FCC- TEST REPORT

Report Number	:	**64.790.16.04282.01**	Date of Issue:	September 06, 2016

Model	:	CAMVI-0360-A
Product Type	:	360 WIFI Camera
Applicant	:	Monster Digital, Inc.
Address	:	2655 Park Center Drive Suite C, Simi Valley, 93065, USA
Production Facility	:	SHUOYING DIGITAL SCIENCE&TECHNOLOGY(CHINA)Co.,Ltd
Address	:	No. 187, 5th Binhai Road, Binhai Industrial Park, Economic and Technological Development Zone, 518109 Wenzhou, Zhejiang PEOPLE'S REPUBLIC OF CHINA
Test Result	:	■ **Positive** ☐ **Negative**
Total pages including Appendices	:	48

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1 Table of Contents

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2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name:	TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, Nanshan District, Shenzhen City, 518052, P. R. China
FCC Registration No.:	502708
Telephone:	86 755 8828 6998
Fax:	86 755 8828 5299

Test Site 2

Company name:	Dongguan NTC Co., Ltd. Building D, Gaosheng Science and Technology Park, Hongtu Road, Nancheng District, Dongguan City, Guangdong, China
Telephone:	86 769 22022444
Fax:	86 769 22022799
FCC Registration No.:	665078

3 Description of the Equipment under Test

Description of the Equipment Under Test

Product:	360 WIFI Camera
Model no.:	CAMVI-0360-A
FCC ID:	2AGZ6-CAMVI0360A
Options and accessories:	NIL
Rating:	3.7VDC, 1000mAh (Supplied by Li-ion rechargeable battery) 5.0VDC, 1.5A (Charging by USB Port)
RF Transmission Frequency:	2412-2462MHz
No. of Operated Channel:	11
Modulation:	CCK, DQPSK, DBPSK for 802.11b QPSK,BPSK for 802.11g/n
Duty Cycle:	100%
Antenna Type:	Integral Antenna
Antenna Gain:	2dBi
Description of the EUT:	The Equipment Under Test (EUT) is a 360 WIFI Camera with WIFI function operating at 2.4GHz

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4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart C 10-1-2015 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

All the test methods were according to KDB558074 D01 v03r05 DTS Measurement Guidance and ANSI C63.10 (2013).

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5 Summary of Test Results

Technical Requirements				
FCC Part 15 Subpart C				
Test Condition		Pages	Test Result	Site
§15.207	Conducted emission AC power port	10	Pass	Site 2
§15.247(b)(1)	Conducted peak output power	13	Pass	Site 2
§15.247(e)	Power spectral density	20	Pass	Site 2
§15.247(a)(2)	6dB bandwidth	14	Pass	Site 2
§15.247(a)(1)	20dB bandwidth and 99% Occupied Bandwidth	--	--	N/A
§15.247(a)(1)	Carrier frequency separation	--	--	N/A
§15.247(a)(1)(iii)	Number of hopping frequencies	--	--	N/A
§15.247(a)(1)(iii)	Dwell Time	--	--	N/A
§15.247(d)	Spurious RF conducted emissions	26	Pass	Site 2
§15.247(d)	Band edge	32	Pass	Site 2
§15.247(d) & §15.209 &	Spurious radiated emissions for transmitter and receiver	36	Pass	Site 2
§15.203	Antenna requirement	See note 1	Pass	Site 2

Remark 1: N/A – Not Applicable.
Note 1: The EUT uses a permanently integral antenna, which gain is 2dBi. According to §15.203, it is considered sufficiently to comply with the provisions of this section.

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6 General Remarks

Remarks

This report is based on previous report 64.790.16.00720.01 for change applicant, product name, model name, and FCC ID. Which has no technical different; therefore no additional test is required.

This submittal(s) (test report) is intended for FCC ID: 2AGZ6-CAMVI0360A complies with Section 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C.

SUMMARY:

All tests according to the regulations cited on page 5 were

■ - Performed

☐ - **Not** Performed

The Equipment under Test

■ - **Fulfills** the general approval requirements.

☐ - **Does not** fulfill the general approval requirements.

Sample Received Date: February 22, 2016

Testing Start Date: February 22, 2016

Testing End Date: February 26, 2016

- TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch -

Reviewed by:	Prepared by:	Tested by:
Phoebe Hu	Aaron Lai	Leon Zhang
EMC Project Manager	EMC Project Engineer	EMC Test Engineer

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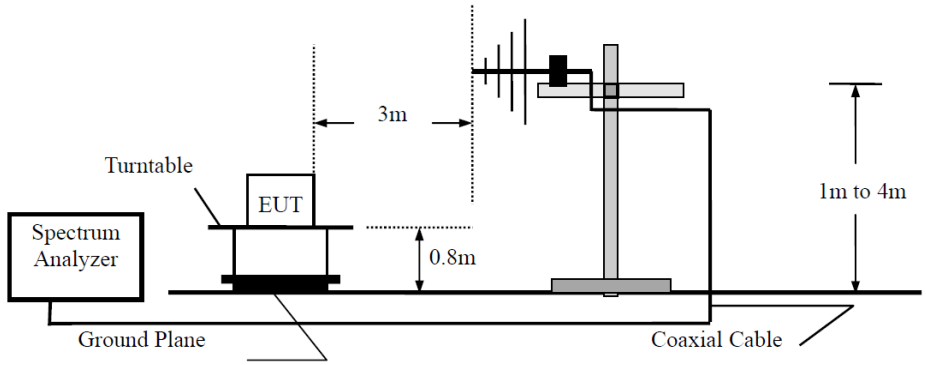
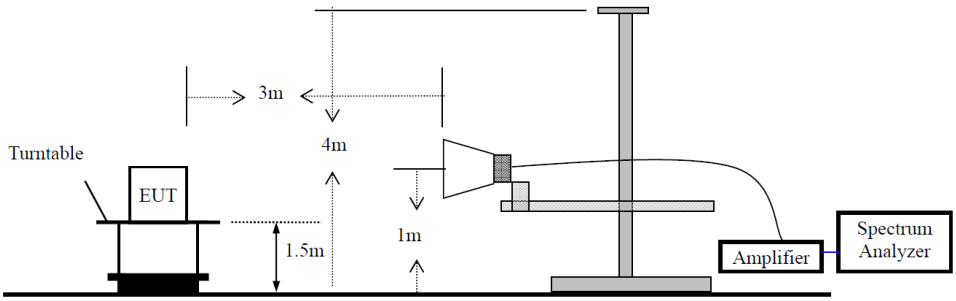
7 Test Setups

7.1 Radiated test setups

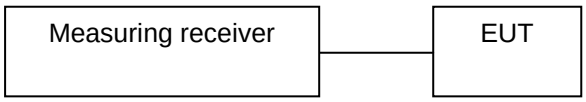
Below 1GHz



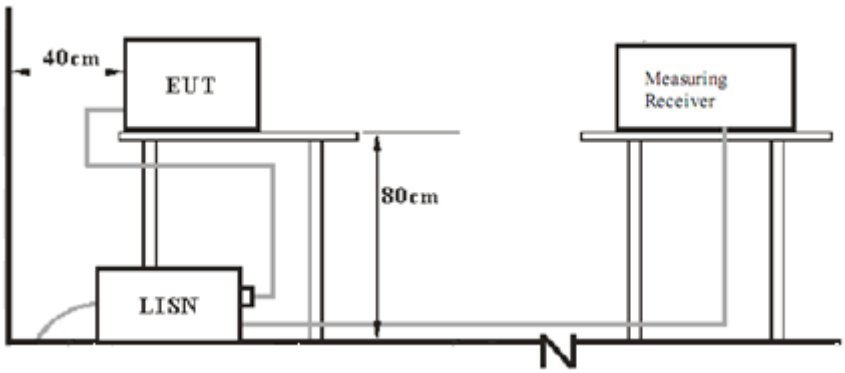
Above 1GHz



7.2 Conducted RF test setups



7.3 AC Power Line Conducted Emission test setups



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8 Systems test configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
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Test software: SSCOM 32.EXE

The system was configured to channel 1, 6 and 11 for the test.

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9 Technical Requirement

9.1 Conducted Emission

Test Method

1. The EUT was placed on a table, which is 0.8m above ground plane
2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
3. Maximum procedure was performed to ensure EUT compliance
4. A EMI test receiver is used to test the emissions from both sides of AC line

Limit

Frequency MHz	QP Limit dBµV	AV Limit dBµV
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Decreasing linea

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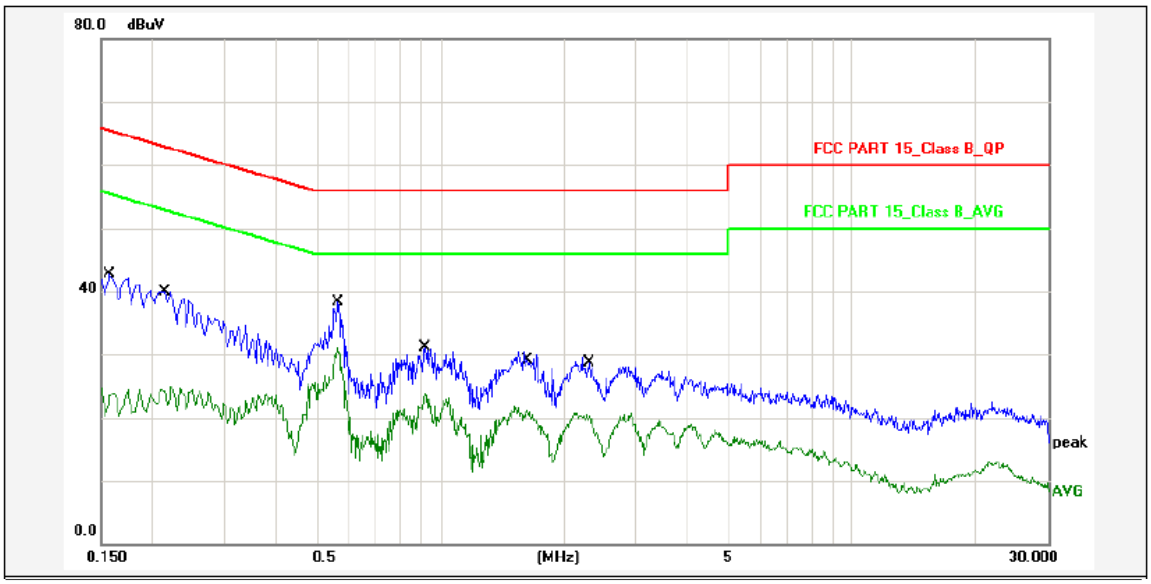
Conducted Emission

Product Type : 360 WIFI Camera
M/N : CAMVI-0360-A
Operating Condition : Charging & TX
Test Specification : Live
Comment : AC 120V/60Hz



No.	Frequency (MHz)	Factor (dBuV)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1580	10.80	29.80	40.60	65.56	-24.96	QP	P	
2	0.1580	10.80	11.90	22.70	55.56	-32.86	AVG	P	
3	0.2140	10.80	27.20	38.00	63.04	-25.04	QP	P	
4	0.2140	10.80	12.10	22.90	53.04	-30.14	AVG	P	
5	0.5660	10.80	25.50	36.30	56.00	-19.70	QP	P	
6	0.5660	10.80	18.40	29.20	46.00	-16.80	AVG	P	
7	0.9220	10.80	18.40	29.20	56.00	-26.80	QP	P	
8	0.9220	10.80	11.10	21.90	46.00	-24.10	AVG	P	
9	1.6300	10.80	17.80	28.60	56.00	-27.40	QP	P	
10	1.6300	10.80	8.20	19.00	46.00	-27.00	AVG	P	
11	2.2780	10.80	16.60	27.40	56.00	-28.60	QP	P	
12	2.2780	10.80	7.70	18.50	46.00	-27.50	AVG	P	

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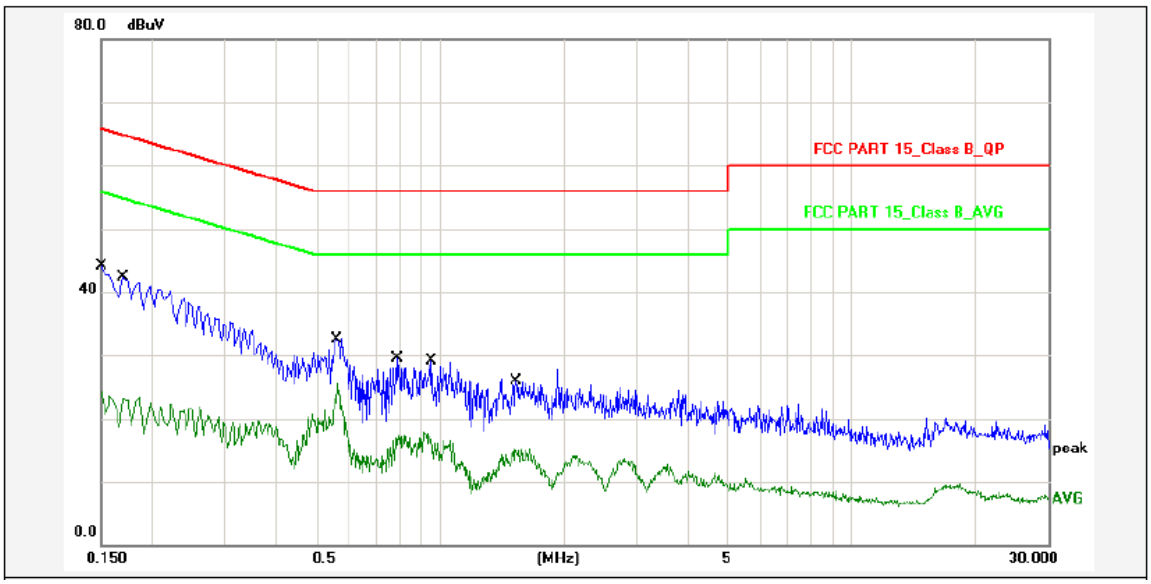
Conducted Emission

Product Type	:	360 WIFI Camera
M/N	:	CAMVI-0360-A
Operating Condition	:	Charging & TX
Test Specification	:	Neutral
Comment	:	AC 120V/60Hz



No.	Frequency (MHz)	Factor (dBuV)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1500	10.80	31.40	42.20	65.99	-23.79	QP	P	
2	0.1500	10.80	11.50	22.30	55.99	-33.69	AVG	P	
3	0.1700	10.80	29.40	40.20	64.96	-24.76	QP	P	
4	0.1700	10.80	10.50	21.30	54.96	-33.66	AVG	P	
5	0.5660	10.80	20.00	30.80	56.00	-25.20	QP	P	
6	0.5660	10.80	12.70	23.50	46.00	-22.50	AVG	P	
7	0.7860	10.80	16.70	27.50	56.00	-28.50	QP	P	
8	0.7860	10.80	4.50	15.30	46.00	-30.70	AVG	P	
9	0.9580	10.80	16.40	27.20	56.00	-28.80	QP	P	
10	0.9580	10.80	4.90	15.70	46.00	-30.30	AVG	P	
11	1.5339	10.80	13.10	23.90	56.00	-32.10	QP	P	
12	1.5339	10.80	2.40	13.20	46.00	-32.80	AVG	P	

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9.2 Conducted peak output power

Test Method

1. Use the following spectrum analyzer settings:
   RBW > the 6 dB bandwidth of the emission being measured, VBW≥3RBW, Span≥3RBW
   Sweep = auto, Detector function = peak, Trace = max hold.
2. Add a correction factor to the display.
3. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power.

