



FCC Test Report

FCC ID : SWX-UAPIWHD
Equipment : UniFi HD IN-WALL
Brand Name : UBIQUITI
Model No. : UAP-IW-HD
Applicant / Manufacturer : Ubiquiti Networks, Inc.
685 Third Avenue, 27th Floor New York,
New York 10017 USA
Standard : 47 CFR FCC Part 15.247

The product was received on Oct. 30, 2017, and testing was started from Nov. 07, 2017 and completed on Mar. 30, 2018. . We, SPORTON INTERTIONAL INC. EMC & Wireless Communications Laboratory, 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Allen Lin

SPORTON INTERTIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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PHOTOGRAPHS OF EUT V01



History of this test report

Report No.	Version	Description	Issued Date
FR7O2609-03AC	01	Initial issue of report	May 25, 2018



Summary of Test Result

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

Reviewed by: Sam Tsai

Report Producer: Ivy Yuan



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), ac (VHT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), ac (VHT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11n HT20	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX

Note:

- ◆ 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.
- ◆ VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ◆ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector
1	1	-	-	internal antenna	Murata
2	2	-	-	internal antenna	i-Pex
3	3	-	-	internal antenna	i-Pex
4	4	-	-	internal antenna	i-Pex
5	1	-	-	internal antenna	fixed on board

Ant.	Port	Gain (dBi)		
		2.4G	5G	BT
1	1	1.8	4	-
2	2			
3	3	-	4	-
4	4			
5	1	-	-	1.4

Note 1: The EUT has three antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n mode (2TX/2RX):

Ant. 1 and Ant. 2 can be used as transmitting/receiving antenna.

For 5GHz function:

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

Ant. 1 & Ant. 2 & Ant. 3 and Ant. 4 can be used as transmitting/receiving antenna.

For Bluetooth function:

For Bluetooth mode (1TX/1RX)

Only Ant. 5 can be used as transmitting/receiving antenna.



1.1.3 EUT Information

Operational Condition	
EUT Power Type	From PoE
Beamforming Function	<input type="checkbox"/> With beamforming <input checked="" type="checkbox"/> Without beamforming
Type of EUT	
<input checked="" type="checkbox"/>	Stand-alone
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)
	Combined Equipment - Brand Name / Model No.: ...
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)
	Host System - Brand Name / Model No.: ...
<input type="checkbox"/>	Other:

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.986	0.061	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.915	0.386	1.397m	1k
802.11n HT20	0.91	0.41	1.309m	1k
802.11n HT40	0.852	0.696	650u	3k



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
- ◆ KDB 558074 D01 v04
- ◆ KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location		
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.		
<input type="checkbox"/>	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.) TEL : 886-3-656-9065 FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Tim	22.5°C / 65%	22/Nov/2017
Radiated	03CH03-HY	Jeff	25°C / 59%	23/Mar/2018
AC Conduction	CO04-HY	Jeff	25°C / 59%	30/Mar/2018

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)	3.6 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
	Vnom	120V




2.2 Test Channel Mode

Test Software Version	MT7603 QA 0.0.1.58
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2.3 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	PoE mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item	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	PoE mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT			V

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	2.4G+5G;EUT =Z
Refer to Sporton Test Report No.: FA7O2609-03 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	



2.4 Support Equipment

Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	AC Source	GW	APS-9102	-
4	PoE	D-Link	DWL-P200	-

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE for EUT	CERIO	POE-S48G	-
2	PoE for client	CERIO	POE-S48G	-
3	client	UBNT	UAP-HD-Nano_Tier 1	-
4	AC adapter for PoE	EDACPOWER	EA10681E-520	-

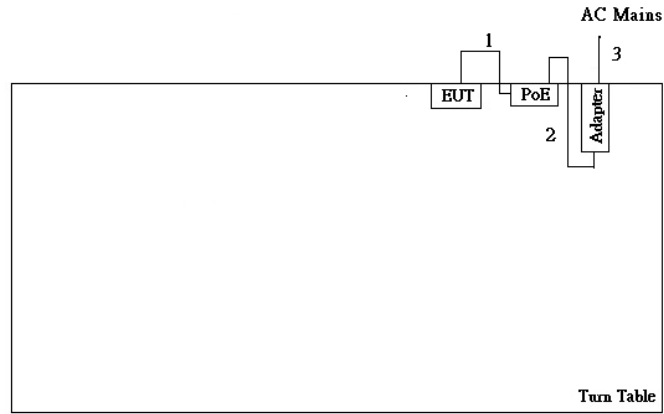
Note. Support equipment No.3 was provided by customer.

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE for EUT	CERIO	POE-S48G	-
2	PoE for client	CERIO	POE-S48G	-
3	client	UBNT	UAP-HD-Nano_Tier 1	-
4	Notebook	Dell	E4300	-
5	AC adapter for PoE	EDACPOWER	EA10681E-520	-

Note. Support equipment No.3 was provided by customer.

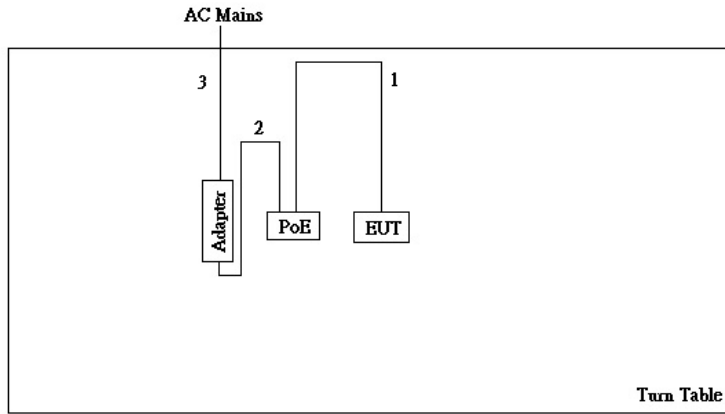
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	RJ-45 Cable	No	1m	-
2	DC power line	No	1m	-
3	AC power line	No	1.5m	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	RJ-45 Cable	No	1m	-
2	DC power line	No	1m	-
3	AC power line	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.

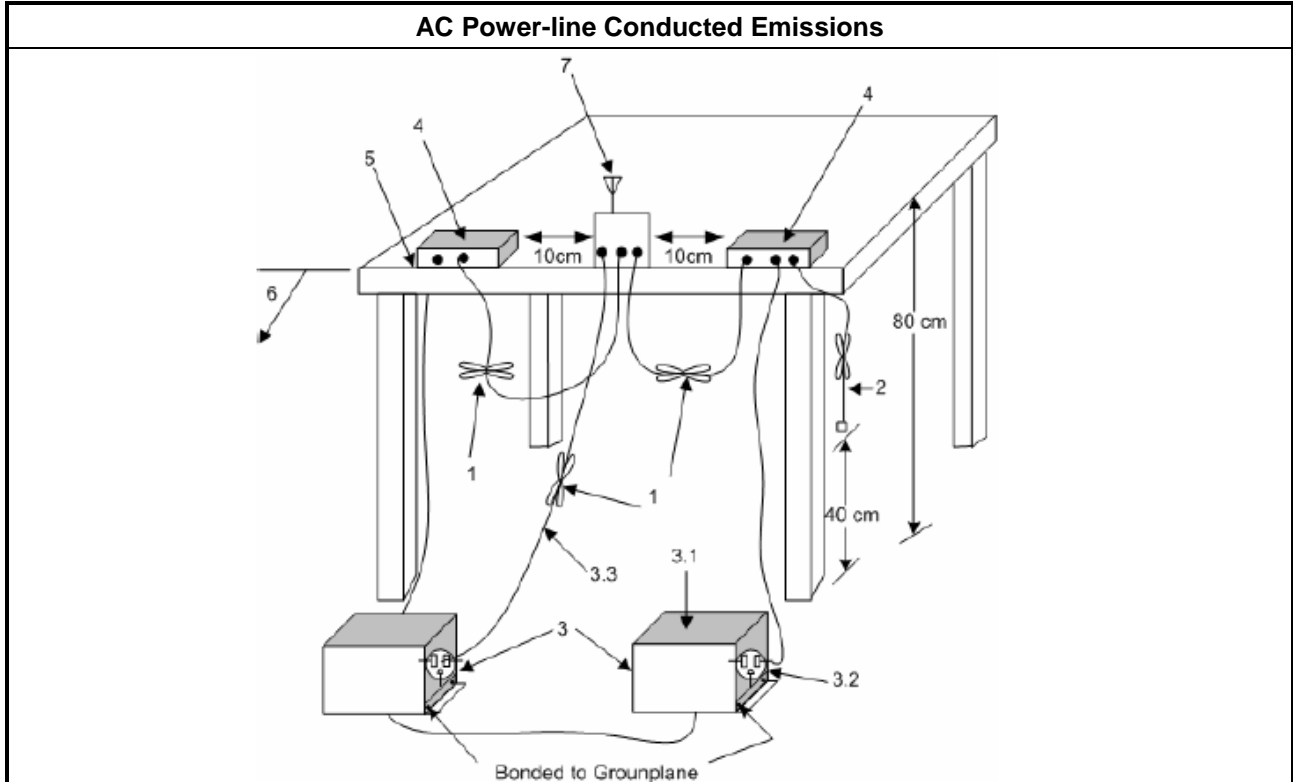
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



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:
<ul style="list-style-type: none"> ▪ 6 dB bandwidth \geq 500 kHz.

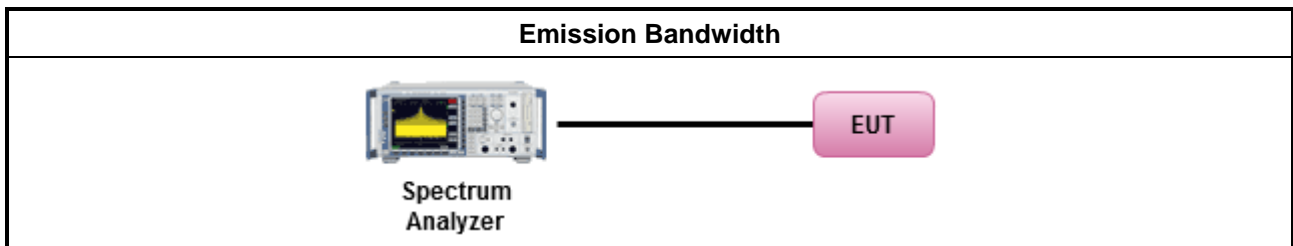
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: 	
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as RSS-Gen, clause 6.6 for for occupied bandwidth testing.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



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	
	<ul style="list-style-type: none"> ▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS):
	<ul style="list-style-type: none"> - Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dBm
e.i.r.p. Power Limit:	
	<ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS)
	<ul style="list-style-type: none"> - Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
<p>P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

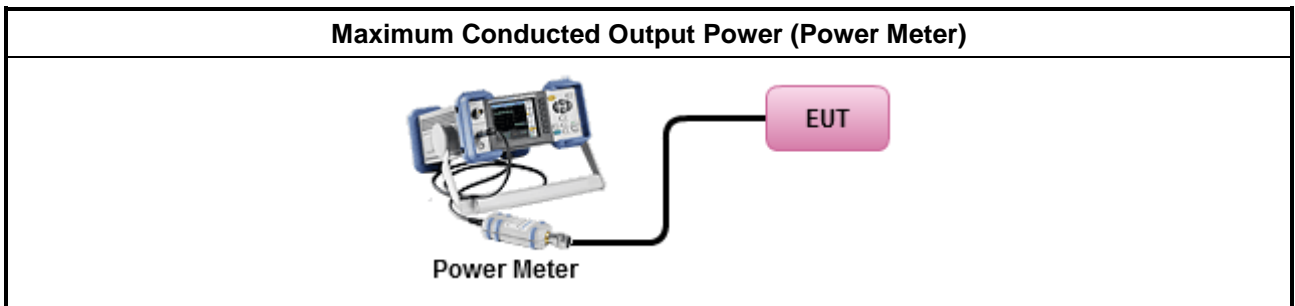
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.2 Option 2 (integrated band power method)
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.3 Option 3 (peak power meter for VBW ≥ DTS BW)
<ul style="list-style-type: none"> Maximum Average Conducted Output Power 	
Duty cycle ≥ 98%	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
Duty cycle < 98%	
<input type="checkbox"/>	Refer as 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	
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 9.2.3.1 Method AVGPM (using an RF average power meter).
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> If the EUT supports multiple transmit chains using options given below: Refer as 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. 	
<ul style="list-style-type: none"> If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



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
<ul style="list-style-type: none"> Power Spectral Density (PSD) \leq 8 dBm/3kHz

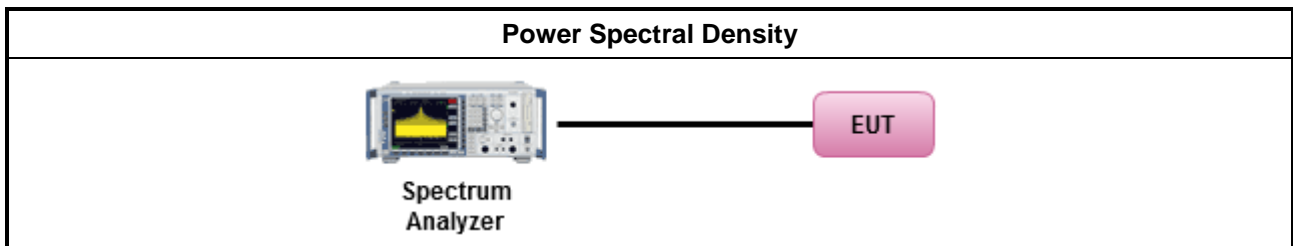
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method
<ul style="list-style-type: none"> 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).
<input checked="" type="checkbox"/> Refer as KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak).
<ul style="list-style-type: none"> For conducted measurement. <ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: <ul style="list-style-type: none"> Measure and sum the spectra across the outputs. Refer as 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.

3.4.4 Test Setup



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.

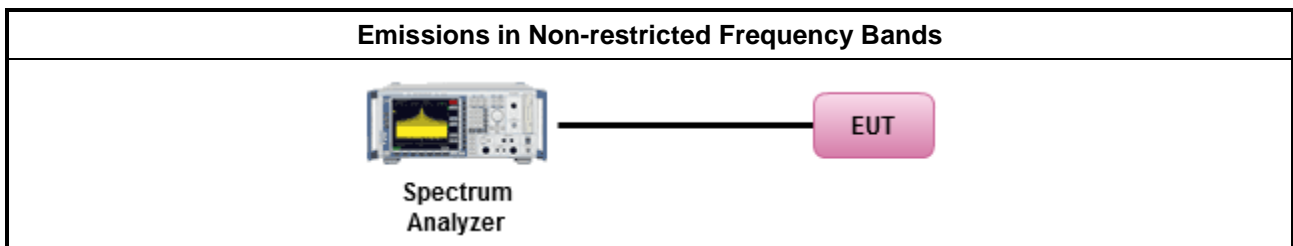
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as KDB 558074, clause 11 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



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.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.6.2 Measuring Instruments

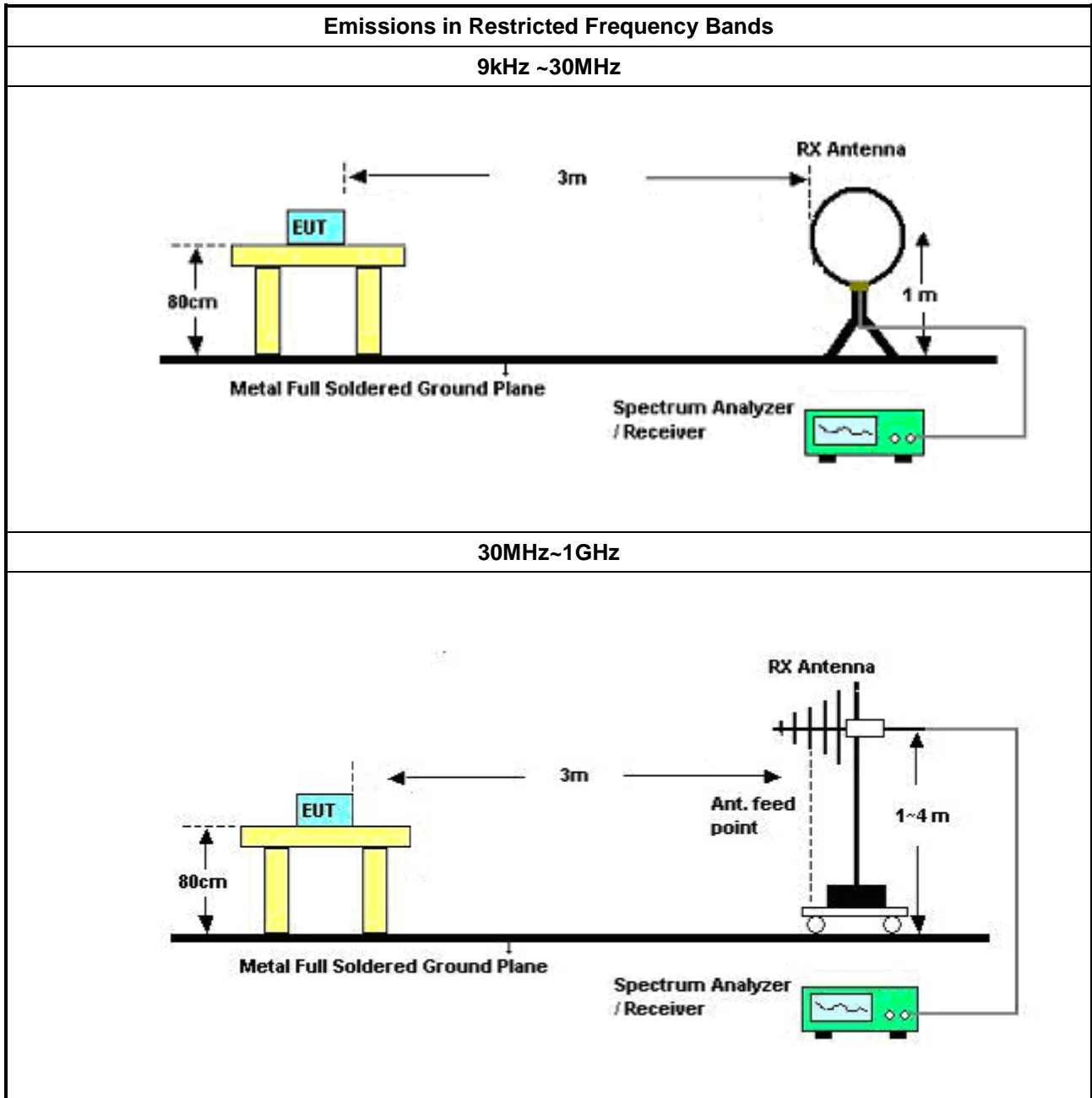
Refer a test equipment and calibration data table in this test report.

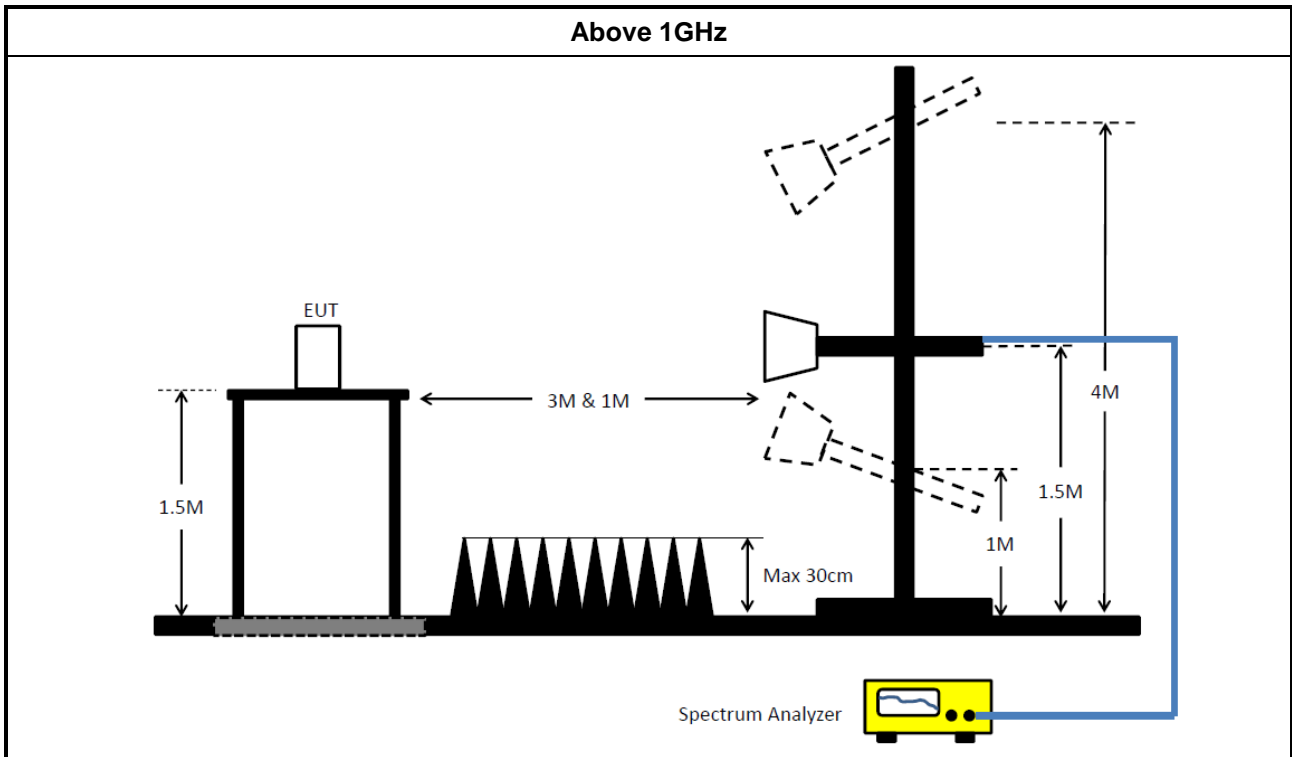


3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> The average emission levels shall be measured in [duty cycle \geq 98 or duty factor]. 	
<ul style="list-style-type: none"> Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band. 	
<ul style="list-style-type: none"> For the transmitter unwanted emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> Refer as KDB 558074, clause 12 for unwanted emissions into restricted bands.
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 12.2.5.3 (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW \geq 1/T.
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> For the transmitter band-edge emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> Refer as 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.
	<ul style="list-style-type: none"> Refer as KDB 558074, clause 13.2 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> Refer as KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
<ul style="list-style-type: none"> For conducted and cabinet radiation measurement, refer as KDB 558074, clause 12.2.2. 	
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> For 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





3.6.5 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

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

3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	17/Nov/2017	16/Nov/2018
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	06/Oct/2017	05/Oct/2018
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	12/Oct/2017	11/Oct/2018

NCR : Non-Calibration Require

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	31/Oct/2017	30/Oct/2018
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	01/Nov/2017	31/Oct/2018
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	19/Apr/2017	18/Apr/2018
Amplifier	Keysight	83017A	MY53270196	1GHz ~ 26.5GHz	31/Aug/2017	30/Aug/2018
Spectrum	R&S	FSV40	101500	9kHz ~ 40GHz	28/Jun/2017	27/Jun/2018
Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	26/Jan/2018	25/Jan/2019
RF Cable-high	SUHNER	SUCOFLEX106	CB222	1GHz ~ 40GHz	26/Jan/2018	25/Jan/2019
Bilog Antenna	SCHAFFNER	CBL 6112B	22237	30MHz ~ 1GHz	08/Jul/2017	07/Jul/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	09/Feb/ 2018	08/Feb/2019
Horn Antenna	SCHWARZBECK	BBHA9120D	1531	1GHz ~ 18GHz	25/Apr/ 2017	24/Apr/2018
Amplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2017	23/Aug/2018
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	16/Mar/2018	15/Mar/2019



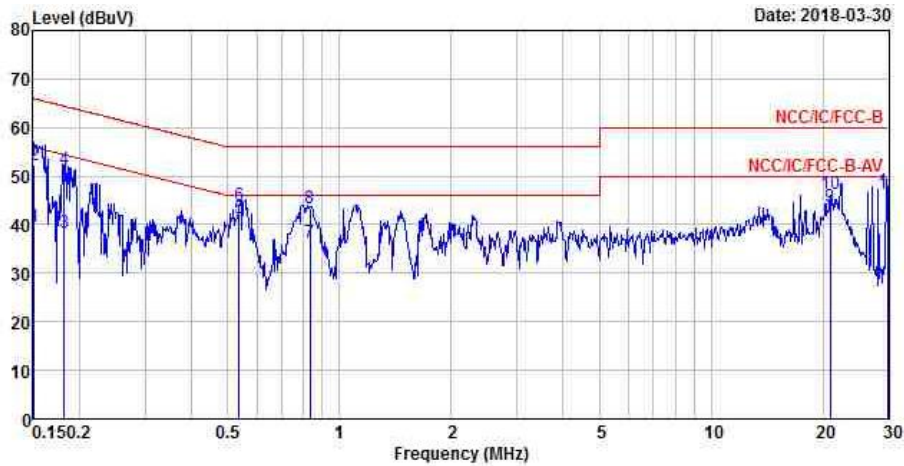
Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101515	9kHz~40GHz	26/Nov/2016	25/Nov/2017
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	06/Nov/2017	05/Nov/2018
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	06/Nov/2017	05/Nov/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018



AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	PoE Mode		



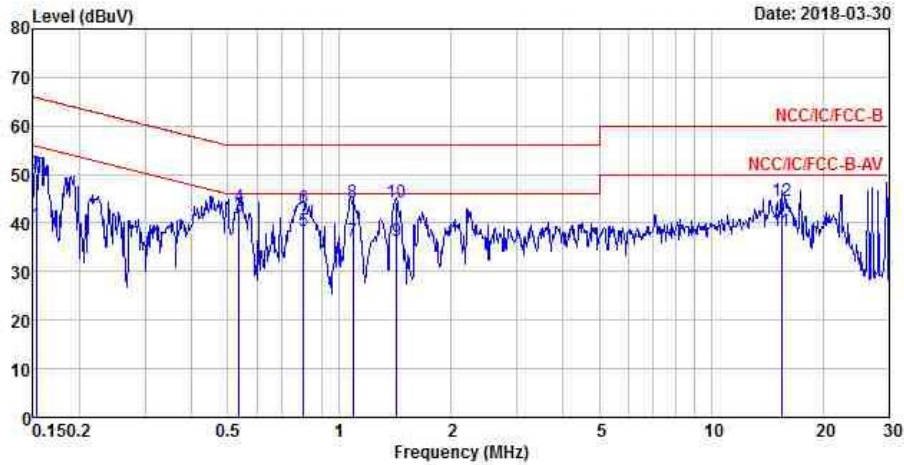
	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.1508	39.69	-16.27	55.96	30.02	9.63	0.04	Average
2	0.1508	52.37	-13.59	65.96	42.70	9.63	0.04	QP
3	0.1822	38.35	-16.04	54.39	28.72	9.62	0.01	Average
4	0.1822	51.45	-12.94	64.39	41.82	9.62	0.01	QP
5	0.5378	41.45	-4.55	46.00	31.77	9.61	0.07	Average
6	0.5378	44.02	-11.98	56.00	34.34	9.61	0.07	QP
7	0.8349	36.25	-9.75	46.00	26.61	9.62	0.02	Average
8	0.8349	43.27	-12.73	56.00	33.63	9.62	0.02	QP
9	20.9025	43.72	-6.28	50.00	33.85	9.71	0.16	Average
10	20.9025	46.24	-13.76	60.00	36.37	9.71	0.16	QP
11 MAX	29.8613	46.29	-3.71	50.00	36.31	9.69	0.29	Average
12	29.8613	46.99	-13.01	60.00	37.01	9.69	0.29	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	1	Power Phase	Line
Operating Function	PoE Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1532	39.45	-16.37	55.82	29.79	9.62	0.04	Average
2	0.1532	50.16	-15.66	65.82	40.50	9.62	0.04	QP
3 MAX	0.5378	41.44	-4.56	46.00	31.76	9.61	0.07	Average
4	0.5378	43.29	-12.71	56.00	33.61	9.61	0.07	QP
5	0.8002	38.32	-7.68	46.00	28.69	9.61	0.02	Average
6	0.8002	43.20	-12.80	56.00	33.57	9.61	0.02	QP
7	1.0881	36.31	-9.69	46.00	26.70	9.61	0.00	Average
8	1.0881	44.21	-11.79	56.00	34.60	9.61	0.00	QP
9	1.4257	36.27	-9.73	46.00	26.65	9.62	0.00	Average
10	1.4257	44.39	-11.61	56.00	34.77	9.62	0.00	QP
11	15.4701	38.45	-11.55	50.00	28.79	9.64	0.02	Average
12	15.4701	44.43	-15.57	60.00	34.77	9.64	0.02	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

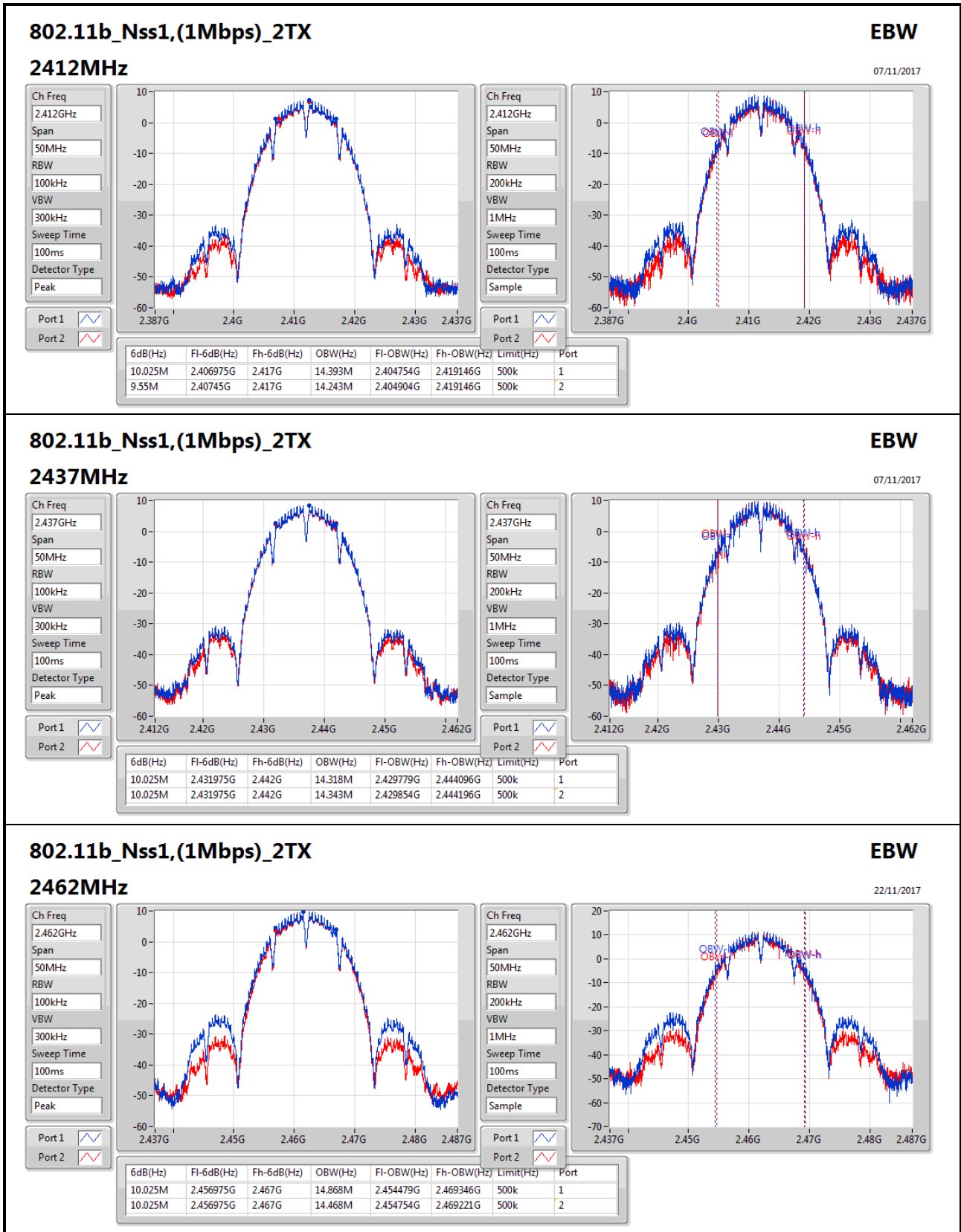
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	10.025M	14.868M	14M9G1D	9.55M	14.243M
802.11g_Nss1,(6Mbps)_2TX	15.05M	16.667M	16M7D1D	15.025M	16.317M
802.11n HT20_Nss1,(MCS0)_2TX	15.375M	17.791M	17M8D1D	13.15M	17.516M
802.11n HT40_Nss1,(MCS0)_2TX	35.1M	35.982M	36M0D1D	33.75M	35.782M

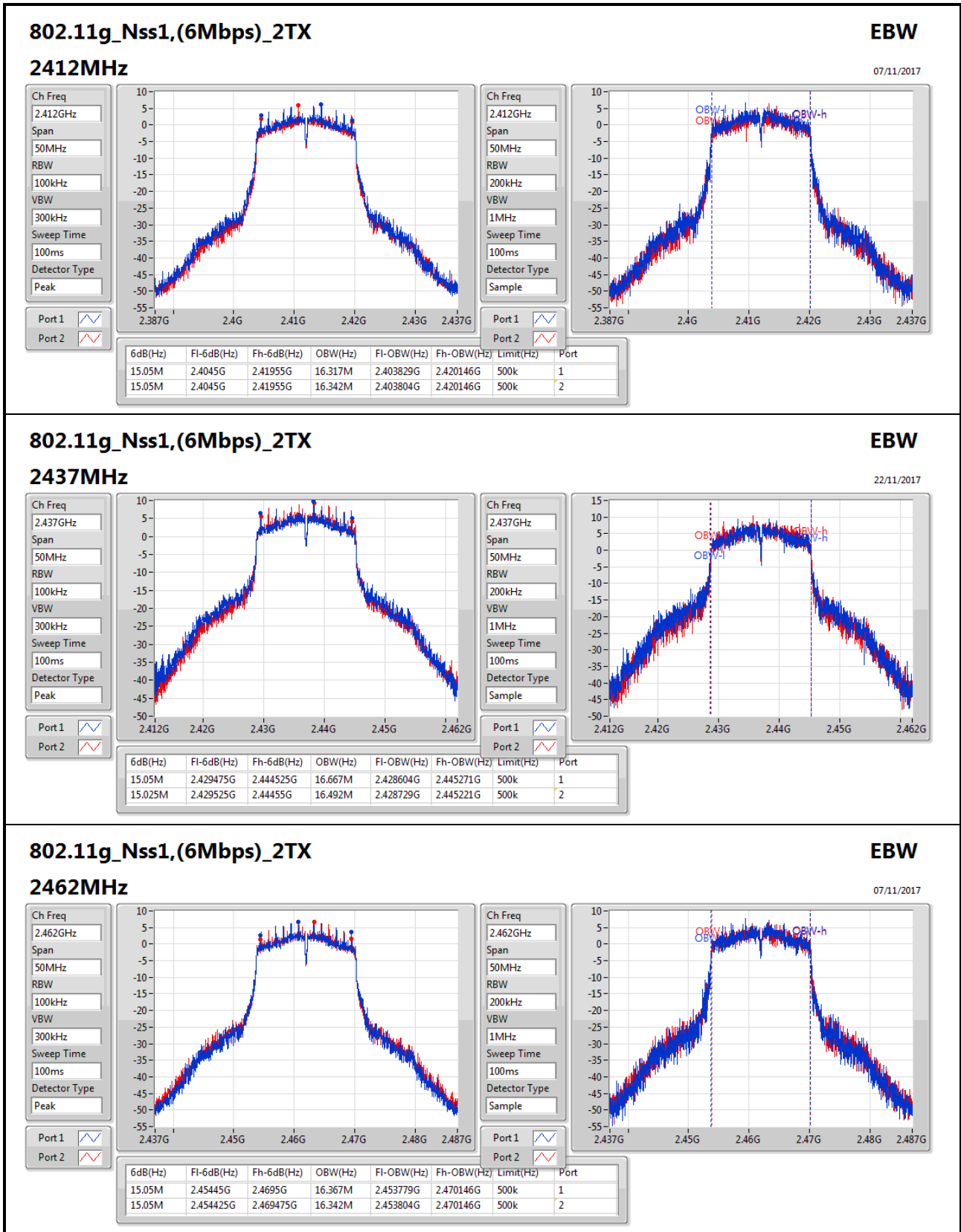
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

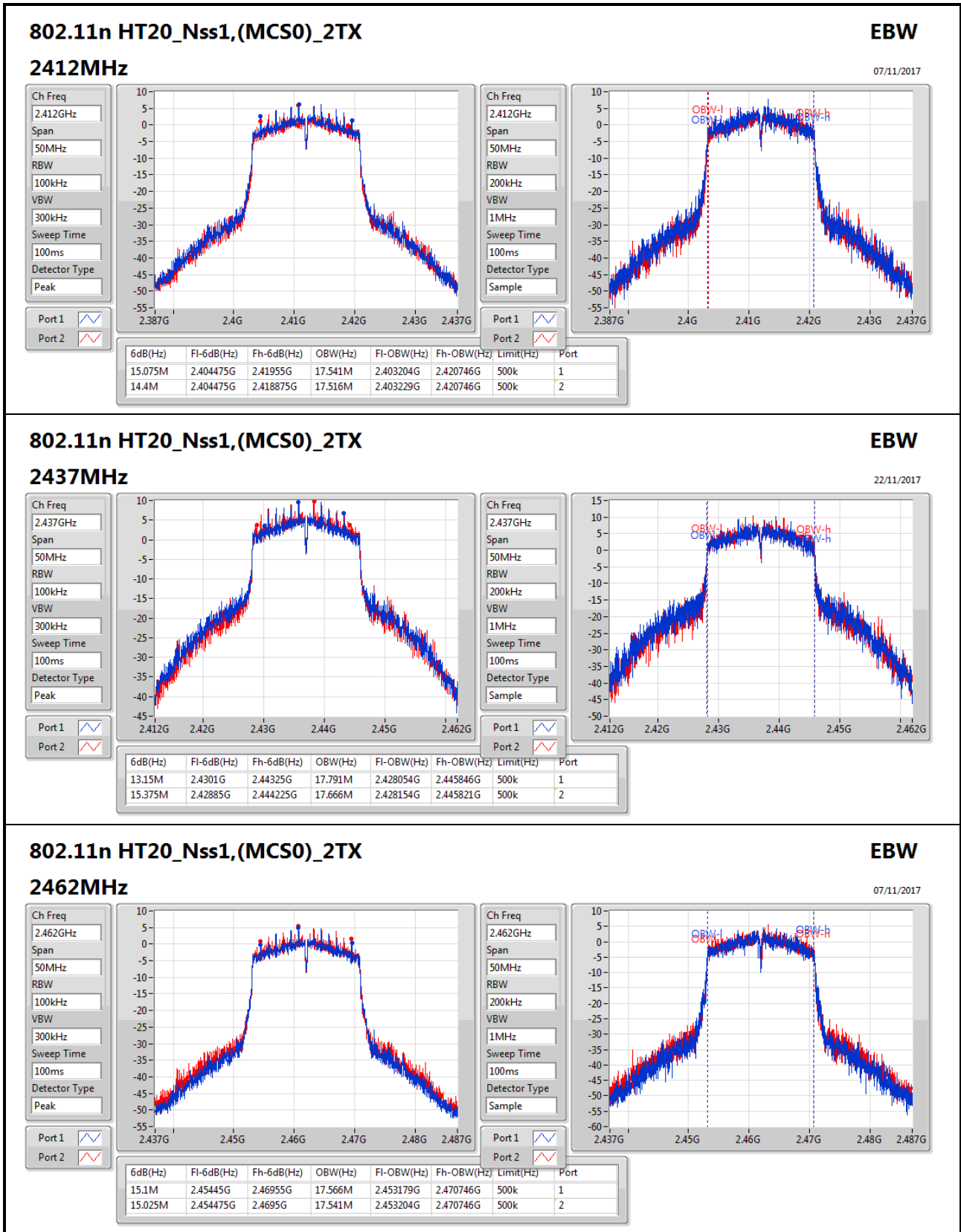
Result

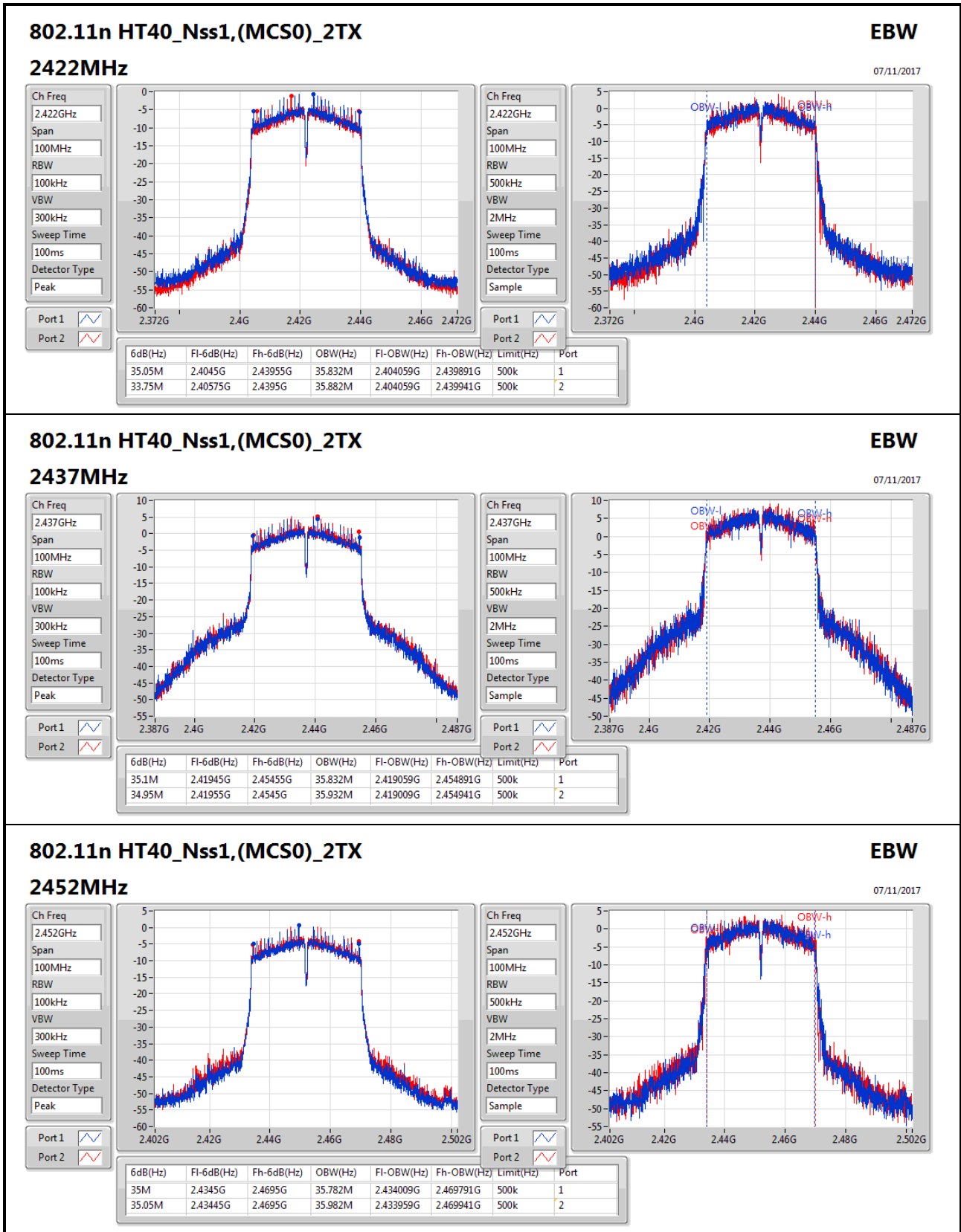
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	10.025M	14.393M	9.55M	14.243M
2437MHz	Pass	500k	10.025M	14.318M	10.025M	14.343M
2462MHz	Pass	500k	10.025M	14.868M	10.025M	14.468M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.05M	16.317M	15.05M	16.342M
2437MHz	Pass	500k	15.05M	16.667M	15.025M	16.492M
2462MHz	Pass	500k	15.05M	16.367M	15.05M	16.342M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.075M	17.541M	14.4M	17.516M
2437MHz	Pass	500k	13.15M	17.791M	15.375M	17.666M
2462MHz	Pass	500k	15.1M	17.566M	15.025M	17.541M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.05M	35.832M	33.75M	35.882M
2437MHz	Pass	500k	35.1M	35.832M	34.95M	35.932M
2452MHz	Pass	500k	35M	35.782M	35.05M	35.982M

Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;











Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	22.92	0.19588
802.11g_Nss1,(6Mbps)_2TX	22.96	0.19770
802.11n HT20_Nss1,(MCS0)_2TX	22.98	0.19861
802.11n HT40_Nss1,(MCS0)_2TX	20.95	0.12445

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	1.80	17.40	16.82	20.13	30.00
2417MHz_TnomVnom	Pass	1.80	19.28	18.42	21.88	30.00
2437MHz_TnomVnom	Pass	1.80	18.47	18.29	21.39	30.00
2462MHz_TnomVnom	Pass	1.80	20.11	19.71	22.92	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	1.80	16.45	15.84	19.17	30.00
2417MHz_TnomVnom	Pass	1.80	19.96	19.46	22.73	30.00
2437MHz_TnomVnom	Pass	1.80	19.81	20.08	22.96	30.00
2457MHz_TnomVnom	Pass	1.80	19.71	19.36	22.55	30.00
2462MHz_TnomVnom	Pass	1.80	17.34	17.32	20.34	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	1.80	16.38	16.26	19.33	30.00
2417MHz_TnomVnom	Pass	1.80	19.77	19.47	22.63	30.00
2437MHz_TnomVnom	Pass	1.80	19.73	20.19	22.98	30.00
2457MHz_TnomVnom	Pass	1.80	19.64	19.39	22.53	30.00
2462MHz_TnomVnom	Pass	1.80	15.20	15.29	18.26	30.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	1.80	11.88	11.15	14.54	30.00
2427MHz_TnomVnom	Pass	1.80	17.87	17.36	20.63	30.00
2437MHz_TnomVnom	Pass	1.80	17.89	17.99	20.95	30.00
2447MHz_TnomVnom	Pass	1.80	17.81	17.43	20.63	30.00
2452MHz_TnomVnom	Pass	1.80	12.90	12.96	15.94	30.00

DG = Directional Gain; Port X = Port X output power



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-5.16
802.11g_Nss1,(6Mbps)_2TX	-5.12
802.11n HT20_Nss1,(MCS0)_2TX	-2.69
802.11n HT40_Nss1,(MCS0)_2TX	-8.35

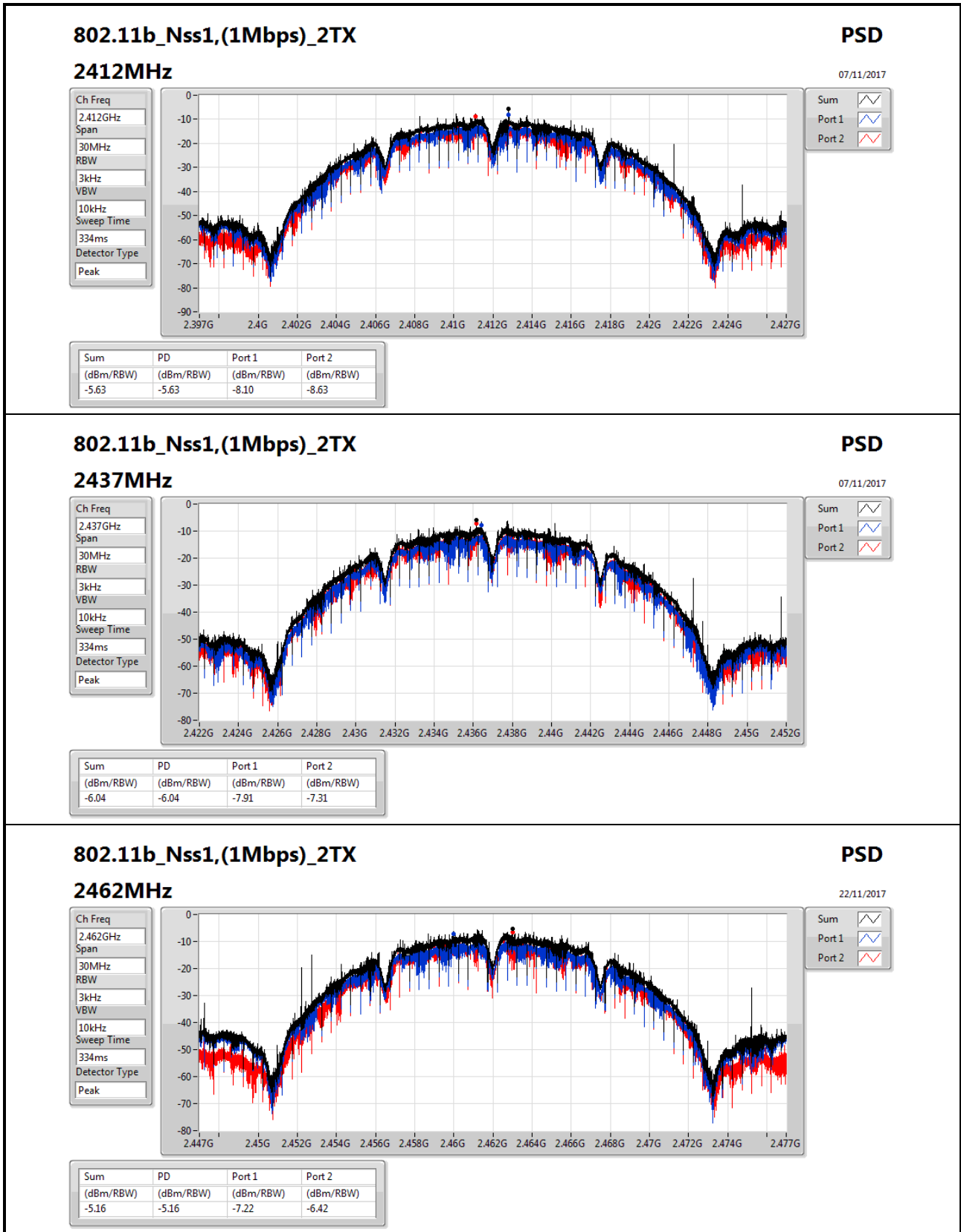
RBW=3kHz.

