FCC Test Report

Equipment	:	AC1200 Wi-Fi Range Extender,AV1200 Passthrough Powerline Edition
Brand Name	:	TP-Link
Model No.	:	TL-WPA8630P
FCC ID	:	TE7WPA8630P
Standard	:	47 CFR FCC Part 15.247
Operating Band	:	2400 MHz – 2483.5 MHz
Function	:	☒ Point-to-multipoint; ☐ Point-to-point
Applicant	:	TP-Link Technologies Co., Ltd. Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Nanshan, Shenzhen,518057,China
Manufacturer	:	TP-Link Technologies Co., Ltd. Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Shennan Rd, Nanshan, Shenzhen City,Guangdong Province,P.R. China

The product sample received on Jul. 17, 2016 and completely tested on Sep. 16, 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)	Maximum Conducted 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
FR672231AA	Rev. 01	Initial issue of report	Nov. 01, 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	2
2.4G	11g	20	2
2.4G	HT20	20	2
2.4G	HT40	40	2

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
1	TP-LINK	3101500886	Dipole Antenna	I-PEX	1.96	2.4GHz TX/RX
2	TP-LINK	3101500887	Dipole Antenna	I-PEX	2.10	2.4GHz TX/RX
3	TP-LINK	3101500857	Dipole Antenna	I-PEX	5.28	5GHz TX/RX
4	TP-LINK	3101500857	Dipole Antenna	I-PEX	5.28	5GHz TX/RX

Note: 1. The EUT has four antennas.

2. For 2.4GHz WLAN function (2TX/2RX):

   Ant. 1 and Ant. 2 could transmit/receive simultaneously.

3. For 5GHz WLAN function (2TX/2RX):

   Ant. 3 and Ant. 4 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	T(s)	VBW(Hz) ≥ 1/T
11b	0.998	n/a (DC>=0.98)	n/a (DC>=0.98)
11g	0.99	n/a (DC>=0.98)	n/a (DC>=0.98)
HT20	0.99	n/a (DC>=0.98)	n/a (DC>=0.98)
HT40	0.985	n/a (DC>=0.98)	n/a (DC>=0.98)

1.1.4 EUT Operational Condition

EUT Power Type	Internal power supply			
Beamforming Function	☐	With beamforming	☒	Without beamforming

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	Serway Li	20°C / 50%	Aug. 19, 2016~Aug. 20, 2016
Radiated	03CH01-CB	Zero Chen, Eason Chen	22°C / 54%	Aug. 20, 2016~Sep. 16, 2016
AC Conduction	CO02-CB	Hank Yang	23°C / 59%	Sep. 13, 2016

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	2	2412	L	17.5
2.4G	11b	20	1	2	2437	M	17
2.4G	11b	20	1	2	2462	H	18
2.4G	11g	20	1	2	2412	L	18
2.4G	11g	20	1	2	2437	M	28.5
2.4G	11g	20	1	2	2462	H	19.5
2.4G	HT20	20	1,(M0)	2	2412	L	18.5
2.4G	HT20	20	1,(M0)	2	2437	M	27
2.4G	HT20	20	1,(M0)	2	2462	H	18
2.4G	HT40	40	1,(M0)	2	2422	L	16.5
2.4G	HT40	40	1,(M0)	2	2437	M	20
2.4G	HT40	40	1,(M0)	2	2452	H	16

Note:
- Test range channel consist of L (Low Ch.), M (Middle Ch.), H (High Ch.), S (Single Ch.) and C (Straddle Band Ch.).

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	CTX mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density
Test Condition	Conducted measurement at transmit chains

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	EUT Y axis
2	EUT Z axis
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
1	EUT Y axis
2	EUT 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
Operating Mode	
1	2.4GHz WLAN + 5GHz WLAN
Refer to Sporton Test Report No.: FA672231 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

N/A

2.5 Support Equipment

For Test Site No: CO02-CB

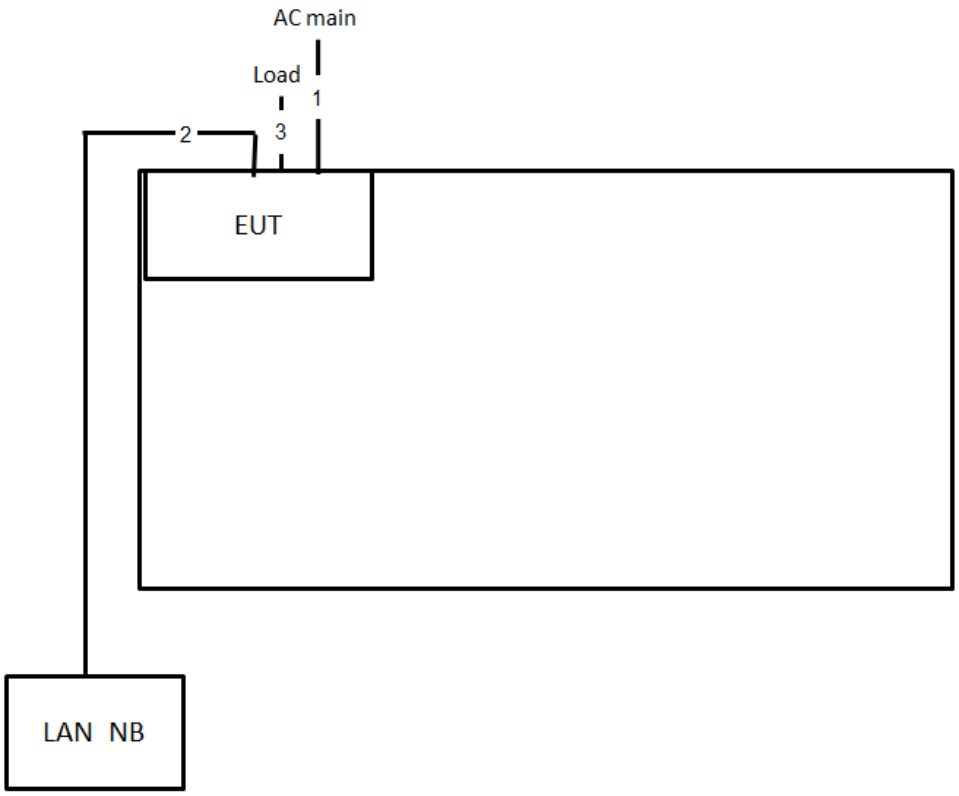
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E6430	DoC

For Test Site No: 03CH01-CB and TH01-CB

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

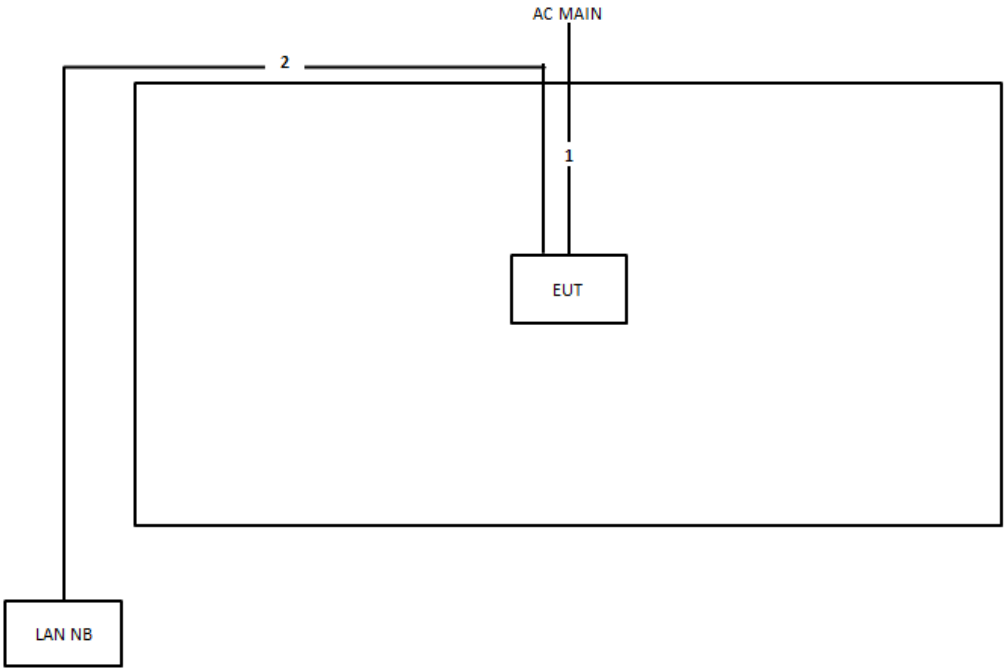
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable*2	No	1.5m

Test Setup Diagram - Radiated Test



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

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

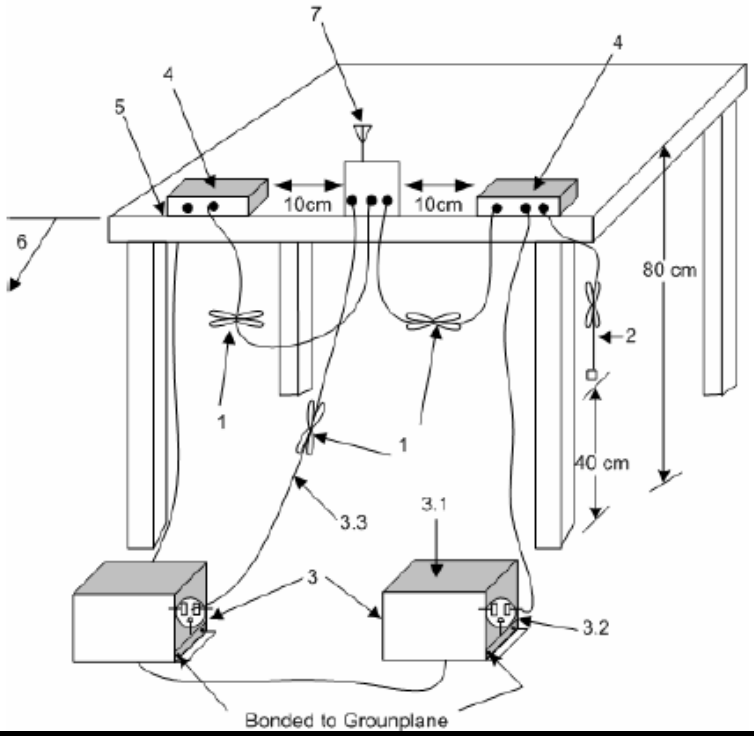
Refer a test equipment and calibration data table in this test report.

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.

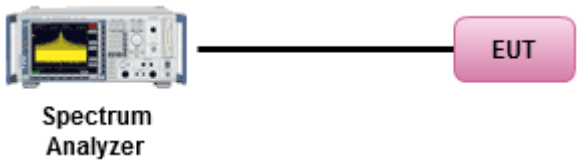
3.2.2 Measuring Instruments

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 Maximum Conducted Output Power

3.3.1 Maximum Conducted 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

Maximum Conducted 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

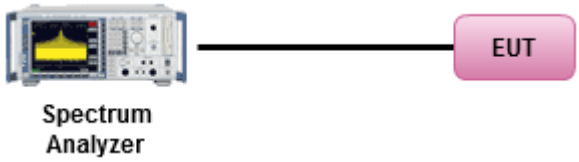
3.4.2 Measuring Instruments

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

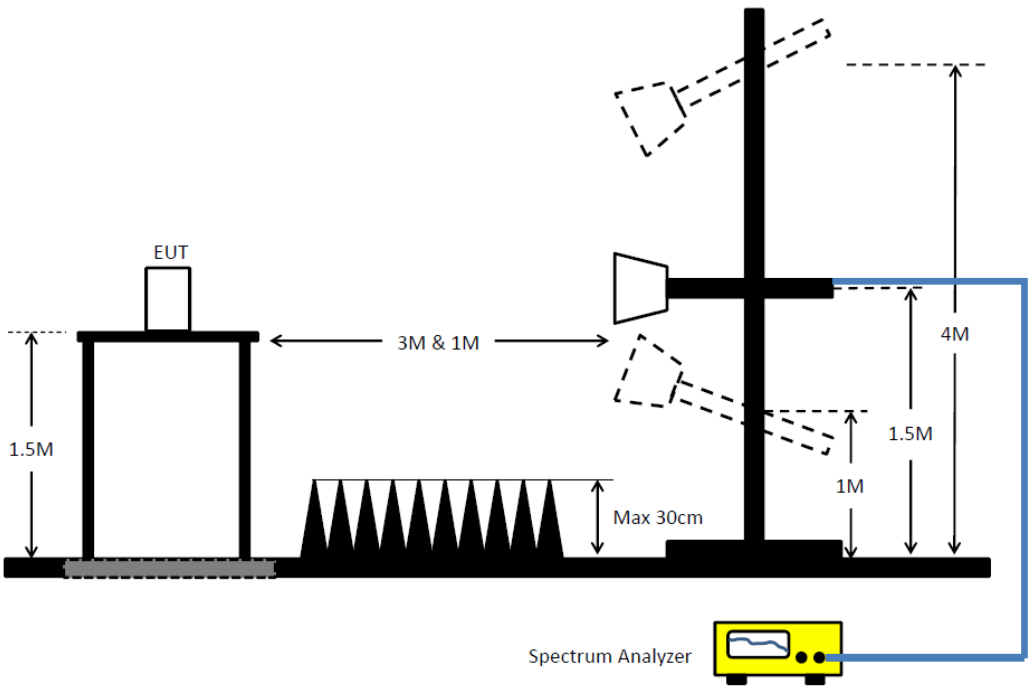
Refer a test equipment and calibration data table in this test report.

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.

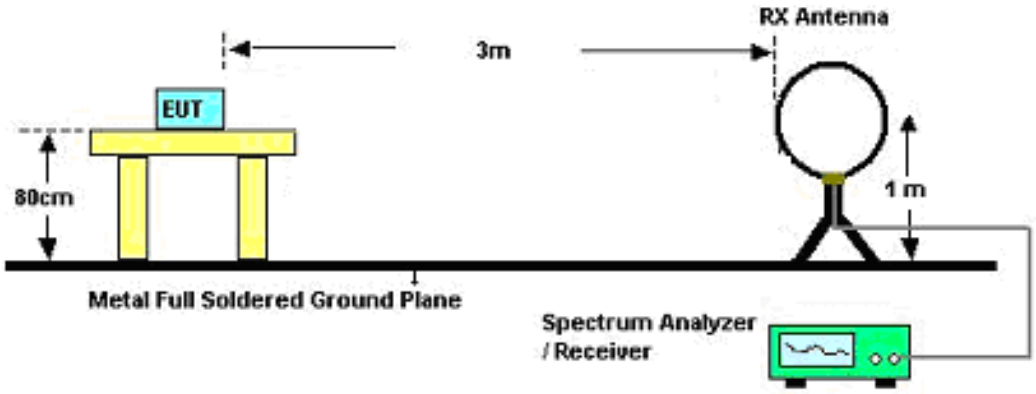
3.6.3 Test Procedures

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.	

