



FCC RADIO TEST REPORT

FCC ID : TV7PL64112ND
Equipment : PWR-LINE AP
Brand Name : Mikrotik
Model Name : PL6411-2nD
Applicant : Mikrotiks SIA
Brivibas gatve 214i, Riga, LV-1039 Latvia
Manufacturer : MIKROTIKLS SIA
Brivibas gatve 214i, Riga, LV-1039 Latvia
Standard : 47 CFR FCC Part 15.247

The product was received on Dec. 26, 2017, and testing was started from Jan. 22, 2018 and completed on May 30, 2018. We, SPORTON INTERNATIONAL 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 INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

SPORTON INTERNATIONAL 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
FR7D2501	01	Initial issue of report	Jun. 12, 2018



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Reviewed by: **Sam Chen**
Report Producer: **Cindy Peng**



1 General Description

1.1 Information

1.1.1 RF General Information

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

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	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.
- ♦ BWch is the nominal channel bandwidth.
- ♦ Nss-Min is the minimum number of spatial streams.
- ♦ Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	Mikrotik	Mikrotik PLC	PCB Antenna	N/A	1.5
2	2	Mikrotik	Mikrotik PLC	PCB Antenna	N/A	1.5

Note: The EUT has two antennas (2TX/2RX).

Ant. 1 (Port 1) and Ant. 2 (Port 2) could transmit/receive simultaneously.



1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	0.977	0.101	12.483m	100
802.11g	0.953	0.209	2.075m	1k
802.11n HT20	0.946	0.241	1.935m	1k
802.11n HT40	0.898	0.467	952.5u	3k

1.1.4 EUT Operational Condition

EUT Power Type	Internal power supply		
Beamforming Function	<input type="checkbox"/> With beamforming	<input checked="" type="checkbox"/> Without beamforming	
Function	<input checked="" type="checkbox"/> Point-to-multipoint	<input type="checkbox"/> Point-to-point	
Test Software Version	winbox.exe		



1.2 Testing Applied Standards

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

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013
- ◆ FCC KDB 558074 D01 v04
- ◆ FCC KDB 662911 D01 v02r01
- ◆ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location		
<input 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
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Brian Sun	22°C / 54%	Feb. 07, 2018
Radiated Below 1GHz	10CH01-CB	Wei Liu	26°C / 58%	May 30, 2018
Radiated Above 1GHz	03CH01-CB	Jeff Wu, Cola Chang	22°C / 54%	Jan. 22, 2018~Mar. 05, 2018
AC Conduction	CO01-CB	GN Hou	24°C / 59%	May 22 ,2018

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



1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.0 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74 x10 ⁻⁸	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	14
2437MHz	14
2462MHz	12
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	16
2417MHz	20
2437MHz	20
2457MHz	20
2462MHz	16
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	16
2417MHz	20
2437MHz	20
2457MHz	20
2462MHz	16
802.11n HT40_Nss1,(MCS0)_2TX	-
2422MHz	12
2427MHz	14
2432MHz	20
2437MHz	20
2442MHz	20
2447MHz	14
2452MHz	12



2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	CTX mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density 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
The EUT was performed at X axis, Y axis and Z axis position for Emissions in Restricted Frequency Bands above 1GHz test, and the worst case was found at X axis for Emissions in Restricted Frequency Bands above 1GHz test, thus the measurement for Emissions in Restricted Frequency Bands test will follow this same test configuration.	
1	EUT in X axis
Operating Mode > 1GHz	CTX
1	EUT in Z axis
2	EUT in Y axis
3	EUT in X axis
Mode 3 has been evaluated to be the worst case after evaluating. Consequently, measurement will follow this same test mode.	



2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

N/A

2.5 Support Equipment

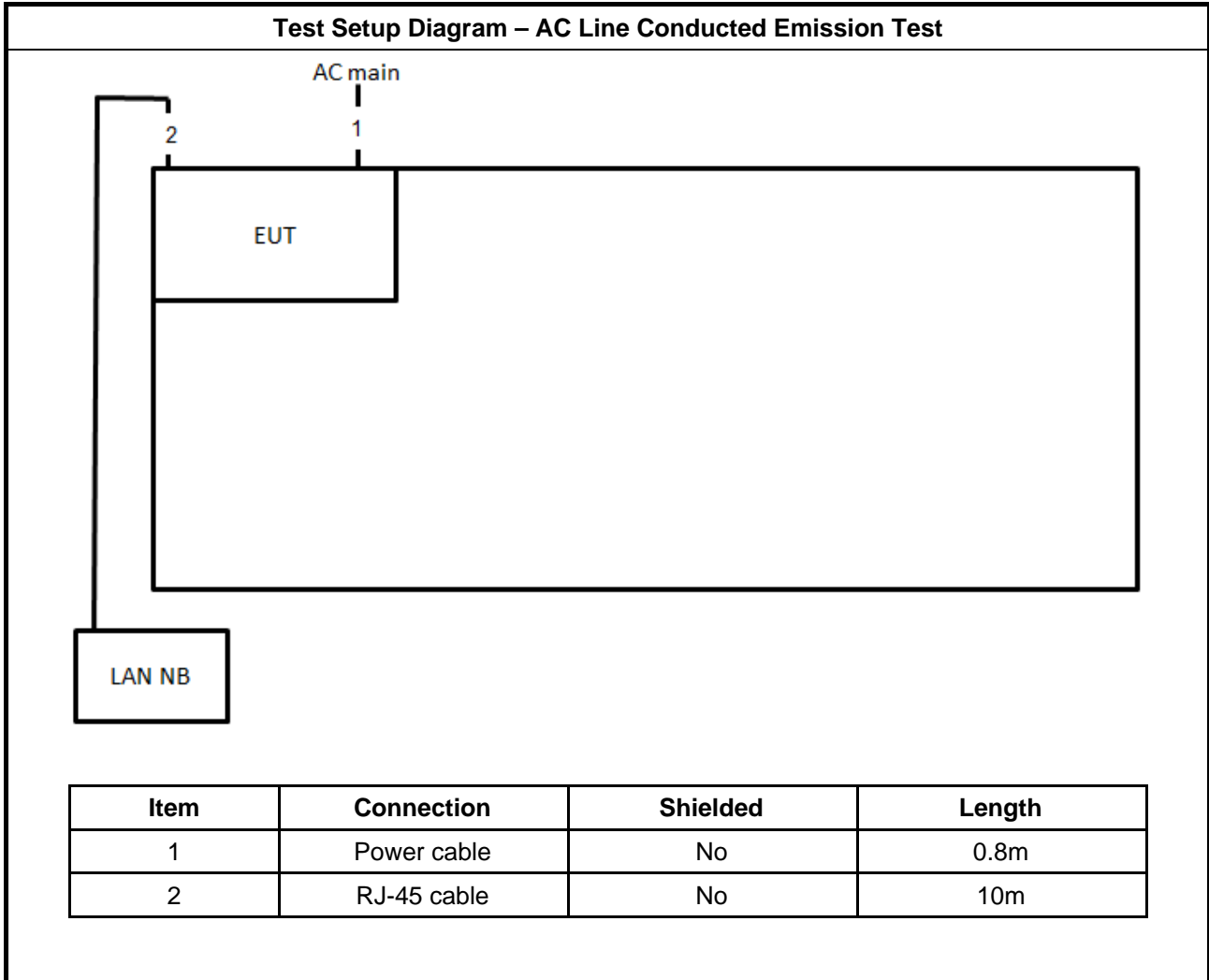
For Test Site No: CO01-CB and 10CH01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E6430	N/A

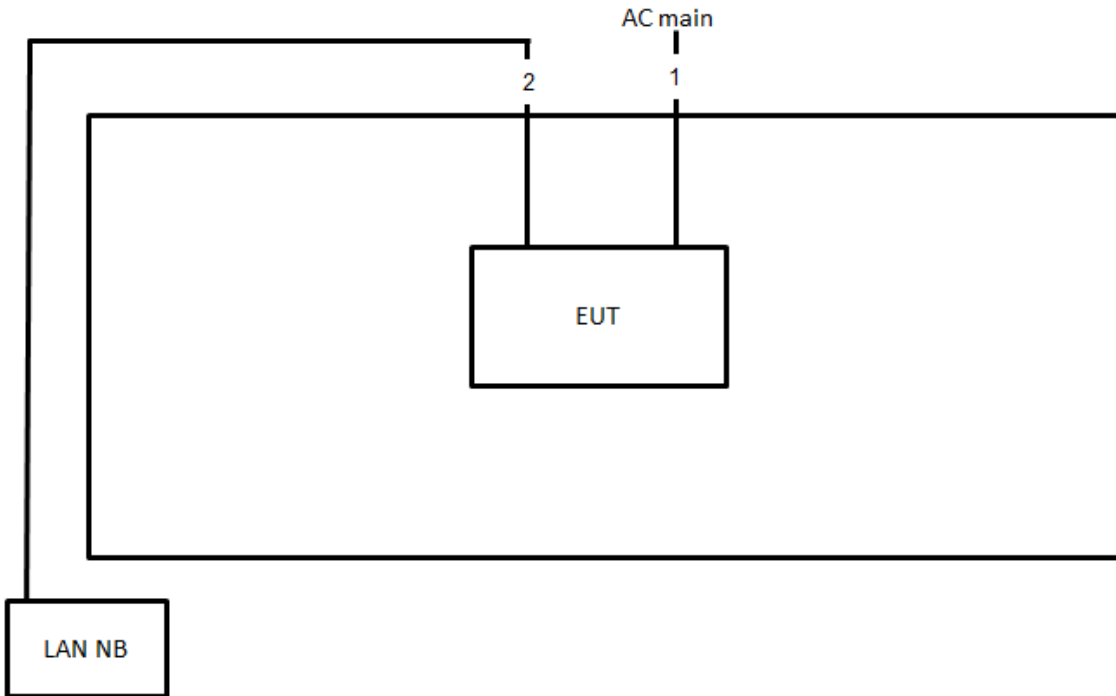
For Test Site No: 03CH01-CB and TH01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	N/A

2.6 Test Setup Diagram



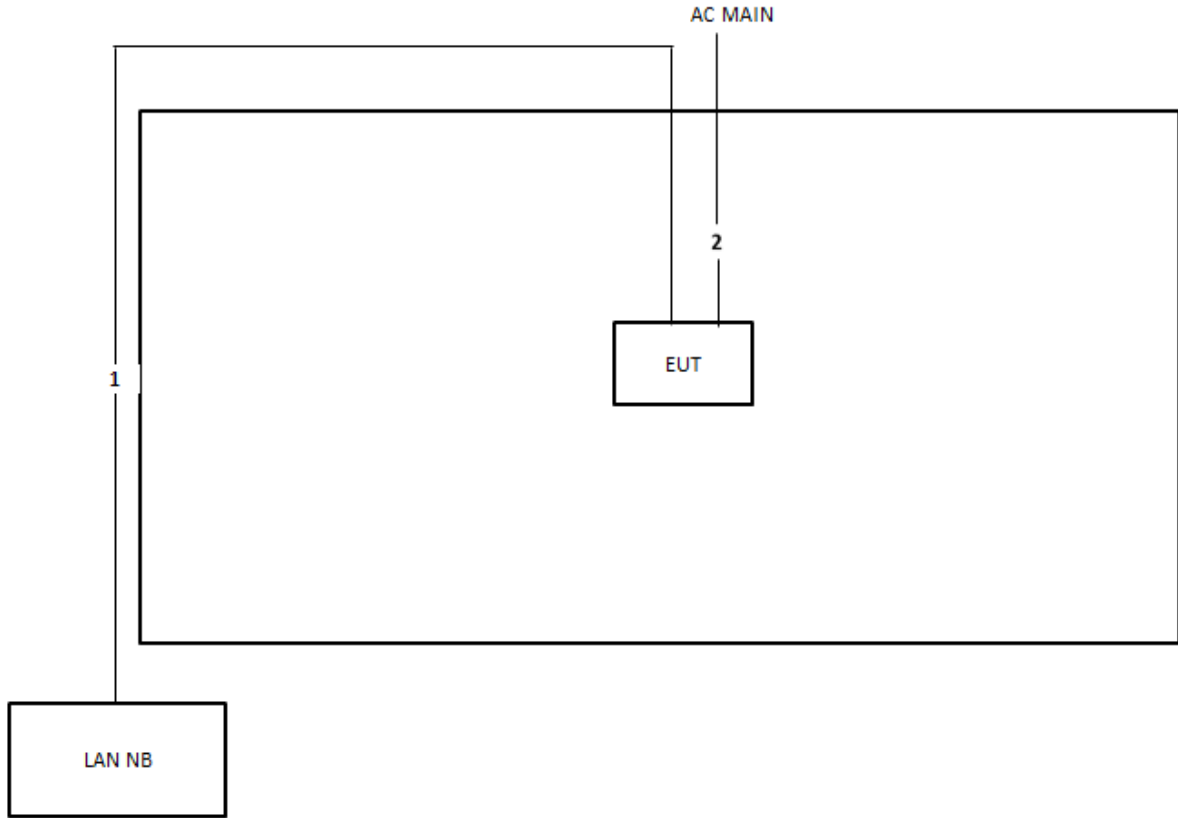
Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	0.8m
2	RJ-45 cable	No	10m



Test Setup Diagram - Radiated Test > 1GHz



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



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.

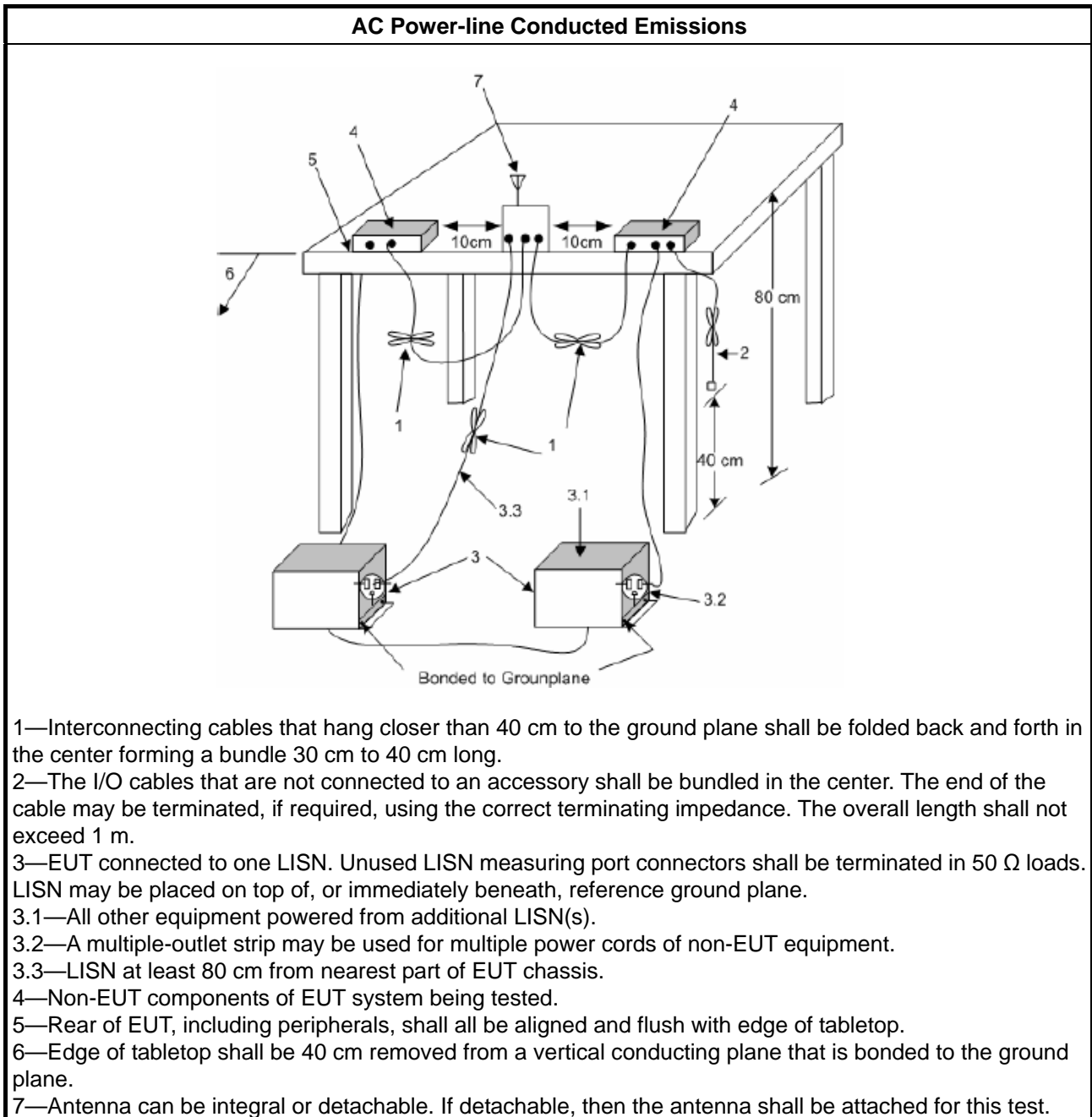
3.1.2 Measuring Instruments

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.

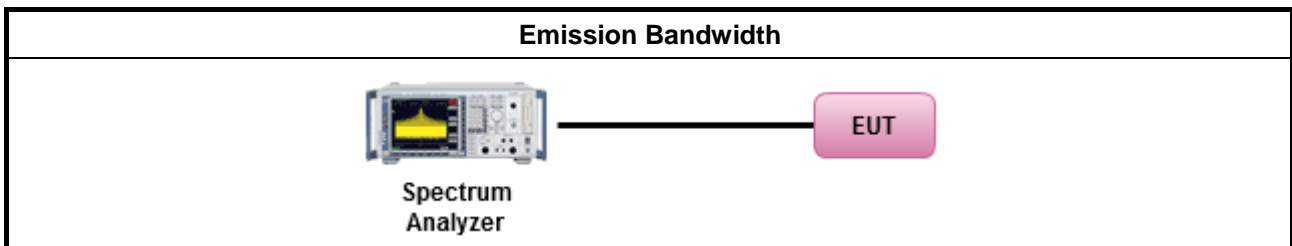
3.2.2 Measuring Instruments

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 FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.1 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 $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

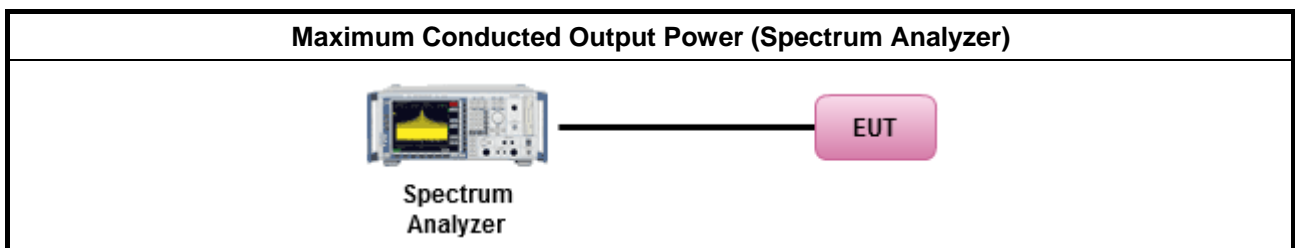
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power 	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 9.1.3 (peak power meter for VBW ≥ DTS BW)
<ul style="list-style-type: none"> ▪ Maximum Conducted Output Power 	
[duty cycle ≥ 98% or external video / power trigger]	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
Measurement using a power meter (PM)	
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM (using an RF average power meter).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 9.2.3.2 Method AVGPM-G (using an gate 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 FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	<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

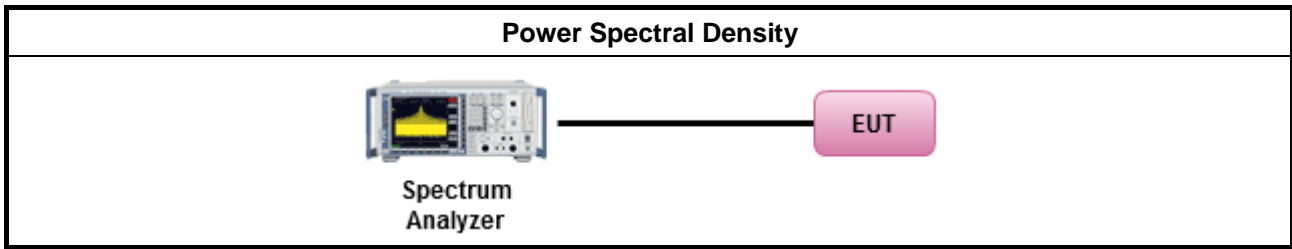
3.4.2 Measuring Instruments

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 FCC KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak). [duty cycle \geq 98% or external video / power trigger]
<input type="checkbox"/> Refer as FCC KDB 558074, clause 10.3 Method AVGPSD-1 (spectral trace averaging).
<input type="checkbox"/> Refer as FCC KDB 558074, clause 10.4 Method AVGPSD-2 (slow sweep speed) duty cycle < 98% and average over on/off periods with duty factor
<input type="checkbox"/> Refer as FCC KDB 558074, clause 10.5 Method AVGPSD-1 Alt (spectral trace averaging).
<input type="checkbox"/> Refer as FCC KDB 558074, clause 10.6 Method AVGPSD-2 Alt. (slow sweep speed)
<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"> <input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace. <input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits, <input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

3.4.4 Test Setup



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.

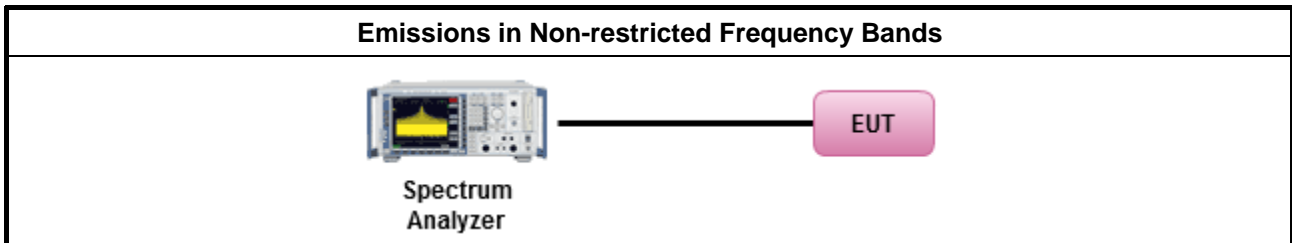
3.5.2 Measuring Instruments

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 FCC 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

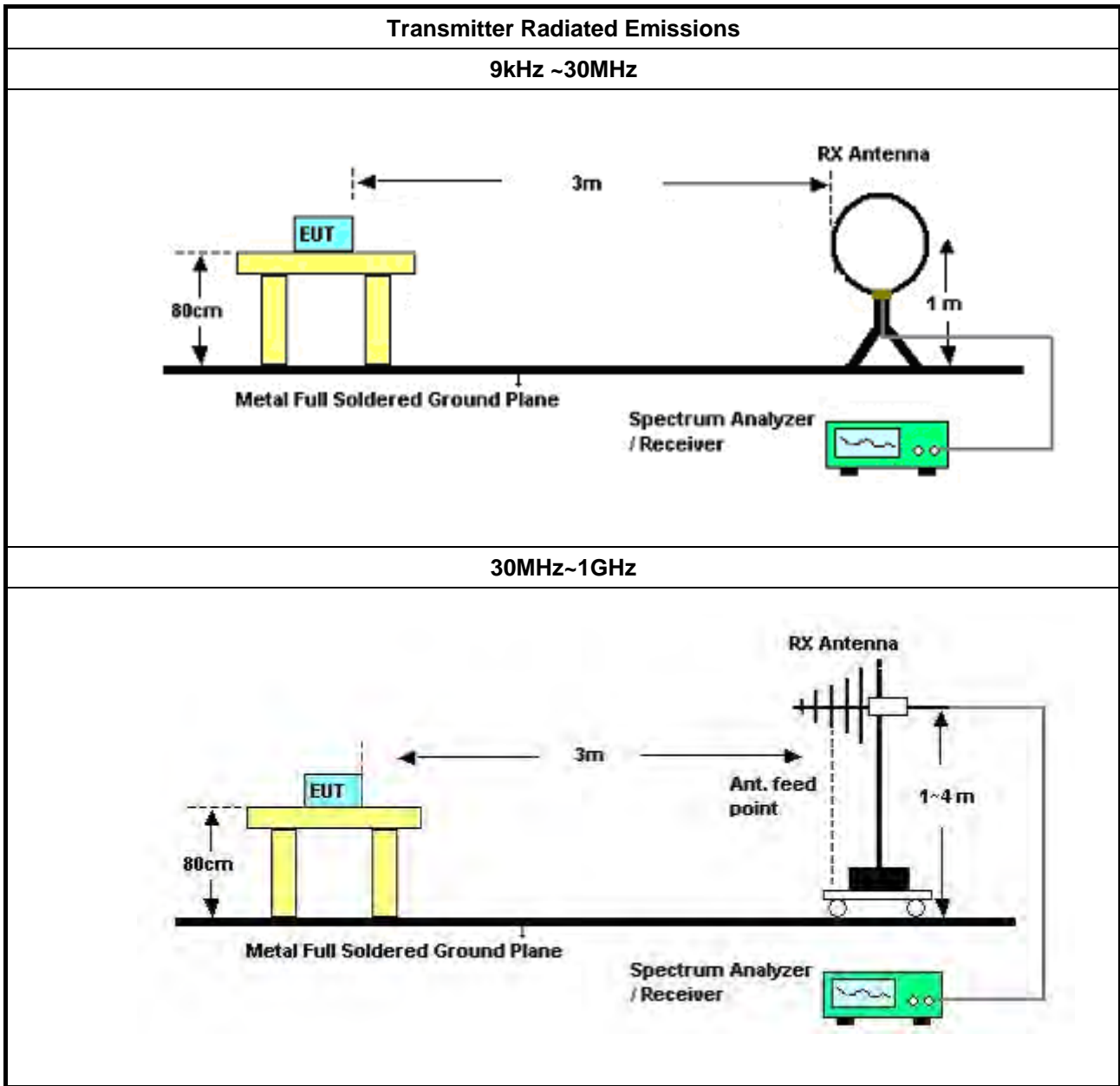
Refer a test equipment and calibration data table in this test report.

