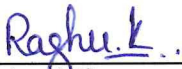


Produkte
Products

Prüfbericht - Nr.: 19660216 001		Seite 1 von 50	
<i>Test Report No.:</i>		<i>Page 1 of 50</i>	
Auftraggeber: <i>Client:</i>	HMicro Inc, 39355 California St #303, Fremont, CA 94538		
Gegenstand der Prüfung: <i>Test item:</i>	HC 1100-C1		
Bezeichnung: <i>Identification:</i>	HP1110	Serien-Nr.: <i>Serial No.</i>	D0SHY
Wareneingangs-Nr.: <i>Receipt No.:</i>	1803130785	Eingangsdatum: <i>Date of receipt:</i>	23.01.2016
Prüfart: <i>Testing location:</i>	Refer Page 4 of 50 for test facilities		
Prüfgrundlage: <i>Test specification:</i>	FCC Part 15: Subpart C 15.247 ANSI C63.10-2013		
Prüfresultat: <i>Test Result:</i>	Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test items passed the test specification(s).</i>		
Prüflaboratorium: <i>Testing Laboratory:</i>	TÜV Rheinland (India) Pvt. Ltd. 82/A, 3rd Main, West Wing, Electronic City Phase 1 Hosur Road, Bangalore – 560 100. India FCC Registration No.: 176555		
geprüft / tested by:		kontrolliert / reviewed by:	
29.03.2016	Raghavendra Katti Engineer	31.03.2016	Saibaba Siddapur Sr.Engineer
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>
	Unterschrift <i>Signature</i>		Unterschrift <i>Signature</i>
			
Sonstiges / Other Aspects: FCC ID:2AHV9-HP1110-C1			
Abkürzungen: P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar N/T = nicht getestet		Abbreviations: P(ass) = passed F(ail) = failed N/A = not applicable N/T = not tested	
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. <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>			

TÜV Rheinland India Pvt. Ltd. 82/A, 3rd Main, West Wing Electronic City Phase 1, Hosur Road, Bangalore-560100, India
 Tel.: +9180 6723 3500 · Fax: +9180 6723 3542 · Web: www.tuv.com

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Test Result Summary

Clause	Test Item	Result
Section 15.247(b) (3)	Maximum Average Conducted Output Power	Pass
Section 15.247(e)	Maximum Power Spectral Density	Pass
Section 15.247(a) (2)	DTS (6 dB) Bandwidth	Pass
Section 15.247(d)	Emission in restricted frequency bands (Band-edge compliance)	Pass
Section 15.209 / 15.205	Spurious Radiated Emissions and Restricted Bands of Operation	Pass

Note: Conducted measurements are done according to the procedure given in KDB No. **558074 D01 DTS Measurement Guidance v03r05**

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Emissions in Restricted Frequency Bands	Section 15.247(d)36
Spurious Radiated Emissions and Restricted Bands of Operation	Section 15.209 and 15.20545
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Appendix 2: EUT External Photo	
Appendix 3: EUT Internal Photo	
Appendix 4: FCC Label Diagram	
Appendix 5: Block Diagram	
Appendix 6: Specification of EUT	
Appendix 7: Schematic Diagrams	
Appendix 8: Bill of Material	
Appendix 9: User Manual	
Appendix 10: Maximum Permissible Exposure Calculation	

List of Test and Measurement Instruments

Equipment	Manufacturer	Model Name	Serial Number	Calibration Due Date	Periodicity	Used for Test Items
EMI Test Receiver	Rohde & Schwarz	ESU 40	100288	02.07.2016	Yearly	Spurious Radiated Emissions
Broadband Antenna	Frankonia	ALX-4000	ALX-4000-814	20.01.2017	Yearly	
Active Loop Antenna	Frankonia	LAX-10	LAX-10-800	22.07.2016	Yearly	
Broadband Horn Antenna	Frankonia	HAX-18	HAX18-802	02.12.2016	Yearly	
Emission Horn Antenna	ETS Lindgren	116706	00107323	02.12.2016	Yearly	
Anechoic Chamber	Frankonia	-	-	-	-	Antenna - Port Conducted Tests
Spectrum Analyser	Agilent Technologies	E4407B	US4119277 2	15.04.2016	Yearly	

Testing Facilities:

- 1) TUV Rheinland (India) Private Limited
108 , Beside ISBR Business School,
Electronic city Phase I
Bangalore - 560 100.

General Product Information

Product Function and Intended Use

The intended use of the WiPatch when used with an iPad tablet installed with an iOS APP is to acquire electrocardiogram signals and respiration signals from adult patients at rest and to transmit wirelessly those signals to a receiver for display purpose and analyze for heart rate and respiration rate. This WiPatch - WiAPP rhythm monitoring system will be used in hospitals and clinics by healthcare professionals. Use can be in acute care facilities.

Ratings and System Details

Operating Frequency	Refer page no 7
No. of channel	11
Channel Spacing	5 MHz
Modulation	DSSS/CCK
Transmit Power	0.85 dBm / 1.21618 mW
Data Rate	802.11b: 1, 2, 5.5 and 11 Mbps
Antenna Type	Chip antenna
Number of antenna	One
Antenna Gain	3.7 dBi
Supply Voltage	2.5 V DC
Dimension	7mm x 102 mm x 75 mm
Environmental	Operational Temperature: 10°C to 40°C

Test Conditions:

Supply Voltage: 2.5V DC from external DC source

Environmental conditions:

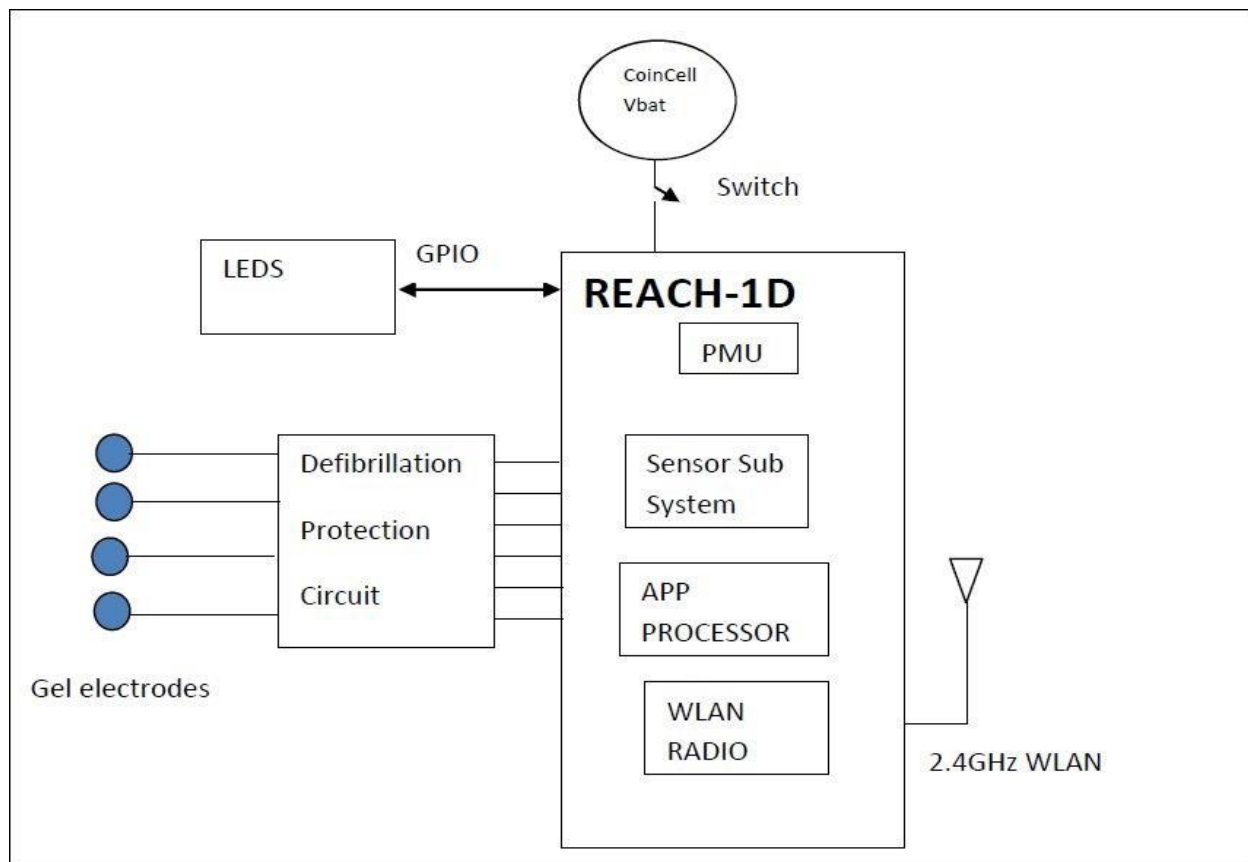
Temperature: +24 °C RH: 62%

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Operational Description

The device has instrumentation amplifiers and respiration current injection circuits to pick up ECG and respiration signals from patient's body. Signals are sampled, digitized and packetized for wireless transmission. Radio used is Wi-Fi and it can connect to an I PAD through an Access Point. Wi-Fi system uses a chip antenna mounted on the Flexible PCB of the WiPatch.

Block Diagram



Test Sample Description:

Radiated test:

One radiated sample was provided, TÜV Rheinland sample ID: 1803130785-5 & 1803130785-18

Conducted test:

Two conducted samples were provided, TÜV Rheinland Sample ID: 1803130785-6 and 1803130785-7.

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Test Set-up and Operation Mode

Principle of Configuration Selection

Transmission was enabled with 100% duty cycle on low, middle and high channel.

Test Operation and Test Software

Test codes were executed in Ubuntu terminal to enable the transmission with 100% duty cycle, changing channels (low, mid and high) and data rates on the EUT for the tests in this report.

Special Accessories and Auxiliary Equipment

- None

Countermeasures to achieve EMC Compliance

- None

Note: All the measurements were performed with power level setting 0dBm.

Table of frequencies

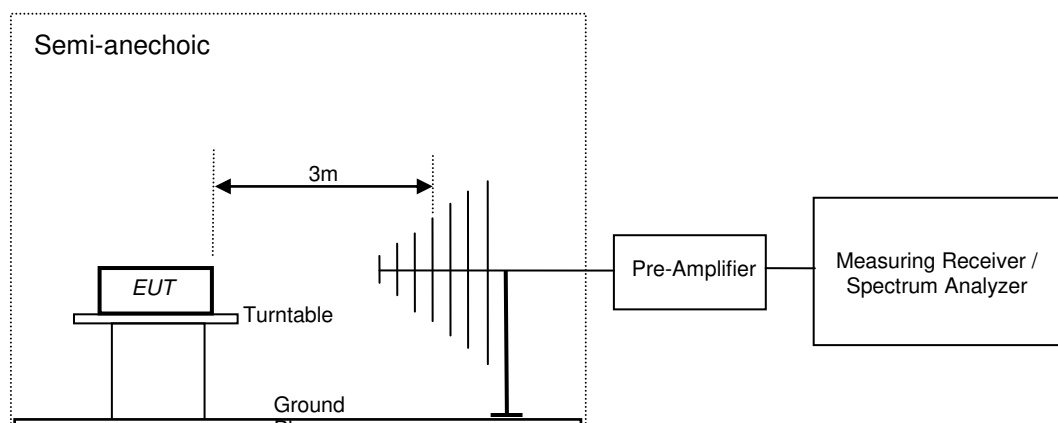
Frequency Band	Channel No.	Frequency (MHz)
2400-2483.5 MHz	1	2412
	2	2417
	3	2422
	4	2427
	5	2432
	6	2437
	7	2442
	8	2447
	9	2452
	10	2457
	11	2462

Test Methodology

Radiated Emission Test

The radiated emission measurement was performed according to the procedures in ANSI C63.10-2013. 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 for below 1GHz & The equipment under test (EUT) was placed at the middle of the 1.5m high turntable, and the EUT is 3 meters far from the measuring antenna for above 1GHz. 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.

The EUT was rotated around the X-, Y-, and Z-Axis and the results from worst case axis are recorded.



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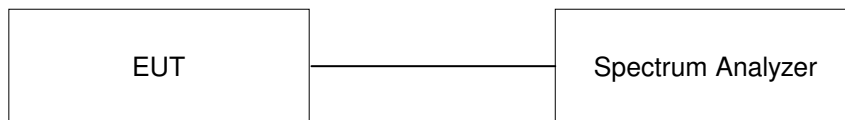
Test Results

Maximum Average Conducted Output Power Result

**Section 15.247(b) (3)
Pass**

Test Specification	FCC Part 15 Subpart C
Measurement Bandwidth (RBW)	300 KHz
Requirement	≤1 watt (30dBm).

Test Method:



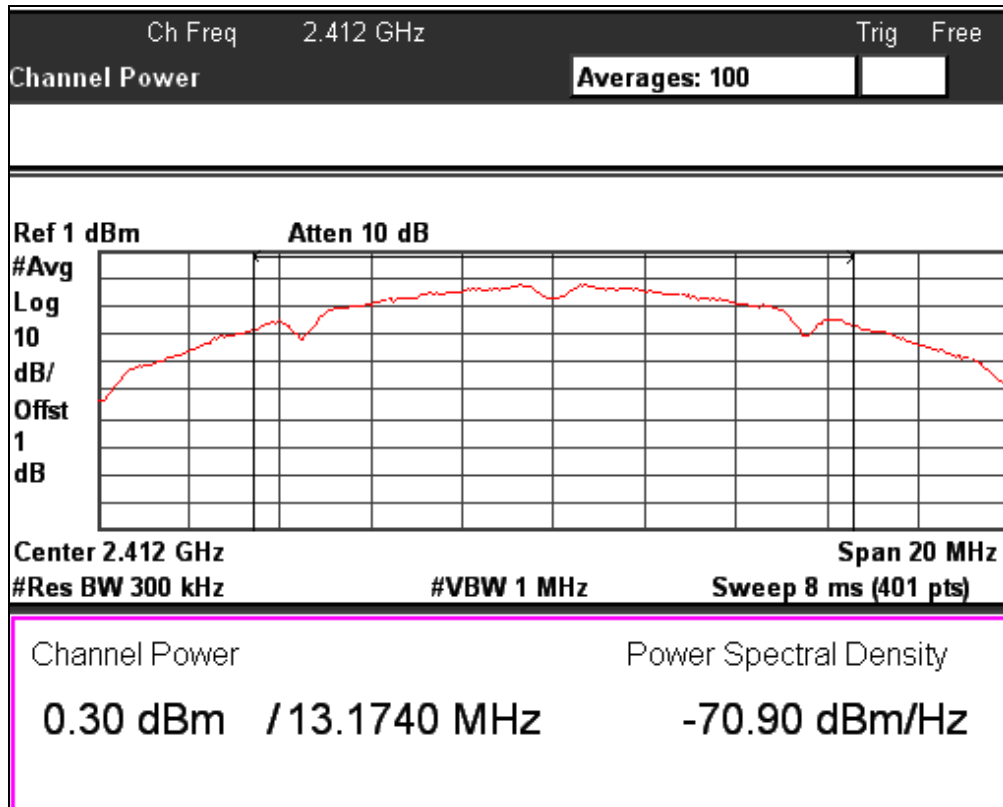
Note: For measurement of Maximum Average conducted output power method AVGSA-1 was used

Test Result:

Cable Loss 1dB Included in the test results

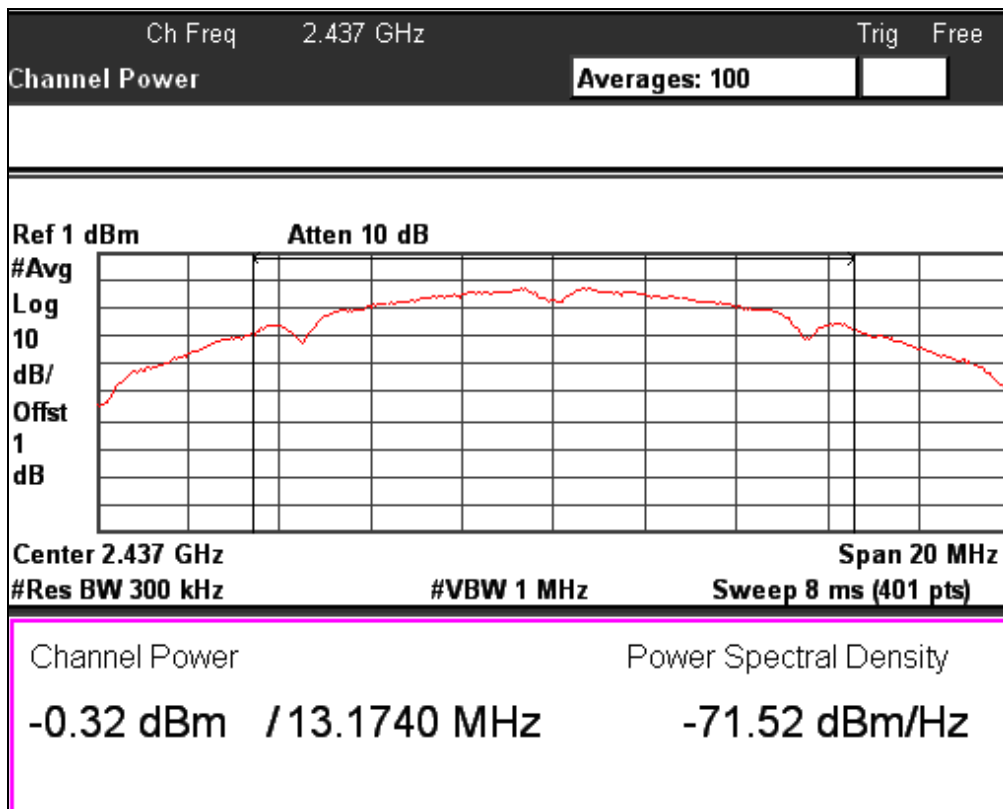
802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Total Average Power (dBm)	Limit (dBm)
b	1	2412	0.30	30
		2437	-0.32	30
		2462	-1.01	30
	2	2412	0.74	30
		2437	0.20	30
		2462	-0.51	30
	5.5	2412	0.85	30
		2437	0.30	30
		2462	-0.44	30
	11	2412	0.56	30
		2437	-0.06	30
		2462	-0.78	30

