FCC Test Report

Equipment	:	Max-Stream AC1750 MU-MIMO GIGABIT ROUTER Max-Stream AC1900 MU-MIMO GIGABIT ROUTER
Brand Name	:	LINKSYS
Model No.	:	EA7400V2;EA7500V2
FCC ID	:	Q87-EA7500V2
Standard	:	47 CFR FCC Part 15.247
Operating Band	:	2400 MHz – 2483.5 MHz
Function	:	☒ Point-to-multipoint; ☐ Point-to-point
Applicant	:	LINKSYS LLC 121 Theory Drive, Irvine ,California,United States, 92617

The product sample received on Jun. 29, 2016 and completely tested on Sep. 02, 2016. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Sam Chen
SPORTON INTERNATIONAL INC.

Testing Laboratory
1190

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Summary of Test Result

Conformance Test Specifications				
Report Clause	**Ref. Std. Clause**	**Description**	**Limit**	**Result**
1.1.2	15.203	Antenna Requirement	FCC 15.203	Complied
3.1	15.207	AC Power-line Conducted Emissions	FCC 15.207	Complied
3.2	15.247(a)	DTS Bandwidth	≥500kHz	Complied
3.3	15.247(b)	Fundamental Emission Output Power	Power [dBm]:30	Complied
3.4	15.247(e)	Power Spectral Density	PSD [dBm/3kHz]:8	Complied
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	Non-Restricted Bands: > 30 dBc	Complied
3.6	15.247(d)	Emissions in Restricted Frequency Bands	Restricted Bands: FCC 15.209	Complied

Revision History

Report No.	Version	Description	Issued Date
FR662319-01AA	Rev. 01	Initial issue of report	Sep. 21, 2016

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4G	11b	20	4
2.4G	11g	20	4
2.4G	HT20	20	4
2.4G	HT40	40	4

Note:
- 2.4G is the 2.4GHz Band (2.4-2.4835GHz).
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)		Remark
					2.4GHz	5GHz	
1	Airgain	ET2420DLSRPSMA	Dipole Ant.	R-SMA	1.3	2.3	External
2	Airgain	ET2420DLSRPSMA	Dipole Ant.	R-SMA	1.3	2.3	
3	Airgain	ET2420DLSRPSMA	Dipole Ant.	R-SMA	1.3	2.3	
4	Airgain	N2420DGCSBK	PCB Ant.	I-PEX	2.1	2.4	Internal

Note: The EUT has four antennas.

<For 2.4GHz>

For IEEE 802.11b/g/n mode (4TX4RX)

Chain 1, Chain 2, Chain 3 and Chain 4 can be used as transmitting/receiving antenna.

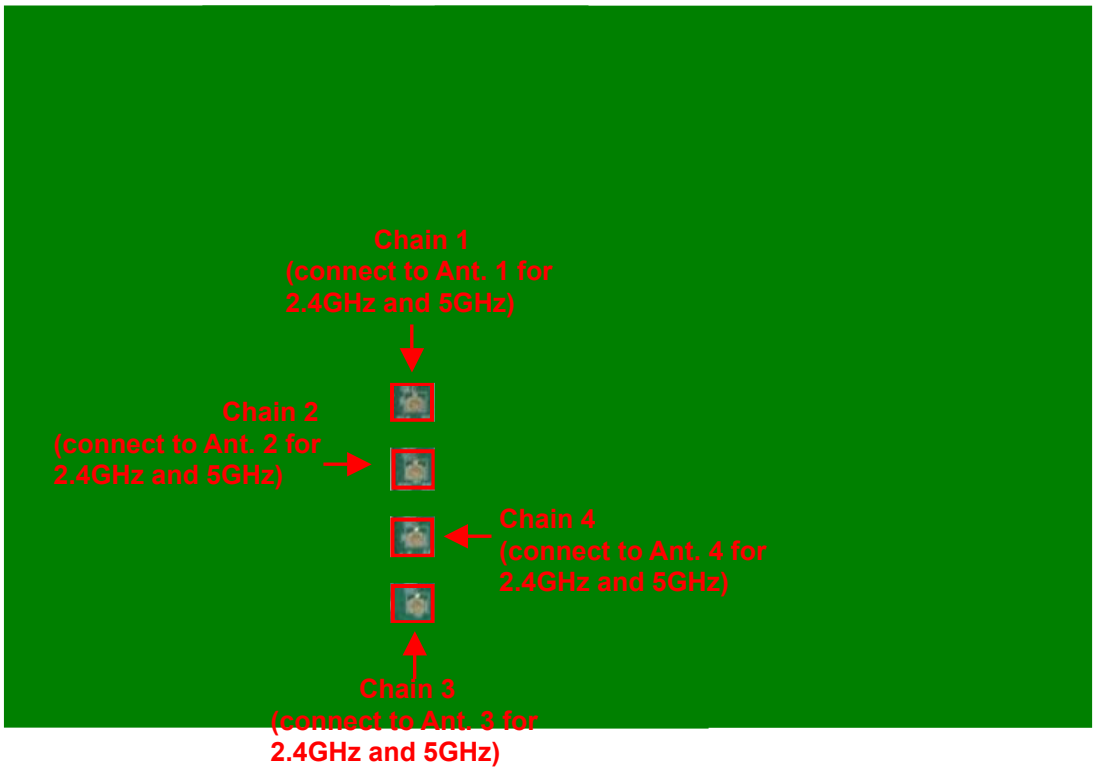
Chain 1, Chain 2, Chain 3 and Chain 4 could transmit/receive simultaneously.

<For 5GHz>

For IEEE 802.11a/n/ac mode (4TX/4RX):

Chain 1, Chain 2, Chain 3 and Chain 4 can be used as transmitting/receiving antenna.

Chain 1, Chain 2, Chain 3 and Chain 4 could transmit/receive simultaneously.



1.1.3 Mode Test Duty Cycle

Mode	DC	T(s)	VBW(Hz) ≥ 1/T
11b	1	n/a (DC>=0.98)	n/a (DC>=0.98)
11g	1	n/a (DC>=0.98)	n/a (DC>=0.98)
HT20	1	n/a (DC>=0.98)	n/a (DC>=0.98)
HT40	1	n/a (DC>=0.98)	n/a (DC>=0.98)

1.1.4 EUT Operational Condition

EUT Power Type	From power adapter			
Beamforming Function	☒	With beamforming for 802.11ac in 5GHz	☐	Without beamforming

1.1.5 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Equipment Name	Modulation	Description
EA7400V2	Max-Stream AC1750 MU-MIMO GIGABIT ROUTER	Without 256QAM in 802.11ac.	All the models are identical, the difference model served as marketing strategy.
EA7500V2	Max-Stream AC1900 MU-MIMO GIGABIT ROUTER	With 256QAM in 802.11ac.	

From the above models, model: EA7500V2 was selected as representative model for the test and its data was recorded in this report.

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 558074 D01 v03r05
- FCC KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location							
☐	HWA YA	ADD	:	No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.			
		TEL	:	886-3-327-3456	FAX	:	886-3-318-0055
☒	JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.			
		TEL	:	886-3-656-9065	FAX	:	886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Eddie Weng	22°C / 54%	Aug. 10, 2016~Aug. 11, 2016
Radiated	03CH01-CB	Dk Chang	22°C / 54%	Jul. 30, 2016~Aug. 17, 2016 for Adapter 1&Adapter 2
		Gino Huang	22°C / 54%	Sep. 02, 2016 for Adapter 3&Adapter 4
AC Conduction	CO01-CB	Kane Liu	23°C / 60%	Jul. 18, 2016 for Adapter 1&Adapter 2
		Gavin Peng/Ryo Fan/Hank Yang	24°C / 51%	Sep. 02, 2016 for Adapter 3&Adapter 4

Test site Designation No. TW0006 with FCC.
Test site registered number IC 4086D with Industry Canada.

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range	Power Setting
2.4G	11b	20	1	4	2412	L	1C
2.4G	11b	20	1	4	2437	M	1A
2.4G	11b	20	1	4	2462	H	16
2.4G	11g	20	1	4	2412	L	21
2.4G	11g	20	1	4	2437	M	28
2.4G	11g	20	1	4	2462	H	1E
2.4G	HT20	20	1,(M0)	4	2412	L	1F
2.4G	HT20	20	1,(M0)	4	2437	M	28
2.4G	HT20	20	1,(M0)	4	2462	H	1C
2.4G	HT40	40	1,(M0)	4	2422	L	18
2.4G	HT40	40	1,(M0)	4	2437	M	20
2.4G	HT40	40	1,(M0)	4	2452	H	1E

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	2.4GHz with Adapter 1
2	5GHz with Adapter 1
Mode 2 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3~5 will follow this same test mode.	
3	5GHz with Adapter 2
4	5GHz with Adapter 3
5	5GHz with Adapter 4
Mode 2 ~ Mode 5 are worst test result among Mode 1~5, and the test result of those four modes are selected to record in the test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Fundamental Emission Output Power Power Spectral Density
Test Condition	Conducted measurement at transmit chains
Note: Measured from R-SMA end when testing.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Non-restricted Frequency Bands Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	2.4GHz + EUT in Z axis with Adapter 1
2	2.4GHz+ EUT in Y axis with Adapter 1
Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	5GHz + EUT in Z axis with Adapter 1
Mode 3 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4~Mode 6 will follow this same test mode.	
4	5GHz + EUT in Z axis with Adapter 2
5	5GHz + EUT in Z axis with Adapter 3
6	5GHz + EUT in Z axis with Adapter 4
Mode 3 ~ Mode 6 are worst test result among Mode 1~6, and the test result of those four modes are selected to record in the test report.	

Operating Mode > 1GHz	CTX
1	Place EUT in Y axis
2	Place EUT in Z axis
Mode 2 has been evaluated to be the worst case after evaluating. Consequently, measurement will follow this same test mode.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
EUT Z axis has been evaluated to be the worst case at Radiated Emissions <Above 1GHz>; thus, the measurement for Simultaneous Transmission Analysis will follow this same test configuration.	
1	Place EUT in Z axis + WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA662319-01 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter 1 (Fixed plug)	LEI	MU30-P120250-A1	Input: 100-240V~50/60Hz 0.8A Output: 12V, 2.5A
Adapter 2 (Fixed plug)	APD	WA-30J12FU	Input: 100-240V~50-60Hz, 0.9A Max. Output: 12V, 2.5A
Adapter 3 (Interchangeable plug)	APD	WA-30J12R	Input: 100-240V~50-60Hz, 0.9A Max. Output: 12V, 2.5A
Adapter 4 (Interchangeable plug)	Ktec	KSAS0361200250D5	Input: 100-240V~50/60Hz, 1.0A Output: 12V, 2.5A
Others			
RJ-45 cable (Black and Bule): Non-Shielded, 1.0m Plug*2 only for Adapter 3 and Adapter 4 use.			

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E6430	DoC
2	Flash disk3.0	Transcend	JetFlash-700	DoC
3	Flash disk3.0	Transcend	JetFlash-700	DoC

For Test Site No: 03CH01-CB

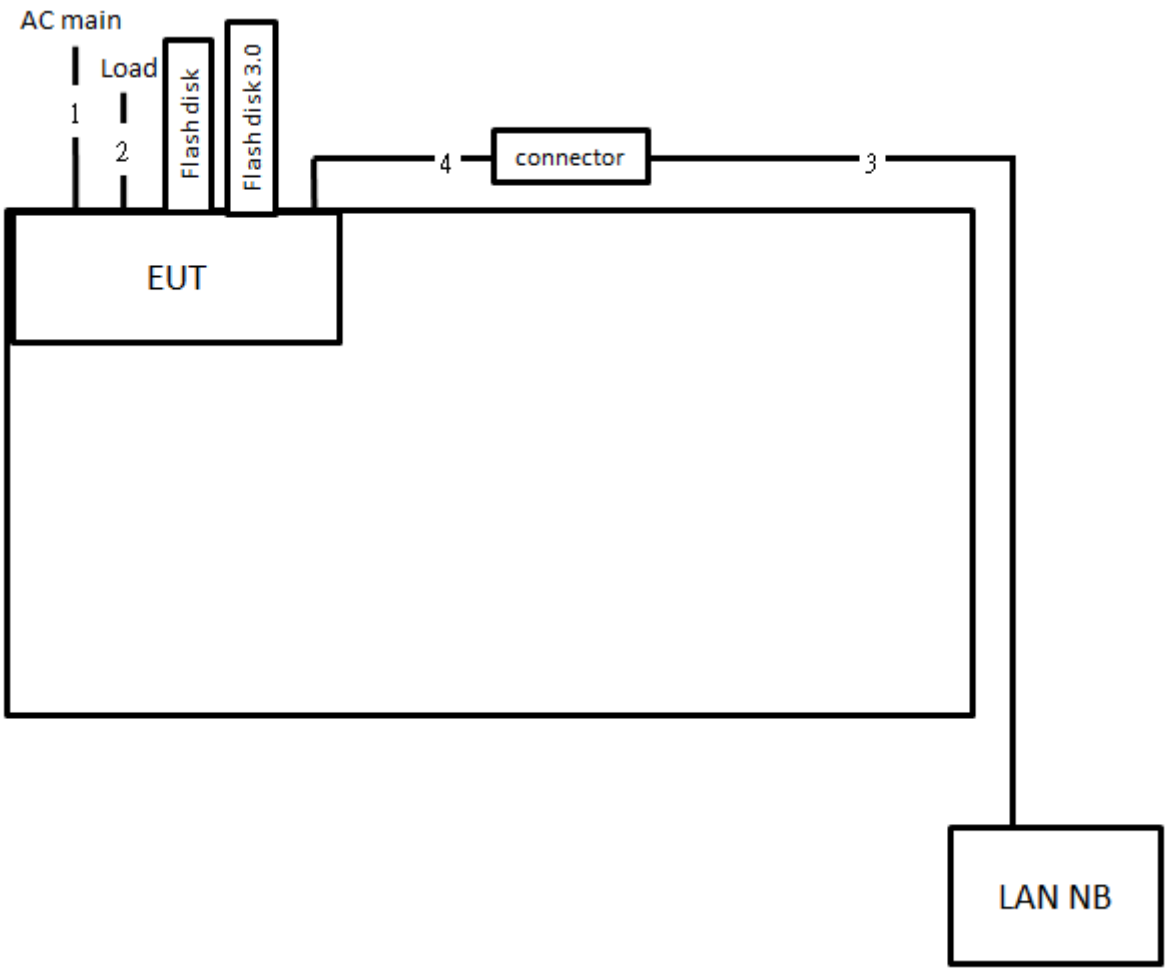
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

For Test Site No: TH01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

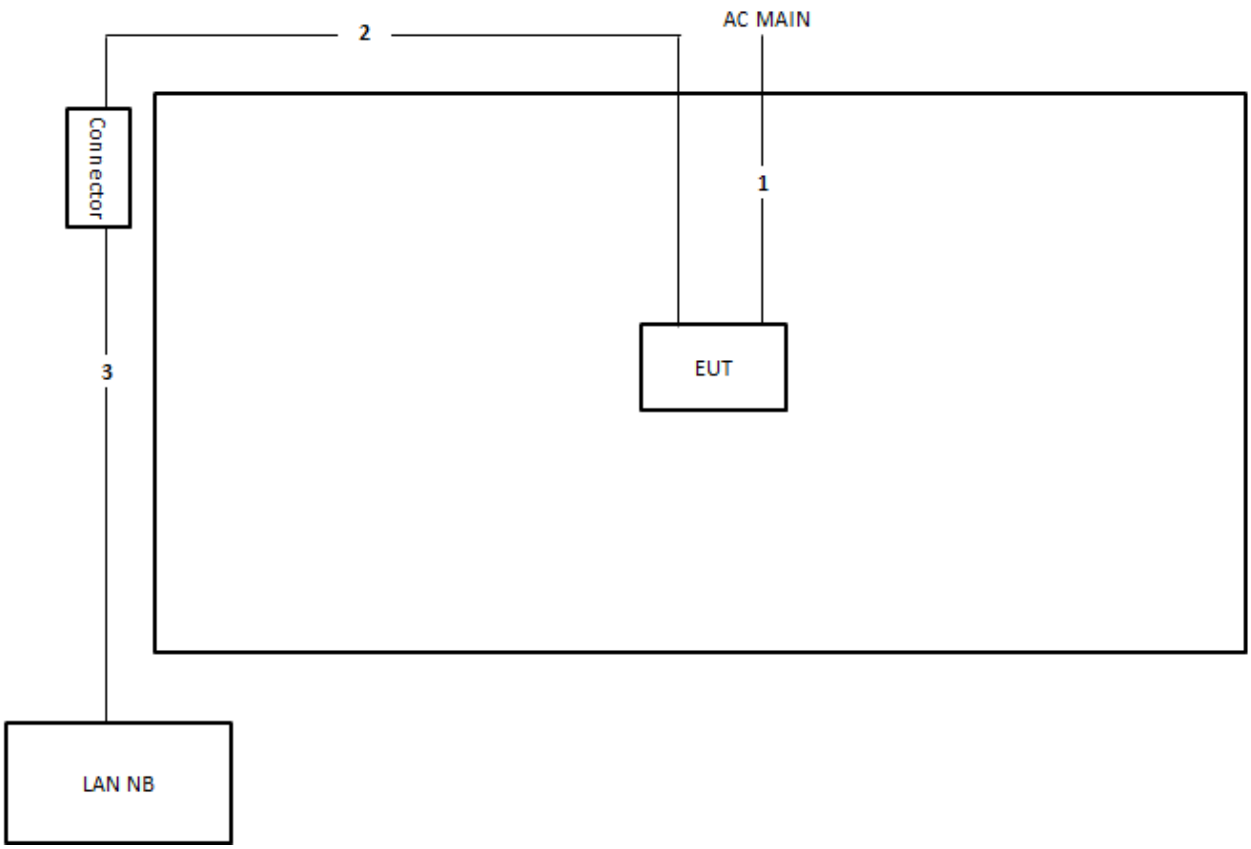
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable*4	No	3m
3	RJ-45 cable	No	10m
4	RJ-45 cable	No	1m

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	1m
3	RJ-45 cable	No	10m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

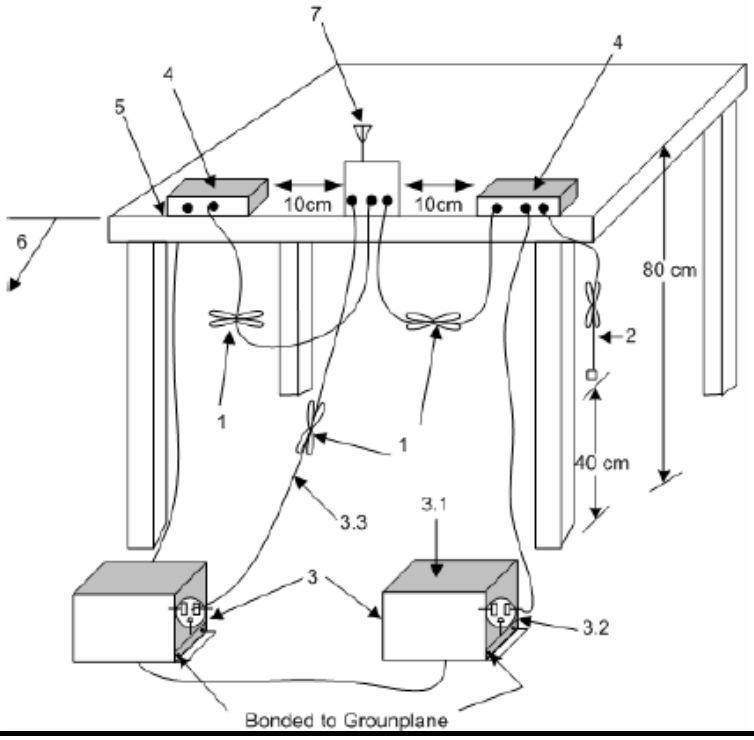
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
▪ 6 dB bandwidth ≥ 500 kHz.

3.2.2 Measuring Instruments

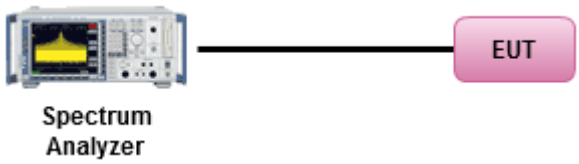
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
	☐ Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
	☐ Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Fundamental Emission Output Power

3.3.1 Fundamental Emission Output Power Limit

Maximum Conducted Output Power Limit		
	▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)	
	▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)$ dBm	
	▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm	
	▪ Smart antenna system (SAS):	
		- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm
		- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm
		- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3 + 8$dB dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.		

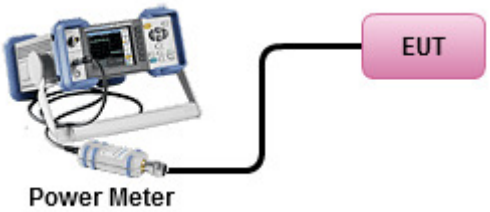
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
▪ Maximum Peak Conducted Output Power	
	☐ Refer as FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
	☐ Refer as FCC KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW ≥ DTS BW)
▪ Maximum Conducted Output Power	
	[duty cycle ≥ 98% or external video / power trigger]
	☐ Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
	☐ Refer as FCC KDB 558074, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
	duty cycle < 98% and average over on/off periods with duty factor
	☐ Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
	RF power meter and average over on/off periods with duty factor or gated trigger
	☒ Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM-G (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
▪ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

3.4.2 Measuring Instruments

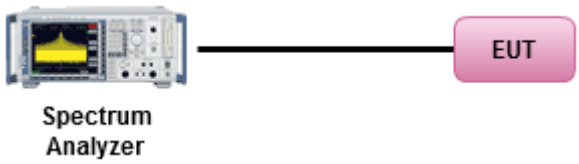
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method			
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).			
	☒ Refer as FCC KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak).		
	[duty cycle ≥ 98% or external video / power trigger]		
	☐ Refer as FCC KDB 558074, clause 10.3 Method AVGPSD-1 (spectral trace averaging).		
	☐ Refer as FCC KDB 558074, clause 10.4 Method AVGPSD-2 (slow sweep speed)		
	duty cycle < 98% and average over on/off periods with duty factor		
	☐ Refer as FCC KDB 558074, clause 10.5 Method AVGPSD-1 Alt (spectral trace averaging).		
	☐ Refer as FCC KDB 558074, clause 10.6 Method AVGPSD-2 Alt. (slow sweep speed)		
▪ For conducted measurement.			
	▪ If The EUT supports multiple transmit chains using options given below:		
		☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	
		☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,	
		☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.	

