TEST REPORT

Reference No.	:	WTS14S1221546E-2E
FCC ID.....	:	2ADTE-DG700
Applicant	:	Shenzhen KVD Communication Equipment
Address	:	13C, Block C, Shenzhen Electronic Technology Building, Shennan Middle Road, Futian District, Shenzhen, China
Manufacturer	:	The same as above
Address	:	The same as above
Product Name	:	Mobile Phone
Model No.	:	TITANS2 DG700
Brand……		DOOGEE
Standards.....	:	FCC CFR47 Part 15 Section 15.247:2014
Date of Receipt sample.....	:	Dec. 22, 2014
Date of Test.....	:	Dec. 23, 2014 ~ Jan.12, 2015
Date of Issue	:	Jan.17, 2015
Test Result	:	**Pass**

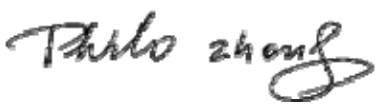
Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:
Waltek Services (Shenzhen) Co., Ltd.
Address: 1/F., Fukangtai Building, West Baima Road, Songgang Street, Baoan District, Shenzhen, Guangdong, China
Tel :+86-755-83551033
Fax:+86-755-83552400

Compiled by:

Zero Zhou / Project Engineer

Approved by:



Philo Zhong / Manager

2 Test Summary

Test Items	Test Requirement	Result
Radiated Emissions	15.247 15.205(a) 15.209(a)	PASS
Conducted Emissions	15.207(a)	PASS
6dB Bandwidth	15.247(a)(2)	PASS
Maximum Peak Output Power	15.247(b)(3),(4)	PASS
Power Spectral Density	15.247(e)	PASS
Band Edge	15.247(d)	PASS
Antenna Requirement	15.203	PASS
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS

3 Contents

Page

4 General Information

4.1 General Description of E.U.T.

Product Name	:Mobile Phone
Model No.	:TITANS2 DG700
Model Description	: N/A
GSM Band(s)	: GSM 850/900/1800/1900MHz
GPRS/EGPRS Class	: 12
WCDMA Band(s)	: FDD Band I/II/V
Wi-Fi Specification	: 802.11b/g/n HT20/n HT40
Bluetooth Version	: Bluetooth v4.0 with BLE
GPS	: Support
NFC	: N/A
Hardware Version	: D28-A2-BOM2
Software Version	: DOOGEE-Titans2-DG700

4.2 Details of E.U.T.

Operation Frequency	: GSM/GPRS/EDGE 850: 824~849MHz GSM/GPRS/EDGE 900: 925-960MHz DCS 1800: 1805-1880MHz PCS 1900: 1850~1910MHz WCDMA Band I: 1920-1980MHz WCDMA Band II: 1850-1910MHz WCDMA Band V: 824~849MHz WiFi: 802.11b/g/n HT20: 2412-2462MHz 802.11n HT40: 2422-2452MHz Bluetooth: 2402-2480MHz GPS: 1.57GHz
Max. RF output power	: GSM 850: 32.78dBm PCS1900: 29.73dBm WCDMA Band II: 22.41dBm WCDMA Band V: 22.55dBm WiFi: 9.44dBm Bluetooth: 3.91dBm
Type of Modulation	: GSM,GPRS: GMSK EDGE: 8PSK WCDMA: QPSK

	WiFi: CCK, OFDM Bluetooth: GFSK, Pi/4 DQPSK,8DPSK
Antenna installation	: GSM/WCDMA: internal permanent antenna WiFi/Bluetooth: internal permanent antenna
Antenna Gain	: GSM 850: -4.0dBi PCS1900: -4.0dBi WCDMA Band V: -4.0dBi WiFi: -1.0dBi Bluetooth: -1.0dBi
Technical Data	: Battery DC 3.7V 2000mAh DC 5V, 1.0A, charging from adapter (Adapter Input: 100-240V~50/60Hz, 0.15A)
Adapter	: Manufacture: Shenzhen KVD Communication Equipment Model No.: TN-050100UZ

4.3 Channel List

WIFI

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	2412	2	2417	3	2422	4	2427
5	2432	6	2437	7	2442	8	2447
9	2452	10	2457	11	2462	12	-

BT BLE

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

4.4 Test Mode

Table 1 Tests Carried Out Under FCC part 15.247

Test Items	Mode	Data Rate	Channel	TX/RX
Maximum Peak Output Power	802.11b	11 Mbps	1/6/11	TX
	802.11g	54 Mbps	1/6/11	TX
	802.11n HT20	108 Mbps	1/6/11	TX
	802.11n HT40	108 Mbps	3/6/9	TX
Power Spectral Density	802.11b	11 Mbps	1/6/11	TX
	802.11g	54 Mbps	1/6/11	TX
	802.11n HT20	108 Mbps	1/6/11	TX
	802.11n HT40	108 Mbps	3/6/9	TX
6dB Bandwidth	802.11b	11 Mbps	1/6/11	TX
	802.11g	54 Mbps	1/6/11	TX
	802.11n HT20	108 Mbps	1/6/11	TX
	802.11n HT40	108 Mbps	3/6/9	TX
Band Edge	802.11b	11 Mbps	1/6/11	TX
	802.11g	54 Mbps	1/6/11	TX
	802.11n HT20	108 Mbps	1/6/11	TX
	802.11n HT40	108 Mbps	3/6/9	TX
Transmitter Spurious Emissions	802.11b	11 Mbps	1/6/11	TX
	802.11g	54 Mbps	1/6/11	TX
	802.11n HT20	108 Mbps	1/6/11	TX
	802.11n HT40	108 Mbps	3/6/9	TX

Table 2 Tests Carried Out Under FCC part 15.247

Test Items	Mode	Data Rate	Channel	TX/RX
Maximum Peak Output Power	BT BLE	1 Mbps	1/19/39	TX
Power Spectral Density	BT BLE	1 Mbps	1/19/39	TX
6dB Bandwidth	BT BLE	1 Mbps	1/19/39	TX
Band Edge	BT BLE	1 Mbps	1/19/39	TX
Transmitter Spurious Emissions	BT BLE	1 Mbps	1/19/39	TX

Note :Parameters set by test software during channel & power tests, the software provided by the customer was used to set the operating channels as well as the output power level. The RF output power set is the power expected by the manufacturer and is going to be fixed on the firmware of the final product .

Table 3 Tests Carried Out Under FCC part 15.207 & FCC part 15.209

Test Item	Test Mode
Conduction Emission, 0.15MHz to 30MHz	Communication(Wifi & BT BLE)

4.5 Test Facility

The test facility has a test site registered with the following organizations:

- **IC – Registration No.: 7760A**

  Waltek Services(Shenzhen) Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration number 7760A, July 12, 2012.

- **FCC Test Site 1#– Registration No.: 880581**

  Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 880581, April 29, 2014.

- **FCC Test Site 2#– Registration No.: 328995**

  Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 328995, December 3, 2014.

5 Equipment Used during Test

5.1 Equipments List

Conducted Emissions Test Site 1#						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1.	EMI Test Receiver	R&S	ESCI	100947	Sep.15,2014	Sep.14,2015
2.	LISN	R&S	ENV216	101215	Sep.15,2014	Sep.14,2015
3.	Cable	Top	TYPE16(3.5M)	-	Sep.15,2014	Sep.14,2015
Conducted Emissions Test Site 2#						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1.	EMI Test Receiver	R&S	ESCI	101155	Sep.15,2014	Sep.14,2015
2.	LISN	SCHWARZBECK	NSLK 8128	8128-289	Sep.15,2014	Sep.14,2015
3.	Limiter	York	MTS-IMP-136	261115-001-0024	Sep.15,2014	Sep.14,2015
4.	Cable	LARGE	RF300	-	Sep.15,2014	Sep.14,2015
3m Semi-anechoic Chamber for Radiation Emissions Test site 1#						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1	EMC Analyzer	Agilent	E7405A	MY45114943	Sep.15,2014	Sep.14,2015
2	Active Loop Antenna	Beijing Dazhi	ZN30900A	-	Sep.15,2014	Sep.14,2015
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	Apr.19,2014	Apr.18,2015
4	Coaxial Cable (below 1GHz)	Top	TYPE16(13M)	-	Sep.15,2014	Sep.14,2015
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	Apr.19,2014	Apr.18,2015
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	Apr.19,2014	Apr.18,2015
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	Mar.17,2014	Mar.16,2015
8	Coaxial Cable (above 1GHz)	Top	1GHz-25GHz	EW02014-7	Apr.10,2014	Apr.09,2015
3m Semi-anechoic Chamber for Radiation Emissions Test site 2#						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No**	**Last Calibration Date**	**Calibration Due Date**
1	Test Receiver	R&S	ESCI	101296	Sep.15,2014	Sep.14,2015
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	Sep.15,2014	Sep.14,2015
3	Amplifier	Compliance pirection systems inc	PAP-0203	22024	Sep.15,2014	Sep.14,2015
4	Cable	HUBER+SUHNER	CBL2	525178	Sep.15,2014	Sep.14,2015
RF Conducted Testing						

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	EMC Analyzer (9k~26.5GHz)	Agilent	E7405A	MY45114943	Sep.15,2014	Sep.14,2015
2.	Spectrum Analyzer (9k-6GHz)	R&S	FSL6	100959	Sep.15,2014	Sep.14,2015
3.	Signal Analyzer (9k~26.5GHz)	Agilent	N9010A	MY50520207	Sep.15,2014	Sep.14,2015

5.2 Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	± 1 x 10^{-6}
RF Power	± 1.0 dB
RF Power Density	± 2.2 dB
Radiated Spurious Emissions test	± 5.03 dB (30M~1000MHz)
	± 5.47 dB (1000M~25000MHz)
Conducted Spurious Emissions test	± 3.64 dB (AC mains 150KHz~30MHz)

5.3 Test Equipment Calibration

All the test equipments used are valid and calibrated by CEPREI Certification Body that address is No.110 Dongguan Zhuang RD. Guangzhou, P.R.China.

6 Conducted Emission

Test Requirement:	FCC CFR 47 Part 15 Section 15.207
Test Method:	ANSI C63.4:2003
Test Result:	PASS
Frequency Range:	150kHz to 30MHz
Class/Severity:	Class B
Limit:	66-56 dBμV between 0.15MHz & 0.5MHz
	56 dBμV between 0.5MHz & 5MHz
	60 dBμV between 5MHz & 30MHz
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)

6.1 E.U.T. Operation

Operating Environment **:**

Temperature:	21.6 °C
Humidity:	51.7 % RH
Atmospheric Pressure:	101.2kPa

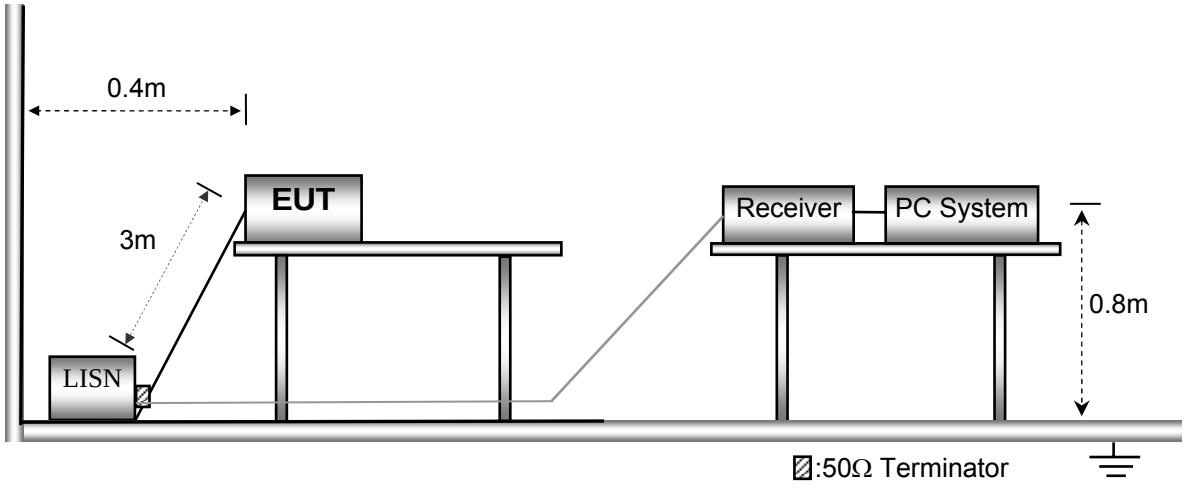
EUT Operation **:**

The test was performed in transmitting mode(Wifi /BT BLE), the worst data were shown in the report.

6.2 EUT Setup

The conducted emission tests were performed using the setup accordance with the

ANSI C63.4:2003.



6.3 Measurement Description

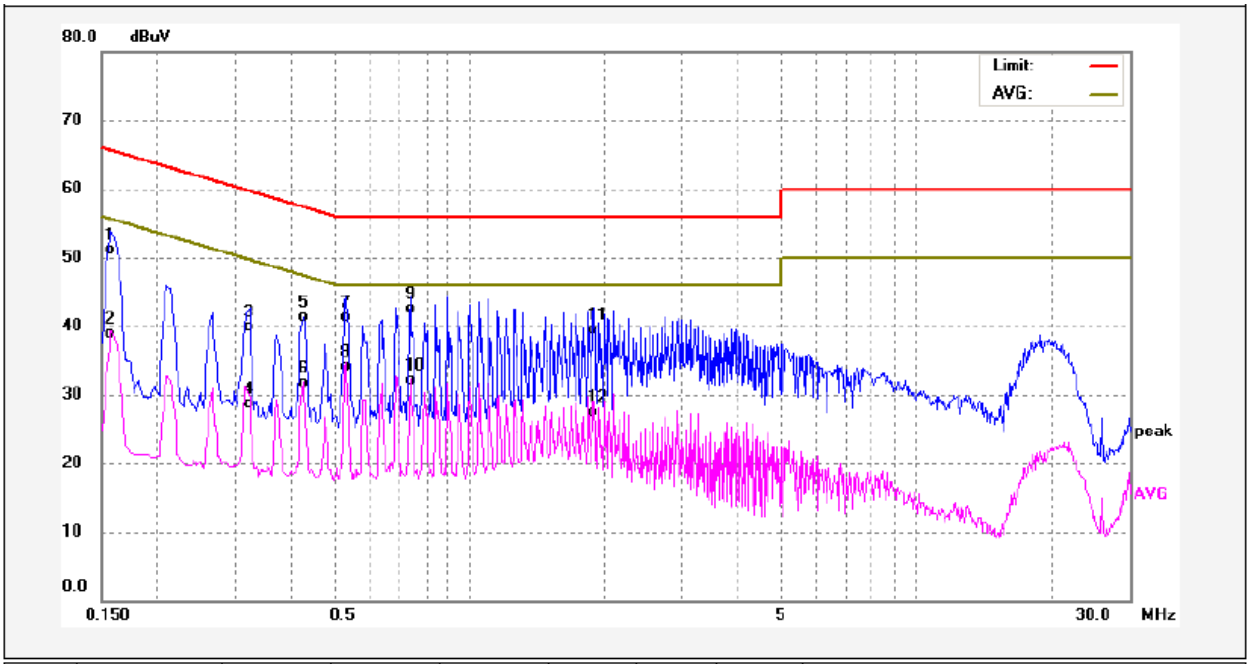
The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

6.4 Conducted Emission Test Result

An initial pre-scan was performed on the live and neutral lines.

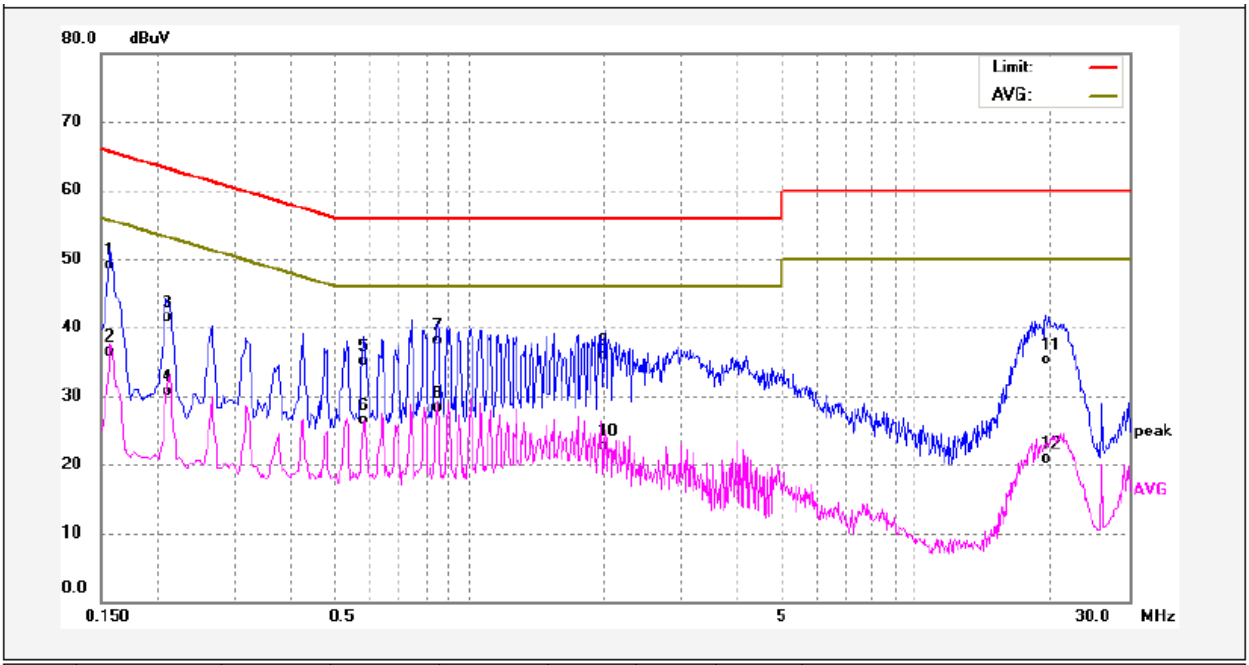
Worst Mode: transmitting mode (Wifi)

Live line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1580	39.95	11.19	51.14	65.56	-14.42	QP	
2	0.1580	27.73	11.19	38.92	55.56	-16.64	AVG	
3	0.3220	28.65	11.30	39.95	59.65	-19.70	QP	
4	0.3220	17.40	11.30	28.70	49.65	-20.95	AVG	
5	0.4260	29.97	11.31	41.28	57.33	-16.05	QP	
6	0.4260	20.45	11.31	31.76	47.33	-15.57	AVG	
7	0.5299	29.92	11.31	41.23	56.00	-14.77	QP	
8	0.5299	22.71	11.31	34.02	46.00	-11.98	AVG	
9	0.7380	31.27	11.32	42.59	56.00	-13.41	QP	
10	0.7380	20.83	11.32	32.15	46.00	-13.85	AVG	
11	1.8980	28.24	11.20	39.44	56.00	-16.56	QP	
12	1.8980	16.33	11.20	27.53	46.00	-18.47	AVG	

Neutral line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1580	37.98	11.19	49.17	65.56	-16.39	QP	
2	0.1580	25.27	11.19	36.46	55.56	-19.10	AVG	
3	0.2100	30.12	11.30	41.42	63.20	-21.78	QP	
4	0.2100	19.41	11.30	30.71	53.20	-22.49	AVG	
5	0.5820	23.81	11.32	35.13	56.00	-20.87	QP	
6	0.5820	15.20	11.32	26.52	46.00	-19.48	AVG	
7	0.8500	26.85	11.26	38.11	56.00	-17.89	QP	
8	0.8500	16.95	11.26	28.21	46.00	-17.79	AVG	
9	2.0260	24.66	11.20	35.86	56.00	-20.14	QP	
10	2.0260	11.59	11.20	22.79	46.00	-23.21	AVG	
11	19.4980	23.82	11.49	35.31	60.00	-24.69	QP	
12	19.4980	9.41	11.49	20.90	50.00	-29.10	AVG	

7 Radiated Emissions

Test Requirement: FCC CFR47 Part 15 Section 15.209 & 15.247

Test Method: ANSI C63.4:2003

Test Result: PASS

Measurement Distance: 3m

Limit:

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(kHz)	300	10000 * 2400/F(kHz)	$20\log^{(2400/F(kHz))} + 80$
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	$20\log^{(24000/F(kHz))} + 40$
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	$20\log^{(500)}$

7.1 EUT Operation

Operating Environment **:**

Temperature: 22.5 °C

Humidity: 52.3 % RH

Atmospheric Pressure: 101.2kPa

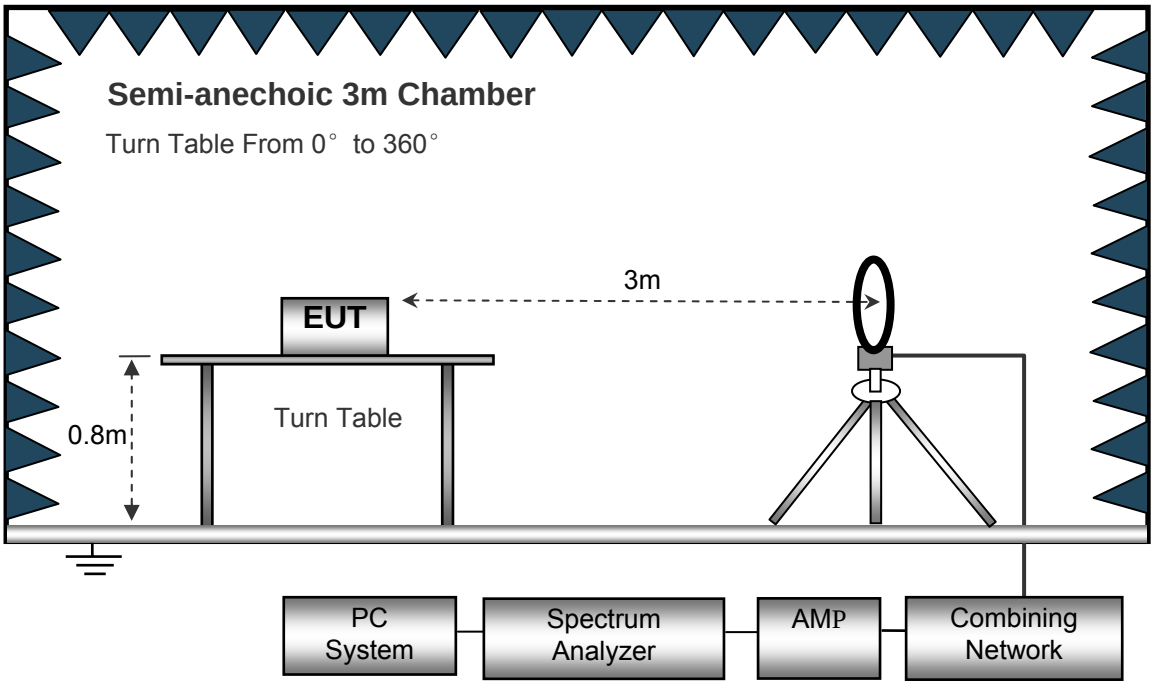
EUT Operation **:**

The test was performed in transmitting mode(Wifi /BT BLE), the test data were shown in the report.