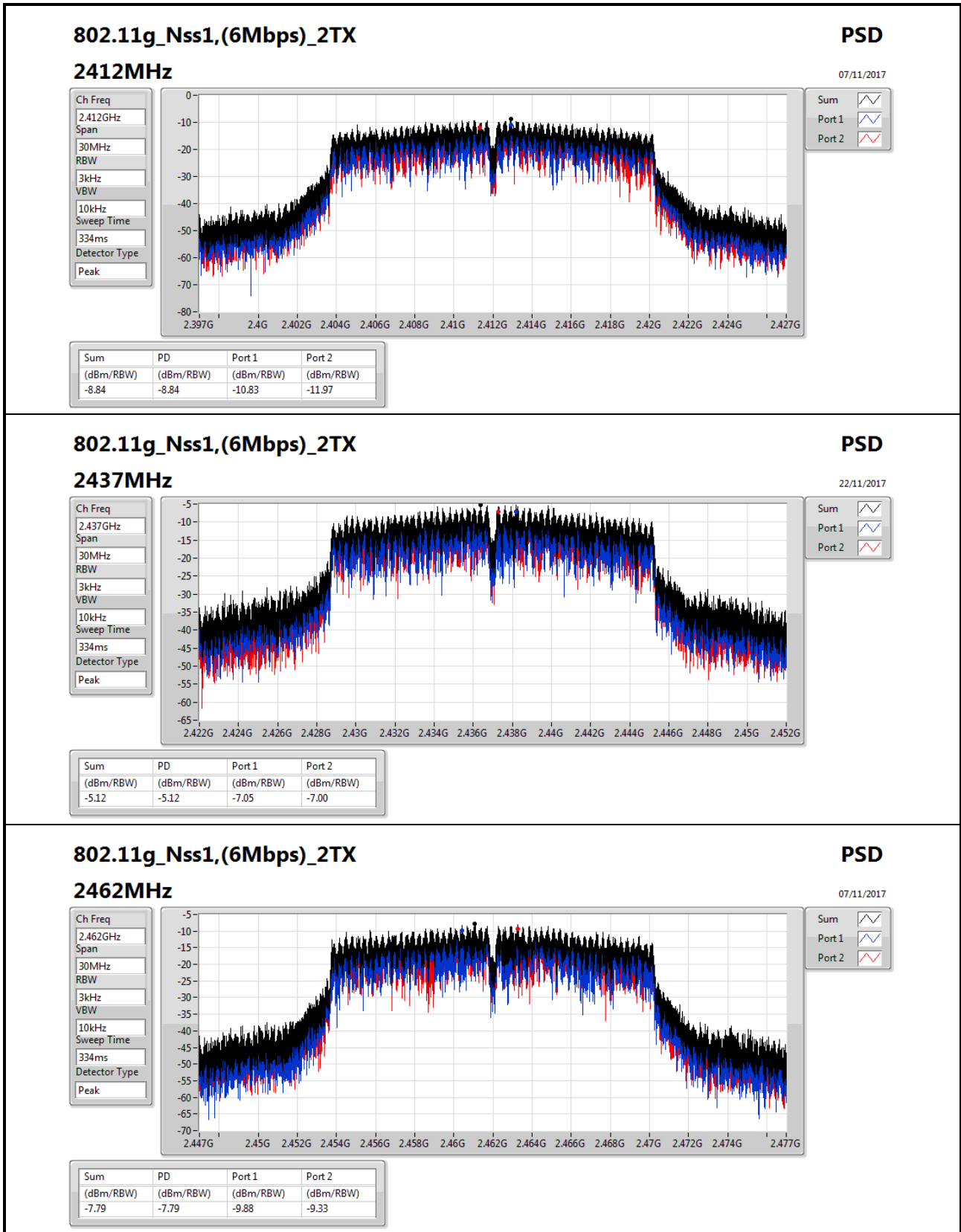
Result

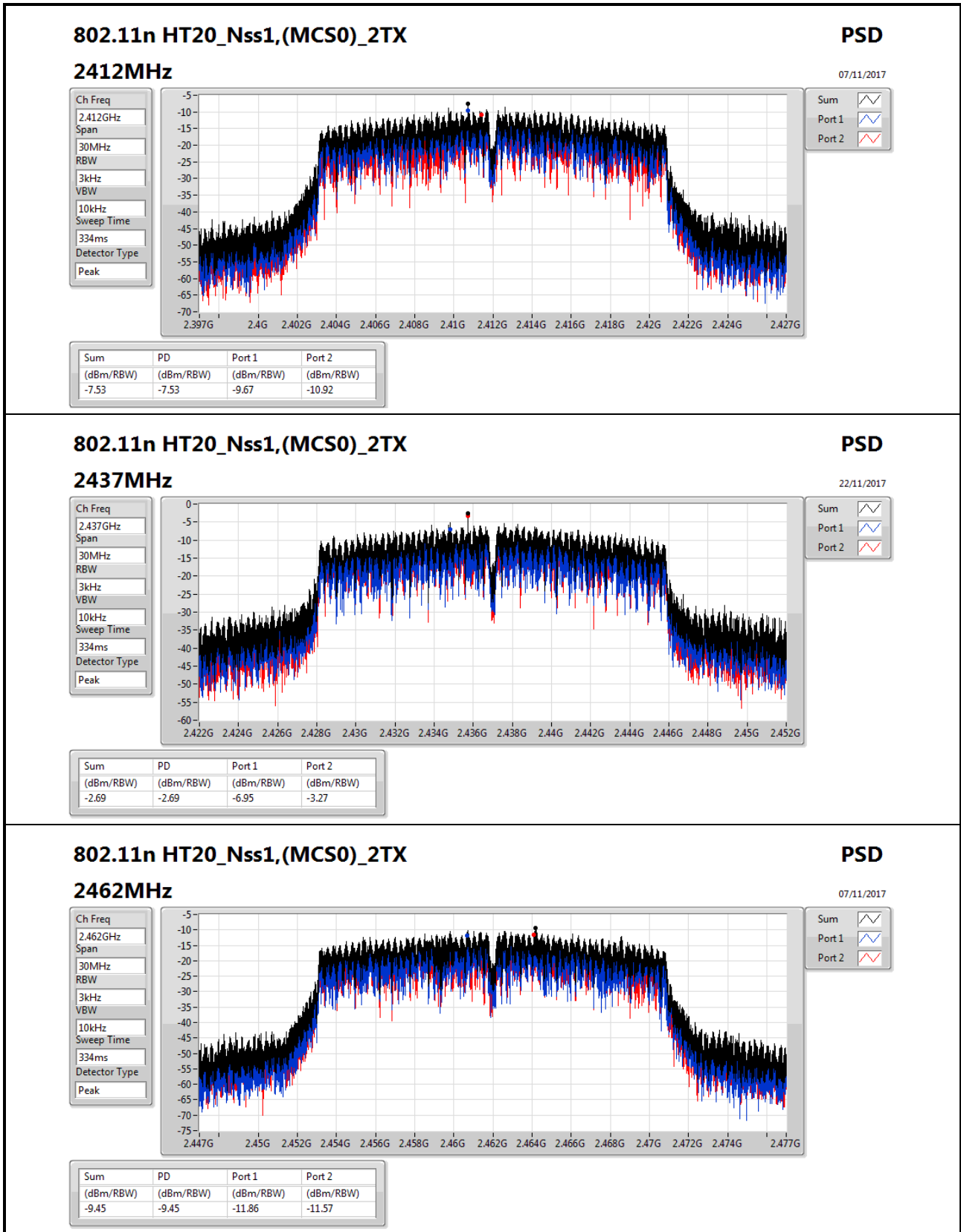
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.81	-8.10	-8.63	-5.63	8.00
2437MHz	Pass	4.81	-7.91	-7.31	-6.04	8.00
2462MHz	Pass	4.81	-7.22	-6.42	-5.16	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.81	-10.83	-11.97	-8.84	8.00
2437MHz	Pass	4.81	-7.05	-7.00	-5.12	8.00
2462MHz	Pass	4.81	-9.88	-9.33	-7.79	8.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.81	-9.67	-10.92	-7.53	8.00
2437MHz	Pass	4.81	-6.95	-3.27	-2.69	8.00
2462MHz	Pass	4.81	-11.86	-11.57	-9.45	8.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.81	-17.62	-17.09	-15.15	8.00
2437MHz	Pass	4.81	-11.00	-10.66	-8.35	8.00
2452MHz	Pass	4.81	-16.71	-16.43	-14.38	8.00

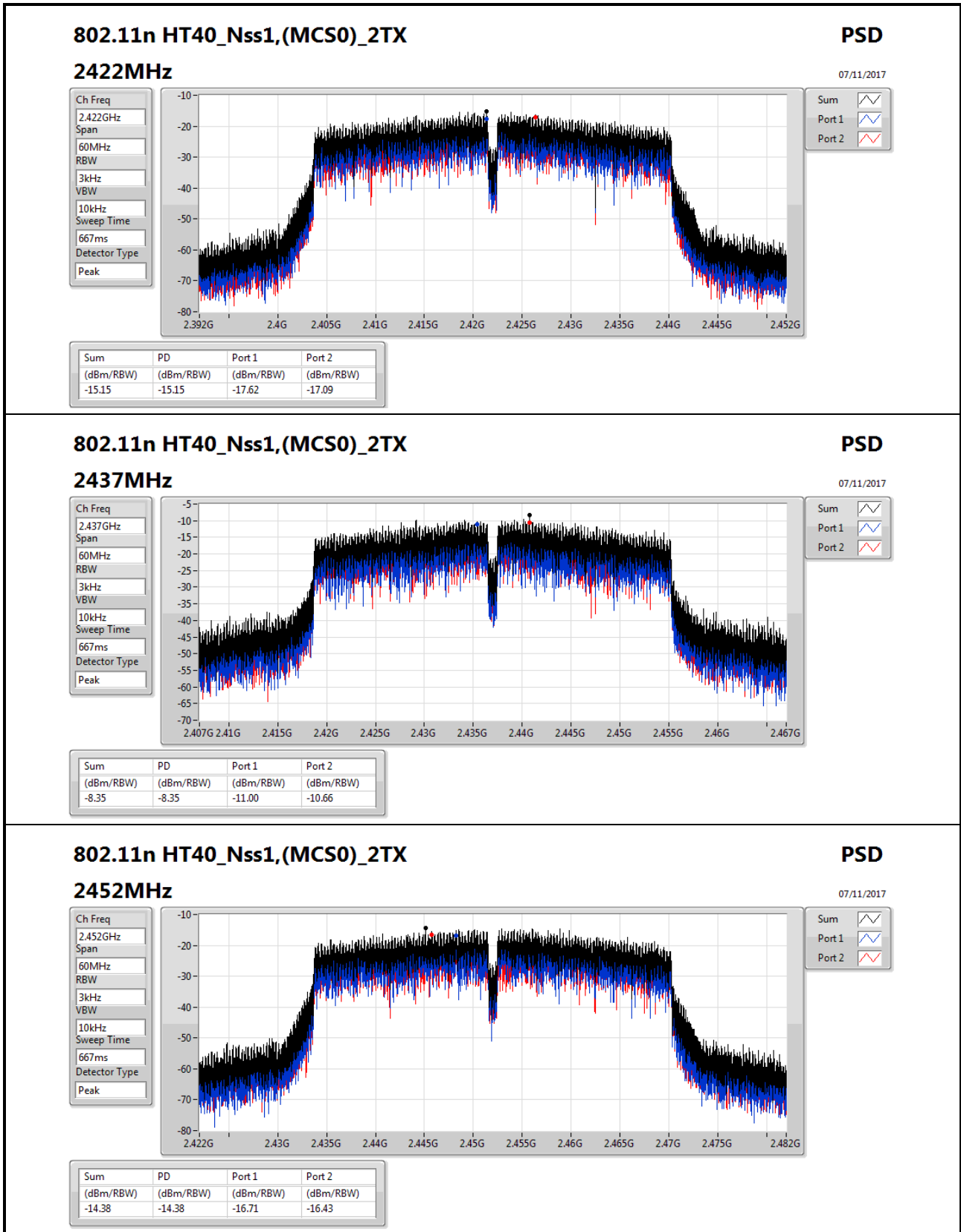
DG = Directional Gain; RBW=3kHz;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;









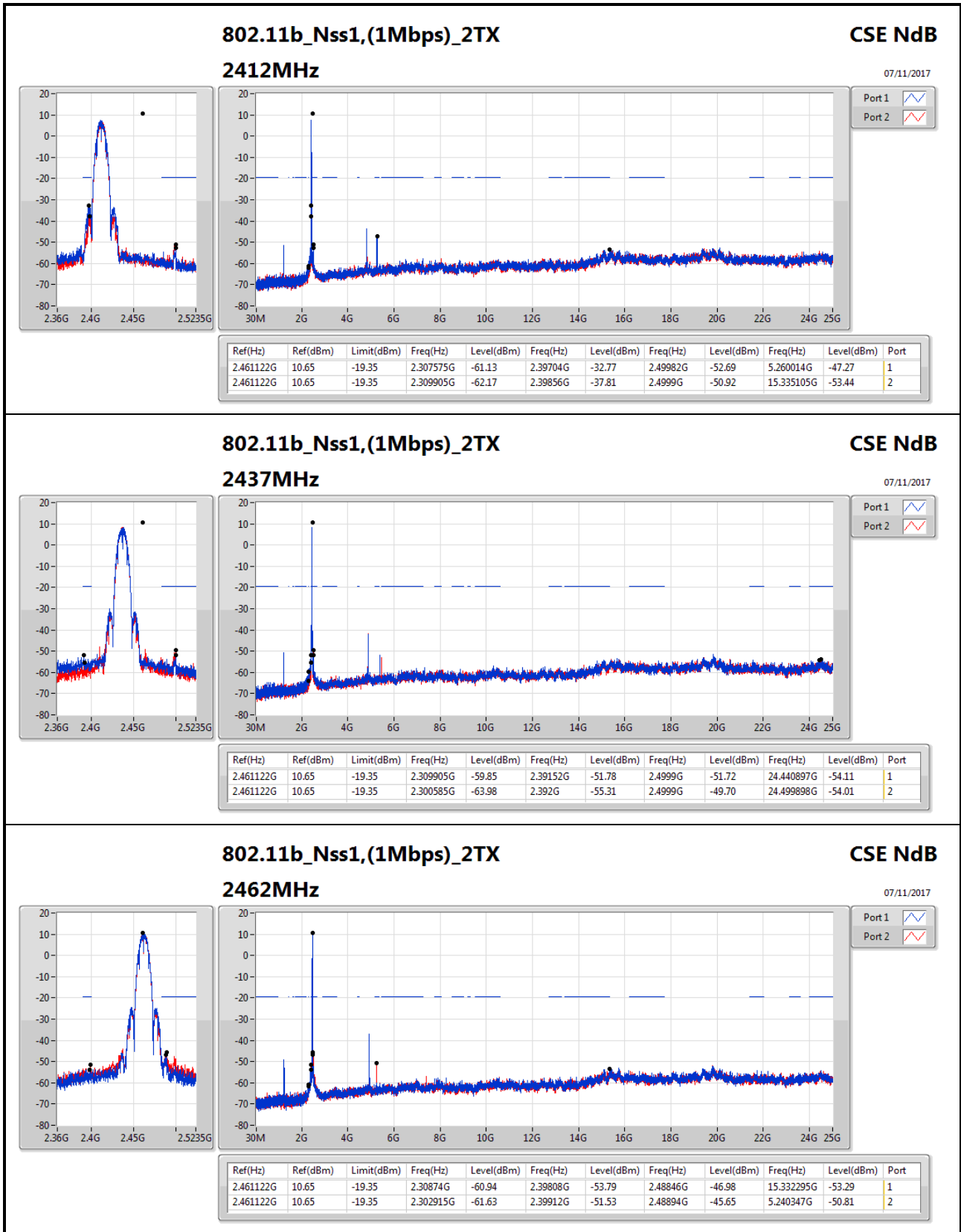


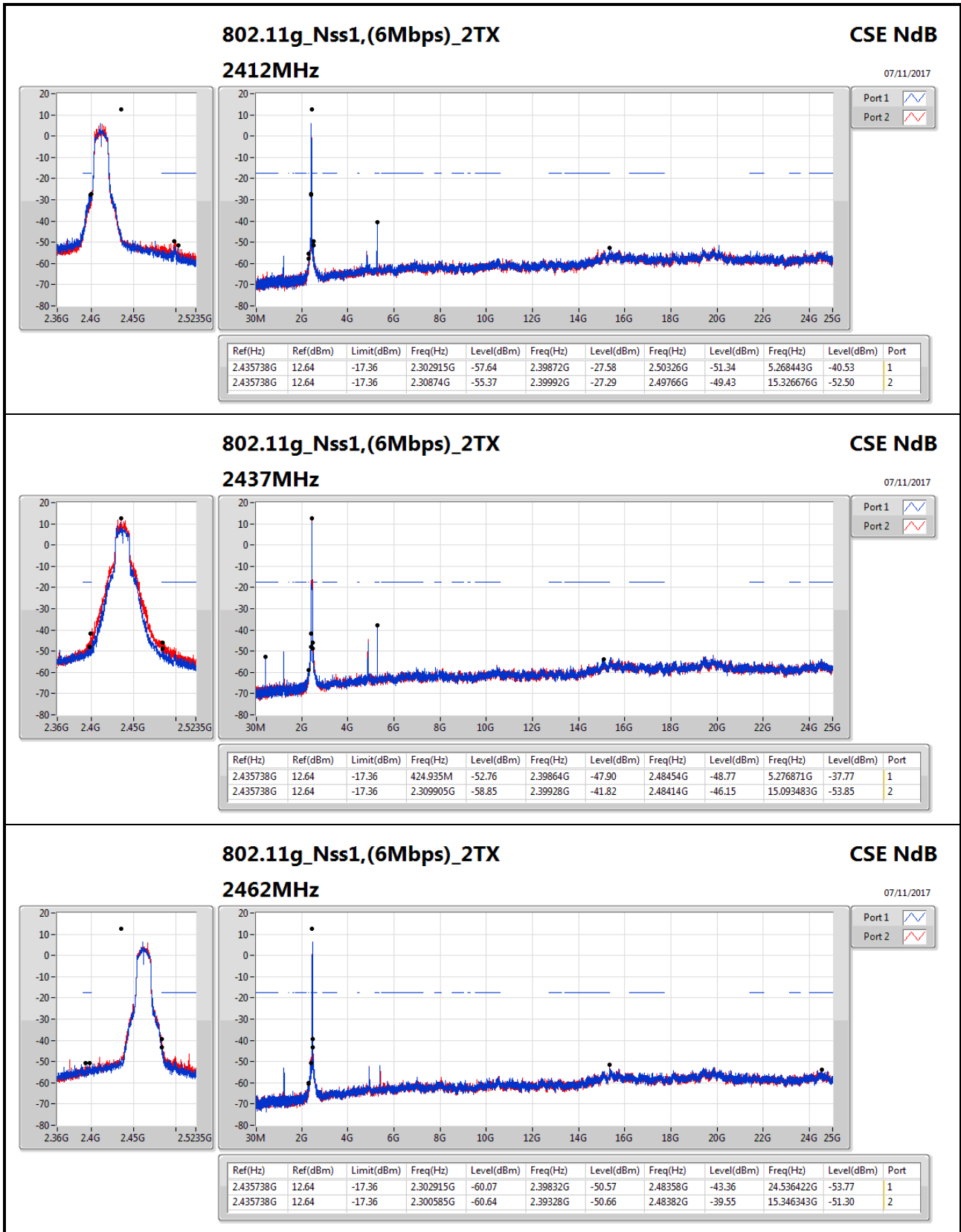
Summary

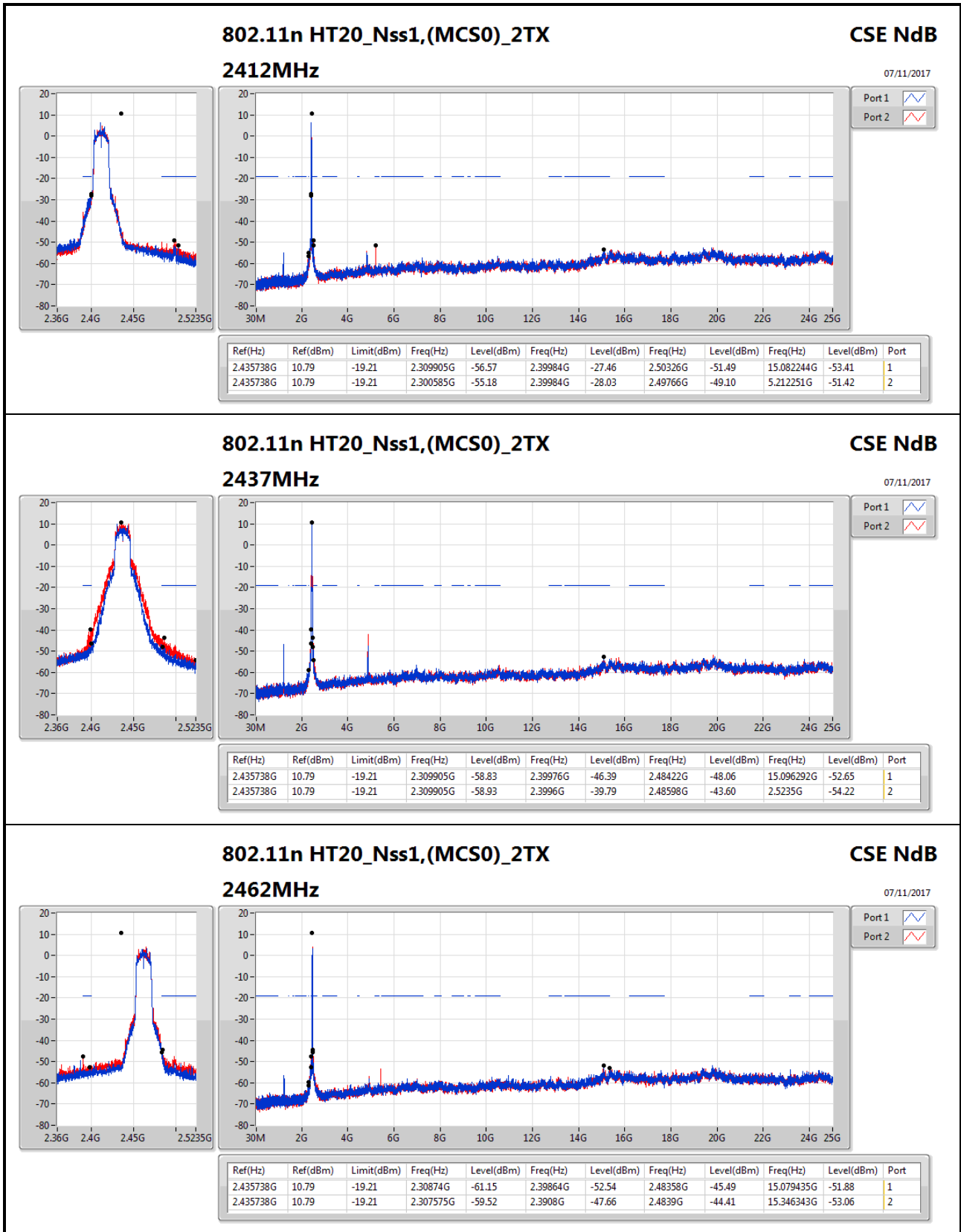
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.461122G	10.65	-19.35	2.307575G	-61.13	2.39704G	-32.77	2.49982G	-52.69	5.260014G	-47.27	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.435738G	12.64	-17.36	2.30874G	-55.37	2.39992G	-27.29	2.49766G	-49.43	15.326676G	-52.50	2
802.11n HT20_Nss1,(MCS0)_2TX	Pass	2.435738G	10.79	-19.21	2.309905G	-56.57	2.39984G	-27.46	2.50326G	-51.49	15.082244G	-53.41	1
802.11n HT40_Nss1,(MCS0)_2TX	Pass	2.434402G	5.43	-24.57	2.30168G	-58.83	2.39968G	-32.04	2.5019G	-46.48	24.441892G	-53.19	1

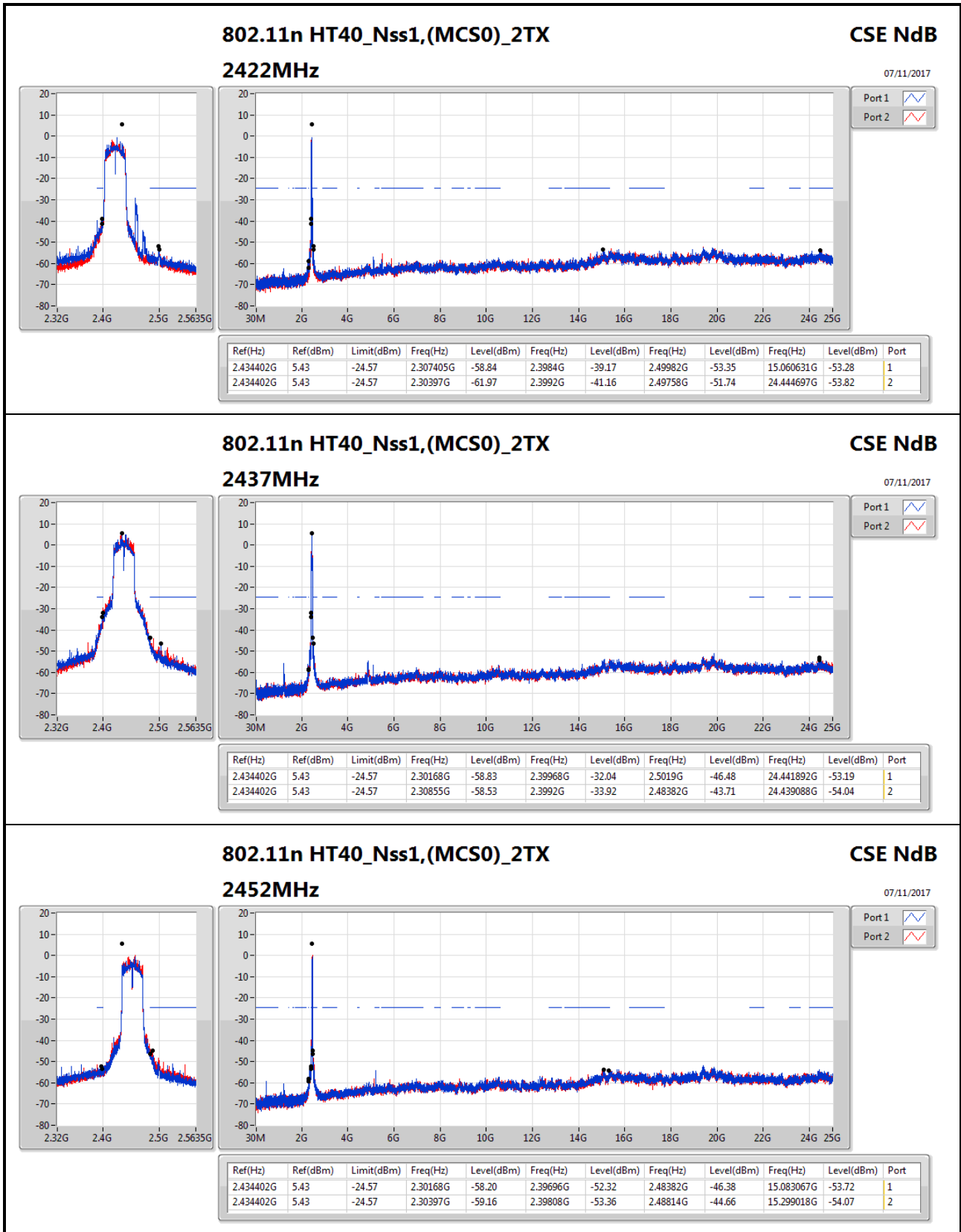
Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.461122G	10.65	-19.35	2.307575G	-61.13	2.39704G	-32.77	2.49982G	-52.69	5.260014G	-47.27	1
2412MHz	Pass	2.461122G	10.65	-19.35	2.309905G	-62.17	2.39856G	-37.81	2.4999G	-50.92	15.335105G	-53.44	2
2437MHz	Pass	2.461122G	10.65	-19.35	2.309905G	-59.85	2.39152G	-51.78	2.4999G	-51.72	24.440897G	-54.11	1
2437MHz	Pass	2.461122G	10.65	-19.35	2.300585G	-63.98	2.392G	-55.31	2.4999G	-49.70	24.499898G	-54.01	2
2462MHz	Pass	2.461122G	10.65	-19.35	2.30874G	-60.94	2.39808G	-53.79	2.48846G	-46.98	15.332295G	-53.29	1
2462MHz	Pass	2.461122G	10.65	-19.35	2.302915G	-61.63	2.39912G	-51.53	2.48894G	-45.65	5.240347G	-50.81	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435738G	12.64	-17.36	2.302915G	-57.64	2.39872G	-27.58	2.50326G	-51.34	5.268443G	-40.53	1
2412MHz	Pass	2.435738G	12.64	-17.36	2.30874G	-55.37	2.39992G	-27.29	2.49766G	-49.43	15.326676G	-52.50	2
2437MHz	Pass	2.435738G	12.64	-17.36	424.935M	-52.76	2.39864G	-47.90	2.48454G	-48.77	5.276871G	-37.77	1
2437MHz	Pass	2.435738G	12.64	-17.36	2.309905G	-58.85	2.39928G	-41.82	2.48414G	-46.15	15.093483G	-53.85	2
2462MHz	Pass	2.435738G	12.64	-17.36	2.302915G	-60.07	2.39832G	-50.57	2.48358G	-43.36	24.536422G	-53.77	1
2462MHz	Pass	2.435738G	12.64	-17.36	2.300585G	-60.64	2.39328G	-50.66	2.48382G	-39.55	15.346343G	-51.30	2
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435738G	10.79	-19.21	2.309905G	-56.57	2.39984G	-27.46	2.50326G	-51.49	15.082244G	-53.41	1
2412MHz	Pass	2.435738G	10.79	-19.21	2.300585G	-55.18	2.39984G	-28.03	2.49766G	-49.10	5.212251G	-51.42	2
2437MHz	Pass	2.435738G	10.79	-19.21	2.309905G	-58.83	2.39976G	-46.39	2.48422G	-48.06	15.096292G	-52.65	1
2437MHz	Pass	2.435738G	10.79	-19.21	2.309905G	-58.93	2.3996G	-39.79	2.48598G	-43.60	2.5235G	-54.22	2
2462MHz	Pass	2.435738G	10.79	-19.21	2.30874G	-61.15	2.39864G	-52.54	2.48358G	-45.49	15.079435G	-51.88	1
2462MHz	Pass	2.435738G	10.79	-19.21	2.307575G	-59.52	2.3908G	-47.66	2.4839G	-44.41	15.346343G	-53.06	2
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.434402G	5.43	-24.57	2.307405G	-58.84	2.3984G	-39.17	2.49982G	-53.35	15.060631G	-53.28	1
2422MHz	Pass	2.434402G	5.43	-24.57	2.30397G	-61.97	2.3992G	-41.16	2.49758G	-51.74	24.444697G	-53.82	2
2437MHz	Pass	2.434402G	5.43	-24.57	2.30168G	-58.83	2.39968G	-32.04	2.5019G	-46.48	24.441892G	-53.19	1
2437MHz	Pass	2.434402G	5.43	-24.57	2.30855G	-58.53	2.3992G	-33.92	2.48382G	-43.71	24.439088G	-54.04	2
2452MHz	Pass	2.434402G	5.43	-24.57	2.30168G	-58.20	2.39696G	-52.32	2.48382G	-46.38	15.083067G	-53.72	1
2452MHz	Pass	2.434402G	5.43	-24.57	2.30397G	-59.16	2.39808G	-53.36	2.48814G	-44.66	15.299018G	-54.07	2











Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11n HT40_Nss1,(MCS0)_2TX	Pass	QP	30M	37.75	40.00	-2.25	-4.45	3	Vertical	194	1.00	-



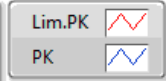
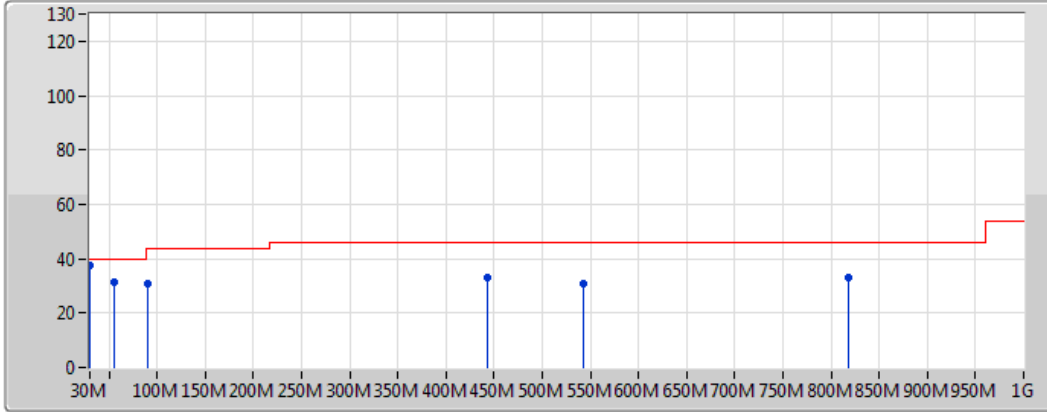
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	31.94M	35.26	40.00	-4.74	-5.36	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	192.96M	30.33	43.50	-13.17	-10.88	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	260.86M	32.48	46.00	-13.52	-5.68	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	499.48M	29.18	46.00	-16.82	-2.45	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	773.02M	33.39	46.00	-12.61	1.12	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	875.84M	33.65	46.00	-12.35	2.30	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	55.22M	31.19	40.00	-8.81	-14.77	3	Vertical	360	1.00	-
2437MHz	Pass	PK	90.14M	30.99	43.50	-12.51	-12.35	3	Vertical	360	1.00	-
2437MHz	Pass	PK	443.22M	32.79	46.00	-13.21	-3.04	3	Vertical	360	1.00	-
2437MHz	Pass	PK	542.16M	30.77	46.00	-15.23	-1.27	3	Vertical	360	1.00	-
2437MHz	Pass	PK	817.64M	32.97	46.00	-13.03	1.52	3	Vertical	360	1.00	-
2437MHz	Pass	QP	30M	37.75	40.00	-2.25	-4.45	3	Vertical	194	1.00	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_PoE

23/03/2018

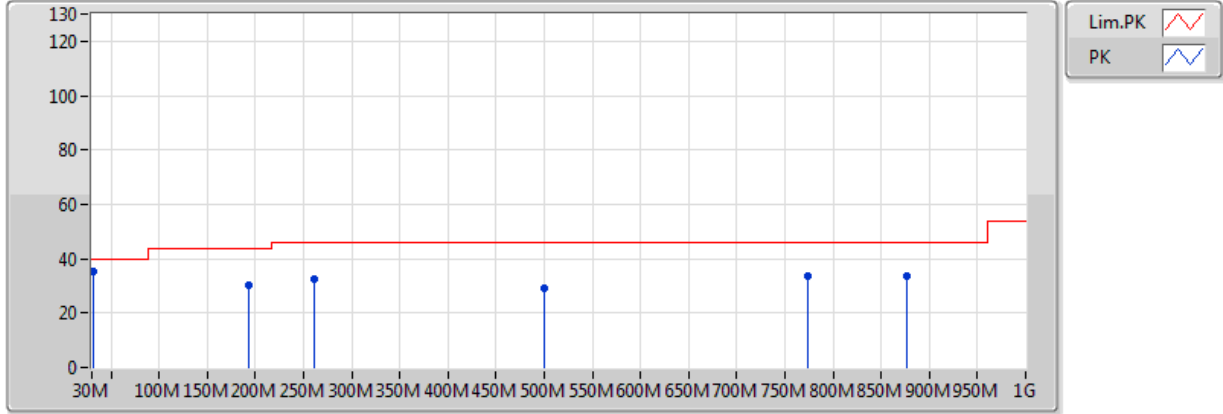


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
QP	30M	37.75	40.00	-2.25	-4.45	3	Vertical	194	1.00	-	42.20	23.11	0.29	27.85
PK	55.22M	31.19	40.00	-8.81	-14.77	3	Vertical	360	1.00	-	45.96	11.92	0.89	27.58
PK	90.14M	30.99	43.50	-12.51	-12.35	3	Vertical	360	1.00	-	43.34	14.02	1.39	27.76
PK	443.22M	32.79	46.00	-13.21	-3.04	3	Vertical	360	1.00	-	35.83	21.92	3.22	28.19
PK	542.16M	30.77	46.00	-15.23	-1.27	3	Vertical	360	1.00	-	32.04	23.71	3.54	28.52
PK	817.64M	32.97	46.00	-13.03	1.52	3	Vertical	360	1.00	-	31.45	25.32	4.20	28.00

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_PoE

23/03/2018



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	31.94M	35.26	40.00	-4.74	-5.36	3	Horizontal	0	1.00	-	40.62	22.11	0.36	27.83
PK	192.96M	30.33	43.50	-13.17	-10.88	3	Horizontal	0	1.00	-	41.21	14.32	2.27	27.47
PK	260.86M	32.48	46.00	-13.52	-5.68	3	Horizontal	0	1.00	-	38.16	18.86	2.76	27.30
PK	499.48M	29.18	46.00	-16.82	-2.45	3	Horizontal	0	1.00	-	31.63	22.72	3.31	28.49
PK	773.02M	33.39	46.00	-12.61	1.12	3	Horizontal	0	1.00	-	32.27	25.13	4.14	28.15
PK	875.84M	33.65	46.00	-12.35	2.30	3	Horizontal	0	1.00	-	31.35	25.76	4.30	27.76



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	AV	2.4992G	48.59	54.00	-5.41	30.85	3	Vertical	243	2.92	-
802.11g_Nss1,(6Mbps)_2TX	Pass	AV	2.4836G	50.86	54.00	-3.14	30.79	3	Horizontal	271	2.63	-
802.11n HT20_Nss1,(MCS0)_2TX	Pass	AV	2.483502G	50.68	54.00	-3.32	30.79	3	Horizontal	267	2.42	-
802.11n HT40_Nss1,(MCS0)_2TX	Pass	AV	2.4838G	50.09	54.00	-3.91	30.79	3	Horizontal	268	3.12	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3898G	46.53	54.00	-7.47	30.45	3	Horizontal	217	2.39	-
2412MHz	Pass	AV	2.4128G	104.35	Inf	-Inf	30.54	3	Horizontal	217	2.39	-
2412MHz	Pass	PK	2.3876G	58.52	74.00	-15.48	30.45	3	Horizontal	217	2.39	-
2412MHz	Pass	PK	2.413G	106.37	Inf	-Inf	30.54	3	Horizontal	217	2.39	-
2412MHz	Pass	AV	2.3788G	46.17	54.00	-7.83	30.41	3	Vertical	246	2.42	-
2412MHz	Pass	AV	2.4128G	100.96	Inf	-Inf	30.54	3	Vertical	246	2.42	-
2412MHz	Pass	PK	2.3788G	58.40	74.00	-15.60	30.41	3	Vertical	246	2.42	-
2412MHz	Pass	PK	2.413G	103.08	Inf	-Inf	30.54	3	Vertical	246	2.42	-
2412MHz	Pass	AV	4.82406G	33.23	54.00	-20.77	5.90	3	Horizontal	141	3.16	-
2412MHz	Pass	PK	4.81062G	44.75	74.00	-29.25	5.86	3	Horizontal	141	3.16	-
2412MHz	Pass	AV	4.82406G	34.65	54.00	-19.35	5.90	3	Vertical	160	2.30	-
2412MHz	Pass	PK	4.82394G	45.00	74.00	-29.00	5.90	3	Vertical	160	2.30	-
2437MHz	Pass	AV	2.3894G	46.25	54.00	-7.75	30.45	3	Horizontal	215	2.58	-
2437MHz	Pass	AV	2.4378G	105.63	Inf	-Inf	30.63	3	Horizontal	215	2.58	-
2437MHz	Pass	AV	2.499G	48.09	54.00	-5.91	30.85	3	Horizontal	215	2.58	-
2437MHz	Pass	PK	2.3822G	58.14	74.00	-15.86	30.42	3	Horizontal	215	2.58	-
2437MHz	Pass	PK	2.4378G	107.81	Inf	-Inf	30.63	3	Horizontal	215	2.58	-
2437MHz	Pass	PK	2.4954G	58.48	74.00	-15.52	30.84	3	Horizontal	215	2.58	-
2437MHz	Pass	AV	2.3866G	46.22	54.00	-7.78	30.45	3	Vertical	240	3.08	-
2437MHz	Pass	AV	2.4378G	103.08	Inf	-Inf	30.63	3	Vertical	240	3.08	-
2437MHz	Pass	AV	2.4982G	48.35	54.00	-5.65	30.85	3	Vertical	240	3.08	-
2437MHz	Pass	PK	2.3738G	58.20	74.00	-15.80	30.40	3	Vertical	240	3.08	-
2437MHz	Pass	PK	2.4378G	105.10	Inf	-Inf	30.63	3	Vertical	240	3.08	-
2437MHz	Pass	PK	2.499G	59.39	74.00	-14.61	30.85	3	Vertical	240	3.08	-
2437MHz	Pass	AV	4.87406G	33.42	54.00	-20.58	6.01	3	Horizontal	147	1.89	-
2437MHz	Pass	PK	4.86002G	44.91	74.00	-29.09	5.98	3	Horizontal	147	1.89	-
2437MHz	Pass	AV	4.874G	34.90	54.00	-19.10	6.01	3	Vertical	157	2.39	-
2437MHz	Pass	PK	4.874G	45.12	74.00	-28.88	6.01	3	Vertical	157	2.39	-
2462MHz	Pass	AV	2.4612G	106.44	Inf	-Inf	30.71	3	Horizontal	223	2.31	-
2462MHz	Pass	AV	2.498G	48.34	54.00	-5.66	30.84	3	Horizontal	223	2.31	-
2462MHz	Pass	PK	2.4612G	108.54	Inf	-Inf	30.71	3	Horizontal	223	2.31	-
2462MHz	Pass	PK	2.488G	59.69	74.00	-14.31	30.81	3	Horizontal	223	2.31	-
2462MHz	Pass	AV	2.4612G	104.47	Inf	-Inf	30.71	3	Vertical	243	2.92	-
2462MHz	Pass	AV	2.4992G	48.59	54.00	-5.41	30.85	3	Vertical	243	2.92	-
2462MHz	Pass	PK	2.4612G	106.51	Inf	-Inf	30.71	3	Vertical	243	2.92	-
2462MHz	Pass	PK	2.4982G	59.97	74.00	-14.03	30.85	3	Vertical	243	2.92	-
2462MHz	Pass	AV	4.92406G	35.03	54.00	-18.97	6.13	3	Horizontal	28	1.01	-
2462MHz	Pass	PK	4.92424G	45.20	74.00	-28.80	6.13	3	Horizontal	28	1.01	-
2462MHz	Pass	AV	4.92412G	36.99	54.00	-17.01	6.13	3	Vertical	266	2.25	-
2462MHz	Pass	PK	4.92418G	46.43	74.00	-27.57	6.13	3	Vertical	266	2.25	-
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3898G	47.79	54.00	-6.21	30.45	3	Horizontal	205	2.67	-
2412MHz	Pass	AV	2.4128G	100.37	Inf	-Inf	30.54	3	Horizontal	205	2.67	-
2412MHz	Pass	PK	2.388G	58.97	74.00	-15.03	30.45	3	Horizontal	205	2.67	-
2412MHz	Pass	PK	2.4132G	107.67	Inf	-Inf	30.54	3	Horizontal	205	2.67	-
2412MHz	Pass	AV	2.38998G	48.25	54.00	-5.75	30.45	3	Vertical	358	3.19	-
2412MHz	Pass	AV	2.41G	97.17	Inf	-Inf	30.53	3	Vertical	358	3.19	-



RSE TX above 1GHz Result

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2412MHz	Pass	PK	2.3896G	59.17	74.00	-14.83	30.45	3	Vertical	358	3.19	-
2412MHz	Pass	PK	2.41G	104.94	Inf	-Inf	30.53	3	Vertical	358	3.19	-
2412MHz	Pass	AV	4.80936G	33.36	54.00	-20.64	5.86	3	Horizontal	0	1.50	-
2412MHz	Pass	PK	4.82292G	44.60	74.00	-29.40	5.89	3	Horizontal	0	1.50	-
2412MHz	Pass	AV	4.81218G	33.44	54.00	-20.56	5.87	3	Vertical	360	1.50	-
2412MHz	Pass	PK	4.82568G	45.29	74.00	-28.71	5.90	3	Vertical	360	1.50	-
2437MHz	Pass	AV	2.371G	48.15	54.00	-5.85	30.38	3	Horizontal	215	2.39	-
2437MHz	Pass	AV	2.4378G	103.76	Inf	-Inf	30.63	3	Horizontal	215	2.39	-
2437MHz	Pass	AV	2.4854G	49.03	54.00	-4.97	30.80	3	Horizontal	215	2.39	-
2437MHz	Pass	PK	2.379G	60.07	74.00	-13.93	30.42	3	Horizontal	215	2.39	-
2437MHz	Pass	PK	2.4378G	110.84	Inf	-Inf	30.63	3	Horizontal	215	2.39	-
2437MHz	Pass	PK	2.4978G	60.02	74.00	-13.98	30.84	3	Horizontal	215	2.39	-
2437MHz	Pass	AV	2.3842G	47.73	54.00	-6.27	30.44	3	Vertical	4	3.07	-
2437MHz	Pass	AV	2.435G	101.97	Inf	-Inf	30.62	3	Vertical	4	3.07	-
2437MHz	Pass	AV	2.4846G	48.55	54.00	-5.45	30.79	3	Vertical	4	3.07	-
2437MHz	Pass	PK	2.3434G	58.52	74.00	-15.48	30.29	3	Vertical	4	3.07	-
2437MHz	Pass	PK	2.435G	109.94	Inf	-Inf	30.62	3	Vertical	4	3.07	-
2437MHz	Pass	PK	2.4858G	59.74	74.00	-14.26	30.80	3	Vertical	4	3.07	-
2437MHz	Pass	AV	4.86158G	33.09	54.00	-20.91	5.98	3	Horizontal	0	1.50	-
2437MHz	Pass	PK	4.87856G	44.58	74.00	-29.42	6.02	3	Horizontal	0	1.50	-
2437MHz	Pass	AV	4.86164G	33.20	54.00	-20.80	5.98	3	Vertical	360	1.50	-
2437MHz	Pass	PK	4.87988G	44.32	74.00	-29.68	6.02	3	Vertical	360	1.50	-
2462MHz	Pass	AV	2.4596G	101.00	Inf	-Inf	30.70	3	Horizontal	271	2.63	-
2462MHz	Pass	AV	2.4836G	50.86	54.00	-3.14	30.79	3	Horizontal	271	2.63	-
2462MHz	Pass	PK	2.4596G	109.47	Inf	-Inf	30.70	3	Horizontal	271	2.63	-
2462MHz	Pass	PK	2.4846G	64.08	74.00	-9.92	30.79	3	Horizontal	271	2.63	-
2462MHz	Pass	AV	2.463G	99.88	Inf	-Inf	30.72	3	Vertical	243	2.94	-
2462MHz	Pass	AV	2.483502G	49.89	54.00	-4.11	30.79	3	Vertical	243	2.94	-
2462MHz	Pass	PK	2.4632G	107.24	Inf	-Inf	30.72	3	Vertical	243	2.94	-
2462MHz	Pass	PK	2.483502G	60.29	74.00	-13.71	30.79	3	Vertical	243	2.94	-
2462MHz	Pass	AV	4.93762G	33.40	54.00	-20.60	6.16	3	Horizontal	133	1.50	-
2462MHz	Pass	PK	4.9258G	44.99	74.00	-29.01	6.13	3	Horizontal	133	1.50	-
2462MHz	Pass	AV	4.9384G	33.43	54.00	-20.57	6.16	3	Vertical	278	1.50	-
2462MHz	Pass	PK	4.93726G	44.56	74.00	-29.44	6.16	3	Vertical	278	1.50	-
802.11n HT20_Nss1_(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3898G	48.89	54.00	-5.11	30.45	3	Horizontal	198	2.69	-
2412MHz	Pass	AV	2.4126G	99.45	Inf	-Inf	30.54	3	Horizontal	198	2.69	-
2412MHz	Pass	PK	2.389998G	59.75	74.00	-14.25	30.45	3	Horizontal	198	2.69	-
2412MHz	Pass	PK	2.4126G	106.60	Inf	-Inf	30.54	3	Horizontal	198	2.69	-
2412MHz	Pass	AV	2.389998G	48.02	54.00	-5.98	30.45	3	Vertical	360	3.12	-
2412MHz	Pass	AV	2.4134G	96.73	Inf	-Inf	30.54	3	Vertical	360	3.12	-
2412MHz	Pass	PK	2.3884G	61.33	74.00	-12.67	30.45	3	Vertical	360	3.12	-
2412MHz	Pass	PK	2.4134G	104.56	Inf	-Inf	30.54	3	Vertical	360	3.12	-
2412MHz	Pass	AV	4.8105G	33.69	54.00	-20.31	5.86	3	Horizontal	360	1.50	-
2412MHz	Pass	PK	4.81146G	44.68	74.00	-29.32	5.87	3	Horizontal	360	1.50	-
2412MHz	Pass	AV	4.81146G	33.56	54.00	-20.44	5.87	3	Vertical	0	1.50	-
2412MHz	Pass	PK	4.81554G	45.34	74.00	-28.66	5.88	3	Vertical	0	1.50	-
2437MHz	Pass	AV	2.3886G	48.24	54.00	-5.76	30.45	3	Horizontal	267	2.71	-
2437MHz	Pass	AV	2.4382G	103.01	Inf	-Inf	30.63	3	Horizontal	267	2.71	-



RSE TX above 1GHz Result

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	2.4978G	49.28	54.00	-4.72	30.84	3	Horizontal	267	2.71	-
2437MHz	Pass	PK	2.3834G	59.75	74.00	-14.25	30.44	3	Horizontal	267	2.71	-
2437MHz	Pass	PK	2.4382G	110.96	Inf	-Inf	30.63	3	Horizontal	267	2.71	-
2437MHz	Pass	PK	2.4846G	60.52	74.00	-13.48	30.79	3	Horizontal	267	2.71	-
2437MHz	Pass	AV	2.3898G	46.80	54.00	-7.20	30.45	3	Vertical	240	3.08	-
2437MHz	Pass	AV	2.4374G	101.18	Inf	-Inf	30.62	3	Vertical	240	3.08	-
2437MHz	Pass	AV	2.4982G	48.83	54.00	-5.17	30.85	3	Vertical	240	3.08	-
2437MHz	Pass	PK	2.343G	57.71	74.00	-16.29	30.29	3	Vertical	240	3.08	-
2437MHz	Pass	PK	2.4378G	108.01	Inf	-Inf	30.63	3	Vertical	240	3.08	-
2437MHz	Pass	PK	2.4998G	60.33	74.00	-13.67	30.85	3	Vertical	240	3.08	-
2437MHz	Pass	AV	4.85912G	33.11	54.00	-20.89	5.98	3	Horizontal	360	1.50	-
2437MHz	Pass	PK	4.85978G	44.62	74.00	-29.38	5.98	3	Horizontal	360	1.50	-
2437MHz	Pass	AV	4.8653G	33.06	54.00	-20.94	5.99	3	Vertical	0	1.50	-
2437MHz	Pass	PK	4.8596G	44.65	74.00	-29.35	5.98	3	Vertical	0	1.50	-
2462MHz	Pass	AV	2.4606G	99.21	Inf	-Inf	30.71	3	Horizontal	267	2.42	-
2462MHz	Pass	AV	2.483502G	50.68	54.00	-3.32	30.79	3	Horizontal	267	2.42	-
2462MHz	Pass	PK	2.4604G	107.51	Inf	-Inf	30.71	3	Horizontal	267	2.42	-
2462MHz	Pass	PK	2.484G	62.75	74.00	-11.25	30.79	3	Horizontal	267	2.42	-
2462MHz	Pass	AV	2.4626G	97.21	Inf	-Inf	30.72	3	Vertical	243	2.95	-
2462MHz	Pass	AV	2.4992G	49.06	54.00	-4.94	30.85	3	Vertical	243	2.95	-
2462MHz	Pass	PK	2.46G	104.59	Inf	-Inf	30.71	3	Vertical	243	2.95	-
2462MHz	Pass	PK	2.4994G	60.51	74.00	-13.49	30.85	3	Vertical	243	2.95	-
2462MHz	Pass	AV	4.93288G	33.46	54.00	-20.54	6.15	3	Horizontal	103	1.50	-
2462MHz	Pass	PK	4.9165G	44.84	74.00	-29.16	6.11	3	Horizontal	103	1.50	-
2462MHz	Pass	AV	4.93774G	33.64	54.00	-20.36	6.16	3	Vertical	218	1.50	-
2462MHz	Pass	PK	4.93204G	44.87	74.00	-29.13	6.14	3	Vertical	218	1.50	-
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.3896G	48.88	54.00	-5.12	30.45	3	Horizontal	218	2.67	-
2422MHz	Pass	AV	2.4248G	92.55	Inf	-Inf	30.58	3	Horizontal	218	2.67	-
2422MHz	Pass	AV	2.4992G	49.06	54.00	-4.94	30.85	3	Horizontal	218	2.67	-
2422MHz	Pass	PK	2.3896G	58.61	74.00	-15.39	30.45	3	Horizontal	218	2.67	-
2422MHz	Pass	PK	2.4276G	99.40	Inf	-Inf	30.59	3	Horizontal	218	2.67	-
2422MHz	Pass	PK	2.4984G	58.91	74.00	-15.09	30.85	3	Horizontal	218	2.67	-
2422MHz	Pass	AV	2.389998G	48.02	54.00	-5.98	30.45	3	Vertical	7	3.14	-
2422MHz	Pass	AV	2.4236G	90.26	Inf	-Inf	30.57	3	Vertical	7	3.14	-
2422MHz	Pass	AV	2.4968G	48.08	54.00	-5.92	30.84	3	Vertical	7	3.14	-
2422MHz	Pass	PK	2.356G	58.32	74.00	-15.68	30.34	3	Vertical	7	3.14	-
2422MHz	Pass	PK	2.424G	97.04	Inf	-Inf	30.58	3	Vertical	7	3.14	-
2422MHz	Pass	PK	2.4988G	59.39	74.00	-14.61	30.85	3	Vertical	7	3.14	-
2422MHz	Pass	AV	4.84928G	34.82	54.00	-19.18	5.95	3	Horizontal	360	1.50	-
2422MHz	Pass	PK	4.85366G	44.95	74.00	-29.05	5.96	3	Horizontal	360	1.50	-
2422MHz	Pass	AV	4.8542G	34.21	54.00	-19.79	5.96	3	Vertical	0	1.50	-
2422MHz	Pass	PK	4.84868G	44.93	74.00	-29.07	5.95	3	Vertical	0	1.50	-
2437MHz	Pass	AV	2.3898G	49.49	54.00	-4.51	30.45	3	Horizontal	268	3.12	-
2437MHz	Pass	AV	2.4382G	98.95	Inf	-Inf	30.63	3	Horizontal	268	3.12	-
2437MHz	Pass	AV	2.4838G	50.09	54.00	-3.91	30.79	3	Horizontal	268	3.12	-
2437MHz	Pass	PK	2.3894G	60.14	74.00	-13.86	30.45	3	Horizontal	268	3.12	-
2437MHz	Pass	PK	2.4354G	106.16	Inf	-Inf	30.62	3	Horizontal	268	3.12	-
2437MHz	Pass	PK	2.4854G	60.18	74.00	-13.82	30.80	3	Horizontal	268	3.12	-



