

# FCC Test Report

**Equipment** : Wireless camera  
**Brand Name** : Alarm.com  
**Model No.** : ADC-V622  
**FCC ID** : PPQ-143V622PT  
**Standard** : 47 CFR FCC Part 15.247  
**Operating Band** : 2400 MHz – 2483.5 MHz  
**Function** :  Point-to-multipoint;  Point-to-point  
**Applicant** : LITE-ON Technology Corp.  
Bldg. C, 90, Chien 1 Rd., Chung-Ho, New Taipei City,  
23585 Taiwan  
**Manufacturer** : Lite-On Network Communication (Dongguan) Limited  
30#Keji Rd., Yin Hu Industrial Area, Qingxi  
Town, DongGuan City, Guangdong, China

The product sample received on Sep. 12, 2017 and completely tested on Nov. 29, 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 / Assistant Manager





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**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



## Revision History

Report No.	Version	Description	Issued Date
FR791315AC	Rev. 01	Initial issue of report	Jan. 24, 2018

# 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]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX(Port 1)
2.4-2.4835GHz	802.11g	20	1TX(Port 1)
2.4-2.4835GHz	802.11n HT20	20	2TX

Note:

- ◆ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ◆ 11g, HT20 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
1	1	LYNwave	ALX17P-222XX1-00	embedded antenna	I-PEX
2	2	LYNwave	ALX17P-222XX2-00	embedded antenna	I-PEX

Ant.	Gain (dBi)		
	2.4G	5G	BT
1	2.66	4.68	2.66
2	2.12	4.76	2.12

Note 1: The EUT has two antennas.

**For 2.4GHz function:**

For IEEE 802.11 b/g mode (1TX/1RX)

Support diversity function and pre-tested on each single chain, the worst case was Ant. 1(port 1) and it was record in this test report.

For IEEE 802.11 n mode (2TX/2RX)

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

**For BT function:**

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Support diversity function, the Ant. 1 (port 1) was declared to be tested only by customer.



**For 5GHz function:**

For IEEE 802.11 a mode (1TX/1RX)

Support diversity function and pre-tested on each single chain, the worst case was Ant. 2(port 2) and it was record in this test report.

For IEEE 802.11 n mode (2TX/2RX)

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

**1.1.3 EUT Information**

Operational Condition	
EUT Power Type	From AC Adapter
RF Chip Model No.	AMPAK 62X2
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	0.989	0.048	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.931	0.311	1.398m	1k
802.11n HT20	0.93	0.315	1.298m	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.		
<input type="checkbox"/>	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.) TEL : 886-3-656-9065      FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Tim	23.2°C / 62%	29/Nov/2017
Radiated	03CH02-HY	Jerry	24.5°C / 62%	24/Oct/2017
AC Conduction	CO04-HY	Eric	22.2°C / 51.8%	29/Sep/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 (9kHz ~ 30MHz)	3.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%



## 2 Test Configuration of EUT

### 2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

### 2.2 Test Channel Mode

Test Software	Dos




Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	68
2437MHz	76
2462MHz	68
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	62
2437MHz	79
2462MHz	62
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	60
2437MHz	76
2462MHz	58



### 2.3 The Worst Case Measurement Configuration

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

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

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	Adapter mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	

## 2.4 Accessories

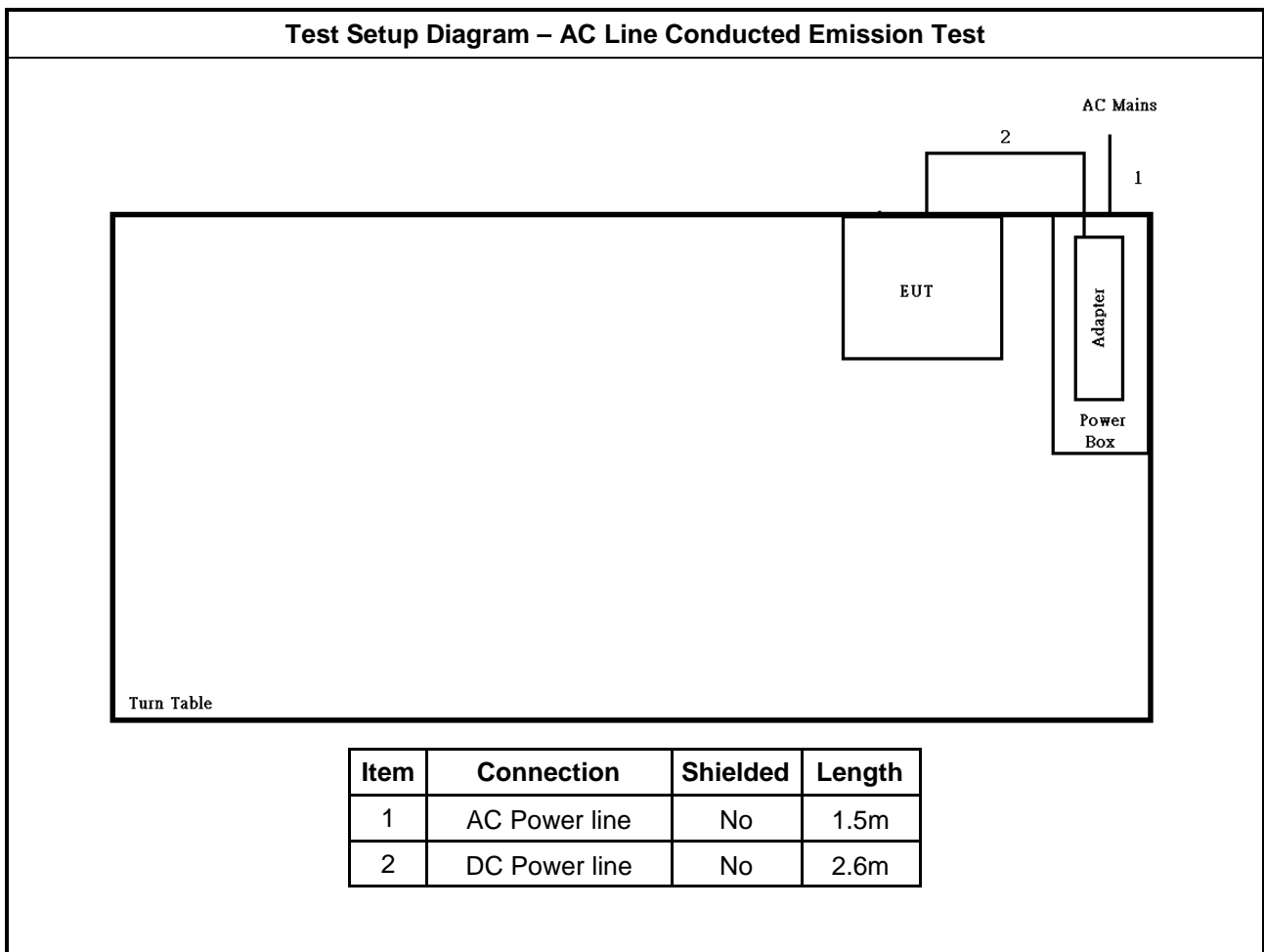
Accessories				
AC Adapter	Brand Name	Asian	Model Name	WA-12M12R
	Power Rating	I/P: 100-240Vac, 50-60Hz, 0.5A, O/P: 12Vdc, 1A		
	Power Cord	2.6 meter, non-shielded cable, w/o ferrite core		

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

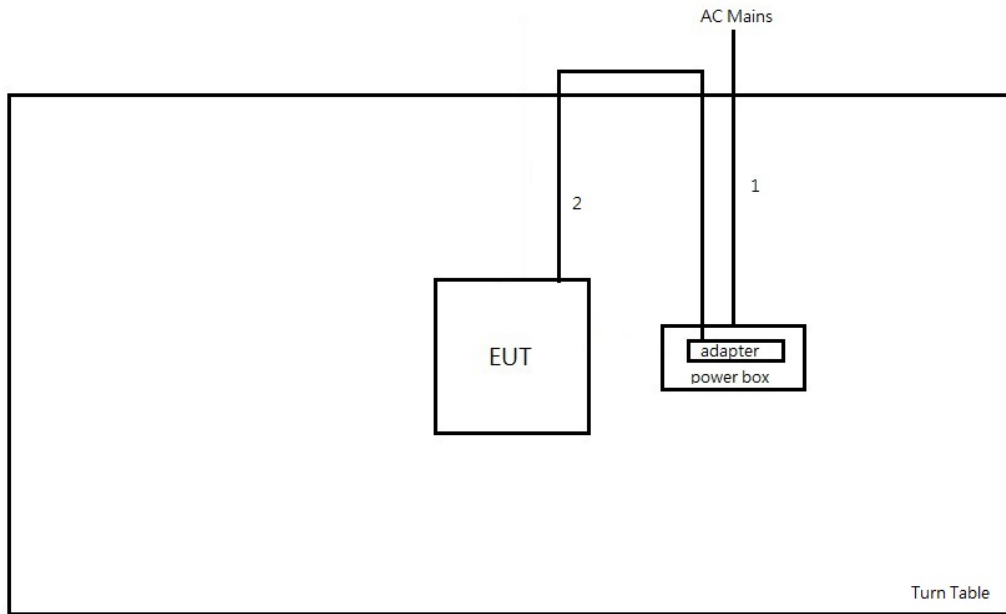
## 2.5 Support Equipment

Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for Notebook	DELL	HA65NM130	DoC

## 2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	AC power line	No	1.5m
2	DC power line	No	2.6m

### 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.

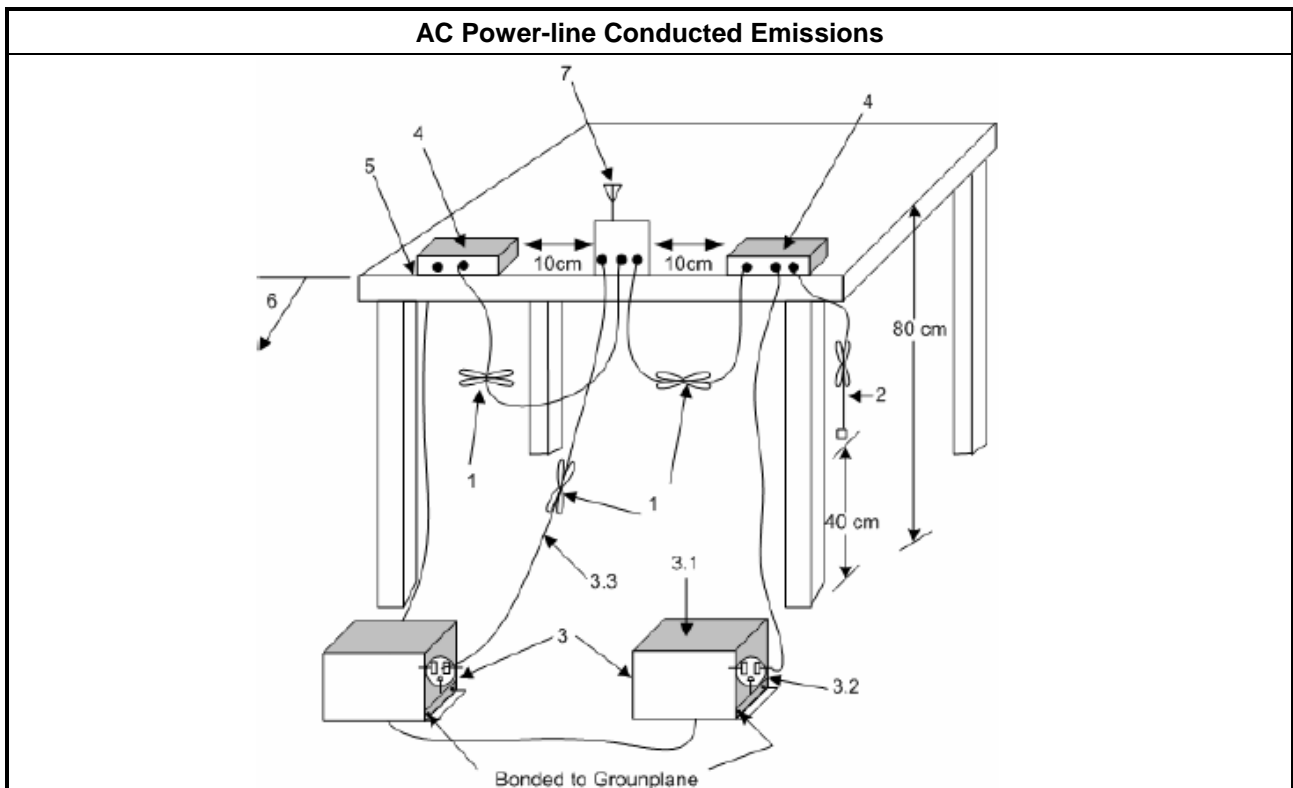
##### 3.1.2 Measuring Instruments

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

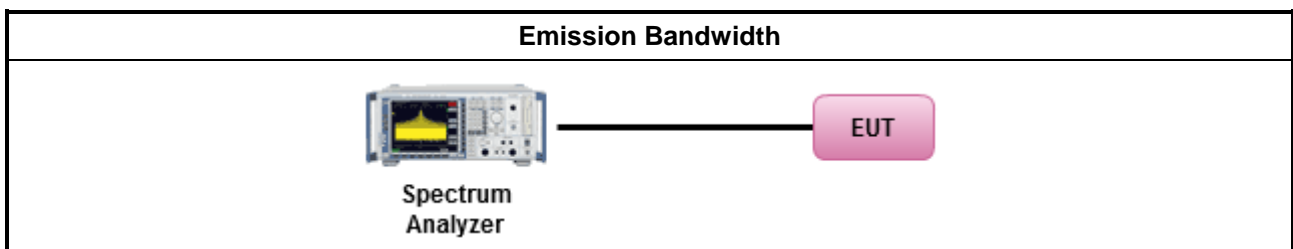
#### 3.2.2 Measuring Instruments

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

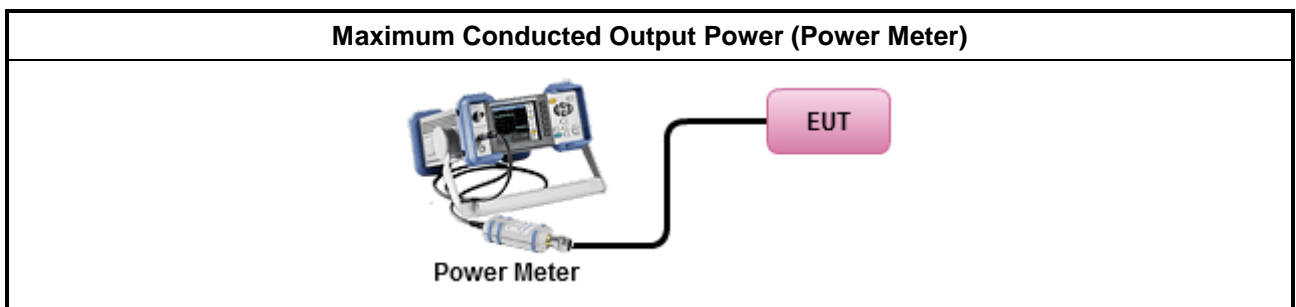
#### 3.3.2 Measuring Instruments

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"> <li>Maximum Peak Conducted Output Power</li> </ul>	
<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"> <li>Maximum Average Conducted Output Power</li> </ul>	
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"> <li>For conducted measurement.</li> </ul>	
<ul style="list-style-type: none"> <li>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.</li> </ul>	
<ul style="list-style-type: none"> <li>If multiple transmit chains, EIRP calculation could be following as methods:  <math>P_{total} = P_1 + P_2 + \dots + P_n</math>                      (calculated in linear unit [mW] and transfer to log unit [dBm])  <math>EIRP_{total} = P_{total} + DG</math> </li> </ul>	

### 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"> <li>Power Spectral Density (PSD) <math>\leq</math> 8 dBm/3kHz</li> </ul>

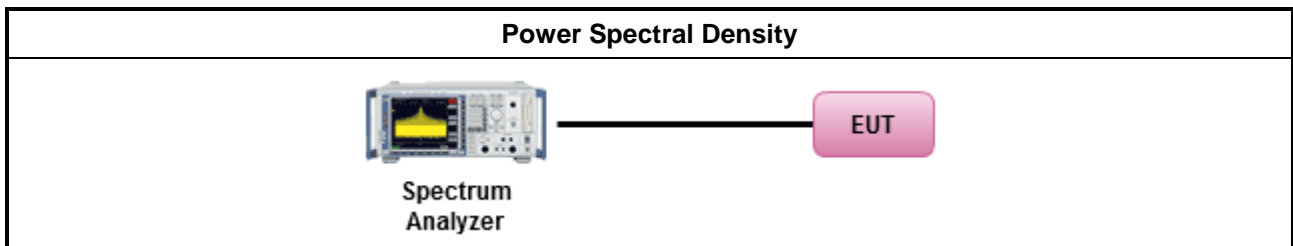
#### 3.4.2 Measuring Instruments

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

#### 3.4.4 Test Setup



#### 3.4.5 Test Result of Power Spectral Density

Refer as Appendix D



### 3.5 Emissions in Non-restricted Frequency Bands

#### 3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

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

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

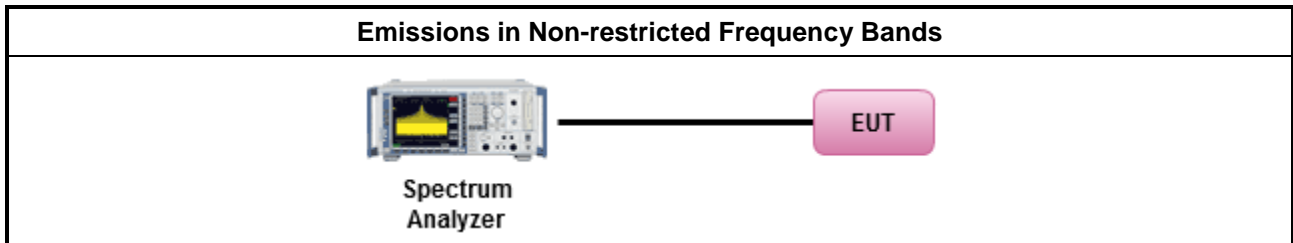
#### 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

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

#### 3.5.4 Test Setup



#### 3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



### 3.6 Emissions in Restricted Frequency Bands

#### 3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

#### 3.6.2 Measuring Instruments

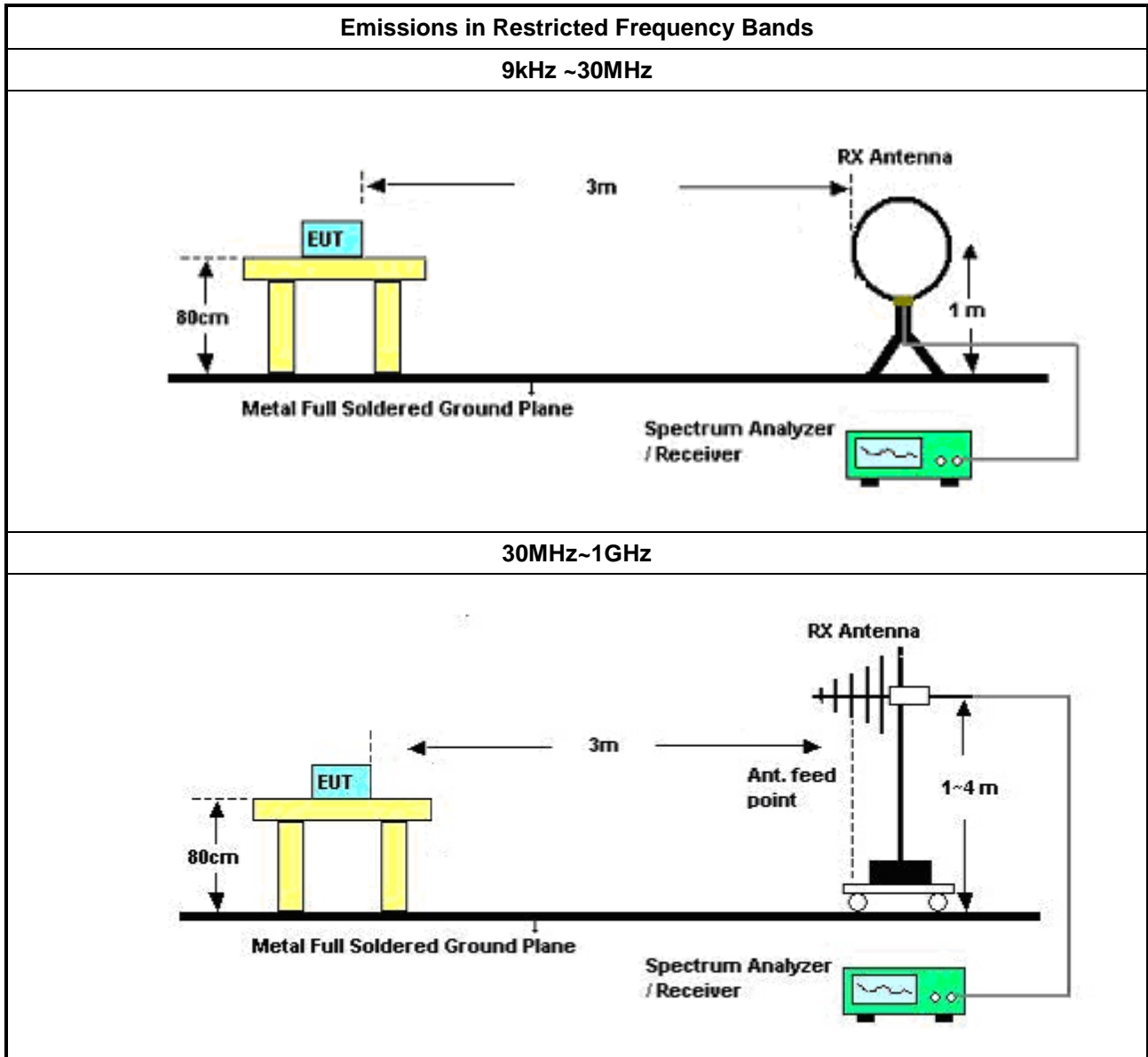
Refer a test equipment and calibration data table in this test report.