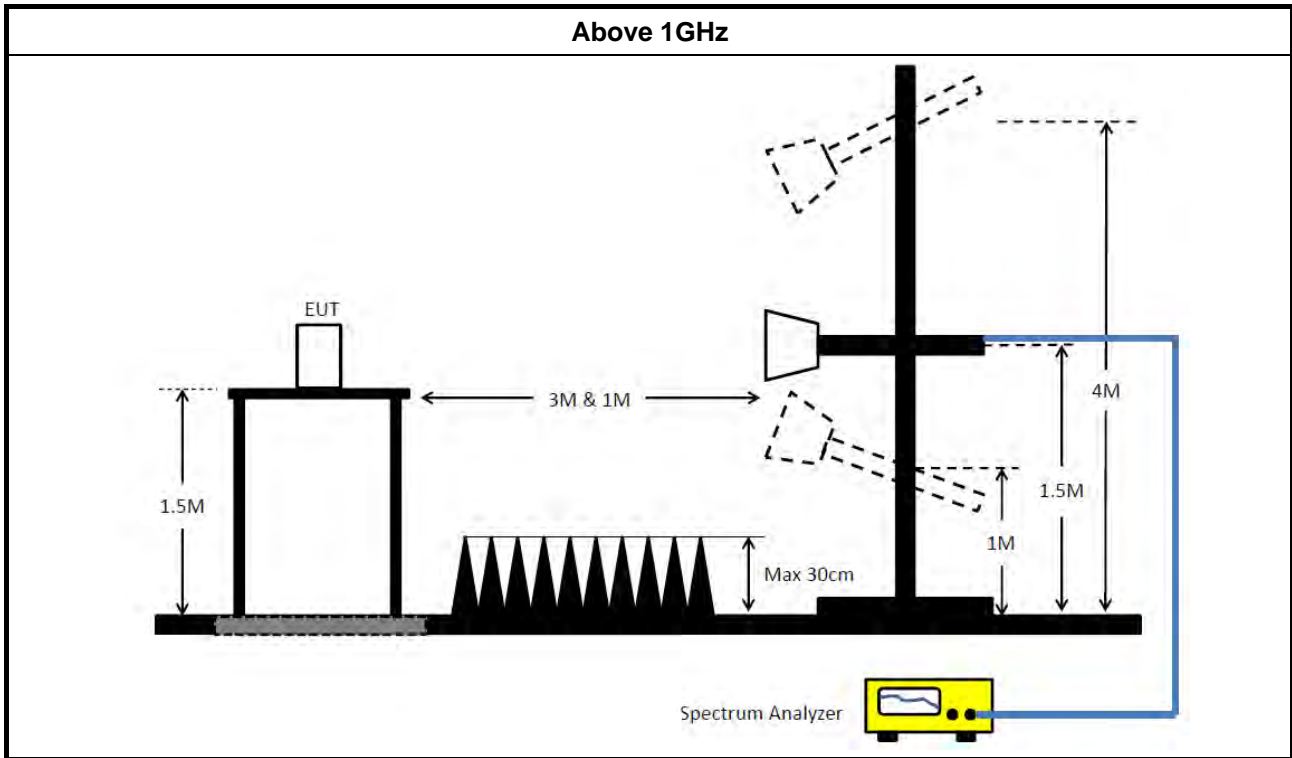


3.6.3 Test Procedures

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 6.9.2.2 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 FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle \geq 98%)
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW \geq 1/T).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW \geq 1/T, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC 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 FCC KDB 558074 clause 13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
<ul style="list-style-type: none"> ▪ For conducted and cabinet radiation measurement, refer as FCC 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 FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.4 Test Setup





3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.6.6 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 31, 2018	Jan. 30, 2019	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-5 0-16-2	04083	150kHz ~ 100MHz	Dec. 20, 2017	Dec. 19, 2018	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 29, 2017	Dec. 28, 2018	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	150kHz ~ 30MHz	May 22, 2018	May 21, 2019	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
10m Semi Anechoic Chamber	TDK	NSA	10CH01-CB	30MHz~1GHz 10m,3m	Mar. 18, 2018	Mar. 17, 2019	Radiation (10CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10783	9kHz ~ 1.3GHz	Mar. 26, 2018	Mar. 25, 2019	Radiation (10CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10784	9kHz ~ 1.3GHz	Mar. 13, 2018	Mar. 12, 2019	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-01	25MHz ~ 1GHz	Nov. 27, 2017	Nov. 26, 2018	Radiation (10CH01-CB)
High Cable	Woken	SUCOFLEX 104	low cable-02	25MHz ~ 1GHz	Nov. 27, 2017	Nov. 26, 2018	Radiation (10CH01-CB)
Biconical Antenna	Schwarzbeck	VHBB 9124	324	30MHz ~ 200MHz	Apr. 24, 2018	Apr. 23, 2019	Radiation (10CH01-CB)
Log Antenna	Schwarzbeck	VUSLP 9111	247	200MHz ~ 1GHz	May 22, 2018	May 21, 2019	Radiation (10CH01-CB)
EMI Test Receiver	Rohde&Schwarz	ESCI	100186	9kHz ~ 3GHz	Jul. 12, 2017	Jul. 11, 2018	Radiation (10CH01-CB)
Spectrum Analyzer	Rohde&Schwarz	FSV30	101026	9kHz ~ 30GHz	Jan. 10, 2018	Jan. 09, 2019	Radiation (10CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2018	Mar. 15, 2019	Radiation (10CH01-CB)
Software	Audix	E3	6.120210m	-	N.C.R.	N.C.R.	Radiation (10CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 20, 2017	Nov. 19, 2018	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 09, 2018	Jan. 08, 2019	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 10, 2017	Jul. 09, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 23, 2017	Nov. 22, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 21, 2017	Dec. 20, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 20, 2017	Nov. 19, 2018	Conducted (TH01-CB)

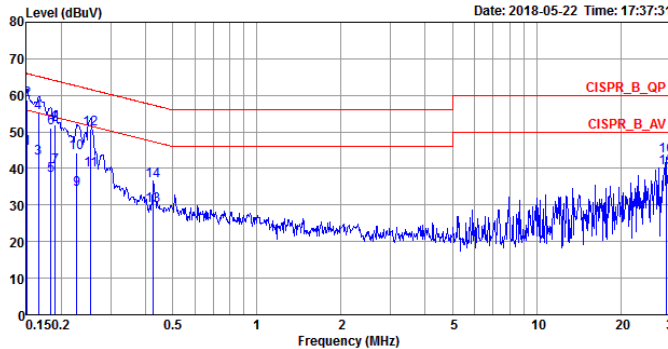
Note: Calibration Interval of instruments listed above is one year.

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



AC Power-line Conducted Emissions Result

Appendix A

AC Power-line Conducted Emissions Result									
Operating Mode	1		Power Phase	Neutral					
Operating Function	CTX								
 <p>The graph shows the AC Power-line Conducted Emissions Result. The Y-axis is Level (dBuV) ranging from 0 to 80. The X-axis is Frequency (MHz) on a logarithmic scale from 0.1502 to 30. Two red lines represent CISPR limits: CISPR_B_QP (Quasi-Peak) and CISPR_B_AV (Average). The blue line represents the measured emission level. The graph shows several peaks, with the highest peak at 0.1508 MHz. The date and time are 2018-05-22 17:37:31.</p>									
	Freq	Level	Over	Limit	Read	LISN	Cable	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1508	45.56	-10.40	55.96	35.30	10.10	0.16	Average	NEUTRAL
2	0.1508	58.79	-7.17	65.96	48.53	10.10	0.16	QP	NEUTRAL
3	0.1659	42.85	-12.31	55.16	32.59	10.10	0.16	Average	NEUTRAL
4	0.1659	55.34	-9.82	65.16	45.08	10.10	0.16	QP	NEUTRAL
5	0.1835	38.11	-16.22	54.33	27.95	10.01	0.15	Average	NEUTRAL
6	0.1835	51.08	-13.25	64.33	40.92	10.01	0.15	QP	NEUTRAL
7	0.1904	40.53	-13.49	54.02	30.38	10.01	0.14	Average	NEUTRAL
8	0.1904	51.99	-12.03	64.02	41.84	10.01	0.14	QP	NEUTRAL
9	0.2268	34.11	-18.46	52.57	23.92	10.05	0.14	Average	NEUTRAL
10	0.2268	44.35	-18.22	62.57	34.16	10.05	0.14	QP	NEUTRAL
11	0.2548	39.45	-12.15	51.60	29.24	10.08	0.13	Average	NEUTRAL
12	0.2548	50.77	-10.83	61.60	40.56	10.08	0.13	QP	NEUTRAL
13	0.4260	29.81	-17.52	47.33	19.43	10.25	0.13	Average	NEUTRAL
14	0.4260	36.72	-20.61	57.33	26.34	10.25	0.13	QP	NEUTRAL
15	29.2350	40.25	-9.75	50.00	29.40	10.56	0.29	Average	NEUTRAL
16	29.2350	43.27	-16.73	60.00	32.42	10.56	0.29	QP	NEUTRAL

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



AC Power-line Conducted Emissions Result

Appendix A

AC Power-line Conducted Emissions Result																																																																																																																																																																																																											
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<p style="text-align: right; font-size: small;">Date: 2018-05-22 Time: 17:35:17</p>																																																																																																																																																																																																											
<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th></th> <th>Freq</th> <th>Level</th> <th>Over</th> <th>Limit</th> <th>Read</th> <th>LISN</th> <th>Cable</th> <th>Remark</th> <th>Pol/Phase</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV</th> <th>dB</th> <th>dBuV</th> <th>dBuV</th> <th>dB</th> <th>dB</th> <th></th> <th></th> </tr> </thead> <tbody> <tr><td>1</td><td>0.1500</td><td>46.68</td><td>-9.32</td><td>56.00</td><td>36.52</td><td>10.00</td><td>0.16</td><td>Average</td><td>LINE</td></tr> <tr><td>2</td><td>0.1500</td><td>60.14</td><td>-5.86</td><td>66.00</td><td>49.98</td><td>10.00</td><td>0.16</td><td>QP</td><td>LINE</td></tr> <tr><td>3</td><td>0.1598</td><td>43.38</td><td>-12.09</td><td>55.47</td><td>33.22</td><td>10.00</td><td>0.16</td><td>Average</td><td>LINE</td></tr> <tr><td>4</td><td>0.1598</td><td>56.57</td><td>-8.90</td><td>65.47</td><td>46.41</td><td>10.00</td><td>0.16</td><td>QP</td><td>LINE</td></tr> <tr><td>5</td><td>0.1731</td><td>40.68</td><td>-14.13</td><td>54.81</td><td>30.53</td><td>10.00</td><td>0.15</td><td>Average</td><td>LINE</td></tr> <tr><td>6</td><td>0.1731</td><td>53.42</td><td>-11.39</td><td>64.81</td><td>43.27</td><td>10.00</td><td>0.15</td><td>QP</td><td>LINE</td></tr> <tr><td>7</td><td>0.1844</td><td>37.89</td><td>-16.39</td><td>54.28</td><td>27.83</td><td>9.91</td><td>0.15</td><td>Average</td><td>LINE</td></tr> <tr><td>8</td><td>0.1844</td><td>51.84</td><td>-12.44</td><td>64.28</td><td>41.78</td><td>9.91</td><td>0.15</td><td>QP</td><td>LINE</td></tr> <tr><td>9</td><td>0.2040</td><td>38.78</td><td>-14.67</td><td>53.45</td><td>28.72</td><td>9.92</td><td>0.14</td><td>Average</td><td>LINE</td></tr> <tr><td>10</td><td>0.2040</td><td>49.82</td><td>-13.63</td><td>63.45</td><td>39.76</td><td>9.92</td><td>0.14</td><td>QP</td><td>LINE</td></tr> <tr><td>11</td><td>0.2117</td><td>37.66</td><td>-15.48</td><td>53.14</td><td>27.60</td><td>9.92</td><td>0.14</td><td>Average</td><td>LINE</td></tr> <tr><td>12</td><td>0.2117</td><td>47.08</td><td>-16.06</td><td>63.14</td><td>37.02</td><td>9.92</td><td>0.14</td><td>QP</td><td>LINE</td></tr> <tr><td>13</td><td>0.2575</td><td>37.14</td><td>-14.37</td><td>51.51</td><td>27.09</td><td>9.92</td><td>0.13</td><td>Average</td><td>LINE</td></tr> <tr><td>14</td><td>0.2575</td><td>45.71</td><td>-15.80</td><td>61.51</td><td>35.66</td><td>9.92</td><td>0.13</td><td>QP</td><td>LINE</td></tr> <tr><td>15</td><td>0.3446</td><td>31.17</td><td>-17.92</td><td>49.09</td><td>21.11</td><td>9.94</td><td>0.12</td><td>Average</td><td>LINE</td></tr> <tr><td>16</td><td>0.3446</td><td>37.84</td><td>-21.25</td><td>59.09</td><td>27.78</td><td>9.94</td><td>0.12</td><td>QP</td><td>LINE</td></tr> <tr><td>17</td><td>29.2350</td><td>40.33</td><td>-9.67</td><td>50.00</td><td>29.53</td><td>10.51</td><td>0.29</td><td>Average</td><td>LINE</td></tr> <tr><td>18</td><td>29.2350</td><td>43.45</td><td>-16.55</td><td>60.00</td><td>32.65</td><td>10.51</td><td>0.29</td><td>QP</td><td>LINE</td></tr> </tbody> </table>					Freq	Level	Over	Limit	Read	LISN	Cable	Remark	Pol/Phase		MHz	dBuV	dB	dBuV	dBuV	dB	dB			1	0.1500	46.68	-9.32	56.00	36.52	10.00	0.16	Average	LINE	2	0.1500	60.14	-5.86	66.00	49.98	10.00	0.16	QP	LINE	3	0.1598	43.38	-12.09	55.47	33.22	10.00	0.16	Average	LINE	4	0.1598	56.57	-8.90	65.47	46.41	10.00	0.16	QP	LINE	5	0.1731	40.68	-14.13	54.81	30.53	10.00	0.15	Average	LINE	6	0.1731	53.42	-11.39	64.81	43.27	10.00	0.15	QP	LINE	7	0.1844	37.89	-16.39	54.28	27.83	9.91	0.15	Average	LINE	8	0.1844	51.84	-12.44	64.28	41.78	9.91	0.15	QP	LINE	9	0.2040	38.78	-14.67	53.45	28.72	9.92	0.14	Average	LINE	10	0.2040	49.82	-13.63	63.45	39.76	9.92	0.14	QP	LINE	11	0.2117	37.66	-15.48	53.14	27.60	9.92	0.14	Average	LINE	12	0.2117	47.08	-16.06	63.14	37.02	9.92	0.14	QP	LINE	13	0.2575	37.14	-14.37	51.51	27.09	9.92	0.13	Average	LINE	14	0.2575	45.71	-15.80	61.51	35.66	9.92	0.13	QP	LINE	15	0.3446	31.17	-17.92	49.09	21.11	9.94	0.12	Average	LINE	16	0.3446	37.84	-21.25	59.09	27.78	9.94	0.12	QP	LINE	17	29.2350	40.33	-9.67	50.00	29.53	10.51	0.29	Average	LINE	18	29.2350	43.45	-16.55	60.00	32.65	10.51	0.29	QP	LINE
	Freq	Level	Over	Limit	Read	LISN	Cable	Remark	Pol/Phase																																																																																																																																																																																																		
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Summary

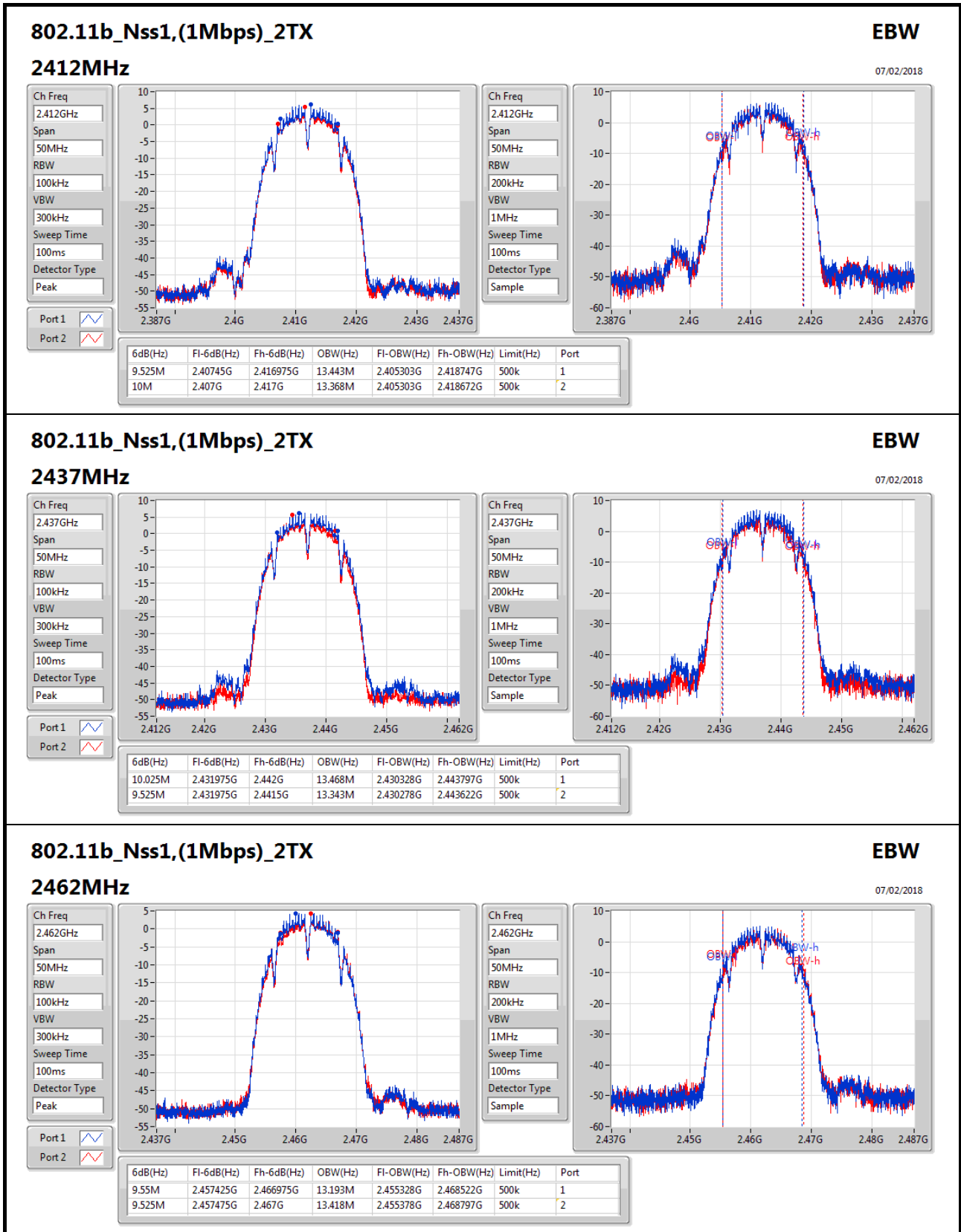
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	10.025M	13.468M	13M5G1D	9.525M	13.193M
802.11g_Nss1,(6Mbps)_2TX	15.1M	16.242M	16M2D1D	12.8M	16.167M
802.11n HT20_Nss1,(MCS0)_2TX	15.075M	16.242M	16M2D1D	13.7M	16.192M
802.11n HT40_Nss1,(MCS0)_2TX	34.95M	35.832M	35M8D1D	31.35M	35.682M

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	9.525M	13.443M	10M	13.368M
2437MHz	Pass	500k	10.025M	13.468M	9.525M	13.343M
2462MHz	Pass	500k	9.55M	13.193M	9.525M	13.418M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	12.8M	16.192M	14.975M	16.192M
2437MHz	Pass	500k	14.075M	16.217M	15.1M	16.242M
2462MHz	Pass	500k	15M	16.167M	15.025M	16.217M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	14.425M	16.217M	13.85M	16.217M
2437MHz	Pass	500k	15.025M	16.217M	13.7M	16.192M
2462MHz	Pass	500k	15.075M	16.217M	13.75M	16.242M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	33.8M	35.832M	31.35M	35.682M
2437MHz	Pass	500k	34.95M	35.682M	32.6M	35.682M
2452MHz	Pass	500k	32.5M	35.682M	31.35M	35.782M

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


802.11b_Nss1,(1Mbps)_2TX
EBW
2462MHz
07/02/2018

Ch Freq
2.462GHz

Span
50MHz

RBW
100kHz

VBW
300kHz

Sweep Time
100ms

Detector Type
Peak

Port 1

Port 2

Ch Freq
2.462GHz

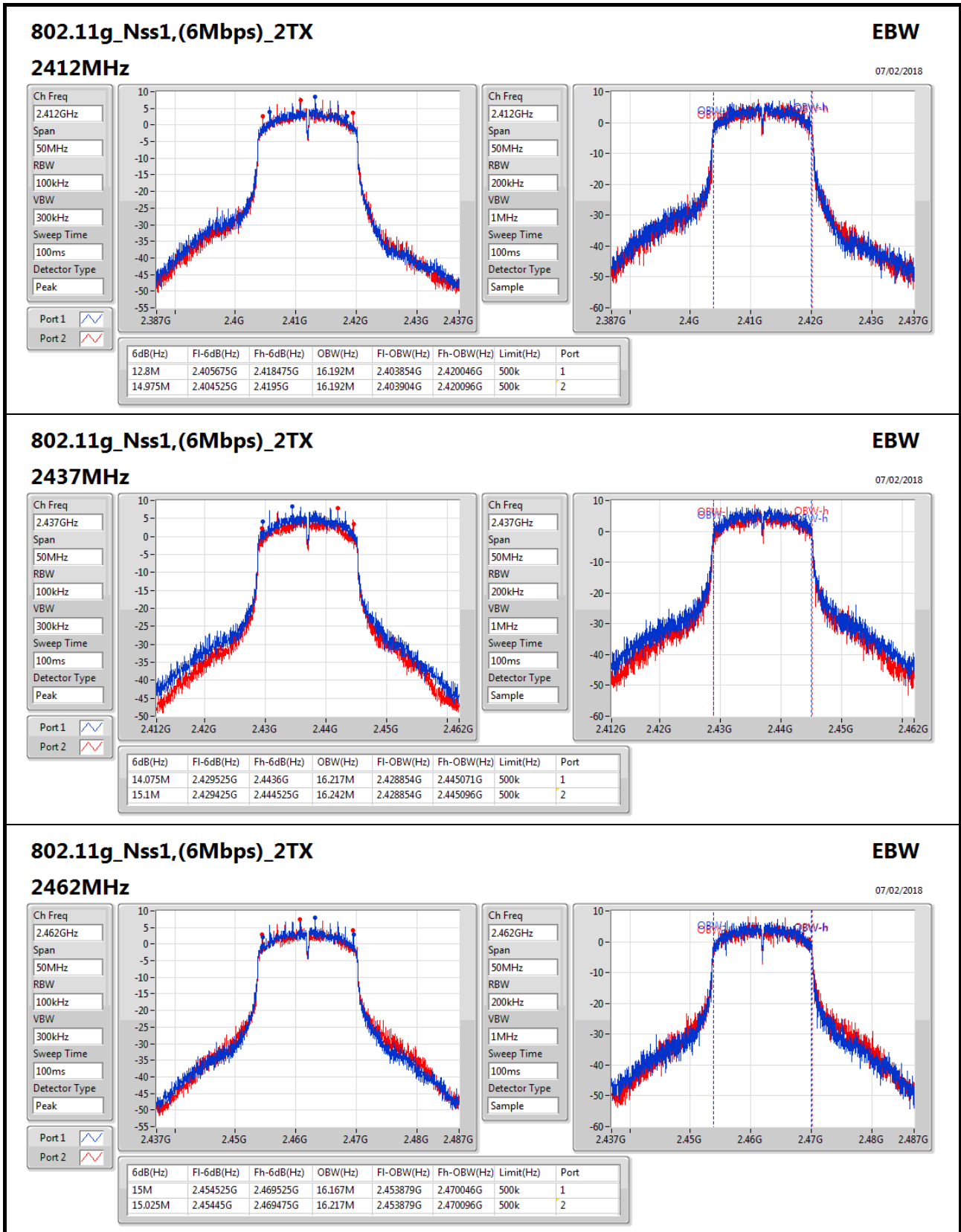
Span
50MHz

RBW
200kHz

VBW
1MHz

Sweep Time
100ms

Detector Type
Sample


802.11g_Nss1,(6Mbps)_2TX
EBW

07/02/2018

2462MHz

Ch Freq: 2.462GHz

Span: 50MHz

RBW: 100kHz

VBW: 300kHz

Sweep Time: 100ms

Detector Type: Peak

Ch Freq: 2.462GHz

Span: 50MHz

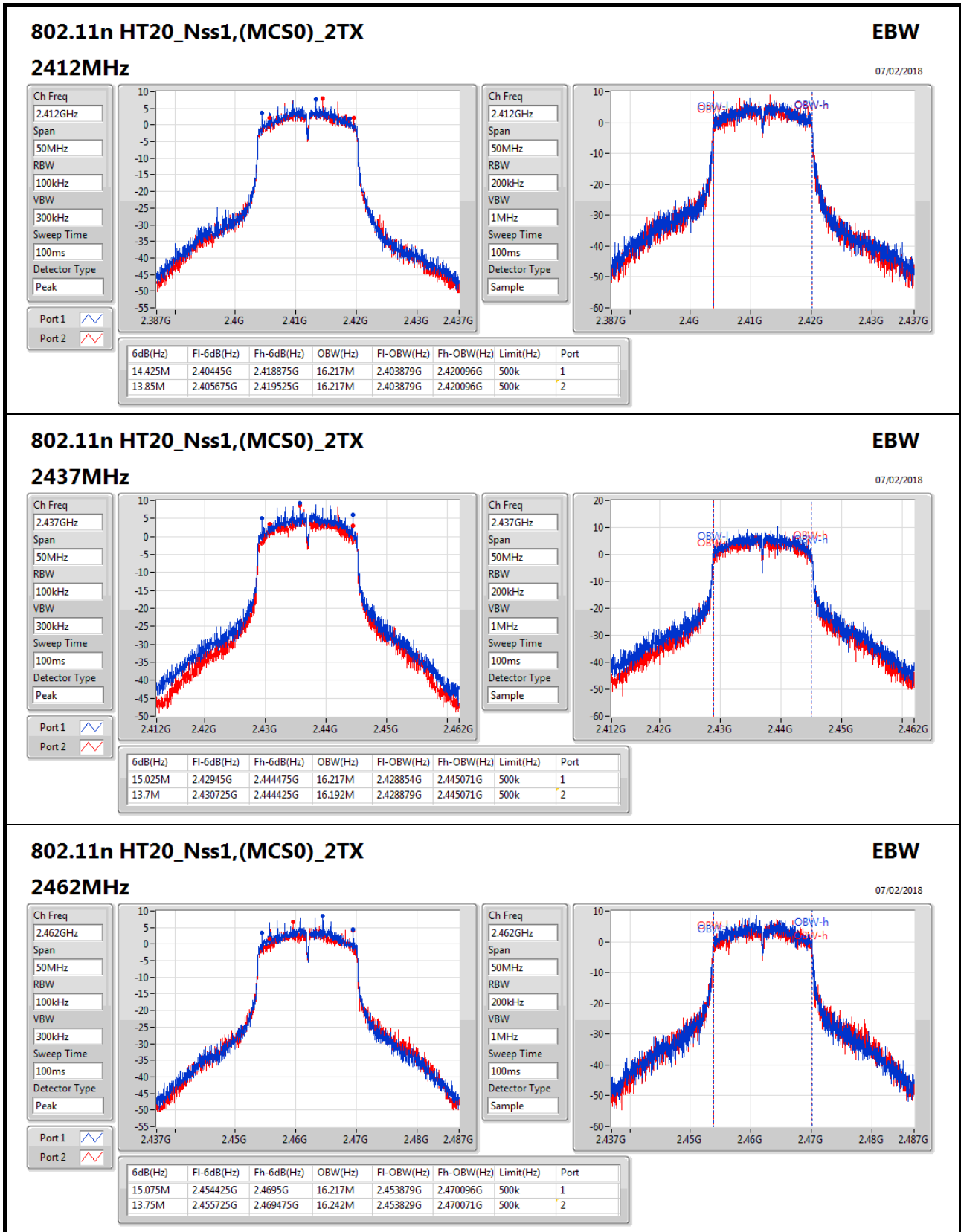
RBW: 200kHz

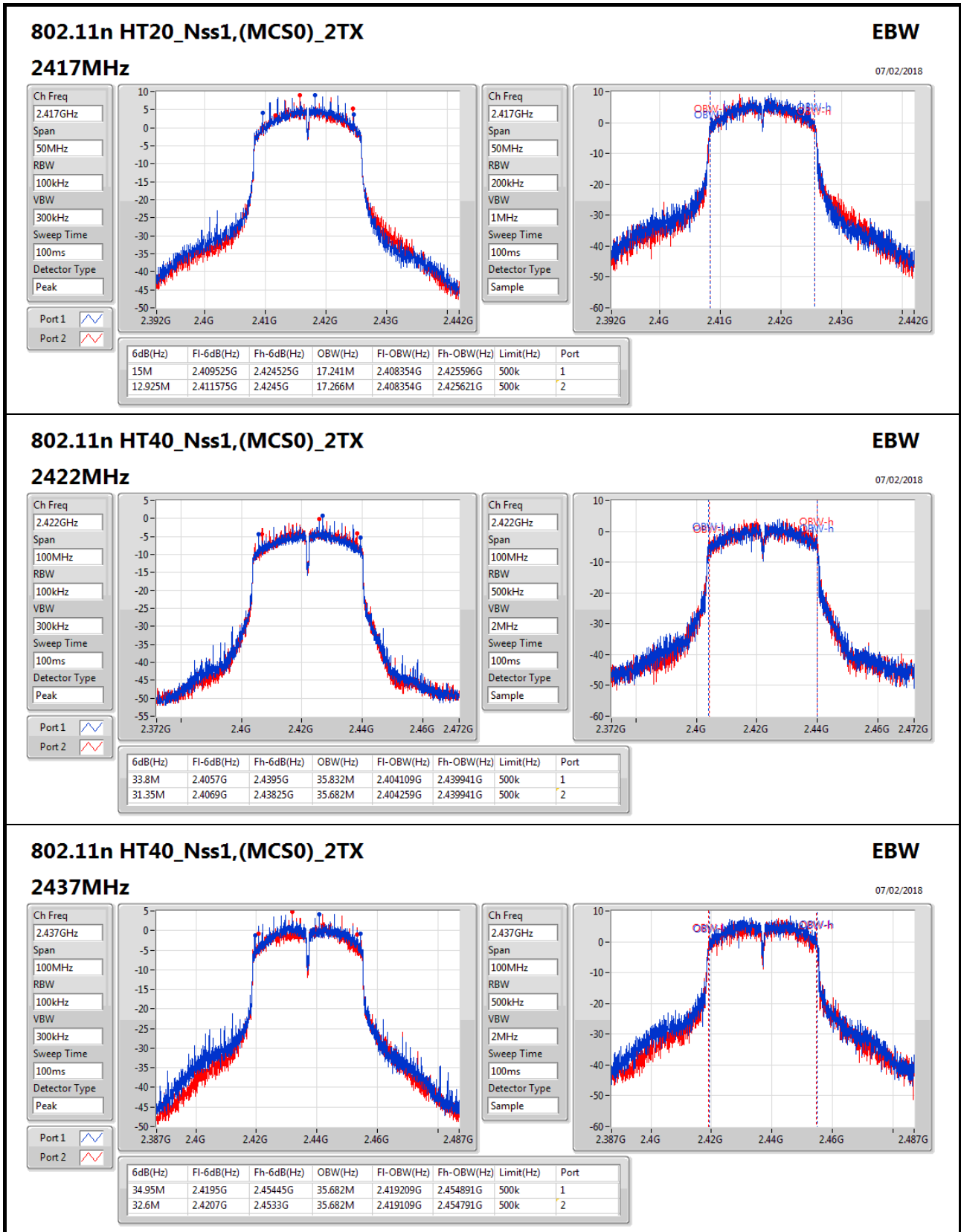
VBW: 1MHz

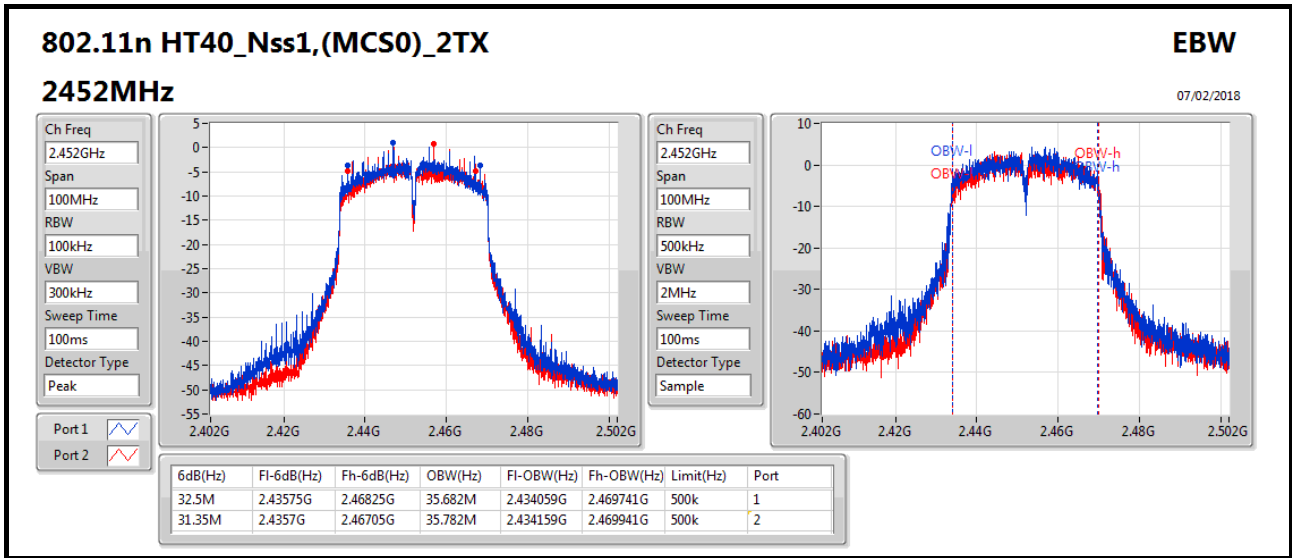
Sweep Time: 100ms

Detector Type: Peak

Sample









Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	18.27	0.06714
802.11g_Nss1,(6Mbps)_2TX	21.82	0.15205
802.11n HT20_Nss1,(MCS0)_2TX	21.88	0.15417
802.11n HT40_Nss1,(MCS0)_2TX	21.01	0.12618