3.4.4 Test Setup

Power Spectral Density



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dB)**
Peak output power procedure	20
Average output power procedure	30

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

3.5.2 Measuring Instruments

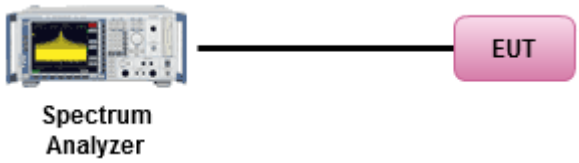
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
▪ Refer as FCC KDB 558074, clause 11 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

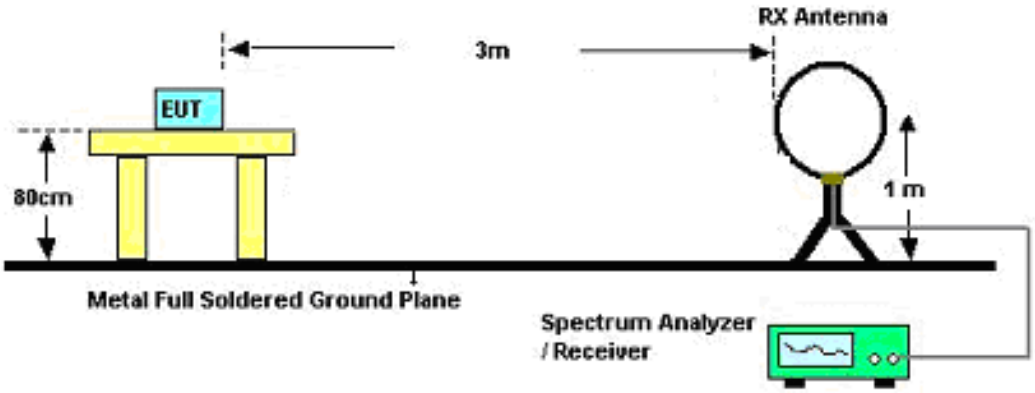
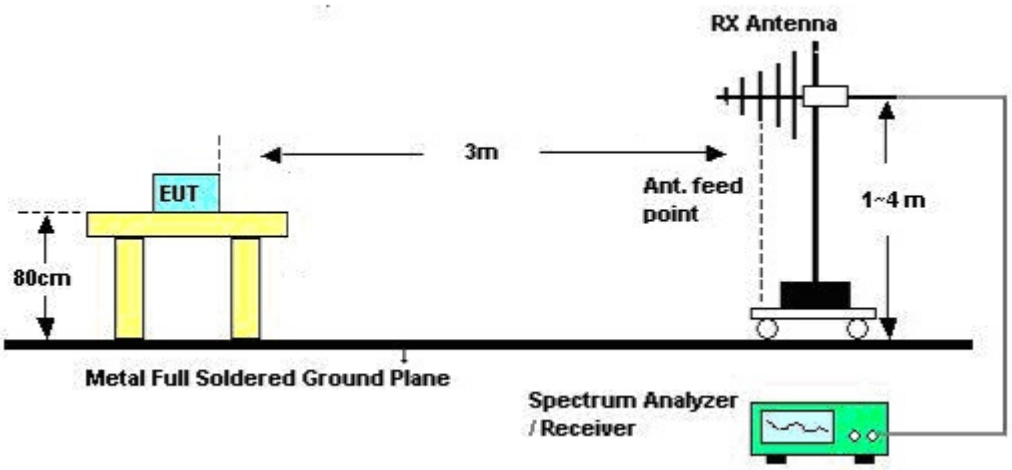
3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

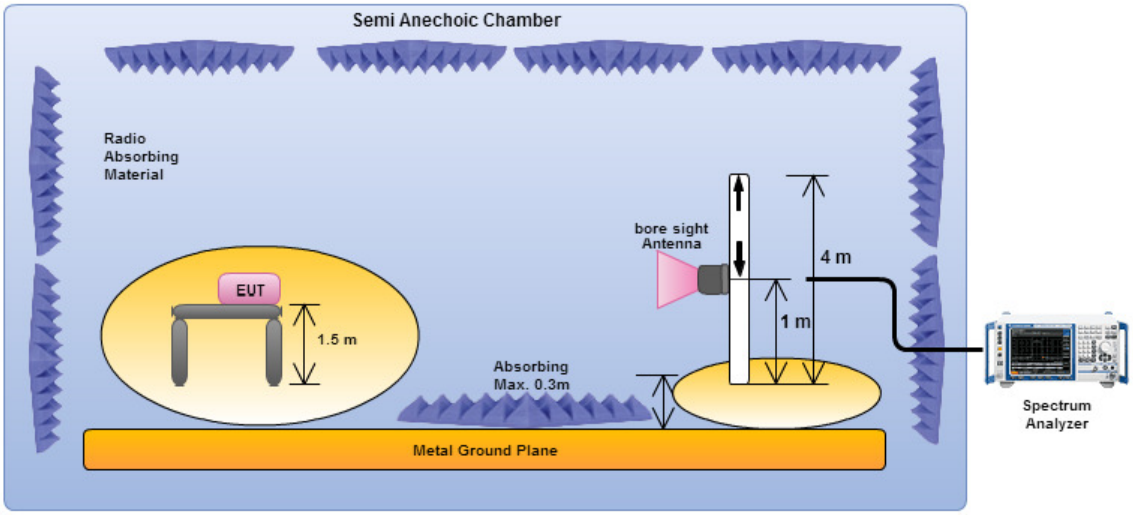
3.6.3 Test Procedures

Test Method		
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
▪ Refer as ANSI C63.10, clause 6.9.2.2 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.		
▪ For the transmitter unwanted emissions shall be measured using following options below:		
	▪ Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.	
		☐ Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle ≥98%)
		☐ Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
		☒ Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW≥1/T).
		☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐ Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		☒ Refer as FCC KDB 558074, clause 12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:		
	▪ Refer as FCC KDB 558074 clause 13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.	
	▪ Refer as FCC KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.	
	▪ Refer as FCC KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).	
▪ For conducted and cabinet radiation measurement, refer as FCC KDB 558074, clause 12.2.2.		
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB	
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.	

3.6.4 Test Setup

Transmitter Radiated Emissions
9kHz ~30MHz

30MHz~1GHz


Above 1GHz



3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.6.6 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix F

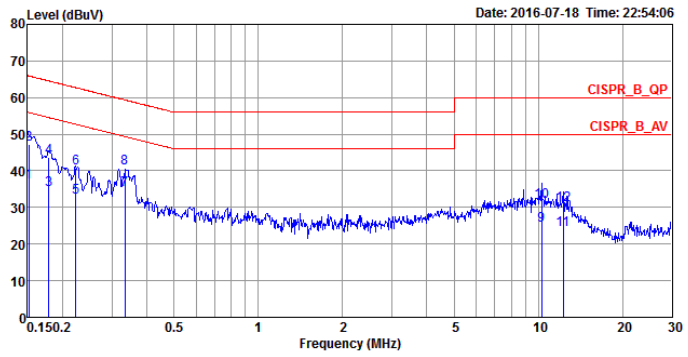
4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 27, 2016	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 08, 2015	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 23, 2015	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 24, 2016	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA	TESEQ	CBL6112D	37880	20MHz ~ 2GHz	Sep. 03, 2015	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Oct. 22, 2015	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 15, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 18, 2016	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Nov. 13, 2015	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Oct. 27, 2015	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 16, 2016	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz ~ 1 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-17	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-1	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-l0-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 09, 2015	Conducted (TH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 02, 2015	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.
"*" Calibration Interval of instruments listed above is two years.
NCR means Non-Calibration required.

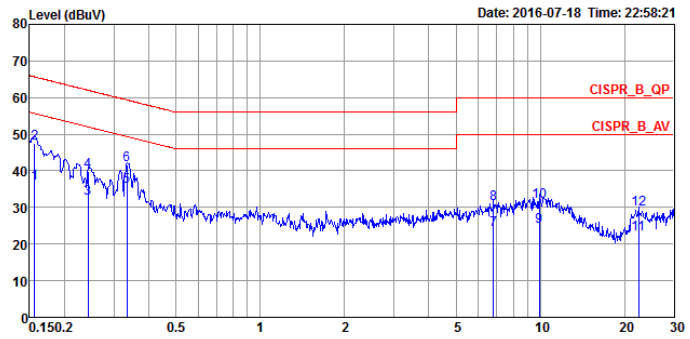
AC Power-line Conducted Emissions Result			
Operating Mode	2	**Power Phase**	Neutral
Operating Function	CTX 5GHz with Adapter 1		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1516	37.03	-18.88	55.91	26.85	10.02	0.16	NEUTRAL	Average
2	0.1516	47.11	-18.80	65.91	36.93	10.02	0.16	NEUTRAL	QP
3	0.1787	34.74	-19.81	54.55	24.64	9.92	0.18	NEUTRAL	Average
4	0.1787	43.77	-20.78	64.55	33.67	9.92	0.18	NEUTRAL	QP
5	0.2232	32.75	-19.95	52.70	22.67	9.92	0.16	NEUTRAL	Average
6	0.2232	40.81	-21.89	62.70	30.73	9.92	0.16	NEUTRAL	QP
7	0.3338	34.72	-14.63	49.35	24.74	9.92	0.06	NEUTRAL	Average
8	0.3338	40.62	-18.73	59.35	30.64	9.92	0.06	NEUTRAL	QP
9	10.2876	25.03	-24.97	50.00	14.73	10.15	0.15	NEUTRAL	Average
10	10.2876	31.64	-28.36	60.00	21.34	10.15	0.15	NEUTRAL	QP
11	12.2531	24.02	-25.98	50.00	13.64	10.19	0.19	NEUTRAL	Average
12	12.2531	30.69	-29.31	60.00	20.31	10.19	0.19	NEUTRAL	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

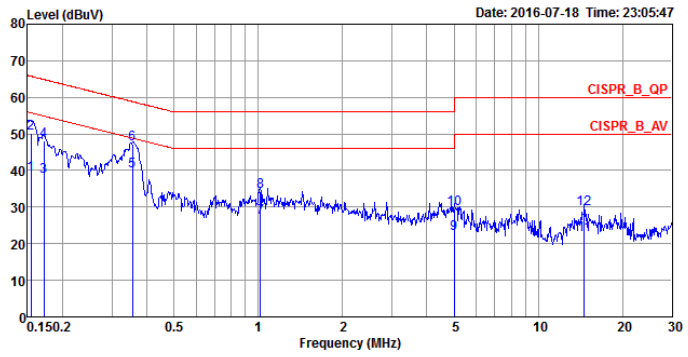
AC Power-line Conducted Emissions Result			
Operating Mode	2	**Power Phase**	Line
Operating Function	CTX 5GHz with Adapter 1		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1565	36.67	-18.98	55.65	26.48	10.02	0.17	LINE	Average
2	0.1565	47.67	-17.98	65.65	37.48	10.02	0.17	LINE	QP
3	0.2429	32.34	-19.66	52.00	22.28	9.92	0.14	LINE	Average
4	0.2429	39.85	-22.15	62.00	29.79	9.92	0.14	LINE	QP
5	0.3338	35.85	-13.50	49.35	25.87	9.92	0.06	LINE	Average
6	0.3338	41.64	-17.71	59.35	31.66	9.92	0.06	LINE	QP
7	6.8051	23.97	-26.03	50.00	13.78	10.07	0.12	LINE	Average
8	6.8051	30.96	-29.04	60.00	20.77	10.07	0.12	LINE	QP
9	9.9130	24.86	-25.14	50.00	14.56	10.15	0.15	LINE	Average
10	9.9130	31.61	-28.39	60.00	21.31	10.15	0.15	LINE	QP
11	22.4163	22.63	-27.37	50.00	12.01	10.37	0.25	LINE	Average
12	22.4163	29.43	-30.57	60.00	18.81	10.37	0.25	LINE	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

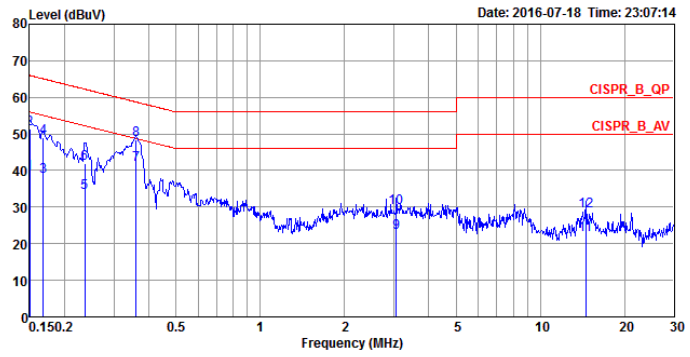
AC Power-line Conducted Emissions Result			
Operating Mode	3	**Power Phase**	Neutral
Operating Function	CTX 5GHz with Adapter 2		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1540	39.04	-16.74	55.78	28.86	10.02	0.16	NEUTRAL	Average
2	0.1540	50.27	-15.51	65.78	40.09	10.02	0.16	NEUTRAL	QP
3	0.1712	38.27	-16.63	54.90	28.08	10.02	0.17	NEUTRAL	Average
4	0.1712	47.98	-16.92	64.90	37.79	10.02	0.17	NEUTRAL	QP
5	0.3558	39.78	-9.05	48.83	29.82	9.92	0.04	NEUTRAL	Average
6	0.3558	47.15	-11.68	58.83	37.19	9.92	0.04	NEUTRAL	QP
7	1.0157	27.20	-18.80	46.00	16.54	9.94	0.72	NEUTRAL	Average
8	1.0157	34.13	-21.87	56.00	23.47	9.94	0.72	NEUTRAL	QP
9	5.0046	22.62	-27.38	50.00	12.50	10.02	0.10	NEUTRAL	Average
10	5.0046	29.53	-30.47	60.00	19.41	10.02	0.10	NEUTRAL	QP
11	14.5942	22.50	-27.50	50.00	12.07	10.22	0.21	NEUTRAL	Average
12	14.5942	29.39	-30.61	60.00	18.96	10.22	0.21	NEUTRAL	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

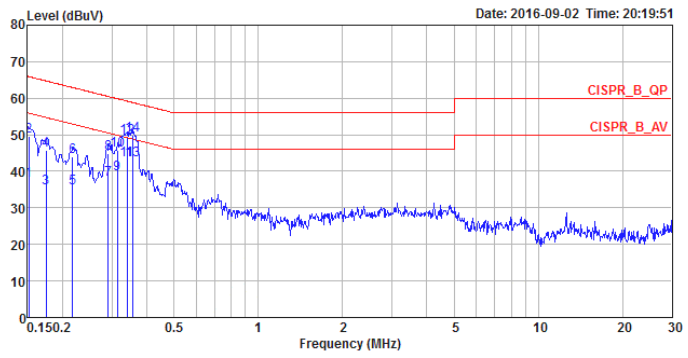
AC Power-line Conducted Emissions Result			
Operating Mode	3	**Power Phase**	Line
Operating Function	CTX 5GHz with Adapter 2		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1500	39.12	-16.88	56.00	28.94	10.02	0.16	LINE	Average
2	0.1500	51.51	-14.49	66.00	41.33	10.02	0.16	LINE	QP
3	0.1677	38.48	-16.60	55.08	28.29	10.02	0.17	LINE	Average
4	0.1677	48.97	-16.11	65.08	38.78	10.02	0.17	LINE	QP
5	0.2366	33.94	-18.28	52.22	23.87	9.92	0.15	LINE	Average
6	0.2366	42.06	-20.16	62.22	31.99	9.92	0.15	LINE	QP
7	0.3596	41.66	-7.08	48.74	31.70	9.92	0.04	LINE	Average
8	0.3596	48.53	-10.21	58.74	38.57	9.92	0.04	LINE	QP
9	3.0576	22.89	-23.11	46.00	12.83	9.98	0.08	LINE	Average
10	3.0576	29.74	-26.26	56.00	19.68	9.98	0.08	LINE	QP
11	14.5171	22.30	-27.70	50.00	11.87	10.22	0.21	LINE	Average
12	14.5171	28.99	-31.01	60.00	18.56	10.22	0.21	LINE	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

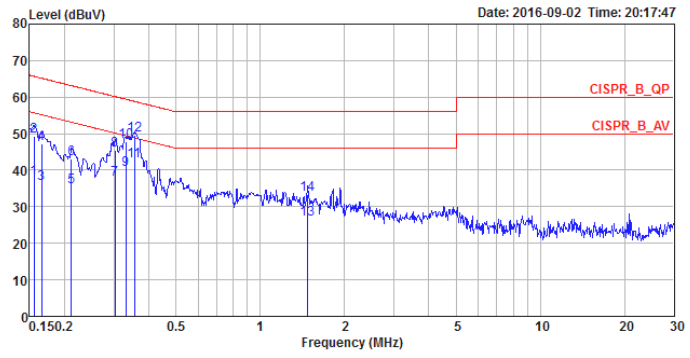
AC Power-line Conducted Emissions Result			
Operating Mode	4	**Power Phase**	Neutral
Operating Function	CTX 5GHz with Adapter 3		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1516	37.46	-18.45	55.91	27.28	10.02	0.16	NEUTRAL	Average
2	0.1516	49.54	-16.37	65.91	39.36	10.02	0.16	NEUTRAL	QP
3	0.1749	35.39	-19.33	54.72	25.29	9.92	0.18	NEUTRAL	Average
4	0.1749	45.67	-19.05	64.72	35.57	9.92	0.18	NEUTRAL	QP
5	0.2174	35.39	-17.53	52.92	25.30	9.92	0.17	NEUTRAL	Average
6	0.2174	44.06	-18.86	62.92	33.97	9.92	0.17	NEUTRAL	QP
7	0.2909	37.85	-12.65	50.50	27.84	9.92	0.09	NEUTRAL	Average
8	0.2909	44.99	-15.51	60.50	34.98	9.92	0.09	NEUTRAL	QP
9	0.3133	39.41	-10.47	49.88	29.42	9.92	0.07	NEUTRAL	Average
10	0.3133	45.90	-13.98	59.88	35.91	9.92	0.07	NEUTRAL	QP
11	0.3392	43.06	-6.16	49.22	33.09	9.92	0.05	NEUTRAL	Average
12	0.3392	49.43	-9.79	59.22	39.46	9.92	0.05	NEUTRAL	QP
13	0.3558	43.10	-5.73	48.83	33.14	9.92	0.04	NEUTRAL	Average
14	0.3558	50.03	-8.80	58.83	40.07	9.92	0.04	NEUTRAL	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

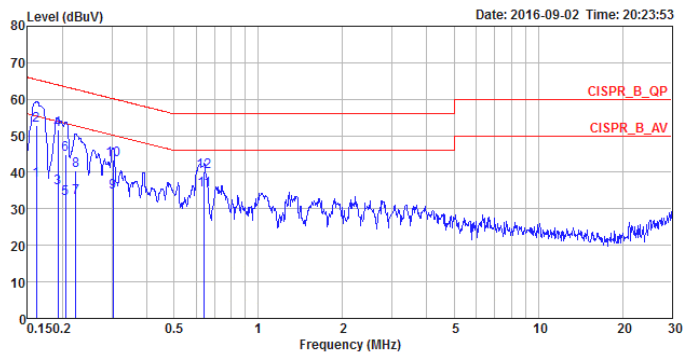
AC Power-line Conducted Emissions Result			
Operating Mode	4	**Power Phase**	Line
Operating Function	CTX 5GHz with Adapter 3		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1557	37.73	-17.96	55.69	27.55	10.02	0.16	LINE	Average
2	0.1557	49.30	-16.39	65.69	39.12	10.02	0.16	LINE	QP
3	0.1659	36.36	-18.80	55.16	26.17	10.02	0.17	LINE	Average
4	0.1659	47.22	-17.94	65.16	37.03	10.02	0.17	LINE	QP
5	0.2117	35.29	-17.85	53.14	25.19	9.92	0.18	LINE	Average
6	0.2117	43.21	-19.93	63.14	33.11	9.92	0.18	LINE	QP
7	0.3035	37.49	-12.66	50.15	27.49	9.92	0.08	LINE	Average
8	0.3035	45.32	-14.83	60.15	35.32	9.92	0.08	LINE	QP
9	0.3303	40.05	-9.39	49.44	30.07	9.92	0.06	LINE	Average
10	0.3303	47.84	-11.60	59.44	37.86	9.92	0.06	LINE	QP
11	0.3558	42.59	-6.24	48.83	32.63	9.92	0.04	LINE	Average
12	0.3558	49.62	-9.21	58.83	39.66	9.92	0.04	LINE	QP
13	1.4718	26.66	-19.34	46.00	16.35	9.95	0.36	LINE	Average
14	1.4718	33.28	-22.72	56.00	22.97	9.95	0.36	LINE	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

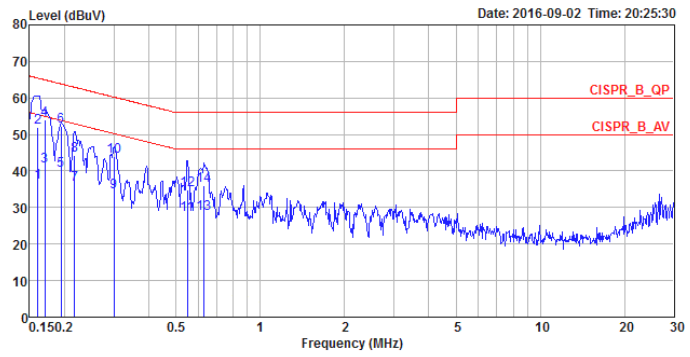
AC Power-line Conducted Emissions Result			
Operating Mode	5	**Power Phase**	Neutral
Operating Function	CTX 5GHz with Adapter 4		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1616	37.71	-17.67	55.38	27.52	10.02	0.17	NEUTRAL	Average
2	0.1616	52.70	-12.68	65.38	42.51	10.02	0.17	NEUTRAL	QP
3	0.1924	35.65	-18.28	53.93	25.54	9.92	0.19	NEUTRAL	Average
4	0.1924	51.75	-12.18	63.93	41.64	9.92	0.19	NEUTRAL	QP
5	0.2050	32.82	-20.58	53.40	22.72	9.92	0.18	NEUTRAL	Average
6	0.2050	44.93	-18.47	63.40	34.83	9.92	0.18	NEUTRAL	QP
7	0.2232	32.99	-19.71	52.70	22.91	9.92	0.16	NEUTRAL	Average
8	0.2232	40.49	-22.21	62.70	30.41	9.92	0.16	NEUTRAL	QP
9	0.3035	34.47	-15.68	50.15	24.47	9.92	0.08	NEUTRAL	Average
10	0.3035	43.26	-16.89	60.15	33.26	9.92	0.08	NEUTRAL	QP
11	0.6406	35.07	-10.93	46.00	24.76	9.93	0.38	NEUTRAL	Average
12	0.6406	40.26	-15.74	56.00	29.95	9.93	0.38	NEUTRAL	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result			
Operating Mode	5	**Power Phase**	Line
Operating Function	CTX 5GHz with Adapter 4		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1607	37.00	-18.43	55.43	26.81	10.02	0.17	LINE	Average
2	0.1607	52.10	-13.33	65.43	41.91	10.02	0.17	LINE	QP
3	0.1703	41.22	-13.72	54.94	31.03	10.02	0.17	LINE	Average
4	0.1703	54.06	-10.88	64.94	43.87	10.02	0.17	LINE	QP
5	0.1945	40.04	-13.80	53.84	29.93	9.92	0.19	LINE	Average
6	0.1945	52.21	-11.63	63.84	42.10	9.92	0.19	LINE	QP
7	0.2174	36.30	-16.62	52.92	26.21	9.92	0.17	LINE	Average
8	0.2174	44.37	-18.55	62.92	34.28	9.92	0.17	LINE	QP
9	0.3003	34.32	-15.92	50.24	24.31	9.92	0.09	LINE	Average
10	0.3003	44.05	-16.19	60.24	34.04	9.92	0.09	LINE	QP
11	0.5493	27.98	-18.02	46.00	17.79	9.93	0.26	LINE	Average
12	0.5493	34.82	-21.18	56.00	24.63	9.93	0.26	LINE	QP
13	0.6271	28.32	-17.68	46.00	18.02	9.93	0.37	LINE	Average
14	0.6271	35.95	-20.05	56.00	25.65	9.93	0.37	LINE	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

