FCC TEST REPORT
FCC ID: 2AWIZHL4GXVF

Report Number.....:	ZKT-220929L7324-01
Date of Test.....:	Sep. 14, 2022 -- Oct. 12, 2022
Date of issue.....:	Oct. 12, 2022
Total number of pages..... :	117
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 .....:	FIBRAIN sp. z o.o.
Address ..... :	Poland, Zaczernie 190F, 36-062
Manufacturer's name .....:	FIBRAIN sp. z o.o.
Address ..... :	Poland, Zaczernie 190F, 36-062
Test specification:	
Standard.....:	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10:2013 KDB558074 D0115.247 Meas Guidance v 05r02
Test procedure..... :	/
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..... :	HGU
Trademark .....:	/
Model/Type reference..... :	HL-4GXV-F, HLE-3GX-F
Ratings..... :	DC 12V Adapter

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

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1. VERSION

Report No.	Version	Description	Approved
ZKT-220929L7324-01	Rev.01	Initial issue of report	Oct. 12, 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
FCC part 15.203/15.247 (c)	Antenna requirement	PASS	
FCC part 15.207	AC Power Line Conducted Emission	PASS	
FCC part 15.247 (b)(3)	Conducted Peak Output Power	PASS	
FCC part 15.247 (a)(2)	Channel Bandwidth& 99% OCB	PASS	
FCC part 15.247 (e)	Power Spectral Density	PASS	
FCC part 15.247(d)	Band Edge	PASS	
FCC part 15.205/15.209	Spurious Emission	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.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power conducted	±0.16dB
3	Spurious emissions conducted	±0.21dB
4	All emissions radiated(<1G)	±4.68dB
5	All emissions radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Product Name:	HGU
Model No.:	HL-4GXV-F
Serial No.:	HLE-3GX-F
Model difference:	Their electrical circuit design, layout, components used and internal wiring are identical, Only the color will be different ,so the name will be different. Test sample model: HL-4GXV-F
Hardware Version:	V10
Software Version:	V10
Sample(s) Status:	Engineer sample
Frequency range:	802.11b/802.11g /802.11n(HT20)/802.11ax(HE20): 2412MHz -2462MHz 802.11ax(HE40)/n(HT40): 2422MHz -2452MHz
Channel numbers:	802.11ax/802.11b/802.11g /802.11n(HT20):11 802.11ax(HE40)/802.11n(HT40):7
Channel separation:	5MHz
Modulation technology:	802.11b: Direct Sequence Spread Spectrum(DSSS) 802.11g/802.11n/802.11ax: Orthogonal Frequency Division Multiplexing(OFDM)
Antenna Type:	FPC Antenna
Antenna gain:	WIFI ANT1:2dBi; WIFI ANT2:2dBi ; MIMO:5.01dBi
Power supply:	AC 120V 50/60Hz
POWER ADAPTER:	MODEL: EUSF-24120-1500 INPUT: 100-240V~ 50/60Hz 0.6A OUTPUT: 12V ⎓ 1.5A

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

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:

Test channel	Frequency (MHz)
	802.11b/802.11g /802.11n(HT20)
Lowest channel	2412MHz
Middle channel	2437MHz
Highest channel	2462MHz

Test channel	Frequency (MHz)
	802.11n(HT40)
Lowest channel	2422MHz
Middle channel	2437MHz
Highest channel	2452MHz

Worst Case Configuration

Description	MIMO (802.11ax-low channel)
Antenna	MIMO
Channel	1
Operating Frequency (MHz)	802.11ax(HE20)2412.00
Data Rate (Mbps)	MCS7

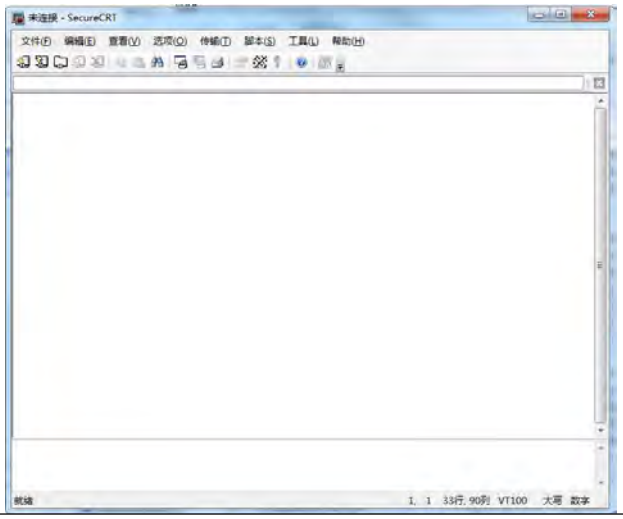
3.2 DESCRIPTION OF TEST MODES

Transmitting mode	Keep the EUT in continuously transmitting mode
Remark: During the test, the duty cycle >98%, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.	

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

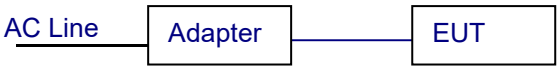
Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	802.11b	802.11g	802.11n (HT20)	802.11n (HT40)
Data rate	11Mbps	54Mbps	MCS7	MCS7

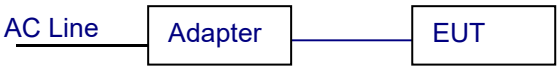
Test Software	SecureCRT 
Power level setup	<30dBm

3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

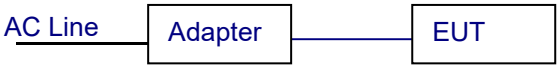
Conducted Emission



Radiated Emission



Conducted Spurious



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	Adapter	/	EUSF-24120-1500	/	SDOC

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, 2021	Oct. 17, 2022
2	Spectrum Analyzer (1GHz-40GHz)	R&S	FSQ	100363	Oct. 17, 2021	Oct. 16, 2022
3	EMI Test Receiver (9kHz-7GHz)	R&S	ESCI7	101169	Oct. 18, 2021	Oct. 17, 2022
4	Bilog Antenna (30MHz-1500MHz)	**Schwarzbeck**	VULB9168	N/A	Oct. 17, 2021	Oct. 16, 2022
5	Horn Antenna (1GHz-18GHz)	Agilent	AH-118	071145	Oct. 17, 2021	Oct. 16, 2022
6	Loop Antenna	TESEQ	HLA6121	58357	Oct. 17, 2021	Oct. 16, 2022
7	Amplifier (30-1000MHz)	EM Electronics	EM330 Amplifier	060747	Oct. 17, 2021	Oct. 16, 2022
8	Amplifier (1GHz-26.5GHz)	Agilent	8449B	3008A00315	Oct. 18, 2021	Oct. 17, 2022
9	RF cables1 (9kHz-30MHz)	N/A	9kHz-30MHz	N/A	Oct. 18, 2021	Oct. 17, 2022
10	RF cables2 (30MHz-1GHz)	N/A	30MHz-1GHz	N/A	Oct. 18, 2021	Oct. 17, 2022
11	RF cables3 (1GHz-40GHz)	N/A	1GHz-40GHz	N/A	Oct. 18, 2021	Oct. 17, 2022
12	ESG Signal Generator	Agilent	E4421B	N/A	Oct. 18, 2021	Oct. 17, 2022
13	Signal Generator	Agilent	N5182A	N/A	Oct. 22, 2021	Oct. 21, 2022
14	Magnetic Field Probe Tester	Narda	ELT-400	0-0344	Oct. 17, 2021	Oct. 16, 2022
15	MWRF Power Meter Test system	MW	MW100-RPCB	N/A	Oct. 22, 2021	Oct. 21, 2022
16	D.C. Power Supply	LongWei	TPR-6405D	N/A	\	\
17	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	\	\
18	RF Software	MW	MTS8310	V2.0.0.0	\	\
19	Turntable	MF	MF-7802BS	N/A	\	\
20	Antenna tower	MF	MF-7802BS	N/A	\	\

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	LISN	R&S	ENV216	101471	Oct. 22, 2021	Oct. 21, 2022
2	LISN	CYBERTEK	EM5040A	E1850400149	Oct. 22, 2021	Oct. 21, 2022
3	Test Cable	N/A	C01	N/A	Oct. 18, 2021	Oct. 17, 2022
4	Test Cable	N/A	C02	N/A	Oct. 18, 2021	Oct. 17, 2022
5	EMI Test Receiver	R&S	ESCI3	101393	Oct. 17, 2021	Oct. 16, 2022
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.

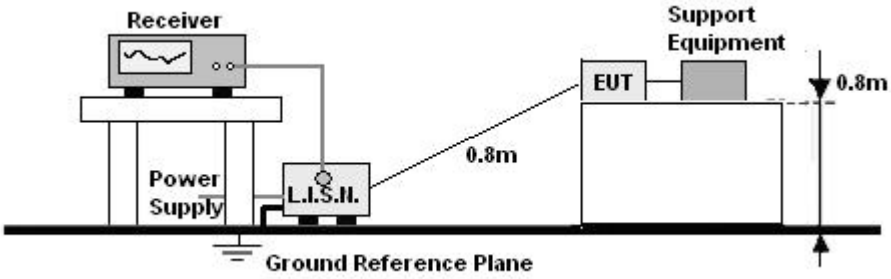
4.1.2 TEST PROCEDURE

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



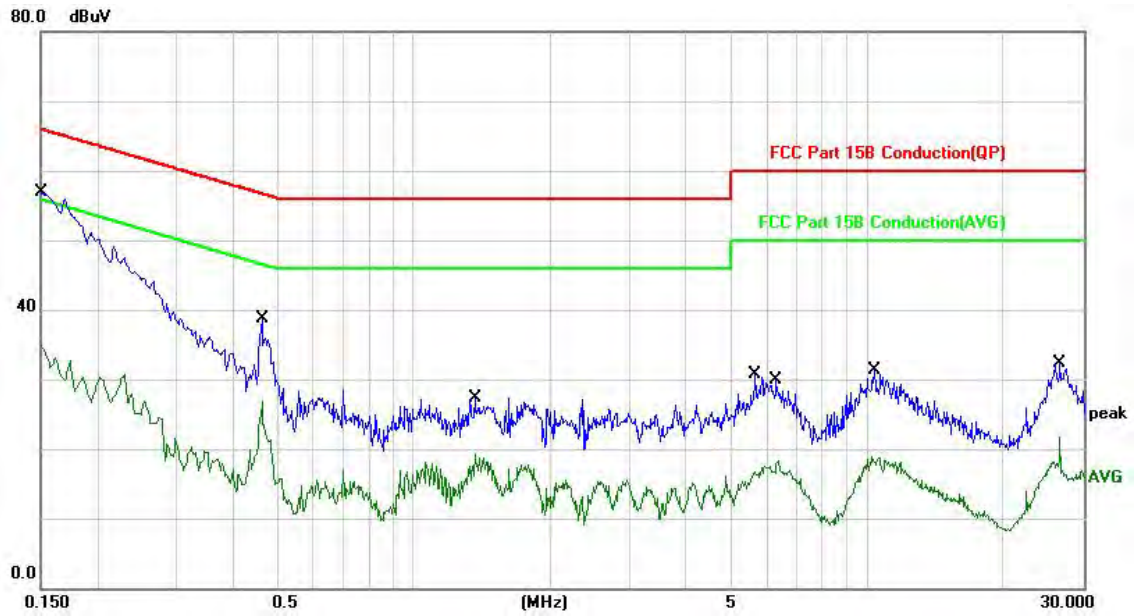
4.1.5 EUT OPERATING CONDITIONS

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, and the data recording in the report.

4.1.6 TEST RESULT

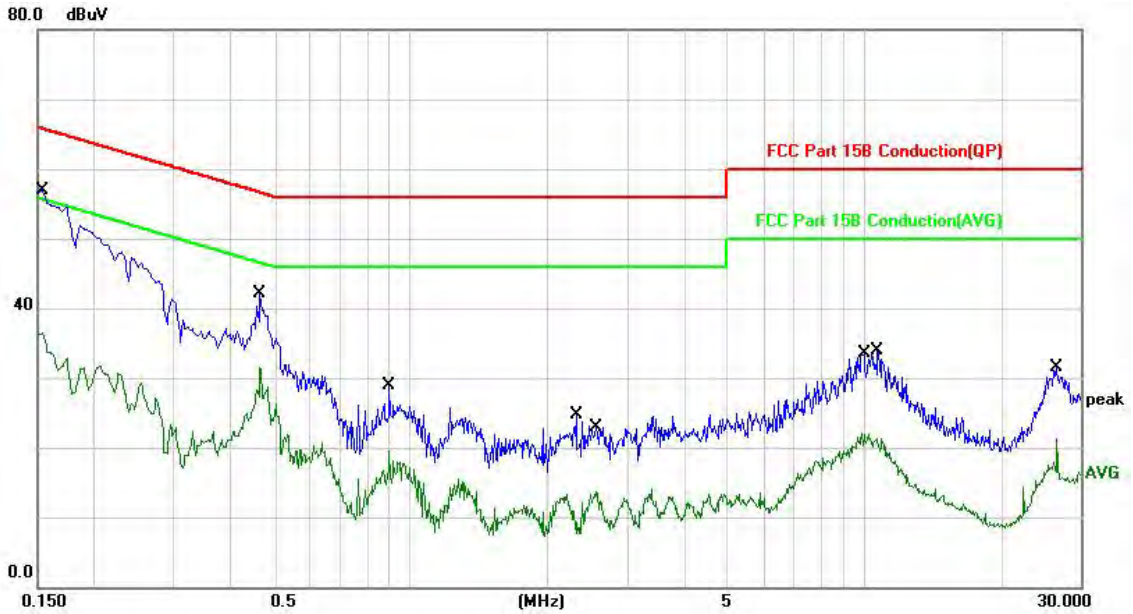
Temperature :	26℃	Relative Humidity:	54%
Pressure :	101kPa	Phase	L
Test Voltage :	AC 120V/60Hz		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1500	46.78	10.05	56.83	65.99	-9.16	QP	
2		0.1500	24.90	10.05	34.95	55.99	-21.04	AVG	
3		0.4620	28.46	10.20	38.66	56.66	-18.00	QP	
4		0.4620	16.65	10.20	26.85	46.66	-19.81	AVG	
5		1.3619	17.25	10.12	27.37	56.00	-28.63	QP	
6		1.3619	9.22	10.12	19.34	46.00	-26.66	AVG	
7		5.6779	20.76	9.94	30.70	60.00	-29.30	QP	
8		6.3620	8.46	9.91	18.37	50.00	-31.63	AVG	
9		10.2700	8.89	10.00	18.89	50.00	-31.11	AVG	
10		10.3500	21.34	10.00	31.34	60.00	-28.66	QP	
11		26.6220	22.49	9.75	32.24	60.00	-27.76	QP	
12		26.6220	11.99	9.75	21.74	50.00	-28.26	AVG	

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 :	AC 120V/60Hz		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1539	46.82	10.05	56.87	65.78	-8.91	QP	
2		0.1539	26.49	10.05	36.54	55.78	-19.24	AVG	
3		0.4660	31.98	10.20	42.18	56.58	-14.40	QP	
4		0.4660	21.26	10.20	31.46	46.58	-15.12	AVG	
5		0.8980	18.80	10.18	28.98	56.00	-27.02	QP	
6		0.8980	9.39	10.18	19.57	46.00	-26.43	AVG	
7		2.3100	14.69	10.02	24.71	56.00	-31.29	QP	
8		2.5660	3.69	10.07	13.76	46.00	-32.24	AVG	
9		9.8860	12.10	9.93	22.03	50.00	-27.97	AVG	
10		10.7060	23.80	10.00	33.80	60.00	-26.20	QP	
11		26.4220	21.69	9.74	31.43	60.00	-28.57	QP	
12		26.6260	11.56	9.76	21.32	50.00	-28.68	AVG	

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

Test Requirement:	FCC Part15 C Section 15.209
Test Method:	ANSI C63.10:2013
Test Frequency Range:	9kHz to 25GHz
Test site:	Measurement Distance: 3m
Receiver setup:	

Frequency	Detector	RBW	VBW	Value
9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

4.2.1 RADIATED EMISSION LIMITS

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:

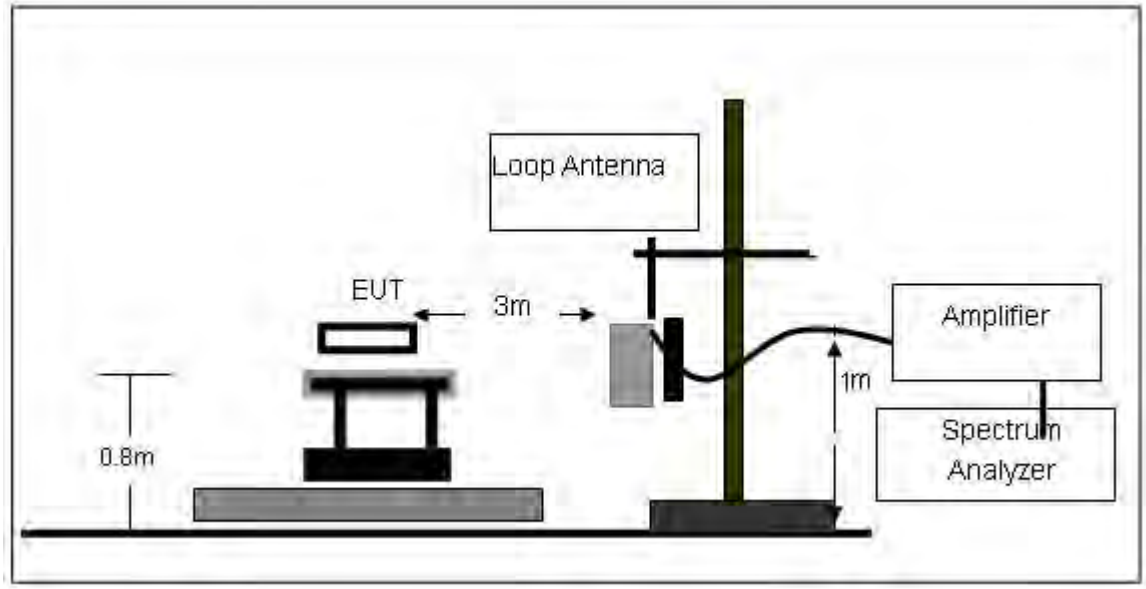
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