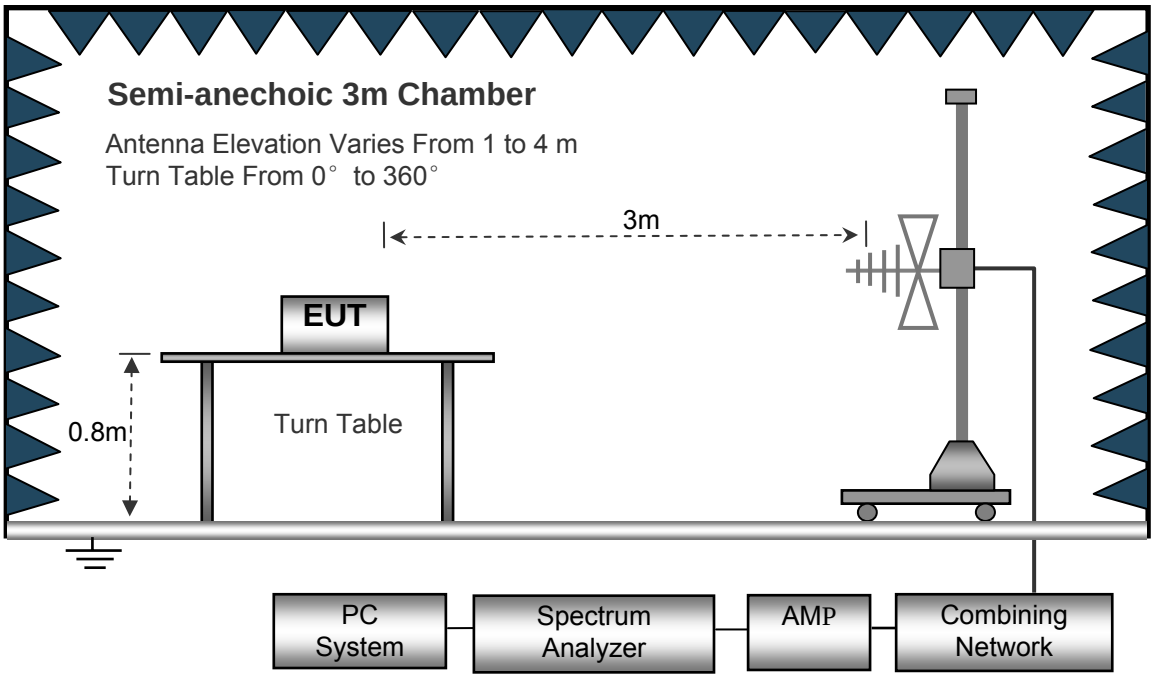
7.2 Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4: 2003.

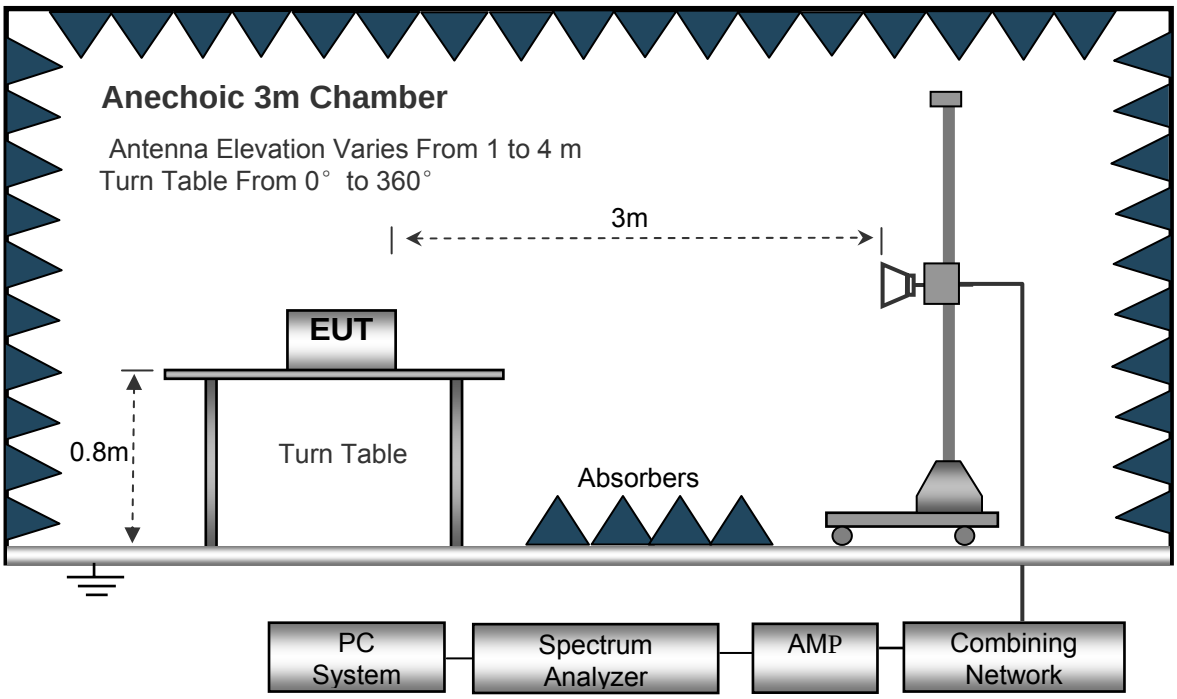
The test setup for emission measurement below 30MHz.



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



The test setup for emission measurement above 1 GHz.



7.3 Spectrum Analyzer Setup

Below 30MHz

Sweep Speed ..... Auto
IF Bandwidth..... 10kHz
Video Bandwidth..... 10kHz
Resolution Bandwidth..... 10kHz

30MHz ~ 1GHz

Sweep Speed ..... Auto
Detector ..... PK
Resolution Bandwidth..... 100kHz
Video Bandwidth..... 300kHz

Above 1GHz

Sweep Speed ..... Auto
Detector ..... PK
Resolution Bandwidth..... 1MHz
Video Bandwidth..... 3MHz
Detector ..... Ave.
Resolution Bandwidth..... 1MHz
Video Bandwidth..... 10Hz

7.4 Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
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.
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 performed in X,Y and Z axis positioning(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand),the worst condition was tested putting the eut in X axis,so the worst data were shown as follow.
8. A 2.4GHz high –pass filter is used druing radiated emissions above 1GHz measurement.

7.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the maximum limit for Class B. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – Limit

7.6 Summary of Test Results

Wifi:

Test Frequency : 32.768kHz ~ 30MHz

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

Test Frequency : 30MHz ~ 18GHz

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
11b: Low Channel 2412MHz									
189.35	24.36	PK	199	1.9	H	11.13	35.49	43.50	-8.01
189.35	20.92	PK	108	1.5	V	11.13	32.05	43.50	-11.45
4824.00	53.56	PK	224	1.8	V	-1.06	52.50	74.00	-21.50
4824.00	45.46	Ave	224	1.8	V	-1.06	44.40	54.00	-9.60
7236.00	43.63	PK	280	1.8	H	1.33	44.96	74.00	-29.04
7236.00	40.17	Ave	280	1.8	H	1.33	41.50	54.00	-12.50
2335.97	46.64	PK	276	1.8	V	-13.19	33.45	74.00	-40.55
2335.97	38.80	Ave	276	1.8	V	-13.19	25.61	54.00	-28.39
2371.46	42.39	PK	88	1.2	H	-13.14	29.25	74.00	-44.75
2371.46	38.68	Ave	88	1.2	H	-13.14	25.54	54.00	-28.46
2497.48	44.44	PK	185	1.3	V	-13.08	31.36	74.00	-42.64
2497.48	37.05	Ave	185	1.3	V	-13.08	23.97	54.00	-30.03

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
11b: Middle Channel 2437MHz									
189.35	23.45	PK	220	1.7	H	11.13	34.58	43.50	-8.92
189.35	22.88	PK	91	1.8	V	11.13	34.01	43.50	-9.49
4874.00	54.03	PK	211	1.3	V	-0.62	53.41	74.00	-20.59
4874.00	47.14	Ave	211	1.3	V	-0.62	46.52	54.00	-7.48
7311.00	44.51	PK	4	1.2	H	2.21	46.72	74.00	-27.28
7311.00	39.44	Ave	4	1.2	H	2.21	41.65	54.00	-12.35
2327.94	46.49	PK	54	1.3	V	-13.19	33.30	74.00	-40.70
2327.94	38.66	Ave	54	1.3	V	-13.19	25.47	54.00	-28.53
2350.39	43.40	PK	111	1.7	H	-13.14	30.26	74.00	-43.74
2350.39	38.87	Ave	111	1.7	H	-13.14	25.73	54.00	-28.27
2483.83	44.64	PK	317	1.0	V	-13.08	31.56	74.00	-42.44
2483.83	38.80	Ave	317	1.0	V	-13.08	25.72	54.00	-28.28

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
11b: High Channel 2462MHz									
189.35	22.58	PK	229	1.7	H	11.13	33.71	43.50	-9.79
189.35	24.38	PK	171	1.5	V	11.13	35.51	43.50	-7.99
4924.00	55.90	PK	102	1.0	V	-0.24	55.66	74.00	-18.34
4924.00	47.77	Ave	102	1.0	V	-0.24	47.53	54.00	-6.47
7386.00	44.02	PK	336	2.0	H	2.84	46.86	74.00	-27.14
7386.00	41.39	Ave	336	2.0	H	2.84	44.23	54.00	-9.77
2328.69	46.75	PK	285	1.6	V	-13.19	33.56	74.00	-40.44
2328.69	37.03	Ave	285	1.6	V	-13.19	23.84	54.00	-30.16
2371.37	42.19	PK	348	1.9	H	-13.14	29.05	74.00	-44.95
2371.37	38.06	Ave	348	1.9	H	-13.14	24.92	54.00	-29.08
2495.15	44.61	PK	73	1.1	V	-13.08	31.53	74.00	-42.47
2495.15	37.83	Ave	73	1.1	V	-13.08	24.75	54.00	-29.25

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
11g: Low Channel 2412MHz									
189.35	24.23	PK	290	1.2	H	11.13	35.36	43.50	-8.14
189.35	24.40	PK	78	1.5	V	11.13	35.53	43.50	-7.97
4824.00	57.65	PK	213	1.1	V	-1.06	56.59	74.00	-17.41
4824.00	48.87	Ave	213	1.1	V	-1.06	47.81	54.00	-6.19
7236.00	44.49	PK	287	1.9	H	1.33	45.82	74.00	-28.18
7236.00	41.36	Ave	287	1.9	H	1.33	42.69	54.00	-11.31
2331.99	45.44	PK	223	1.5	V	-13.19	32.25	74.00	-41.75
2331.99	37.42	Ave	223	1.5	V	-13.19	24.23	54.00	-29.77
2369.73	43.81	PK	275	1.7	H	-13.14	30.67	74.00	-43.33
2369.73	36.46	Ave	275	1.7	H	-13.14	23.32	54.00	-30.68
2497.65	42.79	PK	281	1.2	V	-13.08	29.71	74.00	-44.29
2497.65	37.49	Ave	281	1.2	V	-13.08	24.41	54.00	-29.59

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
11g: Middle Channel 2437MHz									
189.35	22.85	PK	75	1.0	H	11.13	33.98	43.50	-9.52
189.35	23.49	PK	292	1.2	V	11.13	34.62	43.50	-8.88
4874.00	57.34	PK	80	1.6	V	-0.62	56.72	74.00	-17.28
4874.00	49.70	Ave	80	1.6	V	-0.62	49.08	54.00	-4.92
7311.00	46.44	PK	244	1.2	H	2.21	48.65	74.00	-25.35
7311.00	40.53	Ave	244	1.2	H	2.21	42.74	54.00	-11.26
2332.76	45.25	PK	230	1.4	V	-13.19	32.06	74.00	-41.94
2332.76	39.19	Ave	230	1.4	V	-13.19	26.00	54.00	-28.00
2365.62	43.80	PK	218	1.3	H	-13.14	30.66	74.00	-43.34
2365.62	36.82	Ave	218	1.3	H	-13.14	23.68	54.00	-30.32
2497.95	43.69	PK	18	1.6	V	-13.08	30.61	74.00	-43.39
2497.95	37.01	Ave	18	1.6	V	-13.08	23.93	54.00	-30.07

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
11g: High Channel 2462MHz									
189.35	22.09	PK	175	1.1	H	11.13	33.22	43.50	-10.28
189.35	23.27	PK	280	1.3	V	11.13	34.40	43.50	-9.10
4924.00	56.90	PK	134	1.6	V	-0.24	56.66	74.00	-17.34
4924.00	48.99	Ave	134	1.6	V	-0.24	48.75	54.00	-5.25
7386.00	46.30	PK	262	1.2	H	2.84	49.14	74.00	-24.86
7386.00	40.07	Ave	262	1.2	H	2.84	42.91	54.00	-11.09
2328.85	45.80	PK	129	1.0	V	-13.19	32.61	74.00	-41.39
2328.85	38.04	Ave	129	1.0	V	-13.19	24.85	54.00	-29.15
2367.40	42.06	PK	19	1.9	H	-13.14	28.92	74.00	-45.08
2367.40	38.54	Ave	19	1.9	H	-13.14	25.40	54.00	-28.60
2496.53	42.32	PK	13	1.6	V	-13.08	29.24	74.00	-44.76
2496.53	37.37	Ave	13	1.6	V	-13.08	24.29	54.00	-29.71

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
n20: Low Channel 2412MHz									
189.35	21.60	PK	332	1.7	H	11.13	32.73	43.50	-10.77
189.35	22.64	PK	294	1.7	V	11.13	33.77	43.50	-9.73
4824.00	58.61	PK	89	1.6	V	-1.06	57.55	74.00	-16.45
4824.00	48.31	Ave	89	1.6	V	-1.06	47.25	54.00	-6.75
7236.00	47.56	PK	291	1.2	H	1.33	48.89	74.00	-25.11
7236.00	42.02	Ave	291	1.2	H	1.33	43.35	54.00	-10.65
2346.14	45.87	PK	166	1.2	V	-13.19	32.68	74.00	-41.32
2346.14	37.29	Ave	166	1.2	V	-13.19	24.10	54.00	-29.90
2371.98	43.57	PK	207	1.3	H	-13.14	30.43	74.00	-43.57
2371.98	38.05	Ave	207	1.3	H	-13.14	24.91	54.00	-29.09
2495.93	43.79	PK	356	1.1	V	-13.08	30.71	74.00	-43.29
2495.93	37.61	Ave	356	1.1	V	-13.08	24.53	54.00	-29.47

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
n20: Middle Channel 2437MHz									
189.35	21.65	PK	315	1.8	H	11.13	32.78	43.50	-10.72
189.35	23.13	PK	300	1.2	V	11.13	34.26	43.50	-9.24
4874.00	59.60	PK	202	1.0	V	-0.62	58.98	74.00	-15.02
4874.00	50.12	Ave	202	1.0	V	-0.62	49.50	54.00	-4.50
7311.00	48.76	PK	304	1.1	H	2.21	50.97	74.00	-23.03
7311.00	43.42	Ave	304	1.1	H	2.21	45.63	54.00	-8.37
2323.73	45.81	PK	191	1.7	V	-13.19	32.62	74.00	-41.38
2323.73	38.16	Ave	191	1.7	V	-13.19	24.97	54.00	-29.03
2365.19	44.11	PK	342	1.9	H	-13.14	30.97	74.00	-43.03
2365.19	37.83	Ave	342	1.9	H	-13.14	24.69	54.00	-29.31
2491.22	44.54	PK	78	1.8	V	-13.08	31.46	74.00	-42.54
2491.22	37.17	Ave	78	1.8	V	-13.08	24.09	54.00	-29.91

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
n20: High Channel 2462MHz									
189.35	21.09	PK	232	1.0	H	11.13	32.22	43.50	-11.28
189.35	22.82	PK	300	1.2	V	11.13	33.95	43.50	-9.55
4924.00	60.93	PK	144	1.4	V	-0.24	60.69	74.00	-13.31
4924.00	51.47	Ave	144	1.4	V	-0.24	51.23	54.00	-2.77
7386.00	49.83	PK	215	1.4	H	2.84	52.67	74.00	-21.33
7386.00	44.48	Ave	215	1.4	H	2.84	47.32	54.00	-6.68
2330.23	45.69	PK	284	1.4	V	-13.19	32.50	74.00	-41.50
2330.23	37.44	Ave	284	1.4	V	-13.19	24.25	54.00	-29.75
2379.31	42.25	PK	204	1.3	H	-13.14	29.11	74.00	-44.89
2379.31	38.94	Ave	204	1.3	H	-13.14	25.80	54.00	-28.20
2494.21	42.78	PK	8	1.6	V	-13.08	29.70	74.00	-44.30
2494.21	37.40	Ave	8	1.6	V	-13.08	24.32	54.00	-29.68

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
n40: Low Channel 2422MHz									
189.35	22.88	PK	23	1.9	H	11.13	34.01	43.50	-9.49
189.35	22.69	PK	77	2.0	V	11.13	33.82	43.50	-9.68
4844.00	62.63	PK	204	1.9	V	-1.06	61.57	74.00	-12.43
4844.00	52.27	Ave	204	1.9	V	-1.06	51.21	54.00	-2.79
7266.00	50.14	PK	257	1.0	H	1.33	51.47	74.00	-22.53
7266.00	45.19	Ave	257	1.0	H	1.33	46.52	54.00	-7.48
2310.81	46.14	PK	222	1.8	V	-13.19	32.95	74.00	-41.05
2310.81	37.31	Ave	222	1.8	V	-13.19	24.12	54.00	-29.88
2371.56	42.49	PK	51	1.1	H	-13.14	29.35	74.00	-44.65
2371.56	37.80	Ave	51	1.1	H	-13.14	24.66	54.00	-29.34
2486.52	42.25	PK	236	1.8	V	-13.08	29.17	74.00	-44.83
2486.52	37.80	Ave	236	1.8	V	-13.08	24.72	54.00	-29.28

