Radio Test Report

Report No.:STS2405101W02

Issued for

DZS Inc.

5700 Tennyson Parkway Plano TX 75024 United States Of America

Product Name:	Optical Network Terminal (ONT)
Brand Name:	DZS
Model Name:	2466GN
Series Model(s):	N/A
FCC ID:	PJZ2466GN
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 .....: DZS Inc.

Address .....: 5700 Tennyson Parkway Plano TX 75024 United States Of America

Manufacturer's Name.....: DZS Inc.

Address .....: 5700 Tennyson Parkway Plano TX 75024 United States Of America

Factory 1 .....: Bowei Technology Co., Ltd

Address 1 .....: 2F, Building 2, No. 306 Gushui Road, Haining Economic Development Zone, Haining, Jiaxing City, Zhejiang, China.

Factory 2 .....: BLUEWAY VINA CO.,LTD

Address 2 .....: Lot CN17,Van Trung In, Vietyen Dist, Bacgiang Pro Vietnam.

Product Description

Product Name.....: Optical Network Terminal (ONT)

Brand Name.....: DZS

Model Name .....: 2466GN

Series Model(s) .....: N/A

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.....: 23 May 2024

Date (s) of performance of tests .....: 23 May 2024 ~ 03 June 2024

Date of Issue .....: 03 June 2024

Test Result.....: **Pass**

Testing Engineer : Aaron Bu

(Aaron Bu)

Technical Manager : Chris Chen

(Chris Chen)

Authorized Signatory : Bovey Yang

(Bovey Yang)

SHENZHEN STS TEST SERVICES CO., LTD. TESTING APPROVAL

Table of Contents

	Page
1 . SUMMARY OF TEST RESULTS	**5**
1.1 TEST FACTORY	6
1.2 MEASUREMENT UNCERTAINTY	6
2 . GENERAL INFORMATION	**7**
2.1 GENERAL DESCRIPTION OF THE EUT	7
2.2 DESCRIPTION OF TEST MODES	11
2.3 TEST SOFTWARE AND POWER LEVEL	13
2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	14
2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS	15
2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS	16
3 . EMC EMISSION TEST	**17**
3.1 CONDUCTED EMISSION MEASUREMENT	17
3.2 RADIATED EMISSION AND (BANDEDGE) MEASUREMENT	21
4. ANTENNA REQUIREMENT	**66**
4.1 STANDARD REQUIREMENT	66
4.2 EUT ANTENNA	66
APPENDIX - PHOTOS OF TEST SETUP	**67**

Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	03 June 2024	STS2405101W02	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(b)/15.205/15.209	Radiated Emission And (bandedge Emissions) Measurement	PASS
15.203/15.204	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 ± U**, where expended 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	±0.755dB
2	Unwanted Emissions, conducted	±2.874dB
3	All emissions, radiated 9K-30MHz	±3.80dB
4	All emissions, radiated 30M-1GHz	±4.18dB
5	All emissions, radiated 1G-6GHz	±4.90dB
6	All emissions, radiated>6G	±5.24dB
7	Conducted Emission (9KHz-150KHz)	±2.19dB
8	Conducted Emission (150KHz-30MHz)	±2.53dB
9	Occupied Channel Bandwidth	±3.5%
10	Power Spectral Density, conducted	±1.245dB
11	Duty Cycle	±3.2%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Optical Network Terminal (ONT)	
Brand Name	DZS	
Model Name	2466GN	
Series Model(s)	N/A	
Model Difference	N/A	
Product Description	The EUT is a Optical Network Terminal (ONT)	
	Operation Frequency	5.2GWLAN: IEEE 802.11a/ n(HT20)/ac(VHT20)/ax(HE20): 5.180GHz-5.240GHz IEEE 802.11n(HT40)/ac(VHT40)/ax(HE40): 5.190GHz-5.230GHz IEEE 802.11ac(VHT80)/ax(HE80):5.210GHz IEEE 802.11 ac(VHT160)/ax(HE160): 5.250GHz 5.3GWLAN: IEEE 802.11a/ n(HT20)/ac(VHT20)/ax(HE20): 5.260GHz-5.320GHz IEEE 802.11 n(HT40)/ac(VHT40)/ax(HE40): 5.270GHz-5.310GHz IEEE 802.11ac(VHT80)/ax(HE80): 5.290GHz 5.6G WLAN: IEEE 802.11a/ n(HT20)/ac(VHT20) /ax(HE20): 5.500GHz-5.700GHz IEEE 802.11 n(HT40)/ac(VHT40)/ax(HE40): 5.510GHz-5.670GHz IEEE 802.11ac(VHT80)/ax(HE80): 5.530GHz-5.610GHz IEEE 802.11 ac(VHT160)/ax(HE160):5.570GHz 5.8G WLAN: IEEE 802.11a/ n(HT20)/ac(VHT20)/ax(HE20): 5.745GHz-5.825GHz IEEE 802.11a/ n(HT40)/ac(VHT40)/ax(HE40): 5.755GHz-5.795GHz IEEE 802.11ac(VHT80)/ax(HE80):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 802.11ax(OFDM, OFDMA): BPSK,QPSK,16-QAM,64-QAM,256-QAM, 1024QAM	
	Antenna Type:	internal antenna	
	Antenna Gain (dBi):	5.2GWLAN: ANT 1: 2.85, ANT 2: 2.85 MIMO: 5.86 5.3GWLAN: ANT 1: 2.77, ANT 2: 2.77 MIMO: 5.78 5.6G WLAN：ANT 1: 2.56, ANT 2: 2.56 MIMO: 5.57 5.8G WLAN: ANT 1: 2.78, ANT 2: 2.78 MIMO: 5.79	
	Max.Output Power(Conducted):	16.03dBm	

	More details of EUT technical specification, please refer to the User Manual.
Test Channel	Please refer to the Note 3.
Adapter	Model 1: RD1202000-C55-154MG Input: 100-240V AC, 50/60Hz,1.0A MAX Output:DC12V 2A Model 2: TPA289-24120-US Input: 100-240V AC, 50/60Hz,0.7A Output:DC 12 V, 2A
Hardware version number	V2.0
Software version number	znid-13723
Connecting I/O Port(s)	Please refer to the Note 1.

Note

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.
2. The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.

3.

Channel List for 802.11a/n/ac/ax(20MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	40	5200	44	5220	48	5240
52	5260	56	5280	60	5300	64	5320
100	5500	104	5520	108	5540	112	5560
116	5580	120	5600	124	5620	128	5640
132	5660	136	5680	140	5700	149	5745
153	5765	157	5785	161	5805	165	5825

Channel List for 802.11n/ac/ax(40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230	54	5270	62	5310
102	5510	110	5550	118	5590	126	5630
134	5670	151	5755	159	5795	--	--

Channel List for 802.11ac/ax(80MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	58	5290	106	5530	122	5610
155	5775	/	/	/	/	/	/

Channel List for 802.11ac/ax(160MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
50	5250	114	5570	/	/	/	/

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:

Channel List for 802.11a/n/ac/ax (20MHz)		
Frequency Band	Channel	Test Frequency (MHz)
Band I	CH 36	5180
Band I	CH 40	5200
Band I	CH 48	5240

Band II	CH 52	5260
Band II	CH 60	5300
Band II	CH 64	5320
Band III	CH 100	5500
Band III	CH 116	5580
Band III	CH 140	5700
Band Ⅳ	CH 149	5745
Band Ⅳ	CH 157	5785
Band Ⅳ	CH 165	5825

Channel List for 802.11 n/ac/ax (40MHz)		
Frequency Band	EUT Channel	Test Frequency (MHz)
Band I	CH 38	5190
Band I	CH 46	5230
Band II	CH 54	5270
Band II	CH 62	5310
Band III	CH 102	5510
Band III	CH 110	5550
Band III	CH 134	5670
Band Ⅳ	CH 151	5755
Band Ⅳ	CH 159	5795

Channel List for 802.11ac/ax(80MHz)		
Frequency Band	EUT Channel	Test Frequency (MHz)
Band I	CH 42	5210
Band II	CH 58	5290
Band III	CH 106	5530
Band III	CH 122	5610
Band Ⅳ	CH 155	5775

Channel List for 802.11ac/ax(160MHz)		
Frequency Band	EUT Channel	Test Frequency (MHz)
Band I	CH 50	5250
Band II	CH 50	5250
Band III	CH 114	5570

3. KDB 662911 D01 Multiple Transmitter Output v02r01
2) Directional Gain Calculations for In-Band Measurements
a) Basic methodology with NANT transmit antennas, each with the same directional gain GA NT dBi, being driven by NANT transmitter outputs of equal power. Directional gain is to be co mputed as follows:
(i) If any transmit signals are correlated with each other,
Directional gain = GANT + 10 log(NANT) dBi
(ii) If all transmit signals are completely uncorrelated with each other,
Directional gain = GANT

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible 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 CH36&CH40&CH48	6 Mbps
Mode 2	TX IEEE 802.11a CH52&CH60&CH64	6 Mbps
Mode 3	TX IEEE 802.11a CH100&CH116&CH140	6 Mbps
Mode 4	TX IEEE 802.11a CH149&CH157&CH165	6 Mbps
Mode 5	TX IEEE 802.11n20 CH36&CH40&CH48	MCS 0
Mode 6	TX IEEE 802.11n20 CH52&CH60&CH64	MCS 0
Mode 7	TX IEEE 802.11n20 CH100&CH116&CH140	MCS 0
Mode 8	TX IEEE 802.11n20 CH149&CH157&CH165	MCS 0
Mode 9	TX IEEE 802.11n40 CH38&CH46	MCS 0
Mode 10	TX IEEE 802.11n40 CH54&CH62	MCS 0
Mode 11	TX IEEE 802.11n40 CH102&CH110&CH134	MCS 0
Mode 12	TX IEEE 802.11n40 CH151&CH159	MCS 0
Mode 13	TX IEEE 802.11ac20 CH36&CH40&CH48	MCS 0
Mode 14	TX IEEE 802.11ac20 CH52&CH60&CH64	MCS 0
Mode 15	TX IEEE 802.11ac20 CH100&CH116&CH140	MCS 0
Mode 16	TX IEEE 802.11ac20 CH149&CH157&CH165	MCS 0
Mode 17	TX IEEE 802.11ac40 CH38&CH46	MCS 0
Mode 18	TX IEEE 802.11ac40 CH54&CH62	MCS 0
Mode 19	TX IEEE 802.11ac40 CH102&CH110&CH134	MCS 0
Mode 20	TX IEEE 802.11ac40 CH151&CH159	MCS 0
Mode 21	TX IEEE 802.11ac80 CH42	MCS 0
Mode 22	TX IEEE 802.11ac80 CH58	MCS 0
Mode 23	TX IEEE 802.11ac80 CH106&CH122	MCS 0

Mode 24	TX IEEE 802.11ac80 CH155	MCS 0
Mode 25	TX IEEE 802.11ac160 CH50(B1)	MCS 0
Mode 26	TX IEEE 802.11ac160 CH50(B2)	MCS 0
Mode 27	TX IEEE 802.11ac160 CH114(B3)	MCS 0
Mode 28	TX IEEE 802.11ax20 CH36&CH40&CH48	MCS 0
Mode 29	TX IEEE 802.11ax20 CH52&CH60&CH64	MCS 0
Mode 30	TX IEEE 802.11ax20 CH100&CH116&CH140	MCS 0
Mode 31	TX IEEE 802.11ax20 CH149&CH157&CH165	MCS 0
Mode 32	TX IEEE 802.11ax40 CH38&CH46	MCS 0
Mode 33	TX IEEE 802.11ax40 CH54&CH62	MCS 0
Mode 34	TX IEEE 802.11ax40 CH102&CH110&CH134	MCS 0
Mode 35	TX IEEE 802.11ax40 CH151&CH159	MCS 0
Mode 36	TX IEEE 802.11ax80 CH42	MCS 0
Mode 37	TX IEEE 802.11ax80 CH58	MCS 0
Mode 38	TX IEEE 802.11ax80 CH106&CH122	MCS 0
Mode 39	TX IEEE 802.11ax80 CH155	MCS 0
Mode 40	TX IEEE 802.11ax160 CH50(B1)	MCS 0
Mode 41	TX IEEE 802.11ax160 CH50(B2)	MCS 0
Mode 42	TX IEEE 802.11ax160 CH114(B3)	MCS 0

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 be tested for all avaiable 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 43: 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)	Power Class	Software For Testing
WIFI(5G)	U-NII-1 (5150MHz-5250MHz)	802.11a	ANT 1: 2.85 ANT 2: 2.85 MIMO: 5.86	Default	accessMTool_REL_3_2_1_5
		802.11n(HT20)		Default	
		802.11n(HT40)		Default	
		802.11ac(VHT20)		Default	
		802.11ac(VHT40)		Default	
		802.11ac(VHT80)		Default	
		802.11ac(VHT160)		Default	
		802.11ax(HE20)		Default	
		802.11ax(HE40)		Default	
		802.11ax(HE80)		Default	
		802.11ax(HE160)		Default	

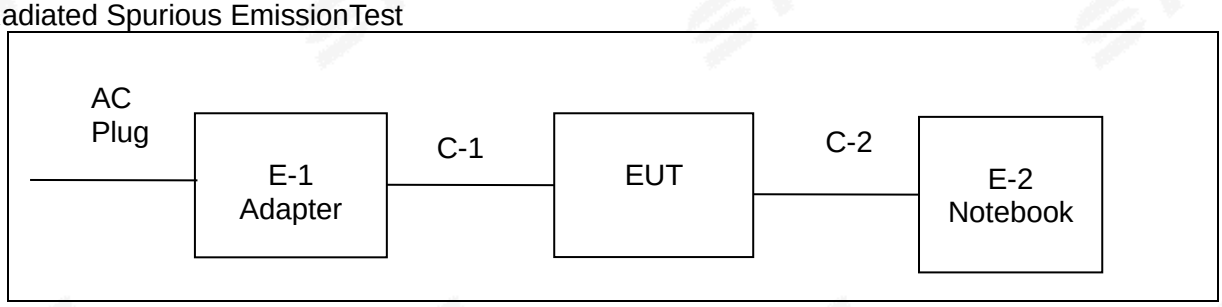
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
WIFI(5G)	U-NII-2A (5250MHz-5350MHz)	802.11a	ANT 1: 2.77 ANT 2: 2.77 MIMO: 5.78	Default	accessMTool_REL_3_2_1_5
		802.11n(HT20)		Default	
		802.11n(HT40)		Default	
		802.11ac(VHT20)		Default	
		802.11ac(VHT40)		Default	
		802.11ac(VHT80)		Default	
		802.11ax(HE20)		Default	
		802.11ax(HE40)		Default	
		802.11ax(HE80)		Default	

RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
WIFI(5G)	U-NII-2C (5470MHz-5725MHz)	802.11a	ANT 1: 2.56 ANT 2: 2.56 MIMO: 5.57	Default	accessMTool_REL_3_2_1_5
		802.11n(HT20)		Default	
		802.11n(HT40)		Default	
		802.11ac(VHT20)		Default	
		802.11ac(VHT40)		Default	
		802.11ac(VHT80)		Default	
		802.11ac(VHT160)		Default	
		802.11ax(HE20)		Default	
		802.11ax(HE40)		Default	
		802.11ax(HE80)		Default	
		802.11ax(HE160)		Default	

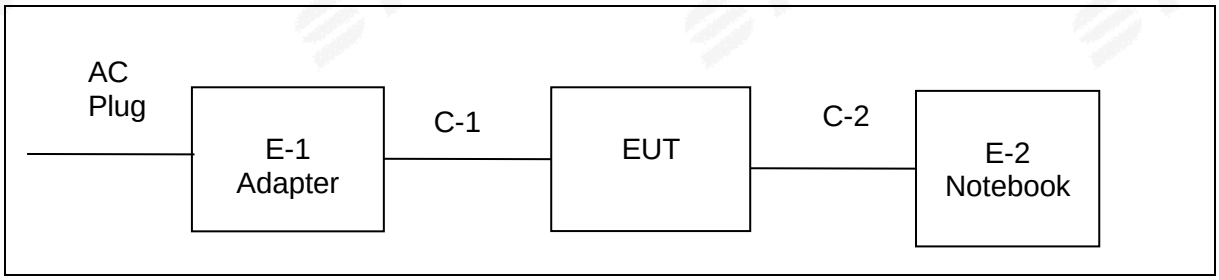
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
WIFI(5G)	U-NII-3 (5725MHz-5895MHz)	802.11a	ANT 1: 2.78 ANT 2: 2.78 MIMO: 5.79	Default	accessMTool_REL_3_2_1_5
		802.11n(HT20)		Default	
		802.11n(HT40)		Default	
		802.11ac(VHT20)		Default	
		802.11ac(VHT40)		Default	
		802.11ac(VHT80)		Default	
		802.11ax(HE20)		Default	
		802.11ax(HE40)		Default	
		802.11ax(HE80)		Default	

2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious EmissionTest



Conducted Emission Test



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.

Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
1	Adapter	RUIDE	RD1202000-C55-154MG	N/A	N/A
	Adapter	TOPOW	TPA289-24120-US	N/A	N/A
2	DC Cable	N/A	N/A	150cm	NO

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
1	LAN Cable	N/A	N/A	>3m	NO
2	Personal computer	DELL	Inspiron 14-3467	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 FOR ALL TEST ITEMS

RF Radiation Test Equipment					
Kind of Equipment	**Manufacturer**	**Type No.**	**Serial No.**	**Last Calibration**	**Calibrated Until**
Temperature & Humidity	SW-108	SuWei	N/A	2024.03.15	2025.03.14
Pre-Amplifier(0.1M -3GHz)	EM	EM330	060665	2024.02.23	2025.02.22
Pre-Amplifier(1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2023.09.26	2024.09.25
Pre-Amplifier(18G-40GHz)	SKET	LNPA_1840-50	SK2018101801	2024.02.23	2025.02.22
Active loop Antenna	ZHINAN	ZN30900C	16035	2023.02.28	2025.02.27
Bilog Antenna	TESEQ	CBL6111D	34678	2022.09.30	2024.09.29
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2023.09.24	2025.09.23
Horn Antenna	A-INFOMW	LB-180400-KF	J211020657	2023.10.10	2025.10.09
Positioning Controller	MF	MF-7802	MF-780208587	N/A	N/A
Signal Analyzer	R&S	FSV 40-N	101823	2023.09.26	2024.09.25
Switch Control Box	N/A	N/A	N/A	N/A	N/A
Filter Box	BALUN Technology	SU319E	BL-SZ1530051	N/A	N/A
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	HONGSHENGFENG	DPS-305AF	17064939	2023.09.26	2024.09.25
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	2023.09.25	2024.09.24
Limtter	CYBERTEK	EM5010	N/A	2023.09.25	2024.09.24
LISN	R&S	ENV216	101242	2023.09.25	2024.09.24
LISN	EMCO	3810/2NM	23625	2023.09.25	2024.09.24
Temperature & Humidity	SW-108	SuWei	N/A	2024.03.15	2025.03.14
Test SW	EZ-EMC	Ver.STSLAB-03A1 CE			

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

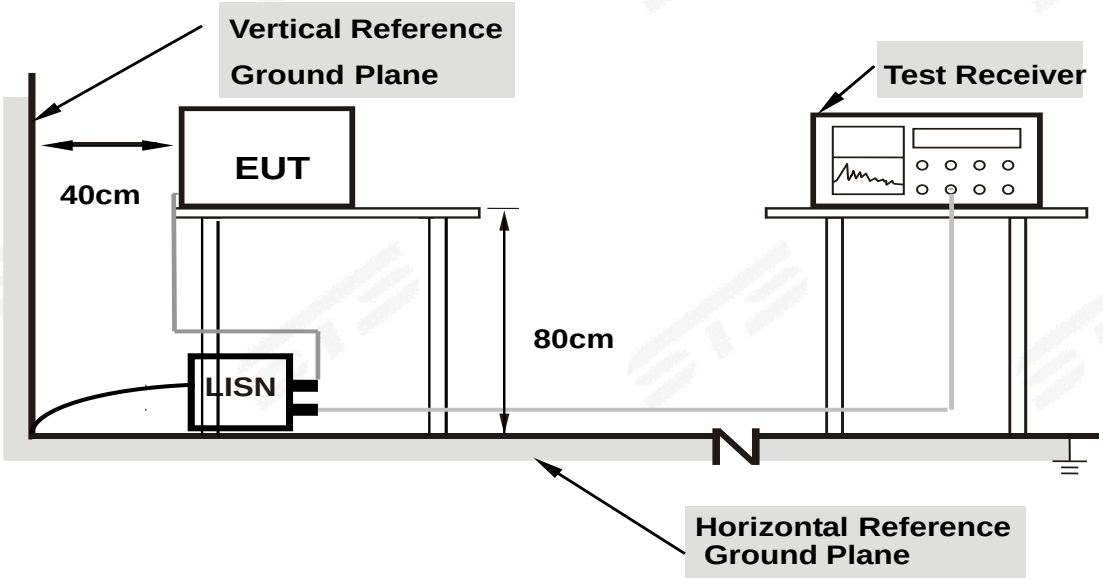
3.1.2 TEST PROCEDURE

a. 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.
b. 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.
c. 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.
d. LISN is at least 80 cm from the nearest part of EUT chassis.
e. 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

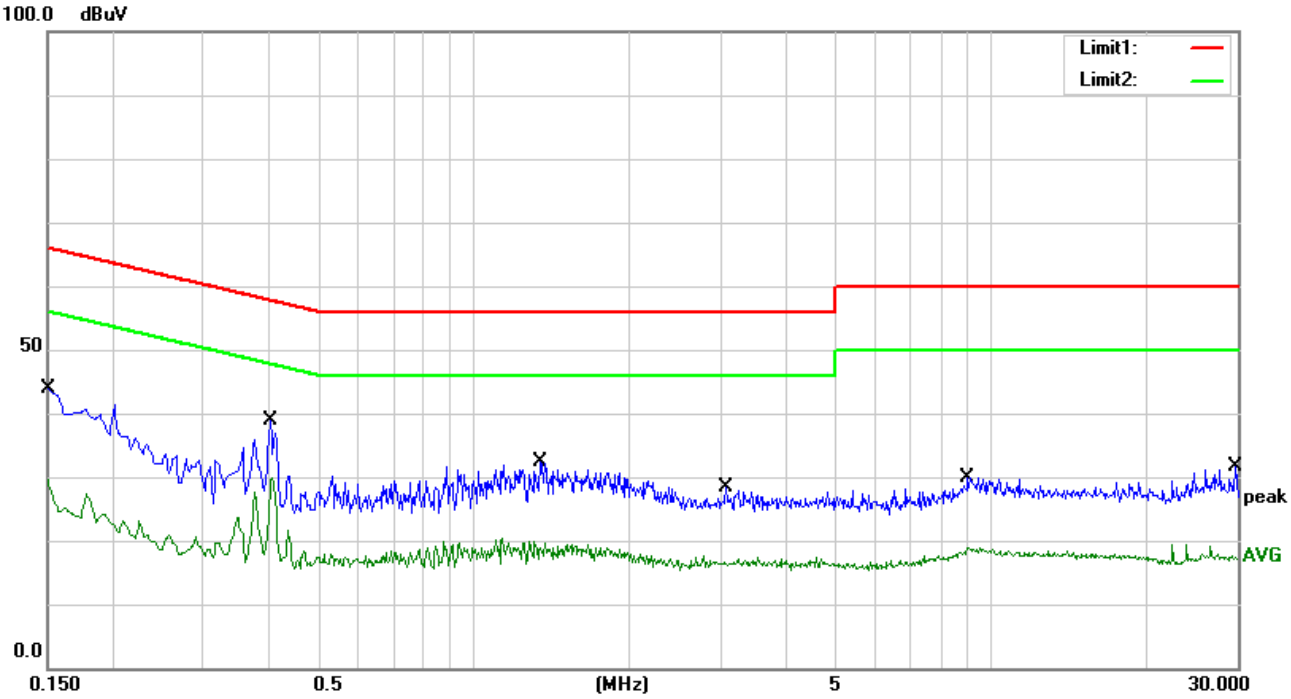
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

3.1.6 TEST RESULTS

Temperature:	25.1(C)	Relative Humidity:	59%RH
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode：	Mode 43		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	24.14	19.78	43.92	66.00	-22.08	QP
2	0.1500	9.76	19.78	29.54	56.00	-26.46	AVG
3	0.4060	18.83	20.01	38.84	57.73	-18.89	QP
4	0.4060	9.87	20.01	29.88	47.73	-17.85	AVG
5	1.3460	12.60	19.77	32.37	56.00	-23.63	QP
6	1.3460	0.54	19.77	20.31	46.00	-25.69	AVG
7	3.0900	8.45	19.83	28.28	56.00	-27.72	QP
8	3.0900	-2.16	19.83	17.67	46.00	-28.33	AVG
9	9.0500	9.73	20.14	29.87	60.00	-30.13	QP
10	9.0500	-1.31	20.14	18.83	50.00	-31.17	AVG
11	29.7740	11.53	20.21	31.74	60.00	-28.26	QP
12	29.7740	-1.06	20.21	19.15	50.00	-30.85	AVG

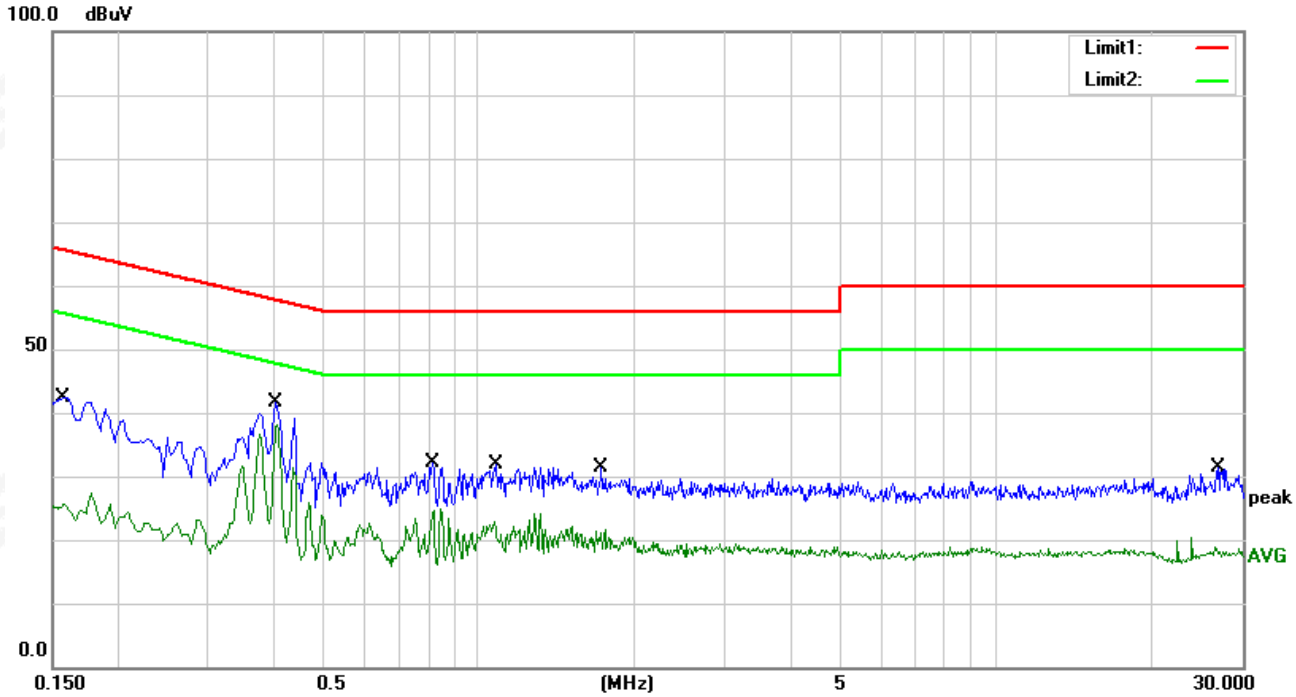
Remark:
1. All readings are Quasi-Peak and Average values
2. Margin = Result (Result =Reading + Factor)–Limit
3. Factor=LISN factor+Cable loss+Limiter (10dB)



Temperature:	25.1(C)	Relative Humidity:	59%RH
Test Voltage	AC 120V/60Hz	Phase:	N
Test Mode	Mode 43		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1580	22.63	19.78	42.41	65.57	-23.16	QP
2	0.1580	7.71	19.78	27.49	55.57	-28.08	AVG
3	0.4060	21.56	20.01	41.57	57.73	-16.16	QP
4	0.4060	18.07	20.01	38.08	47.73	-9.65	AVG
5	0.8140	12.31	19.80	32.11	56.00	-23.89	QP
6	0.8140	4.98	19.80	24.78	46.00	-21.22	AVG
7	1.0780	12.06	19.77	31.83	56.00	-24.17	QP
8	1.0780	4.30	19.77	24.07	46.00	-21.93	AVG
9	1.7260	11.53	19.79	31.32	56.00	-24.68	QP
10	1.7260	1.72	19.79	21.51	46.00	-24.49	AVG
11	26.9180	11.27	20.15	31.42	60.00	-28.58	QP
12	26.9180	0.11	20.15	20.26	50.00	-29.74	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 (BANDEDGE) 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&15.205/209(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	68.2	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			

Note: In case the emission radiated emission above 1000MHz fall within the restricted band the restricted frequency bands, the peak limit is 74 dBuV/m.

