



# FCC Test Report

Equipment : Media Terminal Adaptor  
Brand Name : InnoMedia  
Model No. : MTA8328-1W/MTA8328-1WV  
FCC ID : 2ALCB-MTA-W-0000001  
Standard : 47 CFR FCC Part 15.247  
Operating Band : 2400 MHz – 2483.5 MHz  
Function : ☒ Point-to-multipoint; ☐ Point-to-point  
Applicant : INNOMEDIA TECHNOLOGY INC  
3RD FL HSINCHU SCIENCE-BASED INDUSTRIAL  
PARK 3 INDUSTRIAL E RD IX HSINCHU 300 TAIWAN  
Manufacturer : LUEN HUEI ELECTRONICS CO.,LTD  
17 Kuang Fu Rd.,Hsinchu Industrial,Park  
Hsinchu,Taiwan, R.O.C

The product sample received on Jan. 19, 2017 and completely tested on May 02, 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.

  
Cliff Chang  
SPORTON INTERNATIONAL INC.



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## Summary of Test Result

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

## Revision History

[illegible]

# 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	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11n HT20	20	1TX
2.4-2.4835GHz	802.11n HT40	40	1TX

**Note:**

- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

### 1.1.2 Antenna Information

Ant.	Brand	Part No.	Antenna Type	Connector	Gain (dBi)
1	LYNwave	ALA150-052020-000000	PIFA Antenna	I-PEX	2.0

### 1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)
802.11b	1	0
802.11g	1	0
802.11n HT20	0.915	0.386
802.11n HT40	0.997	0.013

### 1.1.4 EUT Operational Condition

<b>EUT Power Type</b>	From Power Adapter			
<b>Beamforming Function</b>	<input type="checkbox"/>	With beamforming	<input checked="" type="checkbox"/>	Without beamforming

### 1.1.5 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Wi-Fi	USB	Push Button	FXS port
MTA8328-1W	Y	N	Y	1
MTA8328-1WV	Y	Y	Y	1

Note: From the above models, model: MTA8328-1WV was selected as representative model for the test and its data was recorded in this report.

## 1.2 Testing Applied Standards

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

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

## 1.3 Testing Location Information

Testing Location				
<input type="checkbox"/>	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.	TEL : 886-3-327-3456	FAX : 886-3-318-0055
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.	TEL : 886-3-656-9065	FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Serway Li	20°C / 60%	Mar. 03, 2017
Radiated Below 1 GHz	03CH01-CB	Zero Chen / Brain Chen Joy Tseng	22°C / 54%	May 02, 2017
Radiated Above 1GHz	03CH01-CB	Justin Lin / Mason Chen	22°C / 54%	Feb. 21, 2017~Mar. 03, 2017
AC Conduction	CO01-CB	Gavin Peng / Rick Yek	22°C / 61%	Apr. 24, 2017

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

## 1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	$9.74 \times 10^{-8}$	Confidence levels of 95%



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

Band	Power Setting
802.11b_(1Mbps)_1TX	-
2412MHz	55
2437MHz	53
2462MHz	51
802.11g_(6Mbps)_1TX	-
2412MHz	63
2437MHz	63
2462MHz	63
802.11n HT20_Nss1,(MCS0)_1TX	-
2412MHz	63
2437MHz	63
2462MHz	63
802.11n HT40_Nss1,(MCS0)_1TX	-
2422MHz	63
2437MHz	63
2452MHz	63

## 2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	AC power-line conducted emissions
<b>Condition</b>	AC power-line conducted measurement for line and neutral
<b>Operating Mode</b>	Normal Link
1	EUT + LAN + WAN + Phone + Adapter
2	EUT + LAN + WIFI(2.4G) + Adapter
3	EUT + LAN + WIFI(5G) + Adapter
For operating mode 1 is the worst case and it was record in this test report.	

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

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Emissions in Restricted Frequency Bands
<b>Test Condition</b>	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.
<b>Operating Mode &lt; 1GHz</b>	Normal Link
1	EUT at Z-axis + LAN + WAN + Phone + Adapter
2	EUT at Y-axis + LAN + WAN + Phone + Adapter
Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3~4 will follow this same test mode.	
3	EUT at Z-axis + LAN + Wi-Fi(2.4G) + Adapter
4	EUT at Z-axis + LAN + Wi-Fi(5G) + Adapter
For operating mode 1 is the worst case and it was record in this test report.	
<b>Operating Mode &gt; 1GHz</b>	CTX
The EUT was performed at Y axis and Z axis position for Radiated emission test, and the worst case was found at Y axis. So the measurement will follow this same test configuration.	
1	CTX-EUT at Y-axis + Adapter

Note: All the specification of test configurations and test modes were based on customer's request

## 2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

## 2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	Adapter	AOEM	ADS012T-W120100	Input: 100-240V~50-60Hz 0.5A Output: 12V, 1.0A
RJ-45 Cable*2, Non-Shielded, 1.8m				
RJ-11 Cable*1, Non-Shielded, 1.5m				

## 2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*2	DELL	E6430	DoC
2	Phone	SAMPO	HT-B 907WL	DoC
3	Flash disk	Silicon Power	I-Series	DoC

For Test Site No: 03CH01-CB (below 1GHz)

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*2	DELL	E4300	DoC
2	Phone	PHILIPS	M20	N/A

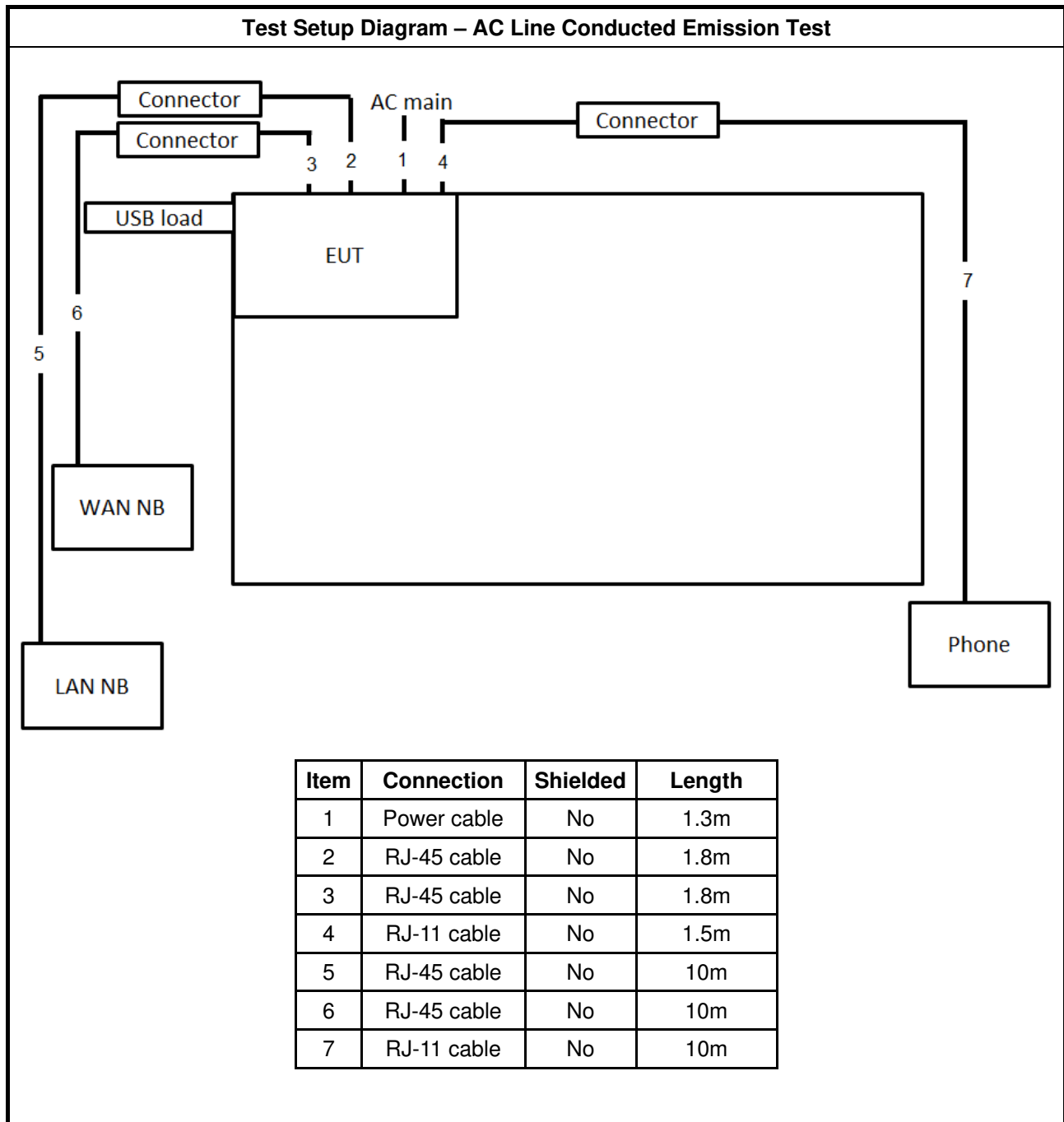
For Test Site No: 03CH01-CB (above 1GHz)

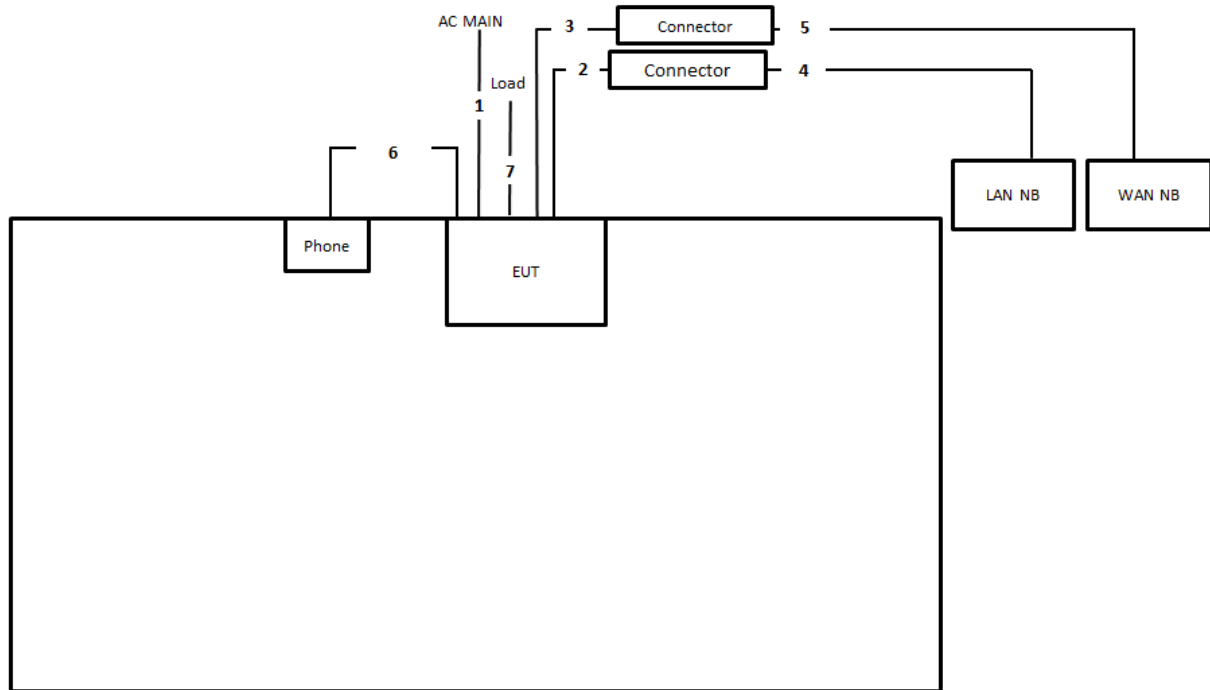
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC

For Test Site No: TH01-CB

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

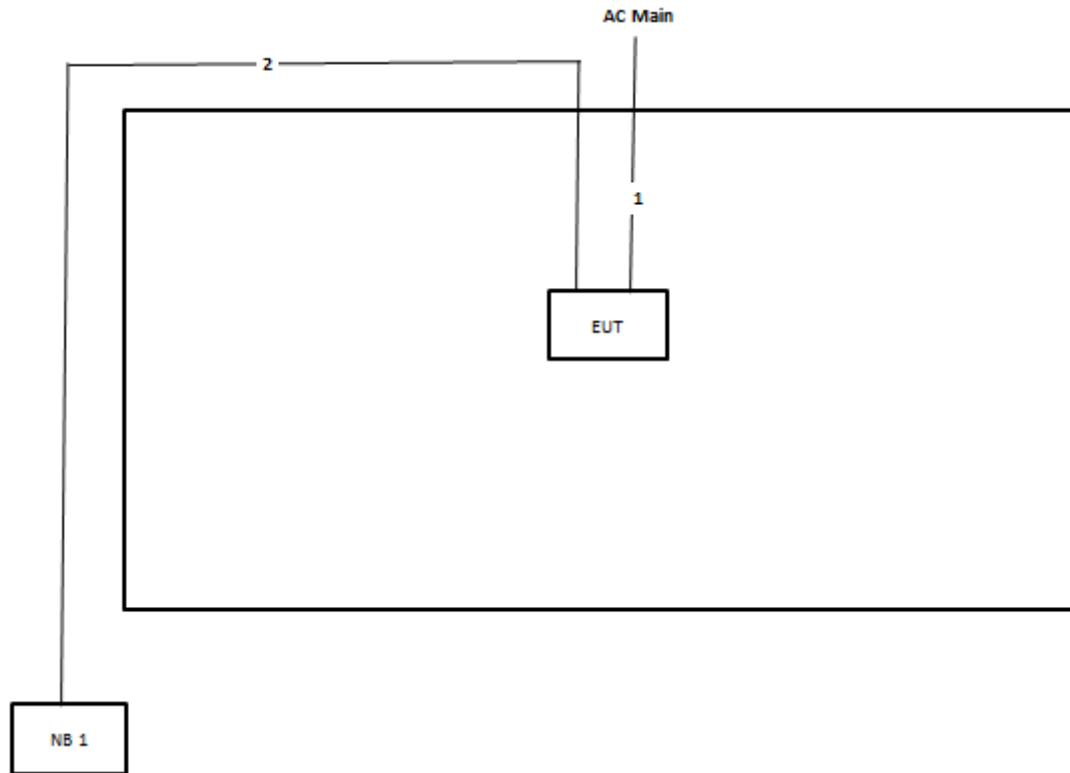
## 2.6 Test Setup Diagram



**Test Setup Diagram - Radiated Test < 1GHz**


Item	Connection	Shielded	Length
1	Power cable	No	1.3m
2	RJ-45 cable	No	1.8m
3	RJ-45 cable	No	1.8m
4	RJ-45 cable	No	10m
5	RJ-45 cable	No	10m
6	RJ-11 cable	No	1.5m
7	USB cable	Yes	2m

**Test Setup Diagram - Radiated Test > 1GHz**



Item	Connection	Shielded	Length
1	Power cable	No	1.3m
2	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.

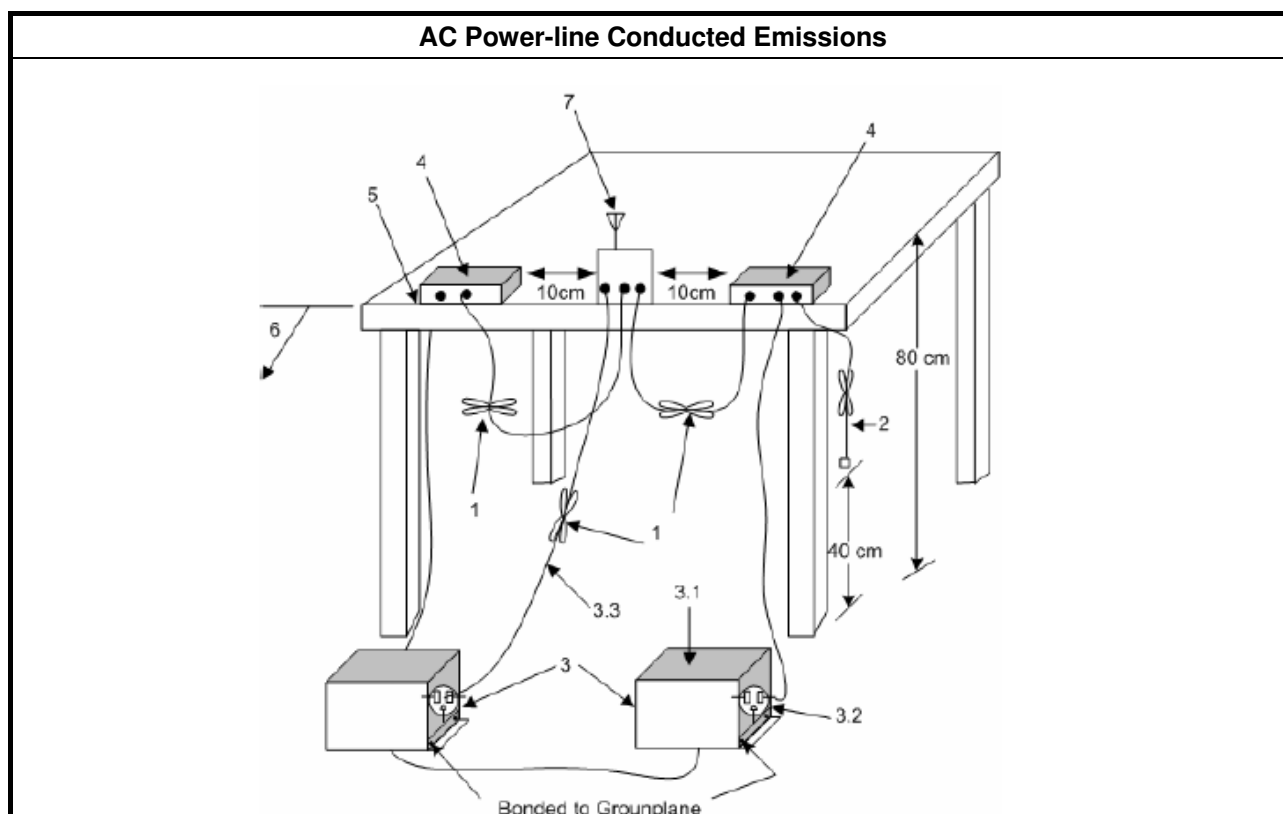
### 3.1.2 Measuring Instruments

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	
<b>Systems using digital modulation techniques:</b>	
▪	6 dB bandwidth $\geq$ 500 kHz.

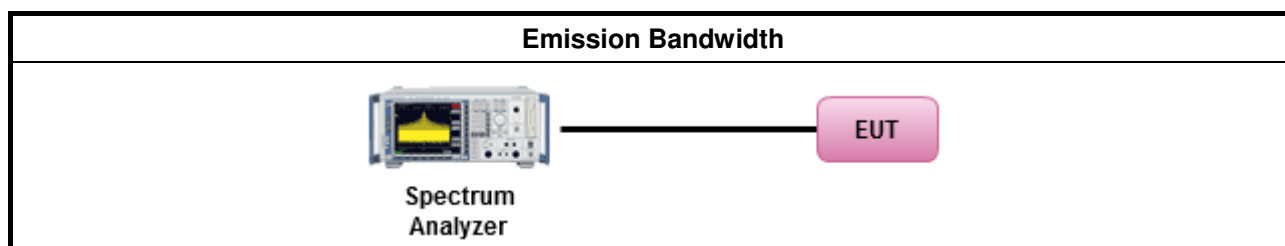
### 3.2.2 Measuring Instruments

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

### 3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

### 3.2.4 Test Setup



### 3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

### 3.3 Maximum Conducted Output Power

#### 3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	▪ Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
$P_{Out}$ = maximum peak conducted output power or maximum conducted output power in dBm, $G_{TX}$ = the maximum transmitting antenna directional gain in dBi.	

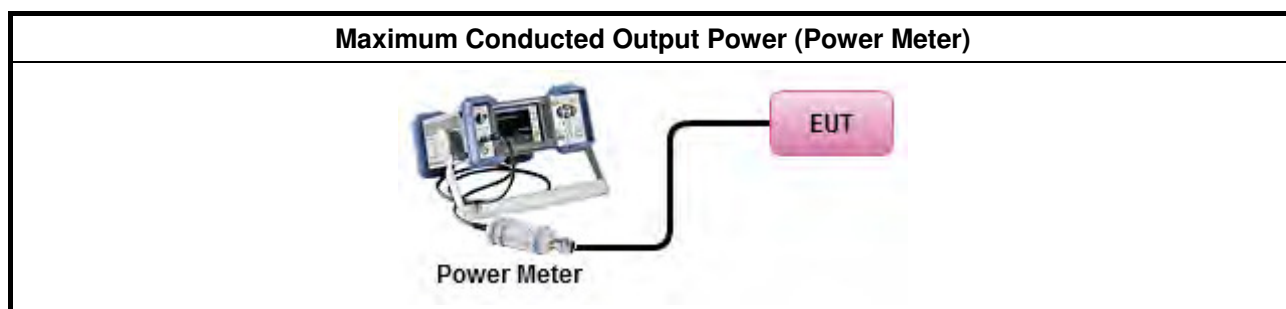
#### 3.3.2 Measuring Instruments

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

### 3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>Maximum Peak Conducted Output Power</li> </ul>	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW ≥ DTS BW)
<ul style="list-style-type: none"> <li>Maximum Conducted Output Power</li> </ul>	
[duty cycle ≥ 98% or external video / power trigger]	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
RF power meter and average over on/off periods with duty factor or gated trigger	
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM-G (using an RF average power meter).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.2 PKPM1 Peak power meter method.
<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 FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.</li> </ul>	
<ul style="list-style-type: none"> <li>If multiple transmit chains, EIRP calculation could be following as methods:  <math display="block">P_{total} = P_1 + P_2 + \dots + P_n</math> (calculated in linear unit [mW] and transfer to log unit [dBm])  <math display="block">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	
▪	Power Spectral Density (PSD) $\leq$ 8 dBm/3kHz

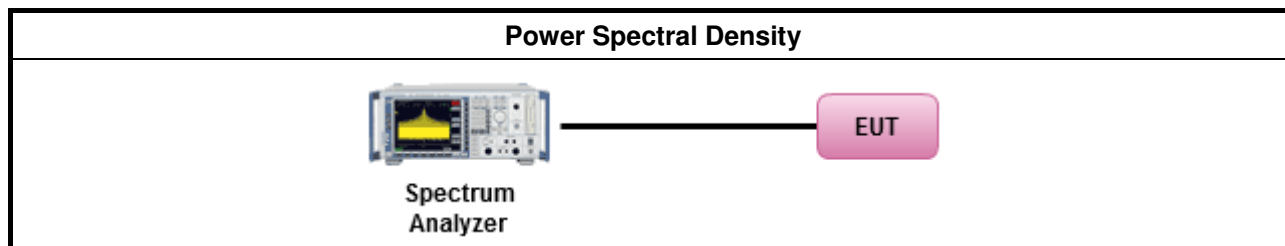
#### 3.4.2 Measuring Instruments

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

#### 3.4.3 Test Procedures

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

### 3.4.4 Test Setup



### 3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

### 3.5 Emissions in Non-restricted Frequency Bands

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

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
<p>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.</p> <p>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.</p>	

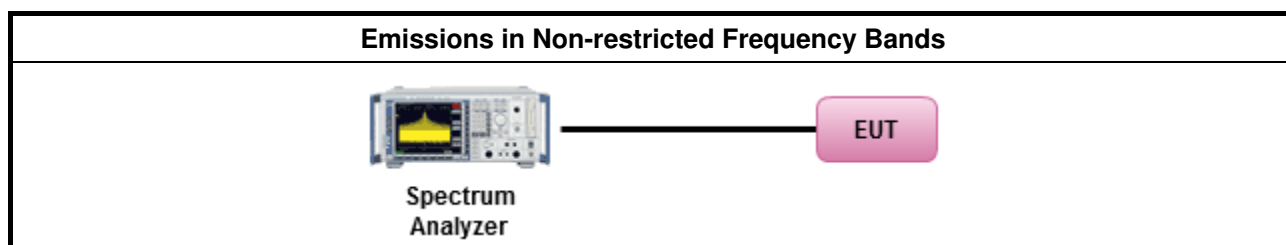
#### 3.5.2 Measuring Instruments

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 FCC 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.

