

FCC TEST REPORT

FCC ID: 2AIXD-DR55Q37

Product : Mobile virtual reality headset

Model Name : DR55Q-37,DR55Q-96A,DR55Q-96M

Brand : Focalmax

Report No. : PT802580160910E-FC02

Prepared for

SHENZHEN D-light Technology Limited
2201F, Block A, Wisdom Building ,Qiao xiang Road, Shahe Street, Nanshan District,
Shenzhen ,China

Prepared by

DongGuan Precise Testing Service Co.,Ltd.
Building D, Baoding Technology Park, Guangming Road 2,
Dongcheng District, Dongguan, Guangdong, China, 523129

TEST RESULT CERTIFICATION

Applicant's name : SHENZHEN D-light Technolgy Limited

Address : 2201F, Block A, Wisdom Building ,Qiao xiang Road, Shahe Street, Nanshan District,Shenzhen ,China

Manufacture's name : SHENZHEN D-light Technolgy Limited

Address : 2201F, Block A, Wisdom Building ,Qiao xiang Road, Shahe Street, Nanshan District,Shenzhen ,China

Product name : Mobile virtual reality headset

Model name : DR55Q-37,DR55Q-96A,DR55Q-96M

Standards : FCC CFR47 Part 15 Section 15.247

Test procedure : ANSI C63.10:2013

Test Date : Sep.20, 2016 ~ Sep.25, 2016

Date of Issue : Sep.26, 2016

Test Result : Pass

This device described above has been tested by PTC, 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.

This report shall not be reproduced except in full, without the written approval of PTC, this document may be altered or revised by PTC, personal only, and shall be noted in the revision of the document.

Testing Engineer

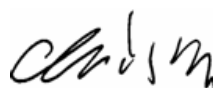
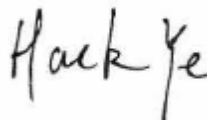
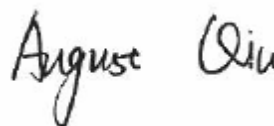
August Qiu

Technical Manager

Hack Ye

Authorized Signatory

Chris Du



Contents

	Page
2 TEST SUMMARY.....	5
3 GENERAL INFORMATION.....	6
3.1 GENERAL DESCRIPTION OF E.U.T.....	6
3.2 CHANNEL LIST	7
3.3 TEST MODE	7
3.4 TEST SIZE.....	7
4 EQUIPMENT DURING TEST.....	8
4.1 EQUIPMENTS LIST.....	8
4.2 MEASUREMENT UNCERTAINTY.....	10
5 CONDUCTED EMISSION.....	11
5.1 E.U.T. OPERATION.....	11
5.2 EUT SETUP	11
5.3 MEASUREMENT DESCRIPTION.....	12
5.4 CONDUCTED EMISSION TEST RESULT	12
6 RADIATED SPURIOUS EMISSIONS.....	14
6.1 EUT OPERATION	14
6.2 TEST SETUP.....	15
6.3 SPECTRUM ANALYZER SETUP.....	16
6.4 TEST PROCEDURE	17
6.5 SUMMARY OF TEST RESULTS	18
7 CONDUCTED SPURIOUS EMISSION.....	34
7.1 TEST PROCEDURE	34
7.2 TEST RESULT.....	34
8 BAND EDGE MEASUREMENT	38
8.1 TEST PROCEDURE	38
8.2 TEST RESULT.....	39
9 6DB BANDWIDTH MEASUREMENT.....	43
9.1 TEST PROCEDURE	43
9.2 TEST RESULT.....	43
10 MAXIMUM PEAK OUTPUT POWER	50
10.1 TEST PROCEDURE.....	50
10.2 TEST RESULT	51



11	POWER SPECTRAL DENSITY.....	52
11.1	TEST PROCEDURE.....	52
11.2	TEST RESULT	52
12	ANTENNA REQUIREMENT.....	59
13	TEST SETUP.....	60



2 Test Summary

Test Items	Test Requirement	Result
Conduct Emission	15.207	PASS
Radiated Spurious Emissions	15.205(a) 15.209 15.247(d)	PASS
Conducted Spurious Emission	15.247(d)	PASS
Band edge	15.247(d) 15.205(a)	PASS
6dB Bandwidth	15.247(a)(2)	PASS
Maximum Peak Output Power	15.247(b)(1)	PASS
Power Spectral Density	15.247(e)	PASS
Antenna Requirement	15.203	PASS
Remark: N/A: Not Applicable		

3 General Information

3.1 General Description of E.U.T.

Product Name	:	Mobile virtual reality headset
Model Name	:	DR55Q-37,DR55Q-96A,DR55Q-96M
Model Description	:	Only different in models name
Bluetooth Version	:	V4.0
Operating frequency	:	For BLE: 2402-2480MHz, 40 channels For WIFI 2412-2462MHz, 11channels
Antenna installation:	:	internal antenna
Antenna Gain:	:	WiFi: 0dBi BLE: 0dBi
The lowest oscillator:	:	19.2MHz
Type of Modulation	:	For BLE: GFSK For WIFI: IEEE 802.11b CCK/QPSK/BPSK IEEE 802.11g BPSK/QPSK/16QAM/64QAM IEEE 802.11n-HT20 BPSK/QPSK/16QAM/64QAM
Power supply	:	DC3.8V 2900mAh Power by battery, DC 5V charging by USB port

3.2 Channel List

WIFI							
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	2412	4	2427	7	2442	10	2457
2	2417	5	2432	8	2447	11	2462
3	2422	6	2437	9	2452	/	/
BLE							
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

3.3 Test Mode

All test mode(s) and condition(s) mentioned were considered and evaluated respectively by performing full tests, the worst data were recorded and reported.

Modulation	Test mode	Low channel	Middle channel	High channel
802.11b/g/n-HT20	Transmitting	2412MHz	2437MHz	2462MHz
GFSK(BLE)	Transmitting	2402MHz	2440MHz	2480MHz
Tests Carried Out Under FCC part 15.207				
Test Item		Test Mode		
Conduction Emission 0.15MHz to 30MHz		BT Communication		

3.4 Test size

DongGuan Precise Testing Service Co.,Ltd.

Add.: Building D, Baoding Technology Park, Guangming Road2, Dongcheng District, Dongguan, Guangdong, China, 523129

FCC Registration No.: 371540; IC Registration No.: 12191A

4 Equipment During Test

4.1 Equipments List

RF Conducted Test							
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	EMC Analyzer (9k~26.5GHz)	Agilent	E4407B	MY45109572	Aug.04, 2016	Aug.03, 2017	1 year
2	EXA Signal Analyzer	Agilent	N9010A	MY50520207 526B25MPB W7X	Aug.04, 2016	Aug.03, 2017	1 year
3	EMI Test Receiver	R&S	ESCI	101155	July 15, 2016	July 14, 2017	1 year
4	Humidity Chamber	GF	GTH-225-40-1P	IAA061225	July 15, 2016	July 14, 2017	1 year
5	Temporary Antenna Connector	Murrata	MXHS83Q E3000	201938	July 15, 2016	July 14, 2017	1 year
6	USB RF power sensor	DARE	RPR3006W	15I00041SN 001	July 15, 2016	July 14, 2017	1 year
7	Attenuator	Huber&Suhner	6810.18.B	757941	July 15, 2016	July 14, 2017	1 year
Radiated Emissions							
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	EMI Test Receiver	Rohde&Schwarz	ESCI	101417	July 15, 2016	July 14, 2017	1 year
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3355	July 15, 2016	July 14, 2017	1 year
3	Amplifier	EM	EM-30180	060538	July 15, 2016	July 14, 2017	1 year
4	Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1246	July 15, 2016	July 14, 2017	1 year
5	Horn Antenna	Schwarzbeck	BBHA 9170	9170-0741	July 15, 2016	July 14, 2017	1 year
6	Loop Antenna	SCHWARZBECK	FMZB1516	9130D-1243	July 15, 2016	July 14, 2017	1 year



7	3m Anechoic Chamber	CHENGYU	966	PTC-002	June 6, 2016	June 5, 2017	1 year
8	Coaxial Cable(below 1GHz)	LARGE	CALB1	-	July 15, 2016	July 14, 2017	1 year
9	Coaxial Cable(above 1GHz)	LARGE	CALB2	-	July 15, 2016	July 14, 2017	1 year
Conducted Emissions							
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	EMI Test Receiver	R&S	ESCI	101155	July 15, 2016	July 14, 2017	1 year
2	LISN	SCHWARZ BECK	NSLK 8128	8128-289	July 15, 2016	July 14, 2017	1 year
3	Cable	LARGE	RF300	-	July 15, 2016	July 14, 2017	1 year



4.2 Description of Support Units

Equipment	Manufacturer	Model No.	Series No.
Note Book	Sony	PCG-51111T	X16-96081
AC Adapter	Sony	NSW24063	SNPA-1900-11SY
AC power line(1.0m)	Cold come	JYD-20	C-2201

4.3 Measurement Uncertainty

Parameter	Uncertainty
RF output power, conducted	$\pm 1.0\text{dB}$
Power Spectral Density, conducted	$\pm 2.2\text{dB}$
Radio Frequency	$\pm 1 \times 10^{-6}$
Bandwidth	$\pm 1.5 \times 10^{-6}$
Time	$\pm 2\%$
Duty Cycle	$\pm 2\%$
Temperature	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$
DC and low frequency voltages	$\pm 3\%$
Conducted Emissions(150kHz~30MHz)	$\pm 3.64\text{dB}$
Radiated Emission(30MHz~1GHz)	$\pm 5.03\text{dB}$
Radiated Emission(1GHz~25GHz)	$\pm 4.74\text{dB}$

5 Conducted Emission

Test Requirement:	: FCC CFR 47 Part 15 Section 15.207
Test Method:	: ANSI C63.4:2014
Test Result:	: PASS
Frequency Range:	: 150kHz to 30MHz
Class/Severity:	: Class B
Limit:	: 66-56 dB μ V between 0.15MHz & 0.5MHz
	: 56 dB μ V between 0.5MHz & 5MHz
	: 60 dB μ V between 5MHz & 30MHz
Detector:	: Peak for pre-scan(9kHz Resolution Bandwidth)

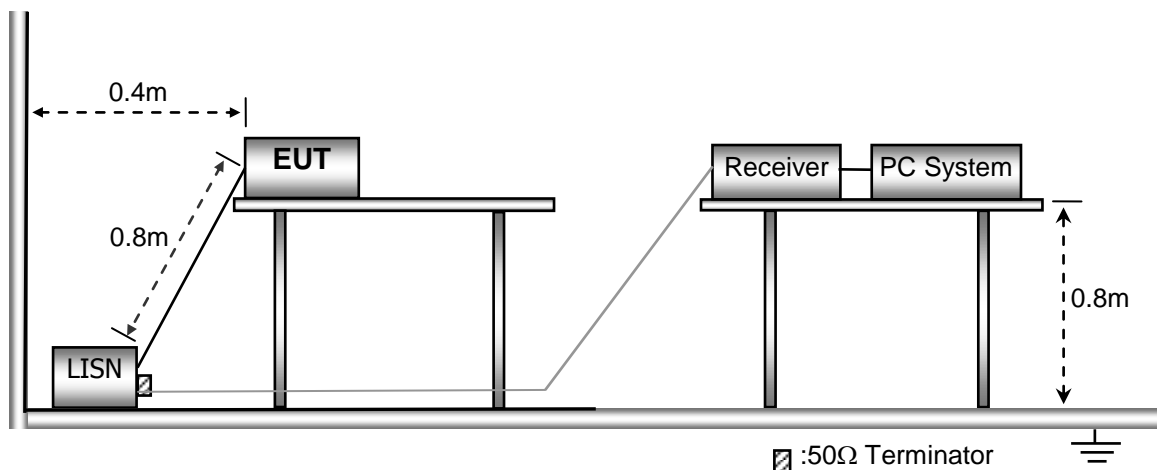
5.1 E.U.T. Operation

Operating Environment:

Temperature:	: 25.5 °C
Humidity:	: 51 % RH
Atmospheric Pressure:	: 101.2kPa
EUT Operation:	: Refer to section 3.3

5.2 EUT Setup

The conducted emission tests were performed using the setup accordance with the ANSI C63.10:2013.

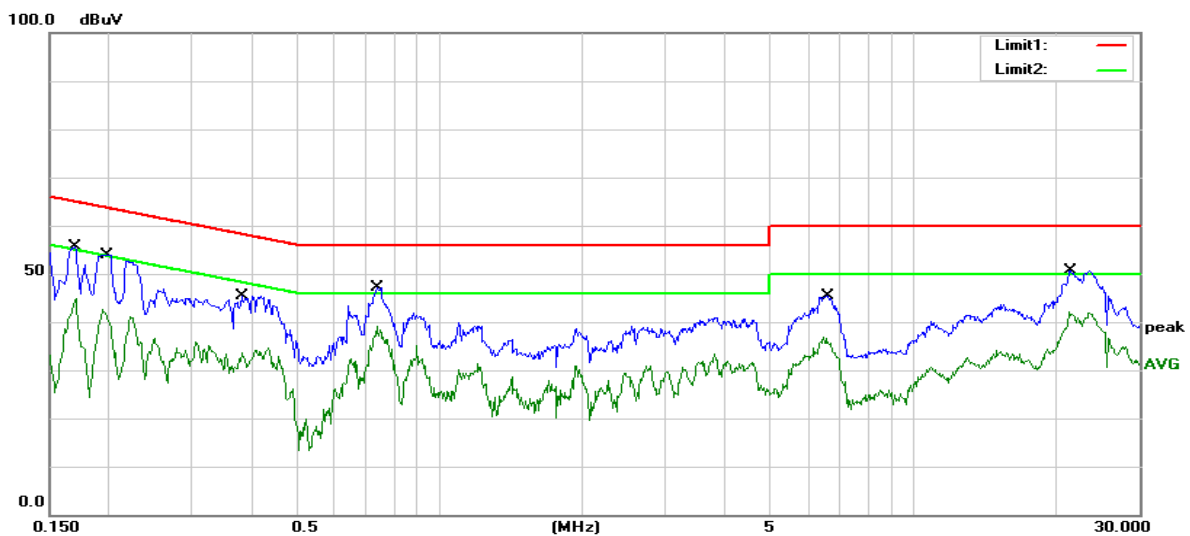


5.3 Measurement Description

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

5.4 Conducted Emission Test Result

Live line:

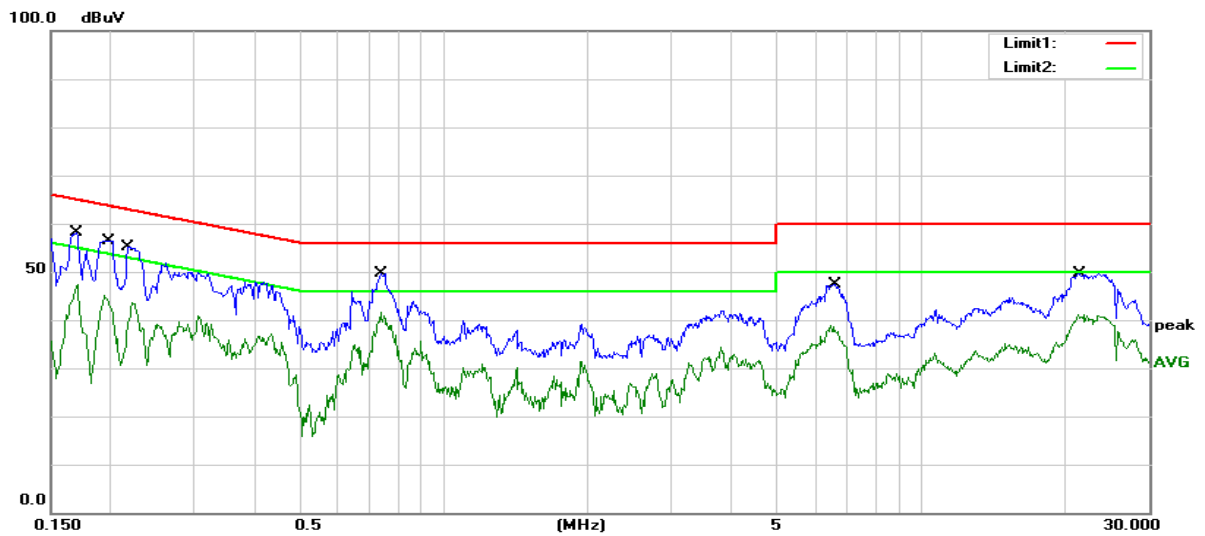


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1700	45.64	10.00	55.64	64.96	-9.32	QP
2	0.1700	34.86	10.00	44.86	54.96	-10.10	AVG
3	0.1980	43.99	10.00	53.99	63.69	-9.70	QP
4	0.1980	32.55	10.00	42.55	53.69	-11.14	AVG
5	0.3820	35.34	10.15	45.49	58.24	-12.75	QP
6	0.3820	23.48	10.15	33.63	48.24	-14.61	AVG
7	0.7420	37.25	9.99	47.24	56.00	-8.76	QP
8	0.7420	29.19	9.99	39.18	46.00	-6.82	AVG
9	6.6140	35.14	10.19	45.33	60.00	-14.67	QP
10	6.6140	26.69	10.19	36.88	50.00	-13.12	AVG
11	21.4940	39.89	10.71	50.60	60.00	-9.40	QP
12	21.4940	31.36	10.71	42.07	50.00	-7.93	AVG

Remark: Emission Level = Receiver Reading + Cable Loss + AMN Factor



Neutral line:



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1700	48.14	10.00	58.14	64.96	-6.82	QP
2	0.1700	37.36	10.00	47.36	54.96	-7.60	AVG
3	0.1980	46.49	10.00	56.49	63.69	-7.20	QP
4	0.1980	35.05	10.00	45.05	53.69	-8.64	AVG
5	0.2180	45.24	9.98	55.22	62.89	-7.67	QP
6	0.2180	33.58	9.98	43.56	52.89	-9.33	AVG
7	0.7420	39.75	9.99	49.74	56.00	-6.26	QP
8	0.7420	31.69	9.99	41.68	46.00	-4.32	AVG
9	6.6140	37.14	10.19	47.33	60.00	-12.67	QP
10	6.6140	28.69	10.19	38.88	50.00	-11.12	AVG
11	21.4940	38.89	10.71	49.60	60.00	-10.40	QP
12	21.4940	30.51	10.71	41.22	50.00	-8.78	AVG

Remark:Emission Level=Receiver Reading+Cable Loss+AMN Factor

6 Radiated Spurious Emissions

Test Requirement: : FCC CFR47 Part 15 Section 15.209 & 15.247
 Test Method: : ANSI C63.10:2013
 Test Result: : PASS
 Measurement Distance: : 3m
 Limit: : See the follow table

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Dist	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log^{(2400/F(\text{kHz}))} + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log^{(24000/F(\text{kHz}))} + 40$
1.705 ~ 30	30	30	$100 * 30$	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

6.1 EUT Operation

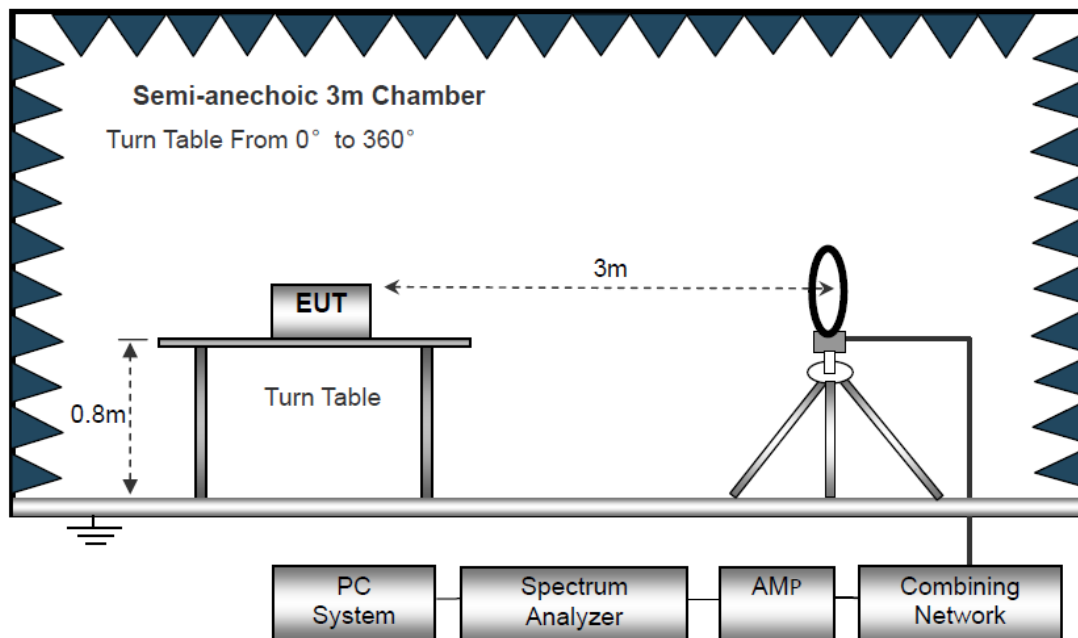
Operating Environment :

Temperature: : 23.5 °C
 Humidity: : 51.1 % RH
 Atmospheric Pressure: : 101.2kPa
 EUT Operation : : Refer to section 3.3

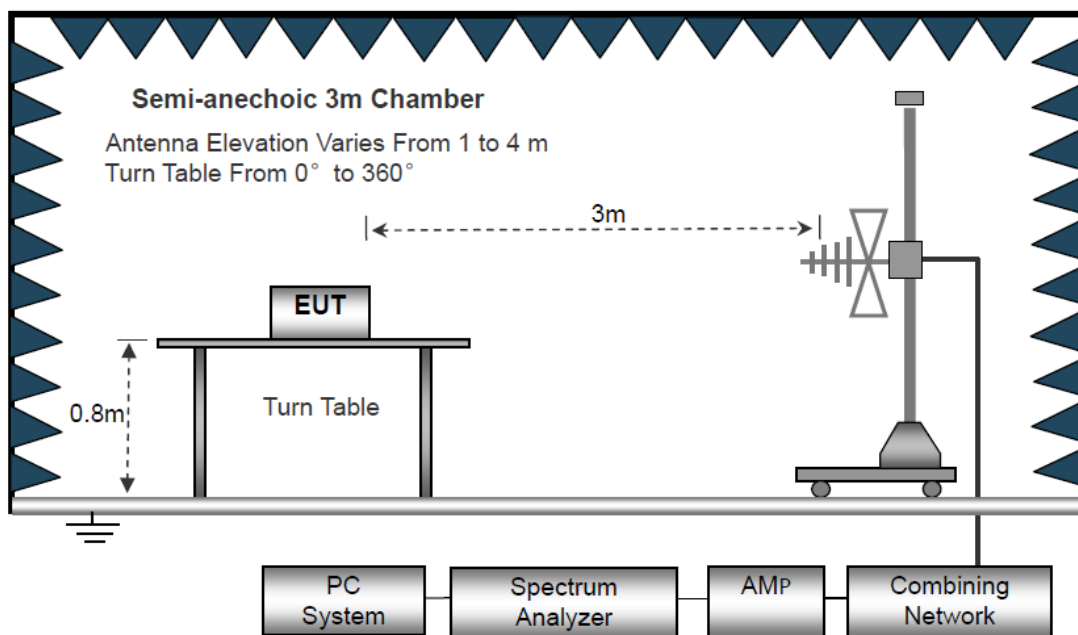
6.2 Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber testsite