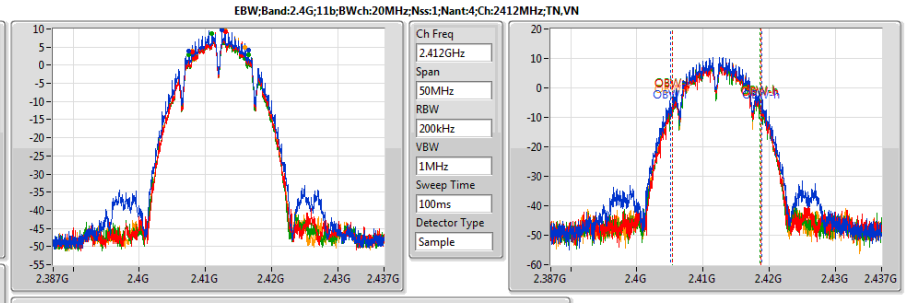
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4G;11b;Nss1;Ntx4	9.025M	13.743M	13M7G1D	8M	13.168M
2.4G;11g;Nss1;Ntx4	16.35M	22.864M	22M9D1D	16.3M	16.367M
2.4G;HT20;Nss1,(M0);Ntx4	17.6M	26.212M	26M2D1D	17.5M	17.616M
2.4G;HT40;Nss1,(M0);Ntx4	36.35M	48.226M	48M2D1D	34.8M	35.932M

Result

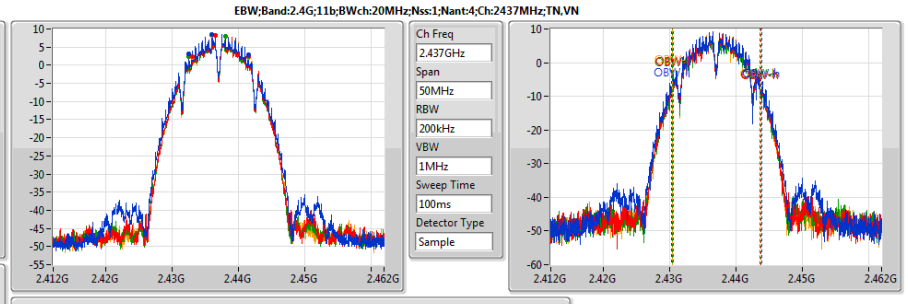
Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)	P3-N dB (Hz)	P3-OBW (Hz)	P4-N dB (Hz)	P4-OBW (Hz)
2.4G;11b;Nss1;Ntx4;2412;TN,VN	Pass	500k	9.025M	13.743M	8.525M	13.268M	9.025M	13.168M	8M	13.368M
2.4G;11b;Nss1;Ntx4;2437;TN,VN	Pass	500k	9.025M	13.568M	8.5M	13.243M	9M	13.193M	8.5M	13.218M
2.4G;11b;Nss1;Ntx4;2462;TN,VN	Pass	500k	8.025M	13.618M	8.525M	13.168M	9M	13.193M	8.05M	13.318M
2.4G;11g;Nss1;Ntx4;2412;TN,VN	Pass	500k	16.3M	16.592M	16.325M	16.492M	16.3M	16.417M	16.325M	16.442M
2.4G;11g;Nss1;Ntx4;2437;TN,VN	Pass	500k	16.35M	22.864M	16.35M	19.065M	16.3M	20.665M	16.325M	19.59M
2.4G;11g;Nss1;Ntx4;2462;TN,VN	Pass	500k	16.325M	16.417M	16.325M	16.417M	16.3M	16.417M	16.325M	16.367M
2.4G;HT20;Nss1,(M0);Ntx4;2412;TN,VN	Pass	500k	17.575M	17.616M	17.6M	23.413M	17.55M	23.563M	17.55M	20.515M
2.4G;HT20;Nss1,(M0);Ntx4;2437;TN,VN	Pass	500k	17.575M	22.739M	17.6M	24.813M	17.55M	24.888M	17.575M	23.163M
2.4G;HT20;Nss1,(M0);Ntx4;2462;TN,VN	Pass	500k	17.525M	17.616M	17.525M	25.262M	17.5M	26.212M	17.55M	23.913M
2.4G;HT40;Nss1,(M0);Ntx4;2422;TN,VN	Pass	500k	35.35M	35.932M	35.9M	44.378M	36.3M	45.577M	36.25M	41.279M
2.4G;HT40;Nss1,(M0);Ntx4;2437;TN,VN	Pass	500k	34.8M	36.032M	36.3M	45.777M	36.35M	46.627M	36.25M	43.678M
2.4G;HT40;Nss1,(M0);Ntx4;2452;TN,VN	Pass	500k	34.8M	36.032M	35.7M	46.427M	35.65M	48.226M	36.3M	44.578M

EBW;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:4;Ch:2412MHz;TN,VN



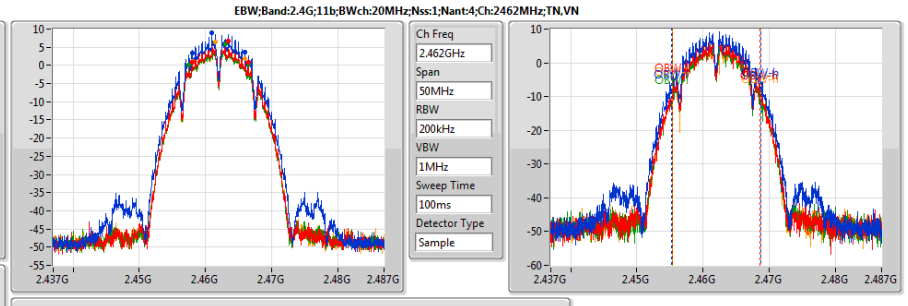
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.025M	2.407475G	2.4165G	13.743M	2.405128G	2.418872G	500k	1
8.525M	2.407975G	2.4165G	13.268M	2.405453G	2.418722G	500k	2
9.025M	2.4075G	2.416525G	13.168M	2.405428G	2.418597G	500k	3
8M	2.408G	2.416G	13.368M	2.405378G	2.418747G	500k	4

EBW;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:4;Ch:2437MHz;TN,VN



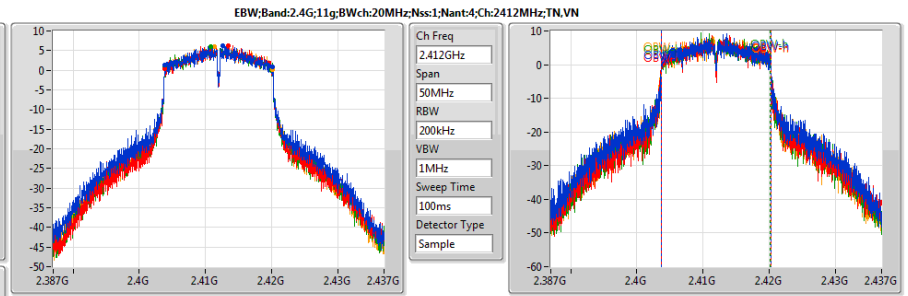
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.025M	2.4325G	2.441525G	13.568M	2.430278G	2.443847G	500k	1
8.5M	2.432975G	2.441475G	13.243M	2.430478G	2.443722G	500k	2
9M	2.4325G	2.4415G	13.193M	2.430428G	2.443622G	500k	3
8.5M	2.433G	2.4415G	13.218M	2.430453G	2.443672G	500k	4

EBW;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:4;Ch:2462MHz;TN,VN



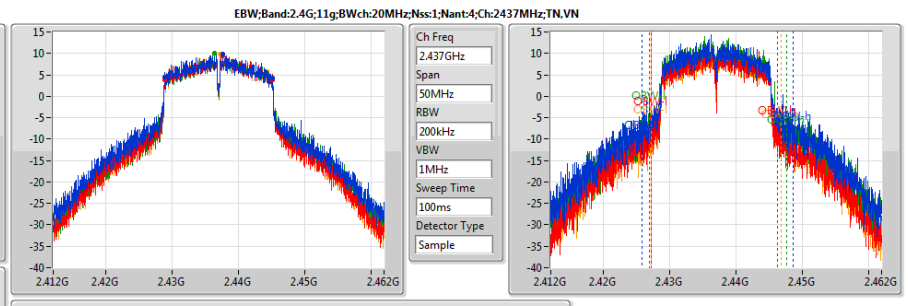
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.025M	2.457975G	2.466G	13.618M	2.455203G	2.468822G	500k	1
8.525M	2.457975G	2.4665G	13.168M	2.455428G	2.468597G	500k	2
9M	2.457525G	2.466525G	13.193M	2.455378G	2.468572G	500k	3
8.05M	2.457975G	2.466025G	13.318M	2.455403G	2.468722G	500k	4

EBW;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:4;Ch:2412MHz;TN,VN



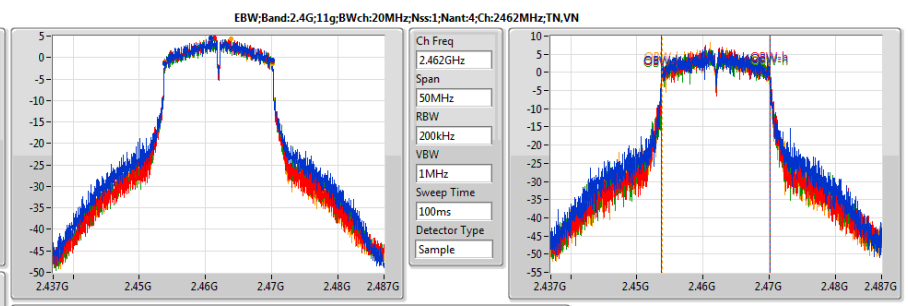
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.40385G	2.42015G	16.592M	2.403679G	2.420271G	500k	1
16.325M	2.40385G	2.420175G	16.492M	2.403729G	2.420221G	500k	2
16.3M	2.40385G	2.42015G	16.417M	2.403779G	2.420196G	500k	3
16.325M	2.40385G	2.420175G	16.442M	2.403779G	2.420221G	500k	4

EBW;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:4;Ch:2437MHz;TN,VN



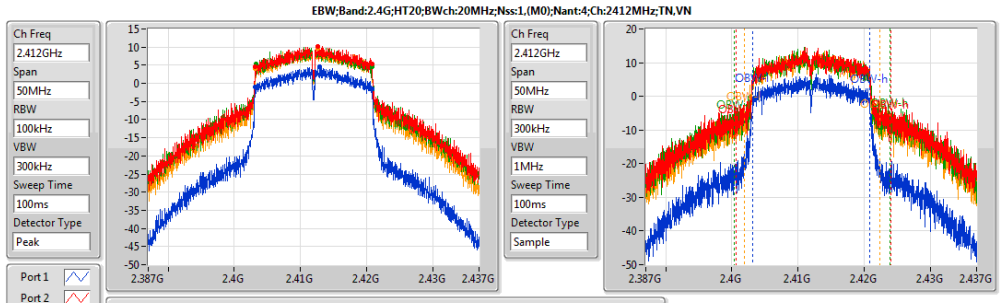
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.428825G	2.445175G	22.864M	2.425756G	2.448619G	500k	1
16.35M	2.428825G	2.445175G	19.065M	2.427205G	2.44627G	500k	2
16.3M	2.428875G	2.445175G	20.665M	2.42693G	2.447595G	500k	3
16.325M	2.42885G	2.445175G	19.59M	2.427205G	2.446795G	500k	4

EBW;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:4;Ch:2462MHz;TN,VN



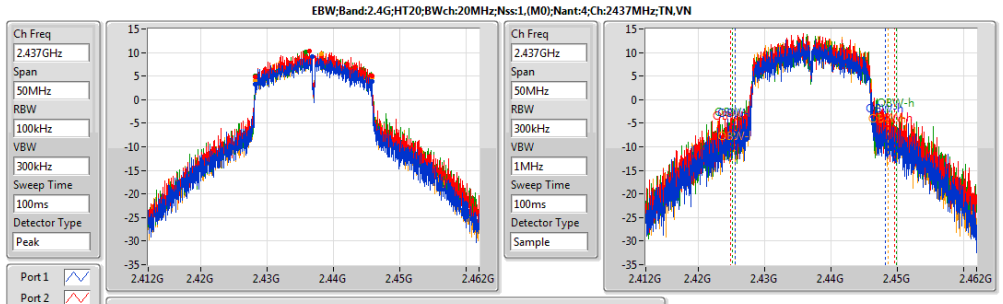
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.453825G	2.47015G	16.417M	2.453779G	2.470196G	500k	1
16.325M	2.453825G	2.47015G	16.417M	2.453779G	2.470196G	500k	2
16.3M	2.45385G	2.47015G	16.417M	2.453779G	2.470196G	500k	3
16.325M	2.45385G	2.470175G	16.367M	2.453804G	2.470171G	500k	4

EBW;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:4;Ch:2412MHz;TN,VN



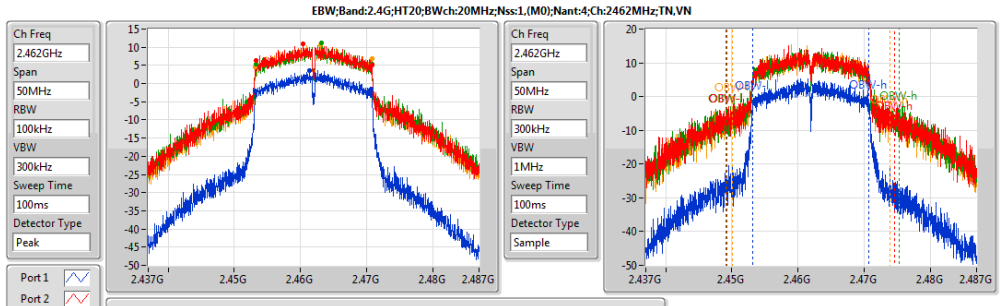
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.403225G	2.4208G	17.616M	2.403179G	2.420796G	500k	1
17.6M	2.4032G	2.4208G	23.413M	2.400681G	2.424094G	500k	2
17.55M	2.40325G	2.4208G	23.563M	2.400306G	2.423869G	500k	3
17.55M	2.403225G	2.420775G	20.515M	2.40193G	2.422445G	500k	4

EBW;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:4;Ch:2437MHz;TN,VN



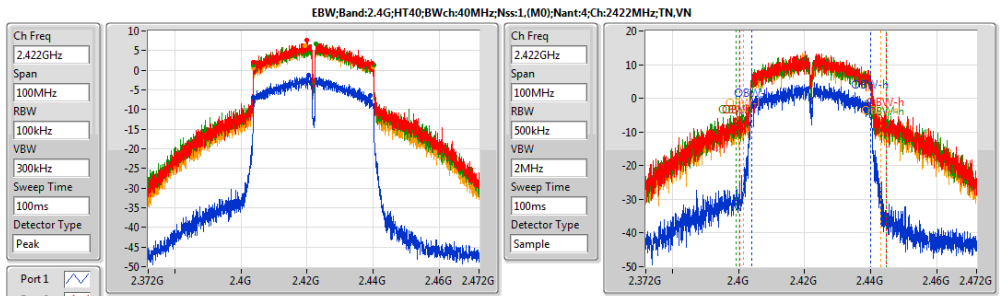
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.4282G	2.445775G	22.739M	2.425456G	2.448194G	500k	1
17.6M	2.4282G	2.4458G	24.813M	2.424856G	2.449669G	500k	2
17.55M	2.428225G	2.445775G	24.888M	2.425056G	2.449944G	500k	3
17.575M	2.428225G	2.4458G	23.163M	2.425481G	2.448644G	500k	4

EBW;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:4;Ch:2462MHz;TN,VN



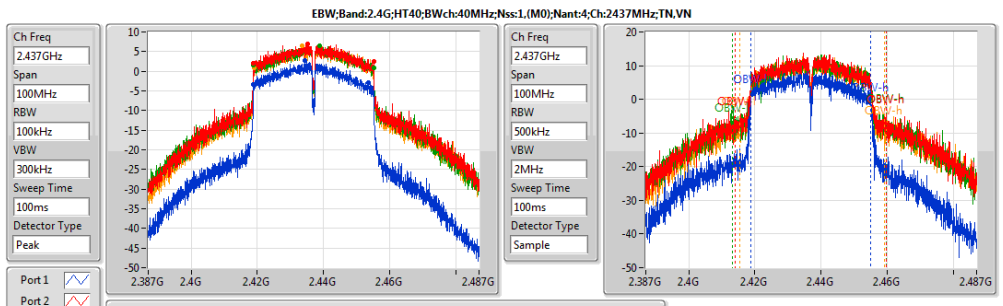
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.525M	2.453225G	2.47075G	17.616M	2.453154G	2.470771G	500k	1
17.525M	2.45325G	2.470775G	25.262M	2.449281G	2.474544G	500k	2
17.5M	2.453275G	2.470775G	26.212M	2.449056G	2.475268G	500k	3
17.55M	2.453225G	2.470775G	23.913M	2.450031G	2.473944G	500k	4

EBW;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:4;Ch:2422MHz;TN,VN



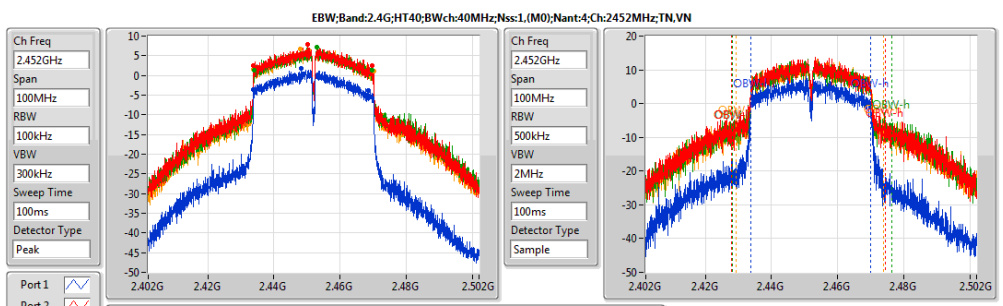
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.35M	2.40385G	2.4392G	35.932M	2.403959G	2.439891G	500k	1
35.9M	2.40385G	2.43975G	44.378M	2.400461G	2.444839G	500k	2
36.3M	2.40385G	2.44015G	45.577M	2.399161G	2.444739G	500k	3
36.25M	2.40385G	2.4401G	41.279M	2.40166G	2.44294G	500k	4

EBW;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:4;Ch:2437MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.8M	2.41885G	2.45365G	36.032M	2.418859G	2.454891G	500k	1
36.3M	2.41885G	2.45515G	45.777M	2.414011G	2.459789G	500k	2
36.35M	2.41885G	2.4552G	46.627M	2.413112G	2.459739G	500k	3
36.25M	2.4189G	2.45515G	43.678M	2.415361G	2.459039G	500k	4

EBW;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:4;Ch:2452MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.8M	2.43385G	2.46865G	36.032M	2.433859G	2.469891G	500k	1
35.7M	2.43385G	2.46955G	46.427M	2.428012G	2.474439G	500k	2
35.65M	2.4341G	2.46975G	48.226M	2.428262G	2.476488G	500k	3
36.3M	2.43385G	2.47015G	44.578M	2.429161G	2.473739G	500k	4

Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
2.4G;11b;Nss1;Ntx4	27.72	0.59156	29.82	0.9594
2.4G;11g;Nss1;Ntx4	26.94	0.49431	29.04	0.80168
2.4G;HT20;Nss1,(M0);Ntx4	26.91	0.49091	29.01	0.79616
2.4G;HT40;Nss1,(M0);Ntx4	23.66	0.23227	25.76	0.3767

Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2 (dBm)	P3 (dBm)	P4 (dBm)
2.4G;11b;Nss1;Ntx4;2412;TN,VN	Pass	2.10	29.82	36.00	27.72	30.00	21.95	21.31	21.92	21.57
2.4G;11b;Nss1;Ntx4;2437;TN,VN	Pass	2.10	28.80	36.00	26.7	30.00	21.08	20.16	21.13	20.27
2.4G;11b;Nss1;Ntx4;2462;TN,VN	Pass	2.10	27.79	36.00	25.69	30.00	19.47	19.58	19.98	19.63
2.4G;11g;Nss1;Ntx4;2412;TN,VN	Pass	2.10	26.22	36.00	24.12	30.00	18.47	17.74	18.23	17.91
2.4G;11g;Nss1;Ntx4;2437;TN,VN	Pass	2.10	29.04	36.00	26.94	30.00	20.79	20.82	21.12	20.92
2.4G;11g;Nss1;Ntx4;2462;TN,VN	Pass	2.10	25.00	36.00	22.9	30.00	16.88	16.84	17.13	16.67
2.4G;HT20;Nss1,(M0);Ntx4;2412;TN,VN	Pass	2.10	25.32	36.00	23.22	30.00	17.53	16.79	17.28	17.17
2.4G;HT20;Nss1,(M0);Ntx4;2437;TN,VN	Pass	2.10	29.01	36.00	26.91	30.00	20.77	20.79	21.16	20.81
2.4G;HT20;Nss1,(M0);Ntx4;2462;TN,VN	Pass	2.10	23.97	36.00	21.87	30.00	15.79	15.86	16.04	15.71
2.4G;HT40;Nss1,(M0);Ntx4;2422;TN,VN	Pass	2.10	22.05	36.00	19.95	30.00	14.48	13.46	14.01	13.71
2.4G;HT40;Nss1,(M0);Ntx4;2437;TN,VN	Pass	2.10	25.76	36.00	23.66	30.00	17.73	17.43	17.84	17.56
2.4G;HT40;Nss1,(M0);Ntx4;2452;TN,VN	Pass	2.10	24.87	36.00	22.77	30.00	16.79	16.67	16.96	16.57