Limits

According to §15.247 (b) (1), conducted peak output power limit as below:

Frequency Range MHz	Limit W	Limit dBm
2400-2483.5	≤1	≤30

Test result as below table

802.11b

Frequency MHz	Conducted Peak Output Power dBm	Result
Top channel 2412MHz	6.89	Pass
Middle channel 2437MHz	7.12	Pass
Bottom channel 2462MHz	7.52	Pass

802.11g

Frequency MHz	Conducted Peak Output Power dBm	Result
Top channel 2412MHz	4.59	Pass
Middle channel 2437MHz	5.35	Pass
Bottom channel 2462MHz	5.54	Pass

802.11n20

Frequency MHz	Conducted Peak Output Power dBm	Result
Top channel 2412MHz	4.99	Pass
Middle channel 2437MHz	5.47	Pass
Bottom channel 2462MHz	5.63	Pass

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9.3 6dB bandwidth

Test Method

1. Use the following spectrum analyzer settings:
   RBW=100K, VBW≥3RBW, Sweep = auto, Detector function = peak, Trace = max hold
2. Use the automatic bandwidth measurement capability of an instrument, may be employed using the X dB bandwidth mode with X set to 6 dB, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.
3. Allow the trace to stabilize, record the X dB Bandwidth value.

Limit

Limit [kHz]
≥500

Test result

802.11b

Frequency MHz	6dB bandwidth MHz	Result
Top channel 2412MHz	10.128205128	Pass
Middle channel 2437MHz	10.236410246	Pass
Bottom channel 2462MHz	10.128205128	Pass

802.11g

Frequency MHz	6dB bandwidth MHz	Result
Top channel 2412MHz	16.474358974	Pass
Middle channel 2437MHz	16.474358974	Pass
Bottom channel 2462MHz	16.474358974	Pass

802.11n20

Frequency MHz	6dB bandwidth MHz	Result
Top channel 2412MHz	17.756410256	Pass
Middle channel 2437MHz	17.756410256	Pass
Bottom channel 2462MHz	17.692307692	Pass

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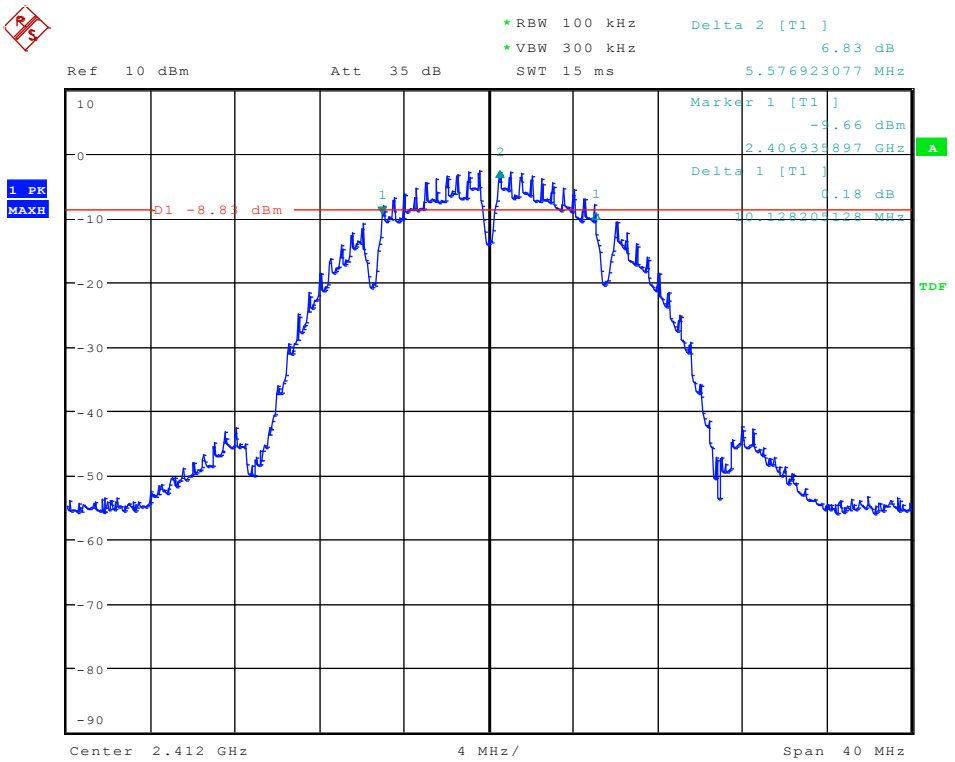
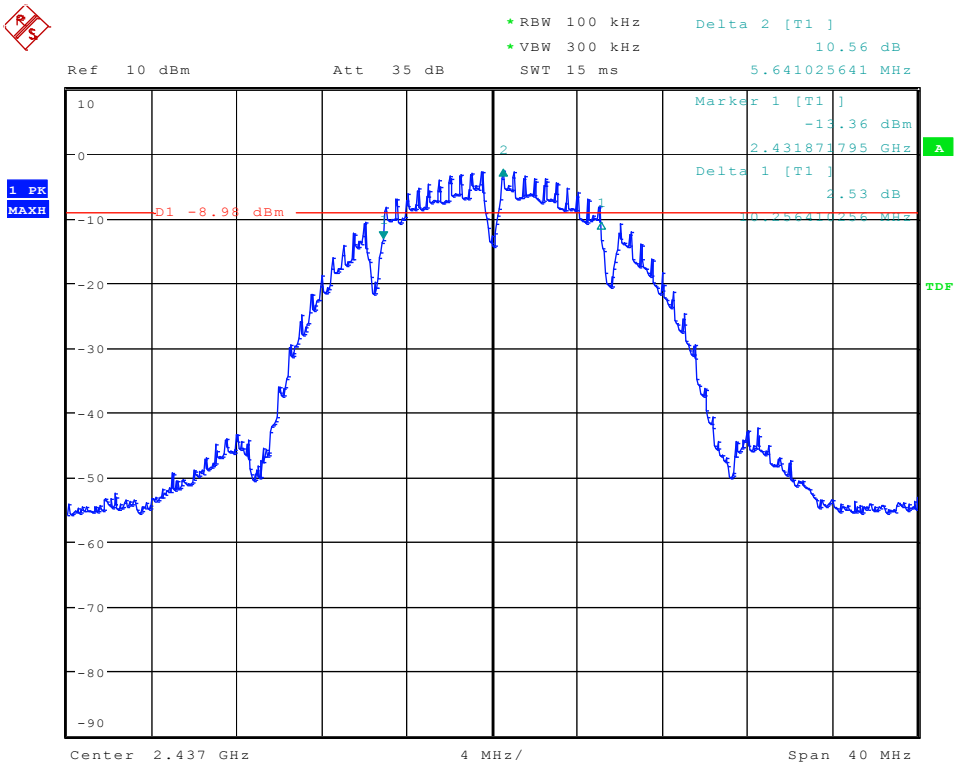
802.11b



2412MHz



2437MHz

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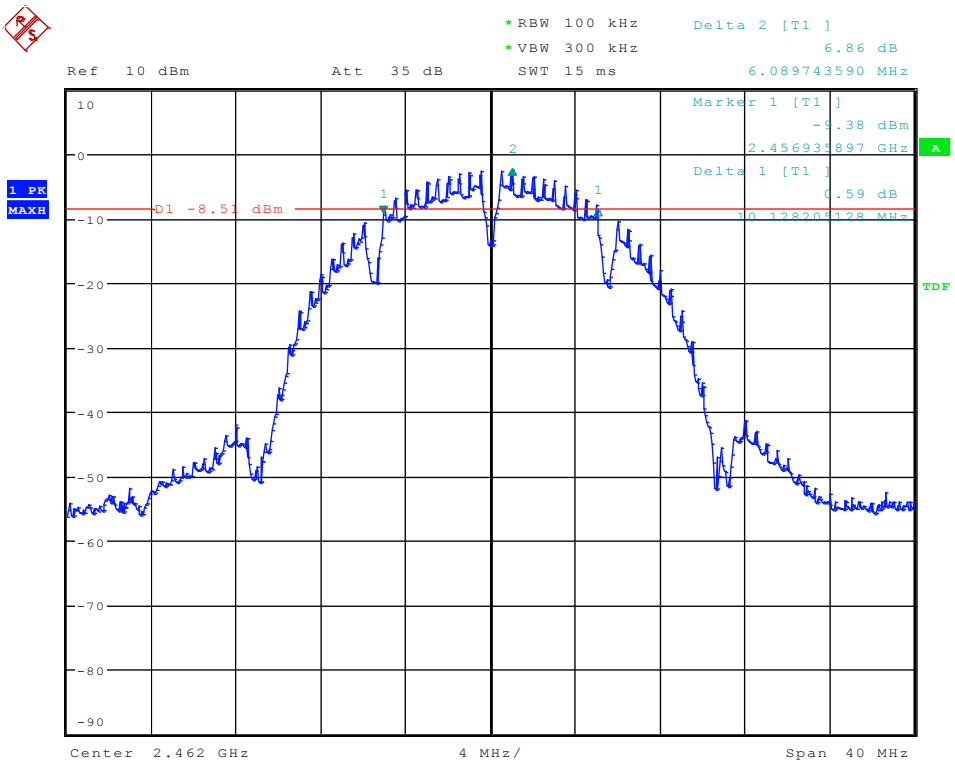
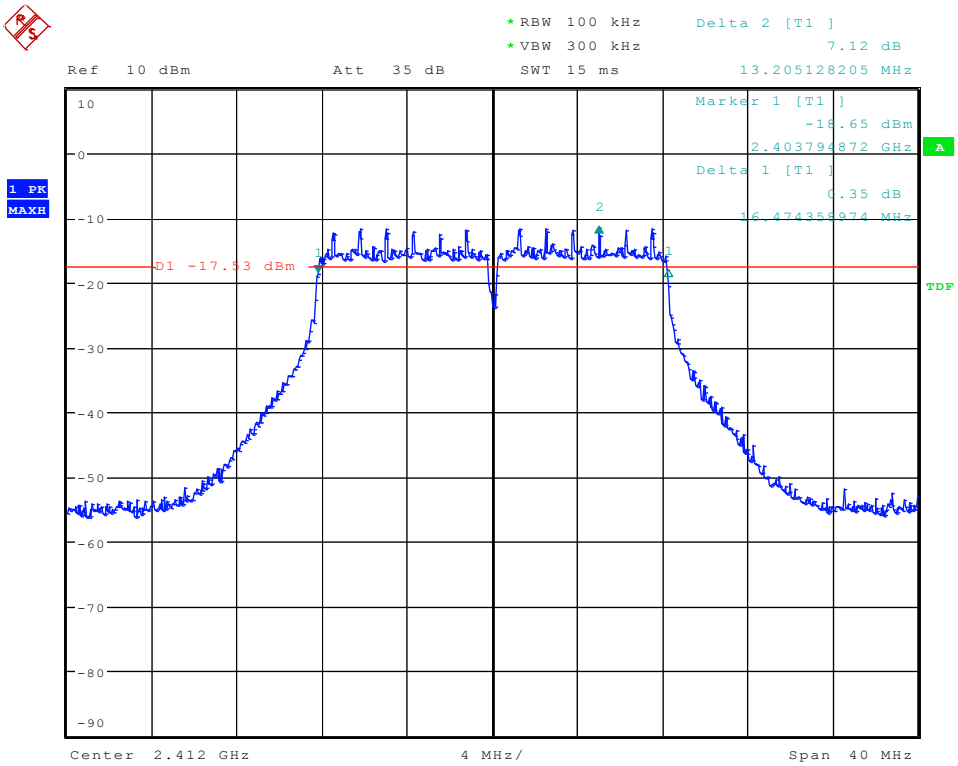