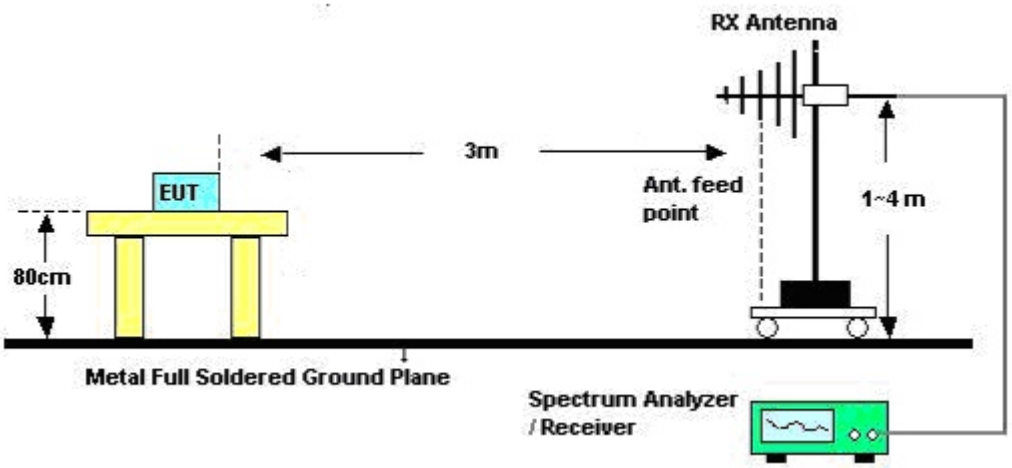
3.6.4 Test Setup

Transmitter Radiated Emissions

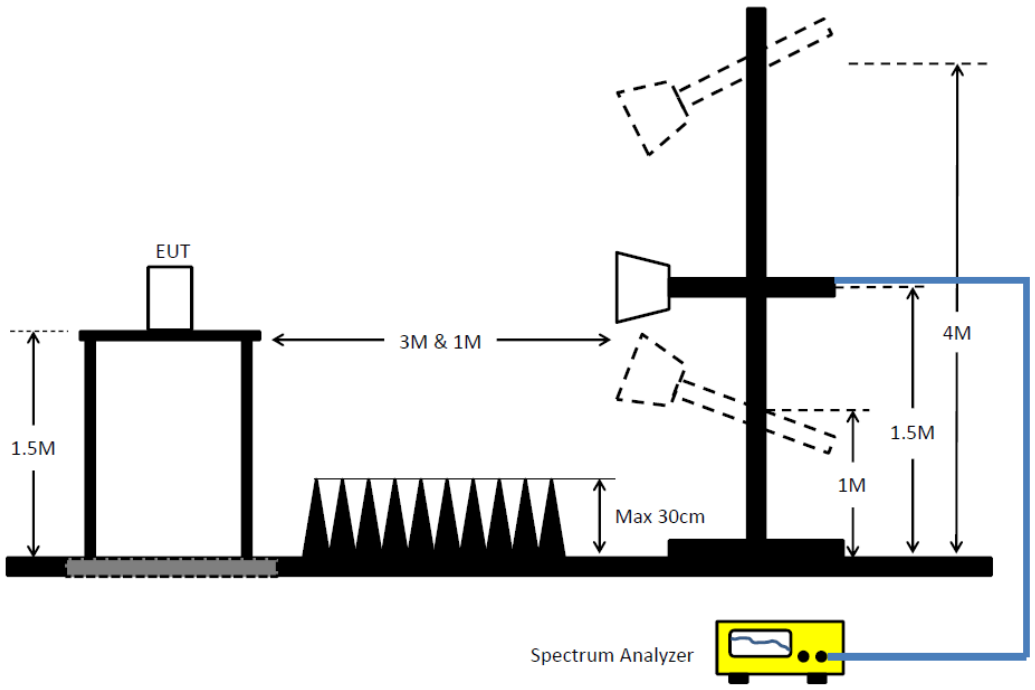
9kHz ~30MHz



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
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 16, 2015	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 13, 2015	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Jan. 18, 2016	Conduction (CO02-CB)
COND Cable	Woken	Cable	01	0.15MHz ~ 30MHz	Dec. 01, 2015	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F	9561-F073	9kHz ~ 30MHz	Sep. 30, 2015	Conduction (CO02-CB)
Bilog Antenna	SCHAFFNER	CBL 6112B	2888	30MHz ~ 1GHz	Nov. 17, 2015	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)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 09, 2015	Conducted (TH01-CB)
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)

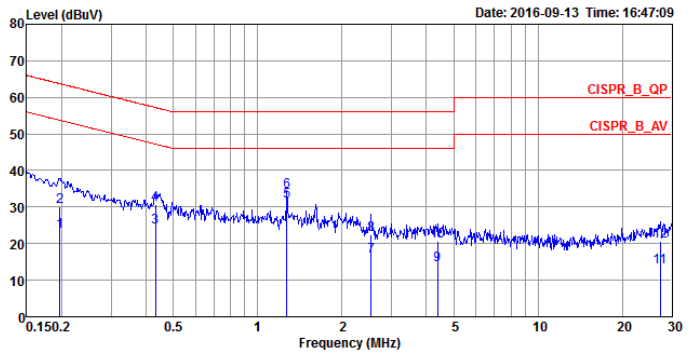
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	RG402	High Cable-8	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	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.

N.C.R. means Non-Calibration required.

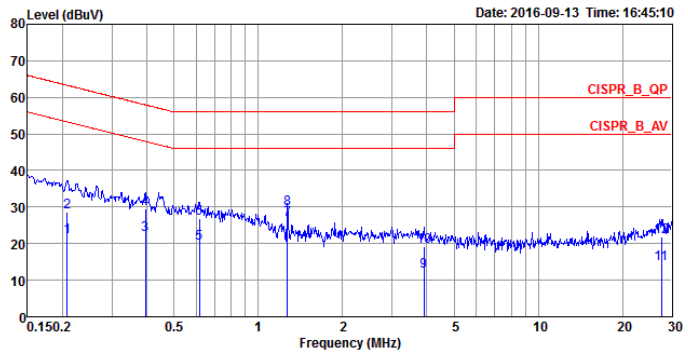
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	CTX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1965	23.30	-30.46	53.76	13.16	9.96	0.18	Average	NEUTRAL
2	0.1965	30.16	-33.60	63.76	20.02	9.96	0.18	QP	NEUTRAL
3	0.4328	24.42	-22.78	47.20	14.25	9.97	0.20	Average	NEUTRAL
4	0.4328	30.84	-26.36	57.20	20.67	9.97	0.20	QP	NEUTRAL
5	1.2688	31.69	-14.31	46.00	21.50	9.98	0.21	Average	NEUTRAL
6	1.2688	34.26	-21.74	56.00	24.07	9.98	0.21	QP	NEUTRAL
7	2.5400	16.54	-29.46	46.00	6.26	10.00	0.28	Average	NEUTRAL
8	2.5400	22.49	-33.51	56.00	12.21	10.00	0.28	QP	NEUTRAL
9	4.3838	14.20	-31.80	46.00	3.84	10.03	0.33	Average	NEUTRAL
10	4.3838	20.70	-35.30	56.00	10.34	10.03	0.33	QP	NEUTRAL
11	27.2711	13.43	-36.57	50.00	2.55	10.33	0.55	Average	NEUTRAL
12	27.2711	20.64	-39.36	60.00	9.76	10.33	0.55	QP	NEUTRAL

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	1	**Power Phase**	Line
Operating Function	CTX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.2072	21.76	-31.56	53.32	11.63	9.95	0.18	Average	LINE
2	0.2072	28.70	-34.62	63.32	18.57	9.95	0.18	QP	LINE
3	0.3955	22.42	-25.53	47.95	12.21	10.01	0.20	Average	LINE
4	0.3955	29.58	-28.37	57.95	19.37	10.01	0.20	QP	LINE
5	0.6173	19.98	-26.02	46.00	9.75	10.03	0.20	Average	LINE
6	0.6173	26.95	-29.05	56.00	16.72	10.03	0.20	QP	LINE
7	1.2688	26.52	-19.48	46.00	16.25	10.06	0.21	Average	LINE
8	1.2688	29.41	-26.59	56.00	19.14	10.06	0.21	QP	LINE
9	3.9014	12.33	-33.67	46.00	1.89	10.11	0.33	Average	LINE
10	3.9014	19.16	-36.84	56.00	8.72	10.11	0.33	QP	LINE
11	27.5616	14.59	-35.41	50.00	3.69	10.34	0.56	Average	LINE
12	27.5616	21.98	-38.02	60.00	11.08	10.34	0.56	QP	LINE

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.)

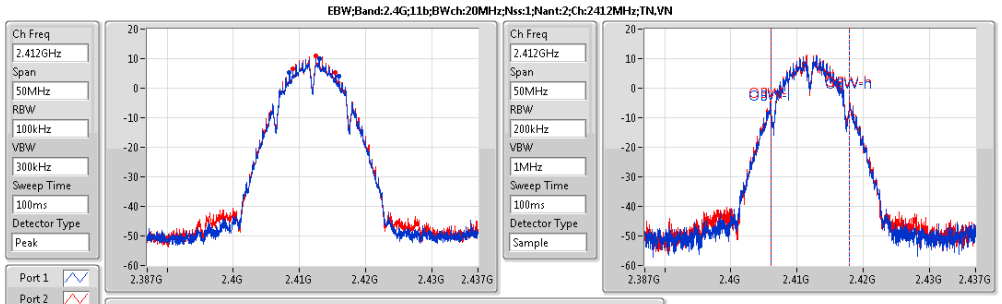
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4G;11b;Nss1;Ntx2	7.5M	12.019M	12M0G1D	6.5M	11.694M
2.4G;11g;Nss1;Ntx2	16.025M	26.612M	26M6D1D	13.325M	16.242M
2.4G;HT20;Nss1,(M0);Ntx2	15.175M	25.287M	25M3D1D	10.975M	17.391M
2.4G;HT40;Nss1,(M0);Ntx2	31.25M	35.982M	36M0D1D	22.55M	35.782M

Result

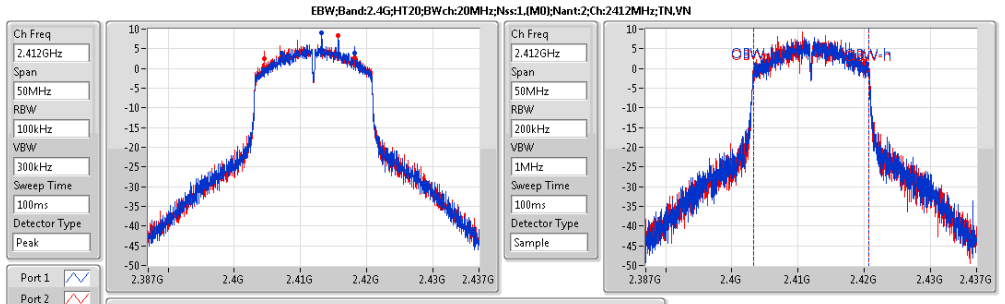
Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)
2.4G;11b;Nss1;Ntx2;2412;TN,VN	Pass	500k	7.5M	11.844M	6.5M	11.869M
2.4G;11b;Nss1;Ntx2;2437;TN,VN	Pass	500k	6.5M	11.694M	7M	11.744M
2.4G;11b;Nss1;Ntx2;2462;TN,VN	Pass	500k	7.05M	12.019M	6.55M	11.794M
2.4G;11g;Nss1;Ntx2;2412;TN,VN	Pass	500k	14.4M	16.242M	13.325M	16.242M
2.4G;11g;Nss1;Ntx2;2437;TN,VN	Pass	500k	16.025M	25.912M	15.05M	26.612M
2.4G;11g;Nss1;Ntx2;2462;TN,VN	Pass	500k	14.975M	16.317M	14.375M	16.317M
2.4G;HT20;Nss1,(M0);Ntx2;2412;TN,VN	Pass	500k	10.975M	17.391M	13.75M	17.416M
2.4G;HT20;Nss1,(M0);Ntx2;2437;TN,VN	Pass	500k	15.175M	24.113M	14.375M	25.287M
2.4G;HT20;Nss1,(M0);Ntx2;2462;TN,VN	Pass	500k	12.825M	17.391M	13.15M	17.416M
2.4G;HT40;Nss1,(M0);Ntx2;2422;TN,VN	Pass	500k	31.25M	35.782M	22.55M	35.832M
2.4G;HT40;Nss1,(M0);Ntx2;2437;TN,VN	Pass	500k	31.25M	35.932M	26.25M	35.982M
2.4G;HT40;Nss1,(M0);Ntx2;2452;TN,VN	Pass	500k	30M	35.782M	26.25M	35.832M

EBW;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:2;Ch:2412MHz;TN,VN



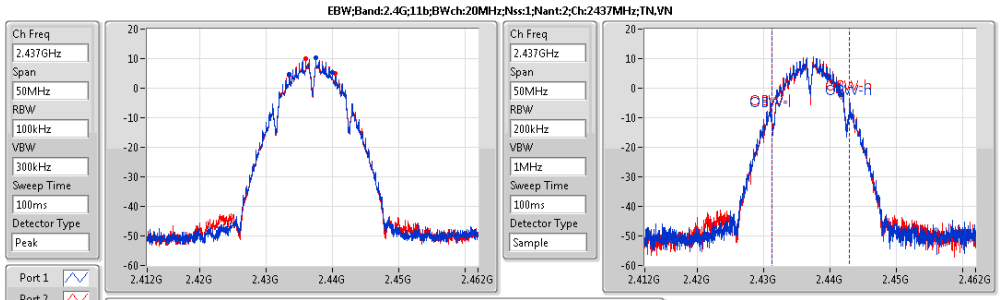
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.5M	2.408475G	2.415975G	11.844M	2.406103G	2.417947G	500k	1
6.5M	2.408975G	2.415475G	11.869M	2.406103G	2.417972G	500k	2

EBW;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:2412MHz;TN,VN



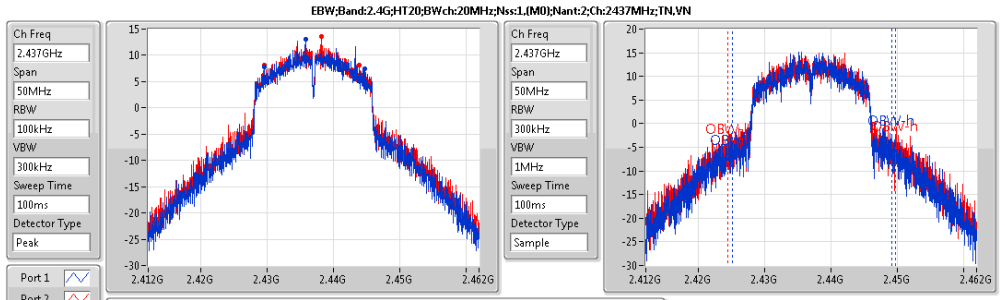
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.975M	2.40725G	2.418225G	17.391M	2.403304G	2.420696G	500k	1
13.75M	2.4045G	2.41825G	17.416M	2.403304G	2.420721G	500k	2

EBW;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:2;Ch:2437MHz;TN,VN



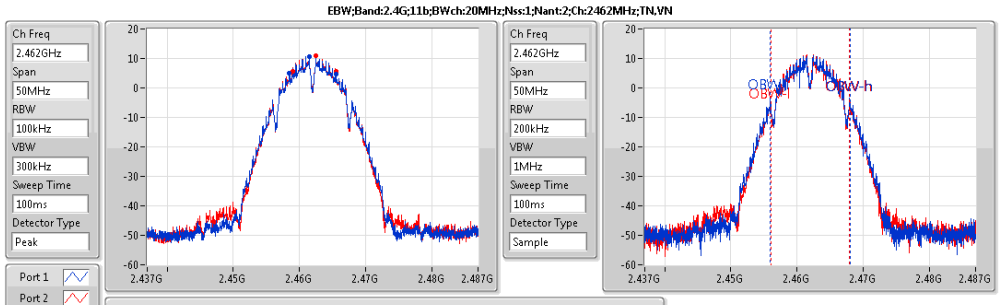
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.5M	2.4335G	2.44G	11.694M	2.431203G	2.442897G	500k	1
7M	2.433475G	2.440475G	11.744M	2.431178G	2.442922G	500k	2

EBW;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:2437MHz;TN,VN



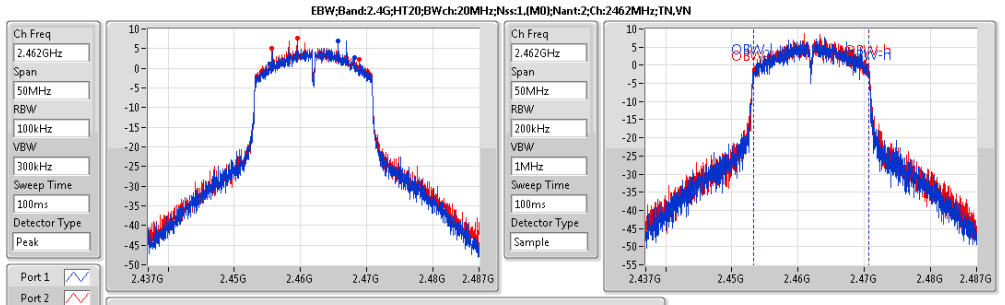
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.175M	2.42955G	2.444725G	24.113M	2.425031G	2.449144G	500k	1
14.375M	2.4295G	2.443875G	25.287M	2.424431G	2.449719G	500k	2

EBW;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:2;Ch:2462MHz;TN,VN



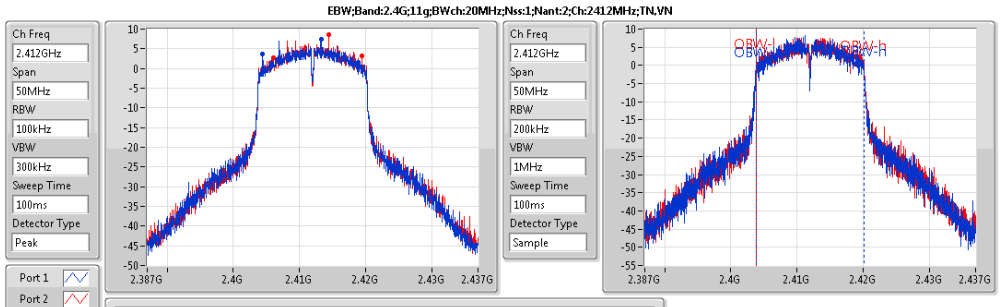
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.458475G	2.465525G	12.019M	2.455978G	2.467997G	500k	1
6.55M	2.45895G	2.4655G	11.794M	2.456103G	2.467897G	500k	2