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:

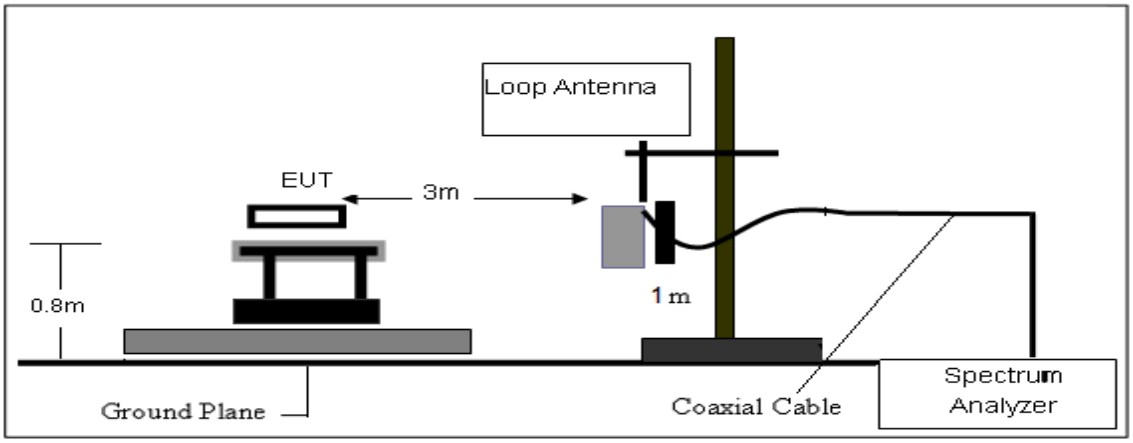
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.2.2 DEVIATION FROM TEST STANDARD

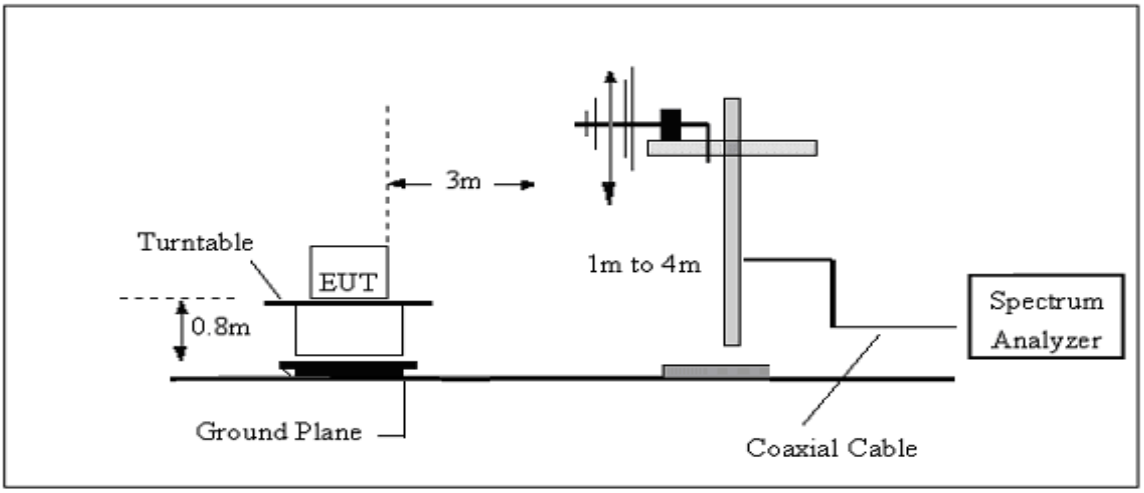
No deviation

3.2.3 TEST SETUP

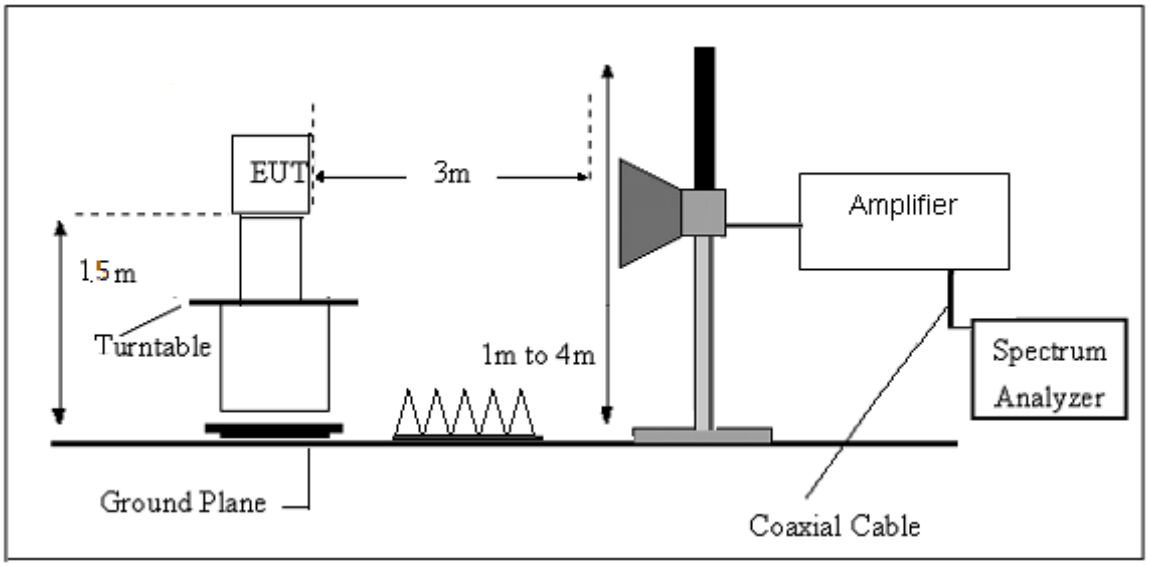
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



3.2.4 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.

3.2.5 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

Factor=AF+CL-AG

3.2.6 TEST RESULTS (Between 9KHz – 30 MHz)

Temperature:	23.1(C)	Relative Humidtity:	60%RH
Test Voltage:	AC 120V/60HZ	Polarization :	--
Test Mode:	TX Mode		

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

Note:

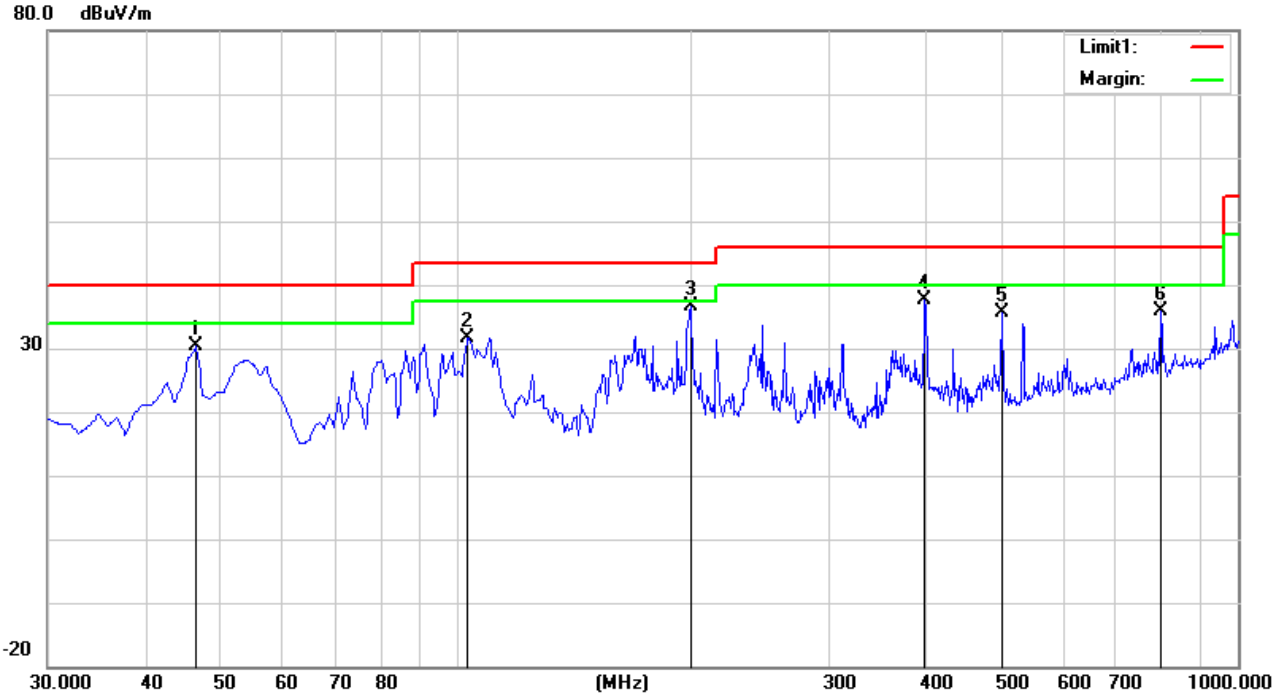
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

3.2.7 TEST RESULTS (Between 30MHz – 1GHz)

Temperature	23.1(C)	Relative Humidtity:	60%RH
Test Voltage	AC 120V/60HZ	Polarization:	Horizontal
Test Mode	Mode1~42 (Mode 10 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	46.4900	51.68	-21.41	30.27	40.00	-9.73	peak
2	103.7200	51.38	-19.73	31.65	43.50	-11.85	peak
3	199.7500	57.63	-21.11	36.52	43.50	-6.98	peak
4	398.6000	48.80	-11.20	37.60	46.00	-8.40	peak
5	499.4800	43.75	-8.02	35.73	46.00	-10.27	peak
6	797.2700	37.80	-2.03	35.77	46.00	-10.23	peak

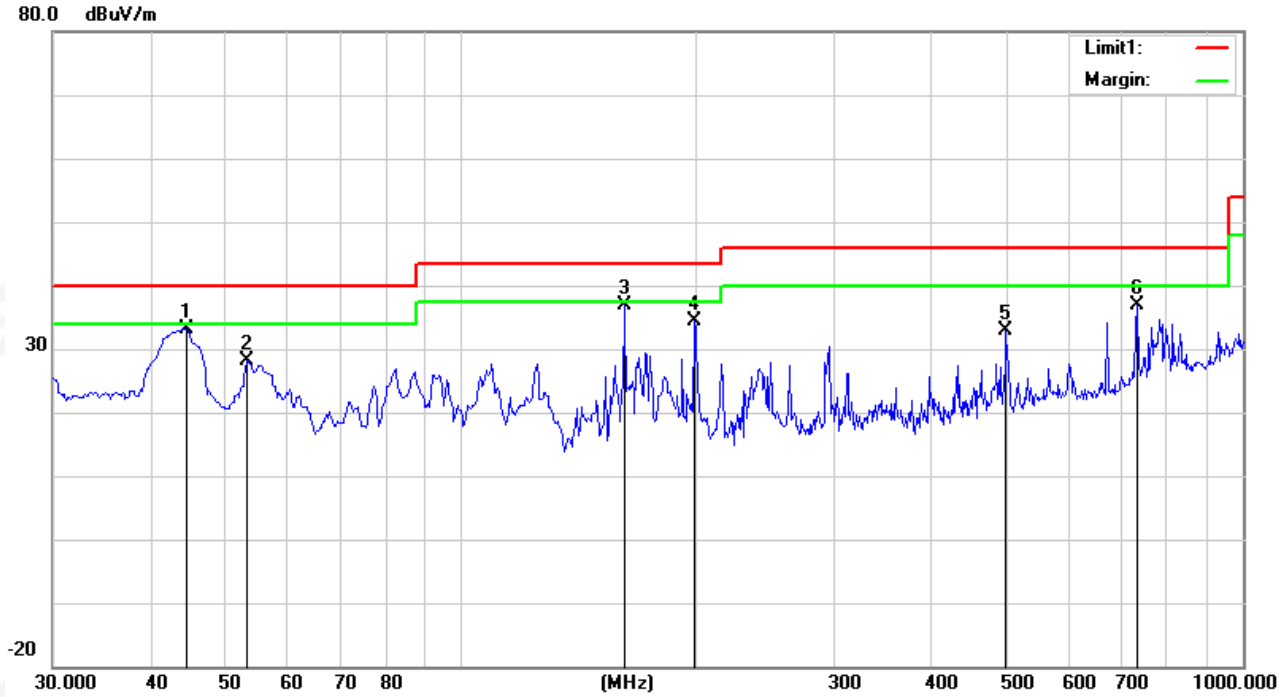
Remark:
1. Margin = Result (Result =Reading + Factor)–Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain



Temperature	23.1(C)	Relative Humidtity:	60%RH
Test Voltage	AC 120V/60HZ	Polarization:	Vertical
Test Mode	Mode1~42 (Mode 10 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	44.5500	53.65	-20.43	33.22	40.00	-6.78	peak
2	53.2800	52.68	-24.47	28.21	40.00	-11.79	peak
3	161.9200	55.85	-19.01	36.84	43.50	-6.66	peak
4	198.7800	55.48	-21.12	34.36	43.50	-9.14	peak
5	498.5100	41.01	-8.04	32.97	46.00	-13.03	peak
6	733.2500	39.34	-2.35	36.99	46.00	-9.01	peak

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



3.2.8 TEST RESULTS (Above 1000 MHz)

U-NII-1 5150-5250MHz

U-NII 1										
Frequency (MHz)	Reading (dBuV)	Amplifier (dB)	Loss (dB)	Antenna Factor (dB/m)	Orrected Factor (dB)	Emission Level (dBμV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
Low Channel (802.11n40/ 5270 MHz)										
3262.61	44.76	44.70	6.70	28.20	-9.80	34.96	74.00	-39.04	Pk	Vertical
3262.61	42.16	44.70	6.70	28.20	-9.80	32.36	54.00	-21.64	AV	Vertical
3254.20	44.68	44.70	6.70	28.20	-9.80	34.88	68.20	-33.32	Pk	Horizontal
3254.20	41.26	44.70	6.70	28.20	-9.80	31.46	54.00	-22.54	AV	Horizontal
3993.61	39.47	44.20	7.90	29.70	-6.60	32.87	74.00	-41.13	Pk	Vertical
3993.61	36.10	44.20	7.90	29.70	-6.60	29.50	54.00	-24.50	AV	Vertical
3990.69	39.09	44.20	7.90	29.70	-6.60	32.49	74.00	-41.51	Pk	Horizontal
3990.69	36.57	44.20	7.90	29.70	-6.60	29.97	54.00	-24.03	AV	Horizontal
7233.49	37.71	43.50	11.40	35.50	3.40	41.11	68.20	-27.09	Pk	Vertical
7233.49	33.70	43.50	11.40	35.50	3.40	37.10	54.00	-16.90	AV	Vertical
7228.42	37.35	43.50	11.40	35.50	3.40	40.75	68.20	-27.45	Pk	Horizontal
7228.42	34.39	43.50	11.40	35.50	3.40	37.79	54.00	-16.21	AV	Horizontal
10400.37	39.80	44.50	13.80	38.80	8.10	47.90	68.20	-20.30	Pk	Vertical
10400.37	37.01	44.50	13.80	38.80	8.10	45.11	54.00	-8.89	AV	Vertical
10399.97	39.96	44.50	13.80	38.80	8.10	48.06	68.20	-20.14	Pk	Horizontal
10399.97	35.83	44.50	13.80	38.80	8.10	43.93	54.00	-10.07	AV	Horizontal
11020.96	33.03	43.60	14.30	39.50	10.20	43.23	74.00	-30.77	Pk	Vertical
11020.96	30.35	43.60	14.30	39.50	10.20	40.55	54.00	-13.45	AV	Vertical
11017.07	33.16	43.60	14.30	39.50	10.20	43.36	74.00	-30.64	Pk	Horizontal
11017.07	30.64	43.60	14.30	39.50	10.20	40.84	54.00	-13.16	AV	Horizontal
13292.03	32.89	42.60	15.90	38.90	12.20	45.09	74.00	-28.91	Pk	Vertical
13292.03	29.67	42.60	15.90	38.90	12.20	41.87	54.00	-12.13	AV	Vertical
13296.86	32.23	42.60	15.90	38.90	12.20	44.43	74.00	-29.57	Pk	Horizontal
13296.86	29.37	42.60	15.90	38.90	12.20	41.57	54.00	-12.43	AV	Horizontal

Remark:
1.Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Scan with 802.11a,802.11n (HT-20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80), 802.11ac(HE160), 802.11ax(HE20), 802.11ax(HE40), 802.11ax(HE80), 802.11ax(VHT160) the worst case is 802.11n (HT-40).
3. 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.

U-NII-2A 5250-5350MHz

U-NII 2A										
Frequency (MHz)	Reading (dBuV)	Amplifier (dB)	Loss (dB)	Antenna Factor (dB/m)	Orrected Factor (dB)	Emission Level (dBµV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
Low Channel (802.11n40/ 5270 MHz)										
3264.54	44.38	44.70	6.70	28.20	-9.80	34.58	74.00	-39.42	Pk	Vertical
3264.54	41.12	44.70	6.70	28.20	-9.80	31.32	54.00	-22.68	AV	Vertical
3258.80	45.18	44.70	6.70	28.20	-9.80	35.38	68.20	-32.82	Pk	Horizontal
3258.80	42.24	44.70	6.70	28.20	-9.80	32.44	54.00	-21.56	AV	Horizontal
3991.15	40.12	44.20	7.90	29.70	-6.60	33.52	74.00	-40.48	Pk	Vertical
3991.15	36.72	44.20	7.90	29.70	-6.60	30.12	54.00	-23.88	AV	Vertical
3991.49	39.17	44.20	7.90	29.70	-6.60	32.57	74.00	-41.43	Pk	Horizontal
3991.49	36.53	44.20	7.90	29.70	-6.60	29.93	54.00	-24.07	AV	Horizontal
7233.33	37.73	43.50	11.40	35.50	3.40	41.13	68.20	-27.07	Pk	Vertical
7233.33	34.23	43.50	11.40	35.50	3.40	37.63	54.00	-16.37	AV	Vertical
7234.43	37.23	43.50	11.40	35.50	3.40	40.63	68.20	-27.57	Pk	Horizontal
7234.43	33.80	43.50	11.40	35.50	3.40	37.20	54.00	-16.80	AV	Horizontal
10360.30	40.14	44.50	13.80	38.80	8.10	48.24	68.20	-19.96	Pk	Vertical
10360.30	37.02	44.50	13.80	38.80	8.10	45.12	54.00	-8.88	AV	Vertical
10360.36	39.05	44.50	13.80	38.80	8.10	47.15	68.20	-21.05	Pk	Horizontal
10360.36	36.59	44.50	13.80	38.80	8.10	44.69	54.00	-9.31	AV	Horizontal
11025.74	33.86	43.60	14.30	39.50	10.20	44.06	74.00	-29.94	Pk	Vertical
11025.74	30.33	43.60	14.30	39.50	10.20	40.53	54.00	-13.47	AV	Vertical
11022.15	32.69	43.60	14.30	39.50	10.20	42.89	74.00	-31.11	Pk	Horizontal
11022.15	30.26	43.60	14.30	39.50	10.20	40.46	54.00	-13.54	AV	Horizontal
13292.68	32.12	42.60	15.90	38.90	12.20	44.32	74.00	-29.68	Pk	Vertical
13292.68	29.22	42.60	15.90	38.90	12.20	41.42	54.00	-12.58	AV	Vertical
13291.27	32.91	42.60	15.90	38.90	12.20	45.11	74.00	-28.89	Pk	Horizontal
13291.27	29.29	42.60	15.90	38.90	12.20	41.49	54.00	-12.51	AV	Horizontal

Remark:

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

2. Scan with 802.11a,802.11n (HT-20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80), 802.11ac(VHT160), 802.11ax(HE20), 802.11ax(HE40), 802.11ax(HE80), 802.11ax(HE160) the worst case is 802.11n (HT-40).

3. 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.

U-NII-2C 5470-5725MHz

Frequency (MHz)	Reading (dBuV)	Amplifier (dB)	Loss (dB)	Antenna Factor (dB/m)	Orrected Factor (dB)	Emission Level (dBμV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
Low Channel (802.11ax40/ 5510 MHz)										
3263.84	44.73	44.70	6.70	28.20	-9.80	34.93	74.00	-39.07	Pk	Vertical
3263.84	41.84	44.70	6.70	28.20	-9.80	32.04	54.00	-21.96	AV	Vertical
3248.04	44.08	44.70	6.70	28.20	-9.80	34.28	68.20	-33.92	Pk	Horizontal
3248.04	41.65	44.70	6.70	28.20	-9.80	31.85	54.00	-22.15	AV	Horizontal
3991.27	39.45	44.20	7.90	29.70	-6.60	32.85	74.00	-41.15	Pk	Vertical
3991.27	35.94	44.20	7.90	29.70	-6.60	29.34	54.00	-24.66	AV	Vertical
3995.88	39.79	44.20	7.90	29.70	-6.60	33.19	74.00	-40.81	Pk	Horizontal
3995.88	36.85	44.20	7.90	29.70	-6.60	30.25	54.00	-23.75	AV	Horizontal
7218.08	37.30	43.50	11.40	35.50	3.40	40.70	68.20	-27.50	Pk	Vertical
7218.08	33.77	43.50	11.40	35.50	3.40	37.17	54.00	-16.83	AV	Vertical
7230.66	37.52	43.50	11.40	35.50	3.40	40.92	68.20	-27.28	Pk	Horizontal
7230.66	34.38	43.50	11.40	35.50	3.40	37.78	54.00	-16.22	AV	Horizontal
10360.27	39.94	44.50	13.80	38.80	8.10	48.04	68.20	-20.16	Pk	Vertical
10360.27	36.57	44.50	13.80	38.80	8.10	44.67	54.00	-9.33	AV	Vertical
10360.06	38.89	44.50	13.80	38.80	8.10	46.99	68.20	-21.21	Pk	Horizontal
10360.06	36.56	44.50	13.80	38.80	8.10	44.66	54.00	-9.34	AV	Horizontal
11023.89	33.91	43.60	14.30	39.50	10.20	44.11	74.00	-29.89	Pk	Vertical
11023.89	29.75	43.60	14.30	39.50	10.20	39.95	54.00	-14.05	AV	Vertical
11033.21	33.82	43.60	14.30	39.50	10.20	44.02	74.00	-29.98	Pk	Horizontal
11033.21	30.28	43.60	14.30	39.50	10.20	40.48	54.00	-13.52	AV	Horizontal
13295.25	31.55	42.60	15.90	38.90	12.20	43.75	74.00	-30.25	Pk	Vertical
13295.25	28.89	42.60	15.90	38.90	12.20	41.09	54.00	-12.91	AV	Vertical
13292.67	32.81	42.60	15.90	38.90	12.20	45.01	74.00	-28.99	Pk	Horizontal
13292.67	29.32	42.60	15.90	38.90	12.20	41.52	54.00	-12.48	AV	Horizontal
Mid Channel (802.11ax40/ 5550 MHz)										
3262.78	45.13	44.70	6.70	28.20	-9.80	35.33	74.00	-38.67	Pk	Vertical
3262.78	41.79	44.70	6.70	28.20	-9.80	31.99	54.00	-22.01	AV	Vertical
3245.82	44.54	44.70	6.70	28.20	-9.80	34.74	68.20	-33.46	Pk	Horizontal
3245.82	41.14	44.70	6.70	28.20	-9.80	31.34	54.00	-22.66	AV	Horizontal
3999.77	39.61	44.20	7.90	29.70	-6.60	33.01	74.00	-40.99	Pk	Vertical
3999.77	36.54	44.20	7.90	29.70	-6.60	29.94	54.00	-24.06	AV	Vertical
3997.61	39.05	44.20	7.90	29.70	-6.60	32.45	74.00	-41.55	Pk	Horizontal
3997.61	36.65	44.20	7.90	29.70	-6.60	30.05	54.00	-23.95	AV	Horizontal
7222.83	37.16	43.50	11.40	35.50	3.40	40.56	68.20	-27.64	Pk	Vertical
7222.83	34.55	43.50	11.40	35.50	3.40	37.95	54.00	-16.05	AV	Vertical
7235.25	37.00	43.50	11.40	35.50	3.40	40.40	68.20	-27.80	Pk	Horizontal
7235.25	34.24	43.50	11.40	35.50	3.40	37.64	54.00	-16.36	AV	Horizontal
10400.09	38.76	44.50	13.80	38.80	8.10	46.86	68.20	-21.34	Pk	Vertical
10400.09	37.16	44.50	13.80	38.80	8.10	45.26	54.00	-8.74	AV	Vertical
10400.17	39.24	44.50	13.80	38.80	8.10	47.34	68.20	-20.86	Pk	Horizontal
10400.17	36.84	44.50	13.80	38.80	8.10	44.94	54.00	-9.06	AV	Horizontal
11018.52	33.18	43.60	14.30	39.50	10.20	43.38	74.00	-30.62	Pk	Vertical
11018.52	30.09	43.60	14.30	39.50	10.20	40.29	54.00	-13.71	AV	Vertical
11023.25	33.73	43.60	14.30	39.50	10.20	43.93	74.00	-30.07	Pk	Horizontal
11023.25	31.17	43.60	14.30	39.50	10.20	41.37	54.00	-12.63	AV	Horizontal
13286.08	31.85	42.60	15.90	38.90	12.20	44.05	74.00	-29.95	Pk	Vertical
13286.08	28.70	42.60	15.90	38.90	12.20	40.90	54.00	-13.10	AV	Vertical
13295.33	32.99	42.60	15.90	38.90	12.20	45.19	74.00	-28.81	Pk	Horizontal
13295.33	28.87	42.60	15.90	38.90	12.20	41.07	54.00	-12.93	AV	Horizontal

High Channel (802.11ax40/ 5670 MHz)										
3253.76	44.65	44.70	6.70	28.20	-9.80	34.85	68.20	-33.35	Pk	Vertical
3253.76	41.48	44.70	6.70	28.20	-9.80	31.68	54.00	-22.32	AV	Vertical
3255.17	44.06	44.70	6.70	28.20	-9.80	34.26	68.20	-33.94	Pk	Horizontal
3255.17	41.02	44.70	6.70	28.20	-9.80	31.22	54.00	-22.78	AV	Horizontal
3993.66	38.91	44.20	7.90	29.70	-6.60	32.31	74.00	-41.69	Pk	Vertical
3993.66	36.42	44.20	7.90	29.70	-6.60	29.82	54.00	-24.18	AV	Vertical
3994.42	39.91	44.20	7.90	29.70	-6.60	33.31	74.00	-40.69	Pk	Horizontal
3994.42	36.00	44.20	7.90	29.70	-6.60	29.40	54.00	-24.60	AV	Horizontal
7216.70	37.41	43.50	11.40	35.50	3.40	40.81	68.20	-27.39	Pk	Vertical
7216.70	34.17	43.50	11.40	35.50	3.40	37.57	54.00	-16.43	AV	Vertical
7232.85	37.09	43.50	11.40	35.50	3.40	40.49	68.20	-27.71	Pk	Horizontal
7232.85	34.52	43.50	11.40	35.50	3.40	37.92	54.00	-16.08	AV	Horizontal
10480.24	39.97	44.50	13.80	38.80	8.10	48.07	68.20	-20.13	Pk	Vertical
10480.24	36.80	44.50	13.80	38.80	8.10	44.90	54.00	-9.10	AV	Vertical
10480.42	40.14	44.50	13.80	38.80	8.10	48.24	68.20	-19.96	Pk	Horizontal
10480.42	36.99	44.50	13.80	38.80	8.10	45.09	54.00	-8.91	AV	Horizontal
11025.69	33.13	43.60	14.30	39.50	10.20	43.33	74.00	-30.67	Pk	Vertical
11025.69	29.90	43.60	14.30	39.50	10.20	40.10	54.00	-13.90	AV	Vertical
11034.43	33.71	43.60	14.30	39.50	10.20	43.91	74.00	-30.09	Pk	Horizontal
11034.43	30.77	43.60	14.30	39.50	10.20	40.97	54.00	-13.03	AV	Horizontal
13298.55	32.07	42.60	15.90	38.90	12.20	44.27	74.00	-29.73	Pk	Vertical
13298.55	29.01	42.60	15.90	38.90	12.20	41.21	54.00	-12.79	AV	Vertical
13292.22	32.85	42.60	15.90	38.90	12.20	45.05	74.00	-28.95	Pk	Horizontal
13292.22	29.46	42.60	15.90	38.90	12.20	41.66	54.00	-12.34	AV	Horizontal

Remark:

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

2. Scan with 802.11a,802.11n (HT-20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80), 802.11ac(VHT160), 802.11ax(HE20), 802.11ax(HE40), 802.11ax(HE80), 802.11ax(HE160) the worst case is 802.11n (HT-40)

3. 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.