2462MHz

802.11g



2412MHz

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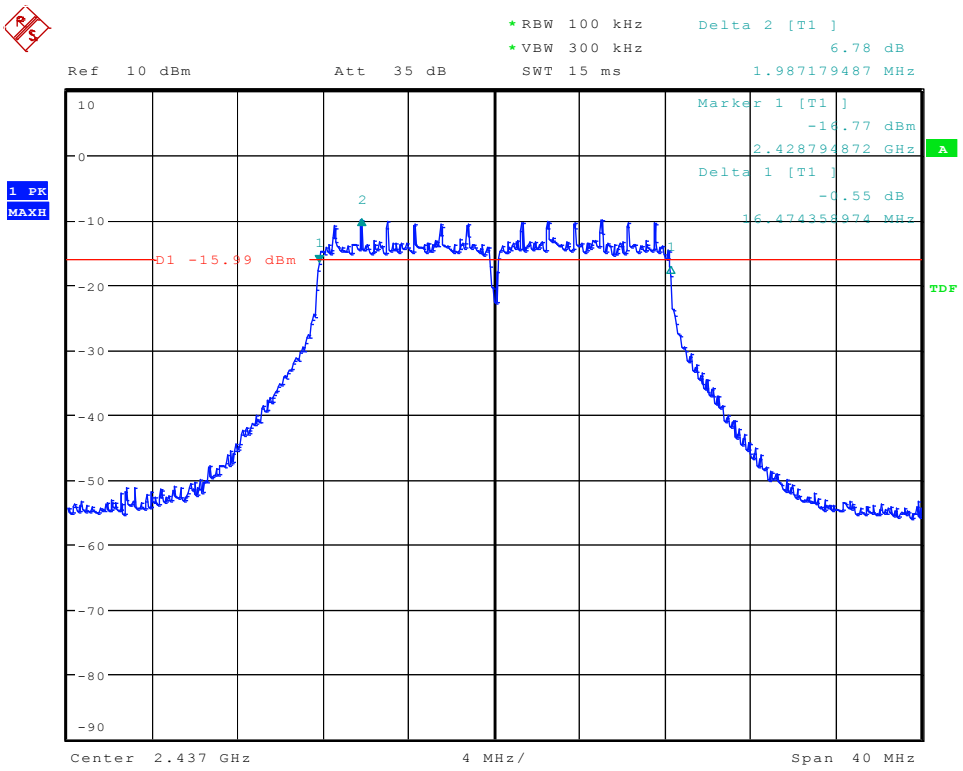
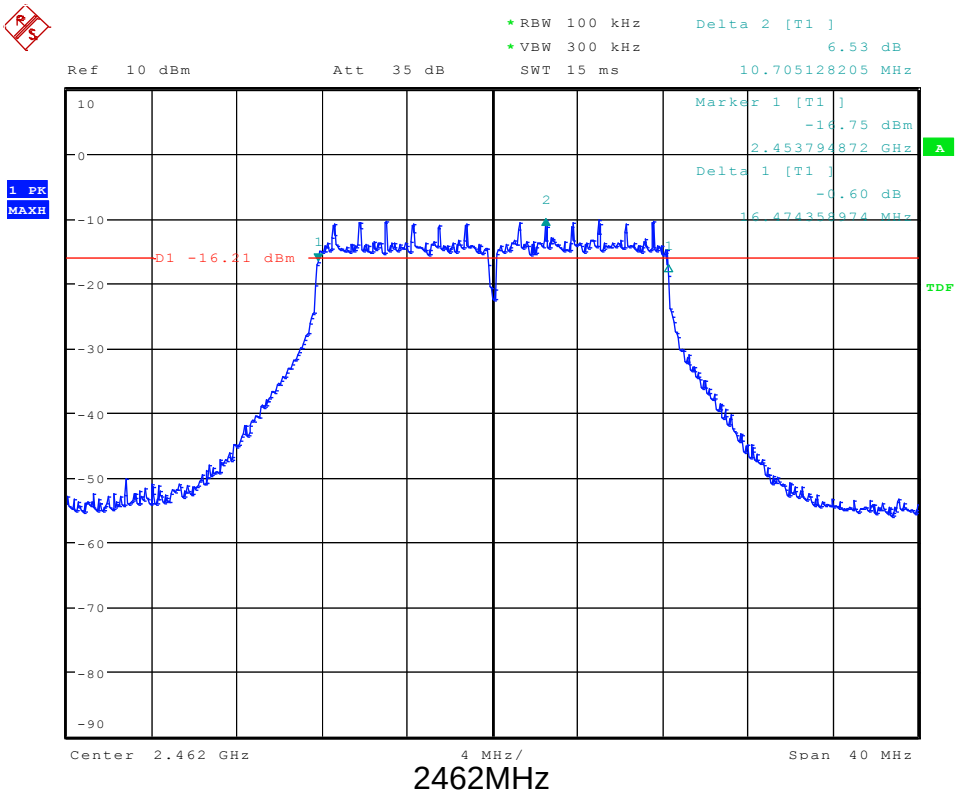


2437MHz



2462MHz

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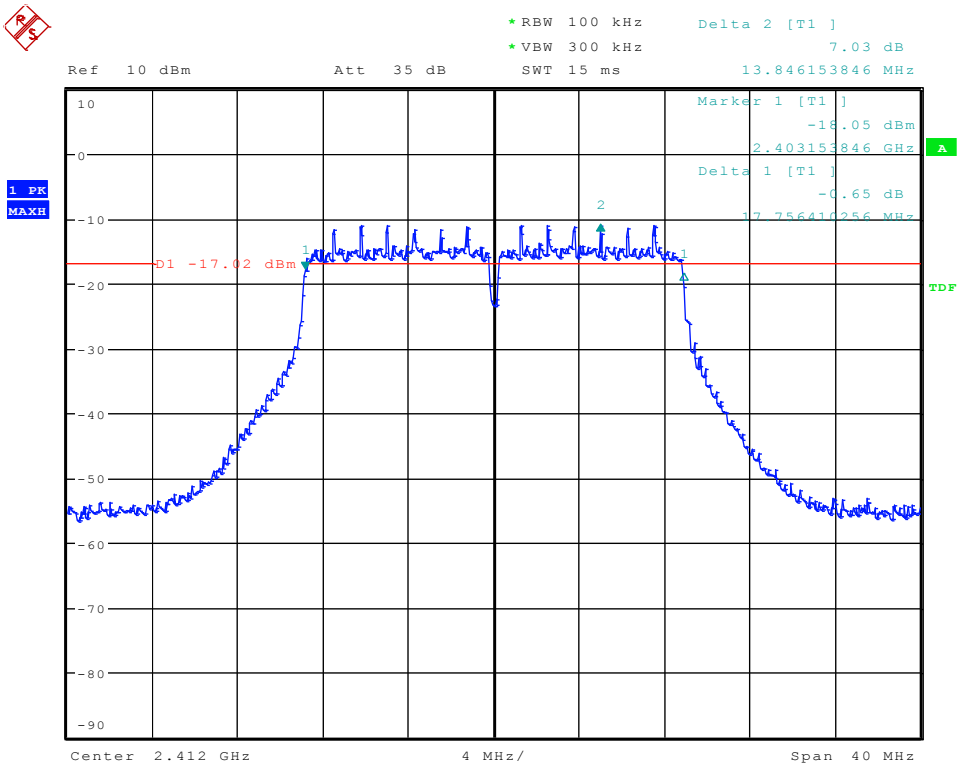
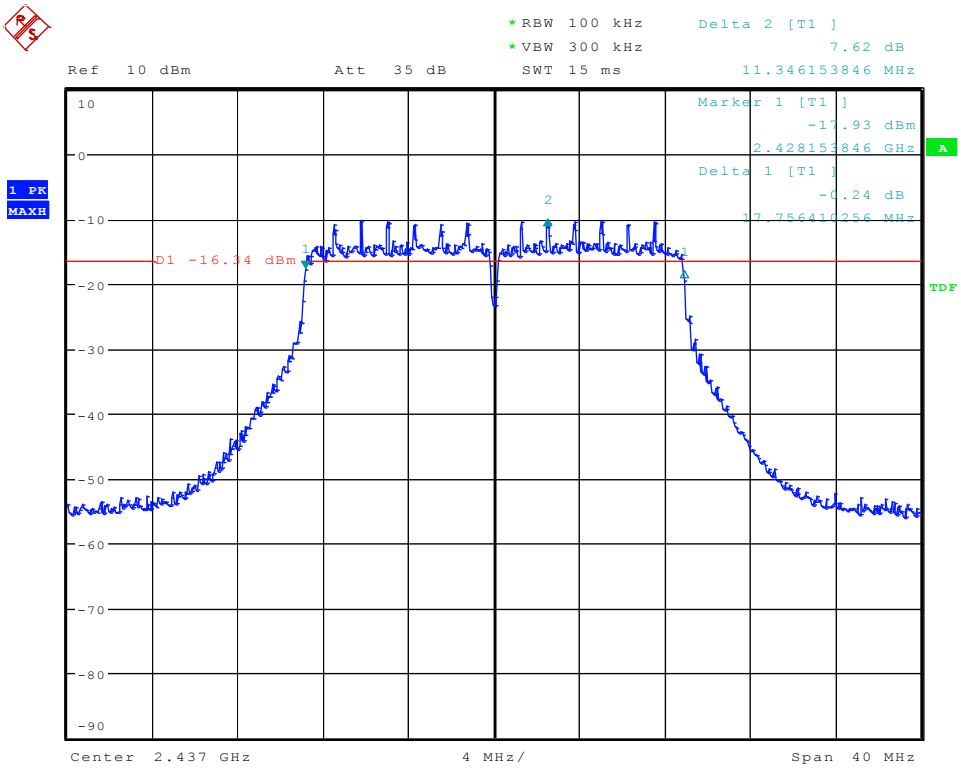
802.11n20



2412MHz



2437MHz

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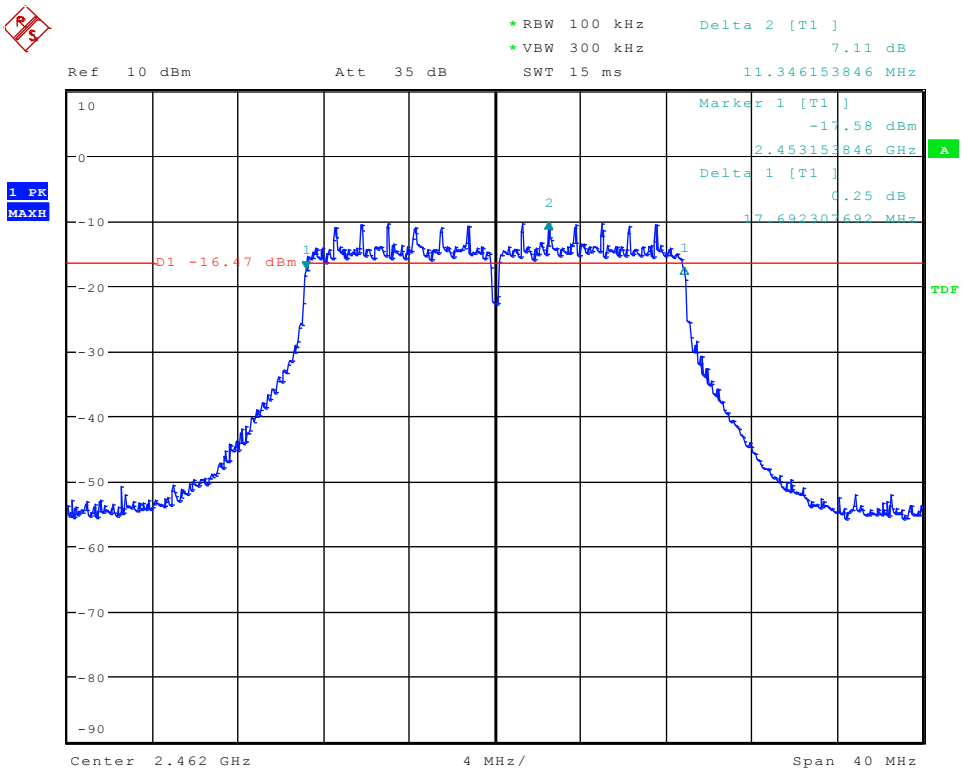

2462MHz

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9.4 Power spectral density

Test Method

This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance:

1. Set analyzer center frequency to DTS channel center frequency. RBW=3kHz,VBW≥3RBW,Span=1.5 times DTS bandwidth, Detector=Peak, Sweep=auto, Trace= max hold.
2. Allow trace to fully stabilize, use the peak marker function to determine the maximum amplitude level within the RBW.
3. Repeat above procedures until other frequencies measured were completed.

