

Produkte
 Products

Prüfbericht - Nr.: 19660166 001		Seite 1 von 98	
<i>Test Report No.:</i>		<i>Page 1 of 98</i>	
Auftraggeber: <i>Client:</i>		Isabella Products, Inc. 23 Bradford Street, 2nd Floor Concord, MA 01742	
Gegenstand der Prüfung: <i>Test item:</i>		Fable Tablet	
Bezeichnung: <i>Identification:</i>		Serien-Nr.: <i>Serial No.</i>	150531000003
		FABLE 001 – ORG FABLE 001 – BLK FABLE 001 – ORD FABLE 001 – BLU	
Wareneingangs-Nr.: <i>Receipt No.:</i>		Eingangsdatum: <i>Date of receipt:</i>	06.03.2015
		1803067493	
Prüfort: <i>Testing location:</i>		Refer Page 4 of 98 for test facilities	
Prüfgrundlage: <i>Test specification:</i>		FCC Part 15: Subpart C ANSI C63.10-2009	
Prüfergebnis: <i>Test Result:</i>		Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). The test items passed the test specification(s).	
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:	
11.03.2015 Girish Kumar.G Datum Name/Stellung Unterschrift Date Name/Position Signature		26.03.2015 Raghavendra Kulkarni Datum Name/Stellung Unterschrift Date Name/Position Signature	
Sonstiges / Other Aspects:		FCC ID : 2ADNZ10490056	
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
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Test Result Summary

Clause	Test Item	Result
FCC 15.247(b) (3)	Maximum Average Conducted Output Power	Pass
FCC 15.247(a) (2)	6dB Bandwidth	Pass
FCC 15.247(e)	Maximum Power Spectral Density	Pass
FCC 15.247(d)	Emissions in non-restricted frequency bands	Pass
FCC 15.209 / FCC 15.205	Spurious Radiated Emissions and Restricted Bands of Operation	Pass
FCC 15.207	Conducted emission test on a.c Power line	Pass

Note: Conducted measurements are done according to the procedure given in KDB No. **558074**
D01 DTS Meas Guidance v03r02

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List of Test and Measurement Instruments

Testing Facilities

- 1) TÜV Rheinland (India) Pvt. Ltd.
82/A, 3rd Main, West Wing, Electronic City,
West Phase, Hosur Road
Bangalore - 560 100.

Equipment	Manufacturer	Model Name	Serial Number	Calibration Due Date	Periodicity	Used for Test Items
Spectrum Analyser	Agilent Technologies	E4407B	US41192772	27.03.2015	Yearly	Antenna - Port Conducted Tests

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

Equipment	Manufacturer	Model Name	Serial Number	Calibration Due Date	Periodicity	Used for Test Items
EMI Test Receiver	Rohde & Schwarz	ESU 40	100288	20.06.2015	Yearly	Spurious Radiated Emissions
Broadband Antenna	Frankonia	ALX-4000	ALX-4000-806	22.06.2015	Yearly	
Active Loop Antenna	Frankonia	LAX-10	LAX-10-800	22.06.2015	Yearly	
Broadband Horn Antenna	Frankonia	HAX-18	HAX18-802	22.06.2015	Yearly	
Emission Horn Antenna	ETS Lindgren	116706	00107323	22.06.2015	Yearly	
Anechoic Chamber	Frankonia	-	-	-	-	Conducted Emission on AC power lines
LISN	Rohde & Schwarz	ENV216	100022	12.09.2015	Yearly	
EMI Receiver	Rohde & Schwarz	ESR7	101133	19.11.2015	Yearly	

General Product Information

Product Function and Intended Use

Fable is a 7 inch tablet designed for kid's entertainment and education purpose. Fable is designed to use as handheld computer with the plastic enclosure. This unit can get connected to internet/servers using WIFI connectivity. It provides the necessary education and entertainment contents on 7 inch LCD Screen. It also features touch panel input, 3MP camera, Accelerometer, internal Mic and Speaker with Head phone connectivity. This battery powered unit is intended for the personal use and expected to be used at the close proximity of the human body.

Ratings and System Details

Operating Frequency Range	2400MHz – 2483.50MHz	
No. of channel	11	
Channel Spacing	5MHz	
Transmitted Power	802.11b	09.77 dBm
	802.11g	05.61 dBm
	802.11n	05.52 dBm
Data Rate	802.11b: 1,2, 5.5,11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n: 6.5, 14.4, 21.7, 28.9, 39, 57.8, 65Mbps	
Number of antenna	One	
Antenna Gain and Antenna type	0.8dBi, Chip Multilayer Antenna	
Supply Voltage to Product	5V DC	
Environmental	Operational Temperature: 0°C to 45° C	

Test Conditions:

Supply Voltage: 5V DC from Power Charger

Environmental conditions:

Temperature: +24.2 °C RH: 54%

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Test Set-up and Operation Mode

Principle of Configuration Selection

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

Test Operation and Test Software

Test software was used to enable the transmission with 100% duty cycle, changing channels (low/mid/high) and data rates on the EUT for the tests in this report.

Special Accessories and Auxiliary Equipment

- None

Countermeasures to achieve EMC Compliance

- Testing was conducted with the Power adaptor cable connected to the AC mains (5v supply for charging EUT). A ferrite bead 1422858, Make: Shenzhen Kedahui Technology CO., LTD. (Refer Test Setup Photos) was added on the Power adaptor cable, closer to the EUT side.

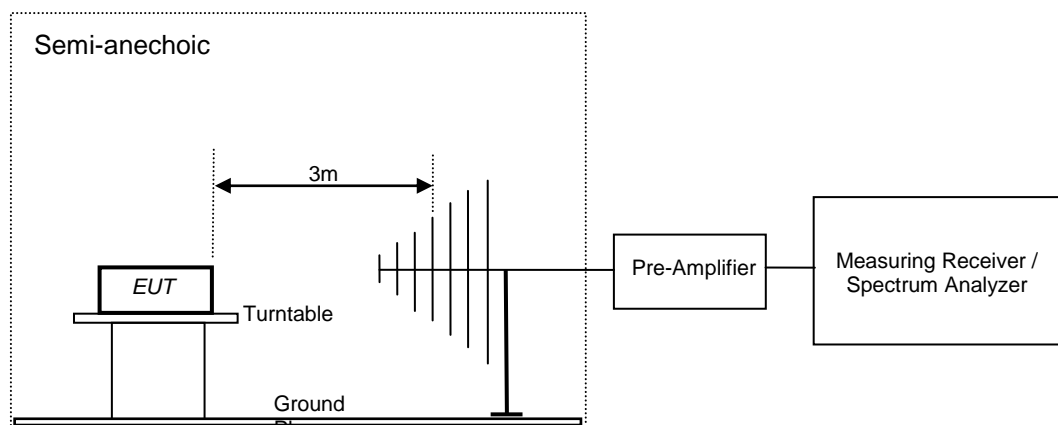
Test Modes – Data Rates and Modulations

For Radiated spurious emissions, the tests were performed for all data rates and only worst case results are reported in this report.

Test Methodology

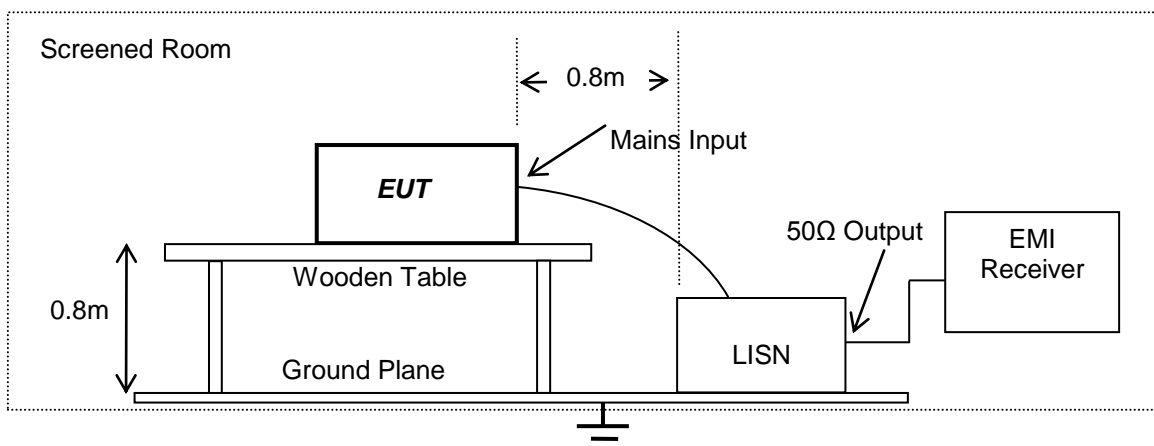
Radiated Emission Test

The radiated emission measurement was performed according to the procedures in ANSI C63.10 - 2009. 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. The EUT was rotated around the X-, Y-, and Z-Axis and the results from worst case axis are recorded.



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 C63.10 - 2009, 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

Maximum Average Conducted Output Power

Section 15.247(b) (3)

Result

Pass

Test Specification	FCC Part 15 Subpart C
Measurement Bandwidth (RBW)	1MHz
Requirement	<1 watt (30dBm).

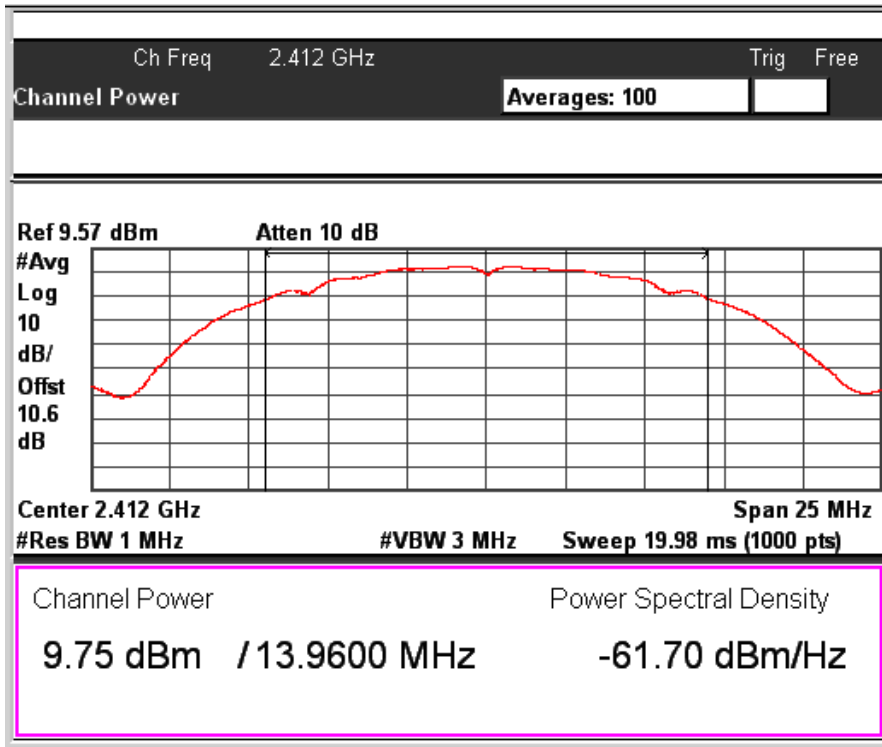
Test Method:



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

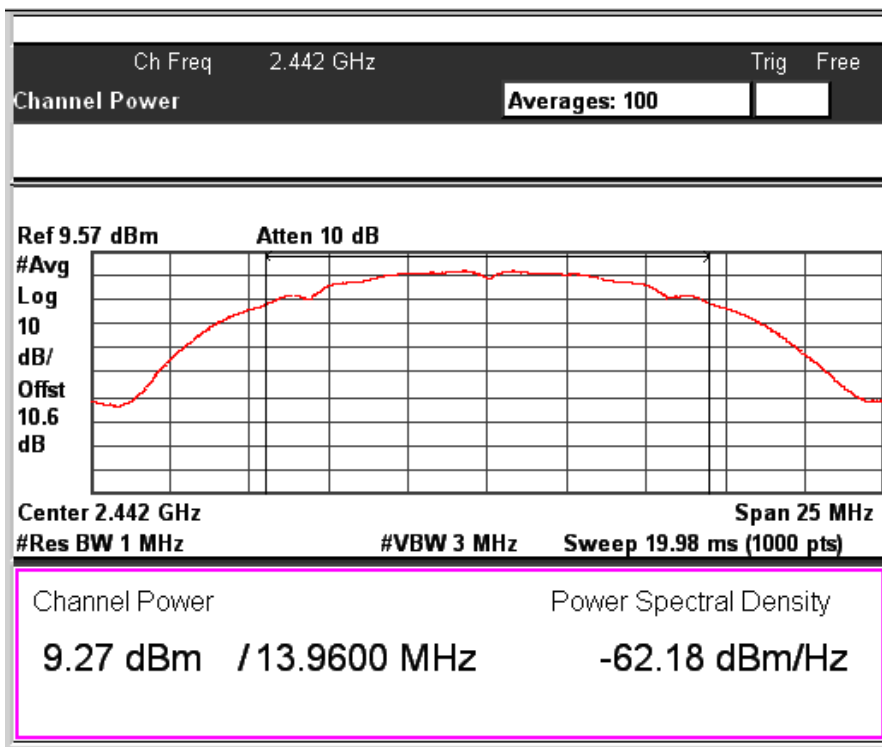
Test Result: Wi-Fi

802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Total Power (dBm)	Limit (dBm)	Margin (dB)
b	1	2412.00	09.75	30.00	-20.25
		2442.00	09.27	30.00	-20.73
		2462.00	08.80	30.00	-21.20
	11	2412.00	09.77	30.00	-20.23
		2442.00	09.17	30.00	-20.83
		2462.00	08.97	30.00	-21.03



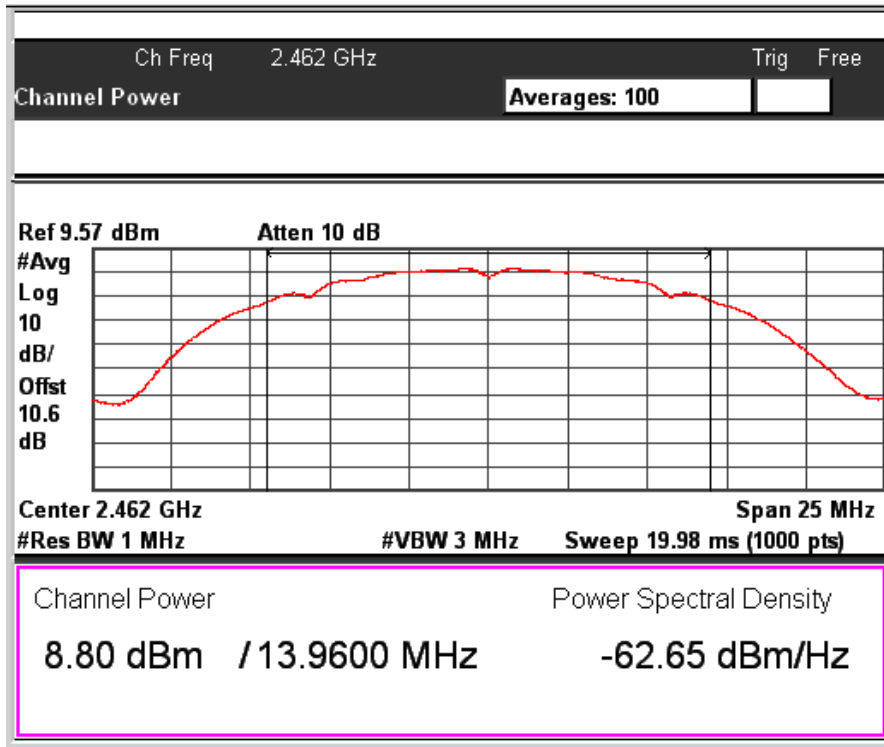
Data rate: 1 Mbps

Channel Frequency: 2412 MHz



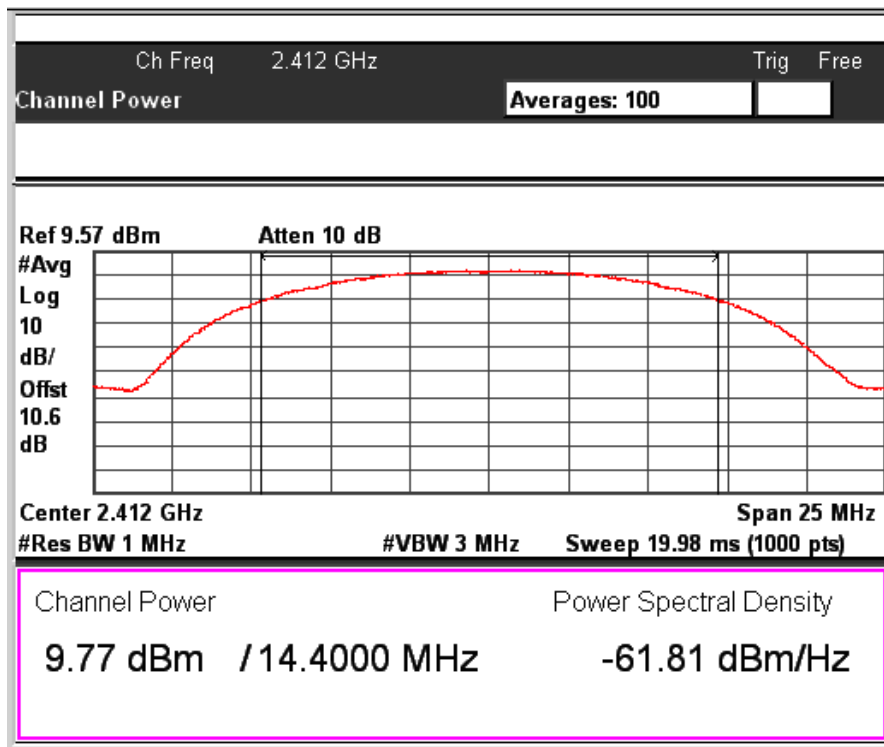
Data rate: 1 Mbps

Channel Frequency: 2442 MHz



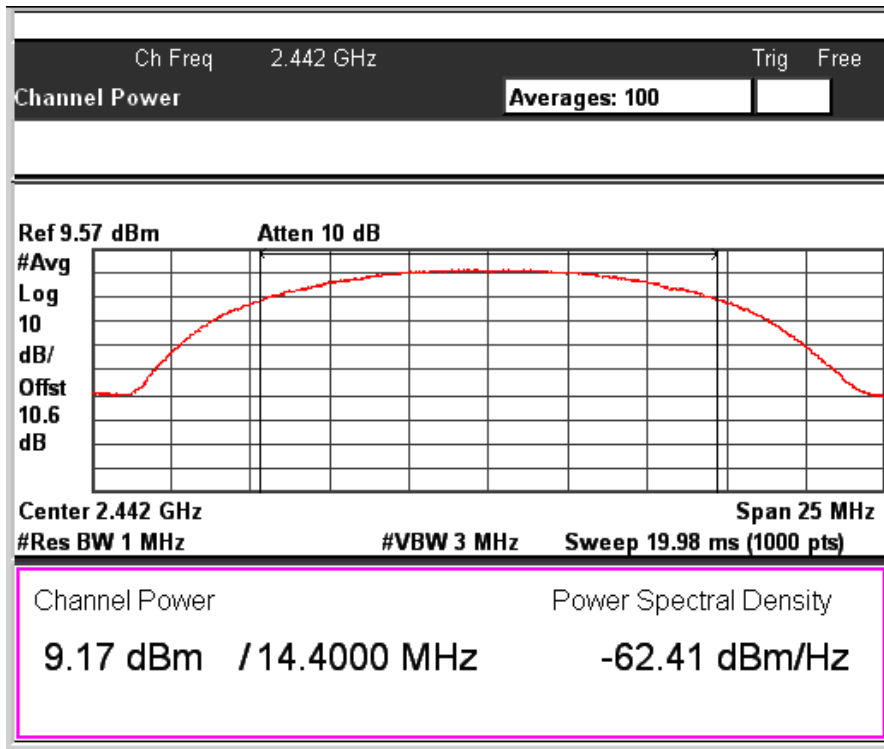
Data rate: 1 Mbps

Channel Frequency: 2462 MHz



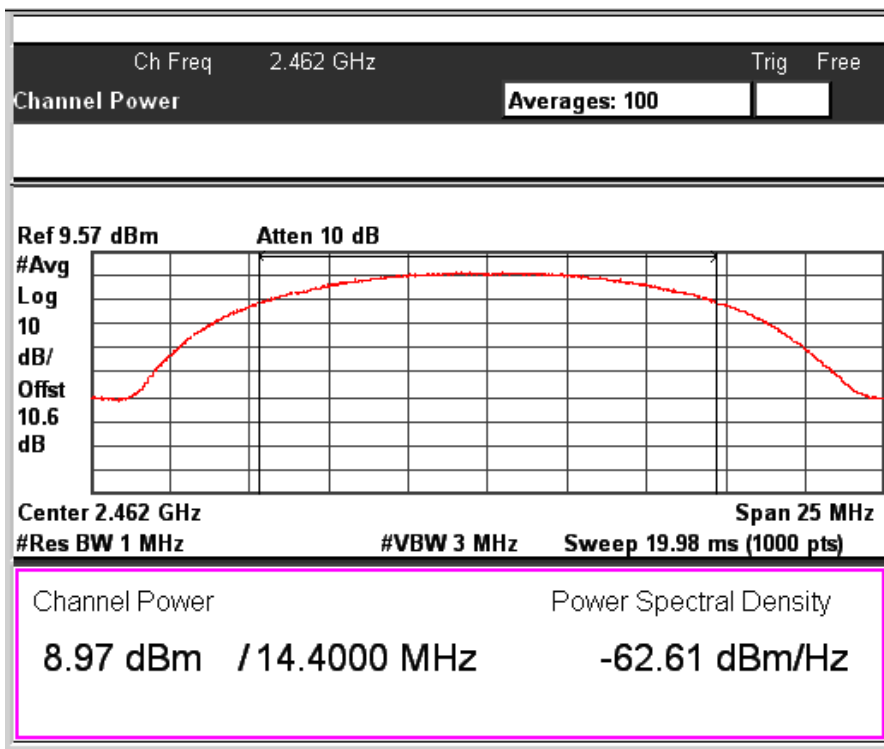
Data rate: 11 Mbps

Channel Frequency: 2412 MHz



Data rate: 11 Mbps

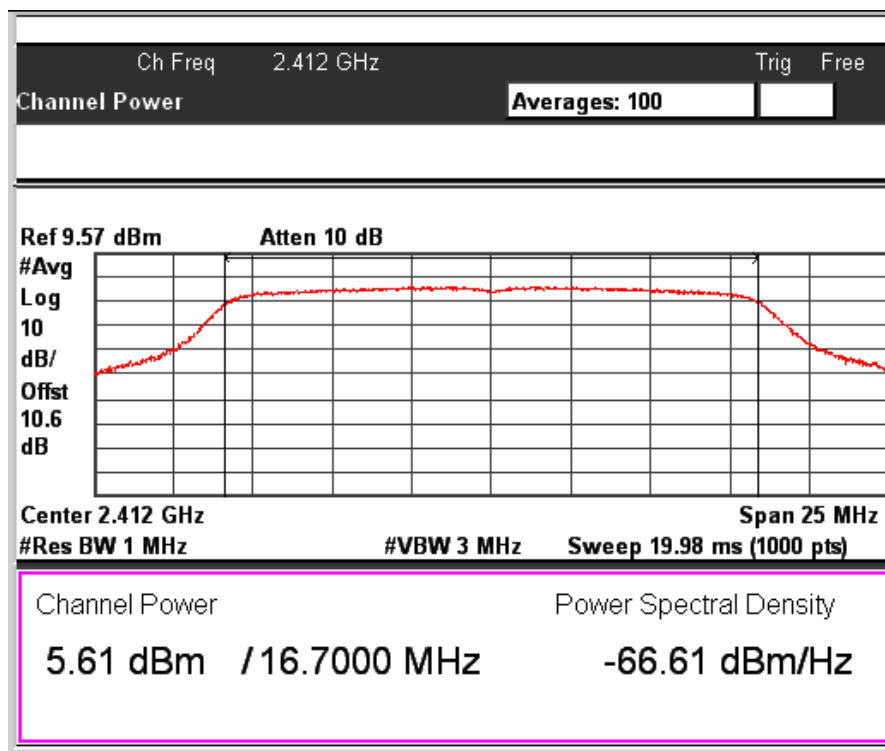
Channel Frequency: 2442 MHz



Data rate: 11 Mbps

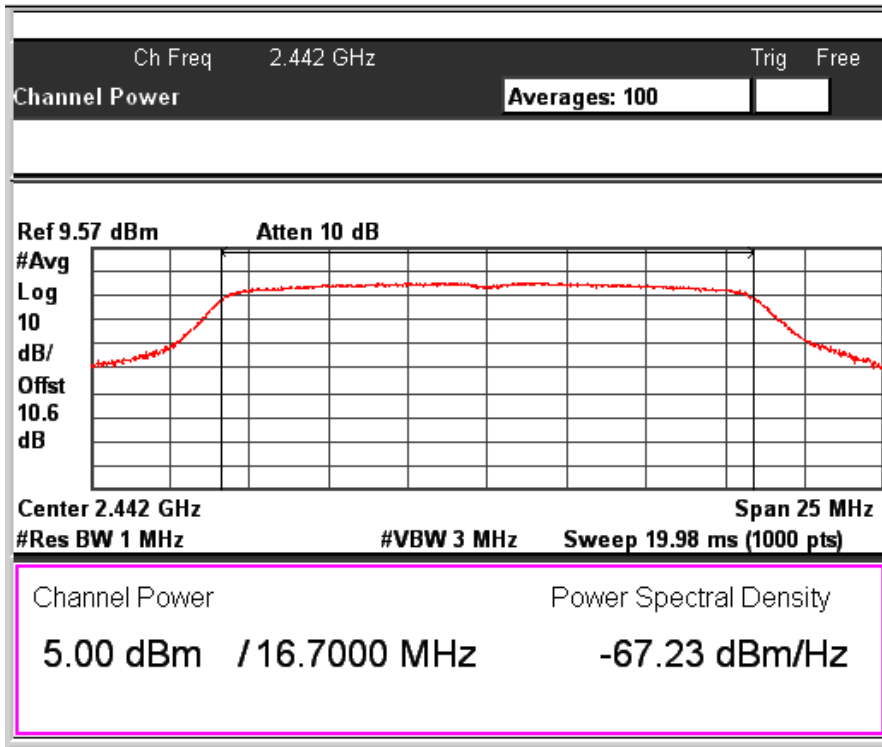
Channel Frequency: 2462 MHz

802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Total Power (dBm)	Limit (dBm)	Margin (dB)
g	6	2412.00	05.61	30.00	-24.39
		2442.00	05.00	30.00	-25.00
		2462.00	04.51	30.00	-25.49
	24	2412.00	05.37	30.00	-24.63
		2442.00	04.66	30.00	-25.34
		2462.00	04.35	30.00	-25.65
	54	2412.00	05.13	30.00	-24.87
		2442.00	04.51	30.00	-25.49
		2462.00	04.06	30.00	-25.94



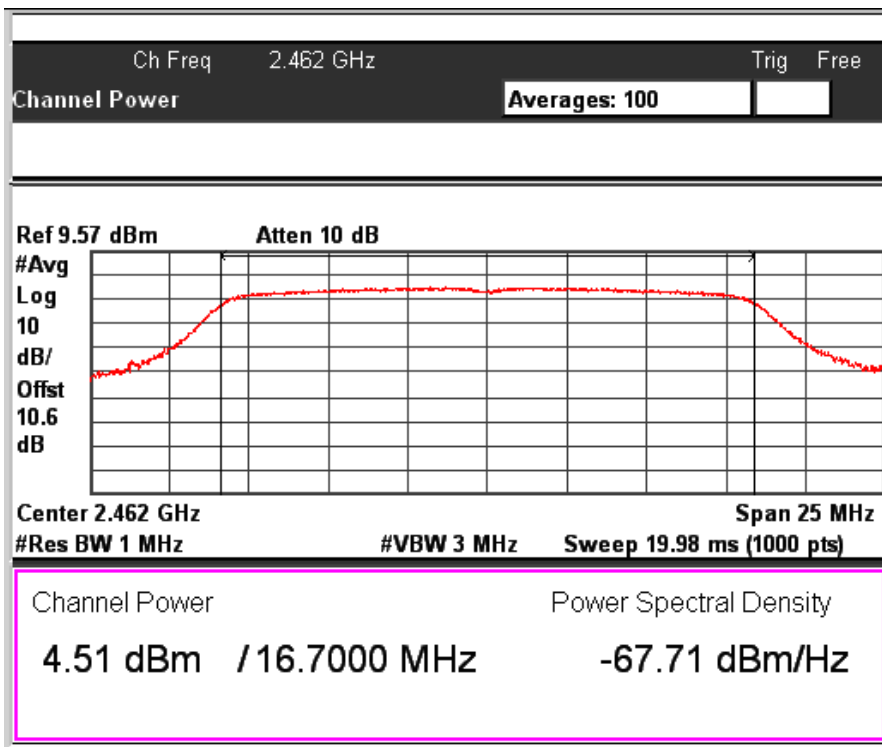
Data rate: 6 Mbps

Channel Frequency: 2412 MHz



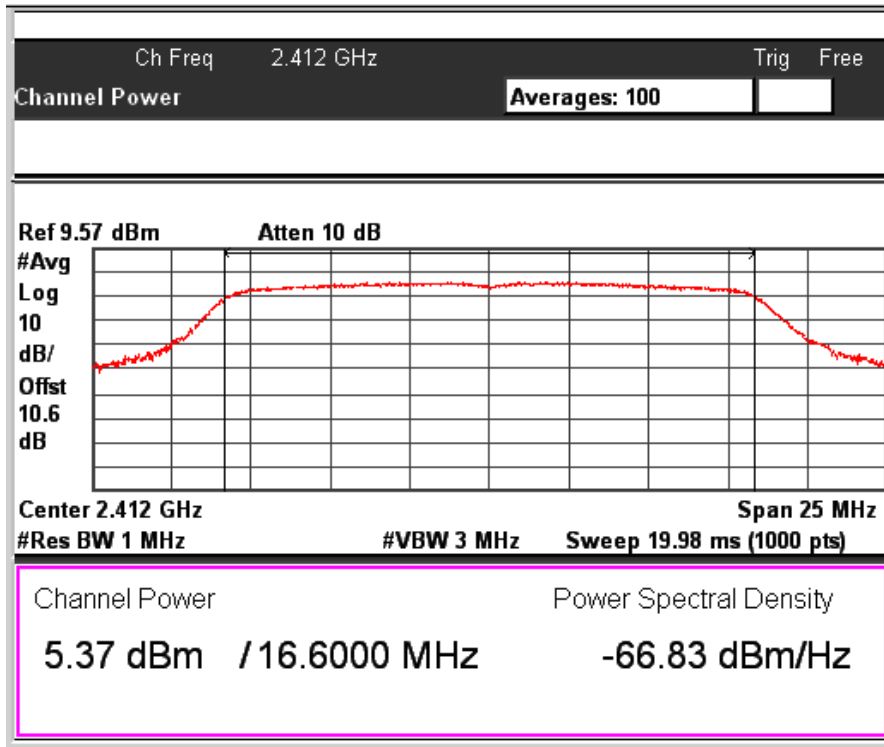
Data rate: 6 Mbps

Channel Frequency: 2442 MHz



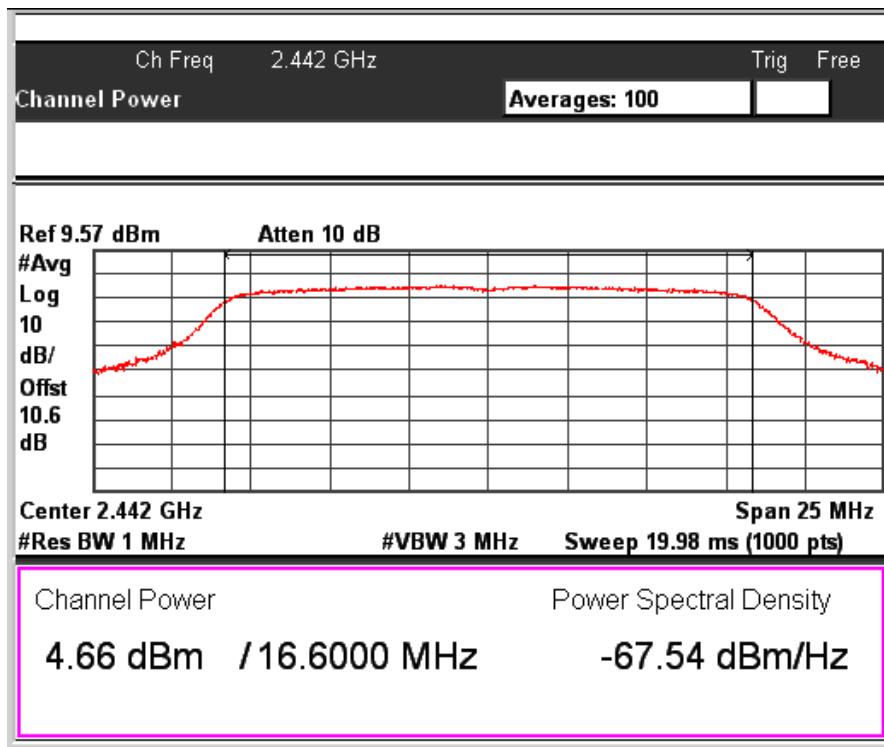
Data rate: 6 Mbps

Channel Frequency: 2462 MHz



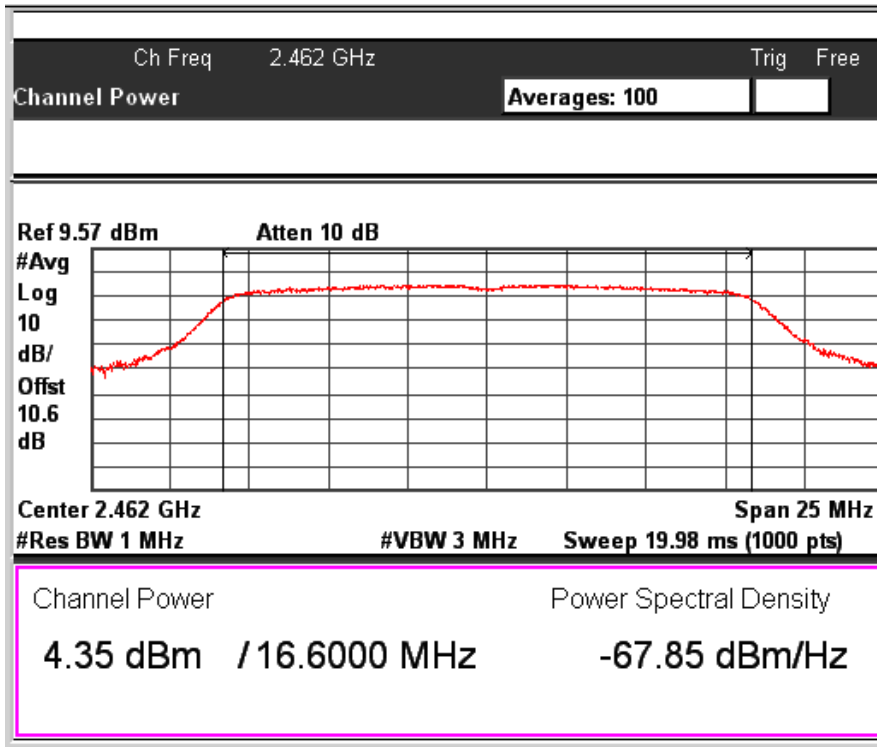
Data rate: 24 Mbps

Channel Frequency: 2412 MHz



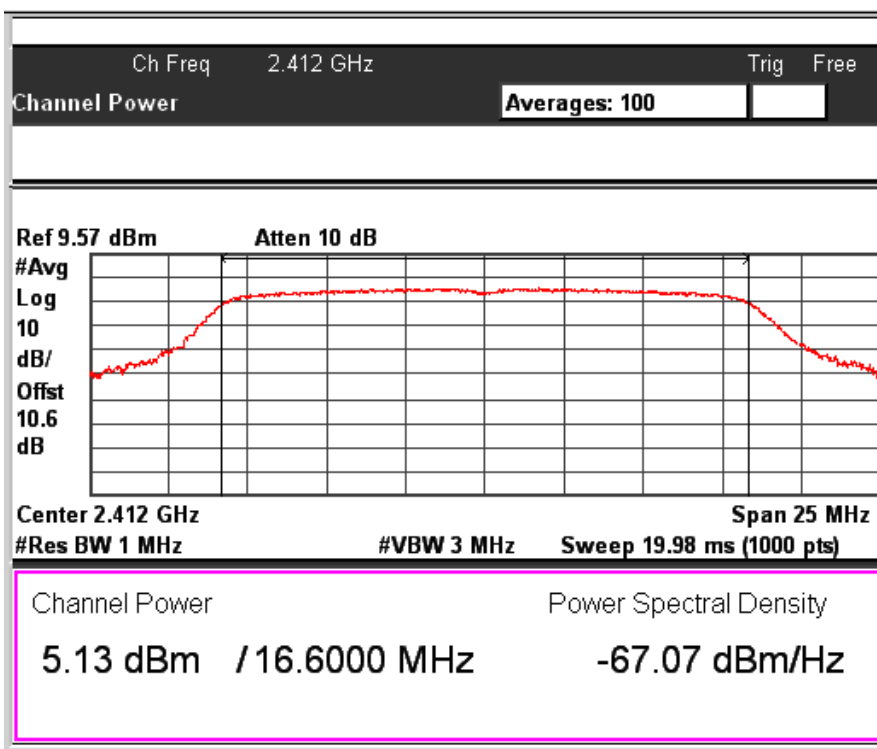
Data rate: 24 Mbps

Channel Frequency: 2442 MHz



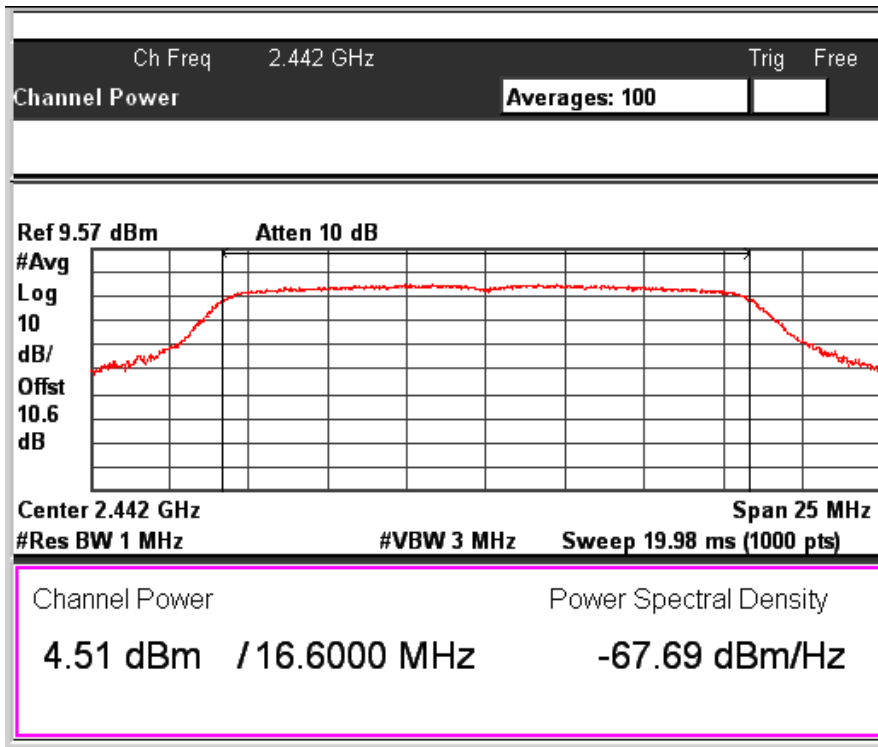
Data rate: 24 Mbps

Channel Frequency: 2462 MHz



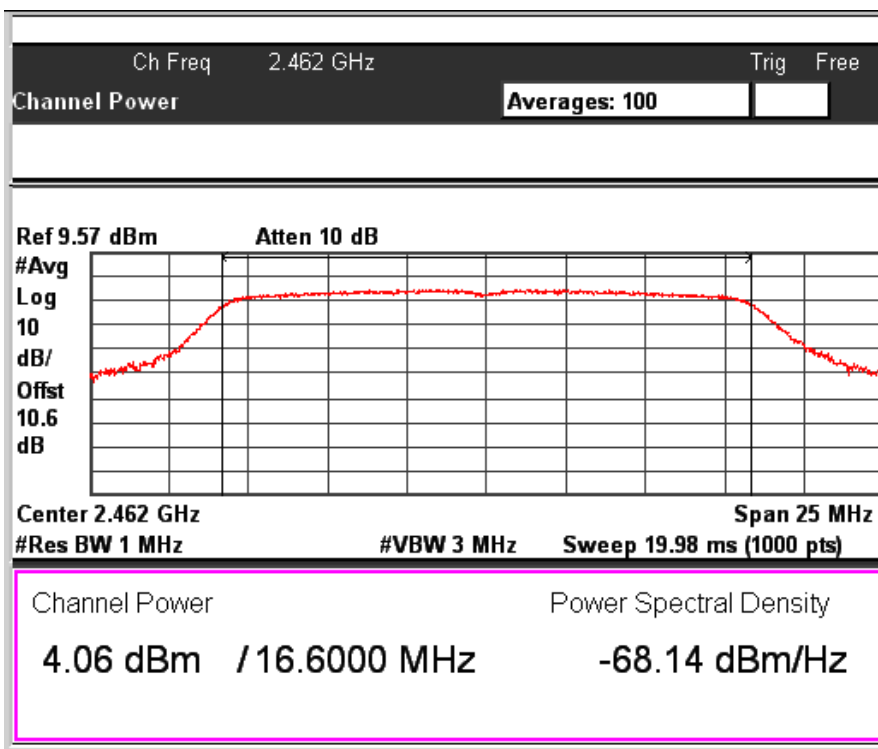
Data rate: 54 Mbps

Channel Frequency: 2412 MHz



Data rate: 54 Mbps

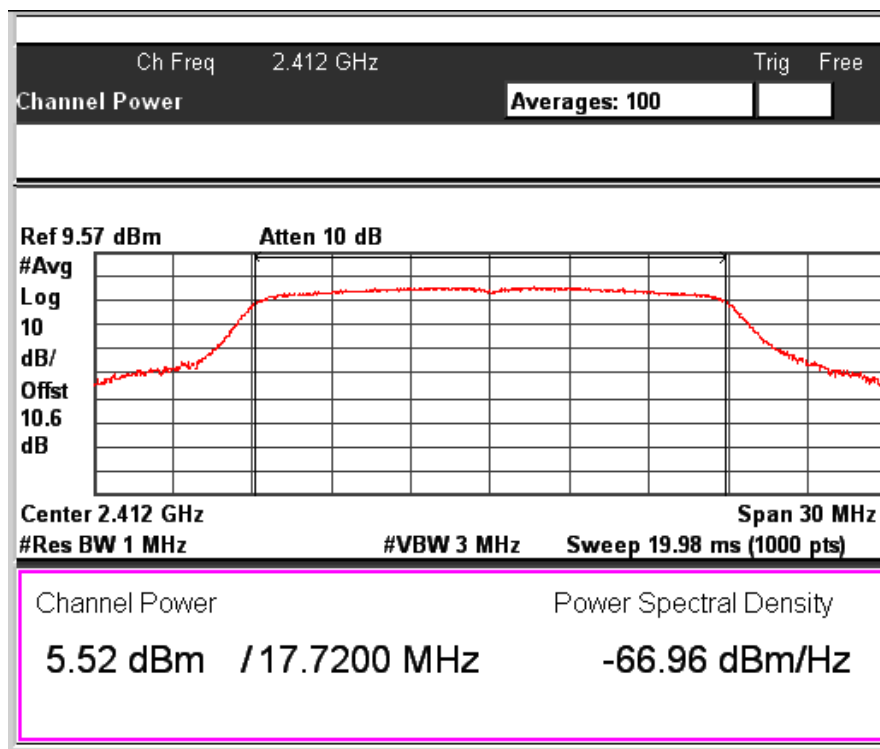
Channel Frequency: 2442 MHz



Data rate: 54 Mbps

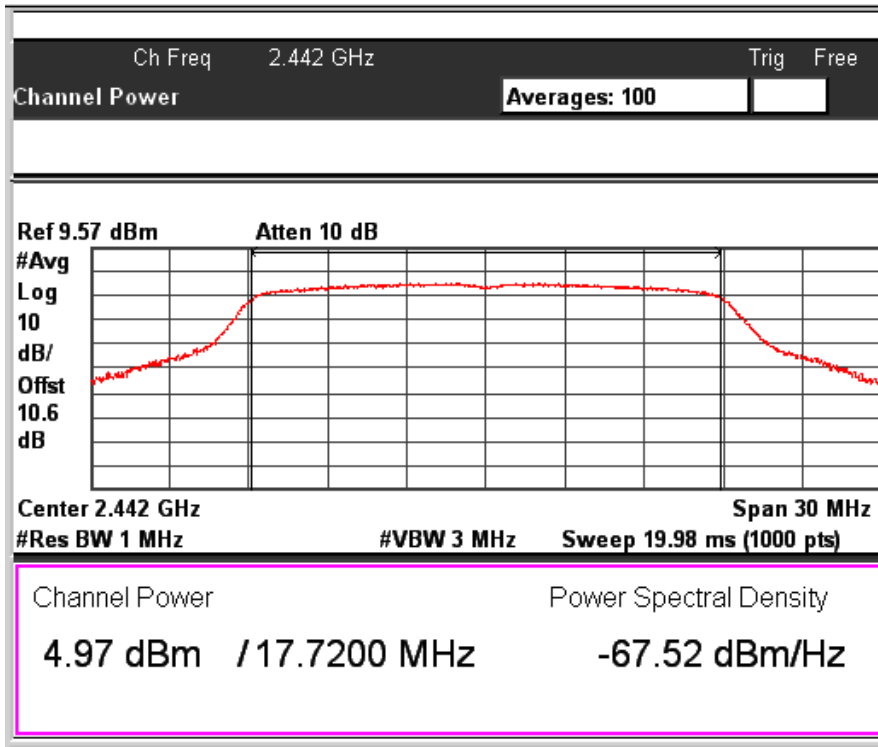
Channel Frequency: 2462 MHz

802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Total Power (dBm)	Limit (dBm)	Margin (dB)
n	6.5	2412.00	05.52	30.00	-24.48
		2442.00	04.97	30.00	-25.03
		2462.00	04.49	30.00	-25.51
	39	2412.00	05.19	30.00	-24.81
		2442.00	04.57	30.00	-25.43
		2462.00	04.14	30.00	-25.86
	65	2412.00	05.07	30.00	-24.93
		2442.00	04.41	30.00	-25.59
		2462.00	04.04	30.00	-25.96



