
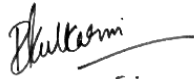


Prüfbericht - Nr.: 19660105 001		Seite 1 von 55	
<i>Test Report No.:</i>		<i>Page 1 of 55</i>	
Auftraggeber: <i>Client:</i>		ResMed Sensor Technologies Ltd. Blocks 9&10, NexusUCD Building, Belfield Office Park Clonskeagh, Dublin Ireland	
Gegenstand der Prüfung: <i>Test item:</i>		S+ By ResMed	
Bezeichnung: <i>Identification:</i>	22102	Serien-Nr.: <i>Serial No.</i>	Engineering Sample
Wareneingangs-Nr.: <i>Receipt No.:</i>	1803032534	Eingangsdatum: <i>Date of receipt:</i>	21.04.2014
Prüfort: <i>Testing location:</i>		Refer Page 4 of 55 for test facilities	
Prüfgrundlage: <i>Test specification:</i>		FCC Part 15 Sub Part C ANSI C63.4-2003	
Prüfergebnis: <i>Test Result:</i>		Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test item passed the test specification(s).</i>	
Prüflaboratorium: <i>Testing Laboratory:</i>		TÜV Rheinland (India) Pvt. Ltd. Alpha Tower, Sigma Soft Tech Park, # 7, Whitefield Main Road, Varthur Kodi, Bangalore – 560066, India	
geprüft / tested by:		kontrolliert / reviewed by:	
30.04.2014 Vinay N Engineer 		15.05.2014 Raghavendra Kulkarni Senior Manager 	
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>
Sonstiges / Other Aspects:		FCC ID:YAK22102 Contains FCC ID: YAKBM14	
Abkürzungen:		Abbreviations:	
P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar N/T = nicht getestet		P(ass) = passed F(ail) = failed N/A = not applicable N/T = not tested	
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</p> <p><i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i></p>			

Test Result Summary

Clause	Test Item	Result
Section 15.247 (b) (1)	Conducted Peak RF Output Power Test	Pass
Section 15.247 (a)(1)	Bandwidth Occupancy	Pass
Section 15.247 (a)(1)(III)	Number of Hopping Channels	Pass
Section 15.247 (a)(1)	Carrier Frequency Separation	Pass
Section 15.247 (a)(1)(III)	Time of Occupancy	Pass
Section 15.257 (d)	Band-edge compliance	Pass
Section 15.209 & 15.205,15.245	Spurious Radiated Emissions	Pass
Section 15.207	Conducted Emission Test on a.c. Power Line	Pass

Note: This product contains 10.5GHz Field disturbance sensor module with FCC ID: YAKBM14. Hence module related tests are excluded.

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List of Test and Measurement Instruments

Equipment	Manufacturer	Model	S/N	Calibration Due Date
EMI Test Receiver	Rohde & Schwarz	ESU 40	100288	04.10.2014
Hybrid Log Periodic antenna	ETS Lindgren	3142D	00081354	26.07.2014
Broadband Horn Antenna	Frankonia	HAX-18	HAX18-802	23.03.2015
Double-Ridged Waveguide Horn Antenna	ETS Lindgren	116794	00133356	01.09.2014
Emission Horn Antenna	ETS Lindgren	116706	00107323	24.08.2014
Active Loop Antenna	Frankonia	LAX-10	LAX-10-800	11.04.2015
Spectrum Analyser	Agilent Technologies	E4407B	US41192772	21.03.2015

Testing Facilities:

- 1) TUV Rheinland (India) Private Limited
No. 108, West Wing
Electronic city Phase I
Bangalore – 560100

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General Product Information

Product Function and Intended Use

The S+ is a non-contact sleep sensor incorporating an analysis tool that will give tailored advice to help improve a person's sleep.

The S+ captures sleep and bedroom environment data. It uses RF movement sensing technology to monitor breathing and body movement. It also measures ambient light, temperature and noise levels.

Ratings and System Details

Operating Frequency	2400 – 2483.5MHz
No. of channel	79
Channel Spacing	1MHz
Transmitted Power	-0.89dBm
Modulation	FHSS
Data Rate	1,2,3 Mbps
Antenna Type	PCB Antenna
Number of antenna	1
Antenna Gain	5.44dBi
Supply Voltage	100V-240V 50/60Hz
Dimensions	205 x 107 x 57 mm
Environmental	Operating: +5 degC to 35deg C Storage : -20 deg C to 60 deg C

Test Conditions:

Voltage: 110V AC, 60Hz

Environmental conditions:

Temperature: +23 °C

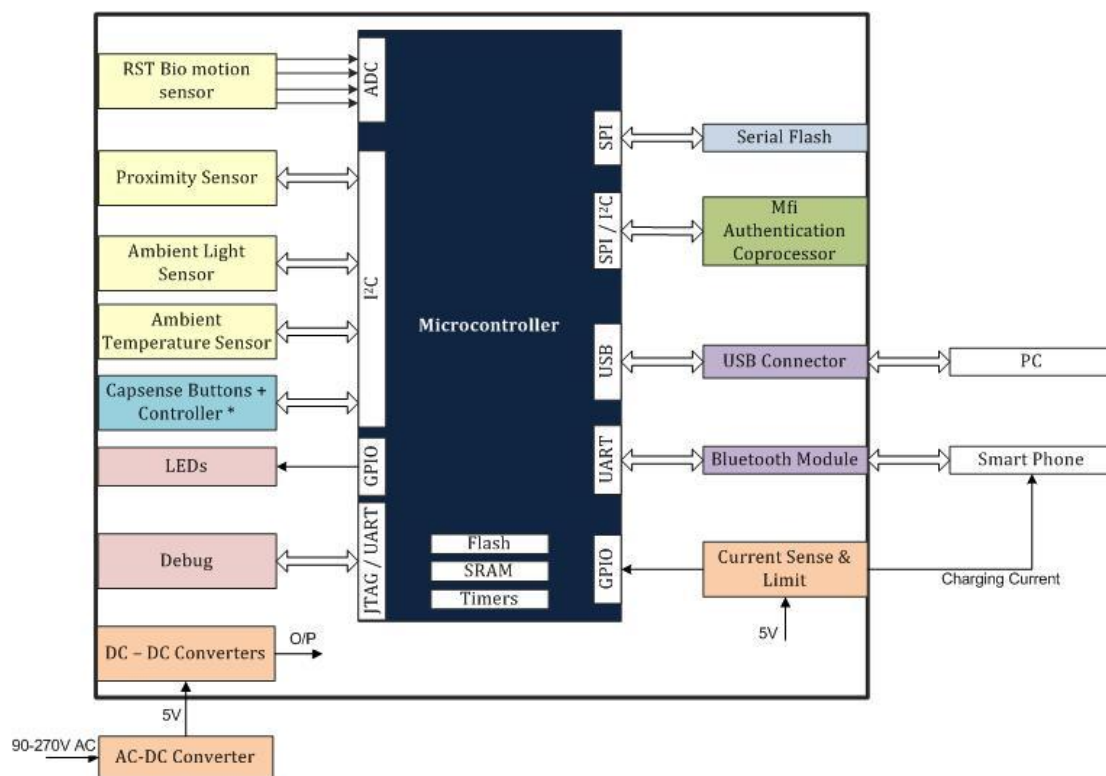
RH: 62%

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Operation Descriptions

Resmed Sensor Technology has a patented and manufactured RST Sensor that does not make any physical contact with the User during Sleep monitoring. The RST Sensor is interfaced to a Microcontroller, Bluetooth wireless port, USB port, Temperature sensor and Proximity sensor. The BT wireless port is for interface to a Smart Mobile phone. The USB port for a PC connectivity, the Temperature sensor to measure ambient temperature and the Proximity sensor for Device-User interface.

Block Diagram



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Test Set-up and Operation Mode

Principle of Configuration Selection

Emission: The test was performed under continuous transmission to obtain the maximum emissions.

Test Operation and Test Software

Testing software was used to enable the continuous transmission and changing the frequency hopping channels (low/mid/high) on the EUT for the tests in this report.

Special Accessories and Auxiliary Equipment

The EUT was tested together with the following additional accessory:

- Notebook computer for controlling different transmit channels and also used to enable the frequency hopping.

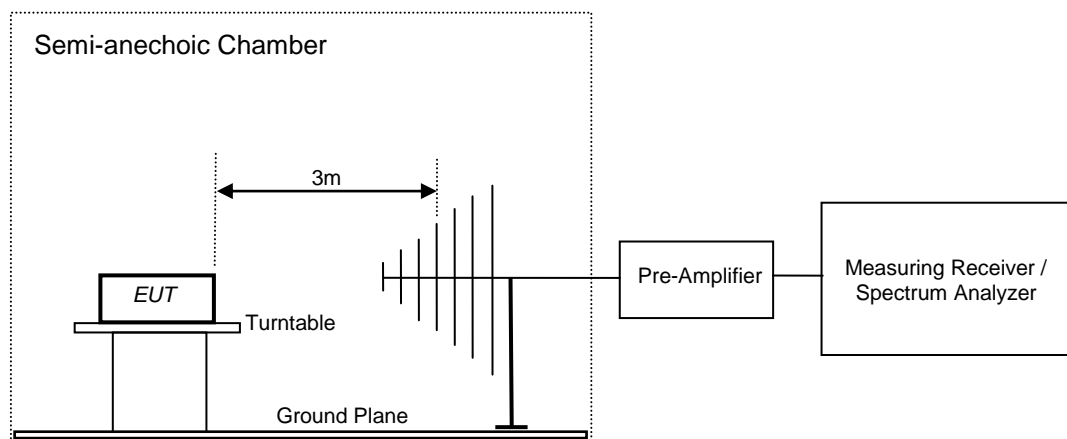
Countermeasures to achieve EMC Compliance

- none

Test Methodology

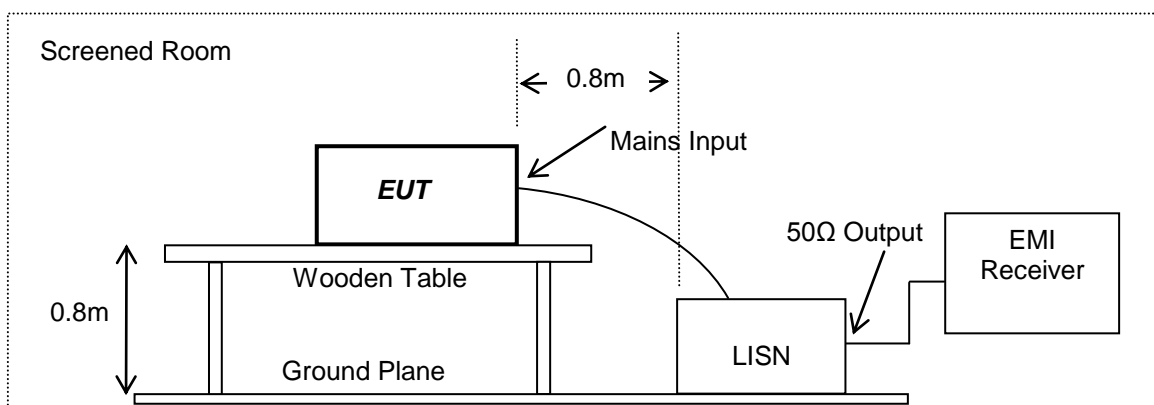
Radiated Emission Test

The radiated emission measurement was performed according to the procedures in ANSI C63.4-2003. The equipment under test (EUT) was placed at the middle of the 80 cm high turntable, and the EUT is 3 meters far from the measuring antenna. The turntable was rotated 360° for obtaining the maximum emission. The height of the measuring antennas was scanned between 1m and 4m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. Repeat the measurement steps until the maximum emissions were obtained. The measurement above 1000MHz was performed by horn antenna. The measurement below 30MHz was performed by loop antenna.



Conducted Emission Test on a.c. mains line

The equipment under test (EUT) was placed on a wooden table 80cm above the ground plane, the LISN was placed 80cm away from the EUT. The test was performed in accordance with ANSI C63.4: 2003, with the following: an initial measurement was performed in peak and average detection mode on the live and neutral lines. The pre-scan was performed by peak detection on both live and neutral conductors. Any emissions recorded within 20dB of the relevant limit line were re-measured using quasi-peak and average detections, the 6 worst cases were recorded in the table of results.



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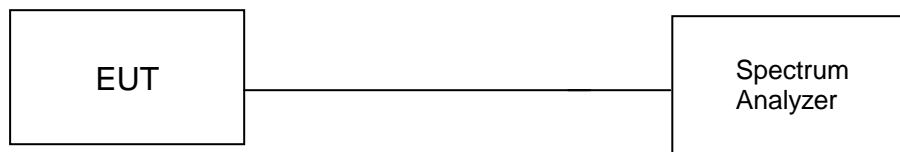
Test Results

Conducted Peak Output Power Result

Section 15.247 (b) (1)
Pass

Test Specification	FCC Part 15C
Measurement Bandwidth (RBW)	3 MHz
Detector	Peak
Supply voltage	110 Volt 60Hz AC
Requirement	<1 watt (30dBm) for system employing at least 75 hopping channels

Test Method:

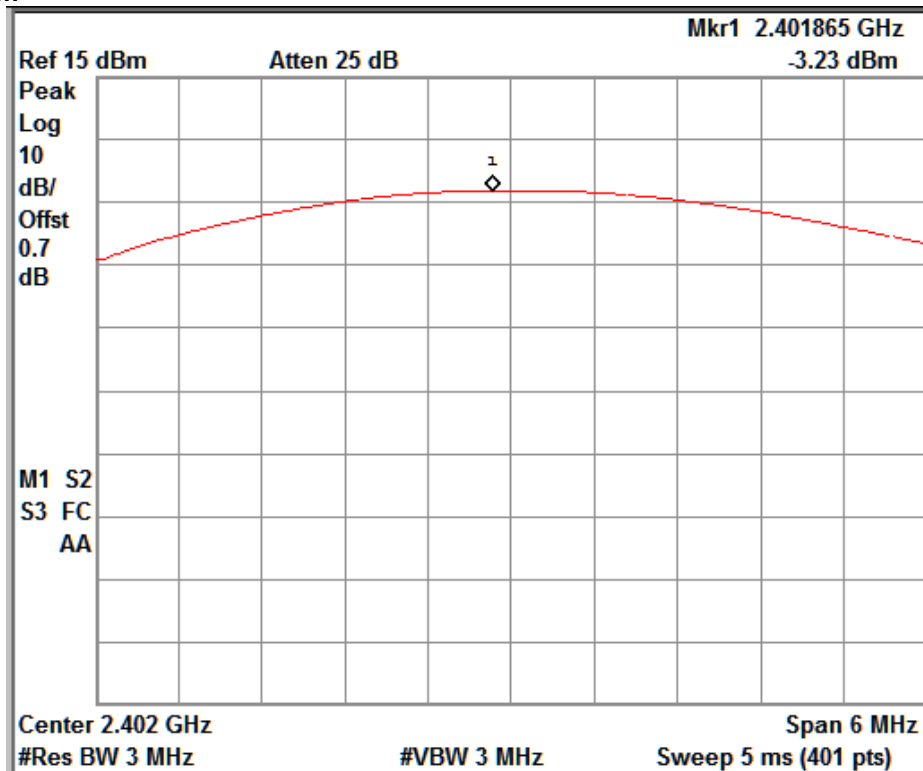


Test Result:

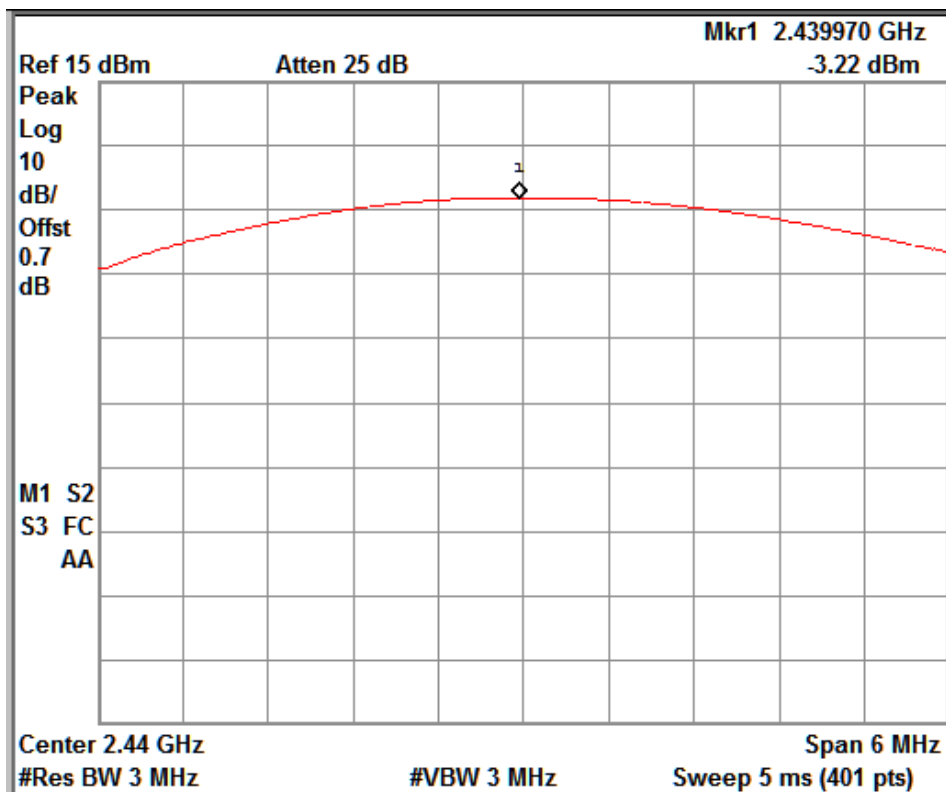
Modulation Type: GFSK

Channel	Frequency (MHz)	Output power (dBm)	Limit (dBm)	Remarks
Low	2402	-3.23	30	Pass
Mid	2441	-3.22	30	Pass
High	2480	-3.82	30	Pass

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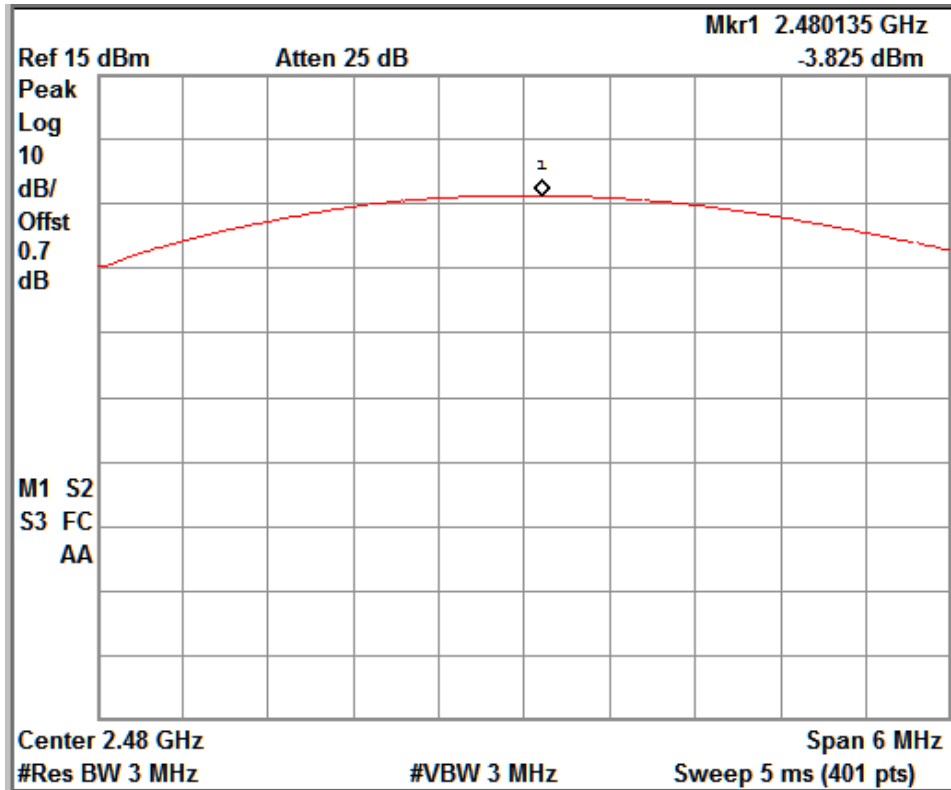