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
n40: Middle Channel 2437MHz									
189.35	22.44	PK	56	1.9	H	11.13	33.57	43.50	-9.93
189.35	23.92	PK	163	1.2	V	11.13	35.05	43.50	-8.45
4874.00	63.56	PK	118	1.1	V	-0.62	62.94	74.00	-11.06
4874.00	53.39	Ave	118	1.1	V	-0.62	52.77	54.00	-1.23
7311.00	50.64	PK	273	1.8	H	2.21	52.85	74.00	-21.15
7311.00	46.57	Ave	273	1.8	H	2.21	48.78	54.00	-5.22
2340.61	46.51	PK	78	1.9	V	-13.19	33.32	74.00	-40.68
2340.61	38.15	Ave	78	1.9	V	-13.19	24.96	54.00	-29.04
2359.27	42.00	PK	219	1.3	H	-13.14	28.86	74.00	-45.14
2359.27	37.56	Ave	219	1.3	H	-13.14	24.42	54.00	-29.58
2483.65	44.56	PK	237	1.7	V	-13.08	31.48	74.00	-42.52
2483.65	36.99	Ave	237	1.7	V	-13.08	23.91	54.00	-30.09

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.247/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
n40: High Channel 2452MHz									
189.35	23.23	PK	343	1.4	H	11.13	34.36	43.50	-9.14
189.35	23.54	PK	116	1.1	V	11.13	34.67	43.50	-8.83
4904.00	65.00	PK	225	1.7	V	-0.24	64.76	74.00	-9.24
4904.00	52.99	Ave	225	1.7	V	-0.24	52.75	54.00	-1.25
7356.00	50.13	PK	267	1.0	H	2.84	52.97	74.00	-21.03
7356.00	47.66	Ave	267	1.0	H	2.84	50.50	54.00	-3.50
2349.77	46.23	PK	258	1.0	V	-13.19	33.04	74.00	-40.96
2349.77	39.37	Ave	258	1.0	V	-13.19	26.18	54.00	-27.82
2357.87	42.47	PK	284	1.0	H	-13.14	29.33	74.00	-44.67
2357.87	37.02	Ave	284	1.0	H	-13.14	23.88	54.00	-30.12
2484.37	42.21	PK	56	1.5	V	-13.08	29.13	74.00	-44.87
2484.37	36.39	Ave	56	1.5	V	-13.08	23.31	54.00	-30.69

Test Frequency: 18GHz~25GHz

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

BT BLE:

Test Frequency : 32.768kHz ~ 30MHz

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

Test Frequency : 30MHz ~ 18GHz

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Low Channel 2402MHz									
189.35	22.45	QP	295	1.1	H	11.13	33.58	43.50	-9.92
189.35	20.41	QP	109	1.5	V	11.13	31.54	43.50	-11.96
4804.00	48.66	PK	309	1.2	V	-1.06	47.60	74.00	-26.40
4804.00	43.36	Ave	309	1.2	V	-1.06	42.30	54.00	-11.70
7206.00	40.41	PK	170	1.8	H	1.33	41.74	74.00	-32.26
7206.00	36.59	Ave	170	1.8	H	1.33	37.92	54.00	-16.08

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Middle Channel 2440MHz									
189.35	24.09	QP	221	1.5	H	11.13	35.22	43.50	-8.28
189.35	23.13	QP	169	1.2	V	11.13	34.26	43.50	-9.24
4880.00	49.35	PK	4	1.9	V	-0.62	48.73	74.00	-25.27
4880.00	44.03	Ave	4	1.9	V	-0.62	43.41	54.00	-10.59
7320.00	42.87	PK	49	1.9	H	2.21	45.08	74.00	-28.92
7320.00	37.17	Ave	49	1.9	H	2.21	39.38	54.00	-14.62

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
High Channel 2480MHz									
189.35	22.02	QP	343	1.0	H	11.13	33.15	43.50	-10.35
189.35	20.33	QP	286	1.6	V	11.13	31.46	43.50	-12.04
4960.00	49.74	PK	163	1.2	V	-0.24	49.50	74.00	-24.50
4960.00	42.99	Ave	163	1.2	V	-0.24	42.75	54.00	-11.25
7440.00	39.38	PK	261	2.0	H	2.84	42.22	74.00	-31.78
7440.00	37.90	Ave	261	2.0	H	2.84	40.74	54.00	-13.26

Test Frequency: 18GHz~25GHz

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

8 Band Edge Measurement

Test Requirement:	FCC CFR47 Part 15 Section 15.247
Test Method:	KDB 558074 D01 v03r02 06/05/2014
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:	Transmitting

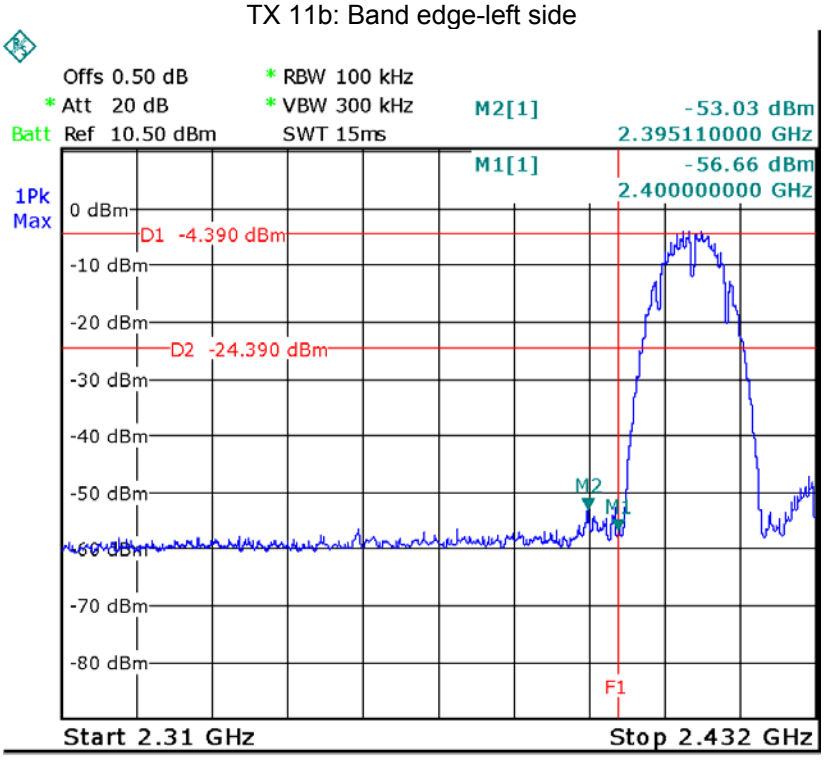
8.1 Test Produce

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

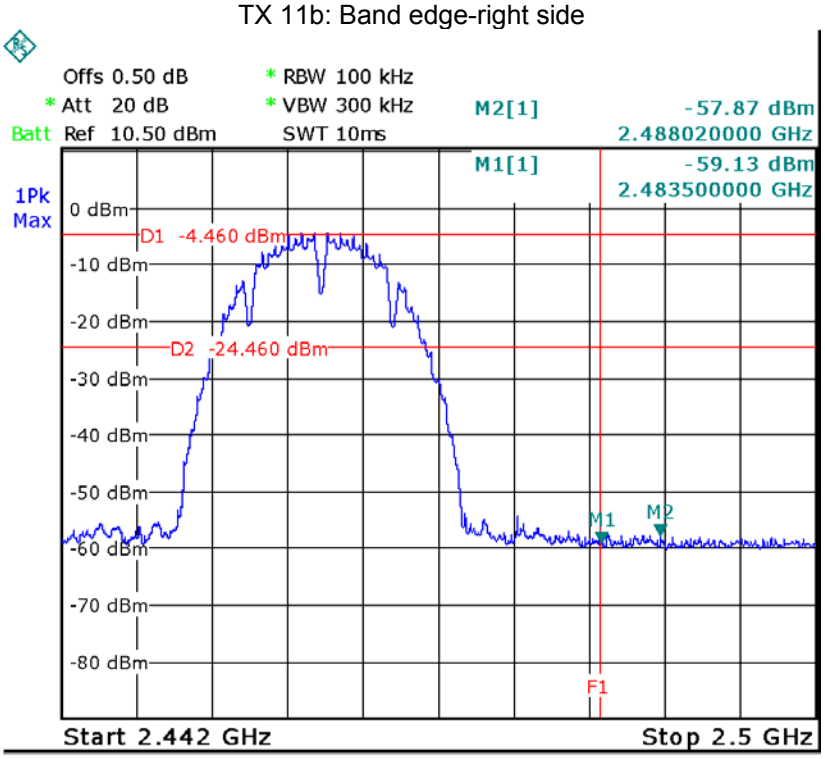
8.2 Test Result

Test result plots shown as follows:

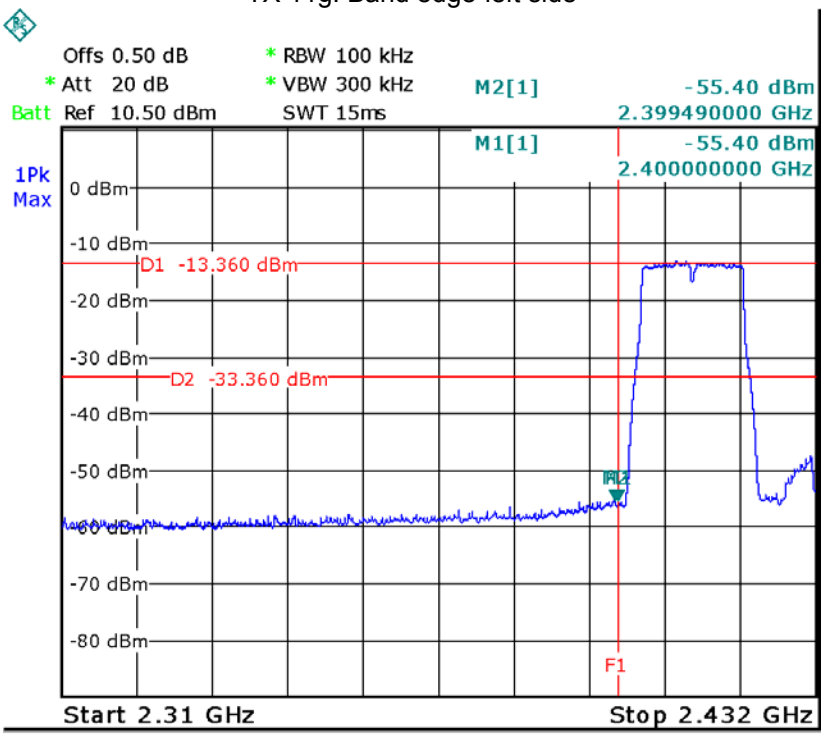
TX 11b: Band edge-left side



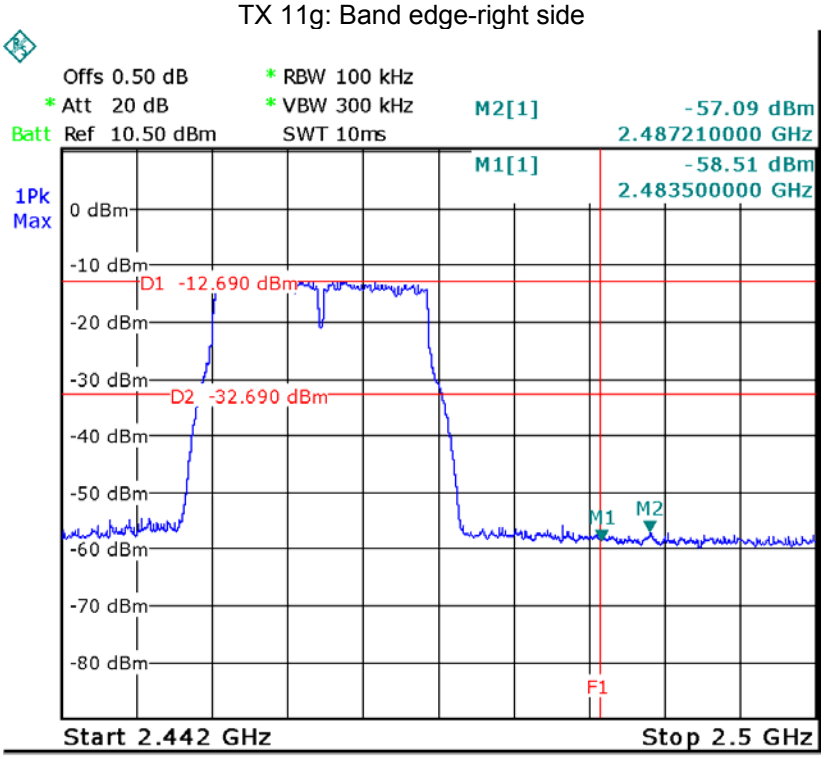
TX 11b: Band edge-right side



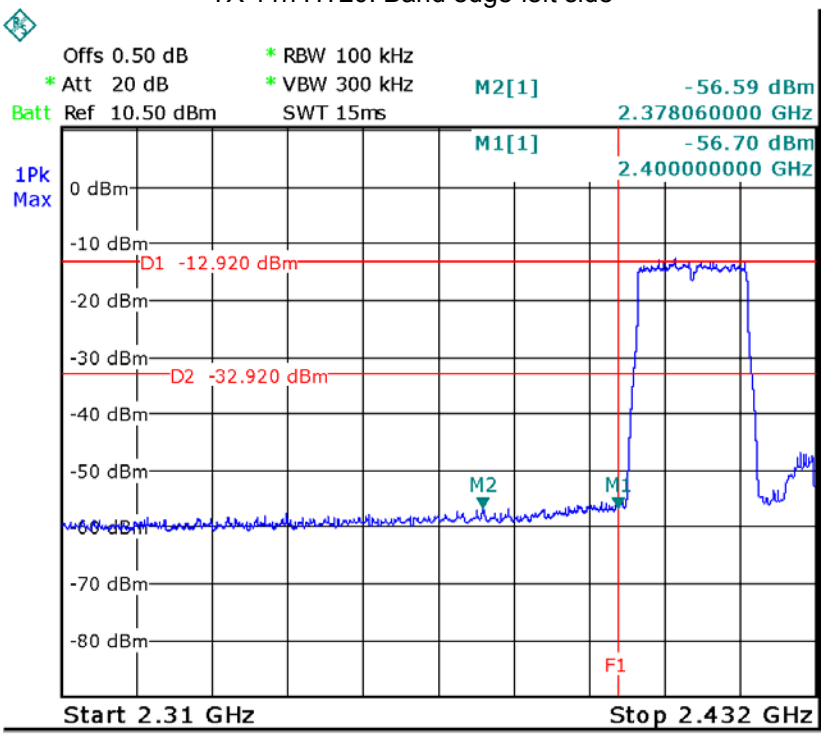
TX 11g: Band edge-left side



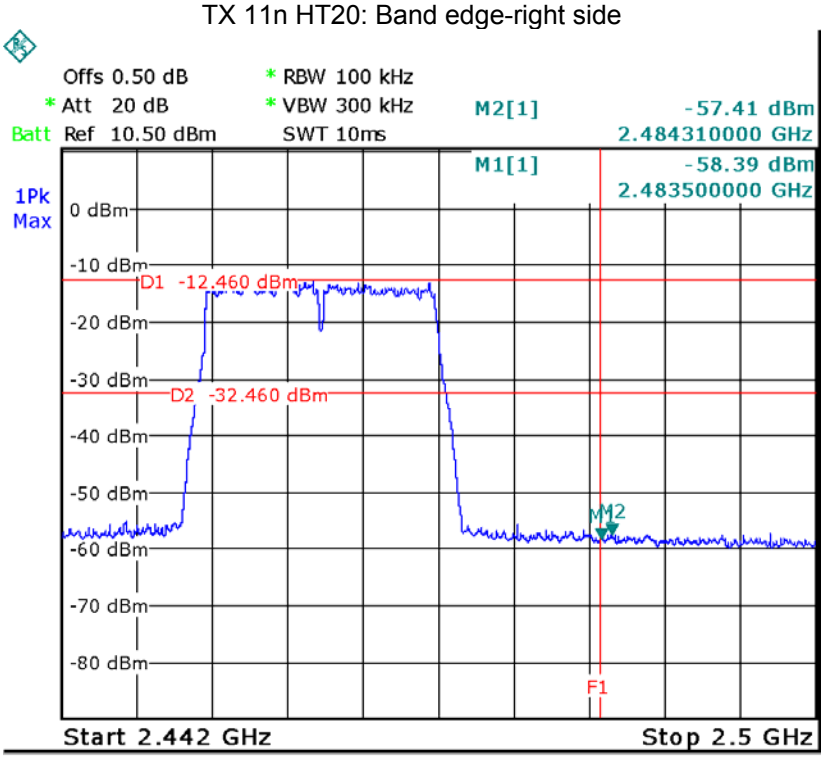
TX 11g: Band edge-right side



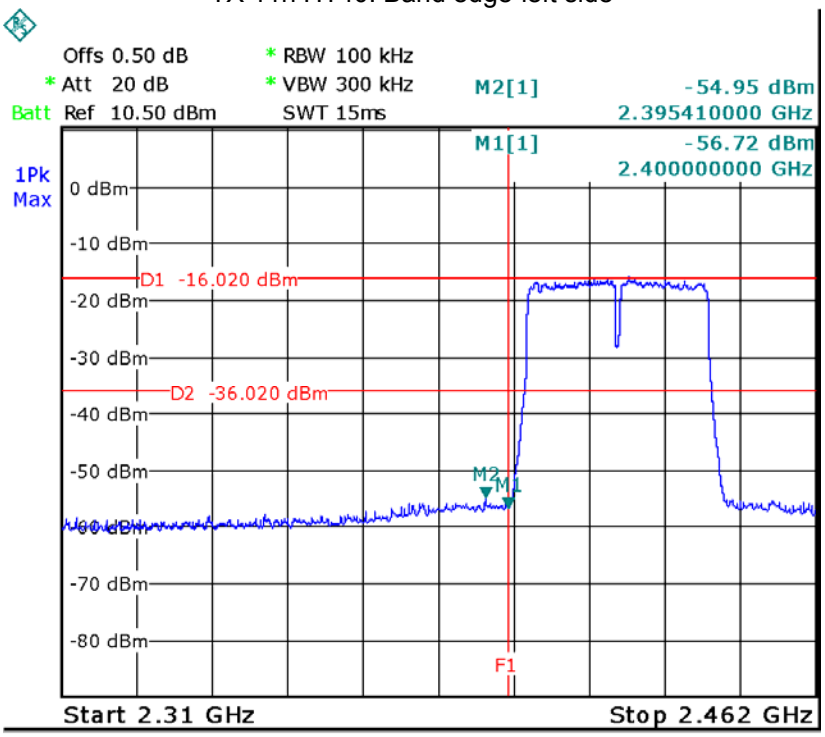
TX 11n HT20: Band edge-left side



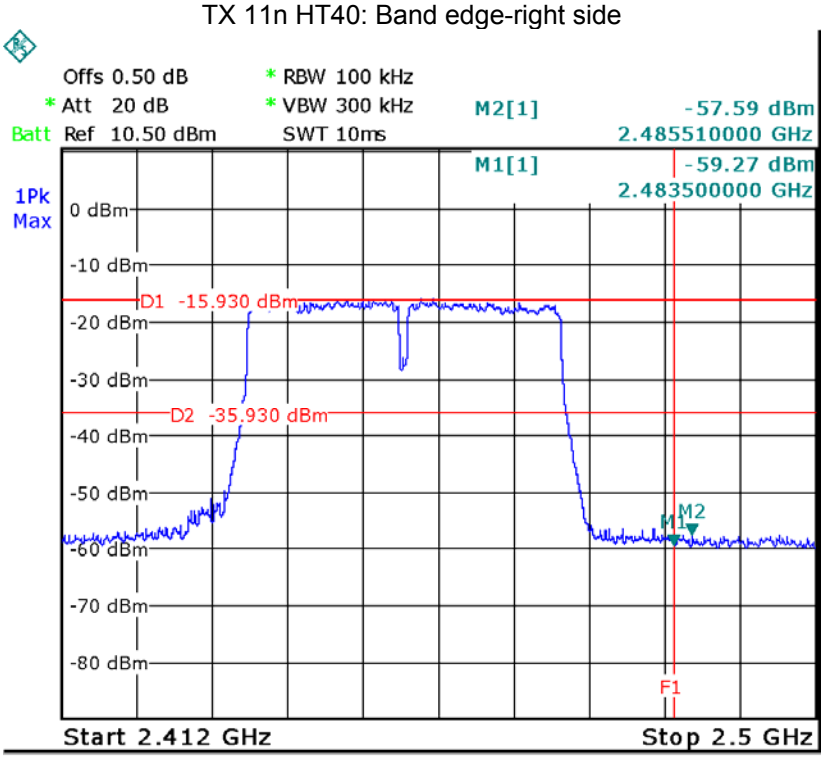
TX 11n HT20: Band edge-right side



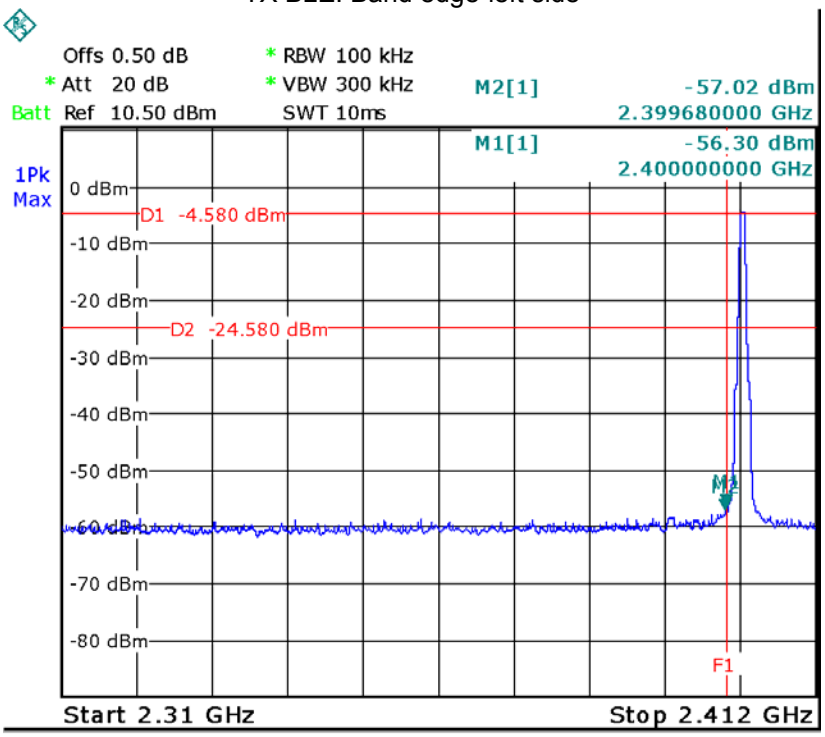
TX 11n HT40: Band edge-left side



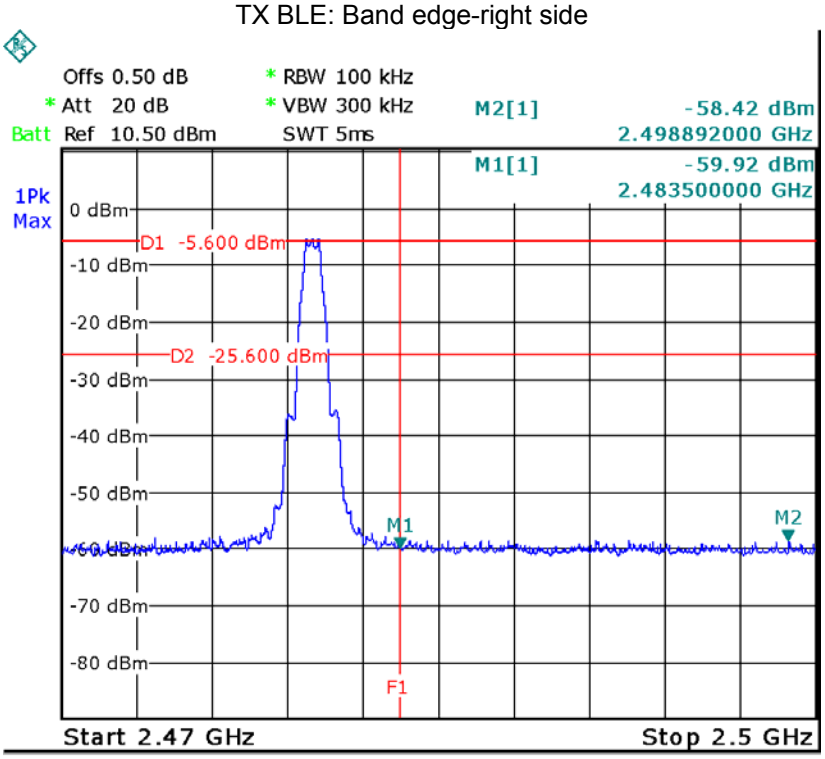
TX 11n HT40: Band edge-right side



TX BLE: Band edge-left side



TX BLE: Band edge-right side



9 6 dB Bandwidth Measurement

Test Requirement: FCC CFR47 Part 15 Section 15.247

Test Method: KDB 558074 D01 v03r02 06/05/2014

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;

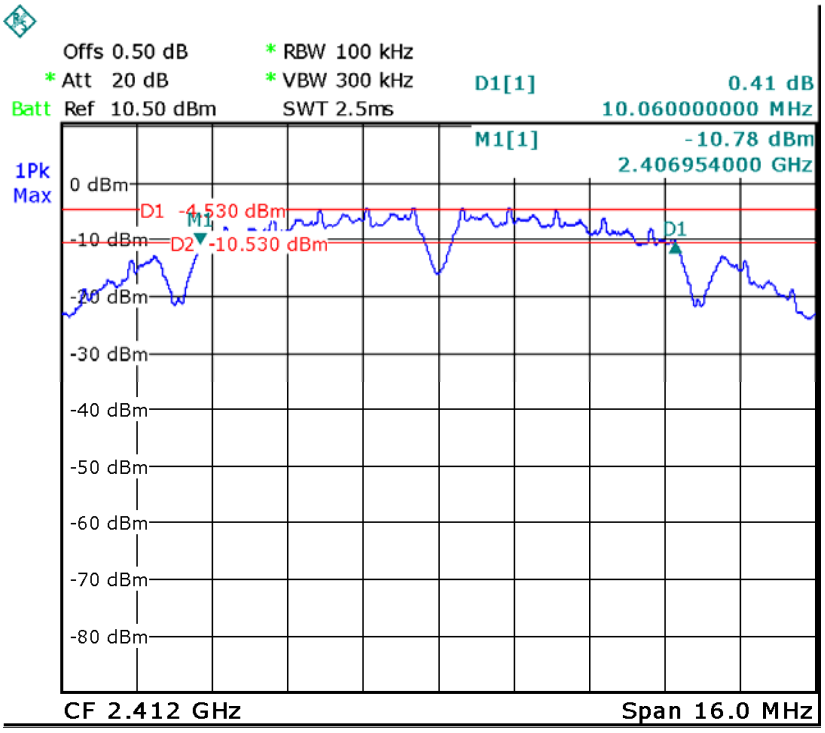
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz

9.2 Test Result:

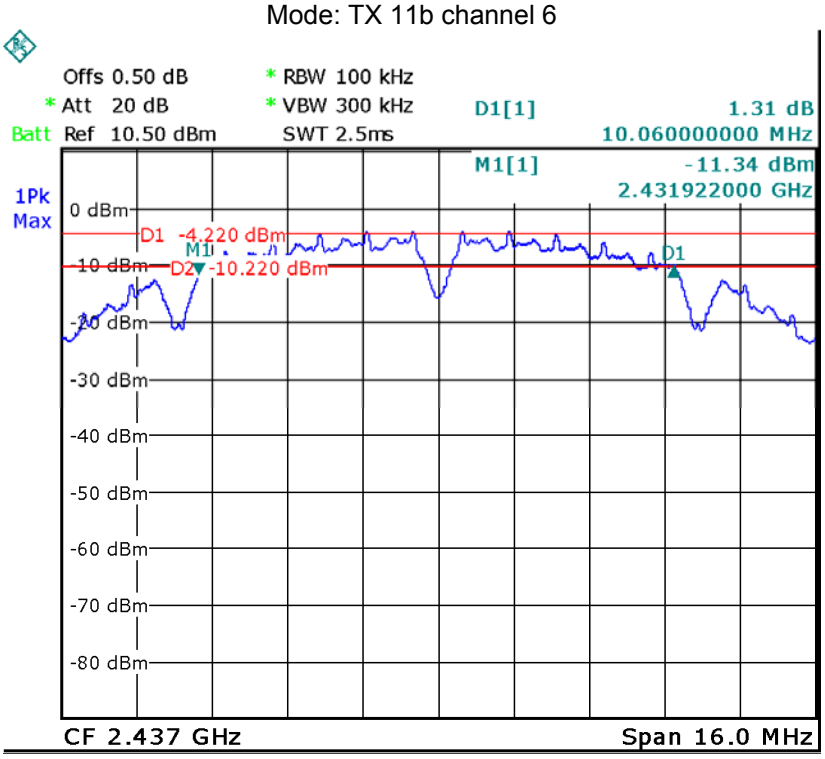
Operation mode	Bandwidth (MHz)		
TX 11b	Channel 1	Channel 6	Channel 11
	10.060	10.060	10.060
TX 11g	Channel 1	Channel 6	Channel 11
	16.617	16.617	16.617
TX 11n HT20	Channel 1	Channel 6	Channel 11
	17.838	17.838	17.838
TX 11n HT40	Channel 3	Channel 6	Channel 9
	36.560	36.560	36.560
BT BLE	Channel 1	Channel 20	Channel 40
	0.665	0.665	0.665

Test result plot as follows:

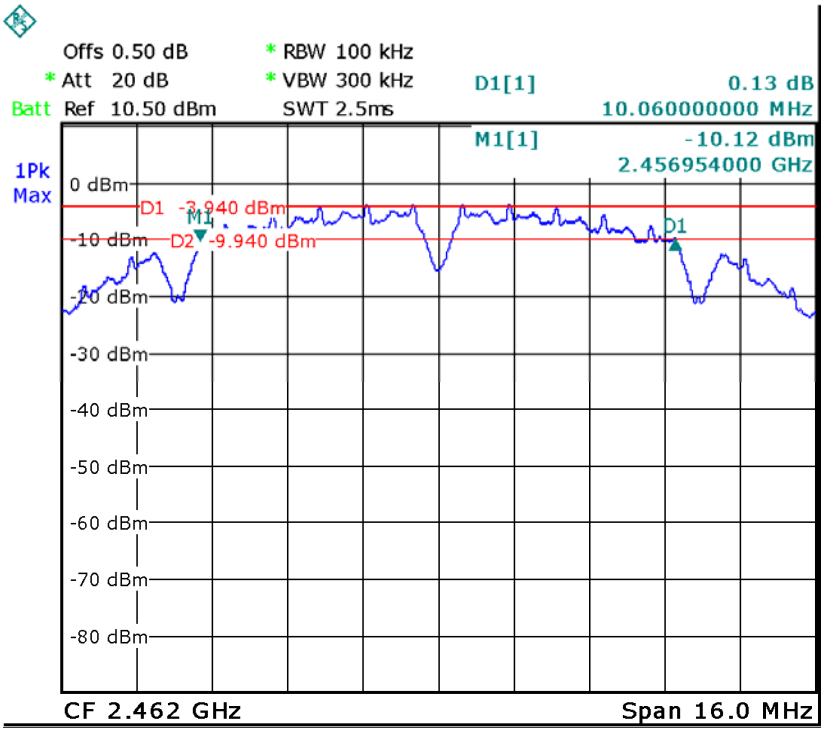
Mode: TX 11b channel 1



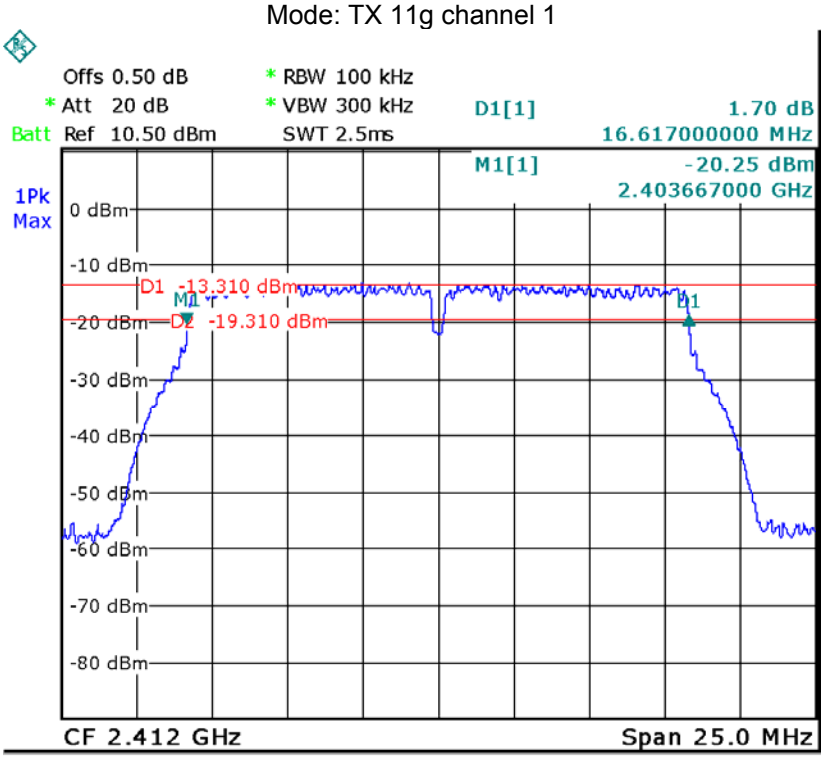
Mode: TX 11b channel 6



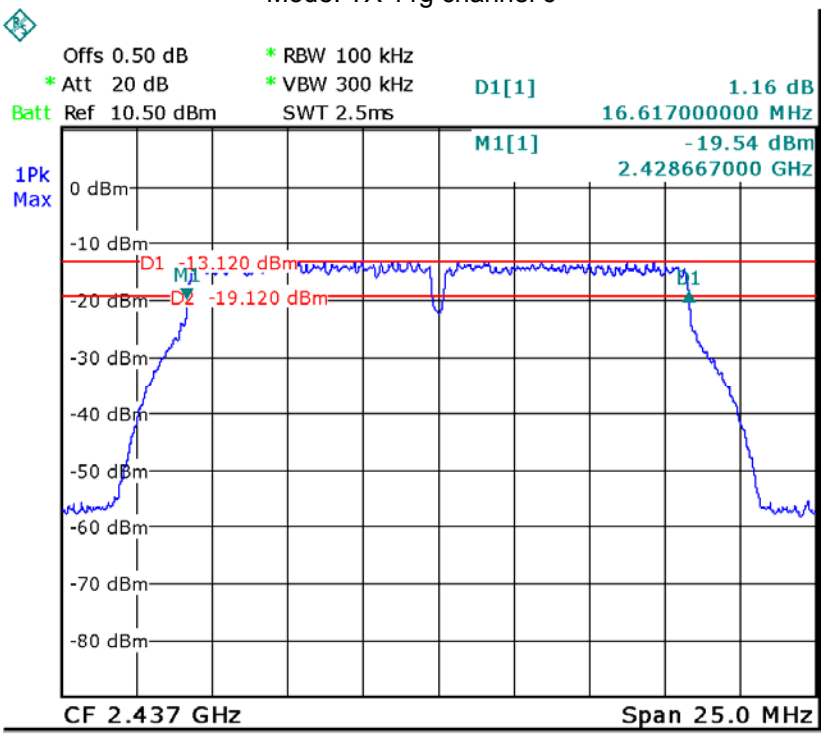
Mode: TX 11b channel 11



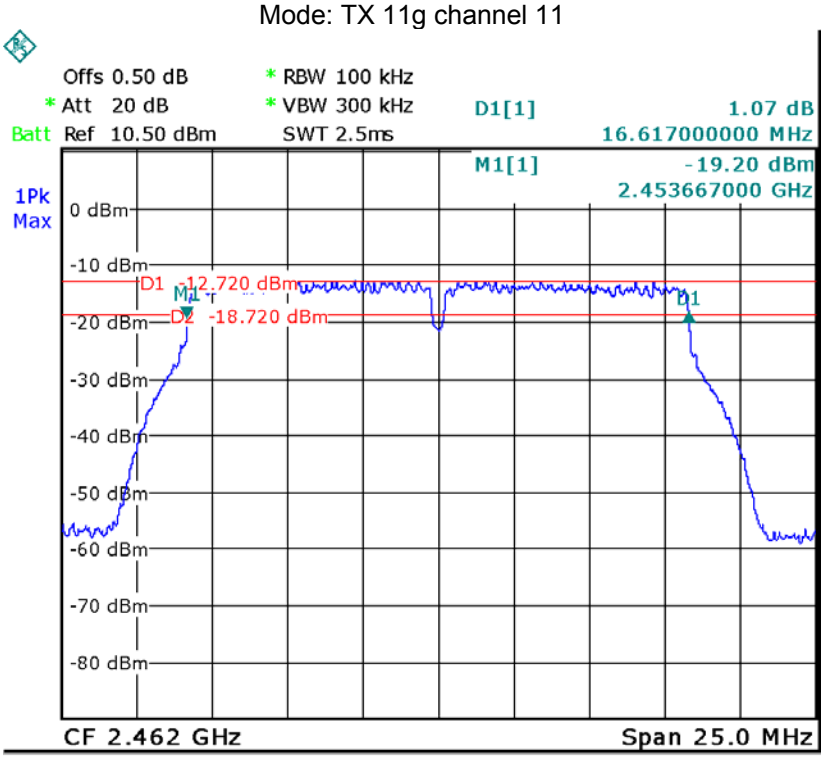
Mode: TX 11g channel 1



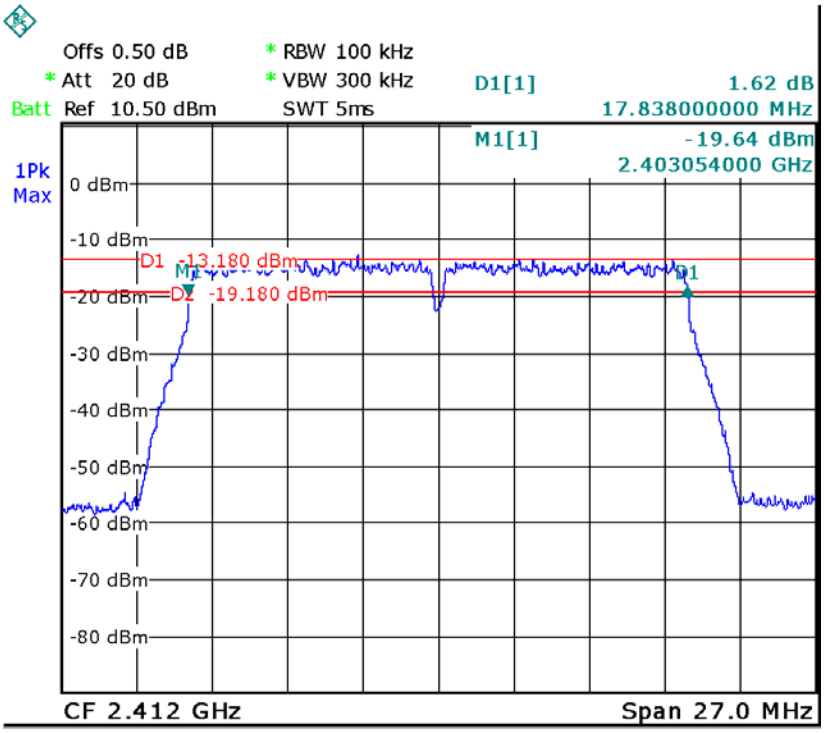
Mode: TX 11g channel 6



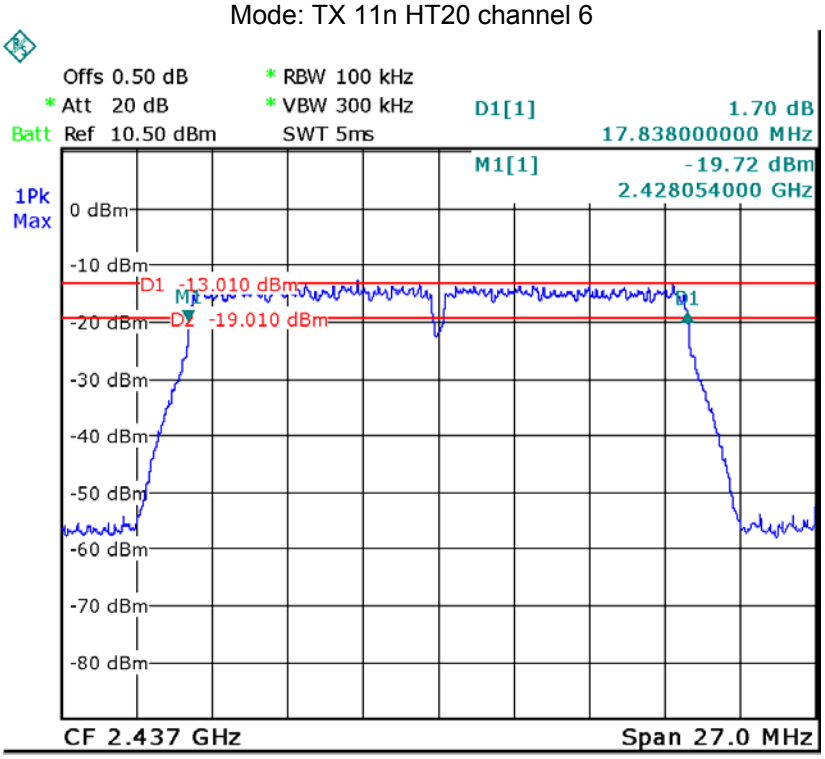
Mode: TX 11g channel 11



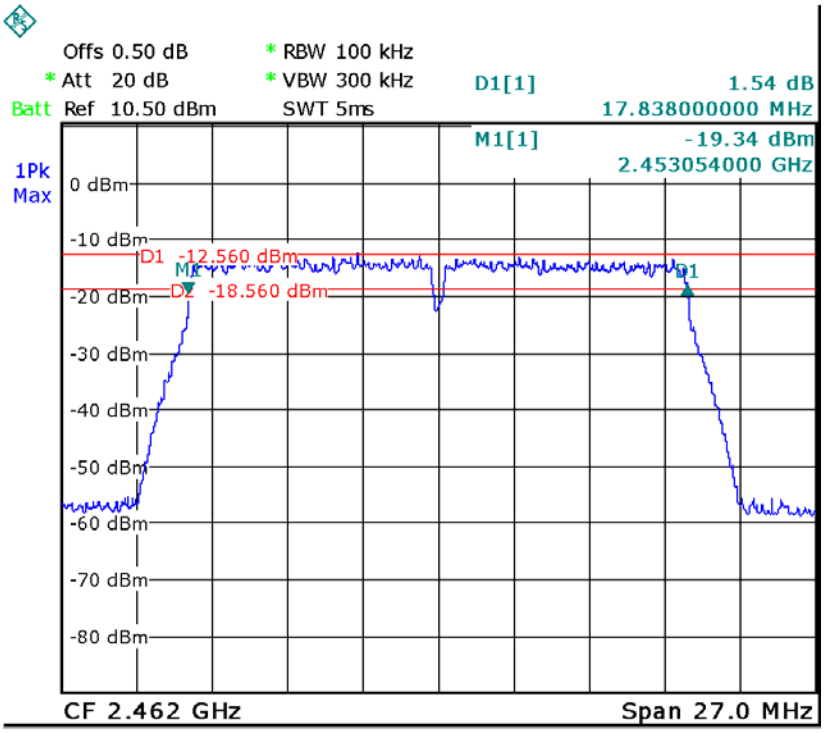
Mode: TX 11n HT20 channel 1



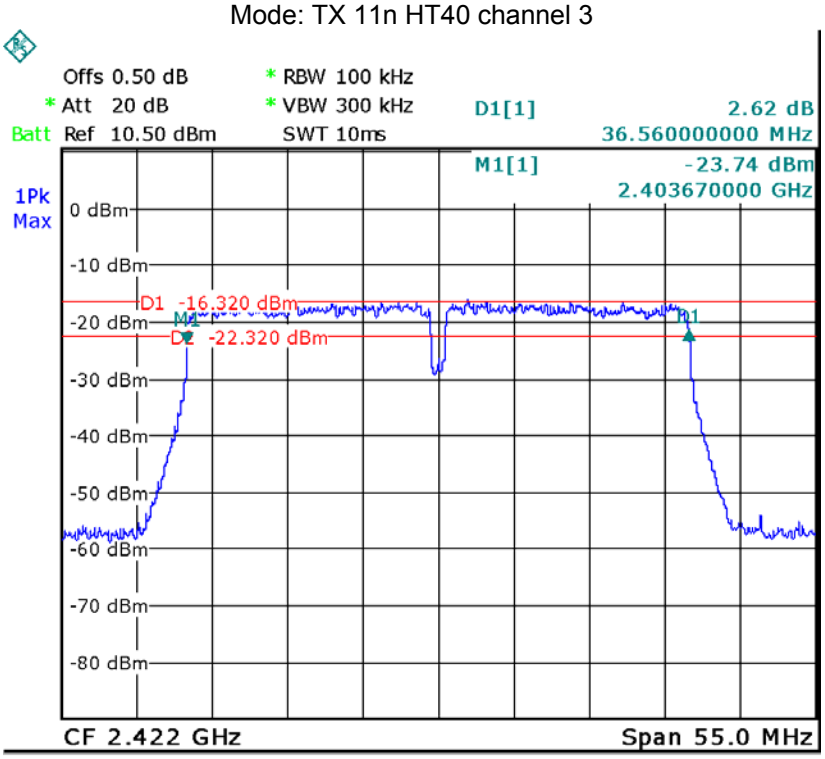
Mode: TX 11n HT20 channel 6



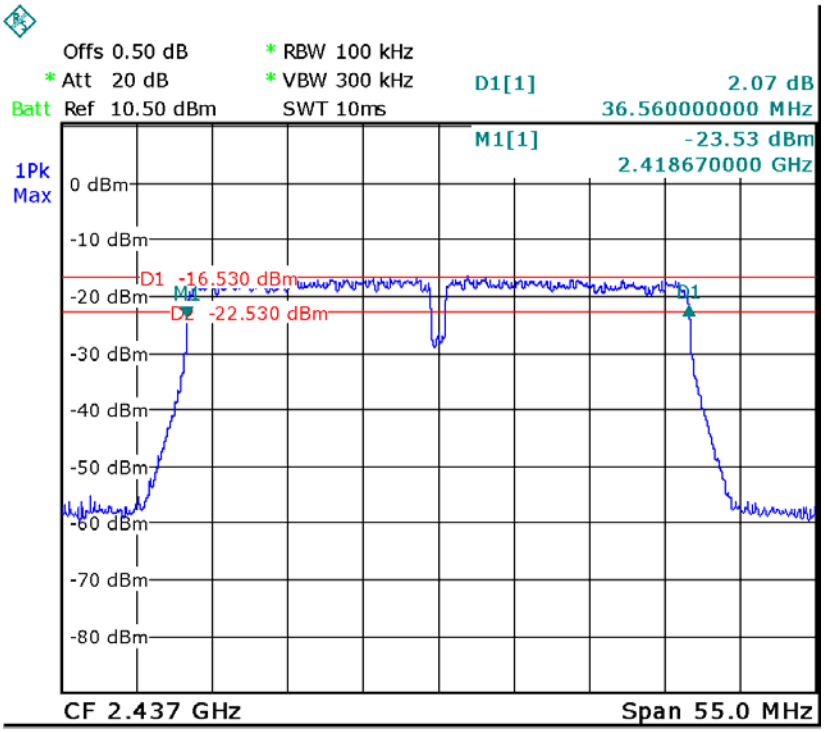
Mode: TX 11n HT20 channel 11



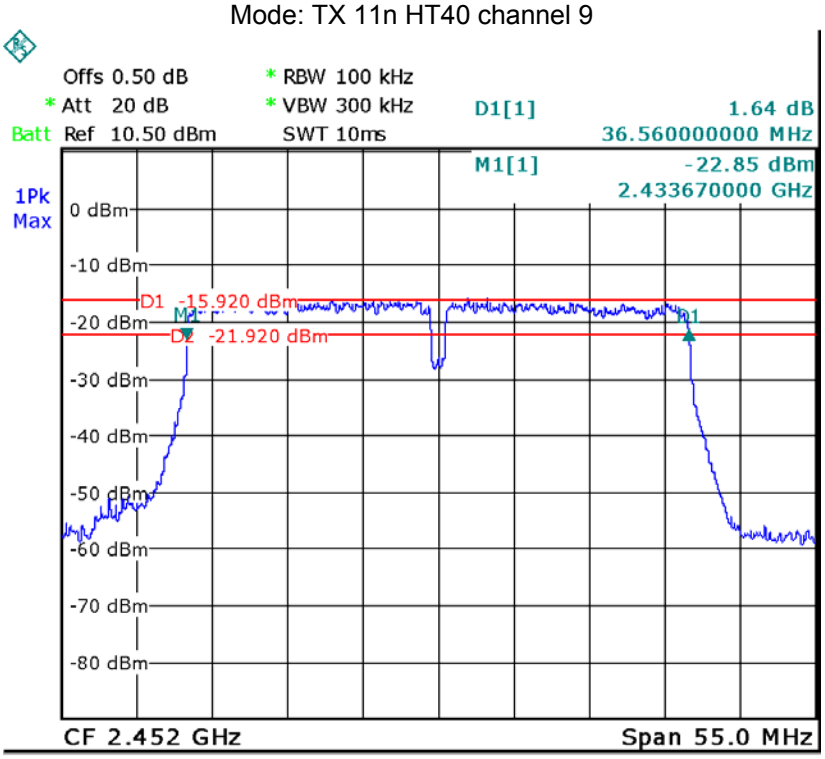
Mode: TX 11n HT40 channel 3



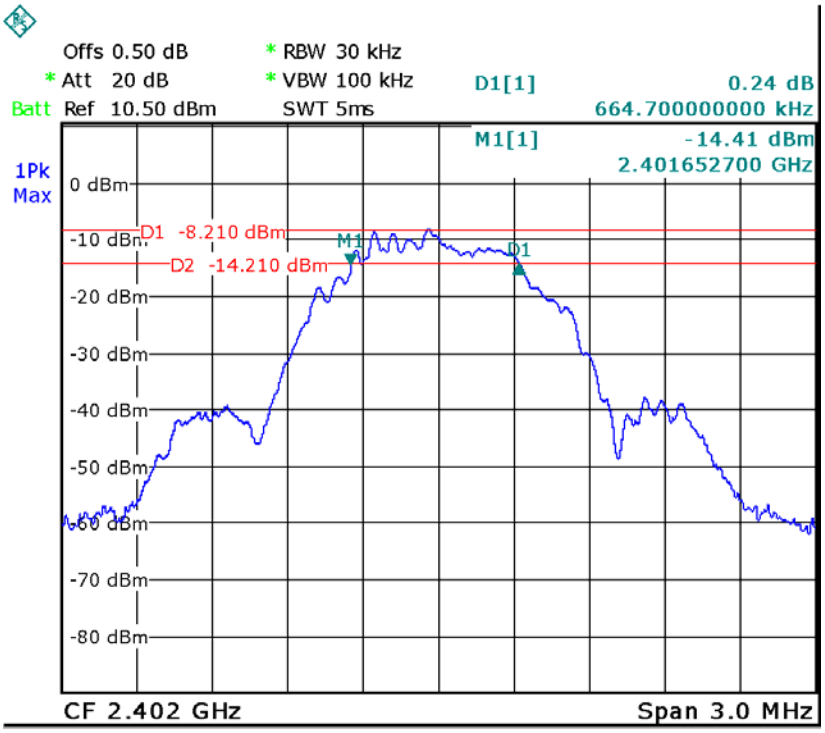
Mode: TX 11n HT40 channel 6



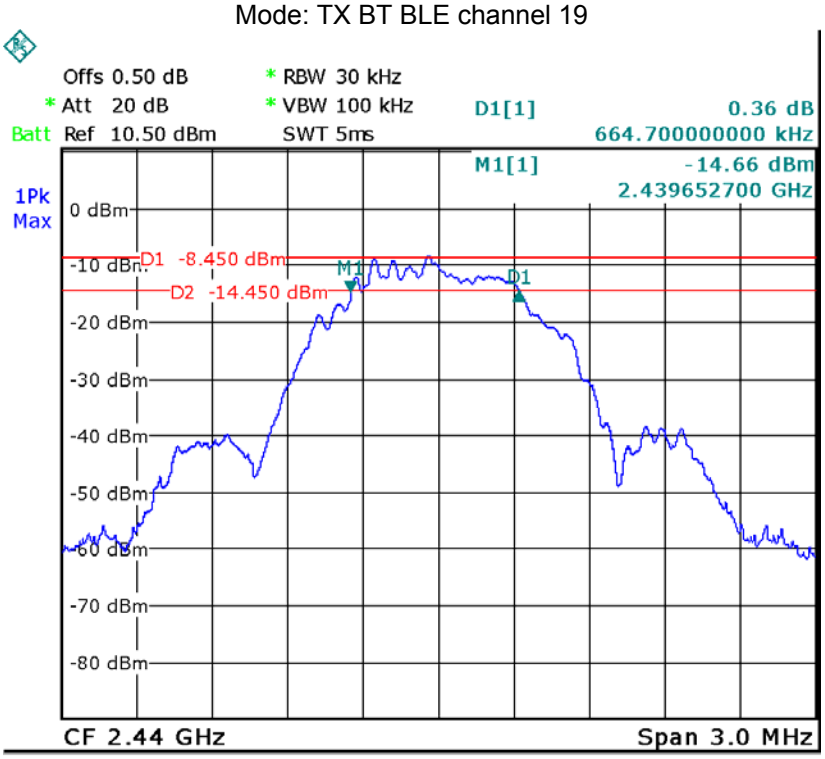
Mode: TX 11n HT40 channel 9



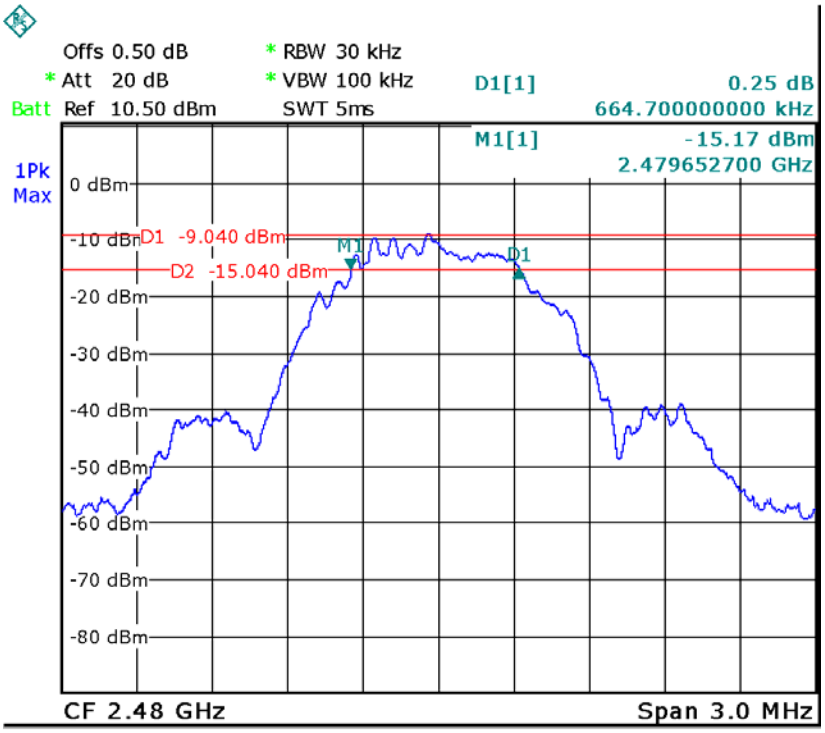
Mode: TX BT BLE channel 0



Mode: TX BT BLE channel 19



Mode: TX BT BLE channel 39



10 Maximum Peak Output Power

Test Requirement: FCC CFR47 Part 15 Section 15.247

Test Method: KDB 558074 D01 v03r02 06/05/2014

10.1 Test Procedure:

KDB 558074 D01 v03r02 06/05/2014

section 9.1.1

This procedure shall be used when the measurement instrument has available a resolution bandwidth that is greater than the DTS bandwidth.

a)Set the RBW ⩾ DTS bandwidth.

b)Set VBW ⩾ 3 RBW.

c)Set span ⩾ 3 x RBW

d)Sweep time = auto couple.

e)Detector = peak.

f)Trace mode = max hold.

g)Allow trace to fully stabilize.

h)Use peak marker function to determine the peak amplitude level.

section 9.1.2

This procedure may be used when the maximum available RBW of the measurement instrument is less than the DTS bandwidth.

a)Set the RBW = 1 MHz.

b)Set the VBW ⩾ 3 RBW

c)Set the span ⩾ 1.5 x DTS bandwidth.

d)Detector = peak.

e)Sweep time = auto couple.

f)Trace mode = max hold.

g)Allow trace to fully stabilize.

h)Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select peak detector). If the instrument does not have a band power function, sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS bandwidth.