#### 3.6.2 Measuring Instruments

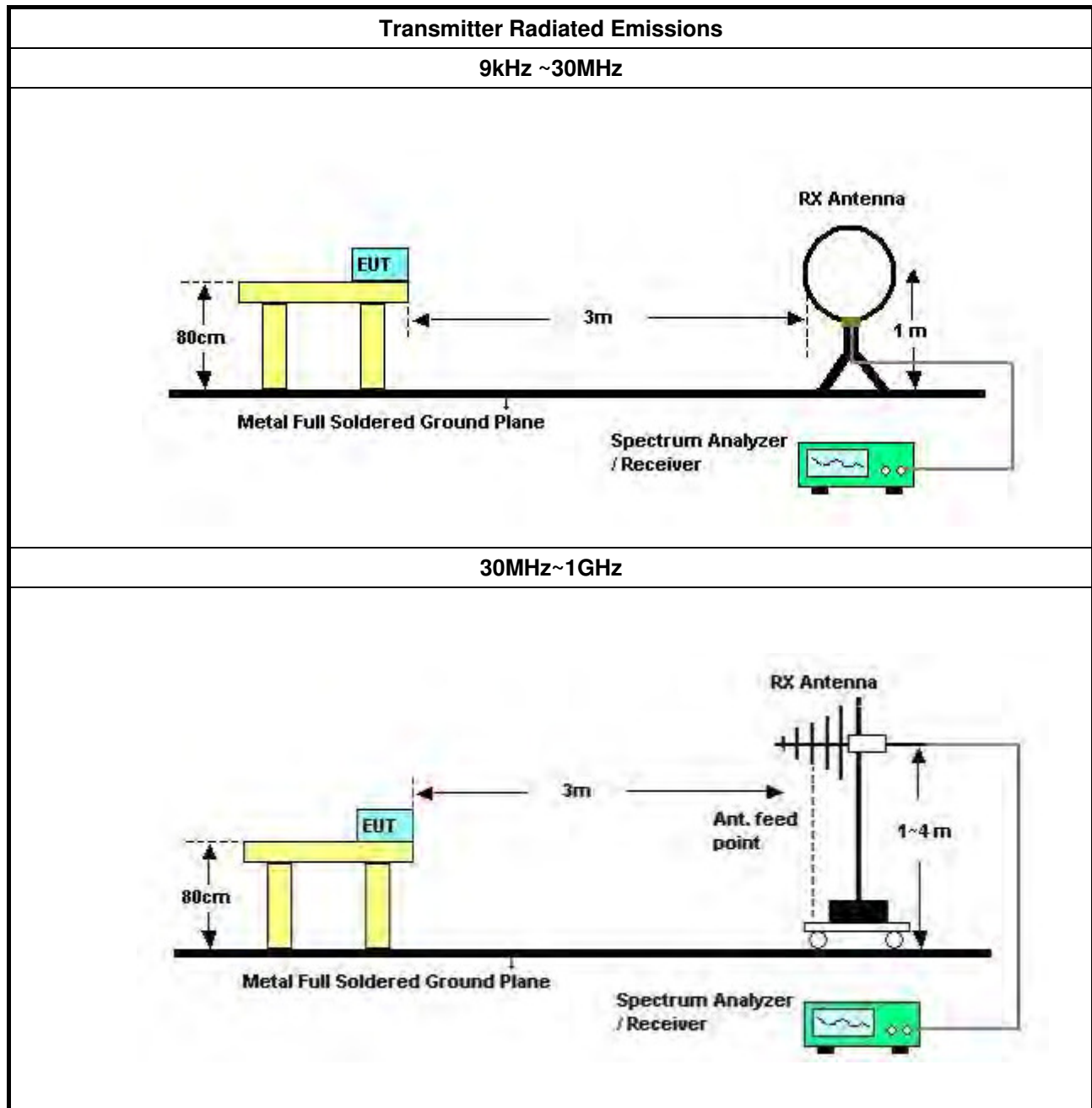
Refer a test equipment and calibration data table in this test report.

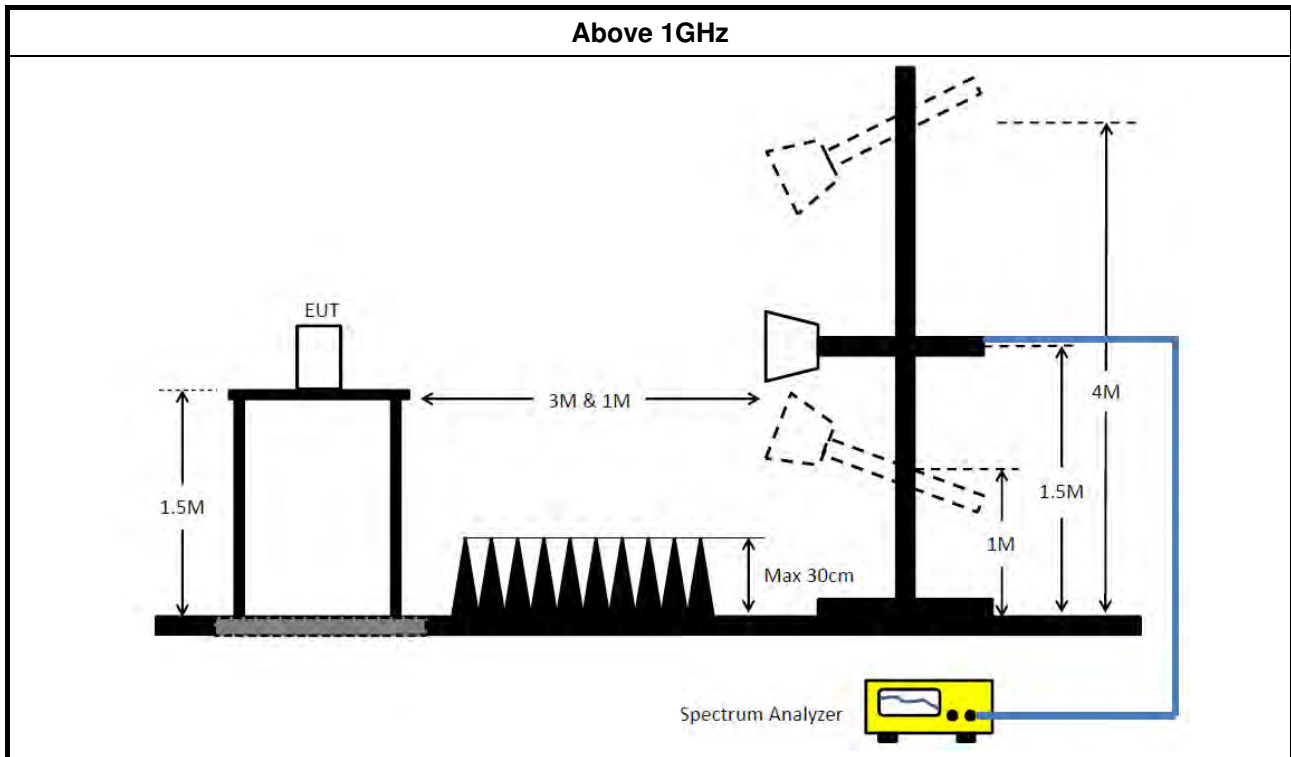
### 3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>The average emission levels shall be measured in [duty cycle <math>\geq 98</math> or duty factor].</li> </ul>	
<ul style="list-style-type: none"> <li>Refer as ANSI C63.10, clause 6.9.2.2 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.</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 FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.</li> </ul>	<input type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle $\geq 98\%$ )
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW $\geq 1/T$ ).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW $\geq 1/T$ , where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> <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 FCC KDB 558074 clause 13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.</li> </ul>	<ul style="list-style-type: none"> <li>Refer as FCC KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as FCC KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).</li> </ul>
<ul style="list-style-type: none"> <li>For conducted and cabinet radiation measurement, refer as FCC 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 <math>10 \log(N)</math> dB</li> </ul>	<ul style="list-style-type: none"> <li>For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.</li> </ul>



### 3.6.4 Test Setup





### 3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

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

### 3.6.6 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix F

## 4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 24, 2016	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2016	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 13, 2017	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 21, 2016	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 16, 2016	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-10-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)



## FCC Test Report

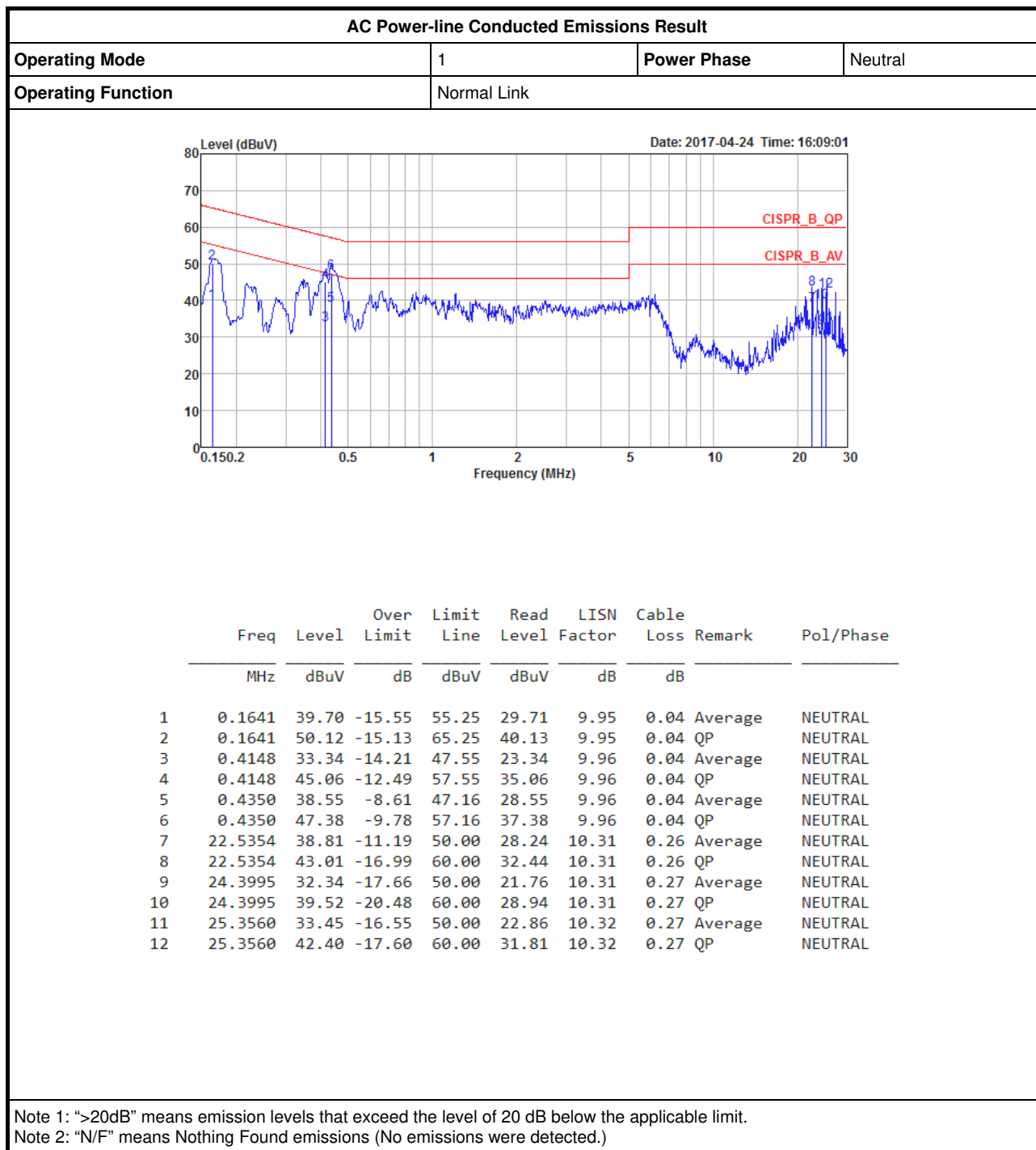
Report No. : FR711841

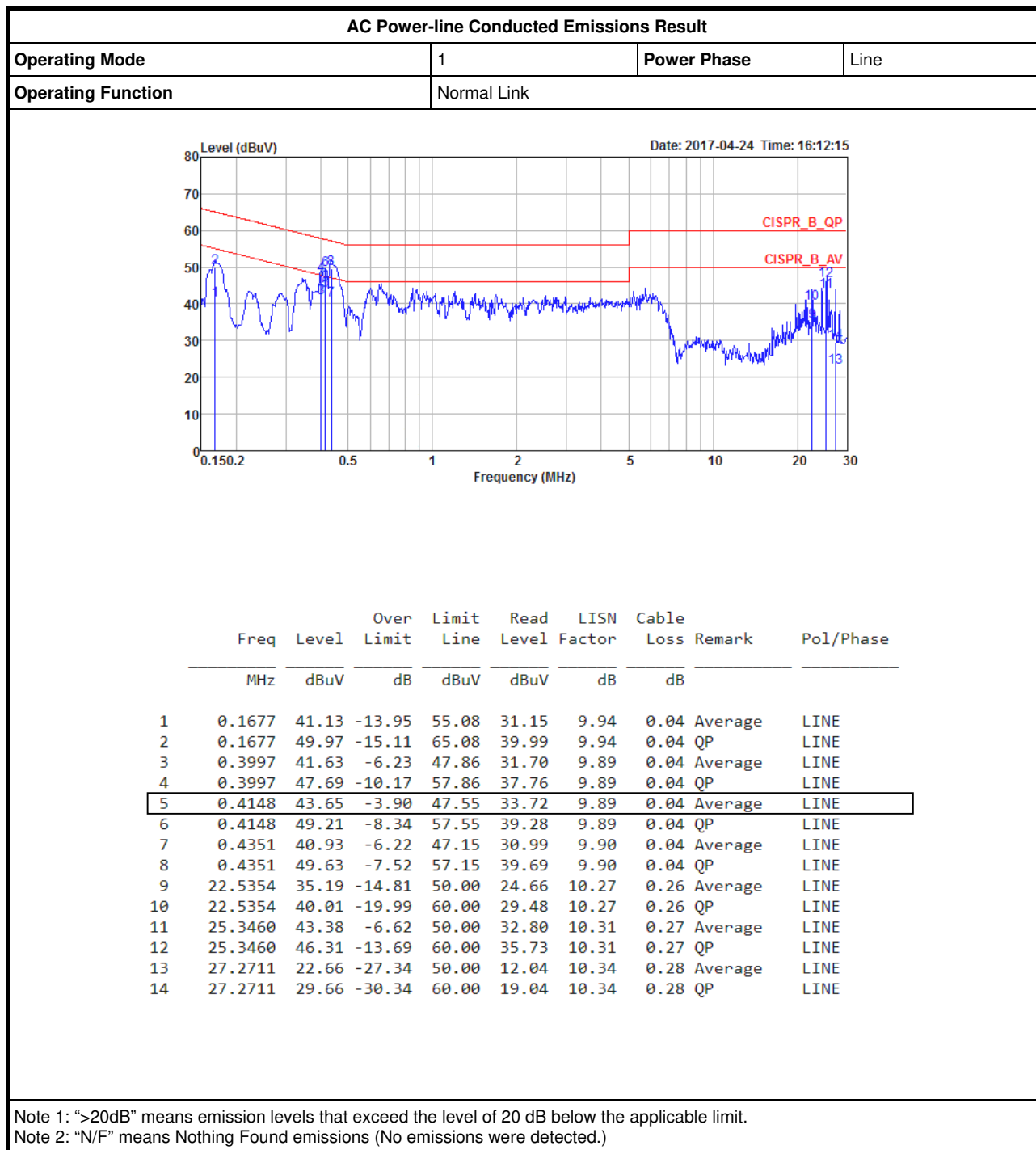
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	RG402	High Cable-9	1 GHz ~26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz ~26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Conducted (TH01-CB)

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

“\*” Calibration Interval of instruments listed above is two years.

N.C.R means Non-Calibration required.





**Summary**

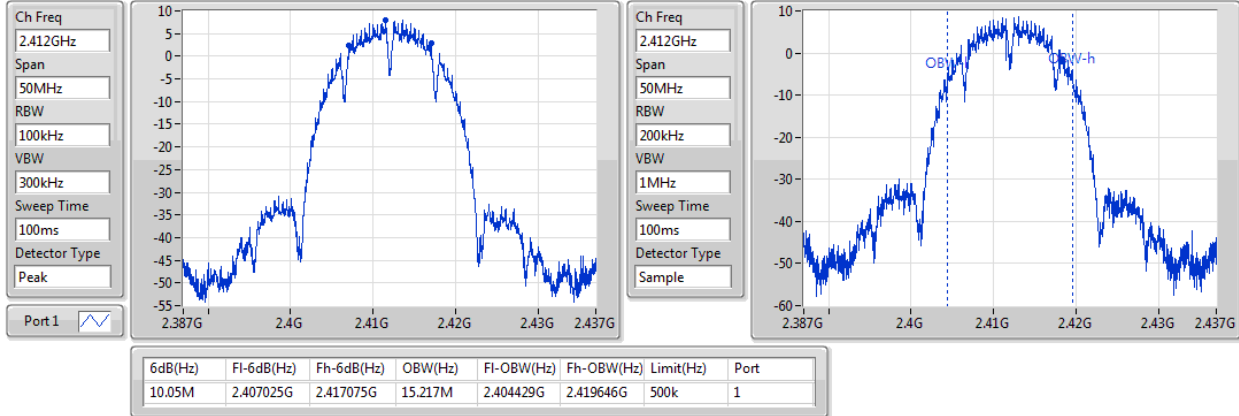
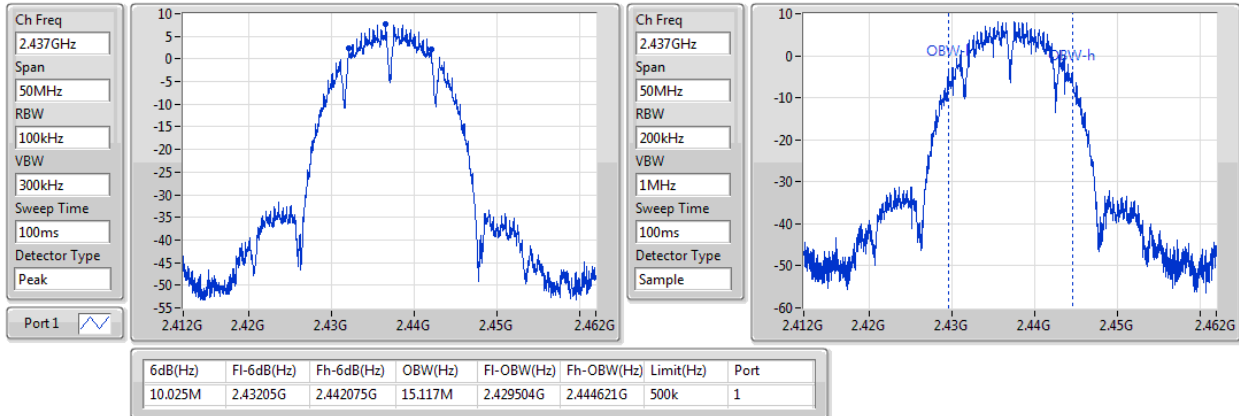
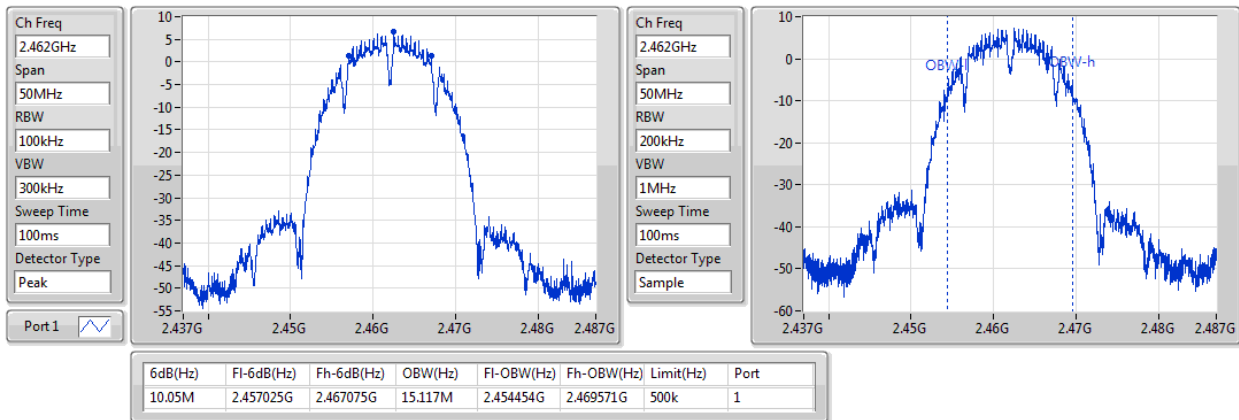
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2.4-2.4835GHz	10.05M	15.217M	15M2G1D	10.025M	15.117M
802.11g_(6Mbps)_1TX	-	-	-	-	-
2.4-2.4835GHz	16.3M	16.692M	16M7D1D	16.275M	16.592M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2.4-2.4835GHz	17.55M	17.816M	17M8D1D	17.475M	17.741M
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
2.4-2.4835GHz	35.9M	36.332M	36M3D1D	35.65M	36.282M

**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)
802.11b_(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	10.05M	15.217M
2437MHz	Pass	500k	10.025M	15.117M
2462MHz	Pass	500k	10.05M	15.117M
802.11g_(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.3M	16.592M
2437MHz	Pass	500k	16.275M	16.617M
2462MHz	Pass	500k	16.3M	16.692M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.55M	17.741M
2437MHz	Pass	500k	17.525M	17.791M
2462MHz	Pass	500k	17.475M	17.816M
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	35.9M	36.282M
2437MHz	Pass	500k	35.65M	36.282M
2452MHz	Pass	500k	35.7M	36.332M

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

**802.11b\_(1Mbps)\_1TX**
**EBW**
**2412MHz**

**802.11b\_(1Mbps)\_1TX**
**EBW**
**2437MHz**

**802.11b\_(1Mbps)\_1TX**
**EBW**
**2462MHz**




**802.11g\_(6Mbps)\_1TX**
**EBW**
**2412MHz**

Ch Freq  
2.412GHz


Span  
50MHz

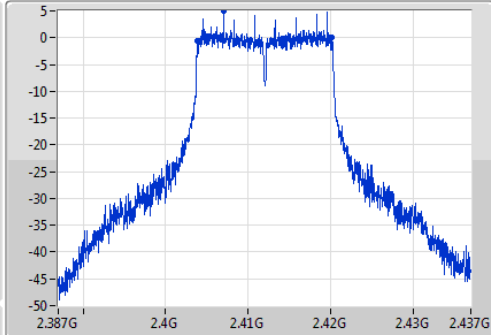
RBW  
100kHz

VBW  
300kHz

Sweep Time  
100ms

Detector Type  
Peak

Port1 



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.4039G	2.4202G	16.592M	2.403729G	2.420321G	500k	1

Ch Freq  
2.412GHz

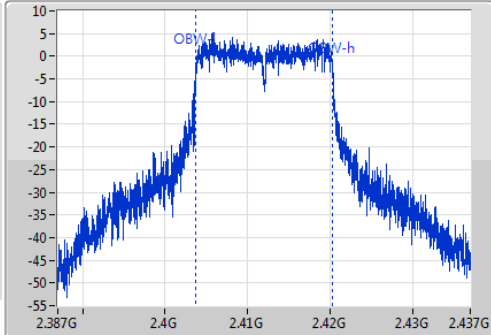
Span  
50MHz

RBW  
200kHz

VBW  
1MHz

Sweep Time  
100ms

Detector Type  
Sample


**802.11g\_(6Mbps)\_1TX**
**EBW**
**2437MHz**

Ch Freq  
2.437GHz


Span  
50MHz

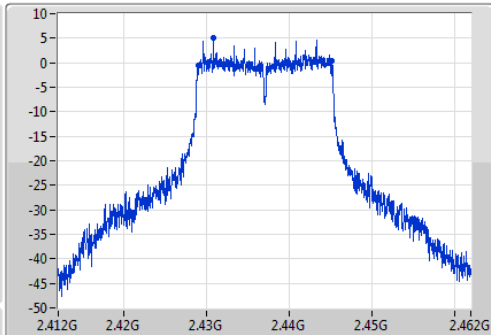
RBW  
100kHz

VBW  
300kHz

Sweep Time  
100ms

Detector Type  
Peak

Port1 



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	2.428925G	2.4452G	16.617M	2.428729G	2.445346G	500k	1

Ch Freq  
2.437GHz

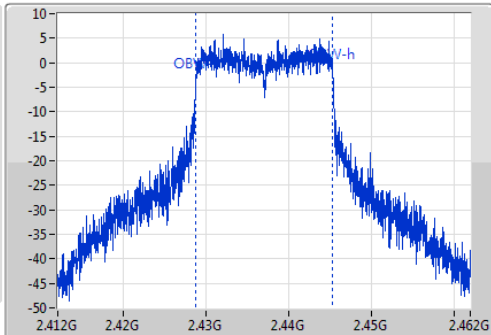
Span  
50MHz

RBW  
200kHz

VBW  
1MHz

Sweep Time  
100ms

Detector Type  
Sample


**802.11g\_(6Mbps)\_1TX**
**EBW**
**2462MHz**

Ch Freq  
2.462GHz


Span  
50MHz

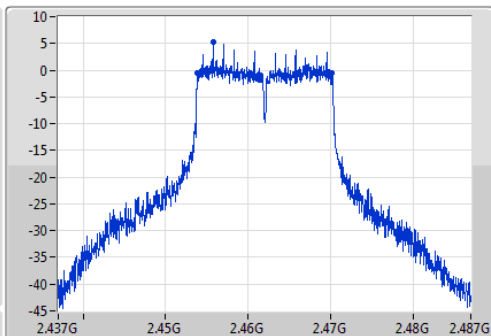
RBW  
100kHz

VBW  
300kHz

Sweep Time  
100ms

Detector Type  
Peak

Port1 



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.4539G	2.4702G	16.692M	2.453679G	2.470371G	500k	1