EBW;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:2462MHz;TN,VN



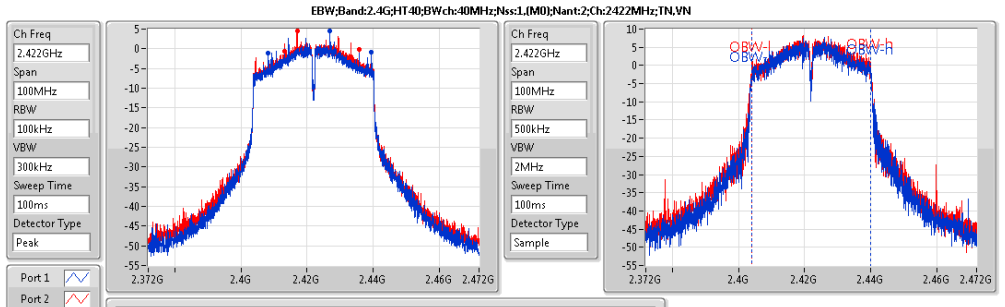
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
12.825M	2.455325G	2.46815G	17.391M	2.453279G	2.470671G	500k	1
13.15M	2.4557G	2.46885G	17.416M	2.453279G	2.470696G	500k	2

EBW;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:2;Ch:2412MHz;TN,VN



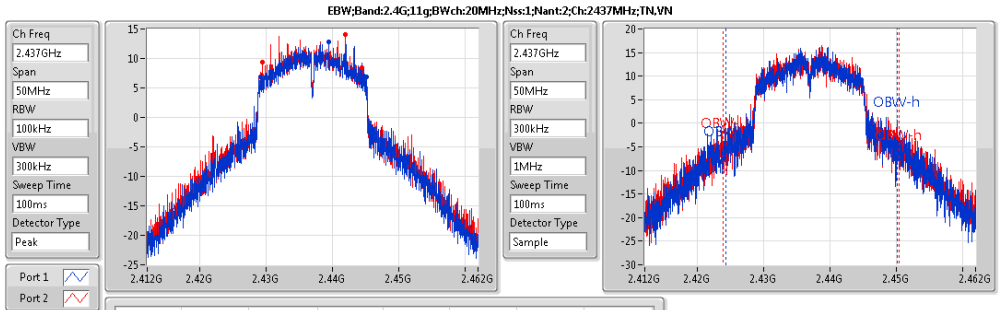
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.4M	2.404475G	2.418875G	16.242M	2.403879G	2.420121G	500k	1
13.325M	2.4061G	2.419425G	16.242M	2.403879G	2.420121G	500k	2

EBW;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:2422MHz;TN,VN



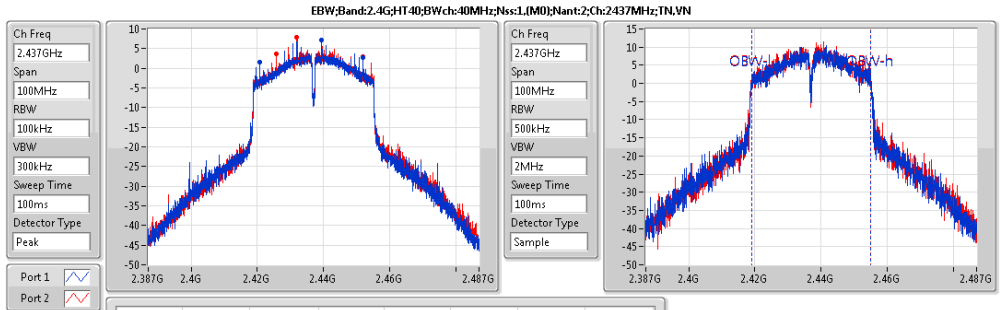
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
31.25M	2.40825G	2.4395G	35.782M	2.404159G	2.439941G	500k	1
22.55M	2.41315G	2.4357G	35.832M	2.404109G	2.439941G	500k	2

EBW;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:2;Ch:2437MHz;TN,VN



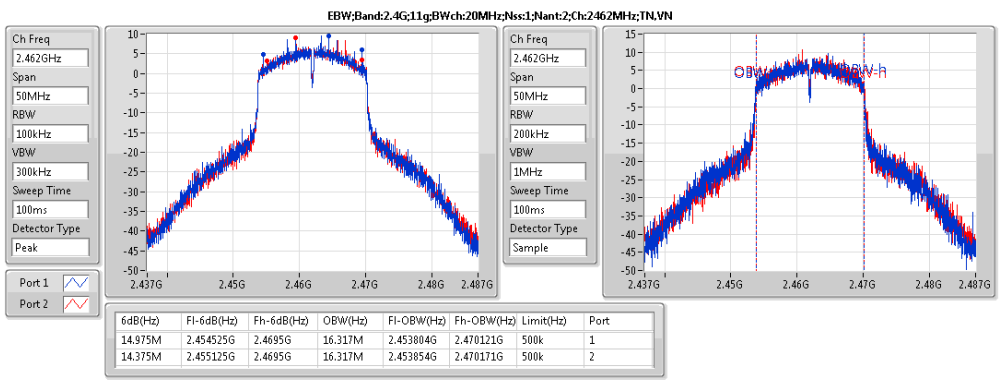
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.025M	2.4291G	2.445125G	25.912M	2.424281G	2.450193G	500k	1
15.05M	2.42945G	2.4445G	26.612M	2.423832G	2.450443G	500k	2

EBW;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:2437MHz;TN,VN



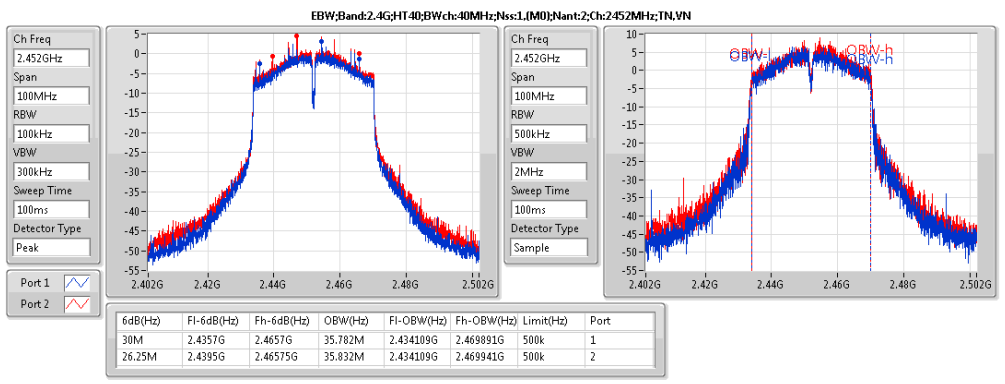
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
31.25M	2.42075G	2.452G	35.932M	2.419059G	2.454991G	500k	1
26.25M	2.4257G	2.45195G	35.982M	2.419009G	2.454991G	500k	2

EBW;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:2;Ch:2462MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.975M	2.454525G	2.4695G	16.317M	2.453804G	2.470121G	500k	1
14.375M	2.455125G	2.4695G	16.317M	2.453854G	2.470171G	500k	2

EBW;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:2452MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30M	2.4357G	2.4657G	35.782M	2.434109G	2.469891G	500k	1
26.25M	2.4395G	2.46575G	35.832M	2.434109G	2.469941G	500k	2

Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
2.4G;11b;Nss1;Ntx2	21.74	0.14928	23.84	0.24210
2.4G;11g;Nss1;Ntx2	27.37	0.54576	29.47	0.88511
2.4G;HT20;Nss1,(M0);Ntx2	26.73	0.47098	28.83	0.763835
2.4G;HT40;Nss1,(M0);Ntx2	22.82	0.19143	24.92	0.310456

Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2 (dBm)
2.4G;11b;Nss1;Ntx2;2412;TN,VN	Pass	2.01	22.74	36.00	20.73	30.00	17.49	17.94
2.4G;11b;Nss1;Ntx2;2437;TN,VN	Pass	2.01	22.52	36.00	20.51	30.00	17.28	17.71
2.4G;11b;Nss1;Ntx2;2462;TN,VN	Pass	2.01	23.75	36.00	21.74	30.00	18.78	18.67
2.4G;11g;Nss1;Ntx2;2412;TN,VN	Pass	2.01	23.49	36.00	21.48	30.00	18.52	18.42
2.4G;11g;Nss1;Ntx2;2437;TN,VN	Pass	2.01	29.38	36.00	27.37	30.00	24.35	24.37
2.4G;11g;Nss1;Ntx2;2462;TN,VN	Pass	2.01	24.76	36.00	22.75	30.00	19.68	19.8
2.4G;HT20;Nss1,(M0);Ntx2;2412;TN,VN	Pass	2.01	23.81	36.00	21.80	30.00	18.8	18.77
2.4G;HT20;Nss1,(M0);Ntx2;2437;TN,VN	Pass	2.01	28.74	36.00	26.73	30.00	23.73	23.71
2.4G;HT20;Nss1,(M0);Ntx2;2462;TN,VN	Pass	2.01	23.42	36.00	21.41	30.00	18.28	18.52
2.4G;HT40;Nss1,(M0);Ntx2;2422;TN,VN	Pass	2.01	21.90	36.00	19.89	30.00	16.73	17.02
2.4G;HT40;Nss1,(M0);Ntx2;2437;TN,VN	Pass	2.01	24.83	36.00	22.82	30.00	19.76	19.86
2.4G;HT40;Nss1,(M0);Ntx2;2452;TN,VN	Pass	2.01	21.53	36.00	19.52	30.00	16.22	16.78

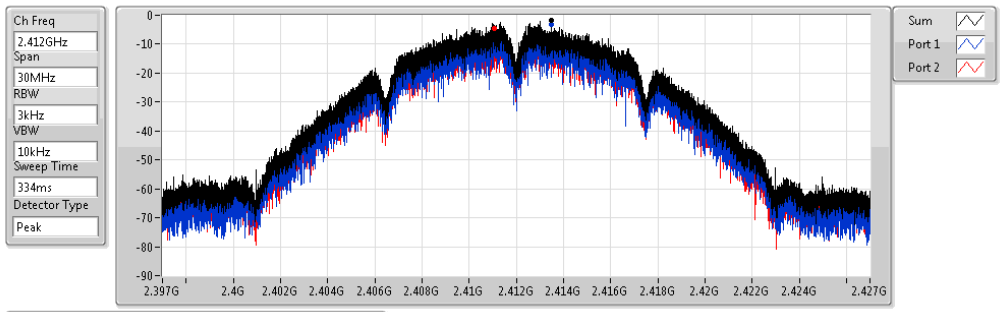
Summary

Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
2.4G;11b;Nss1;Ntx2	-1.66	3.34
2.4G;11g;Nss1;Ntx2	1.19	6.19
2.4G;HT20;Nss1,(M0);Ntx2	-0.32	4.68
2.4G;HT40;Nss1,(M0);Ntx2	-6.11	-1.12

Result

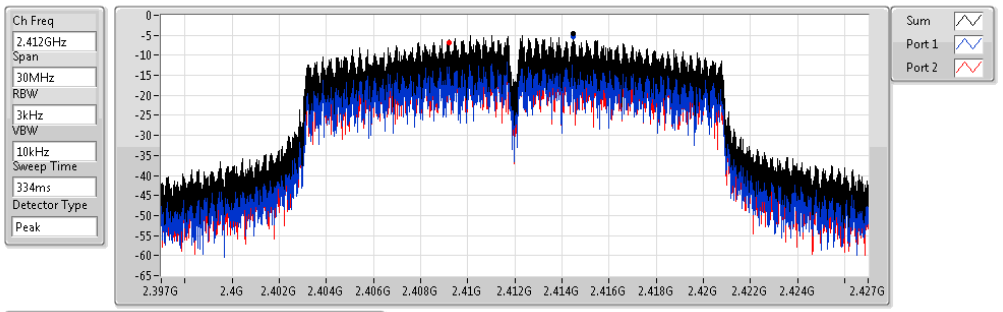
Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	PD (dBm/RBW)	PD.Limit (dBm/RBW)	EIRP.PD (dBm/RBW)	EIRP.PD.Lim (dBm/RBW)	P1 (dBm/RBW)	P2 (dBm/RBW)
2.4G;11b;Nss1;Ntx2;2412;TN,VN	Pass	3k	3k	0.00	5.00	-1.66	8.00	3.34	Inf	-3.04	-4.41
2.4G;11b;Nss1;Ntx2;2437;TN,VN	Pass	3k	3k	0.00	5.00	-2.25	8.00	2.75	Inf	-4.93	-5.10
2.4G;11b;Nss1;Ntx2;2462;TN,VN	Pass	3k	3k	0.00	5.00	-1.79	8.00	3.20	Inf	-2.60	-4.46
2.4G;11g;Nss1;Ntx2;2412;TN,VN	Pass	3k	3k	0.00	5.00	-4.28	8.00	0.71	Inf	-6.07	-5.48
2.4G;11g;Nss1;Ntx2;2437;TN,VN	Pass	3k	3k	0.00	5.00	1.19	8.00	6.19	Inf	-0.93	-0.55
2.4G;11g;Nss1;Ntx2;2462;TN,VN	Pass	3k	3k	0.00	5.00	-3.53	8.00	1.46	Inf	-4.21	-4.38
2.4G;HT20;Nss1,(M0);Ntx2;2412;TN,VN	Pass	3k	3k	0.00	5.00	-4.60	8.00	0.40	Inf	-5.27	-6.86
2.4G;HT20;Nss1,(M0);Ntx2;2437;TN,VN	Pass	3k	3k	0.00	5.00	-0.32	8.00	4.68	Inf	-1.34	-1.33
2.4G;HT20;Nss1,(M0);Ntx2;2462;TN,VN	Pass	3k	3k	0.00	5.00	-5.13	8.00	-0.14	Inf	-7.63	-6.38
2.4G;HT40;Nss1,(M0);Ntx2;2422;TN,VN	Pass	3k	3k	0.00	5.00	-8.18	8.00	-3.19	Inf	-9.82	-10.08
2.4G;HT40;Nss1,(M0);Ntx2;2437;TN,VN	Pass	3k	3k	0.00	5.00	-6.11	8.00	-1.12	Inf	-8.21	-7.73
2.4G;HT40;Nss1,(M0);Ntx2;2452;TN,VN	Pass	3k	3k	0.00	5.00	-8.58	8.00	-3.58	Inf	-10.21	-10.07

PSD;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:2;Ch:2412MHz;TN,VN



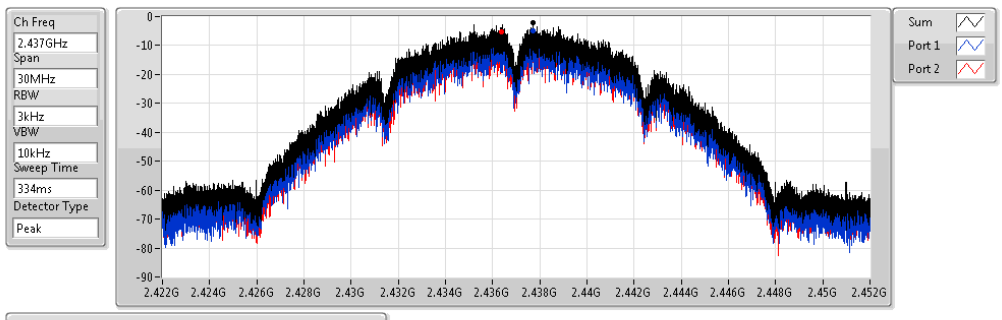
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.66	-1.66	-3.04	-4.41

PSD;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:2412MHz;TN,VN



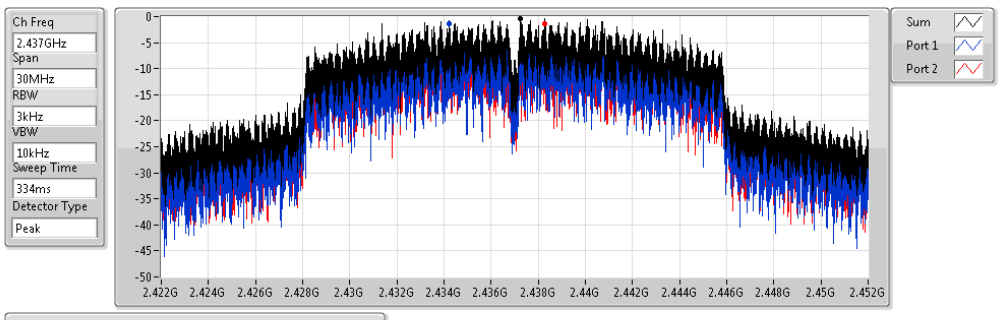
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.60	-4.60	-5.27	-6.86