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.50	14.89	14.57	17.74	30.00
2437MHz	Pass	1.50	15.81	14.62	18.27	30.00
2462MHz	Pass	1.50	13.22	12.59	15.93	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.50	17.3	16.99	20.16	30.00
2437MHz	Pass	1.50	19.15	18.24	21.73	30.00
2462MHz	Pass	1.50	18.01	17.23	20.65	30.00
2417MHz	Pass	1.50	18.97	18.65	21.82	30.00
2457MHz	Pass	1.50	18.86	18.75	21.82	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.50	17.7	17.24	20.49	30.00
2437MHz	Pass	1.50	19.32	17.82	21.64	30.00
2462MHz	Pass	1.50	17.95	17.03	20.52	30.00
2417MHz	Pass	1.50	18.96	18.78	21.88	30.00
2457MHz	Pass	1.50	18.69	18.08	21.41	30.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	1.50	12.9	12.93	15.93	30.00
2437MHz	Pass	1.50	18.13	17.3	20.75	30.00
2452MHz	Pass	1.50	13.86	12.97	16.45	30.00
2427MHz	Pass	1.50	15.56	15.63	18.61	30.00
2432MHz	Pass	1.50	18.43	17.52	21.01	30.00
2442MHz	Pass	1.50	18.49	17.23	20.92	30.00
2447MHz	Pass	1.50	18.57	17.28	20.98	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	-6.68
802.11g_Nss1,(6Mbps)_2TX	-4.81
802.11n HT20_Nss1,(MCS0)_2TX	-3.56
802.11n HT40_Nss1,(MCS0)_2TX	-8.58

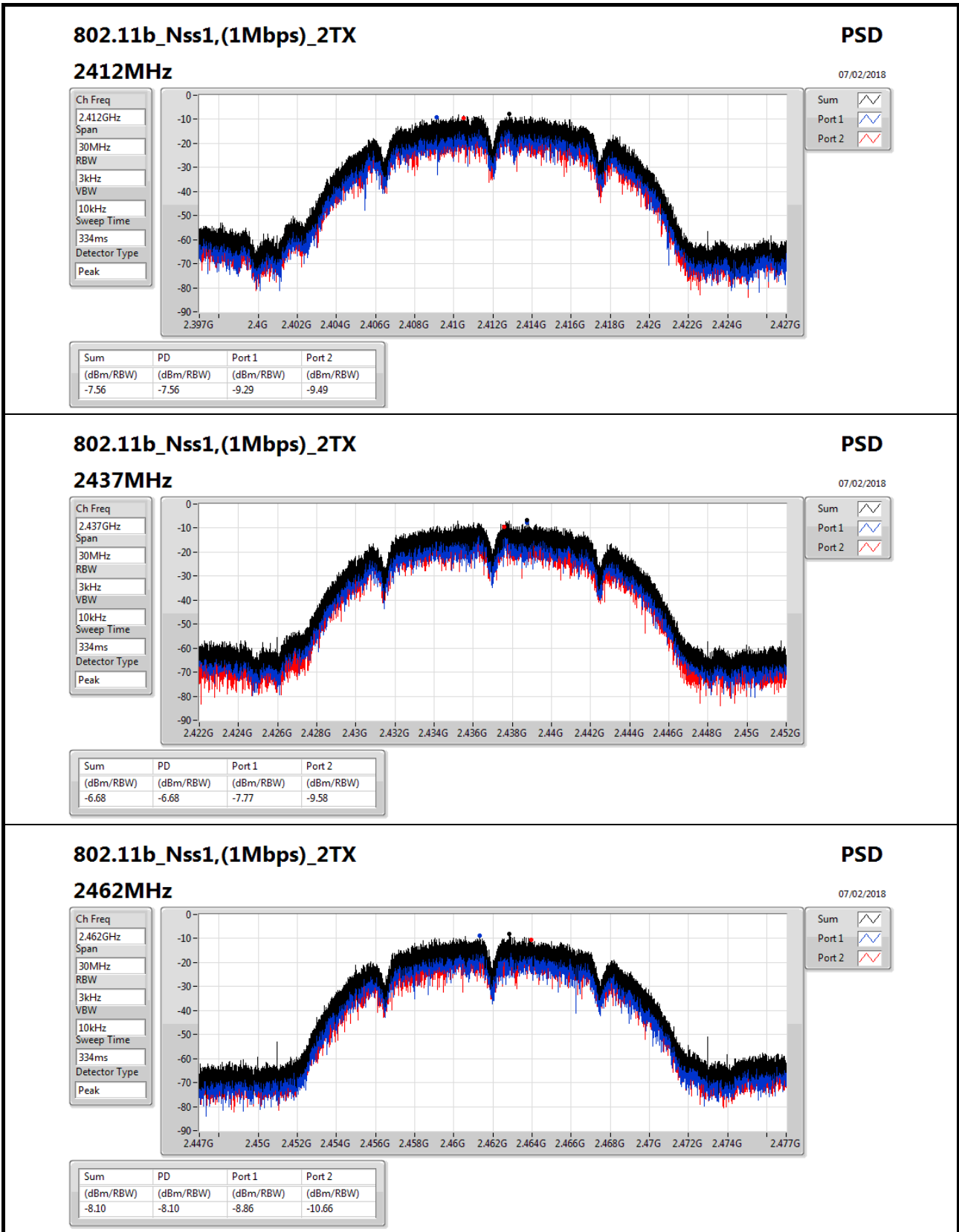
RBW=3kHz.

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	4.51	-9.29	-9.49	-7.56	8.00
2437MHz	Pass	4.51	-7.77	-9.58	-6.68	8.00
2462MHz	Pass	4.51	-8.86	-10.66	-8.10	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.51	-7.67	-6.84	-5.24	8.00
2437MHz	Pass	4.51	-5.40	-6.91	-4.81	8.00
2462MHz	Pass	4.51	-7.62	-7.90	-5.97	8.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.51	-6.69	-8.09	-5.44	8.00
2437MHz	Pass	4.51	-4.74	-6.16	-3.56	8.00
2462MHz	Pass	4.51	-6.93	-6.69	-5.85	8.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.51	-14.73	-14.22	-12.91	8.00
2437MHz	Pass	4.51	-10.08	-10.53	-8.58	8.00
2452MHz	Pass	4.51	-14.35	-13.48	-12.94	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;



802.11b_Nss1,(1Mbps)_2TX

2462MHz

PSD

07/02/2018

Ch Freq

2.462GHz

Span

30MHz

RBW

3kHz

VBW

10kHz

Sweep Time

334ms

Detector Type

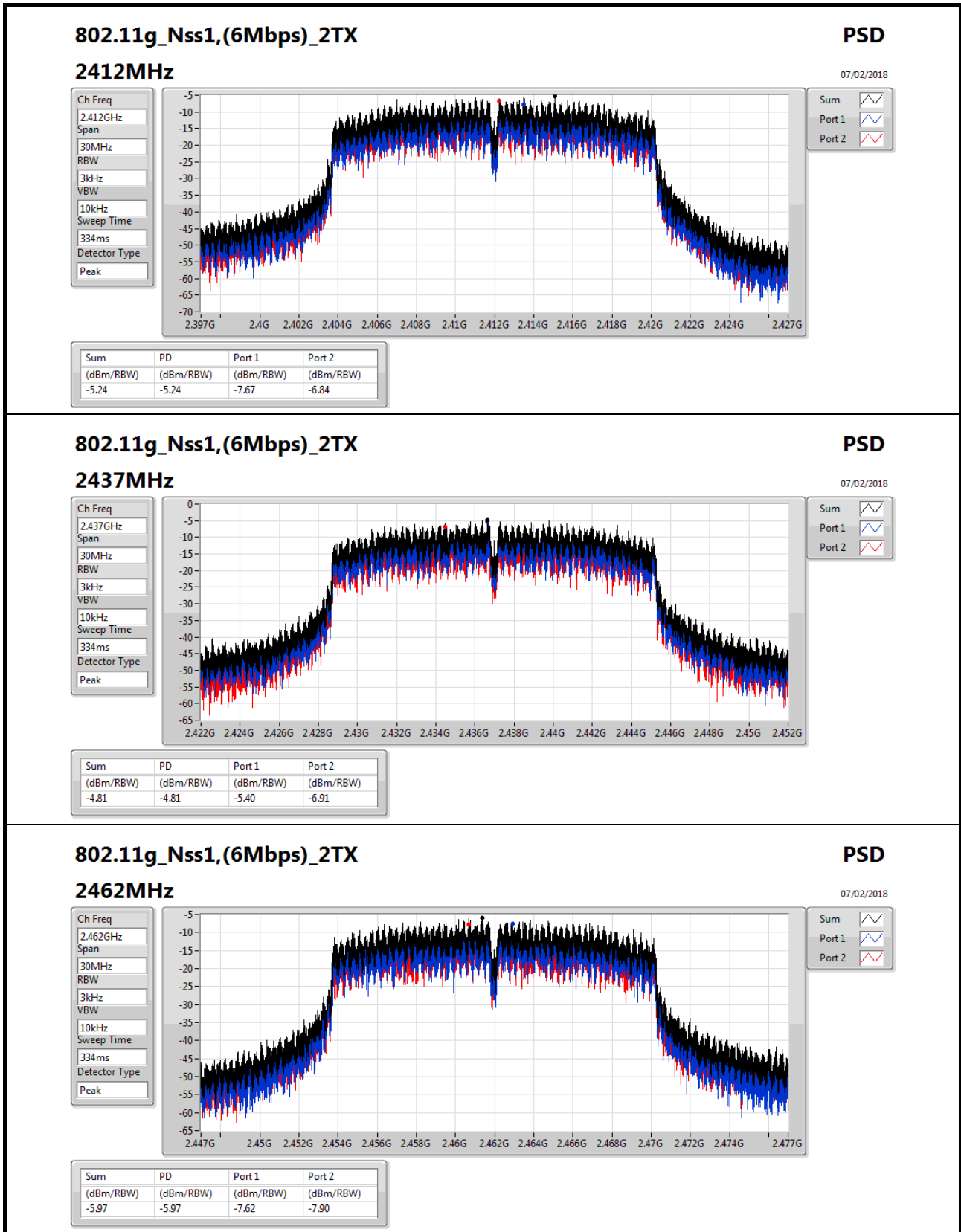
Peak

Sum

Port 1

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.10	-8.10	-8.86	-10.66



802.11g_Nss1,(6Mbps)_2TX

2462MHz

PSD

07/02/2018

Ch Freq
2.462GHz

Span
30MHz

RBW
3kHz

VBW
10kHz

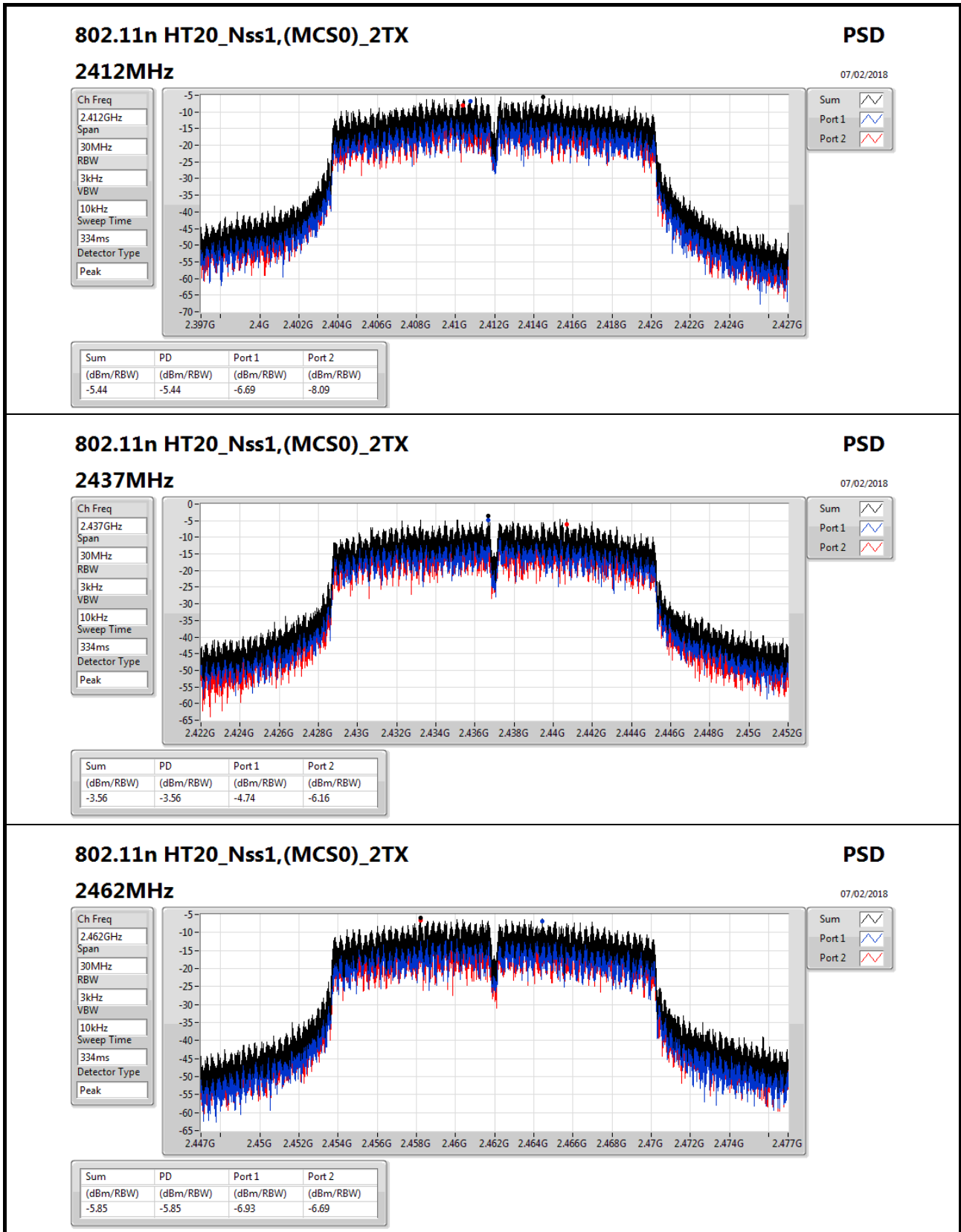
Sweep Time
334ms

Detector Type
Peak

Sum

Port 1

Port 2



802.11n HT20_Nss1,(MCS0)_2TX

2462MHz

PSD

07/02/2018

Ch Freq
2.462GHz

Span
30MHz

RBW
3kHz

VBW
10kHz

Sweep Time
334ms

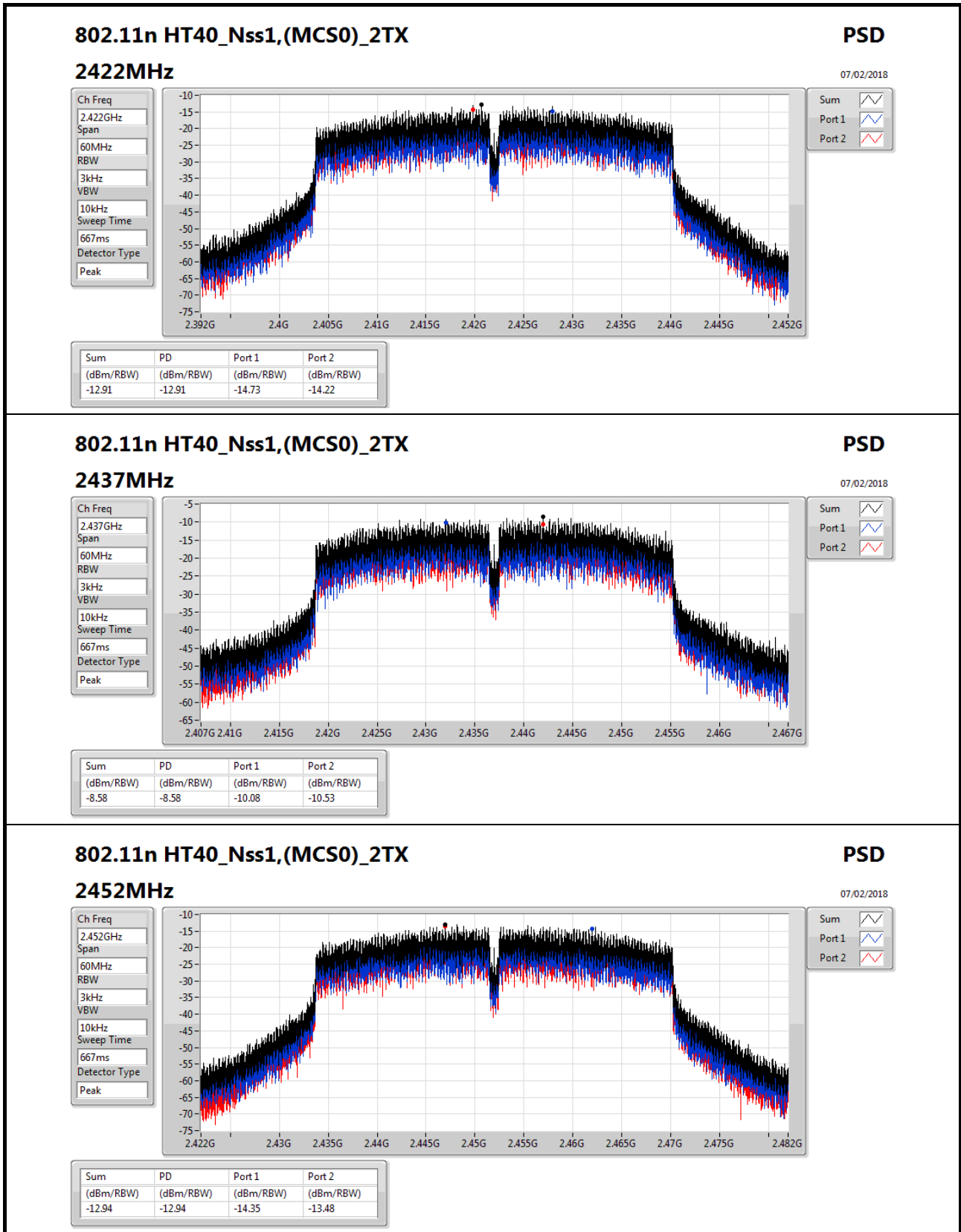
Detector Type
Peak

Sum

Port 1

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.85	-5.85	-6.93	-6.69



802.11n HT40_Nss1,(MCS0)_2TX

2452MHz

PSD

07/02/2018

Ch Freq
2.452GHz

Span
60MHz

RBW
3kHz

VBW
10kHz

Sweep Time
667ms

Detector Type
Peak

Sum

Port 1

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.94	-12.94	-14.35	-13.48

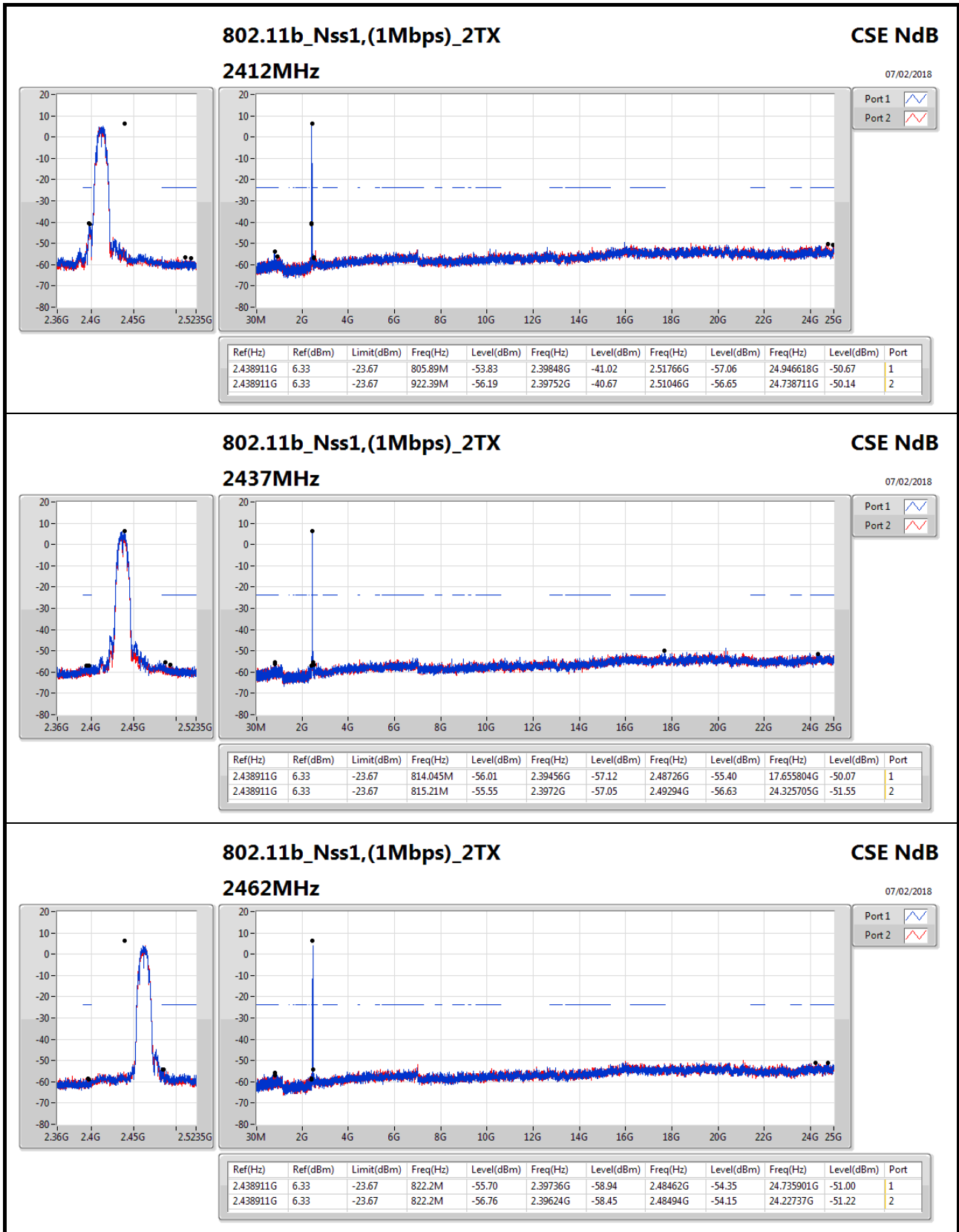


Summary

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	2.438911G	6.33	-23.67	922.39M	-56.19	2.39752G	-40.67	2.51046G	-56.65	24.738711G	-50.14	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.437909G	6.91	-23.09	803.56M	-53.16	2.39704G	-26.94	2.50174G	-56.85	24.373468G	-51.37	1
802.11n HT20_Nss1,(MCS0)_2TX	Pass	2.438243G	9.26	-20.74	807.055M	-55.17	2.39976G	-27.09	2.52286G	-56.52	24.373468G	-50.47	2
802.11n HT40_Nss1,(MCS0)_2TX	Pass	2.440748G	4.83	-25.17	824.63M	-53.85	2.39952G	-28.96	2.4907G	-41.86	24.36056G	-51.20	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	2.438911G	6.33	-23.67	805.89M	-53.83	2.39848G	-41.02	2.51766G	-57.06	24.946618G	-50.67	1
2412MHz	Pass	2.438911G	6.33	-23.67	922.39M	-56.19	2.39752G	-40.67	2.51046G	-56.65	24.738711G	-50.14	2
2437MHz	Pass	2.438911G	6.33	-23.67	814.045M	-56.01	2.39456G	-57.12	2.48726G	-55.40	17.655804G	-50.07	1
2437MHz	Pass	2.438911G	6.33	-23.67	815.21M	-55.55	2.3972G	-57.05	2.49294G	-56.63	24.325705G	-51.55	2
2462MHz	Pass	2.438911G	6.33	-23.67	822.2M	-55.70	2.39736G	-58.94	2.48462G	-54.35	24.735901G	-51.00	1
2462MHz	Pass	2.438911G	6.33	-23.67	822.2M	-56.76	2.39624G	-58.45	2.48494G	-54.15	24.22737G	-51.22	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.437909G	6.91	-23.09	803.56M	-53.16	2.39704G	-26.94	2.50174G	-56.85	24.373468G	-51.37	1
2412MHz	Pass	2.437909G	6.91	-23.09	801.23M	-55.59	2.39824G	-27.41	2.4991G	-56.46	24.690948G	-50.35	2
2437MHz	Pass	2.437909G	6.91	-23.09	811.715M	-52.00	2.39864G	-51.41	2.4847G	-50.80	24.404373G	-50.67	1
2437MHz	Pass	2.437909G	6.91	-23.09	816.375M	-55.40	2.3916G	-53.93	2.4851G	-53.02	24.314467G	-50.03	2
2462MHz	Pass	2.437909G	6.91	-23.09	821.035M	-53.12	2.39928G	-57.98	2.48382G	-41.37	16.402739G	-50.29	1
2462MHz	Pass	2.437909G	6.91	-23.09	823.365M	-53.64	2.39032G	-57.79	2.48358G	-42.29	24.412801G	-51.09	2
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.438243G	9.26	-20.74	807.055M	-51.48	2.39952G	-27.25	2.48894G	-56.29	16.425215G	-51.13	1
2412MHz	Pass	2.438243G	9.26	-20.74	807.055M	-55.17	2.39976G	-27.09	2.52286G	-56.52	24.373468G	-50.47	2
2437MHz	Pass	2.438243G	9.26	-20.74	812.88M	-50.81	2.39696G	-51.19	2.48438G	-51.26	24.699377G	-49.92	1
2437MHz	Pass	2.438243G	9.26	-20.74	814.045M	-53.12	2.39512G	-53.55	2.4843G	-53.39	24.072844G	-49.35	2
2462MHz	Pass	2.438243G	9.26	-20.74	819.87M	-53.76	2.39312G	-57.76	2.48454G	-40.43	24.387515G	-50.29	1
2462MHz	Pass	2.438243G	9.26	-20.74	819.87M	-54.88	2.3916G	-58.41	2.48358G	-39.36	17.647375G	-50.86	2
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.440748G	4.83	-25.17	715.855M	-56.51	2.39952G	-30.21	2.49454G	-56.30	24.36056G	-50.67	1
2422MHz	Pass	2.440748G	4.83	-25.17	810.89M	-56.75	2.39952G	-30.23	2.50846G	-54.78	17.621196G	-50.84	2
2437MHz	Pass	2.440748G	4.83	-25.17	824.63M	-53.85	2.39952G	-28.96	2.4907G	-41.86	24.36056G	-51.20	1
2437MHz	Pass	2.440748G	4.83	-25.17	824.63M	-56.49	2.39952G	-34.61	2.4843G	-40.88	16.653622G	-50.25	2
2452MHz	Pass	2.440748G	4.83	-25.17	844.095M	-57.12	2.39696G	-57.17	2.48574G	-39.17	16.726541G	-51.19	1
2452MHz	Pass	2.440748G	4.83	-25.17	940.275M	-57.30	2.3944G	-55.77	2.48558G	-39.13	24.985977G	-51.04	2



