17.92	Peak	60.90	Vertical	Pass
6**	17887.250	45.90	7.13	54.0	8.10	AV	60.90	Vertical	Pass

RSE-18G-26G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18704.000	50.32	2.04	52.36	54.00	-1.64	peak
2	20320.000	50.02	2.07	52.09	54.00	-1.91	peak
3	22248.000	48.31	3.67	51.98	54.00	-2.02	peak
4	23208.000	48.93	3.85	52.78	68.20	-15.42	peak
5	24216.000	47.33	4.67	52.00	68.20	-16.20	peak
6	25224.000	46.99	5.46	52.45	68.20	-15.75	peak

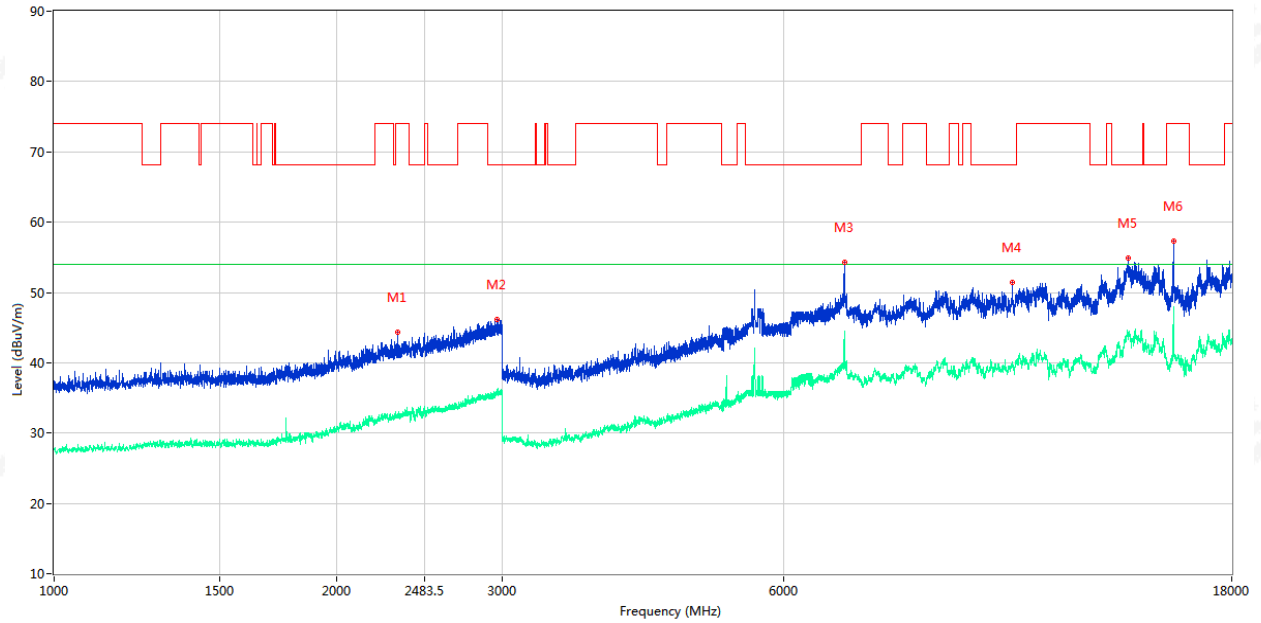
RSE-26G-40G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26798.000	46.56	6.39	52.95	68.20	-15.25	peak
2	28030.000	44.59	7.41	52.00	68.20	-16.20	peak
3	31516.000	42.58	9.19	51.77	54.00	-2.23	peak
4	32888.000	42.75	9.05	51.80	68.20	-16.40	peak
5	35226.000	42.48	9.74	52.22	68.20	-15.98	peak
6	39244.000	44.66	7.47	52.13	54.00	-1.87	peak

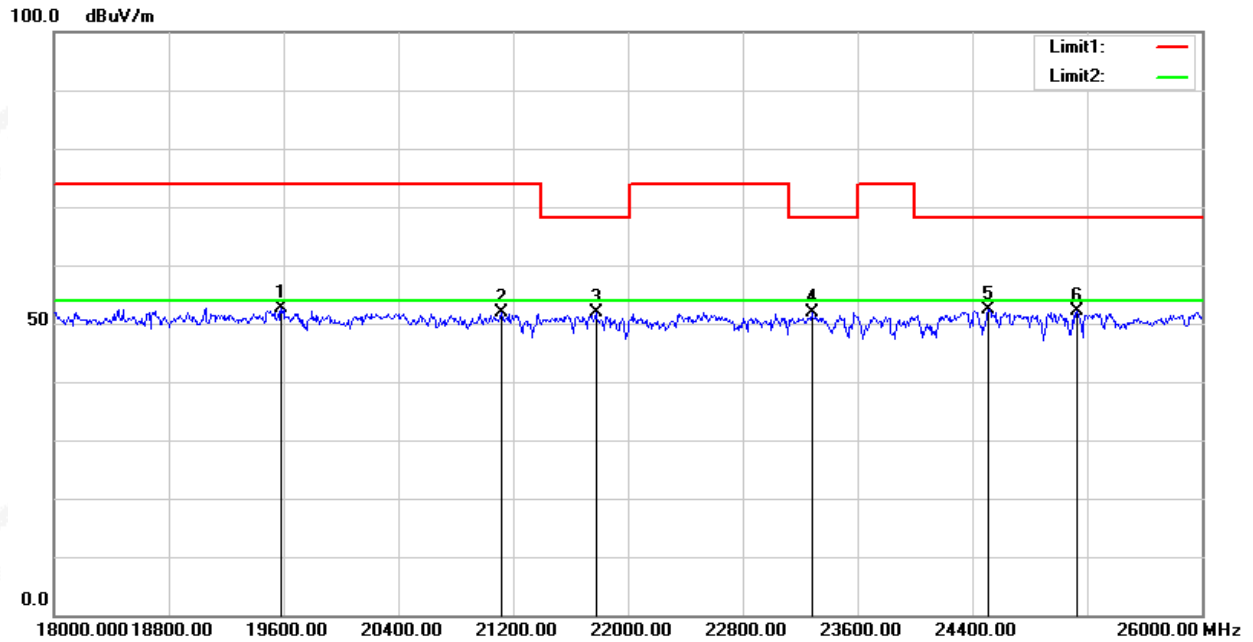
Middle
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



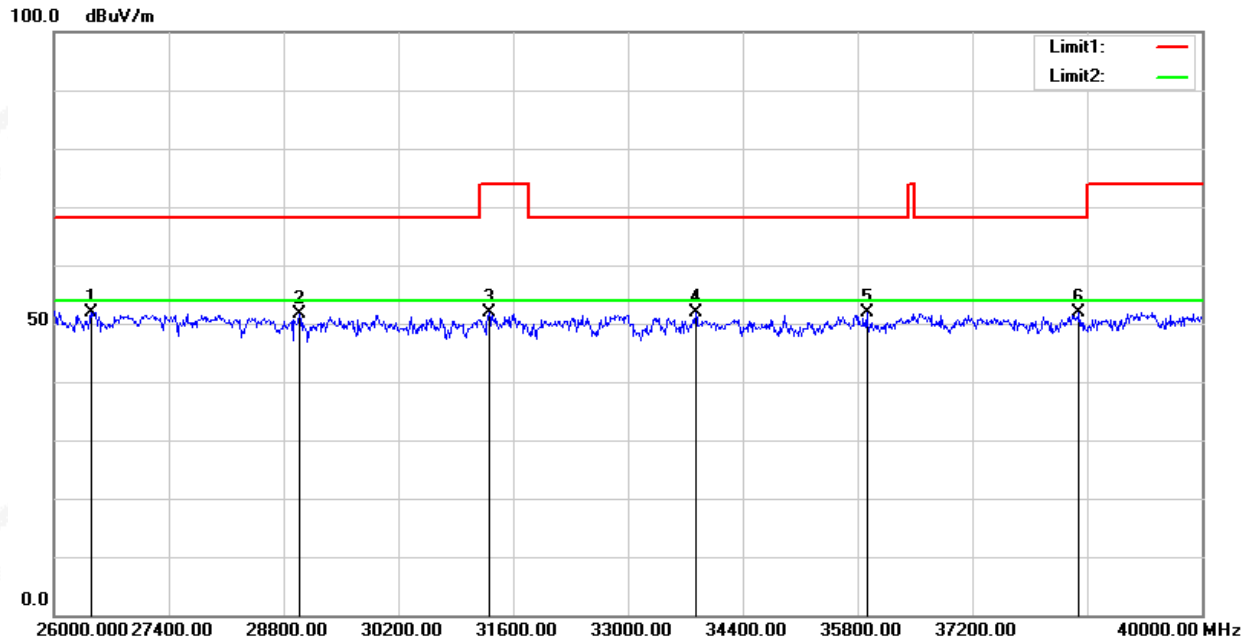
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2324.500	44.36	2.49	74.0	29.64	Peak	356.20	Horizontal	Pass
1**	2324.500	32.34	2.49	54.0	21.66	AV	356.20	Horizontal	Pass
2	2967.000	46.15	5.30	68.2	22.05	Peak	269.30	Horizontal	Pass
2**	2967.000	36.19	5.30	54.0	17.81	AV	269.30	Horizontal	Pass
3	6960.000	54.25	1.00	68.2	13.95	Peak	353.50	Horizontal	Pass
3**	6960.000	42.76	1.00	54.0	11.24	AV	353.50	Horizontal	Pass
4	10503.500	51.44	1.31	68.2	16.76	Peak	253.50	Horizontal	Pass
4**	10503.500	39.77	1.31	54.0	14.23	AV	253.50	Horizontal	Pass
5	13976.750	54.92	8.16	68.2	13.28	Peak	10.20	Horizontal	Pass
5**	13976.750	44.24	8.16	54.0	9.76	AV	10.20	Horizontal	Pass
6	15604.750	57.26	3.57	74.0	16.74	Peak	92.40	Horizontal	Pass
6**	15604.750	48.02	3.57	54.0	5.98	AV	92.40	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	19584.000	51.06	1.52	52.58	54.00	-1.42	peak
2	21120.000	49.11	2.72	51.83	54.00	-2.17	peak
3	21776.000	48.71	3.20	51.91	68.20	-16.29	peak
4	23280.000	48.01	3.92	51.93	68.20	-16.27	peak
5	24512.000	47.72	4.72	52.44	68.20	-15.76	peak
6	25128.000	46.63	5.40	52.03	68.20	-16.17	peak

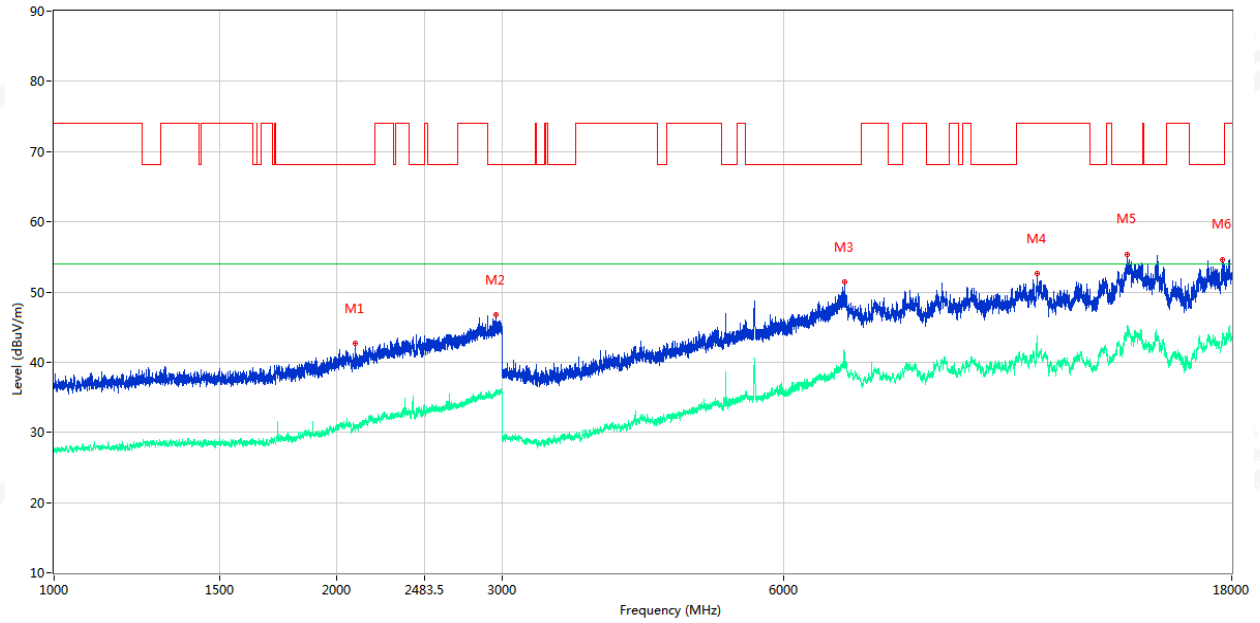
RSE-26G-40G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26448.000	45.86	6.03	51.89	68.20	-16.31	peak
2	28996.000	42.73	8.99	51.72	68.20	-16.48	peak
3	31306.000	42.69	9.09	51.78	54.00	-2.22	peak
4	33826.000	42.60	9.32	51.92	68.20	-16.28	peak
5	35912.000	42.36	9.40	51.76	68.20	-16.44	peak
6	38502.000	45.41	6.35	51.76	68.20	-16.44	peak

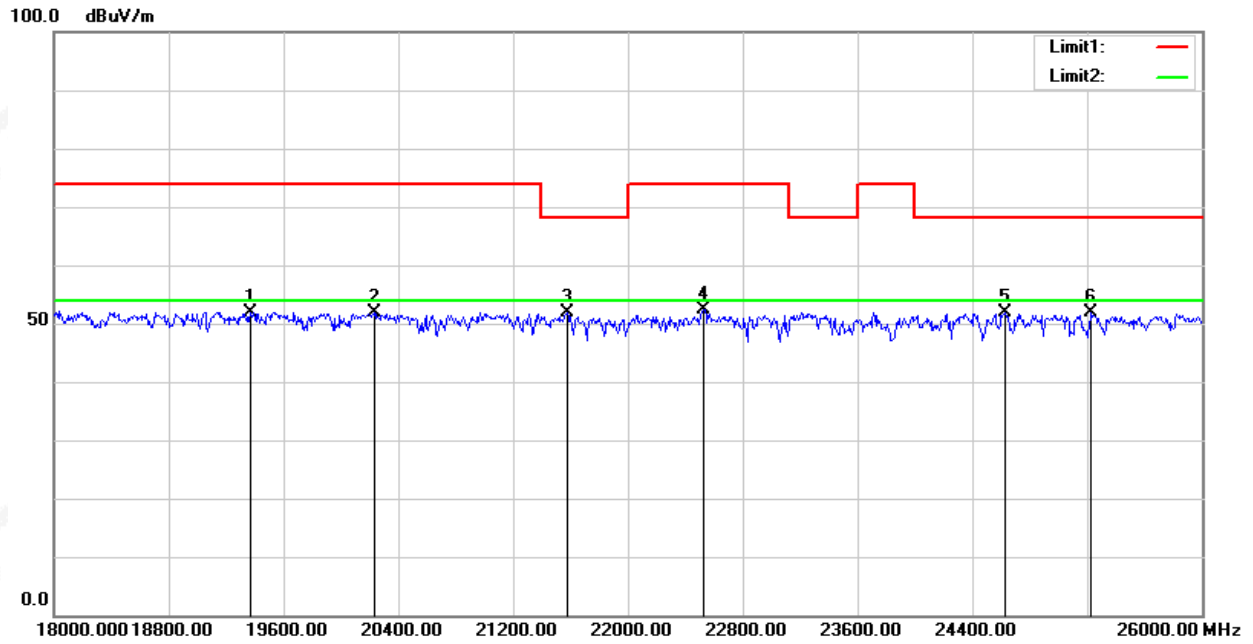
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



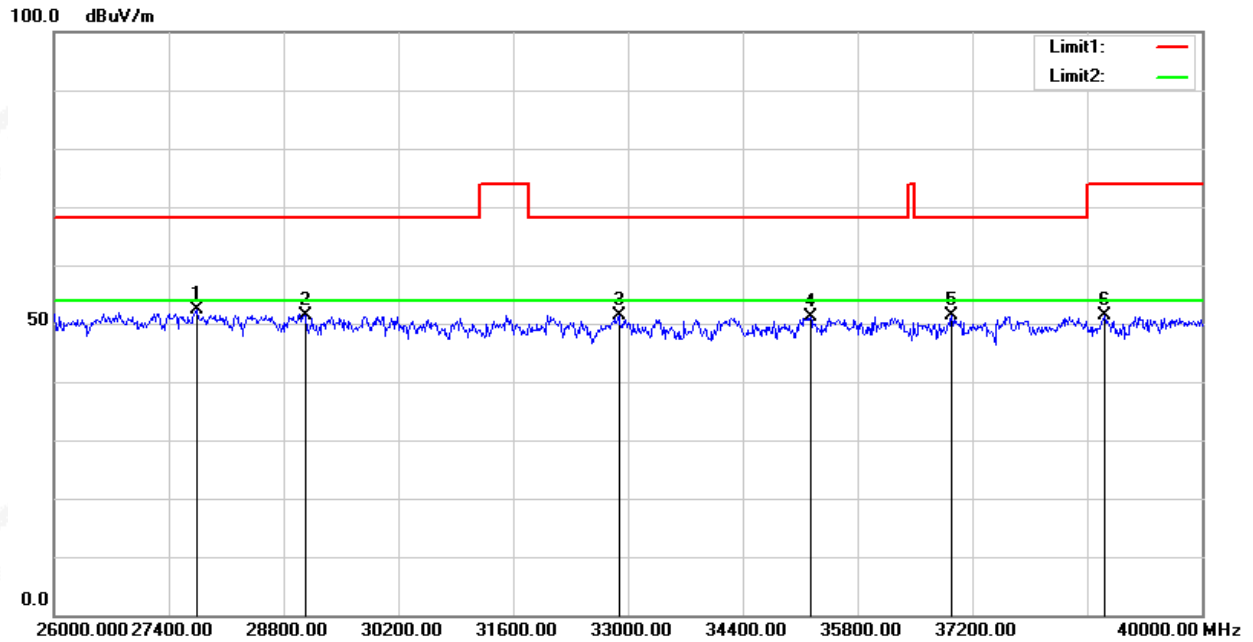
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2096.500	42.64	0.87	68.2	25.56	Peak	334.10	Vertical	Pass
1**	2096.500	30.61	0.87	54.0	23.39	AV	334.10	Vertical	Pass
2	2956.000	46.72	5.24	68.2	21.48	Peak	0.50	Vertical	Pass
2**	2956.000	35.61	5.24	54.0	18.39	AV	0.50	Vertical	Pass
3	6955.000	51.36	0.96	68.2	16.84	Peak	200.80	Vertical	Pass
3**	6955.000	41.17	0.96	54.0	12.83	AV	200.80	Vertical	Pass
4	11171.750	52.58	2.47	74.0	21.42	Peak	360.00	Vertical	Pass
4**	11171.750	42.03	2.47	54.0	11.97	AV	360.00	Vertical	Pass
5	13916.250	55.40	7.40	68.2	12.80	Peak	147.90	Vertical	Pass
5**	13916.250	44.27	7.40	54.0	9.73	AV	147.90	Vertical	Pass
6	17615.000	54.65	6.51	68.2	13.55	Peak	326.80	Vertical	Pass
6**	17615.000	44.24	6.51	54.0	9.76	AV	326.80	Vertical	Pass

RSE-18G-26G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	19368.000	50.39	1.55	51.94	54.00	-2.06	peak
2	20232.000	49.77	2.00	51.77	54.00	-2.23	peak
3	21576.000	48.79	3.01	51.80	68.20	-16.40	peak
4	22528.000	48.57	3.90	52.47	54.00	-1.53	peak
5	24632.000	47.04	4.87	51.91	68.20	-16.29	peak
6	25224.000	46.49	5.46	51.95	68.20	-16.25	peak

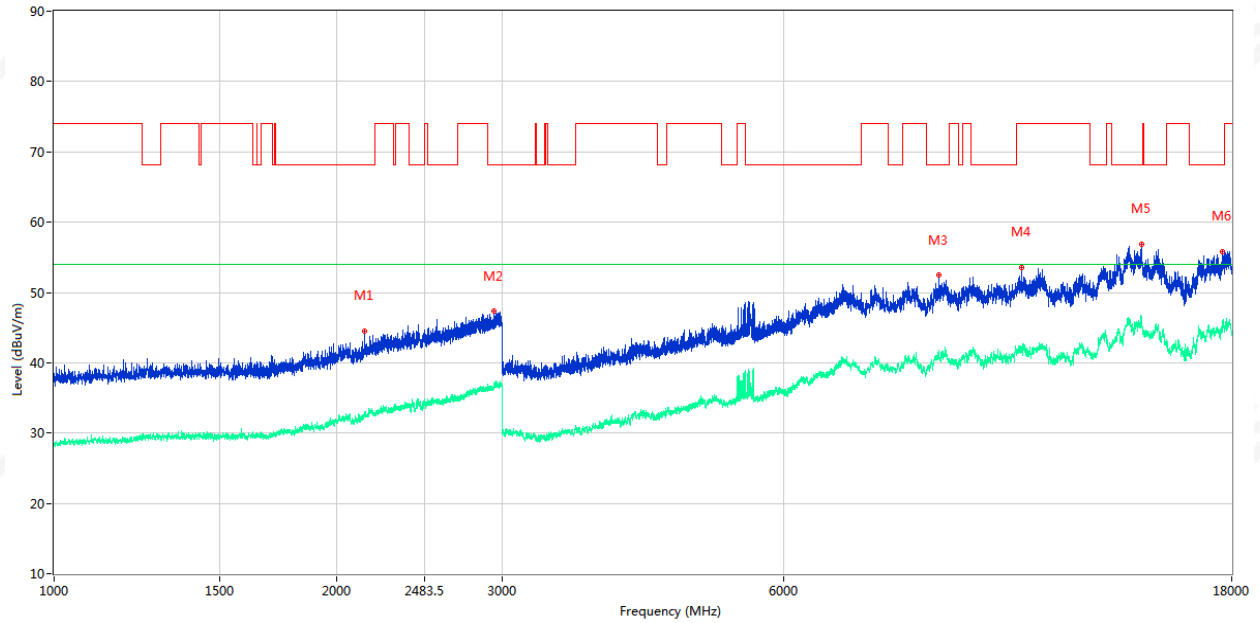
RSE-26G-40G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	27736.000	45.15	7.11	52.26	68.20	-15.94	peak
2	29066.000	42.47	9.01	51.48	68.20	-16.72	peak
3	32888.000	42.25	9.05	51.30	68.20	-16.90	peak
4	35226.000	41.48	9.74	51.22	68.20	-16.98	peak
5	36948.000	43.38	7.88	51.26	68.20	-16.94	peak
6	38810.000	44.64	6.73	51.37	54.00	-2.63	peak

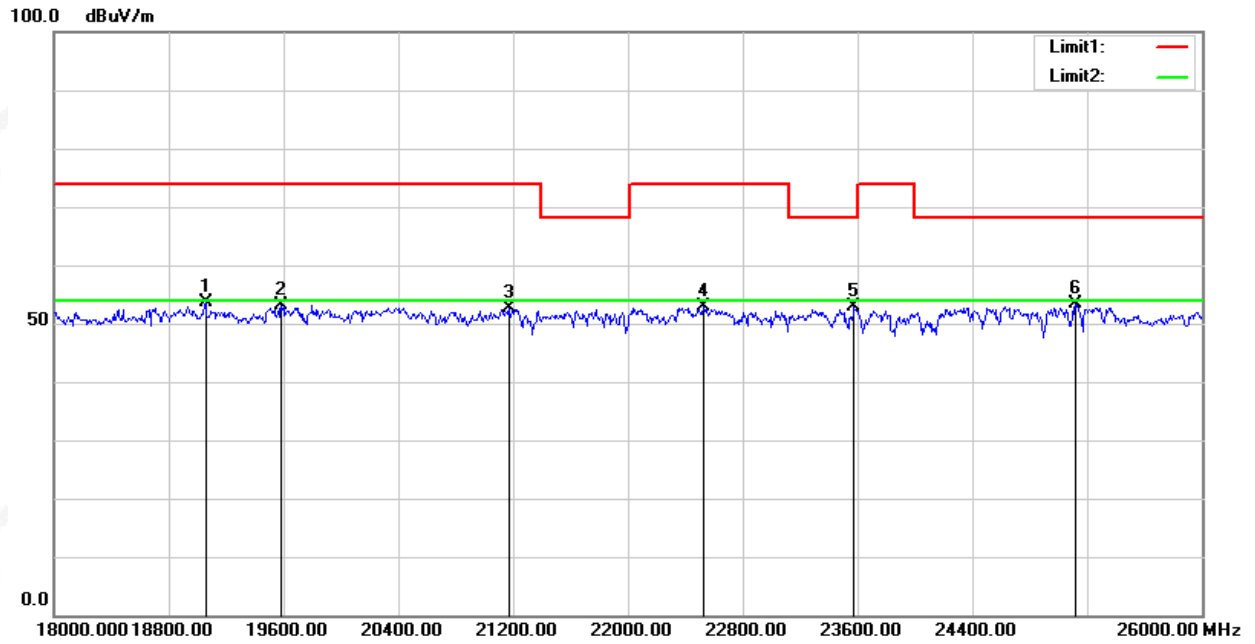
High
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