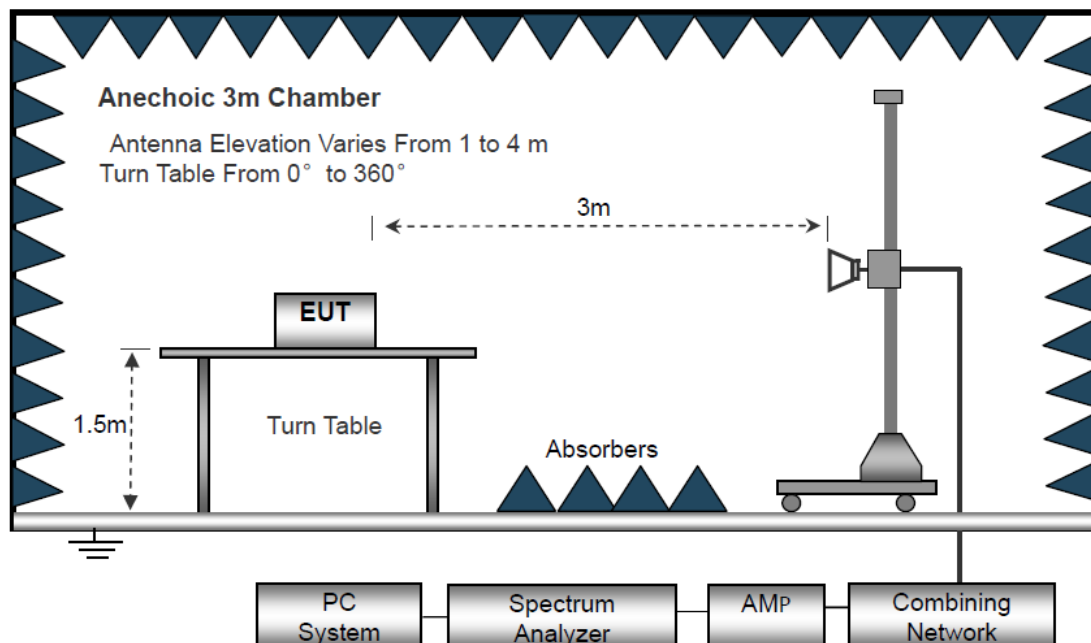
The test setup for emission measurement below 30MHz



The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1 GHz



6.3 Spectrum Analyzer Setup

Below 30MHz

IF Bandwidth : 10kHz

Resolution Bandwidth : 10kHz

Video Bandwidth : 10kHz

30MHz ~ 1GHz

Detector : PK

Resolution Bandwidth : 100kHz

Video Bandwidth : 300kHz

Detector : QP

Resolution Bandwidth : 120kHz

Video Bandwidth : 300kHz

Above 1GHz

Detector : PK

Resolution Bandwidth : 1MHz

Video Bandwidth : 3MHz

Detector : AV

Resolution Bandwidth : 1MHz

Video Bandwidth : 10Hz

6.4 Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above ground plane for below 1GHz and 1.5m for above 1GHz.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions. The spectrum was investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The radiation measurements are tested under 3-axes(X,Y,Z) position(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand), After pre-test, It was found that the worse radiation emission was get at the X position. So the data shown was the X position only.
8. The test above 1GHz must be use the fully anechoic room, and the test below 1GHz use the half anechoic room

6.5 Summary of Test Results

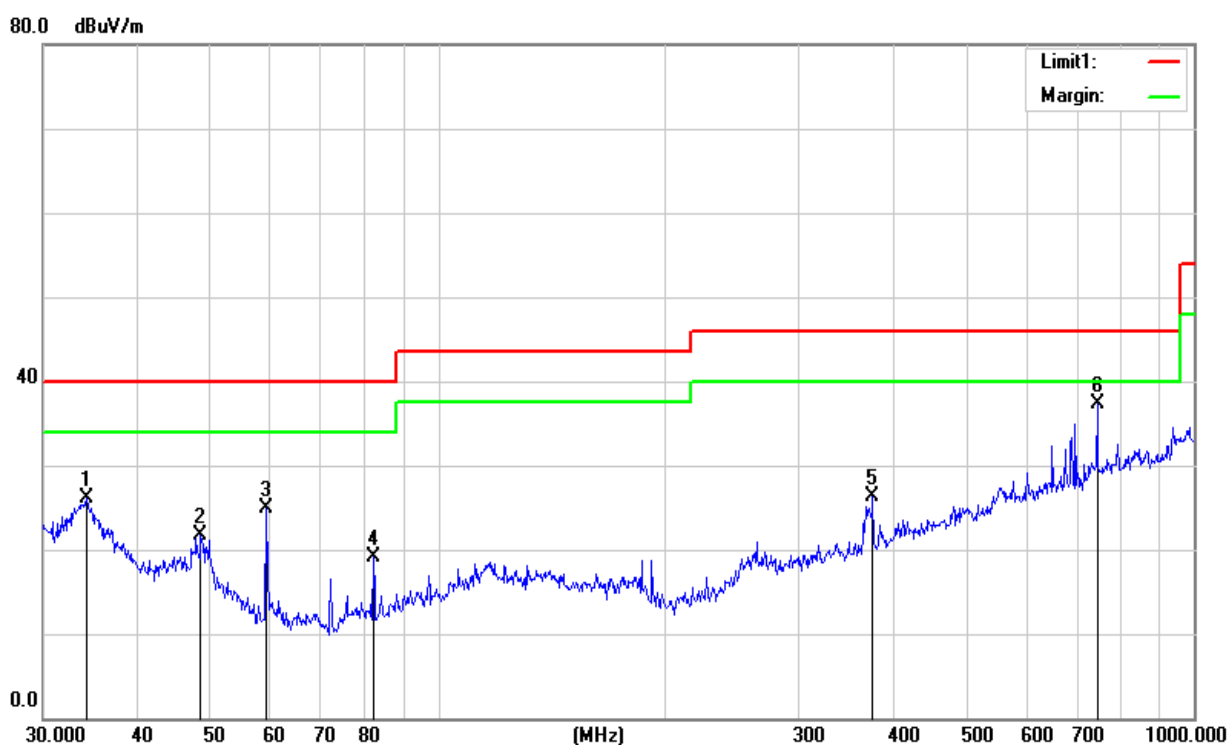
Test Frequency: Below 30MHz

The measurements were more than 20 dB below the limit and not reported.

Test Frequency: 30MHz ~ 1GHz

All applicable test modes have been tested and only the worst case (802.11b TX in middle channel) is recorded.

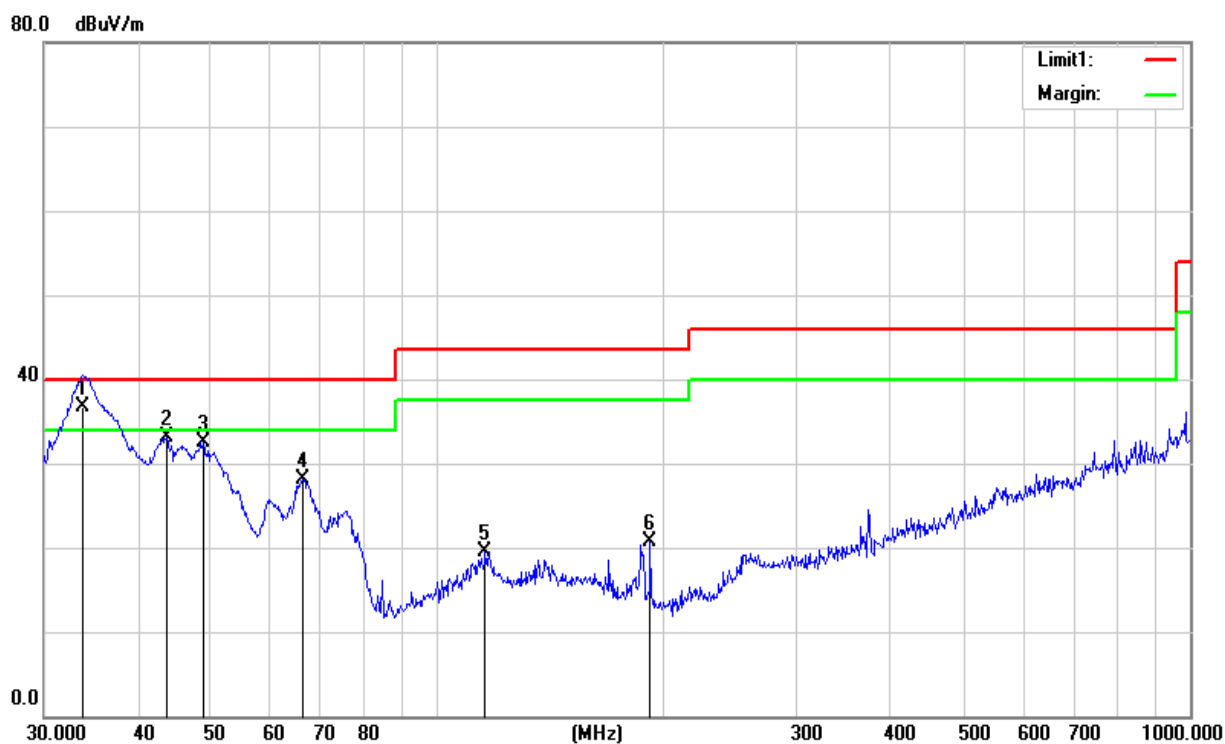
Antenna Polarization: Horizontal



Frequency	Reading	Correct	Result	Limit	Margin	Remark
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
34.2760	9.65	16.53	26.18	40.00	-13.82	QP
48.5016	12.74	8.88	21.62	40.00	-18.38	QP
59.2325	19.47	5.45	24.92	40.00	-15.08	QP
82.0705	10.77	8.28	19.05	40.00	-20.95	QP
375.9384	9.50	16.81	26.31	46.00	-19.69	QP
744.8660	12.03	25.34	37.37	46.00	-8.63	QP

Remark: Emission Level = Receiver Reading + Cable Loss + ANT Factor - AMP Factor

Antenna Polarization: Vertical



Frequency	Reading	Correct	Result	Limit	Margin	Remark
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
33.7790	19.85	16.79	36.64	40.00	-3.36	QP
43.6584	21.64	11.44	33.08	40.00	-6.92	QP
48.8430	23.84	8.71	32.55	40.00	-7.45	QP
66.2660	22.23	5.84	28.07	40.00	-11.93	QP
115.7256	7.31	12.23	19.54	43.50	-23.96	QP
191.7450	11.47	9.19	20.66	43.50	-22.84	QP

Remark:Emission Level=Receiver Reading+Cable Loss+ANT Factor-AMP Factor



Test Frequency: 1GHz ~ 18GHz

Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Orrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel 11b(2412 MHz)										
3265.10	49.96	44.70	6.70	28.20	-9.80	40.16	74.00	-33.84	PK	Vertical
3265.10	39.92	44.70	6.70	28.20	-9.80	30.12	54.00	-23.88	AV	Vertical
3265.06	49.92	44.70	6.70	28.20	-9.80	40.12	74.00	-33.88	PK	Horizontal
3265.06	39.96	44.70	6.70	28.20	-9.80	30.16	54.00	-23.84	AV	Horizontal
4824.78	60.25	44.20	9.04	31.60	-3.56	56.69	74.00	-17.31	PK	Vertical
4824.78	40.26	44.20	9.04	31.60	-3.56	36.70	54.00	-17.30	AV	Vertical
4824.81	60.27	44.20	9.04	31.60	-3.56	56.71	74.00	-17.29	PK	Horizontal
4824.81	40.25	44.20	9.04	31.60	-3.56	36.69	54.00	-17.31	AV	Horizontal
5360.09	47.13	44.20	9.86	32.00	-2.34	44.79	74.00	-29.21	PK	Vertical
5360.09	39.12	44.20	9.86	32.00	-2.34	36.78	54.00	-17.22	AV	Vertical
5360.07	47.19	44.20	9.86	32.00	-2.34	44.85	74.00	-29.15	PK	Horizontal
5360.07	39.18	44.20	9.86	32.00	-2.34	36.84	54.00	-17.16	AV	Horizontal
7236.18	52.68	43.50	11.40	35.50	3.40	56.08	74.00	-17.92	PK	Vertical
7236.18	34.61	43.50	11.40	35.50	3.40	38.01	54.00	-15.99	AV	Vertical
7236.16	52.63	43.50	11.40	35.50	3.40	56.03	74.00	-17.97	PK	Horizontal
7236.16	34.63	43.50	11.40	35.50	3.40	38.03	54.00	-15.97	AV	Horizontal
11036.22	41.91	43.60	14.30	39.50	10.20	52.11	74.00	-21.89	PK	Vertical
11036.22	31.85	43.60	14.30	39.50	10.20	42.05	54.00	-11.95	AV	Vertical
11036.47	41.86	43.60	14.30	39.50	10.20	52.06	74.00	-21.94	PK	Horizontal
11036.47	31.86	43.60	14.30	39.50	10.20	42.06	54.00	-11.94	AV	Horizontal
13299.62	41.73	42.60	15.90	38.90	12.20	53.93	74.00	-20.07	PK	Vertical
13299.62	28.72	42.60	15.90	38.90	12.20	40.92	54.00	-13.08	AV	Vertical
13299.74	41.75	42.60	15.90	38.90	12.20	53.95	74.00	-20.05	PK	Horizontal
13299.74	30.72	42.60	15.90	38.90	12.20	42.92	54.00	-11.08	AV	Horizontal
16000.15	41.77	42.70	18.00	37.10	12.40	54.17	74.00	-19.83	PK	Vertical
16000.15	28.77	42.70	18.00	37.10	12.40	41.17	54.00	-12.83	AV	Vertical
16000.04	41.77	42.70	18.00	37.10	12.40	54.17	74.00	-19.83	PK	Horizontal
16000.04	31.05	42.70	18.00	37.10	12.40	43.45	54.00	-10.55	AV	Horizontal
17998.14	31.91	42.70	19.40	46.50	23.20	55.11	74.00	-18.89	PK	Vertical
17998.14	20.92	42.70	19.40	46.50	23.20	44.12	54.00	-9.88	AV	Vertical
17998.01	31.93	42.70	19.40	46.50	23.20	55.13	74.00	-18.87	PK	Horizontal
17998.01	19.92	42.70	19.40	46.50	23.20	43.12	54.00	-10.88	AV	Horizontal



Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel 11b(2437 MHz)										
3265.00	49.89	44.70	6.70	28.20	-9.80	40.09	74.00	-33.91	PK	Vertical
3265.00	39.86	44.70	6.70	28.20	-9.80	30.06	54.00	-23.94	AV	Vertical
3264.95	49.86	44.70	6.70	28.20	-9.80	40.06	74.00	-33.94	PK	Horizontal
3264.95	39.87	44.70	6.70	28.20	-9.80	30.07	54.00	-23.93	AV	Horizontal
4874.76	60.18	44.20	9.04	31.60	-3.56	56.62	74.00	-17.38	PK	Vertical
4874.76	40.18	44.20	9.04	31.60	-3.56	36.62	54.00	-17.38	AV	Vertical
4874.70	60.19	44.20	9.04	31.60	-3.56	56.63	74.00	-17.37	PK	Horizontal
4874.70	40.13	44.20	9.04	31.60	-3.56	36.57	54.00	-17.43	AV	Horizontal
5359.97	47.06	44.20	9.86	32.00	-2.34	44.72	74.00	-29.28	PK	Vertical
5359.97	39.07	44.20	9.86	32.00	-2.34	36.73	54.00	-17.27	AV	Vertical
5360.00	47.13	44.20	9.86	32.00	-2.34	44.79	74.00	-29.21	PK	Horizontal
5360.00	39.07	44.20	9.86	32.00	-2.34	36.73	54.00	-17.27	AV	Horizontal
7336.05	52.57	43.50	11.40	35.50	3.40	55.97	74.00	-18.03	PK	Vertical
7336.05	34.57	43.50	11.40	35.50	3.40	37.97	54.00	-16.03	AV	Vertical
7336.04	52.58	43.50	11.40	35.50	3.40	55.98	74.00	-18.02	PK	Horizontal
7336.04	34.54	43.50	11.40	35.50	3.40	37.94	54.00	-16.06	AV	Horizontal
11036.11	41.86	43.60	14.30	39.50	10.20	52.06	74.00	-21.94	PK	Vertical
11036.11	31.79	43.60	14.30	39.50	10.20	41.99	54.00	-12.01	AV	Vertical
11036.11	41.83	43.60	14.30	39.50	10.20	52.03	74.00	-21.97	PK	Horizontal
11036.11	31.81	43.60	14.30	39.50	10.20	42.01	54.00	-11.99	AV	Horizontal
13299.71	41.63	42.60	15.90	38.90	12.20	53.83	74.00	-20.17	PK	Vertical
13299.71	31.66	42.60	15.90	38.90	12.20	43.86	54.00	-10.14	AV	Vertical
13299.62	41.69	42.60	15.90	38.90	12.20	53.89	74.00	-20.11	PK	Horizontal
13299.62	30.63	42.60	15.90	38.90	12.20	42.83	54.00	-11.17	AV	Horizontal
15999.98	41.72	42.70	18.00	37.10	12.40	54.12	74.00	-19.88	PK	Vertical
15999.98	28.67	42.70	18.00	37.10	12.40	41.07	54.00	-12.93	AV	Vertical
15999.99	41.71	42.70	18.00	37.10	12.40	54.11	74.00	-19.89	PK	Horizontal
15999.99	30.99	42.70	18.00	37.10	12.40	43.39	54.00	-10.61	AV	Horizontal
17998.13	31.82	42.70	19.40	46.50	23.20	55.02	74.00	-18.98	PK	Vertical
17998.13	21.88	42.70	19.40	46.50	23.20	45.08	54.00	-8.92	AV	Vertical
17998.00	31.84	42.70	19.40	46.50	23.20	55.04	74.00	-18.96	PK	Horizontal
17998.00	21.84	42.70	19.40	46.50	23.20	45.04	54.00	-8.96	AV	Horizontal



Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel 11b(2462 MHz)										
3265.07	49.83	44.70	6.70	28.20	-9.80	40.03	74.00	-33.97	PK	Vertical
3265.07	39.77	44.70	6.70	28.20	-9.80	29.97	54.00	-24.03	AV	Vertical
3265.04	49.74	44.70	6.70	28.20	-9.80	39.94	74.00	-34.06	PK	Horizontal
3265.04	39.82	44.70	6.70	28.20	-9.80	30.02	54.00	-23.98	AV	Horizontal
4924.82	60.07	44.20	9.04	31.60	-3.56	56.51	74.00	-17.49	PK	Vertical
4924.82	40.14	44.20	9.04	31.60	-3.56	36.58	54.00	-17.42	AV	Vertical
4924.78	60.11	44.20	9.04	31.60	-3.56	56.55	74.00	-17.45	PK	Horizontal
4924.78	40.03	44.20	9.04	31.60	-3.56	36.47	54.00	-17.53	AV	Horizontal
5360.04	46.97	44.20	9.86	32.00	-2.34	44.63	74.00	-29.37	PK	Vertical
5360.04	39.01	44.20	9.86	32.00	-2.34	36.67	54.00	-17.33	AV	Vertical
5360.03	47.06	44.20	9.86	32.00	-2.34	44.72	74.00	-29.28	PK	Horizontal
5360.03	38.98	44.20	9.86	32.00	-2.34	36.64	54.00	-17.36	AV	Horizontal
7386.16	52.47	43.50	11.40	35.50	3.40	55.87	74.00	-18.13	PK	Vertical
7386.16	35.45	43.50	11.40	35.50	3.40	38.85	54.00	-15.15	AV	Vertical
7386.20	52.51	43.50	11.40	35.50	3.40	55.91	74.00	-18.09	PK	Horizontal
7386.20	35.46	43.50	11.40	35.50	3.40	38.86	54.00	-15.14	AV	Horizontal
11036.21	41.74	43.60	14.30	39.50	10.20	51.94	74.00	-22.06	PK	Vertical
11036.21	31.72	43.60	14.30	39.50	10.20	41.92	54.00	-12.08	AV	Vertical
11036.19	41.77	43.60	14.30	39.50	10.20	51.97	74.00	-22.03	PK	Horizontal
11036.19	31.79	43.60	14.30	39.50	10.20	41.99	54.00	-12.01	AV	Horizontal
16000.09	41.62	42.70	18.00	37.10	12.40	54.02	74.00	-19.98	PK	Vertical
16000.09	29.62	42.70	18.00	37.10	12.40	42.02	54.00	-11.98	AV	Vertical
16000.05	41.60	42.70	18.00	37.10	12.40	54.00	74.00	-20.00	PK	Horizontal
16000.05	30.90	42.70	18.00	37.10	12.40	43.30	54.00	-10.70	AV	Horizontal
17998.22	31.73	42.70	19.40	46.50	23.20	54.93	74.00	-19.07	PK	Vertical
17998.22	20.76	42.70	19.40	46.50	23.20	43.96	54.00	-10.04	AV	Vertical
17998.09	31.79	42.70	19.40	46.50	23.20	54.99	74.00	-19.01	PK	Horizontal
17998.09	20.79	42.70	19.40	46.50	23.20	43.99	54.00	-10.01	AV	Horizontal



Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel 11g(2412 MHz)										
3265.10	49.90	44.70	6.70	28.20	-9.80	40.10	74.00	-33.90	PK	Vertical
3265.10	39.87	44.70	6.70	28.20	-9.80	30.07	54.00	-23.93	AV	Vertical
3265.06	49.86	44.70	6.70	28.20	-9.80	40.06	74.00	-33.94	PK	Horizontal
3265.06	39.90	44.70	6.70	28.20	-9.80	30.10	54.00	-23.90	AV	Horizontal
4824.78	60.19	44.20	9.04	31.60	-3.56	56.63	74.00	-17.37	PK	Vertical
4824.78	40.18	44.20	9.04	31.60	-3.56	36.62	54.00	-17.38	AV	Vertical
4824.81	60.21	44.20	9.04	31.60	-3.56	56.65	74.00	-17.35	PK	Horizontal
4824.81	40.16	44.20	9.04	31.60	-3.56	36.60	54.00	-17.40	AV	Horizontal
5360.09	47.04	44.20	9.86	32.00	-2.34	44.70	74.00	-29.30	PK	Vertical
5360.09	39.03	44.20	9.86	32.00	-2.34	36.69	54.00	-17.31	AV	Vertical
5360.07	47.13	44.20	9.86	32.00	-2.34	44.79	74.00	-29.21	PK	Horizontal
5360.07	39.11	44.20	9.86	32.00	-2.34	36.77	54.00	-17.23	AV	Horizontal
7236.18	52.60	43.50	11.40	35.50	3.40	56.00	74.00	-18.00	PK	Vertical
7236.18	34.55	43.50	11.40	35.50	3.40	37.95	54.00	-16.05	AV	Vertical
7236.16	52.56	43.50	11.40	35.50	3.40	55.96	74.00	-18.04	PK	Horizontal
7236.16	34.56	43.50	11.40	35.50	3.40	37.96	54.00	-16.04	AV	Horizontal
11036.22	41.82	43.60	14.30	39.50	10.20	52.02	74.00	-21.98	PK	Vertical
11036.22	31.78	43.60	14.30	39.50	10.20	41.98	54.00	-12.02	AV	Vertical
11036.47	41.79	43.60	14.30	39.50	10.20	51.99	74.00	-22.01	PK	Horizontal
11036.47	31.78	43.60	14.30	39.50	10.20	41.98	54.00	-12.02	AV	Horizontal
13299.62	41.68	42.60	15.90	38.90	12.20	53.88	74.00	-20.12	PK	Vertical
13299.62	28.63	42.60	15.90	38.90	12.20	40.83	54.00	-13.17	AV	Vertical
13299.74	41.69	42.60	15.90	38.90	12.20	53.89	74.00	-20.11	PK	Horizontal
13299.74	30.63	42.60	15.90	38.90	12.20	42.83	54.00	-11.17	AV	Horizontal
16000.15	41.71	42.70	18.00	37.10	12.40	54.11	74.00	-19.89	PK	Vertical
16000.15	28.71	42.70	18.00	37.10	12.40	41.11	54.00	-12.89	AV	Vertical
16000.04	41.69	42.70	18.00	37.10	12.40	54.09	74.00	-19.91	PK	Horizontal
16000.04	30.97	42.70	18.00	37.10	12.40	43.37	54.00	-10.63	AV	Horizontal
17998.14	31.85	42.70	19.40	46.50	23.20	55.05	74.00	-18.95	PK	Vertical
17998.14	20.82	42.70	19.40	46.50	23.20	44.02	54.00	-9.98	AV	Vertical
17998.01	31.86	42.70	19.40	46.50	23.20	55.06	74.00	-18.94	PK	Horizontal
17998.01	19.84	42.70	19.40	46.50	23.20	43.04	54.00	-10.96	AV	Horizontal



Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel 11g(2437 MHz)										
3265.00	49.81	44.70	6.70	28.20	-9.80	40.01	74.00	-33.99	PK	Vertical
3265.00	39.79	44.70	6.70	28.20	-9.80	29.99	54.00	-24.01	AV	Vertical
3264.95	49.79	44.70	6.70	28.20	-9.80	39.99	74.00	-34.01	PK	Horizontal
3264.95	39.80	44.70	6.70	28.20	-9.80	30.00	54.00	-24.00	AV	Horizontal
4874.76	60.08	44.20	9.04	31.60	-3.56	56.52	74.00	-17.48	PK	Vertical
4874.76	40.09	44.20	9.04	31.60	-3.56	36.53	54.00	-17.47	AV	Vertical
4874.70	60.11	44.20	9.04	31.60	-3.56	56.55	74.00	-17.45	PK	Horizontal
4874.70	40.06	44.20	9.04	31.60	-3.56	36.50	54.00	-17.50	AV	Horizontal
5359.97	46.97	44.20	9.86	32.00	-2.34	44.63	74.00	-29.37	PK	Vertical
5359.97	38.98	44.20	9.86	32.00	-2.34	36.64	54.00	-17.36	AV	Vertical
5360.00	47.04	44.20	9.86	32.00	-2.34	44.70	74.00	-29.30	PK	Horizontal
5360.00	38.99	44.20	9.86	32.00	-2.34	36.65	54.00	-17.35	AV	Horizontal
7336.05	52.48	43.50	11.40	35.50	3.40	55.88	74.00	-18.12	PK	Vertical
7336.05	34.49	43.50	11.40	35.50	3.40	37.89	54.00	-16.11	AV	Vertical
7336.04	52.52	43.50	11.40	35.50	3.40	55.92	74.00	-18.08	PK	Horizontal
7336.04	34.45	43.50	11.40	35.50	3.40	37.85	54.00	-16.15	AV	Horizontal
11036.11	41.78	43.60	14.30	39.50	10.20	51.98	74.00	-22.02	PK	Vertical
11036.11	31.72	43.60	14.30	39.50	10.20	41.92	54.00	-12.08	AV	Vertical
11036.11	41.76	43.60	14.30	39.50	10.20	51.96	74.00	-22.04	PK	Horizontal
11036.11	31.73	43.60	14.30	39.50	10.20	41.93	54.00	-12.07	AV	Horizontal
13299.71	41.58	42.60	15.90	38.90	12.20	53.78	74.00	-20.22	PK	Vertical
13299.71	31.58	42.60	15.90	38.90	12.20	43.78	54.00	-10.22	AV	Vertical
13299.62	41.62	42.60	15.90	38.90	12.20	53.82	74.00	-20.18	PK	Horizontal
13299.62	30.53	42.60	15.90	38.90	12.20	42.73	54.00	-11.27	AV	Horizontal
15999.98	41.65	42.70	18.00	37.10	12.40	54.05	74.00	-19.95	PK	Vertical
15999.98	28.59	42.70	18.00	37.10	12.40	40.99	54.00	-13.01	AV	Vertical
15999.99	41.61	42.70	18.00	37.10	12.40	54.01	74.00	-19.99	PK	Horizontal
15999.99	30.90	42.70	18.00	37.10	12.40	43.30	54.00	-10.70	AV	Horizontal
17998.13	31.74	42.70	19.40	46.50	23.20	54.94	74.00	-19.06	PK	Vertical
17998.13	21.81	42.70	19.40	46.50	23.20	45.01	54.00	-8.99	AV	Vertical
17998.00	31.78	42.70	19.40	46.50	23.20	54.98	74.00	-19.02	PK	Horizontal
17998.00	21.75	42.70	19.40	46.50	23.20	44.95	54.00	-9.05	AV	Horizontal



Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel 11g(2462 MHz)										
3265.07	49.73	44.70	6.70	28.20	-9.80	39.93	74.00	-34.07	PK	Vertical
3265.07	39.69	44.70	6.70	28.20	-9.80	29.89	54.00	-24.11	AV	Vertical
3265.04	49.69	44.70	6.70	28.20	-9.80	39.89	74.00	-34.11	PK	Horizontal
3265.04	39.75	44.70	6.70	28.20	-9.80	29.95	54.00	-24.05	AV	Horizontal
4924.82	59.99	44.20	9.04	31.60	-3.56	56.43	74.00	-17.57	PK	Vertical
4924.82	40.08	44.20	9.04	31.60	-3.56	36.52	54.00	-17.48	AV	Vertical
4924.78	60.03	44.20	9.04	31.60	-3.56	56.47	74.00	-17.53	PK	Horizontal
4924.78	39.97	44.20	9.04	31.60	-3.56	36.41	54.00	-17.59	AV	Horizontal
5360.04	46.91	44.20	9.86	32.00	-2.34	44.57	74.00	-29.43	PK	Vertical
5360.04	38.96	44.20	9.86	32.00	-2.34	36.62	54.00	-17.38	AV	Vertical
5360.03	46.99	44.20	9.86	32.00	-2.34	44.65	74.00	-29.35	PK	Horizontal
5360.03	38.90	44.20	9.86	32.00	-2.34	36.56	54.00	-17.44	AV	Horizontal
7386.16	52.39	43.50	11.40	35.50	3.40	55.79	74.00	-18.21	PK	Vertical
7386.16	35.39	43.50	11.40	35.50	3.40	38.79	54.00	-15.21	AV	Vertical
7386.20	52.46	43.50	11.40	35.50	3.40	55.86	74.00	-18.14	PK	Horizontal
7386.20	35.39	43.50	11.40	35.50	3.40	38.79	54.00	-15.21	AV	Horizontal
11036.21	41.67	43.60	14.30	39.50	10.20	51.87	74.00	-22.13	PK	Vertical
11036.21	31.63	43.60	14.30	39.50	10.20	41.83	54.00	-12.17	AV	Vertical
11036.19	41.70	43.60	14.30	39.50	10.20	51.90	74.00	-22.10	PK	Horizontal
11036.19	31.69	43.60	14.30	39.50	10.20	41.89	54.00	-12.11	AV	Horizontal
16000.09	41.54	42.70	18.00	37.10	12.40	53.94	74.00	-20.06	PK	Vertical
16000.09	29.52	42.70	18.00	37.10	12.40	41.92	54.00	-12.08	AV	Vertical
16000.05	41.52	42.70	18.00	37.10	12.40	53.92	74.00	-20.08	PK	Horizontal
16000.05	30.80	42.70	18.00	37.10	12.40	43.20	54.00	-10.80	AV	Horizontal
17998.22	31.65	42.70	19.40	46.50	23.20	54.85	74.00	-19.15	PK	Vertical
17998.22	20.70	42.70	19.40	46.50	23.20	43.90	54.00	-10.10	AV	Vertical
17998.09	31.71	42.70	19.40	46.50	23.20	54.91	74.00	-19.09	PK	Horizontal
17998.09	20.73	42.70	19.40	46.50	23.20	43.93	54.00	-10.07	AV	Horizontal



Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel 11n20(2412 MHz)										
3265.10	49.82	44.70	6.70	28.20	-9.80	40.02	74.00	-33.98	PK	Vertical
3265.10	39.82	44.70	6.70	28.20	-9.80	30.02	54.00	-23.98	AV	Vertical
3265.06	49.77	44.70	6.70	28.20	-9.80	39.97	74.00	-34.03	PK	Horizontal
3265.06	39.83	44.70	6.70	28.20	-9.80	30.03	54.00	-23.97	AV	Horizontal
4824.78	60.10	44.20	9.04	31.60	-3.56	56.54	74.00	-17.46	PK	Vertical
4824.78	40.11	44.20	9.04	31.60	-3.56	36.55	54.00	-17.45	AV	Vertical
4824.81	60.13	44.20	9.04	31.60	-3.56	56.57	74.00	-17.43	PK	Horizontal
4824.81	40.10	44.20	9.04	31.60	-3.56	36.54	54.00	-17.46	AV	Horizontal
5360.09	46.95	44.20	9.86	32.00	-2.34	44.61	74.00	-29.39	PK	Vertical
5360.09	38.93	44.20	9.86	32.00	-2.34	36.59	54.00	-17.41	AV	Vertical
5360.07	47.07	44.20	9.86	32.00	-2.34	44.73	74.00	-29.27	PK	Horizontal
5360.07	39.03	44.20	9.86	32.00	-2.34	36.69	54.00	-17.31	AV	Horizontal
7236.18	52.52	43.50	11.40	35.50	3.40	55.92	74.00	-18.08	PK	Vertical
7236.18	34.48	43.50	11.40	35.50	3.40	37.88	54.00	-16.12	AV	Vertical
7236.16	52.48	43.50	11.40	35.50	3.40	55.88	74.00	-18.12	PK	Horizontal
7236.16	34.51	43.50	11.40	35.50	3.40	37.91	54.00	-16.09	AV	Horizontal
11036.22	41.76	43.60	14.30	39.50	10.20	51.96	74.00	-22.04	PK	Vertical
11036.22	31.73	43.60	14.30	39.50	10.20	41.93	54.00	-12.07	AV	Vertical
11036.47	41.72	43.60	14.30	39.50	10.20	51.92	74.00	-22.08	PK	Horizontal
11036.47	31.69	43.60	14.30	39.50	10.20	41.89	54.00	-12.11	AV	Horizontal
13299.62	41.60	42.60	15.90	38.90	12.20	53.80	74.00	-20.20	PK	Vertical
13299.62	28.54	42.60	15.90	38.90	12.20	40.74	54.00	-13.26	AV	Vertical
13299.74	41.63	42.60	15.90	38.90	12.20	53.83	74.00	-20.17	PK	Horizontal
13299.74	30.57	42.60	15.90	38.90	12.20	42.77	54.00	-11.23	AV	Horizontal
16000.15	41.62	42.70	18.00	37.10	12.40	54.02	74.00	-19.98	PK	Vertical
16000.15	28.64	42.70	18.00	37.10	12.40	41.04	54.00	-12.96	AV	Vertical
16000.04	41.59	42.70	18.00	37.10	12.40	53.99	74.00	-20.01	PK	Horizontal
16000.04	30.89	42.70	18.00	37.10	12.40	43.29	54.00	-10.71	AV	Horizontal
17998.14	31.78	42.70	19.40	46.50	23.20	54.98	74.00	-19.02	PK	Vertical
17998.14	20.73	42.70	19.40	46.50	23.20	43.93	54.00	-10.07	AV	Vertical
17998.01	31.77	42.70	19.40	46.50	23.20	54.97	74.00	-19.03	PK	Horizontal
17998.01	19.77	42.70	19.40	46.50	23.20	42.97	54.00	-11.03	AV	Horizontal



Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel 11n20(2437 MHz)										
3265.00	49.74	44.70	6.70	28.20	-9.80	39.94	74.00	-34.06	PK	Vertical
3265.00	39.70	44.70	6.70	28.20	-9.80	29.90	54.00	-24.10	AV	Vertical
3264.95	49.73	44.70	6.70	28.20	-9.80	39.93	74.00	-34.07	PK	Horizontal
3264.95	39.73	44.70	6.70	28.20	-9.80	29.93	54.00	-24.07	AV	Horizontal
4874.76	60.00	44.20	9.04	31.60	-3.56	56.44	74.00	-17.56	PK	Vertical
4874.76	40.03	44.20	9.04	31.60	-3.56	36.47	54.00	-17.53	AV	Vertical
4874.70	60.05	44.20	9.04	31.60	-3.56	56.49	74.00	-17.51	PK	Horizontal
4874.70	39.96	44.20	9.04	31.60	-3.56	36.40	54.00	-17.60	AV	Horizontal
5359.97	46.89	44.20	9.86	32.00	-2.34	44.55	74.00	-29.45	PK	Vertical
5359.97	38.90	44.20	9.86	32.00	-2.34	36.56	54.00	-17.44	AV	Vertical
5360.00	46.98	44.20	9.86	32.00	-2.34	44.64	74.00	-29.36	PK	Horizontal
5360.00	38.91	44.20	9.86	32.00	-2.34	36.57	54.00	-17.43	AV	Horizontal
7336.05	52.40	43.50	11.40	35.50	3.40	55.80	74.00	-18.20	PK	Vertical
7336.05	34.40	43.50	11.40	35.50	3.40	37.80	54.00	-16.20	AV	Vertical
7336.04	52.43	43.50	11.40	35.50	3.40	55.83	74.00	-18.17	PK	Horizontal
7336.04	34.37	43.50	11.40	35.50	3.40	37.77	54.00	-16.23	AV	Horizontal
11036.11	41.70	43.60	14.30	39.50	10.20	51.90	74.00	-22.10	PK	Vertical
11036.11	31.62	43.60	14.30	39.50	10.20	41.82	54.00	-12.18	AV	Vertical
11036.11	41.71	43.60	14.30	39.50	10.20	51.91	74.00	-22.09	PK	Horizontal
11036.11	31.66	43.60	14.30	39.50	10.20	41.86	54.00	-12.14	AV	Horizontal
13299.71	41.52	42.60	15.90	38.90	12.20	53.72	74.00	-20.28	PK	Vertical
13299.71	31.48	42.60	15.90	38.90	12.20	43.68	54.00	-10.32	AV	Vertical
13299.62	41.54	42.60	15.90	38.90	12.20	53.74	74.00	-20.26	PK	Horizontal
13299.62	30.47	42.60	15.90	38.90	12.20	42.67	54.00	-11.33	AV	Horizontal
15999.98	41.58	42.70	18.00	37.10	12.40	53.98	74.00	-20.02	PK	Vertical
15999.98	28.53	42.70	18.00	37.10	12.40	40.93	54.00	-13.07	AV	Vertical
15999.99	41.54	42.70	18.00	37.10	12.40	53.94	74.00	-20.06	PK	Horizontal
15999.99	30.85	42.70	18.00	37.10	12.40	43.25	54.00	-10.75	AV	Horizontal
17998.13	31.67	42.70	19.40	46.50	23.20	54.87	74.00	-19.13	PK	Vertical
17998.13	21.73	42.70	19.40	46.50	23.20	44.93	54.00	-9.07	AV	Vertical
17998.00	31.72	42.70	19.40	46.50	23.20	54.92	74.00	-19.08	PK	Horizontal
17998.00	21.65	42.70	19.40	46.50	23.20	44.85	54.00	-9.15	AV	Horizontal



Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel 11n20(2462 MHz)										
3265.07	49.64	44.70	6.70	28.20	-9.80	39.84	74.00	-34.16	PK	Vertical
3265.07	39.59	44.70	6.70	28.20	-9.80	29.79	54.00	-24.21	AV	Vertical
3265.04	49.61	44.70	6.70	28.20	-9.80	39.81	74.00	-34.19	PK	Horizontal
3265.04	39.68	44.70	6.70	28.20	-9.80	29.88	54.00	-24.12	AV	Horizontal
4924.82	59.91	44.20	9.04	31.60	-3.56	56.35	74.00	-17.65	PK	Vertical
4924.82	39.98	44.20	9.04	31.60	-3.56	36.42	54.00	-17.58	AV	Vertical
4924.78	59.95	44.20	9.04	31.60	-3.56	56.39	74.00	-17.61	PK	Horizontal
4924.78	39.91	44.20	9.04	31.60	-3.56	36.35	54.00	-17.65	AV	Horizontal
5360.04	46.82	44.20	9.86	32.00	-2.34	44.48	74.00	-29.52	PK	Vertical
5360.04	38.88	44.20	9.86	32.00	-2.34	36.54	54.00	-17.46	AV	Vertical
5360.03	46.93	44.20	9.86	32.00	-2.34	44.59	74.00	-29.41	PK	Horizontal
5360.03	38.84	44.20	9.86	32.00	-2.34	36.50	54.00	-17.50	AV	Horizontal
7386.16	52.31	43.50	11.40	35.50	3.40	55.71	74.00	-18.29	PK	Vertical
7386.16	35.31	43.50	11.40	35.50	3.40	38.71	54.00	-15.29	AV	Vertical
7386.20	52.37	43.50	11.40	35.50	3.40	55.77	74.00	-18.23	PK	Horizontal
7386.20	35.32	43.50	11.40	35.50	3.40	38.72	54.00	-15.28	AV	Horizontal
11036.21	41.59	43.60	14.30	39.50	10.20	51.79	74.00	-22.21	PK	Vertical
11036.21	31.56	43.60	14.30	39.50	10.20	41.76	54.00	-12.24	AV	Vertical
11036.19	41.65	43.60	14.30	39.50	10.20	51.85	74.00	-22.15	PK	Horizontal
11036.19	31.63	43.60	14.30	39.50	10.20	41.83	54.00	-12.17	AV	Horizontal
16000.09	41.45	42.70	18.00	37.10	12.40	53.85	74.00	-20.15	PK	Vertical
16000.09	29.45	42.70	18.00	37.10	12.40	41.85	54.00	-12.15	AV	Vertical
16000.05	41.43	42.70	18.00	37.10	12.40	53.83	74.00	-20.17	PK	Horizontal
16000.05	30.72	42.70	18.00	37.10	12.40	43.12	54.00	-10.88	AV	Horizontal
17998.22	31.56	42.70	19.40	46.50	23.20	54.76	74.00	-19.24	PK	Vertical
17998.22	20.65	42.70	19.40	46.50	23.20	43.85	54.00	-10.15	AV	Vertical
17998.09	31.64	42.70	19.40	46.50	23.20	54.84	74.00	-19.16	PK	Horizontal
17998.09	20.66	42.70	19.40	46.50	23.20	43.86	54.00	-10.14	AV	Horizontal

Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel BLE(2402 MHz)										
3265.26	40.08	44.70	6.70	28.20	-9.80	30.28	54.00	-23.72	AV	Vertical
3265.23	50.13	44.70	6.70	28.20	-9.80	40.33	74.00	-33.67	PK	Horizontal
3265.23	40.10	44.70	6.70	28.20	-9.80	30.30	54.00	-23.70	AV	Horizontal
4803.93	60.37	44.20	9.04	31.60	-3.56	56.81	74.00	-17.19	PK	Vertical
4803.93	40.38	44.20	9.04	31.60	-3.56	36.82	54.00	-17.18	AV	Vertical
4804.91	60.44	44.20	9.04	31.60	-3.56	56.88	74.00	-17.12	PK	Horizontal
4804.91	40.38	44.20	9.04	31.60	-3.56	36.82	54.00	-17.18	AV	Horizontal
5360.20	47.30	44.20	9.86	32.00	-2.34	44.96	74.00	-29.04	PK	Vertical
5360.20	39.31	44.20	9.86	32.00	-2.34	36.97	54.00	-17.03	AV	Vertical
5360.20	47.33	44.20	9.86	32.00	-2.34	44.99	74.00	-29.01	PK	Horizontal
5360.20	39.30	44.20	9.86	32.00	-2.34	36.96	54.00	-17.04	AV	Horizontal
7206.29	52.78	43.50	11.40	35.50	3.40	56.18	74.00	-17.82	PK	Vertical
7206.29	34.76	43.50	11.40	35.50	3.40	38.16	54.00	-15.84	AV	Vertical
7206.33	52.79	43.50	11.40	35.50	3.40	56.19	74.00	-17.81	PK	Horizontal
7206.33	34.79	43.50	11.40	35.50	3.40	38.19	54.00	-15.81	AV	Horizontal
11036.36	42.05	43.60	14.30	39.50	10.20	52.25	74.00	-21.75	PK	Vertical
11036.36	32.02	43.60	14.30	39.50	10.20	42.22	54.00	-11.78	AV	Vertical
11036.59	42.00	43.60	14.30	39.50	10.20	52.20	74.00	-21.80	PK	Horizontal
11036.59	32.02	43.60	14.30	39.50	10.20	42.22	54.00	-11.78	AV	Horizontal
13299.74	41.84	42.60	15.90	38.90	12.20	54.04	74.00	-19.96	PK	Vertical
13299.74	28.87	42.60	15.90	38.90	12.20	41.07	54.00	-12.93	AV	Vertical
13299.88	41.87	42.60	15.90	38.90	12.20	54.07	74.00	-19.93	PK	Horizontal
13299.88	30.87	42.60	15.90	38.90	12.20	43.07	54.00	-10.93	AV	Horizontal
16000.29	41.94	42.70	18.00	37.10	12.40	54.34	74.00	-19.66	PK	Vertical
16000.29	27.87	42.70	18.00	37.10	12.40	40.27	54.00	-13.73	AV	Vertical
16000.20	41.93	42.70	18.00	37.10	12.40	54.33	74.00	-19.67	PK	Horizontal
16000.20	29.16	42.70	18.00	37.10	12.40	41.56	54.00	-12.44	AV	Horizontal
17998.30	32.09	42.70	19.40	46.50	23.20	55.29	74.00	-18.71	PK	Vertical
17998.30	20.10	42.70	19.40	46.50	23.20	43.30	54.00	-10.70	AV	Vertical
17998.16	32.12	42.70	19.40	46.50	23.20	55.32	74.00	-18.68	PK	Horizontal
17998.16	20.06	42.70	19.40	46.50	23.20	43.26	54.00	-10.74	AV	Horizontal
3265.26	40.08	44.70	6.70	28.20	-9.80	30.28	54.00	-23.72	AV	Vertical



Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel BLE(2440 MHz)										
3265.16	50.06	44.70	6.70	28.20	-9.80	40.26	74.00	-33.74	PK	Vertical
3265.16	40.02	44.70	6.70	28.20	-9.80	30.22	54.00	-23.78	AV	Vertical
3265.17	50.04	44.70	6.70	28.20	-9.80	40.24	74.00	-33.76	PK	Horizontal
3265.17	40.02	44.70	6.70	28.20	-9.80	30.22	54.00	-23.78	AV	Horizontal
4880.85	60.31	44.20	9.04	31.60	-3.56	56.75	74.00	-17.25	PK	Vertical
4880.85	40.34	44.20	9.04	31.60	-3.56	36.78	54.00	-17.22	AV	Vertical
4880.80	60.30	44.20	9.04	31.60	-3.56	56.74	74.00	-17.26	PK	Horizontal
4880.80	40.31	44.20	9.04	31.60	-3.56	36.75	54.00	-17.25	AV	Horizontal
5360.10	47.26	44.20	9.86	32.00	-2.34	44.92	74.00	-29.08	PK	Vertical
5360.10	39.23	44.20	9.86	32.00	-2.34	36.89	54.00	-17.11	AV	Vertical
5360.02	47.23	44.20	9.86	32.00	-2.34	44.89	74.00	-29.11	PK	Horizontal
5360.02	39.22	44.20	9.86	32.00	-2.34	36.88	54.00	-17.12	AV	Horizontal
7320.20	52.73	43.50	11.40	35.50	3.40	56.13	74.00	-17.87	PK	Vertical
7320.20	34.66	43.50	11.40	35.50	3.40	38.06	54.00	-15.94	AV	Vertical
7320.58	52.76	43.50	11.40	35.50	3.40	56.16	74.00	-17.84	PK	Horizontal
7320.58	44.73	43.50	11.40	35.50	3.40	48.13	54.00	-5.87	AV	Horizontal
11036.30	41.98	43.60	14.30	39.50	10.20	52.18	74.00	-21.82	PK	Vertical
11036.30	32.00	43.60	14.30	39.50	10.20	42.20	54.00	-11.80	AV	Vertical
11036.47	41.93	43.60	14.30	39.50	10.20	52.13	74.00	-21.87	PK	Horizontal
11036.47	31.94	43.60	14.30	39.50	10.20	42.14	54.00	-11.86	AV	Horizontal
13299.83	41.74	42.60	15.90	38.90	12.20	53.94	74.00	-20.06	PK	Vertical
13299.83	28.79	42.60	15.90	38.90	12.20	40.99	54.00	-13.01	AV	Vertical
13299.75	41.82	42.60	15.90	38.90	12.20	54.02	74.00	-19.98	PK	Horizontal
13299.75	30.80	42.60	15.90	38.90	12.20	43.00	54.00	-11.00	AV	Horizontal
16000.14	41.89	42.70	18.00	37.10	12.40	54.29	74.00	-19.71	PK	Vertical
16000.14	28.81	42.70	18.00	37.10	12.40	41.21	54.00	-12.79	AV	Vertical
16000.09	41.86	42.70	18.00	37.10	12.40	54.26	74.00	-19.74	PK	Horizontal
16000.09	31.08	42.70	18.00	37.10	12.40	43.48	54.00	-10.52	AV	Horizontal
17998.29	31.96	42.70	19.40	46.50	23.20	55.16	74.00	-18.84	PK	Vertical
17998.29	21.03	42.70	19.40	46.50	23.20	44.23	54.00	-9.77	AV	Vertical
17998.17	32.04	42.70	19.40	46.50	23.20	55.24	74.00	-18.76	PK	Horizontal
17998.17	21.02	42.70	19.40	46.50	23.20	44.22	54.00	-9.78	AV	Horizontal