Channel Frequency: 2402 MHz



Channel Frequency: 2441 MHz

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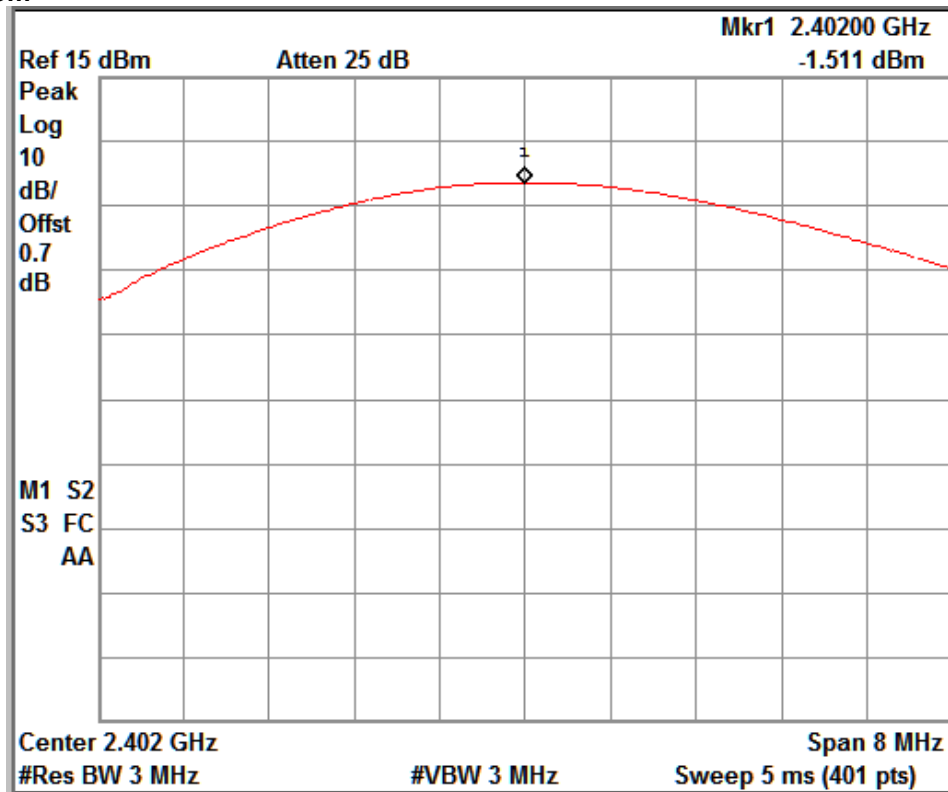
Channel Frequency: 2480 MHz

Modulation Type: P/4 DQPSK

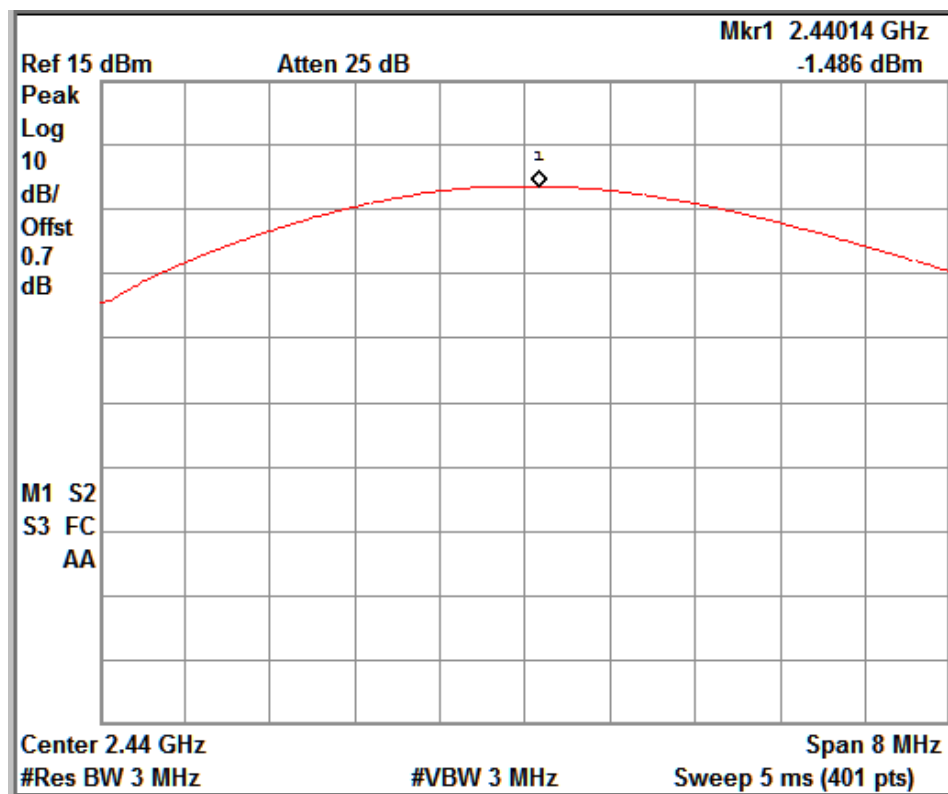
Test Results:

Channel	Frequency (MHz)	Output power (dBm)	Limit (dBm)	Remarks
Low	2402	-1.51	30	Pass
Mid	2441	-1.48	30	Pass
High	2480	-2.10	30	Pass

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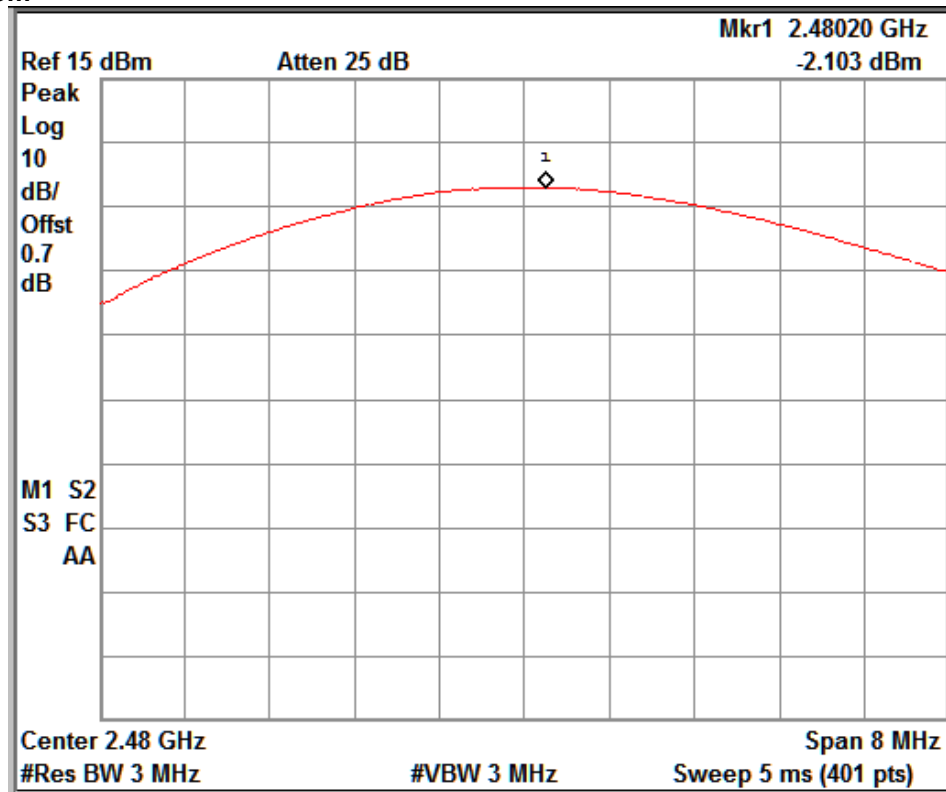


Channel Frequency: 2402 MHz



Channel Frequency: 2441 MHz

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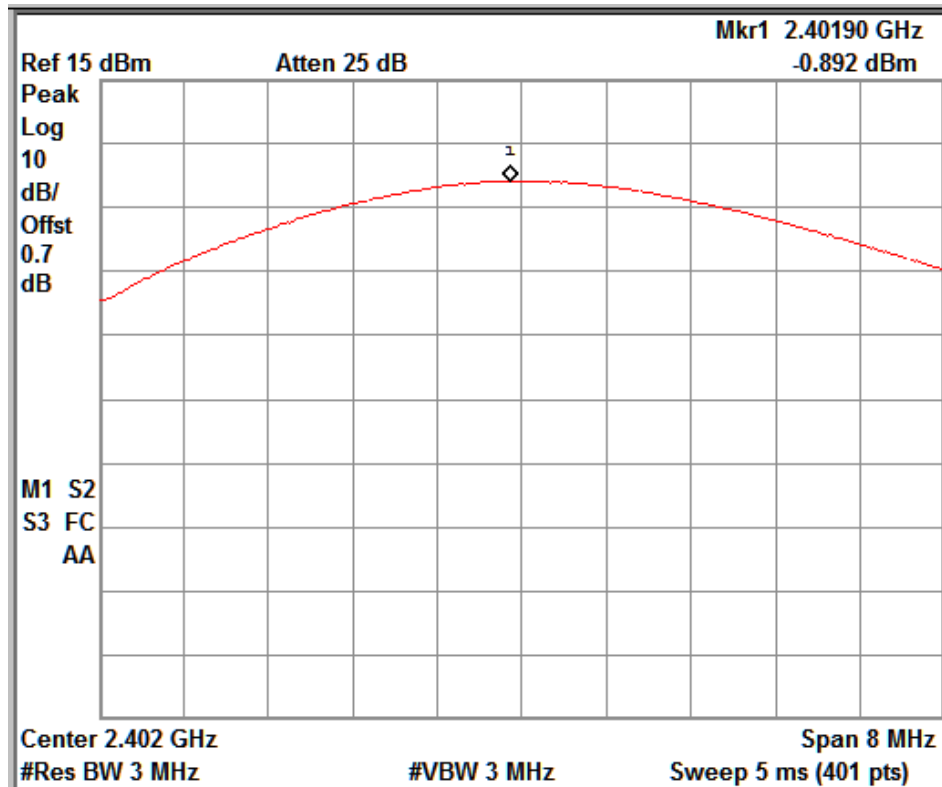
Channel Frequency: 2480 MHz

Modulation Type: 8 DQPSK

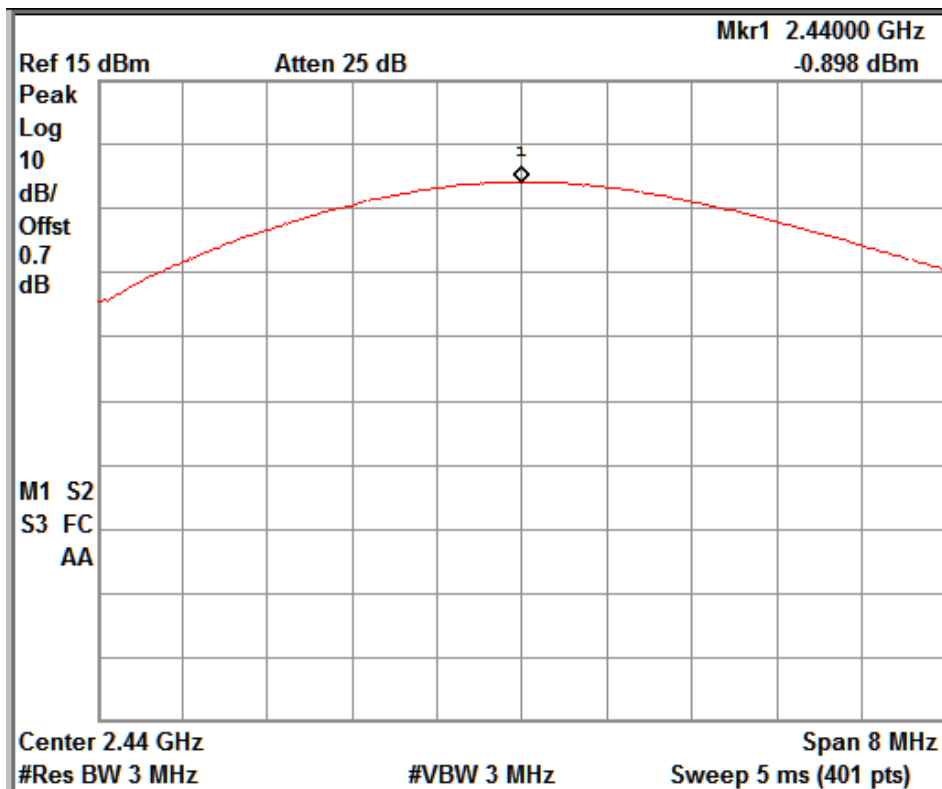
Test Results:

Channel	Frequency (MHz)	Output power (dBm)	Limit (dBm)	Remarks
Low	2402	-0.89	30	Pass
Mid	2441	-0.89	30	Pass
High	2480	-1.43	30	Pass

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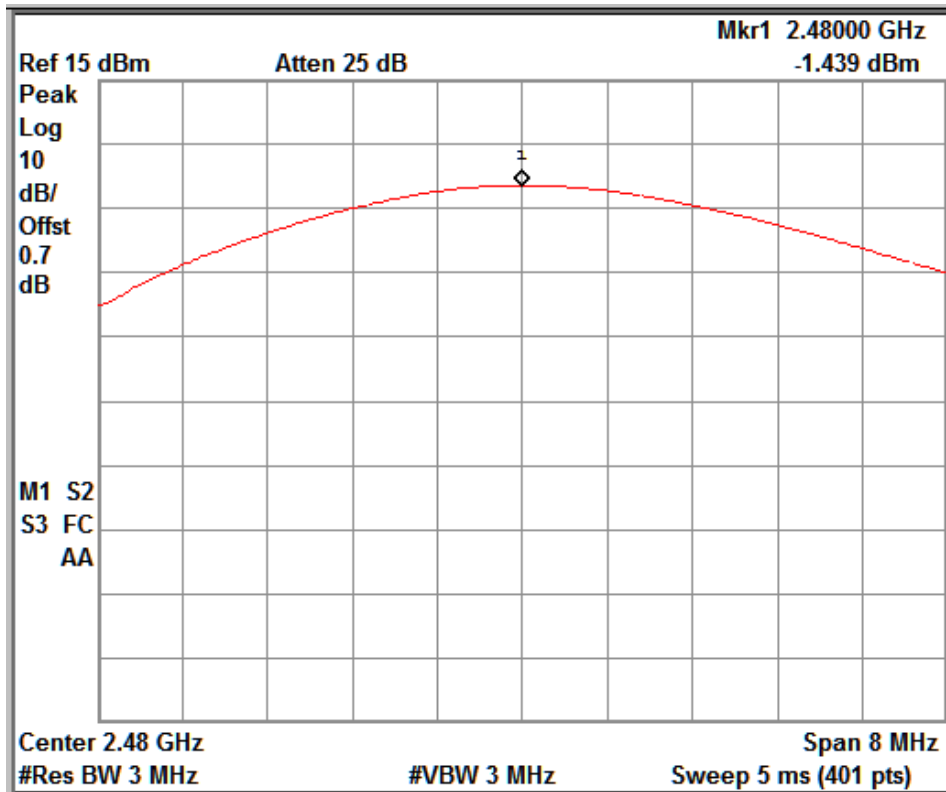


Channel Frequency: 2402 MHz



Channel Frequency: 2441 MHz

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Channel Frequency: 2480 MHz

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**Bandwidth Occupancy
Result**

**Section 15.247 (a) (1)
Pass**

<p>Test Specification Detector Function Supply Voltage Port of testing Requirement</p>	<p>FCC Part 15C Peak 110 Volt 60Hz AC Antenna port</p> <p>The bandwidth of a frequency hopping channel is the 20 dB emission bandwidth, measured with the hopping stopped. The system RF bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hopset. The hopset shall be such that the near-term distribution of frequencies appears random, with sequential hops randomly distributed in both direction and magnitude of change in the hopset while the long-term distribution appears evenly distributed. The Occupied bandwidth should be at least 500 kHz</p>
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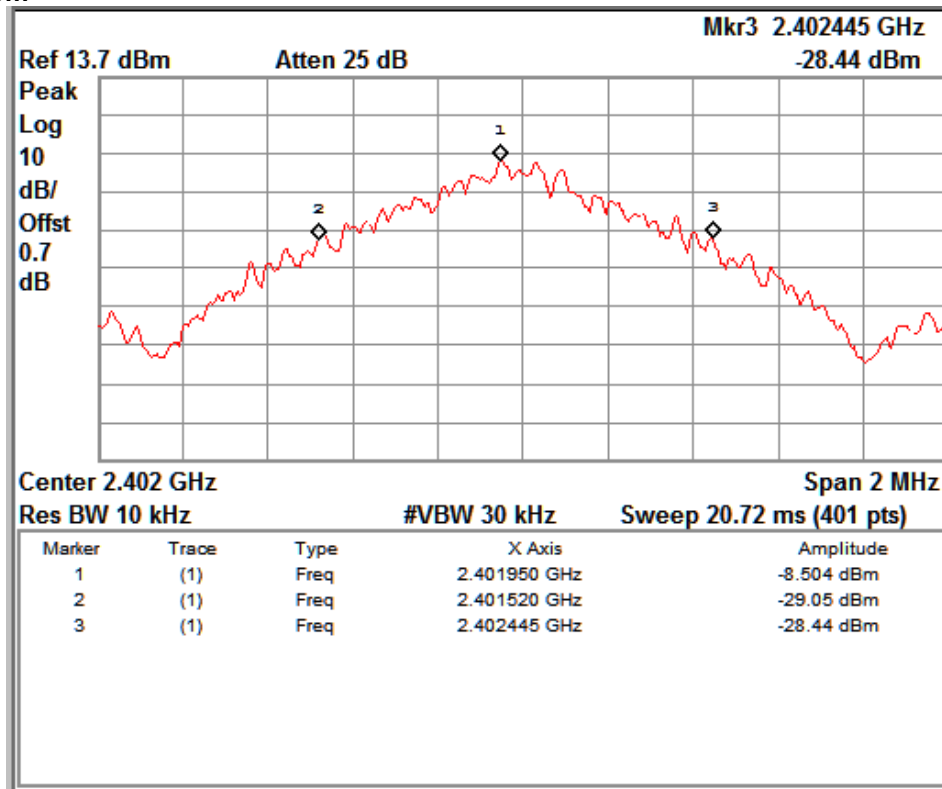
Test Method:



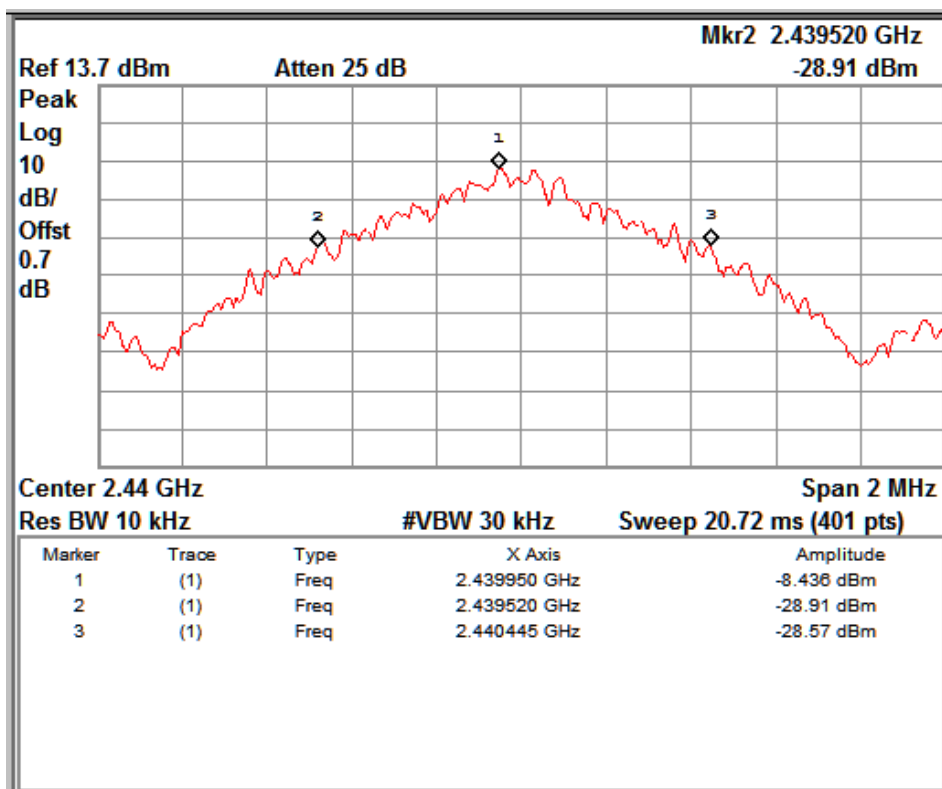
Test Result:

Modulation Type: GFSK

Channel Frequency (MHz)	Lower 20dB Frequency (MHz)	Higher 20dB Frequency (MHz)	20dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
2402	2401.520	2402.445	0.92	0.936
2441	2439.520	2440.445	0.92	0.929
2480	2479.520	2480.445	0.92	0.930