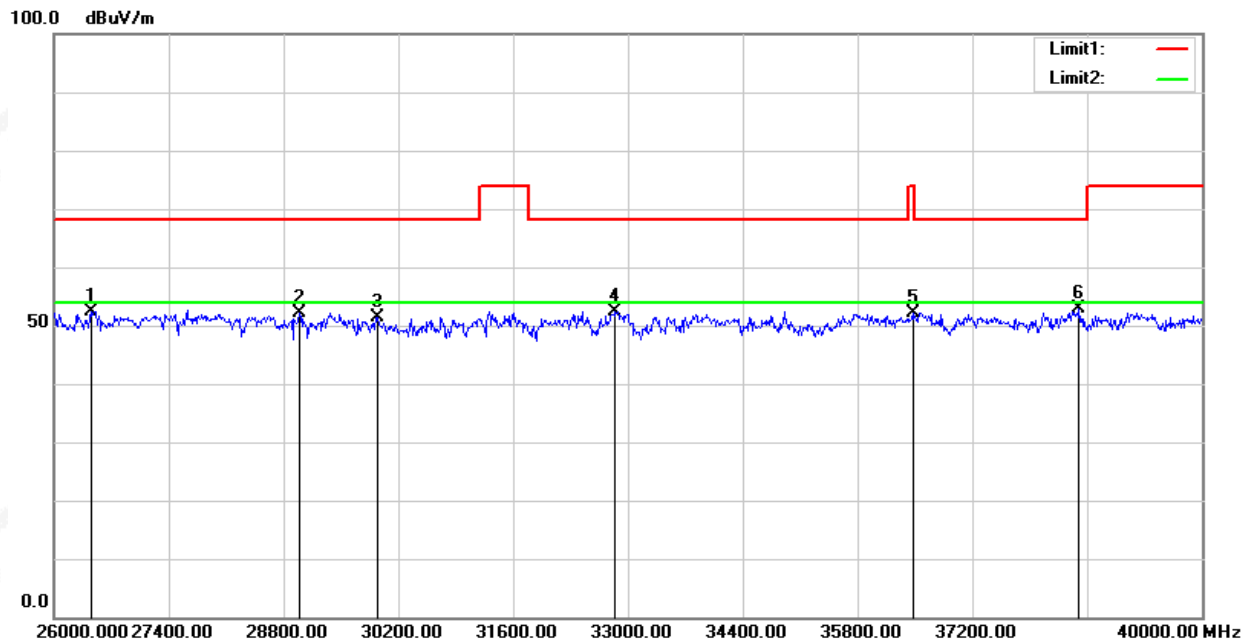
No .	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2142.500	44.55	1.72	68.2	23.65	Peak	133.30	Horizontal	Pass
1**	2142.500	32.63	1.72	54.0	21.37	AV	133.30	Horizontal	Pass
2	2942.500	47.36	5.17	68.2	20.84	Peak	204.80	Horizontal	Pass
2**	2942.500	36.61	5.17	54.0	17.39	AV	204.80	Horizontal	Pass
3	8765.500	52.45	0.18	68.2	15.75	Peak	225.70	Horizontal	Pass
3**	8765.500	40.98	0.18	54.0	13.02	AV	225.70	Horizontal	Pass
4	10742.750	53.60	1.53	74.0	20.40	Peak	160.60	Horizontal	Pass
4**	10742.750	42.21	1.53	54.0	11.79	AV	160.60	Horizontal	Pass
5	14414.000	56.93	6.89	68.2	11.27	Peak	341.80	Horizontal	Pass
5**	14414.000	46.11	6.89	54.0	7.89	AV	341.80	Horizontal	Pass
6	17601.249	55.87	6.60	68.2	12.33	Peak	358.80	Horizontal	Pass
6**	17601.249	45.43	6.60	54.0	8.57	AV	358.80	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	19056.000	51.88	1.72	53.60	54.00	-0.40	peak
2	19584.000	51.56	1.52	53.08	54.00	-0.92	peak
3	21168.000	49.76	2.75	52.51	54.00	-1.49	peak
4	22528.000	48.91	3.90	52.81	54.00	-1.19	peak
5	23576.000	48.56	4.21	52.77	68.20	-15.43	peak
6	25120.000	47.98	5.38	53.36	68.20	-14.84	peak

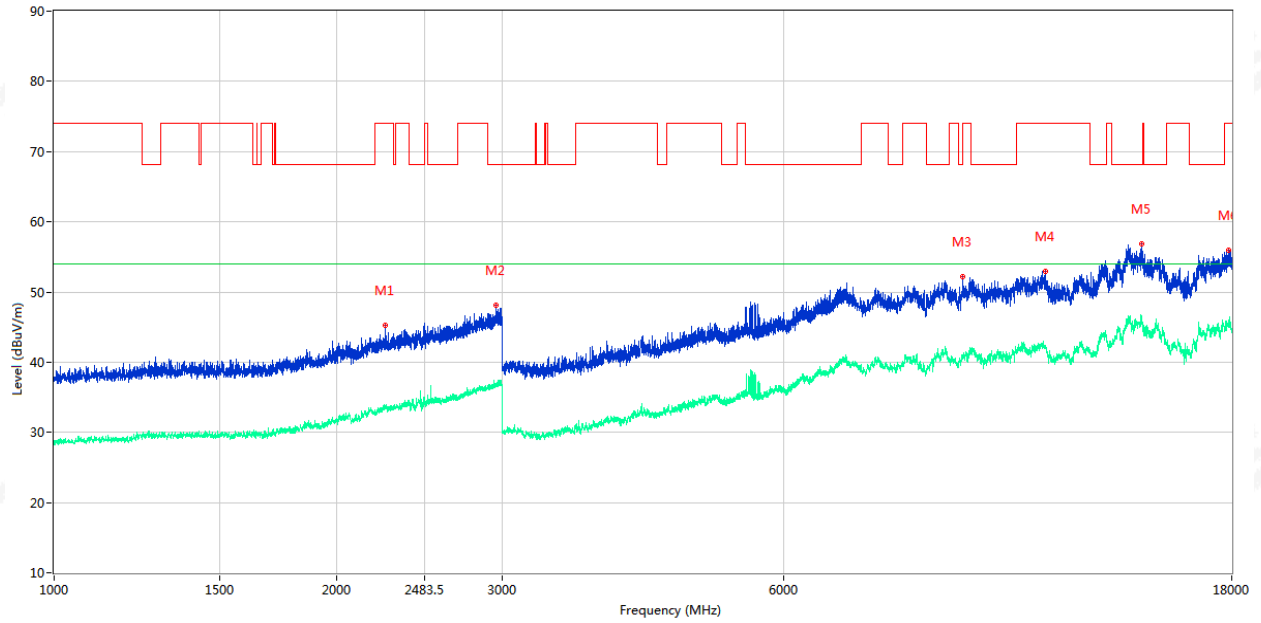
RSE-26G-40G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26448.000	46.36	6.03	52.39	68.20	-15.81	peak
2	28996.000	43.23	8.99	52.22	68.20	-15.98	peak
3	29948.000	42.44	9.05	51.49	68.20	-16.71	peak
4	32846.000	43.24	9.06	52.30	68.20	-15.90	peak
5	36472.000	43.57	8.51	52.08	54.00	-1.92	peak
6	38502.000	46.41	6.35	52.76	68.20	-15.44	peak

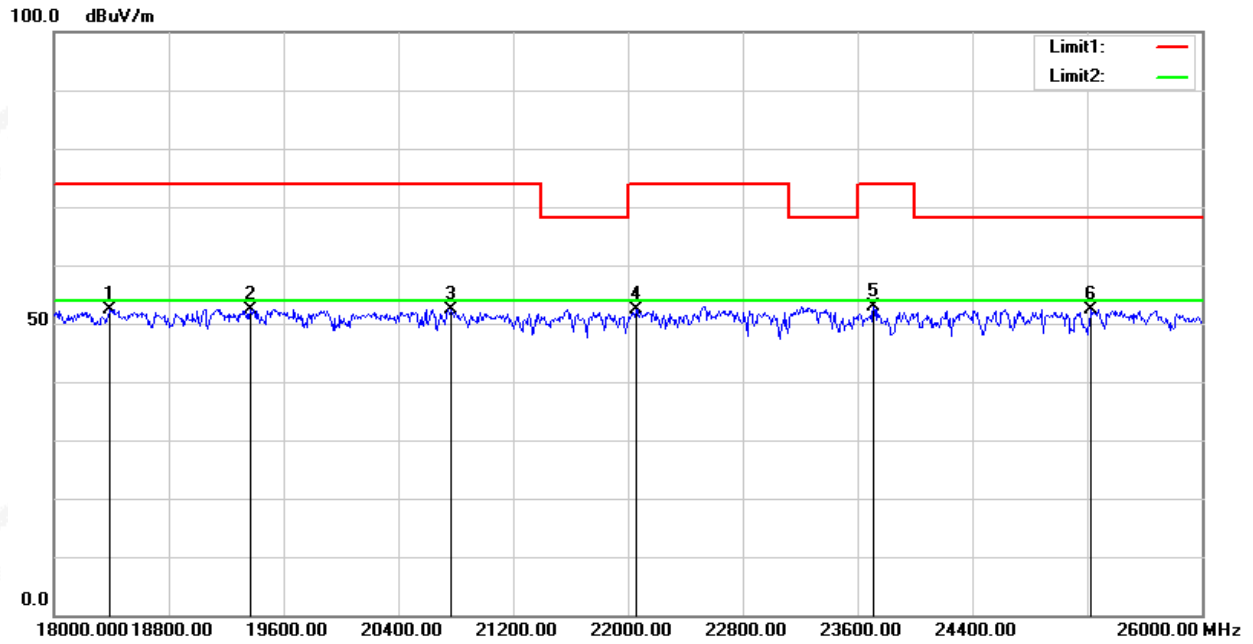
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



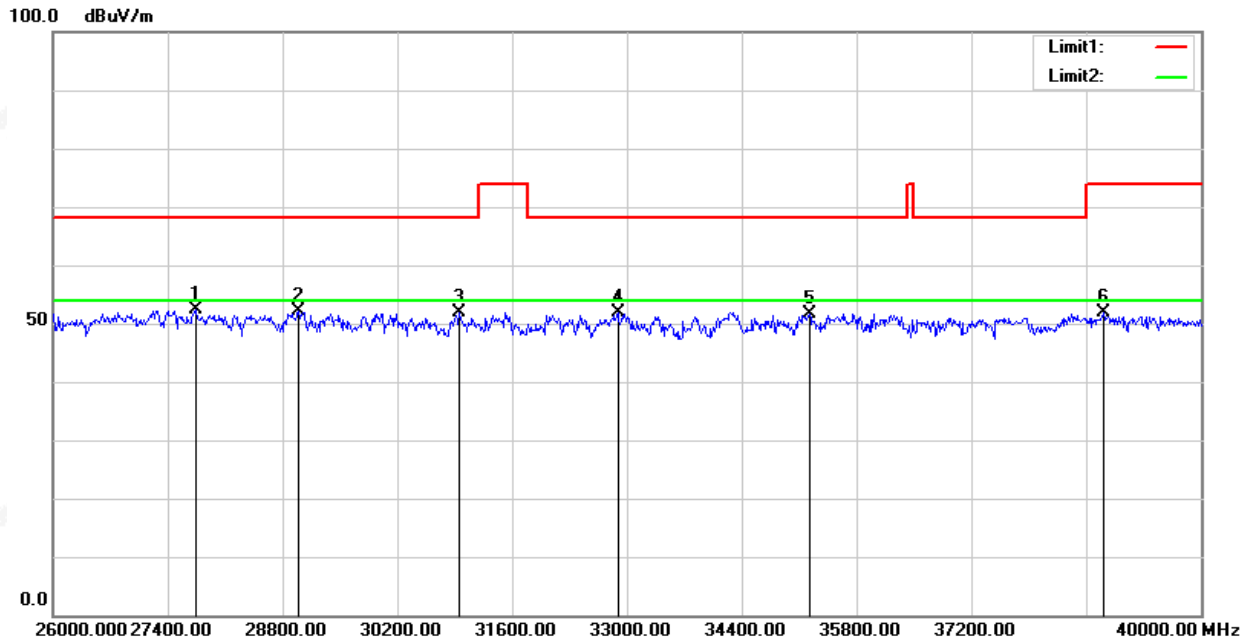
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2252.500	45.29	2.16	74.0	28.71	Peak	54.50	Vertical	Pass
1**	2252.500	33.52	2.16	54.0	20.48	AV	54.50	Vertical	Pass
2	2957.000	48.11	5.25	68.2	20.09	Peak	159.80	Vertical	Pass
2**	2957.000	36.96	5.25	54.0	17.04	AV	159.80	Vertical	Pass
3	9293.500	52.15	0.82	68.2	16.05	Peak	235.30	Vertical	Pass
3**	9293.500	40.95	0.82	54.0	13.05	AV	235.30	Vertical	Pass
4	11391.750	52.95	1.98	74.0	21.05	Peak	358.60	Vertical	Pass
4**	11391.750	42.07	1.98	54.0	11.93	AV	358.60	Vertical	Pass
5	14430.500	56.84	6.77	68.2	11.36	Peak	156.10	Vertical	Pass
5**	14430.500	45.97	6.77	54.0	8.03	AV	156.10	Vertical	Pass
6	17867.999	55.95	6.96	74.0	18.05	Peak	86.90	Vertical	Pass
6**	17867.999	45.55	6.96	54.0	8.45	AV	86.90	Vertical	Pass

RSE-18G-26G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18392.000	50.10	2.35	52.45	54.00	-1.55	peak
2	19368.000	50.89	1.55	52.44	54.00	-1.56	peak
3	20768.000	49.97	2.46	52.43	54.00	-1.57	peak
4	22056.000	48.84	3.47	52.31	54.00	-1.69	peak
5	23712.000	48.48	4.34	52.82	54.00	-1.18	peak
6	25224.000	46.99	5.46	52.45	68.20	-15.75	peak

RSE-26G-40G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	27736.000	45.15	7.11	52.26	68.20	-15.94	peak
2	28996.000	43.07	8.99	52.06	68.20	-16.14	peak
3	30956.000	42.91	8.94	51.85	68.20	-16.35	peak
4	32888.000	42.75	9.05	51.80	68.20	-16.40	peak
5	35226.000	41.98	9.74	51.72	68.20	-16.48	peak
6	38810.000	45.14	6.73	51.87	54.00	-2.13	peak

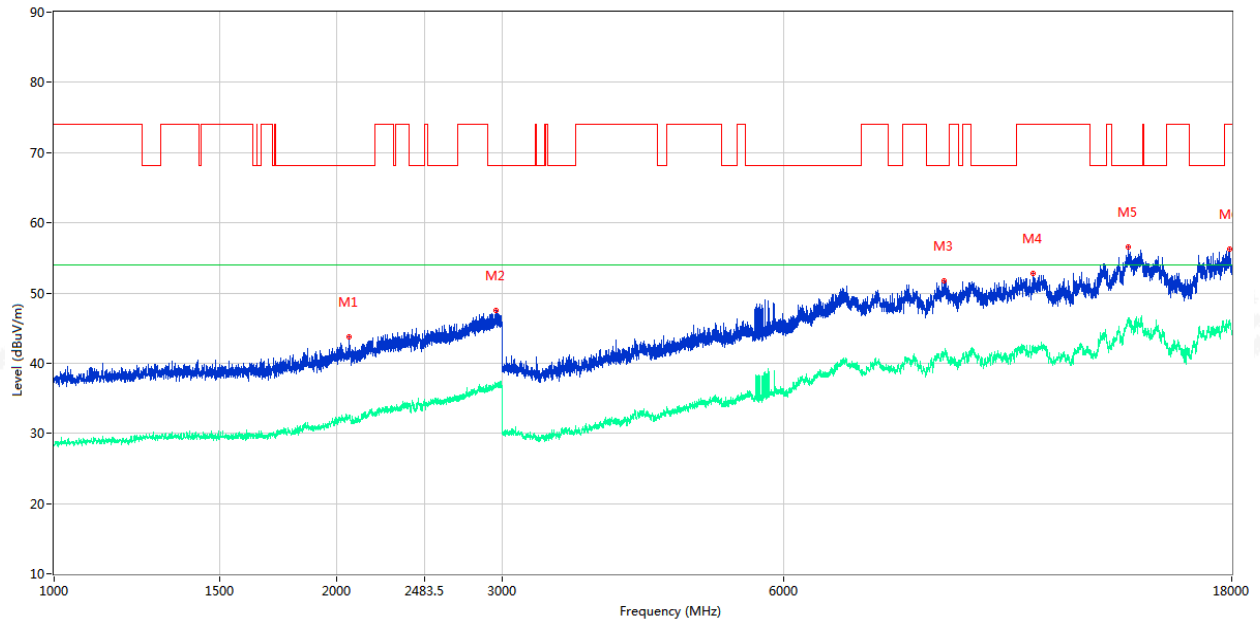
Note:

- 1) Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Emission Level = Reading + Factor.
- 2) The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.
- 3) All modes have been measured, only worst mode was reported.



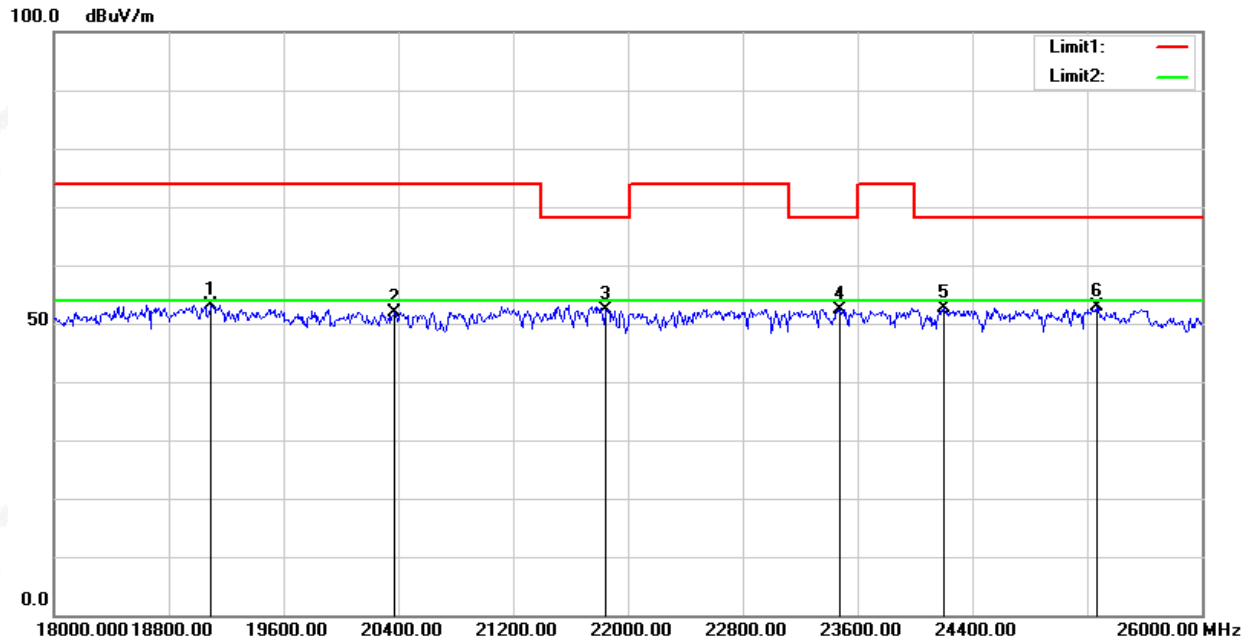
U-NII-3
MIMO
Worst mode (802.11n20)
Low
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



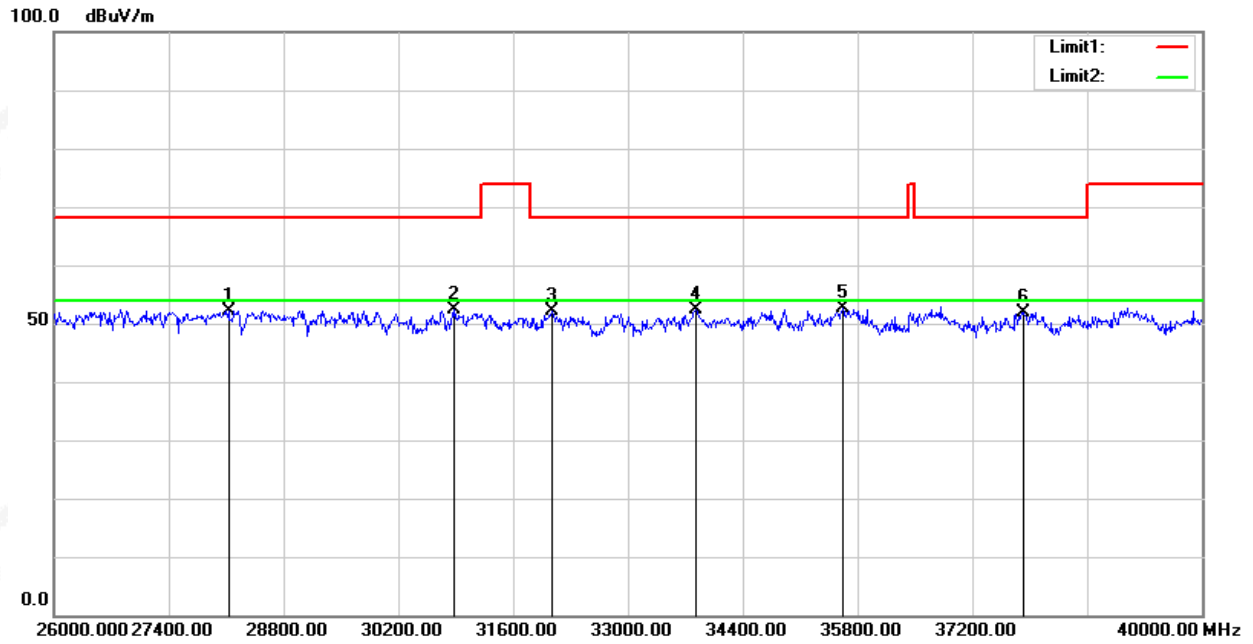
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2062.000	43.71	0.83	68.2	24.49	Peak	214.90	Horizontal	Pass
1**	2062.000	32.28	0.83	54.0	21.72	AV	214.90	Horizontal	Pass
2	2960.000	47.54	5.26	68.2	20.66	Peak	131.70	Horizontal	Pass
2**	2960.000	36.98	5.26	54.0	17.02	AV	131.70	Horizontal	Pass
3	8878.250	51.74	1.33	68.2	16.46	Peak	232.70	Horizontal	Pass
3**	8878.250	41.23	1.33	54.0	12.77	AV	232.70	Horizontal	Pass
4	11053.500	52.78	1.94	74.0	21.22	Peak	17.50	Horizontal	Pass
4**	11053.500	41.88	1.94	54.0	12.12	AV	17.50	Horizontal	Pass
5	13976.750	56.50	8.16	68.2	11.70	Peak	317.10	Horizontal	Pass
5**	13976.750	46.32	8.16	54.0	7.68	AV	317.10	Horizontal	Pass
6	17895.500	56.18	7.20	74.0	17.82	Peak	34.20	Horizontal	Pass
6**	17895.500	45.99	7.20	54.0	8.01	AV	34.20	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	19096.000	51.43	1.70	53.13	54.00	-0.87	peak
2	20376.000	49.81	2.13	51.94	54.00	-2.06	peak
3	21848.000	49.07	3.27	52.34	68.20	-15.86	peak
4	23480.000	48.37	4.12	52.49	68.20	-15.71	peak
5	24200.000	48.07	4.66	52.73	68.20	-15.47	peak
6	25264.000	47.31	5.48	52.79	68.20	-15.41	peak

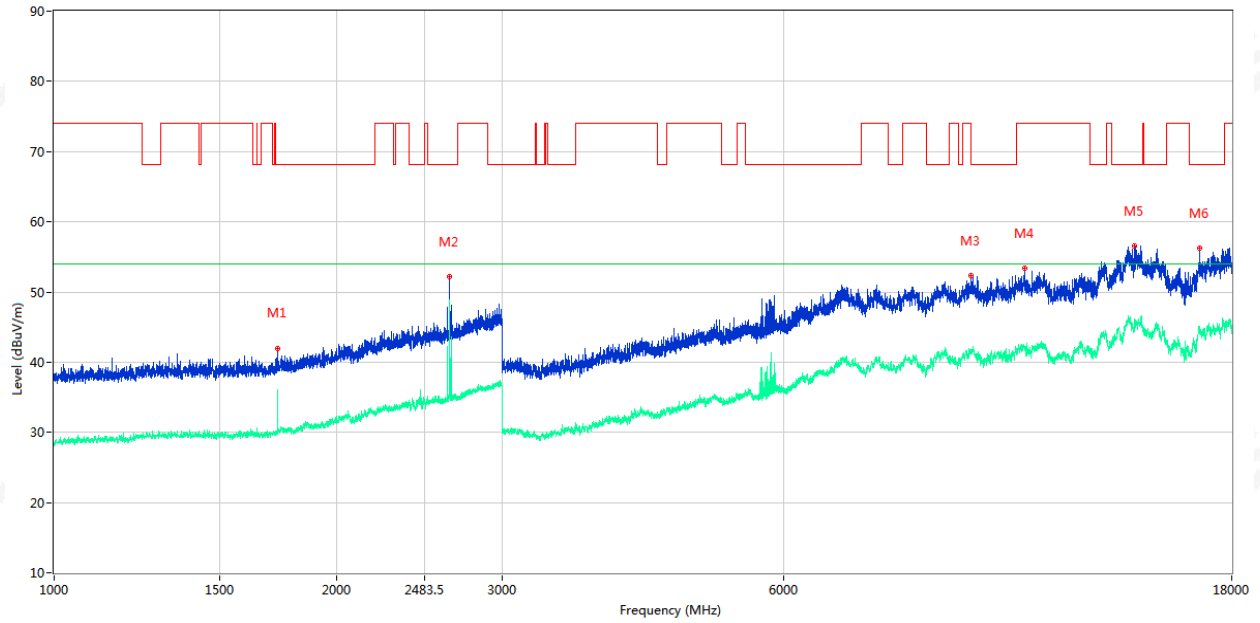
RSE-26G-40G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	28128.000	44.66	7.57	52.23	68.20	-15.97	peak
2	30886.000	43.34	8.94	52.28	68.20	-15.92	peak
3	32076.000	42.85	9.22	52.07	68.20	-16.13	peak
4	33826.000	43.10	9.32	52.42	68.20	-15.78	peak
5	35618.000	42.92	9.66	52.58	68.20	-15.62	peak
6	37816.000	45.05	6.90	51.95	68.20	-16.25	peak

