FCC Test Report

Equipment	:	Dashcam
Brand Name	:	DOD
Model No.	:	RC500S, RC505S, RC508S, RC510S, RC400S, RC405S, RC408S, RC410S
FCC ID	:	2AF9K-RC500S
Standard	:	47 CFR FCC Part 15.247
Operating Band	:	2400 MHz – 2483.5 MHz
Function	:	☐ Point-to-multipoint; ☒ Point-to-point
Applicant	:	Shenzhen DOD Technology Co.,Ltd. 5/F Building3# Minxing Industrial Park Minkang Rd.Minzhi Longhua Shenzhen Guangdong China
Manufacturer	:	Shenzhen DOD Technology Co.,Ltd. 5/F Building3# Minxing Industrial Park Minkang Rd.Minzhi Longhua Shenzhen Guangdong China

The product sample received on Oct. 13, 2016 and completely tested on Mar. 20, 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.

Testing Laboratory
1190

Table of Contents

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
FR6O1203-01	Rev. 01	Initial issue of report	Apr. 06, 2017
FR6O1203-01	Rev. 02	Change the function to Point-to-point	Apr. 24, 2017

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
2.4G	11b	20	1
2.4G	11g	20	1
2.4G	802.11n HT20	20	1
2.4G	802.11n HT40	40	1

Note:
- 2.4G is the 2.4GHz Band (2.4-2.4835GHz).
- 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	Model Name	Antenna Type	Connector	Gain (dBi)
1	-	-	-	N/A	3

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF (dB)	T(s)	VBW (Hz) ≥ 1/T
802.11b	0.99	0.044	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.97	0.132	4.143m	300
802.11n HT20	0.961	0.173	3.855m	300
802.11n HT40	0.963	0.164	3.815m	300

1.1.4 EUT Operational Condition

EUT Power Type	From Camera Power Adapter			
Beamforming Function	☐	With beamforming	☒	Without beamforming

1.1.5 Table for Multiple Listing

The EUT has eight model names which are identical to each other in all aspects except for the following table:

Brand Name	Model Name	Description
DOD	RC500S	All the models are identical, the difference model for difference served as marketing strategy.
	RC505S	
	RC508S	
	RC510S	
	RC400S	
	RC405S	
	RC408S	
	RC410S	

From the above models, model: RC500S 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 v03r05
- FCC KDB 662911 D01 v02r01
- FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location							
☐	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
☒	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	Eddie Weng	20°C / 54%	Jan. 23, 2017
Radiated	03CH01-CB	Mason Chen	21°C / 50%	Jan. 19, 2017 | Jan. 26, 2017
AC Conduction	CO01-CB	Deven Hunag, Hank Yang	23°C / 66%	Mar. 20, 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	9.74×10^{-8}	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_(1Mbps)_1TX	-
2412MHz	47
2437MHz	45
2462MHz	44
802.11g_(6Mbps)_1TX	-
2412MHz	63
2437MHz	63
2462MHz	61
802.11n HT20_Nss1,(MCS0)_1TX	-
2412MHz	63
2437MHz	63
2462MHz	60
802.11n HT40_Nss1,(MCS0)_1TX	-
2422MHz	61
2437MHz	63
2452MHz	60

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link - recording mode with Camera Power Adapter

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
Operating Mode > 1GHz	CTX

Note: 1.The EUT can only be used at Z axis position.

2. 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
Rear Dash Camera *1 Camera Power Adapter*1: shielded, 4m Rear Camera Connection Cable*1: shielded, 4.9m

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Power Supply	Advanced	LPS-305	DoC

For Test Site No: 03CH01-CB

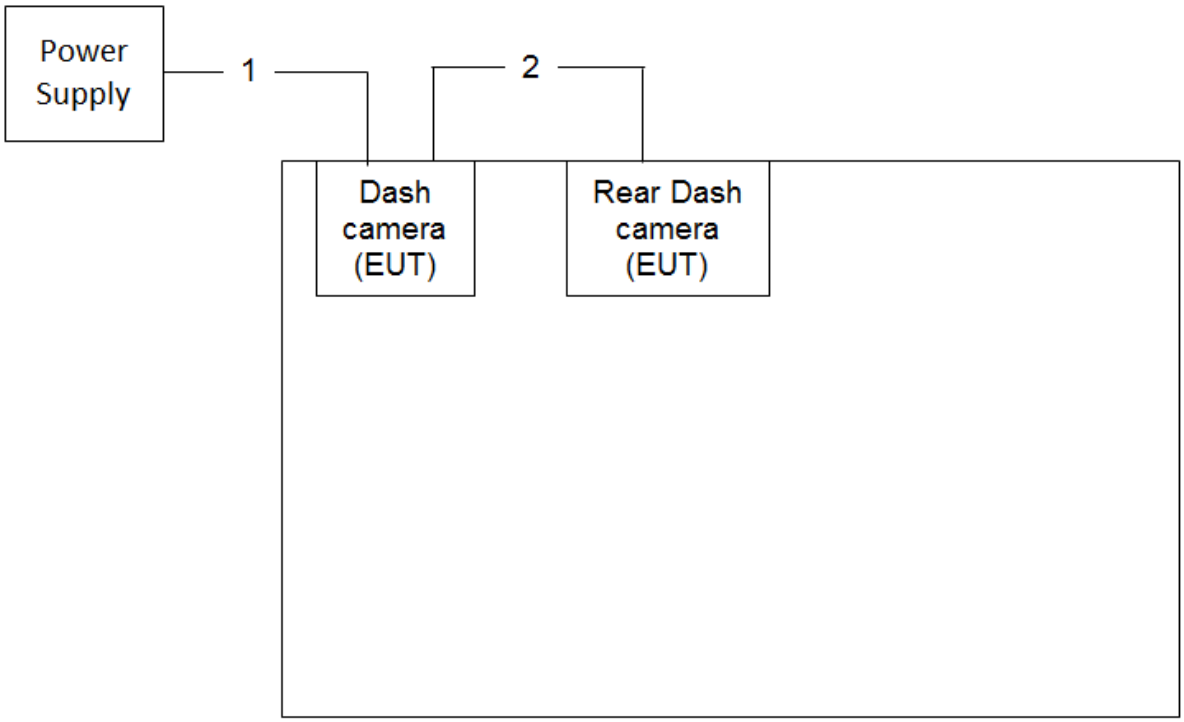
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E4300	DoC
2	Fixture	N/A	N/A	N/A

For Test Site No: TH01-CB

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

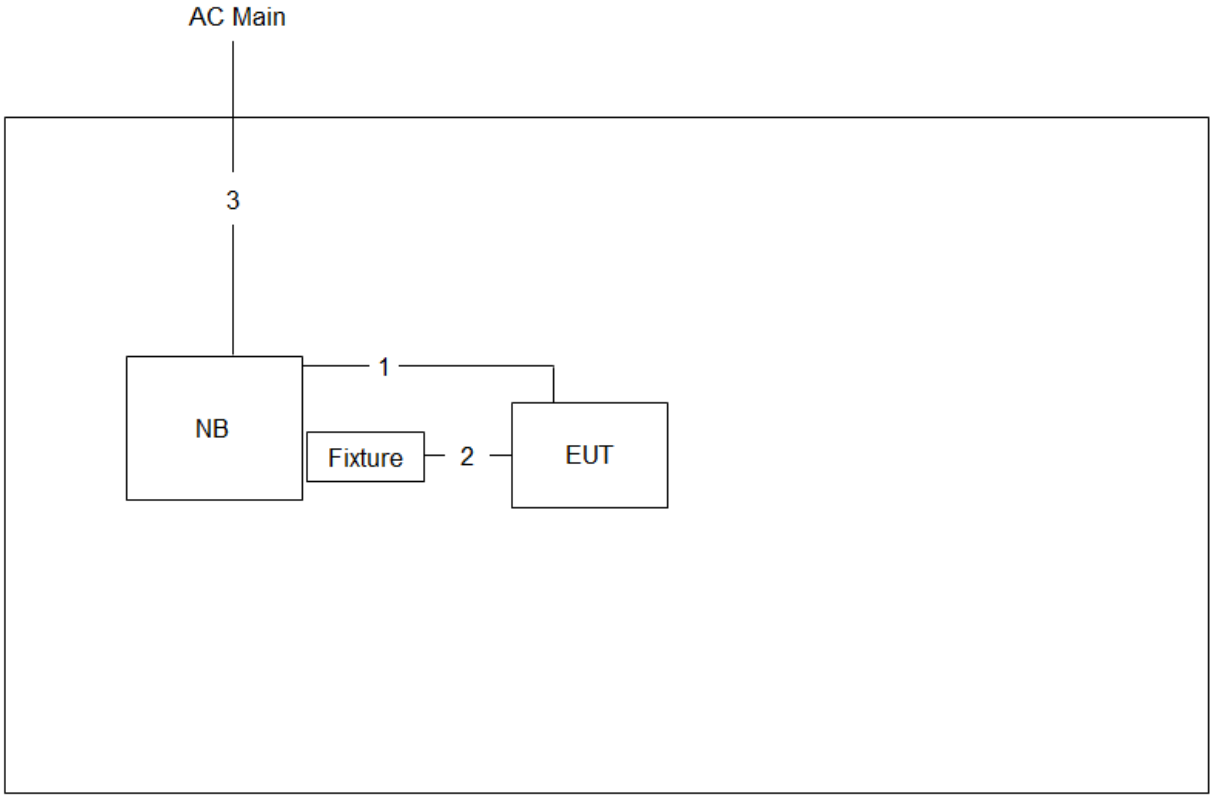
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	DC Power cable	Yes	4m
2	Rear camera Connection Cable	Yes	4.9m

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	USB Cable	No	1.3m
2	Console Cable	No	0.3m
3	Power Cable	No	1.8m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

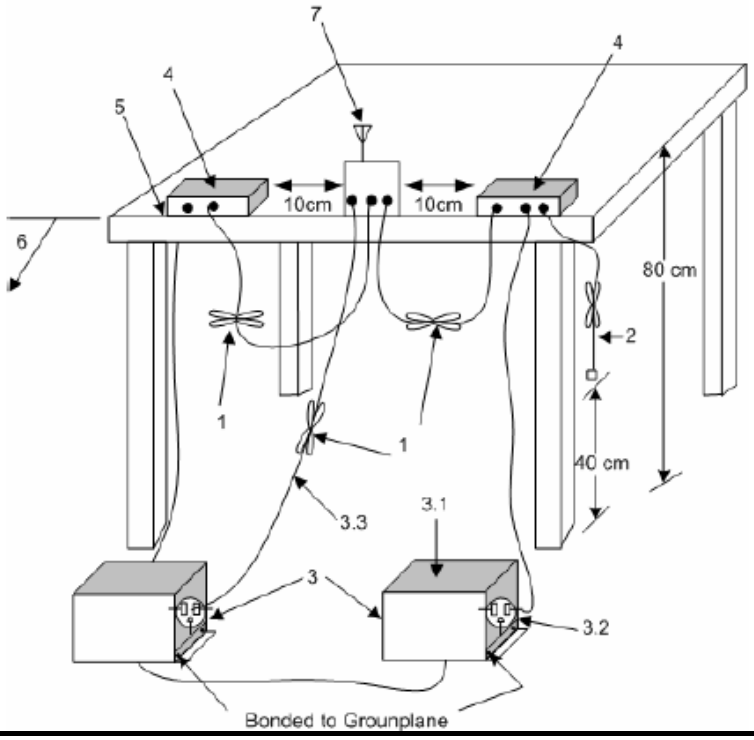
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
▪ 6 dB bandwidth ≥ 500 kHz.

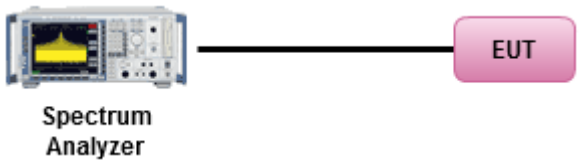
3.2.2 Measuring Instruments

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:	
	☒ Refer as FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
	☐ Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
	☐ Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth


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	
▪ Maximum Peak Conducted Output Power	
	☐ Refer as FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
	☐ Refer as FCC KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW ≥ DTS BW)
▪ Maximum Conducted Output Power	
	[duty cycle ≥ 98% or external video / power trigger]
	☐ Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
	☐ 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
	☐ Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
	☐ 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
	☒ Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM-G (using an RF average power meter).
	☐ Refer as FCC KDB 558074, clause 9.1.2 PKPM1 Peak power meter method.
▪ For conducted measurement.	
	▪ 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.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


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) ≤ 8 dBm/3kHz

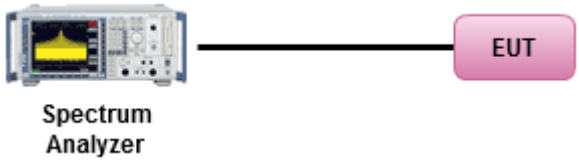
3.4.2 Measuring Instruments

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).		
	☒ Refer as FCC KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak).	
	[duty cycle ≥ 98% or external video / power trigger]	
	☐ Refer as FCC KDB 558074, clause 10.3 Method AVGPSD-1 (spectral trace averaging).	
	☐ Refer as FCC KDB 558074, clause 10.4 Method AVGPSD-2 (slow sweep speed)	
	duty cycle < 98% and average over on/off periods with duty factor	
	☐ Refer as FCC KDB 558074, clause 10.5 Method AVGPSD-1 Alt (spectral trace averaging).	
	☐ Refer as FCC KDB 558074, clause 10.6 Method AVGPSD-2 Alt. (slow sweep speed)	
▪ For conducted measurement.		
	▪ If The EUT supports multiple transmit chains using options given below:	
		☒ 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.
		☐ 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,
		☐ 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

Power Spectral Density
 Spectrum Analyzer

3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.
Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

3.5.2 Measuring Instruments

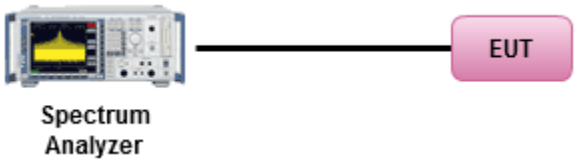
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

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

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands



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.

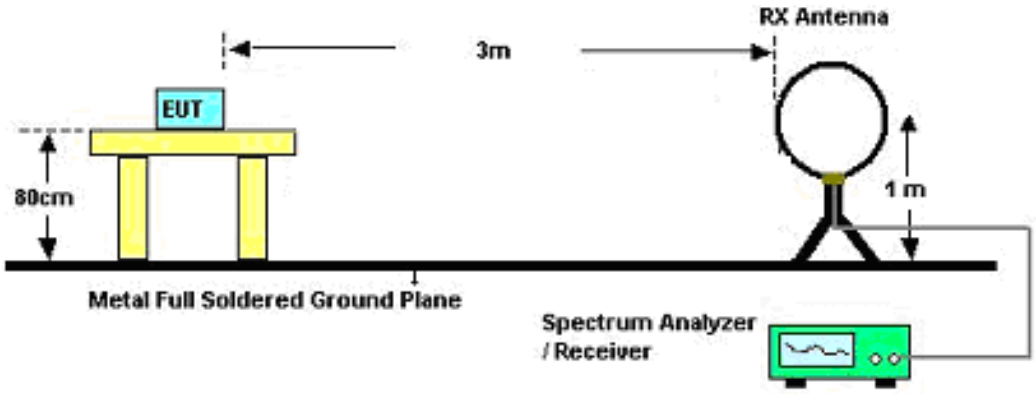
3.6.3 Test Procedures

Test Method		
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
▪ 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.		
▪ For the transmitter unwanted emissions shall be measured using following options below:		
	▪ Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.	
		☐ Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle ≥98%)
		☐ Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
		☒ Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW≥1/T).
		☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐ Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		☒ Refer as FCC KDB 558074, clause 12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:		
	▪ 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.	
	▪ Refer as FCC KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.	
	▪ 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).	
▪ For conducted and cabinet radiation measurement, refer as FCC KDB 558074, clause 12.2.2.		
	▪ 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	
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.	