Ch Freq  
2.462GHz

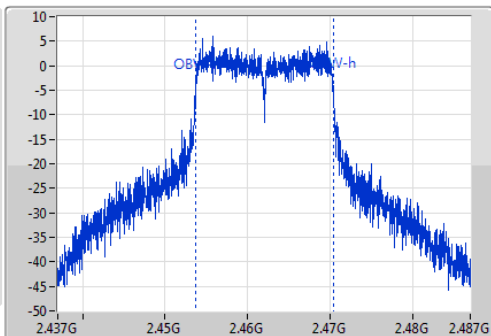
Span  
50MHz

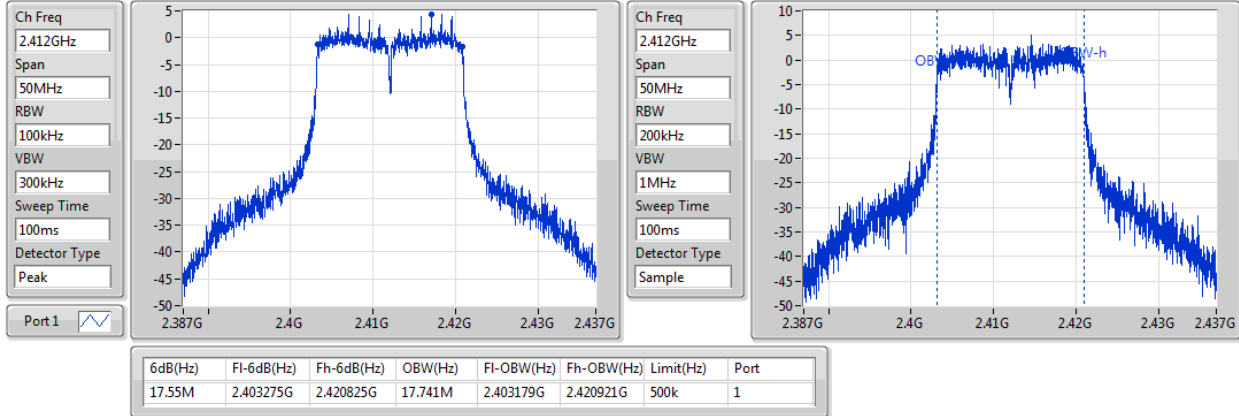
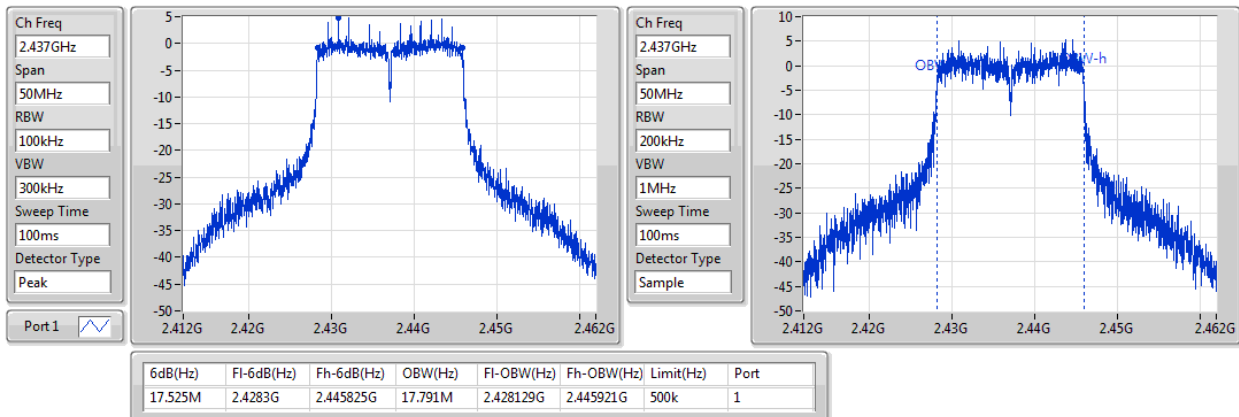
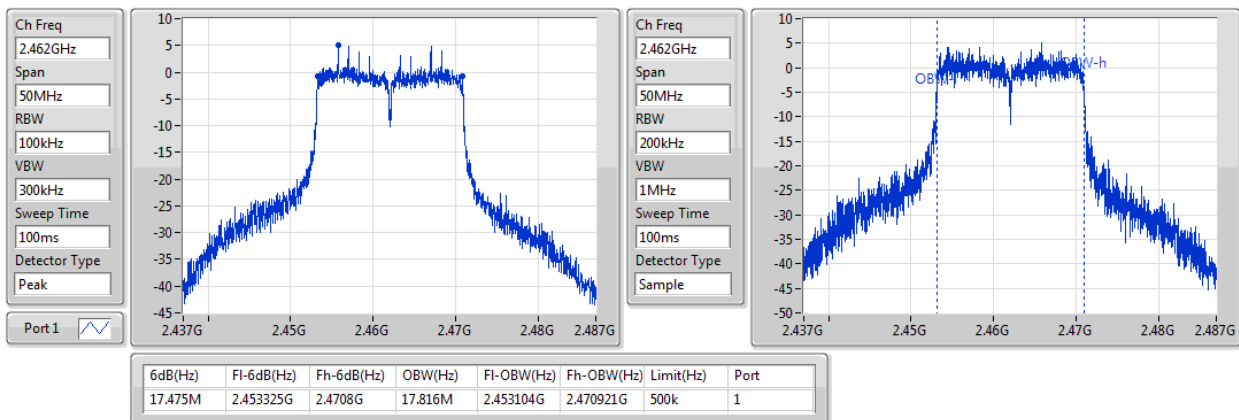
RBW  
200kHz

VBW  
1MHz

Sweep Time  
100ms

Detector Type  
Sample



**802.11n HT20\_Nss1,(MCS0)\_1TX**
**EBW**
**2412MHz**

**802.11n HT20\_Nss1,(MCS0)\_1TX**
**EBW**
**2437MHz**

**802.11n HT20\_Nss1,(MCS0)\_1TX**
**EBW**
**2462MHz**


**802.11n HT40\_Nss1,(MCS0)\_1TX**
**EBW**
**2422MHz**

Ch Freq  
2.422GHz


Span  
100MHz

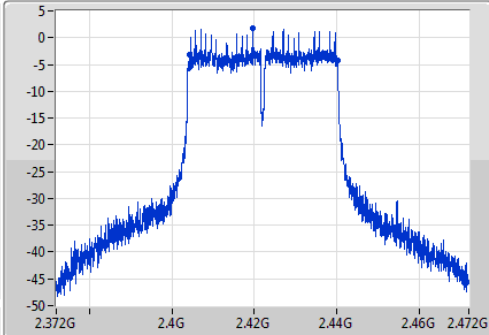
RBW  
100kHz

VBW  
300kHz

Sweep Time  
100ms

Detector Type  
Peak

Port 1 



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.9M	2.4043G	2.4402G	36.282M	2.403909G	2.440191G	500k	1

Ch Freq  
2.422GHz

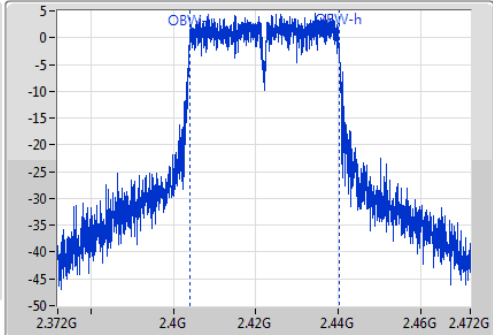
Span  
100MHz

RBW  
500kHz

VBW  
2MHz

Sweep Time  
100ms

Detector Type  
Sample


**802.11n HT40\_Nss1,(MCS0)\_1TX**
**EBW**
**2437MHz**

Ch Freq  
2.437GHz

Span  
100MHz

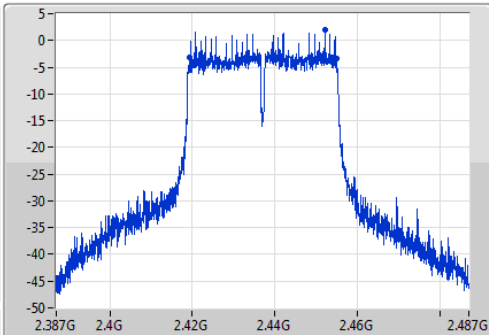
RBW  
100kHz

VBW  
300kHz

Sweep Time  
100ms

Detector Type  
Peak

Port 1 



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.65M	2.4193G	2.45495G	36.282M	2.418909G	2.455191G	500k	1

Ch Freq  
2.437GHz

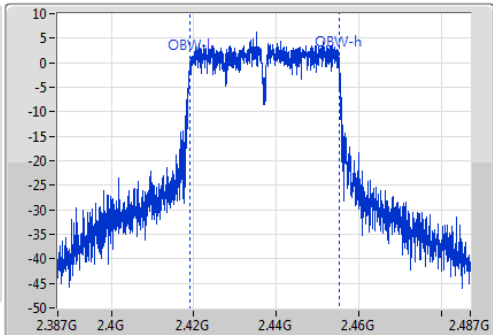
Span  
100MHz

RBW  
500kHz

VBW  
2MHz

Sweep Time  
100ms

Detector Type  
Sample


**802.11n HT40\_Nss1,(MCS0)\_1TX**
**EBW**
**2452MHz**

Ch Freq  
2.452GHz


Span  
100MHz

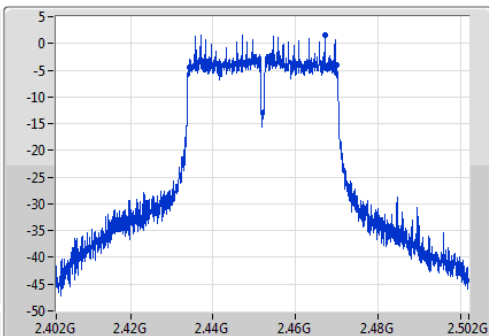
RBW  
100kHz

VBW  
300kHz

Sweep Time  
100ms

Detector Type  
Peak

Port 1 



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.7M	2.43425G	2.46995G	36.332M	2.433809G	2.470141G	500k	1

Ch Freq  
2.452GHz

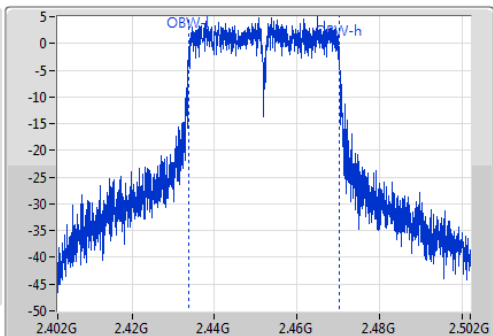
Span  
100MHz

RBW  
500kHz

VBW  
2MHz

Sweep Time  
100ms

Detector Type  
Sample



### Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_1TX	-	-
2.4-2.4835GHz	16.51	0.04477
802.11g_(6Mbps)_1TX	-	-
2.4-2.4835GHz	14.67	0.02931
802.11n HT20_Nss1,(MCS0)_1TX	-	-
2.4-2.4835GHz	14.71	0.02958
802.11n HT40_Nss1,(MCS0)_1TX	-	-
2.4-2.4835GHz	14.58	0.02871

### Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.00	16.51	16.51	30.00
2437MHz	Pass	2.00	16.02	16.02	30.00
2462MHz	Pass	2.00	15.31	15.31	30.00
802.11g_(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.00	14.59	14.59	30.00
2437MHz	Pass	2.00	14.67	14.67	30.00
2462MHz	Pass	2.00	14.66	14.66	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	2.00	14.55	14.55	30.00
2437MHz	Pass	2.00	14.71	14.71	30.00
2462MHz	Pass	2.00	14.65	14.65	30.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
2422MHz	Pass	2.00	14.49	14.49	30.00
2437MHz	Pass	2.00	14.58	14.58	30.00
2452MHz	Pass	2.00	14.42	14.42	30.00

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

**Summary**

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_1TX	-
2.4-2.4835GHz	-6.74
802.11g_(6Mbps)_1TX	-
2.4-2.4835GHz	-11.99
802.11n HT20_Nss1,(MCS0)_1TX	-
2.4-2.4835GHz	-10.78
802.11n HT40_Nss1,(MCS0)_1TX	-
2.4-2.4835GHz	-13.33

RBW=3kHz.

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.00	-6.79	-6.79	8.00
2437MHz	Pass	2.00	-6.74	-6.74	8.00
2462MHz	Pass	2.00	-7.56	-7.56	8.00
802.11g_(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.00	-12.09	-12.09	8.00
2437MHz	Pass	2.00	-11.99	-11.99	8.00
2462MHz	Pass	2.00	-12.13	-12.13	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	2.00	-10.81	-10.81	8.00
2437MHz	Pass	2.00	-10.78	-10.78	8.00
2462MHz	Pass	2.00	-10.88	-10.88	8.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
2422MHz	Pass	2.00	-13.33	-13.33	8.00
2437MHz	Pass	2.00	-13.38	-13.38	8.00
2452MHz	Pass	2.00	-13.43	-13.43	8.00

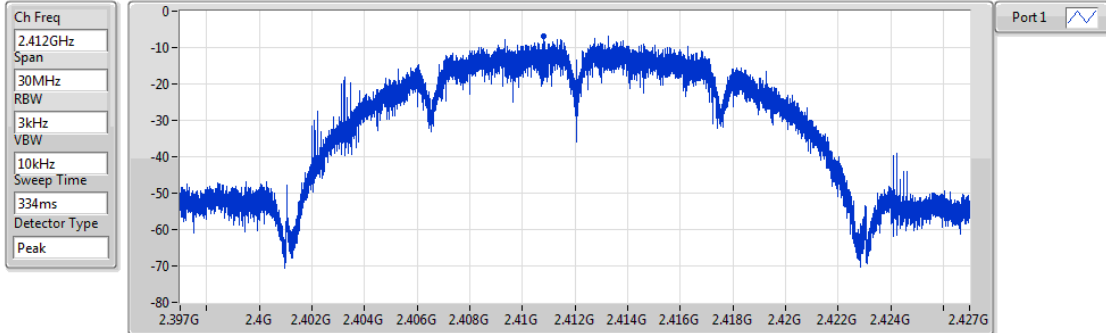
**DG** = Directional Gain; RBW=3kHz;

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

### 802.11b\_(1Mbps)\_1TX

PSD

2412MHz

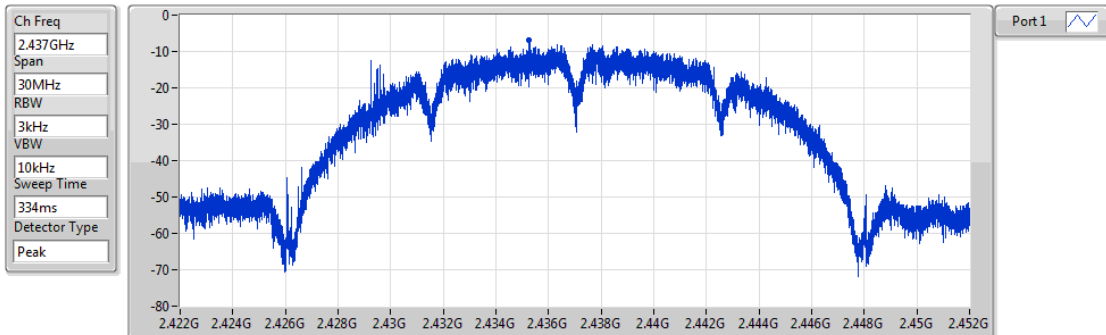


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.79	-6.79	-6.79

### 802.11b\_(1Mbps)\_1TX

PSD

2437MHz

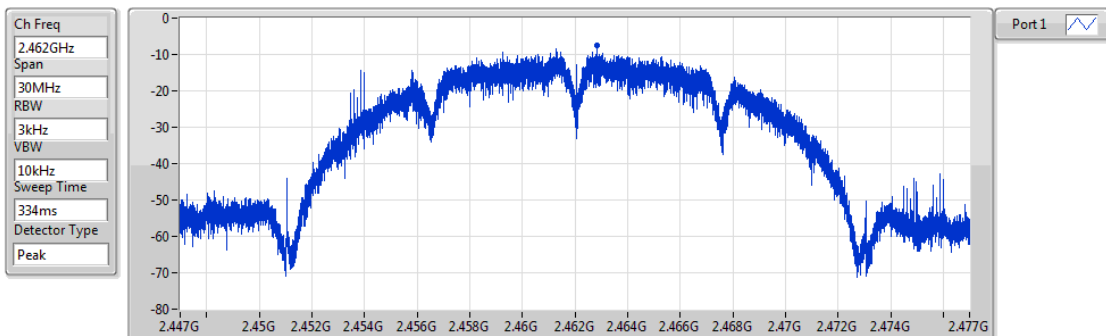


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.74	-6.74	-6.74

### 802.11b\_(1Mbps)\_1TX

PSD

2462MHz

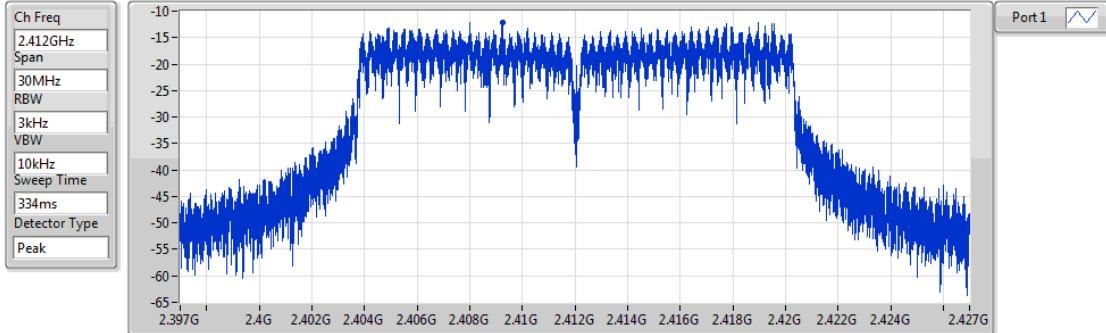


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.56	-7.56	-7.56

### 802.11g\_(6Mbps)\_1TX

PSD

2412MHz

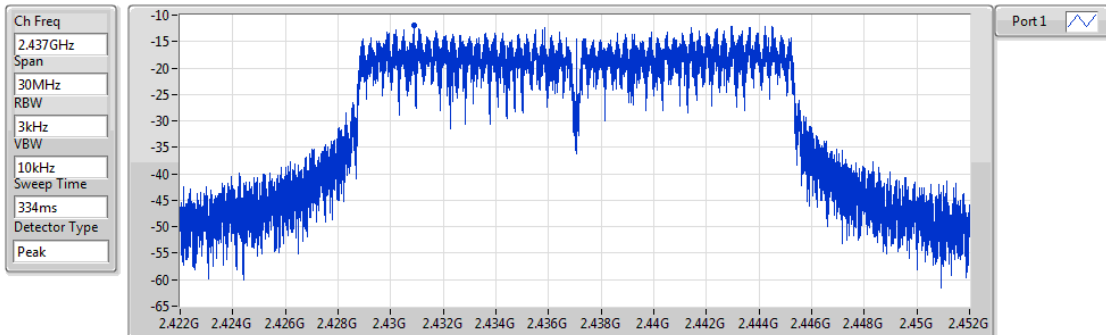


Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-12.09	-12.09	-12.09

### 802.11g\_(6Mbps)\_1TX

PSD

2437MHz

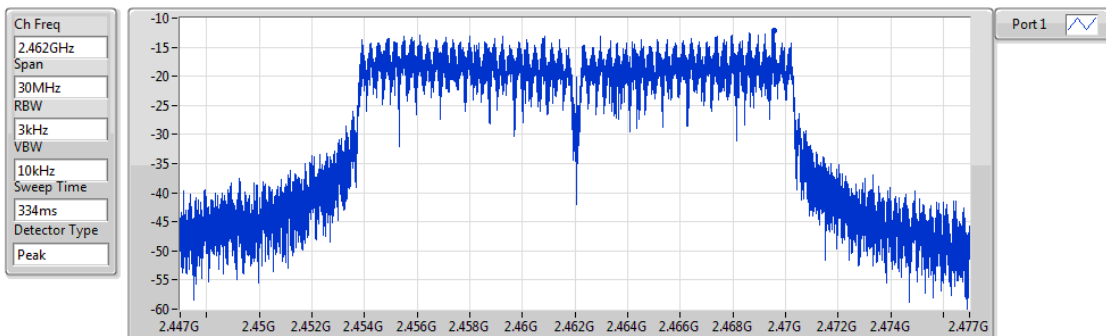


Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-11.99	-11.99	-11.99

### 802.11g\_(6Mbps)\_1TX

PSD

2462MHz

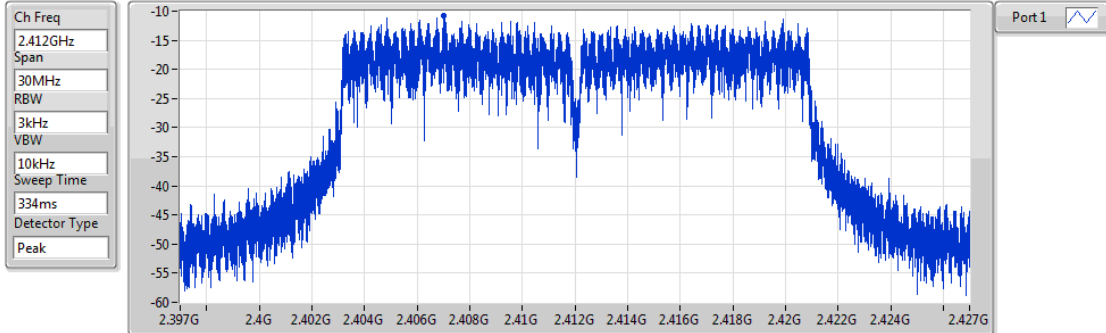


Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-12.13	-12.13	-12.13

### 802.11n HT20\_Nss1,(MCS0)\_1TX

PSD

2412MHz

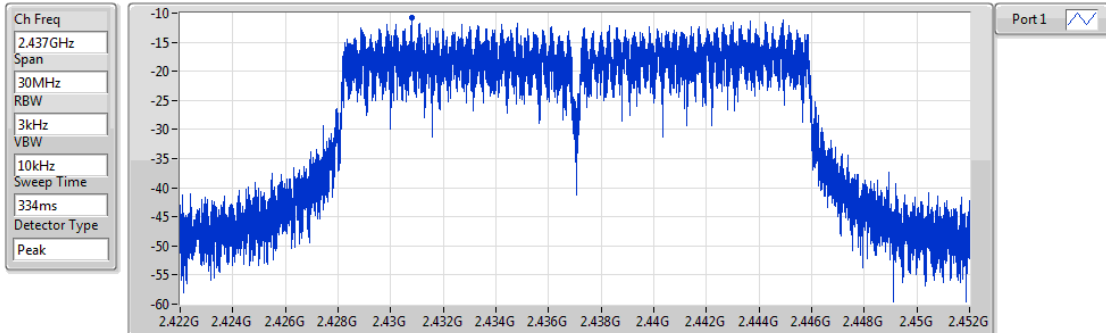


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.81	-10.81	-10.81

### 802.11n HT20\_Nss1,(MCS0)\_1TX

PSD

2437MHz

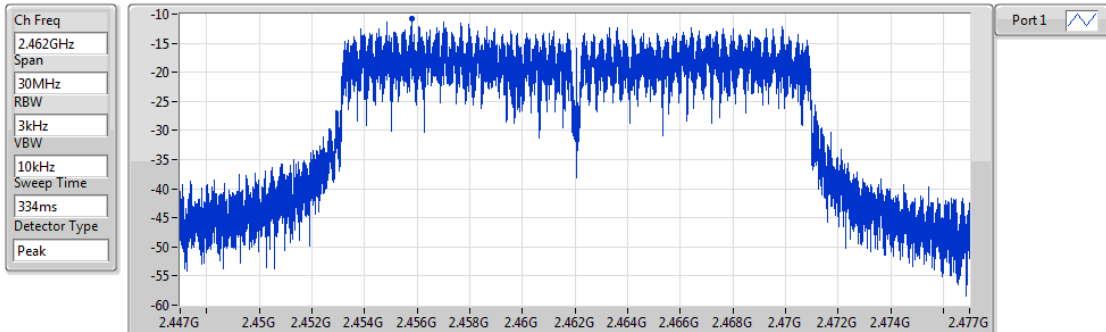


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.78	-10.78	-10.78

### 802.11n HT20\_Nss1,(MCS0)\_1TX

PSD

2462MHz



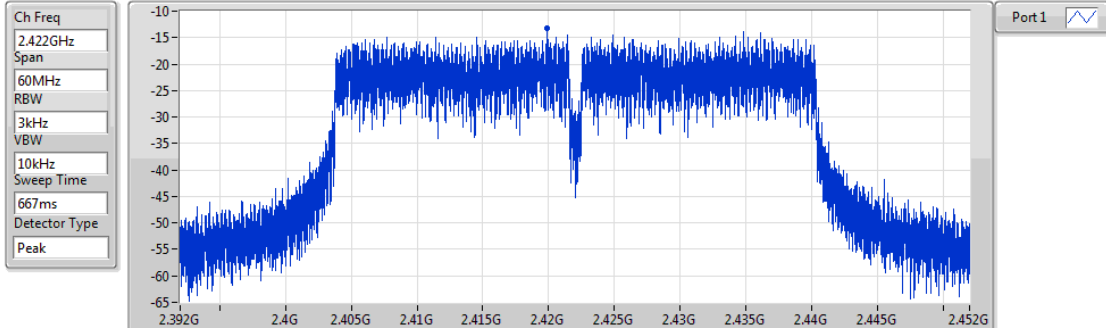
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.88	-10.88	-10.88