RSE TX above 1GHz Result

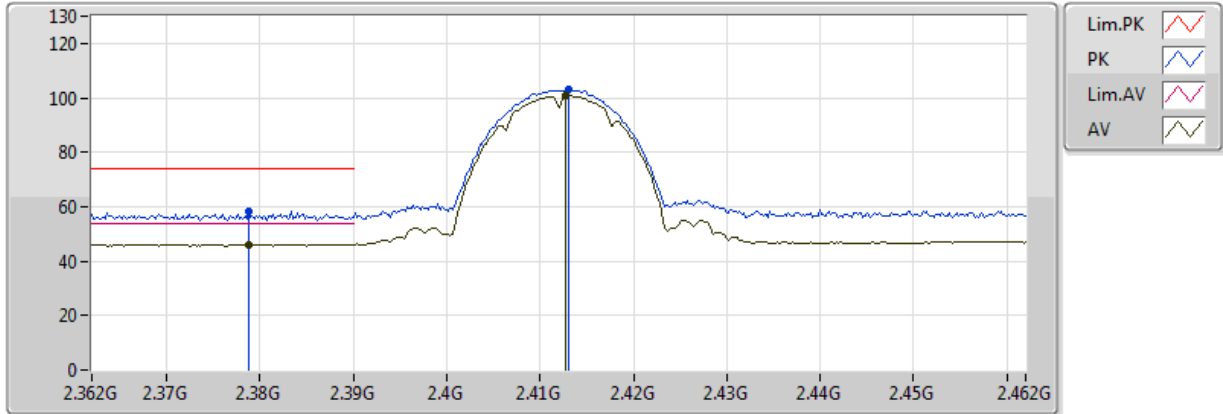
Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	2.3898G	47.55	54.00	-6.45	30.45	3	Vertical	243	3.09	-
2437MHz	Pass	AV	2.4398G	96.55	Inf	-Inf	30.63	3	Vertical	243	3.09	-
2437MHz	Pass	AV	2.4998G	49.72	54.00	-4.28	30.85	3	Vertical	243	3.09	-
2437MHz	Pass	PK	2.3574G	57.48	74.00	-16.52	30.34	3	Vertical	243	3.09	-
2437MHz	Pass	PK	2.435G	103.74	Inf	-Inf	30.62	3	Vertical	243	3.09	-
2437MHz	Pass	PK	2.4986G	59.39	74.00	-14.61	30.85	3	Vertical	243	3.09	-
2437MHz	Pass	AV	4.86194G	34.18	54.00	-19.82	5.98	3	Horizontal	216	1.50	-
2437MHz	Pass	PK	4.86194G	44.63	74.00	-29.37	5.98	3	Horizontal	216	1.50	-
2437MHz	Pass	AV	4.86788G	34.13	54.00	-19.87	6.00	3	Vertical	314	1.50	-
2437MHz	Pass	PK	4.86596G	44.79	74.00	-29.21	5.99	3	Vertical	314	1.50	-
2452MHz	Pass	AV	2.3892G	47.54	54.00	-6.46	30.45	3	Horizontal	267	2.62	-
2452MHz	Pass	AV	2.4532G	93.95	Inf	-Inf	30.68	3	Horizontal	267	2.62	-
2452MHz	Pass	AV	2.486G	49.68	54.00	-4.32	30.80	3	Horizontal	267	2.62	-
2452MHz	Pass	PK	2.3856G	58.43	74.00	-15.57	30.44	3	Horizontal	267	2.62	-
2452MHz	Pass	PK	2.4488G	101.13	Inf	-Inf	30.67	3	Horizontal	267	2.62	-
2452MHz	Pass	PK	2.486G	60.23	74.00	-13.77	30.80	3	Horizontal	267	2.62	-
2452MHz	Pass	AV	2.3832G	47.23	54.00	-6.77	30.43	3	Vertical	244	2.94	-
2452MHz	Pass	AV	2.4548G	90.73	Inf	-Inf	30.69	3	Vertical	244	2.94	-
2452MHz	Pass	AV	2.4992G	49.50	54.00	-4.50	30.85	3	Vertical	244	2.94	-
2452MHz	Pass	PK	2.3552G	57.35	74.00	-16.65	30.33	3	Vertical	244	2.94	-
2452MHz	Pass	PK	2.4548G	97.98	Inf	-Inf	30.69	3	Vertical	244	2.94	-
2452MHz	Pass	PK	2.4844G	59.28	74.00	-14.72	30.79	3	Vertical	244	2.94	-
2452MHz	Pass	AV	4.91654G	34.65	54.00	-19.35	6.11	3	Horizontal	168	1.50	-
2452MHz	Pass	PK	4.91606G	45.35	74.00	-28.65	6.11	3	Horizontal	168	1.50	-
2452MHz	Pass	AV	4.91738G	34.20	54.00	-19.80	6.11	3	Vertical	0	1.50	-
2452MHz	Pass	PK	4.91798G	44.87	74.00	-29.13	6.11	3	Vertical	0	1.50	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

17/03/2018

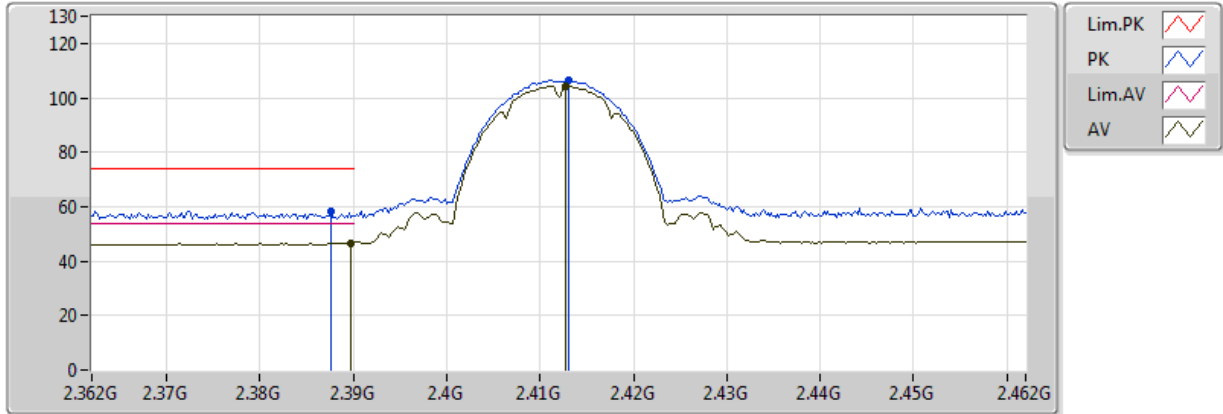


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3788G	46.17	54.00	-7.83	30.41	3	Vertical	246	2.42	-	15.76	27.18	3.23	-
AV	2.4128G	100.96	Inf	-Inf	30.54	3	Vertical	246	2.42	-	70.42	27.27	3.26	-
PK	2.3788G	58.40	74.00	-15.60	30.41	3	Vertical	246	2.42	-	27.99	27.18	3.23	-
PK	2.413G	103.08	Inf	-Inf	30.54	3	Vertical	246	2.42	-	72.54	27.27	3.26	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

17/03/2018



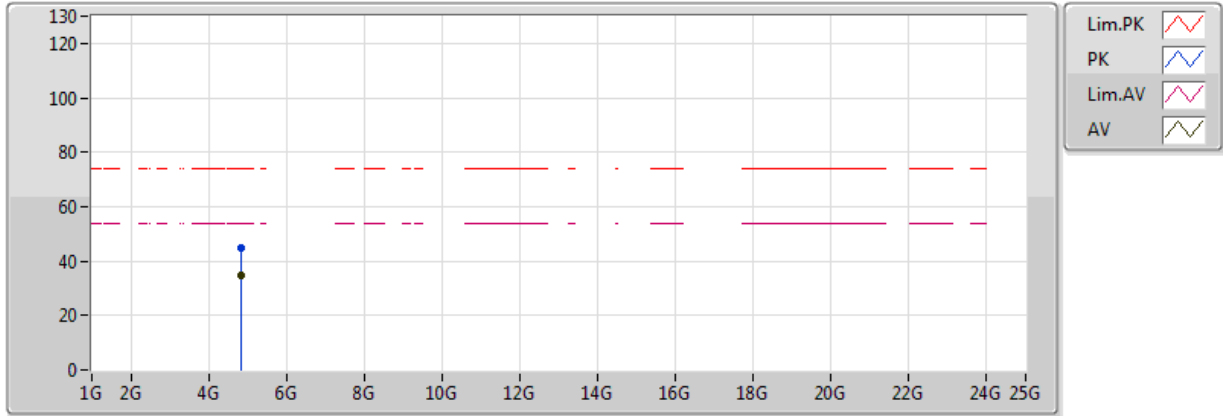
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AV	2.3898G	46.53	54.00	-7.47	30.45	3	Horizontal	217	2.39	-	16.08	27.21	3.24	-
AV	2.4128G	104.35	Inf	-Inf	30.54	3	Horizontal	217	2.39	-	73.81	27.27	3.26	-
PK	2.3876G	58.52	74.00	-15.48	30.45	3	Horizontal	217	2.39	-	28.07	27.21	3.24	-
PK	2.413G	106.37	Inf	-Inf	30.54	3	Horizontal	217	2.39	-	75.83	27.27	3.26	-



802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

17/03/2018

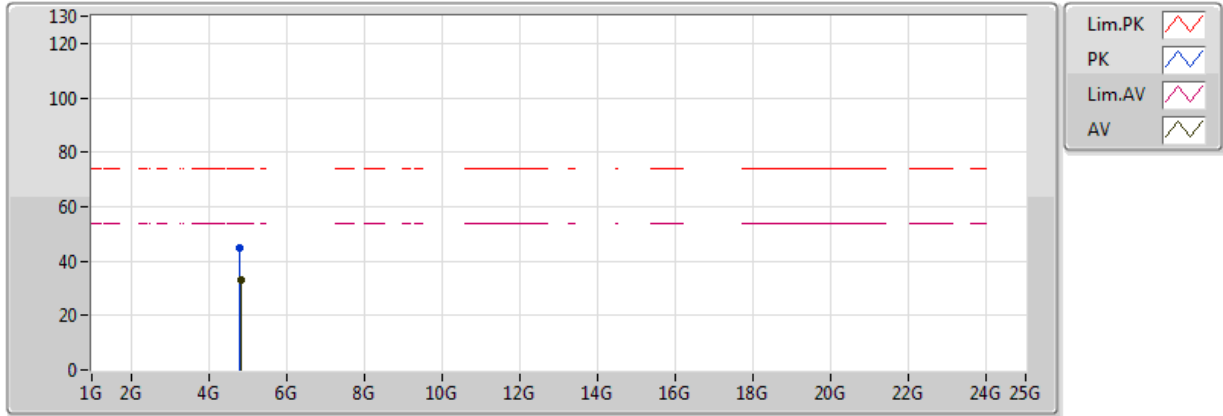


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.82406G	34.65	54.00	-19.35	5.90	3	Vertical	160	2.30	-	28.75	31.22	4.52	29.85
PK	4.82394G	45.00	74.00	-29.00	5.90	3	Vertical	160	2.30	-	39.10	31.22	4.52	29.85

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

17/03/2018

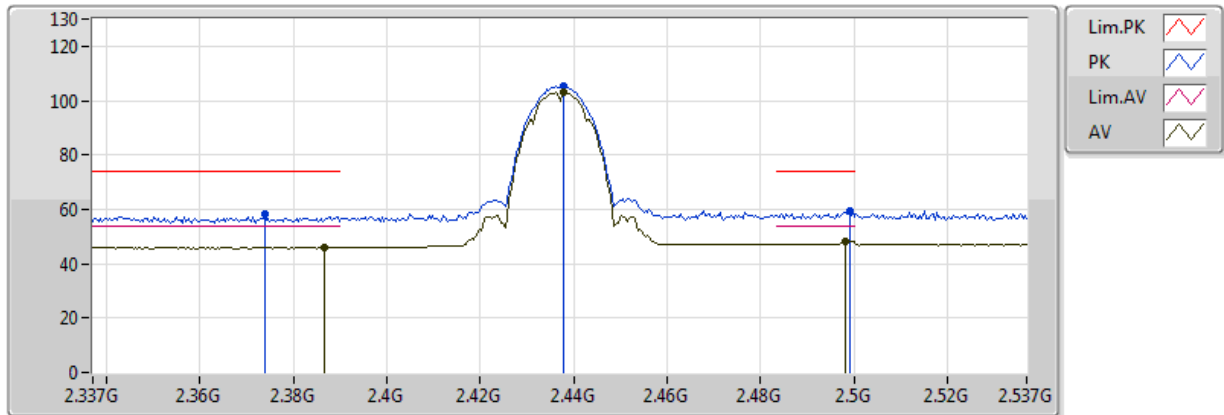


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.82406G	33.23	54.00	-20.77	5.90	3	Horizontal	141	3.16	-	27.33	31.22	4.52	29.85
PK	4.81062G	44.75	74.00	-29.25	5.86	3	Horizontal	141	3.16	-	38.89	31.20	4.52	29.85

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

17/03/2018

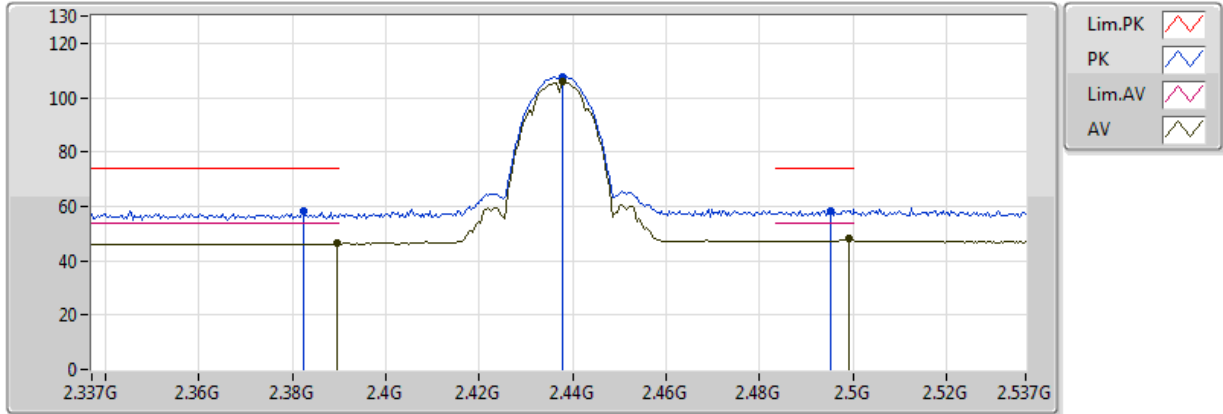


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3866G	46.22	54.00	-7.78	30.45	3	Vertical	240	3.08	-	15.77	27.21	3.24	-
AV	2.4378G	103.08	Inf	-Inf	30.63	3	Vertical	240	3.08	-	72.45	27.34	3.29	-
AV	2.4982G	48.35	54.00	-5.65	30.85	3	Vertical	240	3.08	-	17.50	27.50	3.35	-
PK	2.3738G	58.20	74.00	-15.80	30.40	3	Vertical	240	3.08	-	27.80	27.17	3.23	-
PK	2.4378G	105.10	Inf	-Inf	30.63	3	Vertical	240	3.08	-	74.47	27.34	3.29	-
PK	2.499G	59.39	74.00	-14.61	30.85	3	Vertical	240	3.08	-	28.54	27.50	3.35	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

17/03/2018



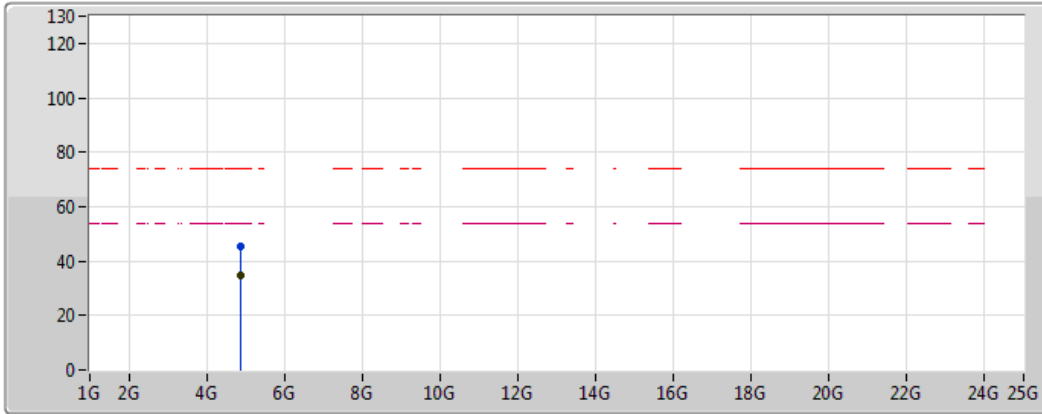
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AV	2.3894G	46.25	54.00	-7.75	30.45	3	Horizontal	215	2.58	-	15.80	27.21	3.24	-
AV	2.4378G	105.63	Inf	-Inf	30.63	3	Horizontal	215	2.58	-	75.00	27.34	3.29	-
AV	2.499G	48.09	54.00	-5.91	30.85	3	Horizontal	215	2.58	-	17.24	27.50	3.35	-
PK	2.3822G	58.14	74.00	-15.86	30.42	3	Horizontal	215	2.58	-	27.72	27.19	3.23	-
PK	2.4378G	107.81	Inf	-Inf	30.63	3	Horizontal	215	2.58	-	77.18	27.34	3.29	-
PK	2.4954G	58.48	74.00	-15.52	30.84	3	Horizontal	215	2.58	-	27.64	27.49	3.35	-



802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

17/03/2018



Lim.PK	
PK	
Lim.AV	
AV	

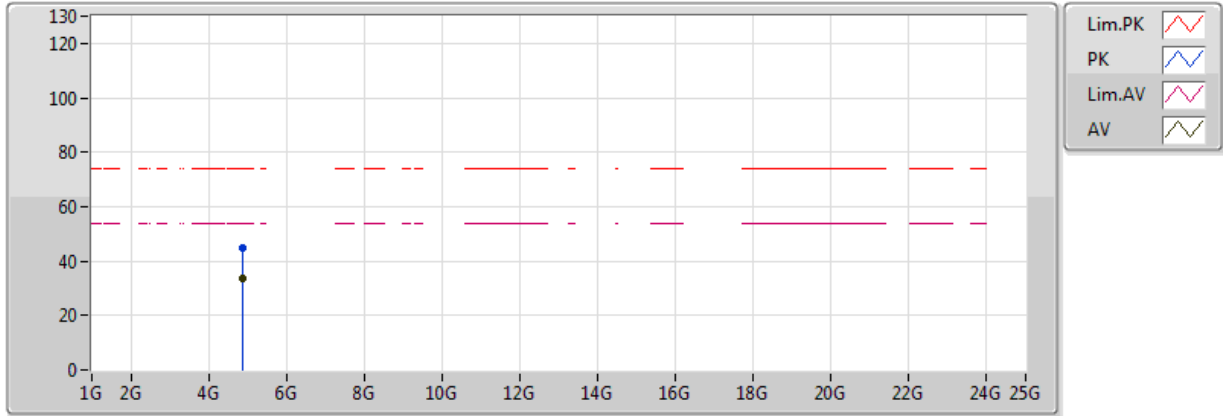
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AV	4.874G	34.90	54.00	-19.10	6.01	3	Vertical	157	2.39	-	28.89	31.30	4.55	29.84
PK	4.874G	45.12	74.00	-28.88	6.01	3	Vertical	157	2.39	-	39.11	31.30	4.55	29.84



802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

17/03/2018

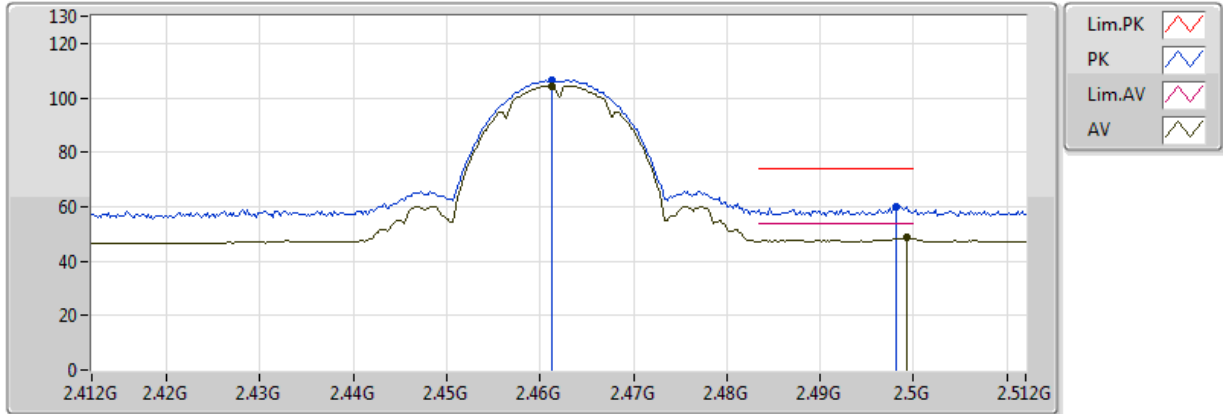


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87406G	33.42	54.00	-20.58	6.01	3	Horizontal	147	1.89	-	27.41	31.30	4.55	29.84
PK	4.86002G	44.91	74.00	-29.09	5.98	3	Horizontal	147	1.89	-	38.93	31.28	4.54	29.84

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

17/03/2018

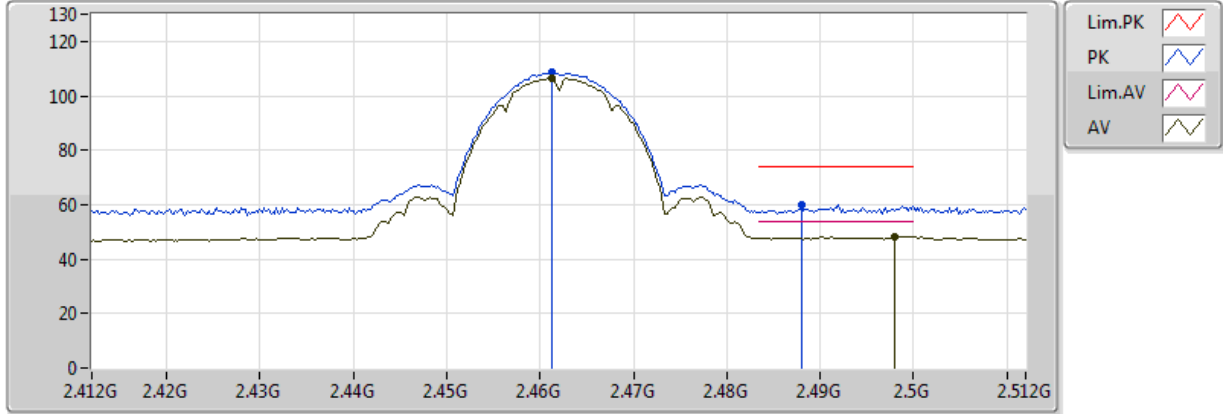


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4612G	104.47	Inf	-Inf	30.71	3	Vertical	243	2.92	-	73.76	27.40	3.31	-
AV	2.4992G	48.59	54.00	-5.41	30.85	3	Vertical	243	2.92	-	17.74	27.50	3.35	-
PK	2.4612G	106.51	Inf	-Inf	30.71	3	Vertical	243	2.92	-	75.80	27.40	3.31	-
PK	2.4982G	59.97	74.00	-14.03	30.85	3	Vertical	243	2.92	-	29.12	27.50	3.35	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

17/03/2018

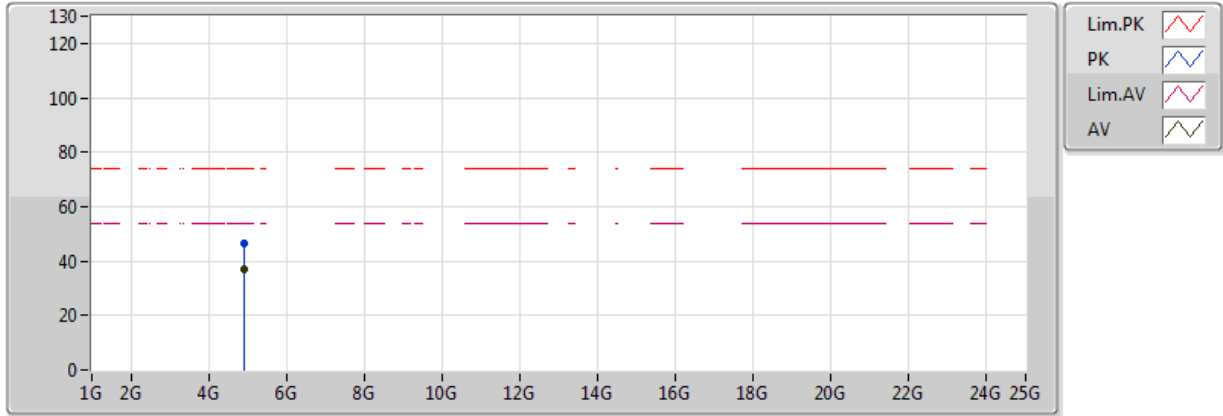


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4612G	106.44	Inf	-Inf	30.71	3	Horizontal	223	2.31	-	75.73	27.40	3.31	-
AV	2.498G	48.34	54.00	-5.66	30.84	3	Horizontal	223	2.31	-	17.50	27.49	3.35	-
PK	2.4612G	108.54	Inf	-Inf	30.71	3	Horizontal	223	2.31	-	77.83	27.40	3.31	-
PK	2.488G	59.69	74.00	-14.31	30.81	3	Horizontal	223	2.31	-	28.88	27.47	3.34	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

17/03/2018

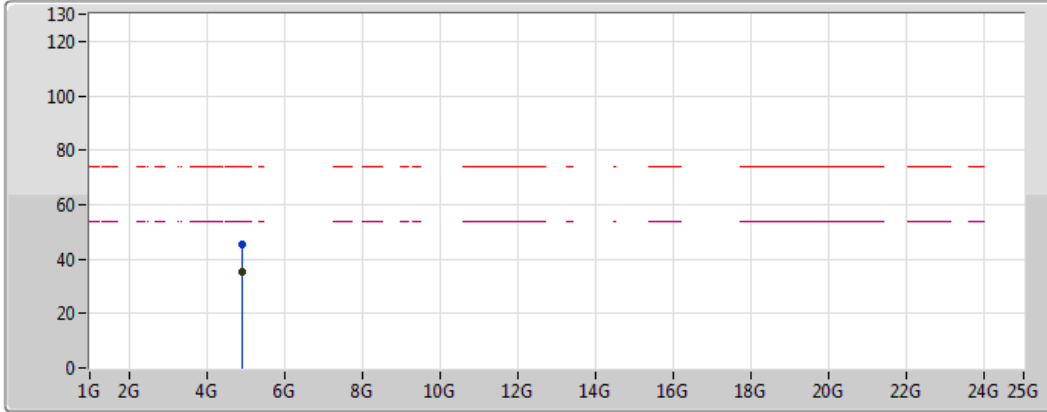






Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.92412G	36.99	54.00	-17.01	6.13	3	Vertical	266	2.25	-	30.86	31.38	4.57	29.83
PK	4.92418G	46.43	74.00	-27.57	6.13	3	Vertical	266	2.25	-	40.30	31.38	4.57	29.83