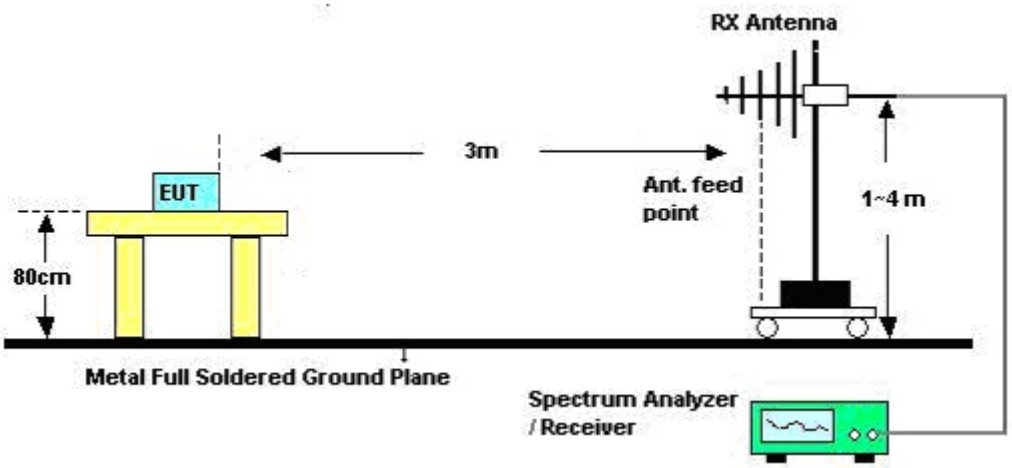
3.6.4 Test Setup

Transmitter Radiated Emissions

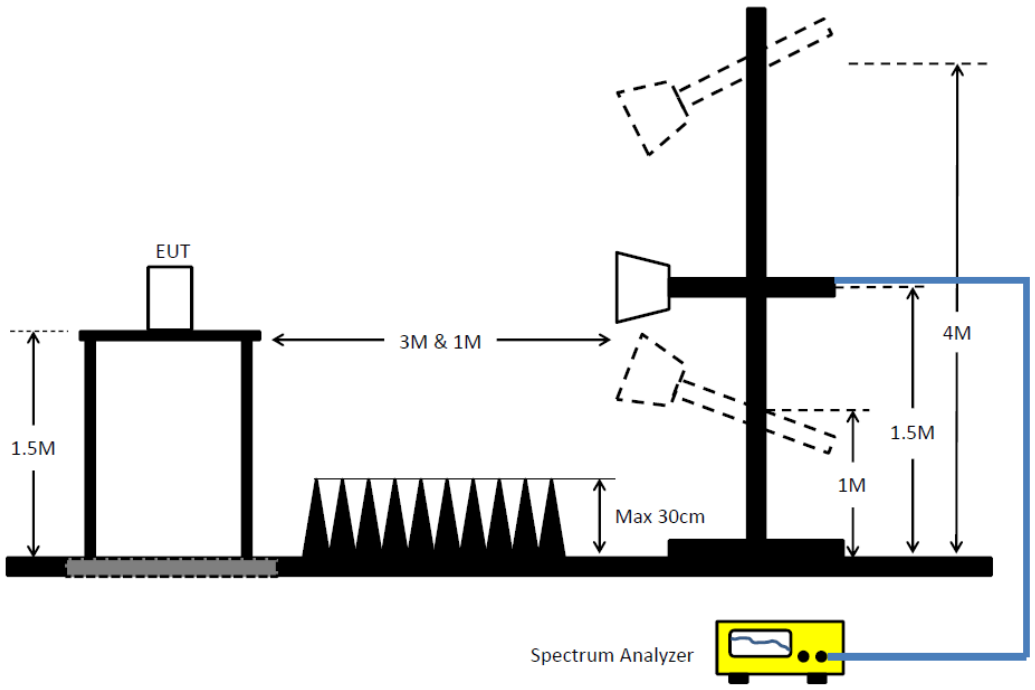
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



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 Attenator	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. 15, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jun. 28, 2016	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-l0-7	N/A	N/A	Radiation (03CH01-CB)

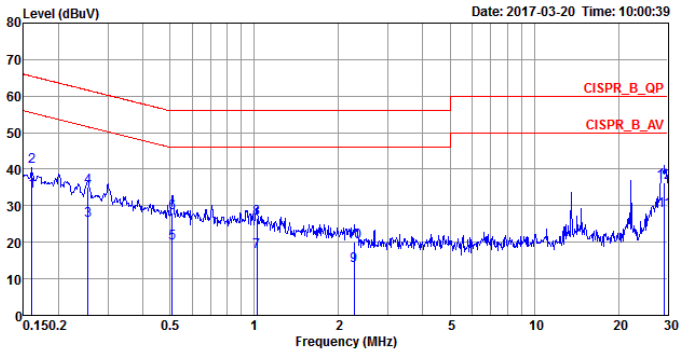
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 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)
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.

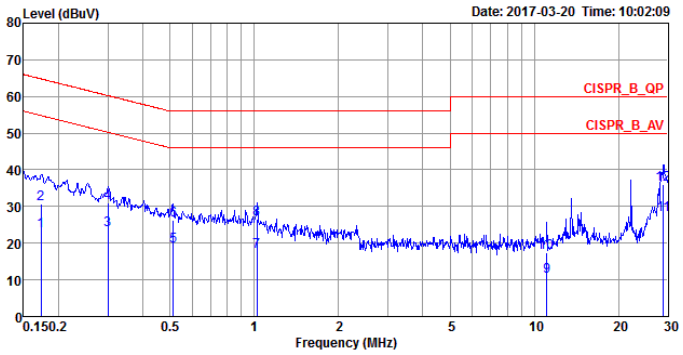
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	**Neutral**
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1607	34.08	-21.35	55.43	23.81	10.10	0.17	Average	NEUTRAL
2	0.1607	40.63	-24.80	65.43	30.36	10.10	0.17	QP	NEUTRAL
3	0.2548	26.10	-25.50	51.60	15.89	10.08	0.13	Average	NEUTRAL
4	0.2548	35.27	-26.33	61.60	25.06	10.08	0.13	QP	NEUTRAL
5	0.5101	19.67	-26.33	46.00	9.25	10.22	0.20	Average	NEUTRAL
6	0.5101	28.18	-27.82	56.00	17.76	10.22	0.20	QP	NEUTRAL
7	1.0211	17.55	-28.45	46.00	6.78	10.05	0.72	Average	NEUTRAL
8	1.0211	26.49	-29.51	56.00	15.72	10.05	0.72	QP	NEUTRAL
9	2.2726	13.52	-32.48	46.00	3.50	9.95	0.07	Average	NEUTRAL
10	2.2726	20.19	-35.81	56.00	10.17	9.95	0.07	QP	NEUTRAL
11	29.2157	28.53	-21.47	50.00	17.66	10.56	0.31	Average	NEUTRAL
12	29.2157	36.32	-23.68	60.00	25.45	10.56	0.31	QP	NEUTRAL

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

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	**Line**
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1731	23.45	-31.36	54.81	13.27	10.00	0.18	Average	LINE
2	0.1731	30.58	-34.23	64.81	20.40	10.00	0.18	QP	LINE
3	0.3003	23.55	-26.69	50.24	13.53	9.93	0.09	Average	LINE
4	0.3003	31.00	-29.24	60.24	20.98	9.93	0.09	QP	LINE
5	0.5128	19.04	-26.96	46.00	8.89	9.95	0.20	Average	LINE
6	0.5128	26.37	-29.63	56.00	16.22	9.95	0.20	QP	LINE
7	1.0211	17.64	-28.36	46.00	6.96	9.96	0.72	Average	LINE
8	1.0211	26.49	-29.51	56.00	15.81	9.96	0.72	QP	LINE
9	11.0797	10.88	-39.12	50.00	0.56	10.15	0.17	Average	LINE
10	11.0797	17.54	-42.46	60.00	7.22	10.15	0.17	QP	LINE
11	28.9077	27.61	-22.39	50.00	16.80	10.50	0.31	Average	LINE
12	28.9077	36.10	-23.90	60.00	25.29	10.50	0.31	QP	LINE

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

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2.4-2.4835GHz	10.025M	15.292M	15M3G1D	9.55M	15.192M
802.11g_(6Mbps)_1TX	-	-	-	-	-
2.4-2.4835GHz	16.325M	16.692M	16M7D1D	16.3M	16.617M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2.4-2.4835GHz	17.5M	17.866M	17M9D1D	17.275M	17.741M
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
2.4-2.4835GHz	35.25M	36.232M	36M2D1D	33.8M	35.982M

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;

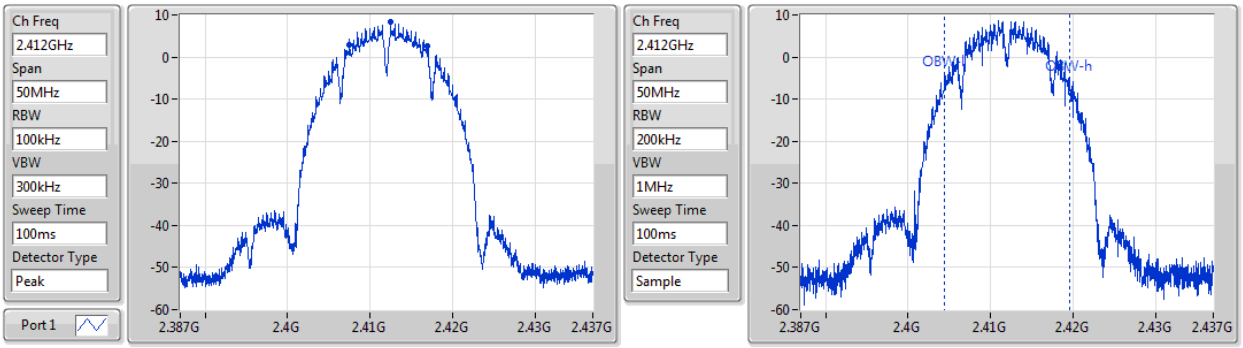
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	9.55M	15.267M
2437MHz	Pass	500k	10.025M	15.192M
2462MHz	Pass	500k	10.025M	15.292M
802.11g_(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.3M	16.692M
2437MHz	Pass	500k	16.325M	16.667M
2462MHz	Pass	500k	16.3M	16.617M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.3M	17.741M
2437MHz	Pass	500k	17.275M	17.866M
2462MHz	Pass	500k	17.5M	17.741M
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-
2422MHz	Pass	500k	35M	35.982M
2437MHz	Pass	500k	33.8M	36.232M
2452MHz	Pass	500k	35.25M	36.032M

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

802.11b_(1Mbps)_1TX EBW

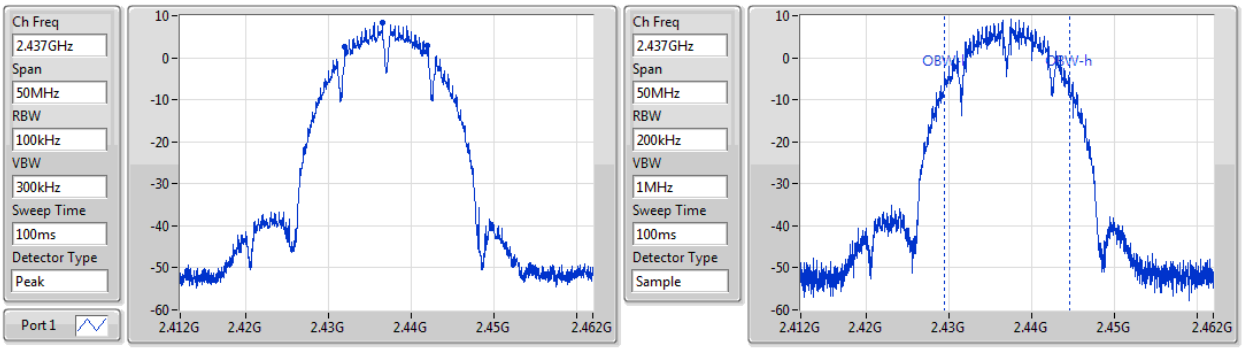
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.55M	2.40745G	2.417G	15.267M	2.404379G	2.419646G	500k	1

802.11b_(1Mbps)_1TX EBW

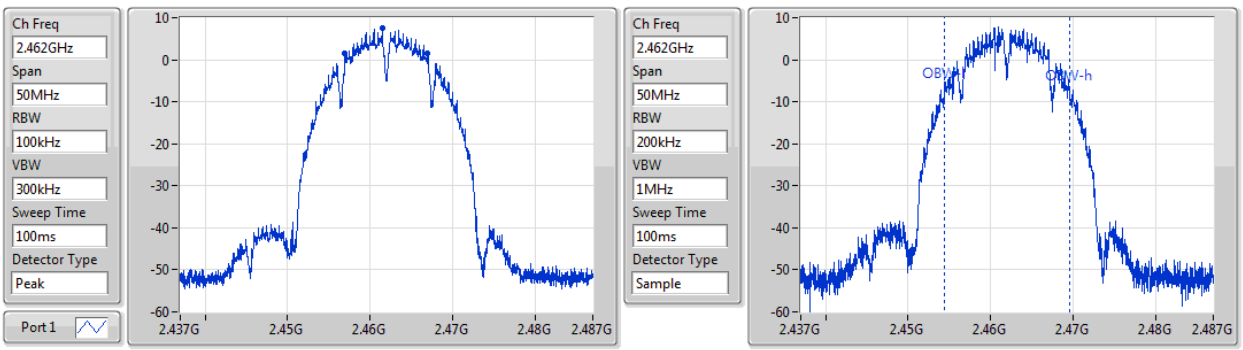
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.025M	2.431975G	2.442G	15.192M	2.429379G	2.444571G	500k	1

802.11b_(1Mbps)_1TX EBW

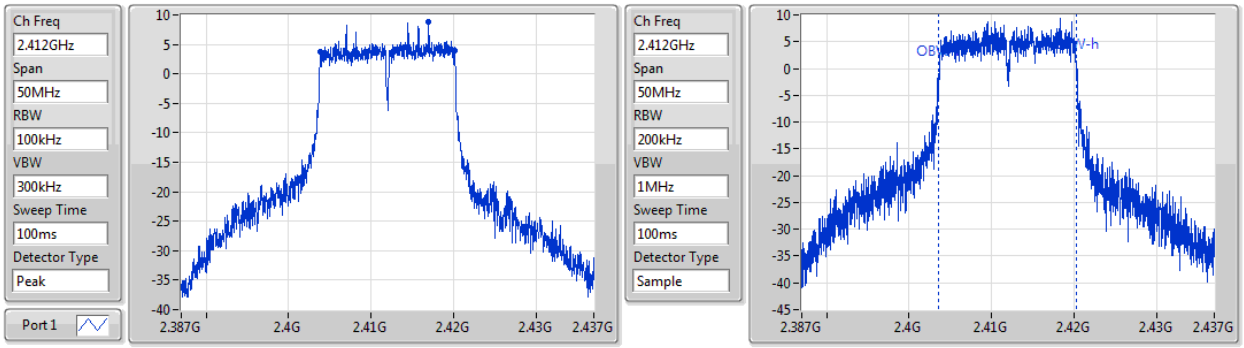
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.025M	2.456975G	2.467G	15.292M	2.454354G	2.469646G	500k	1

802.11g_(6Mbps)_1TX **EBW**

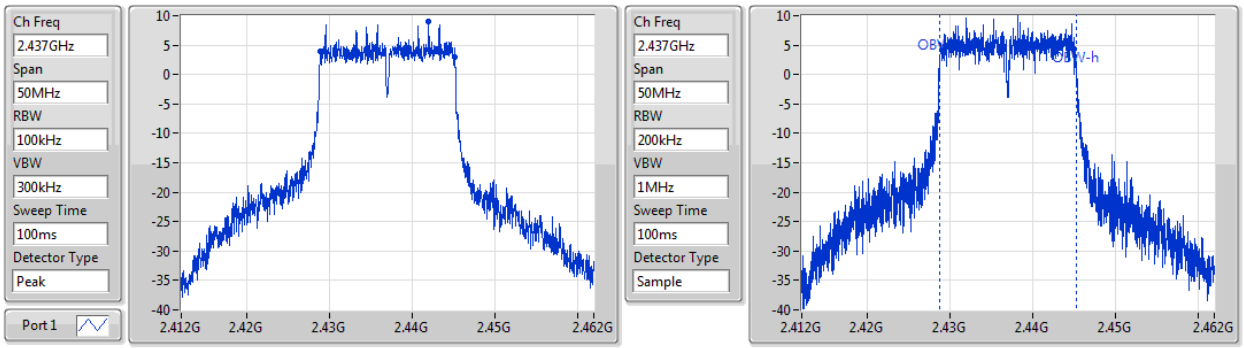
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.40385G	2.42015G	16.692M	2.403629G	2.420321G	500k	1

802.11g_(6Mbps)_1TX **EBW**

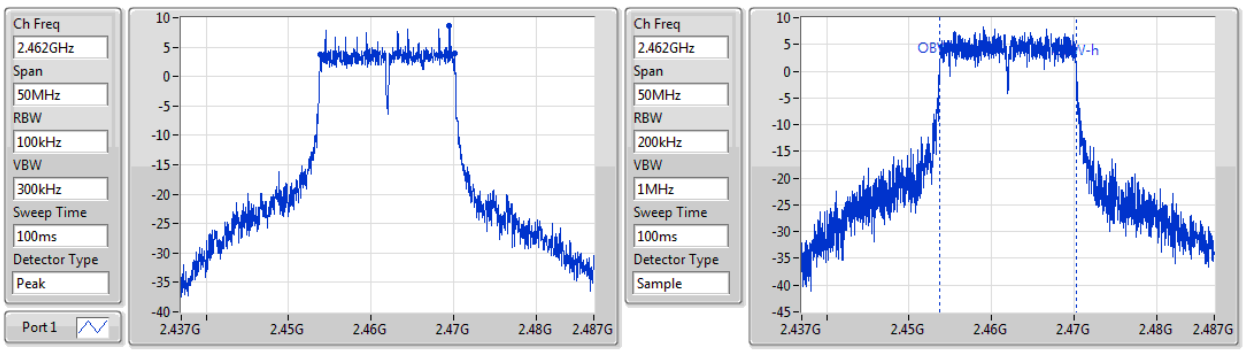
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.42885G	2.445175G	16.667M	2.428654G	2.445321G	500k	1