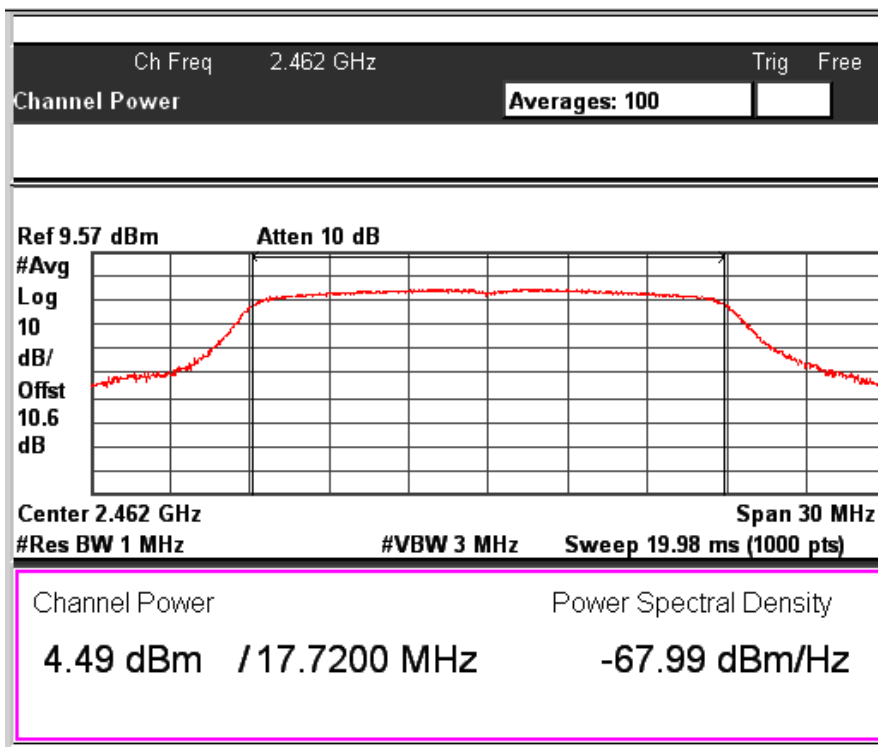
Data Rate: 6.5 Mbps

Channel Frequency: 2412 MHz



Data Rate: 6.5 Mbps

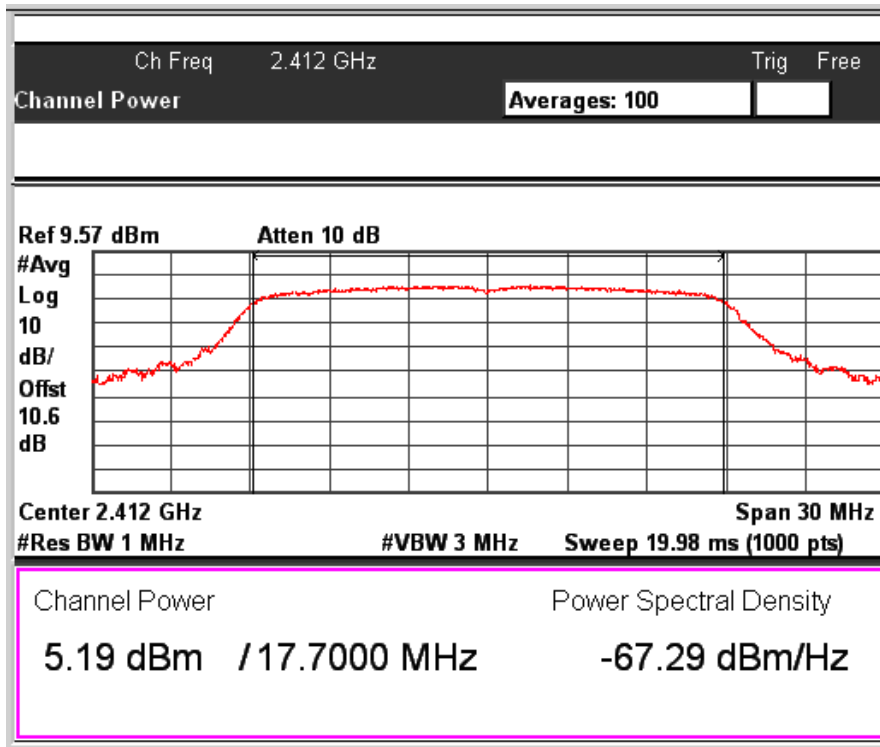
Channel Frequency: 2442 MHz



Data Rate: 6.5 Mbps

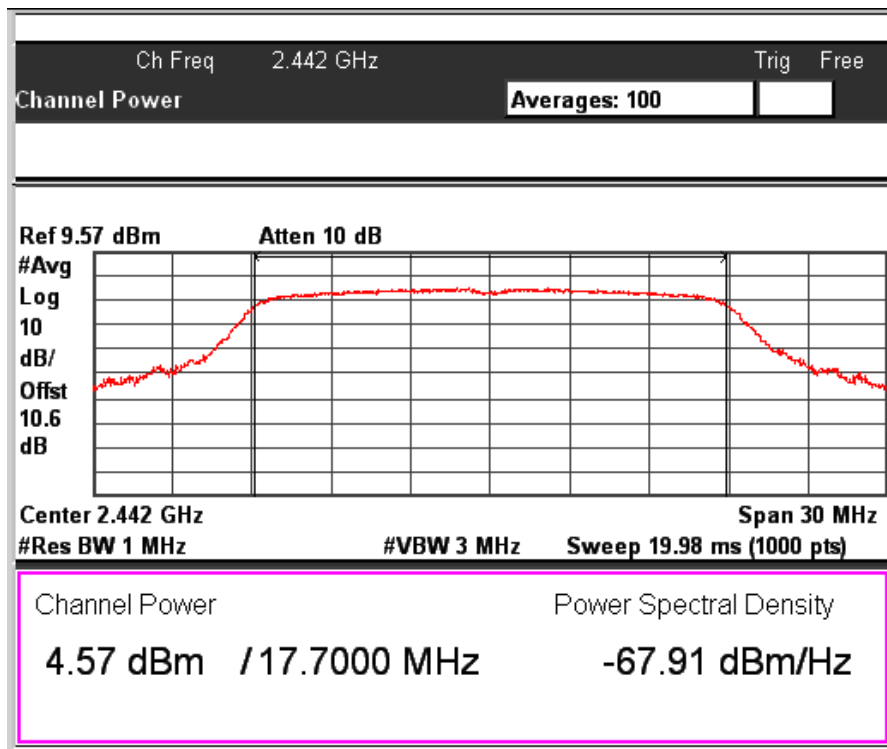
Channel Frequency: 2462 MHz

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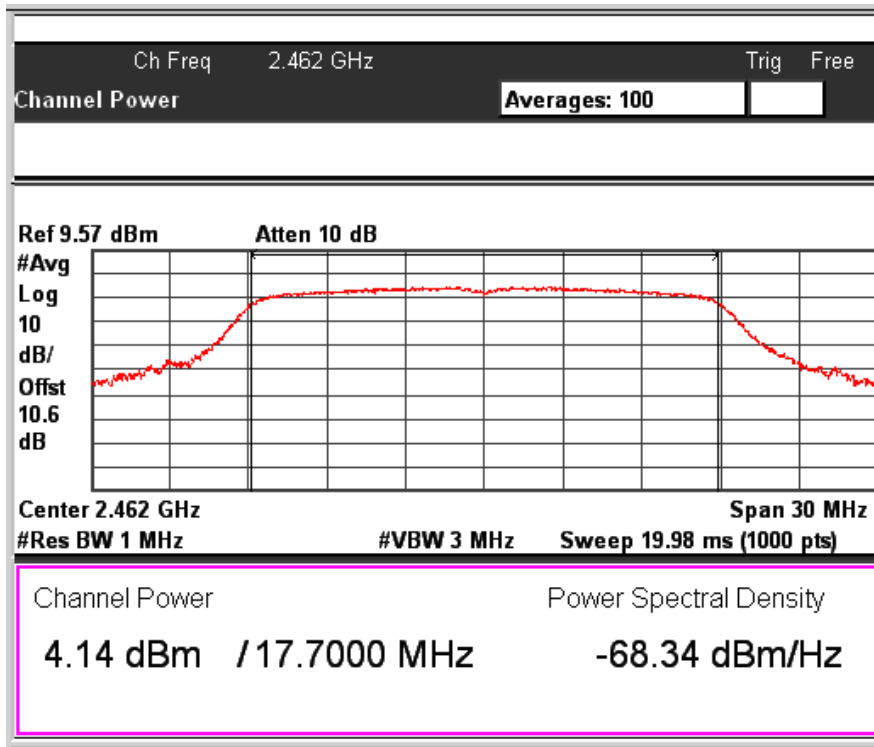
Data Rate: 39 Mbps

Channel Frequency: 2412 MHz



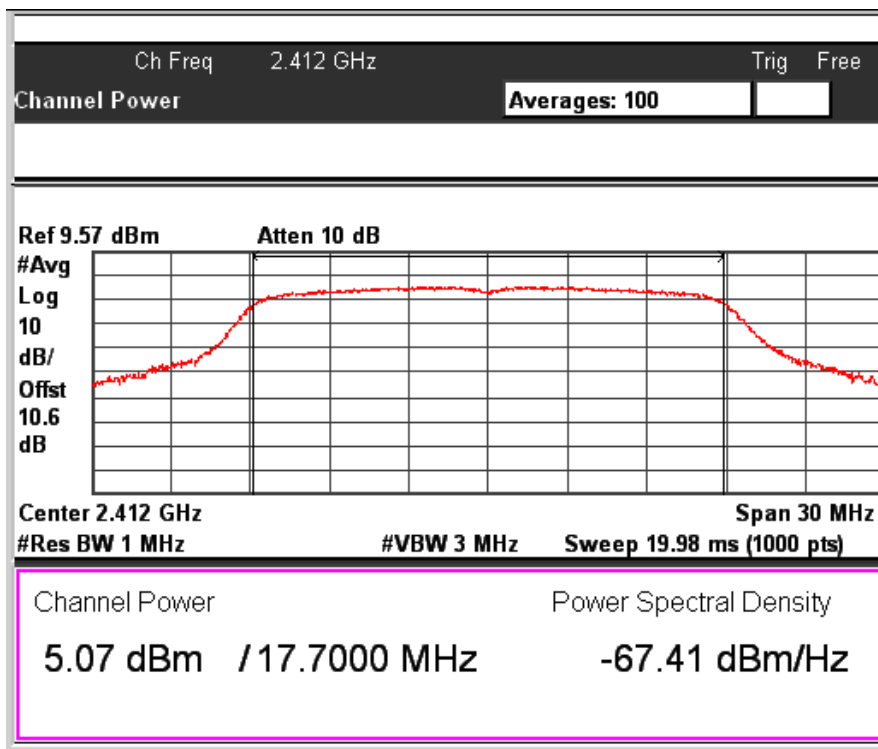
Data Rate: 39 Mbps

Channel Frequency: 2442 MHz



Data Rate: 39 Mbps

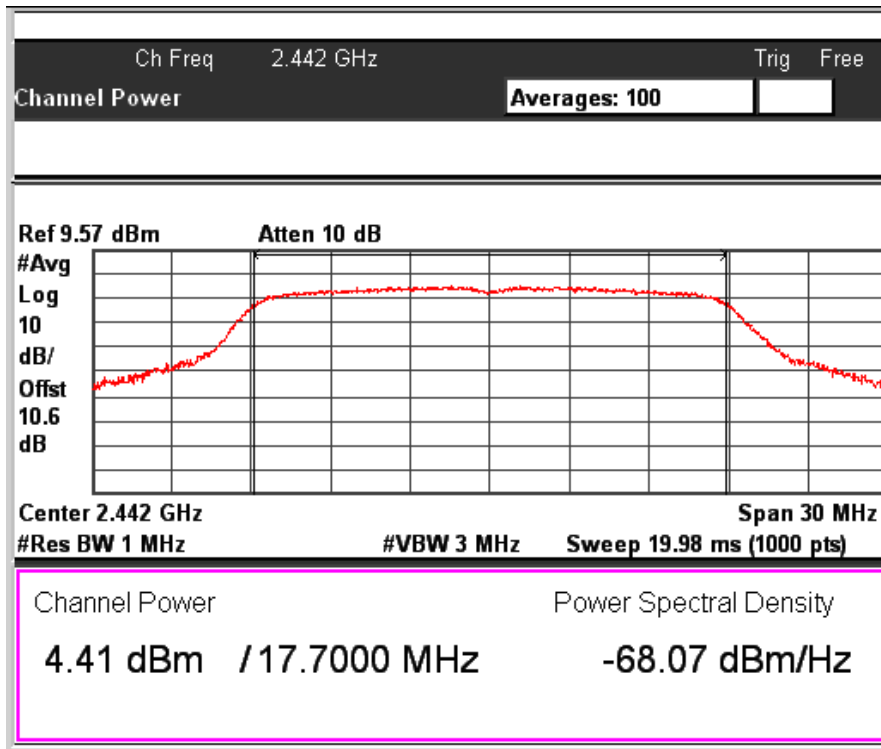
Channel Frequency: 2462 MHz



Data Rate: 65 Mbps

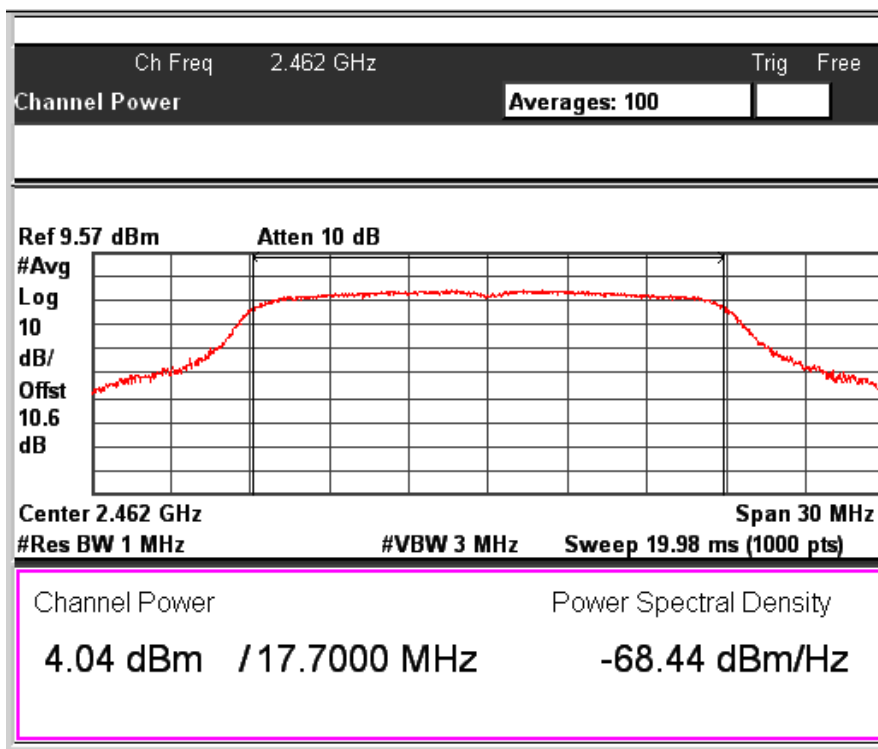
Channel Frequency: 2412 MHz

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Data Rate: 65 Mbps

Channel Frequency: 2442 MHz



Data Rate: 65 Mbps

Channel Frequency: 2462 MHz

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Maximum Power Spectral Density

Section 15.247(e)

Result

Pass

Test Specification FCC Part 15 Section 15.247 (e)

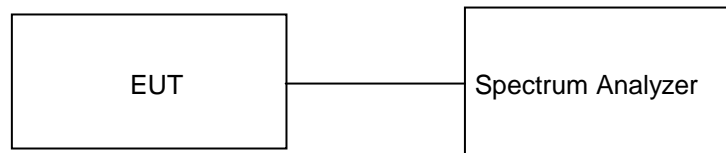
Detector Function Average

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

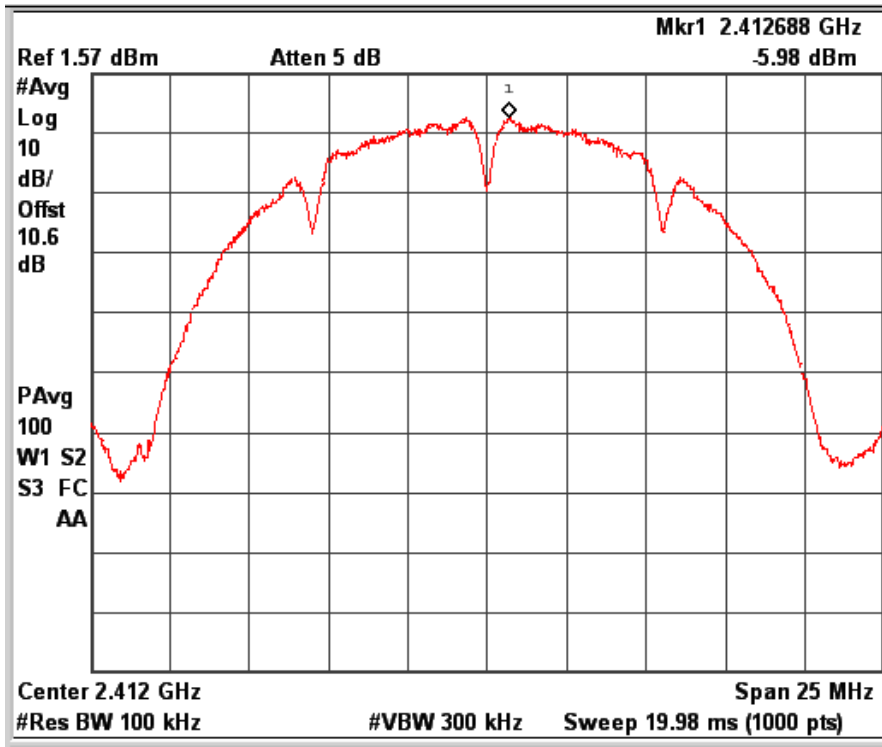
Test Method:



Test Result:

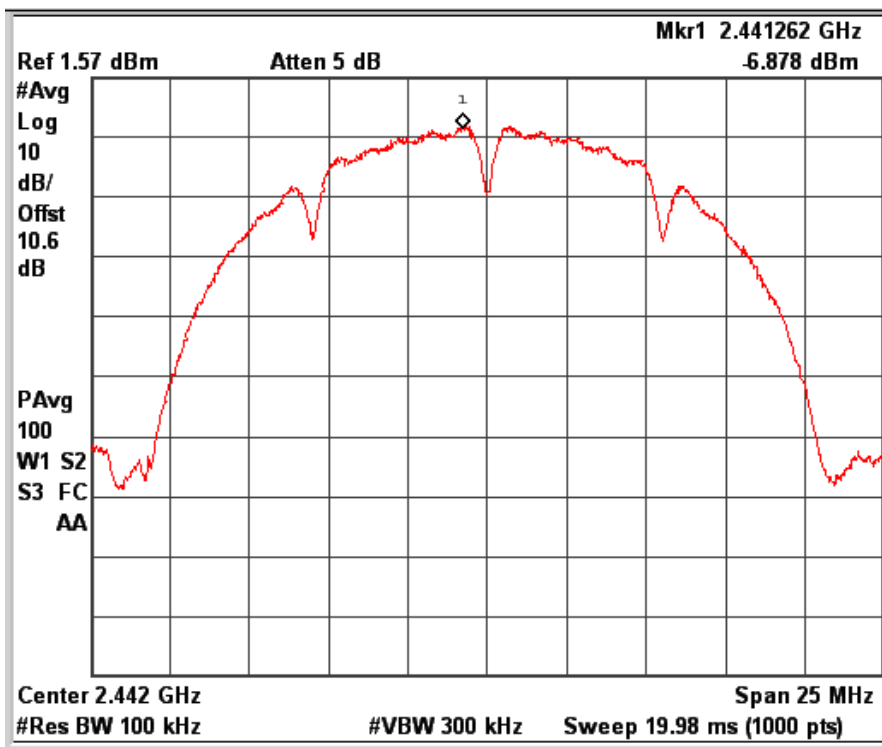
802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
b	1	2412.00	-05.98	8.00	-13.98
		2442.00	-06.87	8.00	-14.87
		2462.00	-06.99	8.00	-14.99
	11	2412.00	-07.59	8.00	-15.59
		2442.00	-08.82	8.00	-16.82
		2462.00	-08.59	8.00	-16.59

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Data rate: 1 Mbps

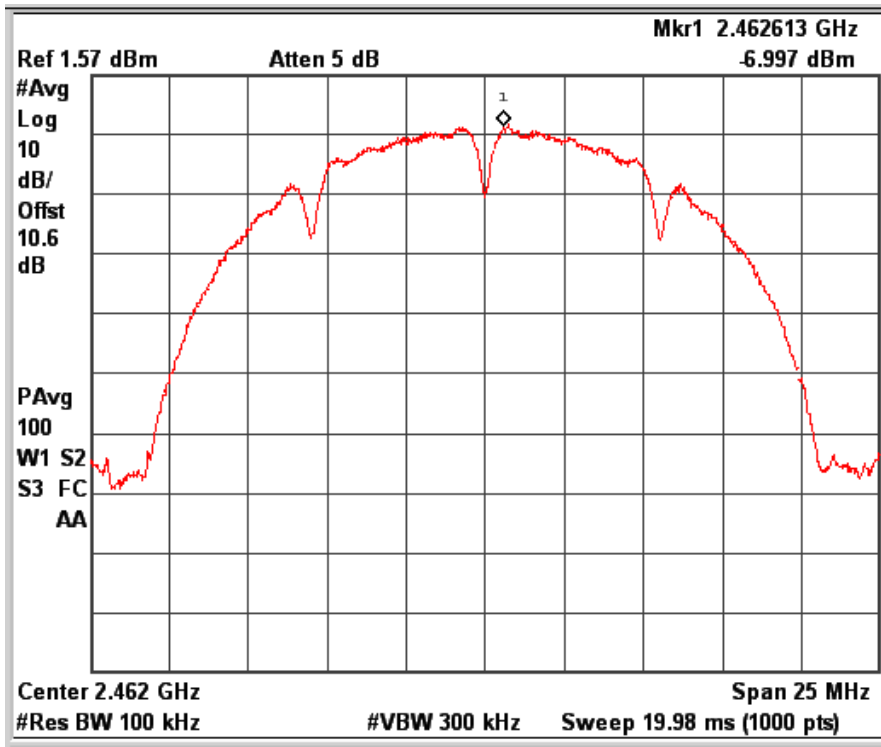
Channel Frequency: 2412 MHz



Data rate: 1 Mbps

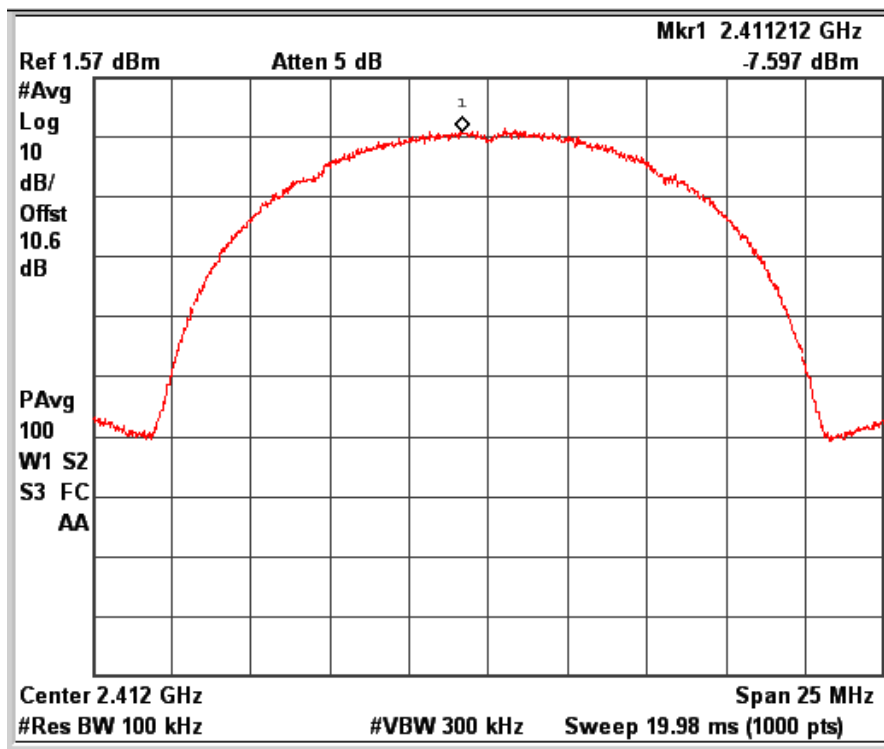
Channel Frequency: 2442 MHz

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Data rate: 1 Mbps

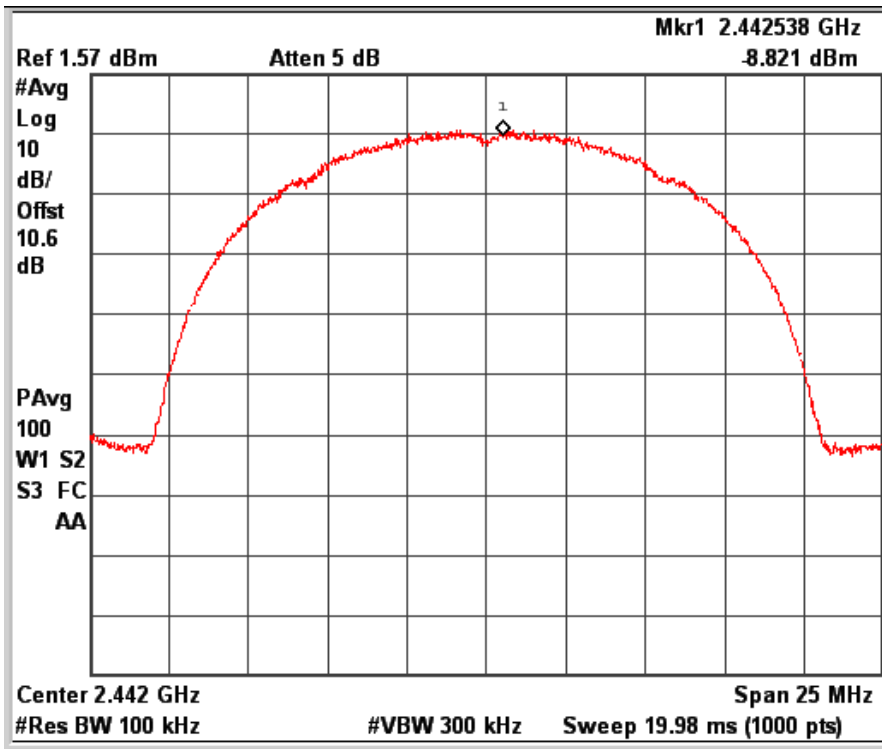
Channel Frequency: 2462 MHz



Data rate: 11 Mbps

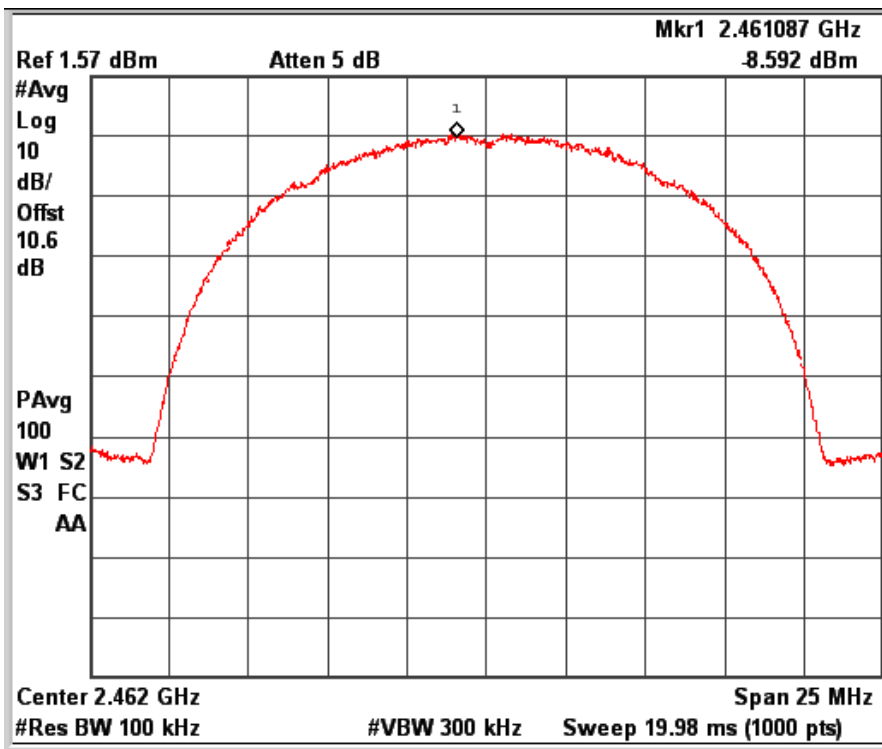
Channel Frequency: 2412 MHz

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Data rate: 11 Mbps

Channel Frequency: 2442 MHz

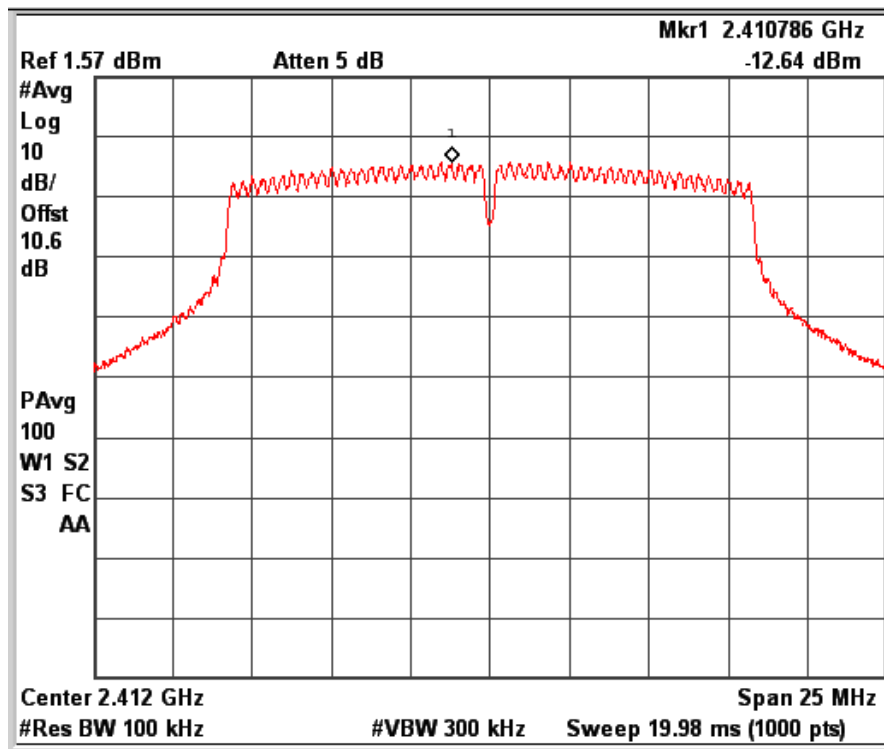


Data rate: 11 Mbps

Channel Frequency: 2462 MHz

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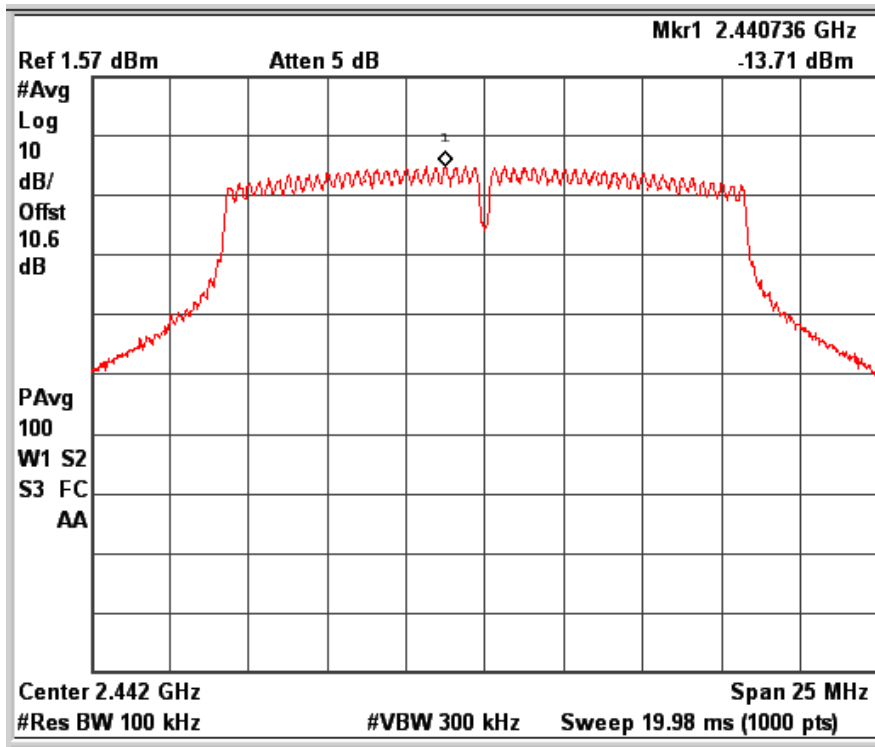
802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
g	6	2412.00	-12.64	8.00	-20.64
		2442.00	-13.71	8.00	-21.71
		2462.00	-14.55	8.00	-22.55
	24	2412.00	-13.12	8.00	-21.12
		2442.00	-14.23	8.00	-22.23
		2462.00	-13.87	8.00	-21.87
	54	2412.00	-13.04	8.00	-21.04
		2442.00	-13.85	8.00	-21.85
		2462.00	-14.35	8.00	-22.35