Limit

Limit [dBm]
≤8

Test result

802.11b

Frequency	Power spectral density	Result
MHz	**dBm**	
Top channel 2412MHz	-16.37	Pass
Middle channel 2437MHz	-16.17	Pass
Bottom channel 2462MHz	-15.90	Pass

802.11g

Frequency	Power spectral density	Result
MHz	**dBm**	
Top channel 2412MHz	-25.61	Pass
Middle channel 2437MHz	-24.74	Pass
Bottom channel 2462MHz	-24.13	Pass

802.11n20

Frequency	Power spectral density	Result
MHz	**dBm**	
Top channel 2412MHz	-24.14	Pass
Middle channel 2437MHz	-25.08	Pass
Bottom channel 2462MHz	-24.58	Pass

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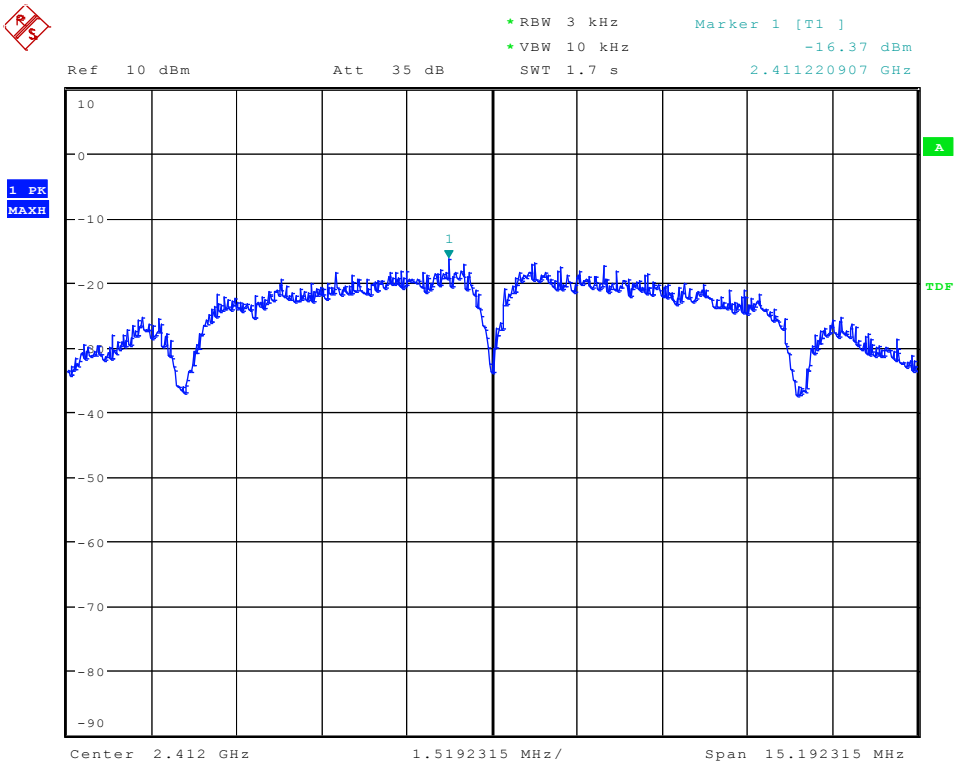
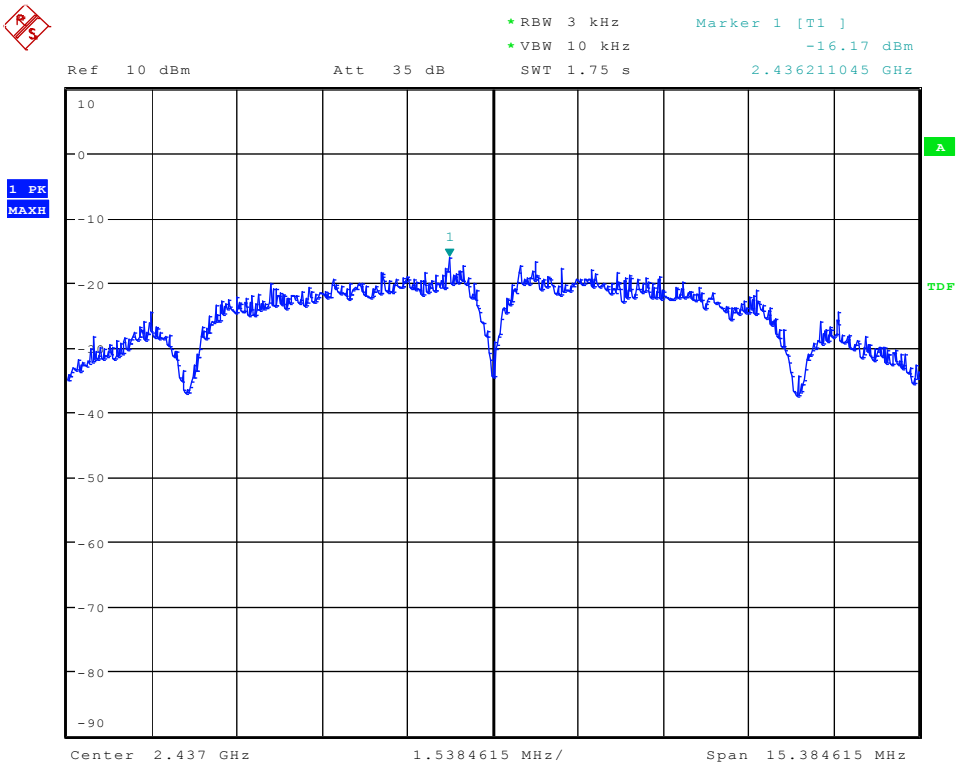
802.11b





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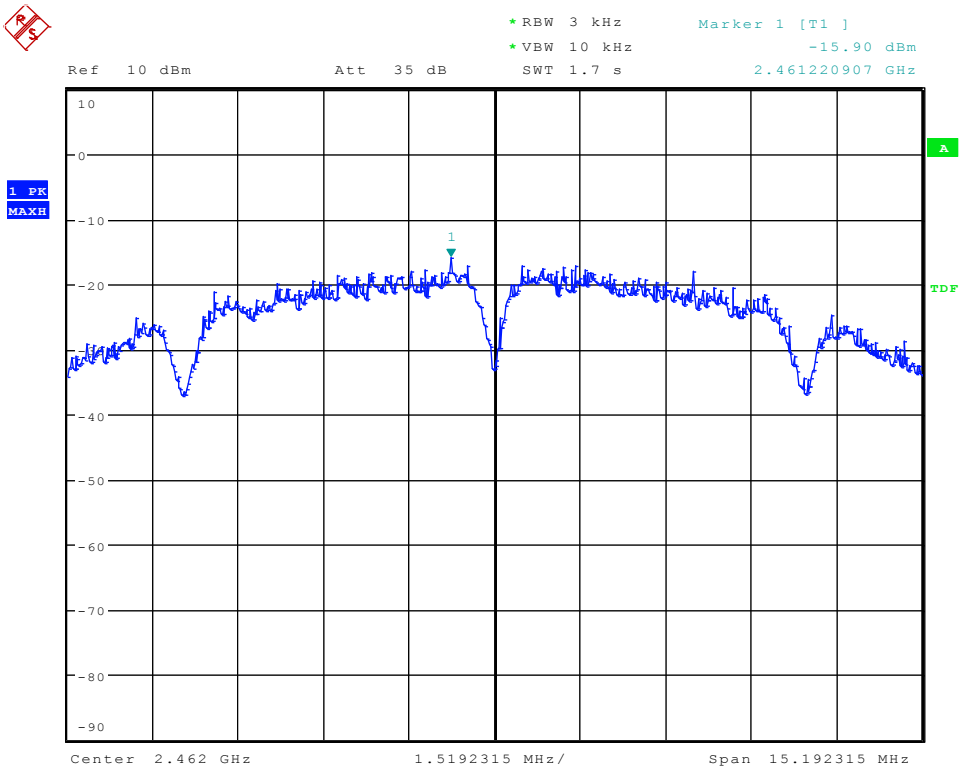
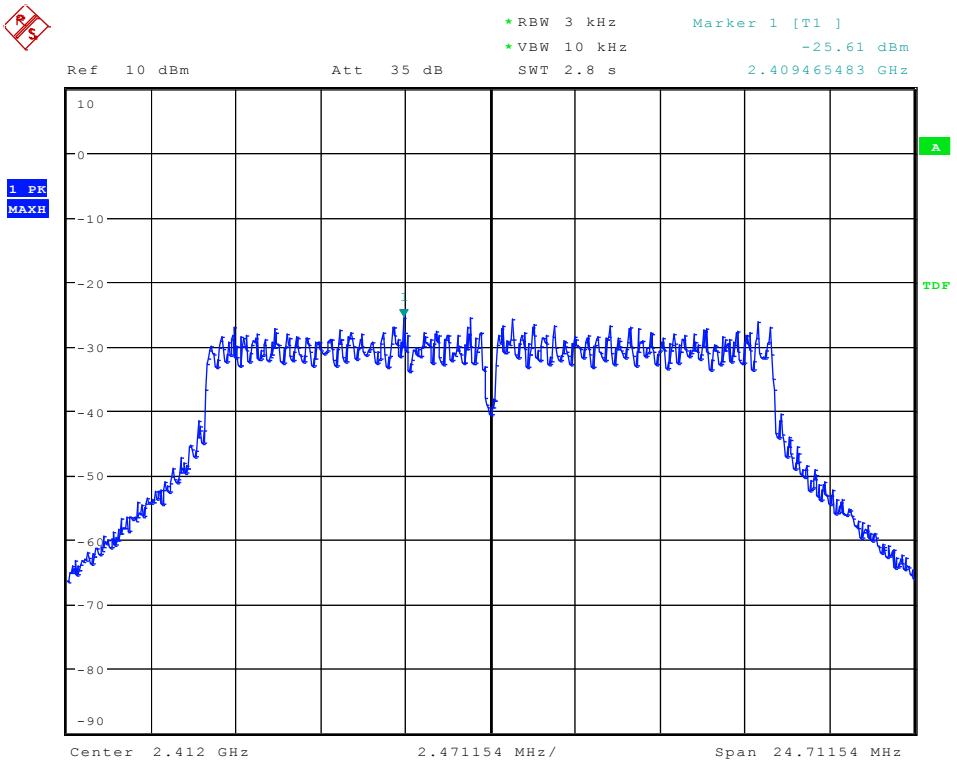


802.11g



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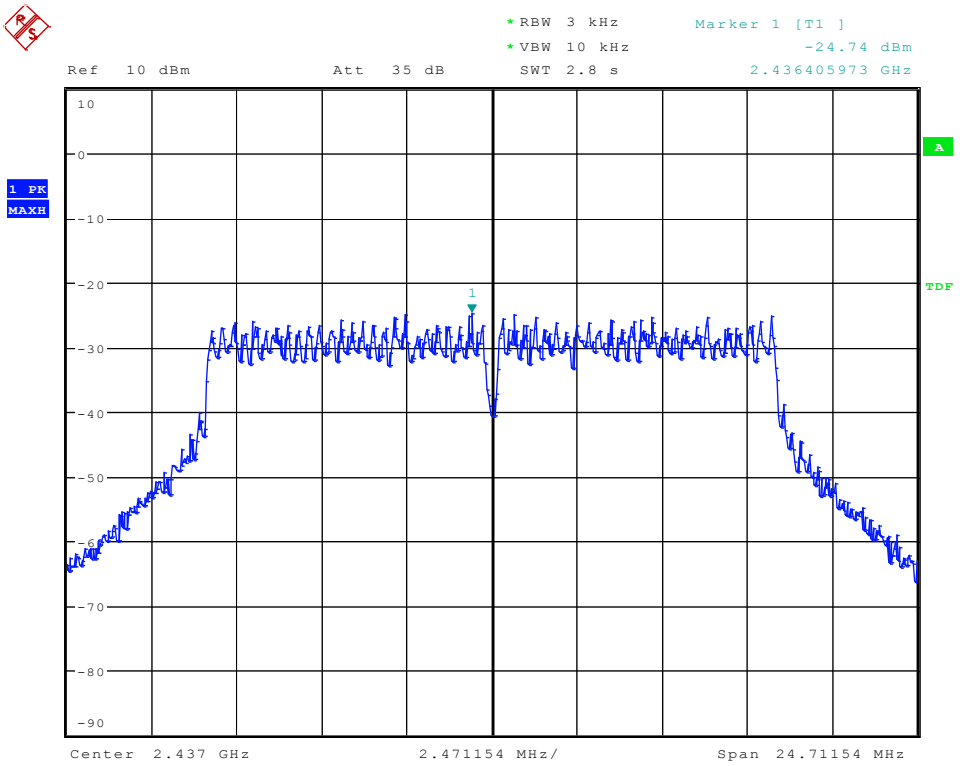

