



FCC Test Report

Equipment : cnPilot E600 Indoor
Brand Name : Cambium Networks
Model No. : cnPilot E600 Indoor
FCC ID : Z8H89FT0036
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : Point-to-multipoint; Point-to-point
Applicant / Manufacturer : Cambium Networks Inc.
3800 Golf Road, Suite 360 Rolling Meadows,
IL 60008, USA

The product sample received on Jun. 23, 2017 and completely tested on Jul. 14, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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


Phoenix Chen
SPORTON INTERNATIONAL INC.





Table of Contents

- 1 GENERAL DESCRIPTION5**
- 1.1 Information.....5
- 1.2 Testing Applied Standards7
- 1.3 Testing Location Information7
- 1.4 Measurement Uncertainty8
- 2 TEST CONFIGURATION OF EUT.....9**
- 2.1 Test Condition9
- 2.2 Test Channel Mode9
- 2.3 The Worst Case Measurement Configuration.....10
- 2.4 Accessories11
- 2.5 Support Equipment.....11
- 2.6 Test Setup Diagram12
- 3 TRANSMITTER TEST RESULT14**
- 3.1 AC Power-line Conducted Emissions14
- 3.2 DTS Bandwidth.....15
- 3.3 Maximum Conducted Output Power16
- 3.4 Power Spectral Density18
- 3.5 Emissions in Non-restricted Frequency Bands19
- 3.6 Emissions in Restricted Frequency Bands.....21
- 4 TEST EQUIPMENT AND CALIBRATION DATA25**

APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS

APPENDIX B. TEST RESULTS OF DTS BANDWIDTH

APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER

APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY

APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS

APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS

APPENDIX G. TEST RESULTS OF RADIATED EMISSION CO-LOCATION

APPENDIX H. TEST PHOTOS

PHOTOGRAPHS OF EUT V01



Summary of Test Result

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



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.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
2	1	-	-	PIFA Antenna	I-PEX	5.28
3	2	-	-	PIFA Antenna	I-PEX	4.08

Note: 1: 802.11 b/g/n used two antennas are for signal transmitting and receiving.(2T2R Spatial Multiplexing MIMO configuration)



1.1.3 EUT Information

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

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.992	0.035	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.946	0.241	2.065m	1k
802.11n HT20	0.975	0.11	5.001m	300
802.11n HT40	0.956	0.195	2.429m	1k



1.2 Testing Applied Standards

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

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

1.3 Testing Location Information

Testing Location		
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.		
Test site registered number IC 4086B-1 with Industry Canada.		
<input type="checkbox"/>	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.) TEL : 886-3-656-9065 FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Gary	21.5°C / 61%	14/Jul/2017
Radiated	03CH02-HY	Andy	22.2°C / 56%	01/Jul/2017
AC Conduction	CO01-HY	Teddy	24°C / 58%	07/Jul/2017



1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	2.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	2.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	2.9 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	110V

2.2 Test Channel Mode




Test Software	QDART_CONN.WIN.1.0 Installer-00036.2
---------------	--------------------------------------

Mode	Power Setting
802.11b_(1Mbps)_2TX	-
2412MHz	20.5
2437MHz	20.5
2462MHz	20
802.11g_(6Mbps)_2TX	-
2412MHz	17
2437MHz	23
2462MHz	15.5
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	16
2437MHz	23
2462MHz	16
802.11n HT40_Nss1,(MCS0)_2TX	-
2422MHz	16
2437MHz	17
2452MHz	15

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions Emissions in Non-restricted Frequency Bands
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	WiFi 2.4G & 5G, BT ON, ETH1 : 1Gbps, ETH2 : 1Gbps, AC 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	CTX		
1	Adapter Mode		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	(Y Plane),Bluetooth+WLAN 2.4GHz+ WLAN 5GHz
2	(Z Plane),Bluetooth+WLAN 2.4GHz+ WLAN 5GHz
Refer to Sporton Test Report No.: FA740634-01 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.4 Accessories

Accessories				
AC Adapter	Brand Name	CWT	Model Name	KPL-040F-VI
	Power Rating	I/P: <u>100</u> - <u>240</u> V~ 50/60Hz, <u>1.7</u> A, O/P: <u>12</u> Vdc, <u>3.33</u> A 40W		
	DC Power Cord	1.16 meter, non-shielded cable, with one ferrite core		

Reminder: Regarding to more detail and other information, please refer to user manual.

2.5 Support Equipment

Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	R33002 / DOC
2	Adapter for NB	DELL	HA65NM130	R35737 / DOC
3	Client	-	-	-
4	Notebook	DELL	E5410	R33002 / DOC
5	Adapter for NB	DELL	HA65NM130	R35737 / DOC
6	AC Source	GW	APS-9102	-

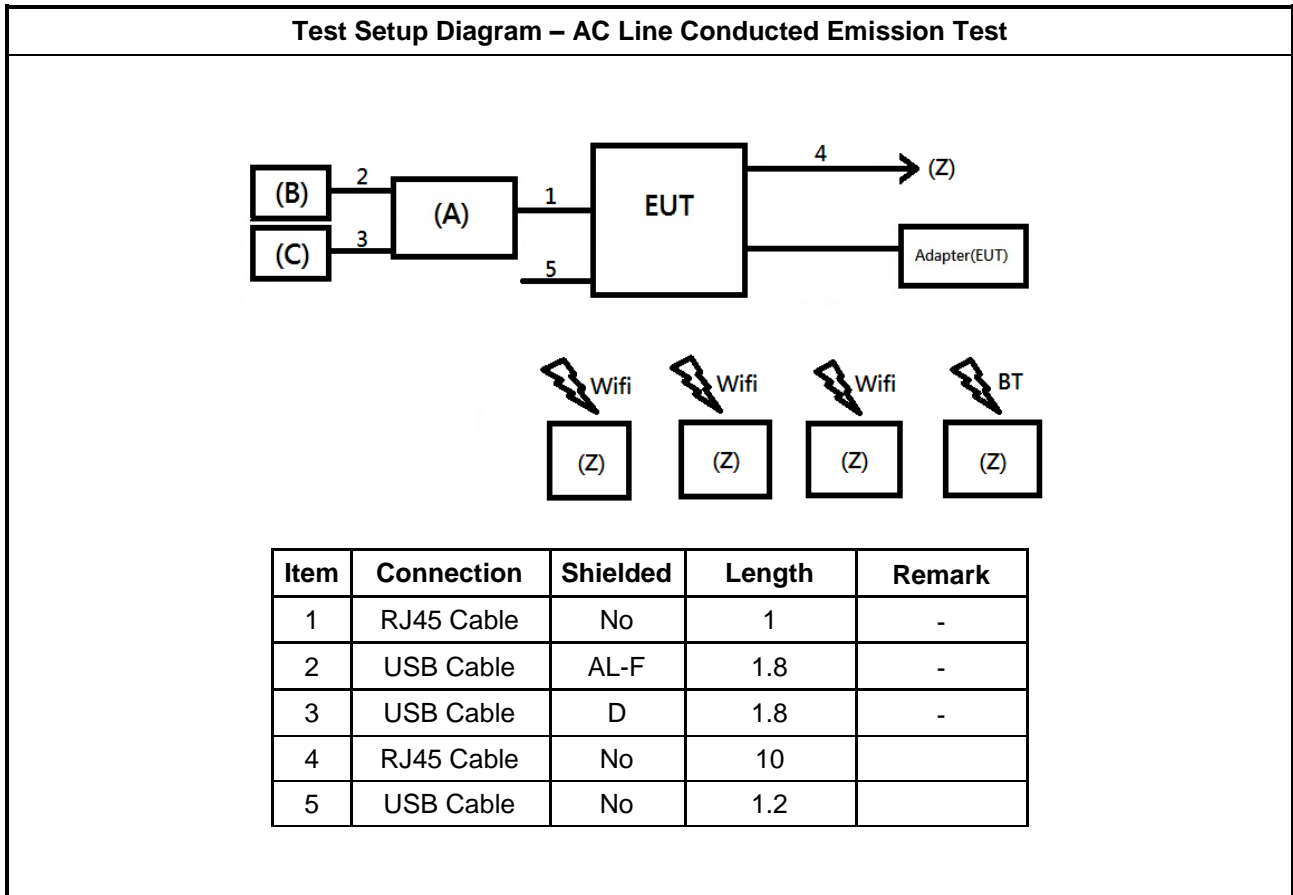
Note: Support equipment No.3 was provided by customer.

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DOC
2	Notebook	DELL	E5530	DOC
3	Client	-	-	-
4	AC Adapter	DELL	LA65NS2-01	-

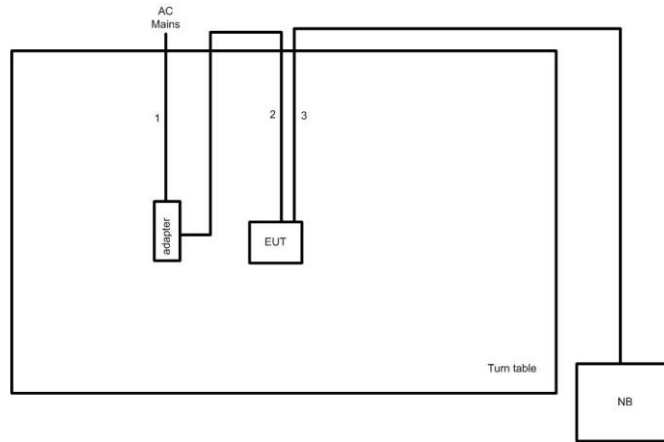
Note: Support equipment No.3 was provided by customer.

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	P55G	P55G	DoC
B	Mouse	Microsoft	1113	DoC
C	Printer	EPSON	C61	N/A
Z	Notebook	DELL	Latitude E5430	DoC
Z	Notebook	DELL	Latitude E5540	DoC
Z	Notebook	DELL	Latitude E5520	DoC
Z	Notebook	DELL	Latitude E5430	DoC
Z	Notebook	DELL	D5500	DoC

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length	Remark
1	AC Power line	No	2.3m	-
2	DC Power line	No	1.16m	-
3	RJ-45 cable	No	10m	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

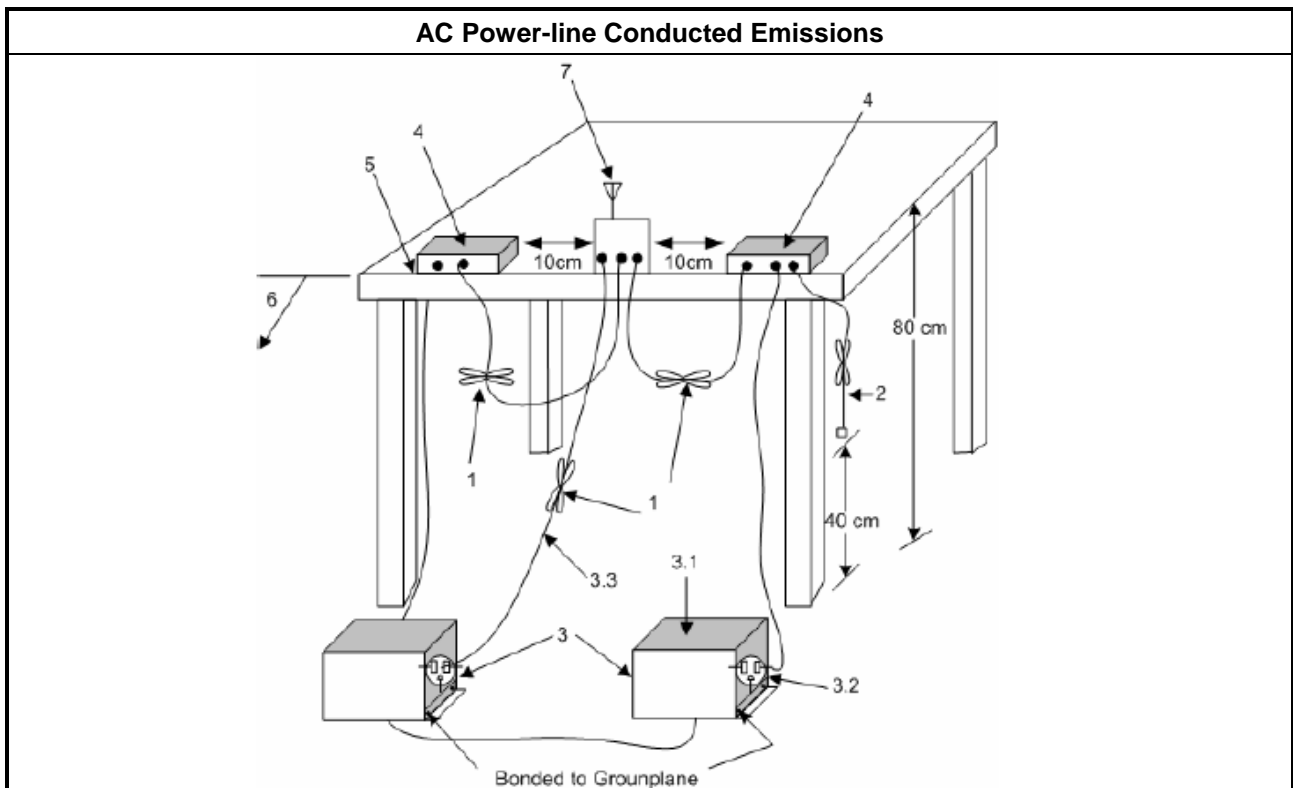
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
<ul style="list-style-type: none"> ▪ 6 dB bandwidth \geq 500 kHz.

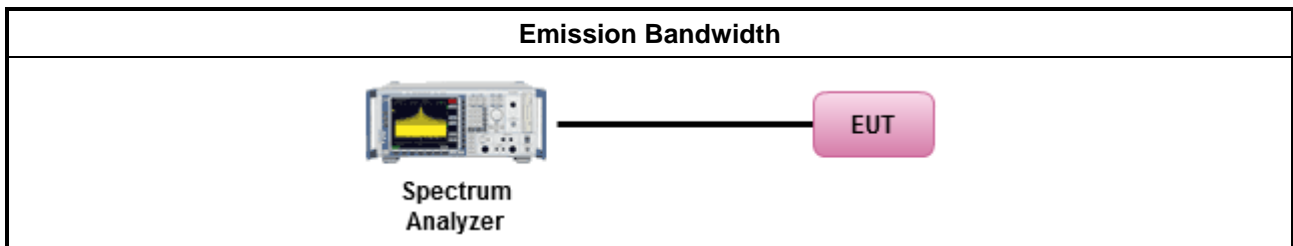
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

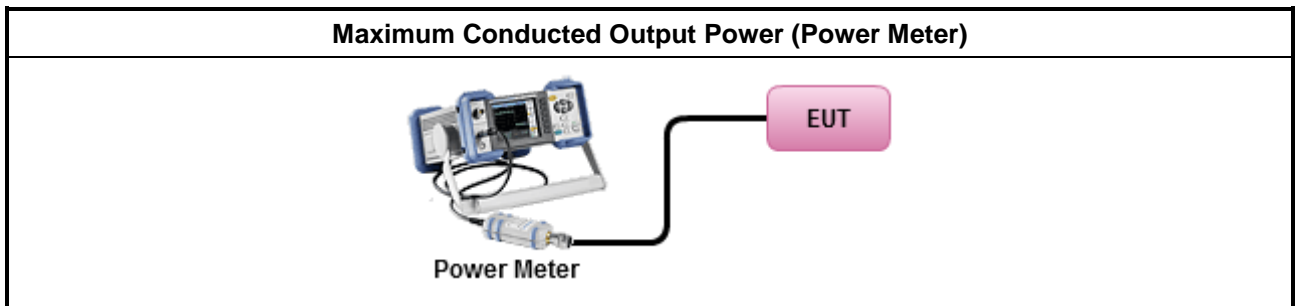
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.2 Option 2 (integrated band power method)
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.3 Option 3 (peak power meter for VBW ≥ DTS BW)
<ul style="list-style-type: none"> ▪ Maximum Average Conducted Output Power 	
Duty cycle ≥ 98%	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
Duty cycle < 98%	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
RF power meter and average over on/off periods with duty factor or gated trigger	
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 9.2.3.1 Method AVGPM (using an RF average power meter).
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. 	
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

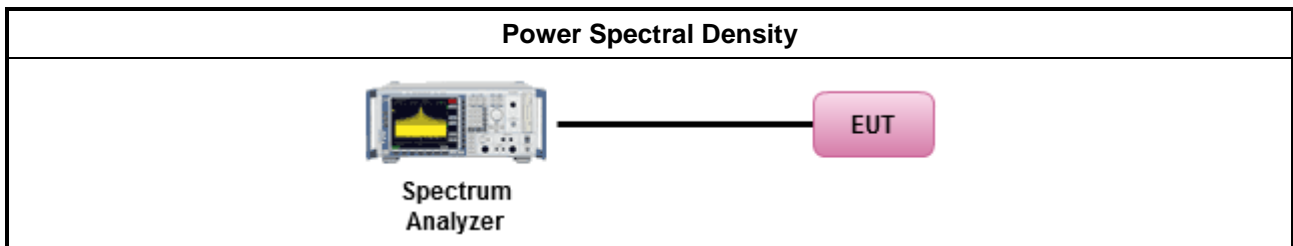
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option). 	
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak).
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: 	
<input checked="" type="checkbox"/>	Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D



3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

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

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

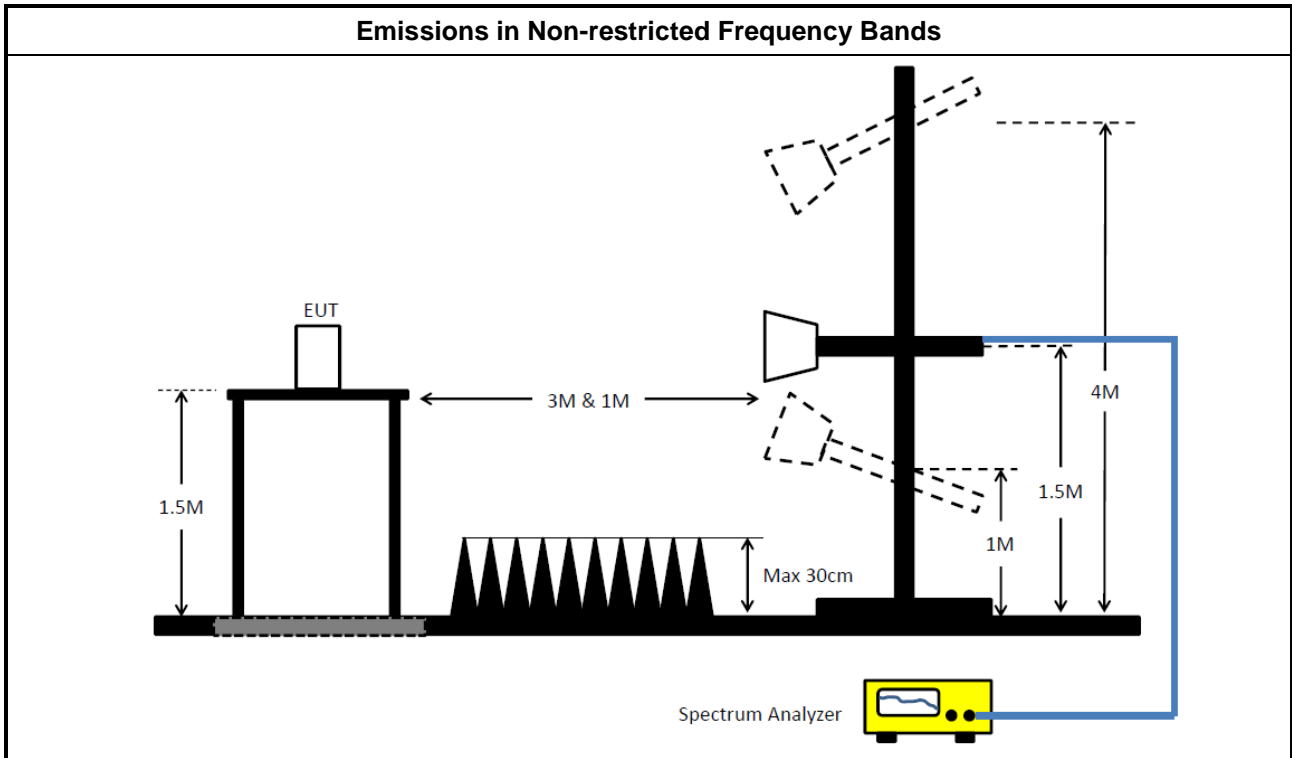
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

3.6.2 Measuring Instruments

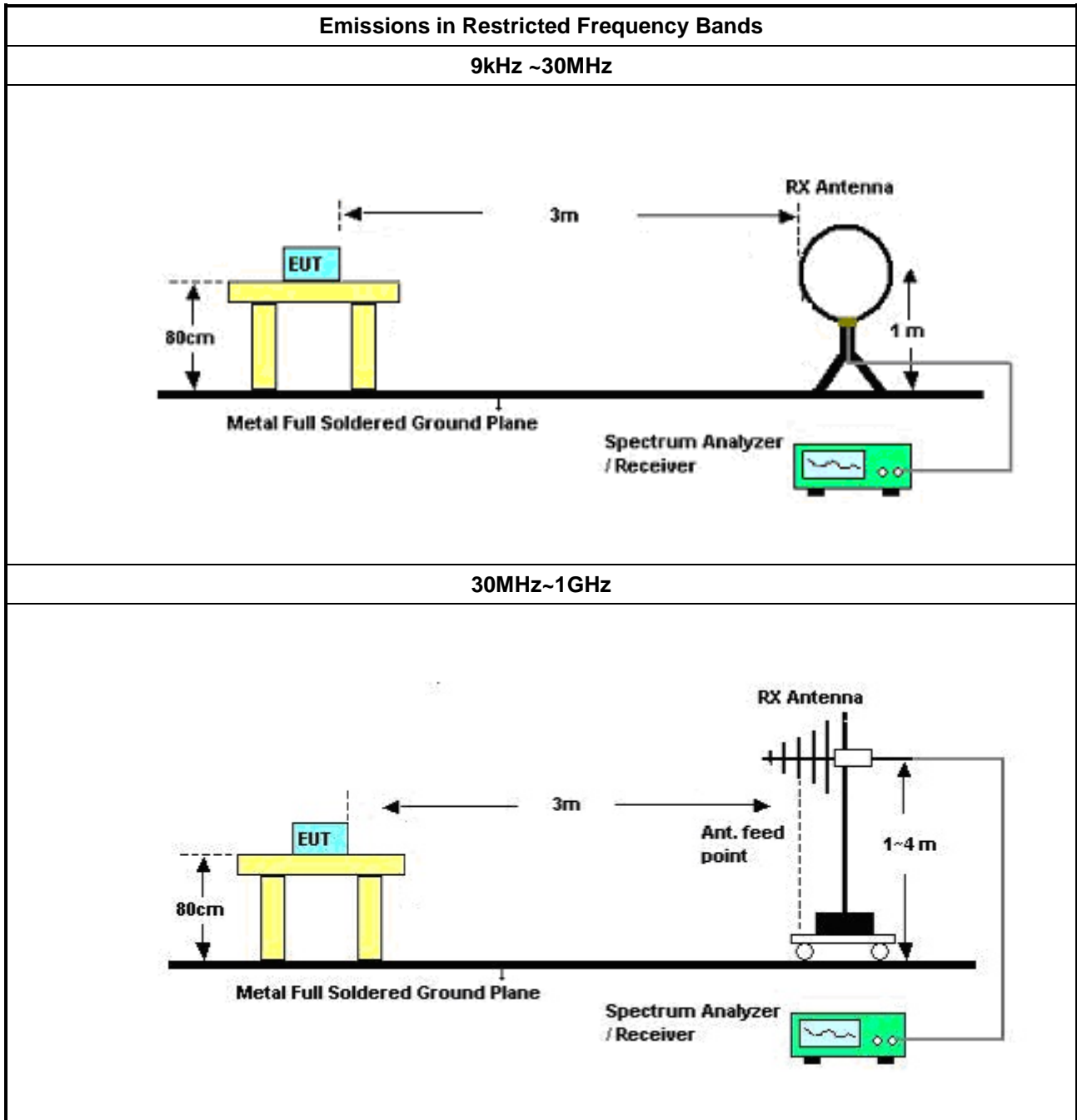
Refer a test equipment and calibration data table in this test report.



3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor]. 	
<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band. 	
<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: 	
<ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 12 for unwanted emissions into restricted bands. 	
	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Refer as KDB 558074, clause 12.2.5.3 (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW\geq1/T.
	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Refer as KDB 558074, clause 12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> ▪ For the transmitter band-edge emissions shall be measured using following options below: 	
<ul style="list-style-type: none"> ▪ Refer as KDB 558074 clause 13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below. 	
<ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 13.2 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements. 	
<ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz). 	
<ul style="list-style-type: none"> ▪ For conducted and cabinet radiation measurement, refer as KDB 558074, clause 12.2.2. 	
<ul style="list-style-type: none"> ▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB 	
<ul style="list-style-type: none"> ▪ For KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. 	

