RADIO TEST REPORT

Report No.:STS2111209W13

Issued for

Shenzhen Grand Time Technology Co.,ltd

Unit 1201, 12th floor, Konka R&D Building, Science and Technology South 12th Road, Nanshan District, Shenzhen, China

Product Name:	4G LTE POC Radio
Brand Name:	Grandtime
Model Name:	F39
Series Model:	N/A
FCC ID:	2AM6P-F39
Test Standard:	FCC Part 15.407

Shenzhen STS Test Services Co., Ltd.
A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ,
Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China
TEL: +86-755 3688 6288 FAX: +86-755 3688 6277 E-mail:sts@stsapp.com

TEST RESULT CERTIFICATION

Applicant's Name	:	Shenzhen Grand Time Technology Co.,ltd
Address	:	Unit 1201, 12th floor, Konka R&D Building, Science and Technology South 12th Road, Nanshan District, Shenzhen, China
Manufacture's Name	:	Shenzhen Grand Time Technology Co.,ltd
Address	:	Unit 1201, 12th floor, Konka R&D Building, Science and Technology South 12th Road, Nanshan District, Shenzhen, China

Product Description

Product Name	:	4G LTE POC Radio
Brand Name	:	Grandtime
Model Name	:	F39
Series Model	:	N/A
Test Standards	:	FCC Part15.407
Test Procedure		ANSI C63.10-2013

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.
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Date of Test	:	
Date of receipt of test item	:	12 Dec. 2021
Date (s) of performance of tests	:	12 Dec. 2021 ~ 05 July 2022
Date of Issue	:	05 July 2022
Test Result	:	**Pass**

Testing Engineer : Chris Chen

(Chris Chen)

Technical Manager : Sean She

(Sean she)

Authorized Signatory : Bovey Yang

(Bovey Yang)

Table of Contents Page

Table of Contents **Page**

Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	05 July 2022	STS2111209W13	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 (2) (26 dB) / § 15.407 (e) (6 dB)/ § 15.407 (a) (99%)	26dB/6dB &99% Bandwidth	PASS
15.407(a) (1).(2).(3).(4).(5)	Maximum Conducted Output Power	PASS
15.407(b)& 15.209	Radiated Emission And (bandedge Emissions) Measurement	PASS
15.407(b)7	Conducted Emission And (bandedge Emissions) Measurement	PASS
15.407(a) (1).(2).(3).(4).(5)	Power Spectral Density	PASS
15.407(c)	Automatically Discontinue Transmission	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 C63.10-2013.

1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD
Add. : A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong 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	±0.68dB
2	Unwanted Emissions, conducted	±2.988dB
3	All emissions, radiated 30-1GHz	±5.6dB
4	All emissions, radiated 1G-6GHz	±5.5dB
5	All emissions, radiated>6G	±5.8dB
6	Conducted Emission (9KHz-150KHz)	±3.37dB
7	Conducted Emission (150KHz-30MHz)	±3.83dB

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

<table>
<tr><td>Product Name</td><td>4G LTE POC Radio</td></tr>
<tr><td>Trade Name</td><td>Grandtime</td></tr>
<tr><td>Model Name</td><td>F39</td></tr>
<tr><td>Series Model</td><td>N/A</td></tr>
<tr><td>Model Difference</td><td>N/A</td></tr>
<tr><td>Product Description</td><td>The EUT is a 4G LTE POC Radio
<table>
<tr><td>Operation Frequency:</td><td>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</td></tr>
<tr><td></td><td>IEEE 802.11a/ n(HT20)/ac(VHT20):
5.260GHz-5.320GHz
IEEE 802.11n(HT40)/ac(VHT40):
5.270GHz-5.310GHz
IEEE 802.11ac(VHT80): 5.290GHz</td></tr>
<tr><td>Modulation Type:</td><td>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</td></tr>
<tr><td>Antenna Designation:</td><td>Please refer to the Note 3.</td></tr>
<tr><td>Max.Output Power(Conducted):</td><td>9.44 dBm</td></tr>
</table>
More details of EUT technical specification, please refer to the User's Manual.</td></tr>
<tr><td>Test Channel</td><td>Please refer to the Note 2.</td></tr>
<tr><td>Adapter</td><td>Input: AC 100-240 50/60Hz 0.35A
Output: DC 5.0V 2000mA</td></tr>
<tr><td>Battery</td><td>Rated Voltage: 3.8V
Charge Limit Voltage:4.35V
Capacity: 5000mA</td></tr>
<tr><td>Hardware version number</td><td>F39-V1.1</td></tr>
<tr><td>Software version number</td><td>DQSD_F39_V01</td></tr>
<tr><td>Connecting I/O Port(s)</td><td>Please refer to the Note 1.</td></tr>
</table>

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.

2.

Operation Frequency of channel			
5.180GHz-5.240GHz		5.260GHz-5.320GHz	
Channel	Frequency	Channel	Frequency
36	5180	52	5260
38	5190	54	5270
40	5200	56	5280
42	5210	58	5290
44	5220	60	5300
46	5230	62	5310
48	5240	64	5320

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 802.11n(HT40) /ac (VHT40)			
Channel	Freq.(MHz)	Channel	Freq.(MHz)
38	5190	54	5270
46	5230	62	5310

For 802.11ac (VHT80)			
Channel	Freq.(MHz)	Channel	Freq.(MHz)
42	5210		

3.

Ant	Brand	Model Name	Ant Type	Connector	Gain (dBi)	NOTE
A	Grandtime	F39	PIFA	N/A	1dBi	WLAN Ant

Note: 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.

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 HT20 CH36&CH40&CH48	6 Mbps
Mode 2	TX IEEE 802.11a HT20 CH52&CH60&CH64	6 Mbps
Mode 3	TX IEEE 802.11n HT20 CH36&CH40&CH48	MCS 0
Mode 4	TX IEEE 802.11ac HT20 CH36&CH40&CH48	NSS1 MCS0
Mode 5	TX IEEE 802.11n HT20 CH52&CH60&CH64	MCS 0
Mode 6	TX IEEE 802.11ac HT20 CH52&CH60&CH64	NSS1 MCS0
Mode 7	TX IEEE 802.11n HT40 CH38&CH46	MCS 0
Mode 8	TX IEEE 802.11ac HT40 CH38&CH46	NSS1 MCS0
Mode 9	TX IEEE 802.11n HT40 CH54 &CH62	MCS 0
Mode 10	TX IEEE 802.11ac HT40 CH54 &CH62	NSS1 MCS0
Mode 11	TX IEEE 802.11ac HT80 CH42	NSS1 MCS0
Mode 12	TX IEEE 802.11ac HT80 CH58	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 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 13: Keeping TX + WLAN Link

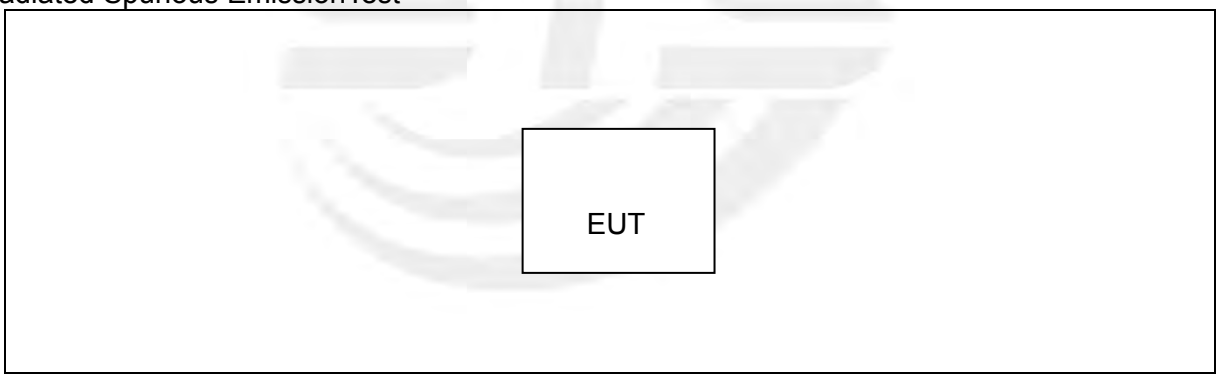
2.3 TEST SOFTWARE AND POWER LEVEL

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

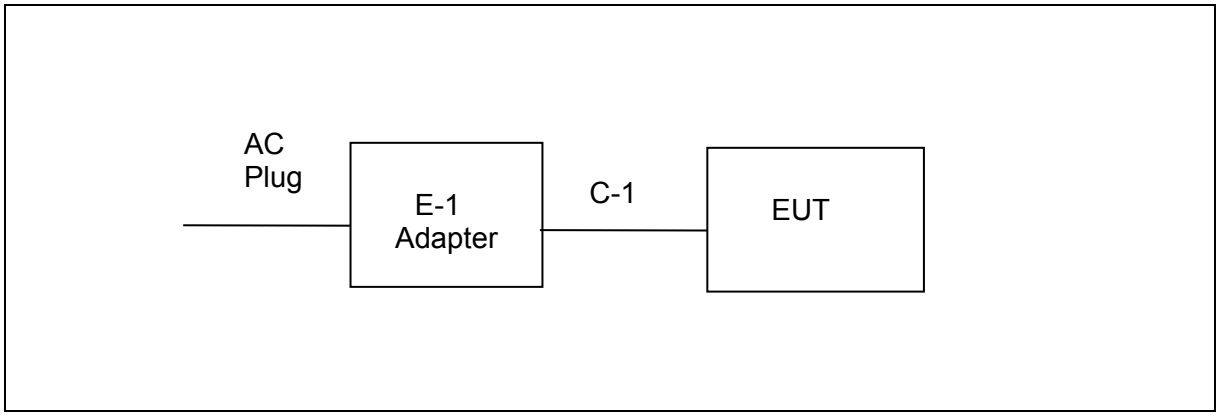
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
WIFI(5G)	U-NII-1 (5150MHz-5250 MHz)	802.11a	1	15	Engineering mode
		802.11n(HT20)		15	
		802.11n(HT40)		15	
		802.11ac(VHT20)		15	
		802.11ac(VHT40)		15	
		802.11ac(VHT80)		15	
RF Function	Type	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
WIFI(5G)	U-NII-2A (5250MHz-5350 MHz)	802.11a	1	15	Engineering mode
		802.11n(HT20)		15	
		802.11n(HT40)		15	
		802.11ac(VHT20)		15	
		802.11ac(VHT40)		15	
		802.11ac(VHT80)		15	

2.4 BLOCK DIGRAM 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
E-1	Adapter	N/A	AS1201A-0502000USU	N/A	N/A
C-1	Type-C Cable	N/A	N/A	100cm	NO

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A

Note:

(1) The support equipment was authorized by Declaration of Confirmation.

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

2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2021.09.30	2022.09.29
Signal Analyzer	Agilent	N9020A	101823	2021.09.30	2022.09.29
Active loop Antenna	ZHINAN	ZN30900C	16035	2021.04.11	2023.04.10
Bilog Antenna	TESEQ	CBL6111D	34678	2020.10.12	2022.10.11
Horn Antenna	SCHWARZBECK	BBHA 9120D(1201)	02014	2021.10.11	2023.10.10
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2020.10.12	2022.10.11
Pre-Amplifier (0.1M-3GHz)	EM	EM330	060665	2021.10.08	2022.10.07
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2021.09.30	2022.09.29
Pre-Amplifier (18G-40GHz)	SKET	LNPA-1840-50	SK2018101801	2021.09.28	2022.09.27
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08
turn table	EM	SC100_1	60531	N/A	N/A
Antenna mast	EM	SC100	N/A	N/A	N/A
Test SW	FARAD	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	2021.09.30	2022.09.29
LISN	R&S	ENV216	101242	2021.09.30	2022.09.29
LISN	EMCO	3810/2NM	23625	2021.09.30	2022.09.29
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 CE)			

RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Power Sensor	Keysight	U2021XA	MY55520005	2021.09.30	2022.09.29
			MY55520006	2021.09.30	2022.09.29
			MY56120038	2021.09.30	2022.09.29
			MY56280002	2021.09.30	2022.09.29
Signal Analyzer	Agilent	N9020A	MY51110105	2022.03.01	2023.02.28
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08
Test SW	FARAD	LZ-RF /LzRf-3A3			

3. EMC EMISSION TEST

3.1CONDUCTED 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

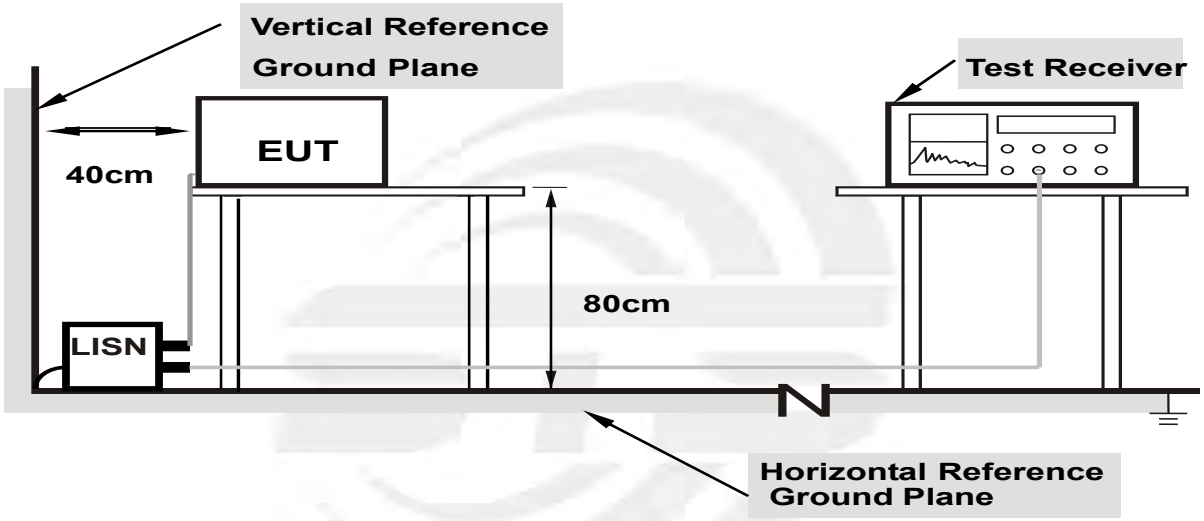
3.1.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 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 at least 80 cm from 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 from other units and other metal planes

3.1.5 EUT OPERATING CONDITIONS

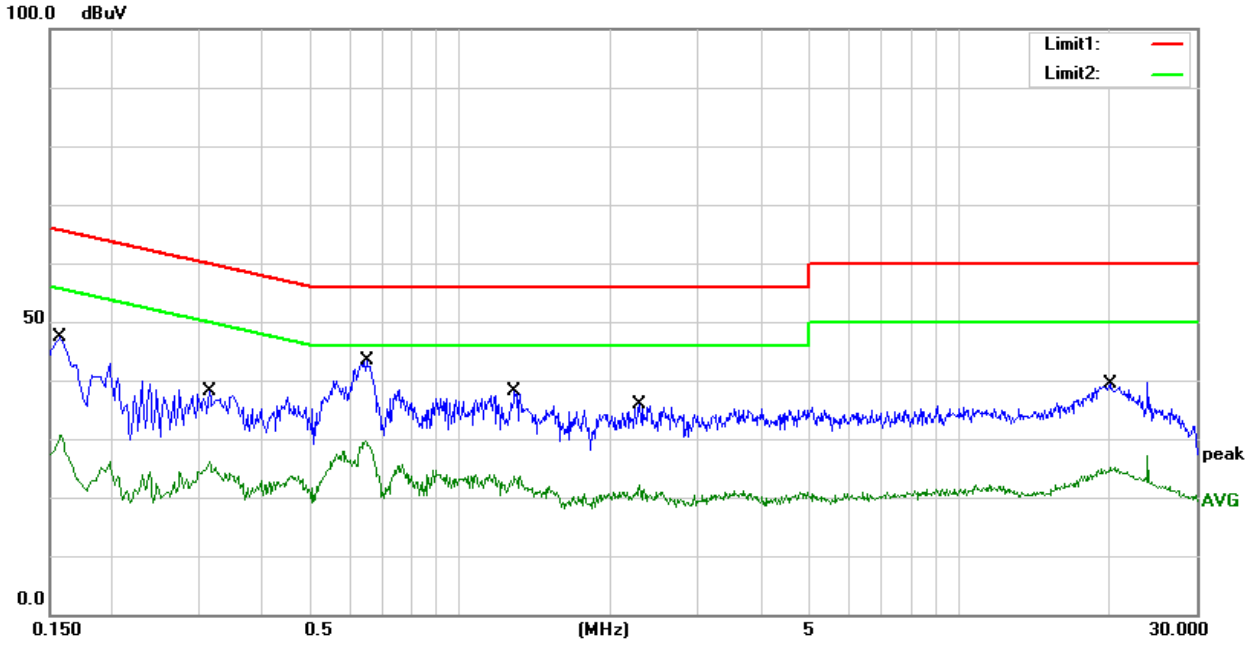
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