### 802.11n HT40\_Nss1,(MCS0)\_1TX

PSD

2422MHz

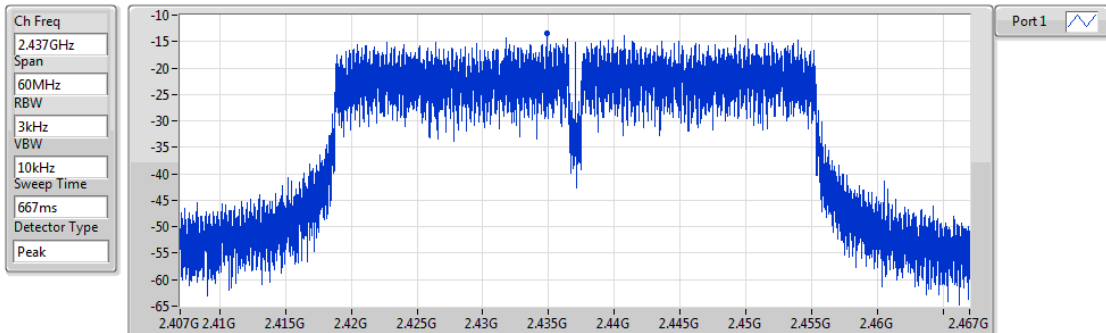


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.33	-13.33	-13.33

### 802.11n HT40\_Nss1,(MCS0)\_1TX

PSD

2437MHz

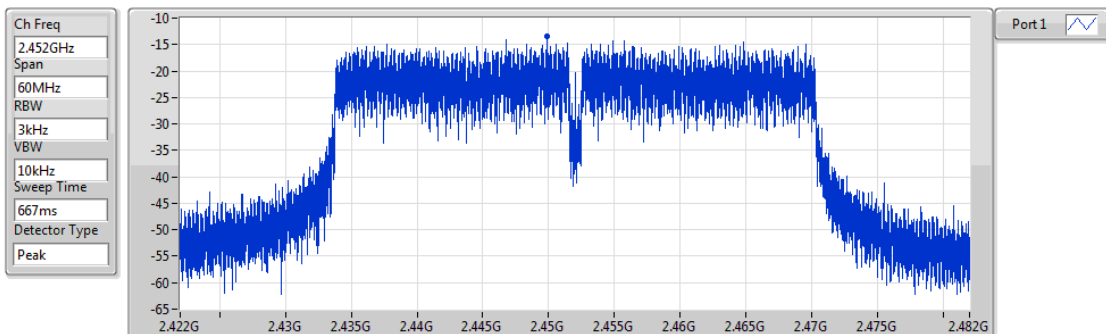


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.38	-13.38	-13.38

### 802.11n HT40\_Nss1,(MCS0)\_1TX

PSD

2452MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.43	-13.43	-13.43

**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 HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.432064G	5.08	-24.92	2.300585G	-55.86	2.398G	-26.03	2.49566G	-53.62	2.537548G	-52.49	1

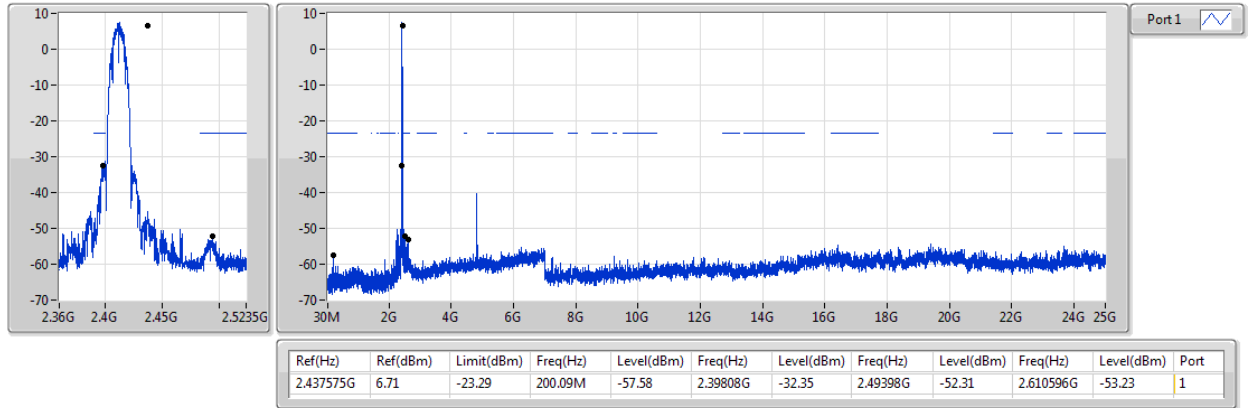
**Result**

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_(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.437575G	6.71	-23.29	200.09M	-57.58	2.39808G	-32.35	2.49398G	-52.31	2.610596G	-53.23	1
2437MHz	Pass	2.437575G	6.71	-23.29	200.09M	-57.44	2.39752G	-52.10	2.4879G	-48.66	6.833369G	-54.68	1
2462MHz	Pass	2.437575G	6.71	-23.29	2.305245G	-51.43	2.39528G	-59.29	2.48734G	-47.14	2.582501G	-53.55	1
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.430728G	4.69	-25.31	2.300585G	-54.79	2.39672G	-27.59	2.48614G	-52.66	2.537548G	-54.00	1
2437MHz	Pass	2.430728G	4.69	-25.31	2.309905G	-54.36	2.39296G	-49.39	2.48774G	-47.87	2.562834G	-53.60	1
2462MHz	Pass	2.430728G	4.69	-25.31	2.30641G	-55.84	2.39704G	-55.53	2.48374G	-36.03	2.534738G	-51.51	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.432064G	5.08	-24.92	2.300585G	-55.86	2.398G	-26.03	2.49566G	-53.62	2.537548G	-52.49	1
2437MHz	Pass	2.432064G	5.08	-24.92	2.309905G	-55.15	2.39056G	-47.81	2.4851G	-47.25	2.548786G	-53.77	1
2462MHz	Pass	2.432064G	5.08	-24.92	2.30175G	-56.27	2.39304G	-56.45	2.48358G	-34.03	2.52631G	-50.78	1
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.440748G	1.89	-28.11	2.19405G	-59.82	2.39344G	-30.67	2.48414G	-47.94	6.969468G	-52.75	1
2437MHz	Pass	2.440748G	1.89	-28.11	903.635M	-60.01	2.39664G	-36.81	2.48942G	-41.17	2.569109G	-54.88	1
2452MHz	Pass	2.440748G	1.89	-28.11	30M	-59.91	2.39584G	-47.74	2.48942G	-30.29	6.240281G	-53.36	1