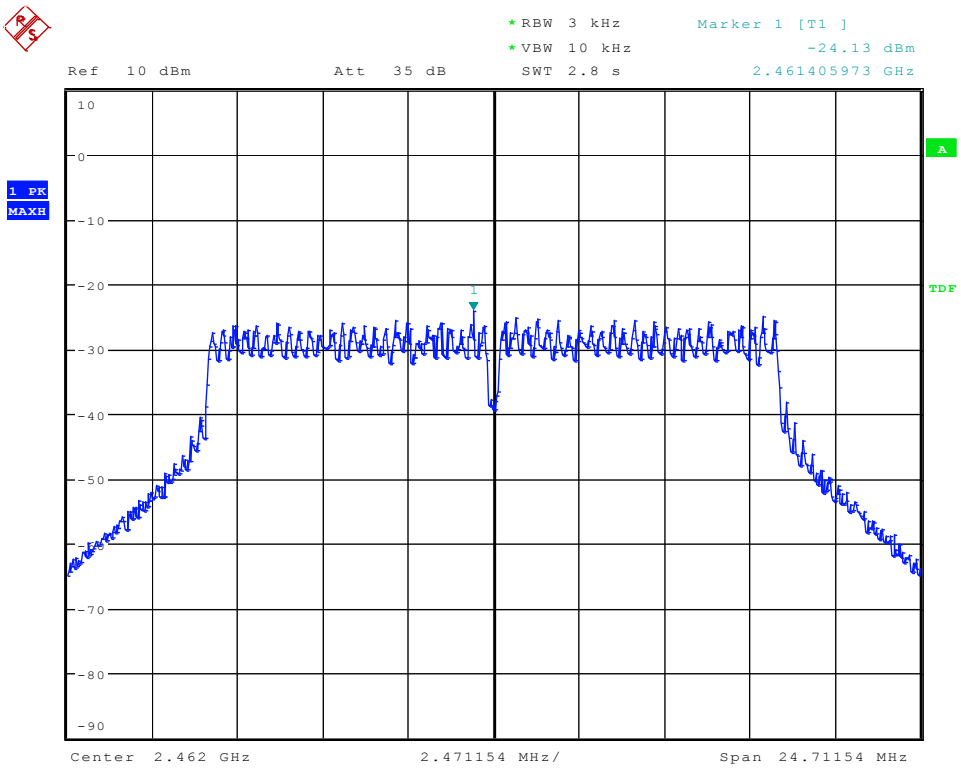

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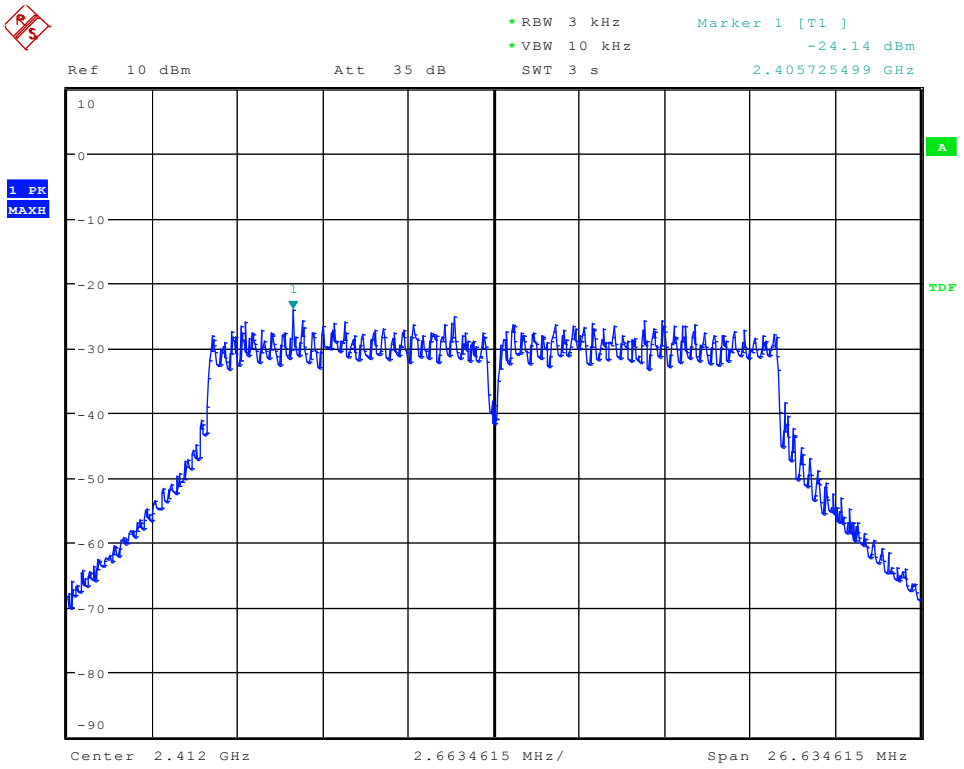
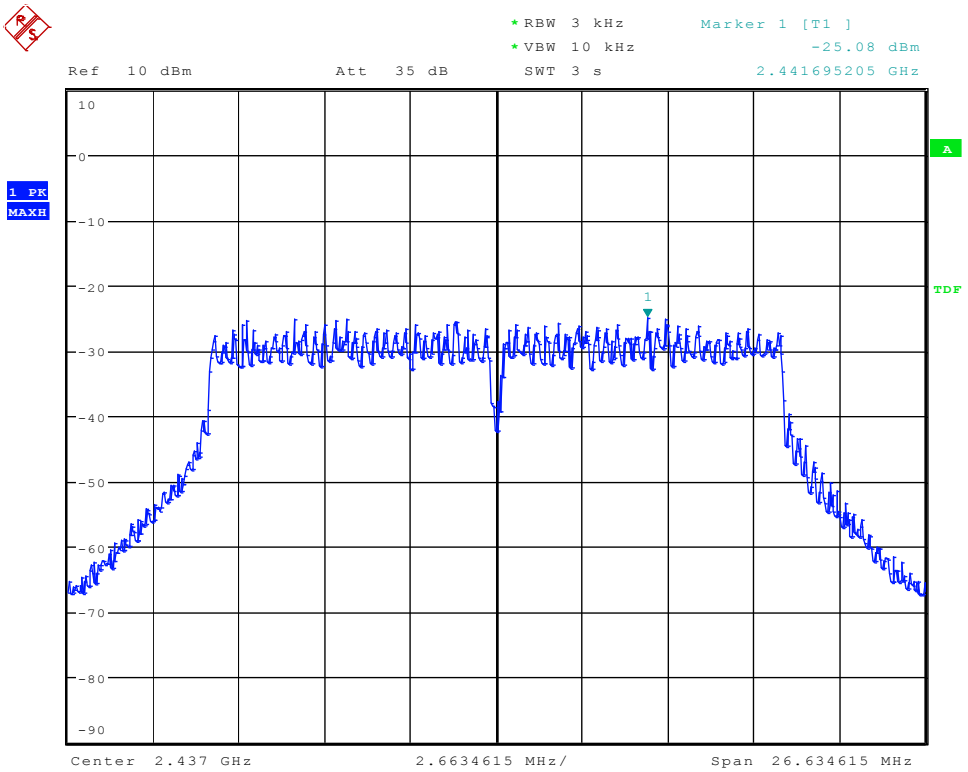
802.11n20





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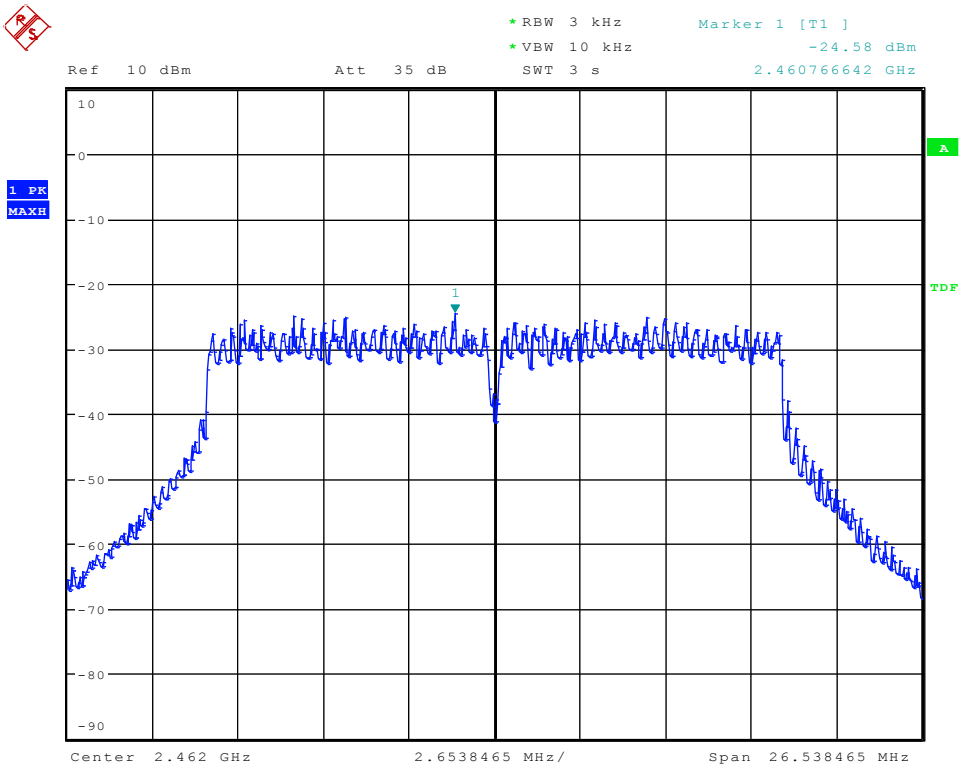

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9.5 Spurious RF conducted emissions

Test Method

1. Establish a reference level by using the following procedure:
   a. Set RBW=100 kHz. VBW≥3RBW. Detector =peak, Sweep time = auto couple, Trace mode = max hold.
   b. Allow trace to fully stabilize, use the peak marker function to determine the maximum PSD level.
2. Use the maximum PSD level to establish the reference level.
   a. Set the center frequency and span to encompass frequency range to be measured.
   b. Use the peak marker function to determine the maximum amplitude level. Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements, report the three highest emissions relative to the limit.
3. Repeat above procedures until other frequencies measured were completed.

Limit

Frequency Range MHz	Limit (dBc)
30-25000	-20

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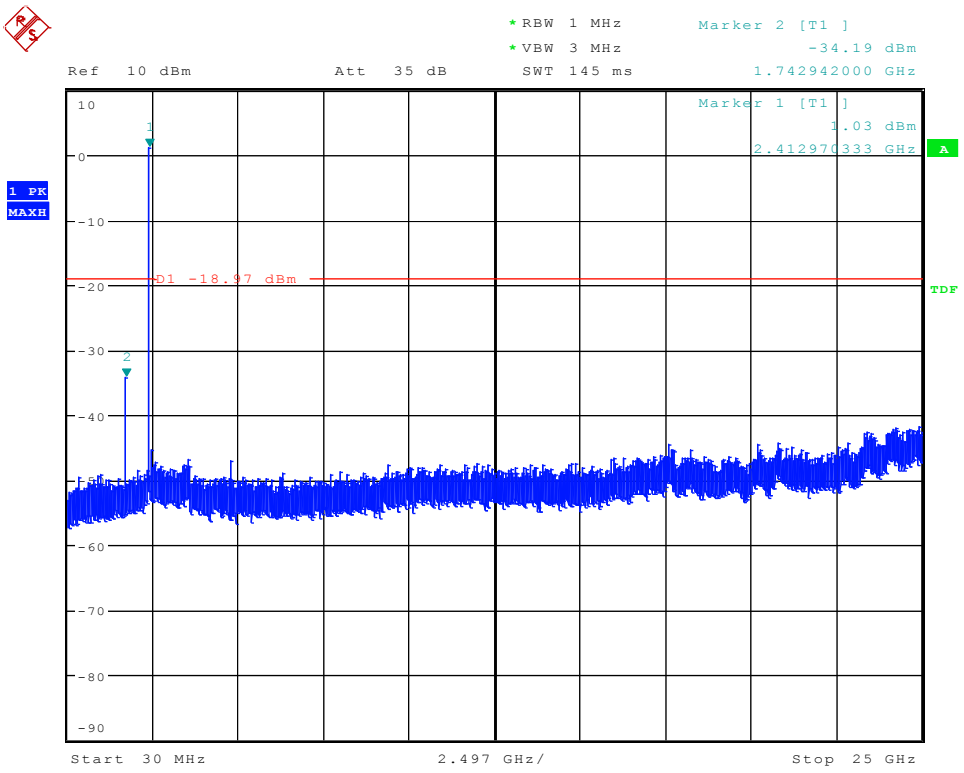
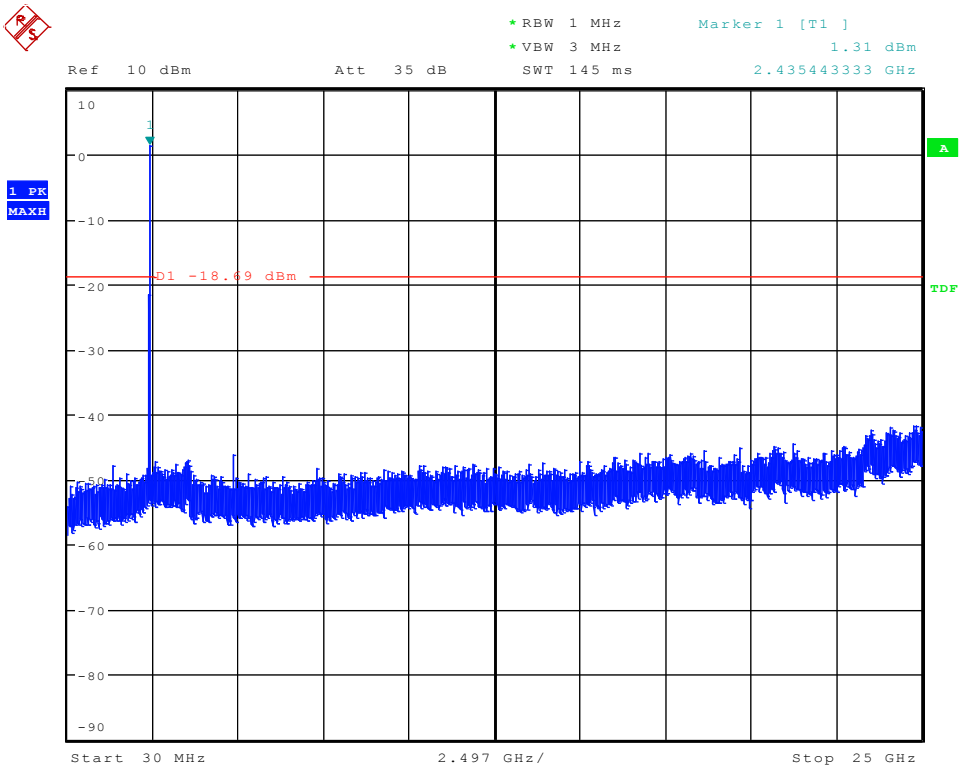
Spurious RF conducted emissions