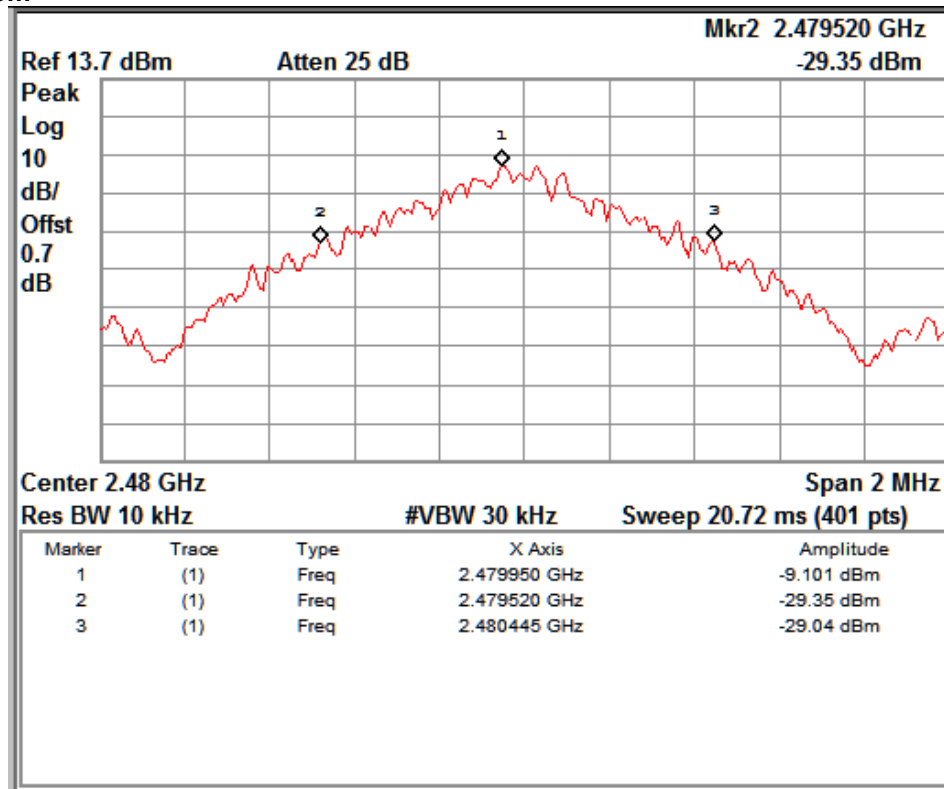


Channel Low: 20dB Bandwidth Measurement

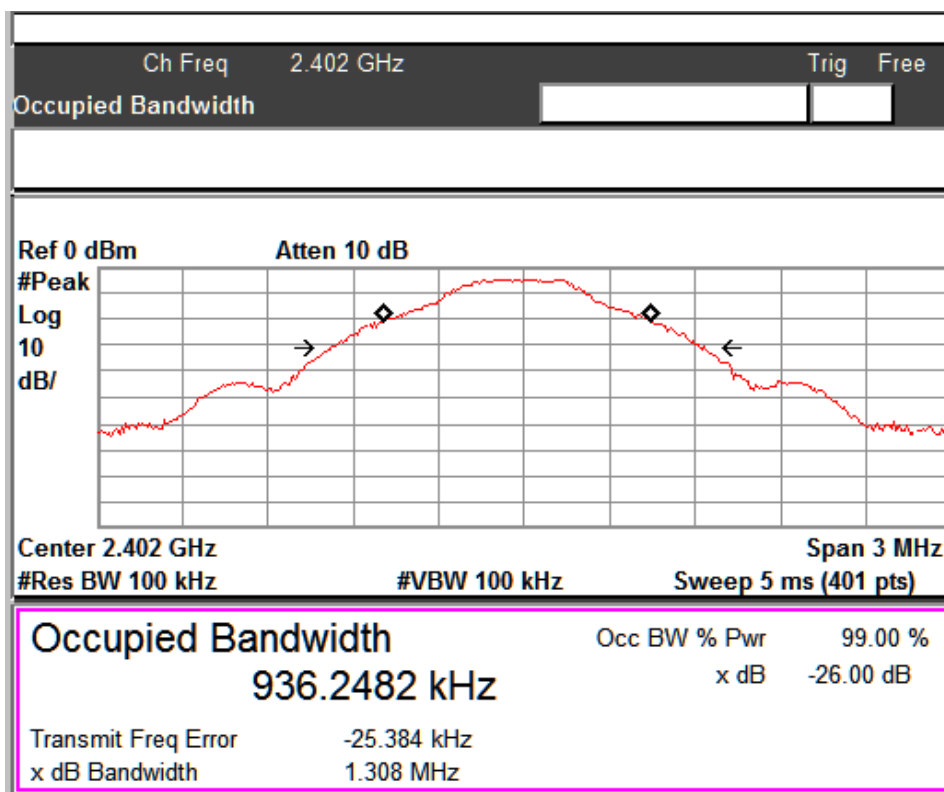


Channel Mid: 20dB Bandwidth Measurement

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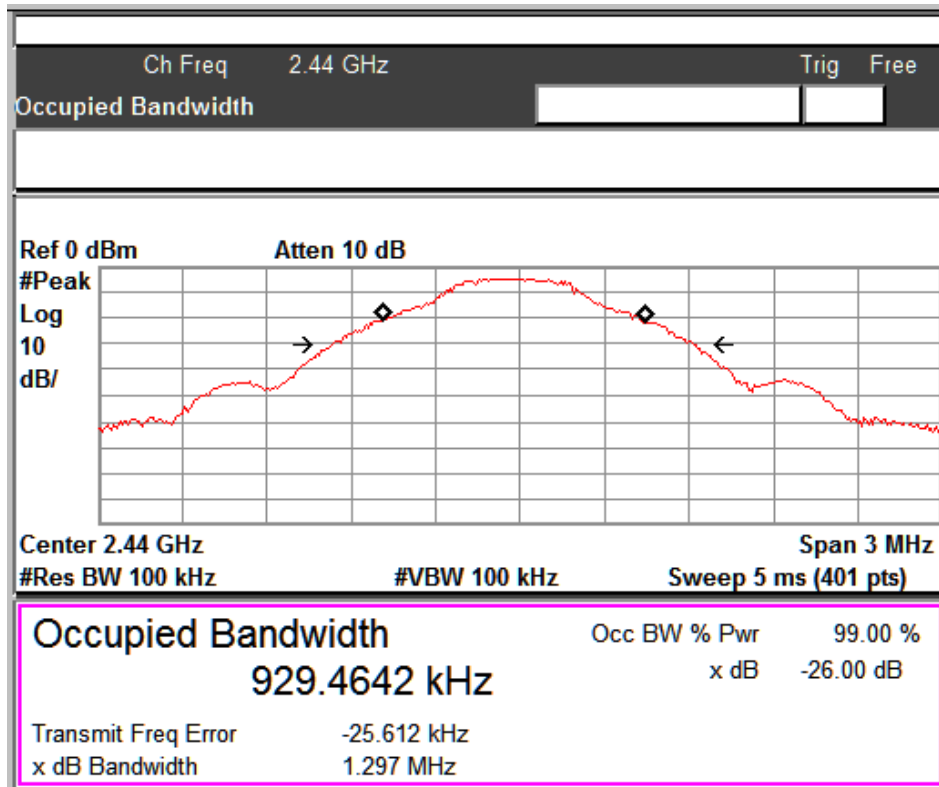


Channel High: 20dB Bandwidth Measurement

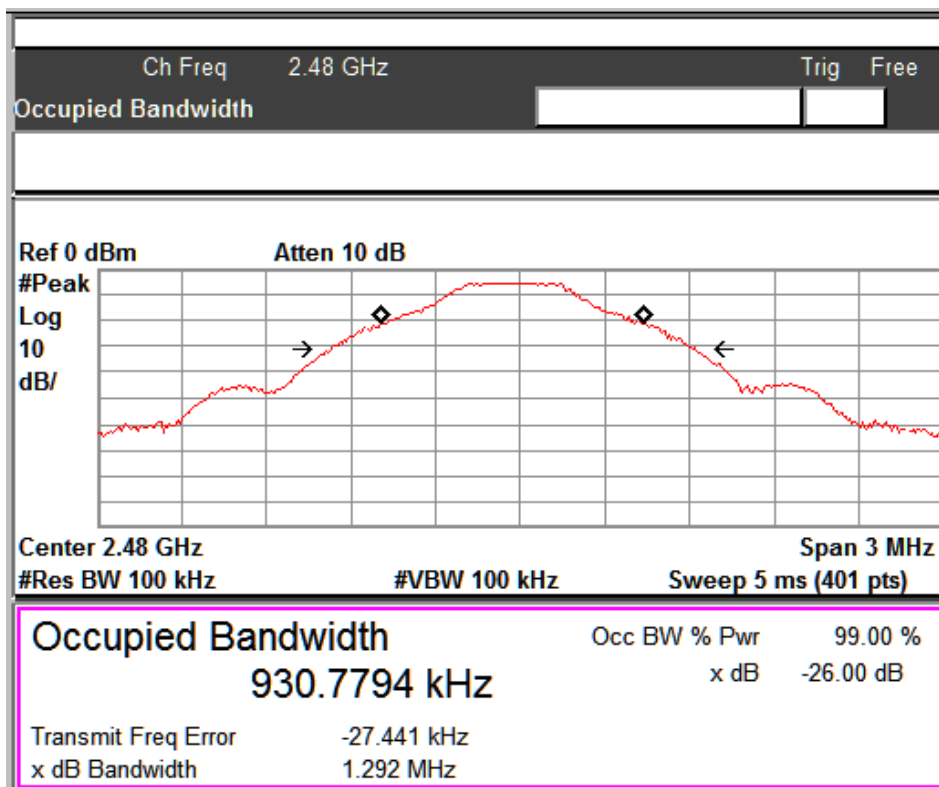


99% Occupied Bandwidth: Channel Low

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99% Occupied Bandwidth: Channel Mid



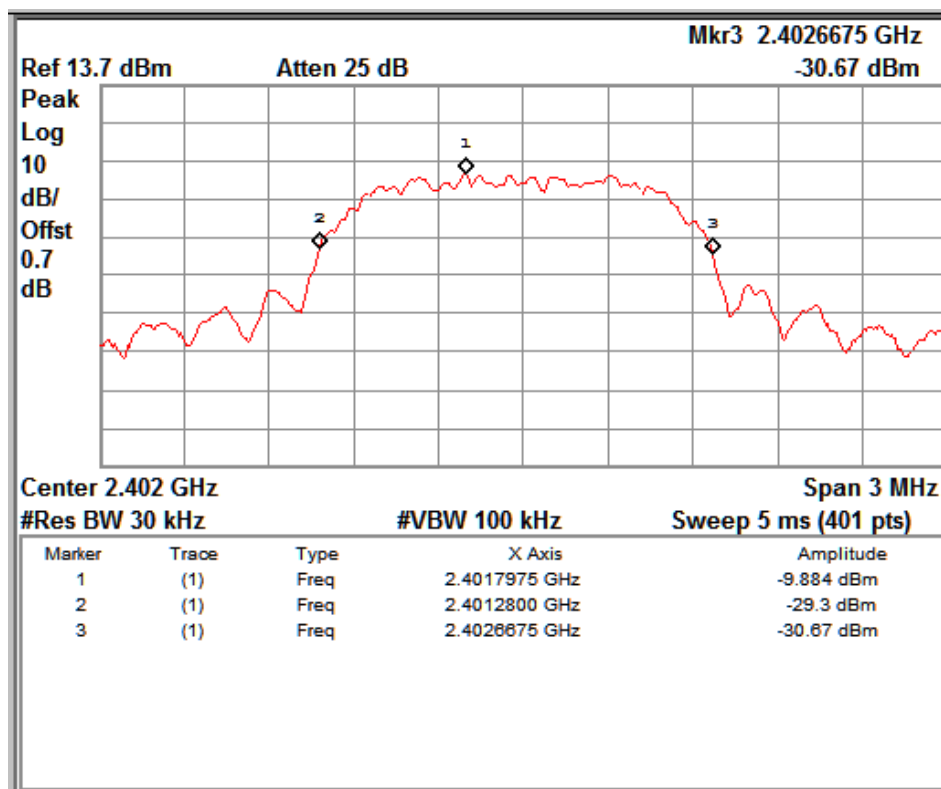
99% Occupied Bandwidth: Channel High

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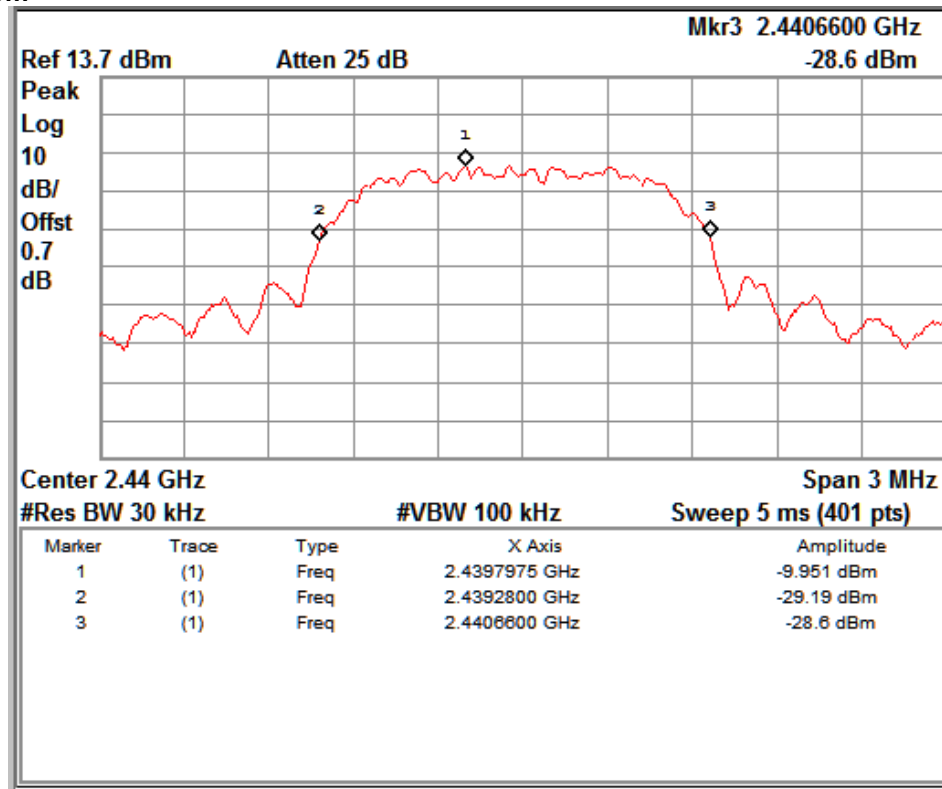
Modulation Type: P/4 DQPSK

Test Results:

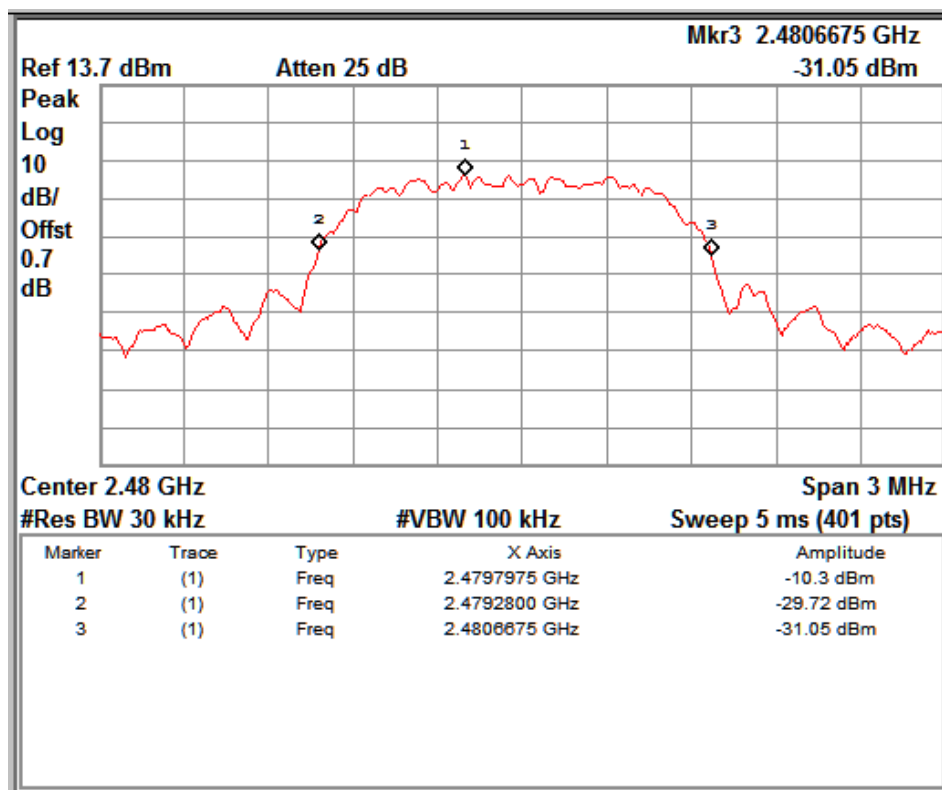
Channel Frequency (MHz)	Lower 20dB Frequency (MHz)	Higher 20dB Frequency (MHz)	20dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
2402	2401.280	2402.667	1.38	1.24
2441	2439.280	2440.660	1.38	1.25
2480	2479.280	2480.667	1.38	1.24