U-NII-3 (5.725-5.850) GHz

U-NII 2C										
Frequency (MHz)	Reading (dBuV)	Amplifier (dB)	Loss (dB)	Antenna Factor (dB/m)	Orrected Factor (dB)	Emission Level (dBμV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
Low Channel (802.11ac40/ 5755 MHz)										
3250.83	44.03	44.70	6.70	28.20	-9.80	34.23	68.20	-33.97	Pk	Vertical
3250.83	42.09	44.70	6.70	28.20	-9.80	32.29	54.00	-21.71	AV	Vertical
3250.01	44.19	44.70	6.70	28.20	-9.80	34.39	68.20	-33.81	Pk	Horizontal
3250.01	41.97	44.70	6.70	28.20	-9.80	32.17	54.00	-21.83	AV	Horizontal
3994.52	39.14	44.20	7.90	29.70	-6.60	32.54	74.00	-41.46	Pk	Vertical
3994.52	37.13	44.20	7.90	29.70	-6.60	30.53	54.00	-23.47	AV	Vertical
3999.93	39.65	44.20	7.90	29.70	-6.60	33.05	74.00	-40.95	Pk	Horizontal
3999.93	36.02	44.20	7.90	29.70	-6.60	29.42	54.00	-24.58	AV	Horizontal
7235.65	36.92	43.50	11.40	35.50	3.40	40.32	68.20	-27.88	Pk	Vertical
7235.65	34.48	43.50	11.40	35.50	3.40	37.88	54.00	-16.12	AV	Vertical
7221.30	36.76	43.50	11.40	35.50	3.40	40.16	68.20	-28.04	Pk	Horizontal
7221.30	33.67	43.50	11.40	35.50	3.40	37.07	54.00	-16.93	AV	Horizontal
10360.04	39.50	44.50	13.80	38.80	8.10	47.60	68.20	-20.60	Pk	Vertical
10360.04	36.40	44.50	13.80	38.80	8.10	44.50	54.00	-9.50	AV	Vertical
10359.96	39.16	44.50	13.80	38.80	8.10	47.26	68.20	-20.94	Pk	Horizontal
10359.96	35.88	44.50	13.80	38.80	8.10	43.98	54.00	-10.02	AV	Horizontal
11018.20	33.75	43.60	14.30	39.50	10.20	43.95	74.00	-30.05	Pk	Vertical
11018.20	30.63	43.60	14.30	39.50	10.20	40.83	54.00	-13.17	AV	Vertical
11035.53	33.08	43.60	14.30	39.50	10.20	43.28	74.00	-30.72	Pk	Horizontal
11035.53	30.24	43.60	14.30	39.50	10.20	40.44	54.00	-13.56	AV	Horizontal
13285.33	31.95	42.60	15.90	38.90	12.20	44.15	74.00	-29.85	Pk	Vertical
13285.33	29.05	42.60	15.90	38.90	12.20	41.25	54.00	-12.75	AV	Vertical
13285.74	31.67	42.60	15.90	38.90	12.20	43.87	74.00	-30.13	Pk	Horizontal
13285.74	30.00	42.60	15.90	38.90	12.20	42.20	54.00	-11.80	AV	Horizontal
Low Channel (802.11ac40/ 5795 MHz)										
3245.47	44.42	44.70	6.70	28.20	-9.80	34.62	68.20	-33.58	Pk	Vertical
3245.47	41.93	44.70	6.70	28.20	-9.80	32.13	54.00	-21.87	AV	Vertical
3258.35	44.44	44.70	6.70	28.20	-9.80	34.64	68.20	-33.56	Pk	Horizontal
3258.35	41.12	44.70	6.70	28.20	-9.80	31.32	54.00	-22.68	AV	Horizontal
3986.92	40.02	44.20	7.90	29.70	-6.60	33.42	74.00	-40.58	Pk	Vertical
3986.92	36.94	44.20	7.90	29.70	-6.60	30.34	54.00	-23.66	AV	Vertical
3991.88	38.85	44.20	7.90	29.70	-6.60	32.25	74.00	-41.75	Pk	Horizontal
3991.88	37.12	44.20	7.90	29.70	-6.60	30.52	54.00	-23.48	AV	Horizontal
7219.83	37.02	43.50	11.40	35.50	3.40	40.42	68.20	-27.78	Pk	Vertical
7219.83	34.13	43.50	11.40	35.50	3.40	37.53	54.00	-16.47	AV	Vertical
7231.03	37.32	43.50	11.40	35.50	3.40	40.72	68.20	-27.48	Pk	Horizontal
7231.03	34.85	43.50	11.40	35.50	3.40	38.25	54.00	-15.75	AV	Horizontal
10480.39	40.01	44.50	13.80	38.80	8.10	48.11	68.20	-20.09	Pk	Vertical
10480.39	36.92	44.50	13.80	38.80	8.10	45.02	54.00	-8.98	AV	Vertical
10480.40	39.61	44.50	13.80	38.80	8.10	47.71	68.20	-20.49	Pk	Horizontal
10480.40	37.09	44.50	13.80	38.80	8.10	45.19	54.00	-8.81	AV	Horizontal
11018.48	33.60	43.60	14.30	39.50	10.20	43.80	74.00	-30.20	Pk	Vertical
11018.48	29.83	43.60	14.30	39.50	10.20	40.03	54.00	-13.97	AV	Vertical
11030.29	33.23	43.60	14.30	39.50	10.20	43.43	74.00	-30.57	Pk	Horizontal
11030.29	30.67	43.60	14.30	39.50	10.20	40.87	54.00	-13.13	AV	Horizontal
13291.70	31.90	42.60	15.90	38.90	12.20	44.10	74.00	-29.90	Pk	Vertical
13291.70	28.79	42.60	15.90	38.90	12.20	40.99	54.00	-13.01	AV	Vertical
13288.43	32.96	42.60	15.90	38.90	12.20	45.16	74.00	-28.84	Pk	Horizontal
13288.43	29.60	42.60	15.90	38.90	12.20	41.80	54.00	-12.20	AV	Horizontal

Remark:

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

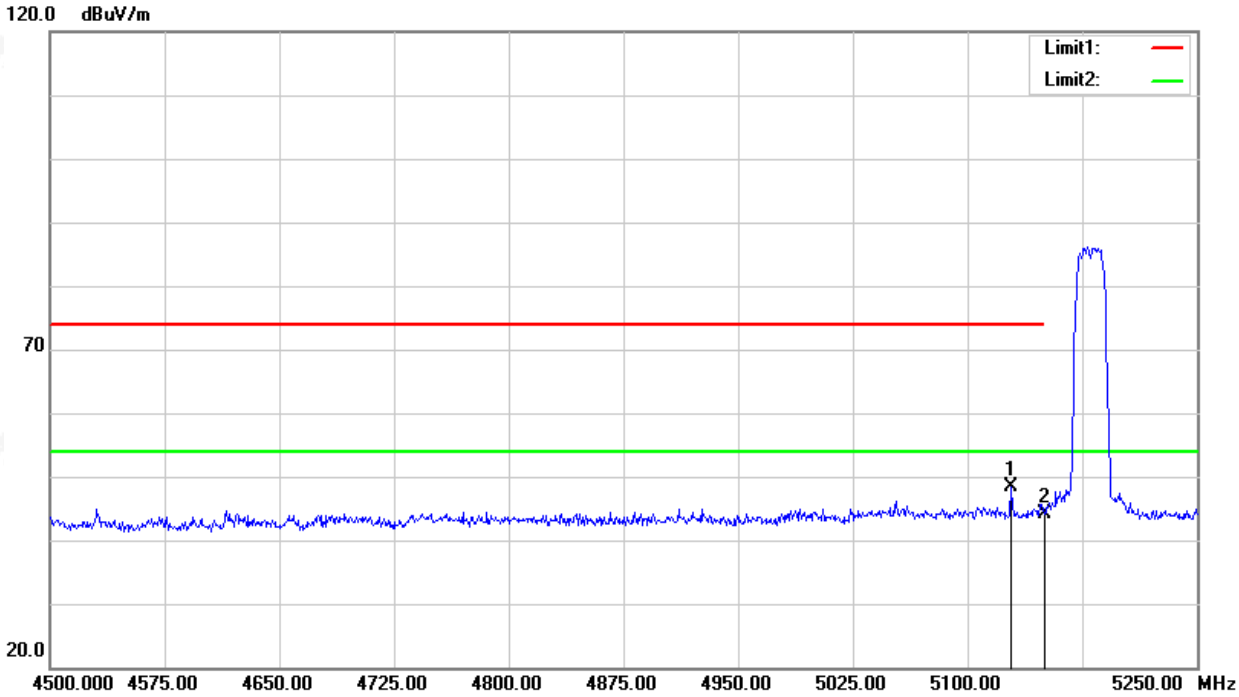
2. Scan with 802.11a,802.11n (HT-20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80), 802.11ax(HE20), 802.11ax(HE40), 802.11ax(HE80) the worst case is 802.11n (HT-40).

3. 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.

3.2.9 RESTRICTED FREQUENCY BANDS AND BAND EDGE

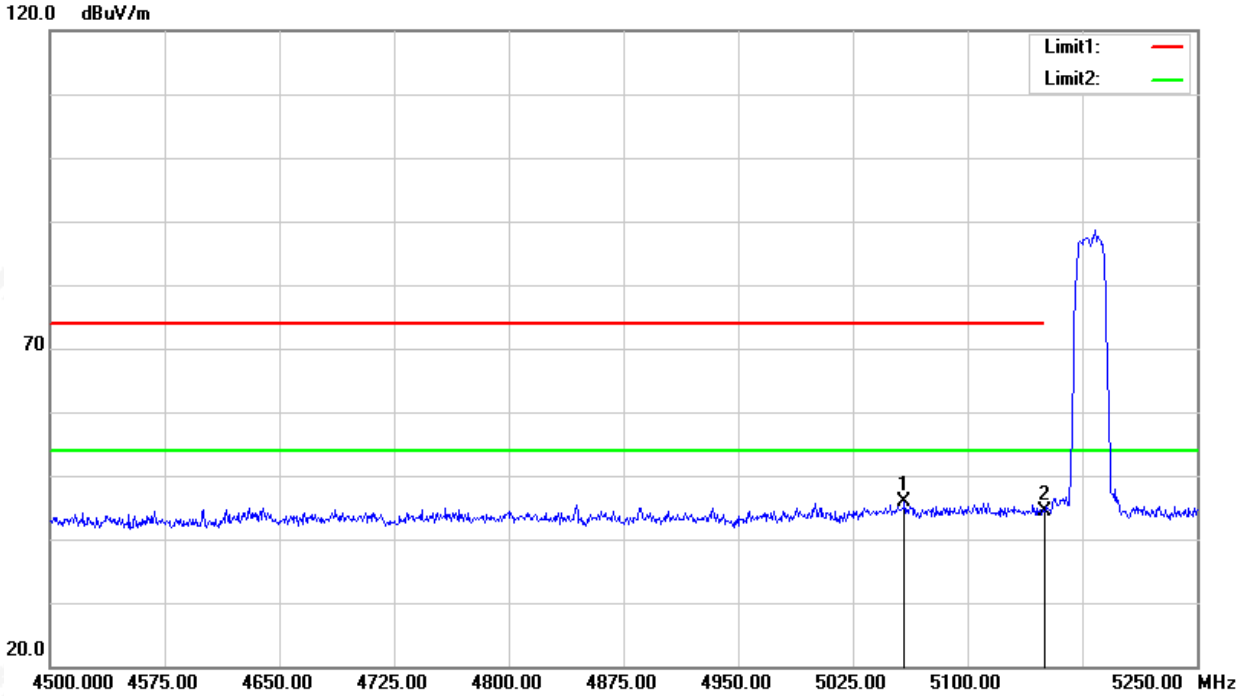
U-NII-1 5150-5250MHz

802.11n20-L-H



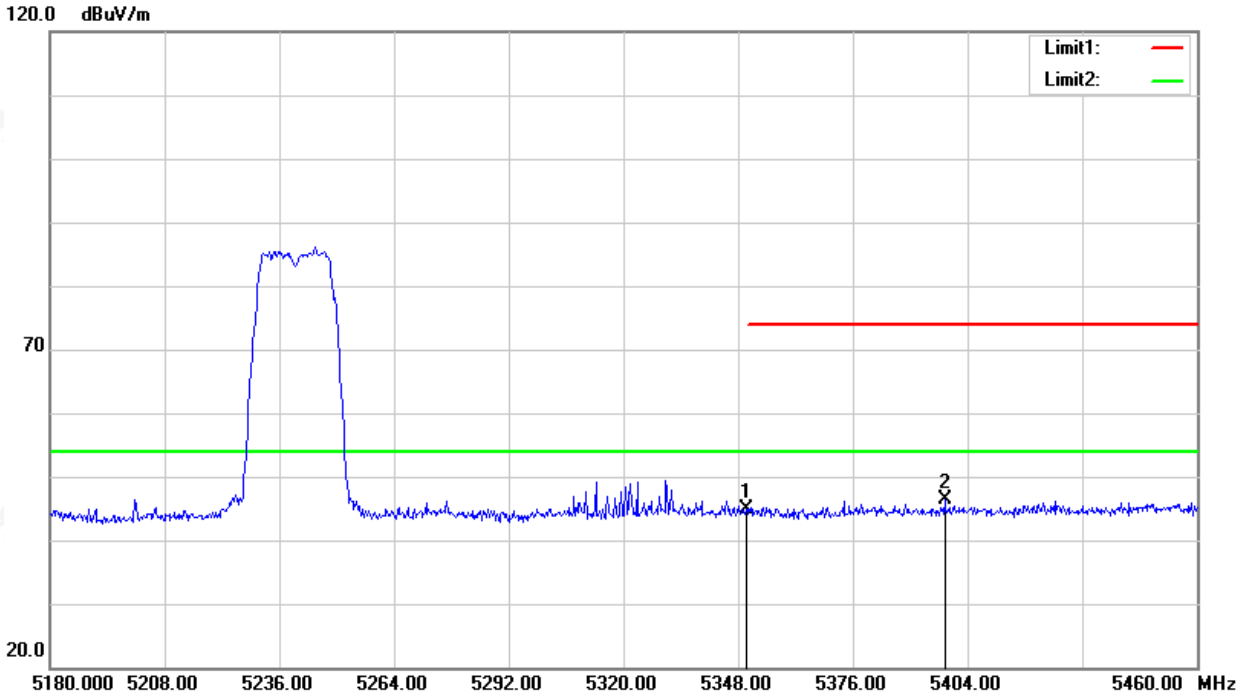
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5128.500	54.22	-5.74	48.48	74.00	-25.52	peak
2	5150.000	49.95	-5.73	44.22	74.00	-29.78	peak

802.11n20-L-V



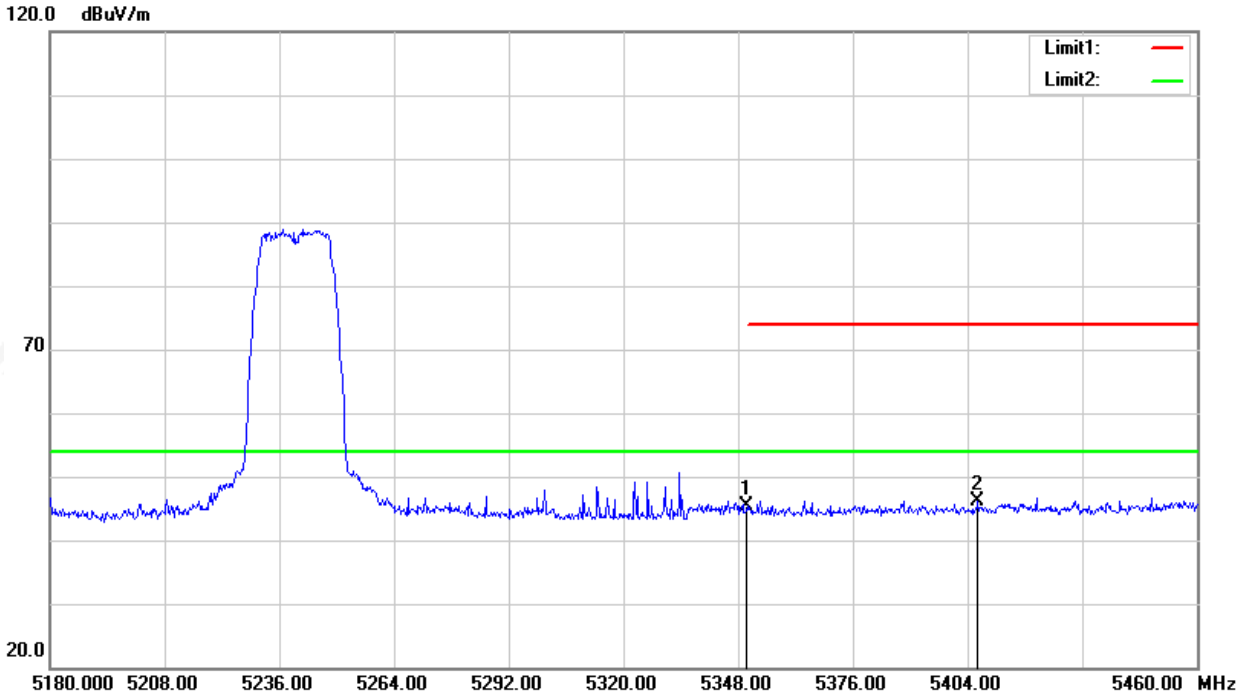
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5058.750	51.71	-5.92	45.79	74.00	-28.21	peak
2	5150.000	50.22	-5.73	44.49	74.00	-29.51	peak

802.11n20-H-H



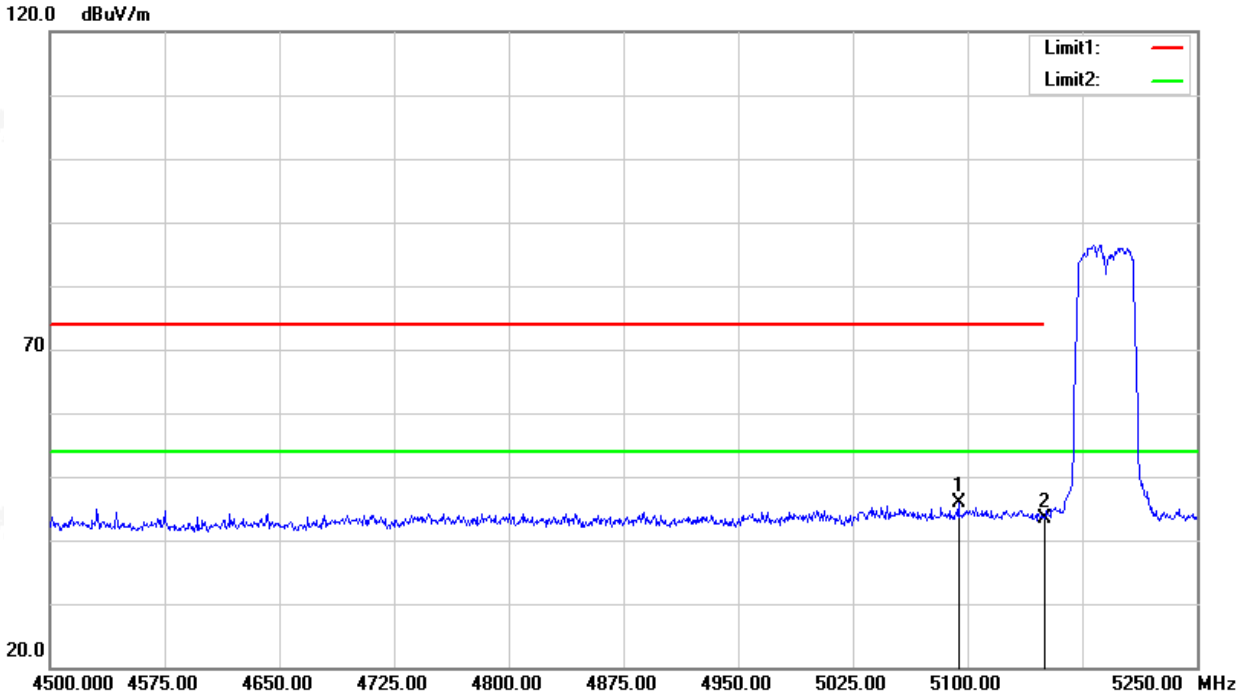
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	50.05	-5.23	44.82	74.00	-29.18	peak
2	5398.400	51.59	-5.25	46.34	74.00	-27.66	peak

802.11n20-H-V



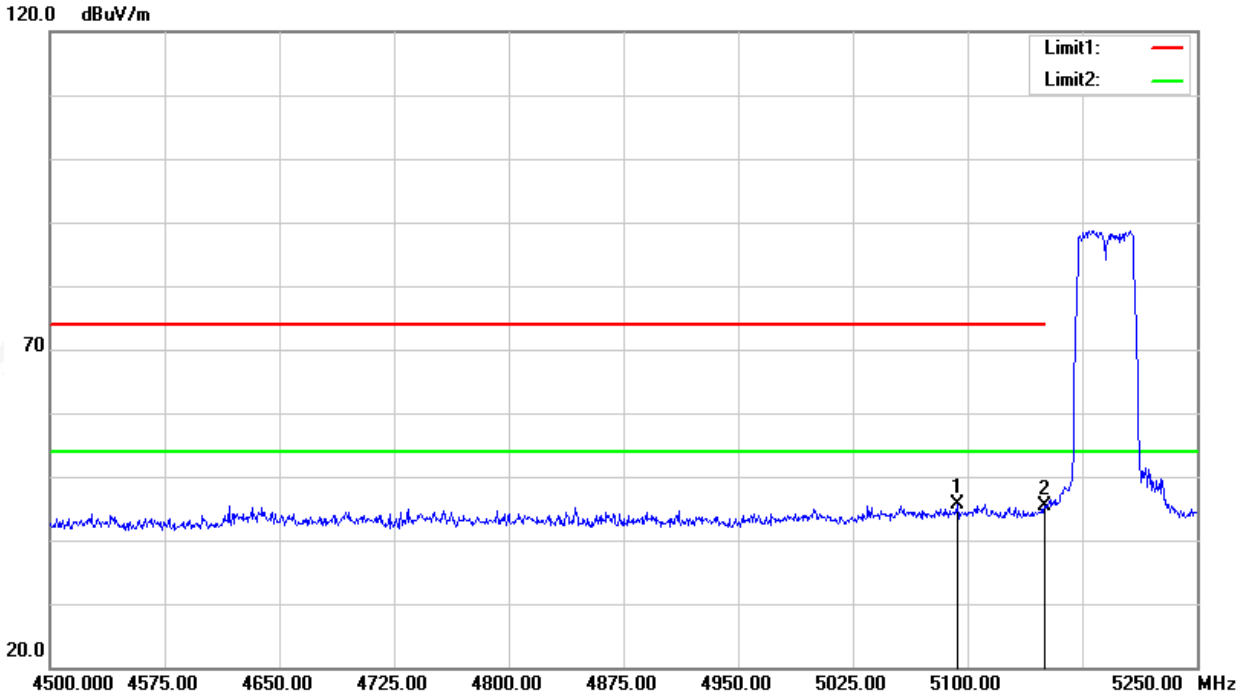
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	50.49	-5.23	45.26	74.00	-28.74	peak
2	5406.520	51.34	-5.23	46.11	74.00	-27.89	peak

802.11n40-L-H



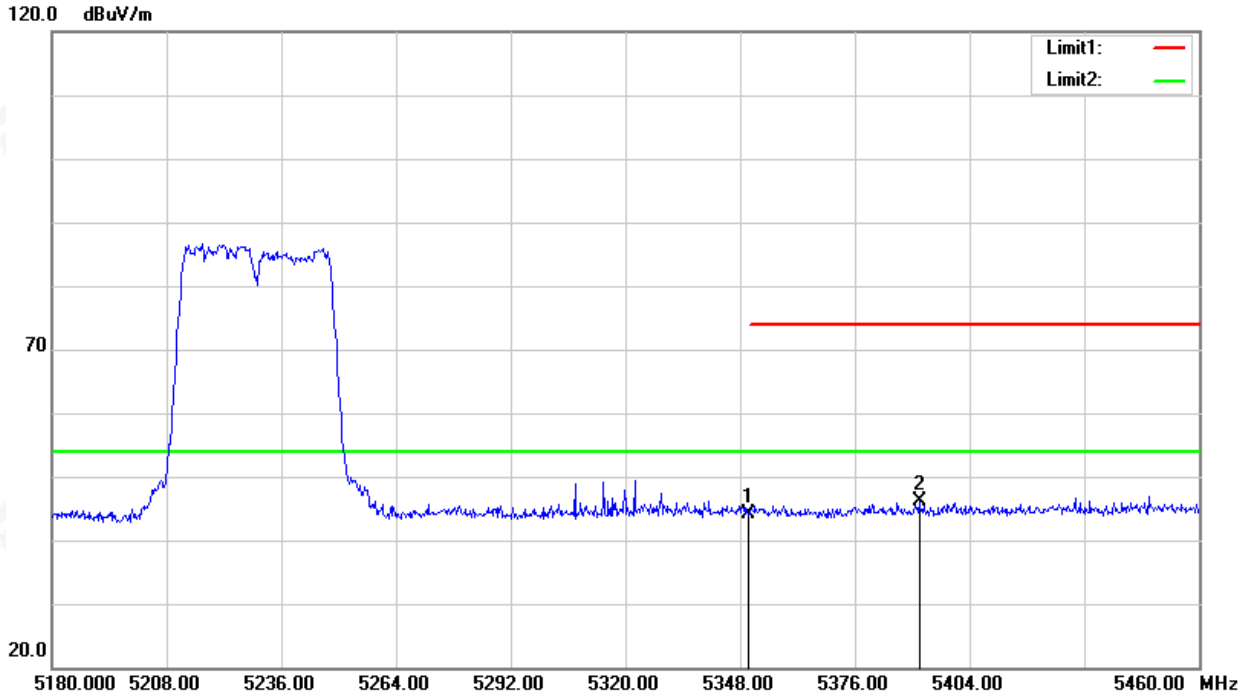
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5094.000	51.59	-5.76	45.83	74.00	-28.17	peak
2	5150.000	49.07	-5.73	43.34	74.00	-30.66	peak