3.1.6 TEST RESULTS

Temperature:	26.1(C)	Relative Humidity:	60%RH
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode：	Mode 13		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1580	27.12	20.31	47.43	65.57	-18.14	QP
2	0.1580	10.36	20.31	30.67	55.57	-24.90	AVG
3	0.3140	17.24	20.76	38.00	59.86	-21.86	QP
4	0.3140	5.38	20.76	26.14	49.86	-23.72	AVG
5	0.6500	22.88	20.40	43.28	56.00	-12.72	QP
6	0.6500	9.24	20.40	29.64	46.00	-16.36	AVG
7	1.2860	17.74	20.33	38.07	56.00	-17.93	QP
8	1.2860	3.50	20.33	23.83	46.00	-22.17	AVG
9	2.2860	15.41	20.41	35.82	56.00	-20.18	QP
10	2.2860	1.59	20.41	22.00	46.00	-24.00	AVG
11	20.1540	16.39	22.90	39.29	60.00	-20.71	QP
12	20.1540	2.28	22.90	25.18	50.00	-24.82	AVG

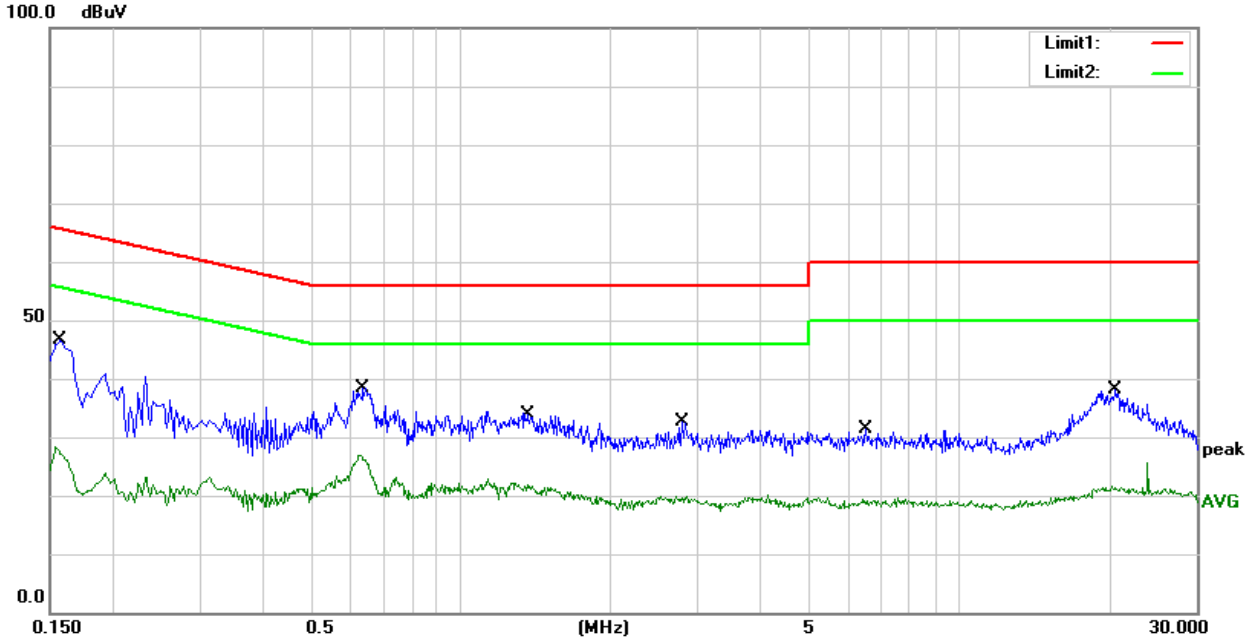
Remark:
1. All readings are Quasi-Peak and Average values.
2. Margin = Result (Result =Reading + Factor)–Limit



Temperature:	26.1(C)	Relative Humidity:	60%RH
Test Voltage	AC 120V/60Hz	Phase:	N
Test Mode	Mode 13		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1580	26.29	20.31	46.60	65.57	-18.97	QP
2	0.1580	7.99	20.31	28.30	55.57	-27.27	AVG
3	0.6380	18.08	20.41	38.49	56.00	-17.51	QP
4	0.6380	6.53	20.41	26.94	46.00	-19.06	AVG
5	1.3700	13.47	20.34	33.81	56.00	-22.19	QP
6	1.3700	2.50	20.34	22.84	46.00	-23.16	AVG
7	2.7940	12.12	20.43	32.55	56.00	-23.45	QP
8	2.7940	-0.47	20.43	19.96	46.00	-26.04	AVG
9	6.4900	10.84	20.56	31.40	60.00	-28.60	QP
10	6.4900	-0.94	20.56	19.62	50.00	-30.38	AVG
11	20.6260	15.20	22.88	38.08	60.00	-21.92	QP
12	20.6260	2.77	22.88	25.65	50.00	-24.35	AVG

Remark:
1. All readings are Quasi-Peak and Average values.
2. Margin = Result (Result =Reading + Factor)–Limit



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 (a); 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			

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 of at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters(above 1GHz is 1.5 m) above the ground at a 3 meter anechoic chamber. The table was rotated 360 degrees 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 polarizations 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 then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

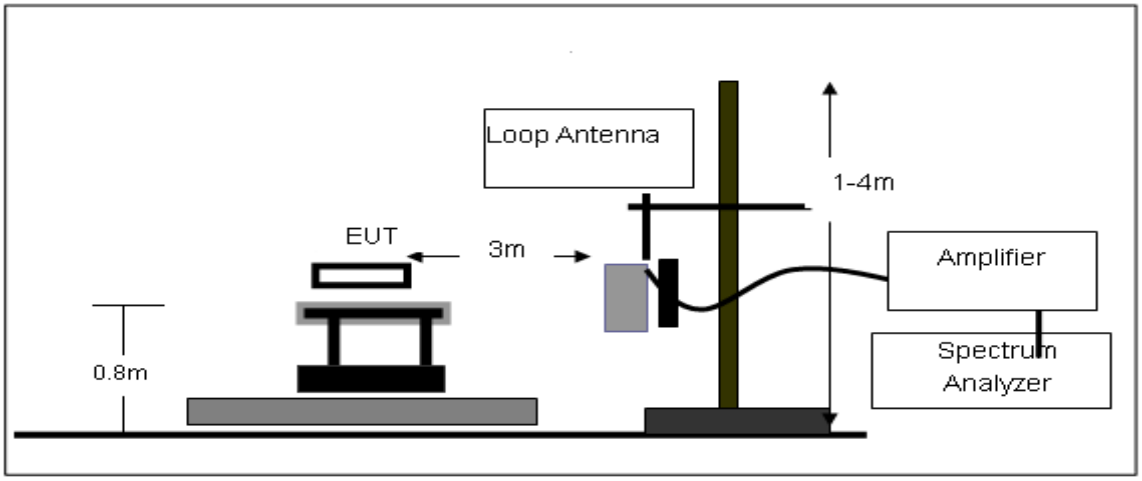
Both horizontal and vertical antenna polarities were tested and performed test to three orthogonal axis. The worst case emissions were reported

3.2.2 DEVIATION FROM TEST STANDARD

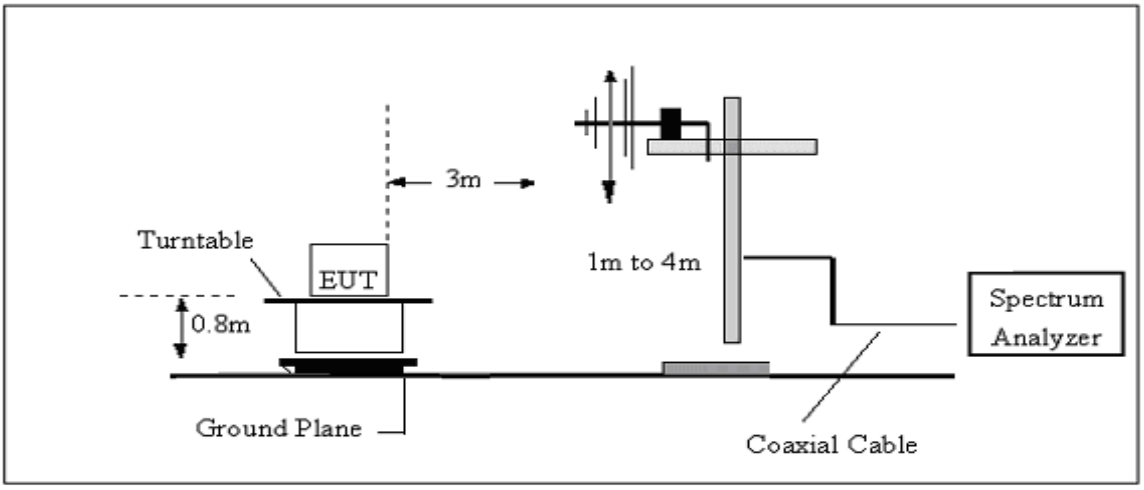
No deviation

3.2.3 TEST SETUP

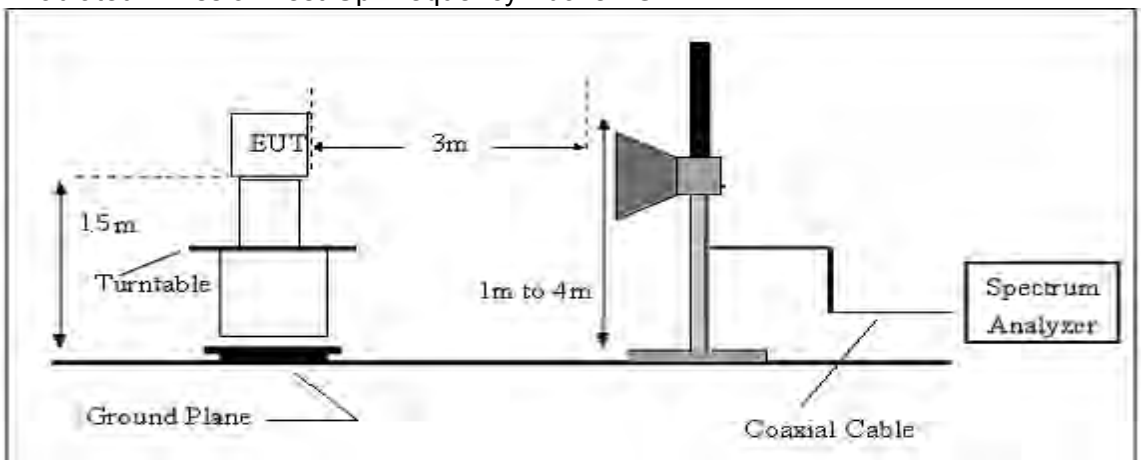
（A）Radiated Emission Test-Up Frequency Below 30MHz



（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 ：	DC 3.8V	Polarization :	--
Test Mode ：	TX Mode		

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

Note:

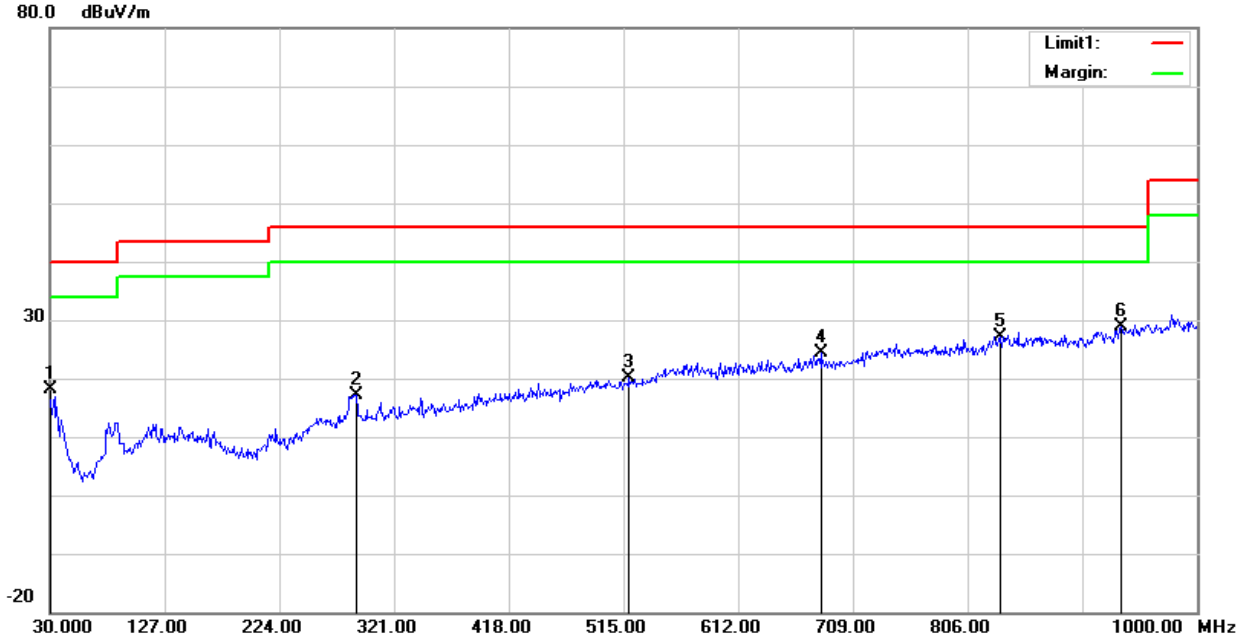
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

3.2.7 TEST RESULTS (Between 30MHz – 1GHz)

Temperature	23.1(C)	Relative Humidtity:	60%RH
Test Voltage	DC 3.8V	Polarization:	Horizontal
Test Mode	Mode 1~12(Mode 6 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)
1	30.0000	31.09	-12.85	18.24	40.00	-21.76	
2	288.9900	32.37	-15.21	17.16	46.00	-28.84	
3	519.8500	27.87	-7.82	20.05	46.00	-25.95	
4	681.8400	28.76	-4.29	24.47	46.00	-21.53	
5	833.1600	27.85	-0.62	27.23	46.00	-18.77	
6	935.9800	27.74	1.04	28.78	46.00	-17.22	

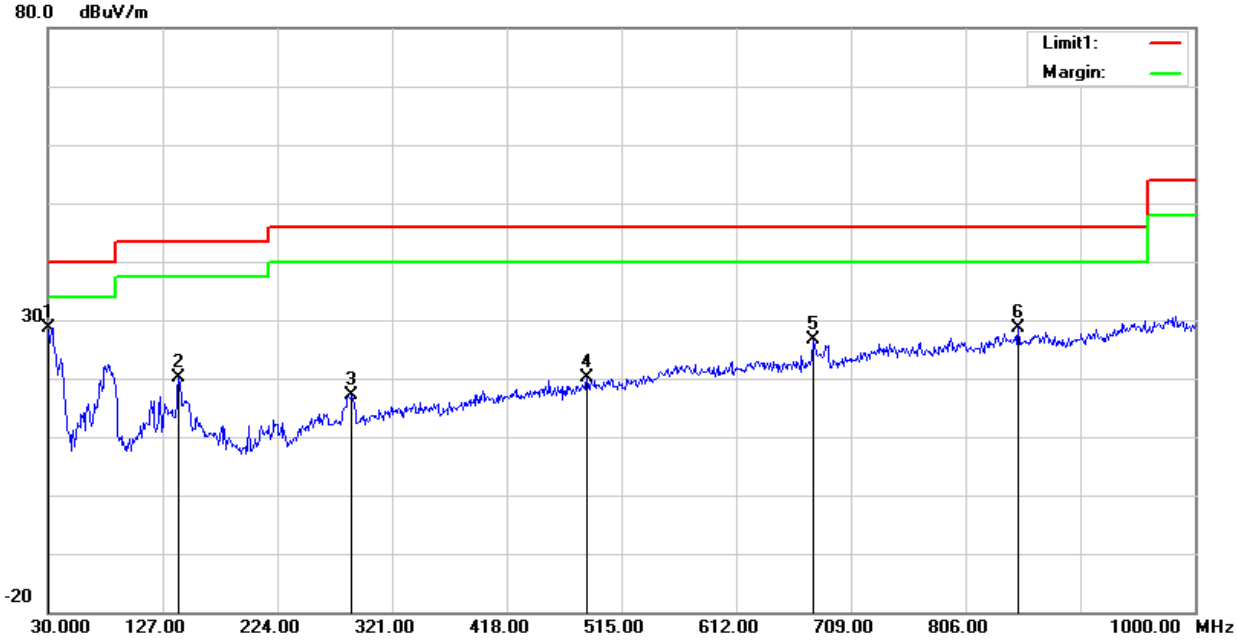
Remark:
1. Margin = Result (Result =Reading + Factor)–Limit