Above 1000 MHz										
Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	
Low Channel BLE(2480 MHz)										
3265.16	50.02	44.70	6.70	28.20	-9.80	40.22	74.00	-33.78	PK	Vertical
3265.16	40.03	44.70	6.70	28.20	-9.80	30.23	54.00	-23.77	AV	Vertical
3265.16	50.04	44.70	6.70	28.20	-9.80	40.24	74.00	-33.76	PK	Horizontal
3265.16	40.06	44.70	6.70	28.20	-9.80	30.26	54.00	-23.74	AV	Horizontal
4960.84	60.33	44.20	9.04	31.60	-3.56	56.77	74.00	-17.23	PK	Vertical
4960.84	40.30	44.20	9.04	31.60	-3.56	36.74	54.00	-17.26	AV	Vertical
4960.83	60.30	44.20	9.04	31.60	-3.56	56.74	74.00	-17.26	PK	Horizontal
4960.83	40.30	44.20	9.04	31.60	-3.56	36.74	54.00	-17.26	AV	Horizontal
5360.14	47.24	44.20	9.86	32.00	-2.34	44.90	74.00	-29.10	PK	Vertical
5360.14	39.25	44.20	9.86	32.00	-2.34	36.91	54.00	-17.09	AV	Vertical
5360.14	47.22	44.20	9.86	32.00	-2.34	44.88	74.00	-29.12	PK	Horizontal
5360.14	39.25	44.20	9.86	32.00	-2.34	36.91	54.00	-17.09	AV	Horizontal
7440.16	52.71	43.50	11.40	35.50	3.40	56.11	74.00	-17.89	PK	Vertical
7440.16	35.67	43.50	11.40	35.50	3.40	39.07	54.00	-14.93	AV	Vertical
7440.23	52.73	43.50	11.40	35.50	3.40	56.13	74.00	-17.87	PK	Horizontal
7440.23	35.76	43.50	11.40	35.50	3.40	39.16	54.00	-14.84	AV	Horizontal
11036.26	42.00	43.60	14.30	39.50	10.20	52.20	74.00	-21.80	PK	Vertical
11036.26	31.95	43.60	14.30	39.50	10.20	42.15	54.00	-11.85	AV	Vertical
11036.30	41.95	43.60	14.30	39.50	10.20	52.15	74.00	-21.85	PK	Horizontal
11036.30	31.99	43.60	14.30	39.50	10.20	42.19	54.00	-11.81	AV	Horizontal
16000.14	41.87	42.70	18.00	37.10	12.40	54.27	74.00	-19.73	PK	Vertical
16000.14	28.81	42.70	18.00	37.10	12.40	41.21	54.00	-12.79	AV	Vertical
16000.15	41.88	42.70	18.00	37.10	12.40	54.28	74.00	-19.72	PK	Horizontal
16000.15	31.08	42.70	18.00	37.10	12.40	43.48	54.00	-10.52	AV	Horizontal
17998.29	31.99	42.70	19.40	46.50	23.20	55.19	74.00	-18.81	PK	Vertical
17998.29	20.04	42.70	19.40	46.50	23.20	43.24	54.00	-10.76	AV	Vertical
17998.17	32.05	42.70	19.40	46.50	23.20	55.25	74.00	-18.75	PK	Horizontal
17998.17	19.99	42.70	19.40	46.50	23.20	43.19	54.00	-10.81	AV	Horizontal



Radiated band edge:

Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	
(MHz)	(dBμV)	(dB)	(dB)	(dB/m)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	Type	Comment
802.11b										
2400.00	69.20	43.80	4.91	25.90	-12.99	56.21	74	-17.79	PK	Vertical
2400.00	54.99	43.80	4.91	25.90	-12.99	42.00	54	-12.00	AV	Vertical
2400.00	70.19	43.80	4.91	25.90	-12.99	57.20	74	-16.80	PK	Horizontal
2400.00	54.16	43.80	4.91	25.90	-12.99	41.17	54	-12.83	AV	Horizontal
2483.50	71.04	43.80	5.12	25.90	-12.78	58.26	74	-15.74	PK	Vertical
2483.50	54.02	43.80	5.12	25.90	-12.78	41.24	54	-12.76	AV	Vertical
2483.50	71.11	43.80	5.12	25.90	-12.78	58.33	74	-15.67	PK	Horizontal
2483.50	54.06	43.80	5.12	25.90	-12.78	41.28	54	-12.72	AV	Horizontal
802.11g										
2400.00	67.97	43.80	4.91	25.90	-12.99	54.98	74	-19.02	PK	Vertical
2400.00	54.09	43.80	4.91	25.90	-12.99	41.10	54	-12.90	AV	Vertical
2400.00	67.14	43.80	4.91	25.90	-12.99	54.15	74	-19.85	PK	Horizontal
2400.00	55.00	43.80	4.91	25.90	-12.99	42.01	54	-11.99	AV	Horizontal
2483.50	67.09	43.80	5.12	25.90	-12.78	54.31	74	-19.69	PK	Vertical
2483.50	54.26	43.80	5.12	25.90	-12.78	41.48	54	-12.52	AV	Vertical
2483.50	67.03	43.80	5.12	25.90	-12.78	54.25	74	-19.75	PK	Horizontal
2483.50	54.16	43.80	5.12	25.90	-12.78	41.38	54	-12.62	AV	Horizontal
802.11n20										
2400.00	67.13	43.80	4.91	25.90	-12.99	54.14	74	-19.86	PK	Vertical
2400.00	54.05	43.80	4.91	25.90	-12.99	41.06	54	-12.94	AV	Vertical
2400.00	67.04	43.80	4.91	25.90	-12.99	54.05	74	-19.95	PK	Horizontal
2400.00	54.12	43.80	4.91	25.90	-12.99	41.13	54	-12.87	AV	Horizontal
2483.50	67.21	43.80	5.12	25.90	-12.78	54.43	74	-19.57	PK	Vertical
2483.50	54.07	43.80	5.12	25.90	-12.78	41.29	54	-12.71	AV	Vertical
2483.50	67.02	43.80	5.12	25.90	-12.78	54.24	74	-19.76	PK	Horizontal
2483.50	54.02	43.80	5.12	25.90	-12.78	41.24	54	-12.76	AV	Horizontal

**Radiated band edge:**

Frequency (MHz)	Meter Reading (dBμV)	Amplifier (dB)	Loss (dB)	Antenna Factor (dB/m)	Corrected Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type	Comment
BLE										
2400.00	6.61	43.80	4.91	25.90	-12.99	-6.38	74	-80.38	PK	Vertical
2400.00	6.64	43.80	4.91	25.90	-12.99	-6.35	54	-60.35	AV	Vertical
2400.00	6.63	43.80	4.91	25.90	-12.99	-6.36	74	-80.36	PK	Horizontal
2400.00	8.99	43.80	4.91	25.90	-12.99	-4.00	54	-58.00	AV	Horizontal
2483.50	8.99	43.80	5.12	25.90	-12.78	-3.79	74	-77.79	PK	Vertical
2483.50	8.95	43.80	5.12	25.90	-12.78	-3.83	54	-57.83	AV	Vertical
2483.50	8.98	43.80	5.12	25.90	-12.78	-3.80	74	-77.80	PK	Horizontal
2483.50	9.78	43.80	5.12	25.90	-12.78	-3.00	54	-57.00	AV	Horizontal

The measurements were more than 20 dB below the limit and not reported

Remark

- 1.The testing has been conformed to $10 \times 2480 = 24800\text{MHz}$.
- 2.All other emissions more than 30dB below the limit.

7 Conducted Spurious Emission

Test Requirement : FCC CFR47 Part 15 Section 15.247
 Test Method : ANSI C63.10:2013
 Test Limit : Regulation 15.247 (d), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

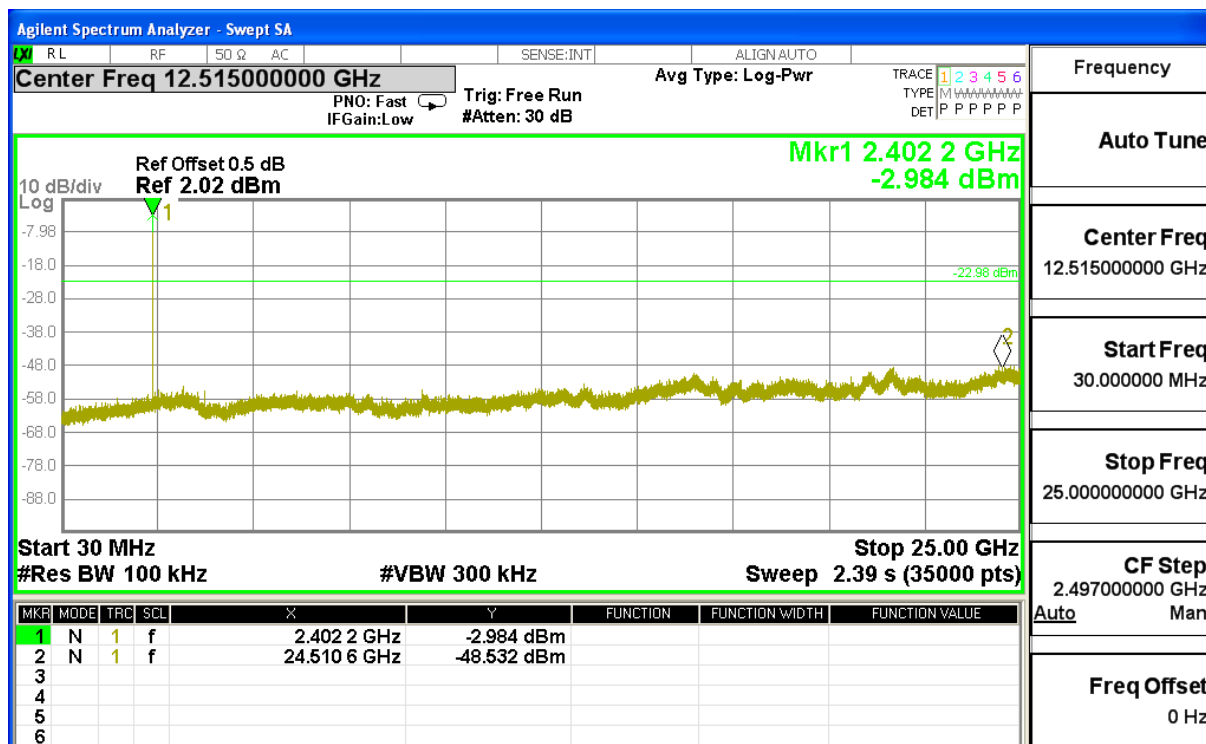
Test Mode : Refer to section 3.3

7.1 Test Procedure

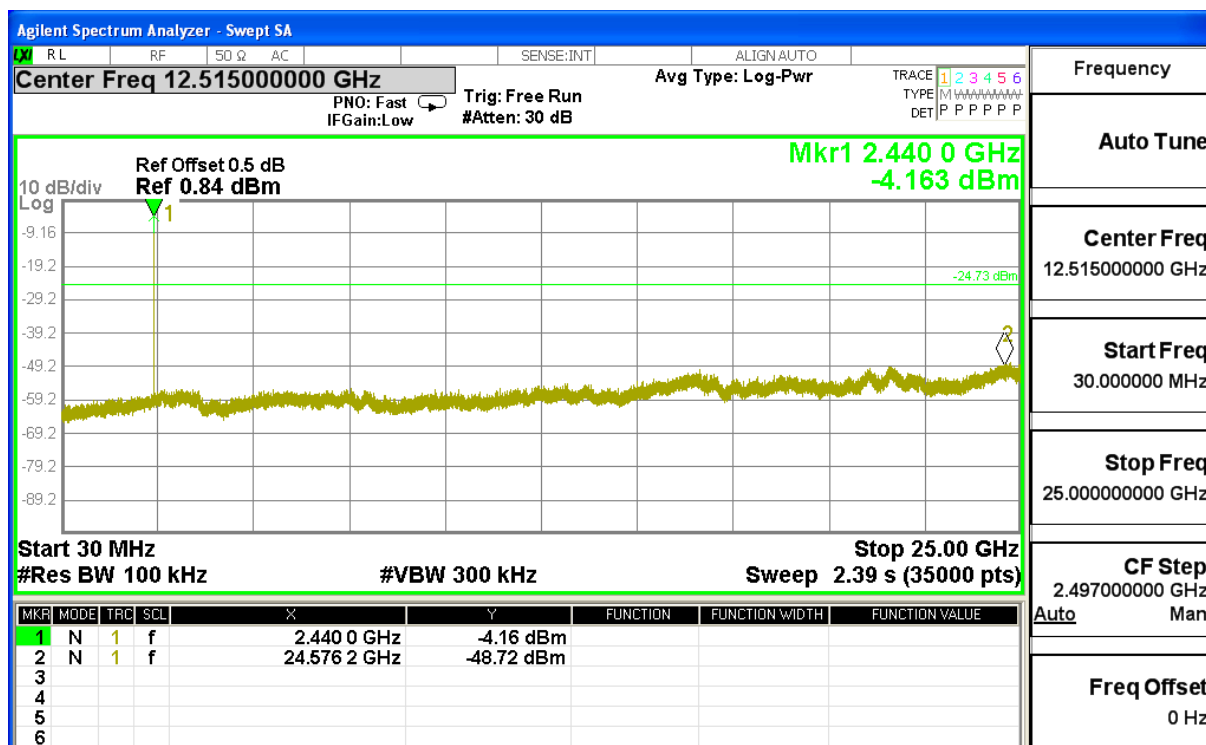
1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz, Sweep = auto
 Detector function = peak, Trace = max hold

7.2 Test Result

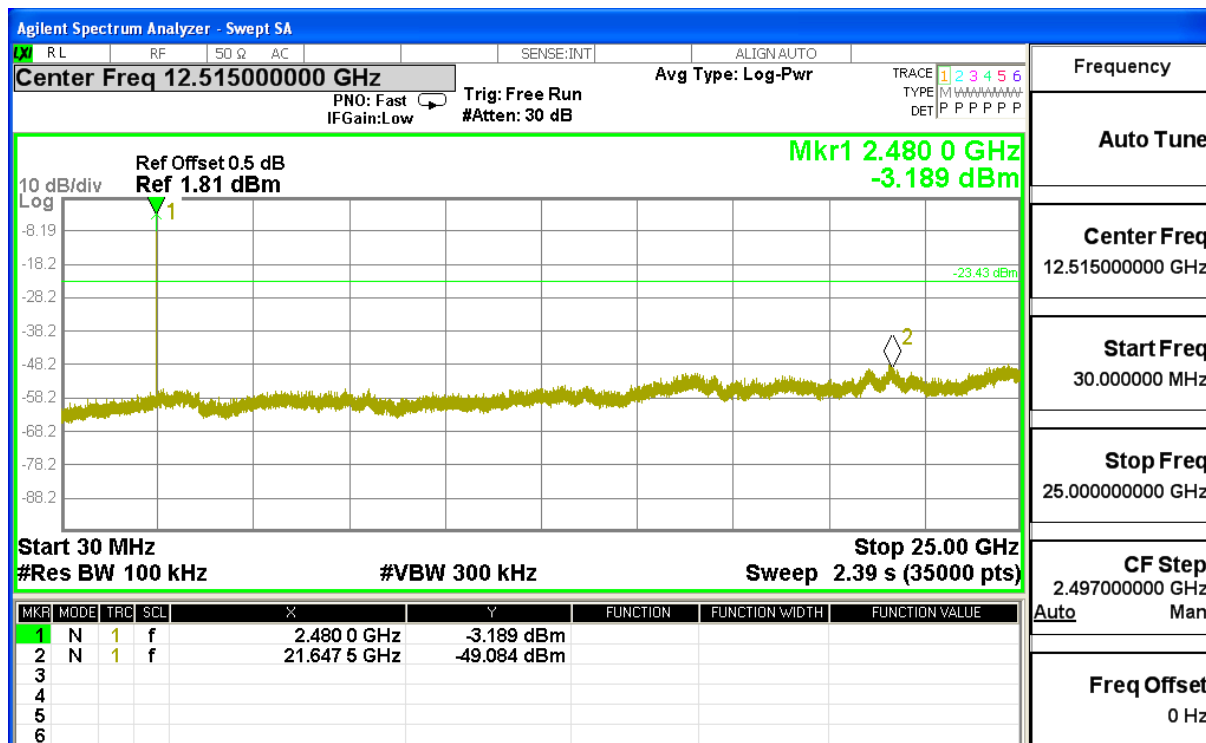
BLE Low Channel



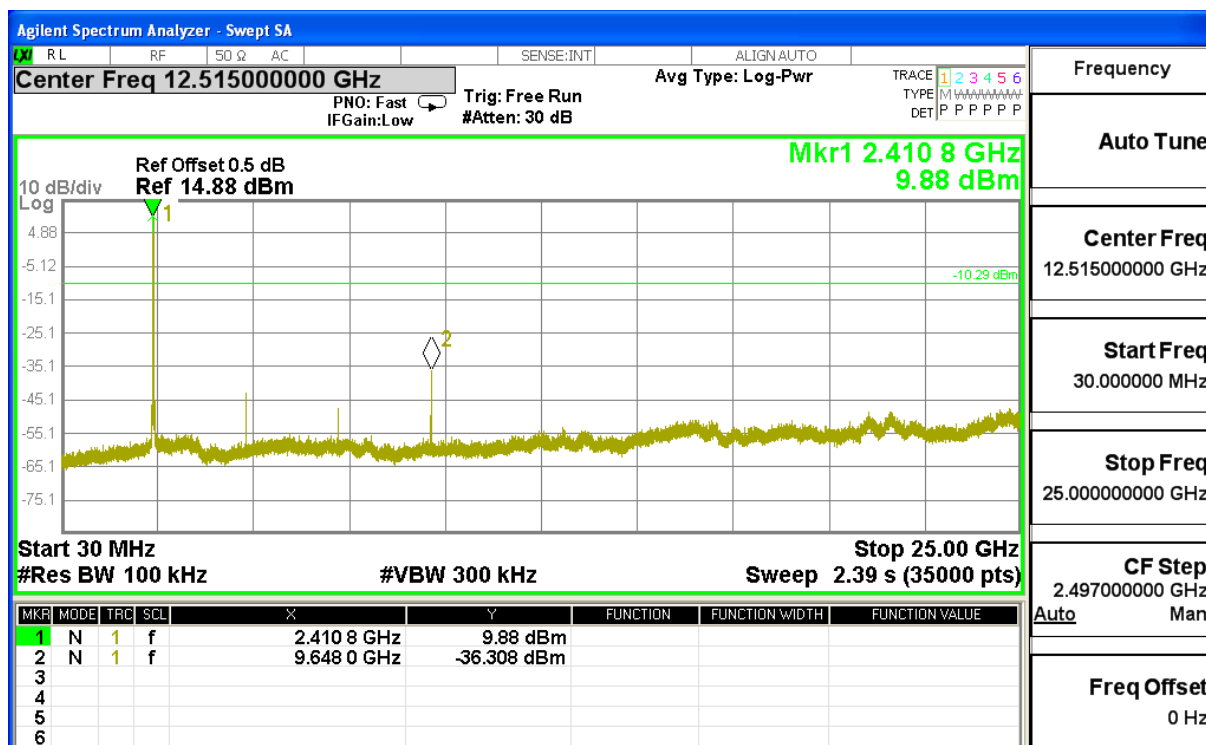
BLE Middle Channel



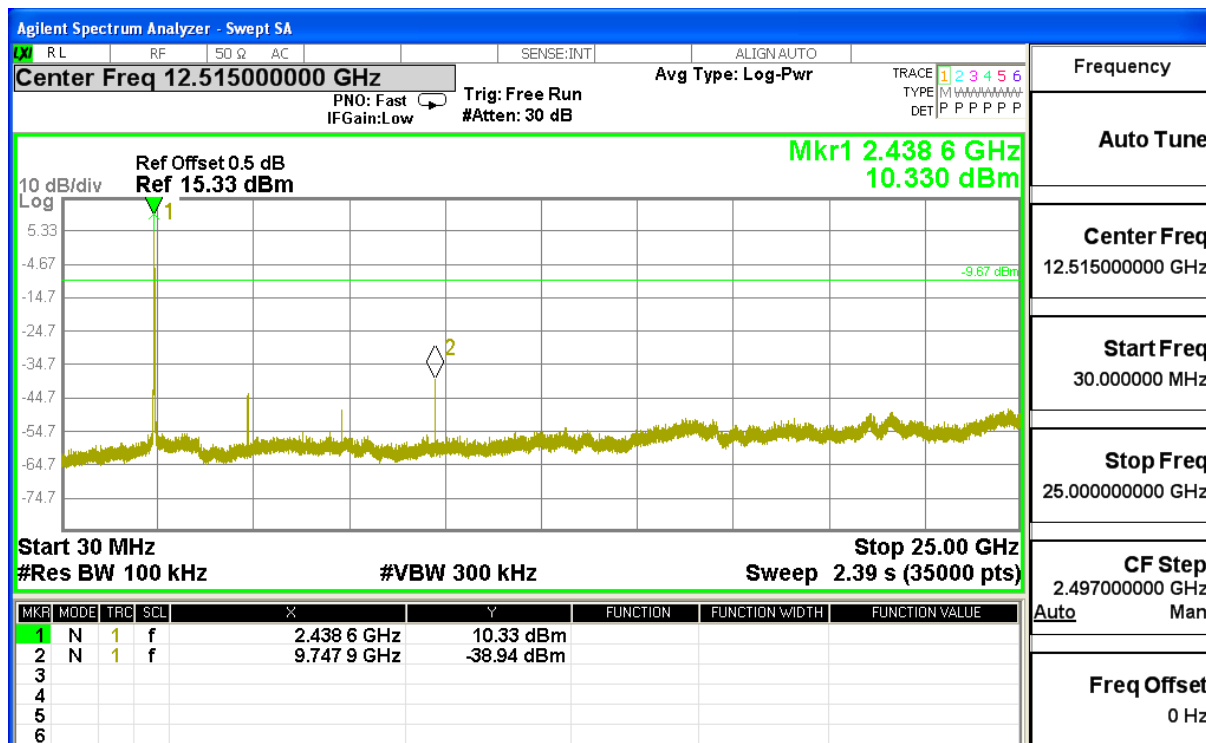
BLE High Channel



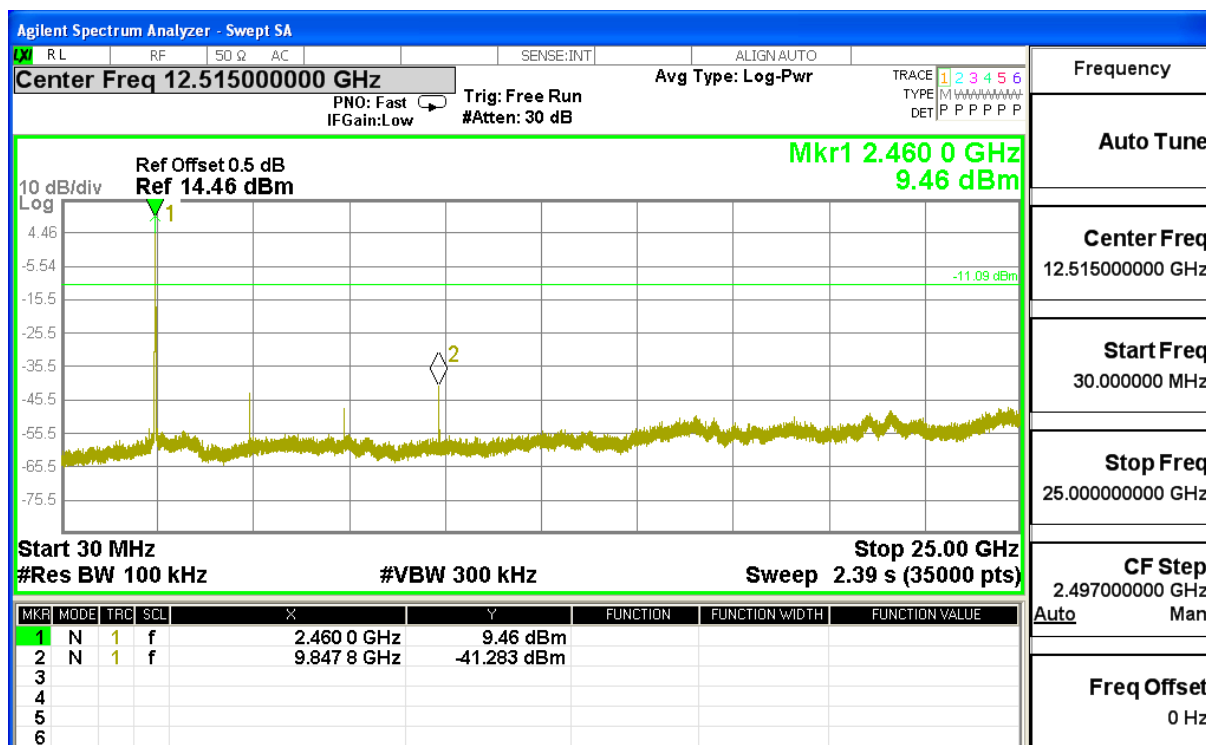
802.11b Low Channel



802.11b Middle Channel



802.11b High Channel



Remark: Scan with 802.11b/g/n HT20/n HT40, The worst case(802.11b mode) was recorded.

