FCC 47 CFR PART 15 SUBPART C AND ANSI C63.10:2013 TEST REPORT

For

Indoor IP Camera

Model: CM01

Trade Name: Vivint

Issued for

Vivint, Inc.

4931 N. 300 W. Provo, Utah 84604 United States

Issued by

Compliance Certification Services Inc.
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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	03/01/2016	Initial Issue	All Page 131	Gloria Chang
01	03/10/2016	Add Duty Cycle Measurement	All Page 132	Gloria Chang

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1. TEST REPORT CERTIFICATION

Applicant	：	Vivint, Inc.
Address	：	4931 N. 300 W. Provo, Utah 84604 United States
Equipment Under Test	：	Indoor IP Camera
Model	：	CM01
Trade Name	：	Vivint
Tested Date	：	January 29 ~ February 19, 2016

APPLICABLE STANDARD	
Standard	**Test Result**
FCC Part 15 Subpart C AND ANSI C63.10:2013	PASS

WE HEREBY CERTIFY THAT: The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by:

Sb. Lu
Sr. Engineer

Reviewed by:

Gundam Lin
Sr. Engineer

2. EUT DESCRIPTION

Product Name	Indoor IP Camera
Model Number	CM01
Identify Number	T160216S01
Received Date	January 29, 2016
Frequency Range	IEEE 802.11b/g, 802.11n HT20 Mode: 2412MHz ~ 2462MHz IEEE 802.11n HT40 Mode: 2422MHz ~ 2452MHz
Transmit Power	IEEE 802.11b Mode: 24.12 dBm (0.2582 W) IEEE 802.11g Mode: 27.30 dBm (0.5370 W) IEEE 802.11n HT20 Mode: 26.89 dBm (0.4887 W) IEEE 802.11n HT40 Mode: 26.61 dBm (0.4581 W)
Channel Spacing	5MHz
Channel Number	IEEE 802.11b/g, 802.11n HT20 Mode: 11 Channels IEEE 802.11n HT40 Mode: 7 Channels
Transmit Data Rate	IEEE 802.11b Mode: up to 11 Mbps IEEE 802.11g Mode: up to 54 Mbps IEEE 802.11n HT20 Mode (800ns GI): up to 130.00 Mbps IEEE 802.11n HT20 Mode (400ns GI): up to 144.40 Mbps IEEE 802.11n HT40 Mode (800ns GI): up to 270.00 Mbps IEEE 802.11n HT40 Mode (400ns GI): up to 300.00 Mbps
Type of Modulation	IEEE 802.11b Mode: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g Mode: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20/40 Mode: OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Type	FPC Antenna × 1, Antenna 1(Chain 1), Antenna Gain: 2.61dBi PIFA Antenna × 1, Antenna 2(Chain 2), Antenna Gain: 2.46dBi
Power Rating	12Vdc
Test Voltage	120Vac, 60Hz
DC Power Cable Type	Non-shielded cable, 2.95 m × 1 (Non-detachable)
I/O Port	Power Port × 1

Power Adapter:

No.	Manufacturer	Model No.	Power Input	Power Output
1	SHENZHEN HONOR ELECTRONIC CO., LTD	ADS-26FSG-12 12018EPCU	100-240Vac, 50/60Hz, Max. 0.7A	12Vdc, 1.5A

Remark:

1. *The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.*
2. *For more details, please refer to the User's manual of the EUT.*
3. *This submittal(s) (test report) is intended for FCC ID: 2AAAS-CM01 filing to comply with Section 15.207, 15.209 and 15.247 of the FCC Part 15, Subpart C Rules.*

3. DESCRIPTION OF TEST MODES

The EUT is a 802.11b/g/n transceiver in Indoor IP Camera had been tested under operating condition.

IEEE 802.11b/g, 802.11n HT20/HT40 Mode (2TX / 2RX) :

Ant. 1 / Chain 1 & Ant. 2 / Chain 2 transmit/receive.

Conducted Emission / Radiated Emission Test (Below 1 GHz)

1. The following test modes were scanned during the preliminary test:

No.	Pre-Test mode
1	Normal Operating (Full Function) / Vertical Mode
2	Normal Operating (Full Function) / Horizontal Mode

2. After the preliminary scan, the following test mode was found to produce the highest emission level.

Final Test mode		
Emission	Radiated Emission	Mode 1
	Conducted Emission	Mode 1

Remark: *Then, the above highest emission mode of the configuration of the EUT and cable was chosen for all final test items.*

Conducted / Radiated Emission Test (Above 1 GHz)

IEEE 802.11b/g, 802.11n HT20 Mode:

The EUT had been tested under operating condition.

There are three channels have been tested as following:

Channel	Frequency (MHz)
Low	2412
Middle	2437
High	2462

IEEE 802.11b Mode: 1Mbps data rate (worst case) was chosen for full testing.
IEEE 802.11g Mode: 6Mbps data rate (worst case) was chosen for full testing.
IEEE 802.11n HT20 Mode: 6.5Mbps data rate (worst case) was chosen for full testing.

IEEE 802.11n HT40 Mode:

The EUT had been tested under operating condition.

There are three channels have been tested as following:

Channel	Frequency (MHz)
Low	2422
Middle	2437
High	2452

IEEE 802.11n HT40 Mode: 13.5Mbps data rate (worst case) was chosen for full testing.

Remark：*The field strength of spurious emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X, Y axis). The worst emission was found in stand-up position(Z axis) and the worst case was recorded.*

4. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10:2013 and FCC CFR 47, 15.207, 15.209 and 15.247.

5. FACILITIES AND ACCREDITATION

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

No.989-1, Wenshan Rd., Shangshan Village,
Qionglin Township, Hsinchu County 30741, Taiwan (R.O.C.)

The sites are constructed in conformance with the requirements of ANSI C63.10:2013 and CISPR 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR 16-1-3, CISPR 16-1-4 and CISPR 16-1-5.

5.2 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

Taiwan	TAF

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada	INDUSTRY CANADA
Japan	VCCI
Taiwan	BSMI
USA	FCC MRA

Copies of granted accreditation certificates are available for downloading from our web site, http:///www.ccsrf.com

Remark: *FCC Designation Number TW1027.*

5.3 MEASUREMENT UNCERTAINTY

The following table is for the measurement uncertainty, which is calculated as per the document CISPR 16-4-2.

PARAMETER	UNCERTAINTY
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 30 to 1000 MHz	+/- 3.97
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 1 to 18GHz	+/- 3.58
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 18 to 26 GHz	+/- 3.59
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 26 to 40 GHz	+/- 3.81
Semi Anechoic Chamber (966 Chamber_C) / Radiated Emission, 30 to 1000 MHz	+/- 3.97
Semi Anechoic Chamber (966 Chamber_C) / Radiated Emission, 1 to 18GHz	+/- 3.58
Semi Anechoic Chamber (966 Chamber_C) / Radiated Emission, 18 to 26 GHz	+/- 3.59
Semi Anechoic Chamber (966 Chamber_C) / Radiated Emission, 26 to 40 GHz	+/- 3.81
Conducted Emission (Mains Terminals), 9kHz to 30MHz	+/- 2.48

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Consistent with industry standard (e.g. CISPR 22, clause 11, Measurement Uncertainty) determining compliance with the limits shall be base on the results of the compliance measurement. Consequently the measure emissions being less than the maximum allowed emission result in this be a compliant test or passing test.

The acceptable measurement uncertainty value without requiring revision of the compliance statement is base on conducted and radiated emissions being less than U_{CISPR} which is 3.6dB and 5.2dB respectively. CCS values (called U_{Lab} in CISPR 16-4-2) is less than U_{CISPR} as shown in the table above. Therefore, MU need not be considered for compliance.

6. SETUP OF EQUIPMENT UNDER TEST

SUPPORT EQUIPMENT

No.	Product	Manufacturer	Model No.	Serial No.
1	Notebook PC	TOSHIBA	PORTEGE R30-A	1E101235H
2	AC750 Wireless Dual Band Gigabit Cloud Router	TP-LINK	Archer C2	214C316003274

No.	Signal Cable Description
1	Non-shielded RJ-45 cable, 12m × 1

SETUP DIAGRAM FOR TESTS

EUT & peripherals setup diagram is shown in appendix setup photos.

EUT OPERATING CONDITION

RF Mode:

1. EUT & peripherals setup diagram is shown in appendix setup photos.
2. TX mode:
   - ⇨ **TX Data Rate:** 1Mbps Bandwidth 20 (IEEE 802.11b Mode)
     6Mbps Bandwidth 20 (IEEE 802.11g Mode)
     6.5Mbps Bandwidth 20 (IEEE 802.11n HT20 Mode)
     13.5Mbps Bandwidth 40 (IEEE 802.11n HT40 Mode)
   - ⇨ **Power control**

     IEEE 802.11b Mode Channel Low (2412MHz) Chain 1/2 Power set 20
     IEEE 802.11b Mode Channel Mid (2437MHz) Chain 1/2 Power set 20
     IEEE 802.11b Mode Channel High (2462MHz) Chain 1/2 Power set 20
     IEEE 802.11g Mode Channel Low (2412MHz) Chain 1/2 Power set 1D
     IEEE 802.11g Mode Channel Mid (2437MHz) Chain 1/2 Power set 1F
     IEEE 802.11g Mode Channel High (2462MHz) Chain 1/2 Power set 1D
     IEEE 802.11n HT20 Mode Channel Low (2412MHz) Chain 1/2 Power set 1B
     IEEE 802.11n HT20 Mode Channel Mid (2437MHz) Chain 1/2 Power set 1F
     IEEE 802.11n HT20 Mode Channel High (2462MHz) Chain 1/2 Power set 1B
     IEEE 802.11n HT40 Mode Channel Low (2422MHz) Chain 1/2 Power set 15
     IEEE 802.11n HT40 Mode Channel Mid (2437MHz) Chain 1/2 Power set 1F
     IEEE 802.11n HT40 Mode Channel High (2452MHz) Chain 1/2 Power set 15
3. All of the functions are under run.
4. Start test.

Normal Mode:

1. EUT & peripherals setup diagram is shown in appendix setup photos.
2. Turn on the power of all equipment.
3. EUT power on and push search button to connect router (DHCP IP:192.168.0.103).
4. Notebook PC link to router with RJ-45 (DHCP IP:192.168.1.101).
5. Notebook PC open IE connect to 192.168.0.103 (login/password//admin/admin).
6. Push live video will see the camera video.
7. Notebook PC ping EUT 192.168.1.103.
8. All of the functions are under run.
9. Start test.

7. FCC PART 15.247 REQUIREMENTS

7.1 DUTY CYCLE MEASUREMENT

Product Name	Indoor IP Camera	Test By	Waternil Guan
Test Model	CM01	Test Date	2016/02/02
Test Mode	TX Mode	Temp. & Humidity	17°C, 66%

Mode	TX on (ms)	TX on + off (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
IEEE 802.11b	12.220	12.390	98.63	0.06	0.010
IEEE 802.11g	2.031	2.148	94.55	0.24	0.492
IEEE 802.11n HT20	1.706	1.814	94.05	0.27	0.586
IEEE 802.11n HT40	0.842	0.959	87.78	0.57	1.188

7.2 6dB BANDWIDTH

LIMITS

§ 15.247(a) (2) For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/04/2016
Test S/W	N/A			

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP

TEST PROCEDURE

1. The transmitter output was connected to a spectrum analyzer.
2. Set RBW = 100 kHz.
3. Set the video bandwidth (VBW) ≥ 3 x RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

TEST RESULTS

Product Name	Indoor IP Camera	Test By	Waternil Guan
Test Model	CM01	Test Date	2016/02/02
Test Mode	TX Mode	Temp. & Humidity	17°C, 66%

IEEE 802.11b Mode (2TX)

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (kHz)	Result
		Chain 1	Chain 2		
Low	2412	10.04	10.04	500	PASS
Middle	2437	10.04	10.05	500	PASS
High	2462	10.05	10.04	500	PASS

IEEE 802.11g Mode (2TX)

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (kHz)	Result
		Chain 1	Chain 2		
Low	2412	15.07	15.10	500	PASS
Middle	2437	15.03	13.85	500	PASS
High	2462	15.02	15.11	500	PASS

IEEE 802.11n HT20 Mode (2TX)

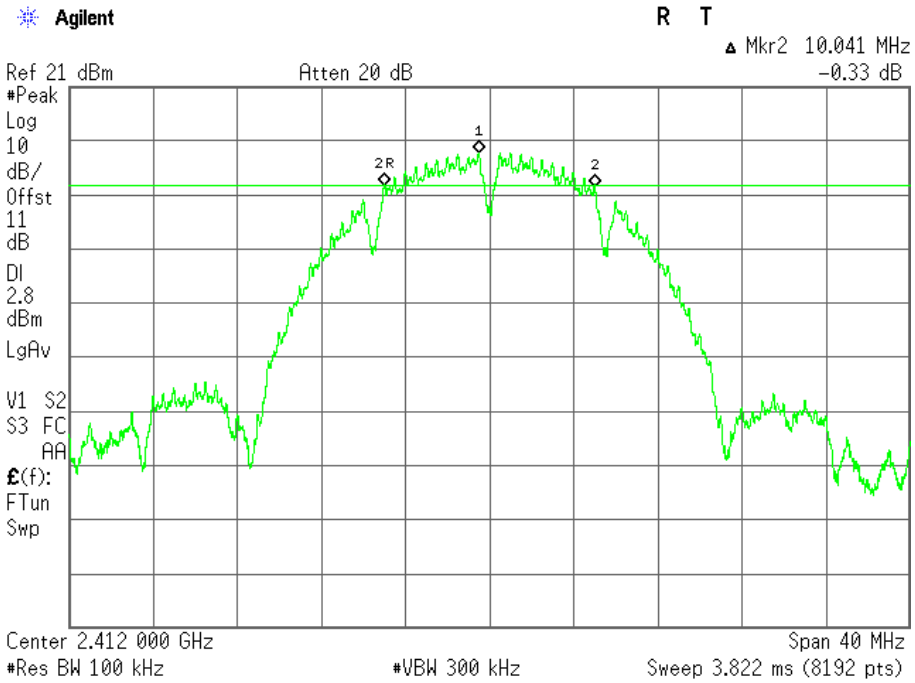
Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (kHz)	Result
		Chain 1	Chain 2		
Low	2412	15.10	15.06	500	PASS
Middle	2437	15.10	15.07	500	PASS
High	2462	15.04	15.09	500	PASS

IEEE 802.11n HT40 Mode (2TX)

Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (kHz)	Result
		Chain 1	Chain 2		
Low	2422	35.00	35.04	500	PASS
Middle	2437	35.03	35.07	500	PASS
High	2452	35.06	35.09	500	PASS

6dB BANDWIDTH

CH Low (IEEE 802.11b Mode / Chain 1)



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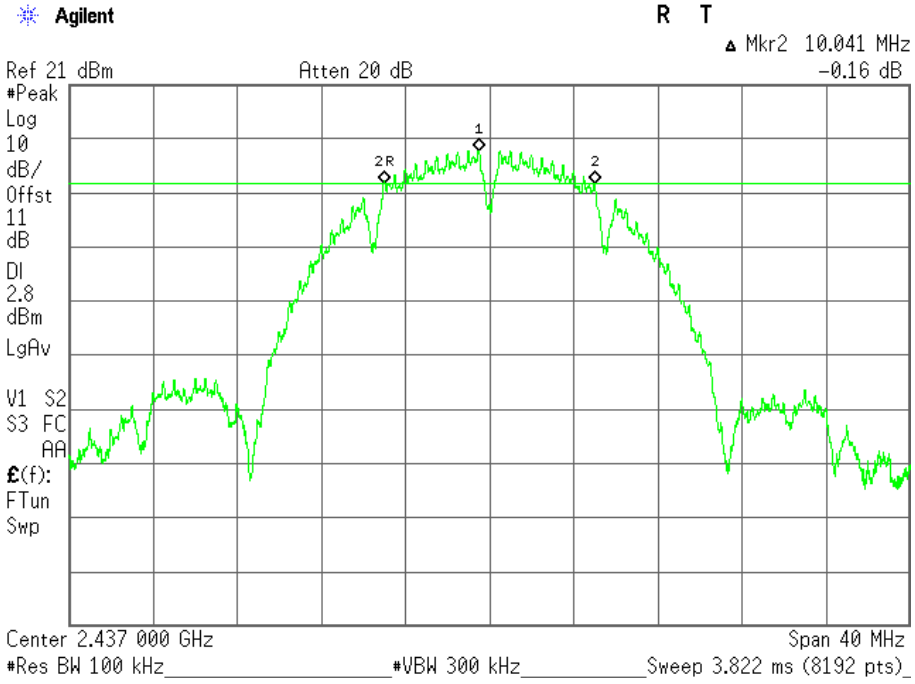

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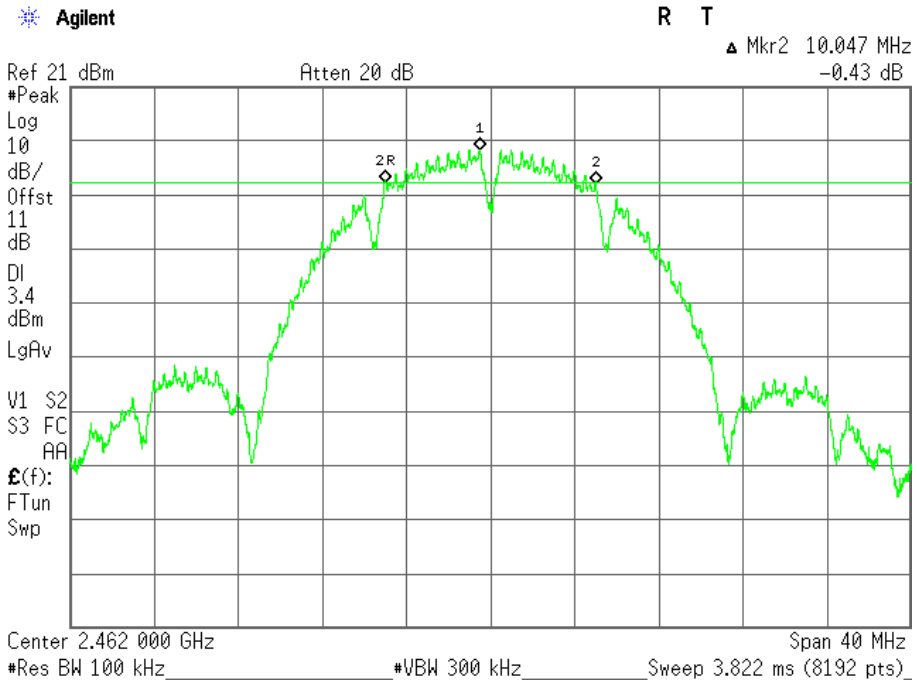

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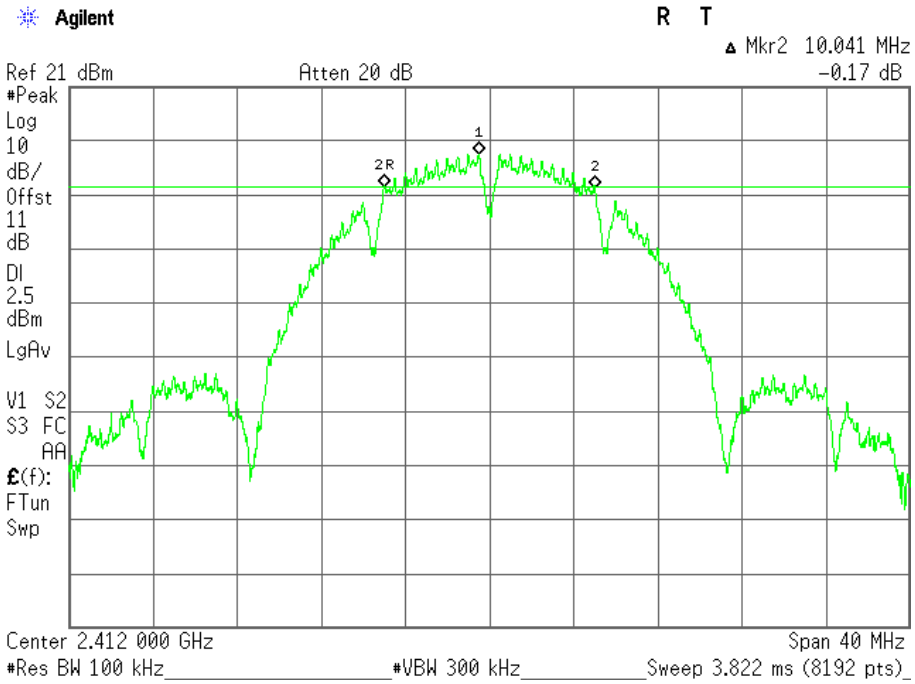

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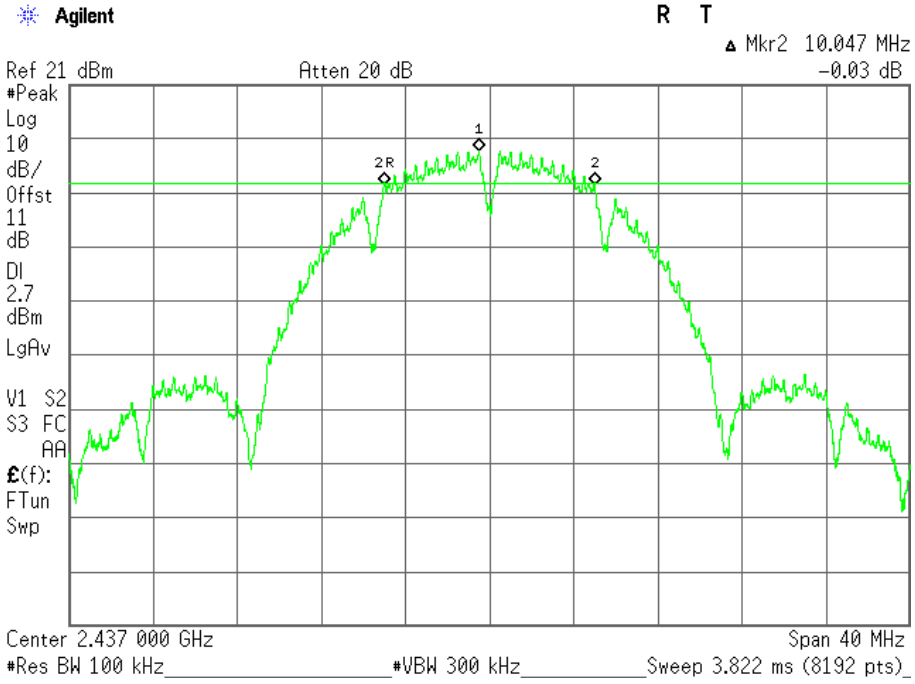

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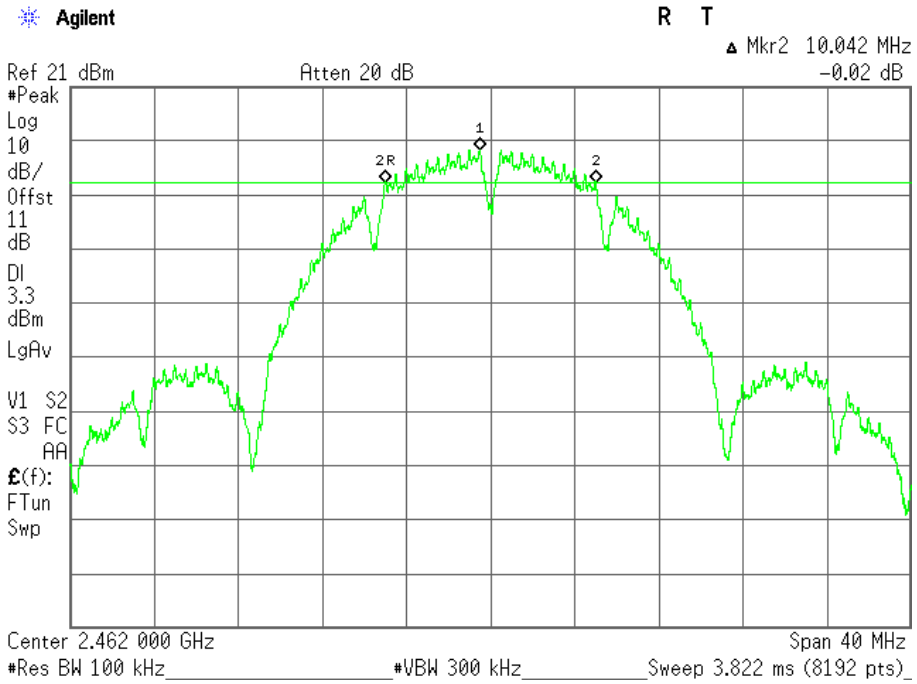

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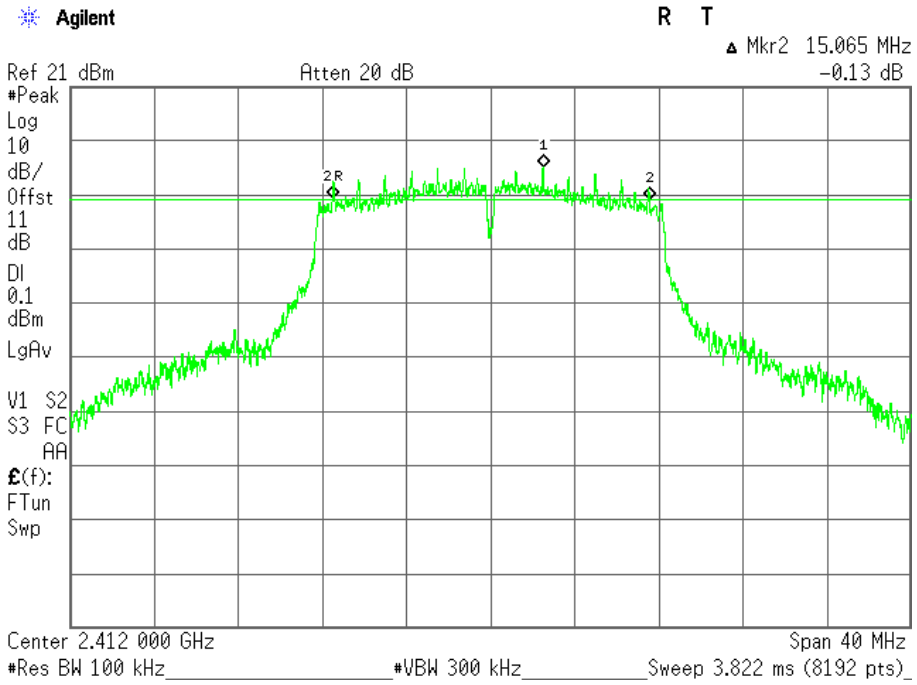

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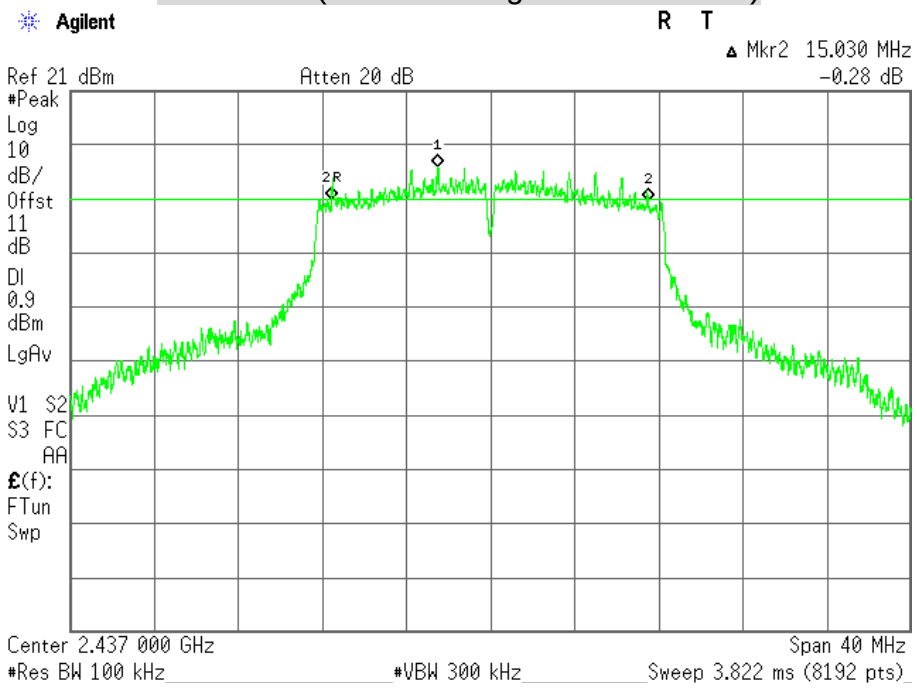

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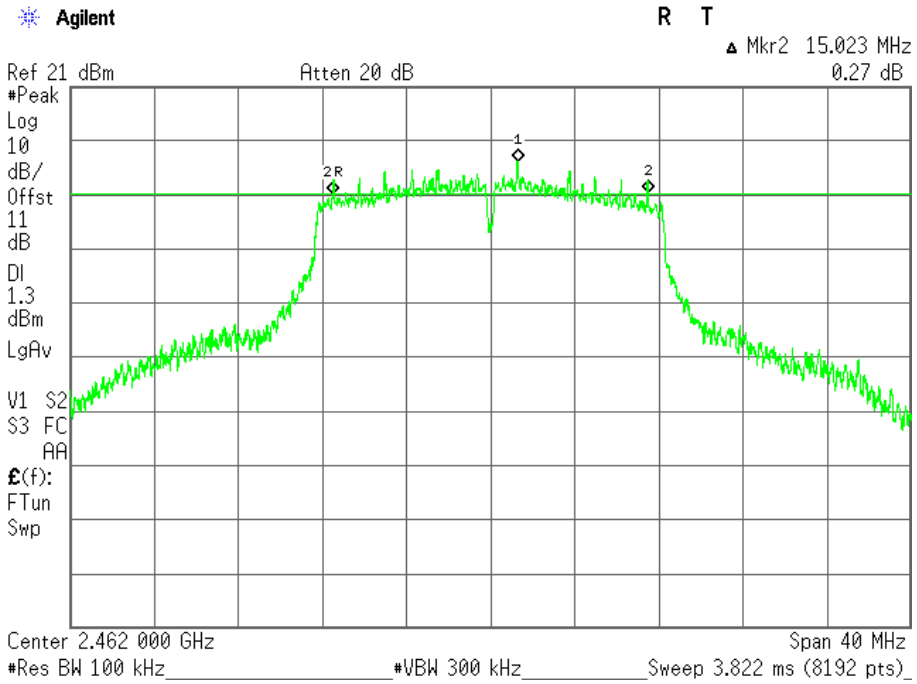

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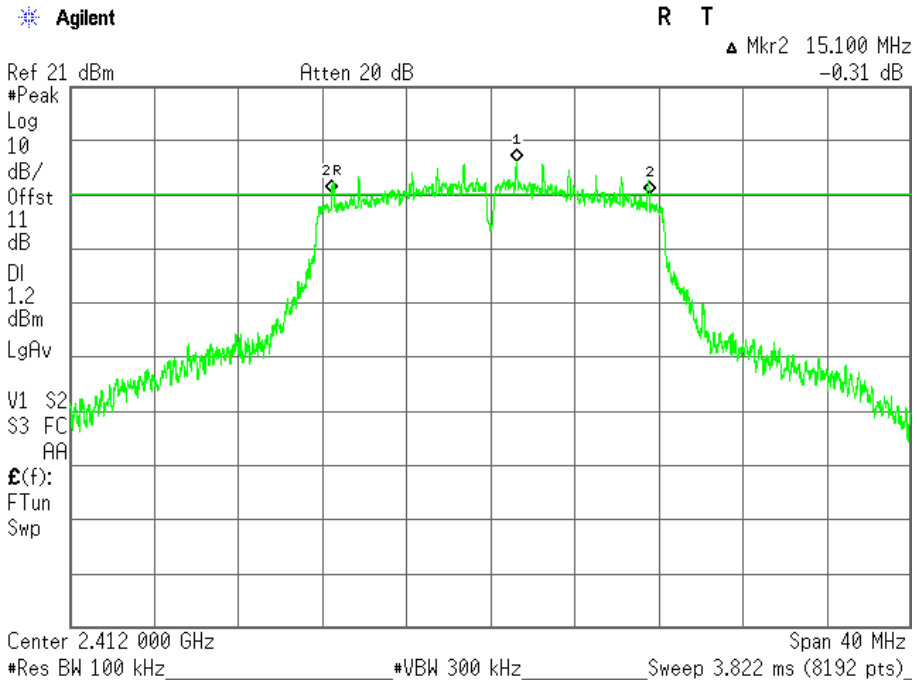

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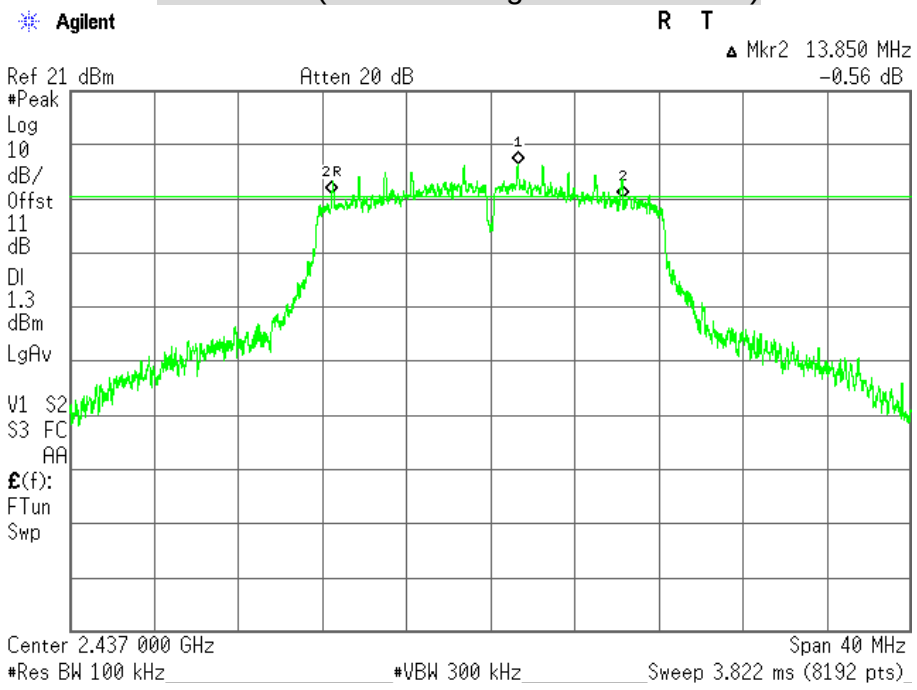

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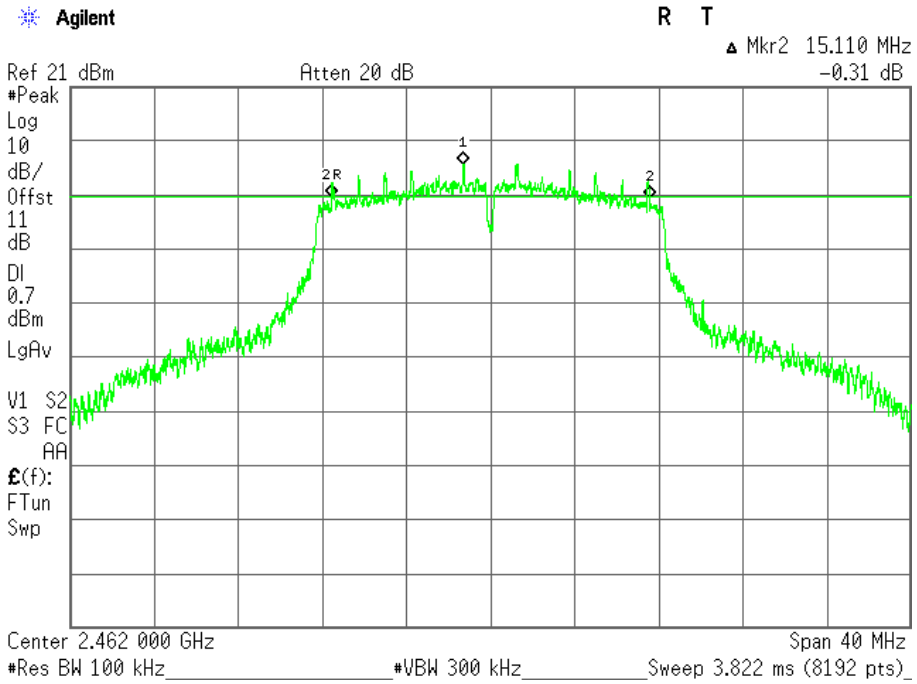

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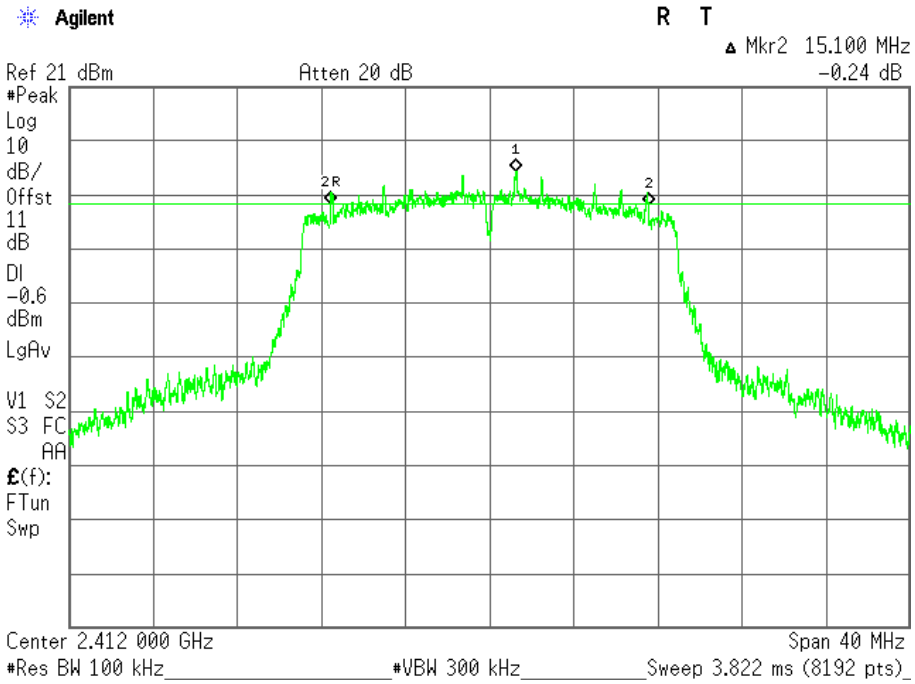