3.6.4 Test Setup





4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	05/Apr/2017	04/Apr/2018
LISN	R&S	ENV 216	101274	9kHz ~ 30MHz	20/Apr/2017	19/Apr/2018
LISN (Support Unit)	MessTec	NNB-2/16Z	99079	9kHz ~ 30MHz	NCR	NCR
RF Cable-CON	HUBER+SUHN ER	RG213/U	07611832010001	9kHz ~ 30MHz	06/Mar/2017	05/Mar/2018
Impuls Begrenzer Pulse Limiter	R&S	ESH3-Z2	100920	9 kHz ~ 30 MHz	09/Nov/2016	08/Nov/2017
Impedance Stabilization Network	TESEQ	T800	23342	150kHz ~ 230MHz	02/Mar/2017	01/Mar/2018

NCR : Non-Calibration Require

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100593	9KHz - 40GHz	26/Oct/2016	25/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz-1GHz	21/Oct/2016	20/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	12/Dec/2016	11/Dec/2017
Amplifier	Agilent	8447D	2944A11149	100KHz-1.3GHz	29/Jun/2017	28/Jun/2018
Amplifier	Agilent	8449B	3008A02373	1GHz-26.5GHz	02/Sep/2016	01/Sep/2017
Receiver	R&S	ESU-26	100422/026	20Hz ~ 26.5GHz	21/Sep/2016	20/Sep/2017
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01531	1GHz-18GHz	25/Apr/2017	24/Apr/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz-40GHz	06/Feb/2017	05/Feb/2018
Bilog Antenna	SCHAFFNER	CBL6112B	2723	30MHz-1GHz	01/Oct/2016	30/Sep/2017
Microwave Preamplifier with 6dB Attenuator	EMC INSTRUMENTS	EMC184045B & PE7005-	1840917	18GHz-40GHz	24/Jun/2016	23/Aug/2017
Loop Antenna	TESEQ	HLA 6120	31244	9KHz-30MHz	02/Mar/2017	01/Mar/2018
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	26/Jan/2017	25/Jan/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	26/Jan/2017	25/Jan/2018
Receiver	R&S	ESU-26	100422/026	20Hz ~ 26.5GHz	21/Sep/2016	20/Sep/2017

**Instrument for Conducted Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	28/Nov/2016	27/Nov/2017
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	27/Oct/2016	26/Oct/2017
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	27/Oct/2016	26/Oct/2017
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	21/Jul/2016	20/Jul/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017



AC Power-line Conducted Emissions Result								
Operating Mode	1	Power Phase	Neutral					
Operating Function	WiFi 2.4G & 5G, BT ON, ETH1 : 1Gbps, ETH2 : 1Gbps, AC MODE							
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.16	21.26	-34.19	55.45	11.54	9.70	0.02	Average
2	0.16	39.42	-26.03	65.45	29.70	9.70	0.02	QP
3 MAX	0.55	29.01	-16.99	46.00	19.35	9.64	0.02	Average
4	0.55	34.87	-21.13	56.00	25.21	9.64	0.02	QP
5	0.94	28.24	-17.76	46.00	18.58	9.64	0.02	Average
6	0.94	34.65	-21.35	56.00	24.99	9.64	0.02	QP
7	1.85	21.37	-24.63	46.00	11.66	9.66	0.05	Average
8	1.85	26.74	-29.26	56.00	17.03	9.66	0.05	QP
9	10.61	22.76	-27.24	50.00	12.85	9.74	0.17	Average
10	10.61	24.91	-35.09	60.00	15.00	9.74	0.17	QP
11	24.78	20.79	-29.21	50.00	10.73	9.79	0.27	Average
12	24.78	24.23	-35.77	60.00	14.17	9.79	0.27	QP
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit. Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)								



Summary

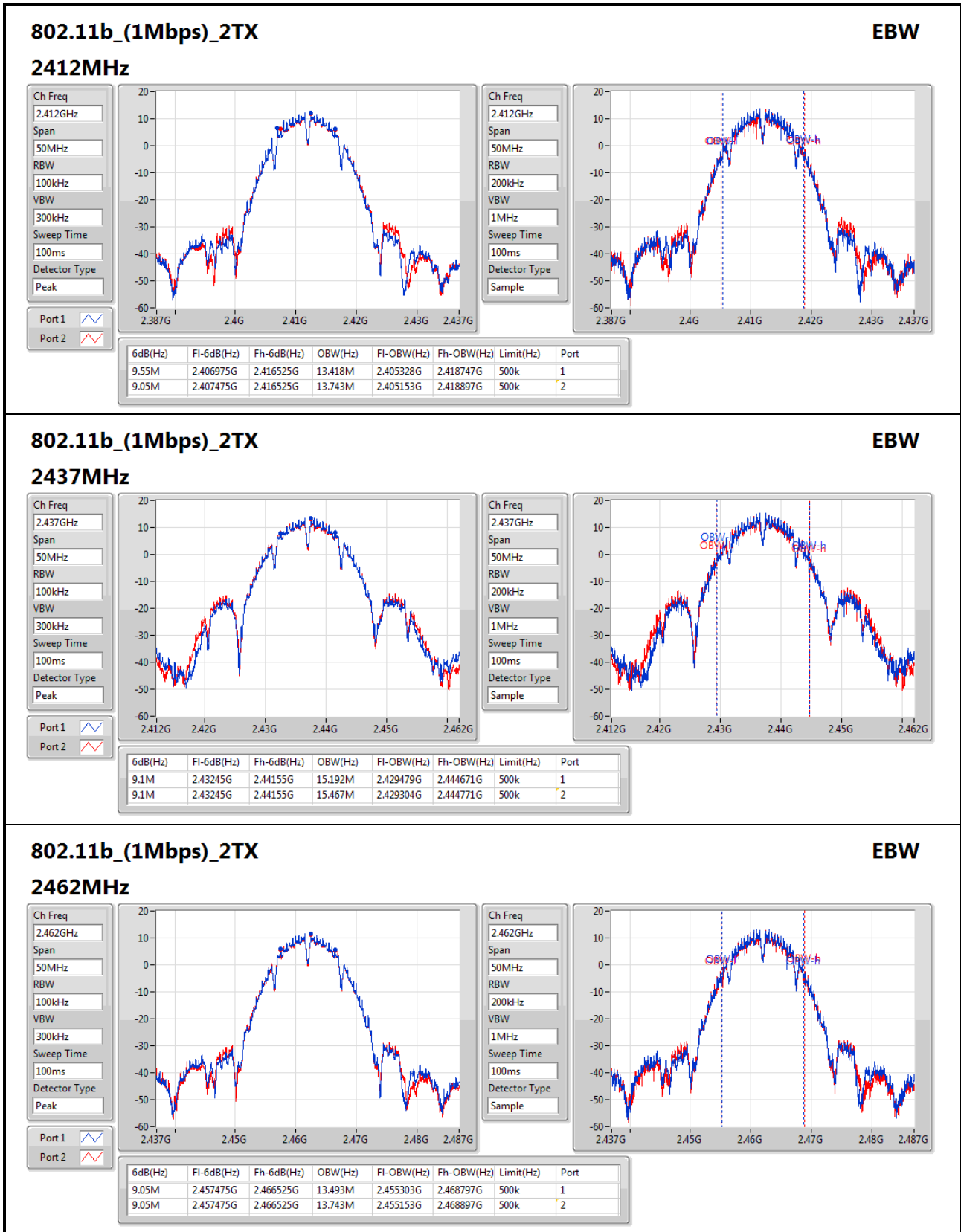
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	9.55M	15.467M	15M5G1D	9.05M	13.418M
802.11g_(6Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	16.35M	23.163M	23M2D1D	16.025M	16.392M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	17.6M	23.888M	23M9D1D	17.55M	17.616M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	35.25M	36.032M	36M0D1D	33.75M	35.882M

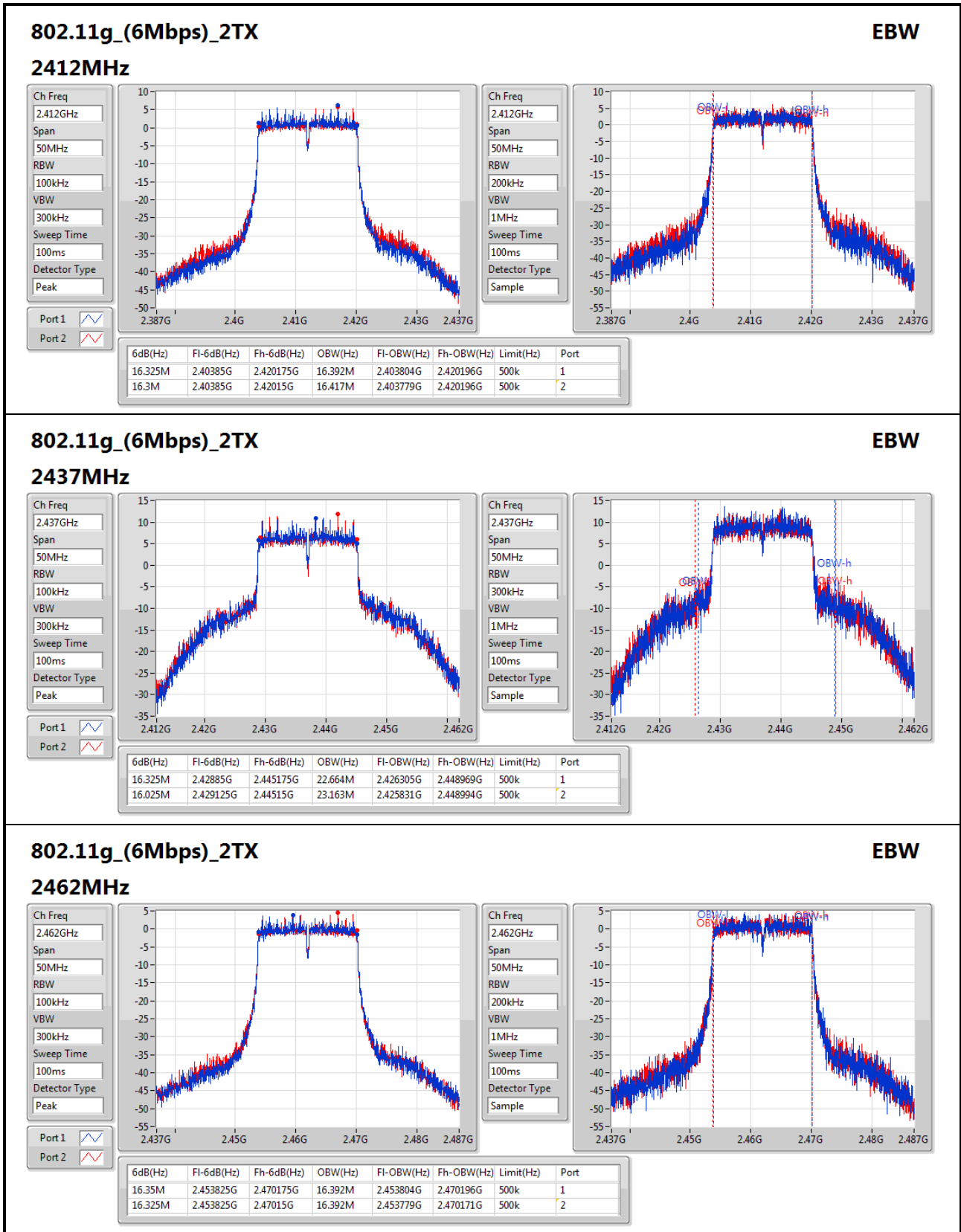
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

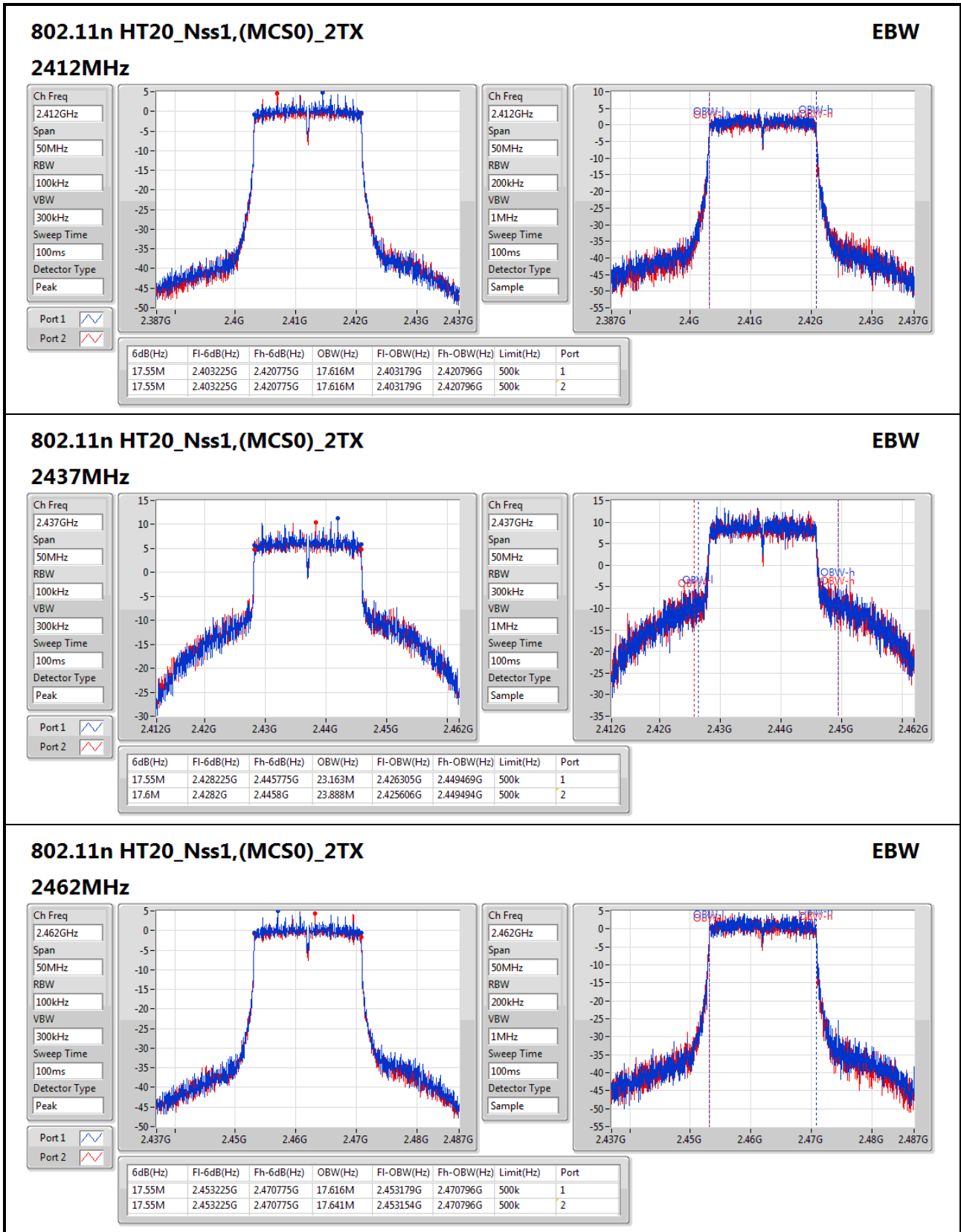
Result

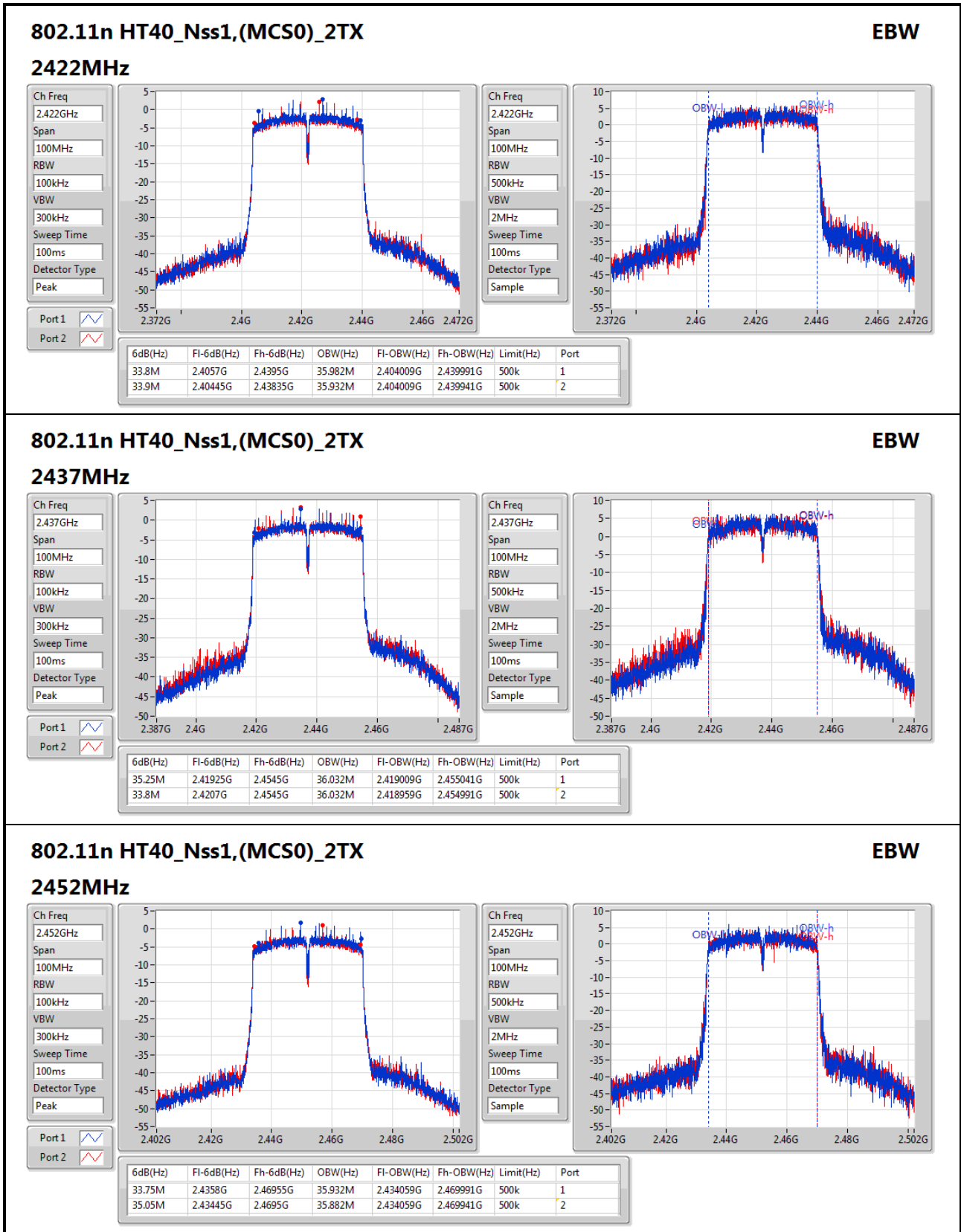
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	9.55M	13.418M	9.05M	13.743M
2437MHz_TnomVnom	Pass	500k	9.1M	15.192M	9.1M	15.467M
2462MHz_TnomVnom	Pass	500k	9.05M	13.493M	9.05M	13.743M
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	16.325M	16.392M	16.3M	16.417M
2437MHz_TnomVnom	Pass	500k	16.325M	22.664M	16.025M	23.163M
2462MHz_TnomVnom	Pass	500k	16.35M	16.392M	16.325M	16.392M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	17.55M	17.616M	17.55M	17.616M
2437MHz_TnomVnom	Pass	500k	17.55M	23.163M	17.6M	23.888M
2462MHz_TnomVnom	Pass	500k	17.55M	17.616M	17.55M	17.641M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k	33.8M	35.982M	33.9M	35.932M
2437MHz_TnomVnom	Pass	500k	35.25M	36.032M	33.8M	36.032M
2452MHz_TnomVnom	Pass	500k	33.75M	35.932M	35.05M	35.882M

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











Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_2TX	-	-
2.4-2.4835GHz	24.80	0.30200
802.11g_(6Mbps)_2TX	-	-
2.4-2.4835GHz	25.51	0.35563
802.11n HT20_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	25.57	0.36058
802.11n HT40_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	20.42	0.11015

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.28	21.24	21.45	24.36	30.00
2437MHz	Pass	5.28	21.54	21.73	24.65	30.00
2462MHz	Pass	5.28	21.70	21.88	24.80	30.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.28	17.32	17.25	20.30	30.00
2437MHz	Pass	5.28	22.61	22.38	25.51	30.00
2462MHz	Pass	5.28	16.16	16.04	19.11	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.28	16.78	16.38	19.59	30.00
2437MHz	Pass	5.28	22.67	22.45	25.57	30.00
2462MHz	Pass	5.28	16.77	16.41	19.60	30.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.28	16.65	16.32	19.50	30.00
2437MHz	Pass	5.28	17.43	17.38	20.42	30.00
2452MHz	Pass	5.28	15.79	15.60	18.71	30.00

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



Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_2TX 2.4-2.4835GHz	- -3.48
802.11g_(6Mbps)_2TX 2.4-2.4835GHz	- -3.27
802.11n HT20_Nss1,(MCS0)_2TX 2.4-2.4835GHz	- -2.83
802.11n HT40_Nss1,(MCS0)_2TX 2.4-2.4835GHz	- -7.24

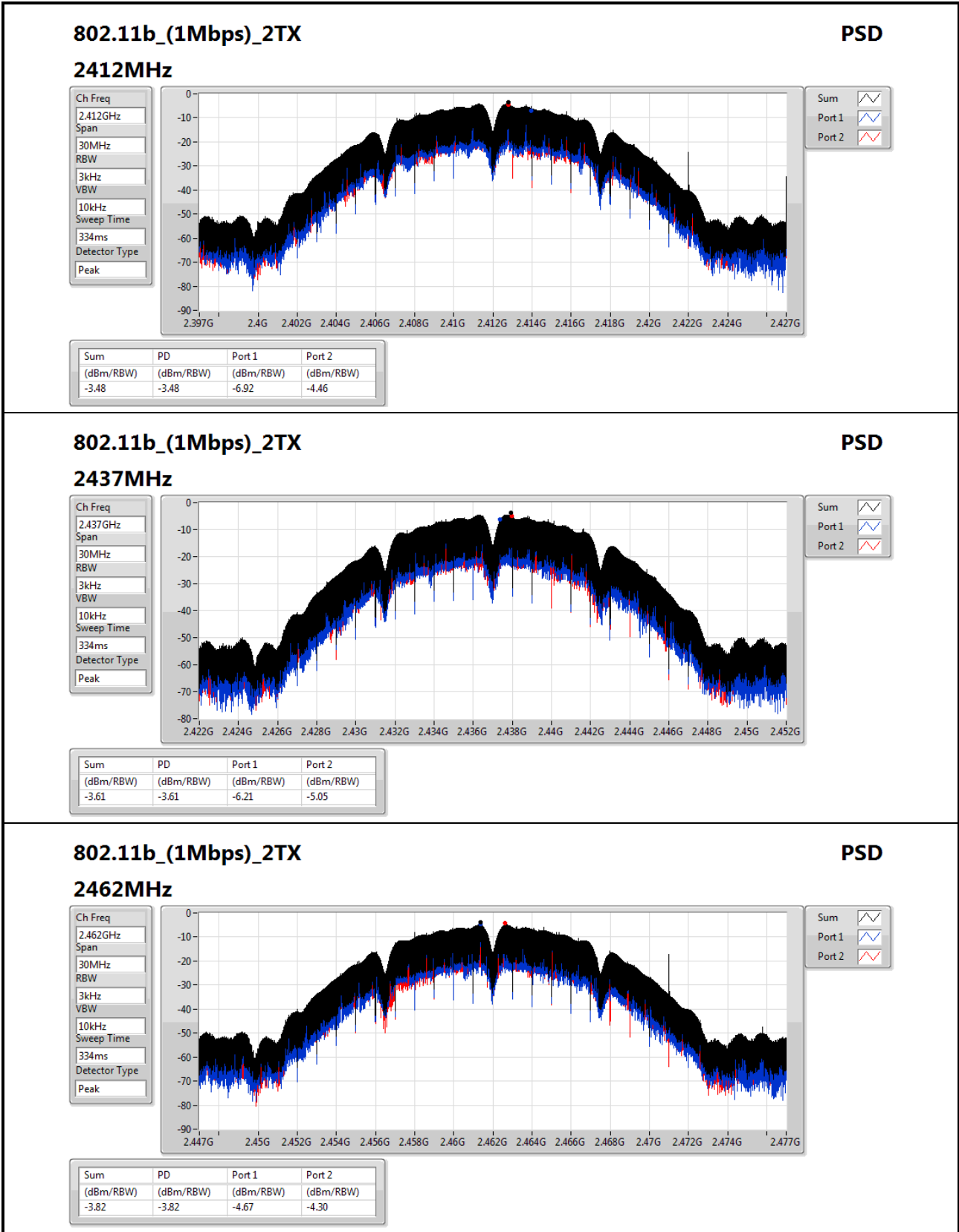
RBW=3kHz.

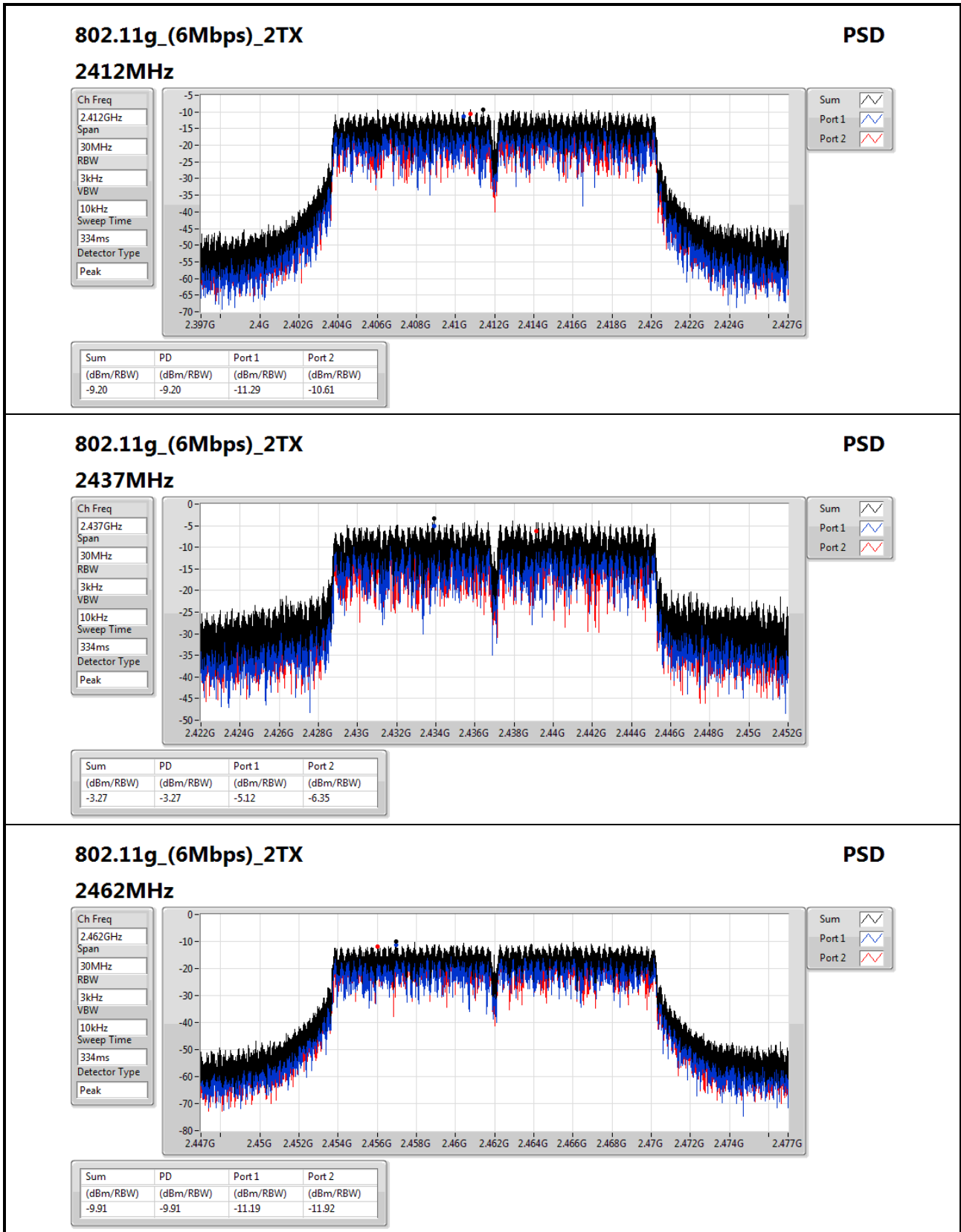
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	7.71	-6.92	-4.46	-3.48	6.29
2437MHz_TnomVnom	Pass	7.71	-6.21	-5.05	-3.61	6.29
2462MHz_TnomVnom	Pass	7.71	-4.67	-4.30	-3.82	6.29
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	7.71	-11.29	-10.61	-9.20	6.29
2437MHz_TnomVnom	Pass	7.71	-5.12	-6.35	-3.27	6.29
2462MHz_TnomVnom	Pass	7.71	-11.19	-11.92	-9.91	6.29
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	7.71	-11.11	-11.92	-9.67	6.29
2437MHz_TnomVnom	Pass	7.71	-6.05	-5.25	-2.83	6.29
2462MHz_TnomVnom	Pass	7.71	-9.57	-10.96	-9.16	6.29
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	7.71	-13.33	-10.19	-9.16	6.29
2437MHz_TnomVnom	Pass	7.71	-10.48	-10.03	-7.24	6.29
2452MHz_TnomVnom	Pass	7.71	-9.97	-12.38	-8.00	6.29

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;