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Data Rate: 1 Mbps

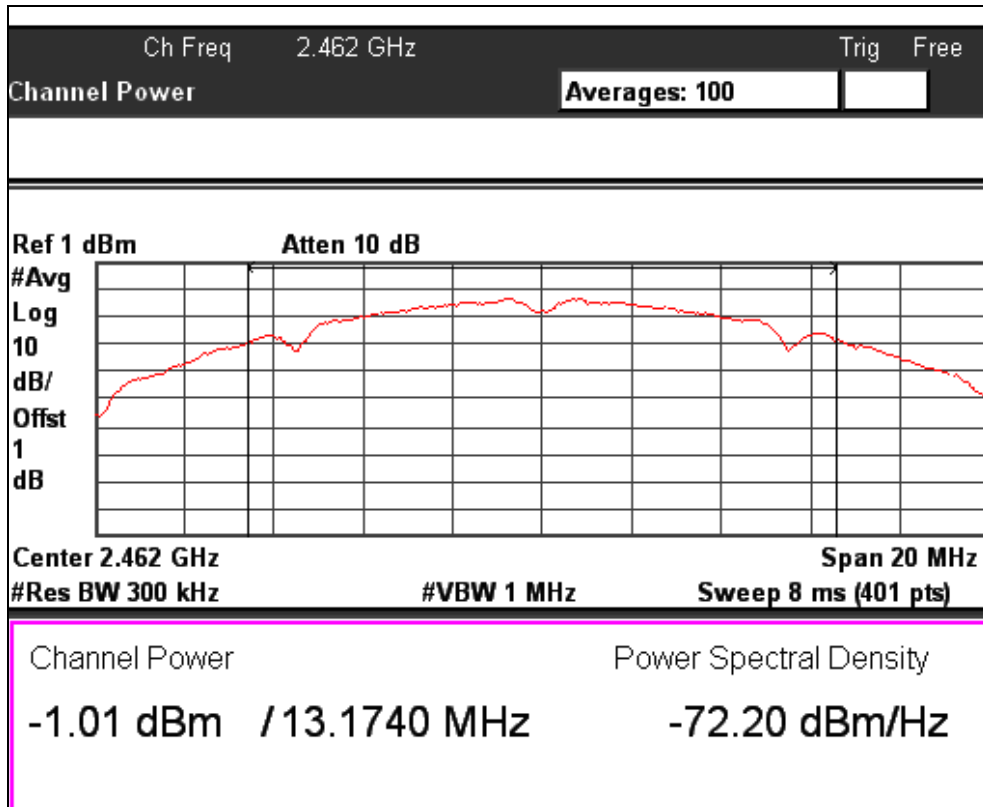
Channel Frequency: 2412 MHz



Data Rate: 1 Mbps

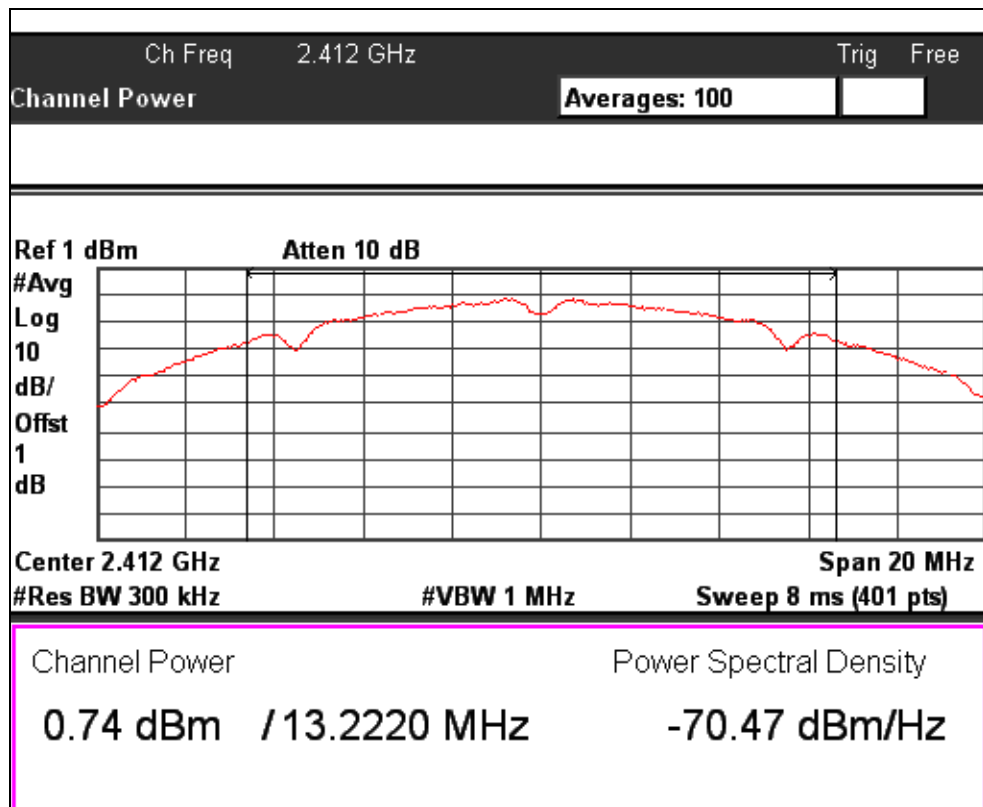
Channel Frequency: 2437 MHz

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Data Rate: 1 Mbps

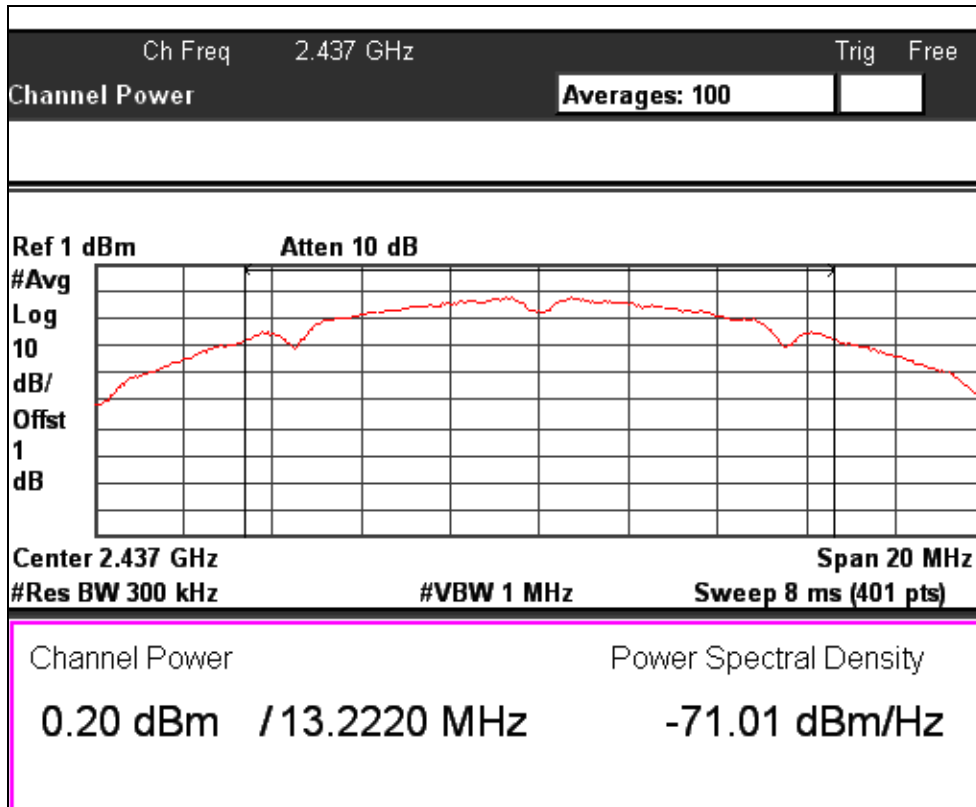
Channel Frequency: 2462 MHz



Data Rate: 2 Mbps

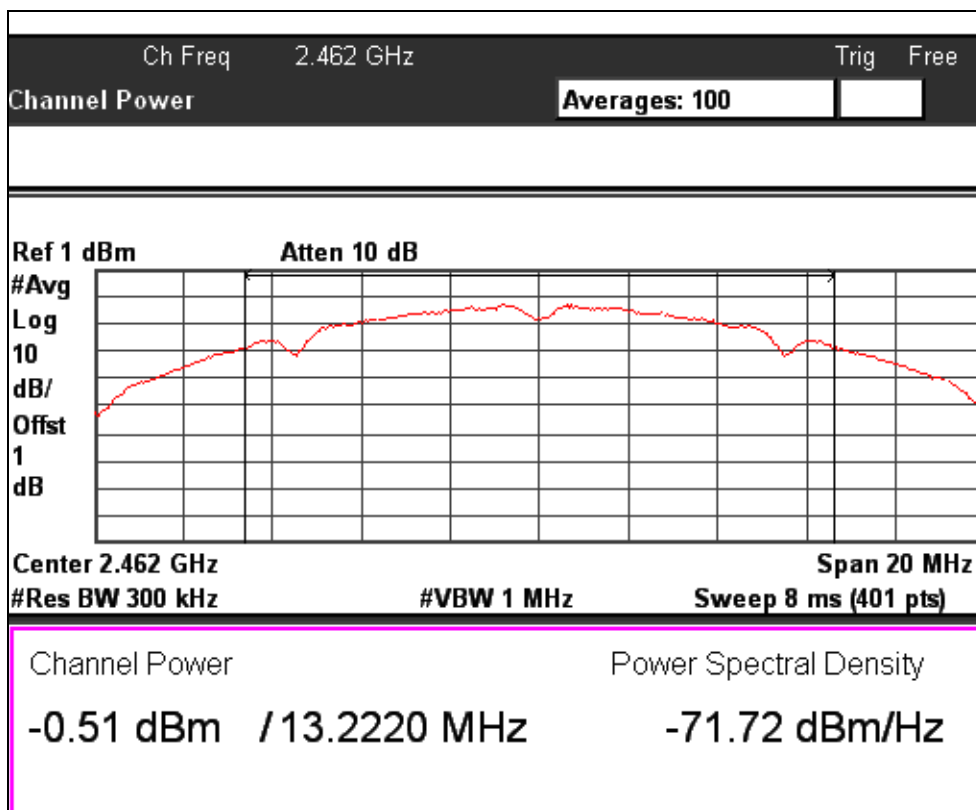
Channel Frequency: 2412 MHz

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Data Rate: 2 Mbps

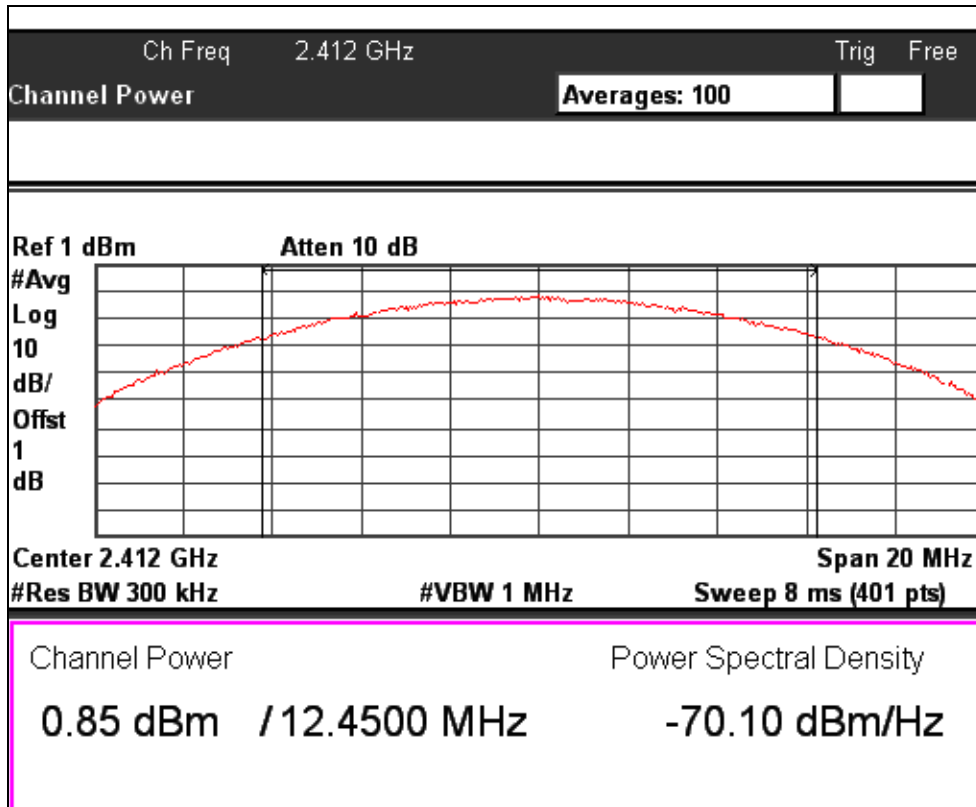
Channel Frequency: 2437 MHz



Data Rate: 2 Mbps

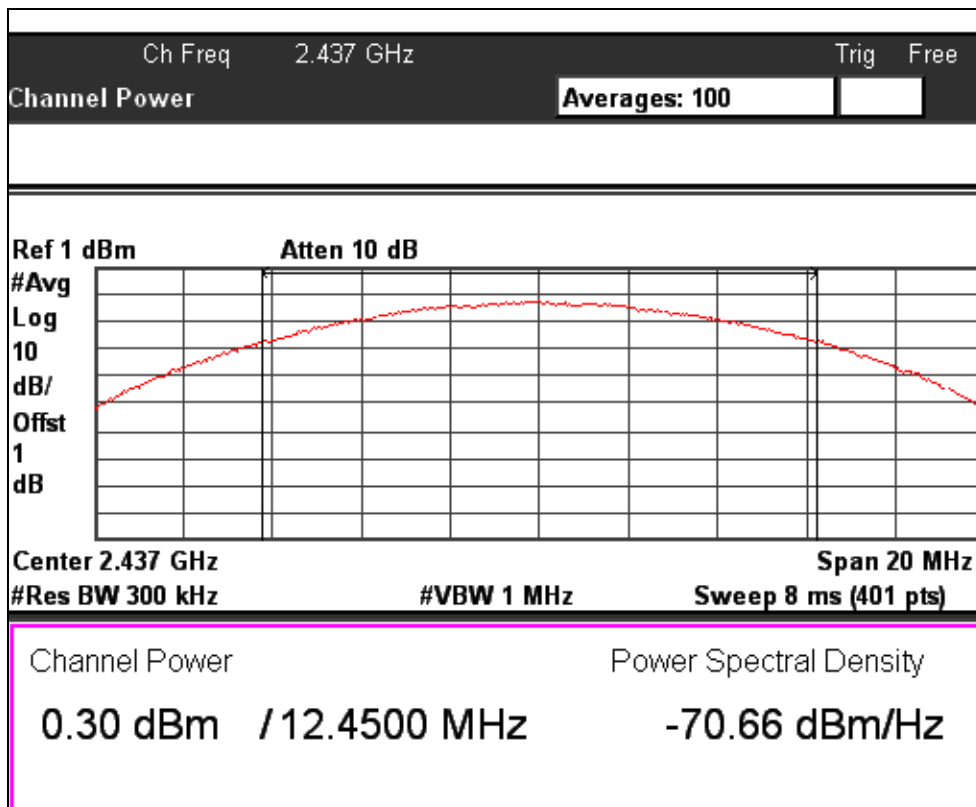
Channel Frequency: 2462 MHz

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Data Rate: 5.5 Mbps

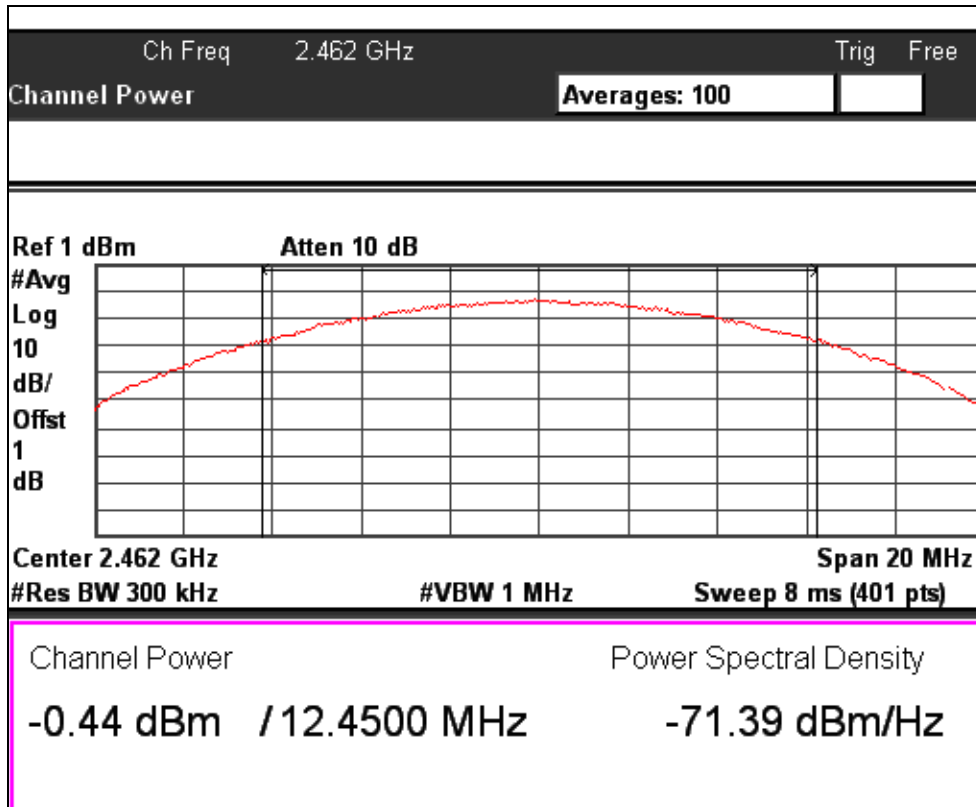
Channel Frequency: 2412 MHz



Data Rate: 5.5 Mbps

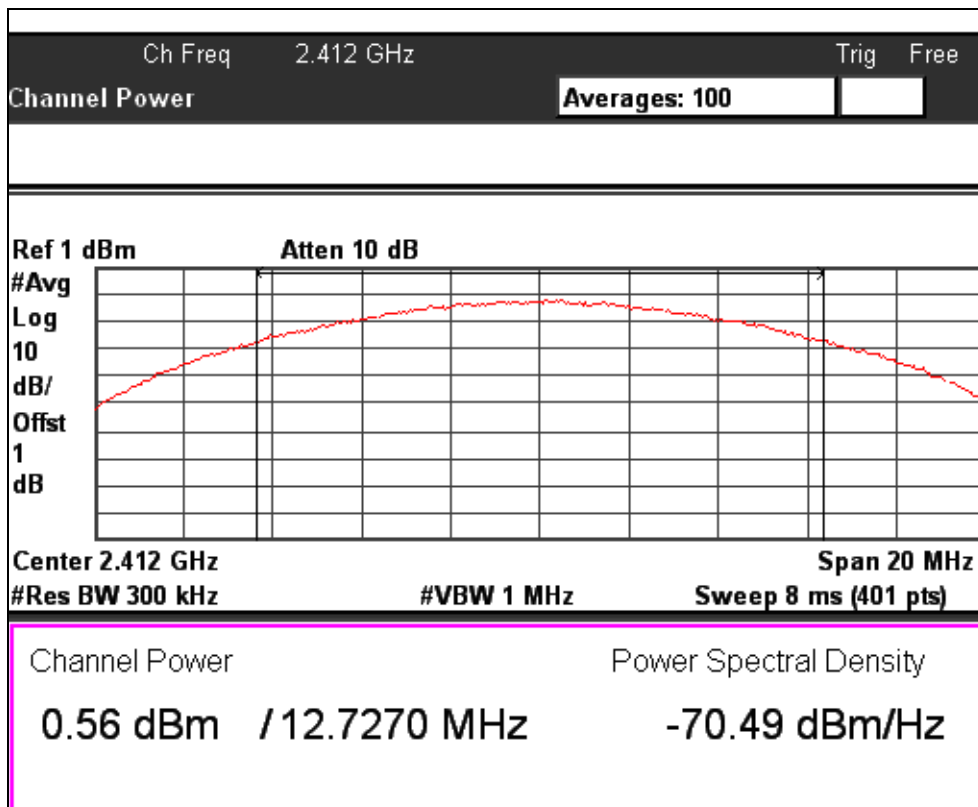
Channel Frequency: 2437 MHz

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Data Rate: 5.5 Mbps

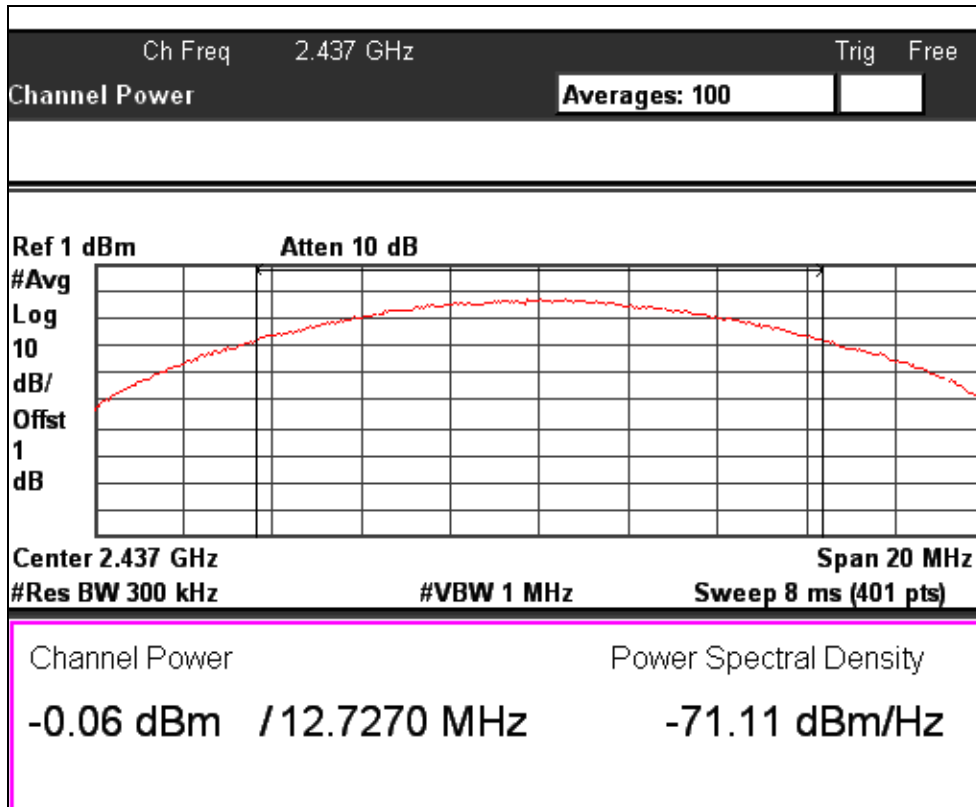
Channel Frequency: 2462 MHz



Data Rate: 11 Mbps

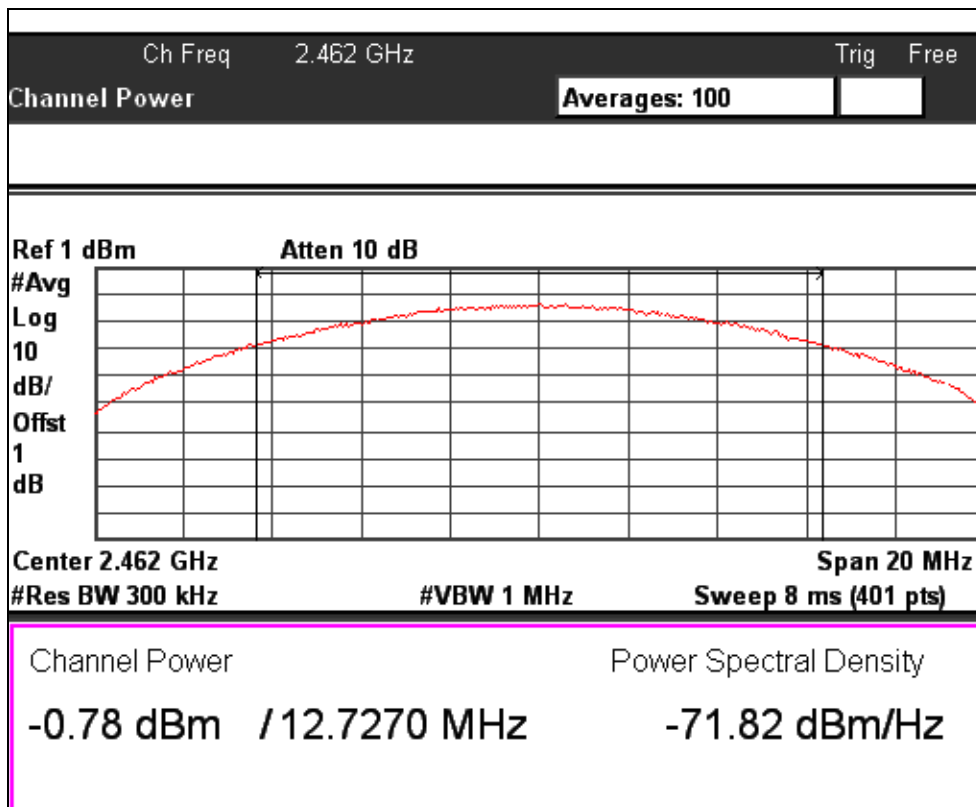
Channel Frequency: 2412 MHz

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Data Rate: 11 Mbps

Channel Frequency: 2437 MHz



Data Rate: 11 Mbps

Channel Frequency: 2462 MHz

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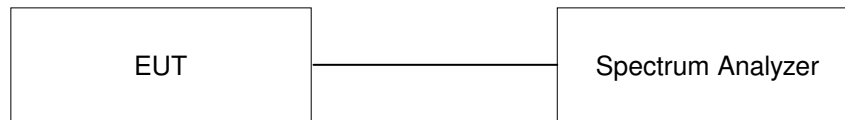
**Maximum Power Spectral Density
Result**

**Section 15.247(e)
Pass**

Test Specification FCC Part 15 Subpart C
 Detector Function Average
 Requirement For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm.

Note: For measurement of Maximum power spectral density option 1 was used (i.e AVGPAD-1)

Test Method:

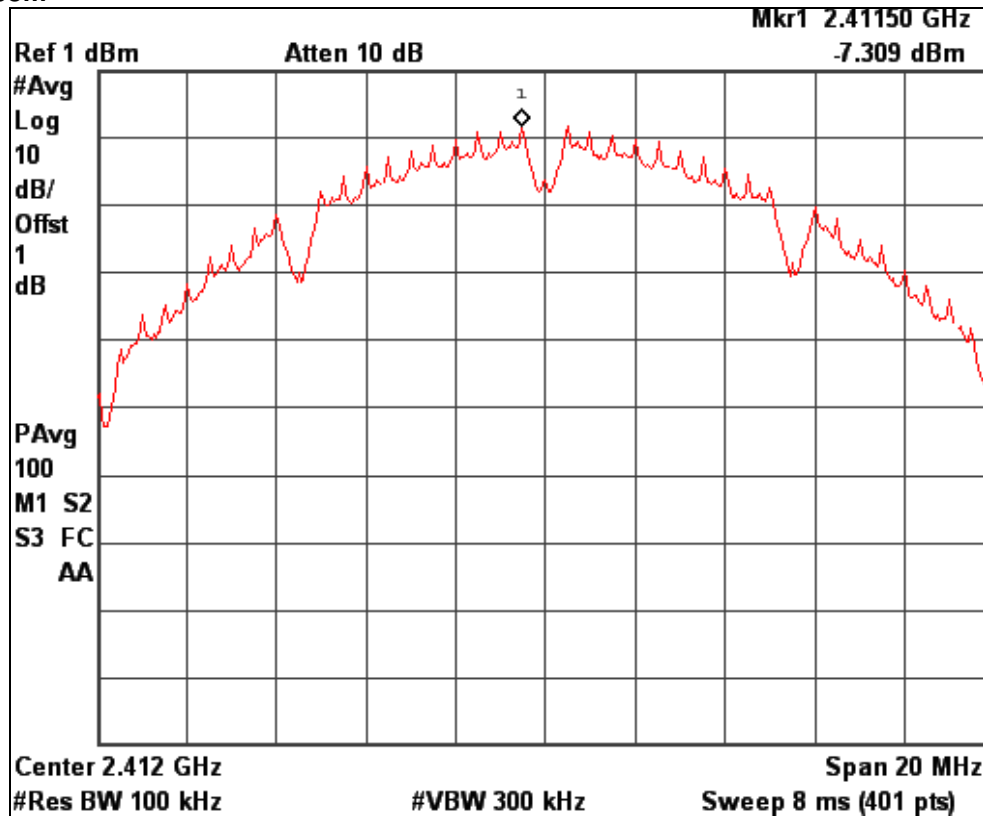


Test Result:

Cable Loss 1dB Included in the test results

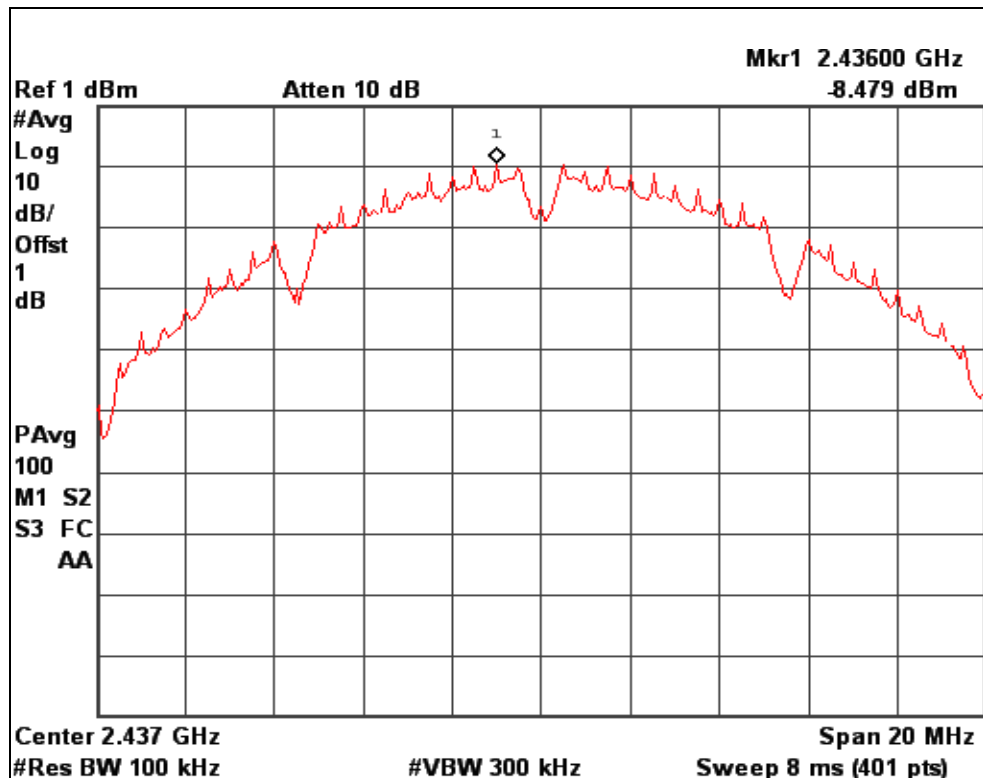
802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Total PSD (dBm)	Limit (dBm)
b	1	2412	-7.30	8
		2437	-8.47	8
		2462	-8.98	8
	2	2412	-8.46	8
		2437	-8.68	8
		2462	-9.21	8
	5.5	2412	-6.79	8
		2437	-7.53	8
		2462	-8.10	8
	11	2412	-7.46	8
		2437	-8.38	8
		2462	-9.15	8