## 802.11b\_(1Mbps)\_1TX

CSE NdB

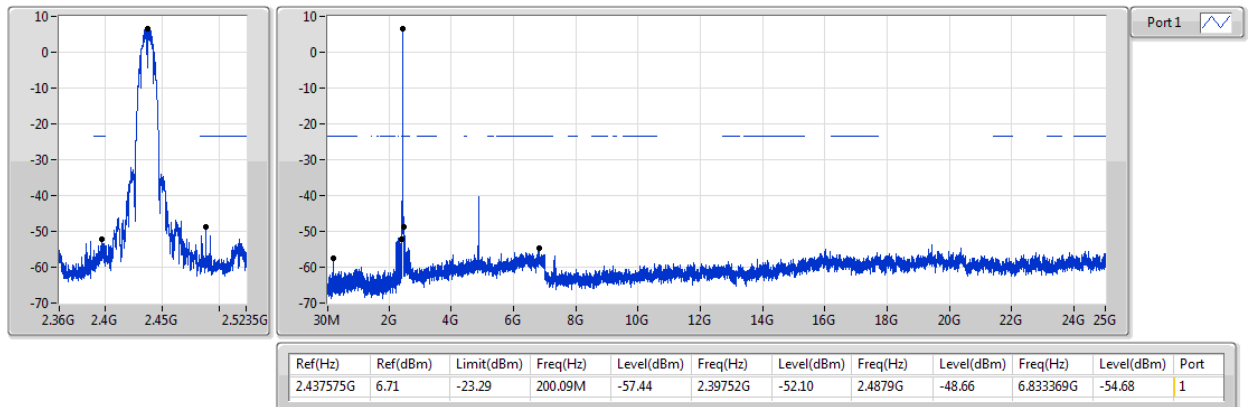
2412MHz



## 802.11b\_(1Mbps)\_1TX

CSE NdB

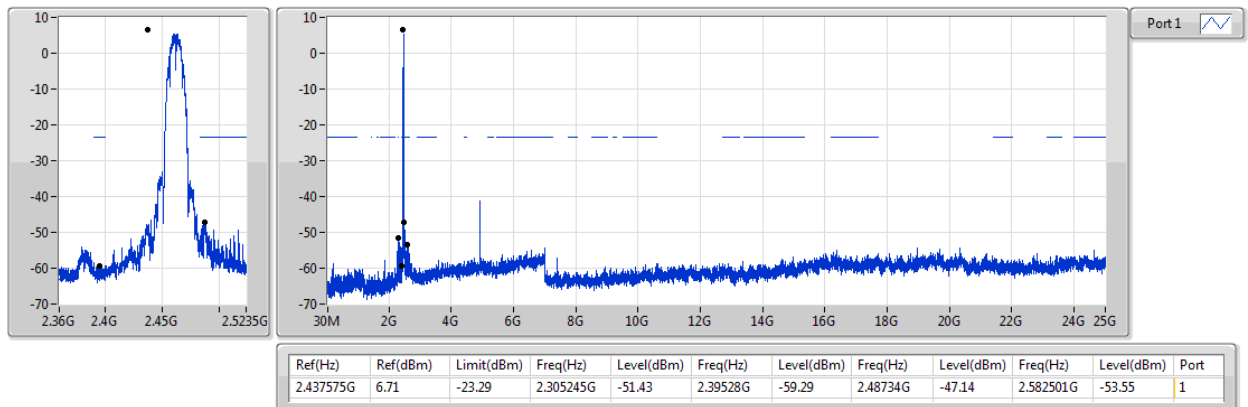
2437MHz



## 802.11b\_(1Mbps)\_1TX

CSE NdB

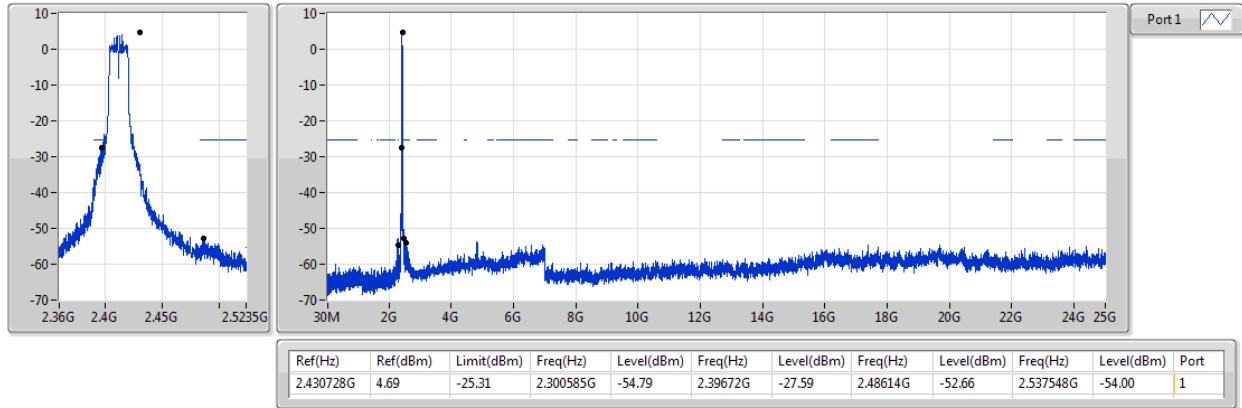
2462MHz



## 802.11g\_(6Mbps)\_1TX

CSE NdB

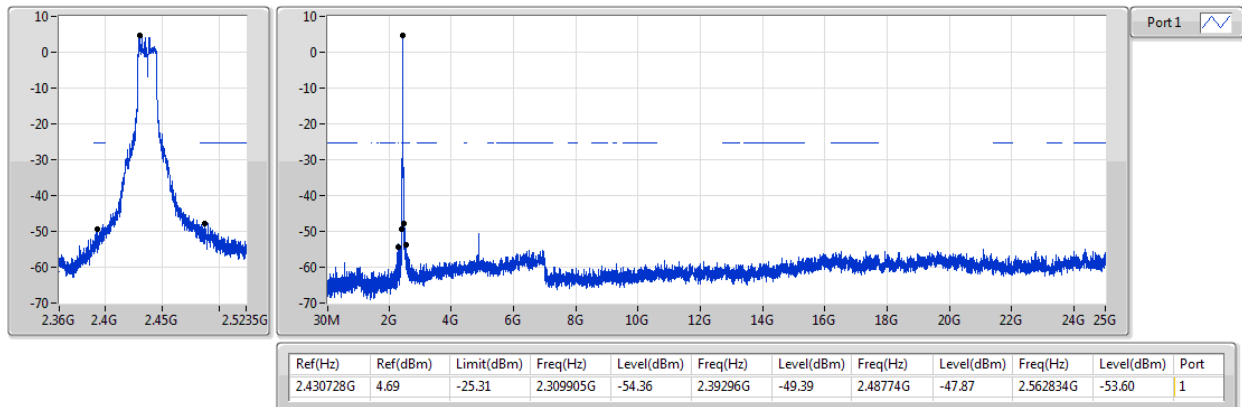
2412MHz



## 802.11g\_(6Mbps)\_1TX

CSE NdB

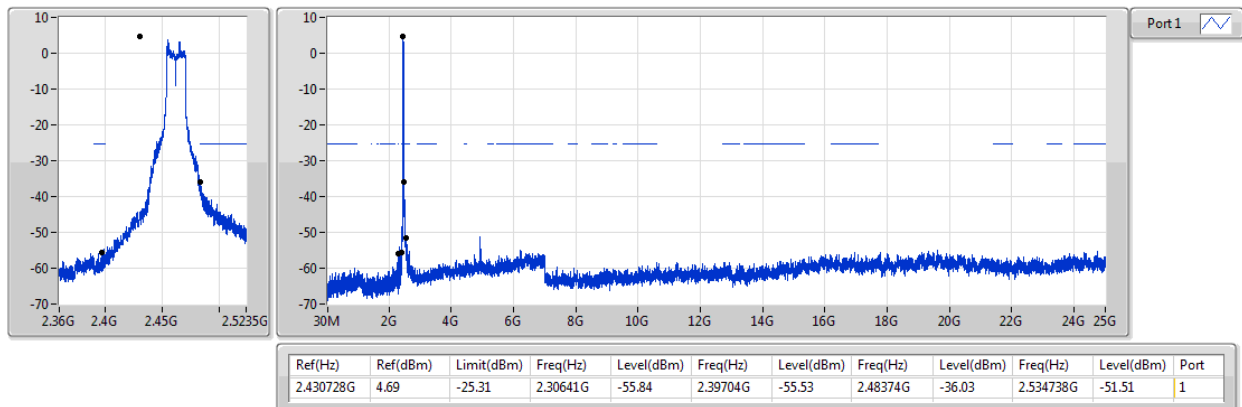
2437MHz



## 802.11g\_(6Mbps)\_1TX

CSE NdB

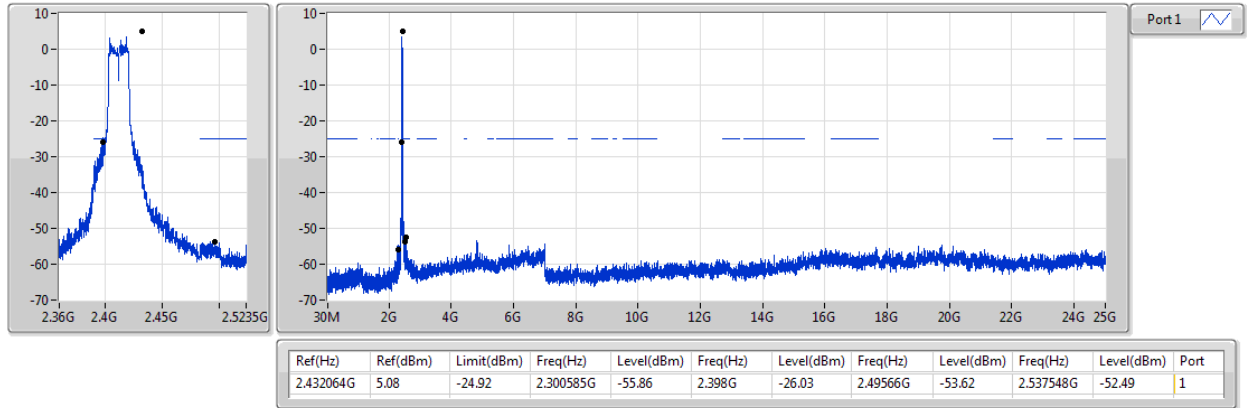
2462MHz



### 802.11n HT20\_Nss1,(MCS0)\_1TX

CSE NdB

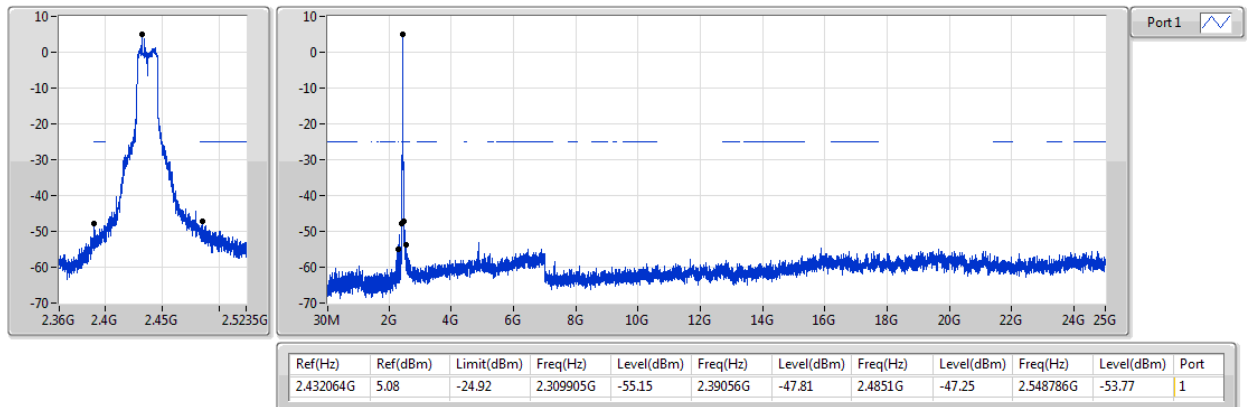
2412MHz



### 802.11n HT20\_Nss1,(MCS0)\_1TX

CSE NdB

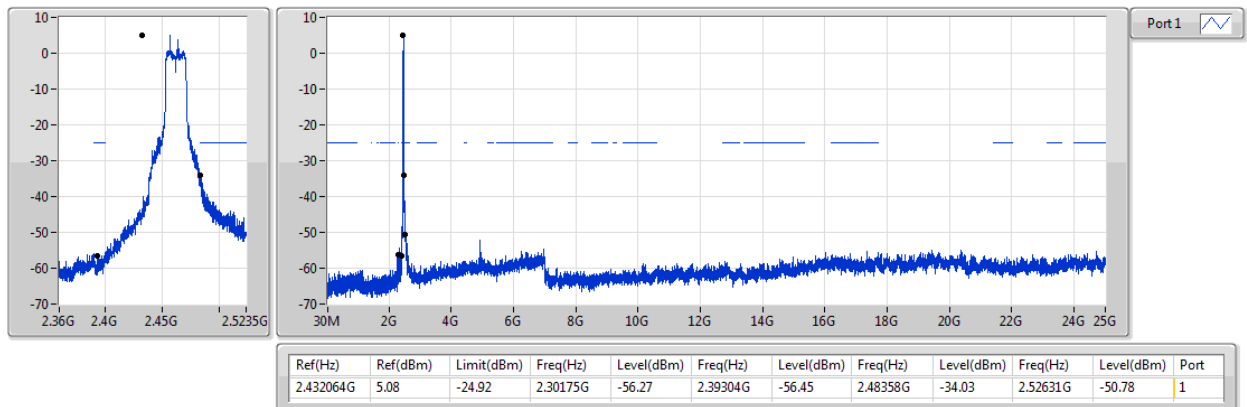
2437MHz



### 802.11n HT20\_Nss1,(MCS0)\_1TX

CSE NdB

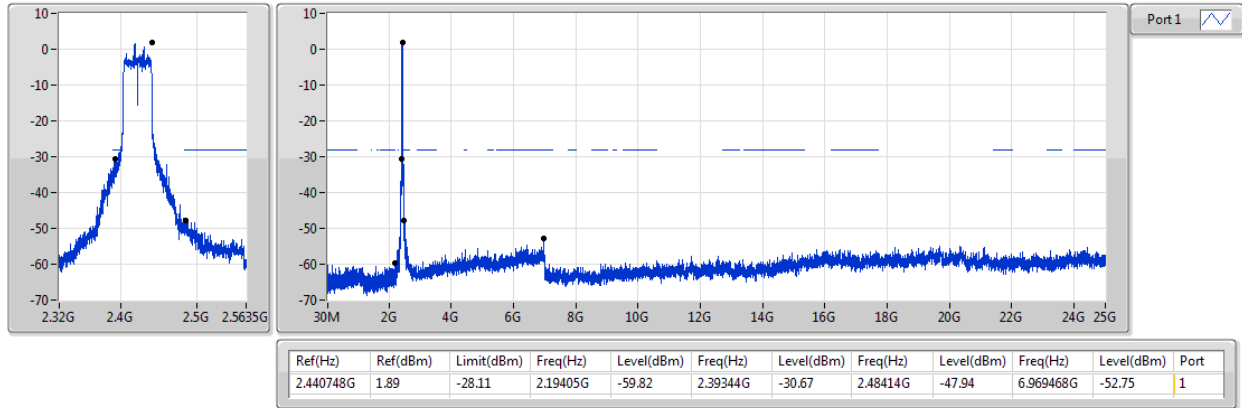
2462MHz



### 802.11n HT40\_Nss1,(MCS0)\_1TX

CSE NdB

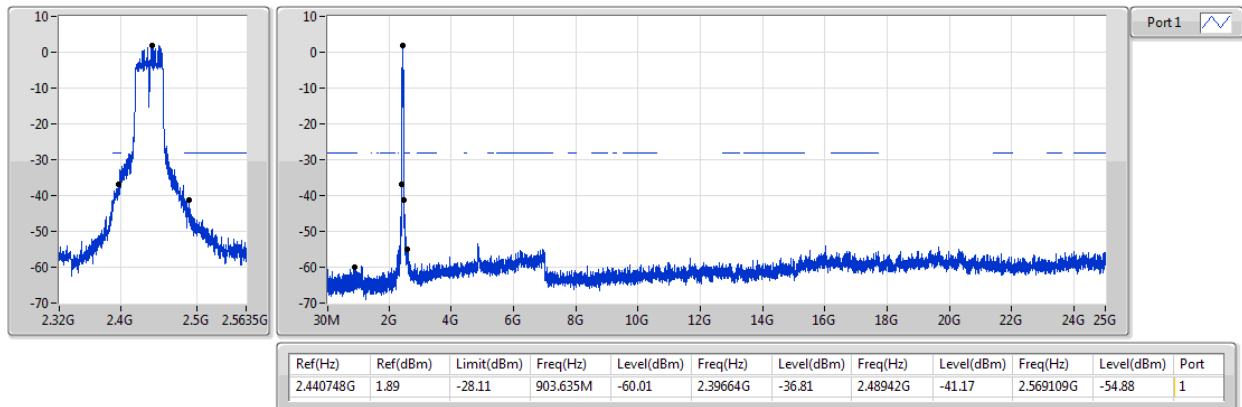
2422MHz



### 802.11n HT40\_Nss1,(MCS0)\_1TX

CSE NdB

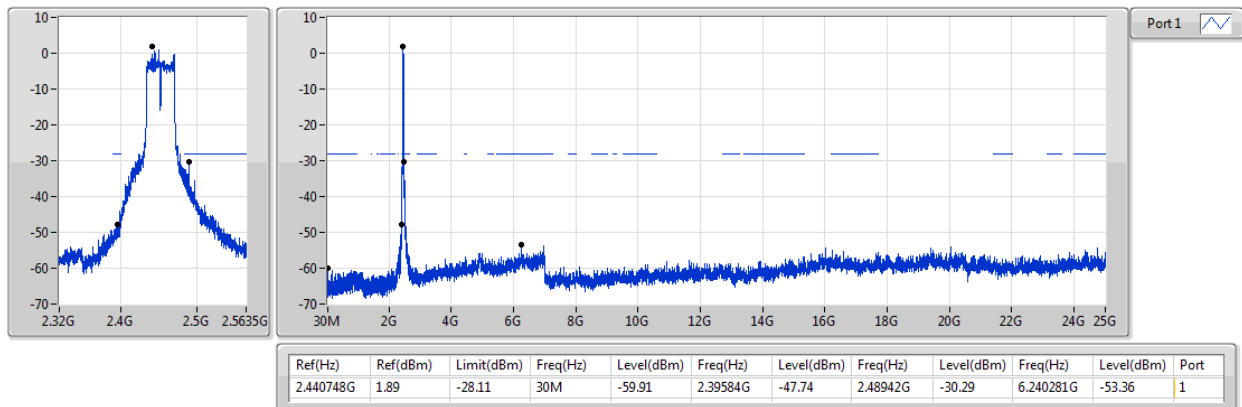
2437MHz

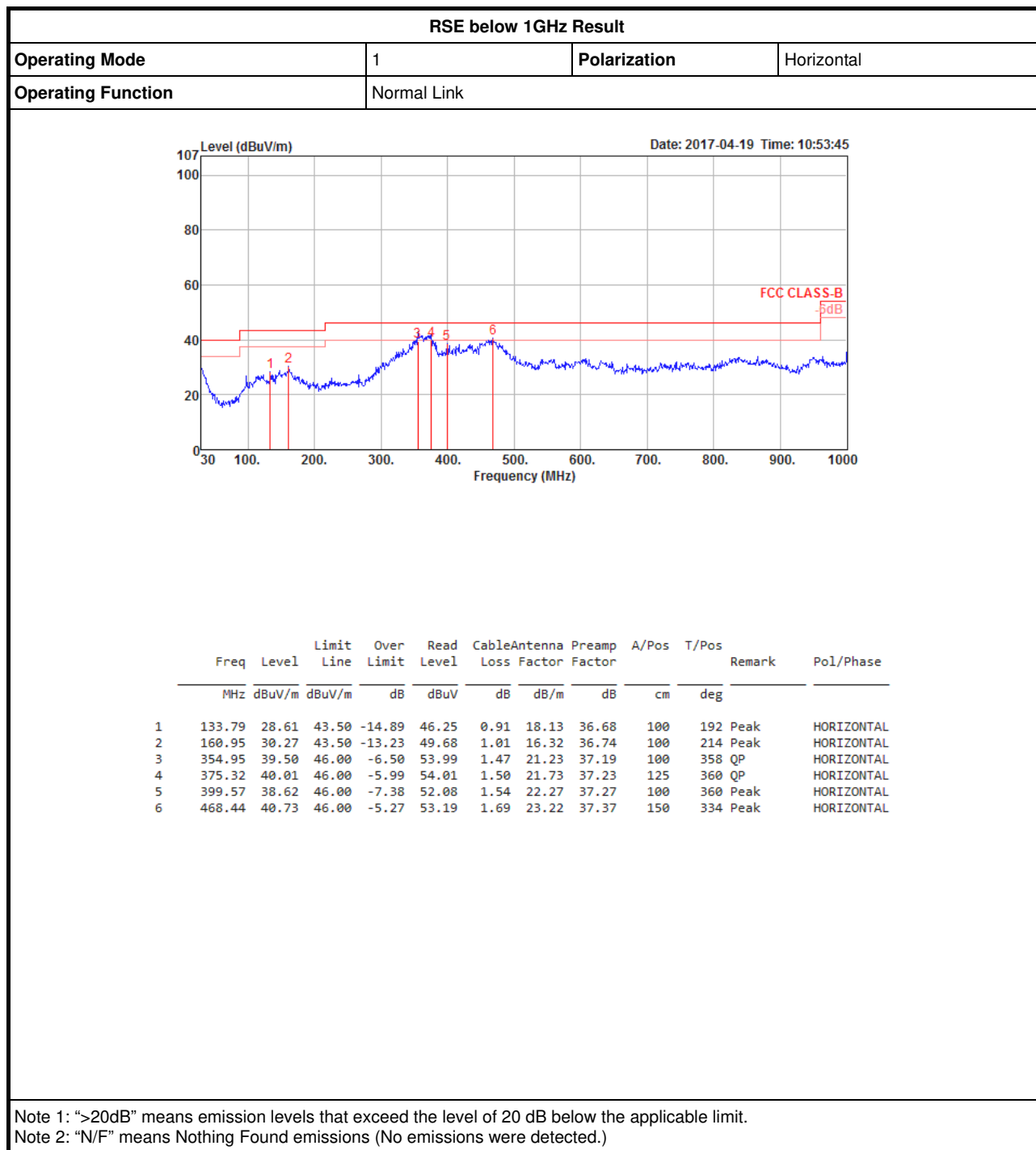


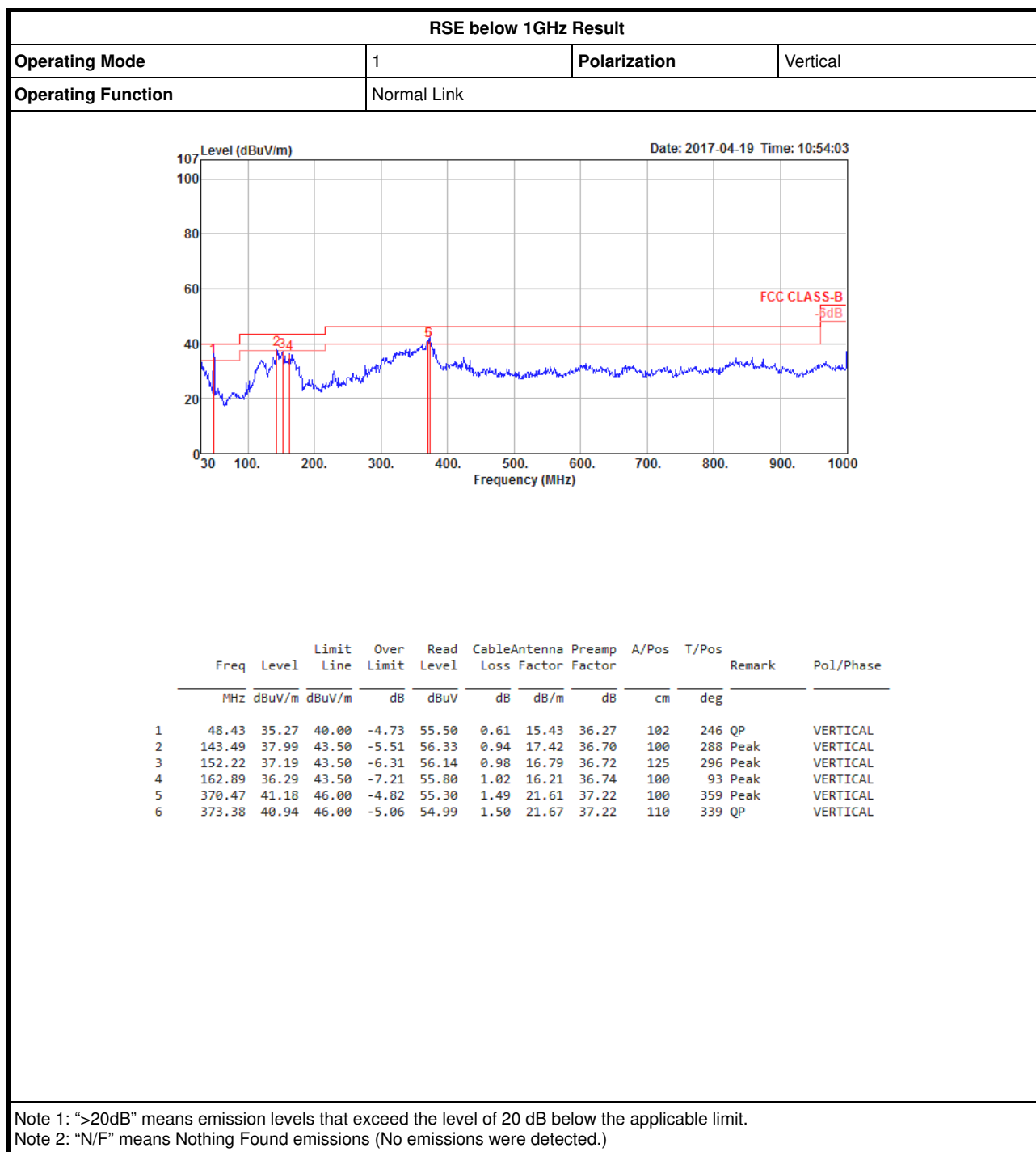
### 802.11n HT40\_Nss1,(MCS0)\_1TX

CSE NdB

2452MHz







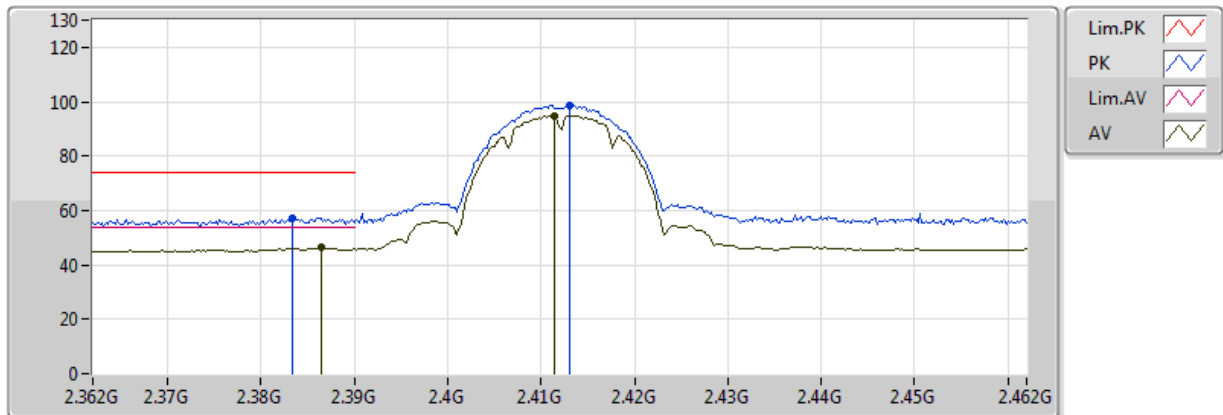


**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11b_(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	4.92412G	53.97	54.00	-0.03	6.85	3	H	308	1.00	-

## 802.11b\_(1Mbps)\_1TX

## 2412MHz\_TX

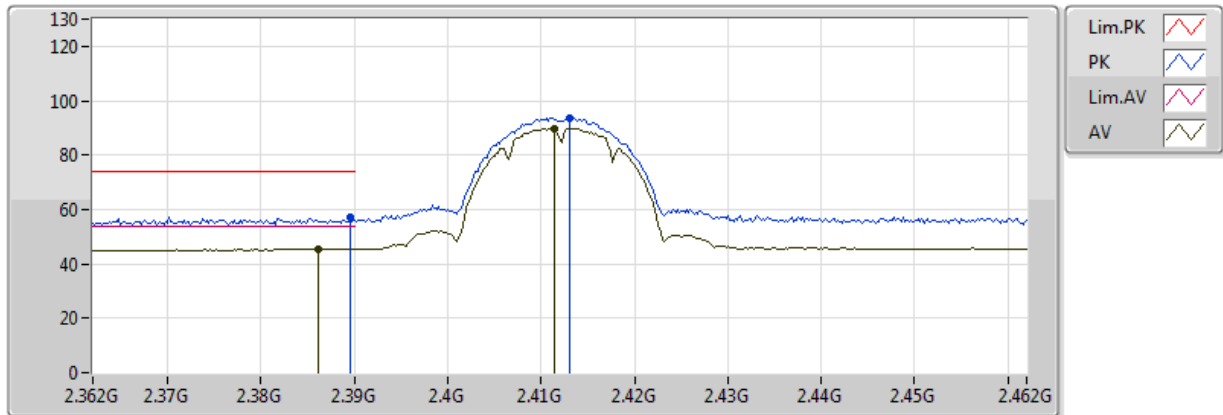


20170302  
EUT Y\_1TX  
Setting 55  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3864G	46.41	54.00	-7.59	33.14	3	V	74	1.24	-
AV	2.4114G	94.81	Inf	-Inf	33.23	3	V	74	1.24	-
PK	2.3834G	57.29	74.00	-16.71	33.13	3	V	74	1.24	-
PK	2.413G	98.76	Inf	-Inf	33.24	3	V	74	1.24	-

## 802.11b\_(1Mbps)\_1TX

## 2412MHz\_TX

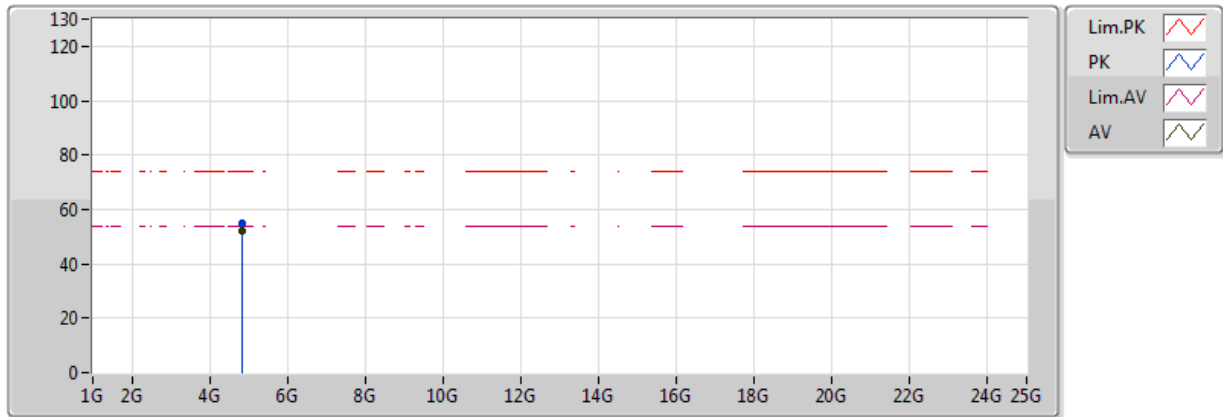


20170302  
EUT Y\_1TX  
Setting 55  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3862G	45.65	54.00	-8.35	33.14	3	H	185	2.99	-
AV	2.4114G	89.91	Inf	-Inf	33.23	3	H	185	2.99	-
PK	2.3896G	57.32	74.00	-16.68	33.15	3	H	185	2.99	-
PK	2.413G	93.73	Inf	-Inf	33.24	3	H	185	2.99	-

## 802.11b\_(1Mbps)\_1TX

## 2412MHz\_TX

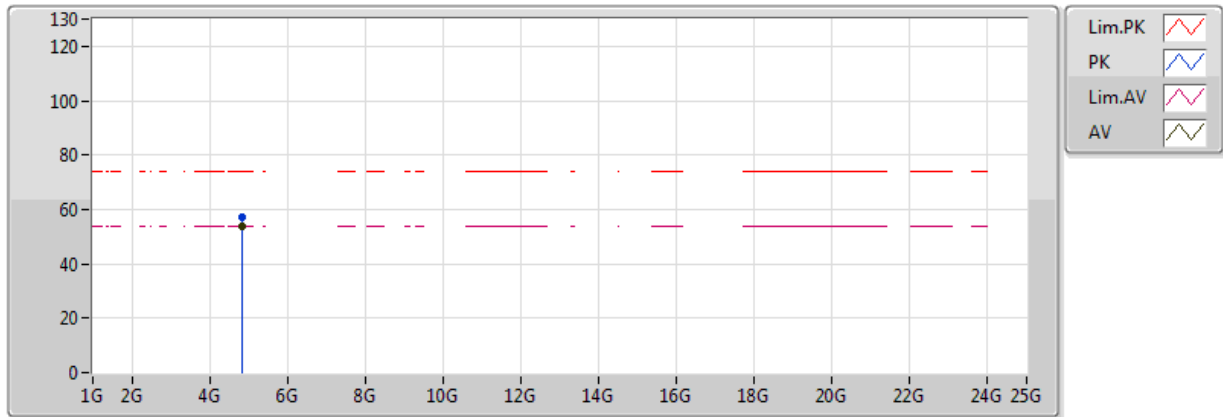


20170302  
EUT\_Y\_1TX  
Setting 55  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82412G	52.16	54.00	-1.84	6.54	3	V	83	1.91	-
PK	4.82394G	55.00	74.00	-19.00	6.54	3	V	83	1.91	-

## 802.11b\_(1Mbps)\_1TX

## 2412MHz\_TX

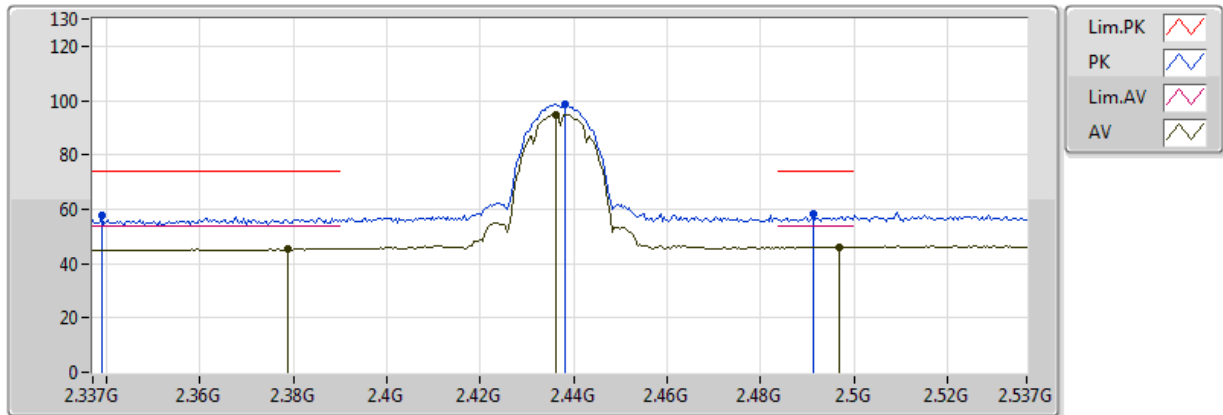


20170302  
EUT\_Y\_1TX  
Setting 55  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82412G	53.84	54.00	-0.16	6.54	3	H	346	2.84	-
PK	4.82412G	56.91	74.00	-17.09	6.54	3	H	346	2.84	-

## 802.11b\_(1Mbps)\_1TX

## 2437MHz\_TX

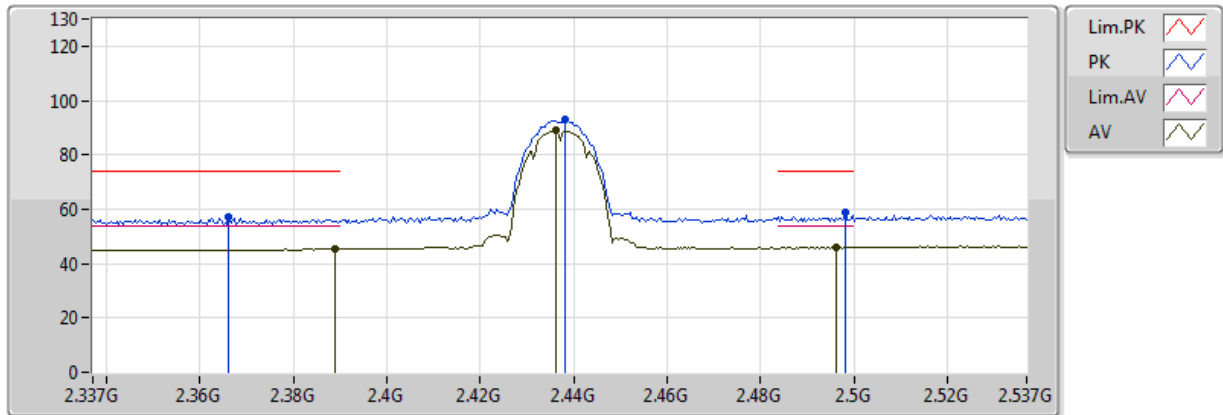


20170302  
EUT Y\_1TX  
Setting 53  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3786G	45.44	54.00	-8.56	33.12	3	V	73	1.19	-
AV	2.4362G	94.85	Inf	-Inf	33.32	3	V	73	1.19	-
AV	2.497G	46.04	54.00	-7.96	33.53	3	V	73	1.19	-
PK	2.339G	57.60	74.00	-16.40	32.98	3	V	73	1.19	-
PK	2.4382G	98.74	Inf	-Inf	33.32	3	V	73	1.19	-
PK	2.4914G	58.30	74.00	-15.70	33.51	3	V	73	1.19	-

### 802.11b\_(1Mbps)\_1TX

### 2437MHz\_TX

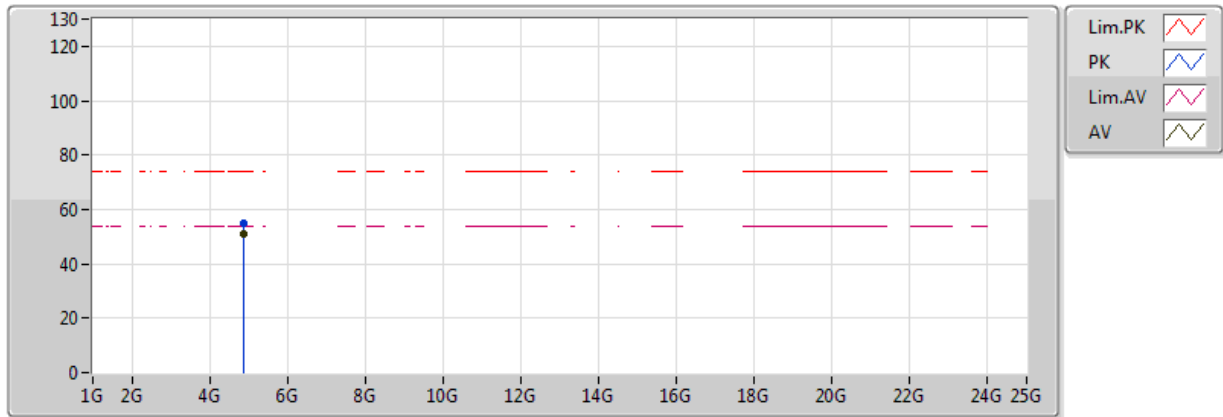


20170302  
EUT Y\_1TX  
Setting 53  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389G	45.42	54.00	-8.58	33.15	3	H	186	2.94	-
AV	2.4362G	88.85	Inf	-Inf	33.32	3	H	186	2.94	-
AV	2.4962G	45.99	54.00	-8.01	33.53	3	H	186	2.94	-
PK	2.3662G	57.34	74.00	-16.66	33.07	3	H	186	2.94	-
PK	2.4382G	92.78	Inf	-Inf	33.32	3	H	186	2.94	-
PK	2.4982G	58.65	74.00	-15.35	33.53	3	H	186	2.94	-

## 802.11b\_(1Mbps)\_1TX

## 2437MHz\_TX



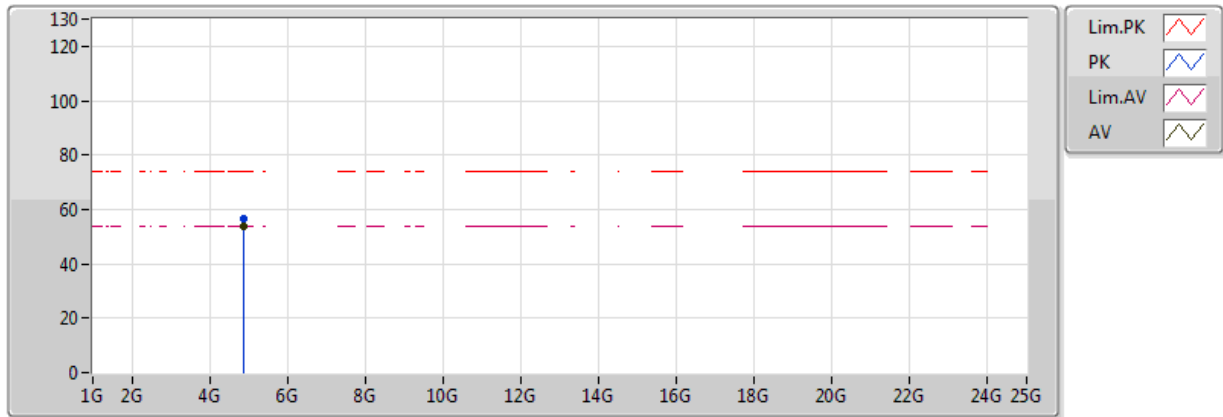
20170302  
EUT\_Y\_1TX  
Setting 53  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87412G	51.23	54.00	-2.77	6.70	3	V	154	2.03	-
PK	4.87418G	54.64	74.00	-19.36	6.70	3	V	154	2.03	-



## 802.11b\_(1Mbps)\_1TX

## 2437MHz\_TX

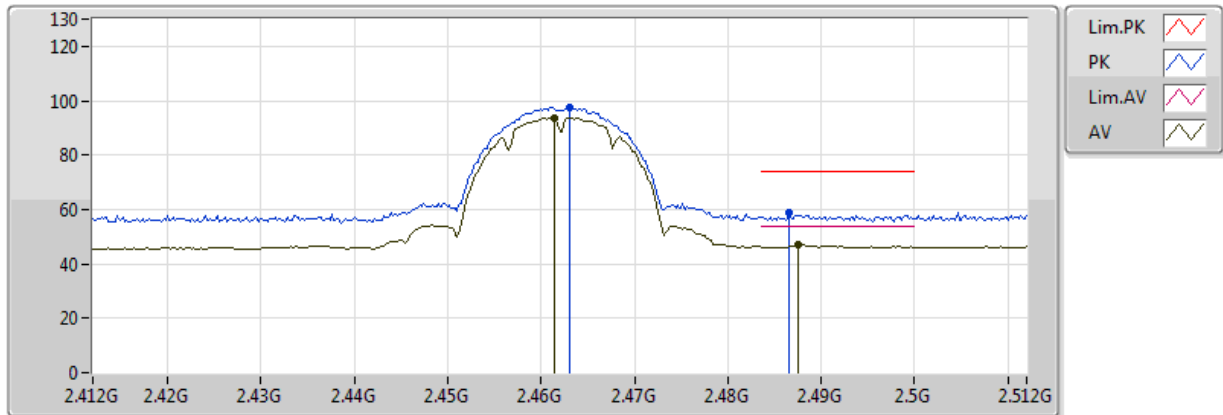


20170302  
EUT Y\_1TX  
Setting 53  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87412G	53.87	54.00	-0.13	6.70	3	H	313	1.03	-
PK	4.87412G	56.34	74.00	-17.66	6.70	3	H	313	1.03	-