802.11g_(6Mbps)_1TX **EBW**

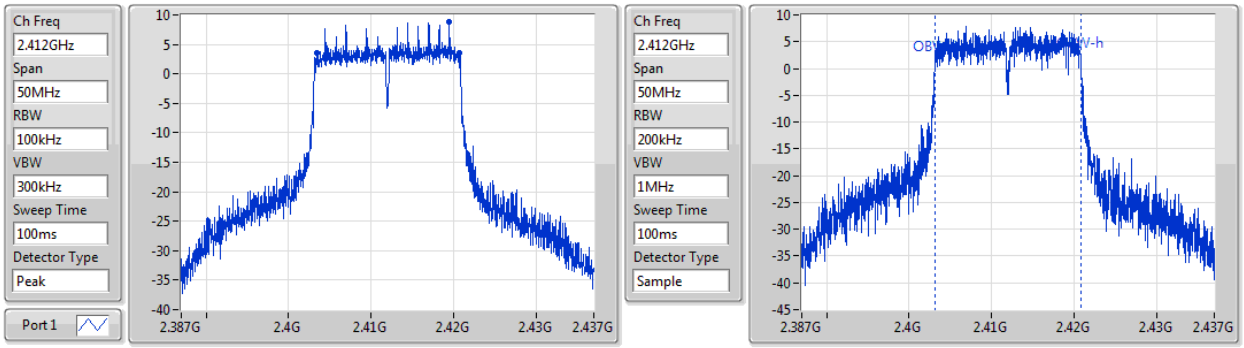
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.45385G	2.47015G	16.617M	2.453654G	2.470271G	500k	1

802.11n HT20_Nss1,(MCS0)_1TX **EBW**

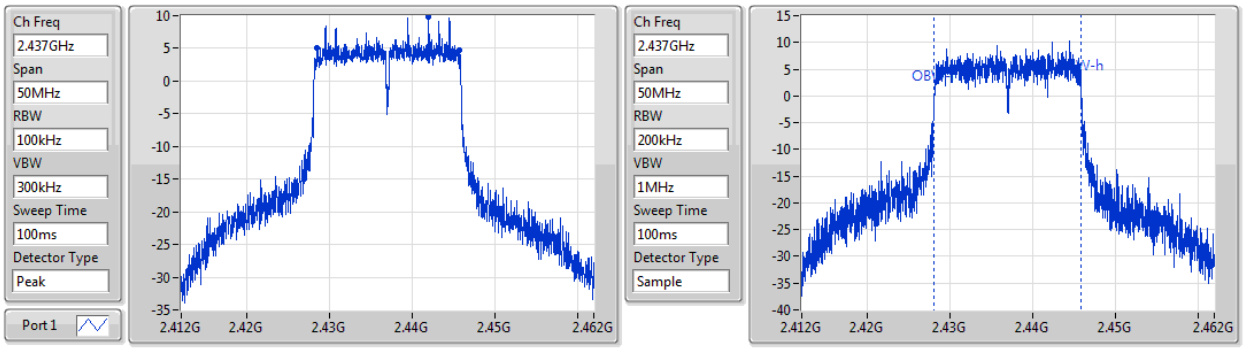
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.3M	2.40345G	2.42075G	17.741M	2.403104G	2.420846G	500k	1

802.11n HT20_Nss1,(MCS0)_1TX **EBW**

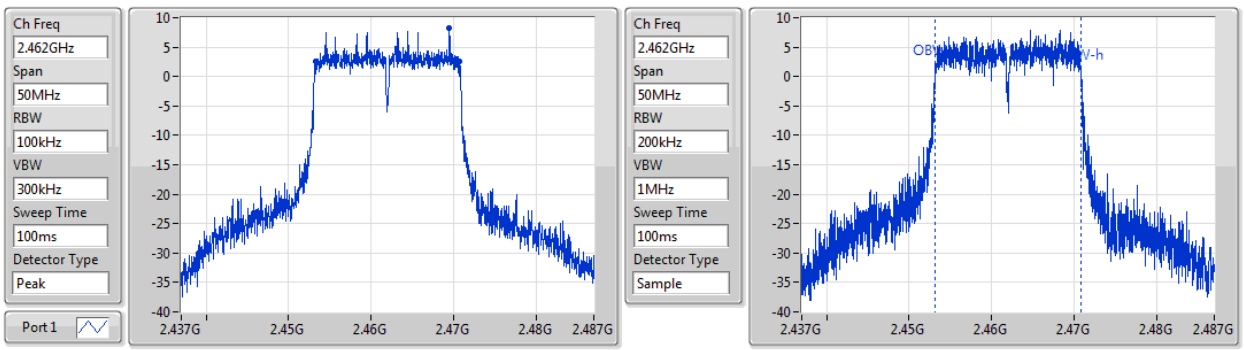
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.275M	2.428475G	2.44575G	17.866M	2.428029G	2.445896G	500k	1

802.11n HT20_Nss1,(MCS0)_1TX **EBW**

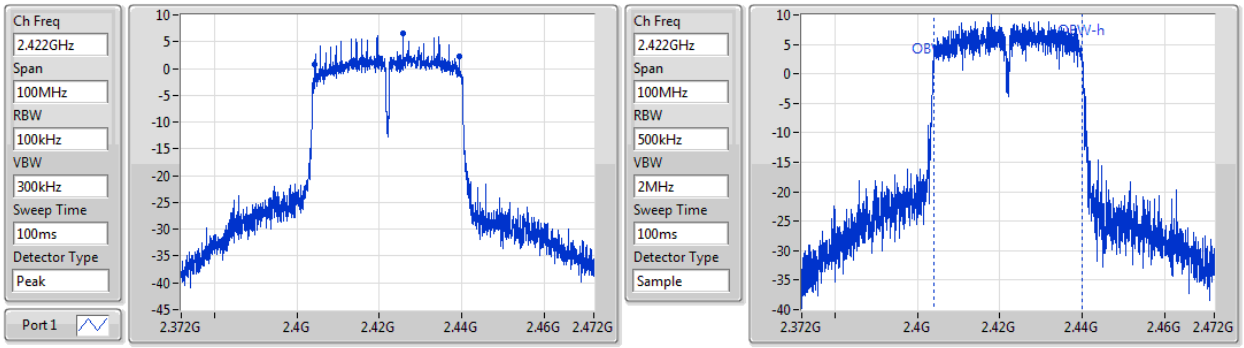
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.5M	2.45325G	2.47075G	17.741M	2.453129G	2.470871G	500k	1

802.11n HT40_Nss1,(MCS0)_1TX **EBW**

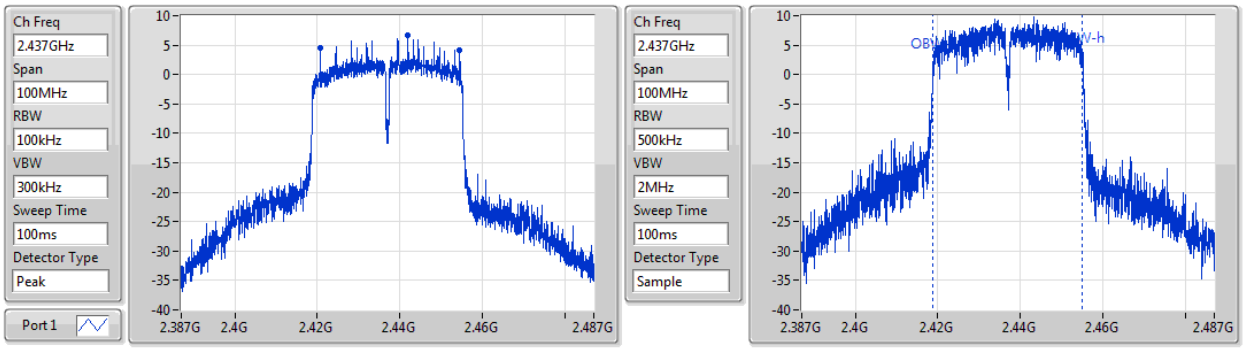
2422MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35M	2.40445G	2.43945G	35.982M	2.404009G	2.439991G	500k	1

802.11n HT40_Nss1,(MCS0)_1TX **EBW**

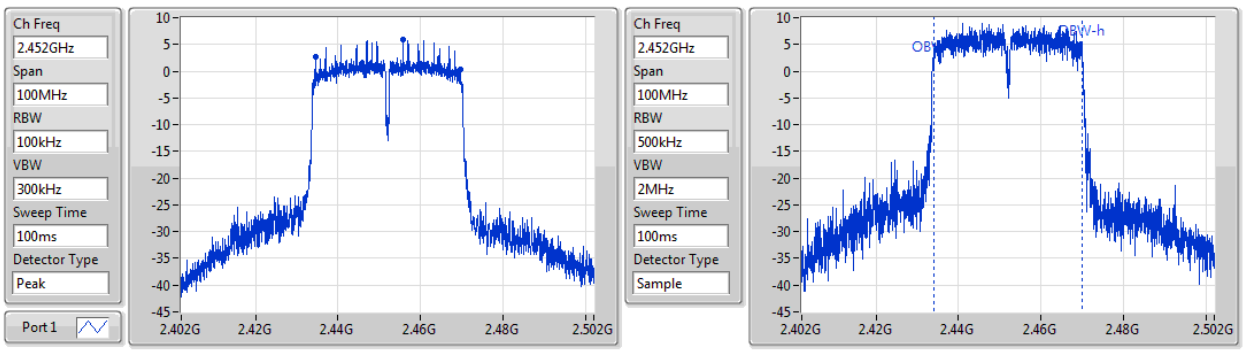
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.8M	2.4207G	2.4545G	36.232M	2.418859G	2.455091G	500k	1

802.11n HT40_Nss1,(MCS0)_1TX **EBW**

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.25M	2.4345G	2.46975G	36.032M	2.433959G	2.469991G	500k	1

Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_1TX	-	-
2.4-2.4835GHz	18.15	0.06531
802.11g_(6Mbps)_1TX	-	-
2.4-2.4835GHz	20.33	0.10789
802.11n HT20_Nss1,(MCS0)_1TX	-	-
2.4-2.4835GHz	20.24	0.10568
802.11n HT40_Nss1,(MCS0)_1TX	-	-
2.4-2.4835GHz	19.75	0.09441

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.00	18.15	18.15	30.00
2437MHz	Pass	3.00	17.78	17.78	30.00
2462MHz	Pass	3.00	17.55	17.55	30.00
802.11g_(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.00	19.92	19.92	30.00
2437MHz	Pass	3.00	20.33	20.33	30.00
2462MHz	Pass	3.00	19.78	19.78	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	3.00	19.89	19.89	30.00
2437MHz	Pass	3.00	20.24	20.24	30.00
2462MHz	Pass	3.00	19.51	19.51	30.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
2422MHz	Pass	3.00	18.82	18.82	30.00
2437MHz	Pass	3.00	19.75	19.75	30.00
2452MHz	Pass	3.00	18.74	18.74	30.00

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

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_1TX	-
2.4-2.4835GHz	-7.37
802.11g_(6Mbps)_1TX	-
2.4-2.4835GHz	-7.57
802.11n HT20_Nss1,(MCS0)_1TX	-
2.4-2.4835GHz	-6.80
802.11n HT40_Nss1,(MCS0)_1TX	-
2.4-2.4835GHz	-9.28

RBW=3kHz.

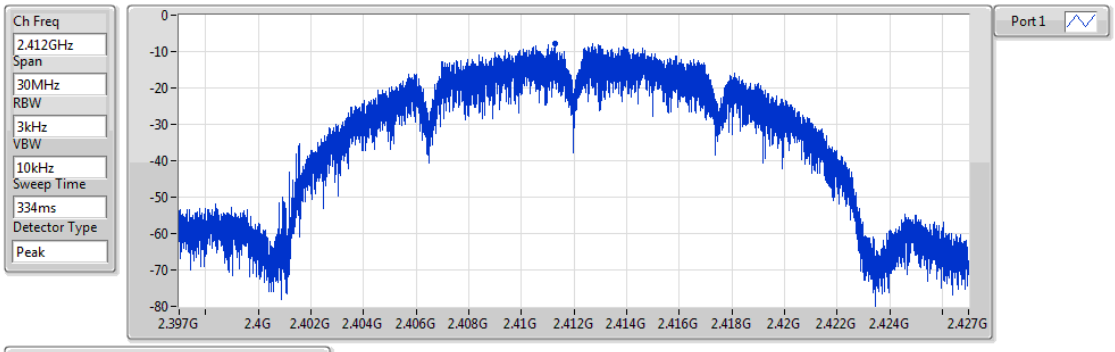
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.00	-7.86	-7.86	8.00
2437MHz	Pass	3.00	-7.37	-7.37	8.00
2462MHz	Pass	3.00	-8.69	-8.69	8.00
802.11g_(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.00	-7.64	-7.64	8.00
2437MHz	Pass	3.00	-7.93	-7.93	8.00
2462MHz	Pass	3.00	-7.57	-7.57	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	3.00	-7.76	-7.76	8.00
2437MHz	Pass	3.00	-6.80	-6.80	8.00
2462MHz	Pass	3.00	-7.86	-7.86	8.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
2422MHz	Pass	3.00	-9.62	-9.62	8.00
2437MHz	Pass	3.00	-9.39	-9.39	8.00
2452MHz	Pass	3.00	-9.28	-9.28	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**

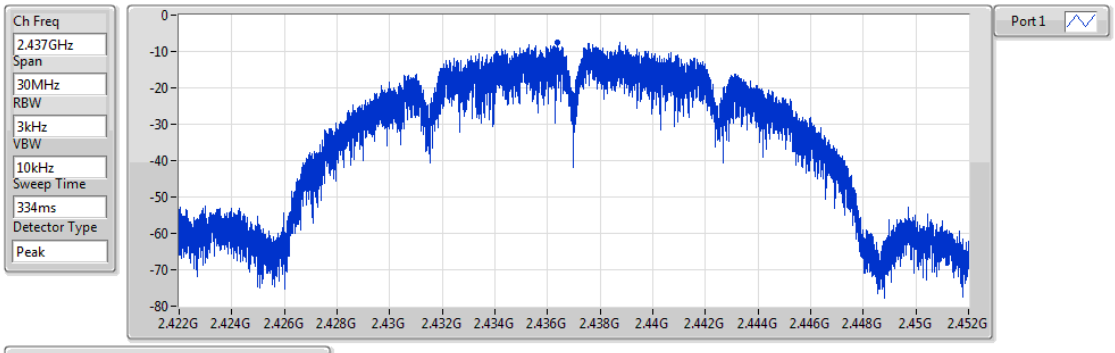
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.86	-7.86	-7.86

802.11b_(1Mbps)_1TX **PSD**

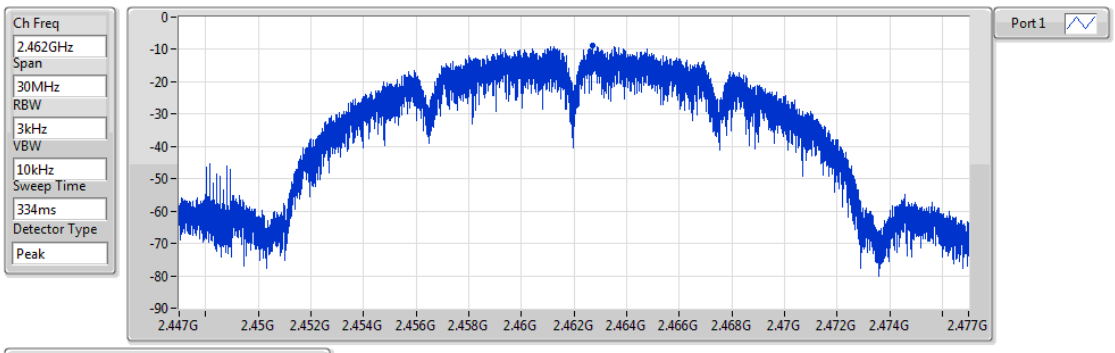
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.37	-7.37	-7.37