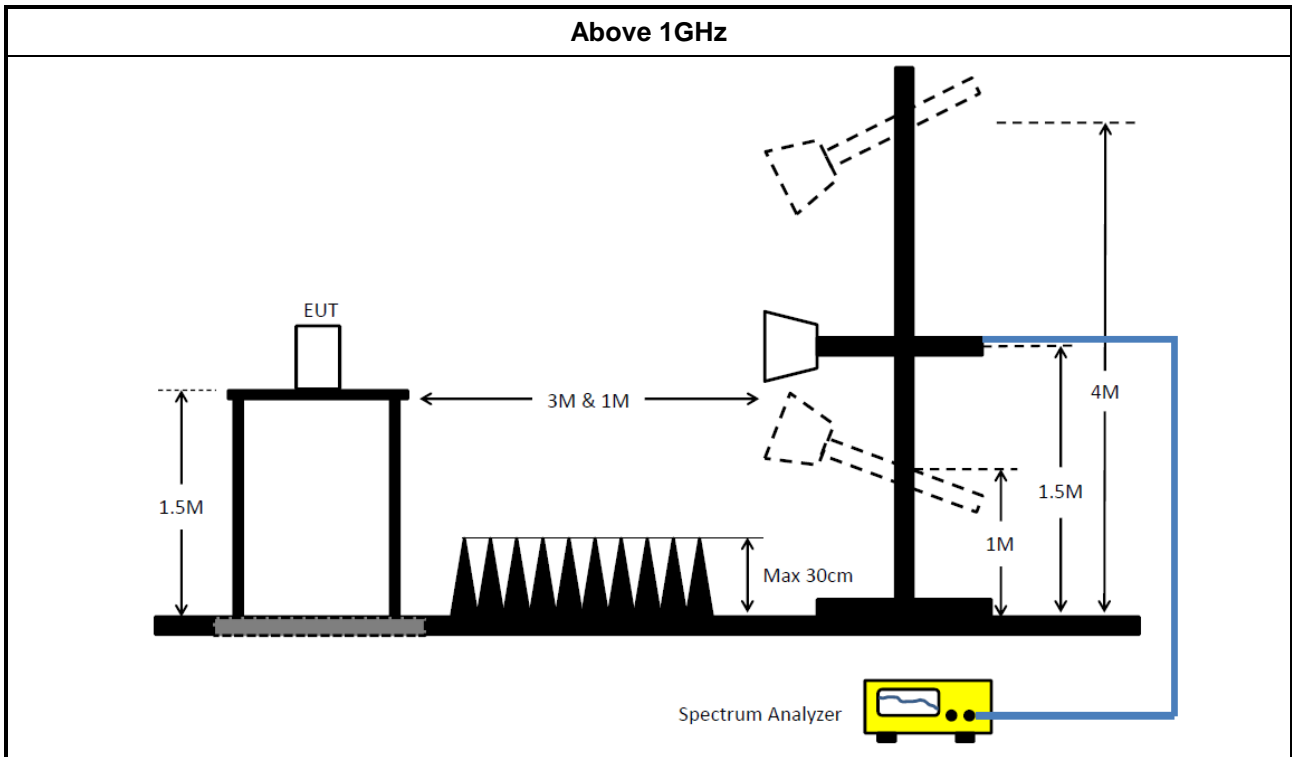


3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>▪ The average emission levels shall be measured in [duty cycle <math>\geq</math> 98 or duty factor].</li> </ul>	
<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ For the transmitter unwanted emissions shall be measured using following options below:</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Refer as KDB 558074, clause 12 for unwanted emissions into restricted bands.</li> </ul>	
	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Refer as KDB 558074, clause 12.2.5.3 (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW<math>\geq</math>1/T.</li> </ul>
	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Refer as KDB 558074, clause 12.2.4 measurement procedure peak limit.</li> </ul>
<ul style="list-style-type: none"> <li>▪ For the transmitter band-edge emissions shall be measured using following options below:</li> </ul>	
<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Refer as KDB 558074, clause 13.2 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ 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).</li> </ul>	
<ul style="list-style-type: none"> <li>▪ For conducted and cabinet radiation measurement, refer as KDB 558074, clause 12.2.2.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ 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</li> </ul>	
<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	

### 3.6.4 Test Setup





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

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

### 3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



## 4 Test Equipment and Calibration Data

### Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	15/Nov/2016	14/Nov/2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	24/Oct/2016	23/Oct/2017
AC POWER	APC	AFC-11005G	F310050055	47Hz-63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	R&S	ESH3-Z2	100921	10 kHz ~ 30 MHz	21/Oct/2016	20/Oct/2017

NCR : Non-Calibration Require

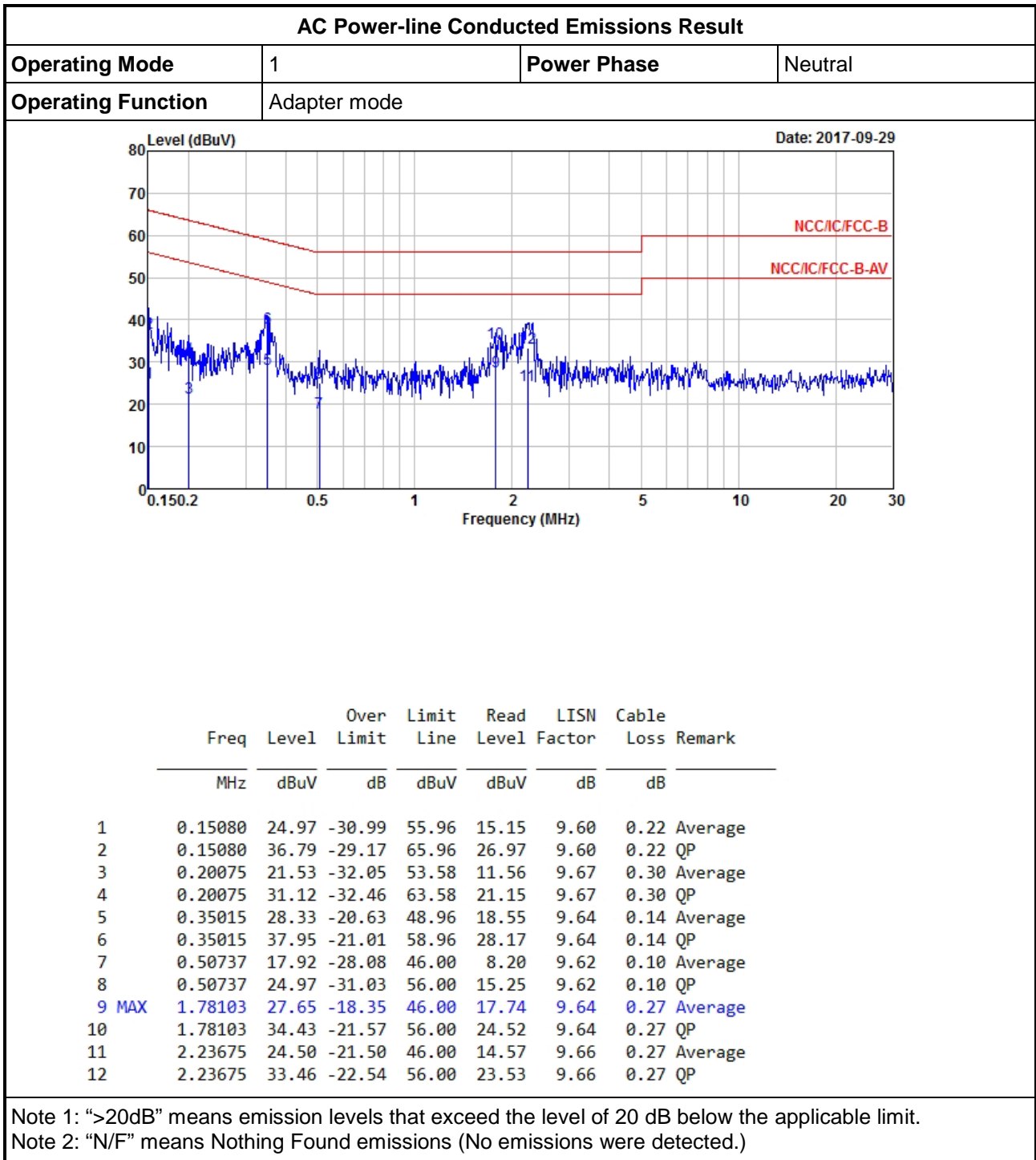
### Instrument for Radiated Test

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	20/Oct/2017	19/Oct/2018
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	Ketsight	83017A	MY53270197	1GHz-26.5GHz	19/Sep/2017	18/Sep/2018
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01531	1GHz-18GHz	11/May/2017	10/May/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz-40GHz	06/Feb/2017	05/Feb/2018
Bilog Antenna	SCHAFFNER	CBL6112B	2723	30MHz-1GHz	09/Sep/2017	08/Sep/2018
Amplifier	MITEQ	JS44-18004000 -33-8P	1840917	18GHz-40GHz	06/Feb/2017	05/Feb/2018
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	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018



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	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	10/Feb/2017	09/Feb/2018
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	10/Feb/2017	09/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz~40GHz	27/Jul/2017	26/Jul/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz~26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz~26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz~26.5GHz	25/Aug/2017	24/Aug/2018
Temp. and Humidity Chamber	Giant Force	GTH-225-40-CP-AR	MAA1611-005	-40 ~ 100°C	10/May/2017	09/May/2018
RF Cable-1.5m	HUBER+SUHNER	SUCOFLEX_104	MY12582/4	30MHz~26.5GHz	25/Aug/2017	24/Aug/2018







AC Power-line Conducted Emissions Result								
Operating Mode	1	Power Phase		Line				
Operating Function	Adapter mode							
<p>The graph displays the AC power-line conducted emissions. The y-axis represents Level in dBUV, ranging from 0 to 80. The x-axis represents Frequency in MHz, ranging from 0.1502 to 30. Two red lines indicate the NCC/IC/FCC-B and NCC/IC/FCC-B-AV limits. A blue line shows the measured emission levels, with several peaks labeled 1 through 12. The date of the test is 2017-09-29.</p>								
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15321	23.43	-32.39	55.82	13.55	9.66	0.22	Average
2	0.15321	35.41	-30.41	65.82	25.53	9.66	0.22	QP
3	0.34830	27.33	-21.67	49.00	17.52	9.67	0.14	Average
4	0.34830	36.70	-22.30	59.00	26.89	9.67	0.14	QP
5	0.77519	15.85	-30.15	46.00	6.11	9.64	0.10	Average
6	0.77519	22.49	-33.51	56.00	12.75	9.64	0.10	QP
7	1.80001	27.67	-18.33	46.00	17.63	9.77	0.27	Average
8	1.80001	35.46	-20.54	56.00	25.42	9.77	0.27	QP
9 MAX	2.26057	29.71	-16.29	46.00	19.65	9.79	0.27	Average
10	2.26057	39.67	-16.33	56.00	29.61	9.79	0.27	QP
11	3.79944	19.39	-26.61	46.00	9.50	9.77	0.12	Average
12	3.79944	24.68	-31.32	56.00	14.79	9.77	0.12	QP

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



**Summary**

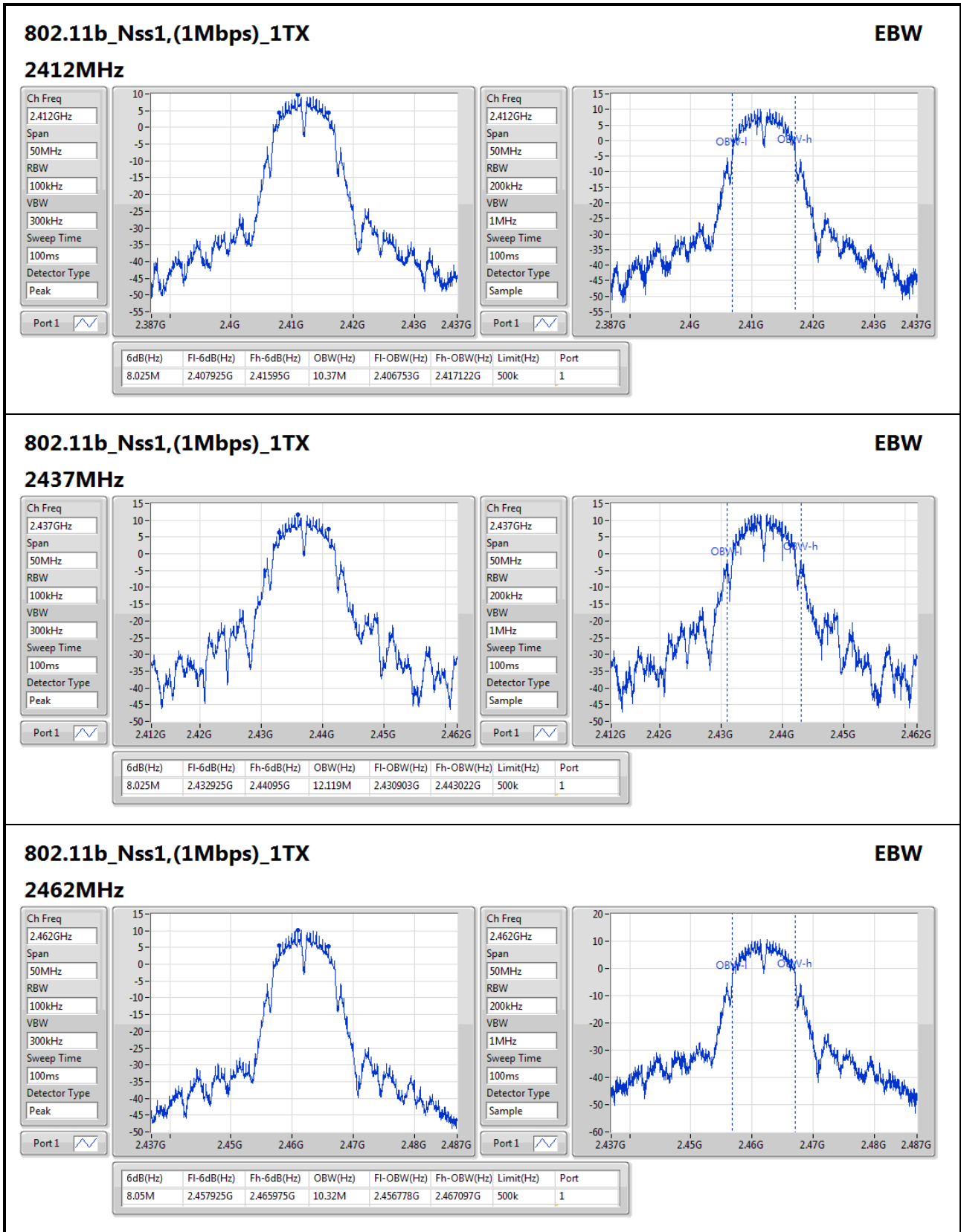
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	8.05M	12.119M	12M1G1D	8.025M	10.32M
802.11g_Nss1,(6Mbps)_1TX	15.3M	17.116M	17M1D1D	15.25M	16.342M
802.11n HT20_Nss1,(MCS0)_2TX	16.3M	17.741M	17M7D1D	15.05M	17.441M

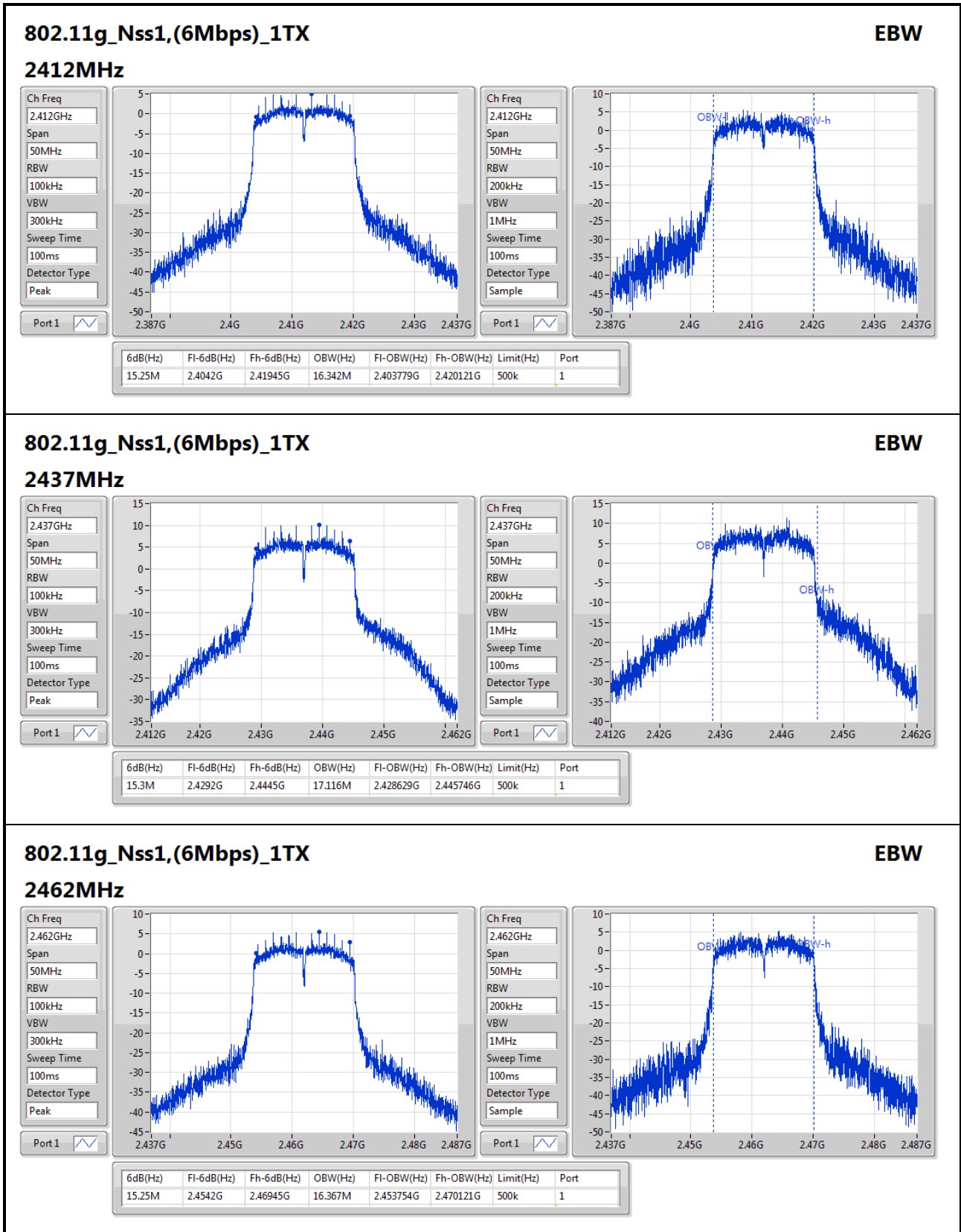
**Max-N dB** = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;  
**Min-N dB** = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