8 Band Edge Measurement

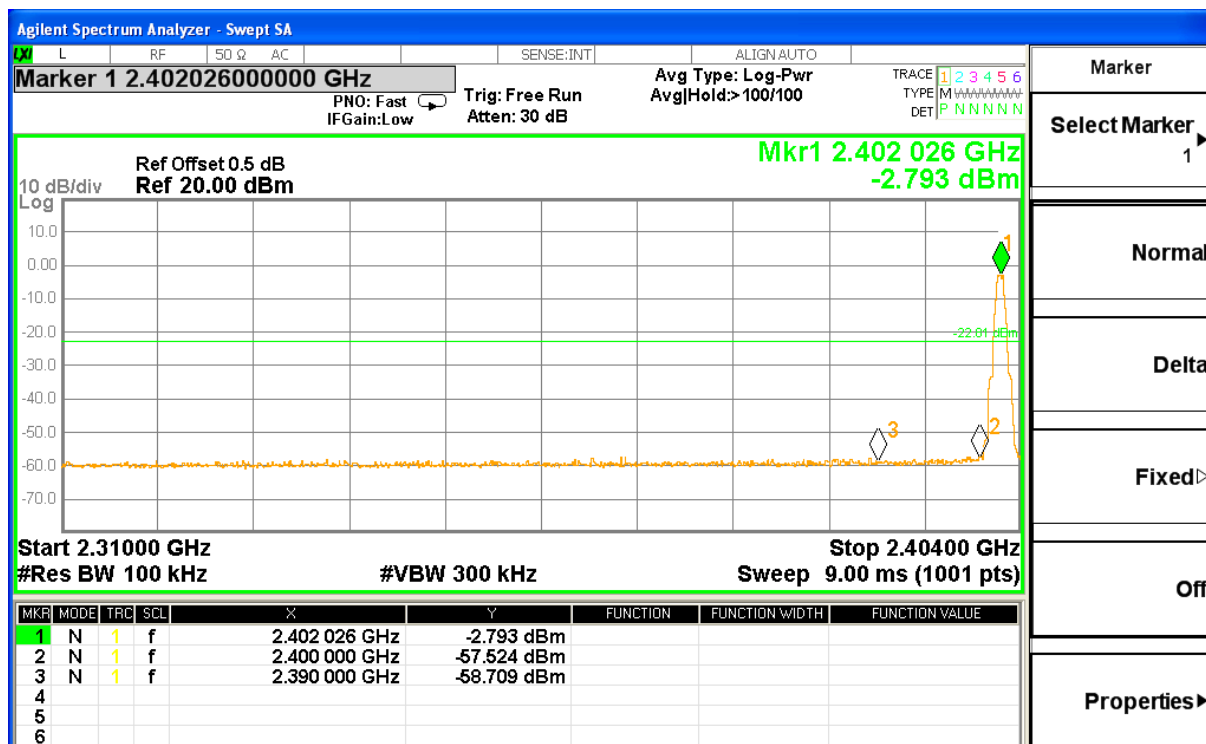
Test Requirement	: Section 15.247(d) In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).
Test Method	: ANSI C63.10:2013
Test Limit	: Regulation 15.247 (d), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).
Test Mode	: Refer to section 3.3

8.1 Test Procedure

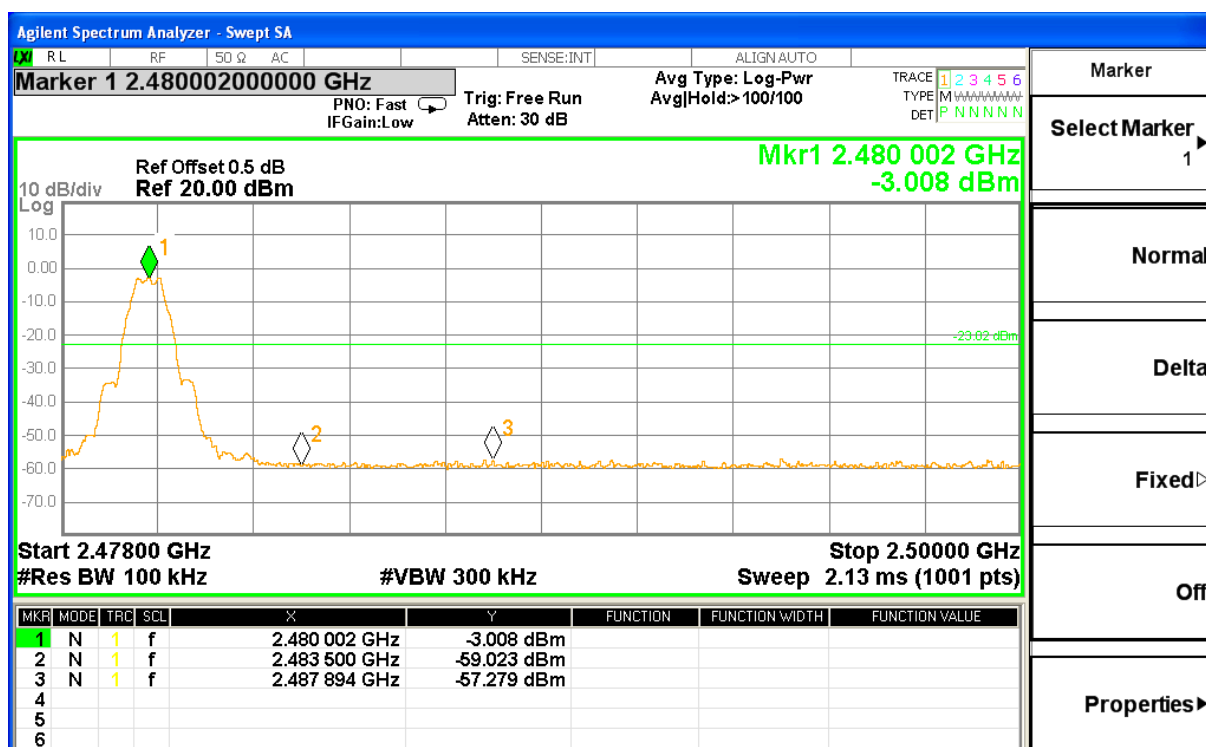
1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz, Sweep = auto
Detector function = peak, Trace = max hold

8.2 Test Result

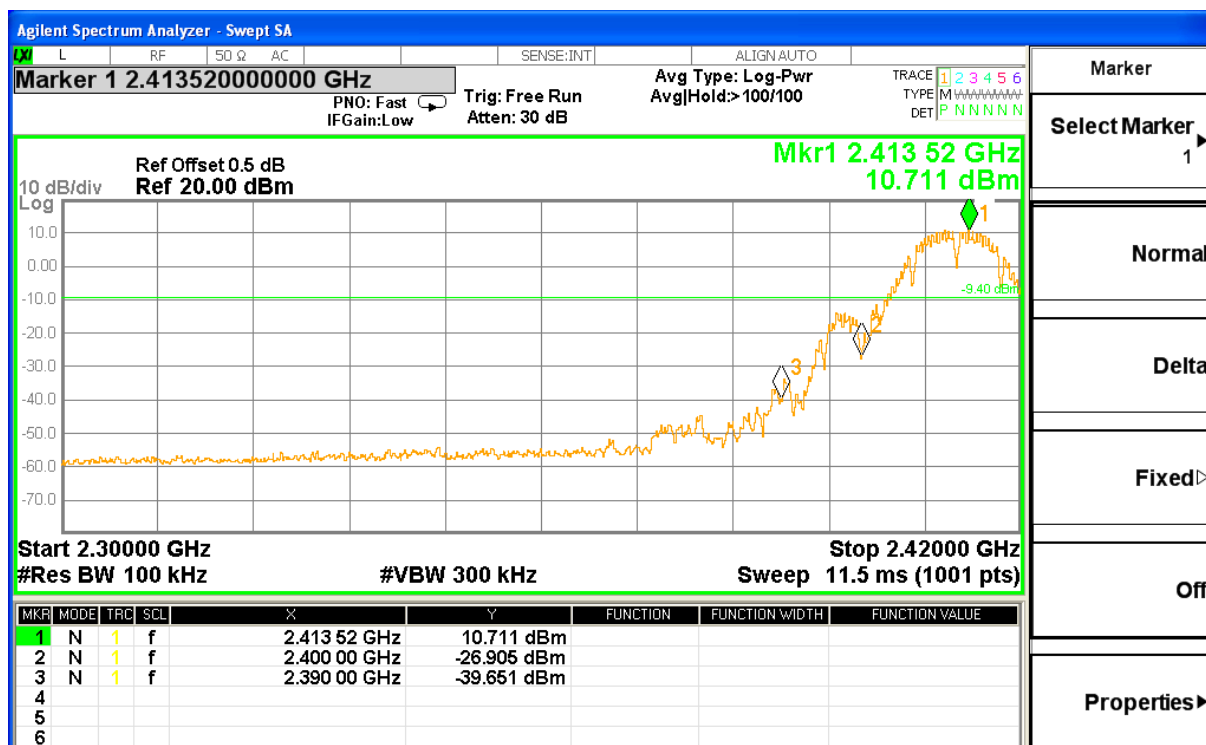
GFSK(BLE) Band edge-left side



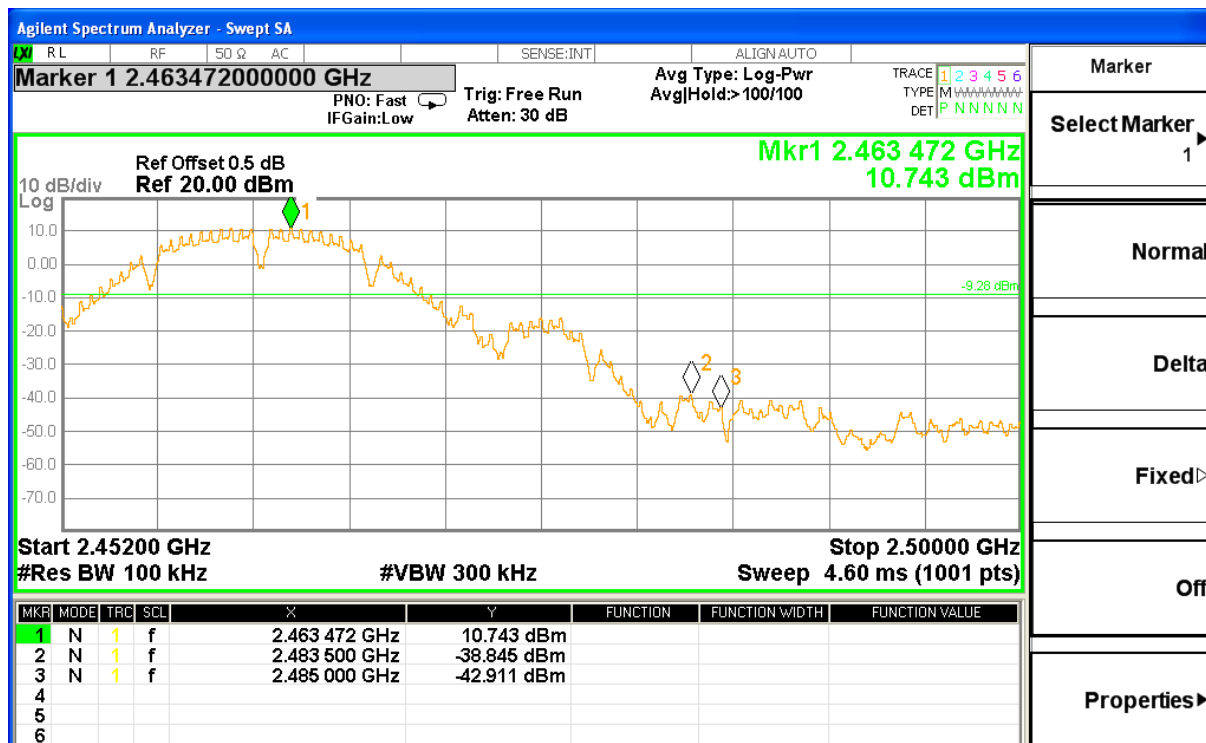
GFSK(BLE) Band edge-right side



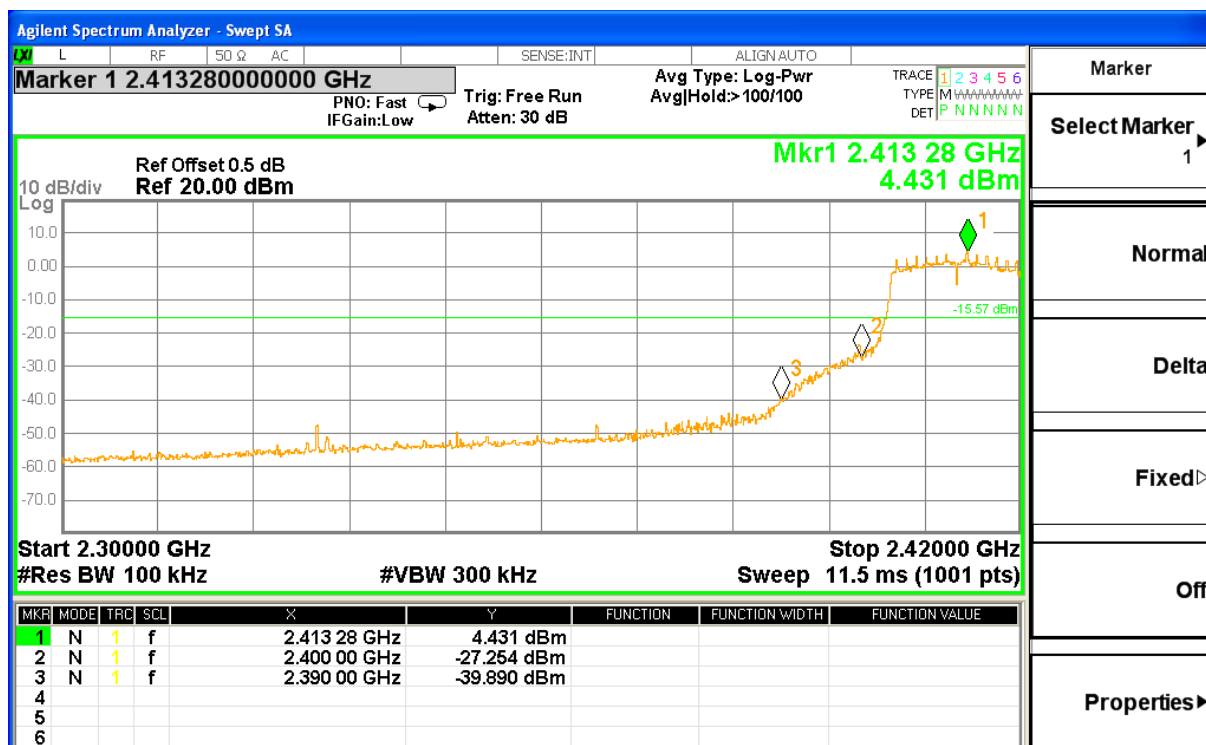
802.11b Band edge-left side



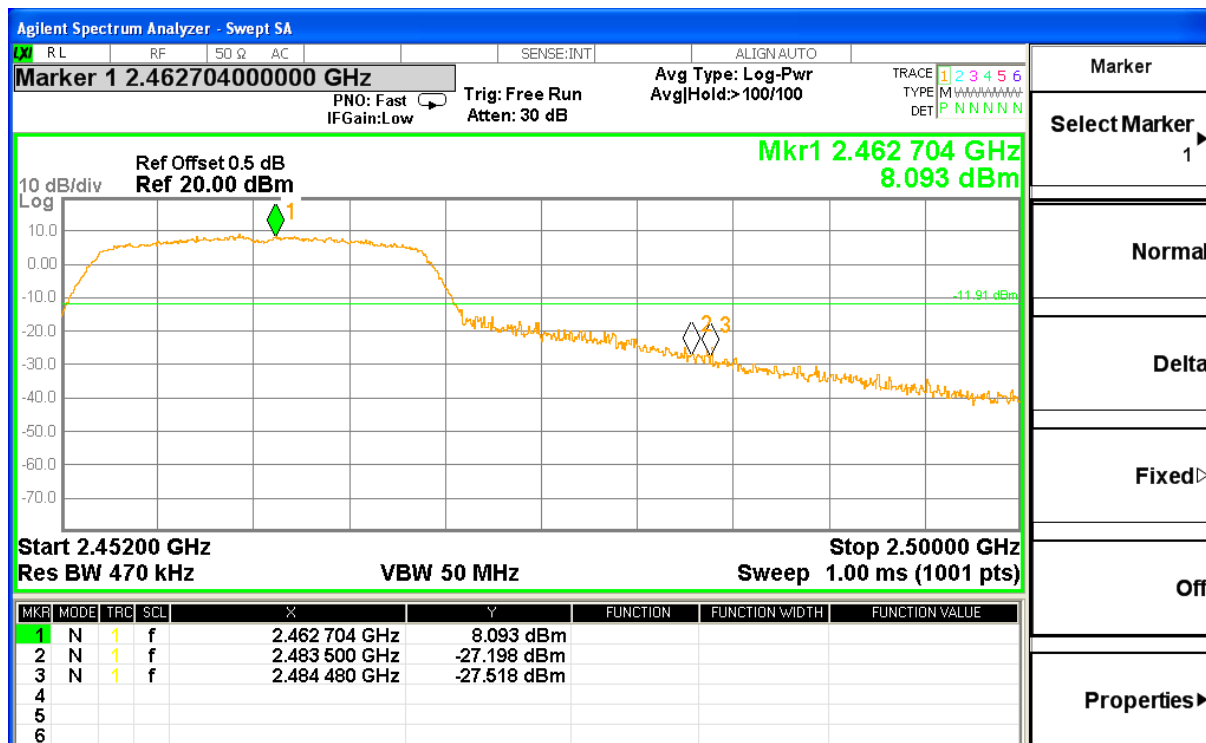
802.11b Band edge-right side



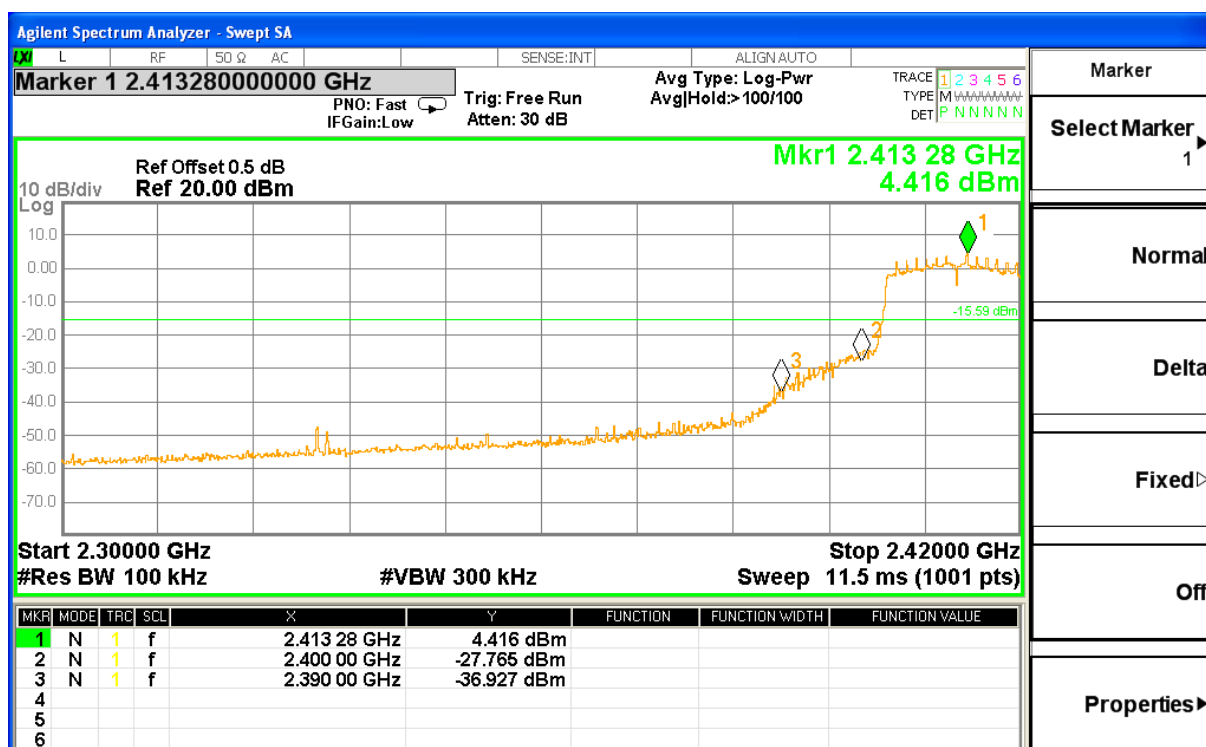
802.11g Band edge-left side



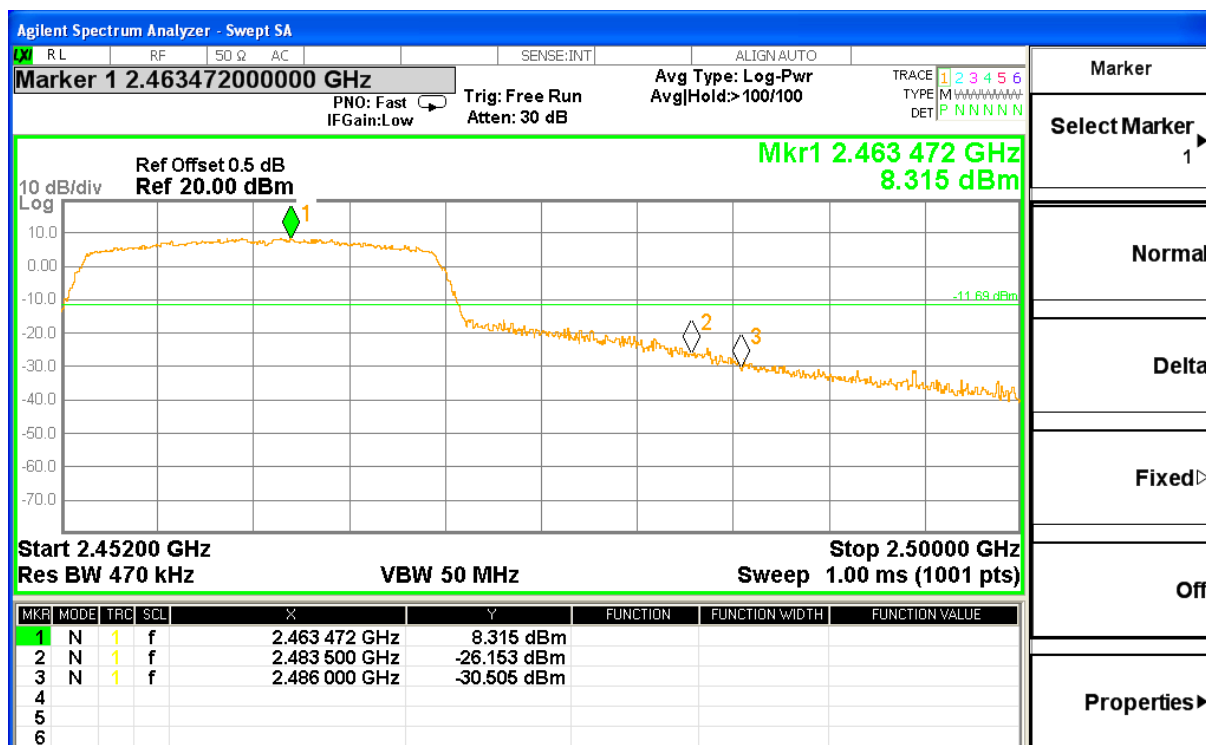
802.11g Band edge-right side



802.11n-HT20 Band edge-left side



802.11n-HT20 Band edge-right side



9 6dB Bandwidth Measurement

Test Requirement : FCC CFR47 Part 15 Section 15.247

Test Method : ANSI C63.10:2013

Test Limit : Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Mode : Refer to section 3.3