802.11b_(1Mbps)_1TX **PSD**

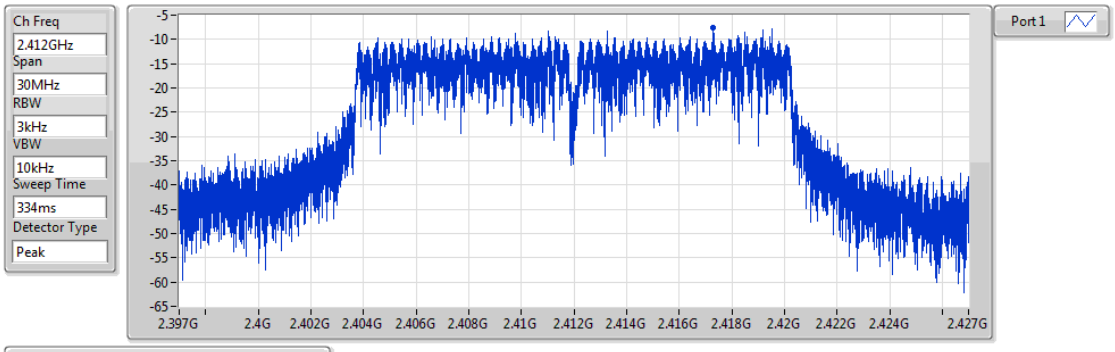
2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.69	-8.69	-8.69

802.11g_(6Mbps)_1TX **PSD**

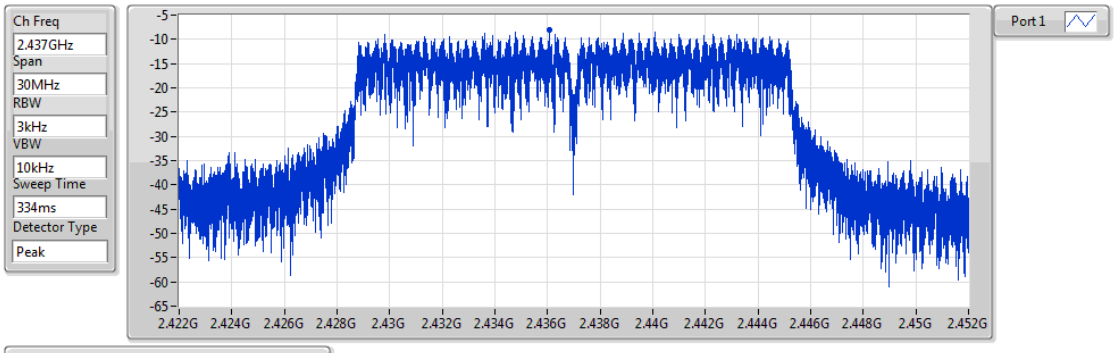
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.64	-7.64	-7.64

802.11g_(6Mbps)_1TX **PSD**

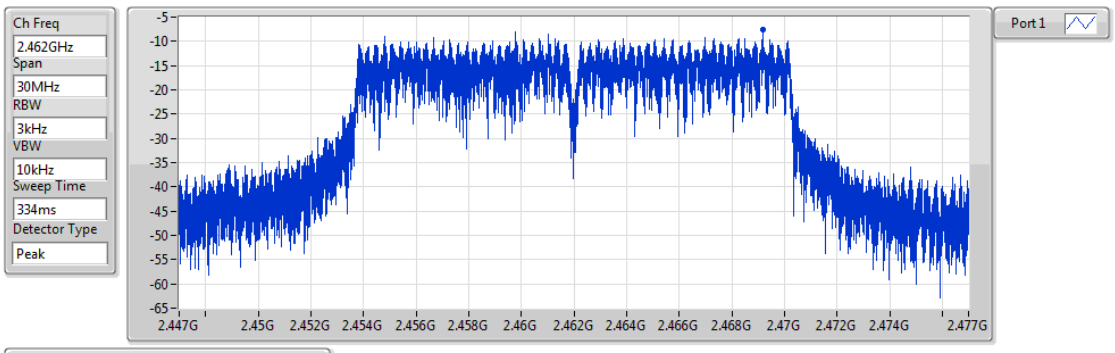
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.93	-7.93	-7.93

802.11g_(6Mbps)_1TX **PSD**

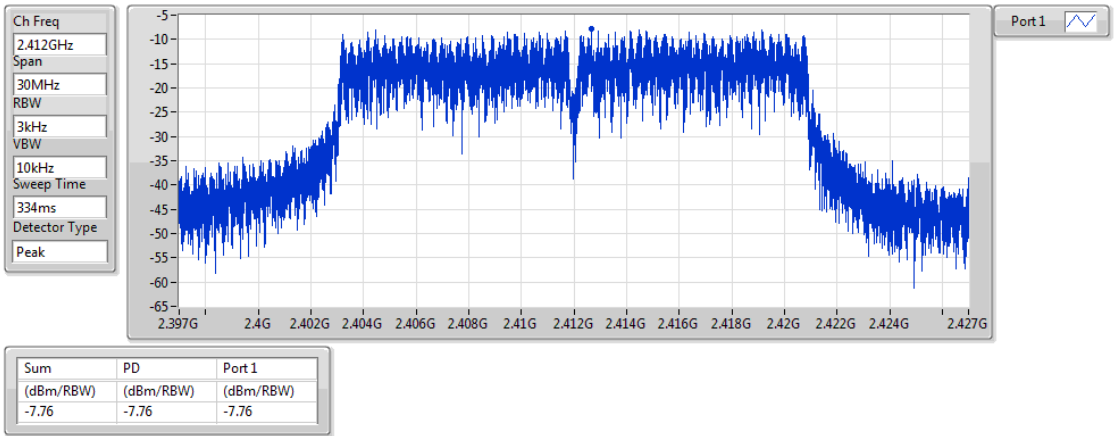
2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.57	-7.57	-7.57

802.11n HT20_Nss1,(MCS0)_1TX **PSD**

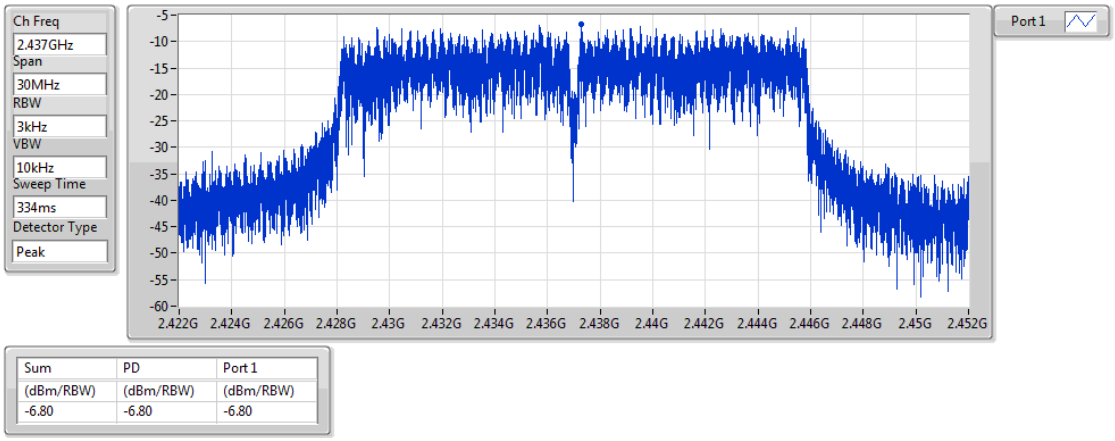
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.76	-7.76	-7.76

802.11n HT20_Nss1,(MCS0)_1TX **PSD**

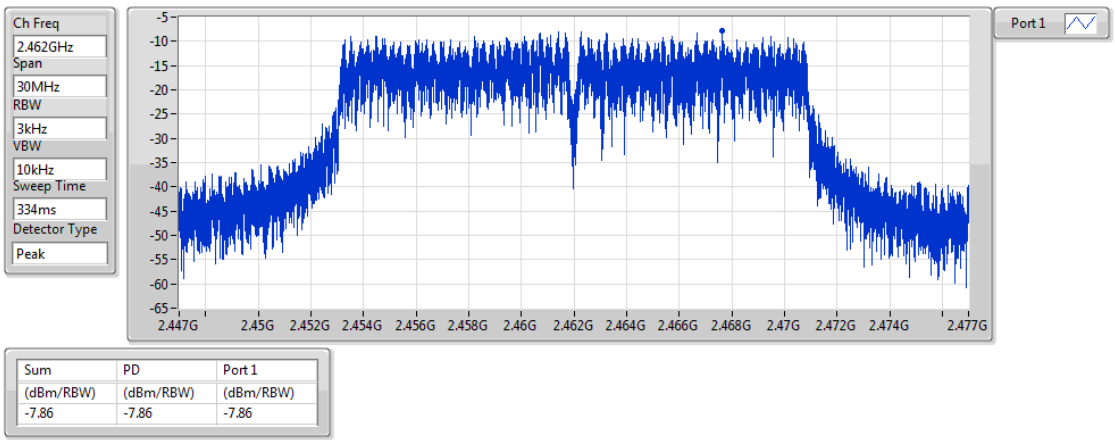
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.80	-6.80	-6.80

802.11n HT20_Nss1,(MCS0)_1TX **PSD**

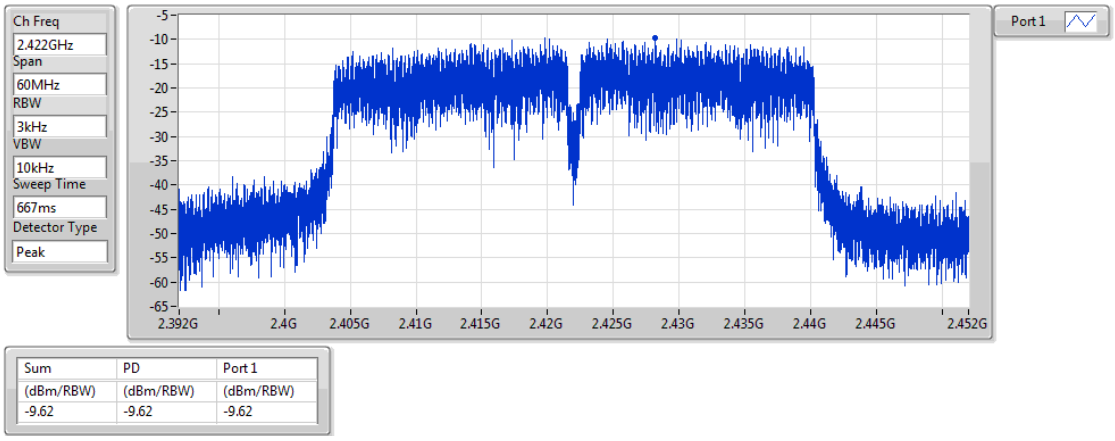
2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.86	-7.86	-7.86

802.11n HT40_Nss1,(MCS0)_1TX **PSD**

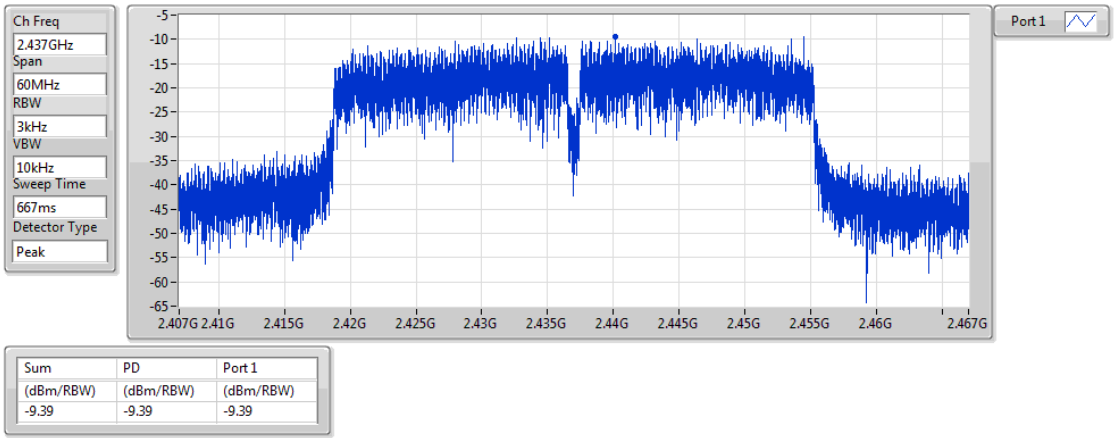
2422MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.62	-9.62	-9.62

802.11n HT40_Nss1,(MCS0)_1TX **PSD**

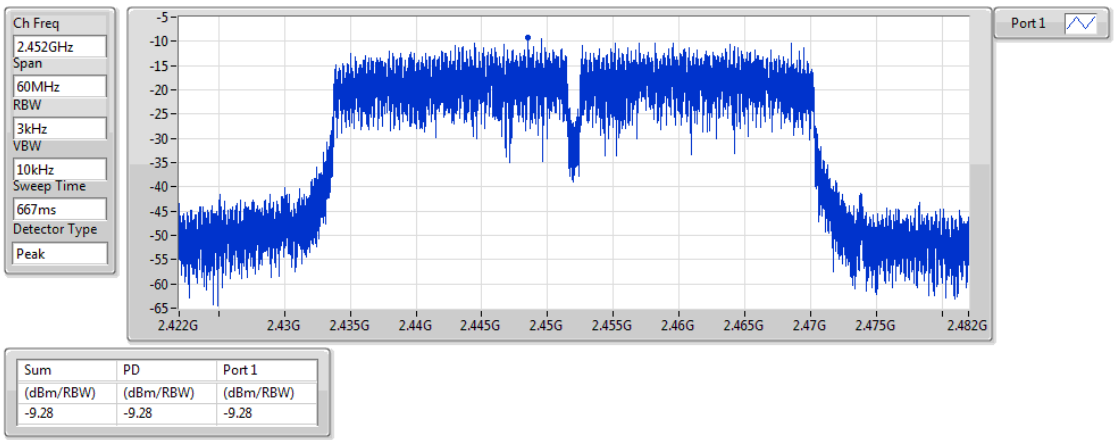
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.39	-9.39	-9.39

802.11n HT40_Nss1,(MCS0)_1TX **PSD**

2452MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.28	-9.28	-9.28

Summary

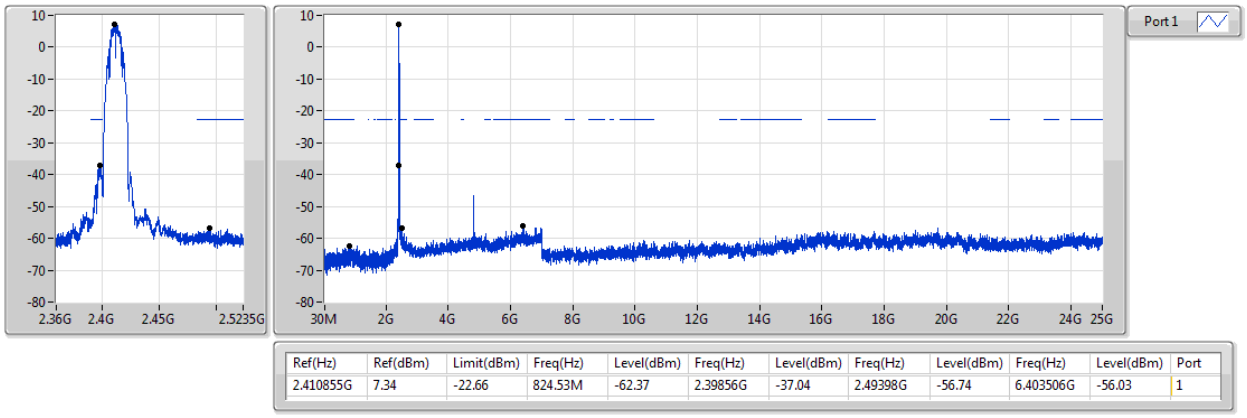
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.438243G	10.11	-19.89	2.30641G	-57.92	2.39952G	-19.93	2.48486G	-47.75	6.836178G	-54.90	1