10.2 Test Result:

Test mode :TX 11b		
10 Maximum Peak Output Power (dBm)		
2412MHz	2437MHz	2462MHz
9.05	9.21	9.44
Limit: 1W/30dBm		
1W/30dBm		

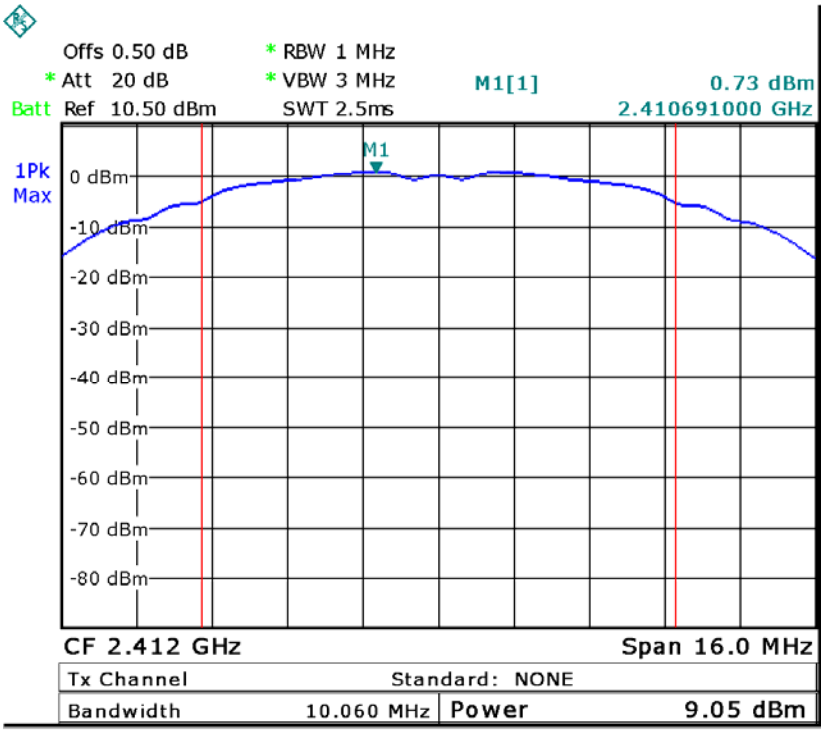
Test mode :TX 11g		
10 Maximum Peak Output Power (dBm)		
2412MHz	2437MHz	2462MHz
9.08	9.16	9.38
Limit		
1W/30dBm		

Test mode :TX 11n HT20		
10 Maximum Peak Output Power (dBm)		
2412MHz	2437MHz	2462MHz
9.13	9.12	9.44
Limit		
1W/30dBm		

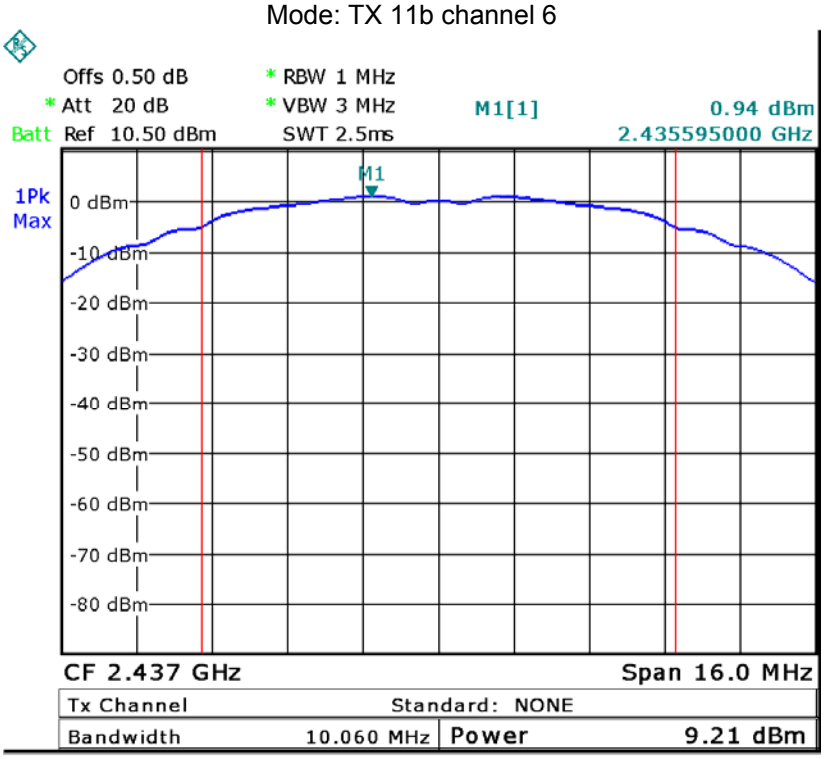
Test mode : TX 11n HT40		
10 Maximum Peak Output Power (dBm)		
2422MHz	2437MHz	2452MHz
9.26	9.09	9.38
Limit		
1W/30dBm		

Test mode : TX BT BLE		
10 Maximum Peak Output Power (dBm)		
2402MHz	2440MHz	2480MHz
-3.57	-3.90	-4.48
Limit		
1W/30dBm		