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

17/03/2018



Lim.PK	
PK	
Lim.AV	
AV	

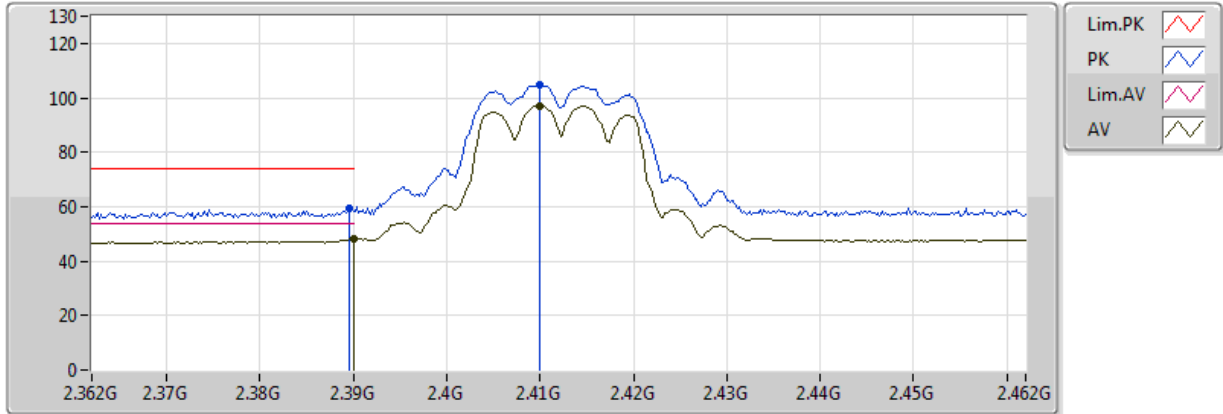
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AV	4.92406G	35.03	54.00	-18.97	6.13	3	Horizontal	28	1.01	-	28.90	31.38	4.57	29.83
PK	4.92424G	45.20	74.00	-28.80	6.13	3	Horizontal	28	1.01	-	39.07	31.38	4.57	29.83



802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

17/03/2018

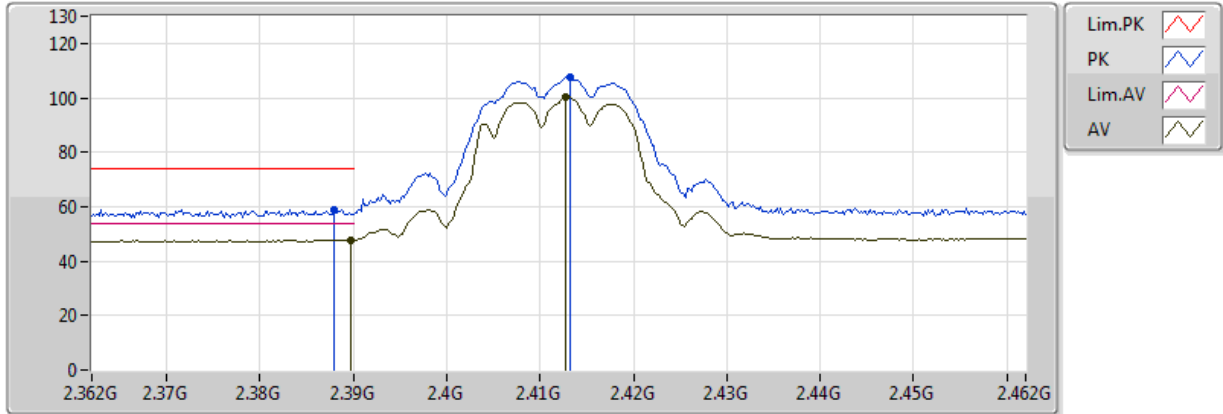


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	48.25	54.00	-5.75	30.45	3	Vertical	358	3.19	-	17.80	27.21	3.24	-
AV	2.41G	97.17	Inf	-Inf	30.53	3	Vertical	358	3.19	-	66.64	27.27	3.26	-
PK	2.3896G	59.17	74.00	-14.83	30.45	3	Vertical	358	3.19	-	28.72	27.21	3.24	-
PK	2.41G	104.94	Inf	-Inf	30.53	3	Vertical	358	3.19	-	74.41	27.27	3.26	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

17/03/2018



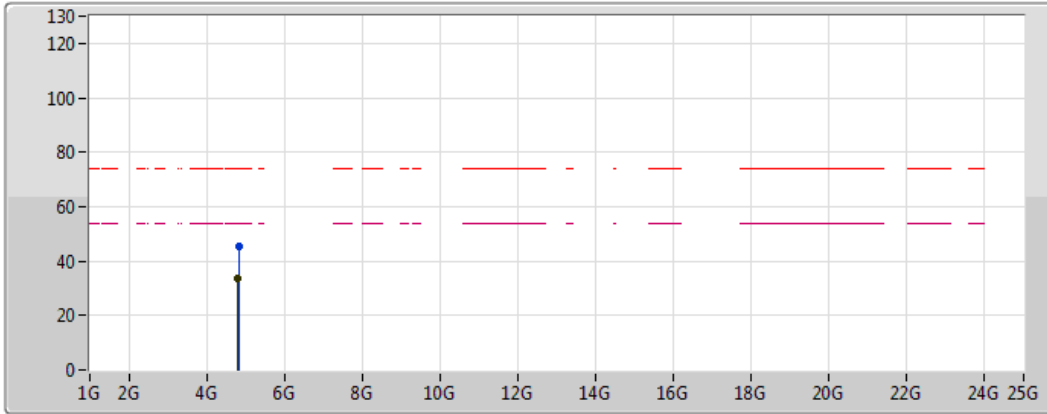
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AV	2.3898G	47.79	54.00	-6.21	30.45	3	Horizontal	205	2.67	-	17.34	27.21	3.24	-
AV	2.4128G	100.37	Inf	-Inf	30.54	3	Horizontal	205	2.67	-	69.83	27.27	3.26	-
PK	2.388G	58.97	74.00	-15.03	30.45	3	Horizontal	205	2.67	-	28.52	27.21	3.24	-
PK	2.4132G	107.67	Inf	-Inf	30.54	3	Horizontal	205	2.67	-	77.13	27.27	3.26	-



802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

17/03/2018



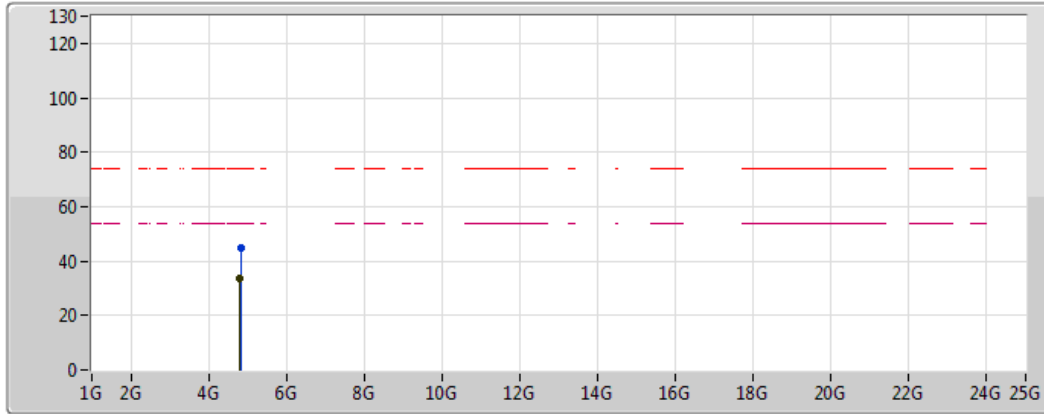
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AV	4.81218G	33.44	54.00	-20.56	5.87	3	Vertical	360	1.50	-	27.57	31.20	4.52	29.85
PK	4.82568G	45.29	74.00	-28.71	5.90	3	Vertical	360	1.50	-	39.39	31.22	4.52	29.84



802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

17/03/2018



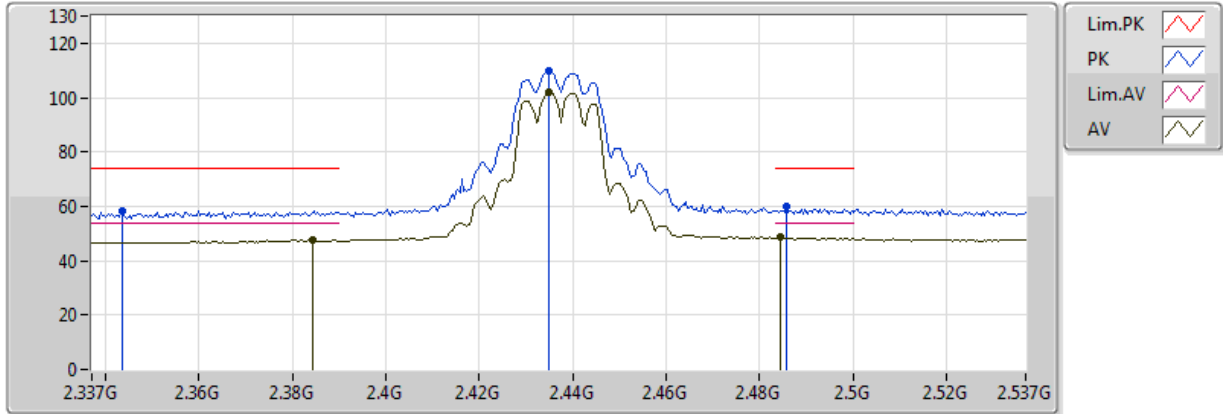
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PK	
Lim.AV	
AV	

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AV	4.80936G	33.36	54.00	-20.64	5.86	3	Horizontal	0	1.50	-	27.50	31.19	4.51	29.85
PK	4.82292G	44.60	74.00	-29.40	5.89	3	Horizontal	0	1.50	-	38.71	31.22	4.52	29.85

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

17/03/2018

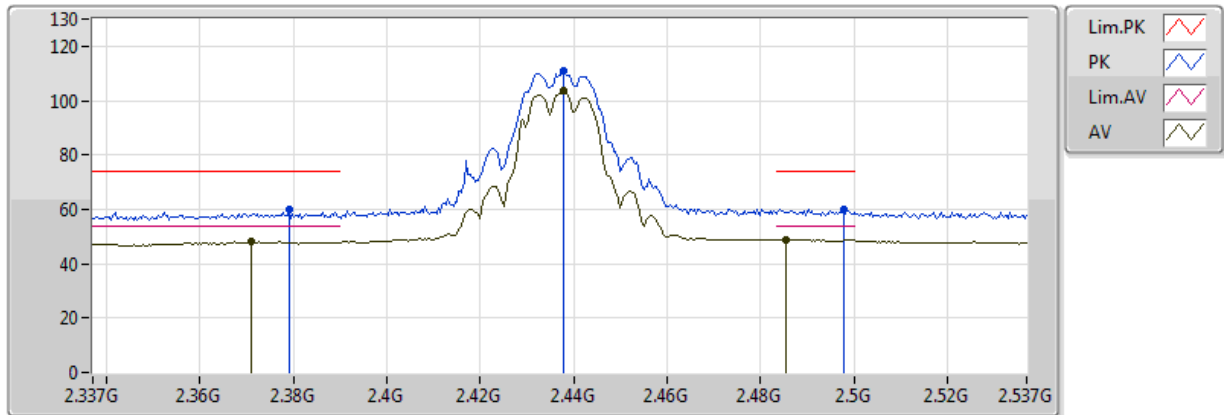


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3842G	47.73	54.00	-6.27	30.44	3	Vertical	4	3.07	-	17.29	27.20	3.24	-
AV	2.435G	101.97	Inf	-Inf	30.62	3	Vertical	4	3.07	-	71.35	27.33	3.29	-
AV	2.4846G	48.55	54.00	-5.45	30.79	3	Vertical	4	3.07	-	17.76	27.46	3.33	-
PK	2.3434G	58.52	74.00	-15.48	30.29	3	Vertical	4	3.07	-	28.23	27.09	3.20	-
PK	2.435G	109.94	Inf	-Inf	30.62	3	Vertical	4	3.07	-	79.32	27.33	3.29	-
PK	2.4858G	59.74	74.00	-14.26	30.80	3	Vertical	4	3.07	-	28.94	27.46	3.34	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

17/03/2018

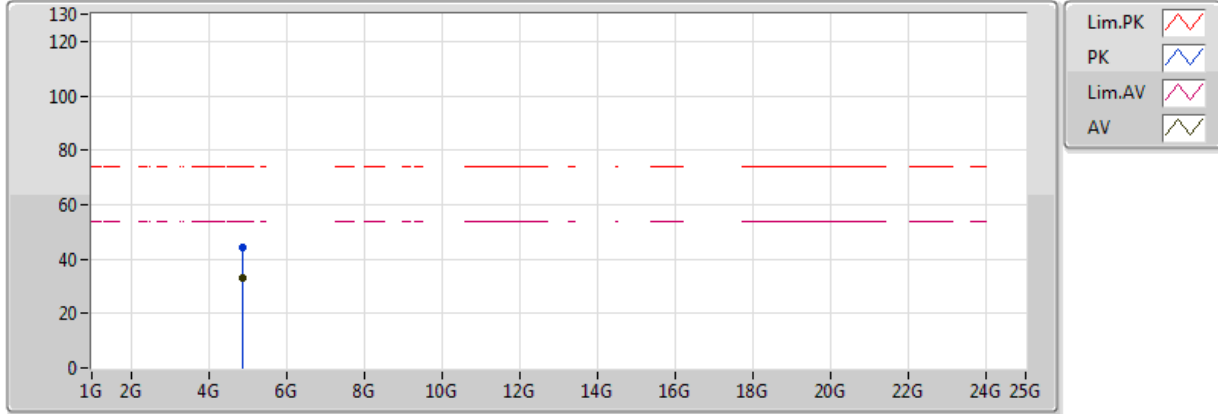


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.371G	48.15	54.00	-5.85	30.38	3	Horizontal	215	2.39	-	17.77	27.16	3.22	-
AV	2.4378G	103.76	Inf	-Inf	30.63	3	Horizontal	215	2.39	-	73.13	27.34	3.29	-
AV	2.4854G	49.03	54.00	-4.97	30.80	3	Horizontal	215	2.39	-	18.23	27.46	3.34	-
PK	2.379G	60.07	74.00	-13.93	30.42	3	Horizontal	215	2.39	-	29.65	27.19	3.23	-
PK	2.4378G	110.84	Inf	-Inf	30.63	3	Horizontal	215	2.39	-	80.21	27.34	3.29	-
PK	2.4978G	60.02	74.00	-13.98	30.84	3	Horizontal	215	2.39	-	29.18	27.49	3.35	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

17/03/2018



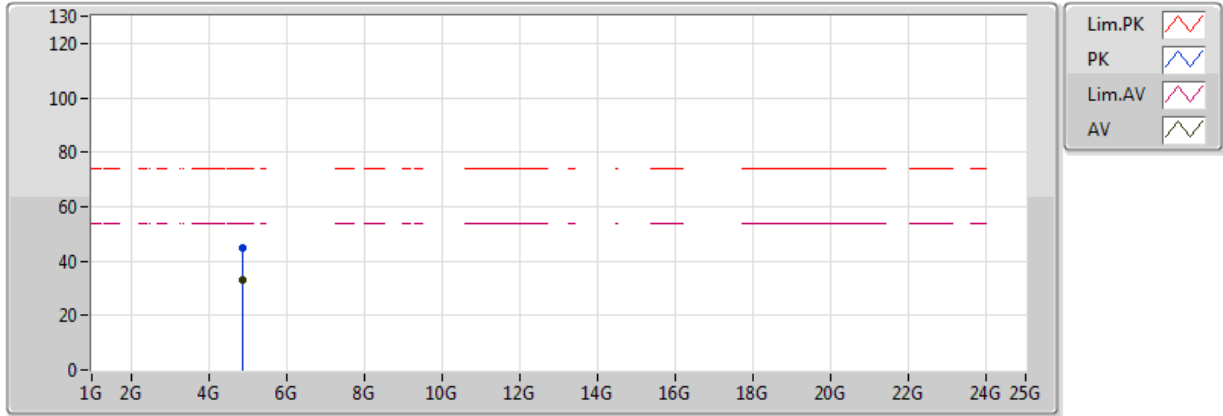
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.86164G	33.20	54.00	-20.80	5.98	3	Vertical	360	1.50	-	27.22	31.28	4.54	29.84
PK	4.87988G	44.32	74.00	-29.68	6.02	3	Vertical	360	1.50	-	38.30	31.31	4.55	29.83



802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

17/03/2018

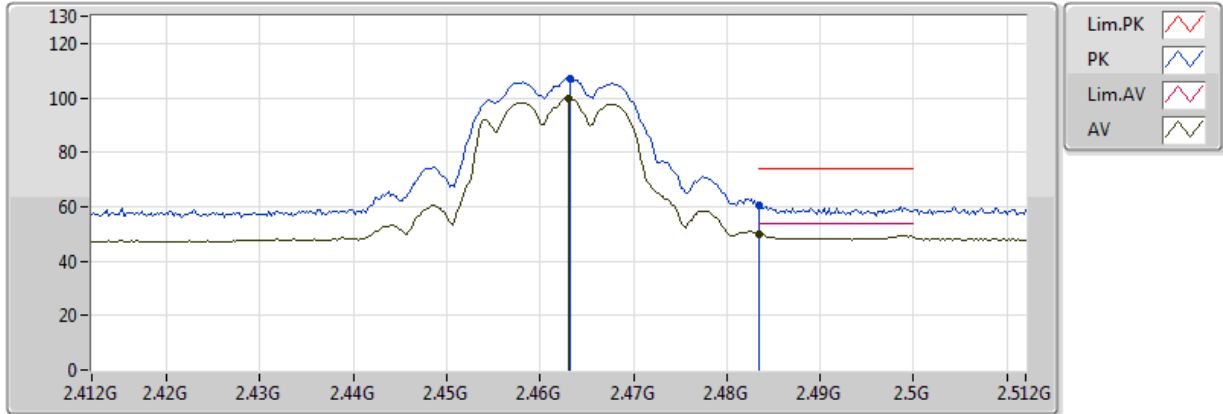


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.86158G	33.09	54.00	-20.91	5.98	3	Horizontal	0	1.50	-	27.11	31.28	4.54	29.84
PK	4.87856G	44.58	74.00	-29.42	6.02	3	Horizontal	0	1.50	-	38.56	31.31	4.55	29.83

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

17/03/2018

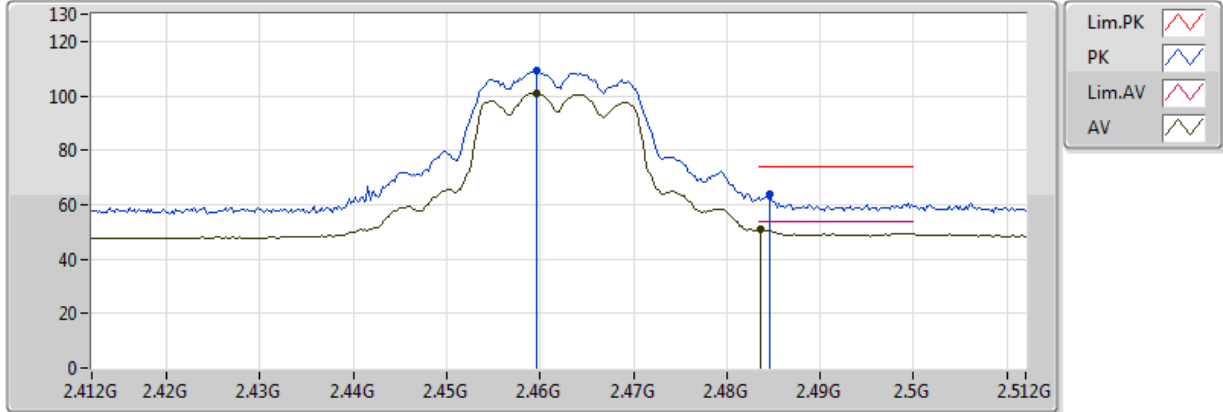


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.463G	99.88	Inf	-Inf	30.72	3	Vertical	243	2.94	-	69.16	27.40	3.31	-
AV	2.483502G	49.89	54.00	-4.11	30.79	3	Vertical	243	2.94	-	19.10	27.46	3.33	-
PK	2.4632G	107.24	Inf	-Inf	30.72	3	Vertical	243	2.94	-	76.52	27.40	3.31	-
PK	2.483502G	60.29	74.00	-13.71	30.79	3	Vertical	243	2.94	-	29.50	27.46	3.33	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

17/03/2018

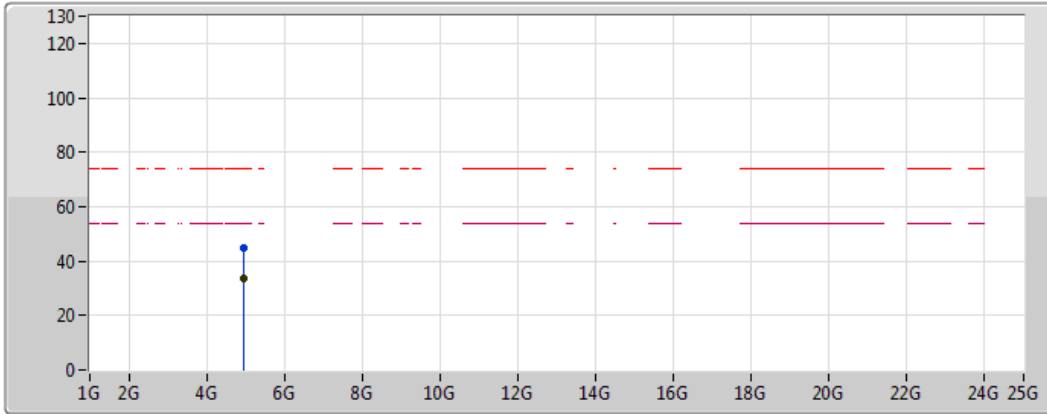


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4596G	101.00	Inf	-Inf	30.70	3	Horizontal	271	2.63	-	70.30	27.39	3.31	-
AV	2.4836G	50.86	54.00	-3.14	30.79	3	Horizontal	271	2.63	-	20.07	27.46	3.33	-
PK	2.4596G	109.47	Inf	-Inf	30.70	3	Horizontal	271	2.63	-	78.77	27.39	3.31	-
PK	2.4846G	64.08	74.00	-9.92	30.79	3	Horizontal	271	2.63	-	33.29	27.46	3.33	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

17/03/2018

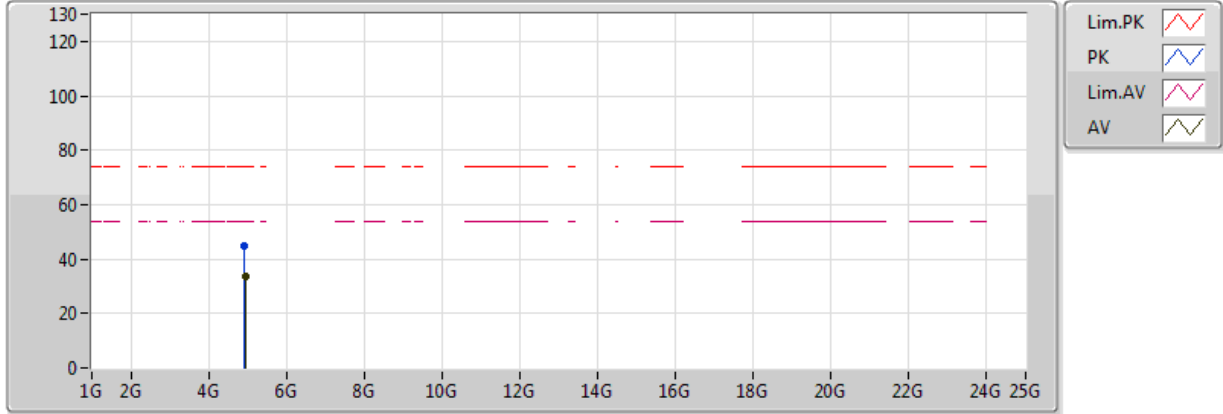


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9384G	33.43	54.00	-20.57	6.16	3	Vertical	278	1.50	-	27.27	31.40	4.58	29.82
PK	4.93726G	44.56	74.00	-29.44	6.16	3	Vertical	278	1.50	-	38.40	31.40	4.58	29.82

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

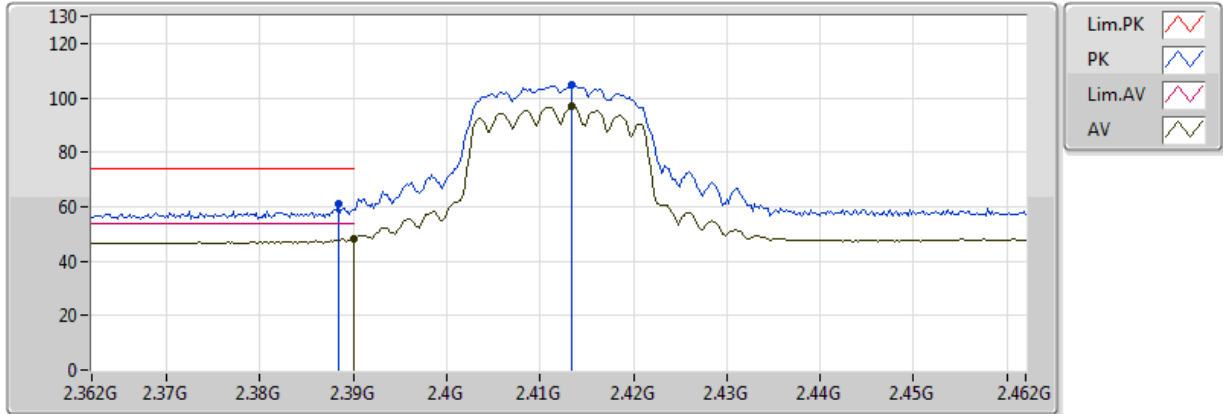
17/03/2018



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.93762G	33.40	54.00	-20.60	6.16	3	Horizontal	133	1.50	-	27.24	31.40	4.58	29.82
PK	4.9258G	44.99	74.00	-29.01	6.13	3	Horizontal	133	1.50	-	38.86	31.38	4.57	29.82