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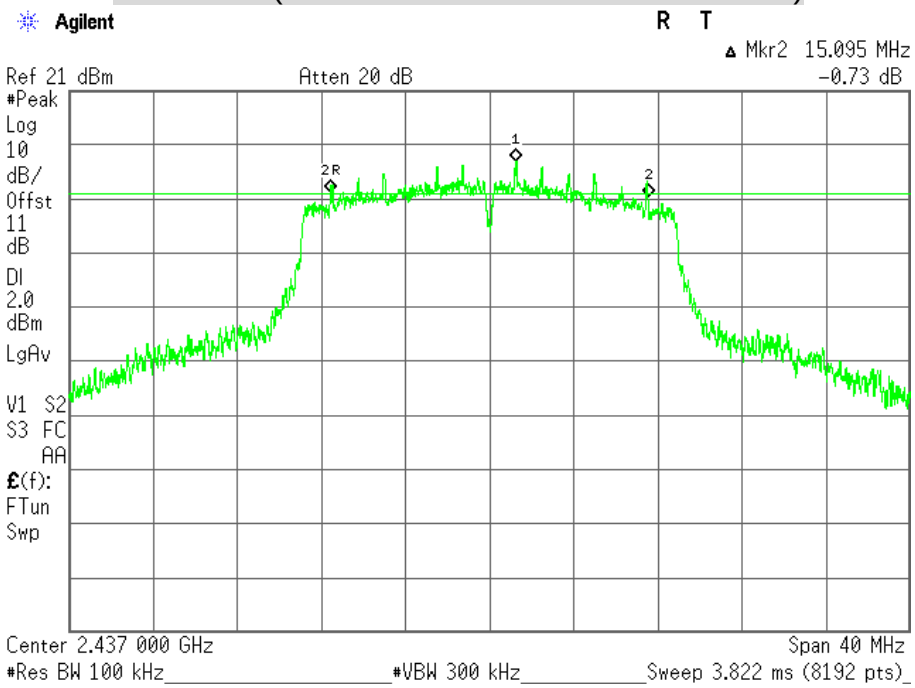

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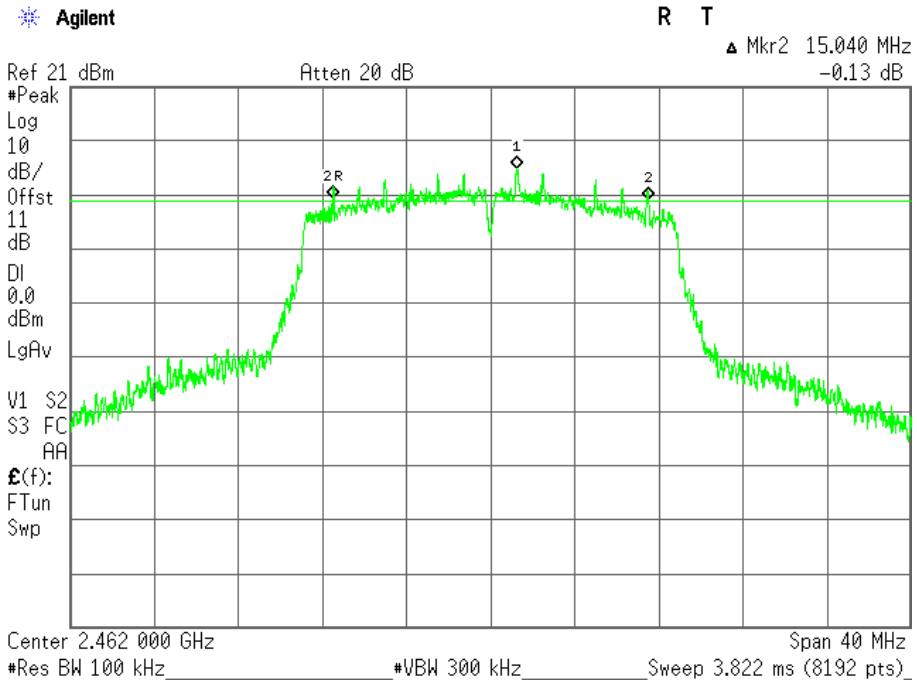

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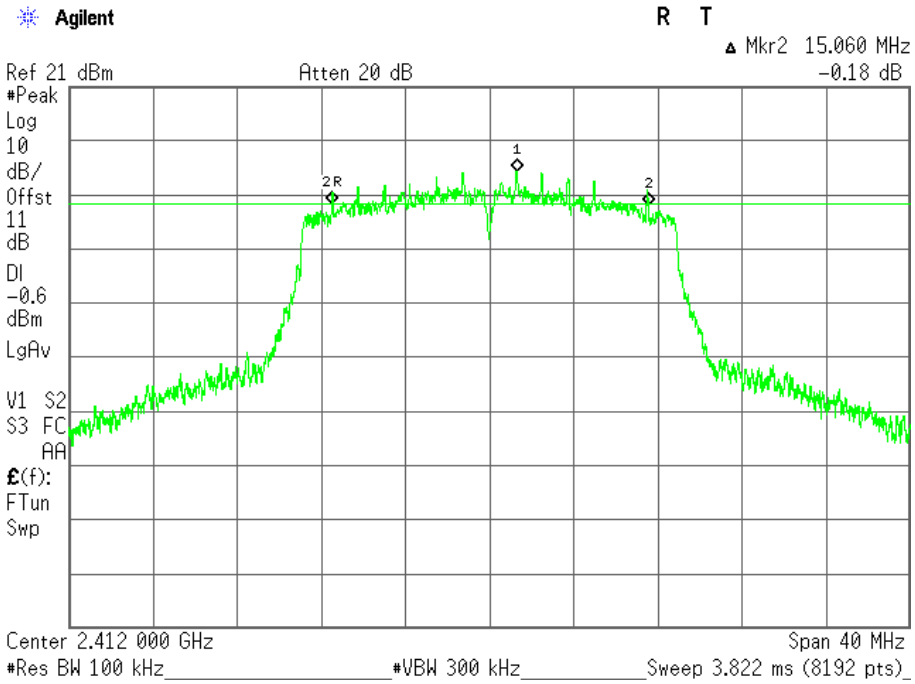

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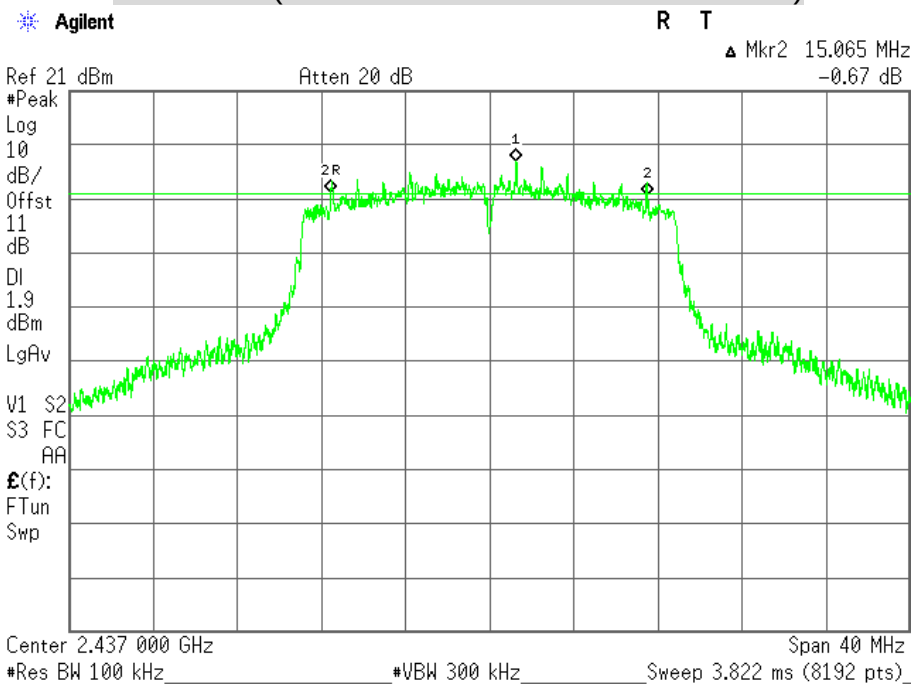

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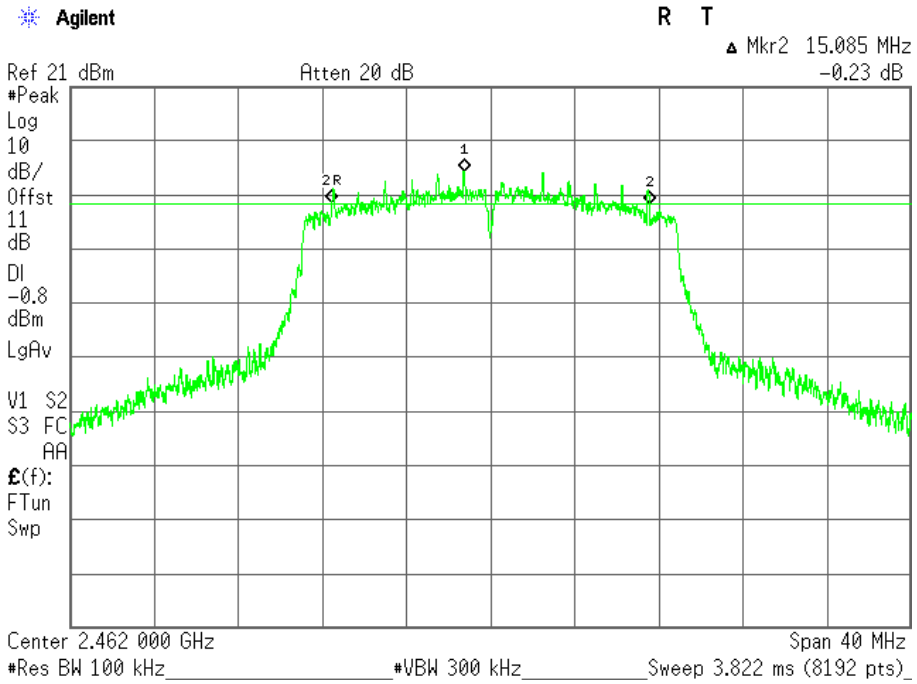

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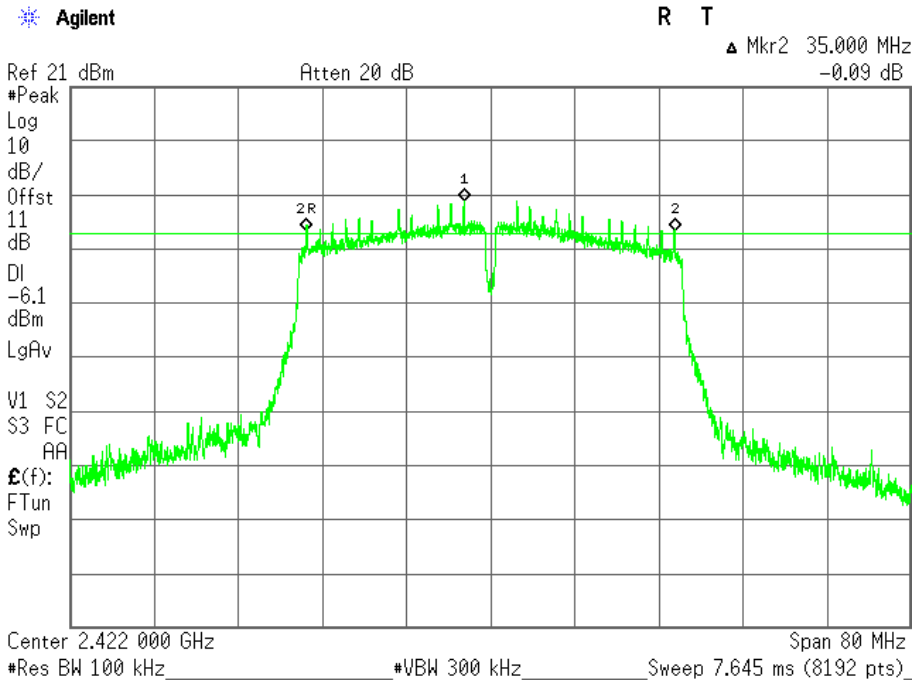

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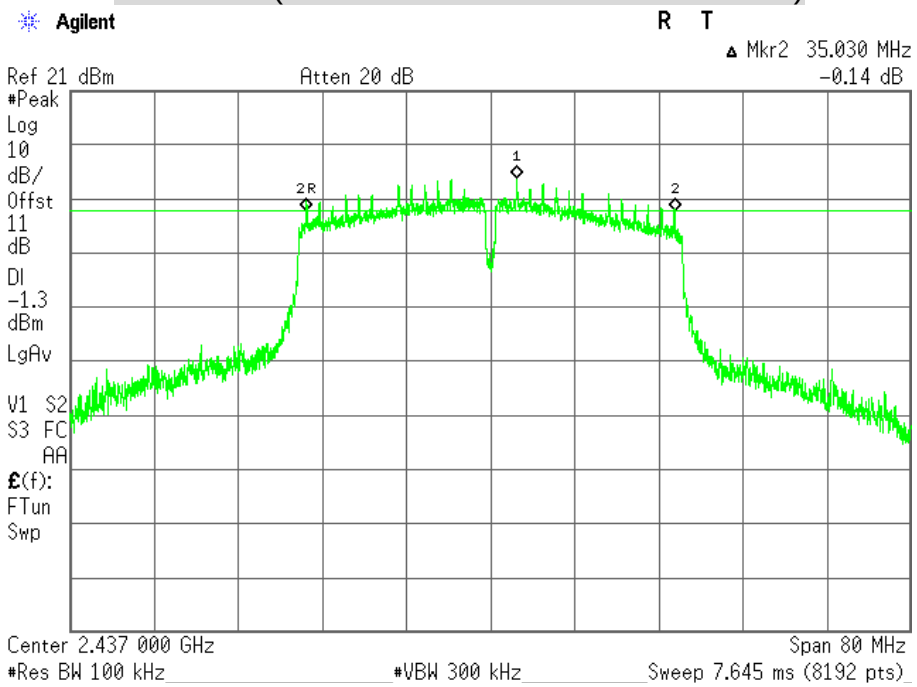

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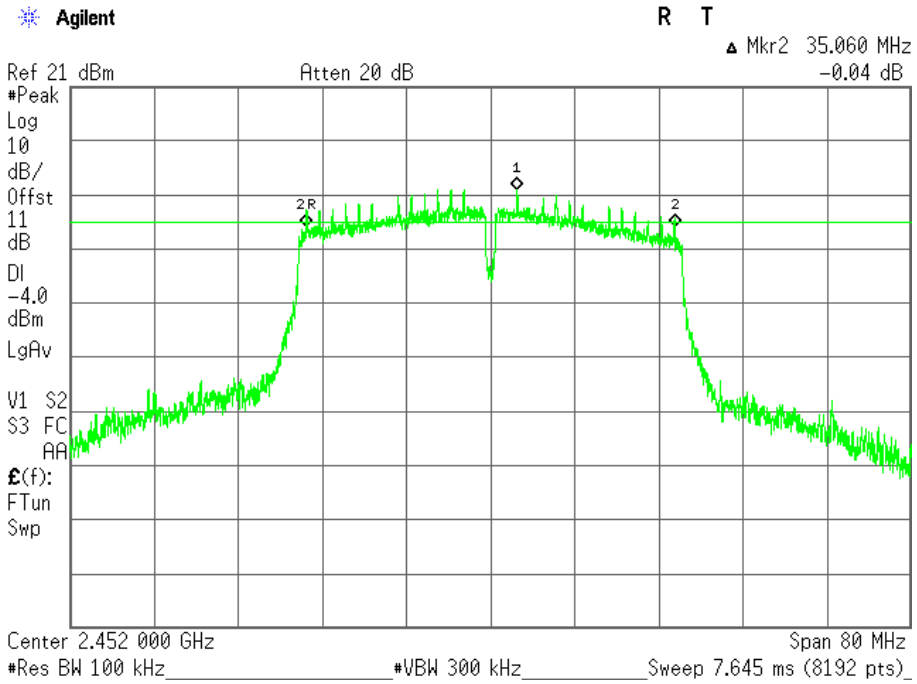

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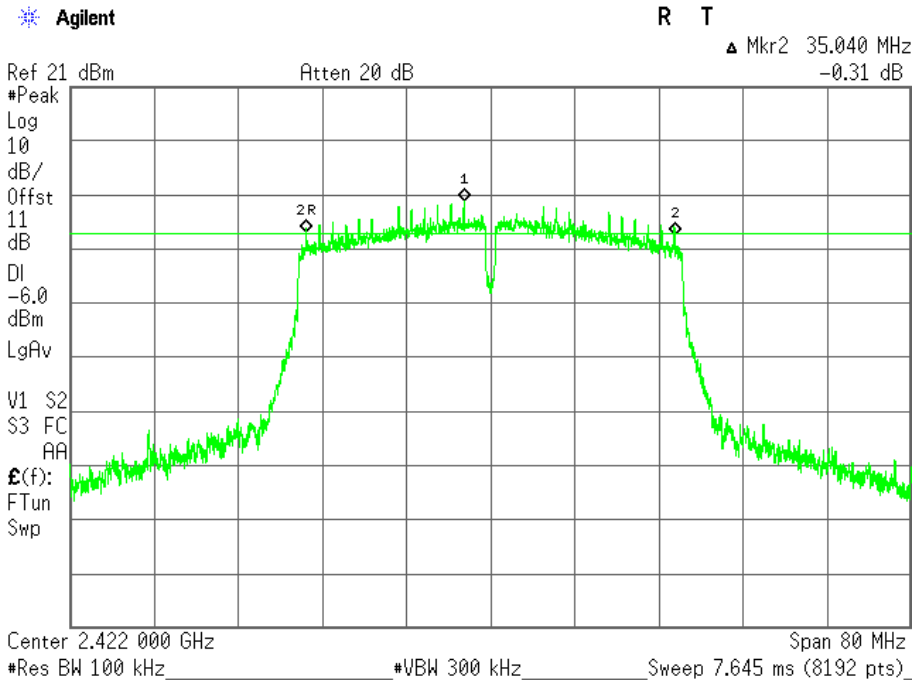

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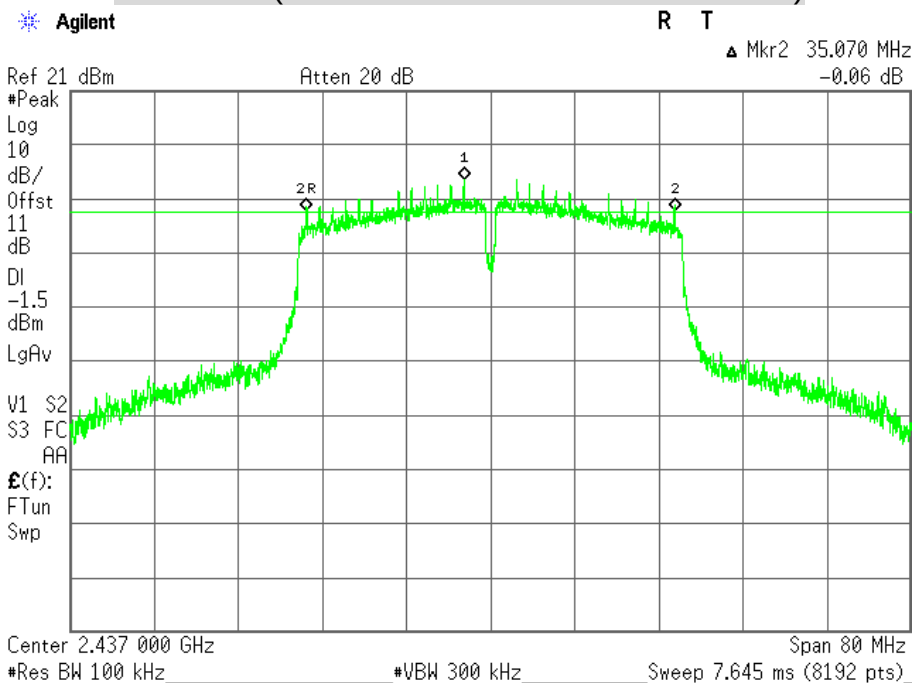

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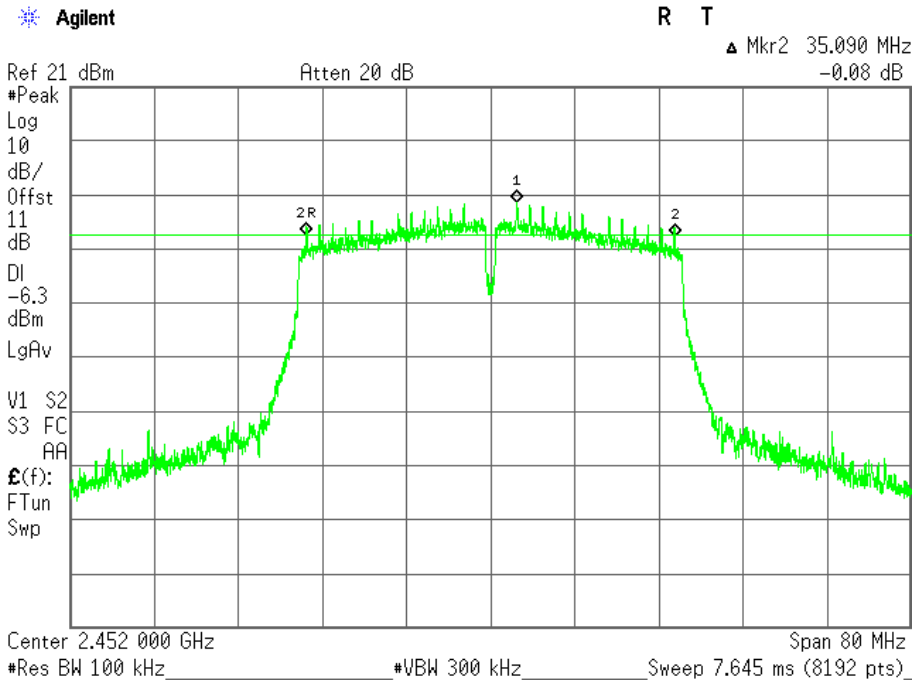


7.3 MAXIMUM PEAK OUTPUT POWER

LIMITS

§ 15.247(b) The maximum peak output power of the intentional radiator shall not exceed the following:
§ 15.247(b) (3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 watt.
§ 15.247(b) (4) Except as shown in paragraphs (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

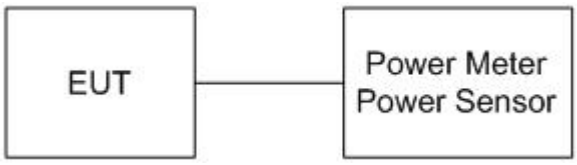
§ KDB 662911: For power measurements on IEEE 802.11 devices
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Power Meter	Anritsu	ML2495A	1149001	12/08/2016
Power Sensor	Anritsu	MA2411B	1126148	12/08/2016
Test S/W	N/A			

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP



TEST PROCEDURE

The transmitter output is connected to the power meter. The power meter is set to the peak power detection.

TEST RESULTS

Product Name	Indoor IP Camera	Test By	Waternil Guan
Test Model	CM01	Test Date	2016/02/02
Test mode	TX Mode	Temp. & Humidity	17°C, 66%

IEEE 802.11b Mode (2TX)

Channel	Channel Frequency (MHz)	Maximum Peak Output Power						Result
		Chain 1	Chain 2	Total		Limit		
		(dBm)	(dBm)	(dBm)	(W)	(dBm)	(W)	
Low	2412	20.64	20.60	23.63	0.2307	30	1	PASS
Middle	2437	20.50	20.40	23.46	0.2218	30	1	PASS
High	2462	21.04	21.18	24.12	0.2582	30	1	PASS

Remark:

1. *At finial test to get the worst-case emission at 1Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.*
3. *Total peak power = Chain 1 + Chain 2.*
4. *Array gain = 0 dB for NANT ≤ 4, power limit do not reduce.*

IEEE 802.11g Mode (2TX)

Channel	Channel Frequency (MHz)	Maximum Peak Output Power						Result
		Chain 1	Chain 2	Total		Limit		
		(dBm)	(dBm)	(dBm)	(W)	(dBm)	(W)	
Low	2412	23.41	24.17	26.82	0.4808	30	1	PASS
Middle	2437	24.29	24.29	27.30	0.5370	30	1	PASS
High	2462	23.26	24.33	26.84	0.4831	30	1	PASS

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.*
3. *Total peak power = Chain 1 + Chain 2.*
4. *Array gain = 0 dB for NANT ≤ 4, power limit do not reduce.*

IEEE 802.11n HT20 Mode (2TX)

Channel	Channel Frequency (MHz)	Maximum Peak Output Power						Result
		Chain 1	Chain 2	Total		Limit		
		(dBm)	(dBm)	(dBm)	(W)	(dBm)	(W)	
Low	2412	23.41	23.79	26.61	0.4581	30	1	PASS
Middle	2437	23.32	24.37	26.89	0.4887	30	1	PASS
High	2462	23.75	23.36	26.57	0.4539	30	1	PASS

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.*
3. *Total peak power = Chain 1 + Chain 2.*
4. *Array gain = 0 dB for NANT ≤ 4, power limit do not reduce.*

IEEE 802.11n HT40 Mode (2TX)

Channel	Channel Frequency (MHz)	Maximum Peak Output Power						Result
		Chain 1	Chain 2	Total		Limit		
		(dBm)	(dBm)	(dBm)	(W)	(dBm)	(W)	
Low	2422	21.40	21.40	24.41	0.2761	30	1	PASS
Middle	2437	23.93	23.24	26.61	0.4581	30	1	PASS
High	2452	21.31	21.33	24.33	0.2710	30	1	PASS

Remark:

1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.*
3. *Total peak power = Chain 1 + Chain 2.*
4. *Array gain = 0 dB for NANT ≤ 4, power limit do not reduce.*

7.4 AVERAGE POWER

LIMITS

None: For reporting purposes only.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Power Meter	Anritsu	ML2495A	1149001	12/08/2016
Power Sensor	Anritsu	MA2411B	1126148	12/08/2016
Test S/W	N/A			

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP

TEST PROCEDURE

The transmitter output is connected to the power meter. The power meter is set to the average power detection.

TEST RESULTS

Product Name	Indoor IP Camera	Test By	Waternil Guan
Test Model	CM01	Test Date	2016/02/02
Test mode	TX Mode	Temp. & Humidity	17°C, 66%

IEEE 802.11b Mode

Channel	Channel Frequency (MHz)	Average Power (dBm)	
		Chain 1	Chain 2
Low	2412	18.70	18.74
Middle	2437	18.86	18.50
High	2462	19.25	19.32

Remark:

1. *At finial test to get the worst-case emission at 1Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*

IEEE 802.11g Mode

Channel	Channel Frequency (MHz)	Average Power (dBm)	
		Chain 1	Chain 2
Low	2412	16.42	16.68
Middle	2437	17.63	17.75
High	2462	16.83	17.08

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*

IEEE 802.11n HT20 Mode

Channel	Channel Frequency (MHz)	Average Power (dBm)	
		Chain 1	Chain 2
Low	2412	15.42	15.39
Middle	2437	17.35	17.58
High	2462	15.90	15.72

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*

IEEE 802.11n HT40 Mode

Channel	Channel Frequency (MHz)	Average Power (dBm)	
		Chain 1	Chain 2
Low	2422	13.28	13.09
Middle	2437	17.38	17.14
High	2452	13.25	13.08

Remark:

1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*

7.5 POWER SPECTRAL DENSITY

LIMITS

§ 15.247(e) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/04/2016
Test S/W	N/A			

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP

TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer.
2. Set analyzer center frequency to DTS channel center frequency.
3. Set the span to 1.5 times the DTS channel bandwidth.
4. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
5. Set the VBW ≥ 3 x RBW.
6. Detector = peak.
7. Sweep time = auto couple.
8. Trace mode = max hold.
9. Allow trace to fully stabilize.
10. Use the peak marker function to determine the maximum amplitude level within the RBW.
11. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST RESULTS

Product Name	Indoor IP Camera	Test By	Waternil Guan
Test Model	CM01	Test Date	2016/02/02
Test mode	TX Mode	Temp. & Humidity	17°C, 66%

IEEE 802.11b Mode (2TX)

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)				Result
		Chain 1	Chain 2	Total	Limit	
Low	2412	4.28	2.91	6.66	8	PASS
Middle	2437	3.14	4.14	6.68	8	PASS
High	2462	2.85	4.68	6.87	8	PASS

Remark:

1. *At finial test to get the worst-case emission at 1Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*
3. *Total power spectral density = Chain 1 + Chain 2.*
4. *The maximum antenna gain is 5.55 dBi which is less than 6dBi, the limit should be 8dBm.*

IEEE 802.11g Mode (2TX)

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)				Result
		Chain 1	Chain 2	Total	Limit	
Low	2412	-9.81	-9.51	-6.65	8	PASS
Middle	2437	-9.48	-9.40	-6.43	8	PASS
High	2462	-10.03	-9.08	-6.52	8	PASS

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*
3. *Total power spectral density = Chain 1 + Chain 2.*
4. *The maximum antenna gain is 5.55 dBi which is less than 6dBi, the limit should be 8dBm.*

IEEE 802.11n HT20 Mode (2TX)

Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)				Result
		Chain 1	Chain 2	Total	Limit	
Low	2412	-11.64	-11.58	-8.60	8	PASS
Middle	2437	-9.66	-9.49	-6.56	8	PASS
High	2462	-11.82	-10.75	-8.24	8	PASS

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*
3. *Total power spectral density = Chain 1 + Chain 2.*
4. *The maximum antenna gain is 5.55 dBi which is less than 6dBi, the limit should be 8dBm.*

IEEE 802.11n HT40 Mode (2TX)

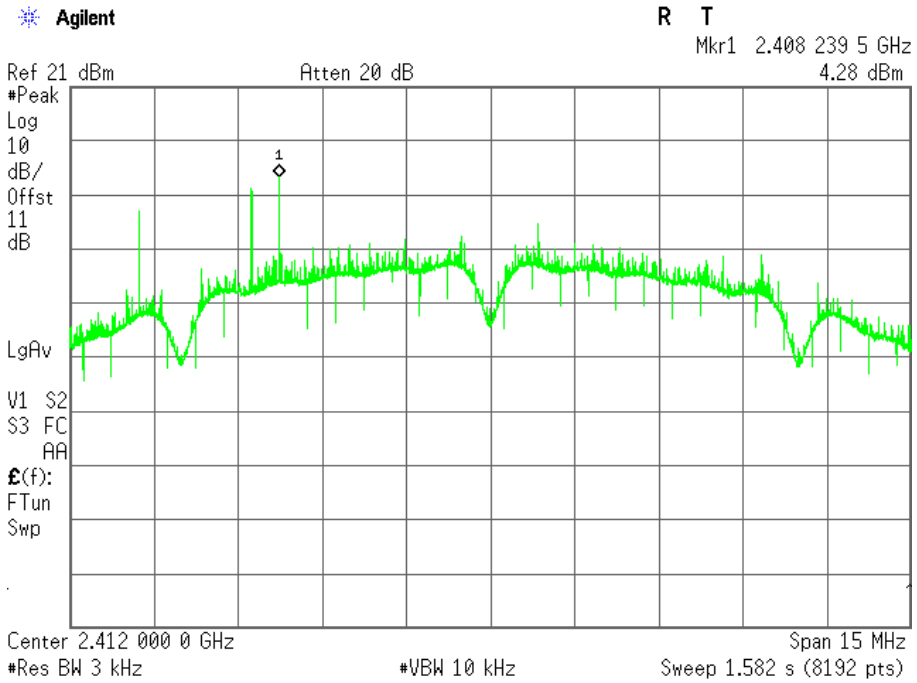
Channel	Channel Frequency (MHz)	Final RF Power Level in 3KHz BW (dBm)				Result
		Chain 1	Chain 2	Total	Limit	
Low	2422	-16.87	-16.65	-13.75	8	PASS
Middle	2437	-13.03	-11.69	-9.30	8	PASS
High	2452	-14.83	-17.17	-12.83	8	PASS

Remark:

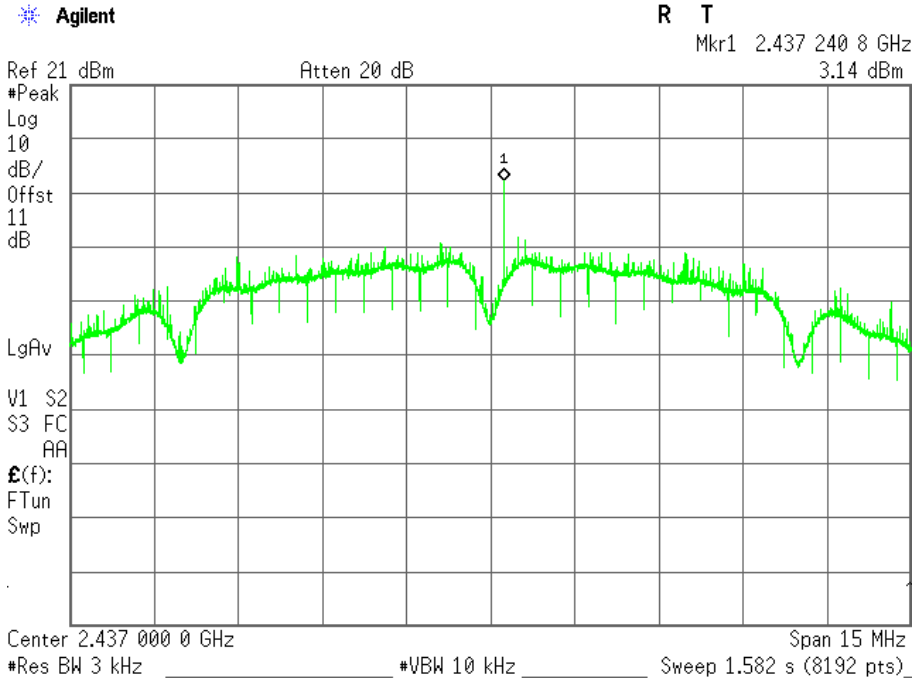
1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the spectrum analyzer to allow for direct reading of power.*
3. *Total power spectral density = Chain 1 + Chain 2.*
4. *The maximum antenna gain is 5.55 dBi which is less than 6dBi, the limit should be 8dBm.*

POWER SPECTRAL DENSITY

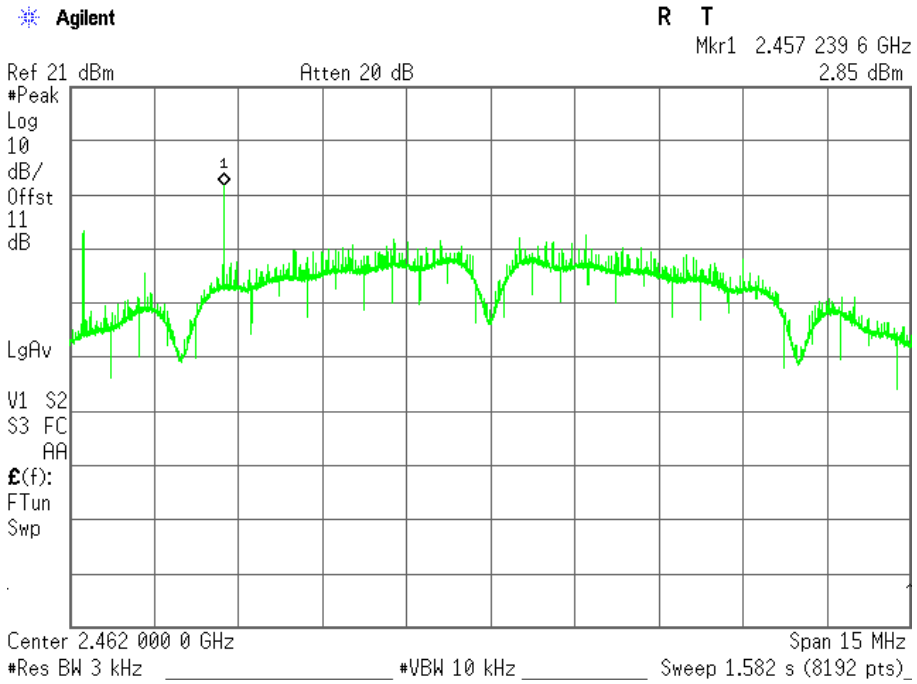
CH Low (IEEE 802.11b Mode / Chain 1)



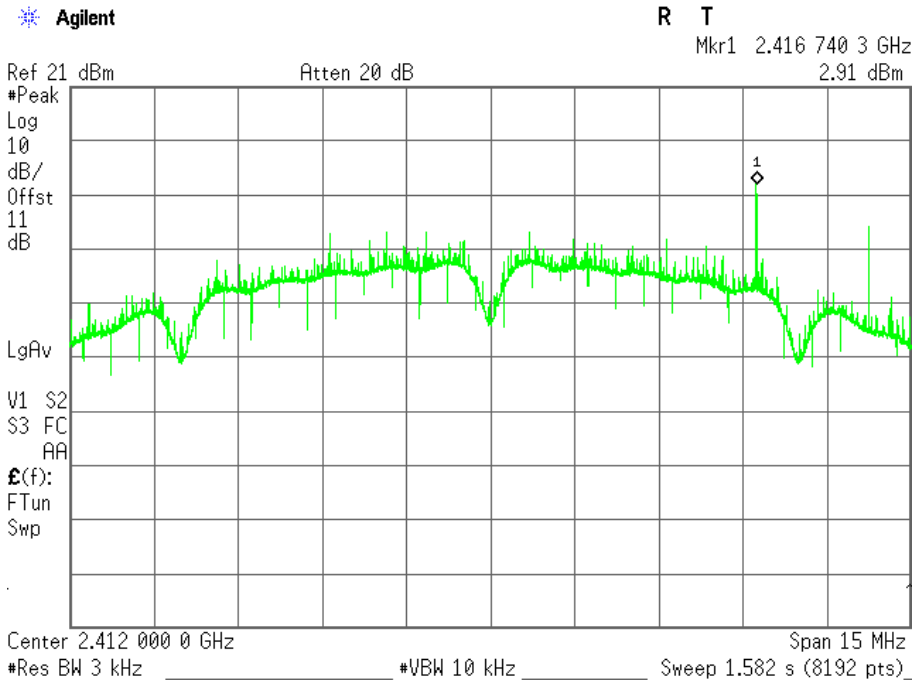
CH Middle (IEEE 802.11b Mode / Chain 1)