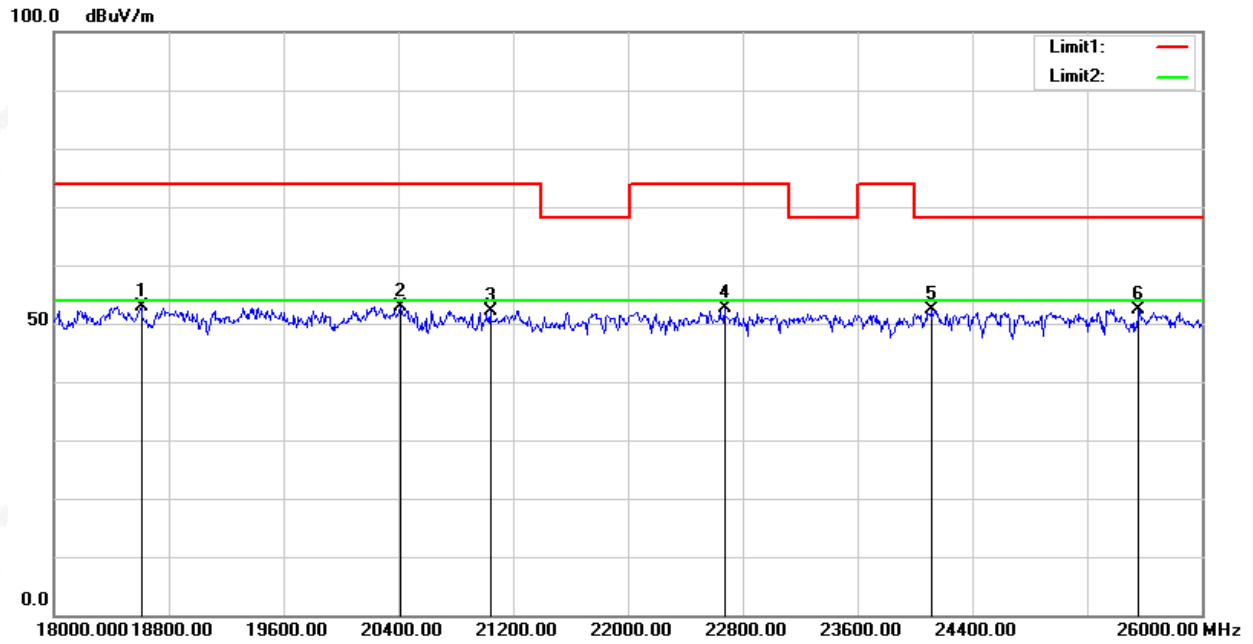
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



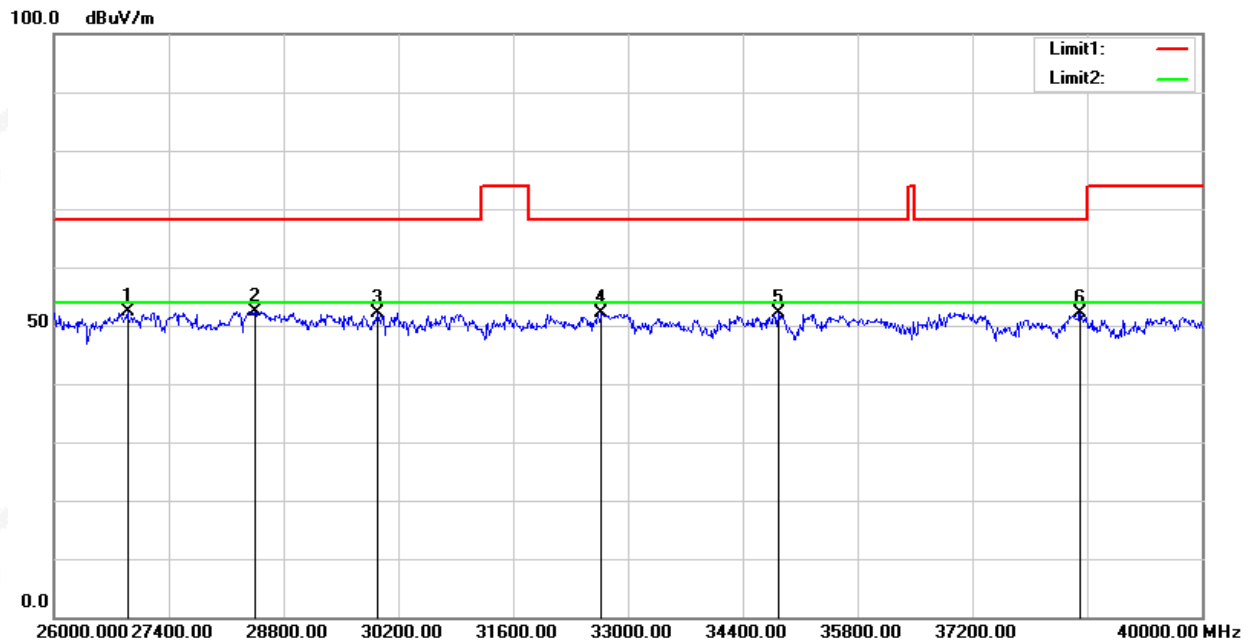
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	1730.000	42.01	-0.70	68.2	26.19	Peak	309.40	Vertical	Pass
1**	1730.000	36.10	-0.70	54.0	17.90	AV	309.40	Vertical	Pass
2	2639.000	52.19	3.86	68.2	16.01	Peak	56.90	Vertical	Pass
2**	2639.000	48.93	3.86	54.0	5.07	AV	56.90	Vertical	Pass
3	9497.000	52.38	1.53	74.0	21.62	Peak	145.50	Vertical	Pass
3**	9497.000	41.59	1.53	54.0	12.41	AV	145.50	Vertical	Pass
4	10830.750	53.38	1.95	74.0	20.62	Peak	329.10	Vertical	Pass
4**	10830.750	42.01	1.95	54.0	11.99	AV	329.10	Vertical	Pass
5	14191.250	56.55	6.95	68.2	11.65	Peak	23.10	Vertical	Pass
5**	14191.250	45.85	6.95	54.0	8.15	AV	23.10	Vertical	Pass
6	16625.000	56.29	4.94	68.2	11.91	Peak	169.30	Vertical	Pass
6**	16625.000	45.03	4.94	54.0	8.97	AV	169.30	Vertical	Pass

RSE-18G-26G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18608.000	50.66	2.14	52.80	54.00	-1.20	peak
2	20416.000	50.64	2.16	52.80	54.00	-1.20	peak
3	21040.000	49.44	2.69	52.13	54.00	-1.87	peak
4	22672.000	48.76	3.82	52.58	54.00	-1.42	peak
5	24120.000	47.80	4.65	52.45	68.20	-15.75	peak
6	25560.000	46.72	5.67	52.39	68.20	-15.81	peak

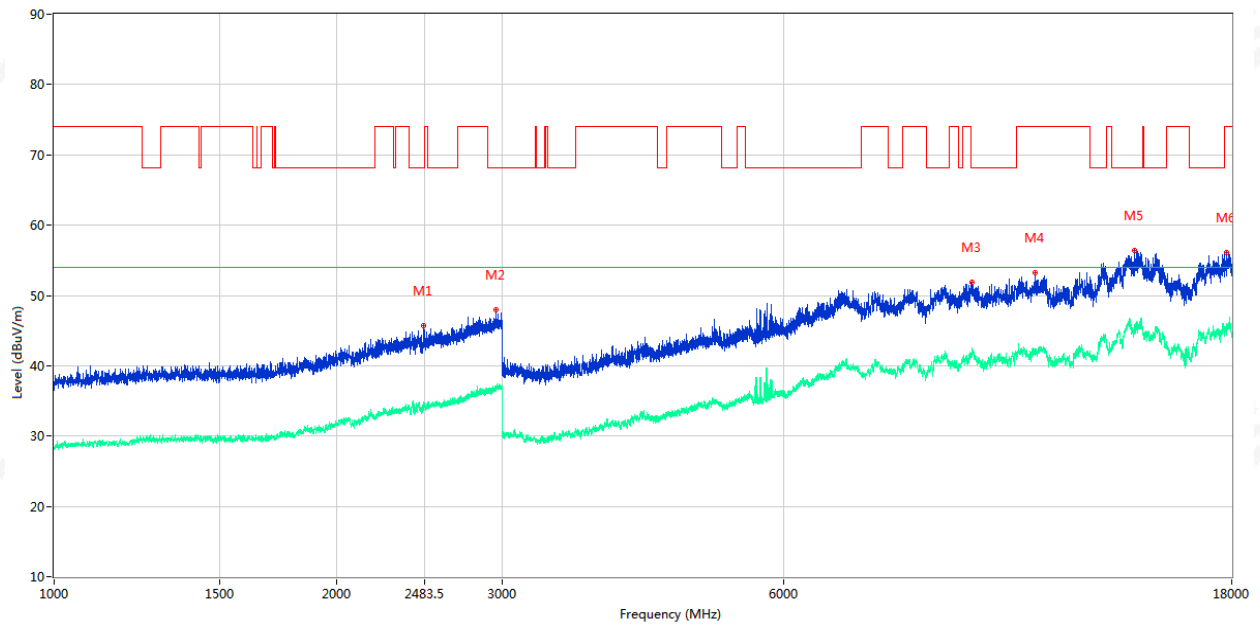
RSE-26G-40G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26896.000	45.78	6.50	52.28	68.20	-15.92	peak
2	28450.000	44.35	8.09	52.44	68.20	-15.76	peak
3	29948.000	43.05	9.05	52.10	68.20	-16.10	peak
4	32678.000	42.91	9.13	52.04	68.20	-16.16	peak
5	34834.000	42.45	9.65	52.10	68.20	-16.10	peak
6	38516.000	45.81	6.35	52.16	68.20	-16.04	peak

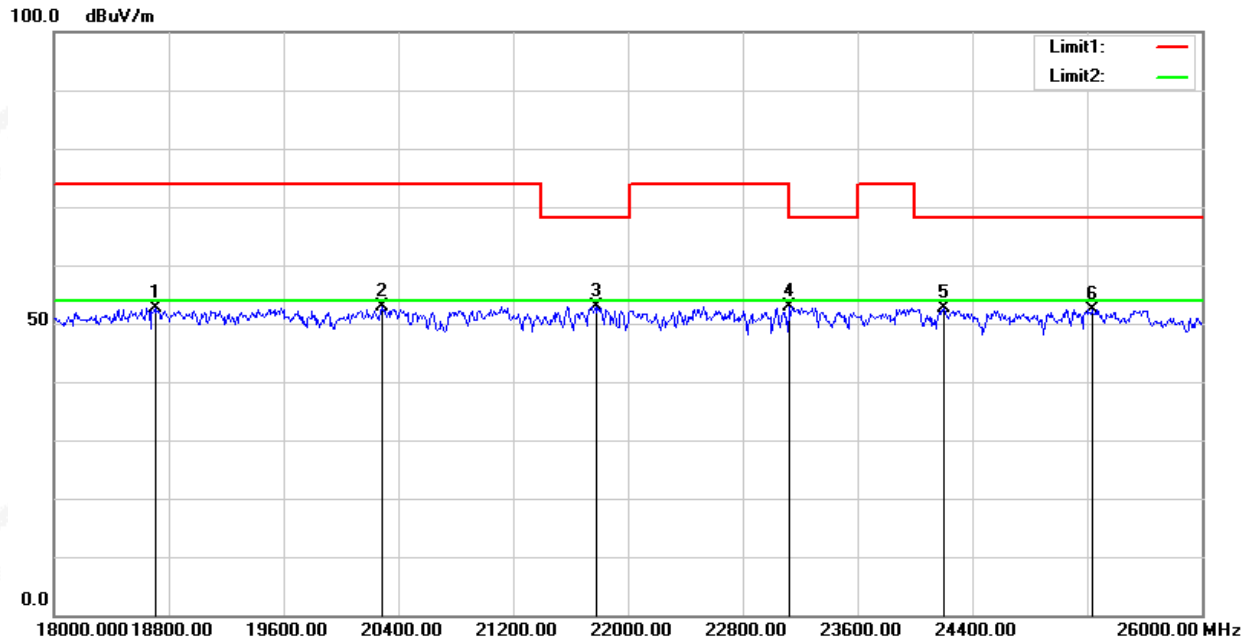
Middle
RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



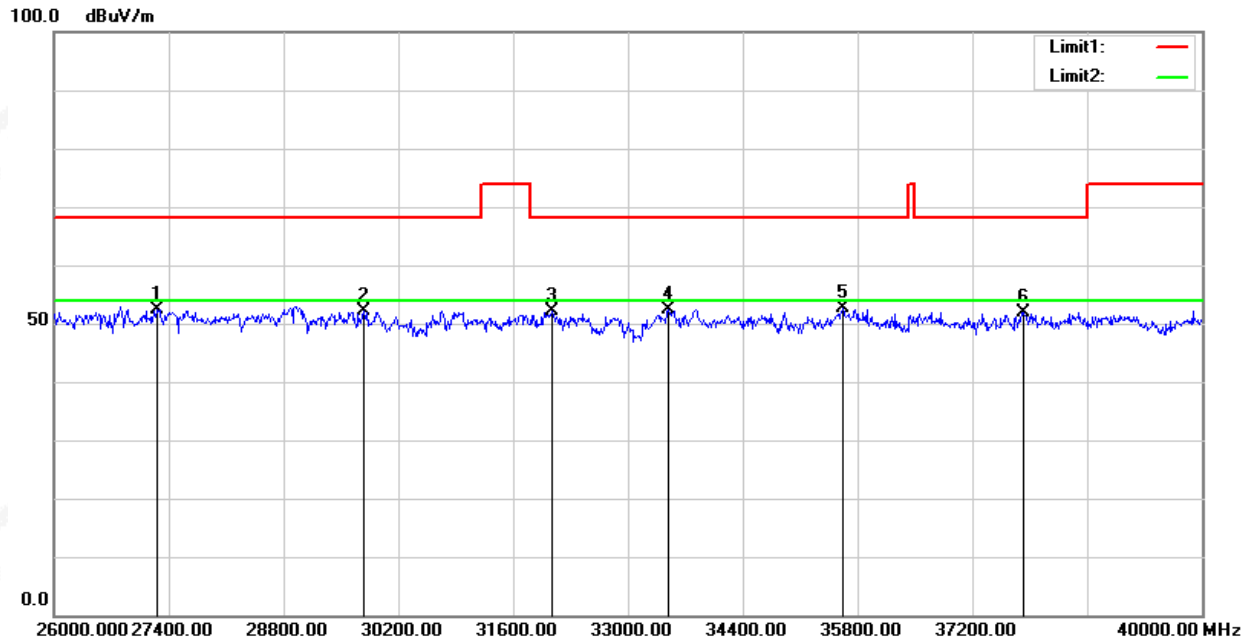
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2476.000	45.68	3.19	68.2	22.52	Peak	81.70	Horizontal	Pass
1**	2476.000	34.24	3.19	54.0	19.76	AV	81.70	Horizontal	Pass
2	2960.000	47.95	5.26	68.2	20.25	Peak	0.00	Horizontal	Pass
2**	2960.000	37.02	5.26	54.0	16.98	AV	0.00	Horizontal	Pass
3	9519.000	51.92	1.36	68.2	16.28	Peak	296.00	Horizontal	Pass
3**	9519.000	42.04	1.36	54.0	11.96	AV	296.00	Horizontal	Pass
4	11119.500	53.19	2.19	74.0	20.81	Peak	2.00	Horizontal	Pass
4**	11119.500	42.17	2.19	54.0	11.83	AV	2.00	Horizontal	Pass
5	14191.250	56.36	6.95	68.2	11.84	Peak	334.30	Horizontal	Pass
5**	14191.250	45.80	6.95	54.0	8.20	AV	334.30	Horizontal	Pass
6	17791.001	56.14	6.34	74.0	17.86	Peak	31.40	Horizontal	Pass
6**	17791.001	45.93	6.34	54.0	8.07	AV	31.40	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18704.000	50.70	2.04	52.74	54.00	-1.26	peak
2	20288.000	50.85	2.05	52.90	54.00	-1.10	peak
3	21776.000	49.71	3.20	52.91	68.20	-15.29	peak
4	23128.000	49.22	3.76	52.98	68.20	-15.22	peak
5	24200.000	48.07	4.66	52.73	68.20	-15.47	peak
6	25232.000	47.01	5.46	52.47	68.20	-15.73	peak

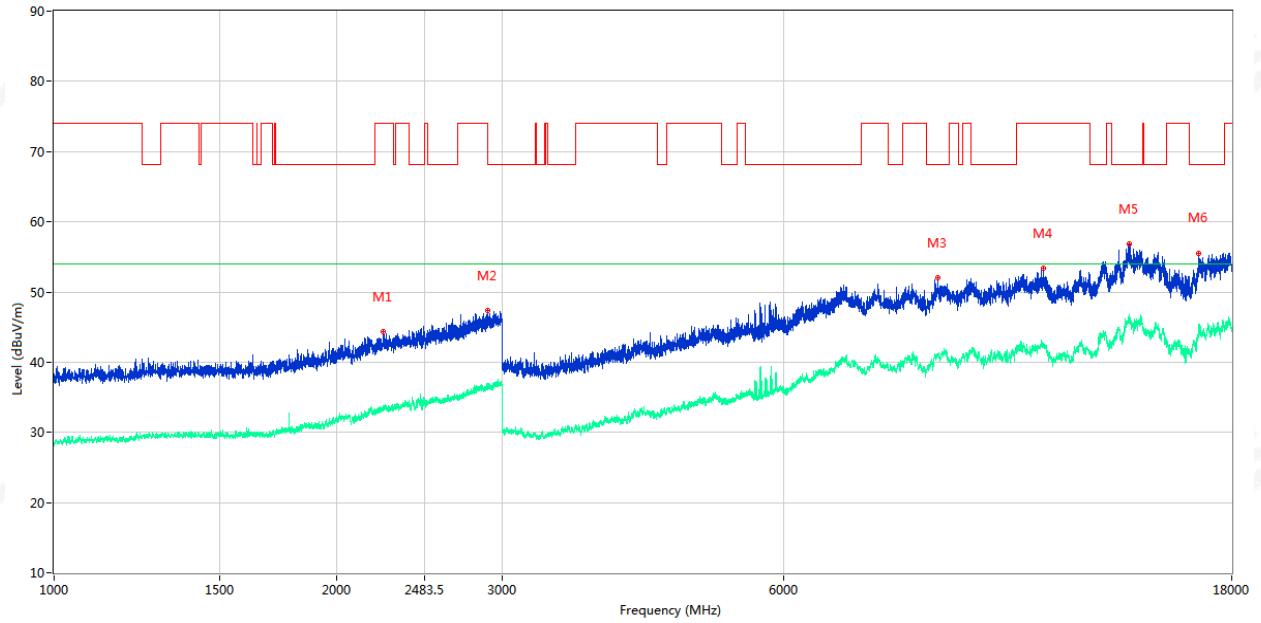
RSE-26G-40G-H



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	27260.000	45.51	6.76	52.27	68.20	-15.93	peak
2	29780.000	43.11	9.08	52.19	68.20	-16.01	peak
3	32076.000	42.85	9.22	52.07	68.20	-16.13	peak
4	33490.000	43.33	9.16	52.49	68.20	-15.71	peak
5	35618.000	42.92	9.66	52.58	68.20	-15.62	peak
6	37816.000	45.05	6.90	51.95	68.20	-16.25	peak

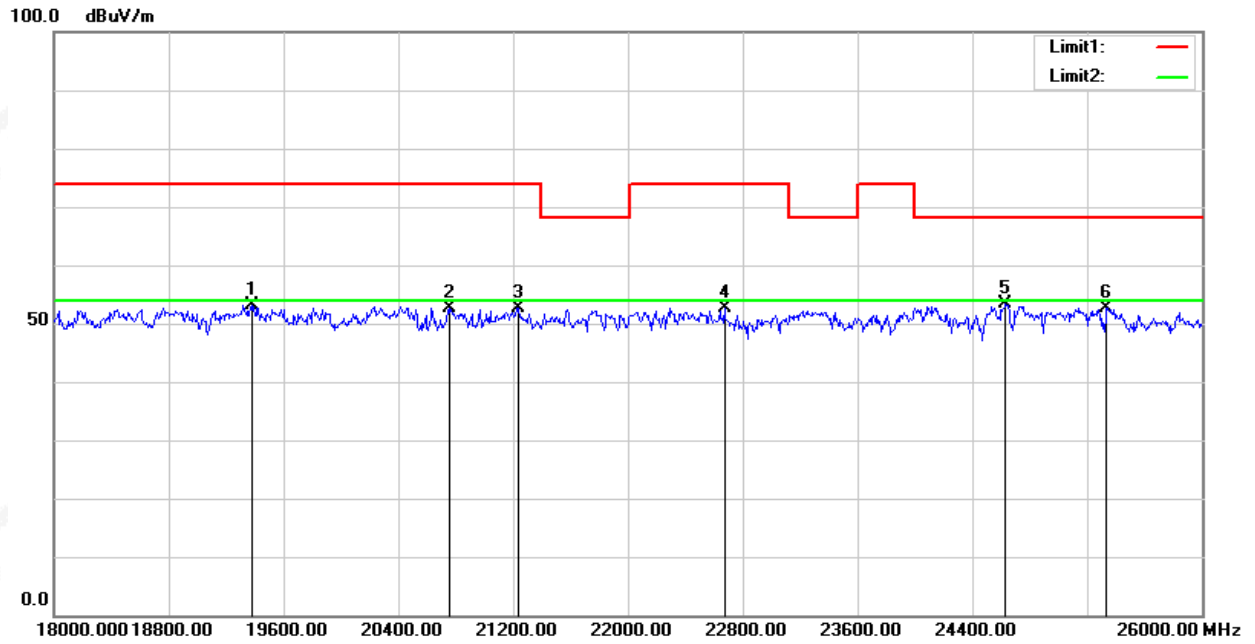
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



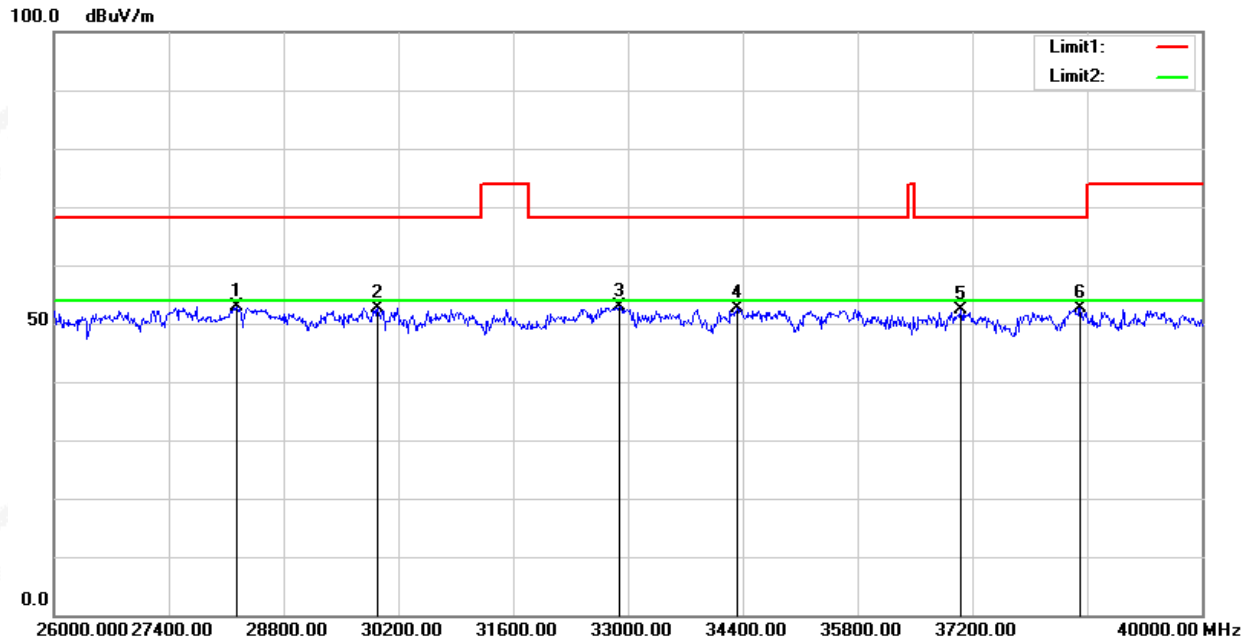
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2240.500	44.35	2.03	74.0	29.65	Peak	22.20	Vertical	Pass
1**	2240.500	33.13	2.03	54.0	20.87	AV	22.20	Vertical	Pass
2	2900.000	47.30	4.90	68.2	20.90	Peak	253.60	Vertical	Pass
2**	2900.000	36.64	4.90	54.0	17.36	AV	253.60	Vertical	Pass
3	8746.250	52.05	0.21	68.2	16.15	Peak	120.70	Vertical	Pass
3**	8746.250	41.05	0.21	54.0	12.95	AV	120.70	Vertical	Pass
4	11342.250	53.32	2.14	74.0	20.68	Peak	290.40	Vertical	Pass
4**	11342.250	42.62	2.14	54.0	11.38	AV	290.40	Vertical	Pass
5	14015.250	56.89	8.21	68.2	11.31	Peak	321.30	Vertical	Pass
5**	14015.250	45.76	8.21	54.0	8.24	AV	321.30	Vertical	Pass
6	16614.000	55.55	5.04	68.2	12.65	Peak	166.90	Vertical	Pass
6**	16614.000	45.04	5.04	54.0	8.96	AV	166.90	Vertical	Pass

RSE-18G-26G-V



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	19384.000	51.48	1.54	53.02	54.00	-0.98	peak
2	20760.000	50.21	2.45	52.66	54.00	-1.34	peak
3	21240.000	49.76	2.80	52.56	54.00	-1.44	peak
4	22672.000	48.76	3.82	52.58	54.00	-1.42	peak
5	24632.000	48.54	4.87	53.41	68.20	-14.79	peak
6	25336.000	47.09	5.54	52.63	68.20	-15.57	peak