Temperature	23.1(C)	Relative Humidtity:	60%RH
Test Voltage	DC 3.8V	Polarization:	Vertical
Test Mode	Mode 1~12(Mode 6 worst mode)		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)
1	30.0000	41.58	-12.85	28.73	40.00	-11.27	
2	140.5800	38.16	-18.05	20.11	43.50	-23.39	
3	287.0500	32.37	-15.31	17.06	46.00	-28.94	
4	485.9000	28.61	-8.40	20.21	46.00	-25.79	
5	676.9900	30.98	-4.37	26.61	46.00	-19.39	
6	850.6200	29.44	-0.73	28.71	46.00	-17.29	

Remark:
1. Margin = Result (Result =Reading + Factor)–Limit



3.2.8 TEST RESULTS (Above 1000 MHz)

U-NII-1 5150-5250MHz

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 (802.11ac20/ 5180 MHz)										
3263.80	44.20	44.70	6.70	28.20	-9.80	34.40	74.00	-39.60	Pk	Vertical
3263.80	41.80	44.70	6.70	28.20	-9.80	32.00	54.00	-22.00	AV	Vertical
3251.34	44.82	44.70	6.70	28.20	-9.80	35.02	68.20	-33.18	Pk	Horizontal
3251.34	41.65	44.70	6.70	28.20	-9.80	31.85	54.00	-22.15	AV	Horizontal
3999.81	39.14	44.20	7.90	29.70	-6.60	32.54	74.00	-41.46	Pk	Vertical
3999.81	35.78	44.20	7.90	29.70	-6.60	29.18	54.00	-24.82	AV	Vertical
3986.20	39.41	44.20	7.90	29.70	-6.60	32.81	74.00	-41.19	Pk	Horizontal
3986.20	36.59	44.20	7.90	29.70	-6.60	29.99	54.00	-24.01	AV	Horizontal
7231.40	37.69	43.50	11.40	35.50	3.40	41.09	68.20	-27.11	Pk	Vertical
7231.40	34.08	43.50	11.40	35.50	3.40	37.48	54.00	-16.52	AV	Vertical
7223.61	37.70	43.50	11.40	35.50	3.40	41.10	68.20	-27.10	Pk	Horizontal
7223.61	33.66	43.50	11.40	35.50	3.40	37.06	54.00	-16.94	AV	Horizontal
10360.05	38.72	44.50	13.80	38.80	8.10	46.82	68.20	-21.38	Pk	Vertical
10360.05	37.00	44.50	13.80	38.80	8.10	45.10	54.00	-8.90	AV	Vertical
10360.22	39.34	44.50	13.80	38.80	8.10	47.44	68.20	-20.76	Pk	Horizontal
10360.22	36.70	44.50	13.80	38.80	8.10	44.80	54.00	-9.20	AV	Horizontal
11022.28	33.66	43.60	14.30	39.50	10.20	43.86	74.00	-30.14	Pk	Vertical
11022.28	30.16	43.60	14.30	39.50	10.20	40.36	54.00	-13.64	AV	Vertical
11026.40	32.93	43.60	14.30	39.50	10.20	43.13	74.00	-30.87	Pk	Horizontal
11026.40	30.40	43.60	14.30	39.50	10.20	40.60	54.00	-13.40	AV	Horizontal
13287.56	31.92	42.60	15.90	38.90	12.20	44.12	74.00	-29.88	Pk	Vertical
13287.56	29.39	42.60	15.90	38.90	12.20	41.59	54.00	-12.41	AV	Vertical
13299.70	32.35	42.60	15.90	38.90	12.20	44.55	74.00	-29.45	Pk	Horizontal
13299.70	29.88	42.60	15.90	38.90	12.20	42.08	54.00	-11.92	AV	Horizontal
Mid Channel (802.11ac20/ 5200 MHz)										
3246.90	44.49	44.70	6.70	28.20	-9.80	34.69	68.20	-33.51	Pk	Vertical
3246.90	41.01	44.70	6.70	28.20	-9.80	31.21	54.00	-22.79	AV	Vertical
3259.33	43.75	44.70	6.70	28.20	-9.80	33.95	68.20	-34.25	Pk	Horizontal
3259.33	42.02	44.70	6.70	28.20	-9.80	32.22	54.00	-21.78	AV	Horizontal
3995.57	39.73	44.20	7.90	29.70	-6.60	33.13	74.00	-40.87	Pk	Vertical
3995.57	36.31	44.20	7.90	29.70	-6.60	29.71	54.00	-24.29	AV	Vertical
3997.21	39.42	44.20	7.90	29.70	-6.60	32.82	74.00	-41.18	Pk	Horizontal
3997.21	35.86	44.20	7.90	29.70	-6.60	29.26	54.00	-24.74	AV	Horizontal
7218.54	36.91	43.50	11.40	35.50	3.40	40.31	68.20	-27.89	Pk	Vertical
7218.54	33.78	43.50	11.40	35.50	3.40	37.18	54.00	-16.82	AV	Vertical
7221.97	36.50	43.50	11.40	35.50	3.40	39.90	68.20	-28.30	Pk	Horizontal
7221.97	34.41	43.50	11.40	35.50	3.40	37.81	54.00	-16.19	AV	Horizontal
10400.11	39.19	44.50	13.80	38.80	8.10	47.29	68.20	-20.91	Pk	Vertical
10400.11	36.41	44.50	13.80	38.80	8.10	44.51	54.00	-9.49	AV	Vertical
10400.15	38.93	44.50	13.80	38.80	8.10	47.03	68.20	-21.17	Pk	Horizontal
10400.15	36.08	44.50	13.80	38.80	8.10	44.18	54.00	-9.82	AV	Horizontal
11026.00	33.26	43.60	14.30	39.50	10.20	43.46	74.00	-30.54	Pk	Vertical
11026.00	30.52	43.60	14.30	39.50	10.20	40.72	54.00	-13.28	AV	Vertical
11020.46	33.37	43.60	14.30	39.50	10.20	43.57	74.00	-30.43	Pk	Horizontal
11020.46	29.85	43.60	14.30	39.50	10.20	40.05	54.00	-13.95	AV	Horizontal
13282.55	32.73	42.60	15.90	38.90	12.20	44.93	74.00	-29.07	Pk	Vertical
13282.55	29.08	42.60	15.90	38.90	12.20	41.28	54.00	-12.72	AV	Vertical
13293.53	32.17	42.60	15.90	38.90	12.20	44.37	74.00	-29.63	Pk	Horizontal
13293.53	28.63	42.60	15.90	38.90	12.20	40.83	54.00	-13.17	AV	Horizontal

High Channel (802.11ac20/ 5240 MHz)										
3248.60	45.15	44.70	6.70	28.20	-9.80	35.35	68.20	-32.85	Pk	Vertical
3248.60	41.16	44.70	6.70	28.20	-9.80	31.36	54.00	-22.64	AV	Vertical
3248.12	44.08	44.70	6.70	28.20	-9.80	34.28	68.20	-33.92	Pk	Horizontal
3248.12	42.06	44.70	6.70	28.20	-9.80	32.26	54.00	-21.74	AV	Horizontal
3989.55	38.81	44.20	7.90	29.70	-6.60	32.21	74.00	-41.79	Pk	Vertical
3989.55	36.27	44.20	7.90	29.70	-6.60	29.67	54.00	-24.33	AV	Vertical
3999.99	39.71	44.20	7.90	29.70	-6.60	33.11	74.00	-40.89	Pk	Horizontal
3999.99	36.87	44.20	7.90	29.70	-6.60	30.27	54.00	-23.73	AV	Horizontal
7229.14	36.83	43.50	11.40	35.50	3.40	40.23	68.20	-27.97	Pk	Vertical
7229.14	34.26	43.50	11.40	35.50	3.40	37.66	54.00	-16.34	AV	Vertical
7234.45	37.52	43.50	11.40	35.50	3.40	40.92	68.20	-27.28	Pk	Horizontal
7234.45	33.97	43.50	11.40	35.50	3.40	37.37	54.00	-16.63	AV	Horizontal
10480.27	39.02	44.50	13.80	38.80	8.10	47.12	68.20	-21.08	Pk	Vertical
10480.27	36.37	44.50	13.80	38.80	8.10	44.47	54.00	-9.53	AV	Vertical
10480.09	39.02	44.50	13.80	38.80	8.10	47.12	68.20	-21.08	Pk	Horizontal
10480.09	35.67	44.50	13.80	38.80	8.10	43.77	54.00	-10.23	AV	Horizontal
11024.43	33.90	43.60	14.30	39.50	10.20	44.10	74.00	-29.90	Pk	Vertical
11024.43	30.15	43.60	14.30	39.50	10.20	40.35	54.00	-13.65	AV	Vertical
11033.62	34.08	43.60	14.30	39.50	10.20	44.28	74.00	-29.72	Pk	Horizontal
11033.62	30.89	43.60	14.30	39.50	10.20	41.09	54.00	-12.91	AV	Horizontal
13294.33	31.57	42.60	15.90	38.90	12.20	43.77	74.00	-30.23	Pk	Vertical
13294.33	28.79	42.60	15.90	38.90	12.20	40.99	54.00	-13.01	AV	Vertical
13282.70	32.10	42.60	15.90	38.90	12.20	44.30	74.00	-29.70	Pk	Horizontal
13282.70	28.95	42.60	15.90	38.90	12.20	41.15	54.00	-12.85	AV	Horizontal

Remark:
1.Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Scan with 802.11a,802.11n (HT-20),802.11n (HT-40), 802.11ac (VHT-20),802.11ac (VHT-40), 802.11ac (VHT-80) the worst case is 802.11ac (VHT-20).
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

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 (802.11ac20/ 5260 MHz)										
3259.84	44.70	44.70	6.70	28.20	-9.80	34.90	68.20	-33.30	Pk	Vertical
3259.84	40.95	44.70	6.70	28.20	-9.80	31.15	54.00	-22.85	AV	Vertical
3264.45	44.95	44.70	6.70	28.20	-9.80	35.15	74.00	-38.85	Pk	Horizontal
3264.45	40.92	44.70	6.70	28.20	-9.80	31.12	54.00	-22.88	AV	Horizontal
4000.06	39.94	44.20	7.90	29.70	-6.60	33.34	74.00	-40.66	Pk	Vertical
4000.06	36.59	44.20	7.90	29.70	-6.60	29.99	54.00	-24.01	AV	Vertical
3981.78	39.62	44.20	7.90	29.70	-6.60	33.02	74.00	-40.98	Pk	Horizontal
3981.78	37.06	44.20	7.90	29.70	-6.60	30.46	54.00	-23.54	AV	Horizontal
7220.19	36.92	43.50	11.40	35.50	3.40	40.32	68.20	-27.88	Pk	Vertical
7220.19	34.06	43.50	11.40	35.50	3.40	37.46	54.00	-16.54	AV	Vertical
7227.80	37.67	43.50	11.40	35.50	3.40	41.07	68.20	-27.13	Pk	Horizontal
7227.80	34.43	43.50	11.40	35.50	3.40	37.83	54.00	-16.17	AV	Horizontal
10520.38	39.79	44.50	13.90	38.80	8.20	47.99	68.20	-20.21	Pk	Vertical
10520.38	36.83	44.50	13.90	38.80	8.20	45.03	54.00	-8.97	AV	Vertical
10520.39	39.87	44.50	13.90	38.80	8.20	48.07	68.20	-20.13	Pk	Horizontal
10520.39	36.44	44.50	13.90	38.80	8.20	44.64	54.00	-9.36	AV	Horizontal
11016.98	33.55	43.60	14.30	39.50	10.20	43.75	74.00	-30.25	Pk	Vertical
11016.98	30.25	43.60	14.30	39.50	10.20	40.45	54.00	-13.55	AV	Vertical
11030.18	33.97	43.60	14.30	39.50	10.20	44.17	74.00	-29.83	Pk	Horizontal
11030.18	29.87	43.60	14.30	39.50	10.20	40.07	54.00	-13.93	AV	Horizontal
13285.63	31.56	42.60	15.90	38.90	12.20	43.76	74.00	-30.24	Pk	Vertical
13285.63	29.87	42.60	15.90	38.90	12.20	42.07	54.00	-11.93	AV	Vertical
13284.87	31.87	42.60	15.90	38.90	12.20	44.07	74.00	-29.93	Pk	Horizontal
13284.87	29.08	42.60	15.90	38.90	12.20	41.28	54.00	-12.72	AV	Horizontal
Mid Channel (802.11ac20/ 5300 MHz)										
3260.22	44.33	44.70	6.70	28.20	-9.80	34.53	74.00	-39.47	Pk	Vertical
3260.22	41.12	44.70	6.70	28.20	-9.80	31.32	54.00	-22.68	AV	Vertical
3255.91	44.84	44.70	6.70	28.20	-9.80	35.04	68.20	-33.16	Pk	Horizontal
3255.91	41.15	44.70	6.70	28.20	-9.80	31.35	54.00	-22.65	AV	Horizontal
3997.68	39.78	44.20	7.90	29.70	-6.60	33.18	74.00	-40.82	Pk	Vertical
3997.68	35.83	44.20	7.90	29.70	-6.60	29.23	54.00	-24.77	AV	Vertical
3989.25	39.79	44.20	7.90	29.70	-6.60	33.19	74.00	-40.81	Pk	Horizontal
3989.25	36.32	44.20	7.90	29.70	-6.60	29.72	54.00	-24.28	AV	Horizontal
7231.26	36.45	43.50	11.40	35.50	3.40	39.85	68.20	-28.35	Pk	Vertical
7231.26	33.85	43.50	11.40	35.50	3.40	37.25	54.00	-16.75	AV	Vertical
7218.17	37.73	43.50	11.40	35.50	3.40	41.13	68.20	-27.07	Pk	Horizontal
7218.17	34.48	43.50	11.40	35.50	3.40	37.88	54.00	-16.12	AV	Horizontal
10600.15	39.55	44.50	13.80	38.80	8.10	47.65	74.00	-26.35	Pk	Vertical
10600.15	36.59	44.50	13.80	38.80	8.10	44.69	54.00	-9.31	AV	Vertical
10600.22	39.65	44.50	13.80	38.80	8.10	47.75	74.00	-26.25	Pk	Horizontal
10600.22	36.53	44.50	13.80	38.80	8.10	44.63	54.00	-9.37	AV	Horizontal
11020.64	33.66	43.60	14.30	39.50	10.20	43.86	74.00	-30.14	Pk	Vertical
11020.64	30.56	43.60	14.30	39.50	10.20	40.76	54.00	-13.24	AV	Vertical
11035.67	33.87	43.60	14.30	39.50	10.20	44.07	74.00	-29.93	Pk	Horizontal
11035.67	30.31	43.60	14.30	39.50	10.20	40.51	54.00	-13.49	AV	Horizontal
13299.33	32.00	42.60	15.90	38.90	12.20	44.20	74.00	-29.80	Pk	Vertical
13299.33	29.63	42.60	15.90	38.90	12.20	41.83	54.00	-12.17	AV	Vertical
13295.99	32.67	42.60	15.90	38.90	12.20	44.87	74.00	-29.13	Pk	Horizontal
13295.99	29.74	42.60	15.90	38.90	12.20	41.94	54.00	-12.06	AV	Horizontal