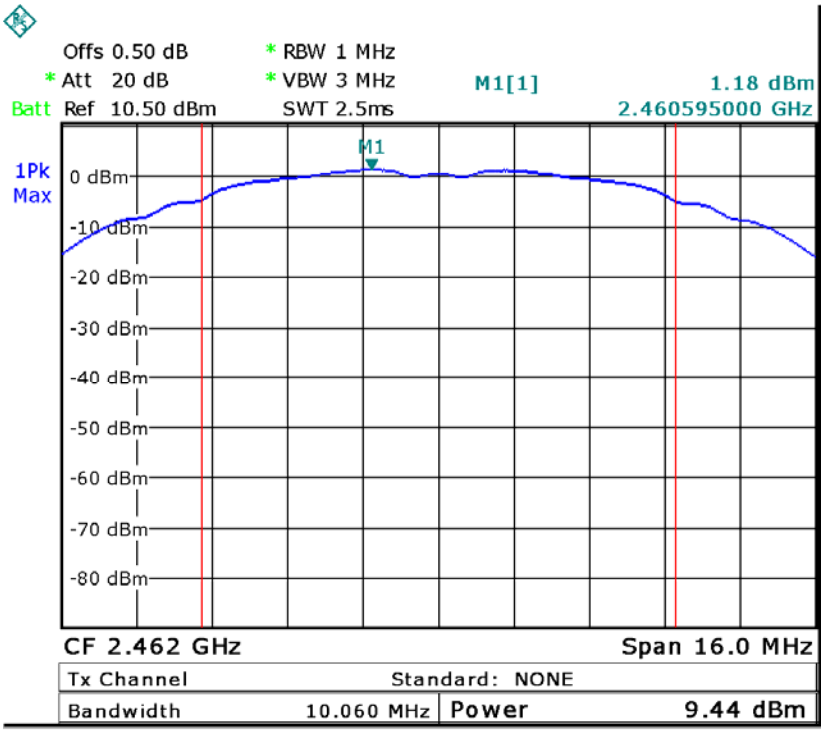
Mode: TX 11b channel 1



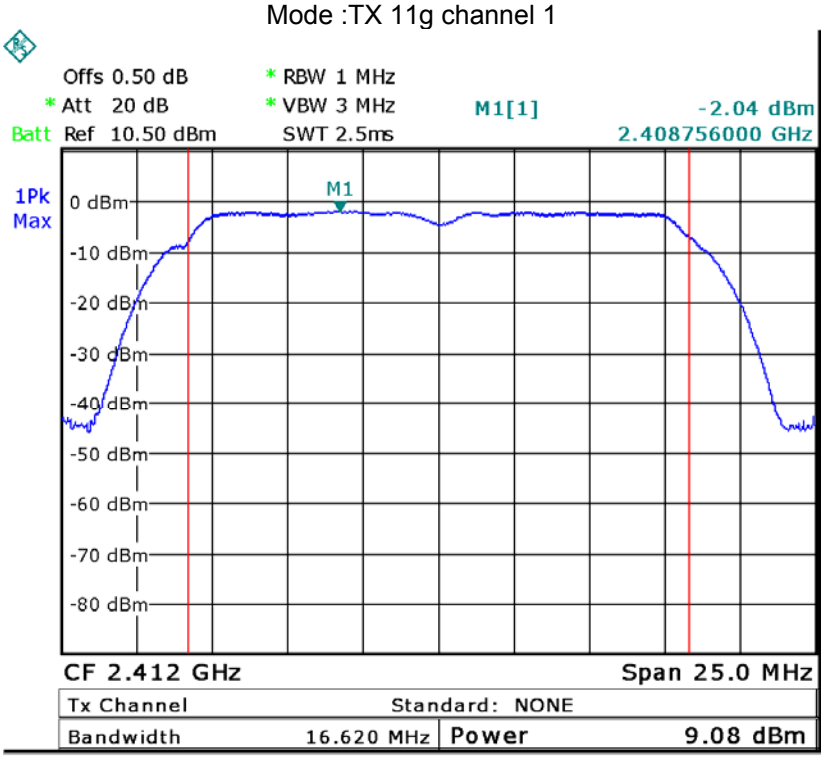
Mode: TX 11b channel 6



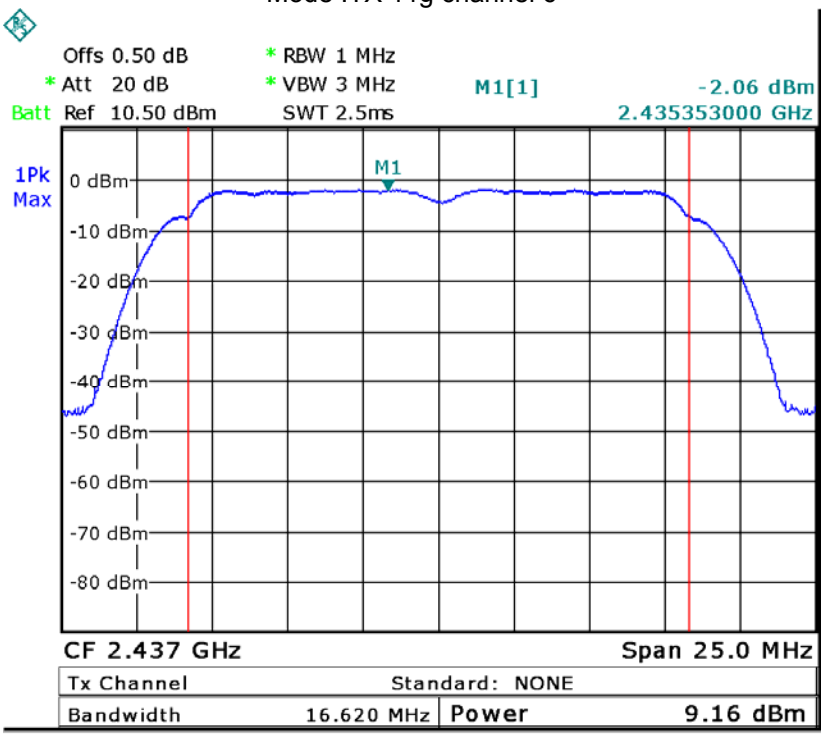
Mode: TX 11b channel 11



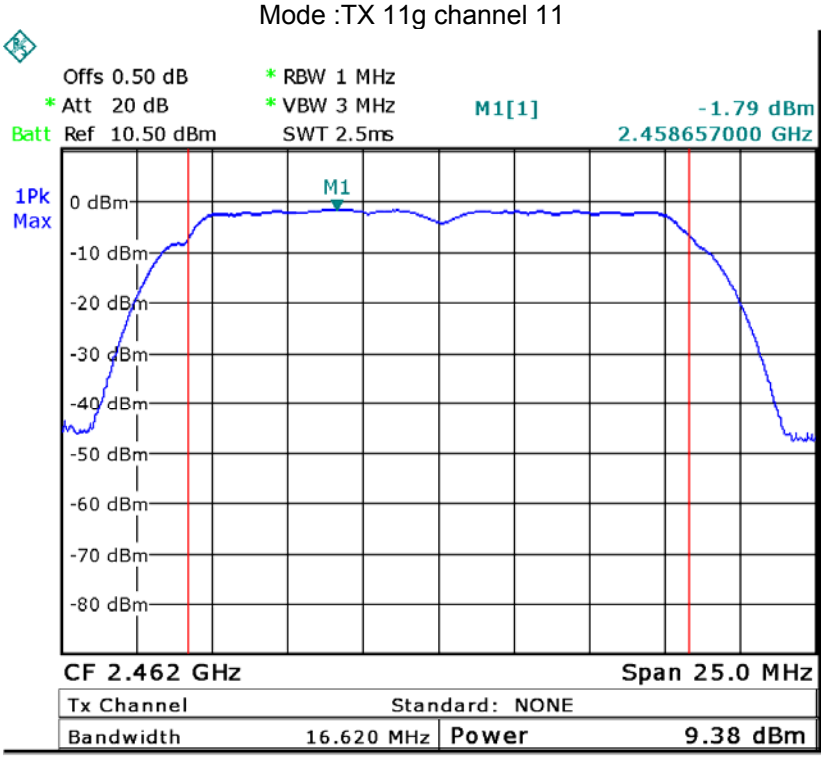
Mode :TX 11g channel 1



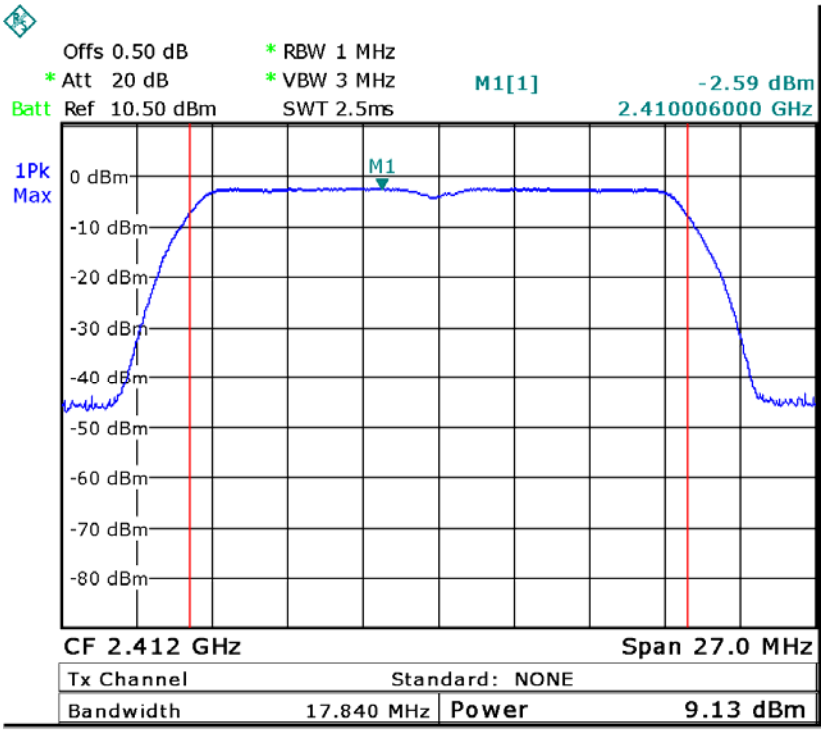
Mode :TX 11g channel 6



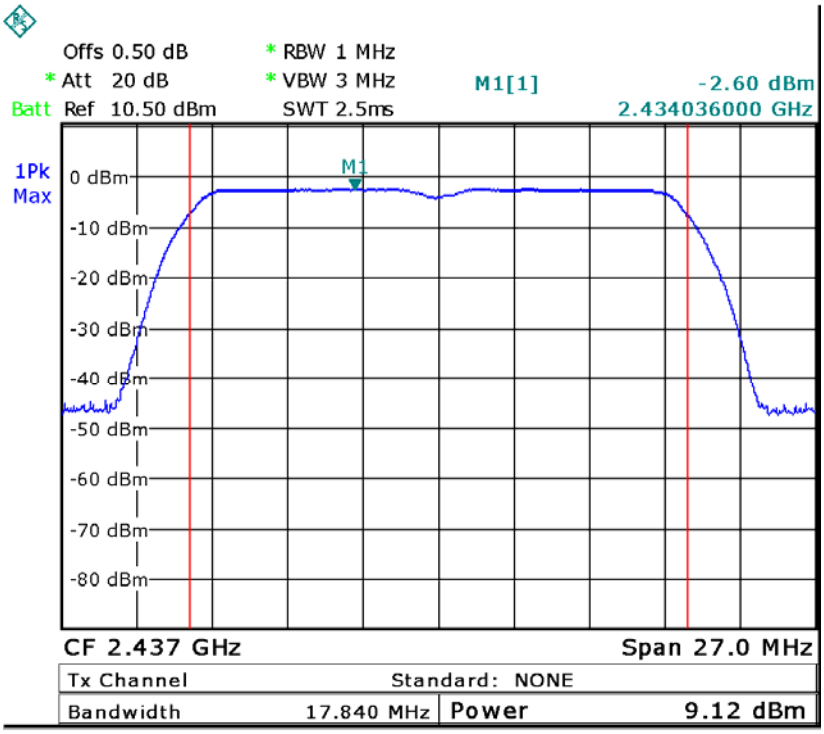
Mode :TX 11g channel 11



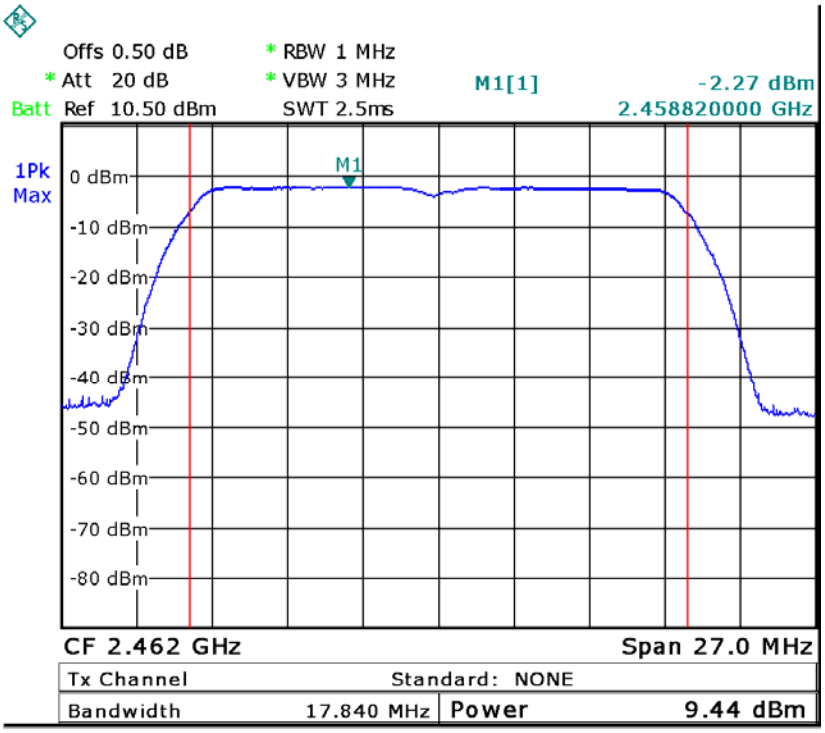
Mode: TX 11n HT20 channel 1



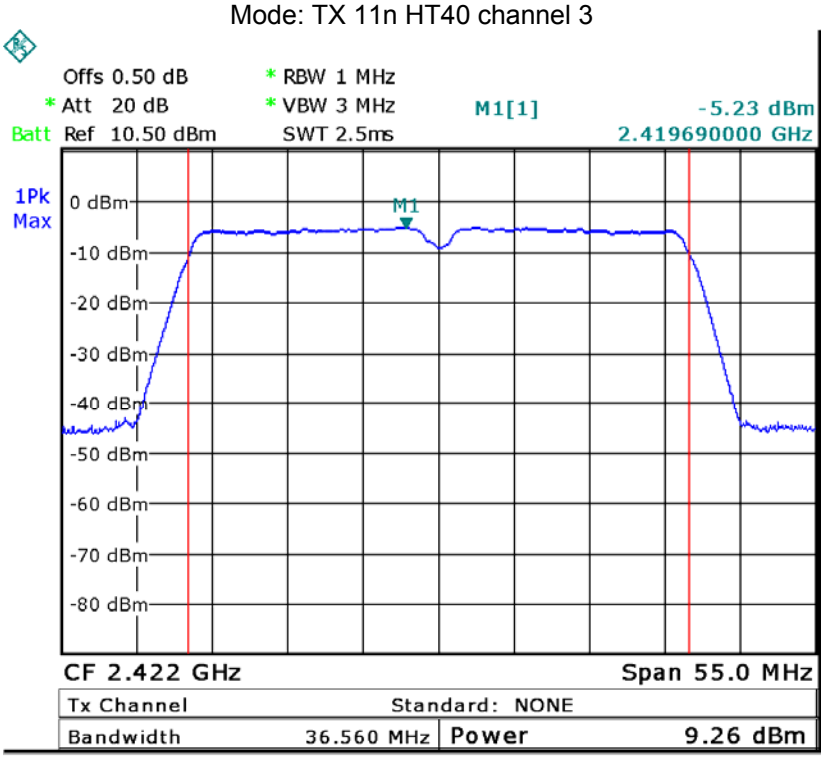
Mode: TX 11n HT20 channel 6



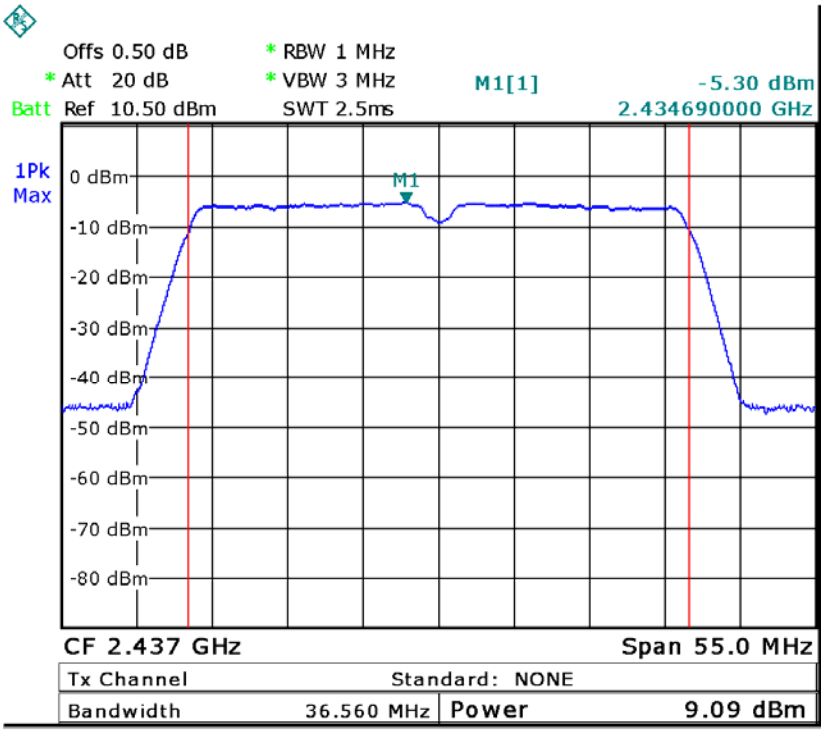
Mode: TX 11n HT20 channel 11



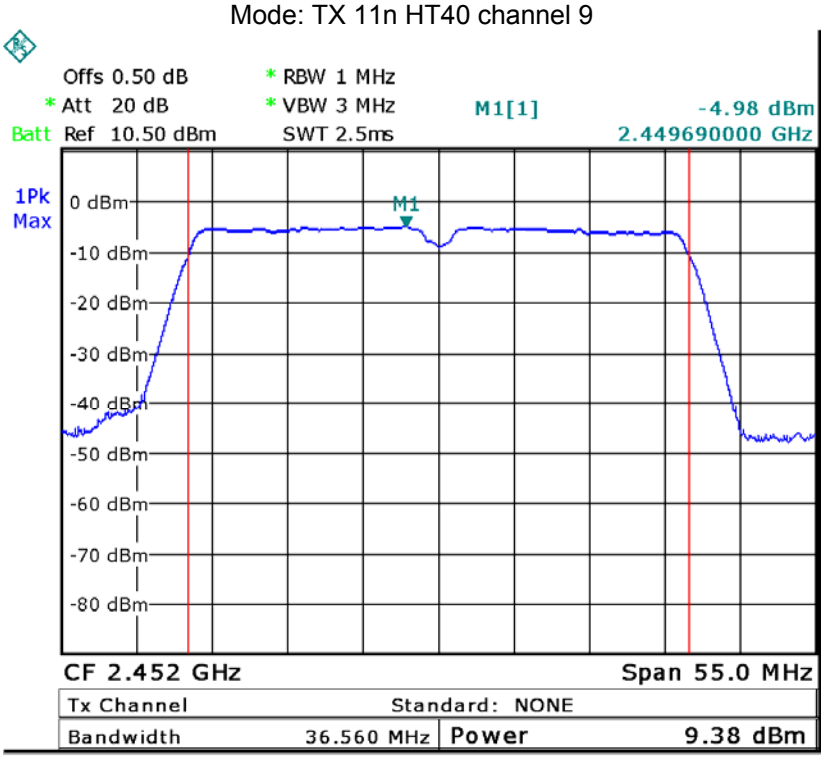
Mode: TX 11n HT40 channel 3



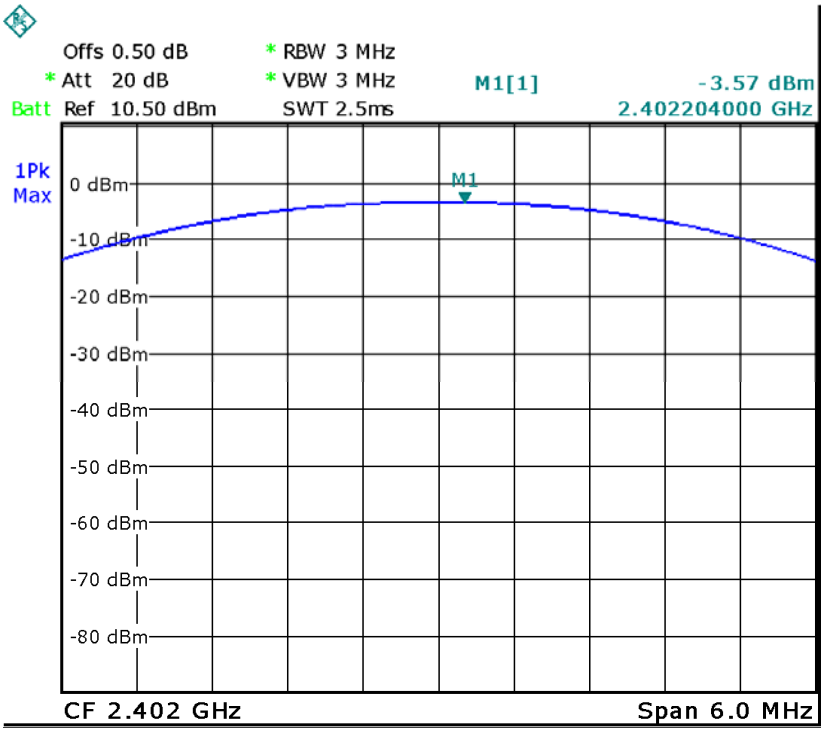
Mode: TX 11n HT40 channel 6



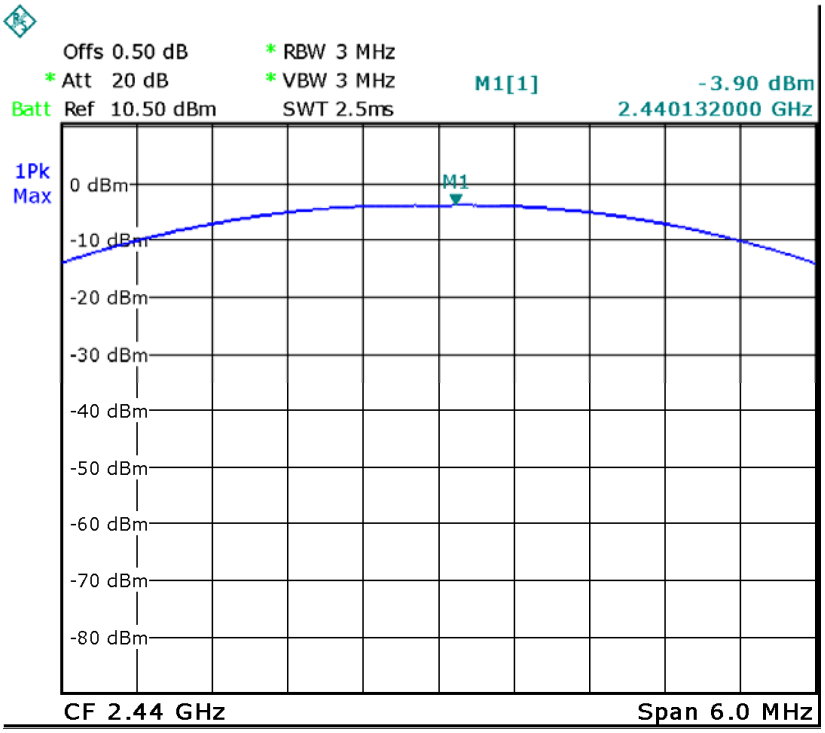
Mode: TX 11n HT40 channel 9



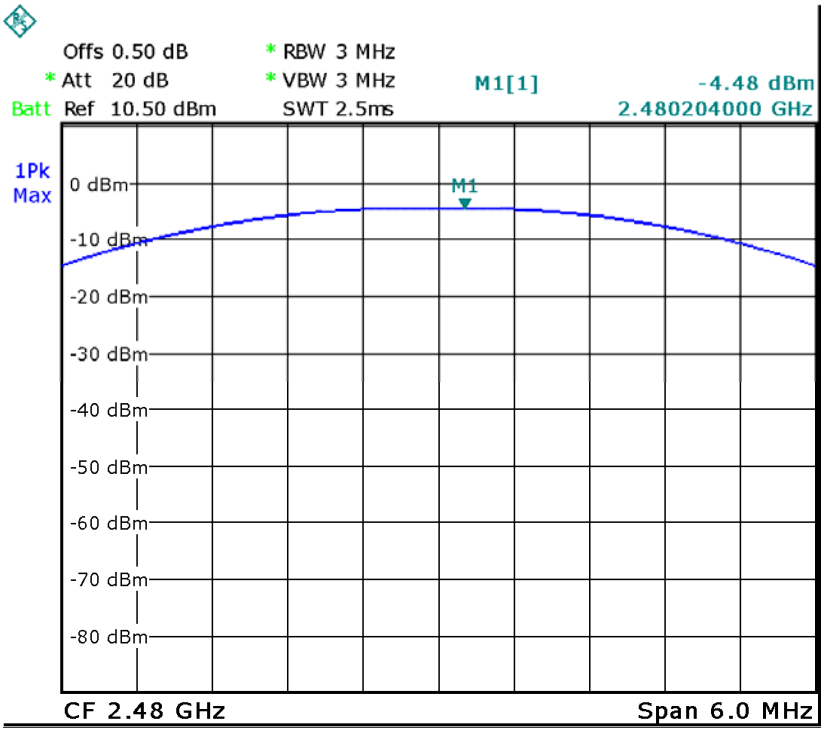
Mode: TX BT BLE channel 0



Mode: TX BT BLE channel 19



Mode: TX BT BLE channel 39



11 Power Spectral density

Test Requirement: FCC CFR47 Part 15 Section 15.247

Test Method: KDB 558074 D01 v03r02 06/05/2014

11.1 Test Procedure:

KDB 558074 D01 v03r02 06/05/2014 section 10.2

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:

Test mode :TX 11b		
Power Spectral (dBm per 3kHz)		
2412MHz	2437MHz	2462MHz
-22.63	-22.52	-22.14
Limit: 1W/30dBm		
8dBm per 3kHz		

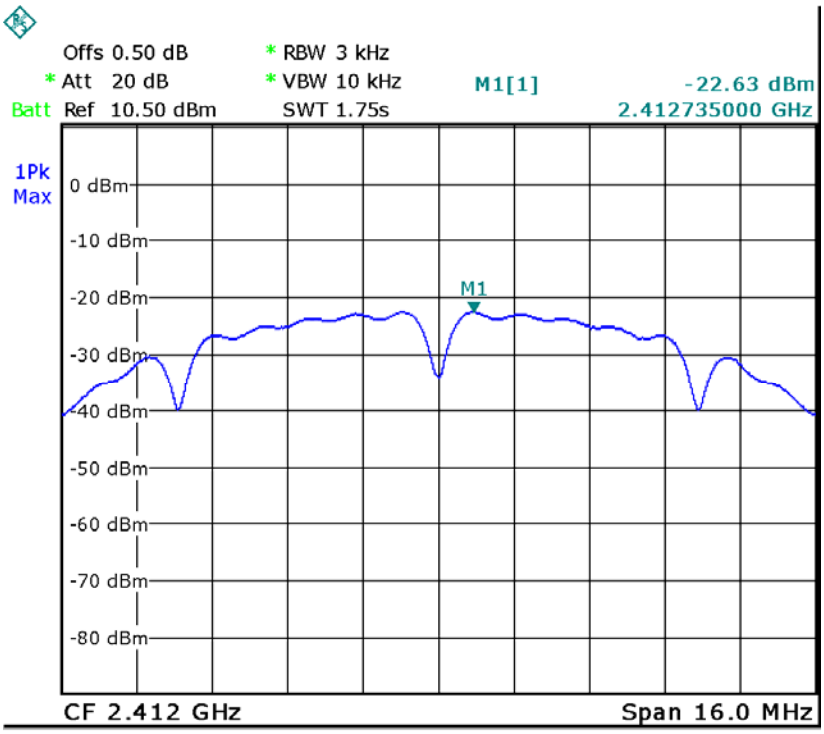
Test mode :TX 11g		
Power Spectral (dBm per 3kHz)		
2412MHz	2437MHz	2462MHz
-27.46	-27.14	-26.73
Limit		
8dBm per 3kHz		

Test mode :TX 11n HT20		
Power Spectral (dBm per 3kHz)		
2412MHz	2437MHz	2462MHz
-27.57	-27.09	-26.58
Limit		
8dBm per 3kHz		

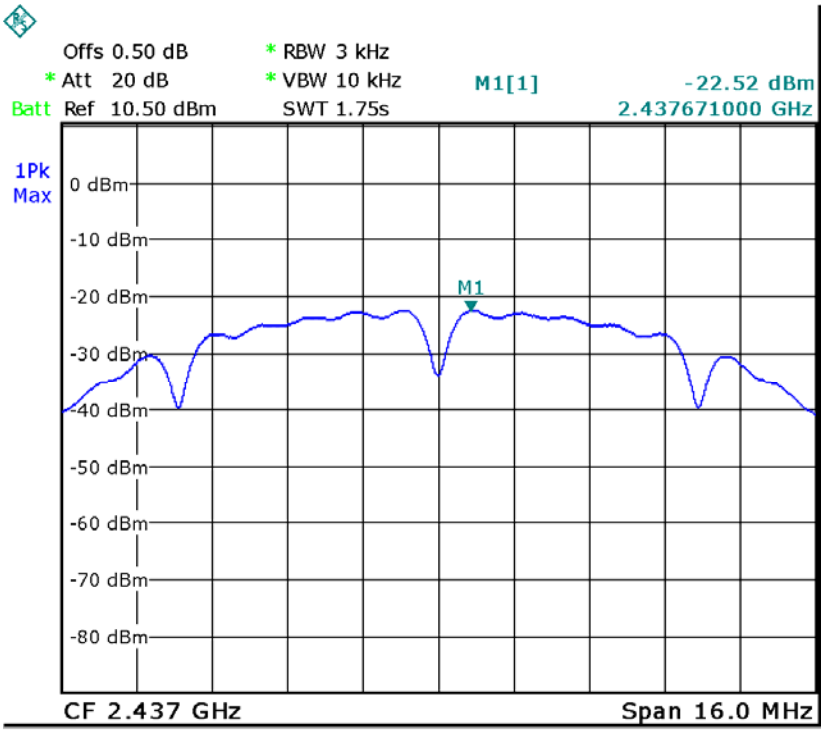
Test mode : TX 11n HT40		
Power Spectral (dBm per 3kHz)		
2422MHz	2437MHz	2452MHz
-28.13	-29.53	-28.39
Limit		
8dBm per 3kHz		

Test mode : TX BT BLE		
Power Spectral (dBm per 3kHz)		
2402MHz	2440MHz	2480MHz
-19.26	-19.56	-20.19
Limit		
8dBm per 3kHz		