CH High (IEEE 802.11b Mode / Chain 1)



CH Low (IEEE 802.11b Mode / Chain 2)



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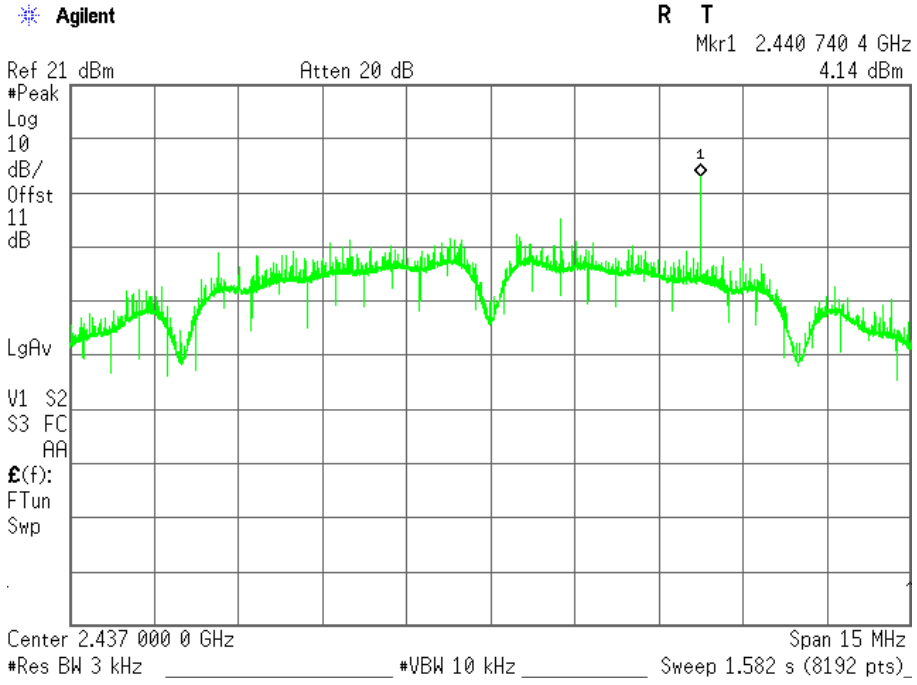
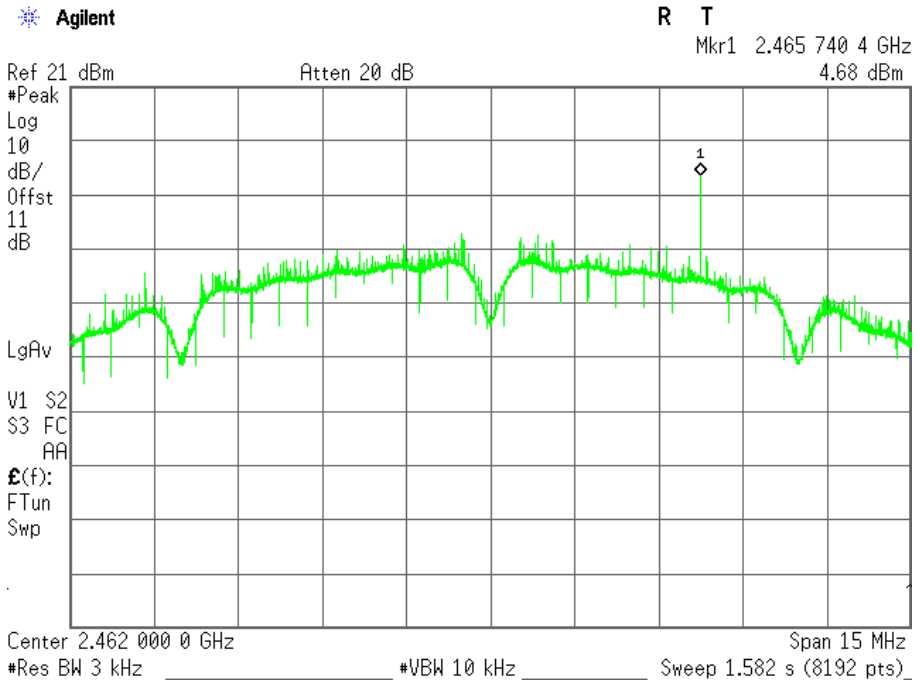
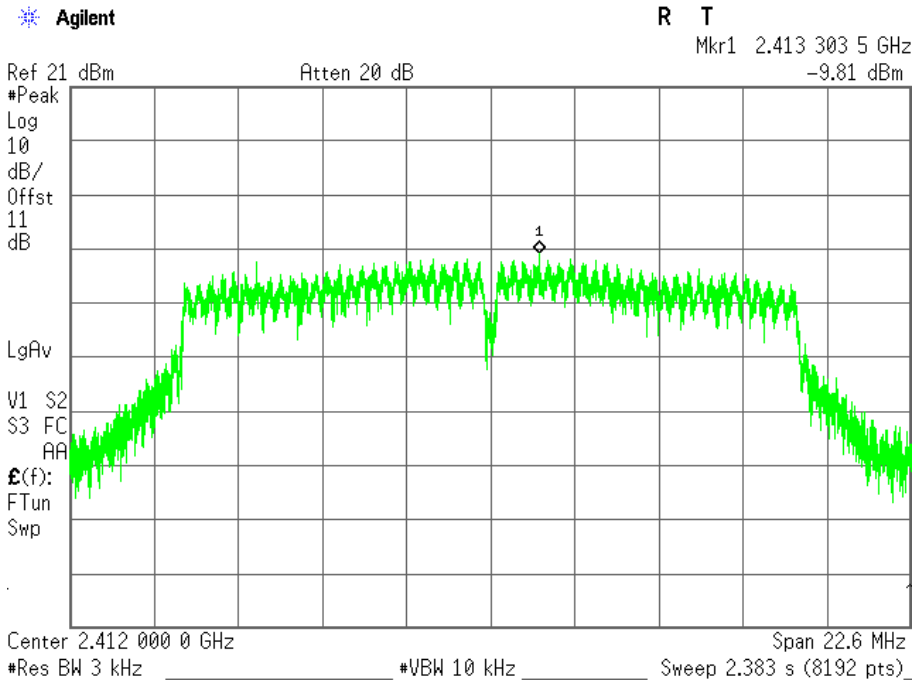


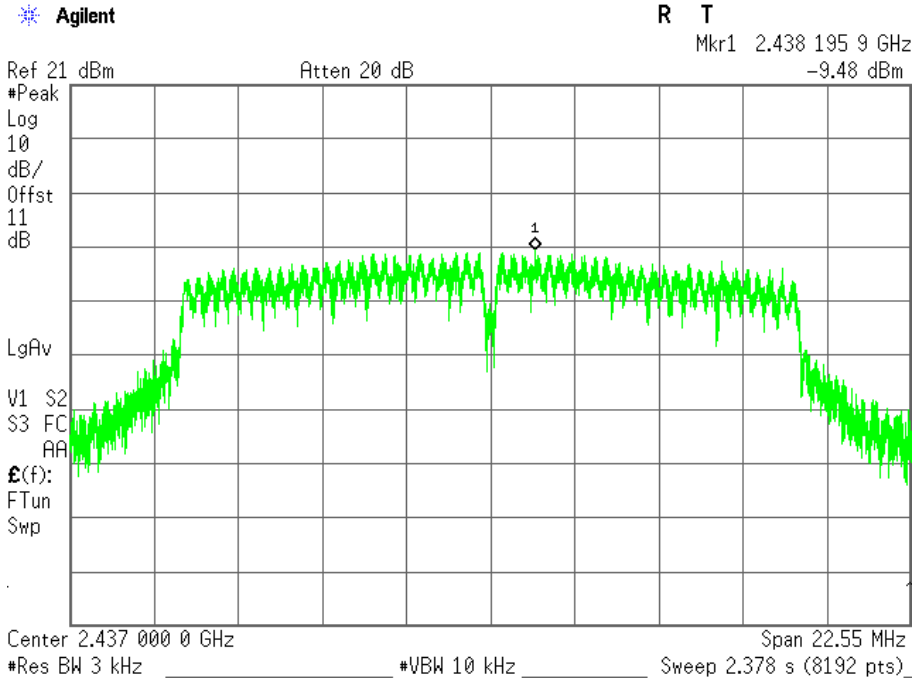
CH High (IEEE 802.11b Mode / Chain 2)



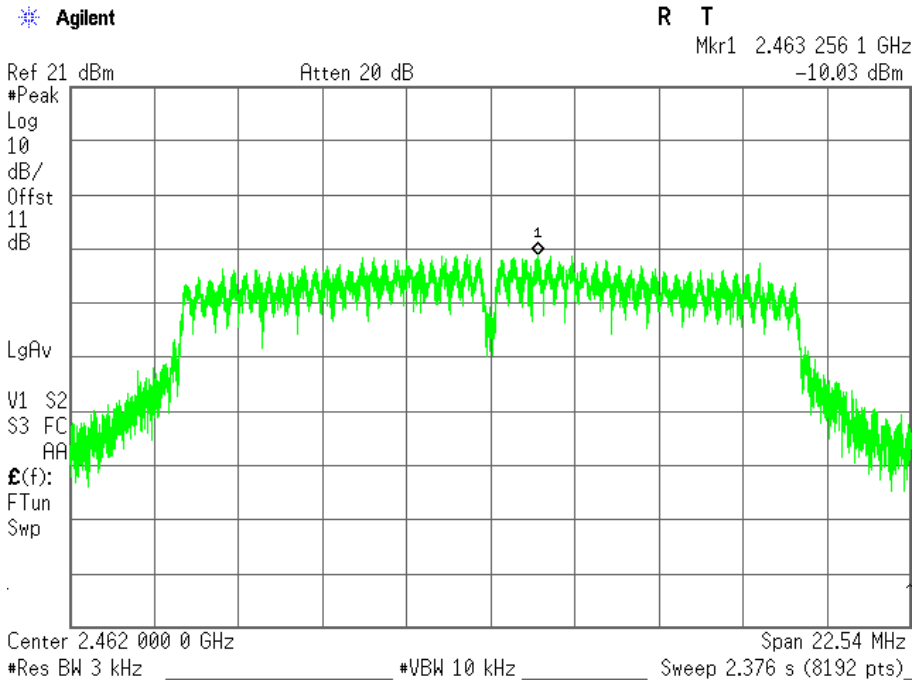
CH Low (IEEE 802.11g Mode / Chain 1)



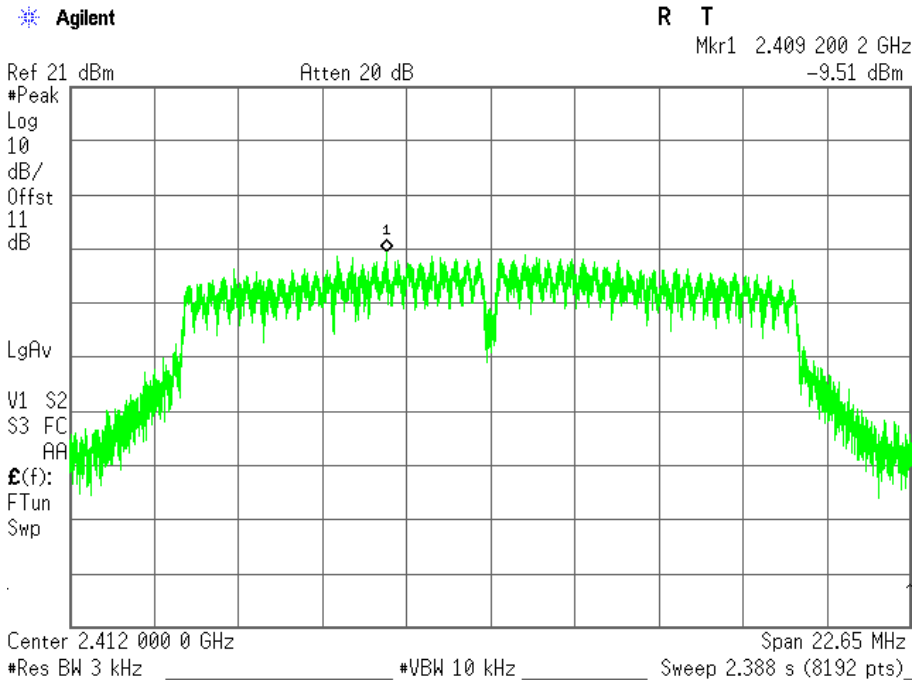
CH Middle (IEEE 802.11g Mode / Chain 1)



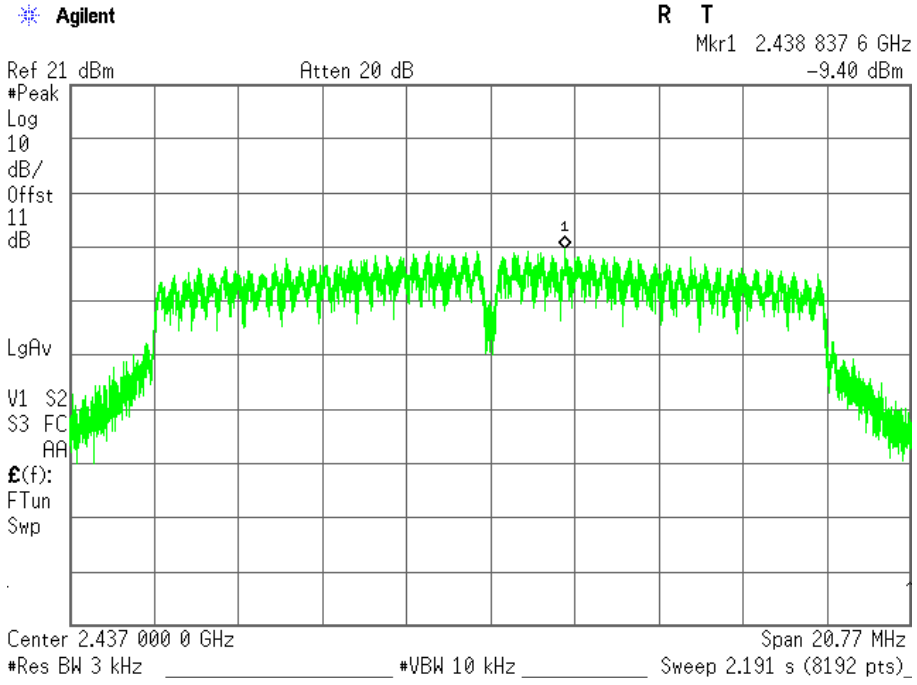
CH High (IEEE 802.11g Mode / Chain 1)



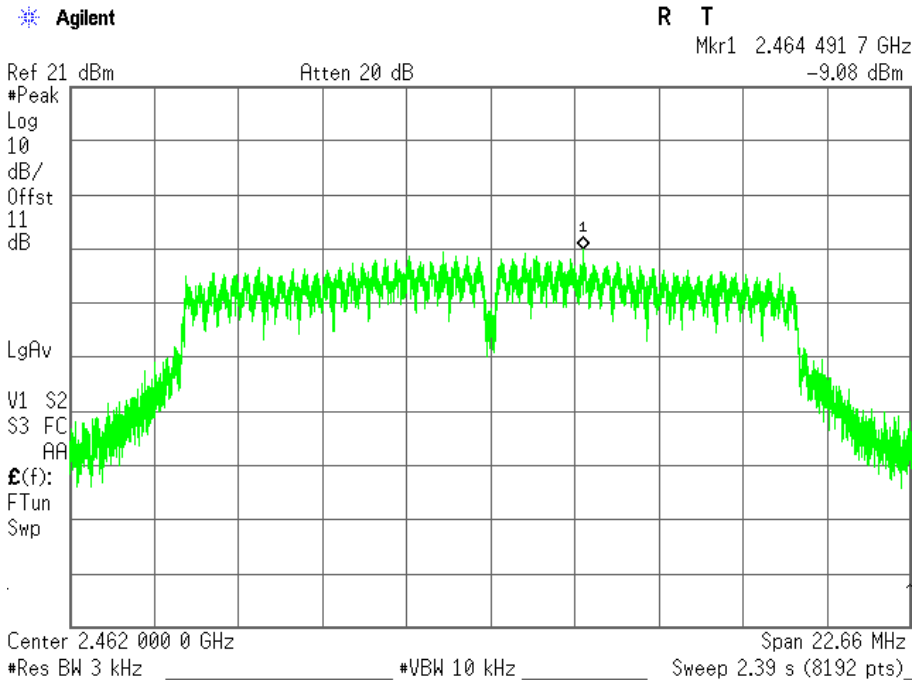
CH Low (IEEE 802.11g Mode /Chain 2)



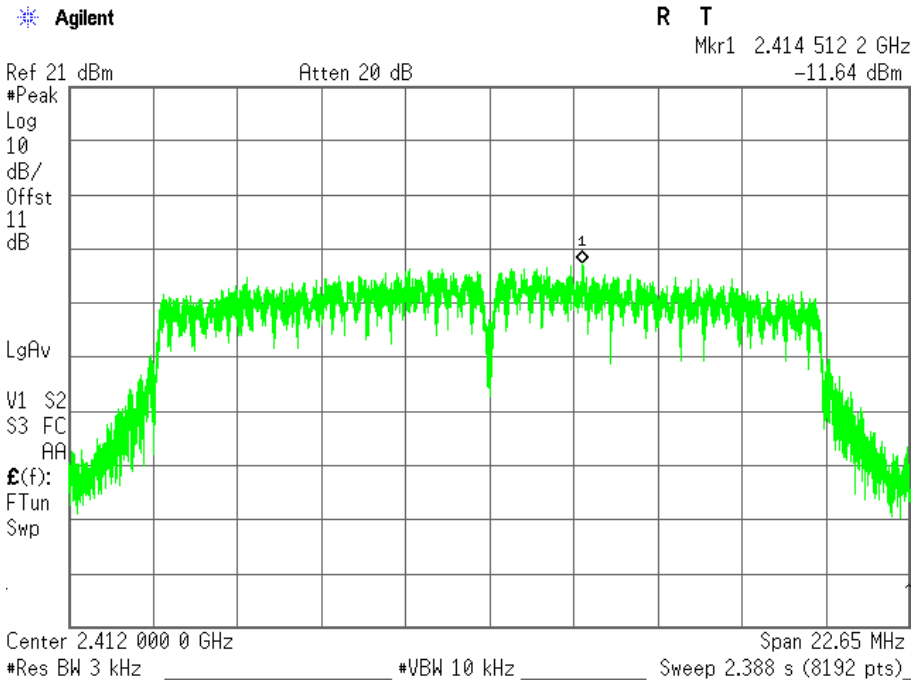
CH Middle (IEEE 802.11g Mode / Chain 2)



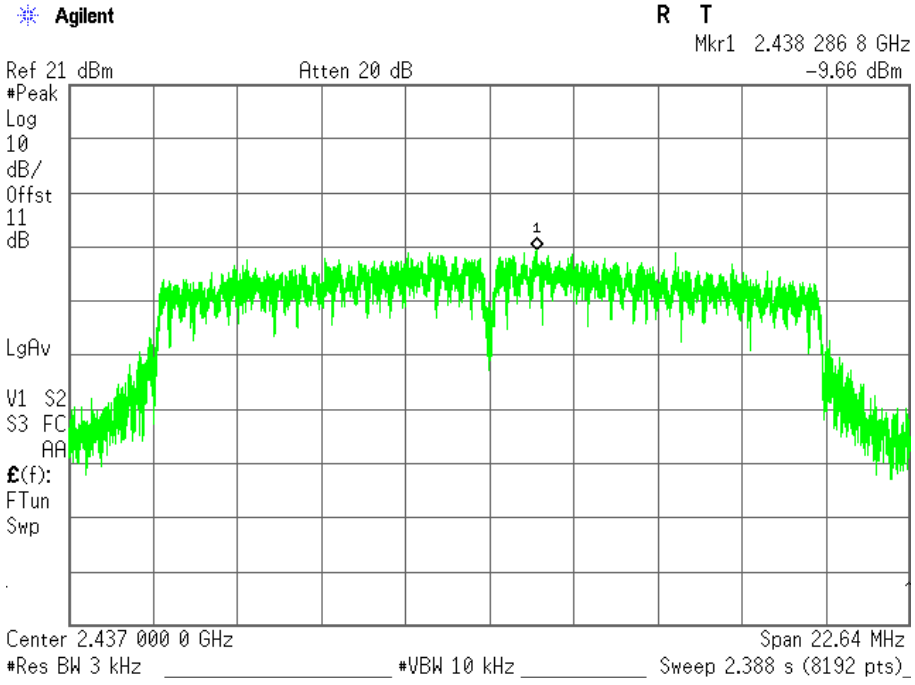
CH High (IEEE 802.11g Mode / Chain 2)



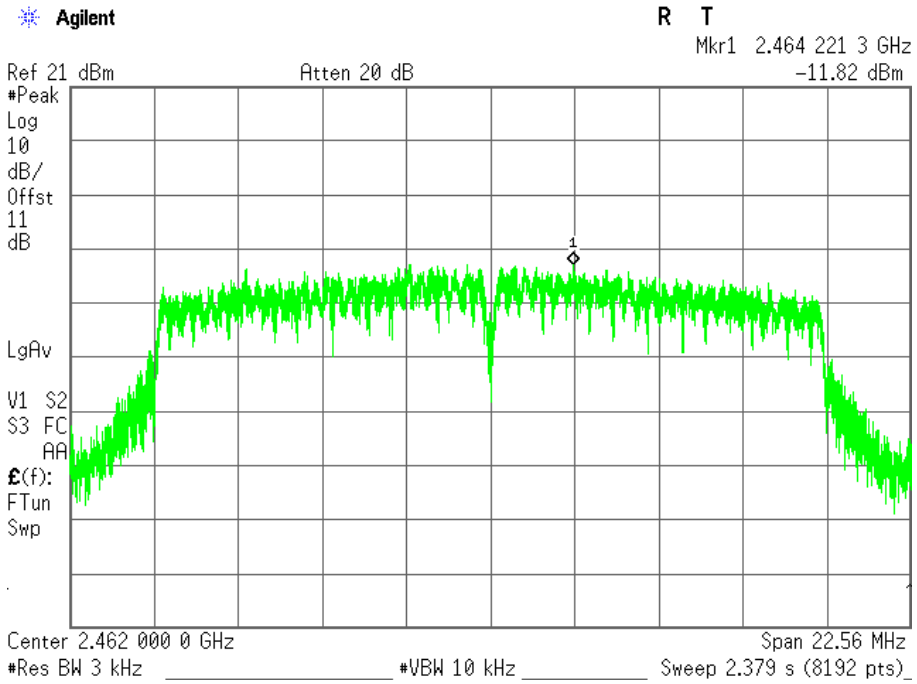
CH Low (IEEE 802.11n HT20 Mode / Chain 1)



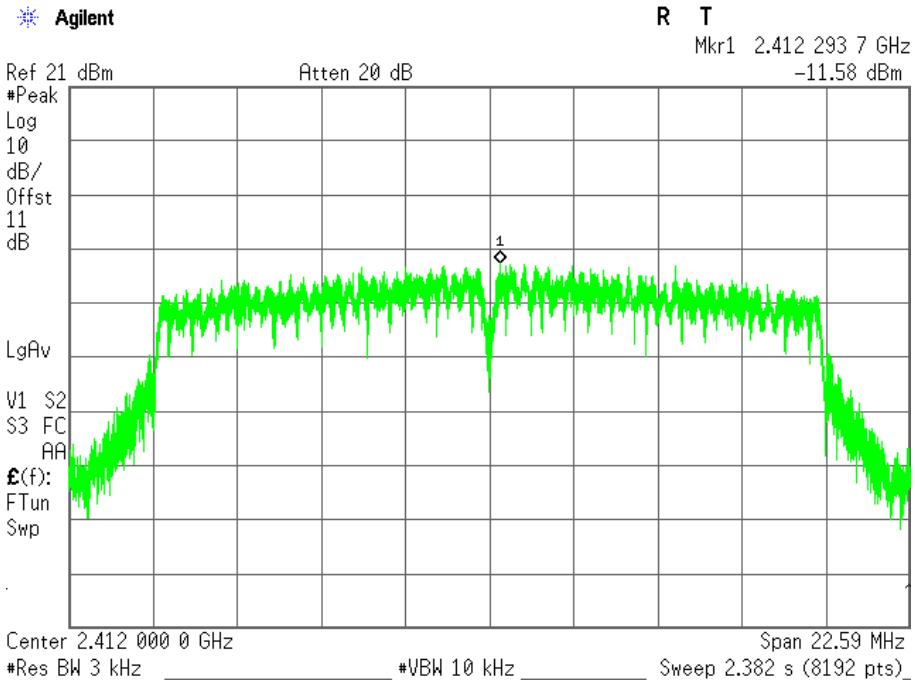
CH Middle (IEEE 802.11n HT20 Mode / Chain 1)



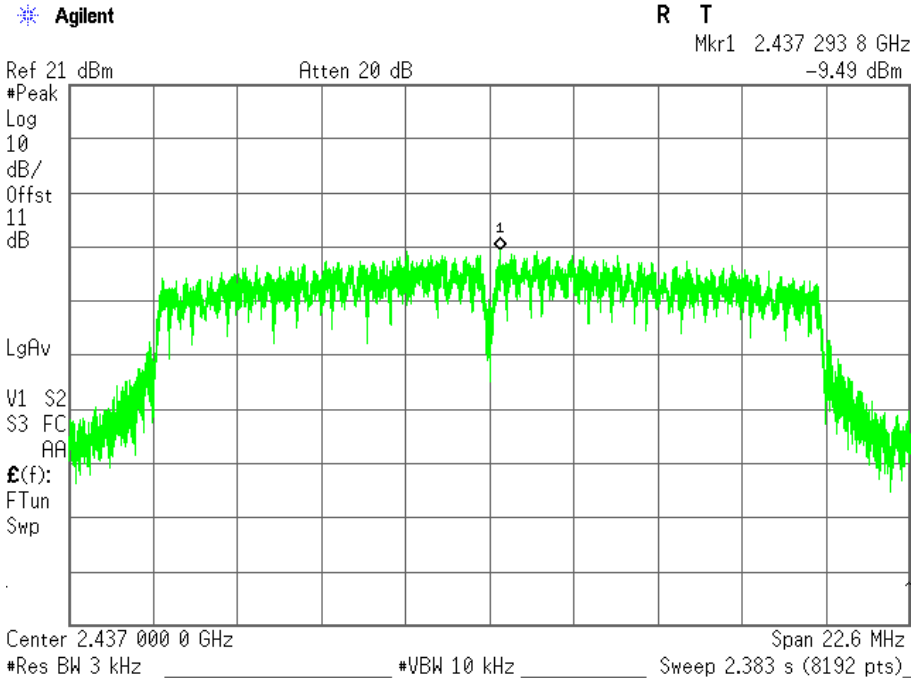
CH High (IEEE 802.11n HT20 Mode / Chain 1)



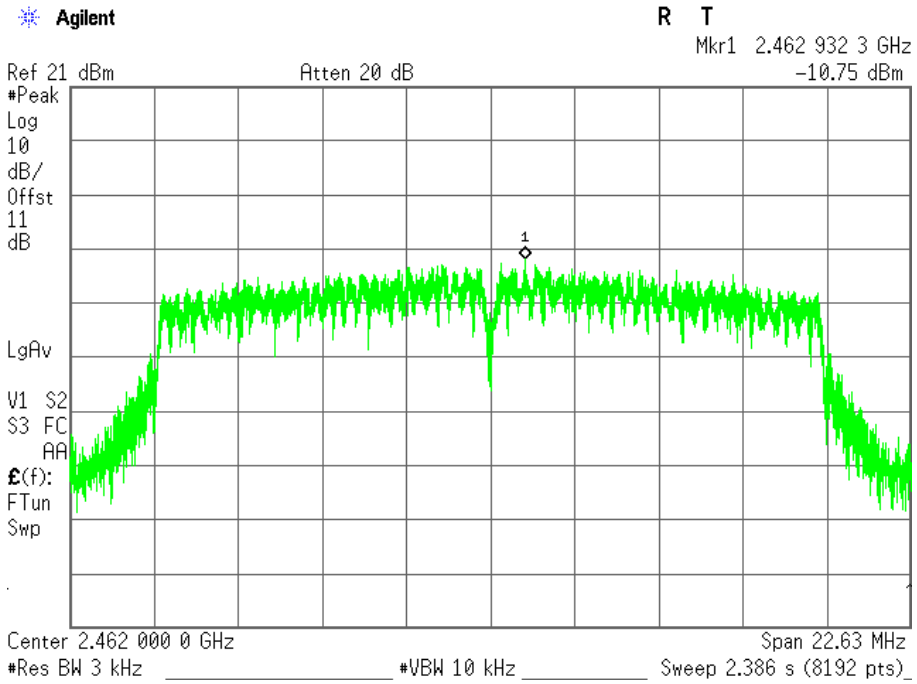
CH Low (IEEE 802.11n HT20 Mode / Chain 2)



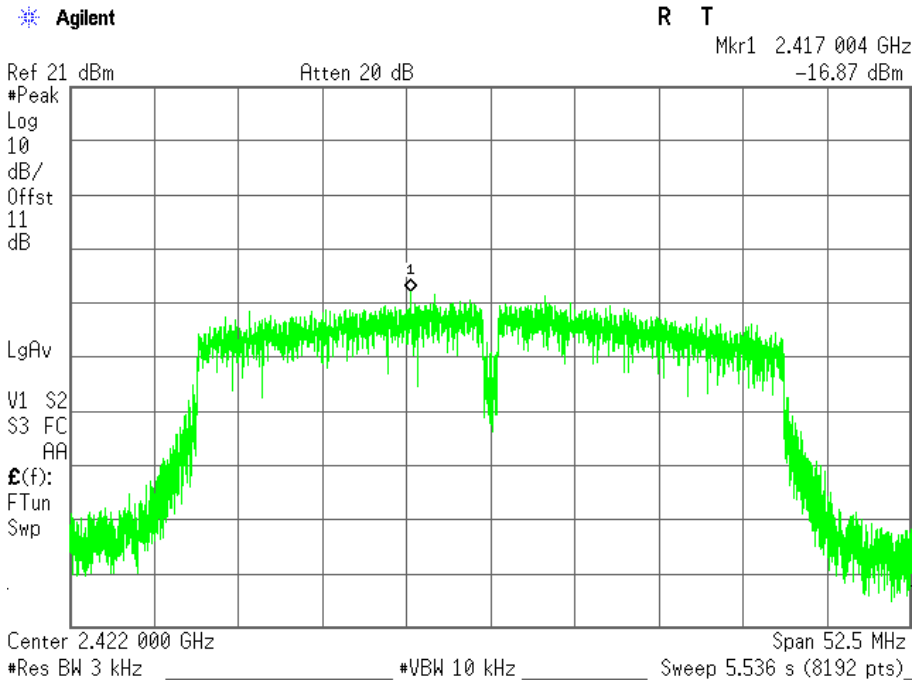
CH Middle (IEEE 802.11n HT20 Mode / Chain 2)



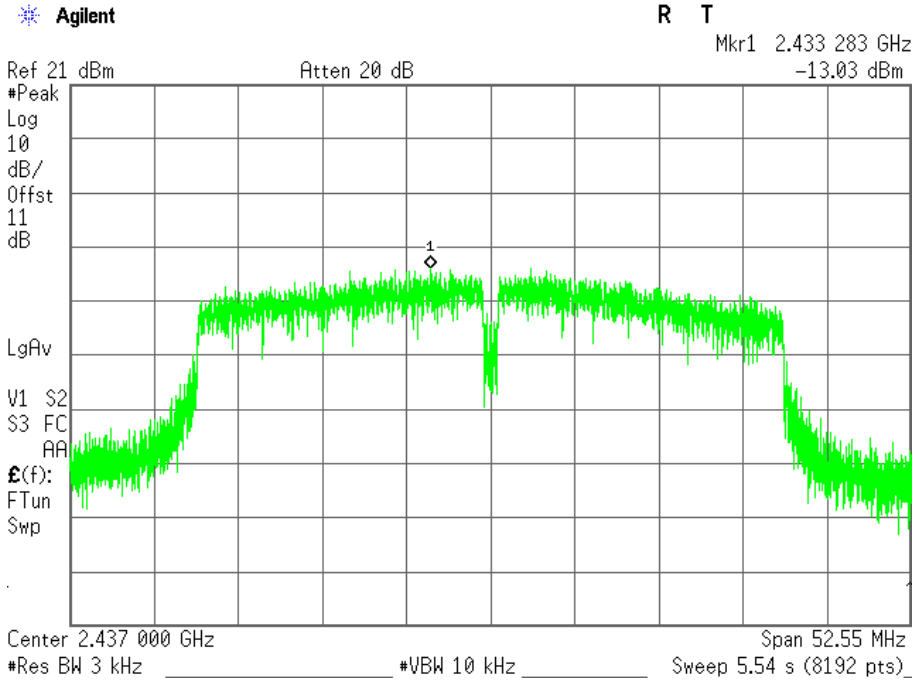
CH High (IEEE 802.11n HT20 Mode / Chain 2)



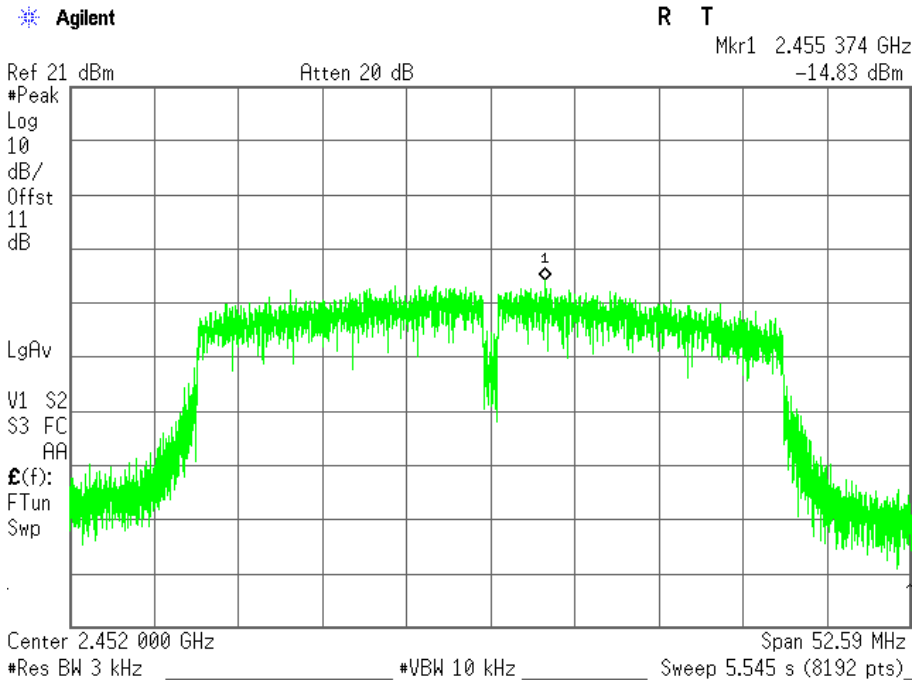
CH Low (IEEE 802.11n HT40 Mode / Chain 1)



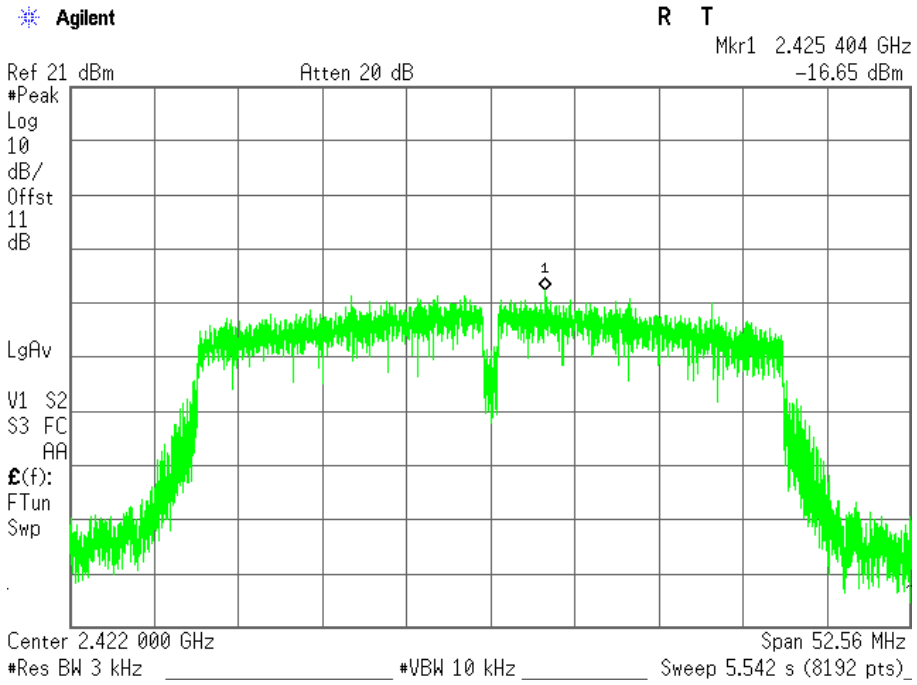
CH Middle (IEEE 802.11n HT40 Mode / Chain 1)



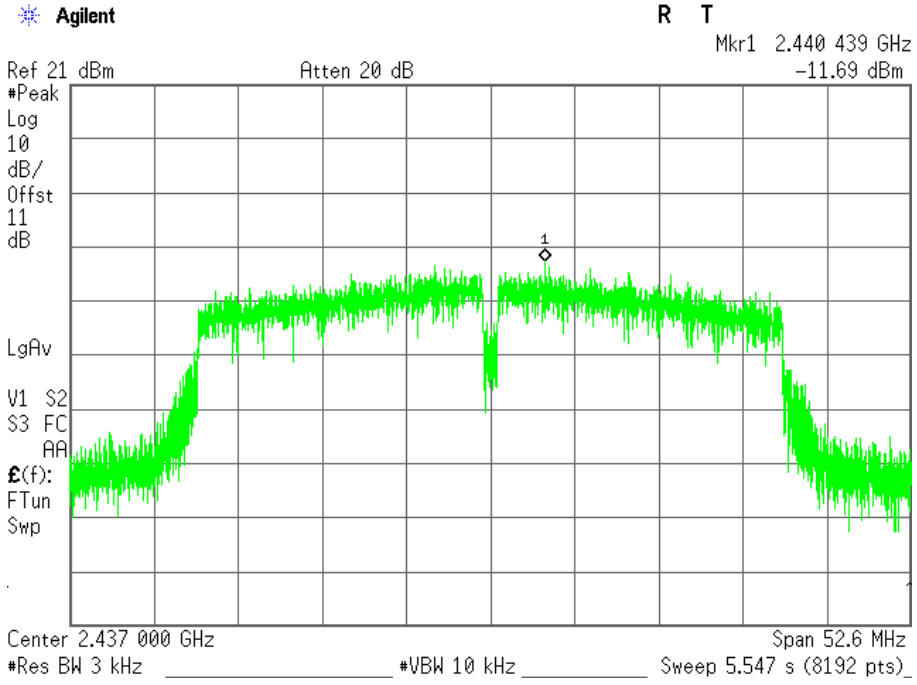
CH High (IEEE 802.11n HT40 Mode / Chain 1)