802.11b_Nss1,(1Mbps)_2TX

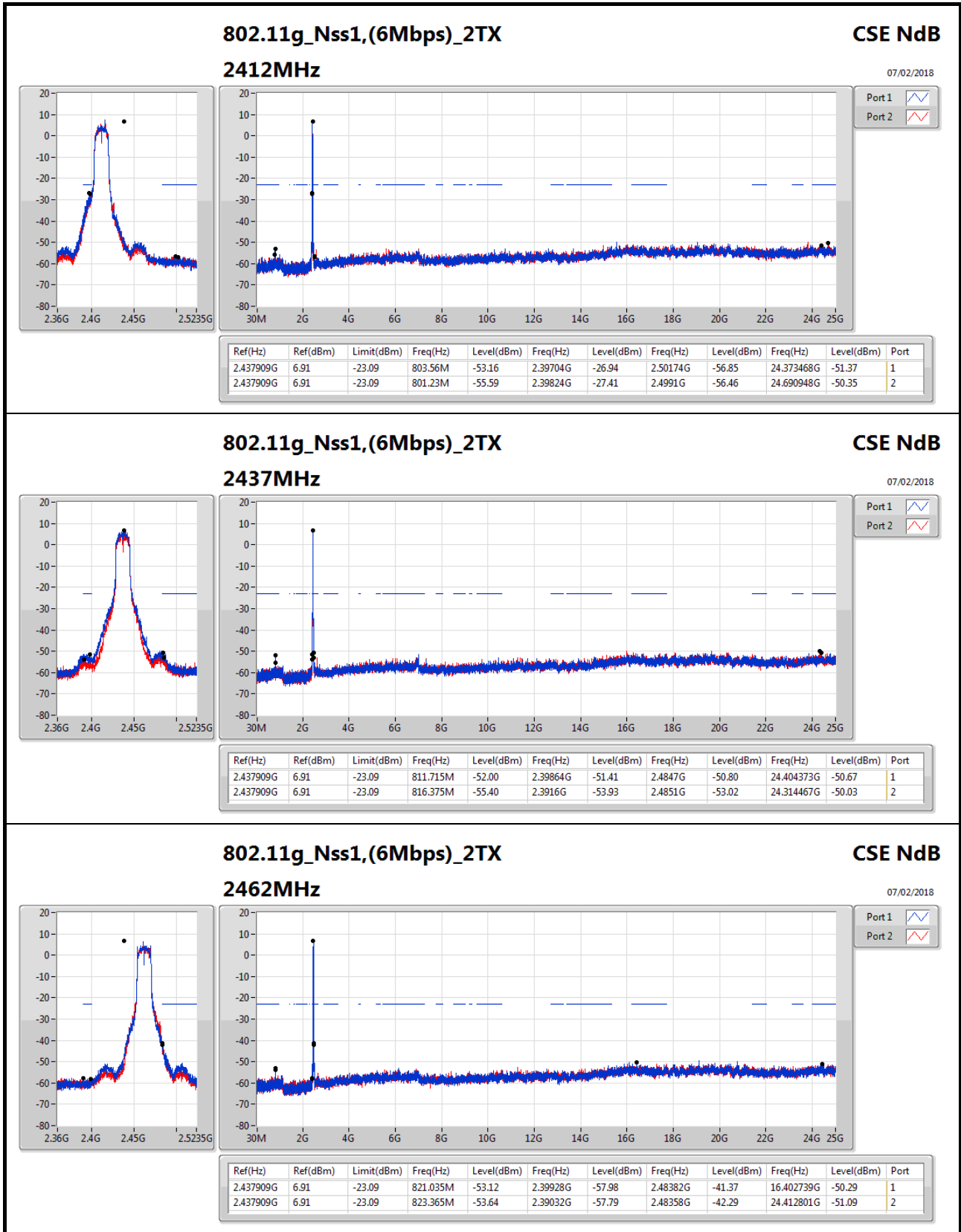
2462MHz

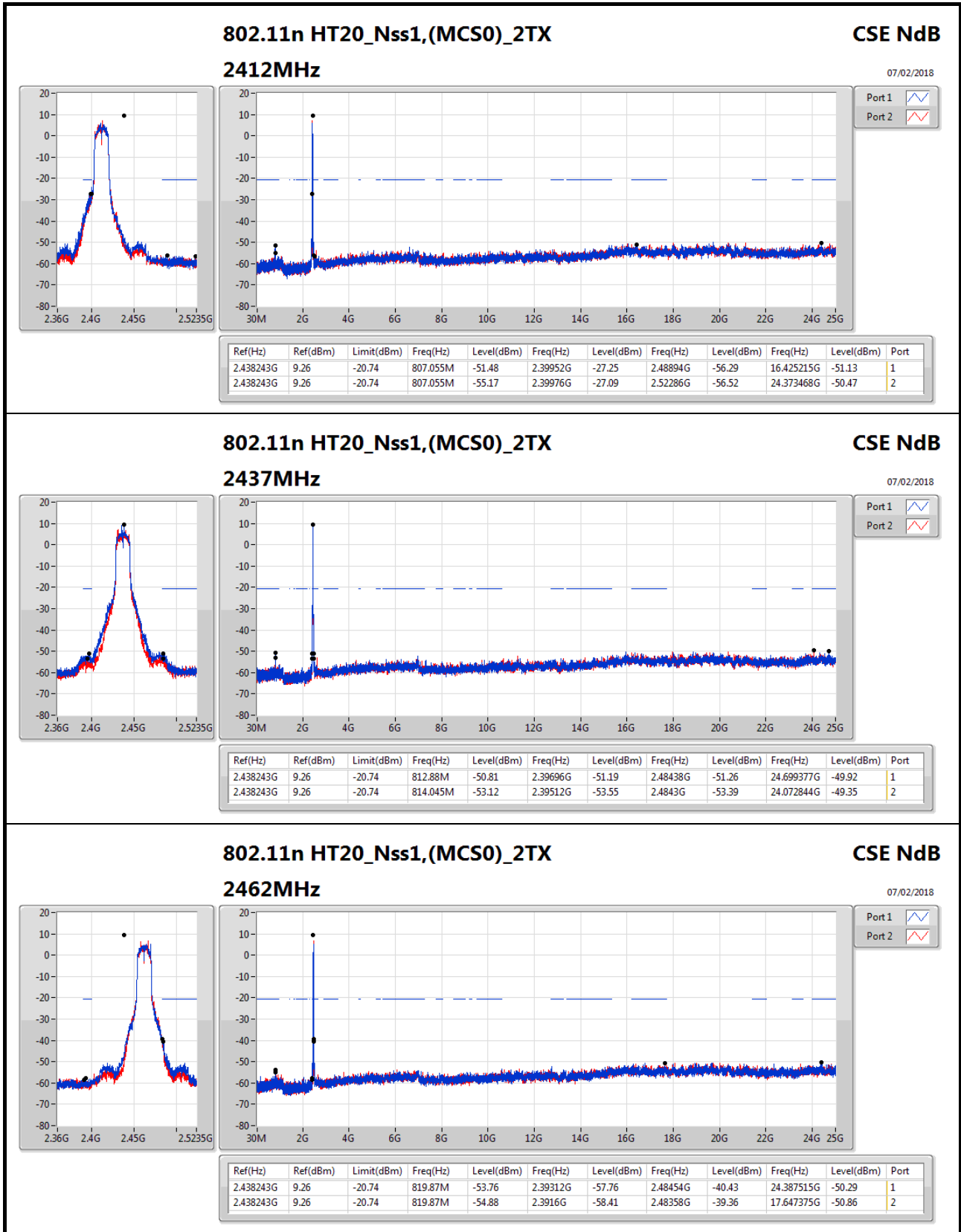
CSE NdB

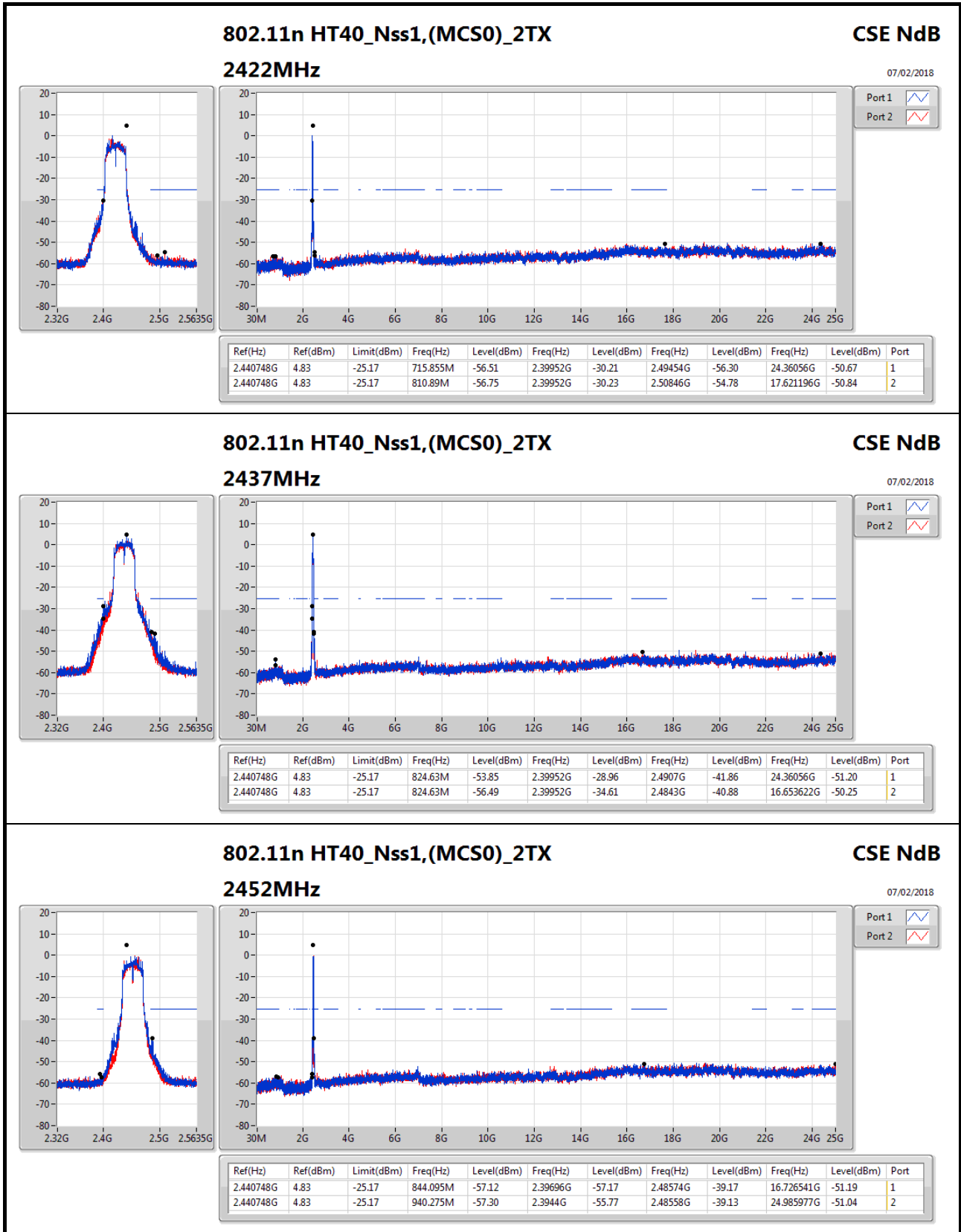
07/02/2018

Port 1

Port 2

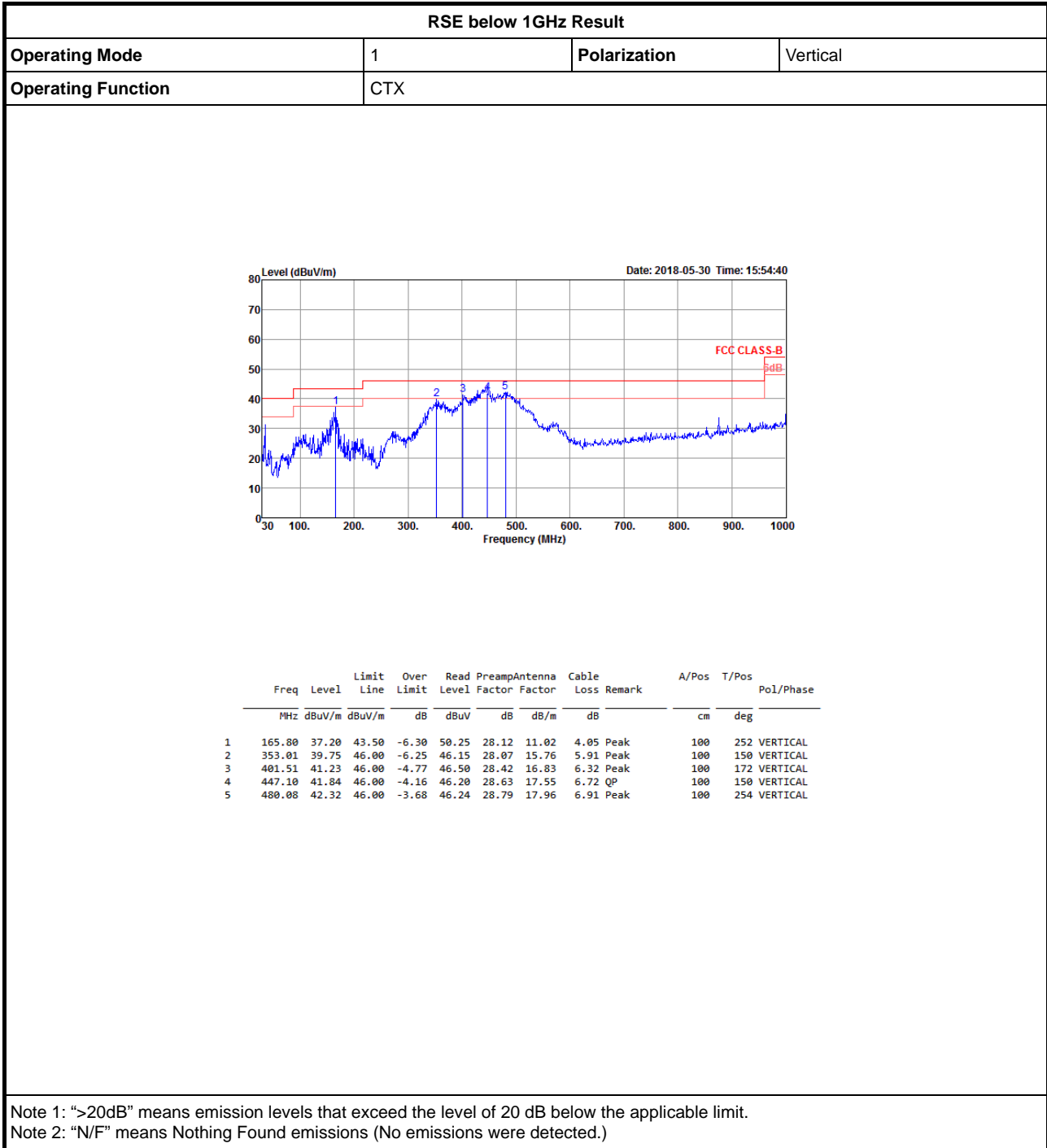








RSE below 1GHz Result																																																																																	
Operating Mode	1	Polarization	Horizontal																																																																														
Operating Function	CTX																																																																																
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="text-align: center;"> <p style="font-size: small;">Date: 2018-05-30 Time: 15:49:09</p> </div> <div style="text-align: right;"> <p style="color: red; font-weight: bold;">FCC CLASS-B</p> <p style="color: red;">5dB</p> </div> </div>																																																																																	
<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th></th> <th>Freq</th> <th>Level</th> <th>Limit</th> <th>Over</th> <th>Read</th> <th>Preamp</th> <th>Antenna</th> <th>Cable</th> <th>Remark</th> <th>A/Pos</th> <th>T/Pos</th> <th>Pol/Phase</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>dBuV</th> <th>dB</th> <th>dB/m</th> <th>dB</th> <th></th> <th>cm</th> <th>deg</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>449.04</td> <td>42.85</td> <td>46.00</td> <td>-3.15</td> <td>47.17</td> <td>28.64</td> <td>17.58</td> <td>6.74</td> <td>Peak</td> <td>100</td> <td>300</td> <td>HORIZONTAL</td> </tr> <tr> <td>2</td> <td>462.62</td> <td>39.86</td> <td>46.00</td> <td>-6.14</td> <td>44.00</td> <td>28.71</td> <td>17.75</td> <td>6.82</td> <td>QP</td> <td>100</td> <td>313</td> <td>HORIZONTAL</td> </tr> <tr> <td>3</td> <td>479.11</td> <td>42.10</td> <td>46.00</td> <td>-3.90</td> <td>46.02</td> <td>28.78</td> <td>17.95</td> <td>6.91</td> <td>Peak</td> <td>100</td> <td>313</td> <td>HORIZONTAL</td> </tr> <tr> <td>4</td> <td>875.84</td> <td>40.74</td> <td>46.00</td> <td>-5.26</td> <td>36.19</td> <td>28.24</td> <td>23.31</td> <td>9.48</td> <td>Peak</td> <td>100</td> <td>262</td> <td>HORIZONTAL</td> </tr> </tbody> </table>					Freq	Level	Limit	Over	Read	Preamp	Antenna	Cable	Remark	A/Pos	T/Pos	Pol/Phase		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg		1	449.04	42.85	46.00	-3.15	47.17	28.64	17.58	6.74	Peak	100	300	HORIZONTAL	2	462.62	39.86	46.00	-6.14	44.00	28.71	17.75	6.82	QP	100	313	HORIZONTAL	3	479.11	42.10	46.00	-3.90	46.02	28.78	17.95	6.91	Peak	100	313	HORIZONTAL	4	875.84	40.74	46.00	-5.26	36.19	28.24	23.31	9.48	Peak	100	262	HORIZONTAL
	Freq	Level	Limit	Over	Read	Preamp	Antenna	Cable	Remark	A/Pos	T/Pos	Pol/Phase																																																																					
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg																																																																						
1	449.04	42.85	46.00	-3.15	47.17	28.64	17.58	6.74	Peak	100	300	HORIZONTAL																																																																					
2	462.62	39.86	46.00	-6.14	44.00	28.71	17.75	6.82	QP	100	313	HORIZONTAL																																																																					
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4	875.84	40.74	46.00	-5.26	36.19	28.24	23.31	9.48	Peak	100	262	HORIZONTAL																																																																					
<p>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.)</p>																																																																																	





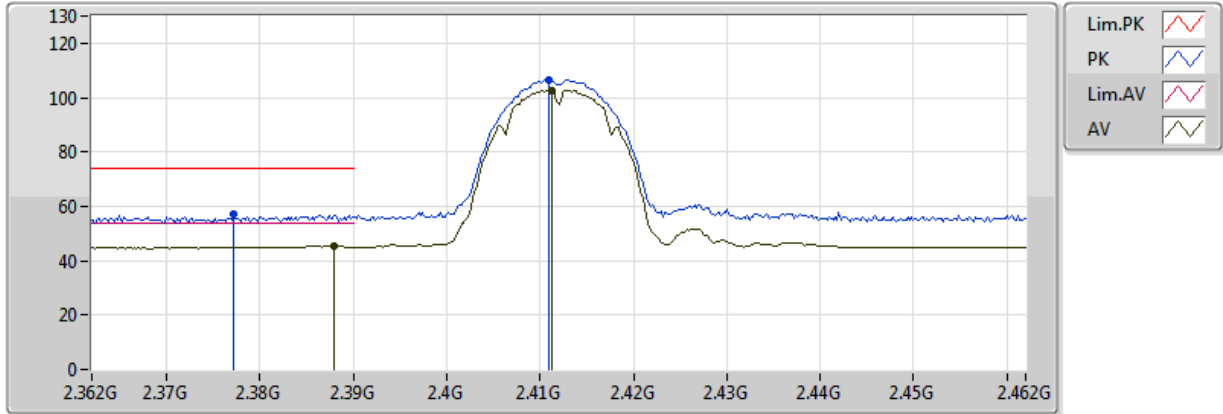
Summary

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	AV	2.483502G	53.88	54.00	-0.12	32.42	3	Vertical	309	1.09	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

03/02/2018



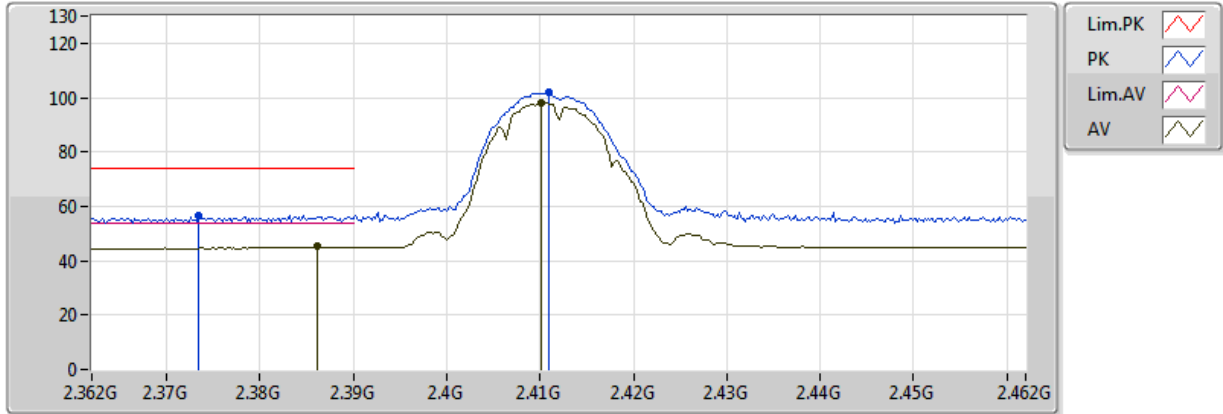
20180203
EUT_X_2TX
Setting 14
04-Z-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.388G	45.55	54.00	-8.45	33.16	3	Vertical	255	1.12	-
AV	2.4112G	102.67	Inf	-Inf	33.17	3	Vertical	255	1.12	-
PK	2.3772G	57.10	74.00	-16.90	33.16	3	Vertical	255	1.12	-
PK	2.411G	106.61	Inf	-Inf	33.17	3	Vertical	255	1.12	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

03/02/2018



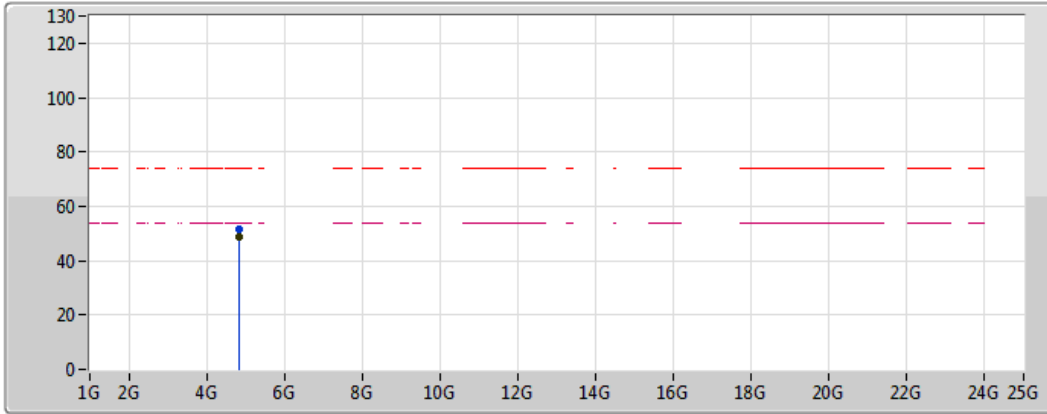
20180203
EUT_X_2TX
Setting 14
04-Z-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3862G	45.12	54.00	-8.88	33.16	3	Horizontal	337	2.99	-
AV	2.4102G	98.17	Inf	-Inf	33.17	3	Horizontal	337	2.99	-
PK	2.3734G	56.46	74.00	-17.54	33.15	3	Horizontal	337	2.99	-
PK	2.411G	101.72	Inf	-Inf	33.17	3	Horizontal	337	2.99	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

03/02/2018



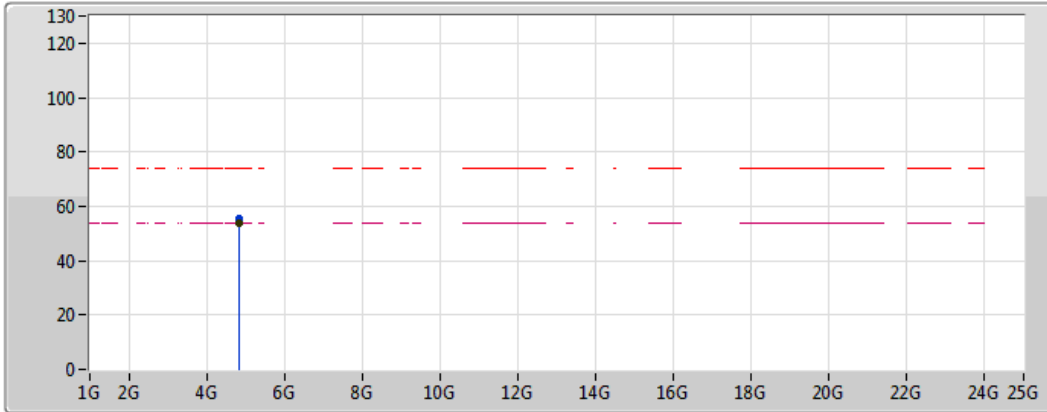
20180203
EUT_X_2TX
Setting 14
04-Z-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.82396G	48.51	54.00	-5.49	3.16	3	Vertical	183	1.13	-
PK	4.82394G	51.54	74.00	-22.46	3.16	3	Vertical	183	1.13	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

03/02/2018



Legend for the spectrum plot:

- Lim.PK: Red dashed line with a red zigzag icon
- PK: Blue solid line with a blue zigzag icon
- Lim.AV: Magenta dashed line with a magenta zigzag icon
- AV: Black solid line with a black zigzag icon

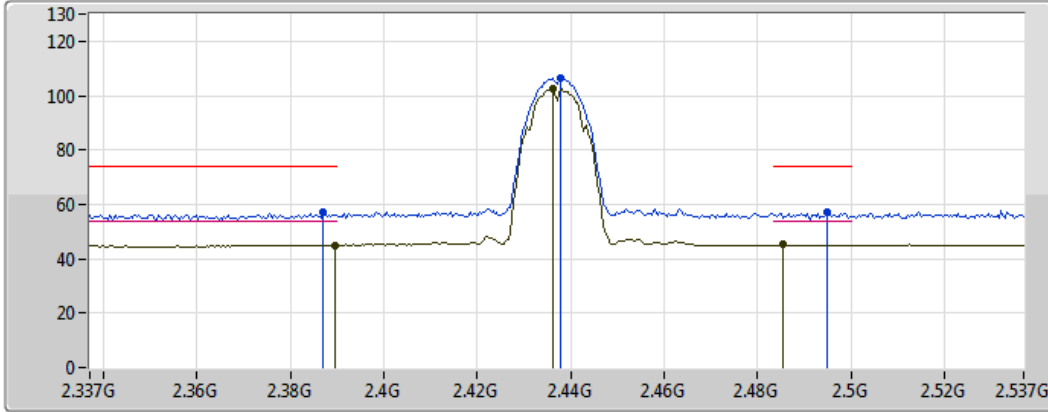
20180203
EUT_X_2TX
Setting 14
04-Z-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.82396G	53.78	54.00	-0.22	3.16	3	Horizontal	234	2.39	-
PK	4.82386G	55.32	74.00	-18.68	3.16	3	Horizontal	234	2.39	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