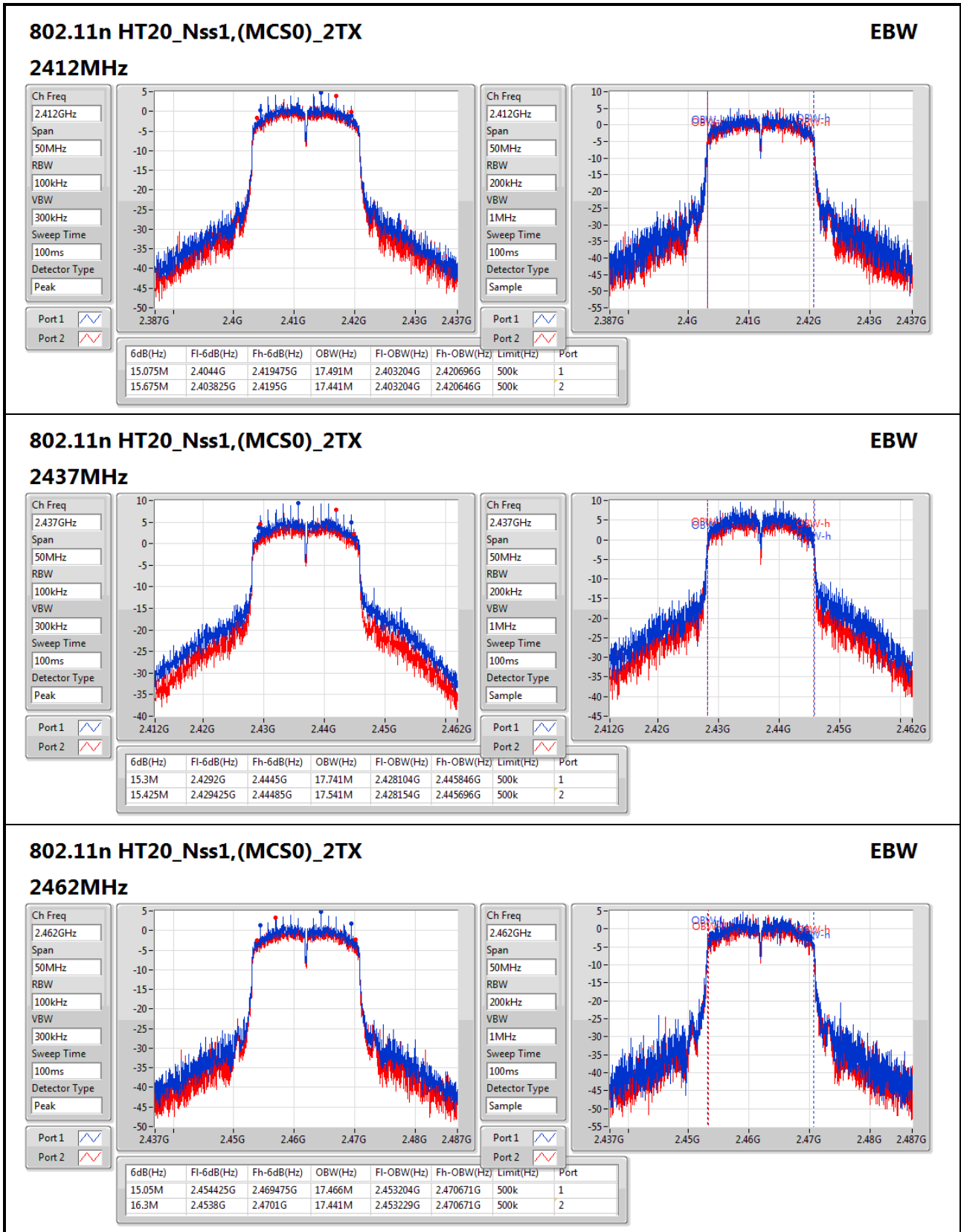
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	8.025M	10.37M		
2437MHz_TnomVnom	Pass	500k	8.025M	12.119M		
2462MHz_TnomVnom	Pass	500k	8.05M	10.32M		
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	15.25M	16.342M		
2437MHz_TnomVnom	Pass	500k	15.3M	17.116M		
2462MHz_TnomVnom	Pass	500k	15.25M	16.367M		
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	15.075M	17.491M	15.675M	17.441M
2437MHz_TnomVnom	Pass	500k	15.3M	17.741M	15.425M	17.541M
2462MHz_TnomVnom	Pass	500k	15.05M	17.466M	16.3M	17.441M

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









**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	19.17	0.08260
802.11g_Nss1,(6Mbps)_1TX	19.70	0.09333
802.11n HT20_Nss1,(MCS0)_2TX	21.26	0.13366

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.66	17.05		17.05	30.00
2437MHz_TnomVnom	Pass	2.66	19.17		19.17	30.00
2462MHz_TnomVnom	Pass	2.66	17.39		17.39	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.66	14.97		14.97	30.00
2437MHz_TnomVnom	Pass	2.66	19.70		19.70	30.00
2462MHz_TnomVnom	Pass	2.66	15.31		15.31	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.66	14.52	13.76	17.17	30.00
2437MHz_TnomVnom	Pass	2.66	18.95	17.41	21.26	30.00
2462MHz_TnomVnom	Pass	2.66	14.24	13.20	16.76	30.00

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



**Summary**

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-3.20
802.11g_Nss1,(6Mbps)_1TX	-4.34
802.11n HT20_Nss1,(MCS0)_2TX	-4.48

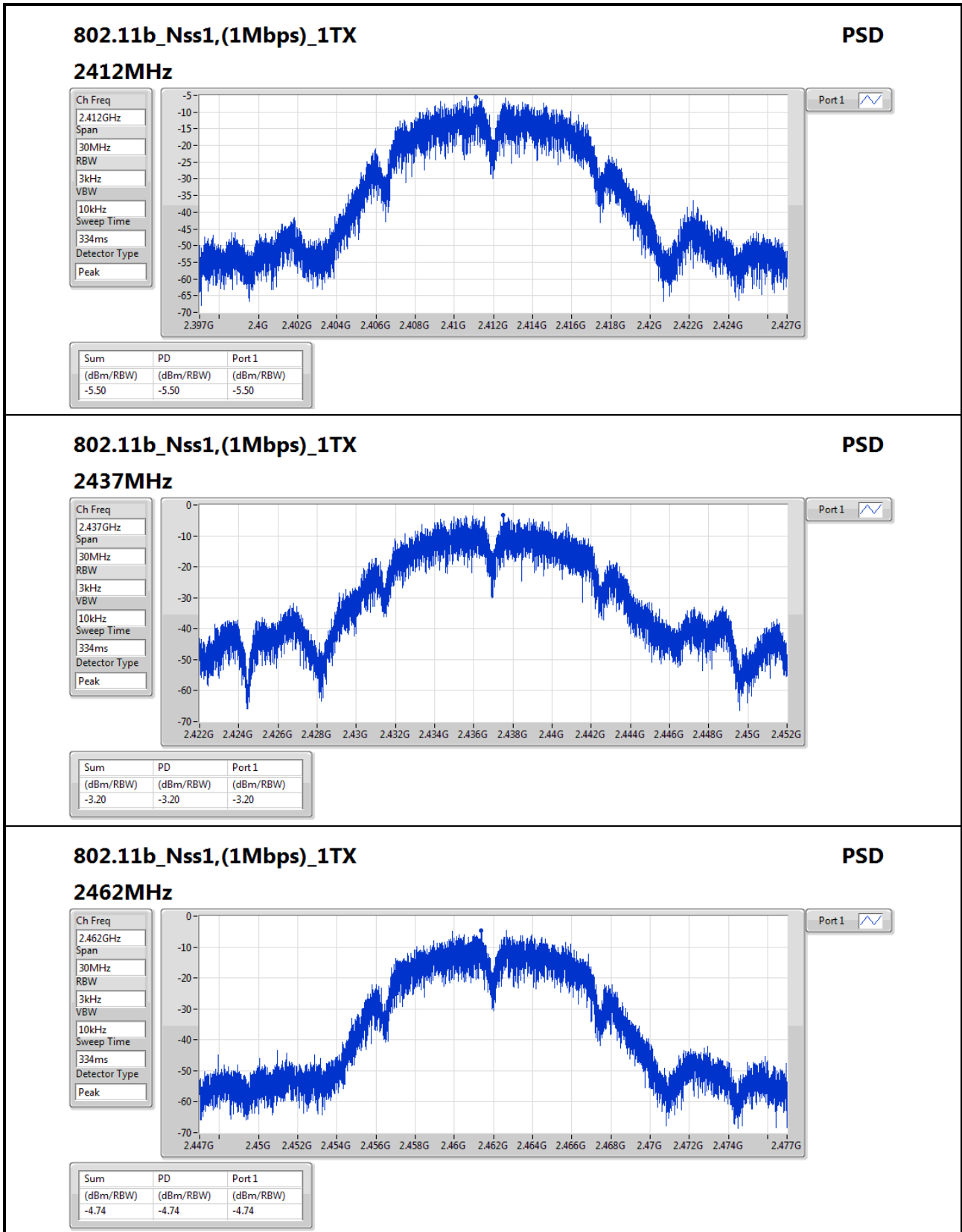
RBW=3kHz.

**Result**

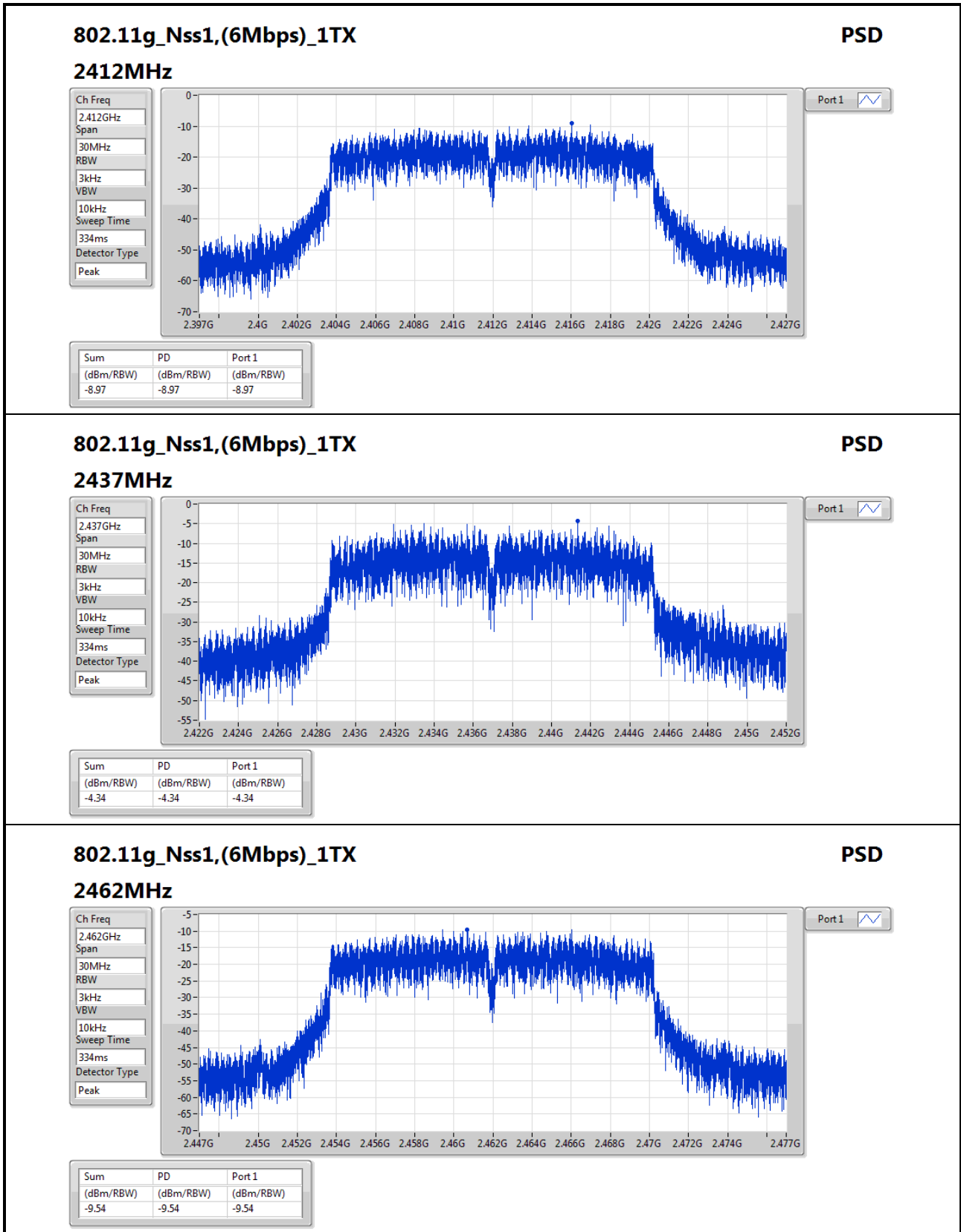
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.66	-5.50		-5.50	8.00
2437MHz_TnomVnom	Pass	2.66	-3.20		-3.20	8.00
2462MHz_TnomVnom	Pass	2.66	-4.74		-4.74	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.66	-8.97		-8.97	8.00
2437MHz_TnomVnom	Pass	2.66	-4.34		-4.34	8.00
2462MHz_TnomVnom	Pass	2.66	-9.54		-9.54	8.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	5.40	-10.32	-11.16	-9.23	8.00
2437MHz_TnomVnom	Pass	5.40	-6.17	-7.07	-4.48	8.00
2462MHz_TnomVnom	Pass	5.40	-9.43	-11.58	-8.80	8.00

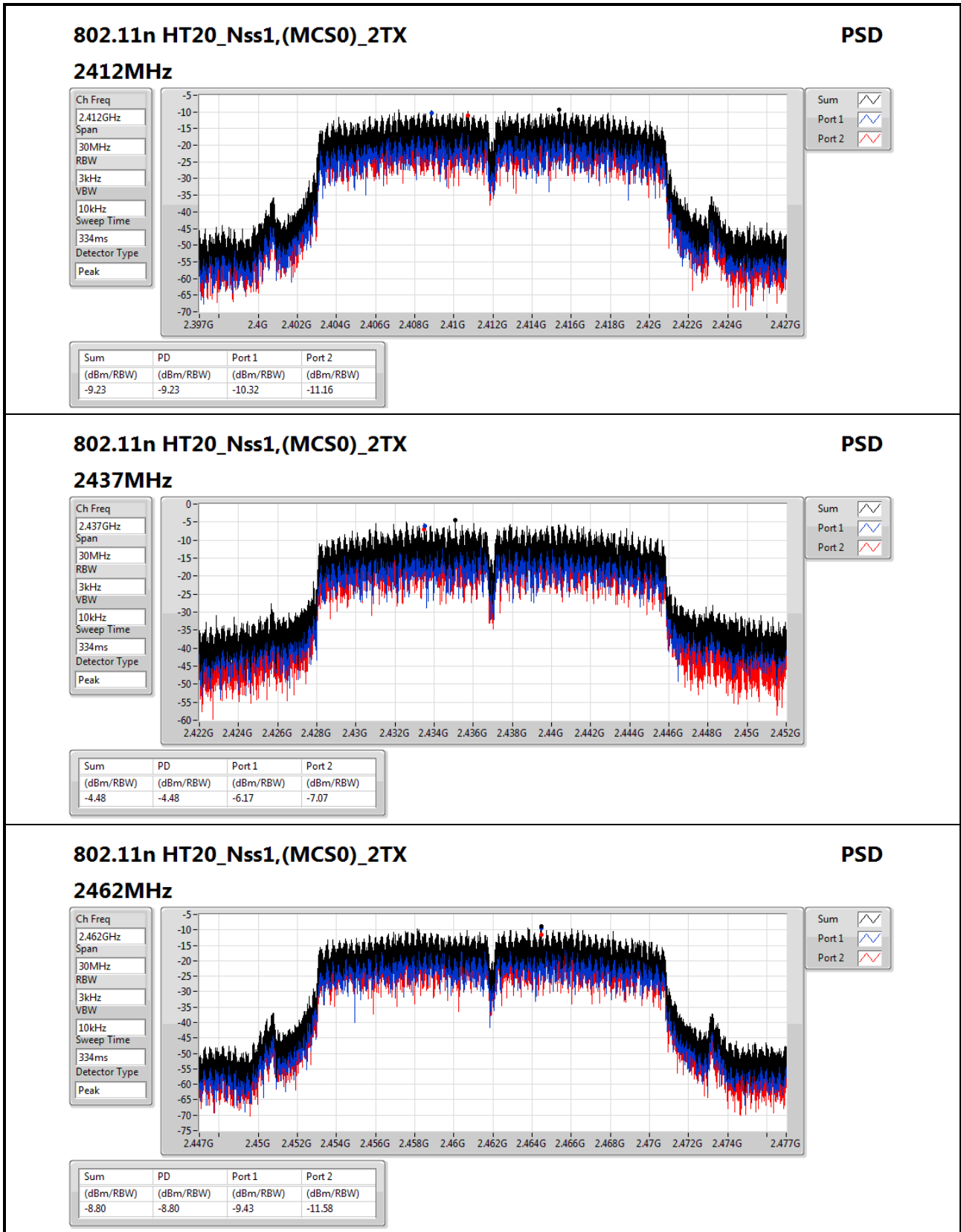
DG = Directional Gain; RBW=3kHz;