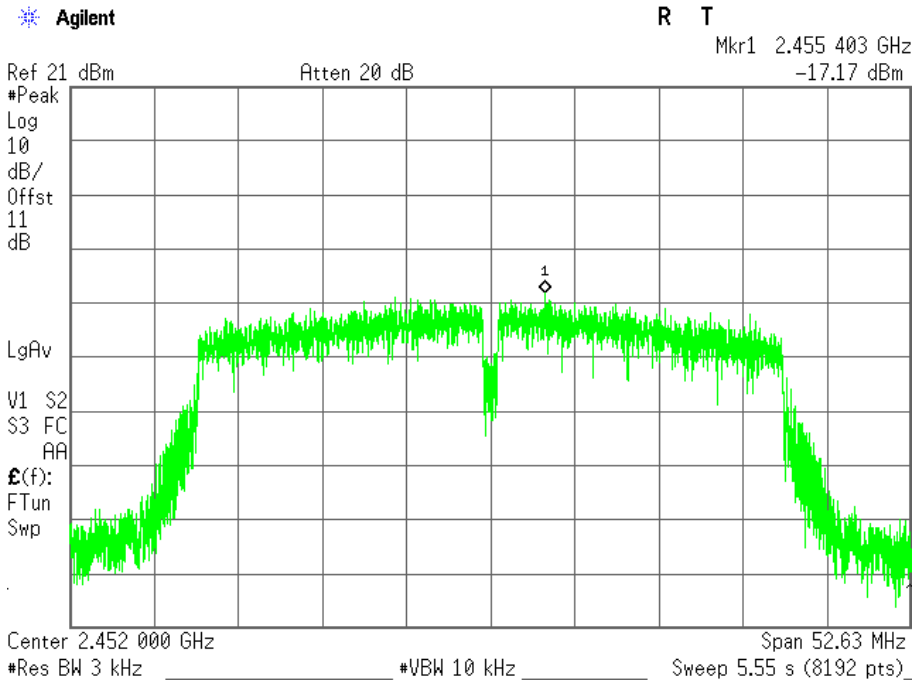
CH Low (IEEE 802.11n HT40 Mode / Chain 2)



CH Middle (IEEE 802.11n HT40 Mode / Chain 2)



CH High (IEEE 802.11n HT40 Mode / Chain 2)



7.6 CONDUCTED SPURIOUS EMISSION

LIMITS

§ 15.247(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the and that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/04/2016
Test S/W	N/A			

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP

TEST PROCEDURE

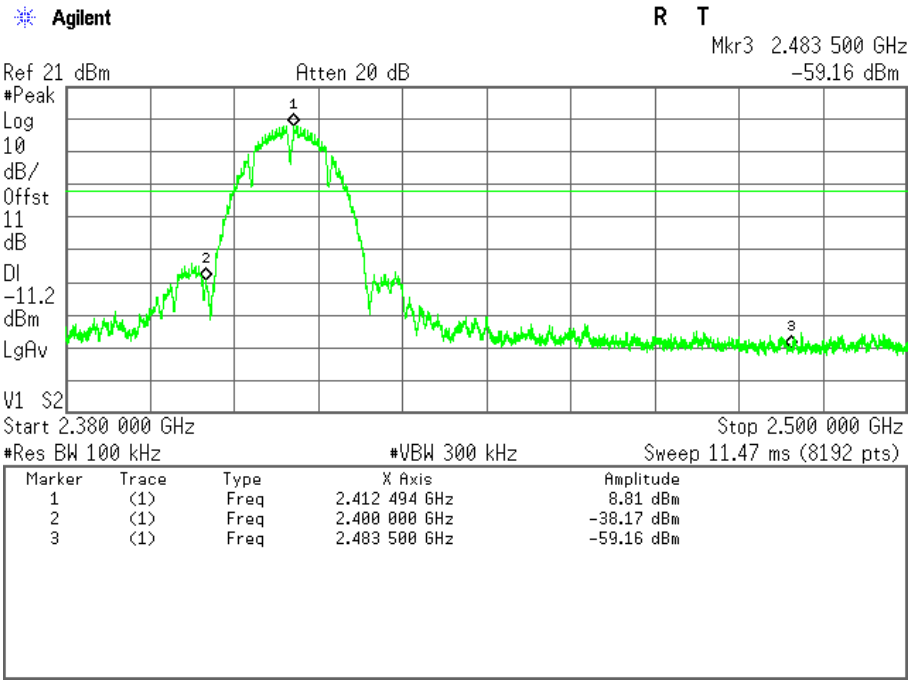
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.
The spectrum from 30 MHz to 26.5 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

TEST RESULTS

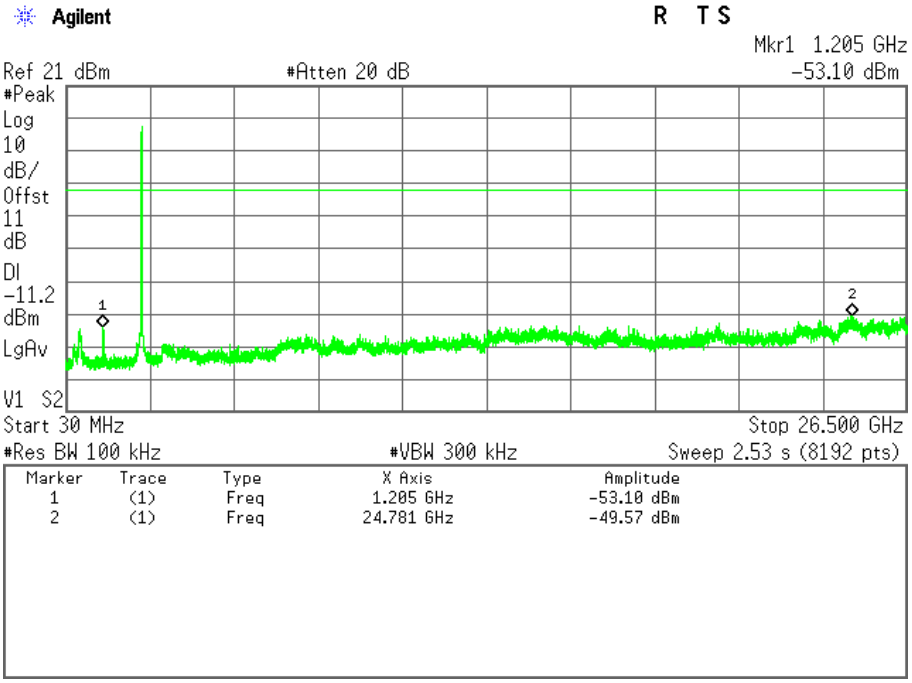
Product Name	Indoor IP Camera	Test By	Waternil Guan
Test Model	CM01	Test Date	2016/02/02
Test mode	TX Mode	Temp. & Humidity	17°C, 66%

OUT-OF-BAND SPURIOUS EMISSIONS-CONDUCTED MEASUREMENT

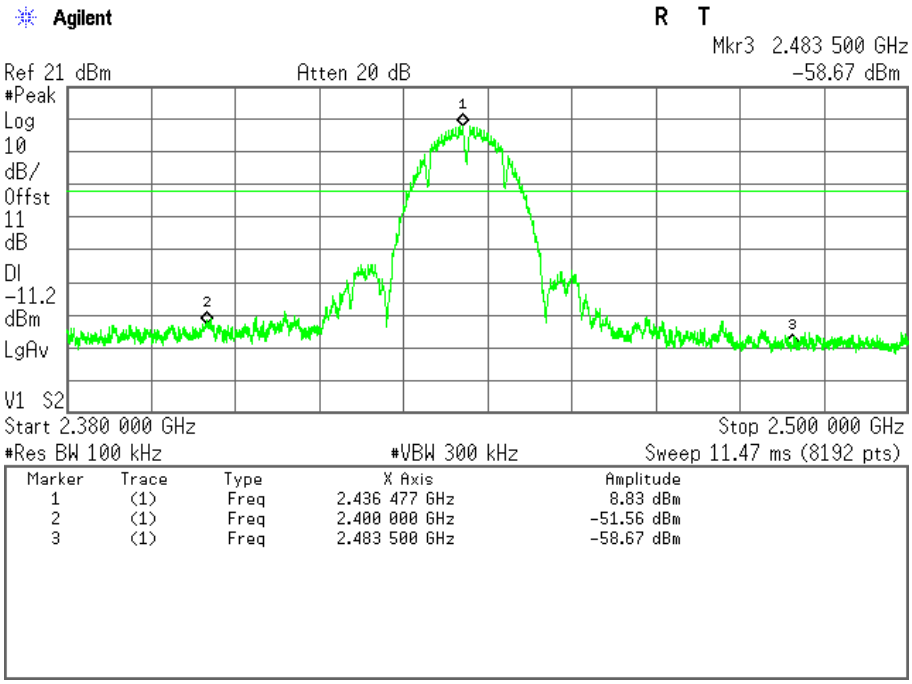
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11b Mode / Chain 1)



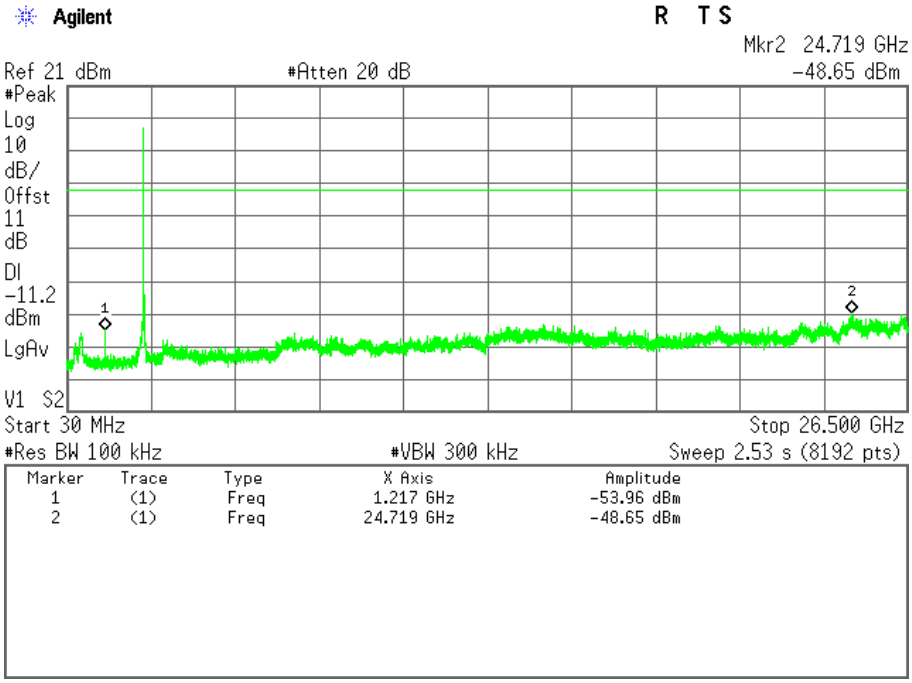
CH Low (30MHz ~ 26.5GHz / IEEE 802.11b Mode / Chain 1)



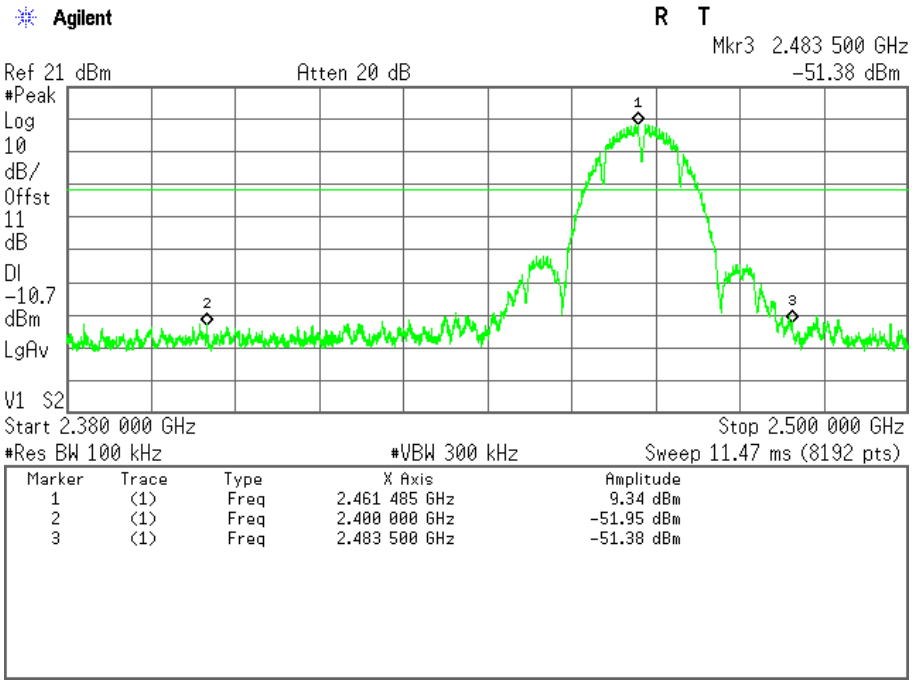
CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11b Mode / Chain 1)



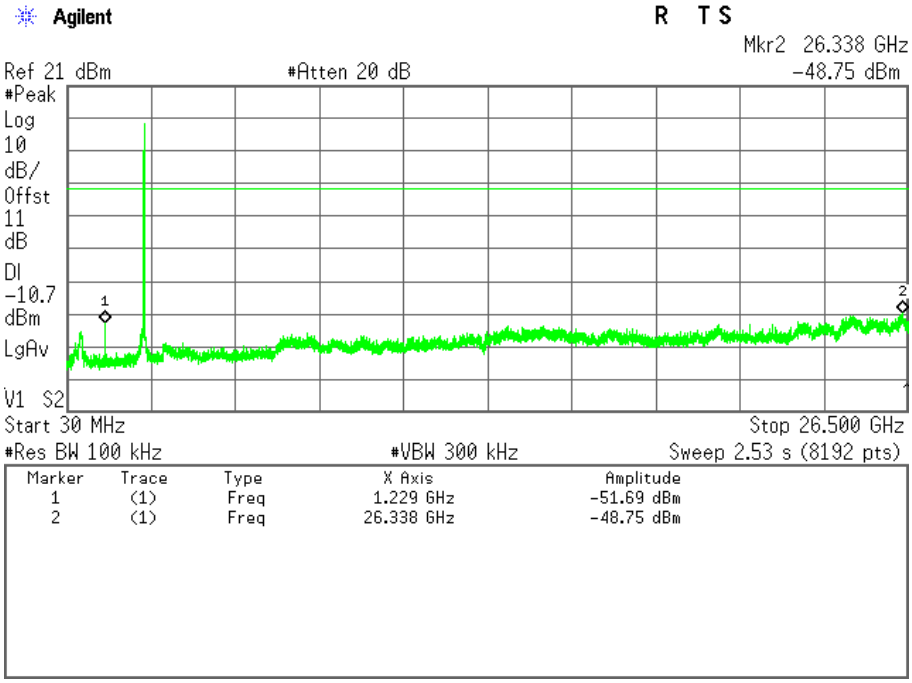
CH Middle (30MHz ~ 26.5GHz / IEEE 802.11b Mode / Chain 1)



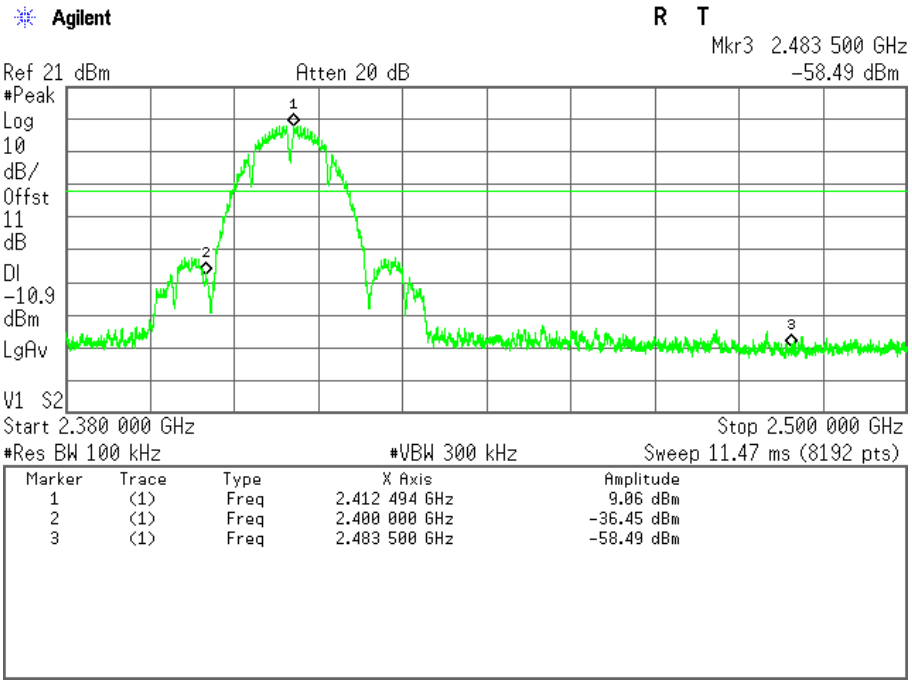
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11b Mode / Chain 1)



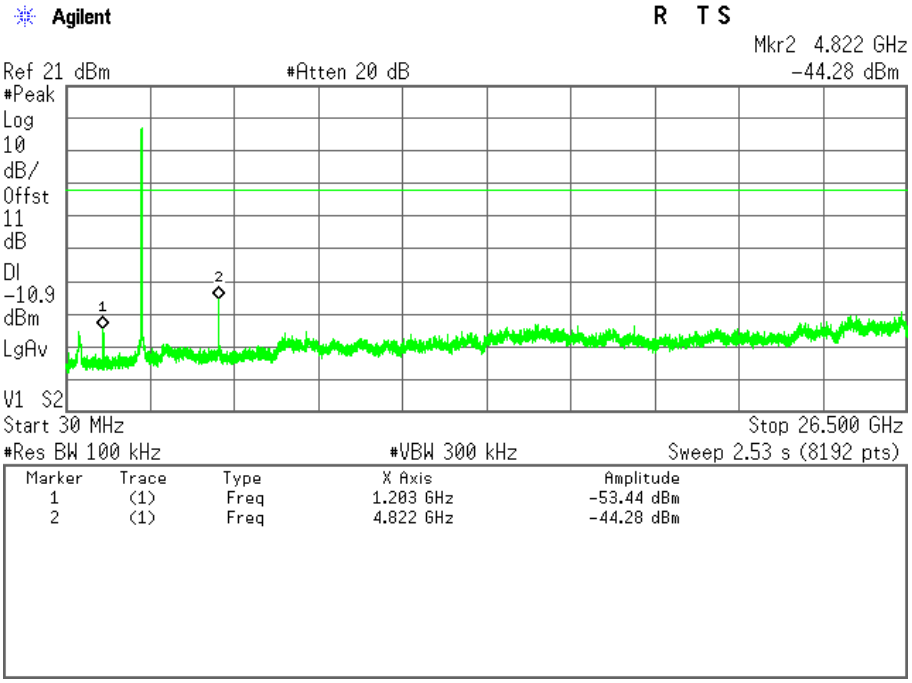
CH High (30MHz ~ 26.5GHz / IEEE 802.11b Mode / Chain 1)



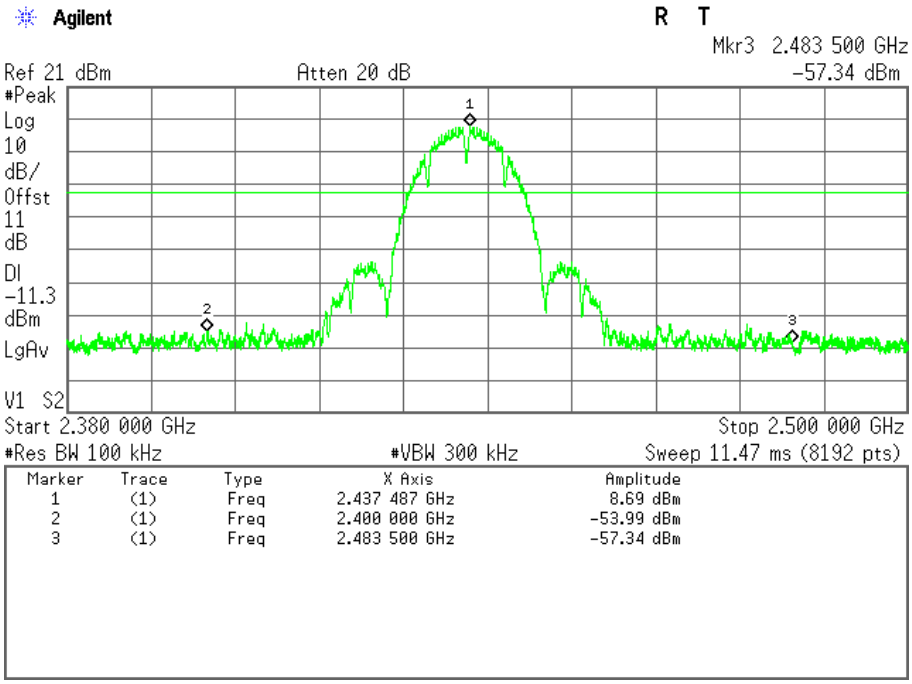
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11b Mode / Chain 2)



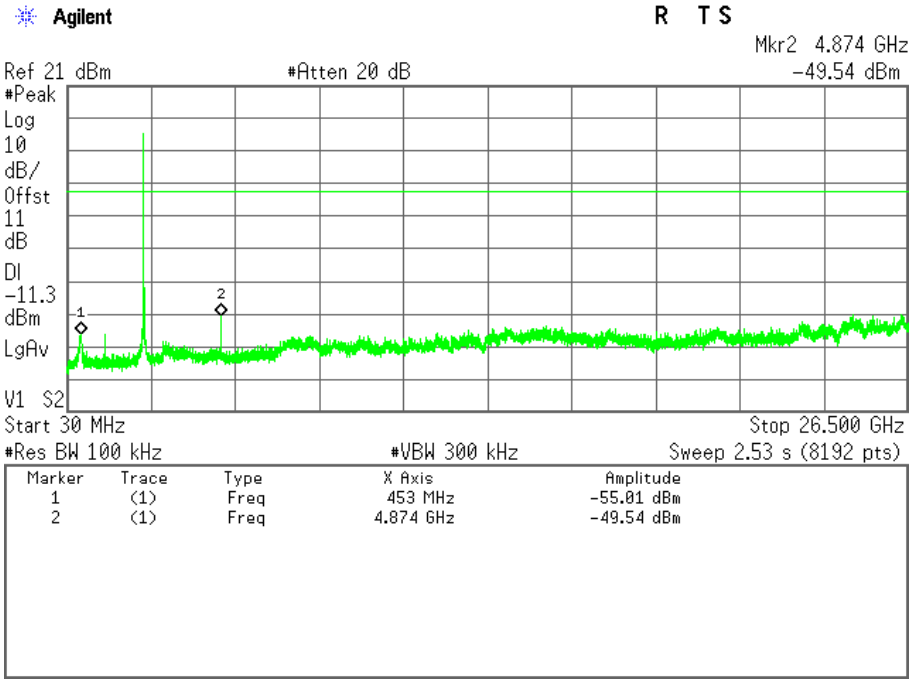
CH Low (30MHz ~ 26.5GHz / IEEE 802.11b Mode / Chain 2)



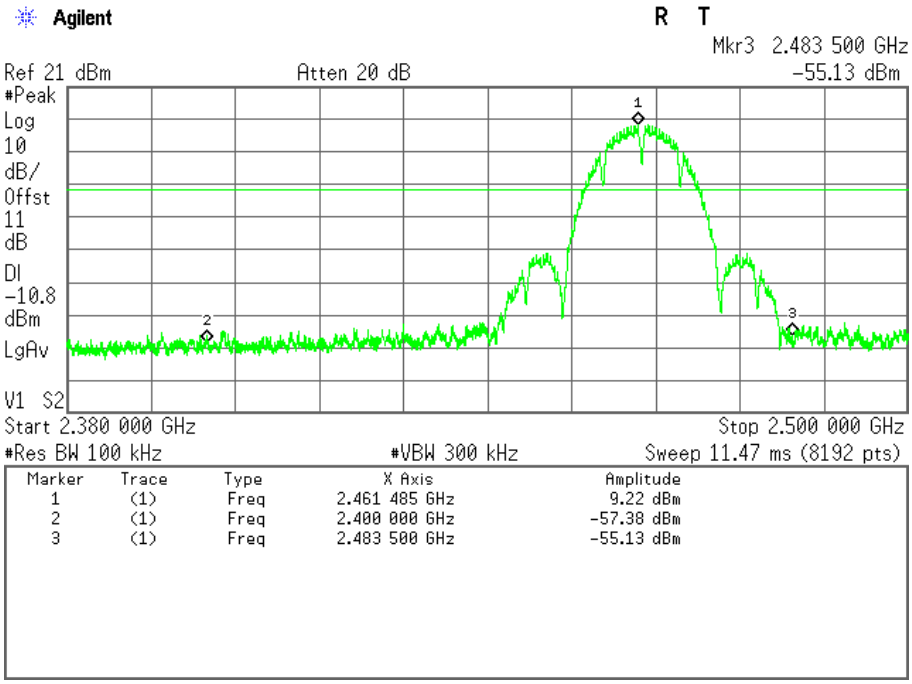
CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11b Mode / Chain 2)



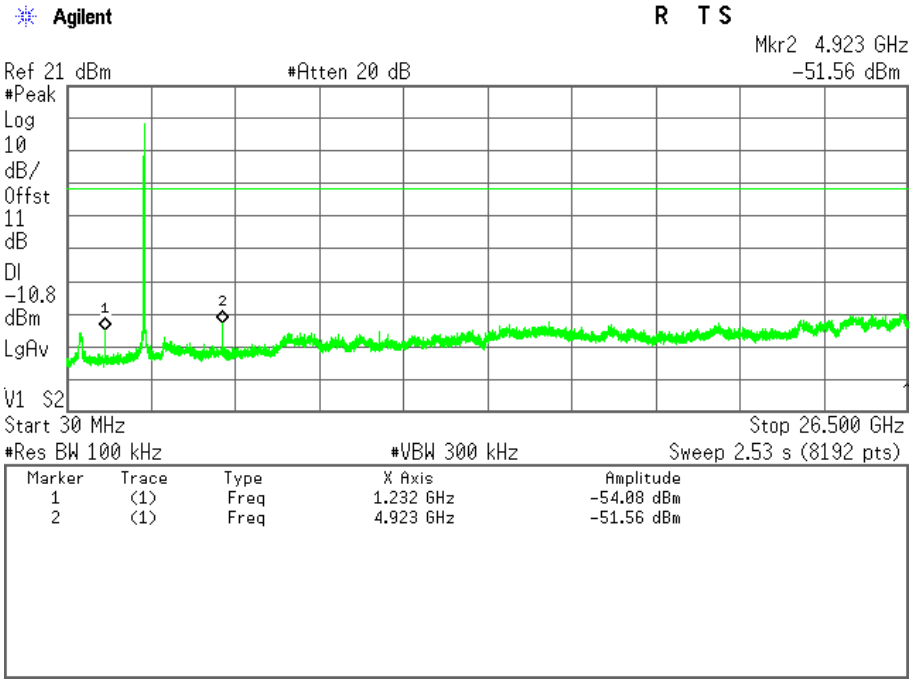
CH Middle (30MHz ~ 26.5GHz / IEEE 802.11b Mode / Chain 2)



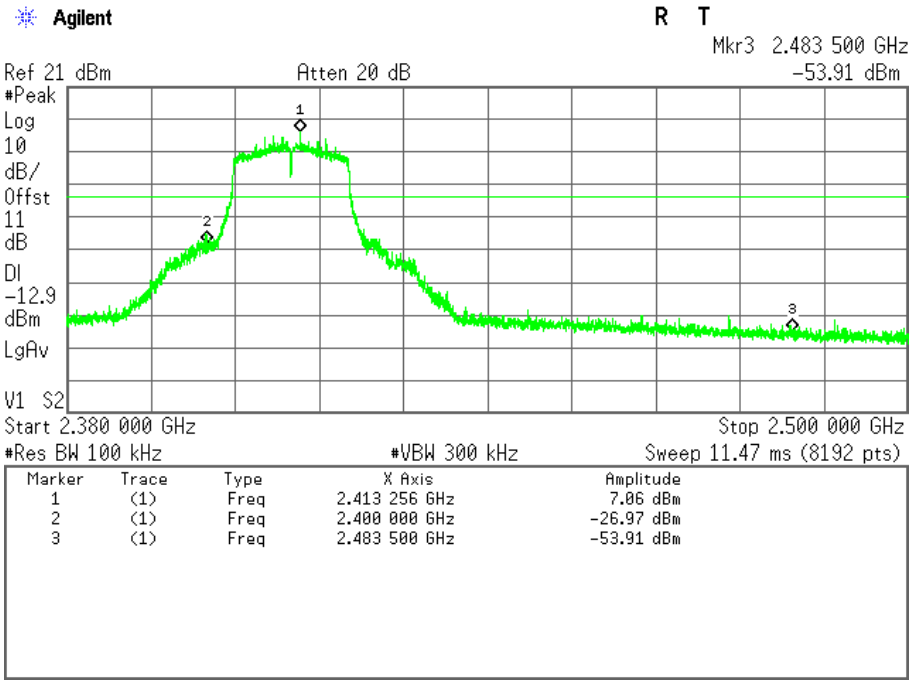
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11b Mode / Chain 2)



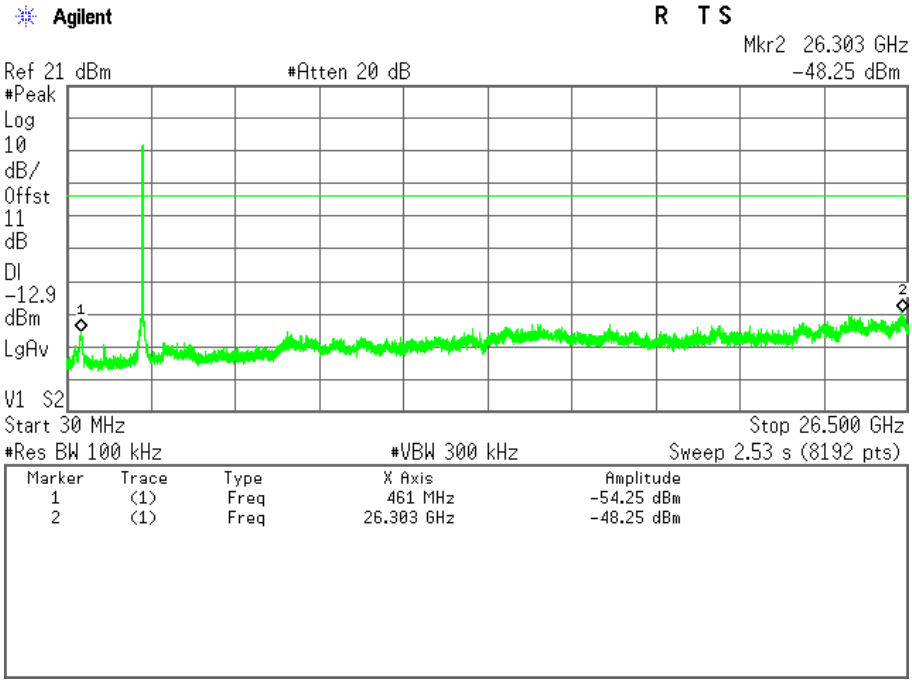
CH High (30MHz ~ 26.5GHz / IEEE 802.11b Mode / Chain 2)



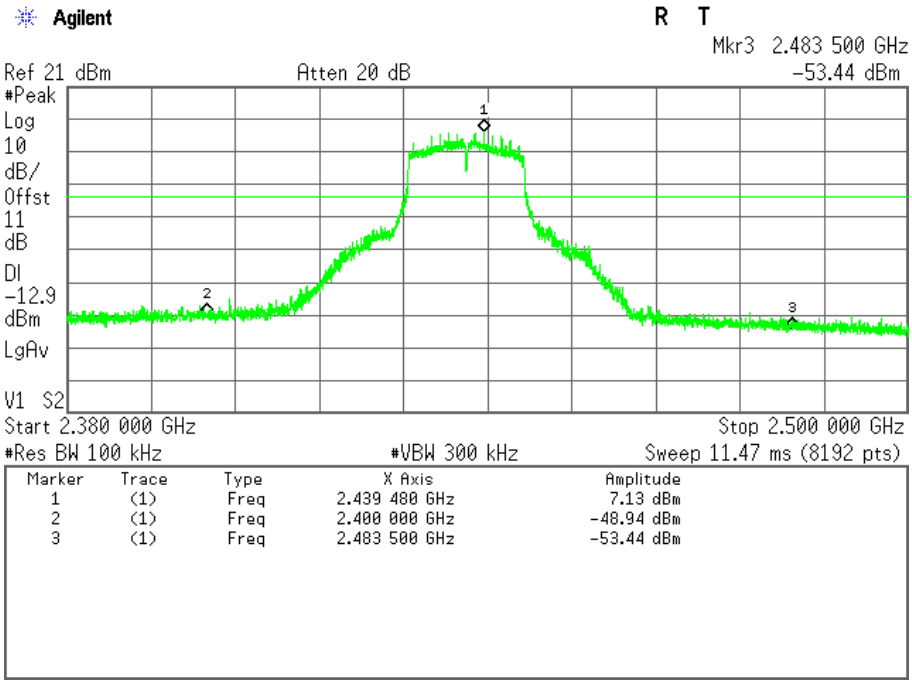
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11g Mode / Chain 1)



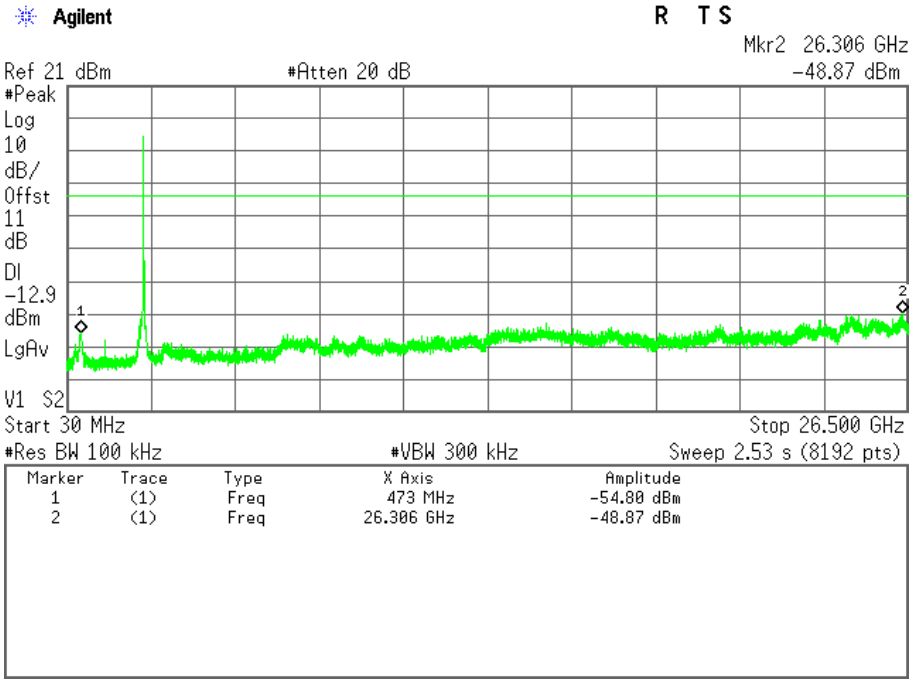
CH Low (30MHz ~ 26.5GHz / IEEE 802.11g Mode / Chain 1)



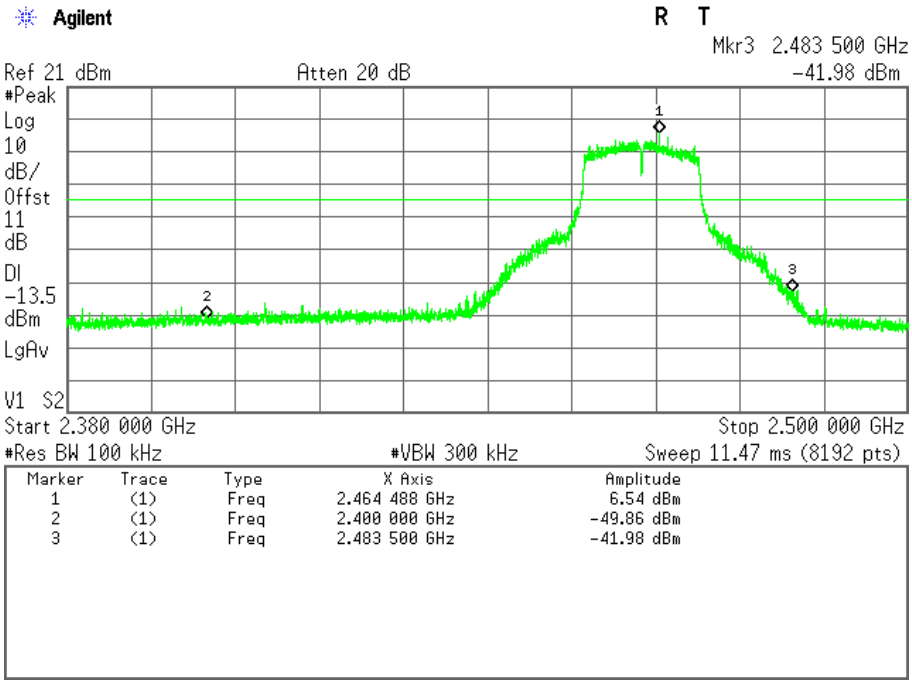
CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11g Mode / Chain 1)