03/02/2018



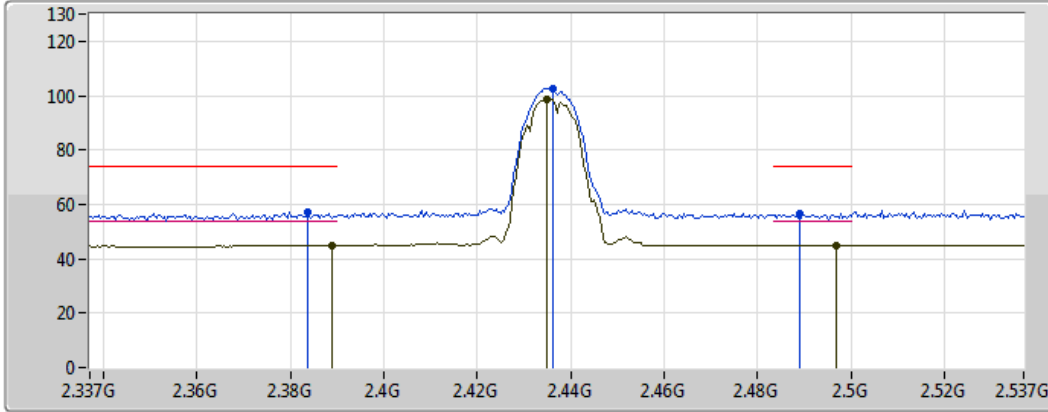
20180203
EUT_X_2TX
Setting 14
04-J-1
FSP(100142)




Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3894G	45.06	54.00	-8.94	33.16	3	Vertical	256	1.28	-
AV	2.4362G	102.39	Inf	-Inf	33.18	3	Vertical	256	1.28	-
AV	2.4854G	45.11	54.00	-8.89	33.19	3	Vertical	256	1.28	-
PK	2.387G	57.19	74.00	-16.81	33.16	3	Vertical	256	1.28	-
PK	2.4378G	106.43	Inf	-Inf	33.18	3	Vertical	256	1.28	-
PK	2.495G	57.00	74.00	-17.00	33.19	3	Vertical	256	1.28	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

03/02/2018



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

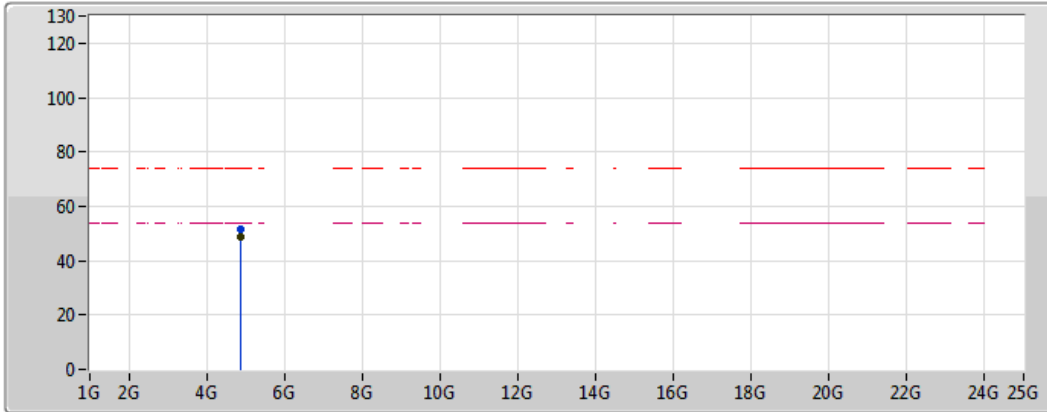
20180203
EUT_X_2TX
Setting 14
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.389G	44.94	54.00	-9.06	33.16	3	Horizontal	334	2.99	-
AV	2.435G	98.87	Inf	-Inf	33.18	3	Horizontal	334	2.99	-
AV	2.497G	45.00	54.00	-9.00	33.19	3	Horizontal	334	2.99	-
PK	2.3838G	57.18	74.00	-16.82	33.16	3	Horizontal	334	2.99	-
PK	2.4362G	102.78	Inf	-Inf	33.18	3	Horizontal	334	2.99	-
PK	2.489G	56.52	74.00	-17.48	33.19	3	Horizontal	334	2.99	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

03/02/2018



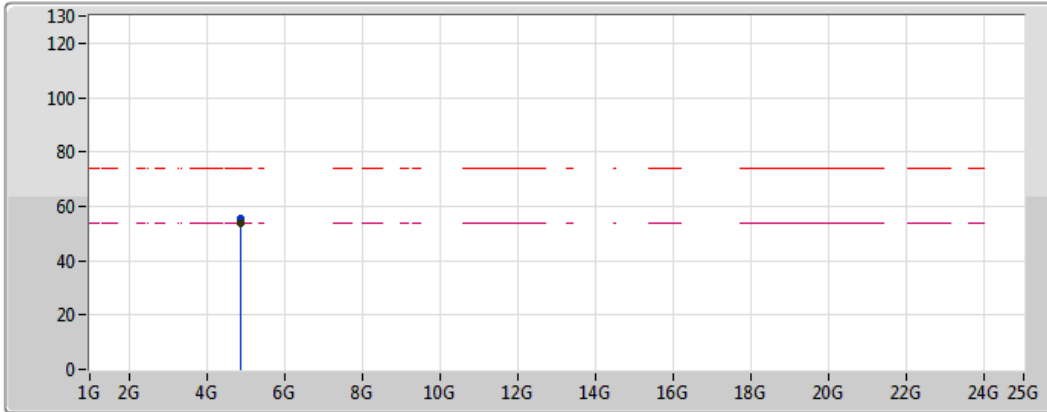
20180203
EUT_X_2TX
Setting 14
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.87396G	48.48	54.00	-5.52	3.27	3	Vertical	184	1.12	-
PK	4.87392G	51.76	74.00	-22.24	3.27	3	Vertical	184	1.12	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

03/02/2018



Legend:

- Lim.PK (Red dashed line)
- PK (Blue line)
- Lim.AV (Magenta dashed line)
- AV (Black line)

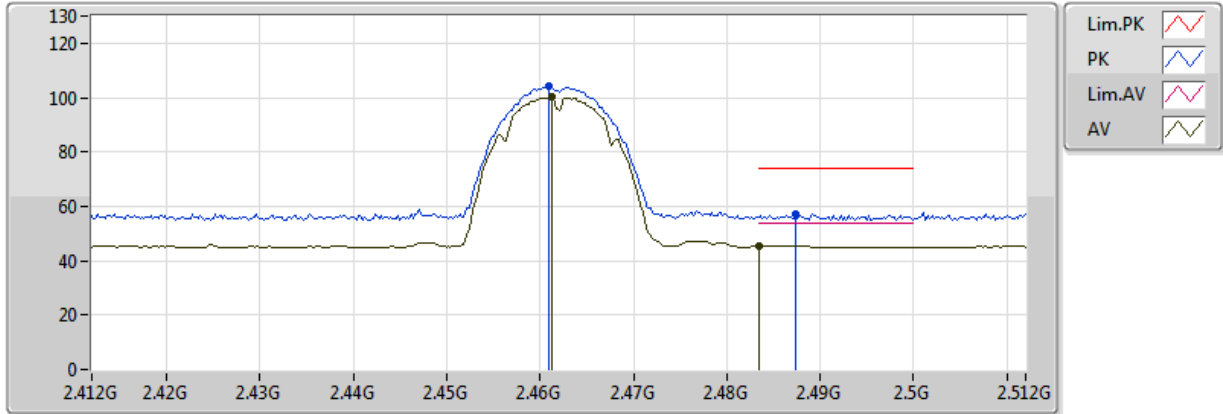
20180203
EUT_X_2TX
Setting 14
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.87396G	53.60	54.00	-0.40	3.27	3	Horizontal	239	2.58	-
PK	4.87392G	55.71	74.00	-18.29	3.27	3	Horizontal	239	2.58	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

03/02/2018



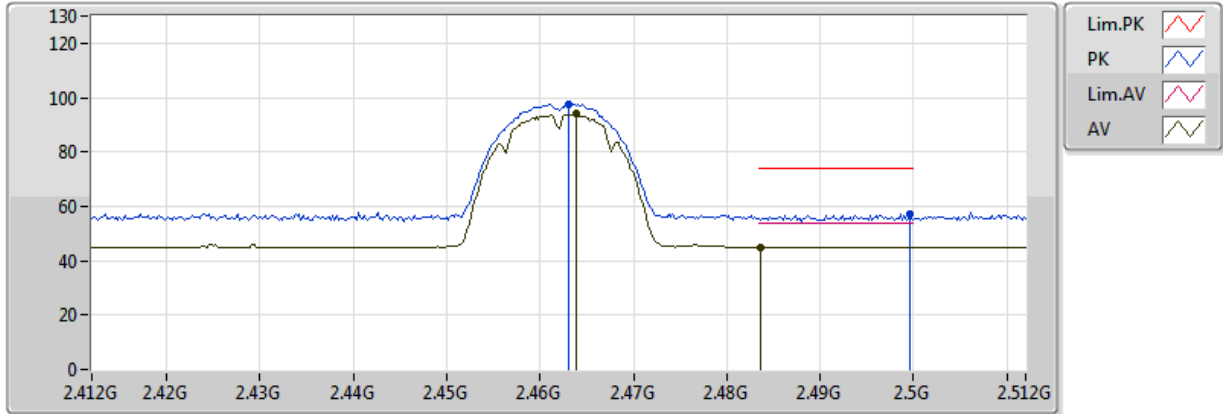
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.4612G	100.15	Inf	-Inf	33.18	3	Vertical	255	1.07	-
AV	2.483502G	45.51	54.00	-8.49	33.19	3	Vertical	255	1.07	-
PK	2.461G	104.05	Inf	-Inf	33.18	3	Vertical	255	1.07	-
PK	2.4874G	57.25	74.00	-16.75	33.19	3	Vertical	255	1.07	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

03/02/2018



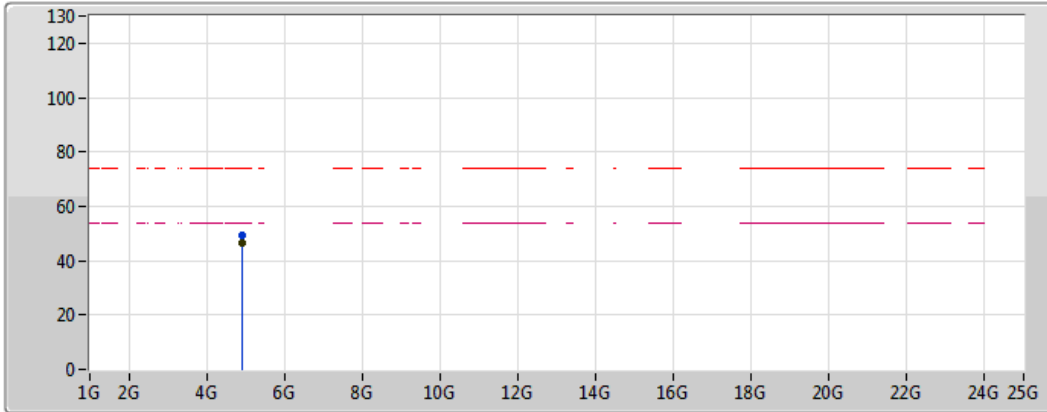
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.4638G	93.90	Inf	-Inf	33.18	3	Horizontal	308	2.83	-
AV	2.4836G	45.03	54.00	-8.97	33.19	3	Horizontal	308	2.83	-
PK	2.463G	97.73	Inf	-Inf	33.18	3	Horizontal	308	2.83	-
PK	2.4996G	57.09	74.00	-16.91	33.19	3	Horizontal	308	2.83	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

03/02/2018



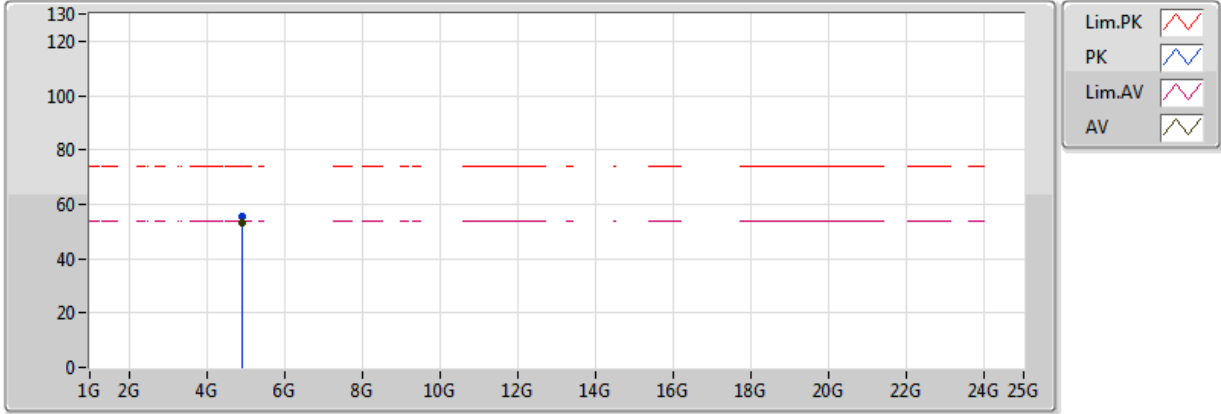
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.92396G	46.60	54.00	-7.40	3.38	3	Vertical	186	1.16	-
PK	4.92384G	49.41	74.00	-24.59	3.38	3	Vertical	186	1.16	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

03/02/2018



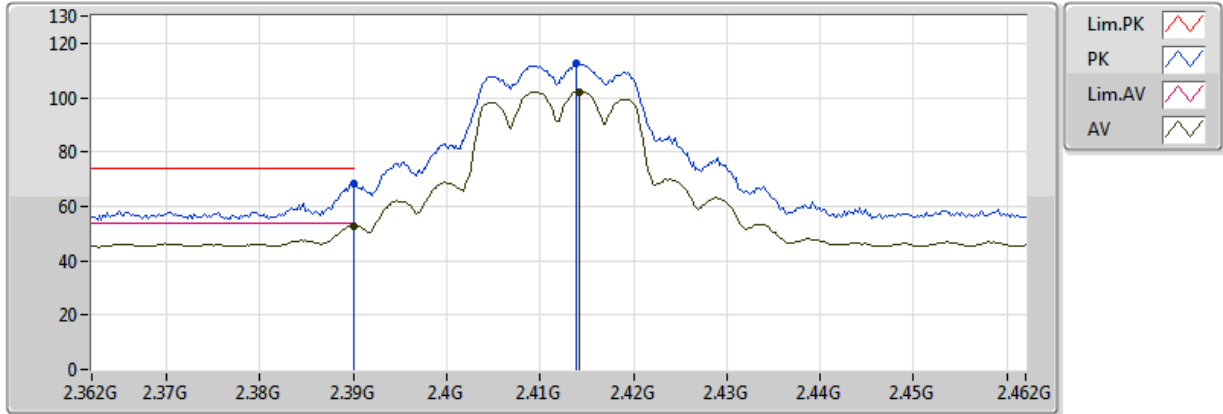
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.92396G	53.08	54.00	-0.92	3.38	3	Horizontal	232	2.41	-
PK	4.92396G	55.48	74.00	-18.52	3.38	3	Horizontal	232	2.41	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

03/02/2018



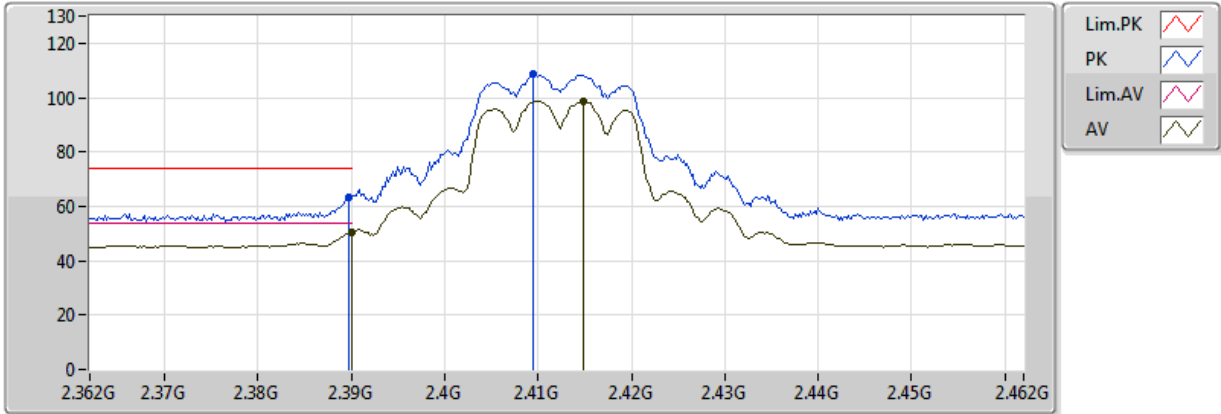
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.39G	52.93	54.00	-1.07	33.16	3	Vertical	225	1.12	-
AV	2.4142G	102.23	Inf	-Inf	33.17	3	Vertical	225	1.12	-
PK	2.39G	68.64	74.00	-5.36	33.16	3	Vertical	225	1.12	-
PK	2.4138G	112.43	Inf	-Inf	33.17	3	Vertical	225	1.12	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

03/02/2018



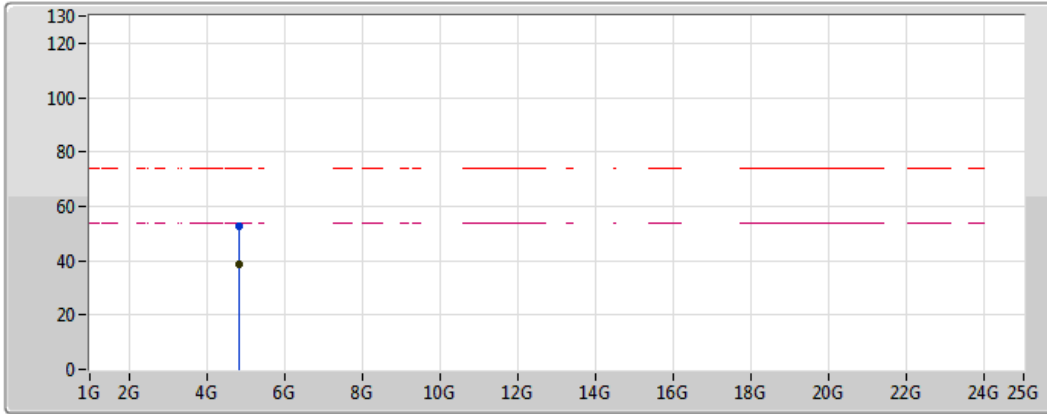
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.39G	50.69	54.00	-3.31	33.16	3	Horizontal	209	1.01	-
AV	2.4148G	98.84	Inf	-Inf	33.17	3	Horizontal	209	1.01	-
PK	2.3898G	63.20	74.00	-10.80	33.16	3	Horizontal	209	1.01	-
PK	2.4094G	108.53	Inf	-Inf	33.17	3	Horizontal	209	1.01	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

03/02/2018



Legend for the spectrum plot:

- Lim.PK: Red dashed line
- PK: Blue line with peak marker
- Lim.AV: Magenta dashed line
- AV: Black line with average marker

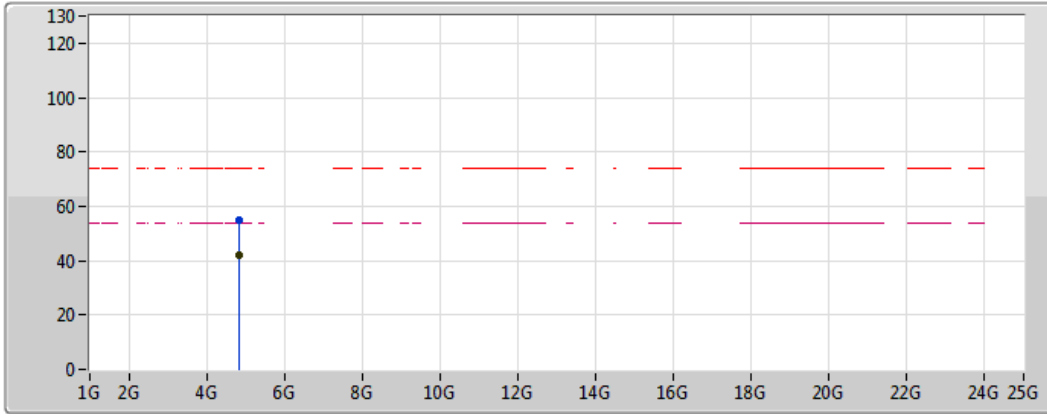
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.82368G	38.79	54.00	-15.21	3.16	3	Vertical	185	1.22	-
PK	4.82376G	52.67	74.00	-21.33	3.16	3	Vertical	185	1.22	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

03/02/2018



Legend:

- Lim.PK (Red dashed line)
- PK (Blue line)
- Lim.AV (Magenta dashed line)
- AV (Black line)

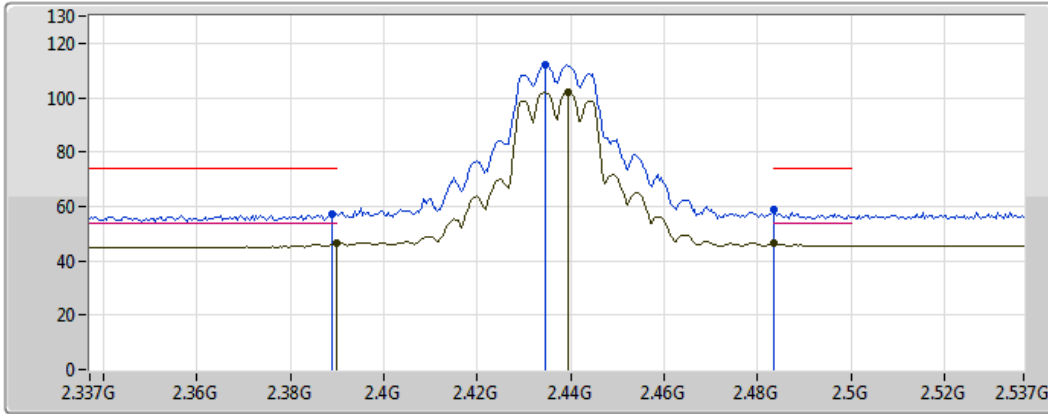
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.82352G	41.75	54.00	-12.25	3.16	3	Horizontal	236	2.54	-
PK	4.82328G	55.17	74.00	-18.83	3.16	3	Horizontal	236	2.54	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

03/02/2018



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: Blue line with a valley icon

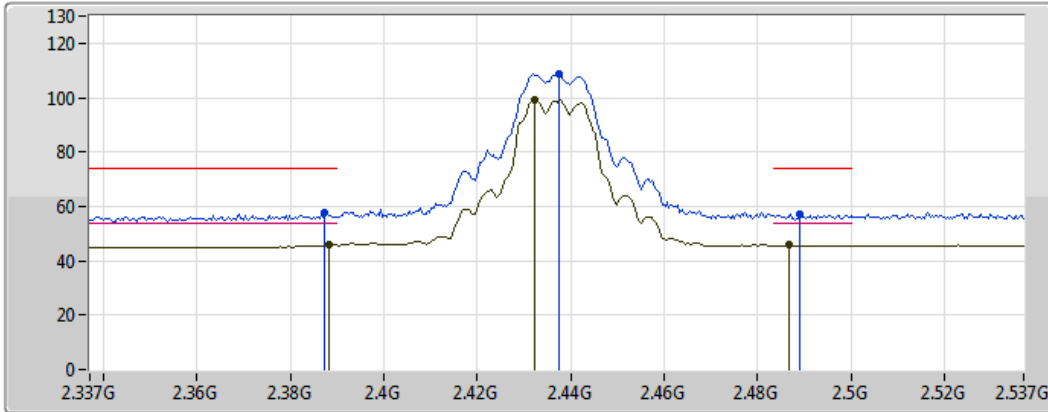
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.389998G	46.31	54.00	-7.69	33.16	3	Vertical	255	1.05	-
AV	2.4394G	102.14	Inf	-Inf	33.18	3	Vertical	255	1.05	-
AV	2.483502G	46.36	54.00	-7.64	33.19	3	Vertical	255	1.05	-
PK	2.389G	57.42	74.00	-16.58	33.16	3	Vertical	255	1.05	-
PK	2.4346G	111.91	Inf	-Inf	33.18	3	Vertical	255	1.05	-
PK	2.483502G	58.66	74.00	-15.34	33.19	3	Vertical	255	1.05	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

03/02/2018



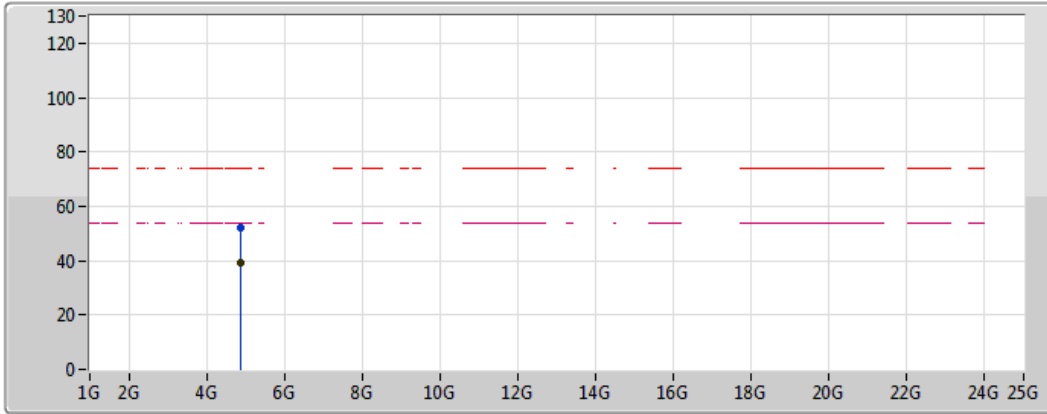
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3882G	45.90	54.00	-8.10	33.16	3	Horizontal	341	1.01	-
AV	2.4322G	99.05	Inf	-Inf	33.18	3	Horizontal	341	1.01	-
AV	2.4866G	45.71	54.00	-8.29	33.19	3	Horizontal	341	1.01	-
PK	2.3874G	57.66	74.00	-16.34	33.16	3	Horizontal	341	1.01	-
PK	2.4374G	108.74	Inf	-Inf	33.18	3	Horizontal	341	1.01	-
PK	2.489G	57.09	74.00	-16.91	33.19	3	Horizontal	341	1.01	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

03/02/2018



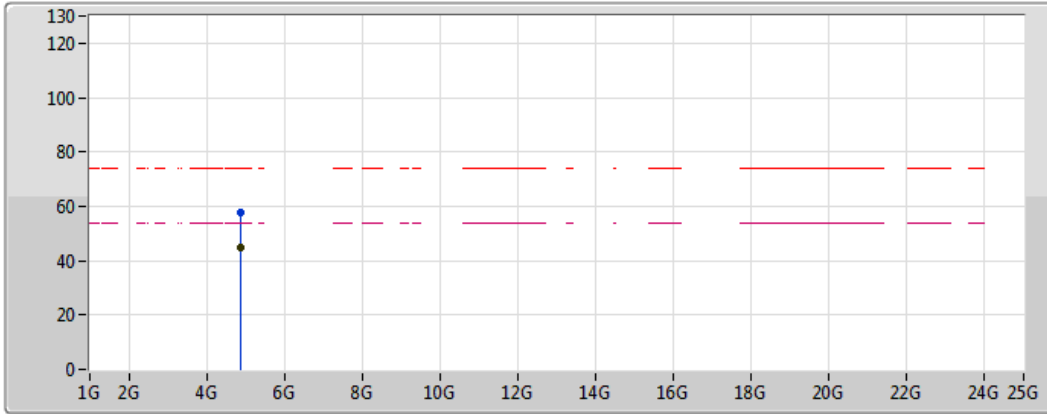
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.87376G	39.31	54.00	-14.69	3.27	3	Vertical	186	1.20	-
PK	4.87344G	52.39	74.00	-21.61	3.27	3	Vertical	186	1.20	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

03/02/2018



Legend:

- Lim.PK (Red dashed line)
- PK (Blue line with dot)
- Lim.AV (Magenta dashed line)
- AV (Black line with dot)