802.11n40-L-V



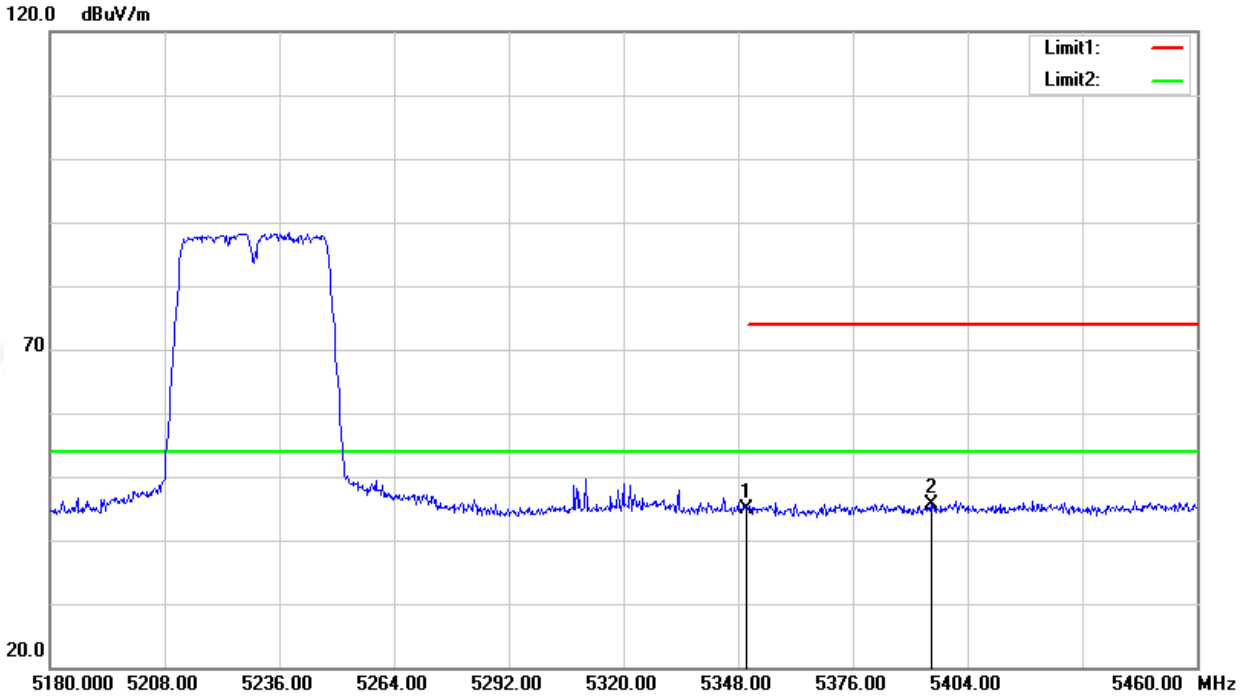
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5093.250	51.29	-5.77	45.52	74.00	-28.48	peak
2	5150.000	51.15	-5.73	45.42	74.00	-28.58	peak

802.11n40-H-H



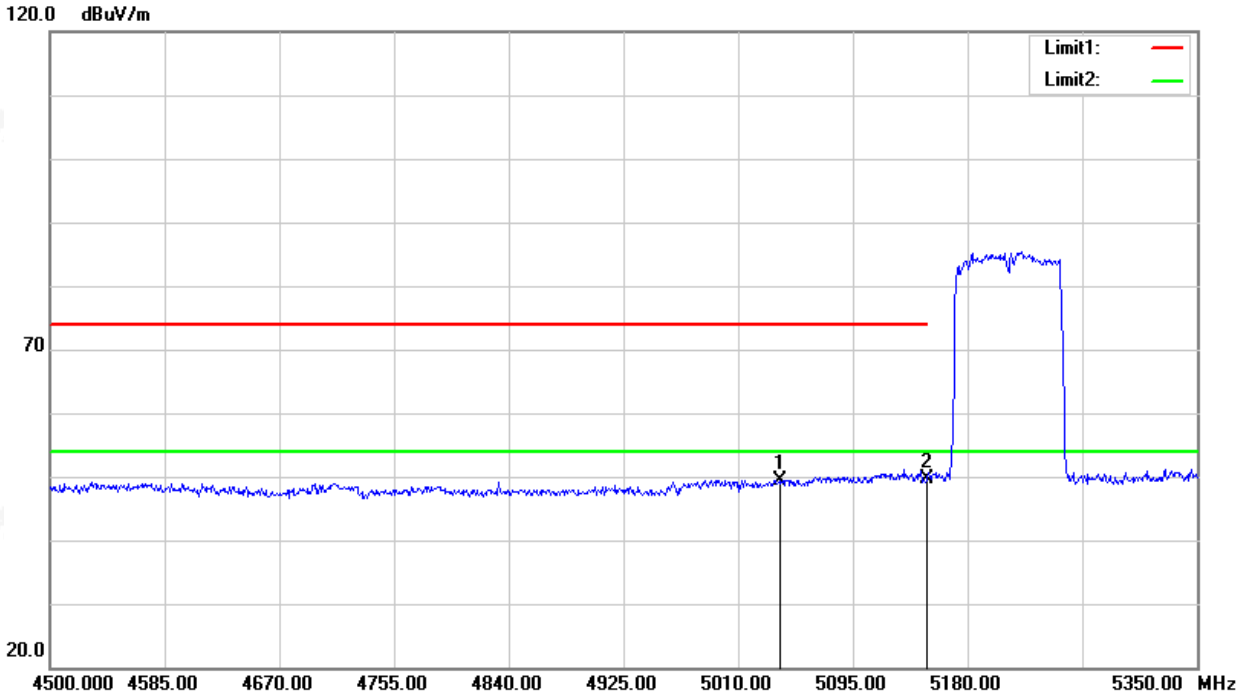
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	49.46	-5.23	44.23	74.00	-29.77	peak
2	5391.680	51.26	-5.25	46.01	74.00	-27.99	peak

802.11n40-H-V



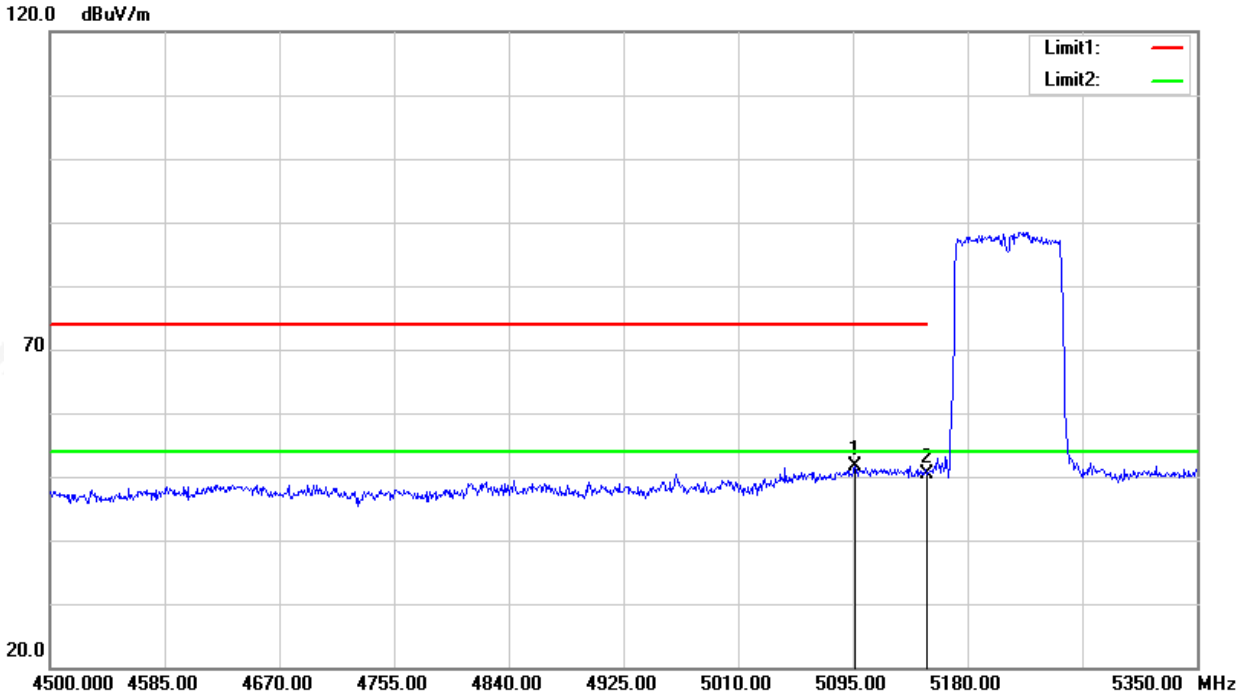
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	50.17	-5.23	44.94	74.00	-29.06	peak
2	5395.040	50.89	-5.24	45.65	74.00	-28.35	peak

802.11ax80-L-H



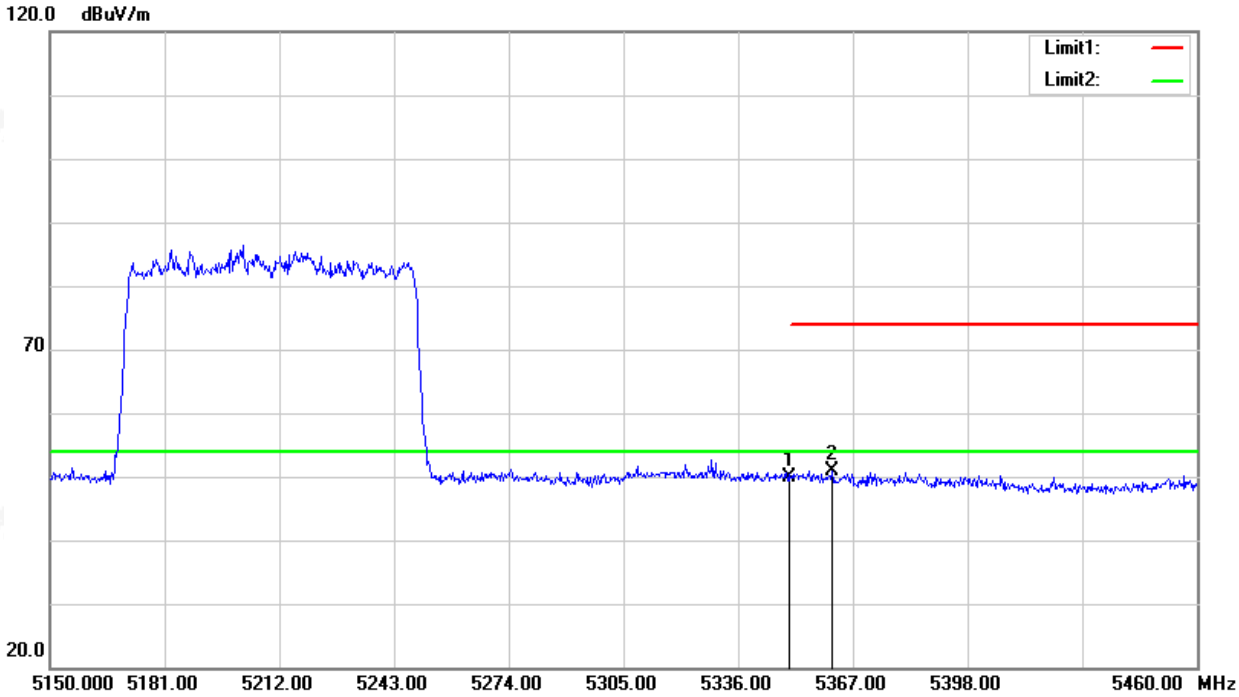
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5041.450	17.85	31.63	49.48	74.00	-24.52	peak
2	5150.000	17.81	31.72	49.53	74.00	-24.47	peak

802.11ax80-L-V



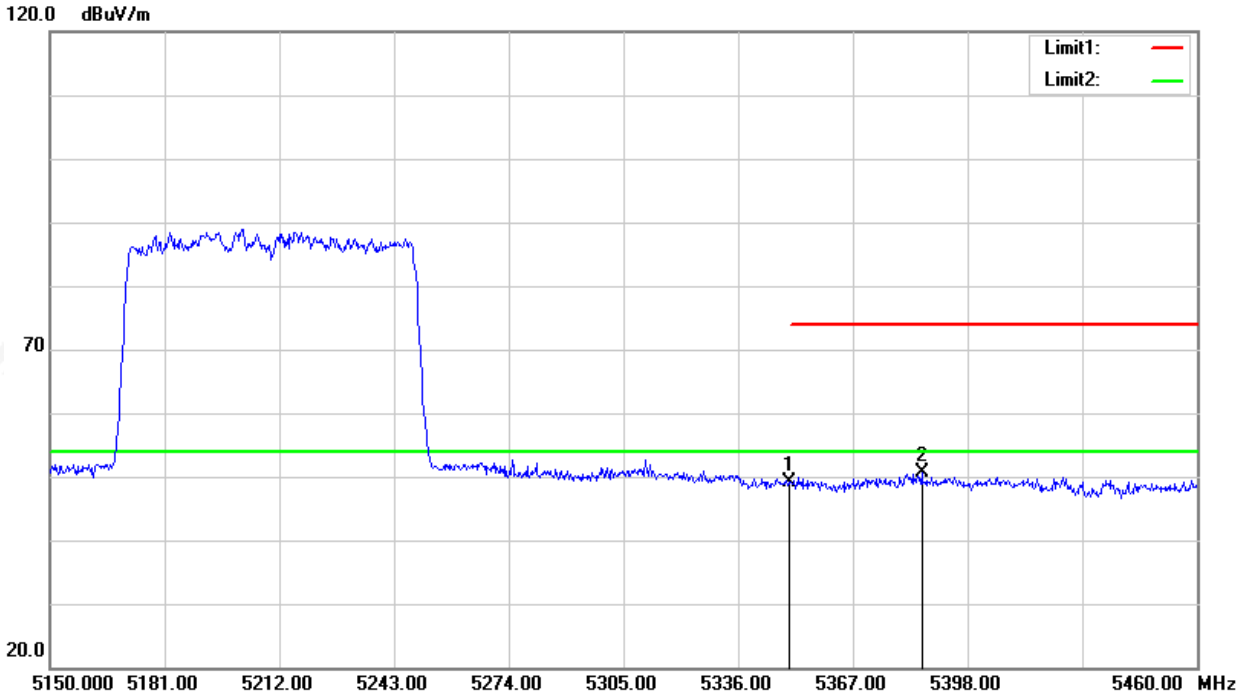
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5096.700	20.07	31.68	51.75	74.00	-22.25	peak
2	5150.000	18.61	31.72	50.33	74.00	-23.67	peak

802.11ax80-H-H



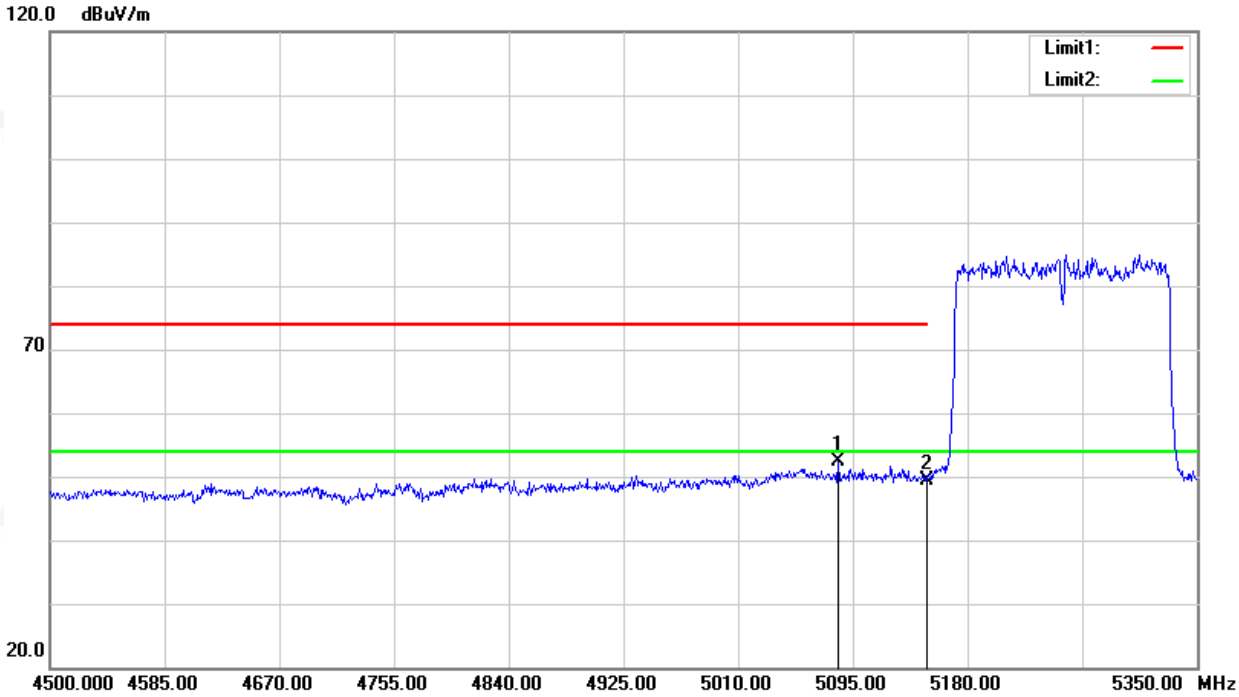
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	18.10	31.88	49.98	74.00	-24.02	peak
2	5361.420	18.96	31.89	50.85	74.00	-23.15	peak

802.11ax80-H-V



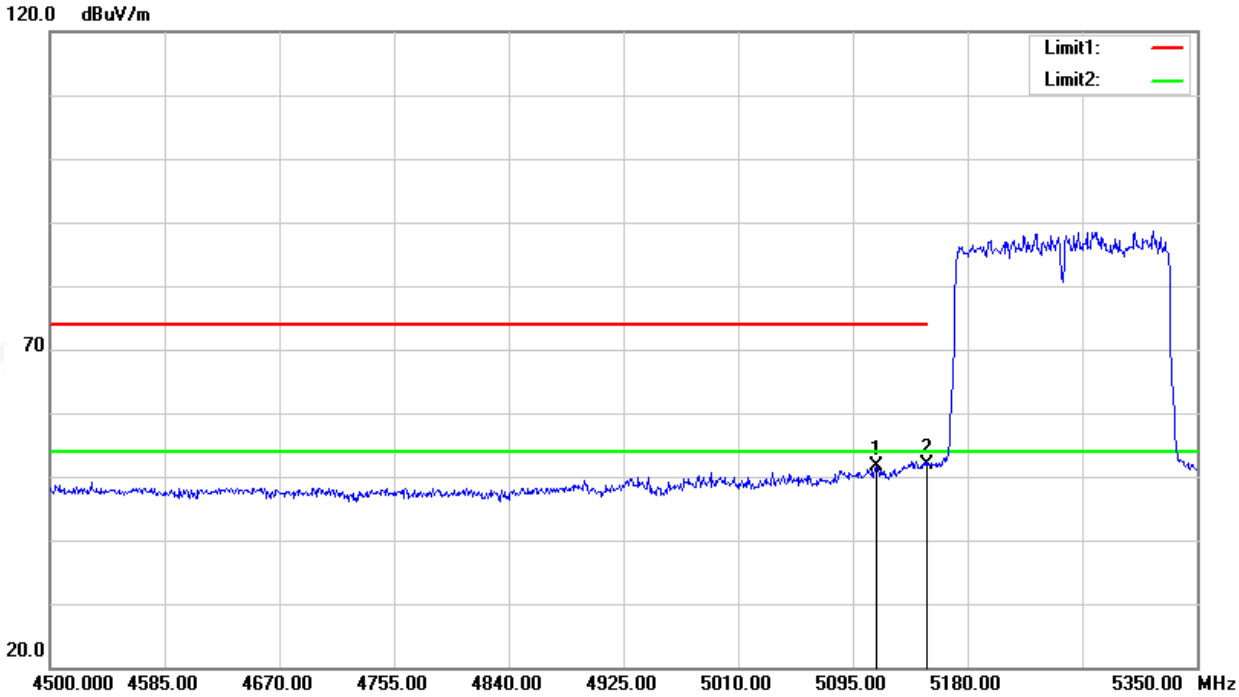
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	17.26	31.88	49.14	74.00	-24.86	peak
2	5385.600	18.68	31.91	50.59	74.00	-23.41	peak

802.11ax160-L-H



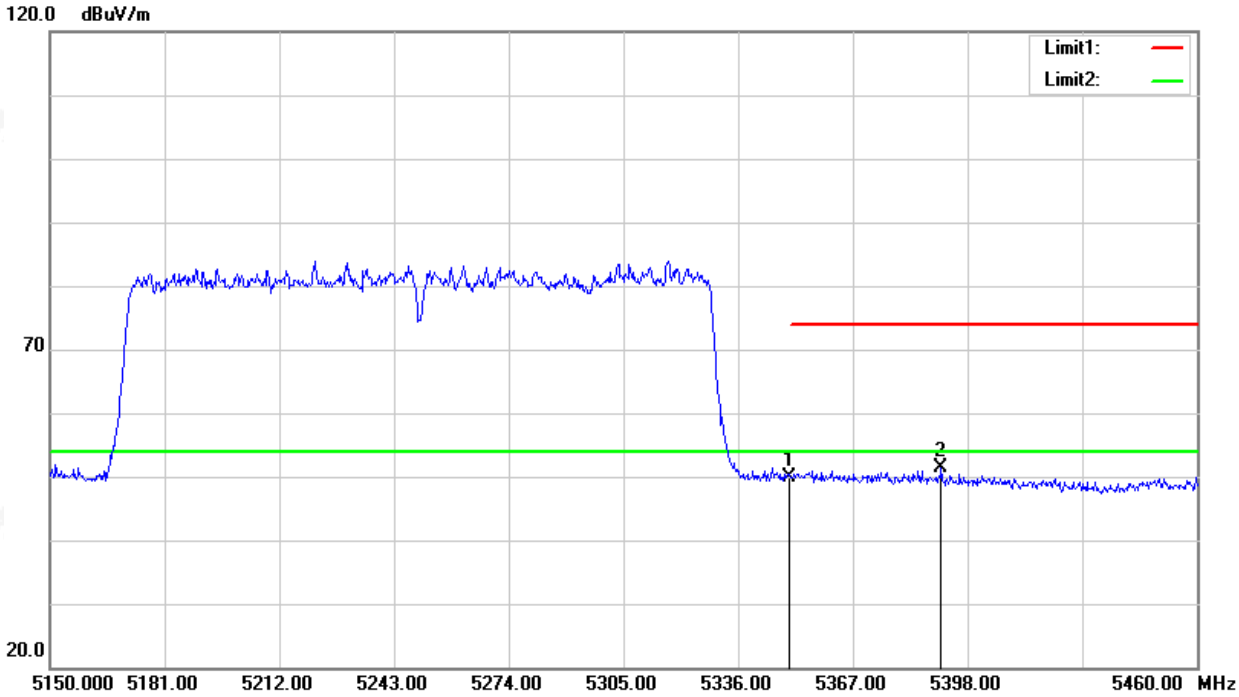
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5083.950	20.60	31.67	52.27	74.00	-21.73	peak
2	5150.000	17.74	31.72	49.46	74.00	-24.54	peak

802.11ax160-L-V



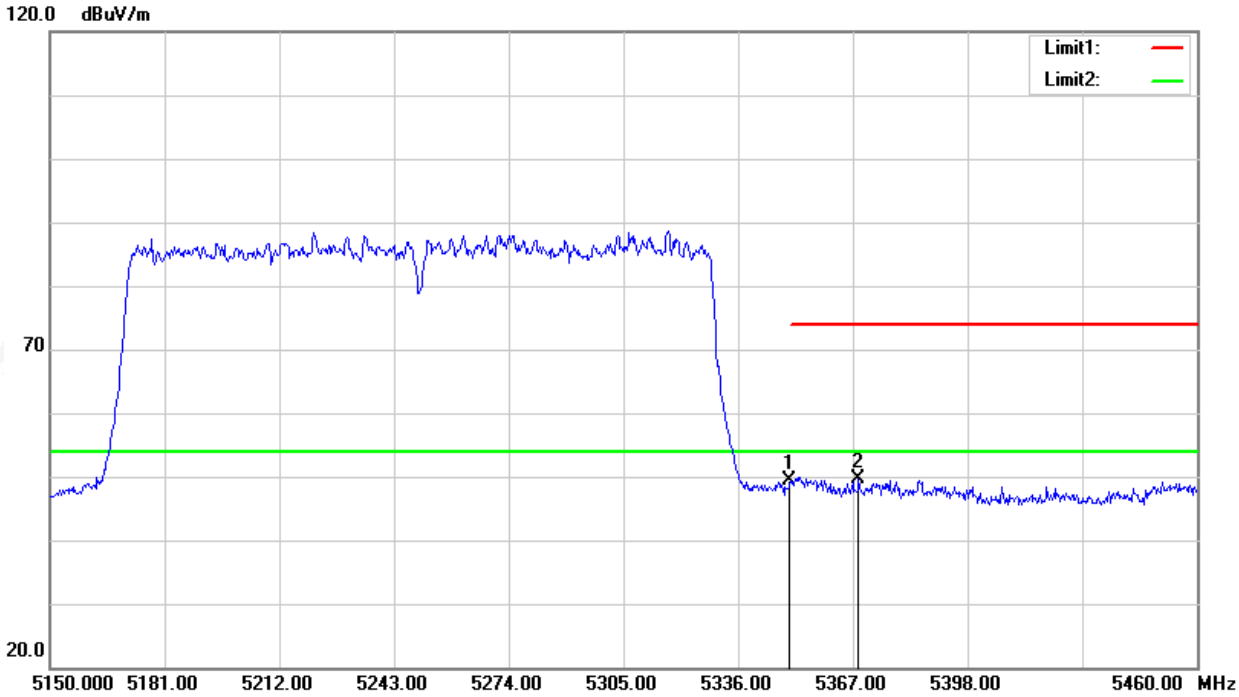
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5112.850	19.96	31.69	51.65	74.00	-22.35	peak
2	5150.000	20.24	31.72	51.96	74.00	-22.04	peak

802.11ax160-H-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	18.05	31.88	49.93	74.00	-24.07	peak
2	5390.870	19.40	31.91	51.31	74.00	-22.69	peak

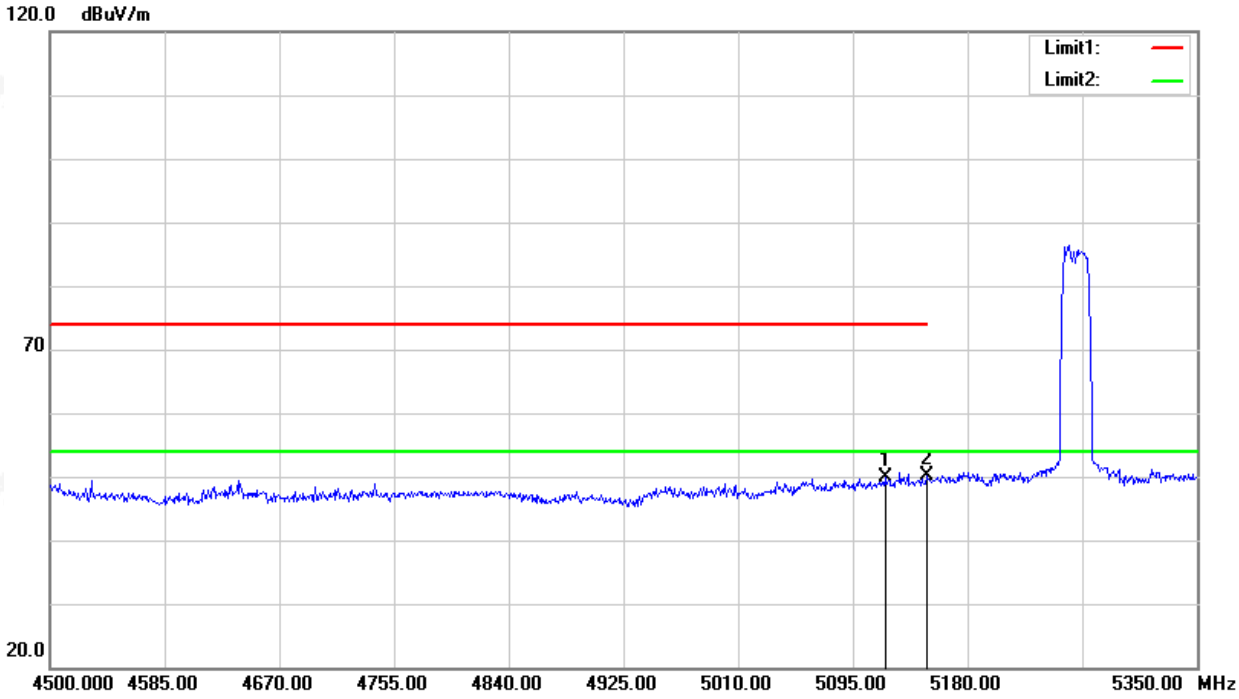
802.11ax160-H-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	17.54	31.88	49.42	74.00	-24.58	peak
2	5368.550	17.83	31.89	49.72	74.00	-24.28	peak

