FCC TEST REPORT
FCC ID: 2A9JR-DGNS-GH

Report Number	ZKT-220920L7015-02
Date of Test	Aug. 25, 2022 -- Nov. 25, 2022
Date of issue	Nov. 25, 2022
Total number of pages	69
Test Result	PASS
Testing Laboratory	**Shenzhen ZKT Technology Co., Ltd.**
Address	1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China
Applicant's name	Shanghai Cross Stars Cultural Technology LLC., Co.
Address	Floor 3, building 7, block chain ecological Valley, Jing'an District, Shanghai, P.R.China
Manufacturer's name	Shanghai Cross Stars Cultural Technology LLC., Co.
Address	Floor 3, building 7, block chain ecological Valley, Jing'an District, Shanghai, P.R.China
Test specification:	
Standard	FCC CFR Title 47 Part 15 Subpart E Section 15.407 ANSI C63.10:2013
Test procedure	KDB 789033 D02 V01r02
Non-standard test method	N/A
Test Report Form No.	TRF-EL-110_V0
Test Report Form(s) Originator	ZKT Testing
Master TRF	Dated: 2020-01-06

This device described above has been tested by ZKT, and 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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Product name	RTK Position Ground Device
Trademark	N/A
Model/Type reference	DGNS-GH
Ratings	DC20-28V/30W or DC14.8V 6700mAh,99.16Wh(supplied via built-in battery)

Testing procedure and testing location:

Testing Laboratory .....:	**Shenzhen ZKT Technology Co., Ltd.**
Address .....:	1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China
Tested by (name + signature) .....:	Alen He
Reviewer (name + signature).....:	Joe Liu
Approved (name + signature) .....:	Lake Xie

Table of Contents

1. VERSION

Report No.	Version	Description	Approved
ZKT-220920L7015-01	Rev.01	Initial issue of report	Nov. 25, 2022

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C			
Standard Section	Test Item	Result	Remark
15.203/15.247 (c)	Antenna requirement	PASS	
15.207	AC Power Line Conducted Emission	PASS	
15.407 (a) (b)	Spurious Radiated Emissions and Band Edge	PASS	
15.407 (e) /15.403(i)	6 dB bandwidth, 26dB Emission Bandwidth& 99% Occupied Bandwidth	PASS	
15.407 (a)	Power Spectral Density	PASS	
15.407 (a)(1)(2)(3)	Maximum conducted output power	PASS	
15.407 (g)	Frequency Stability	PASS	

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

2.1 TEST FACILITY

Shenzhen ZKT Technology Co., Ltd.
Add. : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

FCC Test Firm Registration Number: 692225
Designation Number: CN1299
IC Registered No.: 27033

2.2 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.	tem	ncertainty
1	3m camber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
2	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
3	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
4	Conducted Adjacent channel power	U=1.38dB
5	Conducted output power uncertainty Above 1G	U=1.576dB
6	Conducted output power uncertainty below 1G	U=1.28dB
7	humidity uncertainty	U=5.3%
8	Temperature uncertainty	U=0.59℃
9	Radiated disturbance(30MHz-1000MHz)	U=4.8dB
10	Radiated disturbance(1GHz-6GHz)	U=4.9dB
11	Radiated disturbance(1GHz-18GHz)	U=5.0dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Product Name:	RTK Position Ground Device		
Model No.:	DGNS-GH		
Hardware Version:	HW11		
Software Version:	V2.0.4		
Sample(s) Status:	Engineer sample		
	IEEE802.11 WLAN mode supported	802.11a/n/ac(20MHz channel bandwidth) 802.11n/ac(40MHz channel bandwidth) 802.11 ac (80MHz channel bandwidth)	
	Date rate	802.11ac:MCS0-MCS9 802.11n: MCS0-MCS7 802.11a: 6.5-54Mbps	
	Modulation	OFDM/OFDMA	
	U-NII-1	Frequency Range	802.11a/n/ac(20MHz) : 5180-5240MHz 802.11n/ac(40MHz) : 5190-5230MHz 802.11 ac (80MHz) : 5210MHz
		Channels	802.11 a/n/ac (20MHz): 4 802.11 ac /n (40MHz): 2 802.11 ac (80MHz): 1
	U-NII-3	Frequency Range	802.11 a/n/ac(20MHz) : 5745-5825 MHz 802.11 n/ac (40MHz): 5755-5795 MHz 802.11 ac (80MHz): 5775 MHz
		Channels	802.11 a/n/ac(20MHz) : 5 802.11 n/ac (40MHz): 2 802.11 ac (80MHz): 1
Antenna Type:	glue stick antenna		
Antenna gain:	3.27dBi		
Power supply:	DC20-28V/30W or DC14.8V 6700mAh,99.16Wh(supplied via built-in battery)		

U-NII-1		U-NII-3	
CH.	Frequency (MHz)	CH.	Frequency (MHz)
36	5180	149	5745
40	5200	…	…
44	5220	157	5785
48	5240	…	…
		165	5825

802.11a/n/ac(20MHz) Frequency / Channel Operations

U-NII-1		U-NII-3	
CH.	Frequency (MHz)	CH.	Frequency (MHz)
38	5190	151	5755
46	5230	159	5795

802.11n /ac(40MHz BW) Frequency / Channel Operations

U-NII-1		U-NII-3	
CH.	Frequency (MHz)	CH.	Frequency (MHz)
42	5210	155	5775

802.11ac (80MHz BW) Frequency / Channel Operations

3.2 DESCRIPTION OF TEST MODES

Worst Case Configuration: transmitting both 2.4GHz mode and 5GHz mode

Description	5 GHz Emission
Antenna	ANT1
Channel	149
Operating Frequency (MHz)	802.11ac
Data Rate (Mbps)	OFDM/MCS11
Mode	U-NII-3 -5745MHz

3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Emission

adapter — EUT

Radiated Emission

battery — EUT

Conducted Spurious

battery — EUT

3.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
1	AC-DC adapter	/	Output DC24V	/	/
2	/	/	/	/	/

Item	Shielded Type	Ferrite Core	Length	Note

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.

3.5EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	KEYSIGHT	9020A	MY55370835	Oct. 18, 2022	Oct. 17, 2023
2	Spectrum Analyzer (1GHz-40GHz)	R&S	FSQ	100363	Oct. 17, 2022	Oct. 16, 2023
3	EMI Test Receiver (9kHz-7GHz)	R&S	ESCI7	101169	Oct. 18, 2022	Oct. 17, 2023
4	Bilog Antenna (30MHz-1500MHz)	Schwarzbeck	VULB9168	N/A	Oct. 17, 2022	Oct. 16, 2023
5	Horn Antenna (1GHz-18GHz)	Agilent	AH-118	071145	Oct. 17, 2022	Oct. 16, 2023
6	Loop Antenna	TESEQ	HLA6121	58357	Oct. 17, 2022	Oct. 16, 2023
7	Amplifier (30-1000MHz)	EM Electronics	EM330 Amplifier	060747	Oct. 17, 2022	Oct. 16, 2023
8	Amplifier (1GHz-26.5GHz)	Agilent	8449B	3008A00315	Oct. 18, 2022	Oct. 17, 2023
9	RF cables1 (9kHz-30MHz)	N/A	9kHz-30MHz	N/A	Oct. 18, 2022	Oct. 17, 2023
10	RF cables2 (30MHz-1GHz)	N/A	30MHz-1GHz	N/A	Oct. 18, 2022	Oct. 17, 2023
11	RF cables3 (1GHz-40GHz)	N/A	1GHz-40GHz	N/A	Oct. 18, 2022	Oct. 17, 2023
12	ESG Signal Generator	Agilent	E4421B	N/A	Oct. 18, 2022	Oct. 17, 2023
13	Signal Generator	Agilent	N5182A	N/A	Oct. 22, 2022	Oct. 21, 2023
14	Magnetic Field Probe Tester	Narda	ELT-400	0-0344	Oct. 17, 2022	Oct. 16, 2023
15	MWRF Power Meter Test system	MW	MW100-RPCB	N/A	Oct. 22, 2022	Oct. 21, 2023
16	Power sensor	KEYSIGHT	U2002H	MY51190005	Oct. 22, 2022	Oct. 21, 2023
17	D.C. Power Supply	LongWei	TPR-6405D	N/A	\	\
18	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	\	\
19	RF Software	MW	MTS8310	V2.0.0.0	\	\
20	Turntable	MF	MF-7802BS	N/A	\	\
21	Antenna tower	MF	MF-7802BS	N/A	\	\

Conduction Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	LISN	R&S	ENV216	101471	Oct. 22, 2022	Oct. 21, 2023
2	LISN	CYBERTEK	EM5040A	E1850400149	Oct. 22, 2022	Oct. 21, 2023
3	Test Cable	N/A	C01	N/A	Oct. 18, 2022	Oct. 17, 2023
4	Test Cable	N/A	C02	N/A	Oct. 18, 2022	Oct. 17, 2023
5	EMI Test Receiver	R&S	ESCI3	101393	Oct. 17, 2022	Oct. 16, 2023
6	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	\	\

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto

4.1.1 POWER LINE CONDUCTED EMISSION LIMITS

FREQUENCY (MHz)	Limit (dBuV)		Standard
	Quasi-peak	Average	
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) *Decreases with the logarithm of the frequency.

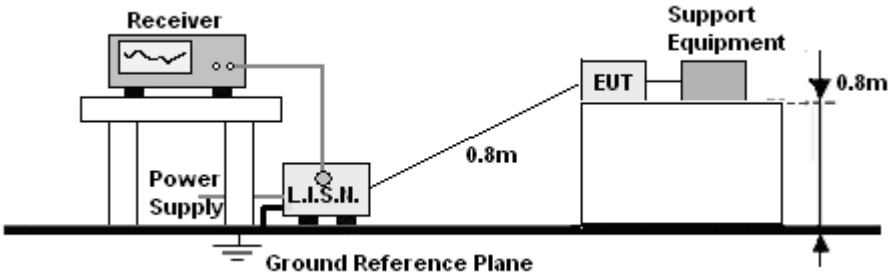
4.1.2 TEST PROCEDURE

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system; a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10:2013.
2. Support equipment, if needed, was placed as per ANSI C63.10:2013
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10:2013.
4. The adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5. All support equipments received AC power from a second LISN, if any.
6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.e.
8 For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TEST SETUP



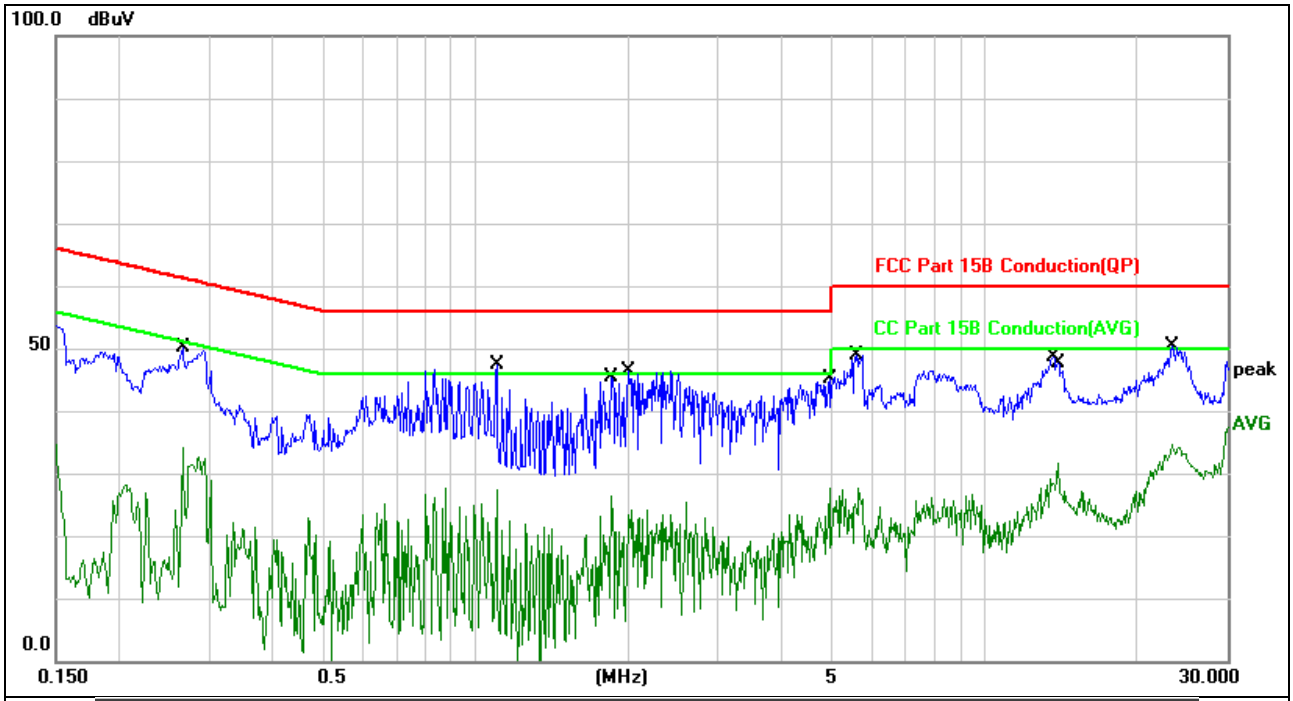
4.1.5 EUT OPERATING CONDITIONS

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.

We pretest AC 120V, the worst voltage was AC 120V and the data recording in the report.

4.1.6 TEST RESULT

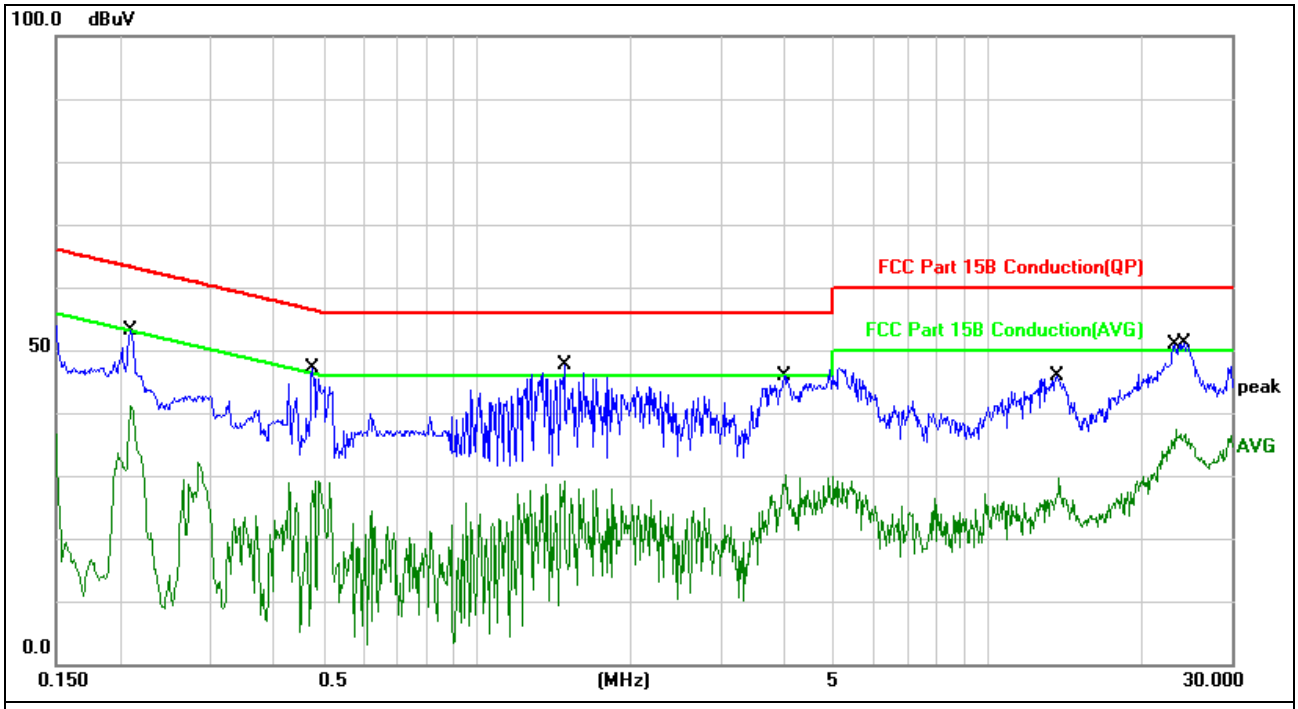
Temperature：	26℃	Relative Humidity:	54%
Pressure：	101kPa	Phase：	L
Test Voltage ：	AC120V(DC24V)	Mode:	802.11n-5785MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2660	40.04	10.10	50.14	61.24	-11.10	QP	
2		0.2660	24.03	10.10	34.13	51.24	-17.11	AVG	
3	*	1.1019	37.23	10.16	47.39	56.00	-8.61	QP	
4		1.1019	17.14	10.16	27.30	46.00	-18.70	AVG	
5		1.8580	16.35	10.06	26.41	46.00	-19.59	AVG	
6		2.0019	36.40	10.04	46.44	56.00	-9.56	QP	
7		4.9537	17.72	9.96	27.68	46.00	-18.32	AVG	
8		5.5938	39.03	9.95	48.98	60.00	-11.02	QP	
9		13.6938	38.64	9.95	48.59	60.00	-11.41	QP	
10		13.9298	21.79	9.94	31.73	50.00	-18.27	AVG	
11		23.3500	24.91	9.75	34.66	50.00	-15.34	AVG	
12		23.4860	40.65	9.75	50.40	60.00	-9.60	QP	

Notes:
1.An initial pre-scan was performed on the line and neutral lines with peak detector.
2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3.Mesurement Level = Reading level + Correct Factor

Temperature :	26℃	Relative Humidity:	54%
Pressure :	101kPa	Phase :	N
Test Voltage :	AC120V(DC24V)	Mode:	802.11n-5785MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2099	43.16	10.07	53.23	63.21	-9.98	QP	
2		0.2099	31.00	10.07	41.07	53.21	-12.14	AVG	
3		0.4779	36.93	10.20	47.13	56.38	-9.25	QP	
4		0.4819	18.99	10.20	29.19	46.31	-17.12	AVG	
5	*	1.4859	37.56	10.10	47.66	56.00	-8.34	QP	
6		1.4859	19.03	10.10	29.13	46.00	-16.87	AVG	
7		4.0060	36.13	9.81	45.94	56.00	-10.06	QP	
8		4.0458	20.32	9.82	30.14	46.00	-15.86	AVG	
9		13.6458	35.94	9.96	45.90	60.00	-14.10	QP	
10		13.7779	19.77	9.95	29.72	50.00	-20.28	AVG	
11		23.3380	27.54	9.75	37.29	50.00	-12.71	AVG	
12		24.2340	41.42	9.74	51.16	60.00	-8.84	QP	

Notes:
1.An initial pre-scan was performed on the line and neutral lines with peak detector.
2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3.Mesurement Level = Reading level + Correct Factor

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

1. Radiated emissions from9 kHz to25 GHz were measured according to the methods defines in ANSI C63.10-2013.The EUT was placed above the ground plane, 0.8 meter for frequency below 1GHzand1.5meterforfrequencyabove1GHz. The interface cable sand equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions.