802.11g_(6Mbps)_2TX
PSD

2462MHz

Ch Freq
2.462GHz

Span
30MHz

RBW
3kHz

VBW
10kHz

Sweep Time
334ms

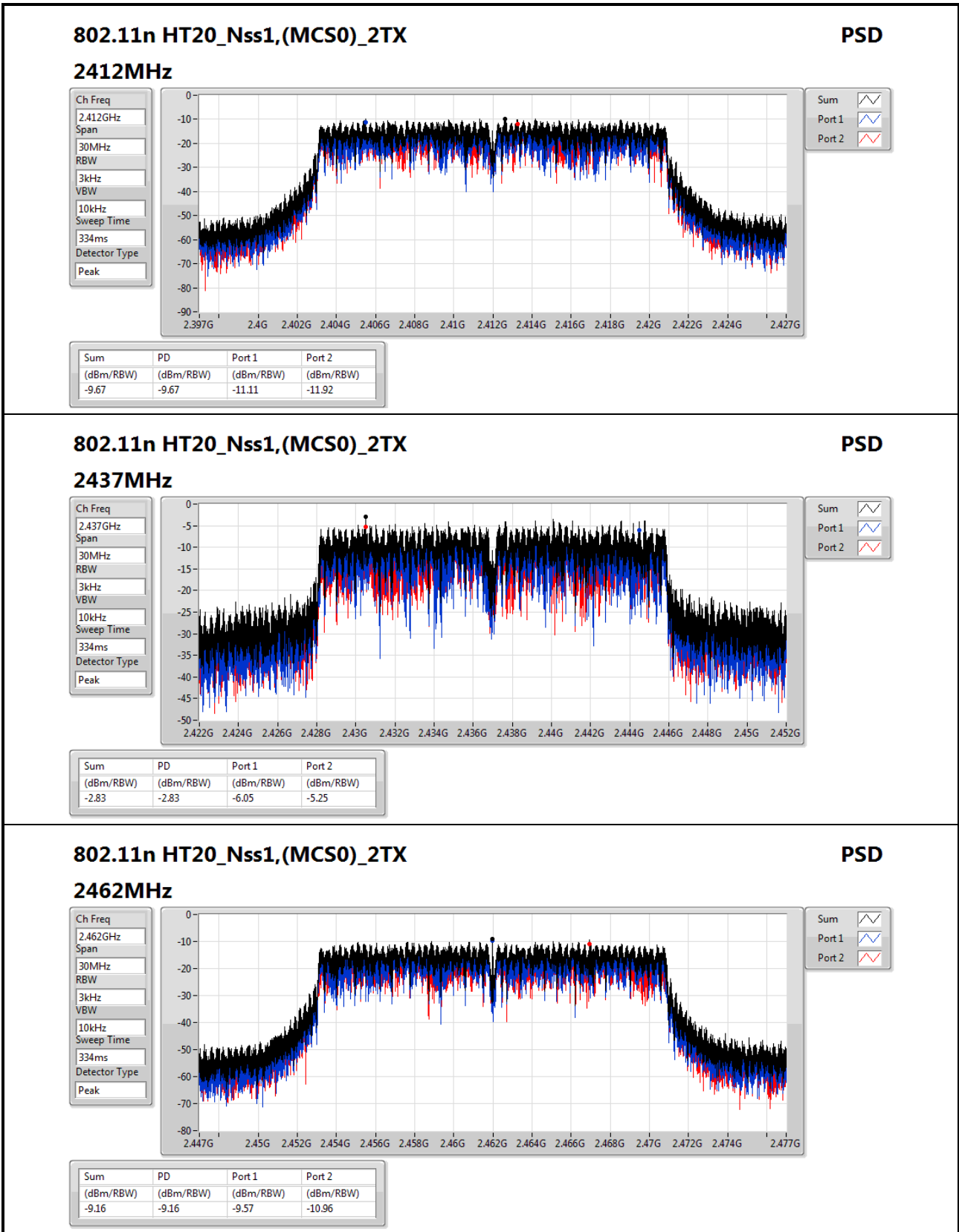
Detector Type
Peak

Sum

Port 1

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.91	-9.91	-11.19	-11.92



802.11n HT20_Nss1,(MCS0)_2TX

2462MHz

PSD

Ch Freq
2.462GHz

Span
30MHz

RBW
3kHz

VBW
10kHz

Sweep Time
334ms

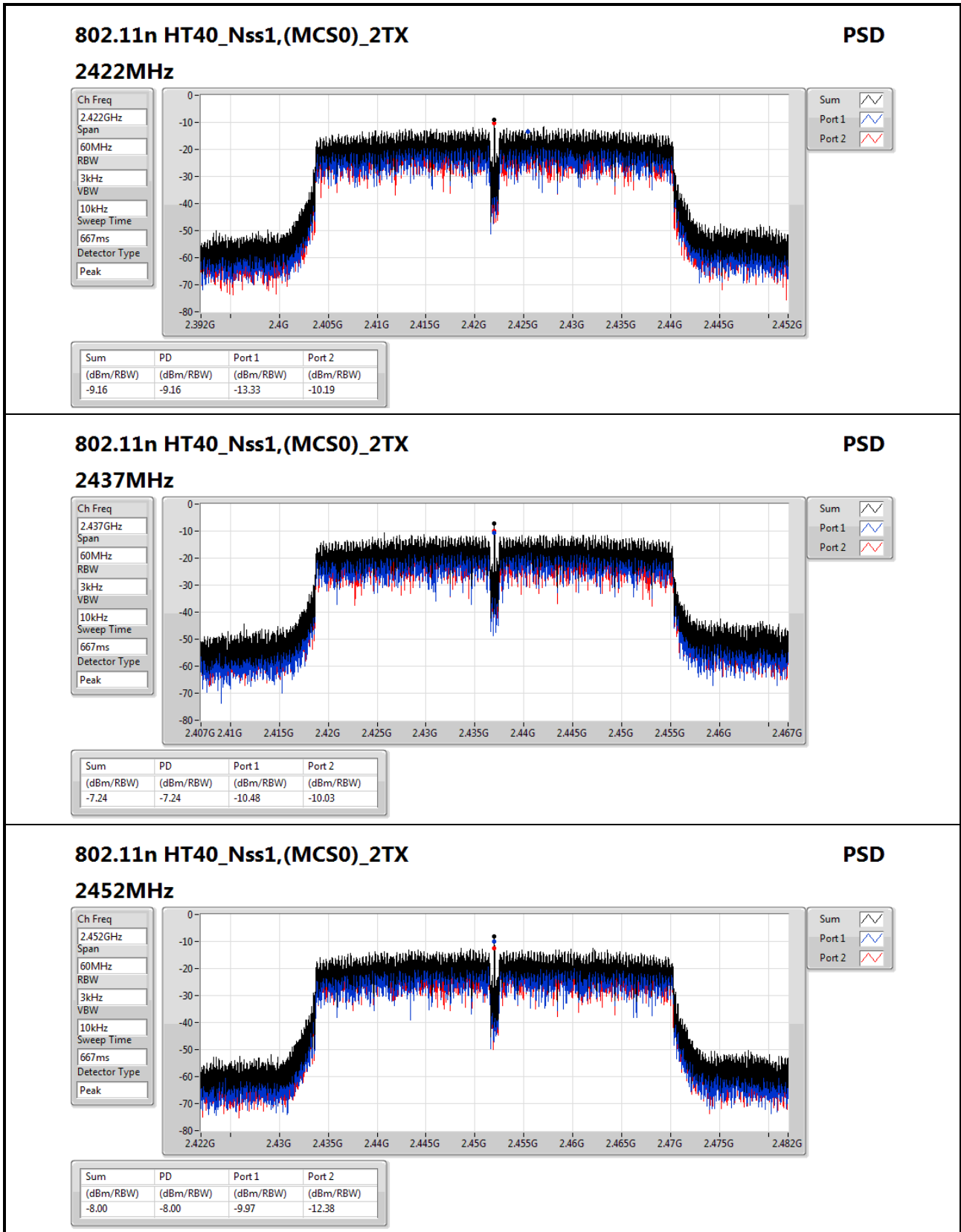
Detector Type
Peak

Sum

Port 1

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.16	-9.16	-9.57	-10.96


802.11n HT40_Nss1,(MCS0)_2TX
PSD

2452MHz

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)
-8.00	-8.00	-9.97	-12.38

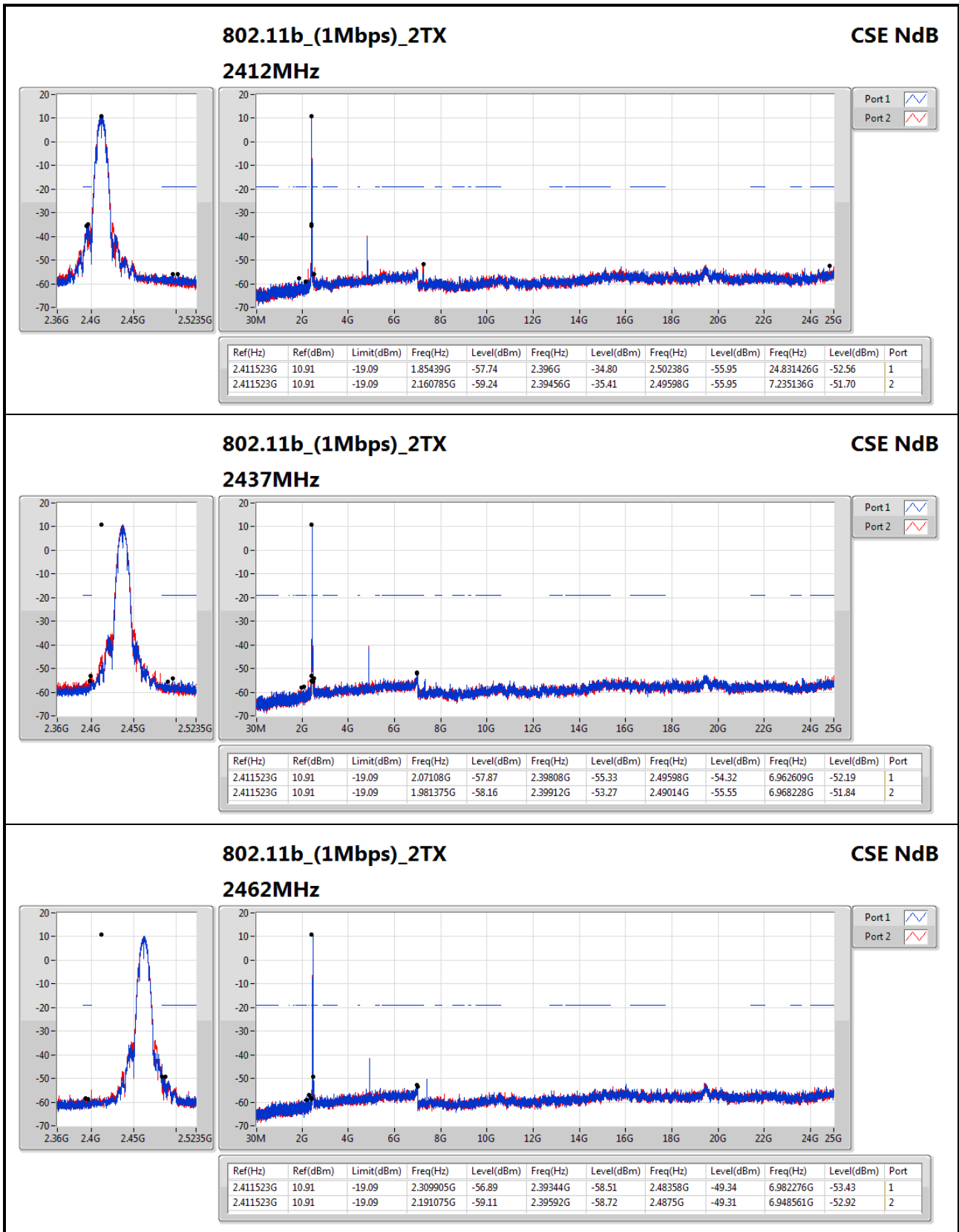


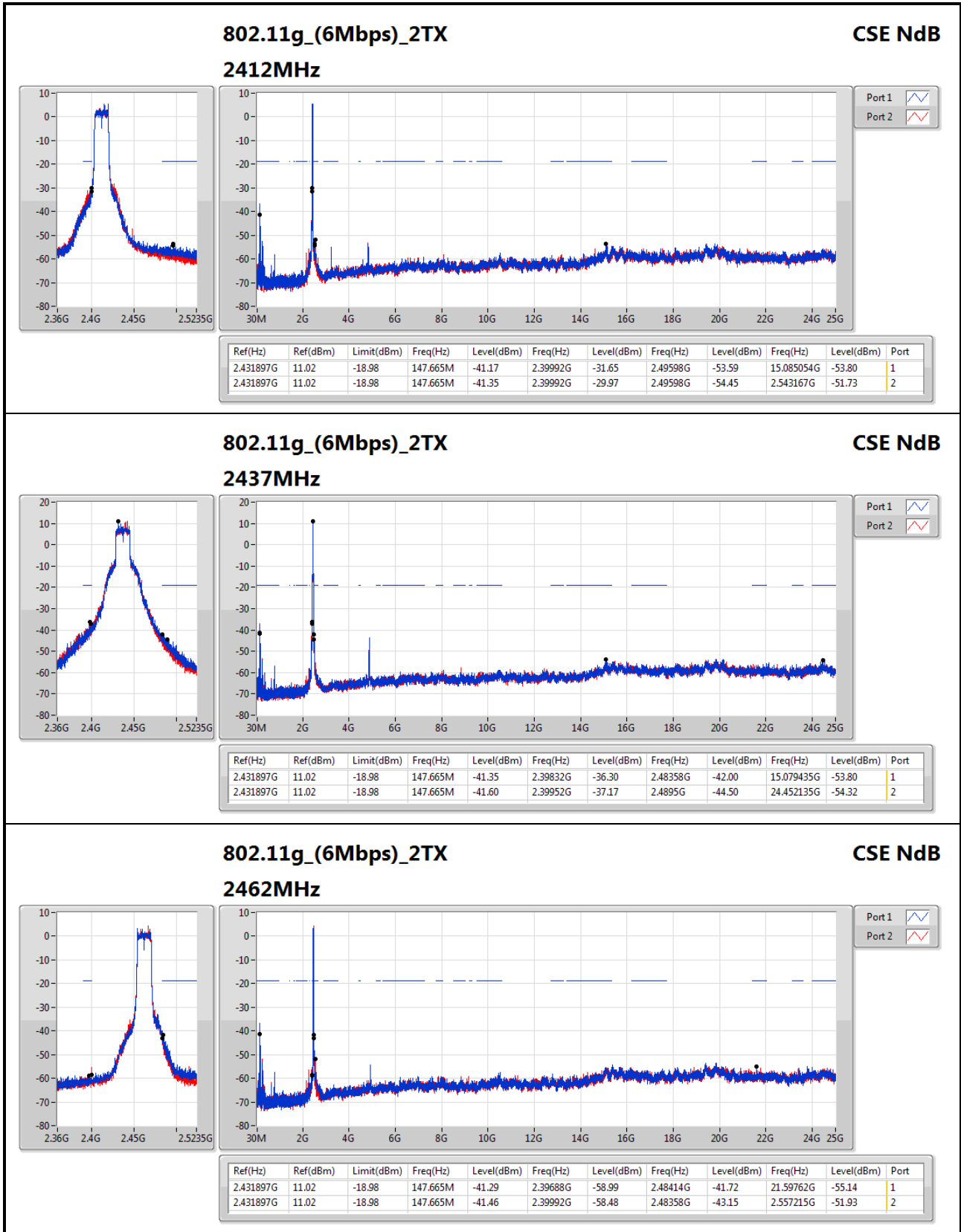
Summary

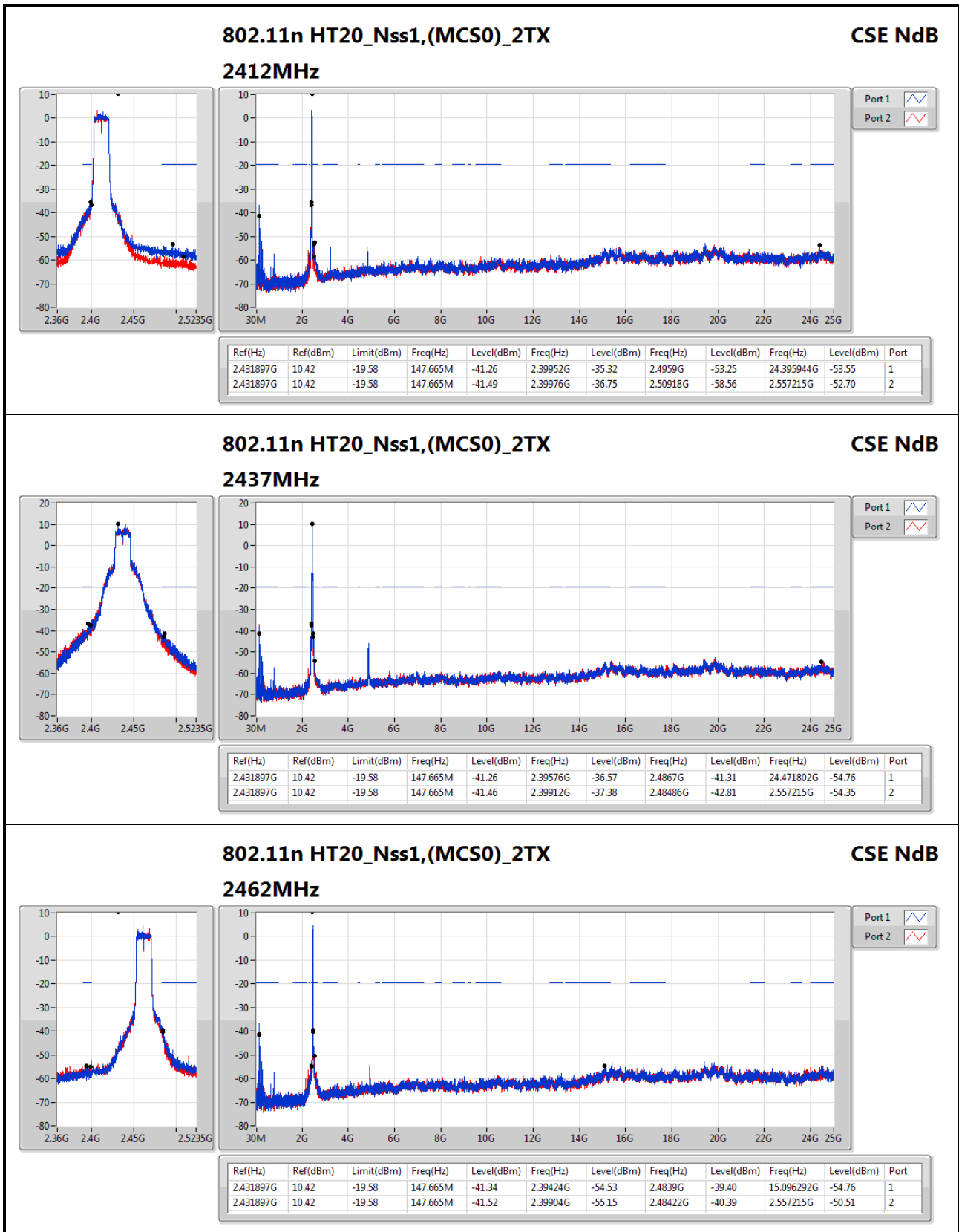
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.428223G	2.27	-27.73	146.79M	-41.47	2.39968G	-34.15	2.48446G	-41.31	15.122331G	-54.73	2

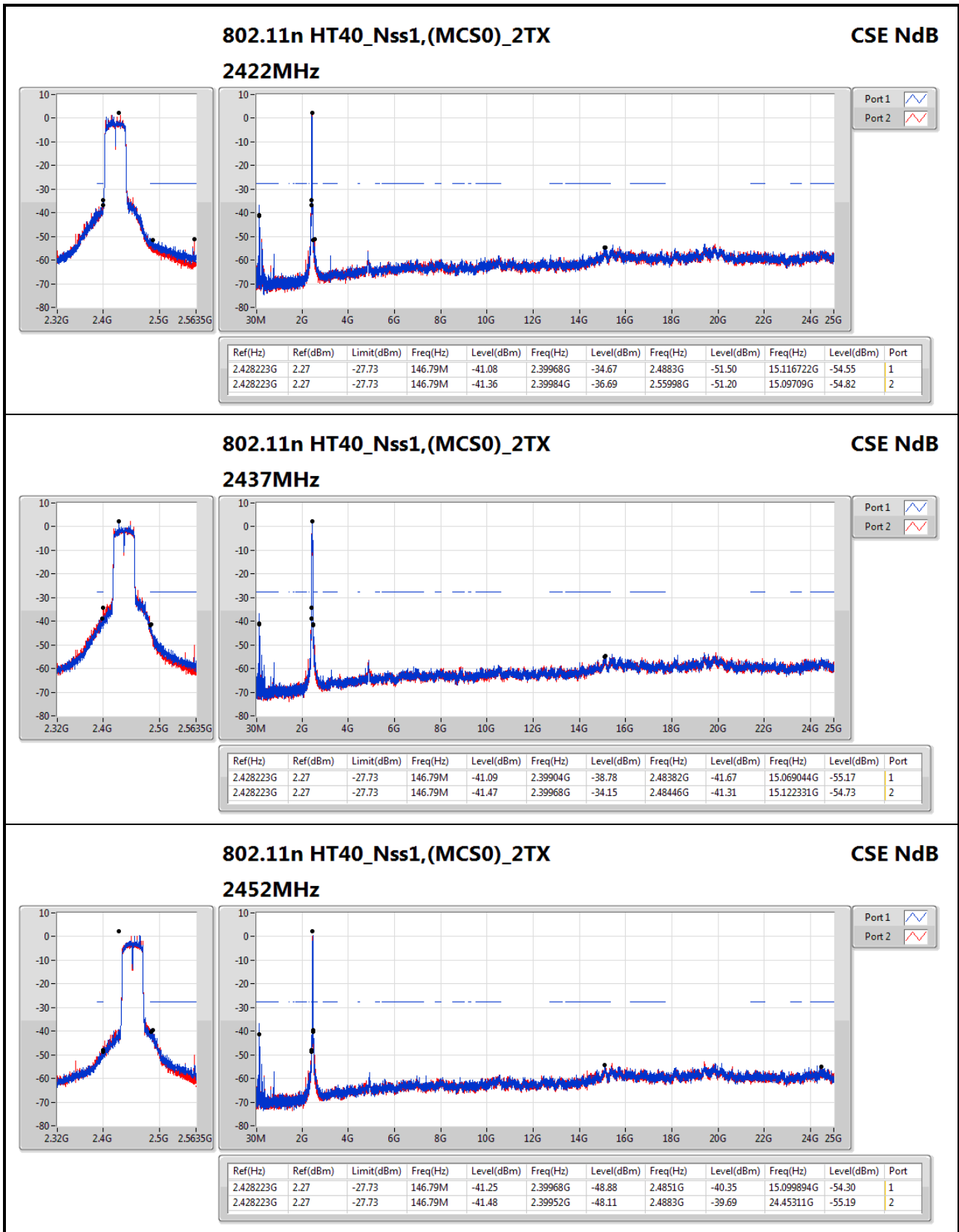
Result

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_(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.411523G	10.91	-19.09	1.85439G	-57.74	2.396G	-34.80	2.50238G	-55.95	24.831426G	-52.56	1
2412MHz_TnomVnom	Pass	2.411523G	10.91	-19.09	2.160785G	-59.24	2.39456G	-35.41	2.49598G	-55.95	7.235136G	-51.70	2
2437MHz_TnomVnom	Pass	2.411523G	10.91	-19.09	2.07108G	-57.87	2.39808G	-55.33	2.49598G	-54.32	6.962609G	-52.19	1
2437MHz_TnomVnom	Pass	2.411523G	10.91	-19.09	1.981375G	-58.16	2.39912G	-53.27	2.49014G	-55.55	6.968228G	-51.84	2
2462MHz_TnomVnom	Pass	2.411523G	10.91	-19.09	2.309905G	-56.89	2.39344G	-58.51	2.48358G	-49.34	6.982276G	-53.43	1
2462MHz_TnomVnom	Pass	2.411523G	10.91	-19.09	2.191075G	-59.11	2.39592G	-58.72	2.4875G	-49.31	6.948561G	-52.92	2
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.431897G	11.02	-18.98	147.665M	-41.17	2.39992G	-31.65	2.49598G	-53.59	15.085054G	-53.80	1
2412MHz_TnomVnom	Pass	2.431897G	11.02	-18.98	147.665M	-41.35	2.39992G	-29.97	2.49598G	-54.45	2.543167G	-51.73	2
2437MHz_TnomVnom	Pass	2.431897G	11.02	-18.98	147.665M	-41.35	2.39832G	-36.30	2.48358G	-42.00	15.079435G	-53.80	1
2437MHz_TnomVnom	Pass	2.431897G	11.02	-18.98	147.665M	-41.60	2.39952G	-37.17	2.4895G	-44.50	24.452135G	-54.32	2
2462MHz_TnomVnom	Pass	2.431897G	11.02	-18.98	147.665M	-41.29	2.39688G	-58.99	2.48414G	-41.72	21.59762G	-55.14	1
2462MHz_TnomVnom	Pass	2.431897G	11.02	-18.98	147.665M	-41.46	2.39992G	-58.48	2.48358G	-43.15	2.557215G	-51.93	2
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.431897G	10.42	-19.58	147.665M	-41.26	2.39952G	-35.32	2.4959G	-53.25	24.395944G	-53.55	1
2412MHz_TnomVnom	Pass	2.431897G	10.42	-19.58	147.665M	-41.49	2.39976G	-36.75	2.50918G	-58.56	2.557215G	-52.70	2
2437MHz_TnomVnom	Pass	2.431897G	10.42	-19.58	147.665M	-41.26	2.39576G	-36.57	2.4867G	-41.31	24.471802G	-54.76	1
2437MHz_TnomVnom	Pass	2.431897G	10.42	-19.58	147.665M	-41.46	2.39912G	-37.38	2.48486G	-42.81	2.557215G	-54.35	2
2462MHz_TnomVnom	Pass	2.431897G	10.42	-19.58	147.665M	-41.34	2.39424G	-54.53	2.4839G	-39.40	15.096292G	-54.76	1
2462MHz_TnomVnom	Pass	2.431897G	10.42	-19.58	147.665M	-41.52	2.39904G	-55.15	2.48422G	-40.39	2.557215G	-50.51	2
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	2.428223G	2.27	-27.73	146.79M	-41.08	2.39968G	-34.67	2.4883G	-51.50	15.116722G	-54.55	1
2422MHz_TnomVnom	Pass	2.428223G	2.27	-27.73	146.79M	-41.36	2.39984G	-36.69	2.55998G	-51.20	15.09709G	-54.82	2
2437MHz_TnomVnom	Pass	2.428223G	2.27	-27.73	146.79M	-41.09	2.39904G	-38.78	2.48382G	-41.67	15.069044G	-55.17	1
2437MHz_TnomVnom	Pass	2.428223G	2.27	-27.73	146.79M	-41.47	2.39968G	-34.15	2.48446G	-41.31	15.122331G	-54.73	2
2452MHz_TnomVnom	Pass	2.428223G	2.27	-27.73	146.79M	-41.25	2.39968G	-48.88	2.4851G	-40.35	15.099894G	-54.30	1
2452MHz_TnomVnom	Pass	2.428223G	2.27	-27.73	146.79M	-41.48	2.39952G	-48.11	2.4883G	-39.69	24.45311G	-55.19	2











Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	PK	35.82M	35.05	40.00	-4.95	-7.10	3	Vertical	360	1.00	-

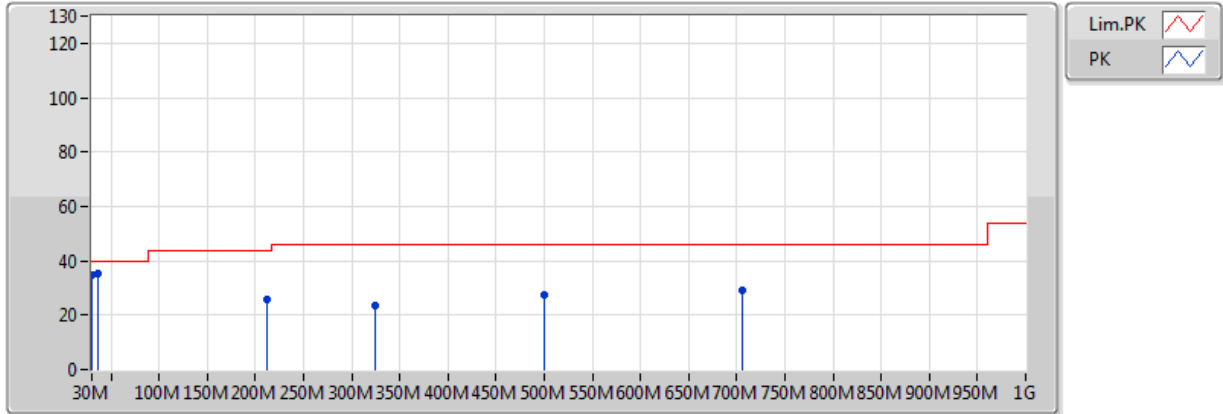


Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	30.00003M	33.51	40.00	-6.49	-4.25	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	177.44M	30.54	43.50	-12.96	-11.07	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	212.36M	28.58	43.50	-14.92	-11.01	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	330.7M	26.74	46.00	-19.26	-6.01	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	499.48M	26.94	46.00	-19.06	-2.52	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	592.6M	28.76	46.00	-17.24	-1.16	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	30M	34.86	40.00	-5.14	-4.25	3	Vertical	360	1.00	-
2437MHz	Pass	PK	35.82M	35.05	40.00	-4.95	-7.10	3	Vertical	360	1.00	-
2437MHz	Pass	PK	212.36M	25.69	43.50	-17.81	-11.01	3	Vertical	360	1.00	-
2437MHz	Pass	PK	324.88M	23.33	46.00	-22.67	-6.04	3	Vertical	360	1.00	-
2437MHz	Pass	PK	499.48M	27.66	46.00	-18.34	-2.52	3	Vertical	360	1.00	-
2437MHz	Pass	PK	705.12M	28.96	46.00	-17.04	-0.25	3	Vertical	360	1.00	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

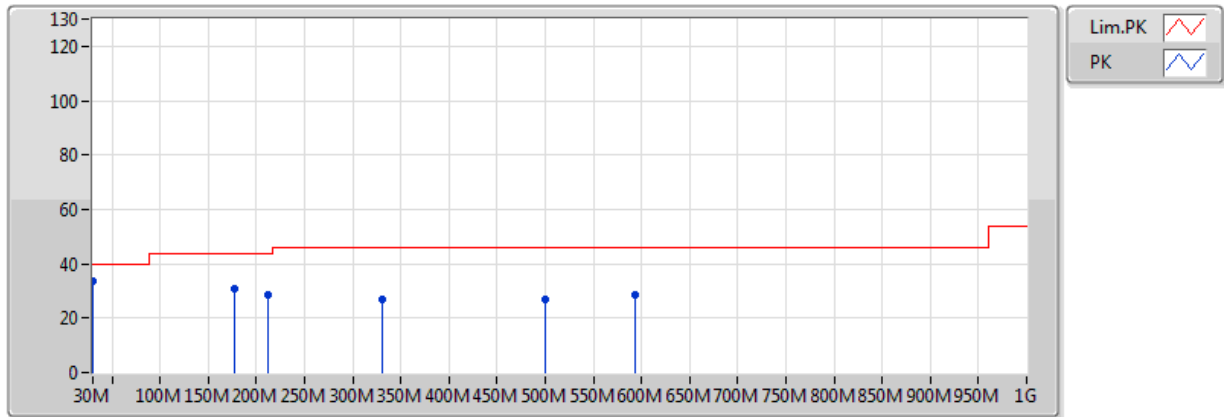


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	30M	34.86	40.00	-5.14	-4.25	3	Vertical	360	1.00	-	39.11	22.02	0.68	26.95
PK	35.82M	35.05	40.00	-4.95	-7.10	3	Vertical	360	1.00	-	42.15	19.51	0.78	27.40
PK	212.36M	25.69	43.50	-17.81	-11.01	3	Vertical	360	1.00	-	36.70	14.12	2.23	27.36
PK	324.88M	23.33	46.00	-22.67	-6.04	3	Vertical	360	1.00	-	29.37	18.71	2.56	27.31
PK	499.48M	27.66	46.00	-18.34	-2.52	3	Vertical	360	1.00	-	30.18	22.53	3.39	28.44
PK	705.12M	28.96	46.00	-17.04	-0.25	3	Vertical	360	1.00	-	29.21	24.02	4.11	28.37