## 802.11b\_(1Mbps)\_1TX

## 2462MHz\_TX

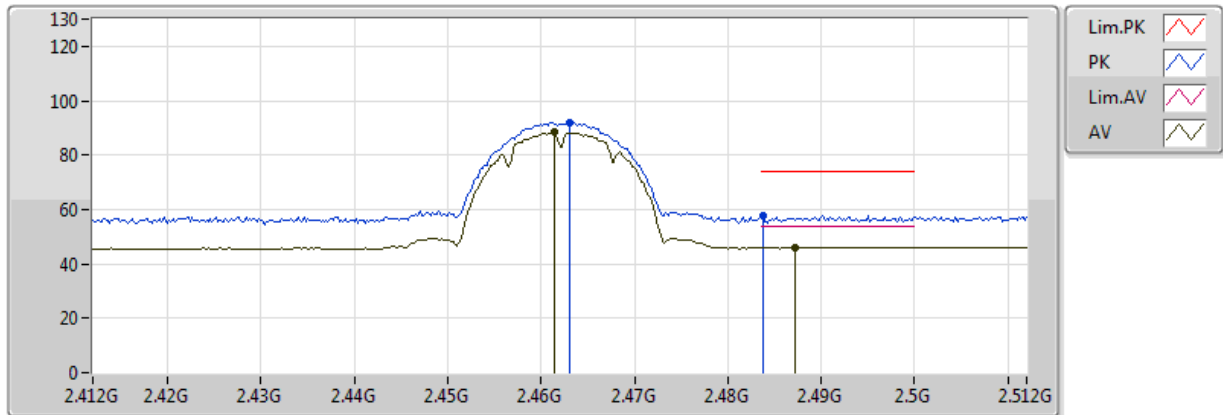


20170302  
EUT Y\_1TX  
Setting 51  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4614G	93.79	Inf	-Inf	33.40	3	V	71	1.01	-
AV	2.4876G	46.88	54.00	-7.12	33.50	3	V	71	1.01	-
PK	2.463G	97.60	Inf	-Inf	33.41	3	V	71	1.01	-
PK	2.4866G	58.56	74.00	-15.44	33.49	3	V	71	1.01	-

## 802.11b\_(1Mbps)\_1TX

## 2462MHz\_TX

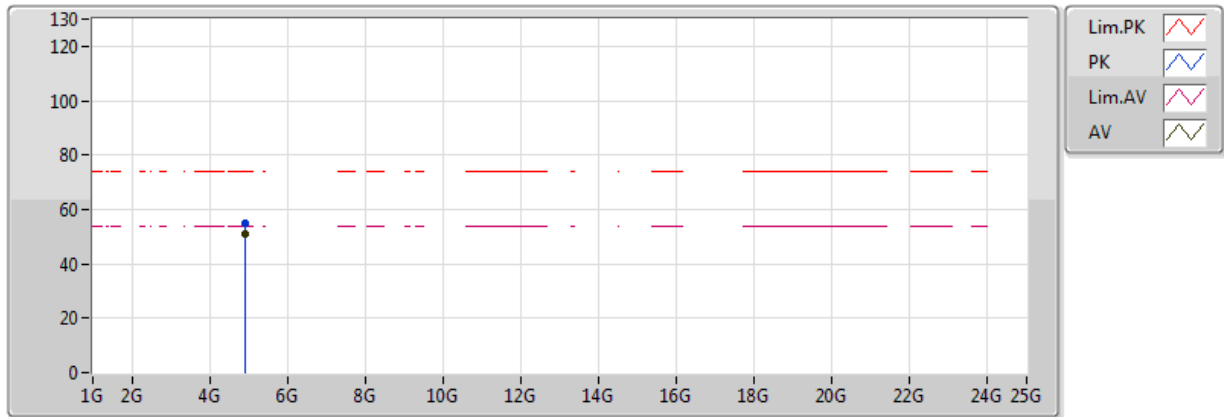


20170302  
EUT\_Y\_1TX  
Setting 51  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4614G	88.30	Inf	-Inf	33.40	3	H	195	2.90	-
AV	2.4872G	46.09	54.00	-7.91	33.50	3	H	195	2.90	-
PK	2.463G	92.14	Inf	-Inf	33.41	3	H	195	2.90	-
PK	2.4838G	57.91	74.00	-16.09	33.48	3	H	195	2.90	-

## 802.11b\_(1Mbps)\_1TX

## 2462MHz\_TX

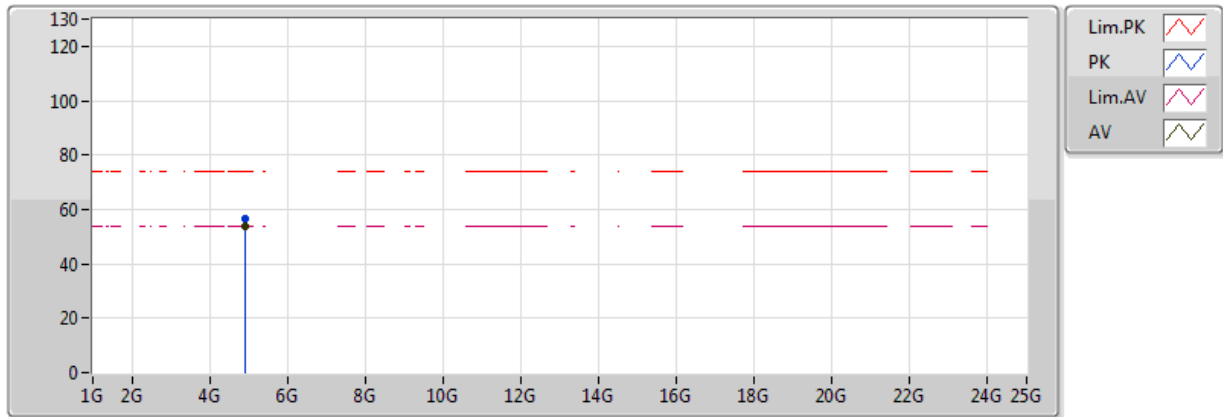


20170302  
EUT Y\_1TX  
Setting 51  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92412G	51.15	54.00	-2.85	6.85	3	V	149	2.12	-
PK	4.92418G	54.87	74.00	-19.13	6.85	3	V	149	2.12	-

## 802.11b\_(1Mbps)\_1TX

## 2462MHz\_TX

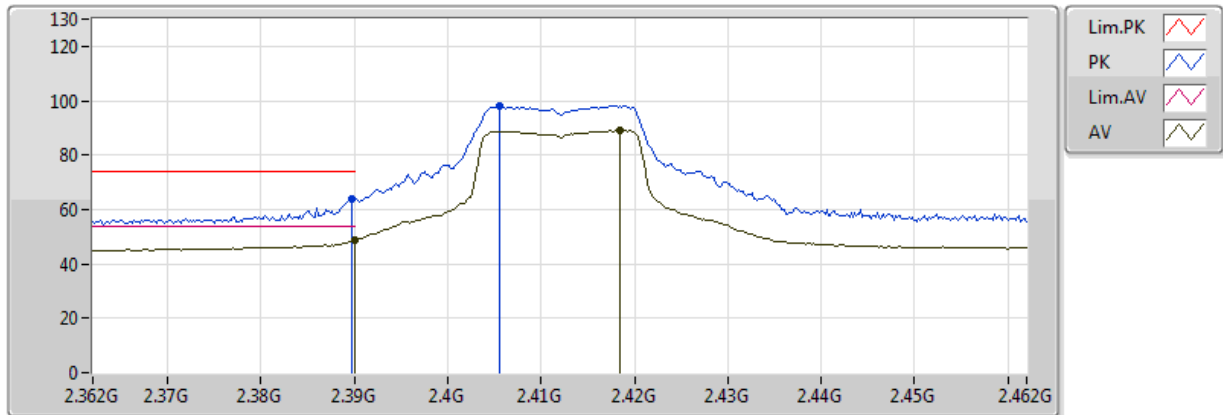


20170302  
EUT Y\_1TX  
Setting 51  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92412G	53.97	54.00	-0.03	6.85	3	H	308	1.00	-
PK	4.92412G	56.83	74.00	-17.17	6.85	3	H	308	1.00	-

### 802.11g\_(6Mbps)\_1TX

### 2412MHz\_TX

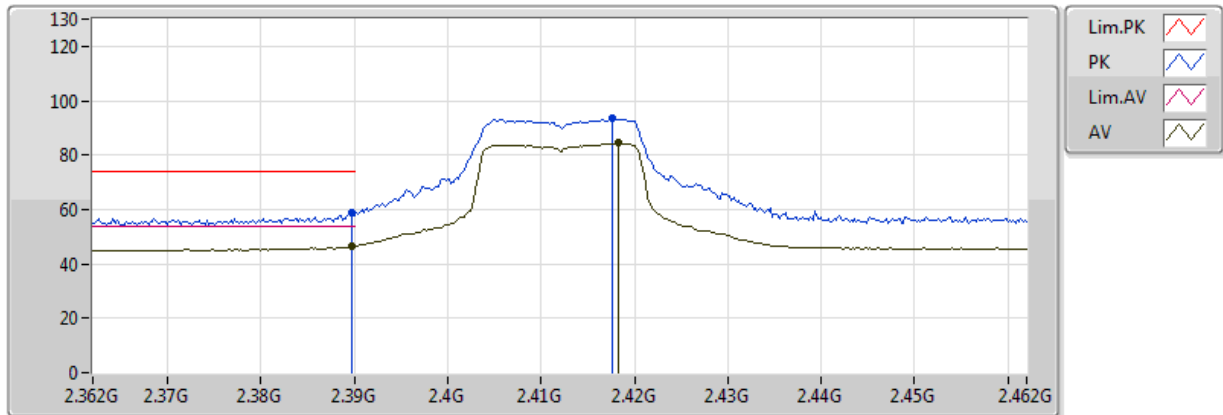


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.39G	48.59	54.00	-5.41	33.16	3	V	70	1.06	-
AV	2.4184G	89.12	Inf	-Inf	33.25	3	V	70	1.06	-
PK	2.3898G	63.71	74.00	-10.29	33.15	3	V	70	1.06	-
PK	2.4056G	98.30	Inf	-Inf	33.21	3	V	70	1.06	-

## 802.11g\_(6Mbps)\_1TX

## 2412MHz\_TX

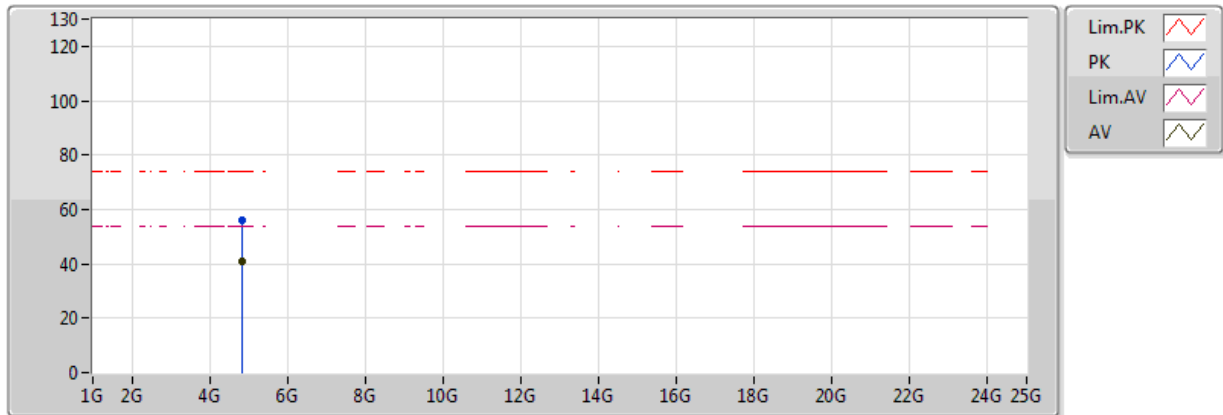


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	46.38	54.00	-7.62	33.15	3	H	186	2.67	-
AV	2.4182G	84.34	Inf	-Inf	33.25	3	H	186	2.67	-
PK	2.3898G	58.94	74.00	-15.06	33.15	3	H	186	2.67	-
PK	2.4176G	93.46	Inf	-Inf	33.25	3	H	186	2.67	-

## 802.11g\_(6Mbps)\_1TX

## 2412MHz\_TX



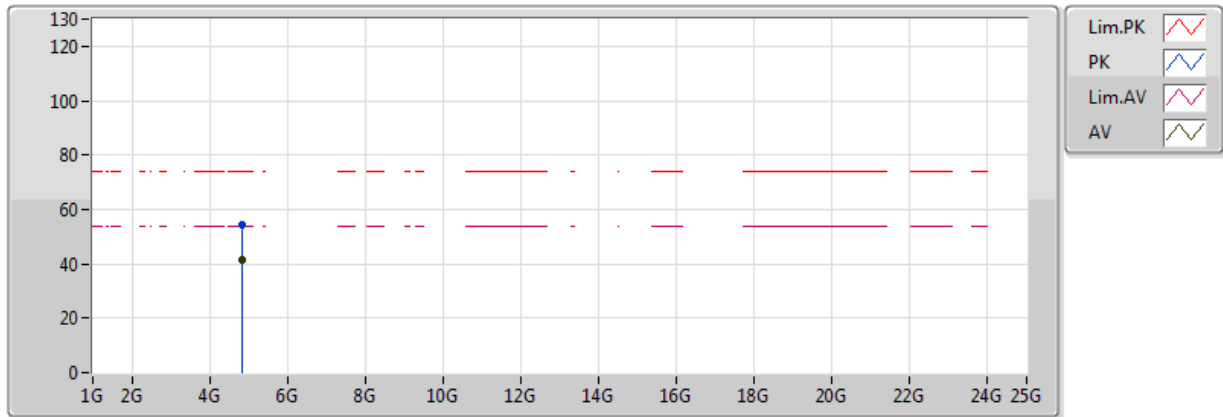
20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824096G	41.16	54.00	-12.84	6.54	3	V	247	1.33	-
PK	4.824104G	55.80	74.00	-18.20	6.54	3	V	247	1.33	-



## 802.11g\_(6Mbps)\_1TX

## 2412MHz\_TX

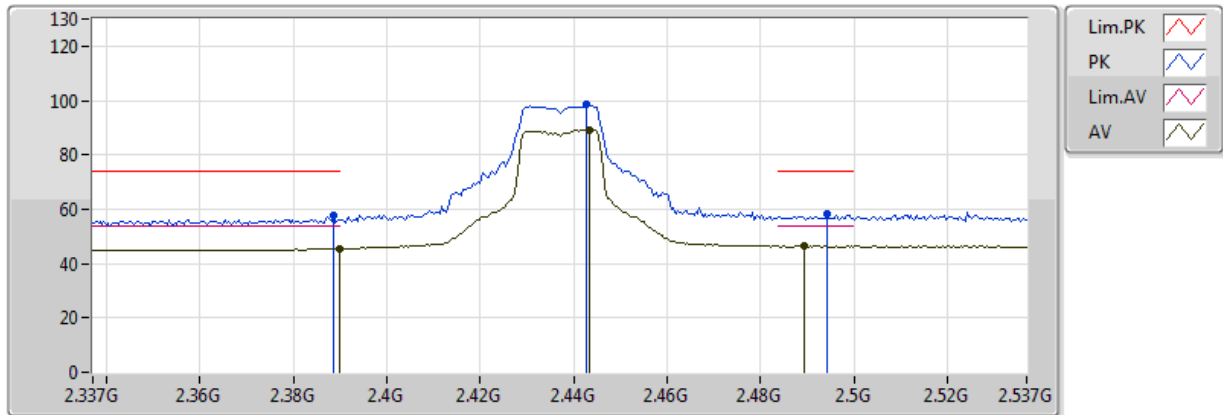


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824044G	41.74	54.00	-12.26	6.54	3	H	208	1.95	-
PK	4.824936G	54.60	74.00	-19.40	6.55	3	H	208	1.95	-

## 802.11g\_(6Mbps)\_1TX

## 2437MHz\_TX

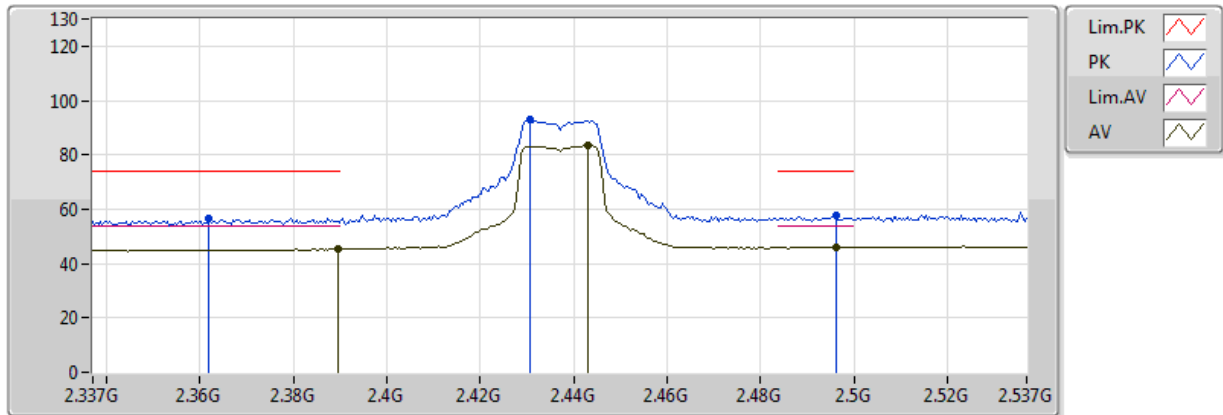


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	45.64	54.00	-8.36	33.15	3	V	72	1.04	-
AV	2.4434G	89.28	Inf	-Inf	33.34	3	V	72	1.04	-
AV	2.4894G	46.51	54.00	-7.49	33.50	3	V	72	1.04	-
PK	2.3886G	57.52	74.00	-16.48	33.15	3	V	72	1.04	-
PK	2.4426G	98.51	Inf	-Inf	33.34	3	V	72	1.04	-
PK	2.4942G	58.03	74.00	-15.97	33.52	3	V	72	1.04	-

## 802.11g\_(6Mbps)\_1TX

## 2437MHz\_TX

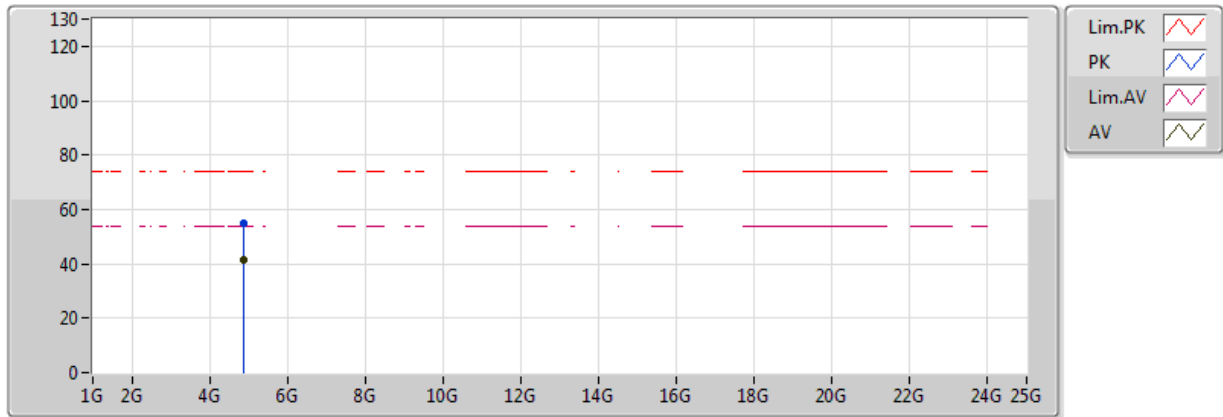


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3894G	45.38	54.00	-8.62	33.15	3	H	185	2.93	-
AV	2.443G	83.41	Inf	-Inf	33.34	3	H	185	2.93	-
AV	2.4962G	46.09	54.00	-7.91	33.53	3	H	185	2.93	-
PK	2.3618G	56.87	74.00	-17.13	33.06	3	H	185	2.93	-
PK	2.4306G	92.75	Inf	-Inf	33.30	3	H	185	2.93	-
PK	2.4962G	57.50	74.00	-16.50	33.53	3	H	185	2.93	-

## 802.11g\_(6Mbps)\_1TX

## 2437MHz\_TX

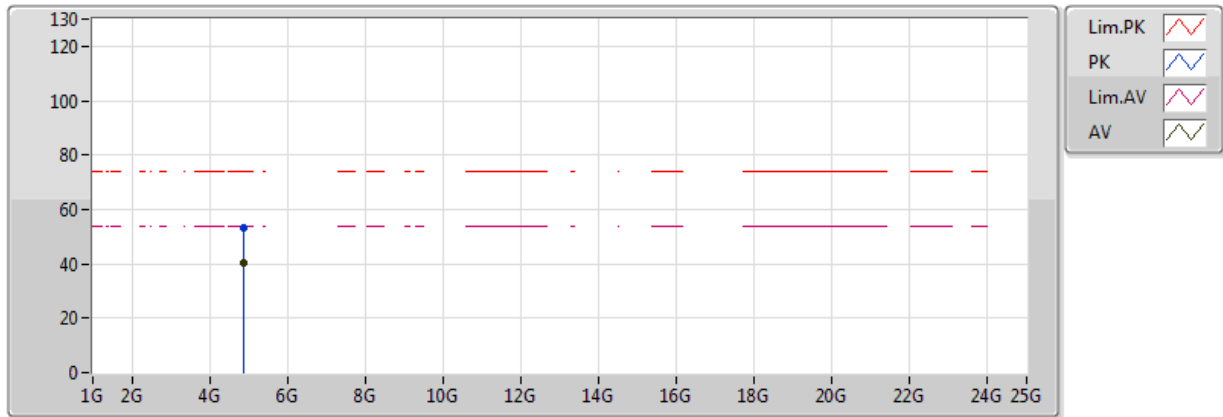


20170302  
EUT\_Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.874368G	41.73	54.00	-12.27	6.70	3	V	132	1.57	-
PK	4.873632G	54.93	74.00	-19.07	6.70	3	V	132	1.57	-

## 802.11g\_(6Mbps)\_1TX

## 2437MHz\_TX

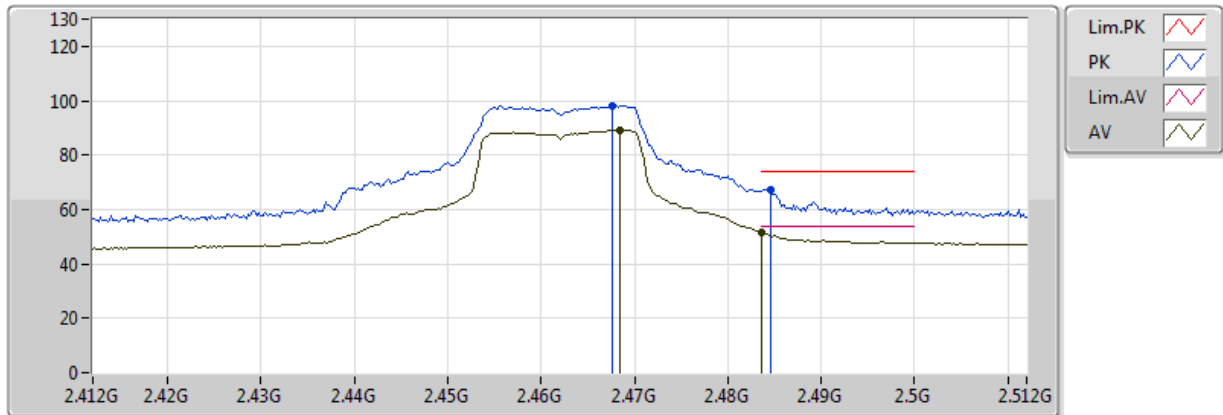


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.874152G	40.30	54.00	-13.70	6.70	3	H	246	2.02	-
PK	4.87424G	53.15	74.00	-20.85	6.70	3	H	246	2.02	-

## 802.11g\_(6Mbps)\_1TX

## 2462MHz\_TX

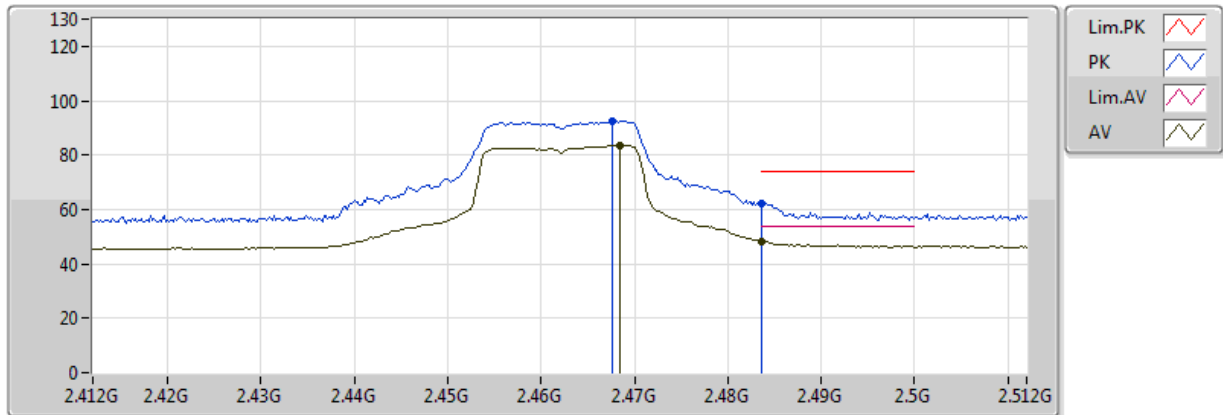


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4684G	89.31	Inf	-Inf	33.43	3	V	74	1.01	-
AV	2.4836G	51.46	54.00	-2.54	33.48	3	V	74	1.01	-
PK	2.4676G	98.28	Inf	-Inf	33.43	3	V	74	1.01	-
PK	2.4846G	67.17	74.00	-6.83	33.49	3	V	74	1.01	-