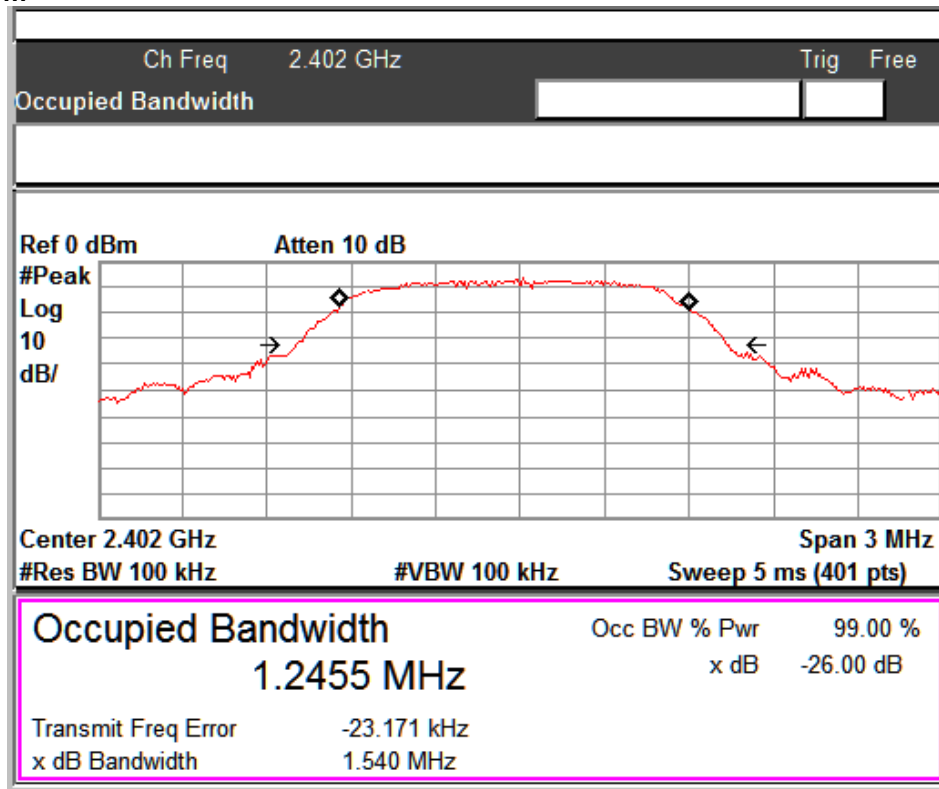
Channel Low: 20dB Bandwidth Measurement



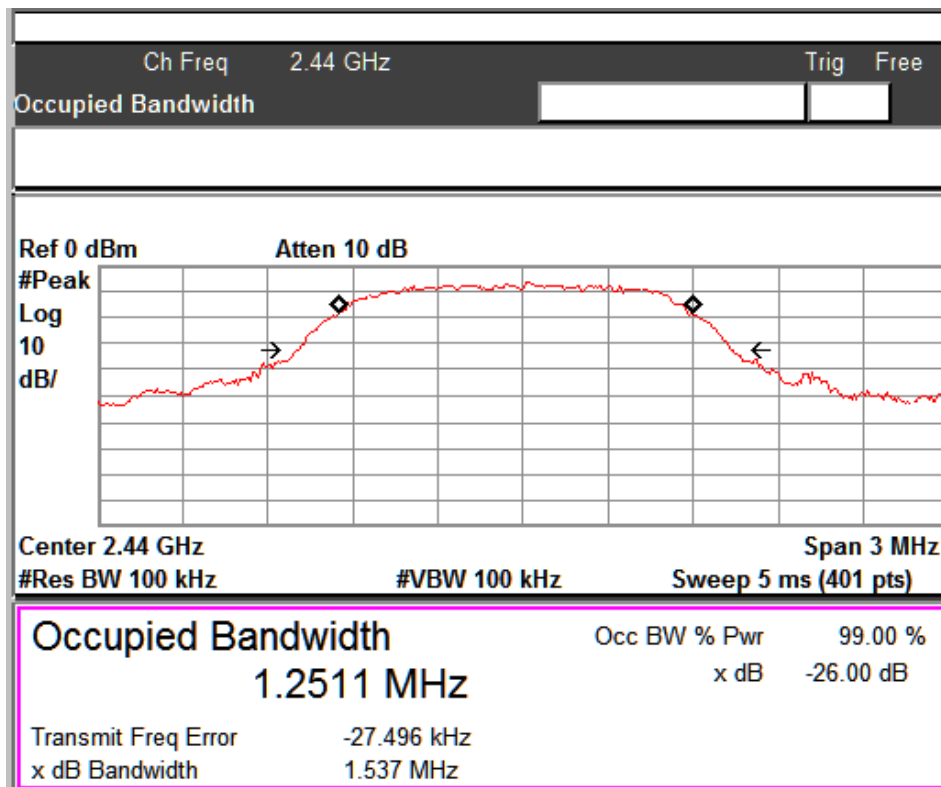
Channel Mid: 20dB Bandwidth Measurement



Channel High: 20dB Bandwidth Measurement

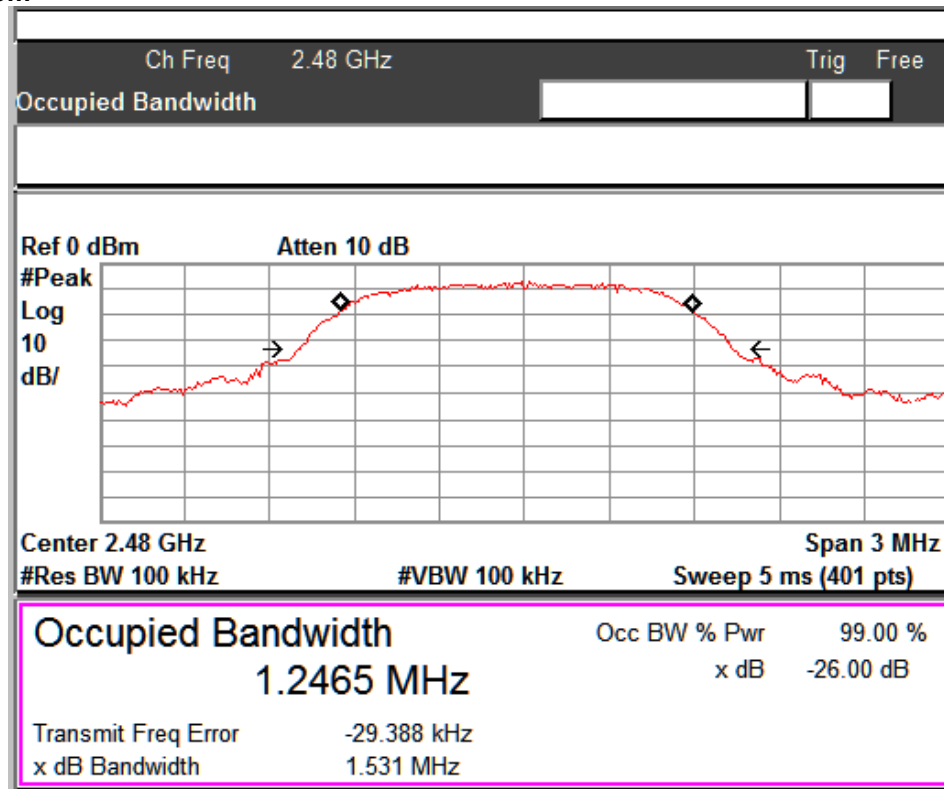


99% Occupied Bandwidth: Channel Low



99% Occupied Bandwidth: Channel Mid

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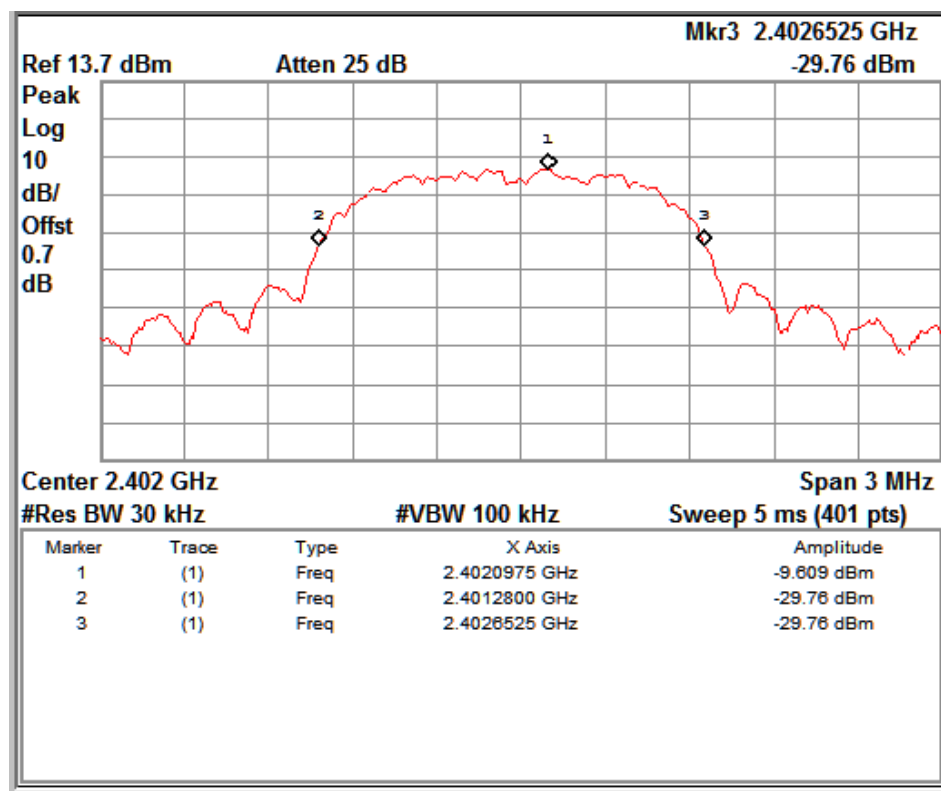
99% Occupied Bandwidth: Channel High

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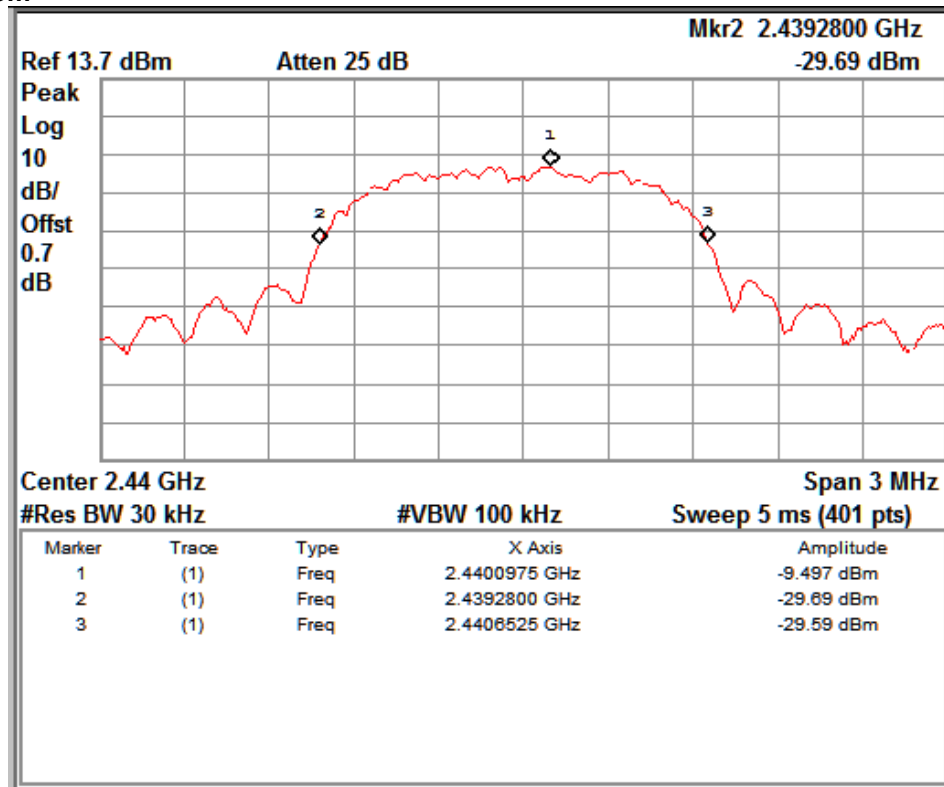
Modulation Type: 8 DQPSK

Test Results:

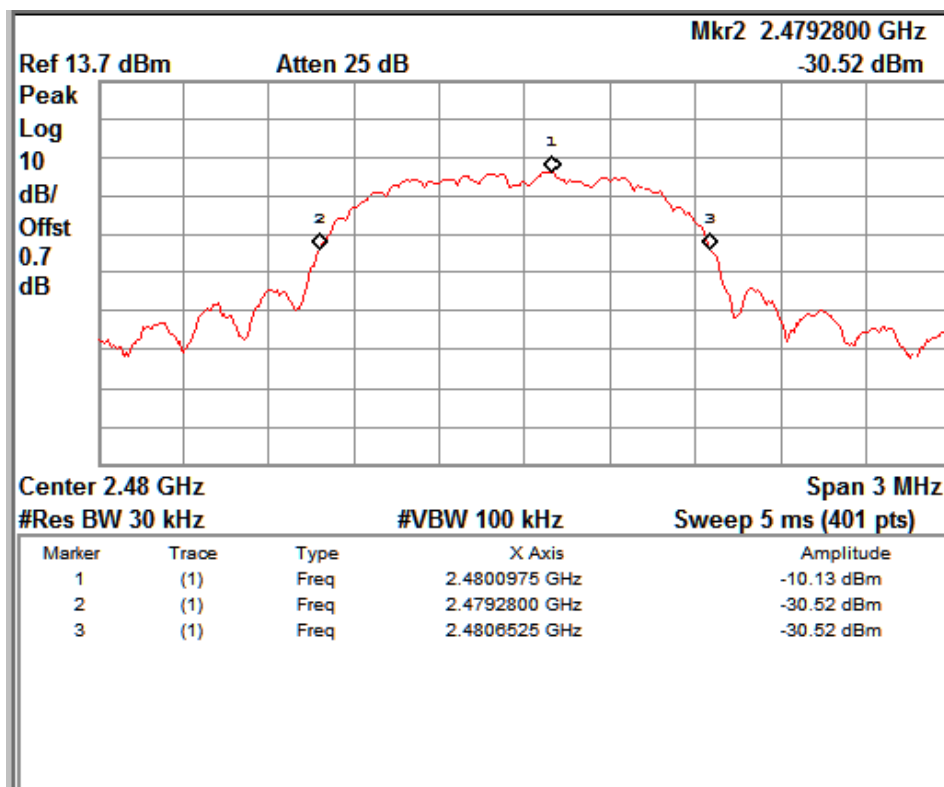
Channel Frequency (MHz)	Lower 20dB Frequency (MHz)	Higher 20dB Frequency (MHz)	20dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
2402	2401.280	2402.652	1.37	1.26
2441	2439.280	2440.652	1.37	1.25
2480	2479.280	2480.652	1.37	1.26



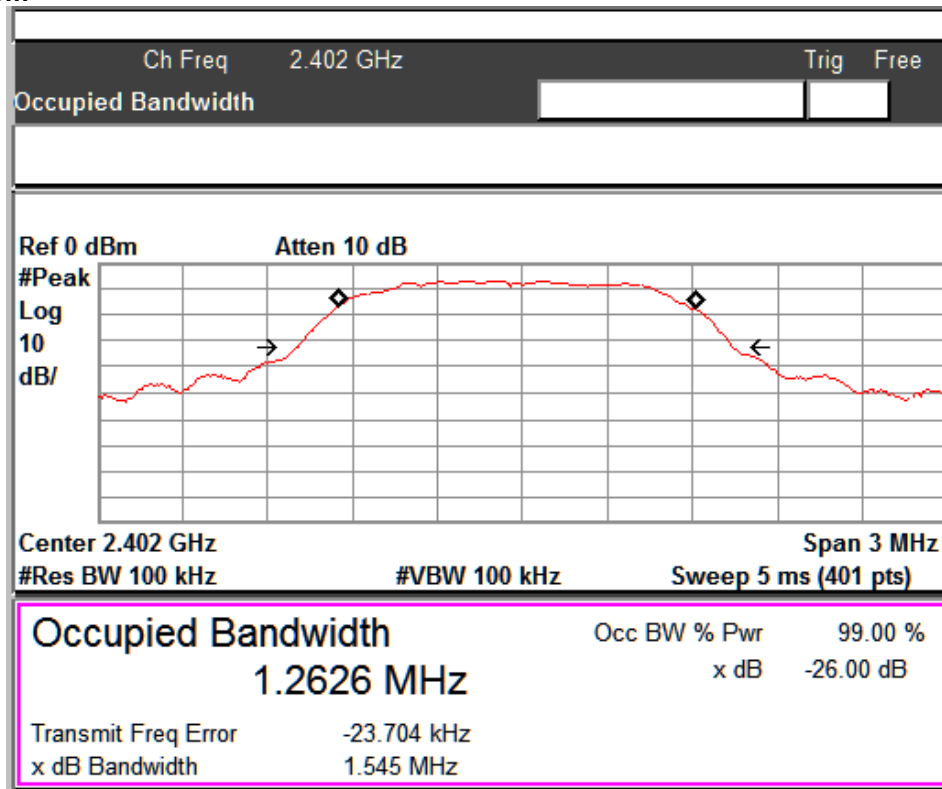
Channel Low: 20dB Bandwidth Measurement



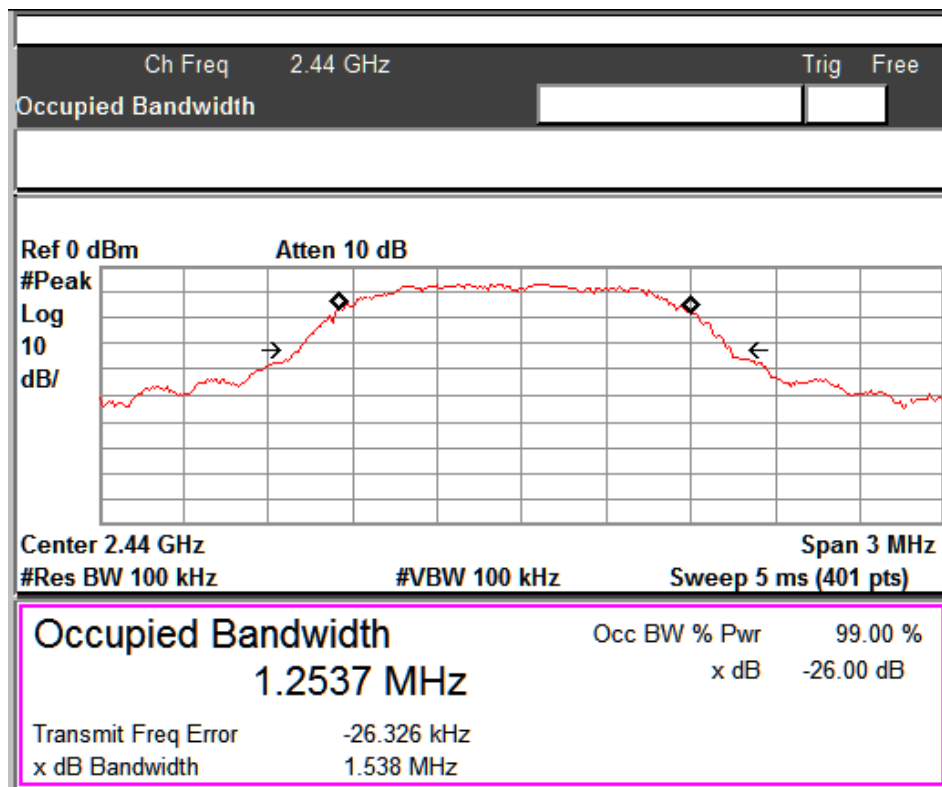
Channel Mid: 20dB Bandwidth Measurement



Channel High: 20dB Bandwidth Measurement

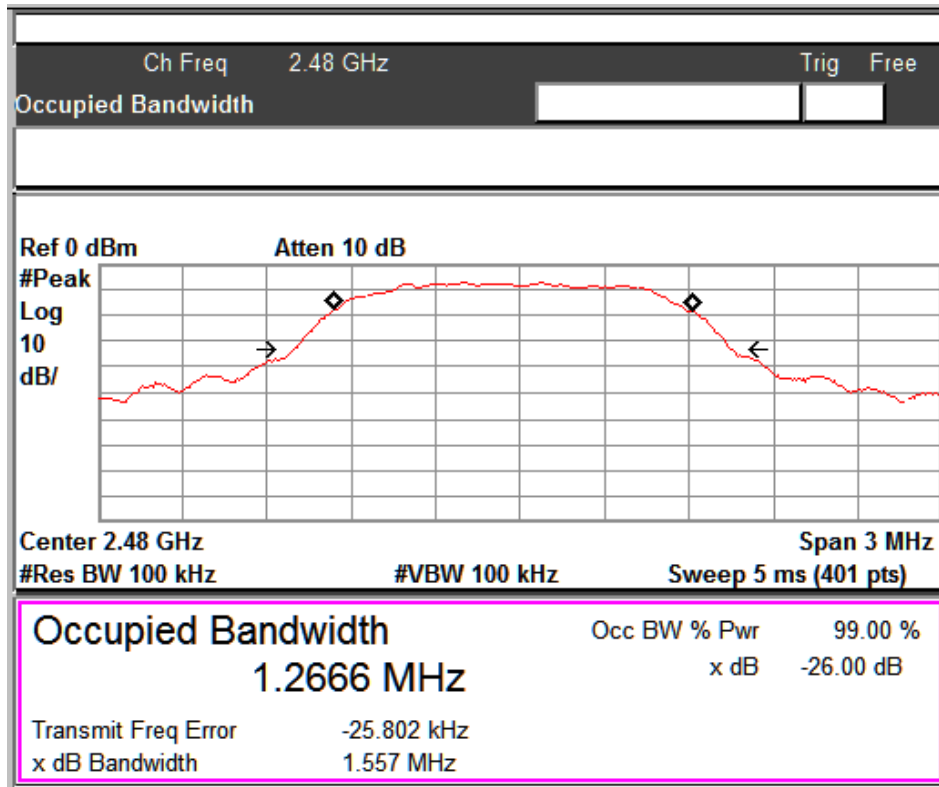


99% Occupied Bandwidth: Channel Low



99% Occupied Bandwidth: Channel Mid

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99% Occupied Bandwidth: Channel High

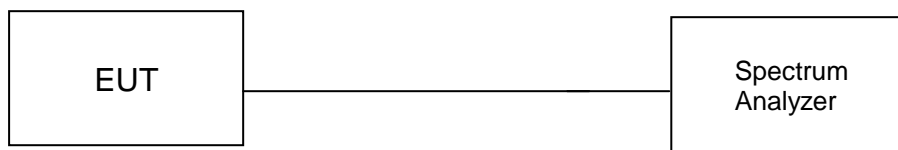
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Number of Hopping Channels
Result

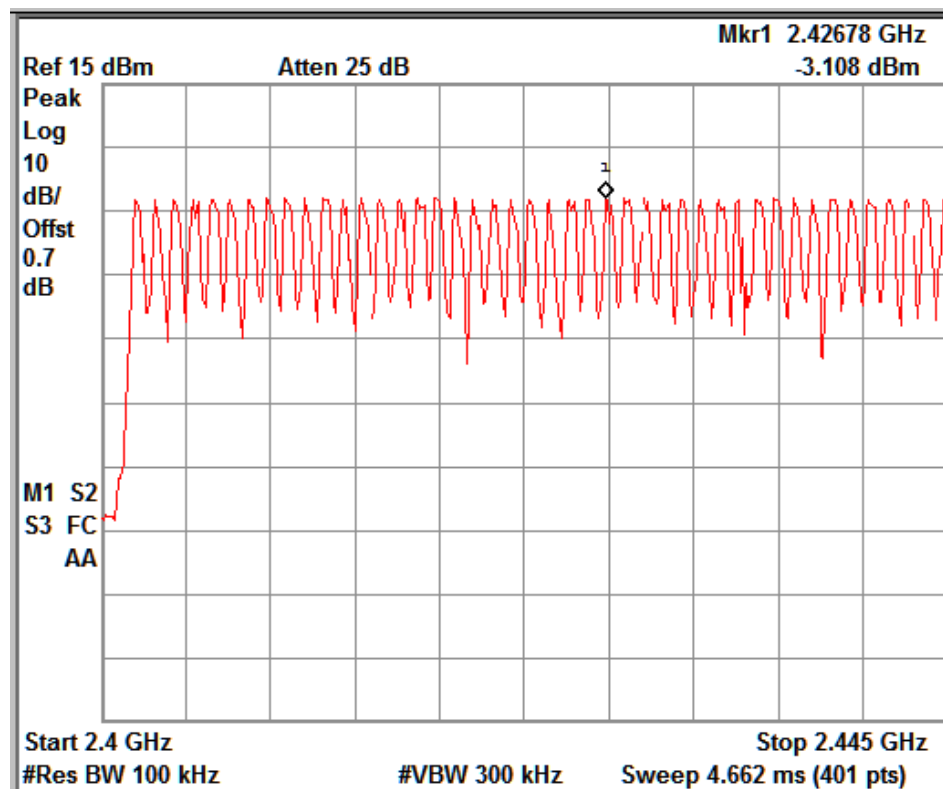
Section (a) (1) (iii)
Pass

Test Specification	FCC part 15C
Detector Function	Peak
Supply Voltage	110 Volt 60Hz AC
Port of testing	Antenna port
Requirement	Frequency hopping systems operating in the band 2400-2483.5 MHz shall use at least 15 hopping channels