802.11b



2412MHz



2437MHz

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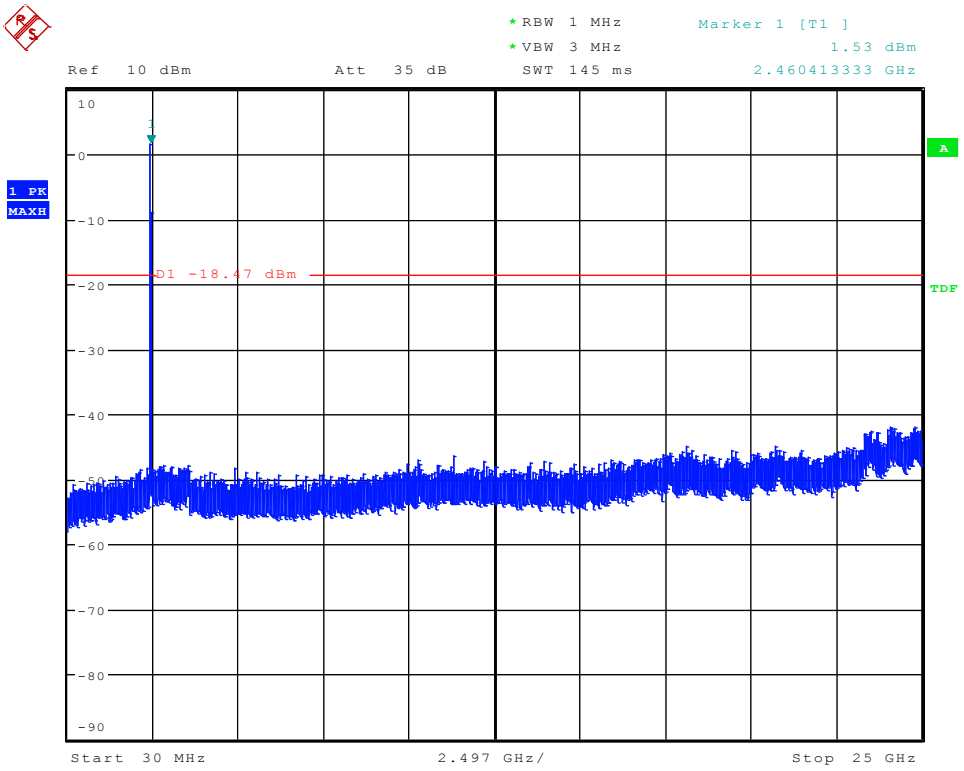
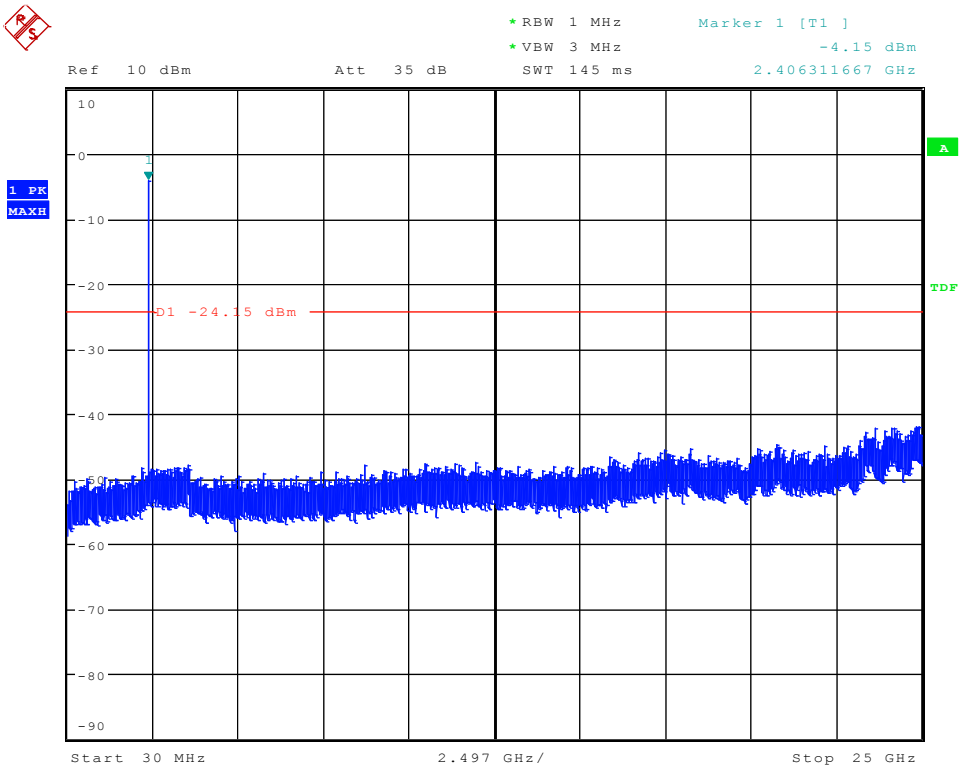
Spurious RF conducted emissions



2462MHz

802.11g



2412MHz

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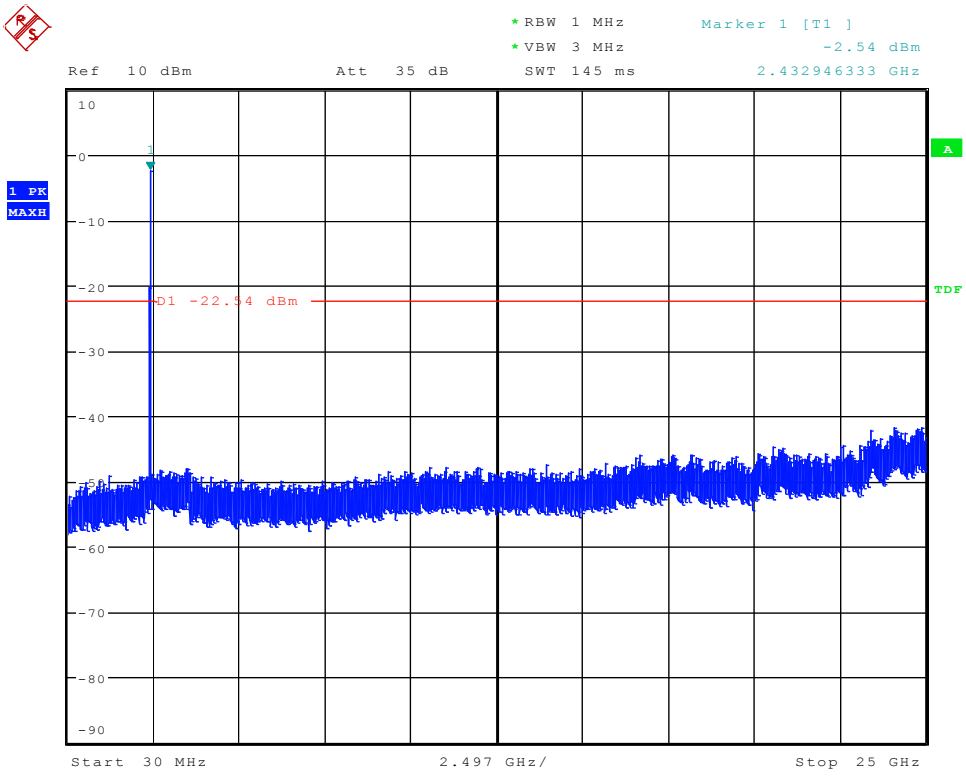
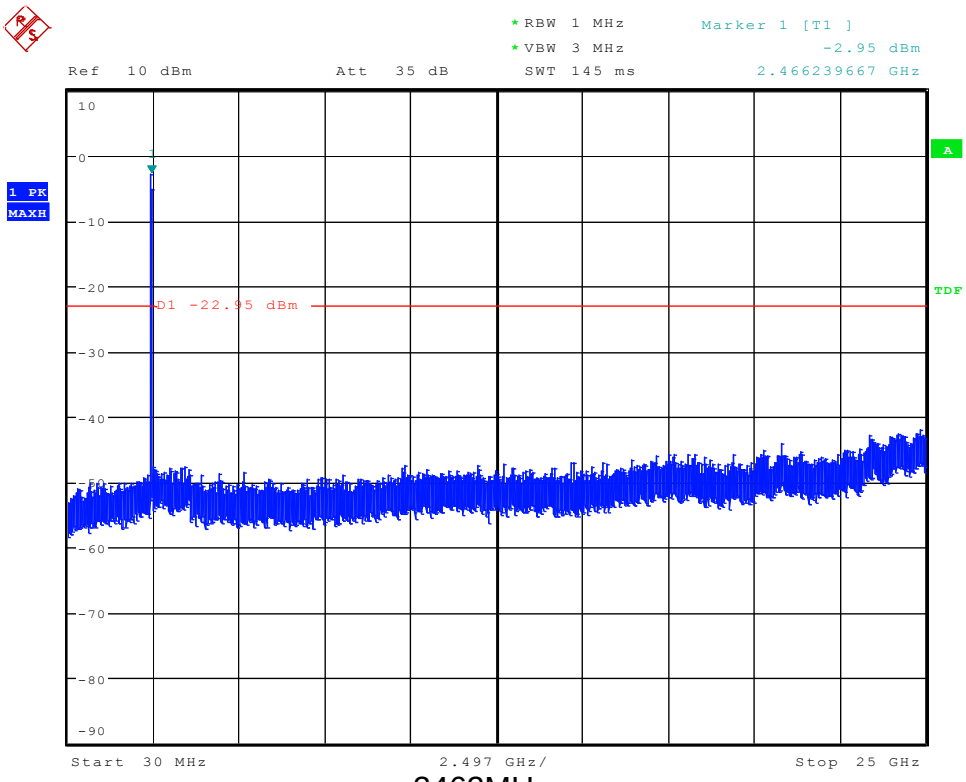
Spurious RF conducted emissions



2437MHz



2462MHz

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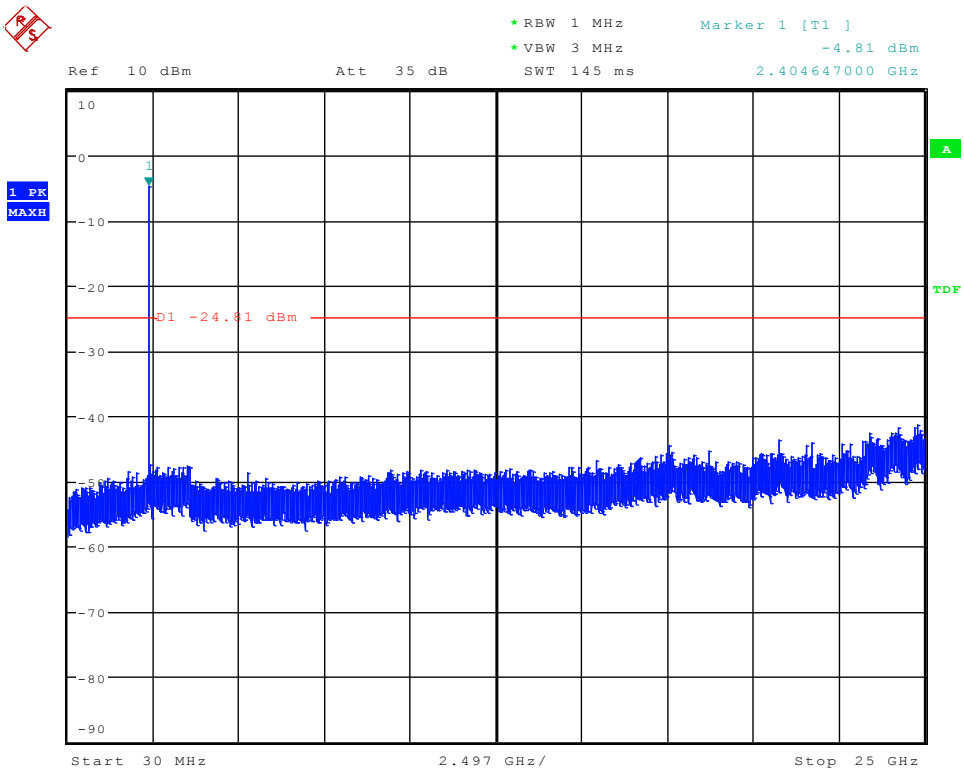
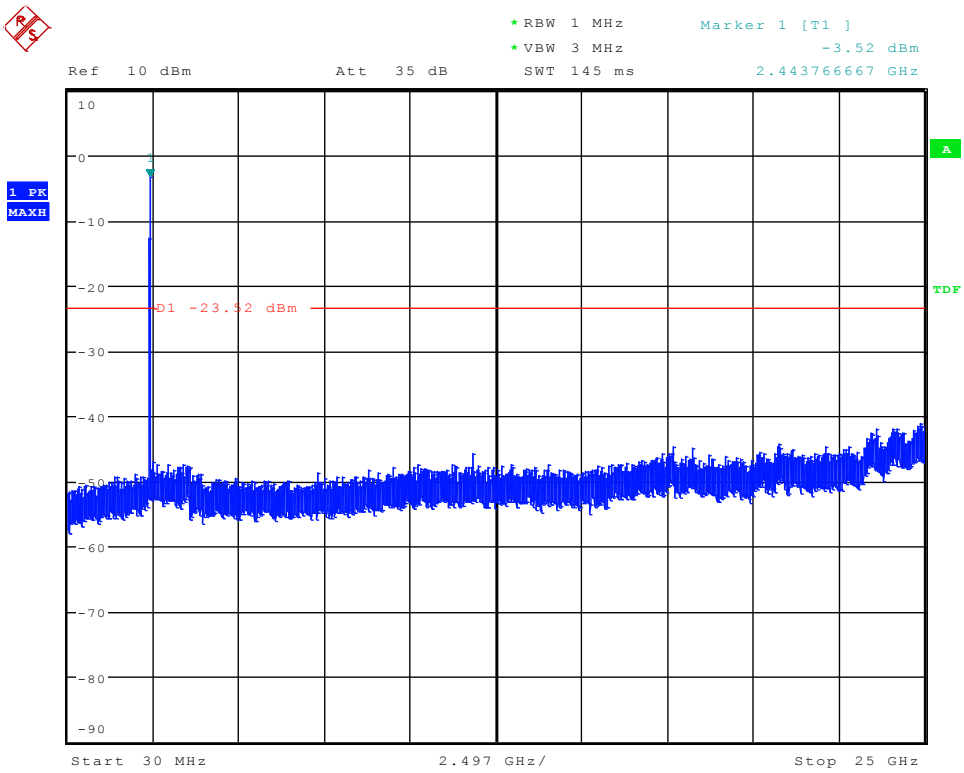
Spurious RF conducted emissions