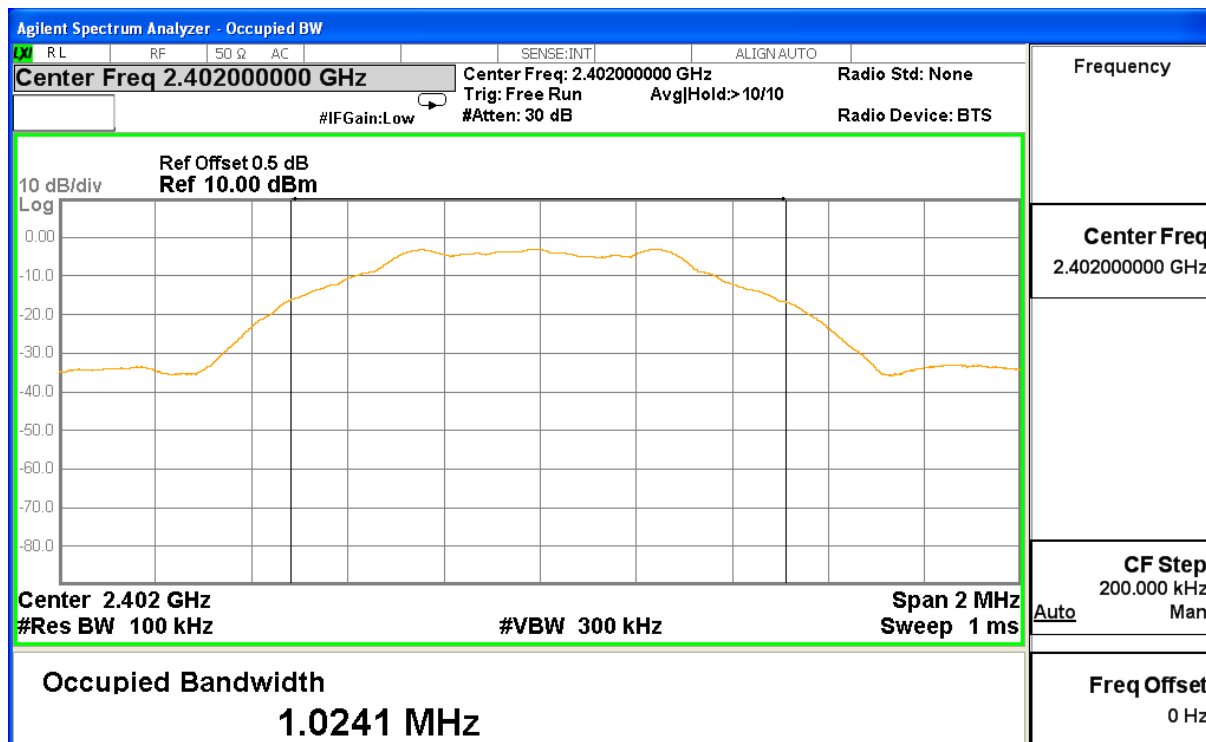
9.1 Test Procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: For BLE, RBW = 100 kHz, VBW = 300kHz, For WIFI, RBW = 100kHz, VBW = 300kHz

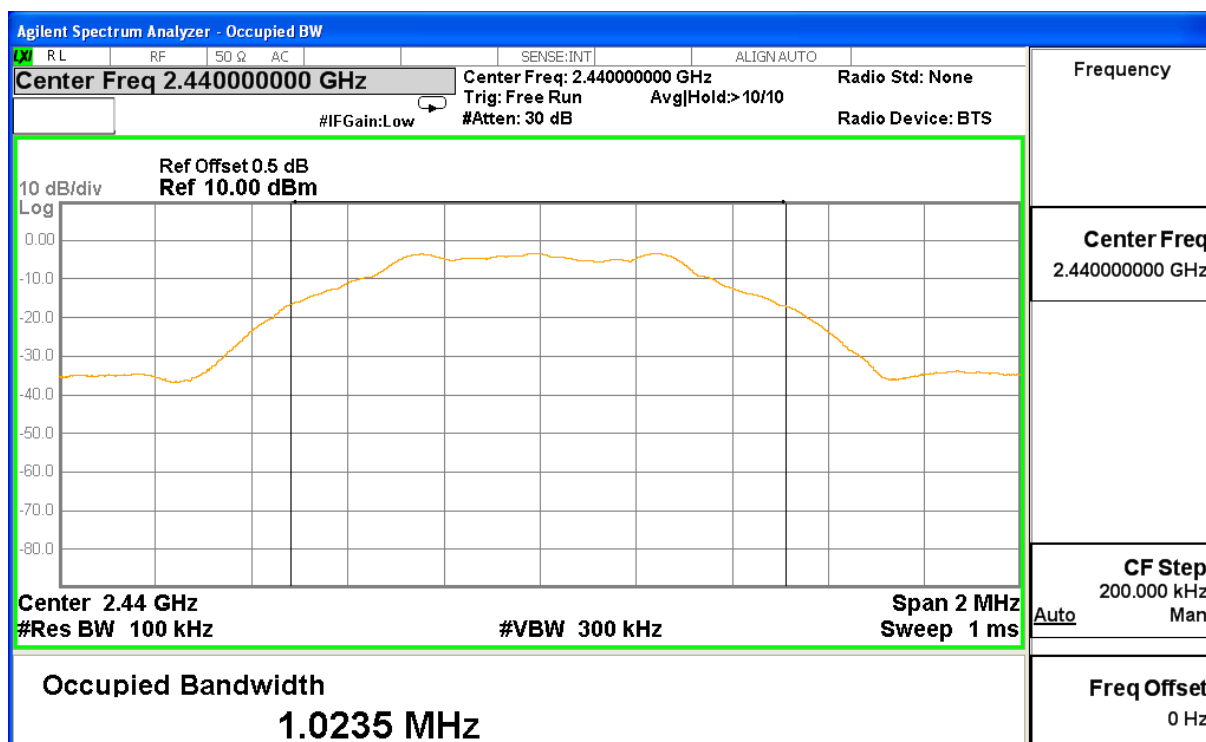
9.2 Test Result

Modulation	Bandwidth(MHz)			Limit
	Low Channel	Middle Channel	High Channel	
GFSK(BLE)	1.0241	1.0235	1.0259	≥500kHz
802.11b	13.971	13.890	13.836	≥500kHz
802.11g	16.191	16.383	16.396	≥500kHz
802.11n-HT20	17.553	17.554	17.543	≥500kHz