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX



EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	30.00003M	33.51	40.00	-6.49	-4.25	3	Horizontal	0	1.00	-	37.76	22.02	0.68	26.95
PK	177.44M	30.54	43.50	-12.96	-11.07	3	Horizontal	0	1.00	-	41.61	14.48	1.95	27.50
PK	212.36M	28.58	43.50	-14.92	-11.01	3	Horizontal	0	1.00	-	39.59	14.12	2.23	27.36
PK	330.7M	26.74	46.00	-19.26	-6.01	3	Horizontal	0	1.00	-	32.75	18.76	2.57	27.34
PK	499.48M	26.94	46.00	-19.06	-2.52	3	Horizontal	0	1.00	-	29.46	22.53	3.39	28.44
PK	592.6M	28.76	46.00	-17.24	-1.16	3	Horizontal	0	1.00	-	29.92	23.69	3.65	28.50



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.3898G	53.90	54.00	-0.10	31.44	3	Horizontal	53	1.48	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3872G	52.73	54.00	-1.27	30.93	3	Horizontal	55	1.01	-
2412MHz	Pass	AV	2.4102G	108.20	Inf	-Inf	31.01	3	Horizontal	55	1.01	-
2412MHz	Pass	AV	4.824G	41.87	54.00	-12.13	6.58	3	Horizontal	87	1.77	-
2412MHz	Pass	PK	2.387G	61.51	74.00	-12.49	30.92	3	Horizontal	55	1.01	-
2412MHz	Pass	PK	2.4106G	110.79	Inf	-Inf	31.01	3	Horizontal	55	1.01	-
2412MHz	Pass	PK	4.824G	49.29	74.00	-24.71	6.58	3	Horizontal	87	1.77	-
2412MHz	Pass	AV	2.3878G	48.68	54.00	-5.32	31.44	3	Vertical	359	3.49	-
2412MHz	Pass	AV	2.4128G	105.16	Inf	-Inf	31.53	3	Vertical	359	3.49	-
2412MHz	Pass	AV	4.824G	53.71	54.00	-0.29	6.58	3	Vertical	174	2.20	-
2412MHz	Pass	PK	2.3868G	60.26	74.00	-13.74	31.43	3	Vertical	359	3.49	-
2412MHz	Pass	PK	2.413G	107.75	Inf	-Inf	31.53	3	Vertical	359	3.49	-
2412MHz	Pass	PK	4.824G	57.00	74.00	-17.00	6.58	3	Vertical	174	2.20	-
2437MHz	Pass	AV	2.3894G	45.14	54.00	-8.86	30.93	3	Horizontal	57	1.17	-
2437MHz	Pass	AV	2.4362G	109.01	Inf	-Inf	31.10	3	Horizontal	57	1.17	-
2437MHz	Pass	AV	2.485G	46.28	54.00	-7.72	31.28	3	Horizontal	57	1.17	-
2437MHz	Pass	AV	4.874G	44.54	54.00	-9.46	6.74	3	Horizontal	79	1.79	-
2437MHz	Pass	PK	2.3766G	58.51	74.00	-15.49	30.89	3	Horizontal	57	1.17	-
2437MHz	Pass	PK	2.4342G	110.47	Inf	-Inf	31.09	3	Horizontal	57	1.17	-
2437MHz	Pass	PK	2.493G	59.61	74.00	-14.39	31.30	3	Horizontal	57	1.17	-
2437MHz	Pass	PK	4.874G	50.66	74.00	-23.34	6.74	3	Horizontal	79	1.79	-
2437MHz	Pass	AV	2.3862G	44.99	54.00	-9.01	30.92	3	Vertical	357	3.34	-
2437MHz	Pass	AV	2.4378G	105.99	Inf	-Inf	31.11	3	Vertical	357	3.34	-
2437MHz	Pass	AV	2.4942G	46.04	54.00	-7.96	31.31	3	Vertical	357	3.34	-
2437MHz	Pass	AV	4.874G	53.20	54.00	-0.80	6.74	3	Vertical	172	3.33	-
2437MHz	Pass	PK	2.3586G	58.51	74.00	-15.49	30.83	3	Vertical	357	3.34	-
2437MHz	Pass	PK	2.4378G	108.61	Inf	-Inf	31.11	3	Vertical	357	3.34	-
2437MHz	Pass	PK	2.485G	58.98	74.00	-15.02	31.28	3	Vertical	357	3.34	-
2437MHz	Pass	PK	4.874G	56.34	74.00	-17.66	6.74	3	Vertical	172	3.33	-
2462MHz	Pass	AV	2.4638G	107.59	Inf	-Inf	31.20	3	Horizontal	48	2.57	-
2462MHz	Pass	AV	2.483502G	53.25	54.00	-0.75	31.27	3	Horizontal	48	2.57	-
2462MHz	Pass	AV	4.924G	43.55	54.00	-10.45	2.48	3	Horizontal	26	1.50	-
2462MHz	Pass	PK	2.4648G	110.14	Inf	-Inf	31.20	3	Horizontal	48	2.57	-
2462MHz	Pass	PK	2.4836G	62.48	74.00	-11.52	31.27	3	Horizontal	48	2.57	-
2462MHz	Pass	PK	4.924G	49.92	74.00	-24.08	2.48	3	Horizontal	26	1.50	-
2462MHz	Pass	AV	2.4612G	104.07	Inf	-Inf	31.19	3	Vertical	356	3.44	-
2462MHz	Pass	AV	2.483502G	48.49	54.00	-5.51	31.27	3	Vertical	356	3.44	-
2462MHz	Pass	AV	4.924G	52.62	54.00	-1.38	2.48	3	Vertical	166	3.33	-
2462MHz	Pass	PK	2.4612G	106.69	Inf	-Inf	31.19	3	Vertical	356	3.44	-
2462MHz	Pass	PK	2.4974G	60.41	74.00	-13.59	31.32	3	Vertical	356	3.44	-
2462MHz	Pass	PK	4.924G	54.97	74.00	-19.03	2.48	3	Vertical	216	1.49	-
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3898G	53.90	54.00	-0.10	31.44	3	Horizontal	53	1.48	-
2412MHz	Pass	AV	2.4148G	99.58	Inf	-Inf	31.53	3	Horizontal	53	1.48	-
2412MHz	Pass	AV	4.824G	31.95	54.00	-22.05	6.48	3	Horizontal	205	1.50	-
2412MHz	Pass	PK	2.3894G	68.57	74.00	-5.43	31.44	3	Horizontal	53	1.48	-
2412MHz	Pass	PK	2.4148G	110.94	Inf	-Inf	31.53	3	Horizontal	53	1.48	-
2412MHz	Pass	PK	4.824G	46.35	74.00	-27.65	6.48	3	Horizontal	205	1.50	-



RSE TX above 1GHz Result

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2412MHz	Pass	AV	2.3868G	49.84	54.00	-4.16	31.43	3	Vertical	351	3.21	-
2412MHz	Pass	AV	2.4168G	96.14	Inf	-Inf	31.54	3	Vertical	351	3.21	-
2412MHz	Pass	AV	4.824G	32.18	54.00	-21.82	6.48	3	Vertical	165	1.50	-
2412MHz	Pass	PK	2.3866G	63.93	74.00	-10.07	31.43	3	Vertical	351	3.21	-
2412MHz	Pass	PK	2.4176G	106.57	Inf	-Inf	31.54	3	Vertical	351	3.21	-
2412MHz	Pass	PK	4.824G	45.90	74.00	-28.10	6.48	3	Vertical	165	1.50	-
2437MHz	Pass	AV	2.3894G	51.62	54.00	-2.38	31.44	3	Horizontal	53	2.45	-
2437MHz	Pass	AV	2.439G	105.54	Inf	-Inf	31.62	3	Horizontal	53	2.45	-
2437MHz	Pass	AV	2.483502G	53.63	54.00	-0.37	31.78	3	Horizontal	53	2.45	-
2437MHz	Pass	AV	4.874G	37.70	54.00	-16.30	6.61	3	Horizontal	202	1.49	-
2437MHz	Pass	PK	2.3886G	67.08	74.00	-6.92	31.44	3	Horizontal	53	2.45	-
2437MHz	Pass	PK	2.439G	116.57	Inf	-Inf	31.62	3	Horizontal	53	2.45	-
2437MHz	Pass	PK	2.4842G	68.08	74.00	-5.92	31.78	3	Horizontal	53	2.45	-
2437MHz	Pass	PK	4.874G	51.28	74.00	-22.72	6.61	3	Horizontal	202	1.49	-
2437MHz	Pass	AV	2.3878G	49.75	54.00	-4.25	31.44	3	Vertical	19	3.02	-
2437MHz	Pass	AV	2.4334G	102.54	Inf	-Inf	31.60	3	Vertical	19	3.02	-
2437MHz	Pass	AV	2.483502G	52.01	54.00	-1.99	31.78	3	Vertical	19	3.02	-
2437MHz	Pass	AV	4.874G	38.79	54.00	-15.21	6.61	3	Vertical	225	1.40	-
2437MHz	Pass	PK	2.3882G	65.32	74.00	-8.68	31.44	3	Vertical	19	3.02	-
2437MHz	Pass	PK	2.4338G	113.61	Inf	-Inf	31.60	3	Vertical	19	3.02	-
2437MHz	Pass	PK	2.4842G	66.36	74.00	-7.64	31.78	3	Vertical	19	3.02	-
2437MHz	Pass	PK	4.874G	52.33	74.00	-21.67	6.61	3	Vertical	225	1.40	-
2462MHz	Pass	AV	2.4598G	99.97	Inf	-Inf	31.70	3	Horizontal	52	1.02	-
2462MHz	Pass	AV	2.484G	53.89	54.00	-0.11	31.78	3	Horizontal	52	1.02	-
2462MHz	Pass	AV	4.924G	32.13	54.00	-21.87	6.73	3	Horizontal	212	1.50	-
2462MHz	Pass	PK	2.4646G	111.34	Inf	-Inf	31.71	3	Horizontal	52	1.02	-
2462MHz	Pass	PK	2.484G	70.65	74.00	-3.35	31.78	3	Horizontal	52	1.02	-
2462MHz	Pass	PK	4.924G	46.83	74.00	-27.17	6.73	3	Horizontal	212	1.50	-
2462MHz	Pass	AV	2.4684G	96.42	Inf	-Inf	31.73	3	Vertical	19	3.29	-
2462MHz	Pass	AV	2.483502G	52.38	54.00	-1.62	31.78	3	Vertical	19	3.29	-
2462MHz	Pass	AV	4.924G	32.63	54.00	-21.37	6.73	3	Vertical	164	2.04	-
2462MHz	Pass	PK	2.4676G	107.20	Inf	-Inf	31.72	3	Vertical	19	3.29	-
2462MHz	Pass	PK	2.483502G	68.65	74.00	-5.35	31.78	3	Vertical	19	3.29	-
2462MHz	Pass	PK	4.924G	46.81	74.00	-27.19	6.73	3	Vertical	164	2.04	-
802.11n HT20_Nss1_(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3898G	53.81	54.00	-0.19	31.44	3	Horizontal	65	1.02	-
2412MHz	Pass	AV	2.4066G	99.33	Inf	-Inf	31.50	3	Horizontal	65	1.02	-
2412MHz	Pass	AV	4.824G	31.89	54.00	-22.11	6.48	3	Horizontal	195	1.50	-
2412MHz	Pass	PK	2.3892G	69.61	74.00	-4.39	31.44	3	Horizontal	65	1.02	-
2412MHz	Pass	PK	2.4056G	110.56	Inf	-Inf	31.50	3	Horizontal	65	1.02	-
2412MHz	Pass	PK	4.824G	46.90	74.00	-27.10	6.48	3	Horizontal	195	1.50	-
2412MHz	Pass	AV	2.39G	50.35	54.00	-3.65	31.45	3	Vertical	357	3.49	-
2412MHz	Pass	AV	2.4136G	95.64	Inf	-Inf	31.53	3	Vertical	357	3.49	-
2412MHz	Pass	AV	4.824G	32.12	54.00	-21.88	6.48	3	Vertical	167	2.85	-
2412MHz	Pass	PK	2.3892G	64.85	74.00	-9.15	31.44	3	Vertical	357	3.49	-
2412MHz	Pass	PK	2.4136G	107.39	Inf	-Inf	31.53	3	Vertical	357	3.49	-
2412MHz	Pass	PK	4.824G	46.24	74.00	-27.76	6.48	3	Vertical	167	2.85	-
2437MHz	Pass	AV	2.389998G	52.82	54.00	-1.18	31.44	3	Horizontal	306	1.03	-
2437MHz	Pass	AV	2.4314G	105.45	Inf	-Inf	31.59	3	Horizontal	306	1.03	-



RSE TX above 1GHz Result

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	2.4854G	53.79	54.00	-0.21	31.79	3	Horizontal	306	1.03	-
2437MHz	Pass	AV	4.874G	36.96	54.00	-17.04	6.61	3	Horizontal	202	1.85	-
2437MHz	Pass	PK	2.3886G	68.59	74.00	-5.41	31.44	3	Horizontal	306	1.03	-
2437MHz	Pass	PK	2.4306G	116.20	Inf	-Inf	31.59	3	Horizontal	306	1.03	-
2437MHz	Pass	PK	2.4862G	72.93	74.00	-1.07	31.79	3	Horizontal	306	1.03	-
2437MHz	Pass	PK	4.874G	51.80	74.00	-22.20	6.61	3	Horizontal	202	1.85	-
2437MHz	Pass	AV	2.389998G	49.56	54.00	-4.44	31.44	3	Vertical	354	3.26	-
2437MHz	Pass	AV	2.4354G	101.86	Inf	-Inf	31.61	3	Vertical	354	3.26	-
2437MHz	Pass	AV	2.4906G	50.43	54.00	-3.57	31.81	3	Vertical	354	3.26	-
2437MHz	Pass	AV	4.874G	38.59	54.00	-15.41	6.61	3	Vertical	226	1.39	-
2437MHz	Pass	PK	2.389G	64.34	74.00	-9.66	31.44	3	Vertical	354	3.26	-
2437MHz	Pass	PK	2.4362G	113.00	Inf	-Inf	31.61	3	Vertical	354	3.26	-
2437MHz	Pass	PK	2.4858G	65.21	74.00	-8.79	31.79	3	Vertical	354	3.26	-
2437MHz	Pass	PK	4.874G	53.57	74.00	-20.43	6.61	3	Vertical	226	1.39	-
2462MHz	Pass	AV	2.4702G	99.25	Inf	-Inf	31.73	3	Horizontal	50	1.23	-
2462MHz	Pass	AV	2.483502G	53.06	54.00	-0.94	31.78	3	Horizontal	50	1.23	-
2462MHz	Pass	AV	4.924G	32.20	54.00	-21.80	6.73	3	Horizontal	247	1.50	-
2462MHz	Pass	PK	2.4696G	110.74	Inf	-Inf	31.73	3	Horizontal	50	1.23	-
2462MHz	Pass	PK	2.4838G	68.79	74.00	-5.21	31.78	3	Horizontal	50	1.23	-
2462MHz	Pass	PK	4.924G	46.10	74.00	-27.90	6.73	3	Horizontal	247	1.50	-
2462MHz	Pass	AV	2.4594G	96.33	Inf	-Inf	31.69	3	Vertical	355	3.47	-
2462MHz	Pass	AV	2.483502G	51.91	54.00	-2.09	31.78	3	Vertical	355	3.47	-
2462MHz	Pass	AV	4.924G	32.35	54.00	-21.65	6.73	3	Vertical	209	1.50	-
2462MHz	Pass	PK	2.4604G	107.07	Inf	-Inf	31.70	3	Vertical	355	3.47	-
2462MHz	Pass	PK	2.483502G	68.57	74.00	-5.43	31.78	3	Vertical	355	3.47	-
2462MHz	Pass	PK	4.924G	46.94	74.00	-27.06	6.73	3	Vertical	209	1.50	-
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.39G	53.75	54.00	-0.25	31.45	3	Horizontal	60	1.01	-
2422MHz	Pass	AV	2.4164G	97.22	Inf	-Inf	31.54	3	Horizontal	60	1.01	-
2422MHz	Pass	AV	2.4964G	49.07	54.00	-4.93	31.83	3	Horizontal	60	1.01	-
2422MHz	Pass	AV	4.844G	32.03	54.00	-21.97	6.53	3	Horizontal	316	1.50	-
2422MHz	Pass	PK	2.39G	70.01	74.00	-3.99	31.45	3	Horizontal	60	1.01	-
2422MHz	Pass	PK	2.4176G	107.71	Inf	-Inf	31.54	3	Horizontal	60	1.01	-
2422MHz	Pass	PK	2.4896G	62.84	74.00	-11.16	31.80	3	Horizontal	60	1.01	-
2422MHz	Pass	PK	4.844G	47.13	74.00	-26.87	6.53	3	Horizontal	316	1.50	-
2422MHz	Pass	AV	2.386G	50.76	54.00	-3.24	31.43	3	Vertical	353	3.26	-
2422MHz	Pass	AV	2.42G	93.17	Inf	-Inf	31.55	3	Vertical	353	3.26	-
2422MHz	Pass	AV	2.4836G	48.07	54.00	-5.93	31.78	3	Vertical	353	3.26	-
2422MHz	Pass	AV	4.844G	32.19	54.00	-21.81	6.53	3	Vertical	168	2.31	-
2422MHz	Pass	PK	2.3856G	68.00	74.00	-6.00	31.43	3	Vertical	353	3.26	-
2422MHz	Pass	PK	2.4192G	103.01	Inf	-Inf	31.55	3	Vertical	353	3.26	-
2422MHz	Pass	PK	2.4968G	61.76	74.00	-12.24	31.83	3	Vertical	353	3.26	-
2422MHz	Pass	PK	4.844G	45.92	74.00	-28.08	6.53	3	Vertical	168	2.31	-
2437MHz	Pass	AV	2.389998G	53.18	54.00	-0.82	31.44	3	Horizontal	66	1.02	-
2437MHz	Pass	AV	2.4306G	98.17	Inf	-Inf	31.59	3	Horizontal	66	1.02	-
2437MHz	Pass	AV	2.4862G	52.99	54.00	-1.01	31.79	3	Horizontal	66	1.02	-
2437MHz	Pass	AV	4.874G	32.14	54.00	-21.86	6.61	3	Horizontal	360	1.50	-
2437MHz	Pass	PK	2.389G	66.42	74.00	-7.58	31.44	3	Horizontal	66	1.02	-
2437MHz	Pass	PK	2.4294G	107.90	Inf	-Inf	31.59	3	Horizontal	66	1.02	-



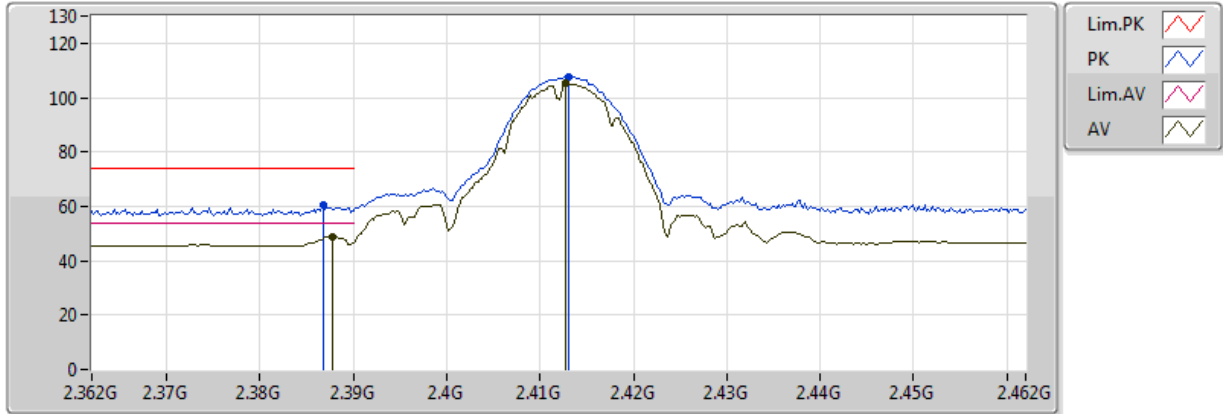
RSE TX above 1GHz Result

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	PK	2.4842G	67.28	74.00	-6.72	31.78	3	Horizontal	66	1.02	-
2437MHz	Pass	PK	4.874G	45.71	74.00	-28.29	6.61	3	Horizontal	360	1.50	-
2437MHz	Pass	AV	2.3782G	48.58	54.00	-5.42	31.40	3	Vertical	2	3.37	-
2437MHz	Pass	AV	2.4386G	94.28	Inf	-Inf	31.62	3	Vertical	2	3.37	-
2437MHz	Pass	AV	2.483502G	51.25	54.00	-2.75	31.78	3	Vertical	2	3.37	-
2437MHz	Pass	AV	4.874G	32.31	54.00	-21.69	6.61	3	Vertical	0	1.50	-
2437MHz	Pass	PK	2.3814G	61.35	74.00	-12.65	31.41	3	Vertical	2	3.37	-
2437MHz	Pass	PK	2.4394G	103.98	Inf	-Inf	31.62	3	Vertical	2	3.37	-
2437MHz	Pass	PK	2.483502G	65.19	74.00	-8.81	31.78	3	Vertical	2	3.37	-
2437MHz	Pass	PK	4.874G	46.30	74.00	-27.70	6.61	3	Vertical	0	1.50	-
2452MHz	Pass	AV	2.388G	47.12	54.00	-6.88	31.44	3	Horizontal	52	2.09	-
2452MHz	Pass	AV	2.4588G	96.62	Inf	-Inf	31.69	3	Horizontal	52	2.09	-
2452MHz	Pass	AV	2.4836G	53.66	54.00	-0.34	31.78	3	Horizontal	52	2.09	-
2452MHz	Pass	AV	4.904G	32.30	54.00	-21.70	6.68	3	Horizontal	360	1.50	-
2452MHz	Pass	PK	2.3596G	60.71	74.00	-13.29	31.34	3	Horizontal	52	2.09	-
2452MHz	Pass	PK	2.4616G	106.50	Inf	-Inf	31.70	3	Horizontal	52	2.09	-
2452MHz	Pass	PK	2.4884G	73.05	74.00	-0.95	31.80	3	Horizontal	52	2.09	-
2452MHz	Pass	PK	4.904G	45.80	74.00	-28.20	6.68	3	Horizontal	360	1.50	-
2452MHz	Pass	AV	2.3892G	47.10	54.00	-6.90	31.44	3	Vertical	356	3.49	-
2452MHz	Pass	AV	2.45G	92.37	Inf	-Inf	31.66	3	Vertical	356	3.49	-
2452MHz	Pass	AV	2.4868G	52.26	54.00	-1.74	31.79	3	Vertical	356	3.49	-
2452MHz	Pass	AV	4.904G	32.25	54.00	-21.75	6.68	3	Vertical	0	1.50	-
2452MHz	Pass	PK	2.378G	61.03	74.00	-12.97	31.40	3	Vertical	356	3.49	-
2452MHz	Pass	PK	2.4492G	102.55	Inf	-Inf	31.66	3	Vertical	356	3.49	-
2452MHz	Pass	PK	2.488G	69.65	74.00	-4.35	31.80	3	Vertical	356	3.49	-
2452MHz	Pass	PK	4.904G	46.65	74.00	-27.35	6.68	3	Vertical	0	1.50	-

802.11b_(1Mbps)_2TX

2412MHz_TX



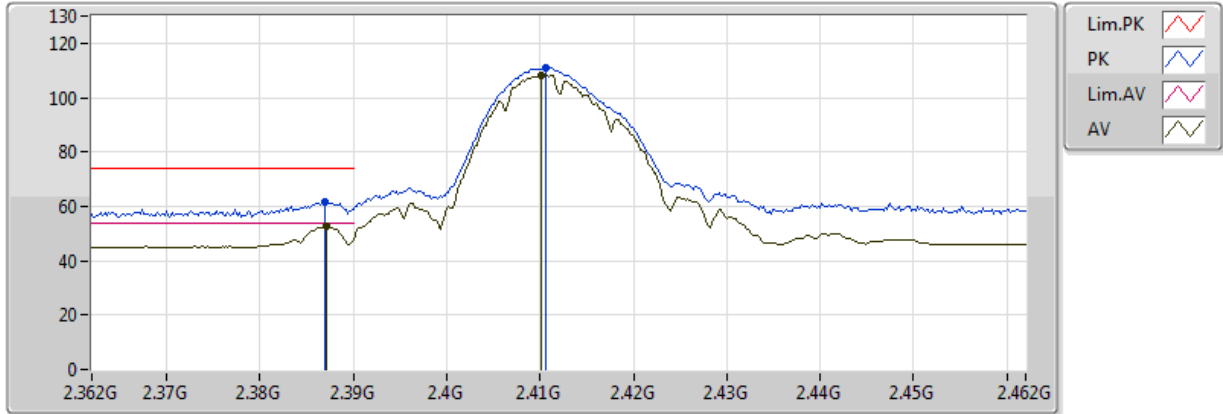
EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3878G	48.68	54.00	-5.32	31.44	3	Vertical	359	3.49	-	17.24	27.21	4.23	-
AV	2.4128G	105.16	Inf	-Inf	31.53	3	Vertical	359	3.49	-	73.63	27.27	4.25	-
PK	2.3868G	60.26	74.00	-13.74	31.43	3	Vertical	359	3.49	-	28.83	27.21	4.23	-
PK	2.413G	107.75	Inf	-Inf	31.53	3	Vertical	359	3.49	-	76.22	27.27	4.25	-



802.11b_(1Mbps)_2TX

2412MHz_TX

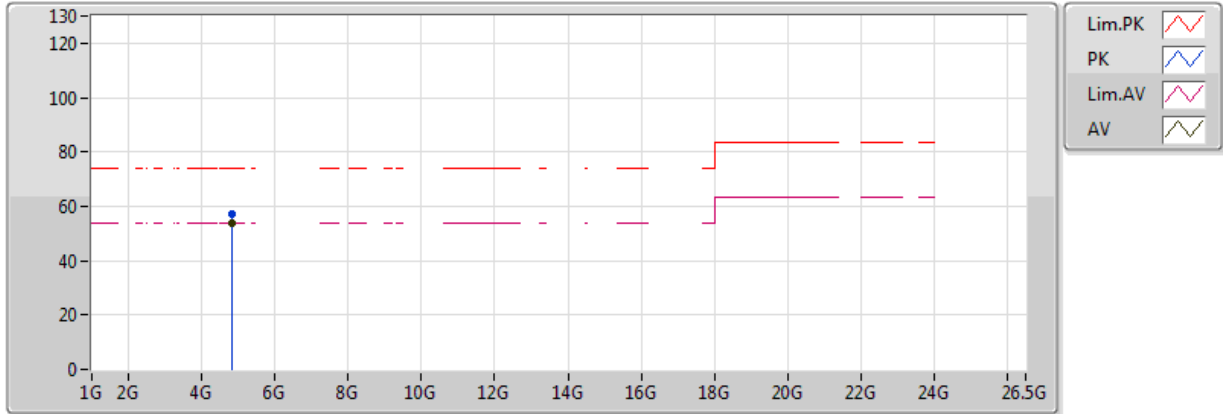


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3872G	52.73	54.00	-1.27	30.93	3	Horizontal	55	1.01	-	21.81	27.31	3.62	-
AV	2.4102G	108.20	Inf	-Inf	31.01	3	Horizontal	55	1.01	-	77.19	27.37	3.64	-
PK	2.387G	61.51	74.00	-12.49	30.92	3	Horizontal	55	1.01	-	30.58	27.31	3.62	-
PK	2.4106G	110.79	Inf	-Inf	31.01	3	Horizontal	55	1.01	-	79.78	27.37	3.64	-

802.11b_(1Mbps)_2TX

2412MHz_TX

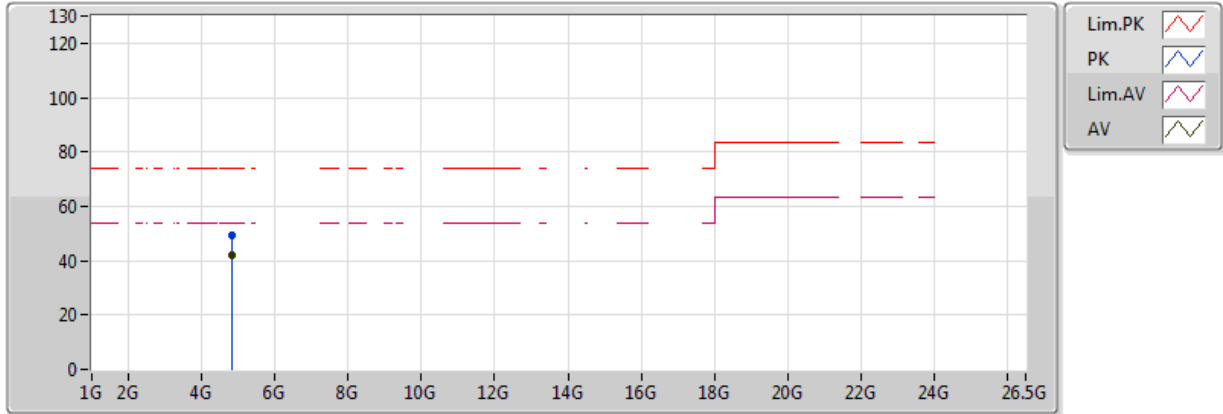


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.824G	53.71	54.00	-0.29	6.58	3	Vertical	174	2.20	-	47.13	31.28	5.41	30.11
PK	4.824G	57.00	74.00	-17.00	6.58	3	Vertical	174	2.20	-	50.42	31.28	5.41	30.11