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	2.410855G	7.34	-22.66	824.53M	-62.37	2.39856G	-37.04	2.49398G	-56.74	6.403506G	-56.03	1
2437MHz	Pass	2.436406G	7.34	-22.66	2.302915G	-61.81	2.398G	-55.27	2.48422G	-56.44	16.26788G	-56.78	1
2462MHz	Pass	2.461122G	7.34	-22.66	399.305M	-61.64	2.39384G	-58.61	2.48822G	-50.57	6.816512G	-56.62	1
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.438243G	10.11	-19.89	2.30641G	-57.92	2.39952G	-19.93	2.48486G	-47.75	6.836178G	-54.90	1
2437MHz	Pass	2.438243G	10.11	-19.89	2.302915G	-57.75	2.3992G	-36.28	2.48662G	-37.17	2.5235G	-46.03	1
2462MHz	Pass	2.438243G	10.11	-19.89	2.30874G	-59.08	2.39896G	-43.69	2.48414G	-27.58	2.5235G	-43.22	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.434402G	8.04	-21.96	2.309905G	-58.77	2.39664G	-22.73	2.48374G	-50.19	6.979466G	-56.39	1
2437MHz	Pass	2.434402G	8.04	-21.96	2.30641G	-57.72	2.39792G	-36.26	2.48358G	-37.18	2.5235G	-49.68	1
2462MHz	Pass	2.434402G	8.04	-21.96	2.307575G	-60.02	2.39792G	-47.27	2.4839G	-27.29	2.52631G	-46.06	1
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.434402G	6.82	-23.18	31.145M	-48.15	2.39968G	-24.28	2.49006G	-38.75	2.5635G	-52.88	1
2437MHz	Pass	2.434402G	6.82	-23.18	30M	-43.22	2.39968G	-23.93	2.48446G	-30.36	2.566305G	-43.89	1
2452MHz	Pass	2.434402G	6.82	-23.18	30M	-47.48	2.39936G	-39.12	2.4859G	-27.71	2.569109G	-50.13	1

802.11b_(1Mbps)_1TX **CSE NdB**

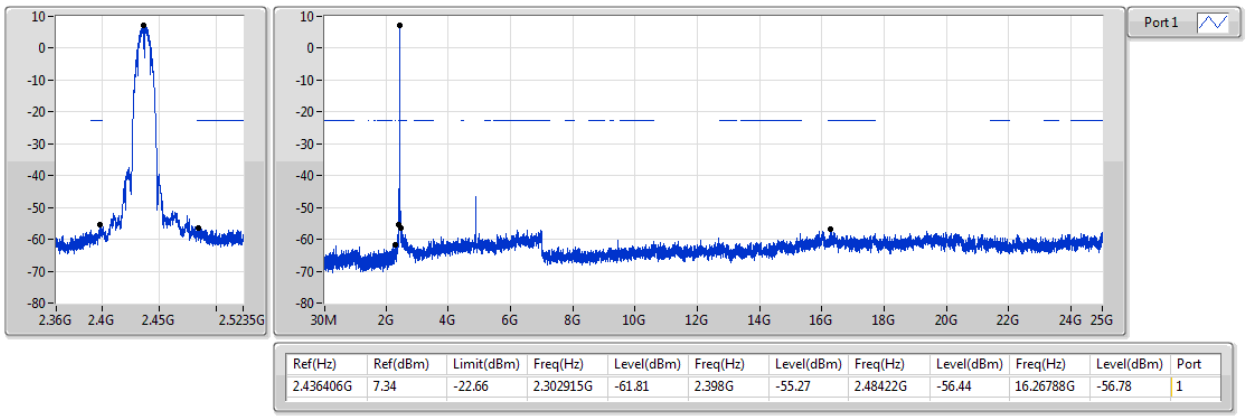
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.410855G	7.34	-22.66	824.53M	-62.37	2.39856G	-37.04	2.49398G	-56.74	6.403506G	-56.03	1

802.11b_(1Mbps)_1TX **CSE NdB**

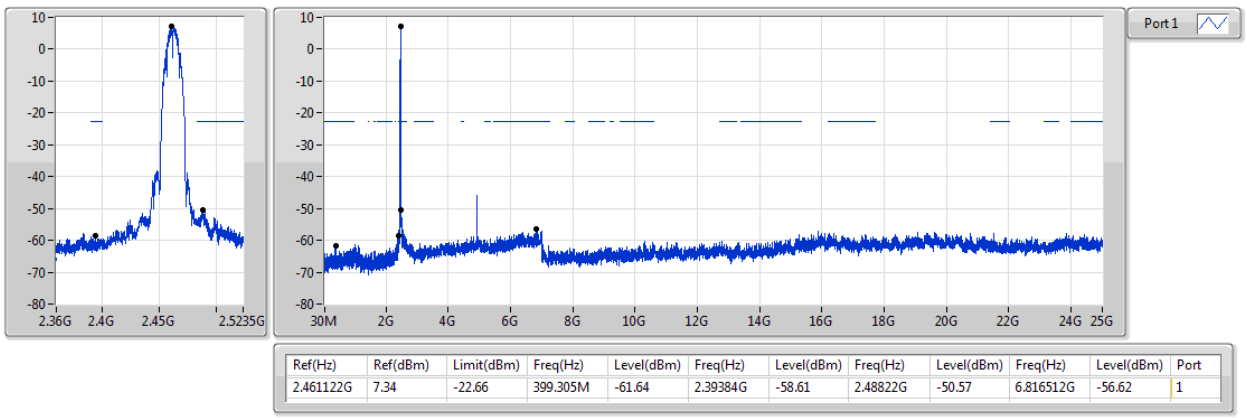
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.436406G	7.34	-22.66	2.302915G	-61.81	2.398G	-55.27	2.48422G	-56.44	16.26788G	-56.78	1

802.11b_(1Mbps)_1TX **CSE NdB**

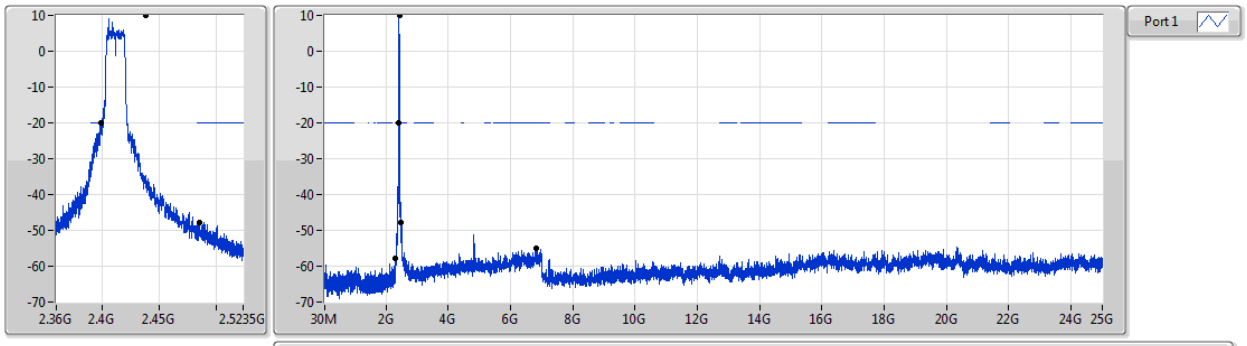
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.461122G	7.34	-22.66	399.305M	-61.64	2.39384G	-58.61	2.48822G	-50.57	6.816512G	-56.62	1

802.11g_(6Mbps)_1TX **CSE NdB**

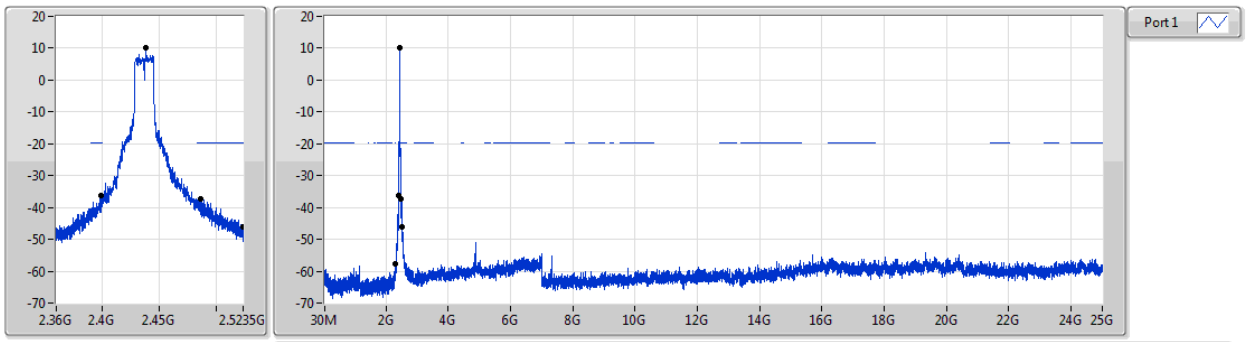
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	10.11	-19.89	2.30641G	-57.92	2.39952G	-19.93	2.48486G	-47.75	6.836178G	-54.90	1

802.11g_(6Mbps)_1TX **CSE NdB**

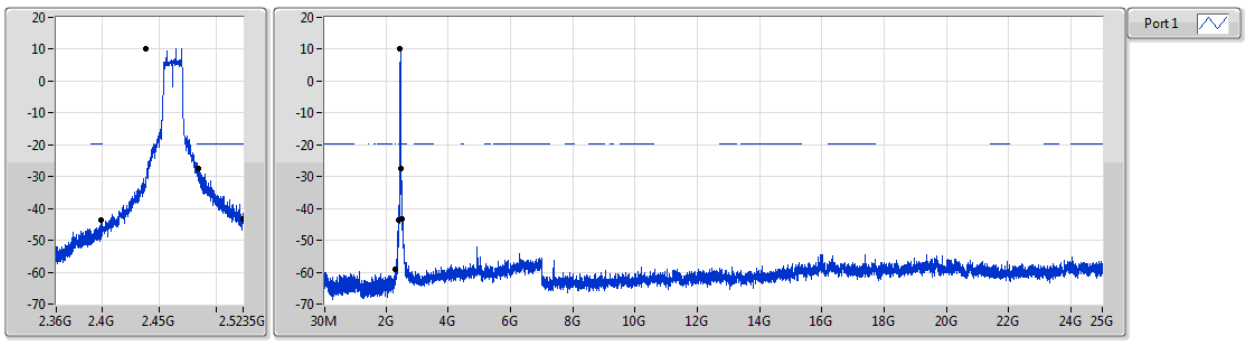
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	10.11	-19.89	2.302915G	-57.75	2.3992G	-36.28	2.48662G	-37.17	2.5235G	-46.03	1

802.11g_(6Mbps)_1TX **CSE NdB**

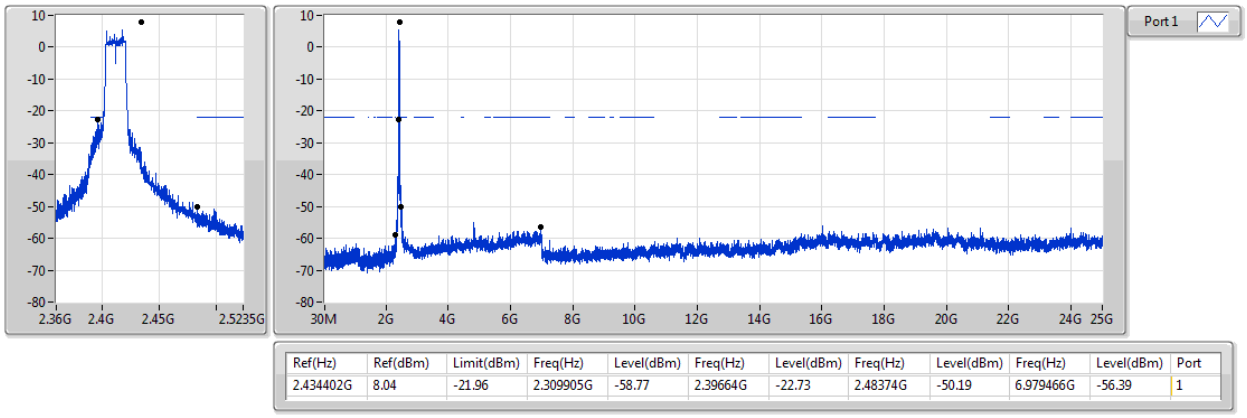
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438243G	10.11	-19.89	2.30874G	-59.08	2.39896G	-43.69	2.48414G	-27.58	2.5235G	-43.22	1

802.11n HT20_Nss1,(MCS0)_1TX **CSE NdB**

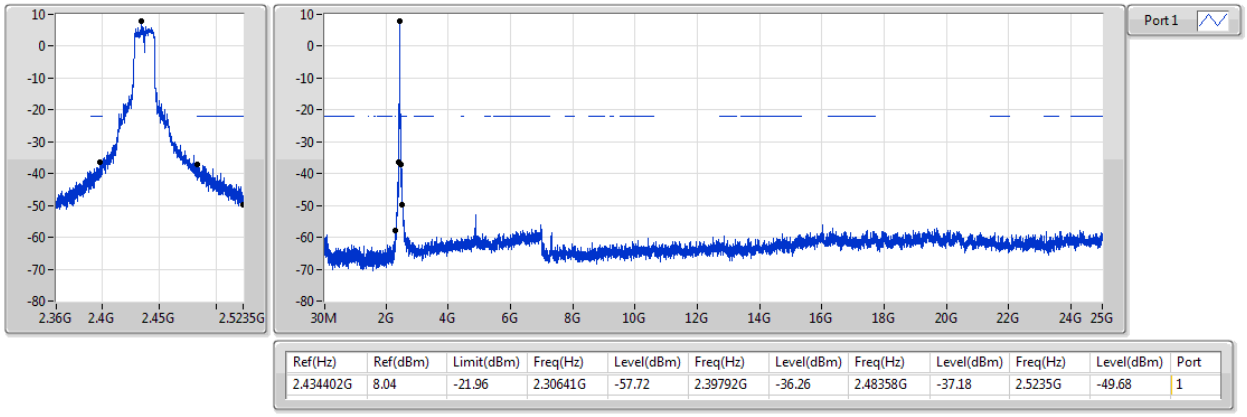
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.434402G	8.04	-21.96	2.309905G	-58.77	2.39664G	-22.73	2.48374G	-50.19	6.979466G	-56.39	1

802.11n HT20_Nss1,(MCS0)_1TX **CSE NdB**

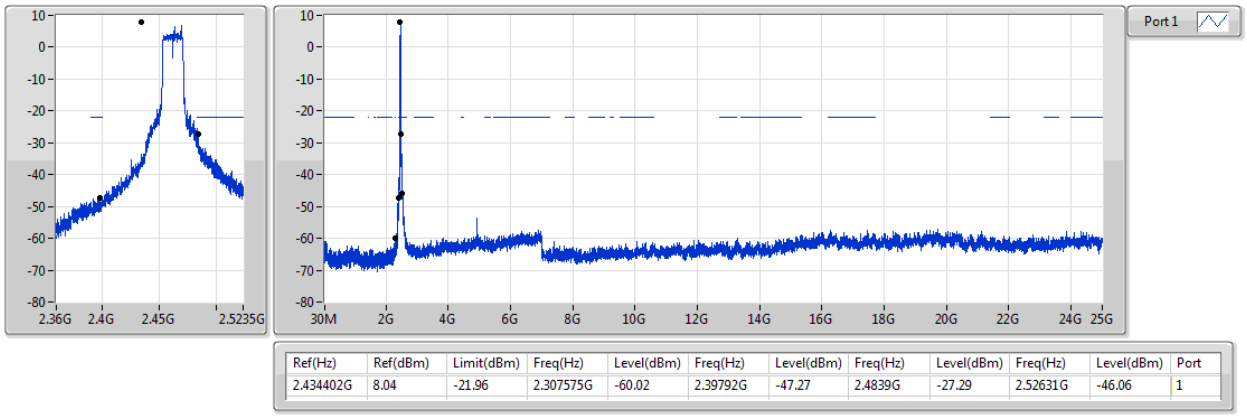
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.434402G	8.04	-21.96	2.30641G	-57.72	2.39792G	-36.26	2.48358G	-37.18	2.5235G	-49.68	1

802.11n HT20_Nss1,(MCS0)_1TX **CSE NdB**

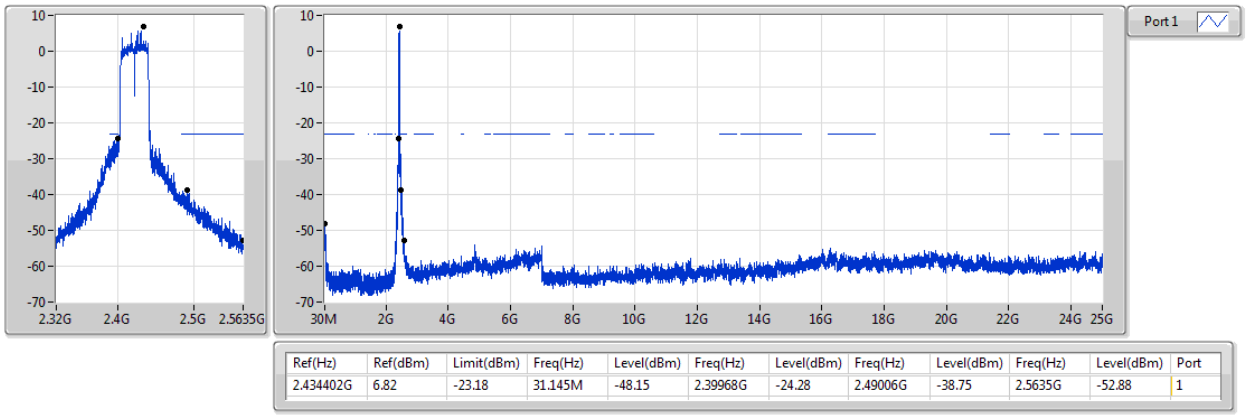
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.434402G	8.04	-21.96	2.307575G	-60.02	2.39792G	-47.27	2.4839G	-27.29	2.52631G	-46.06	1