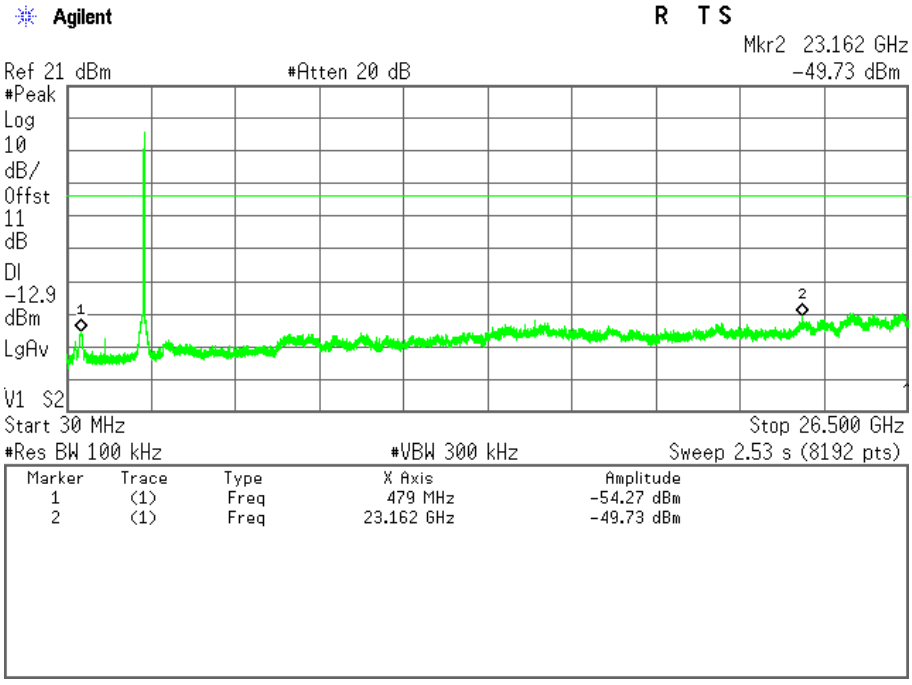
CH Middle (30MHz ~ 26.5GHz / IEEE 802.11g Mode / Chain 1)



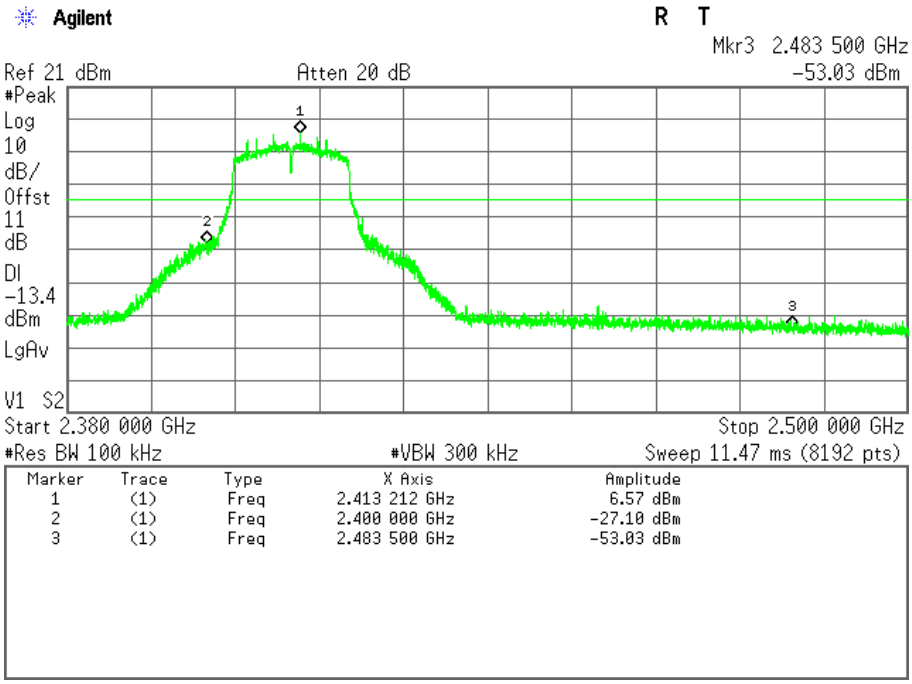
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11g Mode / Chain 1)



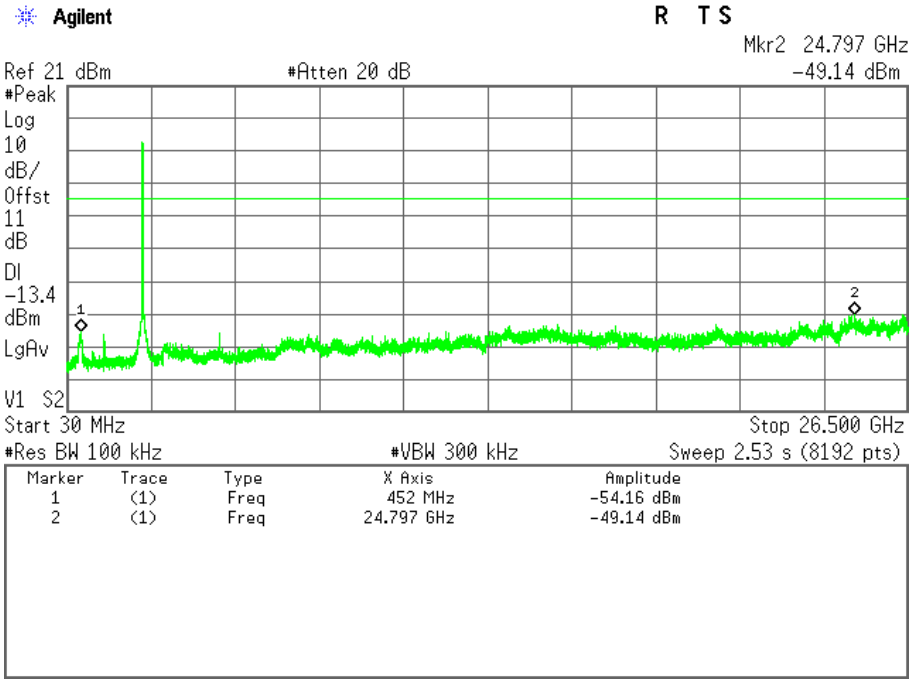
CH High (30MHz ~ 26.5GHz / IEEE 802.11g Mode / Chain 1)



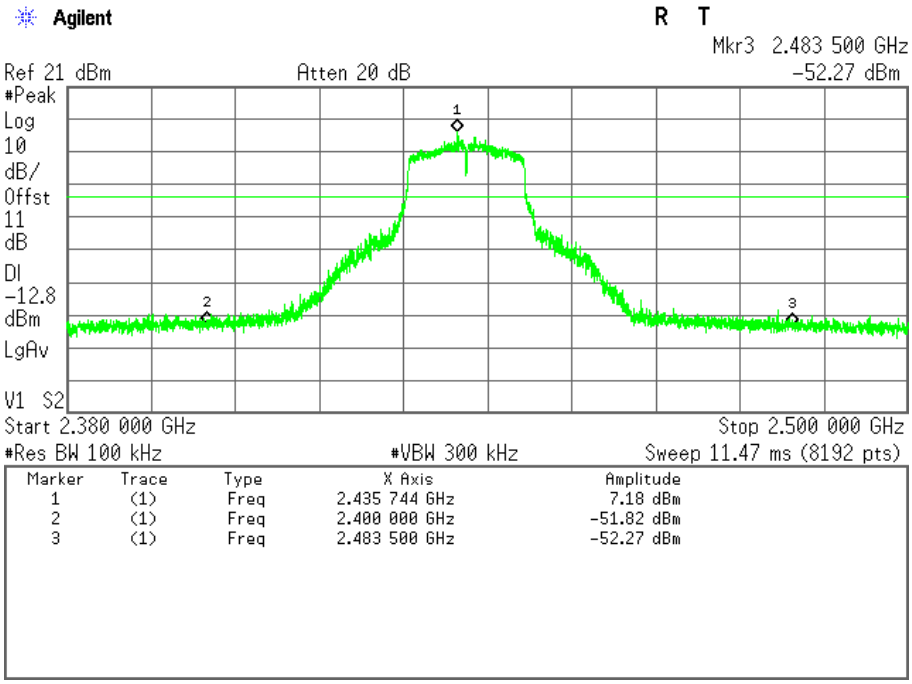
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11g Mode / Chain 2)



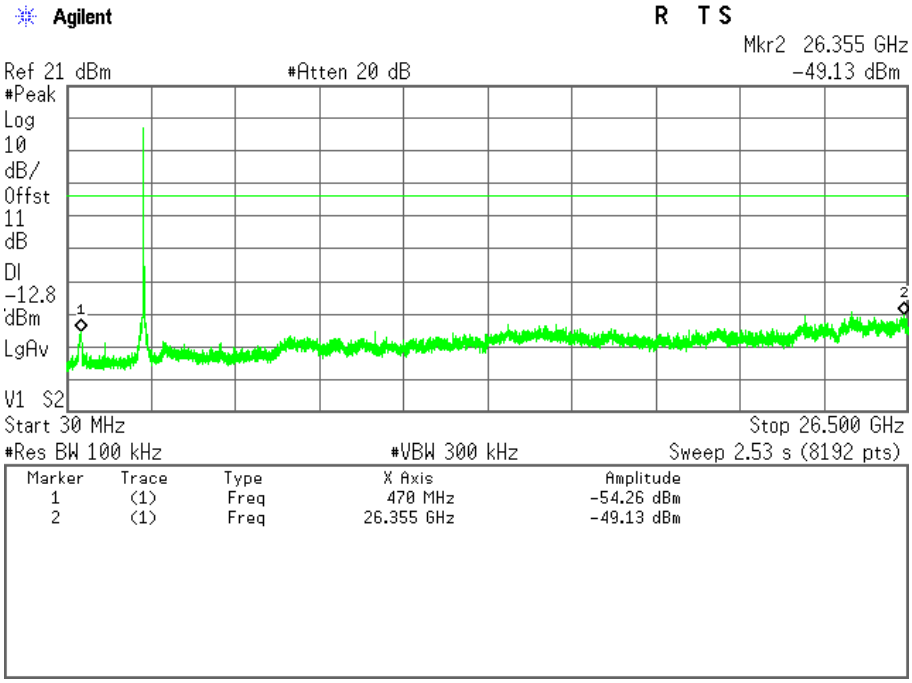
CH Low (30MHz ~ 26.5GHz / IEEE 802.11g Mode / Chain 2)



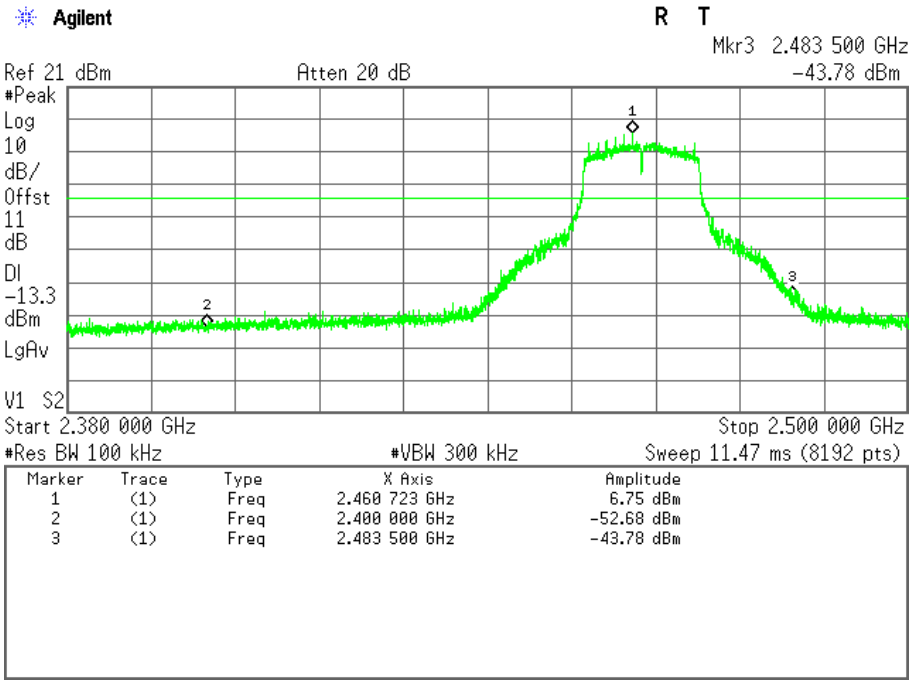
CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11g Mode / Chain 2)



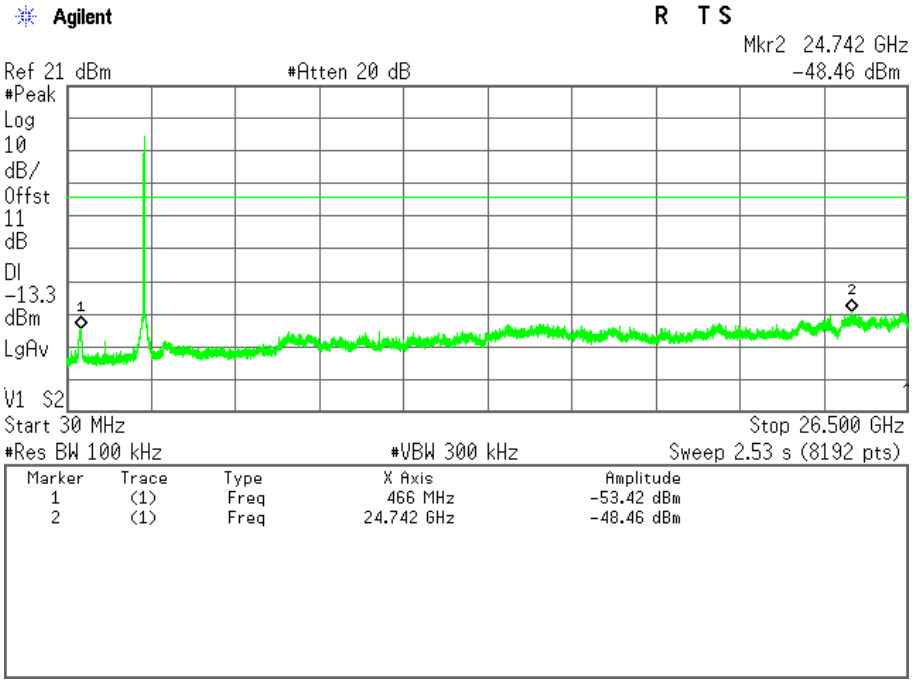
CH Middle (30MHz ~ 26.5GHz / IEEE 802.11g Mode / Chain 2)



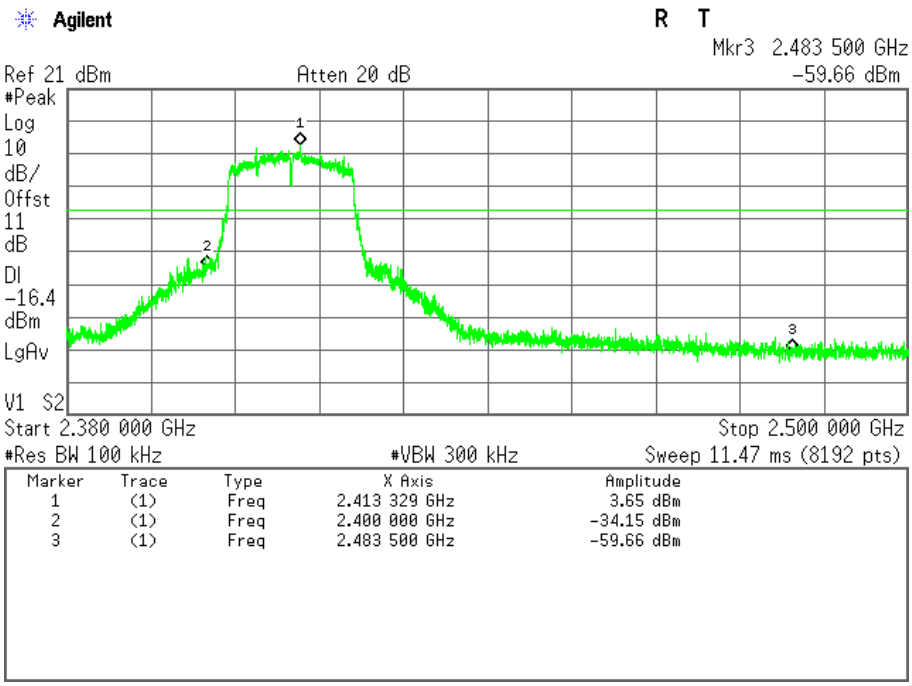
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11g Mode / Chain 2)



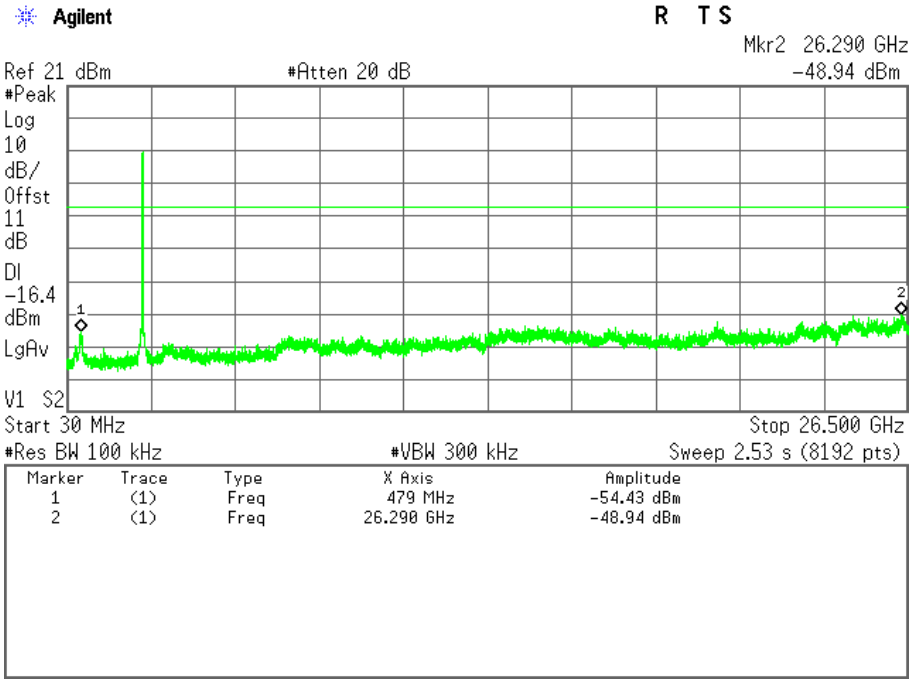
CH High (30MHz ~ 26.5GHz / IEEE 802.11g Mode / Chain 2)



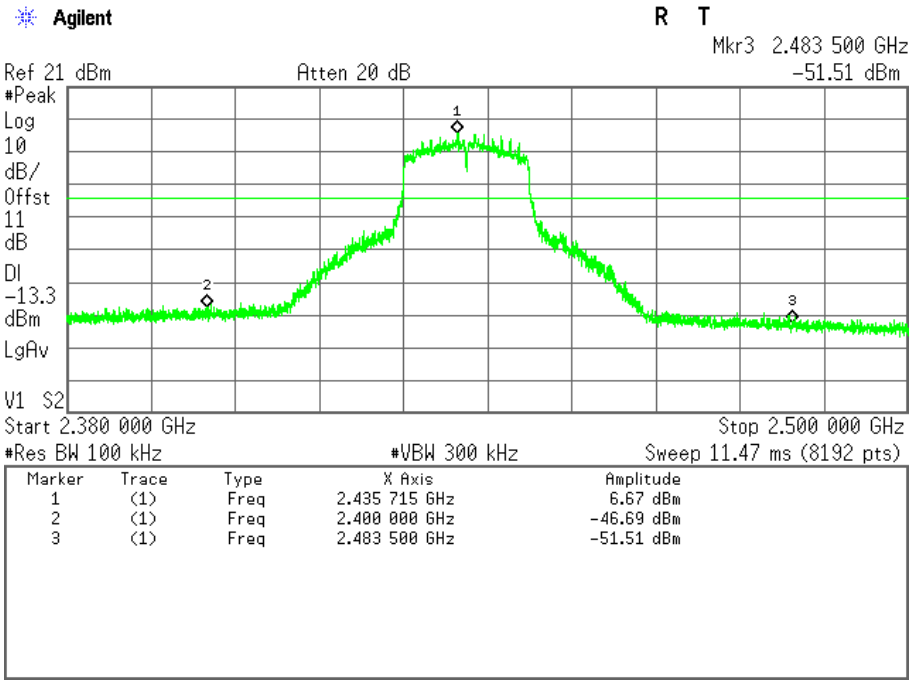
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11n HT20 Mode / Chain 1)



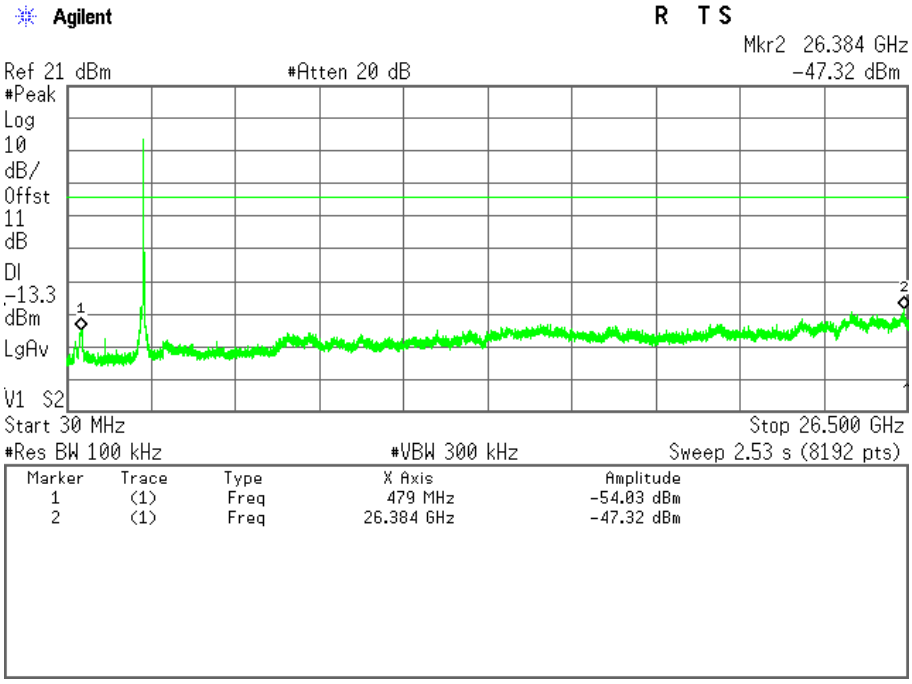
CH Low (30MHz ~ 26.5GHz / IEEE 802.11n HT20 Mode / Chain 1)



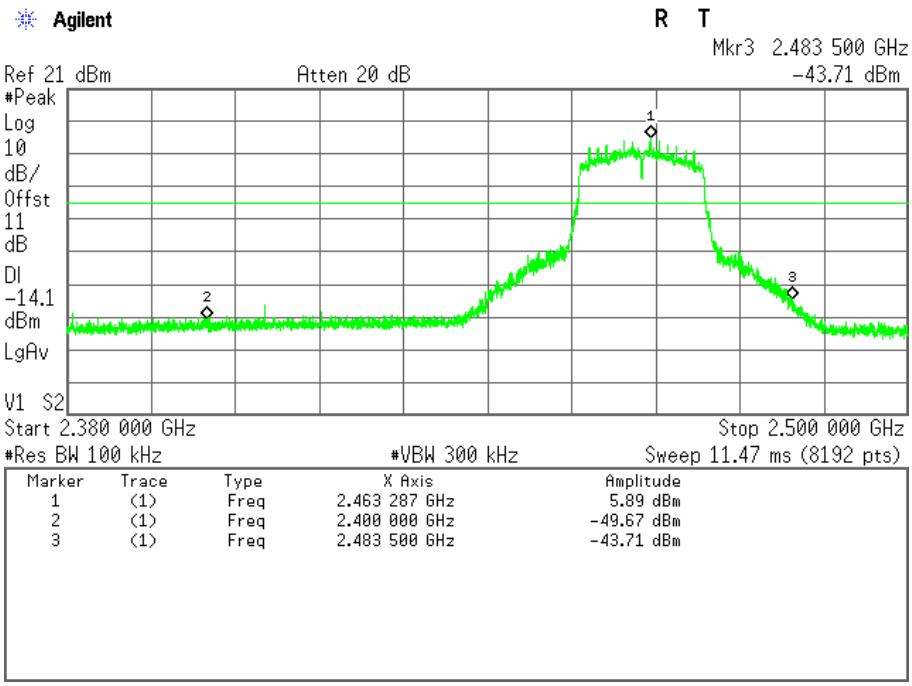
CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11n HT20 Mode / Chain 1)



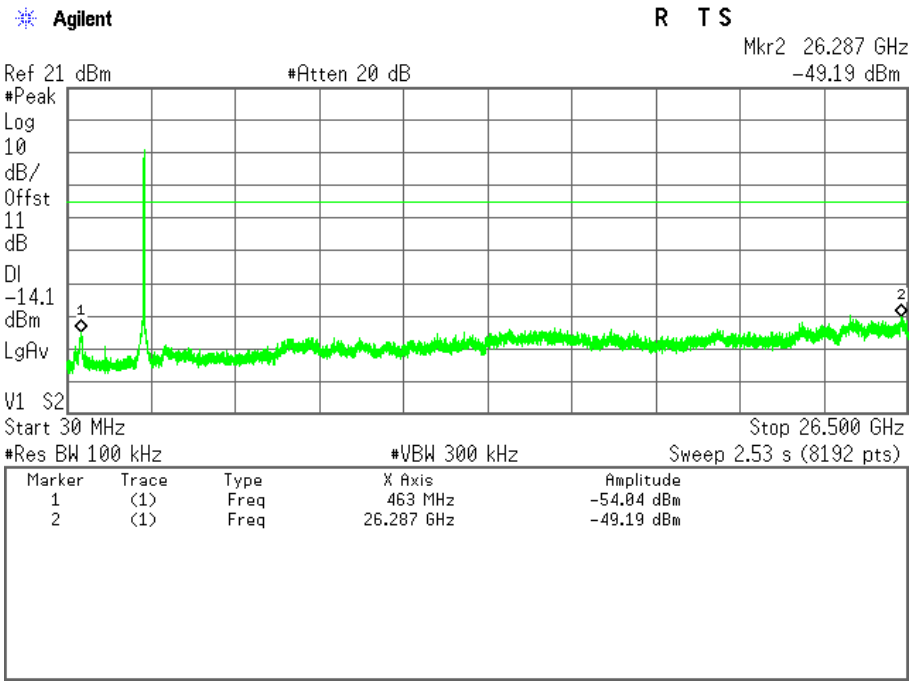
CH Middle (30MHz ~ 26.5GHz / IEEE 802.11n HT20 Mode / Chain 1)



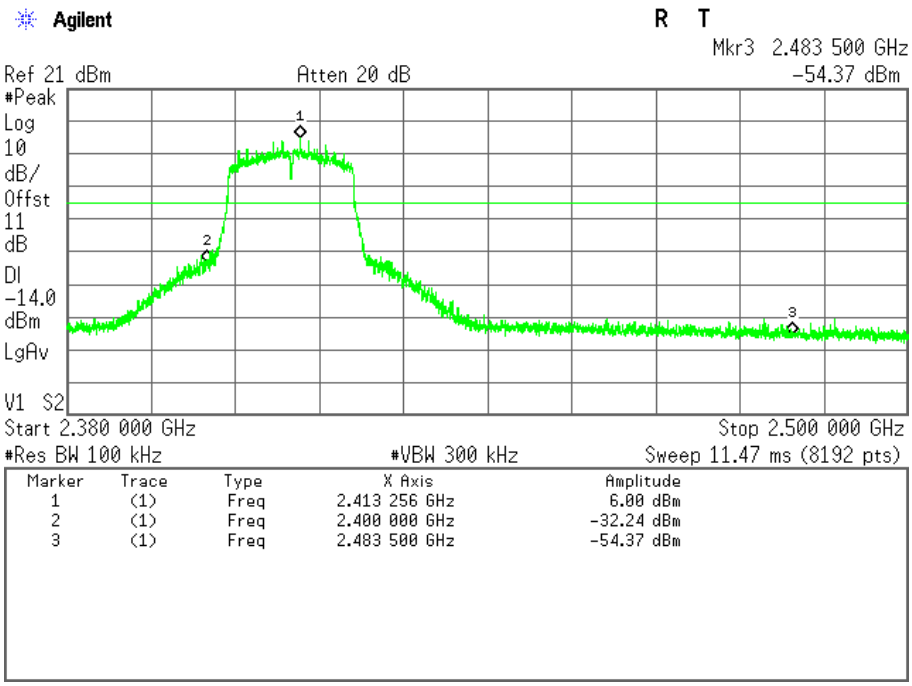
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11n HT20 Mode / Chain 1)



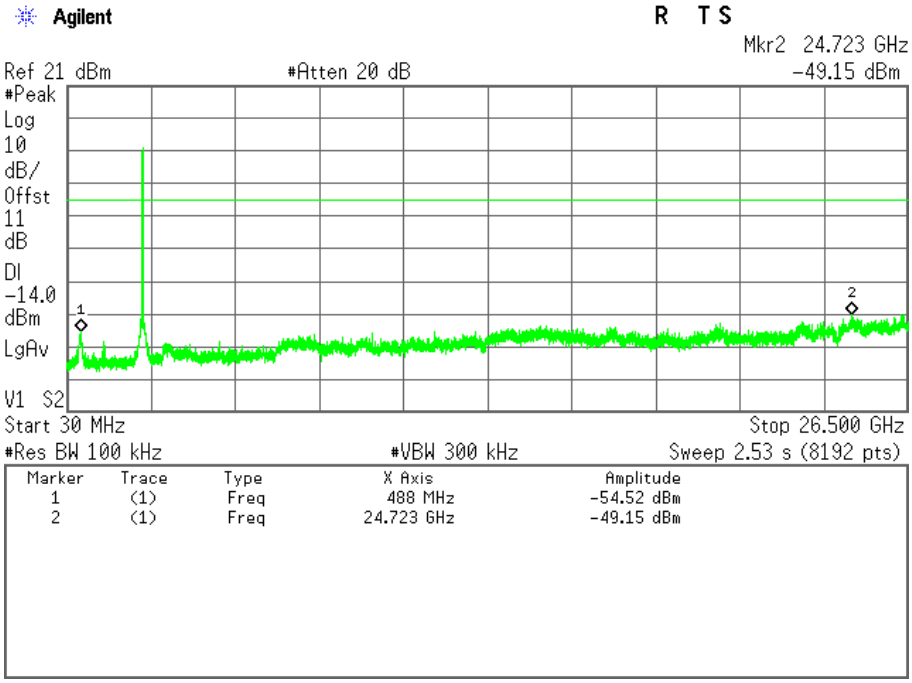
CH High (30MHz ~ 26.5GHz / IEEE 802.11n HT20 Mode / Chain 1)



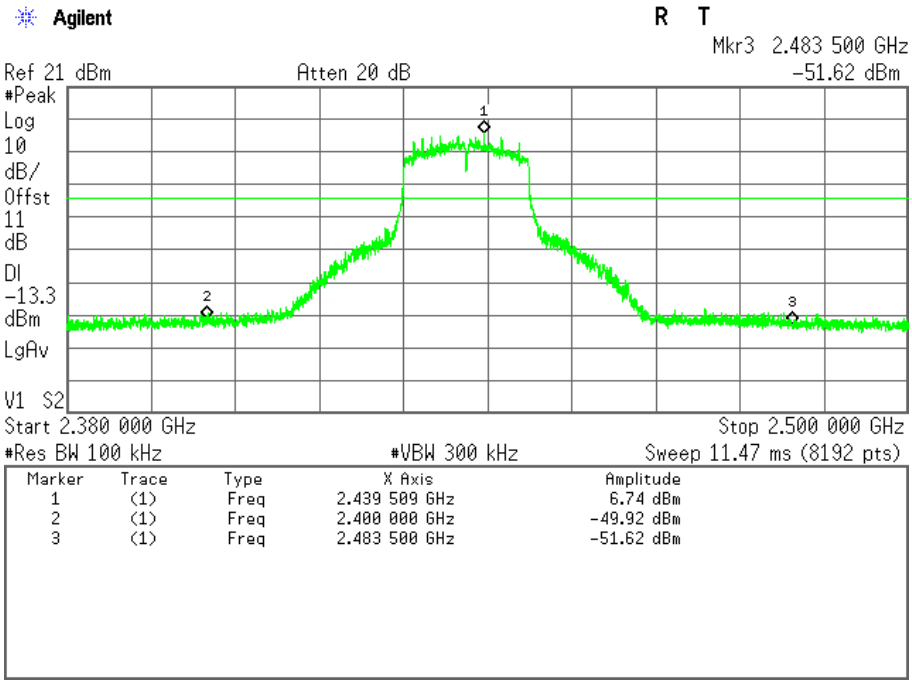
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11n HT20 Mode / Chain 2)



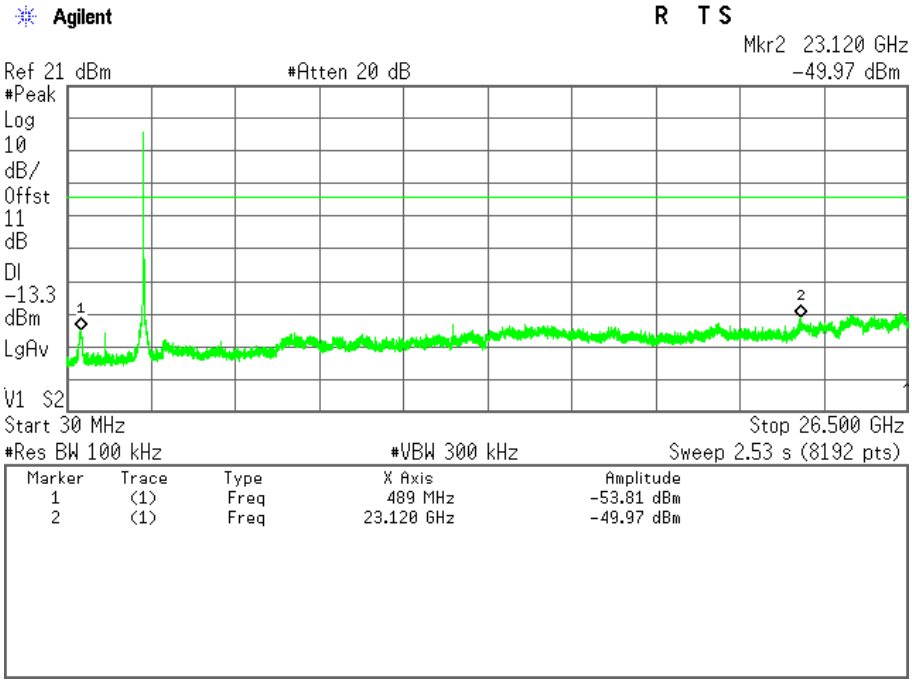
CH Low (30MHz ~ 26.5GHz / IEEE 802.11n HT20 Mode / Chain 2)



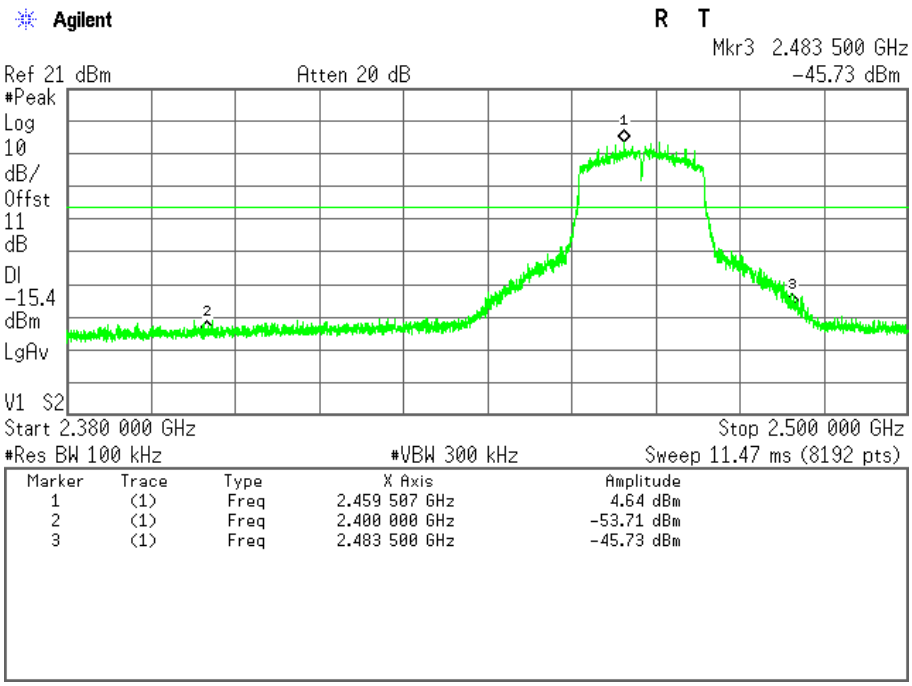
CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11n HT20 Mode / Chain 2)