802.11n20



2412MHz



2437MHz

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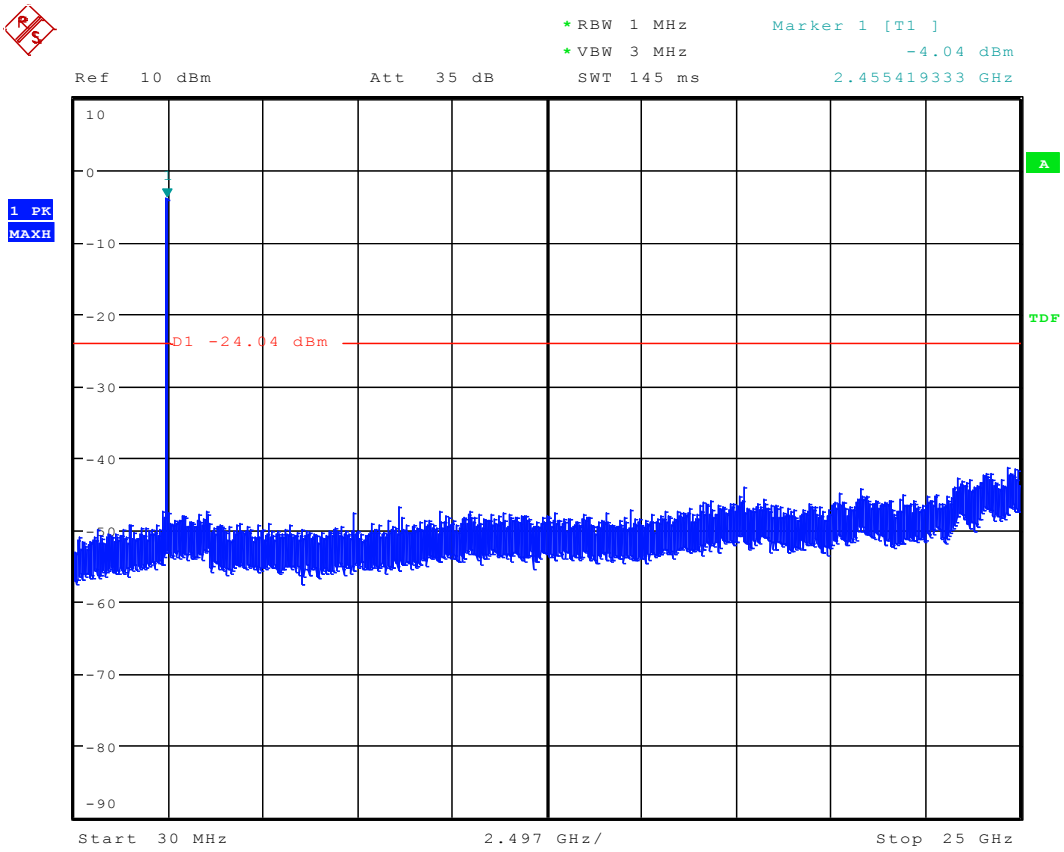
Spurious RF conducted emissions



2462MHz

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9.6 Band edge

Test Method

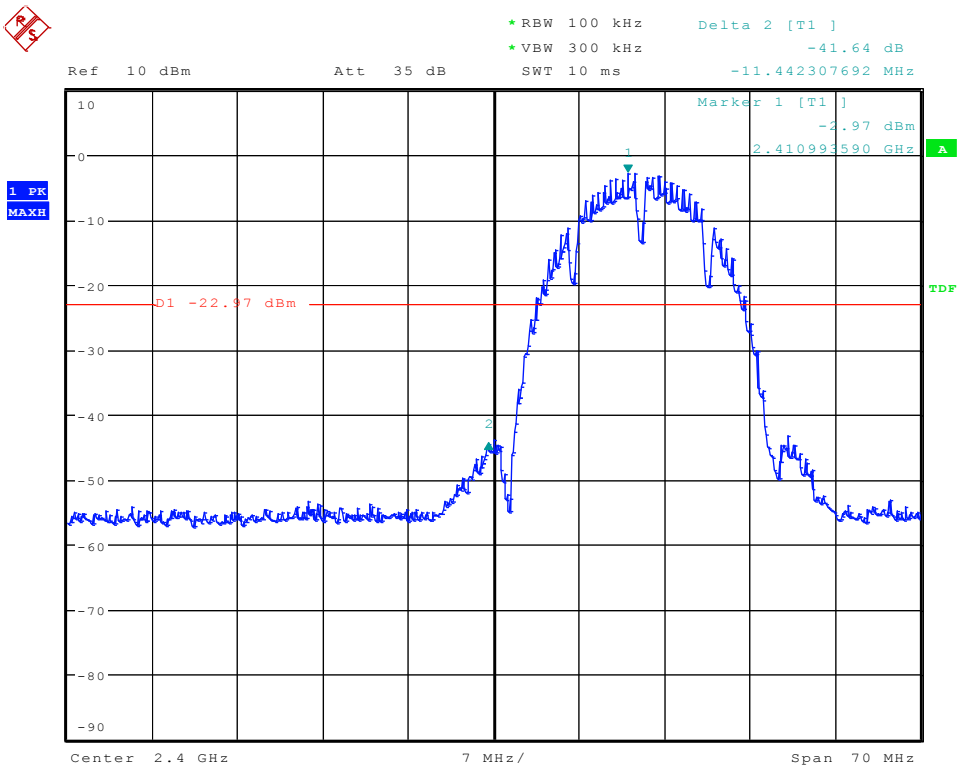
1 Use the following spectrum analyzer settings:
Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 100 kHz, VBW≥RBW, Sweep = auto, Detector function = peak, Trace = max hold.
2 Allow the trace to stabilize, use the peak and delta measurement to record the result.
3 The level displayed must comply with the limit specified in this Section.

Limit

Frequency Range MHz	Limit (dBc)
30-25000	-20

Test result

802.11b



2412MHz

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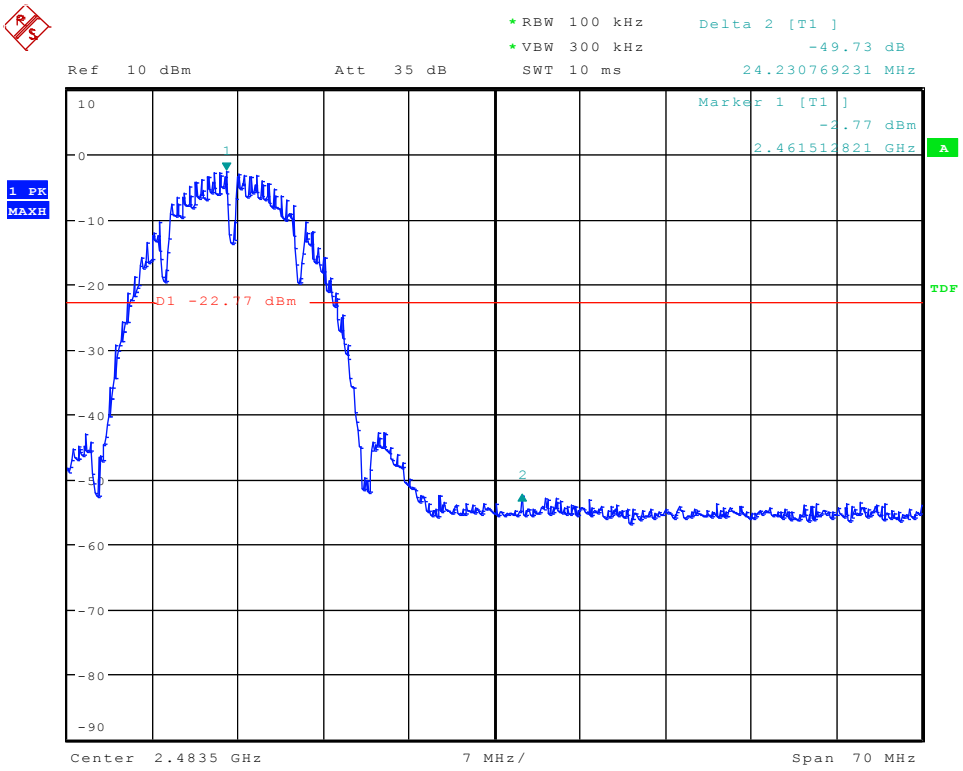
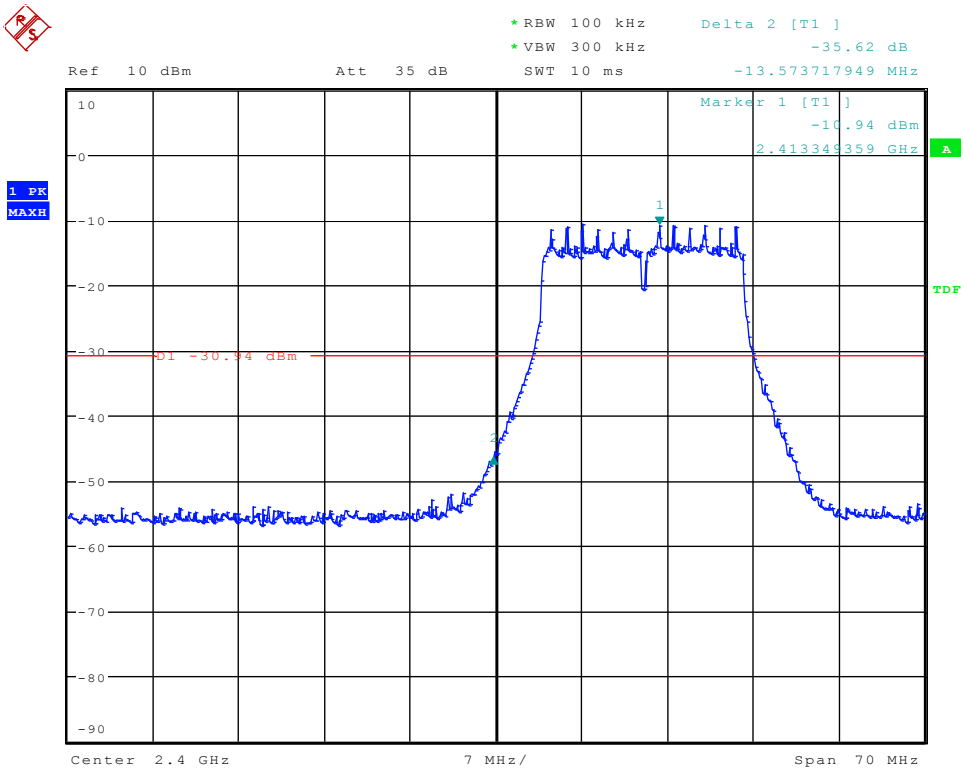
Band edge



2462MHz

802.11g



2412MHz

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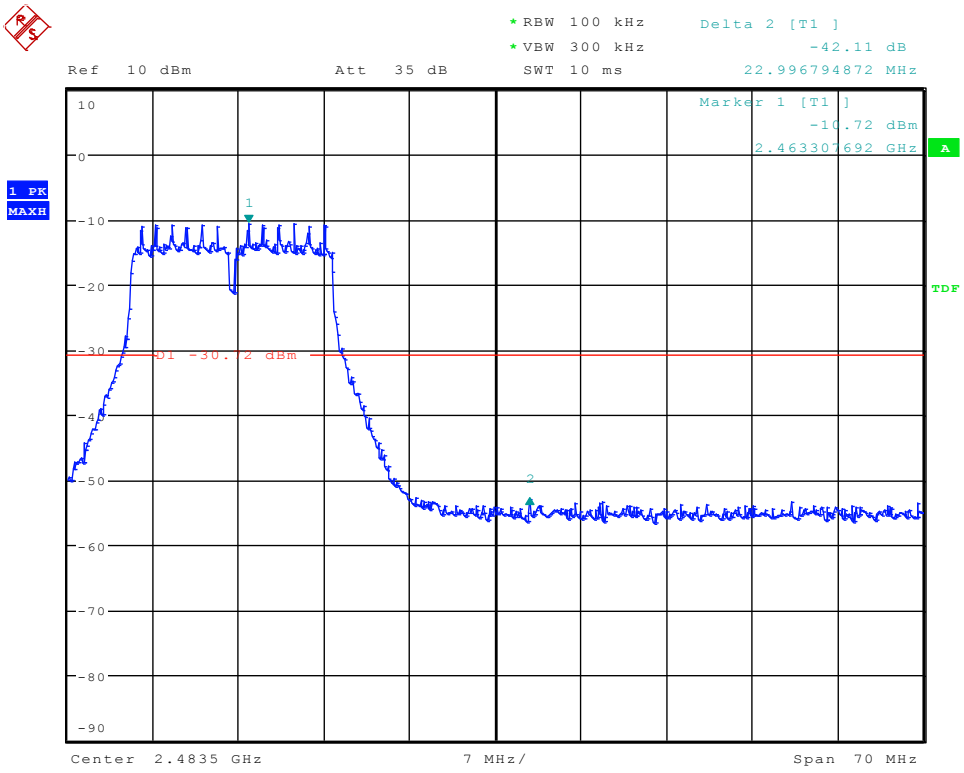
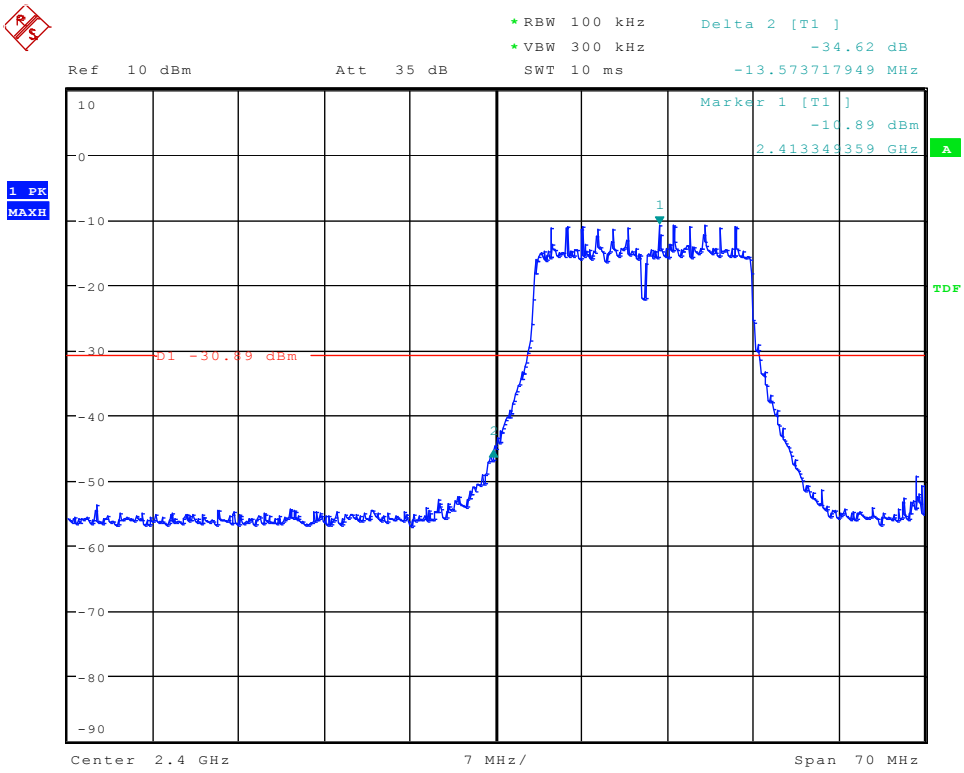
Band edge