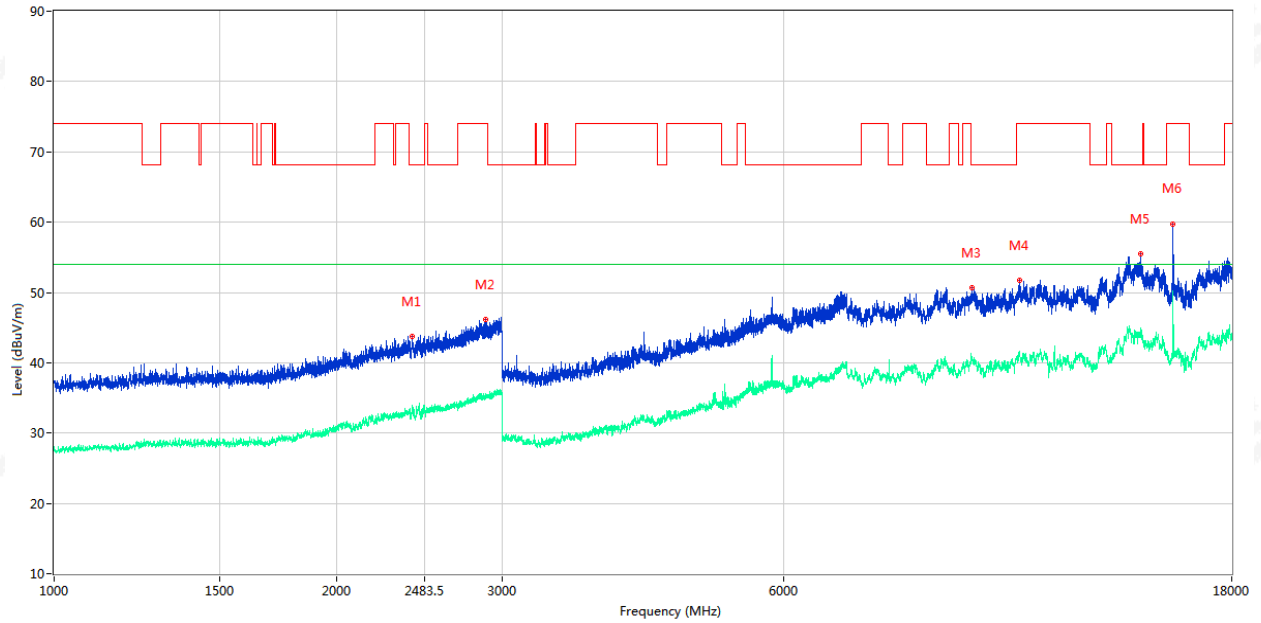
RSE-26G-40G-V



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	28226.000	45.13	7.73	52.86	68.20	-15.34	peak
2	29948.000	43.55	9.05	52.60	68.20	-15.60	peak
3	32902.000	43.94	9.05	52.99	68.20	-15.21	peak
4	34330.000	43.12	9.50	52.62	68.20	-15.58	peak
5	37060.000	44.70	7.73	52.43	68.20	-15.77	peak
6	38516.000	46.31	6.35	52.66	68.20	-15.54	peak

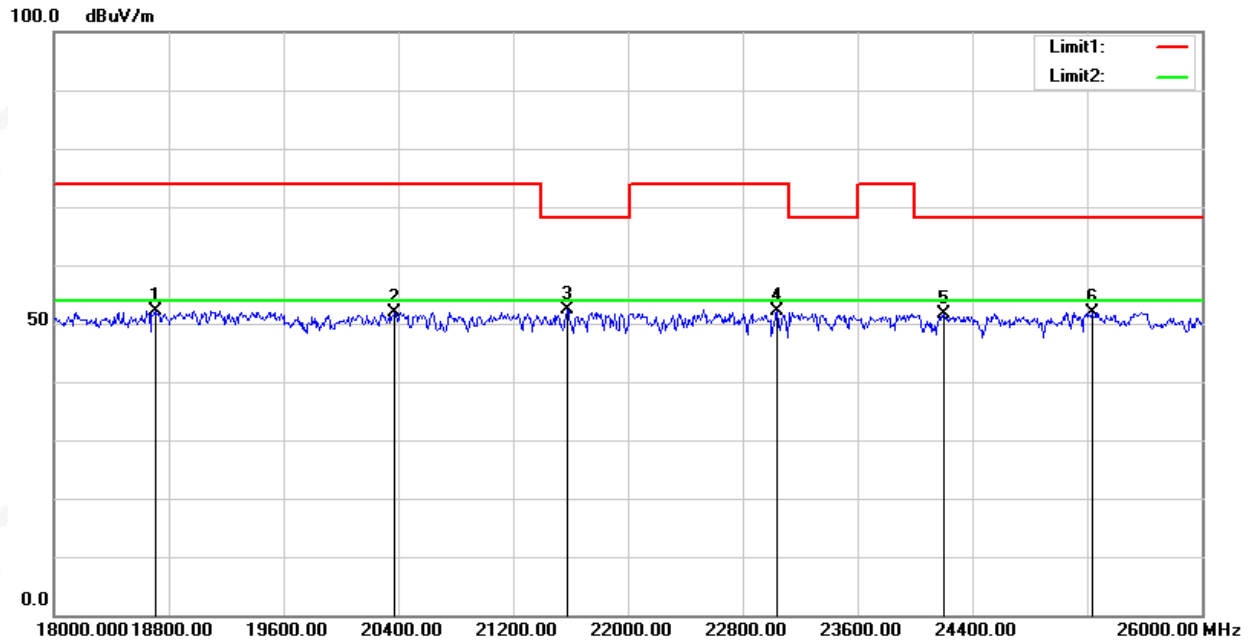
High RSE-1G-18G-H

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



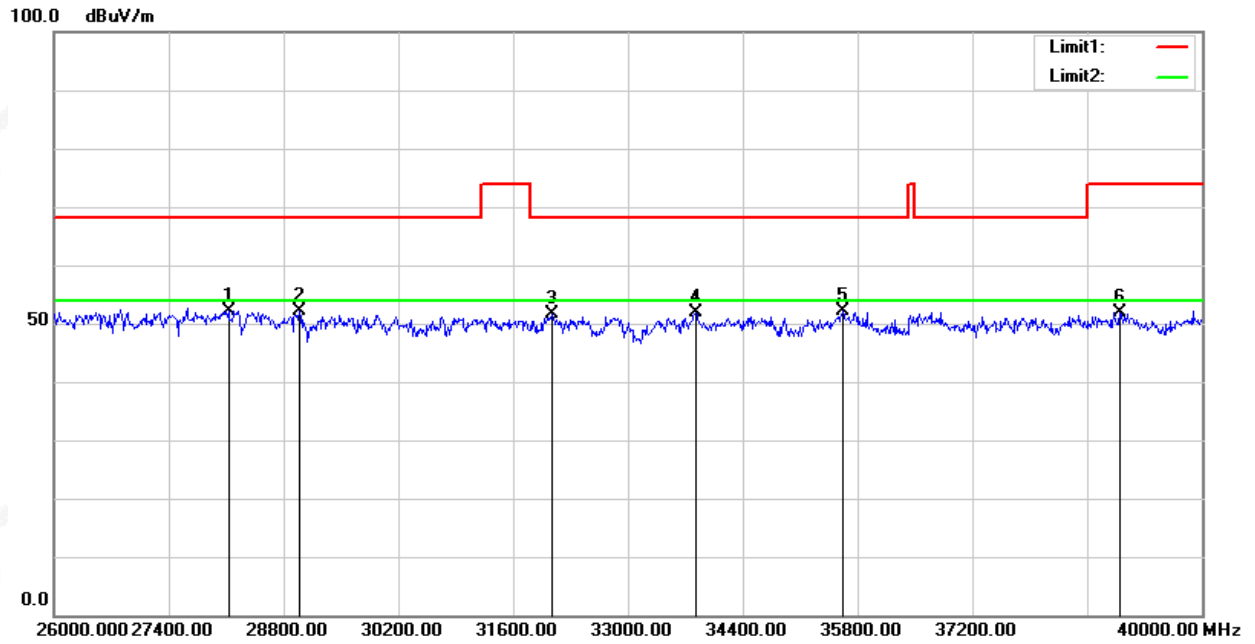
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2410.000	43.80	3.10	68.2	24.40	Peak	142.70	Horizontal	Pass
1**	2410.000	33.62	3.10	54.0	20.38	AV	142.70	Horizontal	Pass
2	2886.000	46.08	4.93	74.0	27.92	Peak	190.70	Horizontal	Pass
2**	2886.000	35.27	4.93	54.0	18.73	AV	190.70	Horizontal	Pass
3	9508.000	50.67	1.47	68.2	17.53	Peak	72.70	Horizontal	Pass
3**	9508.000	40.87	1.47	54.0	13.13	AV	72.70	Horizontal	Pass
4	10695.999	51.75	1.18	74.0	22.25	Peak	115.50	Horizontal	Pass
4**	10695.999	41.68	1.18	54.0	12.32	AV	115.50	Horizontal	Pass
5	14405.750	55.46	6.95	68.2	12.74	Peak	57.90	Horizontal	Pass
5**	14405.750	44.69	6.95	54.0	9.31	AV	57.90	Horizontal	Pass
6	15580.000	59.78	3.49	74.0	14.22	Peak	345.90	Horizontal	Pass
6**	15580.000	48.11	3.49	54.0	5.89	AV	345.90	Horizontal	Pass

RSE-18G-26G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18704.000	50.20	2.04	52.24	54.00	-1.76	peak
2	20376.000	49.81	2.13	51.94	54.00	-2.06	peak
3	21576.000	49.31	3.01	52.32	68.20	-15.88	peak
4	23040.000	48.56	3.67	52.23	54.00	-1.77	peak
5	24200.000	47.07	4.66	51.73	68.20	-16.47	peak
6	25232.000	46.51	5.46	51.97	68.20	-16.23	peak

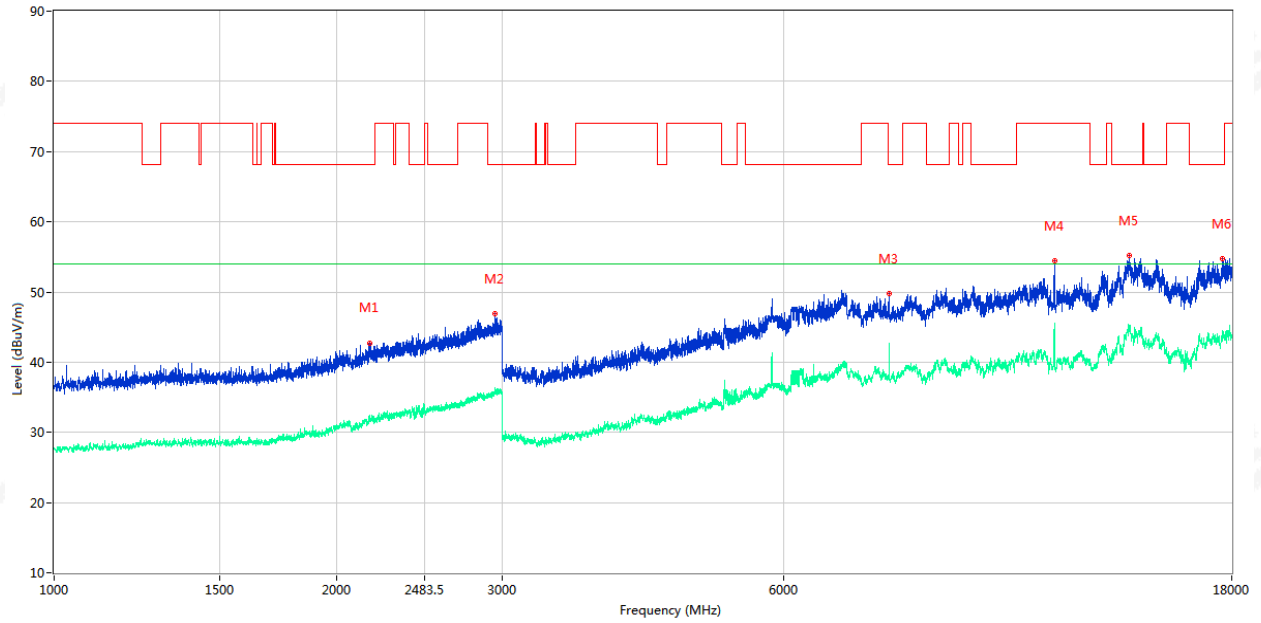
RSE-26G-40G-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	28128.000	44.66	7.57	52.23	68.20	-15.97	peak
2	28996.000	43.23	8.99	52.22	68.20	-15.98	peak
3	32076.000	42.35	9.22	51.57	68.20	-16.63	peak
4	33826.000	42.60	9.32	51.92	68.20	-16.28	peak
5	35618.000	42.42	9.66	52.08	68.20	-16.12	peak
6	38992.000	44.95	6.95	51.90	54.00	-2.10	peak

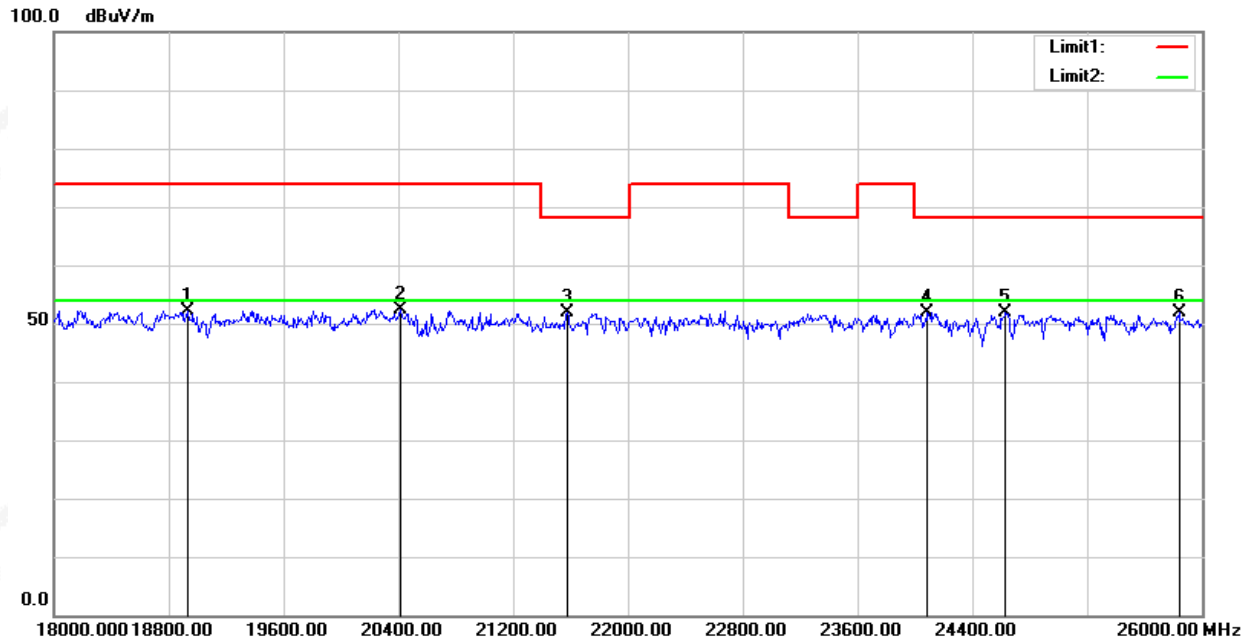
RSE-1G-18G-V

RE_FCC Test Case_FCC 15C 1GHz-18GHz - 5G



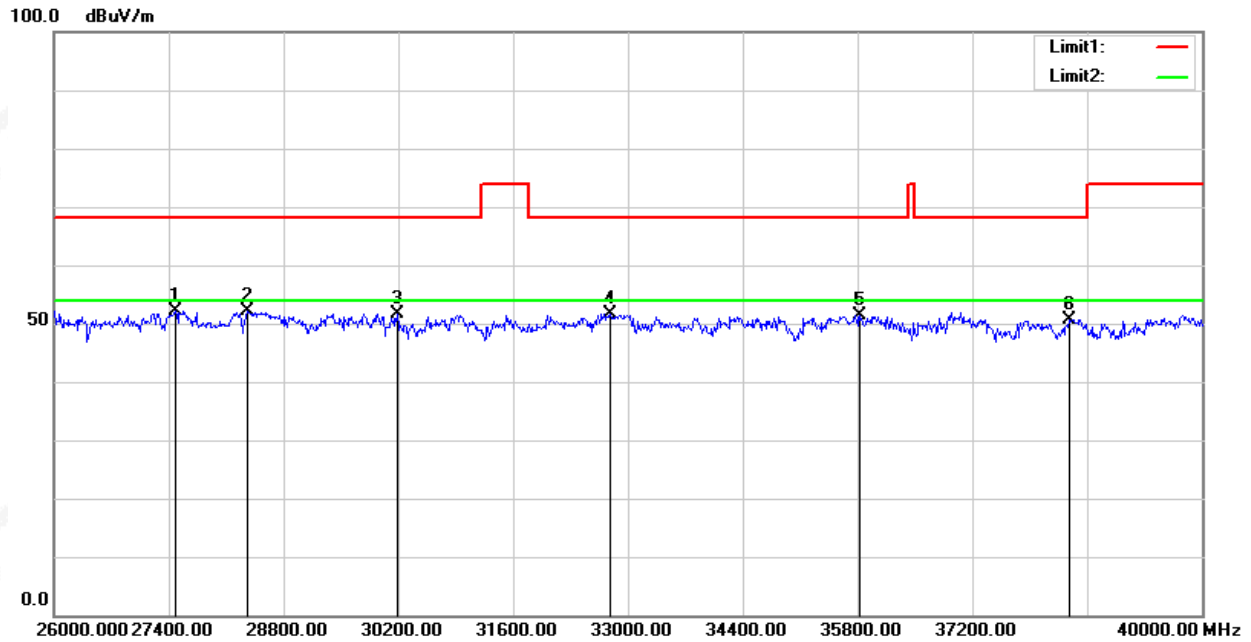
No	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Antenna	Verdict
1	2171.500	42.75	1.71	68.2	25.45	Peak	206.30	Vertical	Pass
1**	2171.500	31.60	1.71	54.0	22.40	AV	206.30	Vertical	Pass
2	2947.500	46.87	5.20	68.2	21.33	Peak	185.10	Vertical	Pass
2**	2947.500	35.71	5.20	54.0	18.29	AV	185.10	Vertical	Pass
3	7764.500	49.80	-1.53	68.2	18.40	Peak	7.00	Vertical	Pass
3**	7764.500	42.62	-1.53	54.0	11.38	AV	7.00	Vertical	Pass
4	11653.000	54.48	1.80	74.0	19.52	Peak	32.40	Vertical	Pass
4**	11653.000	45.62	1.80	54.0	8.38	AV	32.40	Vertical	Pass
5	14004.250	55.21	8.38	68.2	12.99	Peak	298.20	Vertical	Pass
5**	14004.250	45.15	8.38	54.0	8.85	AV	298.20	Vertical	Pass
6	17615.000	54.75	6.51	68.2	13.45	Peak	28.30	Vertical	Pass
6**	17615.000	44.11	6.51	54.0	9.89	AV	28.30	Vertical	Pass

RSE-18G-26G-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18936.000	50.28	1.81	52.09	54.00	-1.91	peak
2	20416.000	50.14	2.16	52.30	54.00	-1.70	peak
3	21576.000	48.79	3.01	51.80	68.20	-16.40	peak
4	24088.000	47.32	4.65	51.97	68.20	-16.23	peak
5	24632.000	47.04	4.87	51.91	68.20	-16.29	peak
6	25840.000	46.01	5.76	51.77	68.20	-16.43	peak

RSE-26G-40G-V



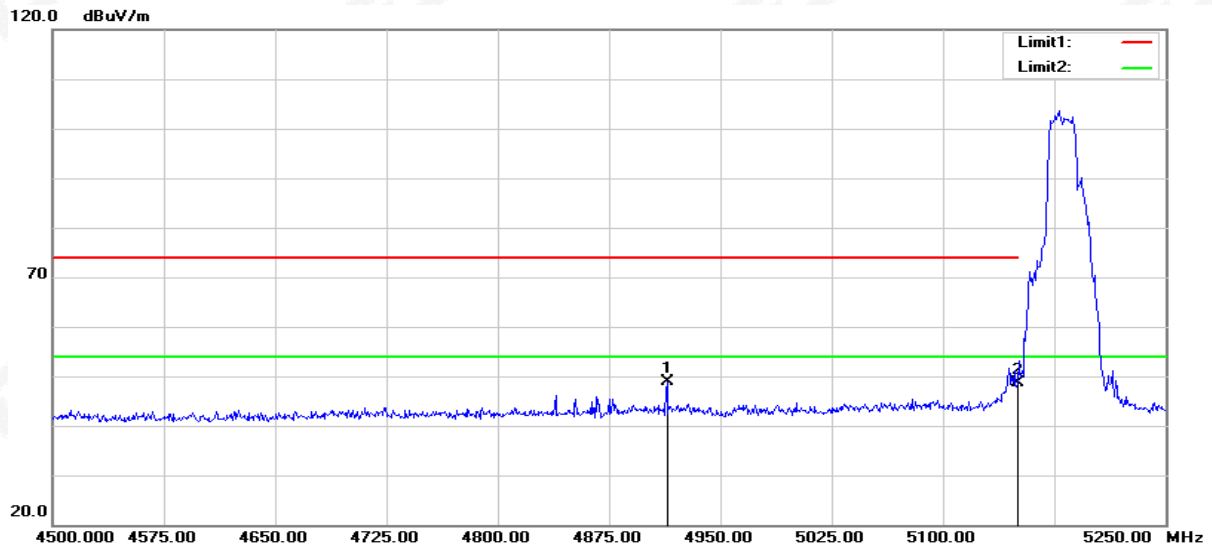
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	27484.000	45.33	6.88	52.21	68.20	-15.99	peak
2	28366.000	44.10	7.96	52.06	68.20	-16.14	peak
3	30186.000	42.52	8.99	51.51	68.20	-16.69	peak
4	32790.000	42.52	9.08	51.60	68.20	-16.60	peak
5	35828.000	41.84	9.47	51.31	68.20	-16.89	peak
6	38376.000	44.32	6.43	50.75	68.20	-17.45	peak

Note:

- 1) Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Emission Level = Reading + Factor.
- 2) The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.
- 3) All modes have been measured, only worst mode was reported.

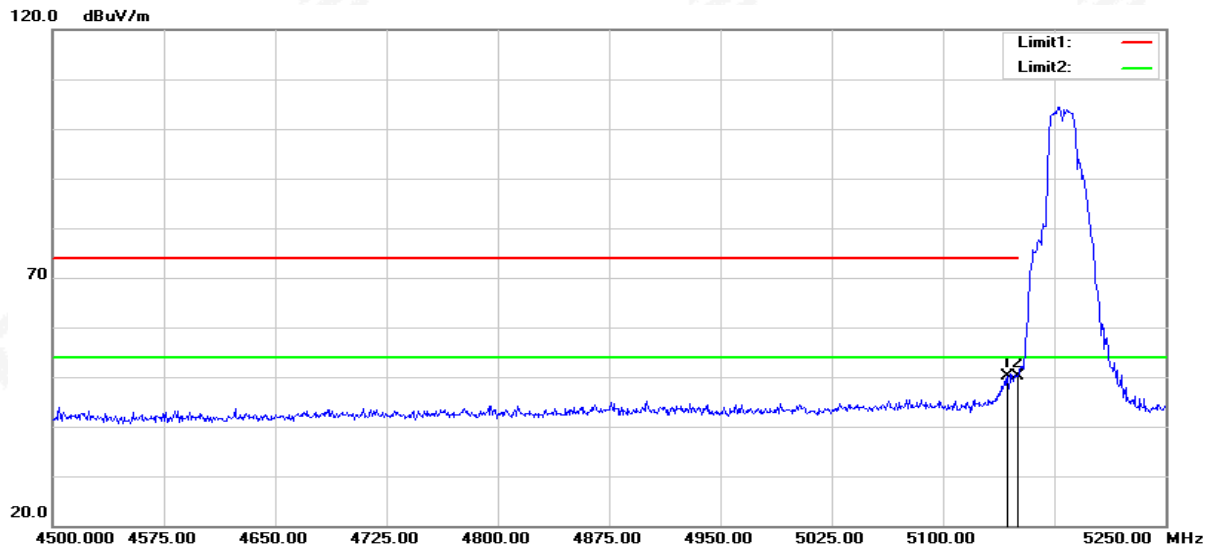
3.2.9 TEST RESULTS(Band edge Requirements)

U-NII-1 (5.150-5.2500) GHz

MIMO
802.11n20-L-H


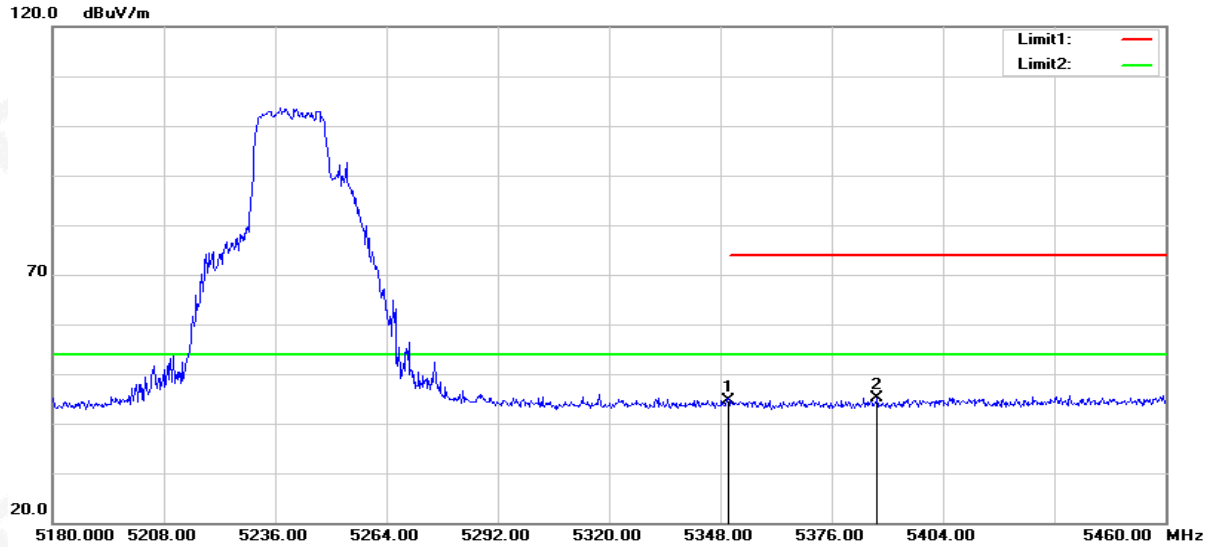
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4914.000	54.96	-6.05	48.91	54.00	-5.09	peak
2	5150.000	54.33	-5.77	48.56	54.00	-5.44	peak