Data rate: 6 Mbps

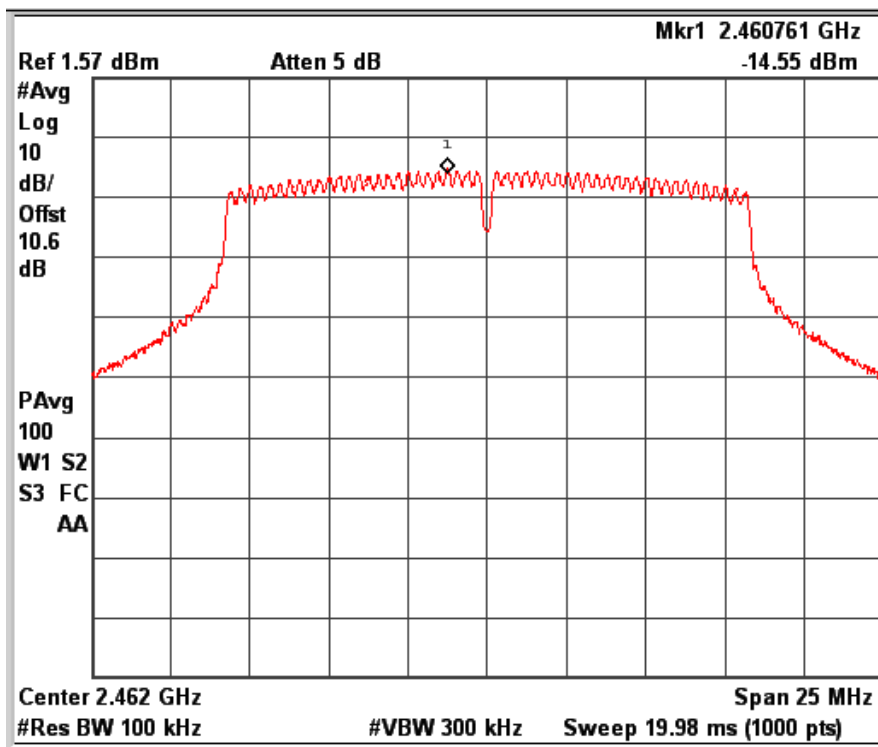
Channel Frequency: 2412 MHz

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Data rate: 6 Mbps

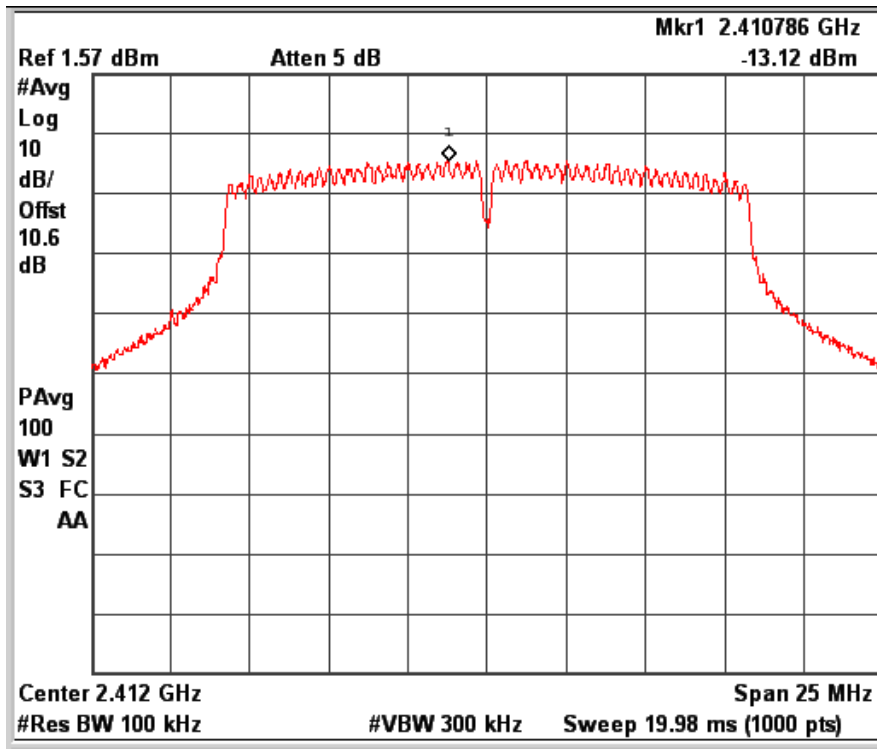
Channel Frequency: 2442 MHz



Data rate: 6 Mbps

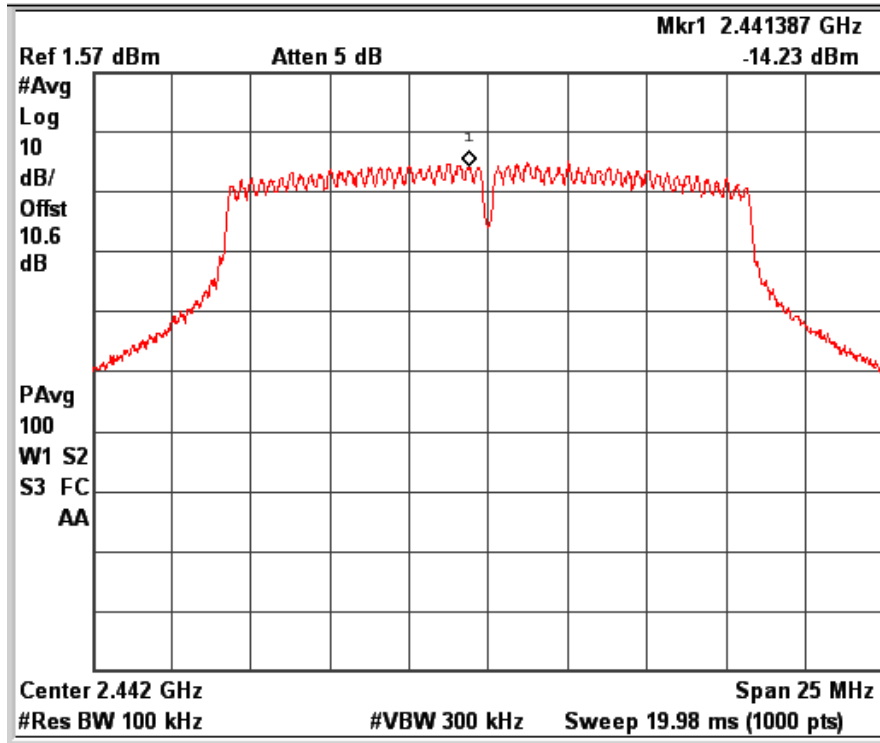
Channel Frequency: 2462 MHz

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Data rate: 24 Mbps

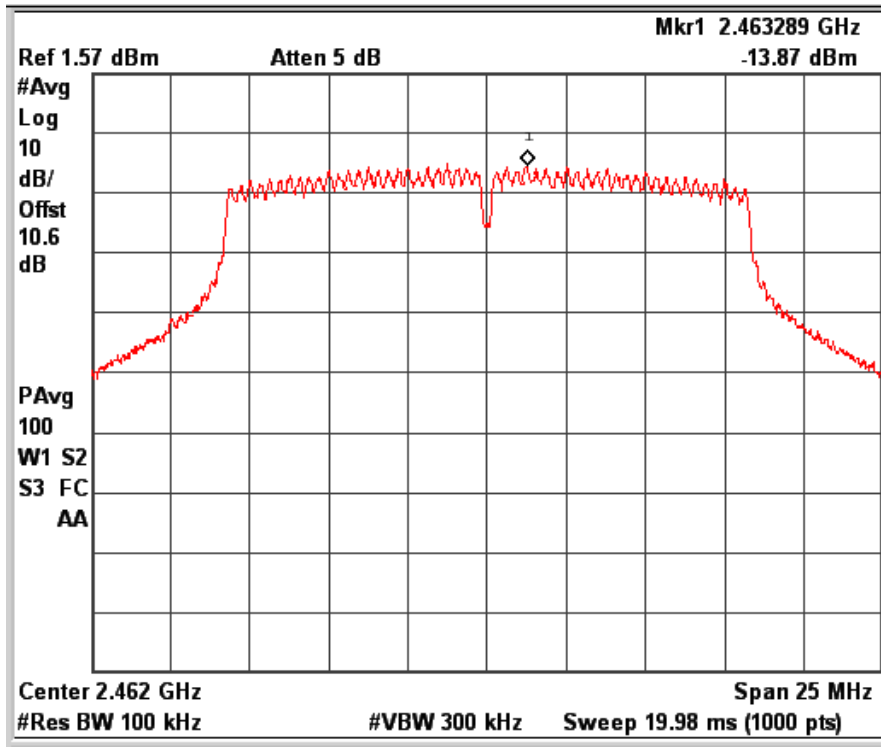
Channel Frequency: 2412 MHz



Data rate: 24 Mbps

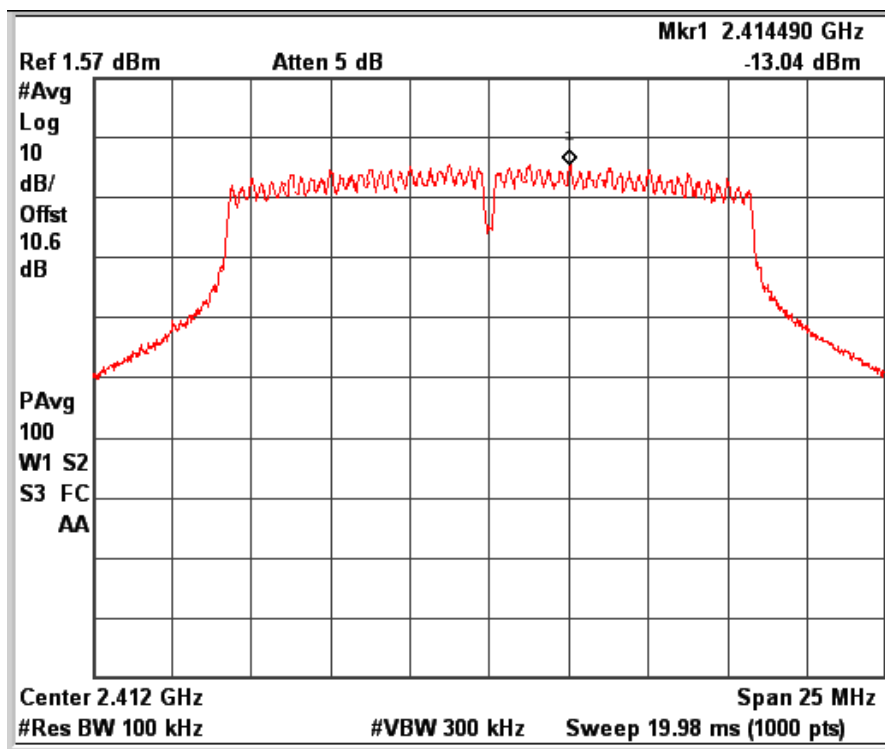
Channel Frequency: 2442 MHz

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Data rate: 24 Mbps

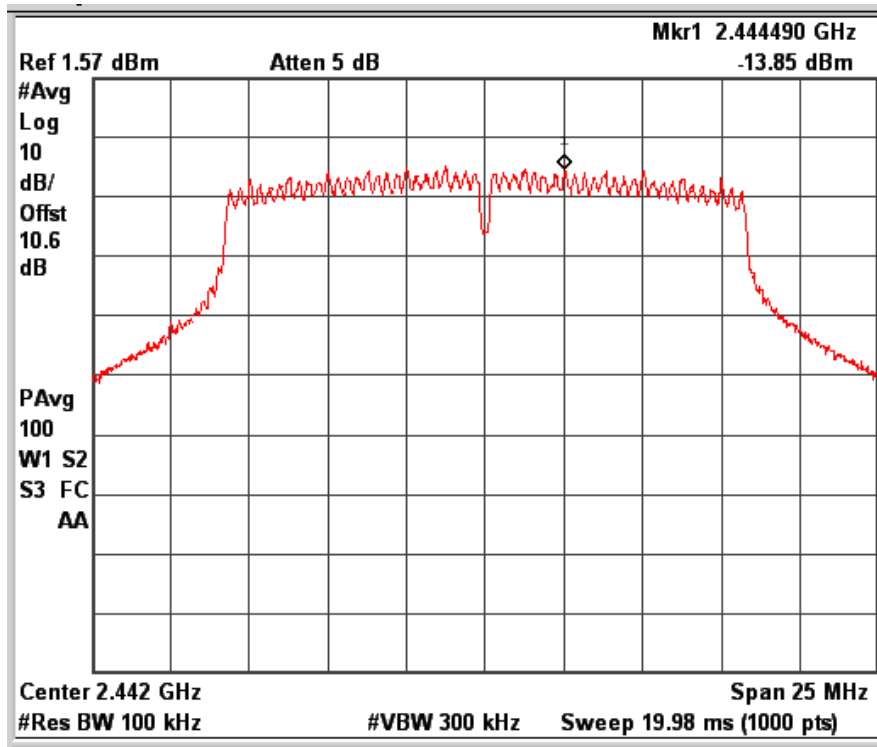
Channel Frequency: 2462 MHz



Data rate: 54 Mbps

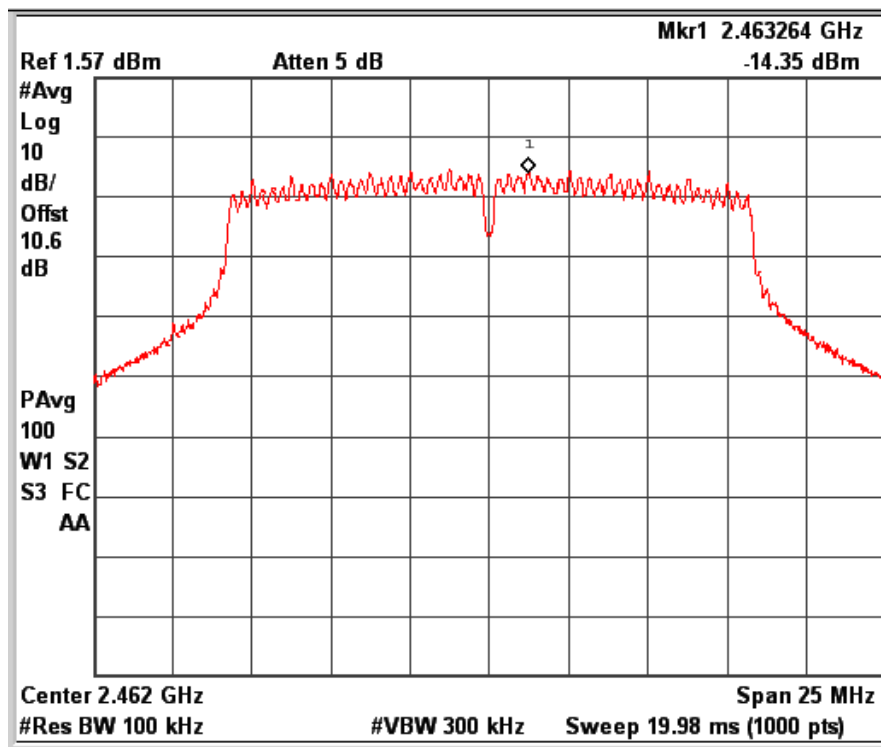
Channel Frequency: 2412 MHz

www.tuv.com



Data rate: 54 Mbps

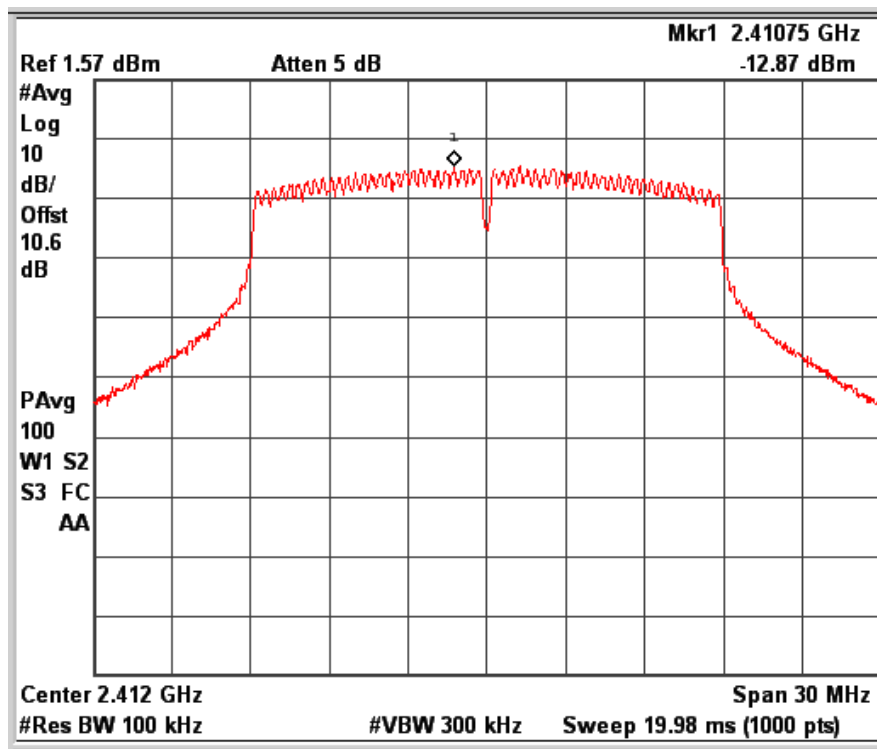
Channel Frequency: 2442 MHz



Data rate: 54 Mbps

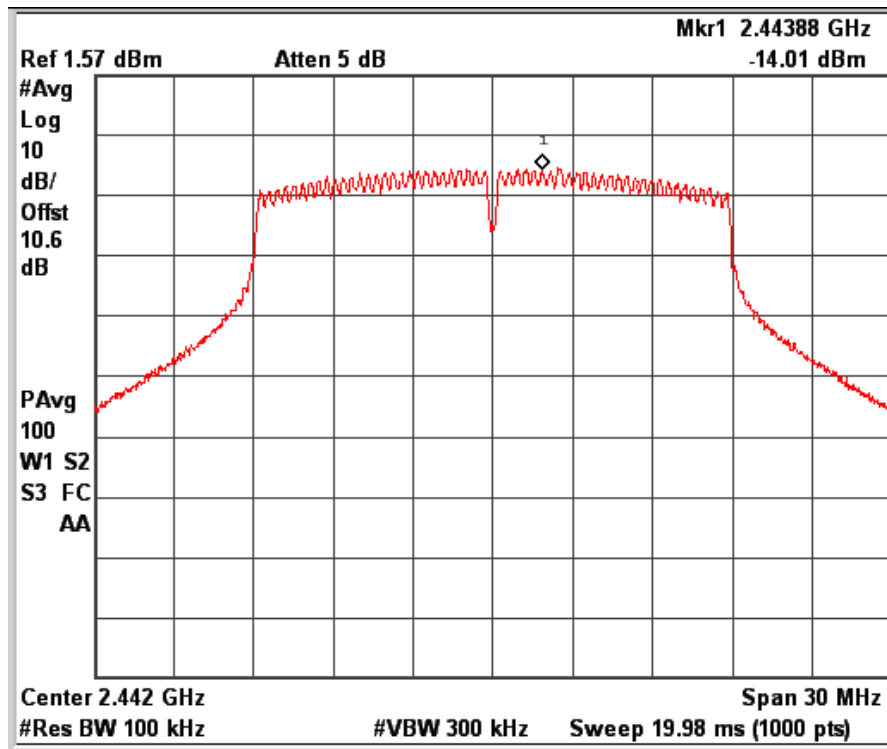
Channel Frequency: 2462 MHz

802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
n	6.5	2412.00	-12.87	8.00	-20.87
		2442.00	-14.01	8.00	-22.01
		2462.00	-13.68	8.00	-21.68
	39	2412.00	-12.96	8.00	-20.96
		2442.00	-13.72	8.00	-21.72
		2462.00	-14.46	8.00	-22.46
	65	2412.00	-12.51	8.00	-20.51
		2442.00	-13.17	8.00	-21.17
		2462.00	-13.34	8.00	-21.34



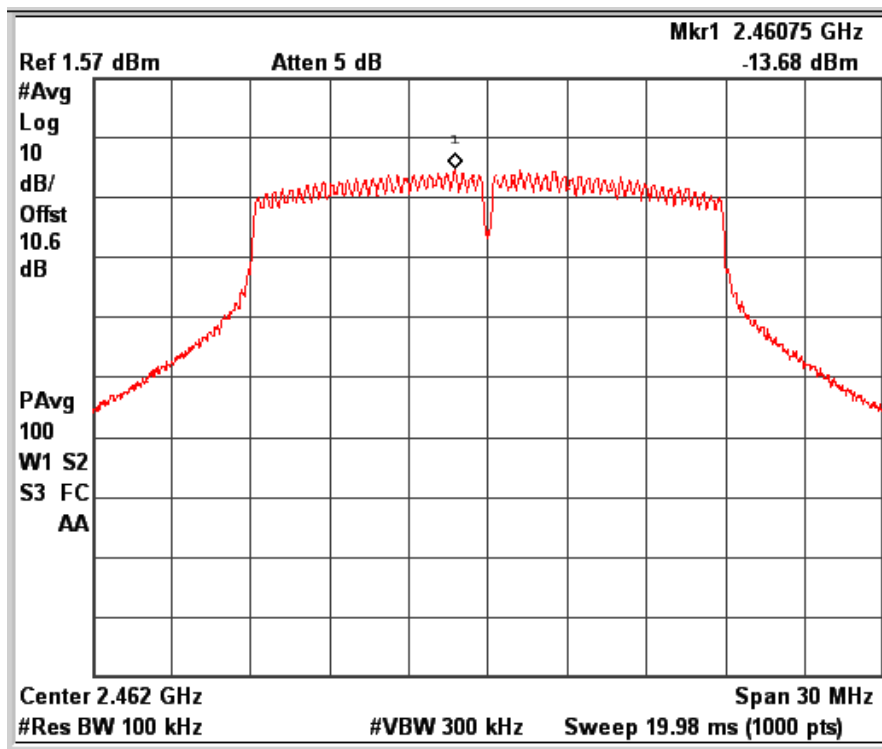
Data rate: 6.5 Mbps

Channel Frequency: 2412 MHz



Data rate: 6.5 Mbps

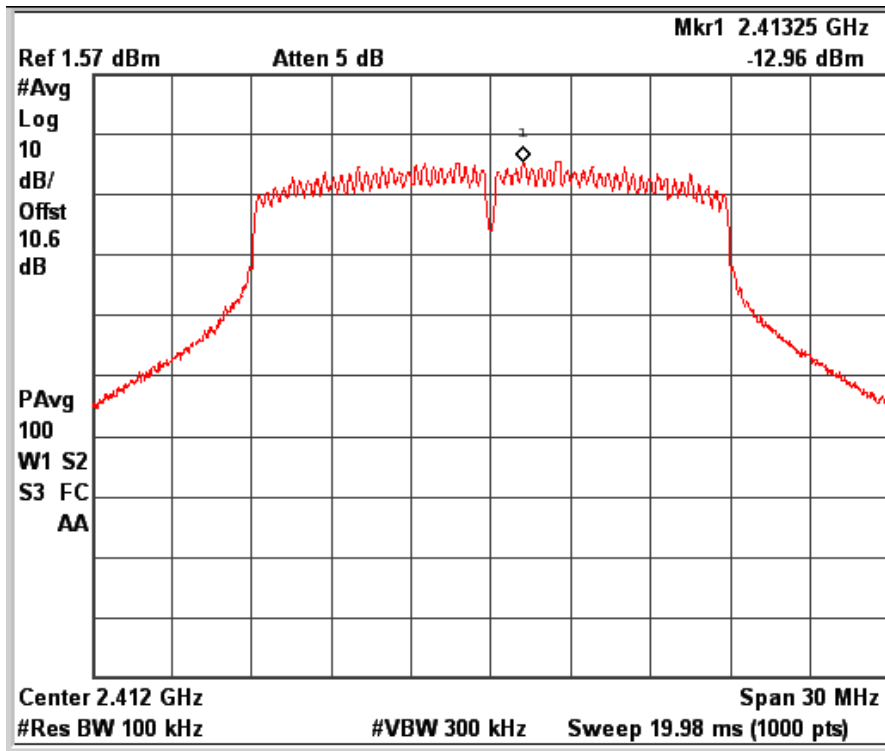
Channel Frequency: 2442 MHz



Data rate: 6.5 Mbps

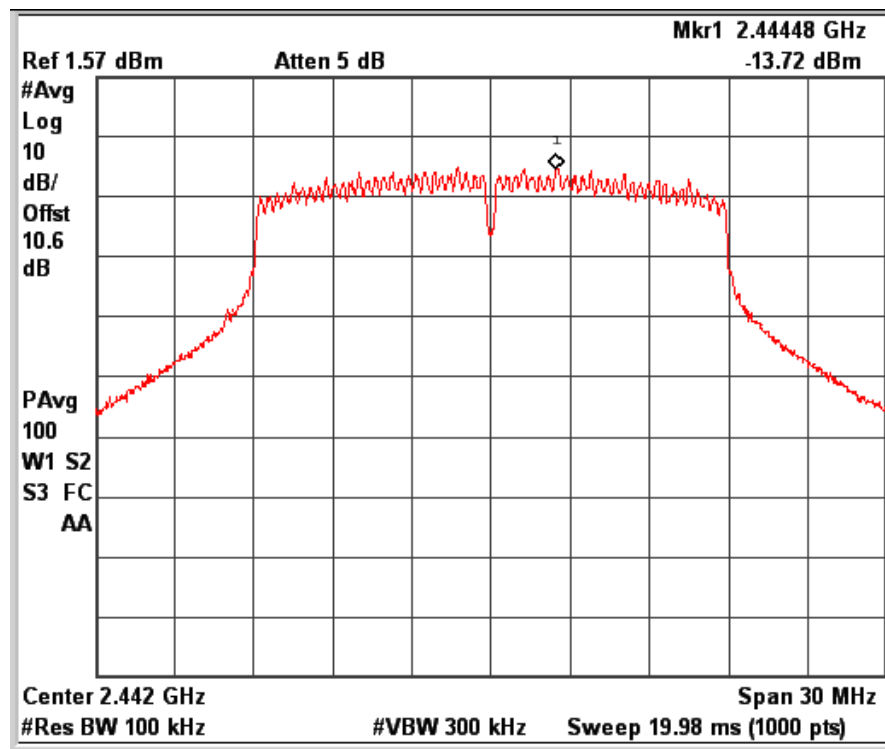
Channel Frequency: 2462 MHz

www.tuv.com



Data rate: 39 Mbps

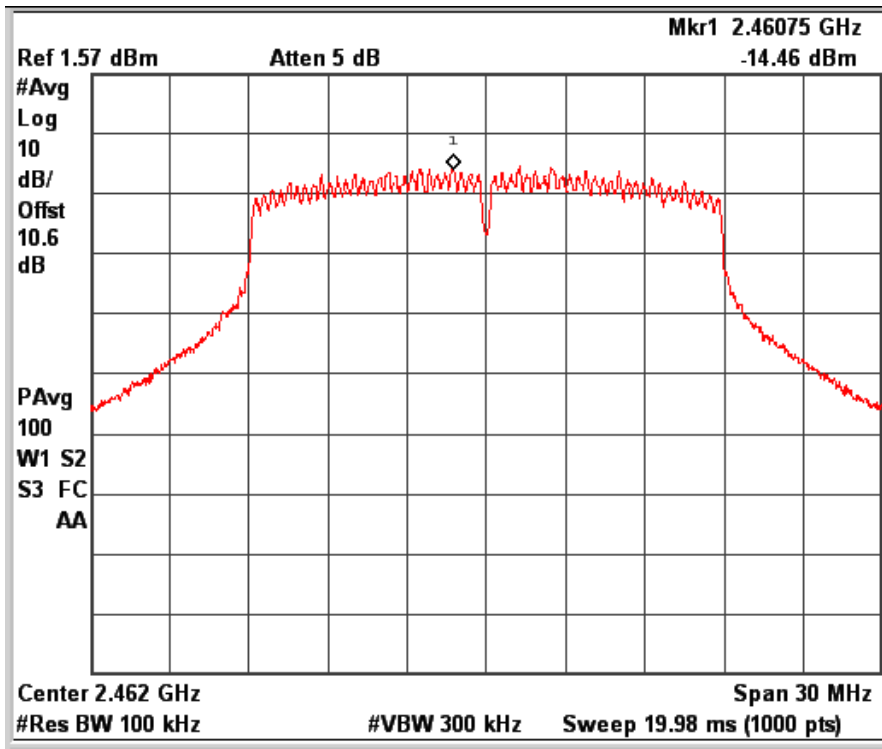
Channel Frequency: 2412 MHz



Data rate: 39 Mbps

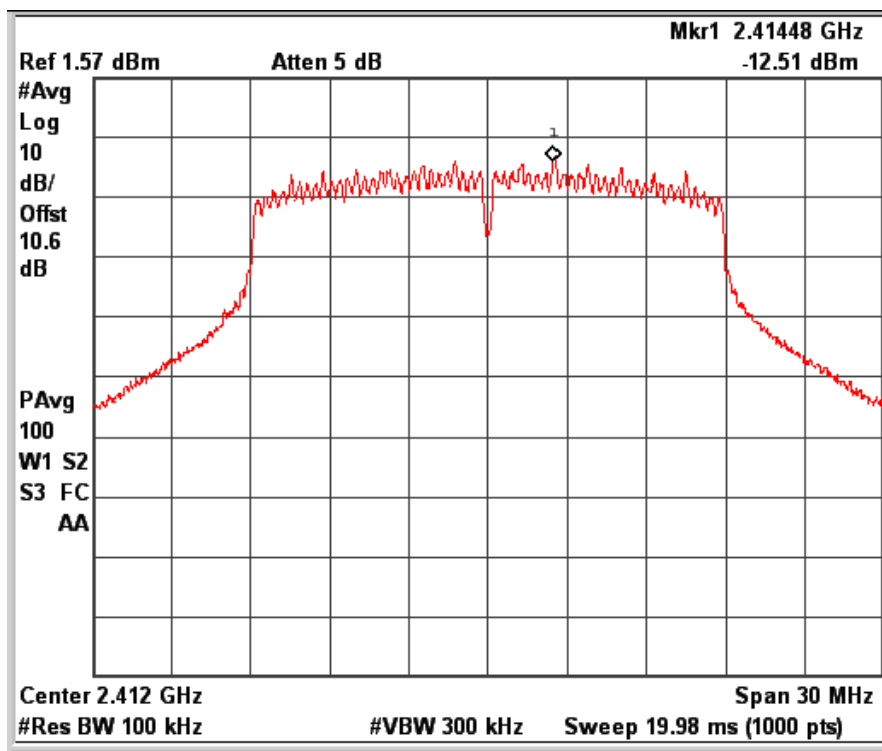
Channel Frequency: 2442 MHz

www.tuv.com



Data rate: 39 Mbps

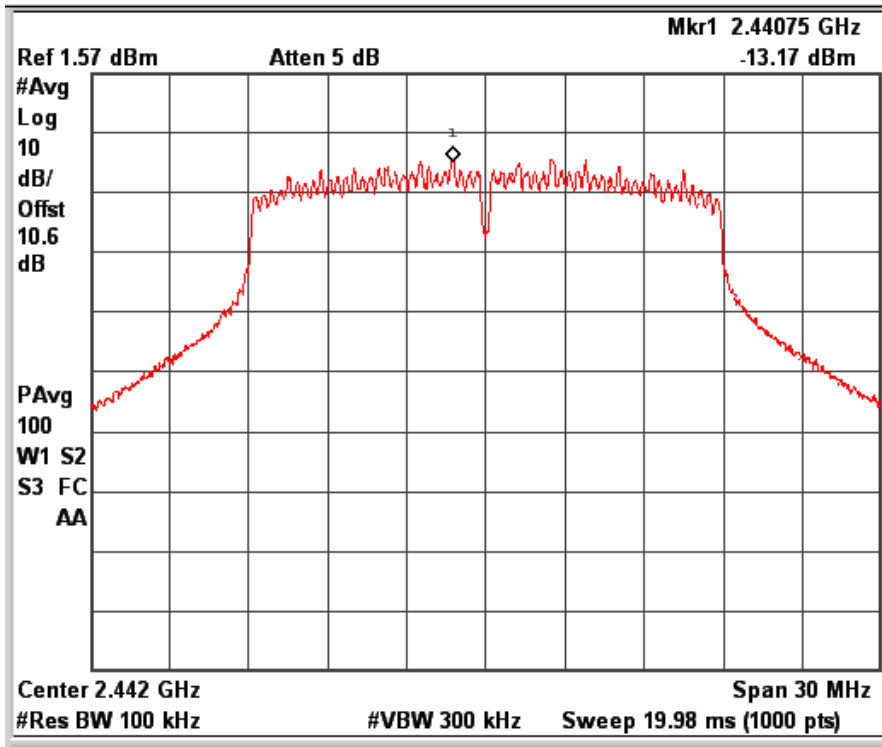
Channel Frequency: 2462 MHz



Data rate: 65 Mbps

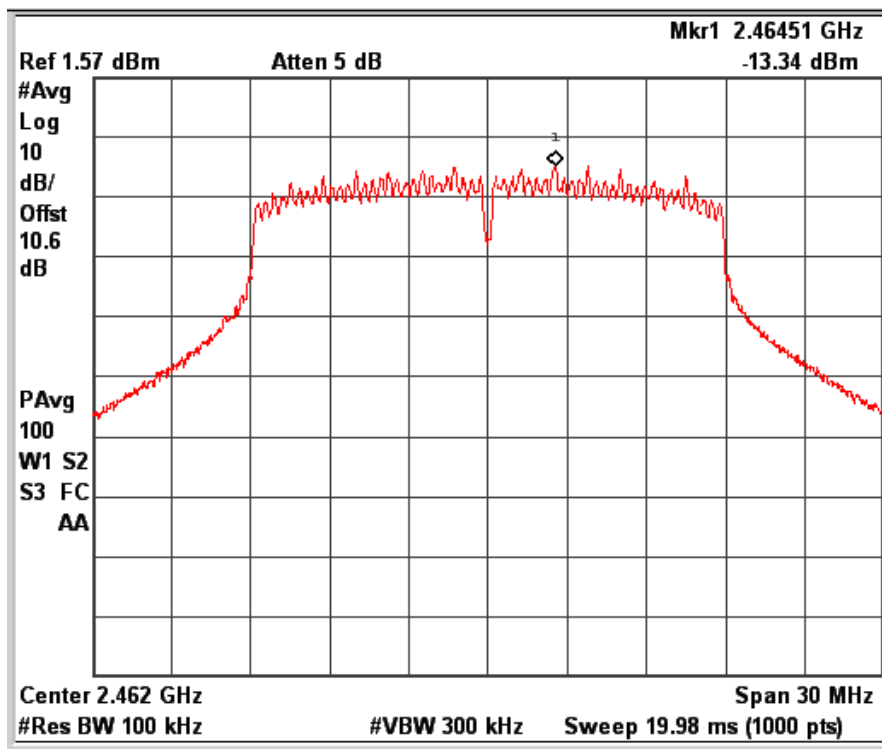
Channel Frequency: 2412 MHz

www.tuv.com



Data rate: 65 Mbps

Channel Frequency: 2442 MHz



Data rate: 65 Mbps

Channel Frequency: 2462 MHz

www.tuv.com
6 dB Bandwidth

Section 15.247(a) (2)

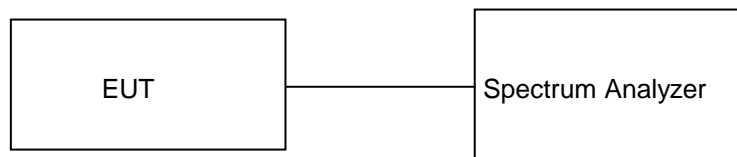
Result

Pass

Test Specification
Requirement

FCC Part 15 Section 15.247 (a) (2)
The minimum 6 dB bandwidth shall be at least 500 kHz.

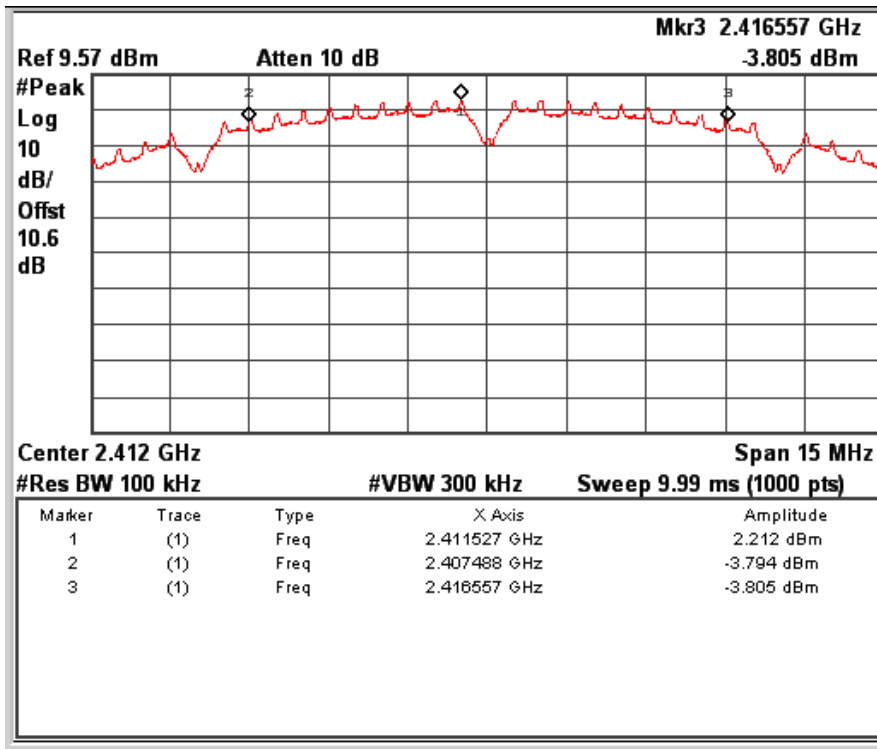
Test Method:



Test Result:

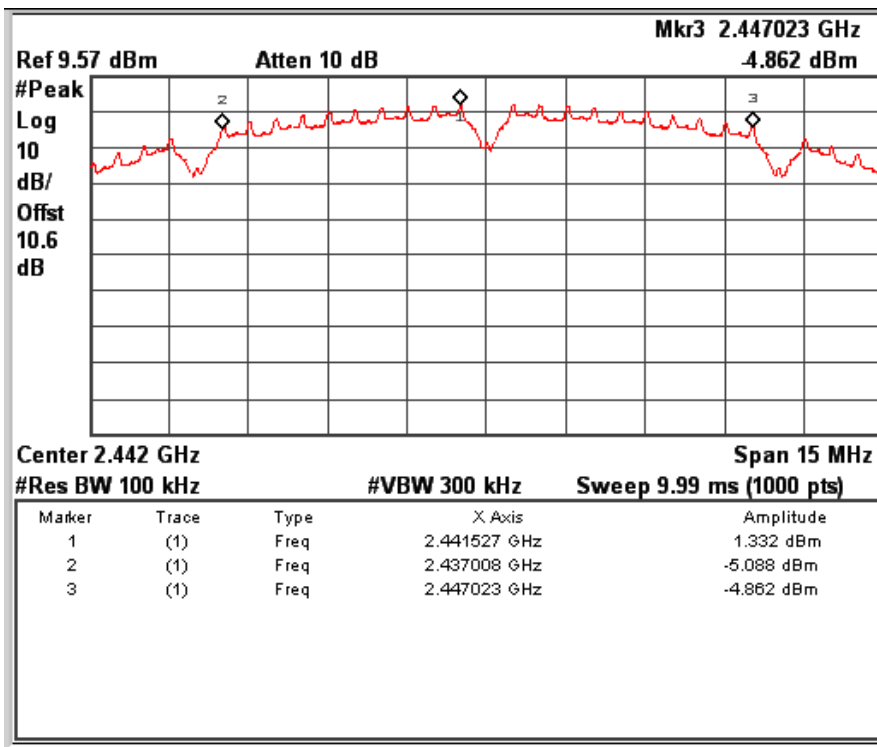
802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Lower Frequency (MHz)	Upper Frequency (MHz)	6 dB Bandwidth (MHz)	99% OBW (MHz)
b	1	2412.00	2407.48	2416.55	09.06	13.90
		2442.00	2437.00	2447.02	10.01	13.91
		2462.00	2457.02	2467.02	10.00	13.96
	11	2412.00	2406.67	2417.71	11.03	14.37
		2442.00	2436.67	2447.71	11.03	14.40
		2462.00	2456.99	2467.08	10.09	14.41

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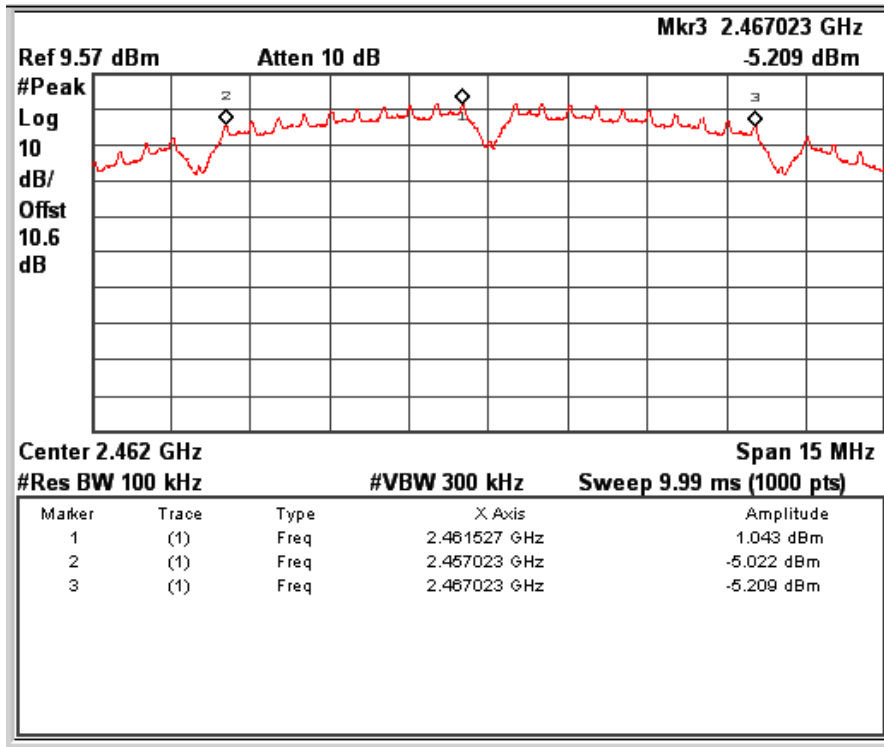
Data Rate: 1 Mbps