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Data Rate: 1 Mbps

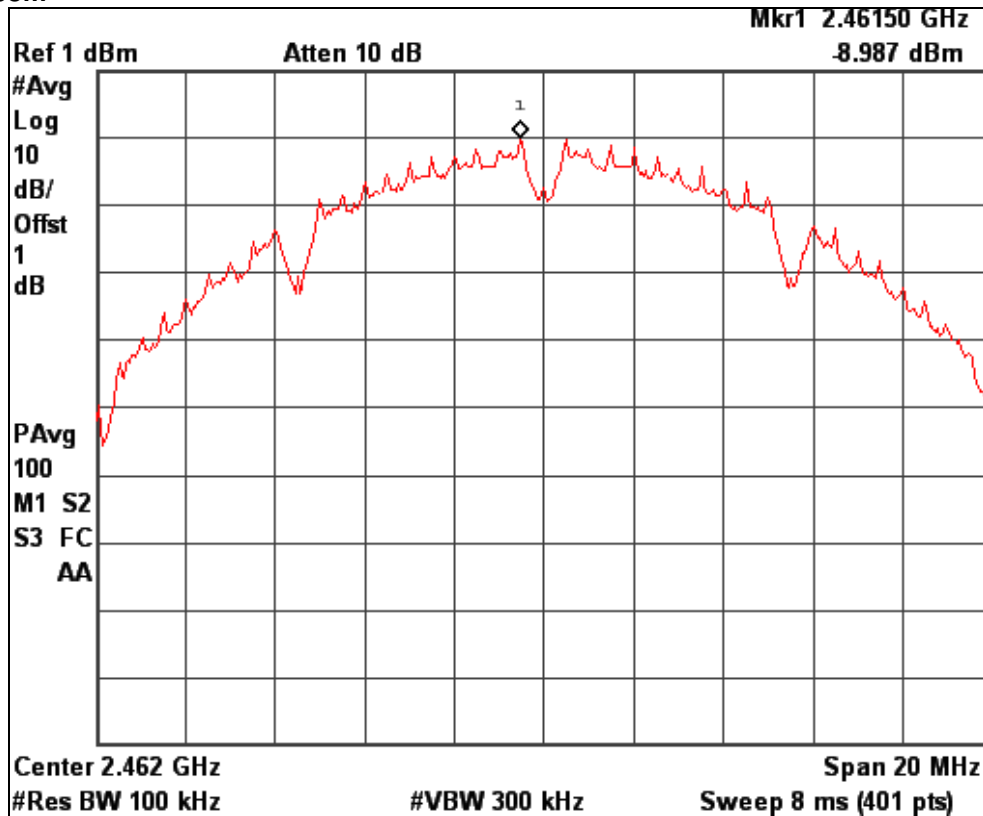
Channel Frequency: 2412 MHz



Data Rate: 1 Mbps

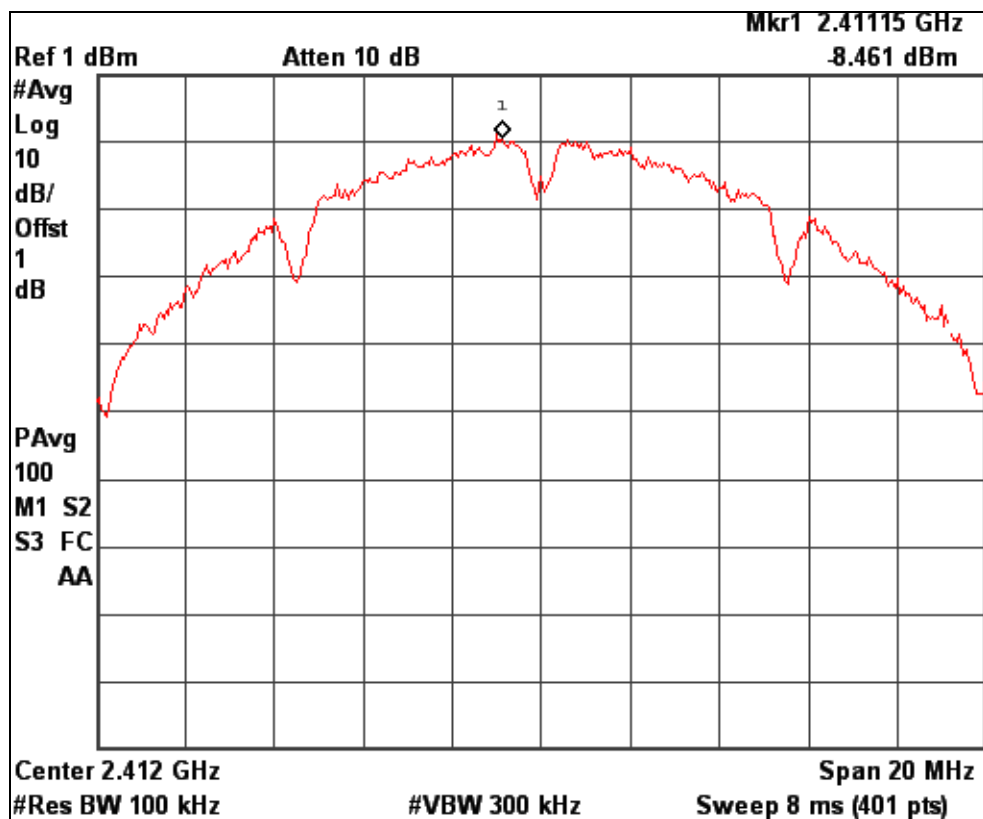
Channel Frequency: 2437 MHz

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Data Rate: 1 Mbps

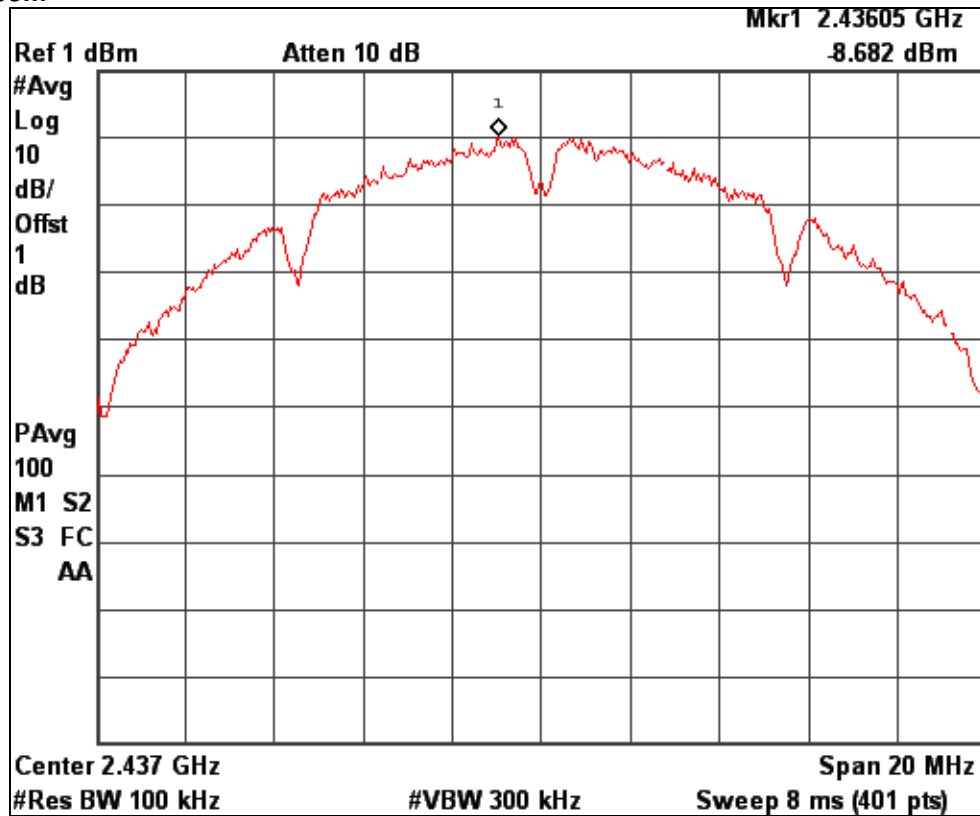
Channel Frequency: 2462 MHz



Data Rate: 2 Mbps

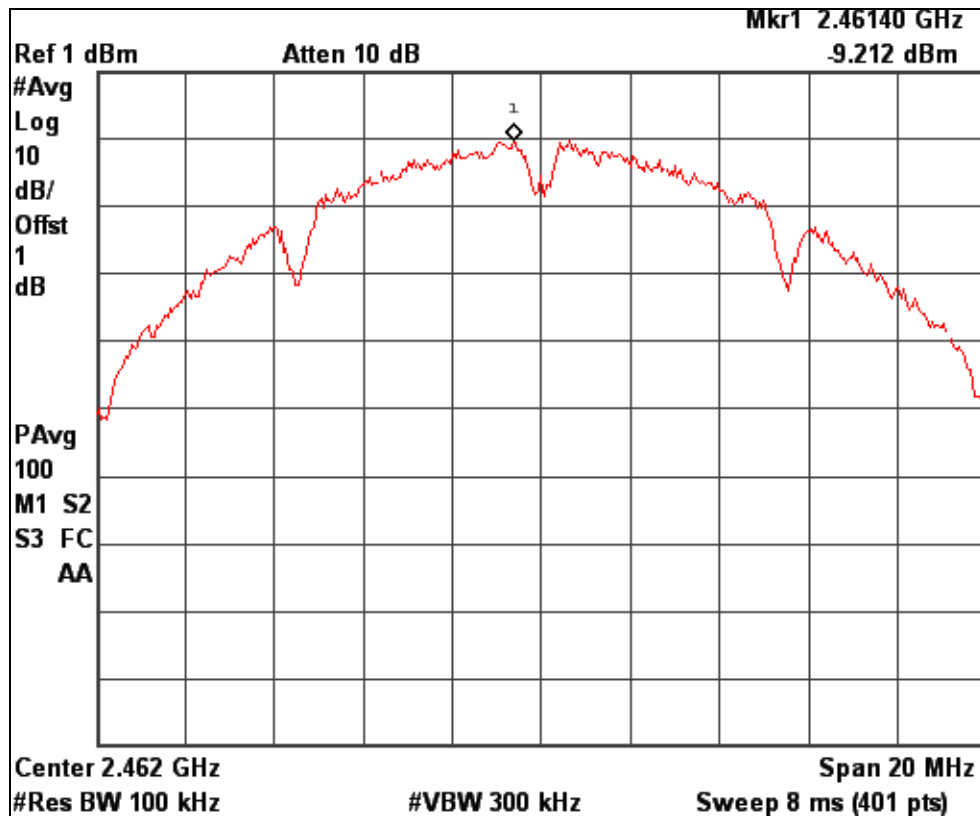
Channel Frequency: 2412 MHz

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Data Rate: 2 Mbps

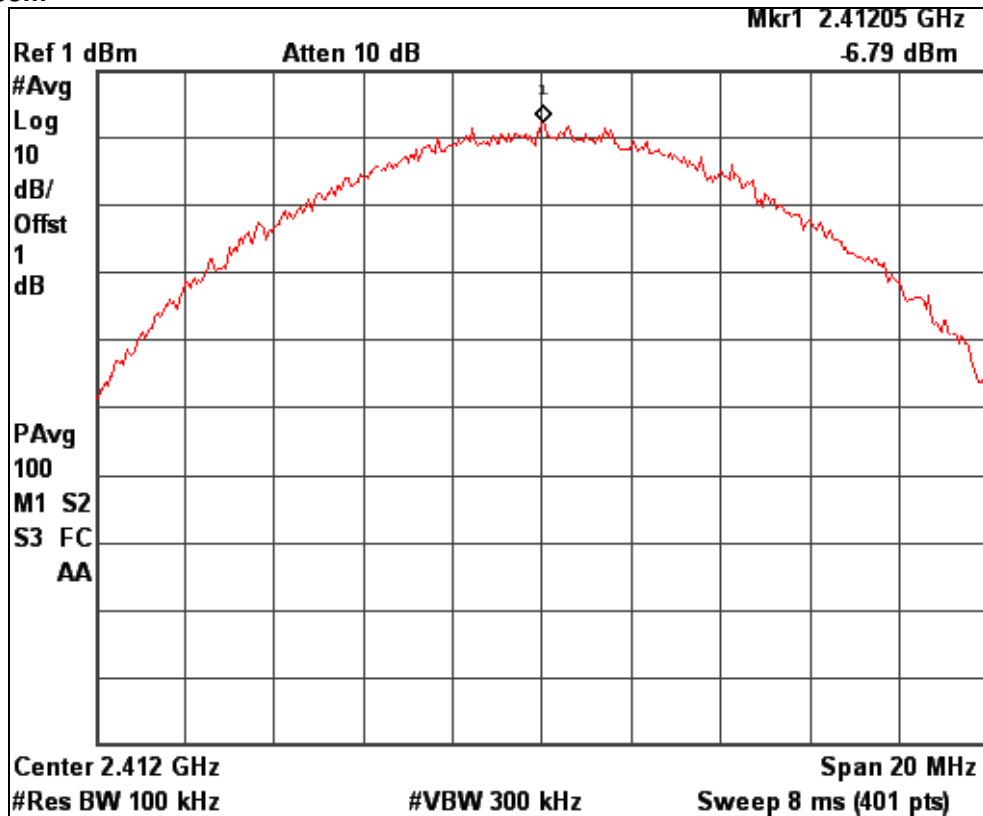
Channel Frequency: 2437 MHz



Data Rate: 2 Mbps

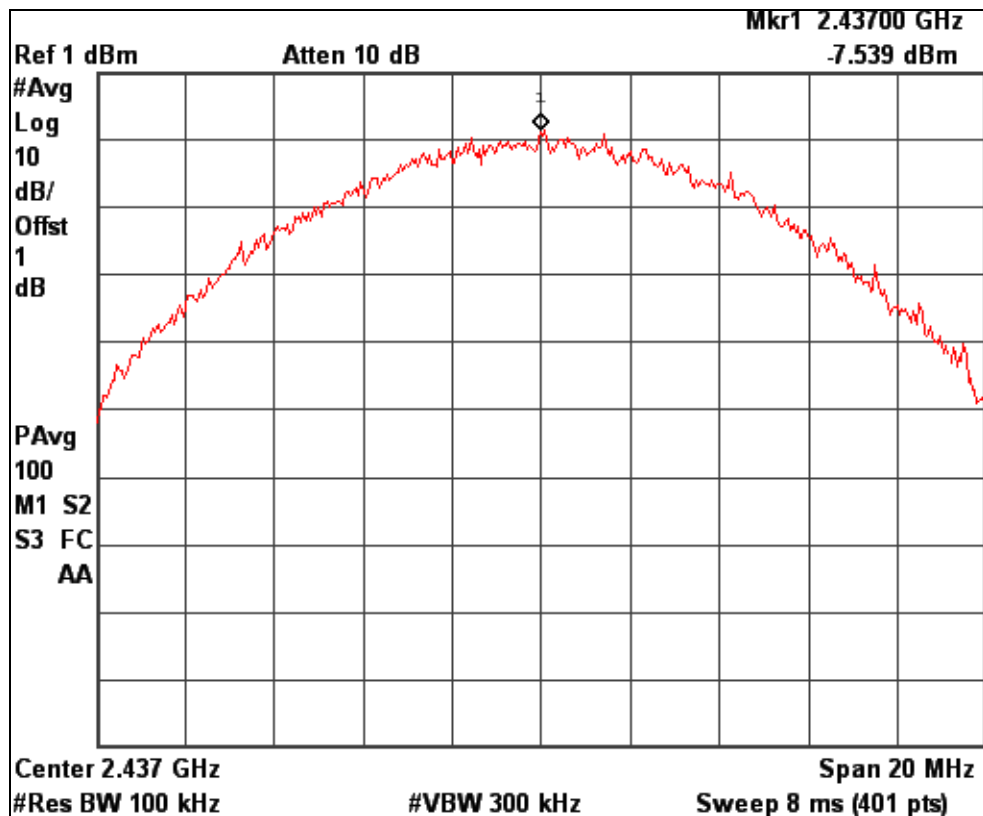
Channel Frequency: 2462 MHz

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Data Rate: 5.5 Mbps

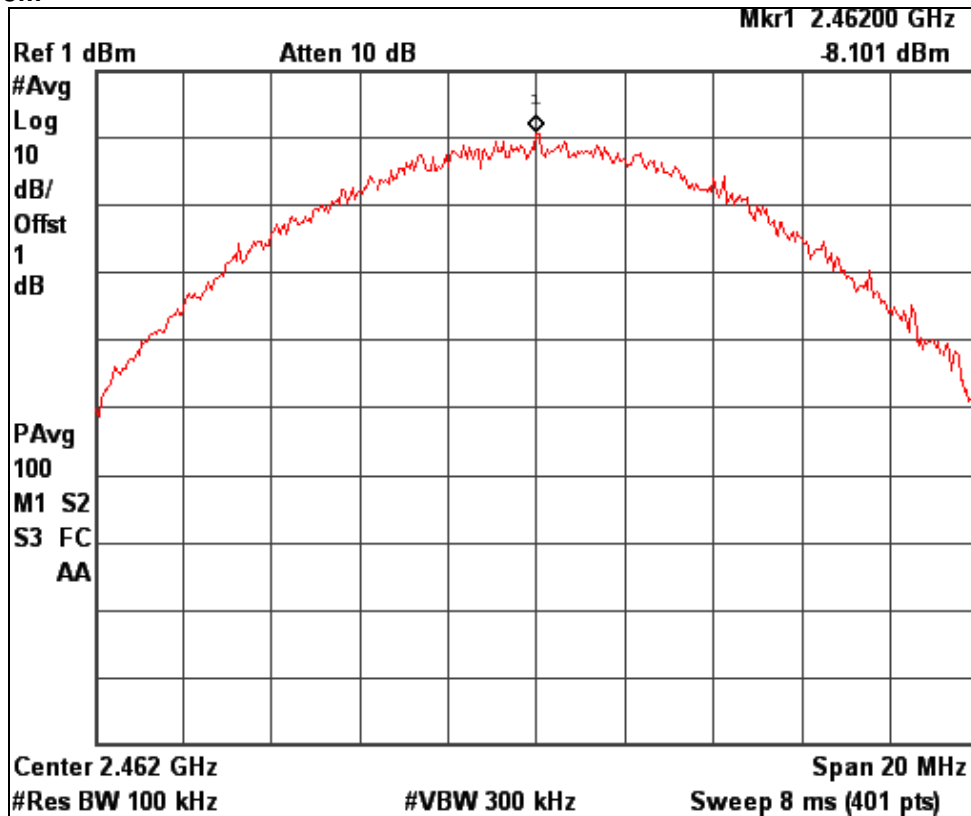
Channel Frequency: 2412 MHz



Data Rate: 5.5 Mbps

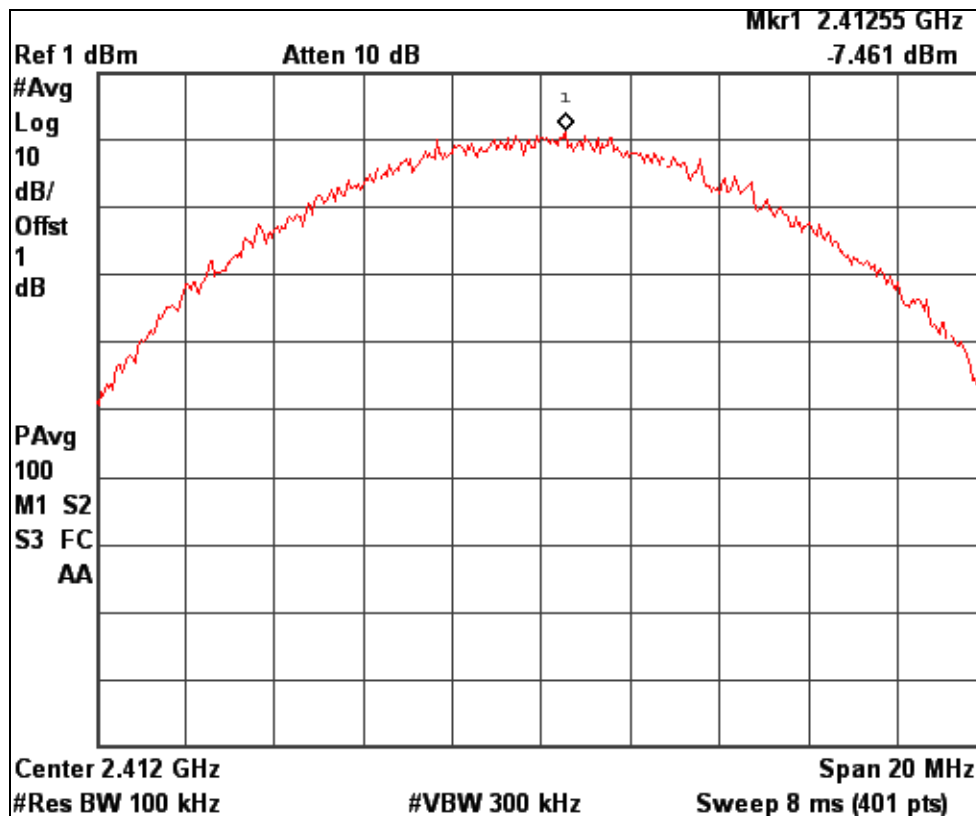
Channel Frequency: 2437 MHz

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Data Rate: 5.5 Mbps

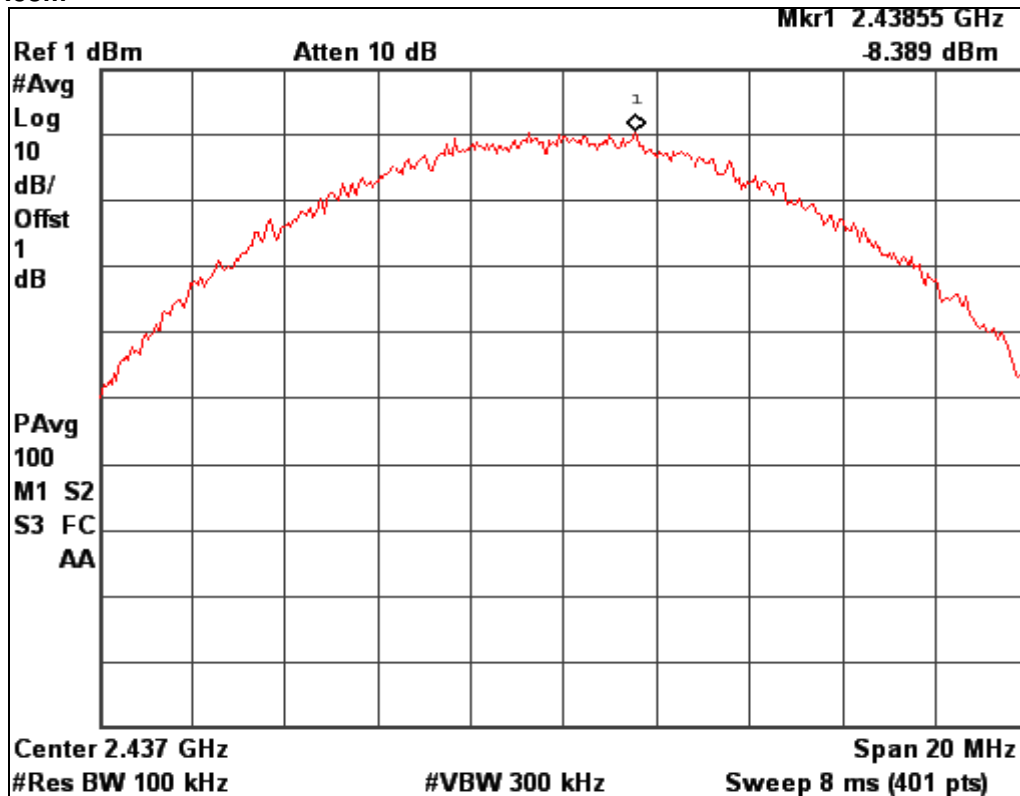
Channel Frequency: 2462 MHz



Data Rate: 11 Mbps

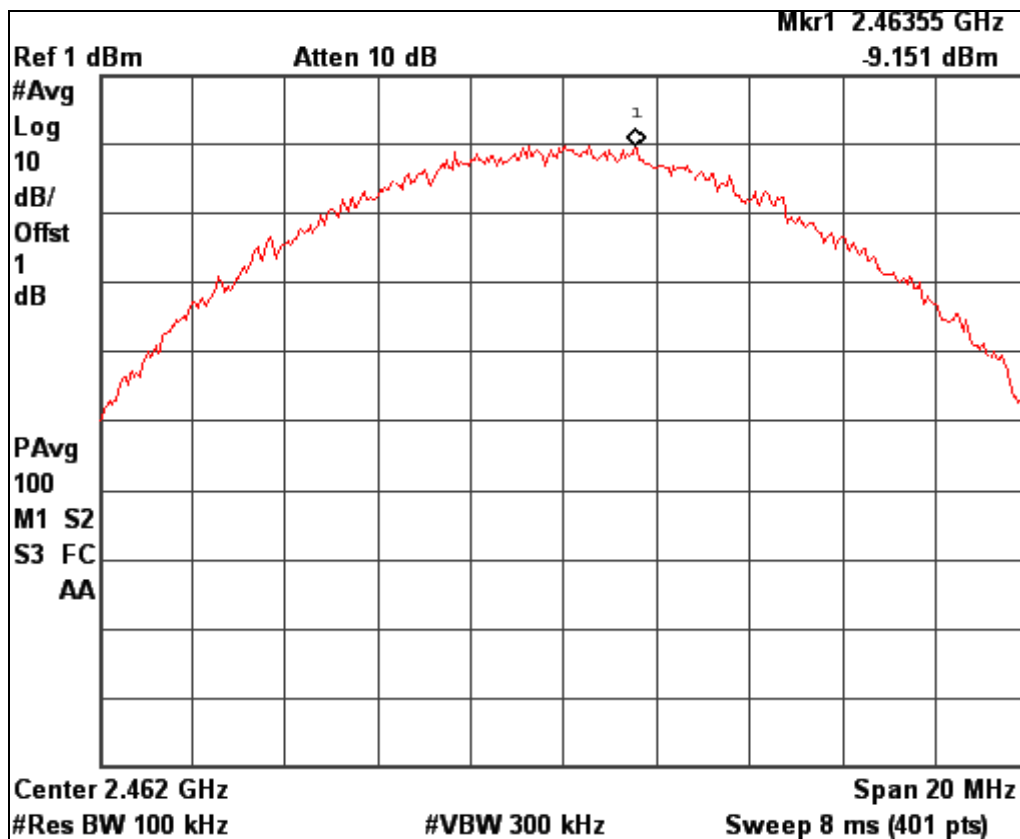
Channel Frequency: 2412 MHz

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Data Rate: 11 Mbps

Channel Frequency: 2437 MHz



Data Rate: 11 Mbps

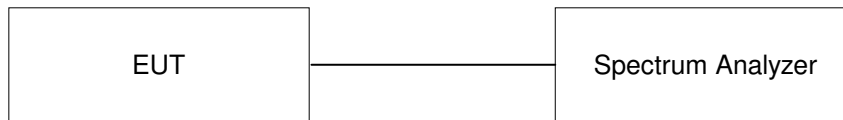
Channel Frequency: 2462 MHz

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6 dB Bandwidth
Result

Section 15.247(a) (2)
Pass

Test Specification FCC Part 15 Subpart C
Requirement The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Method:

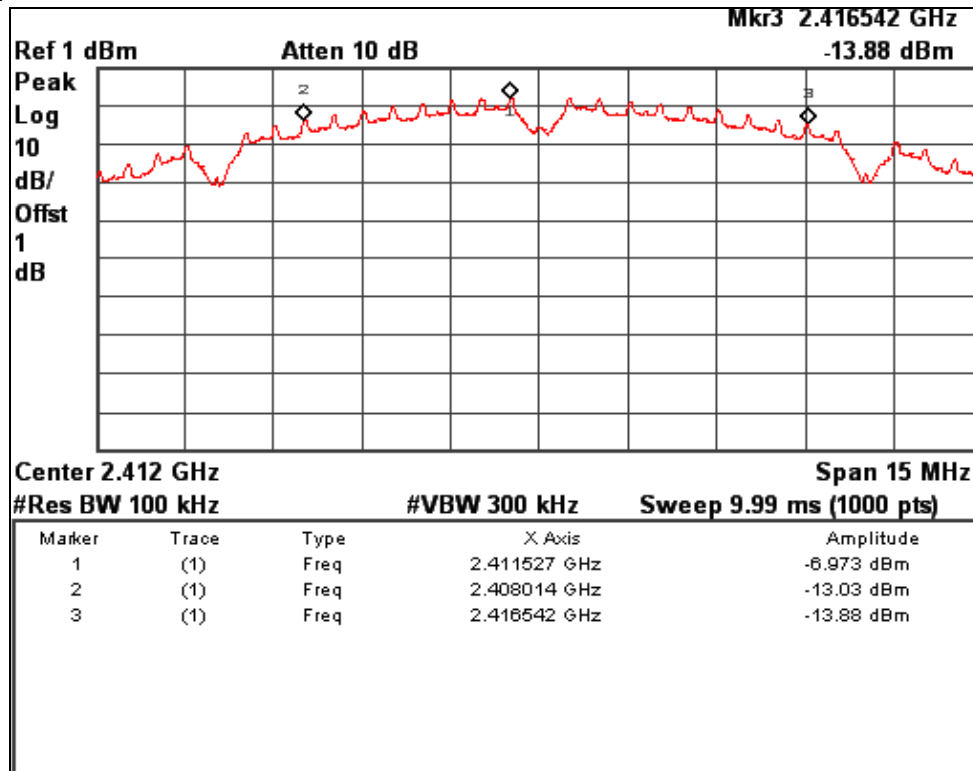


Test Result:

Cable Loss 1dB Included in the test results

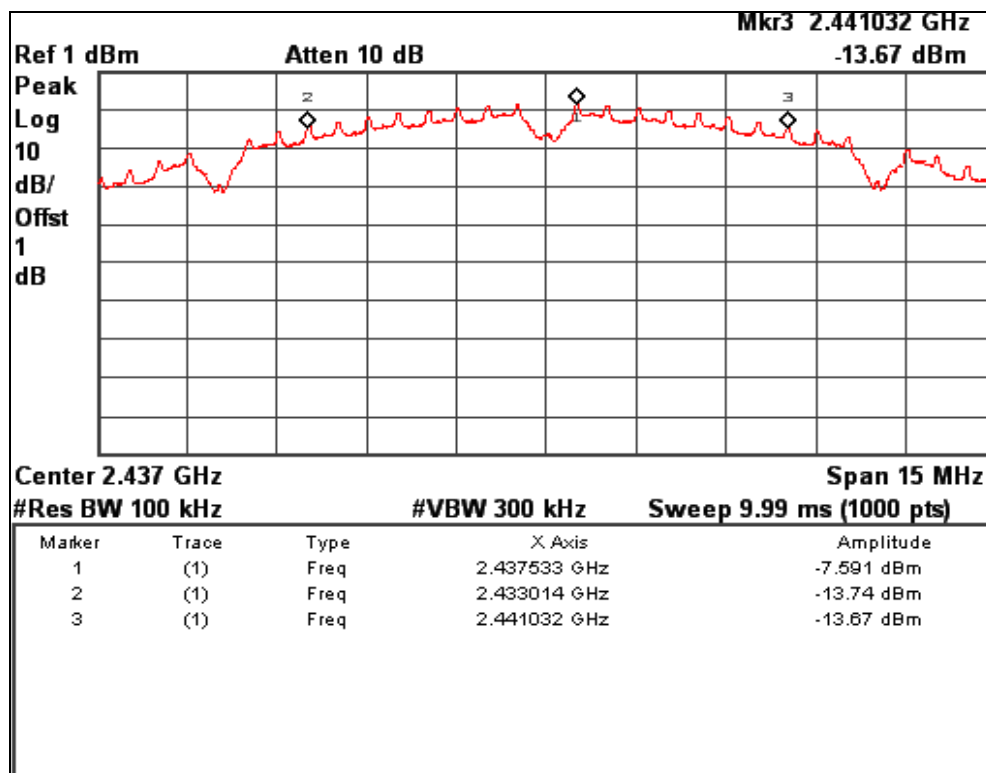
802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	6 dB Bandwidth (MHz)	99% OBW (MHz)
b	1	2412	8.52	13.24
		2437	8.01	13.18
		2462	8.02	13.11
	2	2412	7.75	13.24
		2437	7.68	13.25
		2462	7.60	13.18
	5.5	2412	7.37	12.42
		2437	7.18	12.48
		2462	7.25	12.46
	11	2412	7.43	12.75
		2437	7.81	12.72
		2462	7.56	12.71

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Data Rate: 1 Mbps

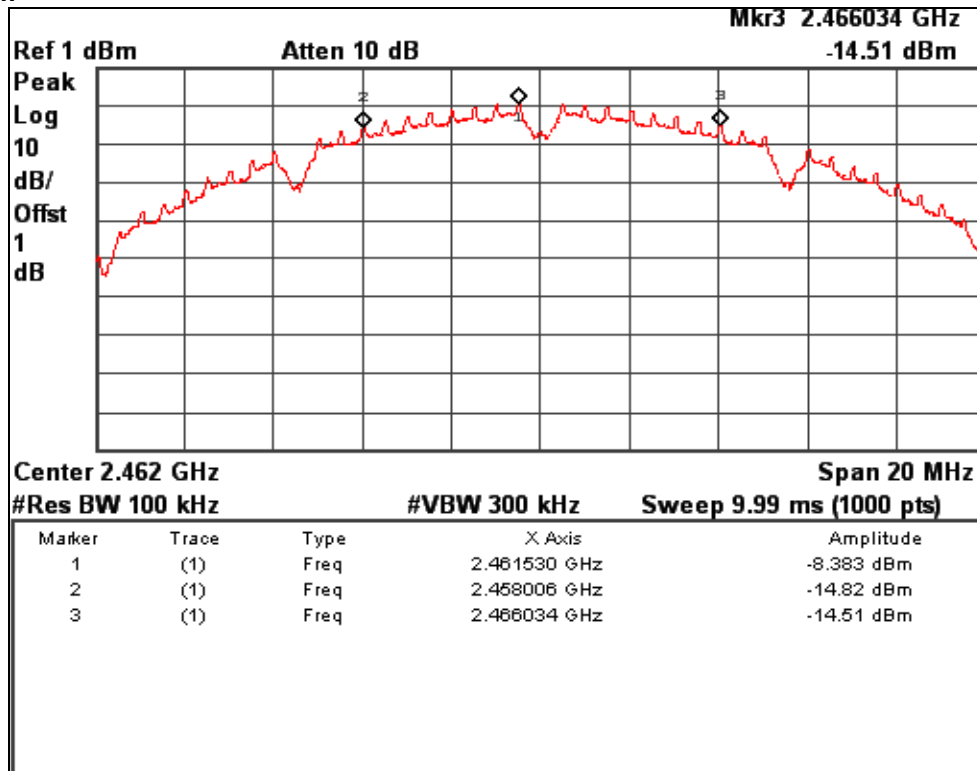
Channel Frequency: 2412 MHz



Data Rate: 1 Mbps

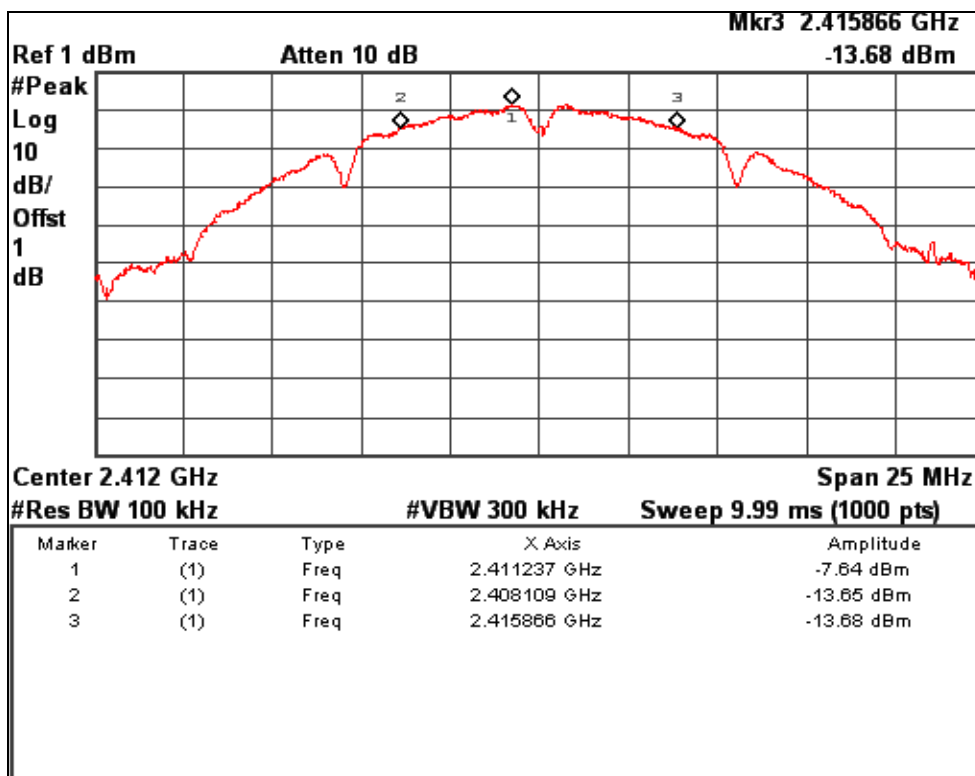
Channel Frequency: 2437 MHz

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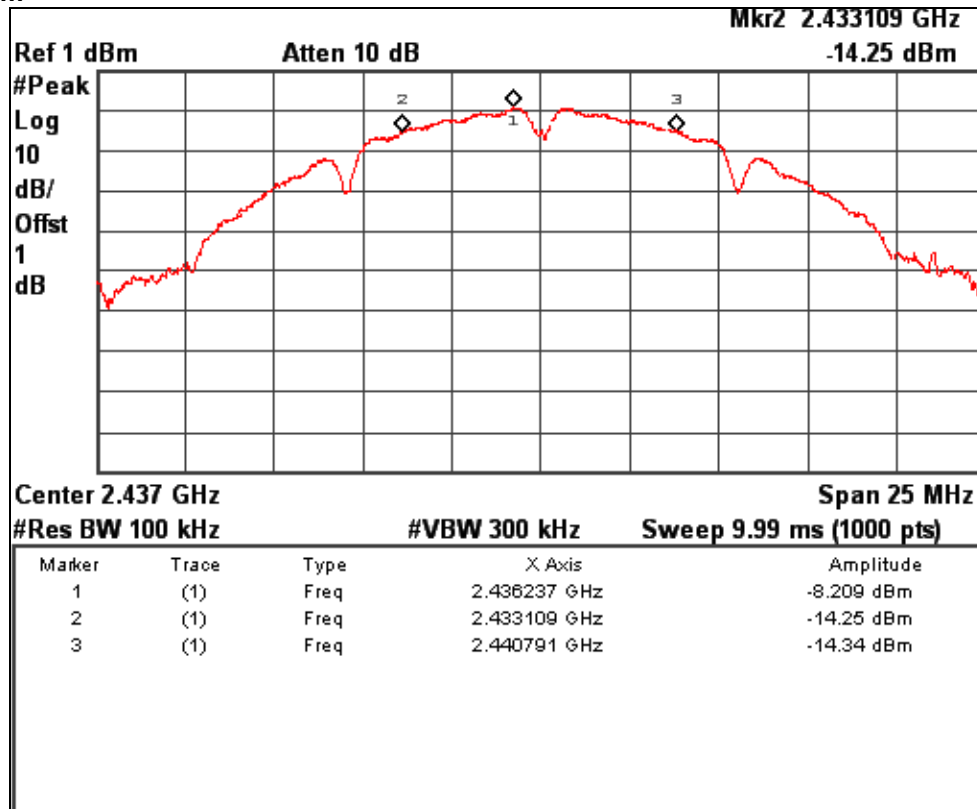
Data Rate: 1 Mbps