802.11n HT40_Nss1,(MCS0)_1TX **CSE NdB**

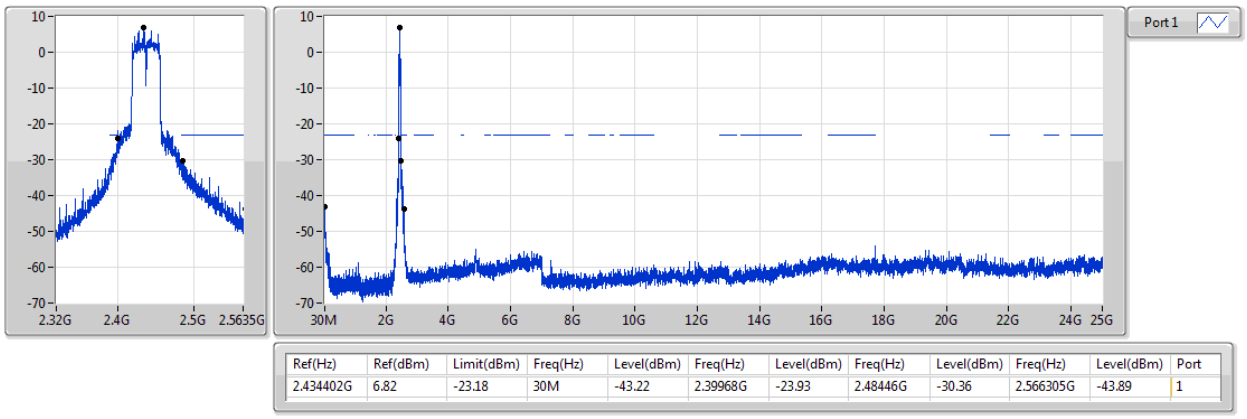
2422MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.434402G	6.82	-23.18	31.145M	-48.15	2.39968G	-24.28	2.49006G	-38.75	2.5635G	-52.88	1

802.11n HT40_Nss1,(MCS0)_1TX **CSE NdB**

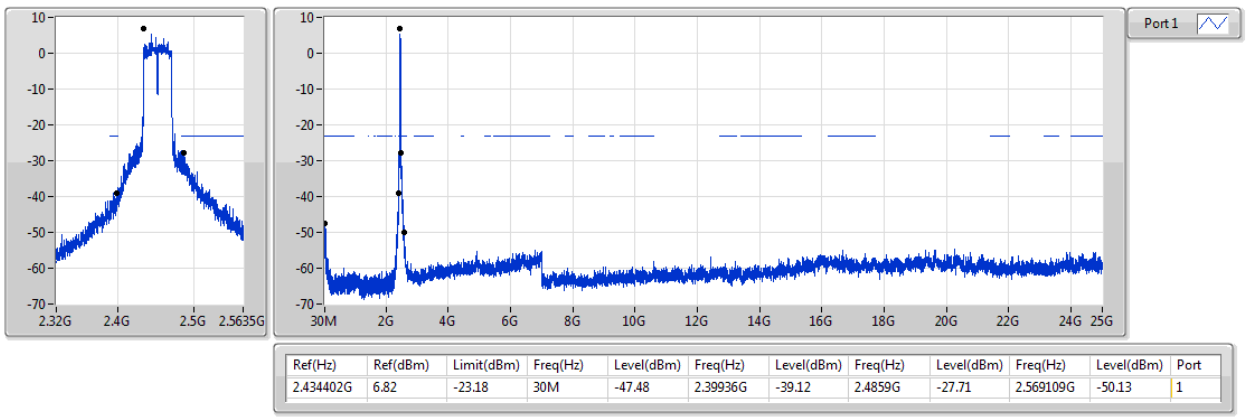
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.434402G	6.82	-23.18	30M	-43.22	2.39968G	-23.93	2.48446G	-30.36	2.566305G	-43.89	1

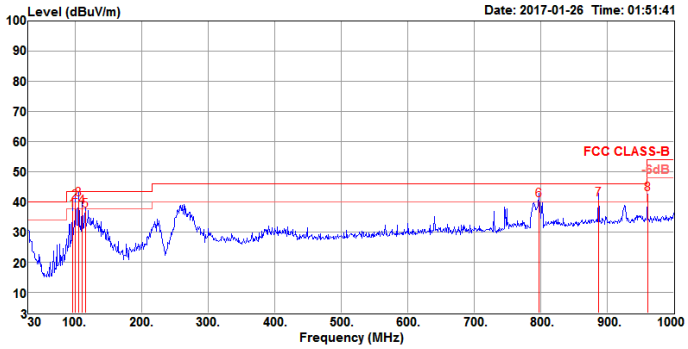
802.11n HT40_Nss1,(MCS0)_1TX **CSE NdB**

2452MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.434402G	6.82	-23.18	30M	-47.48	2.39936G	-39.12	2.4859G	-27.71	2.569109G	-50.13	1

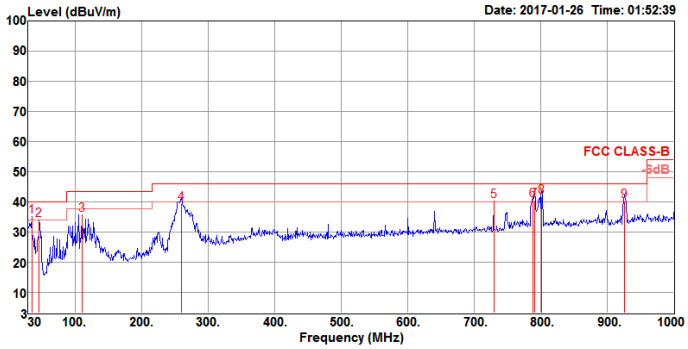
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	CTX		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	95.96	37.01	43.50	-6.49	51.53	1.10	16.83	32.45	200	74	QP	HORIZONTAL
2	100.81	40.01	43.50	-3.49	53.60	1.13	17.73	32.45	200	94	QP	HORIZONTAL
3	105.66	40.70	43.50	-2.80	53.70	1.15	18.29	32.44	200	87	QP	HORIZONTAL
4	110.51	38.26	43.50	-5.24	50.70	1.18	18.81	32.43	125	75	QP	HORIZONTAL
5	115.36	37.14	43.50	-6.36	49.40	1.21	18.96	32.43	150	103	QP	HORIZONTAL
6	797.27	40.44	46.00	-5.56	42.56	3.29	26.78	32.19	100	27	QP	HORIZONTAL
7	886.51	40.83	46.00	-5.17	41.50	3.46	27.62	31.75	200	212	QP	HORIZONTAL
8	960.23	42.57	54.00	-11.43	41.88	3.61	28.20	31.12	200	322	Peak	HORIZONTAL

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.)

RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	CTX		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	34.85	35.04	40.00	-4.96	43.87	0.66	23.35	32.84	100	340	Peak	VERTICAL
2	46.49	33.78	40.00	-6.22	49.05	0.76	16.44	32.47	100	350	Peak	VERTICAL
3	110.51	35.58	43.50	-7.92	48.02	1.18	18.81	32.43	100	200	Peak	VERTICAL
4	259.89	39.30	46.00	-6.70	49.90	1.83	19.90	32.33	200	11	QP	VERTICAL
5	729.37	40.22	46.00	-5.78	43.22	3.12	26.20	32.32	150	210	Peak	VERTICAL
6	787.57	40.57	46.00	-5.43	42.80	3.27	26.71	32.21	200	172	QP	VERTICAL
7	790.48	40.41	46.00	-5.59	42.60	3.28	26.73	32.20	150	294	QP	VERTICAL
8	801.15	41.57	46.00	-4.43	43.61	3.31	26.83	32.18	150	51	QP	VERTICAL
9	925.31	40.31	46.00	-5.69	40.31	3.54	27.91	31.45	150	233	QP	VERTICAL

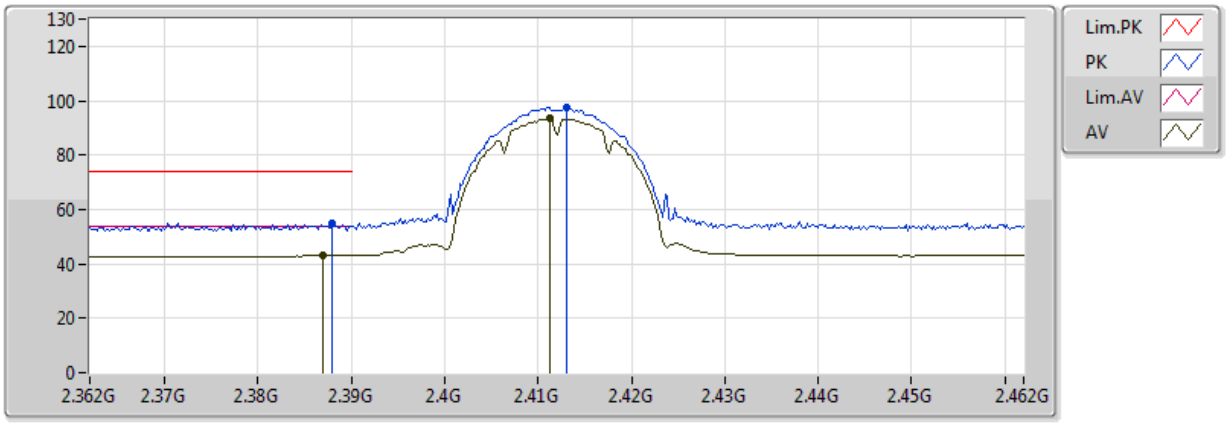
Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.483502G	53.94	54.00	-0.06	31.03	3	H	138	2.34	-

802.11b_(1Mbps)_1TX

2412MHz_TX

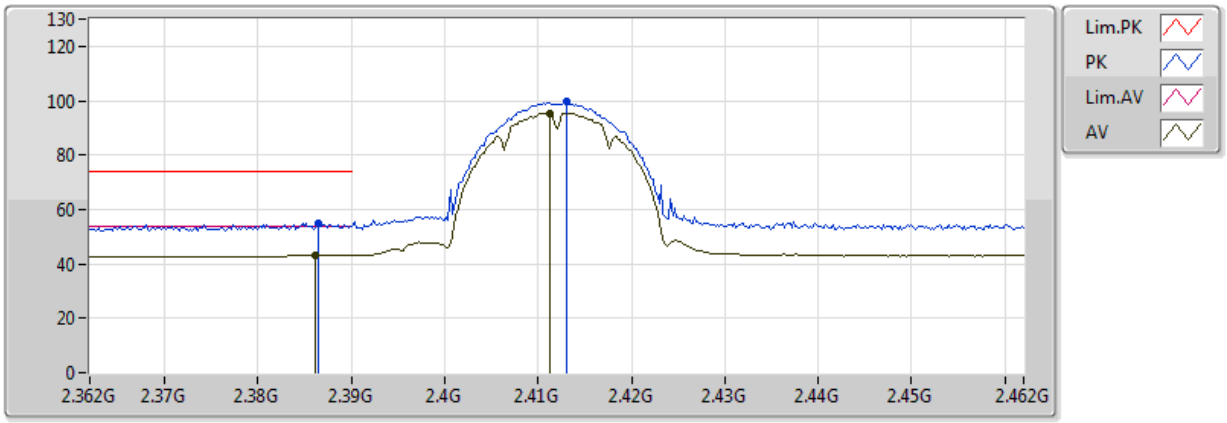


20170119
EUT Z_1TX
Setting 47
03-M-1
FSP(100142)

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	43.06	54.00	-10.94	30.72	3	V	271	1.78	-
AV	2.4112G	93.54	Inf	-Inf	30.80	3	V	271	1.78	-
PK	2.388G	55.19	74.00	-18.81	30.72	3	V	271	1.78	-
PK	2.413G	97.31	Inf	-Inf	30.80	3	V	271	1.78	-

802.11b_(1Mbps)_1TX

2412MHz_TX

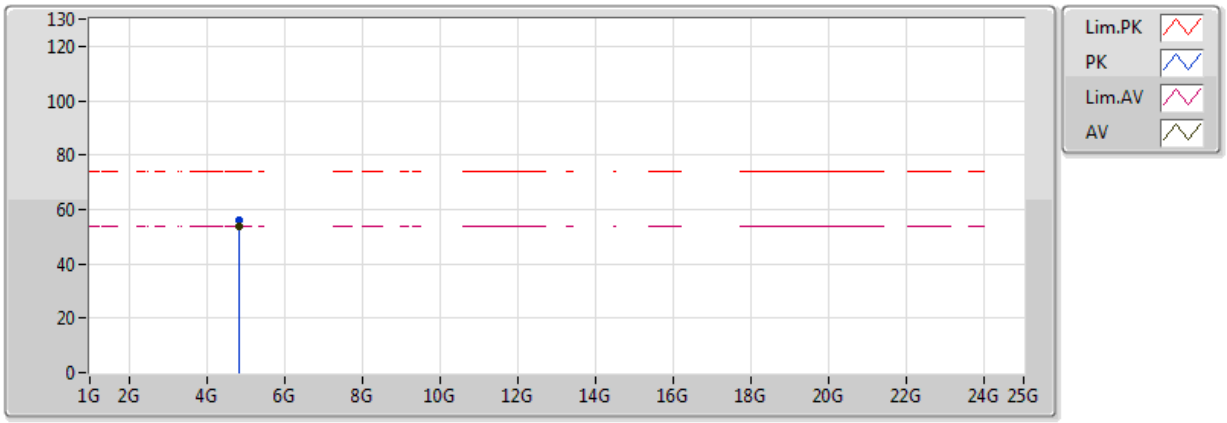


20170119
EUT Z_1TX
Setting 47
03-M-1
FSP(100142)

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	43.23	54.00	-10.77	30.71	3	H	151	1.55	-
AV	2.4112G	95.53	Inf	-Inf	30.80	3	H	151	1.55	-
PK	2.3864G	55.11	74.00	-18.89	30.72	3	H	151	1.55	-
PK	2.413G	99.47	Inf	-Inf	30.80	3	H	151	1.55	-

802.11b_(1Mbps)_1TX

2412MHz_TX

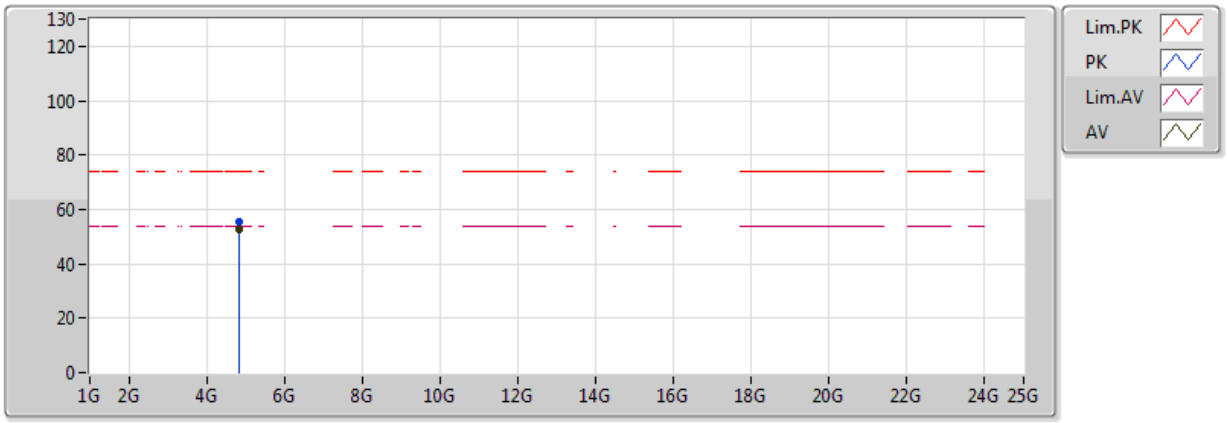


20170119
EUT Z_1TX
Setting 47
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82402G	53.53	54.00	-0.47	5.92	3	V	95	1.93	-
PK	4.82401G	55.79	74.00	-18.21	5.92	3	V	95	1.93	-