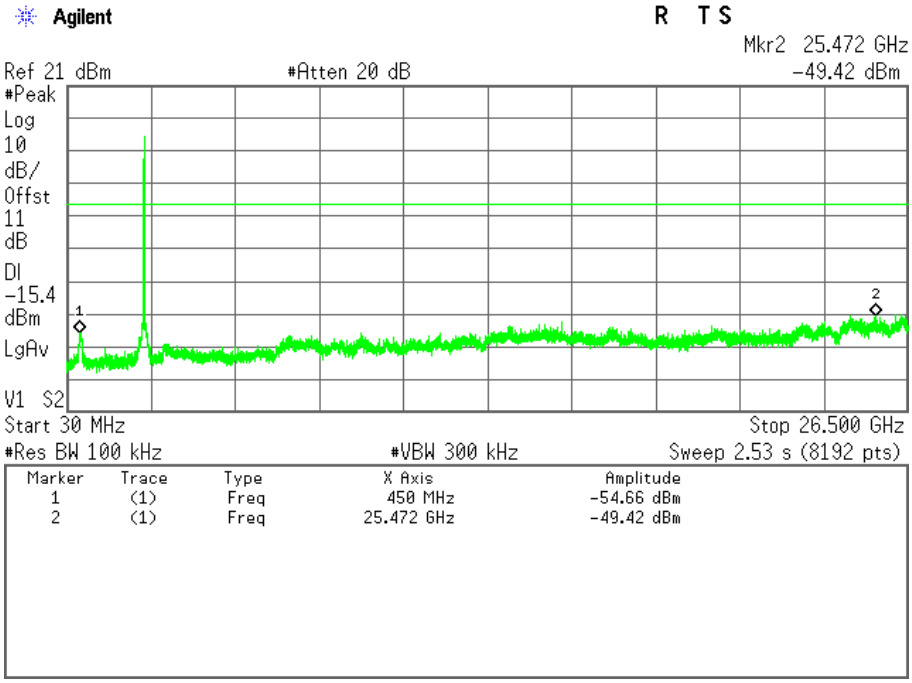
CH Middle (30MHz ~ 26.5GHz / IEEE 802.11n HT20 Mode / Chain 2)



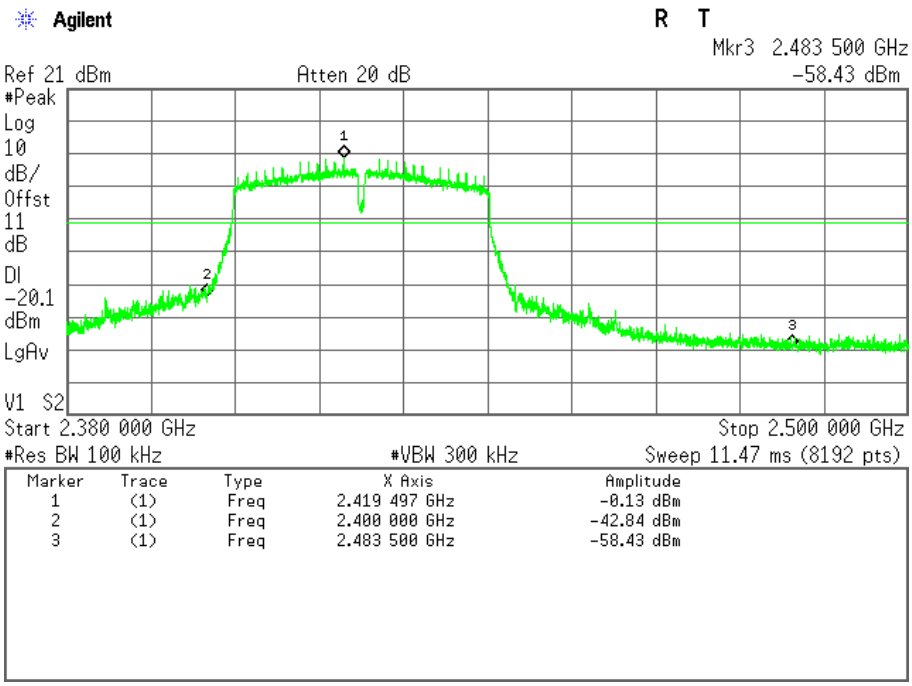
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11n HT20 Mode / Chain 2)



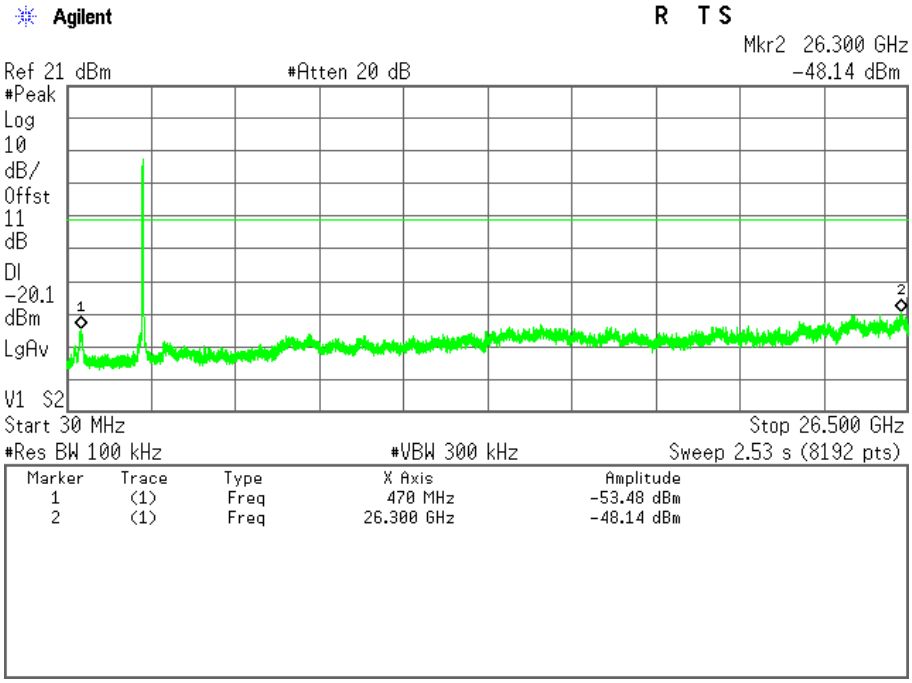
CH High (30MHz ~ 26.5GHz / IEEE 802.11n HT20 Mode / Chain 2)



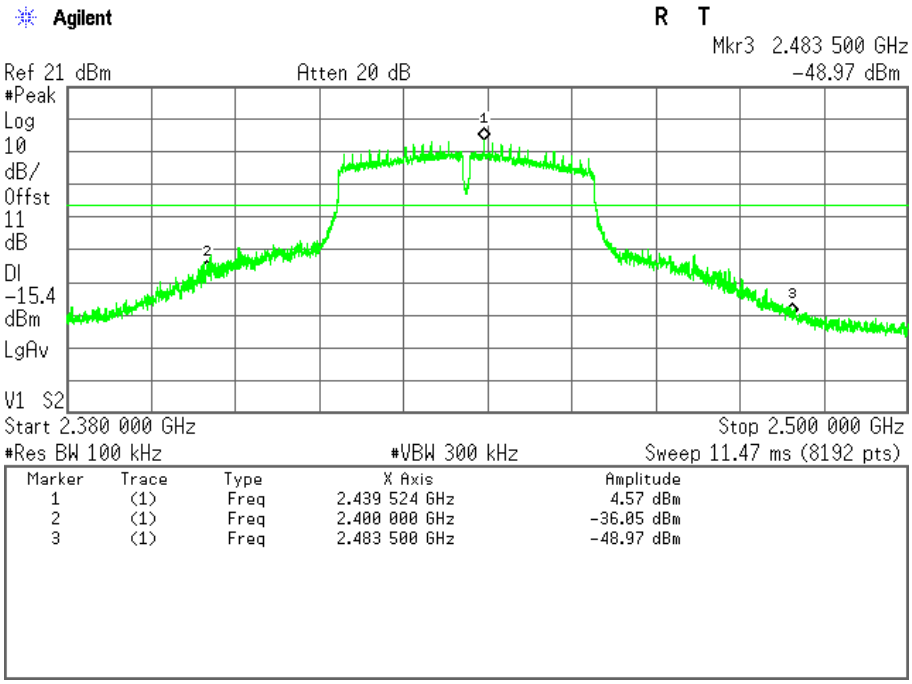
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11n HT40 Mode / Chain 1)



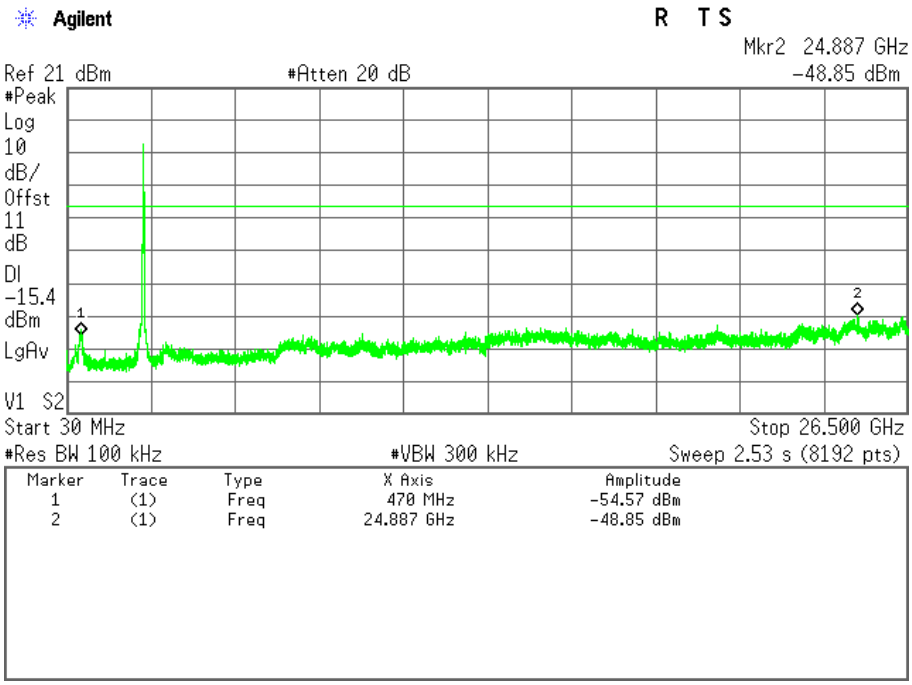
CH Low (30MHz ~ 26.5GHz / IEEE 802.11n HT40 Mode / Chain 1)



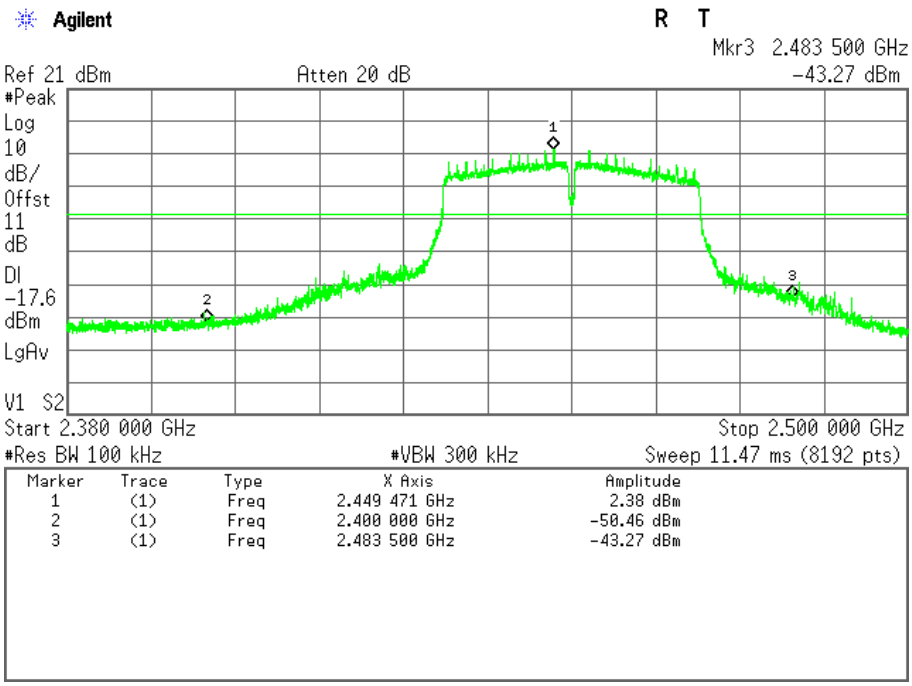
CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11n HT40 Mode / Chain 1)



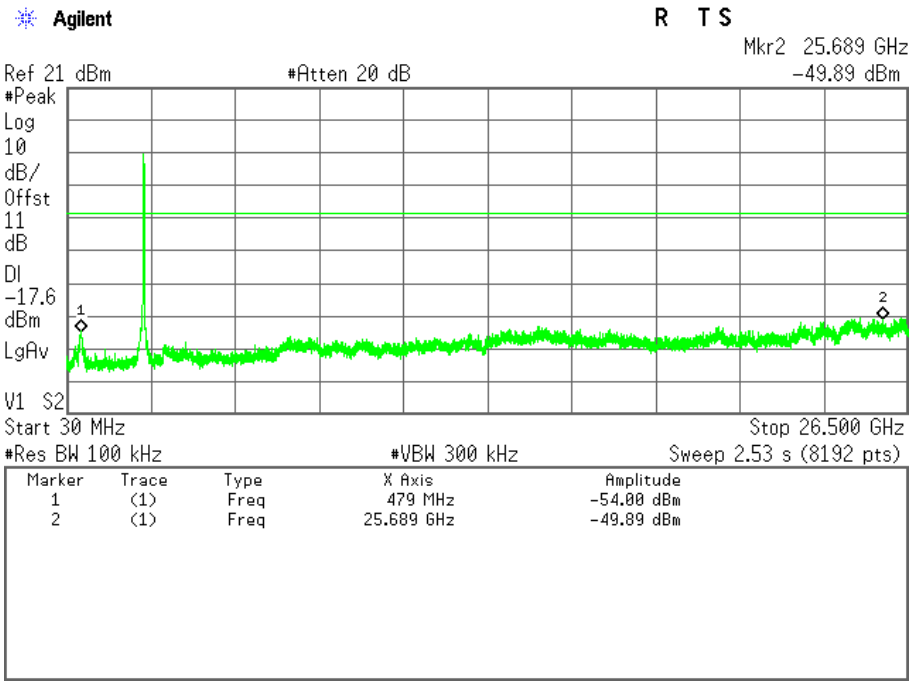
CH Middle (30MHz ~ 26.5GHz / IEEE 802.11n HT40 Mode / Chain 1)



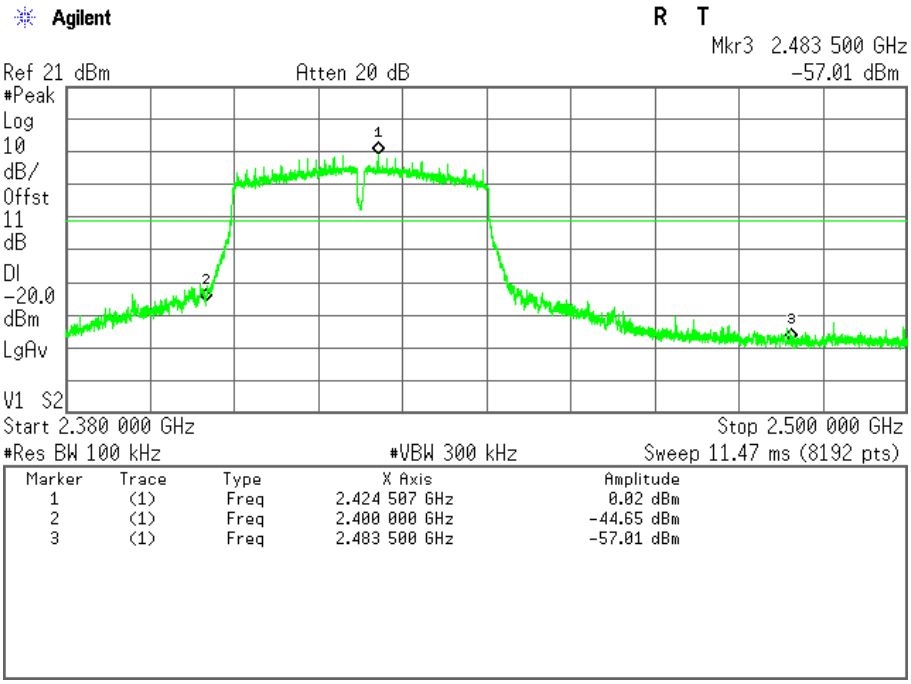
CH High (2.38GHz ~ 2.5GHz / IEEE 802.11n HT40 Mode / Chain 1)



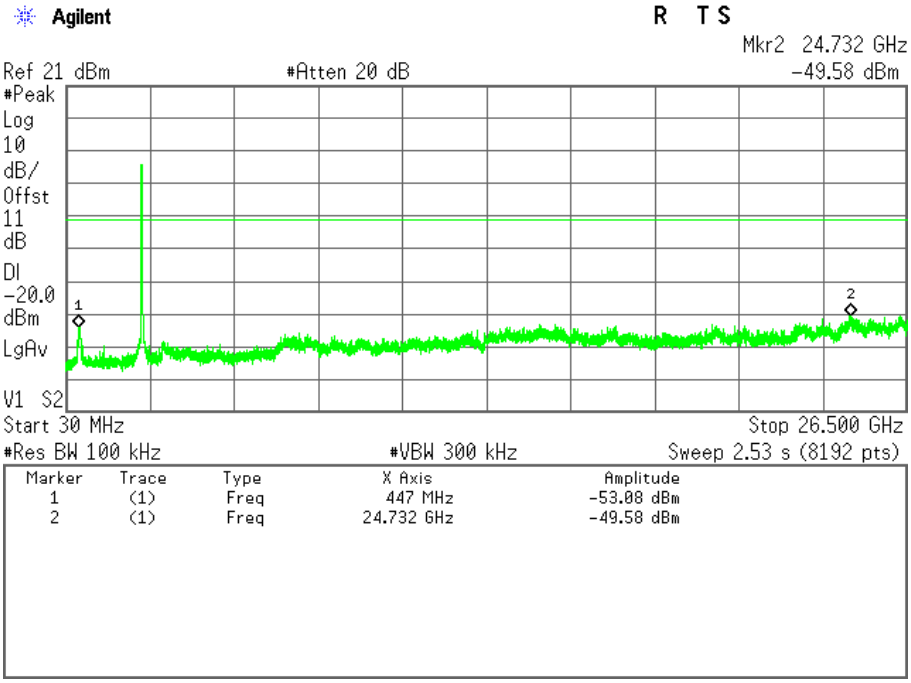
CH High (30MHz ~ 26.5GHz / IEEE 802.11n HT40 Mode / Chain 1)



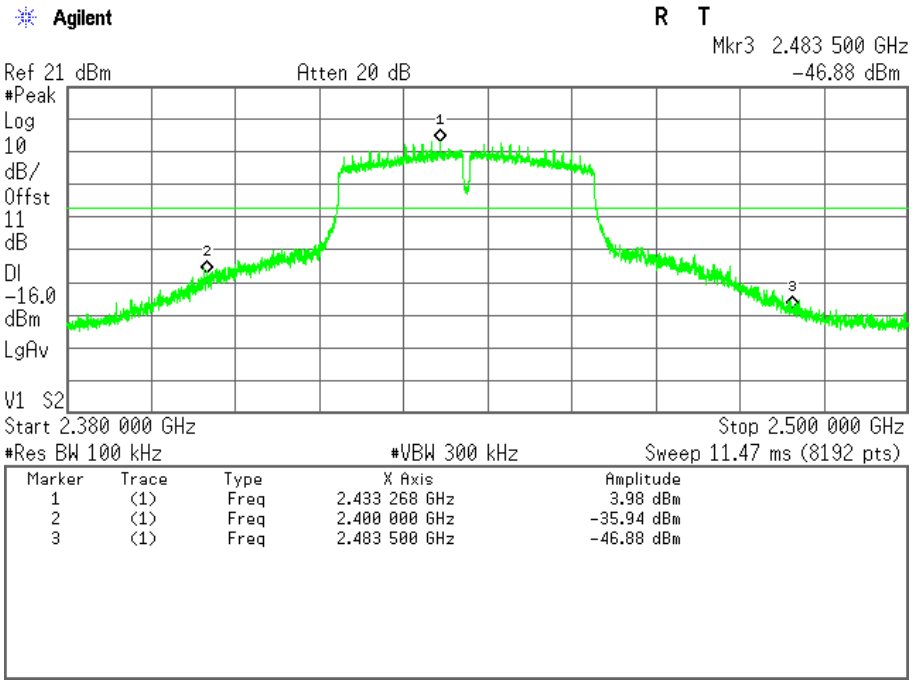
CH Low (2.38GHz ~ 2.5GHz / IEEE 802.11n HT40 Mode / Chain 2)



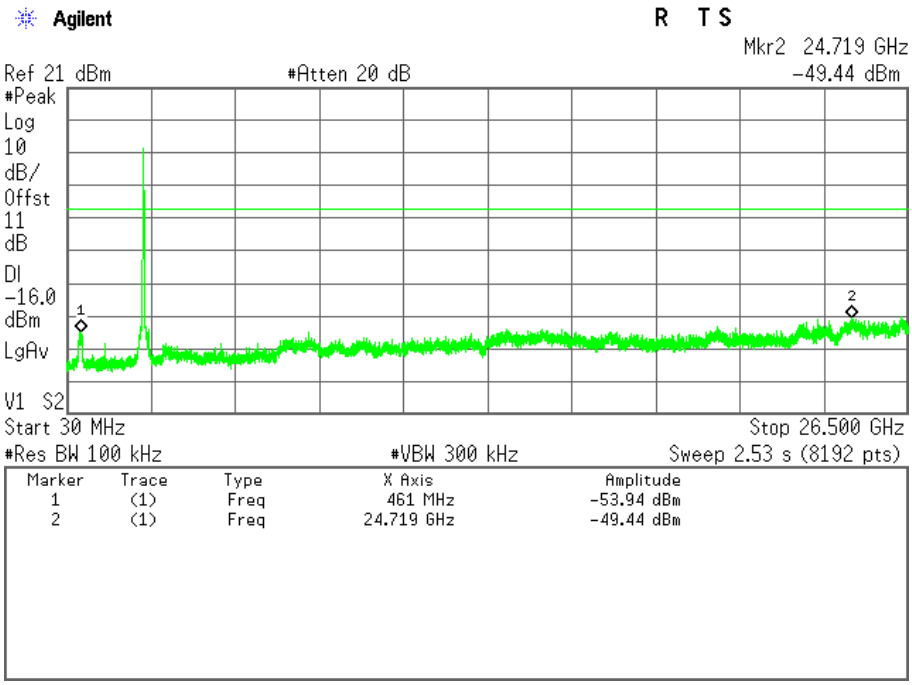
CH Low (30MHz ~ 26.5GHz / IEEE 802.11n HT40 Mode / Chain 2)



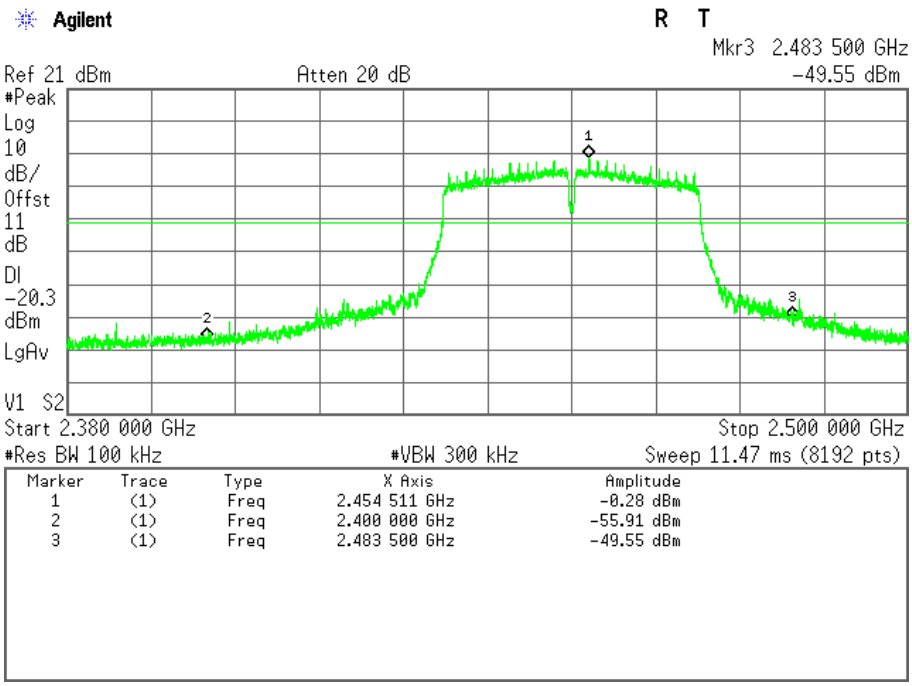
CH Middle (2.38GHz ~ 2.5GHz / IEEE 802.11n HT40 Mode / Chain 2)



CH Middle (30MHz ~ 26.5GHz / IEEE 802.11n HT40 Mode / Chain 2)

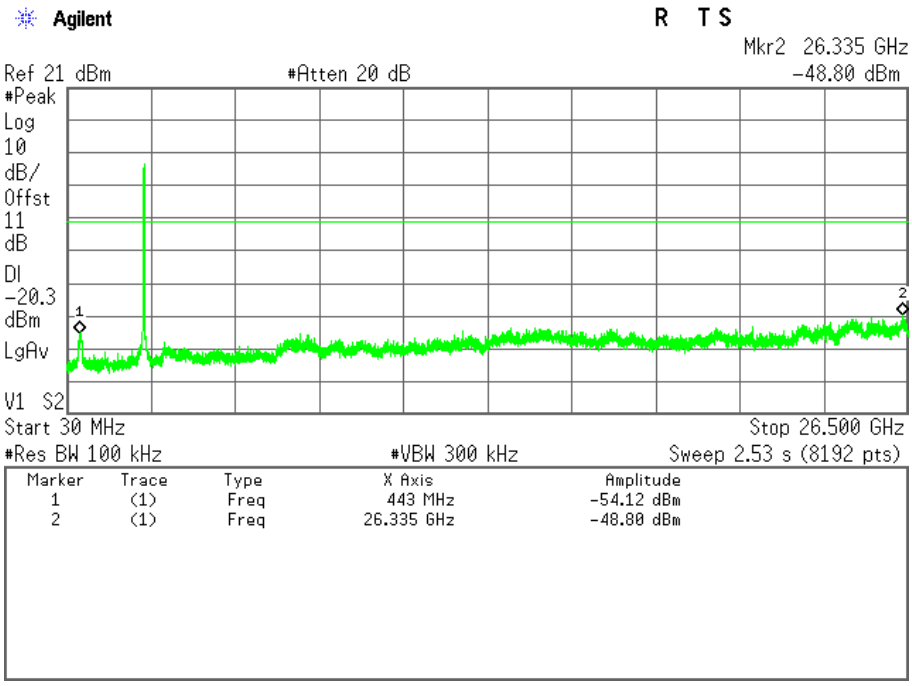


CH High (2.38GHz ~ 2.5GHz / IEEE 802.11n HT40 Mode / Chain 2)



Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.454 511 GHz	-0.28 dBm
2	(1)	Freq	2.400 000 GHz	-55.91 dBm
3	(1)	Freq	2.483 500 GHz	-49.55 dBm

CH High (30MHz ~ 26.5GHz / IEEE 802.11n HT40 Mode / Chain 2)



Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	443 MHz	-54.12 dBm
2	(1)	Freq	26.335 GHz	-48.80 dBm

7.7 RADIATED EMISSION

LIMITS

(1) According to § 15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 -1710	10.6 -12.7
6.26775 - 6.26825	108 -121.94	1718.8 - 1722.2	13.25 -13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 – 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 -16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3338	36.43 - 36.5
12.57675 - 12.57725	322 -335.4	3600 - 4400	([2])
13.36 - 13.41			

Remark:
1. [1] Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
2. [2] Above 38.6

(2) According to § 15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown is Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

(3) According to § 15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(KHz)	300
0.490 – 1.705	24000/F(KHz)	30
1.705 – 30.0	30	30
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

Remark: ***Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.*

(4) According to § 15.209 (b) In the emission table above, the tighter limit applies at the band edges.

TEST EQUIPMENT

Radiated Emission / 966Chamber_B

Name of Equipment	Manufacture	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY46180323	04/14/2016
EMI Test Receiver	Rohde & Schwarz	ESCI	101131	03/19/2016
Bi-log Antenna	TESEQ	CBL 6112D	35403	08/04/2016
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-778	08/09/2016
Double-Ridged Waveguide Horn	ETS-LINDGREN	3117	00078733	11/25/2016
Horn Antenna	COM-POWER	AH-840	03077	12/08/2016
Pre-Amplifier	Agilent	8447D	2944A10052	07/14/2016
Pre-Amplifier	Agilent	8449B	3008A01916	07/14/2016
LOOP Antenna	COM-POWER	AL-130	121060	05/24/2016
Test S/W	E3.815206a			

Remark: *Each piece of equipment is scheduled for calibration once a year.*

Radiated Emission / 966Chamber_C

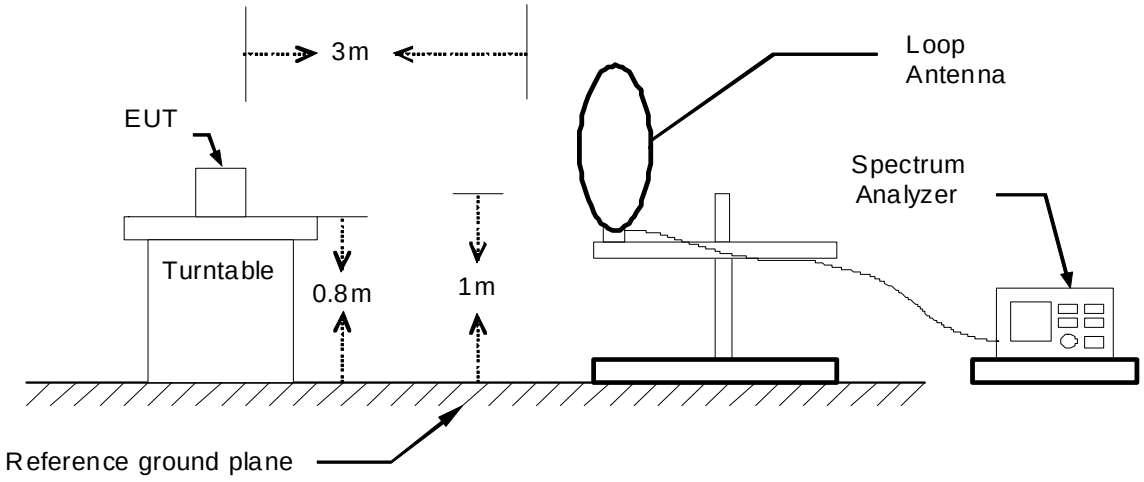
Name of Equipment	Manufacture	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY45280064	03/26/2016
EMI Test Receiver	Rohde & Schwarz	ESCI	101387	10/06/2016
Bi-log Antenna	TESEQ	CBL 6112D	35404	08/04/2016
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-778	08/09/2016
Double-Ridged Waveguide Horn	ETS-LINDGREN	3117	00078732	07/14/2016
Horn Antenna	COM-POWER	AH-840	03077	12/08/2016
Pre-Amplifier	EMCI	EMC001625	980243	04/12/2016
Pre-Amplifier	COM-POWER	PAM-118A	551043	04/12/2016
LOOP Antenna	COM-POWER	AL-130	121060	05/24/2016
Test S/W	E3.815206a			

Remark: *Each piece of equipment is scheduled for calibration once a year.*

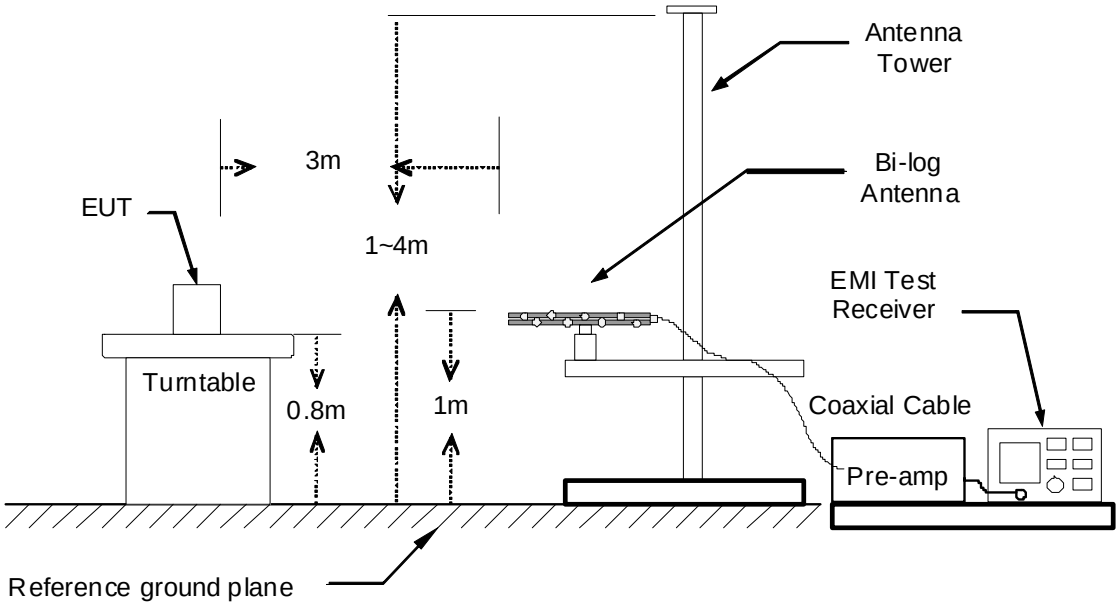
TEST SETUP

The diagram below shows the test setup that is utilized to make the measurements for emission below 1GHz.

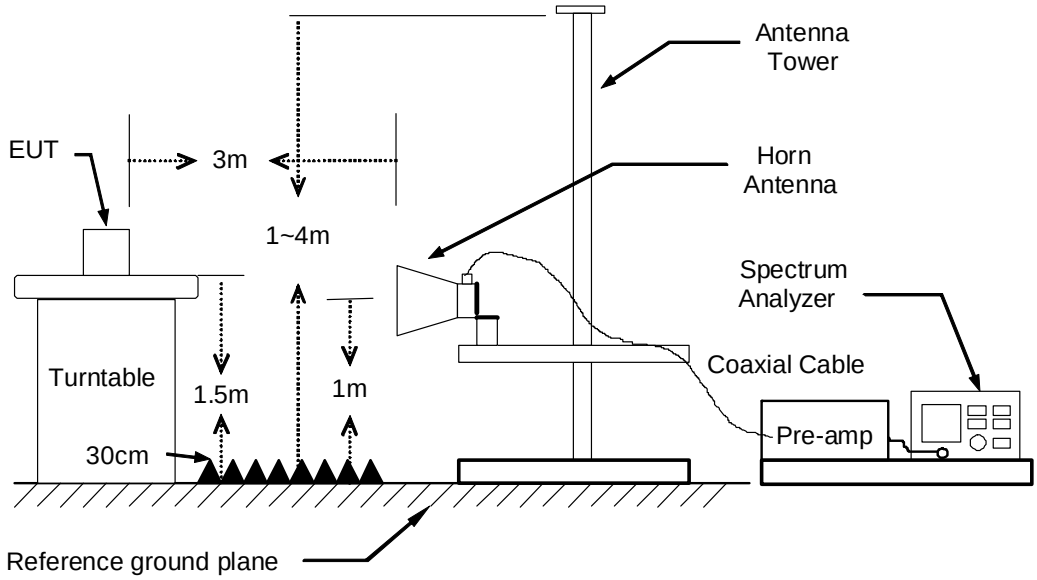
9kHz ~ 30MHz



30MHz ~ 1GHz



The diagram below shows the test setup that is utilized to make the measurements for emission above 1GHz.



TEST PROCEDURE

1. The EUT was placed on the top of a rotating table 0.8 and 1.5 meters above the ground. The table was rotated 360 degrees to determine the position of the highest radiation.
2. While measuring the radiated emission below 1GHz, the EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. While measuring the radiated emission above 1GHz, the EUT was set 3 meters away from the interference-receiving antenna.
3. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarization 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 table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold mode.
6. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Remark:

1. *The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.*
2. *The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1GHz.*
3. *The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.*
4. *If continuous transmission of the EUT (D ≥ 98%) cannot be achieved and the duty cycle is not constant (duty cycle variations exceed ±2%), then the following procedure shall be used: RBW = 1 MHz, VBW ≥ 1 / T.*

TEST RESULTS

Below 1 GHz (9kHz ~ 30MHz)

No emission found between lowest internal used/generated frequency to 30MHz.