PSD;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:2;Ch:2437MHz;TN,VN



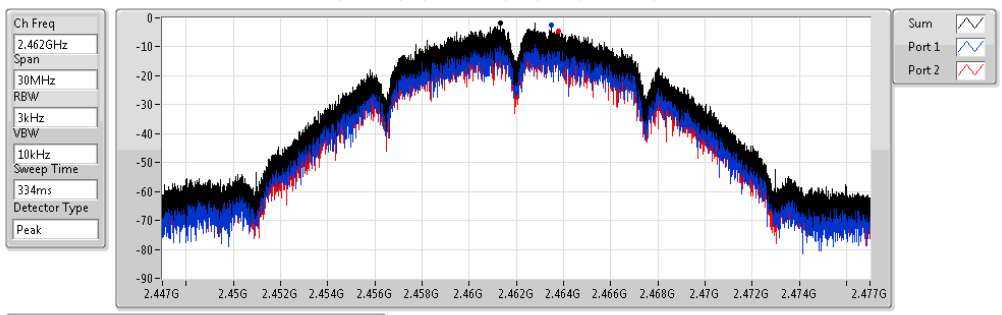
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.25	-2.25	-4.93	-5.10

PSD;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:2437MHz;TN,VN



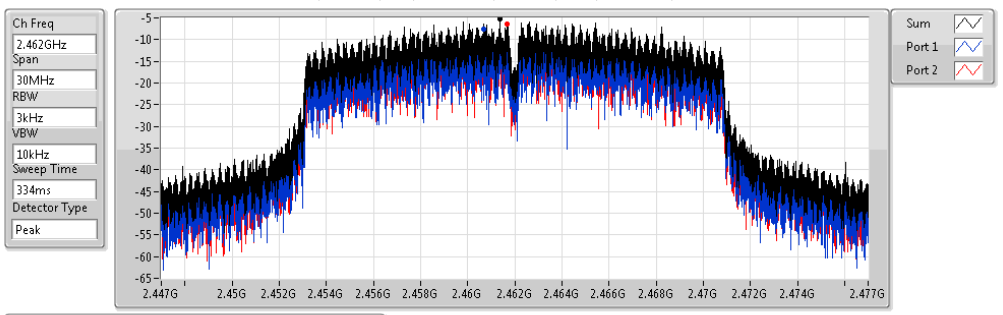
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.32	-0.32	-1.34	-1.33

PSD;Band:2.4G;11b;BWch:20MHz;Nss:1;Nant:2;Ch:2462MHz;TN,VN



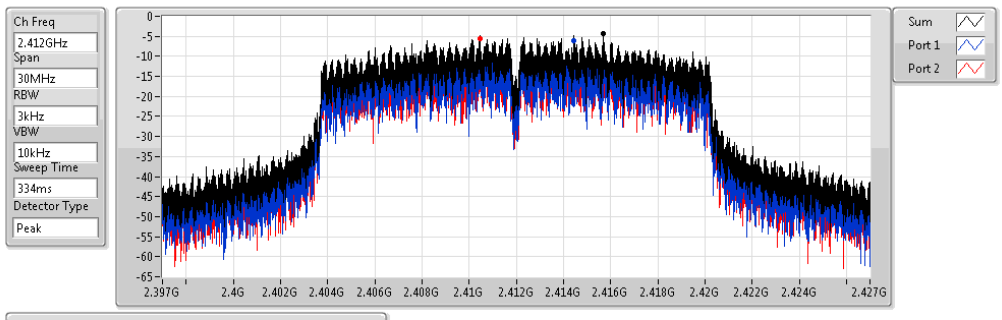
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.79	-1.79	-2.60	-4.46

PSD;Band:2.4G;HT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:2462MHz;TN,VN



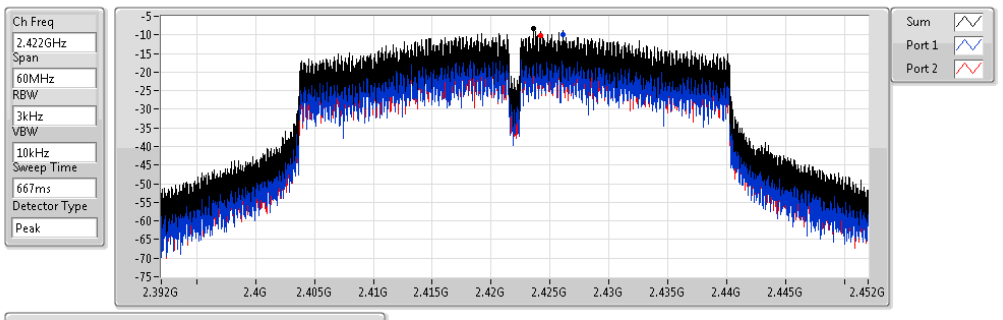
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.13	-5.13	-7.63	-6.38

PSD;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:2;Ch:2412MHz;TN,VN



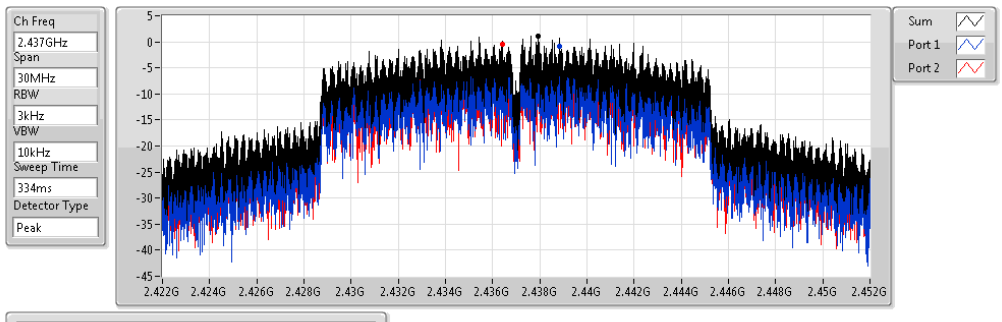
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.28	-4.28	-6.07	-5.48

PSD;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:2422MHz;TN,VN



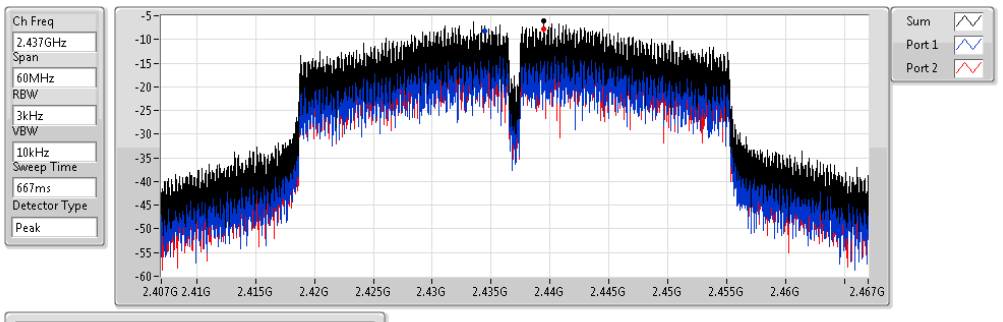
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.18	-8.18	-9.82	-10.08

PSD;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:2;Ch:2437MHz;TN,VN



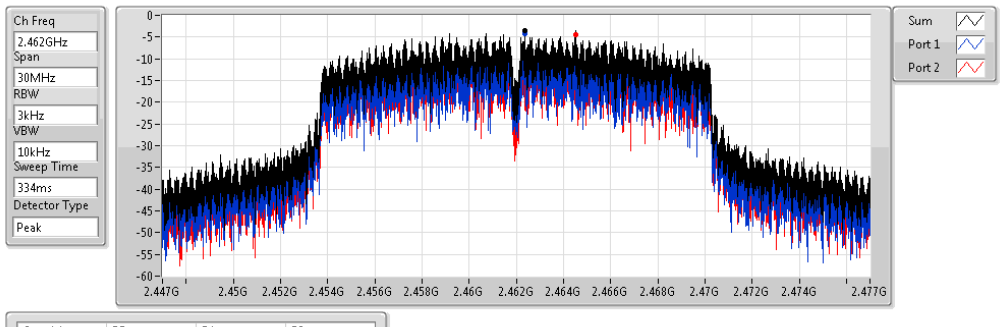
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.19	1.19	-0.93	-0.55

PSD;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:2437MHz;TN,VN



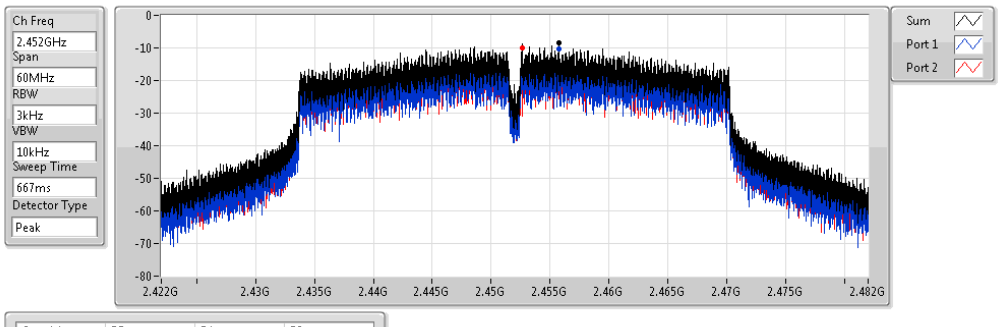
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.11	-6.11	-8.21	-7.73

PSD;Band:2.4G;11g;BWch:20MHz;Nss:1;Nant:2;Ch:2462MHz;TN,VN



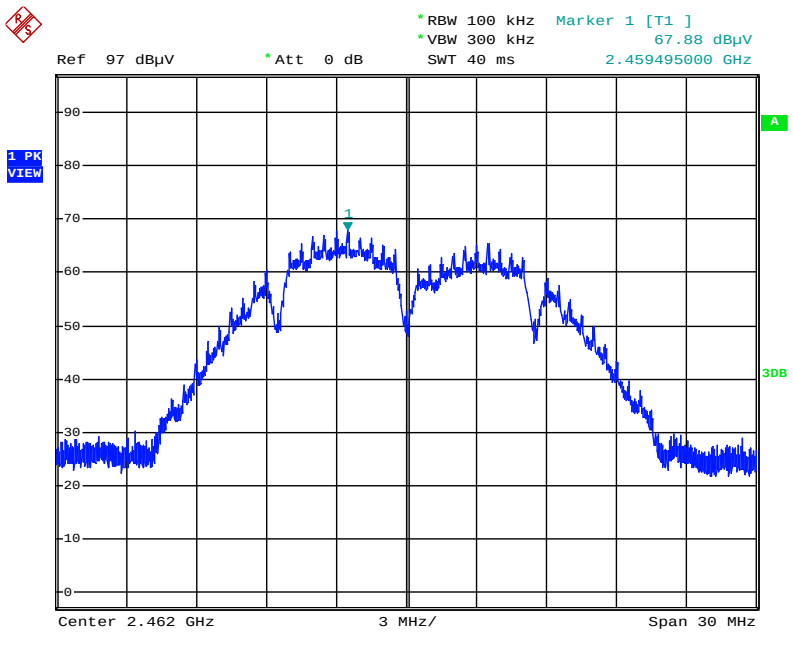
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.53	-3.53	-4.21	-4.38

PSD;Band:2.4G;HT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:2452MHz;TN,VN



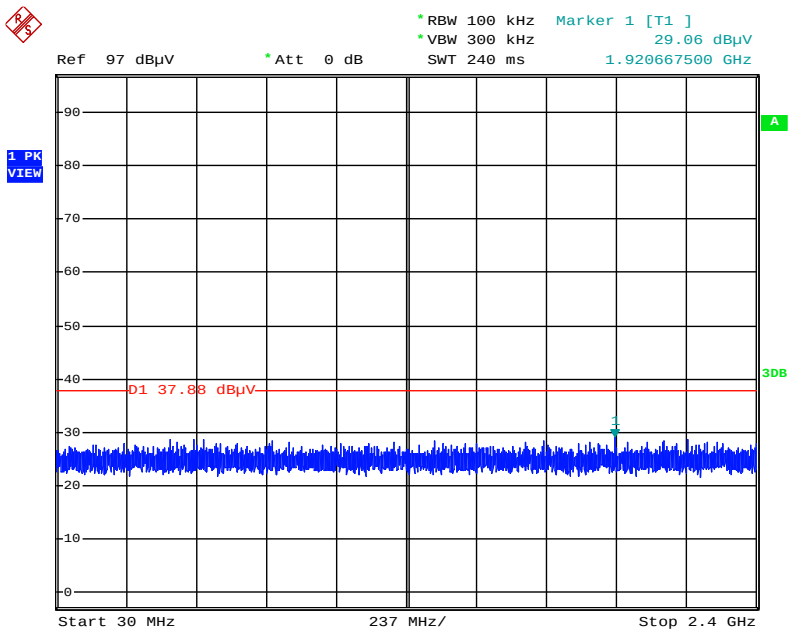
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.58	-8.58	-10.21	-10.07