4.2.3 DEVIATION FROM TEST STANDARD

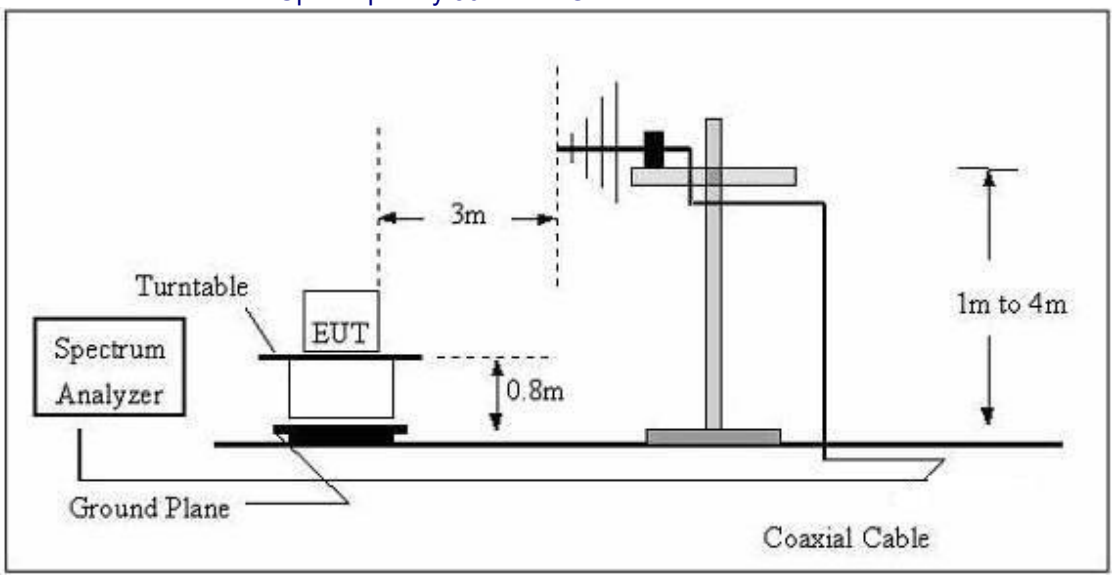
No deviation

4.2.4 TEST SETUP

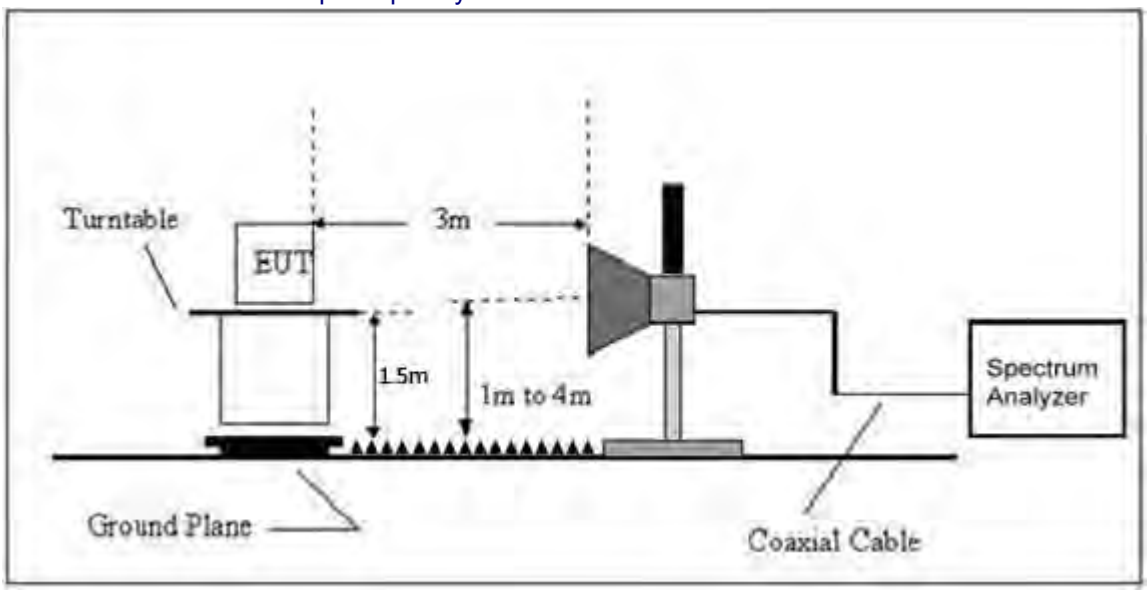
（A）Radiated Emission Test-Up Frequency Below 30MHz



（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:	AC120V 60Hz		

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		67.4382	42.09	-15.23	26.86	40.00	-13.14	QP	100	0	
2		130.8369	38.28	-10.24	28.04	43.50	-15.46	QP	100	0	
3		167.8243	42.56	-10.31	32.25	43.50	-11.25	QP	100	0	
4		250.3012	47.91	-10.72	37.19	46.00	-8.81	QP	100	0	
5	*	375.9385	47.83	-6.29	41.54	46.00	-4.46	QP	100	0	
6		543.2742	32.25	-2.74	29.51	46.00	-16.49	QP	100	0	

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	AC120V 60Hz		

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		30.5306	35.32	-4.89	30.43	40.00	-9.57	QP	100	360	
2	*	56.7917	46.18	-15.59	30.59	40.00	-9.41	QP	100	360	
3		131.2965	42.25	-10.21	32.04	43.50	-11.46	QP	100	360	
4		250.3012	41.90	-10.72	31.18	46.00	-14.82	QP	100	360	
5		375.9385	41.09	-6.29	34.80	46.00	-11.20	QP	100	360	
6		627.2738	33.79	-1.46	32.33	46.00	-13.67	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.
3.The test data shows only the worst case- MIMO (802.11ax-low channel)

1GHz~25GHz

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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)	Detect or Type
Low Channel:2412MHz									
V	4824	53.41	30.55	5.77	24.66	53.29	74.00	-20.71	PK
V	4824	44.09	30.55	5.77	24.66	43.97	54.00	-10.03	AV
V	7236	57.46	30.33	6.32	24.55	58.00	74.00	-16.00	PK
V	7236	46.71	30.33	6.32	24.55	47.25	54.00	-6.75	AV
V	9648	45.82	30.85	7.45	24.69	47.11	74.00	-26.89	PK
V	9648	44.40	30.85	7.45	24.69	45.69	54.00	-8.31	AV
H	4824	44.33	31.02	8.99	25.57	47.87	74.00	-26.13	PK
H	4824	44.96	31.02	8.99	25.57	48.50	54.00	-5.50	AV
H	7236	44.28	30.55	5.77	24.66	44.16	74.00	-29.84	PK
H	7236	44.90	30.55	5.77	24.66	44.78	54.00	-9.22	AV
H	9648	46.30	30.33	6.32	24.55	46.84	74.00	-27.16	PK
H	9648	45.91	30.33	6.32	24.55	46.45	54.00	-7.55	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)	Detect or Type
Middle Channel:2437MHz									
V	4874	55.09	30.55	5.77	24.66	54.97	74.00	-19.03	PK
V	4874	43.89	30.55	5.77	24.66	43.77	54.00	-10.23	AV
V	7311	55.48	30.33	6.32	24.55	56.02	74.00	-17.98	PK
V	7311	46.84	30.33	6.32	24.55	47.38	54.00	-6.62	AV
V	9748	45.90	30.85	7.45	24.69	47.19	74.00	-26.81	PK
V	9748	45.23	30.85	7.45	24.69	46.52	54.00	-7.48	AV
H	4874	46.28	31.02	8.99	25.57	49.82	74.00	-24.18	PK
H	4874	45.60	31.02	8.99	25.57	49.14	54.00	-4.86	AV
H	7311	46.44	30.55	5.77	24.66	46.32	74.00	-27.68	PK
H	7311	45.12	30.55	5.77	24.66	45.00	54.00	-9.00	AV
H	9748	46.57	30.33	6.32	24.55	47.11	74.00	-26.89	PK
H	9748	44.39	30.33	6.32	24.55	44.93	54.00	-9.07	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)	Detect or Type
High Channel:2462MHz									
V	4924	56.03	30.55	5.77	24.66	55.91	74.00	-18.09	PK
V	4924	44.61	30.55	5.77	24.66	44.49	54.00	-9.51	AV
V	7386	54.82	30.33	6.32	24.55	55.36	74.00	-18.64	PK
V	7386	45.77	30.33	6.32	24.55	46.31	54.00	-7.69	AV
V	9848	44.35	30.85	7.45	24.69	45.64	74.00	-28.36	PK
V	9848	45.35	30.85	7.45	24.69	46.64	54.00	-7.36	AV
H	4924	44.80	31.02	8.99	25.57	48.34	74.00	-25.66	PK
H	4924	45.07	31.02	8.99	25.57	48.61	54.00	-5.39	AV
H	7386	44.78	30.55	5.77	24.66	44.66	74.00	-29.34	PK
H	7386	44.96	30.55	5.77	24.66	44.84	54.00	-9.16	AV
H	9848	45.59	30.33	6.32	24.55	46.13	74.00	-27.87	PK
H	9848	43.84	30.33	6.32	24.55	44.38	54.00	-9.62	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:2412MHz									
V	4824	57.66	30.55	5.77	24.66	57.54	74.00	-16.46	PK
V	4824	45.52	30.55	5.77	24.66	45.40	54.00	-8.60	AV
V	7236	56.03	30.33	6.32	24.55	56.57	74.00	-17.43	PK
V	7236	47.51	30.33	6.32	24.55	48.05	54.00	-5.95	AV
V	9648	45.94	30.85	7.45	24.69	47.23	74.00	-26.77	PK
V	9648	43.94	30.85	7.45	24.69	45.23	54.00	-8.77	AV
H	4824	45.57	31.02	8.99	25.57	49.11	74.00	-24.89	PK
H	4824	45.03	31.02	8.99	25.57	48.57	54.00	-5.43	AV
H	7236	44.74	30.55	5.77	24.66	44.62	74.00	-29.38	PK
H	7236	44.67	30.55	5.77	24.66	44.55	54.00	-9.45	AV
H	9648	45.00	30.33	6.32	24.55	45.54	74.00	-28.46	PK
H	9648	45.23	30.33	6.32	24.55	45.77	54.00	-8.23	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:2437MHz									
V	4874	54.97	30.55	5.77	24.66	54.85	74.00	-19.15	PK
V	4874	43.91	30.55	5.77	24.66	43.79	54.00	-10.21	AV
V	7311	55.69	30.33	6.32	24.55	56.23	74.00	-17.77	PK
V	7311	46.82	30.33	6.32	24.55	47.36	54.00	-6.64	AV
V	9748	46.21	30.85	7.45	24.69	47.50	74.00	-26.50	PK
V	9748	44.48	30.85	7.45	24.69	45.77	54.00	-8.23	AV
H	4874	45.82	31.02	8.99	25.57	49.36	74.00	-24.64	PK
H	4874	44.78	31.02	8.99	25.57	48.32	54.00	-5.68	AV
H	7311	44.60	30.55	5.77	24.66	44.48	74.00	-29.52	PK
H	7311	45.26	30.55	5.77	24.66	45.14	54.00	-8.86	AV
H	9748	46.59	30.33	6.32	24.55	47.13	74.00	-26.87	PK
H	9748	45.03	30.33	6.32	24.55	45.57	54.00	-8.43	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:2462MHz									
V	4924	57.48	30.55	5.77	24.66	57.36	74.00	-16.64	PK
V	4924	43.88	30.55	5.77	24.66	43.76	54.00	-10.24	AV
V	7386	57.16	30.33	6.32	24.55	57.70	74.00	-16.30	PK
V	7386	47.00	30.33	6.32	24.55	47.54	54.00	-6.46	AV
V	9848	44.91	30.85	7.45	24.69	46.20	74.00	-27.80	PK
V	9848	45.06	30.85	7.45	24.69	46.35	54.00	-7.65	AV
H	4924	45.37	31.02	8.99	25.57	48.91	74.00	-25.09	PK
H	4924	44.06	31.02	8.99	25.57	47.60	54.00	-6.40	AV
H	7386	43.86	30.55	5.77	24.66	43.74	74.00	-30.26	PK
H	7386	44.42	30.55	5.77	24.66	44.30	54.00	-9.70	AV
H	9848	46.10	30.33	6.32	24.55	46.64	74.00	-27.36	PK
H	9848	44.62	30.33	6.32	24.55	45.16	54.00	-8.84	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:2412MHz									
V	4824	53.92	30.55	5.77	24.66	53.80	74.00	-20.20	PK
V	4824	45.42	30.55	5.77	24.66	45.30	54.00	-8.70	AV
V	7236	54.65	30.33	6.32	24.55	55.19	74.00	-18.81	PK
V	7236	44.91	30.33	6.32	24.55	45.45	54.00	-8.55	AV
V	9648	46.39	30.85	7.45	24.69	47.68	74.00	-26.32	PK
V	9648	44.95	30.85	7.45	24.69	46.24	54.00	-7.76	AV
H	4824	44.67	31.02	8.99	25.57	48.21	74.00	-25.79	PK
H	4824	44.69	31.02	8.99	25.57	48.23	54.00	-5.77	AV
H	7236	44.20	30.55	5.77	24.66	44.08	74.00	-29.92	PK
H	7236	43.62	30.55	5.77	24.66	43.50	54.00	-10.50	AV
H	9648	44.21	30.33	6.32	24.55	44.75	74.00	-29.25	PK
H	9648	45.44	30.33	6.32	24.55	45.98	54.00	-8.02	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:2437MHz									
V	4874	55.10	30.55	5.77	24.66	54.98	74.00	-19.02	PK
V	4874	44.79	30.55	5.77	24.66	44.67	54.00	-9.33	AV
V	7311	54.67	30.33	6.32	24.55	55.21	74.00	-18.79	PK
V	7311	46.28	30.33	6.32	24.55	46.82	54.00	-7.18	AV
V	9748	44.60	30.85	7.45	24.69	45.89	74.00	-28.11	PK
V	9748	46.41	30.85	7.45	24.69	47.70	54.00	-6.30	AV
H	4874	46.25	31.02	8.99	25.57	49.79	74.00	-24.21	PK
H	4874	44.46	31.02	8.99	25.57	48.00	54.00	-6.00	AV
H	7311	46.53	30.55	5.77	24.66	46.41	74.00	-27.59	PK
H	7311	44.53	30.55	5.77	24.66	44.41	54.00	-9.59	AV
H	9748	46.15	30.33	6.32	24.55	46.69	74.00	-27.31	PK
H	9748	45.17	30.33	6.32	24.55	45.71	54.00	-8.29	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:2462MHz									
V	4924	52.06	30.55	5.77	24.66	51.94	74.00	-22.06	PK
V	4924	43.20	30.55	5.77	24.66	43.08	54.00	-10.92	AV
V	7386	54.84	30.33	6.32	24.55	55.38	74.00	-18.62	PK
V	7386	47.45	30.33	6.32	24.55	47.99	54.00	-6.01	AV
V	9848	43.80	30.85	7.45	24.69	45.09	74.00	-28.91	PK
V	9848	43.74	30.85	7.45	24.69	45.03	54.00	-8.97	AV
H	4924	44.54	31.02	8.99	25.57	48.08	74.00	-25.92	PK
H	4924	44.83	31.02	8.99	25.57	48.37	54.00	-5.63	AV
H	7386	44.70	30.55	5.77	24.66	44.58	74.00	-29.42	PK
H	7386	44.50	30.55	5.77	24.66	44.38	54.00	-9.62	AV
H	9848	45.17	30.33	6.32	24.55	45.71	74.00	-28.29	PK
H	9848	45.65	30.33	6.32	24.55	46.19	54.00	-7.81	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:2422MHz									
V	4844	56.05	30.55	5.77	24.66	55.93	74.00	-18.07	PK
V	4844	44.46	30.55	5.77	24.66	44.34	54.00	-9.66	AV
V	7266	55.36	30.33	6.32	24.55	55.90	74.00	-18.10	PK
V	7266	45.51	30.33	6.32	24.55	46.05	54.00	-7.95	AV
V	9688	46.12	30.85	7.45	24.69	47.41	74.00	-26.59	PK
V	9688	44.97	30.85	7.45	24.69	46.26	54.00	-7.74	AV
H	4844	45.96	31.02	8.99	25.57	49.50	74.00	-24.50	PK
H	4844	44.05	31.02	8.99	25.57	47.59	54.00	-6.41	AV
H	7266	46.36	30.55	5.77	24.66	46.24	74.00	-27.76	PK
H	7266	43.63	30.55	5.77	24.66	43.51	54.00	-10.49	AV
H	9688	43.63	30.33	6.32	24.55	44.17	74.00	-29.83	PK
H	9688	45.29	30.33	6.32	24.55	45.83	54.00	-8.17	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
Middle Channel:2437MHz									
V	4874	53.48	30.55	5.77	24.66	53.36	74.00	-20.64	PK
V	4874	45.26	30.55	5.77	24.66	45.14	54.00	-8.86	AV
V	7311	54.90	30.33	6.32	24.55	55.44	74.00	-18.56	PK
V	7311	46.94	30.33	6.32	24.55	47.48	54.00	-6.52	AV
V	9748	45.68	30.85	7.45	24.69	46.97	74.00	-27.03	PK
V	9748	45.95	30.85	7.45	24.69	47.24	54.00	-6.76	AV
H	4874	46.56	31.02	8.99	25.57	50.10	74.00	-23.90	PK
H	4874	44.27	31.02	8.99	25.57	47.81	54.00	-6.19	AV
H	7311	45.78	30.55	5.77	24.66	45.66	74.00	-28.34	PK
H	7311	46.02	30.55	5.77	24.66	45.90	54.00	-8.10	AV
H	9748	46.07	30.33	6.32	24.55	46.61	74.00	-27.39	PK
H	9748	45.41	30.33	6.32	24.55	45.95	54.00	-8.05	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:2452MHz									
V	4904	56.85	30.55	5.77	24.66	56.73	74.00	-17.27	PK
V	4904	43.00	30.55	5.77	24.66	42.88	54.00	-11.12	AV
V	7356	55.32	30.33	6.32	24.55	55.86	74.00	-18.14	PK
V	7356	45.51	30.33	6.32	24.55	46.05	54.00	-7.95	AV
V	9808	45.69	30.85	7.45	24.69	46.98	74.00	-27.02	PK
V	9808	44.51	30.85	7.45	24.69	45.80	54.00	-8.20	AV
H	4904	46.41	31.02	8.99	25.57	49.95	74.00	-24.05	PK
H	4904	44.62	31.02	8.99	25.57	48.16	54.00	-5.84	AV
H	7356	46.57	30.55	5.77	24.66	46.45	74.00	-27.55	PK
H	7356	45.08	30.55	5.77	24.66	44.96	54.00	-9.04	AV
H	9808	45.86	30.33	6.32	24.55	46.40	74.00	-27.60	PK
H	9808	46.29	30.33	6.32	24.55	46.83	54.00	-7.17	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:2412MHz									
V	4824	53.40	30.55	5.77	24.66	53.28	74.00	-20.72	PK
V	4824	45.48	30.55	5.77	24.66	45.36	54.00	-8.64	AV
V	7236	55.29	30.33	6.32	24.55	55.83	74.00	-18.17	PK
V	7236	46.93	30.33	6.32	24.55	47.47	54.00	-6.53	AV
V	9648	46.27	30.85	7.45	24.69	47.56	74.00	-26.44	PK
V	9648	44.87	30.85	7.45	24.69	46.16	54.00	-7.84	AV
H	4824	45.25	31.02	8.99	25.57	48.79	74.00	-25.21	PK
H	4824	45.74	31.02	8.99	25.57	49.28	54.00	-4.72	AV
H	7236	45.20	30.55	5.77	24.66	45.08	74.00	-28.92	PK
H	7236	44.15	30.55	5.77	24.66	44.03	54.00	-9.97	AV
H	9648	46.34	30.33	6.32	24.55	46.88	74.00	-27.12	PK
H	9648	43.92	30.33	6.32	24.55	44.46	54.00	-9.54	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:2437MHz									
V	4874	56.23	30.55	5.77	24.66	56.11	74.00	-17.89	PK
V	4874	43.60	30.55	5.77	24.66	43.48	54.00	-10.52	AV
V	7311	57.24	30.33	6.32	24.55	57.78	74.00	-16.22	PK
V	7311	47.04	30.33	6.32	24.55	47.58	54.00	-6.42	AV
V	9748	44.61	30.85	7.45	24.69	45.90	74.00	-28.10	PK
V	9748	46.37	30.85	7.45	24.69	47.66	54.00	-6.34	AV
H	4874	45.04	31.02	8.99	25.57	48.58	74.00	-25.42	PK
H	4874	46.27	31.02	8.99	25.57	49.81	54.00	-4.19	AV
H	7311	46.42	30.55	5.77	24.66	46.30	74.00	-27.70	PK
H	7311	45.43	30.55	5.77	24.66	45.31	54.00	-8.69	AV
H	9748	44.18	30.33	6.32	24.55	44.72	74.00	-29.28	PK
H	9748	44.36	30.33	6.32	24.55	44.90	54.00	-9.10	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:2462MHz									
V	4924	53.06	30.55	5.77	24.66	52.94	74.00	-21.06	PK
V	4924	44.36	30.55	5.77	24.66	44.24	54.00	-9.76	AV
V	7386	55.39	30.33	6.32	24.55	55.93	74.00	-18.07	PK
V	7386	45.43	30.33	6.32	24.55	45.97	54.00	-8.03	AV
V	9848	44.07	30.85	7.45	24.69	45.36	74.00	-28.64	PK
V	9848	44.87	30.85	7.45	24.69	46.16	54.00	-7.84	AV
H	4924	43.94	31.02	8.99	25.57	47.48	74.00	-26.52	PK
H	4924	45.43	31.02	8.99	25.57	48.97	54.00	-5.03	AV
H	7386	44.20	30.55	5.77	24.66	44.08	74.00	-29.92	PK
H	7386	46.27	30.55	5.77	24.66	46.15	54.00	-7.85	AV
H	9848	44.47	30.33	6.32	24.55	45.01	74.00	-28.99	PK
H	9848	44.14	30.33	6.32	24.55	44.68	54.00	-9.32	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:2422MHz									
V	4844	54.53	30.55	5.77	24.66	54.41	74.00	-19.59	PK
V	4844	42.84	30.55	5.77	24.66	42.72	54.00	-11.28	AV
V	7266	54.70	30.33	6.32	24.55	55.24	74.00	-18.76	PK
V	7266	45.96	30.33	6.32	24.55	46.50	54.00	-7.50	AV
V	9688	46.14	30.85	7.45	24.69	47.43	74.00	-26.57	PK
V	9688	46.46	30.85	7.45	24.69	47.75	54.00	-6.25	AV
H	4844	43.72	31.02	8.99	25.57	47.26	74.00	-26.74	PK
H	4844	46.17	31.02	8.99	25.57	49.71	54.00	-4.29	AV
H	7266	45.93	30.55	5.77	24.66	45.81	74.00	-28.19	PK
H	7266	45.70	30.55	5.77	24.66	45.58	54.00	-8.42	AV
H	9688	45.23	30.33	6.32	24.55	45.77	74.00	-28.23	PK
H	9688	46.36	30.33	6.32	24.55	46.90	54.00	-7.10	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
Middle Channel:2437MHz									
V	4874	52.49	30.55	5.77	24.66	52.37	74.00	-21.63	PK
V	4874	42.61	30.55	5.77	24.66	42.49	54.00	-11.51	AV
V	7311	55.09	30.33	6.32	24.55	55.63	74.00	-18.37	PK
V	7311	47.19	30.33	6.32	24.55	47.73	54.00	-6.27	AV
V	9748	45.75	30.85	7.45	24.69	47.04	74.00	-26.96	PK
V	9748	44.58	30.85	7.45	24.69	45.87	54.00	-8.13	AV
H	4874	45.07	31.02	8.99	25.57	48.61	74.00	-25.39	PK
H	4874	44.81	31.02	8.99	25.57	48.35	54.00	-5.65	AV
H	7311	45.98	30.55	5.77	24.66	45.86	74.00	-28.14	PK
H	7311	46.09	30.55	5.77	24.66	45.97	54.00	-8.03	AV
H	9748	45.55	30.33	6.32	24.55	46.09	74.00	-27.91	PK
H	9748	46.42	30.33	6.32	24.55	46.96	54.00	-7.04	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:2452MHz									
V	4904	52.57	30.55	5.77	24.66	52.45	74.00	-21.55	PK
V	4904	43.22	30.55	5.77	24.66	43.10	54.00	-10.90	AV
V	7356	54.95	30.33	6.32	24.55	55.49	74.00	-18.51	PK
V	7356	46.66	30.33	6.32	24.55	47.20	54.00	-6.80	AV
V	9808	44.19	30.85	7.45	24.69	45.48	74.00	-28.52	PK
V	9808	45.43	30.85	7.45	24.69	46.72	54.00	-7.28	AV
H	4904	44.83	31.02	8.99	25.57	48.37	74.00	-25.63	PK
H	4904	45.83	31.02	8.99	25.57	49.37	54.00	-4.63	AV
H	7356	44.50	30.55	5.77	24.66	44.38	74.00	-29.62	PK
H	7356	44.73	30.55	5.77	24.66	44.61	54.00	-9.39	AV
H	9808	45.36	30.33	6.32	24.55	45.90	74.00	-28.10	PK
H	9808	43.94	30.33	6.32	24.55	44.48	54.00	-9.52	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:2412MHz									
V	4824	58.43	30.55	5.77	24.66	58.31	74.00	-15.69	PK
V	4824	43.65	30.55	5.77	24.66	43.53	54.00	-10.47	AV
V	7236	57.54	30.33	6.32	24.55	58.08	74.00	-15.92	PK
V	7236	44.75	30.33	6.32	24.55	45.29	54.00	-8.71	AV
V	9648	46.15	30.85	7.45	24.69	47.44	74.00	-26.56	PK
V	9648	46.33	30.85	7.45	24.69	47.62	54.00	-6.38	AV
H	4824	46.23	31.02	8.99	25.57	49.77	74.00	-24.23	PK
H	4824	44.60	31.02	8.99	25.57	48.14	54.00	-5.86	AV
H	7236	44.01	30.55	5.77	24.66	43.89	74.00	-30.11	PK
H	7236	44.90	30.55	5.77	24.66	44.78	54.00	-9.22	AV
H	9648	45.70	30.33	6.32	24.55	46.24	74.00	-27.76	PK
H	9648	44.04	30.33	6.32	24.55	44.58	54.00	-9.42	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
Middle Channel:2437MHz									
V	4874	56.18	30.55	5.77	24.66	56.06	74.00	-17.94	PK
V	4874	43.13	30.55	5.77	24.66	43.01	54.00	-10.99	AV
V	7311	55.52	30.33	6.32	24.55	56.06	74.00	-17.94	PK
V	7311	45.57	30.33	6.32	24.55	46.11	54.00	-7.89	AV
V	9748	46.38	30.85	7.45	24.69	47.67	74.00	-26.33	PK
V	9748	43.60	30.85	7.45	24.69	44.89	54.00	-9.11	AV
H	4874	43.92	31.02	8.99	25.57	47.46	74.00	-26.54	PK
H	4874	43.98	31.02	8.99	25.57	47.52	54.00	-6.48	AV
H	7311	45.79	30.55	5.77	24.66	45.67	74.00	-28.33	PK
H	7311	43.99	30.55	5.77	24.66	43.87	54.00	-10.13	AV
H	9748	46.33	30.33	6.32	24.55	46.87	74.00	-27.13	PK
H	9748	46.24	30.33	6.32	24.55	46.78	54.00	-7.22	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:2462MHz									
V	4924	57.01	30.55	5.77	24.66	56.89	74.00	-17.11	PK
V	4924	44.92	30.55	5.77	24.66	44.80	54.00	-9.20	AV
V	7386	55.62	30.33	6.32	24.55	56.16	74.00	-17.84	PK
V	7386	45.24	30.33	6.32	24.55	45.78	54.00	-8.22	AV
V	9848	44.90	30.85	7.45	24.69	46.19	74.00	-27.81	PK