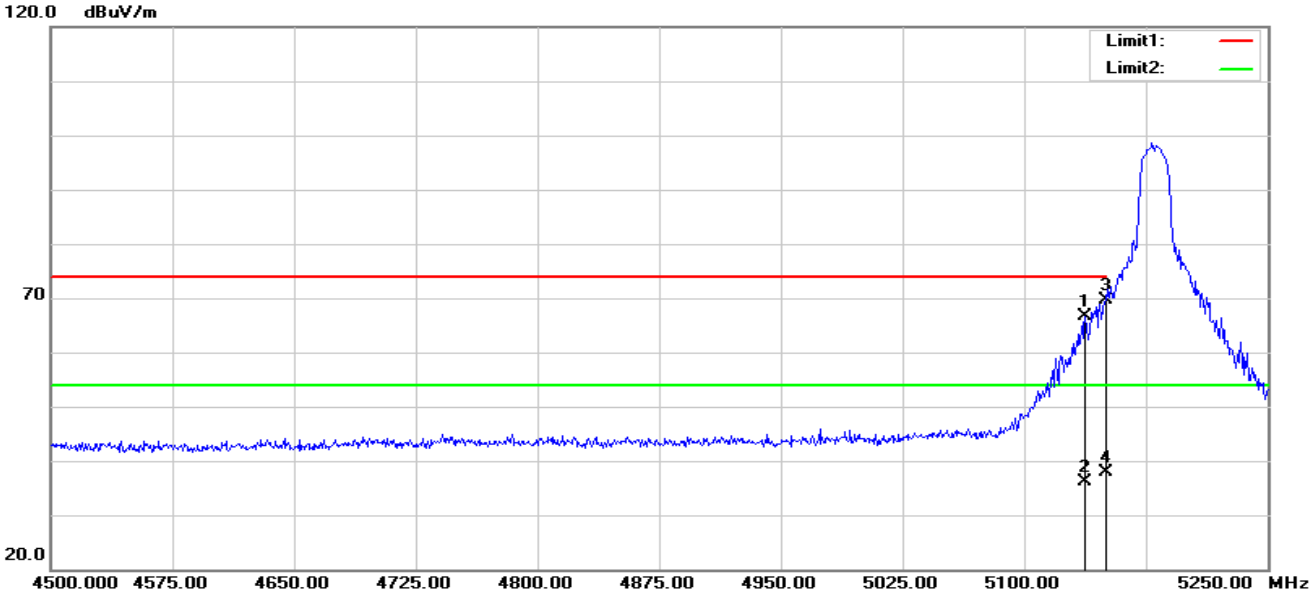
Mid Channel (802.11ac20/ 5300 MHz)										
3260.22	44.33	44.70	6.70	28.20	-9.80	34.53	74.00	-39.47	Pk	Vertical
3260.22	41.12	44.70	6.70	28.20	-9.80	31.32	54.00	-22.68	AV	Vertical
3255.91	44.84	44.70	6.70	28.20	-9.80	35.04	68.20	-33.16	Pk	Horizontal
3255.91	41.15	44.70	6.70	28.20	-9.80	31.35	54.00	-22.65	AV	Horizontal
3997.68	39.78	44.20	7.90	29.70	-6.60	33.18	74.00	-40.82	Pk	Vertical
3997.68	35.83	44.20	7.90	29.70	-6.60	29.23	54.00	-24.77	AV	Vertical
3989.25	39.79	44.20	7.90	29.70	-6.60	33.19	74.00	-40.81	Pk	Horizontal
3989.25	36.32	44.20	7.90	29.70	-6.60	29.72	54.00	-24.28	AV	Horizontal
7231.26	36.45	43.50	11.40	35.50	3.40	39.85	68.20	-28.35	Pk	Vertical
7231.26	33.85	43.50	11.40	35.50	3.40	37.25	54.00	-16.75	AV	Vertical
7218.17	37.73	43.50	11.40	35.50	3.40	41.13	68.20	-27.07	Pk	Horizontal
7218.17	34.48	43.50	11.40	35.50	3.40	37.88	54.00	-16.12	AV	Horizontal
10600.15	39.55	44.50	13.80	38.80	8.10	47.65	74.00	-26.35	Pk	Vertical
10600.15	36.59	44.50	13.80	38.80	8.10	44.69	54.00	-9.31	AV	Vertical
10600.22	39.65	44.50	13.80	38.80	8.10	47.75	74.00	-26.25	Pk	Horizontal
10600.22	36.53	44.50	13.80	38.80	8.10	44.63	54.00	-9.37	AV	Horizontal
11020.64	33.66	43.60	14.30	39.50	10.20	43.86	74.00	-30.14	Pk	Vertical
11020.64	30.56	43.60	14.30	39.50	10.20	40.76	54.00	-13.24	AV	Vertical
11035.67	33.87	43.60	14.30	39.50	10.20	44.07	74.00	-29.93	Pk	Horizontal
11035.67	30.31	43.60	14.30	39.50	10.20	40.51	54.00	-13.49	AV	Horizontal
13299.33	32.00	42.60	15.90	38.90	12.20	44.20	74.00	-29.80	Pk	Vertical
13299.33	29.63	42.60	15.90	38.90	12.20	41.83	54.00	-12.17	AV	Vertical
13295.99	32.67	42.60	15.90	38.90	12.20	44.87	74.00	-29.13	Pk	Horizontal
13295.99	29.74	42.60	15.90	38.90	12.20	41.94	54.00	-12.06	AV	Horizontal

Remark:
1.Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Scan with 802.11a,802.11n (HT-20),802.11n (HT-40), 802.11ac (VHT-20),802.11ac (VHT-40), 802.11ac (VHT-80) the worst case is 802.11ac (VHT-20).
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

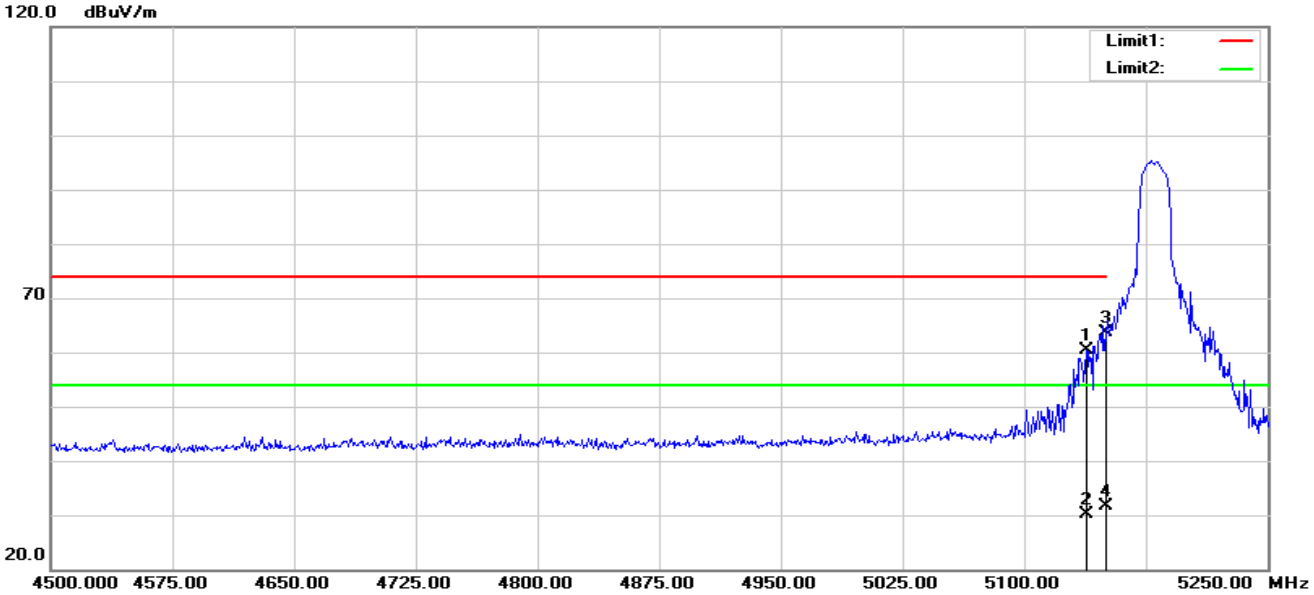
U-NII-1 5150-5250MHz

RSE-802.11ac20-L-H



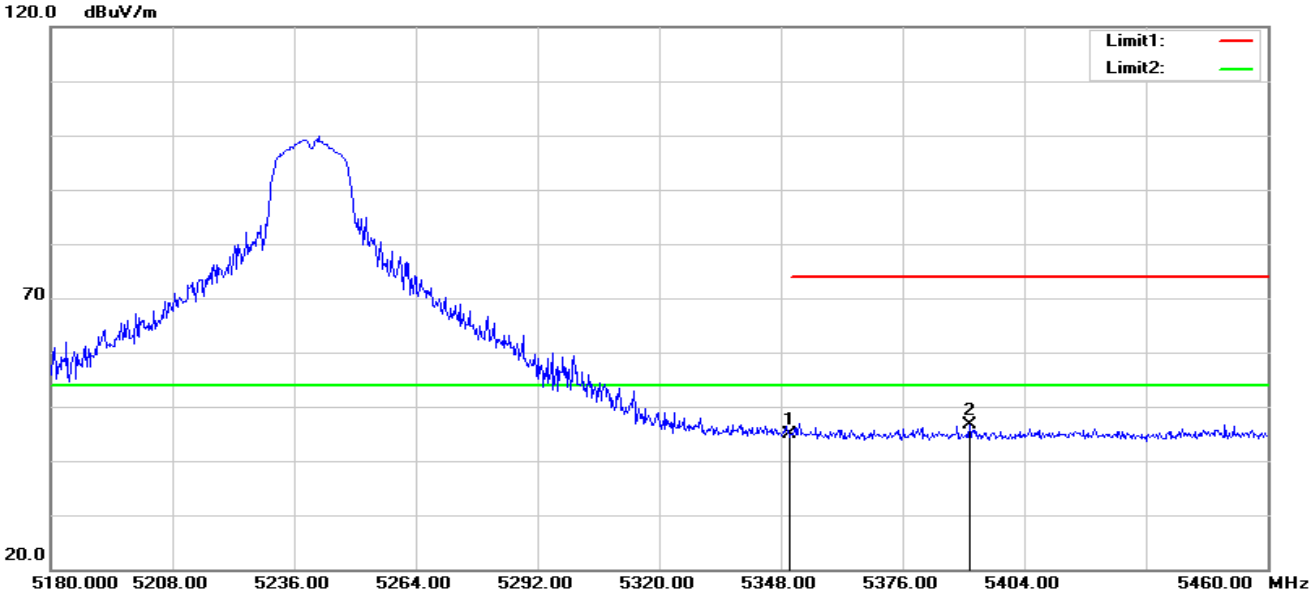
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5137.500	72.26	-5.74	66.52	74.00	-7.48	peak
2	5137.500	41.98	-5.74	36.24	54.00	-17.76	AVG
3	5150.000	75.48	-5.73	69.75	74.00	-4.25	peak
4	5150.000	43.67	-5.73	37.94	54.00	-16.06	AVG

RSE-802.11ac20-L-V



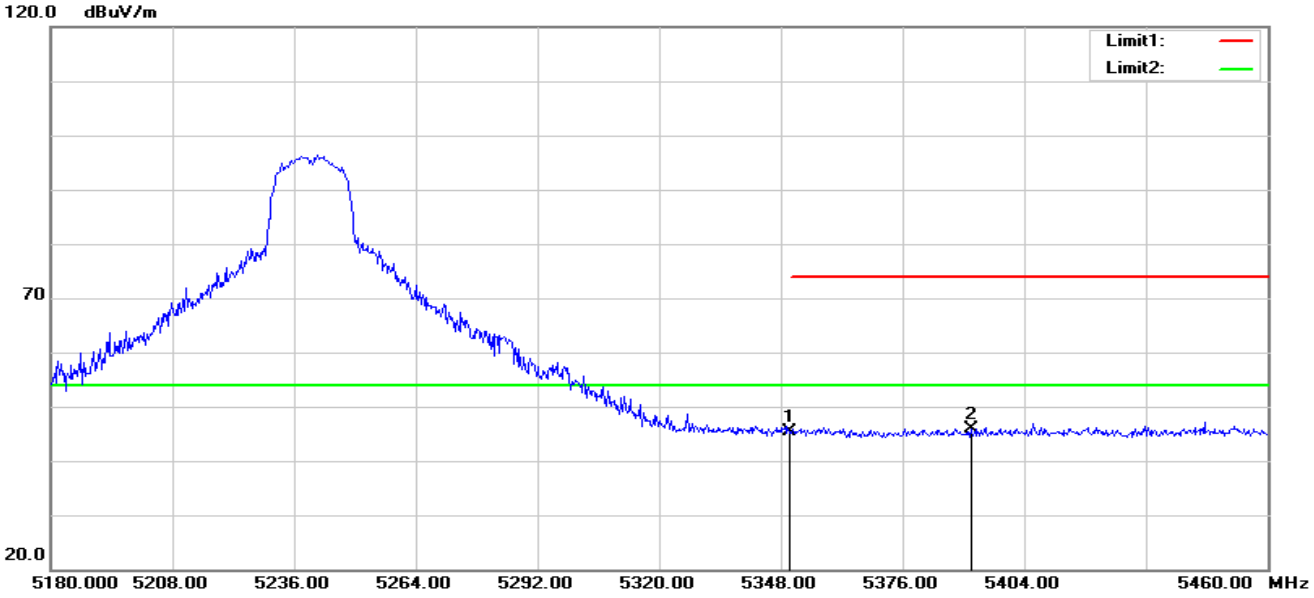
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5138.250	66.05	-5.74	60.31	74.00	-13.69	peak
2	5138.250	35.77	-5.74	30.03	54.00	-23.97	AVG
3	5150.000	69.28	-5.73	63.55	74.00	-10.45	peak
4	5150.000	37.47	-5.73	31.74	54.00	-22.26	AVG

RSE-802.11ac20-H-H



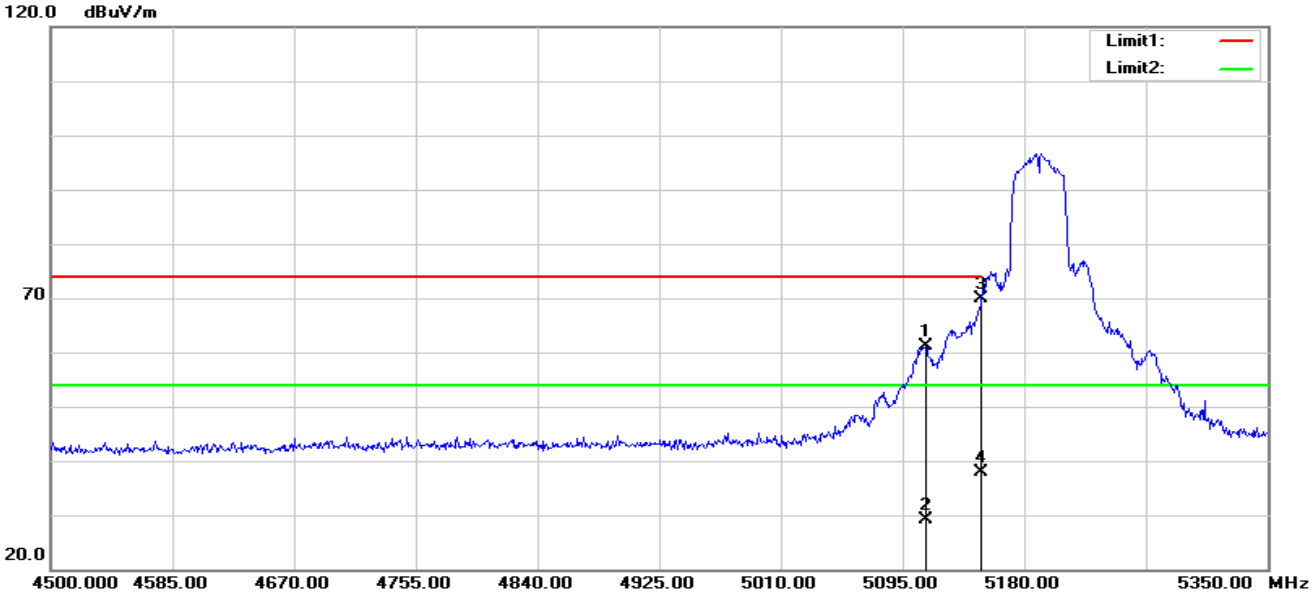
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	50.22	-5.23	44.99	74.00	-29.01	peak
2	5391.400	51.81	-5.25	46.56	74.00	-27.44	peak