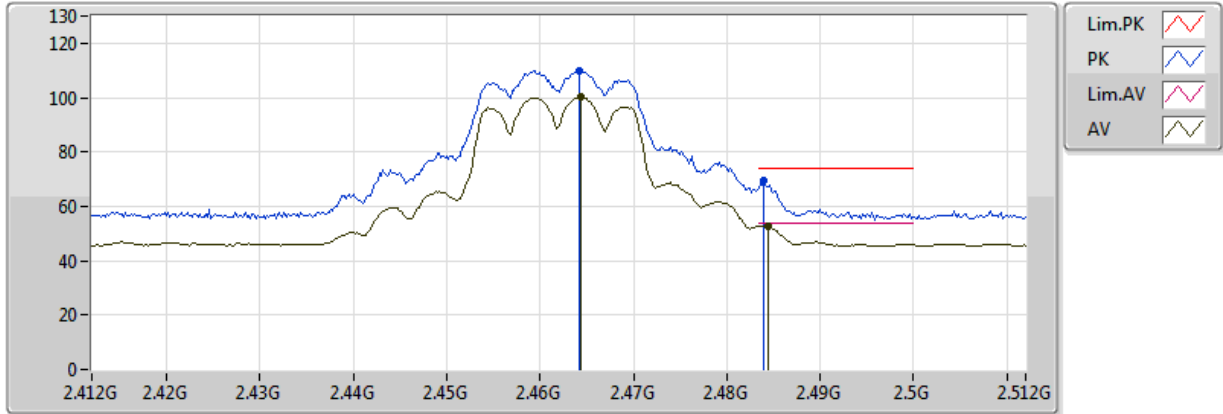
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.874G	44.85	54.00	-9.15	3.27	3	Horizontal	238	2.52	-
PK	4.87408G	57.92	74.00	-16.08	3.27	3	Horizontal	238	2.52	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

03/02/2018



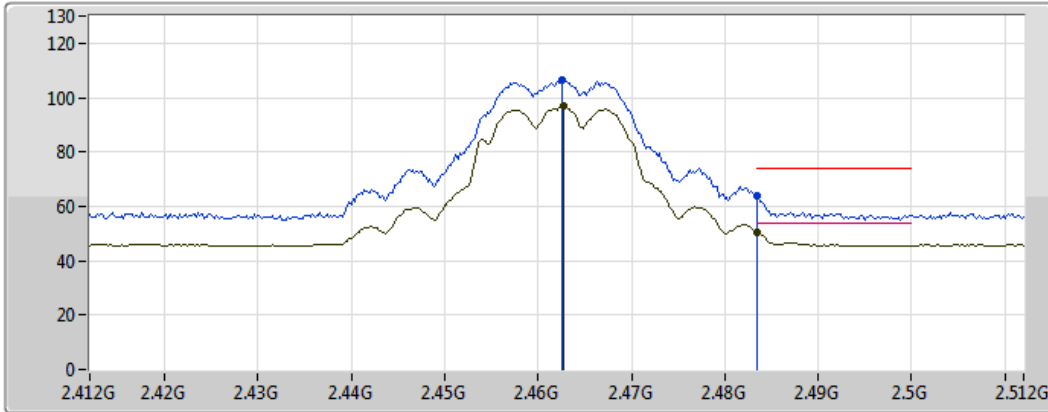
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)





Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.4644G	100.27	Inf	-Inf	33.18	3	Vertical	226	1.07	-
AV	2.4844G	52.94	54.00	-1.06	33.19	3	Vertical	226	1.07	-
PK	2.4642G	109.84	Inf	-Inf	33.18	3	Vertical	226	1.07	-
PK	2.484G	69.54	74.00	-4.46	33.19	3	Vertical	226	1.07	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

03/02/2018



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

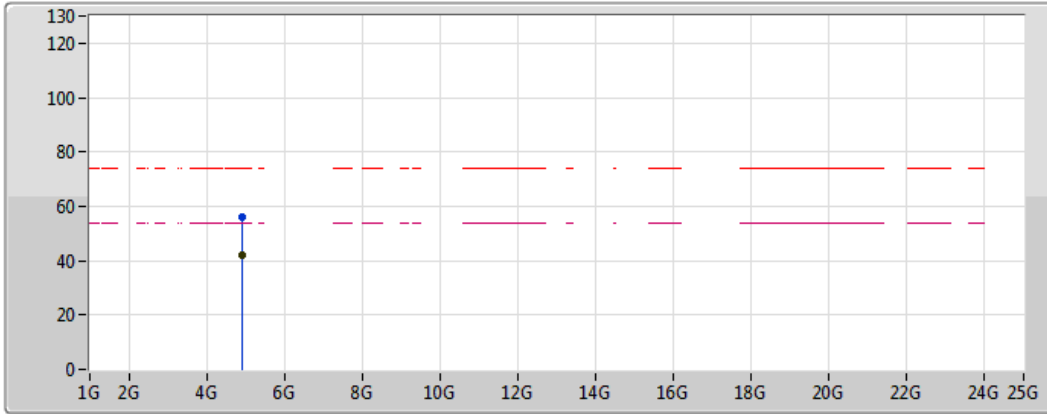
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EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.4628G	96.80	Inf	-Inf	33.18	3	Horizontal	352	1.13	-
AV	2.483502G	50.58	54.00	-3.42	33.19	3	Horizontal	352	1.13	-
PK	2.4626G	106.52	Inf	-Inf	33.18	3	Horizontal	352	1.13	-
PK	2.483502G	63.94	74.00	-10.06	33.19	3	Horizontal	352	1.13	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

03/02/2018



Legend:

- Lim.PK (Red dashed line)
- PK (Blue line)
- Lim.AV (Magenta dashed line)
- AV (Black line)

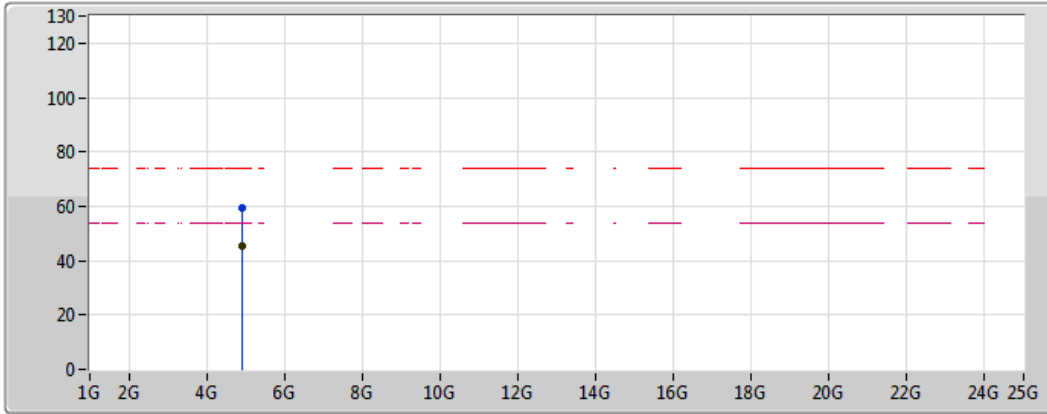
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.92392G	42.27	54.00	-11.73	3.38	3	Vertical	257	2.55	-
PK	4.92376G	55.76	74.00	-18.24	3.38	3	Vertical	257	2.55	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

03/02/2018



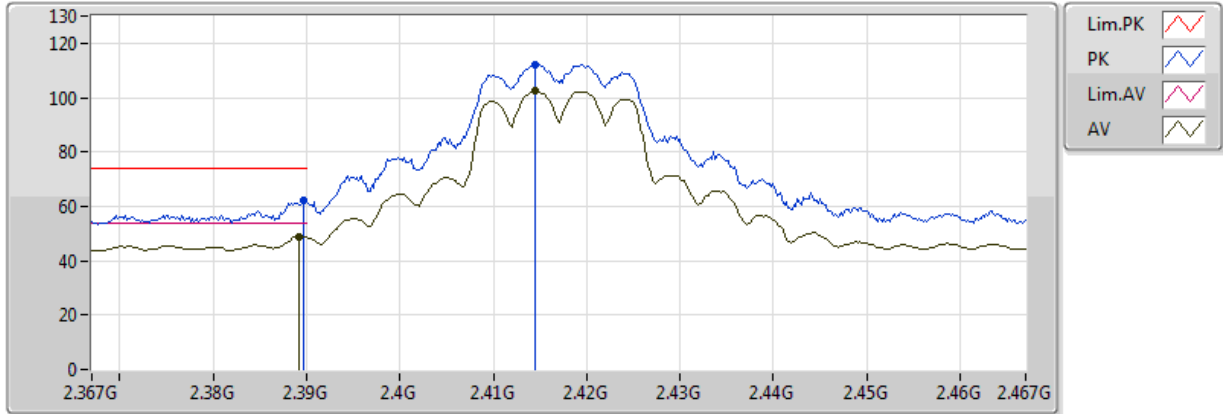
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.9236G	45.57	54.00	-8.43	3.38	3	Horizontal	236	2.38	-
PK	4.9284G	59.54	74.00	-14.46	3.39	3	Horizontal	236	2.38	-

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

07/02/2018



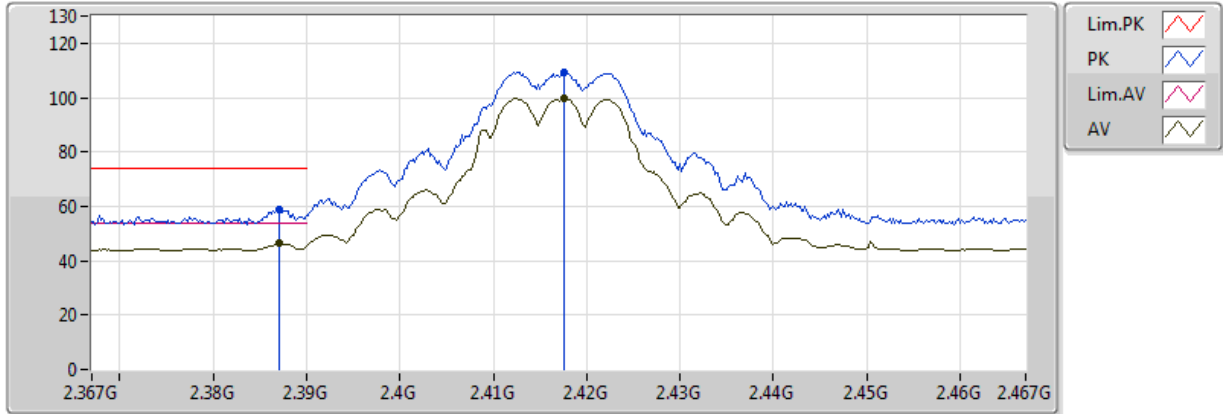
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3892G	49.01	54.00	-4.99	32.18	3	Vertical	310	1.12	-
AV	2.4144G	102.49	Inf	-Inf	32.25	3	Vertical	310	1.12	-
PK	2.3896G	62.42	74.00	-11.58	32.18	3	Vertical	310	1.12	-
PK	2.4144G	112.29	Inf	-Inf	32.25	3	Vertical	310	1.12	-

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

07/02/2018



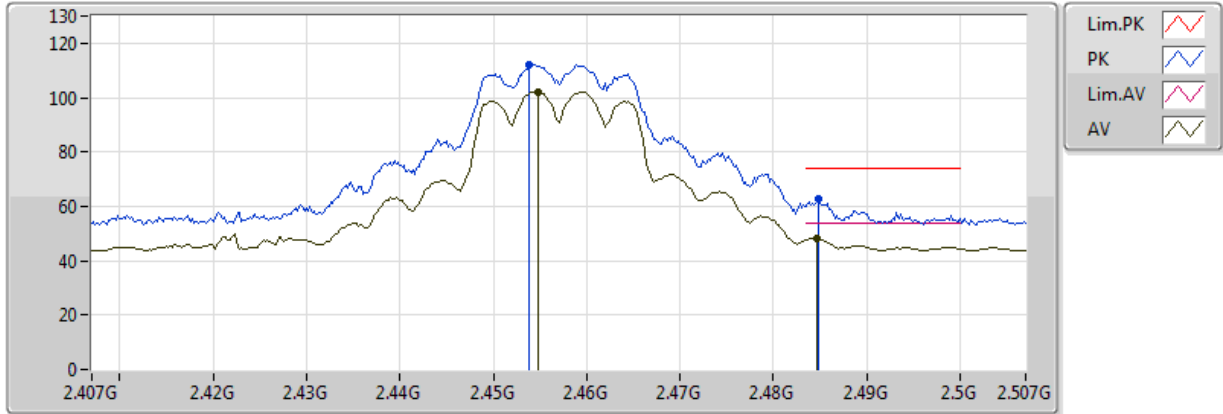
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.387G	46.37	54.00	-7.63	32.18	3	Horizontal	215	1.48	-
AV	2.4176G	99.96	Inf	-Inf	32.26	3	Horizontal	215	1.48	-
PK	2.387G	58.74	74.00	-15.26	32.18	3	Horizontal	215	1.48	-
PK	2.4176G	109.25	Inf	-Inf	32.26	3	Horizontal	215	1.48	-

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

07/02/2018



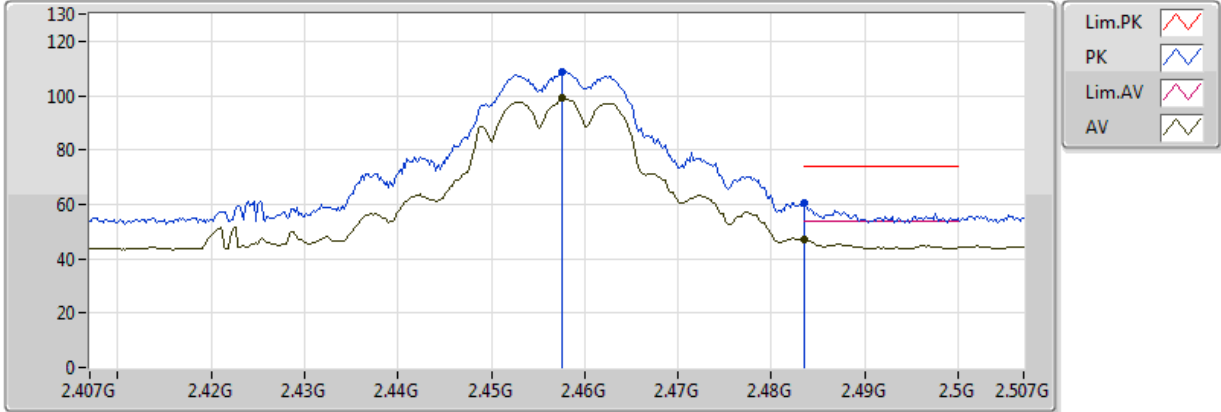
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.4548G	102.16	Inf	-Inf	32.35	3	Vertical	310	1.10	-
AV	2.4846G	48.34	54.00	-5.66	32.42	3	Vertical	310	1.10	-
PK	2.4538G	112.32	Inf	-Inf	32.35	3	Vertical	310	1.10	-
PK	2.4848G	62.58	74.00	-11.42	32.42	3	Vertical	310	1.10	-

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

07/02/2018



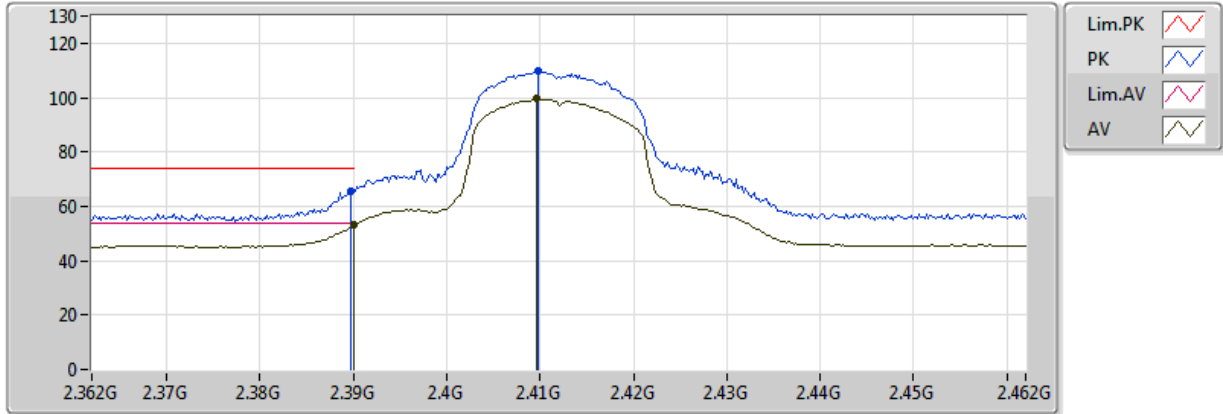
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.4576G	98.98	Inf	-Inf	32.35	3	Horizontal	216	1.39	-
AV	2.483502G	47.13	54.00	-6.87	32.42	3	Horizontal	216	1.39	-
PK	2.4576G	108.69	Inf	-Inf	32.35	3	Horizontal	216	1.39	-
PK	2.483502G	60.31	74.00	-13.69	32.42	3	Horizontal	216	1.39	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

03/02/2018



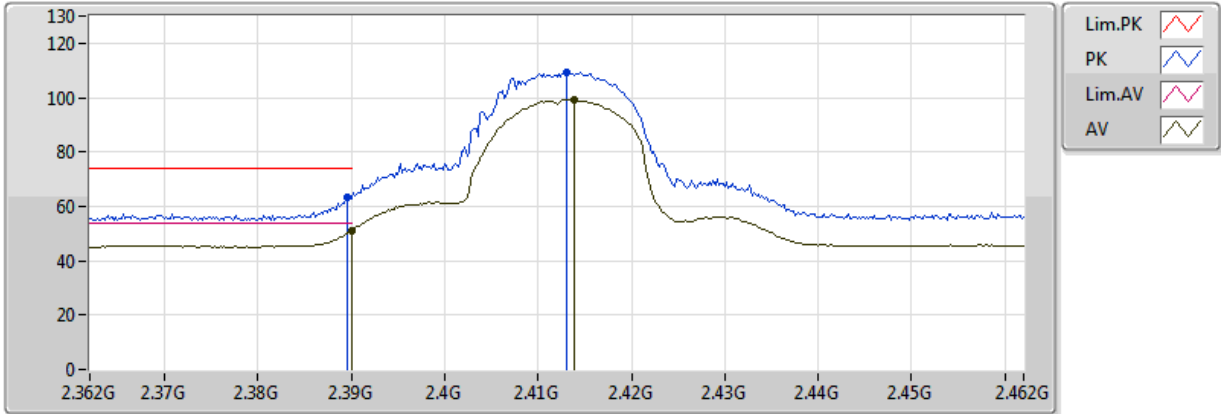
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.39G	53.07	54.00	-0.93	33.16	3	Vertical	92	1.22	-
AV	2.4096G	99.53	Inf	-Inf	33.17	3	Vertical	92	1.22	-
PK	2.3898G	65.66	74.00	-8.34	33.16	3	Vertical	92	1.22	-
PK	2.4098G	109.73	Inf	-Inf	33.17	3	Vertical	92	1.22	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

03/02/2018



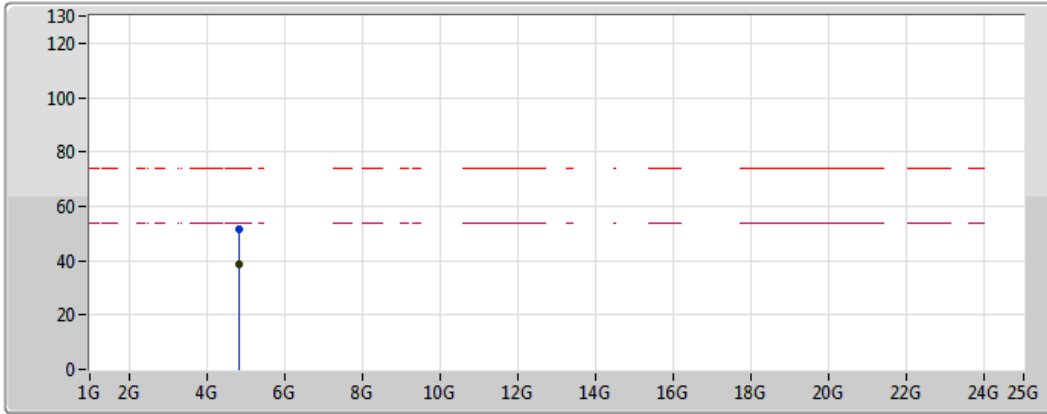
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.39G	51.13	54.00	-2.87	33.16	3	Horizontal	204	1.01	-
AV	2.4138G	99.29	Inf	-Inf	33.17	3	Horizontal	204	1.01	-
PK	2.3896G	63.48	74.00	-10.52	33.16	3	Horizontal	204	1.01	-
PK	2.413G	109.54	Inf	-Inf	33.17	3	Horizontal	204	1.01	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

03/02/2018



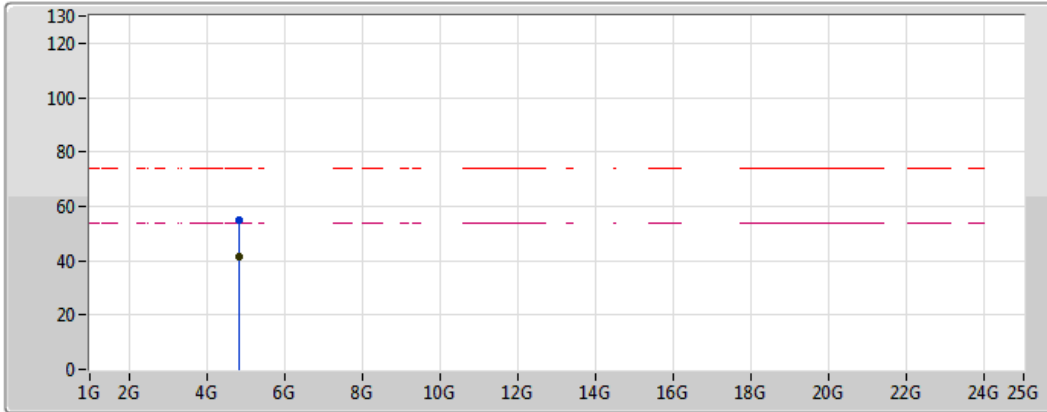
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.82392G	38.39	54.00	-15.61	3.16	3	Vertical	184	1.27	-
PK	4.82464G	51.29	74.00	-22.71	3.16	3	Vertical	184	1.27	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

03/02/2018



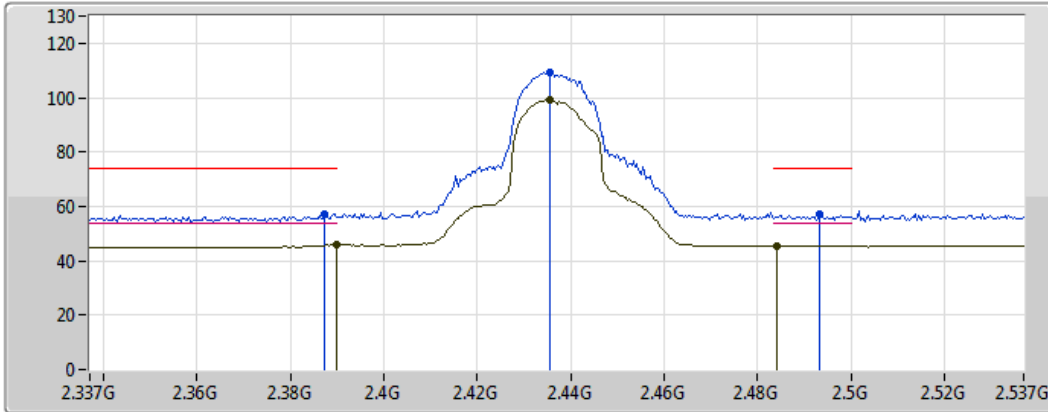
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.8236G	41.60	54.00	-12.40	3.16	3	Horizontal	232	2.42	-
PK	4.8236G	55.06	74.00	-18.94	3.16	3	Horizontal	232	2.42	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

03/02/2018



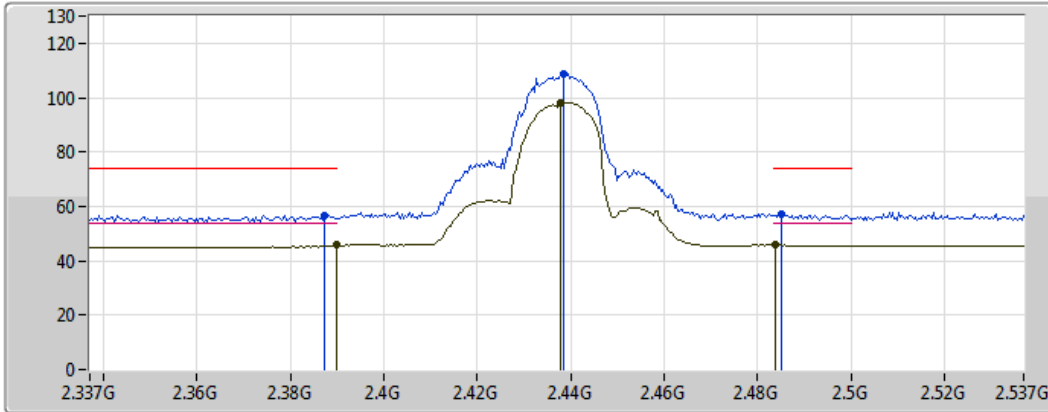
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.389998G	45.96	54.00	-8.04	33.16	3	Vertical	92	1.34	-
AV	2.4354G	99.41	Inf	-Inf	33.18	3	Vertical	92	1.34	-
AV	2.4842G	45.52	54.00	-8.48	33.19	3	Vertical	92	1.34	-
PK	2.3874G	57.27	74.00	-16.73	33.16	3	Vertical	92	1.34	-
PK	2.4354G	109.10	Inf	-Inf	33.18	3	Vertical	92	1.34	-
PK	2.4934G	57.13	74.00	-16.87	33.19	3	Vertical	92	1.34	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

03/02/2018



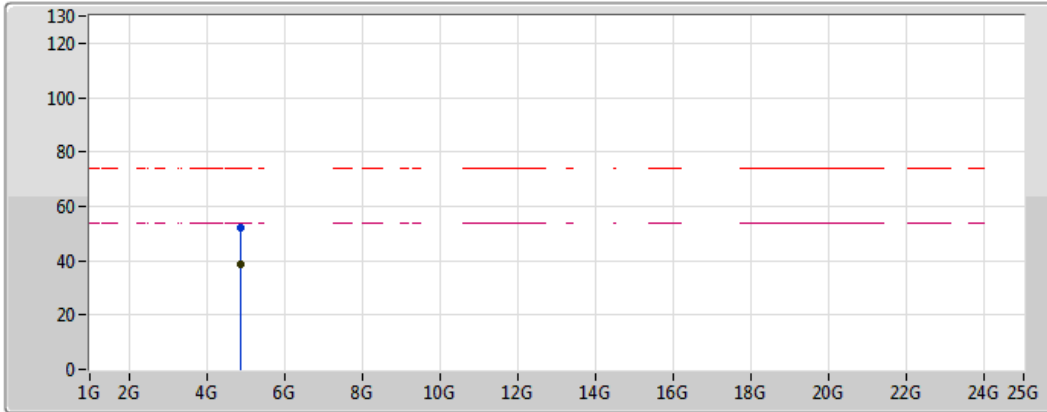
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EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.389998G	45.73	54.00	-8.27	33.16	3	Horizontal	205	1.01	-
AV	2.4378G	98.22	Inf	-Inf	33.18	3	Horizontal	205	1.01	-
AV	2.4838G	45.90	54.00	-8.10	33.19	3	Horizontal	205	1.01	-
PK	2.3874G	56.75	74.00	-17.25	33.16	3	Horizontal	205	1.01	-
PK	2.4386G	108.60	Inf	-Inf	33.18	3	Horizontal	205	1.01	-
PK	2.485G	57.16	74.00	-16.84	33.19	3	Horizontal	205	1.01	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

03/02/2018



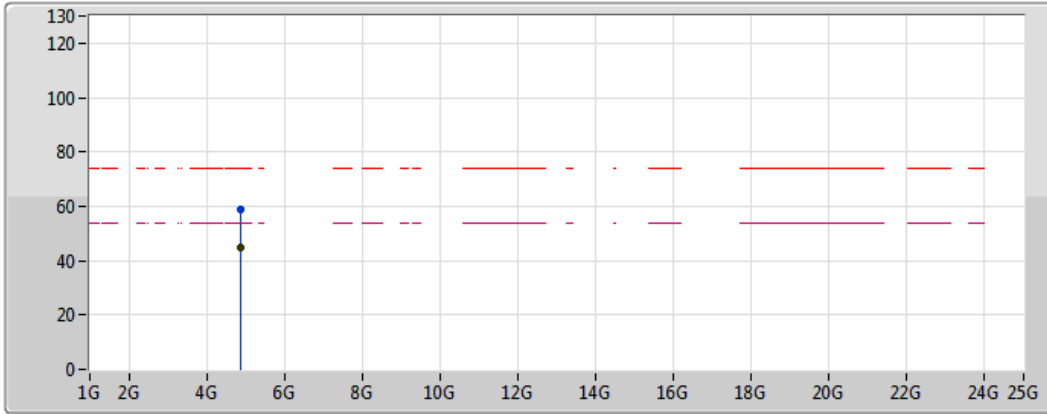
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.87392G	38.85	54.00	-15.15	3.27	3	Vertical	184	1.32	-
PK	4.87496G	51.92	74.00	-22.08	3.27	3	Vertical	184	1.32	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