Channel frequency: 2412 MHz



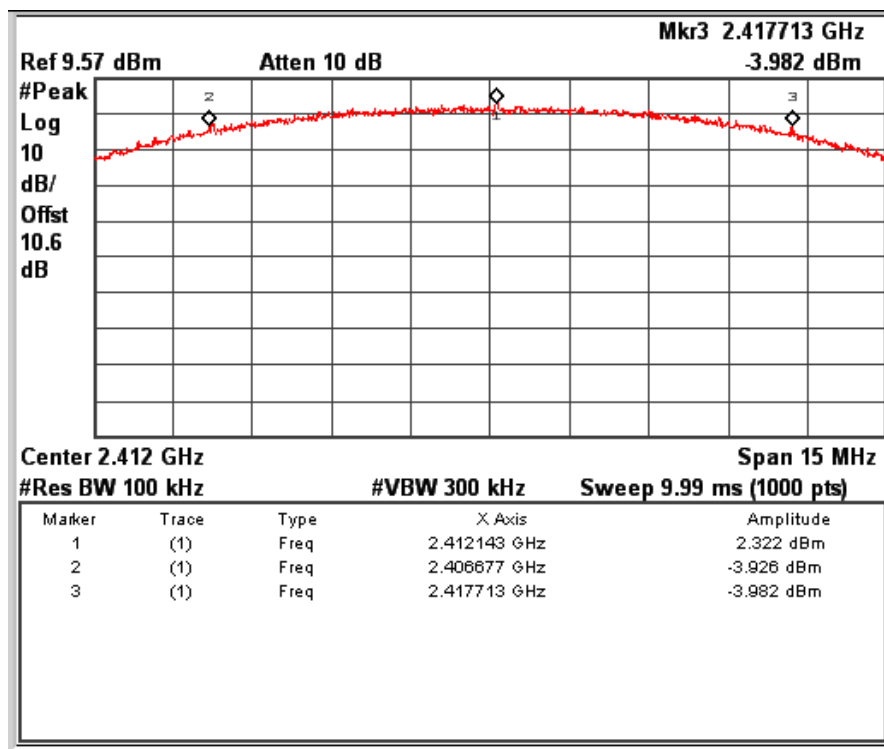
Data Rate: 1 Mbps

Channel frequency: 2442 MHz



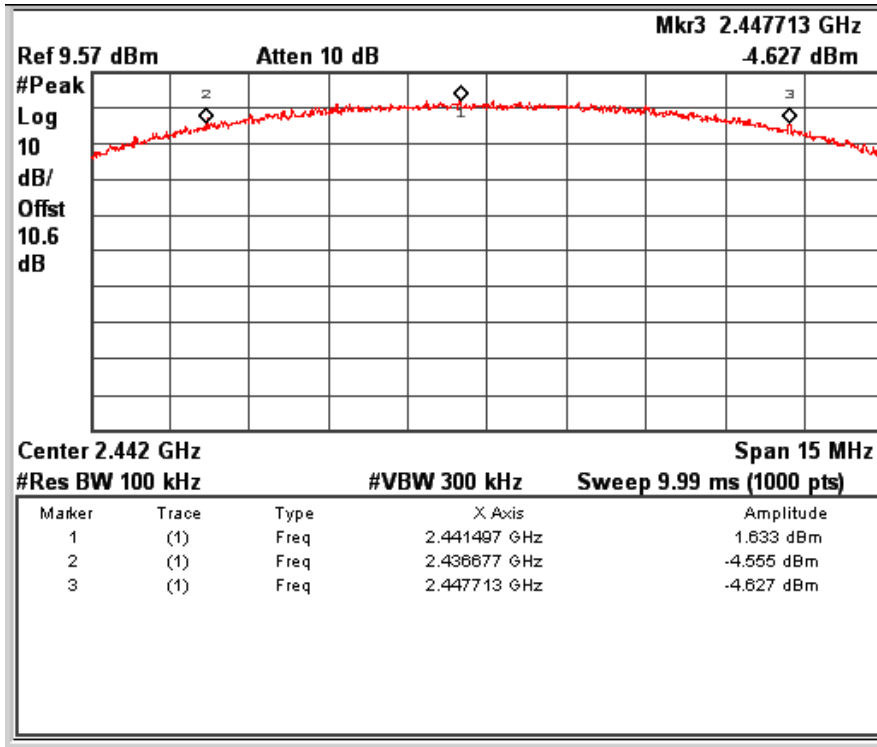
Data Rate: 1 Mbps

Channel frequency: 2462 MHz



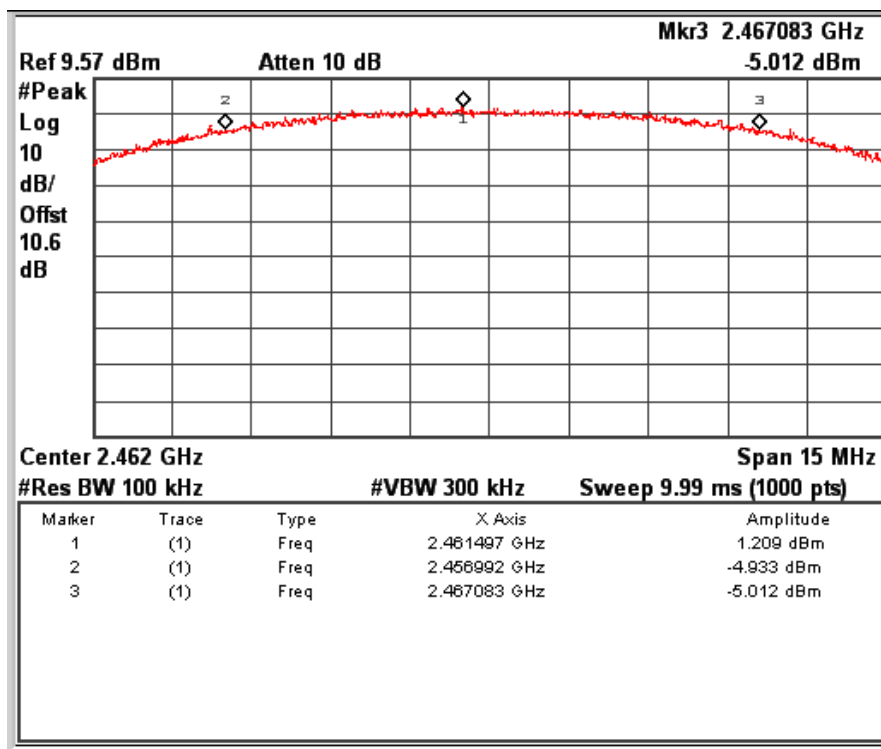
Data Rate: 11 Mbps

Channel frequencies: 2412 MHz



Data Rate: 11 Mbps

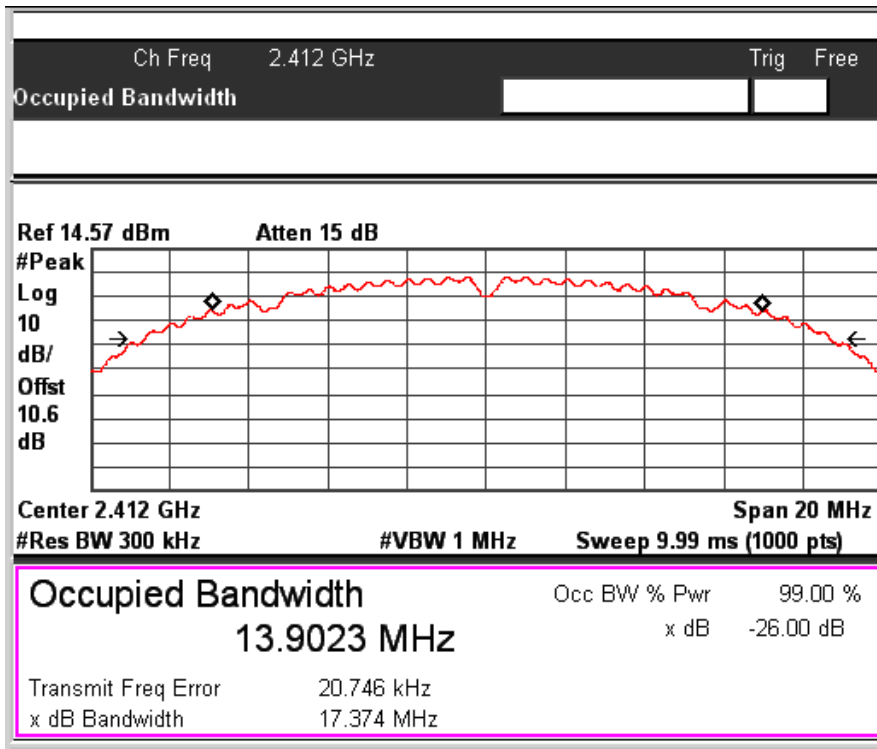
Channel frequency: 2442 MHz



Data Rate: 11 Mbps

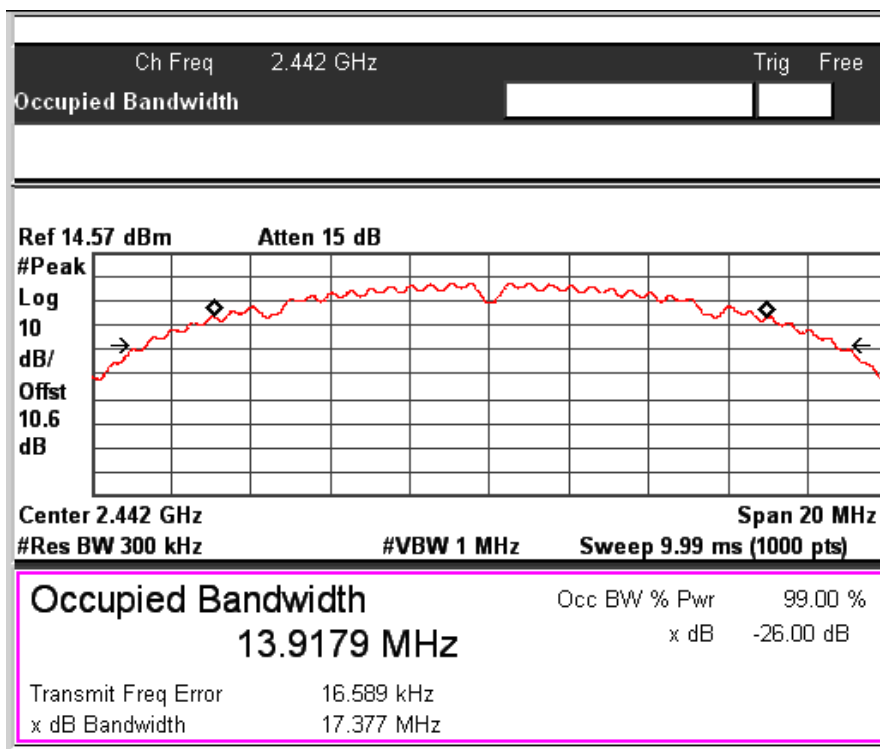
Channel frequency: 2462 MHz

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Data rate: 1 Mbps

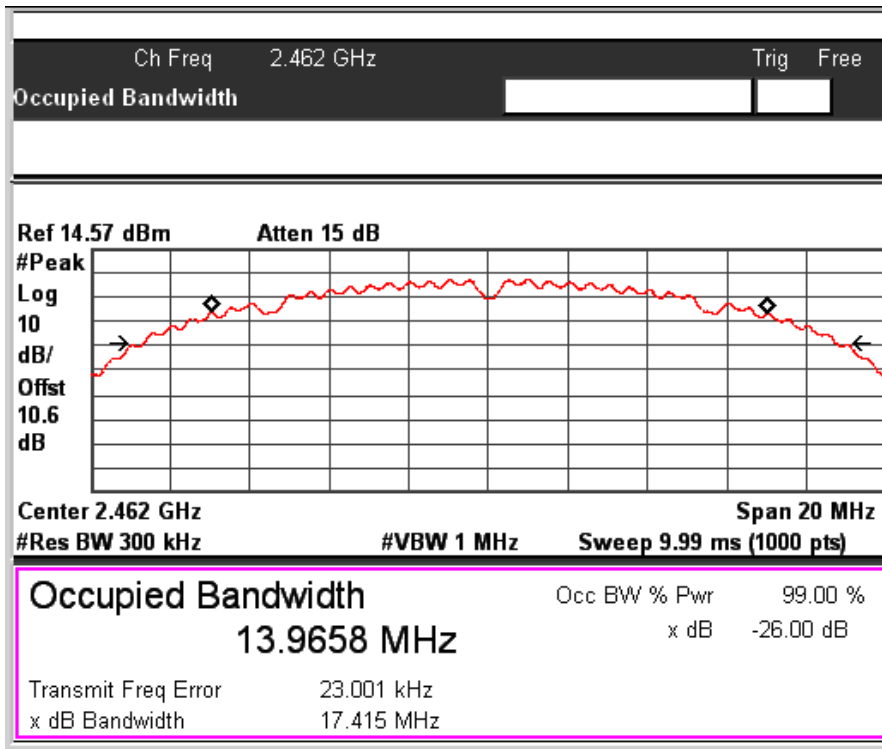
99% OBW: Channel 2412MHz



Data rate: 1 Mbps

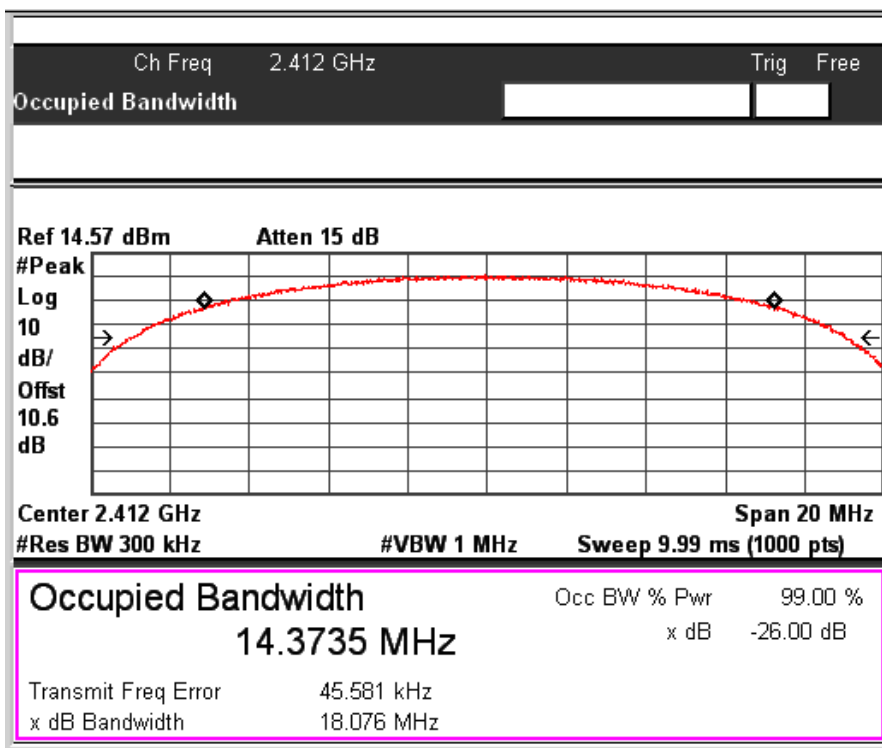
99% OBW: Channel 2442MHz

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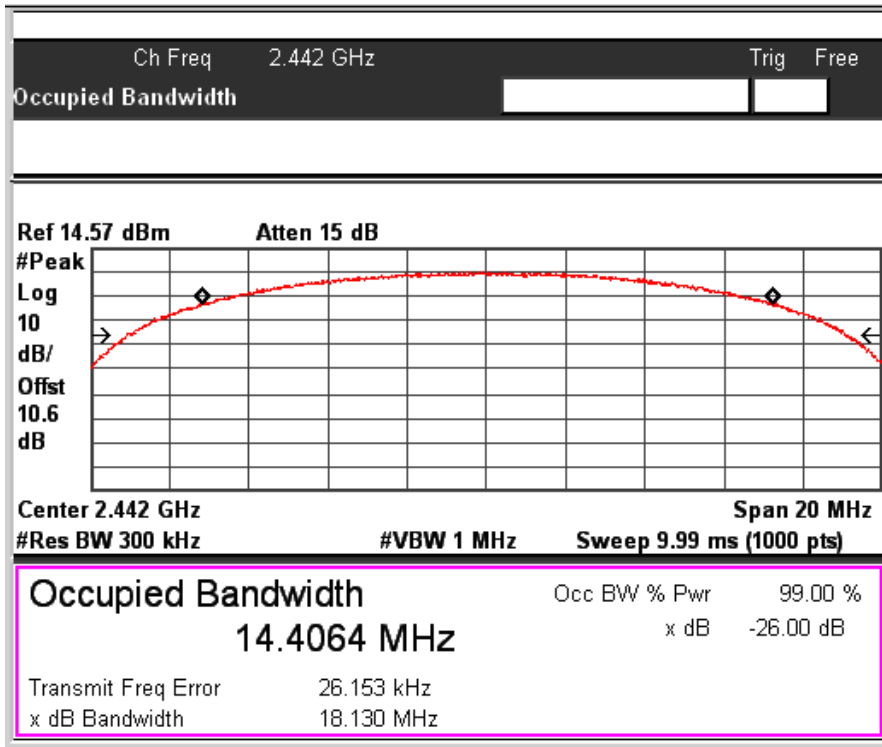
Data rate: 1 Mbps

99% OBW: Channel 2462MHz



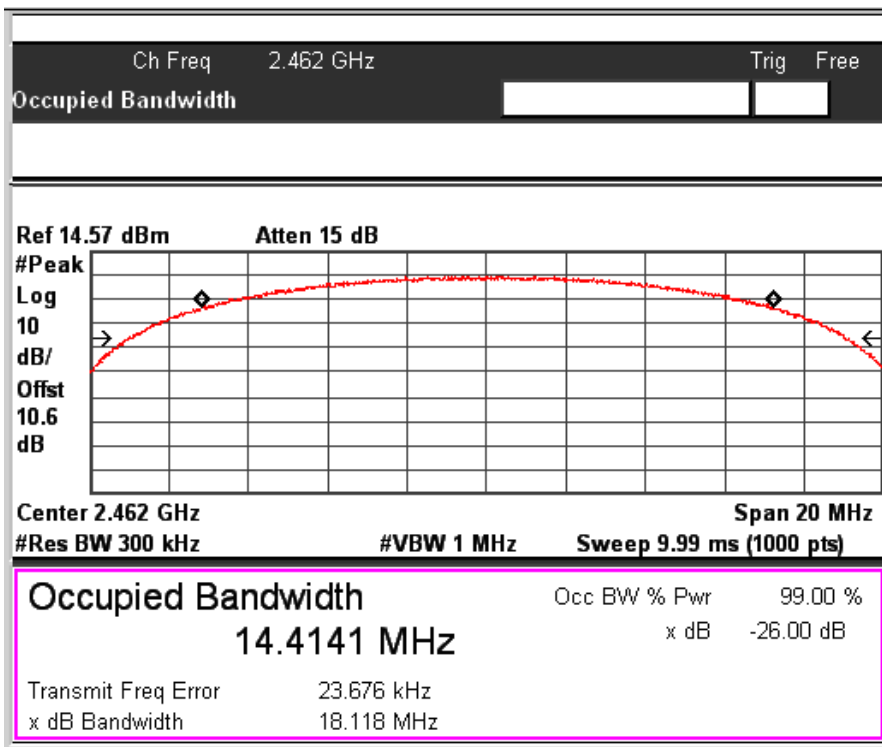
Data rate: 11 Mbps

99% OBW: Channel 2412MHz



Data rate: 11 Mbps

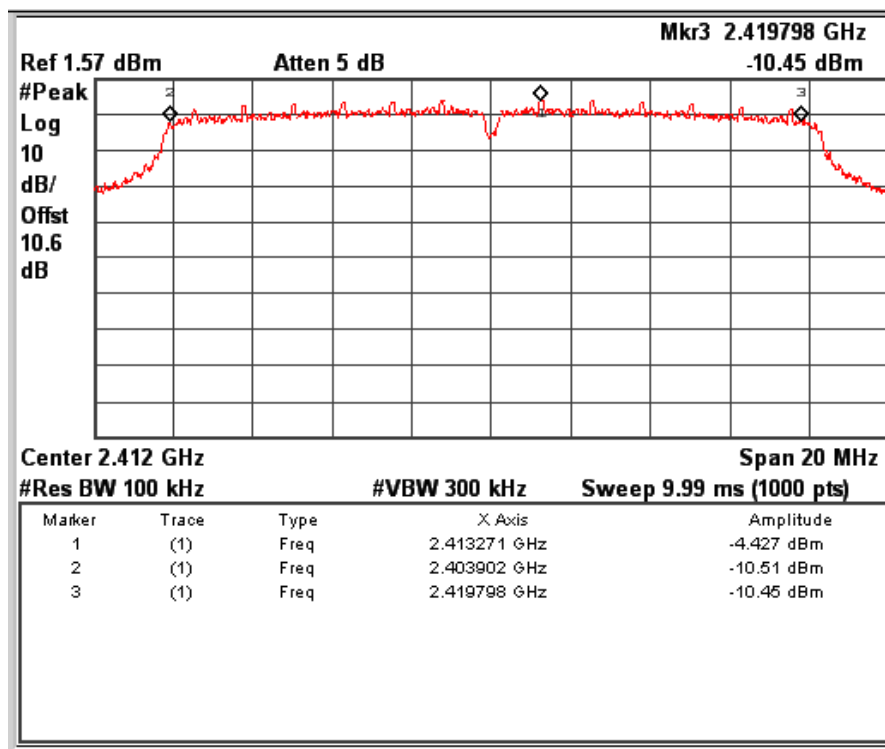
99% OBW: Channel 2442MHz



Data rate: 11 Mbps

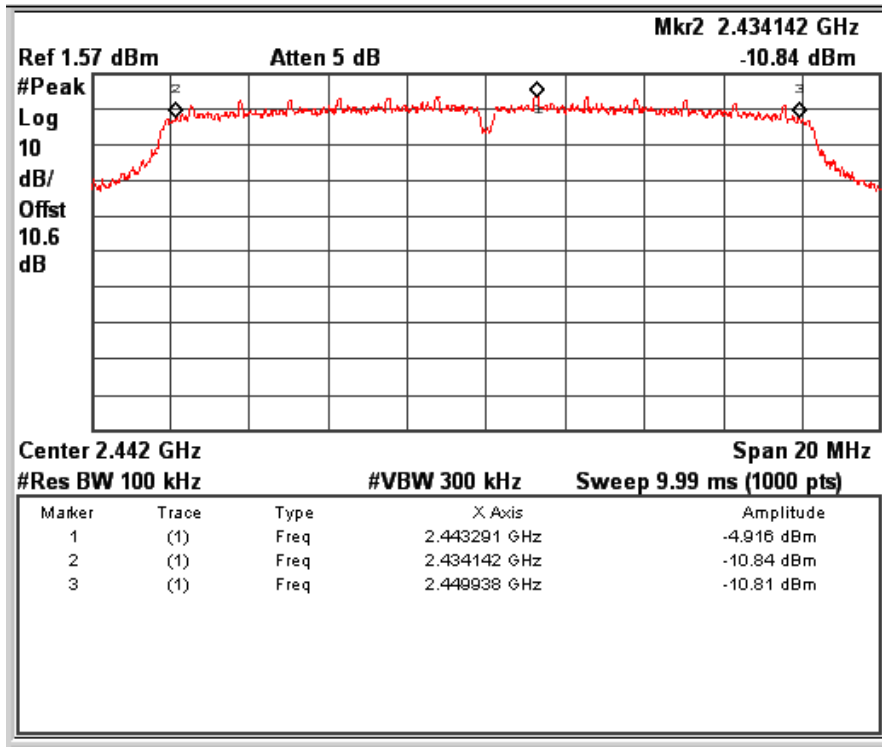
99% OBW: Channel 2462MHz

802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Lower Frequency (MHz)	Upper Frequency (MHz)	6 dB Bandwidth (MHz)	99% OBW (MHz)
g	6	2412.00	2403.90	2419.79	15.89	16.69
		2442.00	2434.14	2449.93	15.79	16.69
		2462.00	2454.24	2469.91	15.67	16.70
	24	2412.00	2403.84	2420.23	16.39	16.59
		2442.00	2433.92	2450.21	16.29	16.60
		2462.00	2453.84	2470.21	16.37	16.59
	54	2412.00	2403.84	2420.21	16.37	16.59
		2442.00	2433.82	2450.19	16.37	16.60
		2462.00	2453.90	2470.11	16.21	16.61