V	9848	44.46	30.85	7.45	24.69	45.75	54.00	-8.25	AV
H	4924	44.69	31.02	8.99	25.57	48.23	74.00	-25.77	PK
H	4924	44.36	31.02	8.99	25.57	47.90	54.00	-6.10	AV
H	7386	46.04	30.55	5.77	24.66	45.92	74.00	-28.08	PK
H	7386	46.54	30.55	5.77	24.66	46.42	54.00	-7.58	AV
H	9848	44.28	30.33	6.32	24.55	44.82	74.00	-29.18	PK
H	9848	45.48	30.33	6.32	24.55	46.02	54.00	-7.98	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:2412MHz									
V	4824	57.85	30.55	5.77	24.66	57.73	74.00	-16.27	PK
V	4824	43.40	30.55	5.77	24.66	43.28	54.00	-10.72	AV
V	7236	55.47	30.33	6.32	24.55	56.01	74.00	-17.99	PK
V	7236	46.57	30.33	6.32	24.55	47.11	54.00	-6.89	AV
V	9648	46.05	30.85	7.45	24.69	47.34	74.00	-26.66	PK
V	9648	44.02	30.85	7.45	24.69	45.31	54.00	-8.69	AV
H	4824	45.79	31.02	8.99	25.57	49.33	74.00	-24.67	PK
H	4824	44.08	31.02	8.99	25.57	47.62	54.00	-6.38	AV
H	7236	44.67	30.55	5.77	24.66	44.55	74.00	-29.45	PK
H	7236	44.04	30.55	5.77	24.66	43.92	54.00	-10.08	AV
H	9648	45.55	30.33	6.32	24.55	46.09	74.00	-27.91	PK
H	9648	45.51	30.33	6.32	24.55	46.05	54.00	-7.95	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:2437MHz									
V	4874	58.39	30.55	5.77	24.66	58.27	74.00	-15.73	PK
V	4874	43.37	30.55	5.77	24.66	43.25	54.00	-10.75	AV
V	7311	55.51	30.33	6.32	24.55	56.05	74.00	-17.95	PK
V	7311	44.92	30.33	6.32	24.55	45.46	54.00	-8.54	AV
V	9748	45.59	30.85	7.45	24.69	46.88	74.00	-27.12	PK
V	9748	45.87	30.85	7.45	24.69	47.16	54.00	-6.84	AV
H	4874	46.44	31.02	8.99	25.57	49.98	74.00	-24.02	PK
H	4874	43.78	31.02	8.99	25.57	47.32	54.00	-6.68	AV
H	7311	44.18	30.55	5.77	24.66	44.06	74.00	-29.94	PK
H	7311	44.66	30.55	5.77	24.66	44.54	54.00	-9.46	AV
H	9748	43.86	30.33	6.32	24.55	44.40	74.00	-29.60	PK
H	9748	44.53	30.33	6.32	24.55	45.07	54.00	-8.93	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:2462MHz									
V	4924	52.18	30.55	5.77	24.66	52.06	74.00	-21.94	PK
V	4924	43.83	30.55	5.77	24.66	43.71	54.00	-10.29	AV
V	7386	54.74	30.33	6.32	24.55	55.28	74.00	-18.72	PK

V	7386	47.06	30.33	6.32	24.55	47.60	54.00	-6.40	AV
V	9848	46.06	30.85	7.45	24.69	47.35	74.00	-26.65	PK
V	9848	43.70	30.85	7.45	24.69	44.99	54.00	-9.01	AV
H	4924	45.08	31.02	8.99	25.57	48.62	74.00	-25.38	PK
H	4924	46.28	31.02	8.99	25.57	49.82	54.00	-4.18	AV
H	7386	43.67	30.55	5.77	24.66	43.55	74.00	-30.45	PK
H	7386	45.34	30.55	5.77	24.66	45.22	54.00	-8.78	AV
H	9848	45.01	30.33	6.32	24.55	45.55	74.00	-28.45	PK
H	9848	45.42	30.33	6.32	24.55	45.96	54.00	-8.04	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:2412MHz									
V	4824	57.60	30.55	5.77	24.66	57.48	74.00	-16.52	PK
V	4824	44.19	30.55	5.77	24.66	44.07	54.00	-9.93	AV
V	7236	55.23	30.33	6.32	24.55	55.77	74.00	-18.23	PK
V	7236	46.79	30.33	6.32	24.55	47.33	54.00	-6.67	AV
V	9648	46.21	30.85	7.45	24.69	47.50	74.00	-26.50	PK
V	9648	43.78	30.85	7.45	24.69	45.07	54.00	-8.93	AV
H	4824	45.19	31.02	8.99	25.57	48.73	74.00	-25.27	PK
H	4824	45.57	31.02	8.99	25.57	49.11	54.00	-4.89	AV
H	7236	45.02	30.55	5.77	24.66	44.90	74.00	-29.10	PK
H	7236	44.12	30.55	5.77	24.66	44.00	54.00	-10.00	AV
H	9648	45.18	30.33	6.32	24.55	45.72	74.00	-28.28	PK
H	9648	44.69	30.33	6.32	24.55	45.23	54.00	-8.77	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:2437MHz									
V	4874	52.96	30.55	5.77	24.66	52.84	74.00	-21.16	PK
V	4874	43.97	30.55	5.77	24.66	43.85	54.00	-10.15	AV
V	7311	56.61	30.33	6.32	24.55	57.15	74.00	-16.85	PK
V	7311	45.43	30.33	6.32	24.55	45.97	54.00	-8.03	AV
V	9748	44.33	30.85	7.45	24.69	45.62	74.00	-28.38	PK
V	9748	46.49	30.85	7.45	24.69	47.78	54.00	-6.22	AV
H	4874	45.20	31.02	8.99	25.57	48.74	74.00	-25.26	PK
H	4874	44.37	31.02	8.99	25.57	47.91	54.00	-6.09	AV
H	7311	44.31	30.55	5.77	24.66	44.19	74.00	-29.81	PK
H	7311	44.78	30.55	5.77	24.66	44.66	54.00	-9.34	AV
H	9748	43.75	30.33	6.32	24.55	44.29	74.00	-29.71	PK
H	9748	46.36	30.33	6.32	24.55	46.90	54.00	-7.10	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:2462MHz									
V	4924	52.86	30.55	5.77	24.66	52.74	74.00	-21.26	PK