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









### 802.11n 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

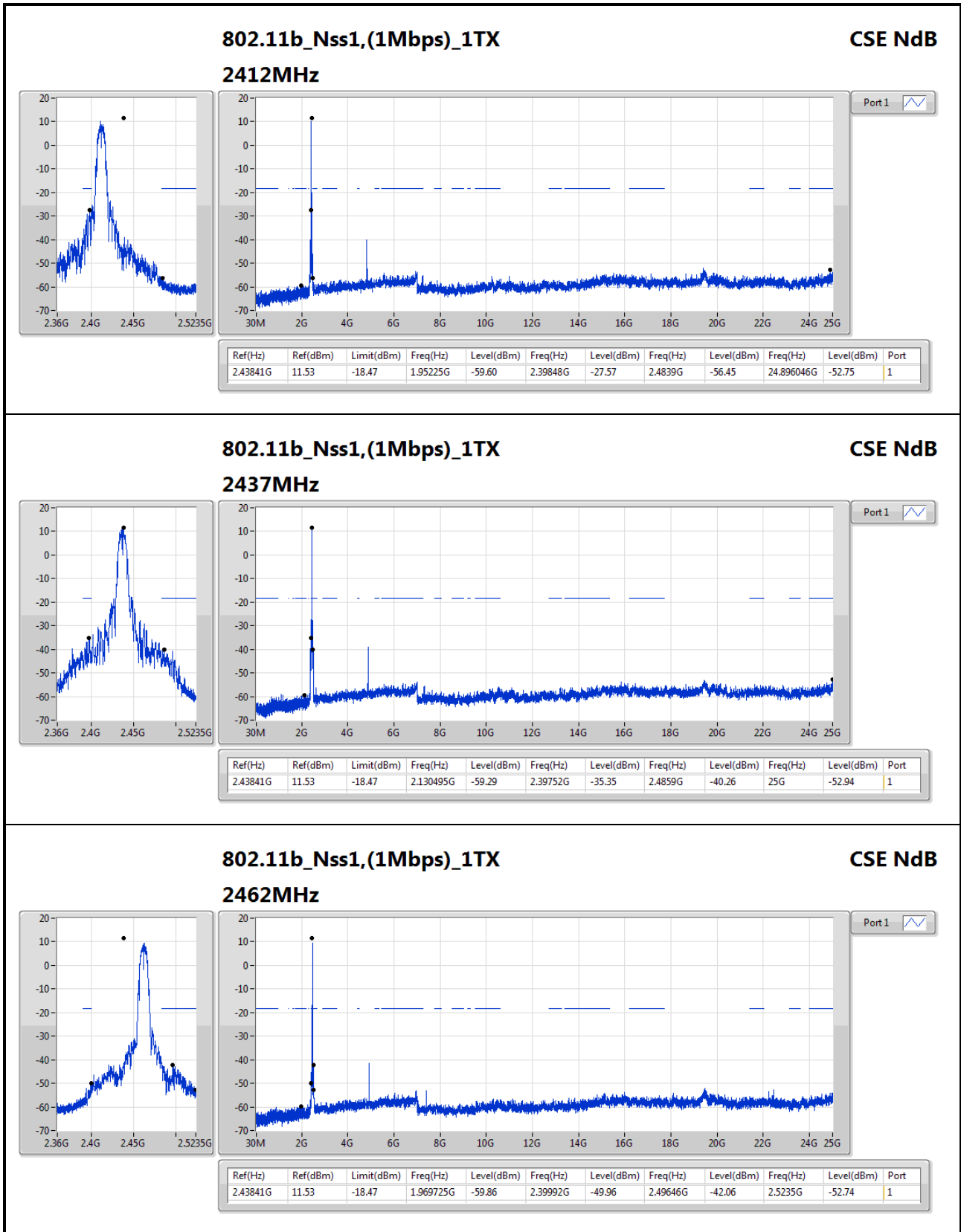


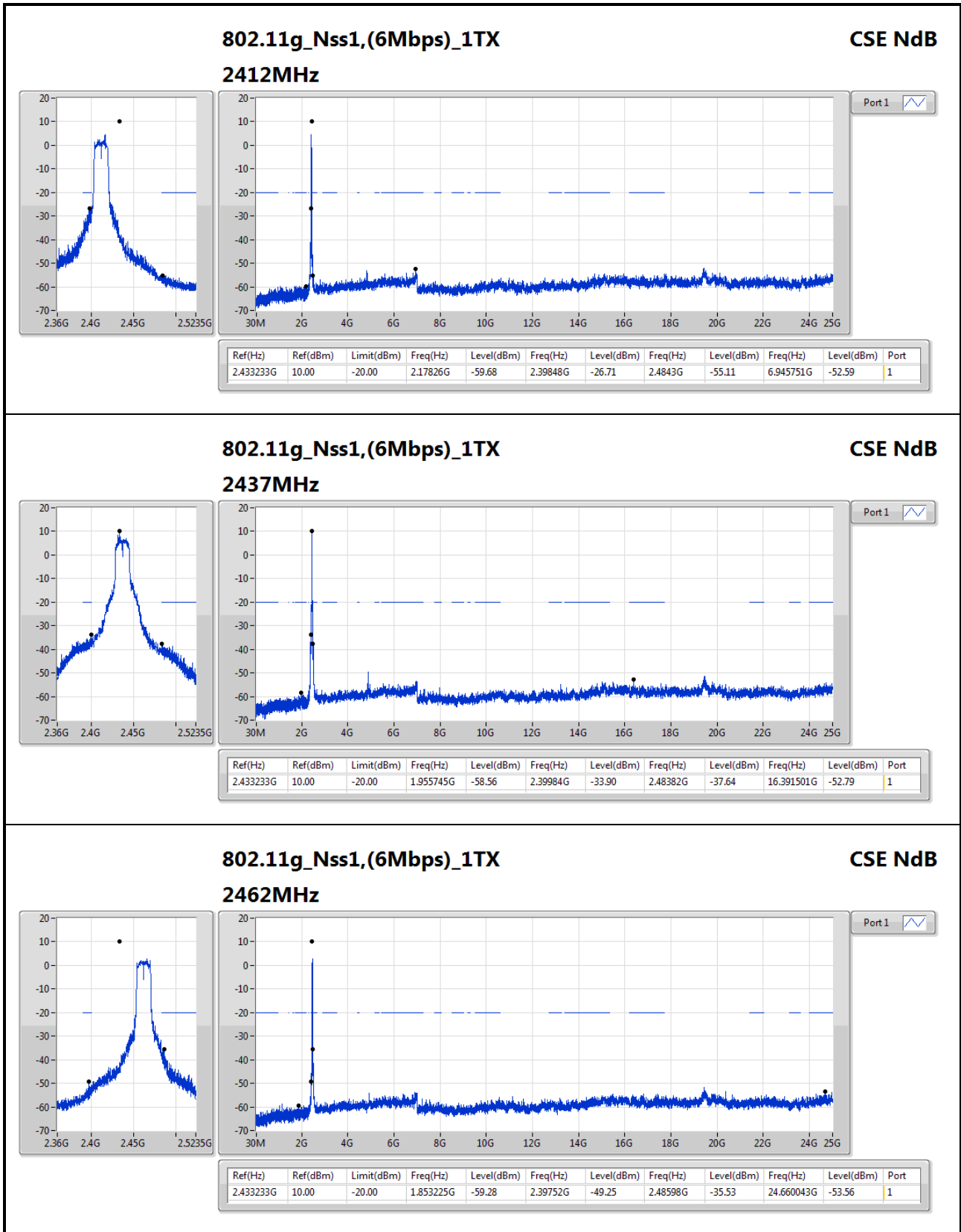
Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.43841G	11.53	-18.47	1.95225G	-59.60	2.39848G	-27.57	2.4839G	-56.45	24.896046G	-52.75	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.433233G	10.00	-20.00	2.17826G	-59.68	2.39848G	-26.71	2.4843G	-55.11	6.945751G	-52.59	1
802.11n HT20_Nss1,(MCS0)_2TX	Pass	2.434402G	8.98	-21.02	2.195735G	-58.83	2.39856G	-25.11	2.48798G	-55.26	24.682519G	-53.29	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.43841G	11.53	-18.47	1.95225G	-59.60	2.39848G	-27.57	2.4839G	-56.45	24.896046G	-52.75	1
2437MHz_TnomVnom	Pass	2.43841G	11.53	-18.47	2.130495G	-59.29	2.39752G	-35.35	2.4859G	-40.26	25G	-52.94	1
2462MHz_TnomVnom	Pass	2.43841G	11.53	-18.47	1.969725G	-59.86	2.39992G	-49.96	2.49646G	-42.06	2.5235G	-52.74	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.433233G	10.00	-20.00	2.17826G	-59.68	2.39848G	-26.71	2.4843G	-55.11	6.945751G	-52.59	1
2437MHz_TnomVnom	Pass	2.433233G	10.00	-20.00	1.955745G	-58.56	2.39984G	-33.90	2.48382G	-37.64	16.391501G	-52.79	1
2462MHz_TnomVnom	Pass	2.433233G	10.00	-20.00	1.853225G	-59.28	2.39752G	-49.25	2.48598G	-35.53	24.660043G	-53.56	1
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.434402G	8.98	-21.02	2.195735G	-58.83	2.39856G	-25.11	2.48798G	-55.26	24.682519G	-53.29	1
2412MHz_TnomVnom	Pass	2.434402G	8.98	-21.02	1.976715G	-59.29	2.39976G	-26.25	2.50006G	-55.47	16.354976G	-53.06	2
2437MHz_TnomVnom	Pass	2.434402G	8.98	-21.02	1.948755G	-59.42	2.39952G	-33.35	2.48414G	-36.89	2.529119G	-52.20	1
2437MHz_TnomVnom	Pass	2.434402G	8.98	-21.02	1.953415G	-59.05	2.39736G	-39.09	2.48662G	-40.54	6.982276G	-53.53	2
2462MHz_TnomVnom	Pass	2.434402G	8.98	-21.02	2.18059G	-58.40	2.3988G	-51.18	2.48414G	-36.35	6.996324G	-53.44	1
2462MHz_TnomVnom	Pass	2.434402G	8.98	-21.02	1.89866G	-58.84	2.39504G	-55.58	2.48438G	-38.87	24.696567G	-52.97	2



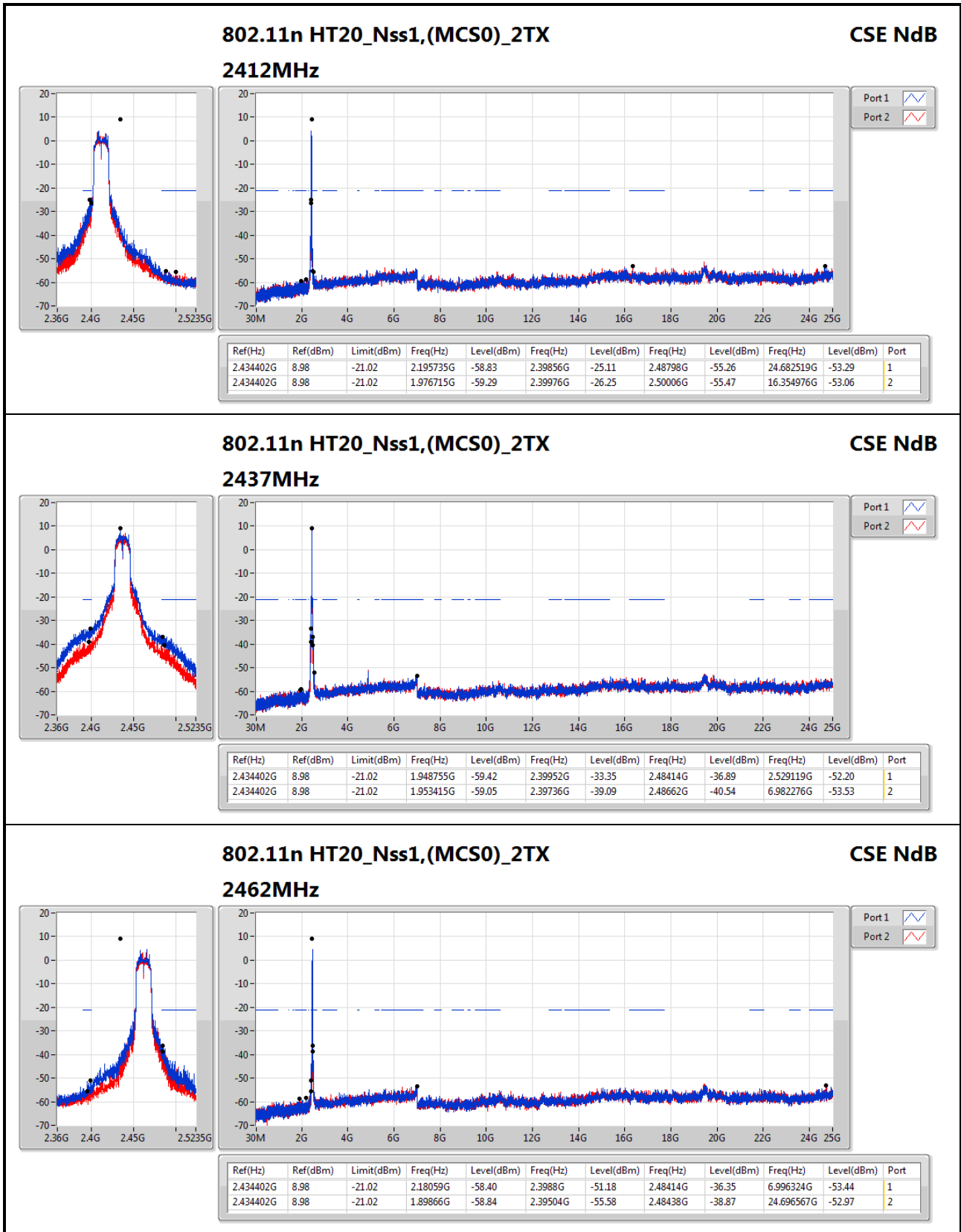


**802.11g\_Nss1,(6Mbps)\_1TX**

**2462MHz**

**CSE NdB**

Port 1





Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11n HT20_Nss1,(MCS0)_2TX	Pass	PK	883.6M	39.62	46.00	-6.38	0.45	3	Vertical	360	1.00	-



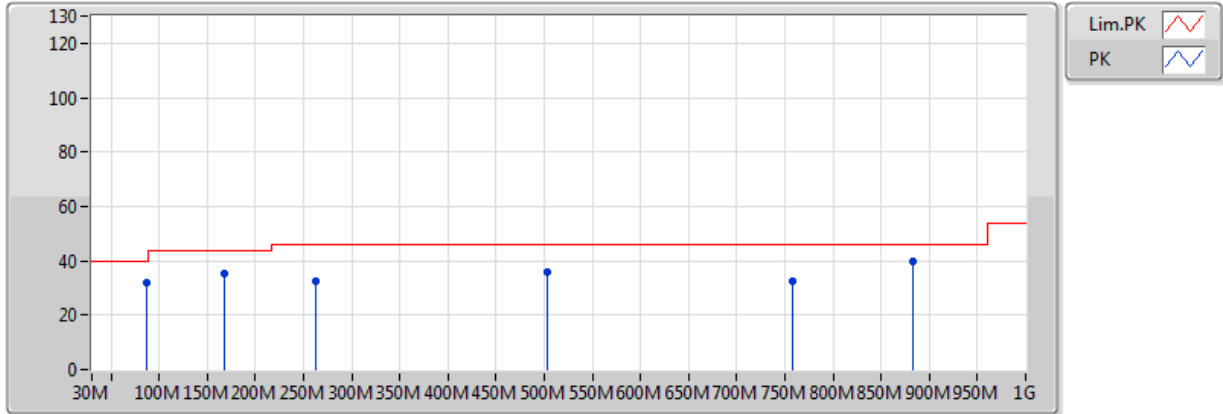
**Result**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	31.94M	26.65	40.00	-13.35	-8.47	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	167.74M	36.57	43.50	-6.93	-15.42	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	262.8M	34.97	46.00	-11.03	-11.17	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	311.3M	38.86	46.00	-7.14	-10.71	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	503.36M	30.99	46.00	-15.01	-6.94	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	654.68M	31.98	46.00	-14.02	-4.43	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	86.26M	31.99	40.00	-8.01	-17.78	3	Vertical	360	1.00	-
2437MHz	Pass	PK	167.74M	35.41	43.50	-8.09	-15.42	3	Vertical	360	1.00	-
2437MHz	Pass	PK	262.8M	32.70	46.00	-13.30	-11.17	3	Vertical	360	1.00	-
2437MHz	Pass	PK	503.36M	35.97	46.00	-10.03	-6.94	3	Vertical	360	1.00	-
2437MHz	Pass	PK	757.5M	32.47	46.00	-13.53	-2.24	3	Vertical	360	1.00	-
2437MHz	Pass	PK	883.6M	39.62	46.00	-6.38	0.45	3	Vertical	360	1.00	-



### 802.11n HT20\_Nss1,(MCS0)\_2TX

### 2437MHz\_adapter

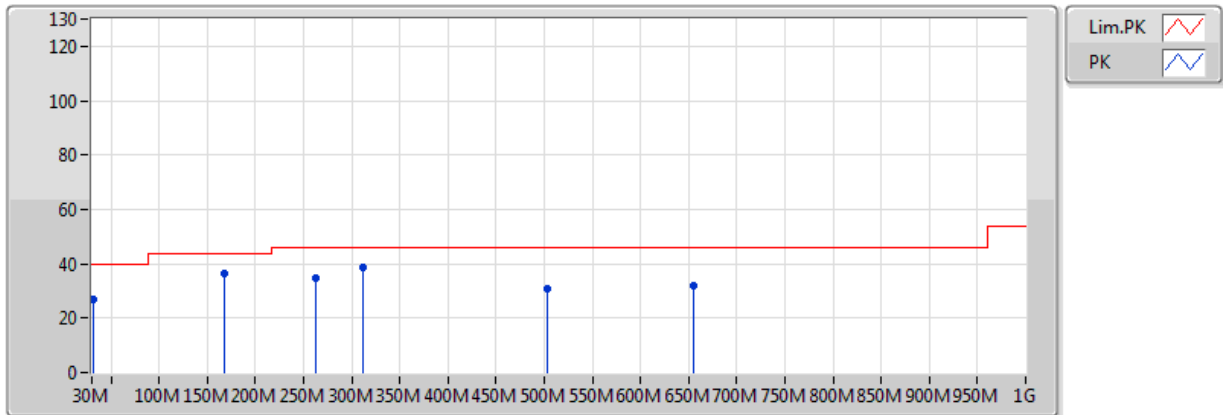


EUT=Y

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	86.26M	31.99	40.00	-8.01	-17.78	3	Vertical	360	1.00	-	49.77	8.61	1.35	27.74
PK	167.74M	35.41	43.50	-8.09	-15.42	3	Vertical	360	1.00	-	50.83	10.20	1.94	27.56
PK	262.8M	32.70	46.00	-13.30	-11.17	3	Vertical	360	1.00	-	43.87	13.83	2.29	27.29
PK	503.36M	35.97	46.00	-10.03	-6.94	3	Vertical	360	1.00	-	42.91	18.15	3.40	28.49
PK	757.5M	32.47	46.00	-13.53	-2.24	3	Vertical	360	1.00	-	34.71	21.76	4.20	28.20
PK	883.6M	39.62	46.00	-6.38	0.45	3	Vertical	360	1.00	-	39.17	23.13	5.05	27.73

### 802.11n HT20\_Nss1,(MCS0)\_2TX

### 2437MHz\_adapter



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	31.94M	26.65	40.00	-13.35	-8.47	3	Horizontal	0	1.00	-	35.12	18.65	0.71	27.83
PK	167.74M	36.57	43.50	-6.93	-15.42	3	Horizontal	0	1.00	-	51.99	10.20	1.94	27.56
PK	262.8M	34.97	46.00	-11.03	-11.17	3	Horizontal	0	1.00	-	46.14	13.83	2.29	27.29
PK	311.3M	38.86	46.00	-7.14	-10.71	3	Horizontal	0	1.00	-	49.57	14.04	2.54	27.29
PK	503.36M	30.99	46.00	-15.01	-6.94	3	Horizontal	0	1.00	-	37.93	18.15	3.40	28.49
PK	654.68M	31.98	46.00	-14.02	-4.43	3	Horizontal	0	1.00	-	36.41	20.25	3.78	28.46



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	AV	2.4854G	53.77	54.00	-0.23	33.10	3	Vertical	310	1.50	-
802.11g_Nss1,(6Mbps)_1TX	Pass	PK	2.3882G	73.70	74.00	-0.30	32.71	3	Vertical	301	1.01	-
802.11n HT20_Nss1,(MCS0)_2TX	Pass	PK	2.3898G	73.69	74.00	-0.31	32.72	3	Vertical	295	1.03	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	49.36	54.00	-4.64	32.72	3	Horizontal	1	1.50	-
2412MHz	Pass	AV	2.4112G	96.57	Inf	-Inf	32.80	3	Horizontal	1	1.50	-
2412MHz	Pass	PK	2.3874G	62.42	74.00	-11.58	32.71	3	Horizontal	1	1.50	-
2412MHz	Pass	PK	2.411G	99.18	Inf	-Inf	32.80	3	Horizontal	1	1.50	-
2412MHz	Pass	AV	2.39G	53.12	54.00	-0.88	32.72	3	Vertical	315	1.50	-
2412MHz	Pass	AV	2.4112G	101.70	Inf	-Inf	32.80	3	Vertical	315	1.50	-
2412MHz	Pass	PK	2.39G	62.94	74.00	-11.06	32.72	3	Vertical	315	1.50	-
2412MHz	Pass	PK	2.411G	104.29	Inf	-Inf	32.80	3	Vertical	315	1.50	-
2412MHz	Pass	AV	4.82387G	38.31	54.00	-15.69	4.15	3	Horizontal	313	2.11	-
2412MHz	Pass	PK	4.82406G	47.23	74.00	-26.77	4.15	3	Horizontal	313	2.11	-
2412MHz	Pass	AV	4.8239G	41.06	54.00	-12.94	4.15	3	Vertical	37	1.73	-
2412MHz	Pass	PK	4.82376G	48.08	74.00	-25.92	4.15	3	Vertical	37	1.73	-
2437MHz	Pass	AV	2.389G	50.13	54.00	-3.87	32.72	3	Horizontal	6	1.46	-
2437MHz	Pass	AV	2.4362G	99.93	Inf	-Inf	32.90	3	Horizontal	6	1.46	-
2437MHz	Pass	AV	2.485G	50.97	54.00	-3.03	33.10	3	Horizontal	6	1.46	-
2437MHz	Pass	PK	2.3882G	61.94	74.00	-12.06	32.71	3	Horizontal	6	1.46	-
2437MHz	Pass	PK	2.4362G	102.66	Inf	-Inf	32.90	3	Horizontal	6	1.46	-
2437MHz	Pass	PK	2.485G	63.37	74.00	-10.63	33.10	3	Horizontal	6	1.46	-
2437MHz	Pass	AV	2.3886G	53.12	54.00	-0.88	32.72	3	Vertical	310	1.50	-
2437MHz	Pass	AV	2.4362G	104.33	Inf	-Inf	32.90	3	Vertical	310	1.50	-
2437MHz	Pass	AV	2.4854G	53.77	54.00	-0.23	33.10	3	Vertical	310	1.50	-
2437MHz	Pass	PK	2.3842G	62.84	74.00	-11.16	32.70	3	Vertical	310	1.50	-
2437MHz	Pass	PK	2.4362G	106.53	Inf	-Inf	32.90	3	Vertical	310	1.50	-
2437MHz	Pass	PK	2.4862G	63.46	74.00	-10.54	33.10	3	Vertical	310	1.50	-
2437MHz	Pass	AV	4.87394G	46.48	54.00	-7.52	4.27	3	Horizontal	40	1.28	-
2437MHz	Pass	PK	4.87391G	51.96	74.00	-22.04	4.27	3	Horizontal	40	1.28	-
2437MHz	Pass	AV	4.87395G	44.84	54.00	-9.16	4.27	3	Vertical	138	1.74	-
2437MHz	Pass	PK	4.87383G	51.01	74.00	-22.99	4.27	3	Vertical	138	1.74	-
2462MHz	Pass	AV	2.4612G	98.52	Inf	-Inf	33.00	3	Horizontal	155	1.01	-
2462MHz	Pass	AV	2.483502G	49.74	54.00	-4.26	33.09	3	Horizontal	155	1.01	-
2462MHz	Pass	PK	2.4612G	101.16	Inf	-Inf	33.00	3	Horizontal	155	1.01	-
2462MHz	Pass	PK	2.4964G	62.28	74.00	-11.72	33.15	3	Horizontal	155	1.01	-
2462MHz	Pass	AV	2.4612G	103.32	Inf	-Inf	33.00	3	Vertical	296	1.09	-
2462MHz	Pass	AV	2.483502G	53.27	54.00	-0.73	33.09	3	Vertical	296	1.09	-
2462MHz	Pass	PK	2.4612G	105.95	Inf	-Inf	33.00	3	Vertical	296	1.09	-
2462MHz	Pass	PK	2.4836G	63.82	74.00	-10.18	33.09	3	Vertical	296	1.09	-
2462MHz	Pass	AV	4.92392G	43.56	54.00	-10.44	4.40	3	Horizontal	138	2.47	-
2462MHz	Pass	PK	4.92398G	50.13	74.00	-23.87	4.40	3	Horizontal	138	2.47	-
2462MHz	Pass	AV	4.92392G	46.04	54.00	-7.96	4.40	3	Vertical	62	1.92	-
2462MHz	Pass	PK	4.92414G	51.43	74.00	-22.57	4.40	3	Vertical	62	1.92	-
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3898G	48.81	54.00	-5.19	32.72	3	Horizontal	1	1.50	-
2412MHz	Pass	AV	2.4088G	89.44	Inf	-Inf	32.80	3	Horizontal	1	1.50	-
2412MHz	Pass	PK	2.39G	68.06	74.00	-5.94	32.72	3	Horizontal	1	1.50	-
2412MHz	Pass	PK	2.4068G	101.01	Inf	-Inf	32.79	3	Horizontal	1	1.50	-
2412MHz	Pass	AV	2.3896G	52.05	54.00	-1.95	32.72	3	Vertical	301	1.01	-
2412MHz	Pass	AV	2.409G	95.08	Inf	-Inf	32.80	3	Vertical	301	1.01	-