Channel Frequency: 2462 MHz



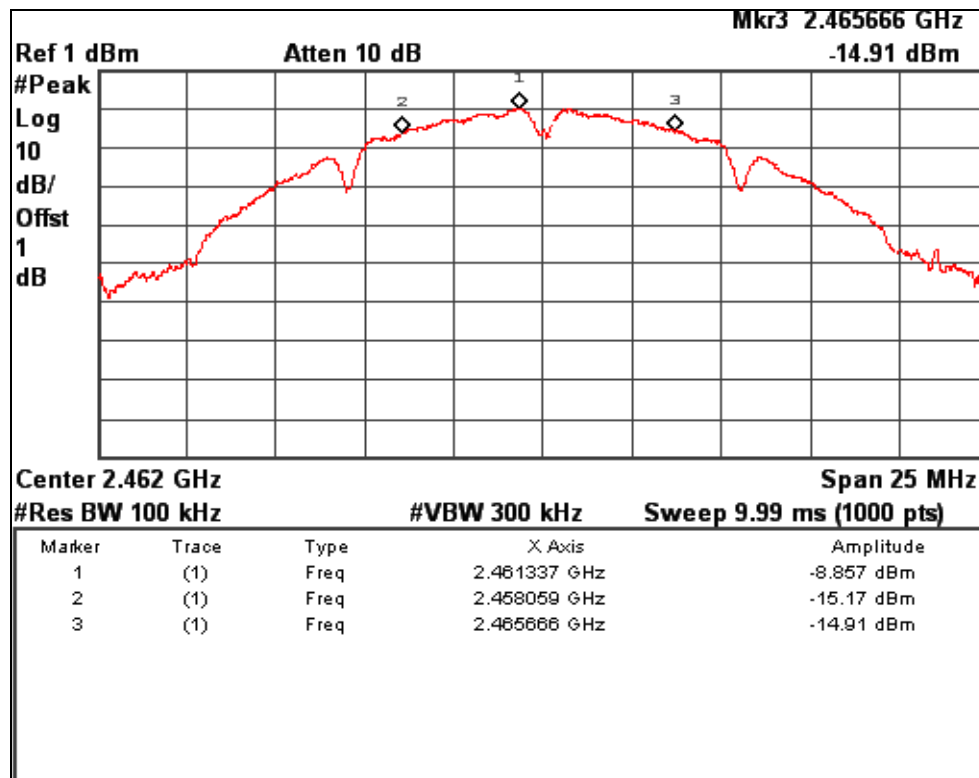
Data Rate: 2 Mbps

Channel Frequency: 2412 MHz



Data Rate: 2 Mbps

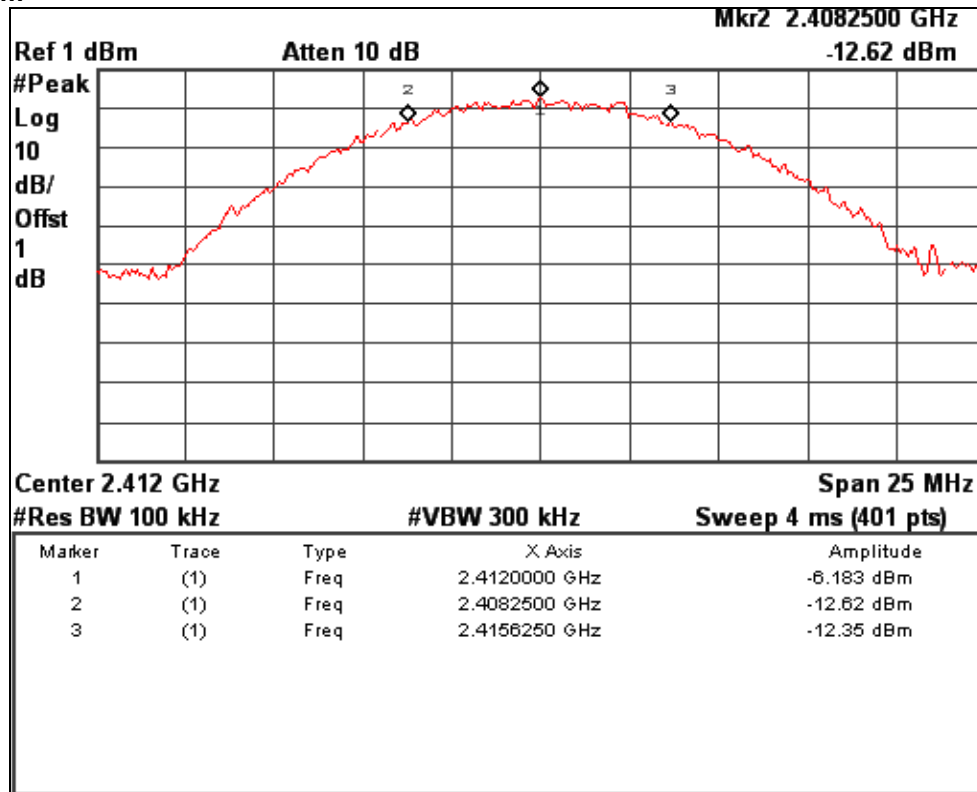
Channel Frequency: 2437 MHz



Data Rate: 2 Mbps

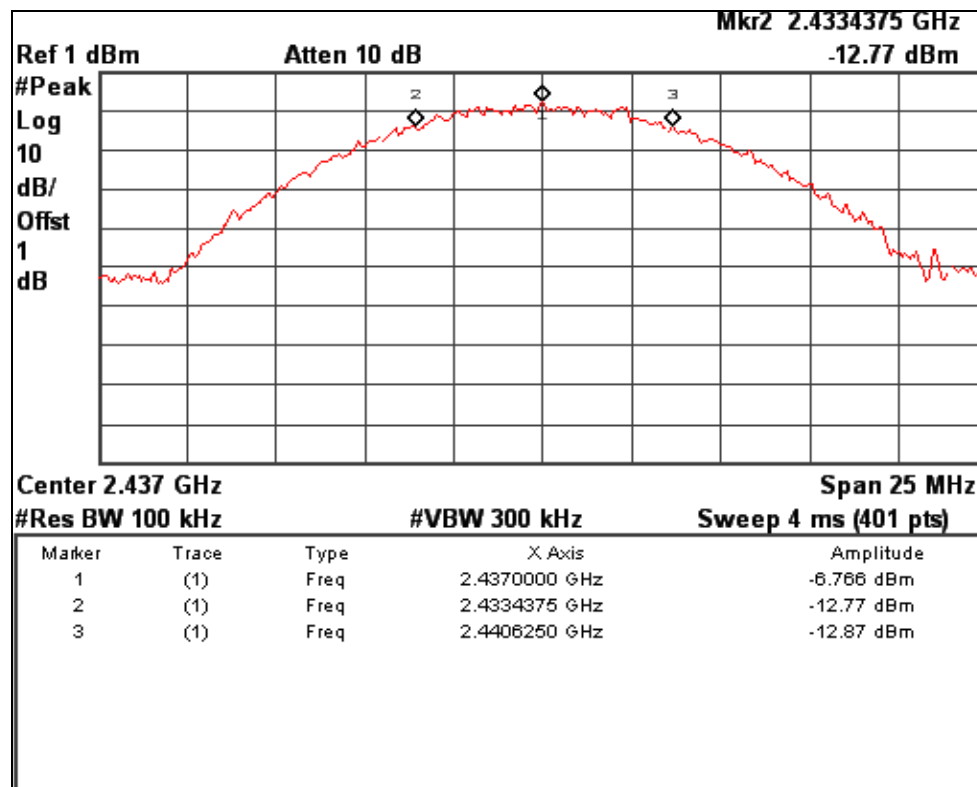
Channel Frequency: 2462 MHz

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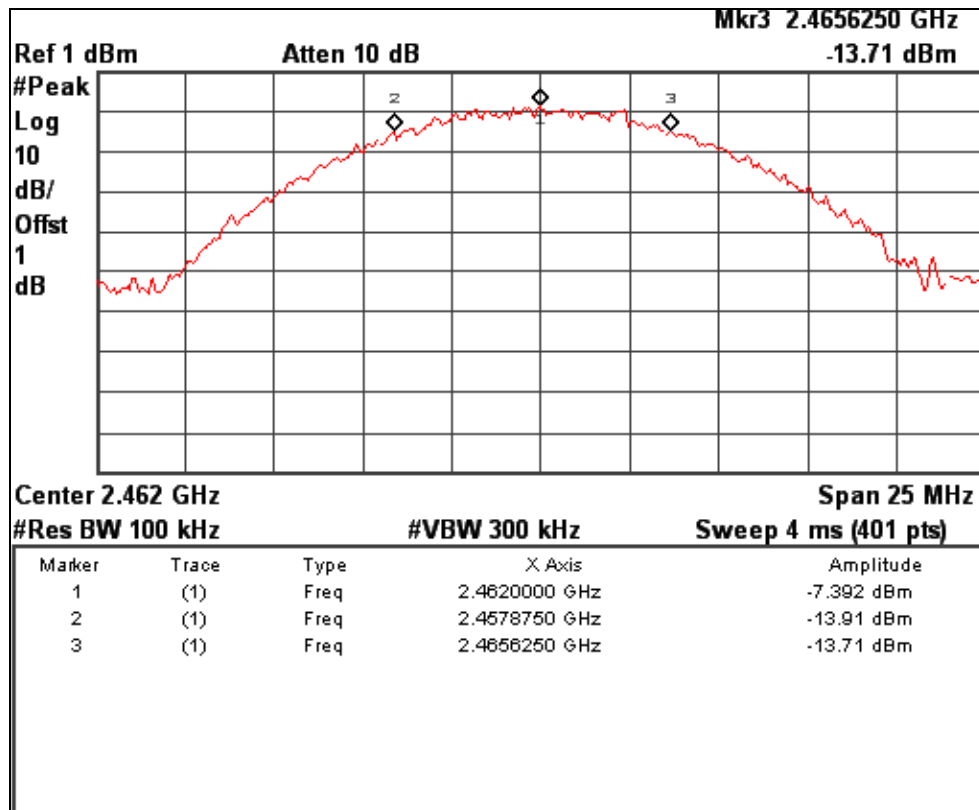
Data Rate: 5.5 Mbps

Channel Frequency: 2412 MHz



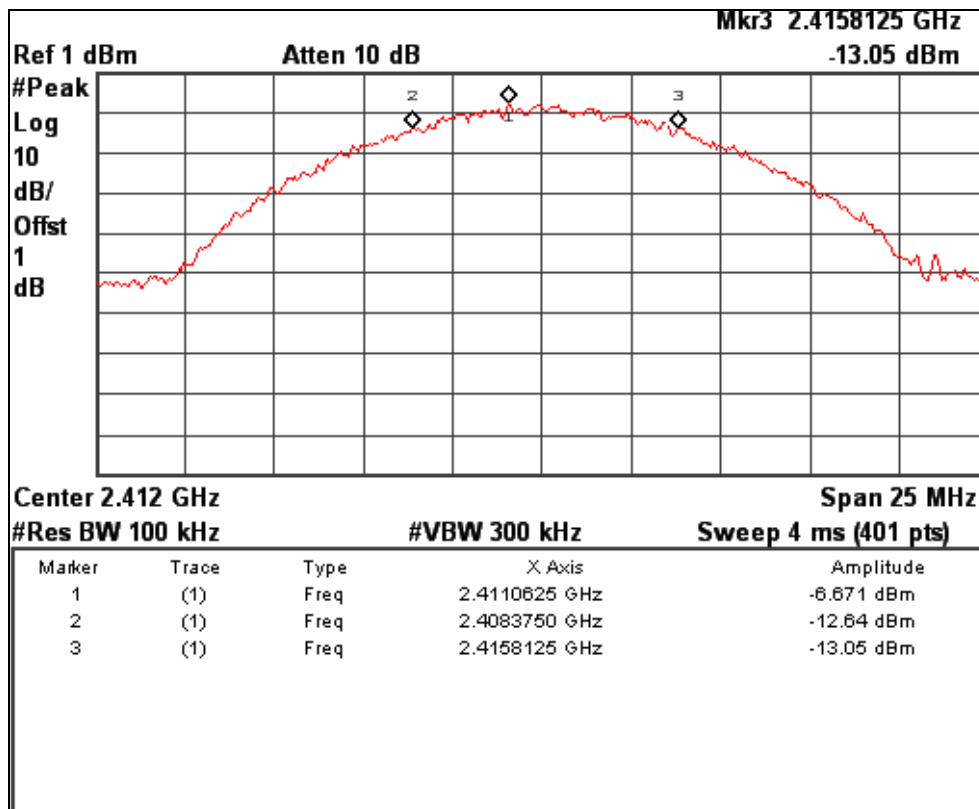
Data Rate: 5.5 Mbps

Channel Frequency: 2437 MHz



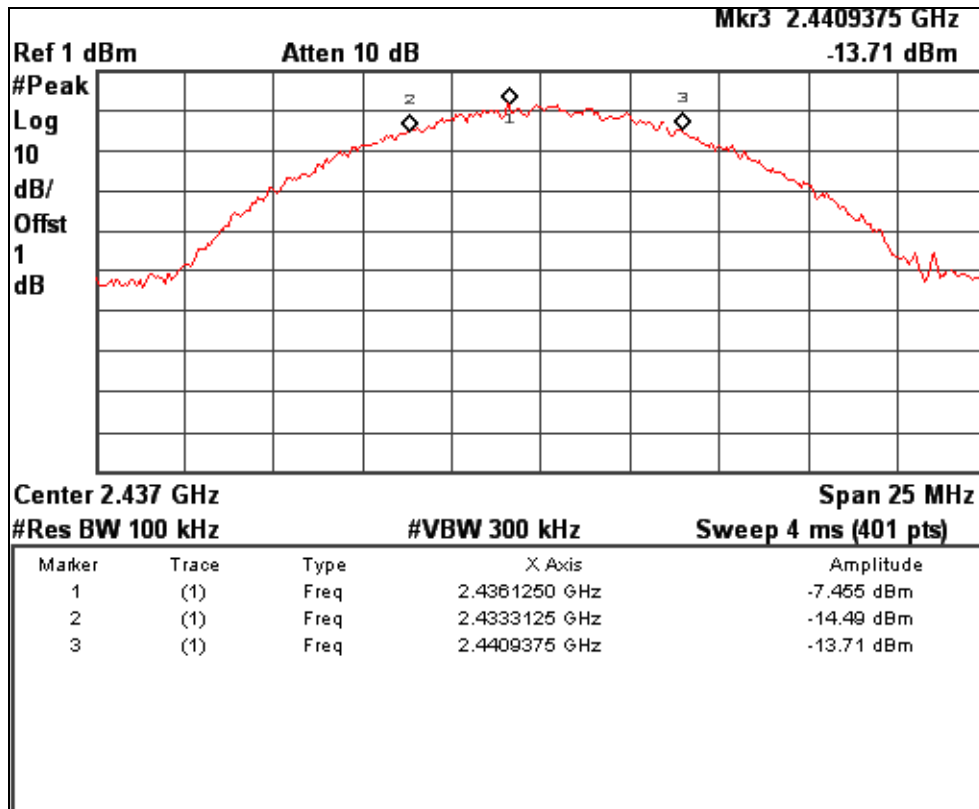
Data Rate: 5.5 Mbps

Channel Frequency: 2462 MHz



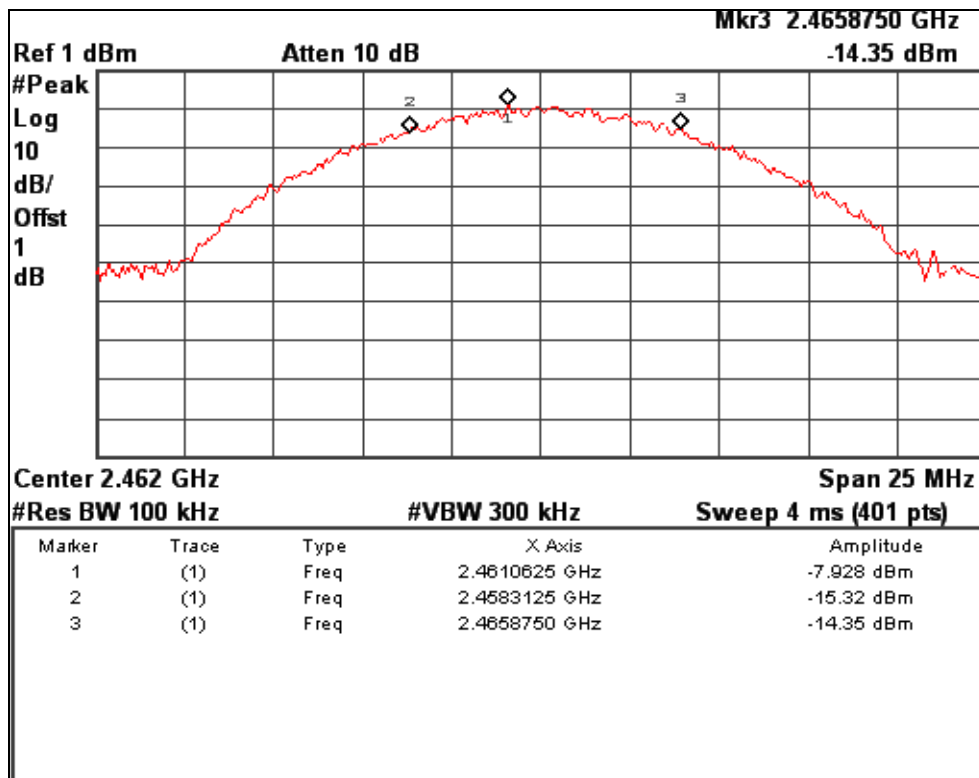
Data Rate: 11 Mbps

Channel Frequency: 2412 MHz



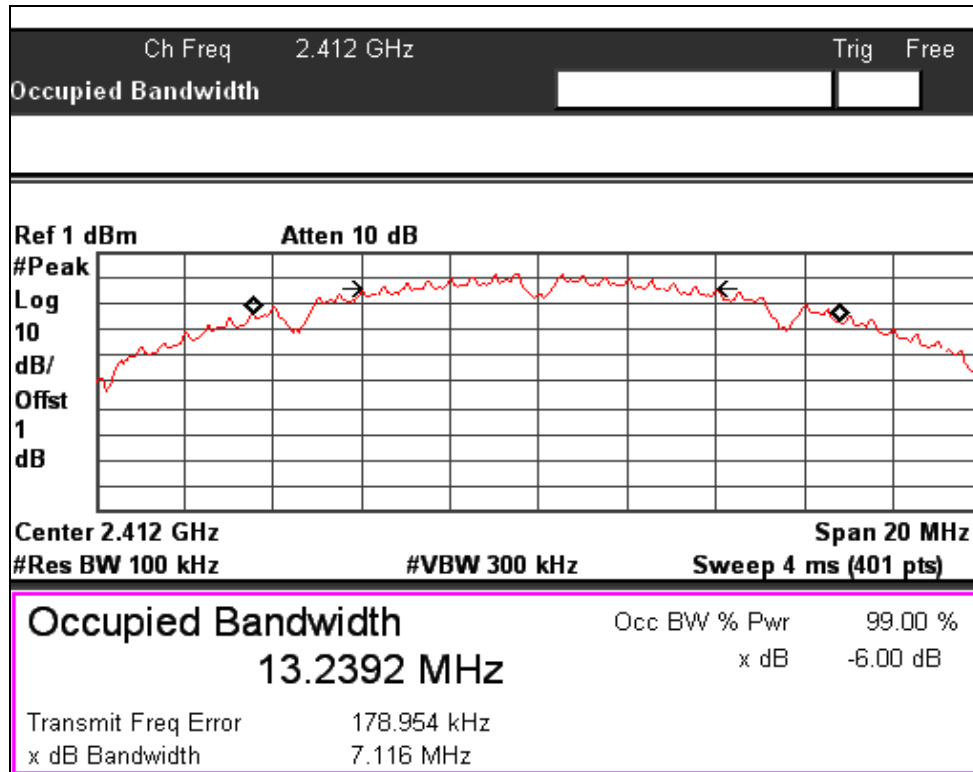
Data Rate: 11 Mbps

Channel Frequency: 2437 MHz



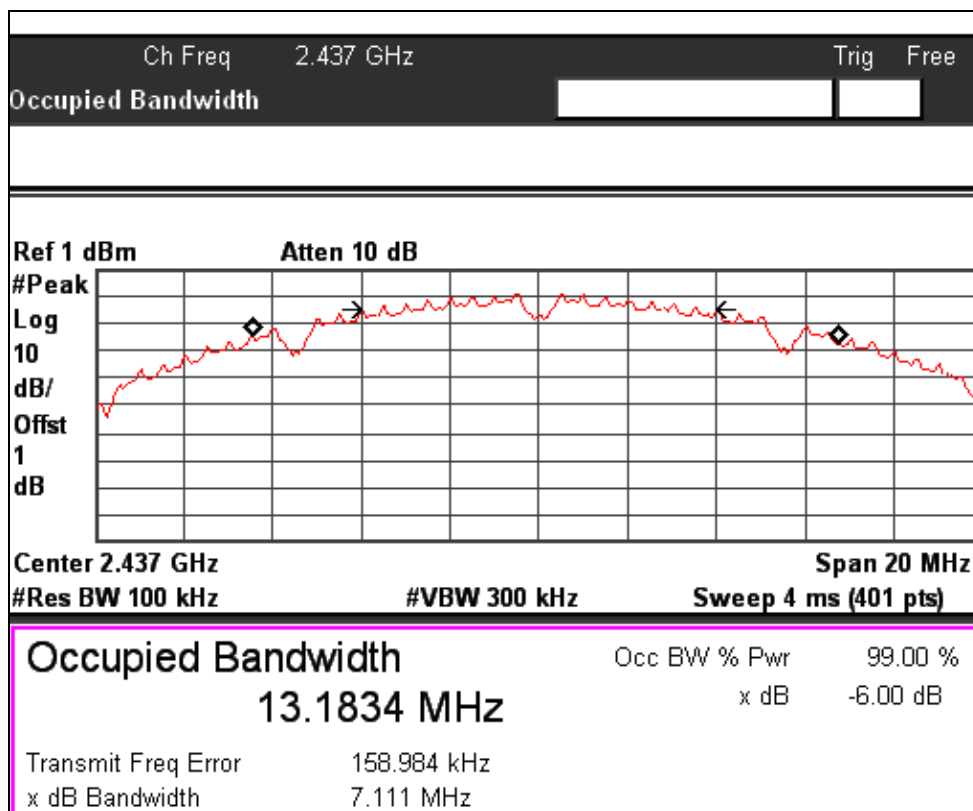
Data Rate: 11 Mbps

Channel Frequency: 2462 MHz



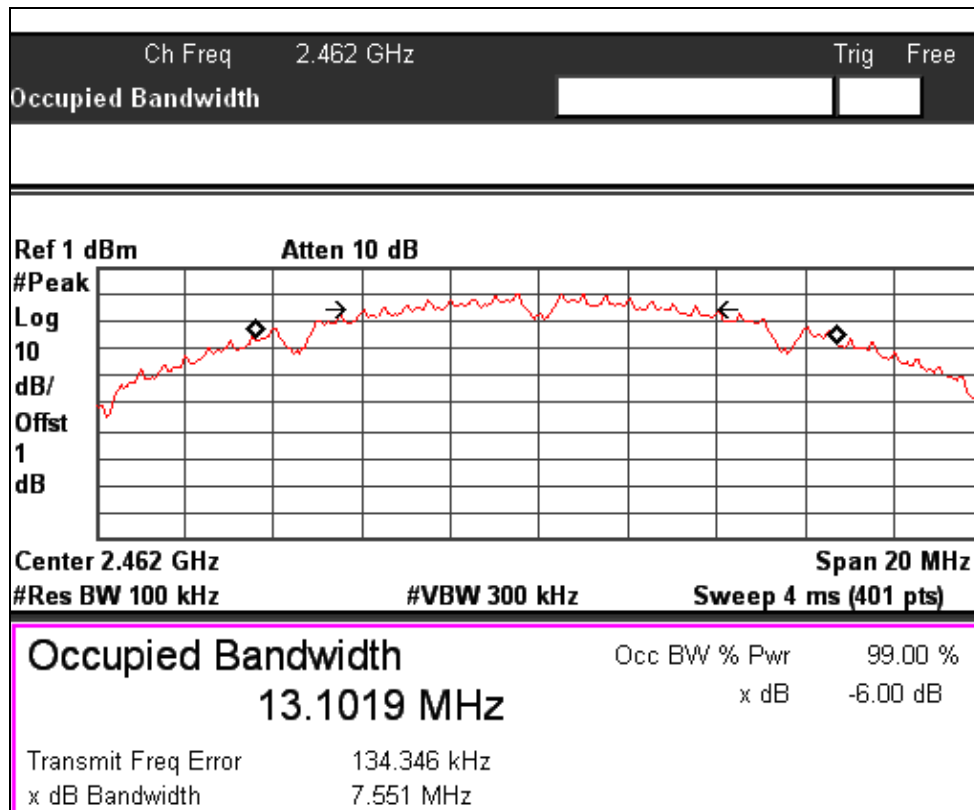
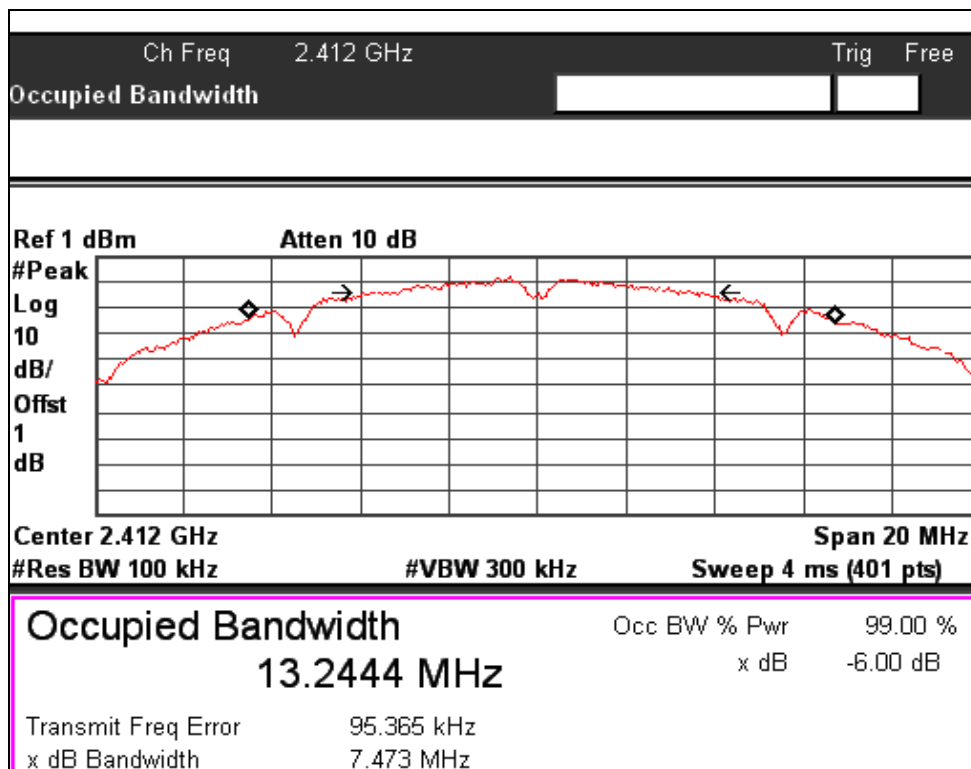
Data Rate: 1 Mbps

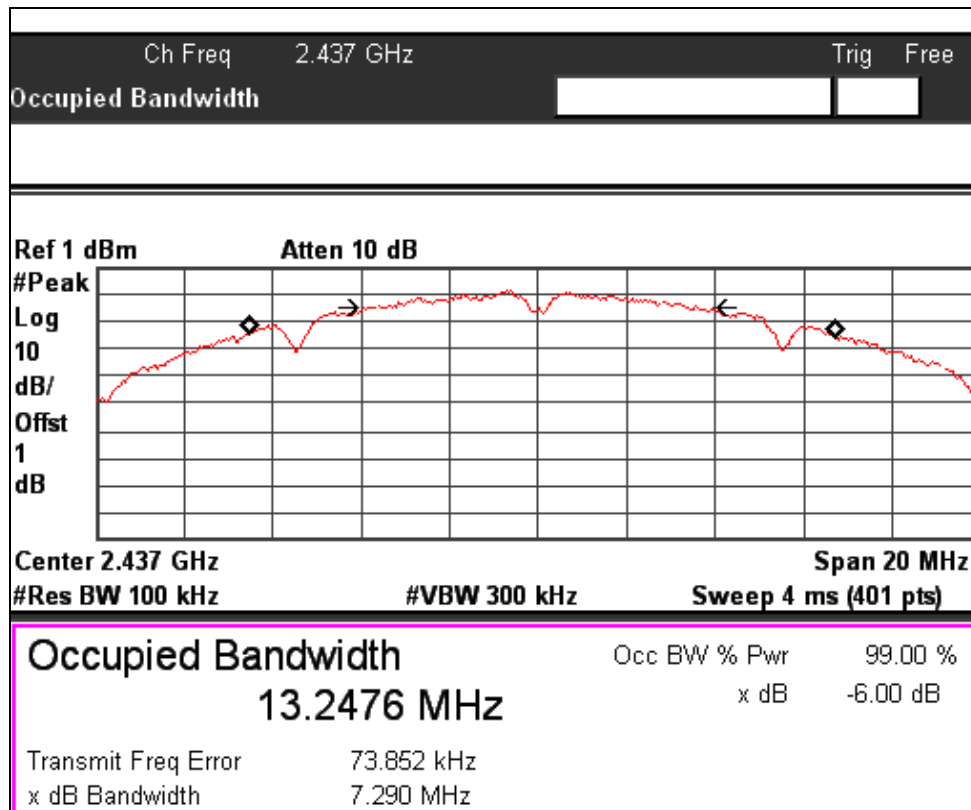
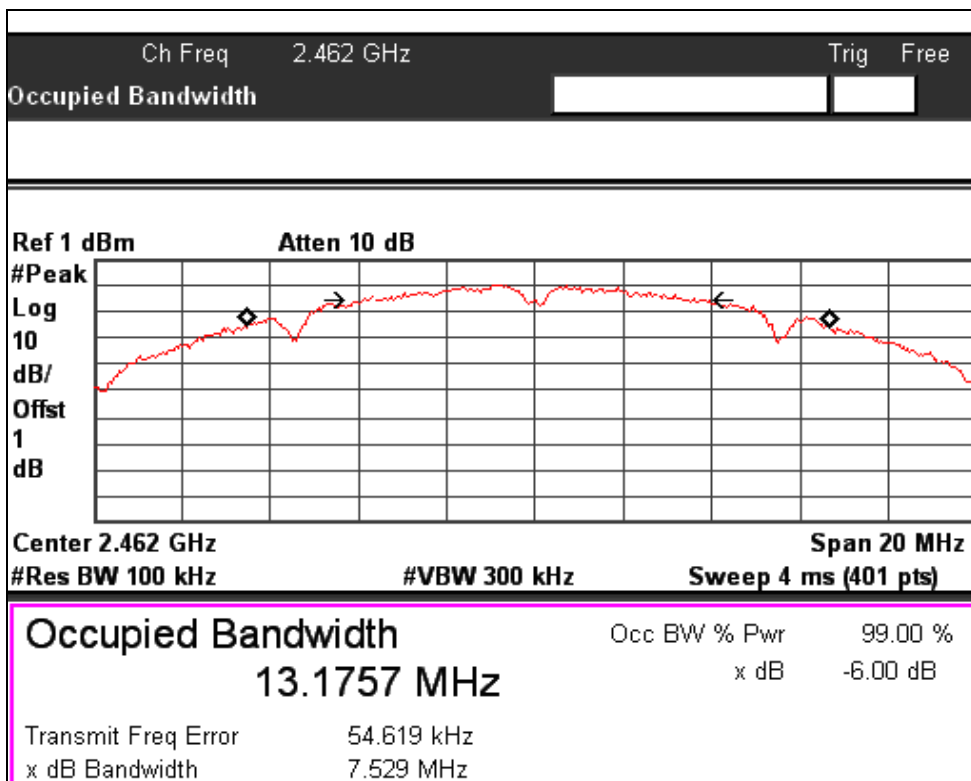
Channel Frequency: 2412 MHz