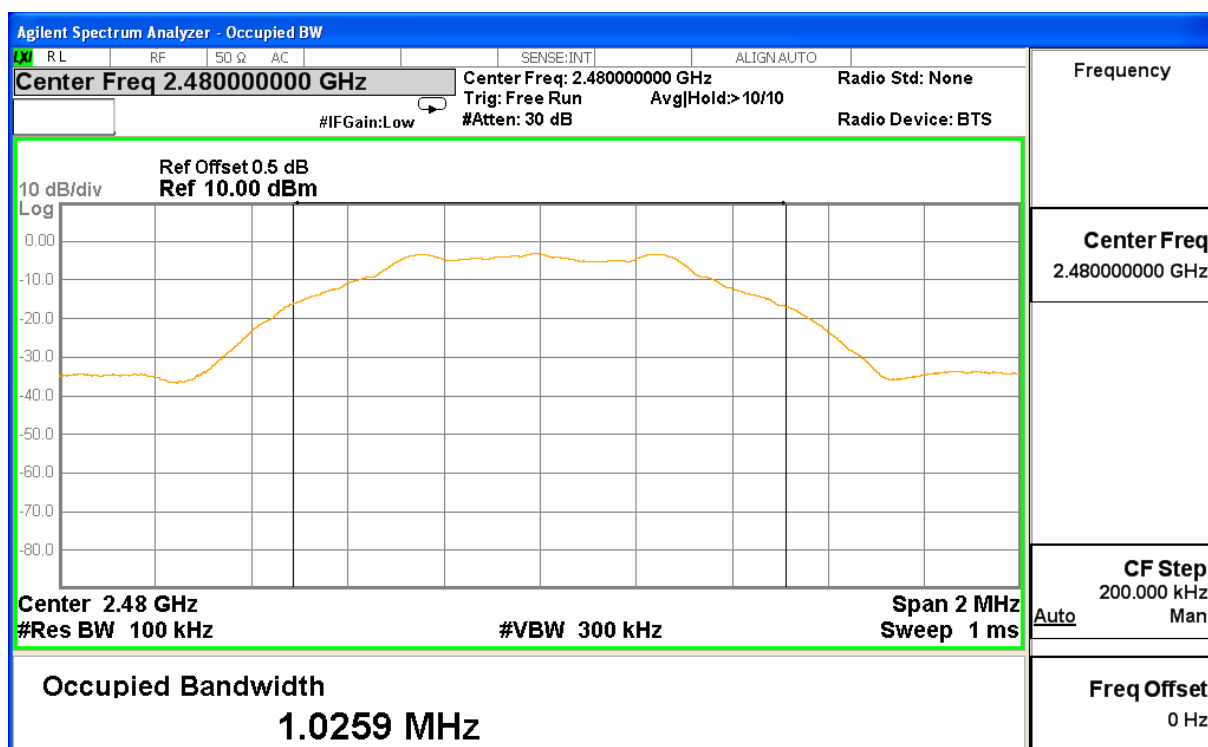
GFSK(BLE) Low Channel



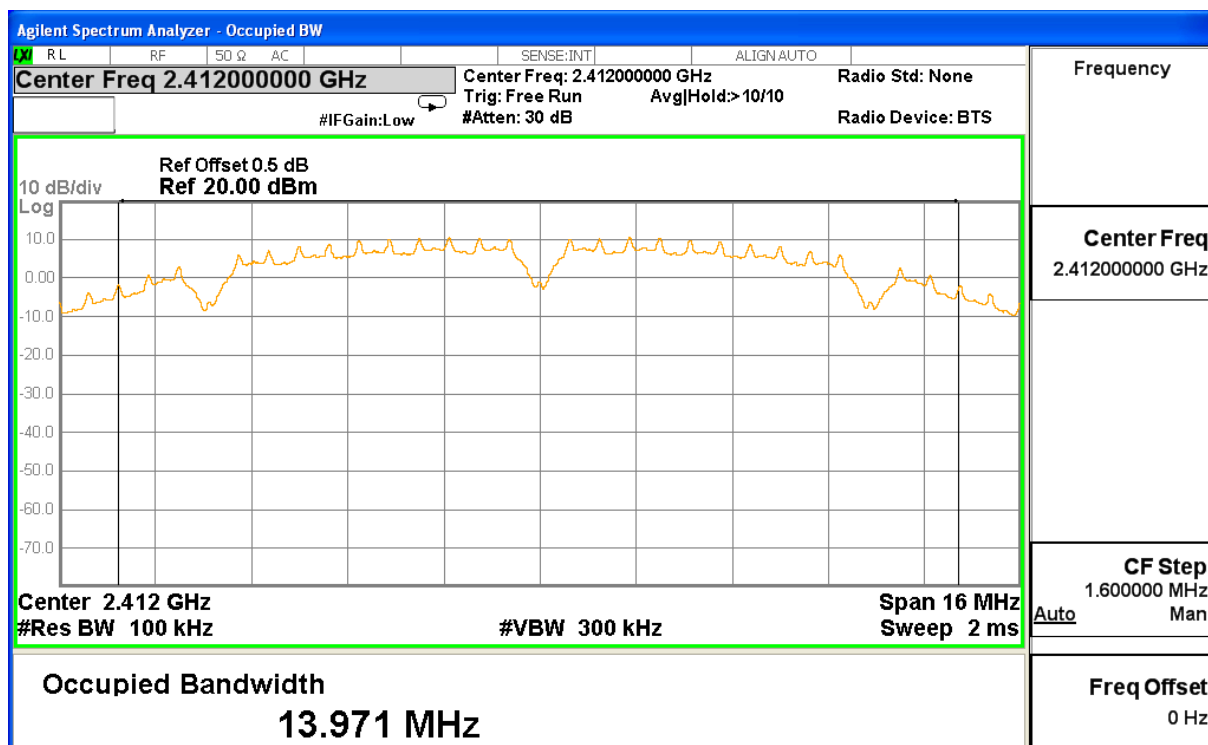
GFSK(BLE) Middle Channel



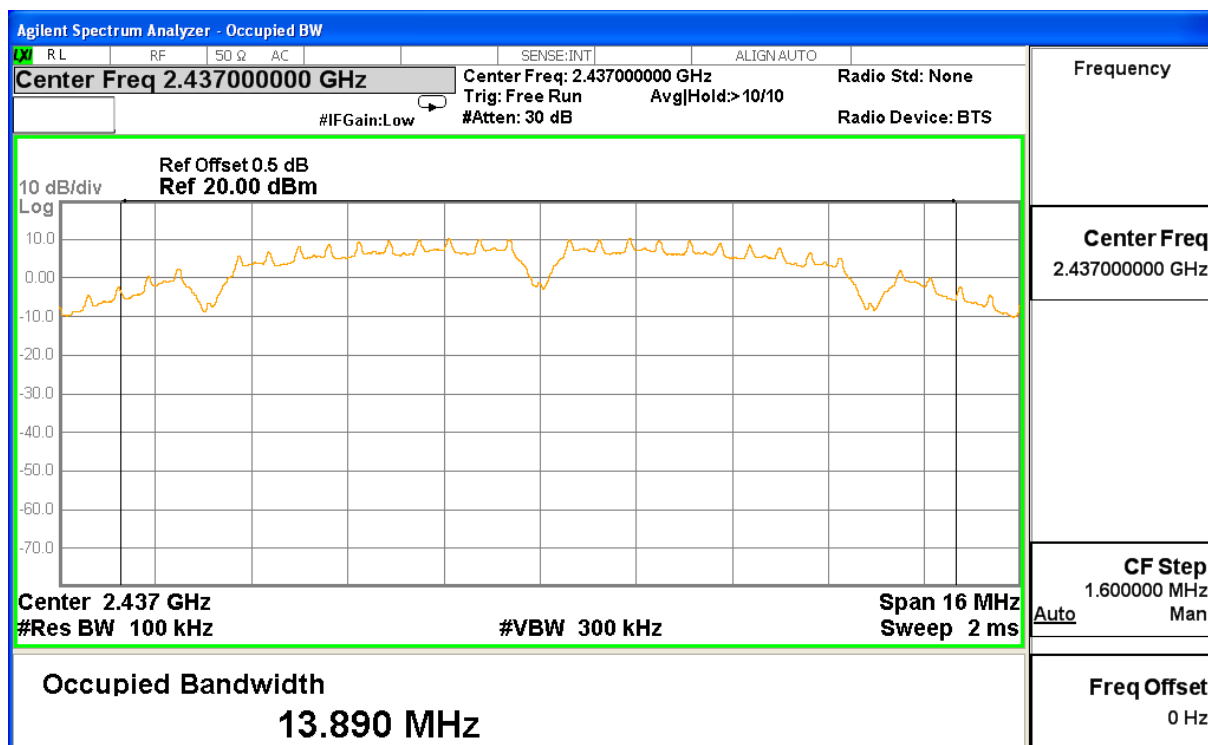
GFSK(BLE)High Channel



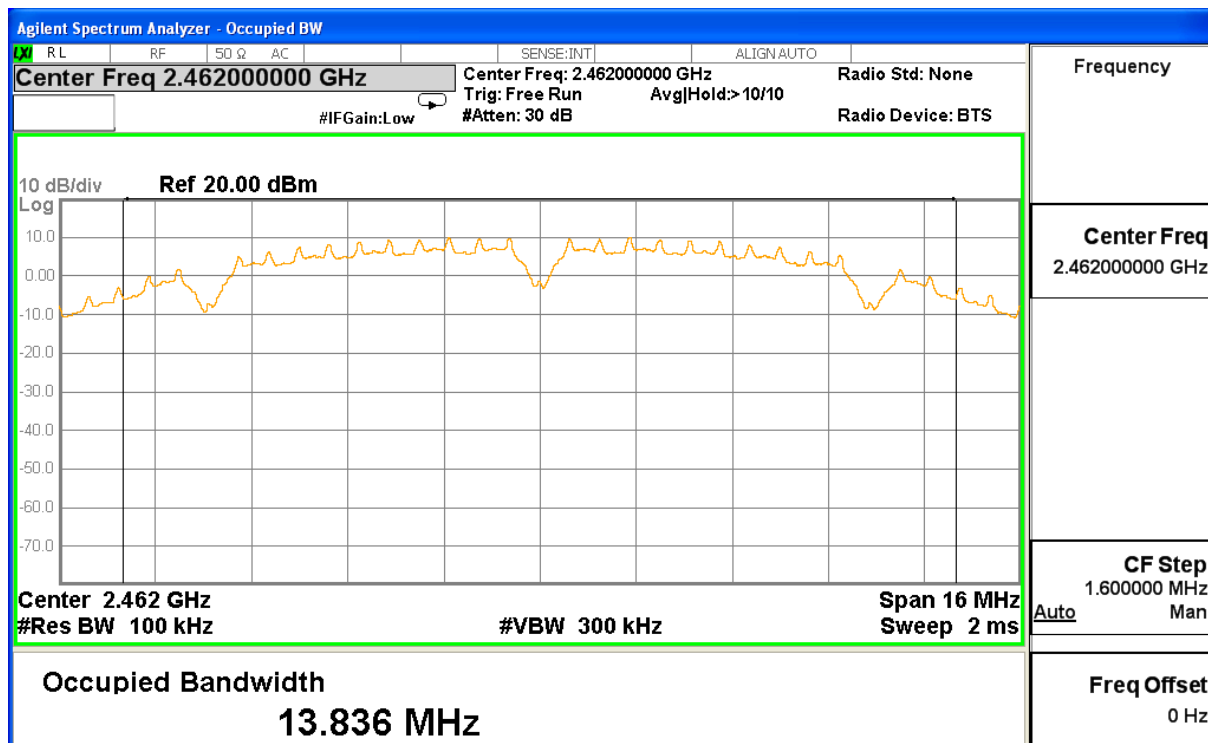
802.11b LowChannel



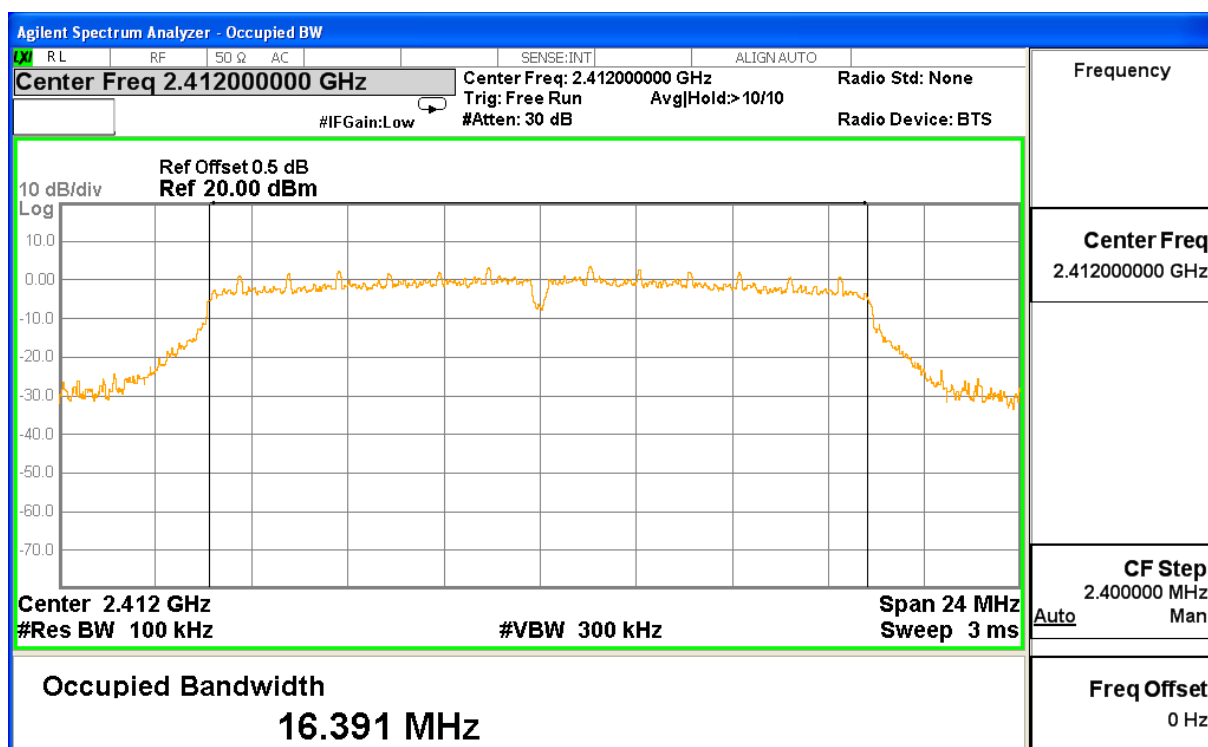
802.11b Middle Channel



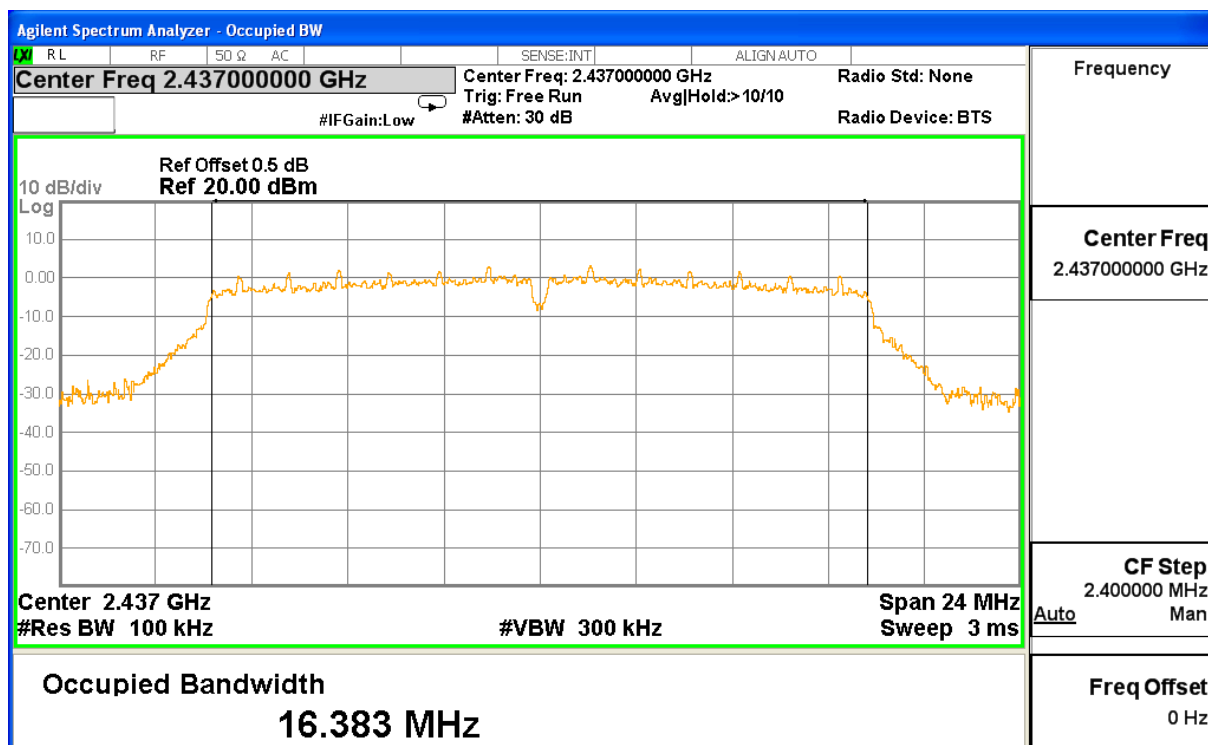
802.11b High Channel



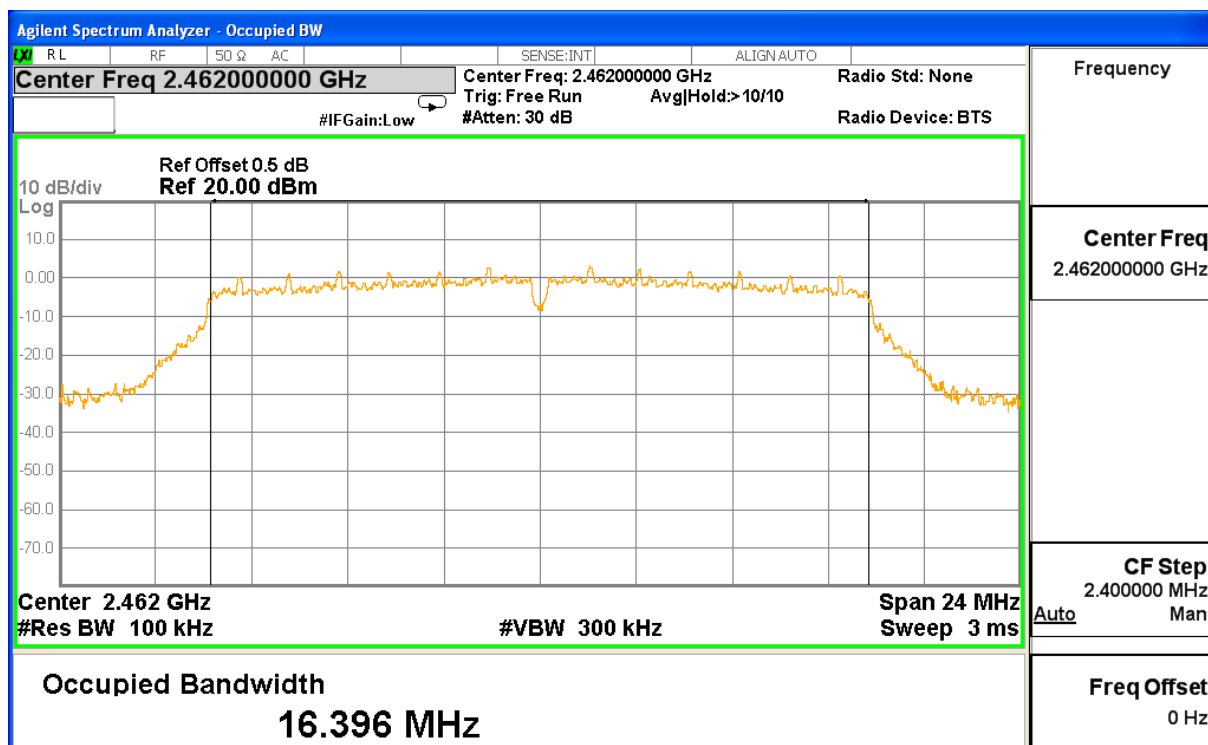
802.11g Low Channel



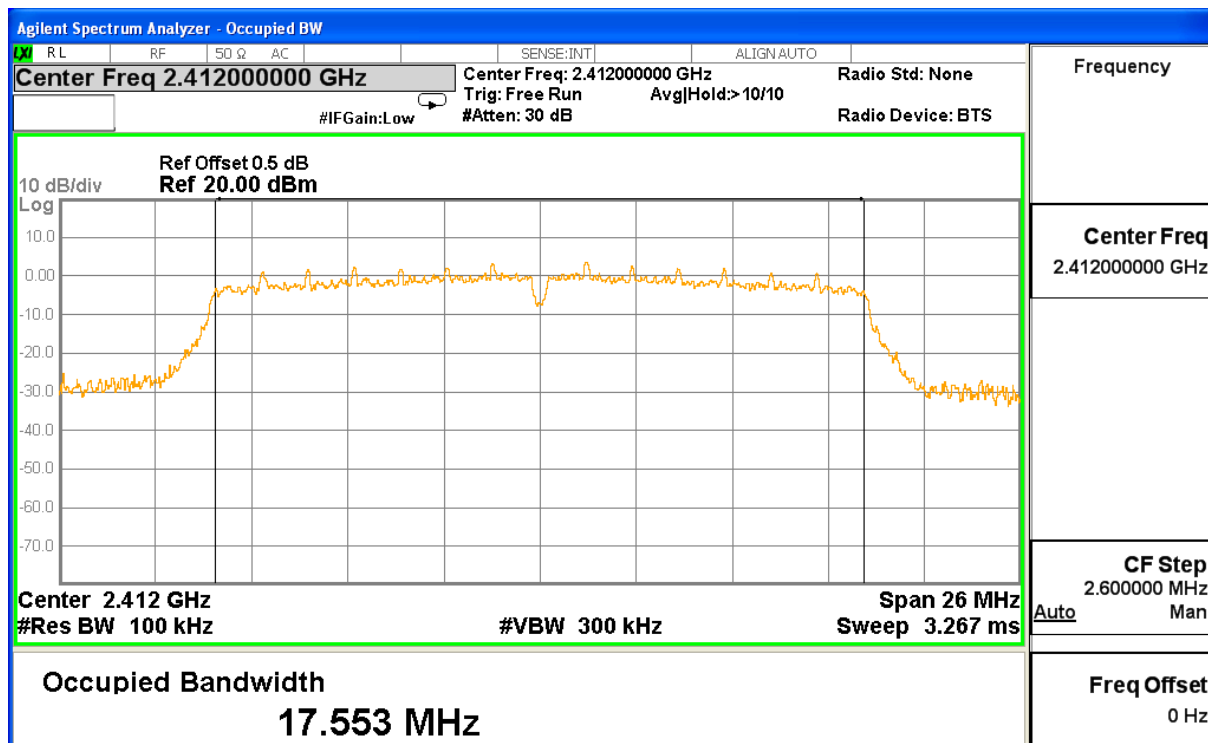
802.11g Middle Channel



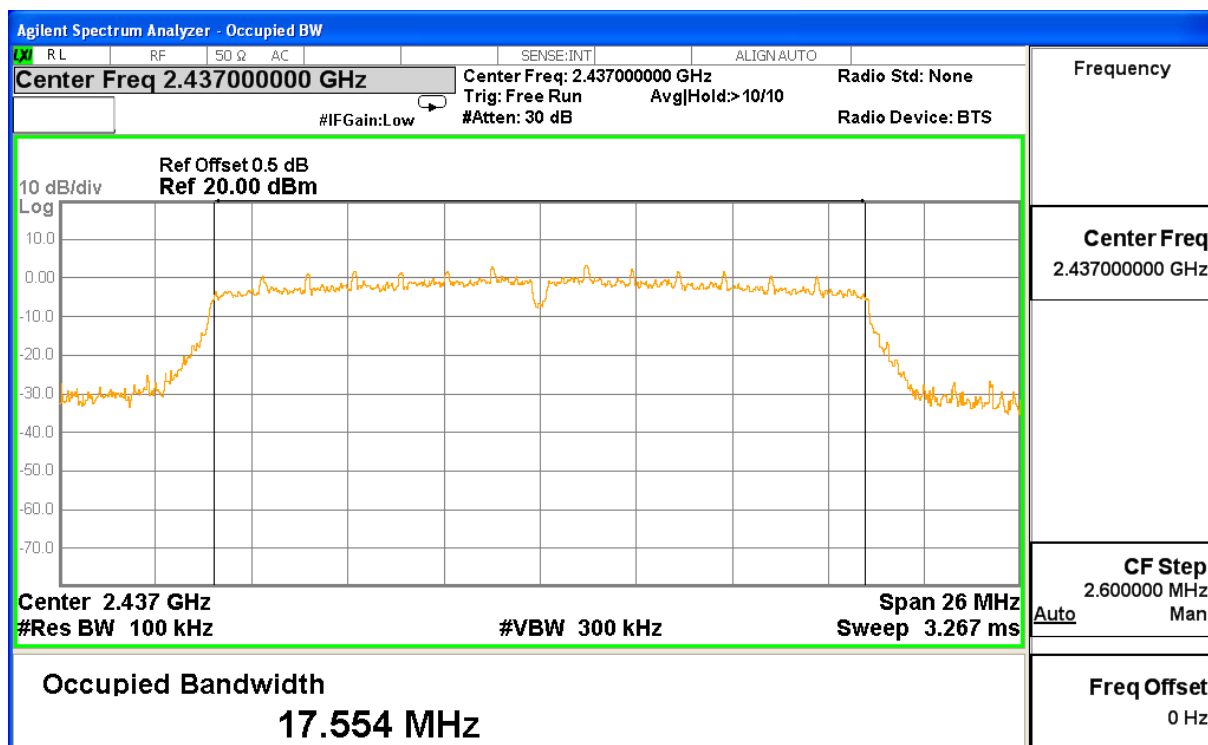
802.11g High Channel



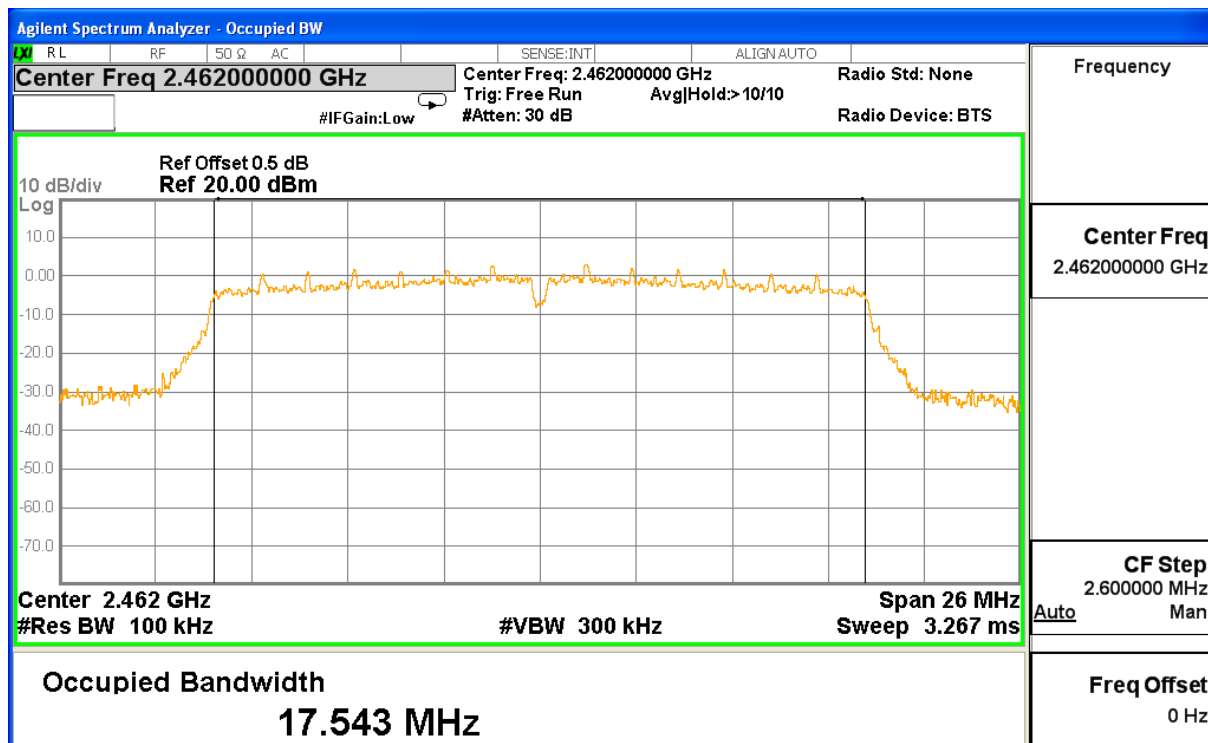
802.11n-HT20 Low Channel



802.11n-HT20Middle Channel



802.11n-HT20High Channel



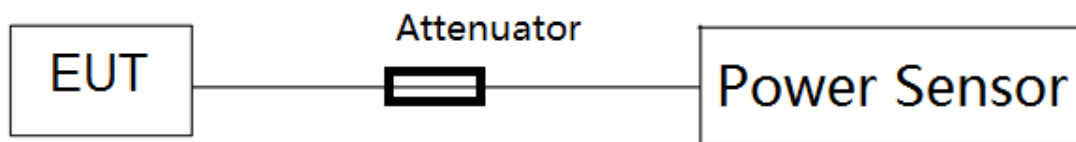


10 Maximum Peak Output Power

Test Requirement	:	FCC CFR47 Part 15 Section 15.247
Test Method	:	ANSI C63.10:2013
Test Limit	:	Regulation 15.247 (b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power.
Test Mode	:	Refer to section 3.3

10.1 Test Procedure

The EUT was directly connected to the Power Sensor&PC





10.2 Test Result

Modulation	Maximum Peak Output Power (dBm)			Limit
	Low Channel	Middle Channel	High Channel	
GFSK(BLE)	-2.57	-2.95	-3.95	1W(30dBm)
802.11b	9.25	9.16	9.22	1W(30dBm)
802.11g	9.21	9.07	9.12	1W(30dBm)
802.11n-HT20	9.14	9.20	9.15	1W(30dBm)

11 Power Spectral density

Test Requirement	: FCC CFR47 Part 15 Section 15.247
Test Method	: ANSI C63.10:2013
Test Limit	: Regulation 15.247(f) The power spectral density conducted from the intentional radiator to the antenna due to the digital modulation operation of the hybrid system, with the frequency hopping operation turned off, shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.
Test Mode	: Refer to section 3.3

11.1 Test Procedure

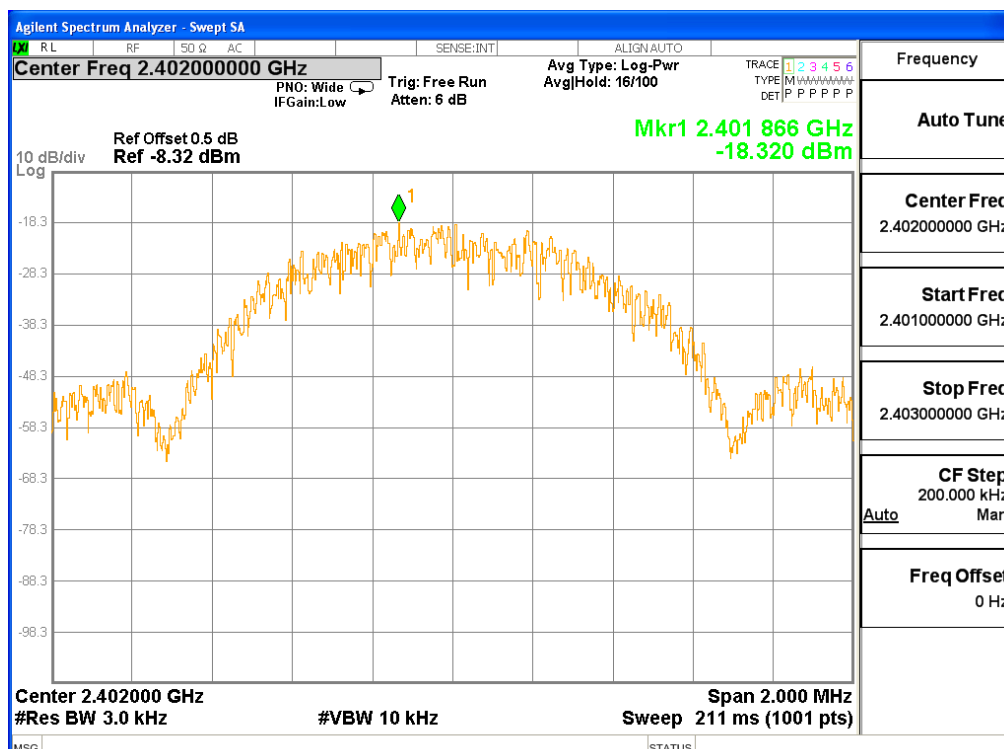
KDB 558074 D01 DTS Meas Guidance

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 3kHz. VBW = 10kHz, Span = 1.5 times the DTS channel bandwidth (6 dB bandwidth). Sweep = auto; Detector Function = Peak. Trace = Max hold.
3. Allow the trace to stabilize. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. The limit is specified in one of the subparagraphs of this Section Submit this plot.

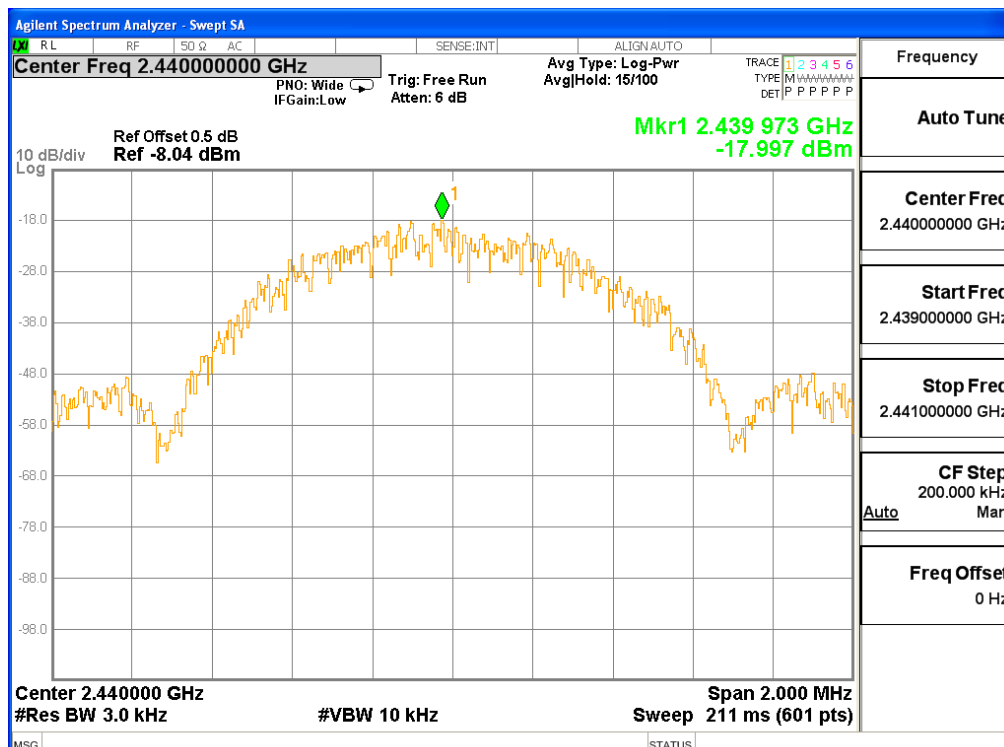
11.2 Test Result

Modulation	Power Spectral density (dBm/3kHz)			Limit
	Low Channel	Middle Channel	High Channel	
GFSK(BLE)	-18.320	-17.997	-18.126	8dBm/3kHz
802.11b	-4.699	-5.487	-4.340	8dBm/3kHz
802.11g	-9.984	-11.368	-11.065	8dBm/3kHz
802.11n-HT20	-10.358	-11.727	-11.925	8dBm/3kHz