Plot on Configuration IEEE 802.11b / Reference Level



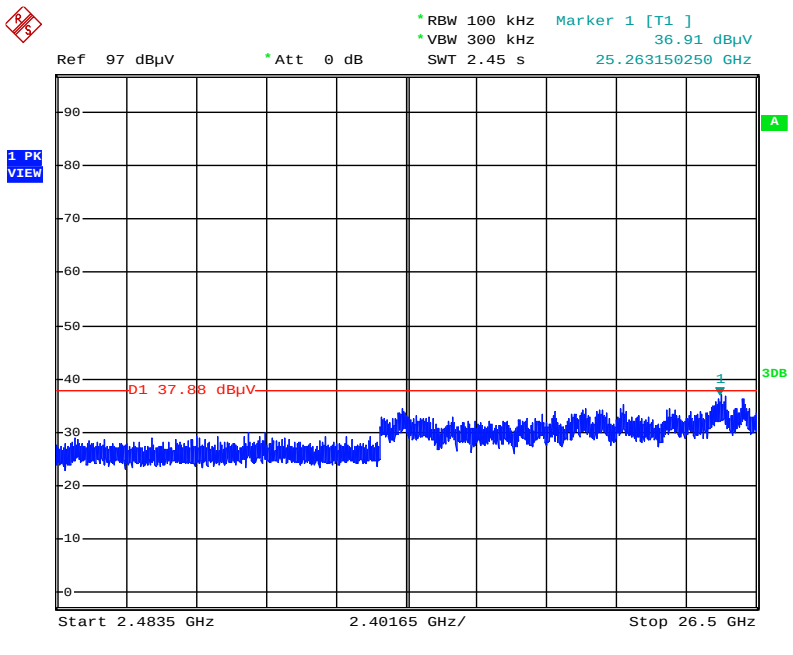
Date: 3.AUG.2016 17:53:58

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



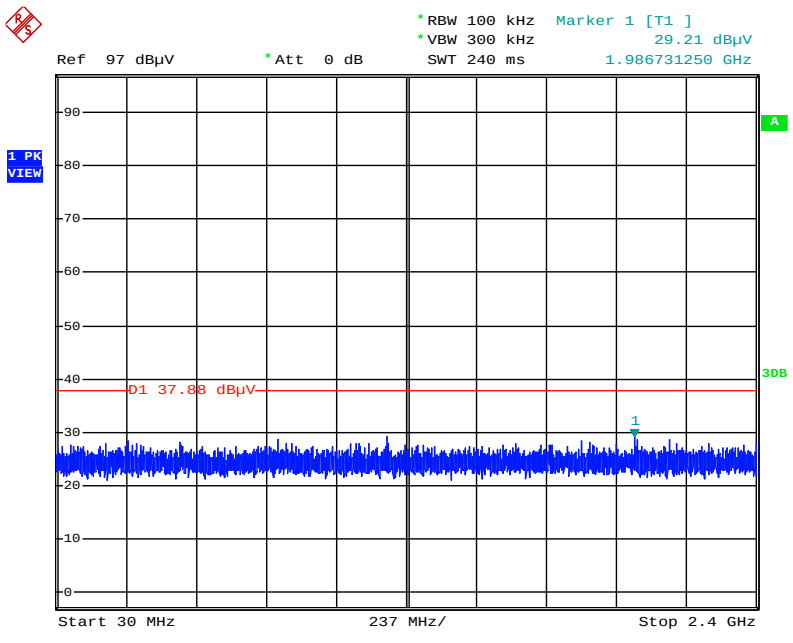
Date: 3.AUG.2016 17:57:03

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



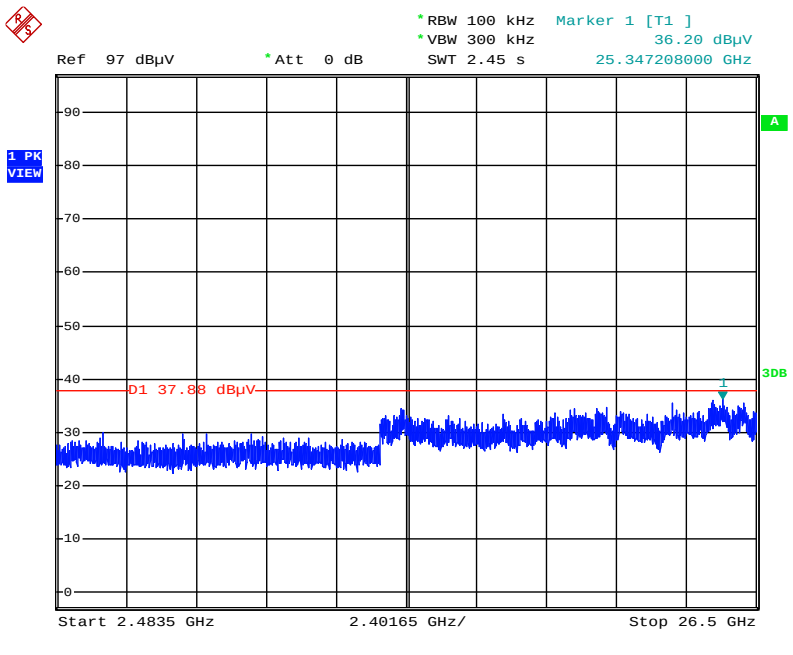
Date: 3.AUG.2016 17:58:55

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



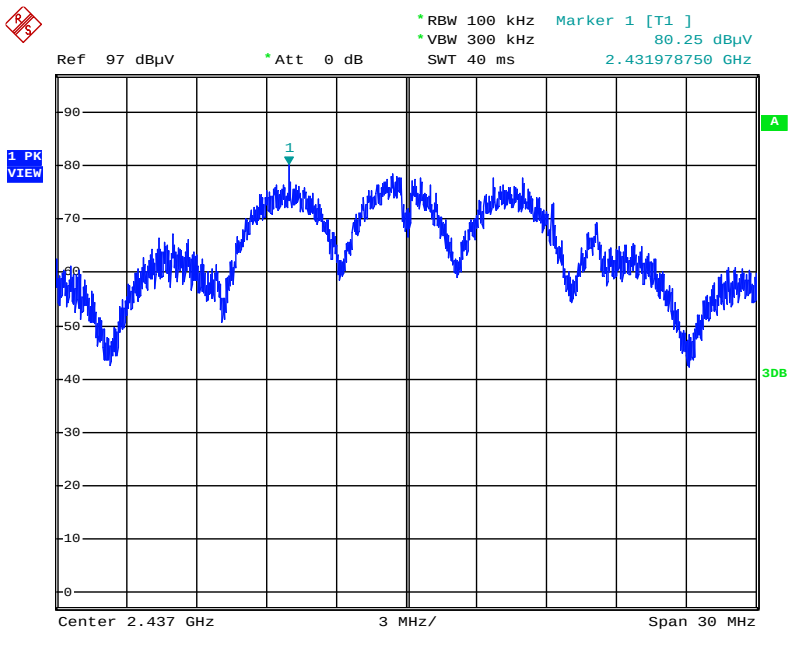
Date: 3.AUG.2016 18:00:06

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



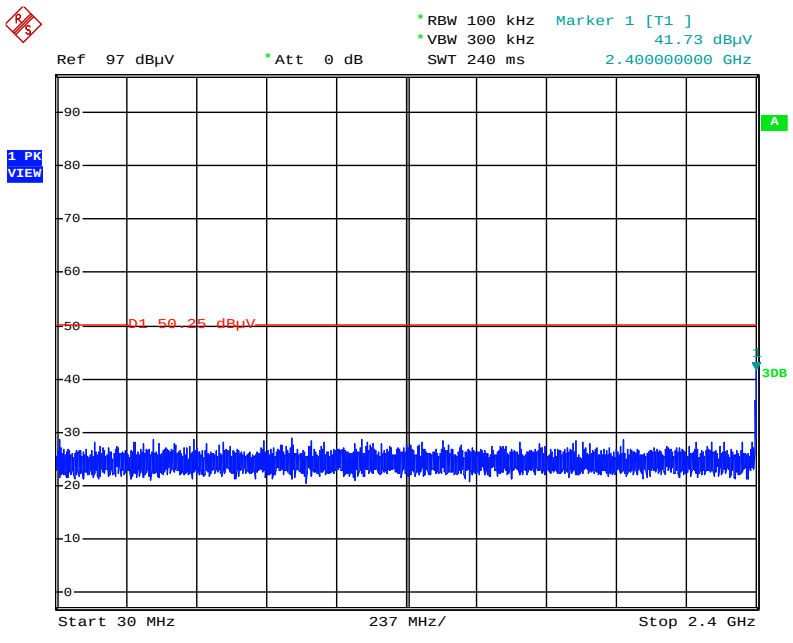
Date: 3.AUG.2016 18:01:02

Plot on Configuration IEEE 802.11g / Reference Level



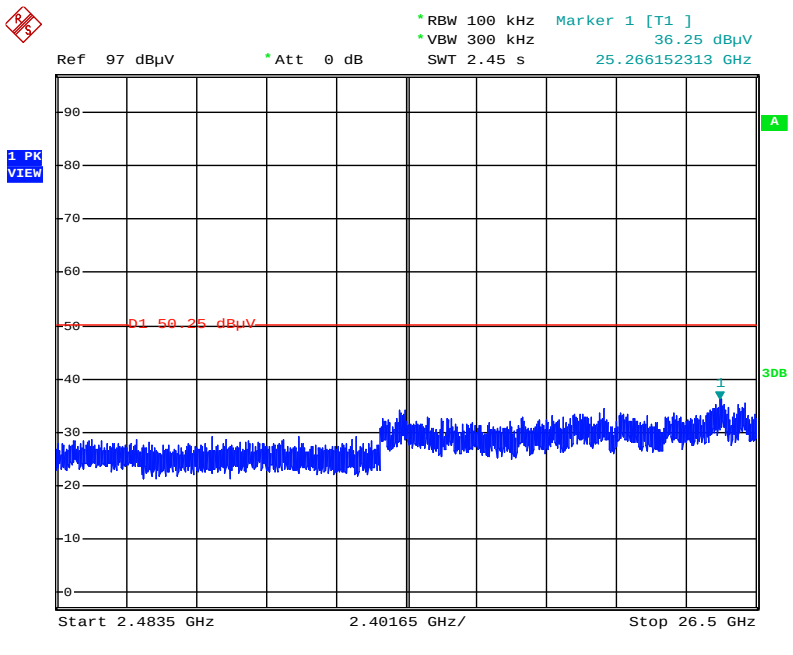
Date: 3.AUG.2016 18:05:13

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



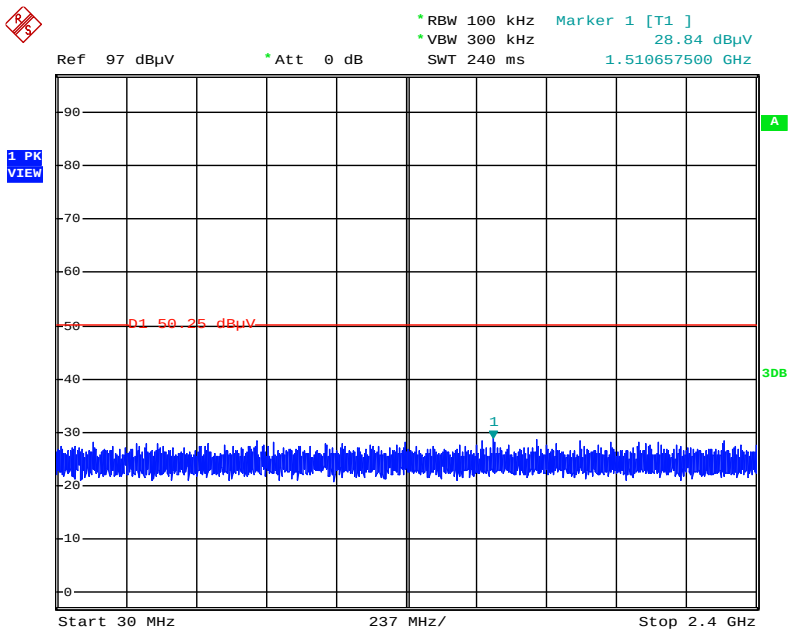
Date: 3.AUG.2016 18:06:55

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



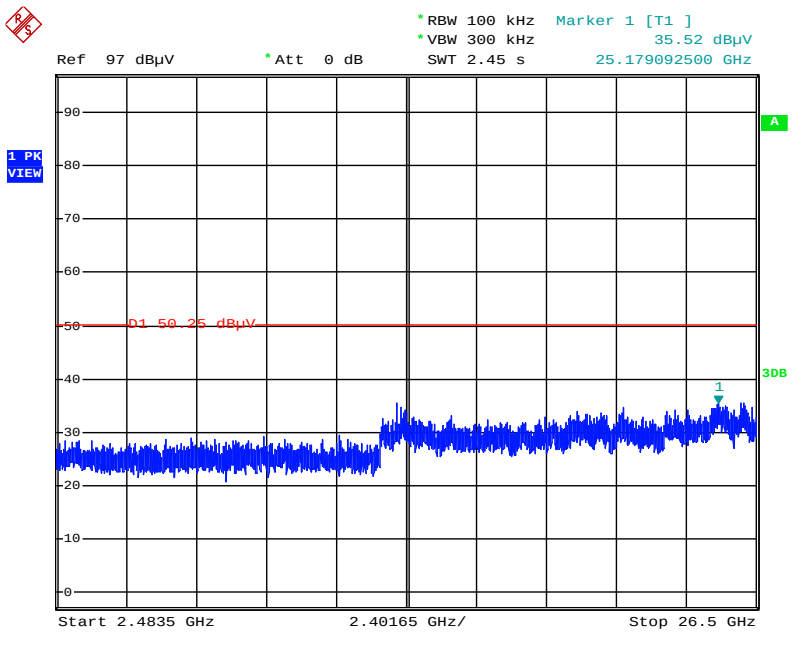
Date: 3.AUG.2016 18:07:48

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



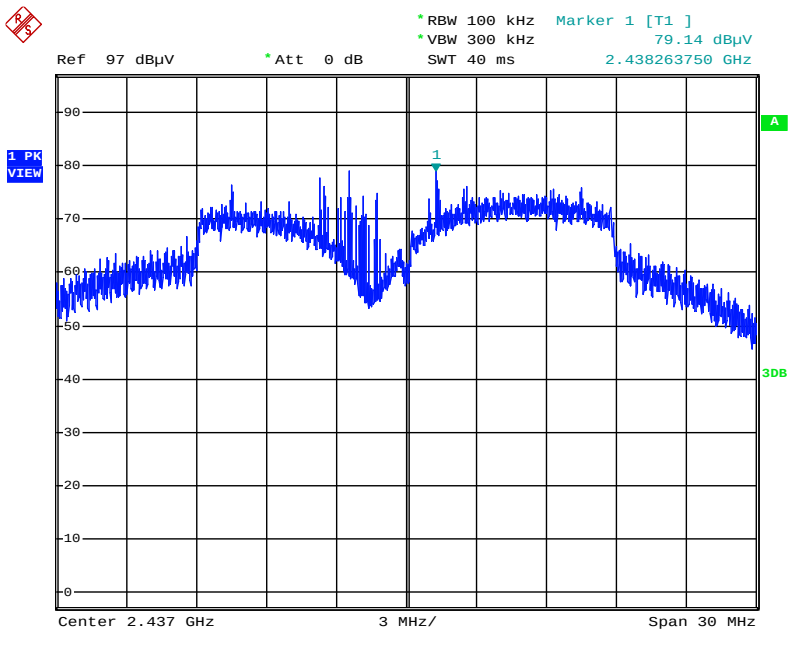
Date: 3.AUG.2016 18:09:05

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



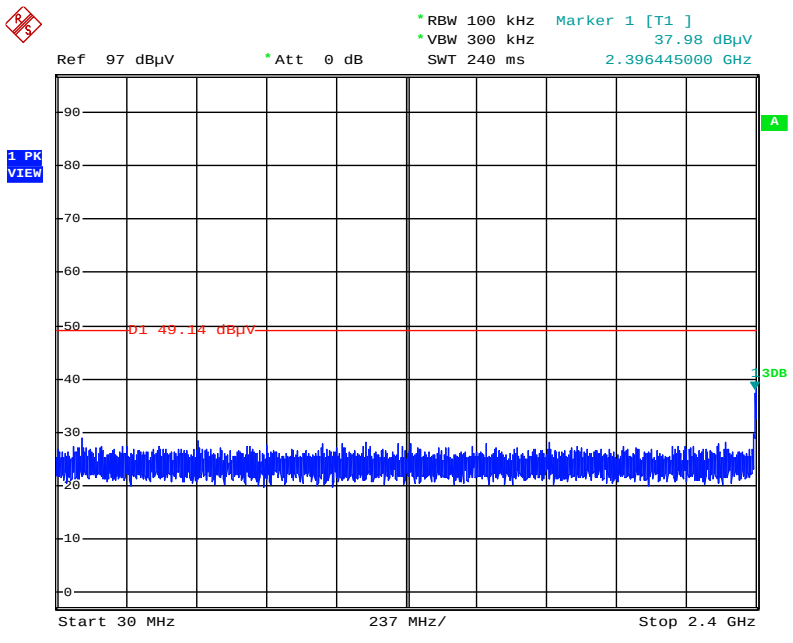
Date: 3.AUG.2016 18:09:42

Plot on Configuration IEEE 802.11n MCS0 HT20 / Reference Level



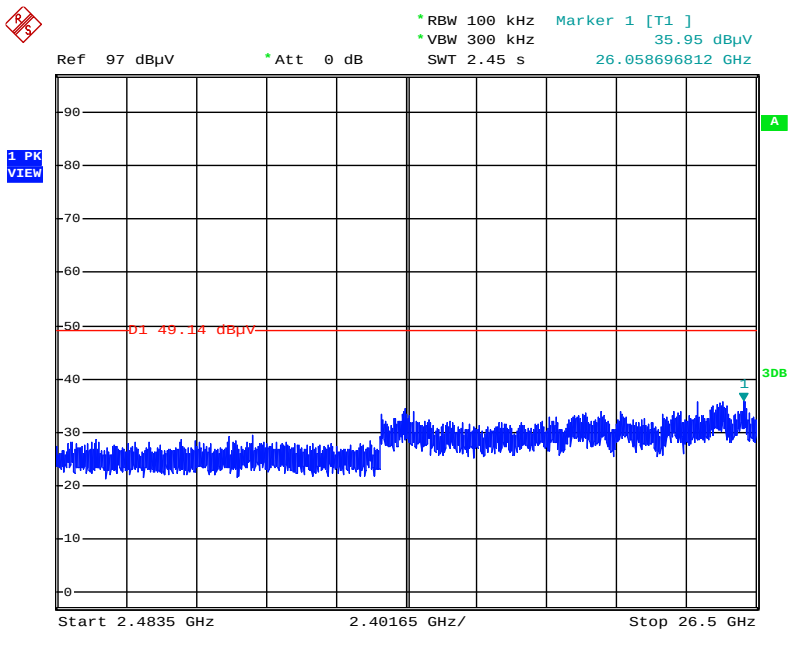
Date: 3.AUG.2016 18:24:42

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



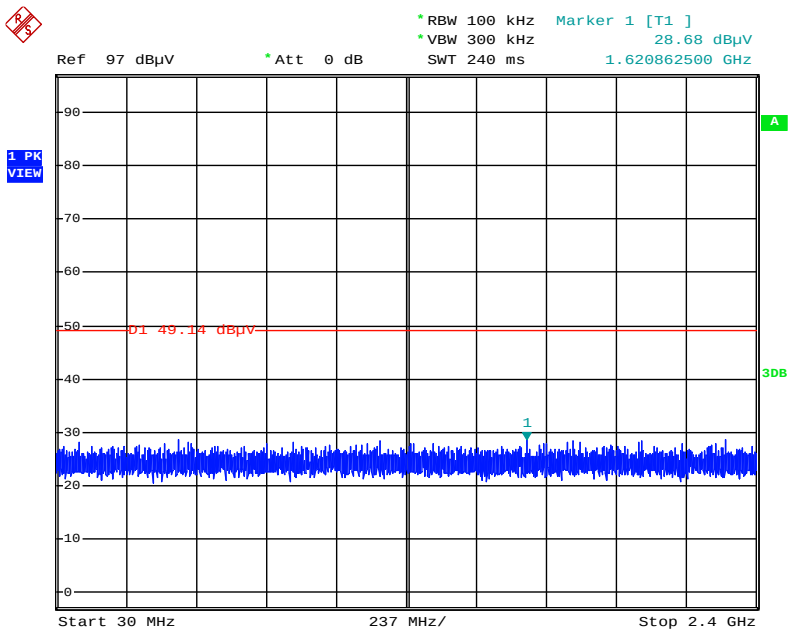
Date: 3.AUG.2016 18:26:20

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



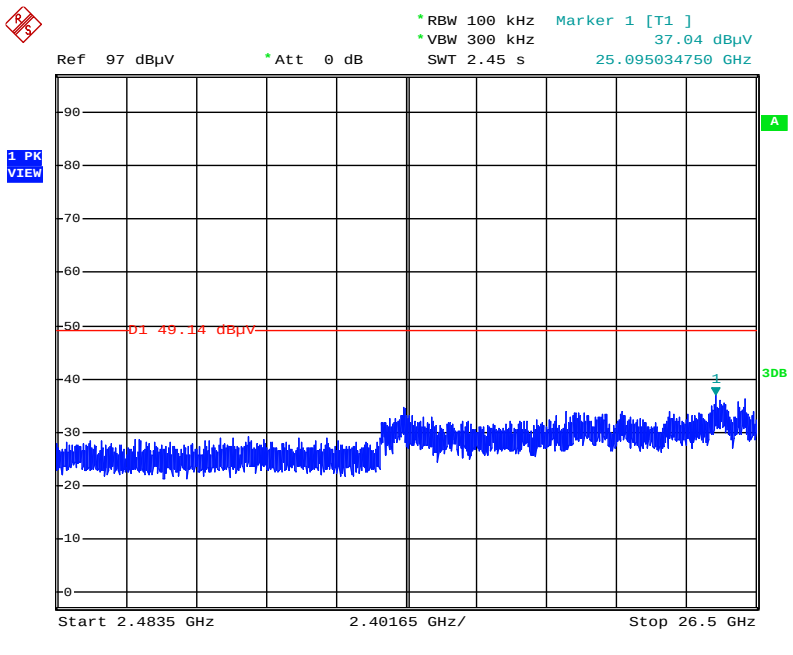
Date: 3.AUG.2016 18:26:54

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



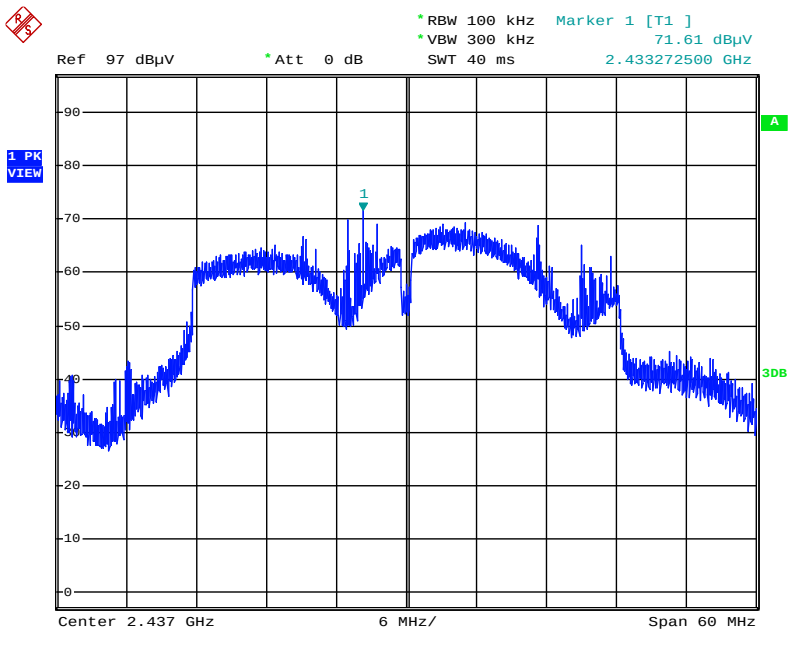
Date: 3.AUG.2016 18:29:03

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



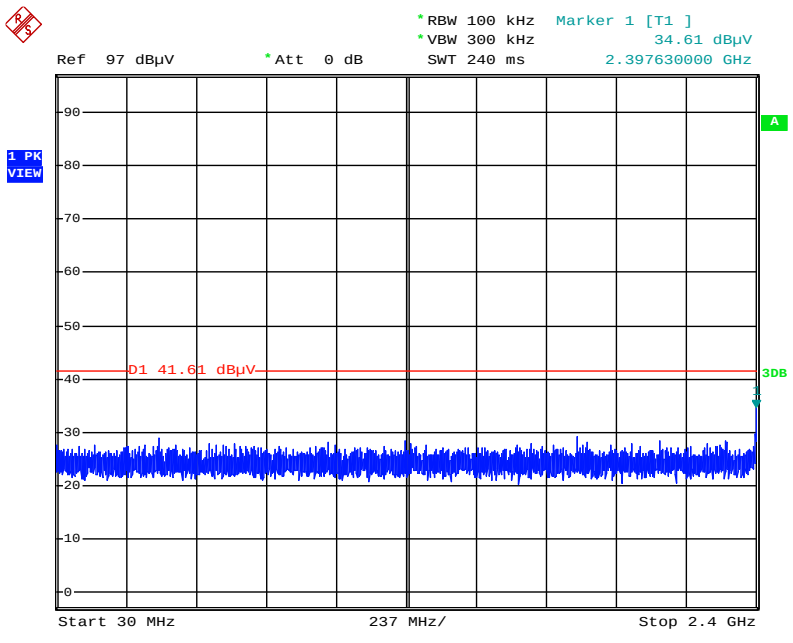
Date: 3.AUG.2016 18:29:40

Plot on Configuration IEEE 802.11n MCS0 HT40 / Reference Level



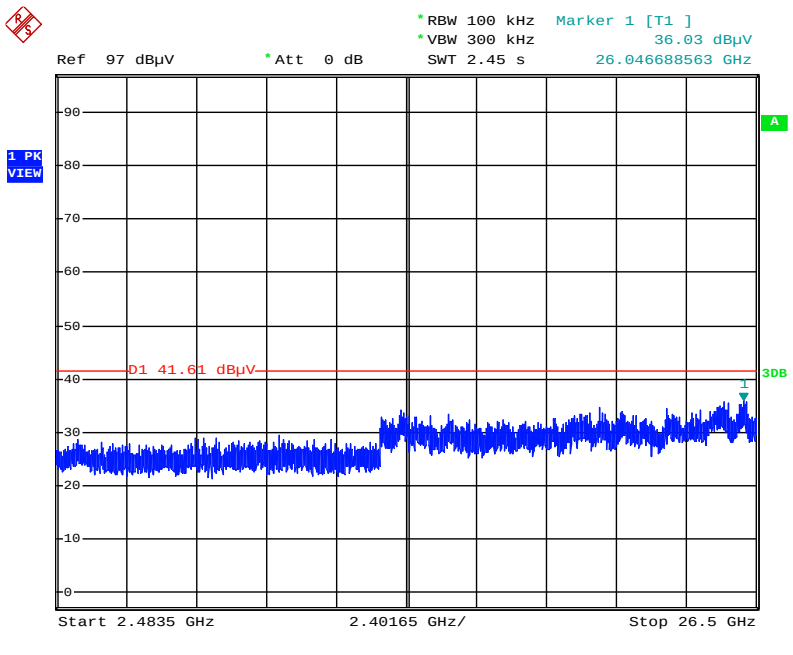
Date: 3.AUG.2016 18:33:38

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



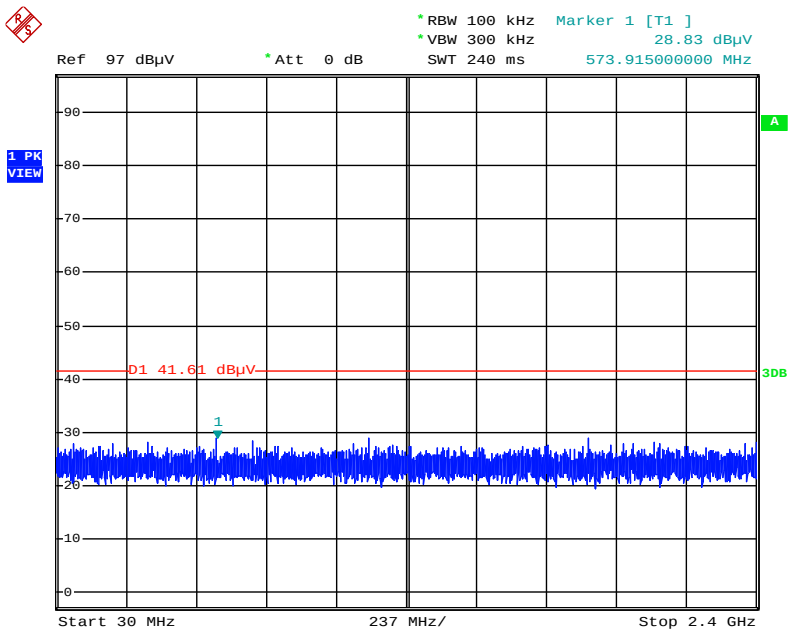
Date: 3.AUG.2016 18:36:45

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



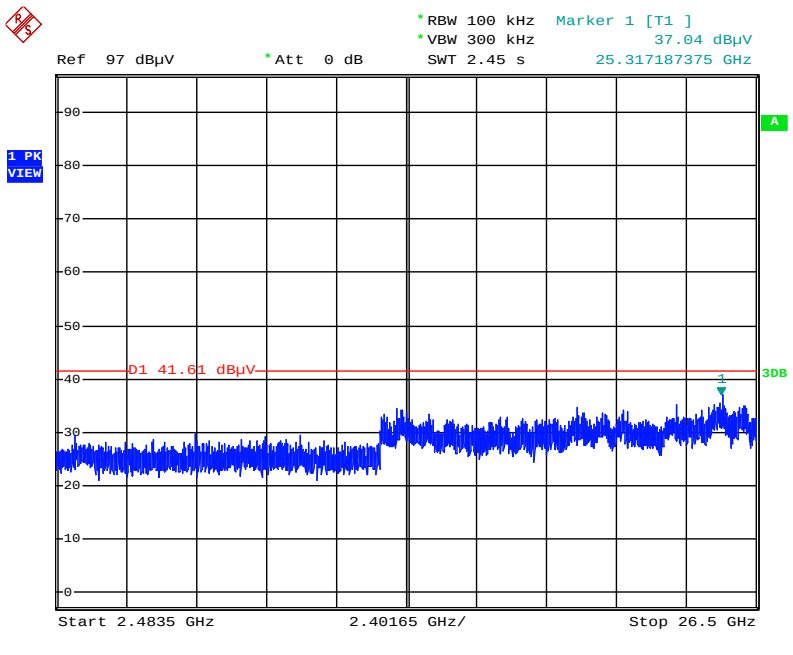
Date: 3.AUG.2016 18:37:19

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



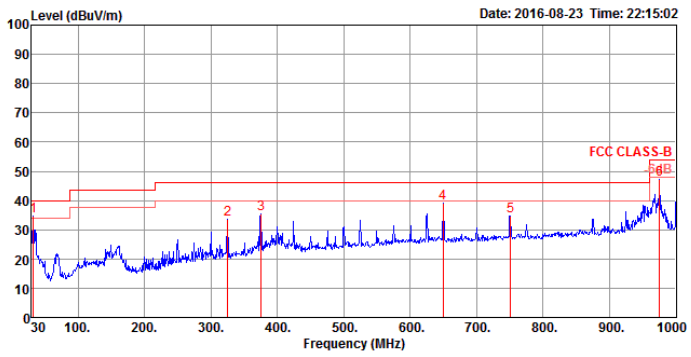
Date: 3.AUG.2016 18:38:11

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



Date: 3.AUG.2016 18:38:43