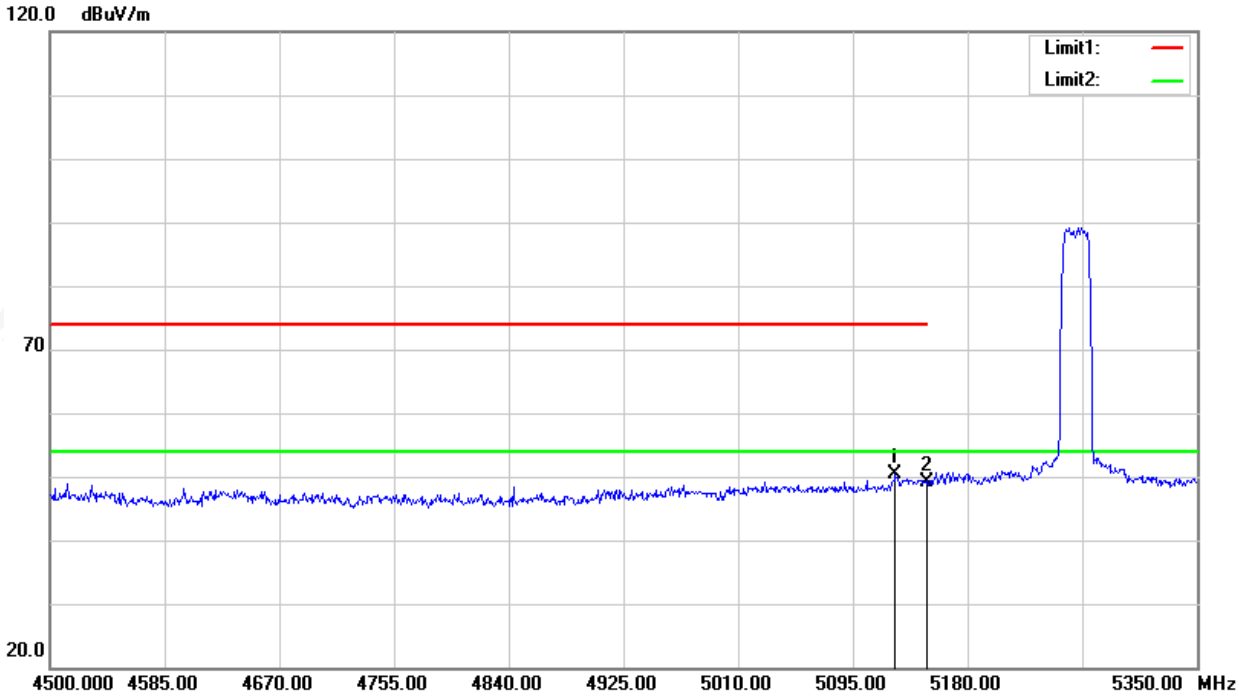
U-NII-2A 5250-5350MHz

802.11ax20-L-H



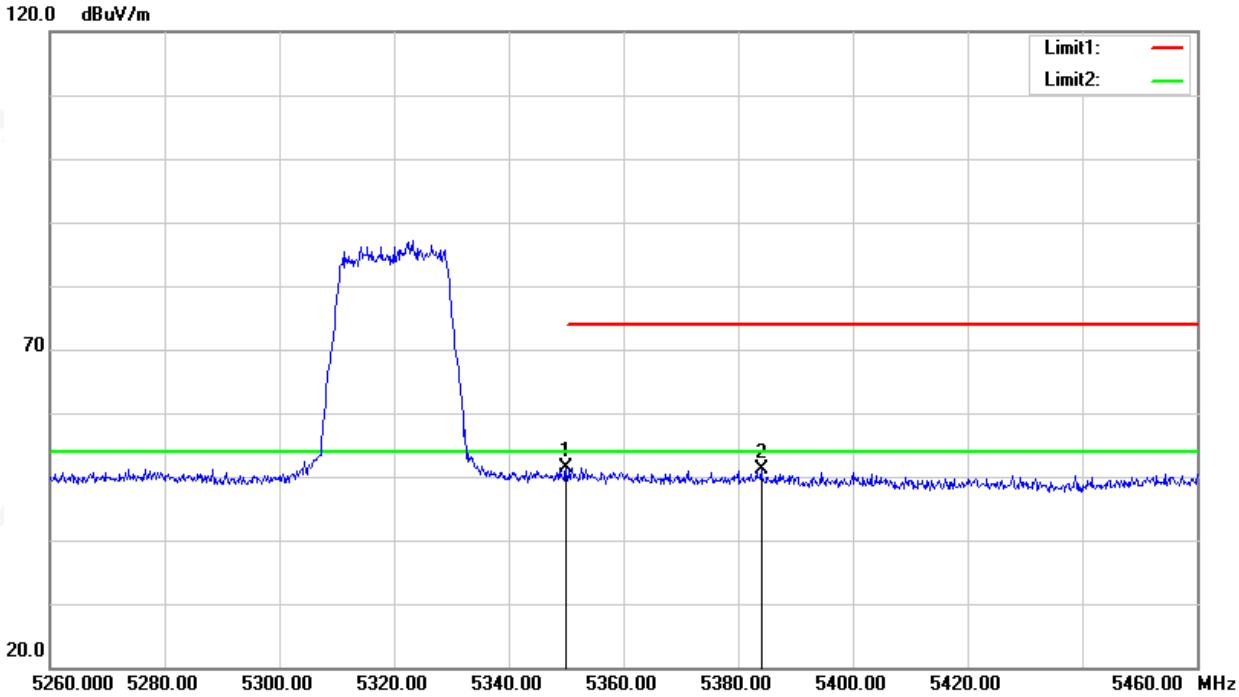
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5118.800	18.09	31.70	49.79	74.00	-24.21	peak
2	5150.000	18.39	31.72	50.11	74.00	-23.89	peak

802.11ax20-L-V



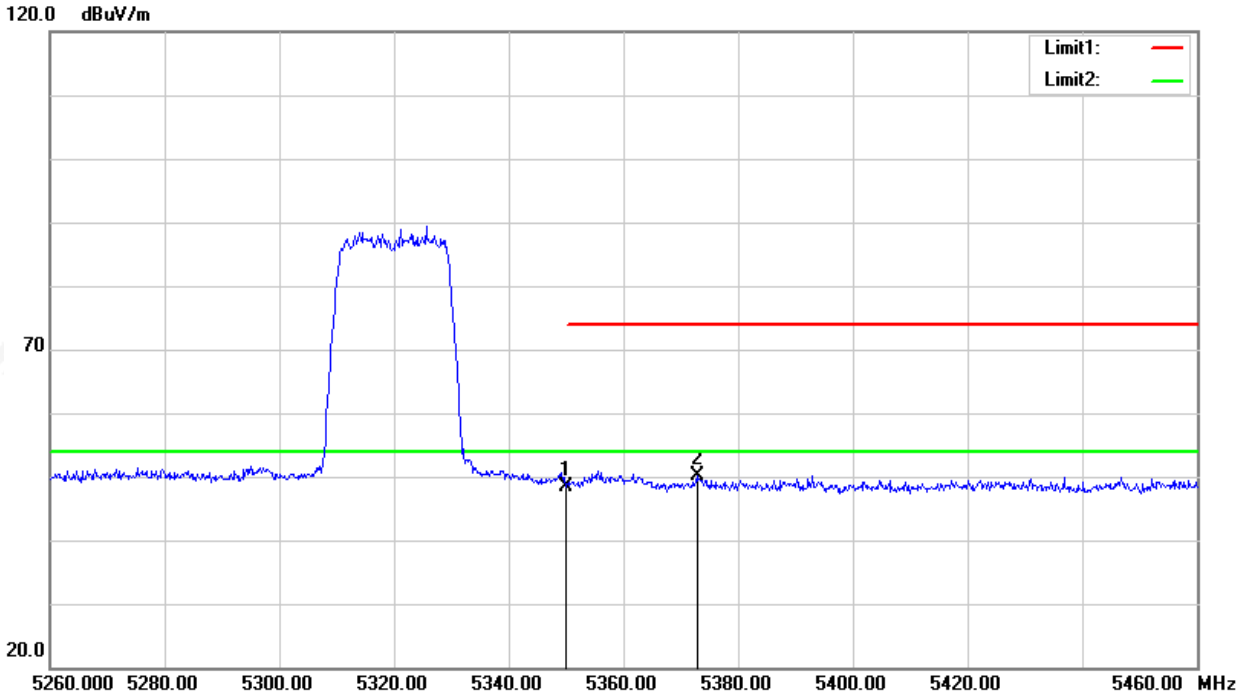
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5126.450	18.60	31.70	50.30	74.00	-23.70	peak
2	5150.000	17.53	31.72	49.25	74.00	-24.75	peak

802.11ax20-H-H



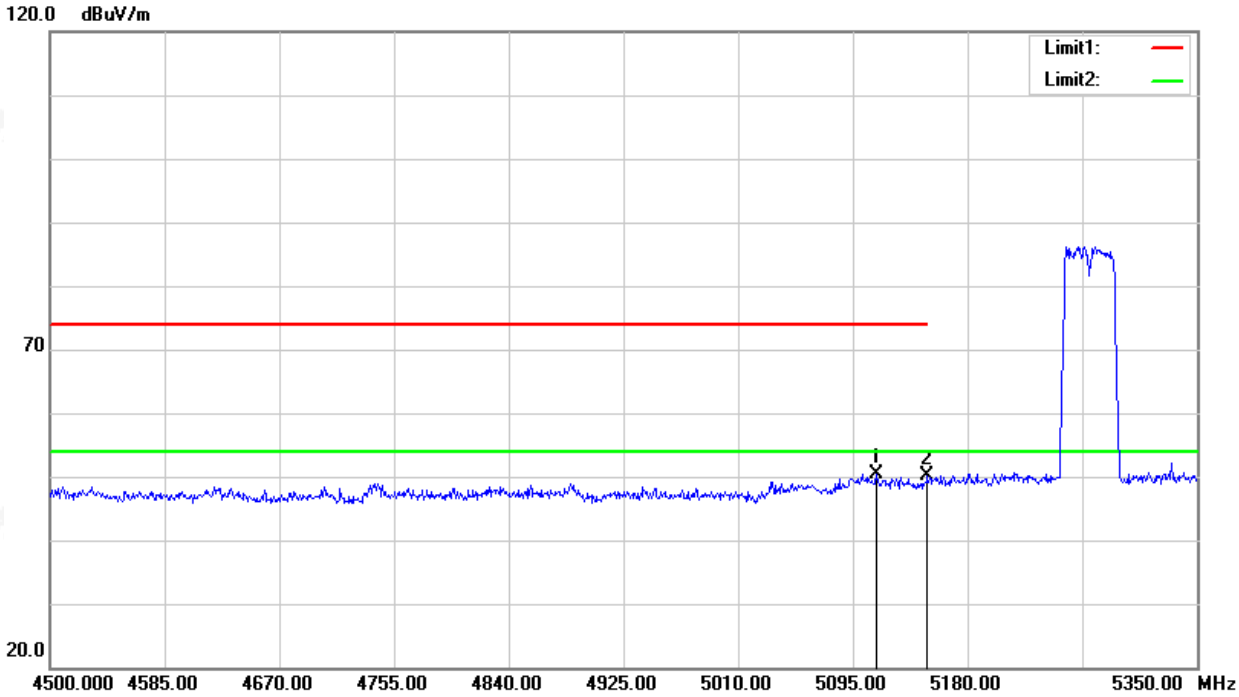
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	19.40	31.88	51.28	74.00	-22.72	peak
2	5384.000	19.11	31.91	51.02	74.00	-22.98	peak

802.11ax20-H-V



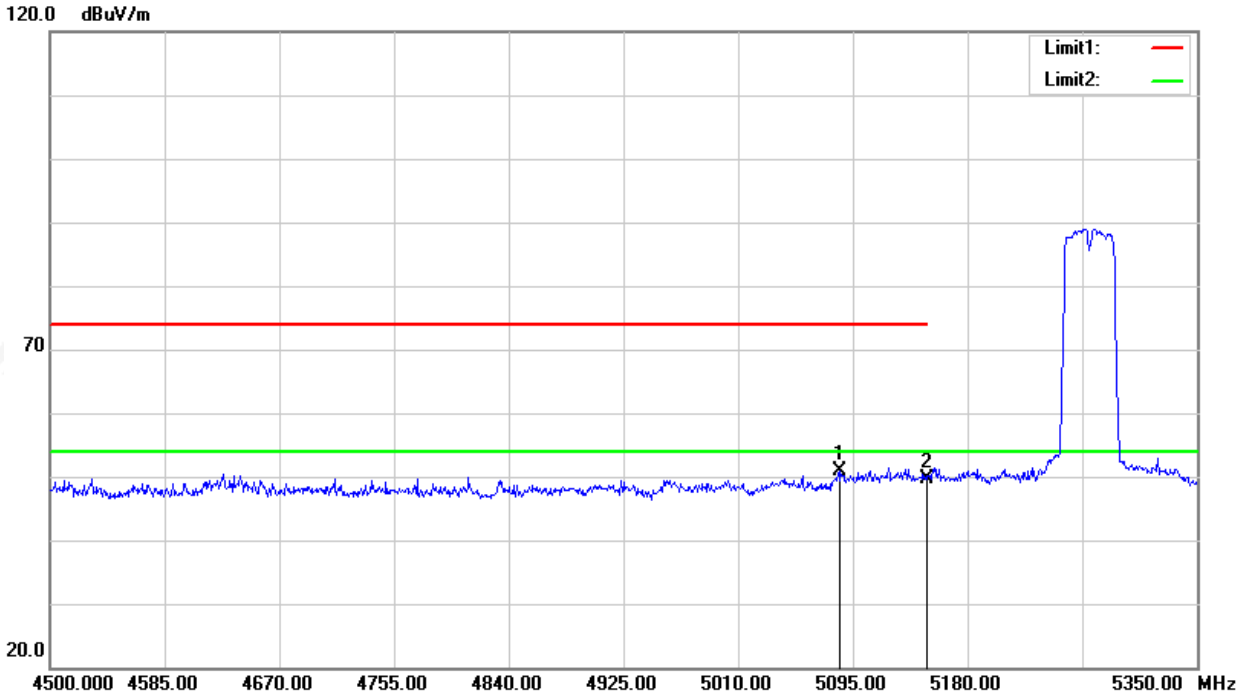
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	16.44	31.88	48.32	74.00	-25.68	peak
2	5372.800	18.28	31.90	50.18	74.00	-23.82	peak

802.11n40-L-H



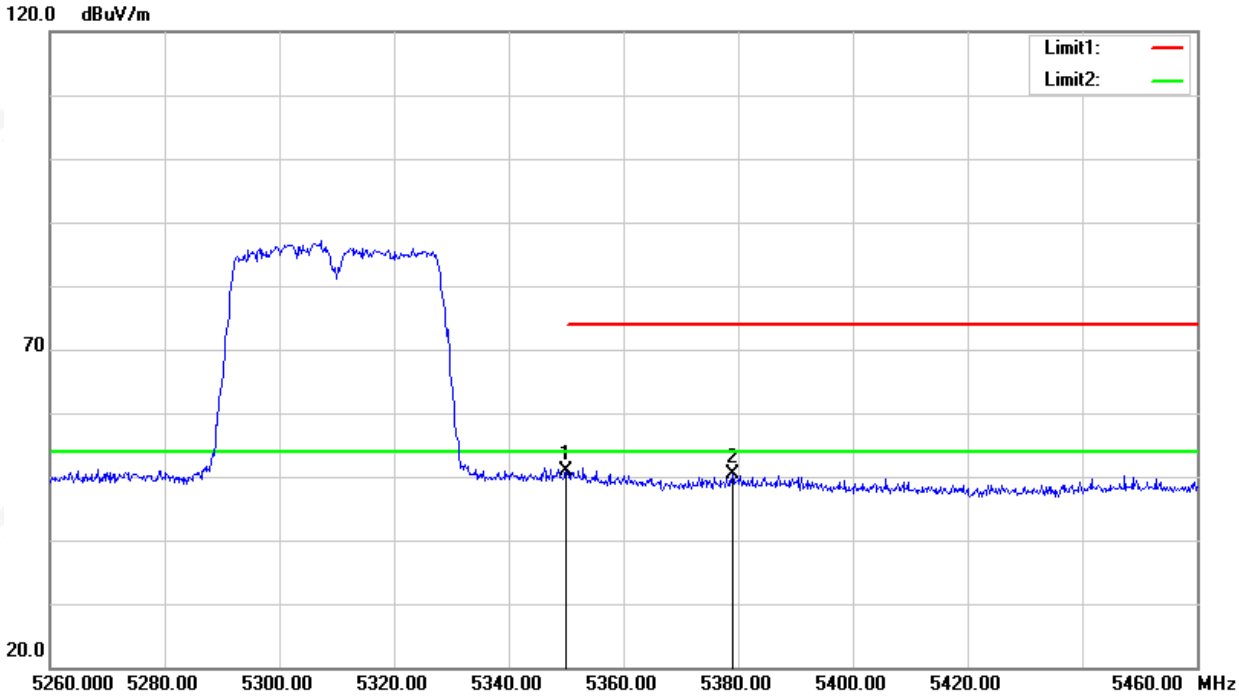
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5112.000	18.65	31.69	50.34	74.00	-23.66	peak
2	5150.000	18.37	31.72	50.09	74.00	-23.91	peak

802.11n40-L-V



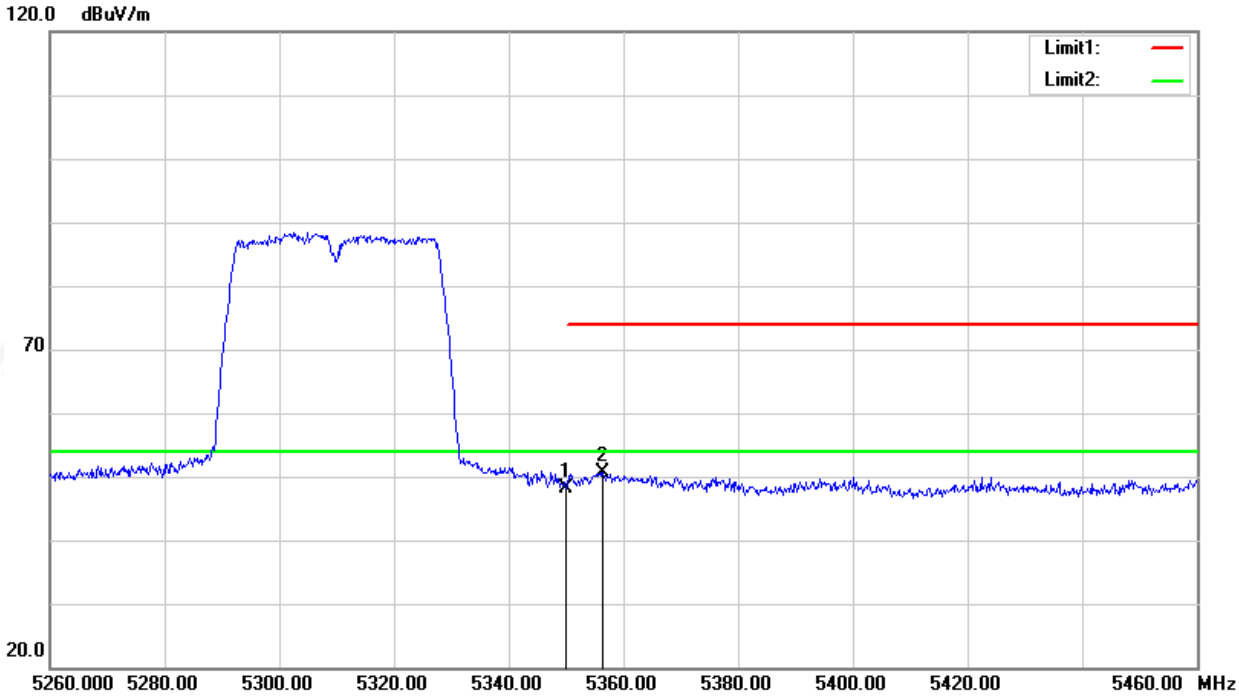
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5084.800	19.17	31.67	50.84	74.00	-23.16	peak
2	5150.000	18.02	31.72	49.74	74.00	-24.26	peak

802.11n40-H-H



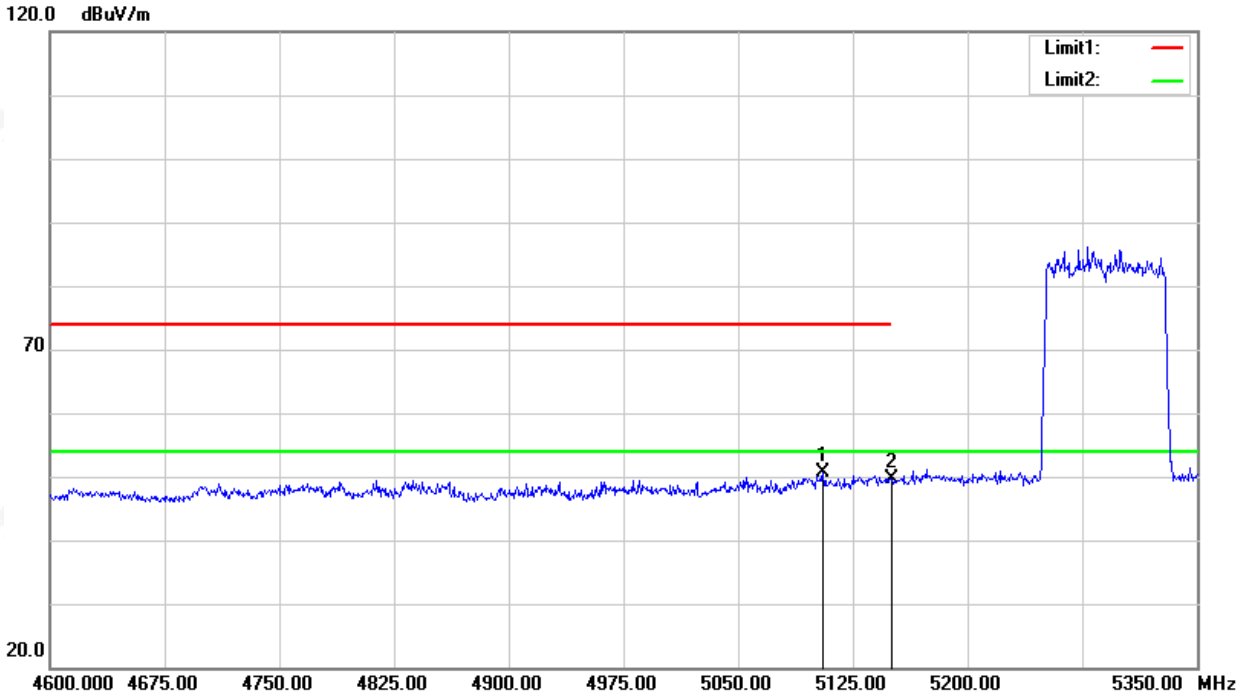
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	18.90	31.88	50.78	74.00	-23.22	peak
2	5379.000	18.39	31.90	50.29	74.00	-23.71	peak

802.11n40-H-V



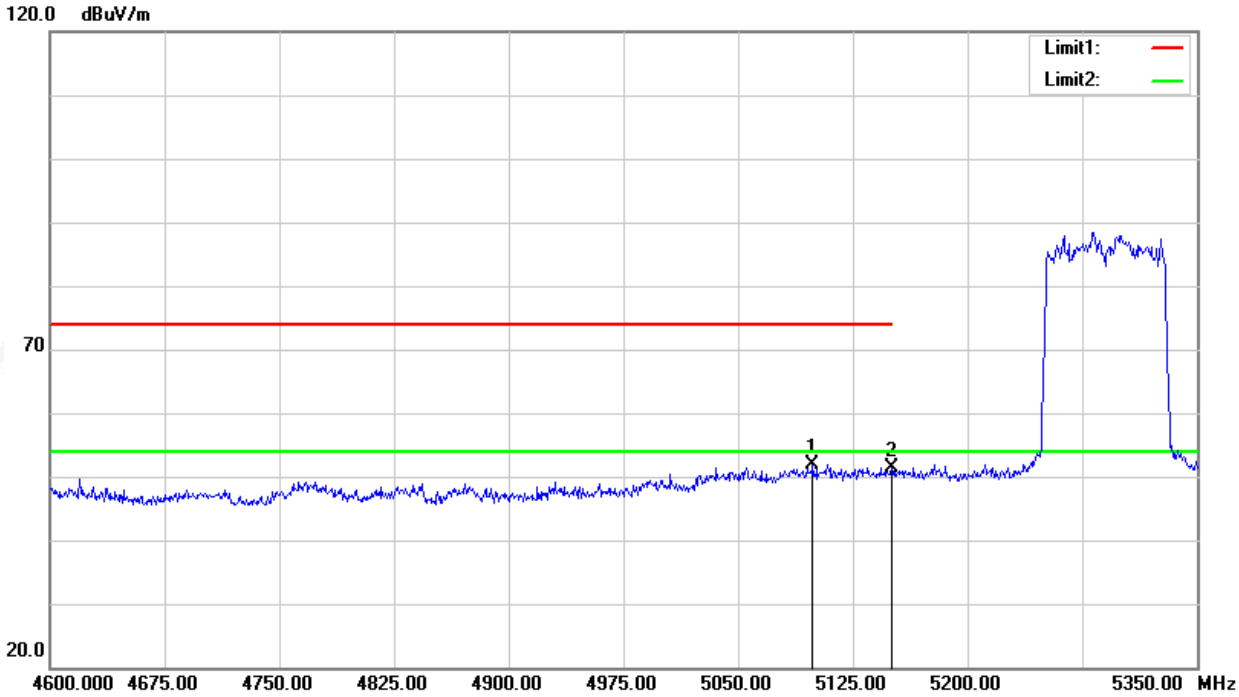
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	16.30	31.88	48.18	74.00	-25.82	peak
2	5356.400	18.86	31.89	50.75	74.00	-23.25	peak