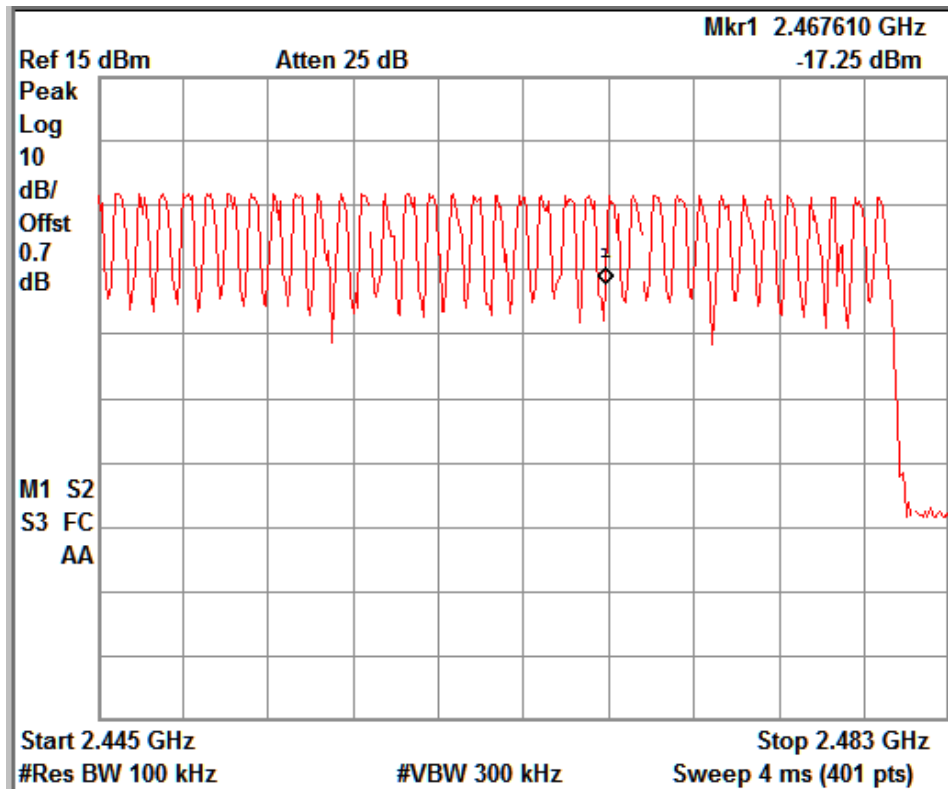
Test Method:



Test Result:



Number of Hopping Channels: 44



Number of Hopping Channels: 35

Total Number of hopping channels = 79 (44 + 35)

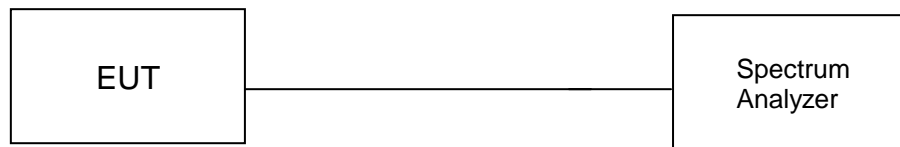
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**Carrier Frequency Separation
Result**

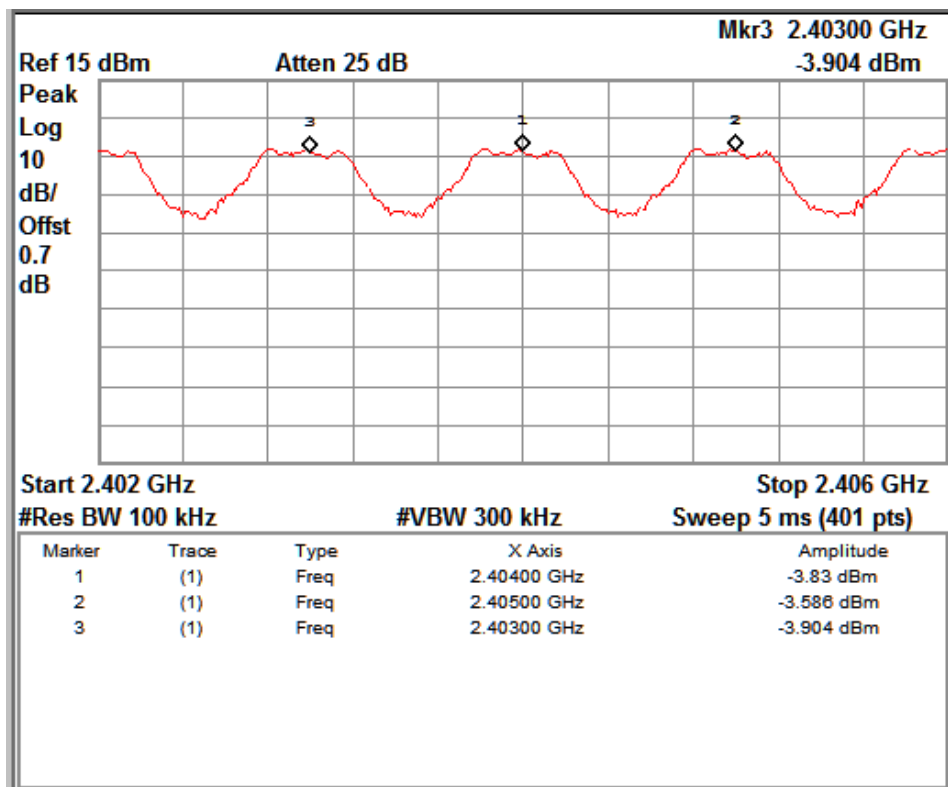
**Section 15.247 (a) (1)
Pass**

Test Specification	FCC Part 15C
Detector Function	Peak
Supply Voltage	110 Volt 60Hz AC
Requirement	Frequency hopping systems shall have hopping channel carrier frequency separated by a minimum of 25kHz or the 20dB bandwidth of the hopping channel, whichever is greater

Test Method:



Test Result:



Channel Separation

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Time of Occupancy (Dwell Time)
Result

Section 15.247 (a)(1)(III)
Pass

Test Specification RSS-210 Issue 7, A8.1 (c)
 Detector Function Peak
 Supply Voltage 110 Volt 60Hz AC
 Requirement The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Transmissions on particular hopping frequencies may be avoided or suppressed provided that a minimum of 15 hopping channels are used.

Test Method:



Test Result:

Transmit Channel	Time slot		Time Slot (ms)
	DH	Measurement Value (ms)	
Low	DH1	0.49	156.80
	DH2	1.70	272.16
	DH3	2.95	314.24
Mid	DH1	0.41	131.20
	DH2	1.72	275.20
	DH3	2.97	316.37
High	DH1	0.41	131.20
	DH2	1.68	268.96
	DH3	2.93	312.21

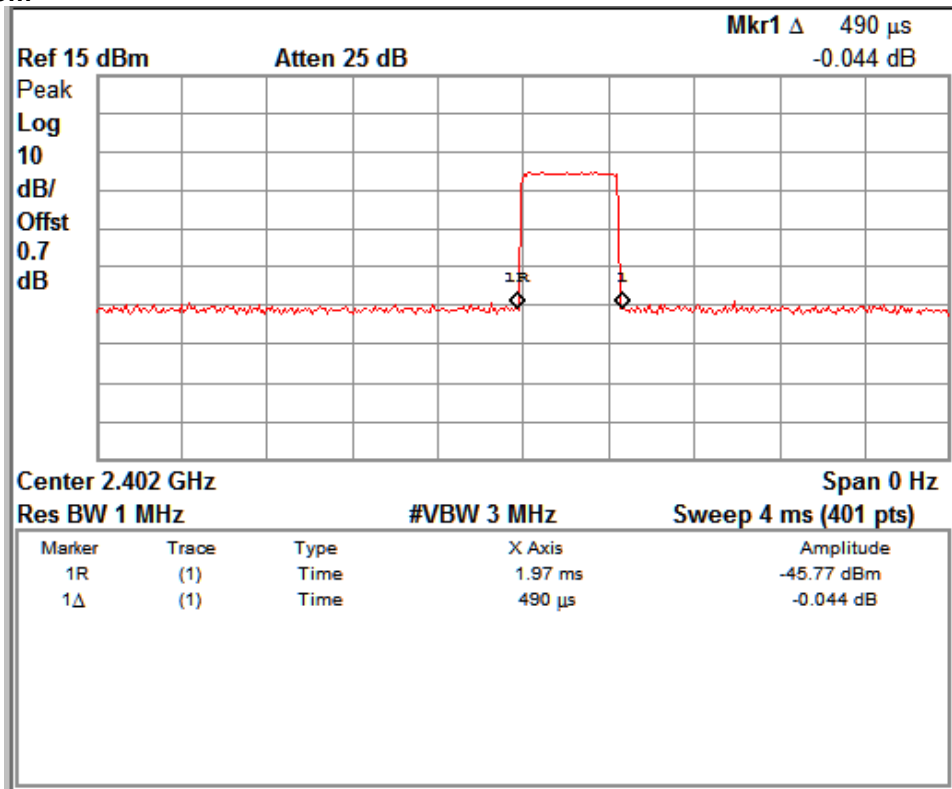
Measurement Method

Period Time = 0.4(ms)*79 = 31.6 ms

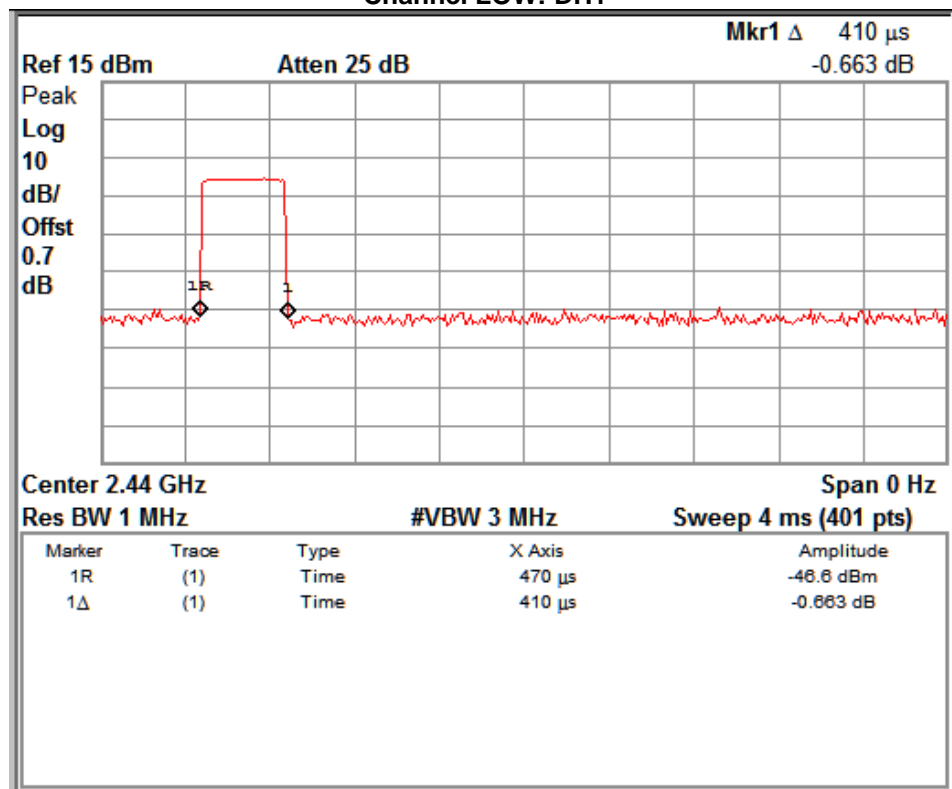
DH1 Time slot = Measurement value (ms)*(1600/(2*79))*Period time

DH2 Time slot = Measurement value (ms)*(1600/(4*79))*Period time

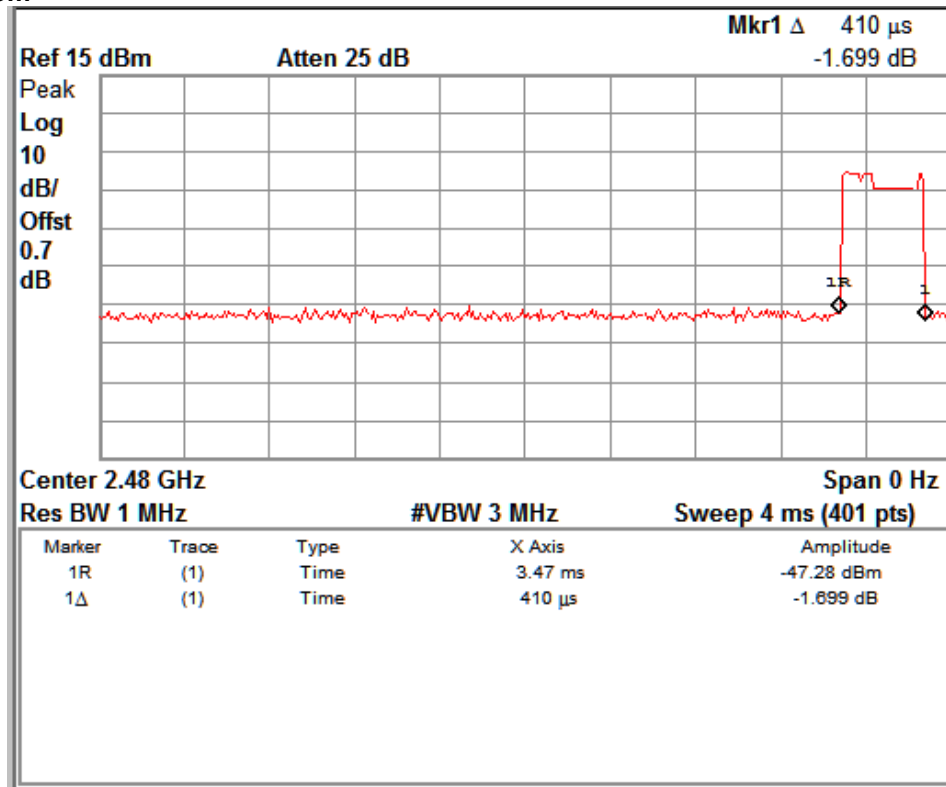
DH3 Time slot = Measurement value (ms)*(1600/(6*79))*Period time