2. For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of –27dBm/MHz.

3. For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

4. For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRPof -27 dBm/MHz.

5. KDB789033v02r01G)2)c)Asspecifiedin15.407(b),emissionsabove1000MHzthatareout sideofthe restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.

According to§15.209(a),exceptasprovidedelsewhereinthisSubpart,theemissionsfroman intentionalradiatorshallnotexceedthefieldstrengthlevelsspecifiedinthefollowingtable:

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

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

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

4.2.2 TEST PROCEDURE

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.1 meters above the ground at a 3 meter semi-anechoiccamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of avariable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum valueof the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned toheights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could bestopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dBmargin would be re-tested one by one using peak, quasi-peak or average method as specified and then reportedin a data sheet.

Above 1GHz test procedure as below:

g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber andchange form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).
h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel

Note:

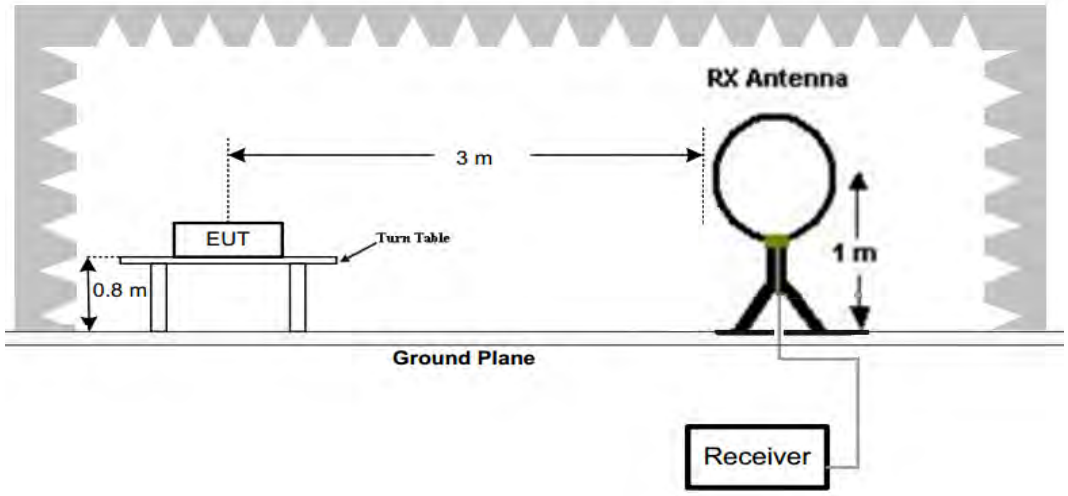
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

4.2.3 DEVIATION FROM TEST STANDARD

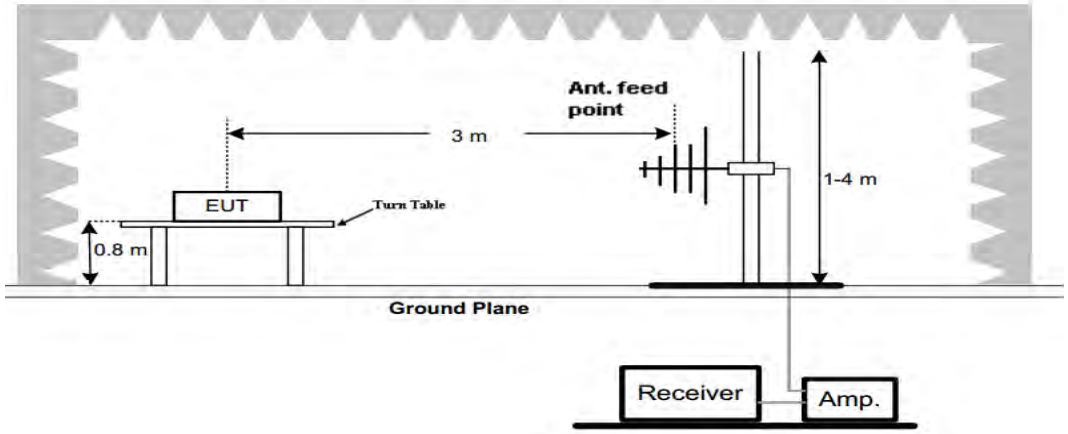
No deviation

4.2.4 TEST SETUP

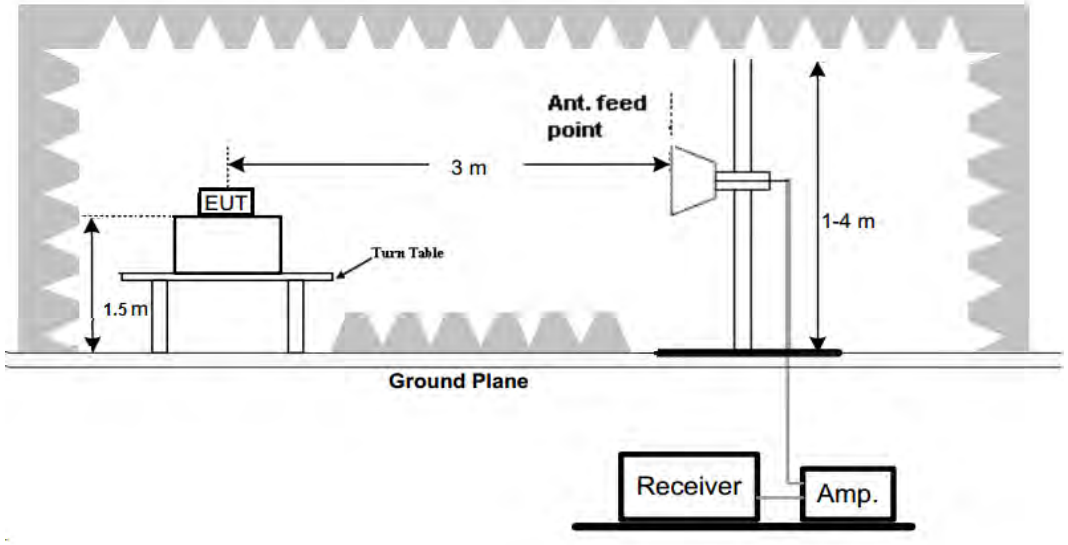
（A）Radiated Emission Test-Up Frequency Below 30MHz



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



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



4.2.5 EUT OPERATING CONDITIONS

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

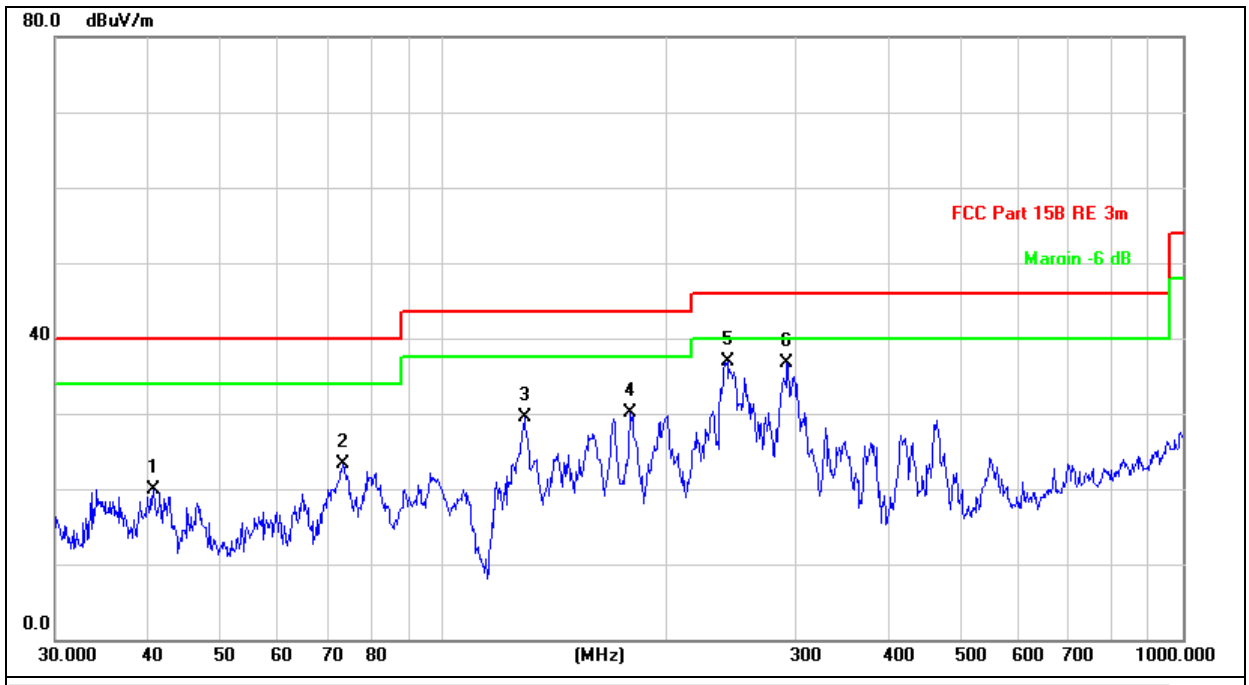
4.2.6 TEST RESULTS

Between 9KHz – 30MHz

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

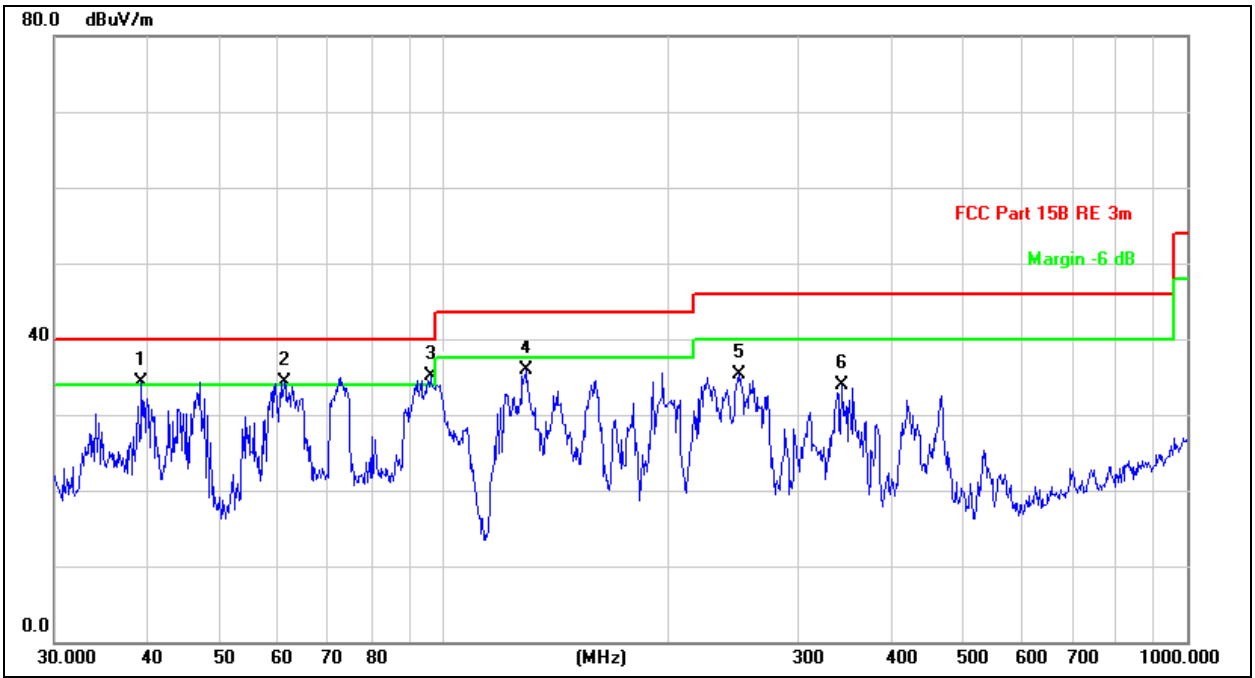
Between 30MHz – 1GHz

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	Horizontal
Test Voltage:	DC14.8V	Mode:	802.11n-5785MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		40.7014	30.45	-10.54	19.91	40.00	-20.09	QP	100	360	
2		73.3593	38.49	-15.13	23.36	40.00	-16.64	QP	100	360	
3		129.0146	39.73	-10.30	29.43	43.50	-14.07	QP	100	360	
4	*	179.3863	40.97	-10.81	30.16	43.50	-13.34	QP	100	360	
5		242.5252	47.51	-10.63	36.88	46.00	-9.12	QP	100	360	
6		292.0582	45.12	-8.48	36.64	46.00	-9.36	QP	100	360	

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	DC14.8V	Mode:	802.11n-5785MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	!	39.2991	44.11	-9.77	34.34	40.00	-5.66	QP	100	360	
2	!	61.1315	49.93	-15.55	34.38	40.00	-5.62	QP	100	360	
3	!	96.0986	49.51	-14.45	35.06	40.00	-4.94	QP	100	360	
4	*	129.4677	46.28	-10.29	35.99	43.50	-7.51	QP	100	360	
5		249.4250	45.96	-10.72	35.24	46.00	-10.76	QP	100	360	
6		343.1800	40.93	-7.05	33.88	46.00	-12.12	QP	100	360	

Remarks:
1.Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2.The emission levels of other frequencies are very lower than the limit and not show in test report.