802.11ax80-L-H



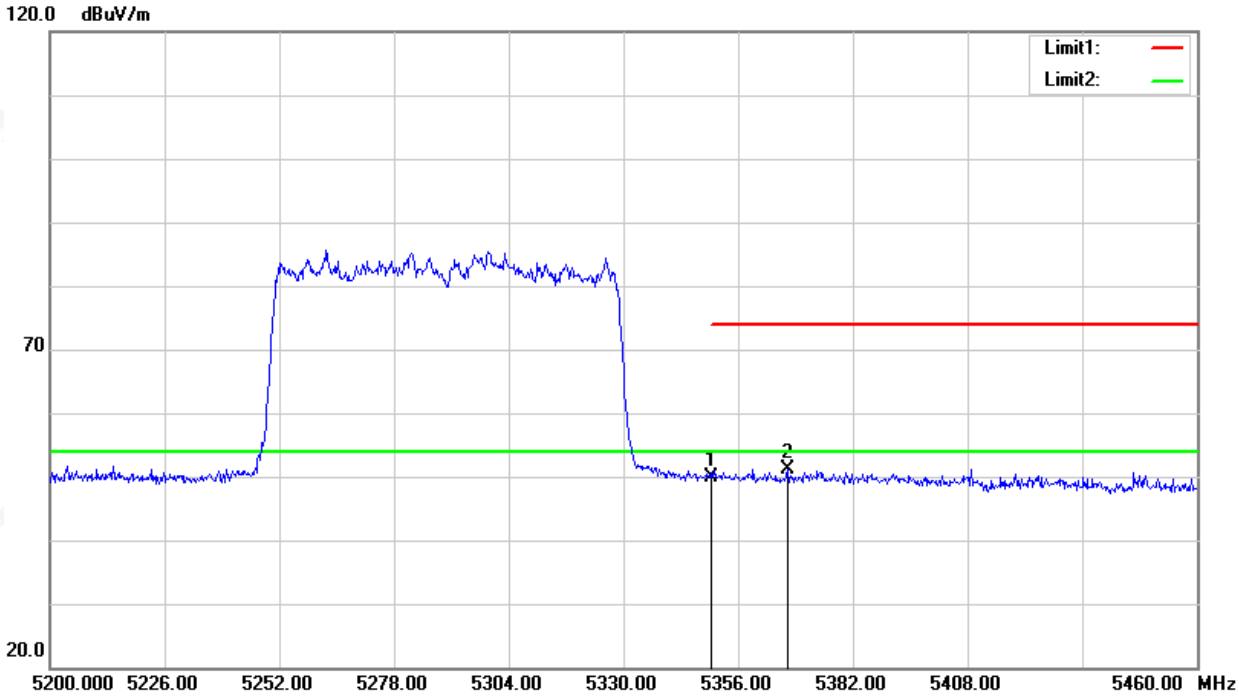
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5105.500	19.03	31.68	50.71	74.00	-23.29	peak
2	5150.000	17.83	31.72	49.55	74.00	-24.45	peak

802.11ax80-L-V



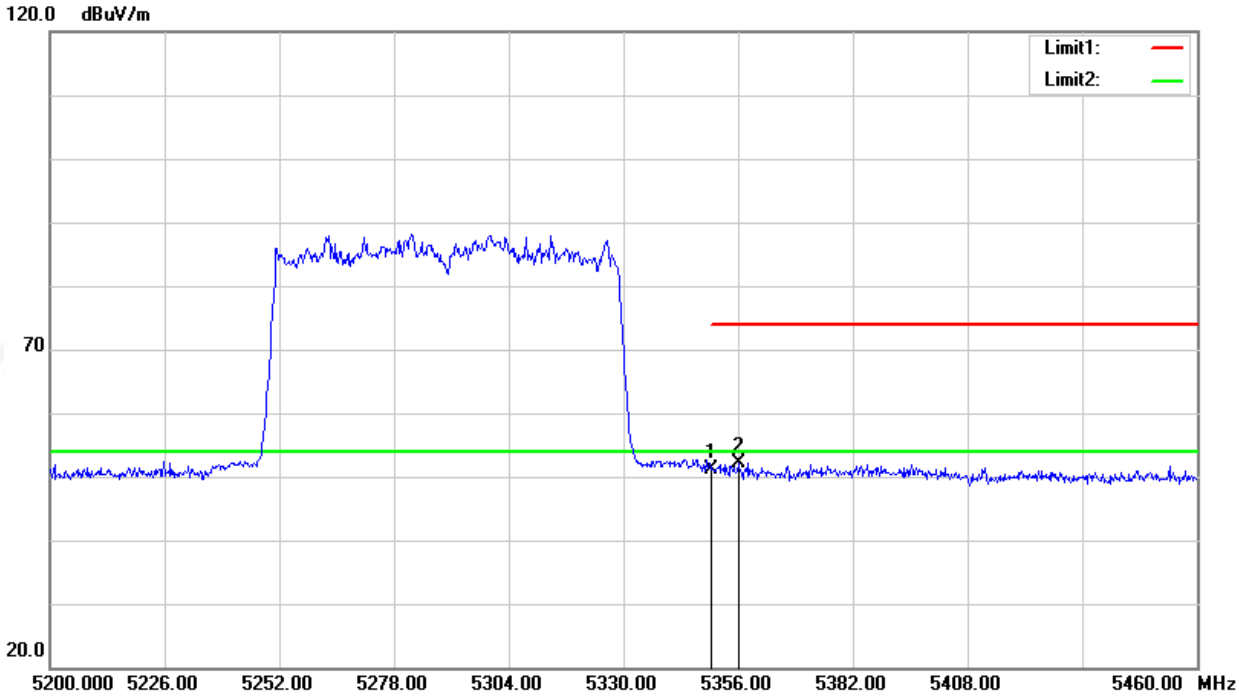
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5098.750	20.20	31.68	51.88	74.00	-22.12	peak
2	5150.000	19.57	31.72	51.29	74.00	-22.71	peak

802.11ax80-H-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	18.02	31.88	49.90	74.00	-24.10	peak
2	5367.180	19.22	31.89	51.11	74.00	-22.89	peak

802.11ax80-H-V

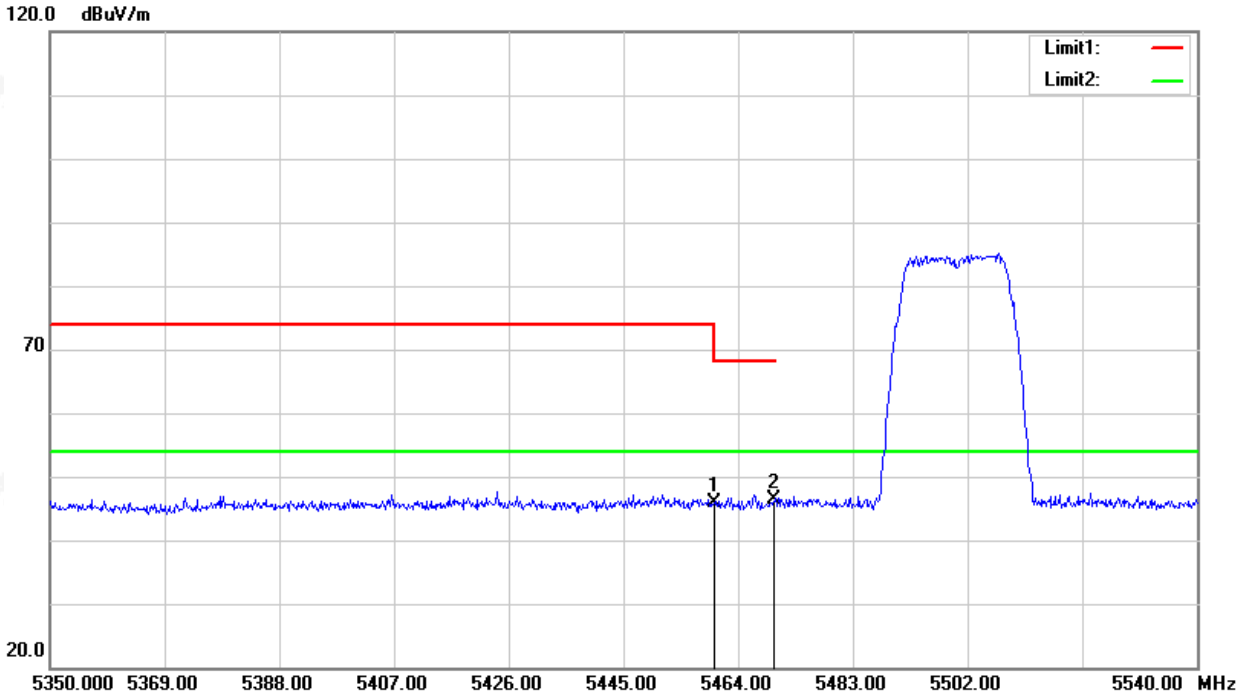


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	19.22	31.88	51.10	74.00	-22.90	peak
2	5356.000	20.35	31.88	52.23	74.00	-21.77	peak

Note: All modes have been tested. Only the worst mode shown in the report.

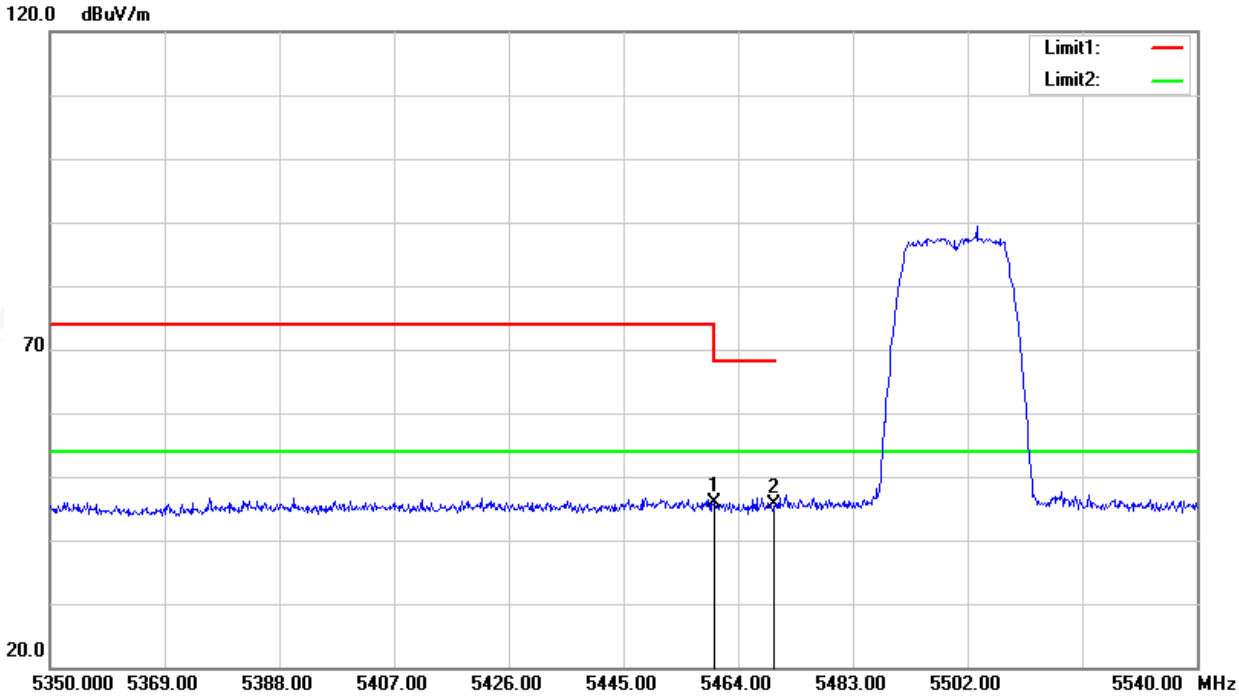
U-NII-2C 5470-5725MHz

802.11n20-L-H



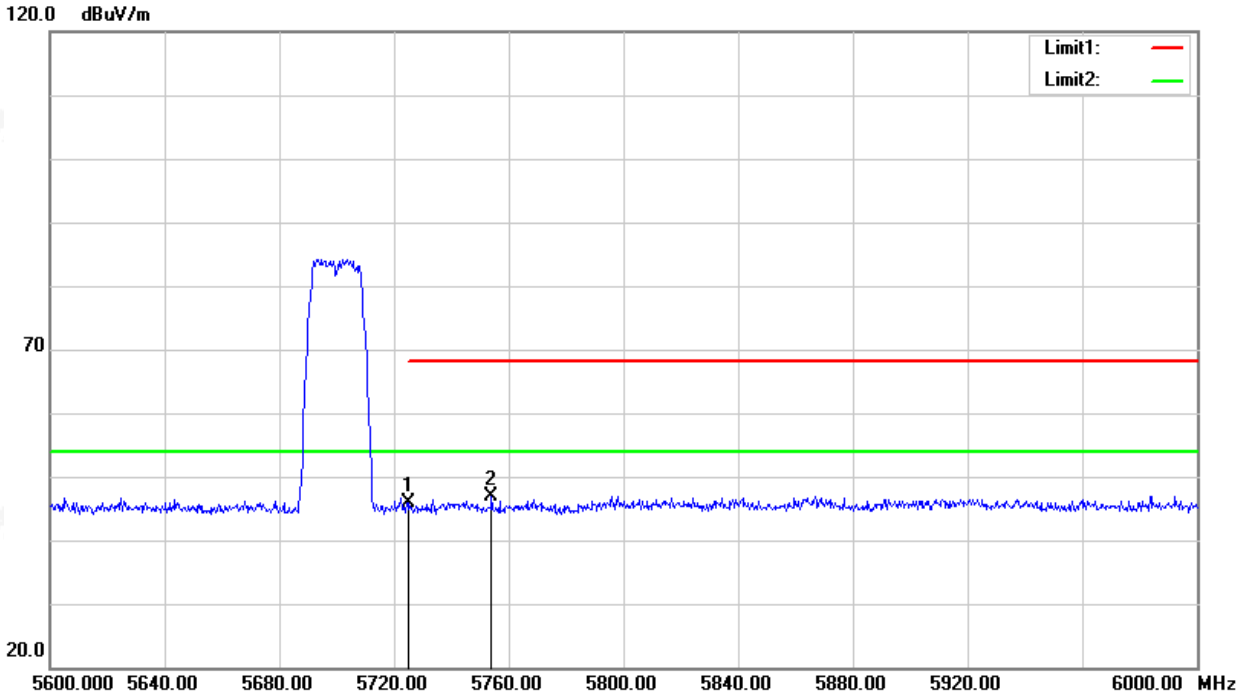
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	51.02	-5.11	45.91	68.20	-22.29	peak
2	5470.000	51.44	-5.09	46.35	68.20	-21.85	peak

802.11n20-L-V



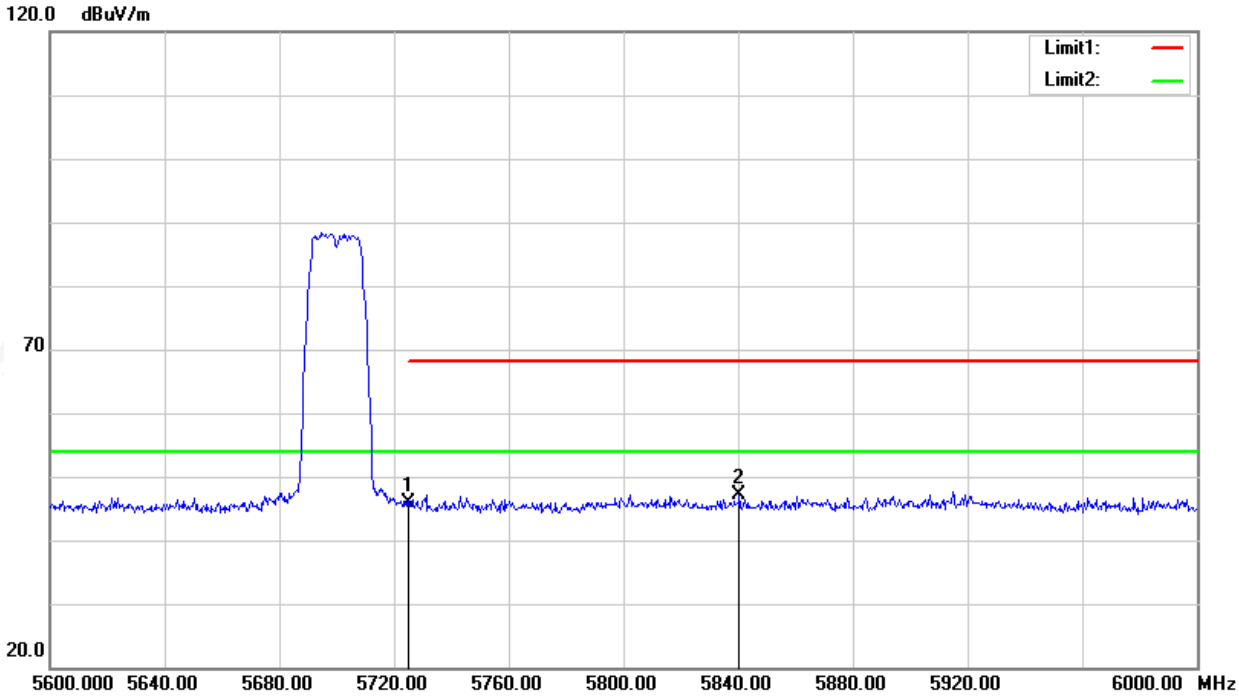
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	51.02	-5.11	45.91	68.20	-22.29	peak
2	5470.000	50.73	-5.09	45.64	68.20	-22.56	peak

802.11n20-H-H



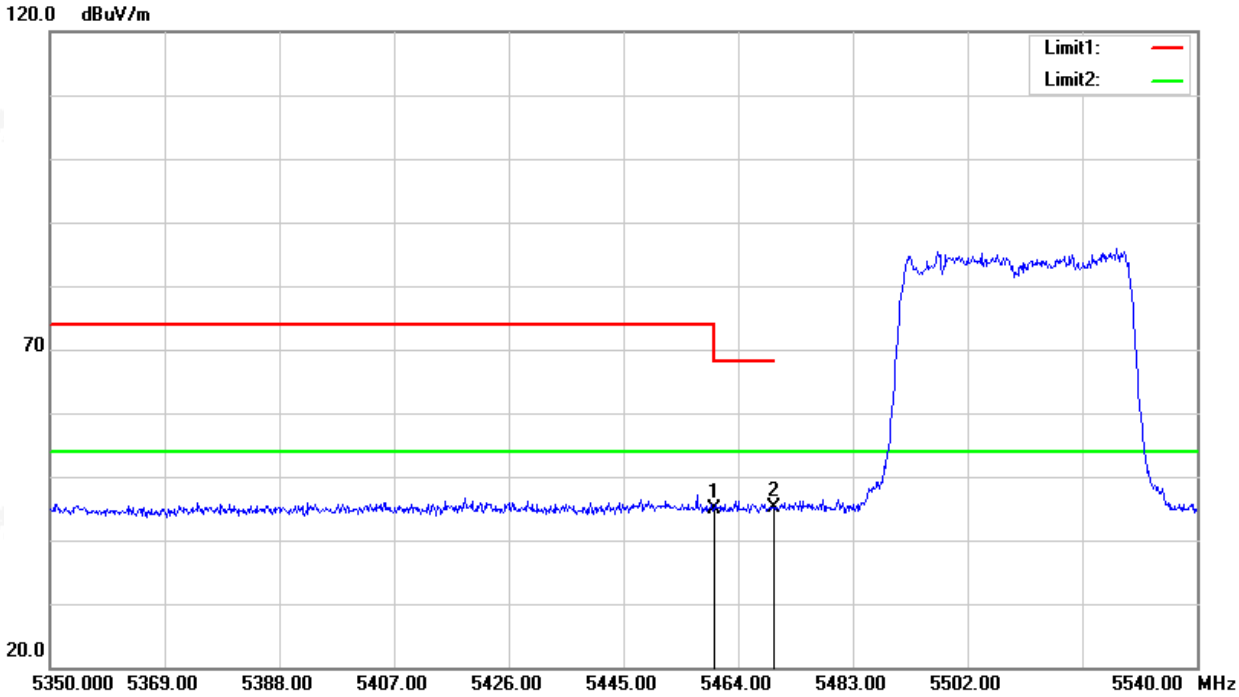
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	50.53	-4.57	45.96	68.20	-22.24	peak
2	5754.000	51.46	-4.47	46.99	68.20	-21.21	peak

802.11n20-H-V



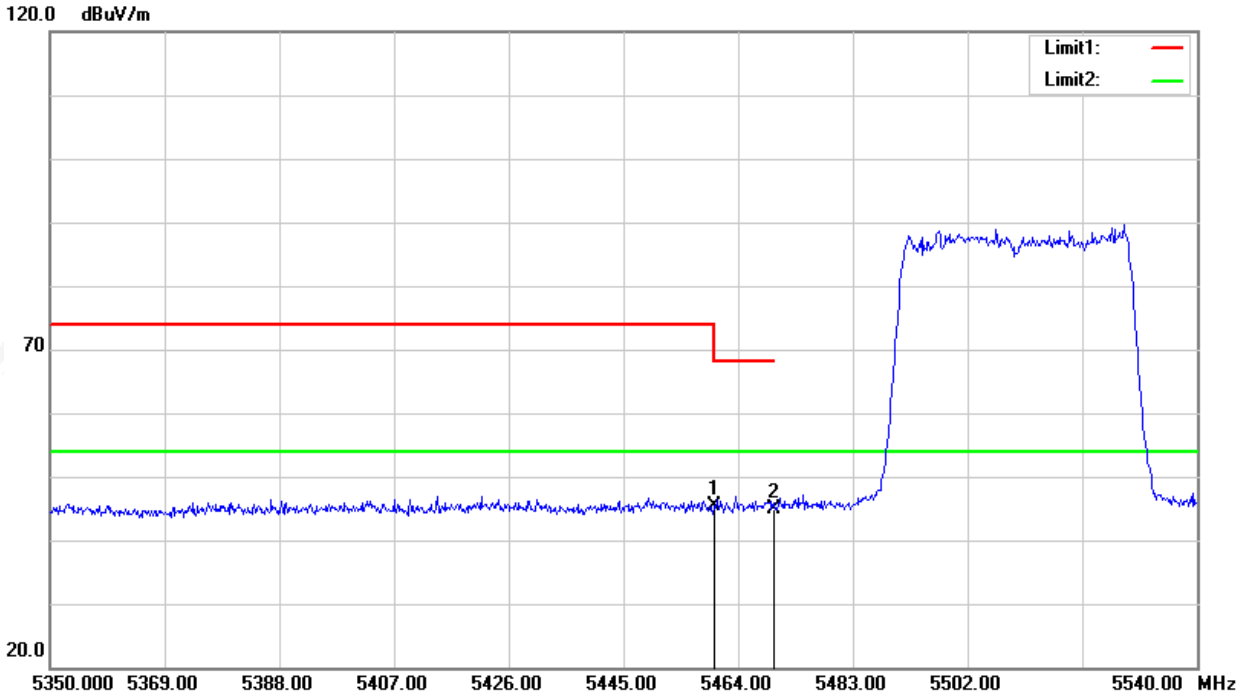
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	50.50	-4.57	45.93	68.20	-22.27	peak
2	5840.400	51.31	-4.15	47.16	68.20	-21.04	peak

802.11ax40-L-H



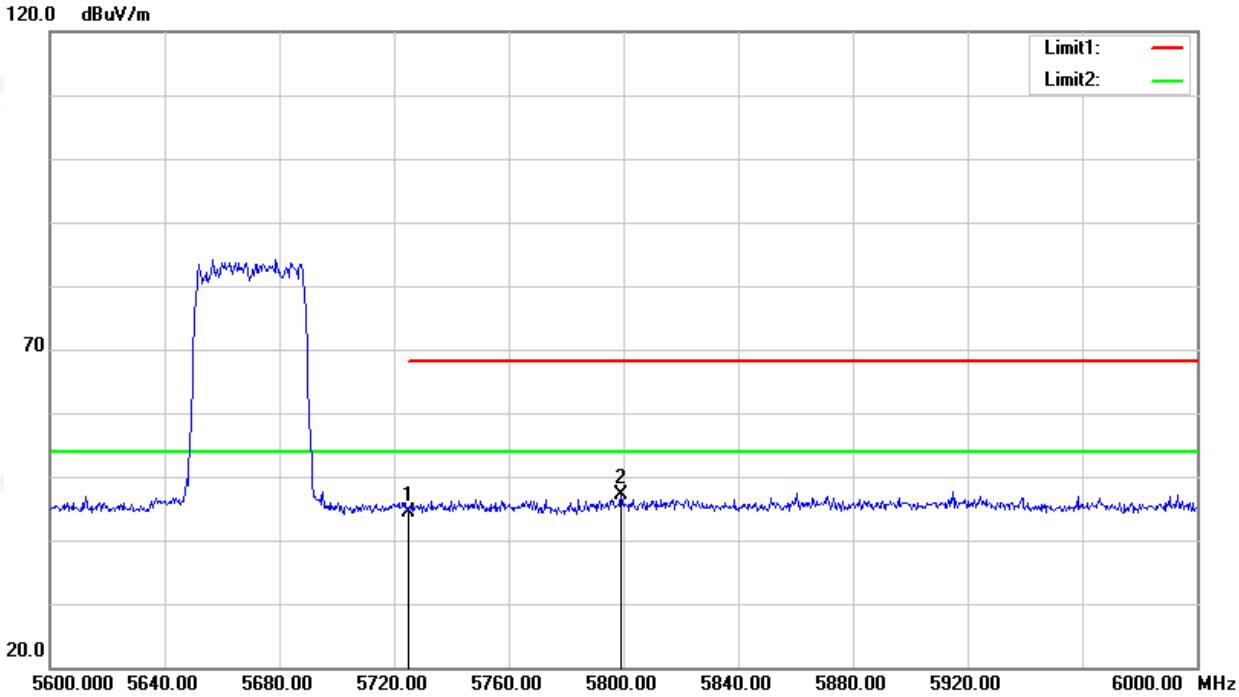
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	49.98	-5.11	44.87	68.20	-23.33	peak
2	5470.000	50.18	-5.09	45.09	68.20	-23.11	peak

802.11ax40-L-V



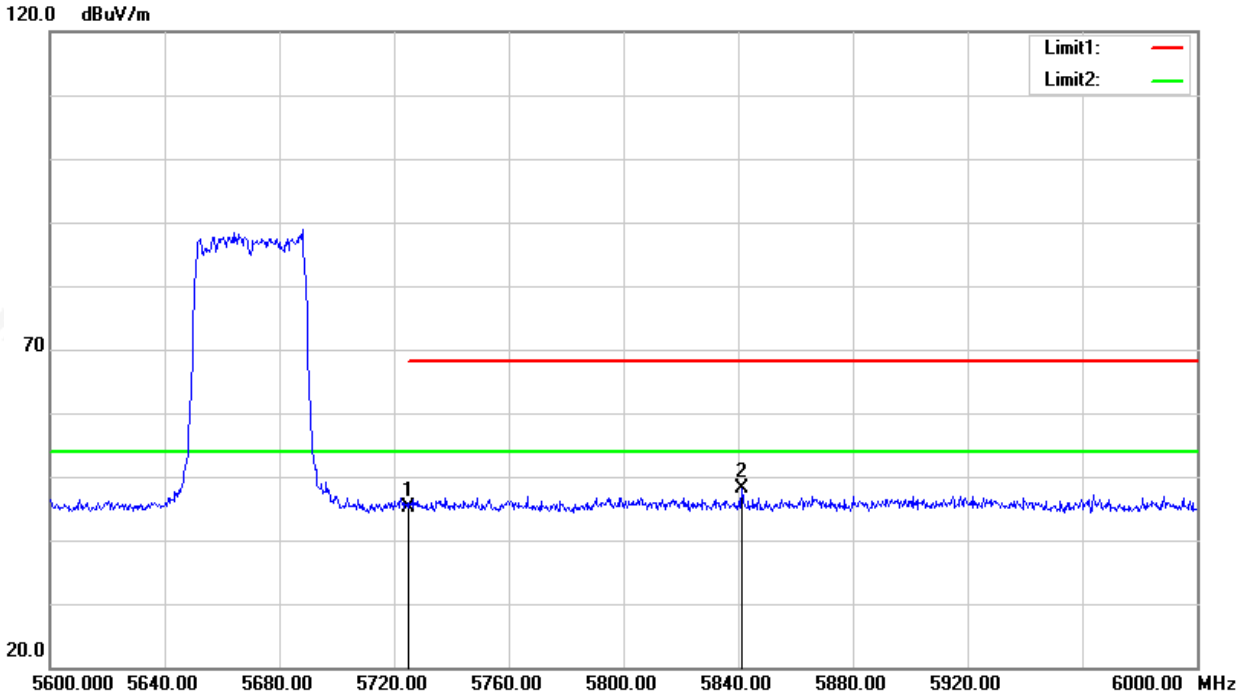
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	50.51	-5.11	45.40	68.20	-22.80	peak
2	5470.000	50.00	-5.09	44.91	68.20	-23.29	peak