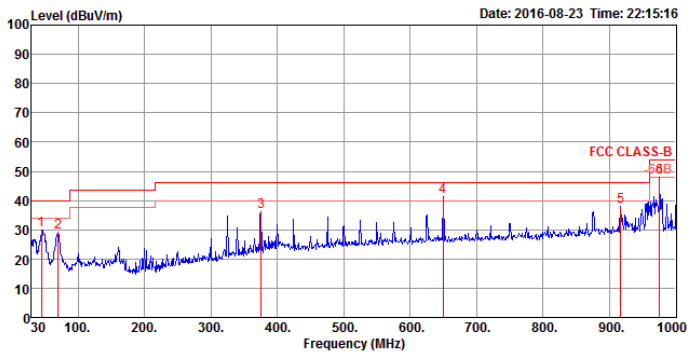
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	CTX		



	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	32.91	34.55	40.00	-5.45	42.20	0.51	24.24	32.40	100	265	Peak	HORIZONTAL
2	324.88	33.72	46.00	-12.28	43.76	1.55	20.70	32.29	100	224	Peak	HORIZONTAL
3	375.32	35.59	46.00	-10.41	44.16	1.67	22.08	32.32	125	187	Peak	HORIZONTAL
4	649.83	38.99	46.00	-7.01	43.08	2.20	26.10	32.39	125	226	Peak	HORIZONTAL
5	750.71	34.77	46.00	-11.23	38.30	2.37	26.40	32.30	100	224	Peak	HORIZONTAL
6	975.75	47.20	54.00	-6.80	47.14	2.72	28.37	31.03	100	163	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	1	**Power Phase**	Vertical
Operating Function	CTX		



	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	44.55	30.06	40.00	-9.94	44.51	0.59	17.37	32.41	100	353	Peak	VERTICAL
2	69.77	28.98	40.00	-11.02	47.74	0.72	12.92	32.40	150	243	Peak	VERTICAL
3	375.32	35.99	46.00	-10.01	44.56	1.67	22.08	32.32	150	346	Peak	VERTICAL
4	649.83	41.23	46.00	-4.77	45.32	2.20	26.10	32.39	100	7	Peak	VERTICAL
5	916.58	37.86	46.00	-8.14	39.01	2.60	27.83	31.58	100	4	Peak	VERTICAL
6	975.75	47.92	54.00	-6.08	47.86	2.72	28.37	31.03	125	26	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 / Ant. 1 + Ant. 2

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	4823.85	55.93	74.00	-18.07	51.51	6.33	31.12	33.03	173	80	Peak	HORIZONTAL
2	4823.99	53.02	54.00	-0.98	48.60	6.33	31.12	33.03	173	80	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	4823.91	56.20	74.00	-17.80	51.78	6.33	31.12	33.03	103	263	Peak	VERTICAL
2	4824.00	53.51	54.00	-0.49	49.09	6.33	31.12	33.03	103	263	Average	VERTICAL

Configurations	IEEE 802.11b CH 6 / Ant. 1 + Ant. 2

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	4873.97	53.60	54.00	-0.40	49.05	6.35	31.21	33.01	238	276	Average	HORIZONTAL
2	4874.04	56.38	74.00	-17.62	51.83	6.35	31.21	33.01	238	276	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	4873.96	51.39	54.00	-2.61	46.84	6.35	31.21	33.01	111	267	Average	VERTICAL
2	4874.03	54.12	74.00	-19.88	49.57	6.35	31.21	33.01	111	267	Peak	VERTICAL

Configurations	IEEE 802.11b CH 11 / Ant. 1 + Ant. 2

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	4923.97	51.43	54.00	-2.57	46.77	6.36	31.29	32.99	220	279	Average	HORIZONTAL
2	4923.97	54.61	74.00	-19.39	49.95	6.36	31.29	32.99	220	279	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	4923.92	54.53	74.00	-19.47	49.87	6.36	31.29	32.99	223	172	Peak	VERTICAL
2	4923.98	51.93	54.00	-2.07	47.27	6.36	31.29	32.99	223	172	Average	VERTICAL