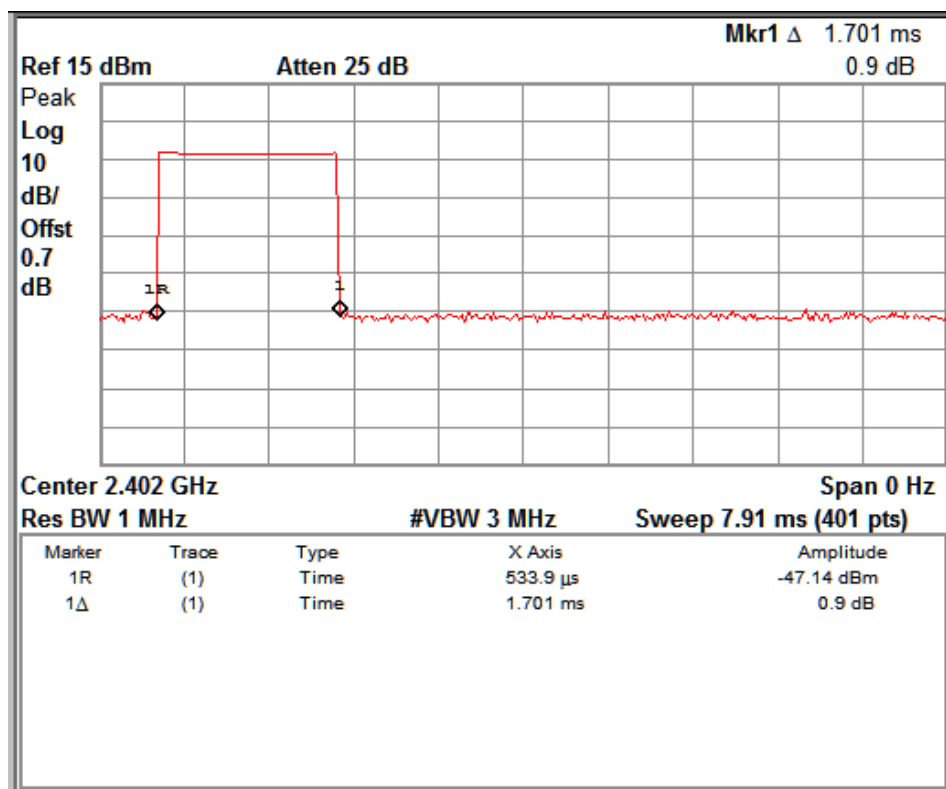
Channel LOW: DH1



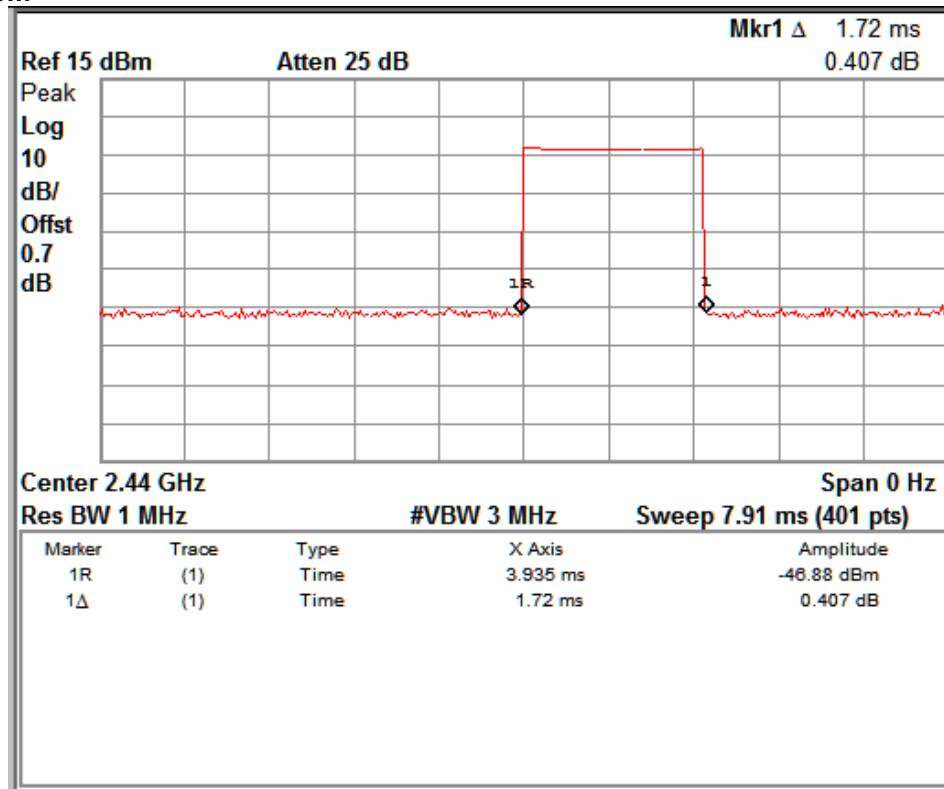
Channel MID: DH1



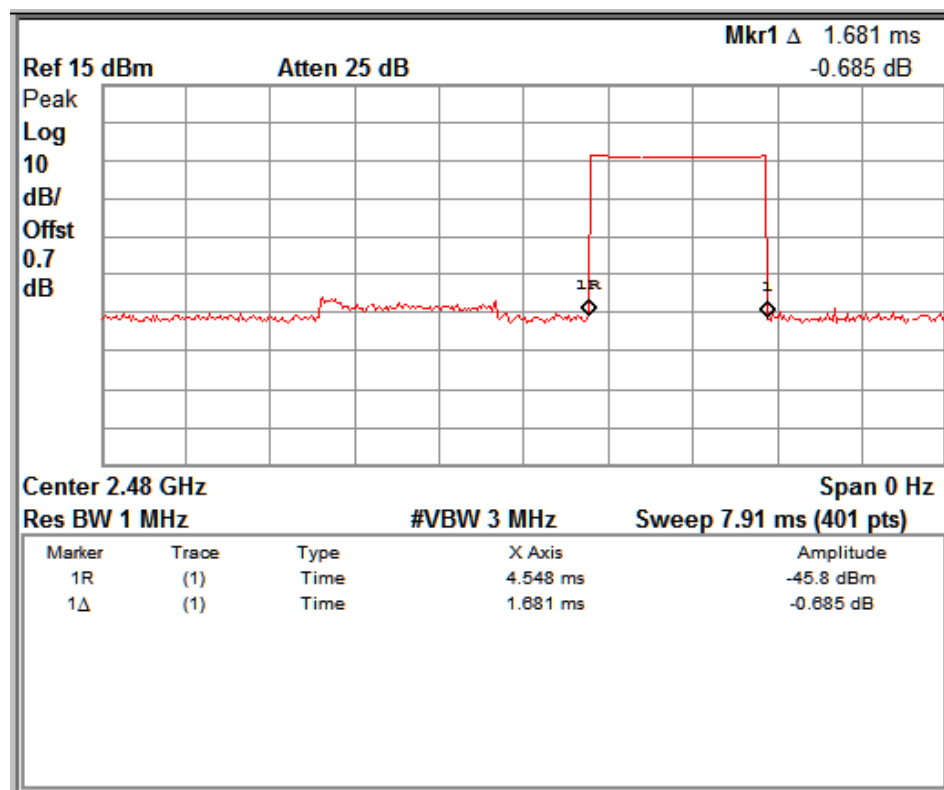
Channel HIGH: DH1



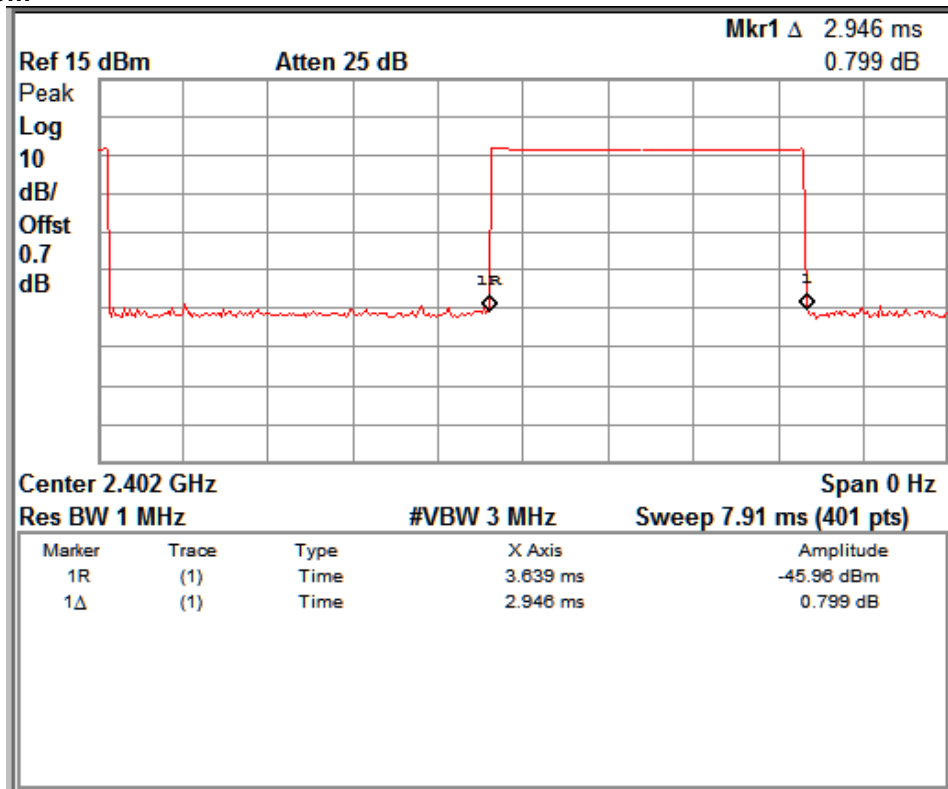
Channel LOW: DH3



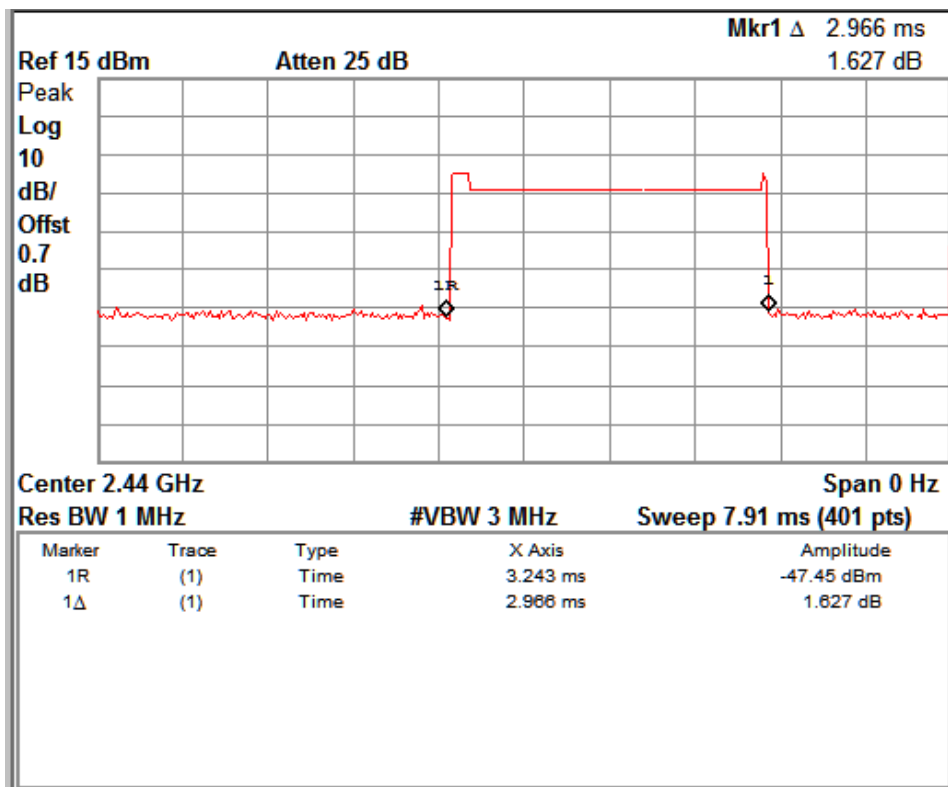
Channel MID: DH3



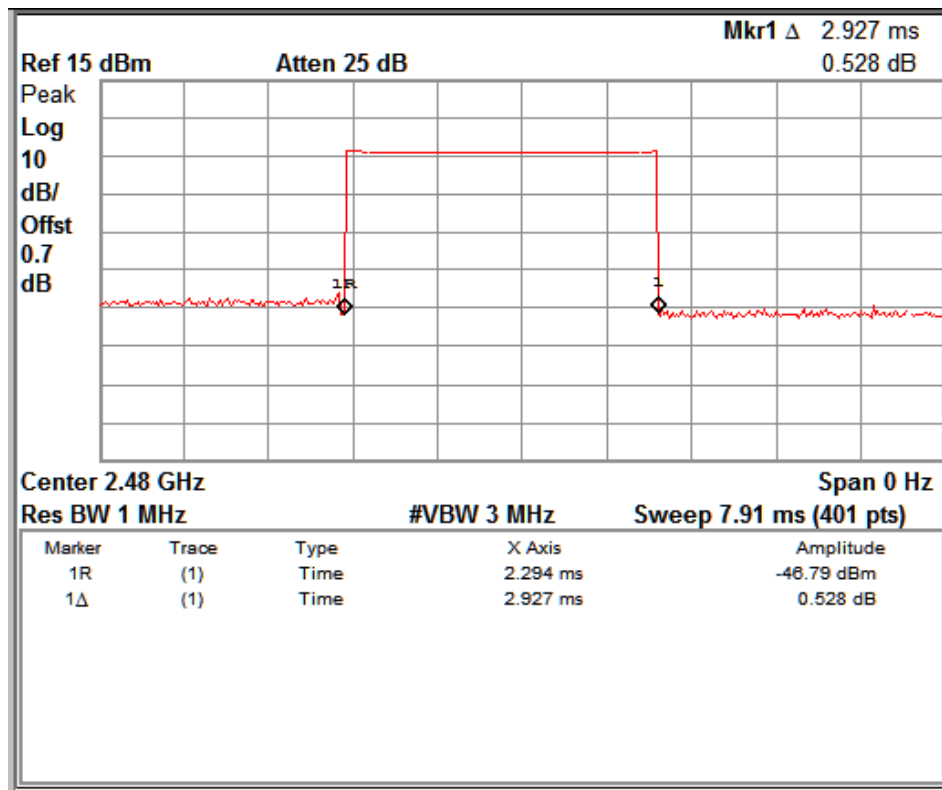
Channel HIGH: DH3



Channel LOW: DH5



Channel MID: DH5



Channel HIGH: DH5

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**Band-edge Compliance
Result**

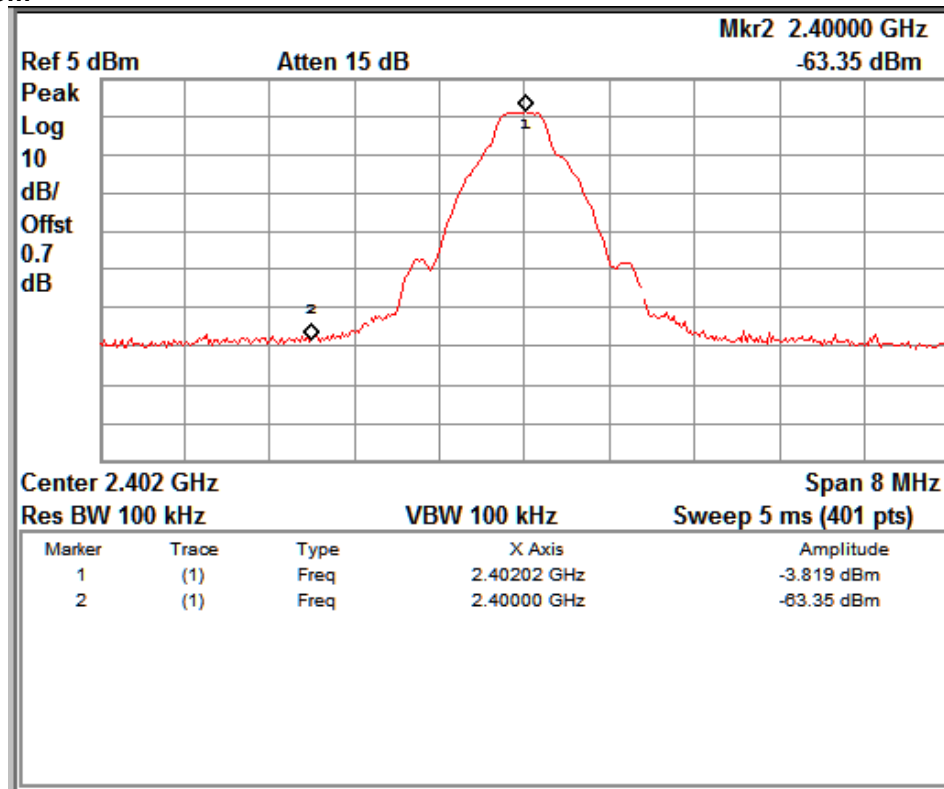
**Section 15.257 (d)
Pass**

Test Specification	FCC Part 15C
Detector Function	Peak
Supply Voltage	110 Volt 60Hz AC
Requirement	In any 100kHz 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 20dB below that in the 100kHz 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.

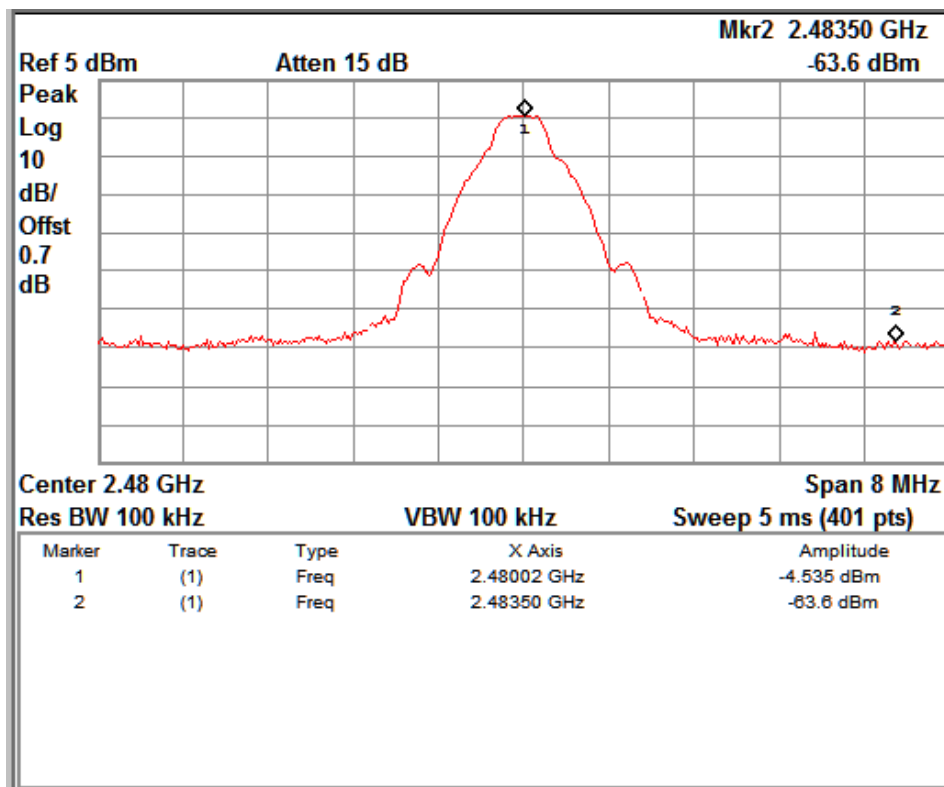
Modulation Type: GFSK

Test Result:

Channel	Fundamental Frequency (MHz)	Value at Band Edge		Limit (dB)	Remarks
		Frequency (MHz)	Value (dB)		
Low	2402.00	2400.0	-63.35	-20	Pass
High	2480.00	2483.5	-63.60	-20	Pass



Channel Low



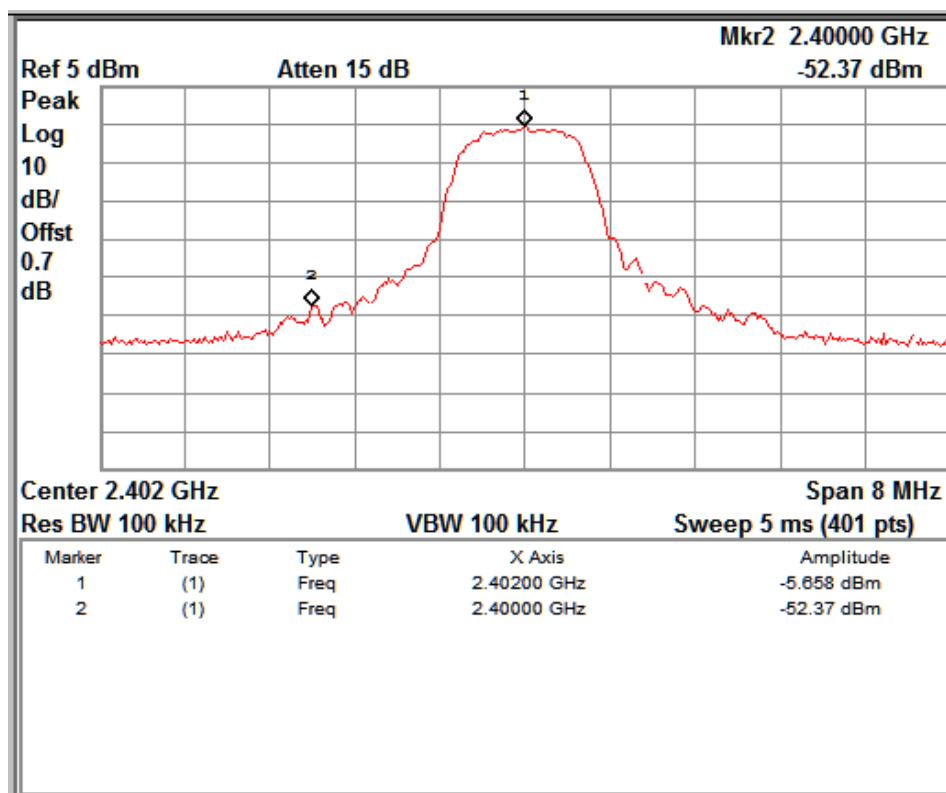
Channel High

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Modulation Type: P/4 DQPSK

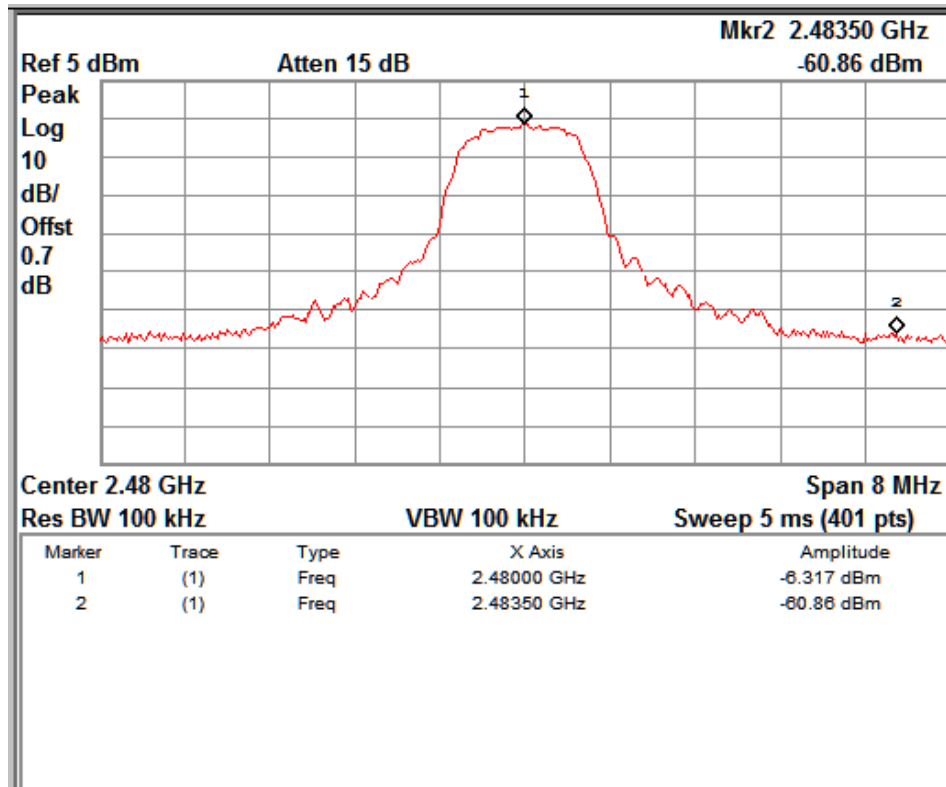
Test Results:

Channel	Fundamental Frequency (MHz)	Value at Band Edge		Limit (dB)	Remarks
		Frequency (MHz)	Value (dB)		
Low	2402.00	2400.0	-52.37	-20	Pass
High	2480.00	2483.5	-60.86	-20	Pass