802.11ax40-H-H



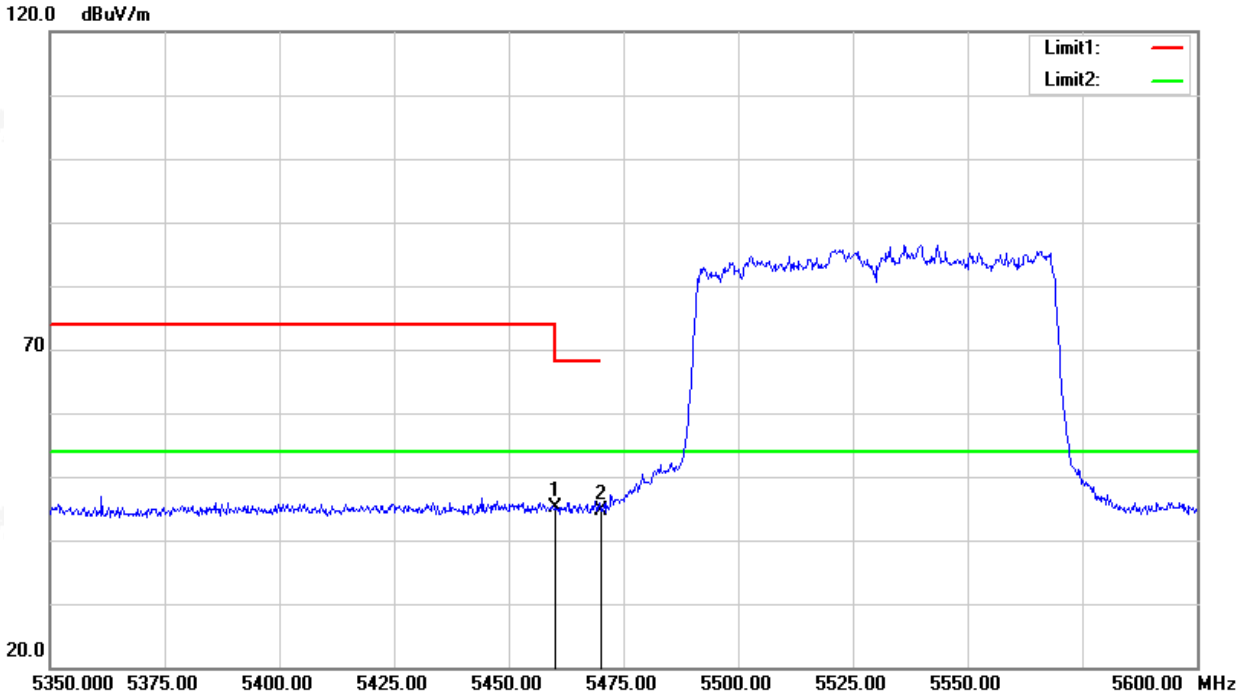
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	49.01	-4.57	44.44	68.20	-23.76	peak
2	5799.200	51.40	-4.32	47.08	68.20	-21.12	peak

802.11ax40-H-V



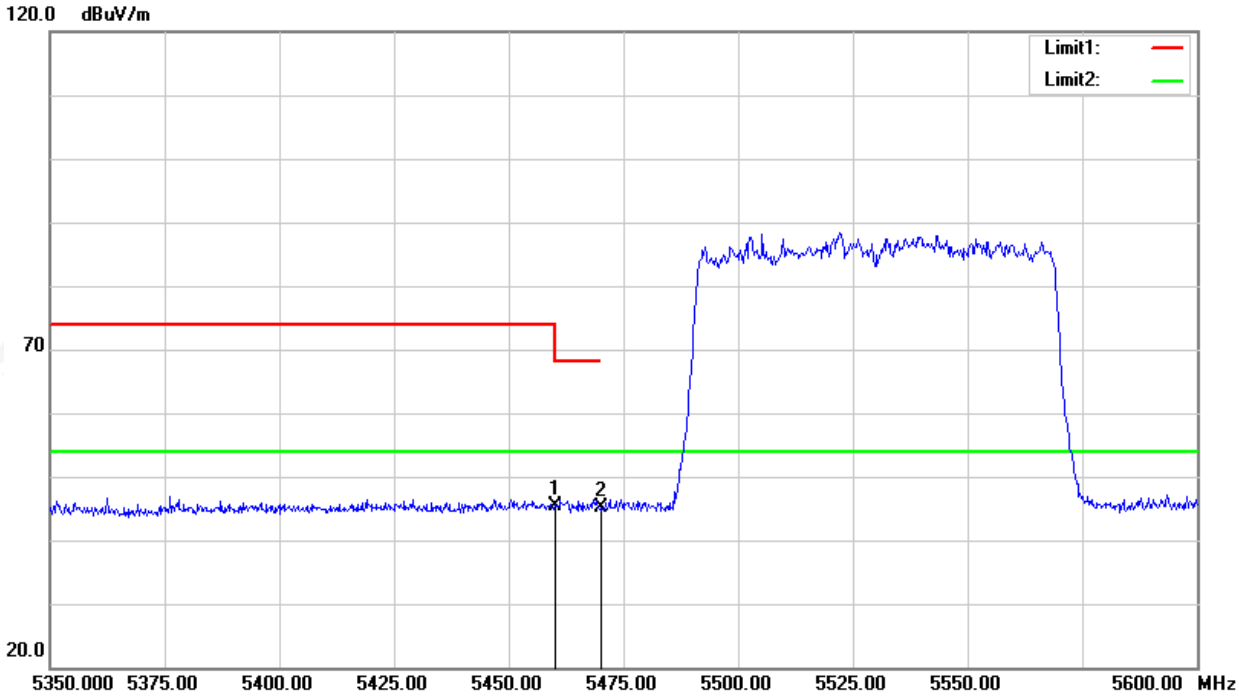
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	49.72	-4.57	45.15	68.20	-23.05	peak
2	5841.200	52.31	-4.13	48.18	68.20	-20.02	peak

802.11ax80-L-H



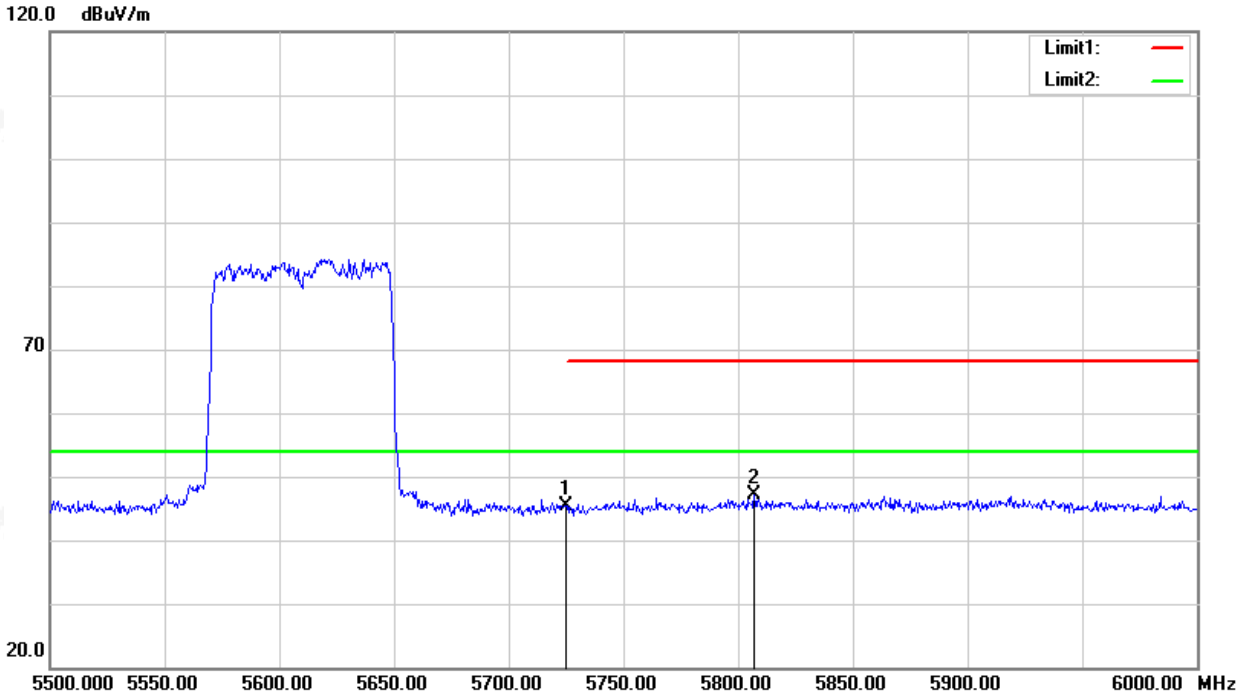
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	50.16	-5.11	45.05	68.20	-23.15	peak
2	5470.000	49.71	-5.09	44.62	68.20	-23.58	peak

802.11ax80-L-V



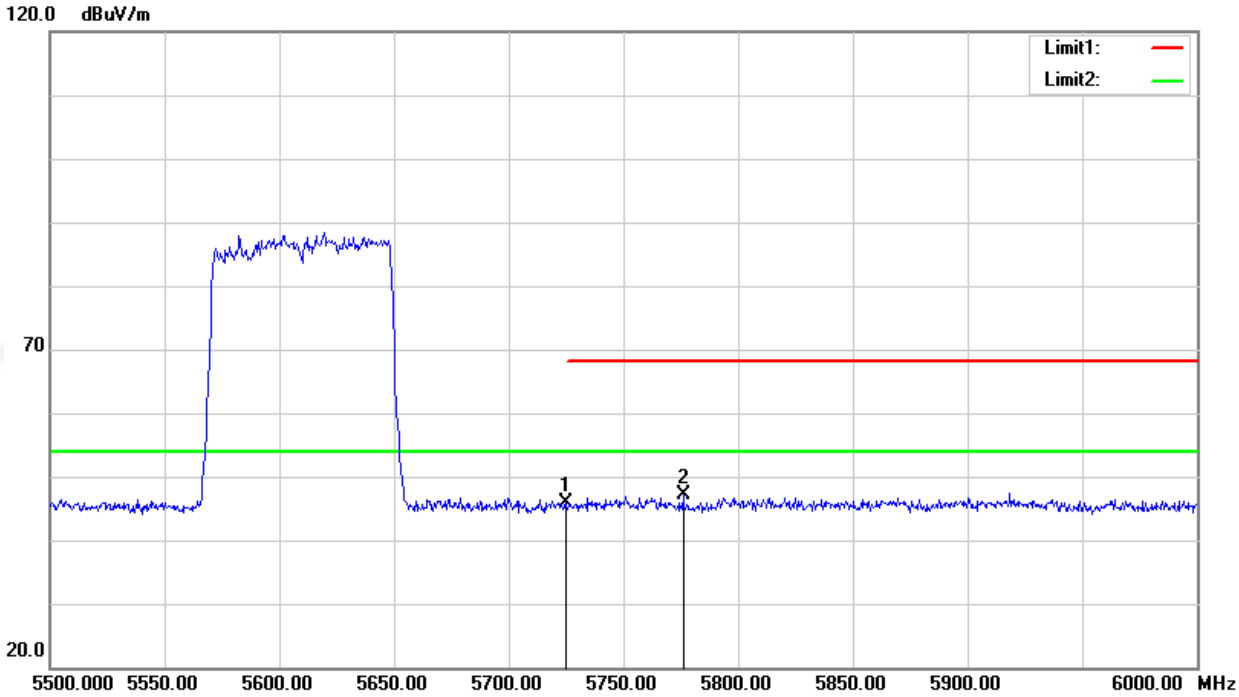
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	50.38	-5.11	45.27	68.20	-22.93	peak
2	5470.000	50.25	-5.09	45.16	68.20	-23.04	peak

802.11ax80-H-H



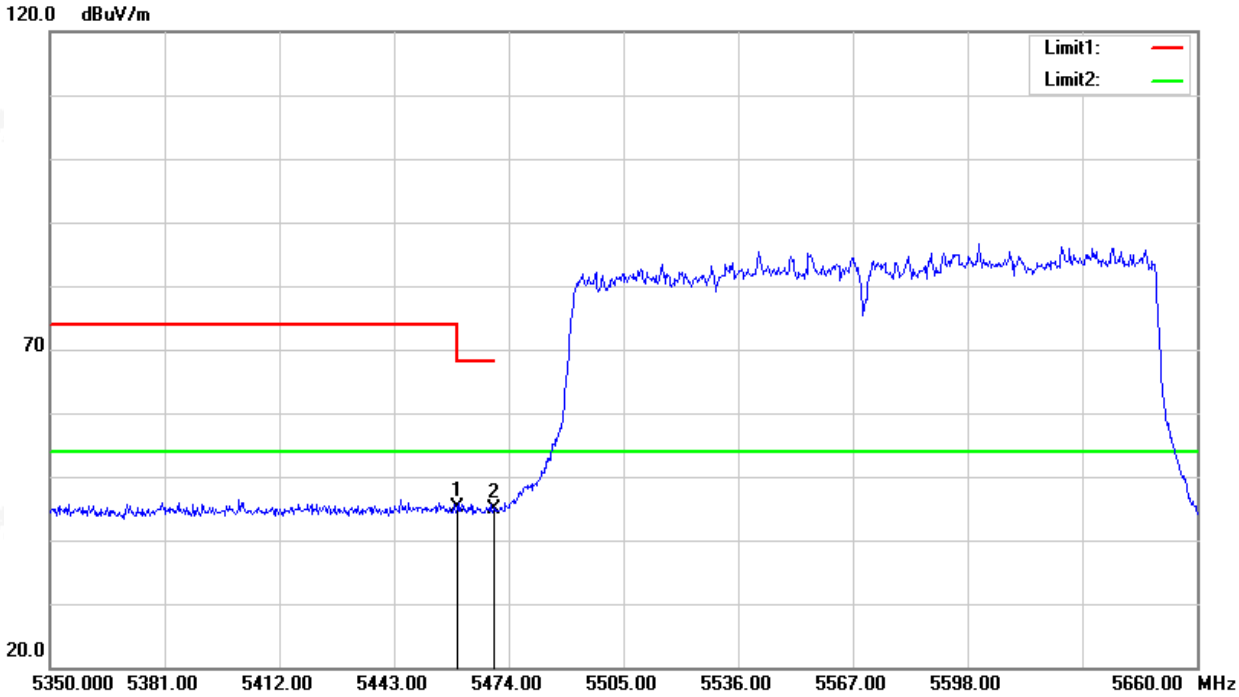
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	50.07	-4.57	45.50	68.20	-22.70	peak
2	5807.000	51.46	-4.29	47.17	68.20	-21.03	peak

802.11ax80-H-V



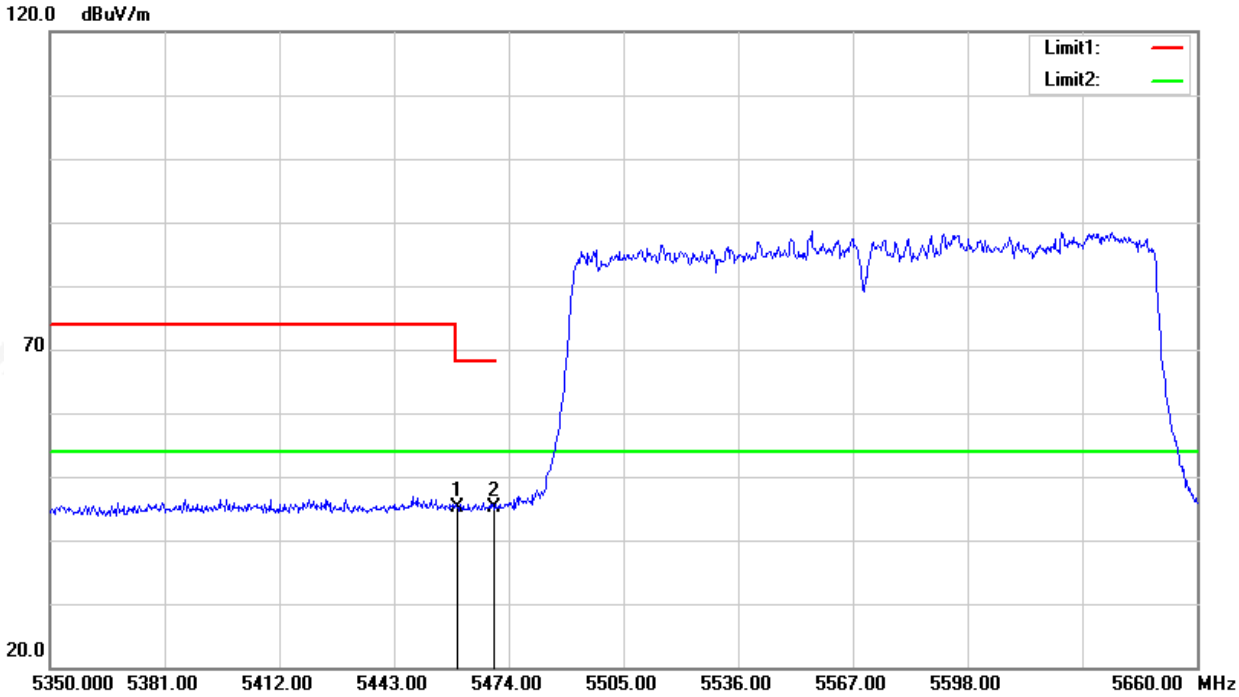
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	50.47	-4.57	45.90	68.20	-22.30	peak
2	5776.000	51.49	-4.40	47.09	68.20	-21.11	peak

802.11ax160-L-H



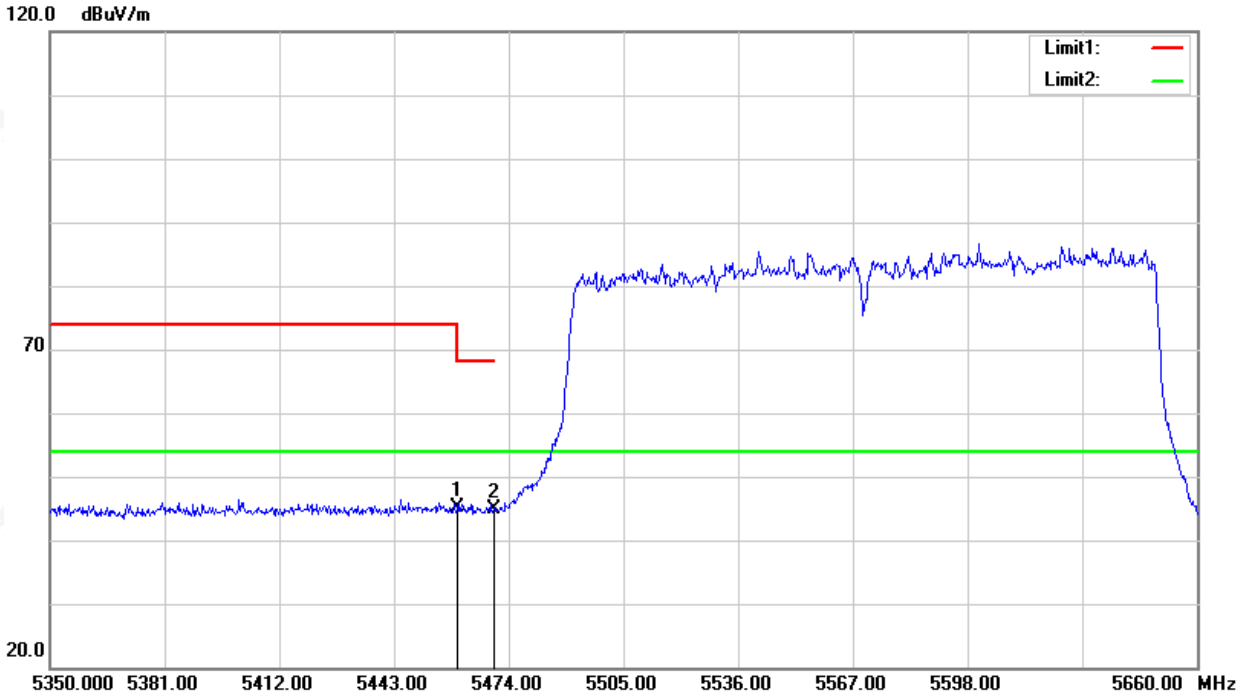
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	50.31	-5.11	45.20	68.20	-23.00	peak
2	5470.000	50.02	-5.09	44.93	68.20	-23.27	peak

802.11ax160-L-V



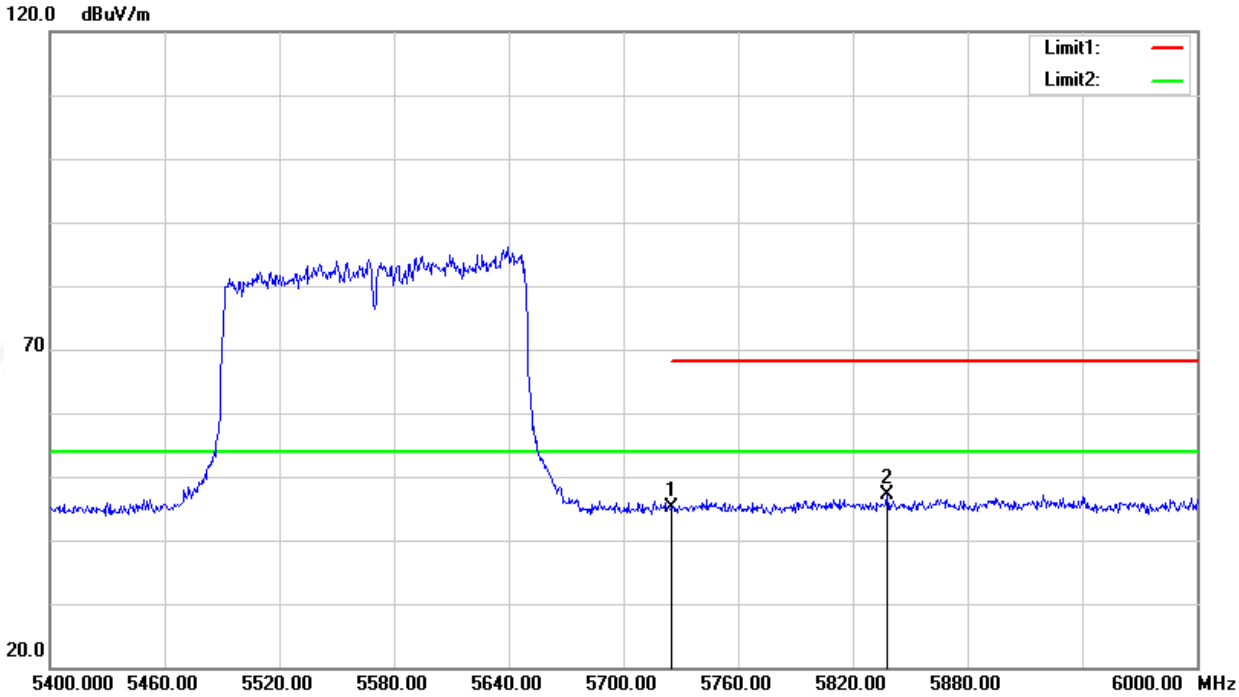
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	50.28	-5.11	45.17	68.20	-23.03	peak
2	5470.000	50.17	-5.09	45.08	68.20	-23.12	peak

802.11ax160-H-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5460.000	50.31	-5.11	45.20	68.20	-23.00	peak
2	5470.000	50.02	-5.09	44.93	68.20	-23.27	peak

802.11ax160-H-V

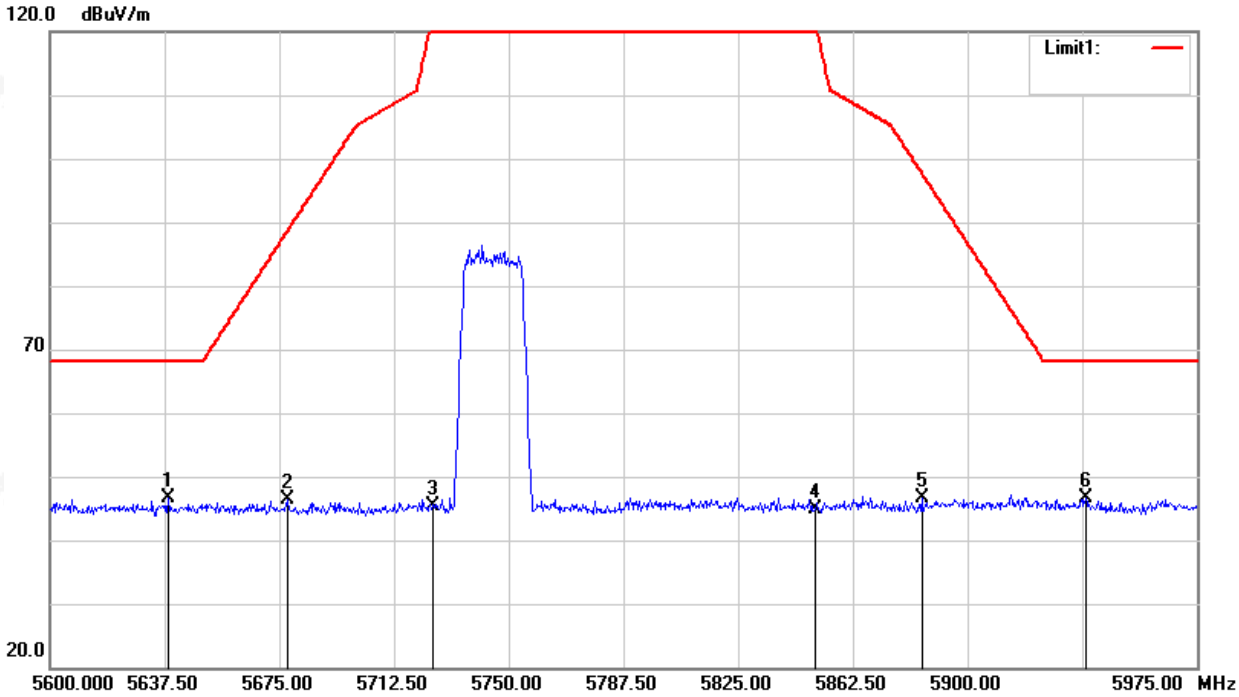


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5725.000	49.77	-4.57	45.20	68.20	-23.00	peak
2	5838.000	51.32	-4.15	47.17	68.20	-21.03	peak

Note: All modes have been tested. Only the worst mode shown in the report.