V	4924	44.99	30.55	5.77	24.66	44.87	54.00	-9.13	AV
V	7386	54.67	30.33	6.32	24.55	55.21	74.00	-18.79	PK
V	7386	46.67	30.33	6.32	24.55	47.21	54.00	-6.79	AV
V	9848	44.16	30.85	7.45	24.69	45.45	74.00	-28.55	PK
V	9848	43.61	30.85	7.45	24.69	44.90	54.00	-9.10	AV
H	4924	46.06	31.02	8.99	25.57	49.60	74.00	-24.40	PK
H	4924	46.26	31.02	8.99	25.57	49.80	54.00	-4.20	AV
H	7386	46.16	30.55	5.77	24.66	46.04	74.00	-27.96	PK
H	7386	46.00	30.55	5.77	24.66	45.88	54.00	-8.12	AV
H	9848	46.54	30.33	6.32	24.55	47.08	74.00	-26.92	PK
H	9848	43.99	30.33	6.32	24.55	44.53	54.00	-9.47	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:2422MHz									
V	4844	55.75	30.55	5.77	24.66	55.63	74.00	-18.37	PK
V	4844	43.83	30.55	5.77	24.66	43.71	54.00	-10.29	AV
V	7266	55.59	30.33	6.32	24.55	56.13	74.00	-17.87	PK
V	7266	47.58	30.33	6.32	24.55	48.12	54.00	-5.88	AV
V	9688	44.50	30.85	7.45	24.69	45.79	74.00	-28.21	PK
V	9688	46.60	30.85	7.45	24.69	47.89	54.00	-6.11	AV
H	4844	45.90	31.02	8.99	25.57	49.44	74.00	-24.56	PK
H	4844	44.94	31.02	8.99	25.57	48.48	54.00	-5.52	AV
H	7266	43.71	30.55	5.77	24.66	43.59	74.00	-30.41	PK
H	7266	45.32	30.55	5.77	24.66	45.20	54.00	-8.80	AV
H	9688	46.06	30.33	6.32	24.55	46.60	74.00	-27.40	PK
H	9688	46.30	30.33	6.32	24.55	46.84	54.00	-7.16	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:2437MHz									
V	4874	52.03	30.55	5.77	24.66	51.91	74.00	-22.09	PK
V	4874	45.00	30.55	5.77	24.66	44.88	54.00	-9.12	AV
V	7311	57.54	30.33	6.32	24.55	58.08	74.00	-15.92	PK
V	7311	47.50	30.33	6.32	24.55	48.04	54.00	-5.96	AV
V	9748	43.63	30.85	7.45	24.69	44.92	74.00	-29.08	PK
V	9748	45.11	30.85	7.45	24.69	46.40	54.00	-7.60	AV
H	4874	46.20	31.02	8.99	25.57	49.74	74.00	-24.26	PK
H	4874	44.51	31.02	8.99	25.57	48.05	54.00	-5.95	AV
H	7311	45.42	30.55	5.77	24.66	45.30	74.00	-28.70	PK
H	7311	43.93	30.55	5.77	24.66	43.81	54.00	-10.19	AV
H	9748	44.43	30.33	6.32	24.55	44.97	74.00	-29.03	PK
H	9748	45.76	30.33	6.32	24.55	46.30	54.00	-7.70	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:2452MHz									
V	4904	54.64	30.55	5.77	24.66	54.52	74.00	-19.48	PK
V	4904	44.41	30.55	5.77	24.66	44.29	54.00	-9.71	AV
V	7356	56.55	30.33	6.32	24.55	57.09	74.00	-16.91	PK
V	7356	45.80	30.33	6.32	24.55	46.34	54.00	-7.66	AV
V	9808	45.00	30.85	7.45	24.69	46.29	74.00	-27.71	PK
V	9808	46.11	30.85	7.45	24.69	47.40	54.00	-6.60	AV
H	4904	43.61	31.02	8.99	25.57	47.15	74.00	-26.85	PK
H	4904	46.02	31.02	8.99	25.57	49.56	54.00	-4.44	AV
H	7356	44.26	30.55	5.77	24.66	44.14	74.00	-29.86	PK
H	7356	43.79	30.55	5.77	24.66	43.67	54.00	-10.33	AV
H	9808	45.57	30.33	6.32	24.55	46.11	74.00	-27.89	PK
H	9808	45.00	30.33	6.32	24.55	45.54	54.00	-8.46	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:2412MHz									
V	4824	54.24	30.55	5.77	24.66	54.12	74.00	-19.88	PK
V	4824	43.98	30.55	5.77	24.66	43.86	54.00	-10.14	AV
V	7236	54.90	30.33	6.32	24.55	55.44	74.00	-18.56	PK
V	7236	44.98	30.33	6.32	24.55	45.52	54.00	-8.48	AV
V	9648	46.09	30.85	7.45	24.69	47.38	74.00	-26.62	PK
V	9648	46.15	30.85	7.45	24.69	47.44	54.00	-6.56	AV
H	4824	44.92	31.02	8.99	25.57	48.46	74.00	-25.54	PK
H	4824	44.35	31.02	8.99	25.57	47.89	54.00	-6.11	AV
H	7236	44.01	30.55	5.77	24.66	43.89	74.00	-30.11	PK
H	7236	45.02	30.55	5.77	24.66	44.90	54.00	-9.10	AV
H	9648	44.60	30.33	6.32	24.55	45.14	74.00	-28.86	PK
H	9648	46.35	30.33	6.32	24.55	46.89	54.00	-7.11	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:2437MHz									
V	4874	52.93	30.55	5.77	24.66	52.81	74.00	-21.19	PK
V	4874	43.18	30.55	5.77	24.66	43.06	54.00	-10.94	AV
V	7311	56.54	30.33	6.32	24.55	57.08	74.00	-16.92	PK
V	7311	46.14	30.33	6.32	24.55	46.68	54.00	-7.32	AV
V	9748	46.16	30.85	7.45	24.69	47.45	74.00	-26.55	PK
V	9748	44.86	30.85	7.45	24.69	46.15	54.00	-7.85	AV
H	4874	44.02	31.02	8.99	25.57	47.56	74.00	-26.44	PK
H	4874	45.46	31.02	8.99	25.57	49.00	54.00	-5.00	AV
H	7311	43.63	30.55	5.77	24.66	43.51	74.00	-30.49	PK
H	7311	44.92	30.55	5.77	24.66	44.80	54.00	-9.20	AV
H	9748	44.83	30.33	6.32	24.55	45.37	74.00	-28.63	PK
H	9748	46.35	30.33	6.32	24.55	46.89	54.00	-7.11	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:2462MHz									
V	4924	52.80	30.55	5.77	24.66	52.68	74.00	-21.32	PK
V	4924	45.48	30.55	5.77	24.66	45.36	54.00	-8.64	AV
V	7386	56.62	30.33	6.32	24.55	57.16	74.00	-16.84	PK
V	7386	46.63	30.33	6.32	24.55	47.17	54.00	-6.83	AV
V	9848	44.76	30.85	7.45	24.69	46.05	74.00	-27.95	PK
V	9848	45.48	30.85	7.45	24.69	46.77	54.00	-7.23	AV
H	4924	45.34	31.02	8.99	25.57	48.88	74.00	-25.12	PK
H	4924	46.39	31.02	8.99	25.57	49.93	54.00	-4.07	AV
H	7386	44.79	30.55	5.77	24.66	44.67	74.00	-29.33	PK
H	7386	46.28	30.55	5.77	24.66	46.16	54.00	-7.84	AV
H	9848	44.79	30.33	6.32	24.55	45.33	74.00	-28.67	PK
H	9848	46.22	30.33	6.32	24.55	46.76	54.00	-7.24	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:2422MHz									
V	4844	53.03	30.55	5.77	24.66	52.91	74.00	-21.09	PK
V	4844	43.37	30.55	5.77	24.66	43.25	54.00	-10.75	AV
V	7266	57.57	30.33	6.32	24.55	58.11	74.00	-15.89	PK
V	7266	45.52	30.33	6.32	24.55	46.06	54.00	-7.94	AV
V	9688	44.82	30.85	7.45	24.69	46.11	74.00	-27.89	PK
V	9688	44.09	30.85	7.45	24.69	45.38	54.00	-8.62	AV
H	4844	45.77	31.02	8.99	25.57	49.31	74.00	-24.69	PK
H	4844	44.47	31.02	8.99	25.57	48.01	54.00	-5.99	AV
H	7266	43.99	30.55	5.77	24.66	43.87	74.00	-30.13	PK
H	7266	46.42	30.55	5.77	24.66	46.30	54.00	-7.70	AV
H	9688	45.93	30.33	6.32	24.55	46.47	74.00	-27.53	PK
H	9688	45.98	30.33	6.32	24.55	46.52	54.00	-7.48	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:2437MHz									
V	4874	57.86	30.55	5.77	24.66	57.74	74.00	-16.26	PK
V	4874	43.13	30.55	5.77	24.66	43.01	54.00	-10.99	AV
V	7311	56.60	30.33	6.32	24.55	57.14	74.00	-16.86	PK
V	7311	45.58	30.33	6.32	24.55	46.12	54.00	-7.88	AV
V	9748	44.00	30.85	7.45	24.69	45.29	74.00	-28.71	PK
V	9748	43.78	30.85	7.45	24.69	45.07	54.00	-8.93	AV
H	4874	44.62	31.02	8.99	25.57	48.16	74.00	-25.84	PK
H	4874	45.87	31.02	8.99	25.57	49.41	54.00	-4.59	AV
H	7311	44.00	30.55	5.77	24.66	43.88	74.00	-30.12	PK
H	7311	46.38	30.55	5.77	24.66	46.26	54.00	-7.74	AV
H	9748	45.53	30.33	6.32	24.55	46.07	74.00	-27.93	PK
H	9748	45.48	30.33	6.32	24.55	46.02	54.00	-7.98	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:2452MHz									
V	4904	53.92	30.55	5.77	24.66	53.80	74.00	-20.20	PK
V	4904	43.35	30.55	5.77	24.66	43.23	54.00	-10.77	AV
V	7356	56.49	30.33	6.32	24.55	57.03	74.00	-16.97	PK
V	7356	45.14	30.33	6.32	24.55	45.68	54.00	-8.32	AV
V	9808	46.30	30.85	7.45	24.69	47.59	74.00	-26.41	PK
V	9808	46.21	30.85	7.45	24.69	47.50	54.00	-6.50	AV
H	4904	44.25	31.02	8.99	25.57	47.79	74.00	-26.21	PK
H	4904	46.20	31.02	8.99	25.57	49.74	54.00	-4.26	AV
H	7356	43.71	30.55	5.77	24.66	43.59	74.00	-30.41	PK
H	7356	45.07	30.55	5.77	24.66	44.95	54.00	-9.05	AV
H	9808	46.54	30.33	6.32	24.55	47.08	74.00	-26.92	PK
H	9808	44.33	30.33	6.32	24.55	44.87	54.00	-9.13	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:2412MHz									
V	4824	53.58	30.55	5.77	24.66	53.46	74.00	-20.54	PK
V	4824	44.04	30.55	5.77	24.66	43.92	54.00	-10.08	AV
V	7236	56.91	30.33	6.32	24.55	57.45	74.00	-16.55	PK
V	7236	47.45	30.33	6.32	24.55	47.99	54.00	-6.01	AV
V	9648	45.51	30.85	7.45	24.69	46.80	74.00	-27.20	PK
V	9648	46.31	30.85	7.45	24.69	47.60	54.00	-6.40	AV
H	4824	45.46	31.02	8.99	25.57	49.00	74.00	-25.00	PK
H	4824	46.13	31.02	8.99	25.57	49.67	54.00	-4.33	AV
H	7236	44.74	30.55	5.77	24.66	44.62	74.00	-29.38	PK
H	7236	43.88	30.55	5.77	24.66	43.76	54.00	-10.24	AV
H	9648	44.52	30.33	6.32	24.55	45.06	74.00	-28.94	PK
H	9648	45.13	30.33	6.32	24.55	45.67	54.00	-8.33	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:2437MHz									
V	4874	58.55	30.55	5.77	24.66	58.43	74.00	-15.57	PK
V	4874	44.83	30.55	5.77	24.66	44.71	54.00	-9.29	AV
V	7311	55.57	30.33	6.32	24.55	56.11	74.00	-17.89	PK
V	7311	47.07	30.33	6.32	24.55	47.61	54.00	-6.39	AV
V	9748	45.84	30.85	7.45	24.69	47.13	74.00	-26.87	PK
V	9748	44.83	30.85	7.45	24.69	46.12	54.00	-7.88	AV
H	4874	45.76	31.02	8.99	25.57	49.30	74.00	-24.70	PK
H	4874	45.37	31.02	8.99	25.57	48.91	54.00	-5.09	AV
H	7311	45.49	30.55	5.77	24.66	45.37	74.00	-28.63	PK
H	7311	44.31	30.55	5.77	24.66	44.19	54.00	-9.81	AV
H	9748	45.98	30.33	6.32	24.55	46.52	74.00	-27.48	PK
H	9748	46.22	30.33	6.32	24.55	46.76	54.00	-7.24	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
High Channel:2462MHz									
V	4924	54.27	30.55	5.77	24.66	54.15	74.00	-19.85	PK
V	4924	45.13	30.55	5.77	24.66	45.01	54.00	-8.99	AV
V	7386	56.75	30.33	6.32	24.55	57.29	74.00	-16.71	PK
V	7386	47.08	30.33	6.32	24.55	47.62	54.00	-6.38	AV
V	9848	45.96	30.85	7.45	24.69	47.25	74.00	-26.75	PK
V	9848	45.23	30.85	7.45	24.69	46.52	54.00	-7.48	AV
H	4924	43.89	31.02	8.99	25.57	47.43	74.00	-26.57	PK
H	4924	44.19	31.02	8.99	25.57	47.73	54.00	-6.27	AV
H	7386	46.56	30.55	5.77	24.66	46.44	74.00	-27.56	PK
H	7386	44.84	30.55	5.77	24.66	44.72	54.00	-9.28	AV
H	9848	45.88	30.33	6.32	24.55	46.42	74.00	-27.58	PK
H	9848	45.18	30.33	6.32	24.55	45.72	54.00	-8.28	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:2422MHz									
V	4844	53.96	30.55	5.77	24.66	53.84	74.00	-20.16	PK
V	4844	43.47	30.55	5.77	24.66	43.35	54.00	-10.65	AV
V	7266	56.48	30.33	6.32	24.55	57.02	74.00	-16.98	PK
V	7266	45.06	30.33	6.32	24.55	45.60	54.00	-8.40	AV
V	9688	44.60	30.85	7.45	24.69	45.89	74.00	-28.11	PK
V	9688	44.88	30.85	7.45	24.69	46.17	54.00	-7.83	AV
H	4844	46.57	31.02	8.99	25.57	50.11	74.00	-23.89	PK
H	4844	45.36	31.02	8.99	25.57	48.90	54.00	-5.10	AV
H	7266	46.29	30.55	5.77	24.66	46.17	74.00	-27.83	PK
H	7266	46.45	30.55	5.77	24.66	46.33	54.00	-7.67	AV
H	9688	45.04	30.33	6.32	24.55	45.58	74.00	-28.42	PK
H	9688	45.29	30.33	6.32	24.55	45.83	54.00	-8.17	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
Middle Channel:2437MHz									
V	4874	52.25	30.55	5.77	24.66	52.13	74.00	-21.87	PK
V	4874	43.82	30.55	5.77	24.66	43.70	54.00	-10.30	AV
V	7311	55.98	30.33	6.32	24.55	56.52	74.00	-17.48	PK
V	7311	46.80	30.33	6.32	24.55	47.34	54.00	-6.66	AV
V	9748	46.54	30.85	7.45	24.69	47.83	74.00	-26.17	PK
V	9748	43.74	30.85	7.45	24.69	45.03	54.00	-8.97	AV
H	4874	44.37	31.02	8.99	25.57	47.91	74.00	-26.09	PK
H	4874	46.43	31.02	8.99	25.57	49.97	54.00	-4.03	AV
H	7311	45.18	30.55	5.77	24.66	45.06	74.00	-28.94	PK
H	7311	45.37	30.55	5.77	24.66	45.25	54.00	-8.75	AV
H	9748	45.64	30.33	6.32	24.55	46.18	74.00	-27.82	PK
H	9748	43.66	30.33	6.32	24.55	44.20	54.00	-9.80	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:2452MHz									
V	4904	52.30	30.55	5.77	24.66	52.18	74.00	-21.82	PK
V	4904	44.79	30.55	5.77	24.66	44.67	54.00	-9.33	AV
V	7356	55.11	30.33	6.32	24.55	55.65	74.00	-18.35	PK
V	7356	47.53	30.33	6.32	24.55	48.07	54.00	-5.93	AV
V	9808	45.54	30.85	7.45	24.69	46.83	74.00	-27.17	PK
V	9808	46.27	30.85	7.45	24.69	47.56	54.00	-6.44	AV
H	4904	44.93	31.02	8.99	25.57	48.47	74.00	-25.53	PK
H	4904	46.58	31.02	8.99	25.57	50.12	54.00	-3.88	AV
H	7356	45.05	30.55	5.77	24.66	44.93	74.00	-29.07	PK
H	7356	45.96	30.55	5.77	24.66	45.84	54.00	-8.16	AV
H	9808	44.75	30.33	6.32	24.55	45.29	74.00	-28.71	PK
H	9808	46.25	30.33	6.32	24.55	46.79	54.00	-7.21	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:2412MHz									
V	4824	56.02	30.55	5.77	24.66	55.90	74.00	-18.10	PK
V	4824	43.31	30.55	5.77	24.66	43.19	54.00	-10.81	AV
V	7236	56.70	30.33	6.32	24.55	57.24	74.00	-16.76	PK
V	7236	46.99	30.33	6.32	24.55	47.53	54.00	-6.47	AV
V	9648	44.13	30.85	7.45	24.69	45.42	74.00	-28.58	PK
V	9648	45.61	30.85	7.45	24.69	46.90	54.00	-7.10	AV
H	4824	46.04	31.02	8.99	25.57	49.58	74.00	-24.42	PK
H	4824	45.02	31.02	8.99	25.57	48.56	54.00	-5.44	AV
H	7236	44.96	30.55	5.77	24.66	44.84	74.00	-29.16	PK
H	7236	46.05	30.55	5.77	24.66	45.93	54.00	-8.07	AV
H	9648	44.05	30.33	6.32	24.55	44.59	74.00	-29.41	PK
H	9648	44.50	30.33	6.32	24.55	45.04	54.00	-8.96	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:2437MHz									
V	4874	55.77	30.55	5.77	24.66	55.65	74.00	-18.35	PK
V	4874	44.95	30.55	5.77	24.66	44.83	54.00	-9.17	AV
V	7311	56.77	30.33	6.32	24.55	57.31	74.00	-16.69	PK
V	7311	46.74	30.33	6.32	24.55	47.28	54.00	-6.72	AV
V	9748	44.41	30.85	7.45	24.69	45.70	74.00	-28.30	PK
V	9748	45.89	30.85	7.45	24.69	47.18	54.00	-6.82	AV
H	4874	44.64	31.02	8.99	25.57	48.18	74.00	-25.82	PK
H	4874	46.07	31.02	8.99	25.57	49.61	54.00	-4.39	AV
H	7311	44.18	30.55	5.77	24.66	44.06	74.00	-29.94	PK
H	7311	46.39	30.55	5.77	24.66	46.27	54.00	-7.73	AV
H	9748	44.11	30.33	6.32	24.55	44.65	74.00	-29.35	PK
H	9748	45.31	30.33	6.32	24.55	45.85	54.00	-8.15	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:2462MHz									
V	4924	55.03	30.55	5.77	24.66	54.91	74.00	-19.09	PK
V	4924	43.80	30.55	5.77	24.66	43.68	54.00	-10.32	AV
V	7386	54.81	30.33	6.32	24.55	55.35	74.00	-18.65	PK
V	7386	46.31	30.33	6.32	24.55	46.85	54.00	-7.15	AV
V	9848	46.01	30.85	7.45	24.69	47.30	74.00	-26.70	PK
V	9848	45.24	30.85	7.45	24.69	46.53	54.00	-7.47	AV
H	4924	44.71	31.02	8.99	25.57	48.25	74.00	-25.75	PK
H	4924	44.40	31.02	8.99	25.57	47.94	54.00	-6.06	AV
H	7386	43.77	30.55	5.77	24.66	43.65	74.00	-30.35	PK
H	7386	45.55	30.55	5.77	24.66	45.43	54.00	-8.57	AV
H	9848	45.98	30.33	6.32	24.55	46.52	74.00	-27.48	PK
H	9848	45.82	30.33	6.32	24.55	46.36	54.00	-7.64	AV

MIMO-802.11ax40

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:2422MHz									
V	4844	52.90	30.55	5.77	24.66	52.78	74.00	-21.22	PK
V	4844	43.55	30.55	5.77	24.66	43.43	54.00	-10.57	AV
V	7266	55.27	30.33	6.32	24.55	55.81	74.00	-18.19	PK
V	7266	47.49	30.33	6.32	24.55	48.03	54.00	-5.97	AV
V	9688	45.10	30.85	7.45	24.69	46.39	74.00	-27.61	PK
V	9688	45.52	30.85	7.45	24.69	46.81	54.00	-7.19	AV
H	4844	44.90	31.02	8.99	25.57	48.44	74.00	-25.56	PK
H	4844	46.53	31.02	8.99	25.57	50.07	54.00	-3.93	AV
H	7266	46.05	30.55	5.77	24.66	45.93	74.00	-28.07	PK
H	7266	44.40	30.55	5.77	24.66	44.28	54.00	-9.72	AV
H	9688	43.94	30.33	6.32	24.55	44.48	74.00	-29.52	PK
H	9688	45.65	30.33	6.32	24.55	46.19	54.00	-7.81	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:2437MHz									
V	4874	54.14	30.55	5.77	24.66	54.02	74.00	-19.98	PK
V	4874	45.13	30.55	5.77	24.66	45.01	54.00	-8.99	AV
V	7311	56.24	30.33	6.32	24.55	56.78	74.00	-17.22	PK
V	7311	44.97	30.33	6.32	24.55	45.51	54.00	-8.49	AV
V	9748	45.58	30.85	7.45	24.69	46.87	74.00	-27.13	PK
V	9748	45.35	30.85	7.45	24.69	46.64	54.00	-7.36	AV
H	4874	43.72	31.02	8.99	25.57	47.26	74.00	-26.74	PK
H	4874	45.02	31.02	8.99	25.57	48.56	54.00	-5.44	AV
H	7311	44.89	30.55	5.77	24.66	44.77	74.00	-29.23	PK
H	7311	44.73	30.55	5.77	24.66	44.61	54.00	-9.39	AV
H	9748	45.68	30.33	6.32	24.55	46.22	74.00	-27.78	PK
H	9748	45.20	30.33	6.32	24.55	45.74	54.00	-8.26	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:2452MHz									
V	4904	51.78	30.55	5.77	24.66	51.66	74.00	-22.34	PK
V	4904	42.90	30.55	5.77	24.66	42.78	54.00	-11.22	AV
V	7356	55.08	30.33	6.32	24.55	55.62	74.00	-18.38	PK
V	7356	45.60	30.33	6.32	24.55	46.14	54.00	-7.86	AV
V	9808	44.47	30.85	7.45	24.69	45.76	74.00	-28.24	PK
V	9808	44.36	30.85	7.45	24.69	45.65	54.00	-8.35	AV
H	4904	46.59	31.02	8.99	25.57	50.13	74.00	-23.87	PK
H	4904	46.41	31.02	8.99	25.57	49.95	54.00	-4.05	AV
H	7356	45.97	30.55	5.77	24.66	45.85	74.00	-28.15	PK
H	7356	43.82	30.55	5.77	24.66	43.70	54.00	-10.30	AV
H	9808	45.51	30.33	6.32	24.55	46.05	74.00	-27.95	PK
H	9808	44.81	30.33	6.32	24.55	45.35	54.00	-8.65	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.