802.11a

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5180MHz									
V	10360	48.70	30.55	5.77	24.66	48.58	74.00	-25.42	PK
V	10360	35.95	30.55	5.77	24.66	35.83	54.00	-18.17	AV
V	15540	48.47	30.33	6.32	24.55	49.01	74.00	-24.99	PK
V	15540	40.87	30.33	6.32	24.55	41.41	54.00	-12.59	AV
V	20720	48.80	30.85	7.45	24.69	50.09	74.00	-23.91	PK
V	20720	39.62	30.85	7.45	24.69	40.91	54.00	-13.09	AV
H	10360	48.13	30.55	5.77	24.66	48.01	74.00	-25.99	PK
H	10360	38.73	30.55	5.77	24.66	38.61	54.00	-15.39	AV
H	15540	47.29	30.33	6.32	24.55	47.83	74.00	-26.17	PK
H	15540	40.79	30.33	6.32	24.55	41.33	54.00	-12.67	AV
H	20720	49.67	30.85	7.45	24.69	50.96	74.00	-23.04	PK
H	20720	41.47	30.85	7.45	24.69	42.76	54.00	-11.24	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5200MHz									
V	10400	48.74	30.55	5.77	24.66	48.62	74.00	-25.38	PK
V	10400	35.66	30.55	5.77	24.66	35.54	54.00	-18.46	AV
V	15600	47.92	30.33	6.32	24.55	48.46	74.00	-25.54	PK
V	15600	41.43	30.33	6.32	24.55	41.97	54.00	-12.03	AV
V	20800	49.89	30.85	7.45	24.69	51.18	74.00	-22.82	PK
V	20800	40.81	30.85	7.45	24.69	42.10	54.00	-11.90	AV
H	10400	48.40	30.55	5.77	24.66	48.28	74.00	-25.72	PK
H	10400	39.85	30.55	5.77	24.66	39.73	54.00	-14.27	AV
H	15600	46.78	30.33	6.32	24.55	47.32	74.00	-26.68	PK
H	15600	40.33	30.33	6.32	24.55	40.87	54.00	-13.13	AV
H	20800	50.05	30.85	7.45	24.69	51.34	74.00	-22.66	PK
H	20800	39.11	30.85	7.45	24.69	40.40	54.00	-13.60	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5240MHz									
V	10480	47.32	30.55	5.77	24.66	47.20	74.00	-26.80	PK
V	10480	35.02	30.55	5.77	24.66	34.90	54.00	-19.10	AV
V	15720	48.09	30.33	6.32	24.55	48.63	74.00	-25.37	PK
V	15720	41.66	30.33	6.32	24.55	42.20	54.00	-11.80	AV
V	20960	49.25	30.85	7.45	24.69	50.54	74.00	-23.46	PK
V	20960	39.14	30.85	7.45	24.69	40.43	54.00	-13.57	AV
H	10480	47.57	30.55	5.77	24.66	47.45	74.00	-26.55	PK
H	10480	38.28	30.55	5.77	24.66	38.16	54.00	-15.84	AV
H	15720	47.41	30.33	6.32	24.55	47.95	74.00	-26.05	PK
H	15720	41.03	30.33	6.32	24.55	41.57	54.00	-12.43	AV
H	20960	49.33	30.85	7.45	24.69	50.62	74.00	-23.38	PK
H	20960	39.61	30.85	7.45	24.69	40.90	54.00	-13.10	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5745MHz									
V	11490	47.64	30.55	5.77	24.66	47.52	74.00	-26.48	PK
V	11490	36.47	30.55	5.77	24.66	36.35	54.00	-17.65	AV
V	17235	49.45	30.33	6.32	24.55	49.99	74.00	-24.01	PK
V	17235	39.40	30.33	6.32	24.55	39.94	54.00	-14.06	AV
V	22980	51.09	30.85	7.45	24.69	52.38	74.00	-21.62	PK
V	22980	40.35	30.85	7.45	24.69	41.64	54.00	-12.36	AV
H	11490	47.95	30.55	5.77	24.66	47.83	74.00	-26.17	PK
H	11490	39.83	30.55	5.77	24.66	39.71	54.00	-14.29	AV
H	17235	48.09	30.33	6.32	24.55	48.63	74.00	-25.37	PK
H	17235	41.27	30.33	6.32	24.55	41.81	54.00	-12.19	AV
H	22980	50.19	30.85	7.45	24.69	51.48	74.00	-22.52	PK
H	22980	39.28	30.85	7.45	24.69	40.57	54.00	-13.43	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5785MHz									
V	11570	49.25	30.55	5.77	24.66	49.13	74.00	-24.87	PK
V	11570	35.36	30.55	5.77	24.66	35.24	54.00	-18.76	AV
V	17355	49.72	30.33	6.32	24.55	50.26	74.00	-23.74	PK
V	17355	39.07	30.33	6.32	24.55	39.61	54.00	-14.39	AV
V	23140	49.52	30.85	7.45	24.69	50.81	74.00	-23.19	PK
V	23140	40.56	30.85	7.45	24.69	41.85	54.00	-12.15	AV
H	11570	46.68	30.55	5.77	24.66	46.56	74.00	-27.44	PK
H	11570	40.73	30.55	5.77	24.66	40.61	54.00	-13.39	AV
H	17355	48.33	30.33	6.32	24.55	48.87	74.00	-25.13	PK
H	17355	40.54	30.33	6.32	24.55	41.08	54.00	-12.92	AV
H	23140	50.88	30.85	7.45	24.69	52.17	74.00	-21.83	PK
H	23140	41.12	30.85	7.45	24.69	42.41	54.00	-11.59	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5825MHz									
V	11650	48.22	30.55	5.77	24.66	48.10	74.00	-25.90	PK
V	11650	36.64	30.55	5.77	24.66	36.52	54.00	-17.48	AV
V	17475	48.57	30.33	6.32	24.55	49.11	74.00	-24.89	PK
V	17475	39.22	30.33	6.32	24.55	39.76	54.00	-14.24	AV
V	23300	48.91	30.85	7.45	24.69	50.20	74.00	-23.80	PK
V	23300	41.43	30.85	7.45	24.69	42.72	54.00	-11.28	AV
H	11650	48.39	30.55	5.77	24.66	48.27	74.00	-25.73	PK
H	11650	37.93	30.55	5.77	24.66	37.81	54.00	-16.19	AV
H	17475	48.21	30.33	6.32	24.55	48.75	74.00	-25.25	PK
H	17475	40.74	30.33	6.32	24.55	41.28	54.00	-12.72	AV
H	23300	51.54	30.85	7.45	24.69	52.83	74.00	-21.17	PK
H	23300	40.11	30.85	7.45	24.69	41.40	54.00	-12.60	AV

802.11n20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5180MHz									
V	10360	49.36	30.55	5.77	24.66	49.24	74.00	-24.76	PK
V	10360	35.13	30.55	5.77	24.66	35.01	54.00	-18.99	AV
V	15540	48.77	30.33	6.32	24.55	49.31	74.00	-24.69	PK
V	15540	41.59	30.33	6.32	24.55	42.13	54.00	-11.87	AV
V	20720	50.38	30.85	7.45	24.69	51.67	74.00	-22.33	PK
V	20720	41.59	30.85	7.45	24.69	42.88	54.00	-11.12	AV
H	10360	47.39	30.55	5.77	24.66	47.27	74.00	-26.73	PK
H	10360	39.33	30.55	5.77	24.66	39.21	54.00	-14.79	AV
H	15540	47.80	30.33	6.32	24.55	48.34	74.00	-25.66	PK
H	15540	40.27	30.33	6.32	24.55	40.81	54.00	-13.19	AV
H	20720	49.96	30.85	7.45	24.69	51.25	74.00	-22.75	PK
H	20720	40.65	30.85	7.45	24.69	41.94	54.00	-12.06	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5200MHz									
V	10400	47.54	30.55	5.77	24.66	47.42	74.00	-26.58	PK
V	10400	34.68	30.55	5.77	24.66	34.56	54.00	-19.44	AV
V	15600	48.90	30.33	6.32	24.55	49.44	74.00	-24.56	PK
V	15600	38.78	30.33	6.32	24.55	39.32	54.00	-14.68	AV
V	20800	50.57	30.85	7.45	24.69	51.86	74.00	-22.14	PK
V	20800	40.94	30.85	7.45	24.69	42.23	54.00	-11.77	AV
H	10400	46.89	30.55	5.77	24.66	46.77	74.00	-27.23	PK
H	10400	38.20	30.55	5.77	24.66	38.08	54.00	-15.92	AV
H	15600	47.55	30.33	6.32	24.55	48.09	74.00	-25.91	PK
H	15600	40.99	30.33	6.32	24.55	41.53	54.00	-12.47	AV
H	20800	51.01	30.85	7.45	24.69	52.30	74.00	-21.70	PK
H	20800	41.65	30.85	7.45	24.69	42.94	54.00	-11.06	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5240MHz									
V	10480	47.74	30.55	5.77	24.66	47.62	74.00	-26.38	PK
V	10480	33.82	30.55	5.77	24.66	33.70	54.00	-20.30	AV
V	15720	48.87	30.33	6.32	24.55	49.41	74.00	-24.59	PK
V	15720	40.30	30.33	6.32	24.55	40.84	54.00	-13.16	AV
V	20960	50.42	30.85	7.45	24.69	51.71	74.00	-22.29	PK
V	20960	38.85	30.85	7.45	24.69	40.14	54.00	-13.86	AV
H	10480	48.51	30.55	5.77	24.66	48.39	74.00	-25.61	PK
H	10480	39.88	30.55	5.77	24.66	39.76	54.00	-14.24	AV
H	15720	48.56	30.33	6.32	24.55	49.10	74.00	-24.90	PK
H	15720	39.71	30.33	6.32	24.55	40.25	54.00	-13.75	AV
H	20960	49.76	30.85	7.45	24.69	51.05	74.00	-22.95	PK
H	20960	40.12	30.85	7.45	24.69	41.41	54.00	-12.59	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5745MHz									
V	11490	48.03	30.55	5.77	24.66	47.91	74.00	-26.09	PK
V	11490	35.35	30.55	5.77	24.66	35.23	54.00	-18.77	AV
V	17235	48.46	30.33	6.32	24.55	49.00	74.00	-25.00	PK
V	17235	41.37	30.33	6.32	24.55	41.91	54.00	-12.09	AV
V	22980	50.50	30.85	7.45	24.69	51.79	74.00	-22.21	PK
V	22980	40.22	30.85	7.45	24.69	41.51	54.00	-12.49	AV
H	11490	45.78	30.55	5.77	24.66	45.66	74.00	-28.34	PK
H	11490	37.85	30.55	5.77	24.66	37.73	54.00	-16.27	AV
H	17235	47.36	30.33	6.32	24.55	47.90	74.00	-26.10	PK
H	17235	40.02	30.33	6.32	24.55	40.56	54.00	-13.44	AV
H	22980	49.80	30.85	7.45	24.69	51.09	74.00	-22.91	PK
H	22980	38.80	30.85	7.45	24.69	40.09	54.00	-13.91	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5785MHz									
V	11570	47.67	30.55	5.77	24.66	47.55	74.00	-26.45	PK
V	11570	35.68	30.55	5.77	24.66	35.56	54.00	-18.44	AV
V	17355	49.00	30.33	6.32	24.55	49.54	74.00	-24.46	PK
V	17355	41.01	30.33	6.32	24.55	41.55	54.00	-12.45	AV
V	23140	51.29	30.85	7.45	24.69	52.58	74.00	-21.42	PK
V	23140	41.00	30.85	7.45	24.69	42.29	54.00	-11.71	AV
H	11570	47.75	30.55	5.77	24.66	47.63	74.00	-26.37	PK
H	11570	38.63	30.55	5.77	24.66	38.51	54.00	-15.49	AV
H	17355	47.29	30.33	6.32	24.55	47.83	74.00	-26.17	PK
H	17355	39.60	30.33	6.32	24.55	40.14	54.00	-13.86	AV
H	23140	50.73	30.85	7.45	24.69	52.02	74.00	-21.98	PK
H	23140	40.70	30.85	7.45	24.69	41.99	54.00	-12.01	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5825MHz									
V	11650	46.89	30.55	5.77	24.66	46.77	74.00	-27.23	PK
V	11650	36.58	30.55	5.77	24.66	36.46	54.00	-17.54	AV
V	17475	48.65	30.33	6.32	24.55	49.19	74.00	-24.81	PK
V	17475	39.40	30.33	6.32	24.55	39.94	54.00	-14.06	AV
V	23300	48.83	30.85	7.45	24.69	50.12	74.00	-23.88	PK
V	23300	39.22	30.85	7.45	24.69	40.51	54.00	-13.49	AV
H	11650	46.83	30.55	5.77	24.66	46.71	74.00	-27.29	PK
H	11650	38.16	30.55	5.77	24.66	38.04	54.00	-15.96	AV
H	17475	48.42	30.33	6.32	24.55	48.96	74.00	-25.04	PK
H	17475	40.69	30.33	6.32	24.55	41.23	54.00	-12.77	AV
H	23300	50.33	30.85	7.45	24.69	51.62	74.00	-22.38	PK
H	23300	40.50	30.85	7.45	24.69	41.79	54.00	-12.21	AV

802.11n40

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5190MHz									
V	10360	49.37	30.55	5.77	24.66	49.25	74.00	-24.75	PK
V	10360	34.80	30.55	5.77	24.66	34.68	54.00	-19.32	AV
V	15540	49.02	30.33	6.32	24.55	49.56	74.00	-24.44	PK
V	15540	40.73	30.33	6.32	24.55	41.27	54.00	-12.73	AV
V	20720	48.89	30.85	7.45	24.69	50.18	74.00	-23.82	PK
V	20720	40.28	30.85	7.45	24.69	41.57	54.00	-12.43	AV
H	10360	47.33	30.55	5.77	24.66	47.21	74.00	-26.79	PK
H	10360	39.89	30.55	5.77	24.66	39.77	54.00	-14.23	AV
H	15540	48.28	30.33	6.32	24.55	48.82	74.00	-25.18	PK
H	15540	41.22	30.33	6.32	24.55	41.76	54.00	-12.24	AV
H	20720	50.73	30.85	7.45	24.69	52.02	74.00	-21.98	PK
H	20720	40.52	30.85	7.45	24.69	41.81	54.00	-12.19	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5230MHz									
V	10460	49.11	30.55	5.77	24.66	48.99	74.00	-25.01	PK
V	10460	36.10	30.55	5.77	24.66	35.98	54.00	-18.02	AV
V	15690	49.46	30.33	6.32	24.55	50.00	74.00	-24.00	PK
V	15690	38.89	30.33	6.32	24.55	39.43	54.00	-14.57	AV
V	20920	49.91	30.85	7.45	24.69	51.20	74.00	-22.80	PK
V	20920	41.63	30.85	7.45	24.69	42.92	54.00	-11.08	AV
H	10460	45.77	30.55	5.77	24.66	45.65	74.00	-28.35	PK
H	10460	38.52	30.55	5.77	24.66	38.40	54.00	-15.60	AV
H	15690	47.93	30.33	6.32	24.55	48.47	74.00	-25.53	PK
H	15690	39.86	30.33	6.32	24.55	40.40	54.00	-13.60	AV
H	20920	51.09	30.85	7.45	24.69	52.38	74.00	-21.62	PK
H	20920	39.16	30.85	7.45	24.69	40.45	54.00	-13.55	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5755MHz									
V	11510	48.24	30.55	5.77	24.66	48.12	74.00	-25.88	PK
V	11510	34.77	30.55	5.77	24.66	34.65	54.00	-19.35	AV
V	17265	47.80	30.33	6.32	24.55	48.34	74.00	-25.66	PK
V	17265	41.62	30.33	6.32	24.55	42.16	54.00	-11.84	AV
V	23020	51.54	30.85	7.45	24.69	52.83	74.00	-21.17	PK
V	23020	40.52	30.85	7.45	24.69	41.81	54.00	-12.19	AV
H	11510	48.49	30.55	5.77	24.66	48.37	74.00	-25.63	PK
H	11510	40.26	30.55	5.77	24.66	40.14	54.00	-13.86	AV
H	17265	48.29	30.33	6.32	24.55	48.83	74.00	-25.17	PK
H	17265	40.70	30.33	6.32	24.55	41.24	54.00	-12.76	AV
H	23020	51.51	30.85	7.45	24.69	52.80	74.00	-21.20	PK
H	23020	40.06	30.85	7.45	24.69	41.35	54.00	-12.65	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5795MHz									
V	11590	49.31	30.55	5.77	24.66	49.19	74.00	-24.81	PK
V	11590	36.16	30.55	5.77	24.66	36.04	54.00	-17.96	AV
V	17385	47.88	30.33	6.32	24.55	48.42	74.00	-25.58	PK
V	17385	38.79	30.33	6.32	24.55	39.33	54.00	-14.67	AV
V	23180	51.72	30.85	7.45	24.69	53.01	74.00	-20.99	PK
V	23180	41.68	30.85	7.45	24.69	42.97	54.00	-11.03	AV
H	11590	46.44	30.55	5.77	24.66	46.32	74.00	-27.68	PK
H	11590	39.71	30.55	5.77	24.66	39.59	54.00	-14.41	AV
H	17385	47.20	30.33	6.32	24.55	47.74	74.00	-26.26	PK
H	17385	39.76	30.33	6.32	24.55	40.30	54.00	-13.70	AV
H	23180	49.45	30.85	7.45	24.69	50.74	74.00	-23.26	PK
H	23180	38.86	30.85	7.45	24.69	40.15	54.00	-13.85	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5180MHz									
V	10360	47.56	30.55	5.77	24.66	47.44	74.00	-26.56	PK
V	10360	35.41	30.55	5.77	24.66	35.29	54.00	-18.71	AV
V	15540	48.70	30.33	6.32	24.55	49.24	74.00	-24.76	PK
V	15540	38.84	30.33	6.32	24.55	39.38	54.00	-14.62	AV
V	20720	49.56	30.85	7.45	24.69	50.85	74.00	-23.15	PK
V	20720	39.52	30.85	7.45	24.69	40.81	54.00	-13.19	AV
H	10360	46.86	30.55	5.77	24.66	46.74	74.00	-27.26	PK
H	10360	39.75	30.55	5.77	24.66	39.63	54.00	-14.37	AV
H	15540	48.41	30.33	6.32	24.55	48.95	74.00	-25.05	PK
H	15540	38.83	30.33	6.32	24.55	39.37	54.00	-14.63	AV
H	20720	49.53	30.85	7.45	24.69	50.82	74.00	-23.18	PK
H	20720	40.38	30.85	7.45	24.69	41.67	54.00	-12.33	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5200MHz									
V	10400	48.18	30.55	5.77	24.66	48.06	74.00	-25.94	PK
V	10400	36.71	30.55	5.77	24.66	36.59	54.00	-17.41	AV
V	15600	48.41	30.33	6.32	24.55	48.95	74.00	-25.05	PK

V	15600	38.97	30.33	6.32	24.55	39.51	54.00	-14.49	AV
V	20800	49.44	30.85	7.45	24.69	50.73	74.00	-23.27	PK
V	20800	40.28	30.85	7.45	24.69	41.57	54.00	-12.43	AV
H	10400	46.63	30.55	5.77	24.66	46.51	74.00	-27.49	PK
H	10400	37.81	30.55	5.77	24.66	37.69	54.00	-16.31	AV
H	15600	48.21	30.33	6.32	24.55	48.75	74.00	-25.25	PK
H	15600	41.54	30.33	6.32	24.55	42.08	54.00	-11.92	AV
H	20800	49.01	30.85	7.45	24.69	50.30	74.00	-23.70	PK
H	20800	39.29	30.85	7.45	24.69	40.58	54.00	-13.42	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5240MHz									
V	10480	49.06	30.55	5.77	24.66	48.94	74.00	-25.06	PK
V	10480	36.49	30.55	5.77	24.66	36.37	54.00	-17.63	AV
V	15720	48.55	30.33	6.32	24.55	49.09	74.00	-24.91	PK
V	15720	41.09	30.33	6.32	24.55	41.63	54.00	-12.37	AV
V	20960	49.61	30.85	7.45	24.69	50.90	74.00	-23.10	PK
V	20960	40.86	30.85	7.45	24.69	42.15	54.00	-11.85	AV
H	10480	47.01	30.55	5.77	24.66	46.89	74.00	-27.11	PK
H	10480	38.64	30.55	5.77	24.66	38.52	54.00	-15.48	AV
H	15720	46.81	30.33	6.32	24.55	47.35	74.00	-26.65	PK
H	15720	40.72	30.33	6.32	24.55	41.26	54.00	-12.74	AV
H	20960	48.88	30.85	7.45	24.69	50.17	74.00	-23.83	PK
H	20960	39.21	30.85	7.45	24.69	40.50	54.00	-13.50	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5745MHz									
V	11490	48.54	30.55	5.77	24.66	48.42	74.00	-25.58	PK
V	11490	34.91	30.55	5.77	24.66	34.79	54.00	-19.21	AV
V	17235	48.20	30.33	6.32	24.55	48.74	74.00	-25.26	PK
V	17235	40.67	30.33	6.32	24.55	41.21	54.00	-12.79	AV
V	22980	49.37	30.85	7.45	24.69	50.66	74.00	-23.34	PK
V	22980	39.94	30.85	7.45	24.69	41.23	54.00	-12.77	AV
H	11490	48.48	30.55	5.77	24.66	48.36	74.00	-25.64	PK
H	11490	37.94	30.55	5.77	24.66	37.82	54.00	-16.18	AV
H	17235	47.22	30.33	6.32	24.55	47.76	74.00	-26.24	PK
H	17235	38.77	30.33	6.32	24.55	39.31	54.00	-14.69	AV
H	22980	51.11	30.85	7.45	24.69	52.40	74.00	-21.60	PK
H	22980	40.25	30.85	7.45	24.69	41.54	54.00	-12.46	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5785MHz									
V	11570	48.23	30.55	5.77	24.66	48.11	74.00	-25.89	PK
V	11570	34.73	30.55	5.77	24.66	34.61	54.00	-19.39	AV