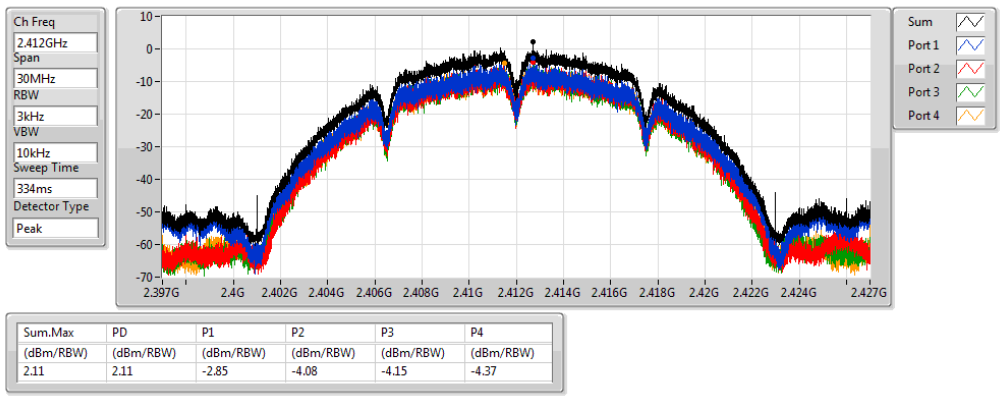
Summary

Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
2.4G;11b;Nss1;Ntx4	2.11	9.64
2.4G;11g;Nss1;Ntx4	2.28	9.81
2.4G;HT20;Nss1,(M0);Ntx4	2.92	10.45
2.4G;HT40;Nss1,(M0);Ntx4	-0.21	7.32

Result

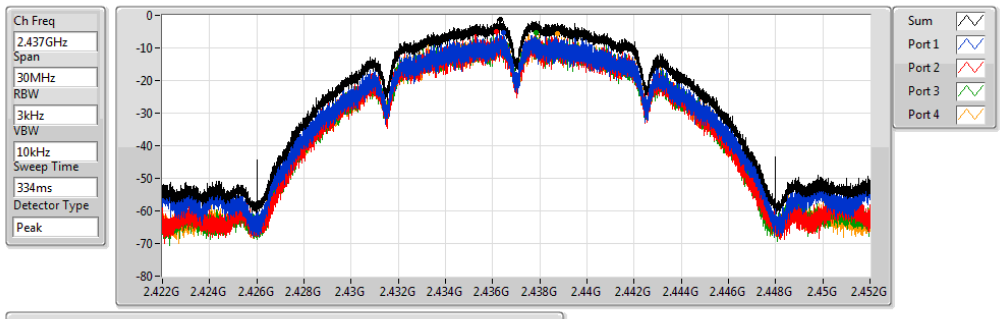
Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	Sum.Max (dBm/RBW)	PD (dBm/RBW)	PD.Limit (dBm/RBW)	EIRP.PD (dBm/RBW)	EIRP.PD.Lim (dBm/RBW)	P1 (dBm/RBW)	P2 (dBm/RBW)	P3 (dBm/RBW)	P4 (dBm/RBW)
2.4G;11b;Nss1;Ntx4;2412;TN,VN	Pass	3k	3k	0.00	7.53	2.11	2.11	6.47	9.64	Inf	-2.85	-4.08	-4.15	-4.37
2.4G;11b;Nss1;Ntx4;2437;TN,VN	Pass	3k	3k	0.00	7.53	-1.34	-1.34	6.47	6.19	Inf	-5.40	-4.91	-5.20	-5.77
2.4G;11b;Nss1;Ntx4;2462;TN,VN	Pass	3k	3k	0.00	7.53	-2.34	-2.34	6.47	5.19	Inf	-5.48	-7.38	-8.17	-7.31
2.4G;11g;Nss1;Ntx4;2412;TN,VN	Pass	3k	3k	0.00	7.53	-0.88	-0.88	6.47	6.65	Inf	-5.44	-5.05	-5.26	-5.66
2.4G;11g;Nss1;Ntx4;2437;TN,VN	Pass	3k	3k	0.00	7.53	2.28	2.28	6.47	9.81	Inf	-1.65	-1.75	-1.41	-1.70
2.4G;11g;Nss1;Ntx4;2462;TN,VN	Pass	3k	3k	0.00	7.53	-1.83	-1.83	6.47	5.70	Inf	-6.13	-6.15	-7.55	-6.75
2.4G;HT20;Nss1,(M0);Ntx4;2412;TN,VN	Pass	3k	3k	0.00	7.53	2.43	2.43	6.47	9.96	Inf	-7.64	-1.73	-2.27	-0.44
2.4G;HT20;Nss1,(M0);Ntx4;2437;TN,VN	Pass	3k	3k	0.00	7.53	2.92	2.92	6.47	10.45	Inf	-3.24	-0.44	-1.51	-2.57
2.4G;HT20;Nss1,(M0);Ntx4;2462;TN,VN	Pass	3k	3k	0.00	7.53	2.25	2.25	6.47	9.78	Inf	-7.47	-1.61	0.03	-1.50
2.4G;HT40;Nss1,(M0);Ntx4;2422;TN,VN	Pass	3k	3k	0.00	7.53	-0.96	-0.96	6.47	6.57	Inf	-12.11	-3.48	-4.31	-4.55
2.4G;HT40;Nss1,(M0);Ntx4;2437;TN,VN	Pass	3k	3k	0.00	7.53	-0.64	-0.64	6.47	6.89	Inf	-8.79	-4.19	-3.51	-4.73
2.4G;HT40;Nss1,(M0);Ntx4;2452;TN,VN	Pass	3k	3k	0.00	7.53	-0.21	-0.21	6.47	7.32	Inf	-9.64	-4.11	-3.83	-3.79

PSD;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:4;Ch:2412MHz;TN,VN



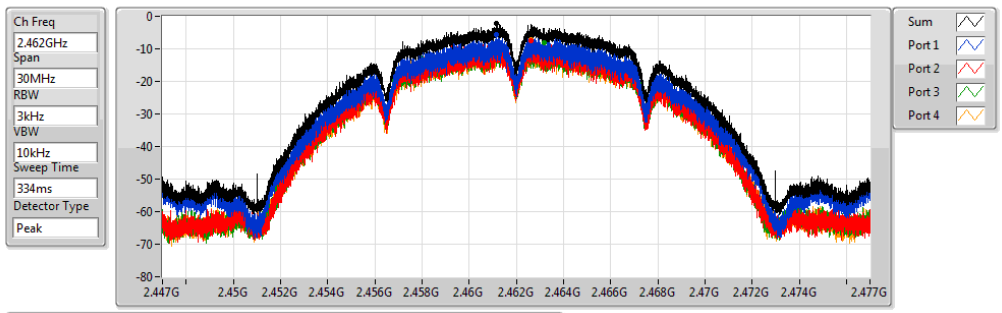
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.11	2.11	-2.85	-4.08	-4.15	-4.37

PSD;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:4;Ch:2437MHz;TN,VN



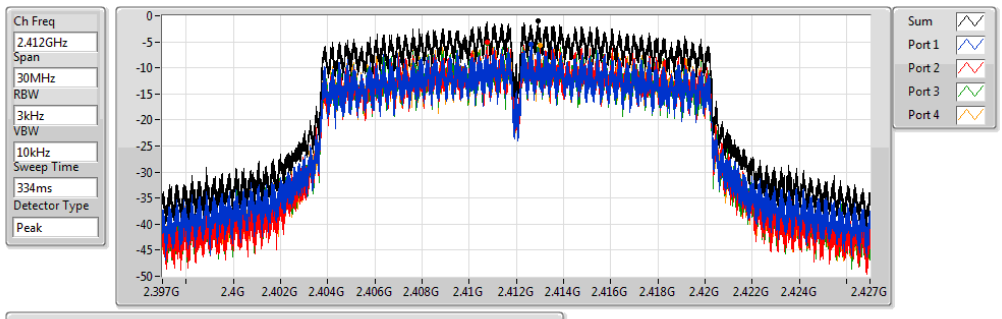
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.34	-1.34	-5.40	-4.91	-5.20	-5.77

PSD;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:4;Ch:2462MHz;TN,VN



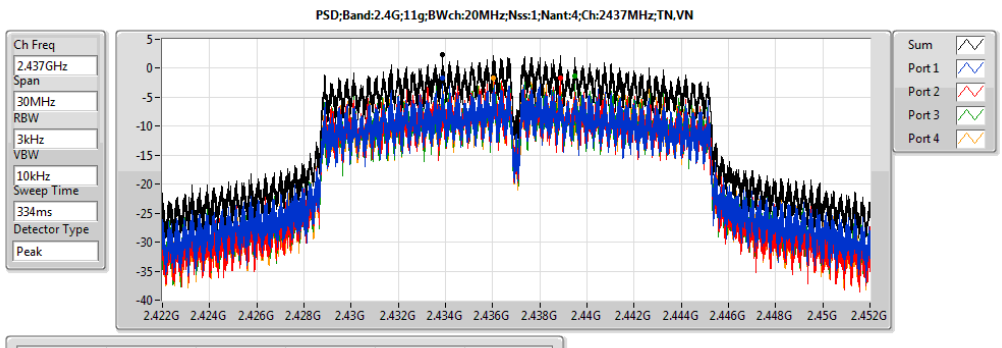
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.34	-2.34	-5.48	-7.38	-8.17	-7.31

PSD;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:4;Ch:2412MHz;TN,VN



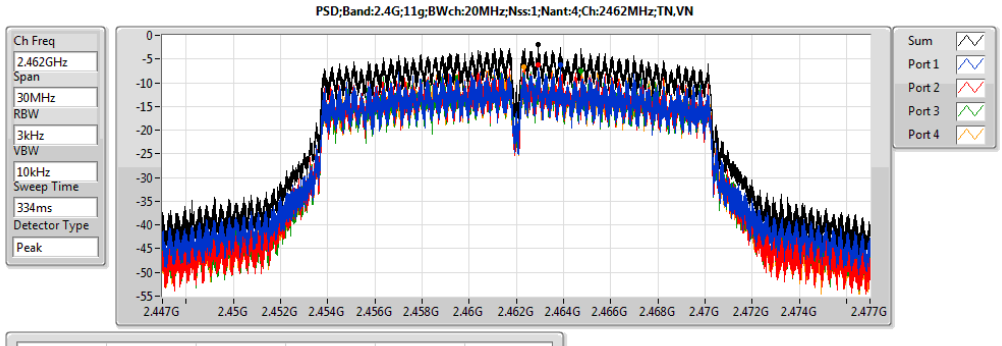
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.88	-0.88	-5.44	-5.05	-5.26	-5.66

PSD;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:4;Ch:2437MHz;TN,VN



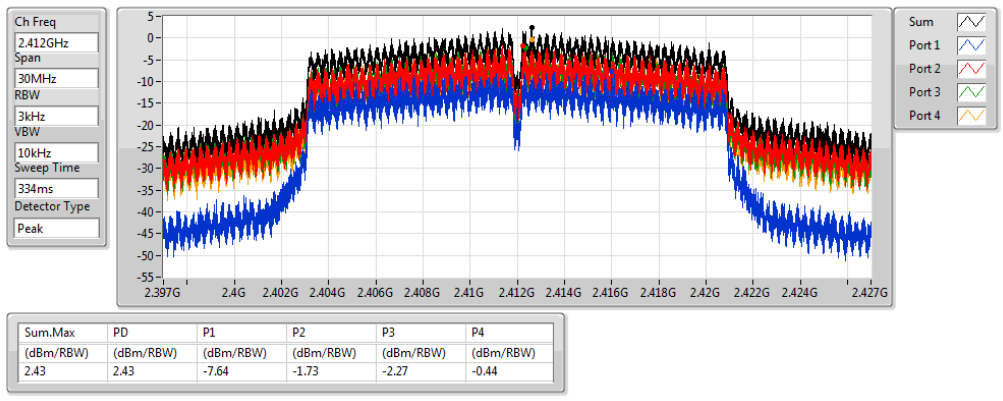
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.28	2.28	-1.65	-1.75	-1.41	-1.70

PSD;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:4;Ch:2462MHz;TN,VN



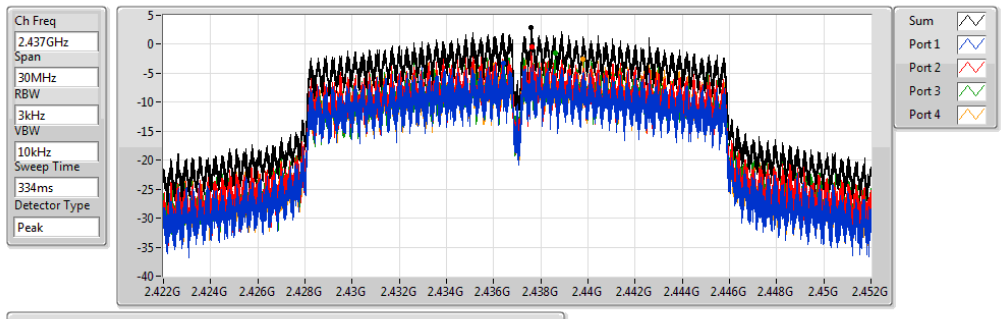
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.83	-1.83	-6.13	-6.15	-7.55	-6.75

PSD;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:4;Ch:2412MHz;TN,VN



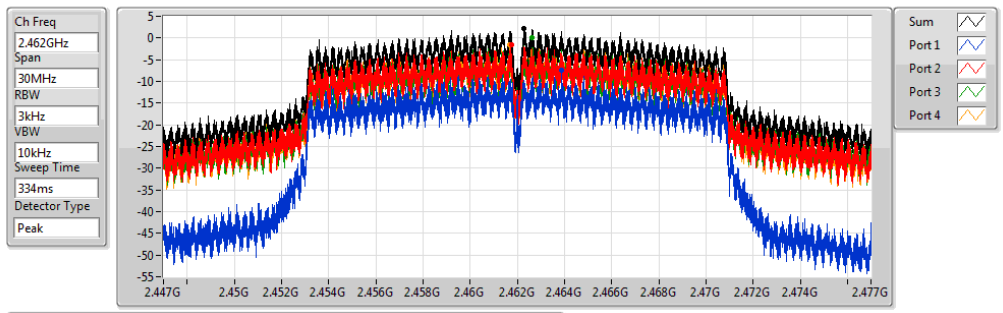
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.43	2.43	-7.64	-1.73	-2.27	-0.44

PSD;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:4;Ch:2437MHz;TN,VN



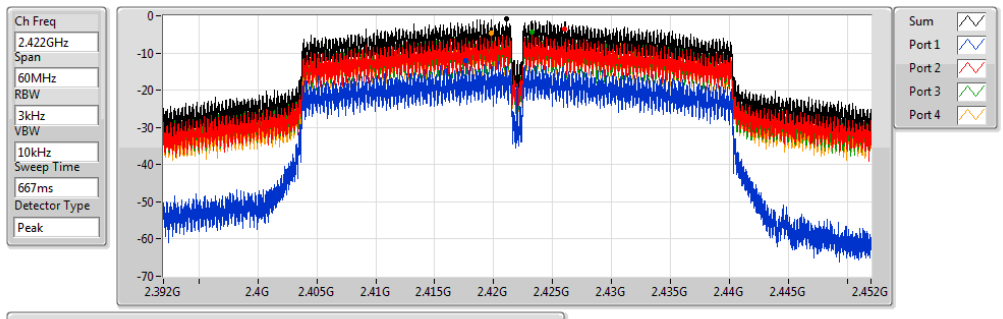
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.92	2.92	-3.24	-0.44	-1.51	-2.57

PSD;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:4;Ch:2462MHz;TN,VN



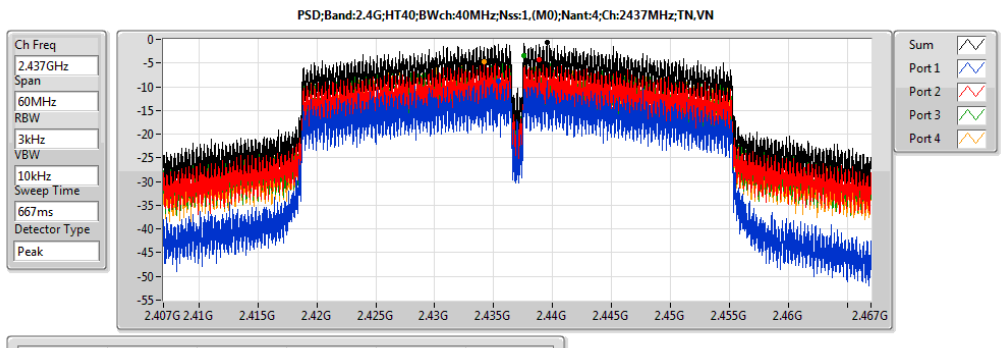
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.25	2.25	-7.47	-1.61	0.03	-1.50

PSD;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:4;Ch:2422MHz;TN,VN



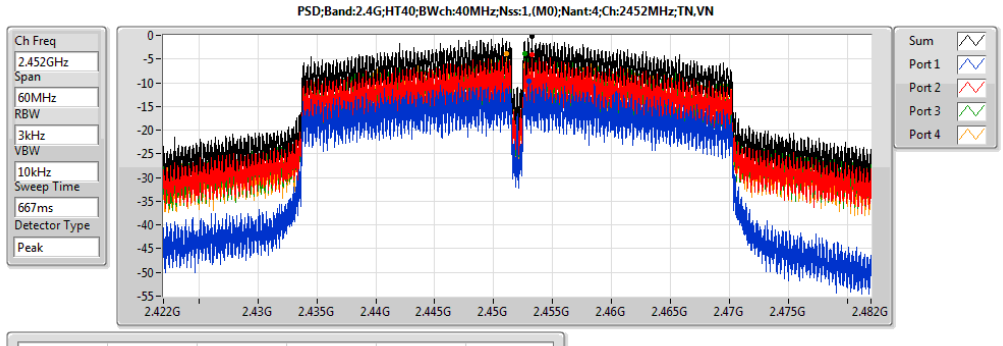
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.96	-0.96	-12.11	-3.48	-4.31	-4.55

PSD;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:4;Ch:2437MHz;TN,VN



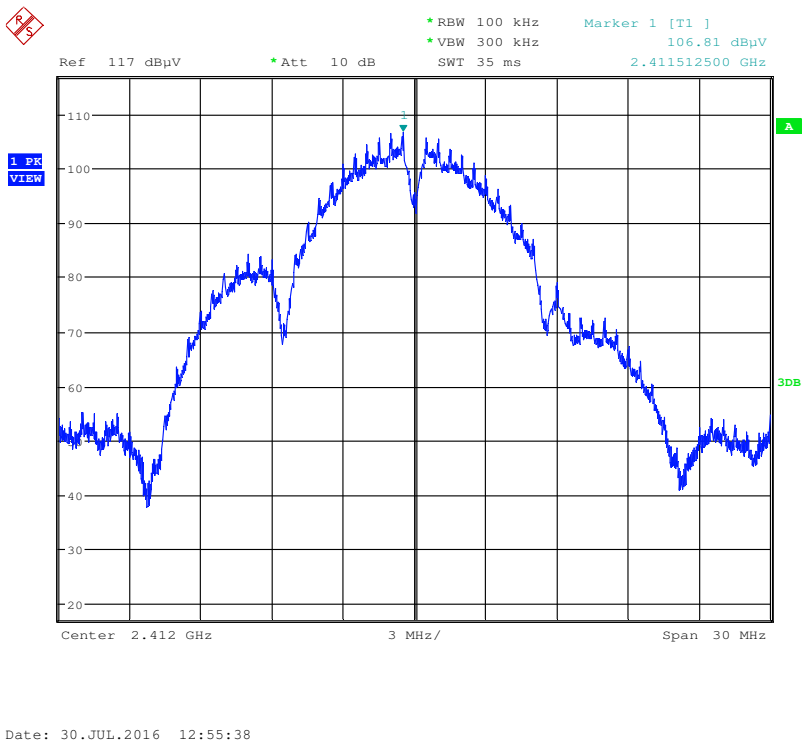
Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.64	-0.64	-8.79	-4.19	-3.51	-4.73

PSD;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:4;Ch:2452MHz;TN,VN

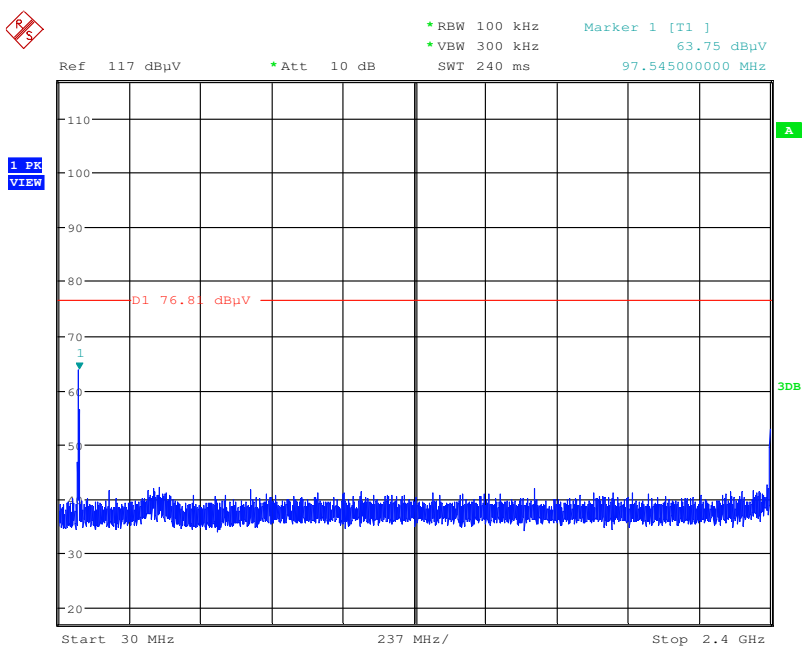


Sum.Max	PD	P1	P2	P3	P4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.21	-0.21	-9.64	-4.11	-3.83	-3.79

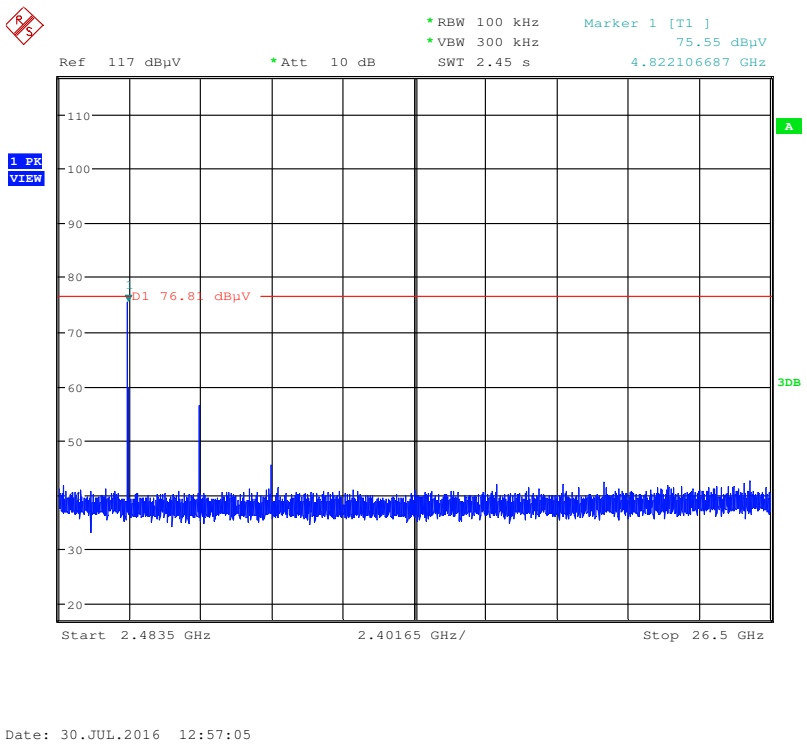
Plot on Configuration IEEE 802.11b / Reference Level