Below 1 GHz (30MHz ~ 1GHz)

Product Name	Indoor IP Camera	Test By	Rex Chiu
Test Model	CM01	Test Date	2016/02/17
Test mode	Mode 1	Temp. & Humidity	25°C, 50%

966Chamber_B at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
33.88	33.67	-10.32	23.35	40.00	-16.65	333	300	Peak
102.75	40.69	-15.42	25.27	43.50	-18.23	177	300	Peak
159.98	44.19	-16.01	28.18	43.50	-15.32	75	200	Peak
332.64	41.18	-10.68	30.50	46.00	-15.50	123	100	Peak
400.54	48.58	-9.11	39.47	46.00	-6.53	182	100	Peak
515.00	38.28	-7.89	30.39	46.00	-15.61	43	200	Peak
800.18	32.65	-4.20	28.45	46.00	-17.55	25	100	Peak

966Chamber_B at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
41.64	50.12	-14.92	35.20	40.00	-4.80	0	100	Peak
80.44	46.51	-19.65	26.86	40.00	-13.14	262	100	Peak
143.49	49.56	-15.02	34.54	43.50	-8.96	141	100	Peak
159.98	45.90	-16.01	29.89	43.50	-13.61	13	100	Peak
303.54	40.79	-11.43	29.36	46.00	-16.64	190	100	Peak
400.54	47.79	-9.11	38.68	46.00	-7.32	151	100	Peak
513.06	43.68	-7.92	35.76	46.00	-10.24	113	100	Peak

Remark:

1. *Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit.*
2. *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*
3. *Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)*
4. *Margin (dB) = Remark result (dBuV/m) - Quasi-peak limit (dBuV/m).*

Above 1 GHz

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11b Mode / TX / CH Low	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1650.00	59.72	-7.82	51.90	74.00	-22.10	247	200	Peak
2496.00	51.33	-4.14	47.19	74.00	-26.81	93	100	Peak
2938.00	48.07	-3.57	44.50	74.00	-29.50	216	100	Peak
3735.00	48.84	-2.92	45.92	74.00	-28.08	344	200	Peak
4830.00	50.78	-0.22	50.56	74.00	-23.44	243	200	Peak
4995.00	48.53	0.36	48.89	74.00	-25.11	187	200	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1658.00	56.88	-7.75	49.13	74.00	-24.87	284	200	Peak
2490.00	51.11	-4.15	46.96	74.00	-27.04	70	100	Peak
2936.00	47.74	-3.57	44.17	74.00	-29.83	302	100	Peak
3075.00	48.26	-3.49	44.77	74.00	-29.23	128	100	Peak
3735.00	47.79	-2.92	44.87	74.00	-29.13	360	200	Peak
4830.00	53.52	-0.22	53.30	54.00	-0.70	228	200	Average
4830.00	54.45	-0.22	54.23	74.00	-19.77	228	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11b Mode / TX / CH Middle	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1640.00	60.13	-7.91	52.22	74.00	-21.78	288	200	Peak
2372.00	47.88	-4.27	43.61	74.00	-30.39	343	200	Peak
2500.00	53.27	-4.14	49.13	74.00	-24.87	49	200	Peak
3735.00	49.61	-2.92	46.69	74.00	-27.31	57	200	Peak
4875.00	50.42	-0.06	50.36	74.00	-23.64	230	200	Peak
9750.00	39.44	4.53	43.97	54.00	-10.03	97	200	Average
9750.00	47.95	4.53	52.48	74.00	-21.52	97	200	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1656.00	55.38	-7.76	47.62	74.00	-26.38	286	200	Peak
2388.00	49.13	-4.25	44.88	74.00	-29.12	1	200	Peak
2484.00	56.52	-4.16	52.36	74.00	-21.64	46	100	Peak
3735.00	47.60	-2.92	44.68	74.00	-29.32	360	200	Peak
4485.00	46.13	-1.42	44.71	74.00	-29.29	122	200	Peak
4875.00	52.94	-0.06	52.88	54.00	-1.12	207	200	Average
4875.00	52.98	-0.06	52.92	74.00	-21.08	207	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11b Mode / TX / CH High	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1638.00	59.23	-7.93	51.30	74.00	-22.70	40	200	Peak
2384.00	47.69	-4.26	43.43	74.00	-30.57	172	100	Peak
2938.00	48.88	-3.57	45.31	74.00	-28.69	216	200	Peak
3735.00	49.56	-2.92	46.64	74.00	-27.36	0	200	Peak
4920.00	51.34	0.10	51.44	74.00	-22.56	240	200	Peak
9855.00	46.88	4.70	51.58	74.00	-22.42	51	200	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1662.00	55.92	-7.71	48.21	74.00	-25.79	288	200	Peak
2046.00	45.26	-4.59	40.67	74.00	-33.33	216	100	Peak
2386.00	49.55	-4.25	45.30	74.00	-28.70	40	100	Peak
3735.00	47.84	-2.92	44.92	74.00	-29.08	0	200	Peak
4485.00	45.90	-1.42	44.48	74.00	-29.52	124	100	Peak
4920.00	52.30	0.10	52.40	54.00	-1.60	245	200	Average
4920.00	54.41	0.10	54.51	74.00	-19.49	245	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11g Mode / TX / CH Low	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1440.00	49.16	-9.18	39.98	74.00	-34.02	357	200	Peak
1650.00	59.66	-7.82	51.84	74.00	-22.16	243	200	Peak
2496.00	53.13	-4.14	48.99	74.00	-25.01	92	100	Peak
3735.00	47.93	-2.92	45.01	74.00	-28.99	61	200	Peak
4215.00	45.80	-1.89	43.91	74.00	-30.09	56	100	Peak
4995.00	48.52	0.36	48.88	74.00	-25.12	191	200	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1660.00	58.37	-7.73	50.64	74.00	-23.36	284	200	Peak
2490.00	54.22	-4.15	50.07	74.00	-23.93	58	200	Peak
2936.00	46.93	-3.57	43.36	74.00	-30.64	230	100	Peak
3735.00	46.81	-2.92	43.89	74.00	-30.11	340	200	Peak
4275.00	44.41	-1.79	42.62	74.00	-31.38	216	200	Peak
4980.00	45.36	0.31	45.67	74.00	-28.33	140	100	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11g Mode / TX / CH Middle	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1648.00	59.77	-7.84	51.93	74.00	-22.07	290	200	Peak
2390.00	50.08	-4.25	45.83	74.00	-28.17	192	200	Peak
2494.00	54.49	-4.15	50.34	74.00	-23.66	92	100	Peak
3735.00	48.43	-2.92	45.51	74.00	-28.49	54	200	Peak
4995.00	49.61	0.36	49.97	74.00	-24.03	179	200	Peak
6090.00	43.22	1.98	45.20	74.00	-28.80	196	200	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1664.00	57.85	-7.69	50.16	74.00	-23.84	292	200	Peak
2390.00	51.96	-4.25	47.71	74.00	-26.29	59	100	Peak
2496.00	54.21	-4.14	50.07	74.00	-23.93	68	200	Peak
4995.00	43.99	0.36	44.35	74.00	-29.65	169	200	Peak
6150.00	42.70	2.09	44.79	74.00	-29.21	178	100	Peak
6960.00	43.33	2.60	45.93	74.00	-28.07	169	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11g Mode / TX / CH High	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1638.00	60.18	-7.93	52.25	74.00	-21.75	243	200	Peak
2392.00	52.44	-4.25	48.19	74.00	-25.81	85	100	Peak
2936.00	50.04	-3.57	46.47	74.00	-27.53	194	200	Peak
3735.00	50.06	-2.92	47.14	74.00	-26.86	57	200	Peak
4995.00	49.17	0.36	49.53	74.00	-24.47	182	200	Peak
6135.00	43.62	2.06	45.68	74.00	-28.32	360	200	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1662.00	56.95	-7.71	49.24	74.00	-24.76	282	200	Peak
2382.00	52.82	-4.26	48.56	74.00	-25.44	68	100	Peak
2938.00	47.68	-3.57	44.11	74.00	-29.89	174	200	Peak
3735.00	47.58	-2.92	44.66	74.00	-29.34	37	200	Peak
4980.00	44.81	0.31	45.12	74.00	-28.88	182	200	Peak
6195.00	43.27	2.18	45.45	74.00	-28.55	61	100	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11n HT20 Mode / TX / CH Low	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1638.00	58.39	-7.93	50.46	74.00	-23.54	26	200	Peak
2496.00	51.68	-4.14	47.54	74.00	-26.46	41	200	Peak
2790.00	48.01	-3.76	44.25	74.00	-29.75	187	100	Peak
3735.00	47.57	-2.92	44.65	74.00	-29.35	46	200	Peak
4980.00	47.82	0.31	48.13	74.00	-25.87	201	100	Peak
6210.00	43.32	2.20	45.52	74.00	-28.48	323	100	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1662.00	55.73	-7.71	48.02	74.00	-25.98	324	200	Peak
2028.00	44.84	-4.61	40.23	74.00	-33.77	269	200	Peak
2488.00	52.81	-4.15	48.66	74.00	-25.34	49	200	Peak
3735.00	46.94	-2.92	44.02	74.00	-29.98	0	200	Peak
4995.00	45.68	0.36	46.04	74.00	-27.96	214	200	Peak
6135.00	43.21	2.06	45.27	74.00	-28.73	181	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11n HT20 Mode / TX / CH Middle	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1602.00	49.94	-8.25	41.69	74.00	-32.31	253	200	Average
1602.00	61.84	-8.25	53.59	74.00	-20.41	253	200	Peak
2392.00	54.78	-4.25	50.53	74.00	-23.47	66	100	Peak
2490.00	56.46	-4.15	52.31	74.00	-21.69	91	100	Peak
3735.00	48.39	-2.92	45.47	74.00	-28.53	46	200	Peak
4995.00	48.22	0.36	48.58	74.00	-25.42	195	200	Peak
6975.00	44.21	2.60	46.81	74.00	-27.19	264	200	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1654.00	55.43	-7.78	47.65	74.00	-26.35	321	100	Peak
2390.00	54.12	-4.25	49.87	74.00	-24.13	1	200	Peak
2484.00	55.93	-4.16	51.77	74.00	-22.23	39	200	Peak
3735.00	47.97	-2.92	45.05	74.00	-28.95	21	200	Peak
4980.00	44.22	0.31	44.53	74.00	-29.47	8	200	Peak
6840.00	42.88	2.64	45.52	74.00	-28.48	338	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11n HT20 Mode / TX / CH High	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1636.00	59.45	-7.95	51.50	74.00	-22.50	240	200	Peak
2380.00	52.07	-4.26	47.81	74.00	-26.19	189	200	Peak
2932.00	48.13	-3.58	44.55	74.00	-29.45	192	100	Peak
3735.00	47.94	-2.92	45.02	74.00	-28.98	57	200	Peak
4980.00	49.79	0.31	50.10	74.00	-23.90	201	100	Peak
6210.00	43.14	2.20	45.34	74.00	-28.66	16	200	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1676.00	56.15	-7.58	48.57	74.00	-25.43	303	100	Peak
2390.00	52.57	-4.25	48.32	74.00	-25.68	56	100	Peak
2880.00	46.03	-3.65	42.38	74.00	-31.62	254	100	Peak
3735.00	47.74	-2.92	44.82	74.00	-29.18	2	200	Peak
4980.00	45.88	0.31	46.19	74.00	-27.81	174	200	Peak
6300.00	42.73	2.37	45.10	74.00	-28.90	274	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11n HT40 Mode / TX / CH Low	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1634.00	59.86	-7.96	51.90	74.00	-22.10	66	200	Peak
2026.00	46.67	-4.61	42.06	74.00	-31.94	306	200	Peak
2492.00	54.20	-4.15	50.05	74.00	-23.95	189	200	Peak
3735.00	48.47	-2.92	45.55	74.00	-28.45	335	200	Peak
4980.00	49.08	0.31	49.39	74.00	-24.61	188	200	Peak
5895.00	43.08	1.59	44.67	74.00	-29.33	223	100	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1660.00	60.00	-7.73	52.27	74.00	-21.73	281	200	Peak
2136.00	45.87	-4.50	41.37	74.00	-32.63	225	100	Peak
2494.00	53.55	-4.15	49.40	74.00	-24.60	12	200	Peak
3735.00	46.74	-2.92	43.82	74.00	-30.18	7	200	Peak
4950.00	45.06	0.20	45.26	74.00	-28.74	234	200	Peak
5460.00	43.84	0.74	44.58	74.00	-29.42	69	200	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11n HT40 Mode / TX / CH Middle	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1670.00	58.95	-7.64	51.31	74.00	-22.69	244	200	Peak
2390.00	54.90	-4.25	50.65	74.00	-23.35	46	100	Peak
2484.00	54.00	-4.16	49.84	74.00	-24.16	61	100	Peak
3735.00	48.79	-2.92	45.87	74.00	-28.13	53	200	Peak
4995.00	48.93	0.36	49.29	74.00	-24.71	248	200	Peak
7305.00	45.93	2.73	48.66	74.00	-25.34	165	200	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1658.00	56.63	-7.75	48.88	74.00	-25.12	264	100	Peak
2390.00	45.44	-4.25	41.19	74.00	-32.81	44	100	Average
2390.00	58.54	-4.25	54.29	74.00	-19.71	44	100	Peak
2484.00	53.71	-4.16	49.55	74.00	-24.45	48	100	Peak
3735.00	47.02	-2.92	44.10	74.00	-29.90	13	200	Peak
4875.00	48.42	-0.06	48.36	74.00	-25.64	218	200	Peak
6240.00	47.94	2.26	50.20	74.00	-23.80	179	100	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/30
Test mode	IEEE 802.11n HT40 Mode / TX / CH High	Temp. & Humidity	20°C, 53%

966Chamber_C at 3Meter / Horizontal

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1636.00	58.96	-7.95	51.01	74.00	-22.99	42	200	Peak
2500.00	53.69	-4.14	49.55	74.00	-24.45	49	100	Peak
2932.00	49.03	-3.58	45.45	74.00	-28.55	198	200	Peak
3735.00	47.93	-2.92	45.01	74.00	-28.99	44	200	Peak
4995.00	48.76	0.36	49.12	74.00	-24.88	196	200	Peak
5970.00	43.00	1.75	44.75	74.00	-29.25	282	200	Peak

966Chamber_C at 3Meter / Vertical

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
1662.00	58.93	-7.71	51.22	74.00	-22.78	310	200	Peak
2256.00	45.40	-4.38	41.02	74.00	-32.98	17	200	Peak
2500.00	57.93	-4.14	53.79	74.00	-20.21	29	100	Peak
3210.00	47.16	-3.49	43.67	74.00	-30.33	317	200	Peak
3735.00	46.23	-2.92	43.31	74.00	-30.69	4	200	Peak
4995.00	44.66	0.36	45.02	74.00	-28.98	176	100	Peak

Remark:

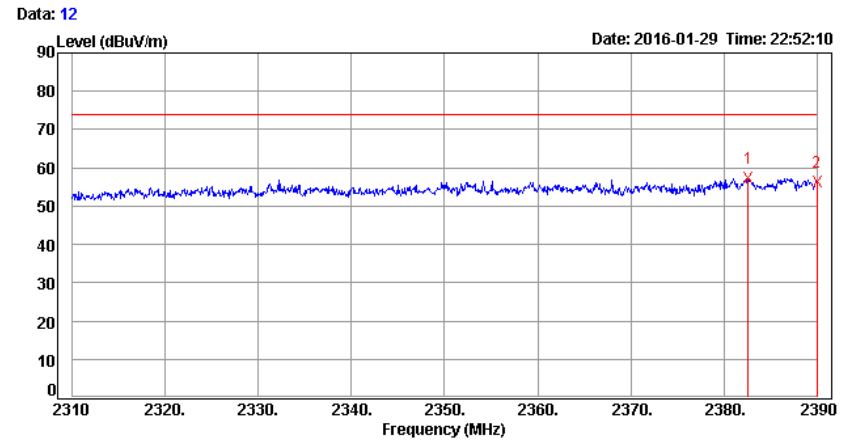
1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(PK)
   Remark AVG = Result(AV) – Limit(AV)

Restricted Band Edges

Product Name	Indoor IP Camera	Test By	Jey Li
Test Model	CM01	Test Date	2016/01/29 ~ 2016/01/30
Test mode	TX Mode	Temp. & Humidity	20°C, 53%

Detector mode: Peak **Polarity: Horizontal**

CH Low (IEEE 802.11b Mode)



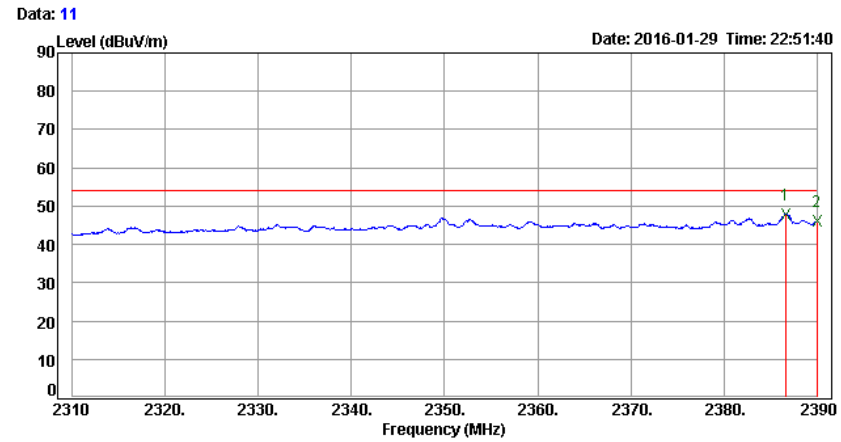
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2382.64	53.16	4.27	57.43	74.00	-16.57			Peak
2390.00	52.16	4.28	56.44	74.00	-17.56			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Horizontal**

CH Low (IEEE 802.11b Mode)

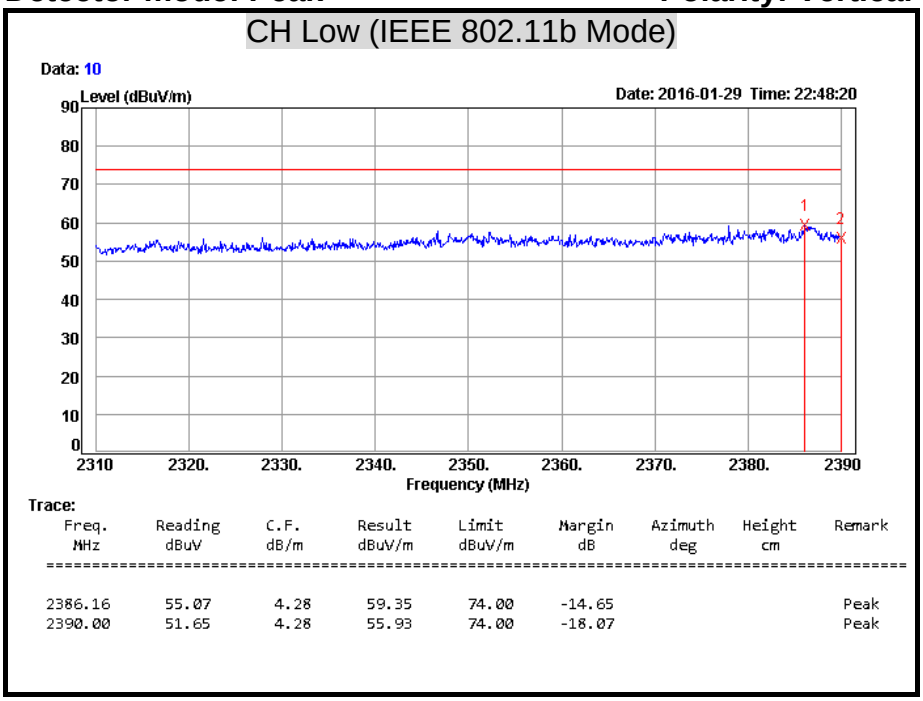


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2386.64	43.55	4.28	47.83	54.00	-6.17			Average
2390.00	41.63	4.28	45.91	54.00	-8.09			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Vertical**

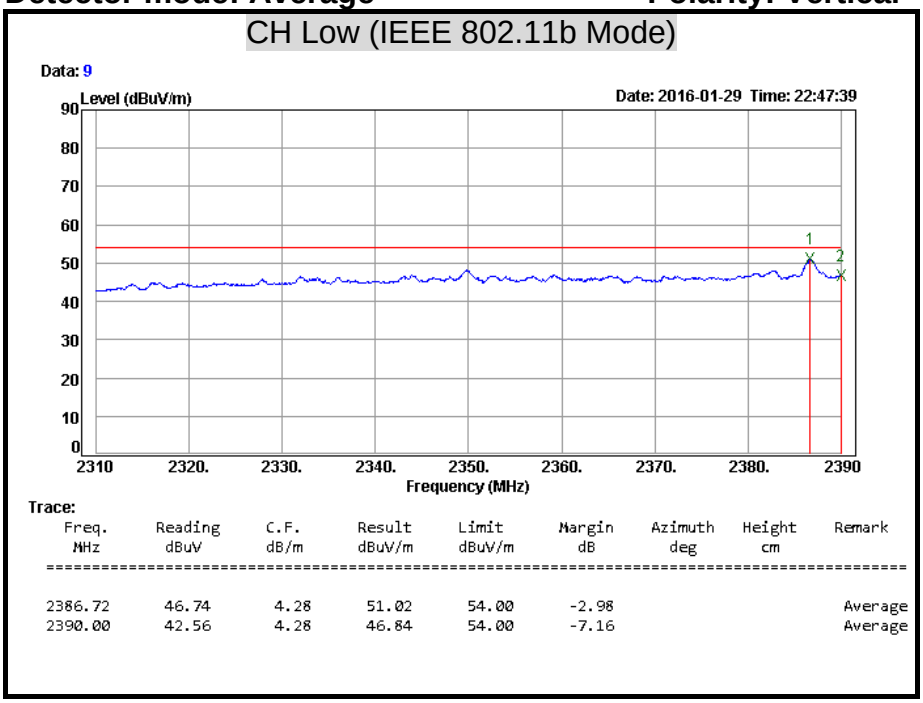


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2386.16	55.07	4.28	59.35	74.00	-14.65			Peak
2390.00	51.65	4.28	55.93	74.00	-18.07			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Vertical**



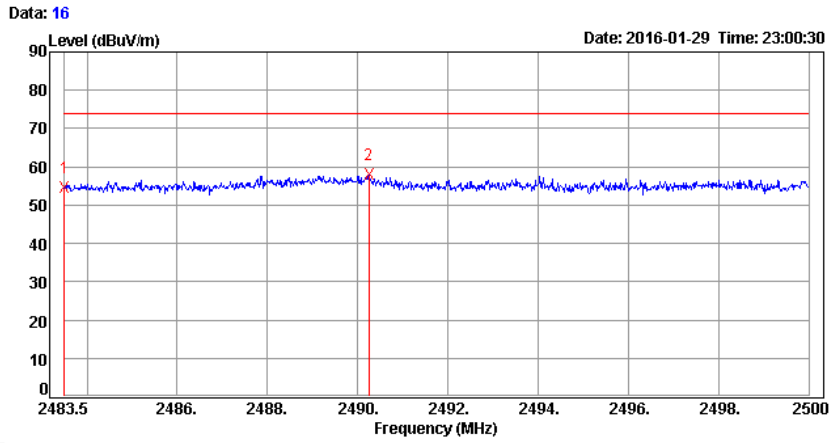
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2386.72	46.74	4.28	51.02	54.00	-2.98			Average
2390.00	42.56	4.28	46.84	54.00	-7.16			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Horizontal**

CH High (IEEE 802.11b Mode)



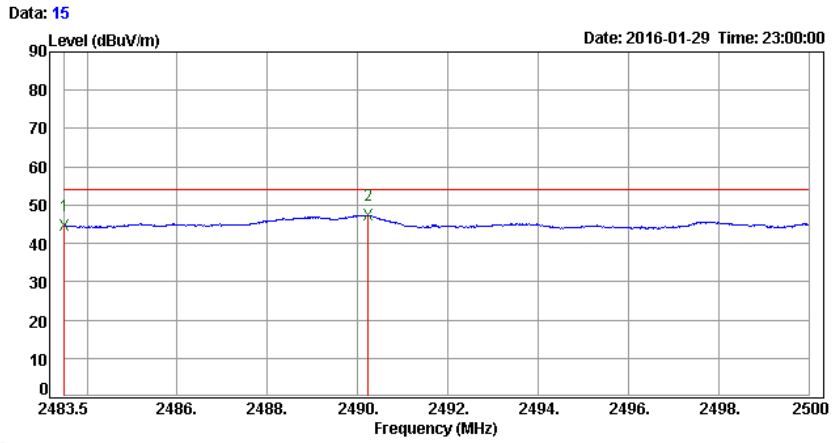
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	49.93	4.48	54.41	74.00	-19.59			Peak
2490.25	53.34	4.50	57.84	74.00	-16.16			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Horizontal**

CH High (IEEE 802.11b Mode)



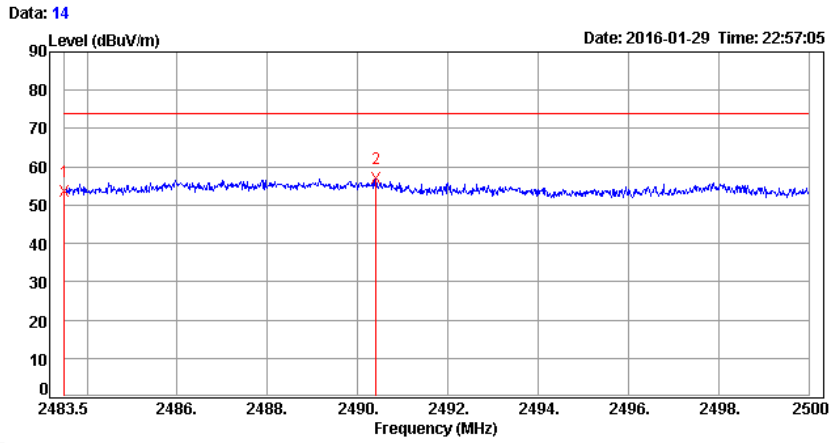
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	40.31	4.48	44.79	54.00	-9.21			Average
2490.23	42.88	4.50	47.38	54.00	-6.62			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Vertical**

CH High (IEEE 802.11b Mode)



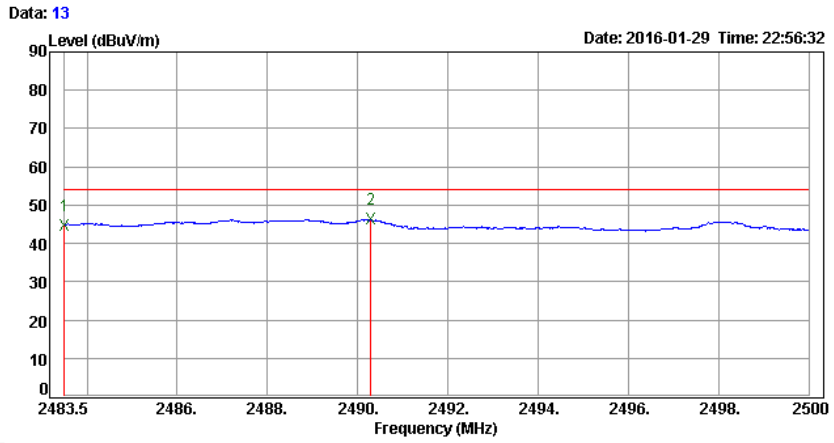
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	49.08	4.48	53.56	74.00	-20.44			Peak
2490.41	52.41	4.50	56.91	74.00	-17.09			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Vertical**

CH High (IEEE 802.11b Mode)

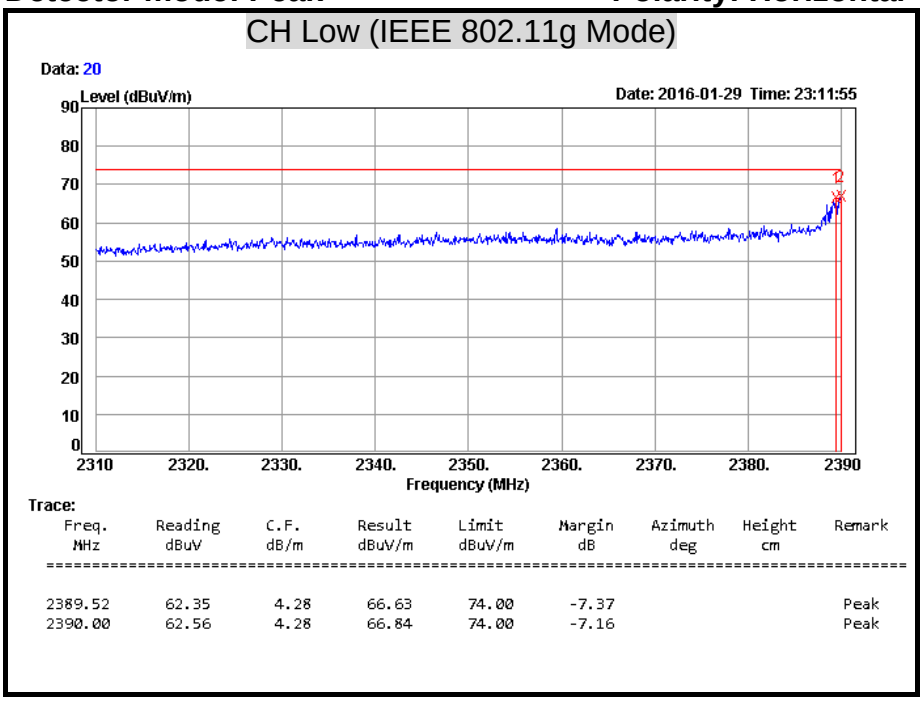


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	40.29	4.48	44.77	54.00	-9.23			Average
2490.30	41.70	4.50	46.20	54.00	-7.80			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Horizontal**

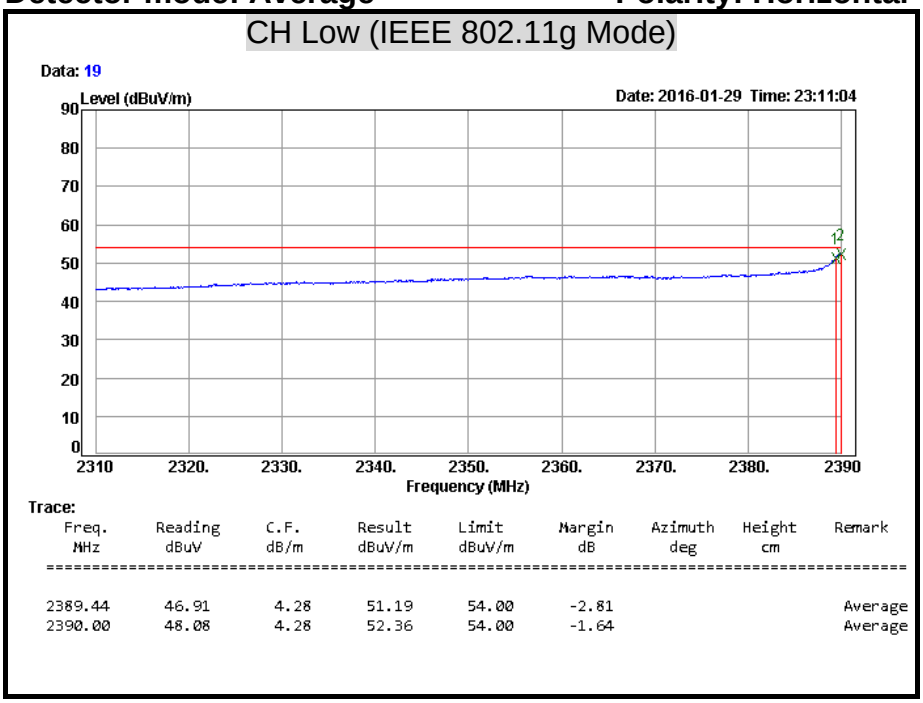


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.52	62.35	4.28	66.63	74.00	-7.37			Peak
2390.00	62.56	4.28	66.84	74.00	-7.16			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Horizontal**

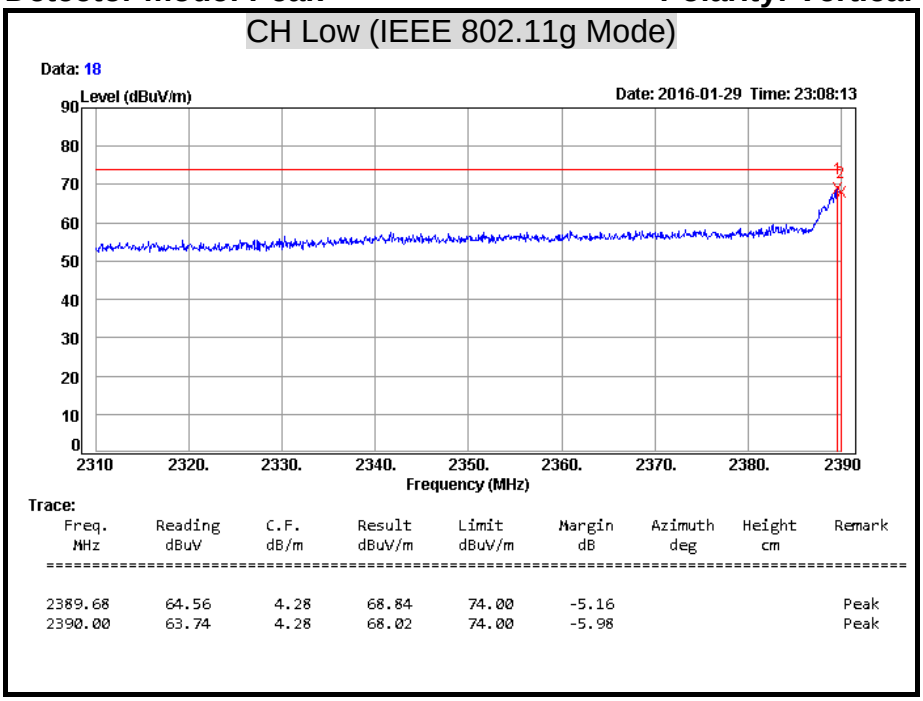


Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.44	46.91	4.28	51.19	54.00	-2.81			Average
2390.00	48.08	4.28	52.36	54.00	-1.64			Average

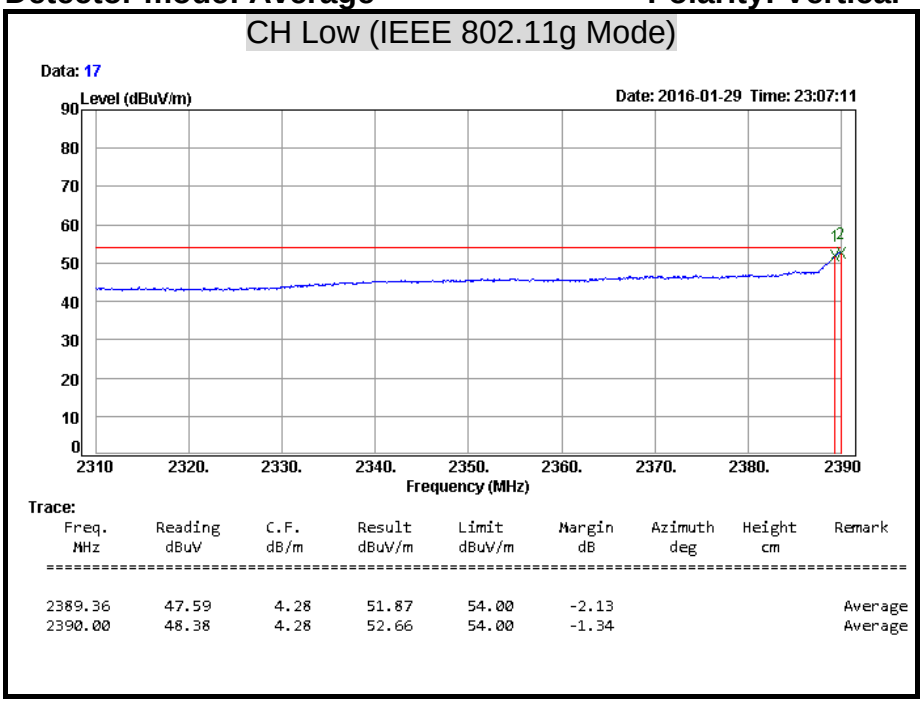
Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Vertical**



Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

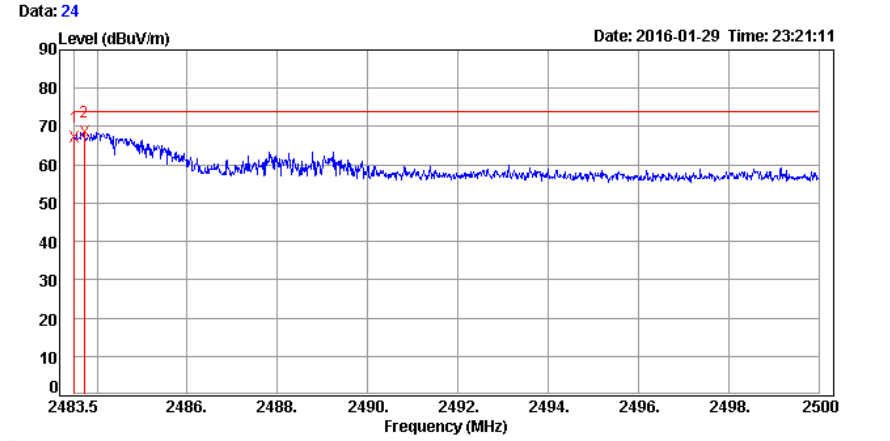
Detector mode: Average **Polarity: Vertical**



Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Horizontal**

CH High (IEEE 802.11g Mode)



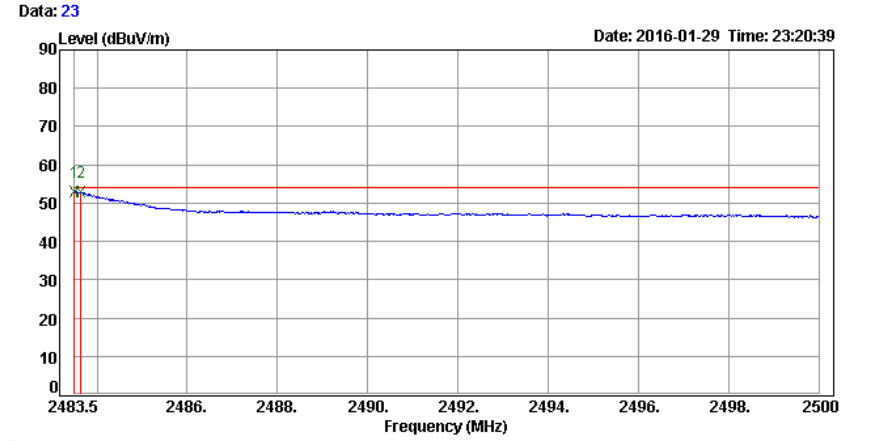
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	62.59	4.48	67.07	74.00	-6.93			Peak
2483.72	64.19	4.49	68.68	74.00	-5.32			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Horizontal**

CH High (IEEE 802.11g Mode)



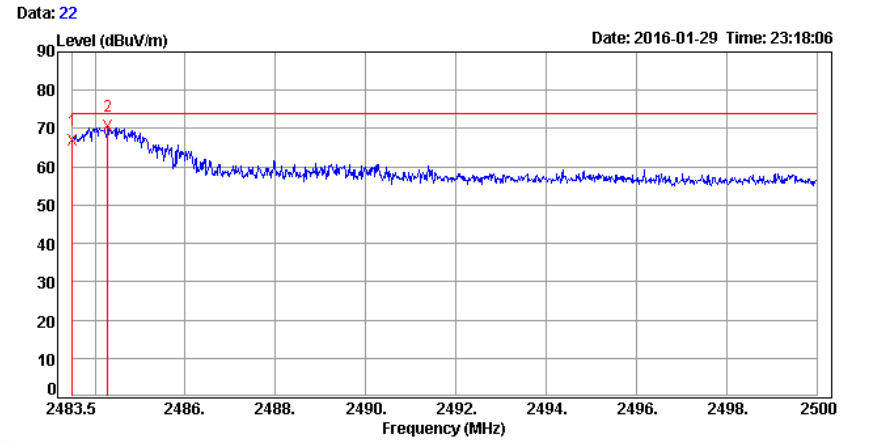
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	48.48	4.48	52.96	54.00	-1.04			Average
2483.65	48.26	4.49	52.75	54.00	-1.25			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Vertical**

CH High (IEEE 802.11g Mode)