03/02/2018



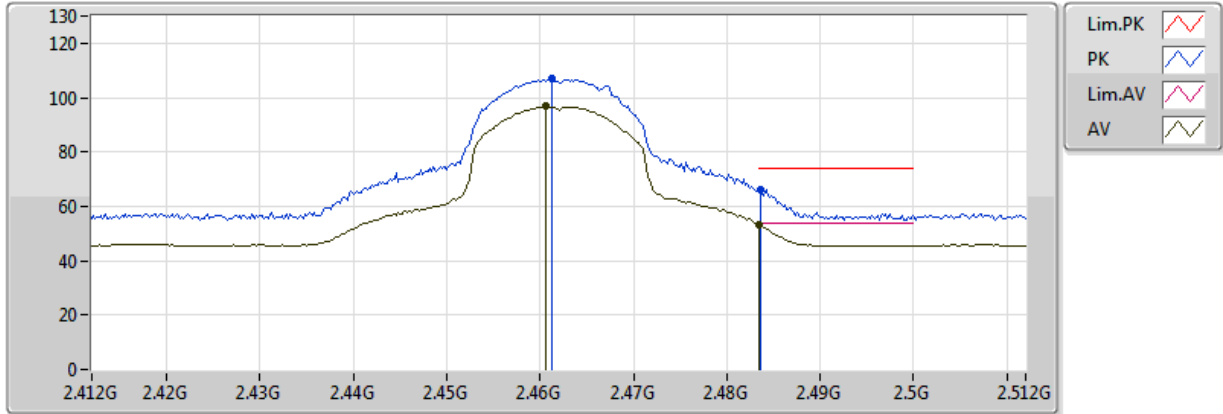
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.87328G	44.93	54.00	-9.07	3.27	3	Horizontal	237	2.52	-
PK	4.87264G	58.72	74.00	-15.28	3.27	3	Horizontal	237	2.52	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

03/02/2018



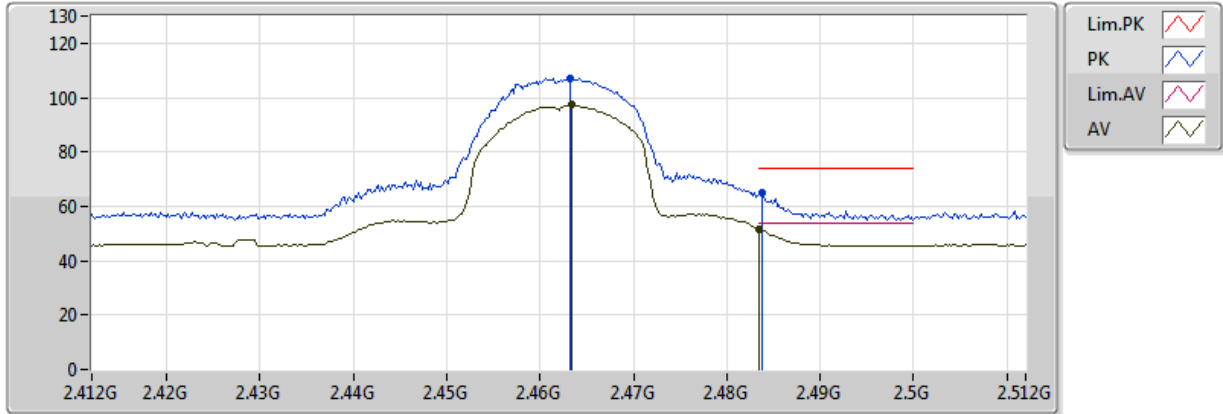
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.4606G	96.67	Inf	-Inf	33.18	3	Vertical	101	1.50	-
AV	2.483502G	53.27	54.00	-0.73	33.19	3	Vertical	101	1.50	-
PK	2.4612G	107.04	Inf	-Inf	33.18	3	Vertical	101	1.50	-
PK	2.4836G	65.95	74.00	-8.05	33.19	3	Vertical	101	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

03/02/2018



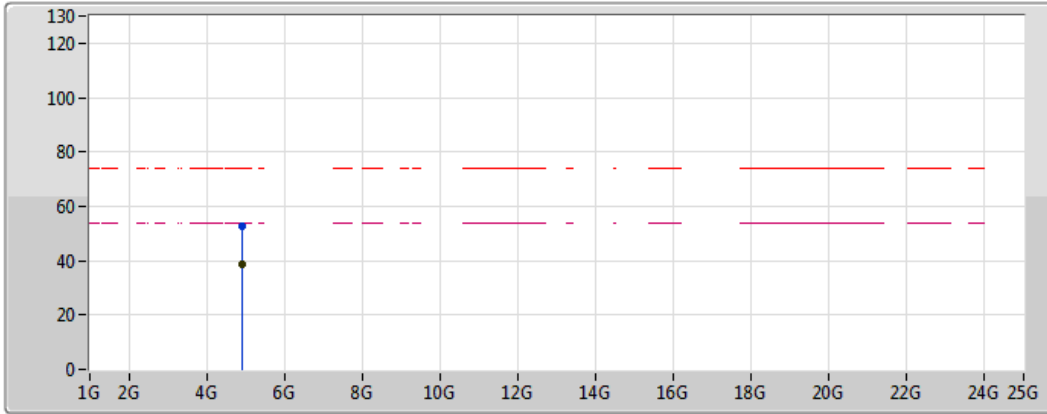
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.4634G	97.30	Inf	-Inf	33.18	3	Horizontal	351	1.17	-
AV	2.483502G	51.65	54.00	-2.35	33.19	3	Horizontal	351	1.17	-
PK	2.4632G	107.29	Inf	-Inf	33.18	3	Horizontal	351	1.17	-
PK	2.4838G	65.19	74.00	-8.81	33.19	3	Horizontal	351	1.17	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

03/02/2018



Legend for the spectrum plot:

- Lim.PK: Red dashed line with a red zigzag icon
- PK: Blue solid line with a blue zigzag icon
- Lim.AV: Magenta dashed line with a magenta zigzag icon
- AV: Black solid line with a black zigzag icon

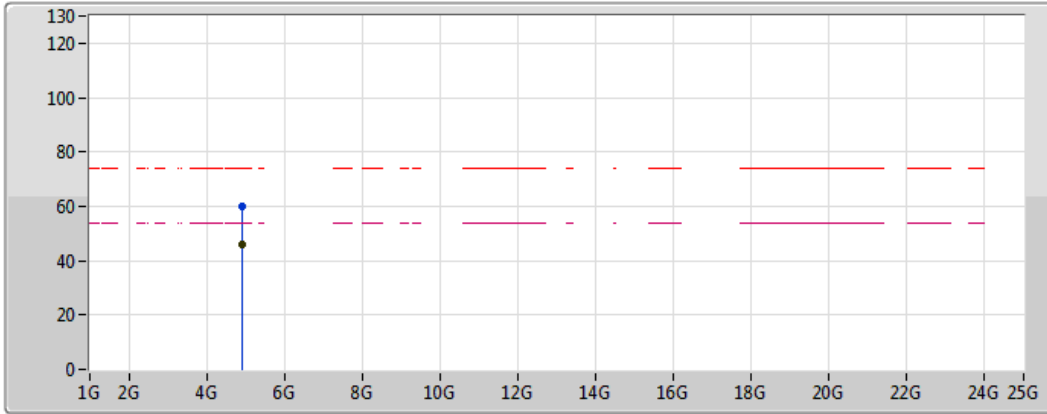
20180203
EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.9236G	38.57	54.00	-15.43	3.38	3	Vertical	181	1.50	-
PK	4.92456G	52.52	74.00	-21.48	3.38	3	Vertical	181	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

03/02/2018



Legend:

- Lim.PK (Red dashed line)
- PK (Blue line)
- Lim.AV (Magenta dashed line)
- AV (Black line)

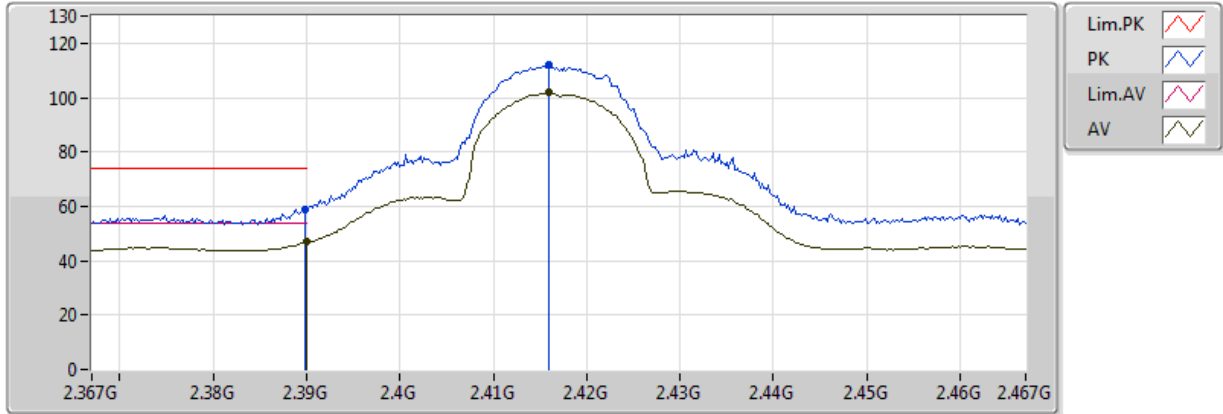
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EUT_X_2TX
Setting 16
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.92224G	46.08	54.00	-7.92	3.38	3	Horizontal	234	2.84	-
PK	4.92296G	60.17	74.00	-13.83	3.38	3	Horizontal	234	2.84	-

802.11n HT20_Nss1,(MCS0)_2TX

2417MHz_TX

07/02/2018



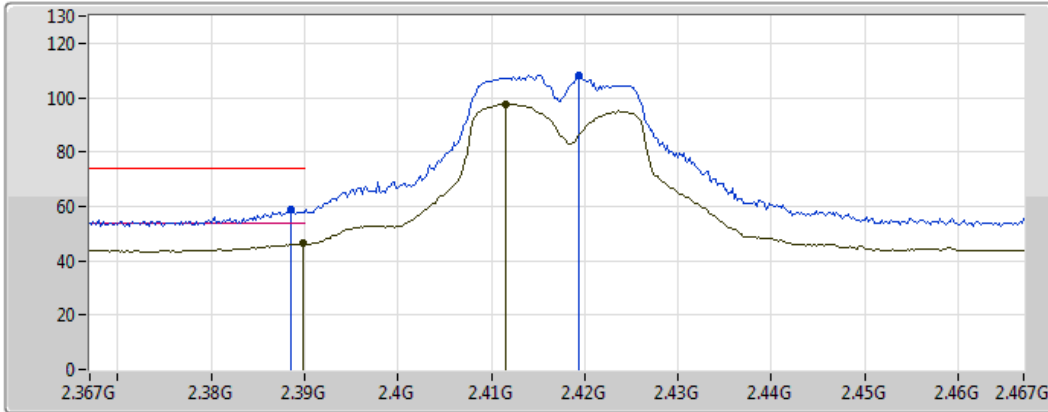
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.39G	46.87	54.00	-7.13	32.18	3	Vertical	306	1.47	-
AV	2.416G	101.80	Inf	-Inf	32.25	3	Vertical	306	1.47	-
PK	2.3898G	58.75	74.00	-15.25	32.18	3	Vertical	306	1.47	-
PK	2.416G	112.00	Inf	-Inf	32.25	3	Vertical	306	1.47	-

802.11n HT20_Nss1,(MCS0)_2TX

2417MHz_TX

07/02/2018



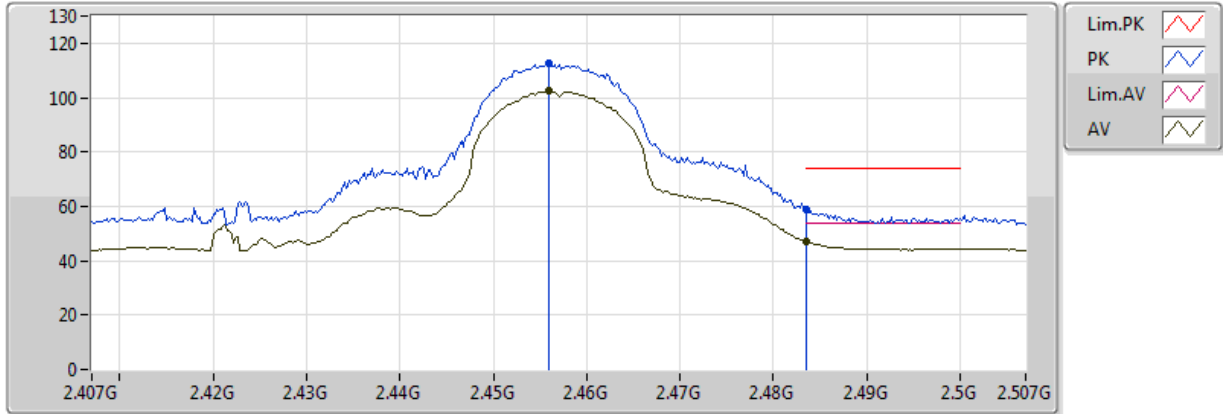
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3898G	46.25	54.00	-7.75	32.18	3	Horizontal	217	1.47	-
AV	2.4116G	97.60	Inf	-Inf	32.24	3	Horizontal	217	1.47	-
PK	2.3886G	59.00	74.00	-15.00	32.18	3	Horizontal	217	1.47	-
PK	2.4194G	108.41	Inf	-Inf	32.26	3	Horizontal	217	1.47	-

802.11n HT20_Nss1,(MCS0)_2TX

2457MHz_TX

07/02/2018



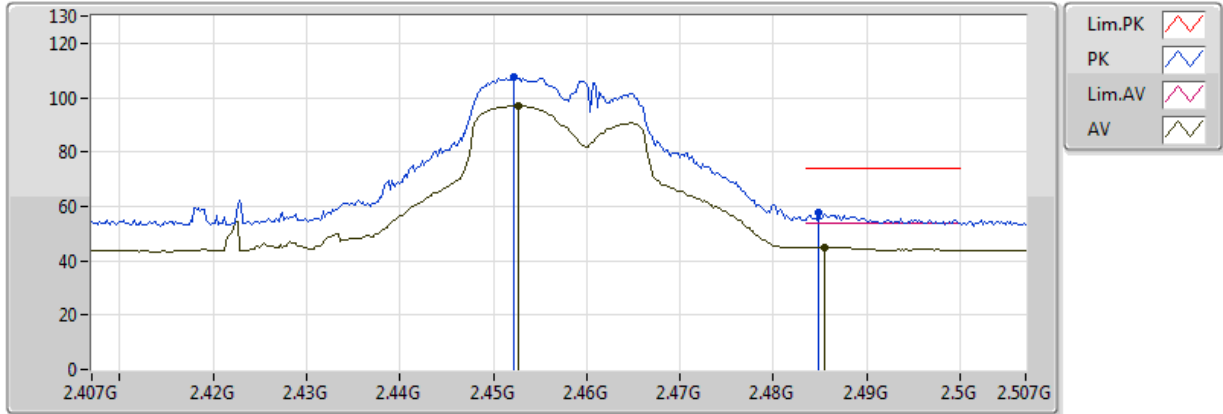
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.456G	102.31	Inf	-Inf	32.35	3	Vertical	310	1.10	-
AV	2.483502G	47.23	54.00	-6.77	32.42	3	Vertical	310	1.10	-
PK	2.456G	112.45	Inf	-Inf	32.35	3	Vertical	310	1.10	-
PK	2.483502G	58.77	74.00	-15.23	32.42	3	Vertical	310	1.10	-

802.11n HT20_Nss1,(MCS0)_2TX

2457MHz_TX

07/02/2018



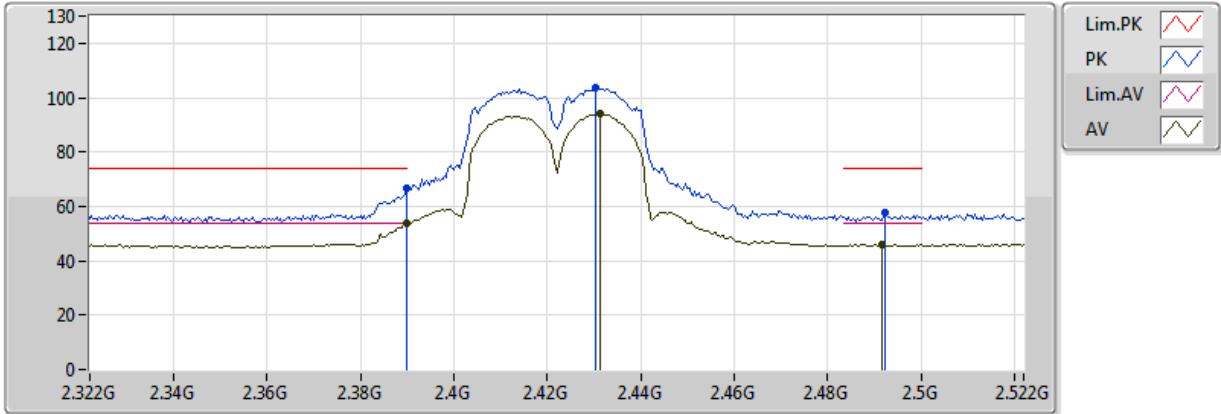
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.4526G	96.95	Inf	-Inf	32.34	3	Horizontal	222	1.11	-
AV	2.4854G	44.96	54.00	-9.04	32.42	3	Horizontal	222	1.11	-
PK	2.4522G	107.42	Inf	-Inf	32.34	3	Horizontal	222	1.11	-
PK	2.4848G	57.71	74.00	-16.29	32.42	3	Horizontal	222	1.11	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

03/02/2018



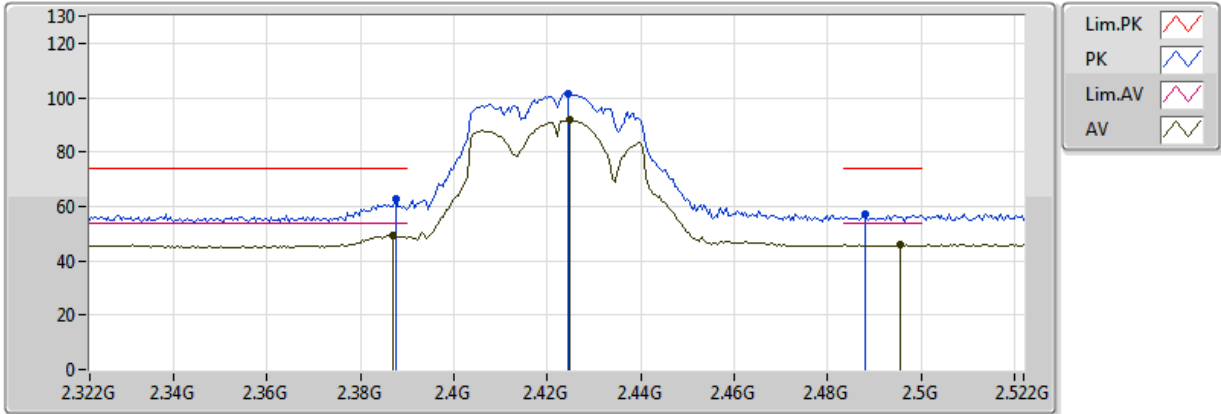
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.39G	53.70	54.00	-0.30	33.16	3	Vertical	255	1.24	-
AV	2.4312G	94.34	Inf	-Inf	33.18	3	Vertical	255	1.24	-
AV	2.4916G	45.88	54.00	-8.12	33.19	3	Vertical	255	1.24	-
PK	2.39G	66.67	74.00	-7.33	33.16	3	Vertical	255	1.24	-
PK	2.4304G	103.53	Inf	-Inf	33.18	3	Vertical	255	1.24	-
PK	2.4924G	57.80	74.00	-16.20	33.19	3	Vertical	255	1.24	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

03/02/2018



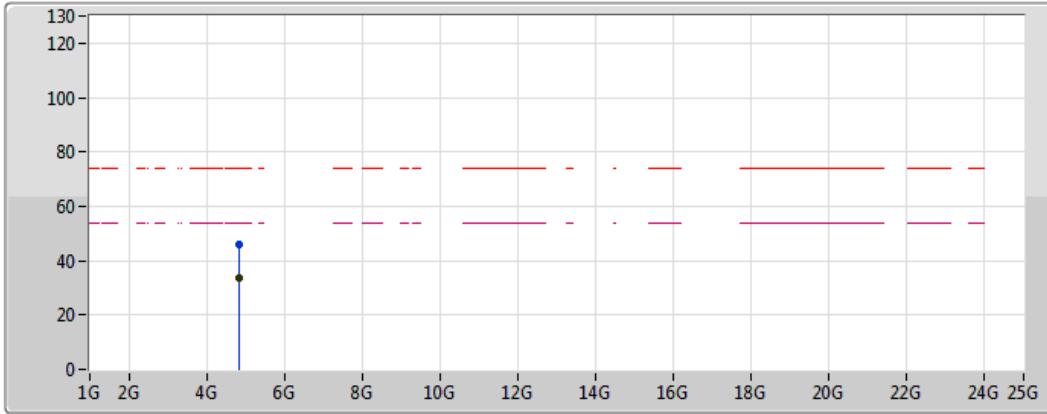
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)





Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3868G	49.31	54.00	-4.69	33.16	3	Horizontal	209	1.01	-
AV	2.4248G	91.66	Inf	-Inf	33.17	3	Horizontal	209	1.01	-
AV	2.4956G	45.80	54.00	-8.20	33.19	3	Horizontal	209	1.01	-
PK	2.3876G	62.49	74.00	-11.51	33.16	3	Horizontal	209	1.01	-
PK	2.4244G	101.57	Inf	-Inf	33.17	3	Horizontal	209	1.01	-
PK	2.488G	56.92	74.00	-17.08	33.19	3	Horizontal	209	1.01	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

03/02/2018



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

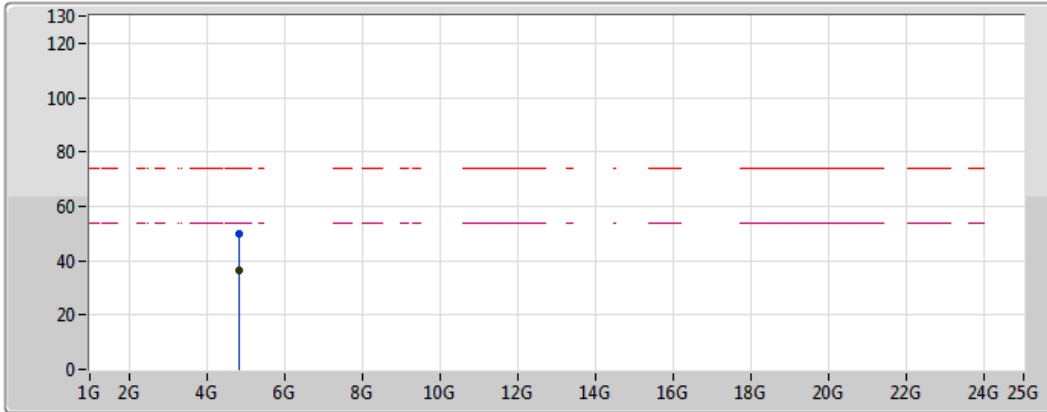
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)





Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.84224G	33.77	54.00	-20.23	3.20	3	Vertical	182	1.34	-
PK	4.84544G	45.95	74.00	-28.05	3.21	3	Vertical	182	1.34	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

03/02/2018



Lim.PK	
PK	
Lim.AV	
AV	

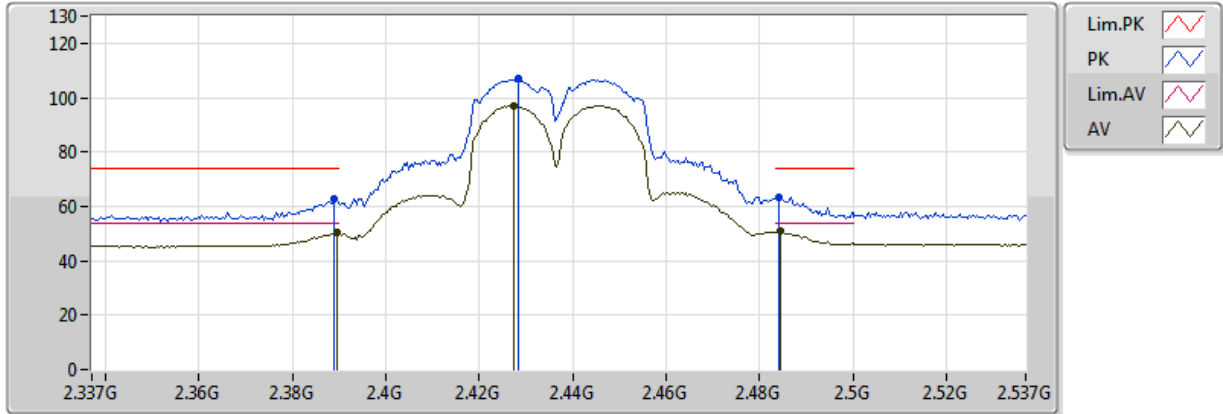
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.84256G	36.62	54.00	-17.38	3.20	3	Horizontal	233	2.36	-
PK	4.8432G	49.70	74.00	-24.30	3.21	3	Horizontal	233	2.36	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

03/02/2018



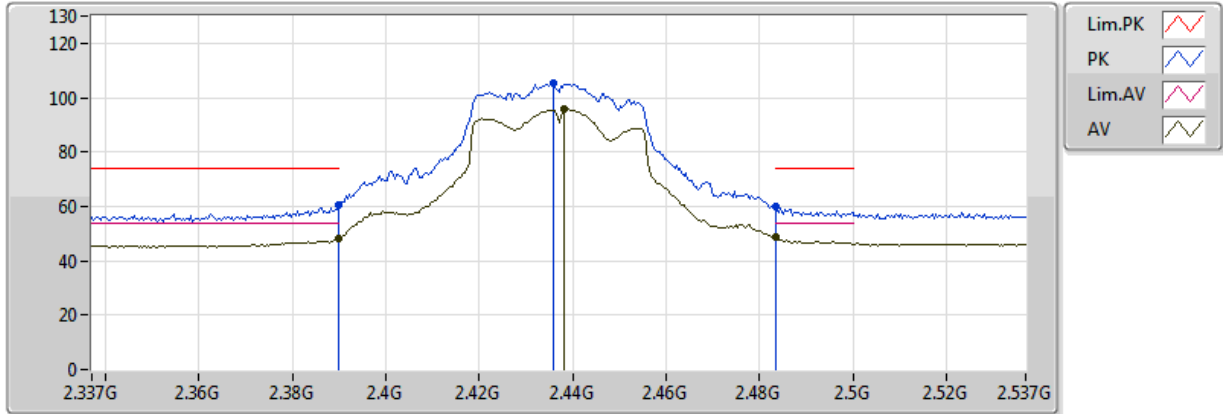
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3894G	50.26	54.00	-3.74	33.16	3	Vertical	243	1.50	-
AV	2.4274G	97.11	Inf	-Inf	33.18	3	Vertical	243	1.50	-
AV	2.4846G	50.98	54.00	-3.02	33.19	3	Vertical	243	1.50	-
PK	2.389G	62.61	74.00	-11.39	33.16	3	Vertical	243	1.50	-
PK	2.4282G	106.98	Inf	-Inf	33.18	3	Vertical	243	1.50	-
PK	2.4842G	63.44	74.00	-10.56	33.19	3	Vertical	243	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