RSE TX above 1GHz Result

Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2412MHz	Pass	PK	2.3882G	73.70	74.00	-0.30	32.71	3	Vertical	301	1.01	-
2412MHz	Pass	PK	2.4166G	106.78	Inf	-Inf	32.83	3	Vertical	301	1.01	-
2412MHz	Pass	AV	4.80966G	33.79	54.00	-20.21	4.11	3	Horizontal	194	1.65	-
2412MHz	Pass	PK	4.81056G	45.74	74.00	-28.26	4.12	3	Horizontal	194	1.65	-
2412MHz	Pass	AV	4.81146G	33.92	54.00	-20.08	4.12	3	Vertical	281	1.66	-
2412MHz	Pass	PK	4.81812G	46.42	74.00	-27.58	4.14	3	Vertical	281	1.66	-
2437MHz	Pass	AV	2.389998G	51.41	54.00	-2.59	32.72	3	Horizontal	1	1.47	-
2437MHz	Pass	AV	2.4342G	95.68	Inf	-Inf	32.90	3	Horizontal	1	1.47	-
2437MHz	Pass	AV	2.483502G	50.76	54.00	-3.24	33.09	3	Horizontal	1	1.47	-
2437MHz	Pass	PK	2.3874G	64.72	74.00	-9.28	32.71	3	Horizontal	1	1.47	-
2437MHz	Pass	PK	2.4358G	105.57	Inf	-Inf	32.90	3	Horizontal	1	1.47	-
2437MHz	Pass	PK	2.4842G	64.93	74.00	-9.07	33.10	3	Horizontal	1	1.47	-
2437MHz	Pass	AV	2.389998G	53.28	54.00	-0.72	32.72	3	Vertical	311	1.29	-
2437MHz	Pass	AV	2.4398G	98.73	Inf	-Inf	32.92	3	Vertical	311	1.29	-
2437MHz	Pass	AV	2.4838G	52.16	54.00	-1.84	33.10	3	Vertical	311	1.29	-
2437MHz	Pass	PK	2.381G	68.78	74.00	-5.22	32.69	3	Vertical	311	1.29	-
2437MHz	Pass	PK	2.4402G	110.26	Inf	-Inf	32.92	3	Vertical	311	1.29	-
2437MHz	Pass	PK	2.483502G	68.44	74.00	-5.56	33.09	3	Vertical	311	1.29	-
2437MHz	Pass	AV	4.88204G	34.73	54.00	-19.27	4.30	3	Horizontal	29	2.27	-
2437MHz	Pass	PK	4.87388G	47.07	74.00	-26.93	4.27	3	Horizontal	29	2.27	-
2437MHz	Pass	AV	4.87412G	35.42	54.00	-18.58	4.28	3	Vertical	1	1.10	-
2437MHz	Pass	PK	4.874G	47.75	74.00	-26.25	4.27	3	Vertical	1	1.10	-
2462MHz	Pass	AV	2.4586G	90.33	Inf	-Inf	32.99	3	Horizontal	156	1.01	-
2462MHz	Pass	AV	2.4836G	49.68	54.00	-4.32	33.09	3	Horizontal	156	1.01	-
2462MHz	Pass	PK	2.4596G	102.48	Inf	-Inf	33.00	3	Horizontal	156	1.01	-
2462MHz	Pass	PK	2.484G	69.25	74.00	-4.75	33.10	3	Horizontal	156	1.01	-
2462MHz	Pass	AV	2.4588G	95.40	Inf	-Inf	33.00	3	Vertical	297	1.10	-
2462MHz	Pass	AV	2.4836G	52.57	54.00	-1.43	33.09	3	Vertical	297	1.10	-
2462MHz	Pass	PK	2.4596G	107.31	Inf	-Inf	33.00	3	Vertical	297	1.10	-
2462MHz	Pass	PK	2.4846G	73.51	74.00	-0.49	33.10	3	Vertical	297	1.10	-
2462MHz	Pass	AV	4.93018G	34.84	54.00	-19.16	4.42	3	Horizontal	40	2.32	-
2462MHz	Pass	PK	4.91866G	47.39	74.00	-26.61	4.39	3	Horizontal	40	2.32	-
2462MHz	Pass	AV	4.93072G	35.24	54.00	-18.76	4.42	3	Vertical	171	2.28	-
2462MHz	Pass	PK	4.92772G	47.87	74.00	-26.13	4.41	3	Vertical	171	2.28	-
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	50.99	54.00	-3.01	32.72	3	Horizontal	159	1.00	-
2412MHz	Pass	AV	2.4154G	94.00	Inf	-Inf	32.82	3	Horizontal	159	1.00	-
2412MHz	Pass	PK	2.39G	73.09	74.00	-0.91	32.72	3	Horizontal	159	1.00	-
2412MHz	Pass	PK	2.4154G	105.95	Inf	-Inf	32.82	3	Horizontal	159	1.00	-
2412MHz	Pass	AV	2.39G	52.14	54.00	-1.86	32.72	3	Vertical	295	1.03	-
2412MHz	Pass	AV	2.4152G	95.28	Inf	-Inf	32.82	3	Vertical	295	1.03	-
2412MHz	Pass	PK	2.3898G	73.69	74.00	-0.31	32.72	3	Vertical	295	1.03	-
2412MHz	Pass	PK	2.415G	107.04	Inf	-Inf	32.82	3	Vertical	295	1.03	-
2412MHz	Pass	AV	4.80972G	33.79	54.00	-20.21	4.11	3	Horizontal	175	2.36	-
2412MHz	Pass	PK	4.81902G	46.55	74.00	-27.45	4.14	3	Horizontal	175	2.36	-
2412MHz	Pass	AV	4.82226G	33.79	54.00	-20.21	4.15	3	Vertical	42	1.13	-
2412MHz	Pass	PK	4.81752G	47.14	74.00	-26.86	4.13	3	Vertical	42	1.13	-
2437MHz	Pass	AV	2.3886G	51.95	54.00	-2.05	32.72	3	Horizontal	158	1.12	-
2437MHz	Pass	AV	2.4402G	98.45	Inf	-Inf	32.92	3	Horizontal	158	1.12	-



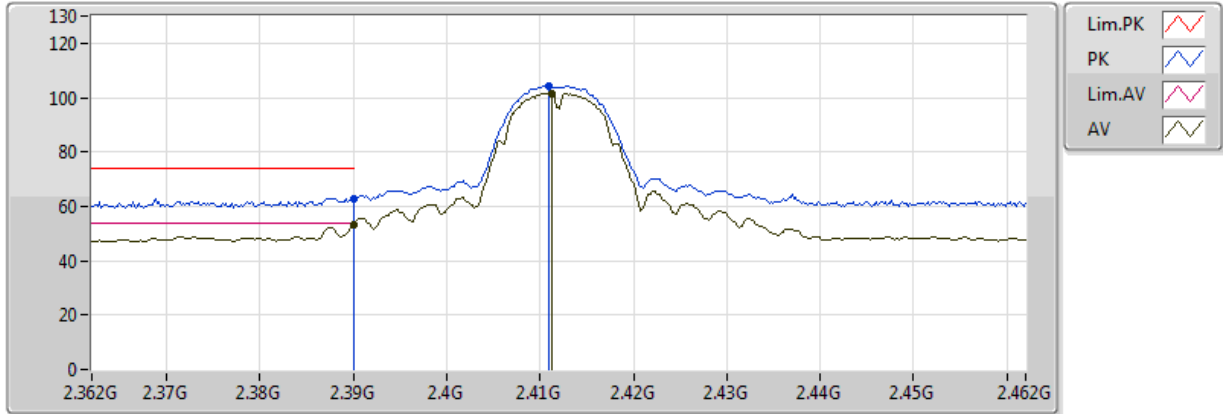
**RSE TX above 1GHz Result**

**Appendix F.2**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	2.483502G	51.24	54.00	-2.76	33.09	3	Horizontal	158	1.12	-
2437MHz	Pass	PK	2.3854G	67.45	74.00	-6.55	32.70	3	Horizontal	158	1.12	-
2437MHz	Pass	PK	2.4402G	110.63	Inf	-Inf	32.92	3	Horizontal	158	1.12	-
2437MHz	Pass	PK	2.4938G	66.11	74.00	-7.89	33.14	3	Horizontal	158	1.12	-
2437MHz	Pass	AV	2.389G	53.50	54.00	-0.50	32.72	3	Vertical	309	1.32	-
2437MHz	Pass	AV	2.4402G	99.59	Inf	-Inf	32.92	3	Vertical	309	1.32	-
2437MHz	Pass	AV	2.483502G	52.36	54.00	-1.64	33.09	3	Vertical	309	1.32	-
2437MHz	Pass	PK	2.3858G	68.71	74.00	-5.29	32.70	3	Vertical	309	1.32	-
2437MHz	Pass	PK	2.4354G	110.69	Inf	-Inf	32.90	3	Vertical	309	1.32	-
2437MHz	Pass	PK	2.483502G	68.31	74.00	-5.69	33.09	3	Vertical	309	1.32	-
2437MHz	Pass	AV	4.874G	35.52	54.00	-18.48	4.27	3	Horizontal	89	2.11	-
2437MHz	Pass	PK	4.88192G	47.13	74.00	-26.87	4.29	3	Horizontal	89	2.11	-
2437MHz	Pass	AV	4.87532G	38.58	54.00	-15.42	4.28	3	Vertical	354	1.74	-
2437MHz	Pass	PK	4.87772G	50.63	74.00	-23.37	4.28	3	Vertical	354	1.74	-
2462MHz	Pass	AV	2.4578G	95.21	Inf	-Inf	32.99	3	Horizontal	161	1.00	-
2462MHz	Pass	AV	2.483502G	51.07	54.00	-2.93	33.09	3	Horizontal	161	1.00	-
2462MHz	Pass	PK	2.4582G	107.34	Inf	-Inf	32.99	3	Horizontal	161	1.00	-
2462MHz	Pass	PK	2.485G	73.31	74.00	-0.69	33.10	3	Horizontal	161	1.00	-
2462MHz	Pass	AV	2.4578G	95.64	Inf	-Inf	32.99	3	Vertical	305	1.65	-
2462MHz	Pass	AV	2.483502G	51.68	54.00	-2.32	33.09	3	Vertical	305	1.65	-
2462MHz	Pass	PK	2.4582G	106.63	Inf	-Inf	32.99	3	Vertical	305	1.65	-
2462MHz	Pass	PK	2.483502G	73.60	74.00	-0.40	33.09	3	Vertical	305	1.65	-
2462MHz	Pass	AV	4.9237G	35.41	54.00	-18.59	4.40	3	Horizontal	234	2.00	-
2462MHz	Pass	PK	4.92898G	47.58	74.00	-26.42	4.41	3	Horizontal	234	2.00	-
2462MHz	Pass	AV	4.92304G	36.32	54.00	-17.68	4.40	3	Vertical	161	1.15	-
2462MHz	Pass	PK	4.92616G	48.26	74.00	-25.74	4.41	3	Vertical	161	1.15	-

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2412MHz\_TX

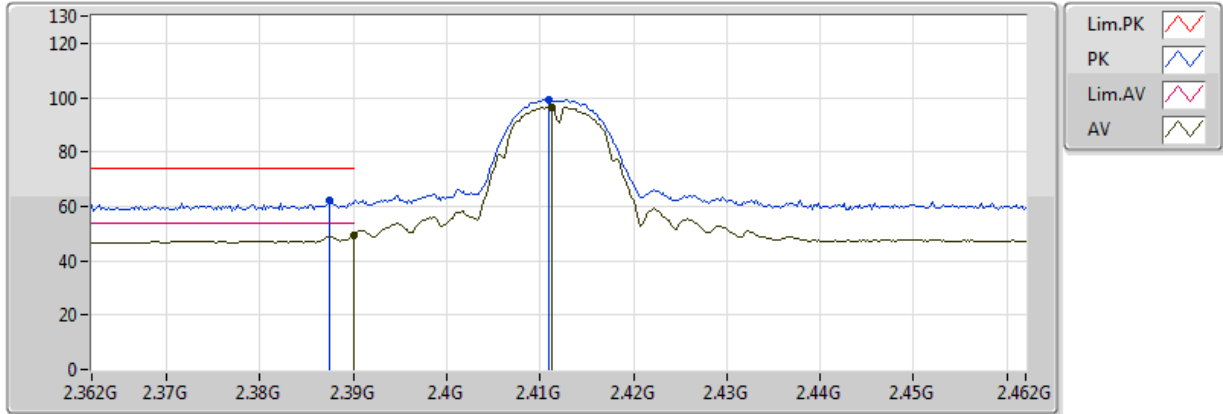


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Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	53.12	54.00	-0.88	32.72	3	Vertical	315	1.50	-	20.40	26.99	5.73	-
AV	2.4112G	101.70	Inf	-Inf	32.80	3	Vertical	315	1.50	-	68.90	27.05	5.75	-
PK	2.39G	62.94	74.00	-11.06	32.72	3	Vertical	315	1.50	-	30.22	26.99	5.73	-
PK	2.411G	104.29	Inf	-Inf	32.80	3	Vertical	315	1.50	-	71.48	27.05	5.75	-

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2412MHz\_TX



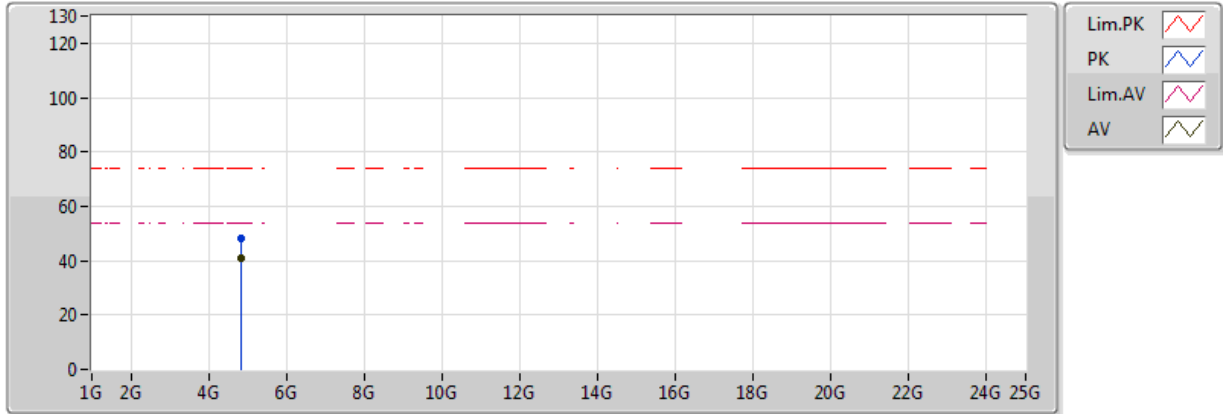
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Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	49.36	54.00	-4.64	32.72	3	Horizontal	1	1.50	-	16.64	26.99	5.73	-
AV	2.4112G	96.57	Inf	-Inf	32.80	3	Horizontal	1	1.50	-	63.77	27.05	5.75	-
PK	2.3874G	62.42	74.00	-11.58	32.71	3	Horizontal	1	1.50	-	29.70	26.98	5.73	-
PK	2.411G	99.18	Inf	-Inf	32.80	3	Horizontal	1	1.50	-	66.38	27.05	5.75	-



### 802.11b\_Nss1,(1Mbps)\_1TX

### 2412MHz\_TX

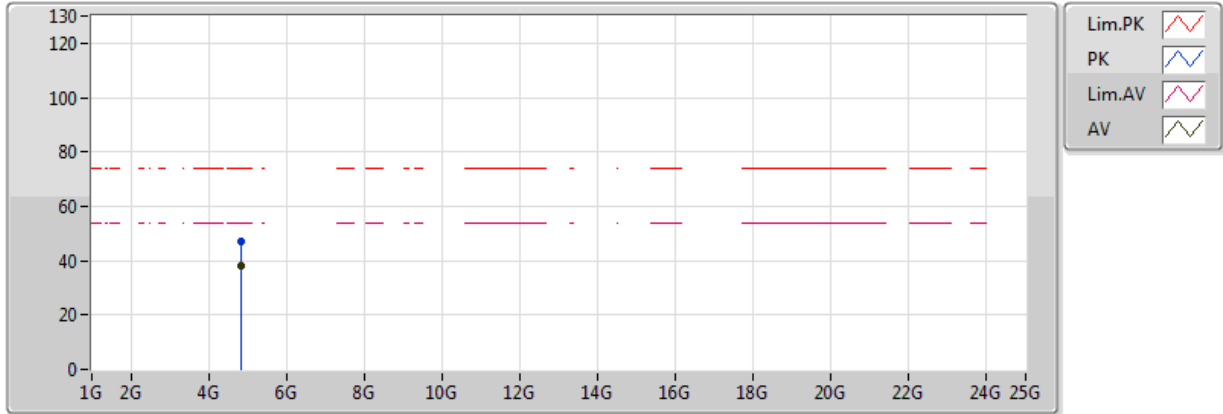


EUT=Y

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	4.8239G	41.06	54.00	-12.94	4.15	3	Vertical	37	1.73	-	36.91	31.22	8.11	35.18
PK	4.82376G	48.08	74.00	-25.92	4.15	3	Vertical	37	1.73	-	43.93	31.22	8.11	35.18

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2412MHz\_TX

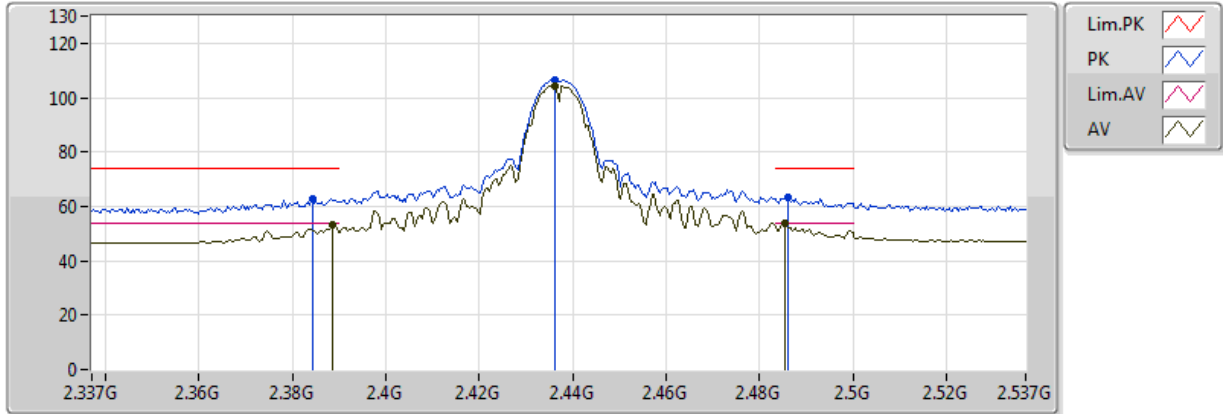


EUT=Y

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	4.82387G	38.31	54.00	-15.69	4.15	3	Horizontal	313	2.11	-	34.16	31.22	8.11	35.18
PK	4.82406G	47.23	74.00	-26.77	4.15	3	Horizontal	313	2.11	-	43.08	31.22	8.11	35.18

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2437MHz\_TX

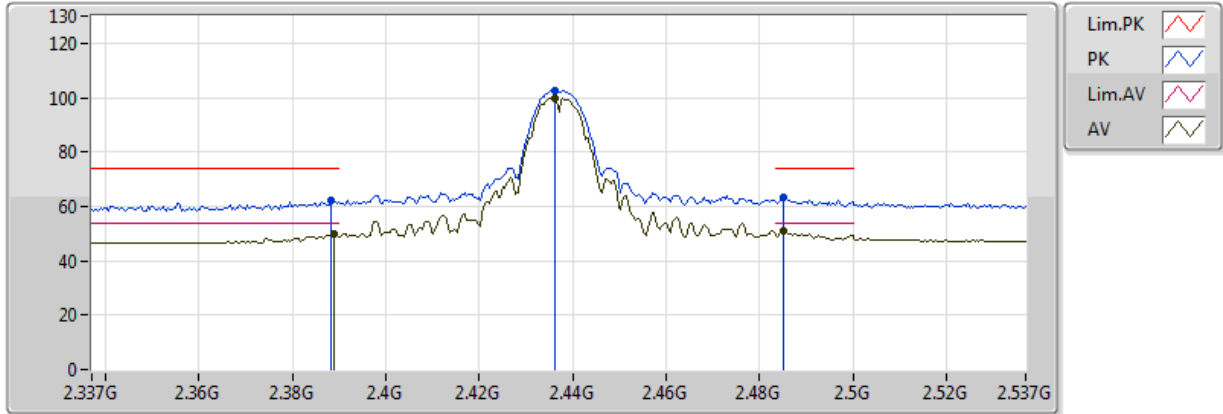


EUT=Y

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	2.3886G	53.12	54.00	-0.88	32.72	3	Vertical	310	1.50	-	20.40	26.99	5.73	-
AV	2.4362G	104.33	Inf	-Inf	32.90	3	Vertical	310	1.50	-	71.43	27.12	5.78	-
AV	2.4854G	53.77	54.00	-0.23	33.10	3	Vertical	310	1.50	-	20.67	27.26	5.84	-
PK	2.3842G	62.84	74.00	-11.16	32.70	3	Vertical	310	1.50	-	30.15	26.98	5.72	-
PK	2.4362G	106.53	Inf	-Inf	32.90	3	Vertical	310	1.50	-	73.62	27.12	5.78	-
PK	2.4862G	63.46	74.00	-10.54	33.10	3	Vertical	310	1.50	-	30.35	27.26	5.84	-