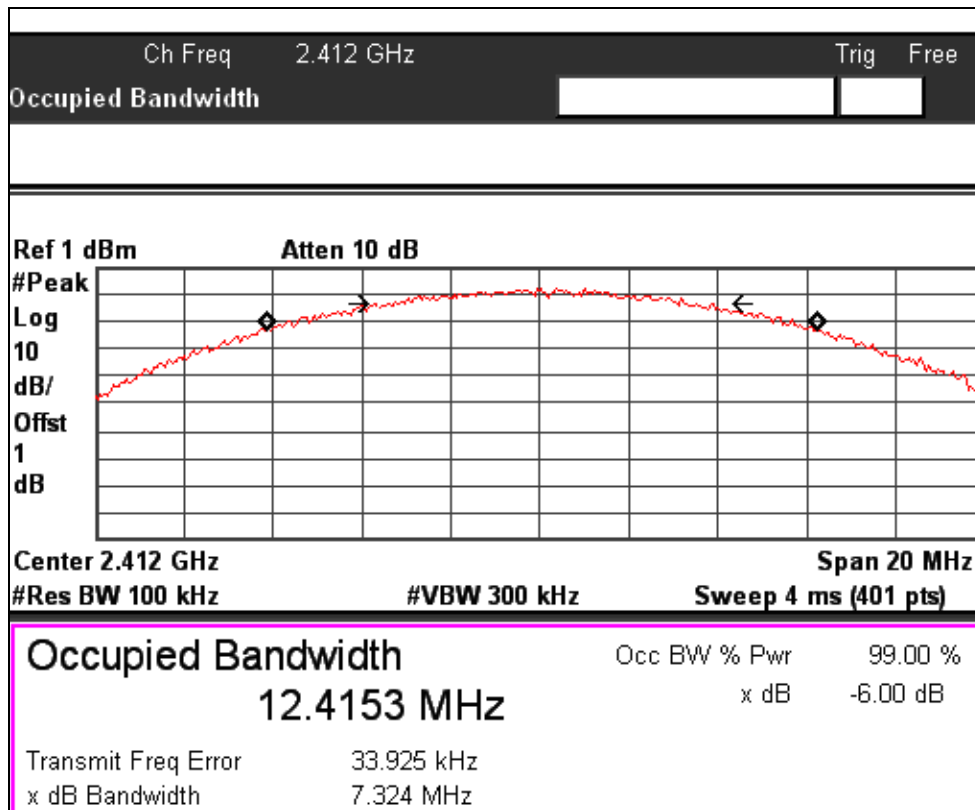
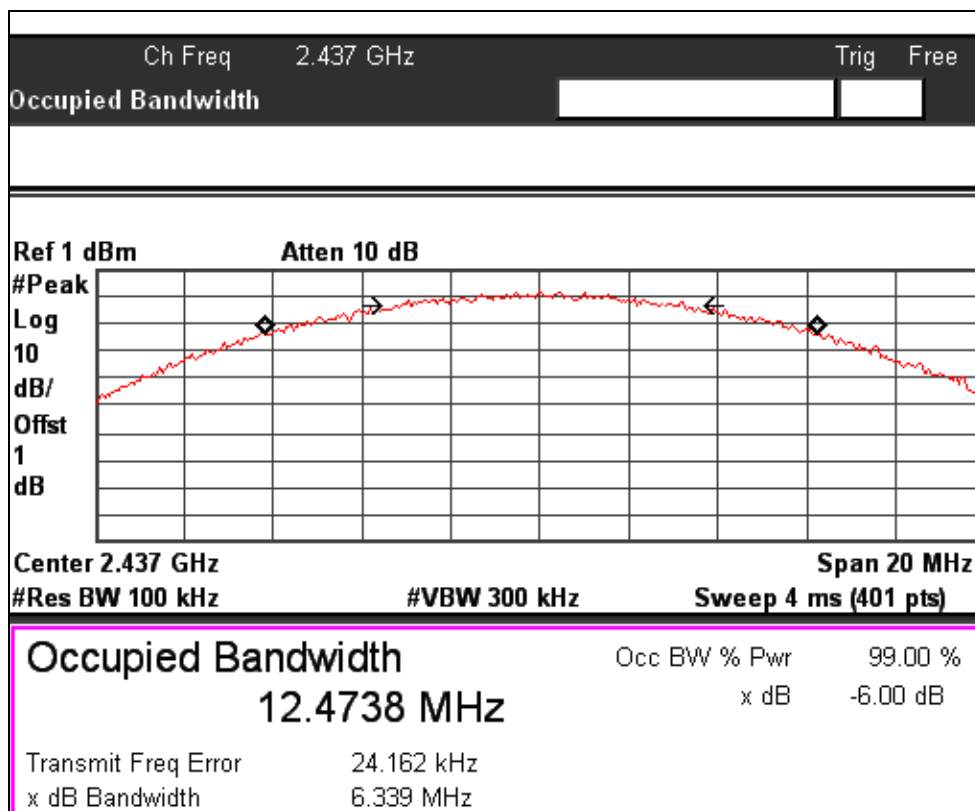


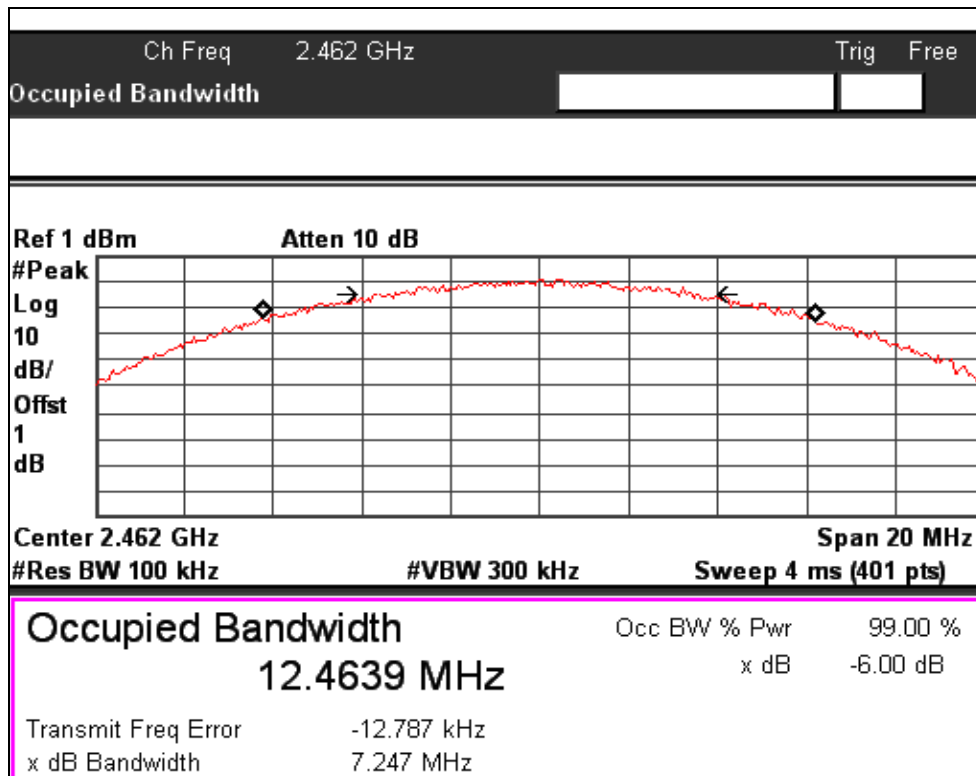
Data Rate: 1 Mbps

Channel Frequency: 2437 MHz


Data Rate: 1 Mbps
Channel Frequency: 2462 MHz

Data Rate: 2 Mbps
Channel Frequency: 2412 MHz

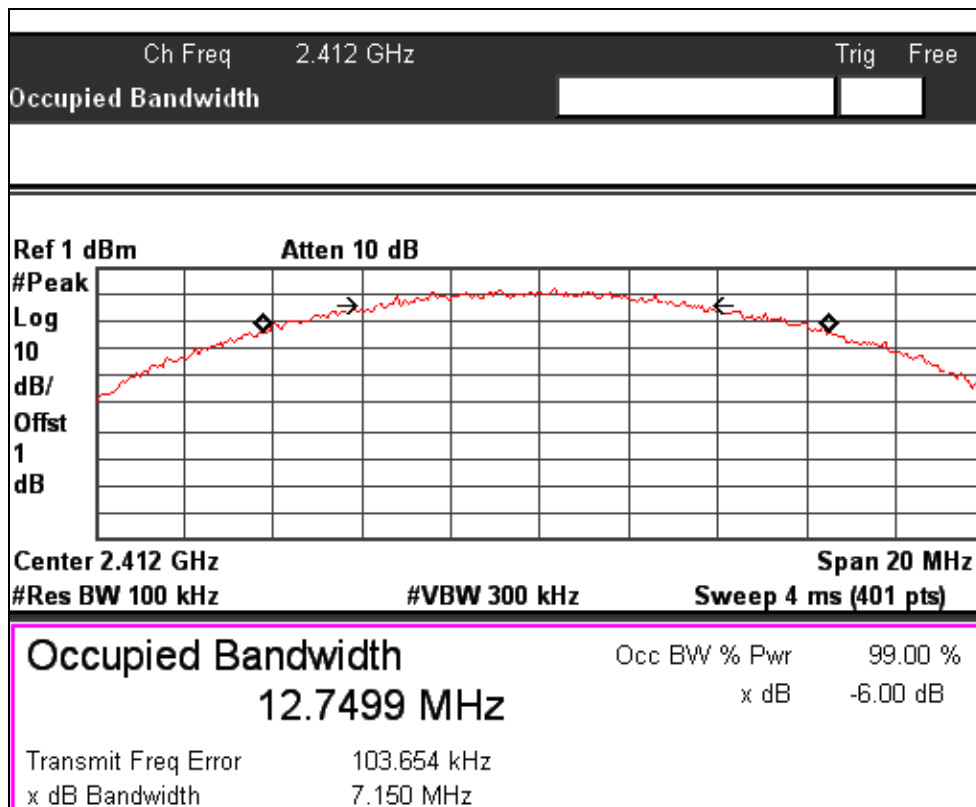

Data Rate: 2 Mbps
Channel Frequency: 2437 MHz

Data Rate: 2 Mbps
Channel Frequency: 2462 MHz


Data Rate: 5.5 Mbps
Channel Frequency: 2412 MHz

Data Rate: 5.5 Mbps
Channel Frequency: 2437 MHz



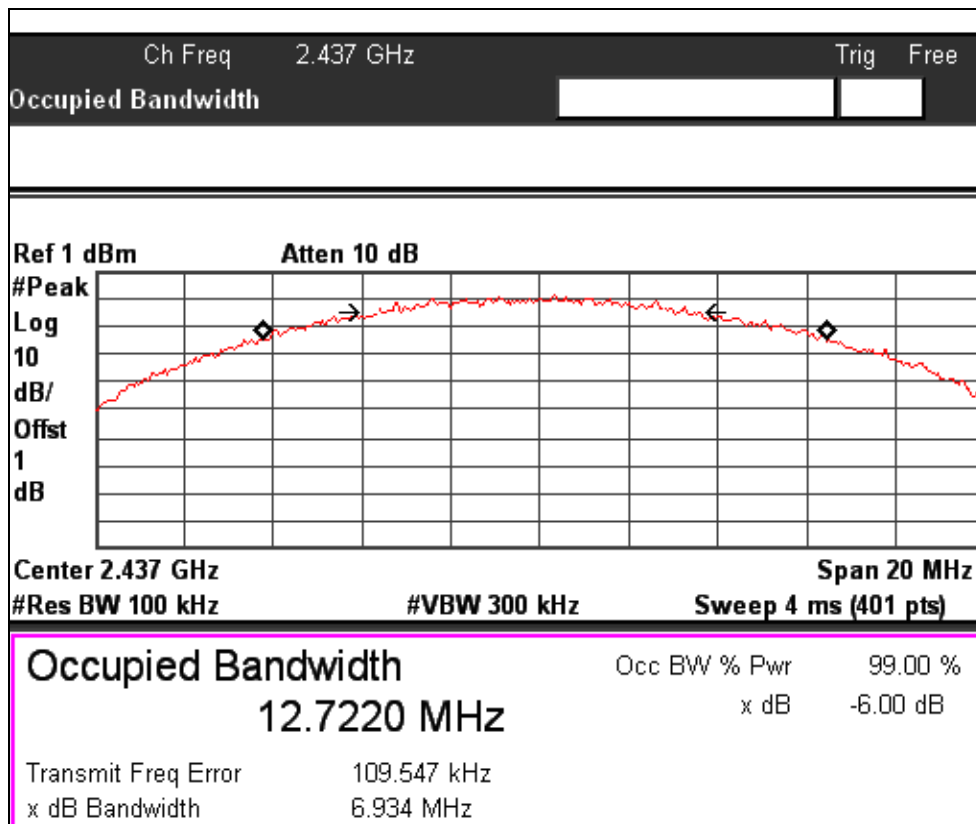
Data Rate: 5.5 Mbps

Channel Frequency: 2462 MHz



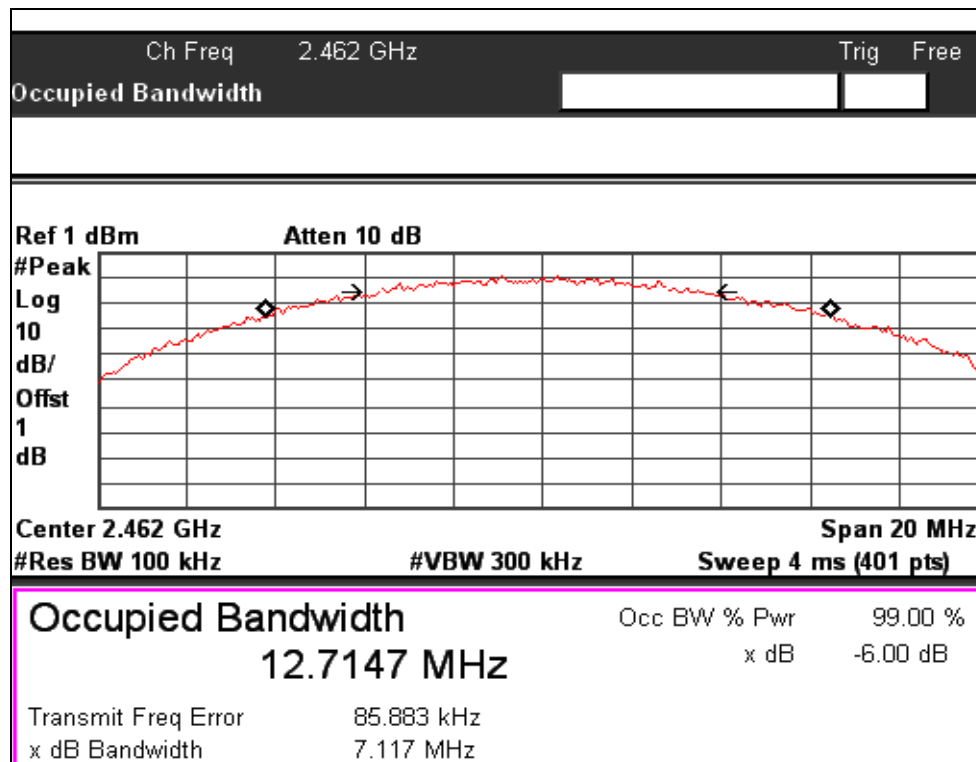
Data Rate: 11 Mbps

Channel Frequency: 2412 MHz



Data Rate: 11 Mbps

Channel Frequency: 2437 MHz



Data Rate: 11 Mbps

Channel Frequency: 2462 MHz

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Emissions in Restricted Frequency Bands
Result

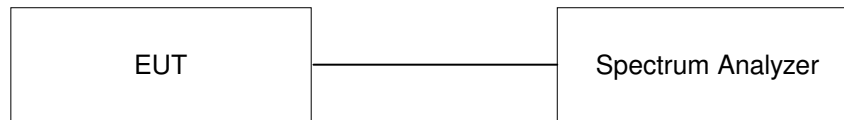
Section 15.247(d)
Pass

Test Specification
Detector Function
Requirement

FCC Part 15 Subpart C
Peak

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.

Test Method:

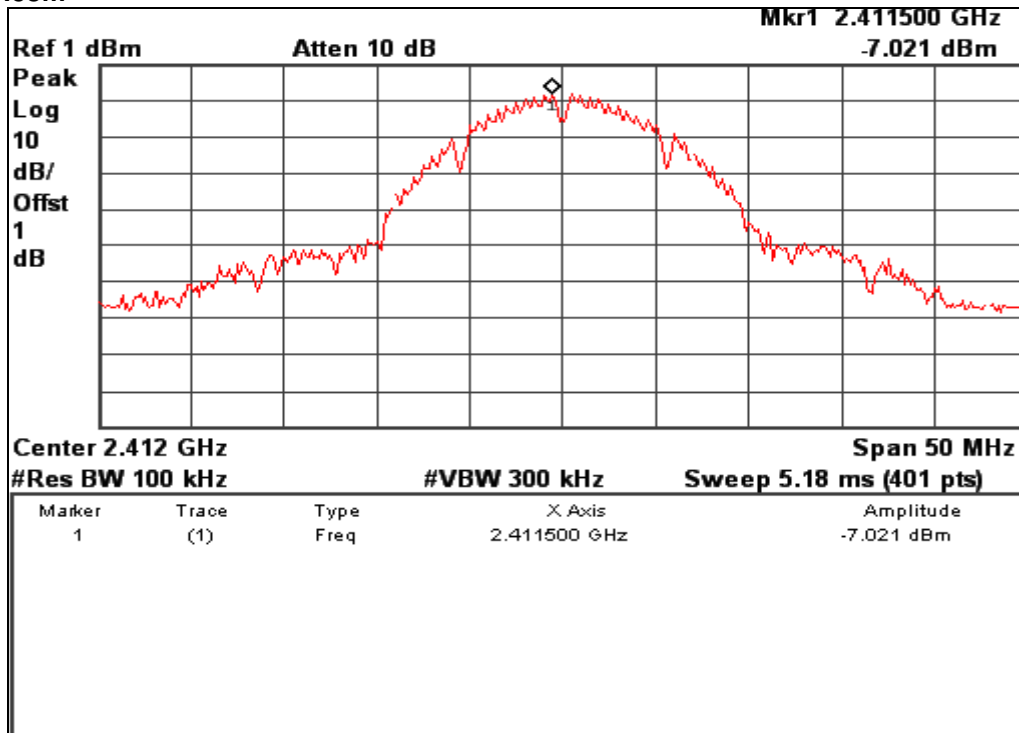


Test Result:

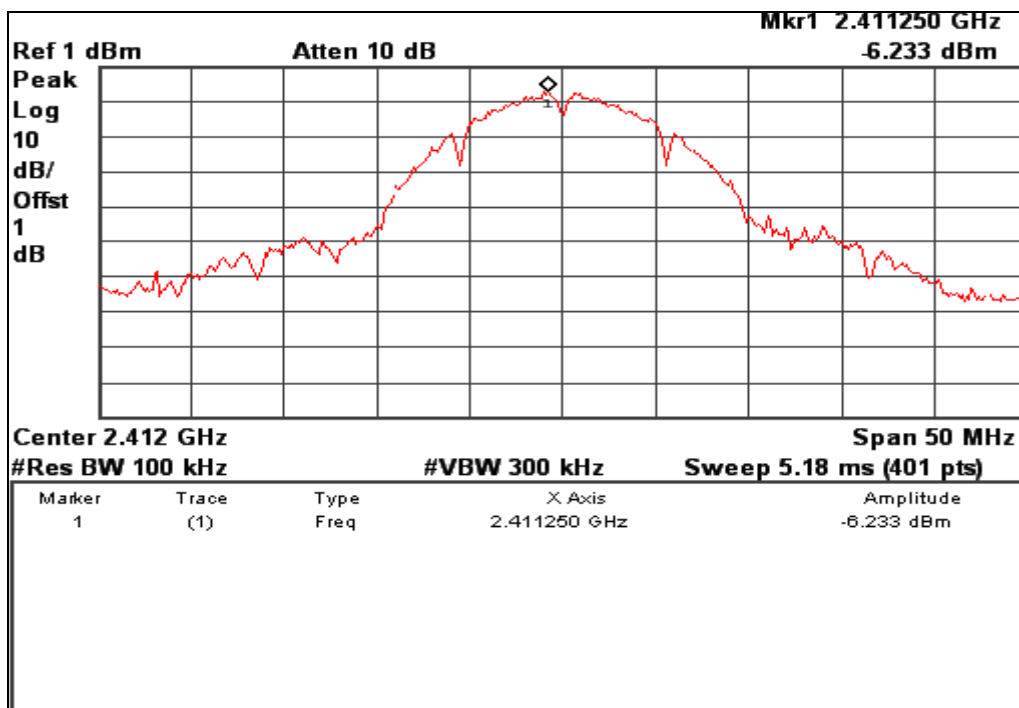
Cable Loss 1dB Included in the test results

802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Value at Band Edge		Reference Value B (dBm)	Band Edge Value A~B (dBc)	Limit (dBc)
			Frequency (MHz)	Value A (dBm)			
b	1	2412	2400.0	-51.24	-7.02	-44.22	-30
		2462	2483.5	-64.79	-7.02	-57.77	-30
	2	2412	2398.0	-47.01	-6.23	-40.78	-30
		2462	2483.5	-65.02	-6.23	-58.79	-30
	5.5	2412	2398.0	-48.15	-5.49	-42.66	-30
		2462	2483.5	-65.93	-5.49	-60.44	-30
	11	2412	2398.0	-47.73	-5.91	-41.82	-30
		2462	2483.5	-64.87	-5.91	-58.96	-30