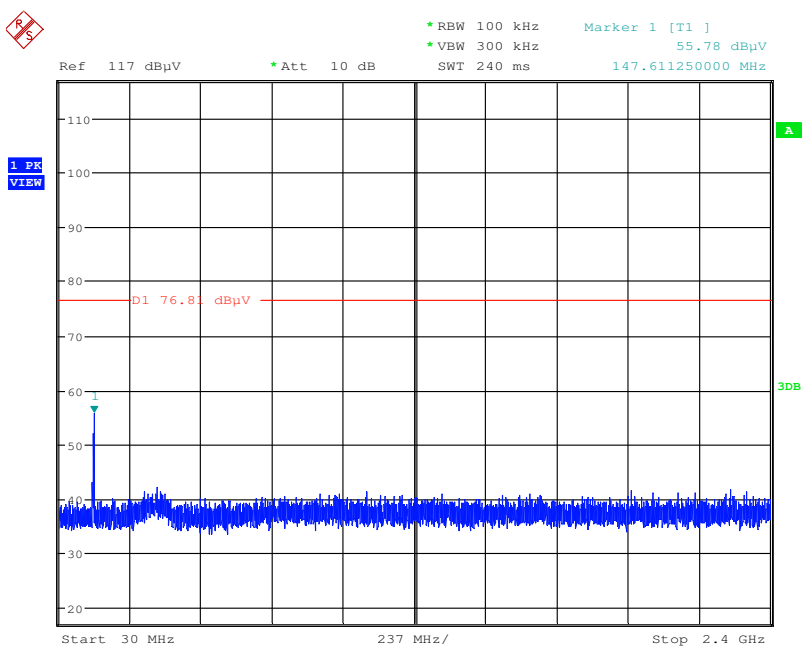
Plot on Configuration IEEE 802.11b / CH 1 / 30MHz~2400MHz (down 30dBc)



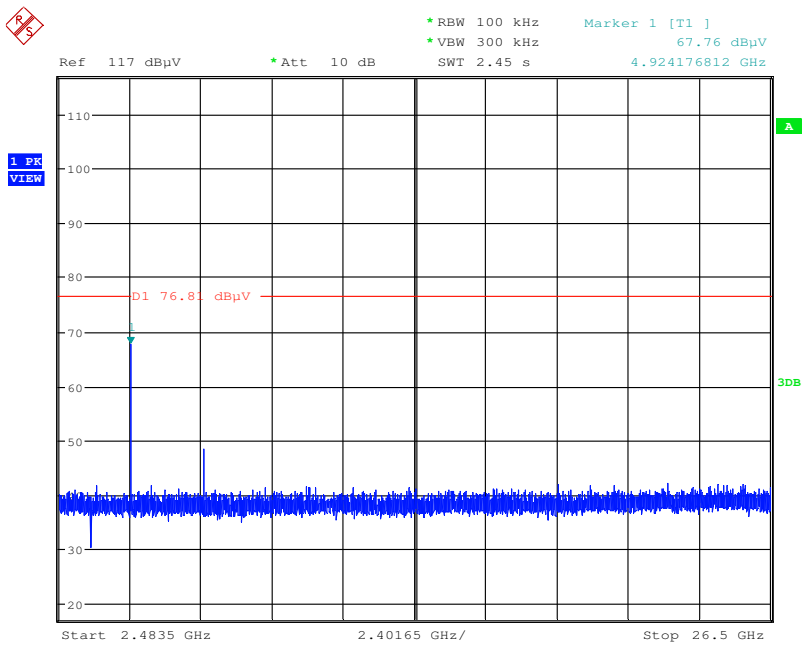
Plot on Configuration IEEE 802.11b / CH 1 / 2483.5MHz~26500MHz (down 30dBc)



Plot on Configuration IEEE 802.11b / CH 11 / 30MHz~2400MHz (down 30dBc)

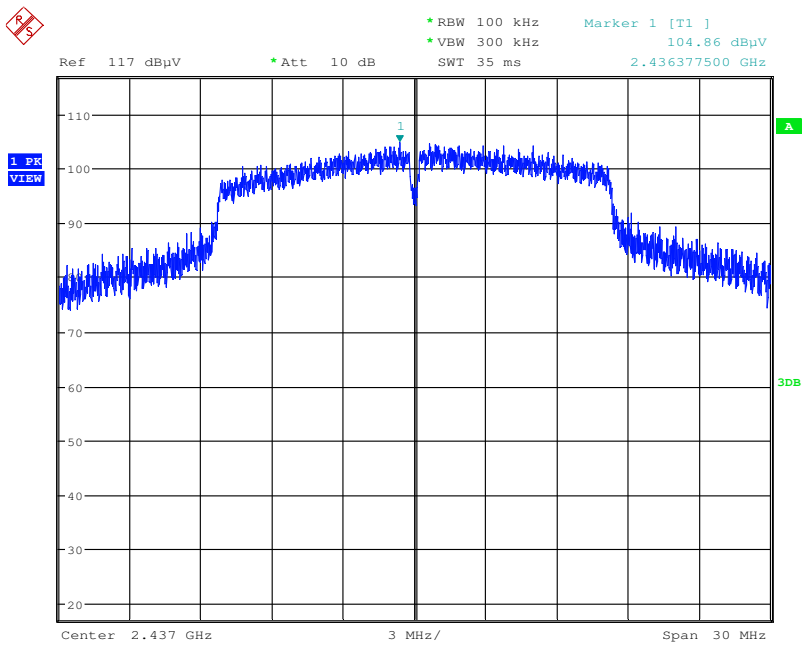


Plot on Configuration IEEE 802.11b / CH 11 / 2483.5MHz~26500MHz (down 30dBc)



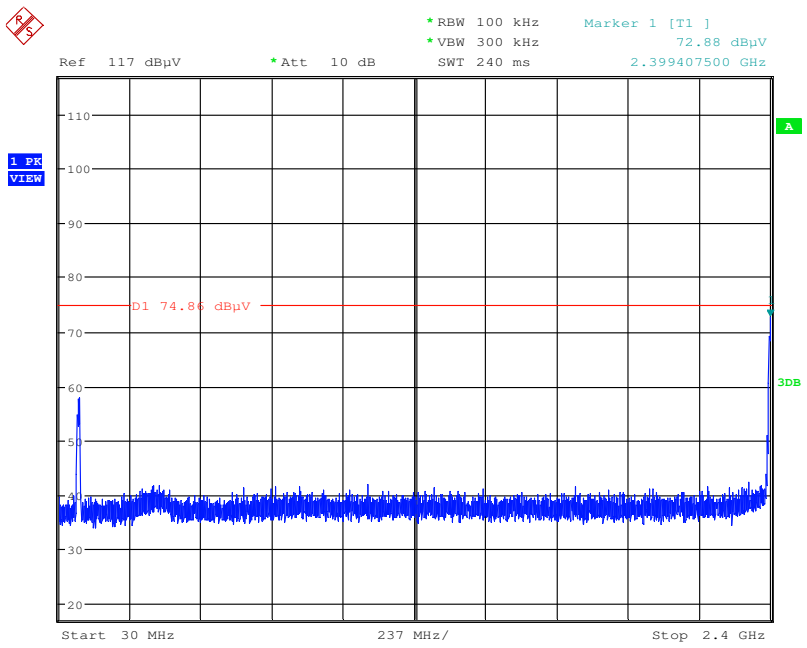
Date: 30.JUL.2016 12:58:01

Plot on Configuration IEEE 802.11g / Reference Level



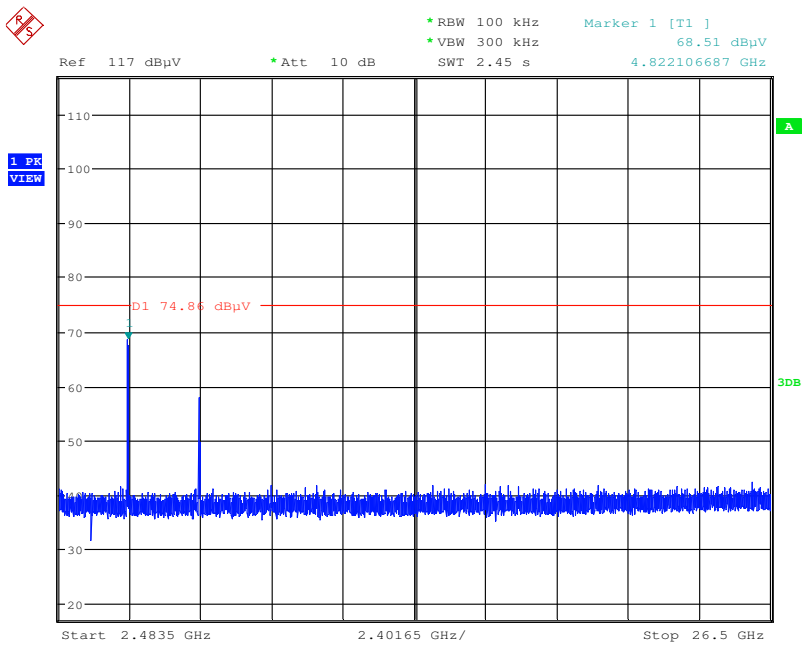
Date: 30.JUL.2016 13:00:00

Plot on Configuration IEEE 802.11g / CH 1 / 30MHz~2400MHz (down 30dBc)



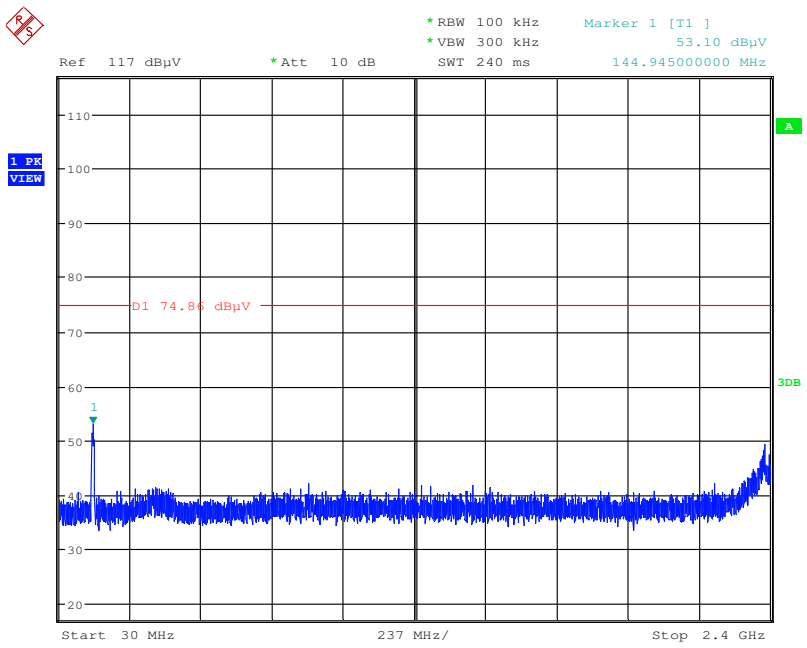
Date: 30.JUL.2016 13:01:20

Plot on Configuration IEEE 802.11g / CH 1 / 2483.5MHz~26500MHz (down 30dBc)



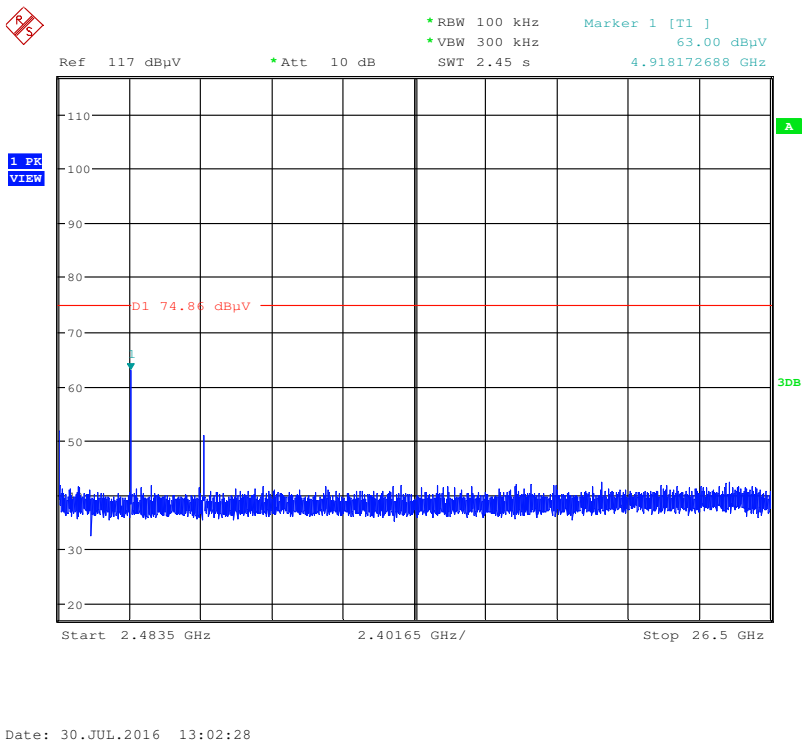
Date: 30.JUL.2016 13:01:48

Plot on Configuration IEEE 802.11g / CH 11 / 30MHz~2400MHz (down 30dBc)

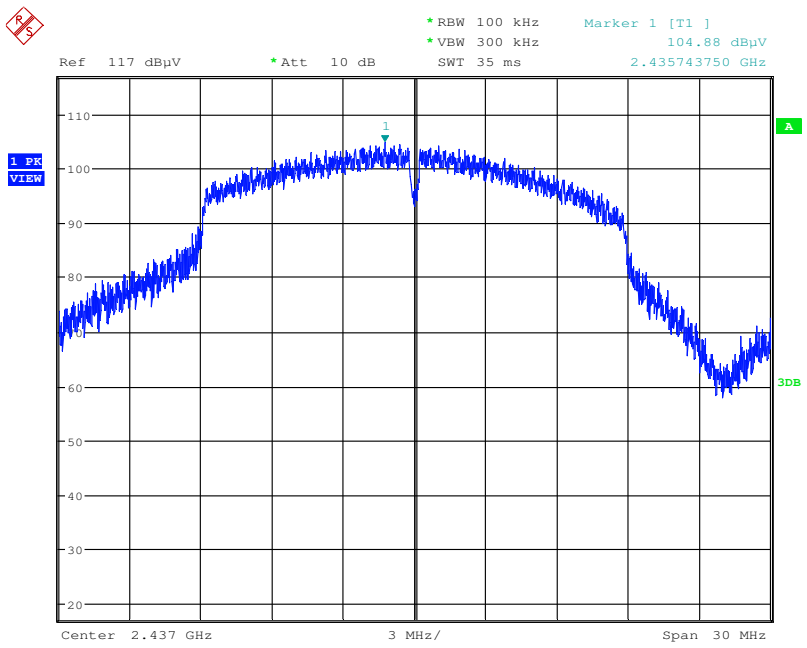


Date: 24.AUG.2016 16:45:05

Plot on Configuration IEEE 802.11g / CH 11 / 2483.5MHz~26500MHz (down 30dBc)

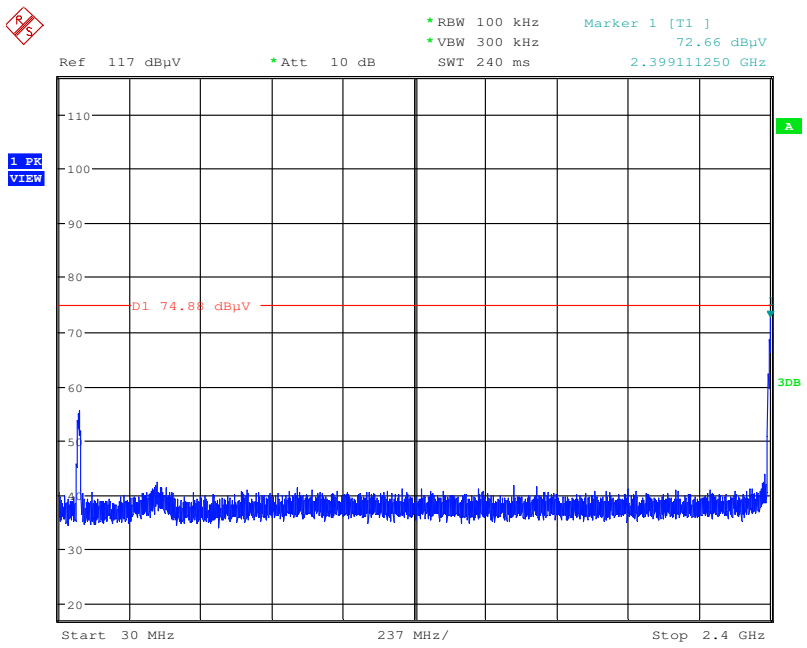


Plot on Configuration IEEE 802.11n MCS0 HT20 / Reference Level



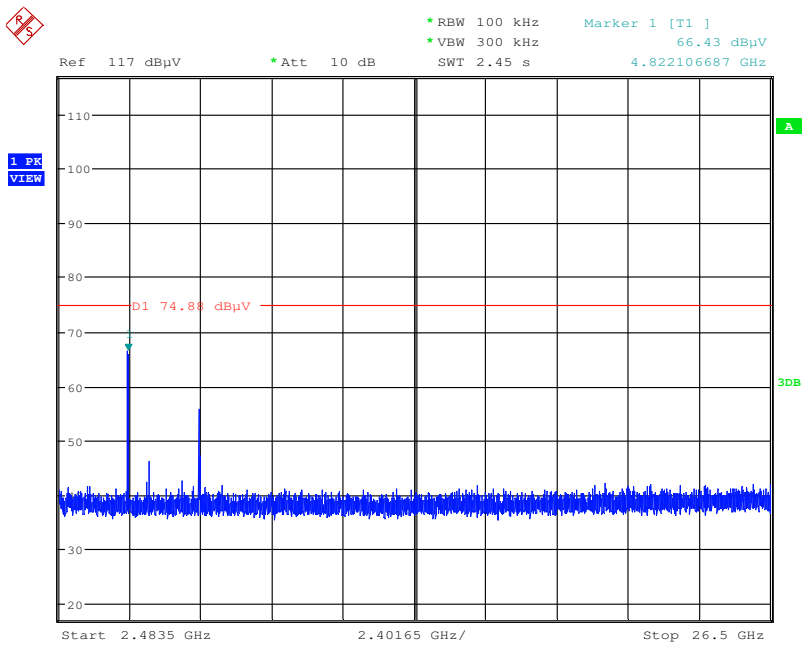
Date: 30.JUL.2016 13:04:09

Plot on Configuration IEEE 802.11n MCS0 HT20 / CH 1 / 30MHz~2400MHz (down 30dBc)



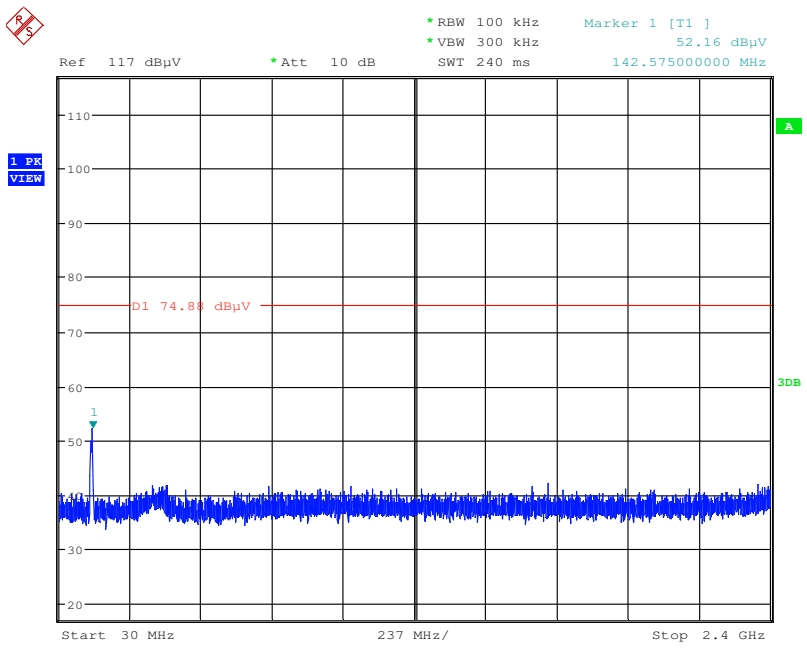
Date: 30.JUL.2016 13:05:09

Plot on Configuration IEEE 802.11n MCS0 HT20 / CH 1 / 2483.5MHz~26500MHz (down 30dBc)



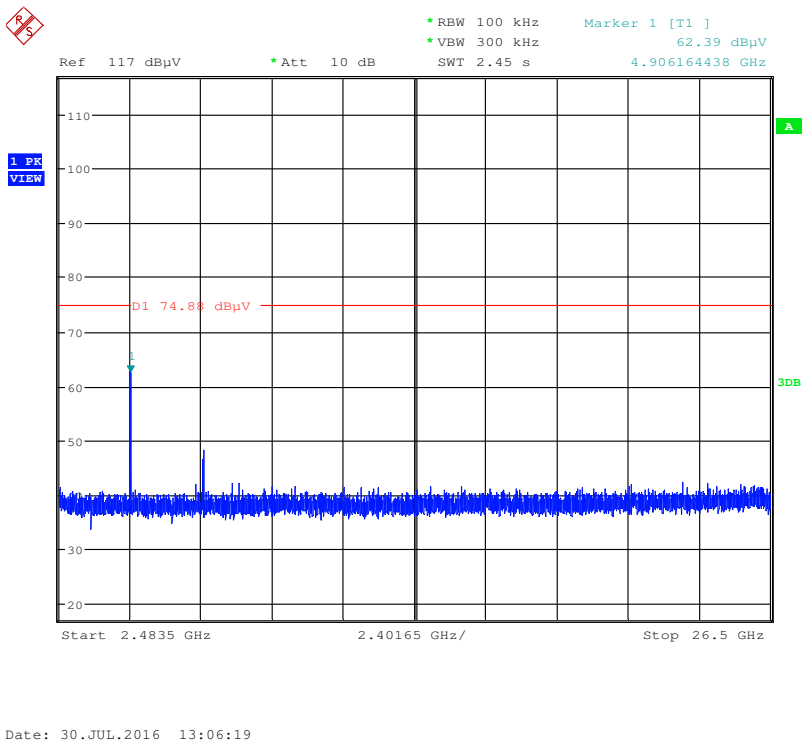
Date: 30.JUL.2016 13:05:33

Plot on Configuration IEEE 802.11n MCS0 HT20 / CH 11 / 30MHz~2400MHz (down 30dBc)