802.11n HT20_Nss1,(MCS0)_2TX 2412MHz_TX

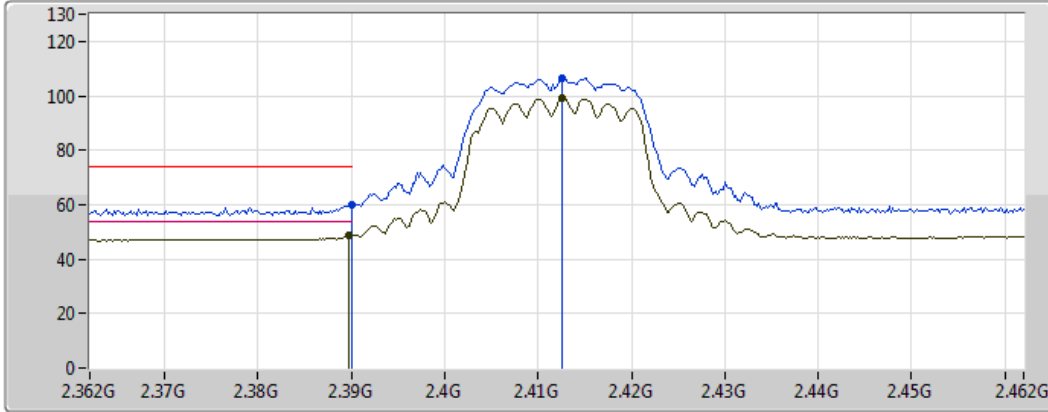
17/03/2018







Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	48.02	54.00	-5.98	30.45	3	Vertical	360	3.12	-	17.57	27.21	3.24	-
AV	2.4134G	96.73	Inf	-Inf	30.54	3	Vertical	360	3.12	-	66.19	27.27	3.26	-
PK	2.3884G	61.33	74.00	-12.67	30.45	3	Vertical	360	3.12	-	30.88	27.21	3.24	-
PK	2.4134G	104.56	Inf	-Inf	30.54	3	Vertical	360	3.12	-	74.02	27.27	3.26	-

**802.11n HT20_Nss1,(MCS0)_2TX
2412MHz_TX**

17/03/2018



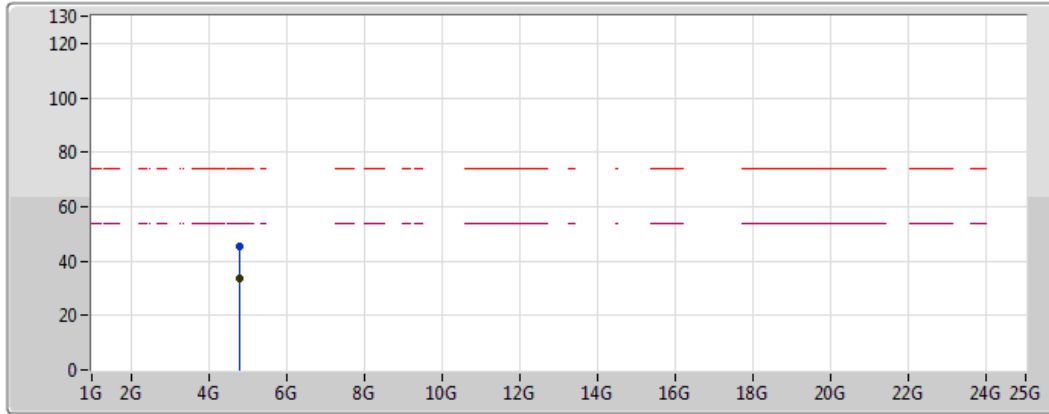
Legend for the spectrum plot:





- Lim.PK 
- PK 
- Lim.AV 
- AV 

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	48.89	54.00	-5.11	30.45	3	Horizontal	198	2.69	-	18.44	27.21	3.24	-
AV	2.4126G	99.45	Inf	-Inf	30.54	3	Horizontal	198	2.69	-	68.91	27.27	3.26	-
PK	2.389998G	59.75	74.00	-14.25	30.45	3	Horizontal	198	2.69	-	29.30	27.21	3.24	-
PK	2.4126G	106.60	Inf	-Inf	30.54	3	Horizontal	198	2.69	-	76.06	27.27	3.26	-

802.11n HT20_Nss1,(MCS0)_2TX 2412MHz_TX

17/03/2018



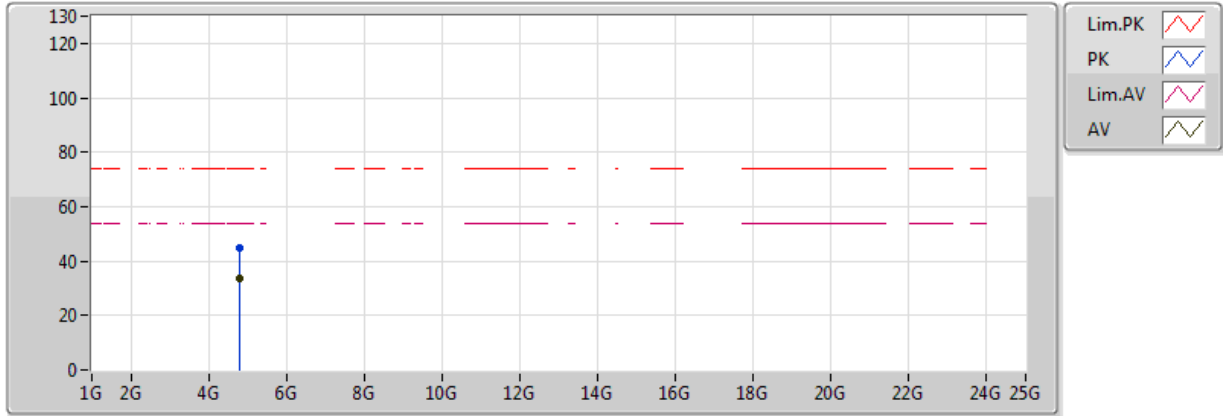
Lim.PK	
PK	
Lim.AV	
AV	

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.81146G	33.56	54.00	-20.44	5.87	3	Vertical	0	1.50	-	27.69	31.20	4.52	29.85
PK	4.81554G	45.34	74.00	-28.66	5.88	3	Vertical	0	1.50	-	39.46	31.20	4.52	29.85

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

17/03/2018

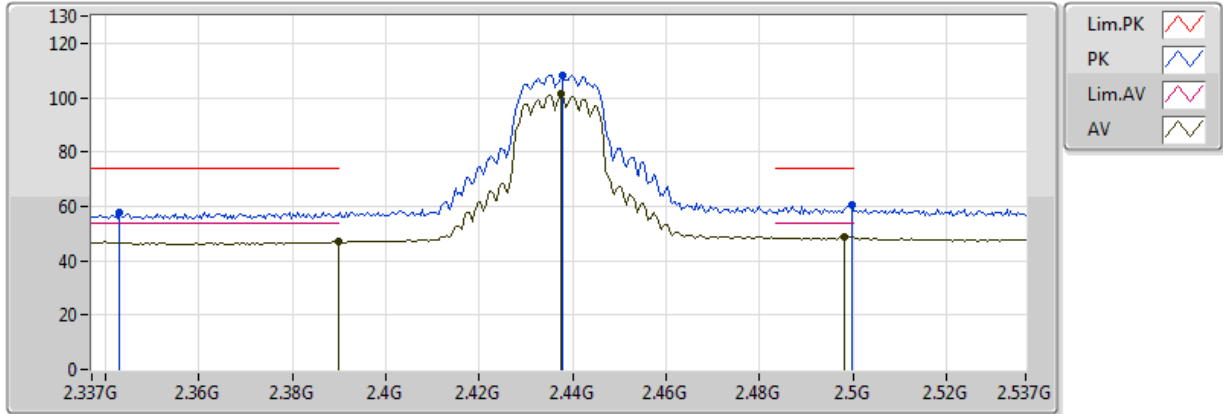


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8105G	33.69	54.00	-20.31	5.86	3	Horizontal	360	1.50	-	27.83	31.20	4.52	29.85
PK	4.81146G	44.68	74.00	-29.32	5.87	3	Horizontal	360	1.50	-	38.81	31.20	4.52	29.85

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

17/03/2018

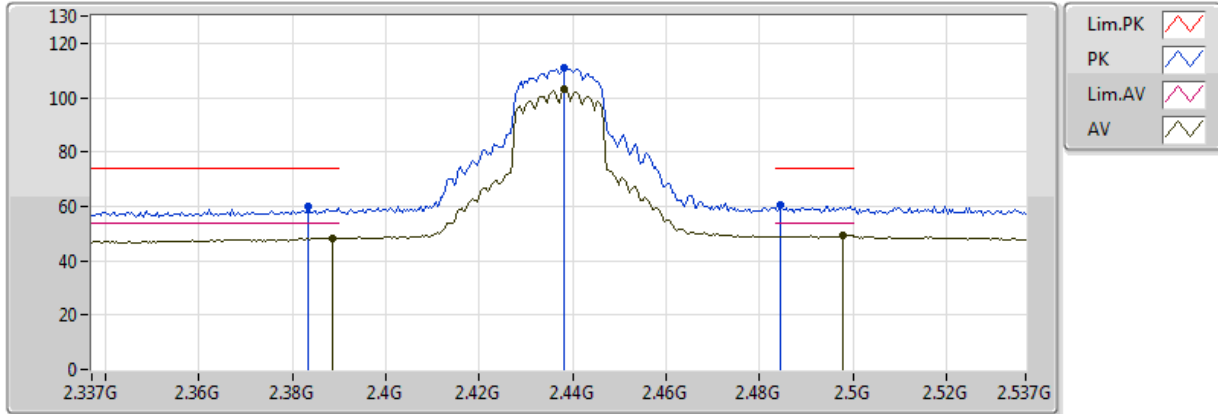


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	46.80	54.00	-7.20	30.45	3	Vertical	240	3.08	-	16.35	27.21	3.24	-
AV	2.4374G	101.18	Inf	-Inf	30.62	3	Vertical	240	3.08	-	70.56	27.34	3.29	-
AV	2.4982G	48.83	54.00	-5.17	30.85	3	Vertical	240	3.08	-	17.98	27.50	3.35	-
PK	2.343G	57.71	74.00	-16.29	30.29	3	Vertical	240	3.08	-	27.42	27.09	3.20	-
PK	2.4378G	108.01	Inf	-Inf	30.63	3	Vertical	240	3.08	-	77.38	27.34	3.29	-
PK	2.4998G	60.33	74.00	-13.67	30.85	3	Vertical	240	3.08	-	29.48	27.50	3.35	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

17/03/2018

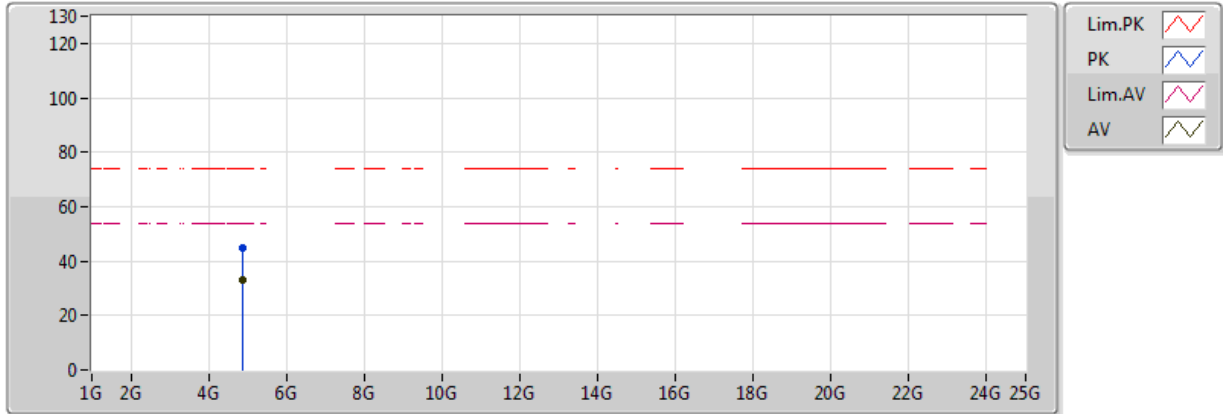


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3886G	48.24	54.00	-5.76	30.45	3	Horizontal	267	2.71	-	17.79	27.21	3.24	-
AV	2.4382G	103.01	Inf	-Inf	30.63	3	Horizontal	267	2.71	-	72.38	27.34	3.29	-
AV	2.4978G	49.28	54.00	-4.72	30.84	3	Horizontal	267	2.71	-	18.44	27.49	3.35	-
PK	2.3834G	59.75	74.00	-14.25	30.44	3	Horizontal	267	2.71	-	29.31	27.20	3.24	-
PK	2.4382G	110.96	Inf	-Inf	30.63	3	Horizontal	267	2.71	-	80.33	27.34	3.29	-
PK	2.4846G	60.52	74.00	-13.48	30.79	3	Horizontal	267	2.71	-	29.73	27.46	3.33	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

17/03/2018

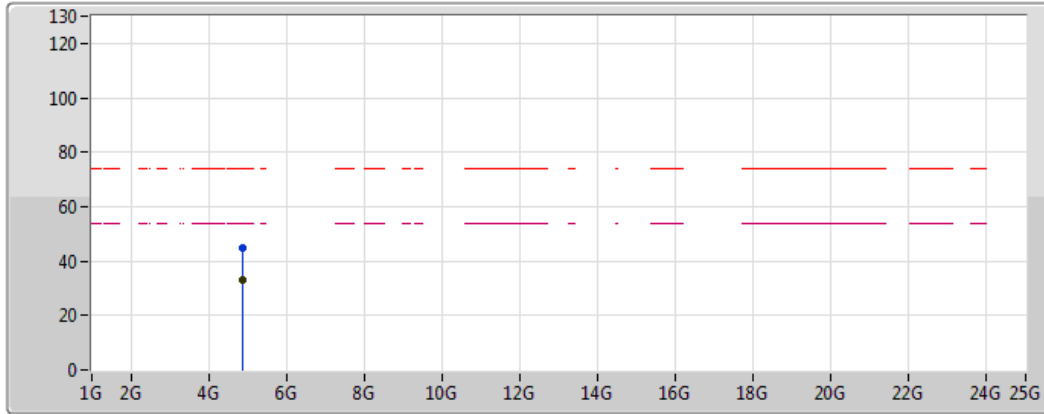


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8653G	33.06	54.00	-20.94	5.99	3	Vertical	0	1.50	-	27.07	31.28	4.54	29.84
PK	4.8596G	44.65	74.00	-29.35	5.98	3	Vertical	0	1.50	-	38.67	31.28	4.54	29.84



**802.11n HT20_Nss1,(MCS0)_2TX
2437MHz_TX**

17/03/2018

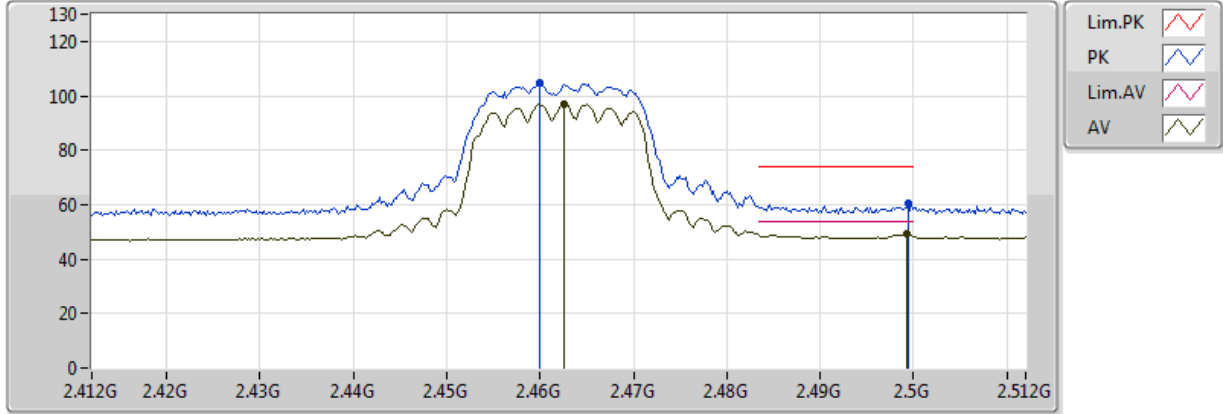


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.85912G	33.11	54.00	-20.89	5.98	3	Horizontal	360	1.50	-	27.13	31.27	4.54	29.84
PK	4.85978G	44.62	74.00	-29.38	5.98	3	Horizontal	360	1.50	-	38.64	31.28	4.54	29.84

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

17/03/2018

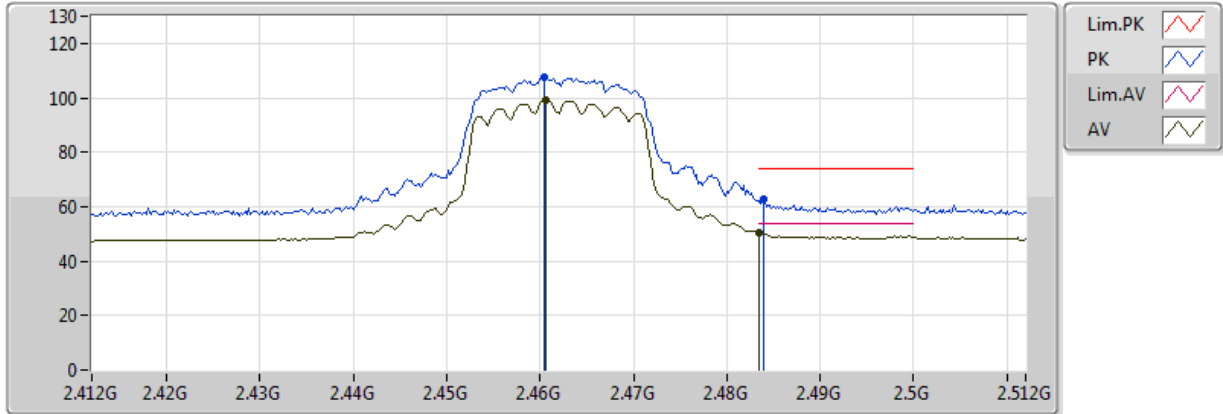


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4626G	97.21	Inf	-Inf	30.72	3	Vertical	243	2.95	-	66.49	27.40	3.31	-
AV	2.4992G	49.06	54.00	-4.94	30.85	3	Vertical	243	2.95	-	18.21	27.50	3.35	-
PK	2.46G	104.59	Inf	-Inf	30.71	3	Vertical	243	2.95	-	73.88	27.40	3.31	-
PK	2.4994G	60.51	74.00	-13.49	30.85	3	Vertical	243	2.95	-	29.66	27.50	3.35	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

17/03/2018

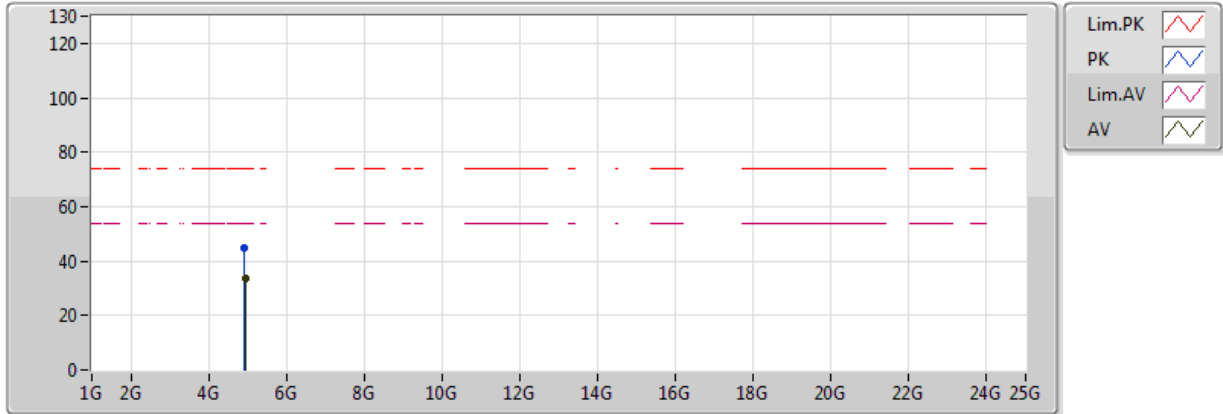


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4606G	99.21	Inf	-Inf	30.71	3	Horizontal	267	2.42	-	68.50	27.40	3.31	-
AV	2.483502G	50.68	54.00	-3.32	30.79	3	Horizontal	267	2.42	-	19.89	27.46	3.33	-
PK	2.4604G	107.51	Inf	-Inf	30.71	3	Horizontal	267	2.42	-	76.80	27.40	3.31	-
PK	2.484G	62.75	74.00	-11.25	30.79	3	Horizontal	267	2.42	-	31.96	27.46	3.33	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

17/03/2018

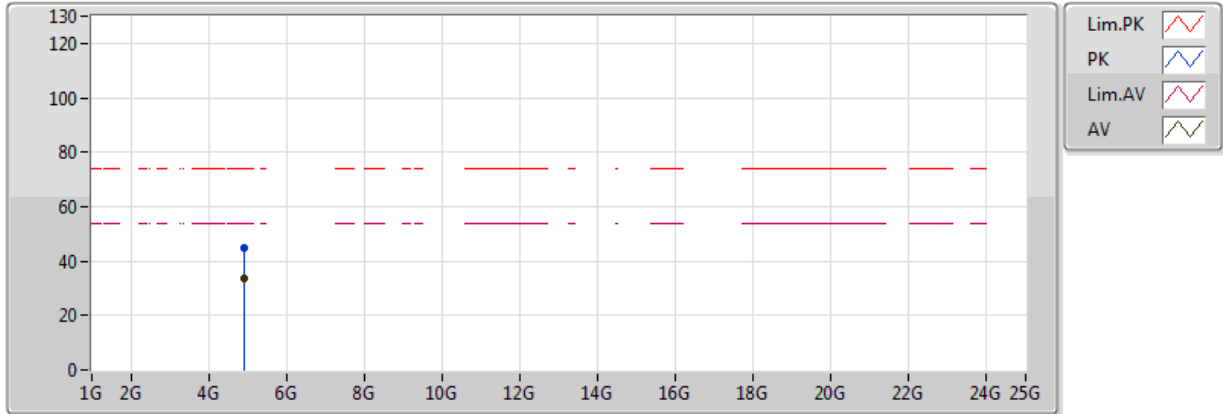


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.93774G	33.64	54.00	-20.36	6.16	3	Vertical	218	1.50	-	27.48	31.40	4.58	29.82
PK	4.93204G	44.87	74.00	-29.13	6.14	3	Vertical	218	1.50	-	38.73	31.39	4.58	29.82

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

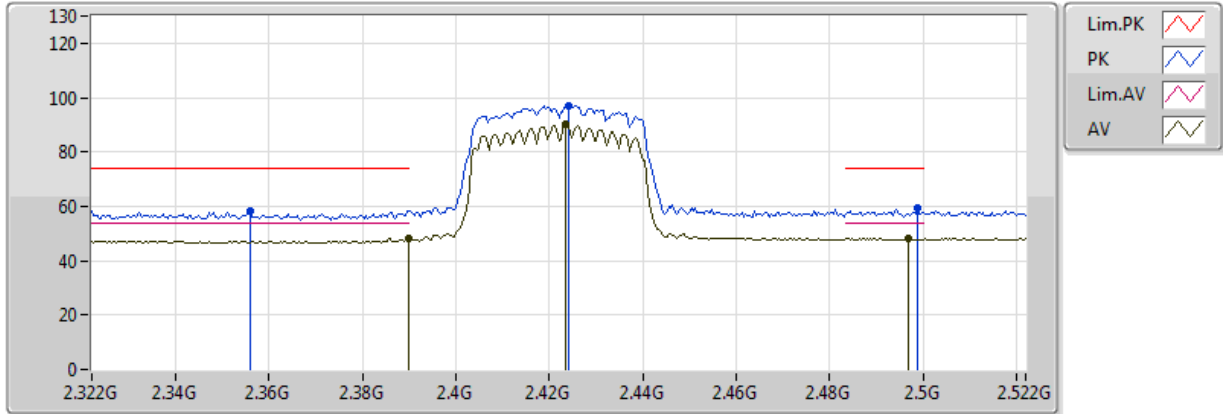
17/03/2018



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.93288G	33.46	54.00	-20.54	6.15	3	Horizontal	103	1.50	-	27.31	31.39	4.58	29.82
PK	4.9165G	44.84	74.00	-29.16	6.11	3	Horizontal	103	1.50	-	38.73	31.37	4.57	29.83

802.11n HT40_Nss1,(MCS0)_2TX 2422MHz_TX

17/03/2018

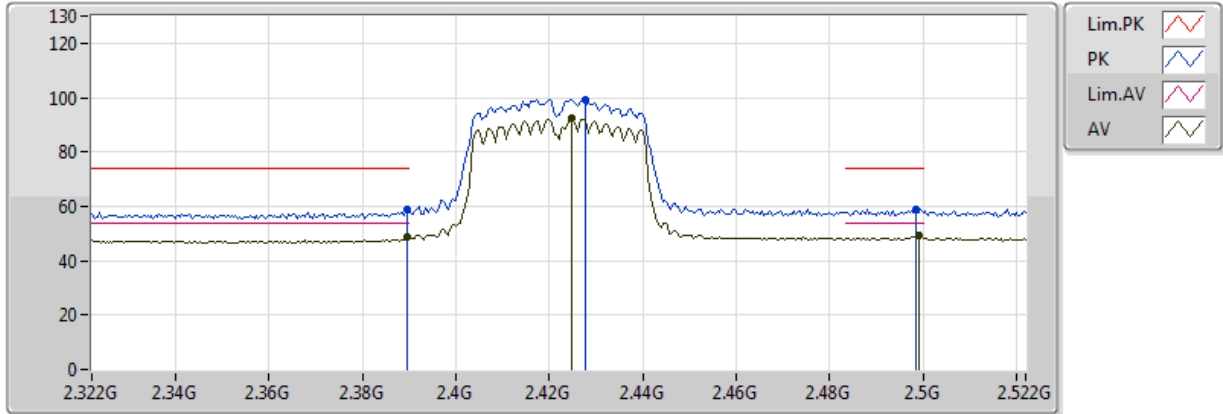


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	48.02	54.00	-5.98	30.45	3	Vertical	7	3.14	-	17.57	27.21	3.24	-
AV	2.4236G	90.26	Inf	-Inf	30.57	3	Vertical	7	3.14	-	59.69	27.30	3.27	-
AV	2.4968G	48.08	54.00	-5.92	30.84	3	Vertical	7	3.14	-	17.24	27.49	3.35	-
PK	2.356G	58.32	74.00	-15.68	30.34	3	Vertical	7	3.14	-	27.98	27.13	3.21	-
PK	2.424G	97.04	Inf	-Inf	30.58	3	Vertical	7	3.14	-	66.46	27.30	3.27	-
PK	2.4988G	59.39	74.00	-14.61	30.85	3	Vertical	7	3.14	-	28.54	27.50	3.35	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