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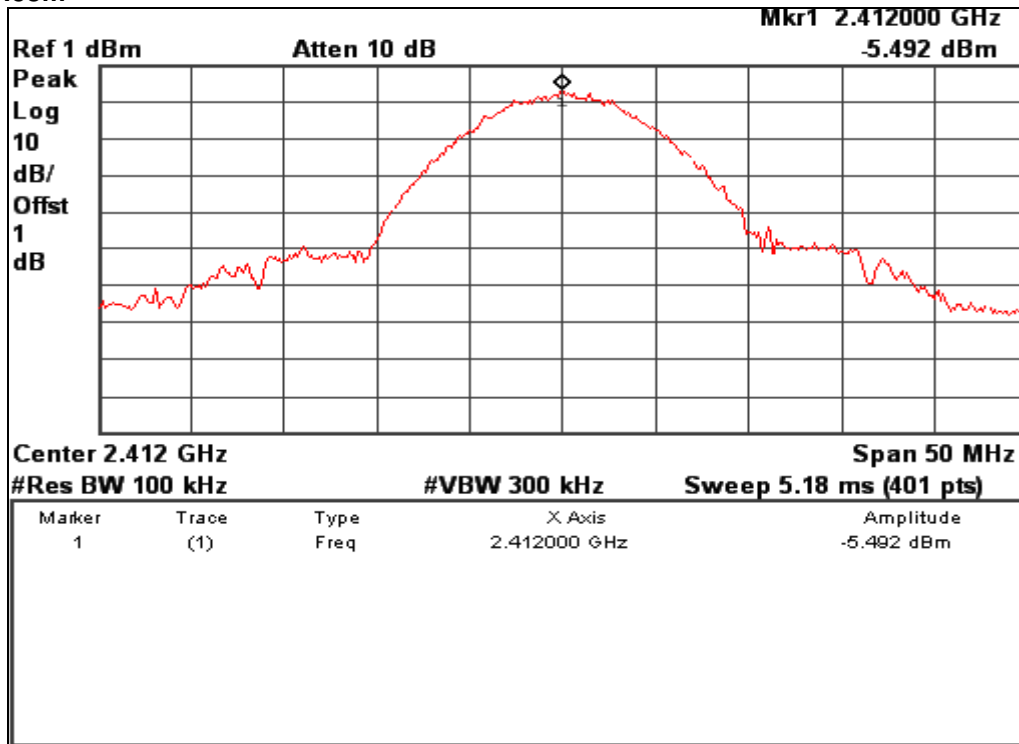


Reference Level Plot: 1 Mbps

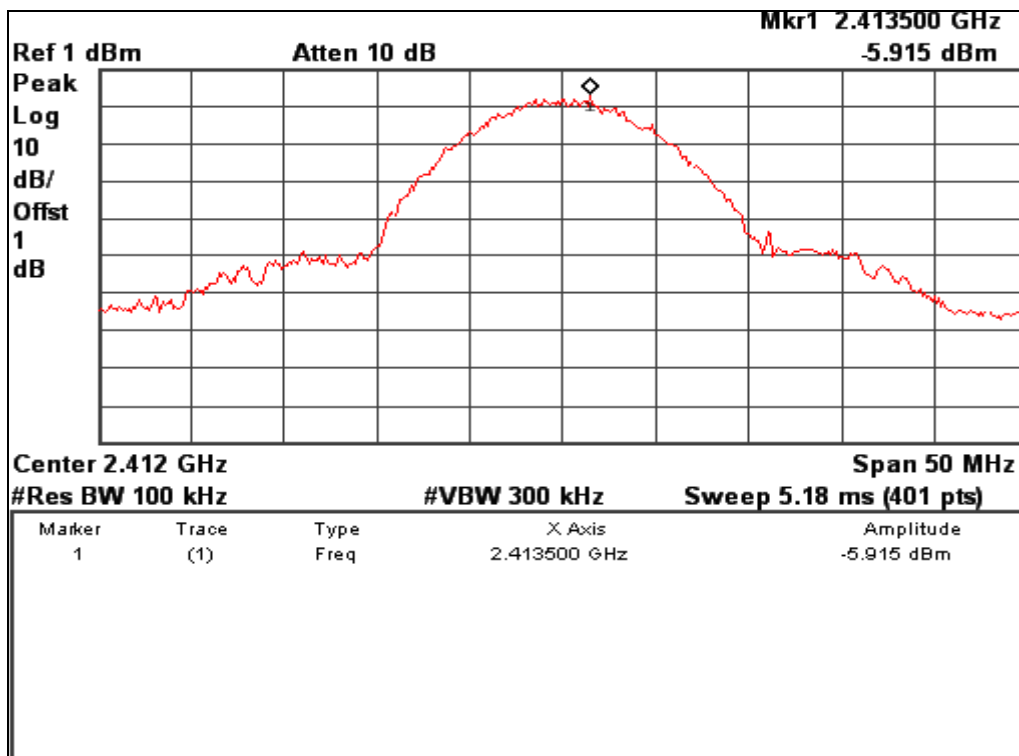


Reference Level Plot: 2 Mbps

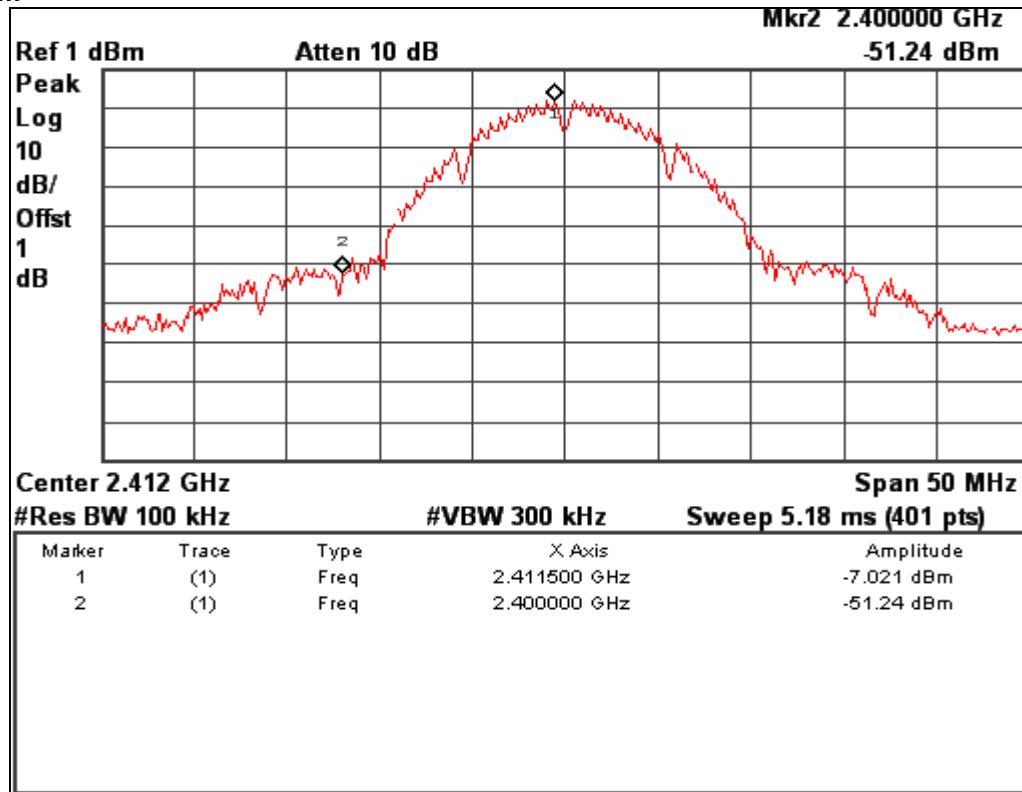
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Reference Level Plot: 5.5 Mbps