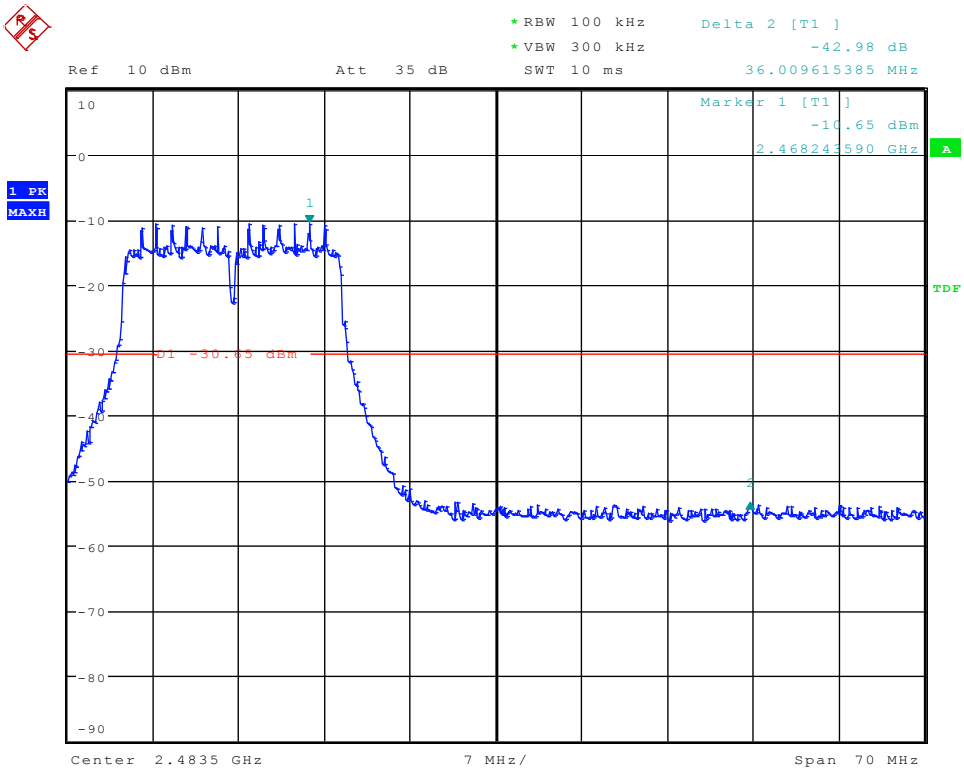


2462MHz

802.11n20



Band edge



2462MHz

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9.7 Spurious radiated emissions for transmitter

Test Method

1: The EUT was place on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

2: The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.

3: The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

4: For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

5: Use the following spectrum analyzer settings According to C63.10:

For Above 1GHz

Span = wide enough to capture the peak level of the in-band emission and all spurious RBW = 1MHz, VBW≥RBW for peak measurement and VBW = 10Hz for average measurement, Sweep = auto, Detector function = peak, Trace = max hold.

For Below 1GHz

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious RBW = 100 KHz, VBW≥RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

Note:

1: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Quasi-peak detection (QP) at frequency below 1GHz.

2: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for peak detection (PK) at frequency above 1GHz.

3: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average ((duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (20log(1/duty cycle)).

4: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.

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Limit

The radio emission outside the operating frequency band shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Radiated emissions which fall in the restricted bands, as defined in section15.205, must comply with the radiated emission limits specified in section 15.209.

Frequency MHz	Field Strength uV/m	Field Strength dBµV/m	Detector
30-88	100	40	QP
88-216	150	43.5	QP
216-960	200	46	QP
960-1000	500	54	QP
Above 1000	500	54	AV
Above 1000	5000	74	PK

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Spurious radiated emissions for transmitter

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

Transmitting spurious emission test result as below:

802.11b
2412MHz (30MHz – 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
594.54	37.70	Horizontal	46.00	QP	Pass
63.95	33.80	Vertical	40.00	QP	Pass

2412MHz (Above 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
4824.00	53.71	Horizontal	74.00	PK	Pass
4824.00	43.69	Horizontal	54.00	AV	Pass
7236.00	55.56	Horizontal	74.00	PK	Pass
7236.00	43.12	Horizontal	54.00	AV	Pass
4824.00	50.38	Vertical	74.00	PK	Pass
4824.00	43.27	Vertical	54.00	AV	Pass
7236.00	53.96	Vertical	74.00	PK	Pass
7236.00	45.22	Vertical	54.00	AV	Pass

Remark:

1: Data of measurement within 30-1000MHz frequency range shown “--” in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
2: “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

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2437MHz (30MHz – 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
--	--	Horizontal	--	QP	Pass
--	--	Vertical	--	QP	Pass

2437MHz (Above 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
4874.00	53.91	Horizontal	74.00	PK	Pass
4874.00	40.56	Horizontal	54.00	AV	Pass
7311.00	56.58	Horizontal	74.00	PK	Pass
7311.00	43.38	Horizontal	54.00	AV	Pass
4874.00	53.72	Vertical	74.00	PK	Pass
4874.00	42.62	Vertical	54.00	AV	Pass
7311.00	57.49	Vertical	74.00	PK	Pass
7311.00	43.38	Vertical	54.00	AV	Pass

Remark:

1: Data of measurement within 30-1000MHz frequency range shown “--” in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
2: “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

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2462MHz (30MHz – 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
--	--	Horizontal	--	QP	Pass
--	--	Vertical	--	QP	Pass

2462MHz (Above 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
4924.00	53.06	Horizontal	74.00	PK	Pass
4924.00	38.73	Horizontal	54.00	AV	Pass
7386.00	54.56	Horizontal	74.00	PK	Pass
7386.00	43.39	Horizontal	54.00	AV	Pass
4924.00	51.18	Vertical	74.00	PK	Pass
4924.00	36.23	Vertical	54.00	AV	Pass
7386.00	52.23	Vertical	74.00	PK	Pass
7386.00	41.28	Vertical	54.00	AV	Pass

Remark:

1: Data of measurement within 30-1000MHz frequency range shown “--” in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
2: “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

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802.11g
2412MHz (30MHz – 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
		Horizontal		QP	Pass
		Vertical		QP	Pass

2412MHz (Above 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
4824.00	52.68	Horizontal	74.00	PK	Pass
4824.00	38.39	Horizontal	54.00	AV	Pass
7236.00	56.98	Horizontal	74.00	PK	Pass
7236.00	43.13	Horizontal	54.00	AV	Pass
4824.00	53.20	Vertical	74.00	PK	Pass
4824.00	39.51	Vertical	54.00	AV	Pass
7236.00	55.37	Vertical	74.00	PK	Pass
7236.00	43.27	Vertical	54.00	AV	Pass

Remark:

1: Data of measurement within 30-1000MHz frequency range shown “--” in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
2: “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

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2437MHz (30MHz – 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
--	--	Horizontal	--	QP	Pass
--	--	Vertical	--	QP	Pass

2437MHz (Above 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
4874.00	53.33	Horizontal	74.00	PK	Pass
4874.00	38.57	Horizontal	54.00	AV	Pass
7311.00	56.53	Horizontal	74.00	PK	Pass
7311.00	43.25	Horizontal	54.00	AV	Pass
4874.00	55.26	Vertical	74.00	PK	Pass
4874.00	40.56	Vertical	54.00	AV	Pass
7311.00	58.11	Vertical	74.00	PK	Pass
7311.00	45.26	Vertical	54.00	AV	Pass

Remark:

1: Data of measurement within 30-1000MHz frequency range shown “--” in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
2: “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

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2462MHz (30MHz – 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
--	--	Horizontal	--	QP	Pass
--	--	Vertical	--	QP	Pass

2462MHz (Above 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
4924.00	53.02	Horizontal	74.00	PK	Pass
4924.00	38.66	Horizontal	54.00	AV	Pass
7386.00	57.38	Horizontal	74.00	PK	Pass
7386.00	46.52	Horizontal	54.00	AV	Pass
4924.00	52.81	Vertical	74.00	PK	Pass
4924.00	38.68	Vertical	54.00	AV	Pass
7386.00	57.13	Vertical	74.00	PK	Pass
7386.00	43.52	Vertical	54.00	AV	Pass

Remark:

1: Data of measurement within 30-1000MHz frequency range shown “--” in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
2: “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

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802.11g
2412MHz (30MHz – 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
--	--	Horizontal	--	QP	Pass
--	--	Vertical	--	QP	Pass

2412MHz (Above 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
4824.00	52.69	Horizontal	74.00	PK	Pass
4824.00	40.13	Horizontal	54.00	AV	Pass
7236.00	54.76	Horizontal	74.00	PK	Pass
7236.00	45.11	Horizontal	54.00	AV	Pass
4824.00	53.27	Vertical	74.00	PK	Pass
4824.00	41.62	Vertical	54.00	AV	Pass
7236.00	55.07	Vertical	74.00	PK	Pass
7236.00	47.28	Vertical	54.00	AV	Pass

Remark:

1: Data of measurement within 30-1000MHz frequency range shown “--” in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
2: “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

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2437MHz (30MHz – 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
--	--	Horizontal	--	QP	Pass
--	--	Vertical	--	QP	Pass

2437MHz (Above 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
4874.00	56.23	Horizontal	74.00	PK	Pass
4874.00	41.58	Horizontal	54.00	AV	Pass
7311.00	59.68	Horizontal	74.00	PK	Pass
7311.00	46.52	Horizontal	54.00	AV	Pass
4874.00	55.26	Vertical	74.00	PK	Pass
4874.00	40.57	Vertical	54.00	AV	Pass
7311.00	57.21	Vertical	74.00	PK	Pass
7311.00	45.13	Vertical	54.00	AV	Pass

Remark:

1: Data of measurement within 30-1000MHz frequency range shown “--” in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
2: “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

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2462MHz (30MHz – 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
--	--	Horizontal	--	QP	Pass
--	--	Vertical	--	QP	Pass

2462MHz (Above 1GHz)

Frequency	Emission Level	Polarization	Limit	Detector	Result
MHz	dBuV/m		dBµV/m		
4924.00	51.82	Horizontal	74.00	PK	Pass
4924.00	37.65	Horizontal	54.00	AV	Pass
7386.00	56.47	Horizontal	74.00	PK	Pass
7386.00	42.16	Horizontal	54.00	AV	Pass
4924.00	52.51	Vertical	74.00	PK	Pass
4924.00	38.26	Vertical	54.00	AV	Pass
7386.00	56.29	Vertical	74.00	PK	Pass
7386.00	43.39	Vertical	54.00	AV	Pass

Remark:

1: Data of measurement within 30-1000MHz frequency range shown “--” in the table above means the reading of emissions are attenuated more than 20db below the permissible limits or the field strength is too small to be measured.
2: “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.

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10 Test Equipment List

List of Test Instruments

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
Test Receiver	Rohde & Schwarz	ESCI7	100837	Nov. 22, 2016
Antenna	Schwarzbeck	VULB9162	9162-010	Nov. 25, 2016
Cable	Huber+Suhner	CBL2-NN-1M	22390001	Nov. 06, 2016
Cable	Huber+Suhner	CIL02	N/A	Nov. 06, 2016
RF Cable	Huber+Suhner	SF-104	MY16559/4	Mar. 06, 2016
Power Amplifier	HP	HP 8447D	1145A00203	Nov. 06, 2016
Horn Antenna	Schwarzbeck	BBHA9170	9170-372	Oct.22, 2016
Horn Antenna	Com-Power	AH-118	071078	Nov. 04, 2016
Loop antenna	Daze	ZA30900A	0708	Oct.09, 2016
Spectrum Analyzer	Rohde & Schwarz	FSU26	200409/026	Aug. 31, 2016
Pre-Amplifier	Agilent	8449B	3008A02964	Nov. 02, 2016
L.I.S.N.	Rohde & Schwarz	ENV 216	101317	Nov. 06, 2016
Temporary antenna connector	TESCOM	SS402	N/A	N/A
Power Meter	Anritsu	ML2495A	1139001	Nov. 04, 2016
Power Sensor	DARE	RPR 3006V	15I00041SN064	Dec. 28, 2016

C - Conducted RF tests

- Conducted peak output power
- 6dB bandwidth
- Power spectral density*
- Spurious RF conducted emissions
- Band edge

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11 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

System Measurement Uncertainty

Items	Extended Uncertainty
Radiation emission	U=±3.70dB (30MHz-25GHz)
Bandwidth	±1.42 x10^{-4}%
Power Spectral Density	±1.06dB
Spurious RF conducted emissions	±2.51dB
Output power test	±1.06dB
Power density test	2.10 dB

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