802.11n20-L-V



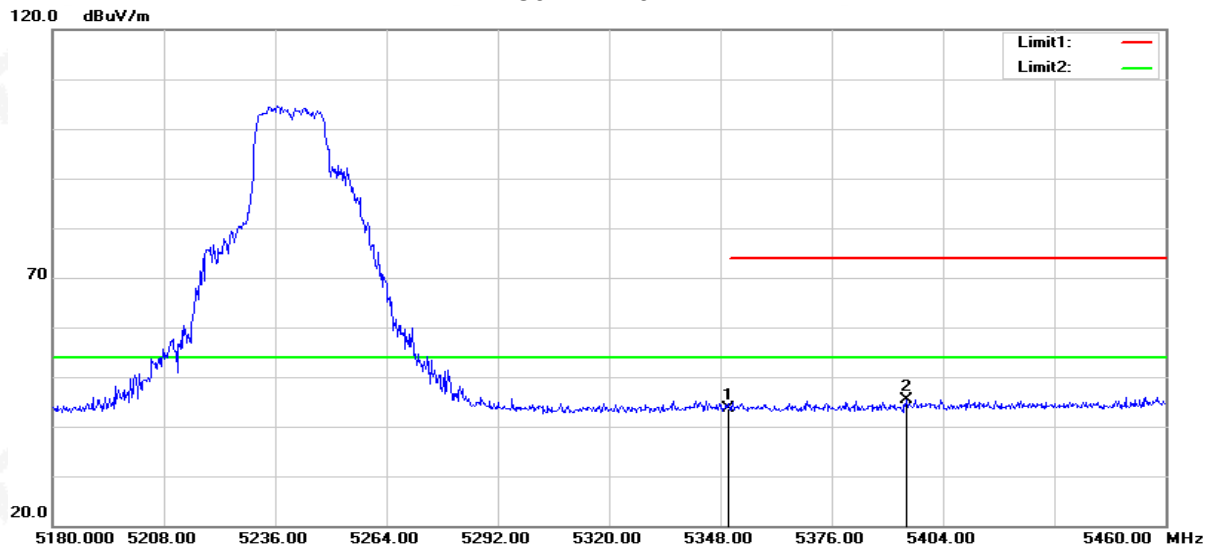
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5143.500	55.95	-5.73	50.22	54.00	-3.78	peak
2	5150.000	55.83	-5.77	50.06	54.00	-3.94	peak

802.11n20-H-H



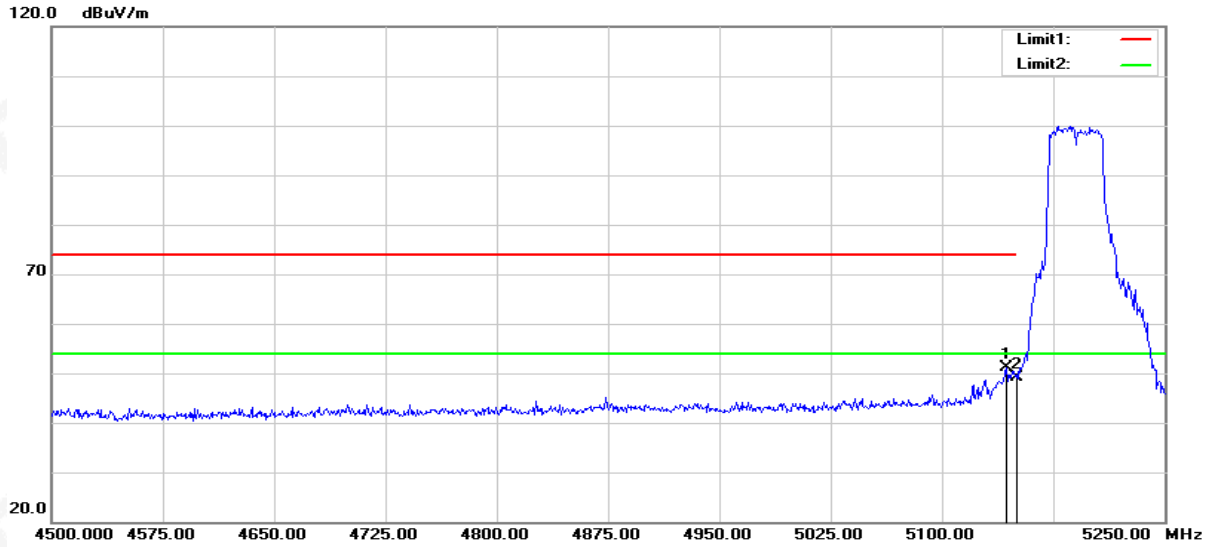
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	49.93	-5.33	44.60	54.00	-9.40	peak
2	5387.480	50.29	-5.15	45.14	54.00	-8.86	peak

802.11n20-H-V



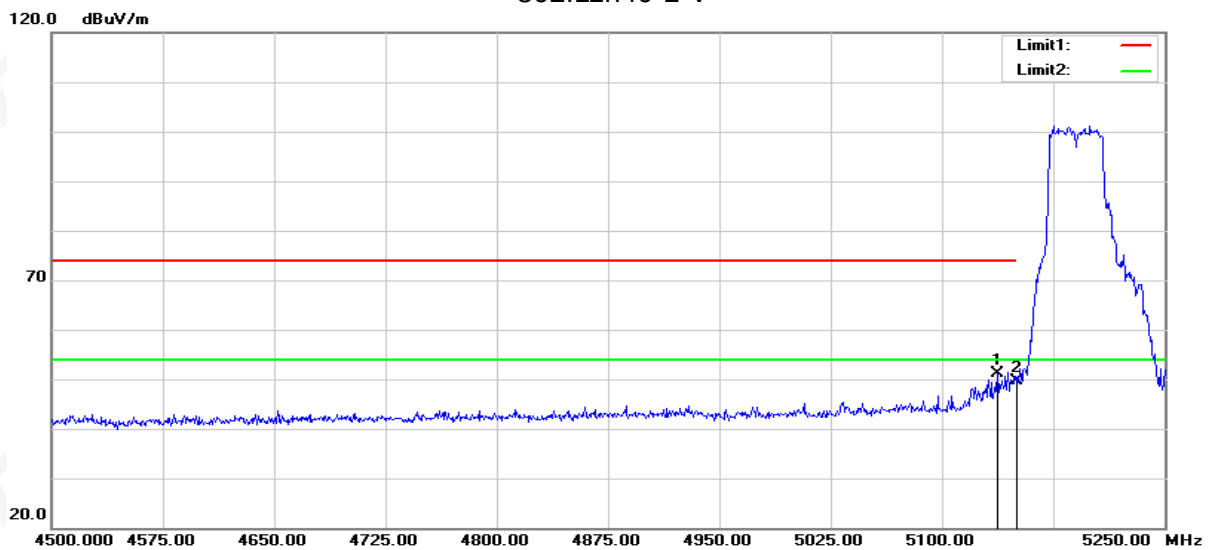
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	49.03	-5.33	43.70	54.00	-10.30	peak
2	5394.760	50.54	-5.11	45.43	54.00	-8.57	peak

802.11n40-L-H



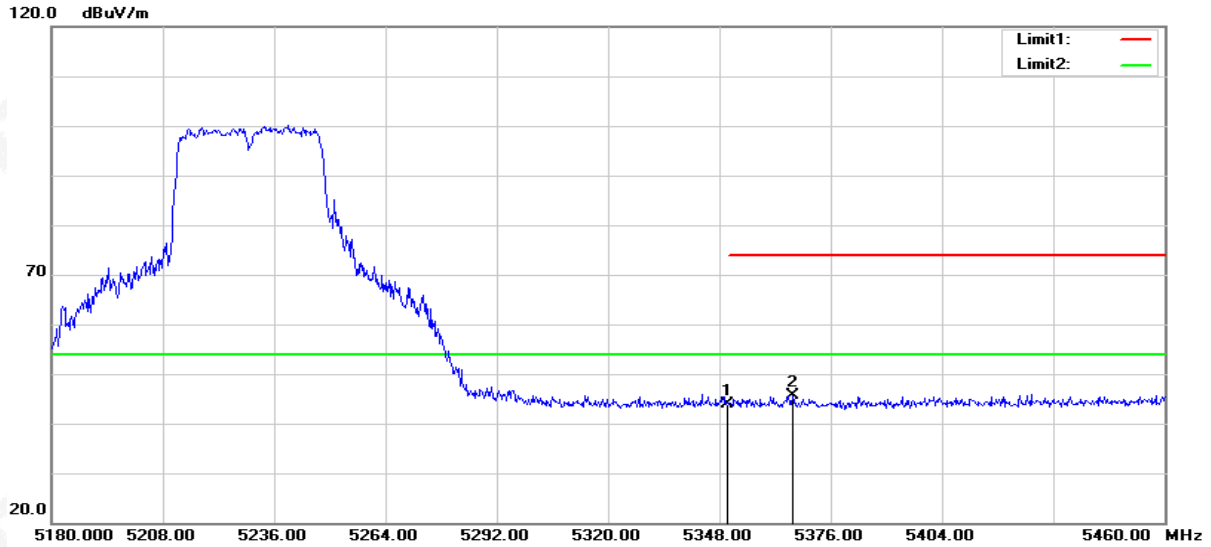
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5143.500	56.85	-5.73	51.12	54.00	-2.88	peak
2	5150.000	54.85	-5.77	49.08	54.00	-4.92	peak

802.11n40-L-V



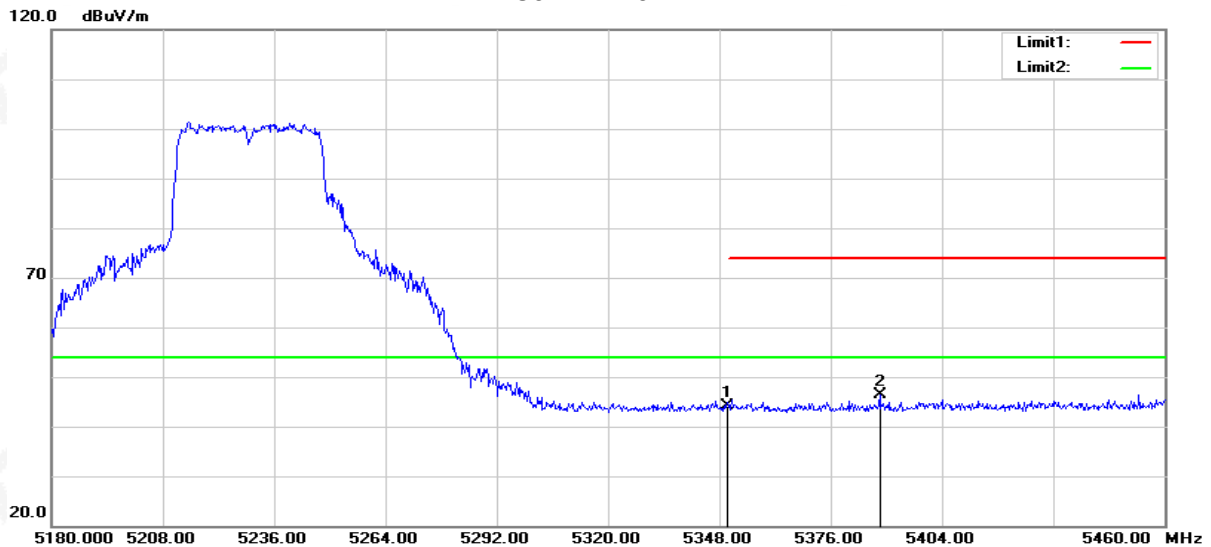
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5137.500	56.76	-5.69	51.07	54.00	-2.93	peak
2	5150.000	55.32	-5.77	49.55	54.00	-4.45	peak

802.11n40-H-H



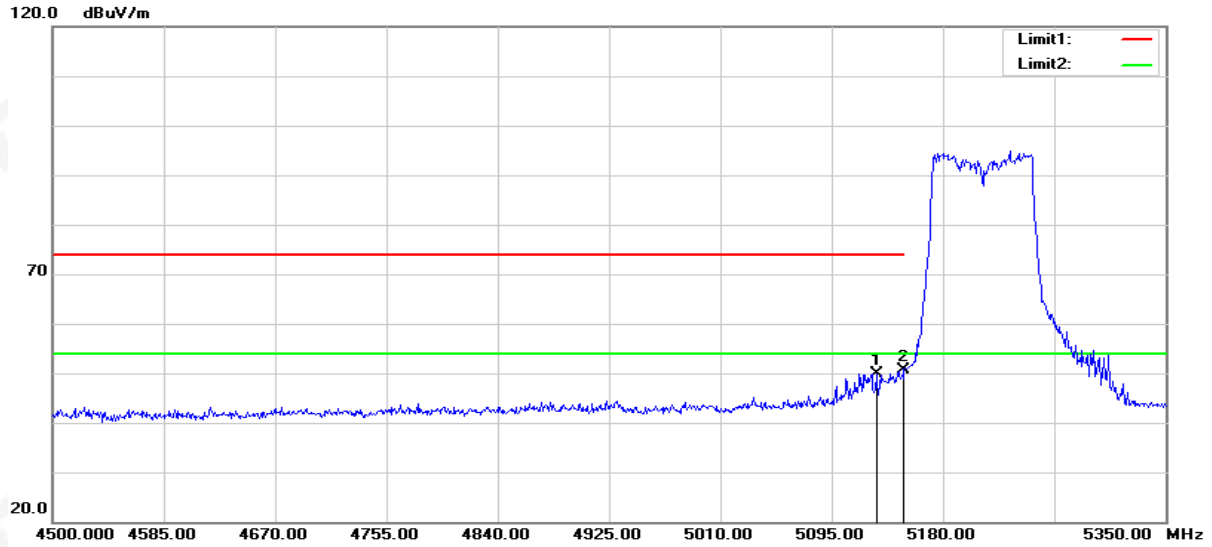
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	49.30	-5.33	43.97	54.00	-10.03	peak
2	5366.480	50.79	-5.25	45.54	54.00	-8.46	peak

802.11n40-H-V



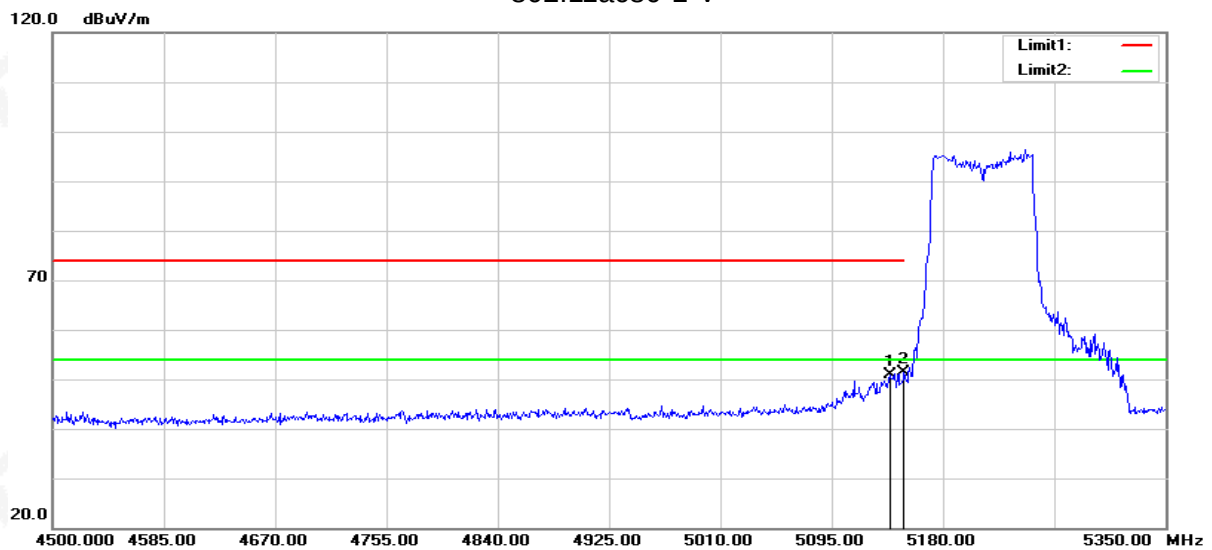
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	49.58	-5.33	44.25	54.00	-9.75	peak
2	5388.320	51.54	-5.15	46.39	54.00	-7.61	peak

802.11ac80-L-H



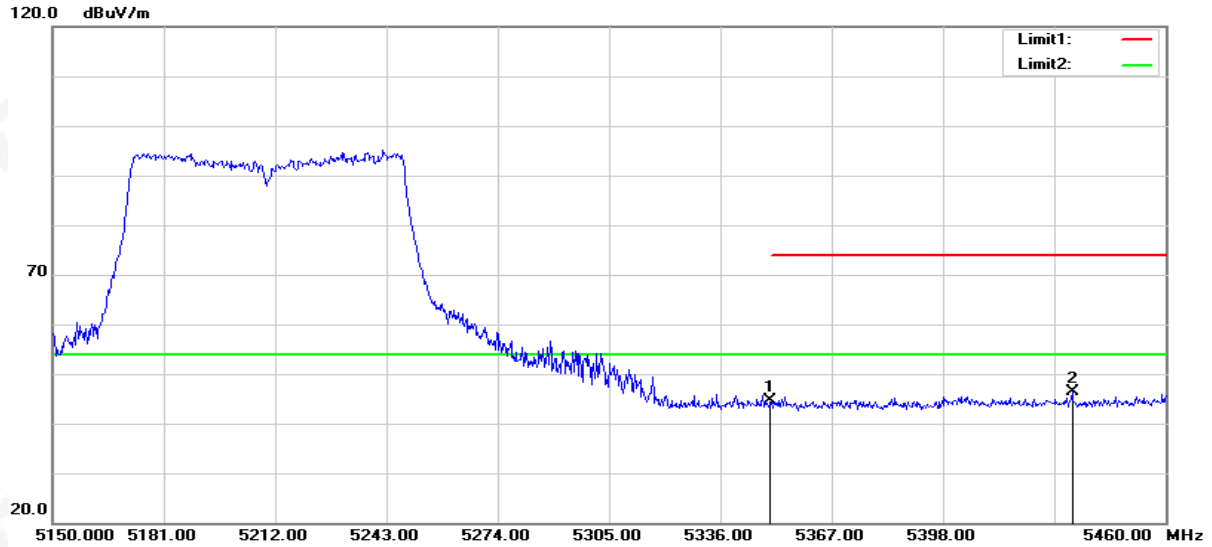
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5129.000	55.55	-5.64	49.91	54.00	-4.09	peak
2	5150.000	56.49	-5.77	50.72	54.00	-3.28	peak

802.11ac80-L-V



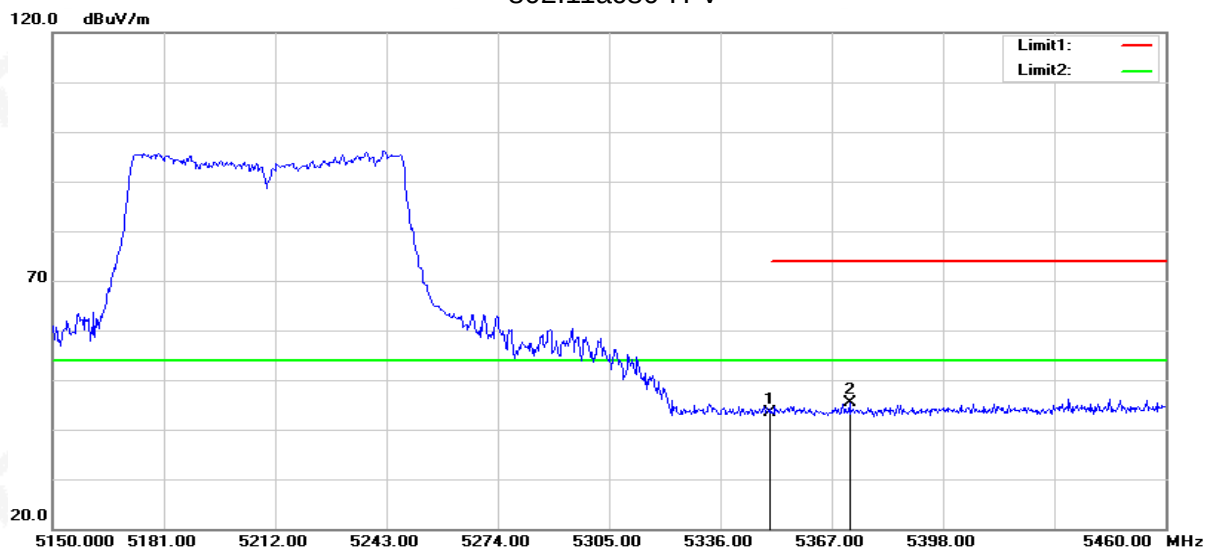
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5139.200	56.60	-5.70	50.90	54.00	-3.10	peak
2	5150.000	57.06	-5.77	51.29	54.00	-2.71	peak

802.11ac80-H-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	49.90	-5.33	44.57	54.00	-9.43	peak
2	5433.960	51.21	-4.94	46.27	54.00	-7.73	peak

802.11ac80-H-V



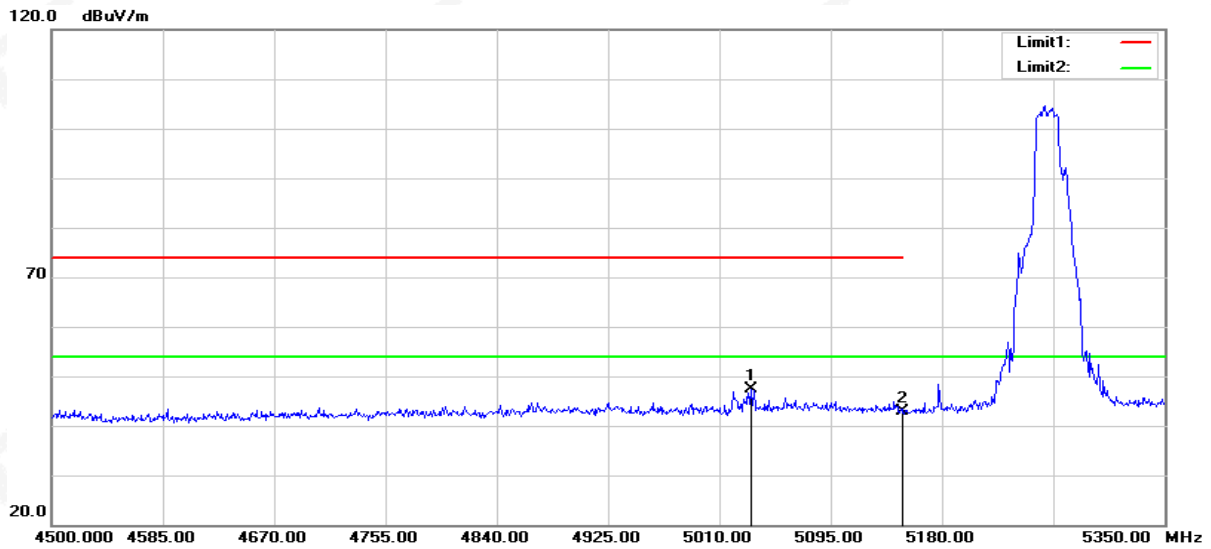
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	48.78	-5.33	43.45	54.00	-10.55	peak
2	5371.960	50.52	-5.22	45.30	54.00	-8.70	peak

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

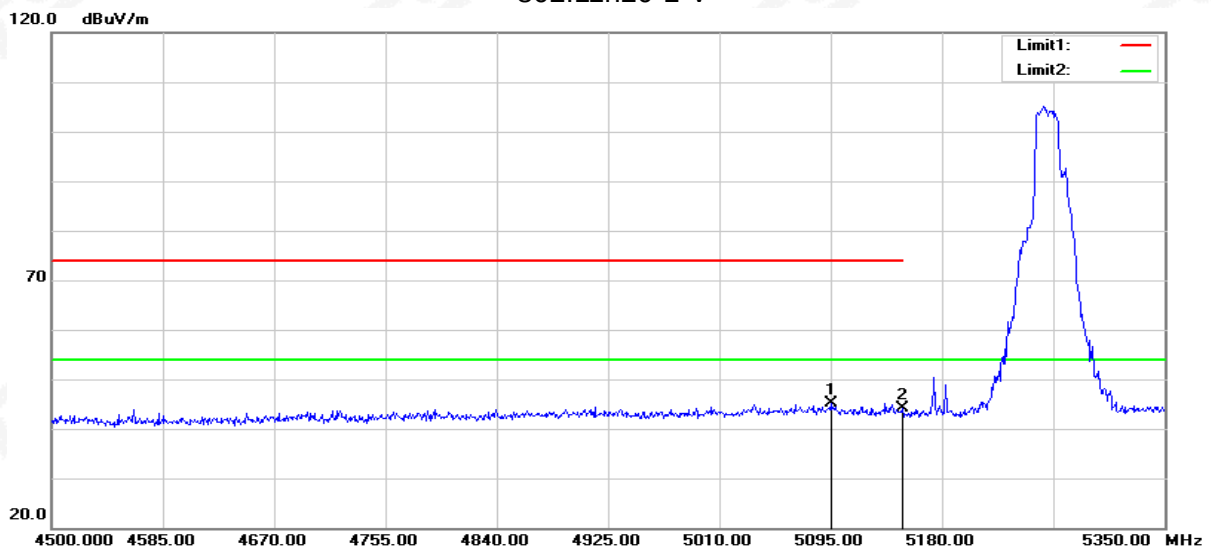
2. All modes have been measured, only worst mode was reported.