5.RADIATED BAND EMISSIONMEASUREMENT

5.1 TEST REQUIREMENT:

Test Requirement:	FCC Part15 C Section 15.209 and 15.205
Test Method:	ANSI C63.10: 2013
Test Frequency Range:	All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.
Test site:	Measurement Distance: 3m
Receiver setup:	

Frequency	Detector	RBW	VBW	Value
Above 1GHz	Peak	1MHz	3MHz	Peak
	Average	1MHz	3MHz	Average

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

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

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

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

5.2 TEST PROCEDURE

Above 1GHz test procedure as below:

a. 1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. 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 a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of 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 to heights from 1 meter to 4 meters and the rota 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.

g. Test the EUT in the lowest channel,the Highest channel

Note:

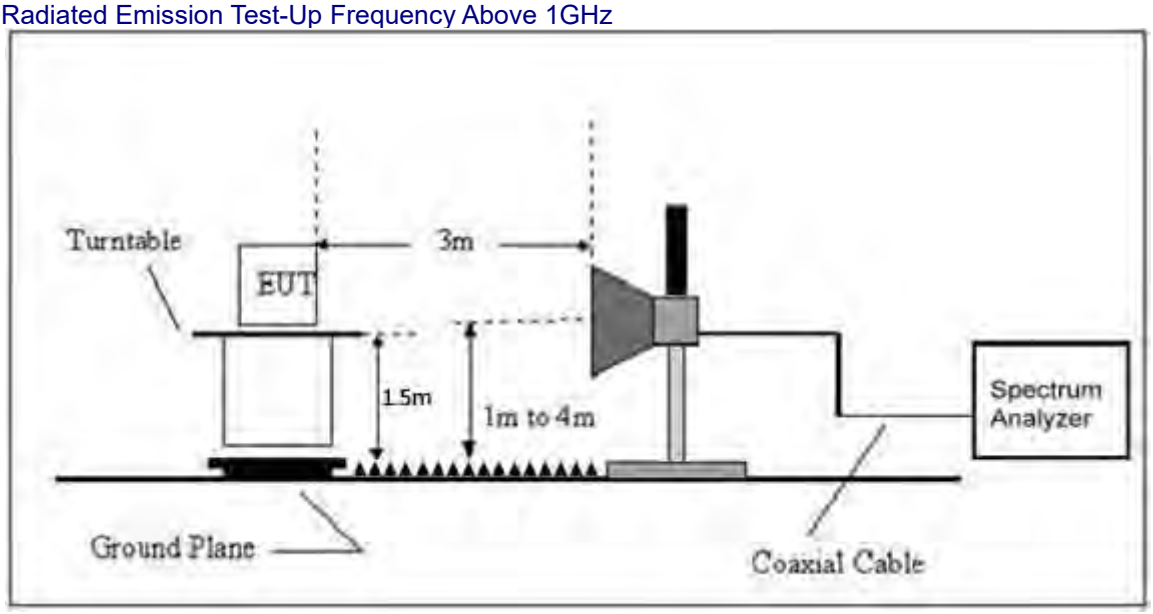
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

5.3 DEVIATION FROM TEST STANDARD

No deviation

5.4 TEST SETUP

Radiated Emission Test-Up Frequency Above 1GHz



5.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

5.6 TEST RESULT

ANT1

	Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Detector Type	Result
802.11b	Low Channel 2412MHz									
	H	2390.00	56.56	30.22	4.85	23.98	55.17	74.00	PK	PASS
	H	2390.00	43.48	30.22	4.85	23.98	42.09	54.00	AV	PASS
	H	2400.00	55.44	30.22	4.85	23.98	54.05	74.00	PK	PASS
	H	2400.00	47.52	30.22	4.85	23.98	46.13	54.00	AV	PASS
	V	2390.00	53.37	30.22	4.85	23.98	51.98	74.00	PK	PASS
	V	2390.00	44.43	30.22	4.85	23.98	43.04	54.00	AV	PASS
	V	2400.00	54.86	30.22	4.85	23.98	53.47	74.00	PK	PASS
	V	2400.00	46.03	30.22	4.85	23.98	44.64	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	58.57	30.22	4.85	23.98	57.18	74.00	PK	PASS
	H	2483.50	44.25	30.22	4.85	23.98	42.86	54.00	AV	PASS
	H	2500.00	56.52	30.22	4.85	23.98	55.13	74.00	PK	PASS
	H	2500.00	46.23	30.22	4.85	23.98	44.84	54.00	AV	PASS
	V	2483.50	57.96	30.22	4.85	23.98	56.57	74.00	PK	PASS
	V	2483.50	43.51	30.22	4.85	23.98	42.12	54.00	AV	PASS
	V	2500.00	55.10	30.22	4.85	23.98	53.71	74.00	PK	PASS
	V	2500.00	47.08	30.22	4.85	23.98	45.69	54.00	AV	PASS

802.11g	Low Channel 2412MHz									
	H	2390.00	52.19	30.22	4.85	23.98	50.80	74.00	PK	PASS
	H	2390.00	44.49	30.22	4.85	23.98	43.10	54.00	AV	PASS
	H	2400.00	56.06	30.22	4.85	23.98	54.67	74.00	PK	PASS
	H	2400.00	45.69	30.22	4.85	23.98	44.30	54.00	AV	PASS
	V	2390.00	55.11	30.22	4.85	23.98	53.72	74.00	PK	PASS
	V	2390.00	43.55	30.22	4.85	23.98	42.16	54.00	AV	PASS
	V	2400.00	56.74	30.22	4.85	23.98	55.35	74.00	PK	PASS
	V	2400.00	44.92	30.22	4.85	23.98	43.53	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	55.17	30.22	4.85	23.98	53.78	74.00	PK	PASS
	H	2483.50	42.76	30.22	4.85	23.98	41.37	54.00	AV	PASS
	H	2500.00	55.68	30.22	4.85	23.98	54.29	74.00	PK	PASS
	H	2500.00	46.00	30.22	4.85	23.98	44.61	54.00	AV	PASS
	V	2483.50	52.03	30.22	4.85	23.98	50.64	74.00	PK	PASS
	V	2483.50	42.95	30.22	4.85	23.98	41.56	54.00	AV	PASS
	V	2500.00	56.76	30.22	4.85	23.98	55.37	74.00	PK	PASS
	V	2500.00	46.56	30.22	4.85	23.98	45.17	54.00	AV	PASS

802.11n20	Low Channel 2412MHz									
	H	2390.00	55.45	30.22	4.85	23.98	54.06	74.00	PK	PASS
	H	2390.00	45.35	30.22	4.85	23.98	43.96	54.00	AV	PASS
	H	2400.00	54.79	30.22	4.85	23.98	53.40	74.00	PK	PASS
	H	2400.00	45.34	30.22	4.85	23.98	43.95	54.00	AV	PASS
	V	2390.00	51.97	30.22	4.85	23.98	50.58	74.00	PK	PASS
	V	2390.00	44.07	30.22	4.85	23.98	42.68	54.00	AV	PASS
	V	2400.00	55.39	30.22	4.85	23.98	54.00	74.00	PK	PASS
	V	2400.00	47.47	30.22	4.85	23.98	46.08	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	53.83	30.22	4.85	23.98	52.44	74.00	PK	PASS
	H	2483.50	44.14	30.22	4.85	23.98	42.75	54.00	AV	PASS
	H	2500.00	56.35	30.22	4.85	23.98	54.96	74.00	PK	PASS
	H	2500.00	45.81	30.22	4.85	23.98	44.42	54.00	AV	PASS

	V	2483.50	54.08	30.22	4.85	23.98	52.69	74.00	PK	PASS
	V	2483.50	42.64	30.22	4.85	23.98	41.25	54.00	AV	PASS
	V	2500.00	54.67	30.22	4.85	23.98	53.28	74.00	PK	PASS
	V	2500.00	46.74	30.22	4.85	23.98	45.35	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

802.11n40	Low Channel 2422MHz									
	H	2390.00	57.11	30.22	4.85	23.98	55.72	74.00	PK	PASS
	H	2390.00	43.57	30.22	4.85	23.98	42.18	54.00	AV	PASS
	H	2400.00	55.88	30.22	4.85	23.98	54.49	74.00	PK	PASS
	H	2400.00	45.51	30.22	4.85	23.98	44.12	54.00	AV	PASS
	V	2390.00	52.44	30.22	4.85	23.98	51.05	74.00	PK	PASS
	V	2390.00	44.46	30.22	4.85	23.98	43.07	54.00	AV	PASS
	V	2400.00	55.24	30.22	4.85	23.98	53.85	74.00	PK	PASS
	V	2400.00	47.28	30.22	4.85	23.98	45.89	54.00	AV	PASS
	High Channel 2452MHz									
	H	2483.50	52.67	30.22	4.85	23.98	51.28	74.00	PK	PASS
	H	2483.50	44.13	30.22	4.85	23.98	42.74	54.00	AV	PASS
	H	2500.00	55.20	30.22	4.85	23.98	53.81	74.00	PK	PASS
	H	2500.00	47.06	30.22	4.85	23.98	45.67	54.00	AV	PASS
	V	2483.50	55.71	30.22	4.85	23.98	54.32	74.00	PK	PASS
	V	2483.50	45.56	30.22	4.85	23.98	44.17	54.00	AV	PASS
	V	2500.00	54.71	30.22	4.85	23.98	53.32	74.00	PK	PASS
	V	2500.00	46.77	30.22	4.85	23.98	45.38	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

802.11ax20	Low Channel 2412MHz									
	H	2390.00	52.13	30.22	4.85	23.98	50.74	74.00	PK	PASS
	H	2390.00	43.00	30.22	4.85	23.98	41.61	54.00	AV	PASS
	H	2400.00	57.22	30.22	4.85	23.98	55.83	74.00	PK	PASS
	H	2400.00	45.52	30.22	4.85	23.98	44.13	54.00	AV	PASS
	V	2390.00	57.90	30.22	4.85	23.98	56.51	74.00	PK	PASS
	V	2390.00	43.45	30.22	4.85	23.98	42.06	54.00	AV	PASS
	V	2400.00	54.92	30.22	4.85	23.98	53.53	74.00	PK	PASS
	V	2400.00	45.47	30.22	4.85	23.98	44.08	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	58.04	30.22	4.85	23.98	56.65	74.00	PK	PASS
	H	2483.50	44.11	30.22	4.85	23.98	42.72	54.00	AV	PASS
	H	2500.00	57.57	30.22	4.85	23.98	56.18	74.00	PK	PASS
	H	2500.00	46.05	30.22	4.85	23.98	44.66	54.00	AV	PASS
	V	2483.50	55.06	30.22	4.85	23.98	53.67	74.00	PK	PASS
	V	2483.50	43.25	30.22	4.85	23.98	41.86	54.00	AV	PASS
	V	2500.00	55.86	30.22	4.85	23.98	54.47	74.00	PK	PASS
	V	2500.00	47.57	30.22	4.85	23.98	46.18	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

802.11ax40	Low Channel 2412MHz									
	H	2390.00	54.35	30.22	4.85	23.98	52.96	74.00	PK	PASS
	H	2390.00	42.93	30.22	4.85	23.98	41.54	54.00	AV	PASS
	H	2400.00	55.74	30.22	4.85	23.98	54.35	74.00	PK	PASS
	H	2400.00	45.16	30.22	4.85	23.98	43.77	54.00	AV	PASS

	V	2390.00	53.40	30.22	4.85	23.98	52.01	74.00	PK	PASS
	V	2390.00	43.11	30.22	4.85	23.98	41.72	54.00	AV	PASS
	V	2400.00	54.66	30.22	4.85	23.98	53.27	74.00	PK	PASS
	V	2400.00	45.00	30.22	4.85	23.98	43.61	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	53.99	30.22	4.85	23.98	52.60	74.00	PK	PASS
	H	2483.50	45.10	30.22	4.85	23.98	43.71	54.00	AV	PASS
	H	2500.00	56.38	30.22	4.85	23.98	54.99	74.00	PK	PASS
	H	2500.00	47.25	30.22	4.85	23.98	45.86	54.00	AV	PASS
	V	2483.50	55.85	30.22	4.85	23.98	54.46	74.00	PK	PASS
	V	2483.50	42.83	30.22	4.85	23.98	41.44	54.00	AV	PASS
	V	2500.00	54.77	30.22	4.85	23.98	53.38	74.00	PK	PASS
	V	2500.00	45.76	30.22	4.85	23.98	44.37	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

ANT2

	Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Detector Type	Result
802.11b	Low Channel 2412MHz									
	H	2390.00	54.62	30.22	4.85	23.98	53.23	74.00	PK	PASS
	H	2390.00	43.09	30.22	4.85	23.98	41.70	54.00	AV	PASS
	H	2400.00	55.09	30.22	4.85	23.98	53.70	74.00	PK	PASS
	H	2400.00	46.59	30.22	4.85	23.98	45.20	54.00	AV	PASS
	V	2390.00	52.84	30.22	4.85	23.98	51.45	74.00	PK	PASS
	V	2390.00	43.23	30.22	4.85	23.98	41.84	54.00	AV	PASS
	V	2400.00	56.64	30.22	4.85	23.98	55.25	74.00	PK	PASS
	V	2400.00	44.86	30.22	4.85	23.98	43.47	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	53.27	30.22	4.85	23.98	51.88	74.00	PK	PASS
	H	2483.50	44.86	30.22	4.85	23.98	43.47	54.00	AV	PASS
	H	2500.00	55.86	30.22	4.85	23.98	54.47	74.00	PK	PASS
	H	2500.00	45.77	30.22	4.85	23.98	44.38	54.00	AV	PASS
	V	2483.50	58.34	30.22	4.85	23.98	56.95	74.00	PK	PASS
	V	2483.50	42.63	30.22	4.85	23.98	41.24	54.00	AV	PASS
	V	2500.00	56.08	30.22	4.85	23.98	54.69	74.00	PK	PASS
	V	2500.00	44.81	30.22	4.85	23.98	43.42	54.00	AV	PASS

802.11g	Low Channel 2412MHz									
	H	2390.00	52.20	30.22	4.85	23.98	50.81	74.00	PK	PASS
	H	2390.00	45.35	30.22	4.85	23.98	43.96	54.00	AV	PASS
	H	2400.00	56.52	30.22	4.85	23.98	55.13	74.00	PK	PASS
	H	2400.00	45.39	30.22	4.85	23.98	44.00	54.00	AV	PASS
	V	2390.00	58.47	30.22	4.85	23.98	57.08	74.00	PK	PASS
	V	2390.00	43.92	30.22	4.85	23.98	42.53	54.00	AV	PASS
	V	2400.00	55.60	30.22	4.85	23.98	54.21	74.00	PK	PASS
	V	2400.00	45.62	30.22	4.85	23.98	44.23	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	51.66	30.22	4.85	23.98	50.27	74.00	PK	PASS
	H	2483.50	44.69	30.22	4.85	23.98	43.30	54.00	AV	PASS
	H	2500.00	54.61	30.22	4.85	23.98	53.22	74.00	PK	PASS
	H	2500.00	45.43	30.22	4.85	23.98	44.04	54.00	AV	PASS
	V	2483.50	52.43	30.22	4.85	23.98	51.04	74.00	PK	PASS

	V	2483.50	43.44	30.22	4.85	23.98	42.05	54.00	AV	PASS
	V	2500.00	54.97	30.22	4.85	23.98	53.58	74.00	PK	PASS
	V	2500.00	47.60	30.22	4.85	23.98	46.21	54.00	AV	PASS

802.11n20	Low Channel 2412MHz									
	H	2390.00	52.09	30.22	4.85	23.98	50.70	74.00	PK	PASS
	H	2390.00	45.12	30.22	4.85	23.98	43.73	54.00	AV	PASS
	H	2400.00	55.42	30.22	4.85	23.98	54.03	74.00	PK	PASS
	H	2400.00	47.17	30.22	4.85	23.98	45.78	54.00	AV	PASS
	V	2390.00	53.72	30.22	4.85	23.98	52.33	74.00	PK	PASS
	V	2390.00	44.11	30.22	4.85	23.98	42.72	54.00	AV	PASS
	V	2400.00	54.78	30.22	4.85	23.98	53.39	74.00	PK	PASS
	V	2400.00	46.35	30.22	4.85	23.98	44.96	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	54.14	30.22	4.85	23.98	52.75	74.00	PK	PASS
	H	2483.50	42.87	30.22	4.85	23.98	41.48	54.00	AV	PASS
	H	2500.00	55.27	30.22	4.85	23.98	53.88	74.00	PK	PASS
	H	2500.00	46.33	30.22	4.85	23.98	44.94	54.00	AV	PASS
	V	2483.50	53.39	30.22	4.85	23.98	52.00	74.00	PK	PASS
	V	2483.50	45.18	30.22	4.85	23.98	43.79	54.00	AV	PASS
	V	2500.00	57.01	30.22	4.85	23.98	55.62	74.00	PK	PASS
	V	2500.00	46.79	30.22	4.85	23.98	45.40	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

802.11n40	Low Channel 2422MHz									
	H	2390.00	57.97	30.22	4.85	23.98	56.58	74.00	PK	PASS
	H	2390.00	45.12	30.22	4.85	23.98	43.73	54.00	AV	PASS
	H	2400.00	57.37	30.22	4.85	23.98	55.98	74.00	PK	PASS
	H	2400.00	46.18	30.22	4.85	23.98	44.79	54.00	AV	PASS
	V	2390.00	53.63	30.22	4.85	23.98	52.24	74.00	PK	PASS
	V	2390.00	44.96	30.22	4.85	23.98	43.57	54.00	AV	PASS
	V	2400.00	57.15	30.22	4.85	23.98	55.76	74.00	PK	PASS
	V	2400.00	44.83	30.22	4.85	23.98	43.44	54.00	AV	PASS
	High Channel 2452MHz									
	H	2483.50	52.93	30.22	4.85	23.98	51.54	74.00	PK	PASS
	H	2483.50	45.06	30.22	4.85	23.98	43.67	54.00	AV	PASS
	H	2500.00	56.61	30.22	4.85	23.98	55.22	74.00	PK	PASS
	H	2500.00	46.47	30.22	4.85	23.98	45.08	54.00	AV	PASS
	V	2483.50	58.36	30.22	4.85	23.98	56.97	74.00	PK	PASS
	V	2483.50	44.35	30.22	4.85	23.98	42.96	54.00	AV	PASS
	V	2500.00	55.87	30.22	4.85	23.98	54.48	74.00	PK	PASS
	V	2500.00	45.72	30.22	4.85	23.98	44.33	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

802.11ax20	Low Channel 2412MHz									
	H	2390.00	56.90	30.22	4.85	23.98	55.51	74.00	PK	PASS
	H	2390.00	42.81	30.22	4.85	23.98	41.42	54.00	AV	PASS
	H	2400.00	57.46	30.22	4.85	23.98	56.07	74.00	PK	PASS
	H	2400.00	47.26	30.22	4.85	23.98	45.87	54.00	AV	PASS
	V	2390.00	58.42	30.22	4.85	23.98	57.03	74.00	PK	PASS
	V	2390.00	42.73	30.22	4.85	23.98	41.34	54.00	AV	PASS
	V	2400.00	56.13	30.22	4.85	23.98	54.74	74.00	PK	PASS
	V	2400.00	46.22	30.22	4.85	23.98	44.83	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	54.44	30.22	4.85	23.98	53.05	74.00	PK	PASS
	H	2483.50	42.92	30.22	4.85	23.98	41.53	54.00	AV	PASS
	H	2500.00	54.74	30.22	4.85	23.98	53.35	74.00	PK	PASS
	H	2500.00	47.22	30.22	4.85	23.98	45.83	54.00	AV	PASS
	V	2483.50	53.54	30.22	4.85	23.98	52.15	74.00	PK	PASS
	V	2483.50	43.01	30.22	4.85	23.98	41.62	54.00	AV	PASS
	V	2500.00	56.93	30.22	4.85	23.98	55.54	74.00	PK	PASS
	V	2500.00	45.33	30.22	4.85	23.98	43.94	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

802.11ax40	Low Channel 2412MHz									
	H	2390.00	56.92	30.22	4.85	23.98	55.53	74.00	PK	PASS
	H	2390.00	42.99	30.22	4.85	23.98	41.60	54.00	AV	PASS
	H	2400.00	55.00	30.22	4.85	23.98	53.61	74.00	PK	PASS
	H	2400.00	47.14	30.22	4.85	23.98	45.75	54.00	AV	PASS
	V	2390.00	54.99	30.22	4.85	23.98	53.60	74.00	PK	PASS
	V	2390.00	44.91	30.22	4.85	23.98	43.52	54.00	AV	PASS
	V	2400.00	56.52	30.22	4.85	23.98	55.13	74.00	PK	PASS
	V	2400.00	44.83	30.22	4.85	23.98	43.44	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	57.47	30.22	4.85	23.98	56.08	74.00	PK	PASS
	H	2483.50	45.55	30.22	4.85	23.98	44.16	54.00	AV	PASS
	H	2500.00	57.15	30.22	4.85	23.98	55.76	74.00	PK	PASS
	H	2500.00	45.84	30.22	4.85	23.98	44.45	54.00	AV	PASS
	V	2483.50	54.92	30.22	4.85	23.98	53.53	74.00	PK	PASS
	V	2483.50	44.59	30.22	4.85	23.98	43.20	54.00	AV	PASS
	V	2500.00	56.16	30.22	4.85	23.98	54.77	74.00	PK	PASS
	V	2500.00	47.37	30.22	4.85	23.98	45.98	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