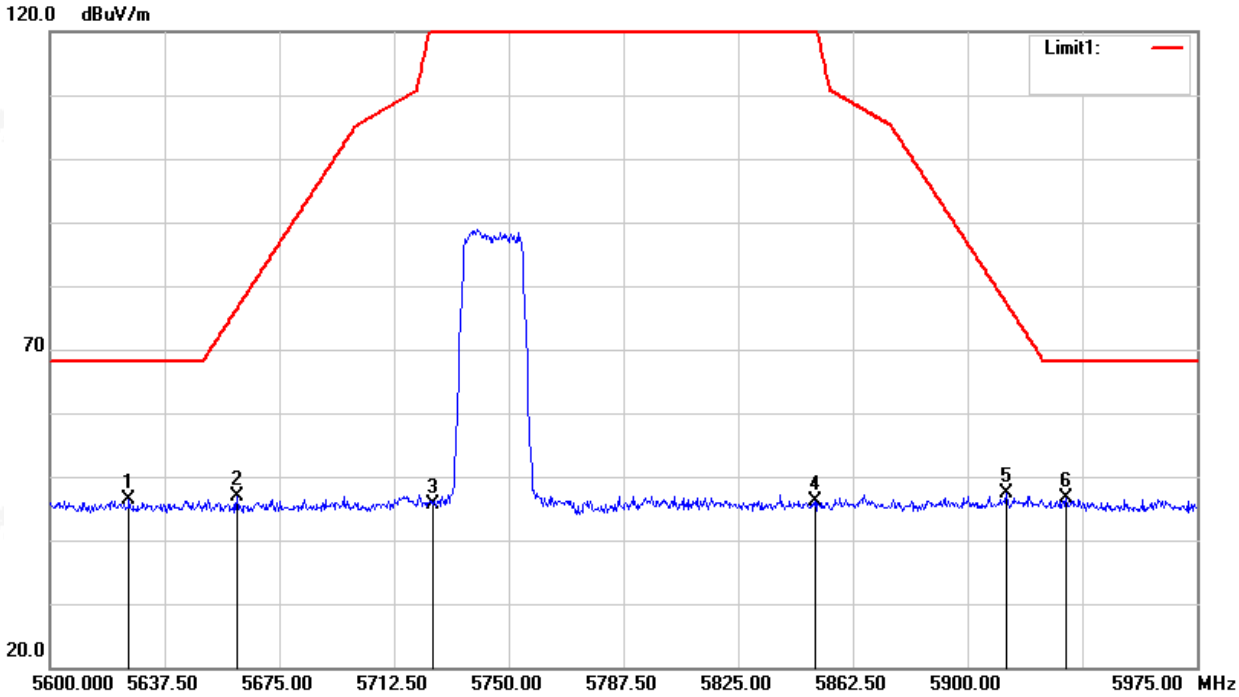
U-NII-3 (5.725-5.85 GHz)

802.11ax20-L-H



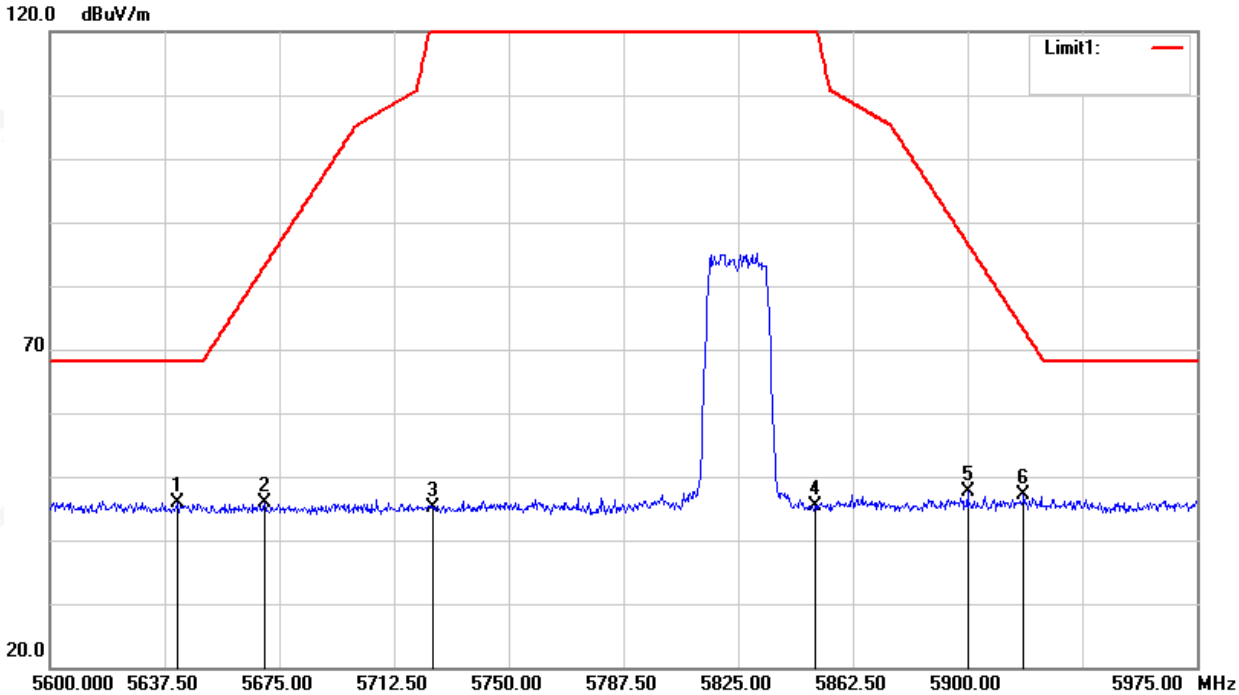
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5638.625	51.23	-4.69	46.54	68.20	-21.66	peak
2	5677.625	51.16	-4.67	46.49	88.64	-42.15	peak
3	5725.000	50.07	-4.57	45.50	122.20	-76.70	peak
4	5850.000	48.95	-4.10	44.85	122.20	-77.35	peak
5	5885.000	50.66	-3.94	46.72	97.80	-51.08	peak
6	5938.625	50.64	-3.95	46.69	68.20	-21.51	peak

802.11ax20-L-V



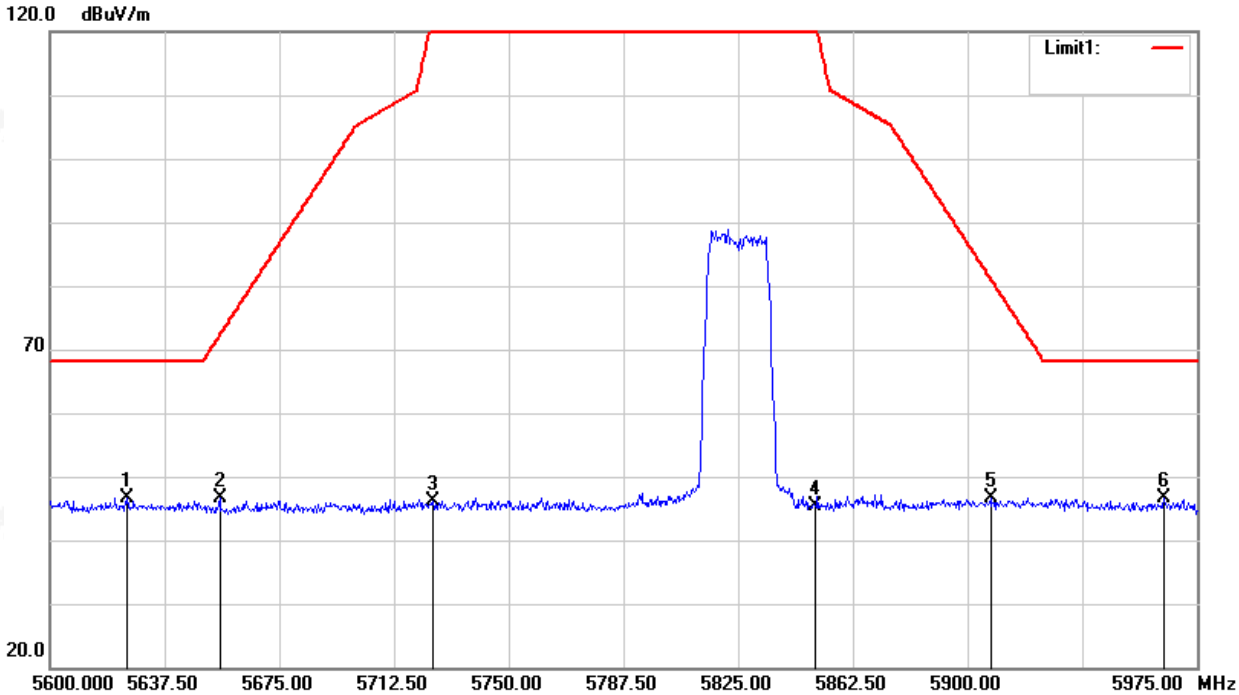
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5625.875	51.18	-4.69	46.49	68.20	-21.71	peak
2	5661.125	51.55	-4.67	46.88	76.43	-29.55	peak
3	5725.000	50.22	-4.57	45.65	122.20	-76.55	peak
4	5850.000	50.28	-4.10	46.18	122.20	-76.02	peak
5	5912.750	51.31	-3.90	47.41	77.27	-29.86	peak
6	5932.250	50.54	-3.94	46.60	68.20	-21.60	peak

802.11ax20-H-H



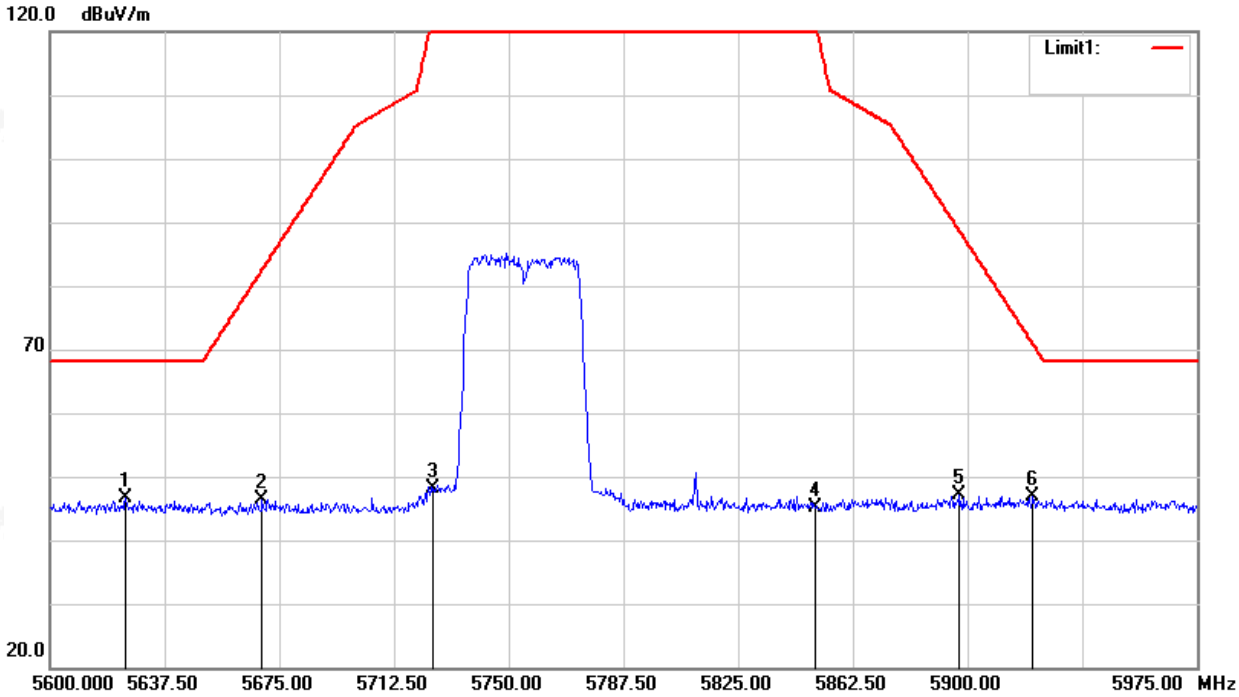
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5641.625	50.60	-4.68	45.92	68.20	-22.28	peak
2	5670.125	50.56	-4.67	45.89	83.09	-37.20	peak
3	5725.000	49.59	-4.57	45.02	122.20	-77.18	peak
4	5850.000	49.57	-4.10	45.47	122.20	-76.73	peak
5	5900.000	51.45	-3.88	47.57	86.70	-39.13	peak
6	5918.375	51.10	-3.91	47.19	73.10	-25.91	peak

802.11ax20-H-V



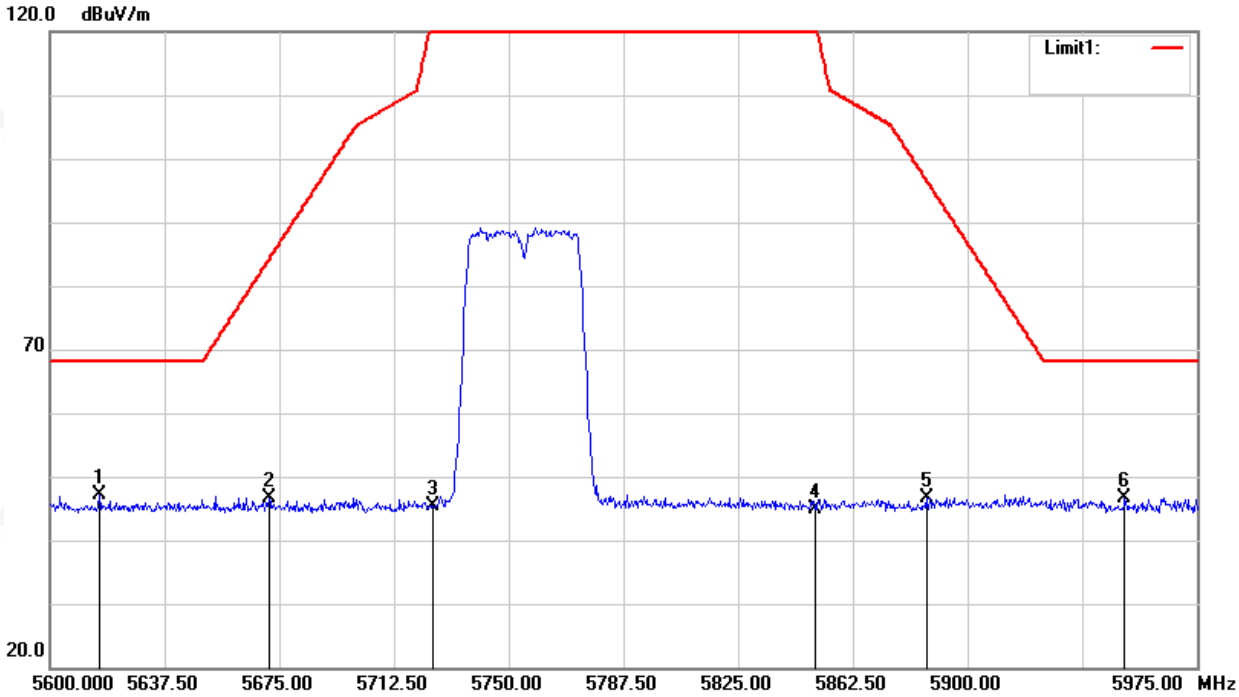
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5625.125	51.38	-4.69	46.69	68.20	-21.51	peak
2	5655.500	51.27	-4.68	46.59	72.27	-25.68	peak
3	5725.000	50.59	-4.57	46.02	122.20	-76.18	peak
4	5850.000	49.58	-4.10	45.48	122.20	-76.72	peak
5	5907.500	50.44	-3.89	46.55	81.15	-34.60	peak
6	5964.125	50.68	-3.99	46.69	68.20	-21.51	peak

802.11ac40-L-H



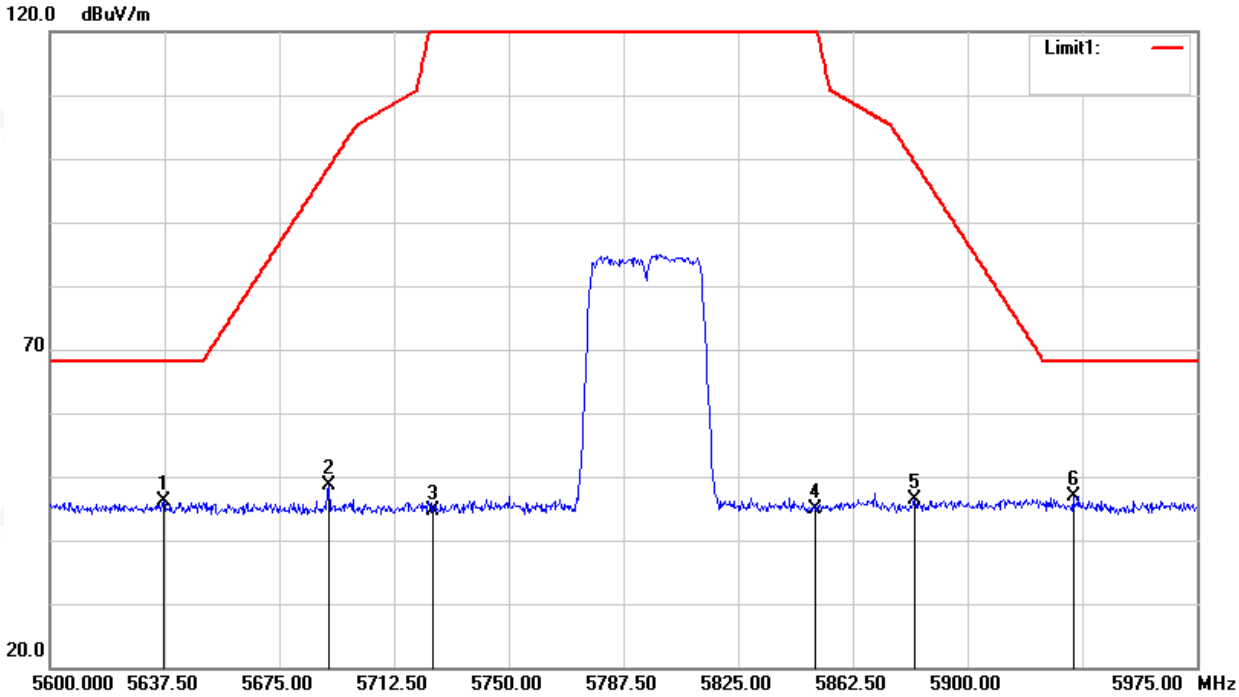
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5624.750	51.24	-4.69	46.55	68.20	-21.65	peak
2	5669.375	51.16	-4.67	46.49	82.54	-36.05	peak
3	5725.000	52.78	-4.57	48.21	122.20	-73.99	peak
4	5850.000	49.23	-4.10	45.13	122.20	-77.07	peak
5	5897.375	51.03	-3.89	47.14	88.64	-41.50	peak
6	5921.375	50.91	-3.92	46.99	70.88	-23.89	peak

802.11ac40-L-V



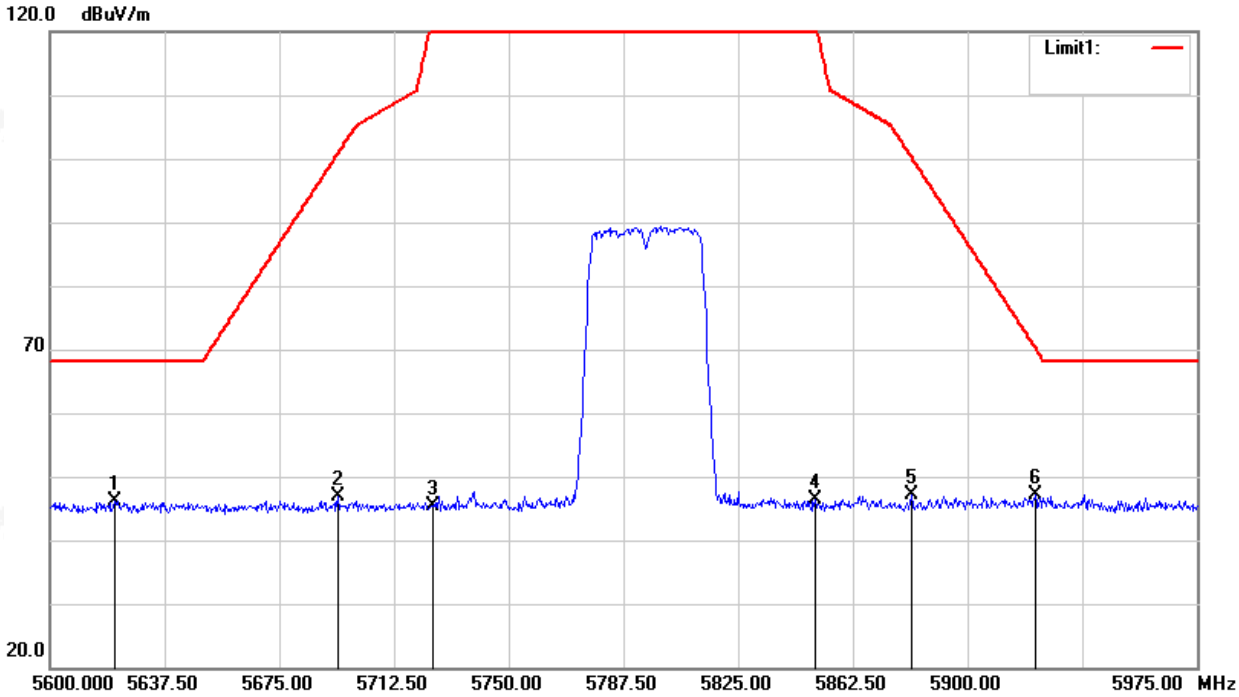
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5616.125	51.71	-4.69	47.02	68.20	-21.18	peak
2	5671.625	51.40	-4.68	46.72	84.20	-37.48	peak
3	5725.000	49.83	-4.57	45.26	122.20	-76.94	peak
4	5850.000	48.96	-4.10	44.86	122.20	-77.34	peak
5	5886.500	50.64	-3.94	46.70	96.69	-49.99	peak
6	5951.375	50.56	-3.97	46.59	68.20	-21.61	peak

802.11ac40-H-H



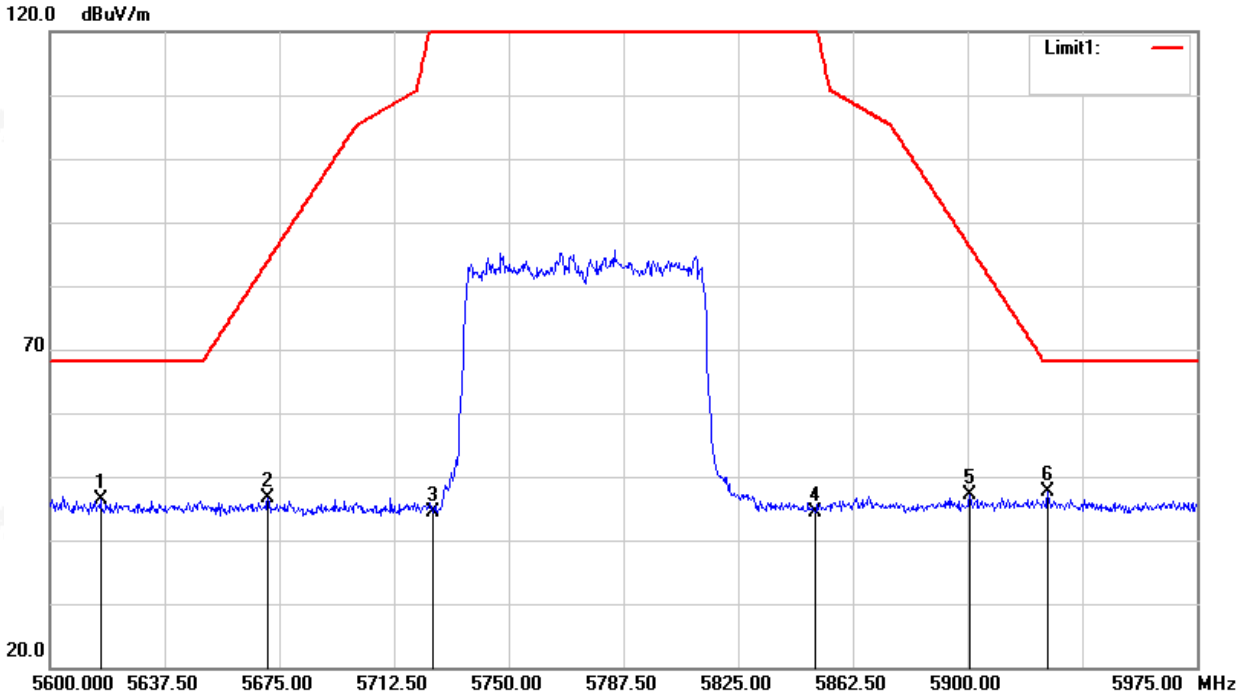
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5637.125	50.73	-4.68	46.05	68.20	-22.15	peak
2	5691.125	53.28	-4.66	48.62	98.63	-50.01	peak
3	5725.000	49.08	-4.57	44.51	122.20	-77.69	peak
4	5850.000	48.87	-4.10	44.77	122.20	-77.43	peak
5	5882.750	50.26	-3.96	46.30	99.47	-53.17	peak
6	5934.500	50.92	-3.93	46.99	68.20	-21.21	peak

802.11ac40-H-V



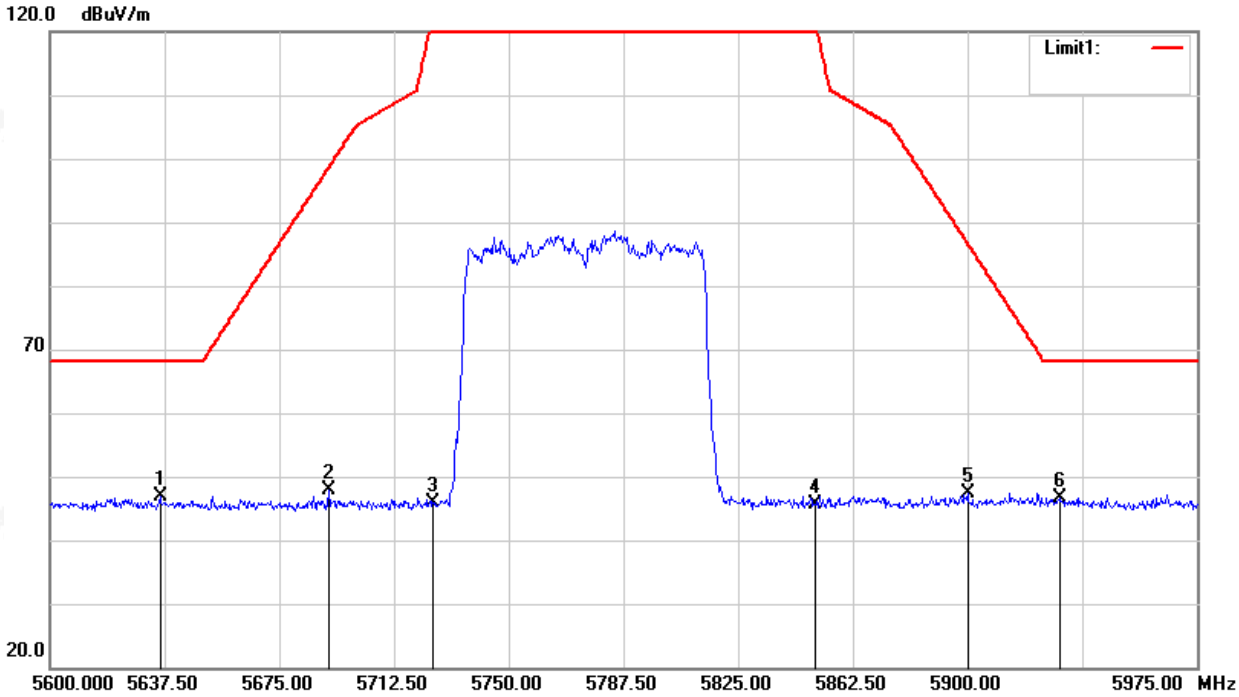
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5621.375	50.72	-4.70	46.02	68.20	-22.18	peak
2	5694.125	51.50	-4.66	46.84	100.85	-54.01	peak
3	5725.000	49.98	-4.57	45.41	122.20	-76.79	peak
4	5850.000	50.43	-4.10	46.33	122.20	-75.87	peak
5	5881.625	51.06	-3.96	47.10	100.30	-53.20	peak
6	5922.125	50.98	-3.91	47.07	70.33	-23.26	peak

802.11ax80-H



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5616.500	51.12	-4.69	46.43	68.20	-21.77	peak
2	5671.250	51.31	-4.68	46.63	83.92	-37.29	peak
3	5725.000	49.07	-4.57	44.50	122.20	-77.70	peak
4	5850.000	48.38	-4.10	44.28	122.20	-77.92	peak
5	5900.750	51.10	-3.88	47.22	86.14	-38.92	peak
6	5926.250	51.52	-3.93	47.59	68.20	-20.61	peak

802.11ax80-V



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5636.000	51.64	-4.68	46.96	68.20	-21.24	peak
2	5691.125	52.44	-4.66	47.78	98.63	-50.85	peak
3	5725.000	50.34	-4.57	45.77	122.20	-76.43	peak
4	5850.000	49.75	-4.10	45.65	122.20	-76.55	peak
5	5900.000	51.14	-3.88	47.26	86.70	-39.44	peak
6	5930.375	50.62	-3.93	46.69	68.20	-21.51	peak

Note: All modes have been tested. Only the worst mode shown in the report.

4. ANTENNA REQUIREMENT

4.1 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.

4.2 EUT ANTENNA

The EUT antenna is internal 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※※※※※