17/03/2018

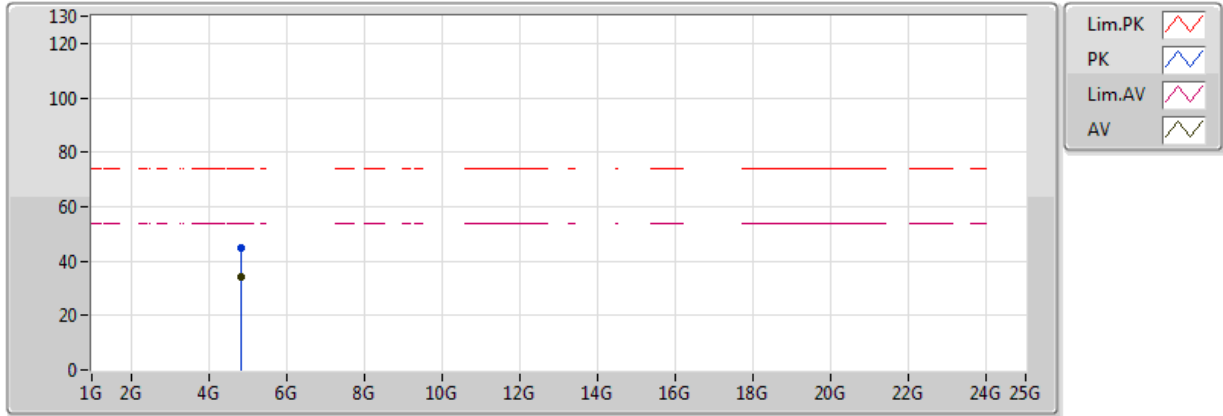


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3896G	48.88	54.00	-5.12	30.45	3	Horizontal	218	2.67	-	18.43	27.21	3.24	-
AV	2.4248G	92.55	Inf	-Inf	30.58	3	Horizontal	218	2.67	-	61.97	27.30	3.27	-
AV	2.4992G	49.06	54.00	-4.94	30.85	3	Horizontal	218	2.67	-	18.21	27.50	3.35	-
PK	2.3896G	58.61	74.00	-15.39	30.45	3	Horizontal	218	2.67	-	28.16	27.21	3.24	-
PK	2.4276G	99.40	Inf	-Inf	30.59	3	Horizontal	218	2.67	-	68.81	27.31	3.28	-
PK	2.4984G	58.91	74.00	-15.09	30.85	3	Horizontal	218	2.67	-	28.06	27.50	3.35	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

17/03/2018

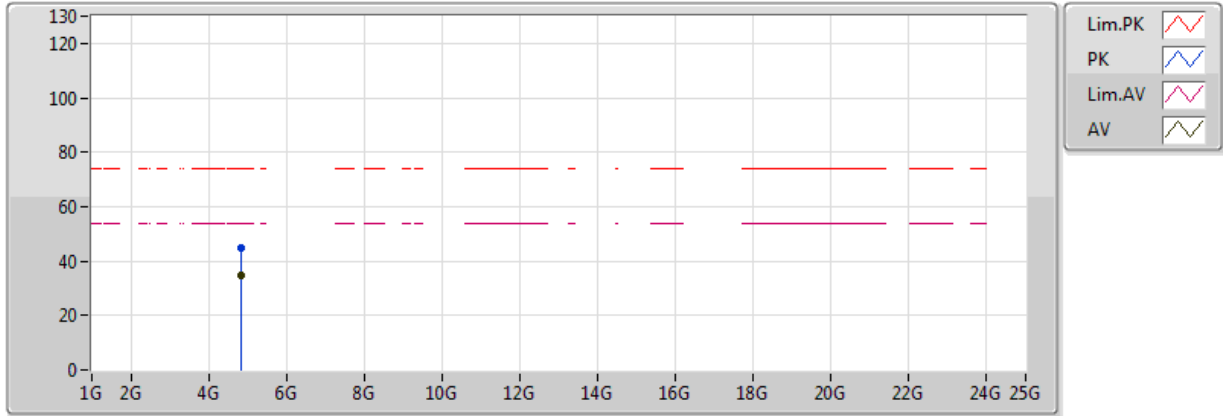


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8542G	34.21	54.00	-19.79	5.96	3	Vertical	0	1.50	-	28.25	31.27	4.54	29.84
PK	4.84868G	44.93	74.00	-29.07	5.95	3	Vertical	0	1.50	-	38.98	31.26	4.53	29.84

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

17/03/2018



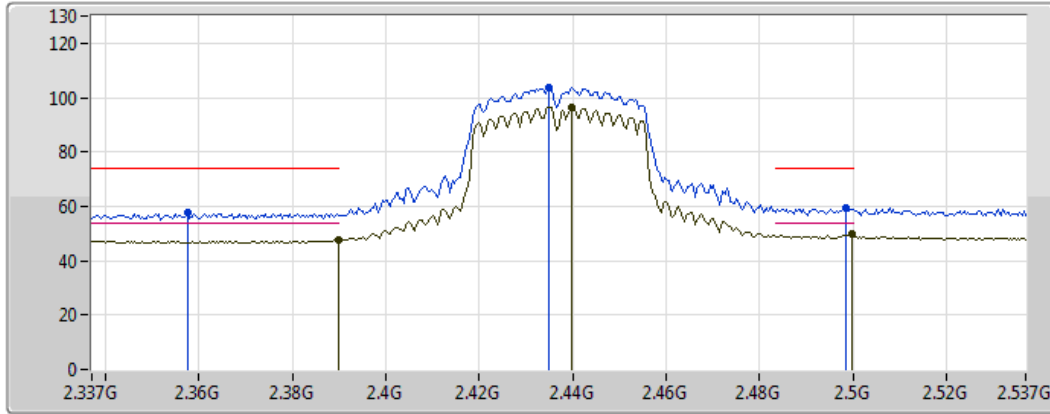
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.84928G	34.82	54.00	-19.18	5.95	3	Horizontal	360	1.50	-	28.87	31.26	4.53	29.84
PK	4.85366G	44.95	74.00	-29.05	5.96	3	Horizontal	360	1.50	-	38.99	31.27	4.54	29.84



802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

17/03/2018

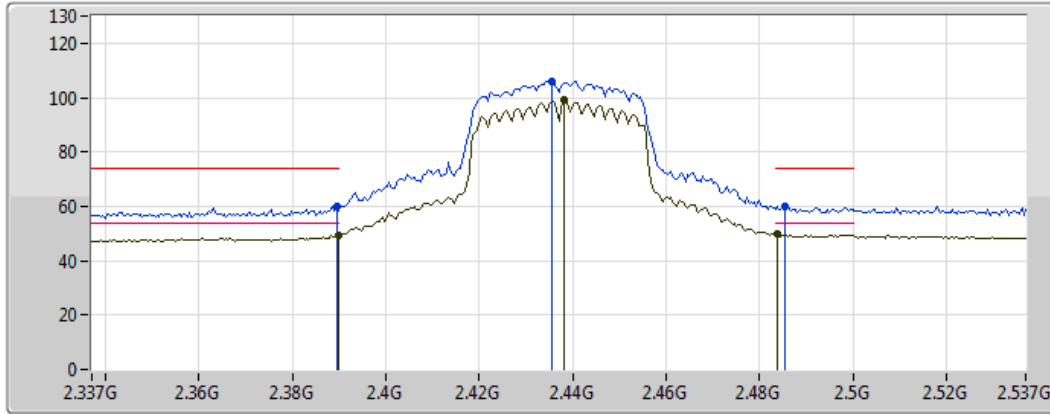


Lim.PK	
PK	
Lim.AV	
AV	

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	47.55	54.00	-6.45	30.45	3	Vertical	243	3.09	-	17.10	27.21	3.24	-
AV	2.4398G	96.55	Inf	-Inf	30.63	3	Vertical	243	3.09	-	65.92	27.34	3.29	-
AV	2.4998G	49.72	54.00	-4.28	30.85	3	Vertical	243	3.09	-	18.87	27.50	3.35	-
PK	2.3574G	57.48	74.00	-16.52	30.34	3	Vertical	243	3.09	-	27.14	27.13	3.21	-
PK	2.435G	103.74	Inf	-Inf	30.62	3	Vertical	243	3.09	-	73.12	27.33	3.29	-
PK	2.4986G	59.39	74.00	-14.61	30.85	3	Vertical	243	3.09	-	28.54	27.50	3.35	-

**802.11n HT40_Nss1,(MCS0)_2TX
2437MHz_TX**

17/03/2018



Legend for the spectrum plot:

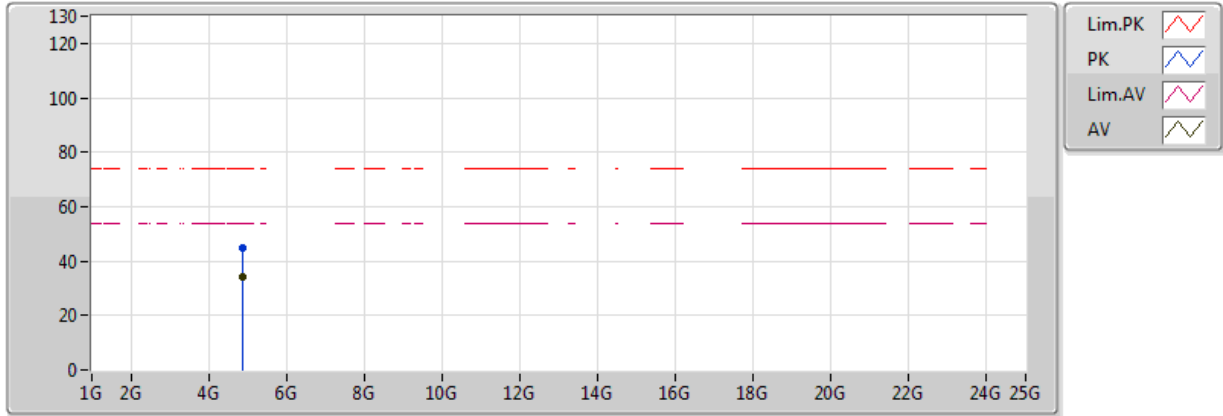
- Lim.PK: Red line with a peak icon
- PK: Blue line with a peak icon
- Lim.AV: Red line with a valley icon
- AV: Green line with a valley icon

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	49.49	54.00	-4.51	30.45	3	Horizontal	268	3.12	-	19.04	27.21	3.24	-
AV	2.4382G	98.95	Inf	-Inf	30.63	3	Horizontal	268	3.12	-	68.32	27.34	3.29	-
AV	2.4838G	50.09	54.00	-3.91	30.79	3	Horizontal	268	3.12	-	19.30	27.46	3.33	-
PK	2.3894G	60.14	74.00	-13.86	30.45	3	Horizontal	268	3.12	-	29.69	27.21	3.24	-
PK	2.4354G	106.16	Inf	-Inf	30.62	3	Horizontal	268	3.12	-	75.54	27.33	3.29	-
PK	2.4854G	60.18	74.00	-13.82	30.80	3	Horizontal	268	3.12	-	29.38	27.46	3.34	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

17/03/2018

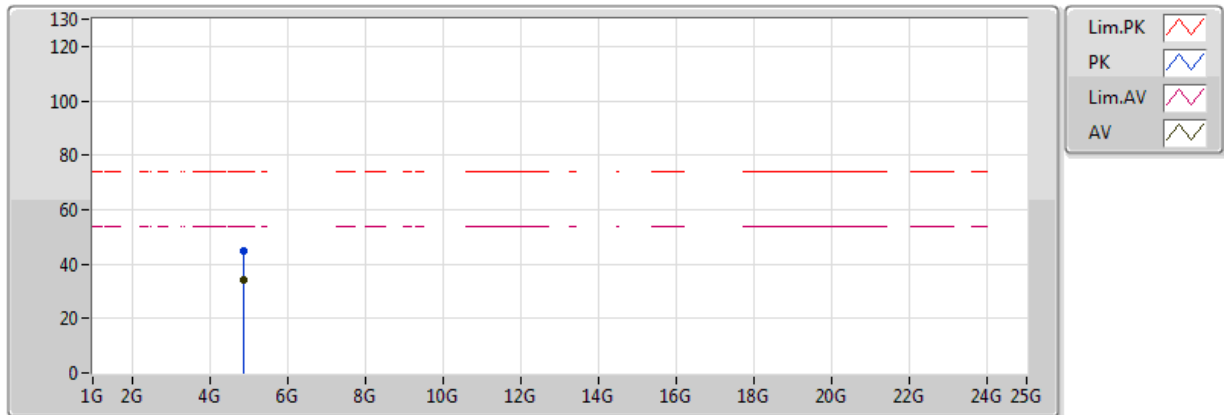


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.86788G	34.13	54.00	-19.87	6.00	3	Vertical	314	1.50	-	28.13	31.29	4.54	29.84
PK	4.86596G	44.79	74.00	-29.21	5.99	3	Vertical	314	1.50	-	38.80	31.29	4.54	29.84

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

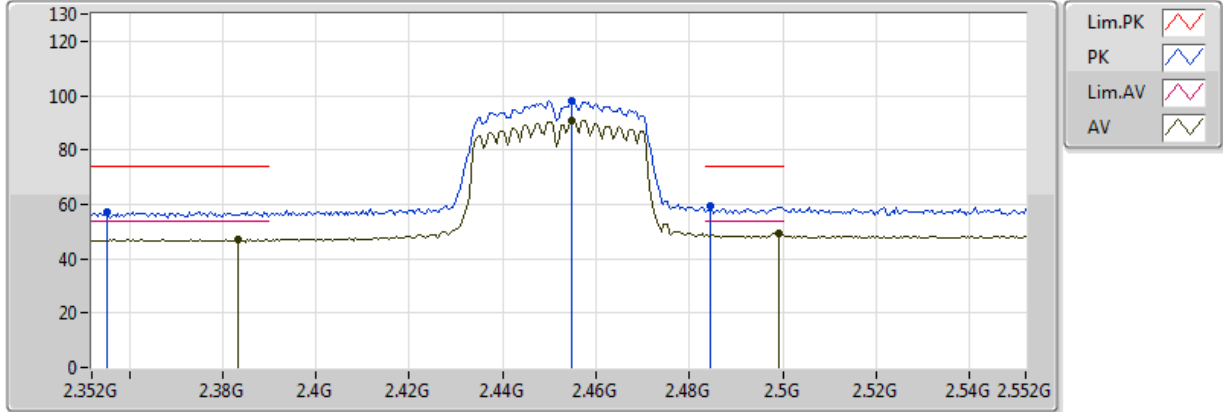
17/03/2018



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.86194G	34.18	54.00	-19.82	5.98	3	Horizontal	216	1.50	-	28.20	31.28	4.54	29.84
PK	4.86194G	44.63	74.00	-29.37	5.98	3	Horizontal	216	1.50	-	38.65	31.28	4.54	29.84

**802.11n HT40_Nss1,(MCS0)_2TX
2452MHz_TX**

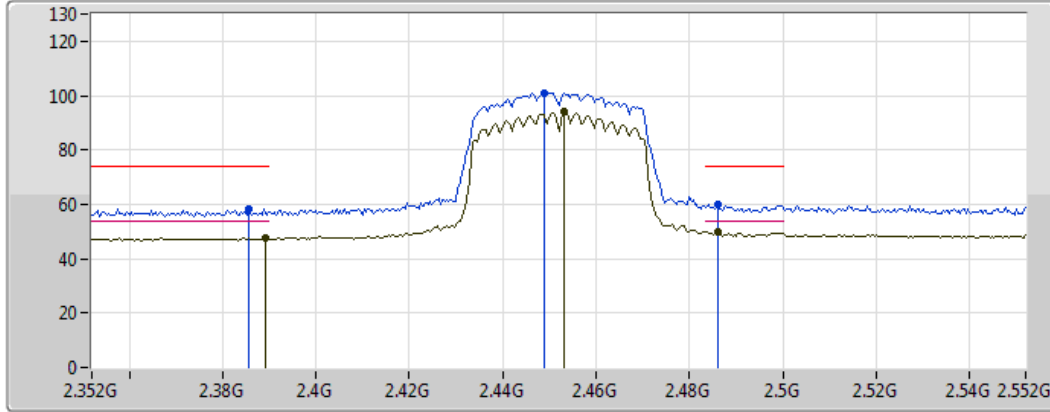
17/03/2018







Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3832G	47.23	54.00	-6.77	30.43	3	Vertical	244	2.94	-	16.80	27.20	3.23	-
AV	2.4548G	90.73	Inf	-Inf	30.69	3	Vertical	244	2.94	-	60.04	27.38	3.30	-
AV	2.4992G	49.50	54.00	-4.50	30.85	3	Vertical	244	2.94	-	18.65	27.50	3.35	-
PK	2.3552G	57.35	74.00	-16.65	30.33	3	Vertical	244	2.94	-	27.02	27.12	3.21	-
PK	2.4548G	97.98	Inf	-Inf	30.69	3	Vertical	244	2.94	-	67.29	27.38	3.30	-
PK	2.4844G	59.28	74.00	-14.72	30.79	3	Vertical	244	2.94	-	28.49	27.46	3.33	-

**802.11n HT40_Nss1,(MCS0)_2TX
2452MHz_TX**

17/03/2018

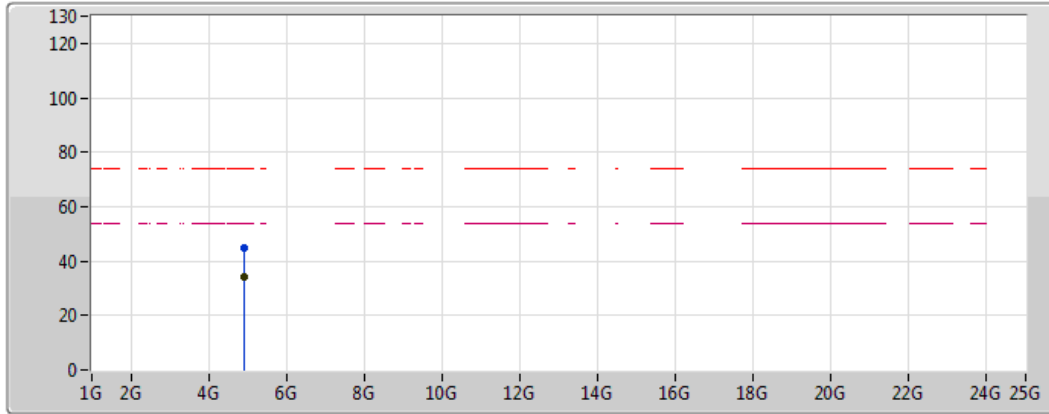


Lim.PK	
PK	
Lim.AV	
AV	

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3892G	47.54	54.00	-6.46	30.45	3	Horizontal	267	2.62	-	17.09	27.21	3.24	-
AV	2.4532G	93.95	Inf	-Inf	30.68	3	Horizontal	267	2.62	-	63.27	27.38	3.30	-
AV	2.486G	49.68	54.00	-4.32	30.80	3	Horizontal	267	2.62	-	18.88	27.46	3.34	-
PK	2.3856G	58.43	74.00	-15.57	30.44	3	Horizontal	267	2.62	-	27.99	27.20	3.24	-
PK	2.4488G	101.13	Inf	-Inf	30.67	3	Horizontal	267	2.62	-	70.46	27.37	3.30	-
PK	2.486G	60.23	74.00	-13.77	30.80	3	Horizontal	267	2.62	-	29.43	27.46	3.34	-

**802.11n HT40_Nss1,(MCS0)_2TX
2452MHz_TX**

17/03/2018

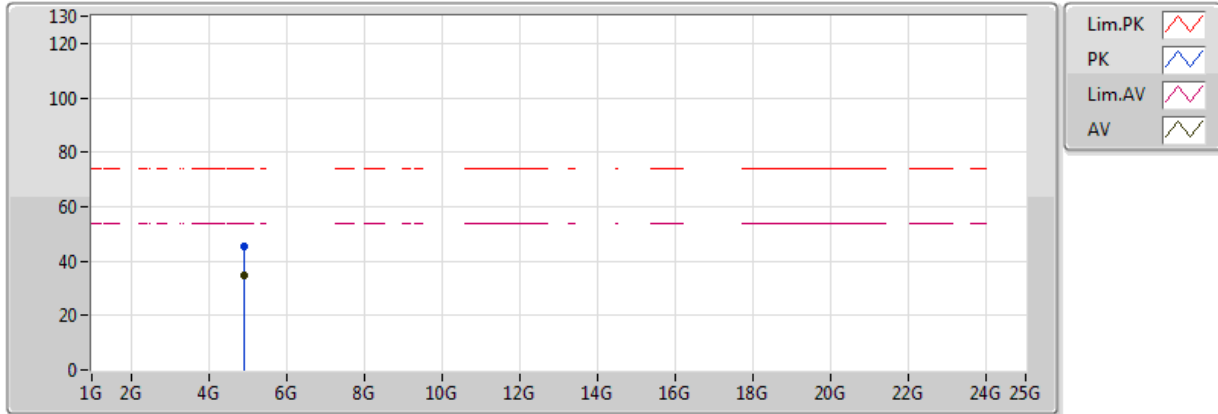


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.91738G	34.20	54.00	-19.80	6.11	3	Vertical	0	1.50	-	28.09	31.37	4.57	29.83
PK	4.91798G	44.87	74.00	-29.13	6.11	3	Vertical	0	1.50	-	38.76	31.37	4.57	29.83

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

17/03/2018



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.91654G	34.65	54.00	-19.35	6.11	3	Horizontal	168	1.50	-	28.54	31.37	4.57	29.83
PK	4.91606G	45.35	74.00	-28.65	6.11	3	Horizontal	168	1.50	-	39.24	31.37	4.57	29.83



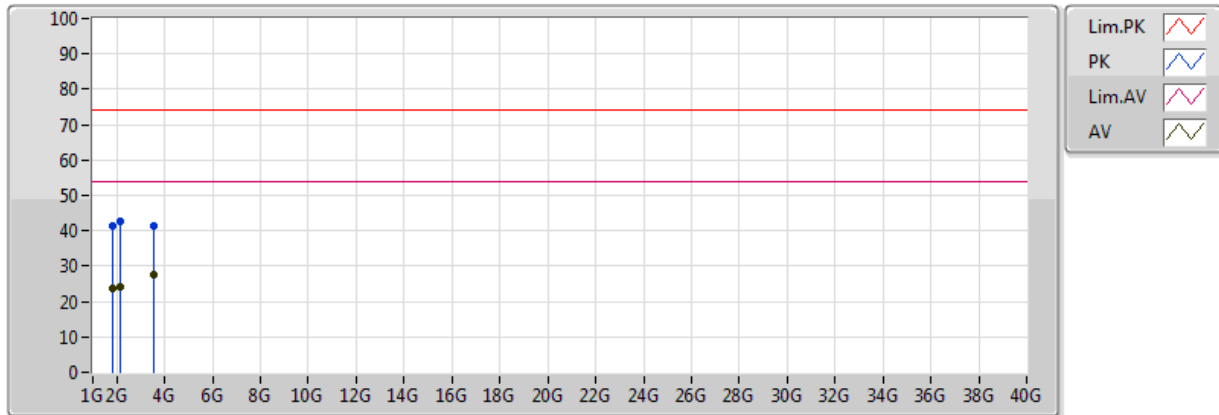
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	AV	3.11G	27.56	54.00	-26.44	-0.10	3	Horizontal	0	1.00	-



Radiation-above 1GHz_Mode 1

23/03/2018

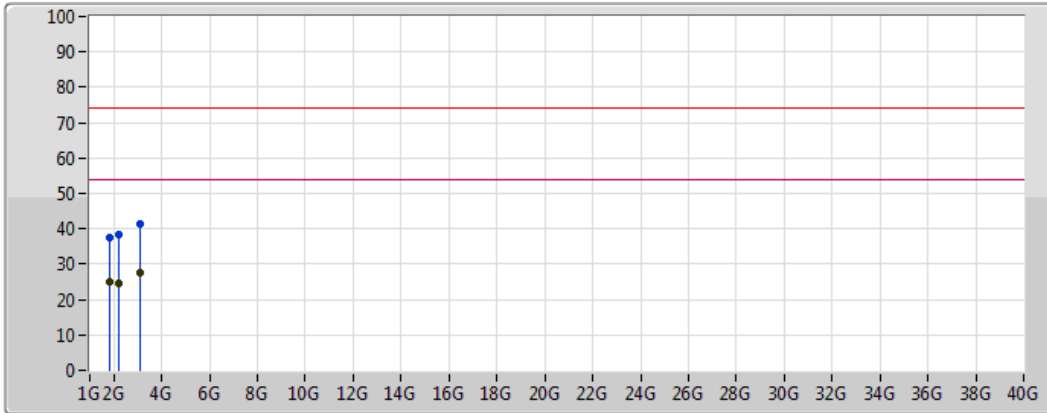


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	1.85G	23.69	54.00	-30.31	-3.84	3	Vertical	360	1.00	-	27.53	26.06	4.53	34.43
AV	2.13G	23.94	54.00	-30.06	-2.99	3	Vertical	360	1.00	-	26.93	26.64	4.82	34.45
AV	3.57G	27.52	54.00	-26.48	0.30	3	Vertical	360	1.00	-	27.22	28.83	6.16	34.69
PK	1.85G	41.29	74.00	-32.71	-3.84	3	Vertical	360	1.00	-	45.13	26.06	4.53	34.43
PK	2.13G	42.46	74.00	-31.54	-2.99	3	Vertical	360	1.00	-	45.45	26.64	4.82	34.45
PK	3.57G	41.59	74.00	-32.41	0.30	3	Vertical	360	1.00	-	41.29	28.83	6.16	34.69



Radiation-above 1GHz_Mode 1

23/03/2018



Legend for the graph:

- Lim.PK: Red line with a peak symbol
- PK: Blue line with a peak symbol
- Lim.AV: Pink line with a peak symbol
- AV: Black line with a peak symbol

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	1.81G	24.86	54.00	-29.14	-3.96	3	Horizontal	0	1.00	-	28.82	26.00	4.49	34.45
AV	2.18G	24.76	54.00	-29.24	-2.83	3	Horizontal	0	1.00	-	27.59	26.77	4.88	34.47
AV	3.11G	27.56	54.00	-26.44	-0.10	3	Horizontal	0	1.00	-	27.66	28.70	5.93	34.73
PK	1.81G	37.59	74.00	-36.41	-3.96	3	Horizontal	0	1.00	-	41.55	26.00	4.49	34.45
PK	2.18G	38.44	74.00	-35.56	-2.83	3	Horizontal	0	1.00	-	41.27	26.77	4.88	34.47
PK	3.11G	41.38	74.00	-32.62	-0.10	3	Horizontal	0	1.00	-	41.48	28.70	5.93	34.73