V	17355	47.99	30.33	6.32	24.55	48.53	74.00	-25.47	PK
V	17355	40.26	30.33	6.32	24.55	40.80	54.00	-13.20	AV
V	23140	49.20	30.85	7.45	24.69	50.49	74.00	-23.51	PK
V	23140	39.86	30.85	7.45	24.69	41.15	54.00	-12.85	AV
H	11570	46.69	30.55	5.77	24.66	46.57	74.00	-27.43	PK
H	11570	38.05	30.55	5.77	24.66	37.93	54.00	-16.07	AV
H	17355	47.10	30.33	6.32	24.55	47.64	74.00	-26.36	PK
H	17355	40.31	30.33	6.32	24.55	40.85	54.00	-13.15	AV
H	23140	50.00	30.85	7.45	24.69	51.29	74.00	-22.71	PK
H	23140	40.92	30.85	7.45	24.69	42.21	54.00	-11.79	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5825MHz									
V	11650	49.52	30.55	5.77	24.66	49.40	74.00	-24.60	PK
V	11650	34.41	30.55	5.77	24.66	34.29	54.00	-19.71	AV
V	17475	49.45	30.33	6.32	24.55	49.99	74.00	-24.01	PK
V	17475	40.87	30.33	6.32	24.55	41.41	54.00	-12.59	AV
V	23300	50.54	30.85	7.45	24.69	51.83	74.00	-22.17	PK
V	23300	41.67	30.85	7.45	24.69	42.96	54.00	-11.04	AV
H	11650	46.17	30.55	5.77	24.66	46.05	74.00	-27.95	PK
H	11650	39.44	30.55	5.77	24.66	39.32	54.00	-14.68	AV
H	17475	48.12	30.33	6.32	24.55	48.66	74.00	-25.34	PK
H	17475	40.67	30.33	6.32	24.55	41.21	54.00	-12.79	AV
H	23300	49.93	30.85	7.45	24.69	51.22	74.00	-22.78	PK
H	23300	39.75	30.85	7.45	24.69	41.04	54.00	-12.96	AV

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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5190MHz									
V	10360	47.33	30.55	5.77	24.66	47.21	74.00	-26.79	PK
V	10360	35.83	30.55	5.77	24.66	35.71	54.00	-18.29	AV
V	15540	49.71	30.33	6.32	24.55	50.25	74.00	-23.75	PK
V	15540	39.06	30.33	6.32	24.55	39.60	54.00	-14.40	AV
V	20720	50.99	30.85	7.45	24.69	52.28	74.00	-21.72	PK
V	20720	39.10	30.85	7.45	24.69	40.39	54.00	-13.61	AV
H	10360	47.67	30.55	5.77	24.66	47.55	74.00	-26.45	PK
H	10360	40.09	30.55	5.77	24.66	39.97	54.00	-14.03	AV
H	15540	47.59	30.33	6.32	24.55	48.13	74.00	-25.87	PK
H	15540	38.98	30.33	6.32	24.55	39.52	54.00	-14.48	AV
H	20720	50.01	30.85	7.45	24.69	51.30	74.00	-22.70	PK
H	20720	38.89	30.85	7.45	24.69	40.18	54.00	-13.82	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5230MHz									
V	10460	48.19	30.55	5.77	24.66	48.07	74.00	-25.93	PK
V	10460	34.87	30.55	5.77	24.66	34.75	54.00	-19.25	AV
V	15690	47.82	30.33	6.32	24.55	48.36	74.00	-25.64	PK
V	15690	39.80	30.33	6.32	24.55	40.34	54.00	-13.66	AV
V	20920	51.25	30.85	7.45	24.69	52.54	74.00	-21.46	PK
V	20920	40.57	30.85	7.45	24.69	41.86	54.00	-12.14	AV
H	10460	48.62	30.55	5.77	24.66	48.50	74.00	-25.50	PK
H	10460	40.51	30.55	5.77	24.66	40.39	54.00	-13.61	AV
H	15690	47.83	30.33	6.32	24.55	48.37	74.00	-25.63	PK
H	15690	41.75	30.33	6.32	24.55	42.29	54.00	-11.71	AV
H	20920	49.04	30.85	7.45	24.69	50.33	74.00	-23.67	PK
H	20920	39.65	30.85	7.45	24.69	40.94	54.00	-13.06	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5755MHz									
V	11510	48.93	30.55	5.77	24.66	48.81	74.00	-25.19	PK
V	11510	34.65	30.55	5.77	24.66	34.53	54.00	-19.47	AV
V	17265	47.88	30.33	6.32	24.55	48.42	74.00	-25.58	PK
V	17265	39.92	30.33	6.32	24.55	40.46	54.00	-13.54	AV
V	23020	51.18	30.85	7.45	24.69	52.47	74.00	-21.53	PK
V	23020	40.41	30.85	7.45	24.69	41.70	54.00	-12.30	AV
H	11510	46.41	30.55	5.77	24.66	46.29	74.00	-27.71	PK
H	11510	38.18	30.55	5.77	24.66	38.06	54.00	-15.94	AV
H	17265	46.89	30.33	6.32	24.55	47.43	74.00	-26.57	PK
H	17265	39.37	30.33	6.32	24.55	39.91	54.00	-14.09	AV
H	23020	51.01	30.85	7.45	24.69	52.30	74.00	-21.70	PK
H	23020	41.54	30.85	7.45	24.69	42.83	54.00	-11.17	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5795MHz									
V	11510	48.39	30.55	5.77	24.66	48.27	74.00	-25.73	PK
V	11510	34.27	30.55	5.77	24.66	34.15	54.00	-19.85	AV
V	17265	48.26	30.33	6.32	24.55	48.80	74.00	-25.20	PK
V	17265	41.53	30.33	6.32	24.55	42.07	54.00	-11.93	AV
V	23020	49.24	30.85	7.45	24.69	50.53	74.00	-23.47	PK
V	23020	41.07	30.85	7.45	24.69	42.36	54.00	-11.64	AV
H	11510	48.37	30.55	5.77	24.66	48.25	74.00	-25.75	PK
H	11510	39.62	30.55	5.77	24.66	39.50	54.00	-14.50	AV
H	17265	47.56	30.33	6.32	24.55	48.10	74.00	-25.90	PK
H	17265	40.65	30.33	6.32	24.55	41.19	54.00	-12.81	AV
H	23020	50.34	30.85	7.45	24.69	51.63	74.00	-22.37	PK
H	23020	39.77	30.85	7.45	24.69	41.06	54.00	-12.94	AV

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Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
5210MHz									
V	10420	48.06	30.55	5.77	24.66	47.94	74.00	-26.06	PK
V	10420	36.33	30.55	5.77	24.66	36.21	54.00	-17.79	AV
V	15630	48.23	30.33	6.32	24.55	48.77	74.00	-25.23	PK
V	15630	41.05	30.33	6.32	24.55	41.59	54.00	-12.41	AV
V	20840	51.42	30.85	7.45	24.69	52.71	74.00	-21.29	PK
V	20840	41.15	30.85	7.45	24.69	42.44	54.00	-11.56	AV
H	10420	46.55	30.55	5.77	24.66	46.43	74.00	-27.57	PK
H	10420	37.76	30.55	5.77	24.66	37.64	54.00	-16.36	AV
H	15630	47.57	30.33	6.32	24.55	48.11	74.00	-25.89	PK
H	15630	41.70	30.33	6.32	24.55	42.24	54.00	-11.76	AV
H	20840	50.14	30.85	7.45	24.69	51.43	74.00	-22.57	PK
H	20840	40.67	30.85	7.45	24.69	41.96	54.00	-12.04	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5775MHz									
V	11550	48.32	30.55	5.77	24.66	48.20	74.00	-25.80	PK
V	11550	36.44	30.55	5.77	24.66	36.32	54.00	-17.68	AV
V	17325	49.04	30.33	6.32	24.55	49.58	74.00	-24.42	PK
V	17325	40.79	30.33	6.32	24.55	41.33	54.00	-12.67	AV
V	23100	50.04	30.85	7.45	24.69	51.33	74.00	-22.67	PK
V	23100	40.45	30.85	7.45	24.69	41.74	54.00	-12.26	AV
H	11550	47.17	30.55	5.77	24.66	47.05	74.00	-26.95	PK
H	11550	39.54	30.55	5.77	24.66	39.42	54.00	-14.58	AV
H	17325	48.38	30.33	6.32	24.55	48.92	74.00	-25.08	PK
H	17325	40.78	30.33	6.32	24.55	41.32	54.00	-12.68	AV
H	23100	50.36	30.85	7.45	24.69	51.65	74.00	-22.35	PK
H	23100	40.52	30.85	7.45	24.69	41.81	54.00	-12.19	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Radiated Band Edge Test:

Worse case mode:		802.11a		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	52.58	-0.12	52.46	74.00	-21.54	peak	H
5150	38.03	-0.12	37.91	54.00	-16.09	AV	H
5150	54.51	-0.12	54.39	74.00	-19.61	peak	V
5150	37.43	-0.12	37.31	54.00	-16.69	AV	V

Worse case mode:		802.11a		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5250	53.49	-0.12	53.37	74.00	-20.63	peak	H
5250	38.38	-0.12	38.26	54.00	-15.74	AV	H
5250	55.03	-0.12	54.91	74.00	-19.09	peak	V
5250	39.71	-0.12	39.59	54.00	-14.41	AV	V

Worse case mode:		802.11a		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	48.23	-0.12	48.11	68.20	-20.09	peak	H
5700	84.04	-0.12	83.92	105.20	-21.28	peak	H
5720	88.87	-0.12	88.75	110.80	-22.05	peak	H
5725	98.02	-0.12	97.90	122.20	-24.30	peak	H
5650	48.26	-0.12	48.14	68.20	-20.06	peak	V
5700	82.69	-0.12	82.57	105.20	-22.63	peak	V
5720	88.05	-0.12	87.93	110.80	-22.87	peak	V
5725	95.15	-0.12	95.03	122.20	-27.17	peak	V

Worse case mode:		802.11a		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	99.55	-0.12	99.43	122.20	-22.77	peak	H
5855	83.15	-0.12	83.03	110.80	-27.77	peak	H
5875	86.55	-0.12	86.43	105.20	-18.77	peak	H
5925	47.24	-0.12	47.12	68.20	-21.08	peak	H
5850	97.53	-0.12	97.41	122.20	-24.79	peak	V
5855	87.45	-0.12	87.33	110.80	-23.47	peak	V
5875	83.23	-0.12	83.11	105.20	-22.09	peak	V
5925	46.33	-0.12	46.21	68.20	-21.99	peak	V

Worse case mode:		802.11n20		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	54.87	-0.12	54.75	74.00	-19.25	peak	H
5150	38.59	-0.12	38.47	54.00	-15.53	AV	H
5150	53.22	-0.12	53.10	74.00	-20.90	peak	V
5150	37.08	-0.12	36.96	54.00	-17.04	AV	V

Worse case mode:		802.11n20		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5250	53.91	-0.12	53.79	74.00	-20.21	peak	H
5250	39.86	-0.12	39.74	54.00	-14.26	AV	H
5250	52.65	-0.12	52.53	74.00	-21.47	peak	V
5250	39.95	-0.12	39.83	54.00	-14.17	AV	V

Worse case mode:		802.11n20		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	50.45	-0.12	50.33	68.20	-17.87	peak	H
5700	84.43	-0.12	84.31	105.20	-20.89	peak	H
5720	89.26	-0.12	89.14	110.80	-21.66	peak	H
5725	95.79	-0.12	95.67	122.20	-26.53	peak	H
5650	47.98	-0.12	47.86	68.20	-20.34	peak	V
5700	84.13	-0.12	84.01	105.20	-21.19	peak	V
5720	90.17	-0.12	90.05	110.80	-20.75	peak	V
5725	95.21	-0.12	95.09	122.20	-27.11	peak	V

Worse case mode:		802.11n20		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	94.63	-0.12	94.51	122.20	-27.69	peak	H
5855	84.90	-0.12	84.78	110.80	-26.02	peak	H
5875	82.29	-0.12	82.17	105.20	-23.03	peak	H
5925	44.88	-0.12	44.76	68.20	-23.44	peak	H
5850	94.22	-0.12	94.10	122.20	-28.10	peak	V
5855	89.31	-0.12	89.19	110.80	-21.61	peak	V
5875	82.24	-0.12	82.12	105.20	-23.08	peak	V
5925	46.28	-0.12	46.16	68.20	-22.04	peak	V

Worse case mode:		802.11n40		Test channel:		38	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	52.33	-0.12	52.21	74.00	-21.79	peak	H
5150	38.77	-0.12	38.65	54.00	-15.35	AV	H
5150	53.80	-0.12	53.68	74.00	-20.32	peak	V
5150	37.02	-0.12	36.90	54.00	-17.10	AV	V

Worse case mode:		802.11n40		Test channel:		46	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5250	51.42	-0.12	51.30	74.00	-22.70	peak	H
5250	38.76	-0.12	38.64	54.00	-15.36	AV	H
5250	53.64	-0.12	53.52	74.00	-20.48	peak	V
5250	37.65	-0.12	37.53	54.00	-16.47	AV	V

Worse case mode:		802.11n40		Test channel:		151	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	48.70	-0.12	48.58	68.20	-19.62	peak	H
5700	84.86	-0.12	84.74	105.20	-20.46	peak	H
5720	90.83	-0.12	90.71	110.80	-20.09	peak	H
5725	98.10	-0.12	97.98	122.20	-24.22	peak	H
5650	47.40	-0.12	47.28	68.20	-20.92	peak	V
5700	84.81	-0.12	84.69	105.20	-20.51	peak	V
5720	90.65	-0.12	90.53	110.80	-20.27	peak	V
5725	95.70	-0.12	95.58	122.20	-26.62	peak	V

Worse case mode:		802.11n40		Test channel:		159	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	98.04	-0.12	97.92	122.20	-24.28	peak	H
5855	86.75	-0.12	86.63	110.80	-24.17	peak	H
5875	82.16	-0.12	82.04	105.20	-23.16	peak	H
5925	47.66	-0.12	47.54	68.20	-20.66	peak	H
5850	97.14	-0.12	97.02	122.20	-25.18	peak	V
5855	88.89	-0.12	88.77	110.80	-22.03	peak	V
5875	84.04	-0.12	83.92	105.20	-21.28	peak	V
5925	46.93	-0.12	46.81	68.20	-21.39	peak	V

Worse case mode:		802.11ac20		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	54.67	-0.12	54.55	74.00	-19.45	peak	H
5150	39.98	-0.12	39.86	54.00	-14.14	AV	H
5150	52.33	-0.12	52.21	74.00	-21.79	peak	V
5150	37.82	-0.12	37.70	54.00	-16.30	AV	V

Worse case mode:		802.11ac20		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5250	53.17	-0.12	53.05	74.00	-20.95	peak	H
5250	38.14	-0.12	38.02	54.00	-15.98	AV	H
5250	55.84	-0.12	55.72	74.00	-18.28	peak	V
5250	39.74	-0.12	39.62	54.00	-14.38	AV	V

Worse case mode:		802.11ac20		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	47.30	-0.12	47.18	68.20	-21.02	peak	H
5700	82.83	-0.12	82.71	105.20	-22.49	peak	H
5720	88.30	-0.12	88.18	110.80	-22.62	peak	H
5725	97.66	-0.12	97.54	122.20	-24.66	peak	H
5650	48.66	-0.12	48.54	68.20	-19.66	peak	V
5700	84.54	-0.12	84.42	105.20	-20.78	peak	V
5720	88.67	-0.12	88.55	110.80	-22.25	peak	V
5725	94.89	-0.12	94.77	122.20	-27.43	peak	V

Worse case mode:		802.11n20		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	94.74	-0.12	94.62	122.20	-27.58	peak	H
5855	88.49	-0.12	88.37	110.80	-22.43	peak	H
5875	82.09	-0.12	81.97	105.20	-23.23	peak	H
5925	46.70	-0.12	46.58	68.20	-21.62	peak	H
5850	99.82	-0.12	99.70	122.20	-22.50	peak	V
5855	86.61	-0.12	86.49	110.80	-24.31	peak	V
5875	83.33	-0.12	83.21	105.20	-21.99	peak	V
5925	49.55	-0.12	49.43	68.20	-18.77	peak	V

Worse case mode:		802.11ac40		Test channel:		38	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	53.44	-0.12	53.32	74.00	-20.68	peak	H
5150	39.52	-0.12	39.40	54.00	-14.60	AV	H
5150	52.35	-0.12	52.23	74.00	-21.77	peak	V
5150	37.77	-0.12	37.65	54.00	-16.35	AV	V