U-NII-2A (5.250-5.350) GHz

MIMO
802.11n20-L-H


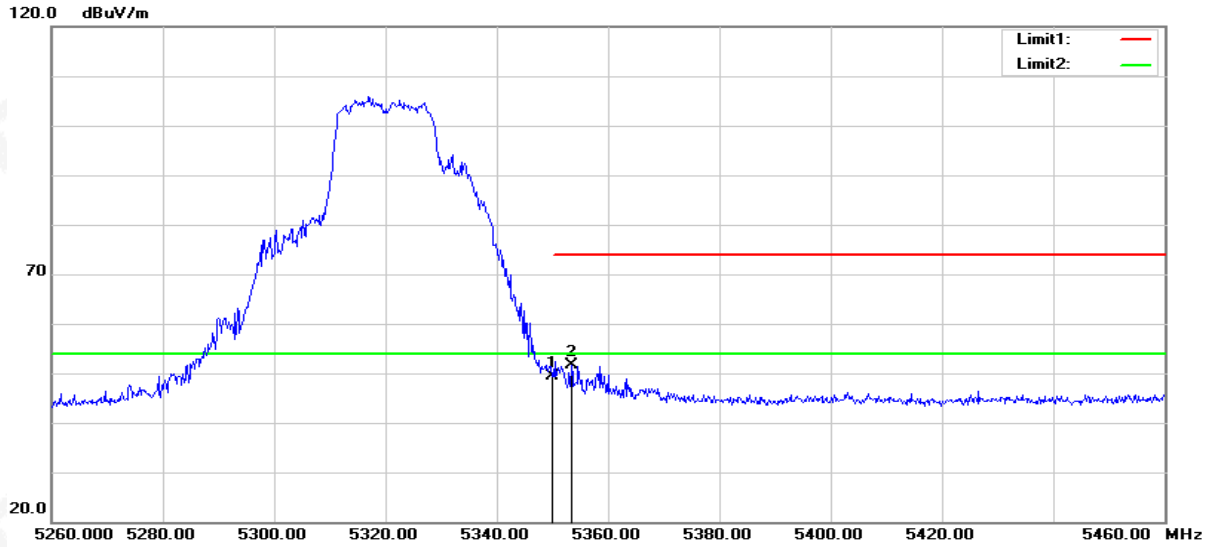
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5033.800	53.23	-5.77	47.46	54.00	-6.54	peak
2	5150.000	48.67	-5.77	42.90	54.00	-11.10	peak

802.11n20-L-V



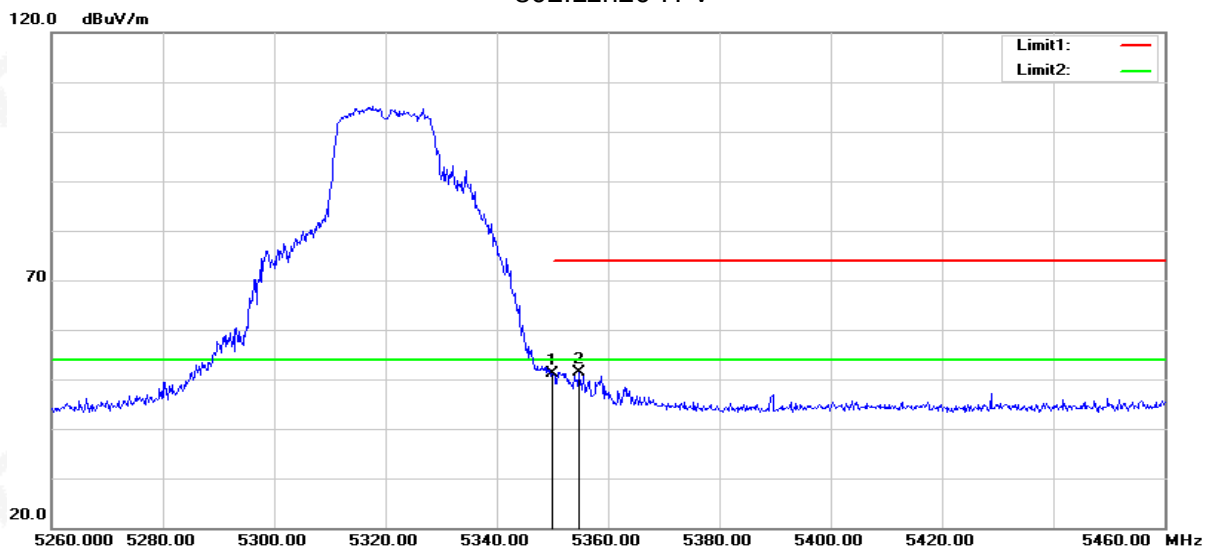
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5095.000	50.57	-5.47	45.10	54.00	-8.90	peak
2	5150.000	49.83	-5.77	44.06	54.00	-9.94	peak

802.11n20-H-H



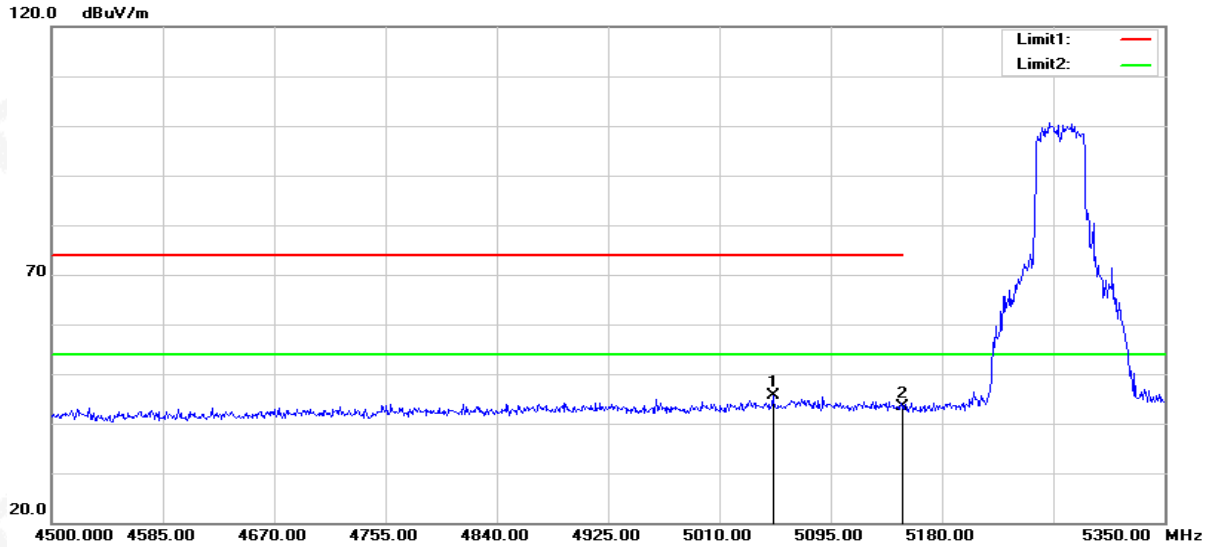
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	54.71	-5.33	49.38	54.00	-4.62	peak
2	5353.400	57.02	-5.32	51.70	54.00	-2.30	peak

802.11n20-H-V



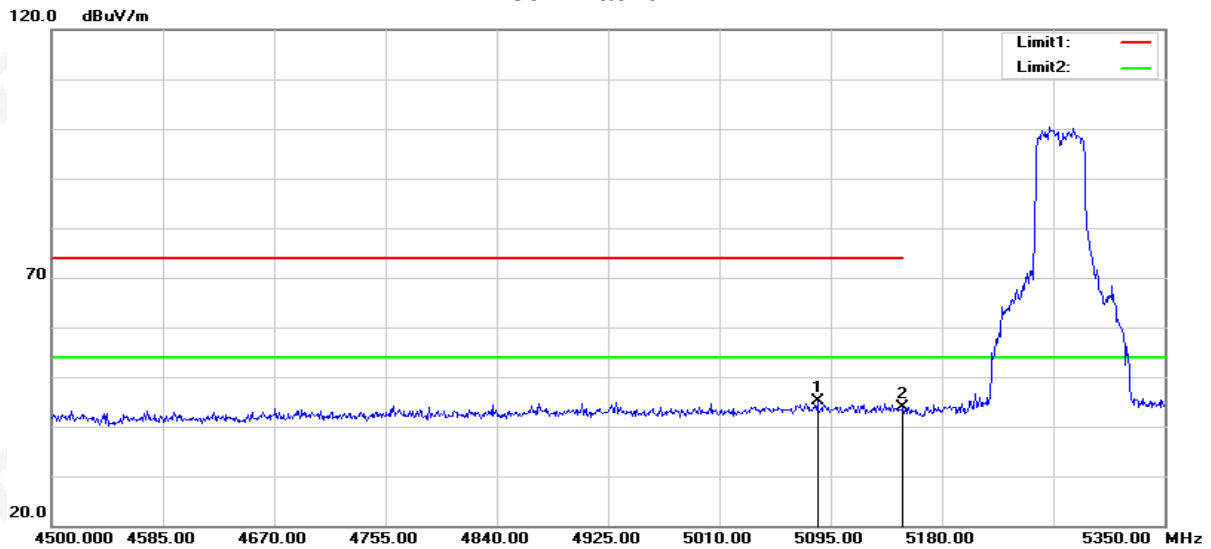
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	56.48	-5.33	51.15	54.00	-2.85	peak
2	5354.800	56.79	-5.31	51.48	54.00	-2.52	peak

802.11ac40-L-H



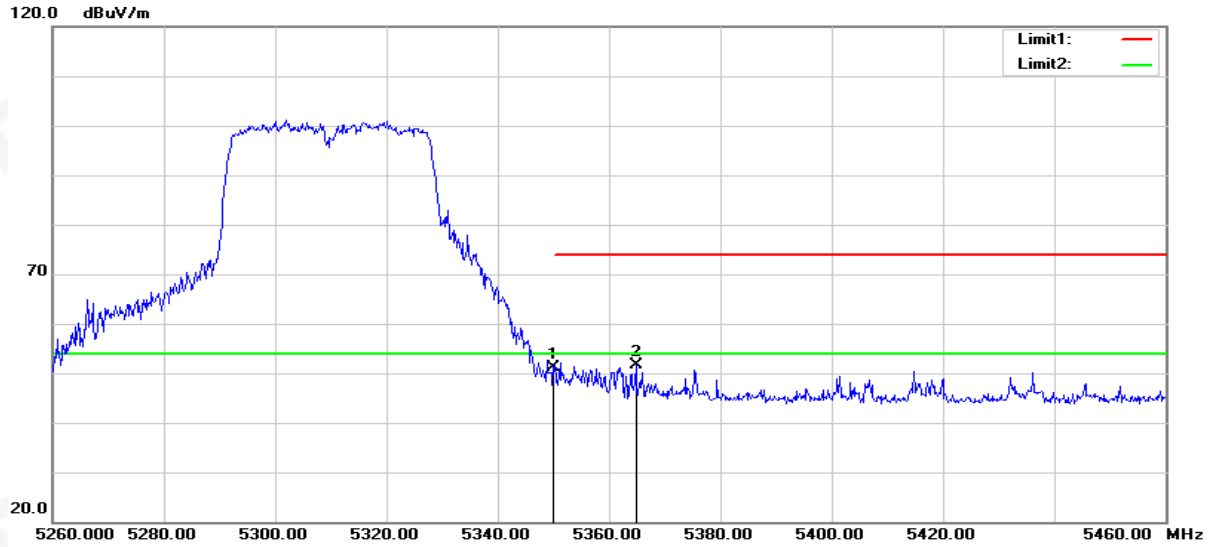
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5050.800	51.25	-5.69	45.56	54.00	-8.44	peak
2	5150.000	49.05	-5.77	43.28	54.00	-10.72	peak

802.11ac40-L-V



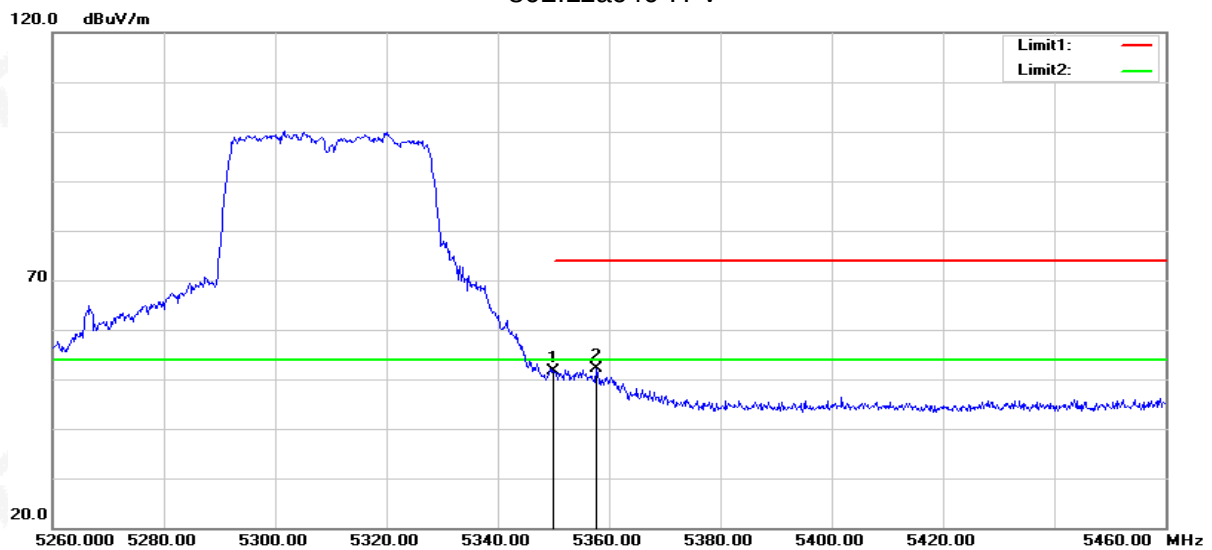
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5084.800	50.60	-5.52	45.08	54.00	-8.92	peak
2	5150.000	49.65	-5.77	43.88	54.00	-10.12	peak

802.11ac40-H-H



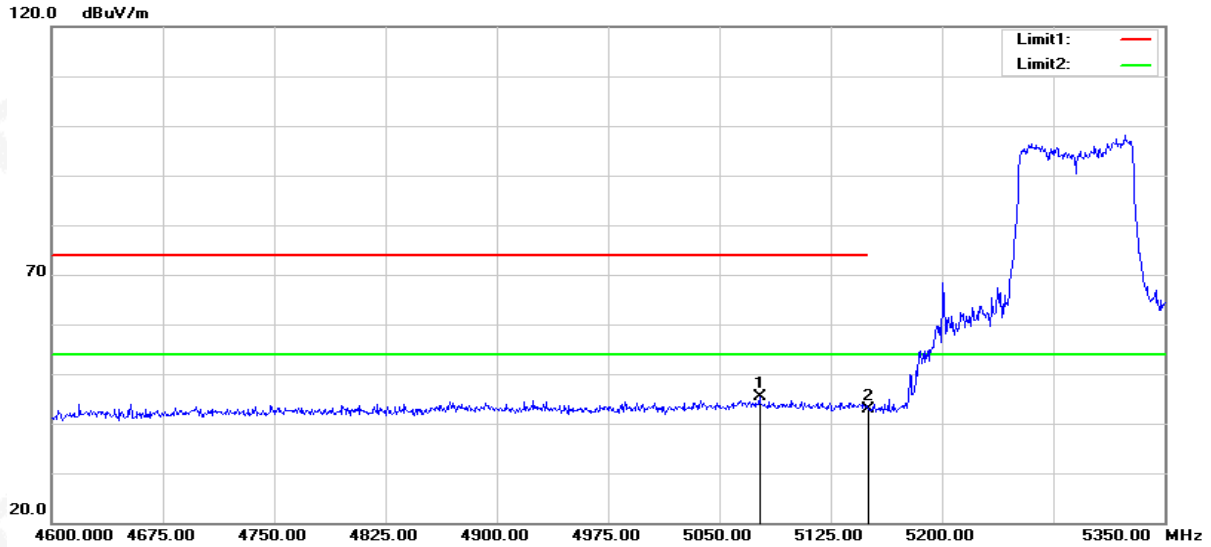
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	56.41	-5.33	51.08	54.00	-2.92	peak
2	5364.800	56.93	-5.26	51.67	54.00	-2.33	peak

802.11ac40-H-V



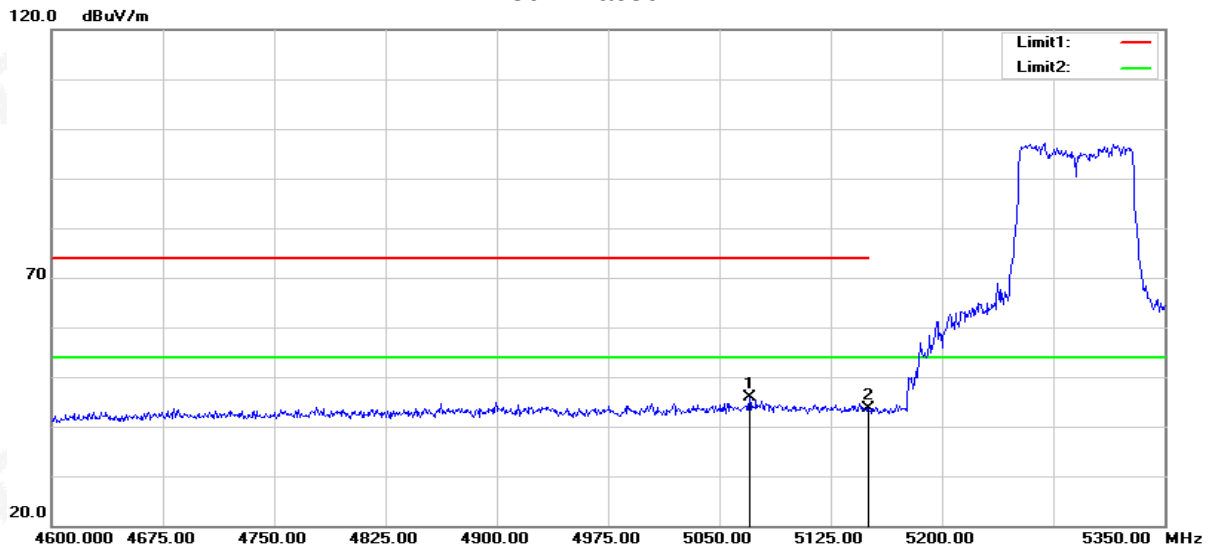
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	57.07	-5.33	51.74	54.00	-2.26	peak
2	5357.600	57.39	-5.29	52.10	54.00	-1.90	peak

802.11ac80-L-H



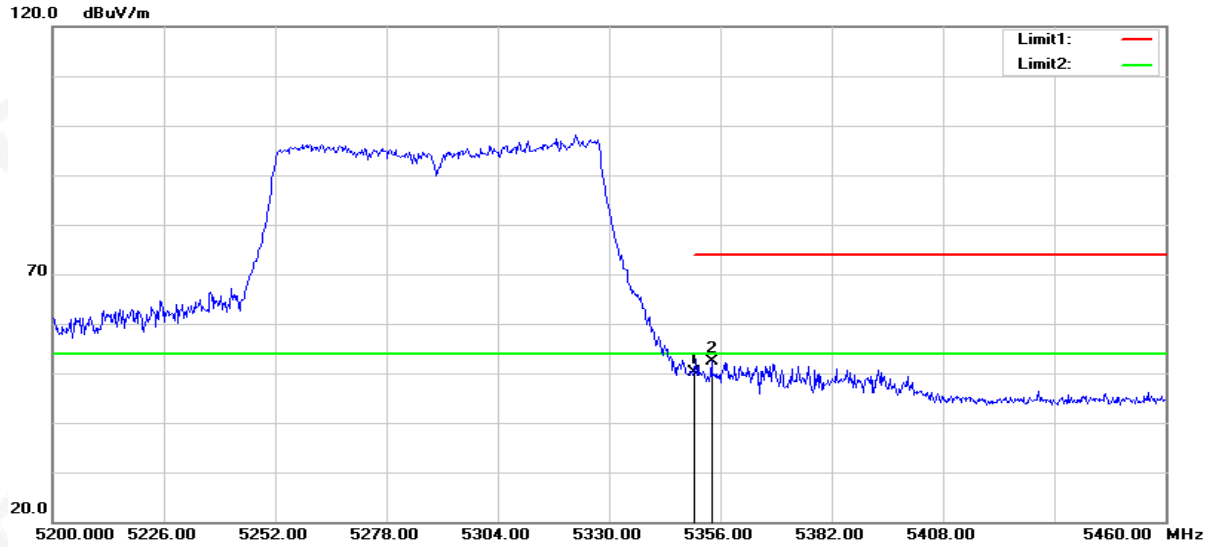
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5077.000	50.86	-5.56	45.30	54.00	-8.70	peak
2	5150.000	48.66	-5.77	42.89	54.00	-11.11	peak

802.11ac80-L-V



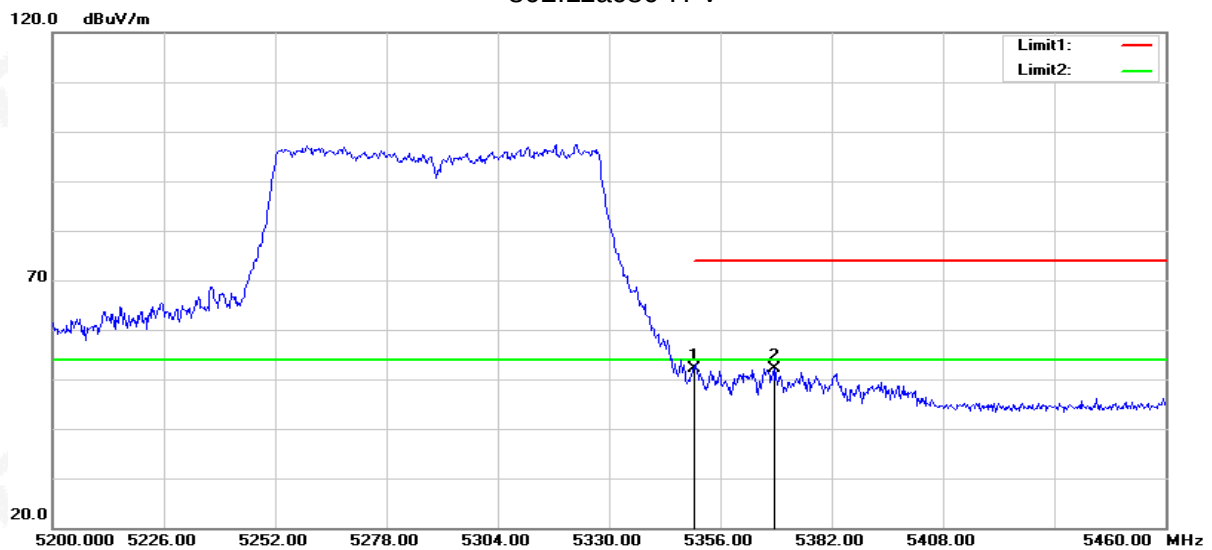
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5070.250	51.35	-5.59	45.76	54.00	-8.24	peak
2	5150.000	49.42	-5.77	43.65	54.00	-10.35	peak

802.11ac80-H-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	55.54	-5.33	50.21	54.00	-3.79	peak
2	5353.920	57.81	-5.31	52.50	54.00	-1.50	peak

802.11ac80-H-V

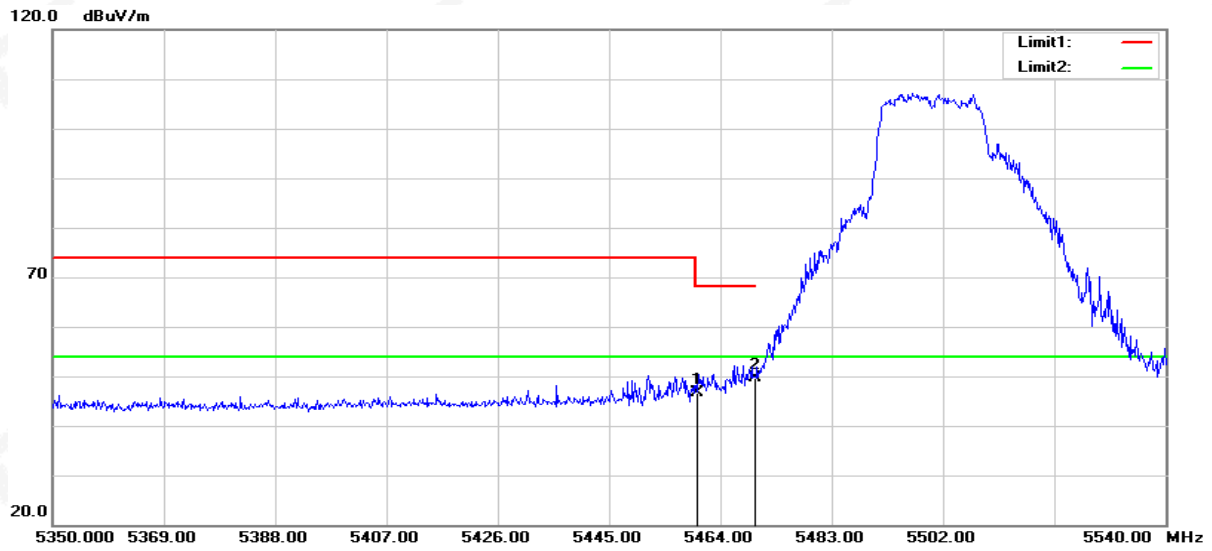


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	57.40	-5.33	52.07	54.00	-1.93	peak
2	5368.740	57.49	-5.25	52.24	54.00	-1.76	peak

Remark:

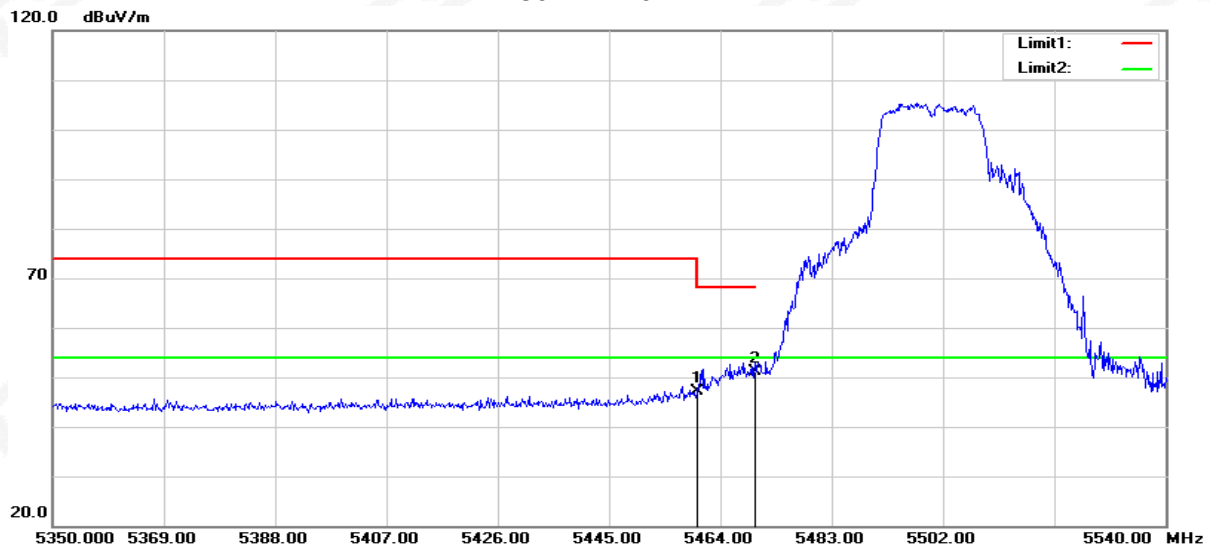
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. All modes have been measured, only worst mode was reported.