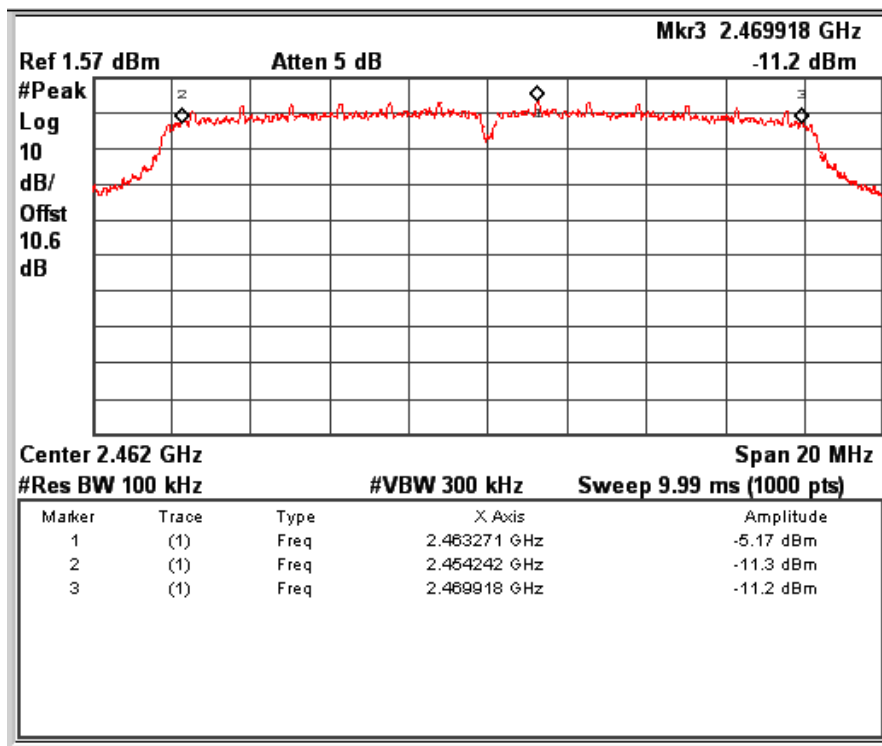
Data Rate: 6 Mbps

Channel frequencies: 2412 MHz



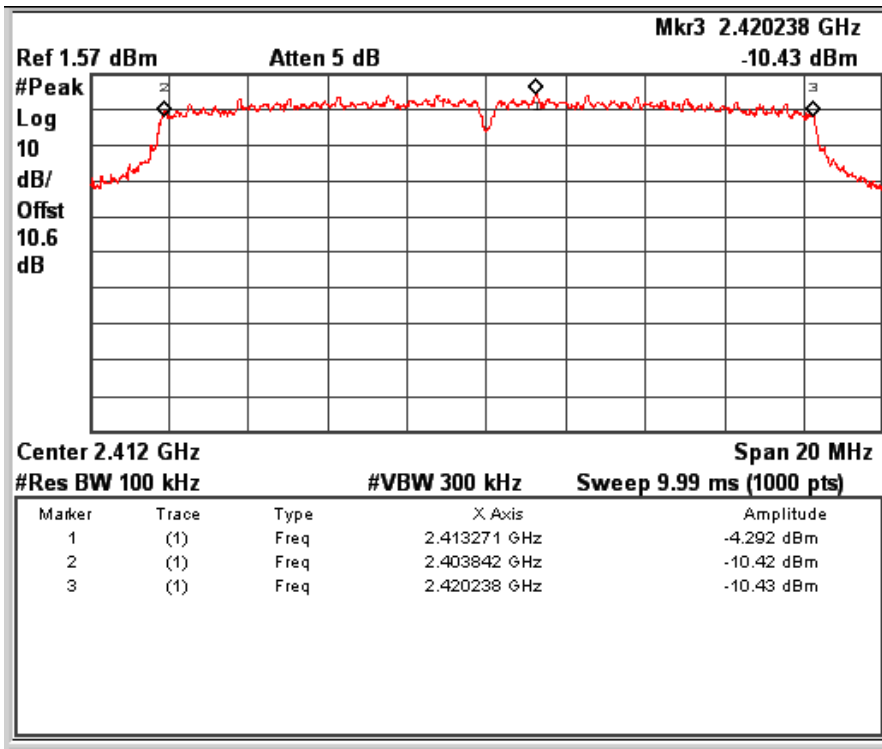
Data Rate: 6 Mbps

Channel frequencies: 2442 MHz



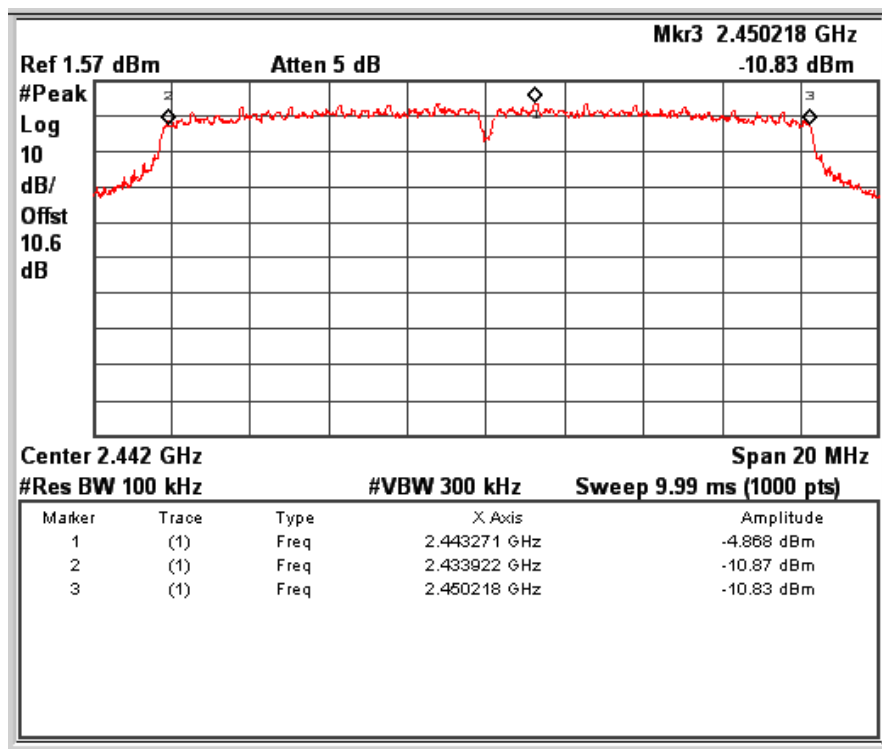
Data Rate: 6 Mbps

Channel frequencies: 2462 MHz



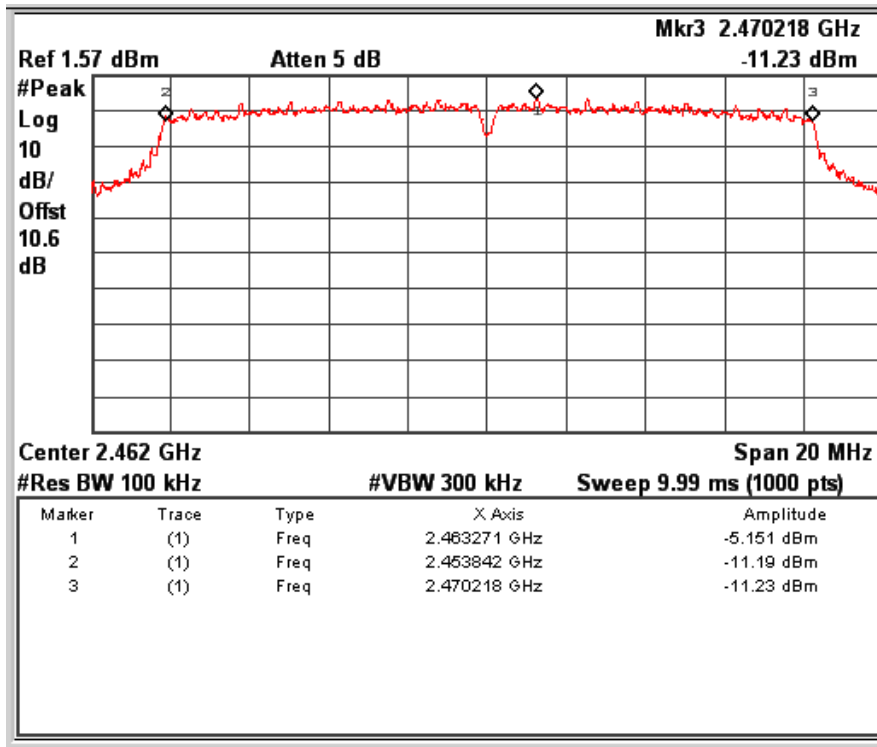
Data Rate: 24 Mbps

Channel frequencies: 2412 MHz



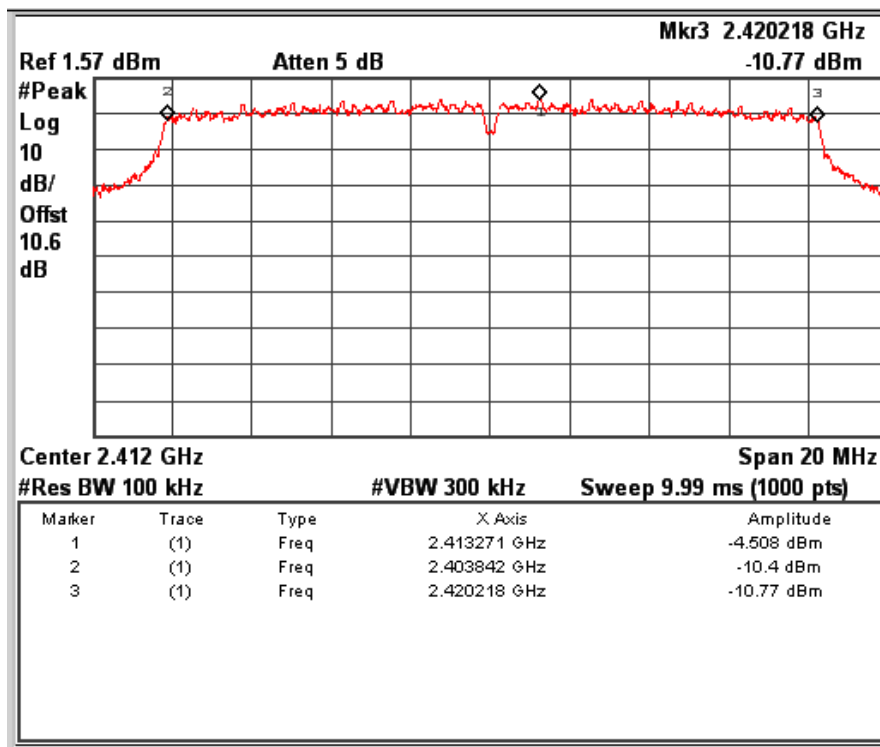
Data Rate: 24 Mbps

Channel frequencies: 2442 MHz



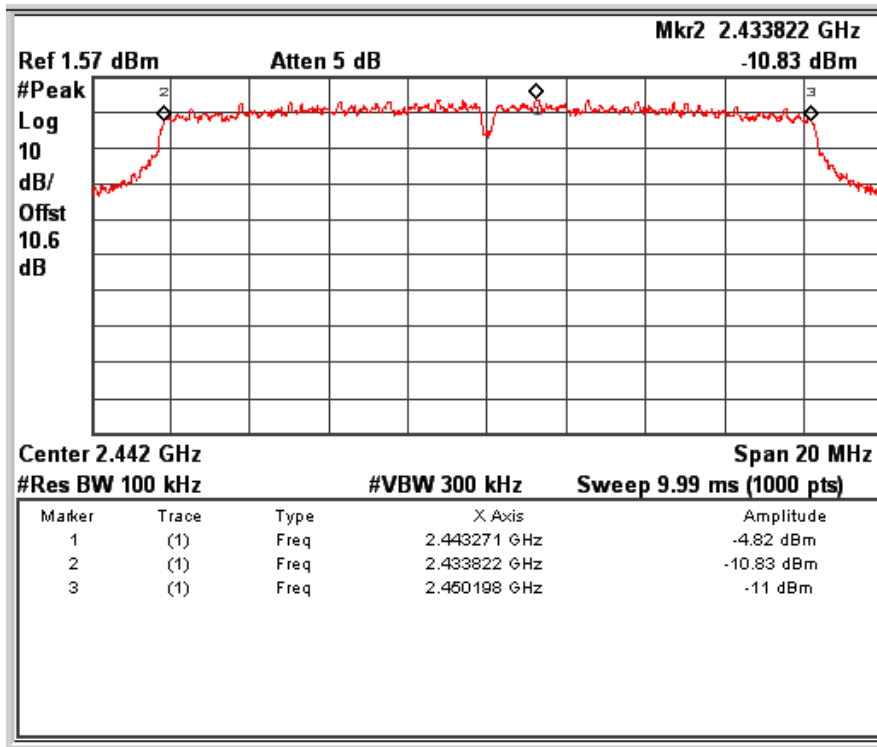
Data Rate: 24 Mbps

Channel frequencies: 2462 MHz



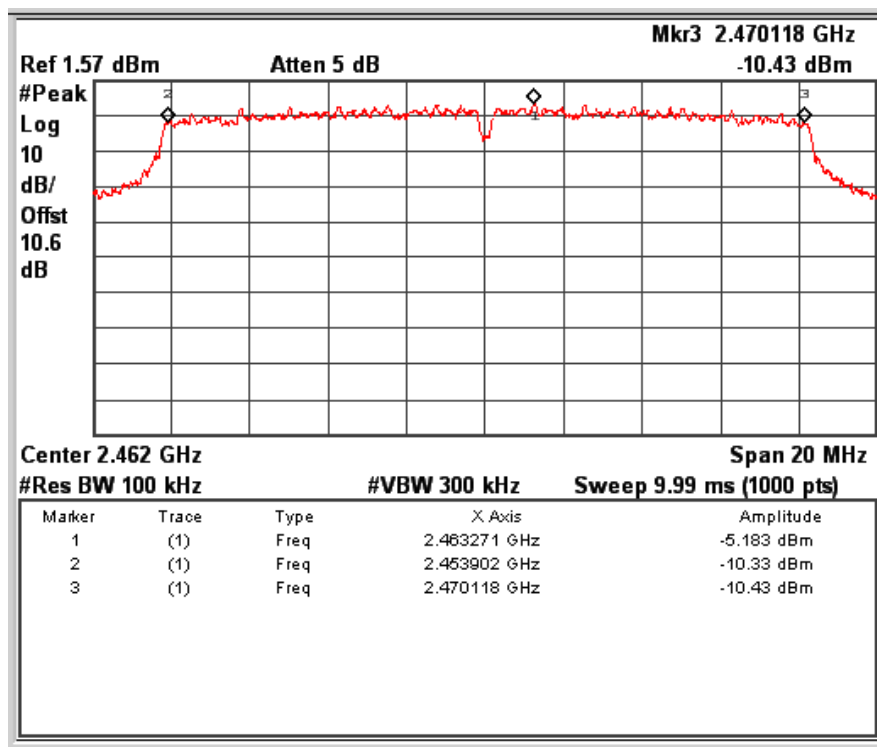
Data Rate: 54 Mbps

Channel frequencies: 2412 MHz



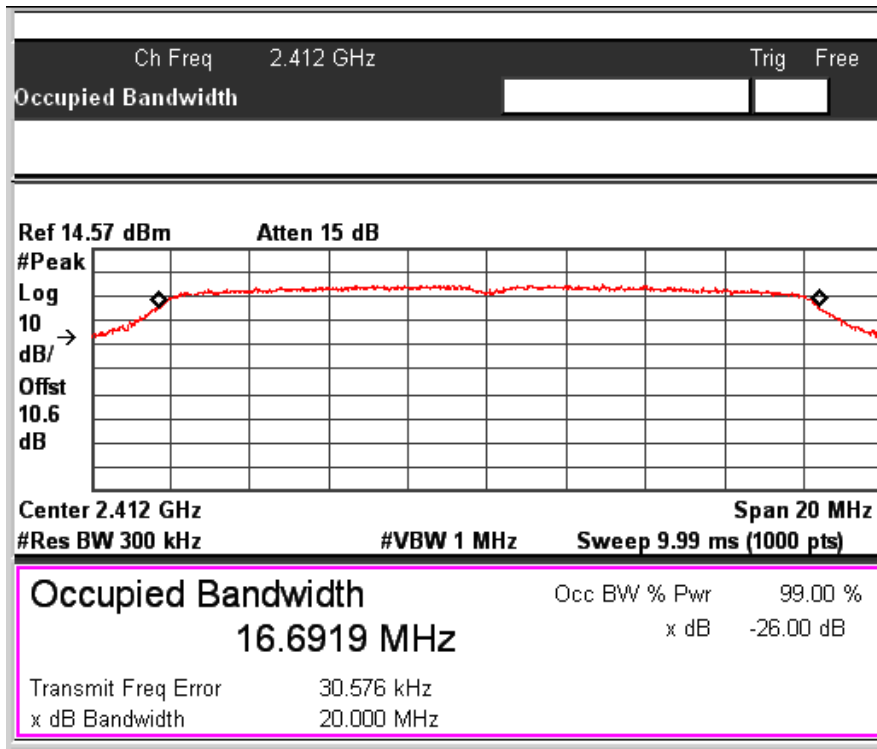
Data Rate: 54 Mbps

Channel frequencies: 2442MHz



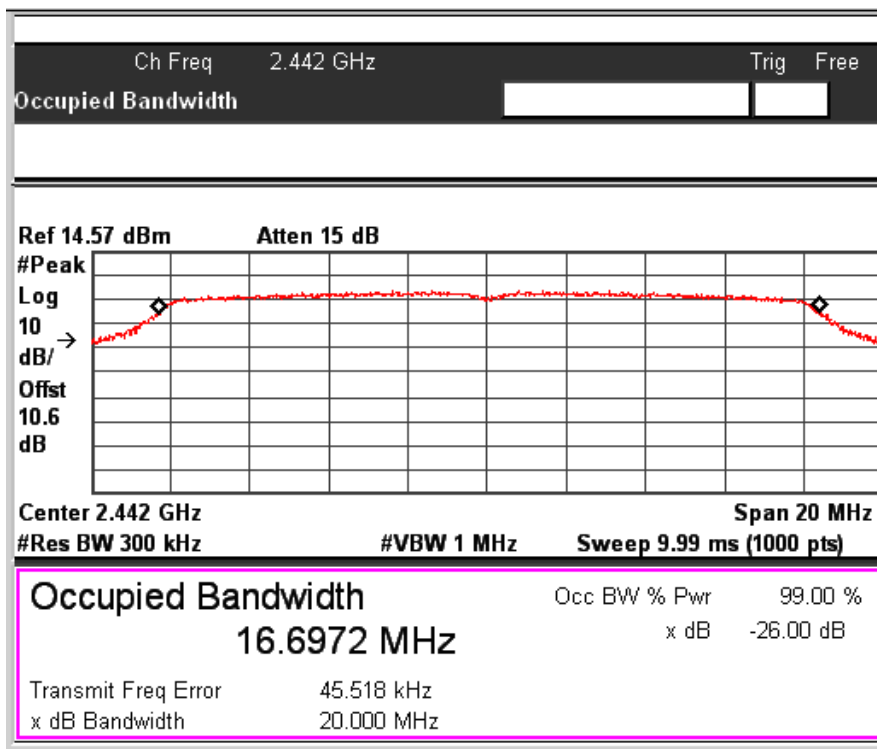
Data Rate: 54 Mbps

Channel frequencies: 2462 MHz



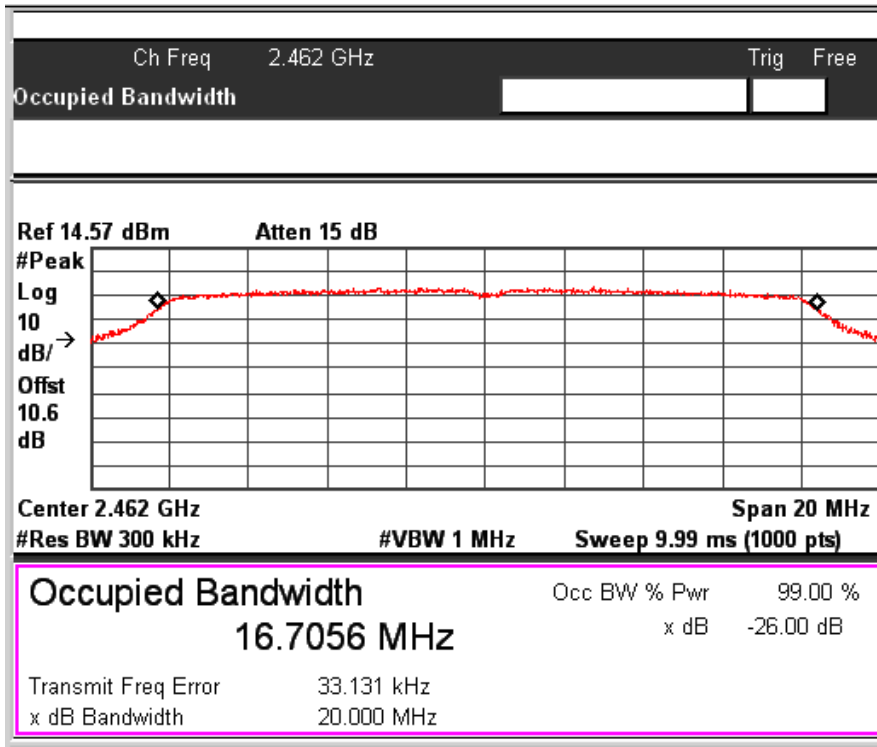
Data Rate: 6 Mbps

99% OBW: Channel 2412MHz



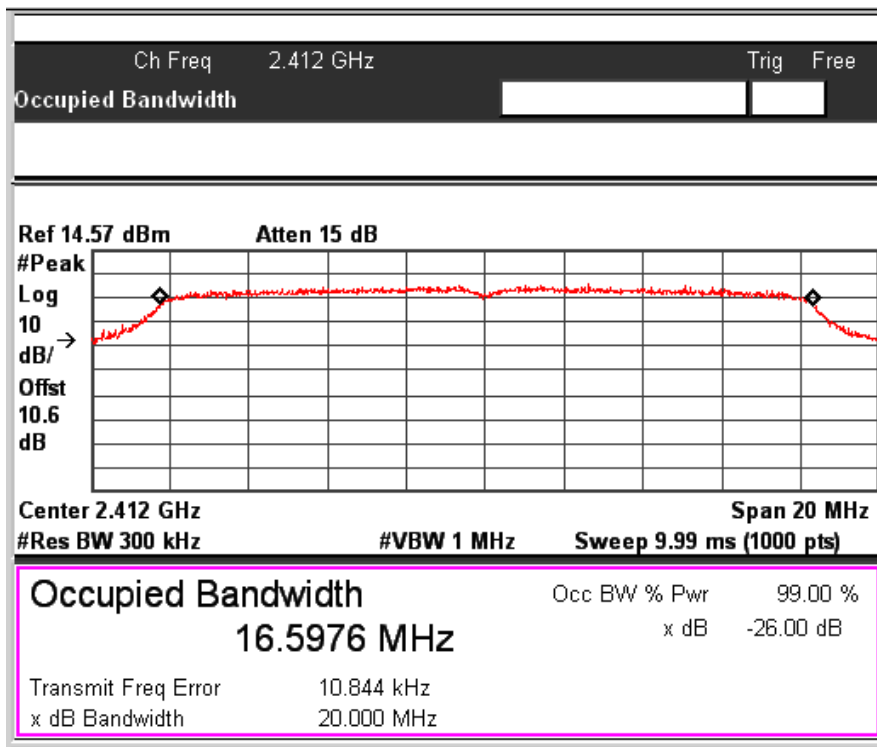
Data Rate: 6 Mbps

99% OBW: Channel 2442MHz



Data Rate: 6 Mbps

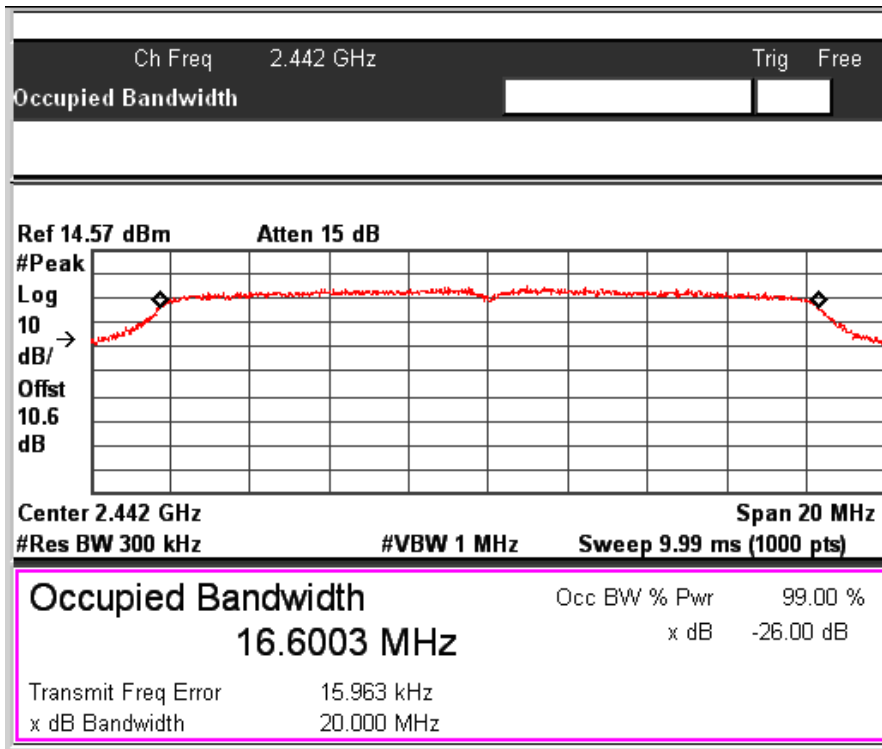
99% OBW: Channel 2462MHz



Data Rate: 24 Mbps

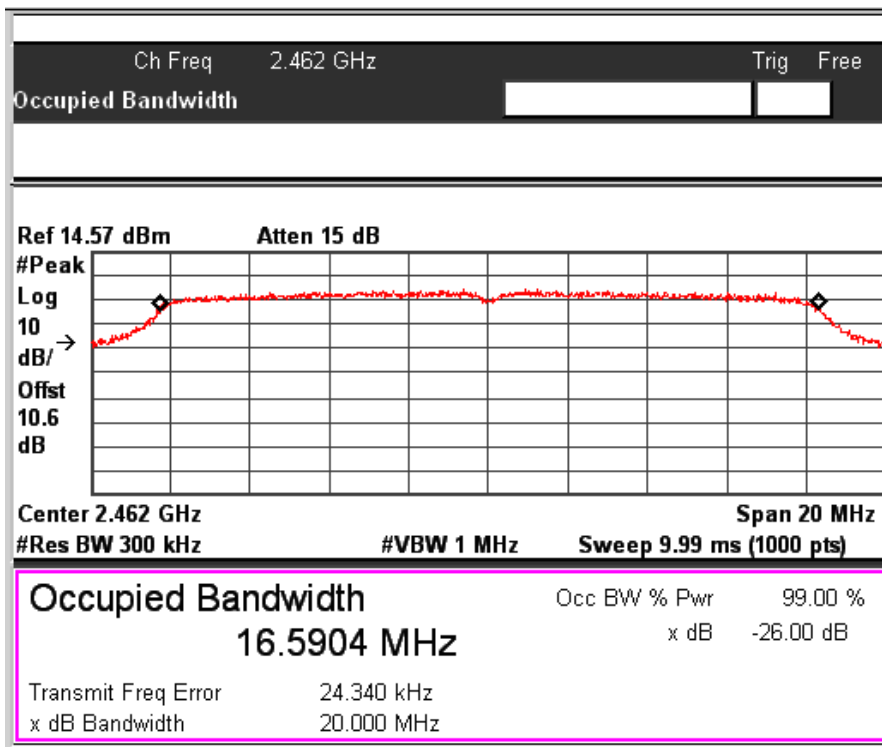
99% OBW: Channel 2412MHz

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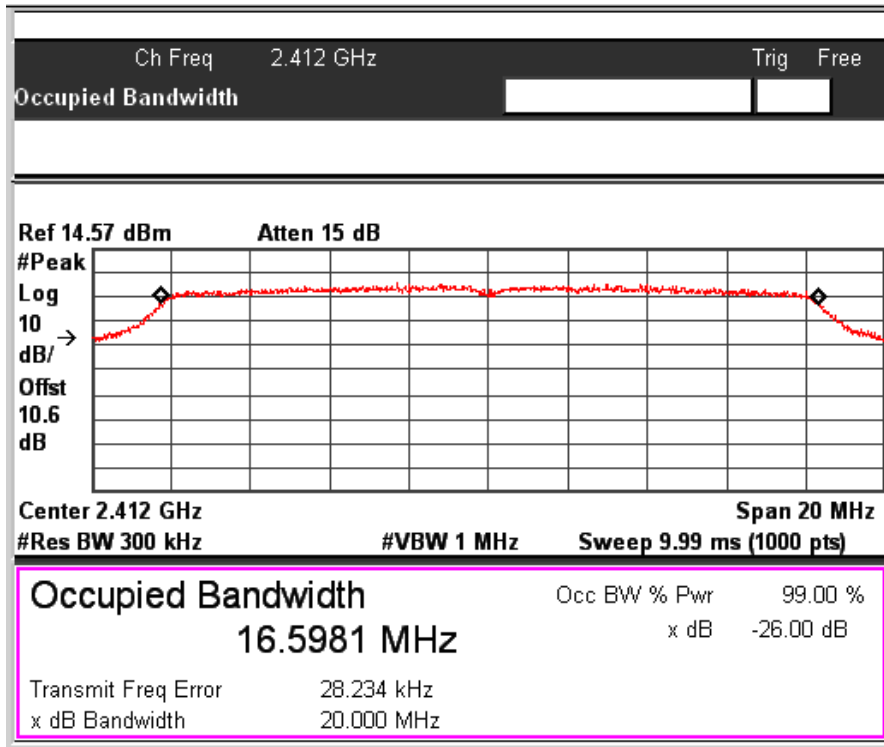
Data Rate: 24 Mbps

99% OBW: Channel 2442MHz



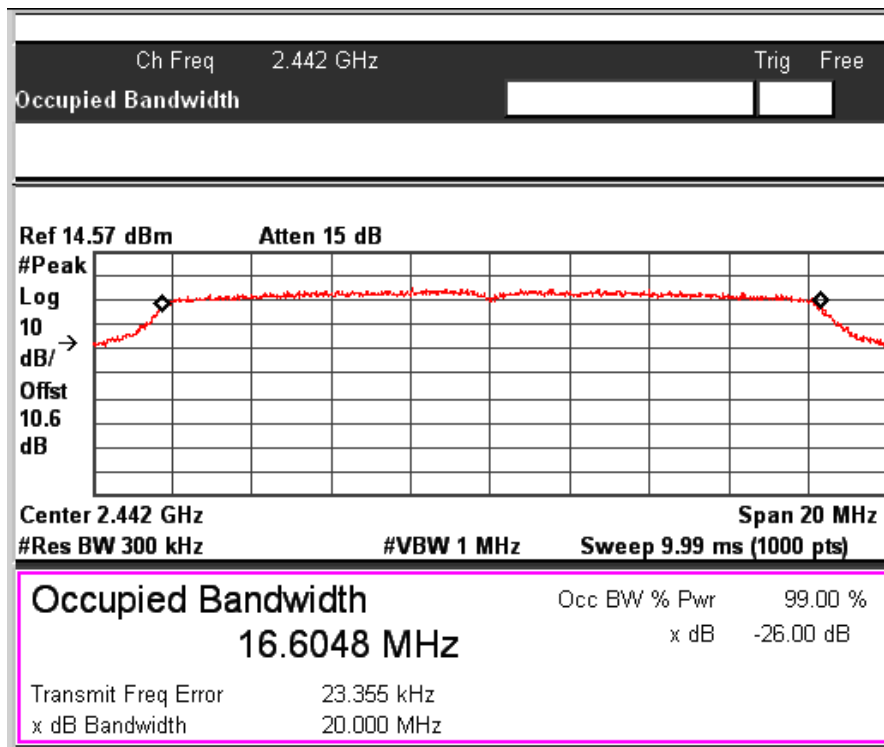
Data Rate: 24 Mbps

99% OBW: Channel 2462MHz



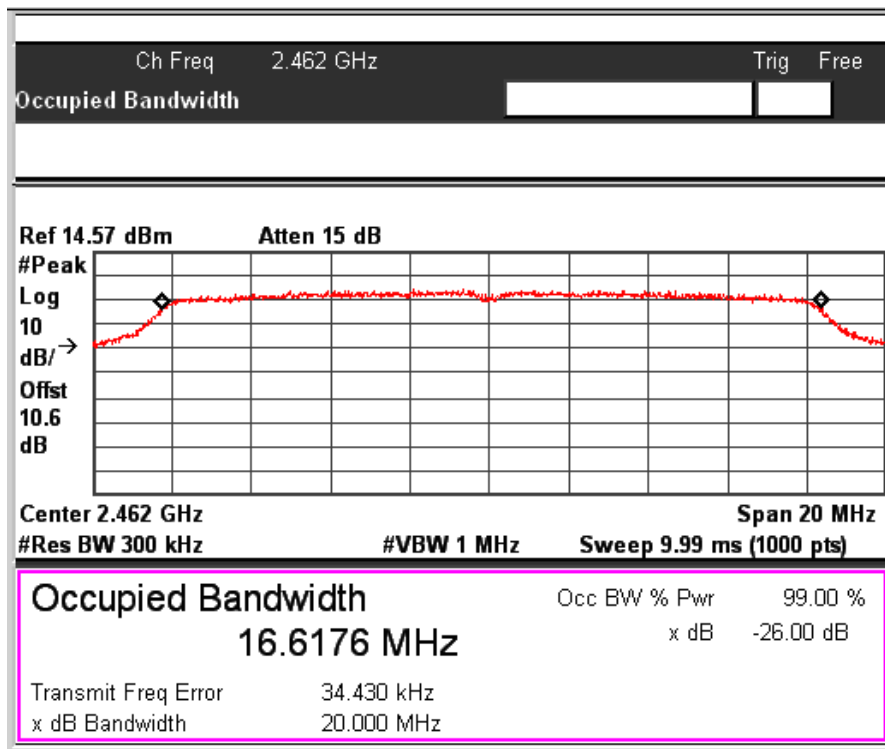
Data Rate: 54 Mbps

99% OBW: Channel 2412MHz



Data Rate: 54 Mbps

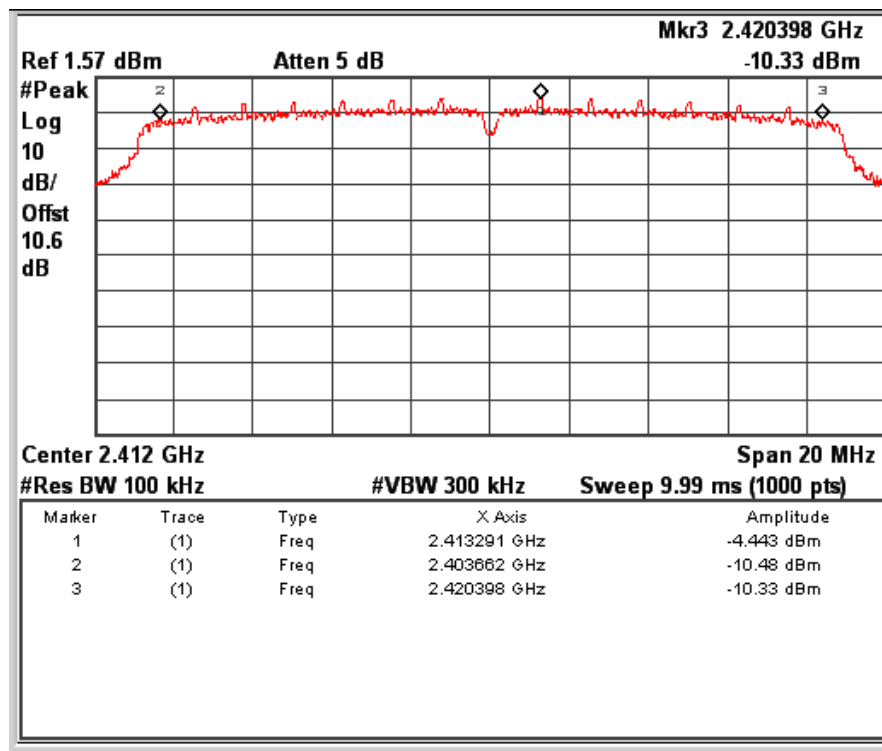
99% OBW: Channel 2442MHz



Data Rate: 54 Mbps

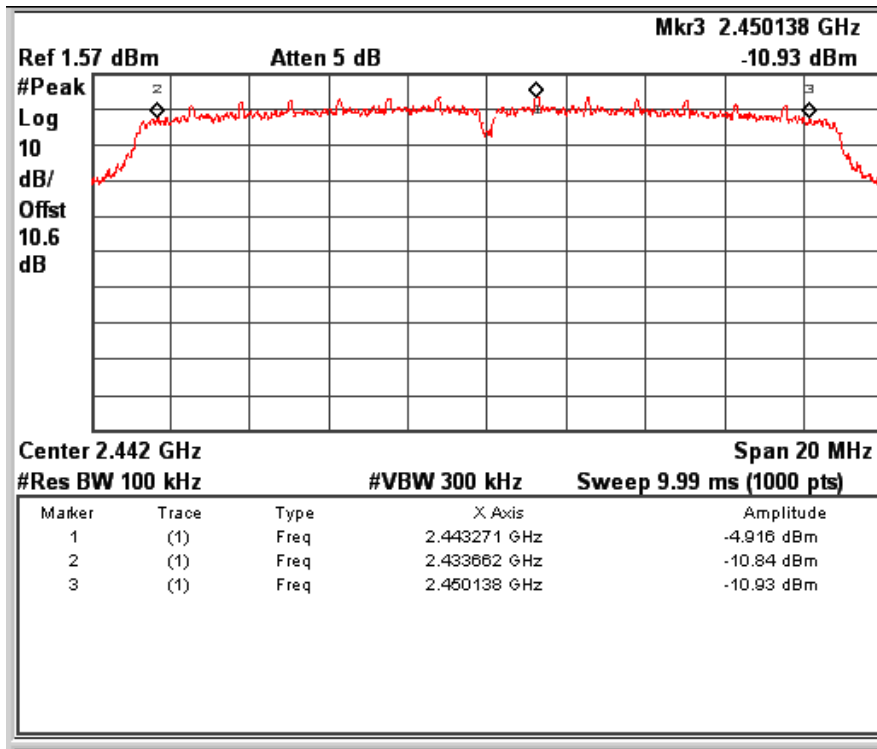
99% OBW: Channel 2462MHz

802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Lower Frequency (MHz)	Upper Frequency (MHz)	6 dB Bandwidth (MHz)	99% OBW (MHz)
n	6.5	2412.00	2403.66	2420.39	16.73	17.69
		2442.00	2433.66	2450.13	16.47	17.69
		2462.00	2454.46	2469.59	15.13	17.72
	39	2412.00	2403.62	2420.77	17.15	17.68
		2442.00	2433.62	2450.75	17.13	17.70
		2462.00	2453.56	2470.75	17.19	17.67
	65	2412.00	2403.54	2420.77	17.23	17.69
		2442.00	2433.28	2450.77	17.49	17.70
		2462.00	2453.24	2470.71	17.47	17.69