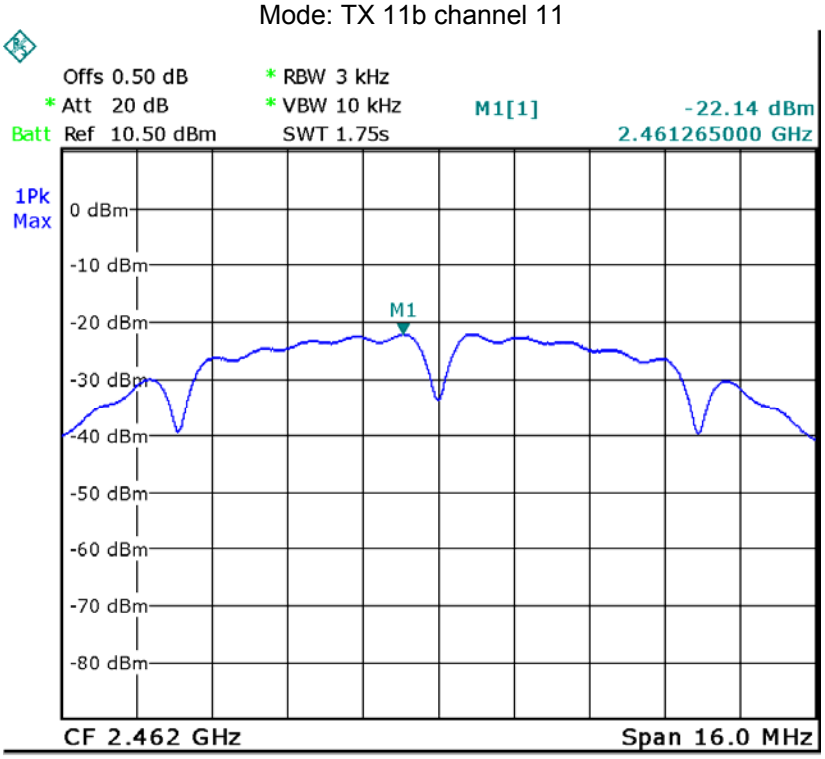
Mode: TX 11b channel 1



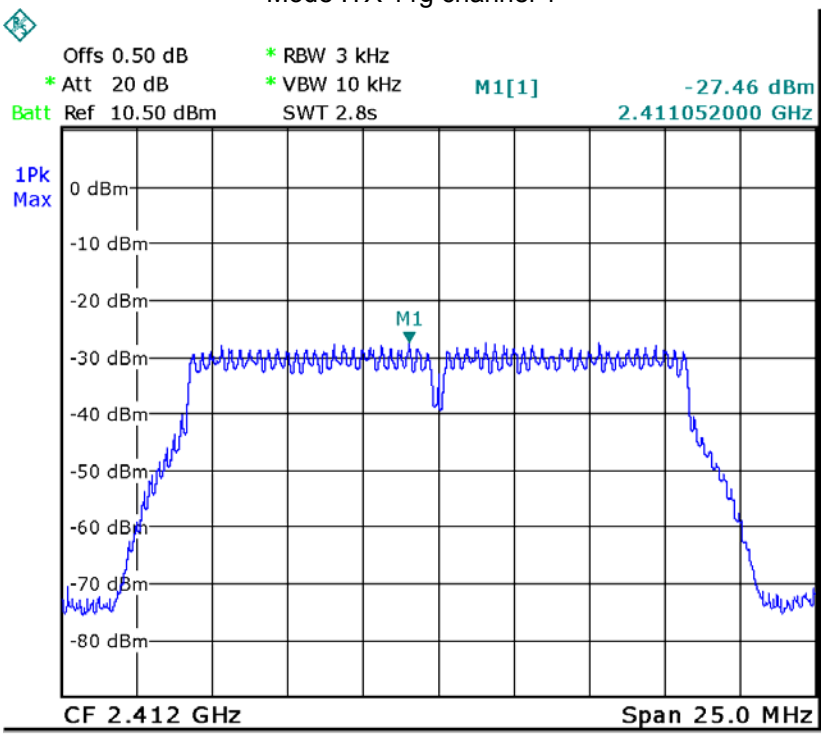
Mode: TX 11b channel 6



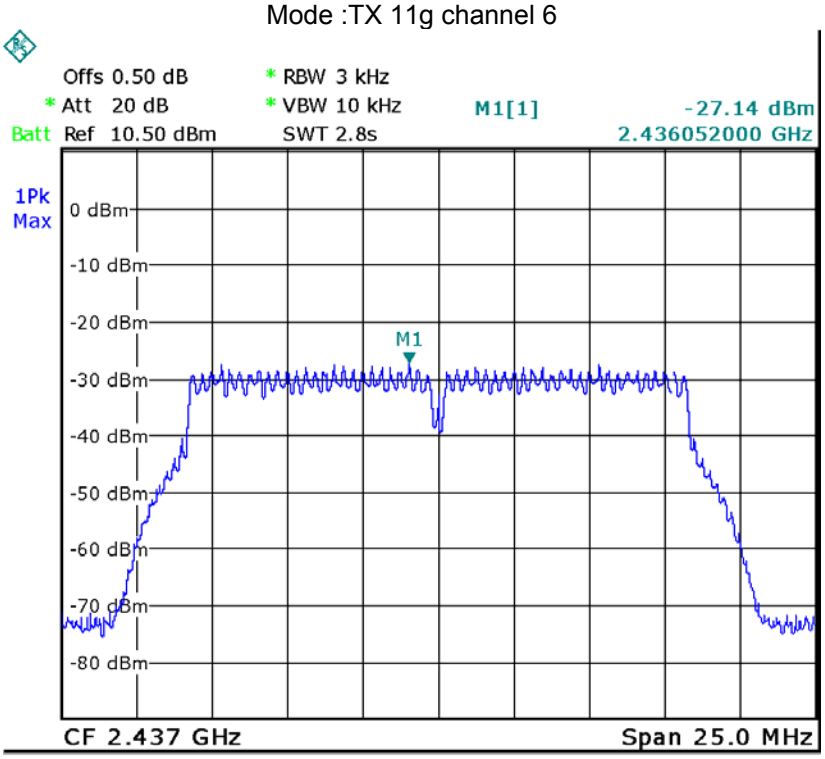
Mode: TX 11b channel 11



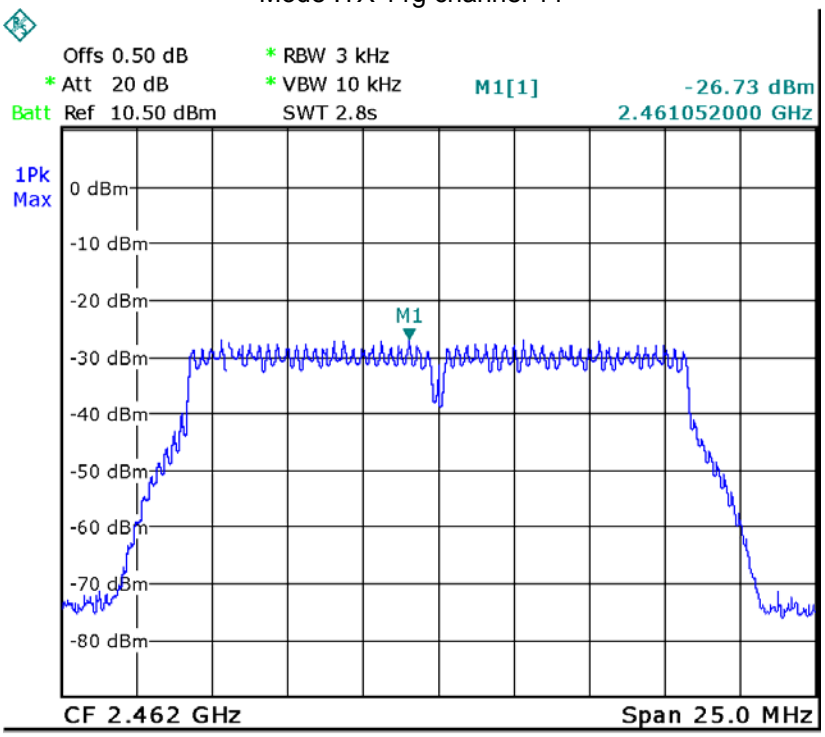
Mode :TX 11g channel 1



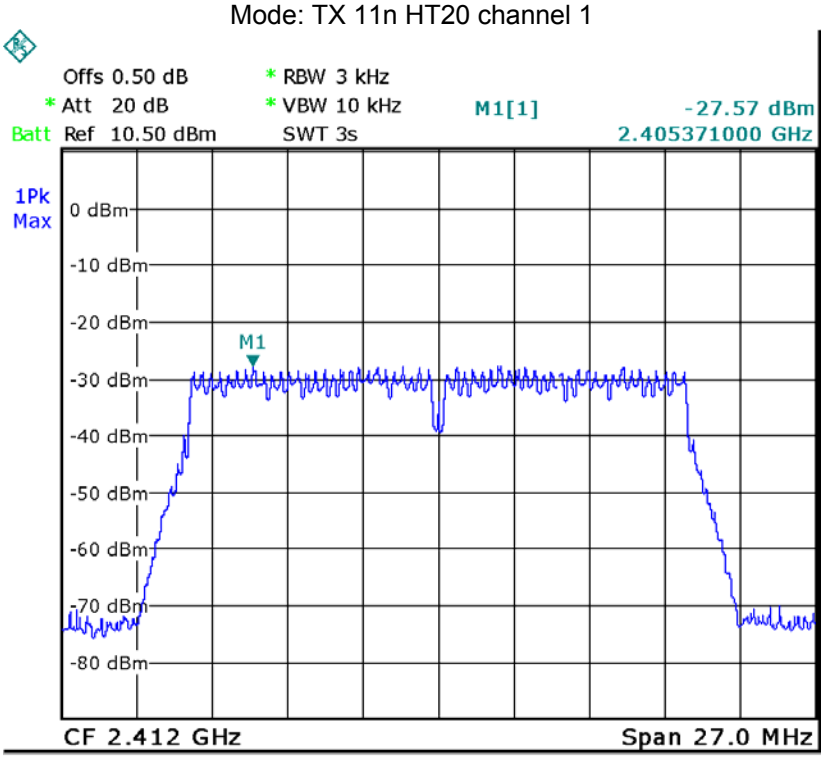
Mode :TX 11g channel 6



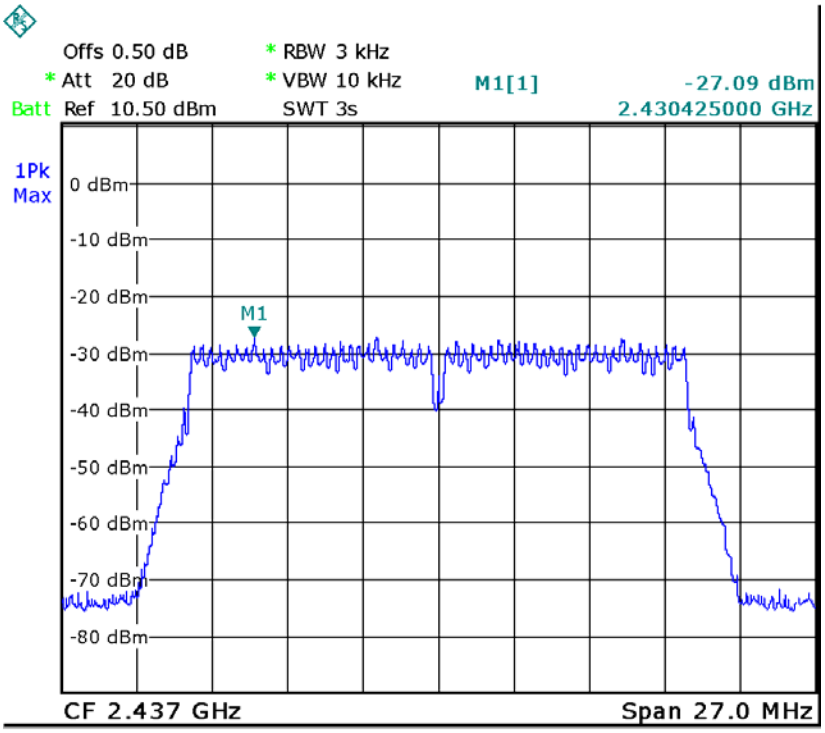
Mode :TX 11g channel 11



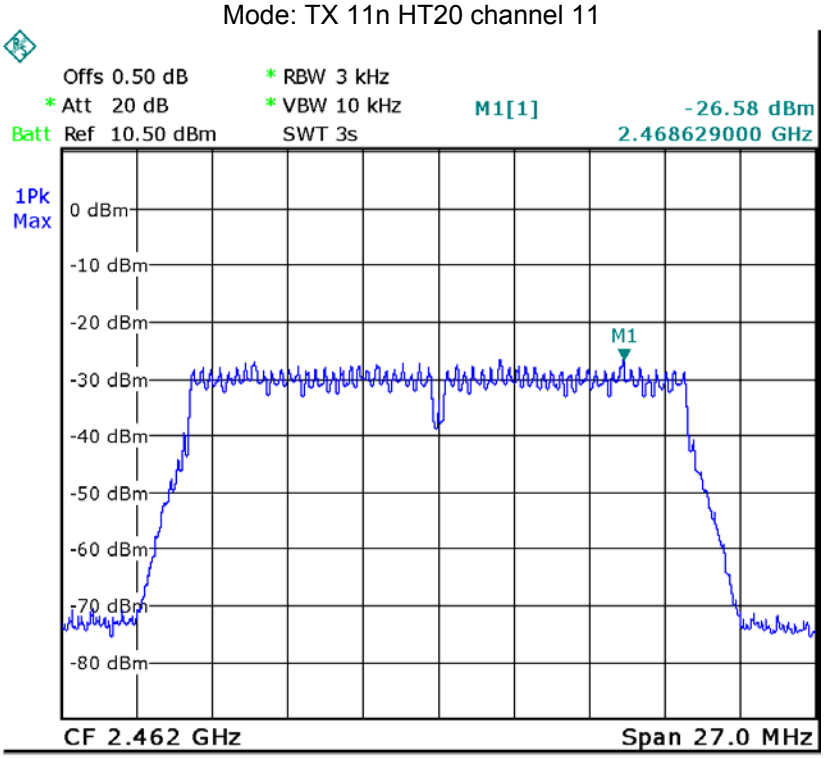
Mode: TX 11n HT20 channel 1



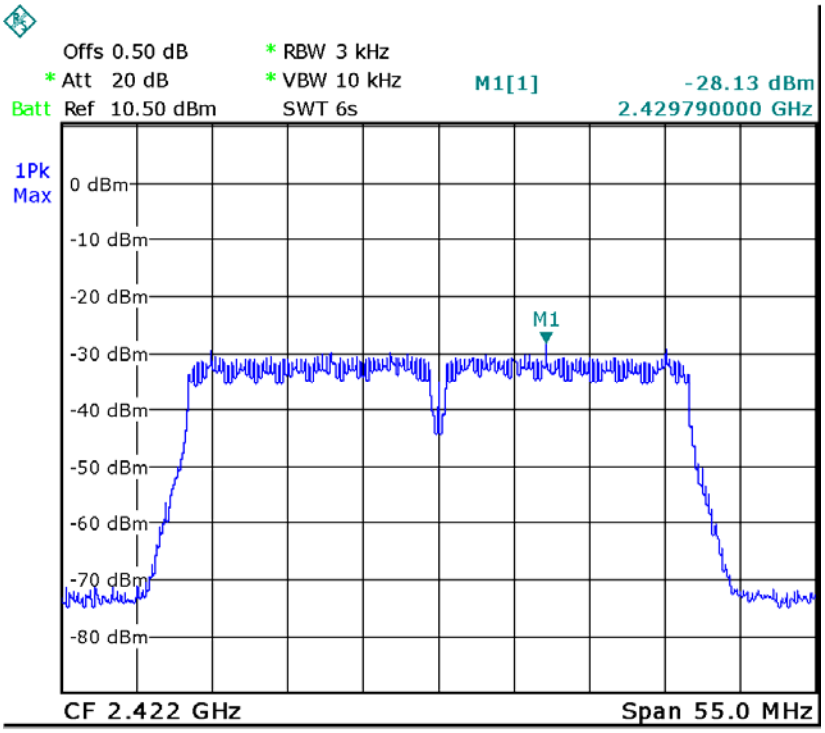
Mode: TX 11n HT20 channel 6



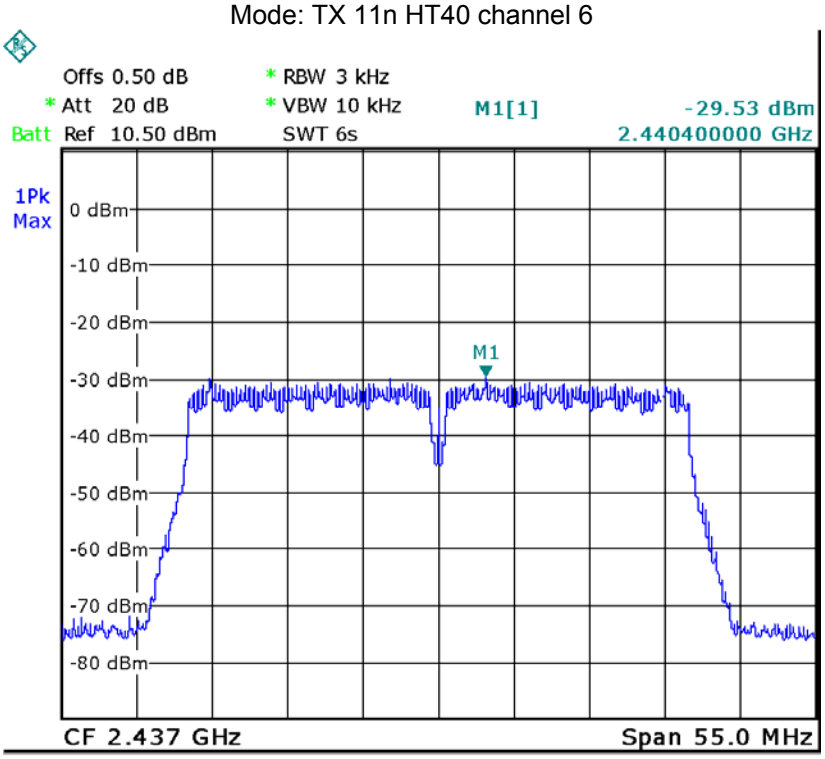
Mode: TX 11n HT20 channel 11



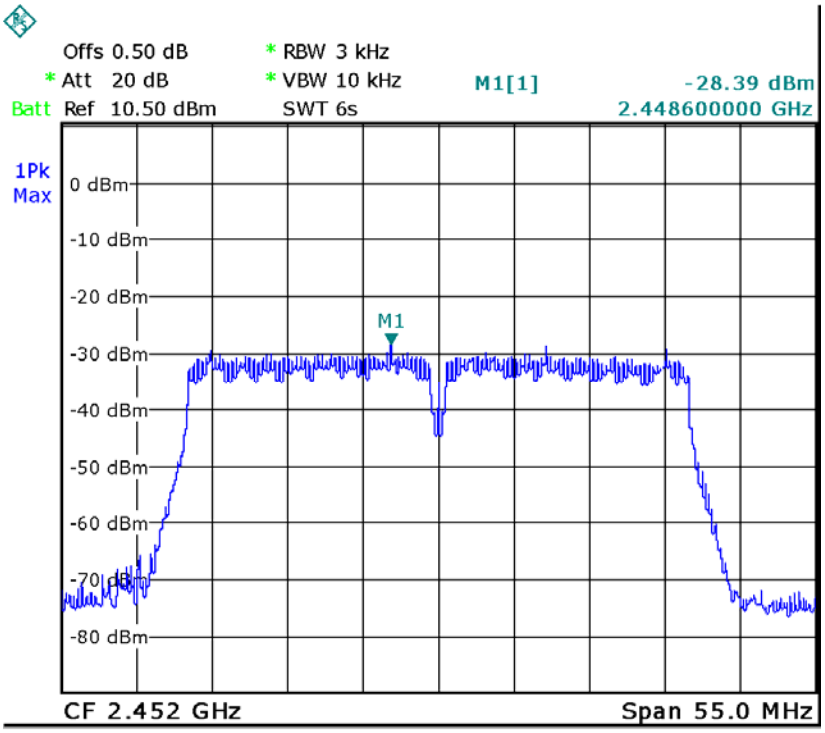
Mode: TX 11n HT40 channel 3



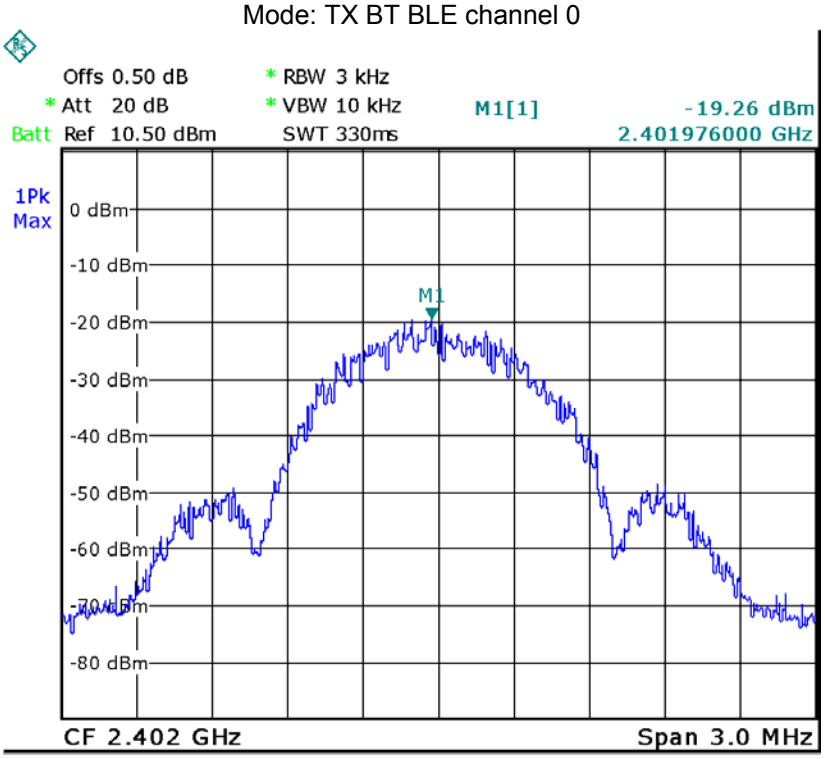
Mode: TX 11n HT40 channel 6



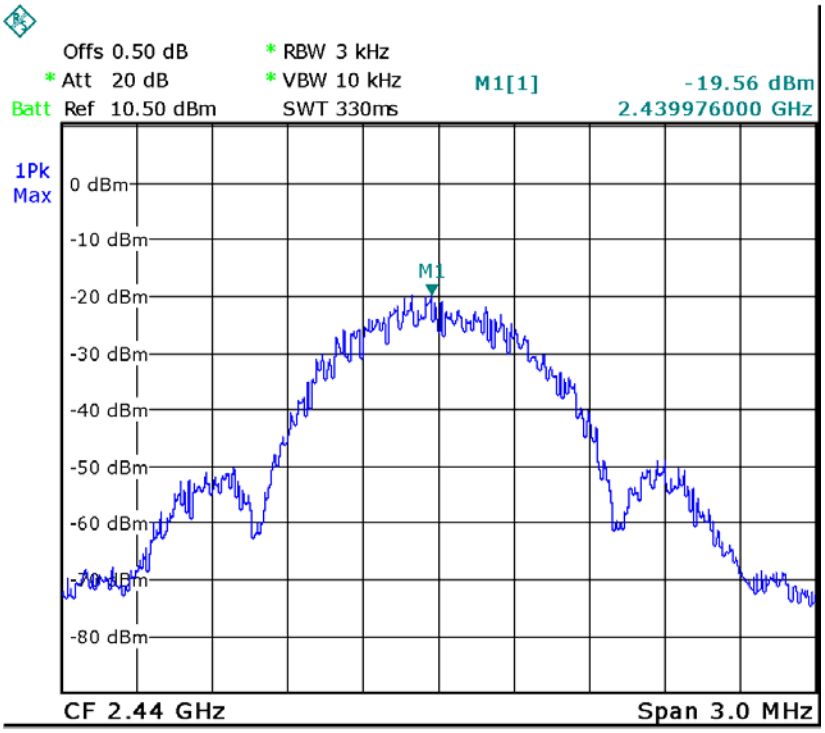
Mode: TX 11n HT40 channel 9



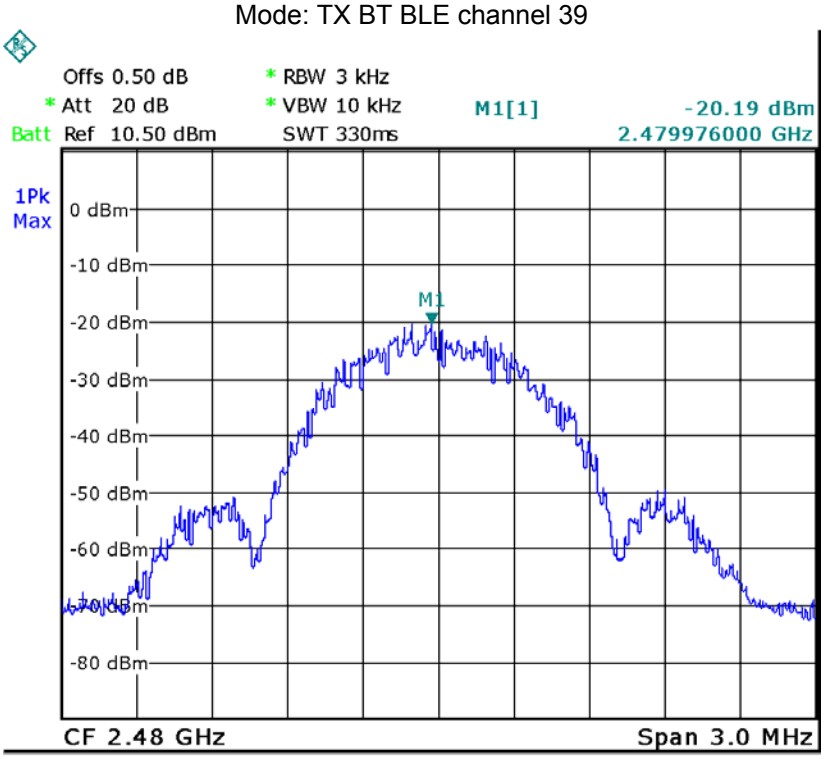
Mode: TX BT BLE channel 0



Mode: TX BT BLE channel 19



Mode: TX BT BLE channel 39



12 Antenna Requirement

According to the FCC Part 15 Paragraph 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. This product has a integrated antenna fulfill the requirement of this section.

13 RF Exposure

Please refer to SAR test report: STR14128288H.

======End of Report======