RSE-802.11ac20-H-V



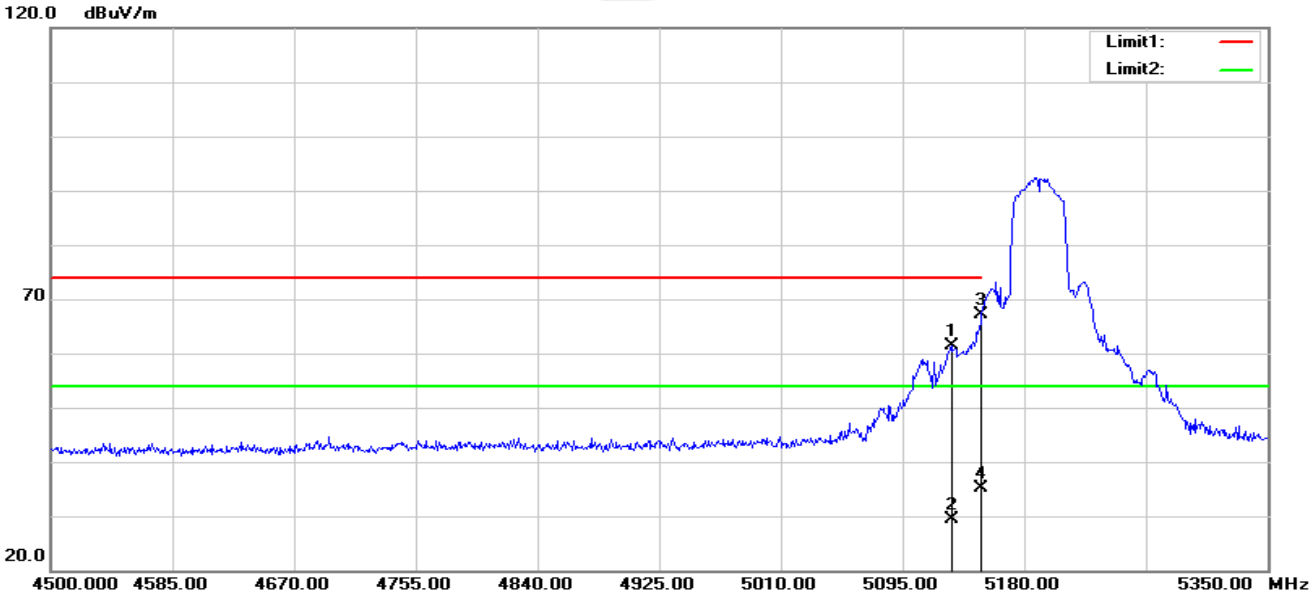
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5350.000	50.57	-5.23	45.34	74.00	-28.66	peak
2	5391.680	51.23	-5.25	45.98	74.00	-28.02	peak

RSE-802.11ac40-L-H



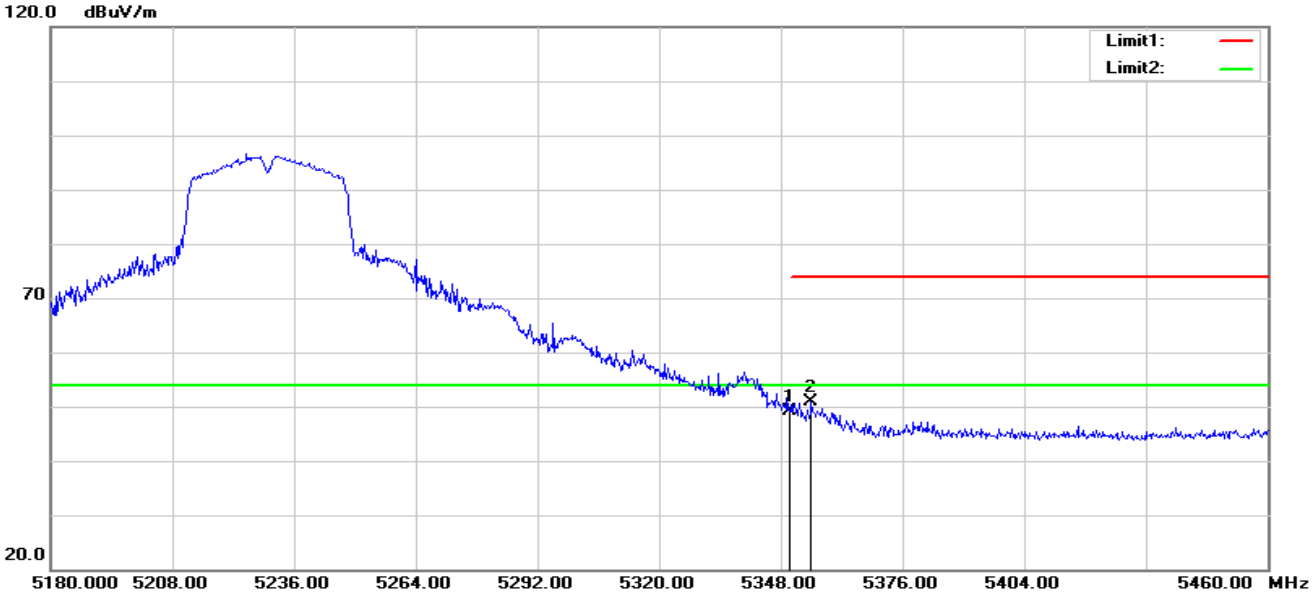
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5111.150	66.90	-5.74	61.16	74.00	-12.84	peak
2	5111.150	34.93	-5.74	29.19	54.00	-24.81	AVG
3	5150.000	75.59	-5.73	69.86	74.00	-4.14	peak
4	5150.000	43.62	-5.73	37.89	54.00	-16.11	AVG

RSE-802.11ac40-L-V



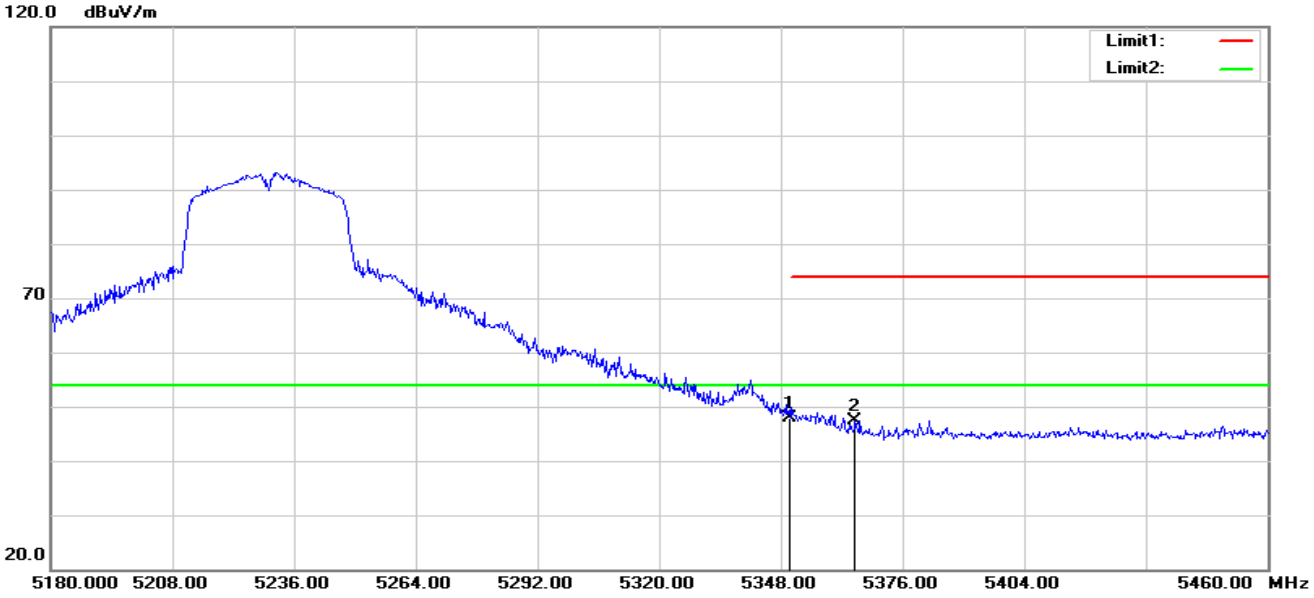
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5129.000	67.12	-5.74	61.38	74.00	-12.62	peak
2	5129.000	35.15	-5.74	29.41	54.00	-24.59	AVG
3	5150.000	72.74	-5.73	67.01	74.00	-6.99	peak
4	5150.000	40.77	-5.73	35.04	54.00	-18.96	AVG

RSE-802.11ac40-H-H



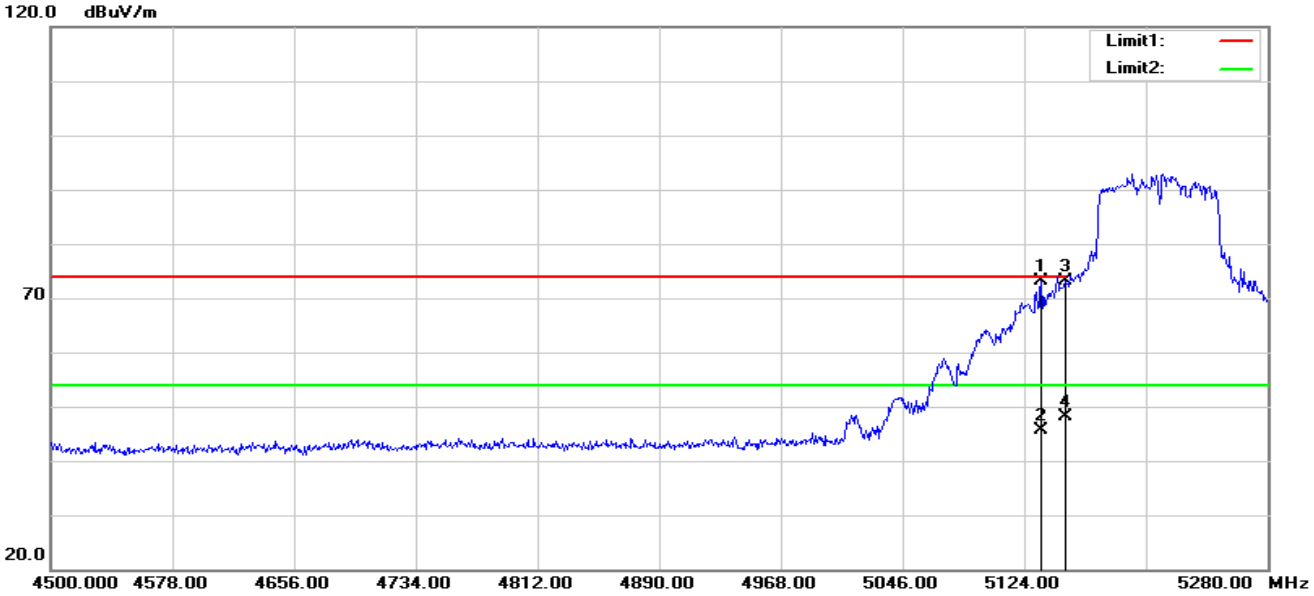
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	54.48	-5.23	49.25	74.00	-24.75	peak
2	5355.000	56.21	-5.24	50.97	74.00	-23.03	peak

RSE-802.11ac40-H-V



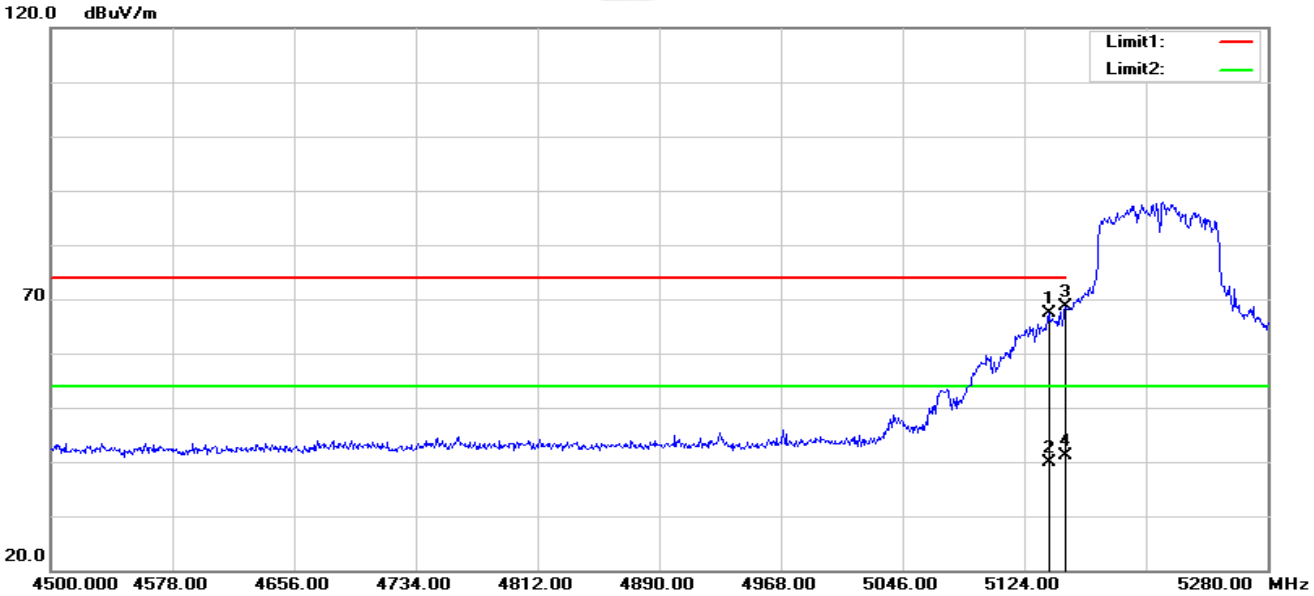
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	53.19	-5.23	47.96	74.00	-26.04	peak
2	5365.080	52.70	-5.24	47.46	74.00	-26.54	peak

RSE-802.11ac80-L-H



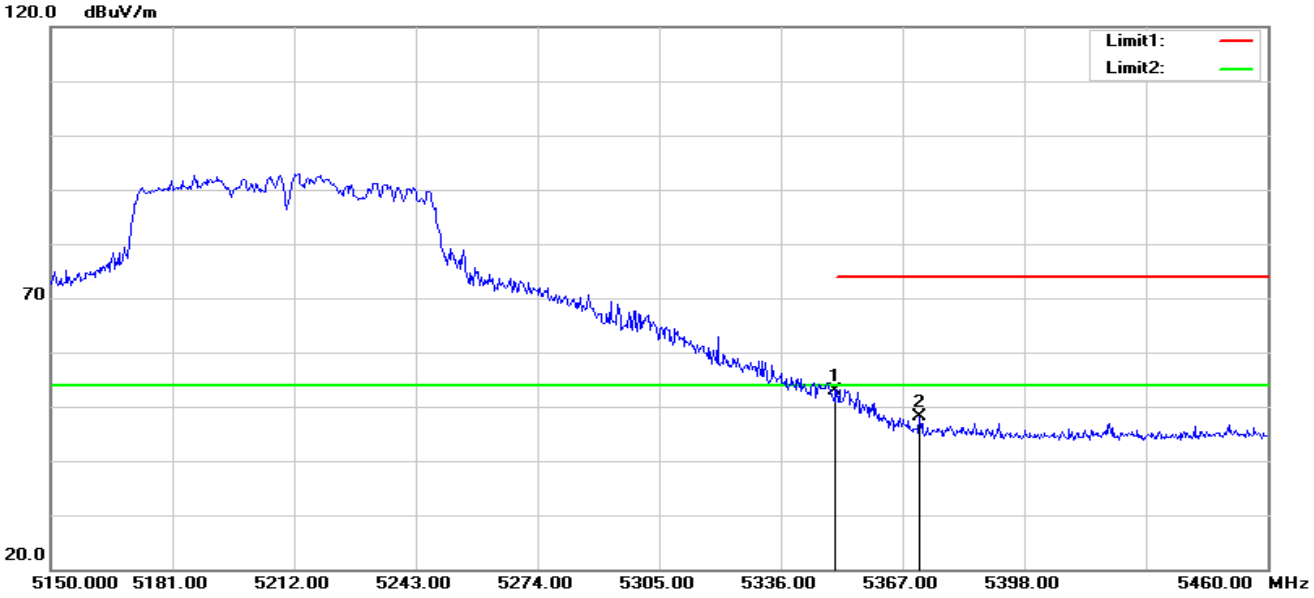
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5134.920	78.86	-5.73	73.13	74.00	-0.87	peak
2	5134.920	51.44	-5.73	45.71	54.00	-8.29	AVG
3	5150.000	78.82	-5.73	73.09	74.00	-0.91	peak
4	5150.000	53.78	-5.73	48.05	54.00	-5.95	AVG