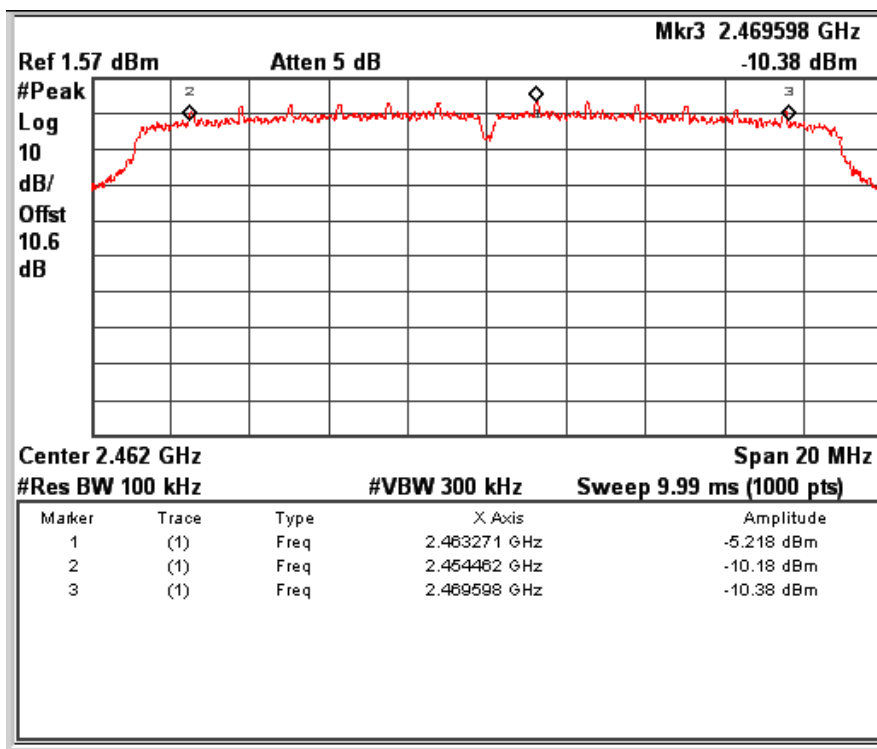
Data Rate: 6.5 Mbps

Channel: 2412 MHz



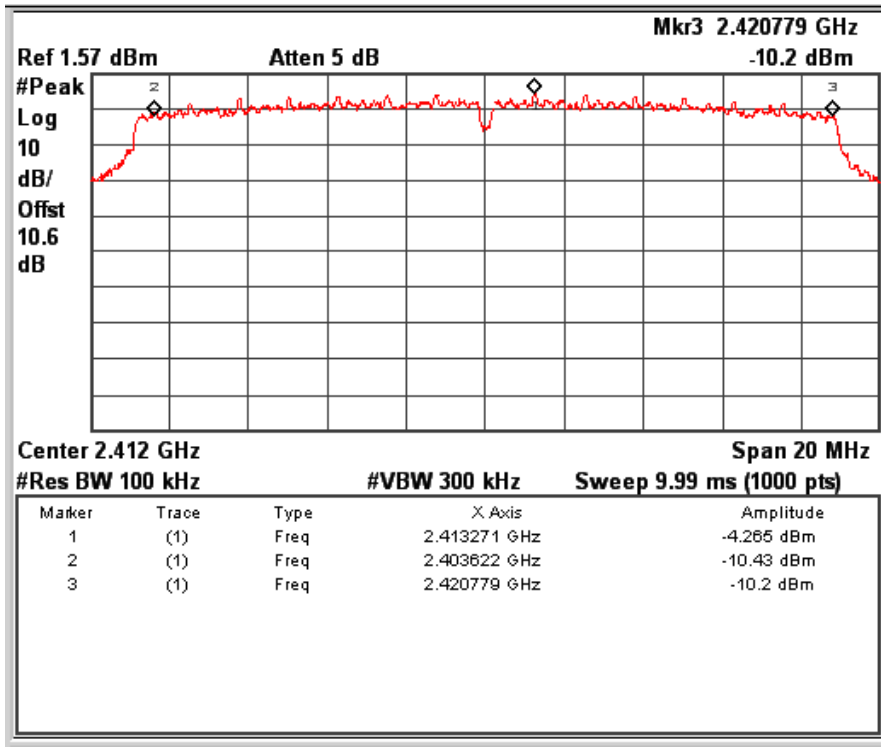
Data Rate: 6.5 Mbps

Channel: 2442 MHz



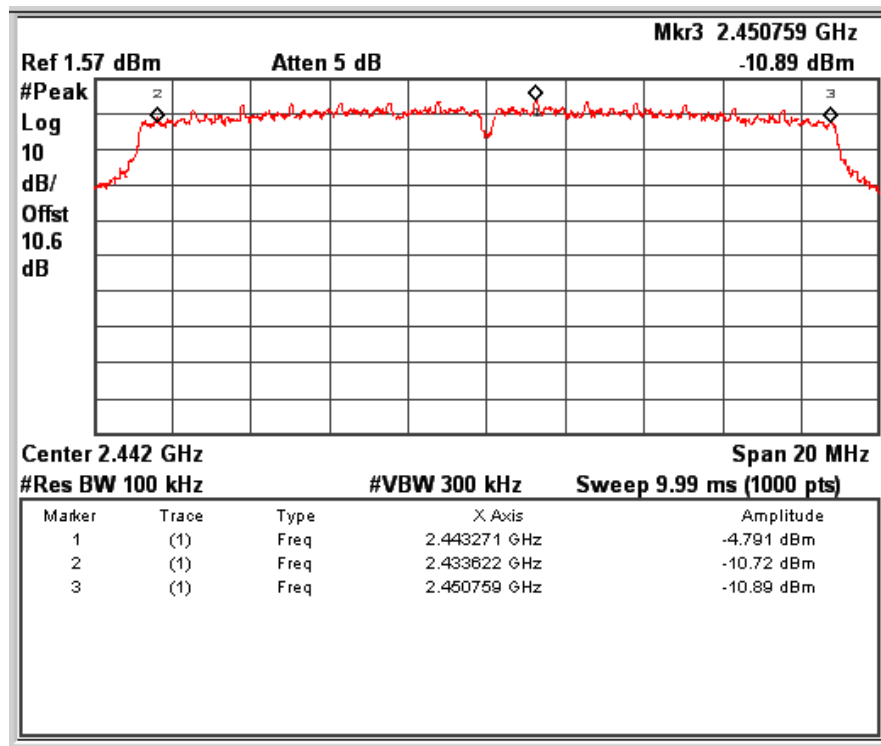
Data Rate: 6.5 Mbps

Channel: 2462 MHz



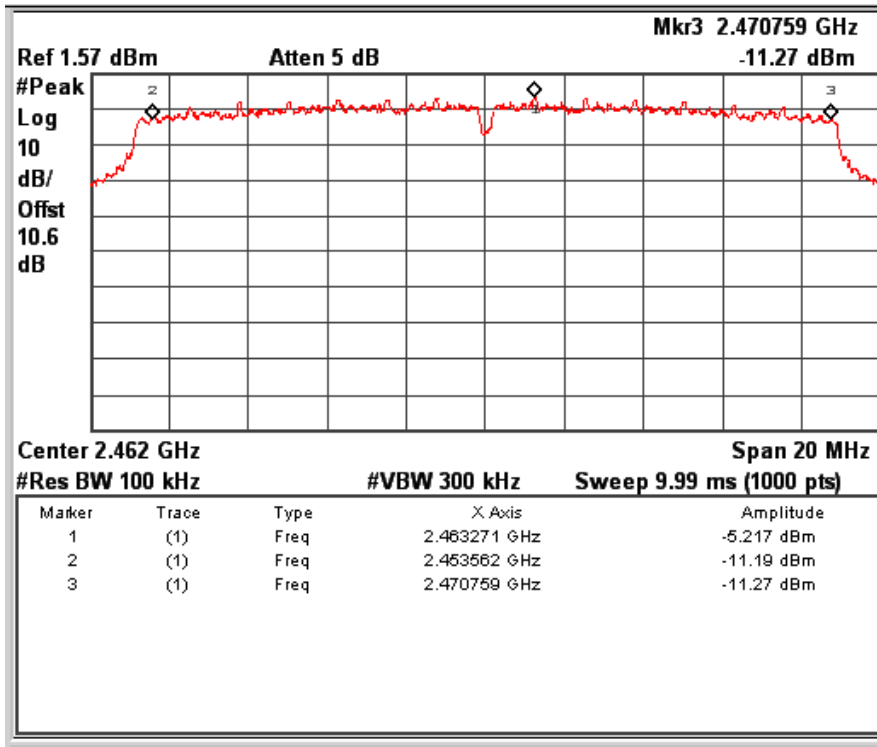
Data Rate: 39 Mbps

Channel: 2412 MHz



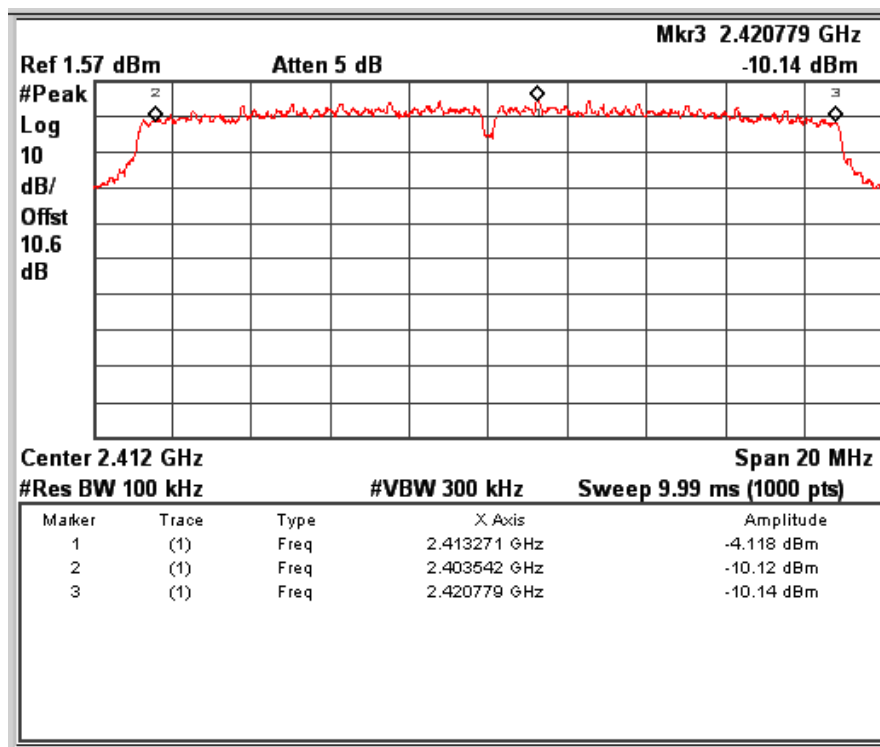
Data Rate: 39 Mbps

Channel: 2442 MHz



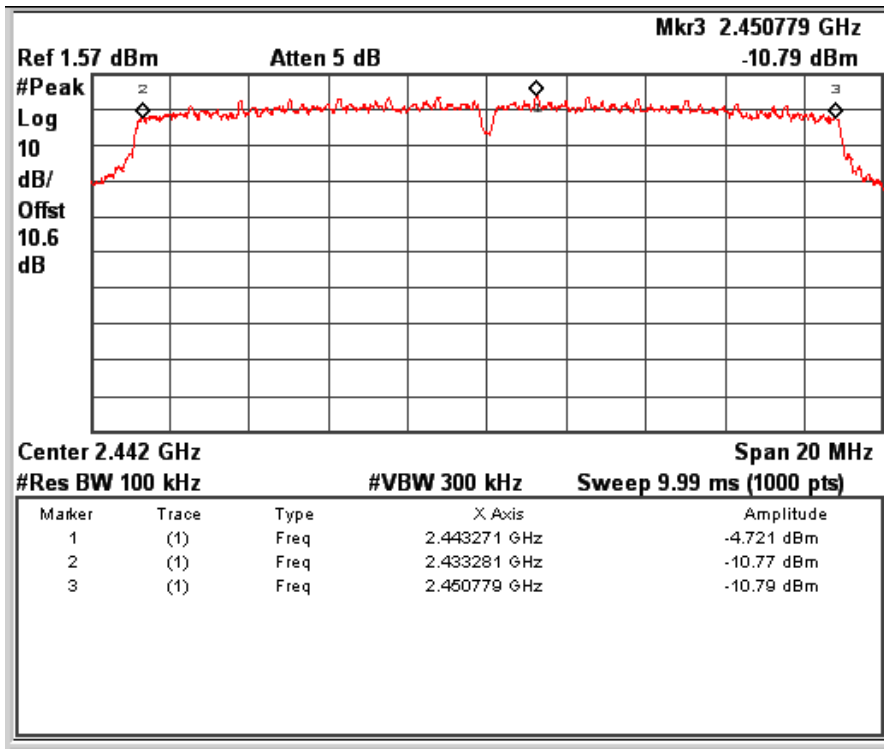
Data Rate: 39 Mbps

Channel: 2462 MHz



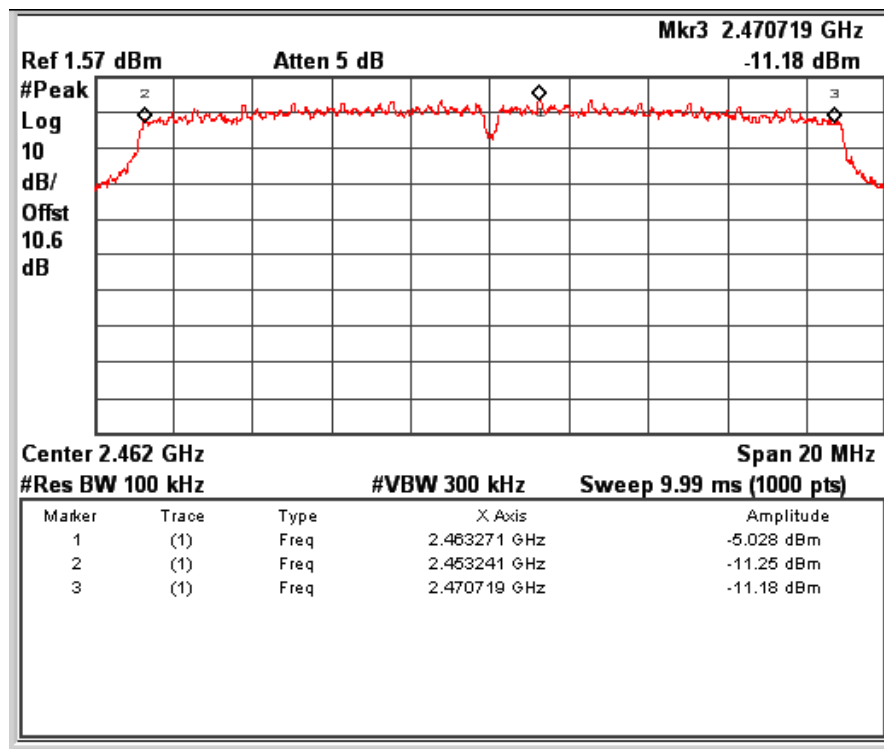
Data Rate: 65 Mbps

Channel: 2412 MHz



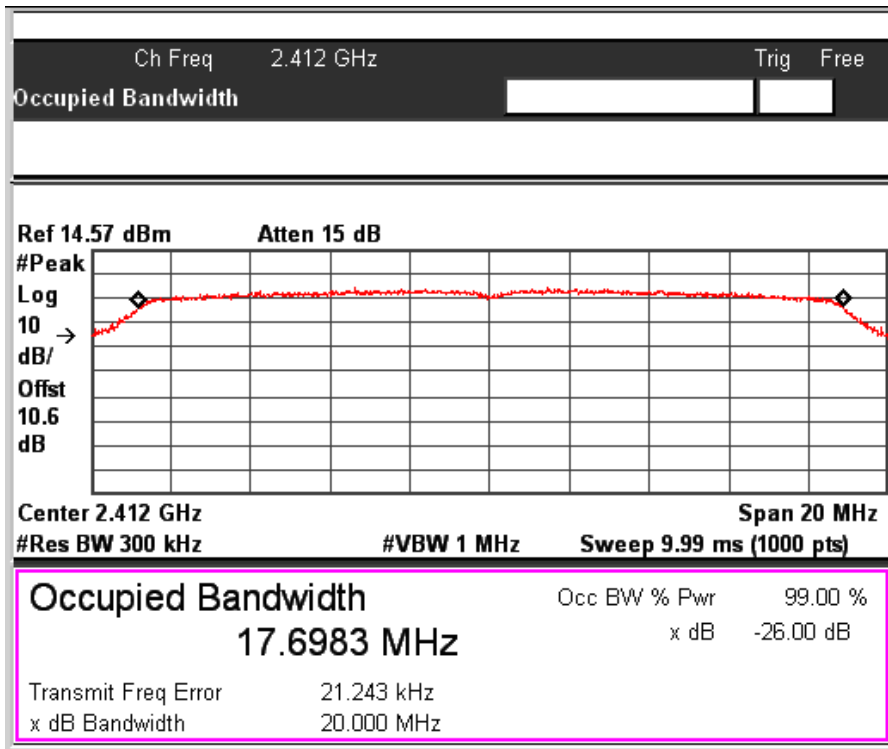
Data Rate: 65 Mbps

Channel: 2442MHz



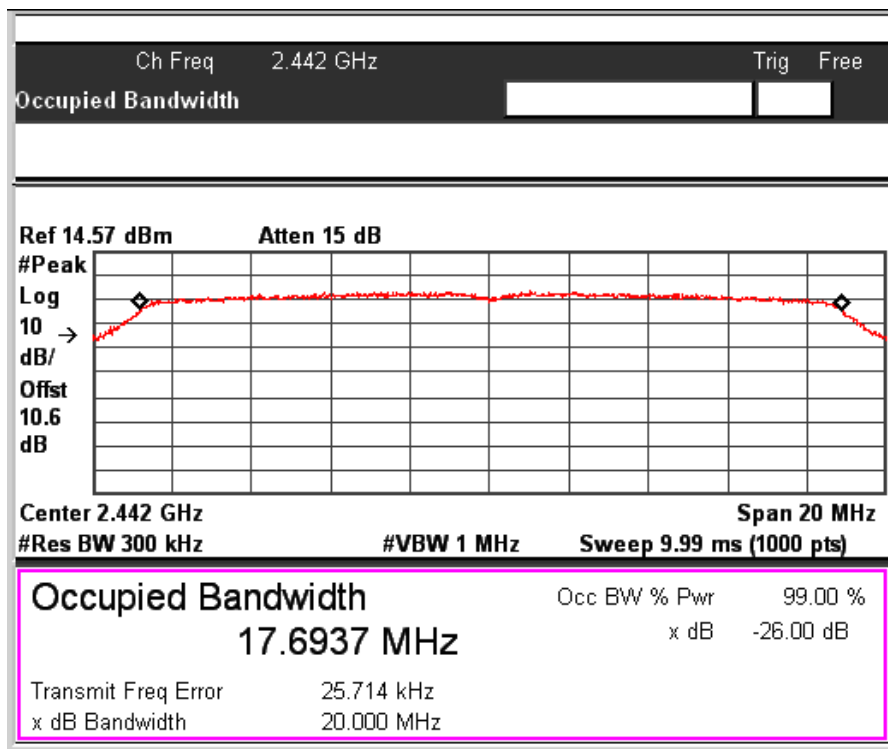
Data Rate: 65 Mbps

Channel: 2462 MHz



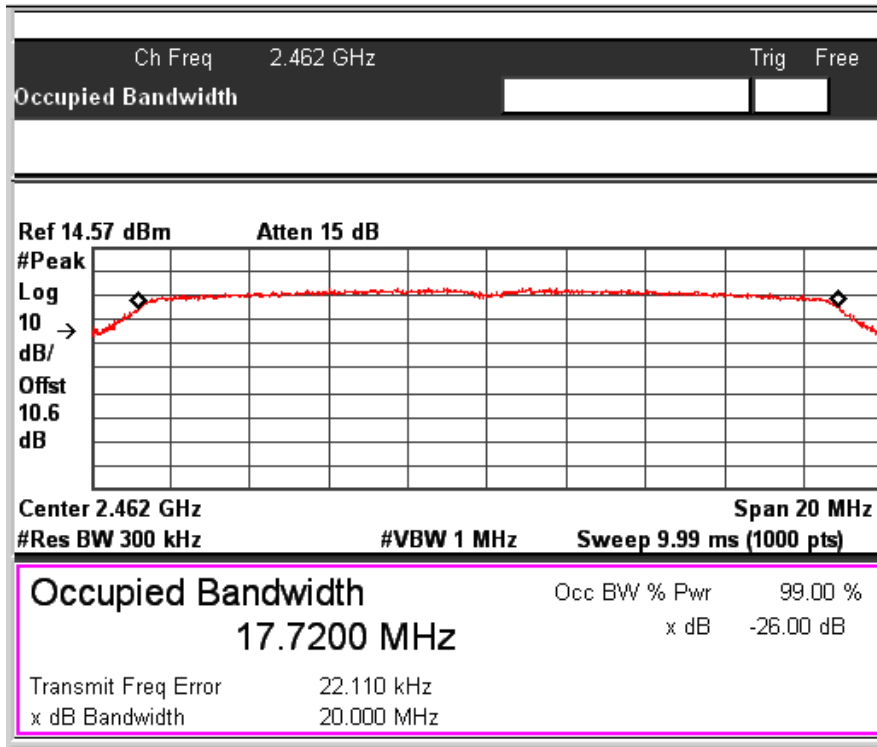
Data Rate: 6.5 Mbps

99% OBW: Channel 2412MHz



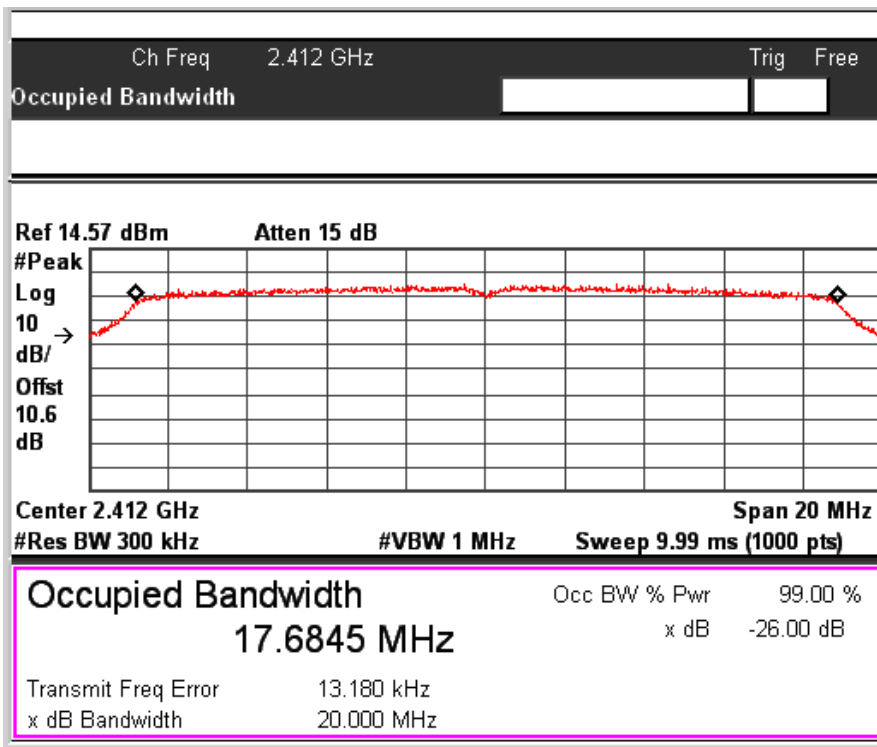
Data Rate: 6.5 Mbps

99% OBW: Channel 2442MHz



Data Rate: 6.5 Mbps

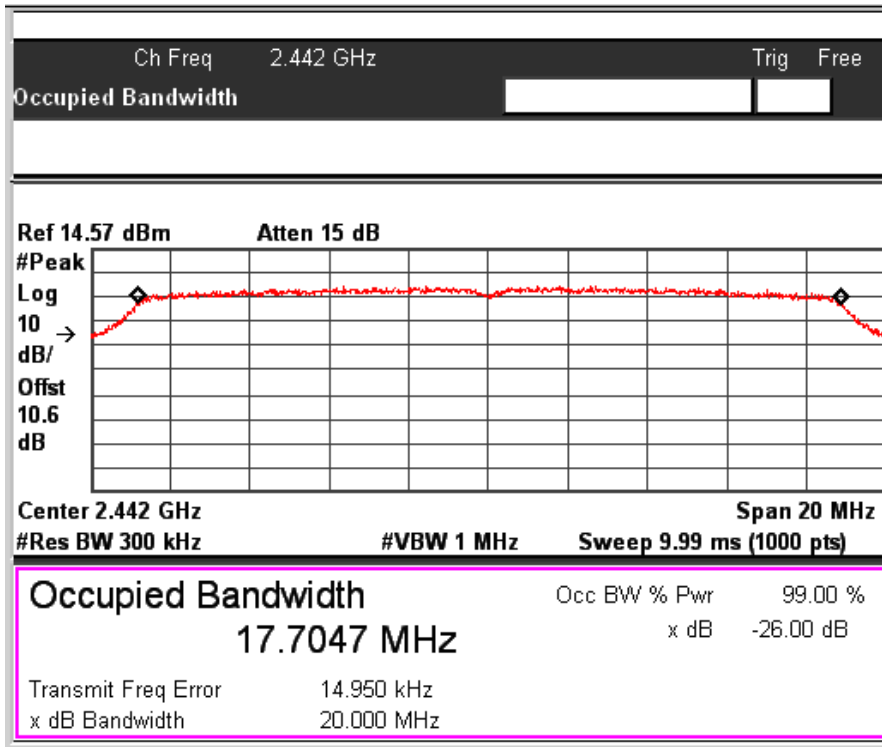
99% OBW: Channel 2462MHz



Data Rate: 39 Mbps

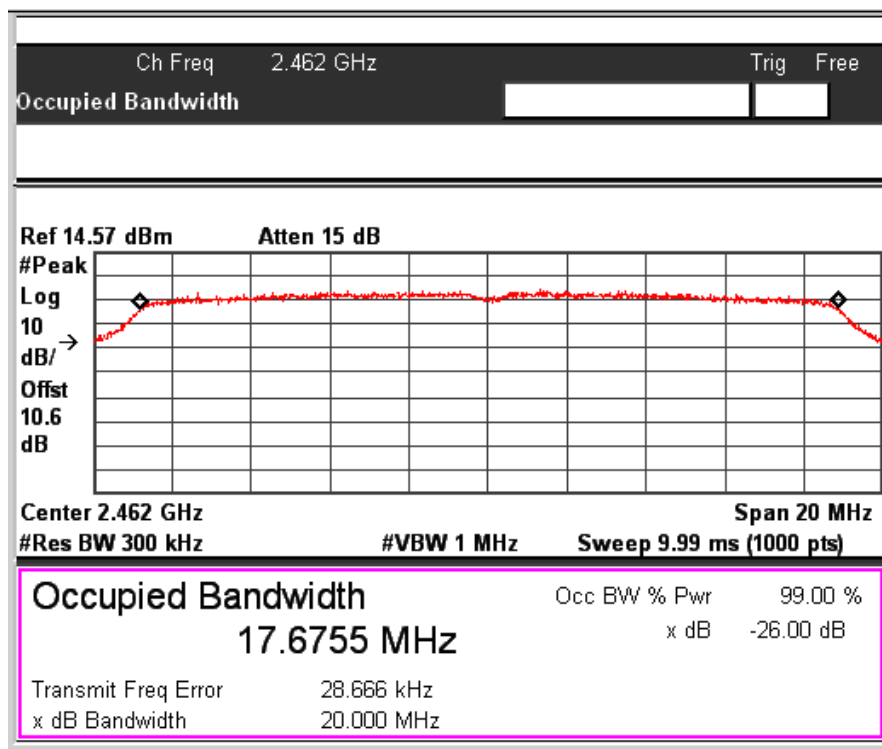
99% OBW: Channel 2412MHz

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Data Rate: 39 Mbps

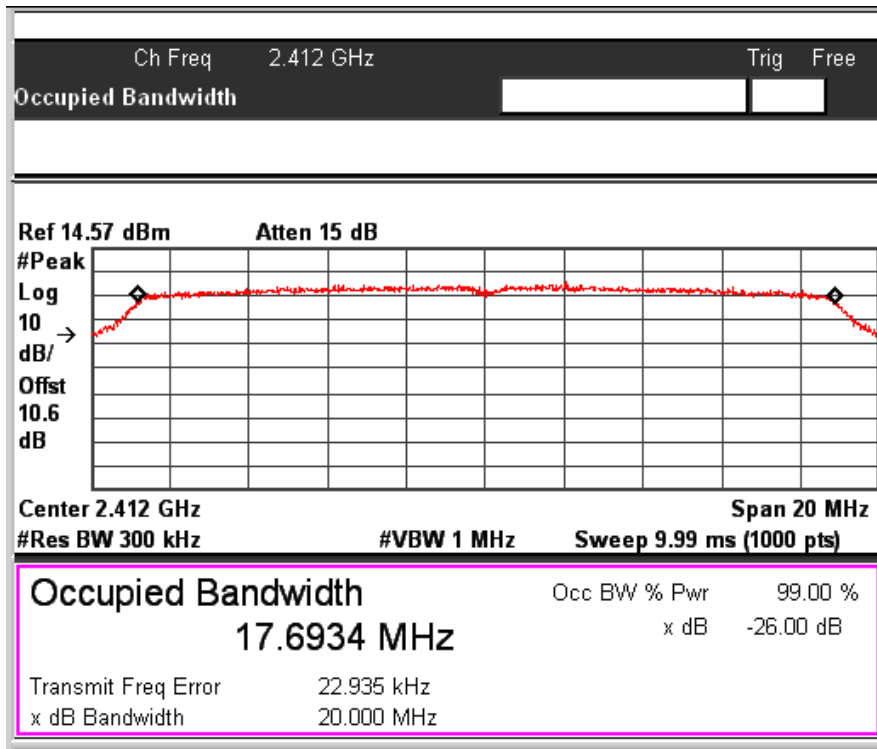
99% OBW: Channel 2442MHz



Data Rate: 39 Mbps

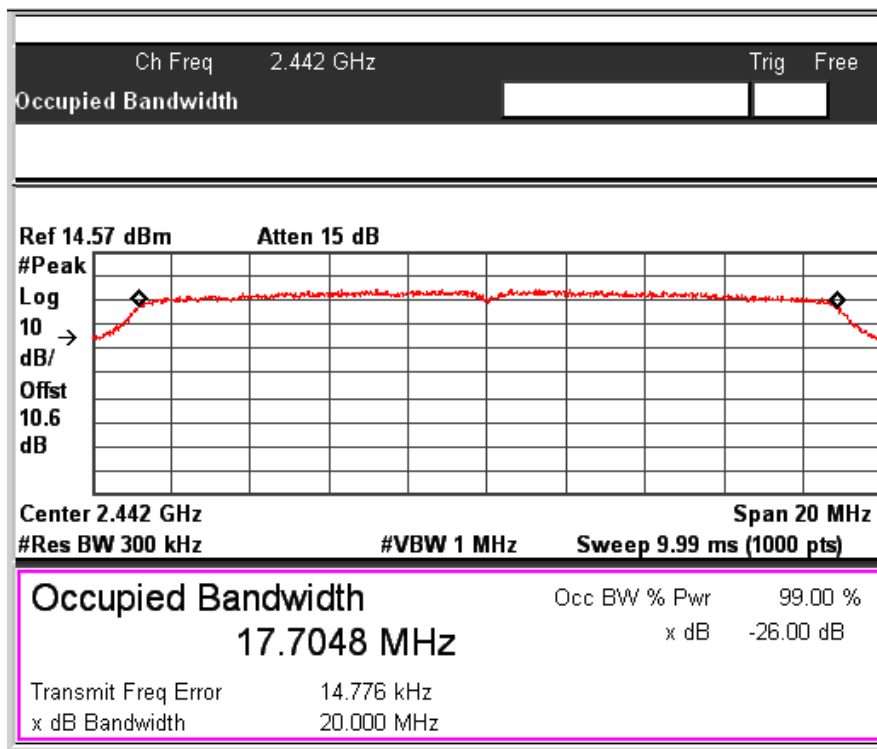
99% OBW: Channel 2462MHz

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Data Rate: 65 Mbps

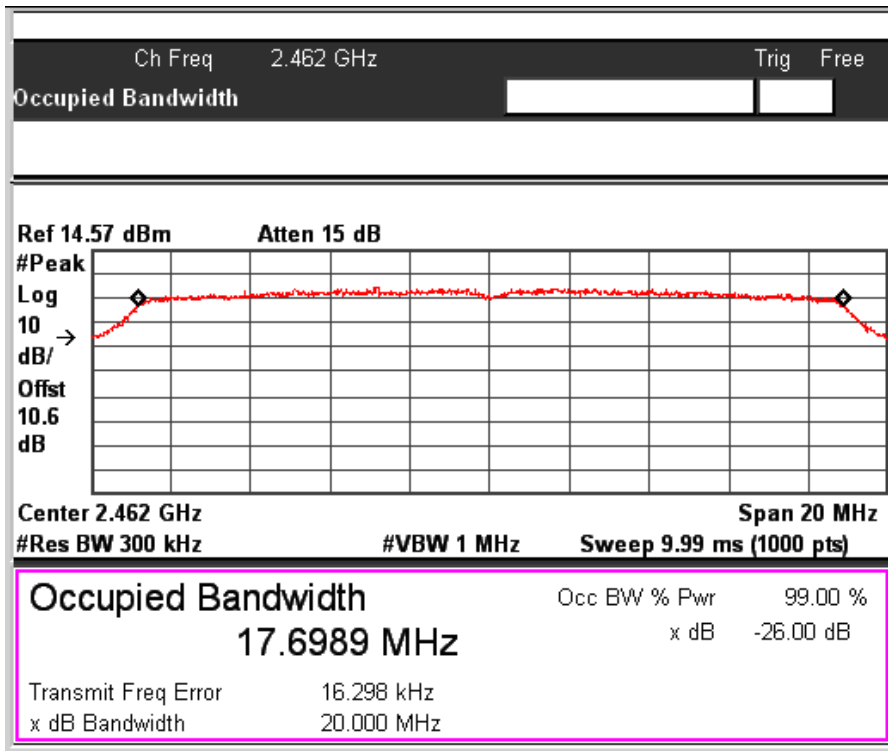
99% OBW: Channel 2412MHz



Data Rate: 65 Mbps

99% OBW: Channel 2442MHz

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Data Rate: 65 Mbps

99% OBW: Channel 2462MHz

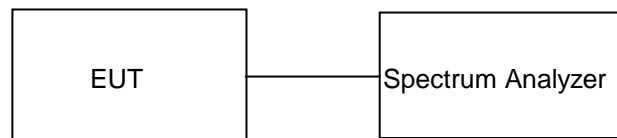
Test Specification
Detector Function
Requirement

FCC Part 15 Section 15.247(d)

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.

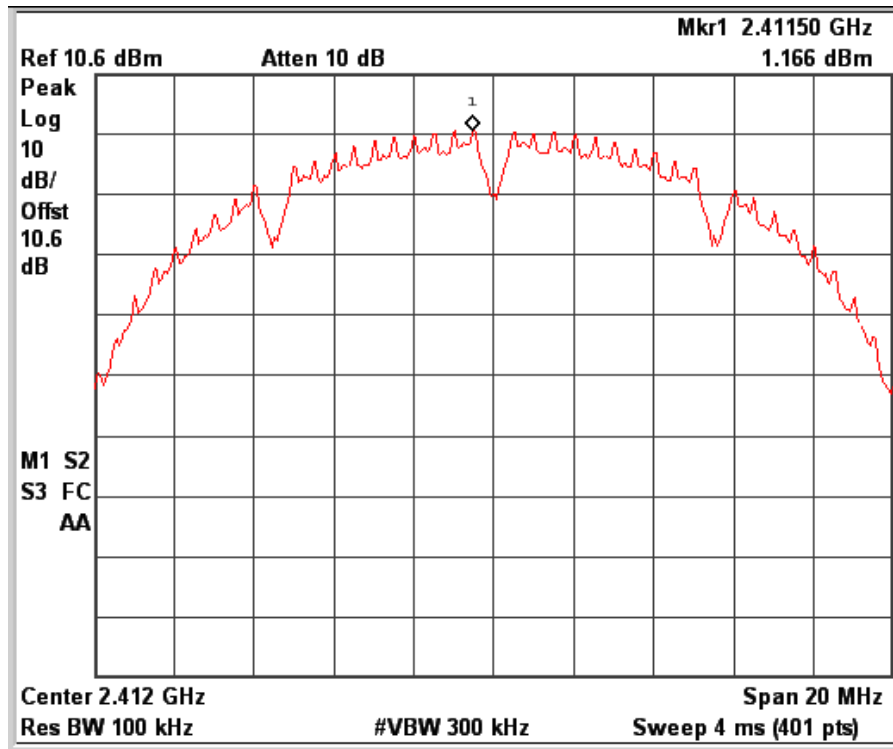
Test Method:



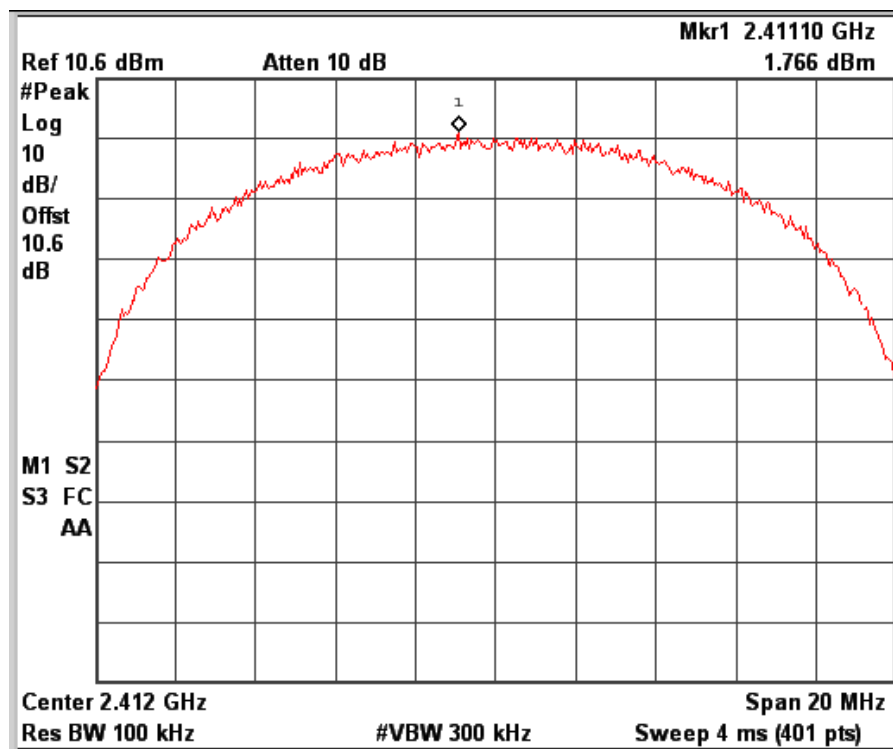
Test Result:

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	-51.01	01.16	-52.17	-30.00
		2462	2483.5	-57.93	01.16	-59.09	-30.00
	11	2412	2400	-46.88	01.76	-48.64	-30.00
		2462	2483.5	-57.58	01.76	-59.34	-30.00

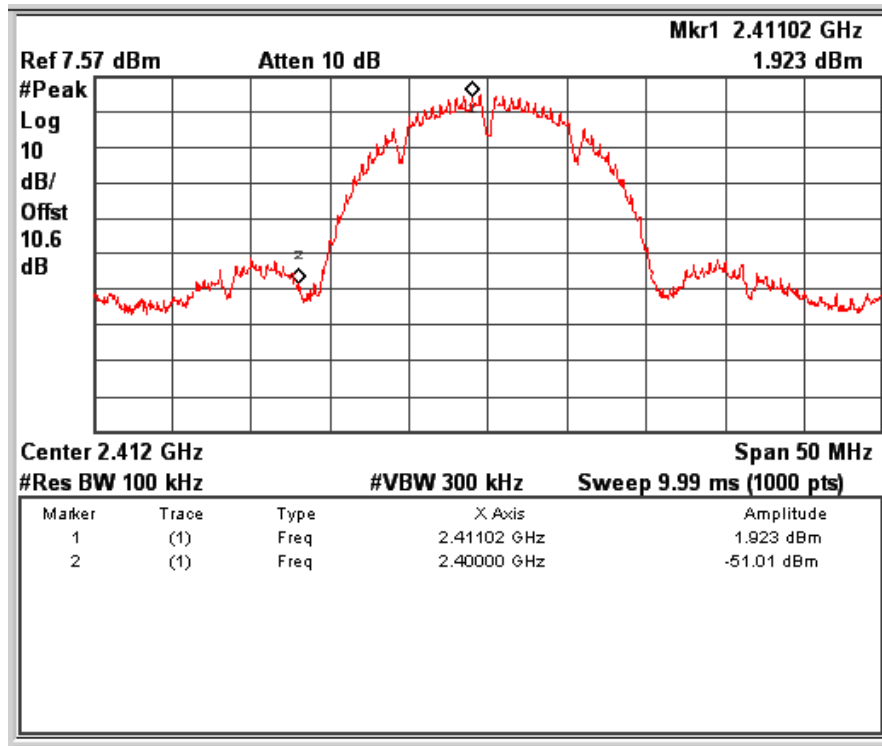
Note: The channel no. 1 (2412 MHz) found to contain the maximum PSD level and is used to establish the reference level.



Reference Level Plot: 1Mbps

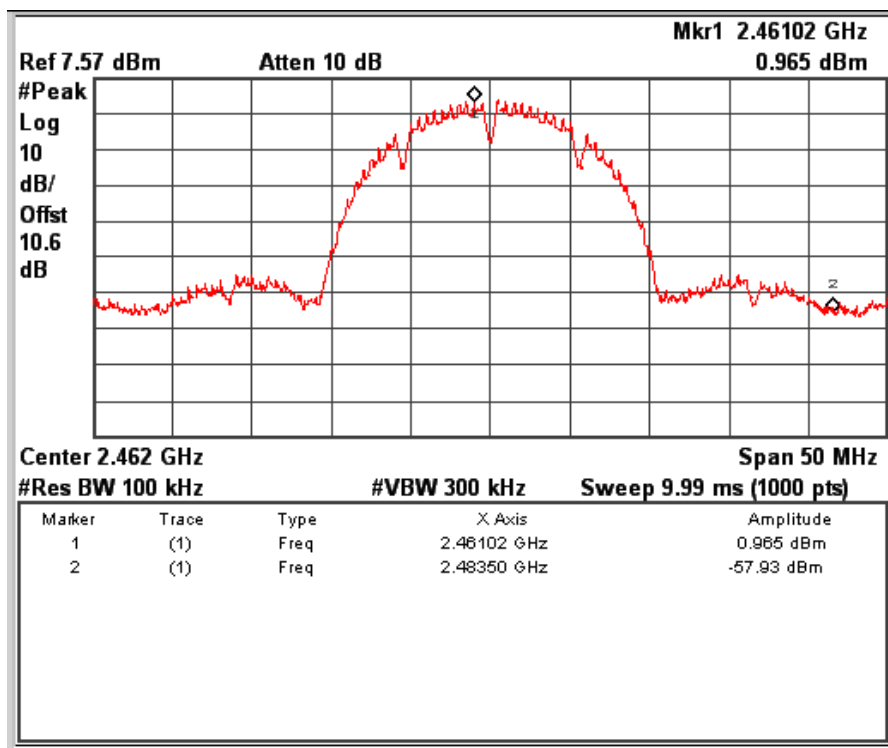


Reference Level Plot: 11Mbps



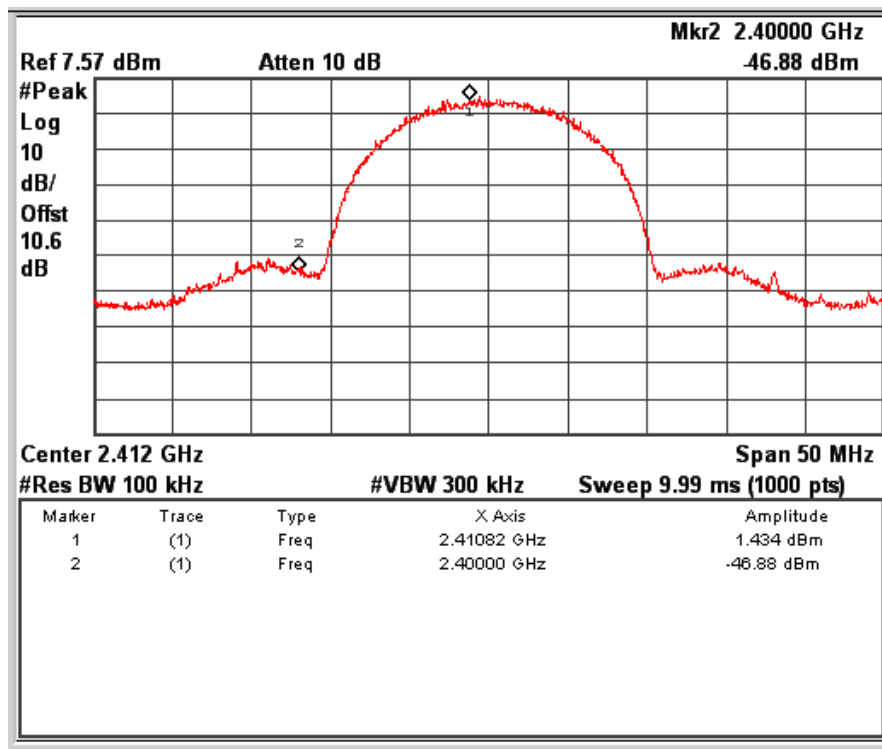
Data Rate: 1 Mbps

Channel frequency: 2412 MHz



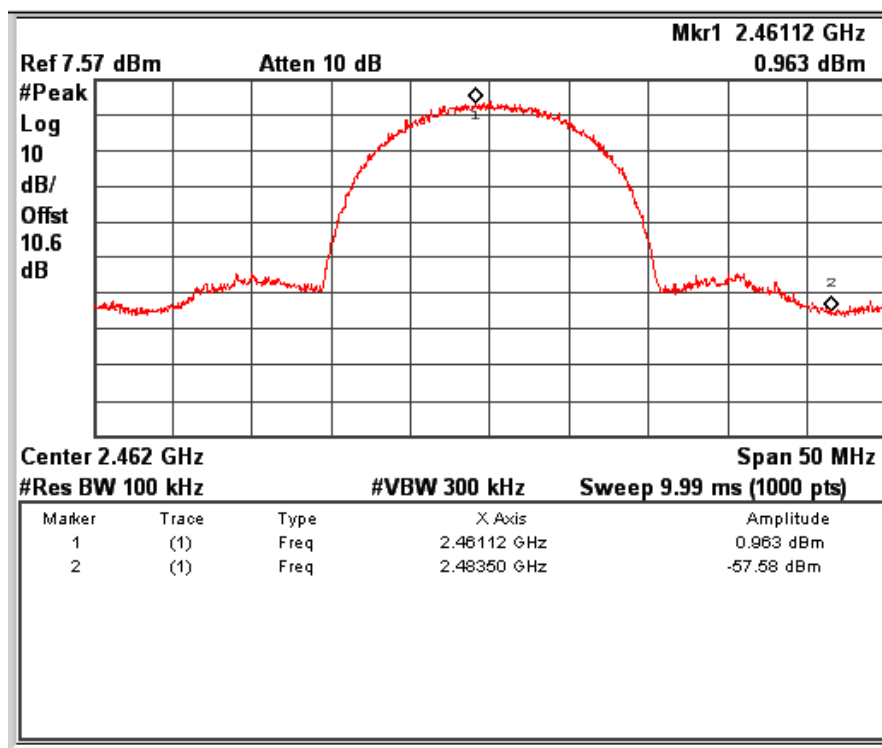
Data Rate: 1 Mbps

Channel frequency: 2462 MHz



Data Rate: 11 Mbps

Channel frequency: 2412 MHz

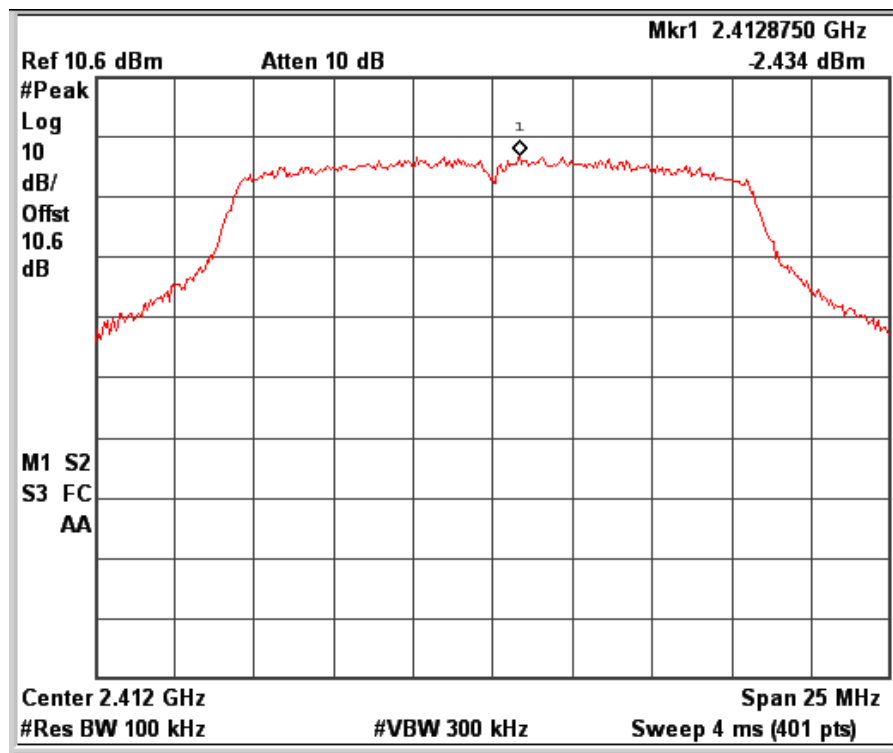


Data Rate: 11 Mbps

Channel frequency: 2462 MHz

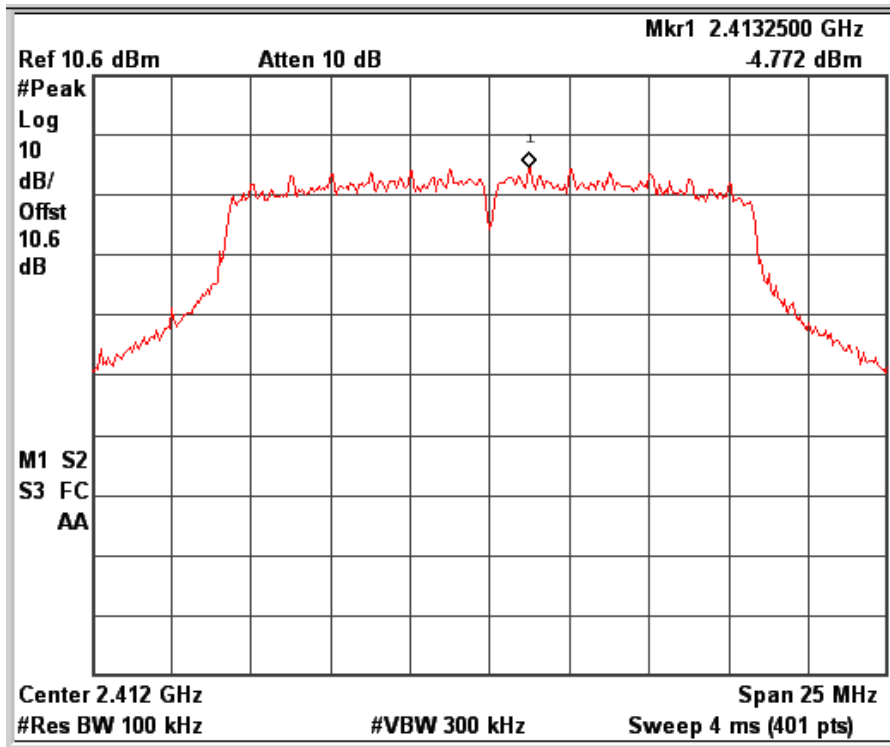
802.11 Protocol	Data Rate (Mbps)	Channel Frequency (MHz)	Value at Band Edge		Reference Value B (dBm)	Band Edge Value A-B (dBc)	Limit (dBc)
			Frequency (MHz)	Value A (dBm)			
g	6	2412	2400	-35.41	-02.43	-32.98	-30.00
		2462	2483.5	-56.56	-02.43	-54.13	-30.00
	24	2412	2400	-36.87	-04.77	-32.10	-30.00
		2462	2483.5	-56.02	-04.77	-51.25	-30.00
	54	2412	2400	-37.15	-04.79	-32.36	-30.00
		2462	2483.5	-54.75	-04.79	-49.96	-30.00

Note: The channel no. 1 (2412 MHz) found to contain the maximum PSD level and is used to establish the reference level.

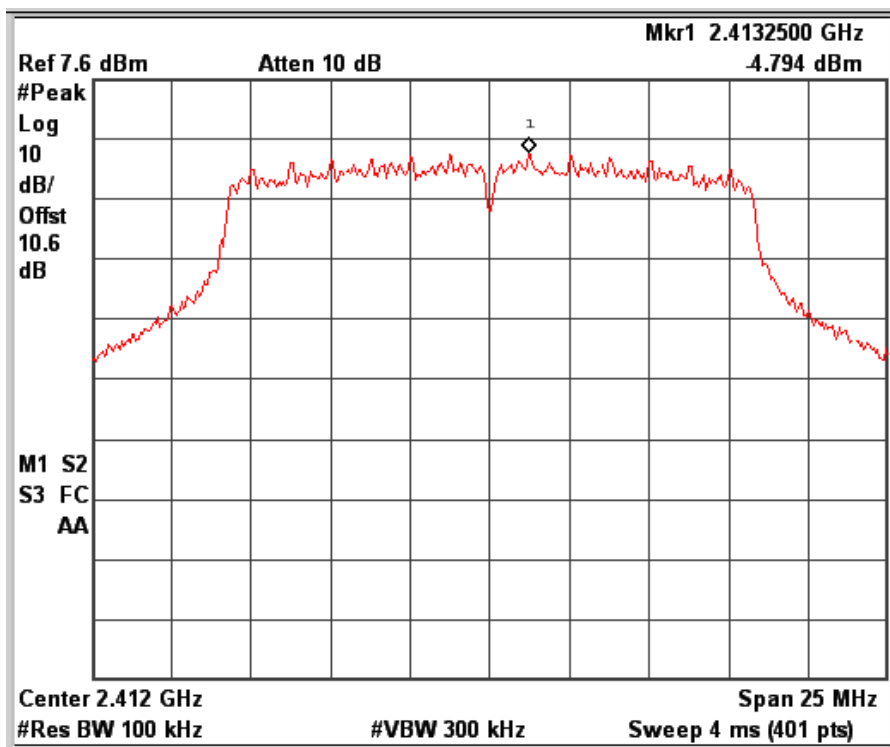


Reference Level Plot: 6 Mbps

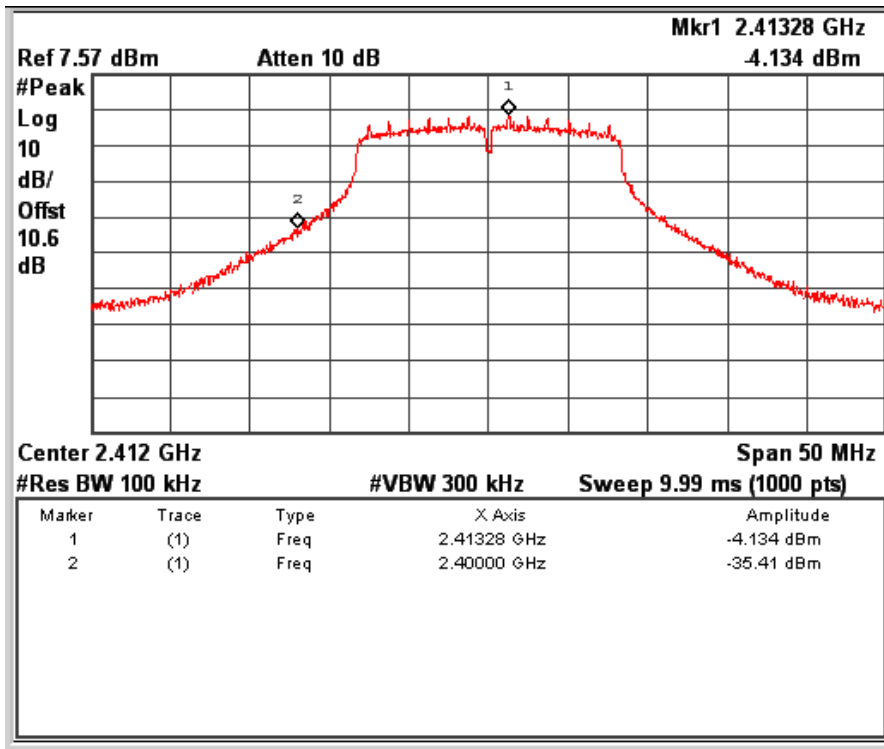
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Reference Level Plot: 24 Mbps