Channel Low

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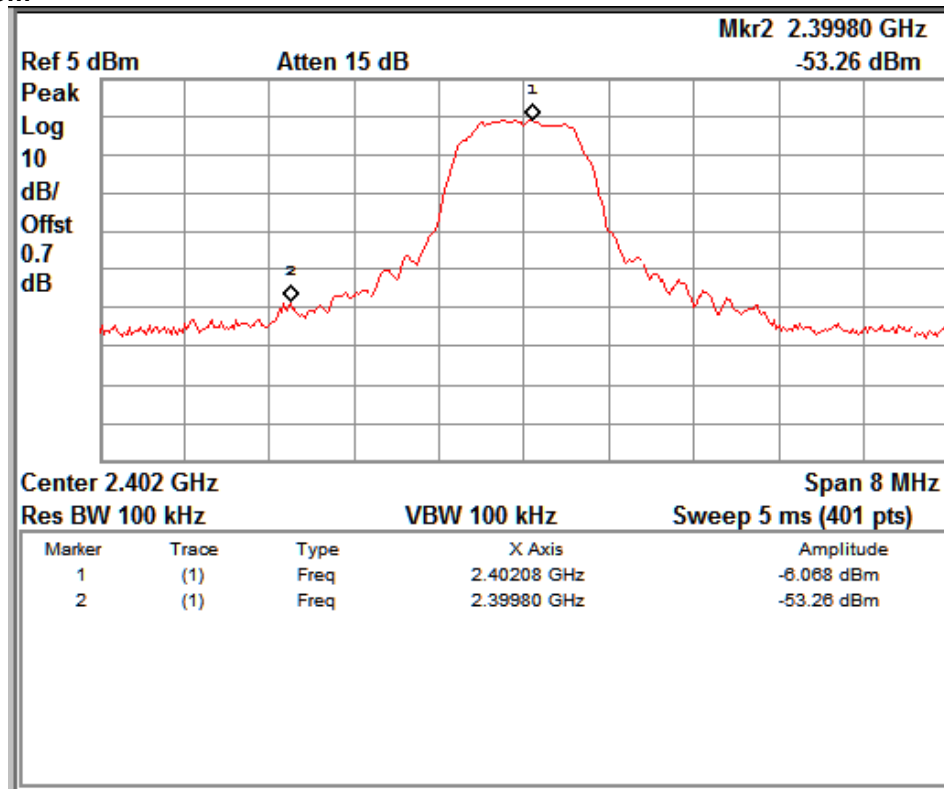


Channel High

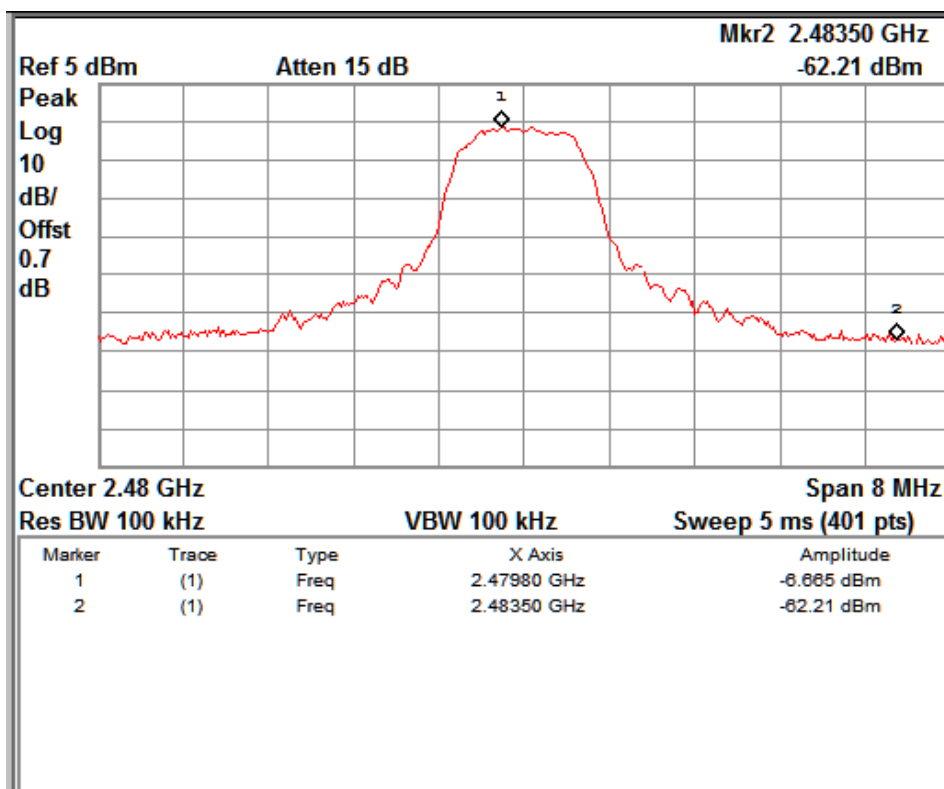
Modulation Type: 8 DQPSK

Test Results:

Channel	Fundamental Frequency (MHz)	Value at Band Edge		Limit (dB)	Remarks
		Frequency (MHz)	Value (dB)		
Low	2402.00	2400.0	-53.26	-20	Pass
High	2480.00	2483.5	-62.21	-20	Pass



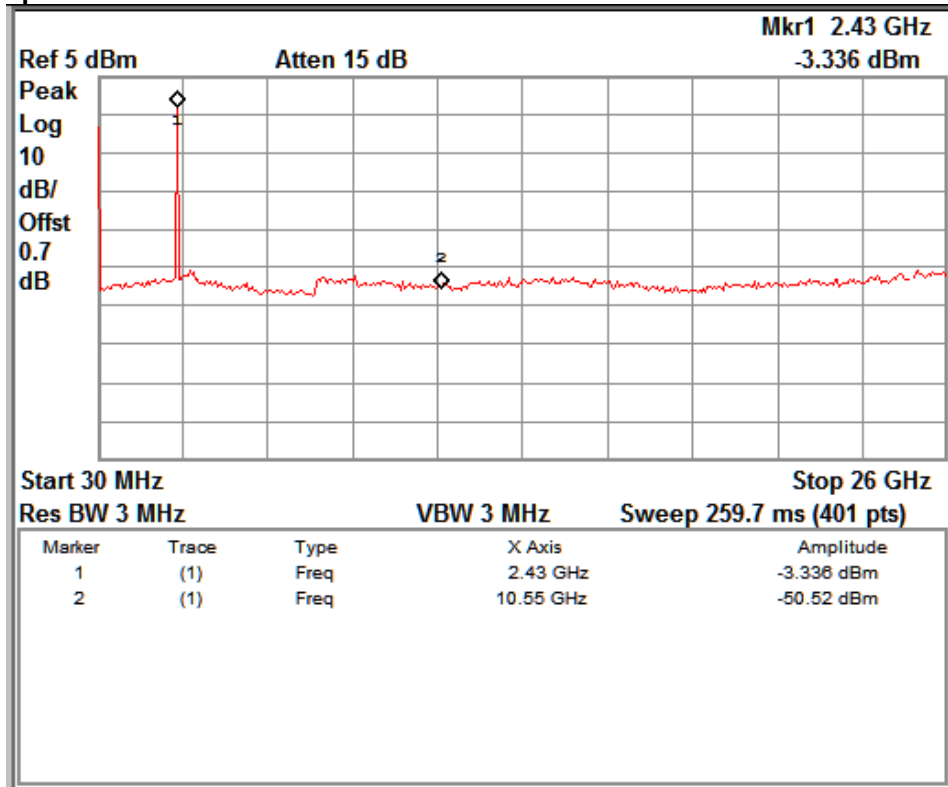
Channel Low



Channel High

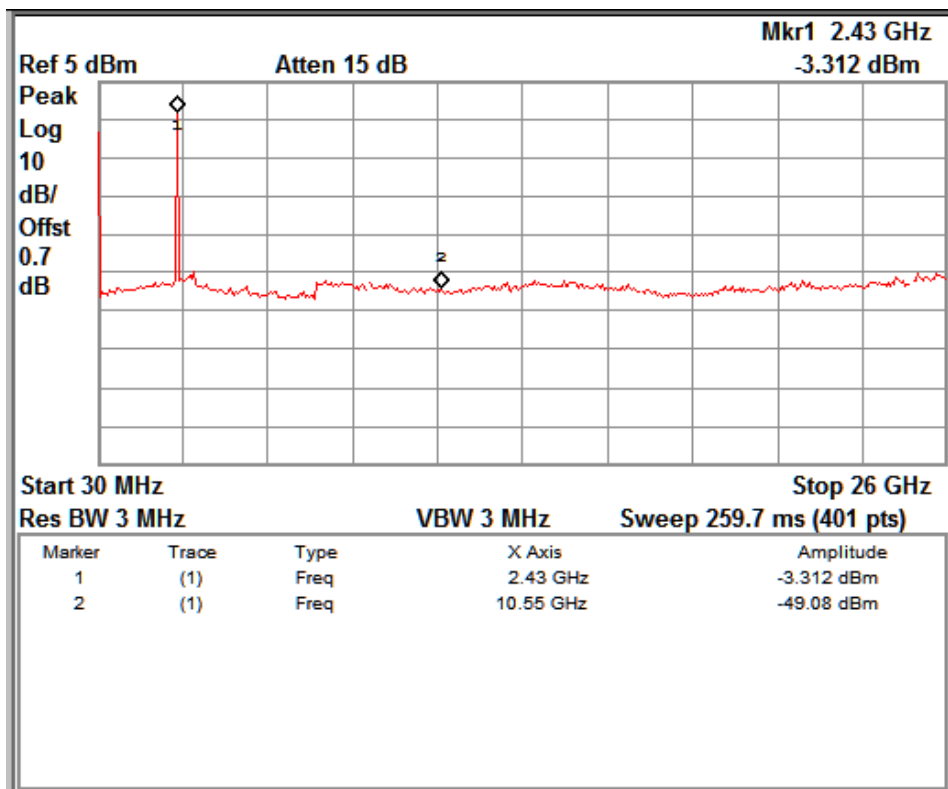
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Conducted Spurious Emissions



Channel: Low

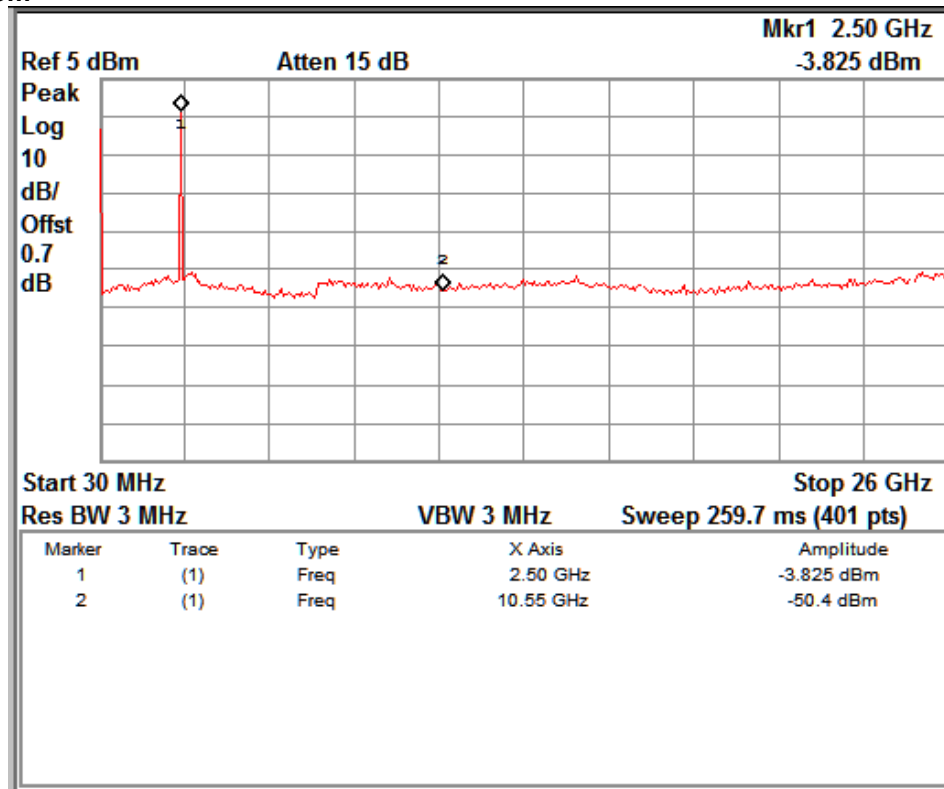
Modulation: GFSK



Channel: Mid

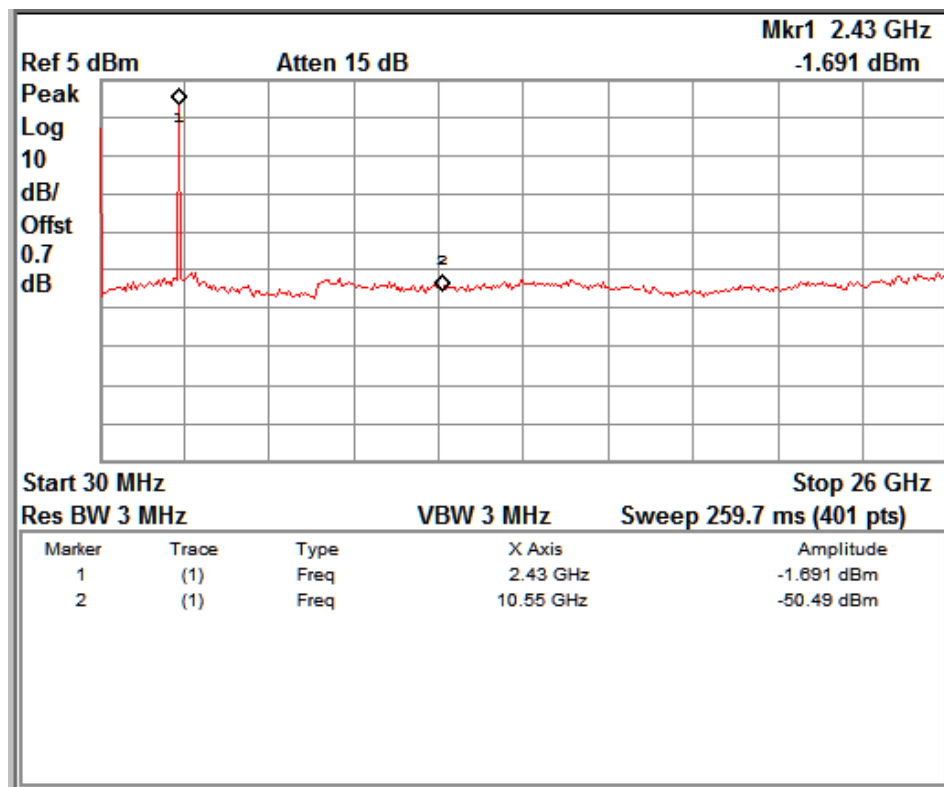
Modulation: GFSK

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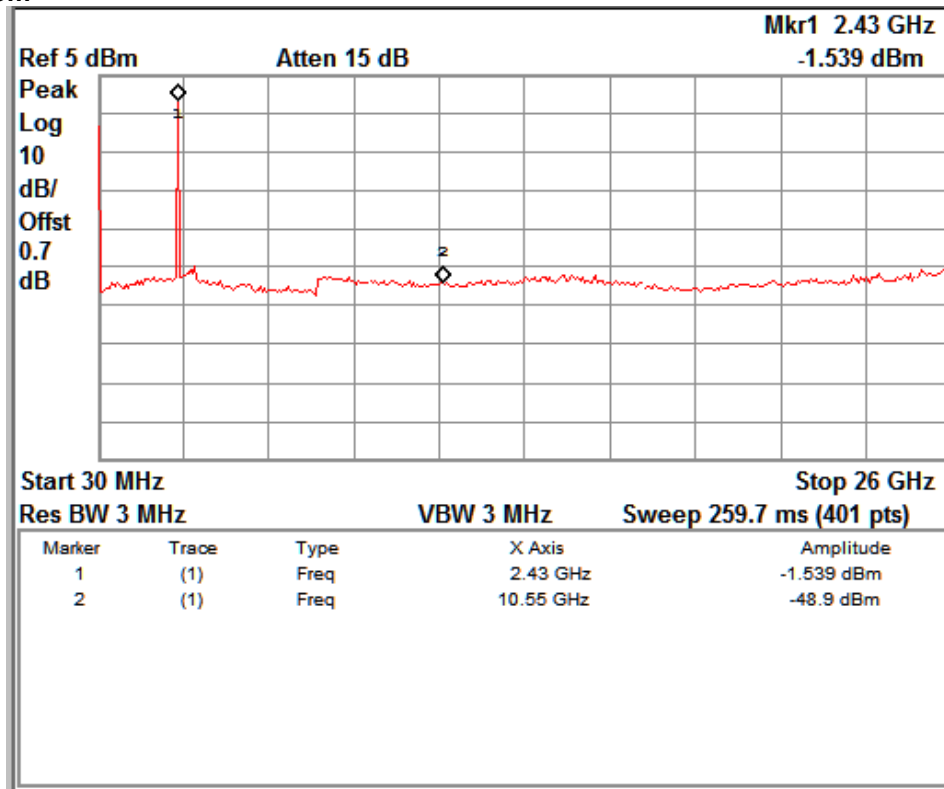
Channel: High