U-NII-2C (5.470-5.725) GHz

MIMO
802.11n20-L-H


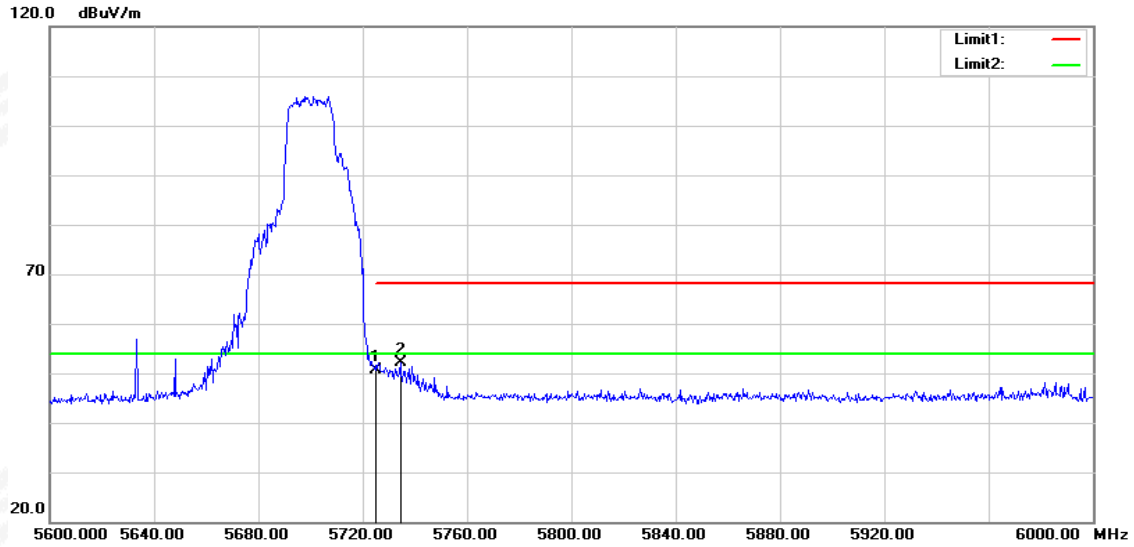
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	51.57	-4.82	46.75	68.20	-21.45	peak
2	5470.000	54.50	-4.78	49.72	68.20	-18.48	peak

802.11n20-L-V



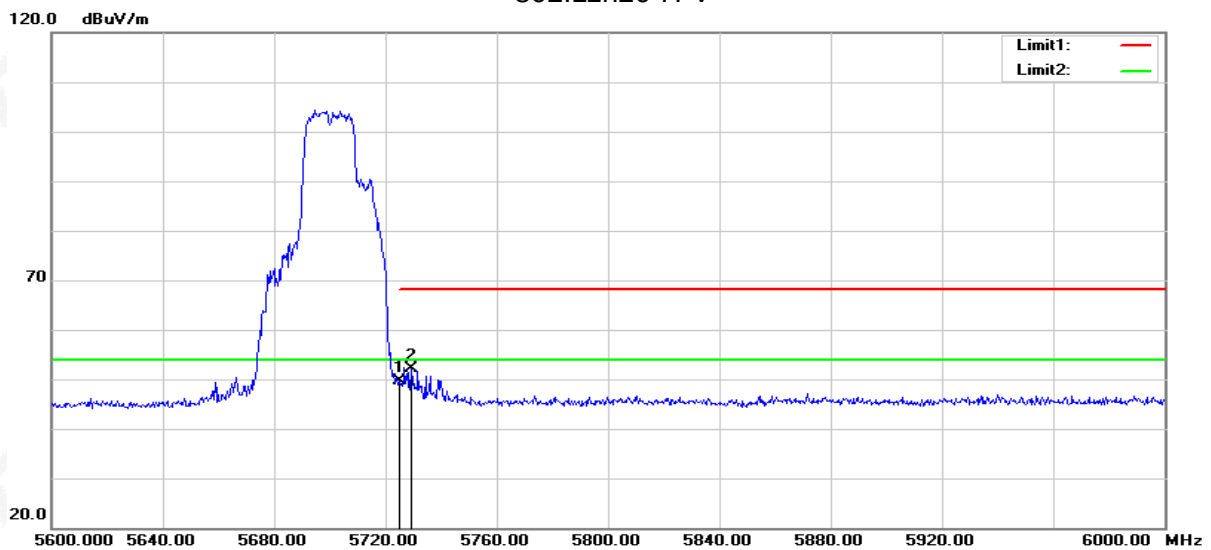
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	51.84	-4.82	47.02	68.20	-21.18	peak
2	5470.000	55.80	-4.78	51.02	68.20	-17.18	peak

802.11n20-H-H



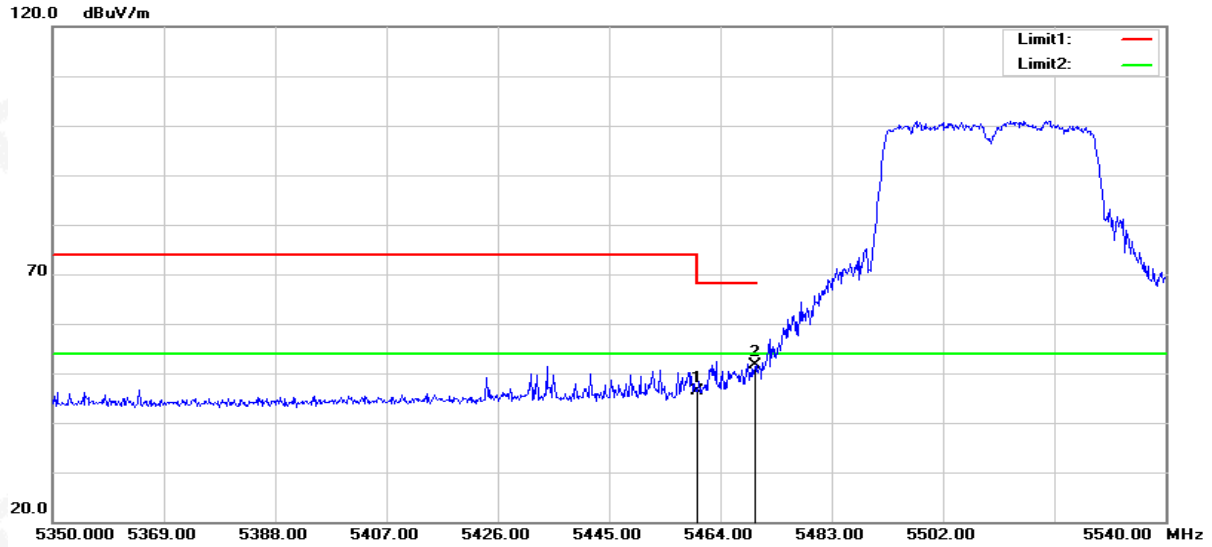
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	55.00	-4.48	50.52	68.20	-17.68	peak
2	5734.400	56.55	-4.42	52.13	68.20	-16.07	peak

802.11n20-H-V



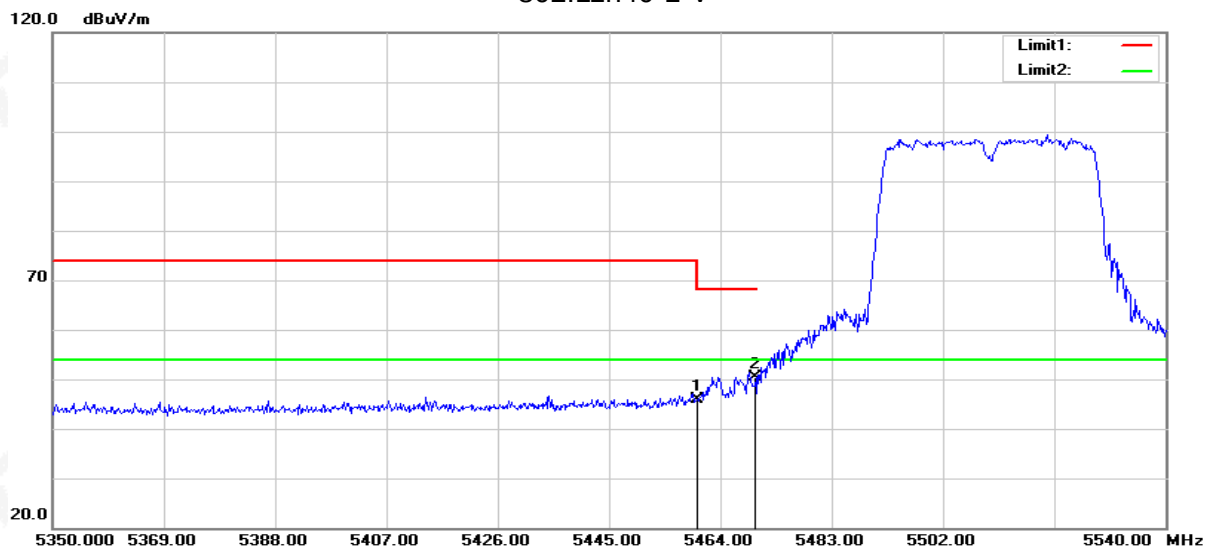
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	54.11	-4.48	49.63	68.20	-18.57	peak
2	5729.200	56.47	-4.46	52.01	68.20	-16.19	peak

802.11n40-L-H



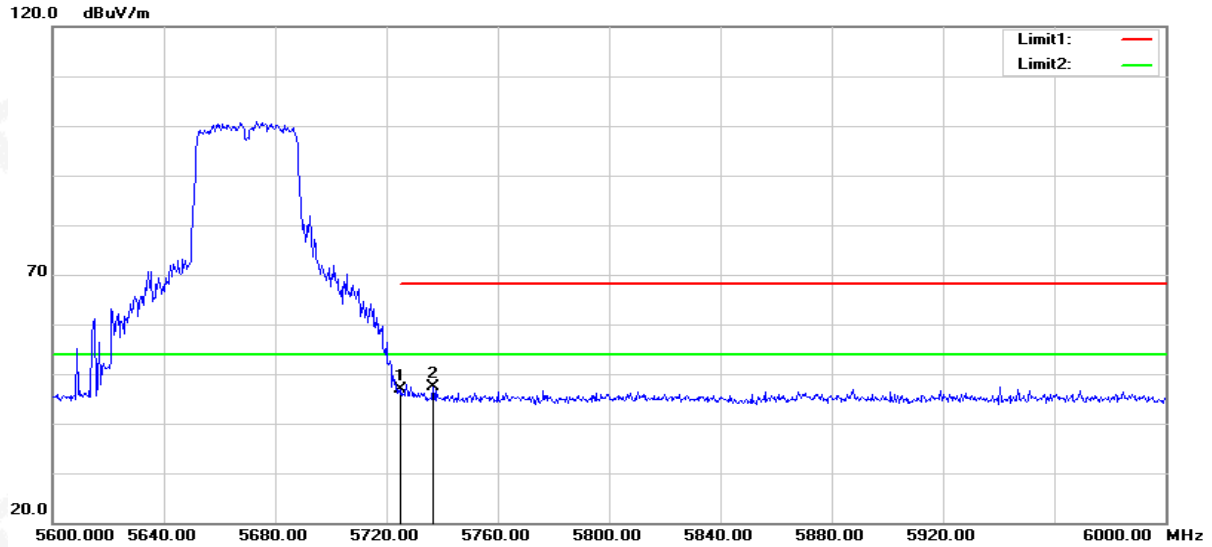
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	51.27	-4.82	46.45	68.20	-21.75	peak
2	5470.000	56.34	-4.78	51.56	68.20	-16.64	peak

802.11n40-L-V



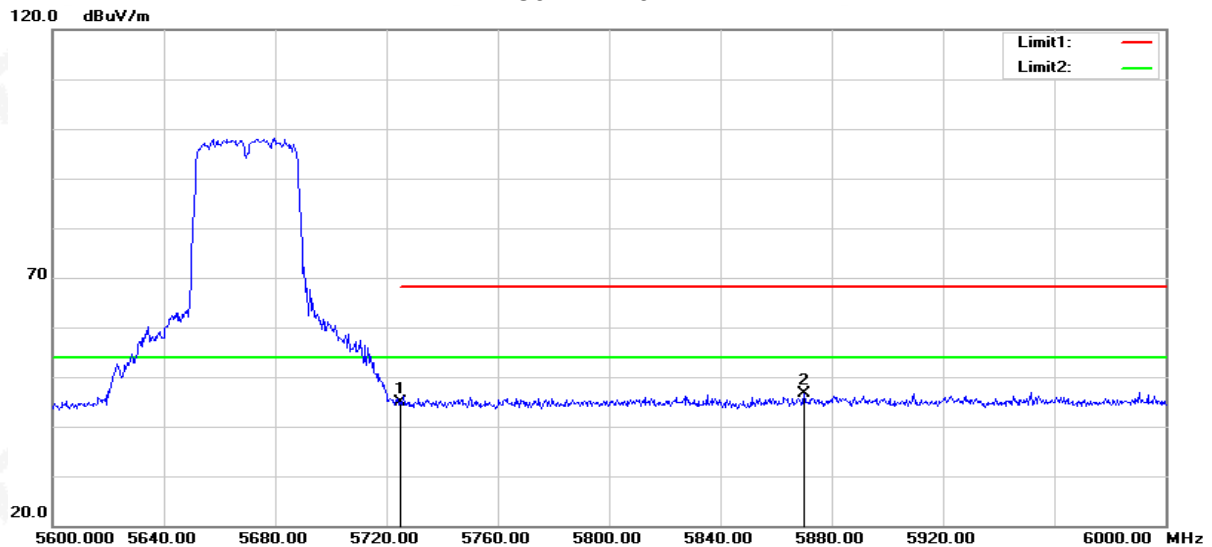
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	50.67	-4.82	45.85	68.20	-22.35	peak
2	5470.000	55.23	-4.78	50.45	68.20	-17.75	peak

802.11n40-H-H



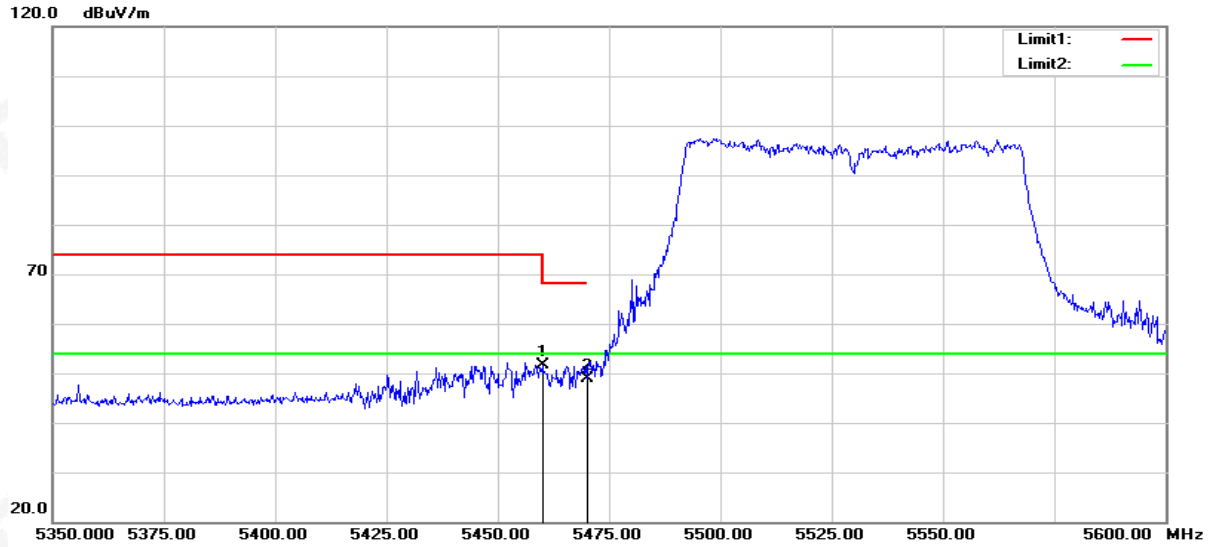
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	51.26	-4.48	46.78	68.20	-21.42	peak
2	5736.800	51.68	-4.41	47.27	68.20	-20.93	peak

802.11n40-H-V



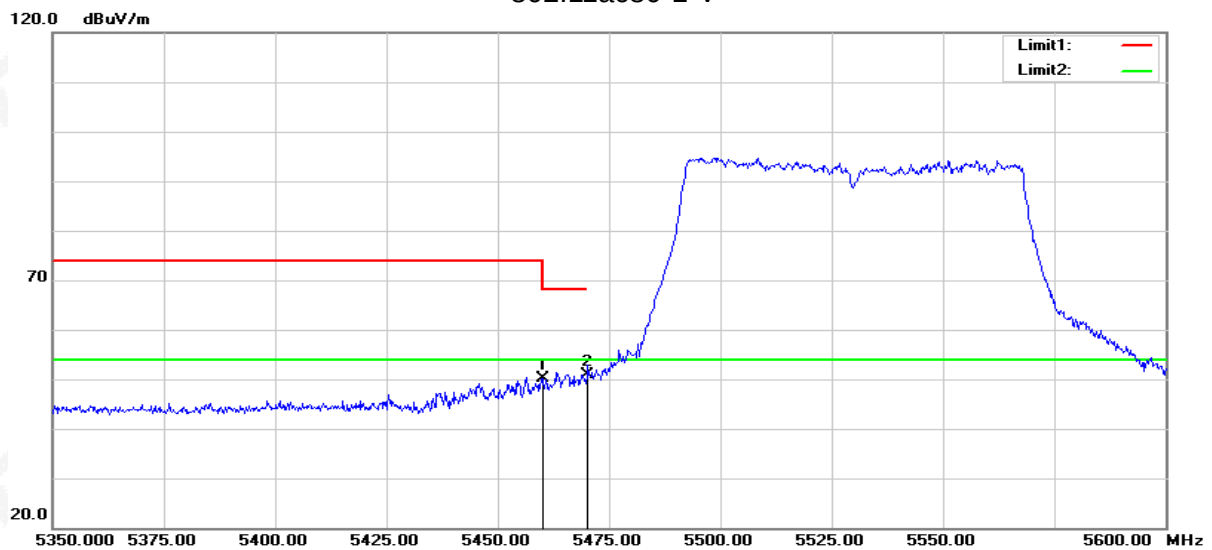
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	49.46	-4.48	44.98	68.20	-23.22	peak
2	5870.000	50.43	-3.74	46.69	68.20	-21.51	peak

802.11ac80-L-H



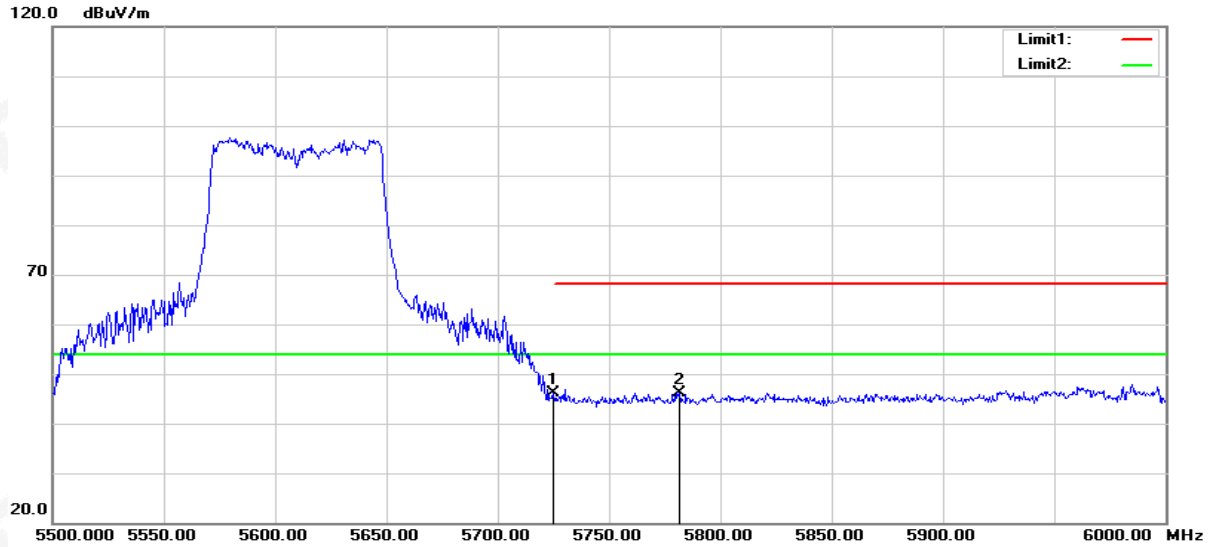
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	56.50	-4.82	51.68	68.20	-16.52	peak
2	5470.000	53.71	-4.78	48.93	68.20	-19.27	peak

802.11ac80-L-V



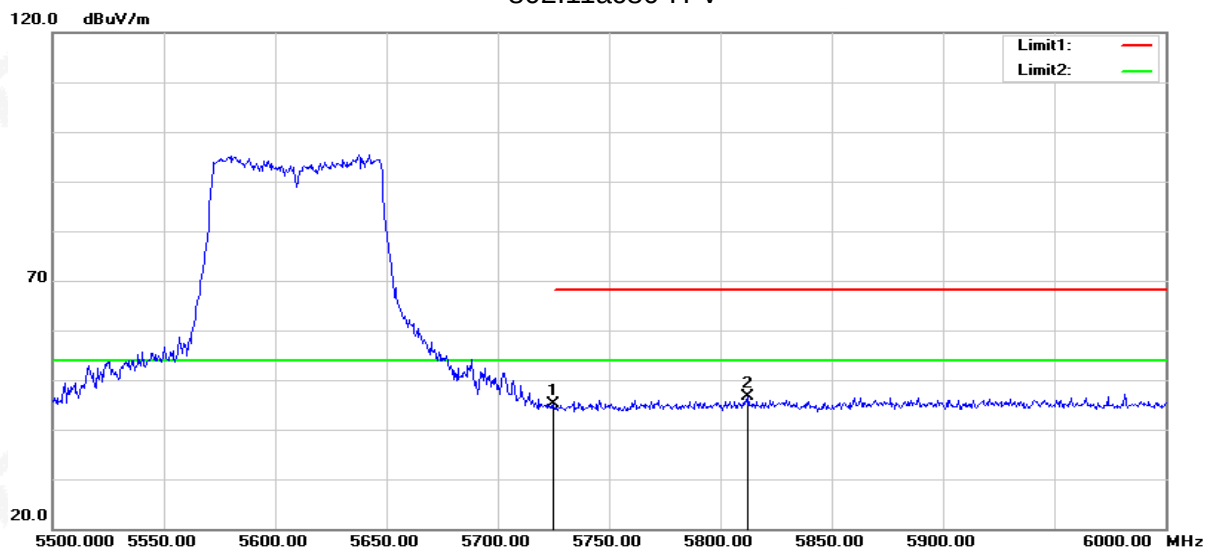
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	54.92	-4.82	50.10	68.20	-18.10	peak
2	5470.000	55.59	-4.78	50.81	68.20	-17.39	peak

802.11ac80-H-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	50.49	-4.48	46.01	68.20	-22.19	peak
2	5781.500	50.31	-4.14	46.17	68.20	-22.03	peak

802.11ac80-H-V



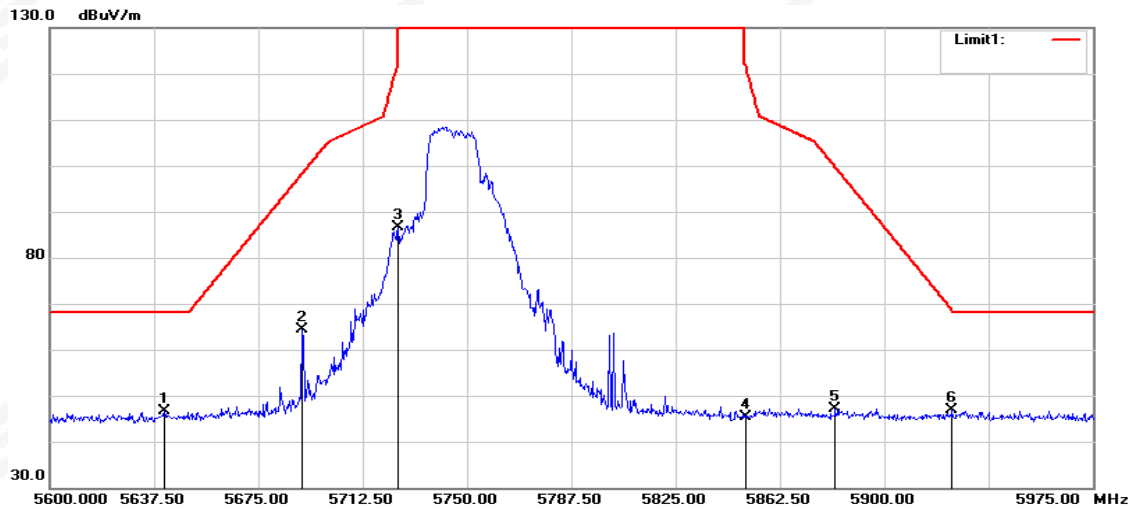
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	49.54	-4.48	45.06	68.20	-23.14	peak
2	5812.500	50.50	-3.97	46.53	68.20	-21.67	peak

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

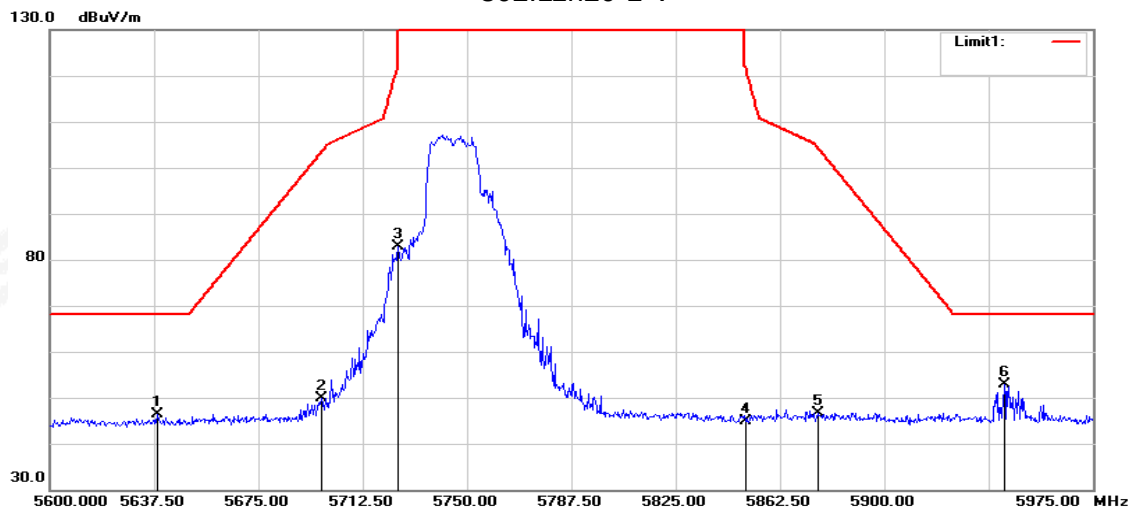
2. All modes have been measured, only worst mode was reported.