802.11b_(1Mbps)_1TX

2412MHz_TX

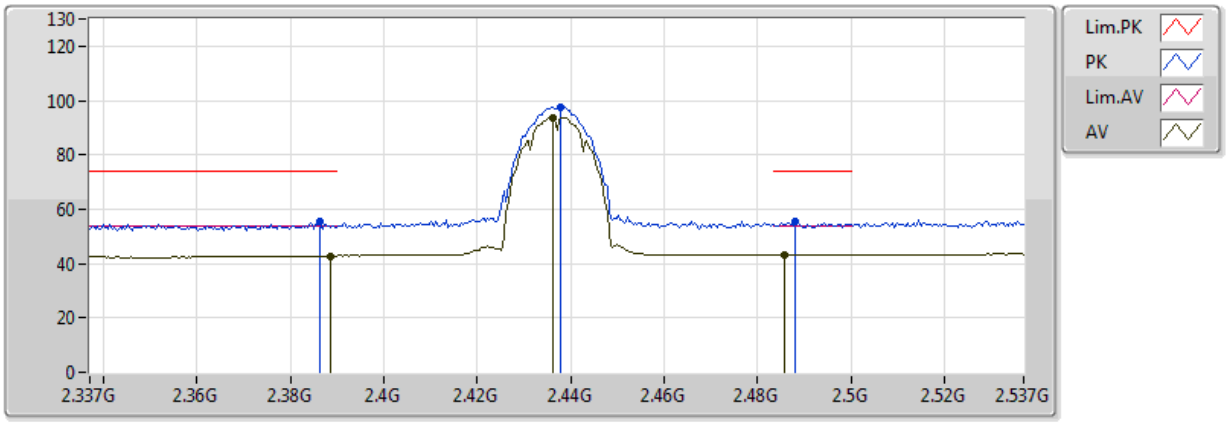


20170119
EUT Z_1TX
Setting 47
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82403G	52.89	54.00	-1.11	5.92	3	H	152	1.49	-
PK	4.82394G	55.58	74.00	-18.42	5.92	3	H	152	1.49	-

802.11b_(1Mbps)_1TX

2437MHz_TX

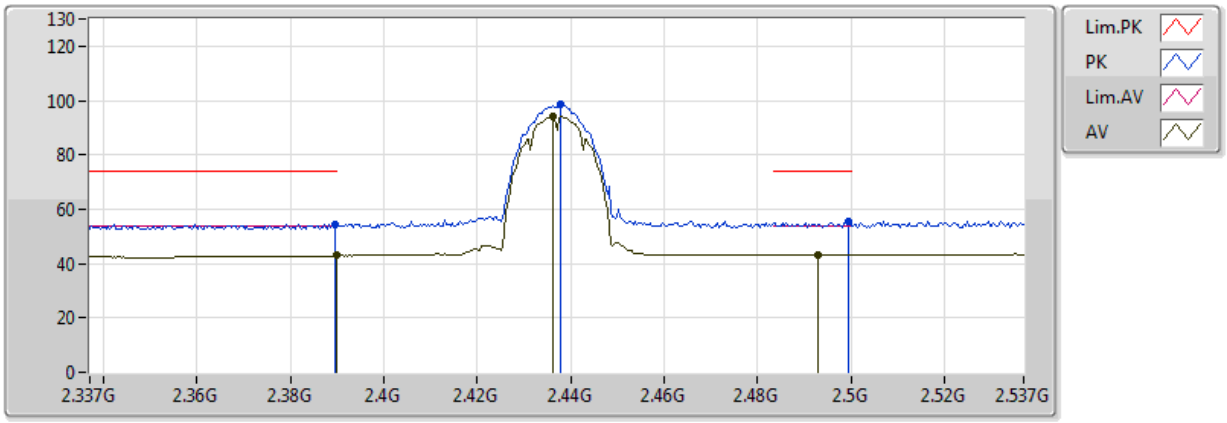


20170119
EUT Z_1TX
Setting 45
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3886G	42.84	54.00	-11.16	30.72	3	V	267	1.96	-
AV	2.4362G	93.79	Inf	-Inf	30.88	3	V	267	1.96	-
AV	2.4858G	43.33	54.00	-10.67	31.03	3	V	267	1.96	-
PK	2.3862G	55.25	74.00	-18.75	30.71	3	V	267	1.96	-
PK	2.4378G	97.77	Inf	-Inf	30.88	3	V	267	1.96	-
PK	2.4882G	55.58	74.00	-18.42	31.04	3	V	267	1.96	-

802.11b_(1Mbps)_1TX

2437MHz_TX

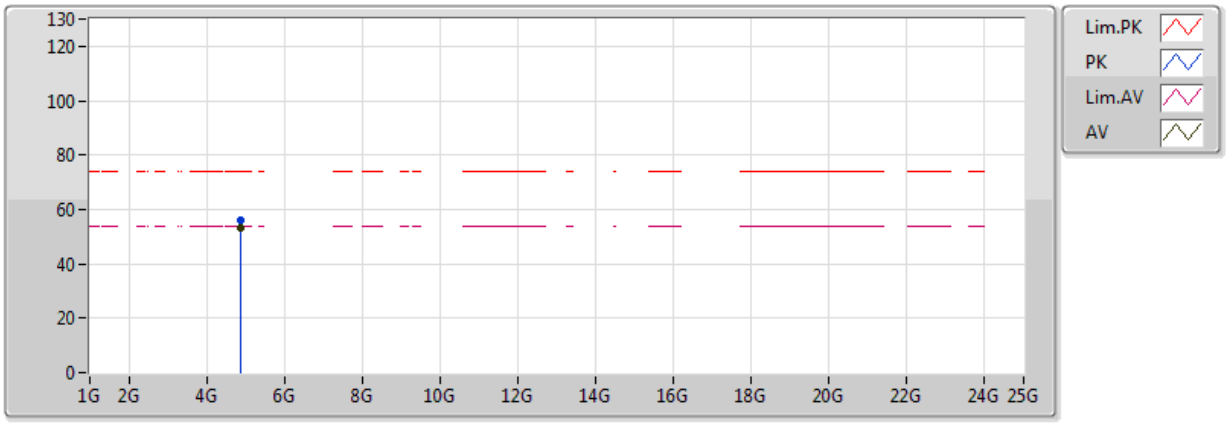


20170119
EUT Z_1TX
Setting 45
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	42.87	54.00	-11.13	30.73	3	H	151	1.95	-
AV	2.4362G	94.12	Inf	-Inf	30.88	3	H	151	1.95	-
AV	2.493G	43.23	54.00	-10.77	31.06	3	H	151	1.95	-
PK	2.3894G	54.62	74.00	-19.38	30.73	3	H	151	1.95	-
PK	2.4378G	98.45	Inf	-Inf	30.88	3	H	151	1.95	-
PK	2.4994G	55.44	74.00	-18.56	31.08	3	H	151	1.95	-

802.11b_(1Mbps)_1TX

2437MHz_TX

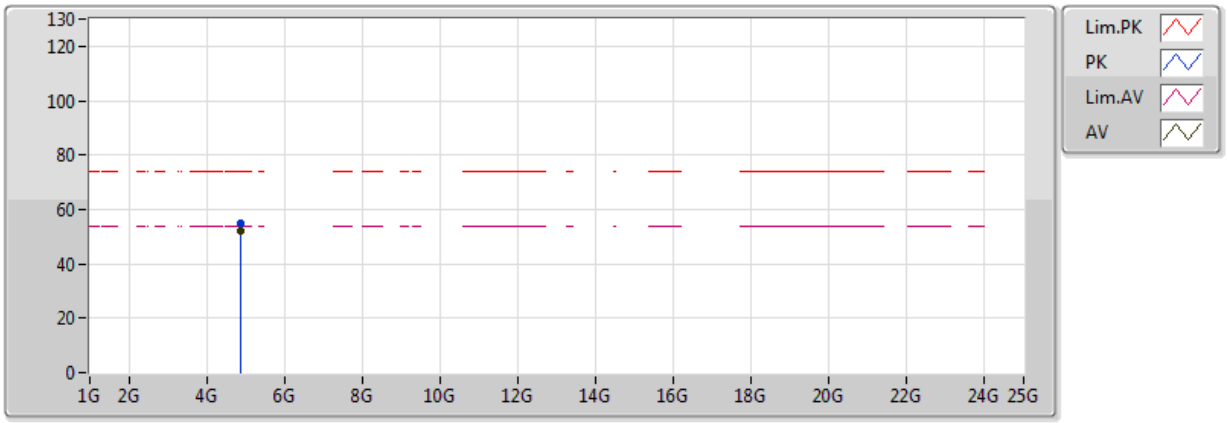


20170119
EUT Z_1TX
Setting 45
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87403G	53.50	54.00	-0.50	6.09	3	V	106	1.93	-
PK	4.87399G	56.18	74.00	-17.82	6.09	3	V	106	1.93	-

802.11b_(1Mbps)_1TX

2437MHz_TX

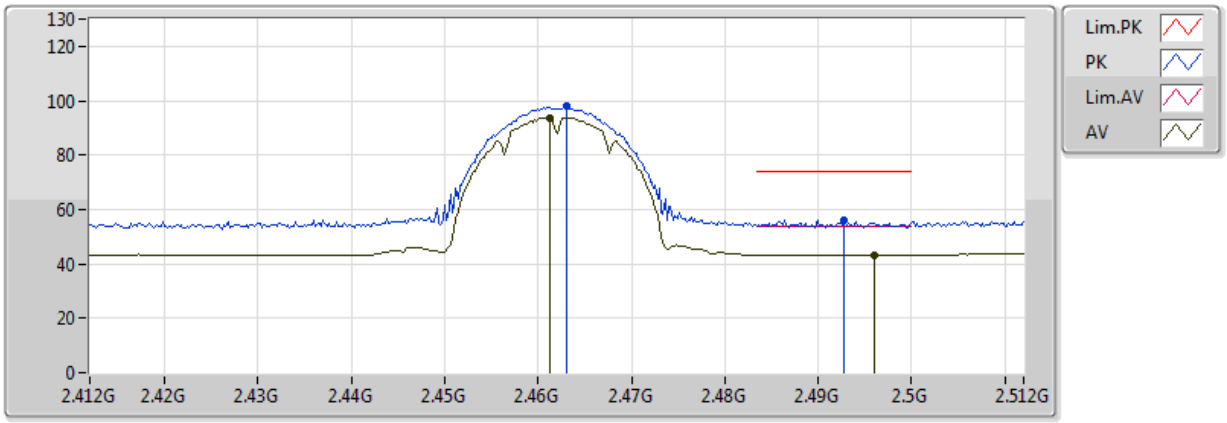


20170119
EUT Z_1TX
Setting 45
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87402G	52.36	54.00	-1.64	6.09	3	H	124	1.54	-
PK	4.87398G	55.14	74.00	-18.86	6.09	3	H	124	1.54	-

802.11b_(1Mbps)_1TX

2462MHz_TX

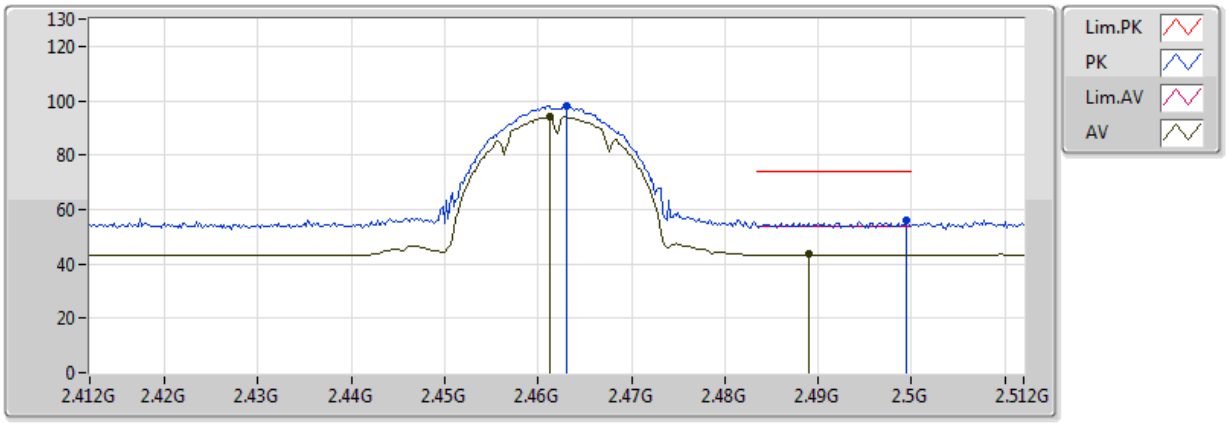


20170119
EUT Z_1TX
Setting 44
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4612G	93.83	Inf	-Inf	30.96	3	V	174	1.54	-
AV	2.496G	43.40	54.00	-10.60	31.07	3	V	174	1.54	-
PK	2.463G	97.79	Inf	-Inf	30.96	3	V	174	1.54	-
PK	2.4928G	56.03	74.00	-17.97	31.06	3	V	174	1.54	-

802.11b_(1Mbps)_1TX

2462MHz_TX

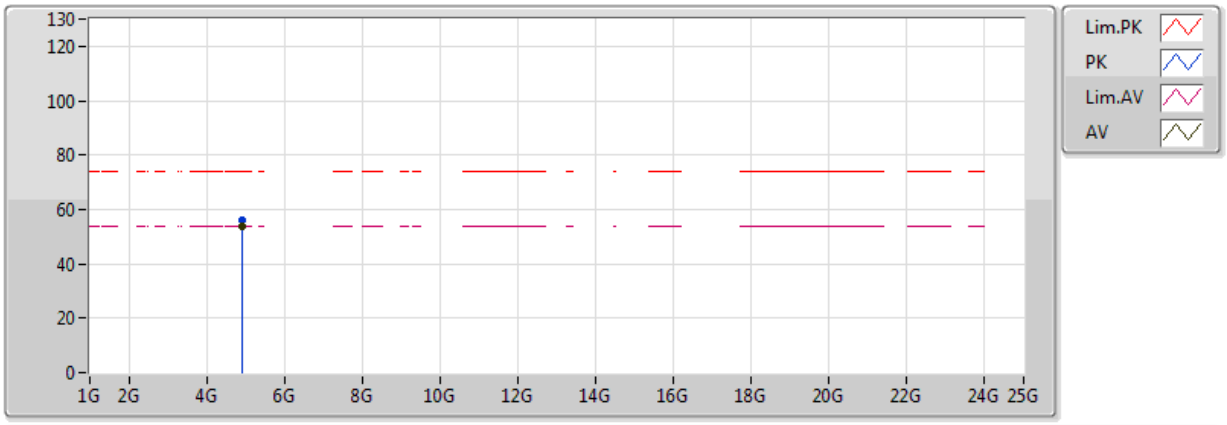


20170119
EUT Z_1TX
Setting 44
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4612G	93.96	Inf	-Inf	30.96	3	H	155	1.30	-
AV	2.489G	43.43	54.00	-10.57	31.04	3	H	155	1.30	-
PK	2.463G	98.00	Inf	-Inf	30.96	3	H	155	1.30	-
PK	2.4994G	55.80	74.00	-18.20	31.08	3	H	155	1.30	-

802.11b_(1Mbps)_1TX

2462MHz_TX

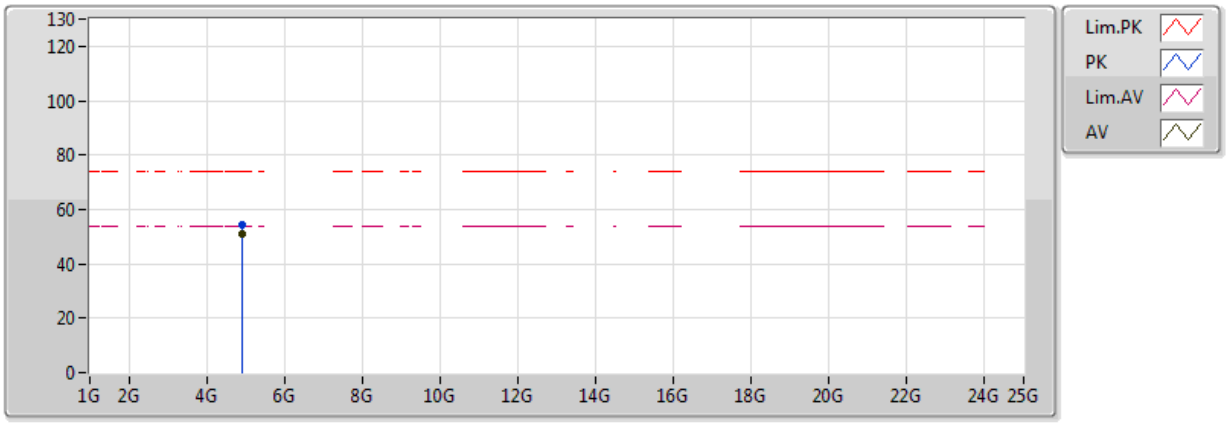


20170119
EUT Z_1TX
Setting 44
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92402G	53.55	54.00	-0.45	6.27	3	V	64	1.04	-
PK	4.92402G	55.82	74.00	-18.18	6.27	3	V	64	1.04	-