802.11b_(1Mbps)_2TX

2412MHz_TX

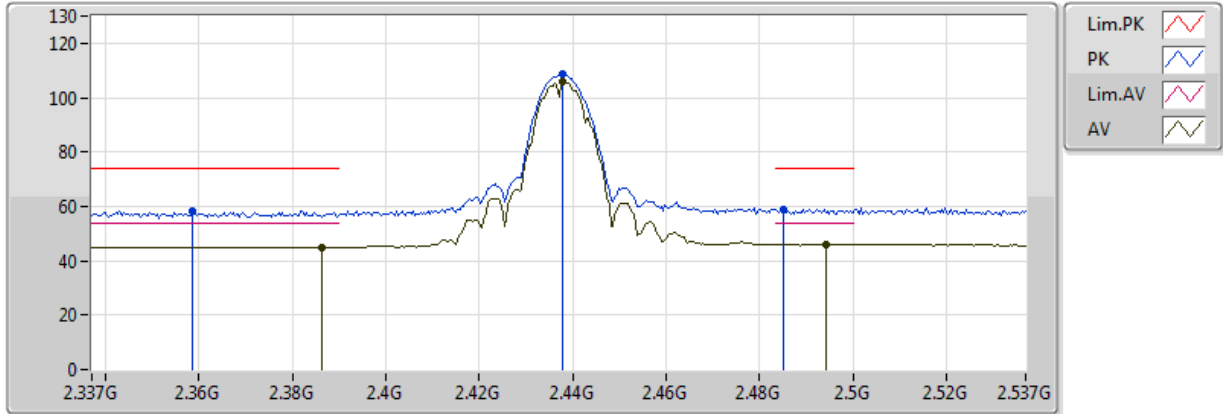


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.824G	41.87	54.00	-12.13	6.58	3	Horizontal	87	1.77	-	35.29	31.28	5.41	30.11
PK	4.824G	49.29	74.00	-24.71	6.58	3	Horizontal	87	1.77	-	42.71	31.28	5.41	30.11

802.11b_(1Mbps)_2TX

2437MHz_TX

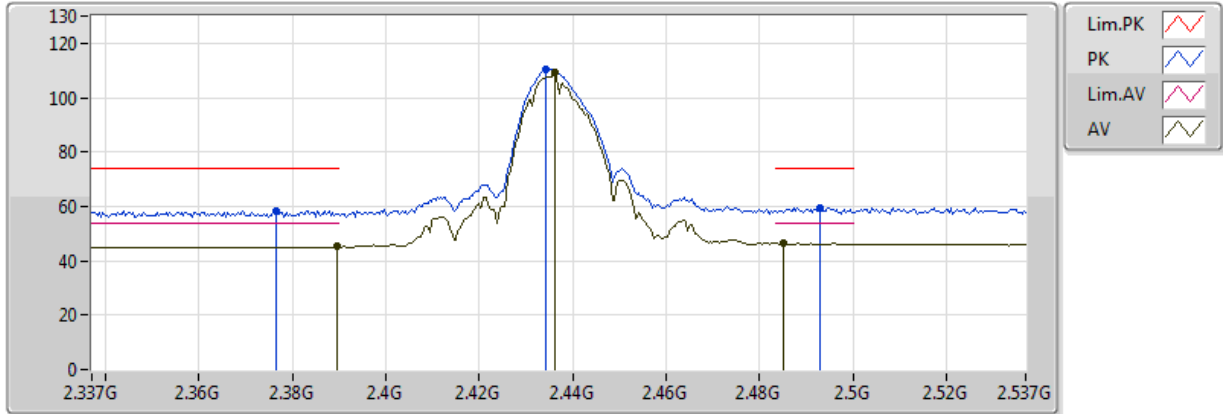


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3862G	44.99	54.00	-9.01	30.92	3	Vertical	357	3.34	-	14.07	27.30	3.62	-
AV	2.4378G	105.99	Inf	-Inf	31.11	3	Vertical	357	3.34	-	74.88	27.44	3.67	-
AV	2.4942G	46.04	54.00	-7.96	31.31	3	Vertical	357	3.34	-	14.73	27.58	3.72	-
PK	2.3586G	58.51	74.00	-15.49	30.83	3	Vertical	357	3.34	-	27.69	27.23	3.59	-
PK	2.4378G	108.61	Inf	-Inf	31.11	3	Vertical	357	3.34	-	77.51	27.44	3.67	-
PK	2.485G	58.98	74.00	-15.02	31.28	3	Vertical	357	3.34	-	27.71	27.56	3.71	-

802.11b_(1Mbps)_2TX

2437MHz_TX

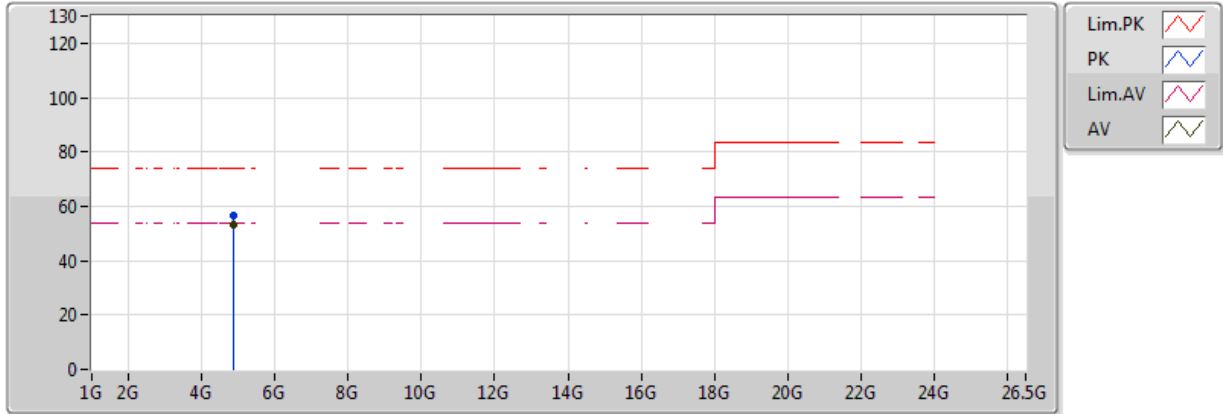


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3894G	45.14	54.00	-8.86	30.93	3	Horizontal	57	1.17	-	14.20	27.31	3.62	-
AV	2.4362G	109.01	Inf	-Inf	31.10	3	Horizontal	57	1.17	-	77.91	27.43	3.67	-
AV	2.485G	46.28	54.00	-7.72	31.28	3	Horizontal	57	1.17	-	15.01	27.56	3.71	-
PK	2.3766G	58.51	74.00	-15.49	30.89	3	Horizontal	57	1.17	-	27.62	27.28	3.61	-
PK	2.4342G	110.47	Inf	-Inf	31.09	3	Horizontal	57	1.17	-	79.38	27.43	3.66	-
PK	2.493G	59.61	74.00	-14.39	31.30	3	Horizontal	57	1.17	-	28.31	27.58	3.72	-

802.11b_(1Mbps)_2TX

2437MHz_TX

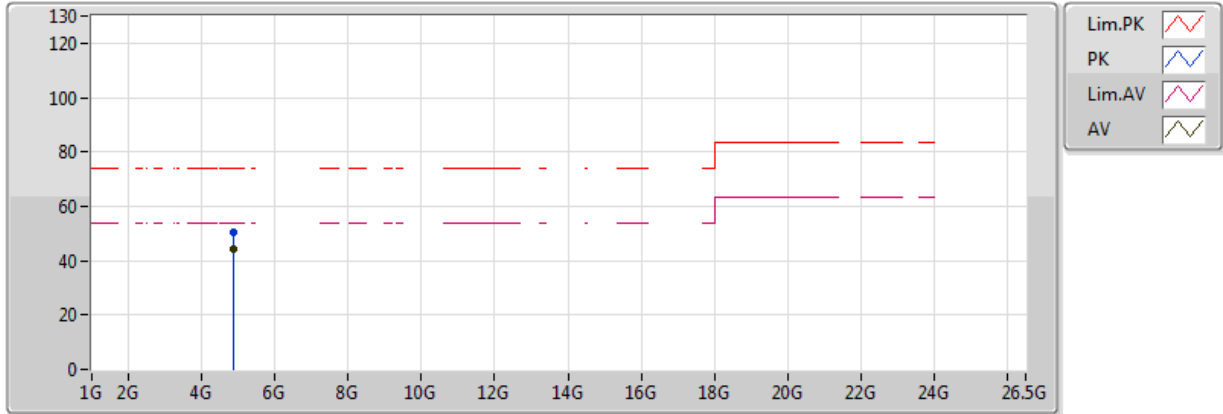


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.874G	53.20	54.00	-0.80	6.74	3	Vertical	172	3.33	-	46.46	31.37	5.46	30.10
PK	4.874G	56.34	74.00	-17.66	6.74	3	Vertical	172	3.33	-	49.60	31.37	5.46	30.10

802.11b_(1Mbps)_2TX

2437MHz_TX

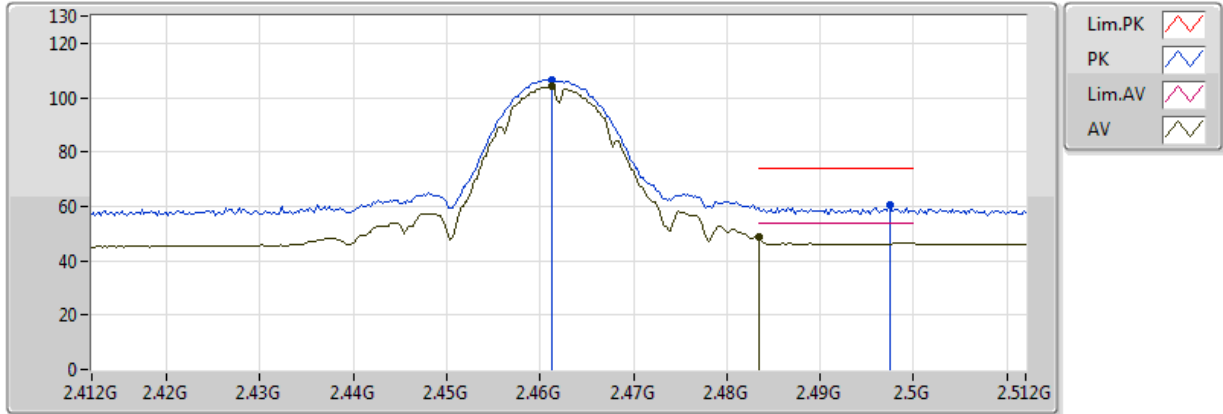


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.874G	44.54	54.00	-9.46	6.74	3	Horizontal	79	1.79	-	37.80	31.37	5.46	30.10
PK	4.874G	50.66	74.00	-23.34	6.74	3	Horizontal	79	1.79	-	43.92	31.37	5.46	30.10

802.11b_(1Mbps)_2TX

2462MHz_TX

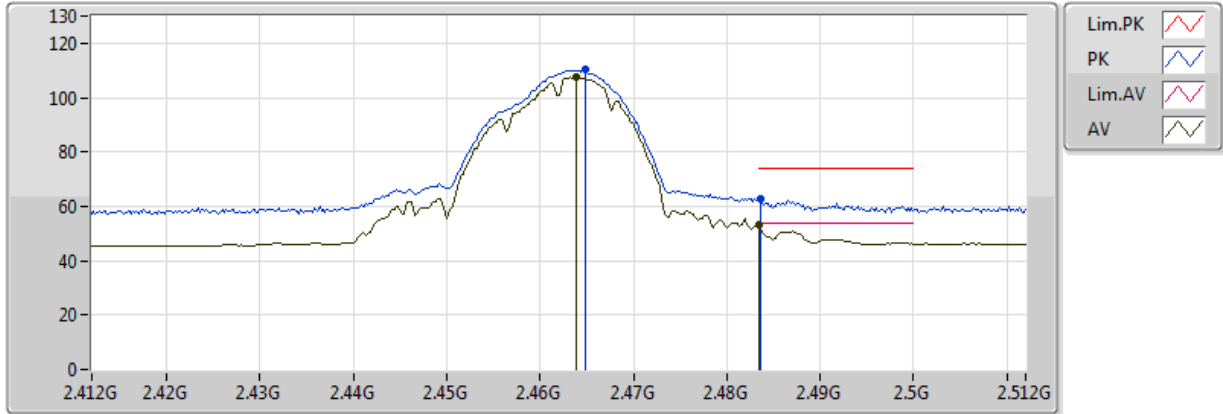


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4612G	104.07	Inf	-Inf	31.19	3	Vertical	356	3.44	-	72.88	27.50	3.69	-
AV	2.483502G	48.49	54.00	-5.51	31.27	3	Vertical	356	3.44	-	17.22	27.56	3.71	-
PK	2.4612G	106.69	Inf	-Inf	31.19	3	Vertical	356	3.44	-	75.50	27.50	3.69	-
PK	2.4974G	60.41	74.00	-13.59	31.32	3	Vertical	356	3.44	-	29.09	27.59	3.73	-

802.11b_(1Mbps)_2TX

2462MHz_TX

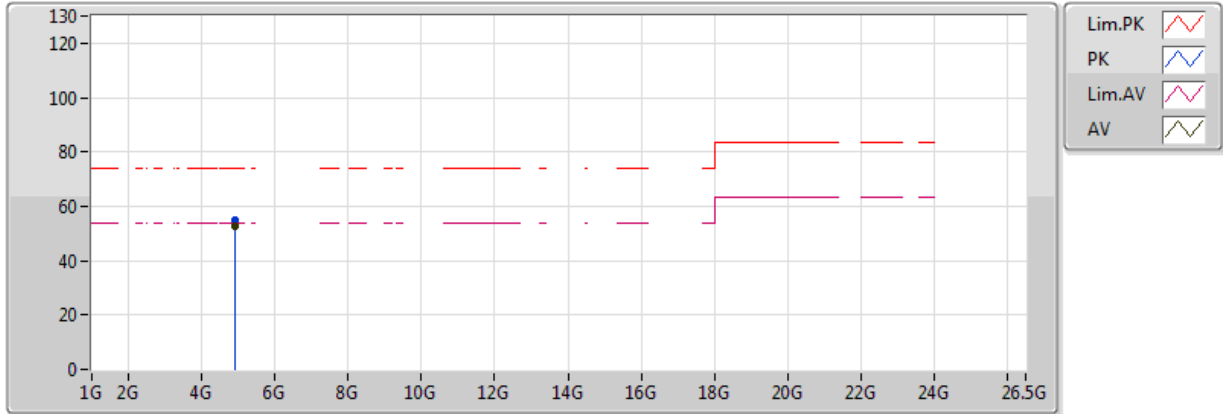


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4638G	107.59	Inf	-Inf	31.20	3	Horizontal	48	2.57	-	76.39	27.51	3.69	-
AV	2.483502G	53.25	54.00	-0.75	31.27	3	Horizontal	48	2.57	-	21.98	27.56	3.71	-
PK	2.4648G	110.14	Inf	-Inf	31.20	3	Horizontal	48	2.57	-	78.94	27.51	3.69	-
PK	2.4836G	62.48	74.00	-11.52	31.27	3	Horizontal	48	2.57	-	31.21	27.56	3.71	-

802.11b_(1Mbps)_2TX

2462MHz_TX

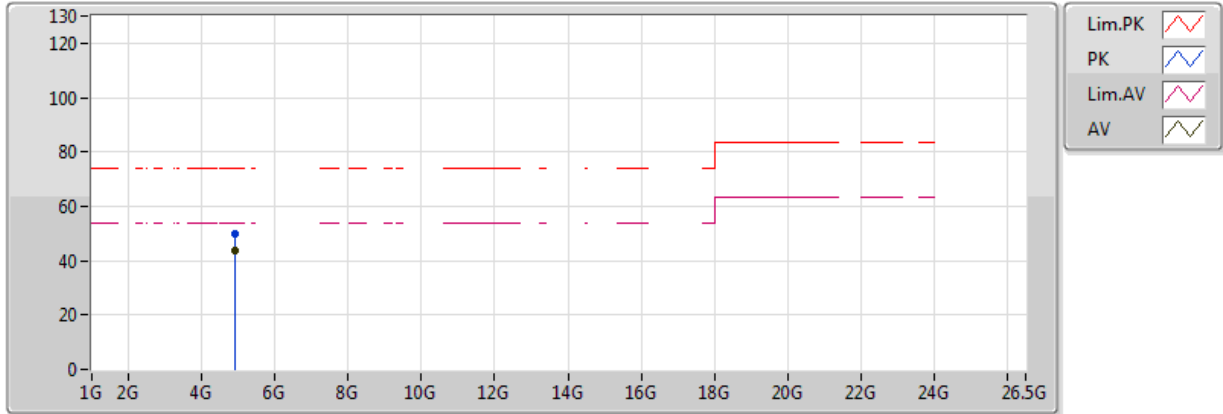


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.924G	52.62	54.00	-1.38	2.48	3	Vertical	166	3.33	-	50.14	31.46	5.52	30.09
PK	4.924G	54.97	74.00	-19.03	2.48	3	Vertical	216	1.49	-	52.49	31.46	5.52	34.50

802.11b_(1Mbps)_2TX

2462MHz_TX

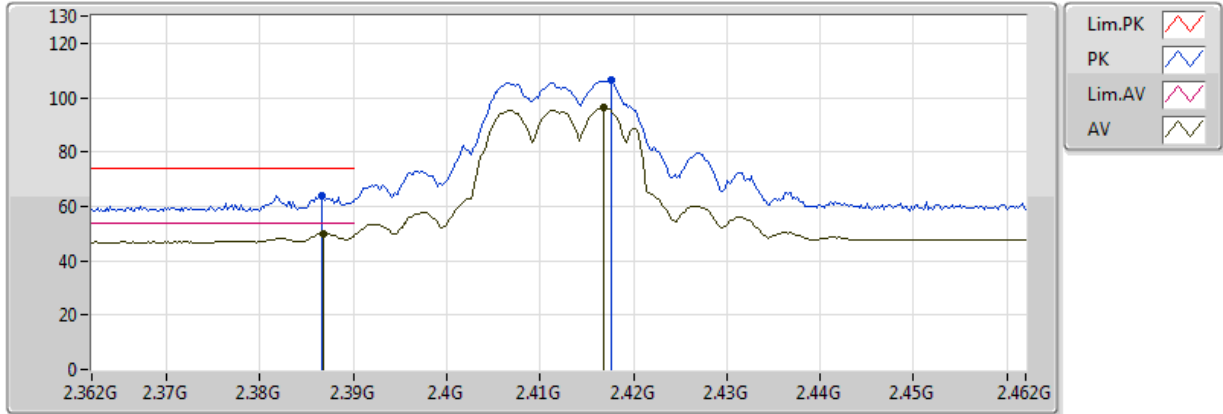


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.924G	43.55	54.00	-10.45	2.48	3	Horizontal	26	1.50	-	41.07	31.46	5.52	34.50
PK	4.924G	49.92	74.00	-24.08	2.48	3	Horizontal	26	1.50	-	47.44	31.46	5.52	34.50

802.11g_(6Mbps)_2TX

2412MHz_TX

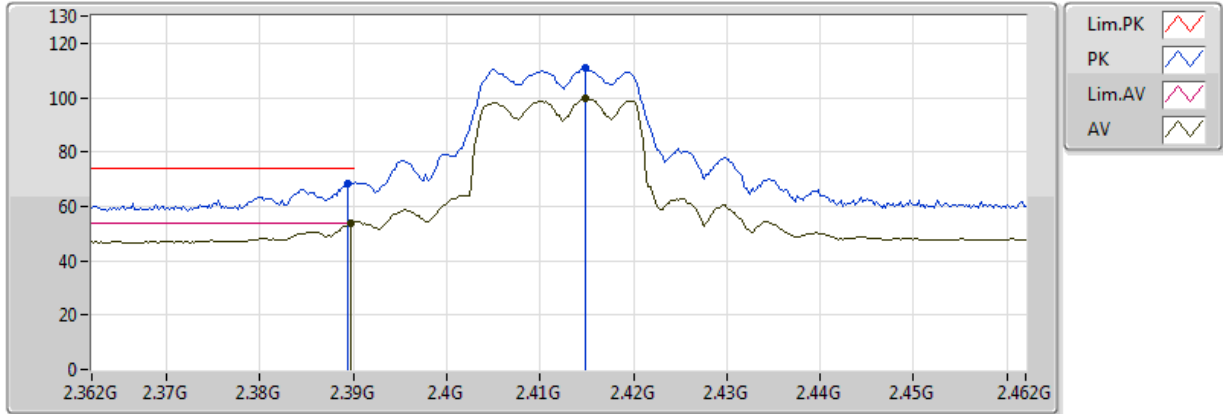


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3868G	49.84	54.00	-4.16	31.43	3	Vertical	351	3.21	-	18.41	27.21	4.23	-
AV	2.4168G	96.14	Inf	-Inf	31.54	3	Vertical	351	3.21	-	64.60	27.28	4.26	-
PK	2.3866G	63.93	74.00	-10.07	31.43	3	Vertical	351	3.21	-	32.50	27.21	4.23	-
PK	2.4176G	106.57	Inf	-Inf	31.54	3	Vertical	351	3.21	-	75.03	27.29	4.26	-

802.11g_(6Mbps)_2TX

2412MHz_TX

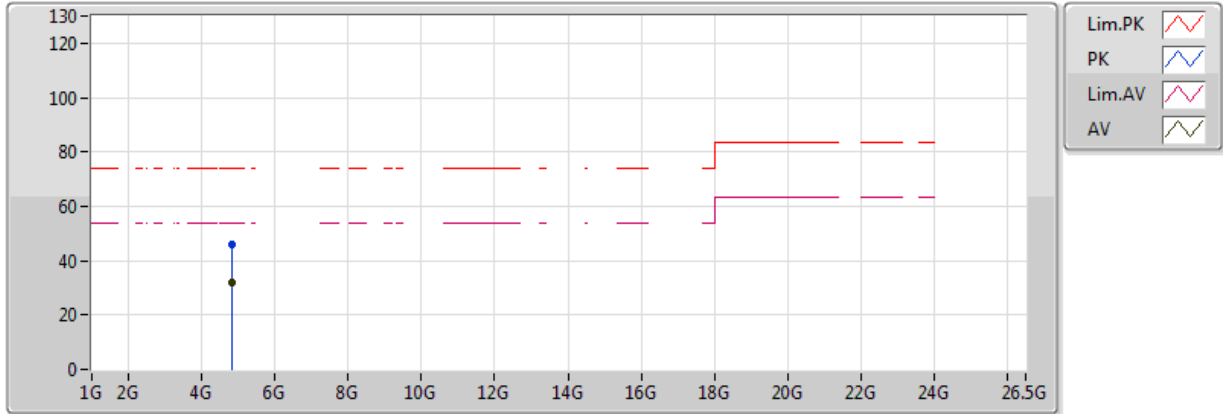


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	53.90	54.00	-0.10	31.44	3	Horizontal	53	1.48	-	22.46	27.21	4.23	-
AV	2.4148G	99.58	Inf	-Inf	31.53	3	Horizontal	53	1.48	-	68.05	27.28	4.25	-
PK	2.3894G	68.57	74.00	-5.43	31.44	3	Horizontal	53	1.48	-	37.13	27.21	4.23	-
PK	2.4148G	110.94	Inf	-Inf	31.53	3	Horizontal	53	1.48	-	79.41	27.28	4.25	-

802.11g_(6Mbps)_2TX

2412MHz_TX

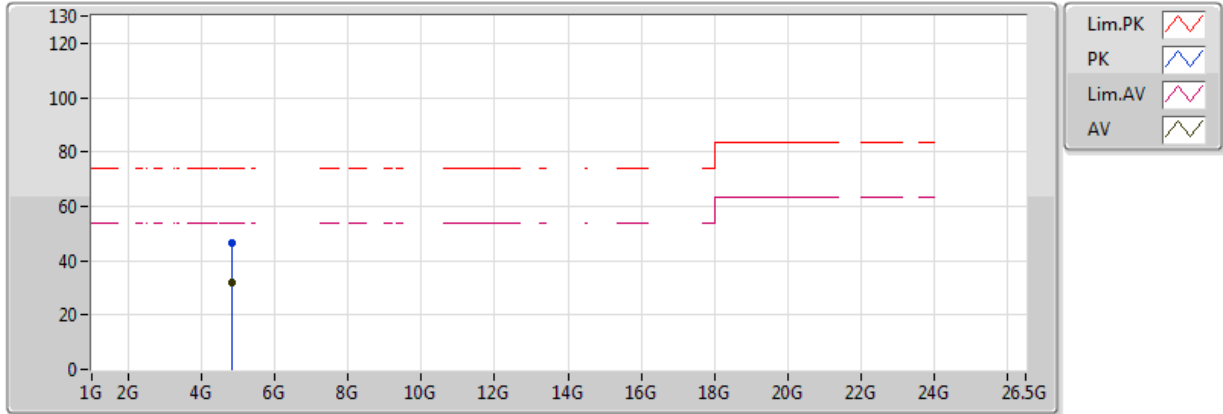


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.824G	32.18	54.00	-21.82	6.48	3	Vertical	165	1.50	-	25.70	31.22	5.37	30.11
PK	4.824G	45.90	74.00	-28.10	6.48	3	Vertical	165	1.50	-	39.42	31.22	5.37	30.11

802.11g_(6Mbps)_2TX

2412MHz_TX

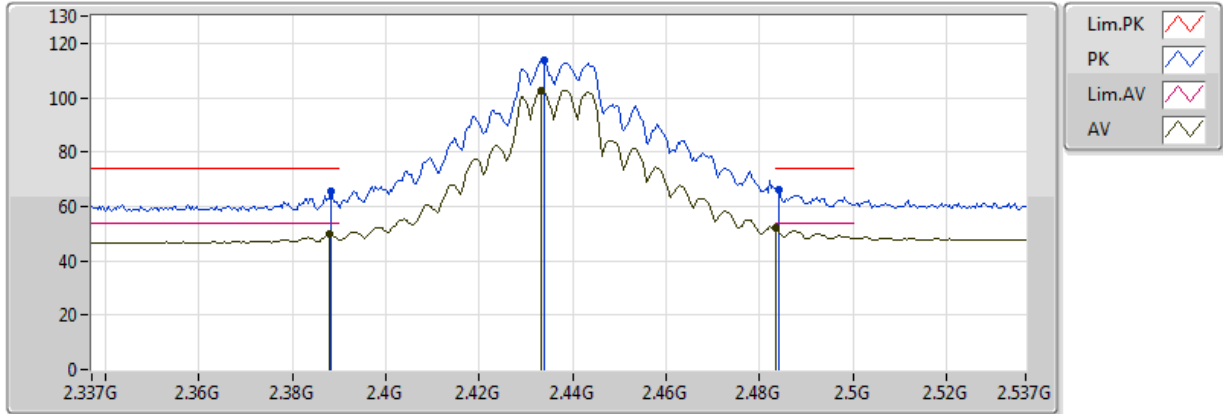


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.824G	31.95	54.00	-22.05	6.48	3	Horizontal	205	1.50	-	25.47	31.22	5.37	30.11
PK	4.824G	46.35	74.00	-27.65	6.48	3	Horizontal	205	1.50	-	39.87	31.22	5.37	30.11

802.11g_(6Mbps)_2TX

2437MHz_TX

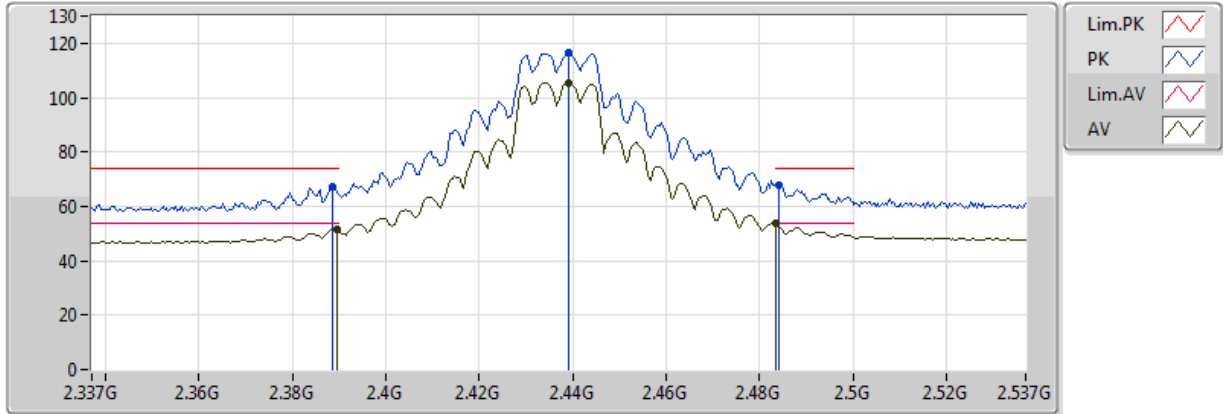


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3878G	49.75	54.00	-4.25	31.44	3	Vertical	19	3.02	-	18.31	27.21	4.23	-
AV	2.4334G	102.54	Inf	-Inf	31.60	3	Vertical	19	3.02	-	70.94	27.33	4.27	-
AV	2.483502G	52.01	54.00	-1.99	31.78	3	Vertical	19	3.02	-	20.23	27.46	4.32	-
PK	2.3882G	65.32	74.00	-8.68	31.44	3	Vertical	19	3.02	-	33.88	27.21	4.23	-
PK	2.4338G	113.61	Inf	-Inf	31.60	3	Vertical	19	3.02	-	82.01	27.33	4.27	-
PK	2.4842G	66.36	74.00	-7.64	31.78	3	Vertical	19	3.02	-	34.58	27.46	4.32	-