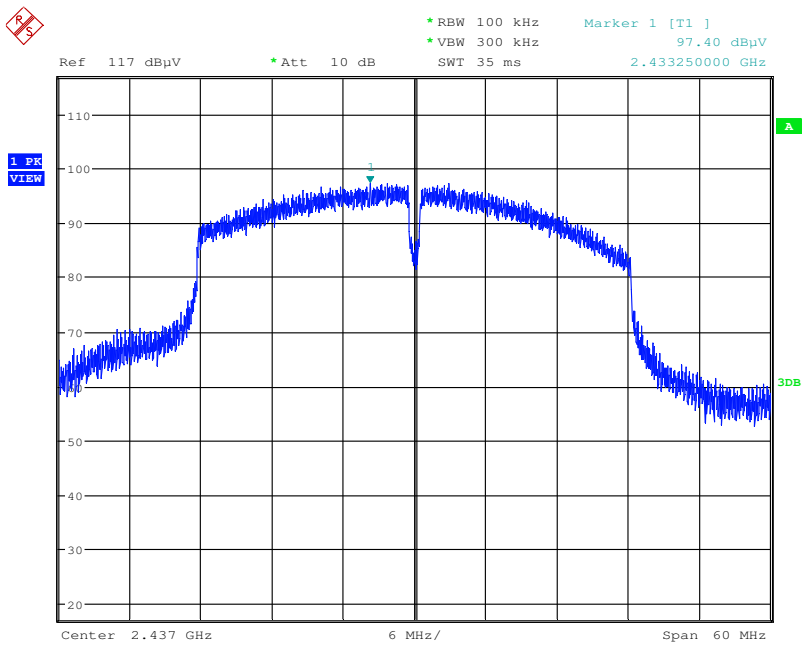


Date: 30.JUL.2016 13:06:35

Plot on Configuration IEEE 802.11n MCS0 HT20 / CH 11 / 2483.5MHz~26500MHz (down 30dBc)

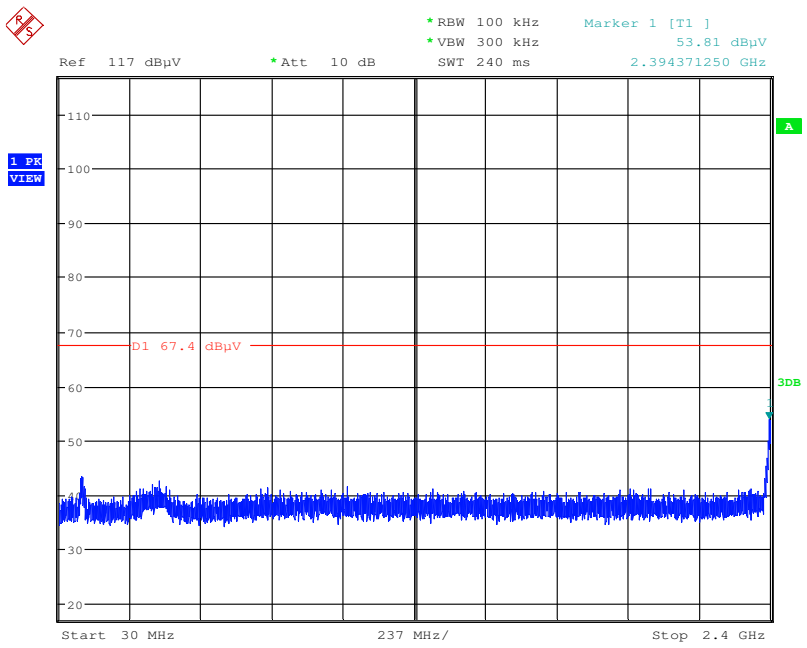


Plot on Configuration IEEE 802.11n MCS0 HT40 / Reference Level



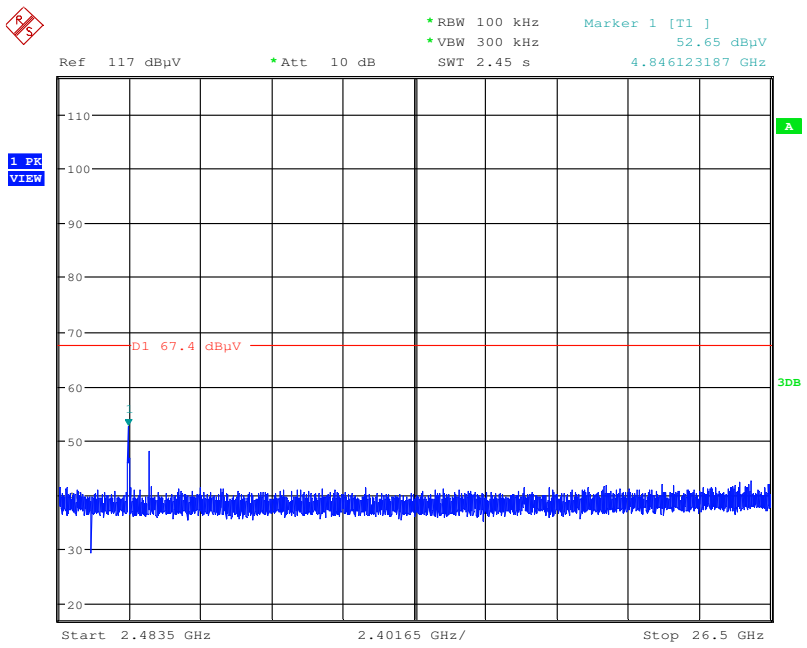
Date: 30.JUL.2016 13:08:09

Plot on Configuration IEEE 802.11n MCS0 HT40 / CH 3 / 30MHz~2400MHz (down 30dBc)



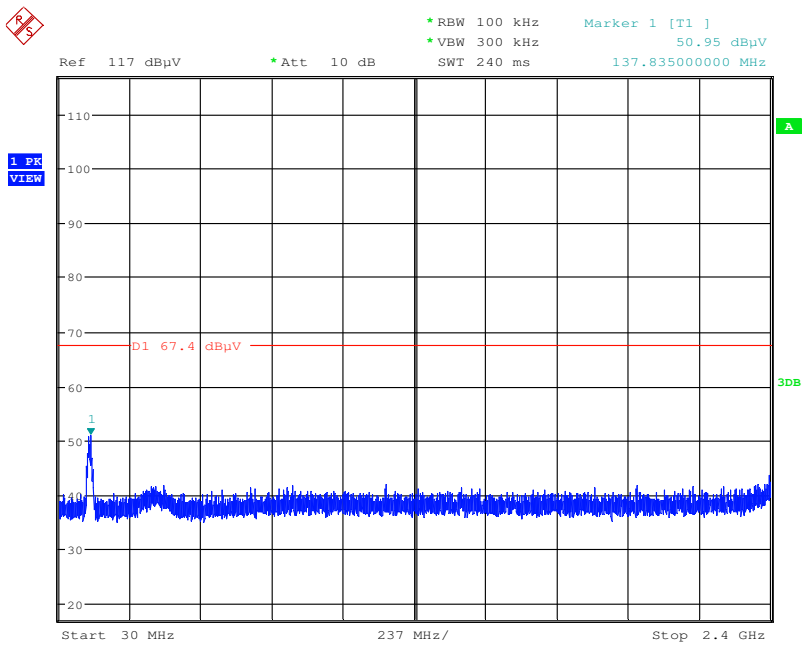
Date: 30.JUL.2016 13:09:07

Plot on Configuration IEEE 802.11n MCS0 HT40 / CH 3 / 2483.5MHz~26500MHz (down 30dBc)



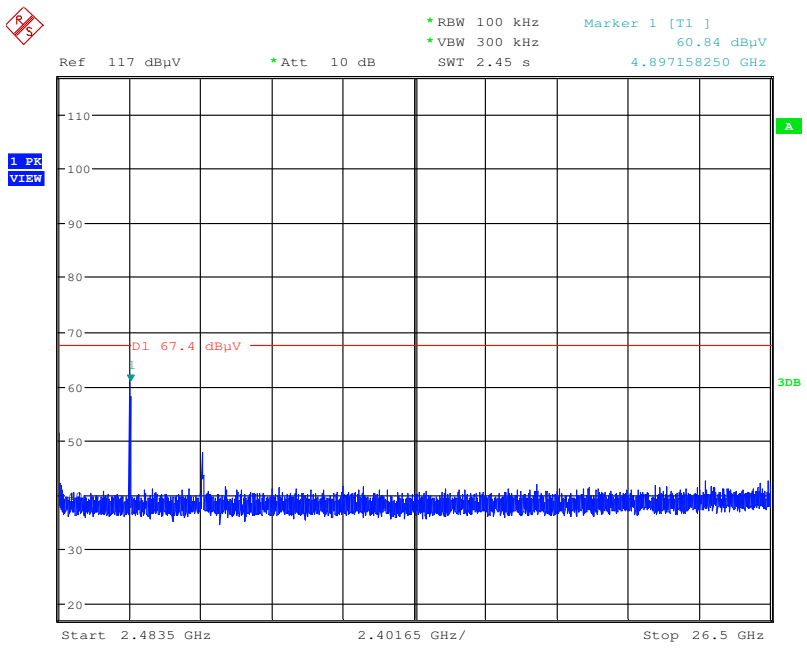
Date: 30.JUL.2016 13:10:04

Plot on Configuration IEEE 802.11n MCS0 HT40 / CH 9 / 30MHz~2400MHz (down 30dBc)



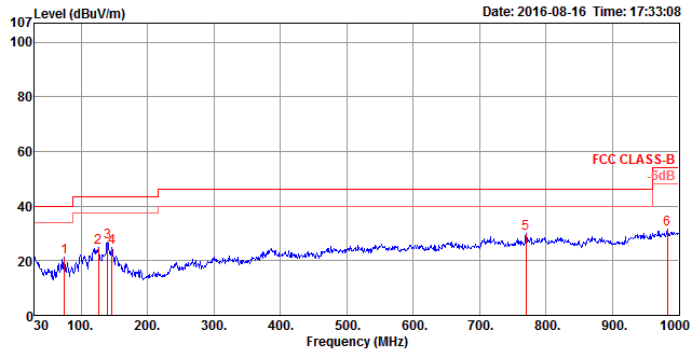
Date: 30.JUL.2016 13:11:13

Plot on Configuration IEEE 802.11n MCS0 HT40 / CH 9 / 2483.5MHz~26500MHz (down 30dBc)



Date: 30.JUL.2016 13:10:38

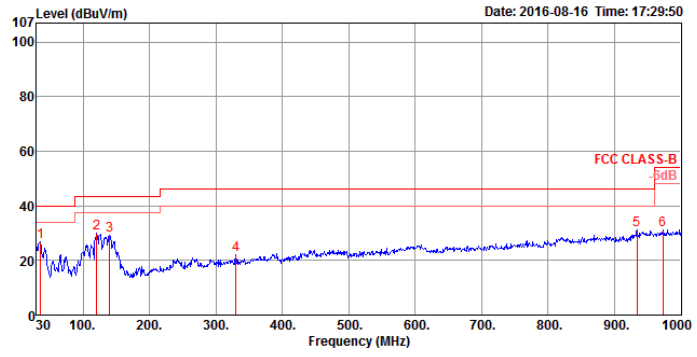
RSE below 1GHz Result			
Operating Mode	3	**Polarization**	Horizontal
Operating Function	5GHz + EUT in Z axis with Adapter 1		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	74.62	21.42	40.00	-18.58	40.47	0.87	32.60	12.68	HORIZONTAL	84	125	Peak
2	126.03	24.99	43.50	-18.51	38.31	1.10	32.56	18.14	HORIZONTAL	285	300	Peak
3	139.61	26.85	43.50	-16.65	40.65	1.16	32.56	17.60	HORIZONTAL	264	200	Peak
4	146.40	24.99	43.50	-18.51	39.28	1.19	32.56	17.08	HORIZONTAL	272	200	Peak
5	770.11	29.92	46.00	-16.08	33.34	2.72	32.46	26.32	HORIZONTAL	226	100	Peak
6	982.54	31.40	54.00	-22.60	31.38	3.15	31.13	28.00	HORIZONTAL	32	100	Peak

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

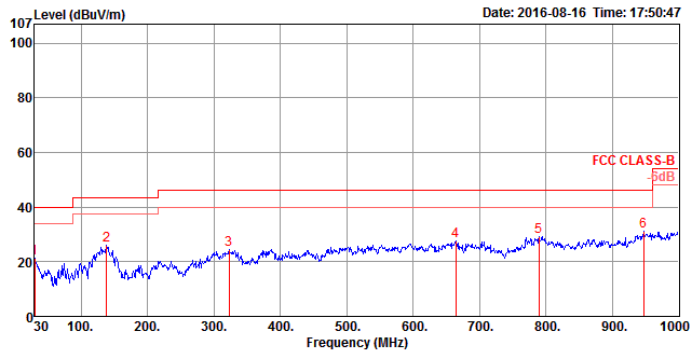
RSE below 1GHz Result			
Operating Mode	3	**Power Phase**	Vertical
Operating Function	5GHz + EUT in Z axis with Adapter 1		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	35.82	27.01	40.00	-12.99	37.09	0.61	32.64	21.95	VERTICAL	289	200	Peak
2	120.21	29.92	43.50	-13.58	43.20	1.08	32.56	18.20	VERTICAL	200	100	Peak
3	139.61	29.18	43.50	-14.32	42.98	1.16	32.56	17.60	VERTICAL	208	100	Peak
4	329.73	22.05	46.00	-23.95	32.33	1.79	32.53	20.46	VERTICAL	311	150	Peak
5	934.04	31.13	46.00	-14.87	31.96	3.00	31.55	27.72	VERTICAL	235	100	Peak
6	972.84	31.30	54.00	-22.70	31.46	3.11	31.21	27.94	VERTICAL	1	200	Peak

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

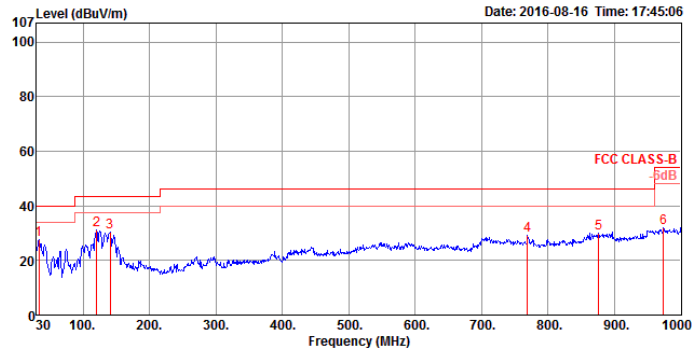
RSE below 1GHz Result			
Operating Mode	4	**Polarization**	Horizontal
Operating Function	5GHz + EUT in Z axis with Adapter 2		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	30.00	21.34	40.00	-18.66	28.05	0.53	32.64	25.40	HORIZONTAL	81	100	Peak
2	138.64	25.90	43.50	-17.60	39.65	1.16	32.56	17.65	HORIZONTAL	279	200	Peak
3	322.94	24.57	46.00	-21.43	35.06	1.77	32.53	20.27	HORIZONTAL	206	100	Peak
4	664.38	27.51	46.00	-18.49	32.27	2.51	32.63	25.36	HORIZONTAL	36	300	Peak
5	789.51	29.18	46.00	-16.82	32.32	2.75	32.41	26.52	HORIZONTAL	334	100	Peak
6	946.65	31.08	46.00	-14.92	31.73	3.01	31.44	27.78	HORIZONTAL	202	300	Peak

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

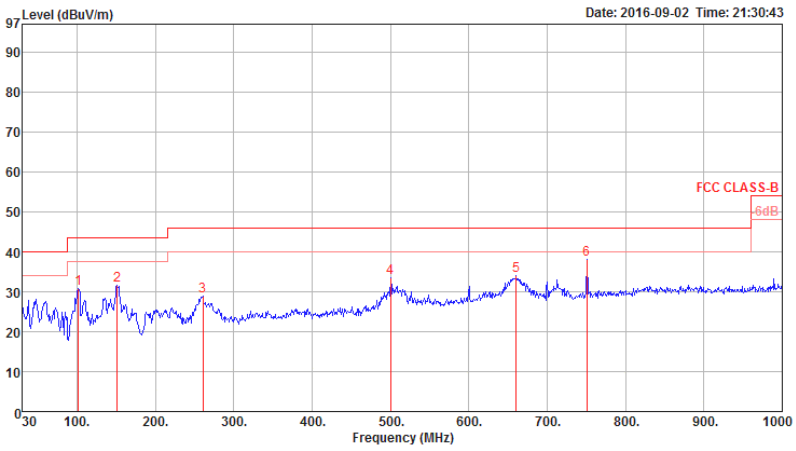
RSE below 1GHz Result			
Operating Mode	4	**Power Phase**	Vertical
Operating Function	5GHz + EUT in Z axis with Adapter 2		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	33.88	27.66	40.00	-12.34	36.62	0.59	32.64	23.09	VERTICAL	104	100	Peak
2	120.21	31.09	43.50	-12.41	44.37	1.08	32.56	18.20	VERTICAL	203	100	Peak
3	140.58	30.24	43.50	-13.26	44.08	1.16	32.56	17.56	VERTICAL	229	100	Peak
4	769.14	29.28	46.00	-16.72	32.73	2.72	32.46	26.29	VERTICAL	347	300	Peak
5	875.84	30.07	46.00	-15.93	31.87	2.89	31.99	27.30	VERTICAL	311	200	Peak
6	973.81	32.12	54.00	-21.88	32.28	3.11	31.21	27.94	VERTICAL	38	125	Peak

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

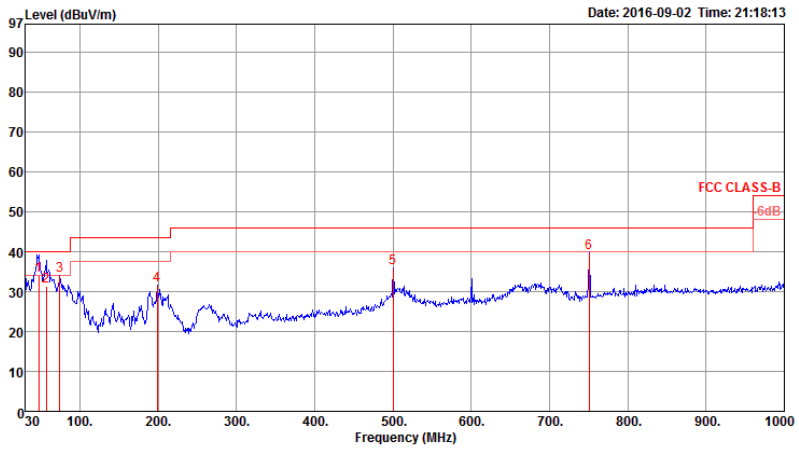
RSE below 1GHz Result			
Operating Mode	5	**Polarization**	Horizontal
Operating Function	5GHz + EUT in Z axis with Adapter 3		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	101.78	30.68	43.50	-12.82	42.23	0.70	17.10	29.35	100	0	Peak	HORIZONTAL
2	151.25	31.51	43.50	-11.99	42.92	0.92	16.76	29.09	100	0	Peak	HORIZONTAL
3	260.86	28.78	46.00	-17.22	37.02	1.36	19.58	29.18	100	0	Peak	HORIZONTAL
4	500.45	33.41	46.00	-12.59	36.91	2.04	23.92	29.46	100	0	Peak	HORIZONTAL
5	660.50	34.15	46.00	-11.85	35.30	2.45	25.45	29.05	100	0	Peak	HORIZONTAL
6	750.71	38.07	46.00	-7.93	37.90	2.68	26.30	28.81	100	0	Peak	HORIZONTAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

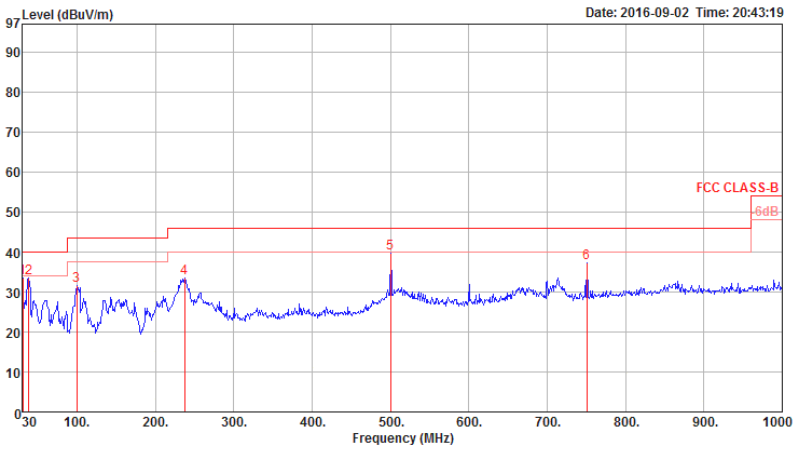
RSE below 1GHz Result			
Operating Mode	5	**Power Phase**	Vertical
Operating Function	5GHz + EUT in Z axis with Adapter 3		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	47.86	33.92	40.00	-6.08	47.67	0.35	15.45	29.55	100	2	QP	VERTICAL
2	57.16	31.31	40.00	-8.69	47.50	0.43	12.89	29.51	118	213	QP	VERTICAL
3	74.62	33.92	40.00	-6.08	50.19	0.55	12.63	29.45	300	0	Peak	VERTICAL
4	198.78	31.59	43.50	-11.91	43.22	1.13	16.09	28.85	300	0	Peak	VERTICAL
5	500.45	36.06	46.00	-9.94	39.56	2.04	23.92	29.46	300	0	Peak	VERTICAL
6	750.71	39.66	46.00	-6.34	39.49	2.68	26.30	28.81	300	0	Peak	VERTICAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