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2437MHz\_TX

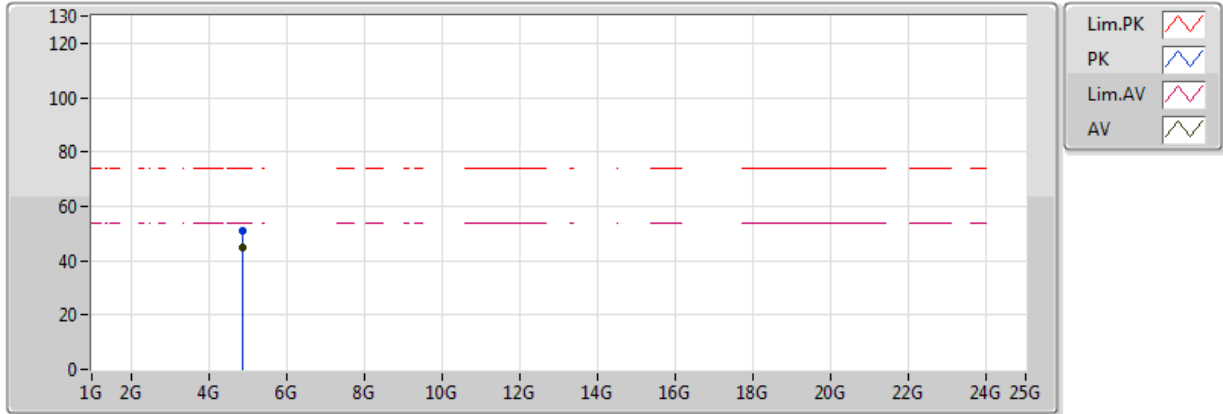


EUT=Y

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	2.389G	50.13	54.00	-3.87	32.72	3	Horizontal	6	1.46	-	17.41	26.99	5.73	-
AV	2.4362G	99.93	Inf	-Inf	32.90	3	Horizontal	6	1.46	-	67.02	27.12	5.78	-
AV	2.485G	50.97	54.00	-3.03	33.10	3	Horizontal	6	1.46	-	17.87	27.26	5.84	-
PK	2.3882G	61.94	74.00	-12.06	32.71	3	Horizontal	6	1.46	-	29.22	26.99	5.73	-
PK	2.4362G	102.66	Inf	-Inf	32.90	3	Horizontal	6	1.46	-	69.76	27.12	5.78	-
PK	2.485G	63.37	74.00	-10.63	33.10	3	Horizontal	6	1.46	-	30.27	27.26	5.84	-

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2437MHz\_TX

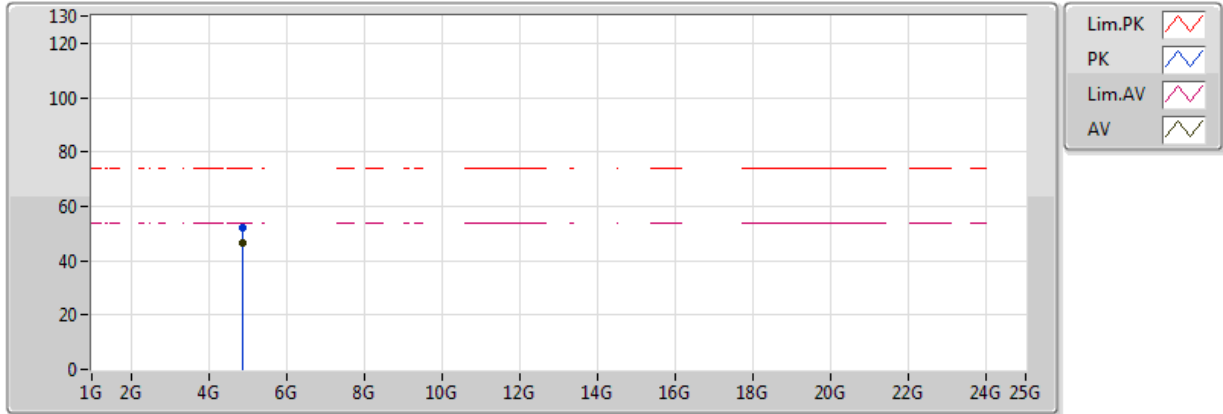


EUT=Y

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	4.87395G	44.84	54.00	-9.16	4.27	3	Vertical	138	1.74	-	40.56	31.30	8.17	35.19
PK	4.87383G	51.01	74.00	-22.99	4.27	3	Vertical	138	1.74	-	46.73	31.30	8.17	35.19

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2437MHz\_TX

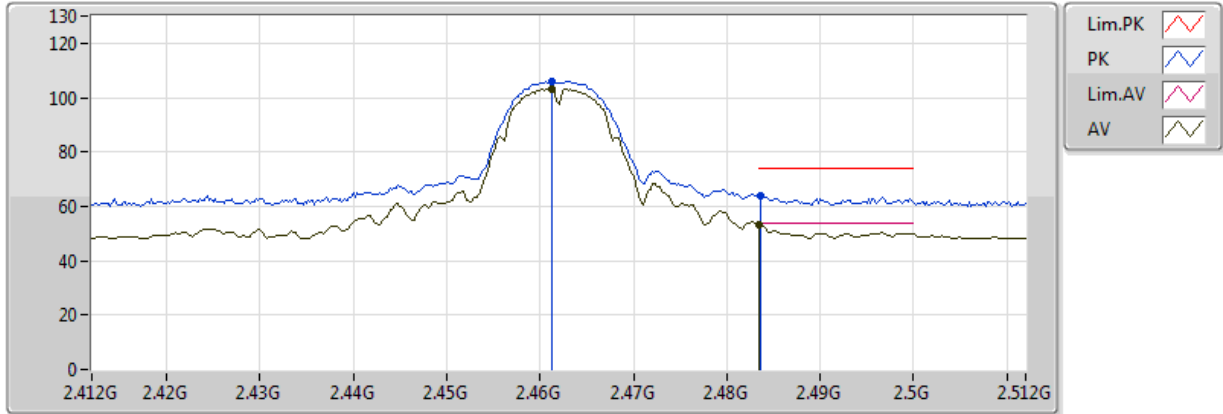


EUT=Y

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	4.87394G	46.48	54.00	-7.52	4.27	3	Horizontal	40	1.28	-	42.21	31.30	8.17	35.19
PK	4.87391G	51.96	74.00	-22.04	4.27	3	Horizontal	40	1.28	-	47.69	31.30	8.17	35.19

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2462MHz\_TX

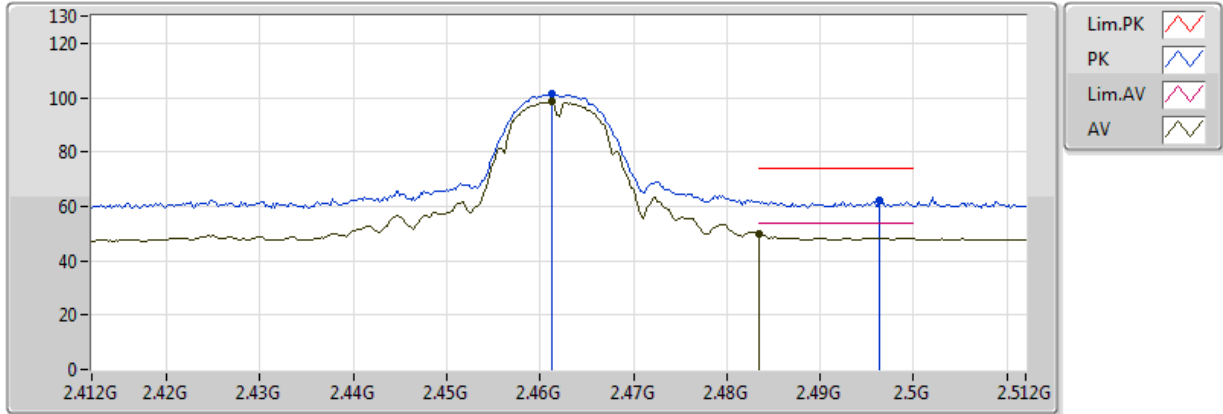


EUT=Y

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	103.32	Inf	-Inf	33.00	3	Vertical	296	1.09	-	70.32	27.19	5.81	-
AV	2.483502G	53.27	54.00	-0.73	33.09	3	Vertical	296	1.09	-	20.18	27.25	5.84	-
PK	2.4612G	105.95	Inf	-Inf	33.00	3	Vertical	296	1.09	-	72.95	27.19	5.81	-
PK	2.4836G	63.82	74.00	-10.18	33.09	3	Vertical	296	1.09	-	30.72	27.25	5.84	-

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2462MHz\_TX



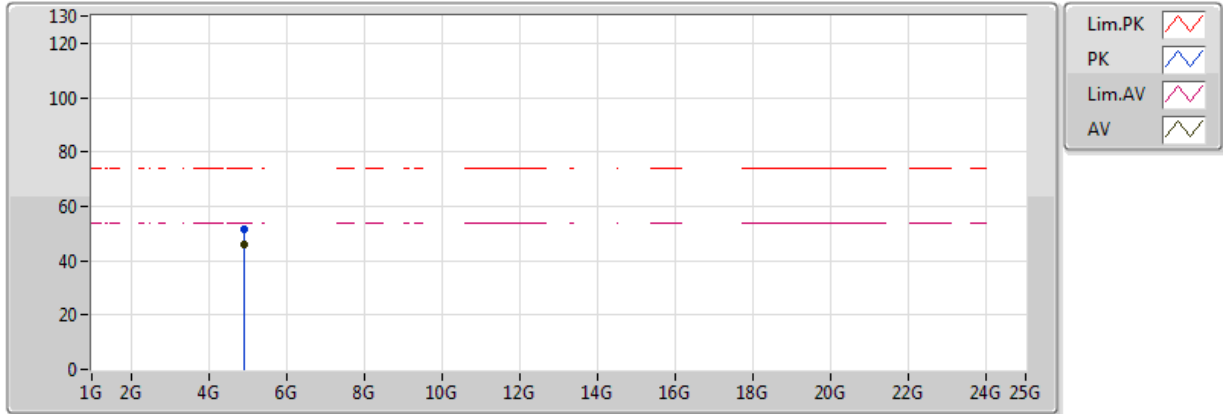
EUT=Y

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	98.52	Inf	-Inf	33.00	3	Horizontal	155	1.01	-	65.51	27.19	5.81	-
AV	2.483502G	49.74	54.00	-4.26	33.09	3	Horizontal	155	1.01	-	16.64	27.25	5.84	-
PK	2.4612G	101.16	Inf	-Inf	33.00	3	Horizontal	155	1.01	-	68.16	27.19	5.81	-
PK	2.4964G	62.28	74.00	-11.72	33.15	3	Horizontal	155	1.01	-	29.14	27.29	5.86	-



### 802.11b\_Nss1,(1Mbps)\_1TX

### 2462MHz\_TX

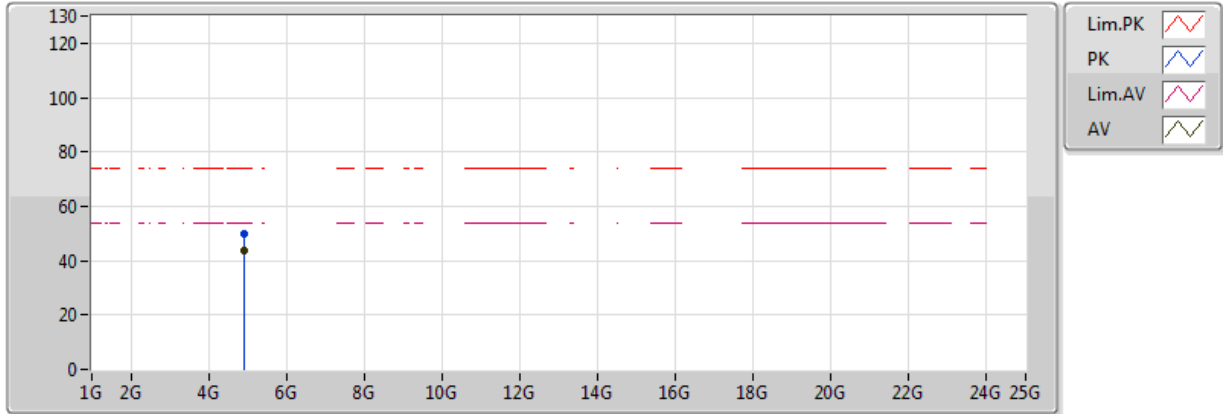


EUT=Y

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	4.92392G	46.04	54.00	-7.96	4.40	3	Vertical	62	1.92	-	41.64	31.38	8.23	35.20
PK	4.92414G	51.43	74.00	-22.57	4.40	3	Vertical	62	1.92	-	47.03	31.38	8.23	35.20

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2462MHz\_TX

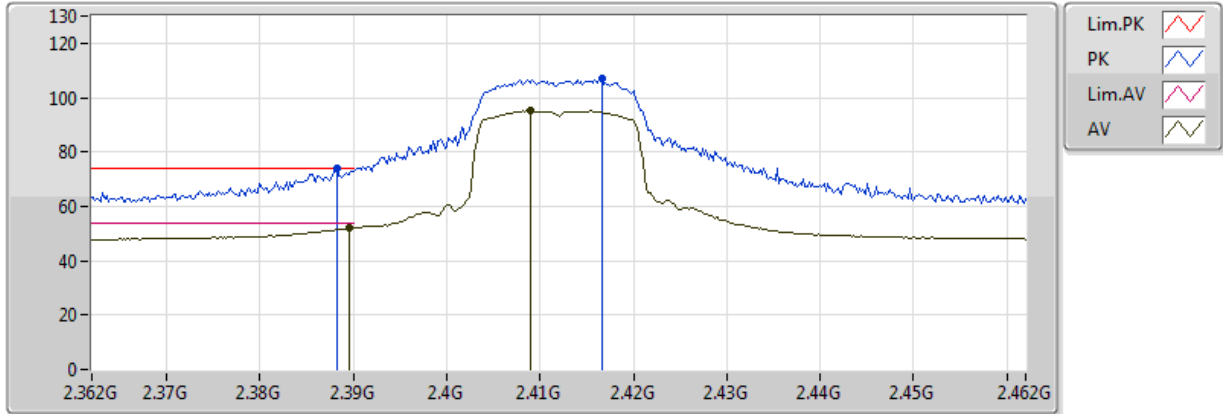


EUT=Y

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	4.92392G	43.56	54.00	-10.44	4.40	3	Horizontal	138	2.47	-	39.16	31.38	8.23	35.20
PK	4.92398G	50.13	74.00	-23.87	4.40	3	Horizontal	138	2.47	-	45.73	31.38	8.23	35.20

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2412MHz\_TX

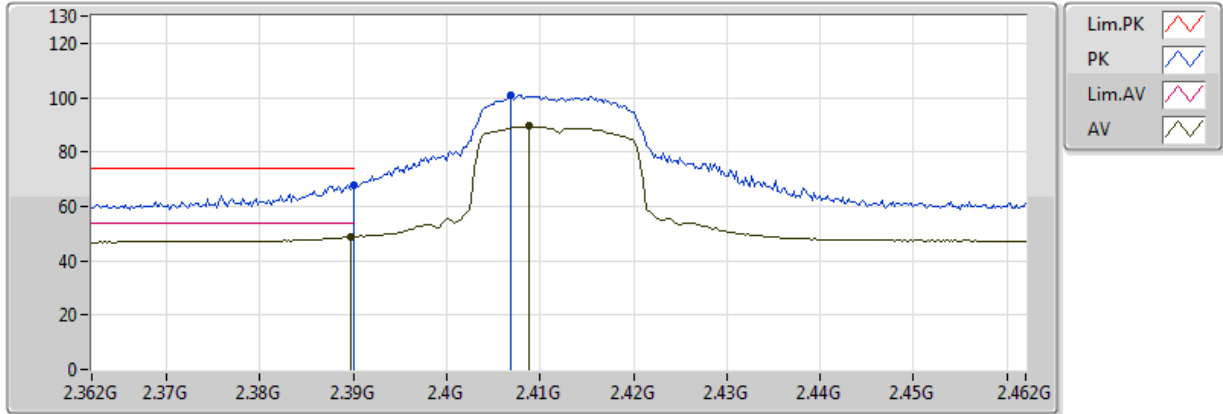


EUT=Y

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	2.3896G	52.05	54.00	-1.95	32.72	3	Vertical	301	1.01	-	19.34	26.99	5.73	-
AV	2.409G	95.08	Inf	-Inf	32.80	3	Vertical	301	1.01	-	62.28	27.05	5.75	-
PK	2.3882G	73.70	74.00	-0.30	32.71	3	Vertical	301	1.01	-	40.99	26.99	5.73	-
PK	2.4166G	106.78	Inf	-Inf	32.83	3	Vertical	301	1.01	-	73.95	27.07	5.76	-

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2412MHz\_TX

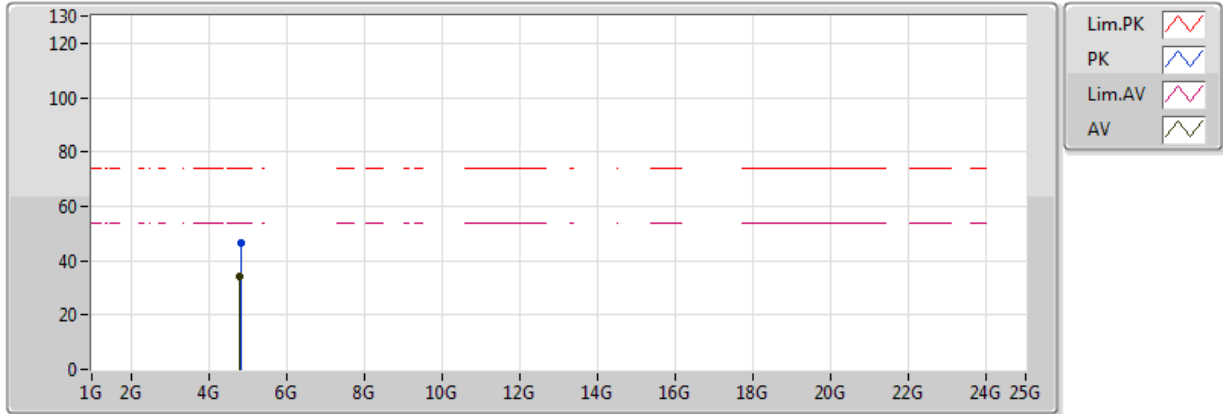


EUT=Y

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	48.81	54.00	-5.19	32.72	3	Horizontal	1	1.50	-	16.09	26.99	5.73	-
AV	2.4088G	89.44	Inf	-Inf	32.80	3	Horizontal	1	1.50	-	56.64	27.04	5.75	-
PK	2.39G	68.06	74.00	-5.94	32.72	3	Horizontal	1	1.50	-	35.34	26.99	5.73	-
PK	2.4068G	101.01	Inf	-Inf	32.79	3	Horizontal	1	1.50	-	68.22	27.04	5.75	-

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2412MHz\_TX

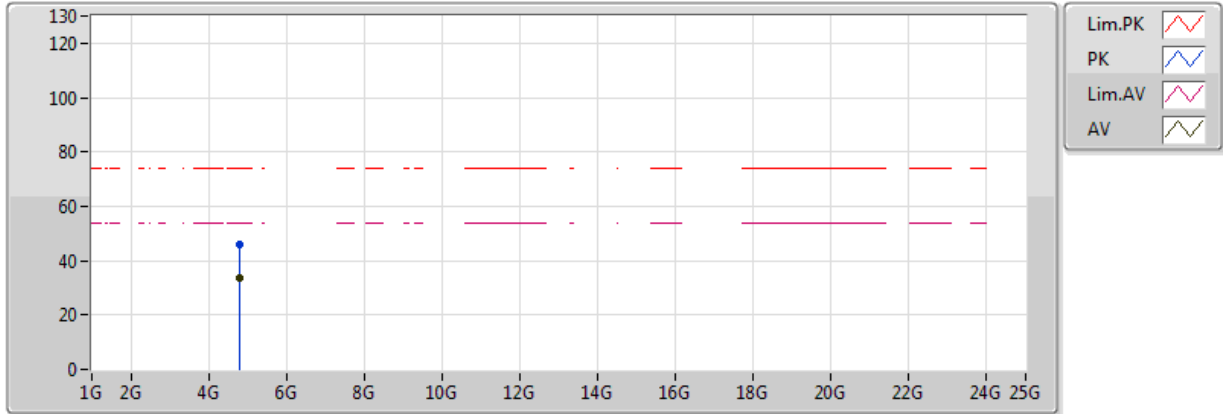


EUT=Y

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	4.81146G	33.92	54.00	-20.08	4.12	3	Vertical	281	1.66	-	29.80	31.20	8.09	35.17
PK	4.81812G	46.42	74.00	-27.58	4.14	3	Vertical	281	1.66	-	42.29	31.21	8.10	35.18