MIMO

802.11n20	Low Channel 2412MHz									
	H	2390.00	56.27	30.22	4.85	23.98	54.88	74.00	PK	PASS
	H	2390.00	43.77	30.22	4.85	23.98	42.38	54.00	AV	PASS
	H	2400.00	56.48	30.22	4.85	23.98	55.09	74.00	PK	PASS
	H	2400.00	44.73	30.22	4.85	23.98	43.34	54.00	AV	PASS
	V	2390.00	57.23	30.22	4.85	23.98	55.84	74.00	PK	PASS
	V	2390.00	43.35	30.22	4.85	23.98	41.96	54.00	AV	PASS
	V	2400.00	55.94	30.22	4.85	23.98	54.55	74.00	PK	PASS
	V	2400.00	47.38	30.22	4.85	23.98	45.99	54.00	AV	PASS
	High Channel 2462MHz									

	H	2483.50	52.39	30.22	4.85	23.98	51.00	74.00	PK	PASS
	H	2483.50	43.15	30.22	4.85	23.98	41.76	54.00	AV	PASS
	H	2500.00	55.78	30.22	4.85	23.98	54.39	74.00	PK	PASS
	H	2500.00	47.13	30.22	4.85	23.98	45.74	54.00	AV	PASS
	V	2483.50	55.45	30.22	4.85	23.98	54.06	74.00	PK	PASS
	V	2483.50	44.33	30.22	4.85	23.98	42.94	54.00	AV	PASS
	V	2500.00	57.60	30.22	4.85	23.98	56.21	74.00	PK	PASS
	V	2500.00	47.24	30.22	4.85	23.98	45.85	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

802.11n40	Low Channel 2422MHz									
	H	2390.00	54.70	30.22	4.85	23.98	53.31	74.00	PK	PASS
	H	2390.00	44.01	30.22	4.85	23.98	42.62	54.00	AV	PASS
	H	2400.00	54.70	30.22	4.85	23.98	53.31	74.00	PK	PASS
	H	2400.00	47.45	30.22	4.85	23.98	46.06	54.00	AV	PASS
	V	2390.00	54.68	30.22	4.85	23.98	53.29	74.00	PK	PASS
	V	2390.00	45.31	30.22	4.85	23.98	43.92	54.00	AV	PASS
	V	2400.00	54.62	30.22	4.85	23.98	53.23	74.00	PK	PASS
	V	2400.00	45.51	30.22	4.85	23.98	44.12	54.00	AV	PASS
	High Channel 2452MHz									
	H	2483.50	51.64	30.22	4.85	23.98	50.25	74.00	PK	PASS
	H	2483.50	45.39	30.22	4.85	23.98	44.00	54.00	AV	PASS
	H	2500.00	55.74	30.22	4.85	23.98	54.35	74.00	PK	PASS
	H	2500.00	46.70	30.22	4.85	23.98	45.31	54.00	AV	PASS
	V	2483.50	54.21	30.22	4.85	23.98	52.82	74.00	PK	PASS
	V	2483.50	44.42	30.22	4.85	23.98	43.03	54.00	AV	PASS
	V	2500.00	56.57	30.22	4.85	23.98	55.18	74.00	PK	PASS
	V	2500.00	47.33	30.22	4.85	23.98	45.94	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

MIMO

802.11ax20	Low Channel 2412MHz									
	H	2390.00	52.63	30.22	4.85	23.98	51.24	74.00	PK	PASS
	H	2390.00	43.57	30.22	4.85	23.98	42.18	54.00	AV	PASS
	H	2400.00	54.69	30.22	4.85	23.98	53.30	74.00	PK	PASS
	H	2400.00	45.95	30.22	4.85	23.98	44.56	54.00	AV	PASS
	V	2390.00	54.14	30.22	4.85	23.98	52.75	74.00	PK	PASS
	V	2390.00	43.83	30.22	4.85	23.98	42.44	54.00	AV	PASS
	V	2400.00	56.56	30.22	4.85	23.98	55.17	74.00	PK	PASS
	V	2400.00	47.49	30.22	4.85	23.98	46.10	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	52.37	30.22	4.85	23.98	50.98	74.00	PK	PASS
	H	2483.50	42.98	30.22	4.85	23.98	41.59	54.00	AV	PASS
	H	2500.00	56.03	30.22	4.85	23.98	54.64	74.00	PK	PASS
	H	2500.00	46.10	30.22	4.85	23.98	44.71	54.00	AV	PASS
	V	2483.50	57.91	30.22	4.85	23.98	56.52	74.00	PK	PASS
	V	2483.50	43.59	30.22	4.85	23.98	42.20	54.00	AV	PASS
	V	2500.00	56.09	30.22	4.85	23.98	54.70	74.00	PK	PASS
	V	2500.00	47.15	30.22	4.85	23.98	45.76	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

802.11ax40	Low Channel 2422MHz									
	H	2390.00	53.70	30.22	4.85	23.98	52.31	74.00	PK	PASS
	H	2390.00	45.48	30.22	4.85	23.98	44.09	54.00	AV	PASS
	H	2400.00	57.04	30.22	4.85	23.98	55.65	74.00	PK	PASS
	H	2400.00	47.24	30.22	4.85	23.98	45.85	54.00	AV	PASS
	V	2390.00	54.61	30.22	4.85	23.98	53.22	74.00	PK	PASS
	V	2390.00	44.18	30.22	4.85	23.98	42.79	54.00	AV	PASS
	V	2400.00	54.73	30.22	4.85	23.98	53.34	74.00	PK	PASS
	V	2400.00	44.80	30.22	4.85	23.98	43.41	54.00	AV	PASS
	High Channel 2452MHz									
	H	2483.50	52.15	30.22	4.85	23.98	50.76	74.00	PK	PASS
	H	2483.50	42.72	30.22	4.85	23.98	41.33	54.00	AV	PASS
	H	2500.00	56.28	30.22	4.85	23.98	54.89	74.00	PK	PASS
	H	2500.00	44.81	30.22	4.85	23.98	43.42	54.00	AV	PASS
	V	2483.50	56.32	30.22	4.85	23.98	54.93	74.00	PK	PASS
	V	2483.50	45.17	30.22	4.85	23.98	43.78	54.00	AV	PASS
	V	2500.00	56.41	30.22	4.85	23.98	55.02	74.00	PK	PASS
	V	2500.00	44.93	30.22	4.85	23.98	43.54	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

6.POWER SPECTRAL DENSITY TEST

Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	KDB558074 D0115.247 Meas Guidance v 05r02

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8dBm/3kHz	2400-2483.5	PASS

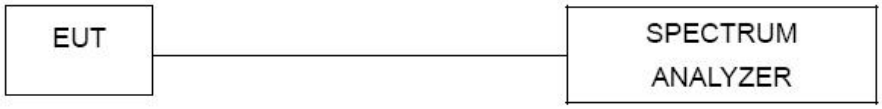
6.2 TEST PROCEDURE

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.

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

6.6 TEST RESULT

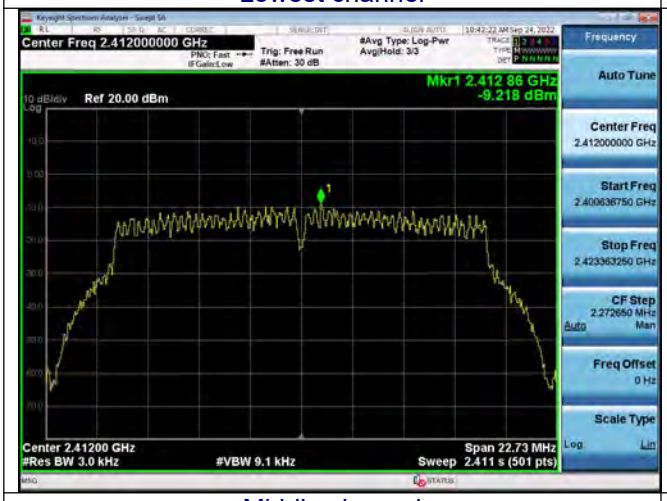
Temperature :	26℃	Relative Humidity :	54%
Pressure :	101kPa	Test Voltage :	AC 120V

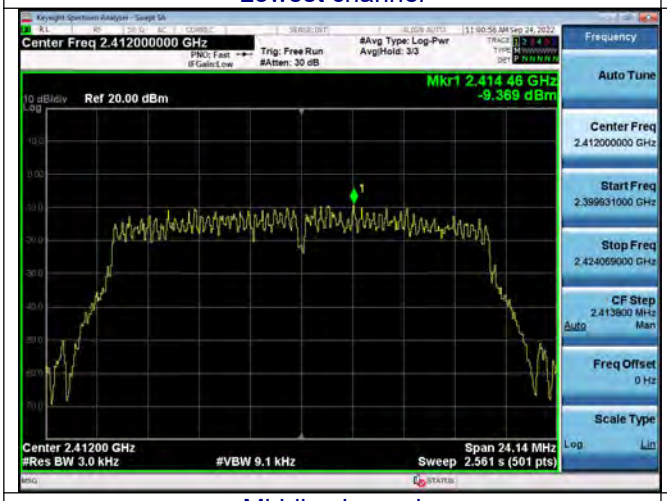
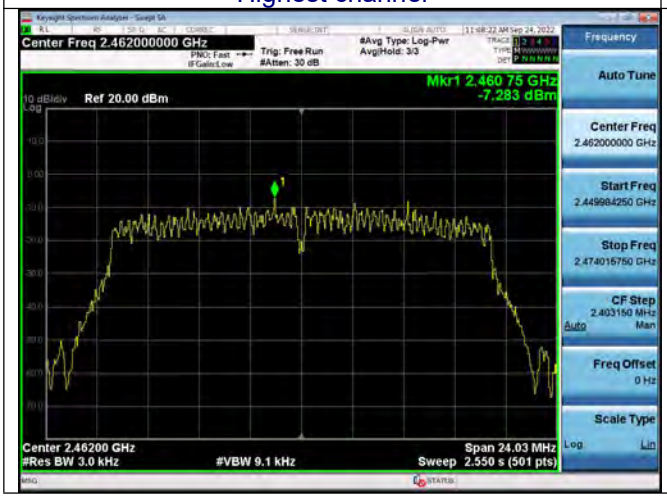
Test mode	Test channel	Power Spectral Density (dBm/3kHz)		Limit:	Result
		ANT1	ANT2		
802.11b	Lowest	-2.068	1.310	8dBm/3kHz	PASS
	Middle	1.559	0.088		
	Highest	-2.213	-2.645		
802.11g	Lowest	-9.218	-9.378	8dBm/3kHz	PASS
	Middle	-8.738	-9.2		
	Highest	-8.841	-8.274		
802.11n(HT20)	Lowest	-9.369	-8.982	8dBm/3kHz	PASS
	Middle	-8.602	-8.971		
	Highest	-7.283	-8.434		
802.11n(HT40)	Lowest	-13.032	-12.672	8dBm/3kHz	PASS
	Middle	-12.351	-12.571		
	Highest	-12.015	-12.071		
802.11ax(HT20)	Lowest	-9.876	-9.785	8dBm/3kHz	PASS
	Middle	-9.196	-10.084		
	Highest	-9.329	-8.745		
802.11ax(HT40)	Lowest	-11.477	-11.612	8dBm/3kHz	PASS
	Middle	-10.231	-11.428		
	Highest	-10.574	-10.283		

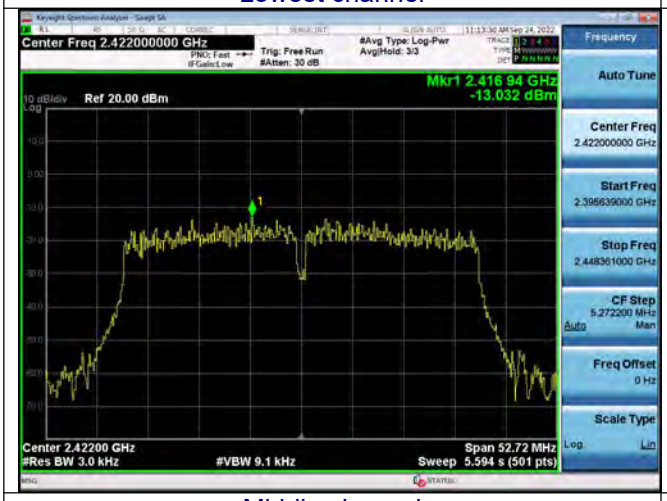
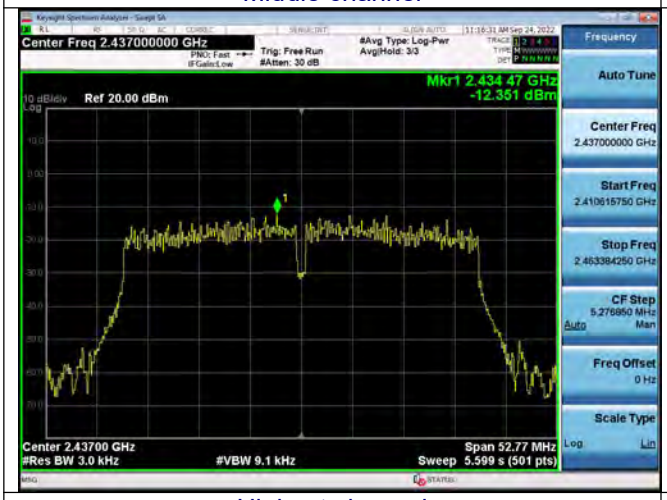
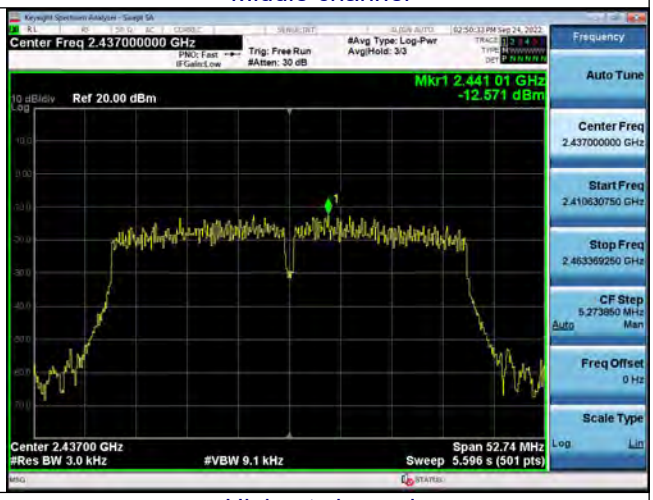
Test mode	Test channel	Power Spectral Density (dBm/3kHz)	Limit:	Result
		MIMO		
802.11n(HT20)	Lowest	-6.16	8dBm/3kHz	PASS
	Middle	-5.77		
	Highest	-4.81		
802.11n(HT40)	Lowest	-9.84	8dBm/3kHz	PASS
	Middle	-9.45		
	Highest	-9.03		
802.11ax(HT20)	Lowest	-6.82	8dBm/3kHz	PASS
	Middle	-6.61		
	Highest	-6.02		
802.11ax(HT40)	Lowest	-8.53	8dBm/3kHz	PASS
	Middle	-7.78		
	Highest	-7.42		

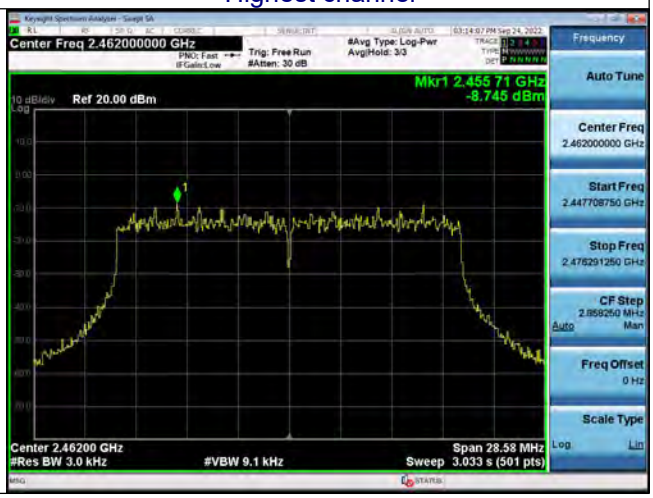
Remark:
1. Measured peak power spectrum density at difference data rate for each mode and recorded worst case for each mode.
2. Test results including cable loss;
3. Please refer to following plots;
4. The PSD limits of IEEE 802.11n HT20 and IEEE 802.11 n HT40 for MIMO with CDD technology should be reduce 10*log(2) =3.010dBi according to KDB662911D01;
5. For MIMO with CCD technology device, The Directional Gain= Gain of individual transmit antennas (dBi) + Array gain;
Array gain = 10 log (Nant), where N_{ant} is the number of transmit antennas.