03/02/2018



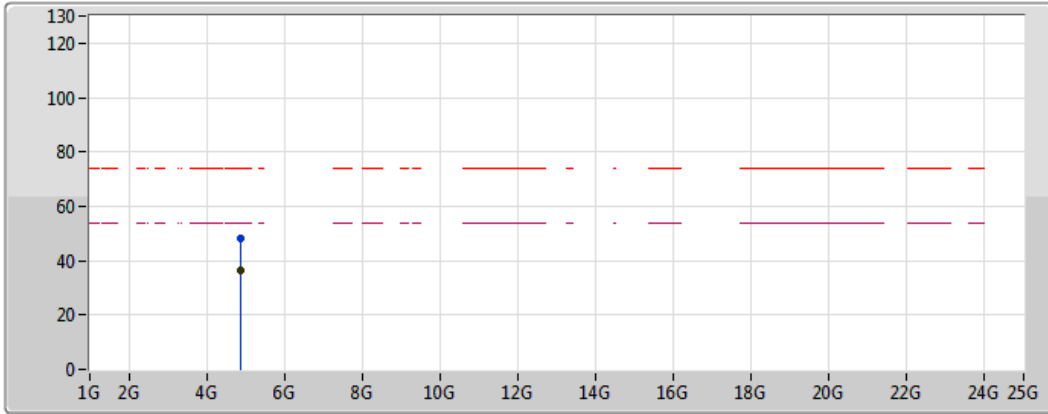
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.389998G	48.12	54.00	-5.88	33.16	3	Horizontal	337	1.00	-
AV	2.4382G	95.59	Inf	-Inf	33.18	3	Horizontal	337	1.00	-
AV	2.483502G	48.55	54.00	-5.45	33.19	3	Horizontal	337	1.00	-
PK	2.389998G	60.43	74.00	-13.57	33.16	3	Horizontal	337	1.00	-
PK	2.4358G	105.37	Inf	-Inf	33.18	3	Horizontal	337	1.00	-
PK	2.483502G	59.98	74.00	-14.02	33.19	3	Horizontal	337	1.00	-





802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

03/02/2018



Legend:

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

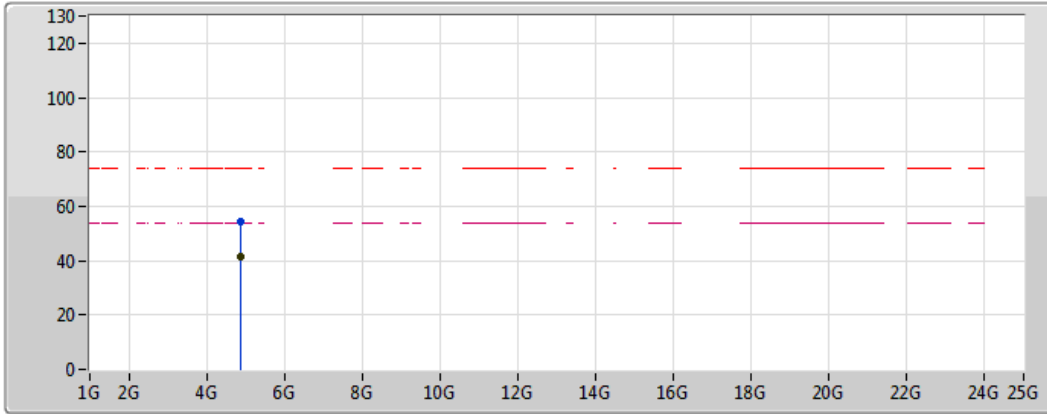
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.8725G	36.50	54.00	-17.50	3.27	3	Vertical	187	1.33	-
PK	4.87406G	48.29	74.00	-25.71	3.27	3	Vertical	187	1.33	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

03/02/2018



Legend for the spectrum plot:

- Lim.PK: Red dashed line with a peak icon
- PK: Blue solid line with a peak icon
- Lim.AV: Magenta dashed line with a peak icon
- AV: Black solid line with a peak icon

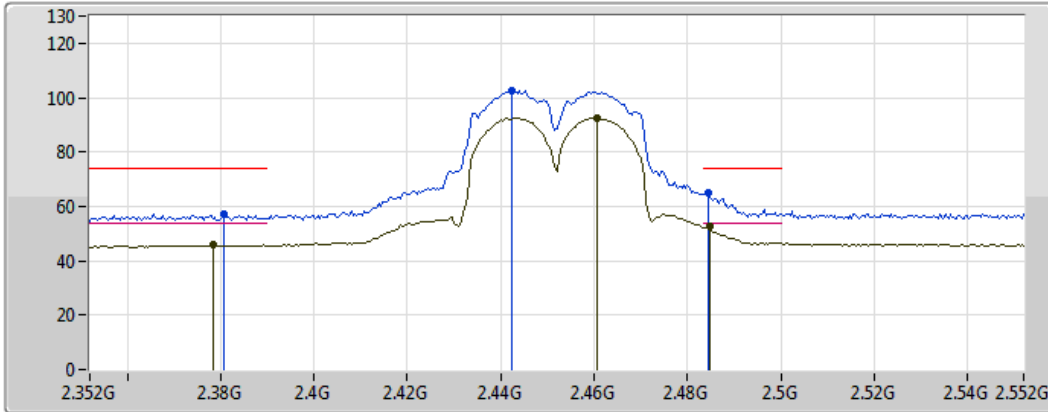
20180203
EUT_X_2TX
Setting 20
04-J-1
FSP(100142)





Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.87346G	41.50	54.00	-12.50	3.27	3	Horizontal	235	2.29	-
PK	4.87316G	54.23	74.00	-19.77	3.27	3	Horizontal	235	2.29	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

03/02/2018



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

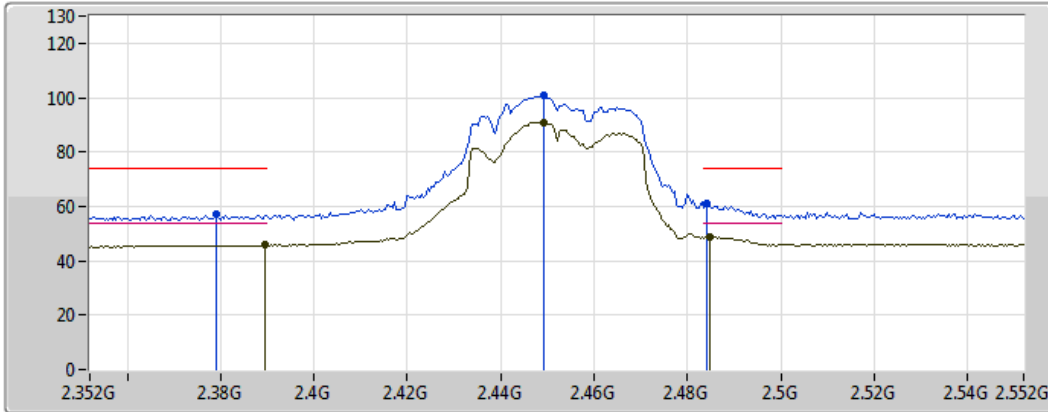
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3784G	45.70	54.00	-8.30	33.16	3	Vertical	269	1.50	-
AV	2.4608G	92.45	Inf	-Inf	33.18	3	Vertical	269	1.50	-
AV	2.4848G	52.45	54.00	-1.55	33.19	3	Vertical	269	1.50	-
PK	2.3808G	57.32	74.00	-16.68	33.16	3	Vertical	269	1.50	-
PK	2.4424G	102.58	Inf	-Inf	33.18	3	Vertical	269	1.50	-
PK	2.4844G	65.17	74.00	-8.83	33.19	3	Vertical	269	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

03/02/2018



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: Blue line with a valley icon

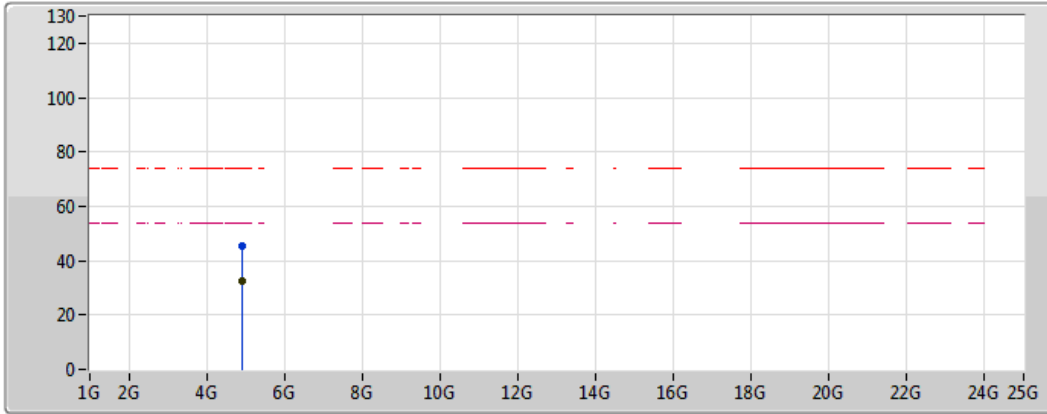
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3896G	45.69	54.00	-8.31	33.16	3	Horizontal	341	2.81	-
AV	2.4492G	91.04	Inf	-Inf	33.18	3	Horizontal	341	2.81	-
AV	2.4848G	48.85	54.00	-5.15	33.19	3	Horizontal	341	2.81	-
PK	2.3792G	56.94	74.00	-17.06	33.16	3	Horizontal	341	2.81	-
PK	2.4492G	100.80	Inf	-Inf	33.18	3	Horizontal	341	2.81	-
PK	2.484G	61.06	74.00	-12.94	33.19	3	Horizontal	341	2.81	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

03/02/2018



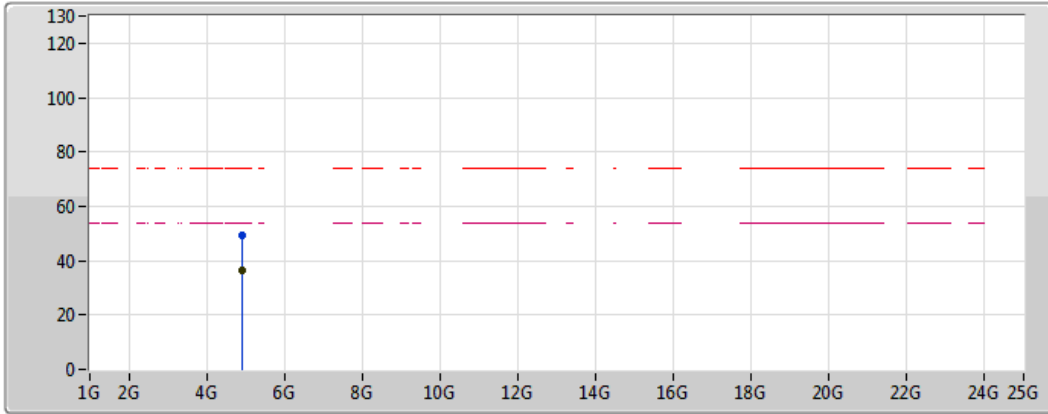
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)





Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.904G	32.78	54.00	-21.22	3.34	3	Vertical	179	1.27	-
PK	4.90412G	45.49	74.00	-28.51	3.34	3	Vertical	179	1.27	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

03/02/2018



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

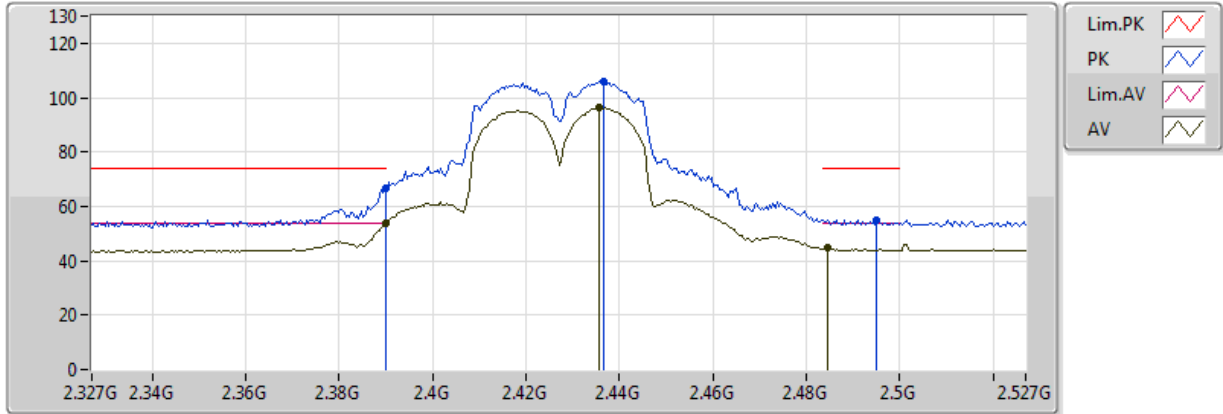
20180203
EUT_X_2TX
Setting 12
04-J-1
FSP(100142)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.90334G	36.37	54.00	-17.63	3.34	3	Horizontal	237	2.99	-
PK	4.9031G	49.46	74.00	-24.54	3.34	3	Horizontal	237	2.99	-

802.11n HT40_Nss1,(MCS0)_2TX

2427MHz_TX

07/02/2018



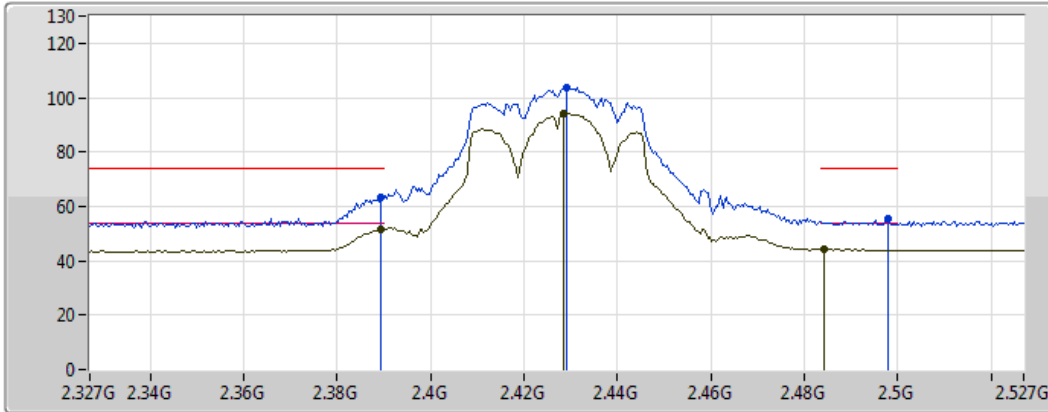
20180207
EUT_X_2TX
Setting 14
03-R-5
FSV





Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.389998G	53.69	54.00	-0.31	32.18	3	Vertical	311	1.10	-
AV	2.4358G	96.23	Inf	-Inf	32.30	3	Vertical	311	1.10	-
AV	2.4846G	44.85	54.00	-9.15	32.42	3	Vertical	311	1.10	-
PK	2.389998G	66.42	74.00	-7.58	32.18	3	Vertical	311	1.10	-
PK	2.4366G	106.02	Inf	-Inf	32.30	3	Vertical	311	1.10	-
PK	2.495G	55.08	74.00	-18.92	32.45	3	Vertical	311	1.10	-

802.11n HT40_Nss1,(MCS0)_2TX

2427MHz_TX

07/02/2018



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

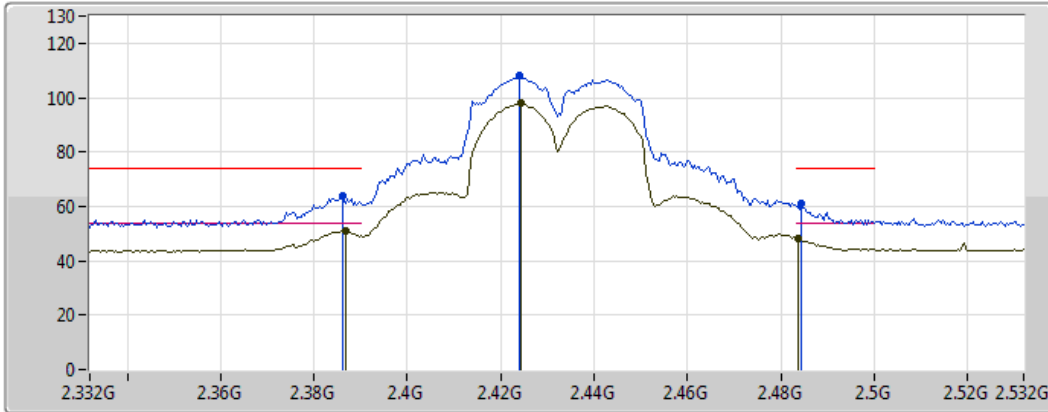
20180207
EUT_X_2TX
Setting 14
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3894G	51.55	54.00	-2.45	32.18	3	Horizontal	216	1.40	-
AV	2.4286G	94.07	Inf	-Inf	32.28	3	Horizontal	216	1.40	-
AV	2.4842G	44.26	54.00	-9.74	32.42	3	Horizontal	216	1.40	-
PK	2.3894G	63.06	74.00	-10.94	32.18	3	Horizontal	216	1.40	-
PK	2.429G	103.81	Inf	-Inf	32.28	3	Horizontal	216	1.40	-
PK	2.4978G	55.36	74.00	-18.64	32.45	3	Horizontal	216	1.40	-

802.11n HT40_Nss1,(MCS0)_2TX

2432MHz_TX

07/02/2018



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: Blue line with a valley icon

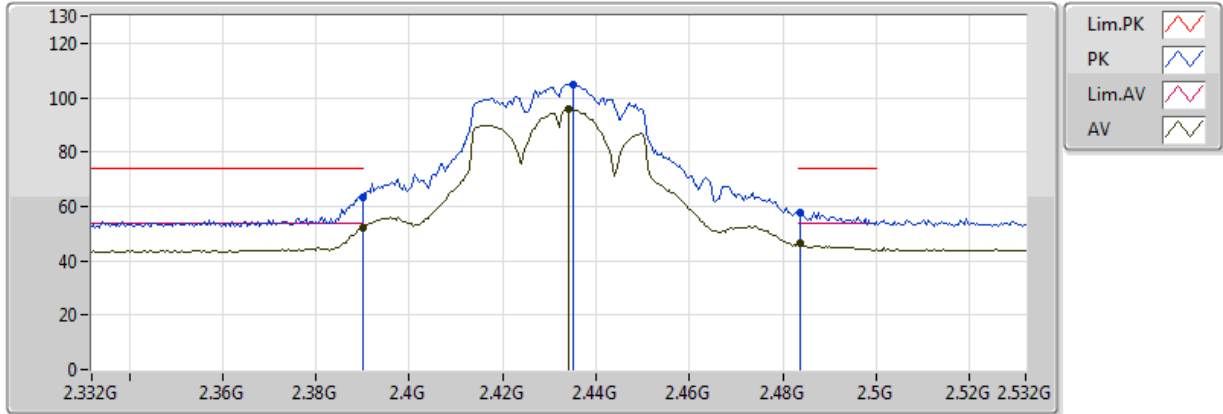
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3868G	51.08	54.00	-2.92	32.18	3	Vertical	301	1.17	-
AV	2.4244G	97.83	Inf	-Inf	32.27	3	Vertical	301	1.17	-
AV	2.4836G	48.28	54.00	-5.72	32.42	3	Vertical	301	1.17	-
PK	2.386G	63.73	74.00	-10.27	32.17	3	Vertical	301	1.17	-
PK	2.424G	108.00	Inf	-Inf	32.27	3	Vertical	301	1.17	-
PK	2.4844G	61.06	74.00	-12.94	32.42	3	Vertical	301	1.17	-

802.11n HT40_Nss1,(MCS0)_2TX

2432MHz_TX

07/02/2018



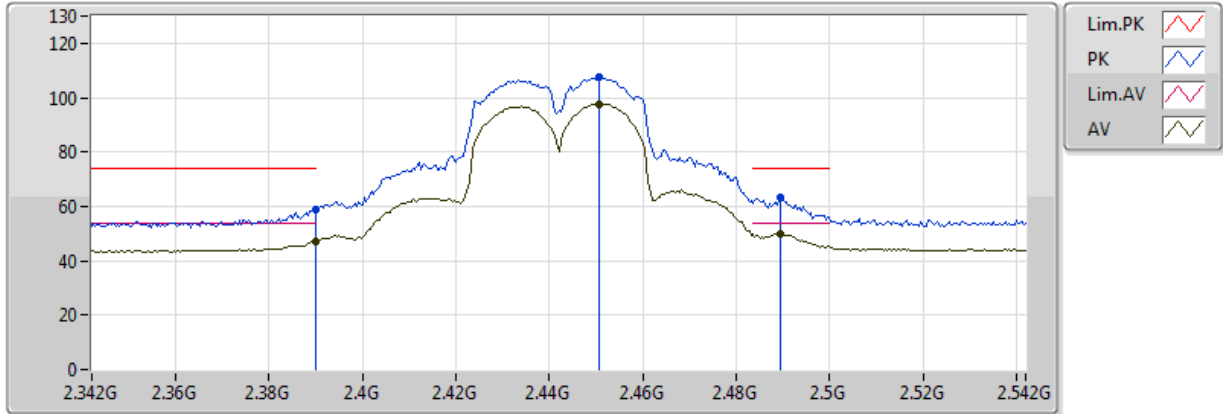
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.39G	51.88	54.00	-2.12	32.18	3	Horizontal	217	1.40	-
AV	2.434G	95.72	Inf	-Inf	32.30	3	Horizontal	217	1.40	-
AV	2.4836G	46.29	54.00	-7.71	32.42	3	Horizontal	217	1.40	-
PK	2.39G	63.46	74.00	-10.54	32.18	3	Horizontal	217	1.40	-
PK	2.4352G	104.97	Inf	-Inf	32.30	3	Horizontal	217	1.40	-
PK	2.4836G	57.88	74.00	-16.12	32.42	3	Horizontal	217	1.40	-

802.11n HT40_Nss1,(MCS0)_2TX

2442MHz_TX

07/02/2018



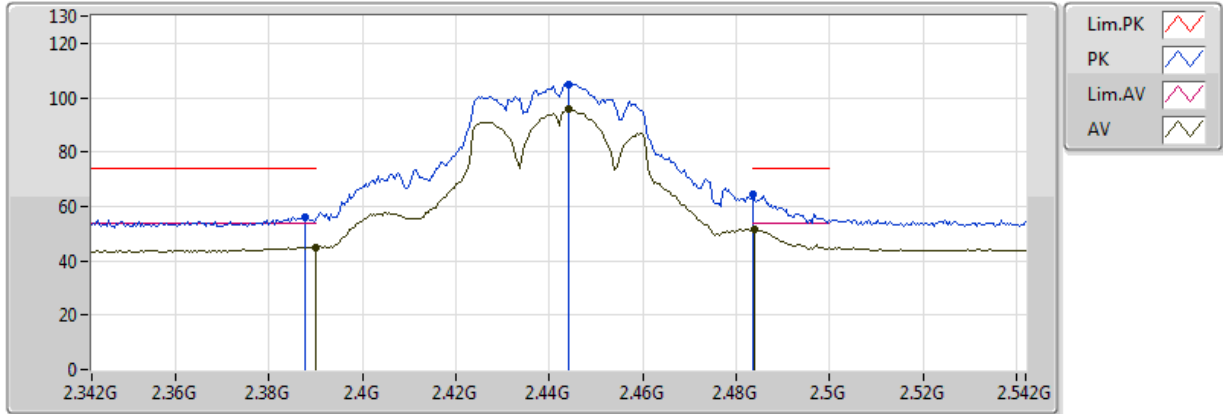
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.39G	47.04	54.00	-6.96	32.18	3	Vertical	308	1.10	-
AV	2.4508G	97.70	Inf	-Inf	32.34	3	Vertical	308	1.10	-
AV	2.4896G	50.14	54.00	-3.86	32.43	3	Vertical	308	1.10	-
PK	2.39G	58.63	74.00	-15.37	32.18	3	Vertical	308	1.10	-
PK	2.4508G	107.82	Inf	-Inf	32.34	3	Vertical	308	1.10	-
PK	2.4896G	63.21	74.00	-10.79	32.43	3	Vertical	308	1.10	-

802.11n HT40_Nss1,(MCS0)_2TX

2442MHz_TX

07/02/2018



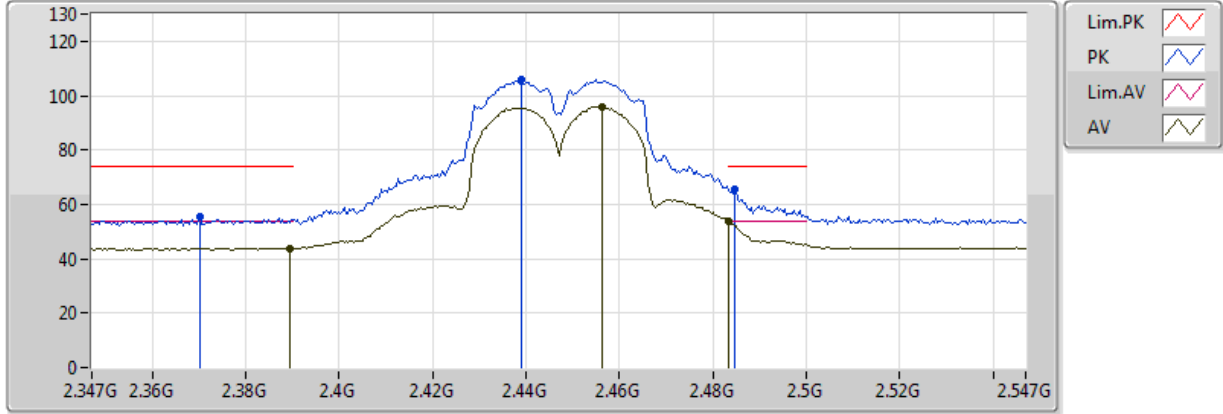
20180207
EUT_X_2TX
Setting 20
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.39G	45.09	54.00	-8.91	32.18	3	Horizontal	216	1.00	-
AV	2.444G	95.54	Inf	-Inf	32.32	3	Horizontal	216	1.00	-
AV	2.484G	51.41	54.00	-2.59	32.42	3	Horizontal	216	1.00	-
PK	2.3876G	56.18	74.00	-17.82	32.18	3	Horizontal	216	1.00	-
PK	2.444G	104.72	Inf	-Inf	32.32	3	Horizontal	216	1.00	-
PK	2.4836G	64.24	74.00	-9.76	32.42	3	Horizontal	216	1.00	-

802.11n HT40_Nss1,(MCS0)_2TX

2447MHz_TX

07/02/2018



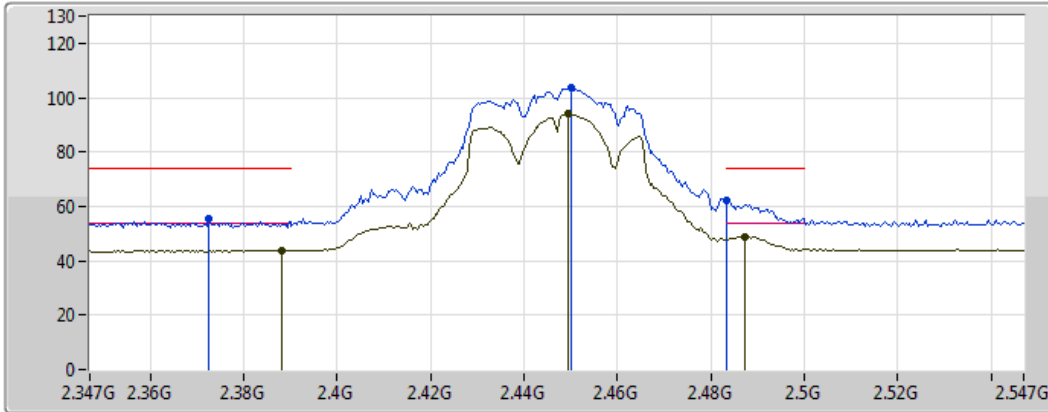
20180207
EUT_X_2TX
Setting 14
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3894G	43.78	54.00	-10.22	32.18	3	Vertical	309	1.09	-
AV	2.4562G	96.03	Inf	-Inf	32.35	3	Vertical	309	1.09	-
AV	2.483502G	53.88	54.00	-0.12	32.42	3	Vertical	309	1.09	-
PK	2.3702G	55.45	74.00	-18.55	32.13	3	Vertical	309	1.09	-
PK	2.439G	105.65	Inf	-Inf	32.31	3	Vertical	309	1.09	-
PK	2.4846G	65.62	74.00	-8.38	32.42	3	Vertical	309	1.09	-

802.11n HT40_Nss1,(MCS0)_2TX

2447MHz_TX

07/02/2018



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: Blue line with a valley icon

20180207
EUT_X_2TX
Setting 14
03-R-5
FSV

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3882G	43.86	54.00	-10.14	32.18	3	Horizontal	219	1.12	-
AV	2.4494G	94.01	Inf	-Inf	32.33	3	Horizontal	219	1.12	-
AV	2.4874G	48.80	54.00	-5.20	32.43	3	Horizontal	219	1.12	-
PK	2.3726G	55.36	74.00	-18.64	32.13	3	Horizontal	219	1.12	-
PK	2.4502G	103.42	Inf	-Inf	32.34	3	Horizontal	219	1.12	-
PK	2.483502G	62.38	74.00	-11.62	32.42	3	Horizontal	219	1.12	-