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2412MHz\_TX

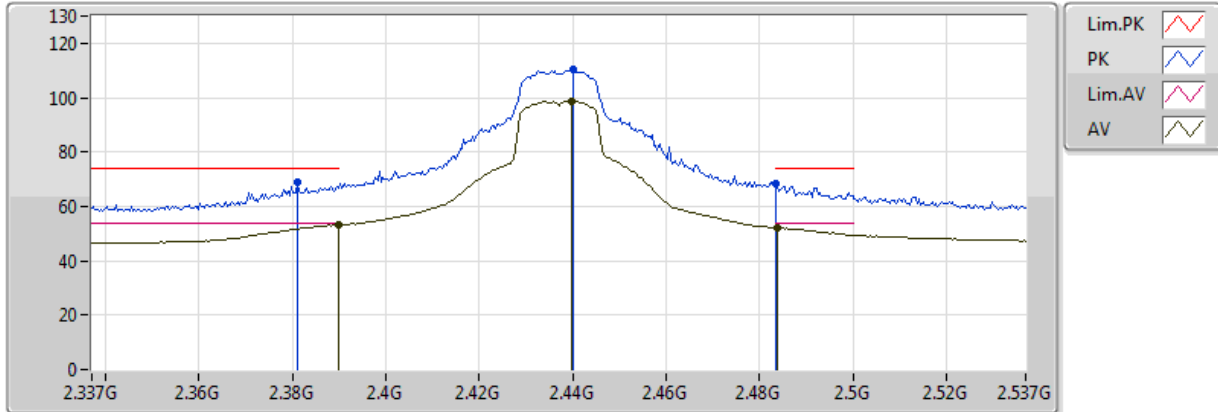


EUT=Y

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	4.80966G	33.79	54.00	-20.21	4.11	3	Horizontal	194	1.65	-	29.68	31.20	8.09	35.17
PK	4.81056G	45.74	74.00	-28.26	4.12	3	Horizontal	194	1.65	-	41.63	31.20	8.09	35.17

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2437MHz\_TX

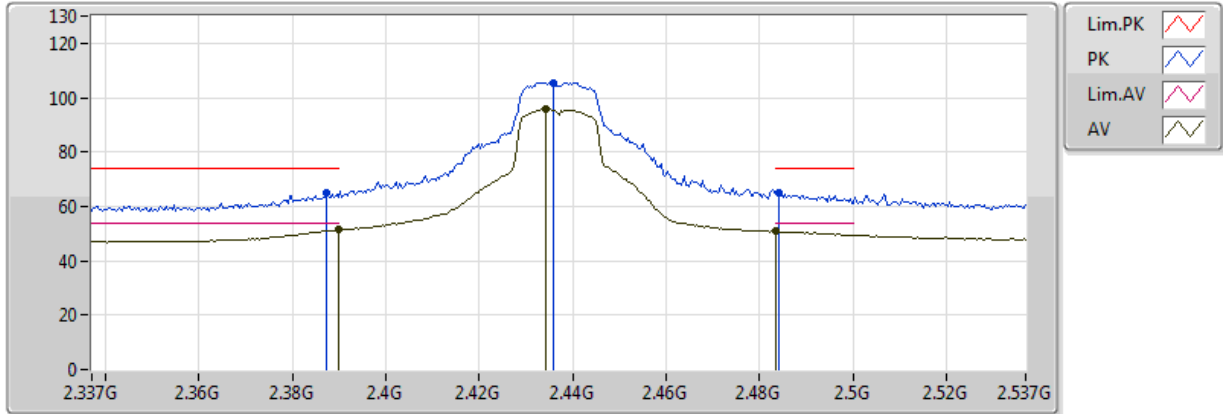


EUT=Y

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	53.28	54.00	-0.72	32.72	3	Vertical	311	1.29	-	20.56	26.99	5.73	-
AV	2.4398G	98.73	Inf	-Inf	32.92	3	Vertical	311	1.29	-	65.81	27.13	5.79	-
AV	2.4838G	52.16	54.00	-1.84	33.10	3	Vertical	311	1.29	-	19.06	27.25	5.84	-
PK	2.381G	68.78	74.00	-5.22	32.69	3	Vertical	311	1.29	-	36.09	26.97	5.72	-
PK	2.4402G	110.26	Inf	-Inf	32.92	3	Vertical	311	1.29	-	77.34	27.13	5.79	-
PK	2.483502G	68.44	74.00	-5.56	33.09	3	Vertical	311	1.29	-	35.35	27.25	5.84	-

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2437MHz\_TX



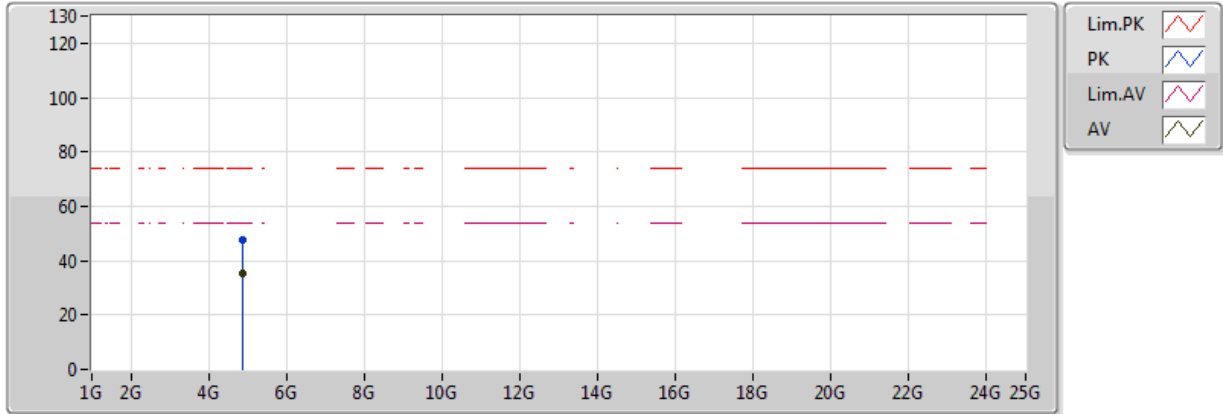
EUT=Y

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	51.41	54.00	-2.59	32.72	3	Horizontal	1	1.47	-	18.69	26.99	5.73	-
AV	2.4342G	95.68	Inf	-Inf	32.90	3	Horizontal	1	1.47	-	62.79	27.12	5.78	-
AV	2.483502G	50.76	54.00	-3.24	33.09	3	Horizontal	1	1.47	-	17.67	27.25	5.84	-
PK	2.3874G	64.72	74.00	-9.28	32.71	3	Horizontal	1	1.47	-	32.01	26.98	5.73	-
PK	2.4358G	105.57	Inf	-Inf	32.90	3	Horizontal	1	1.47	-	72.67	27.12	5.78	-
PK	2.4842G	64.93	74.00	-9.07	33.10	3	Horizontal	1	1.47	-	31.84	27.26	5.84	-



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2437MHz\_TX

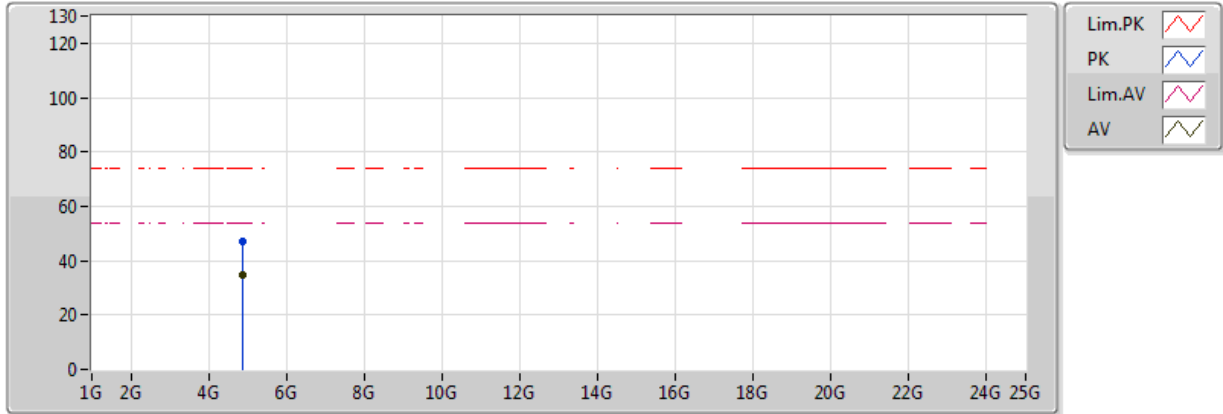


EUT=Y

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	4.87412G	35.42	54.00	-18.58	4.28	3	Vertical	1	1.10	-	31.15	31.30	8.17	35.19
PK	4.874G	47.75	74.00	-26.25	4.27	3	Vertical	1	1.10	-	43.48	31.30	8.17	35.19

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2437MHz\_TX



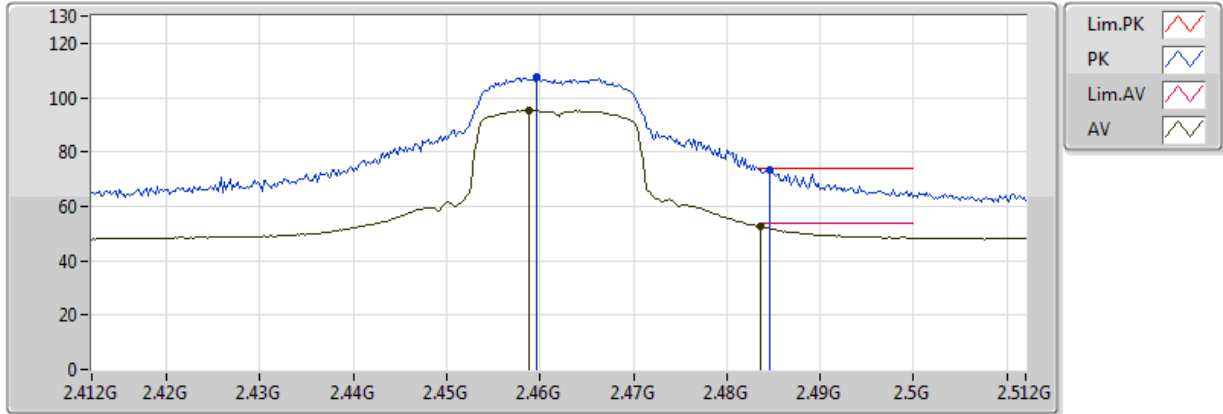
EUT=Y

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	4.88204G	34.73	54.00	-19.27	4.30	3	Horizontal	29	2.27	-	30.44	31.31	8.18	35.19
PK	4.87388G	47.07	74.00	-26.93	4.27	3	Horizontal	29	2.27	-	42.80	31.30	8.17	35.19



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2462MHz\_TX

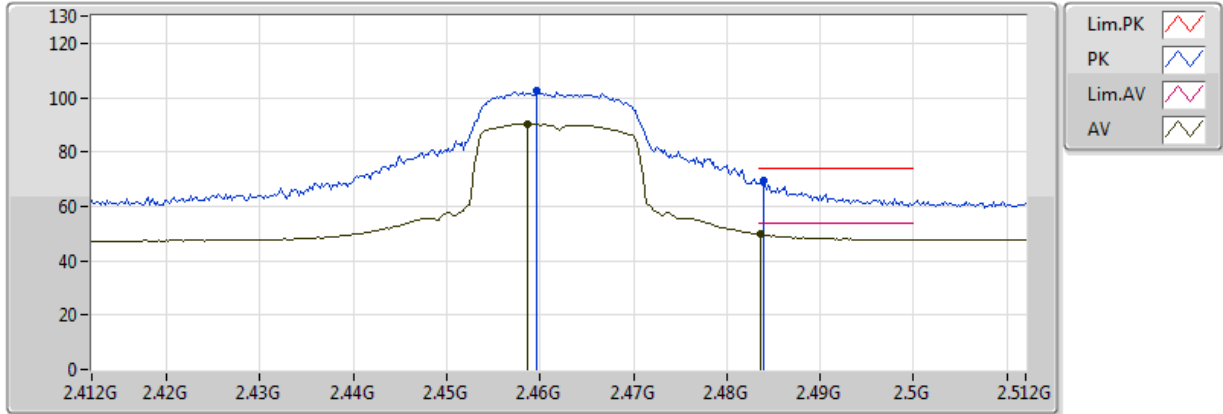


EUT=Y

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	2.4588G	95.40	Inf	-Inf	33.00	3	Vertical	297	1.10	-	62.40	27.18	5.81	-
AV	2.4836G	52.57	54.00	-1.43	33.09	3	Vertical	297	1.10	-	19.47	27.25	5.84	-
PK	2.4596G	107.31	Inf	-Inf	33.00	3	Vertical	297	1.10	-	74.31	27.19	5.81	-
PK	2.4846G	73.51	74.00	-0.49	33.10	3	Vertical	297	1.10	-	40.42	27.26	5.84	-

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2462MHz\_TX

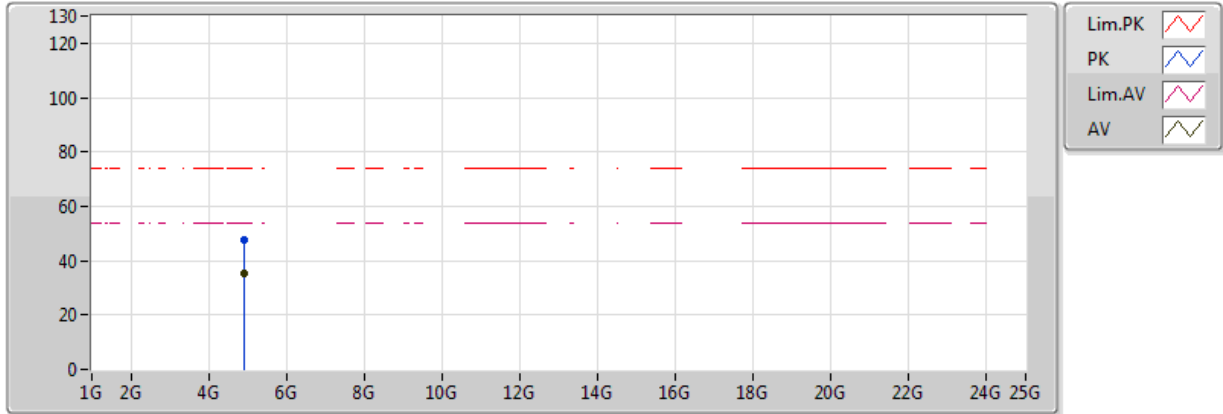


EUT=Y

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	2.4586G	90.33	Inf	-Inf	32.99	3	Horizontal	156	1.01	-	57.34	27.18	5.81	-
AV	2.4836G	49.68	54.00	-4.32	33.09	3	Horizontal	156	1.01	-	16.59	27.25	5.84	-
PK	2.4596G	102.48	Inf	-Inf	33.00	3	Horizontal	156	1.01	-	69.48	27.19	5.81	-
PK	2.484G	69.25	74.00	-4.75	33.10	3	Horizontal	156	1.01	-	36.16	27.26	5.84	-

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2462MHz\_TX

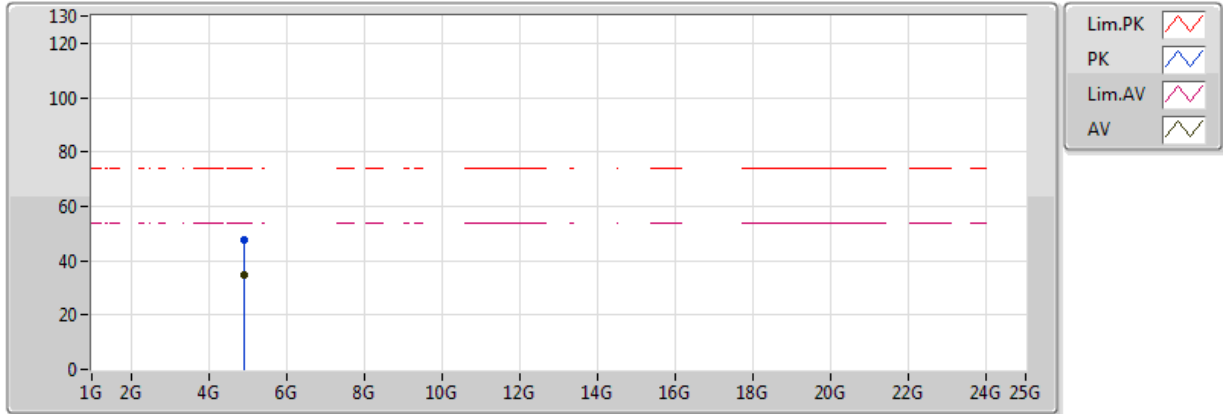


EUT=Y

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	4.93072G	35.24	54.00	-18.76	4.42	3	Vertical	171	2.28	-	30.82	31.39	8.23	35.21
PK	4.92772G	47.87	74.00	-26.13	4.41	3	Vertical	171	2.28	-	43.46	31.38	8.23	35.21

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2462MHz\_TX

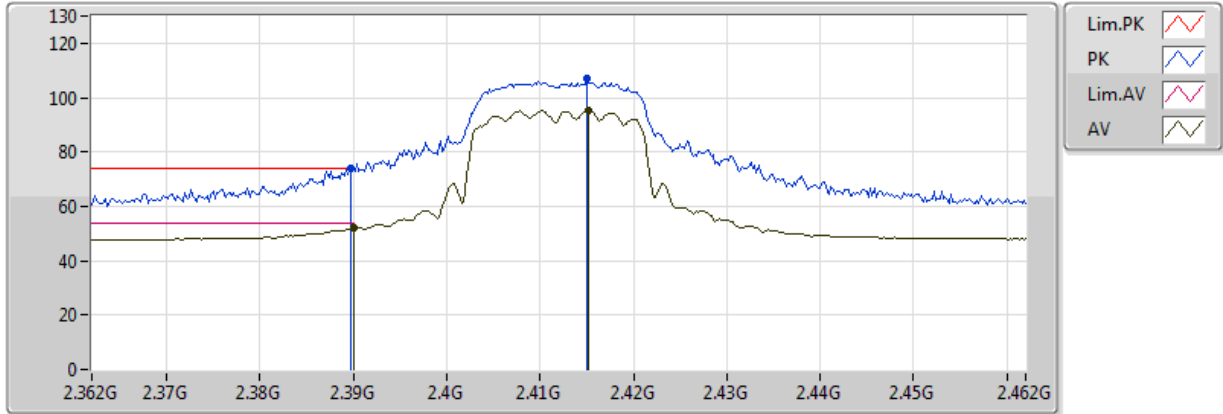


EUT=Y

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	4.93018G	34.84	54.00	-19.16	4.42	3	Horizontal	40	2.32	-	30.43	31.39	8.23	35.21
PK	4.91866G	47.39	74.00	-26.61	4.39	3	Horizontal	40	2.32	-	43.01	31.37	8.22	35.20

### 802.11n HT20\_Nss1,(MCS0)\_2TX

### 2412MHz\_TX

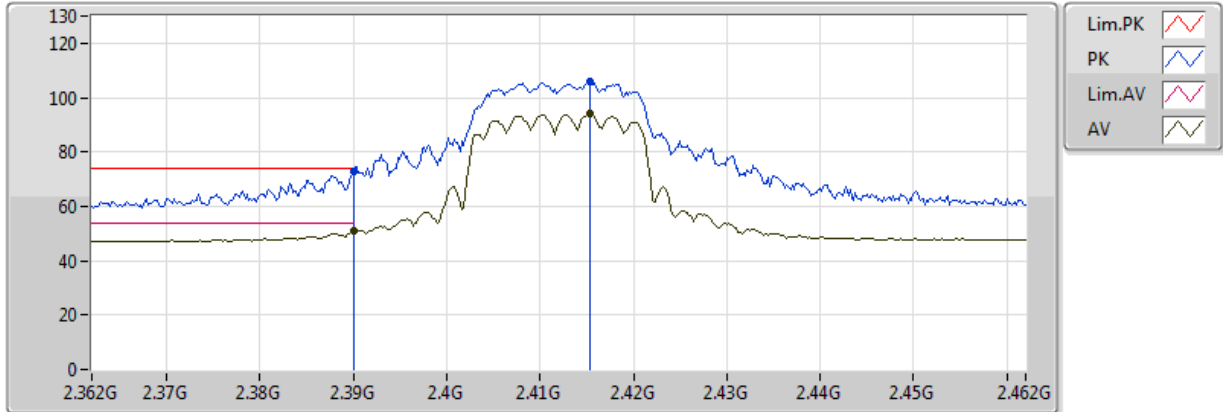


EUT=Y

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	52.14	54.00	-1.86	32.72	3	Vertical	295	1.03	-	19.41	26.99	5.73	-
AV	2.4152G	95.28	Inf	-Inf	32.82	3	Vertical	295	1.03	-	62.46	27.06	5.76	-
PK	2.3898G	73.69	74.00	-0.31	32.72	3	Vertical	295	1.03	-	40.97	26.99	5.73	-
PK	2.415G	107.04	Inf	-Inf	32.82	3	Vertical	295	1.03	-	74.22	27.06	5.76	-