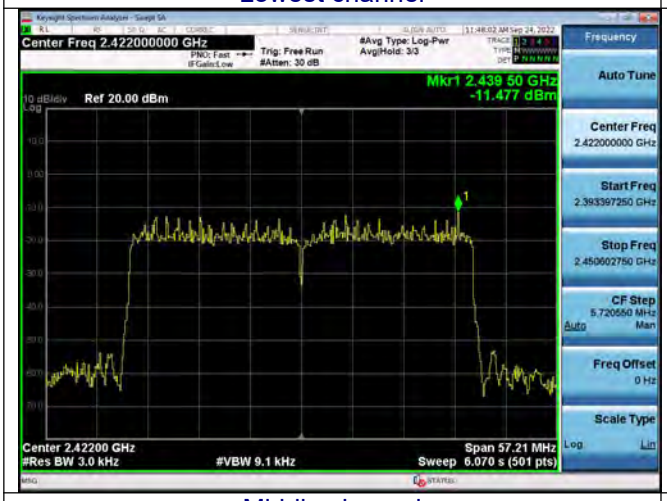
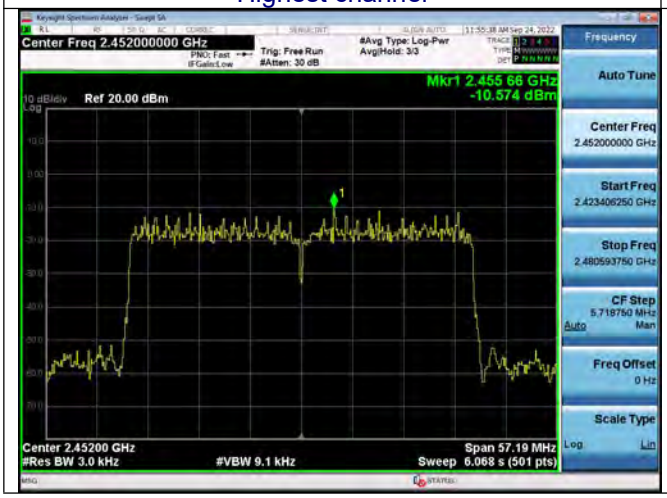
ANT1	ANT2
802.11b	802.11b
Lowest channel	Lowest channel
Middle channel	Middle channel
Highest channel	Highest channel

ANT1	ANT2
802.11g	802.11g
Lowest channel	Lowest channel
	
Middle channel	Middle channel
Highest channel	Highest channel

ANT1	ANT2
802.11n(HT20)	802.11n(HT20)
Lowest channel	Lowest channel
	
Middle channel	Middle channel
Highest channel	Highest channel
	

ANT1	ANT2
802.11n(HT40)	802.11n(HT40)
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel

ANT1	ANT2
802.11ax(HT20)	802.11ax(HT20)
Lowest channel	Lowest channel
Middle channel	Middle channel
Highest channel	Highest channel
	

ANT1	ANT2
802.11ax(HT40)	802.11ax(HT40)
Lowest channel	Lowest channel
	
Middle channel	Middle channel
Highest channel	Highest channel
	

7. CHANNEL BANDWIDTH

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)
Test Method:	KDB558074 D0115.247 Meas Guidance v05r02

7.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

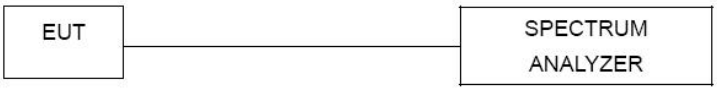
7.2 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 xRBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

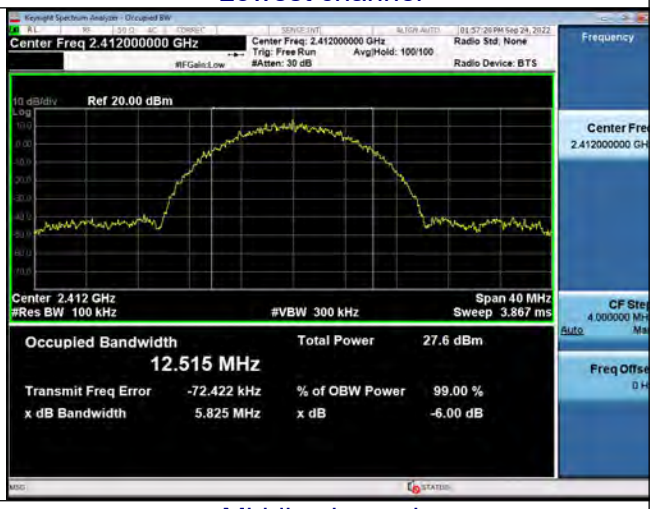
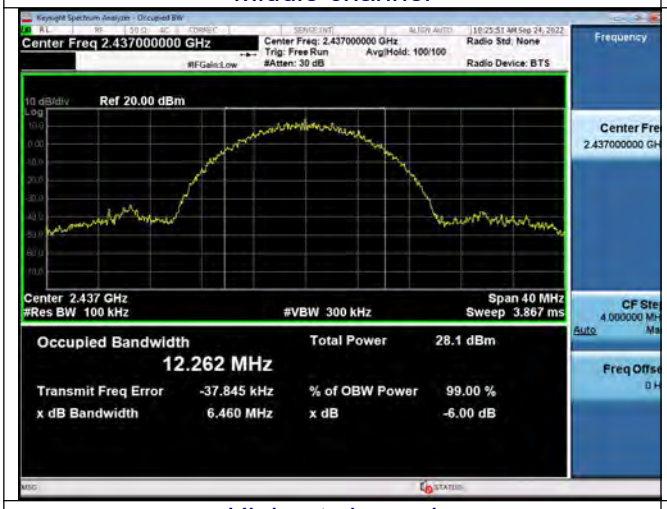
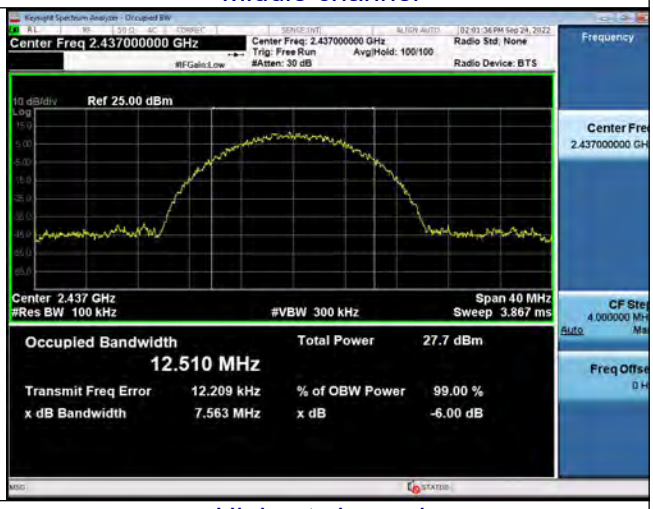
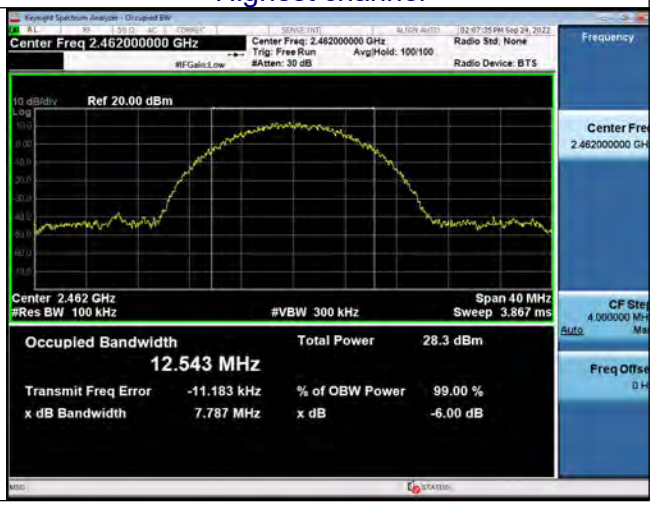
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

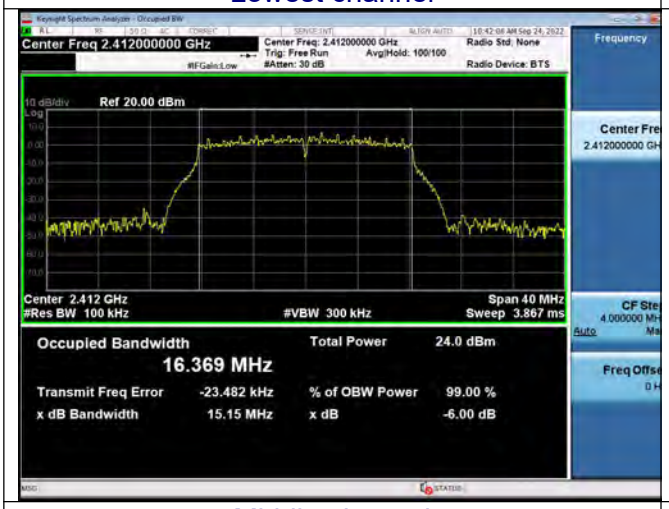
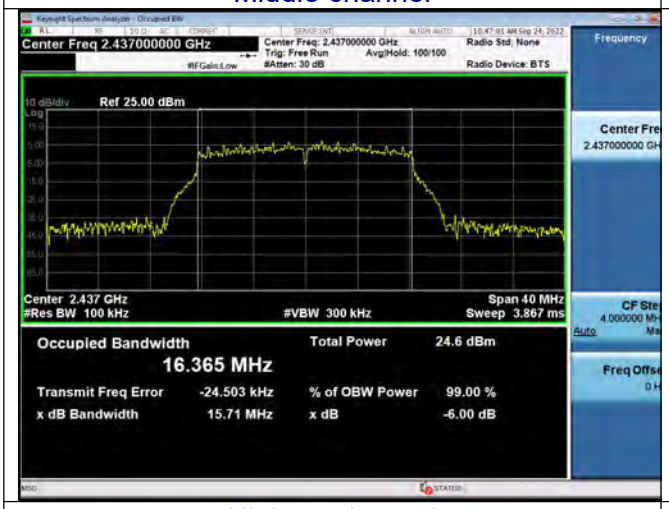
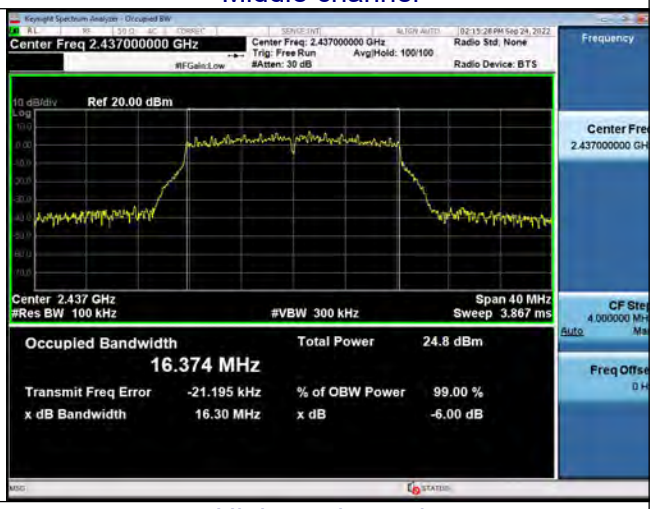
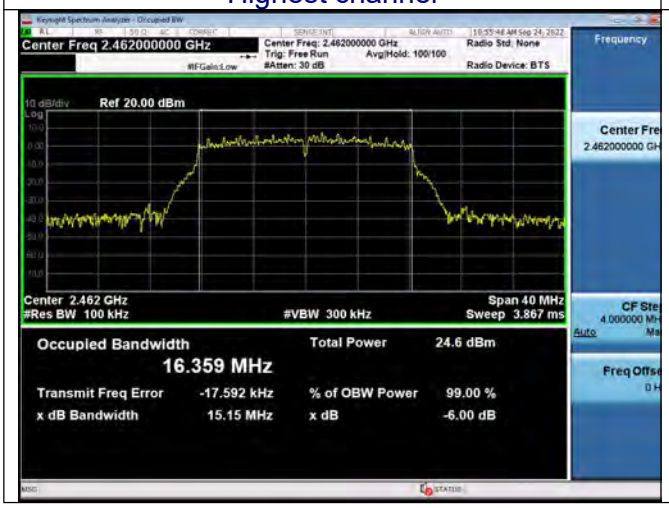
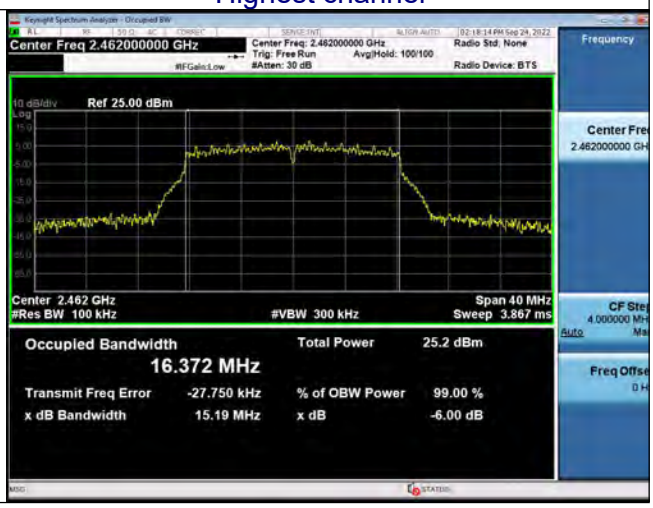
7.6 TEST RESULT

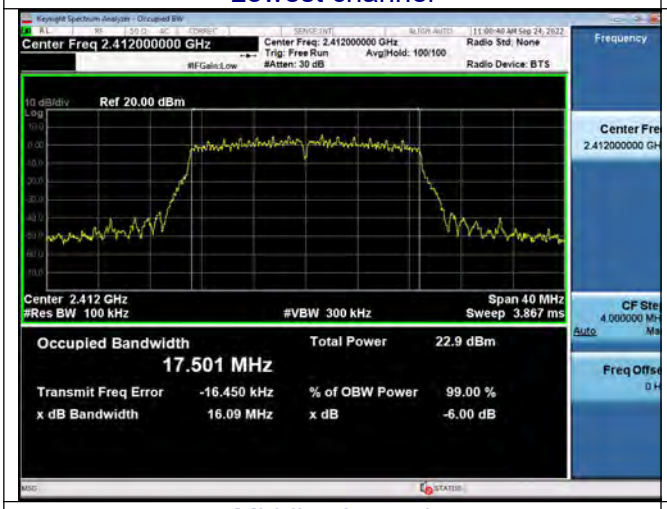
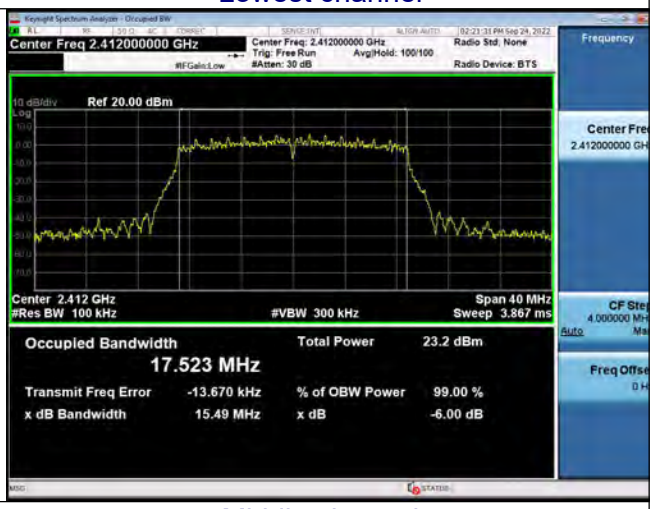
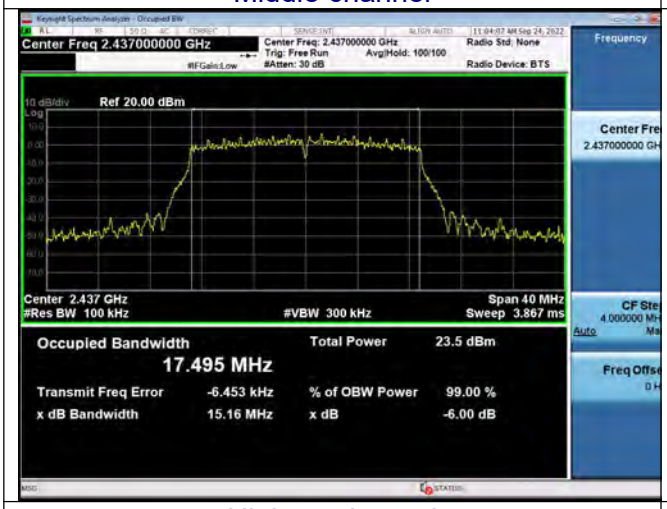
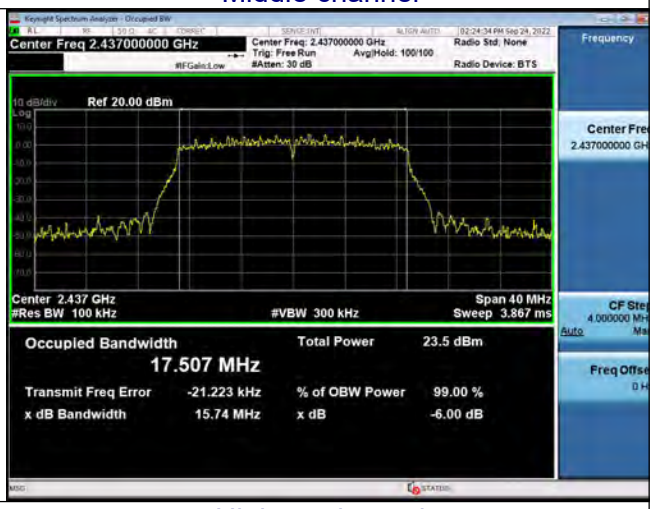
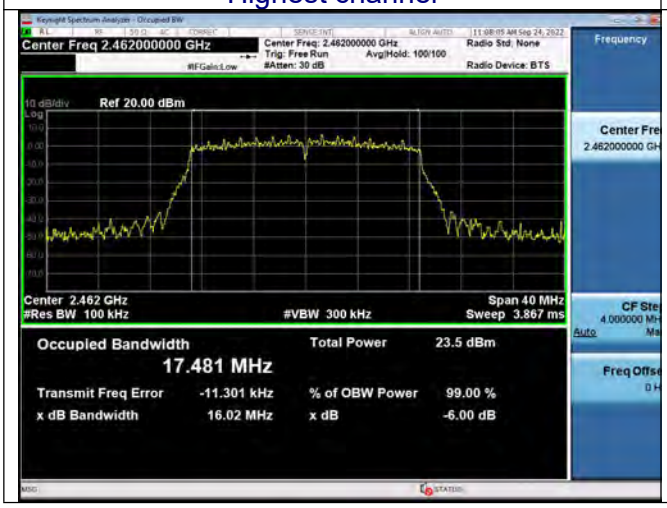
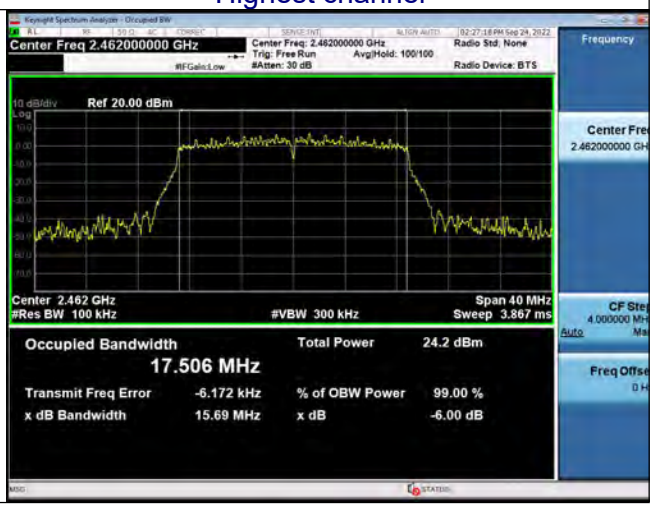
Temperature :	26℃	Relative Humidity :	54%
Pressure :	101kPa	Test Voltage :	AC 120V
Test Mode :	TX Mode		