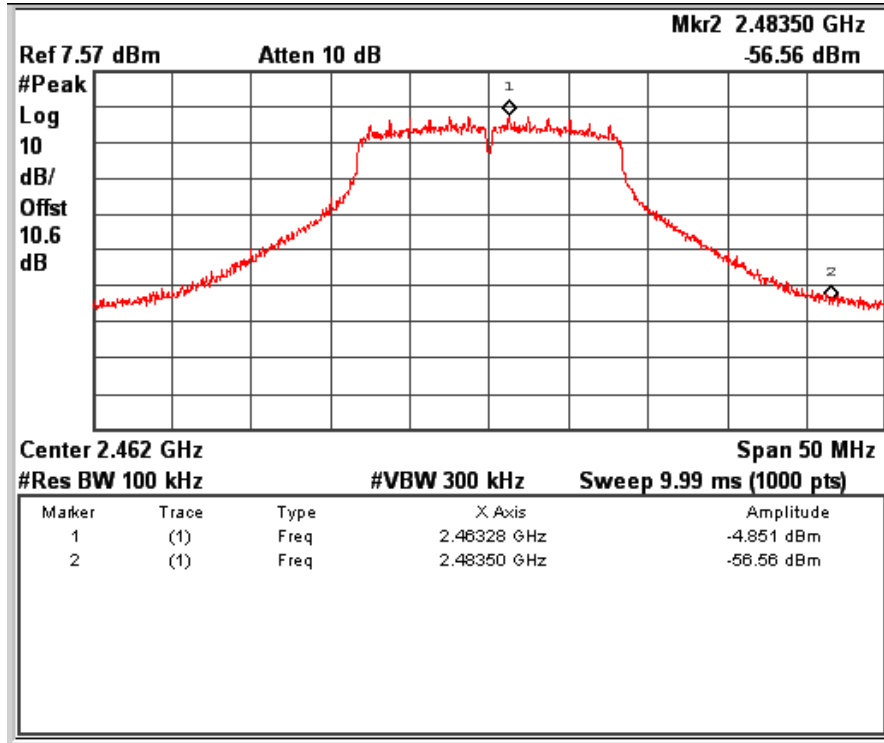


Reference Level Plot: 54 Mbps



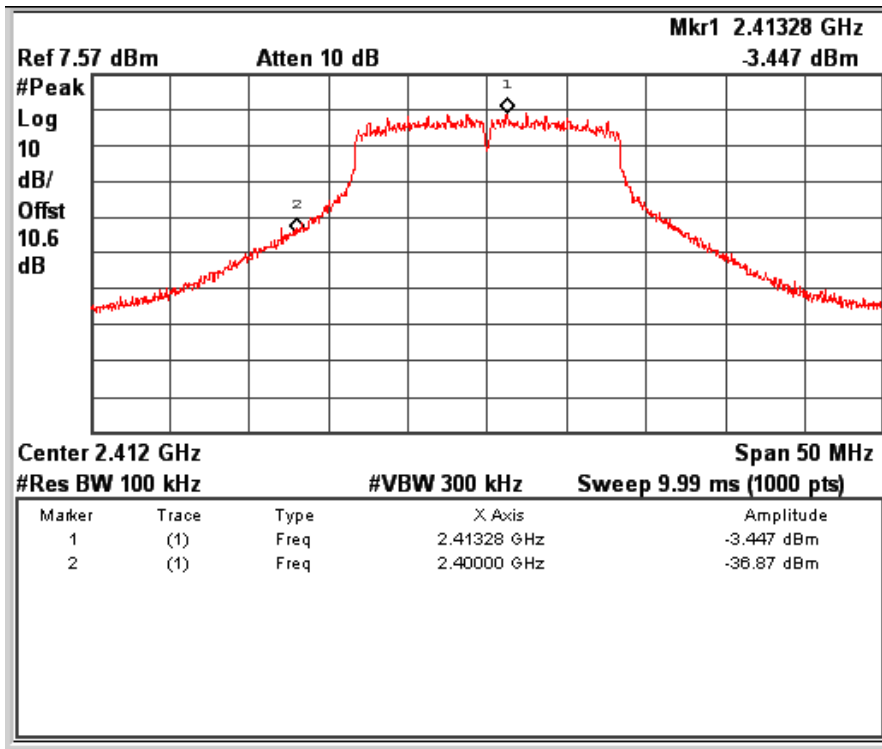
Data Rate: 6 Mbps

Channel frequency: 2412 MHz



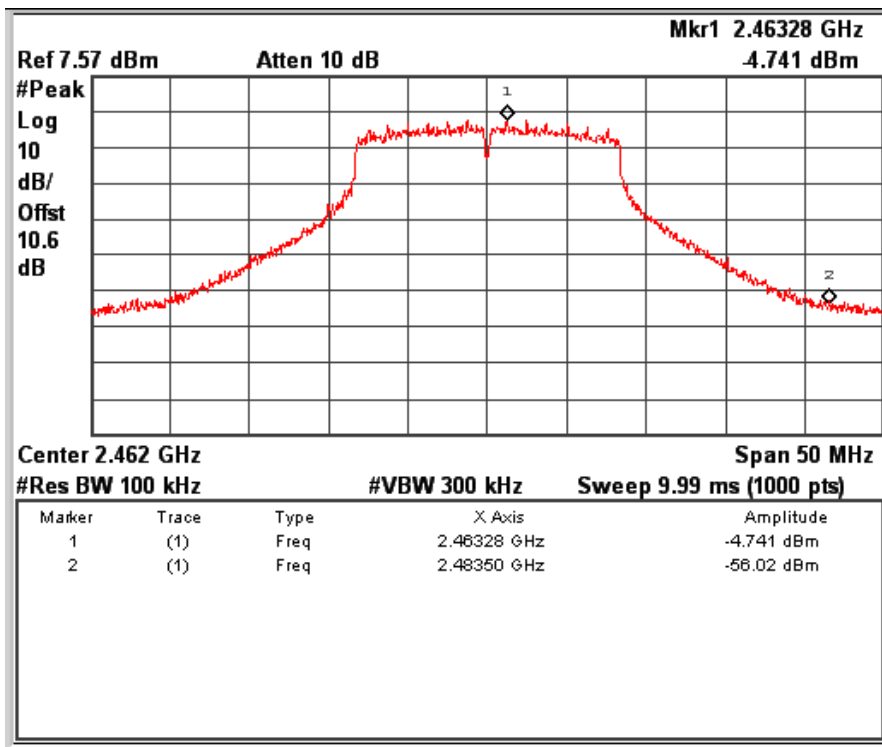
Data Rate: 6 Mbps

Channel frequency: 2462 MHz



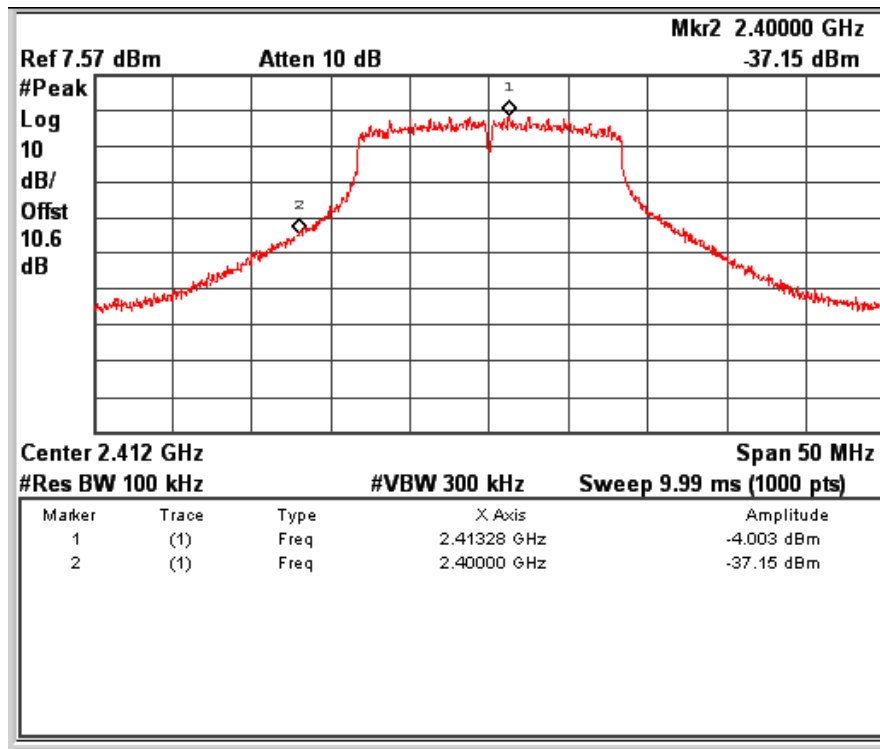
Data Rate: 24 Mbps

Channel frequency: 2412 MHz



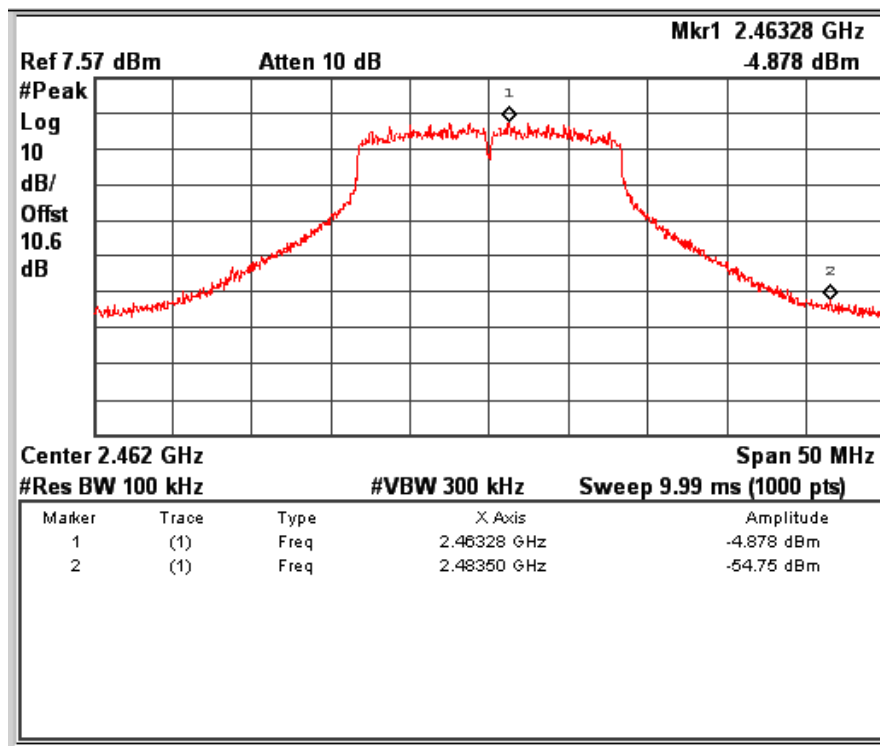
Data Rate: 24 Mbps

Channel frequency: 2462 MHz



Data Rate: 54 Mbps

Channel frequency: 2412 MHz

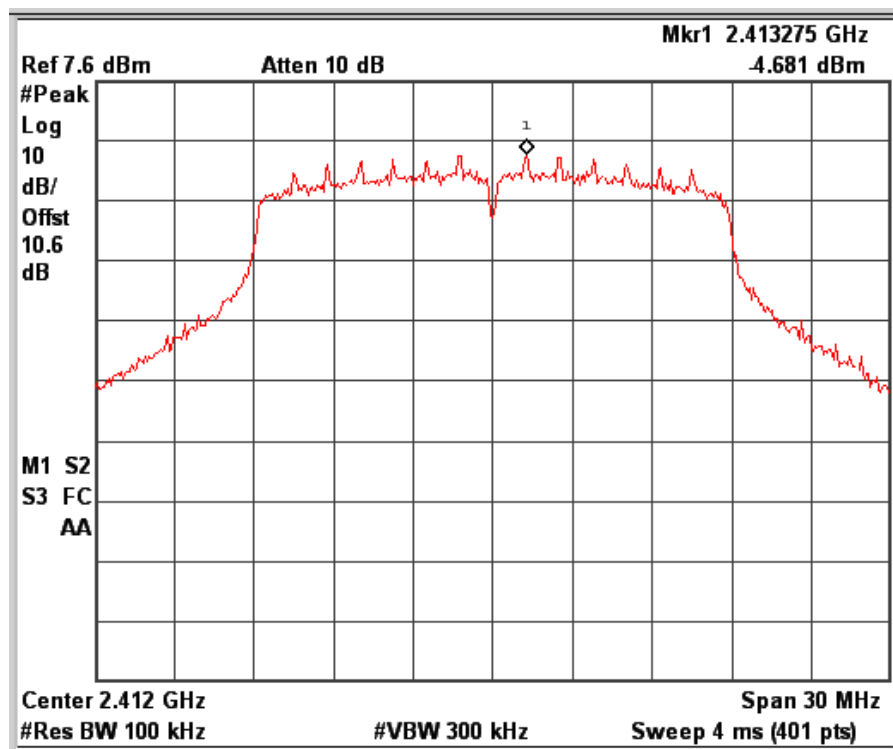


Data Rate: 54 Mbps

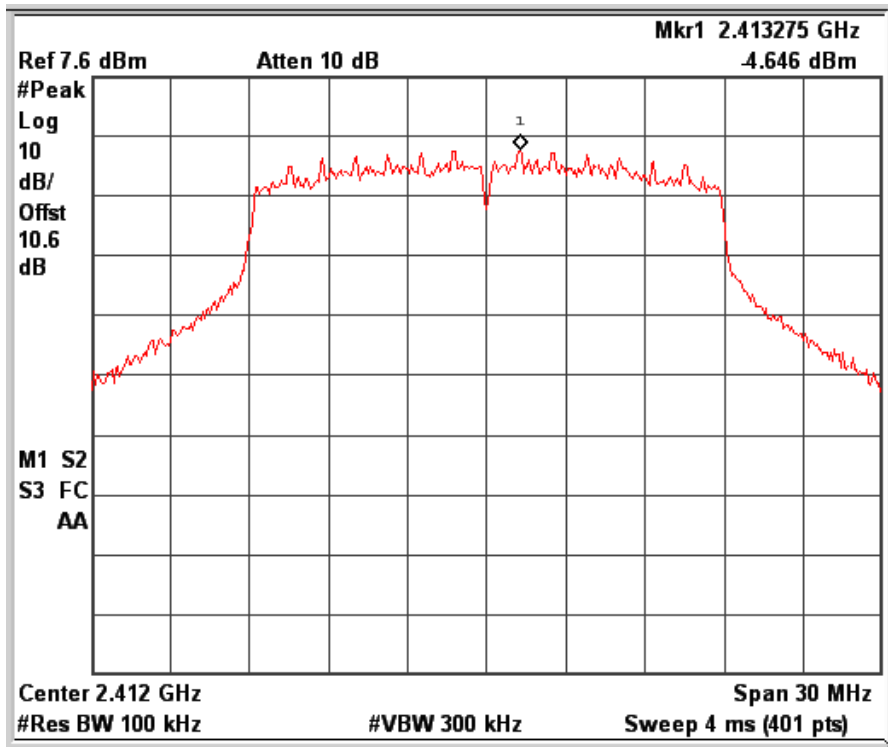
Channel frequency: 2462 MHz

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)			
n	MCS0 (6.5)	2412	2400	-35.34	-04.68	-30.66	-30.00
		2462	2483.5	-55.54	-04.68	-50.86	-30.00
	MCS4 (39)	2412	2400	-35.88	-04.64	-31.24	-30.00
		2462	2483.5	-55.26	-04.64	-50.62	-30.00
	MCS7 (65)	2412	2400	-36.19	-04.50	-31.69	-30.00
		2462	2483.5	-55.47	-04.50	-50.97	-30.00

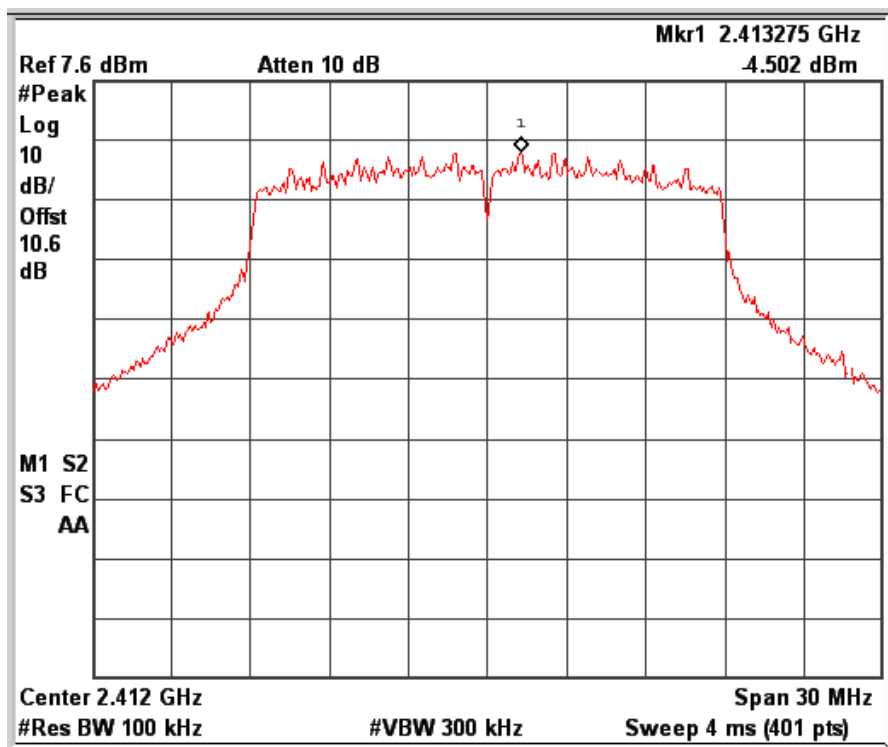
Note: The channel no. 1 (2412 MHz) found to contain the maximum PSD level and is used to establish the reference level.



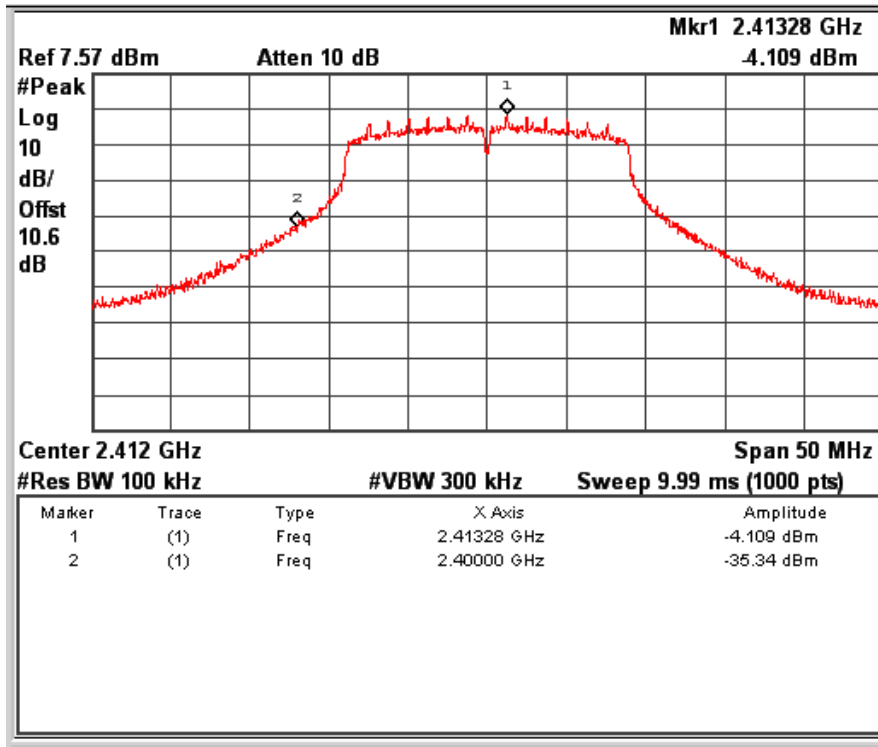
Reference Level Plot: 6.5 Mbps



Reference Level Plot: 39 Mbps

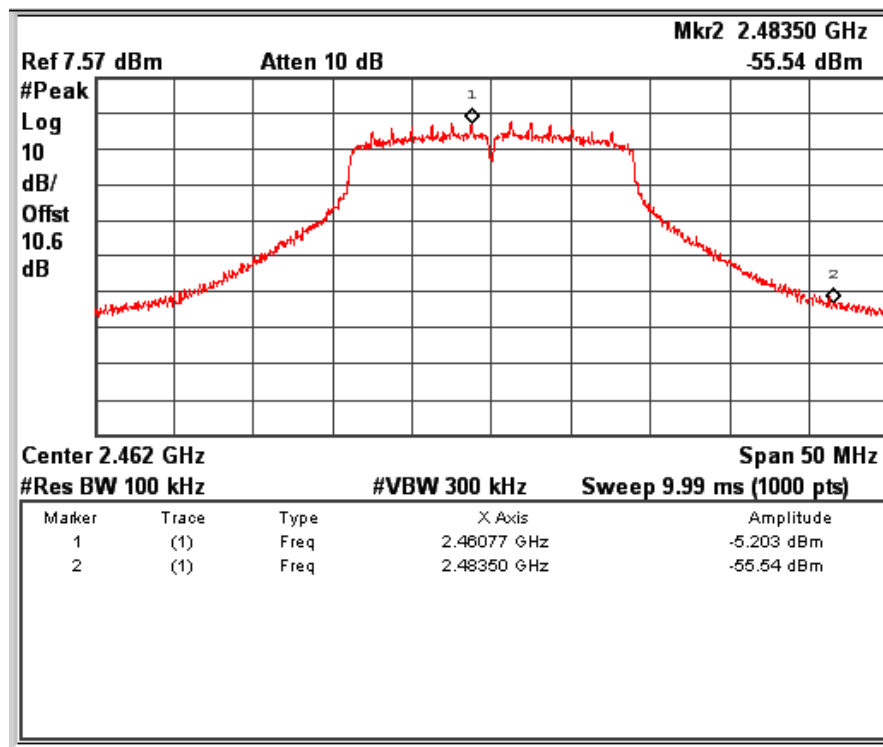


Reference Level Plot: 65 Mbps



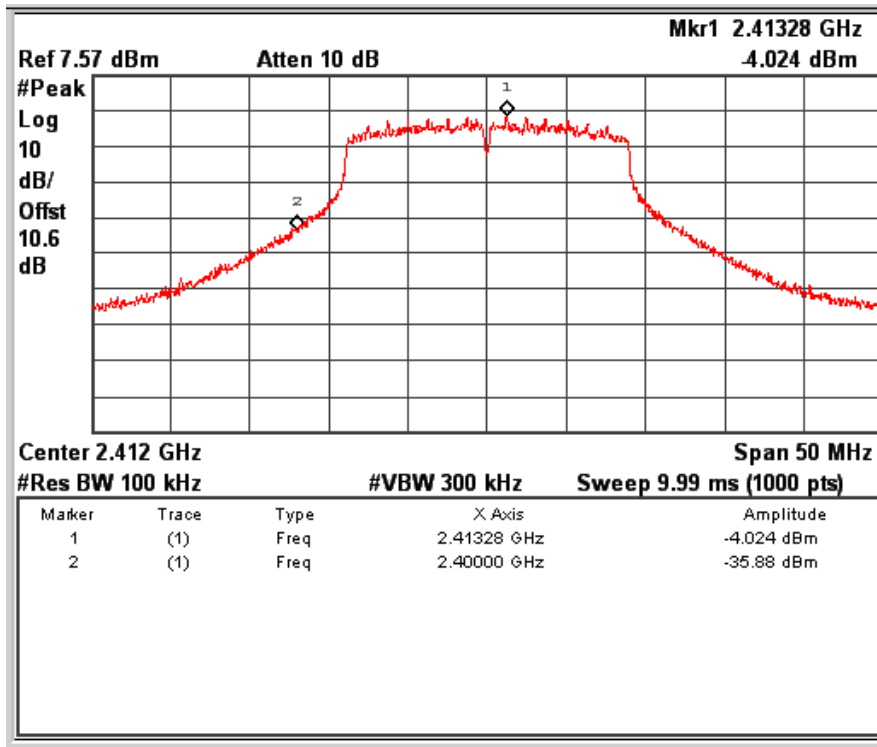
Data Rate: 6.5 Mbps

Channel frequency: 2412 MHz



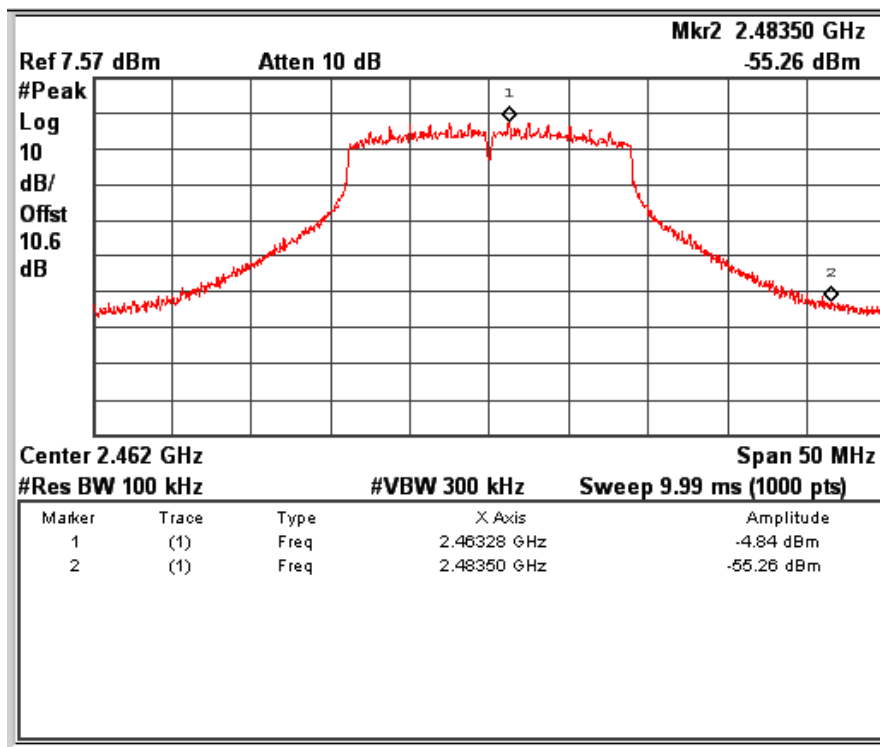
Data Rate: 6.5 Mbps

Channel frequency: 2462 MHz



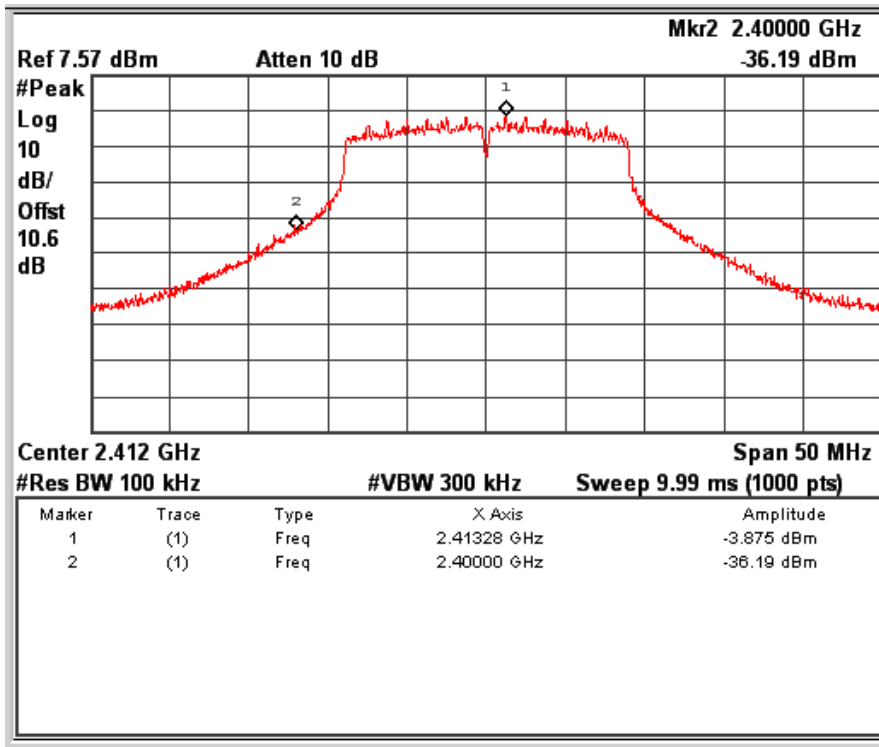
Data Rate: 39 Mbps

Channel frequency: 2412 MHz



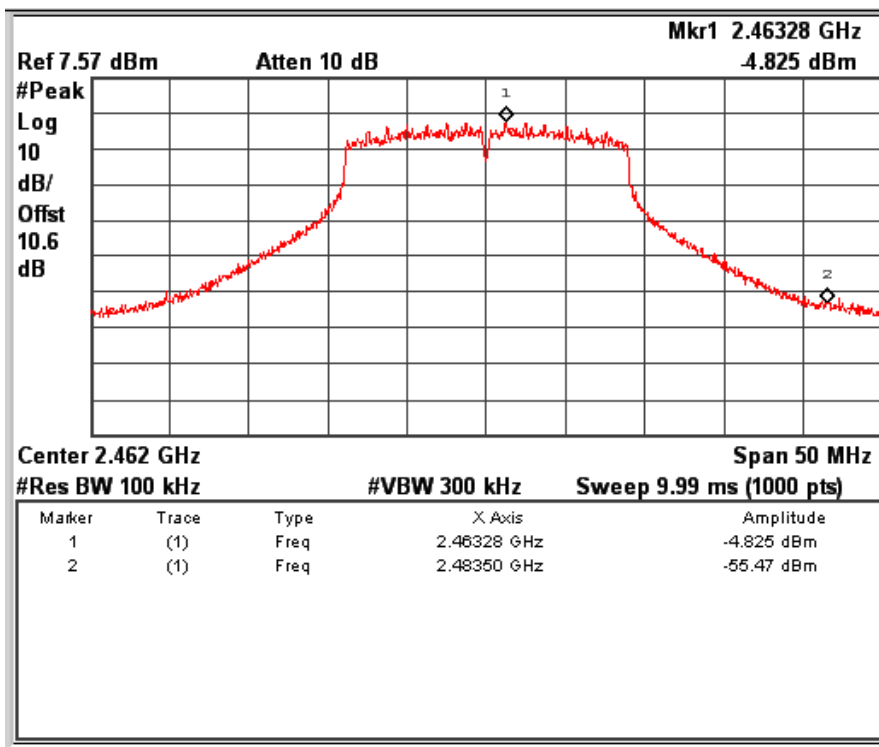
Data Rate: 39 Mbps

Channel frequency: 2462 MHz



Data Rate: 65 Mbps

Channel frequency: 2412 MHz

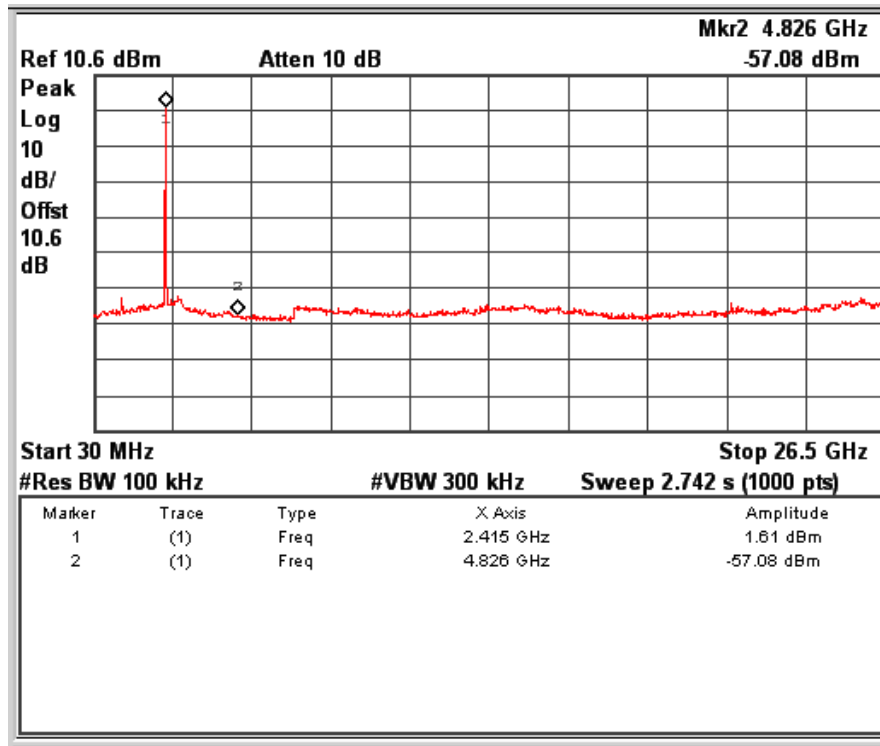


Data Rate: 65 Mbps

Channel frequency: 2462 MHz

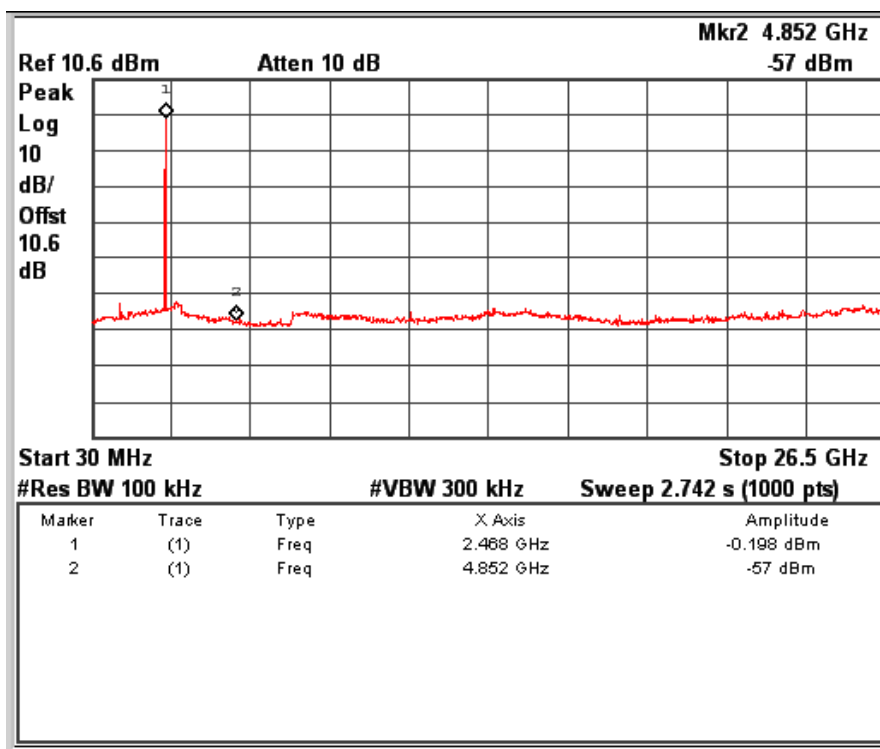
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Conducted Spurious Emission