RSE-802.11ac80-L-V



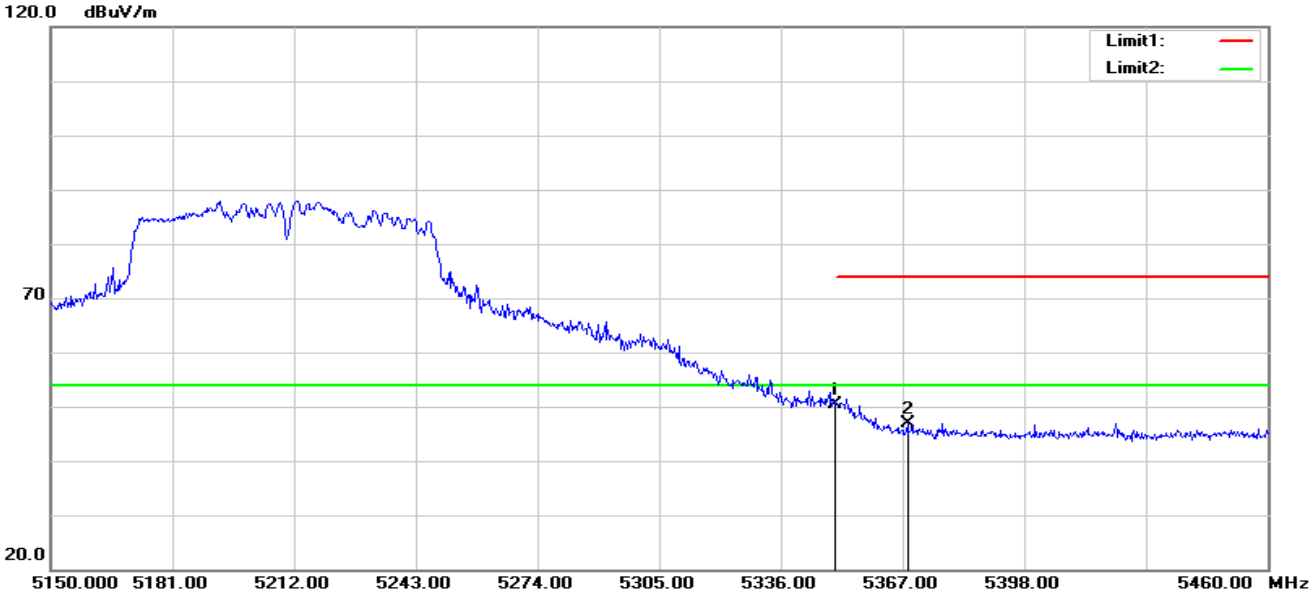
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5139.600	73.15	-5.74	67.41	74.00	-6.59	peak
2	5139.600	45.73	-5.74	39.99	54.00	-14.01	AVG
3	5150.000	74.25	-5.73	68.52	74.00	-5.48	peak
4	5150.000	46.83	-5.73	41.10	54.00	-12.90	AVG

RSE-802.11ac80-H-H



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	58.13	-5.23	52.90	74.00	-21.10	peak
2	5371.340	53.29	-5.24	48.05	74.00	-25.95	peak

RSE-802.11ac80-H-V

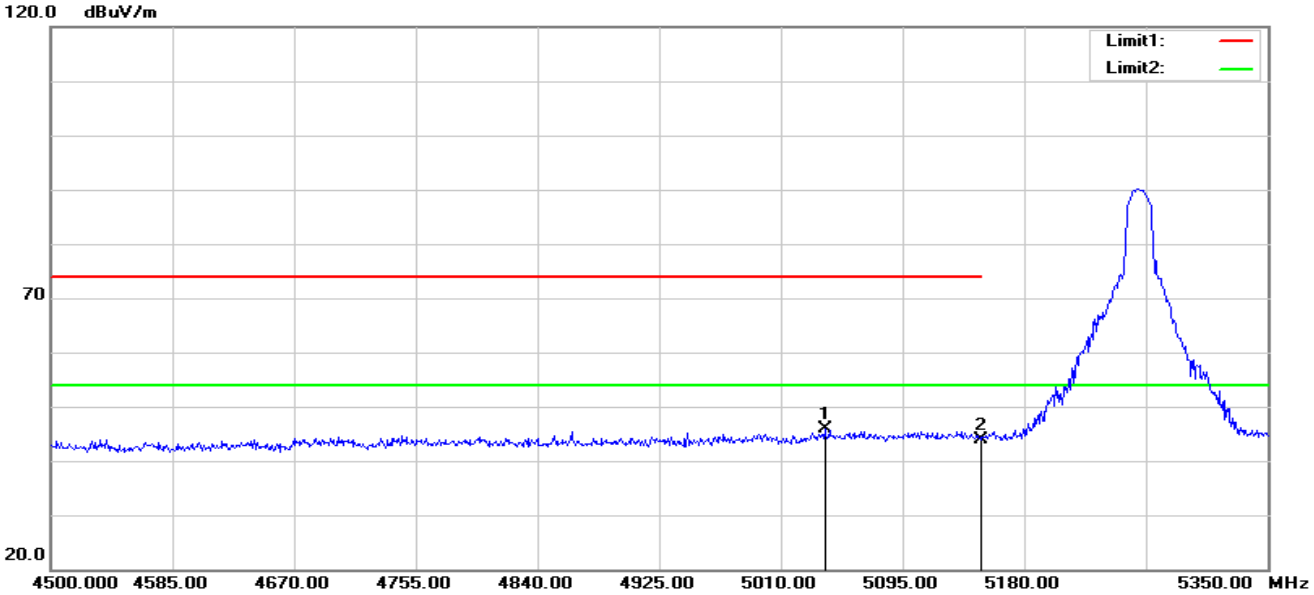


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	55.60	-5.23	50.37	74.00	-23.63	peak
2	5368.240	52.20	-5.24	46.96	74.00	-27.04	peak

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

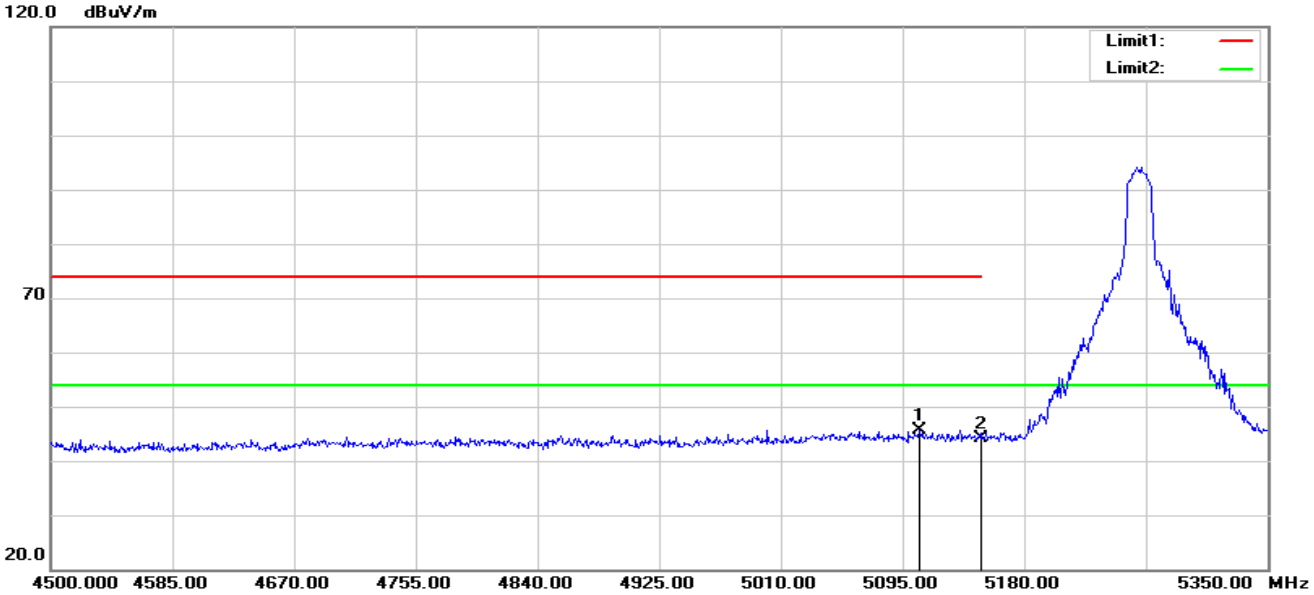
U-NII-2A 5250-5350MHz

RSE-802.11ac20-L-H



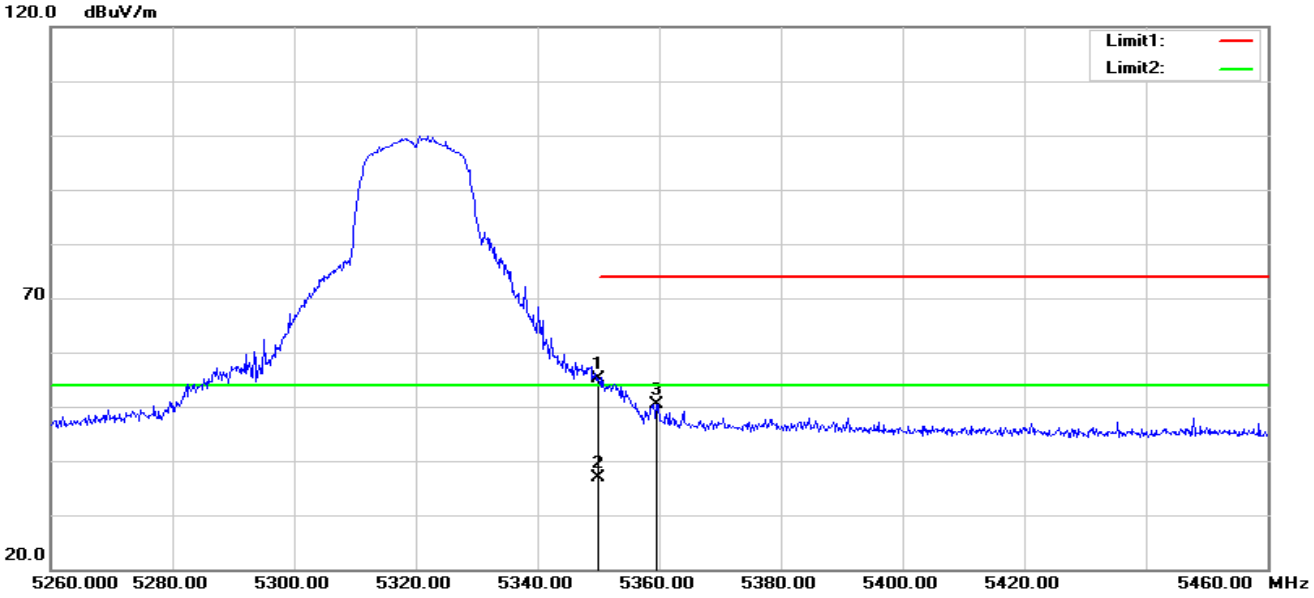
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5040.600	51.77	-6.01	45.76	74.00	-28.24	peak
2	5150.000	49.66	-5.73	43.93	74.00	-30.07	peak

RSE-802.11ac20-L-V



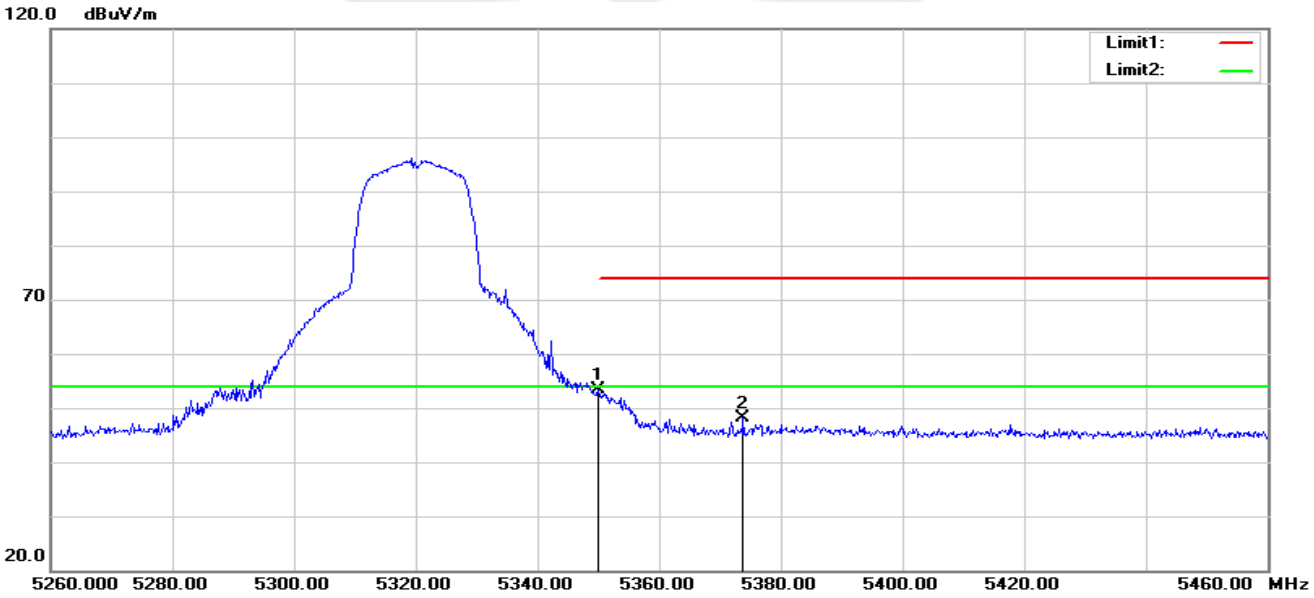
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5106.900	51.29	-5.73	45.56	74.00	-28.44	peak
2	5150.000	49.96	-5.73	44.23	74.00	-29.77	peak

RSE-802.11ac20-H-H



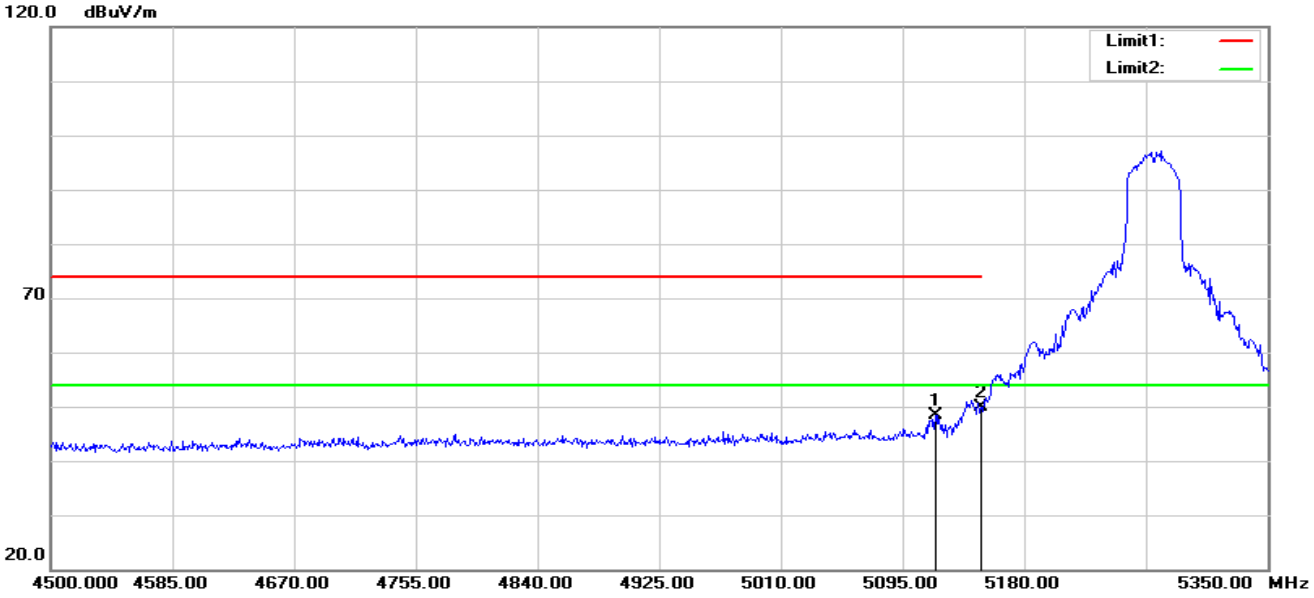
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	60.40	-5.23	55.17	74.00	-18.83	peak
2	5350.000	42.18	-5.23	36.95	54.00	-17.05	AVG
3	5359.600	55.67	-5.23	50.44	74.00	-23.56	peak