Worse case mode:		802.11ac40		Test channel:		46	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5250	55.17	-0.12	55.05	74.00	-18.95	peak	H
5250	41.29	-0.12	41.17	54.00	-12.83	AV	H
5250	52.59	-0.12	52.47	74.00	-21.53	peak	V
5250	40.53	-0.12	40.41	54.00	-13.59	AV	V

Worse case mode:		802.11ac40		Test channel:		151	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	47.01	-0.12	46.89	68.20	-21.31	peak	H
5700	82.48	-0.12	82.36	105.20	-22.84	peak	H
5720	90.62	-0.12	90.50	110.80	-20.30	peak	H
5725	96.98	-0.12	96.86	122.20	-25.34	peak	H
5650	47.55	-0.12	47.43	68.20	-20.77	peak	V
5700	82.86	-0.12	82.74	105.20	-22.46	peak	V
5720	90.56	-0.12	90.44	110.80	-20.36	peak	V
5725	97.03	-0.12	96.91	122.20	-25.29	peak	V

Worse case mode:		802.11ac40		Test channel:		159	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5850	95.99	-0.12	95.87	122.20	-26.33	peak	H
5855	88.81	-0.12	88.69	110.80	-22.11	peak	H
5875	86.20	-0.12	86.08	105.20	-19.12	peak	H
5925	44.04	-0.12	43.92	68.20	-24.28	peak	H
5850	99.61	-0.12	99.49	122.20	-22.71	peak	V
5855	89.78	-0.12	89.66	110.80	-21.14	peak	V
5875	82.26	-0.12	82.14	105.20	-23.06	peak	V
5925	46.50	-0.12	46.38	68.20	-21.82	peak	V

Worse case mode:		802.11ac80		Test channel:		42	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	51.33	-0.12	51.21	74.00	-22.79	peak	H
5150	41.65	-0.12	41.53	54.00	-12.47	AV	H
5150	54.99	-0.12	54.87	74.00	-19.13	peak	V
5150	37.12	-0.12	37.00	54.00	-17.00	AV	V
5250	54.74	-0.12	54.62	74.00	-19.38	peak	H
5250	41.79	-0.12	41.67	54.00	-12.33	AV	H
5250	55.96	-0.12	55.84	74.00	-18.16	peak	V
5250	37.78	-0.12	37.66	54.00	-16.34	AV	V

Worse case mode:		802.11ac80		Test channel:		155	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	48.86	-0.12	48.74	68.20	-19.46	peak	H
5700	82.57	-0.12	82.45	105.20	-22.75	peak	H
5720	90.10	-0.12	89.98	110.80	-20.82	peak	H
5725	95.12	-0.12	95.00	122.20	-27.20	peak	H
5650	49.87	-0.12	49.75	68.20	-18.45	peak	V
5700	84.48	-0.12	84.36	105.20	-20.84	peak	V
5720	87.85	-0.12	87.73	110.80	-23.07	peak	V
5725	94.38	-0.12	94.26	122.20	-27.94	peak	V
5850	99.96	-0.12	99.84	122.20	-22.36	peak	H
5855	86.23	-0.12	86.11	110.80	-24.69	peak	H
5875	82.83	-0.12	82.71	105.20	-22.49	peak	H
5925	46.45	-0.12	46.33	68.20	-21.87	peak	H
5850	98.96	-0.12	98.84	122.20	-23.36	peak	V
5855	90.88	-0.12	90.76	110.80	-20.04	peak	V
5875	80.67	-0.12	80.55	105.20	-24.65	peak	V
5925	47.17	-0.12	47.05	68.20	-21.15	peak	V

Factor =Antenna Factor + Cable Loss – Pre-amplifier

5.POWER SPECTRAL DENSITY TEST

Test Requirement:	FCC 47 CFR Part 15 Subpart E Section 15.407 (a)
Test Method:	KDB 789033 D02 v02r01

5.1 APPLIED PROCEDURES / LIMIT

For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm)

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz 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.

LIMIT:	U-NII-1	17DBM/MHZ
	U-NII-3	30DBM/500KHZ

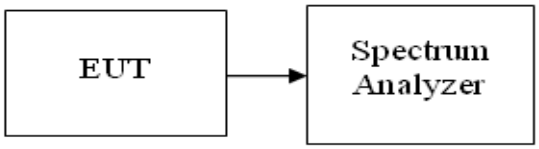
5.2 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
4. Set the VBW ≥ 3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

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

5.6 TEST RESULT

Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC24V
Test Mode ：	TX frequency U-NII-1 & U-NII-3		

U-NII-1

802.11 Mode	Channel No.	Frequency [MHz]	Measured Power Spectral Density [dBm/MHz]	Power Spectral Density Limit [dBm/MHz]
a	36	5180	7.683	17.00
	40	5200	5.345	17.00
	48	5240	6.619	17.00
n(20MHz)	36	5180	7.692	17.00
	40	5200	7.997	17.00
	48	5240	7.563	17.00
ac (20MHz)	36	5180	8.346	17.00
	40	5200	8.975	17.00
	48	5240	8.171	17.00
n (40MHz)	38	5190	2.295	17.00
	46	5230	2.290	17.00
ac(40MHz)	38	5190	4.200	17.00
	46	5230	3.625	17.00
ac(80MHz)	42	5210	-1.657	17.00

U-NII-3

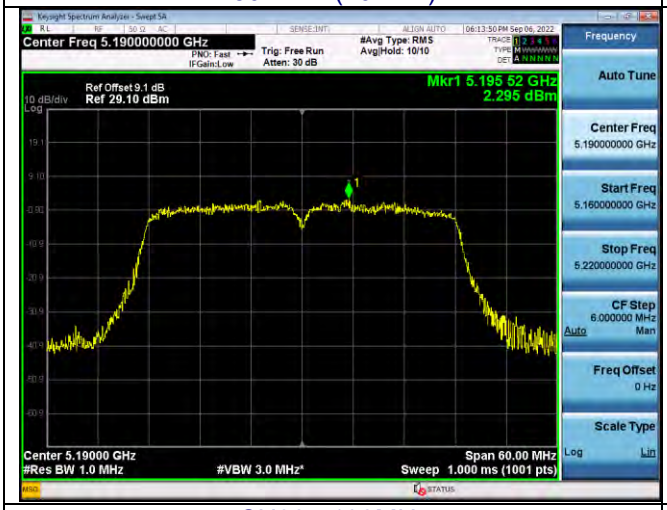
802.11 Mode	Channel No.	Frequency [MHz]	PSD [dBm/1000kHz]	PSD [dBm/500kHz]	Limit [dBm/500kHz]
a	149	5745	9.914	6.904	30.00
	157	5785	10.329	7.319	30.00
	165	5825	10.713	7.703	30.00
n (20MHz)	149	5745	11.323	8.313	30.00
	157	5785	11.496	8.486	30.00
	165	5825	11.136	8.126	30.00
ac (20MHz)	149	5745	11.070	8.060	30.00
	157	5785	11.735	8.725	30.00
	165	5825	10.553	7.543	30.00
n (40MHz)	151	5755	5.633	2.623	30.00
	159	5795	5.211	2.201	30.00
ac(40MHz)	151	5755	6.900	3.890	30.00
	159	5795	6.435	3.425	30.00
ac(80MHz)	155	5755	1.594	-1.416	30.00

Note: Covert PSD [dBm/510KHz]= PSD[dBm/1000KHz]+10*log(500/1000)

U-NII-1

802.11a	802.11n (20MHz)
	
CH36-5180MHz	CH36-5180MHz
	
CH40-5200MHz	CH40-5200MHz
	
CH48-5240MHz	CH48-5240MHz

802.11ac 20MHz)	
	
CH36-5180MHz	
	
CH40-5200MHz	
	
CH48-5240MHz	

802.11n (40MHz)	802.11ac (40MHz)
	
CH38-5190MHz	CH38-5190MHz
	
CH46-5230MHz	CH46-5230MHz

802.11ac (80MHz)	
	
CH42 5210MHz	

U-NII-3

802.11a	802.11n (20MHz)
	
CH149 -5745MHz	CH149 -5745MHz
	
CH157 -5785MHz	CH157 -5785MHz
	
CH165 -5825MHz	CH165 -5825MHz

802.11ac (20MHz)	
	
CH149 -5745MHz	
	
CH157 -5785MHz	
	
CH165 -5825MHz	

802.11n (40MHz)	802.11ac (40MHz)
	
CH151 -5755MHz	CH151 -5755MHz
	
CH159 -5795MHz	CH159 -5795MHz

802.11ac (80MHz)	
	
CH155 -5775MHz	

6. -26 DB & 6DBM EMISSION BANDWIDTH

Test Requirement:	Part 15 Subpart C Section 15.407 (e)
Test Method:	KDB 789033 D02 v02r01

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15.407 (e)		
Bandwidth		
Limit	U-NII-1	N/A
	U-NII-3	≥ 500 kHz

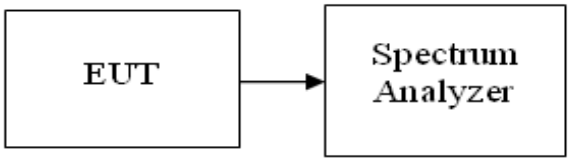
6.2 TEST PROCEDURE

Place the EUT on the table and set it in the transmitting mode.
Remove the antenna from the EUT and then connect a low-loss RF cable from the antenna port to the spectrum analyzer.
Set the spectrum analyzers RBW = approximately 1% of the emission bandwidth, VBW >RBW, Detector = Peak, Span>26dB bandwidth, and Sweep = auto ,Trace mode = max hold.
Measure the maximum width of the emission that is 26dB down from the maximum 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%.
Repeat until all the rest channels were investigated.

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 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

6.6 TEST RESULT

Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC24V
Test Mode ：	TX		

U-NII-1

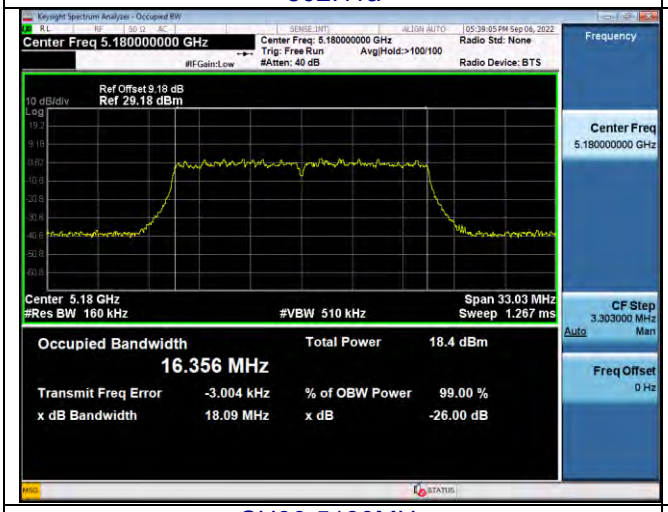
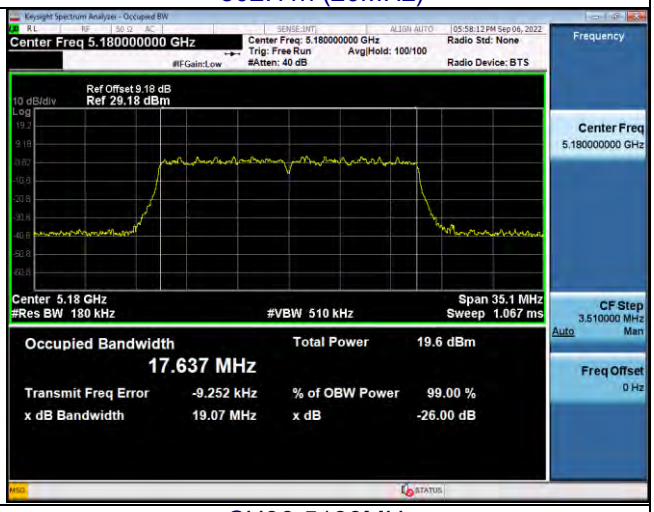
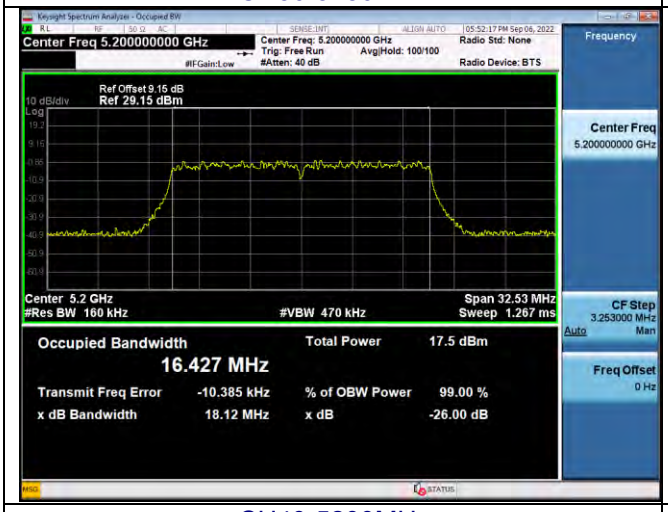
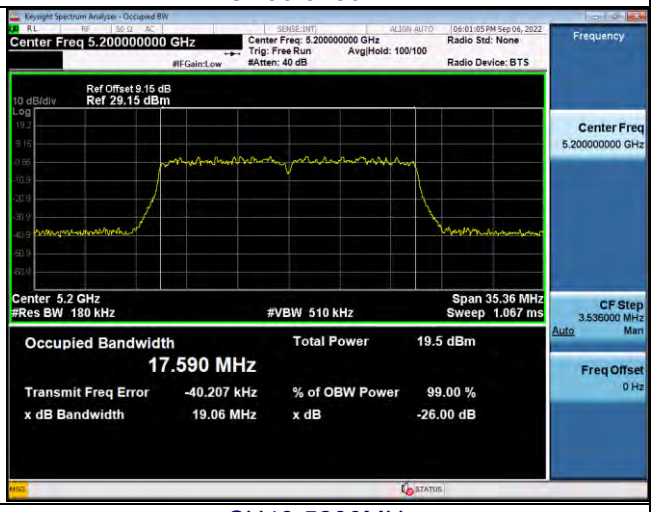
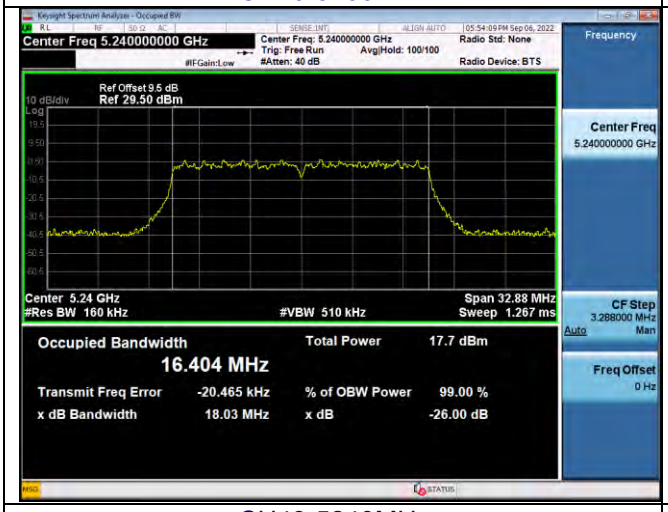
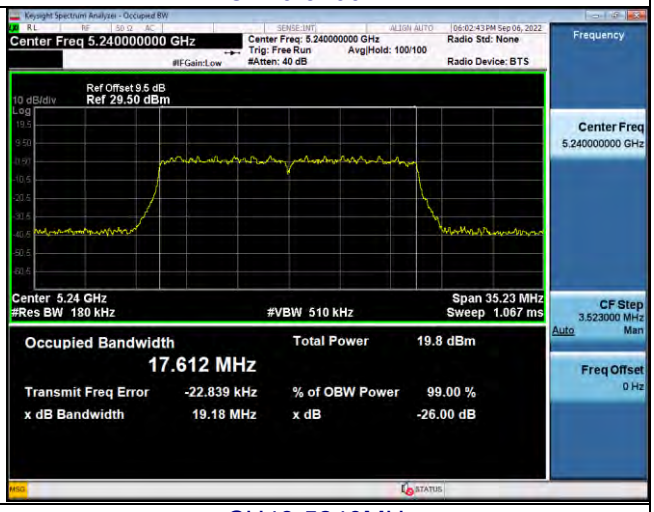
802.11 Mode	Channel No.	Frequency [MHz]	26dB Bandwidth [MHz]
a	36	5180	18.09
	40	5200	18.12
	48	5240	18.03
n (20MHz)	36	5180	19.07
	40	5200	19.06
	48	5240	19.18
ac (20MHz)	36	5180	19.02
	40	5200	19.10
	48	5240	19.06
n(40MHz)	38	5190	40.14
	46	5230	40.62
ac(40MHz)	38	5190	40.70
	46	5230	40.90
ac(80MHz)	42	5210	80.42