Modulation: GFSK



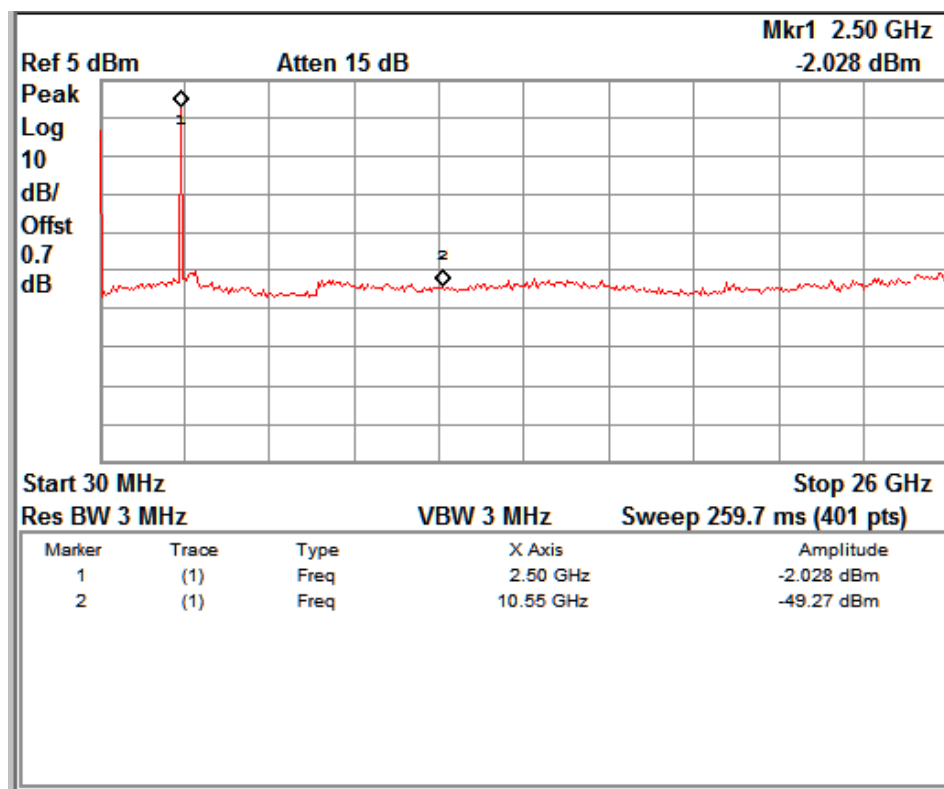
Channel: Low

Modulation: P/4 DQPSK



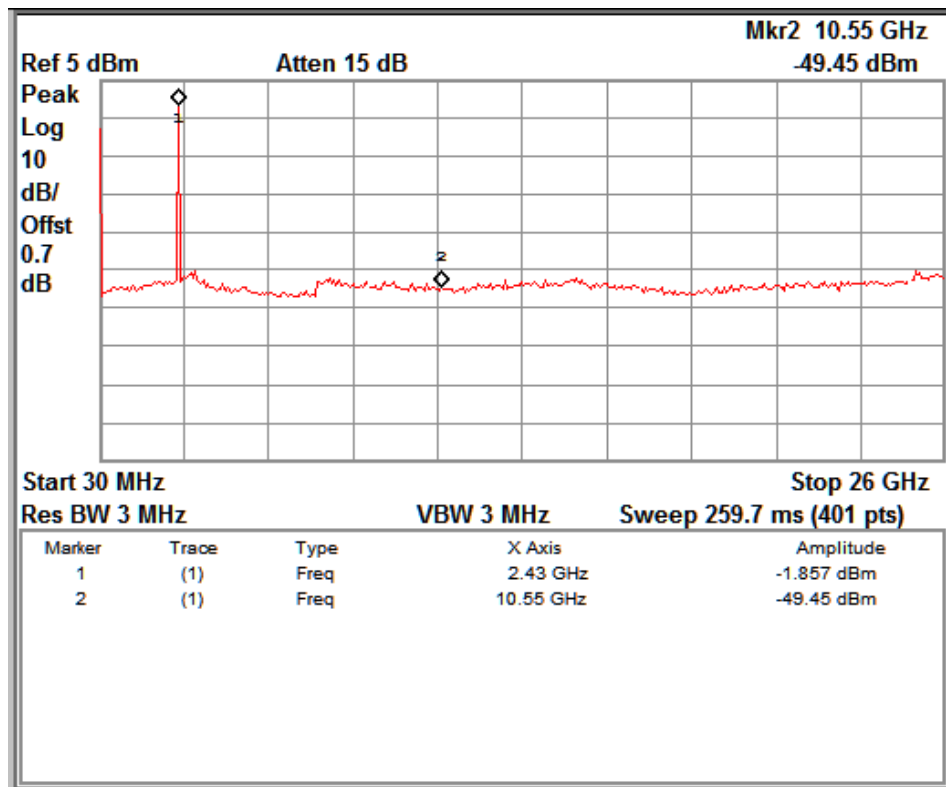
Channel: Mid

Modulation: P/4 DQPSK



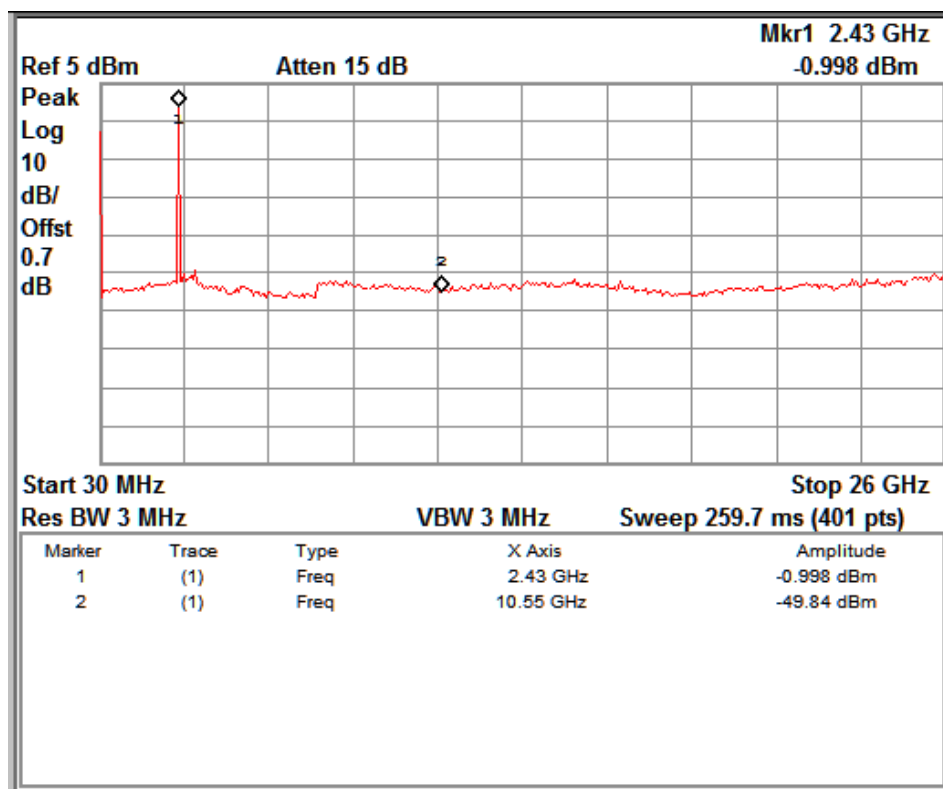
Channel: High

Modulation: P/4 DQPSK



Channel: Low

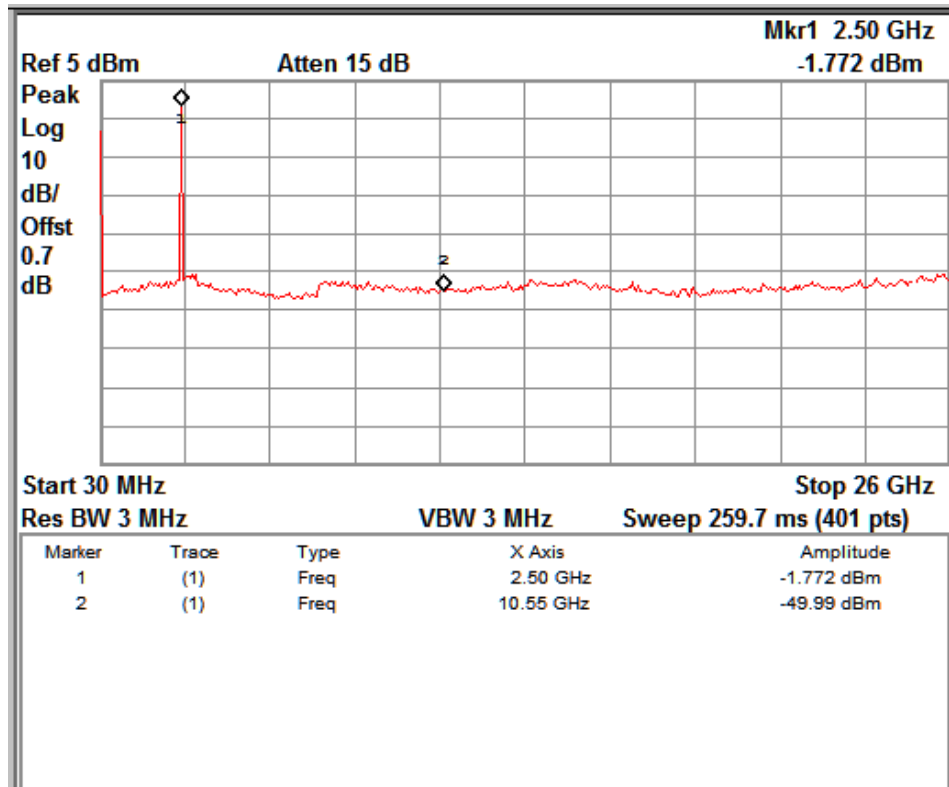
Modulation: 8 DQPSK



Channel: Mid

Modulation: 8 DQPSK

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Channel: High

Modulation: 8 DQPSK

Spurious Radiated Emissions & Restricted Bands of Operation**Section 15.209 & 15.205,15.245****Result****Pass**

Test Specification	FCC Part 15C
Test Method	ANSI C63.4-2003
Measurement Location	Semi Anechoic Chamber
Supply Voltage	110 Volt 60Hz AC
Measuring Frequency Range	9kHz to 40GHz (Up to 10 th harmonic of the highest fundamental frequency)
Measuring Distance	3m
Detection	QP for frequency below 1GHz, Average for frequency above 1GHz
Requirement	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.

Limit for Radiated Emission of Section 15.209:

Frequency (MHz)	Field strength (dBμV) at 3m range	Field strength (dBμV/m) at 3m range
1.705-30	30 (30m range)*	29.5(30m range)*
30-88	100	40.0
88-216	150	43.5
216-960	200	46.0
Above 960	500	54.0

Remark: * the limit shows in the table above of frequency range 1.705-30MHz are at 30 meter range, which corresponds to 49.5dB μ V/m at 3m range by extrapolation calculation and the measurement of loop antenna.

The emission limits shows in the table are based on measurements employing a CISPR quasi-peak detector and above 1000 MHz are based on the measurements employing an average detector.

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Test result:

Worst case emissions observed in the range 30MHz to 1GHz are listed below.

Frequency Range (MHz)	Antenna Polarization	Measured frequency (MHz)	Measured Value (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
0.009 – 1000	Vertical	34.75	35.78	40	-4.22
		40.28	31.02	40	-9.98
		71.22	30.29	40	-9.71
	Horizontal	33.88	32.62	40	-7.38
		54.73	25.43	40	-14.57

Modulation type: GFSK

Channel	Polarization	Frequency (MHz)	Measured Value (dBμV/m)	Limit (dBμV/m)	Margin (dB)
LOW	V	2390(Pk)	43.07	74	-30.93
		2390(Av)	28.8	54	-25.20
		2402(Pk)	90.51	*	*
		2402(Av)	90.13	*	*
		4804(Pk)	49.63	74	-24.37
		4804(Av)	38.14	54	-15.86
		7206(Pk)	58.37	74	-15.63
		7206(Av)	46.60	54	-7.40
	H	2390(Pk)	41.84	74	-32.16
		2390(Av)	27.82	54	-26.18
		2402(Pk)	93.83	*	*
		2402(Av)	93.44	*	*
		4804(Pk)	51.17	74	-22.83
		4804(Av)	43.22	54	-10.78
		7206(Pk)	60.10	74	-13.90
		7206(Av)	51.04	54	-2.96
HIGH	V	2483.5(Pk)	39.28	74	-34.72
		2483.5(Av)	27.10	54	-26.90
		2480(Pk)	85.99	*	*
		2480(Av)	85.60	*	*
		4960(Pk)	49.92	74	-24.08
		4960(Av)	36.77	54	-17.23
		7440(Pk)	57.89	74	-16.11
		7440(Av)	45.92	54	-8.08
	H	2483.5(Pk)	39.58	74	-34.42
		2483.5(Av)	27.64	54	-26.36
		2480(Pk)	88.72	*	*
		2480(Av)	88.35	*	*
		4960(Pk)	50.45	74	-23.55
		4960(Av)	39.07	54	-14.93
		7440(Pk)	59.09	74	-14.91
		7440(Av)	49.33	54	-04.67

* Operation Band

Modulation type: P/4 DQPSK

Channel	Polarization	Frequency (MHz)	Measured Value (dBμV/m)	Limit (dBμV/m)	Margin (dB)
LOW	V	2390(Pk)	43.18	74	-30.82
		2390(Av)	28.35	54	-25.65
		2402(Pk)	91.98	*	*
		2402(Av)	88.57	*	*
		4804(Pk)	49.42	74	-24.58
		4804(Av)	39.61	54	-14.39
		7206(Pk)	58.66	74	-15.34
		7206(Av)	46.18	54	-07.82
	H	2390(Pk)	42.21	74	-31.79
		2390(Av)	28.60	54	-25.40
		2402(Pk)	94.67	*	*
		2402(Av)	91.25	*	*
		4804(Pk)	54.24	74	-19.76
		4804(Av)	45.83	54	-08.17
		7206(Pk)	59.19	74	-14.81
		7206(Av)	49.91	54	-04.09
HIGH	V	2483.5(Pk)	40.40	74	-33.60
		2483.5(Av)	28.68	54	-25.32
		2480(Pk)	87.26	*	*
		2480(Av)	83.75	*	*
		4960(Pk)	50.17	74	-23.83
		4960(Av)	39.48	54	-14.52
		7440(Pk)	57.88	74	-16.12
		7440(Av)	45.83	54	-08.17
	H	2483.5(Pk)	40.21	74	-33.79
		2483.5(Av)	29.41	54	-24.59
		2480(Pk)	89.03	*	*
		2480(Av)	85.69	*	*
		4960(Pk)	52.68	74	-21.32
		4960(Av)	43.32	54	-10.68
		7440(Pk)	60.08	74	-13.92
		7440(Av)	47.98	54	-06.02

* Operation Band

Modulation Type: 8 DQPSK

Channel	Polarization	Frequency (MHz)	Measured Value (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
LOW	V	2390(Pk)	42.72	74	-31.28
		2390(Av)	28.4	54	-25.60
		2402(Pk)	92.54	*	*
		2402(Av)	89.06	*	*
		4804(Pk)	49.42	74	-24.58
		4804(Av)	39.61	54	-14.39
		7206(Pk)	58.61	74	-15.39
		7206(Av)	46.64	54	-7.36
	H	2390(Pk)	46.12	74	-27.88
		2390(Av)	29.95	54	-24.05
		2402(Pk)	95.42	*	*
		2402(Av)	91.88	*	*
		4804(Pk)	51.17	74	-22.83
		4804(Av)	43.22	54	-10.78
		7206(Pk)	59.63	74	-14.37
		7206(Av)	50.54	54	-3.46
HIGH	V	2483.5(Pk)	40.35	74	-33.65
		2483.5(Av)	29.18	54	-24.82
		2480(Pk)	87.49	*	*
		2480(Av)	83.63	*	*
		4960(Pk)	50.52	74	-23.48
		4960(Av)	39.53	54	-14.47
		7440(Pk)	57.97	74	-16.03
		7440(Av)	45.62	54	-8.38
	H	2483.5(Pk)	41.87	74	-32.13
		2483.5(Av)	29.92	54	-24.08
		2480(Pk)	89.29	*	*
		2480(Av)	85.46	*	*
		4960(Pk)	51.96	74	-22.04
		4960(Av)	42.89	54	-11.11
		7440(Pk)	57.43	74	-16.57
		7440(Av)	47.77	54	-06.23

* Operation Band

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10.5GHz Field Disturbance Sensor

Polarization	Frequency (GHz)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
V	21.045 (Av)	68.03	88.00	-19.97
	21.045 (Pk)	71.71	108.00	-36.29
	31.56 (Av)	73.75	88.00	-14.25
	31.56 (Pk)	70.81	108.00	-37.19
H	21.045 (Av)	71.96	88.00	-16.04
	21.045 (Pk)	72.53	108.00	-35.47
	31.56 (Av)	75.07	88.00	-12.93
	31.56 (Pk)	74.07	108.00	-33.93

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**Conducted Emission Test on a.c. Power Line
Result**

**Section 15.207
Pass**

Test Specification : FCC Part 15 C
Test Method : ANSI C63.4-2003
Testing Location : Screened room
Measurement Bandwidth : 9kHz
Frequency Range : 150kHz – 30MHz
Supply Voltage : 110 Volt 60Hz AC

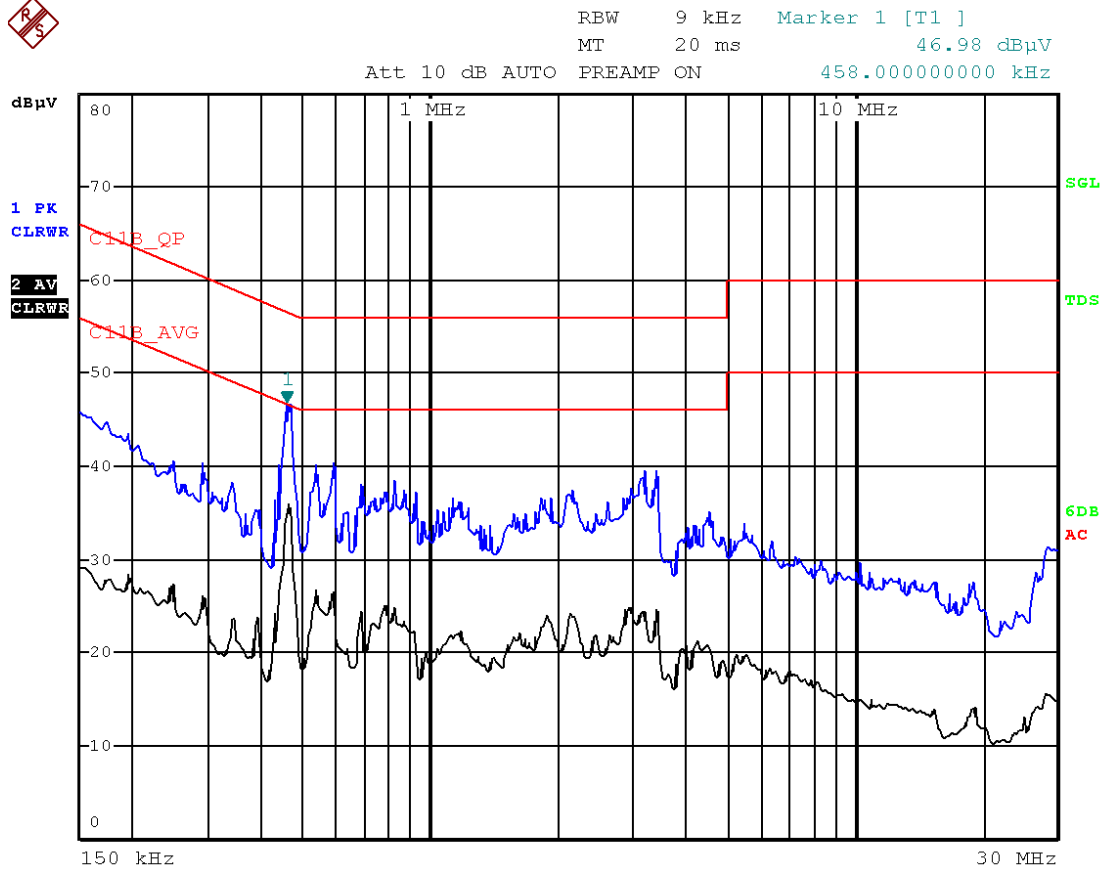
Limit of section 15.207:

Frequency of emission (MHz)	QP Limit (dB μ V)	AV Limit (dB μ V/m)
0.15 – 0.5	66 – 56*	56 – 46*
0.5 – 5	56	46
5 – 30	60	50

* Decreases with the logarithm of the frequency.

Test Result:

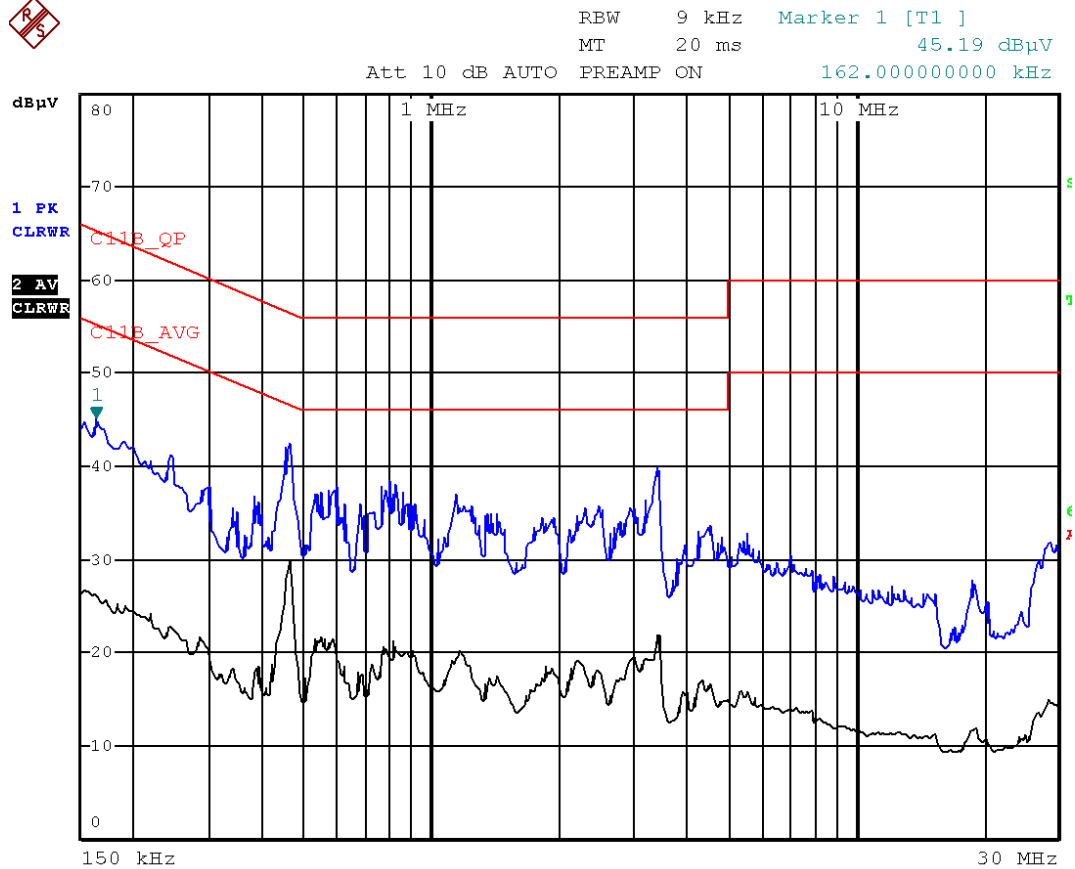
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LINE: Graph

TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
2 Average	462 kHz	35.76 L1	-10.88
1 Quasi Peak	458 kHz	43.59 L1	-13.13
1 Quasi Peak	590 kHz	36.90 L1	-19.09
2 Average	538 kHz	26.37 L1	-19.63
2 Average	782 kHz	24.79 L1	-21.20
2 Average	2.95 MHz	24.36 L1	-21.63
2 Average	1.882 MHz	23.56 L1	-22.44
1 Quasi Peak	818 kHz	33.22 L1	-22.77
1 Quasi Peak	3.198 MHz	32.96 L1	-23.03
1 Quasi Peak	150 kHz	42.56 L1	-23.43
1 Quasi Peak	4.554 MHz	29.12 L1	-26.88
2 Average	154 kHz	28.68 L1	-27.09

LINE: Table



NEUTRAL: Graph

TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Quasi Peak	462 kHz	40.27 N	-16.38
2 Average	462 kHz	29.84 N	-16.81
1 Quasi Peak	3.41 MHz	33.65 N	-22.34
1 Quasi Peak	594 kHz	31.86 N	-24.13
1 Quasi Peak	162 kHz	40.79 N	-24.57
1 Quasi Peak	1.146 MHz	31.02 N	-24.97
2 Average	546 kHz	20.80 N	-25.19
1 Quasi Peak	798 kHz	30.66 N	-25.33
2 Average	814 kHz	20.39 N	-25.60
2 Average	3.43 MHz	19.55 N	-26.44
2 Average	1.174 MHz	19.28 N	-26.71
2 Average	154 kHz	26.83 N	-28.94

NEUTRAL: Table