### 802.11n HT20\_Nss1,(MCS0)\_2TX

### 2412MHz\_TX

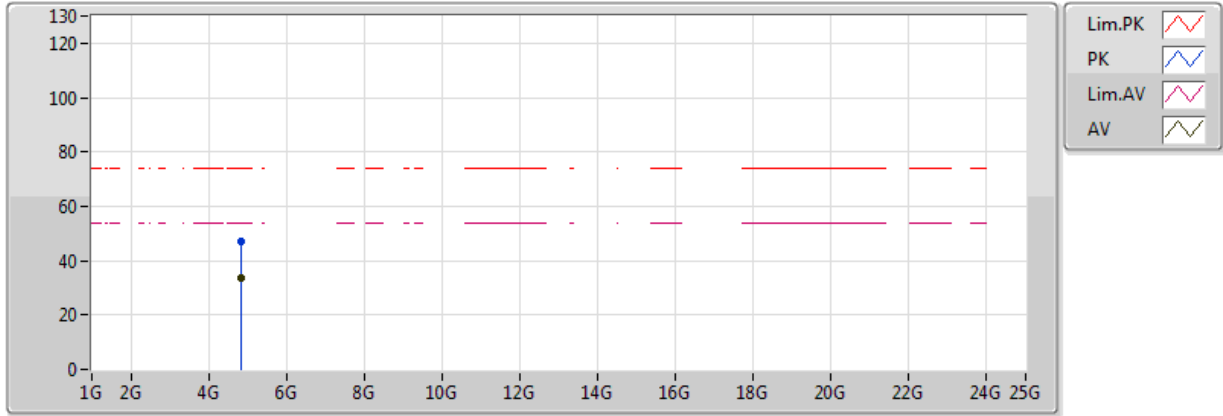


EUT=Y

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	50.99	54.00	-3.01	32.72	3	Horizontal	159	1.00	-	18.27	26.99	5.73	-
AV	2.4154G	94.00	Inf	-Inf	32.82	3	Horizontal	159	1.00	-	61.17	27.06	5.76	-
PK	2.39G	73.09	74.00	-0.91	32.72	3	Horizontal	159	1.00	-	40.37	26.99	5.73	-
PK	2.4154G	105.95	Inf	-Inf	32.82	3	Horizontal	159	1.00	-	73.12	27.06	5.76	-



**802.11n HT20\_Nss1,(MCS0)\_2TX  
2412MHz\_TX**

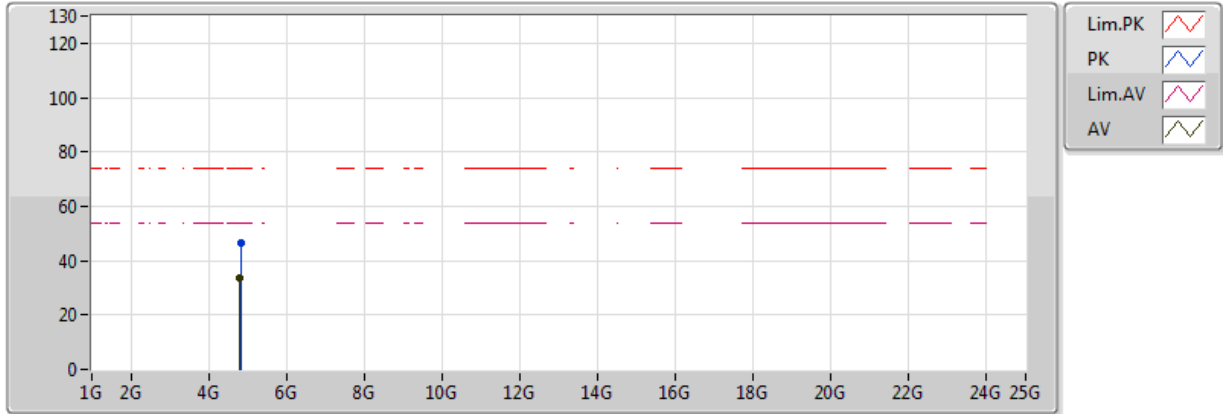


EUT=Y

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	4.82226G	33.79	54.00	-20.21	4.15	3	Vertical	42	1.13	-	29.64	31.22	8.11	35.18
PK	4.81752G	47.14	74.00	-26.86	4.13	3	Vertical	42	1.13	-	43.00	31.21	8.10	35.18

### 802.11n HT20\_Nss1,(MCS0)\_2TX

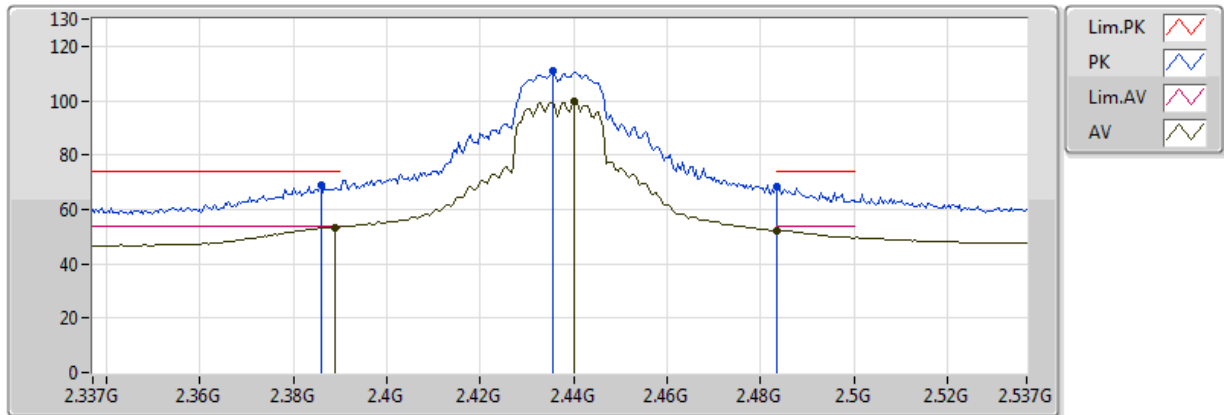
### 2412MHz\_TX



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	4.80972G	33.79	54.00	-20.21	4.11	3	Horizontal	175	2.36	-	29.68	31.20	8.09	35.17
PK	4.81902G	46.55	74.00	-27.45	4.14	3	Horizontal	175	2.36	-	42.41	31.21	8.10	35.18

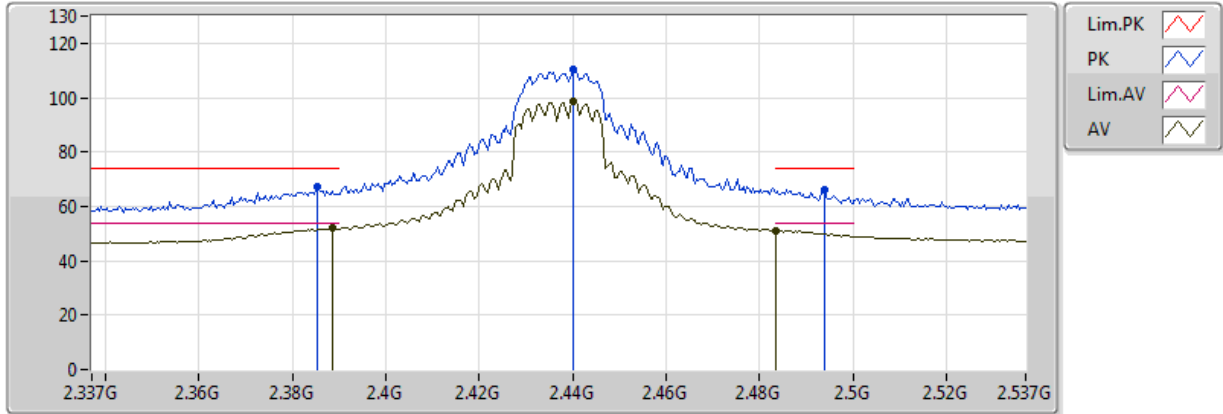
### 802.11n HT20\_Nss1,(MCS0)\_2TX 2437MHz\_TX



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	2.389G	53.50	54.00	-0.50	32.72	3	Vertical	309	1.32	-	20.78	26.99	5.73	-
AV	2.4402G	99.59	Inf	-Inf	32.92	3	Vertical	309	1.32	-	66.67	27.13	5.79	-
AV	2.483502G	52.36	54.00	-1.64	33.09	3	Vertical	309	1.32	-	19.27	27.25	5.84	-
PK	2.3858G	68.71	74.00	-5.29	32.70	3	Vertical	309	1.32	-	36.00	26.98	5.72	-
PK	2.4354G	110.69	Inf	-Inf	32.90	3	Vertical	309	1.32	-	77.79	27.12	5.78	-
PK	2.483502G	68.31	74.00	-5.69	33.09	3	Vertical	309	1.32	-	35.21	27.25	5.84	-

**802.11n HT20\_Nss1,(MCS0)\_2TX  
2437MHz\_TX**

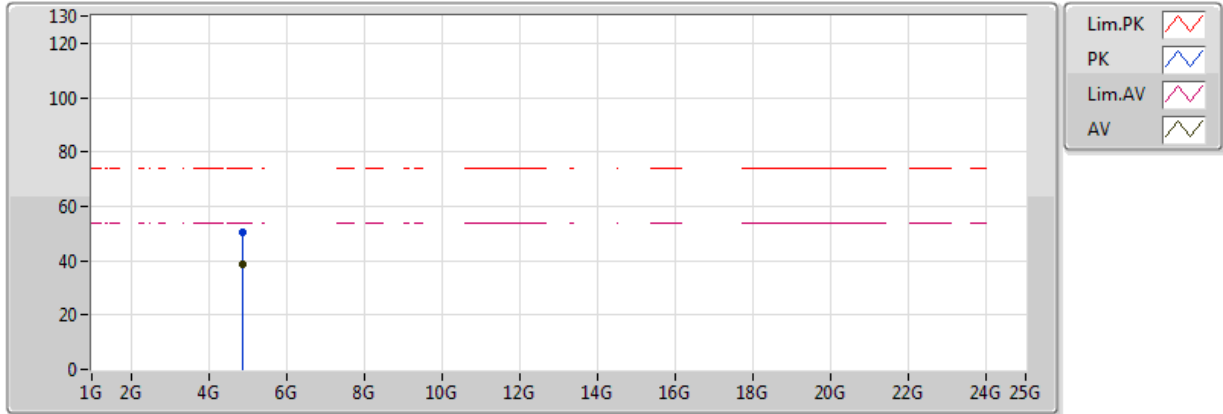


EUT=Y

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	2.3886G	51.95	54.00	-2.05	32.72	3	Horizontal	158	1.12	-	19.23	26.99	5.73	-
AV	2.4402G	98.45	Inf	-Inf	32.92	3	Horizontal	158	1.12	-	65.53	27.13	5.79	-
AV	2.483502G	51.24	54.00	-2.76	33.09	3	Horizontal	158	1.12	-	18.14	27.25	5.84	-
PK	2.3854G	67.45	74.00	-6.55	32.70	3	Horizontal	158	1.12	-	34.75	26.98	5.72	-
PK	2.4402G	110.63	Inf	-Inf	32.92	3	Horizontal	158	1.12	-	77.71	27.13	5.79	-
PK	2.4938G	66.11	74.00	-7.89	33.14	3	Horizontal	158	1.12	-	32.97	27.28	5.85	-

### 802.11n HT20\_Nss1,(MCS0)\_2TX

### 2437MHz\_TX

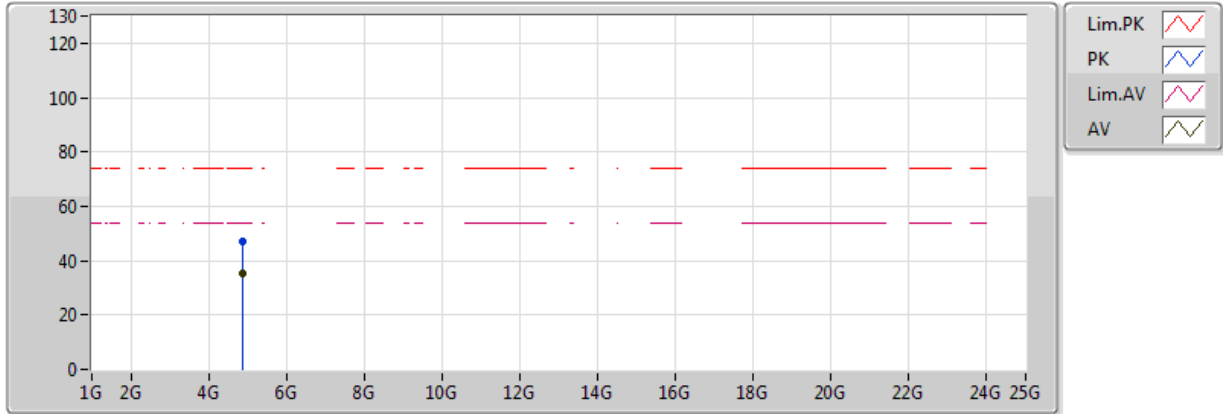


EUT=Y

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	4.87532G	38.58	54.00	-15.42	4.28	3	Vertical	354	1.74	-	34.30	31.30	8.17	35.19
PK	4.87772G	50.63	74.00	-23.37	4.28	3	Vertical	354	1.74	-	46.35	31.30	8.17	35.19

### 802.11n HT20\_Nss1,(MCS0)\_2TX

### 2437MHz\_TX

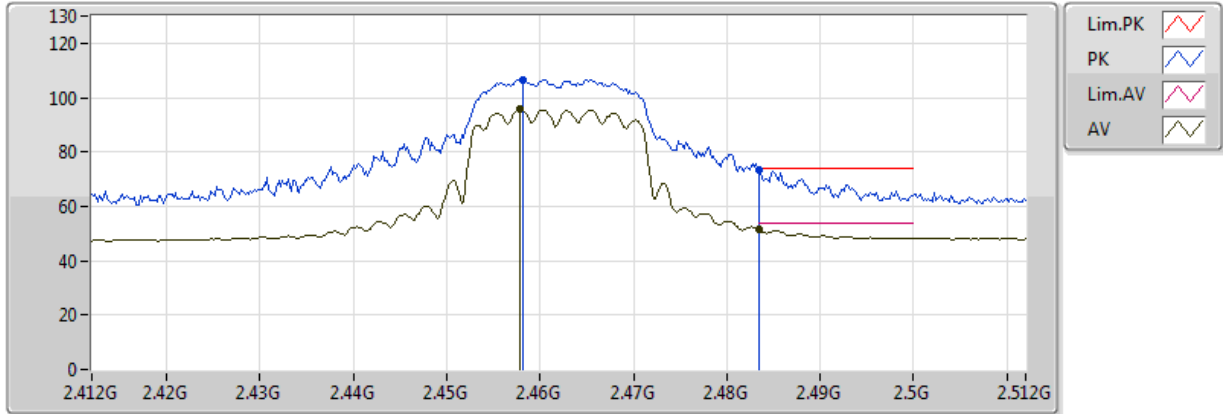


EUT=Y

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	35.52	54.00	-18.48	4.27	3	Horizontal	89	2.11	-	31.25	31.30	8.17	35.19
PK	4.88192G	47.13	74.00	-26.87	4.29	3	Horizontal	89	2.11	-	42.84	31.31	8.18	35.19

### 802.11n HT20\_Nss1,(MCS0)\_2TX

### 2462MHz\_TX

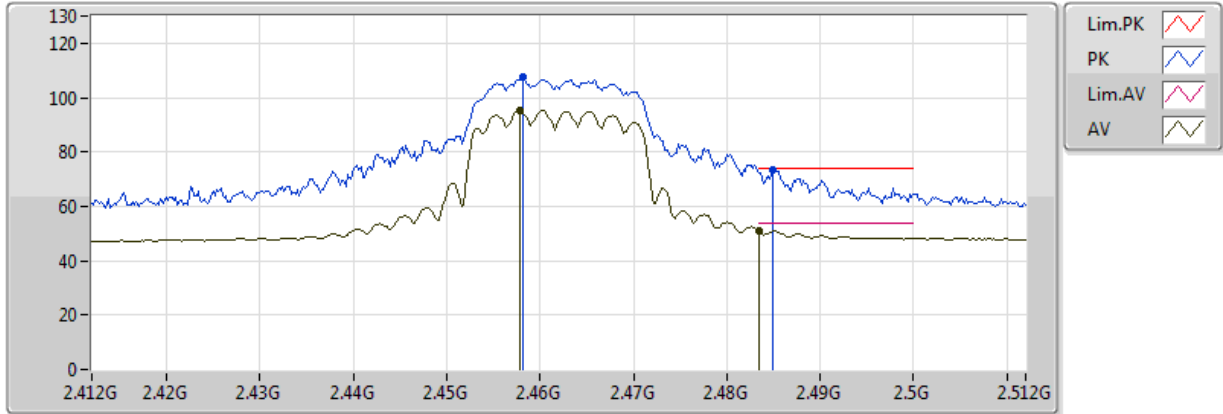


EUT=Y

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	2.4578G	95.64	Inf	-Inf	32.99	3	Vertical	305	1.65	-	62.65	27.18	5.81	-
AV	2.483502G	51.68	54.00	-2.32	33.09	3	Vertical	305	1.65	-	18.58	27.25	5.84	-
PK	2.4582G	106.63	Inf	-Inf	32.99	3	Vertical	305	1.65	-	73.64	27.18	5.81	-
PK	2.483502G	73.60	74.00	-0.40	33.09	3	Vertical	305	1.65	-	40.51	27.25	5.84	-

### 802.11n HT20\_Nss1,(MCS0)\_2TX

### 2462MHz\_TX



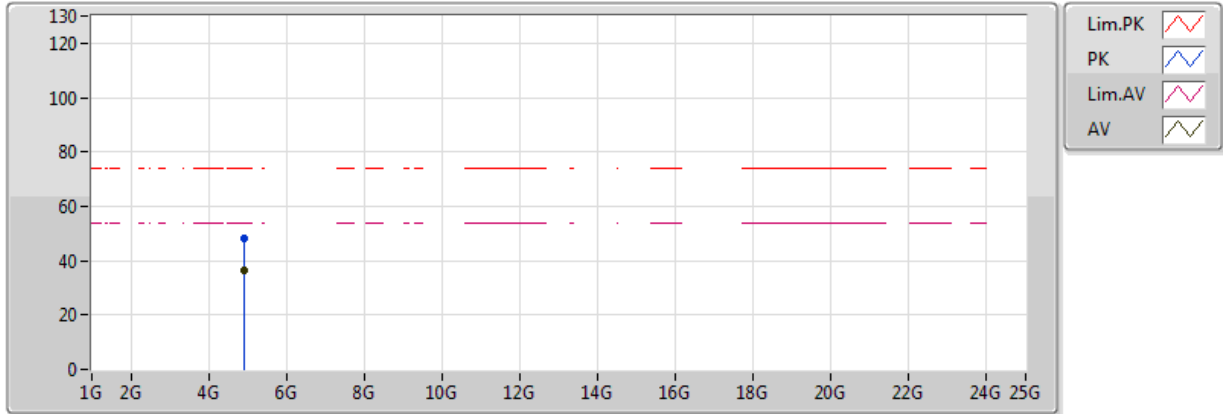
EUT=Y

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	2.4578G	95.21	Inf	-Inf	32.99	3	Horizontal	161	1.00	-	62.21	27.18	5.81	-
AV	2.483502G	51.07	54.00	-2.93	33.09	3	Horizontal	161	1.00	-	17.97	27.25	5.84	-
PK	2.4582G	107.34	Inf	-Inf	32.99	3	Horizontal	161	1.00	-	74.35	27.18	5.81	-
PK	2.485G	73.31	74.00	-0.69	33.10	3	Horizontal	161	1.00	-	40.21	27.26	5.84	-



### 802.11n HT20\_Nss1,(MCS0)\_2TX

### 2462MHz\_TX

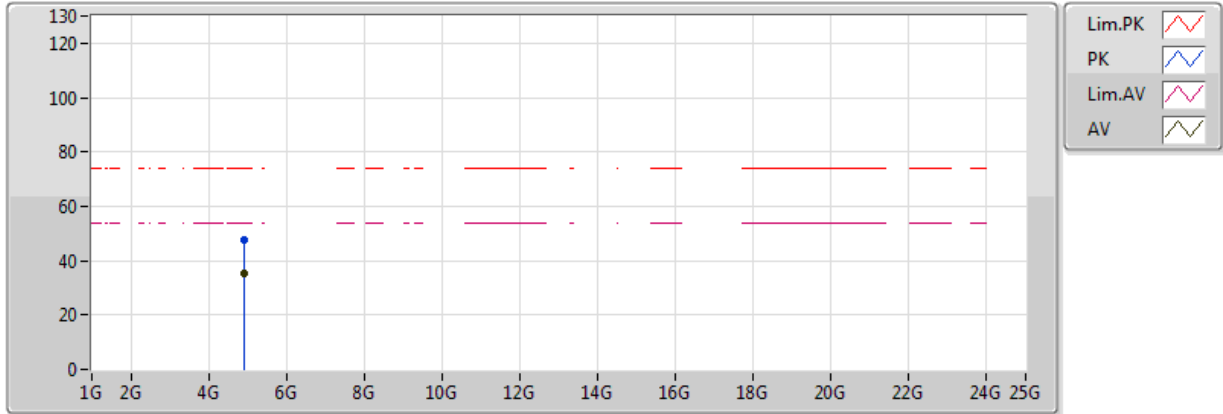


EUT=Y

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	4.92304G	36.32	54.00	-17.68	4.40	3	Vertical	161	1.15	-	31.92	31.38	8.23	35.20
PK	4.92616G	48.26	74.00	-25.74	4.41	3	Vertical	161	1.15	-	43.86	31.38	8.23	35.21

### 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	4.9237G	35.41	54.00	-18.59	4.40	3	Horizontal	234	2.00	-	31.01	31.38	8.23	35.20
PK	4.92898G	47.58	74.00	-26.42	4.41	3	Horizontal	234	2.00	-	43.17	31.39	8.23	35.21