802.11g_(6Mbps)_2TX

2437MHz_TX

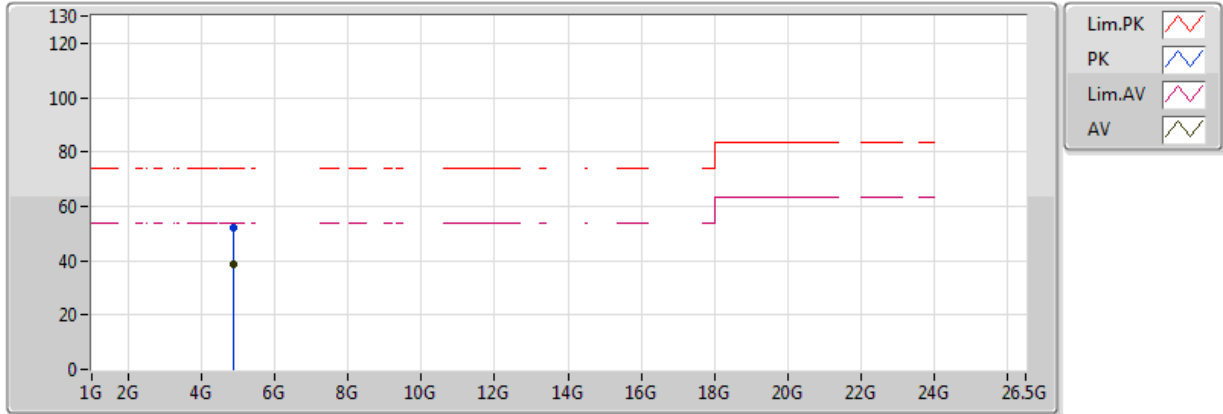


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3894G	51.62	54.00	-2.38	31.44	3	Horizontal	53	2.45	-	20.18	27.21	4.23	-
AV	2.439G	105.54	Inf	-Inf	31.62	3	Horizontal	53	2.45	-	73.92	27.34	4.28	-
AV	2.483502G	53.63	54.00	-0.37	31.78	3	Horizontal	53	2.45	-	21.85	27.46	4.32	-
PK	2.3886G	67.08	74.00	-6.92	31.44	3	Horizontal	53	2.45	-	35.64	27.21	4.23	-
PK	2.439G	116.57	Inf	-Inf	31.62	3	Horizontal	53	2.45	-	84.95	27.34	4.28	-
PK	2.4842G	68.08	74.00	-5.92	31.78	3	Horizontal	53	2.45	-	36.30	27.46	4.32	-

802.11g_(6Mbps)_2TX

2437MHz_TX

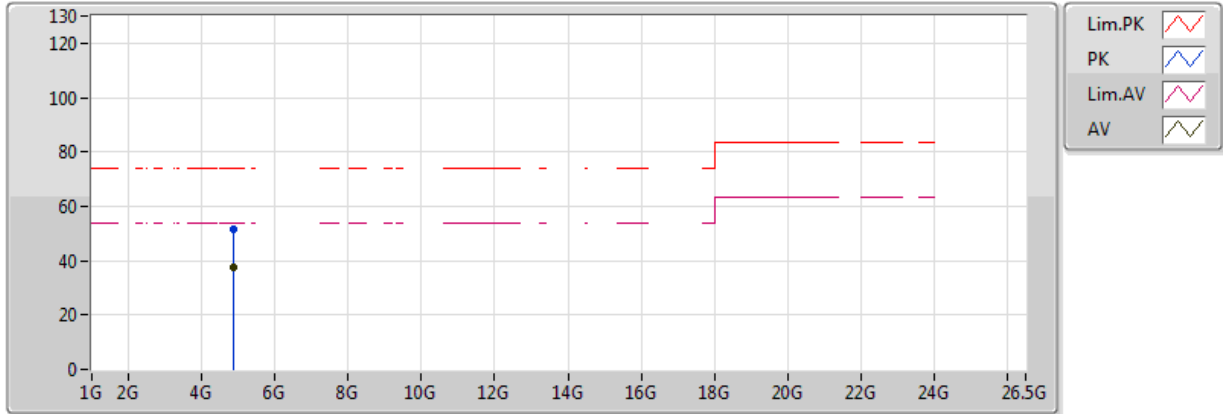


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.874G	38.79	54.00	-15.21	6.61	3	Vertical	225	1.40	-	32.18	31.30	5.40	30.10
PK	4.874G	52.33	74.00	-21.67	6.61	3	Vertical	225	1.40	-	45.72	31.30	5.40	30.10

802.11g_(6Mbps)_2TX

2437MHz_TX

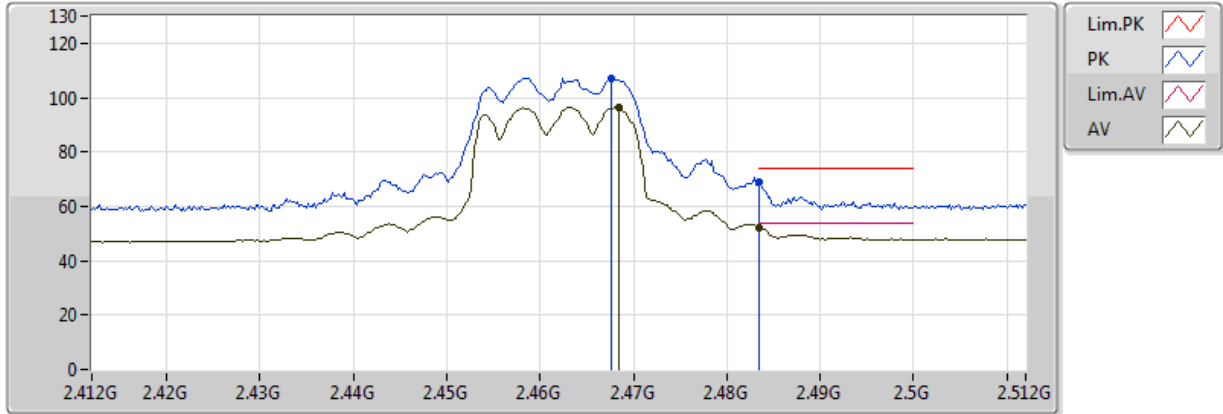


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.874G	37.70	54.00	-16.30	6.61	3	Horizontal	202	1.49	-	31.09	31.30	5.40	30.10
PK	4.874G	51.28	74.00	-22.72	6.61	3	Horizontal	202	1.49	-	44.67	31.30	5.40	30.10

802.11g_(6Mbps)_2TX

2462MHz_TX

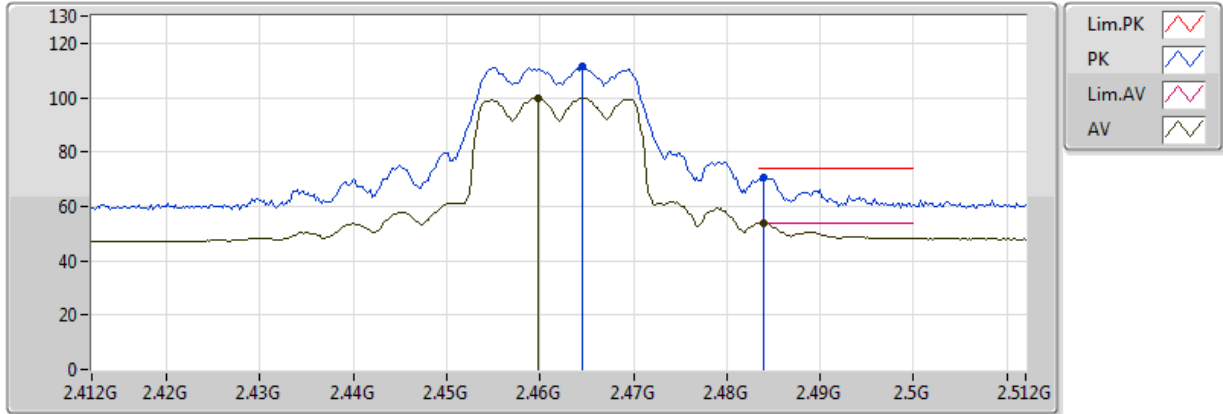


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4684G	96.42	Inf	-Inf	31.73	3	Vertical	19	3.29	-	64.69	27.42	4.31	-
AV	2.483502G	52.38	54.00	-1.62	31.78	3	Vertical	19	3.29	-	20.60	27.46	4.32	-
PK	2.4676G	107.20	Inf	-Inf	31.72	3	Vertical	19	3.29	-	75.48	27.42	4.31	-
PK	2.483502G	68.65	74.00	-5.35	31.78	3	Vertical	19	3.29	-	36.87	27.46	4.32	-

802.11g_(6Mbps)_2TX

2462MHz_TX

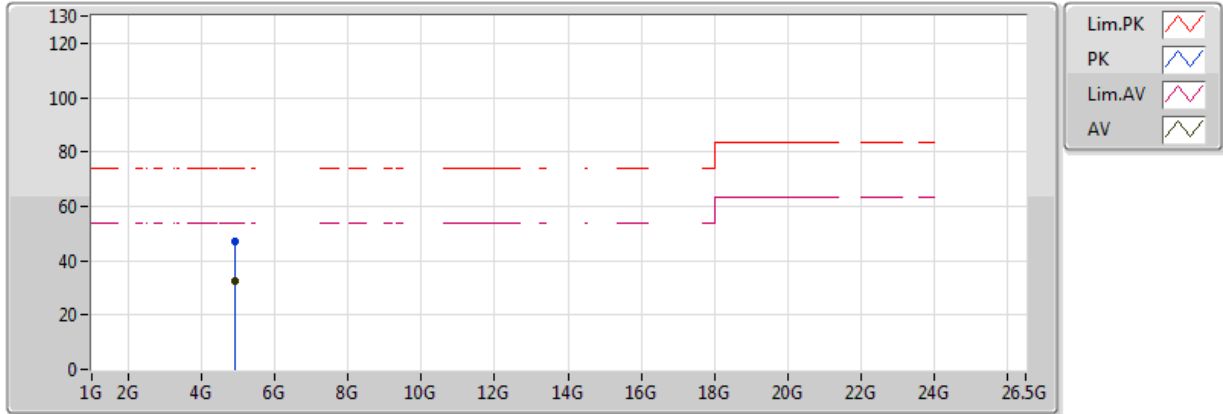


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4598G	99.97	Inf	-Inf	31.70	3	Horizontal	52	1.02	-	68.28	27.40	4.30	-
AV	2.484G	53.89	54.00	-0.11	31.78	3	Horizontal	52	1.02	-	22.11	27.46	4.32	-
PK	2.4646G	111.34	Inf	-Inf	31.71	3	Horizontal	52	1.02	-	79.62	27.41	4.30	-
PK	2.484G	70.65	74.00	-3.35	31.78	3	Horizontal	52	1.02	-	38.87	27.46	4.32	-

802.11g_(6Mbps)_2TX

2462MHz_TX

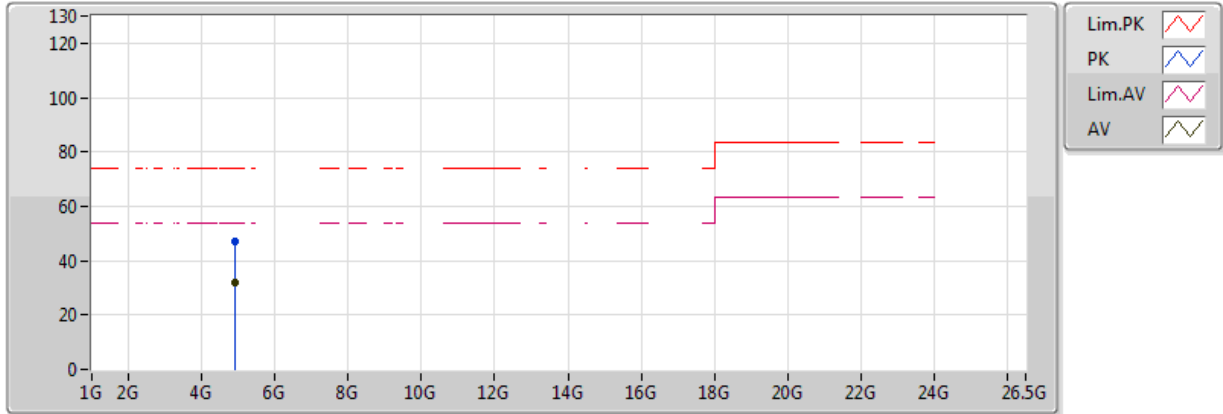


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.924G	32.63	54.00	-21.37	6.73	3	Vertical	164	2.04	-	25.90	31.38	5.44	30.09
PK	4.924G	46.81	74.00	-27.19	6.73	3	Vertical	164	2.04	-	40.08	31.38	5.44	30.09

802.11g_(6Mbps)_2TX

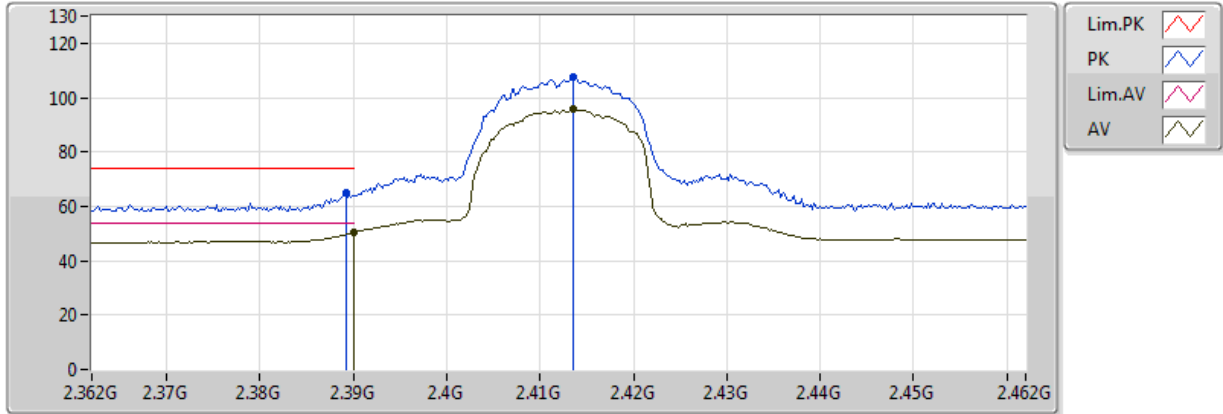
2462MHz_TX



EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.924G	32.13	54.00	-21.87	6.73	3	Horizontal	212	1.50	-	25.40	31.38	5.44	30.09
PK	4.924G	46.83	74.00	-27.17	6.73	3	Horizontal	212	1.50	-	40.10	31.38	5.44	30.09

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

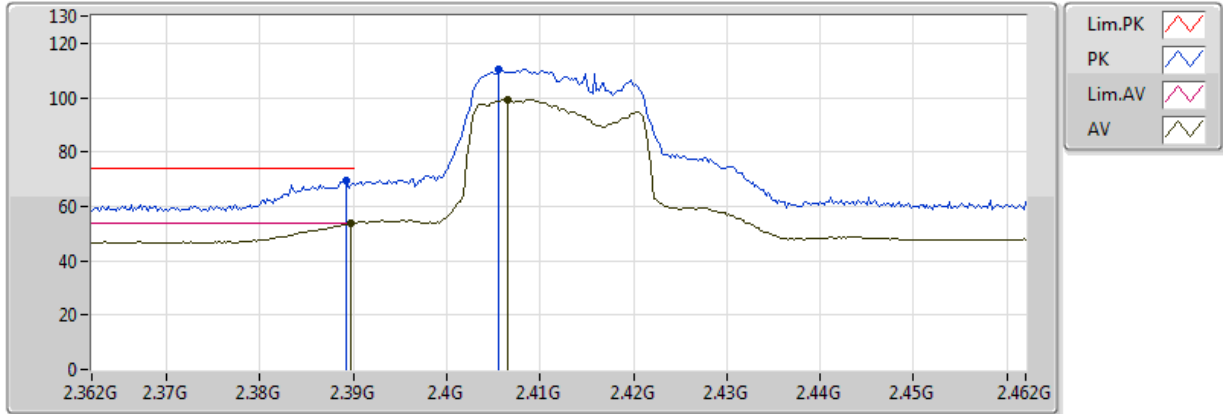


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	50.35	54.00	-3.65	31.45	3	Vertical	357	3.49	-	18.91	27.21	4.23	-
AV	2.4136G	95.64	Inf	-Inf	31.53	3	Vertical	357	3.49	-	64.11	27.28	4.25	-
PK	2.3892G	64.85	74.00	-9.15	31.44	3	Vertical	357	3.49	-	33.41	27.21	4.23	-
PK	2.4136G	107.39	Inf	-Inf	31.53	3	Vertical	357	3.49	-	75.86	27.28	4.25	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

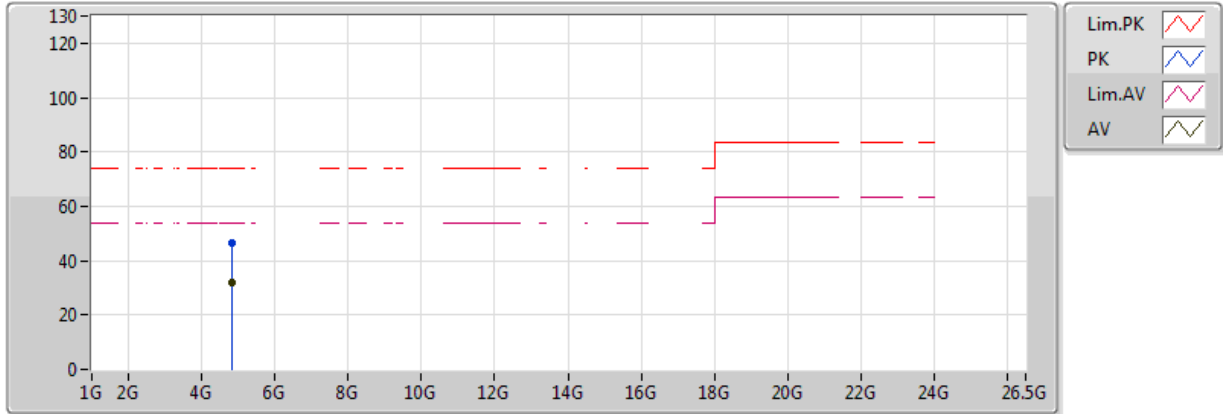


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	53.81	54.00	-0.19	31.44	3	Horizontal	65	1.02	-	22.37	27.21	4.23	-
AV	2.4066G	99.33	Inf	-Inf	31.50	3	Horizontal	65	1.02	-	67.82	27.26	4.25	-
PK	2.3892G	69.61	74.00	-4.39	31.44	3	Horizontal	65	1.02	-	38.17	27.21	4.23	-
PK	2.4056G	110.56	Inf	-Inf	31.50	3	Horizontal	65	1.02	-	79.06	27.25	4.25	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

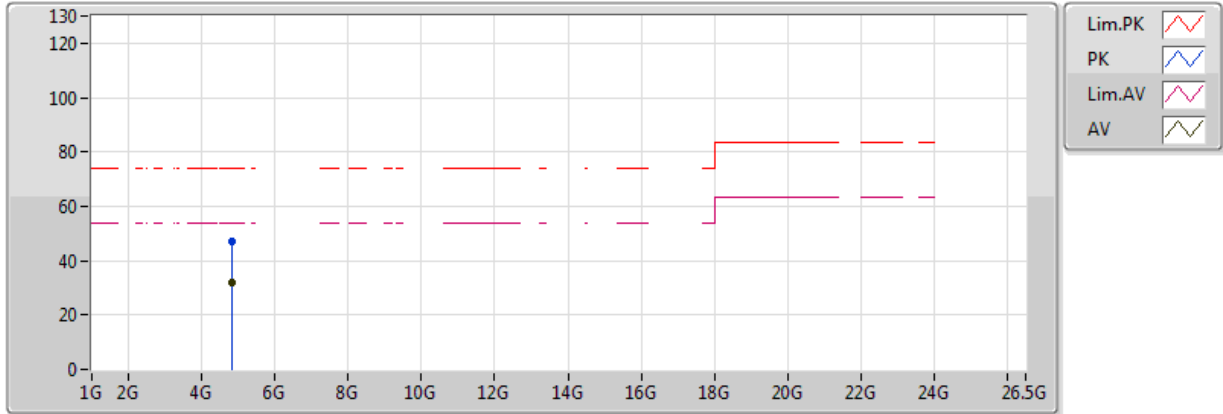


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.824G	32.12	54.00	-21.88	6.48	3	Vertical	167	2.85	-	25.64	31.22	5.37	30.11
PK	4.824G	46.24	74.00	-27.76	6.48	3	Vertical	167	2.85	-	39.76	31.22	5.37	30.11

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

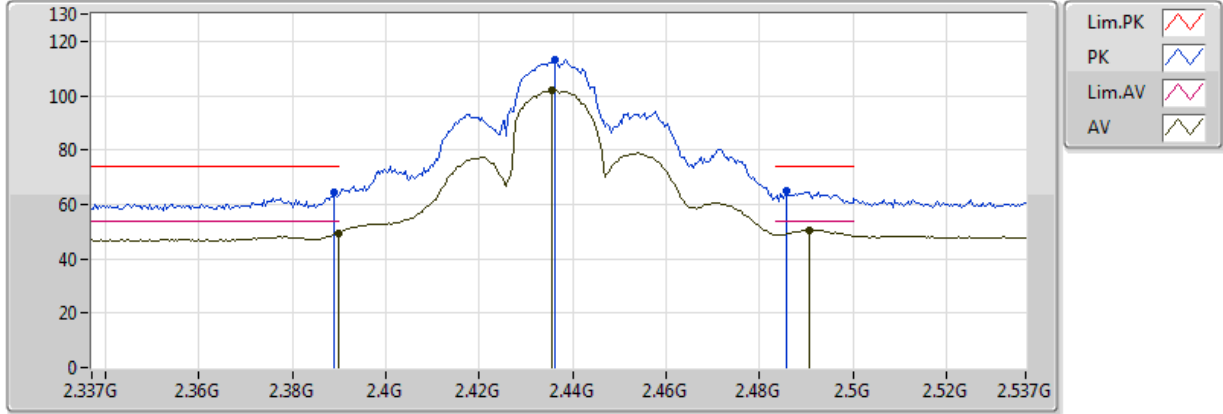


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.824G	31.89	54.00	-22.11	6.48	3	Horizontal	195	1.50	-	25.41	31.22	5.37	30.11
PK	4.824G	46.90	74.00	-27.10	6.48	3	Horizontal	195	1.50	-	40.42	31.22	5.37	30.11

802.11n HT20_Nss1,(MCS0)_2TX

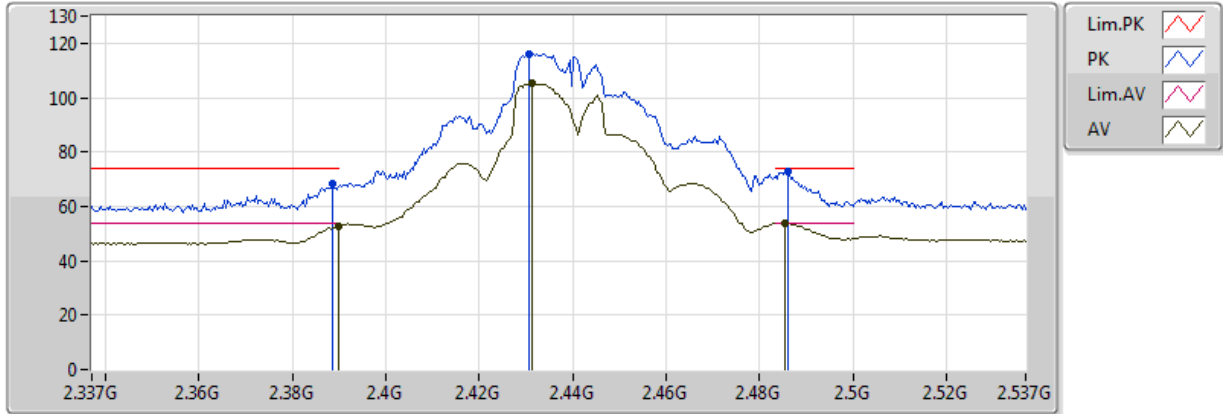
2437MHz_TX



EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	49.56	54.00	-4.44	31.44	3	Vertical	354	3.26	-	18.11	27.21	4.23	-
AV	2.4354G	101.86	Inf	-Inf	31.61	3	Vertical	354	3.26	-	70.25	27.33	4.28	-
AV	2.4906G	50.43	54.00	-3.57	31.81	3	Vertical	354	3.26	-	18.63	27.48	4.33	-
PK	2.389G	64.34	74.00	-9.66	31.44	3	Vertical	354	3.26	-	32.90	27.21	4.23	-
PK	2.4362G	113.00	Inf	-Inf	31.61	3	Vertical	354	3.26	-	81.39	27.33	4.28	-
PK	2.4858G	65.21	74.00	-8.79	31.79	3	Vertical	354	3.26	-	33.42	27.46	4.33	-

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

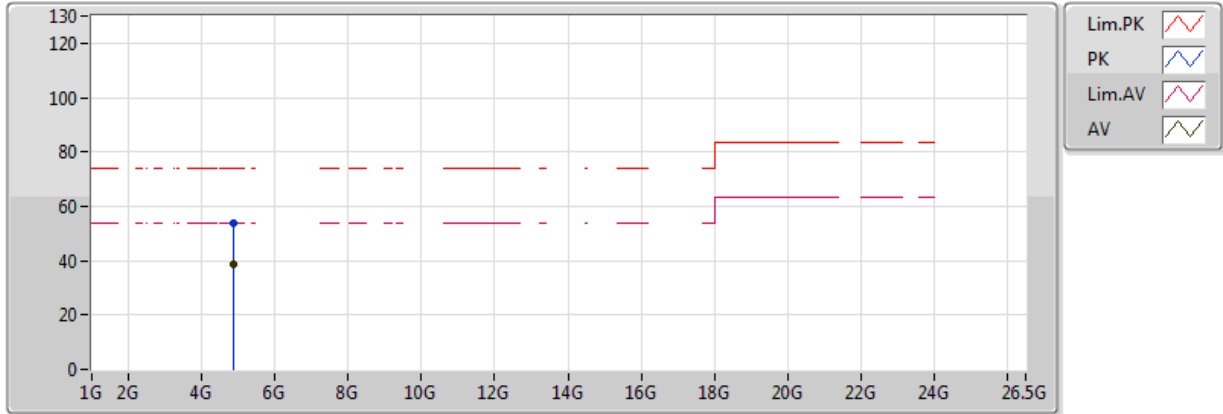


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	52.82	54.00	-1.18	31.44	3	Horizontal	306	1.03	-	21.38	27.21	4.23	-
AV	2.4314G	105.45	Inf	-Inf	31.59	3	Horizontal	306	1.03	-	73.85	27.32	4.27	-
AV	2.4854G	53.79	54.00	-0.21	31.79	3	Horizontal	306	1.03	-	22.01	27.46	4.33	-
PK	2.3886G	68.59	74.00	-5.41	31.44	3	Horizontal	306	1.03	-	37.15	27.21	4.23	-
PK	2.4306G	116.20	Inf	-Inf	31.59	3	Horizontal	306	1.03	-	84.61	27.32	4.27	-
PK	2.4862G	72.93	74.00	-1.07	31.79	3	Horizontal	306	1.03	-	41.14	27.46	4.33	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