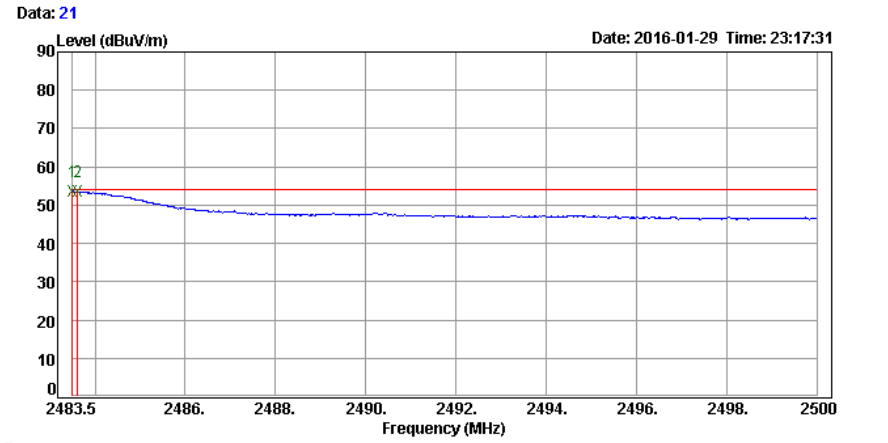
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	62.36	4.48	66.84	74.00	-7.16			Peak
2484.28	66.02	4.49	70.51	74.00	-3.49			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Vertical**

CH High (IEEE 802.11g Mode)



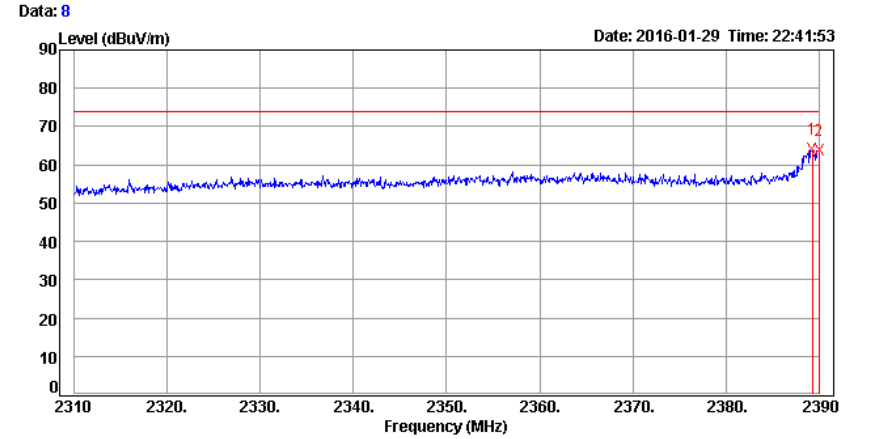
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	49.15	4.48	53.63	54.00	-0.37			Average
2483.62	49.20	4.48	53.68	54.00	-0.32			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Horizontal**

CH Low (IEEE 802.11n HT20 Mode)



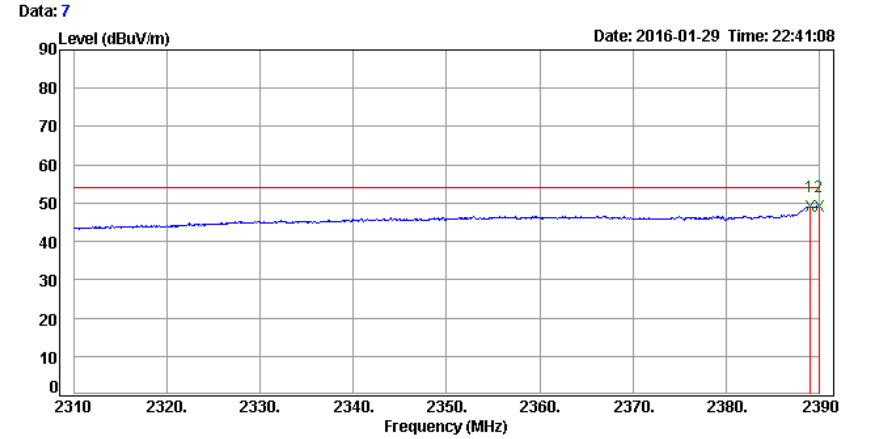
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.28	59.82	4.28	64.10	74.00	-9.90			Peak
2390.00	59.51	4.28	63.79	74.00	-10.21			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Horizontal**

CH Low (IEEE 802.11n HT20 Mode)



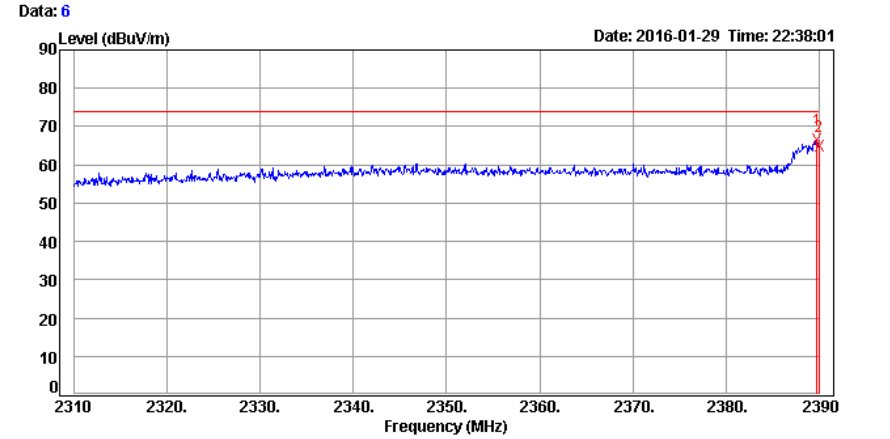
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.04	44.87	4.28	49.15	54.00	-4.85			Average
2390.00	44.68	4.28	48.96	54.00	-5.04			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Vertical**

CH Low (IEEE 802.11n HT20 Mode)



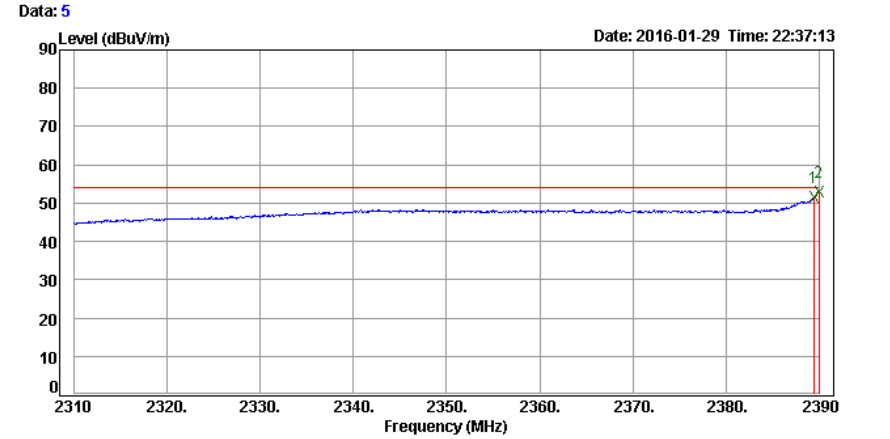
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.84	62.38	4.28	66.66	74.00	-7.34			Peak
2390.00	60.64	4.28	64.92	74.00	-9.08			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Vertical**

CH Low (IEEE 802.11n HT20 Mode)



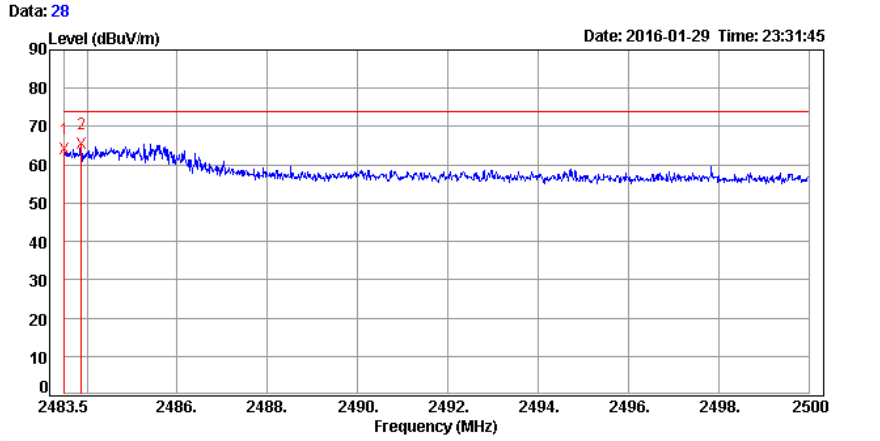
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.44	47.31	4.28	51.59	54.00	-2.41			Average
2390.00	48.65	4.28	52.93	54.00	-1.07			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Horizontal**

CH High (IEEE 802.11n HT20 Mode)



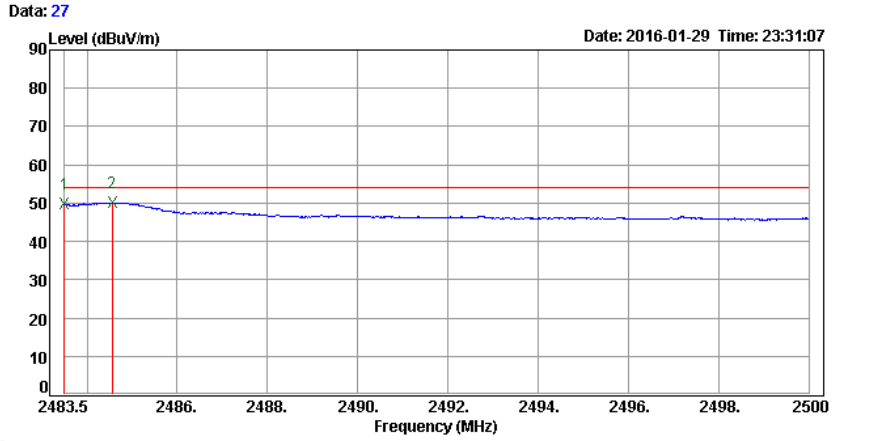
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	59.85	4.48	64.33	74.00	-9.67			Peak
2483.88	61.05	4.49	65.54	74.00	-8.46			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Horizontal**

CH High (IEEE 802.11n HT20 Mode)



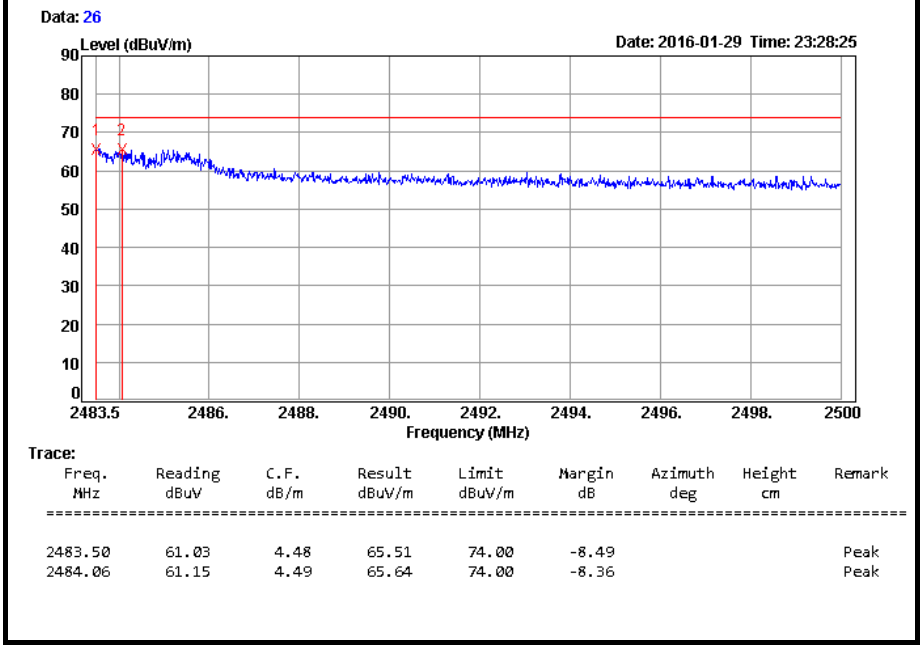
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	45.28	4.48	49.76	54.00	-4.24			Average
2484.56	45.59	4.49	50.08	54.00	-3.92			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Vertical**

CH High (IEEE 802.11n HT20 Mode)



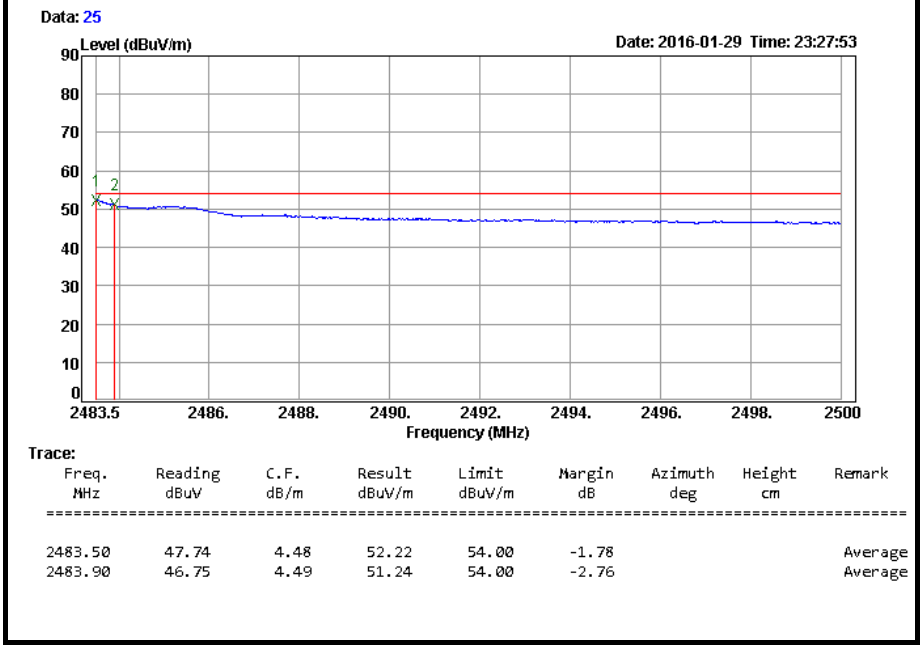
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	61.03	4.48	65.51	74.00	-8.49			Peak
2484.06	61.15	4.49	65.64	74.00	-8.36			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Vertical**

CH High (IEEE 802.11n HT20 Mode)



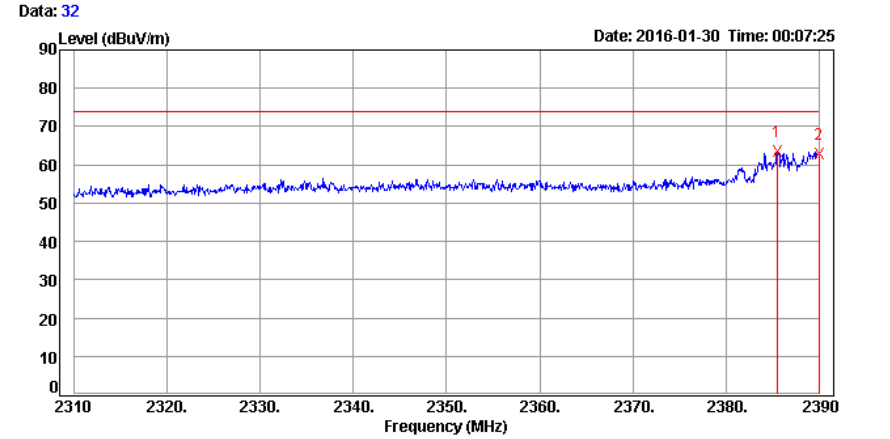
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	47.74	4.48	52.22	54.00	-1.78			Average
2483.90	46.75	4.49	51.24	54.00	-2.76			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Horizontal**

CH Low (IEEE 802.11n HT40 Mode)



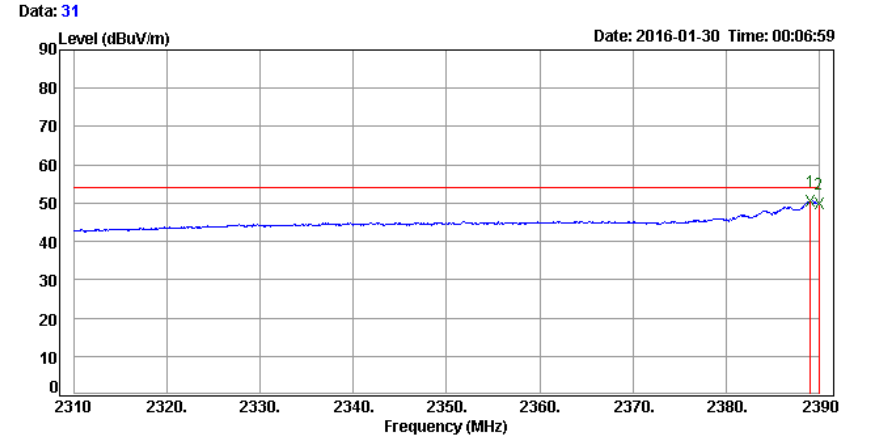
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2385.52	59.23	4.28	63.51	74.00	-10.49			Peak
2390.00	58.48	4.28	62.76	74.00	-11.24			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Horizontal**

CH Low (IEEE 802.11n HT40 Mode)



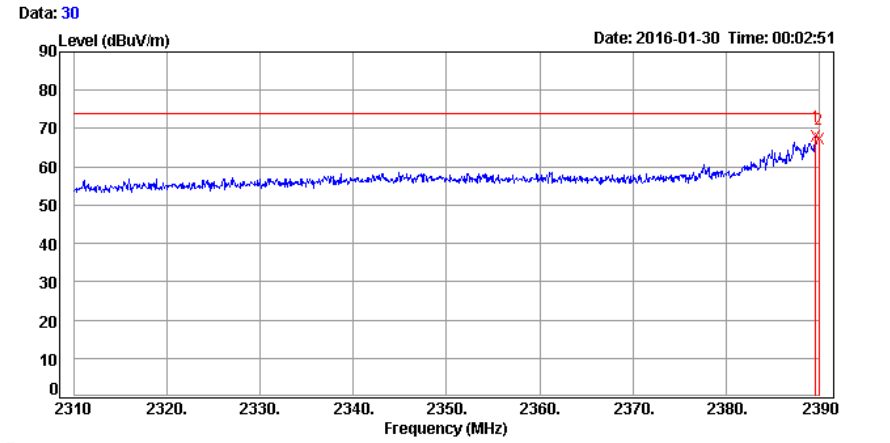
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.12	46.31	4.28	50.59	54.00	-3.41			Average
2390.00	45.41	4.28	49.69	54.00	-4.31			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Vertical**

CH Low (IEEE 802.11n HT40 Mode)



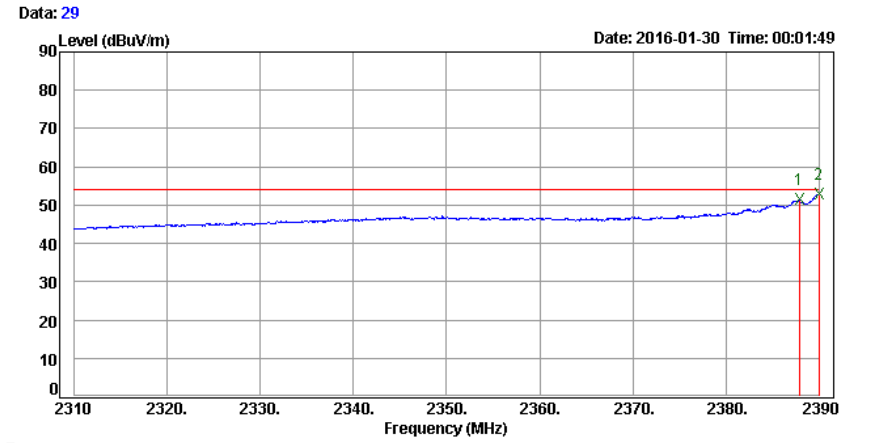
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2389.68	63.52	4.28	67.80	74.00	-6.20			Peak
2390.00	62.96	4.28	67.24	74.00	-6.76			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Vertical**

CH Low (IEEE 802.11n HT40 Mode)



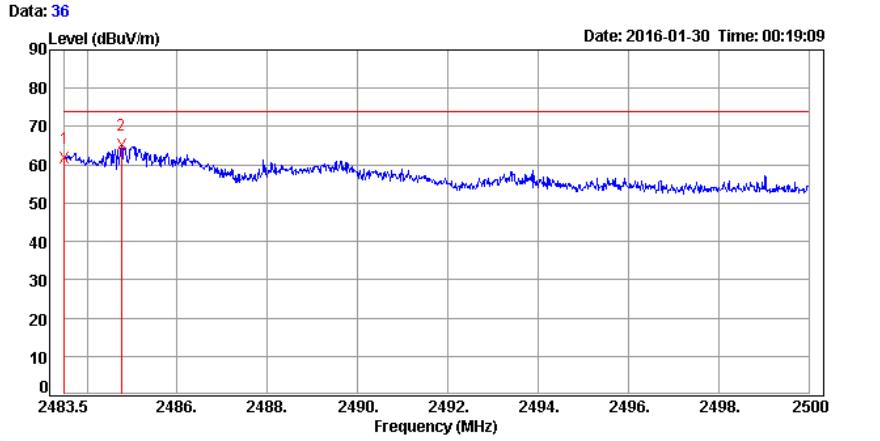
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2387.92	47.10	4.28	51.38	54.00	-2.62			Average
2390.00	48.49	4.28	52.77	54.00	-1.23			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Horizontal**

CH High (IEEE 802.11n HT40 Mode)



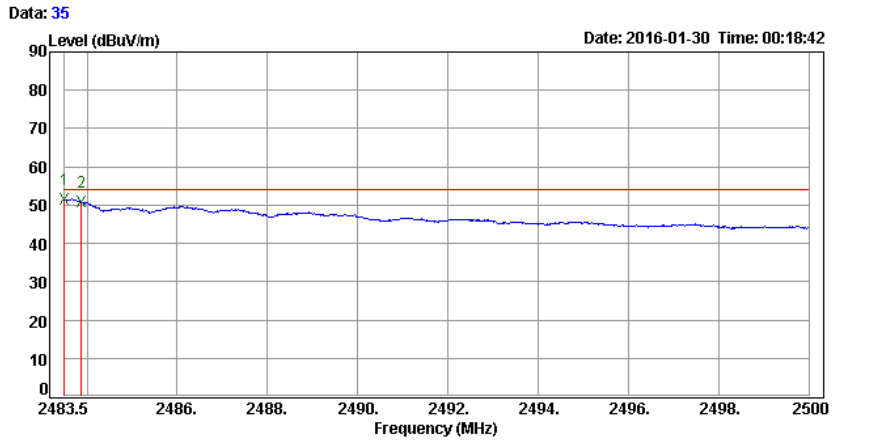
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	57.40	4.48	61.88	74.00	-12.12			Peak
2484.75	60.55	4.49	65.04	74.00	-8.96			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Horizontal**

CH High (IEEE 802.11n HT40 Mode)



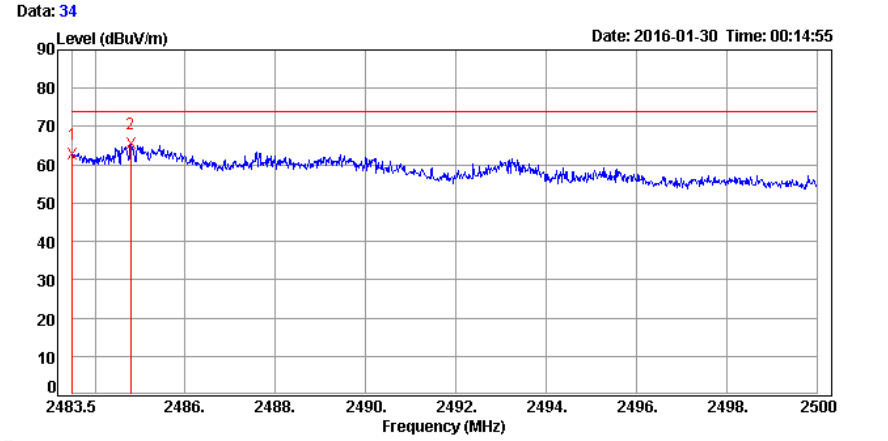
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	46.89	4.48	51.37	54.00	-2.63			Average
2483.88	46.16	4.49	50.65	54.00	-3.35			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Peak **Polarity: Vertical**

CH High (IEEE 802.11n HT40 Mode)



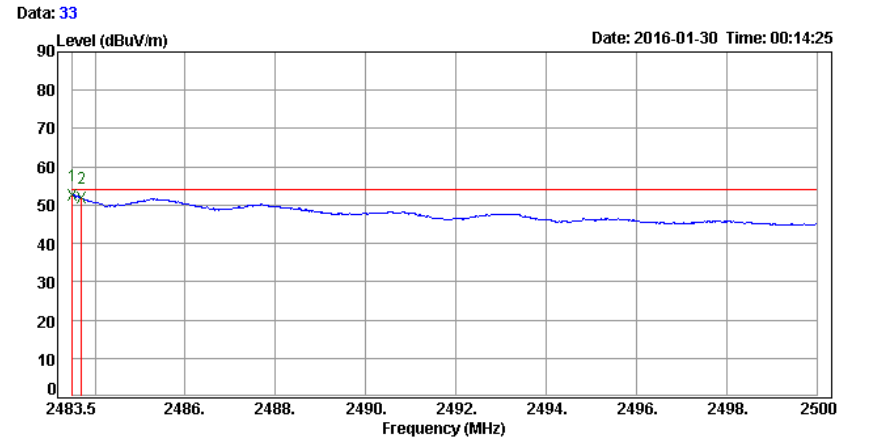
Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	58.29	4.48	62.77	74.00	-11.23			Peak
2484.79	61.00	4.49	65.49	74.00	-8.51			Peak

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

Detector mode: Average **Polarity: Vertical**

CH High (IEEE 802.11n HT40 Mode)



Trace:

Freq. MHz	Reading dBuV	C.F. dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Azimuth deg	Height cm	Remark
2483.50	48.13	4.48	52.61	54.00	-1.39			Average
2483.70	47.43	4.49	51.92	54.00	-2.08			Average

Remark: *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*

7.8 CONDUCTED EMISSION

LIMITS

§ 15.207 (a) Except as shown in paragraph (b) and (c) this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

The lower limit applies at the boundary between the frequency ranges.

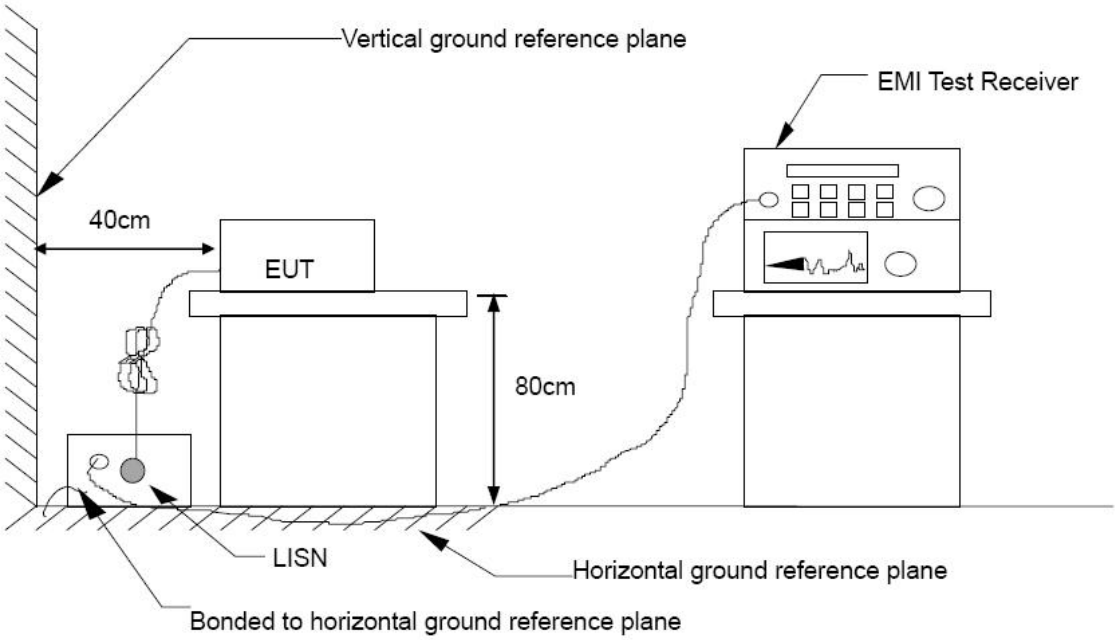
Frequency Range (MHz)	Conducted Limit (dBμv)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5.00	56	46
5.00 - 30.0	60	50

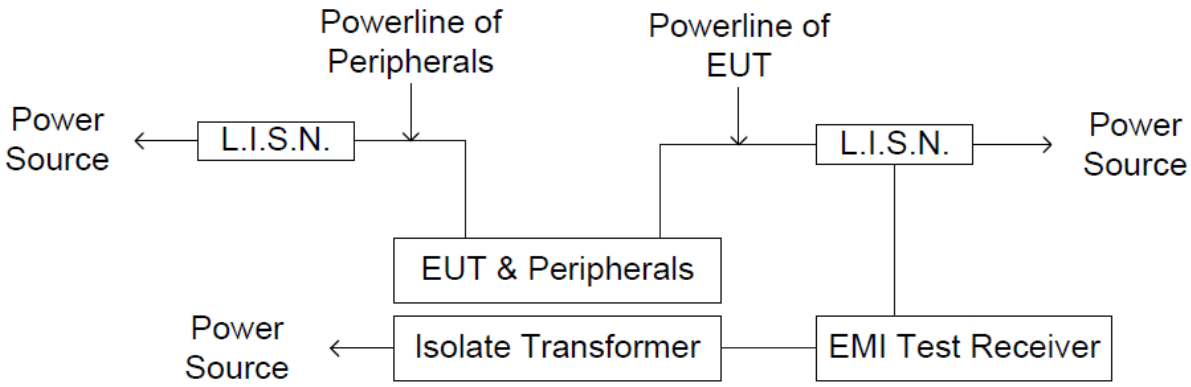
TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
L.I.S.N	Schwarzbeck	NSLK 8127	8127465	08/05/2016
L.I.S.N	Schwarzbeck	NSLK 8127	8127473	03/09/2016
EMI Test Receiver	Rohde & Schwarz	ESHS 30	838550/003	10/31/2016
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100111	06/28/2016
Test S/W	E3.815206a			

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP





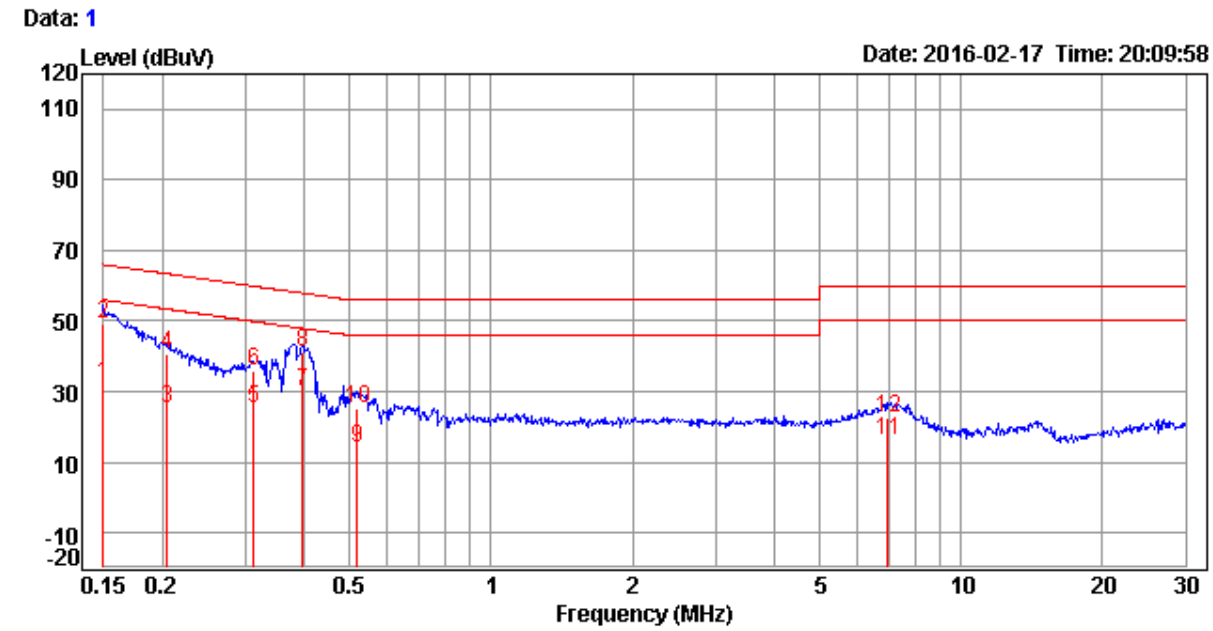
TEST PROCEDURE

The basic test procedure was in accordance with ANSI C63.10:2013.
The test procedure is performed in a 4m × 3m × 2.4m (L×W×H) shielded room.
The EUT along with its peripherals were placed on a 1.0m (W) × 1.5m (L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane.
The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room. All peripherals were connected to the second LISN and the chassis ground also bounded to the horizontal ground plane of shielded room.
The EUT was located so that the distance between the boundary of the EUT and the closest surface of the LISN is 0.8 m. Where a mains flexible cord was provided by the manufacturer shall be 1 m long, or if in excess of 1 m, the excess cable was folded back and forth as far as possible so as to form a bundle not exceeding 0.4 m in length.

TEST RESULTS

Product Name	Indoor IP Camera	Test By	Rex Chiu
Test Model	CM01	Test Date	2016/02/17
Test mode	Mode 1	Temp. & Humidity	25°C, 50%

LINE



Trace:

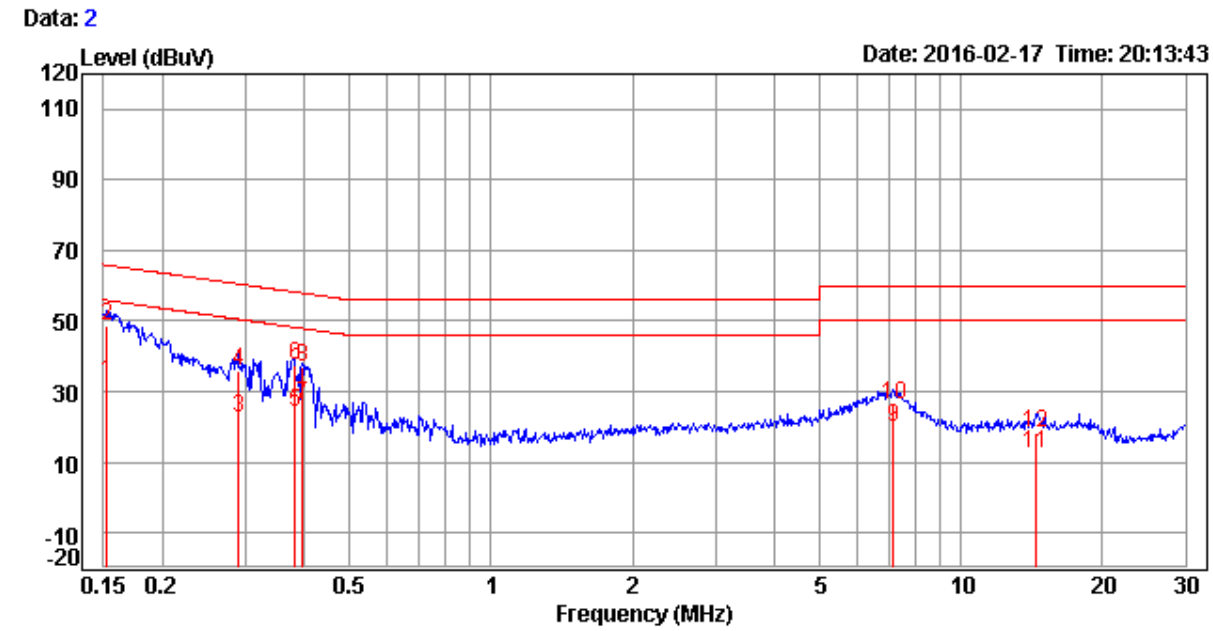
Freq. MHz	Reading dBuV Q.P.	Reading dBuV AV.	C.F. dB	Result dBuV Q.P.	Result dBuV AV.	Limit dBuV Q.P.	Limit dBuV AV.	Margin dB Q.P.	Margin dB AV.
0.150	39.32	22.47	9.96	49.28	32.43	66.00	56.00	-16.72	-23.57
0.204	30.44	15.00	9.99	40.43	24.99	63.45	53.45	-23.02	-28.46
0.313	25.82	15.26	9.99	35.81	25.25	59.88	49.88	-24.07	-24.63
0.396	31.48	20.22	9.99	41.47	30.21	57.95	47.95	-16.48	-17.74
0.518	15.26	4.32	10.00	25.26	14.32	56.00	46.00	-30.74	-31.68
6.988	12.26	5.66	10.27	22.53	15.93	60.00	50.00	-37.47	-34.07

Remark:

1. *Correction Factor = Insertion loss + Cable loss*
2. *Result level = Reading Value + Correction factor*
3. *Margin value = Result level – Limit value*

Product Name	Indoor IP Camera	Test By	Rex Chiu
Test Model	CM01	Test Date	2016/02/17
Test Mode	Mode 1	Temp. & Humidity	25°C, 50%

NEUTRAL



Trace:

Freq. MHz	Reading dBuV Q.P.	Reading dBuV AV.	C.F. dB	Result dBuV Q.P.	Result dBuV AV.	Limit dBuV Q.P.	Limit dBuV AV.	Margin dB Q.P.	Margin dB AV.
0.152	38.60	22.72	9.98	48.58	32.70	65.91	55.91	-17.33	-23.21
0.289	25.62	12.80	10.01	35.63	22.81	60.54	50.54	-24.91	-27.73
0.381	27.64	14.22	10.01	37.65	24.23	58.25	48.25	-20.60	-24.02
0.398	26.76	16.47	10.01	36.77	26.48	57.90	47.90	-21.13	-21.42
7.137	16.14	9.56	10.25	26.39	19.81	60.00	50.00	-33.61	-30.19
14.364	7.87	2.11	10.44	18.31	12.55	60.00	50.00	-41.69	-37.45

Remark:

1. *Correction Factor = Insertion loss + Cable loss*
2. *Result level = Reading Value + Correction factor*
3. *Margin value = Result level – Limit value*