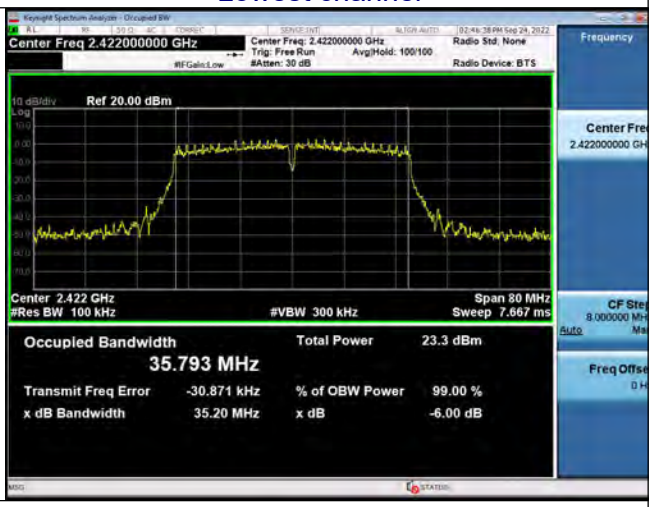
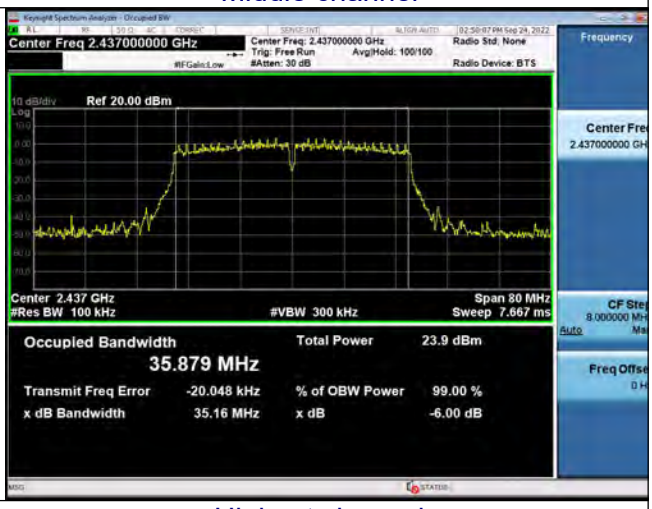
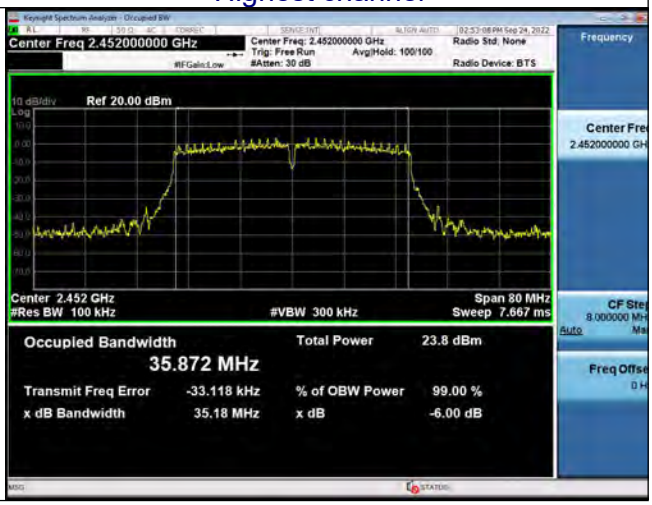
Test mode	Test channel	6dB Emission Bandwidth (MHz)		Limit:	Test Result:
		ANT1	ANT2		
802.11b	Lowest	7.767	5.825	>500kHz	PASS
	Middle	6.46	7.563		
	Highest	7.577	7.787		
802.11g	Lowest	15.15	16.35	>500kHz	PASS
	Middle	15.71	16.30		
	Highest	15.15	15.19		
802.11n(HT20)	Lowest	16.09	15.49	>500kHz	PASS
	Middle	15.16	15.74		
	Highest	16.02	15.69		
802.11n(HT40)	Lowest	35.15	35.20	>500kHz	PASS
	Middle	35.18	35.16		
	Highest	35.18	35.18		
802.11ax(HT20)	Lowest	18.99	19.12	>500kHz	PASS
	Middle	19.06	19.08		
	Highest	19.08	19.06		
802.11ax(HT40)	Lowest	38.14	38.09	>500kHz	PASS
	Middle	38.08	38.11		
	Highest	38.13	38.13		

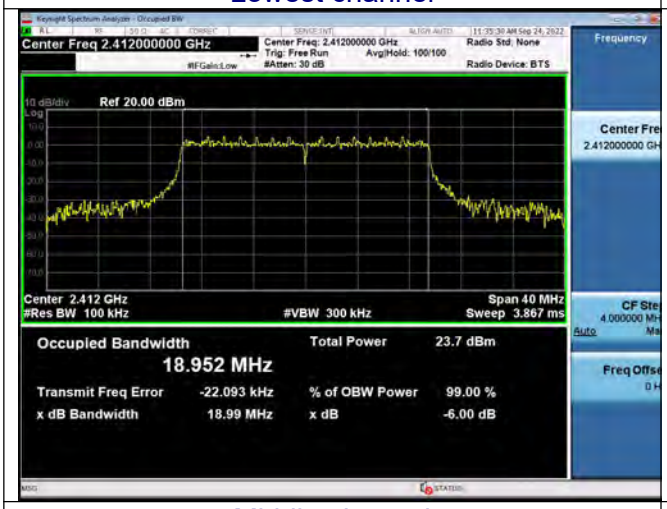
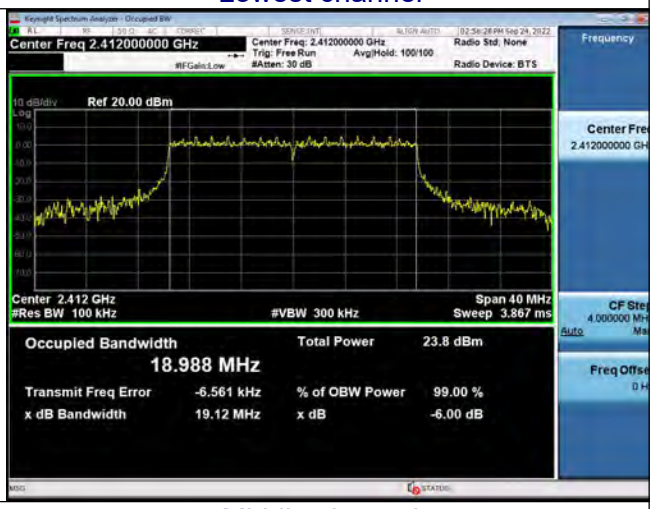
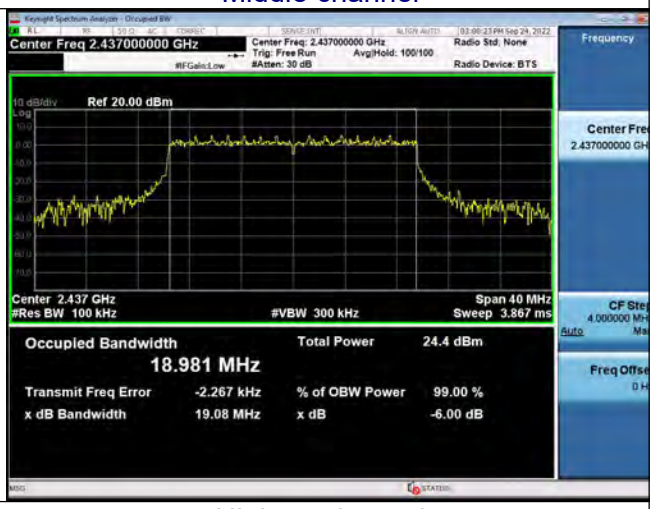
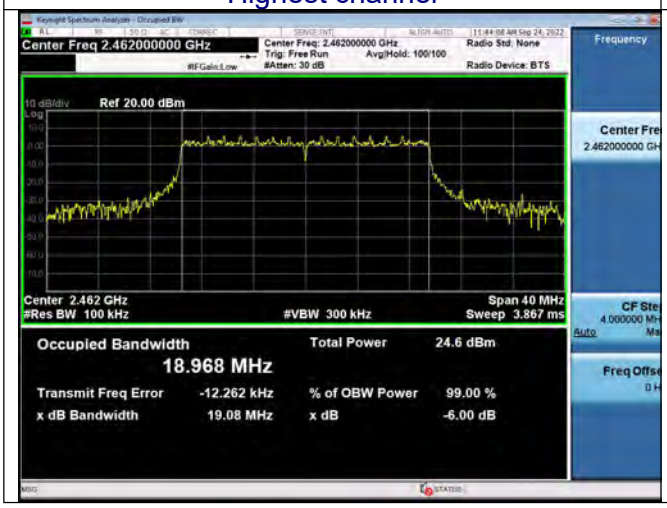
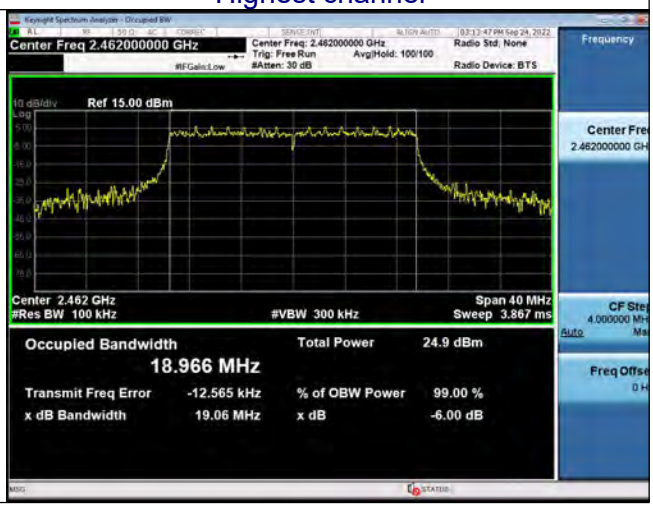
Test plot as follows:

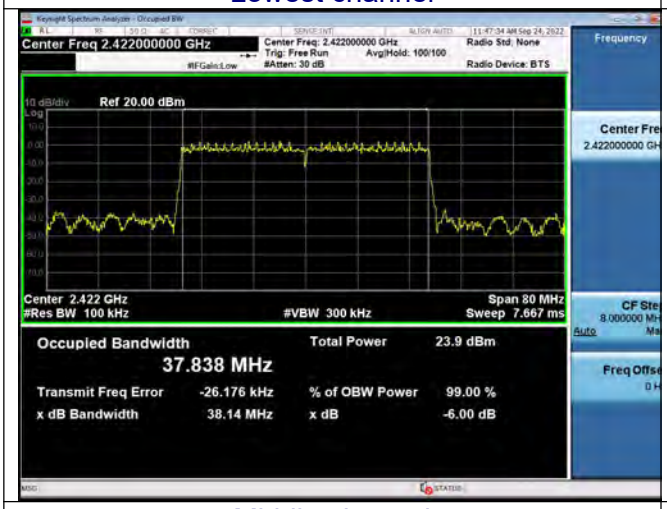
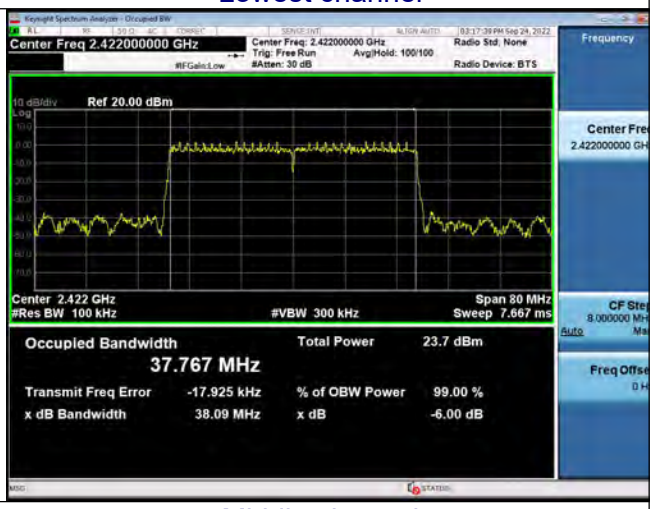
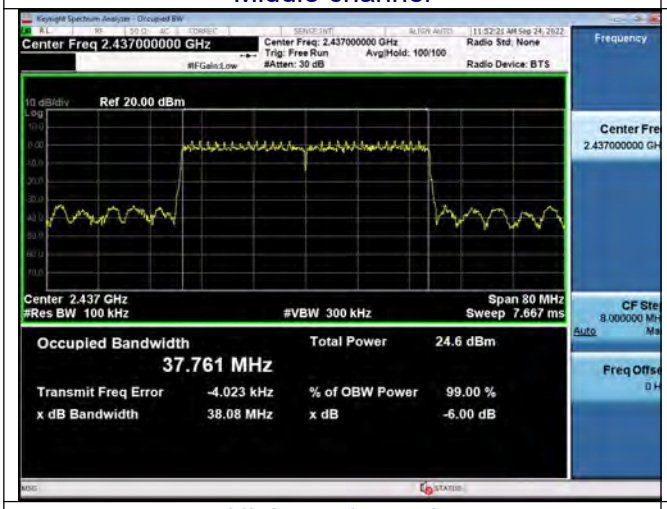
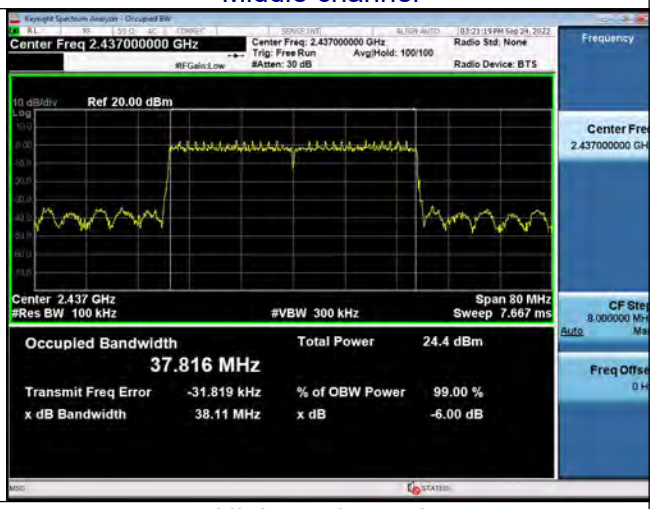
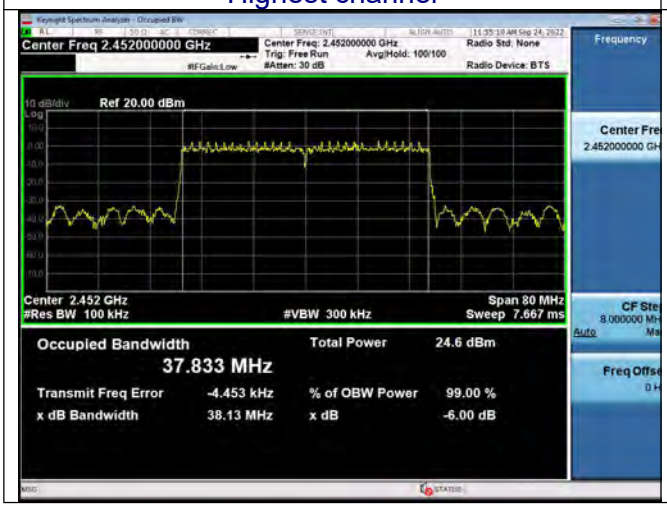
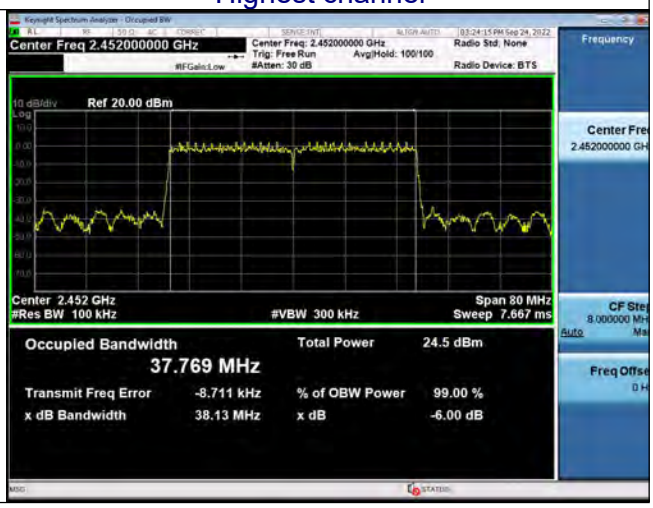
ANT1	ANT2
802.11b	802.11b
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

ANT1	ANT2
802.11g	802.11g
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

ANT1	ANT2
802.11n(HT20)	802.11n(HT20)
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

ANT1	ANT2
802.11n(HT40)	802.11n(HT40)
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

ANT1	ANT2
802.11ax(HT20)	802.11ax(HT20)
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

ANT1	ANT2
802.11ax(HT40)	802.11ax(HT40)
Lowest channel	Lowest channel
	
Middle channel	Middle channel
	
Highest channel	Highest channel
	

8. OUTPUT POWER TEST

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	KDB558074 D0115.247 Meas Guidance v05r02

8.1 APPLIED PROCEDURES/LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

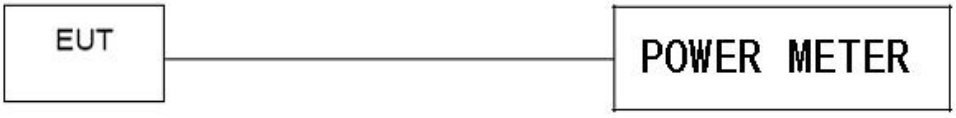
8.2 TEST PROCEDURE

a. The EUT was directly connected to the Power meter

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 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.

8.6 TEST RESULT

Temperature :	26℃	Relative Humidity :	54%
Pressure :	101kPa	Test Voltage :	AC120V

Condition NVNT	Modulation	Frequency (MHz)	Conducted Power(dBm)		limit(dBm)	Result
			ANT1	ANT2		
NVNT	802.11b	2412.00	19.465	19.422	30	Pass
NVNT	802.11b	2437.00	19.505	19.735	30	Pass
NVNT	802.11b	2462.00	19.424	19.105	30	Pass
NVNT	802.11g	2412.00	20.266	20.196	30	Pass
NVNT	802.11g	2437.00	20.282	20.140	30	Pass
NVNT	802.11g	2462.00	19.753	18.036	30	Pass
NVNT	802.11n(HT20)	2412.00	16.224	16.477	30	Pass
NVNT	802.11n(HT20)	2437.00	16.359	16.937	30	Pass
NVNT	802.11n(HT20)	2462.00	15.178	15.780	30	Pass
NVNT	802.11n(HT40)	2422.00	15.115	13.969	30	Pass
NVNT	802.11n(HT40)	2437.00	15.229	14.465	30	Pass
NVNT	802.11n(HT40)	2452.00	13.832	14.486	30	Pass
NVNT	802.11ax(HE20)	2412.00	17.74	17.774	30	Pass
NVNT	802.11ax(HE20)	2437.00	17.369	16.362	30	Pass
NVNT	802.11ax(HE20)	2462.00	17.431	16.780	30	Pass
NVNT	802.11ax(HE40)	2422.00	14.143	14.033	30	Pass
NVNT	802.11ax(HE40)	2437.00	14.803	14.626	30	Pass
NVNT	802.11ax(HE40)	2452.00	14.782	14.572	30	Pass

Condition NVNT	Modulation	Frequency (MHz)	Conducted Power(dBm)	limit(dBm)	Result
			MIMO		
NVNT	802.11n(HT20)	2412.00	19.36	30.00	Pass
NVNT	802.11n(HT20)	2437.00	19.67	30.00	Pass
NVNT	802.11n(HT20)	2462.00	18.50	30.00	Pass
NVNT	802.11n(HT40)	2422.00	17.59	30.00	Pass
NVNT	802.11n(HT40)	2437.00	17.87	30.00	Pass
NVNT	802.11n(HT40)	2452.00	17.18	30.00	Pass
NVNT	802.11ax(HE20)	2412.00	20.77	30.00	Pass
NVNT	802.11ax(HE20)	2437.00	19.90	30.00	Pass
NVNT	802.11ax(HE20)	2462.00	20.13	30.00	Pass
NVNT	802.11ax(HE40)	2422.00	17.10	30.00	Pass
NVNT	802.11ax(HE40)	2437.00	17.73	30.00	Pass
NVNT	802.11ax(HE40)	2452.00	17.69	30.00	Pass

Note:
1. For MIMO with CCD technology device, The Directional Gain= Gain of individual transmit antennas (dBi) + Array gain;
Array gain = 10 log (Nant), where N_{ant} is the number of transmit antennas.

2.802.11b/802.11g-MIMO mode is not supported