RSE-802.11ac20-H-V



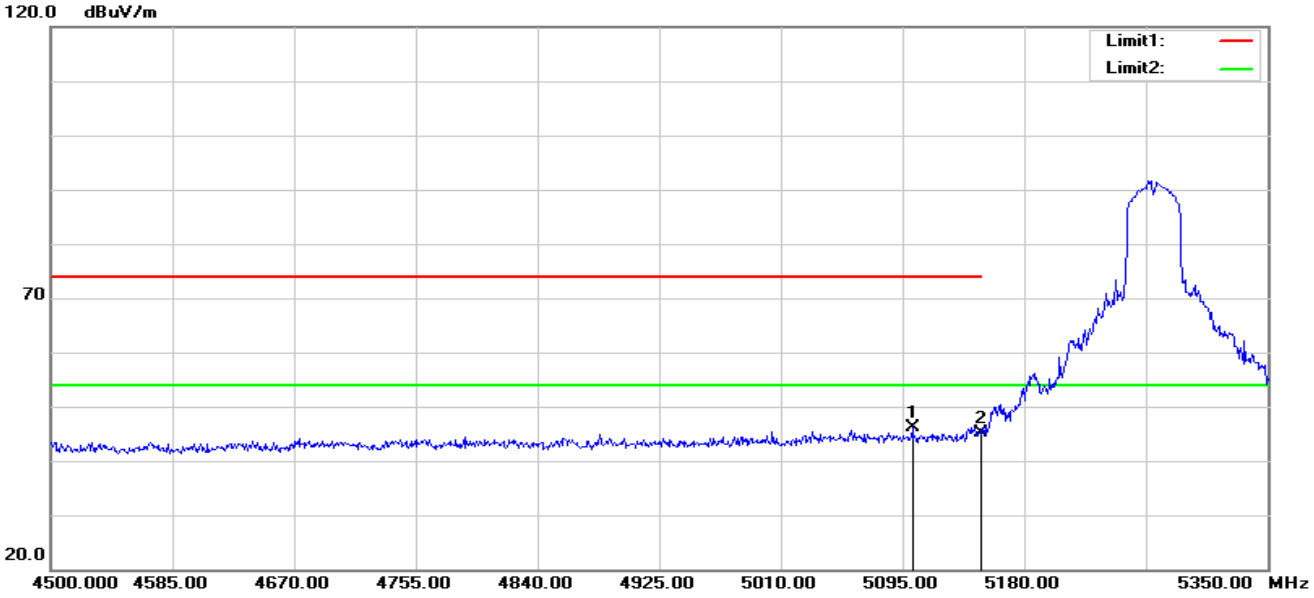
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	58.58	-5.23	53.35	74.00	-20.65	peak
2	5373.800	53.44	-5.24	48.20	74.00	-25.80	peak

RSE-802.11ac40-L-H



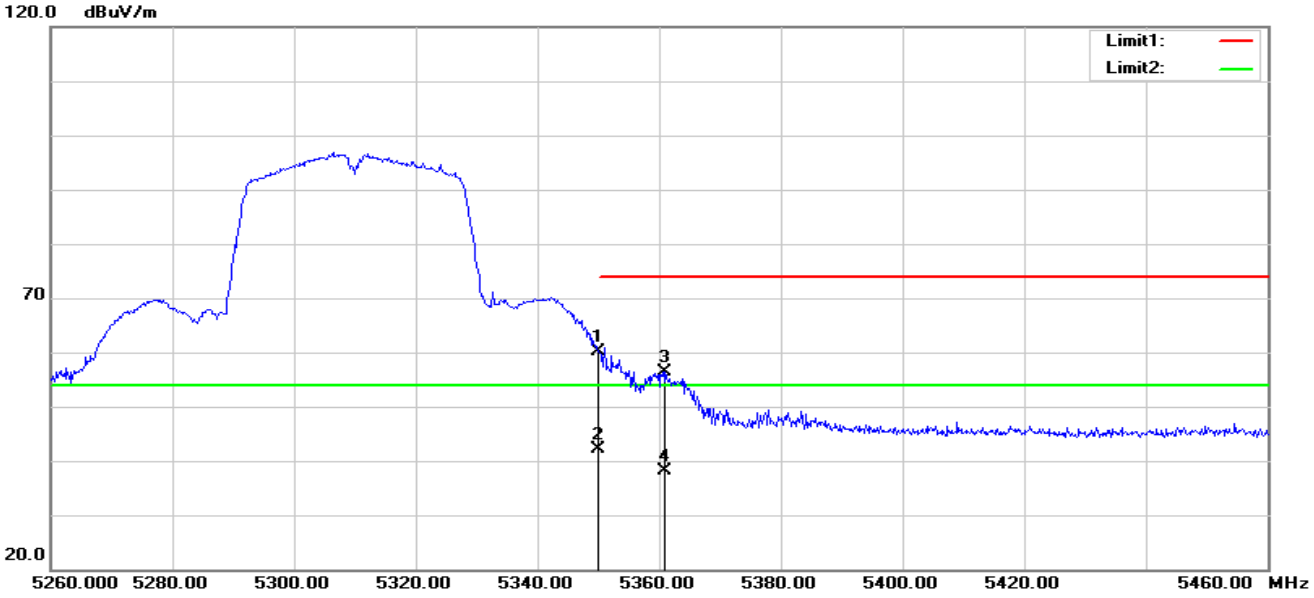
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5117.950	54.21	-5.74	48.47	74.00	-25.53	peak
2	5150.000	55.71	-5.73	49.98	74.00	-24.02	peak

RSE-802.11ac40-L-V



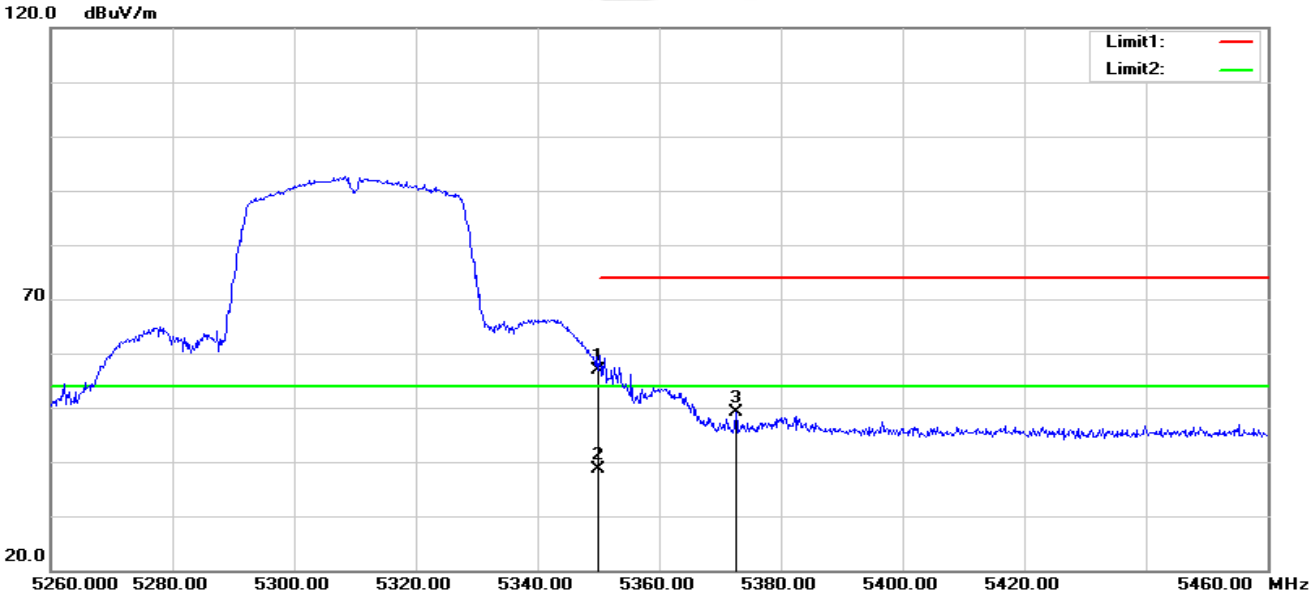
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5101.800	51.95	-5.74	46.21	74.00	-27.79	peak
2	5150.000	50.86	-5.73	45.13	74.00	-28.87	peak

RSE-802.11ac40-H-H



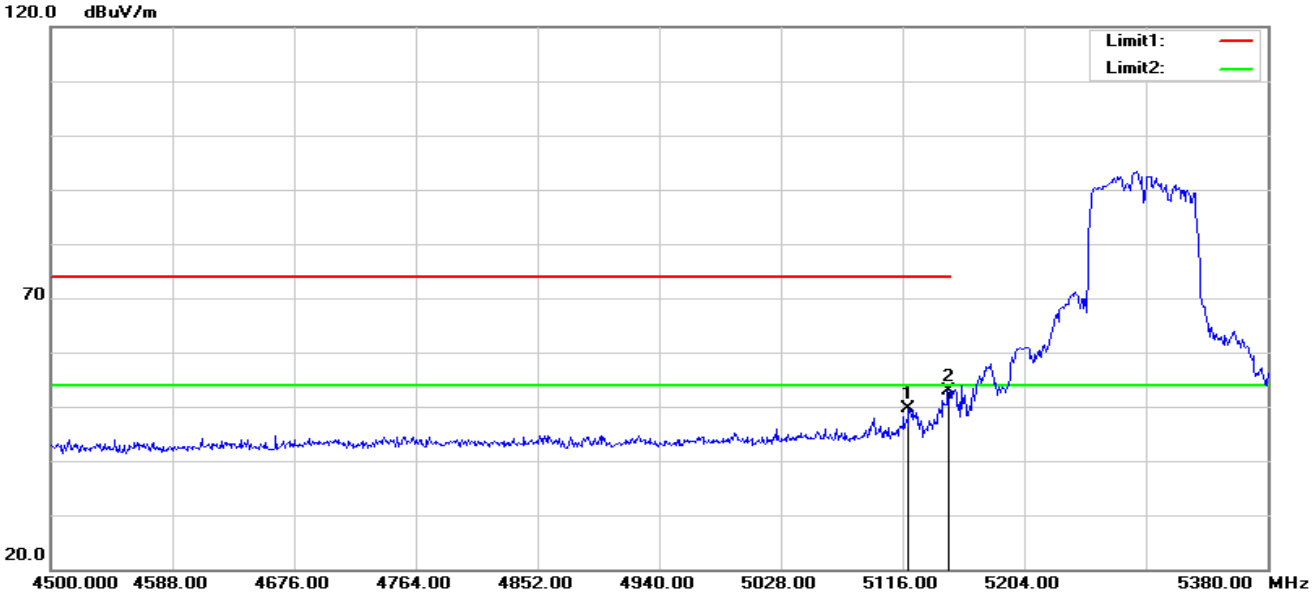
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	65.46	-5.23	60.23	74.00	-13.77	peak
2	5350.000	47.24	-5.23	42.01	54.00	-11.99	AVG
3	5361.000	61.65	-5.23	56.42	74.00	-17.58	peak
4	5361.000	43.43	-5.23	38.20	54.00	-15.80	AVG

RSE-802.11ac40-H-V



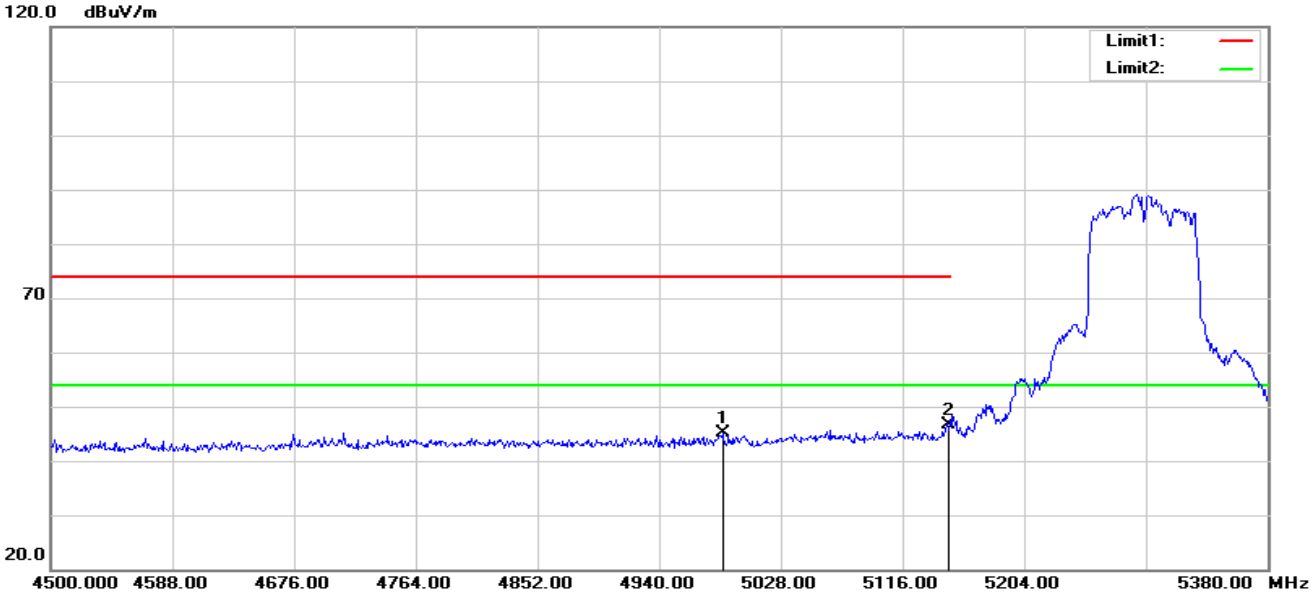
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	62.20	-5.23	56.97	74.00	-17.03	peak
2	5350.000	43.98	-5.23	38.75	54.00	-15.25	AVG
3	5372.600	54.30	-5.24	49.06	74.00	-24.94	peak

RSE-802.11ac80-L-H



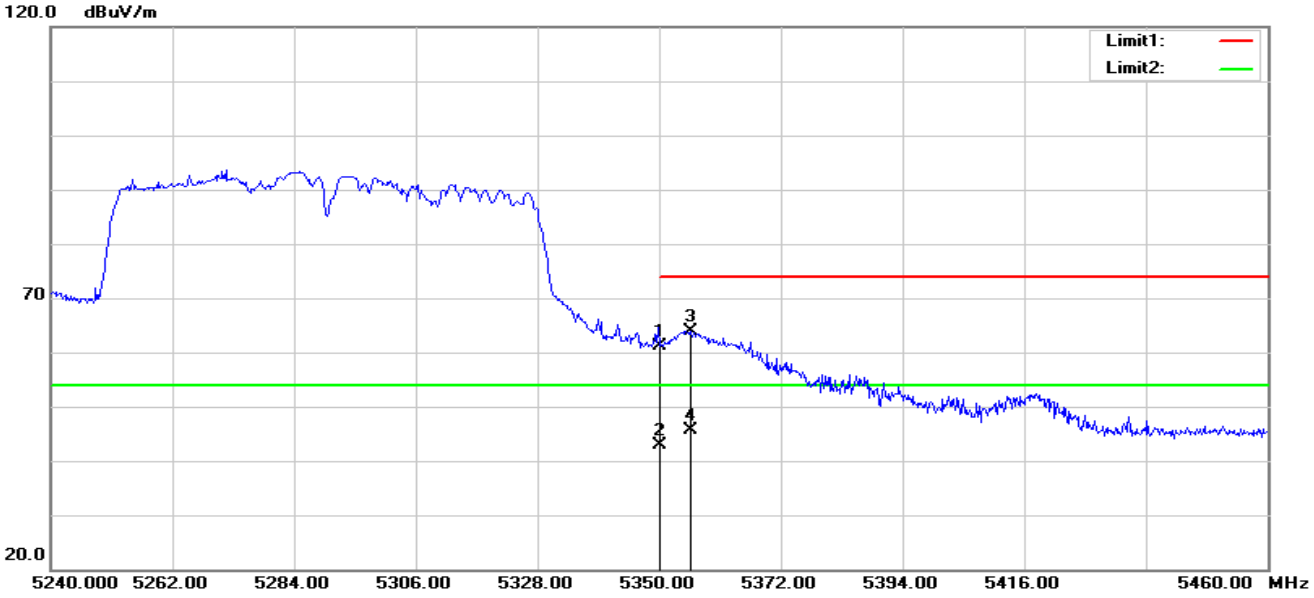
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5120.400	55.33	-5.73	49.60	74.00	-24.40	peak
2	5150.000	58.50	-5.73	52.77	74.00	-21.23	peak