U-NII-3 (5.725-5.850) GHz

MIMO
802.11n20-L-H


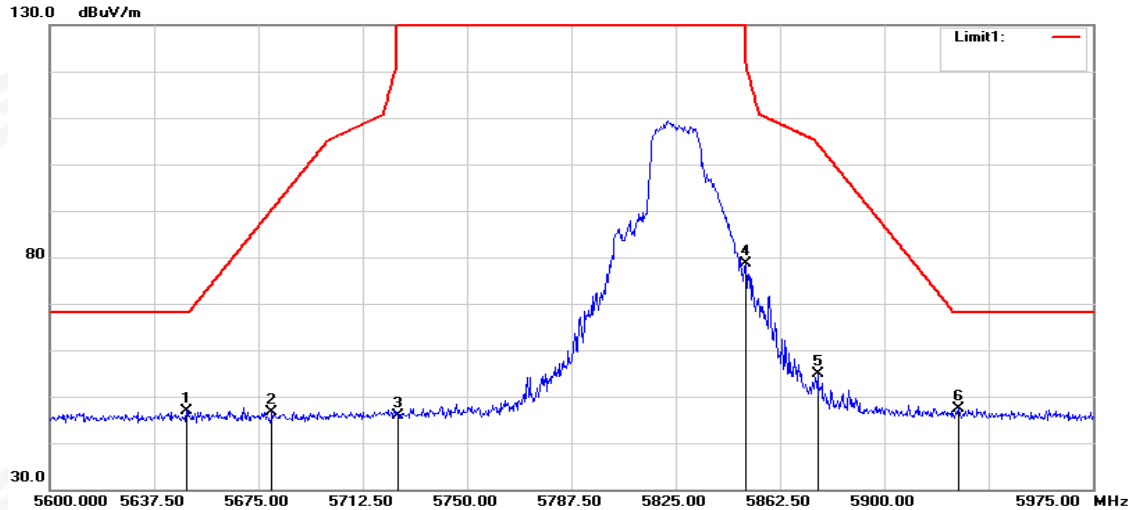
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5641.250	51.40	-4.75	46.65	68.20	-21.55	peak
2	5690.750	69.09	-4.65	64.44	98.36	-33.92	peak
3	5725.000	91.08	-4.48	86.60	122.20	-35.60	peak
4	5850.000	49.20	-3.82	45.38	122.20	-76.82	peak
5	5882.375	50.91	-3.69	47.22	99.74	-52.52	peak
6	5924.375	50.35	-3.59	46.76	68.66	-21.90	peak

802.11n20-L-V



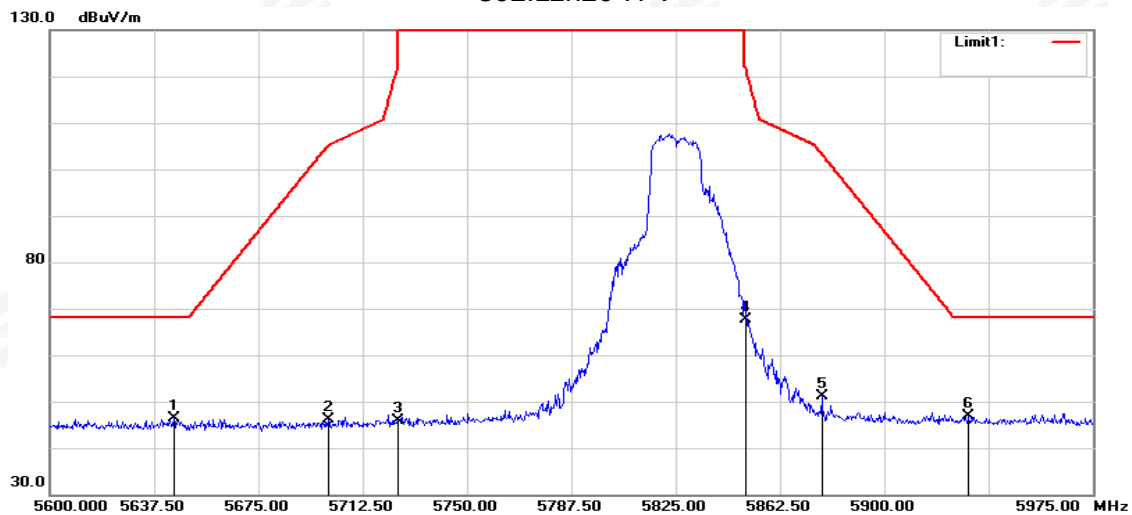
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5638.625	51.22	-4.76	46.46	68.20	-21.74	peak
2	5697.500	54.51	-4.64	49.87	103.35	-53.48	peak
3	5725.000	87.34	-4.48	82.86	122.20	-39.34	peak
4	5850.000	48.67	-3.82	44.85	122.20	-77.35	peak
5	5876.000	50.42	-3.72	46.70	104.46	-57.76	peak
6	5943.125	56.41	-3.56	52.85	68.20	-15.35	peak

802.11n20-H-H



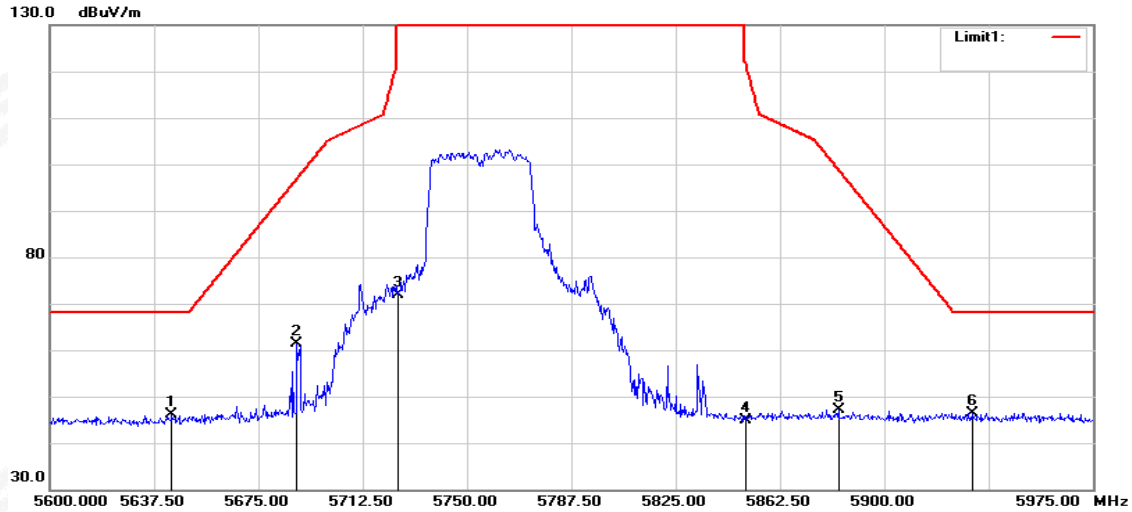
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5649.125	51.74	-4.74	47.00	68.20	-21.20	peak
2	5679.875	51.43	-4.68	46.75	90.31	-43.56	peak
3	5725.000	50.48	-4.48	46.00	122.20	-76.20	peak
4	5850.000	82.55	-3.82	78.73	122.20	-43.47	peak
5	5876.000	58.70	-3.72	54.98	104.46	-49.48	peak
6	5926.625	51.09	-3.59	47.50	68.20	-20.70	peak

802.11n20-H-V



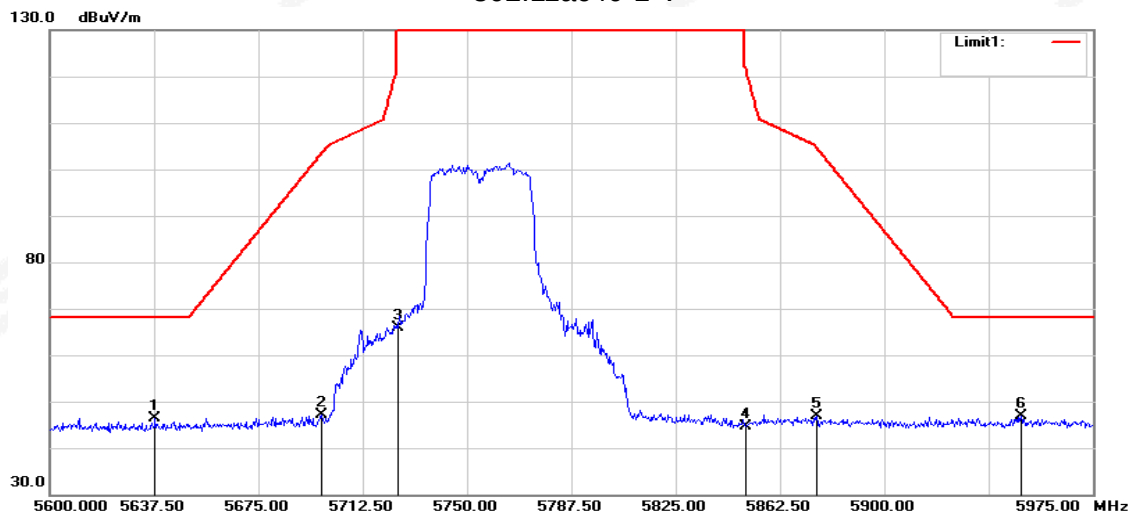
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5644.625	51.18	-4.75	46.43	68.20	-21.77	peak
2	5700.125	50.85	-4.64	46.21	105.23	-59.02	peak
3	5725.000	50.29	-4.48	45.81	122.20	-76.39	peak
4	5850.000	71.39	-3.82	67.57	122.20	-54.63	peak
5	5877.500	54.93	-3.71	51.22	103.35	-52.13	peak
6	5930.375	50.50	-3.58	46.92	68.20	-21.28	peak

802.11ac40-L-H



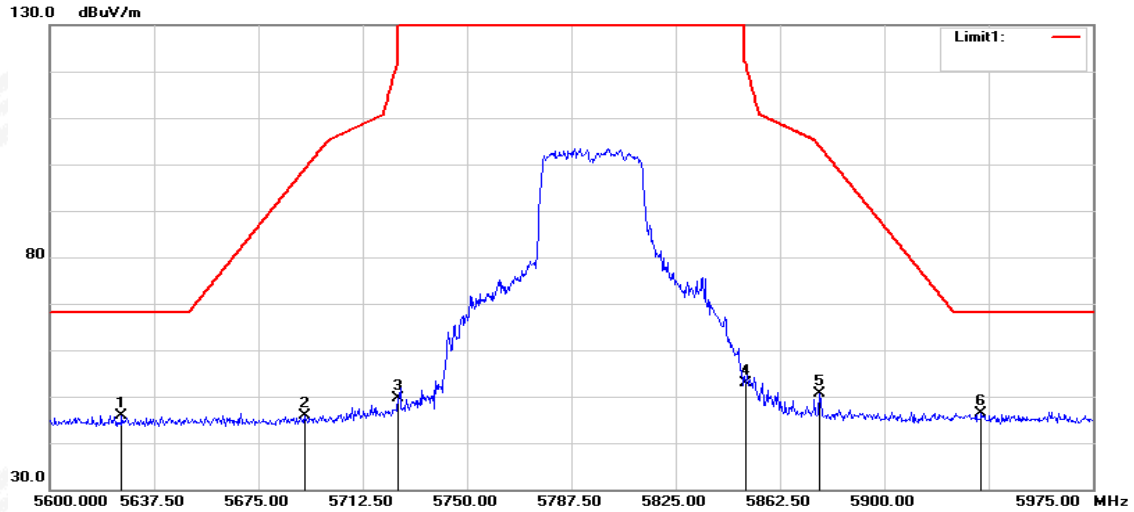
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5643.875	50.91	-4.75	46.16	68.20	-22.04	peak
2	5688.875	66.03	-4.66	61.37	96.97	-35.60	peak
3	5725.000	76.31	-4.48	71.83	122.20	-50.37	peak
4	5850.000	48.73	-3.82	44.91	122.20	-77.29	peak
5	5883.500	50.81	-3.69	47.12	98.91	-51.79	peak
6	5931.500	50.06	-3.58	46.48	68.20	-21.72	peak

802.11ac40-L-V



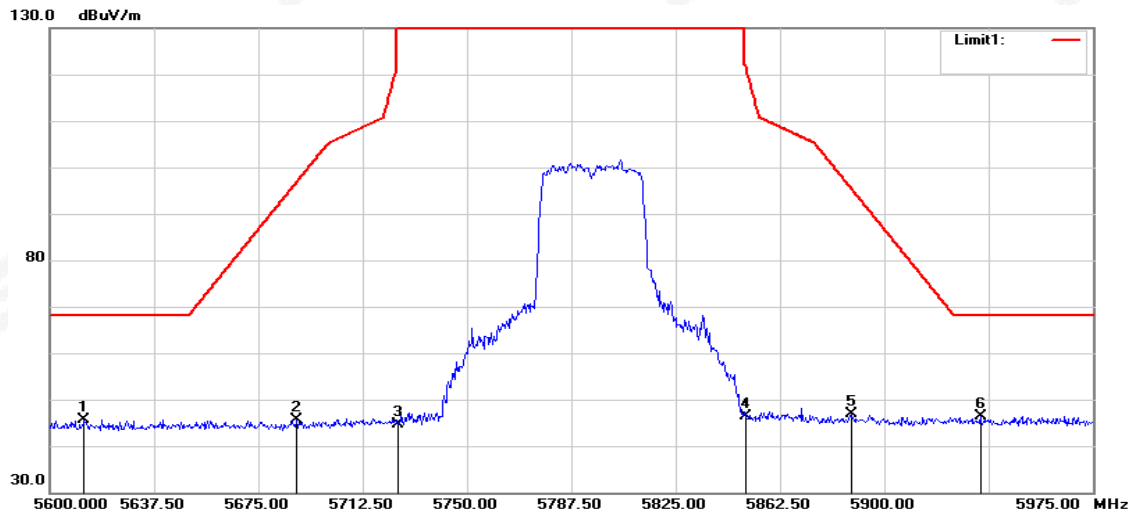
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5637.875	51.07	-4.76	46.31	68.20	-21.89	peak
2	5697.500	51.86	-4.64	47.22	103.35	-56.13	peak
3	5725.000	70.26	-4.48	65.78	122.20	-56.42	peak
4	5850.000	48.49	-3.82	44.67	122.20	-77.53	peak
5	5875.625	50.56	-3.72	46.84	104.74	-57.90	peak
6	5949.125	50.38	-3.55	46.83	68.20	-21.37	peak

802.11ac40-H-H



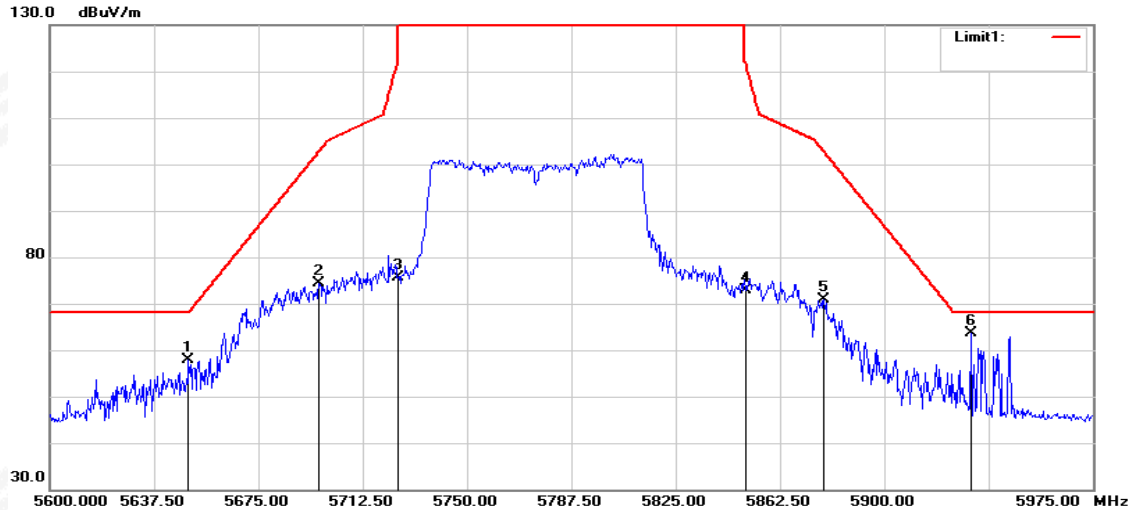
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5625.875	50.62	-4.79	45.83	68.20	-22.37	peak
2	5691.500	50.62	-4.65	45.97	98.91	-52.94	peak
3	5725.000	54.22	-4.48	49.74	122.20	-72.46	peak
4	5850.000	56.79	-3.82	52.97	122.20	-69.23	peak
5	5876.750	54.30	-3.72	50.58	103.91	-53.33	peak
6	5934.875	50.02	-3.57	46.45	68.20	-21.75	peak

802.11ac40-H-V



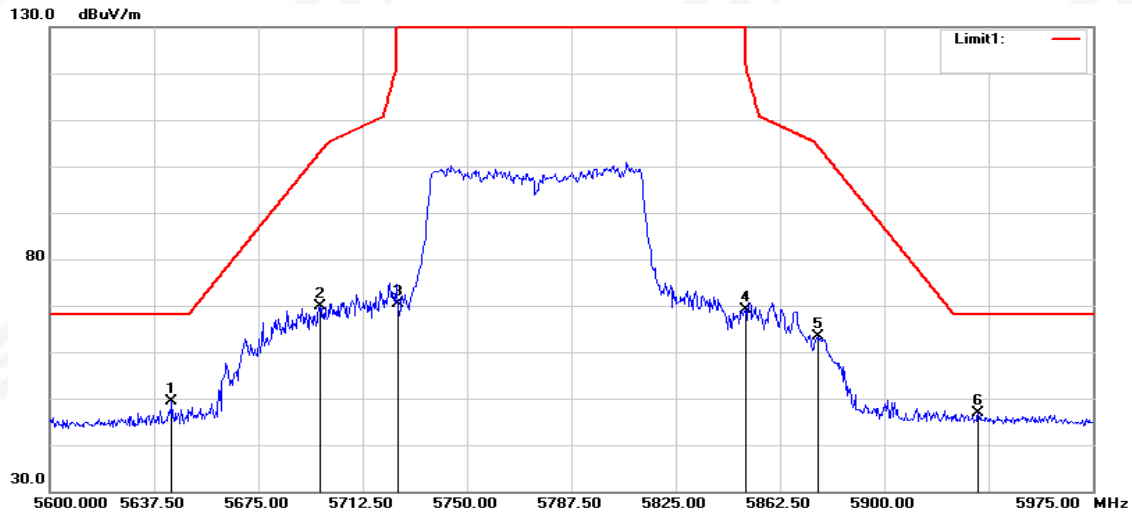
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5612.375	50.48	-4.82	45.66	68.20	-22.54	peak
2	5688.875	50.21	-4.66	45.55	96.97	-51.42	peak
3	5725.000	49.07	-4.48	44.59	122.20	-77.61	peak
4	5850.000	50.20	-3.82	46.38	122.20	-75.82	peak
5	5888.000	50.43	-3.67	46.76	95.58	-48.82	peak
6	5934.500	50.06	-3.57	46.49	68.20	-21.71	peak

802.11ac80-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5649.875	62.71	-4.74	57.97	68.20	-10.23	peak
2	5696.750	78.94	-4.65	74.29	102.80	-28.51	peak
3	5725.000	80.20	-4.48	75.72	122.20	-46.48	peak
4	5850.000	76.65	-3.82	72.83	122.20	-49.37	peak
5	5878.250	74.52	-3.70	70.82	102.80	-31.98	peak
6	5931.125	67.11	-3.58	63.53	68.20	-4.67	peak

802.11ac80-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5643.875	54.07	-4.75	49.32	68.20	-18.88	peak
2	5697.125	74.46	-4.64	69.82	103.07	-33.25	peak
3	5725.000	74.97	-4.48	70.49	122.20	-51.71	peak
4	5850.000	72.96	-3.82	69.14	122.20	-53.06	peak
5	5876.375	66.98	-3.72	63.26	104.18	-40.92	peak
6	5933.750	50.35	-3.58	46.77	68.20	-21.43	peak

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

2. All modes have been measured only worst mode was reported.

4. POWER SPECTRAL DENSITY TEST

4.1 LIMIT

1. For mobile and portable client devices in the 5.15-5.25 GHz band, , the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
3. For the band 5.725-5.850 GHz, the peak power spectral density shall not exceed 30 dBm in any 500KHz band. If transmitting antenna directional gain is greater than 6 dBi, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.2 TEST PROCEDURE

1. The setting follows Method SA-1 of FCC KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.
For devices operating in the band, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (*i.e.*, 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:
 - a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
 - b) Set $VBW \geq 3$ RBW.
 - c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log (500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ kHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
 - d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log (1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
 - e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.
 - f) Please refer to ANSI C63.10-2020 Section 12.6 Method SA-2.

Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the sections 5.c) and 5.d) above, since $RBW=100 \text{ KHz}$ is available on nearly all spectrum analyzers.

4.3 DEVIATION FROM STANDARD

No deviation.

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

4.6 TEST RESULTS

Note: The test data please reference to attachment “STS2511130W33_Appendix 5G WIFI”.

For U-NII 3:

1. Total PSD(dBm/500KHz) = Total PSD(dBm/510KHz) + RBW Factor
2. RBW Factor = $10 * \log(500/510)$

5. DUTY CYCLE

5.1 TEST STANDARD

Please refer to ANSI C63.10-2020 Section 12.2

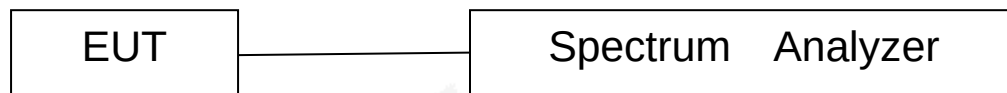
5.2 TEST PROCEDURE

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Zero
RB	set RBW to the largest available value
VB	$VBW \geq RBW$.
Detector	Peak
Trace	Clear Write
Sweep Time	Auto

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 5 Unless otherwise a special operating condition is specified in the follows during the testing.

5.6 TEST RESULTS

Note: The test data please reference to attachment “STS2511130W33_Appendix 5G WIFI”.

6. BANDWIDTH MEASUREMENT

6.1 EMISSION BANDWIDTH (EBW) 26 BANDWID PROCEDURES / LIMIT

The following procedure shall be used for measuring 26 bandwidth

6.1.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW $\geq$ RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.5 TEST RESULTS

Note: The test data please reference to attachment "STS2511130W33_Appendix 5G WIFI".

6.2 OCCUPIED BANDWIDTH (99%) TEST APPLIED PROCEDURES / LIMIT

The following procedure shall be used for measuring (99 %) power bandwidth.

6.2.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures v02r01.

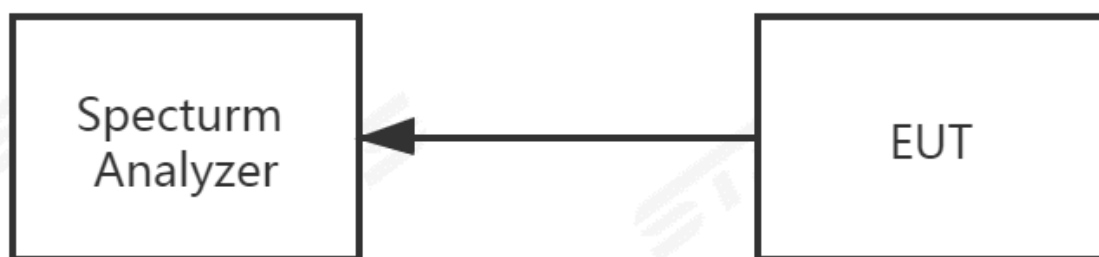
The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

6.2.2 DEVIATION FROM STANDARD

No deviation.

6.2.3 TEST SETUP



6.2.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

6.2.5 TEST RESULTS

Note: The test data please reference to attachment “STS2511130W33_Appendix 5G WIFI”.

6.3 MINIMUM EMISSION BANDWIDTH(6 DB) PROCEDURES / LIMIT

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth.

6.3.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures v02r01.
 - a) Set RBW = 100 kHz.
 - b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
 - c) Detector = Peak.
 - d) Trace mode = max hold.
 - e) Sweep = auto couple.
 - f) Allow the trace to stabilize.
 - g) 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.

6.3.2 DEVIATION FROM STANDARD

No deviation.

6.3.3 TEST SETUP



6.3.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

6.3.5 TEST RESULTS

Note: The test data please reference to attachment "STS2511130W33_Appendix 5G WIFI".

7. MAXIMUM OUTPUT POWER

7.1 LIMIT

For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz, If transmitting antennas of directional gain greater than 6 dBi are used.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used.

FCC Part15 (15.407) , Subpart E				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.407(a) (1) (iv)	Max Output Power	0.25 watt	5150-5250	PASS
		The lesser of 250 mW or 11 dBm + 10 log (26 dB emission bandwidth)	5250-5350 5470-5725	
15.407(a) (3)		1 watt	5725-5895	

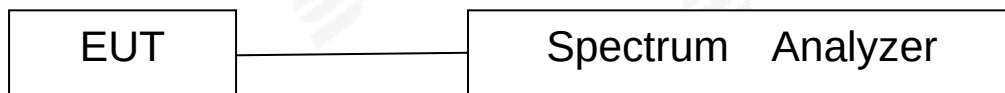
7.2 TEST PROCEDURE

Please refer to ANSI C63.10-2020 Section 12.4.2 Method SA-2

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 5 Unless otherwise a special operating condition is specified in the follows during the testing.

7.6 TEST RESULTS

Note: The test data please reference to attachment "STS2511130W33_Appendix 5G WIFI".

8. AUTOMATICALLY DISCONTINUE TRANSMISSION

8.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

8.2 TEST RESULT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission

9. ANTENNA REQUIREMENT

9.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

9.2 EUT ANTENNA

The EUT antenna is FPC Antenna. It comply with the standard requirement.



APPENDIX - PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

*****END OF THE REPORT*****