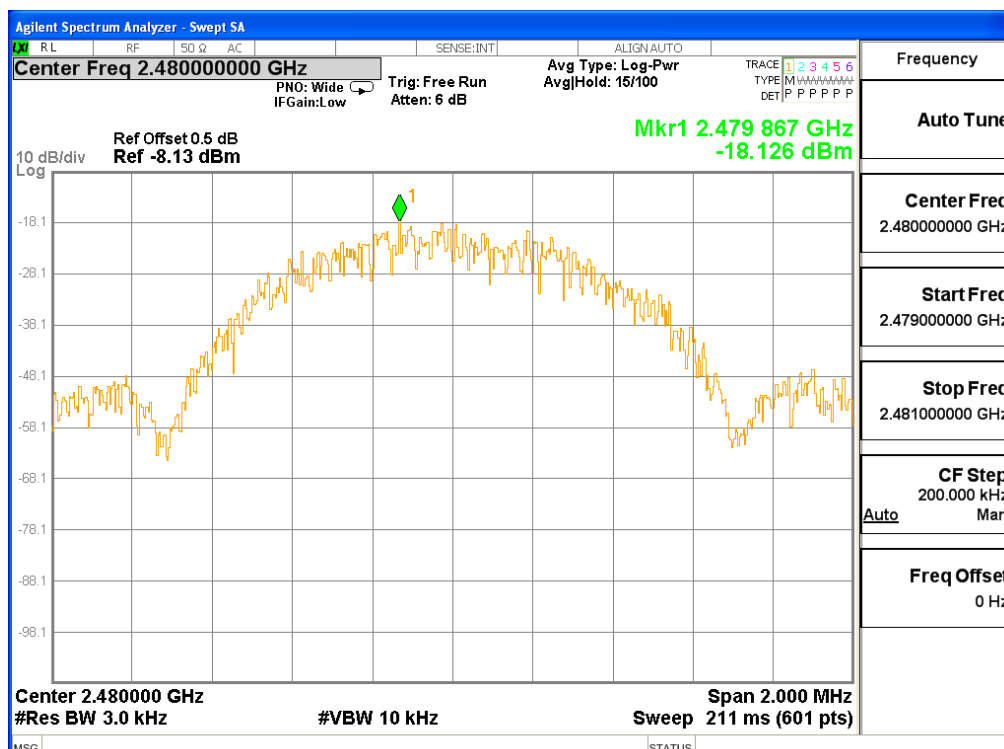
GFSK(BLE) Low Channel



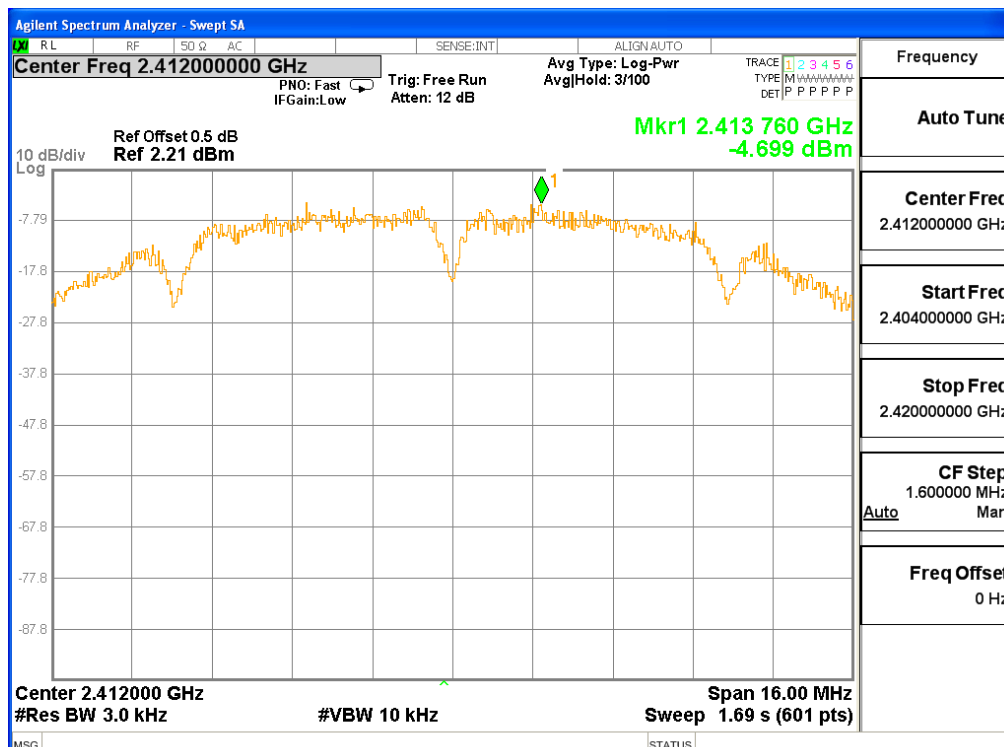
GFSK(BLE) Middle Channel



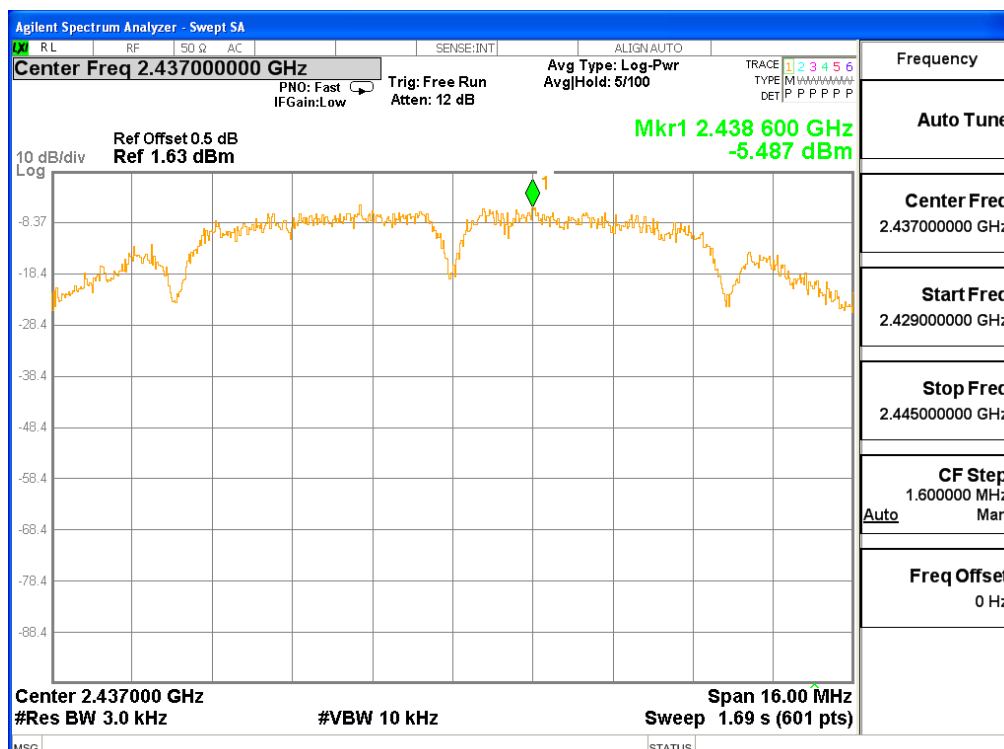
GFSK(BLE)High Channel



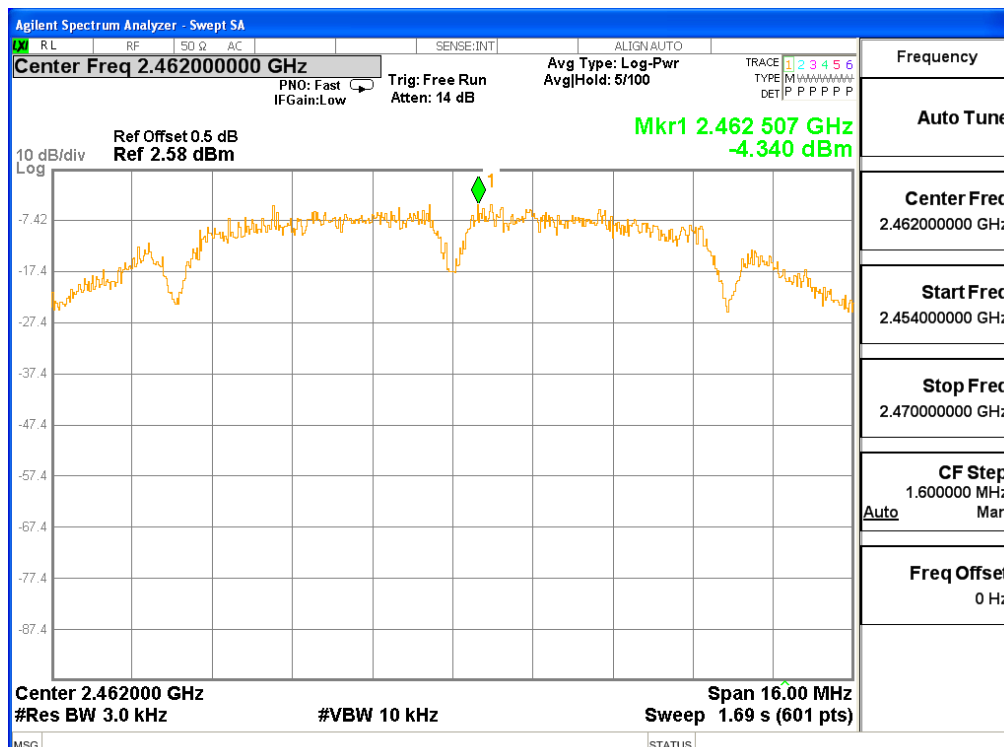
802.11b LowChannel



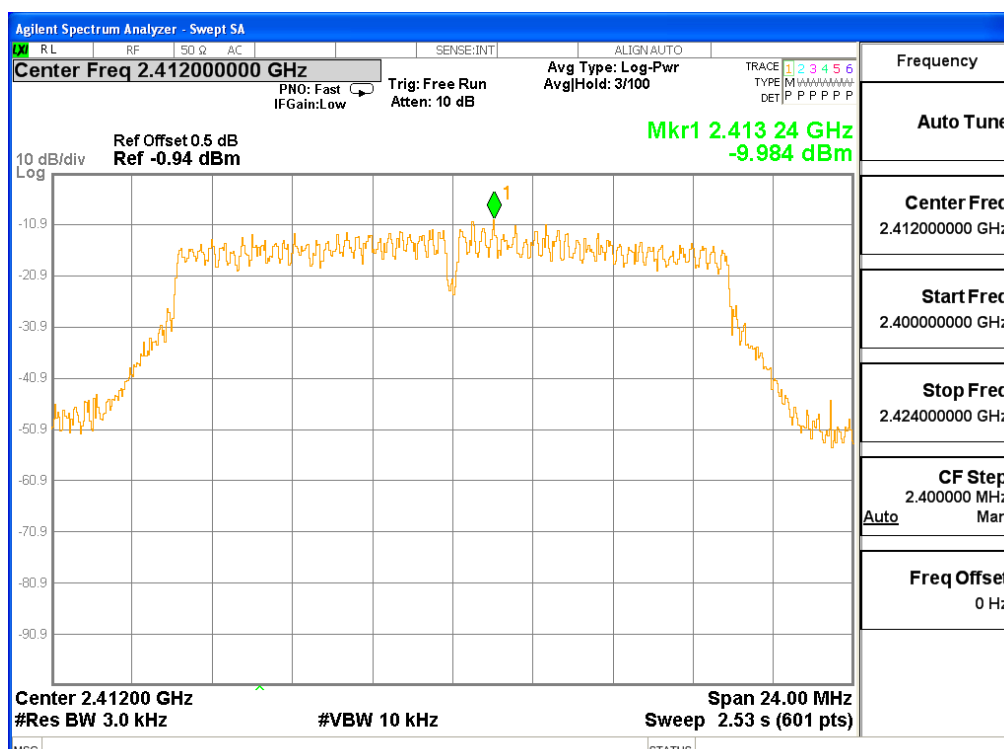
802.11b Middle Channel



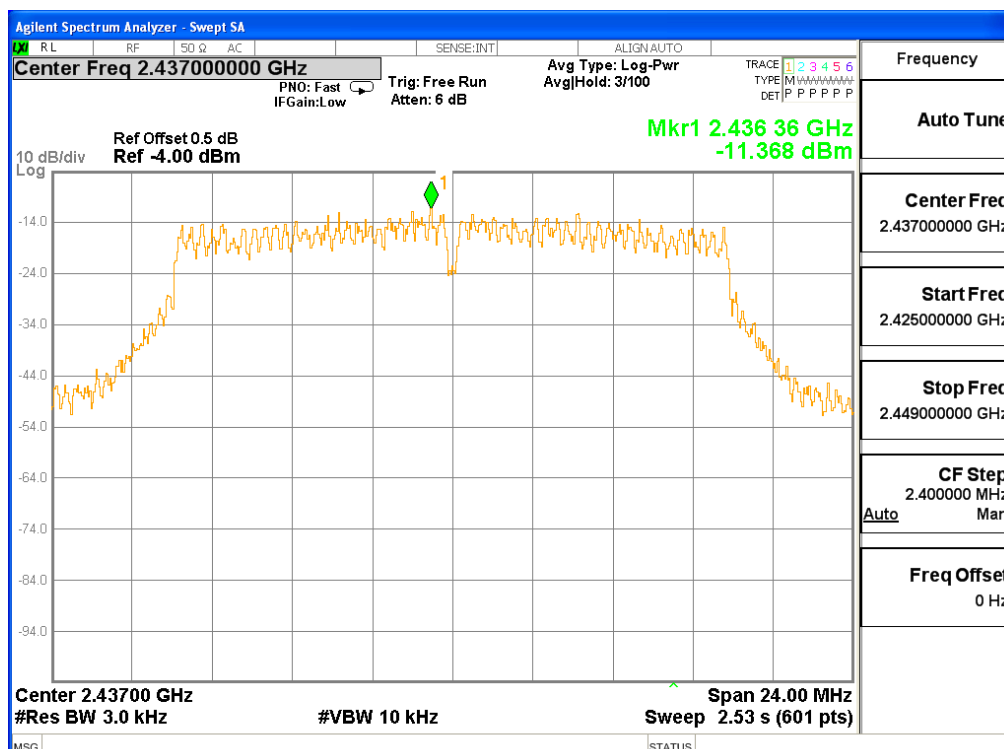
802.11b High Channel



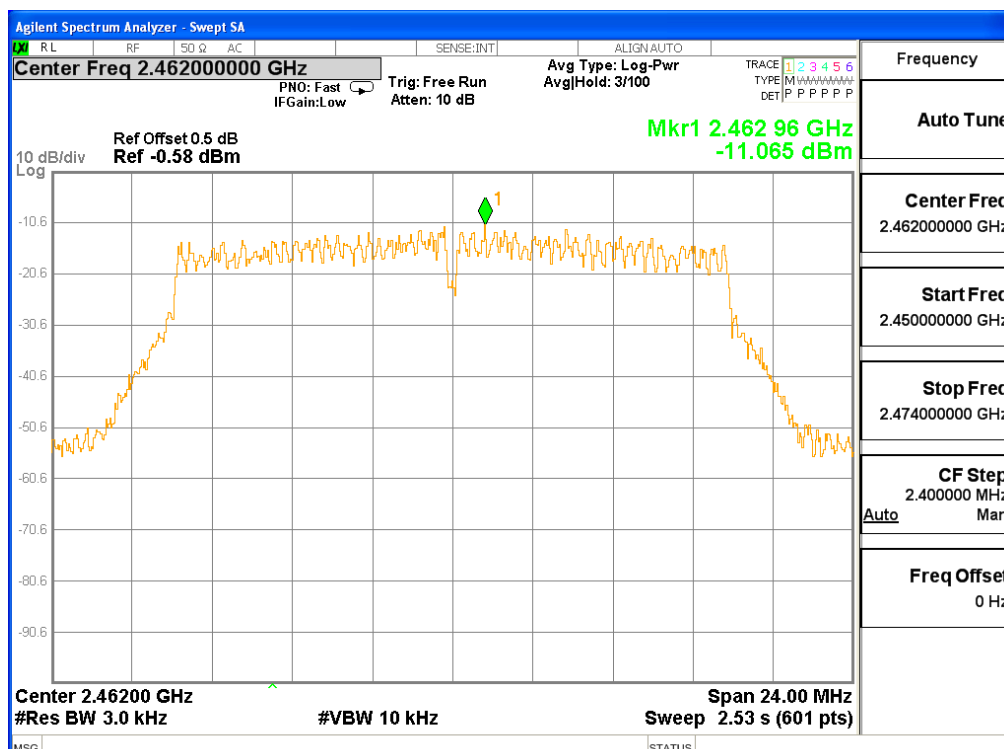
802.11g Low Channel



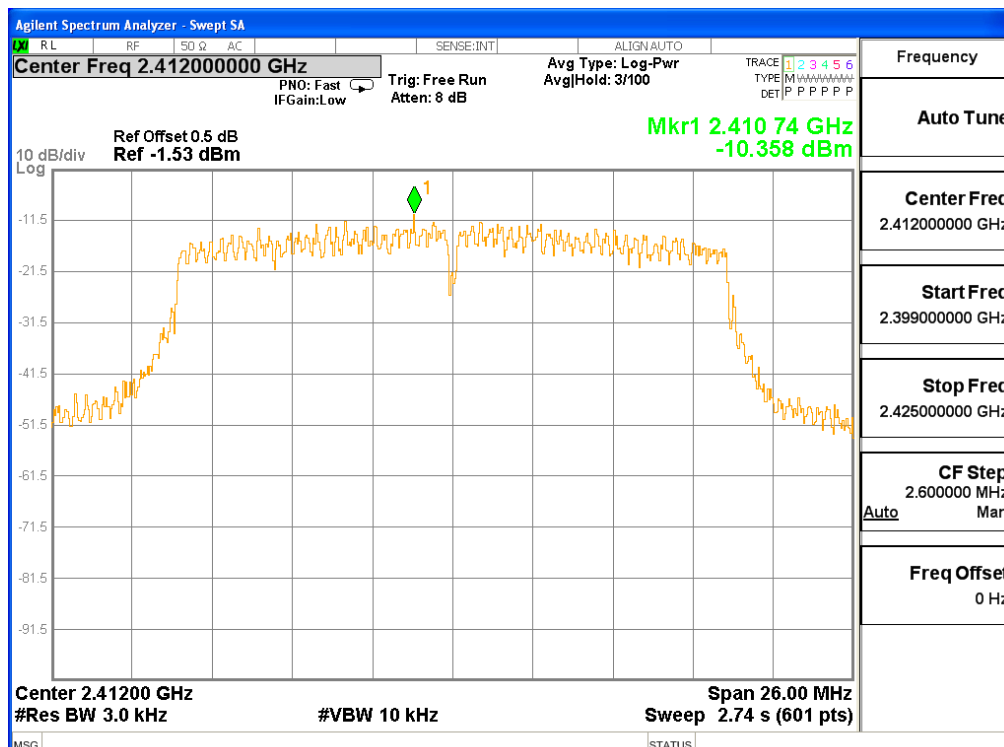
802.11g Middle Channel



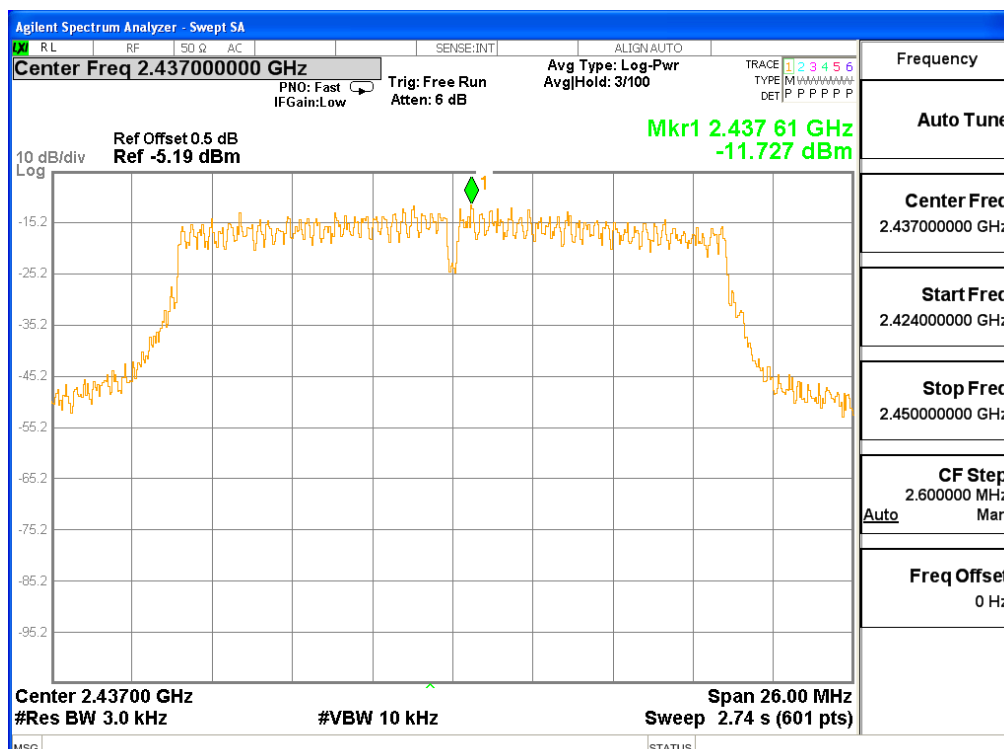
802.11g High Channel



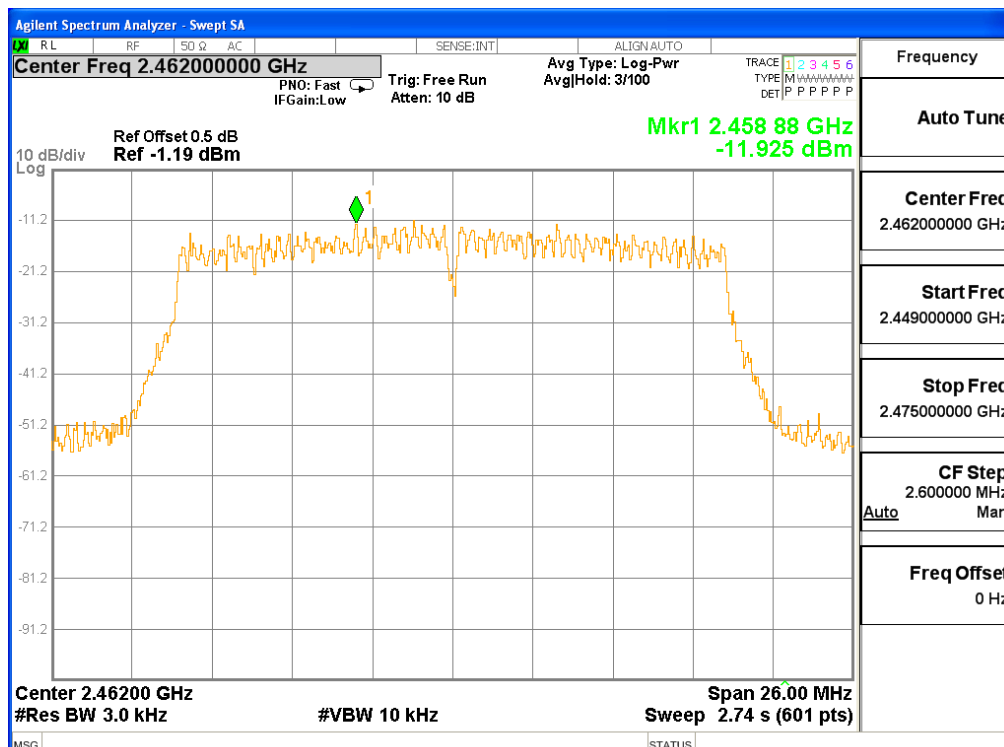
802.11n-HT20 Low Channel



802.11n-HT20Middle Channel



802.11n-HT20High Channel



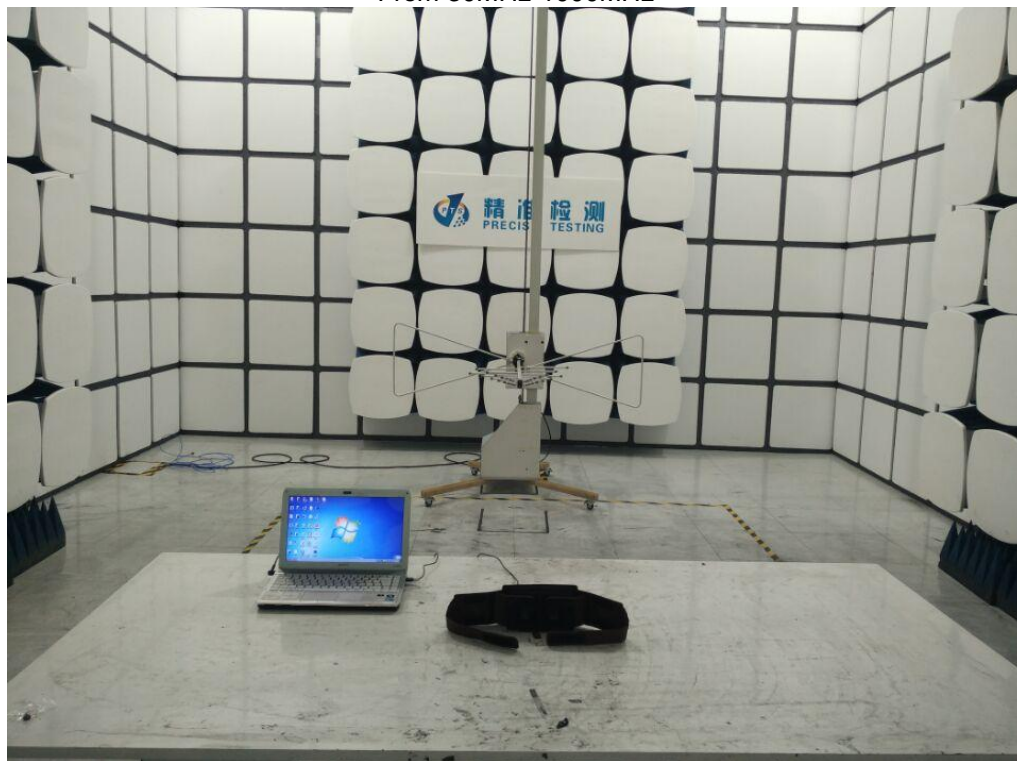


12 Antenna Requirement

According to the FCC part15.203, a transmitter can only be sold or operated with antennas with which it was approved. This product has an internal antenna, it meet the requirement of this section.

13 Test Setup

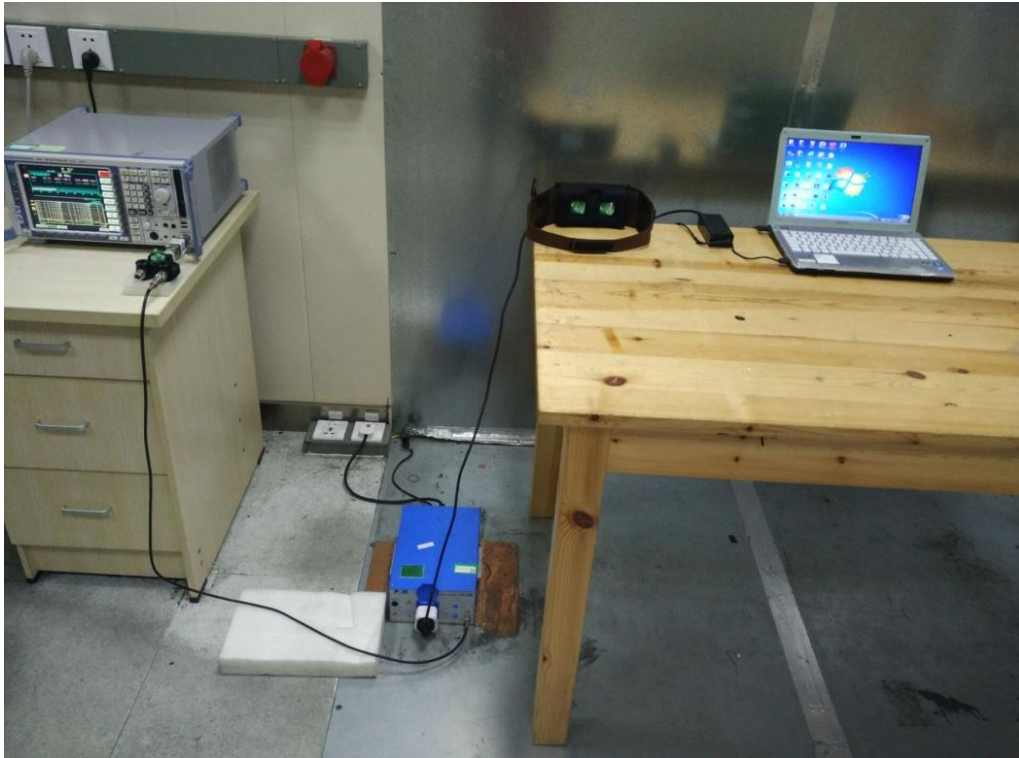
Radiated Spurious Emissions
From 30MHz-1000MHz



Above 1GHz



Conducted Emissions



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