Configurations	IEEE 802.11g CH 1 / Ant. 1 + Ant. 2

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	4825.88	44.48	54.00	-9.52	37.87	7.21	31.14	31.74	224	135	Average	HORIZONTAL
2	4827.76	58.94	74.00	-15.06	52.33	7.21	31.14	31.74	224	135	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	4825.88	55.83	74.00	-18.17	49.22	7.21	31.14	31.74	263	306	Peak	VERTICAL
2	4826.20	42.01	54.00	-11.99	35.40	7.21	31.14	31.74	263	306	Average	VERTICAL

Configurations	IEEE 802.11g CH 6 / Ant. 1 + Ant. 2

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	4869.60	67.80	74.00	-6.20	61.11	7.20	31.21	31.72	225	130	Peak	HORIZONTAL
2	4875.24	53.62	54.00	-0.38	46.93	7.20	31.21	31.72	225	130	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	4871.52	51.52	54.00	-2.48	44.83	7.20	31.21	31.72	274	310	Average	VERTICAL
2	4871.76	64.90	74.00	-9.10	58.21	7.20	31.21	31.72	274	310	Peak	VERTICAL

Configurations	IEEE 802.11g CH 11 / Ant. 1 + Ant. 2

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	4922.48	59.37	74.00	-14.63	52.61	7.19	31.27	31.70	203	107	Peak	HORIZONTAL
2	4925.68	45.63	54.00	-8.37	38.85	7.18	31.29	31.69	203	107	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	4924.36	39.39	54.00	-14.61	32.62	7.18	31.29	31.70	320	47	Average	VERTICAL
2	4925.80	54.04	74.00	-19.96	47.26	7.18	31.29	31.69	320	47	Peak	VERTICAL

Configurations	IEEE 802.11n MCS0 HT20 CH 1 / Ant. 1 + Ant. 2

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	4823.84	44.14	54.00	-9.86	37.54	7.22	31.12	31.74	226	137	Average	HORIZONTAL
2	4827.20	57.20	74.00	-16.80	50.59	7.21	31.14	31.74	226	137	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	4819.60	40.68	54.00	-13.32	34.08	7.22	31.12	31.74	312	309	Average	VERTICAL
2	4820.64	54.54	74.00	-19.46	47.94	7.22	31.12	31.74	312	309	Peak	VERTICAL

Configurations	IEEE 802.11n MCS0 HT20 CH 6 / Ant. 1 + Ant. 2

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	4874.40	53.66	54.00	-0.34	46.97	7.20	31.21	31.72	226	131	Average	HORIZONTAL
2	4874.40	66.00	74.00	-8.00	59.31	7.20	31.21	31.72	226	131	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	4880.40	42.16	54.00	-11.84	35.46	7.20	31.21	31.71	233	126	Average	VERTICAL
2	4880.40	54.23	74.00	-19.77	47.53	7.20	31.21	31.71	233	126	Peak	VERTICAL

Configurations	IEEE 802.11n MCS0 HT20 CH 11 / Ant. 1 + Ant. 2

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	4925.72	56.55	74.00	-17.45	49.77	7.18	31.29	31.69	224	103	Peak	HORIZONTAL
2	4927.08	42.76	54.00	-11.24	35.98	7.18	31.29	31.69	224	103	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	4922.48	39.76	54.00	-14.24	33.00	7.19	31.27	31.70	100	268	Average	VERTICAL
2	4923.24	53.15	74.00	-20.85	46.39	7.19	31.27	31.70	100	268	Peak	VERTICAL

Configurations	IEEE 802.11n MCS0 HT40 CH 3 / Ant. 1 + Ant. 2

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	4899.88	51.72	74.00	-22.28	44.98	7.19	31.25	31.70	180	197	Peak	HORIZONTAL
2	4910.68	37.30	54.00	-16.70	30.54	7.19	31.27	31.70	180	197	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	4894.92	51.31	74.00	-22.69	44.59	7.19	31.23	31.70	204	179	Peak	VERTICAL
2	4912.84	36.28	54.00	-17.72	29.52	7.19	31.27	31.70	204	179	Average	VERTICAL

Configurations	IEEE 802.11n MCS0 HT40 CH 6 / Ant. 1 + Ant. 2

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	4894.48	39.46	54.00	-14.54	32.74	7.19	31.23	31.70	218	284	Average	HORIZONTAL
2	4895.84	53.67	74.00	-20.33	46.93	7.19	31.25	31.70	218	284	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	4894.00	35.46	54.00	-18.54	28.74	7.19	31.23	31.70	320	308	Average	VERTICAL
2	4896.36	48.22	74.00	-25.78	41.48	7.19	31.25	31.70	320	308	Peak	VERTICAL

Configurations	IEEE 802.11n MCS0 HT40 CH 9 / Ant. 1 + Ant. 2

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	4901.52	38.56	54.00	-15.44	31.82	7.19	31.25	31.70	218	282	Average	HORIZONTAL
2	4903.92	45.68	74.00	-28.32	38.94	7.19	31.25	31.70	218	282	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	4898.60	46.54	74.00	-27.46	39.80	7.19	31.25	31.70	175	209	Peak	VERTICAL
2	4913.56	33.76	54.00	-20.24	27.00	7.19	31.27	31.70	175	209	Average	VERTICAL

Note:

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

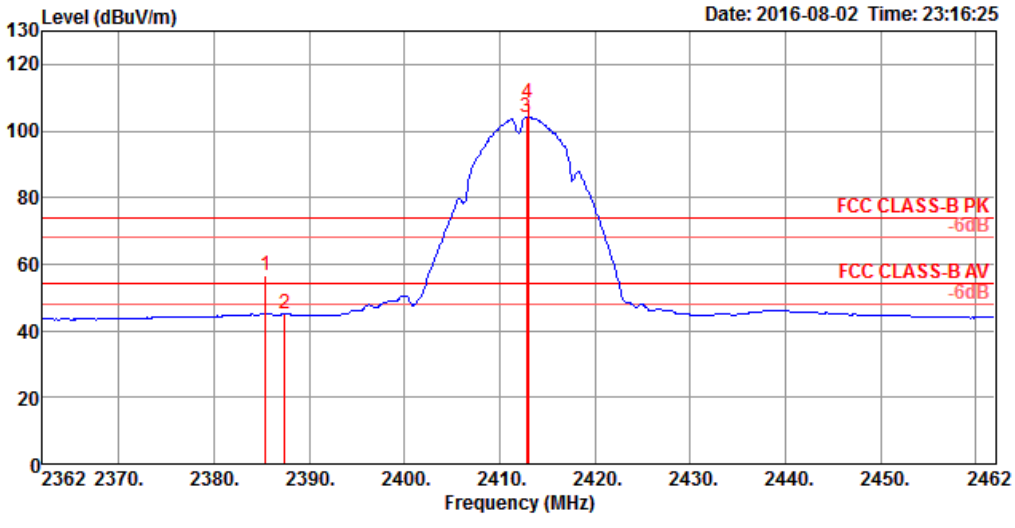
Emission level (dBuV/m) = 20 log Emission level (uV/m).

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

Band Edge Emissions

Configurations	IEEE 802.11b CH 1, 6, 11 / Ant. 1 + Ant. 2

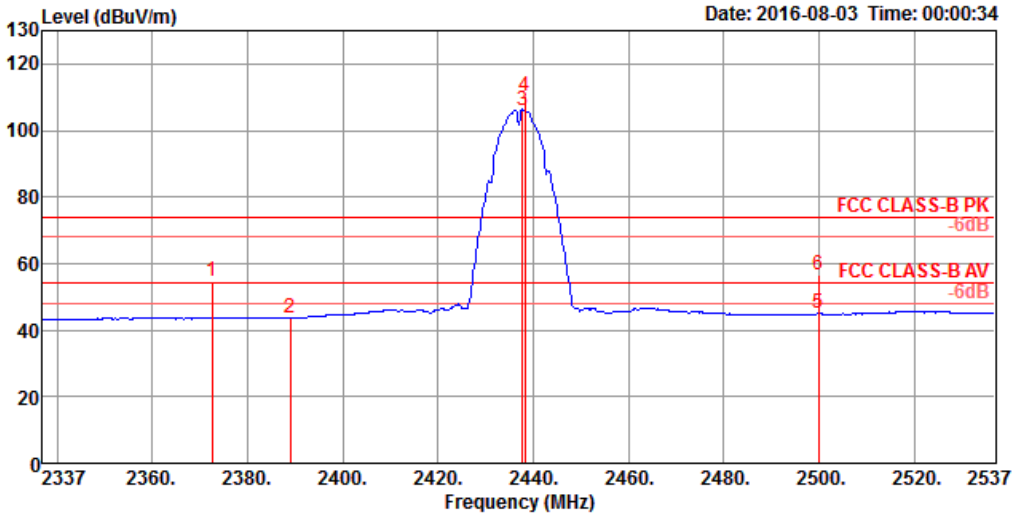
Channel 1



		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		2385.40	56.62	74.00	-17.38	25.24	4.33	27.05	0.00	130	172	Peak	HORIZONTAL
2		2387.40	44.94	54.00	-9.06	13.56	4.33	27.05	0.00	130	172	Average	HORIZONTAL
3	0	2412.80	104.26			72.80	4.35	27.11	0.00	130	172	Average	HORIZONTAL
4	0	2413.00	108.25			76.79	4.35	27.11	0.00	130	172	Peak	HORIZONTAL

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

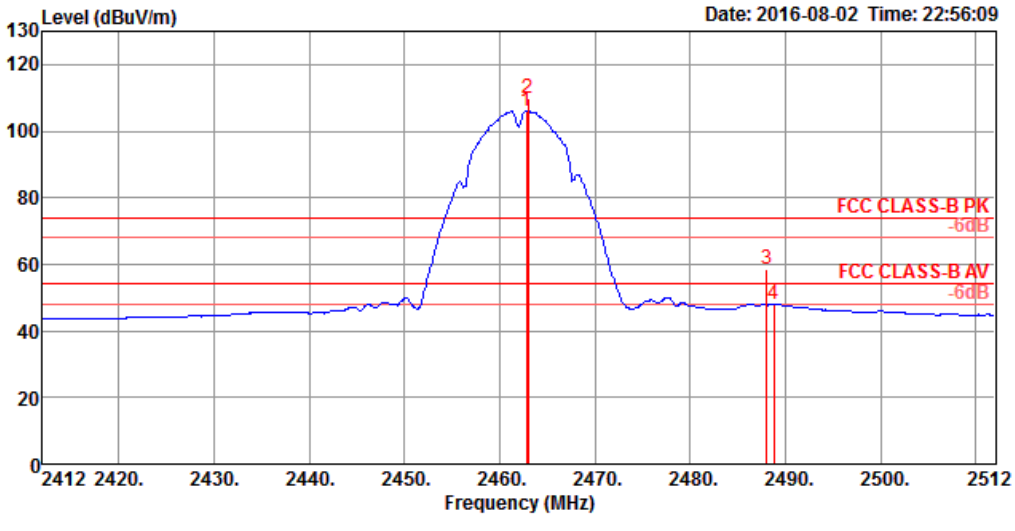
Channel 6



		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		2372.60	54.83	74.00	-19.17	23.50	4.31	27.02	0.00	266	286	Peak	HORIZONTAL
2		2389.00	43.78	54.00	-10.22	12.40	4.33	27.05	0.00	266	286	Average	HORIZONTAL
3	0	2437.80	106.24			74.71	4.37	27.16	0.00	266	286	Average	HORIZONTAL
4	0	2438.20	110.27			78.74	4.37	27.16	0.00	266	286	Peak	HORIZONTAL
5		2500.00	45.14	54.00	-8.86	13.40	4.44	27.30	0.00	266	286	Average	HORIZONTAL
6		2500.00	56.68	74.00	-17.32	24.94	4.44	27.30	0.00	266	286	Peak	HORIZONTAL

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

Channel 11

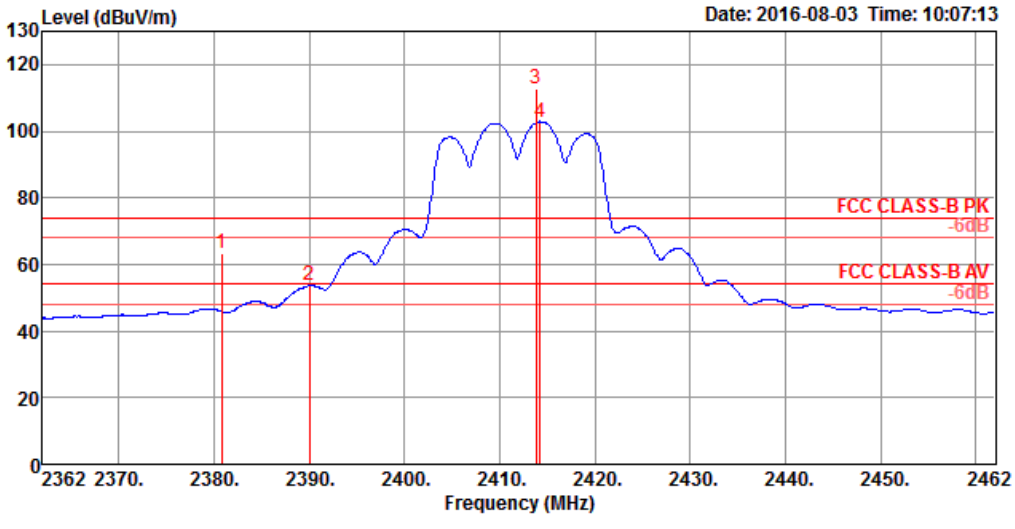


		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	0	2462.80	106.20			74.58	4.40	27.22	0.00	125	101	Average	HORIZONTAL
2	0	2463.00	110.07			78.45	4.40	27.22	0.00	125	101	Peak	HORIZONTAL
3		2488.00	58.68	74.00	-15.32	26.99	4.42	27.27	0.00	125	101	Peak	HORIZONTAL
4		2488.80	48.04	54.00	-5.96	16.35	4.42	27.27	0.00	125	101	Average	HORIZONTAL

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

Configurations	IEEE 802.11g CH 1, 6, 11 / Ant. 1 + Ant. 2

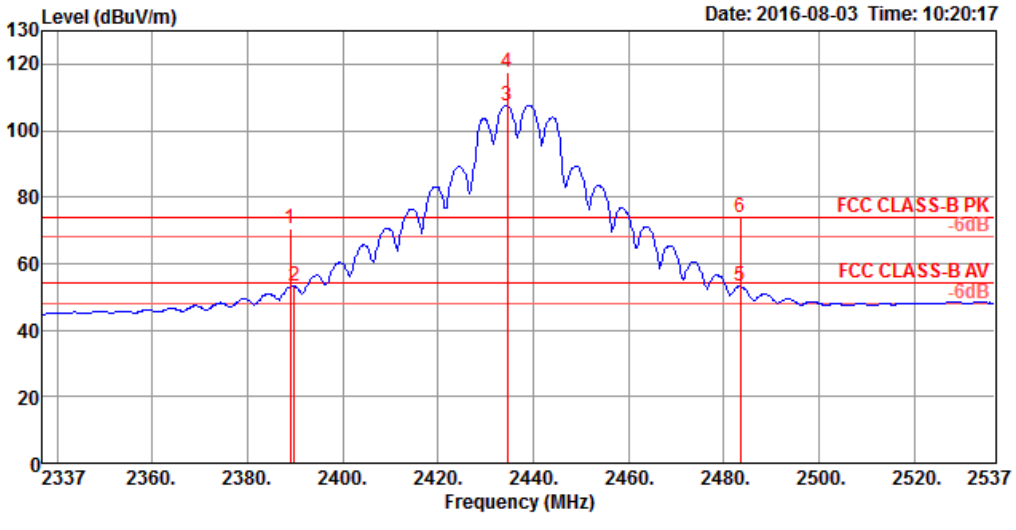
Channel 1



		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		2380.80	63.31	74.00	-10.69	31.95	4.32	27.04	0.00	302	288	Peak	HORIZONTAL
2		2390.00	53.56	54.00	-0.44	22.18	4.33	27.05	0.00	302	288	Average	HORIZONTAL
3	0	2413.80	112.89			81.43	4.35	27.11	0.00	302	288	Peak	HORIZONTAL
4	0	2414.20	102.88			71.42	4.35	27.11	0.00	302	288	Average	HORIZONTAL