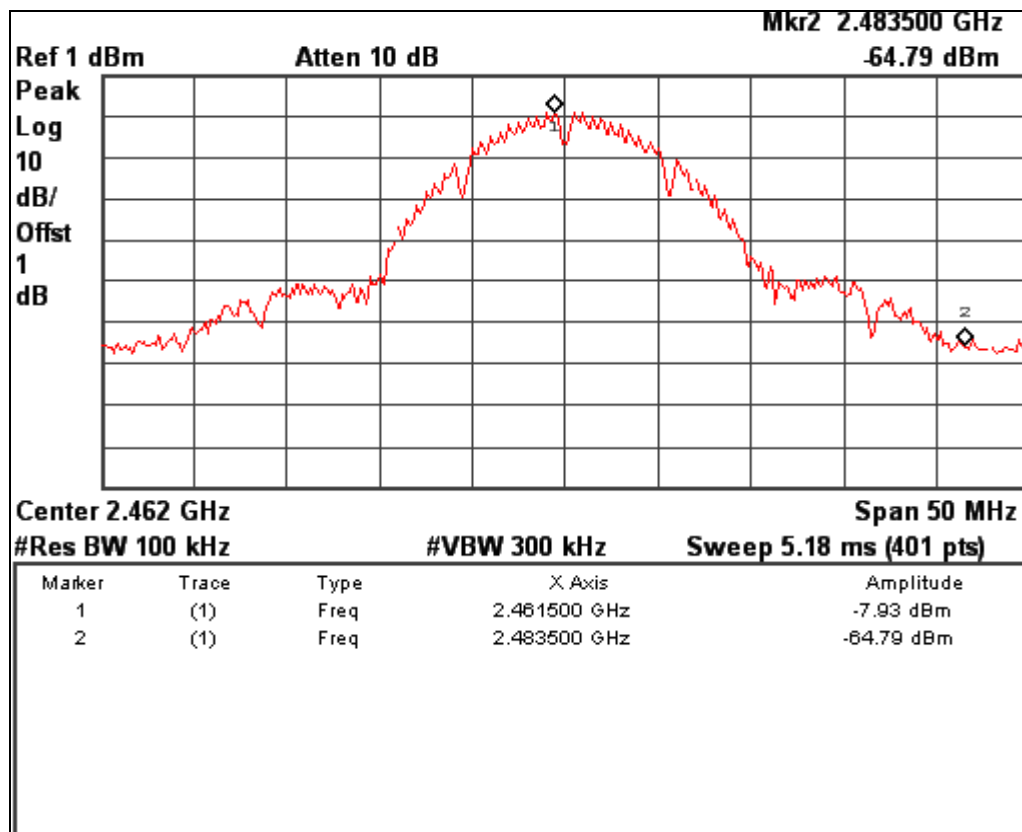


Reference Level Plot: 11 Mbps



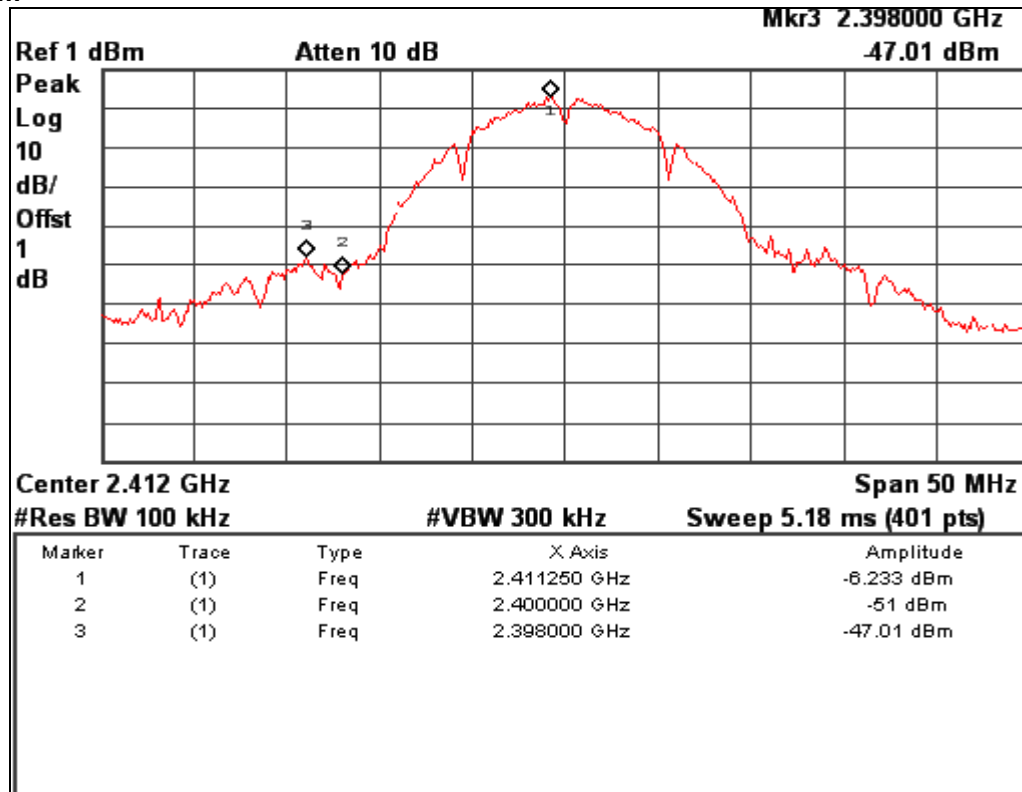
Data Rate: 1 Mbps

Channel frequency: 2412 MHz



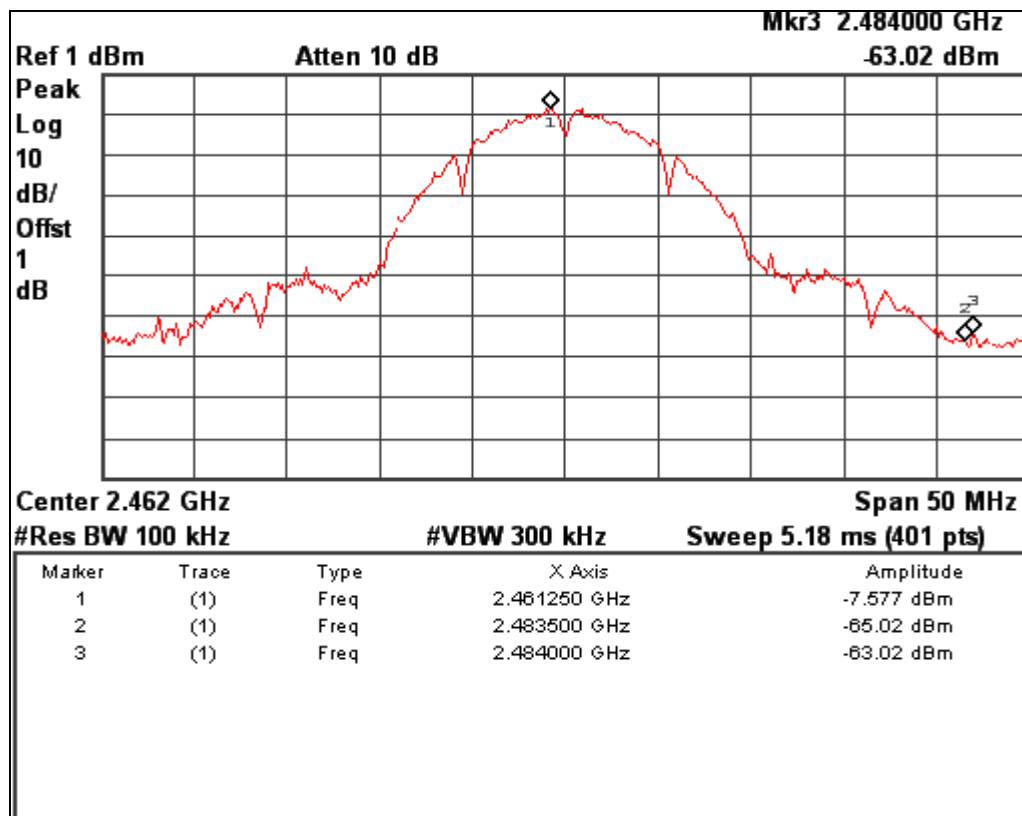
Data Rate: 1 Mbps

Channel frequency: 2462 MHz



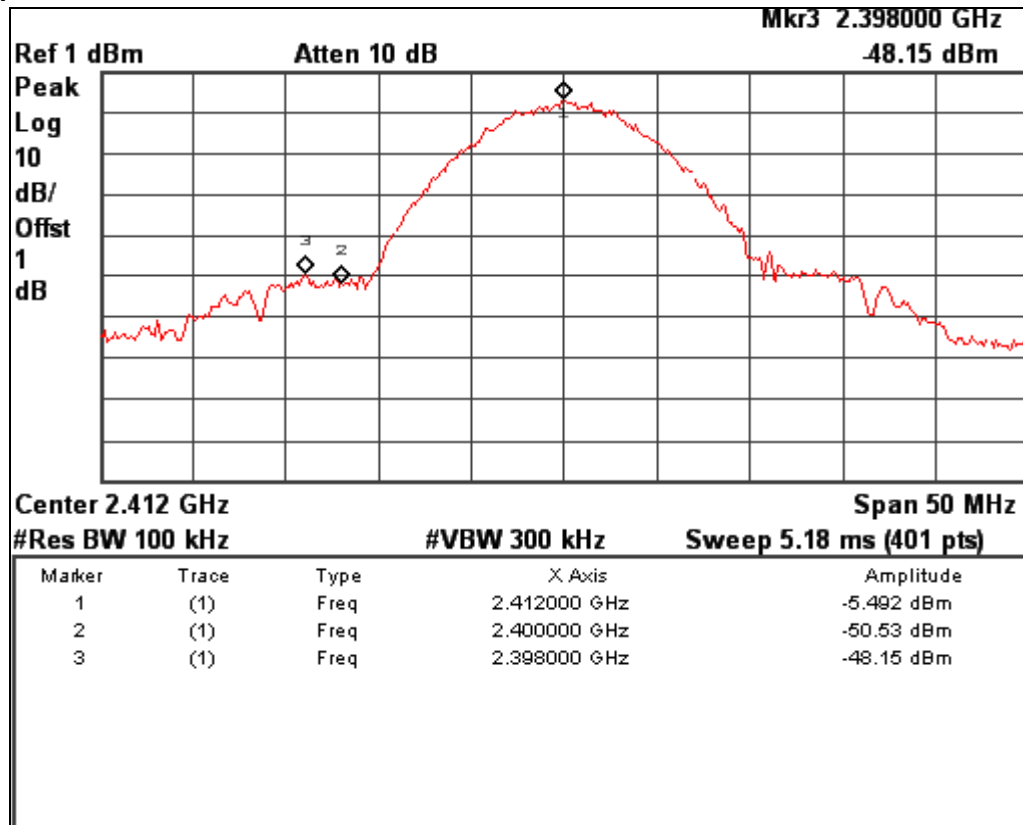
Data Rate: 2 Mbps

Channel frequency: 2412 MHz



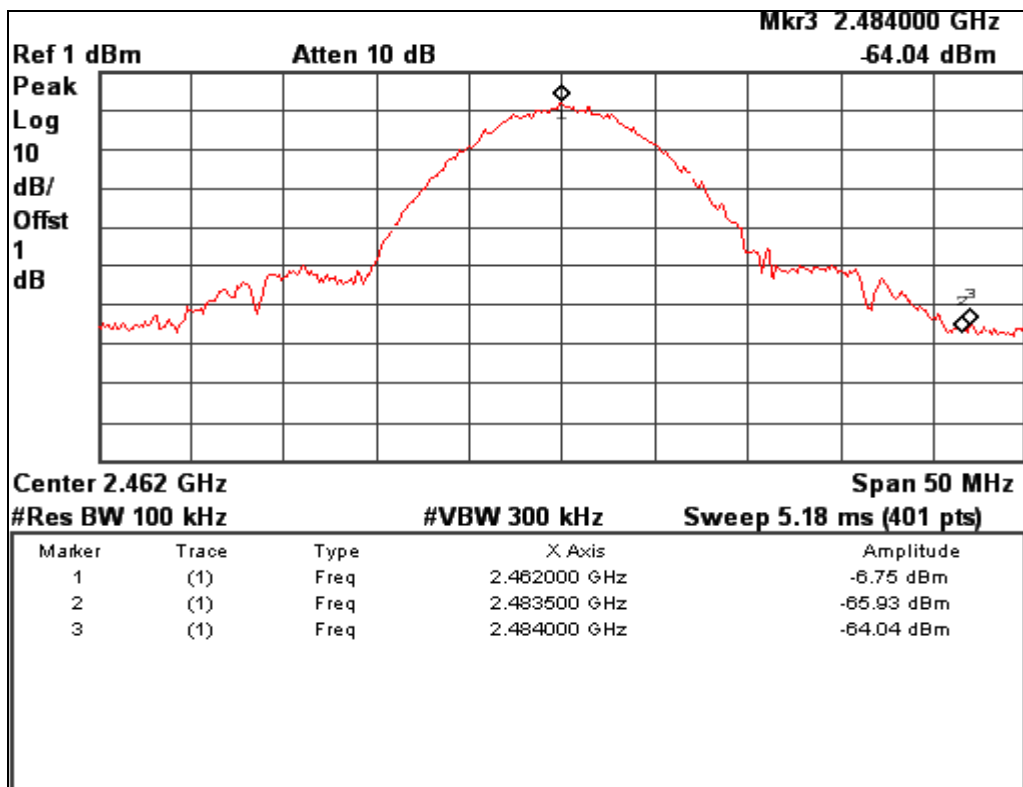
Data Rate: 2 Mbps

Channel frequency: 2462 MHz



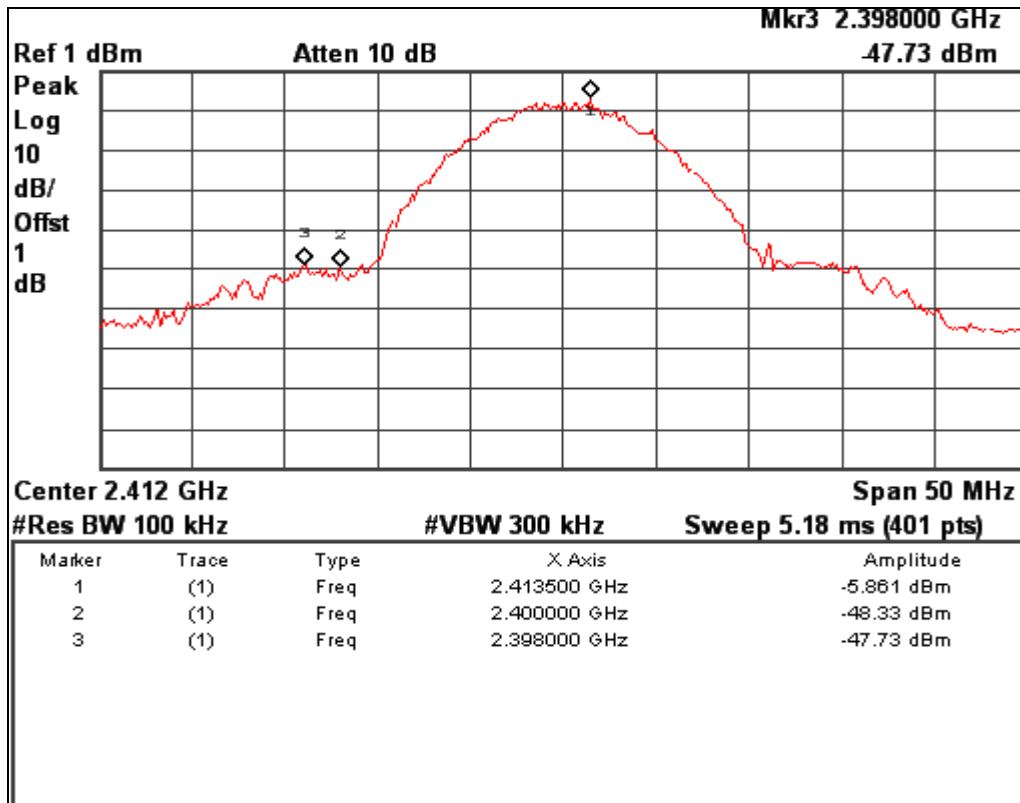
Data Rate: 5.5 Mbps

Channel frequency: 2412 MHz



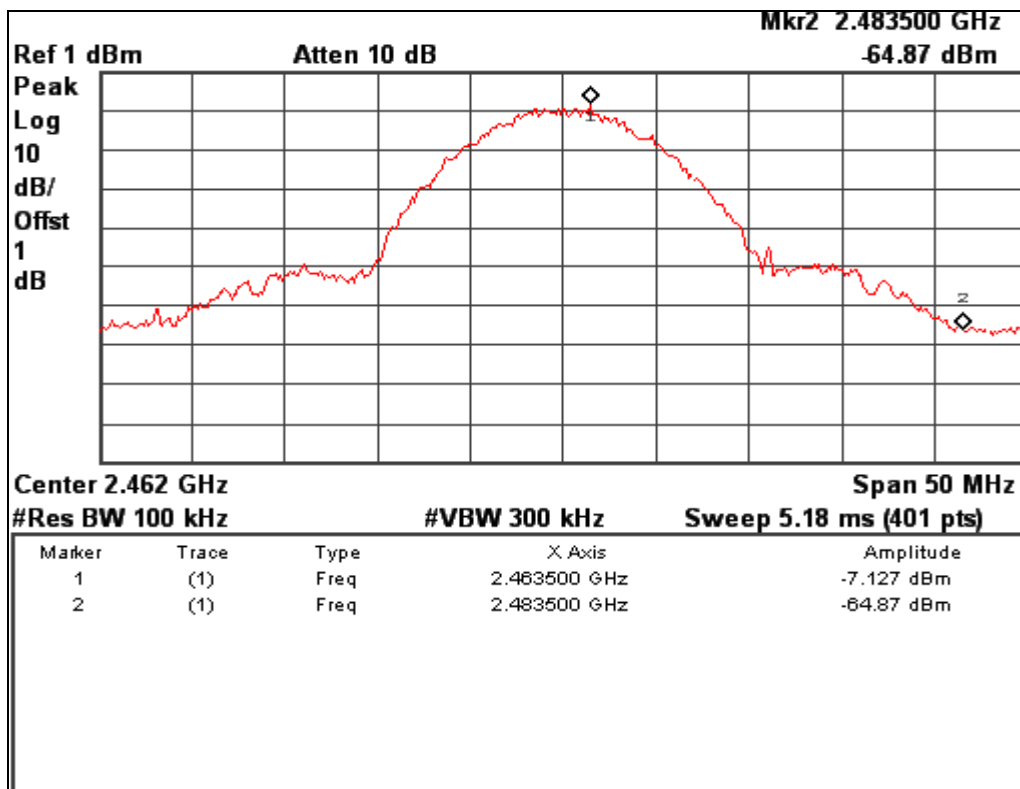
Data Rate: 5.5 Mbps

Channel frequency: 2462 MHz



Data Rate: 11 Mbps

Channel frequency: 2412 MHz

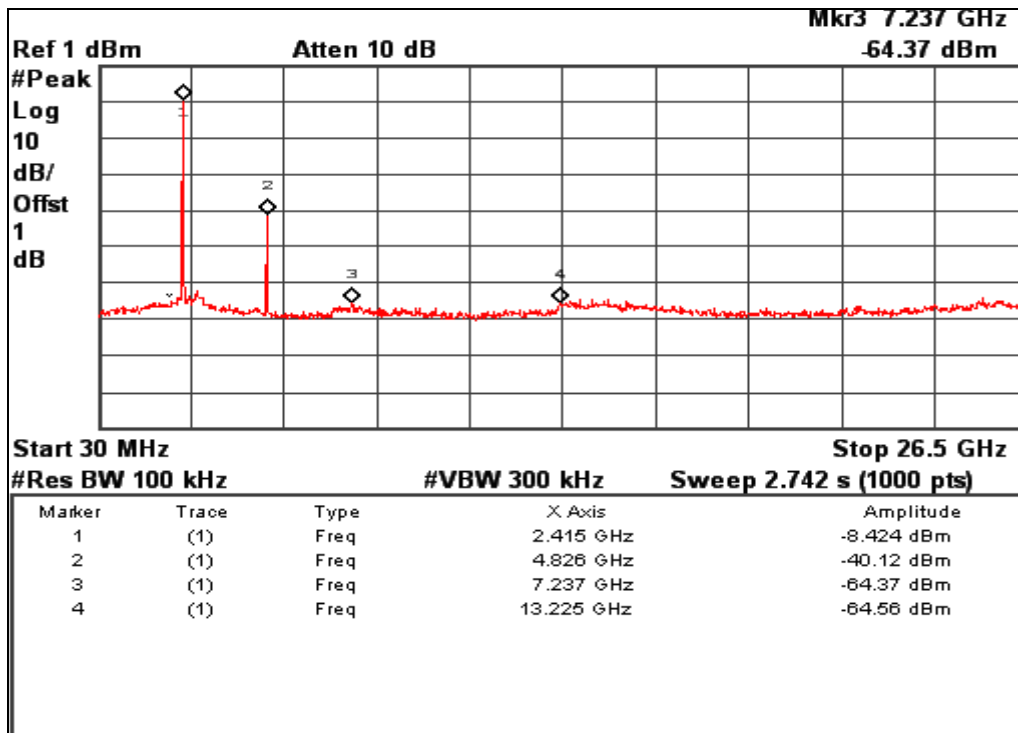


Data Rate: 11 Mbps

Channel frequency: 2462 MHz

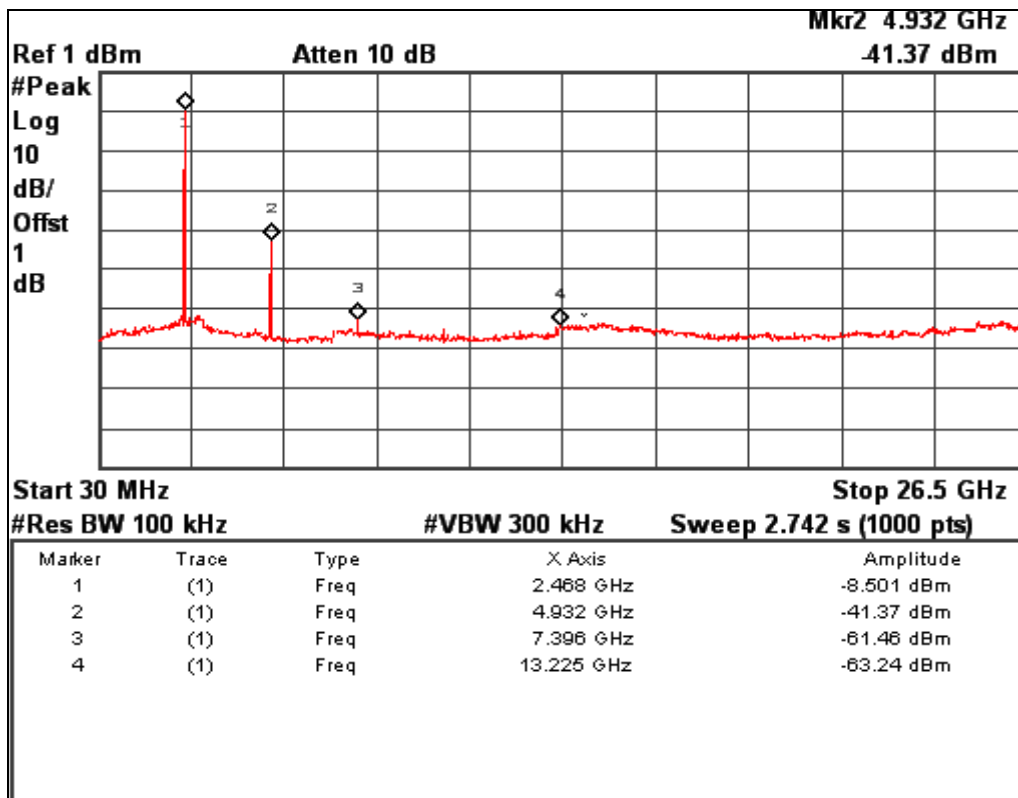
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Conducted Spurious Emission



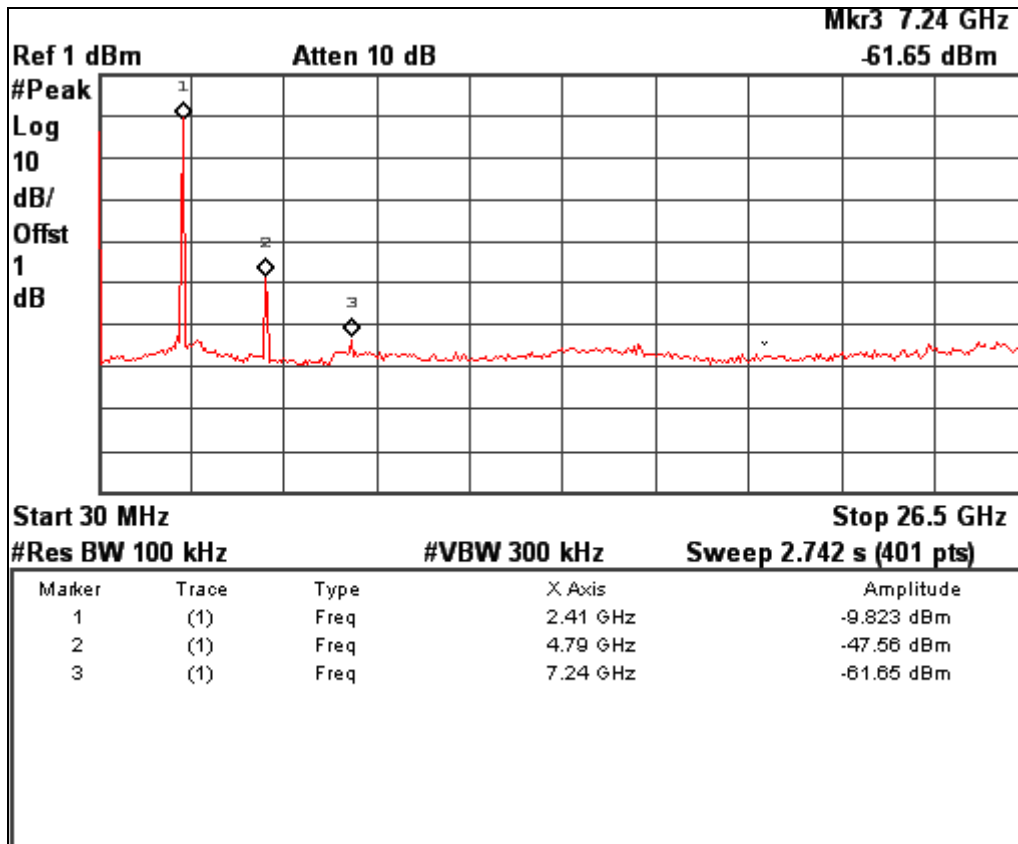
Data Rate: 1 Mbps

Channel frequency: 2412 MHz



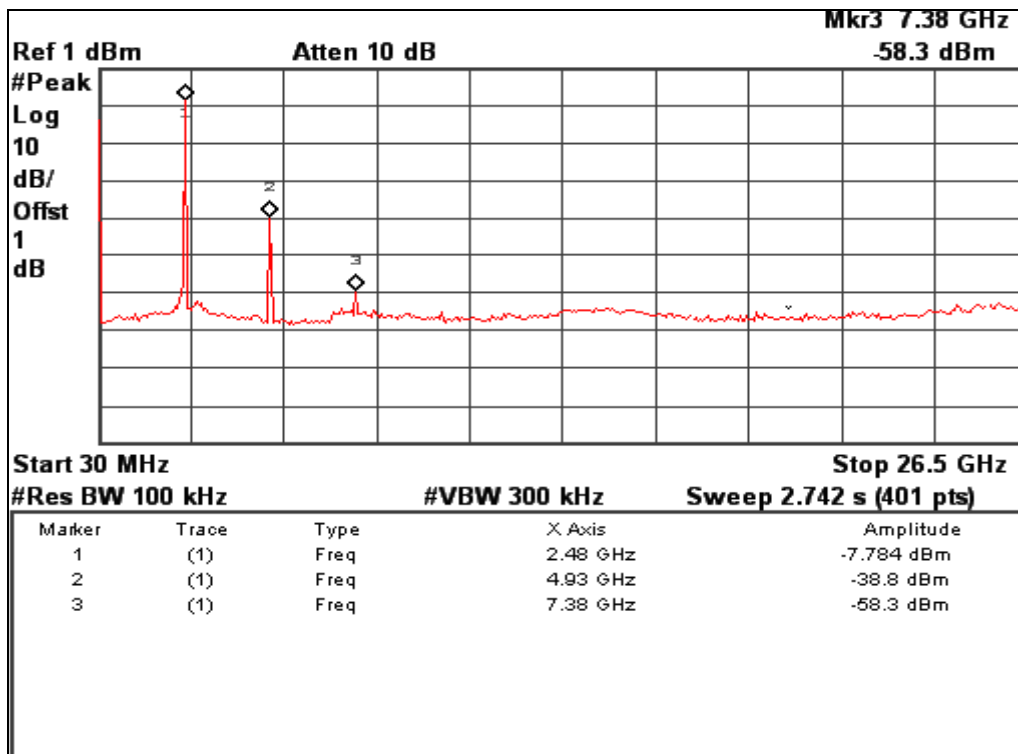
Data Rate: 1 Mbps

Channel frequency: 2462 MHz



Data Rate: 11 Mbps

Channel frequency: 2412 MHz



Data Rate: 11 Mbps

Channel frequency: 2462 MHz

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**Spurious Radiated Emissions and
Restricted Bands of Operation
Result**

**Section 15.209 and 15.205
Pass**

Test Specification	FCC Part 15 Subpart C
Test Method	ANSI C63.10-2013
Measurement Location	Semi Anechoic Chamber
Measuring Distance	3m
Detection	QP for frequency below 1GHz, Average for frequency above 1GHz
Requirement	As per the limits mentioned in the bellow table

Limit for Radiated Emission of Section 15.209:

Frequency (MHz)	Field strength ($\mu\text{V/m}$)	Field strength (dB $\mu\text{V/m}$)	Distance of Measurement (m)
0.009 – 0.490	2400/F(kHz)	48.50 – 13.80	300*
0.490 – 1.705	24000/F(kHz)	33.80 – 23.00	30*
1.705 -30	30	29.54	30*
30-88	100	40.0	3
88-216	150	43.5	3
216-960	200	46.0	3
Above 960	500	54.0	3

Remark: * The limit shows in the table above of frequency range 0.009 – 0.490, 0.490 – 1.705 MHz and 1.705-30MHz is at 300 meter, 30 meter and 30 meter range respectively, which corresponds to 88.50 – 53.80, 53.80 – 43.00 and 49.5dB $\mu\text{V/m}$ at 3m range by extrapolation calculation and the measurement of loop antenna.

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

Channels:

Low : 2412 MHz
Middle : 2437 MHz
High : 2462 MHz

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Test results:

For frequency Range 9kHz - 1 GHz

No emissions found in this frequency range.

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For frequency above 1GHz

Test Result: 1 Mbps

Data Rate (Mbps)	Channel	Polarization	Frequency (MHz)	Power (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1	Low	V	2390(Pk)	42.23	74	-31.77
			2390(Av)	28.44	54	-25.56
			2412(Pk)	88.41	*	-
			2412(Av)	81.57	*	-
			4824(Pk)	55.74	74	-18.26
			4824(Av)	46.39	54	-7.61
			7236(Pk)	No Emissions Found		
			7236(Av)			
		H	2390(Pk)	40.09	74	-33.91
			2390(Av)	27.10	54	-26.90
			2412(Pk)	82.21	*	-
			2412(Av)	75.15	*	-
			4824(Pk)	53.39	74	-20.61
			4824(Av)	43.65	54	-10.35
			7236(Pk)	No Emissions Found		
			7236(Av)			
	Mid	V	2390(Pk)	38.15	74	-35.85
			2390(Av)	27.15	54	-26.85
			2437(Pk)	85.96	*	-
			2437(Av)	79.12	*	-
			2483.5(Pk)	39.26	74	-34.74
			2483.5(Av)	26.85	54	-27.15
			4874(Pk)	56.76	74	-17.24
			4874(Av)	43.99	54	-10.01
			7311(Pk)	No Emissions Found		
			7311(Av)			
		H	2390(Pk)	38.64	74	-35.36
			2390(Av)	26.93	54	-27.07
			2437(Pk)	82.66	*	-
			2437(Av)	75.64	*	-
			2483.5(Pk)	38.76	74	-35.24
			2483.5(Av)	26.90	54	-27.10
			4874(Pk)	53.89	74	-20.11
			4874(Av)	45.01	54	-8.99
			7311(Pk)	No Emissions Found		
			7311(Av)			
	High	V	2483.5(Pk)	41.63	74	-32.37
			2483.5(Av)	27.42	54	-26.58
			2462(Pk)	89.88	*	-
			2462(Av)	82.47	*	-
			4924(Pk)	55.65	74	-18.35
			4924(Av)	48.52	54	-5.48
			7386(Pk)	No Emissions Found		
			7386(Av)			
		H	2483.5(Pk)	40.64	74	-33.36
			2483.5(Av)	27.16	54	-26.84
			2462(Pk)	82.15	*	-
			2462(Av)	74.94	*	-
			4924(Pk)	52.64	74	-21.36
			4924(Av)	44.46	54	-9.54
			7386(Pk)	No Emissions Found		
			7386(Av)			

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Test Result: 2 Mbps

Data Rate (Mbps)	Channel	Polarization	Frequency (MHz)	Power (dBuV/m)	Limit (dBuV/m)	Margin (dB)
2	Low	V	2390(Pk)	40.73	74	-33.27
			2390(Av)	28.91	54	-25.09
			2412(Pk)	89.39	*	-
			2412(Av)	82.45	*	-
			4824(Pk)	57.78	74	-16.22
			4824(Av)	46.68	54	-7.32
			7236(Pk)	No Emissions Found		
			7236(Av)			
		H	2390(Pk)	41.01	74	-32.99
			2390(Av)	27.81	54	-26.19
			2412(Pk)	84.62	*	-
			2412(Av)	77.77	*	-
			4824(Pk)	53.13	74	-20.87
			4824(Av)	41.32	54	-12.68
			7236(Pk)	No Emissions Found		
			7236(Av)			
	Middle	V	2390(Pk)	39.29	74	-34.71
			2390(Av)	27.68	54	-26.32
			2437(Pk)	88.48	*	-
			2437(Av)	81.78	*	-
			2483.5(Pk)	38.53	74	-35.47
			2483.5(Av)	27.04	54	-26.96
			4874(Pk)	55.47	74	-18.53
			4874(Av)	46.18	54	-7.82
			7311(Pk)	No Emissions Found		
			7311(Av)			
		H	2390(Pk)	39.00	74	-35.00
			2390(Av)	26.95	54	-27.05
			2437(Pk)	83.37	*	-
			2437(Av)	76.95	*	-
			2483.5(Pk)	38.32	74	-35.68
			2483.5(Av)	26.97	54	-27.03
			4874(Pk)	57.46	74	-16.54
			4874(Av)	47.85	54	-6.15
			7311(Pk)	No Emissions Found		
			7311(Av)			
	High	V	2483.5(Pk)	42.96	74	-31.04
			2483.5(Av)	28.11	54	-25.89
			2462(Pk)	88.64	*	-
			2462(Av)	81.79	*	-
			4924(Pk)	57.93	74	-16.07
			4924(Av)	50.38	54	-3.62
			7386(Pk)	No Emissions Found		
			7386(Av)			
		H	2483.5(Pk)	40.70	74	-33.30
			2483.5(Av)	26.83	54	-27.17
			2462(Pk)	79.61	*	-
			2462(Av)	72.82	*	-
			4924(Pk)	54.00	74	-20.00
			4924(Av)	43.76	54	-10.24
			7386(Pk)	No Emissions Found		
			7386(Av)			

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Test Result: 5.5 Mbps

Data Rate (Mbps)	Channel	Polarization	Frequency (MHz)	Power (dBuV/m)	Limit (dBuV/m)	Margin (dB)
5.5	Low	V	2390(Pk)	40.96	74	-33.04
			2390(Av)	27.65	54	-26.35
			2412(Pk)	86.13	*	-
			2412(Av)	79.01	*	-
			4824(Pk)	57.46	74	-16.54
			4824(Av)	41.30	54	-12.70
			7236(Pk)	No Emissions Found		
			7236(Av)			
		H	2390(Pk)	40.86	74	-33.14
			2390(Av)	27.33	54	-26.67
			2412(Pk)	85.28	*	-
			2412(Av)	78.27	*	-
			4824(Pk)	55.50	74	-18.50
			4824(Av)	39.52	54	-14.48
			7236(Pk)	No Emissions Found		
			7236(Av)			
	Middle	V	2390(Pk)	38.57	74	-35.43
			2390(Av)	27.46	54	-26.54
			2437(Pk)	87.27	*	-
			2437(Av)	80.29	*	-
			2483.5(Pk)	48.64	74	-25.36
			2483.5(Av)	32.38	54	-21.62
			4874(Pk)	56.78	74	-17.22
			4874(Av)	41.77	54	-12.23
			7311(Pk)	No Emissions Found		
			7311(Av)			
		H	2390(Pk)	40.13	74	-33.87
			2390(Av)	26.94	54	-27.06
			2437(Pk)	83.76	*	-
			2437(Av)	76.91	*	-
			2483.5(Pk)	46.56	74	-27.44
			2483.5(Av)	30.79	54	-23.21
			4874(Pk)	56.00	74	-18.00
			4874(Av)	40.70	54	-13.30
			7311(Pk)	No Emissions Found		
			7311(Av)			
	High	V	2483.5(Pk)	49.43	74	-24.57
			2483.5(Av)	32.35	54	-21.65
			2462(Pk)	88.11	*	-
			2462(Av)	81.17	*	-
			4924(Pk)	56.31	74	-17.69
			4924(Av)	42.26	54	-11.74
			7386(Pk)	No Emissions Found		
			7386(Av)			
		H	2483.5(Pk)	46.97	74	-27.03
			2483.5(Av)	30.54	54	-23.46
			2462(Pk)	82.62	*	-
			2462(Av)	75.70	*	-
			4924(Pk)	54.55	74	-19.45
			4924(Av)	40.23	54	-13.77
			7386(Pk)	No Emissions Found		
			7386(Av)			

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Test Result: 11 Mbps

Data Rate (Mbps)	Channel	Polarization	Frequency (MHz)	Power (dBuV/m)	Limit (dBuV/m)	Margin (dB)
11	Low	V	2390(Pk)	42.52	74	-31.48
			2390(Av)	29.30	54	-24.70
			2412(Pk)	82.35	*	-
			2412(Av)	80.02	*	-
			4824(Pk)	53.98	74	-20.02
			4824(Av)	40.45	54	-13.55
			7236(Pk)	No Emissions Found		
			7236(Av)			
		H	2390(Pk)	41.22	74	-32.78
			2390(Av)	28.28	54	-25.72
			2412(Pk)	84.27	*	-
			2412(Av)	75.87	*	-
			4824(Pk)	55.31	74	-18.69
			4824(Av)	41.72	54	-12.28
			7236(Pk)	No Emissions Found		
			7236(Av)			
	Middle	V	2390(Pk)	40.87	74	-33.13
			2390(Av)	27.60	54	-26.40
			2437(Pk)	89.42	*	-
			2437(Av)	81.00	*	-
			2483.5(Pk)	50.10	74	-23.90
			2483.5(Av)	33.91	54	-20.09
			4874(Pk)	58.55	74	-15.45
			4874(Av)	46.03	54	-7.97
			7311(Pk)	No Emissions Found		
			7311(Av)			
		H	2390(Pk)	39.90	74	-34.10
			2390(Av)	27.13	54	-26.87
			2437(Pk)	87.28	*	-
			2437(Av)	79.00	*	-
			2483.5(Pk)	47.18	74	-26.82
			2483.5(Av)	31.57	54	-22.43
			4874(Pk)	54.75	74	-19.25
			4874(Av)	42.25	54	-11.75
			7311(Pk)	No Emissions Found		
			7311(Av)			
	High	V	2483.5(Pk)	51.52	74	-22.48
			2483.5(Av)	34.13	54	-19.87
			2462(Pk)	85.89	*	-
			2462(Av)	77.56	*	-
			4924(Pk)	57.78	74	-16.22
			4924(Av)	45.44	54	-8.56
			7386(Pk)	No Emissions Found		
			7386(Av)			
		H	2483.5(Pk)	47.62	74	-26.38
			2483.5(Av)	31.75	54	-22.25
			2462(Pk)	87.15	*	-
			2462(Av)	79.15	*	-
			4924(Pk)	53.86	74	-20.14
			4924(Av)	41.10	54	-12.90
			7386(Pk)	No Emissions Found		
			7386(Av)			

*** END OF TEST REPORT***