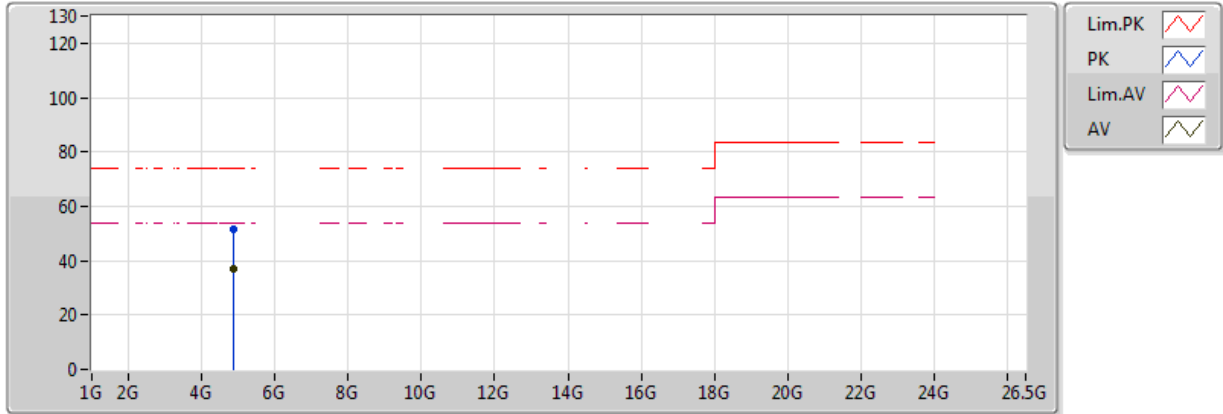


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.874G	38.59	54.00	-15.41	6.61	3	Vertical	226	1.39	-	31.99	31.30	5.40	30.10
PK	4.874G	53.57	74.00	-20.43	6.61	3	Vertical	226	1.39	-	46.96	31.30	5.40	30.10

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

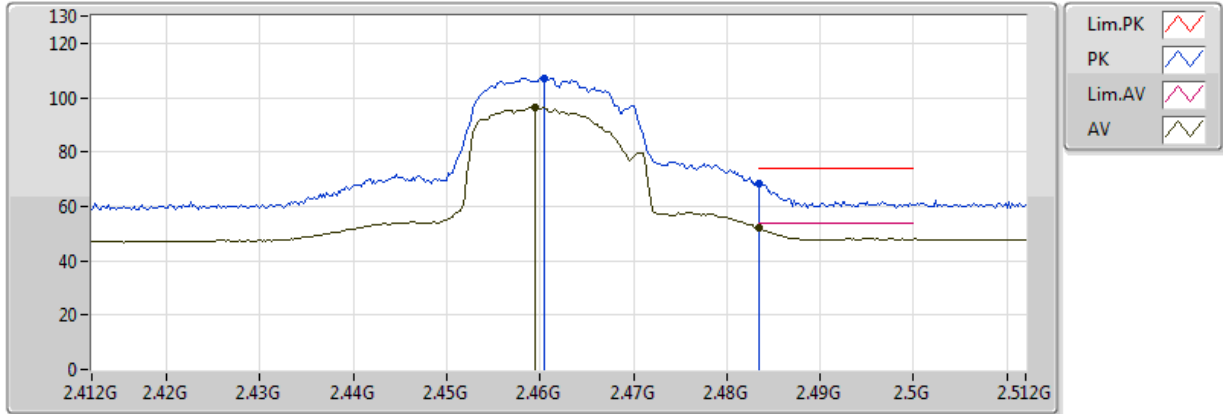


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.874G	36.96	54.00	-17.04	6.61	3	Horizontal	202	1.85	-	30.35	31.30	5.40	30.10
PK	4.874G	51.80	74.00	-22.20	6.61	3	Horizontal	202	1.85	-	45.19	31.30	5.40	30.10

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

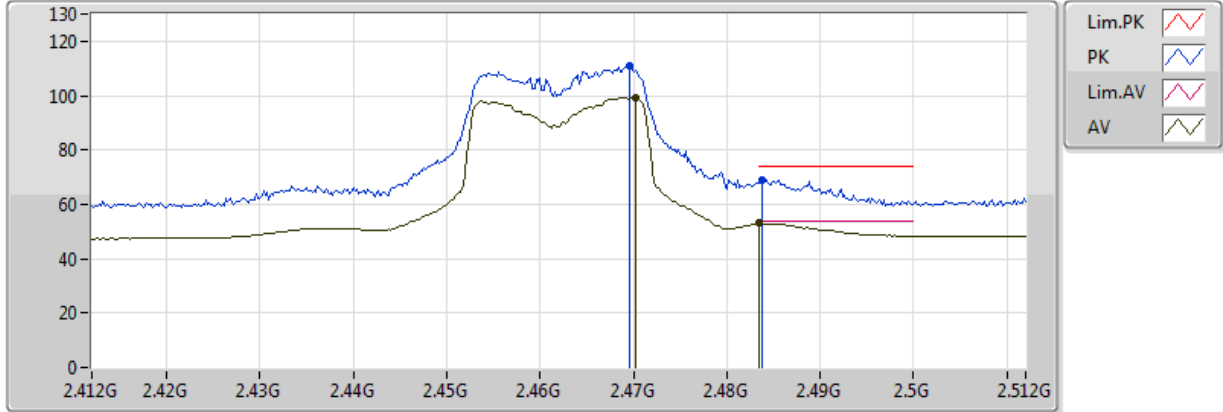


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4594G	96.33	Inf	-Inf	31.69	3	Vertical	355	3.47	-	64.64	27.39	4.30	-
AV	2.483502G	51.91	54.00	-2.09	31.78	3	Vertical	355	3.47	-	20.13	27.46	4.32	-
PK	2.4604G	107.07	Inf	-Inf	31.70	3	Vertical	355	3.47	-	75.37	27.40	4.30	-
PK	2.483502G	68.57	74.00	-5.43	31.78	3	Vertical	355	3.47	-	36.79	27.46	4.32	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

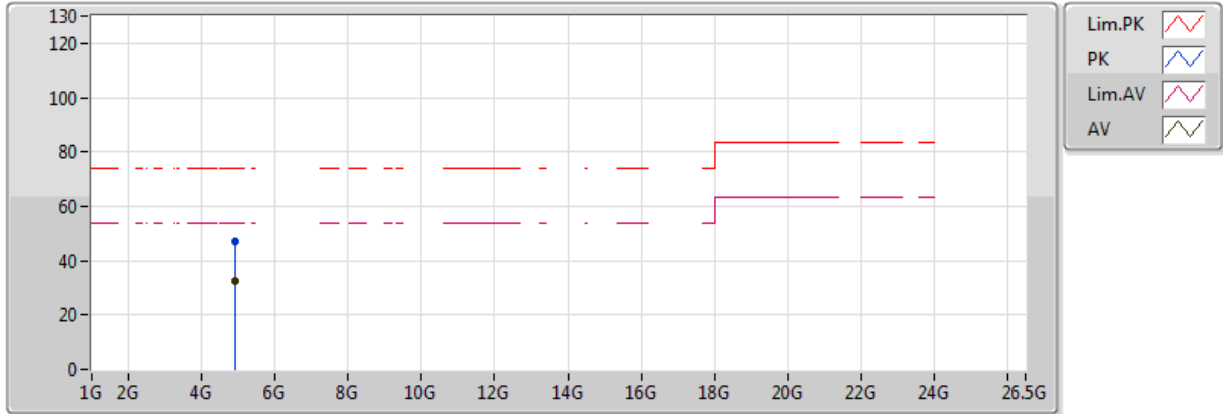


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4702G	99.25	Inf	-Inf	31.73	3	Horizontal	50	1.23	-	67.51	27.42	4.31	-
AV	2.483502G	53.06	54.00	-0.94	31.78	3	Horizontal	50	1.23	-	21.28	27.46	4.32	-
PK	2.4696G	110.74	Inf	-Inf	31.73	3	Horizontal	50	1.23	-	79.01	27.42	4.31	-
PK	2.4838G	68.79	74.00	-5.21	31.78	3	Horizontal	50	1.23	-	37.01	27.46	4.32	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

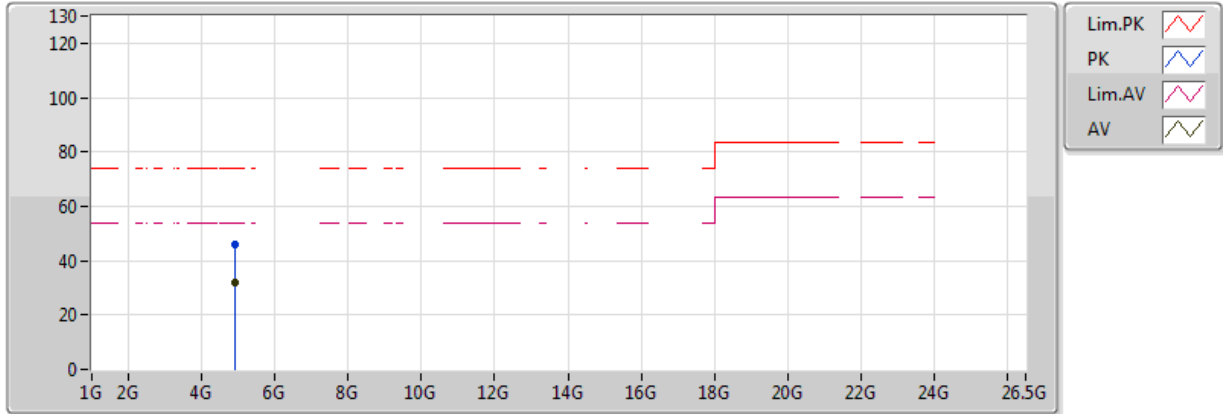


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.924G	32.35	54.00	-21.65	6.73	3	Vertical	209	1.50	-	25.62	31.38	5.44	30.09
PK	4.924G	46.94	74.00	-27.06	6.73	3	Vertical	209	1.50	-	40.21	31.38	5.44	30.09

802.11n HT20_Nss1,(MCS0)_2TX

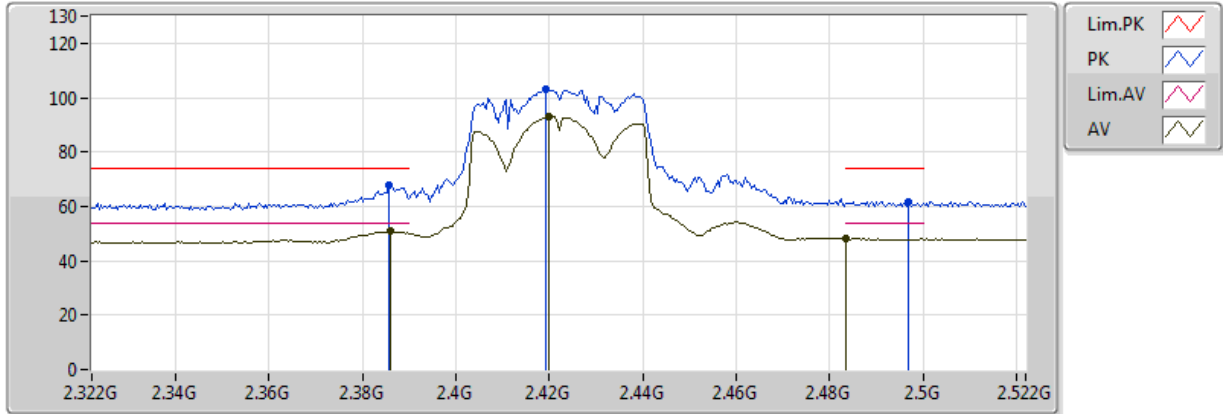
2462MHz_TX



EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.924G	32.20	54.00	-21.80	6.73	3	Horizontal	247	1.50	-	25.47	31.38	5.44	30.09
PK	4.924G	46.10	74.00	-27.90	6.73	3	Horizontal	247	1.50	-	39.37	31.38	5.44	30.09

**802.11n HT40_Nss1,(MCS0)_2TX
2422MHz_TX**

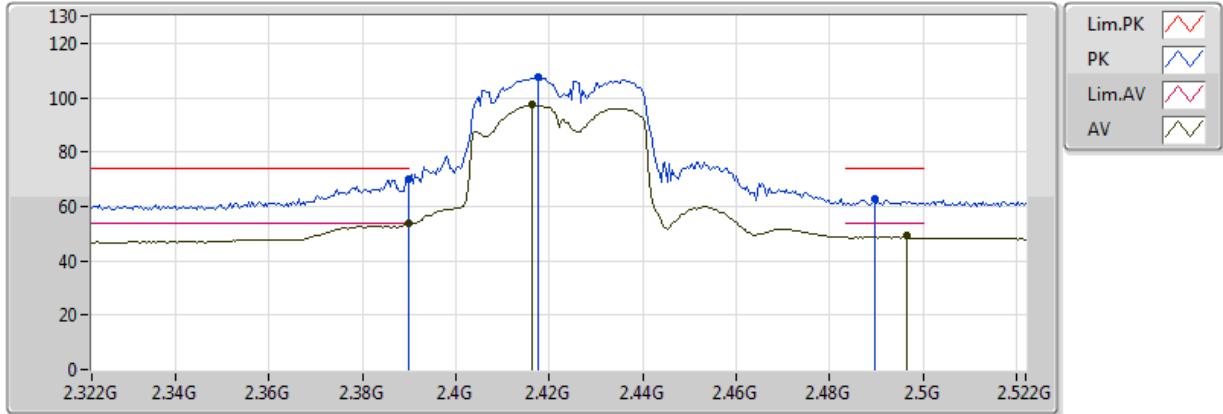


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.386G	50.76	54.00	-3.24	31.43	3	Vertical	353	3.26	-	19.33	27.20	4.23	-
AV	2.42G	93.17	Inf	-Inf	31.55	3	Vertical	353	3.26	-	61.62	27.29	4.26	-
AV	2.4836G	48.07	54.00	-5.93	31.78	3	Vertical	353	3.26	-	16.29	27.46	4.32	-
PK	2.3856G	68.00	74.00	-6.00	31.43	3	Vertical	353	3.26	-	36.58	27.20	4.23	-
PK	2.4192G	103.01	Inf	-Inf	31.55	3	Vertical	353	3.26	-	71.46	27.29	4.26	-
PK	2.4968G	61.76	74.00	-12.24	31.83	3	Vertical	353	3.26	-	29.93	27.49	4.34	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

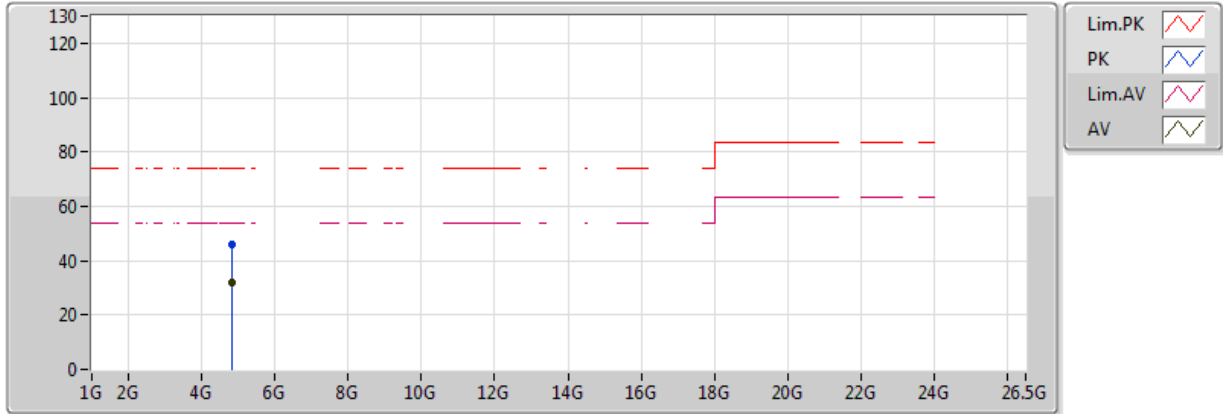


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	53.75	54.00	-0.25	31.45	3	Horizontal	60	1.01	-	22.30	27.21	4.23	-
AV	2.4164G	97.22	Inf	-Inf	31.54	3	Horizontal	60	1.01	-	65.68	27.28	4.26	-
AV	2.4964G	49.07	54.00	-4.93	31.83	3	Horizontal	60	1.01	-	17.25	27.49	4.34	-
PK	2.39G	70.01	74.00	-3.99	31.45	3	Horizontal	60	1.01	-	38.57	27.21	4.23	-
PK	2.4176G	107.71	Inf	-Inf	31.54	3	Horizontal	60	1.01	-	76.16	27.29	4.26	-
PK	2.4896G	62.84	74.00	-11.16	31.80	3	Horizontal	60	1.01	-	31.04	27.47	4.33	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

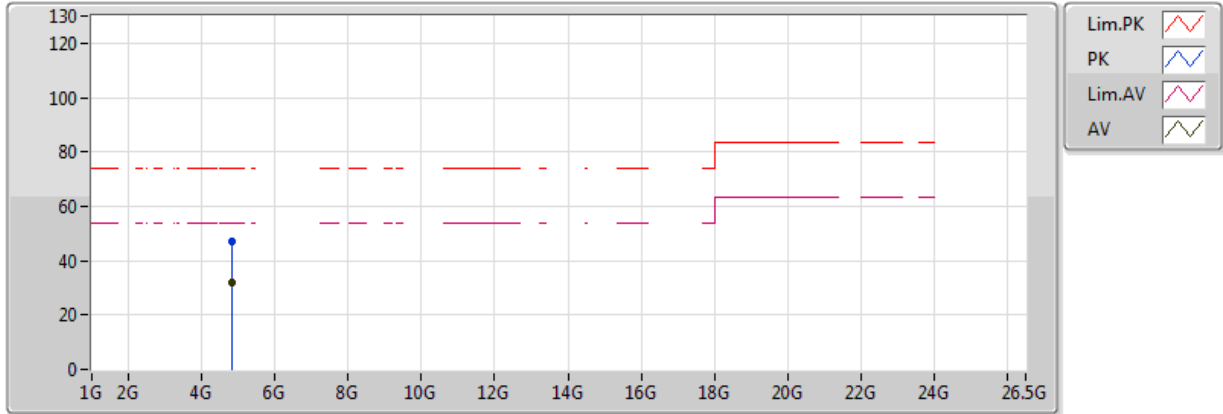


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.844G	32.19	54.00	-21.81	6.53	3	Vertical	168	2.31	-	25.66	31.25	5.38	30.10
PK	4.844G	45.92	74.00	-28.08	6.53	3	Vertical	168	2.31	-	39.39	31.25	5.38	30.10

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

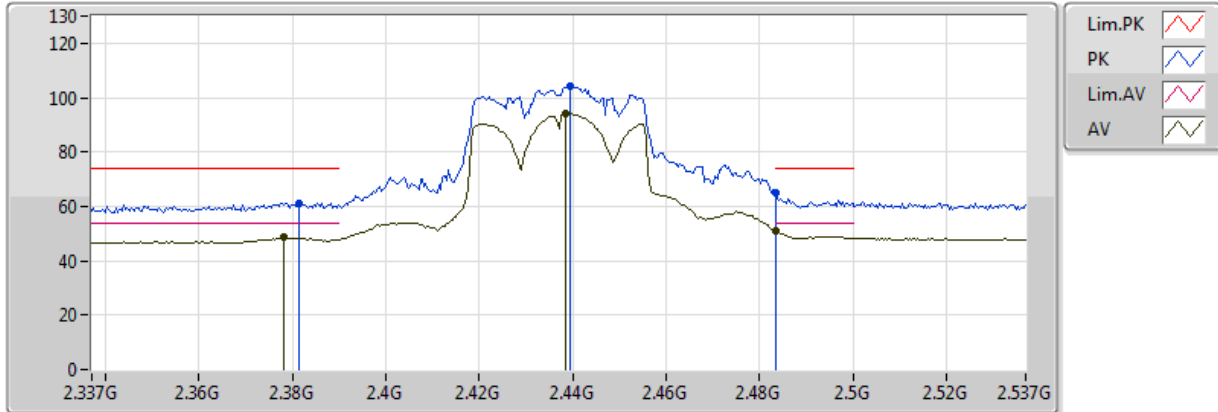


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.844G	32.03	54.00	-21.97	6.53	3	Horizontal	316	1.50	-	25.50	31.25	5.38	30.10
PK	4.844G	47.13	74.00	-26.87	6.53	3	Horizontal	316	1.50	-	40.60	31.25	5.38	30.10

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

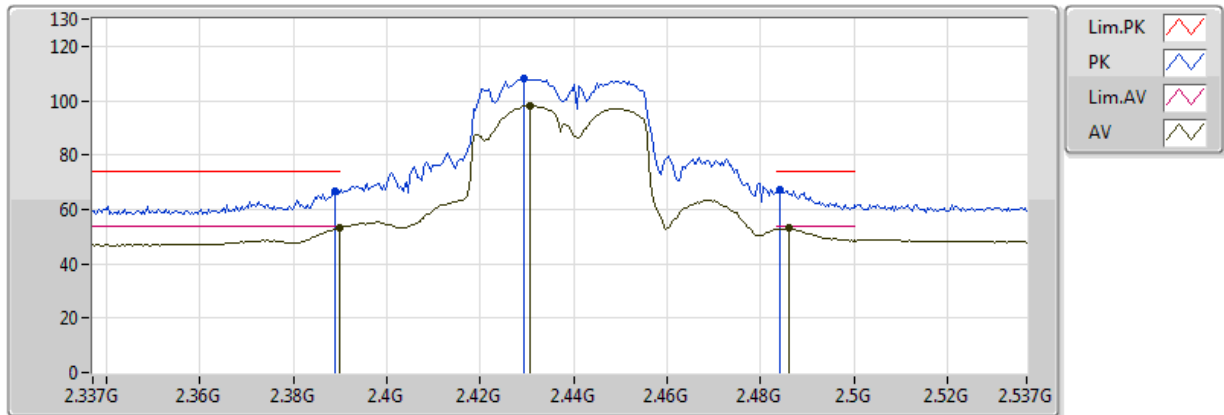


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3782G	48.58	54.00	-5.42	31.40	3	Vertical	2	3.37	-	17.17	27.18	4.22	-
AV	2.4386G	94.28	Inf	-Inf	31.62	3	Vertical	2	3.37	-	62.66	27.34	4.28	-
AV	2.483502G	51.25	54.00	-2.75	31.78	3	Vertical	2	3.37	-	19.47	27.46	4.32	-
PK	2.3814G	61.35	74.00	-12.65	31.41	3	Vertical	2	3.37	-	29.94	27.19	4.22	-
PK	2.4394G	103.98	Inf	-Inf	31.62	3	Vertical	2	3.37	-	72.35	27.34	4.28	-
PK	2.483502G	65.19	74.00	-8.81	31.78	3	Vertical	2	3.37	-	33.41	27.46	4.32	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

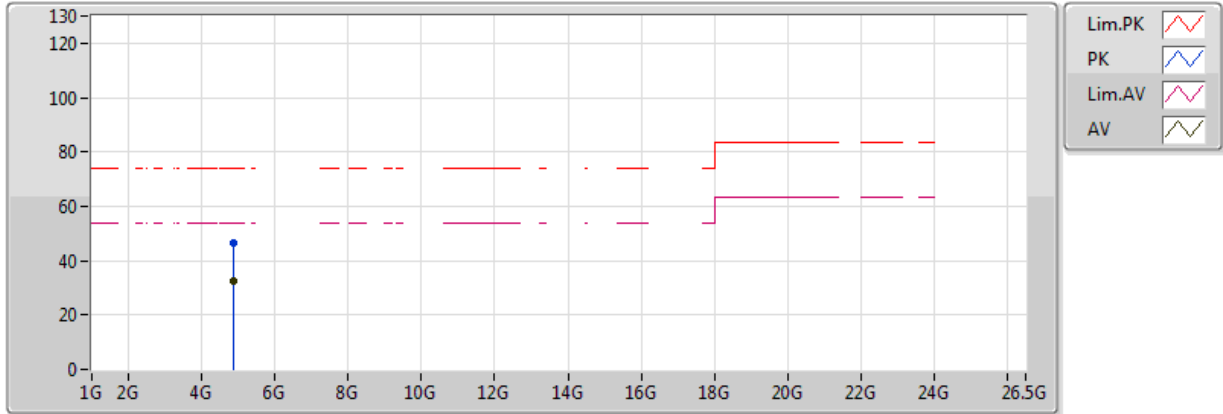


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	53.18	54.00	-0.82	31.44	3	Horizontal	66	1.02	-	21.74	27.21	4.23	-
AV	2.4306G	98.17	Inf	-Inf	31.59	3	Horizontal	66	1.02	-	66.58	27.32	4.27	-
AV	2.4862G	52.99	54.00	-1.01	31.79	3	Horizontal	66	1.02	-	21.20	27.46	4.33	-
PK	2.389G	66.42	74.00	-7.58	31.44	3	Horizontal	66	1.02	-	34.98	27.21	4.23	-
PK	2.4294G	107.90	Inf	-Inf	31.59	3	Horizontal	66	1.02	-	76.31	27.32	4.27	-
PK	2.4842G	67.28	74.00	-6.72	31.78	3	Horizontal	66	1.02	-	35.49	27.46	4.32	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

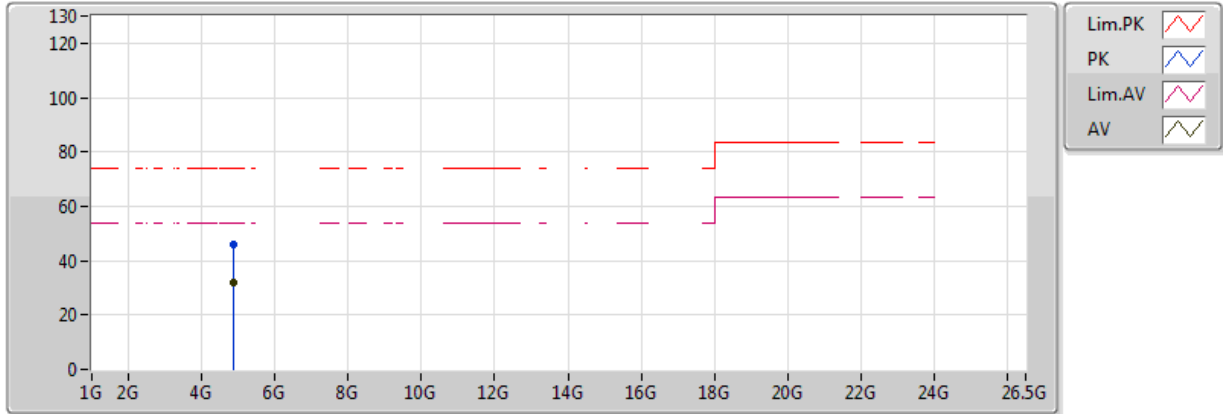


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.874G	32.31	54.00	-21.69	6.61	3	Vertical	0	1.50	-	25.70	31.30	5.40	30.10
PK	4.874G	46.30	74.00	-27.70	6.61	3	Vertical	0	1.50	-	39.69	31.30	5.40	30.10

802.11n HT40_Nss1,(MCS0)_2TX

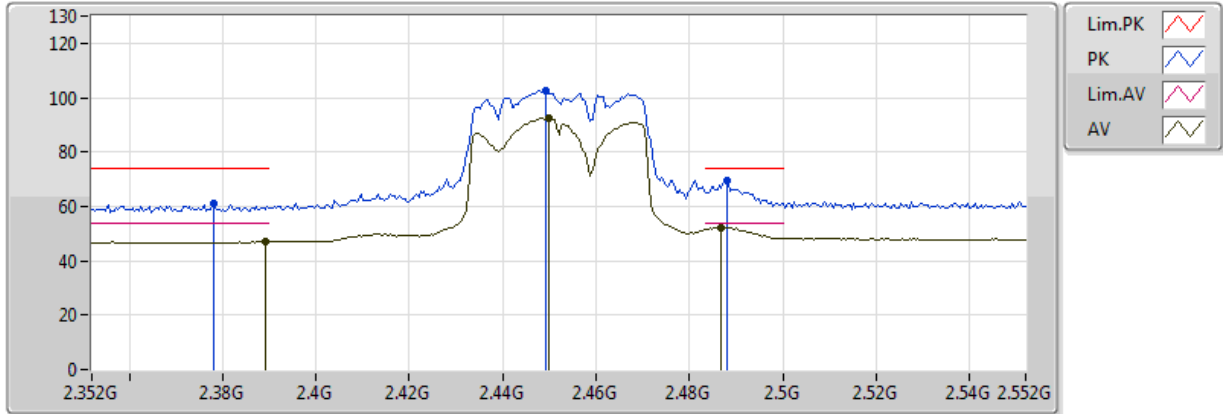
2437MHz_TX



EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.874G	32.14	54.00	-21.86	6.61	3	Horizontal	360	1.50	-	25.53	31.30	5.40	30.10
PK	4.874G	45.71	74.00	-28.29	6.61	3	Horizontal	360	1.50	-	39.10	31.30	5.40	30.10

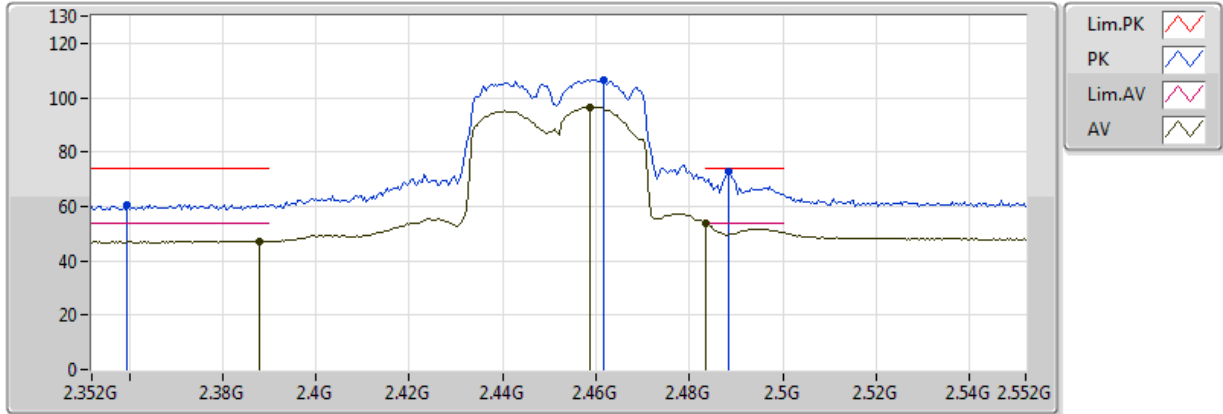
**802.11n HT40_Nss1,(MCS0)_2TX
2452MHz_TX**



EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3892G	47.10	54.00	-6.90	31.44	3	Vertical	356	3.49	-	15.66	27.21	4.23	-
AV	2.45G	92.37	Inf	-Inf	31.66	3	Vertical	356	3.49	-	60.71	27.37	4.29	-
AV	2.4868G	52.26	54.00	-1.74	31.79	3	Vertical	356	3.49	-	20.46	27.47	4.33	-
PK	2.378G	61.03	74.00	-12.97	31.40	3	Vertical	356	3.49	-	29.63	27.18	4.22	-
PK	2.4492G	102.55	Inf	-Inf	31.66	3	Vertical	356	3.49	-	70.90	27.37	4.29	-
PK	2.488G	69.65	74.00	-4.35	31.80	3	Vertical	356	3.49	-	37.86	27.47	4.33	-

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

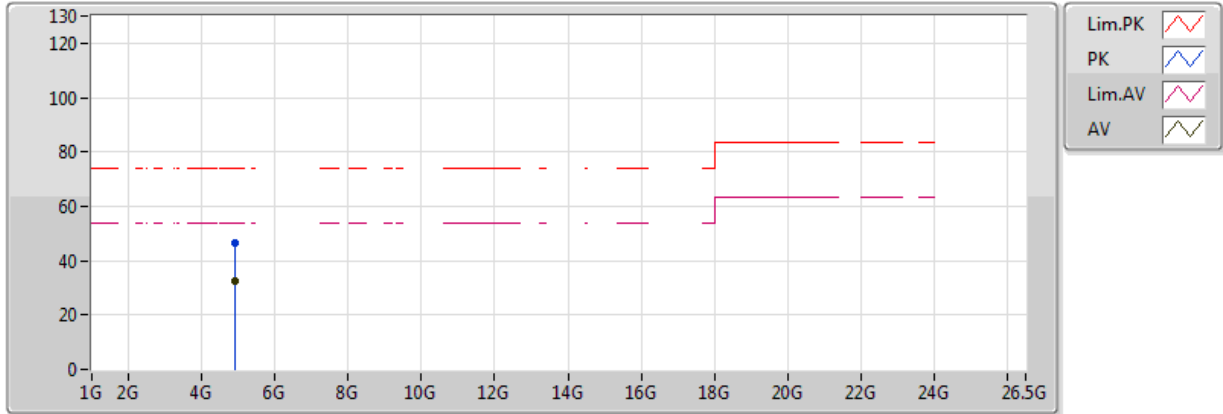


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.388G	47.12	54.00	-6.88	31.44	3	Horizontal	52	2.09	-	15.69	27.21	4.23	-
AV	2.4588G	96.62	Inf	-Inf	31.69	3	Horizontal	52	2.09	-	64.93	27.39	4.30	-
AV	2.4836G	53.66	54.00	-0.34	31.78	3	Horizontal	52	2.09	-	21.88	27.46	4.32	-
PK	2.3596G	60.71	74.00	-13.29	31.34	3	Horizontal	52	2.09	-	29.37	27.13	4.20	-
PK	2.4616G	106.50	Inf	-Inf	31.70	3	Horizontal	52	2.09	-	74.79	27.40	4.30	-
PK	2.4884G	73.05	74.00	-0.95	31.80	3	Horizontal	52	2.09	-	41.25	27.47	4.33	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

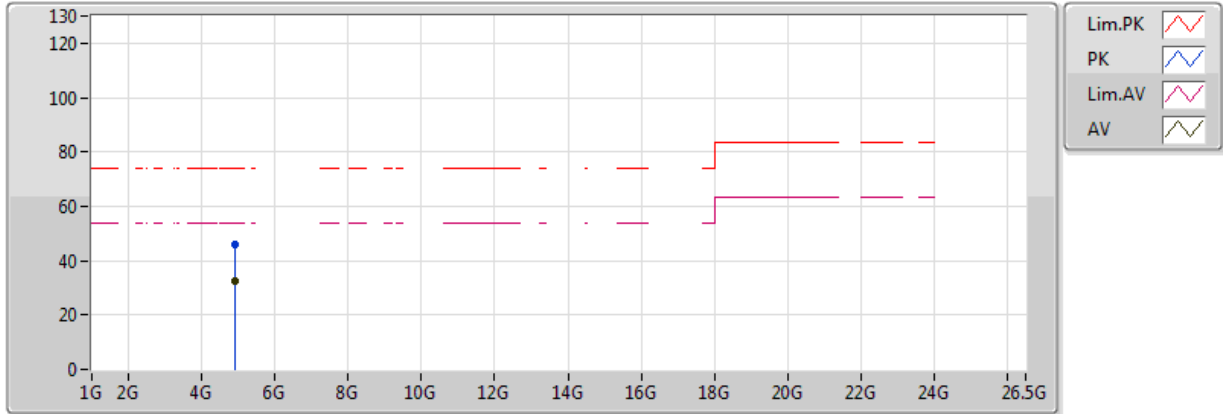


EUT=Y

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.904G	32.25	54.00	-21.75	6.68	3	Vertical	0	1.50	-	25.57	31.35	5.42	30.09
PK	4.904G	46.65	74.00	-27.35	6.68	3	Vertical	0	1.50	-	39.97	31.35	5.42	30.09

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX



EUT=Y

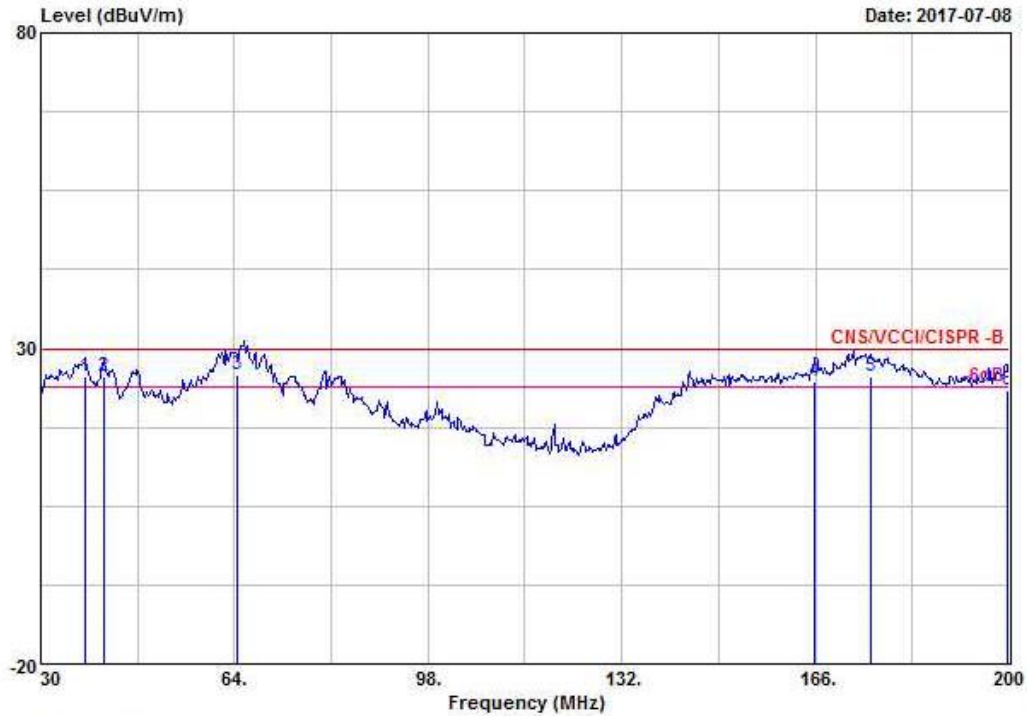
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.904G	32.30	54.00	-21.70	6.68	3	Horizontal	360	1.50	-	25.62	31.35	5.42	30.09
PK	4.904G	45.80	74.00	-28.20	6.68	3	Horizontal	360	1.50	-	39.12	31.35	5.42	30.09



Radiated Emission Co-Location (Below 1GHz)

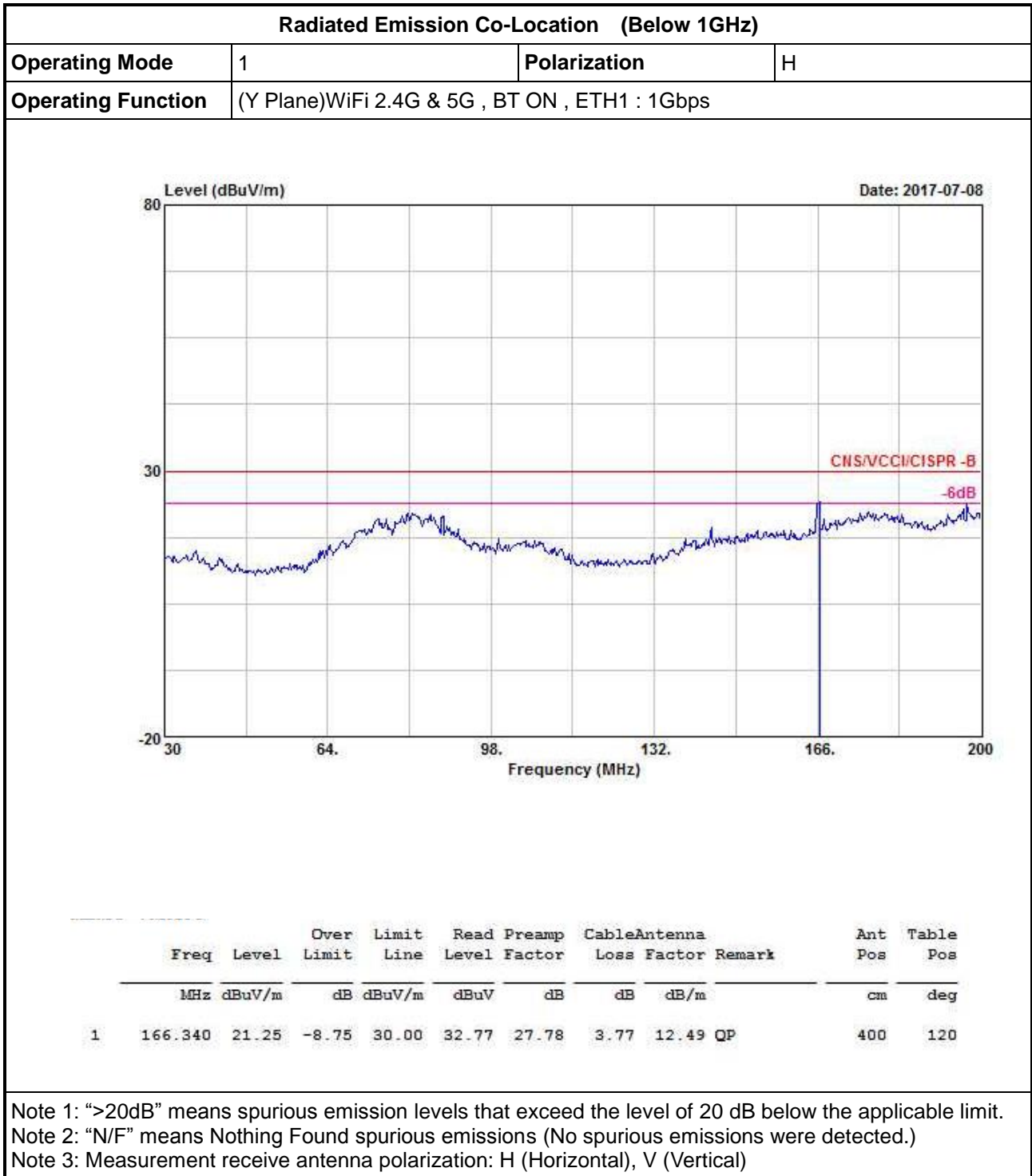
Operating Mode	1	Polarization	V
-----------------------	---	---------------------	---

Operating Function	(Y Plane)WiFi 2.4G & 5G , BT ON , ETH1 : 1Gbps
---------------------------	--



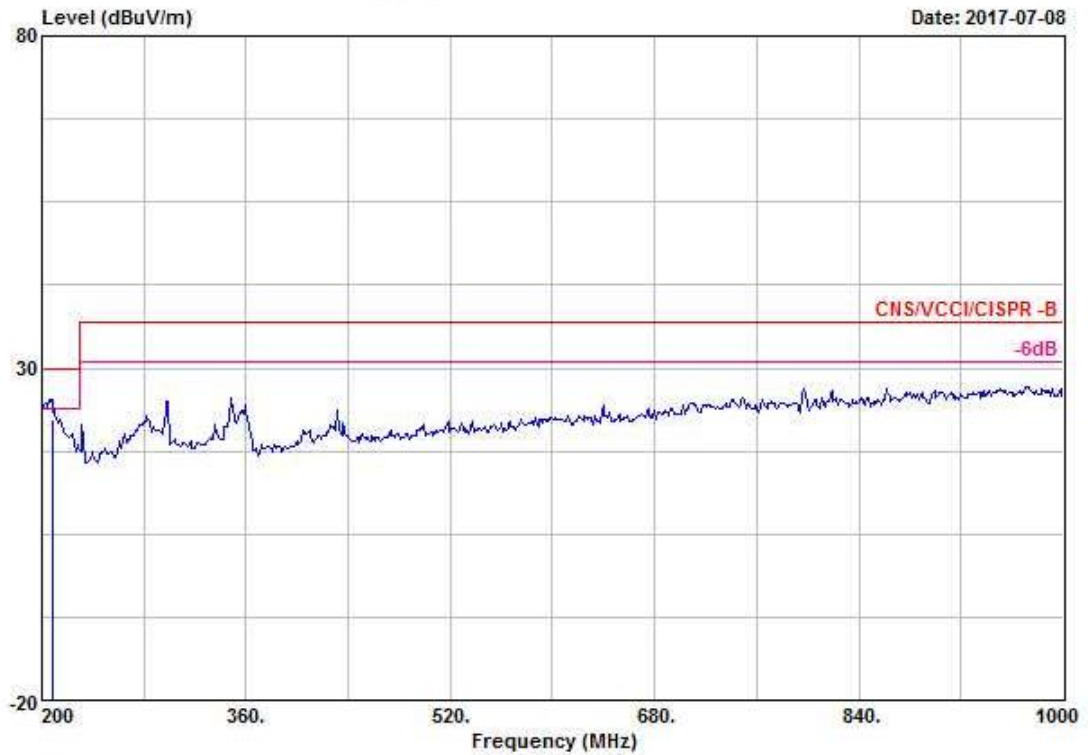
	Freq	Level	Over	Limit	Read	Preamp	CableAntenna		Remark	Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor		Pos	Pos
			dB	dBuV/m	dBuV	dB	dB	dB/m		cm	deg
1 !	37.820	25.42	-4.58	30.00	40.37	28.26	1.77	11.54	QP	100	270
2 !	41.220	25.47	-4.53	30.00	40.87	28.26	1.85	11.01	QP	100	250
3 e	64.410	25.87	-4.13	30.00	42.40	28.20	2.33	9.34	QP	100	210
4 !	165.830	24.58	-5.42	30.00	36.14	27.78	3.77	12.45	QP	100	145
5 !	175.630	25.61	-4.39	30.00	36.46	27.74	3.86	13.03	QP	100	180
6	199.660	23.44	-6.56	30.00	32.11	27.62	4.29	14.66	QP	100	136

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
 Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
 Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)



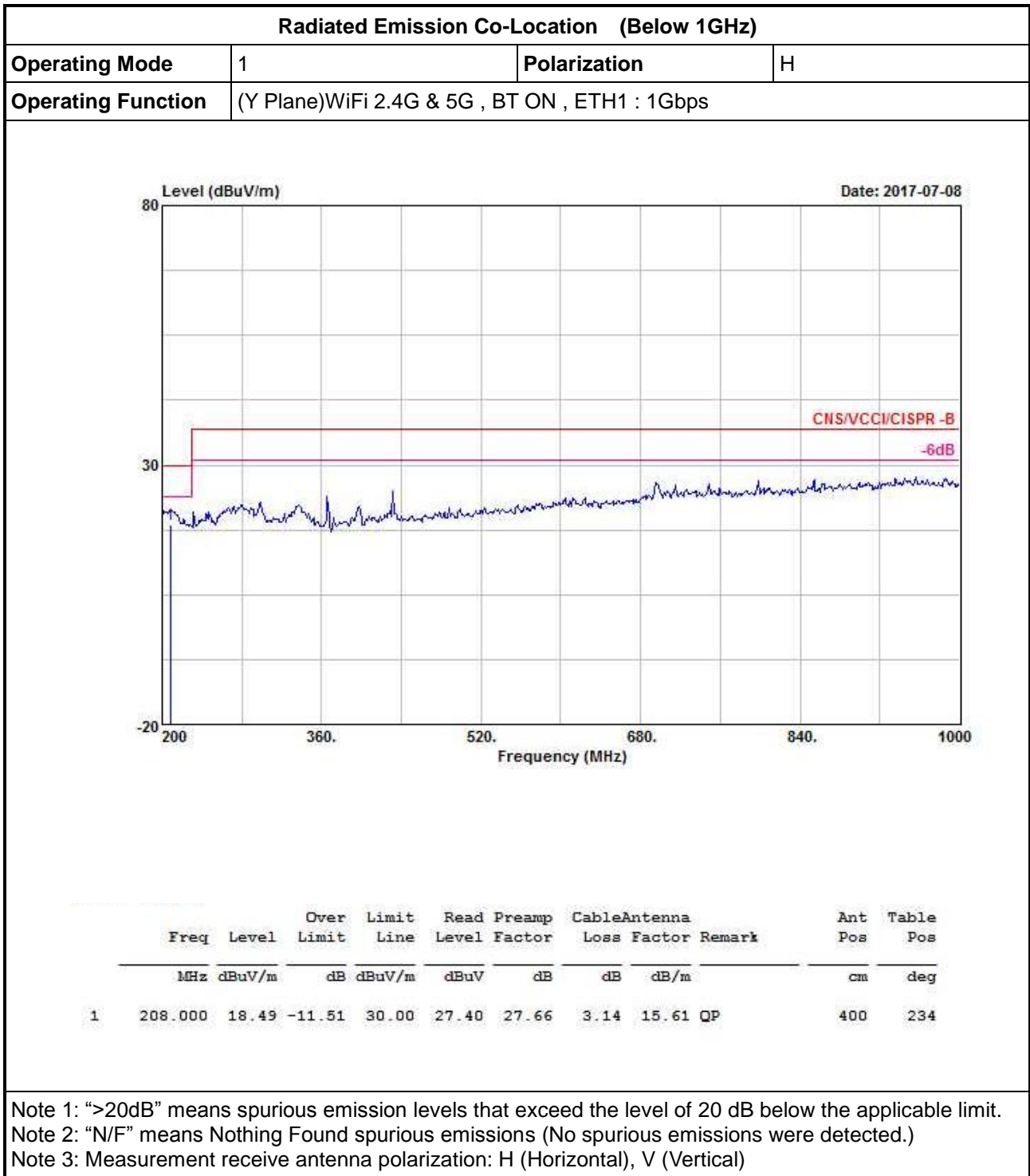


Radiated Emission Co-Location (Below 1GHz)			
Operating Mode	1	Polarization	V
Operating Function	(Y Plane)WiFi 2.4G & 5G , BT ON , ETH1 : 1Gbps		



Freq	Level	Over Limit	Limit Line	Read Level	Preamp Factor	Cable Loss	Antenna Loss	Remark	Ant Pos	Table Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB/m		cm	deg
1	208.000	22.29	-7.71	30.00	31.20	27.66	3.14	15.61 QP	100	100

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
 Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
 Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)





Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1.	Pass	AV	3.335G	28.70	54.00	-25.30	-1.20	3	Horizontal	360	1.00	-
Mode 2.	Pass	AV	3.425G	29.78	54.00	-24.22	-1.11	3	Horizontal	0	1.00	-

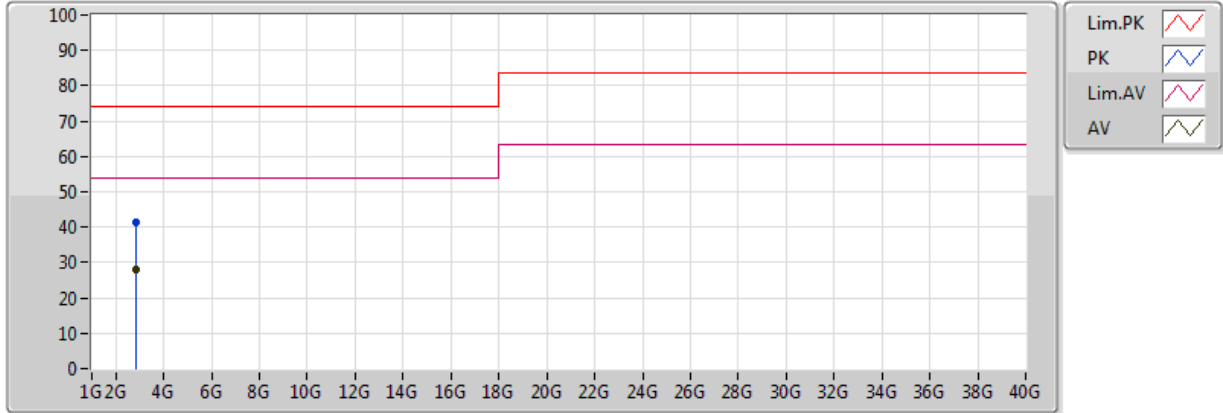


Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1.	Pass	AV	3.335G	28.70	54.00	-25.30	-1.20	3	Horizontal	360	1.00	-
Mode 1.	Pass	PK	3.335G	42.80	74.00	-31.20	-1.20	3	Horizontal	360	1.00	-
Mode 1.	Pass	AV	2.852G	27.97	54.00	-26.03	-1.88	3	Vertical	0	1.00	-
Mode 1.	Pass	PK	2.852G	41.35	74.00	-32.65	-1.88	3	Vertical	0	1.00	-
Mode 2.	Pass	AV	3.425G	29.78	54.00	-24.22	-1.11	3	Horizontal	0	1.00	-
Mode 2.	Pass	PK	3.425G	43.56	74.00	-30.44	-1.11	3	Horizontal	0	1.00	-
Mode 2.	Pass	AV	2.728G	28.49	54.00	-25.51	-2.18	3	Vertical	360	1.00	-
Mode 2.	Pass	PK	2.728G	42.16	74.00	-31.84	-2.18	3	Vertical	360	1.00	-



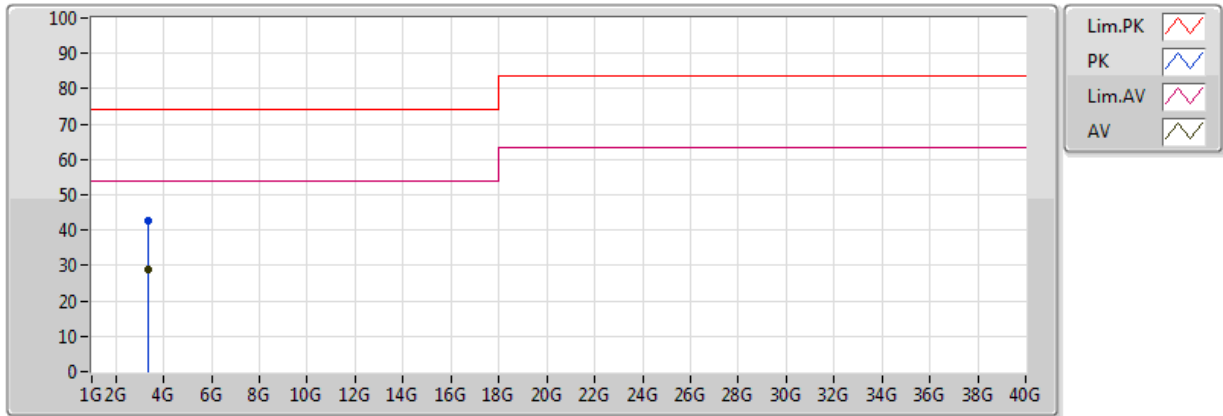
Radiated-above 1GHz_Mode 1



EUT = Y ; 2.4G+5G+BT

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.852G	27.97	54.00	-26.03	-1.88	3	Vertical	0	1.00	-	29.85	28.13	4.64	34.66
PK	2.852G	41.35	74.00	-32.65	-1.88	3	Vertical	0	1.00	-	43.23	28.13	4.64	34.66

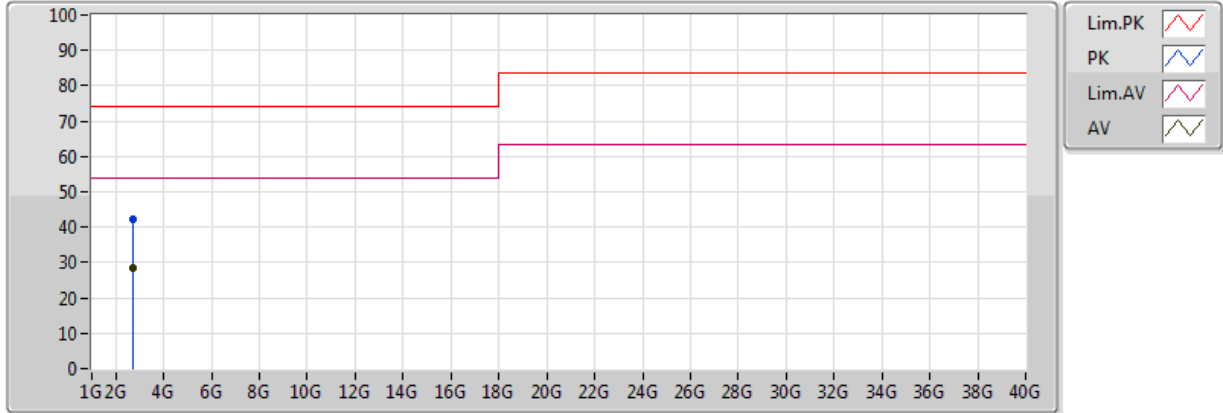
Radiated-above 1GHz_Mode 1



EUT = Y ; 2.4G+5G+BT

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	3.335G	28.70	54.00	-25.30	-1.20	3	Horizontal	360	1.00	-	29.90	28.47	4.98	34.65
PK	3.335G	42.80	74.00	-31.20	-1.20	3	Horizontal	360	1.00	-	44.00	28.47	4.98	34.65

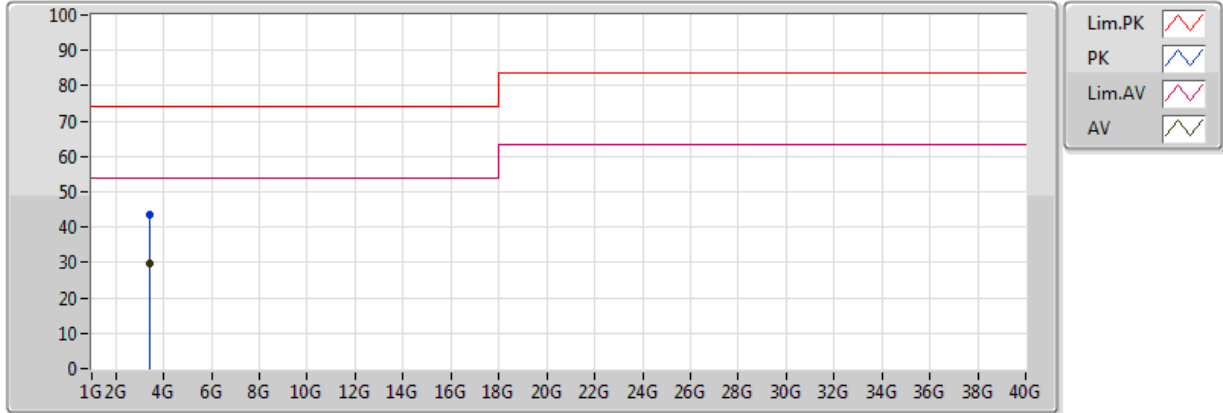
Radiated-above 1GHz_Mode 2



EUT = Z ; 2.4G+5G+BT

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.728G	28.49	54.00	-25.51	-2.18	3	Vertical	360	1.00	-	30.67	27.91	4.54	34.63
PK	2.728G	42.16	74.00	-31.84	-2.18	3	Vertical	360	1.00	-	44.34	27.91	4.54	34.63

Radiated-above 1GHz_Mode 2



EUT = Z ; 2.4G+5G+BT

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	3.425G	29.78	54.00	-24.22	-1.11	3	Horizontal	0	1.00	-	30.89	28.48	5.04	34.64
PK	3.425G	43.56	74.00	-30.44	-1.11	3	Horizontal	0	1.00	-	44.67	28.48	5.04	34.64