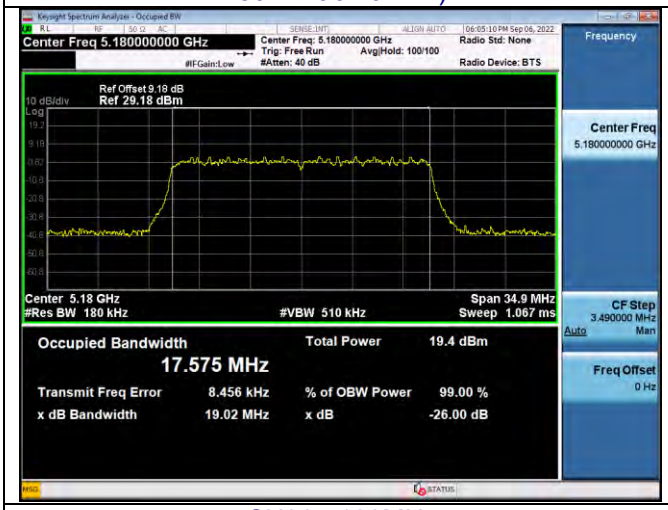
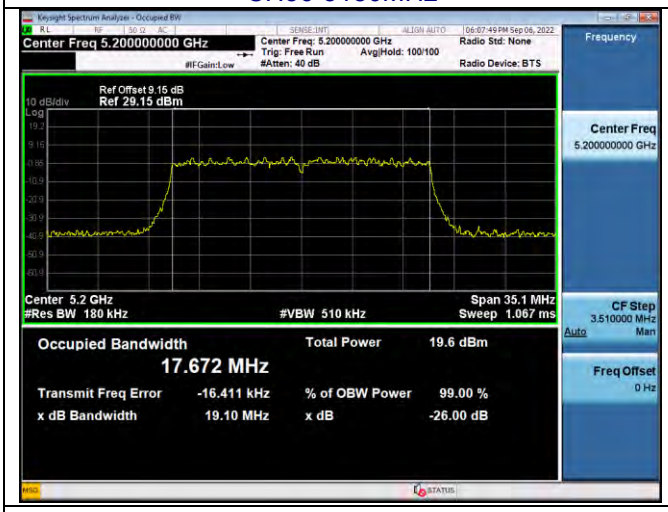
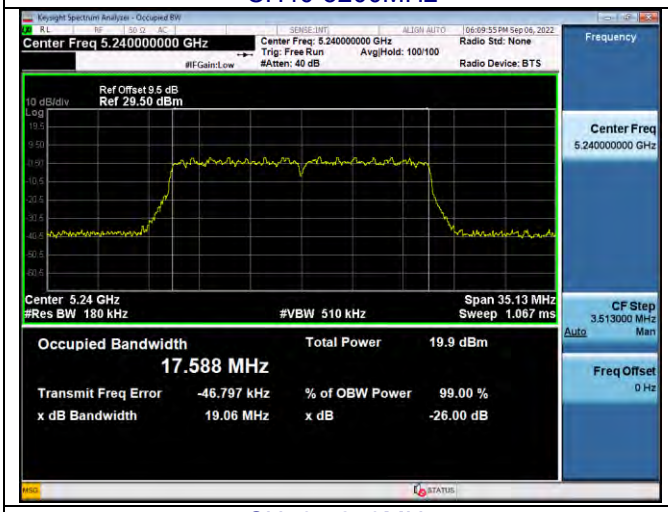
U-NII-3

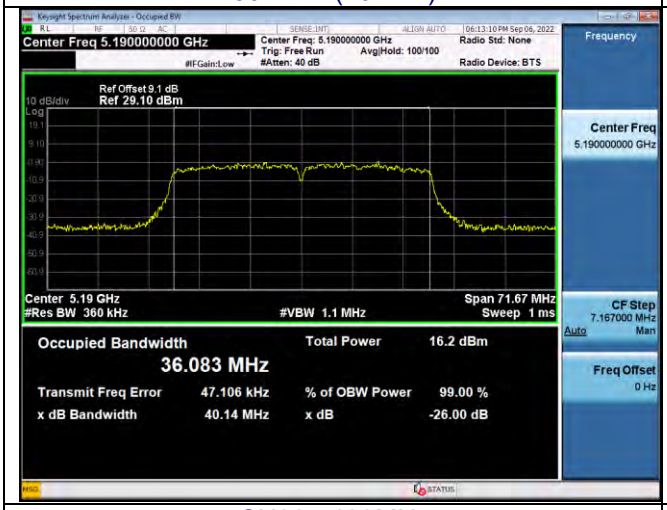
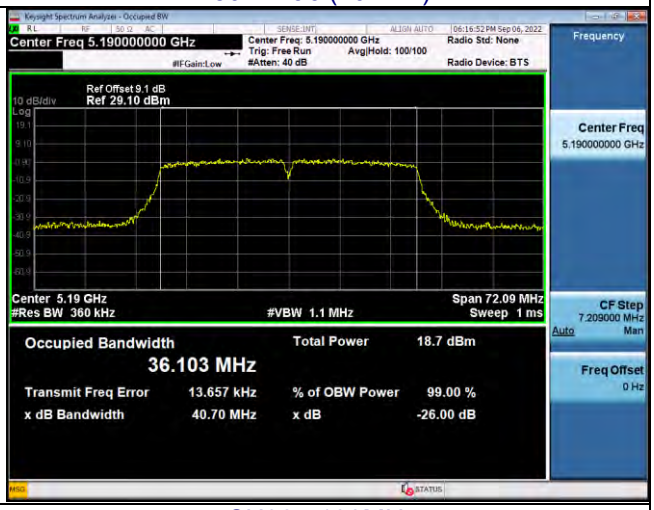
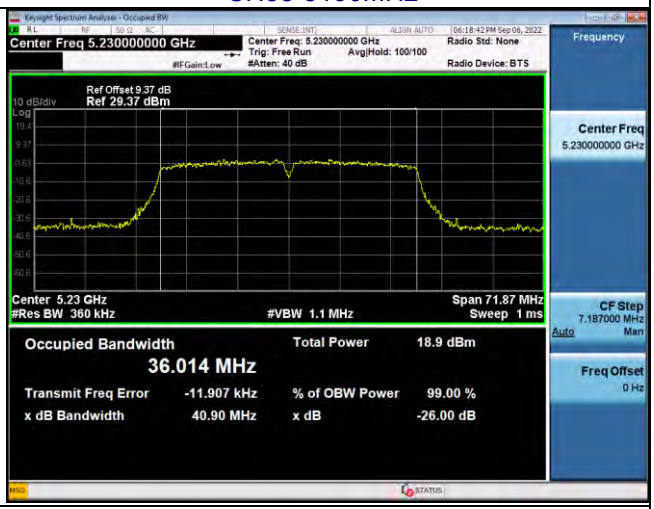
802.11 Mode	Channel No.	Frequency [MHz]	-6db Bandwidth [MHz]	Limit
a	149	5745	16.42	⩾ 500 kHz
	157	5785	16.44	
	165	5825	16.37	
n (20MHz)	149	5745	17.66	
	157	5785	17.55	
	165	5825	17.63	
ac (20MHz)	149	5745	17.55	
	157	5785	17.61	
	165	5825	17.64	
n (40MHz)	151	5755	35.20	
	159	5795	35.68	
ac(40MHz)	151	5755	35.12	
	159	5795	35.18	
ac(80MHz)	155	5775	75.17	

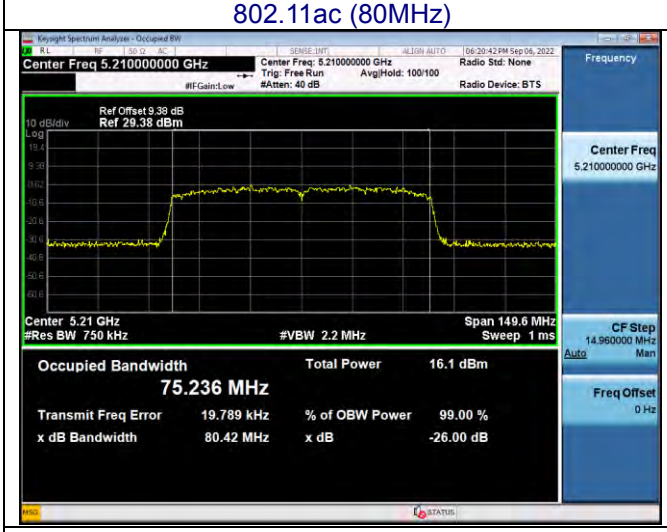
Test plot as follows:

U-NII-1

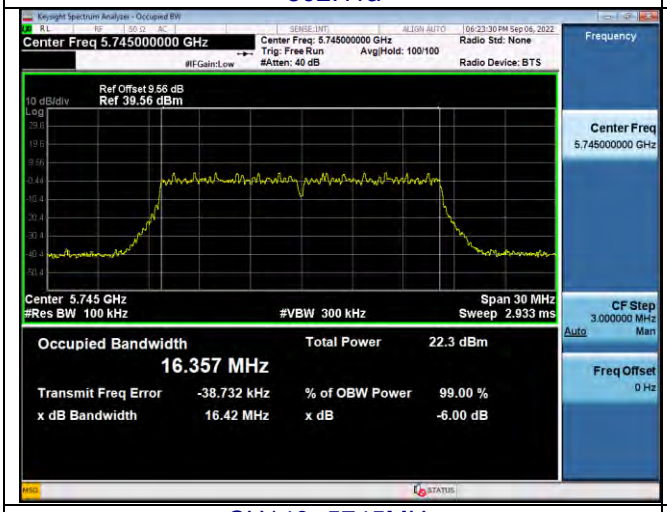
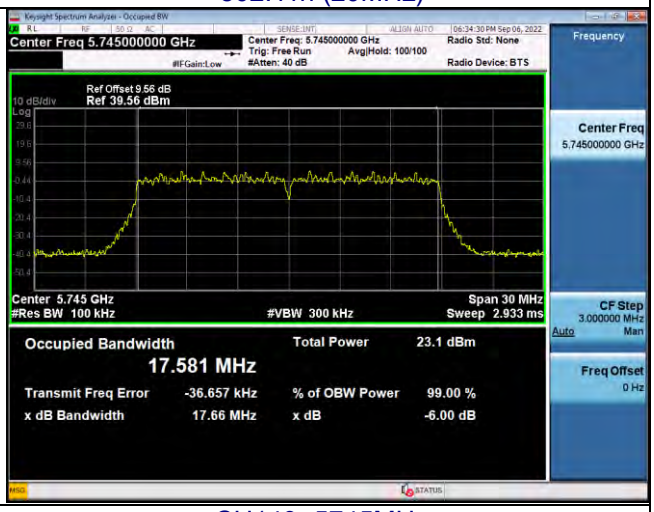
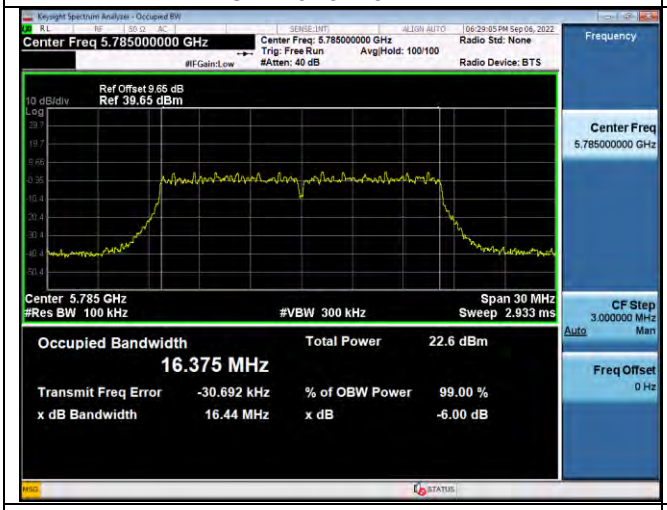
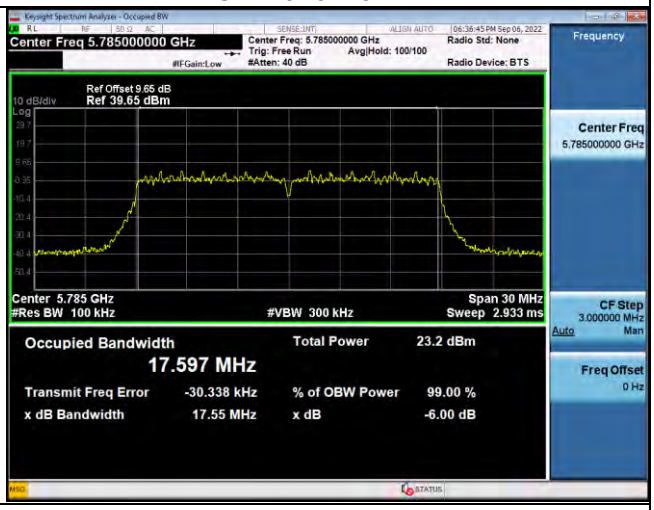
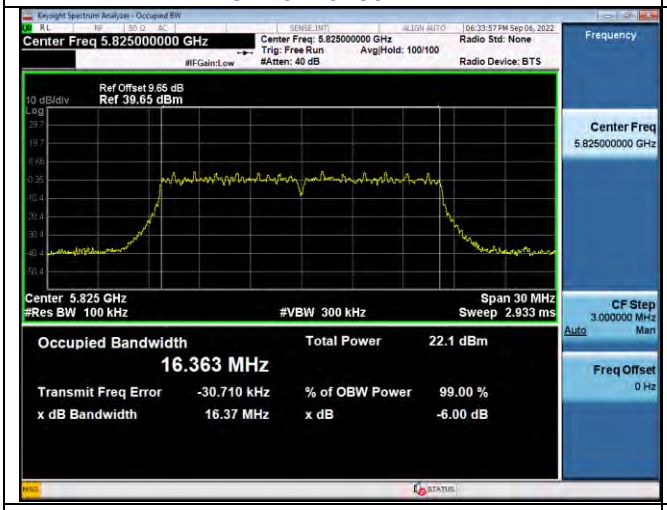
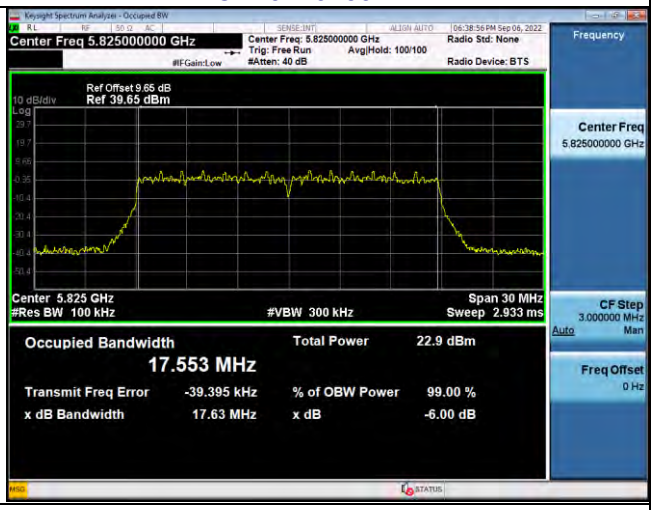
802.11a	802.11n (20MHz)
	
CH36-5180MHz	CH36-5180MHz
	
CH40-5200MHz	CH40-5200MHz
	
CH48-5240MHz	CH48-5240MHz

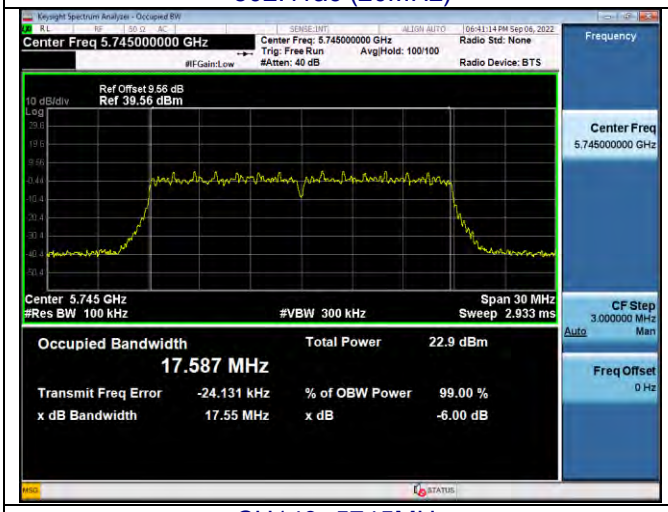
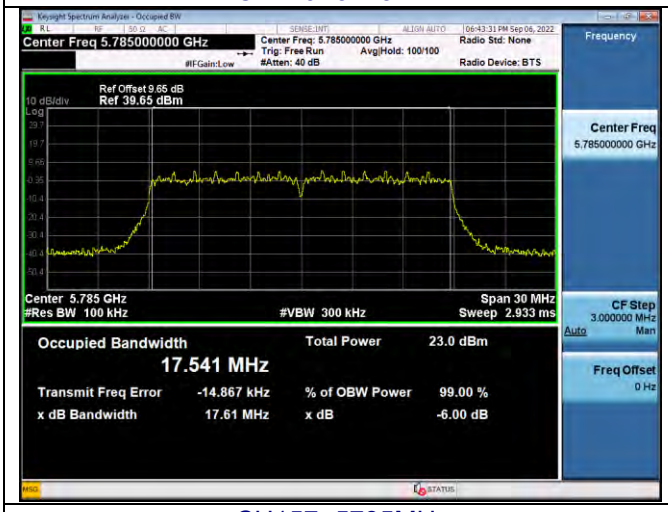
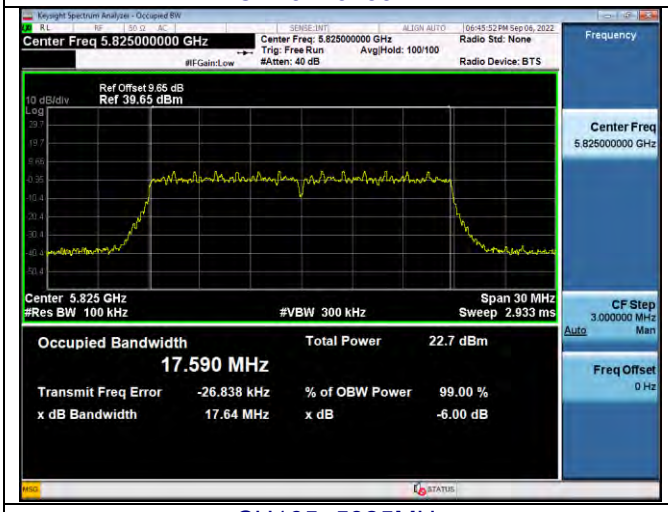
802.11ac 20MHz)	
	