### 802.11g\_(6Mbps)\_1TX

### 2462MHz\_TX

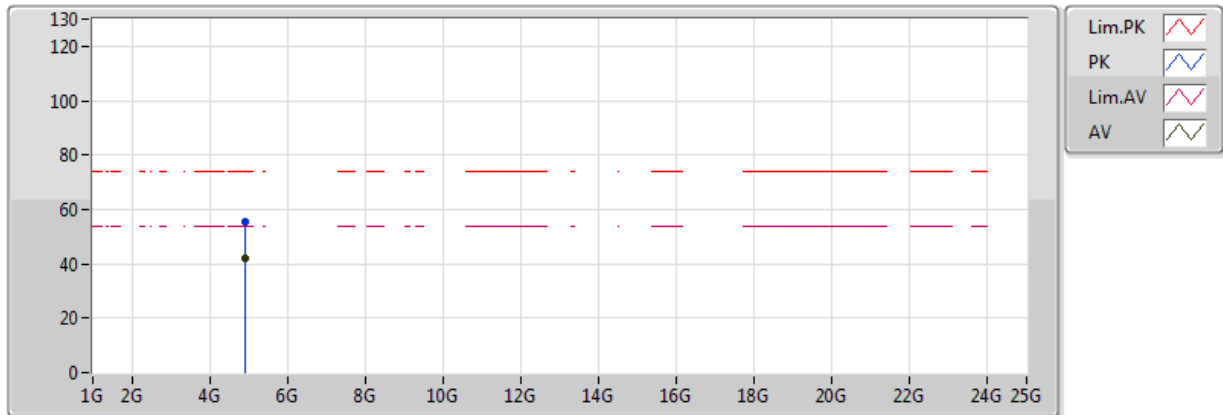


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4684G	83.65	Inf	-Inf	33.43	3	H	195	2.91	-
AV	2.4836G	48.36	54.00	-5.64	33.48	3	H	195	2.91	-
PK	2.4676G	92.65	Inf	-Inf	33.43	3	H	195	2.91	-
PK	2.4836G	62.42	74.00	-11.58	33.48	3	H	195	2.91	-

### 802.11g\_(6Mbps)\_1TX

### 2462MHz\_TX



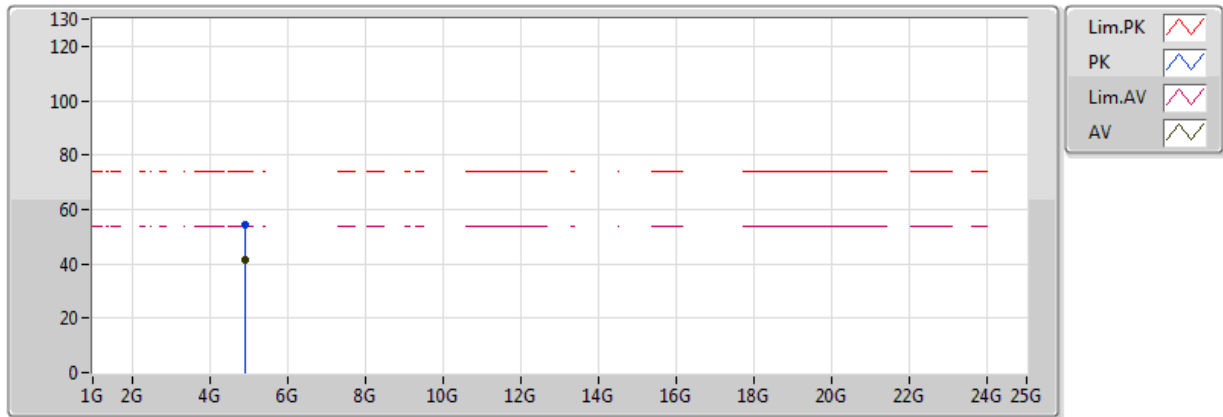
20170302  
EUT\_Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.923992G	42.13	54.00	-11.87	6.85	3	V	135	1.58	-
PK	4.924424G	55.40	74.00	-18.60	6.86	3	V	135	1.58	-



### 802.11g\_(6Mbps)\_1TX

### 2462MHz\_TX

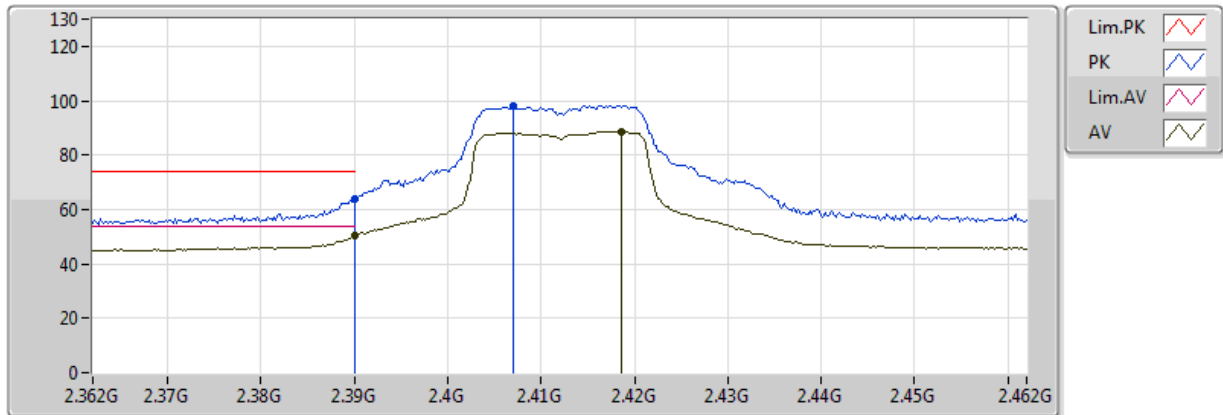


20170302  
EUT\_Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.923416G	41.69	54.00	-12.31	6.85	3	H	21	2.45	-
PK	4.924136G	54.37	74.00	-19.63	6.85	3	H	21	2.45	-

## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2412MHz\_TX

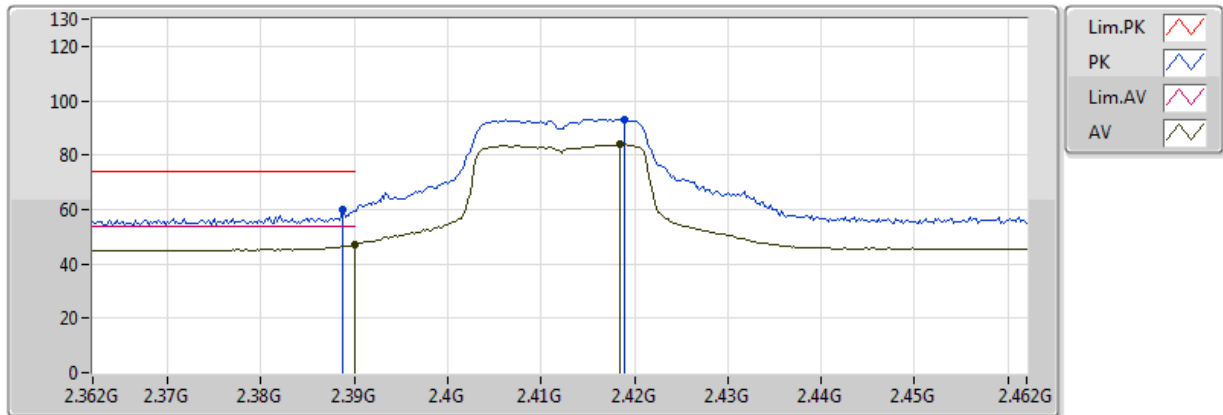


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.39G	50.29	54.00	-3.71	33.16	3	V	69	1.08	-
AV	2.4186G	88.73	Inf	-Inf	33.26	3	V	69	1.08	-
PK	2.39G	64.06	74.00	-9.94	33.16	3	V	69	1.08	-
PK	2.407G	98.18	Inf	-Inf	33.21	3	V	69	1.08	-

### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2412MHz\_TX

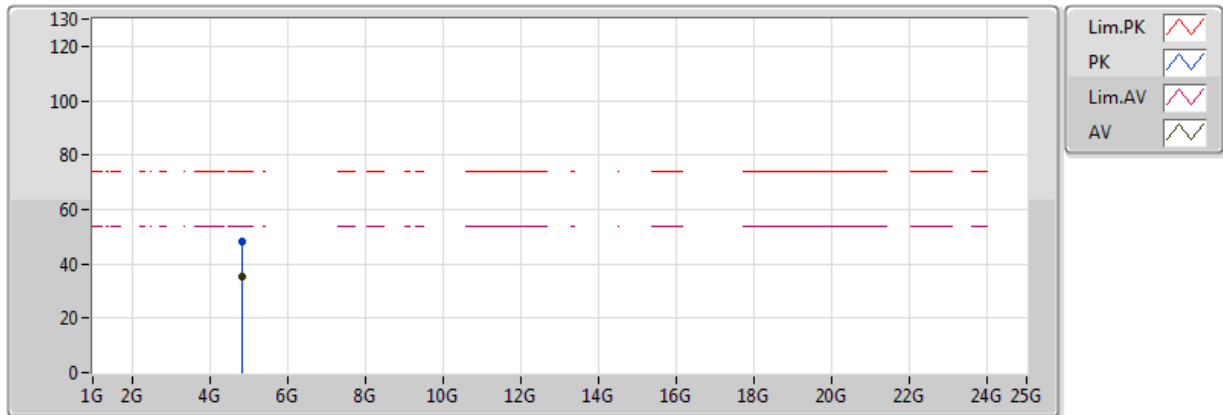


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.39G	47.33	54.00	-6.67	33.16	3	H	187	2.68	-
AV	2.4184G	83.88	Inf	-Inf	33.25	3	H	187	2.68	-
PK	2.3888G	59.70	74.00	-14.30	33.15	3	H	187	2.68	-
PK	2.419G	93.05	Inf	-Inf	33.26	3	H	187	2.68	-

## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2412MHz\_TX

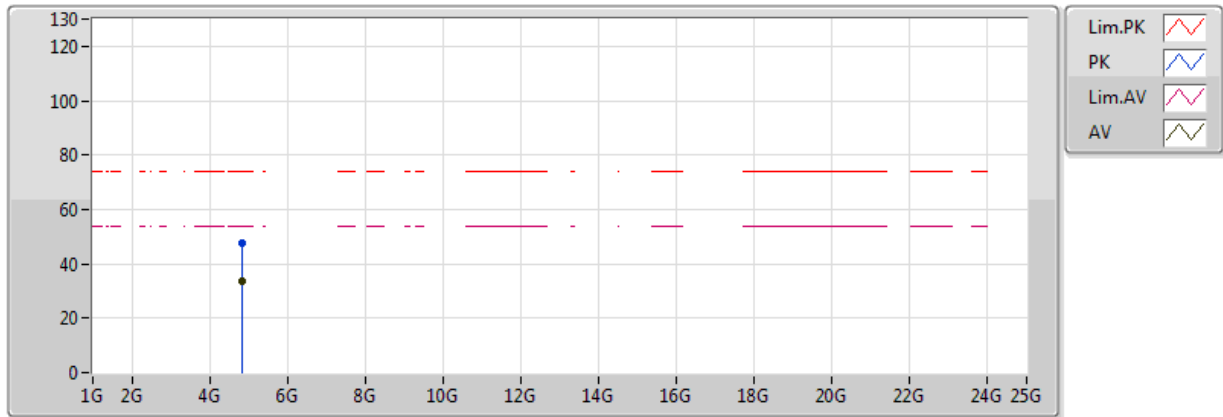


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824336G	35.07	54.00	-18.93	6.55	3	V	110	1.86	-
PK	4.824312G	48.12	74.00	-25.88	6.55	3	V	110	1.86	-

## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2412MHz\_TX

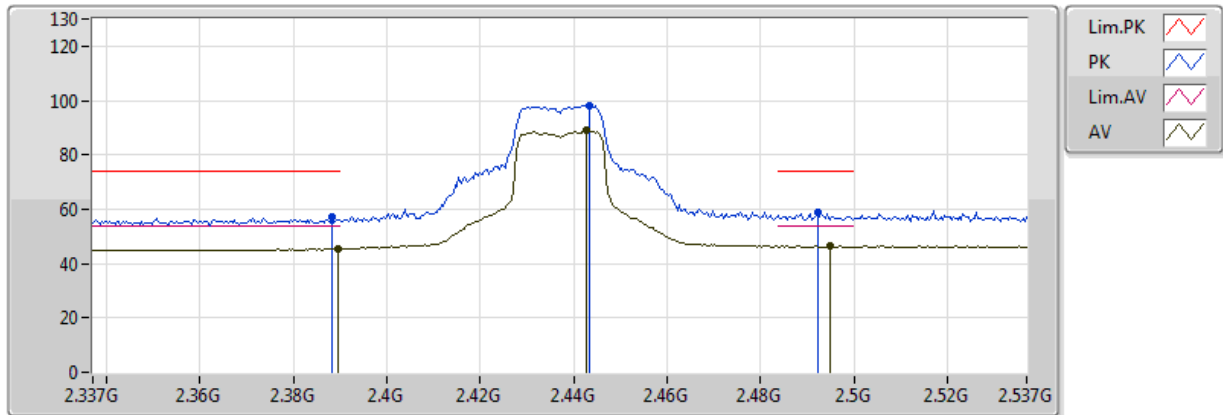


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.823992G	33.72	54.00	-20.28	6.54	3	H	152	1.95	-
PK	4.824724G	47.50	74.00	-26.50	6.55	3	H	152	1.95	-

## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2437MHz\_TX

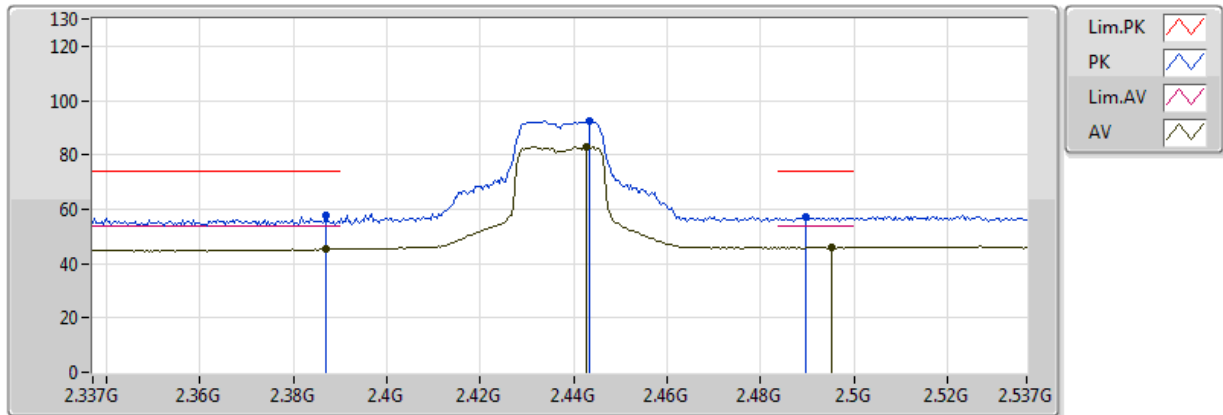


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3894G	45.50	54.00	-8.50	33.15	3	V	70	1.05	-
AV	2.4426G	88.97	Inf	-Inf	33.34	3	V	70	1.05	-
AV	2.495G	46.42	54.00	-7.58	33.52	3	V	70	1.05	-
PK	2.3882G	57.00	74.00	-17.00	33.15	3	V	70	1.05	-
PK	2.4434G	98.15	Inf	-Inf	33.34	3	V	70	1.05	-
PK	2.4922G	58.56	74.00	-15.44	33.51	3	V	70	1.05	-

## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2437MHz\_TX

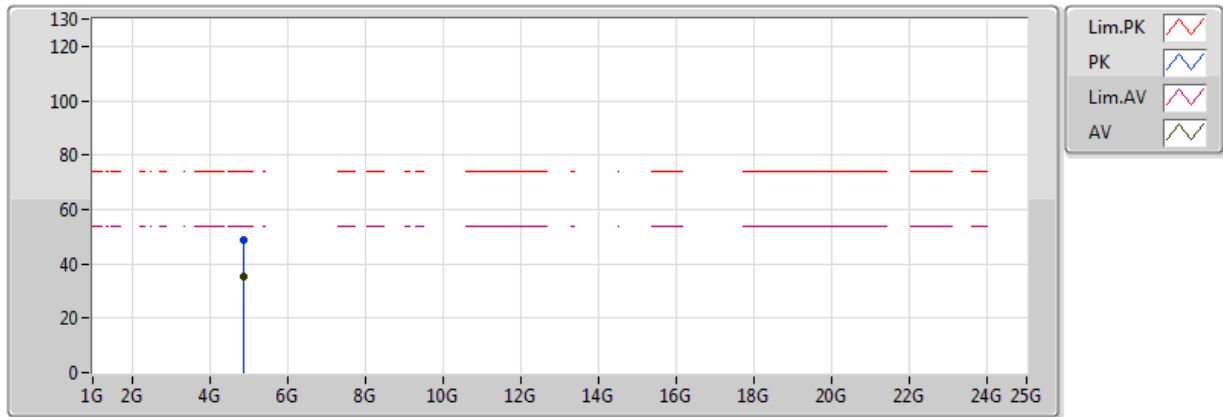


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.387G	45.36	54.00	-8.64	33.14	3	H	186	2.94	-
AV	2.4426G	83.07	Inf	-Inf	33.34	3	H	186	2.94	-
AV	2.4954G	46.05	54.00	-7.95	33.52	3	H	186	2.94	-
PK	2.387G	57.47	74.00	-16.53	33.14	3	H	186	2.94	-
PK	2.4434G	92.32	Inf	-Inf	33.34	3	H	186	2.94	-
PK	2.4898G	57.00	74.00	-17.00	33.50	3	H	186	2.94	-

## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2437MHz\_TX



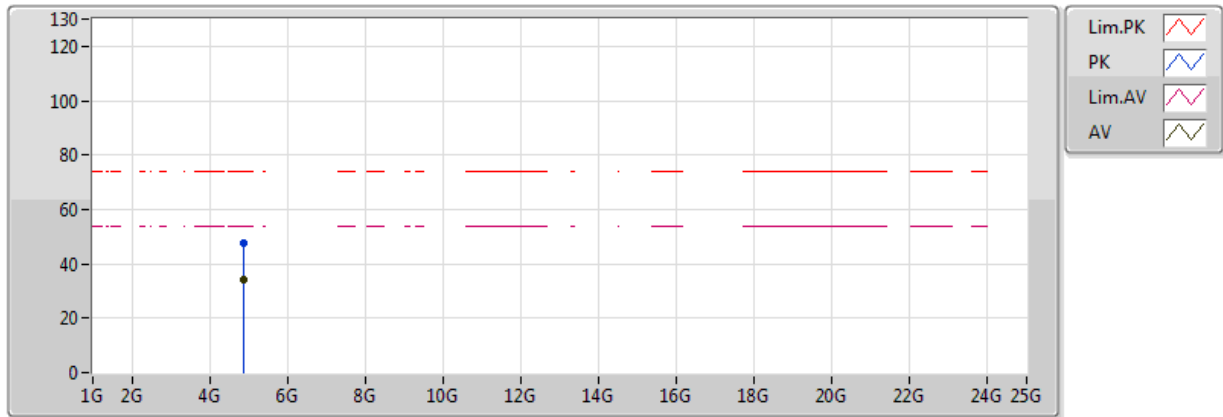
20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.873808G	35.49	54.00	-18.51	6.70	3	V	16	2.19	-
PK	4.874496G	48.81	74.00	-25.19	6.70	3	V	16	2.19	-



## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2437MHz\_TX

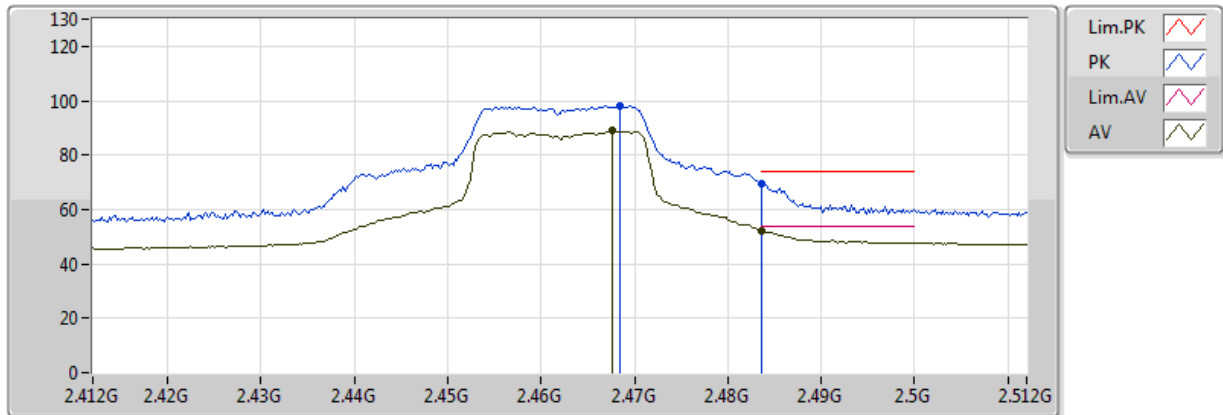


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.873684G	34.09	54.00	-19.91	6.70	3	H	44	1.30	-
PK	4.874188G	47.47	74.00	-26.53	6.70	3	H	44	1.30	-

## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2462MHz\_TX

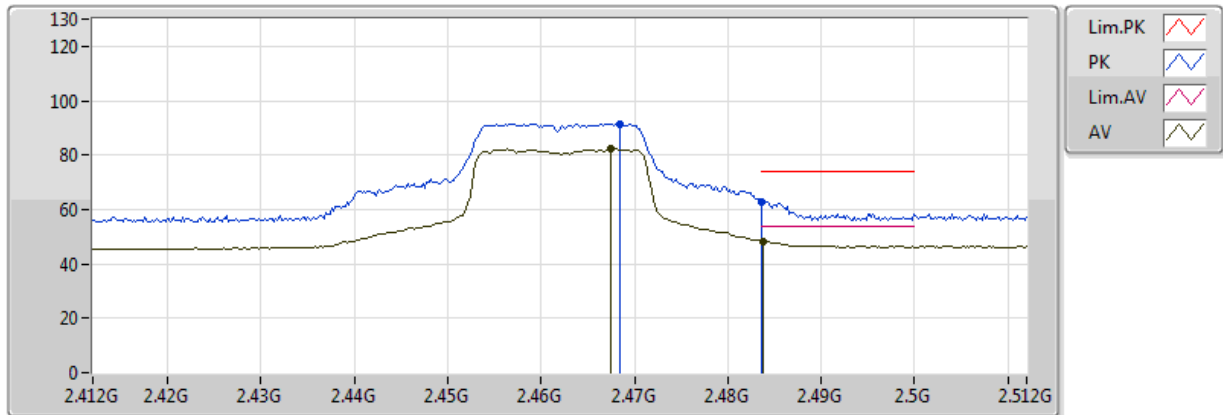


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4676G	88.93	Inf	-Inf	33.43	3	V	73	1.01	-
AV	2.4836G	52.28	54.00	-1.72	33.48	3	V	73	1.01	-
PK	2.4684G	98.27	Inf	-Inf	33.43	3	V	73	1.01	-
PK	2.4836G	69.22	74.00	-4.78	33.48	3	V	73	1.01	-

## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2462MHz\_TX

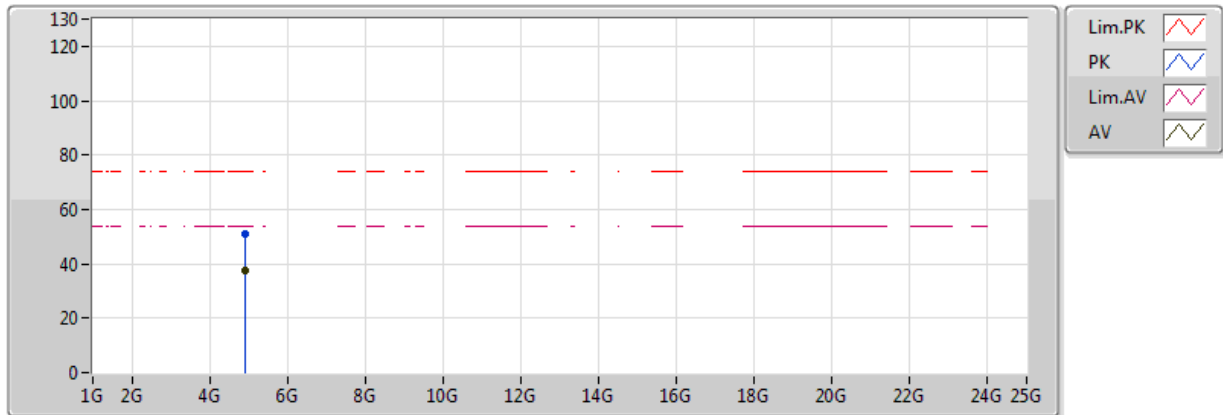


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4674G	82.41	Inf	-Inf	33.43	3	H	180	2.88	-
AV	2.4838G	48.29	54.00	-5.71	33.48	3	H	180	2.88	-
PK	2.4684G	91.59	Inf	-Inf	33.43	3	H	180	2.88	-
PK	2.4836G	62.95	74.00	-11.05	33.48	3	H	180	2.88	-

## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2462MHz\_TX

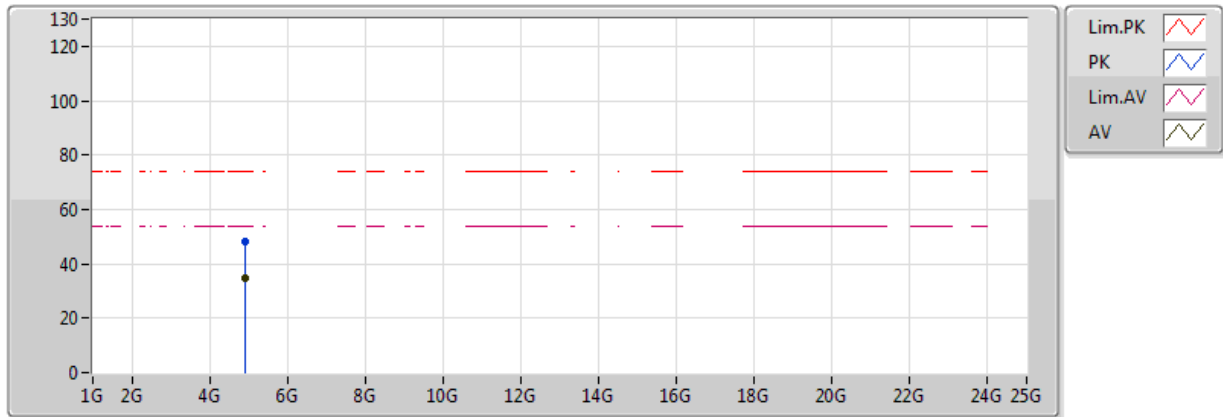


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9248G	37.82	54.00	-16.18	6.86	3	V	238	1.48	-
PK	4.923464G	51.21	74.00	-22.79	6.85	3	V	238	1.48	-

## 802.11n HT20\_Nss1,(MCS0)\_1TX

## 2462MHz\_TX

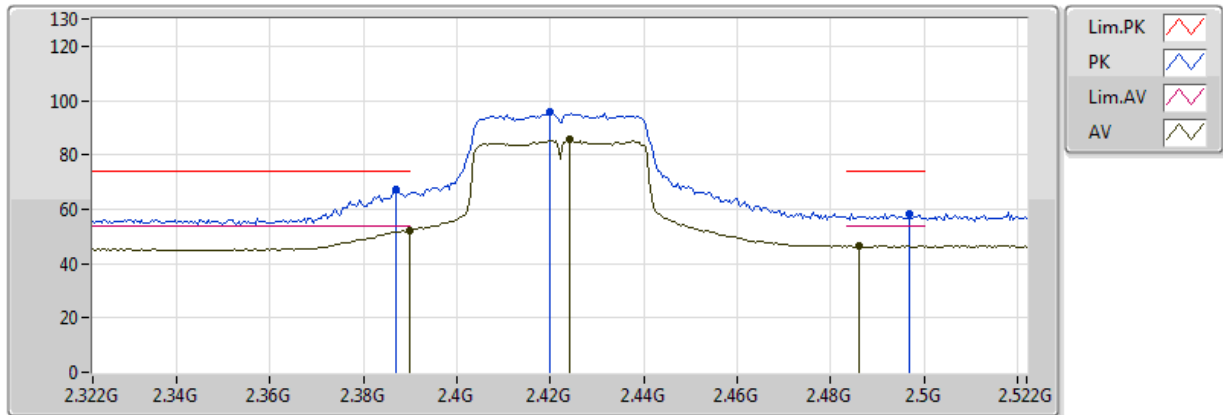


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9231G	34.58	54.00	-19.42	6.85	3	H	27	1.60	-
PK	4.924576G	47.96	74.00	-26.04	6.86	3	H	27	1.60	-

## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2422MHz\_TX

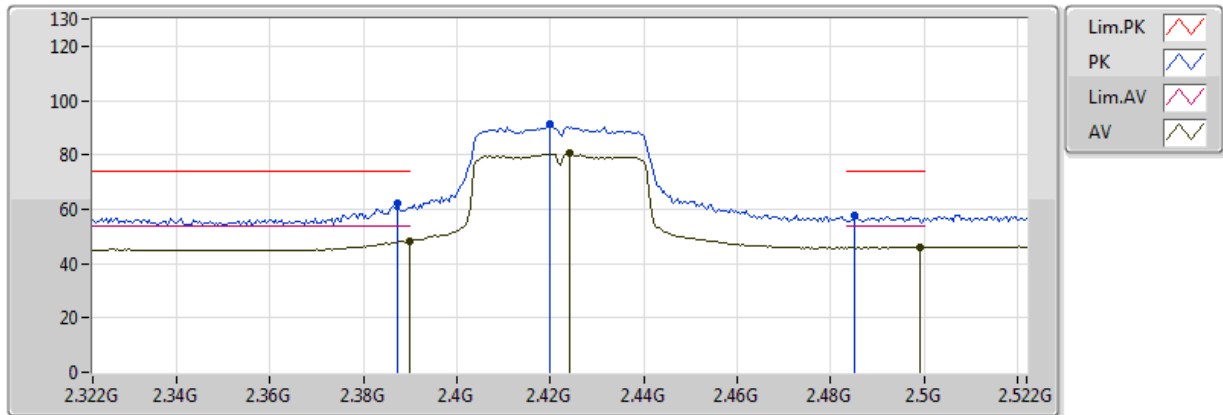


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.39G	52.22	54.00	-1.78	33.16	3	V	71	1.09	-
AV	2.424G	85.55	Inf	-Inf	33.27	3	V	71	1.09	-
AV	2.486G	46.46	54.00	-7.54	33.49	3	V	71	1.09	-
PK	2.3868G	67.22	74.00	-6.78	33.14	3	V	71	1.09	-
PK	2.42G	96.08	Inf	-Inf	33.26	3	V	71	1.09	-
PK	2.4968G	58.39	74.00	-15.61	33.53	3	V	71	1.09	-

## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2422MHz\_TX

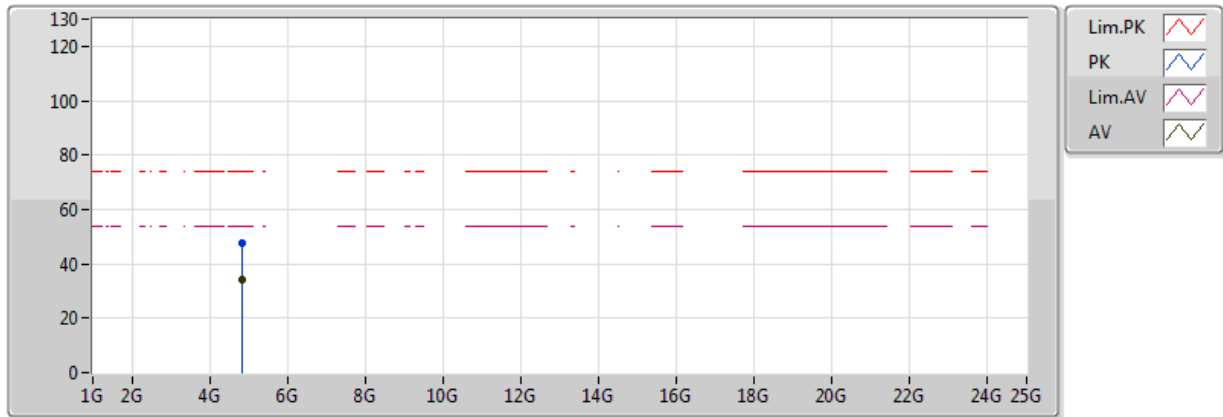


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.39G	48.40	54.00	-5.60	33.16	3	H	186	2.66	-
AV	2.424G	80.71	Inf	-Inf	33.27	3	H	186	2.66	-
AV	2.4992G	45.96	54.00	-8.04	33.54	3	H	186	2.66	-
PK	2.3872G	62.47	74.00	-11.53	33.15	3	H	186	2.66	-
PK	2.42G	91.18	Inf	-Inf	33.26	3	H	186	2.66	-
PK	2.4852G	57.67	74.00	-16.33	33.49	3	H	186	2.66	-

## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2422MHz\_TX



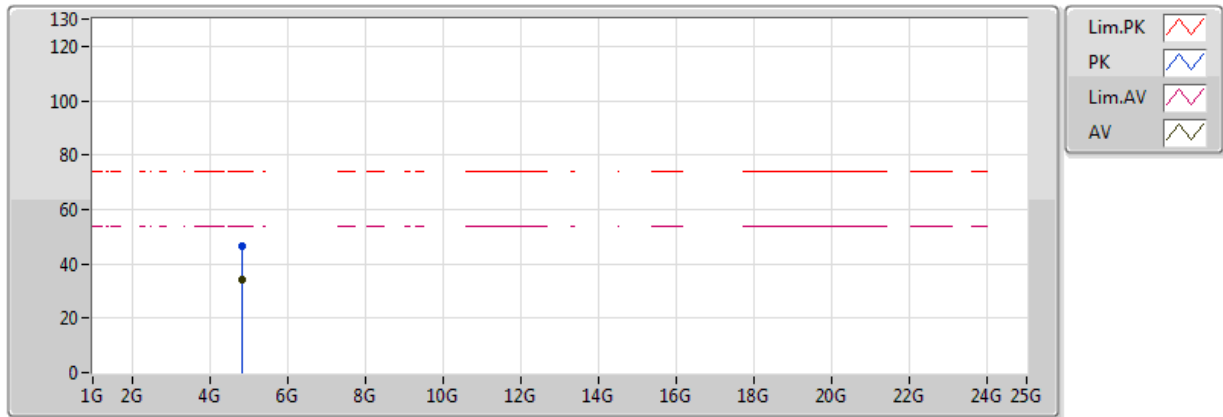
20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.844808G	34.44	54.00	-19.56	6.61	3	V	241	2.35	-
PK	4.843088G	47.59	74.00	-26.41	6.60	3	V	241	2.35	-



## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2422MHz\_TX

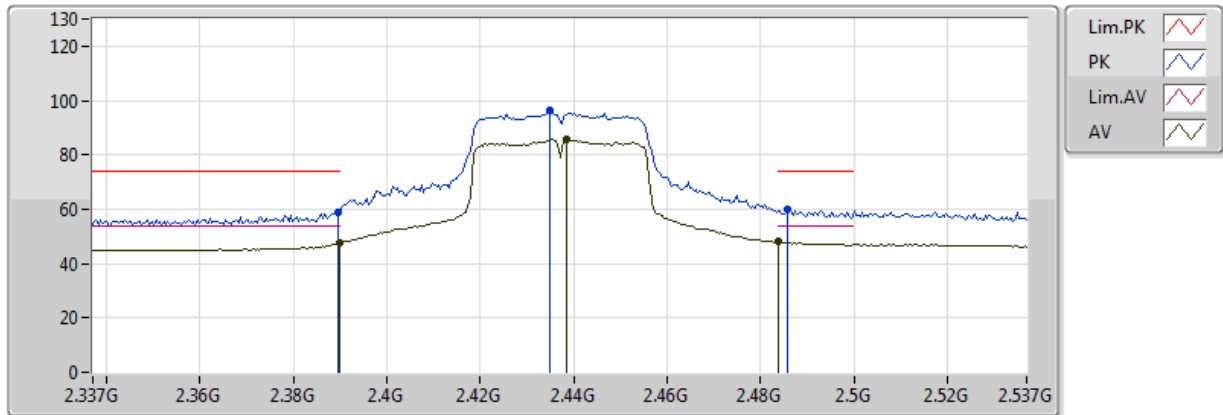


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.844948G	33.93	54.00	-20.07	6.61	3	H	302	1.05	-
PK	4.844412G	46.75	74.00	-27.25	6.61	3	H	302	1.05	-

## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2437MHz\_TX

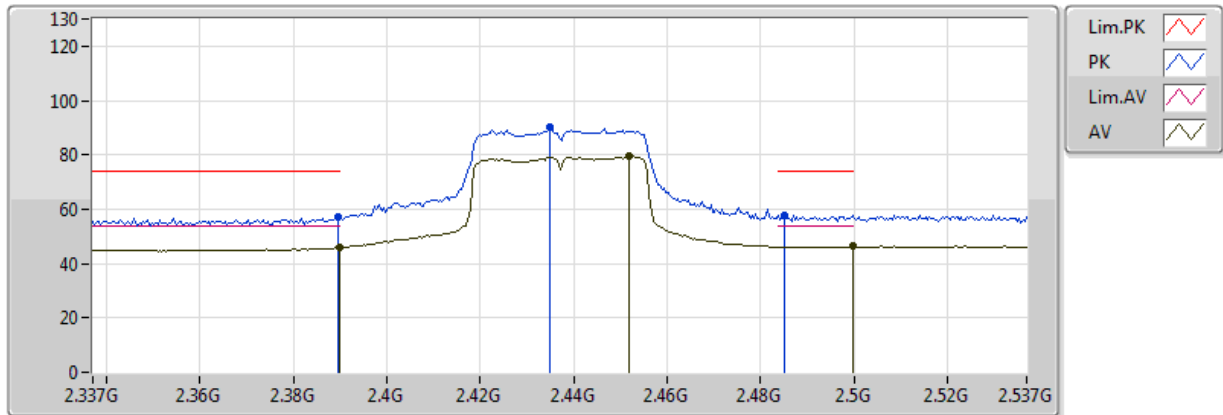


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	47.47	54.00	-6.53	33.15	3	V	73	1.19	-
AV	2.4386G	85.80	Inf	-Inf	33.33	3	V	73	1.19	-
AV	2.4838G	47.97	54.00	-6.03	33.48	3	V	73	1.19	-
PK	2.3894G	58.78	74.00	-15.22	33.15	3	V	73	1.19	-
PK	2.435G	96.41	Inf	-Inf	33.31	3	V	73	1.19	-
PK	2.4858G	59.68	74.00	-14.32	33.49	3	V	73	1.19	-

## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2437MHz\_TX

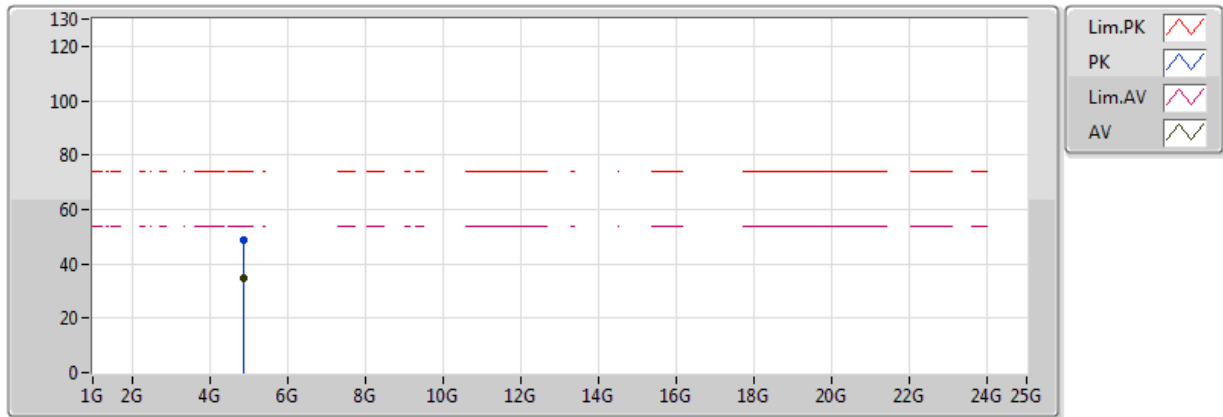


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	45.80	54.00	-8.20	33.15	3	H	200	2.97	-
AV	2.4518G	79.36	Inf	-Inf	33.37	3	H	200	2.97	-
AV	2.4998G	46.29	54.00	-7.71	33.54	3	H	200	2.97	-
PK	2.3894G	57.41	74.00	-16.59	33.15	3	H	200	2.97	-
PK	2.435G	89.95	Inf	-Inf	33.31	3	H	200	2.97	-
PK	2.485G	57.87	74.00	-16.13	33.49	3	H	200	2.97	-

## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2437MHz\_TX

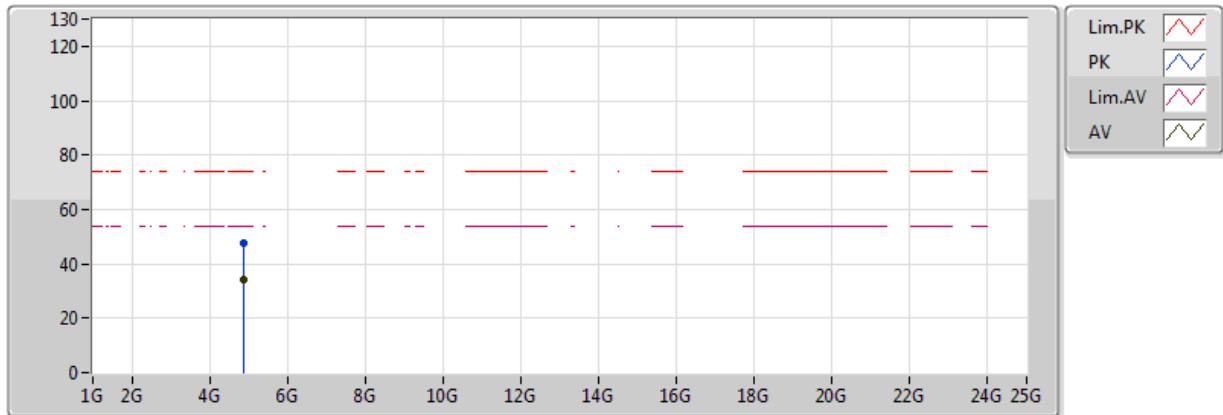


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8749G	34.82	54.00	-19.18	6.70	3	V	111	1.95	-
PK	4.87338G	48.85	74.00	-25.15	6.70	3	V	111	1.95	-

## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2437MHz\_TX

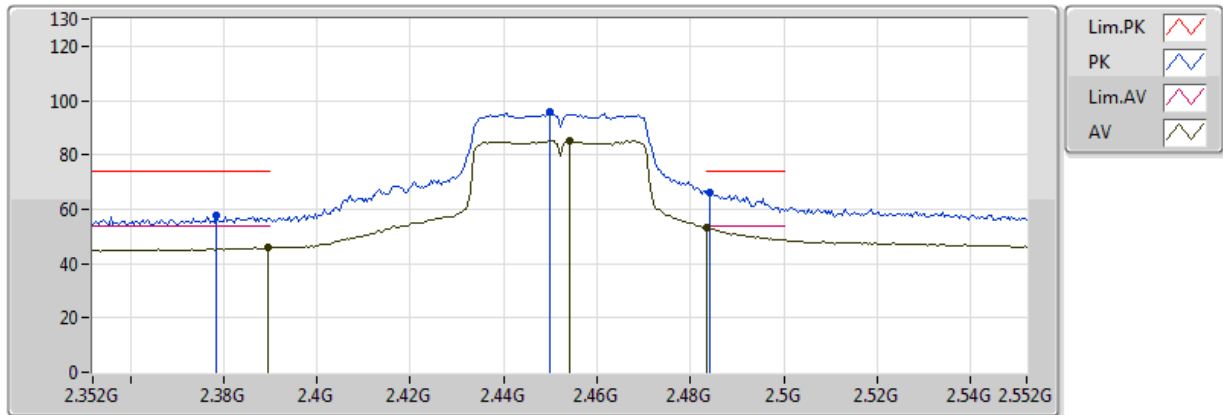


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.873764G	34.12	54.00	-19.88	6.70	3	H	245	1.59	-
PK	4.874596G	47.65	74.00	-26.35	6.70	3	H	245	1.59	-

## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2452MHz\_TX

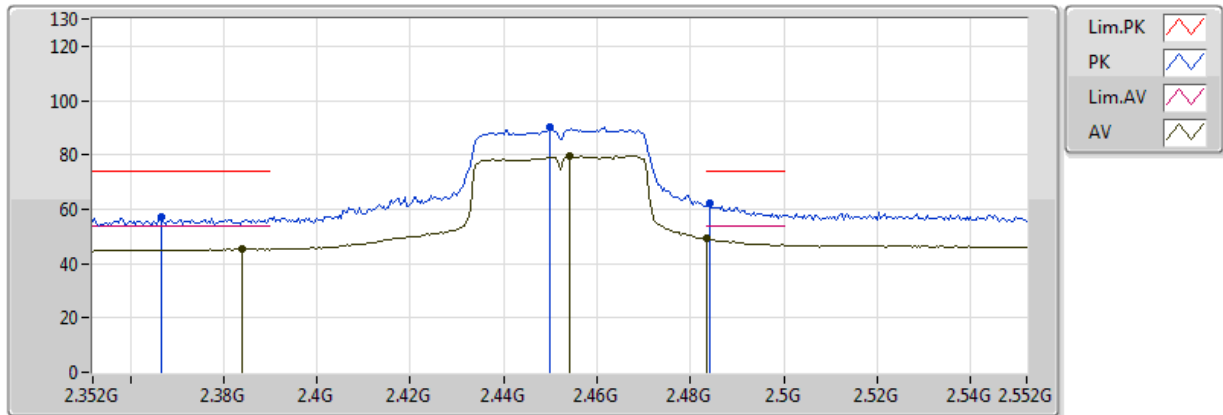


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	45.73	54.00	-8.27	33.15	3	V	71	1.05	-
AV	2.454G	85.32	Inf	-Inf	33.38	3	V	71	1.05	-
AV	2.4836G	53.26	54.00	-0.74	33.48	3	V	71	1.05	-
PK	2.3784G	57.56	74.00	-16.44	33.11	3	V	71	1.05	-
PK	2.45G	96.08	Inf	-Inf	33.37	3	V	71	1.05	-
PK	2.484G	66.06	74.00	-7.94	33.48	3	V	71	1.05	-

## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2452MHz\_TX

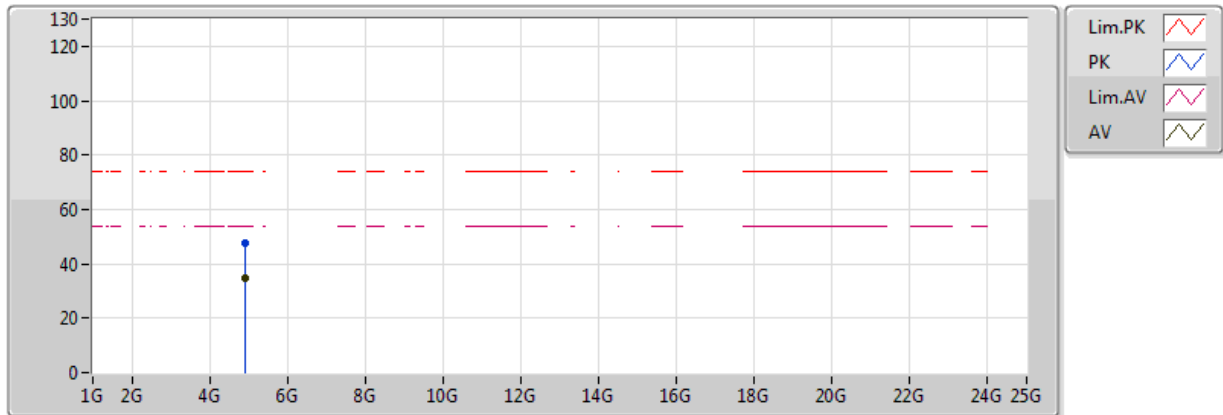


20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.384G	45.42	54.00	-8.58	33.13	3	H	195	2.96	-
AV	2.454G	79.69	Inf	-Inf	33.38	3	H	195	2.96	-
AV	2.4836G	49.09	54.00	-4.91	33.48	3	H	195	2.96	-
PK	2.3668G	56.95	74.00	-17.05	33.07	3	H	195	2.96	-
PK	2.45G	90.26	Inf	-Inf	33.37	3	H	195	2.96	-
PK	2.484G	62.17	74.00	-11.83	33.48	3	H	195	2.96	-

## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2452MHz\_TX



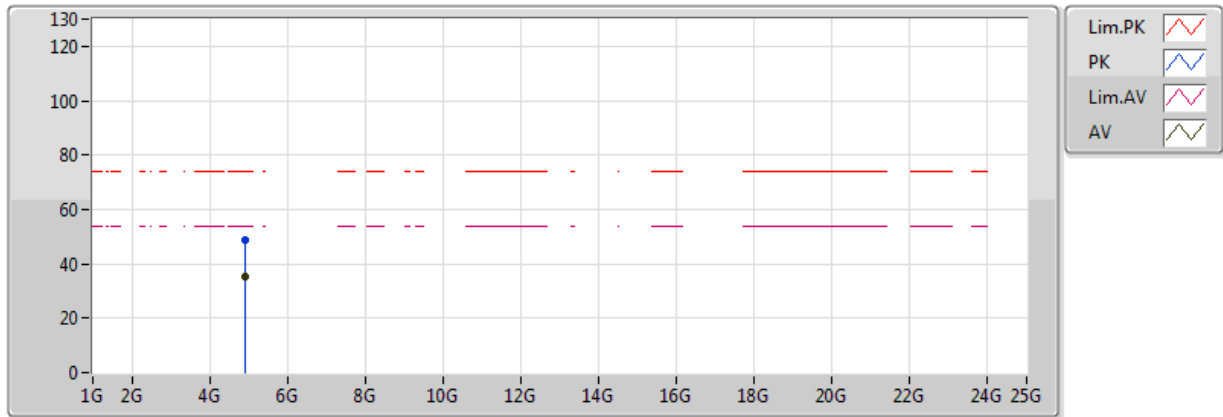
20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
FSP(100080)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.904348G	34.66	54.00	-19.34	6.79	3	V	310	1.55	-
PK	4.904208G	47.56	74.00	-26.44	6.79	3	V	310	1.55	-



## 802.11n HT40\_Nss1,(MCS0)\_1TX

## 2452MHz\_TX



20170302  
EUT Y\_1TX  
Setting 63  
06-M-01  
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Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.904472G	35.46	54.00	-18.54	6.79	3	H	217	1.33	-
PK	4.903968G	48.67	74.00	-25.33	6.79	3	H	217	1.33	-