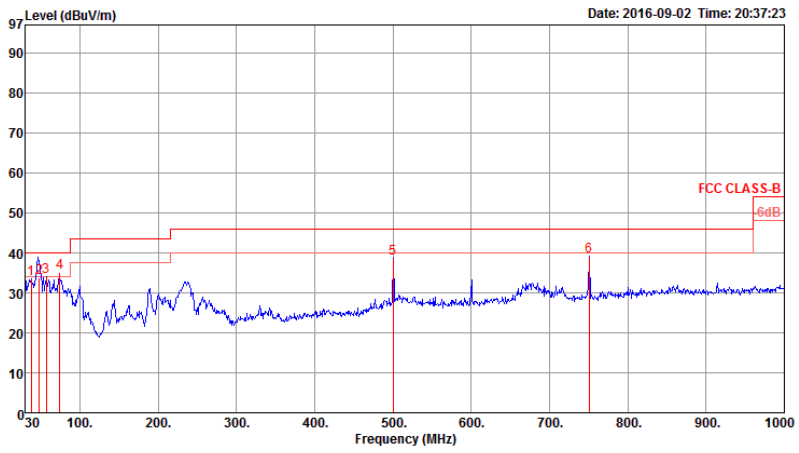
RSE below 1GHz Result			
Operating Mode	6	**Polarization**	Horizontal
Operating Function	5GHz + EUT in Z axis with Adapter 4		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	30.97	33.51	40.00	-6.49	38.01	0.20	24.89	29.59	100	0	Peak	HORIZONTAL
2	38.73	33.63	40.00	-6.37	42.72	0.27	20.21	29.57	100	0	Peak	HORIZONTAL
3	99.84	31.60	43.50	-11.90	43.37	0.69	16.90	29.36	100	0	Peak	HORIZONTAL
4	237.58	33.43	46.00	-12.57	43.55	1.28	17.65	29.05	100	0	Peak	HORIZONTAL
5	500.45	39.84	46.00	-6.16	43.34	2.04	23.92	29.46	100	0	Peak	HORIZONTAL
6	750.71	37.23	46.00	-8.77	37.06	2.68	26.30	28.81	100	0	Peak	HORIZONTAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

RSE below 1GHz Result			
Operating Mode	6	**Power Phase**	Vertical
Operating Function	5GHz + EUT in Z axis with Adapter 4		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	37.76	33.55	40.00	-6.45	42.10	0.26	20.76	29.57	300	0	Peak	VERTICAL
2	47.99	33.89	40.00	-6.11	47.70	0.36	15.38	29.55	102	4	QP	VERTICAL
3	57.16	33.93	40.00	-6.07	50.12	0.43	12.89	29.51	300	0	Peak	VERTICAL
4	74.62	35.06	40.00	-4.94	51.33	0.55	12.63	29.45	300	0	Peak	VERTICAL
5	500.45	38.70	46.00	-7.30	42.20	2.04	23.92	29.46	300	0	Peak	VERTICAL
6	750.71	39.12	46.00	-6.88	38.95	2.68	26.30	28.81	300	0	Peak	VERTICAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

Radiated Emissions (1GHz~10th Harmonic)

Configurations	IEEE 802.11b CH 1 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4823.89	50.64	54.00	-3.36	44.20	6.26	33.11	32.93	117	271	Average	HORIZONTAL
2	4823.97	56.51	74.00	-17.49	50.07	6.26	33.11	32.93	117	271	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4823.92	56.10	74.00	-17.90	49.66	6.26	33.11	32.93	106	299	Peak	VERTICAL
2	4823.97	53.58	54.00	-0.42	47.14	6.26	33.11	32.93	106	299	Average	VERTICAL

Configurations	IEEE 802.11b CH 6 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4874.02	50.36	54.00	-3.64	43.78	6.28	33.23	32.93	123	229	Average	HORIZONTAL
2	4874.13	53.44	74.00	-20.56	46.86	6.28	33.23	32.93	123	229	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4873.97	56.93	74.00	-17.07	50.35	6.28	33.23	32.93	103	299	Peak	VERTICAL
2	4874.02	53.85	54.00	-0.15	47.27	6.28	33.23	32.93	103	299	Average	VERTICAL

Configurations	IEEE 802.11b CH 11 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4961.02	54.40	74.00	-19.60	47.60	6.30	33.41	32.91	133	209	Peak	HORIZONTAL
2	4967.91	51.71	54.00	-2.29	44.88	6.30	33.44	32.91	133	209	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4923.95	55.87	74.00	-18.13	49.15	6.29	33.35	32.92	107	208	Peak	VERTICAL
2	4924.00	53.98	54.00	-0.02	47.26	6.29	33.35	32.92	107	208	Average	VERTICAL

Configurations	IEEE 802.11g CH 1 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4814.71	49.70	74.00	-24.30	43.26	6.26	33.11	32.93	132	230	Peak	HORIZONTAL
2	4817.88	37.64	54.00	-16.36	31.20	6.26	33.11	32.93	132	230	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4821.02	49.82	74.00	-24.18	43.38	6.26	33.11	32.93	113	263	Peak	VERTICAL
2	4821.05	38.02	54.00	-15.98	31.58	6.26	33.11	32.93	113	263	Average	VERTICAL

Configurations	IEEE 802.11g CH 6 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4879.35	56.20	74.00	-17.80	49.62	6.28	33.23	32.93	111	214	Peak	HORIZONTAL
2	4879.64	42.55	54.00	-11.45	35.97	6.28	33.23	32.93	111	214	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4878.23	43.93	54.00	-10.07	37.35	6.28	33.23	32.93	100	157	Average	VERTICAL
2	4878.58	56.21	74.00	-17.79	49.63	6.28	33.23	32.93	100	157	Peak	VERTICAL

Configurations	IEEE 802.11g CH 11 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4926.28	48.40	74.00	-25.60	41.68	6.29	33.35	32.92	133	243	Peak	HORIZONTAL
2	4933.55	36.20	54.00	-17.80	29.48	6.29	33.35	32.92	133	243	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4920.09	49.20	74.00	-24.80	42.51	6.29	33.32	32.92	133	243	Peak	VERTICAL
2	4931.92	36.42	54.00	-17.58	29.70	6.29	33.35	32.92	133	243	Average	VERTICAL

Configurations	IEEE 802.11n MCS0 HT20 CH 1 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4821.44	37.02	54.00	-16.98	30.58	6.26	33.11	32.93	125	224	Average	HORIZONTAL
2	4824.96	49.69	74.00	-24.31	43.25	6.26	33.11	32.93	125	224	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4823.97	50.97	74.00	-23.03	44.53	6.26	33.11	32.93	117	241	Peak	VERTICAL
2	4833.94	37.89	54.00	-16.11	31.41	6.27	33.14	32.93	117	241	Average	VERTICAL

Configurations	IEEE 802.11n MCS0 HT20 CH 6 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4875.04	54.55	74.00	-19.45	47.97	6.28	33.23	32.93	112	229	Peak	HORIZONTAL
2	4876.32	44.65	54.00	-9.35	38.07	6.28	33.23	32.93	112	229	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4874.72	59.98	74.00	-14.02	53.40	6.28	33.23	32.93	100	207	Peak	VERTICAL
2	4874.80	46.44	54.00	-7.56	39.86	6.28	33.23	32.93	100	207	Average	VERTICAL

Configurations	IEEE 802.11n MCS0 HT20 CH 11 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4853.81	38.61	54.00	-15.39	32.07	6.27	33.20	32.93	133	280	Average	HORIZONTAL
2	4853.81	50.78	74.00	-23.22	44.24	6.27	33.20	32.93	133	280	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4852.21	39.36	54.00	-14.64	32.85	6.27	33.17	32.93	129	258	Average	VERTICAL
2	4854.29	51.01	74.00	-22.99	44.47	6.27	33.20	32.93	129	258	Peak	VERTICAL

Configurations	IEEE 802.11n MCS0 HT40 CH 3 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4852.89	36.21	54.00	-17.79	29.70	6.27	33.17	32.93	133	235	Average	HORIZONTAL
2	4857.62	49.22	74.00	-24.78	42.68	6.27	33.20	32.93	133	235	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4824.61	50.38	74.00	-23.62	43.94	6.26	33.11	32.93	133	235	Peak	VERTICAL
2	4842.64	37.13	54.00	-16.87	30.62	6.27	33.17	32.93	133	235	Average	VERTICAL

Configurations	IEEE 802.11n MCS0 HT40 CH 6 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4874.96	36.73	54.00	-17.27	30.15	6.28	33.23	32.93	135	226	Average	HORIZONTAL
2	4878.49	48.66	74.00	-25.34	42.08	6.28	33.23	32.93	135	226	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4867.35	38.11	54.00	-15.89	31.53	6.28	33.23	32.93	136	205	Average	VERTICAL
2	4875.76	48.93	74.00	-25.07	42.35	6.28	33.23	32.93	136	205	Peak	VERTICAL

Configurations	IEEE 802.11n MCS0 HT40 CH 9 / Chain 1+Chain 2+Chain 3+Chain 4

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4897.99	48.60	74.00	-25.40	41.95	6.28	33.29	32.92	122	233	Peak	HORIZONTAL
2	4902.08	35.78	54.00	-18.22	29.13	6.28	33.29	32.92	122	233	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	4895.47	37.50	54.00	-16.50	30.85	6.28	33.29	32.92	114	150	Average	VERTICAL
2	4896.44	50.65	74.00	-23.35	44.00	6.28	33.29	32.92	114	150	Peak	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

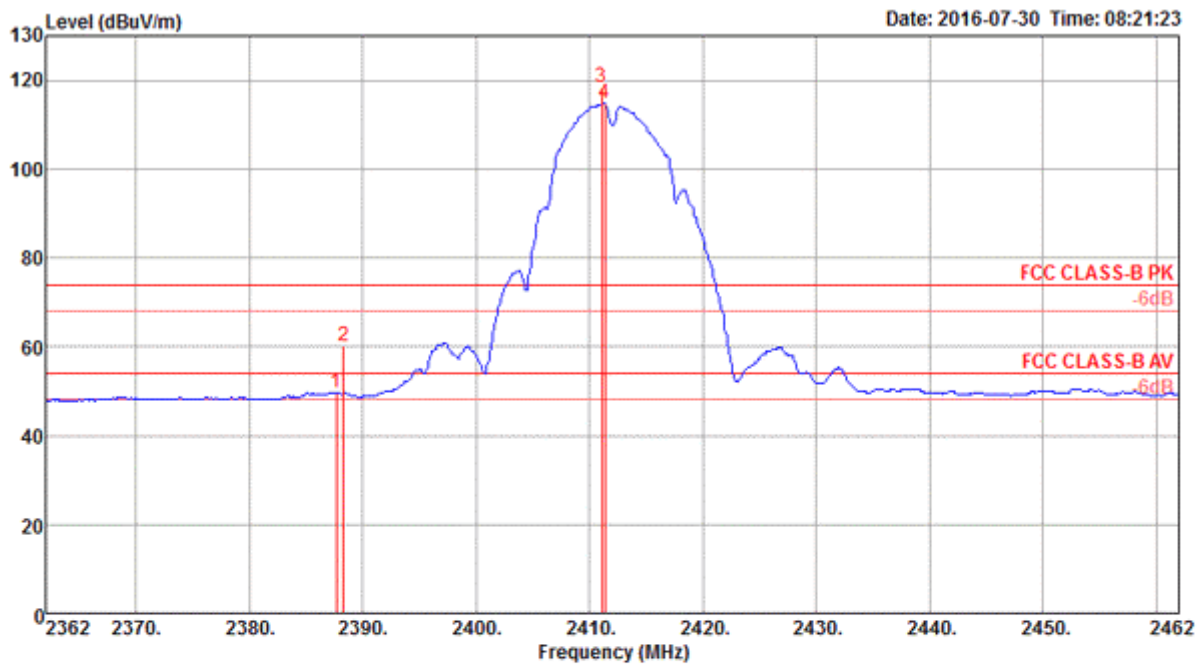
Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Band Edge Emissions

Configurations	IEEE 802.11b CH 1, 6, 11 / Chain 1+Chain 2+Chain 3+Chain 4

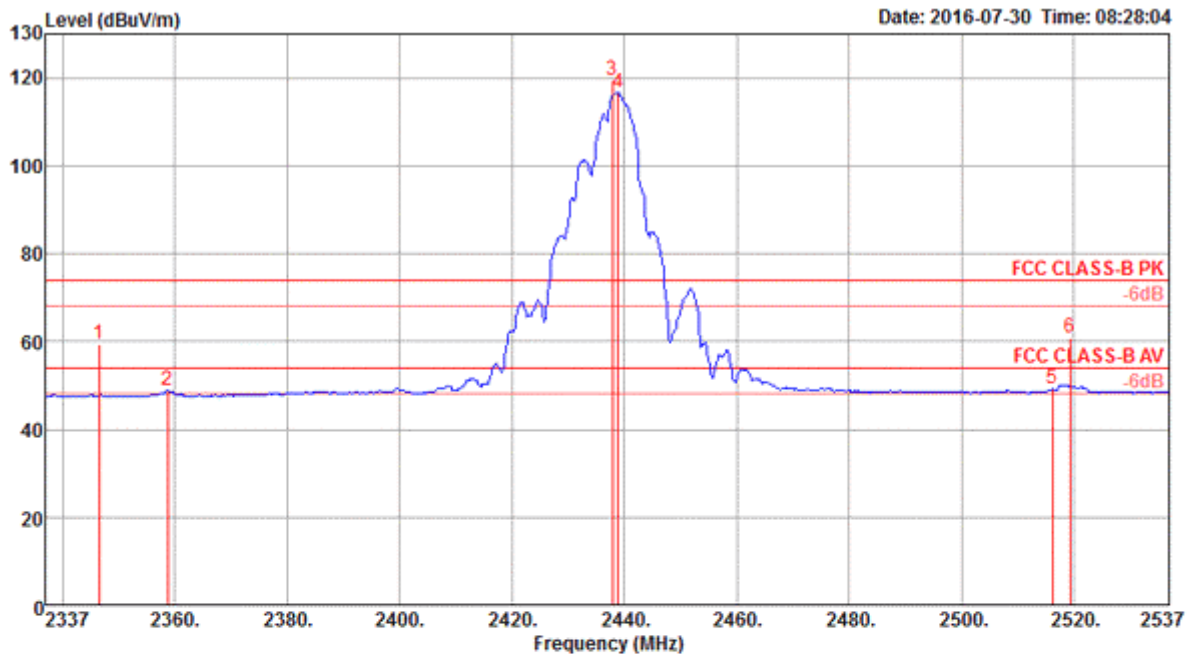
Channel 1



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2387.64	49.67	54.00	-4.33	17.76	3.60	28.31	0.00	241	287	Average	VERTICAL
2	2388.28	60.03	74.00	-13.97	28.12	3.60	28.31	0.00	241	287	Peak	VERTICAL
3	2411.04	118.27			86.30	3.62	28.35	0.00	241	287	Peak	VERTICAL
4	2411.36	114.94			82.96	3.62	28.36	0.00	241	287	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

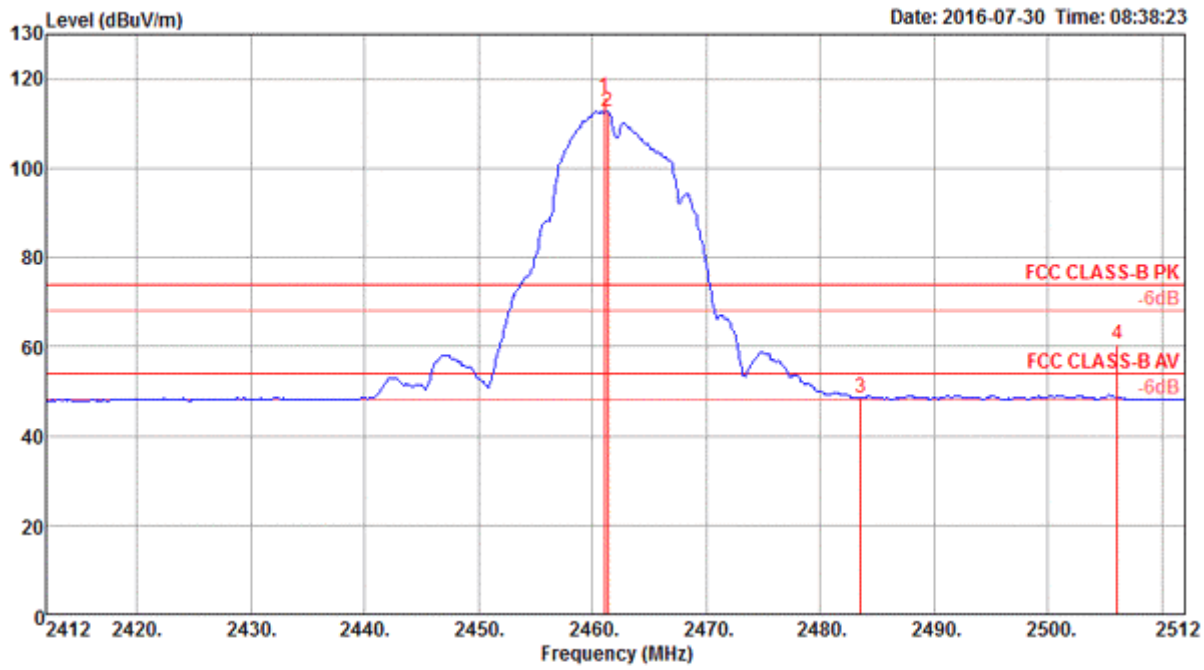
Channel 6



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2346.62	59.34	74.00	-14.66	27.53	3.57	28.24	0.00	228	158	Peak	VERTICAL
2	2358.80	48.74	54.00	-5.26	16.89	3.58	28.27	0.00	228	158	Average	VERTICAL
3	2437.96	119.61			87.58	3.64	28.39	0.00	228	158	Peak	VERTICAL
4	2438.92	116.44			84.41	3.64	28.39	0.00	228	158	Average	VERTICAL
5	2516.20	49.10	54.00	-4.90	16.85	3.70	28.55	0.00	228	158	Average	VERTICAL
6	2519.37	60.85	74.00	-13.15	28.56	3.71	28.58	0.00	228	158	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Channel 11

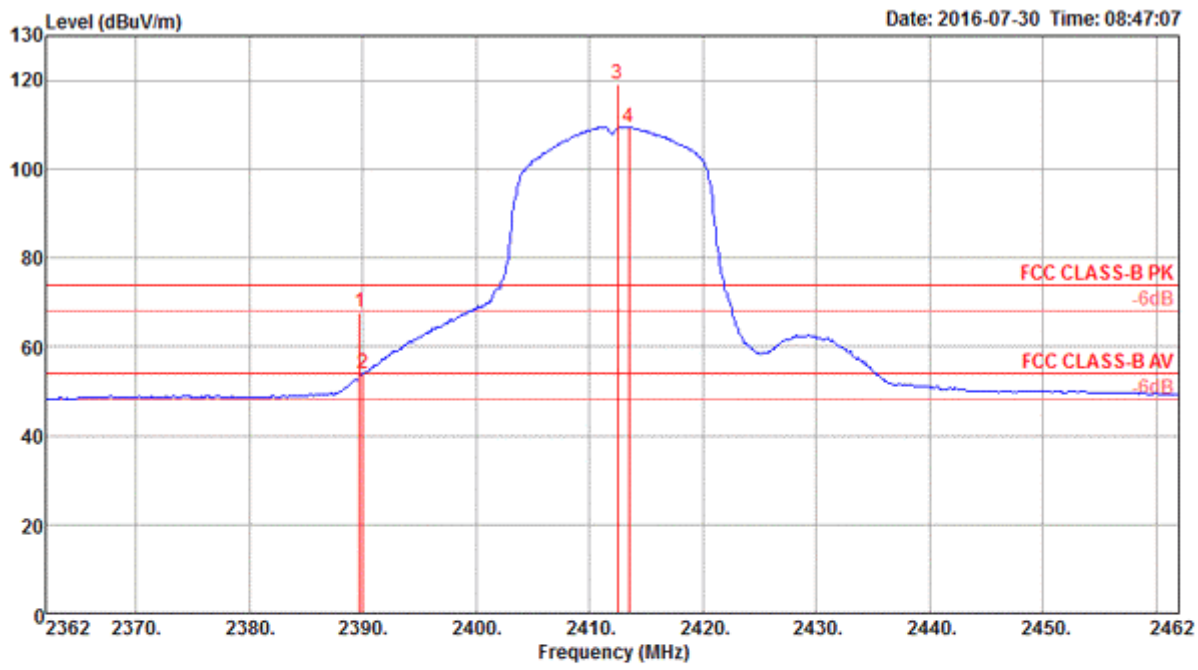


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2461.04	115.95			83.85	3.66	28.44	0.00	252	288	Peak	VERTICAL
2	2461.36	112.59			80.49	3.66	28.44	0.00	252	288	Average	VERTICAL
3	2483.50	48.62	54.00	-5.38	16.46	3.68	28.48	0.00	252	288	Average	VERTICAL
4	2506.07	60.42	74.00	-13.58	28.19	3.70	28.53	0.00	252	288	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Configurations	IEEE 802.11g CH 1, 6, 11 / Chain 1+Chain 2+Chain 3+Chain 4

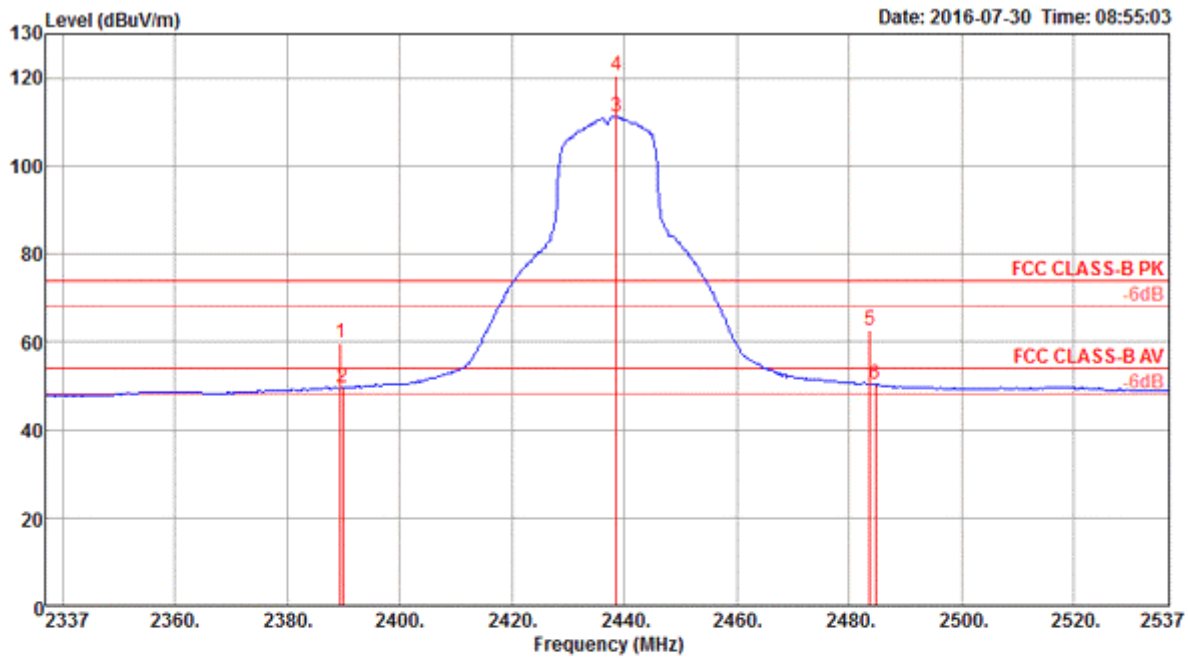
Channel 1



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2389.72	67.60	74.00	-6.40	35.69	3.60	28.31	0.00	244	287	Peak	VERTICAL
2	2390.00	53.89	54.00	-0.11	21.98	3.60	28.31	0.00	244	287	Average	VERTICAL
3	2412.48	119.10			87.12	3.62	28.36	0.00	244	287	Peak	VERTICAL
4	2413.44	109.51			77.53	3.62	28.36	0.00	244	287	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2412 MHz.