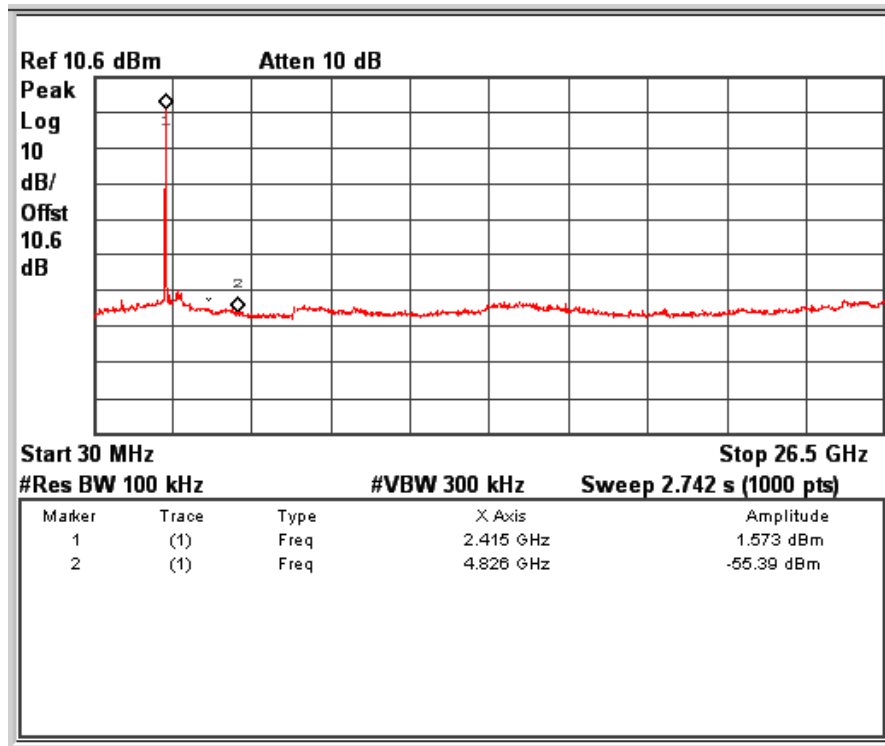
Data Rate: 1Mbps

Channel frequency: 2412 MHz



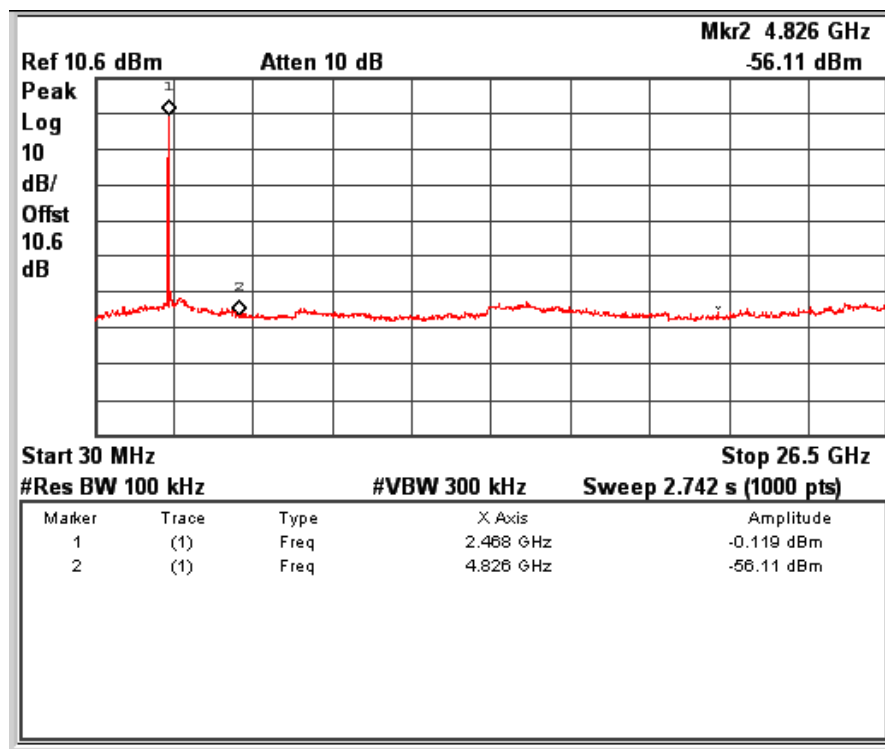
Data Rate: 1Mbps

Channel frequency: 2462 MHz



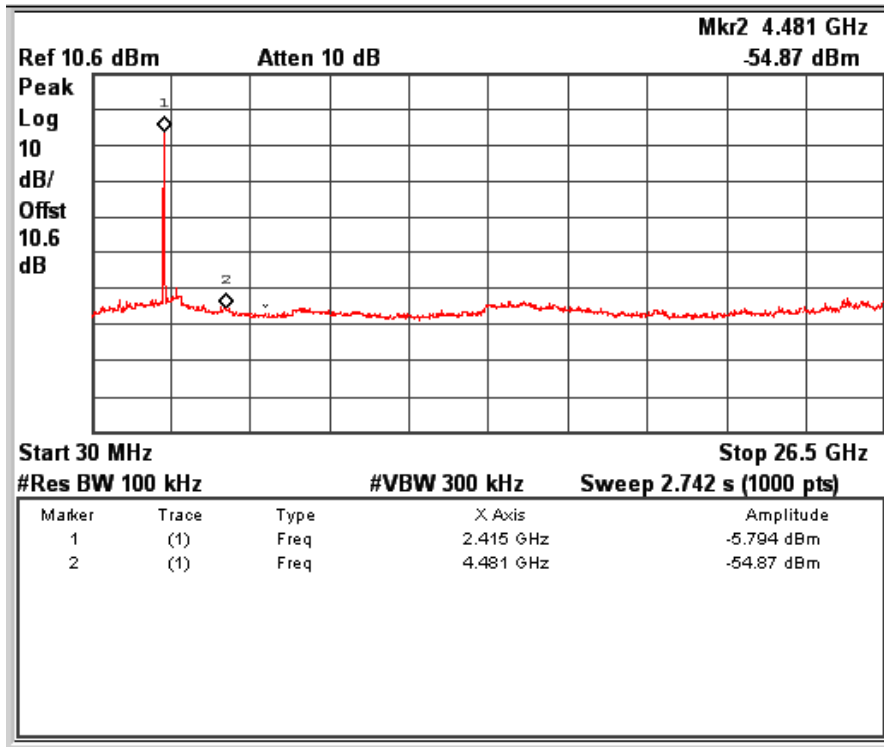
Data Rate: 11Mbps

Channel frequency: 2412 MHz



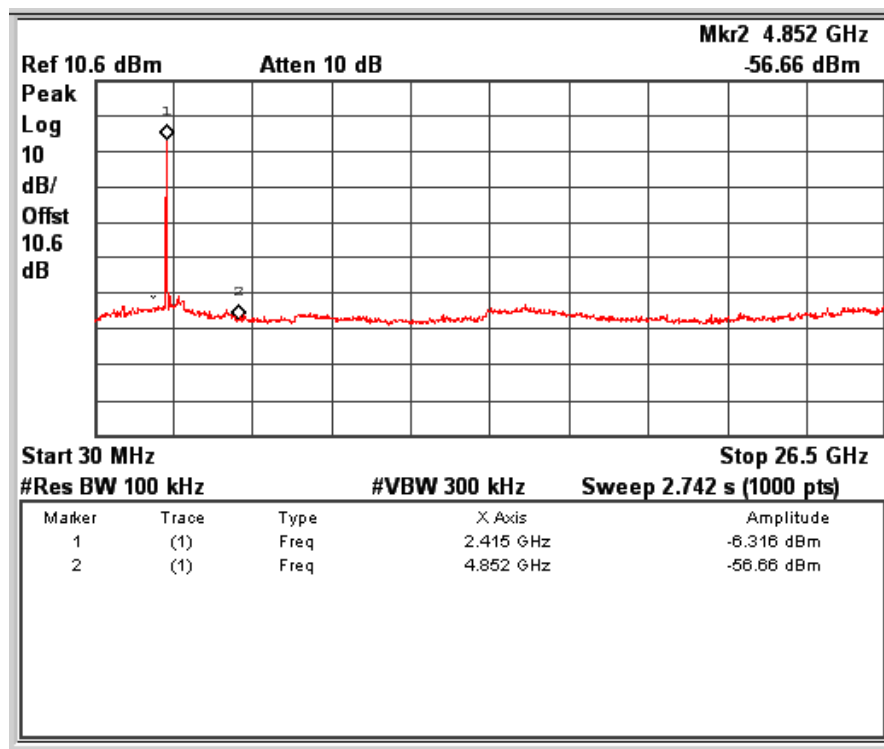
Data Rate: 11Mbps

Channel frequency: 2462 MHz



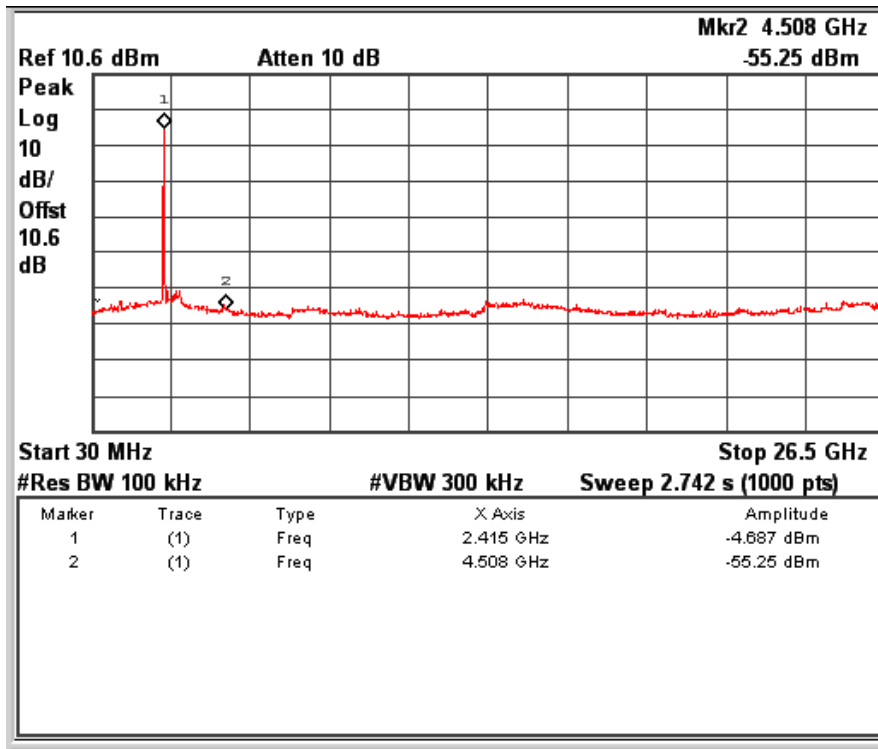
Data Rate: 6Mbps

Channel frequency: 2412 MHz



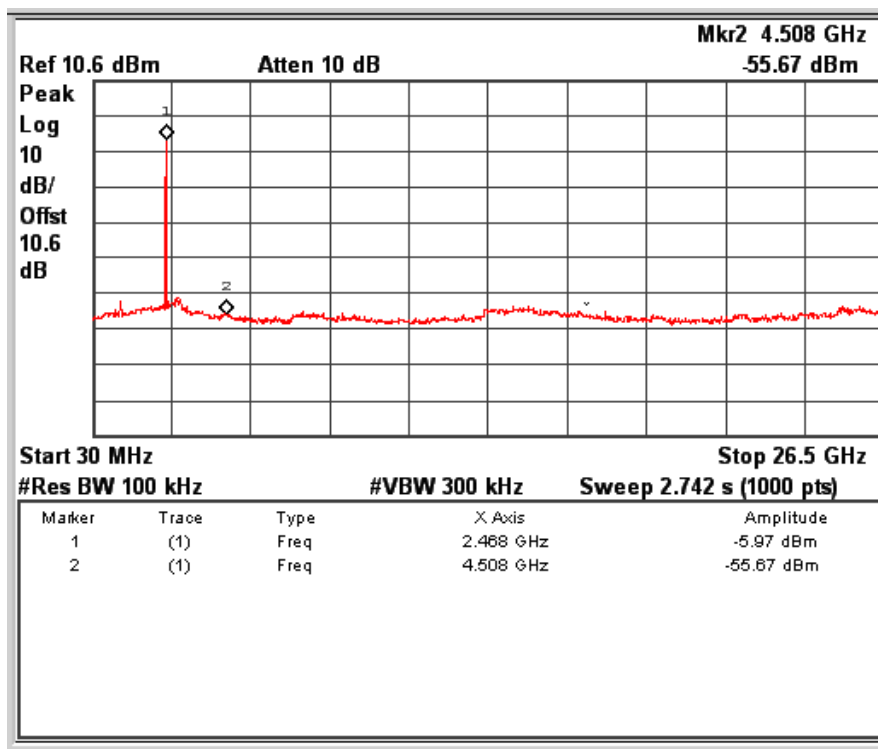
Data Rate: 6Mbps

Channel frequency: 2462 MHz



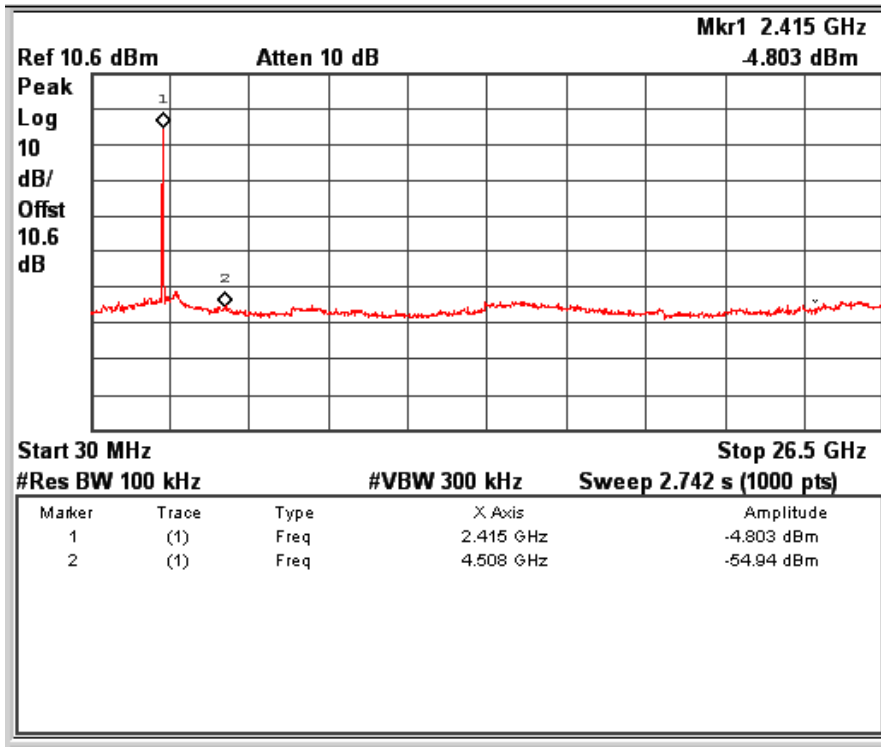
Data Rate: 24Mbps

Channel frequency: 2412 MHz



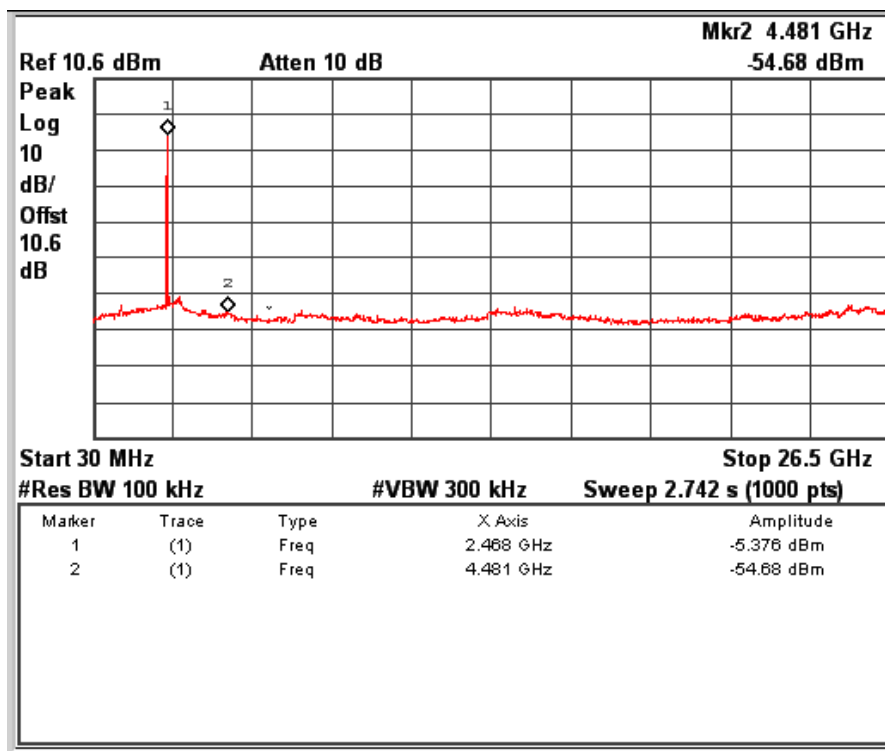
Data Rate: 24Mbps

Channel frequency: 2462 MHz



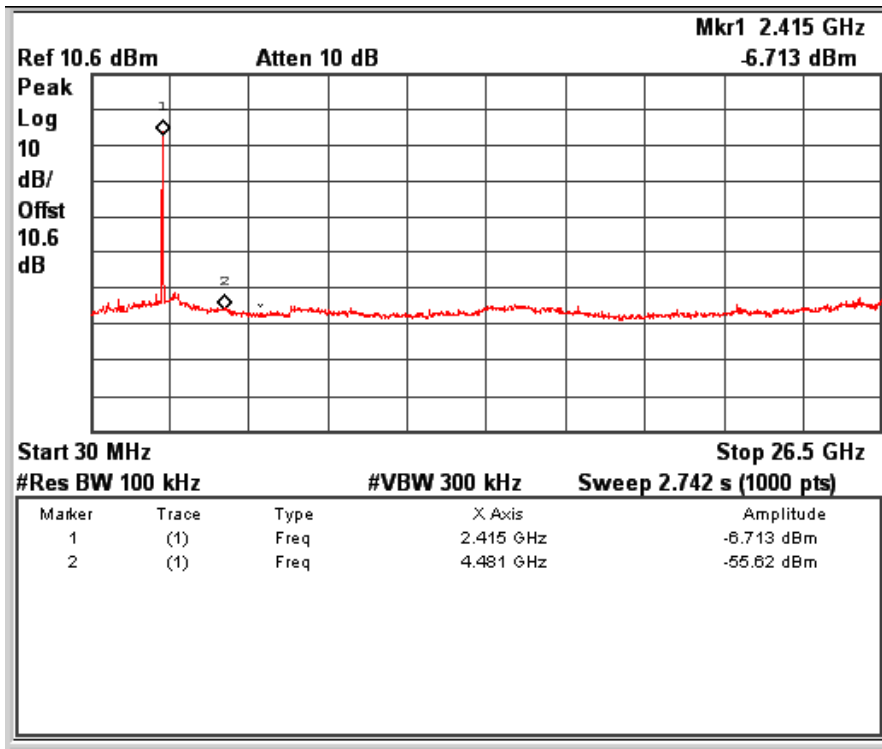
Data Rate: 54Mbps

Channel frequency: 2412 MHz



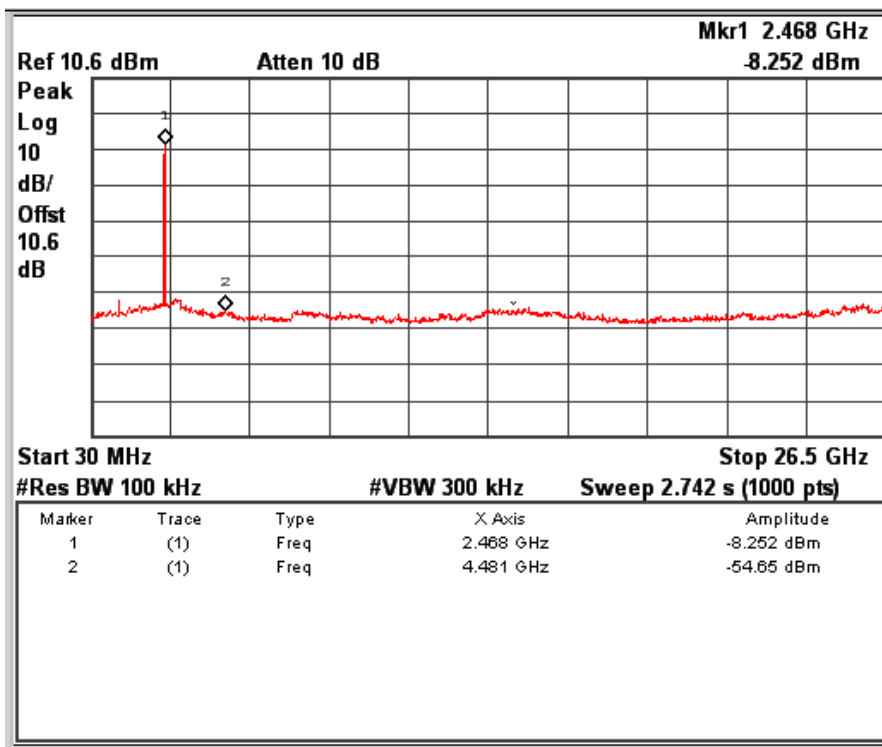
Data Rate: 54Mbps

Channel frequency: 2462 MHz



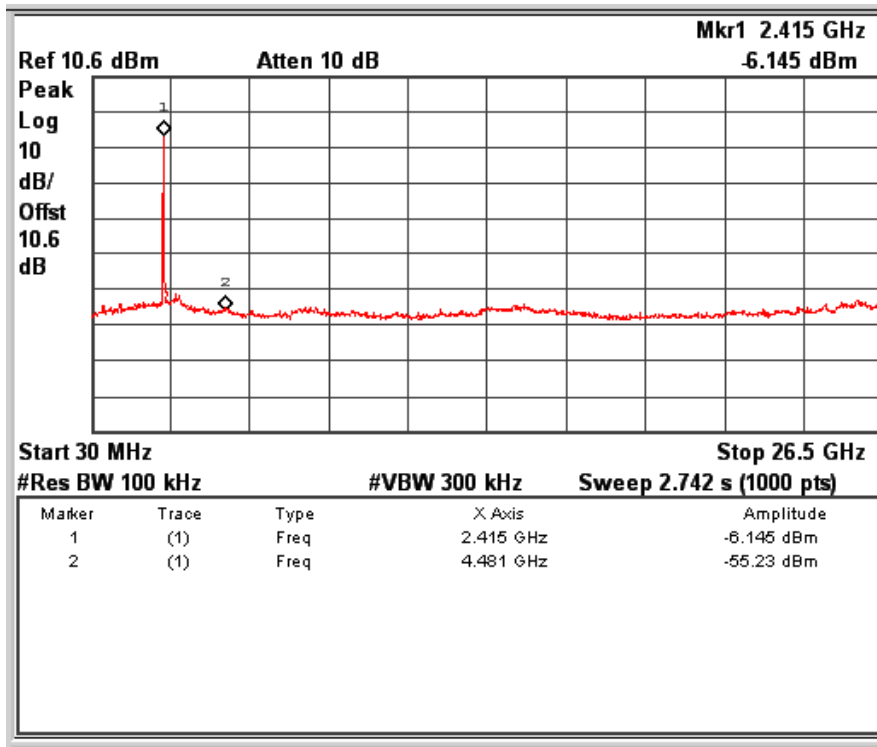
Data Rate: 6.5 Mbps

Channel frequency: 2412 MHz



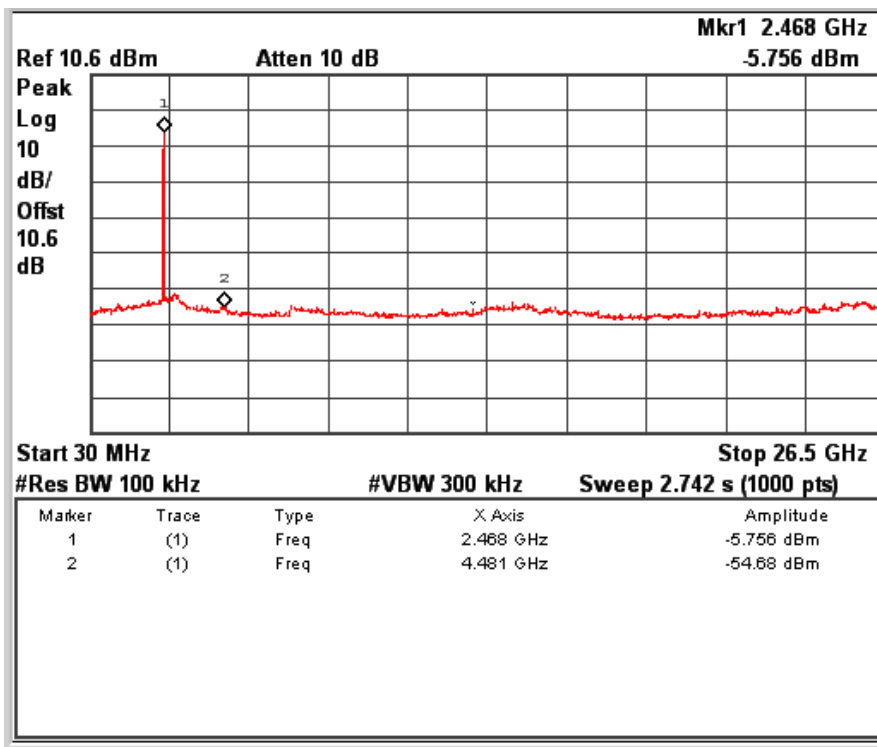
Data Rate: 6.5 Mbps

Channel frequency: 2462 MHz



Data Rate: 39 Mbps

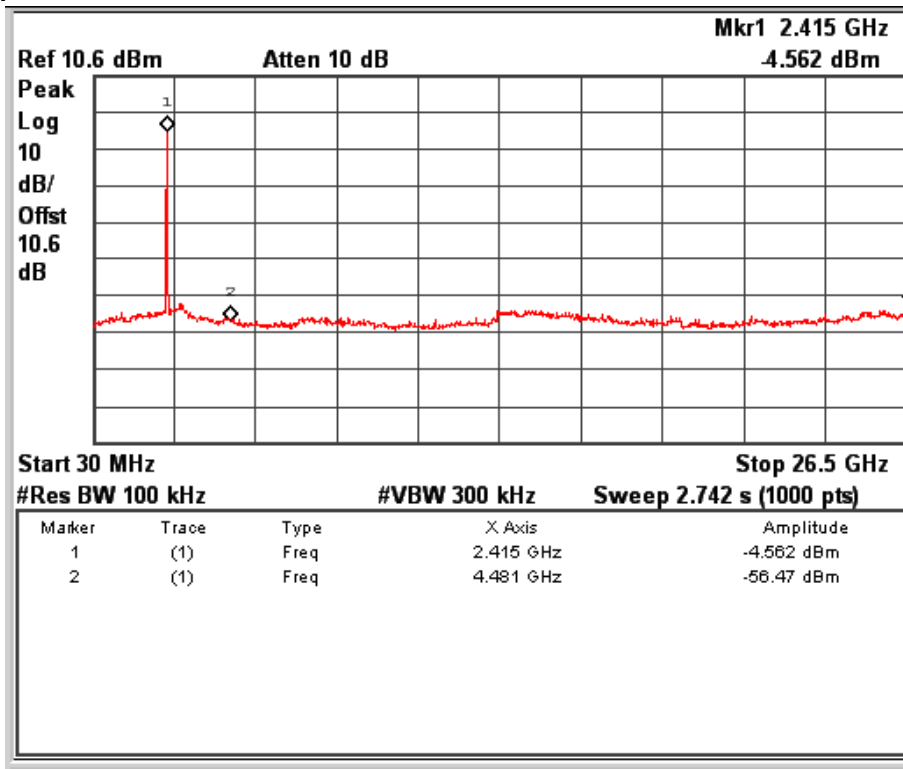
Channel frequency: 2412 MHz



Data Rate: 39 Mbps

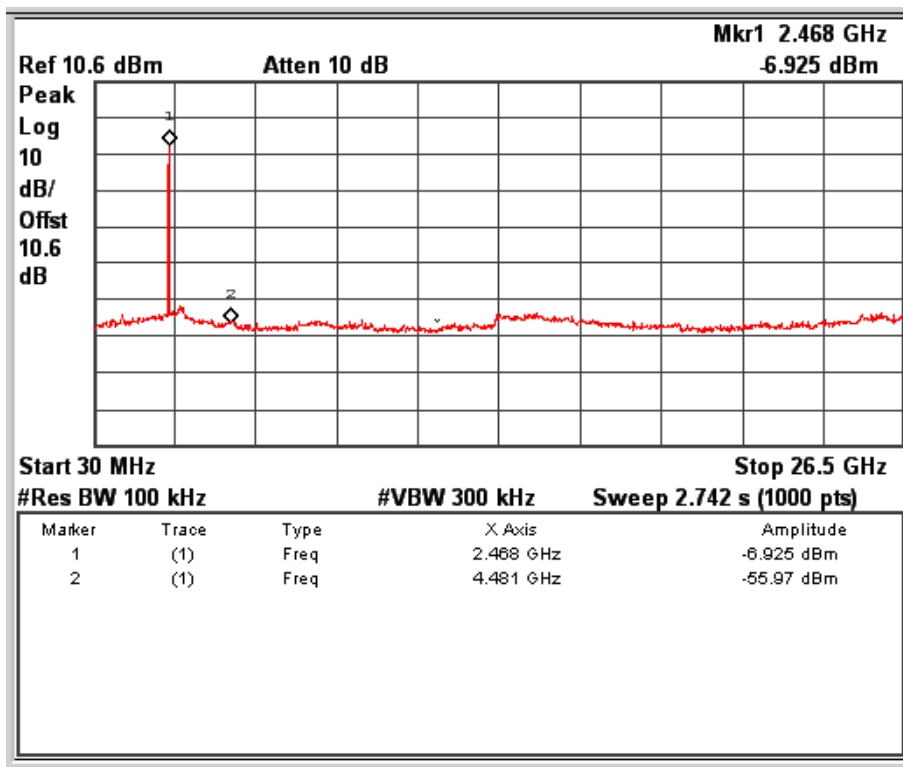
Channel frequency: 2462 MHz

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Data Rate: 65 Mbps

Channel frequency: 2412 MHz



Data Rate: 65 Mbps

Channel frequency: 2462 MHz

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Spurious Radiated Emissions and

Restricted Bands of Operation

Section 15.209 and 15.205

Result

Pass

Test Specification	FCC Part 15 Section 15.209 & 15.205
Test Method	ANSI C63.10-2009
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 below table

Limit for Radiated Emission of Section 15.209:

Frequency (MHz)	Field strength (μV/m)	Field strength (dBμV/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 49.5dBμV/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.

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Test results:

For Frequency Range 9kHz – 30MHz

No emissions found in this frequency range.

For Frequency Range 30MHz – 1GHz

Worst Case emissions are found in the channel 2412MHz in b mode 11Mbps and results are listed below.

Polarization	Frequency (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
V	30.57	34.31	40.00	-05.69
	39.70	33.47	40.00	-06.53
	373.38	36.51	46.00	-09.49
	480.08	37.22	46.00	-08.78
	484.54	36.80	46.00	-09.20
	527.99	35.62	46.00	-10.38
	888.35	38.14	46.00	-07.86
H	30.97	34.20	40.00	-05.80
	215.94	33.60	43.50	-09.90
	239.9	35.20	46.00	-10.80
	365.55	37.14	46.00	-08.86
	720.05	39.50	46.00	-06.50

For Frequency above 1GHz

Test results for worst case data rate are listed below.

B Mode: 1Mbps					
Channel	Polarization	Frequency (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
Low	V	2390(Pk)	39.63	74.00	-34.37
		2390(Av)	29.21	54.00	-24.79
		2412(Pk)	93.15	*	-
		2412(Av)	90.77	*	-
		4824(Pk)	50.01	74.00	-23.99
		4824(Av)	40.66	54.00	-13.34
		7236(Pk)	57.63	74.00	-16.37
		7236(Av)	44.51	54.00	-09.49
	H	2390(Pk)	41.53	74.00	-32.47
		2390(Av)	29.41	54.00	-24.59
		2412(Pk)	94.11	*	-
		2412(Av)	91.36	*	-
		4824(Pk)	51.37	74.00	-22.63

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		4824(Av)	42.94	54.00	-11.06
		7236(Pk)	57.12	74.00	-16.88
		7236(Av)	44.73	54.00	-09.27
Mid	V	2442(Pk)	89.60	*	-
		2442(Av)	87.29	*	-
		4884(Pk)	51.75	74.00	-22.25
		4884(Av)	40.11	54.00	-13.89
		7326(Pk)	57.43	74.00	-16.57
		7326(Av)	45.63	54.00	-8.37
	H	2442(Pk)	92.13	*	-
		2442(Av)	89.54	*	-
		4884(Pk)	51.01	74.00	-22.99
		4884(Av)	41.95	54.00	-12.05
		7326(Pk)	58.19	74.00	-15.81
		7326(Av)	45.45	54.00	-08.55
High	V	2483.5(Pk)	39.21	74.00	-34.79
		2483.5(Av)	27.67	54.00	-26.33
		2462(Pk)	88.62	*	-
		2462(Av)	86.17	*	-
		4924(Pk)	49.98	74.00	-24.02
		4924(Av)	39.33	54.00	-14.67
		7386(Pk)	57.84	74.00	-16.16
		7386(Av)	45.97	54.00	-08.03
	H	2483.5(Pk)	39.68	74.00	-34.32
		2483.5(Av)	28.00	54.00	-26.00
		2462(Pk)	90.36	*	-
		2462(Av)	87.86	*	-
		4924(Pk)	50.63	74.00	-23.37
		4924(Av)	40.58	54.00	-13.42
		7386(Pk)	57.89	74.00	-16.11
		7386(Av)	46.13	54.00	-07.87

* > Fundamental Frequency

B Mode: 11Mbps					
Channel	Polarization	Frequency (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
Low	V	2390(Pk)	41.83	74.00	-32.17
		2390(Av)	31.74	54.00	-22.26
		2412(Pk)	96.98	*	-
		2412(Av)	88.88	*	-
		4824(Pk)	50.02	74.00	-23.98
		4824(Av)	37.64	54.00	-16.36
		7236(Pk)	56.82	74.00	-17.18
		7236(Av)	44.58	54.00	-09.42
	H	2390(Pk)	43.98	74.00	-30.02
		2390(Av)	32.22	54.00	-21.78
		2412(Pk)	97.91	*	-
		2412(Av)	90.01	*	-
		4824(Pk)	49.49	74.00	-24.51
		4824(Av)	38.50	54.00	-15.50
		7236(Pk)	57.07	74.00	-16.93
		7236(Av)	44.70	54.00	-09.30
Mid	V	2442(Pk)	93.49	*	-
		2442(Av)	85.87	*	-
		4884(Pk)	50.15	74.00	-23.85
		4884(Av)	37.70	54.00	-16.30
		7326(Pk)	57.87	74.00	-16.13
		7326(Av)	45.25	54.00	-08.75
	H	2442(Pk)	96.03	*	-
		2442(Av)	88.15	*	-
		4884(Pk)	51.03	74.00	-22.97
		4884(Av)	37.65	54.00	-16.35
		7326(Pk)	57.25	74.00	-16.75
		7326(Av)	45.55	54.00	-08.45
High	V	2483.5(Pk)	40.41	74.00	-33.59
		2483.5(Av)	27.75	54.00	-26.25
		2462(Pk)	91.93	*	-
		2462(Av)	84.53	*	-
		4924(Pk)	50.12	74.00	-23.88
		4924(Av)	37.76	54.00	-16.24
		7386(Pk)	58.28	74.00	-15.72
		7386(Av)	45.73	54.00	-08.27
	H	2483.5(Pk)	39.17	74.00	-34.83
		2483.5(Av)	28.17	54.00	-25.83
		2462(Pk)	93.68	*	-

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		2462(Av)	86.16	*	-
		4924(Pk)	50.91	74.00	-23.09
		4924(Av)	38.02	54.00	-15.98
		7386(Pk)	57.62	74.00	-16.38
		7386(Av)	46.07	54.00	-07.93

* > Fundamental Frequency

G Mode: 6Mbps					
Channel	Polarization	Frequency (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
Low	V	2390(Pk)	47.51	74.00	-26.49
		2390(Av)	33.63	54.00	-20.37
		2412(Pk)	92.01	*	-
		2412(Av)	82.41	*	-
		4824(Pk)	49.37	74.00	-24.63
		4824(Av)	36.52	54.00	-17.48
		7236(Pk)	57.17	74.00	-16.83
		7236(Av)	44.50	54.00	-09.50
	H	2390(Pk)	50.18	74.00	-23.82
		2390(Av)	36.57	54.00	-17.43
		2412(Pk)	93.18	*	-
		2412(Av)	83.75	*	-
		4824(Pk)	48.87	74.00	-25.13
		4824(Av)	36.61	54.00	-17.39
		7236(Pk)	56.43	74.00	-17.57
		7236(Av)	44.57	54.00	-09.43
Mid	V	2442(Pk)	89.49	*	-
		2442(Av)	79.05	*	-
		4884(Pk)	48.83	74.00	-25.17
		4884(Av)	36.84	54.00	-17.16
		7326(Pk)	57.30	74.00	-16.70
		7326(Av)	44.96	54.00	-09.04
	H	2442(Pk)	90.96	*	-
		2442(Av)	81.54	*	-
		4884(Pk)	49.21	74.00	-24.79
		4884(Av)	36.92	54.00	-17.08
		7326(Pk)	57.65	74.00	-16.35
		7326(Av)	45.05	54.00	-08.95
High	V	2483.5(Pk)	41.33	74.00	-32.67
		2483.5(Av)	28.38	54.00	-25.62
		2462(Pk)	87.79	*	-
		2462(Av)	78.26	*	-
		4924(Pk)	49.50	74.00	-24.50

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		4924(Av)	36.87	54.00	-17.13
		7386(Pk)	57.84	74.00	-16.16
		7386(Av)	45.48	54.00	-08.52
	H	2483.5(Pk)	43.67	74.00	-30.33
		2483.5(Av)	29.07	54.00	-24.93
		2462(Pk)	89.86	*	-
		2462(Av)	79.85	*	-
		4924(Pk)	50.03	74.00	-23.97
		4924(Av)	36.87	54.00	-17.13
		7386(Pk)	58.17	74.00	-15.83
		7386(Av)	45.49	54.00	-08.51

* > Fundamental Frequency

G Mode: 24Mbps					
Channel	Polarization	Frequency (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
Low	V	2390(Pk)	49.32	74.00	-24.68
		2390(Av)	35.35	54.00	-18.65
		2412(Pk)	92.46	*	-
		2412(Av)	81.93	*	-
		4824(Pk)	49.02	74.00	-24.98
		4824(Av)	36.45	54.00	-17.55
		7236(Pk)	56.56	74.00	-17.44
		7236(Av)	44.50	54.00	-09.50
	H	2390(Pk)	49.62	74.00	-24.38
		2390(Av)	35.55	54.00	-18.45
		2412(Pk)	93.45	*	-
		2412(Av)	83.35	*	-
		4824(Pk)	49.09	74.00	-24.91
		4824(Av)	36.59	54.00	-17.41
		7236(Pk)	56.88	74.00	-17.12
		7236(Av)	44.55	54.00	-09.45
Mid	V	2442(Pk)	89.47	*	-
		2442(Av)	79.17	*	-
		4884(Pk)	48.89	74.00	-25.11
		4884(Av)	36.87	54.00	-17.13
		7326(Pk)	59.05	74.00	-14.95
		7326(Av)	45.04	54.00	-08.96
	H	2442(Pk)	92.56	*	-
		2442(Av)	81.04	*	-
		4884(Pk)	49.51	74.00	-24.49
		4884(Av)	36.86	54.00	-17.14
		7326(Pk)	57.60	74.00	-16.40

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		7326(Av)	45.08	54.00	-08.92
High	V	2483.5(Pk)	43.80	74.00	-30.20
		2483.5(Av)	28.54	54.00	-25.46
		2462(Pk)	89.16	*	-
		2462(Av)	78.22	*	-
		4924(Pk)	49.94	74.00	-24.06
		4924(Av)	36.86	54.00	-17.14
		7386(Pk)	57.86	74.00	-16.14
		7386(Av)	45.53	54.00	-08.47
	H	2483.5(Pk)	45.69	74.00	-28.31
		2483.5(Av)	29.18	54.00	-24.82
		2462(Pk)	89.65	*	-
		2462(Av)	79.48	*	-
		4924(Pk)	48.70	74.00	-25.30
		4924(Av)	36.90	54.00	-17.10
		7386(Pk)	58.33	74.00	-15.67
		7386(Av)	45.56	54.00	-8.44

* > Fundamental Frequency

G Mode: 54Mbps					
Channel	Polarization	Frequency (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
Low	V	2390(pk)	51.66	74.00	-22.34
		2390(Av)	33.52	54.00	-20.48
		2412(Pk)	93.10	*	-
		2412(Av)	90.63	*	-
		4824(Pk)	48.27	74.00	-25.73
		4824(Av)	36.51	54.00	-17.49
		7236(Pk)	57.38	74.00	-16.62
		7236(Av)	44.42	54.00	-09.58
	H	2390(Pk)	53.02	74.00	-20.98
		2390(Av)	35.87	54.00	-18.13
		2412(Pk)	94.64	*	-
		2412(Av)	83.20	*	-
		4824(Pk)	49.71	74.00	-24.29
		4824(Av)	36.55	54.00	-17.45
		7236(Pk)	56.50	74.00	-17.50
		7236(Av)	44.60	54.00	-09.40
Mid	V	2442(Pk)	89.65	*	-
		2442(Av)	78.65	*	-
		4884(Pk)	49.65	74.00	-24.35
		4884(Av)	36.81	54.00	-17.19

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		7326(Pk)	57.73	74.00	-16.27
		7326(Av)	44.98	54.00	-09.02
High	H	2442(Pk)	92.28	*	-
		2442(Av)	80.82	*	-
		4884(Pk)	49.54	74.00	-24.46
		4884(Av)	36.89	54.00	-17.11
		7326(Pk)	57.82	74.00	-16.18
		7326(Av)	45.04	54.00	-08.96
	V	2483.5(Pk)	40.68	74.00	-33.32
		2483.5(Av)	28.44	54.00	-25.56
		2462(Pk)	88.46	*	-
		2462(Av)	77.40	*	-
		4924(Pk)	49.52	74.00	-24.48
		4924(Av)	36.86	54.00	-17.14
		7386(Pk)	57.66	74.00	-16.34
		7386(Av)	45.57	54.00	-08.43
	H	2483.5(Pk)	42.02	74.00	-31.98
		2483.5(Av)	29.38	54.00	-24.62
		2462(Pk)	90.29	*	-
		2462(Av)	78.66	*	-
		4924(Pk)	49.33	74.00	-24.67
		4924(Av)	36.90	54.00	-17.10
		7386(Pk)	58.66	74.00	-15.34
		7386(Av)	45.51	54.00	-08.49

* > Fundamental Frequency

n Mode: MCS0					
Channel	Polarization	Frequency (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
Low	V	2390(Pk)	49.61	74.00	-24.39
		2390(Av)	36.38	54.00	-17.62
		2412(Pk)	91.60	*	-
		2412(Av)	82.54	*	-
		4824(Pk)	48.53	74.00	-25.47
		4824(Av)	36.43	54.00	-17.57
		7236(Pk)	57.37	74.00	-16.63
		7236(Av)	44.41	54.00	-09.59
	H	2390(Pk)	53.25	74.00	-20.75
		2390(Av)	38.58	54.00	-15.42
		2412(Pk)	92.84	*	-
		2412(Av)	83.99	*	-
		4824(Pk)	49.63	74.00	-24.37
		4824(Av)	36.63	54.00	-17.37

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		7236(Pk)	56.85	74.00	-17.15
		7236(Av)	44.59	54.00	-09.41
Mid	V	2442(Pk)	88.57	*	-
		2442(Av)	79.20	*	-
		4884(Pk)	49.88	74.00	-24.12
		4884(Av)	36.83	54.00	-17.17
		7326(Pk)	57.40	74.00	-16.60
		7326(Av)	44.95	54.00	-09.05
		2442(Pk)	90.52	*	-
	H	2442(Av)	81.58	*	-
		4884(Pk)	50.28	74.00	-23.72
		4884(Av)	36.90	54.00	-17.10
		7326(Pk)	58.01	74.00	-15.99
		7326(Av)	45.06	54.00	-08.94
High	V	2483.5(Pk)	42.16	74.00	-31.84
		2483.5(Av)	28.84	54.00	-25.16
		2462(Pk)	86.88	*	-
		2462(Av)	77.64	*	-
		4924(Pk)	49.36	74.00	-24.64
		4924(Av)	36.90	54.00	-17.10
		7386(Pk)	58.66	74.00	-15.34
		7386(Av)	45.53	54.00	-08.47
	H	2483.5(Pk)	44.97	74.00	-29.03
		2483.5(Av)	29.99	54.00	-24.01
		2462(Pk)	89.74	*	-
		2462(Av)	80.06	*	-
		4924(Pk)	49.36	74.00	-24.64
		4924(Av)	36.91	54.00	-17.09
		7386(Pk)	58.30	74.00	-15.70
		7386(Av)	45.64	54.00	-8.36

* > Fundamental Frequency

n Mode: MCS4					
Channel	Polarization	Frequency (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
Low	V	2390(Pk)	51.94	74.00	-22.06
		2390(Av)	36.30	54.00	-17.70
		2412(Pk)	93.21	*	-
		2412(Av)	82.73	*	-
		4824(Pk)	49.12	74.00	-24.88
		4824(Av)	36.46	54.00	-17.54
		7236(Pk)	57.27	74.00	-16.73
		7236(Av)	44.58	54.00	-09.42

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	H	2390(Pk)	52.18	74.00	-21.82
		2390(Av)	37.37	54.00	-16.63
		2412(Pk)	94.38	*	-
		2412(Av)	83.78	*	-
		4824(Pk)	49.57	74.00	-24.43
		4824(Av)	36.36	54.00	-17.64
		7236(Pk)	57.41	74.00	-16.59
		7236(Av)	44.60	54.00	-09.40
Mid	V	2442(Pk)	89.73	*	-
		2442(Av)	79.09	*	-
		4884(Pk)	49.55	74.00	-24.45
		4884(Av)	36.88	54.00	-17.12
		7326(Pk)	58.28	74.00	-15.72
		7326(Av)	44.98	54.00	-09.02
	H	2442(Pk)	91.70	*	-
		2442(Av)	81.38	*	-
		4884(Pk)	49.04	74.00	-24.96
		4884(Av)	36.81	54.00	-17.19
		7326(Pk)	57.73	74.00	-16.27
		7326(Av)	45.15	54.00	-08.85
High	V	2483.5(Pk)	40.52	74.00	-33.48
		2483.5(Av)	28.88	54.00	-25.12
		2462(Pk)	88.91	*	-
		2462(Av)	78.23	*	-
		4924(Pk)	49.67	74.00	-24.33
		4924(Av)	36.86	54.00	-17.14
		7386(Pk)	58.22	74.00	-15.78
		7386(Av)	45.53	54.00	-08.47
	H	2483.5(Pk)	45.40	74.00	-28.60
		2483.5(Av)	29.75	54.00	-24.25
		2462(Pk)	90.21	*	-
		2462(Av)	79.29	*	-
		4924(Pk)	49.29	74.00	-24.71
		4924(Av)	36.86	54.00	-17.14
		7386(Pk)	58.08	74.00	-15.92
		7386(Av)	45.59	54.00	-08.41

* > Fundamental Frequency

n Mode: MCS7					
Channel	Polarization	Frequency (MHz)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
Low	V	2390(Pk)	52.11	74.00	-21.89
		2390(Av)	35.77	54.00	-18.23

			2412(Pk)	92.64	*	-
			2412(Av)	81.89	*	-
			4824(Pk)	48.52	74.00	-25.48
			4824(Av)	36.50	54.00	-17.50
			7236(Pk)	56.77	74.00	-17.23
			7236(Av)	44.48	54.00	-09.52
		H	2390(Pk)	54.91	74.00	-19.09
			2390(Av)	37.07	54.00	-16.93
			2412(Pk)	94.15	*	-
			2412(Av)	83.63	*	-
			4824(Pk)	48.99	74.00	-25.01
			4824(Av)	36.56	54.00	-17.44
	Mid	V	7236(Pk)	57.05	74.00	-16.95
			7236(Av)	44.64	54.00	-09.36
			2442(Pk)	90.37	*	-
			2442(Av)	79.05	*	-
			4884(Pk)	49.04	74.00	-24.96
			4884(Av)	36.84	54.00	-17.16
		H	7326(Pk)	57.29	74.00	-16.71
			7326(Av)	44.95	54.00	-09.05
			2442(Pk)	93.10	*	-
			2442(Av)	80.72	*	-
			4884(Pk)	49.78	74.00	-24.22
			4884(Av)	36.94	54.00	-17.06
High		V	7326(Pk)	57.29	74.00	-16.71
			7326(Av)	44.96	54.00	-09.04
			2483.5(Pk)	41.62	74.00	-32.38
			2483.5(Av)	28.91	54.00	-25.09
			2462(Pk)	88.01	*	-
			2462(Av)	77.03	*	-
			4924(Pk)	49.33	74.00	-24.67
			4924(Av)	36.88	54.00	-17.12
		H	7386(Pk)	58.29	74.00	-15.71
			7386(Av)	45.47	54.00	-08.53
			2483.5(Pk)	44.29	74.00	-29.71
			2483.5(Av)	29.38	54.00	-24.62
			2462(Pk)	89.66	*	-
			2462(Av)	78.82	*	-
			4924(Pk)	49.38	74.00	-24.62
			4924(Av)	36.94	54.00	-17.06
			7386(Pk)	57.54	74.00	-16.46
			7386(Av)	45.61	54.00	-08.39

* > Fundamental Frequency

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**Conducted Emission Test on A.C. Power Line
Result**

**Section 15.207
Pass**

Test Specification : FCC Part 15 Section 15.207
Test Method : ANSI C63.10-2009
Testing Location : Screened room
Measurement Bandwidth : 9kHz
Frequency Range : 150kHz – 30MHz
Supply Voltage : 120VAC,60Hz

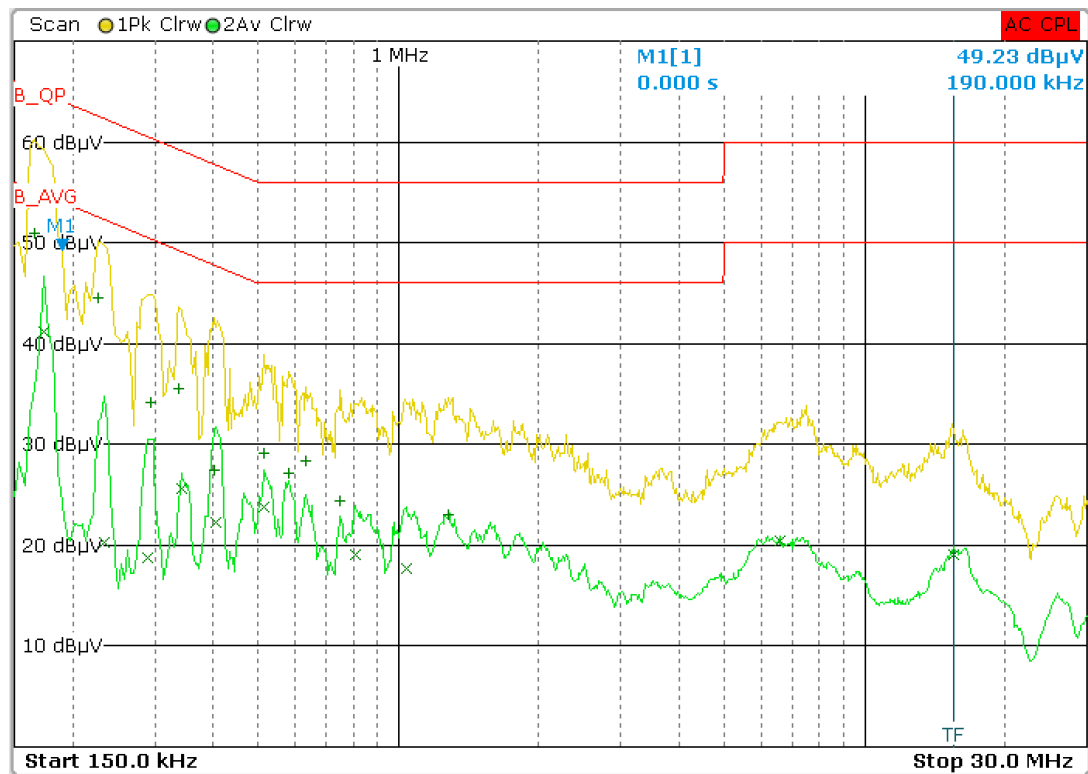
Limit of section 15.207

Frequency of emission (MHz)	QP Limit (dBμV)	AV Limit (dBμV/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

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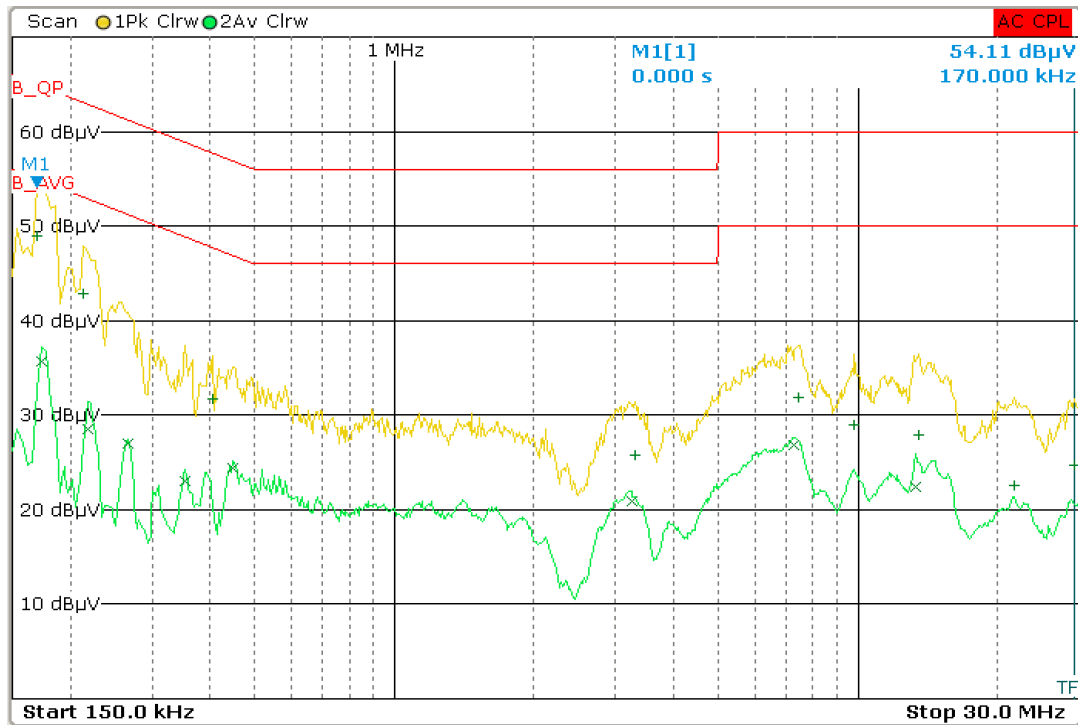
Test Result:



Line Graph

Frequency [MHz]	Emission Level [dBµV]	Limit [dBµV]	Detector
0.166	50.95	65.2	Quasi Peak
0.226	44.56	62.6	Quasi Peak
0.338	35.57	59.3	Quasi Peak
0.294	34.22	60.4	Quasi Peak
0.514	29.07	56.0	Quasi Peak
0.634	28.36	56.0	Quasi Peak
0.174	41.16	54.8	Average
0.514	23.75	46.0	Average
0.342	25.56	49.2	Average
0.406	22.26	47.7	Average
0.806	19.08	46.0	Average
1.042	17.72	46.0	Average

Line: Table



Neutral: Graph

Frequency [MHz]	Emission Level [dBµV]	Limit [dBµV]	Detector
0.170	48.90	65.0	Quasi Peak
0.214	42.87	63.1	Quasi Peak
0.406	31.79	57.7	Quasi Peak
7.438	31.90	60.0	Quasi Peak
3.302	25.81	56.0	Quasi Peak
9.842	28.91	60.0	Quasi Peak
0.274	35.75	54.8	Average
0.414	24.37	46.9	Average
0.550	26.88	50.0	Average
0.826	27.00	51.2	Average
0.686	28.49	52.9	Average
1.374	20.87	46.0	Average

Neutral: Table