CH36-5180MHz	
	
CH40-5200MHz	
	
CH48-5240MHz	

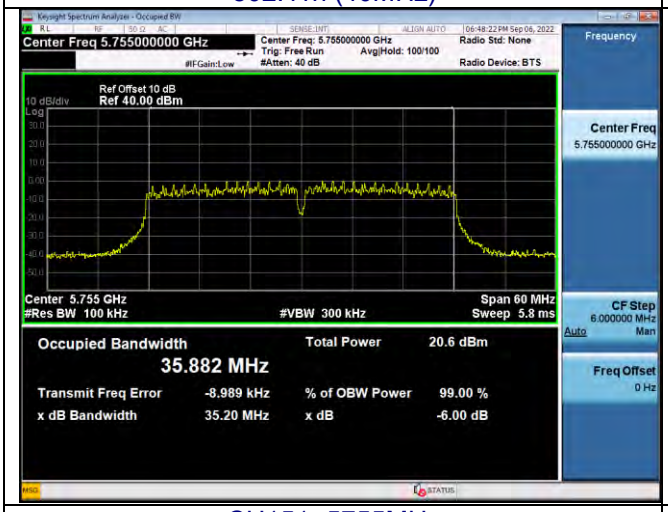
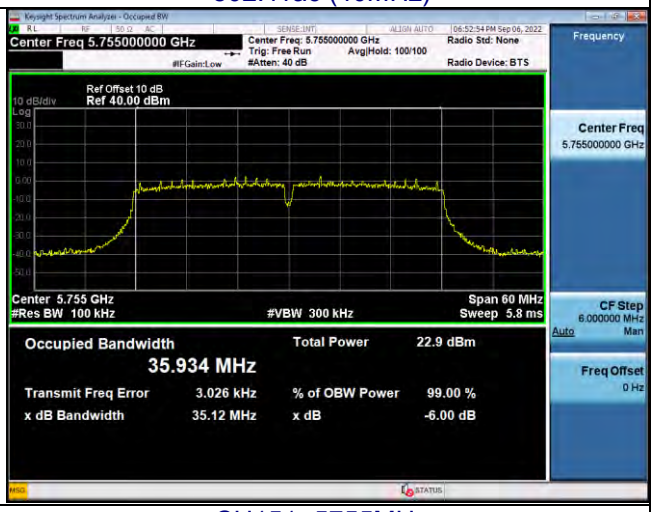
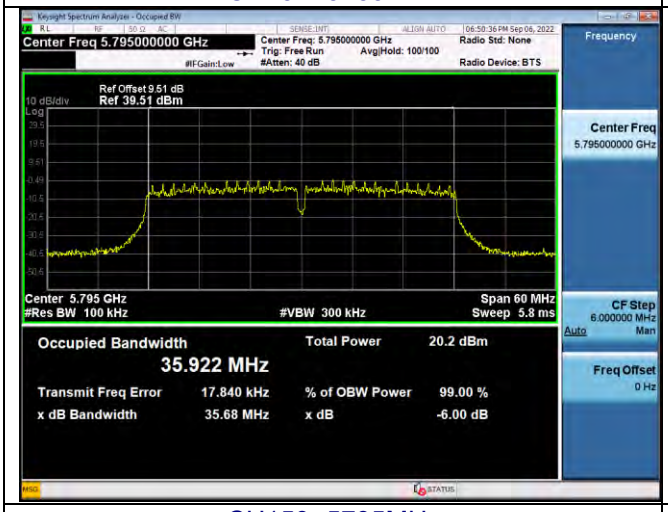
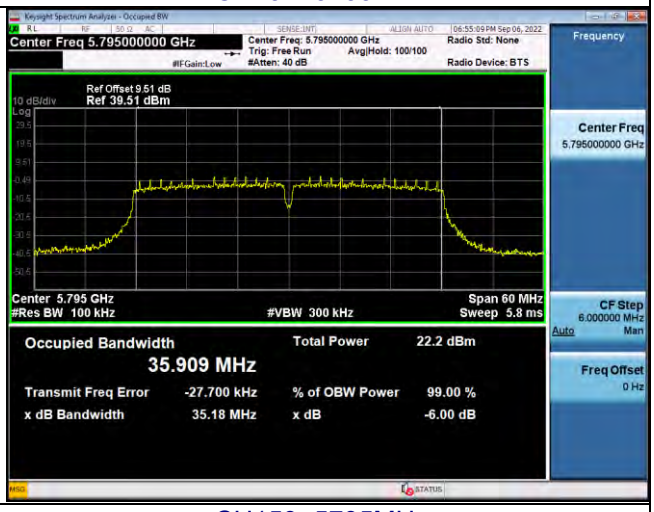
802.11n (40MHz)	802.11ac (40MHz)
	
CH38-5190MHz	CH38-5190MHz
	
CH46-5230MHz	CH46-5230MHz

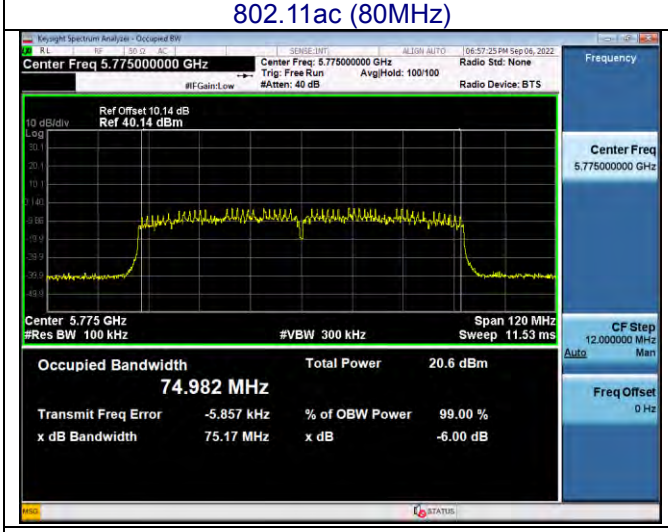
802.11ac (80MHz)	
	
CH42 5210MHz	

U-NII-3

802.11a	802.11n (20MHz)
	
CH149 -5745MHz	CH149 -5745MHz
	
CH157 -5785MHz	CH157 -5785MHz
	
CH165 -5825MHz	CH165 -5825MHz

802.11ac (20MHz)	
	
CH149 -5745MHz	
	
CH157 -5785MHz	
	
CH165 -5825MHz	

802.11n (40MHz)	802.11ac (40MHz)
	
CH151 -5755MHz	CH151 -5755MHz
	
CH159 -5795MHz	CH159 -5795MHz

802.11ac (80MHz)	
	
CH155 -5775MHz	

7. OUTPUT POWER TEST

Test Requirement:	15.407 (a)(1)(2)(3)
Test Method:	KDB 789033 D02 v02r01

7.1 APPLIED PROCEDURES/LIMIT

For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm)

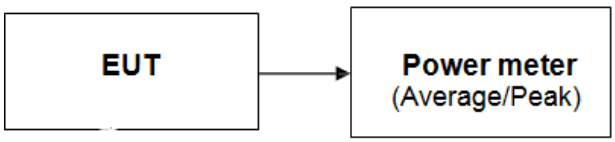
For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum 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.

Test Item	Band	Limit	Result
Max conducted output power	U-NII-1	1 W / 30dbm	Pass
Max conducted output power	U-NII-3	1 W / 30dbm	Pass

7.2 DEVIATION FROM STANDARD

No deviation.

7.3 TEST SETUP



7.4 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.

7.5 TEST RESULT

Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC24V

U-NII-1

802.11 Mode	Channel No.	Frequency [MHz]	Conducted Power [dBm]	Limit [dBm]
a	36	5180	17.02	30.00
	40	5200	15.85	30.00
	48	5240	16.27	30.00
n(20MHz)	36	5180	18.07	30.00
	40	5200	18.00	30.00
	48	5240	18.16	30.00
ac(20MHz)	36	5180	16.07	30.00
	40	5200	16.24	30.00
	48	5240	16.54	30.00
n(40MHz)	38	5190	15.03	30.00
	46	5230	15.40	30.00
ac(40MHz)	38	5190	16.18	30.00
	46	5230	16.35	30.00
ac(80MHz)	42	5210	14.52	30.00

U-NII-3

802.11 Mode	Channel No.	Frequency [MHz]	Conducted Power [dBm]	Limit [dBm]
a	149	5745	19.88	30.00
	157	5785	20.21	30.00
	165	5825	19.90	30.00
n (20MHz)	149	5745	20.88	30.00
	157	5785	20.95	30.00
	165	5825	20.89	30.00
ac (20MHz)	149	5745	20.41	30.00
	157	5785	20.56	30.00
	165	5825	20.24	30.00
n(40MHz)	151	5755	17.76	30.00
	159	5795	17.24	30.00
ac(40MHz)	151	5755	16.79	30.00
	159	5795	16.16	30.00
ac(80MHz)	155	5775	16.62	30.00

8. OUT OF BAND EDGE EMISSION

Test Requirement:	15.407 (b)
Test Method:	KDB 789033 D02 v02r01

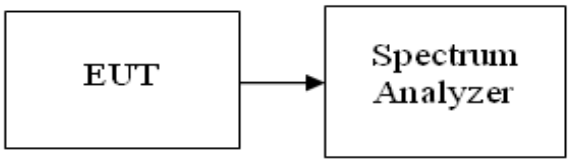
8.1 TEST PROCEDURE

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

8.2 DEVIATION FROM STANDARD

No deviation.

8.3 TEST SETUP



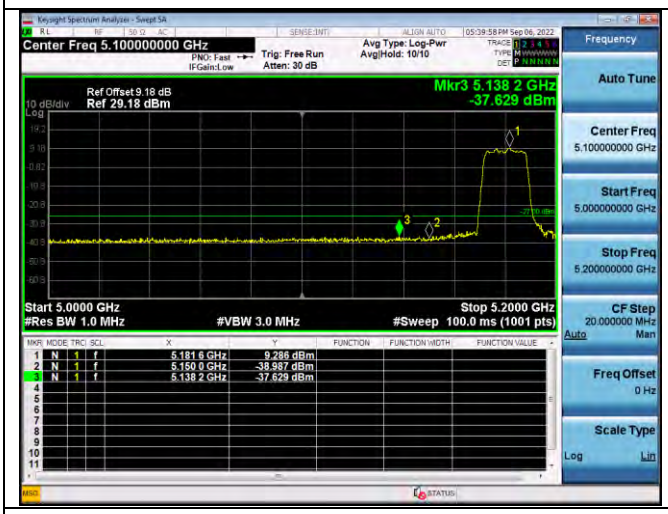
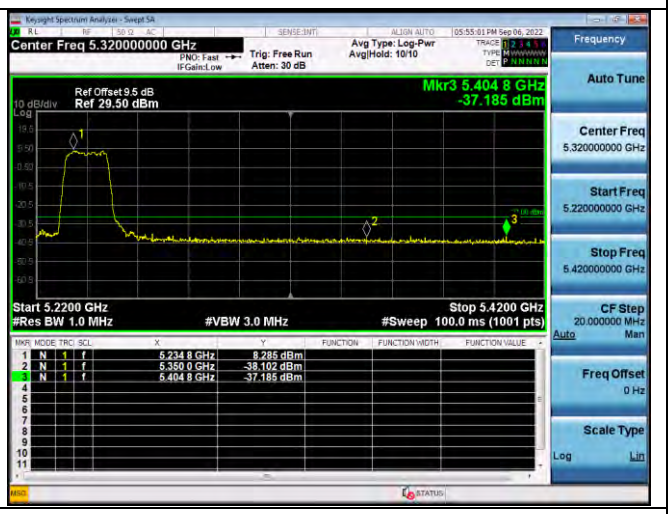
8.4 EUT OPERATION CONDITIONS

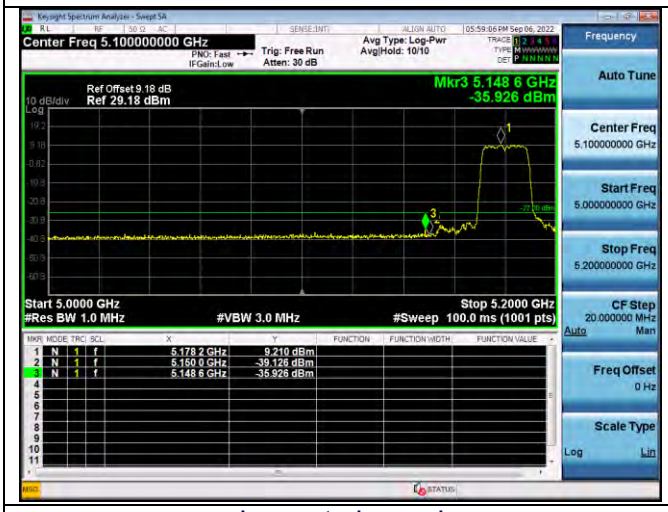
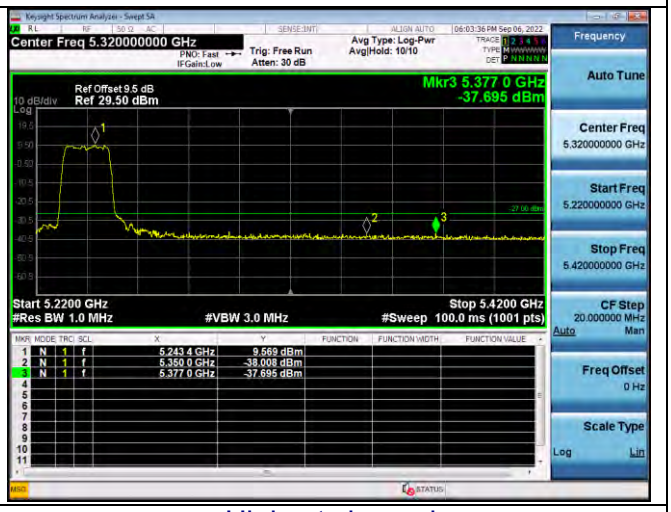
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

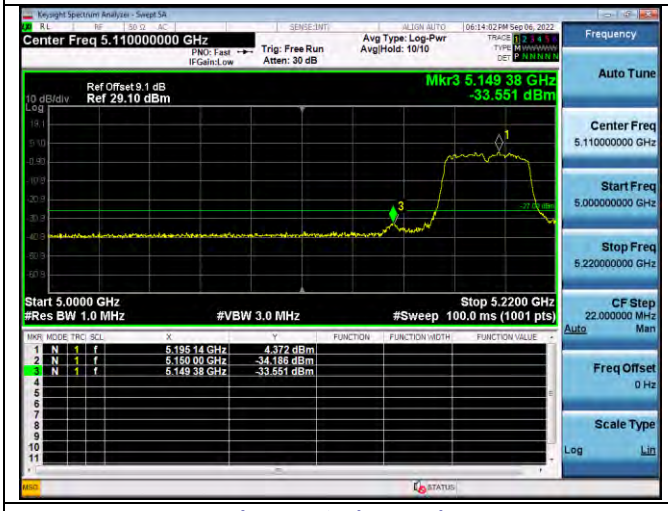
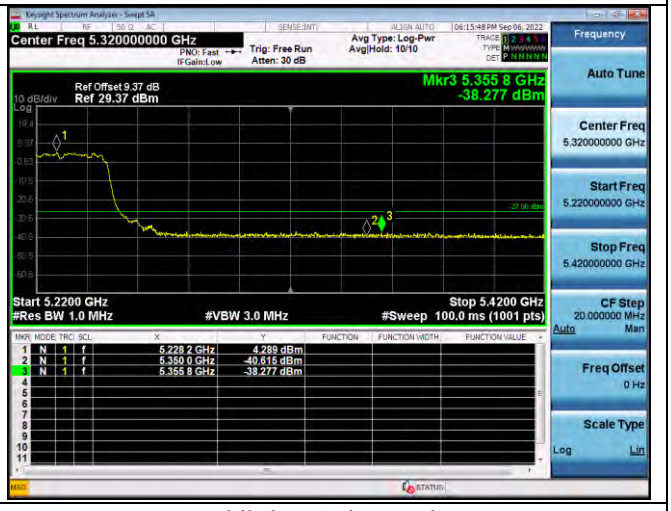
8.5 TEST RESULTS

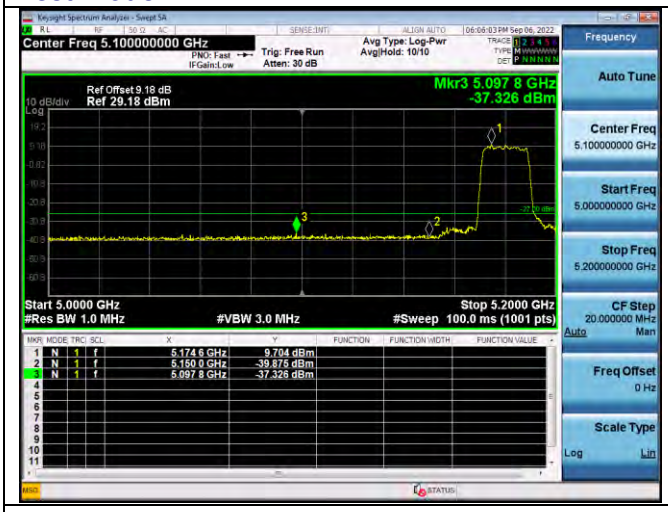
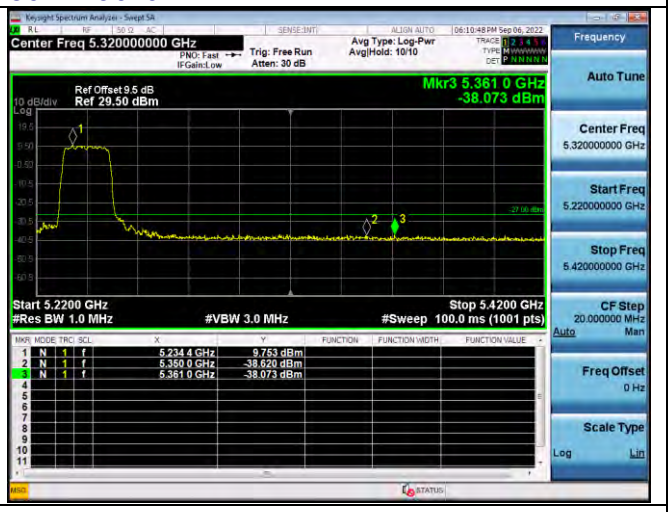
Test plot as follows:

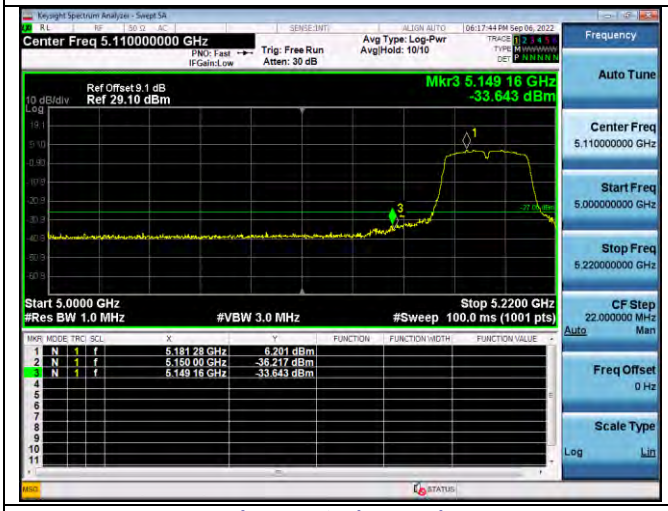
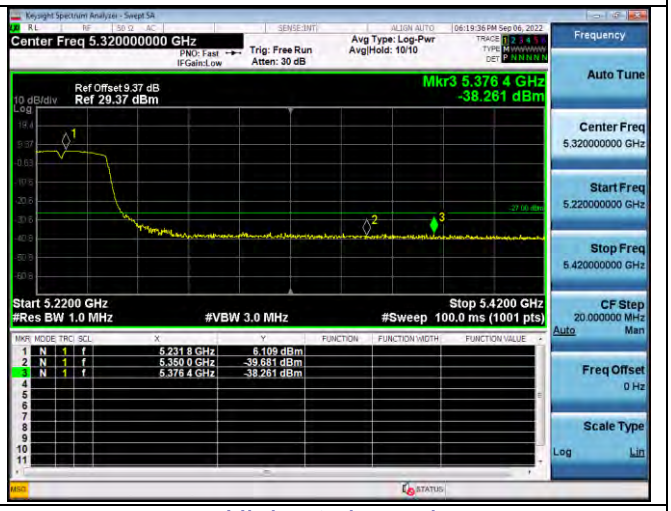
U-NII-1

Test mode:	802.11a
	
Lowest channel	Highest channel

Test mode:	802.11n20
	
Lowest channel	Highest channel

Test mode:	802.11n40
	
Lowest channel	Highest channel

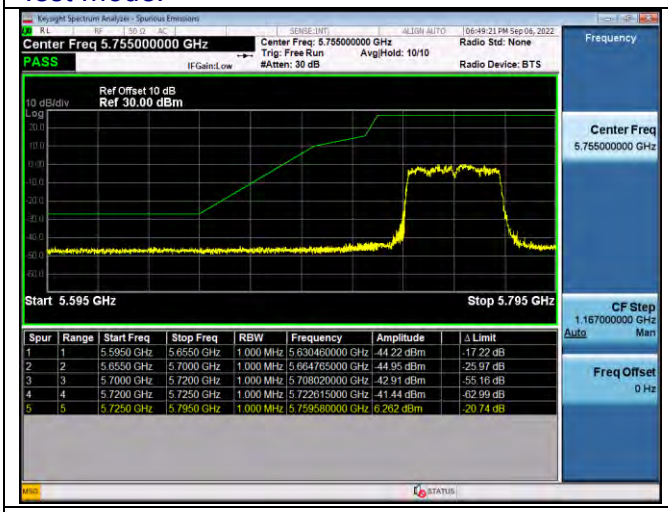
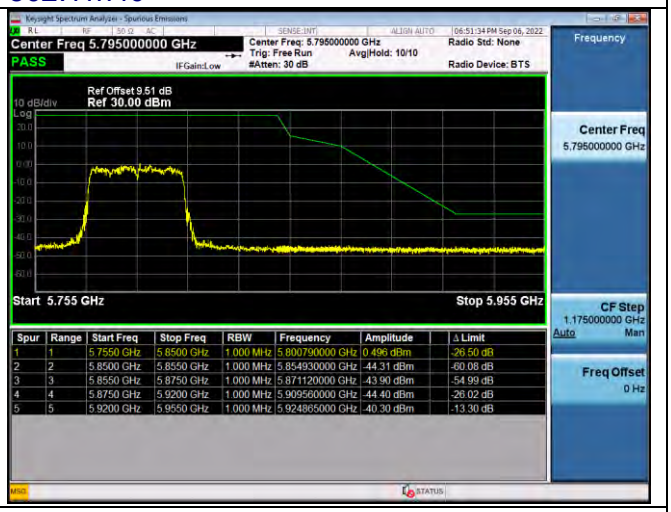
Test mode:	802.11ac20
	
Lowest channel	Highest channel

Test mode:	802.11ac40
	
Lowest channel	Highest channel

U-NII-3

Test mode:	802.11a
	
Lowest channel	Highest channel

Test mode:	802.11n20
	
Lowest channel	Highest channel

Test mode:	802.11n40
	
Lowest channel	Highest channel

Test mode:	802.11ac20
	
Lowest channel	Highest channel

Test mode:	802.11ac40
	
Lowest channel	Highest channel

9. FREQUENCY STABILITY MEASUREMENT

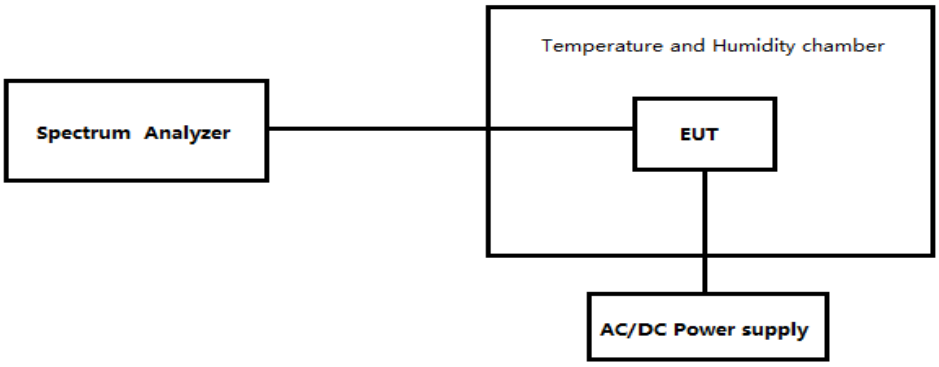
9.1 LIMIT

According to§15.407(g),Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

9.2 TESTPROCEDURE

1. To ensure emission at the band edge is main tainted within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, whichissettomaximumholdfunctionandpeakdetector.Thepeakvalueofthepowerenvelopewas measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

9.3 TESTCONFIGURATION



9.4 TEST RESULT

Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC24V

Note: Only the test results of the worst channel are displayed

ANT1-802.11a-CH36

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	75	0.0145
40	5.0	94	0.0182
30	5.0	90	0.0174
20	5.0	74	0.0143
10	5.0	82	0.0157
0	5.0	86	0.0165
-10	5.0	80	0.0155
-20	5.0	74	0.0143
-30	5.0	99	0.0192

ANT1-802.11a-CH48

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	86	0.0165
40	5.0	73	0.0139
30	5.0	95	0.0181
20	5.0	84	0.0160
10	5.0	82	0.0156
0	5.0	95	0.0180
-10	5.0	73	0.0140
-20	5.0	78	0.0149
-30	5.0	72	0.0137

ANT1-802.11a-CH149

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	91	0.0158
40	5.0	82	0.0143
30	5.0	81	0.0140
20	5.0	71	0.0123
10	5.0	74	0.0128
0	5.0	88	0.0153
-10	5.0	85	0.0149
-20	5.0	88	0.0153
-30	5.0	72	0.0125

ANT1-802.11a-CH165

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	73	0.0126
40	5.0	92	0.0158

30	5.0	89	0.0152
20	5.0	73	0.0126
10	5.0	73	0.0125
0	5.0	78	0.0133
-10	5.0	96	0.0164
-20	5.0	96	0.0165
-30	5.0	92	0.0157

ANT1-802.11n20-CH36

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	87	0.0167
40	5.0	91	0.0176
30	5.0	95	0.0183
20	5.0	79	0.0153
10	5.0	85	0.0164
0	5.0	92	0.0178
-10	5.0	74	0.0142
-20	5.0	85	0.0164
-30	5.0	76	0.0148

ANT1-802.11n20-CH48

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	90	0.0172
40	5.0	76	0.0146
30	5.0	98	0.0188
20	5.0	81	0.0155
10	5.0	81	0.0154
0	5.0	92	0.0175
-10	5.0	82	0.0157
-20	5.0	98	0.0187
-30	5.0	98	0.0188

ANT1-802.11n20-CH149

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	77	0.0133
40	5.0	70	0.0122
30	5.0	95	0.0166
20	5.0	93	0.0161
10	5.0	91	0.0159
0	5.0	98	0.0171
-10	5.0	90	0.0157
-20	5.0	93	0.0163
-30	5.0	96	0.0168

ANT1-802.11n20-CH165

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	91	0.0156
40	5.0	90	0.0154
30	5.0	92	0.0158
20	5.0	82	0.0140
10	5.0	80	0.0138
0	5.0	73	0.0126
-10	5.0	99	0.0171
-20	5.0	88	0.0150
-30	5.0	99	0.0171

ANT1-802.11n40-CH151

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	71	0.0124
40	5.0	93	0.0161
30	5.0	75	0.0130
20	5.0	85	0.0148
10	5.0	83	0.0144
0	5.0	70	0.0122
-10	5.0	92	0.0160
-20	5.0	94	0.0163
-30	5.0	87	0.0151

ANT1-802.11n40-CH159

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	99	0.0171
40	5.0	91	0.0156
30	5.0	71	0.0122
20	5.0	97	0.0167
10	5.0	89	0.0154
0	5.0	83	0.0144
-10	5.0	76	0.0131
-20	5.0	78	0.0134
-30	5.0	76	0.0132

ANT1-802.11ac20-CH36

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	77	0.0150
40	5.0	75	0.0145

30	5.0	95	0.0183
20	5.0	78	0.0151
10	5.0	84	0.0161
0	5.0	79	0.0153
-10	5.0	75	0.0144
-20	5.0	95	0.0183
-30	5.0	79	0.0153

ANT1-802.11ac20-CH48

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	72	0.0138
40	5.0	83	0.0158
30	5.0	83	0.0159
20	5.0	91	0.0173
10	5.0	82	0.0157
0	5.0	87	0.0166
-10	5.0	76	0.0145
-20	5.0	92	0.0175
-30	120	72	0.0137

ANT1-802.11ac20-CH149

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	94	0.0164
40	5.0	83	0.0144
30	5.0	72	0.0126
20	5.0	75	0.0130
10	5.0	81	0.0140
0	5.0	80	0.0138
-10	5.0	87	0.0152
-20	5.0	83	0.0145
-30	5.0	87	0.0151

ANT1-802.11ac20-CH165

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	81	0.0138
40	5.0	89	0.0154
30	5.0	74	0.0128
20	5.0	84	0.0144
10	5.0	70	0.0121
0	5.0	75	0.0129
-10	5.0	98	0.0168
-20	5.0	93	0.0160
-30	5.0	97	0.0167

ANT1-802.11ac40-CH38

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	76	0.0146
40	5.0	87	0.0169
30	5.0	94	0.0181
20	5.0	99	0.0191
10	5.0	95	0.0182
0	5.0	73	0.0141
-10	5.0	75	0.0144
-20	5.0	75	0.0145
-30	5.0	83	0.0160

ANT1-802.11ac40-CH46

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	90	0.0172
40	5.0	99	0.0190
30	5.0	97	0.0186
20	5.0	91	0.0175
10	5.0	95	0.0182
0	5.0	83	0.0159
-10	5.0	84	0.0161
-20	5.0	80	0.0153
-30	5.0	70	0.0135

ANT1-802.11ac40-CH151

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	82	0.0142
40	5.0	82	0.0142
30	5.0	99	0.0172
20	5.0	87	0.0152
10	5.0	73	0.0127
0	5.0	81	0.0141
-10	5.0	92	0.0159
-20	5.0	78	0.0135
-30	5.0	85	0.0148

ANT1-802.11ac40-CH159

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	87	0.0150
40	5.0	80	0.0138
30	5.0	75	0.0130

20	5.0	99	0.0171
10	5.0	70	0.0121
0	5.0	73	0.0126
-10	5.0	73	0.0125
-20	5.0	87	0.0150
-30	5.0	76	0.0131

ANT1-802.11ac80-CH42

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	99	0.0189
40	5.0	84	0.0161
30	5.0	88	0.0170
20	5.0	76	0.0146
10	5.0	92	0.0177
0	5.0	90	0.0173
-10	5.0	81	0.0156
-20	5.0	87	0.0167
-30	5.0	98	0.0187

ANT1-802.11ac80-CH155

Temperature (°C)	Voltage (DC:V)	Frequency Measure with time Elapsed	
		Fequency Deviation(Hz)	(ppm)
50	5.0	88	0.0152
40	5.0	97	0.0168
30	5.0	98	0.0169
20	5.0	73	0.0127
10	5.0	92	0.0160
0	5.0	74	0.0128
-10	5.0	84	0.0145
-20	5.0	73	0.0126
-30	5.0	80	0.0139

10.ANTENNA REQUIREMENT

Standard requirement:	FCC Part15 C Section 15.203 /247(c)

For intentional device, according to FCC 47 CFR Section 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. And according to FCC 47 CFR Section 15.247, if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

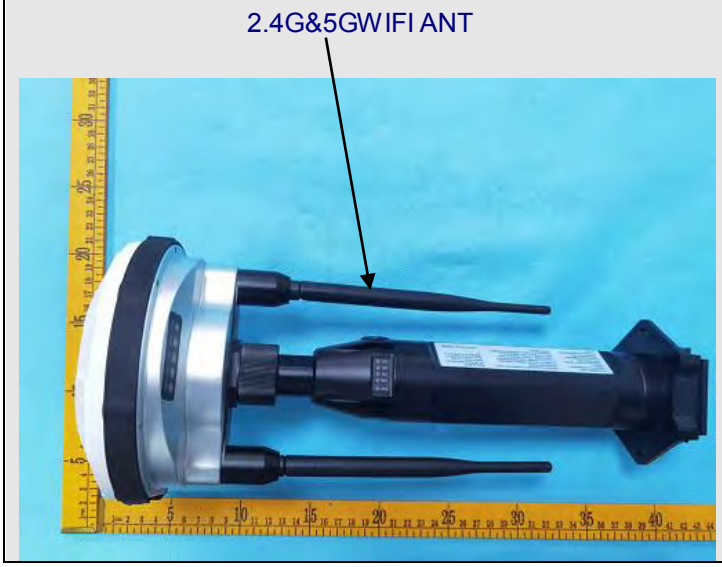
Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

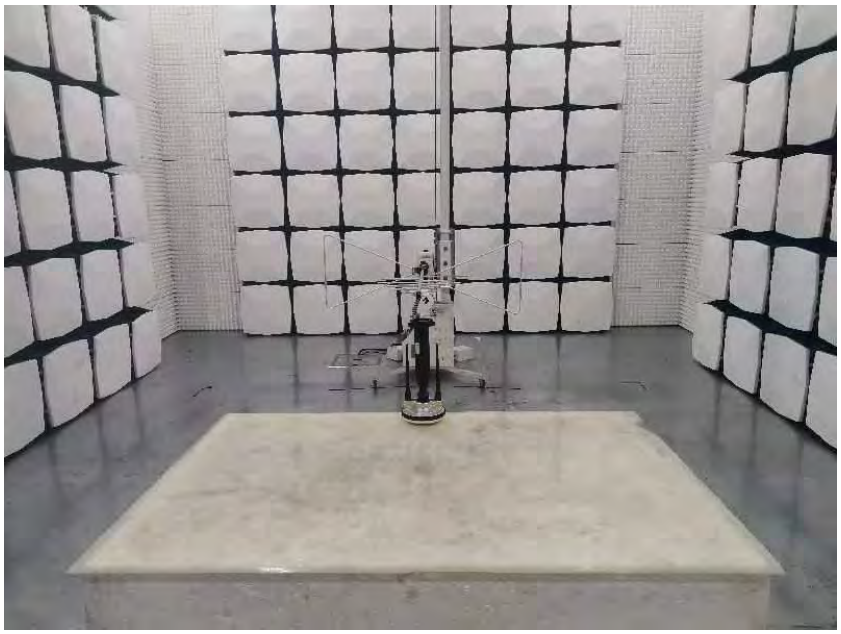
Antenna Connected Construction

The antenna used in this product is a glue stick antenna,, and the best case gain of the antenna is antenna port 1:3.27dBi

EUT Antenna:



11. TEST SETUP PHOTO



12. EUT CONSTRUCTIONAL DETAILS

Reference to the external photos file and internal photos file for details.

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