RSE-802.11ac80-L-V



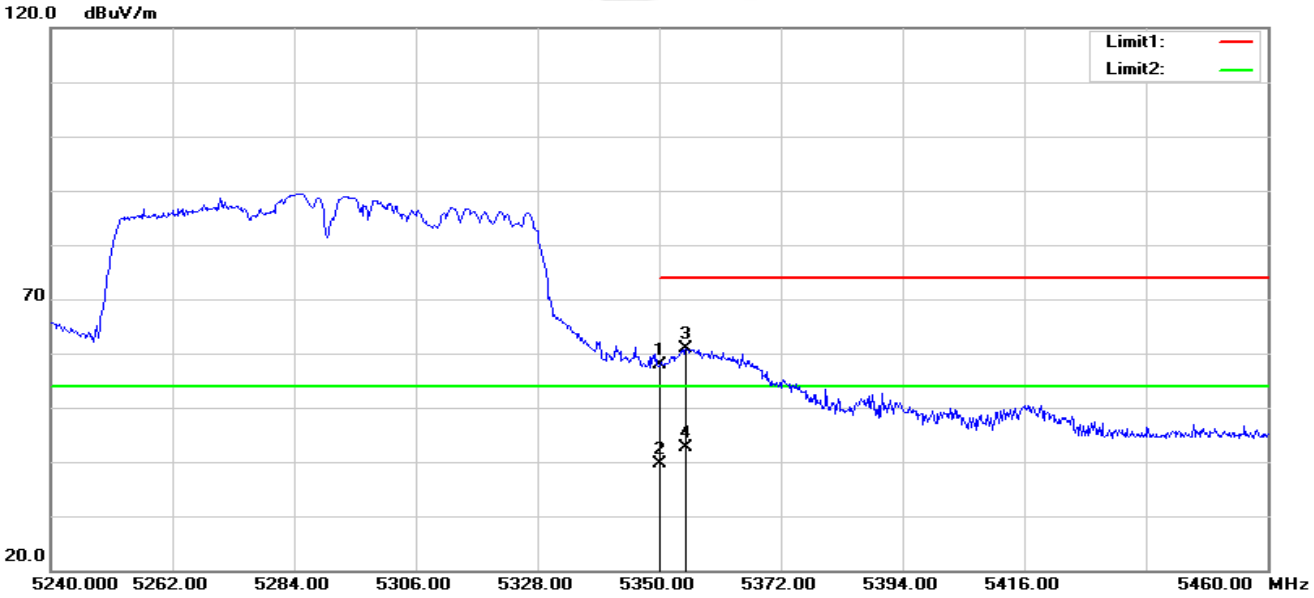
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4985.760	51.33	-6.28	45.05	74.00	-28.95	peak
2	5150.000	52.43	-5.73	46.70	74.00	-27.30	peak

RSE-802.11ac80-H-H



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	66.40	-5.23	61.17	74.00	-12.83	peak
2	5350.000	48.18	-5.23	42.95	54.00	-11.05	AVG
3	5355.720	69.21	-5.24	63.97	74.00	-10.03	peak
4	5355.720	50.99	-5.24	45.75	54.00	-8.25	AVG

RSE-802.11ac80-H-V



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5350.000	63.11	-5.23	57.88	74.00	-16.12	peak
2	5350.000	44.89	-5.23	39.66	54.00	-14.34	AVG
3	5354.840	66.02	-5.24	60.78	74.00	-13.22	peak
4	5354.840	47.80	-5.24	42.56	54.00	-11.44	AVG

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

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 D02 General UNII Test Procedures New Rules v01r03.

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 ≥ 1/*T*, where *T* is defined in section II.B.I.a).

b) Set VBW ≥ 3 RBW.

c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 log (500kHz/RBW) to the measured result, whereas RBW (< 500 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 (1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.

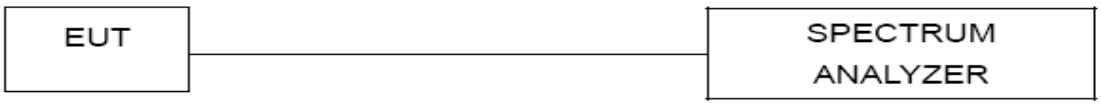
e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the sections5.c) and 5.d) above, since RBW=100 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

5150-5250MHz					
Frequency	Direct measurement Power Density (dBm)	Duty cycle factor (dB)	Final Power Density (dBm)	Limit (dBm)	Result
802.11a					
5180	-1.941	0.061	-1.880	11	PASS
5200	-1.474	0.061	-1.413	11	PASS
5240	-1.712	0.061	-1.651	11	PASS
802.11n20					
5180	-1.595	0.104	-1.491	11	PASS
5200	-1.995	0.104	-1.891	11	PASS
5240	-2.540	0.104	-2.436	11	PASS
802.11n40					
5190	-4.806	0.232	-4.574	11	PASS
5230	-4.948	0.232	-4.716	11	PASS
802.11ac20					
5180	-2.097	0.077	-2.020	11	PASS
5200	-2.234	0.077	-2.157	11	PASS
5240	-2.700	0.077	-2.623	11	PASS
802.11ac40					
5190	-4.796	0.217	-4.579	11	PASS
5230	-4.948	0.217	-4.731	11	PASS
802.11ac80					
5210	-8.484	0.024	-8.460	11	PASS

5250-5350MHz					
Frequency	Direct measurement Power Density (dBm)	Duty cycle factor (dB)	Final Power Density (dBm)	Limit (dBm)	Result
802.11a					
5260	-3.606	0.073	-3.533	11	PASS
5300	-4.494	0.073	-4.421	11	PASS
5320	-5.583	0.073	-5.510	11	PASS
802.11n20					
5260	-4.185	0.078	-4.107	11	PASS
5300	-5.225	0.078	-5.147	11	PASS
5320	-5.861	0.078	-5.783	11	PASS
802.11n40					
5270	-7.558	0.219	-7.339	11	PASS
5310	-8.652	0.219	-8.433	11	PASS
802.11ac20					
5260	-3.935	0.065	-3.870	11	PASS
5300	-4.947	0.065	-4.882	11	PASS
5320	-5.469	0.065	-5.404	11	PASS
802.11ac40					
5270	-7.430	0.206	-7.224	11	PASS
5310	-8.445	0.206	-8.239	11	PASS
802.11ac80					
5290	-11.587	0.468	-11.119	11	PASS

Data see Attachment A

5. BANDWIDTH MEASUREMENT

5.1 EMISSION BANDWIDTH (EBW) 26 BANDWID PROCEDURES / LIMIT

See list of measuring instruments of this test report.

5.1.1 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 > =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%.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP

5.1.4 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.

5.1.5 TEST RESULTS

Frequency (MHz)	26dB Bandwidth (MHz)	Pass/Fail
802.11a		
5180	19.75	Pass
5200	19.78	Pass
5240	19.70	Pass
802.11n(HT20)		
5180	19.93	Pass
5200	20.14	Pass
5240	20.10	Pass
802.11n(HT40)		
5190	40.24	Pass
5230	40.29	Pass
802.11ac(VHT20)		
5180	20.09	Pass
5200	20.02	Pass
5240	20.09	Pass
802.11ac(VHT40)		
5190	40.10	Pass
5230	40.07	Pass
802.11ac(VHT80)		
5210	80.45	Pass

Frequency (MHz)	26dB Bandwidth (MHz)	Pass/Fail
802.11a		
5260	19.78	Pass
5300	19.97	Pass
5320	19.82	Pass
802.11n(HT20)		
5260	20.09	Pass
5300	20.01	Pass
5320	20.07	Pass
802.11n(HT40)		
5270	40.53	Pass
5310	40.27	Pass
802.11ac(VHT20)		
5260	20.08	Pass
5300	19.93	Pass
5320	20.17	Pass
802.11ac(VHT40)		
5270	39.97	Pass
5310	40.02	Pass
802.11ac(VHT80)		
5290	80.45	Pass

Test plot see Attachment B

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

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

5.2.1 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 ≥ 3 · 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.

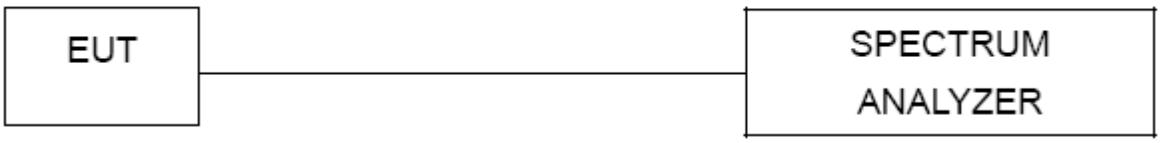
6. Use the 99 % power bandwidth function of the instrument (if available).

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.

5.2.2 DEVIATION FROM STANDARD

No deviation.

5.2.3 TEST SETUP



5.2.4 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.

5.2.5 TEST RESULTS

Frequency (MHz)	99% Bandwidth (MHz)	Pass/Fail
802.11a		
5180	16.38	Pass
5200	16.37	Pass
5240	16.40	Pass
802.11n(HT20)		
5180	17.53	Pass
5200	17.51	Pass
5240	17.53	Pass
802.11n(HT40)		
5190	35.95	Pass
5230	35.94	Pass
802.11ac(VHT20)		
5180	17.52	Pass
5200	17.53	Pass
5240	17.53	Pass
802.11ac(VHT40)		
5190	35.93	Pass
5230	35.91	Pass
802.11ac(VHT80)		
5210	75.29	Pass

Frequency (MHz)	99% Bandwidth (MHz)	Pass/Fail
802.11a		
5260	16.39	Pass
5300	16.78	Pass
5320	16.38	Pass
802.11n(HT20)		
5260	17.54	Pass
5300	17.78	Pass
5320	17.55	Pass
802.11n(HT40)		
5270	35.99	Pass
5310	35.96	Pass
802.11ac(VHT20)		
5260	17.53	Pass
5300	17.52	Pass
5320	17.54	Pass
802.11ac(VHT40)		
5270	35.95	Pass
5310	35.94	Pass
802.11ac(VHT80)		
5290	75.24	Pass

Test plot See Attachment B

6. MAXIMUM CONDUCTED OUTPUT POWER

6.1 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.

<table>
<tr><td colspan="5">FCC Part15 (15.407) , Subpart E</td></tr>
<tr><td>Section</td><td>Test Item</td><td>Limit</td><td>Frequency Range (MHz)</td><td>Result</td></tr>
<tr><td rowspan="2">15.407(a) (1) (iv)</td><td rowspan="3">Peak Output Power</td><td>0.25 watt</td><td>5150-5250</td><td rowspan="3">PASS</td></tr>
<tr><td>The lesser of 250 mW or 11 dBm + 10 log (26 dB emission bandwidth)</td><td>5250-5350
5470-5725</td></tr>
<tr><td>15.407(a) (3)</td><td>1 watt</td><td>5725-5825</td></tr>
</table>

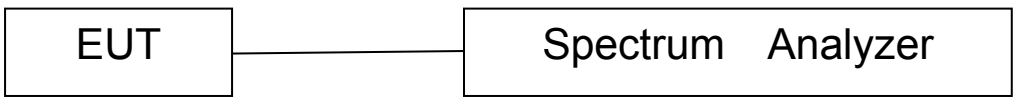
6.2 TEST PROCEDURE

The EUT was directly connected to the Power Sensor&PC

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 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.

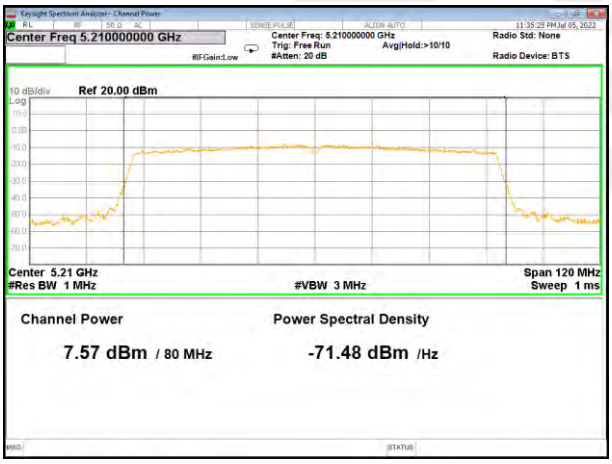
6.6 TEST RESULTS

Note:

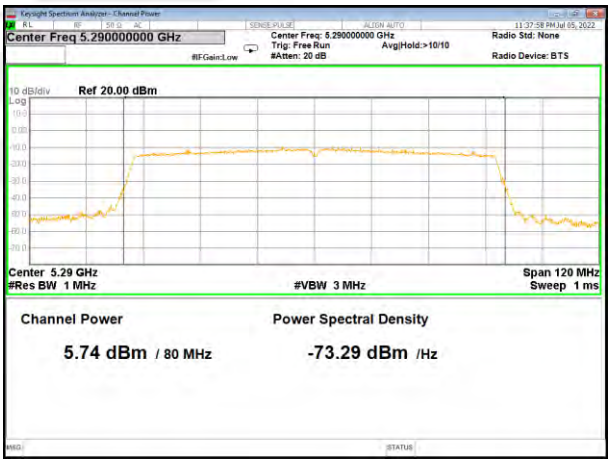
1. For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 0.25 W.
2. For mobile and portable client devices in the 5.25-5.35 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 0.25 W.

U-NII-1 (5.15-5.25GHz)					
Test Channel	Frequency (MHz)	Direct measurement AV Power (dBm)	Duty cycle factor (dB)	Final AV Power (dBm)	LIMIT (dBm)
802.11a					
36	5180	8.48	0.061	8.54	23.98
40	5200	8.48	0.061	8.54	23.98
48	5240	7.98	0.061	8.04	23.98
802.11n(HT20)					
36	5180	8.49	0.104	8.59	23.98
40	5200	8.31	0.104	8.41	23.98
48	5240	7.80	0.104	7.90	23.98
802.11n(HT40)					
38	5190	7.85	0.232	8.08	23.98
46	5230	8.21	0.232	8.44	23.98
802.11ac(VHT20)					
36	5180	8.58	0.077	8.66	23.98
40	5200	8.20	0.077	8.28	23.98
48	5240	7.87	0.077	7.95	23.98
802.11ac(VHT40)					
38	5190	8.30	0.217	8.52	23.98
46	5230	8.14	0.217	8.36	23.98
802.11ac(VHT80)					
42	5210	7.57	0.024	7.59	23.98

U-NII-2A(5.25-5.35GHz)					
Test Channel	Frequency (MHz)	Direct measurement AV Power (dBm)	Duty cycle factor (dB)	Final AV Power (dBm)	LIMIT (dBm)
802.11a					
52	5260	7.76	0.073	7.83	23.96
60	5300	6.93	0.073	7.00	23.98
64	5320	6.65	0.073	6.72	23.97
802.11n(HT20)					
52	5260	7.44	0.078	7.52	23.98
60	5300	6.69	0.078	6.77	23.98
64	5320	6.46	0.078	6.54	23.98
802.11n(HT40)					
54	5270	7.35	0.219	7.57	23.98
62	5310	6.81	0.219	7.03	23.98
802.11ac(VHT20)					
52	5260	9.38	0.065	9.44	23.98
60	5300	8.20	0.065	8.26	23.98
64	5320	7.87	0.065	7.93	23.98
802.11ac(VHT40)					
54	5270	7.38	0.206	7.59	23.98
62	5310	6.71	0.206	6.92	23.98
802.11ac(VHT80)					
58	5290	5.74	0.468	6.21	23.98



5210MHz



5290MHz

Duty cycle

U-NII-1				
Mode	Ton(ms)	Tp(ms)	Duty cycle(%)	Duty factor(dB)
a	1.412	1.432	98.60%	0.061
n20	1.320	1.352	97.63%	0.104
n40	0.656	0.692	94.80%	0.232
ac20	1.344	1.368	98.25%	0.077
ac40	0.664	0.698	95.13%	0.217
ac80	0.366	0.368	99.46%	0.024
U-NII-2A				
Mode	Ton(ms)	Tp(ms)	Duty cycle(%)	Duty factor(dB)
a	1.420	1.444	98.34%	0.073
n20	1.320	1.344	98.21%	0.078
n40	0.658	0.692	95.09%	0.219
ac20	1.336	1.356	98.53%	0.065
ac40	0.658	0.690	95.36%	0.206
ac80	0.334	0.372	89.78%	0.468

Band 1-a20

Band 1-n20

Band 1-n40

Band 1-ac20

Band 1-ac40

Band 1-ac80

Band 2-a20

Band 2-n20

Band 2-n40

Band 2-ac20

Band 2-ac40

Band 2-ac80

7. AUTOMATICALLY DISCONTINUE TRANSMISSION

7.1 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.

7.2 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

8. ANTENNA REQUIREMENT

8.1 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.

8.2 EUT ANTENNA

The EUT antenna is PIFA 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※※※※※