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

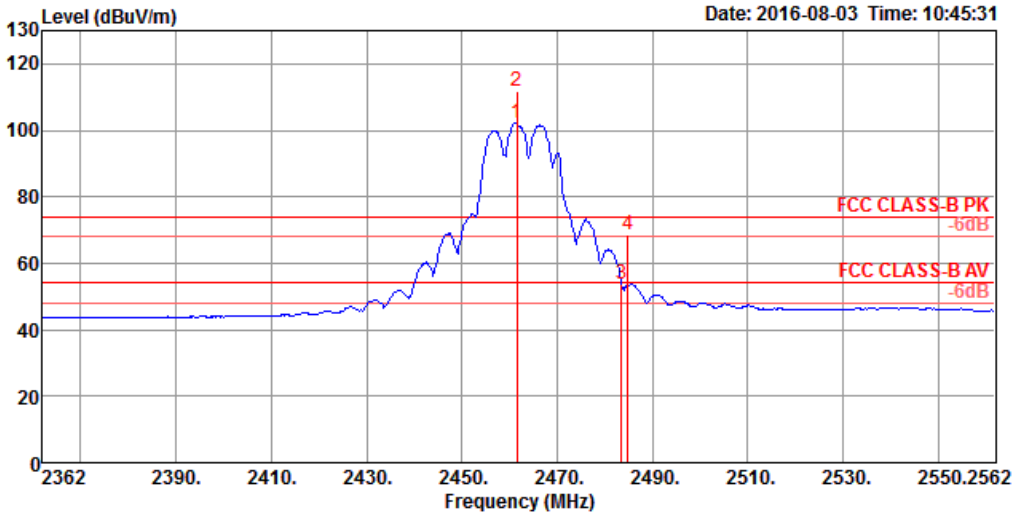
Channel 6



		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		2389.00	70.42	74.00	-3.58	39.04	4.33	27.05	0.00	267	288	Peak	HORIZONTAL
2		2389.80	53.20	54.00	-0.80	21.82	4.33	27.05	0.00	267	288	Average	HORIZONTAL
3	0	2434.60	107.48			75.95	4.37	27.16	0.00	267	288	Average	HORIZONTAL
4	0	2434.60	117.74			86.21	4.37	27.16	0.00	267	288	Peak	HORIZONTAL
5		2483.50	53.13	54.00	-0.87	21.44	4.42	27.27	0.00	267	288	Average	HORIZONTAL
6		2483.50	73.70	74.00	-0.30	42.01	4.42	27.27	0.00	267	288	Peak	HORIZONTAL

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

Channel 11

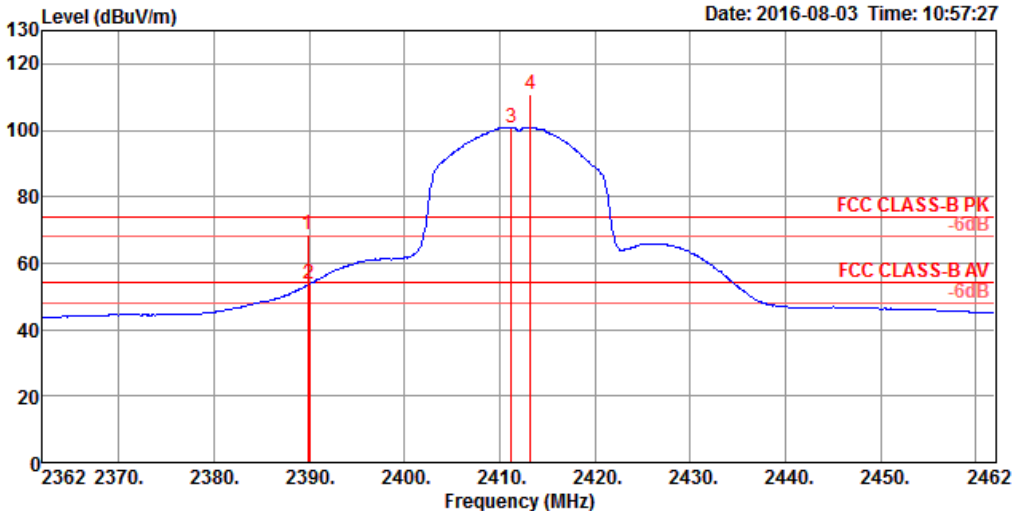


		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	0	2461.60	102.26			70.64	4.40	27.22	0.00	295	277	Average	HORIZONTAL
2	0	2461.60	111.64			80.02	4.40	27.22	0.00	295	277	Peak	HORIZONTAL
3		2483.50	53.64	54.00	-0.36	21.95	4.42	27.27	0.00	295	277	Average	HORIZONTAL
4		2484.80	68.69	74.00	-5.31	37.00	4.42	27.27	0.00	295	277	Peak	HORIZONTAL

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

Configurations	IEEE 802.11n MCS0 HT20 CH 1, 6, 11 / Ant. 1 + Ant. 2

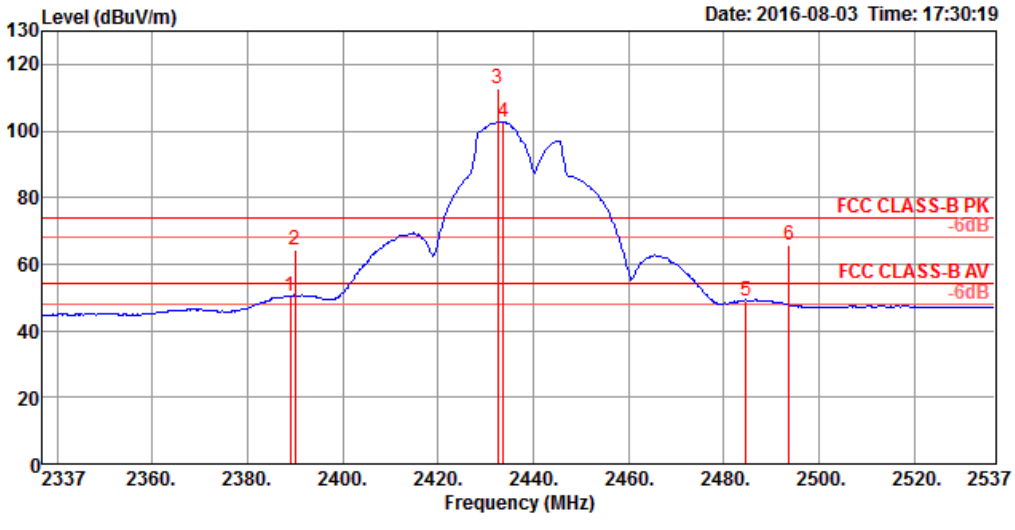
Channel 1



		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		2389.80	68.49	74.00	-5.51	37.11	4.33	27.05	0.00	152	103	Peak	HORIZONTAL
2		2390.00	53.64	54.00	-0.36	22.26	4.33	27.05	0.00	152	103	Average	HORIZONTAL
3	0	2411.20	100.98			69.52	4.35	27.11	0.00	152	103	Average	HORIZONTAL
4	0	2413.20	111.03			79.57	4.35	27.11	0.00	152	103	Peak	HORIZONTAL

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

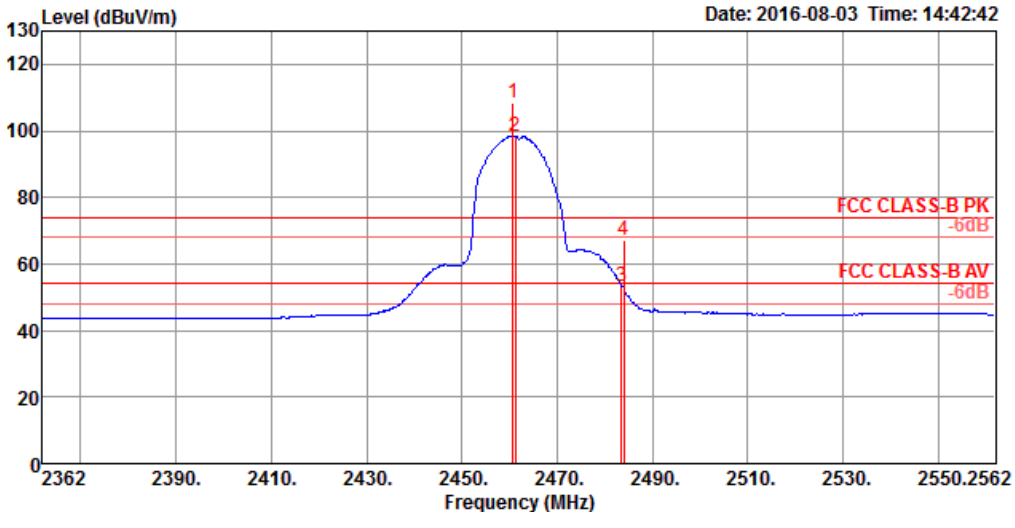
Channel 6



		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		2389.00	50.43	54.00	-3.57	19.05	4.33	27.05	0.00	312	213	Average	VERTICAL
2		2390.00	64.43	74.00	-9.57	33.05	4.33	27.05	0.00	312	213	Peak	VERTICAL
3	0	2432.60	112.51			80.98	4.37	27.16	0.00	312	213	Peak	VERTICAL
4	0	2433.80	102.61			71.08	4.37	27.16	0.00	312	213	Average	VERTICAL
5		2484.60	49.17	54.00	-4.83	17.48	4.42	27.27	0.00	312	213	Average	VERTICAL
6		2493.80	65.72	74.00	-8.28	34.01	4.43	27.28	0.00	312	213	Peak	VERTICAL

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

Channel 11

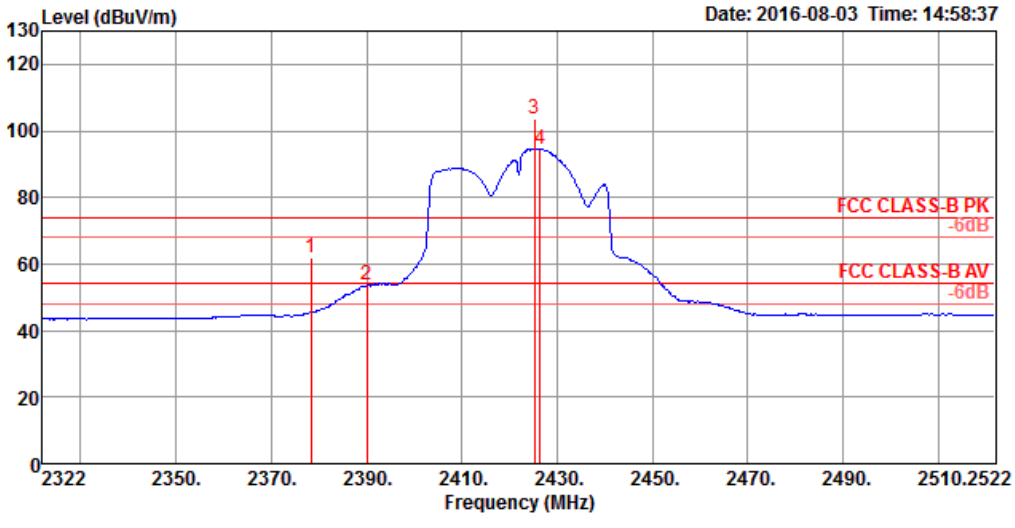


		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	0	2460.80	108.22			76.60	4.40	27.22	0.00	100	184	Peak	VERTICAL
2	0	2461.20	98.55			66.93	4.40	27.22	0.00	100	184	Average	VERTICAL
3		2483.50	53.43	54.00	-0.57	21.74	4.42	27.27	0.00	100	184	Average	VERTICAL
4		2484.00	67.26	74.00	-6.74	35.57	4.42	27.27	0.00	100	184	Peak	VERTICAL

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

Configurations	IEEE 802.11n MCS0 HT40 CH 3, 6, 9 / Ant. 1 + Ant. 2

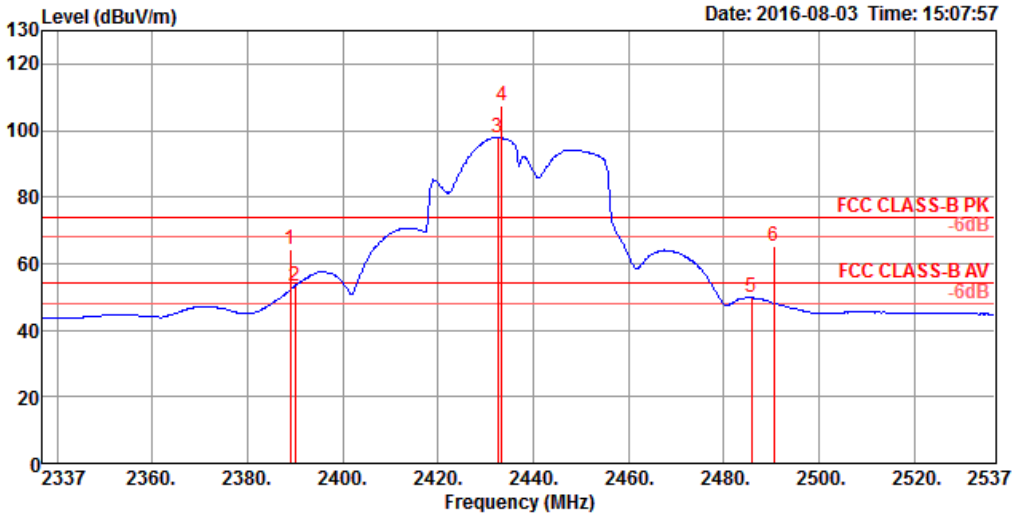
Channel 3



		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		2378.40	61.88	74.00	-12.12	30.52	4.32	27.04	0.00	280	194	Peak	VERTICAL
2		2390.00	53.52	54.00	-0.48	22.14	4.33	27.05	0.00	280	194	Average	VERTICAL
3	0	2425.20	103.49			71.98	4.37	27.14	0.00	280	194	Peak	VERTICAL
4	0	2426.40	94.58			63.07	4.37	27.14	0.00	280	194	Average	VERTICAL

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

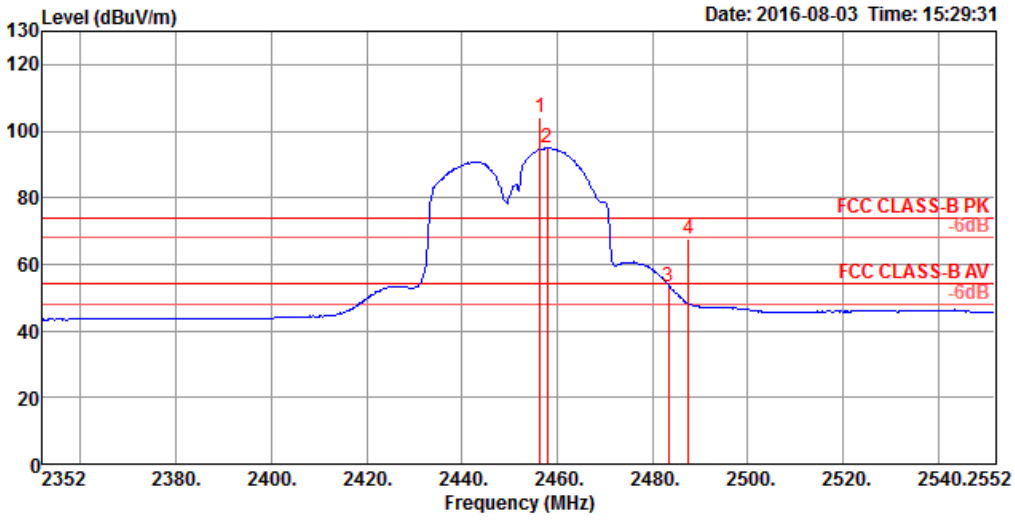
Channel 6



		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		2389.00	64.32	74.00	-9.68	32.94	4.33	27.05	0.00	100	240	Peak	HORIZONTAL
2		2390.00	53.47	54.00	-0.53	22.09	4.33	27.05	0.00	100	240	Average	HORIZONTAL
3	0	2432.60	97.99			66.46	4.37	27.16	0.00	100	240	Average	HORIZONTAL
4	0	2433.40	107.48			75.95	4.37	27.16	0.00	100	240	Peak	HORIZONTAL
5		2485.80	49.80	54.00	-4.20	18.11	4.42	27.27	0.00	100	240	Average	HORIZONTAL
6		2490.60	65.34	74.00	-8.66	33.63	4.43	27.28	0.00	100	240	Peak	HORIZONTAL

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	0	2456.40	104.28			72.68	4.39	27.21	0.00	286	272	Peak	HORIZONTAL
2	0	2458.00	94.89			63.29	4.39	27.21	0.00	286	272	Average	HORIZONTAL
3		2483.50	53.34	54.00	-0.66	21.65	4.42	27.27	0.00	286	272	Average	HORIZONTAL
4		2487.60	67.57	74.00	-6.43	35.88	4.42	27.27	0.00	286	272	Peak	HORIZONTAL

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.