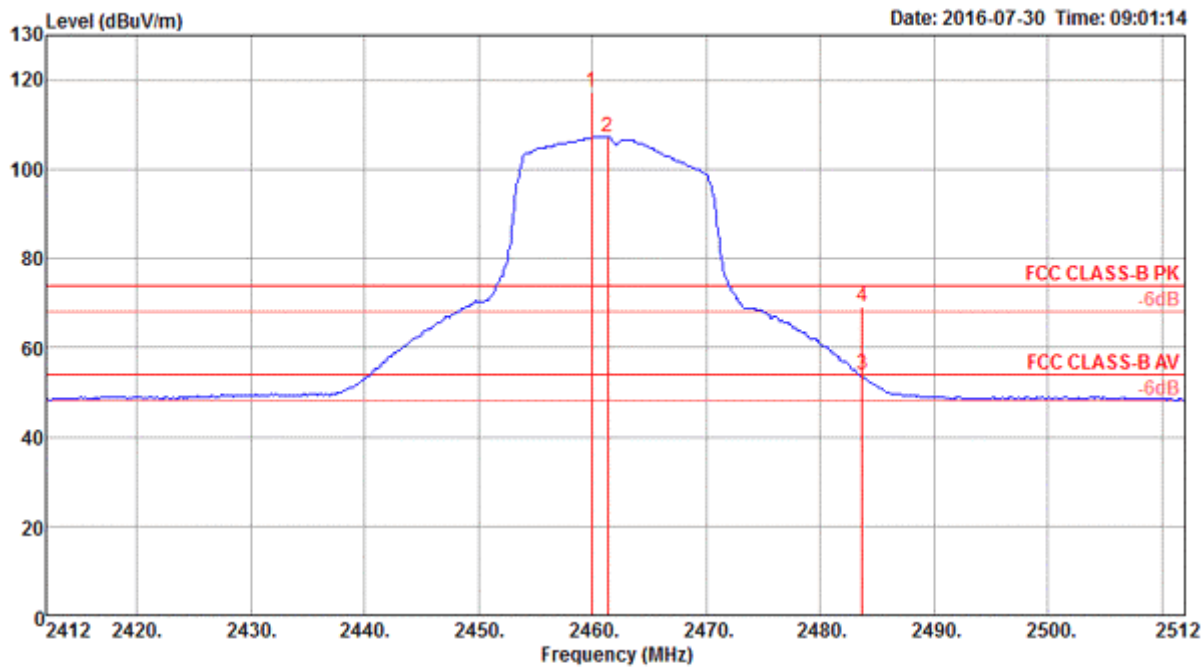
Channel 6



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2389.56	59.86	74.00	-14.14	27.95	3.60	28.31	0.00	274	289	Peak	VERTICAL
2	2390.00	49.68	54.00	-4.32	17.77	3.60	28.31	0.00	274	289	Average	VERTICAL
3	2438.60	111.07			79.04	3.64	28.39	0.00	274	289	Average	VERTICAL
4	2438.60	120.63			88.60	3.64	28.39	0.00	274	289	Peak	VERTICAL
5	2483.80	62.81	74.00	-11.19	30.65	3.68	28.48	0.00	274	289	Peak	VERTICAL
6	2484.76	50.44	54.00	-3.56	18.28	3.68	28.48	0.00	274	289	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Channel 11

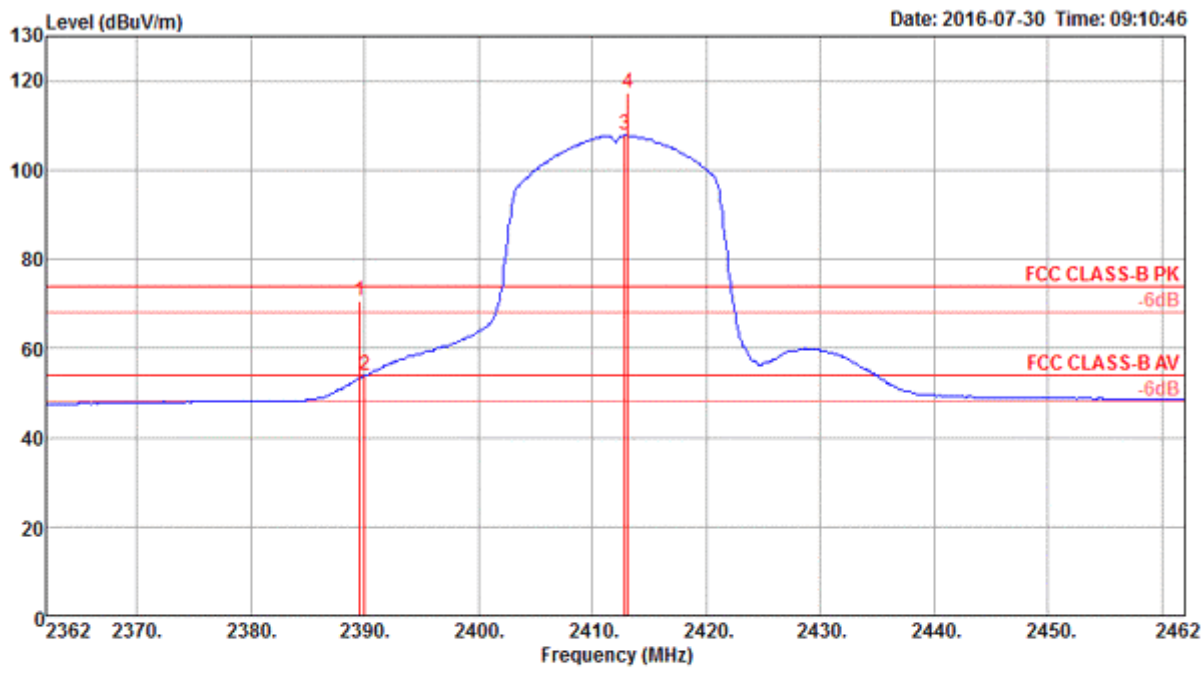


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2459.92	117.41			85.32	3.66	28.43	0.00	259	287	Peak	VERTICAL
2	2461.36	107.28			75.18	3.66	28.44	0.00	259	287	Average	VERTICAL
3	2483.64	53.78	54.00	-0.22	21.62	3.68	28.48	0.00	259	287	Average	VERTICAL
4	2483.64	69.12	74.00	-4.88	36.96	3.68	28.48	0.00	259	287	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2462 MHz.

Configurations	IEEE 802.11n MCS0 HT20 CH 1, 6, 11 / Chain 1+Chain 2+Chain 3+Chain 4

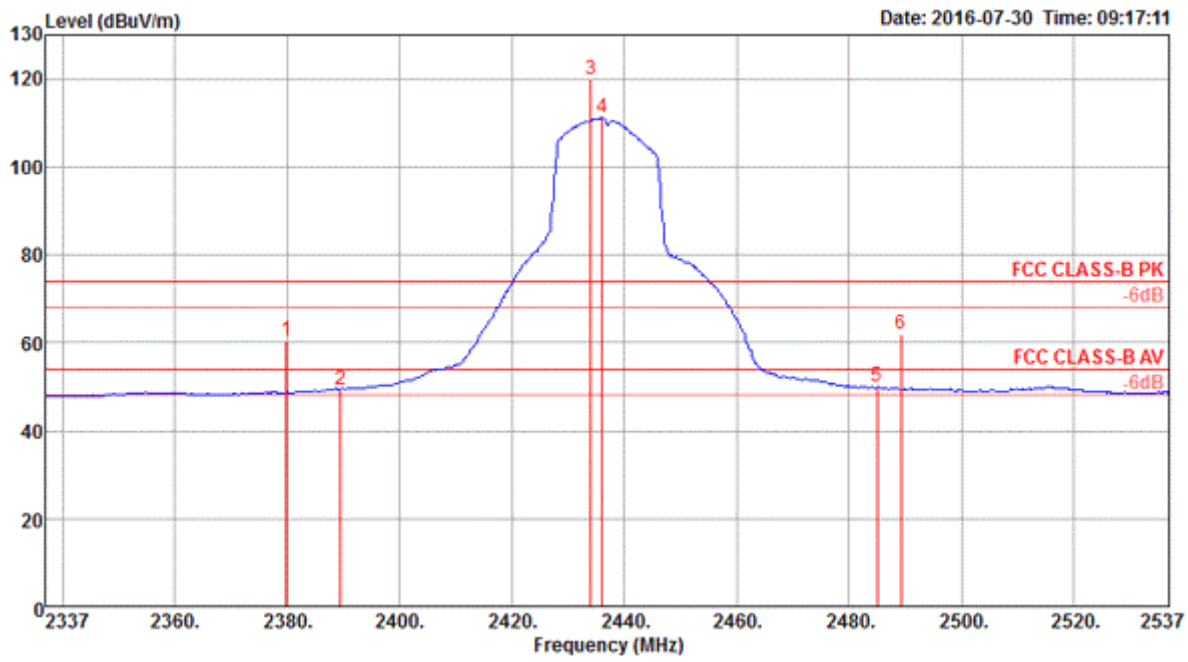
Channel 1



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2389.56	70.70	74.00	-3.30	38.79	3.60	28.31	0.00	249	286	Peak	VERTICAL
2	2390.00	53.88	54.00	-0.12	21.97	3.60	28.31	0.00	249	286	Average	VERTICAL
3	2412.80	107.83			75.85	3.62	28.36	0.00	249	286	Average	VERTICAL
4	2413.12	117.29			85.31	3.62	28.36	0.00	249	286	Peak	VERTICAL

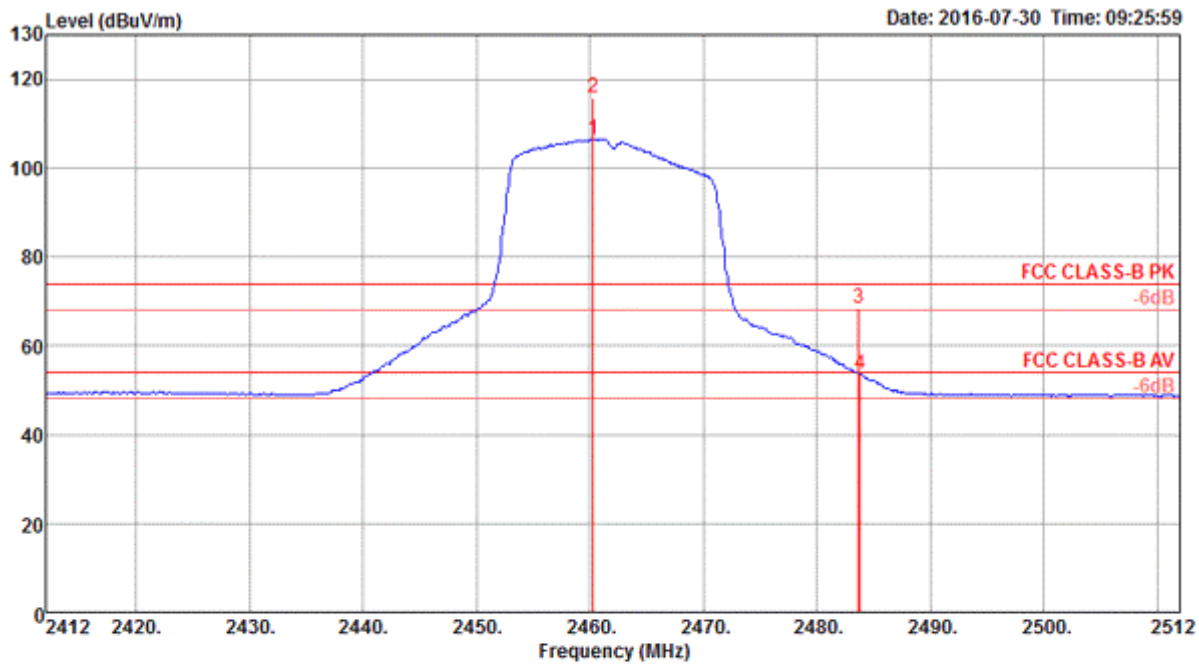
Item 3, 4 are the fundamental frequency at 2412 MHz.

Channel 6



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2379.95	60.31	74.00	-13.69	28.42	3.59	28.30	0.00	272	286	Peak	VERTICAL
2	2389.56	49.30	54.00	-4.70	17.39	3.60	28.31	0.00	272	286	Average	VERTICAL
3	2434.12	119.90			87.87	3.64	28.39	0.00	272	286	Peak	VERTICAL
4	2436.04	111.08			79.05	3.64	28.39	0.00	272	286	Average	VERTICAL
5	2485.08	49.93	54.00	-4.07	17.77	3.68	28.48	0.00	272	286	Average	VERTICAL
6	2489.24	61.84	74.00	-12.16	29.67	3.68	28.49	0.00	272	286	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.



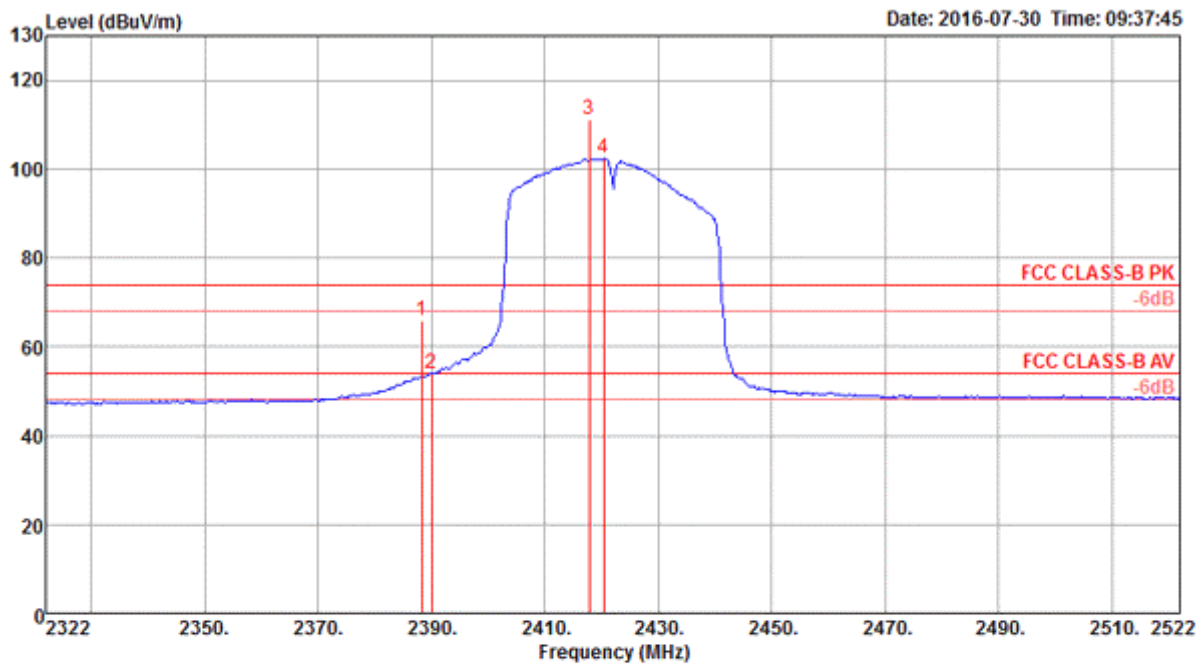
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2460.24	106.45			74.36	3.66	28.43	0.00	250	287	Average	VERTICAL
2	2460.24	115.80			83.71	3.66	28.43	0.00	250	287	Peak	VERTICAL
3	2483.64	68.50	74.00	-5.50	36.34	3.68	28.48	0.00	250	287	Peak	VERTICAL
4	2483.80	53.64	54.00	-0.36	21.48	3.68	28.48	0.00	250	287	Average	VERTICAL

Channel 11

Item 1, 2 are the fundamental frequency at 2462 MHz.

Configurations	IEEE 802.11n MCS0 HT40 CH 3, 6, 9 / Chain 1+Chain 2+Chain 3+Chain 4

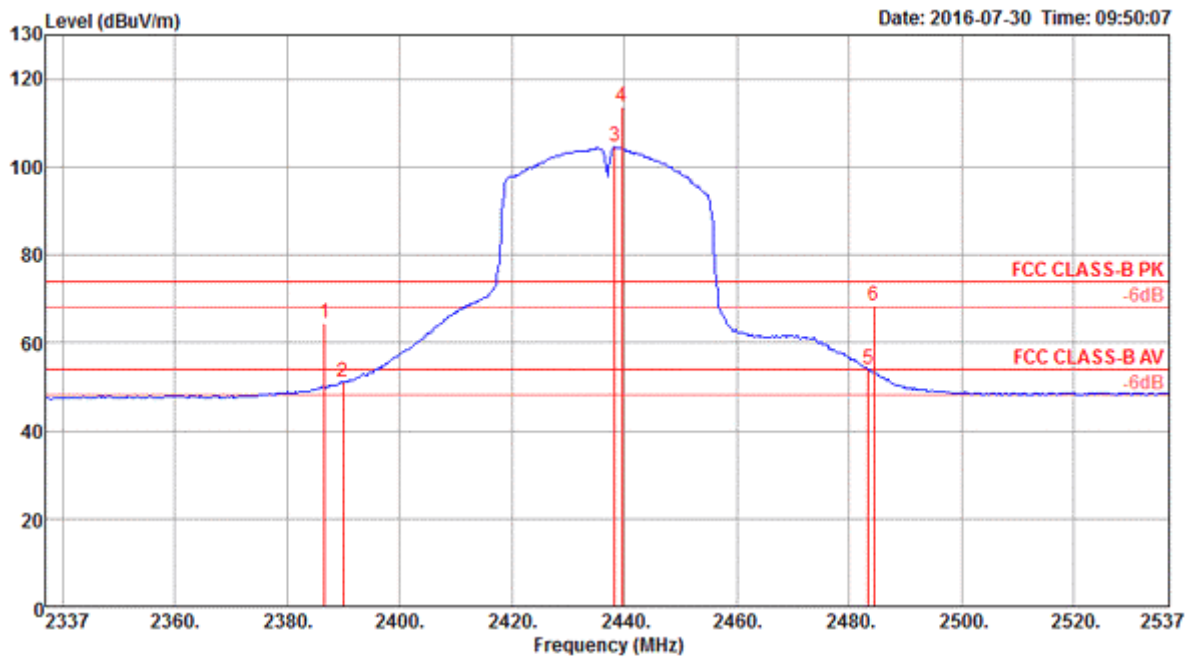
Channel 3



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2388.35	66.05	74.00	-7.95	34.14	3.60	28.31	0.00	251	291	Peak	VERTICAL
2	2390.00	53.85	54.00	-0.15	21.94	3.60	28.31	0.00	251	291	Average	VERTICAL
3	2417.83	111.05			79.07	3.62	28.36	0.00	251	291	Peak	VERTICAL
4	2420.40	102.34			70.34	3.63	28.37	0.00	251	291	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 2422 MHz.

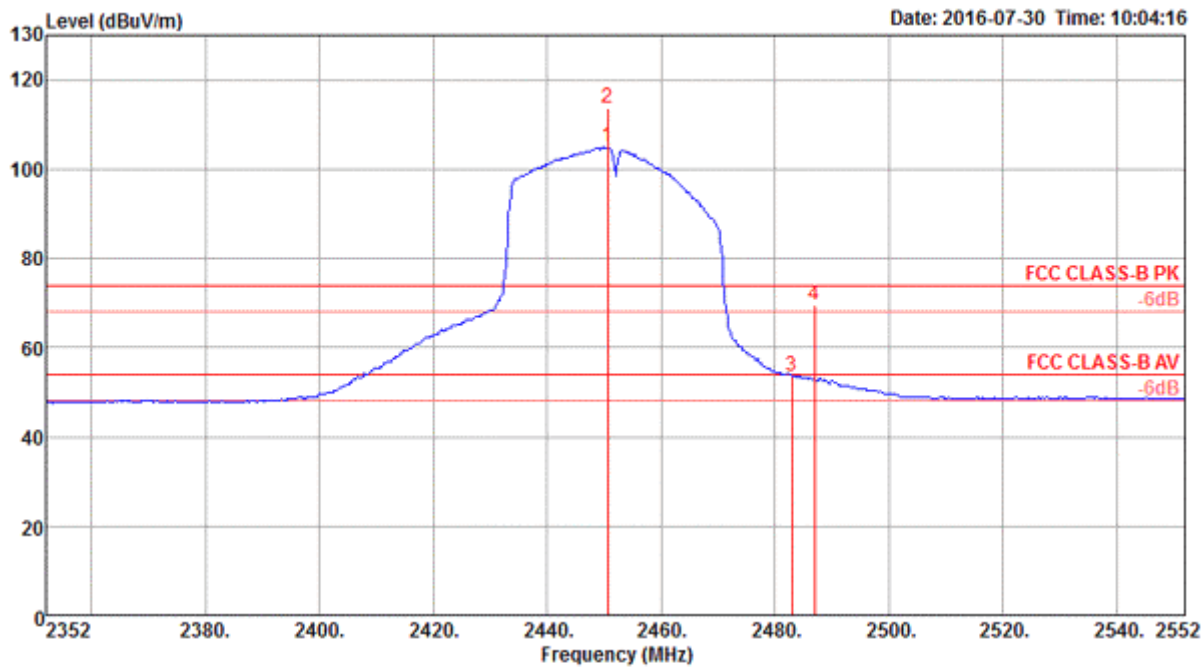
Channel 6



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2386.68	64.47	74.00	-9.53	32.56	3.60	28.31	0.00	297	166	Peak	VERTICAL
2	2390.00	50.96	54.00	-3.04	19.05	3.60	28.31	0.00	297	166	Average	VERTICAL
3	2438.28	104.49			72.46	3.64	28.39	0.00	297	166	Average	VERTICAL
4	2439.56	113.77			81.72	3.64	28.41	0.00	297	166	Peak	VERTICAL
5	2483.50	53.93	54.00	-0.07	21.77	3.68	28.48	0.00	297	166	Average	VERTICAL
6	2484.44	68.30	74.00	-5.70	36.14	3.68	28.48	0.00	297	166	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 2437 MHz.

Channel 9



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	2450.72	105.00			72.93	3.65	28.42	0.00	240	290	Average	VERTICAL
2	2450.72	113.87			81.80	3.65	28.42	0.00	240	290	Peak	VERTICAL
3	2483.00	53.75	54.00	-0.25	21.59	3.68	28.48	0.00	240	290	Average	VERTICAL
4	2486.94	69.44	74.00	-4.56	37.28	3.68	28.48	0.00	240	290	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 2452 MHz.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.