802.11b_(1Mbps)_1TX

2462MHz_TX

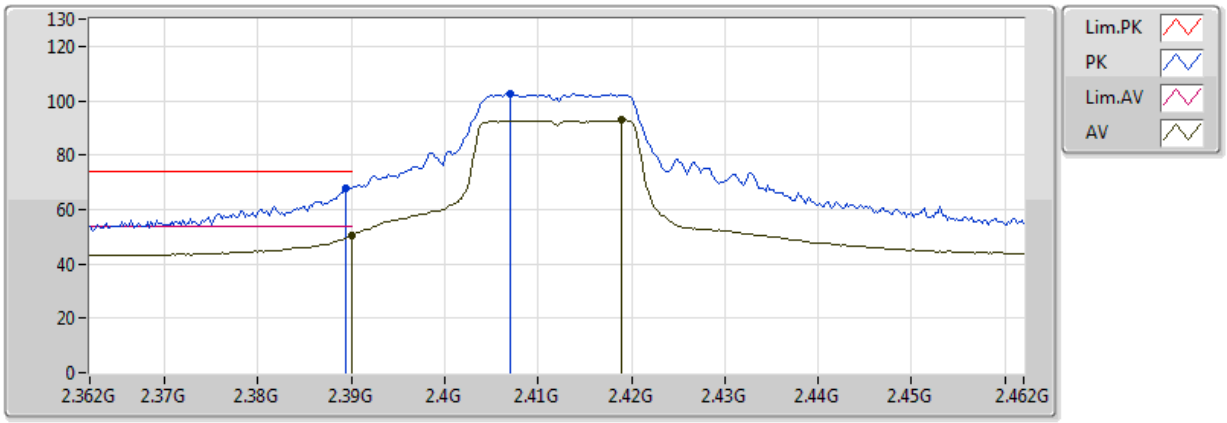


20170119
EUT Z_1TX
Setting 44
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92401G	51.18	54.00	-2.82	6.27	3	H	226	1.00	-
PK	4.9241G	54.28	74.00	-19.72	6.27	3	H	226	1.00	-

802.11g_(6Mbps)_1TX

2412MHz_TX

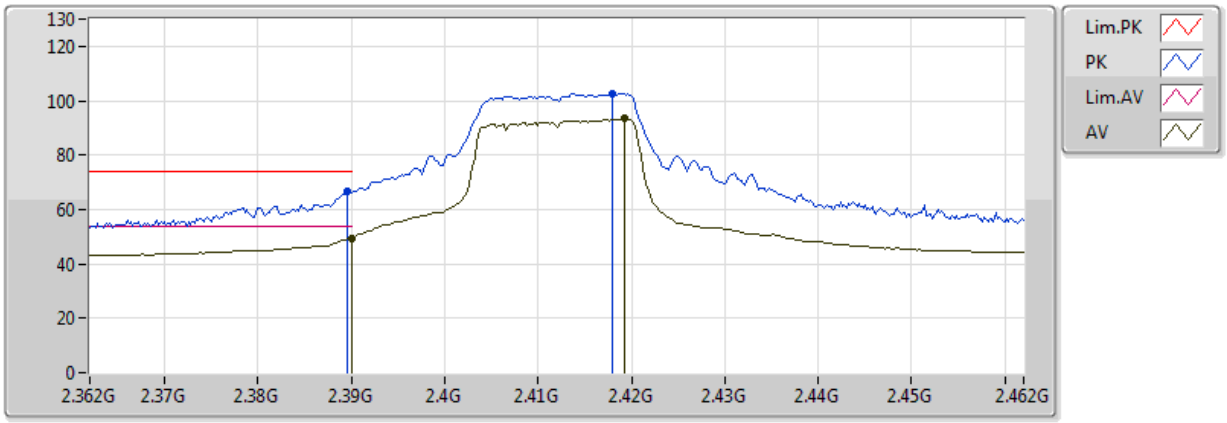


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

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	50.35	54.00	-3.65	30.73	3	V	162	2.81	-
AV	2.419G	92.90	Inf	-Inf	30.82	3	V	162	2.81	-
PK	2.3894G	67.83	74.00	-6.17	30.73	3	V	162	2.81	-
PK	2.407G	102.68	Inf	-Inf	30.78	3	V	162	2.81	-

802.11g_(6Mbps)_1TX

2412MHz_TX

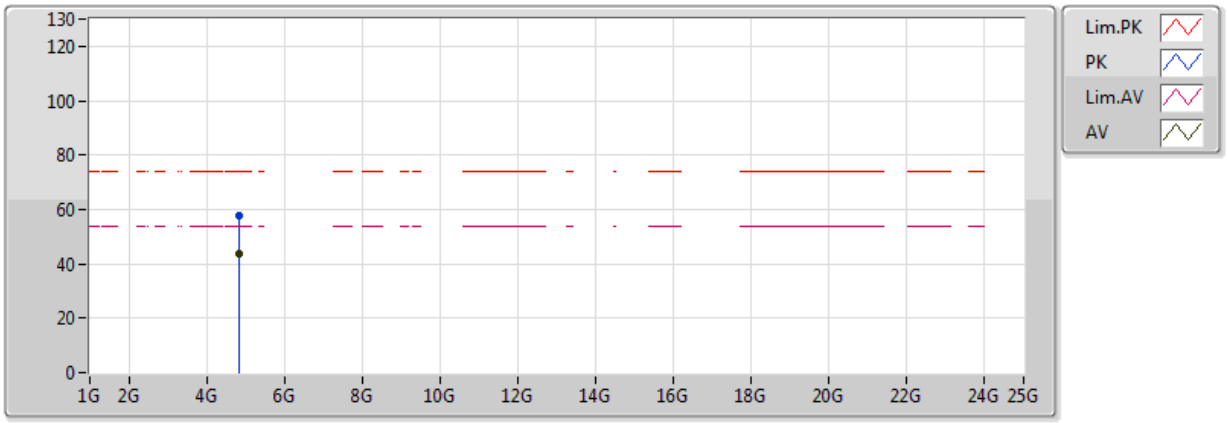


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

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	49.57	54.00	-4.43	30.73	3	H	136	2.67	-
AV	2.4192G	93.38	Inf	-Inf	30.82	3	H	136	2.67	-
PK	2.3896G	66.71	74.00	-7.29	30.73	3	H	136	2.67	-
PK	2.418G	102.69	Inf	-Inf	30.82	3	H	136	2.67	-

802.11g_(6Mbps)_1TX

2412MHz_TX

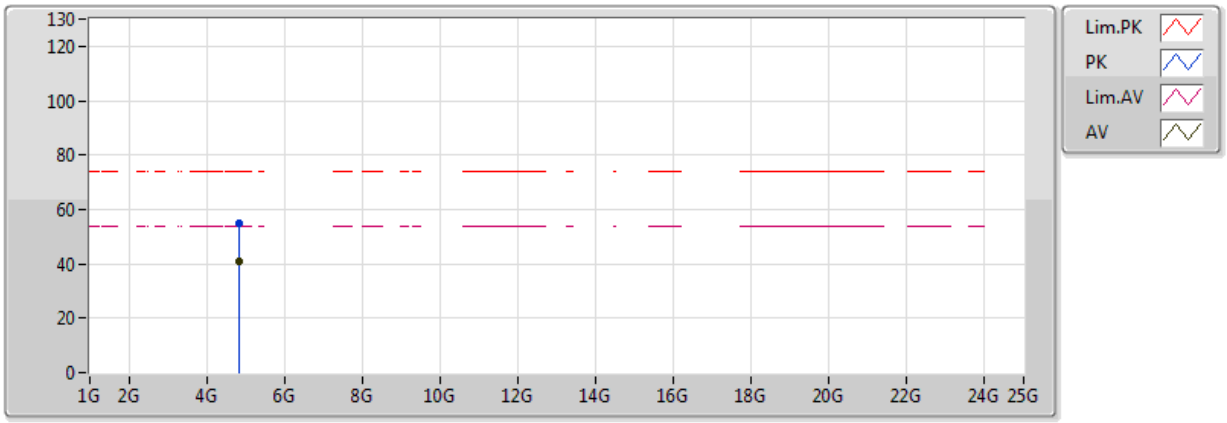


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82396G	43.62	54.00	-10.38	5.92	3	V	67	2.15	-
PK	4.8255G	57.71	74.00	-16.29	5.93	3	V	67	2.15	-

802.11g_(6Mbps)_1TX

2412MHz_TX

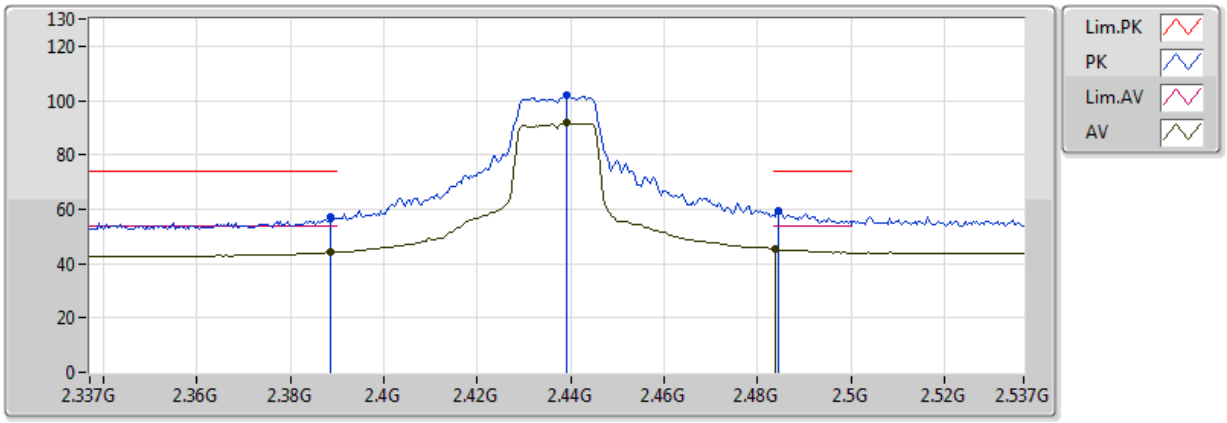


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824G	40.75	54.00	-13.25	5.92	3	H	166	1.01	-
PK	4.82406G	54.79	74.00	-19.21	5.92	3	H	166	1.01	-

802.11g_(6Mbps)_1TX

2437MHz_TX

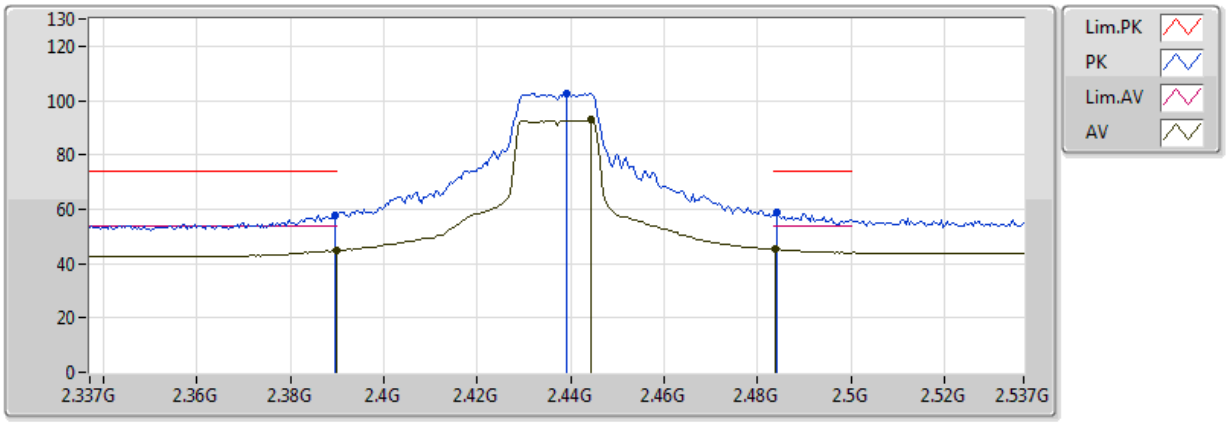


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3886G	44.26	54.00	-9.74	30.72	3	V	253	1.98	-
AV	2.439G	91.73	Inf	-Inf	30.88	3	V	253	1.98	-
AV	2.4838G	45.35	54.00	-8.65	31.03	3	V	253	1.98	-
PK	2.3886G	57.00	74.00	-17.00	30.72	3	V	253	1.98	-
PK	2.439G	101.80	Inf	-Inf	30.88	3	V	253	1.98	-
PK	2.4846G	59.22	74.00	-14.78	31.03	3	V	253	1.98	-

802.11g_(6Mbps)_1TX

2437MHz_TX

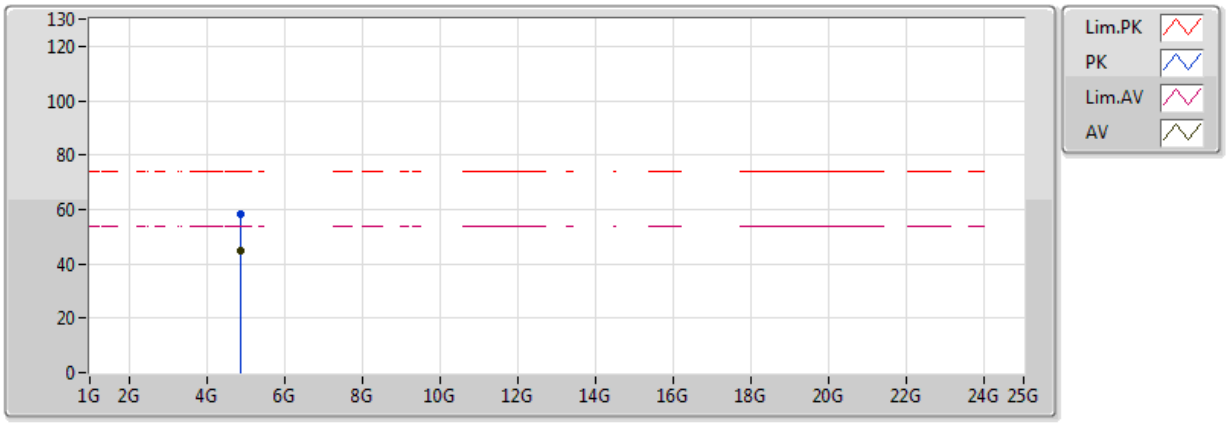


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	44.77	54.00	-9.23	30.73	3	H	140	2.39	-
AV	2.4442G	92.85	Inf	-Inf	30.90	3	H	140	2.39	-
AV	2.4838G	45.27	54.00	-8.73	31.03	3	H	140	2.39	-
PK	2.3894G	57.96	74.00	-16.04	30.73	3	H	140	2.39	-
PK	2.439G	102.71	Inf	-Inf	30.88	3	H	140	2.39	-
PK	2.4842G	58.56	74.00	-15.44	31.03	3	H	140	2.39	-

802.11g_(6Mbps)_1TX

2437MHz_TX

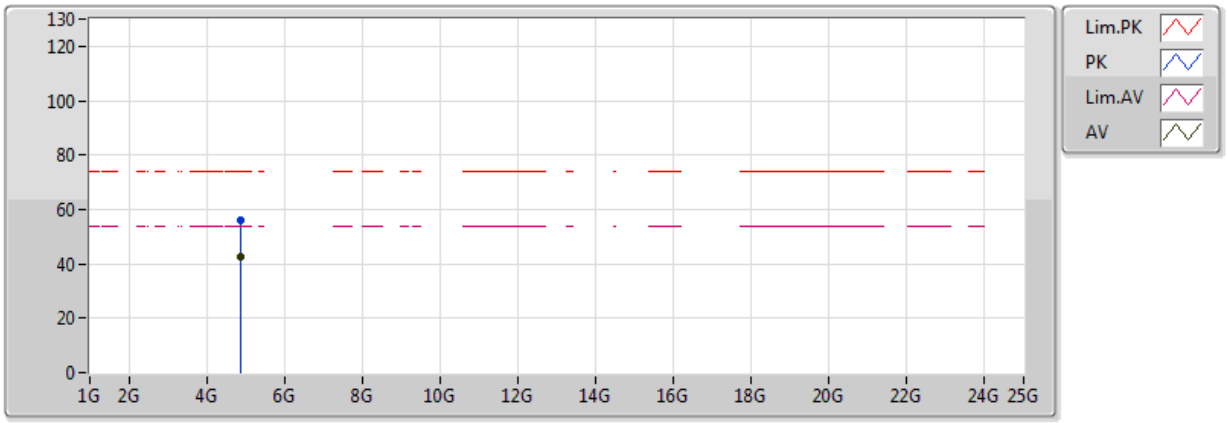


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87411G	44.81	54.00	-9.19	6.09	3	V	67	1.99	-
PK	4.8742G	58.21	74.00	-15.79	6.09	3	V	67	1.99	-

802.11g_(6Mbps)_1TX

2437MHz_TX

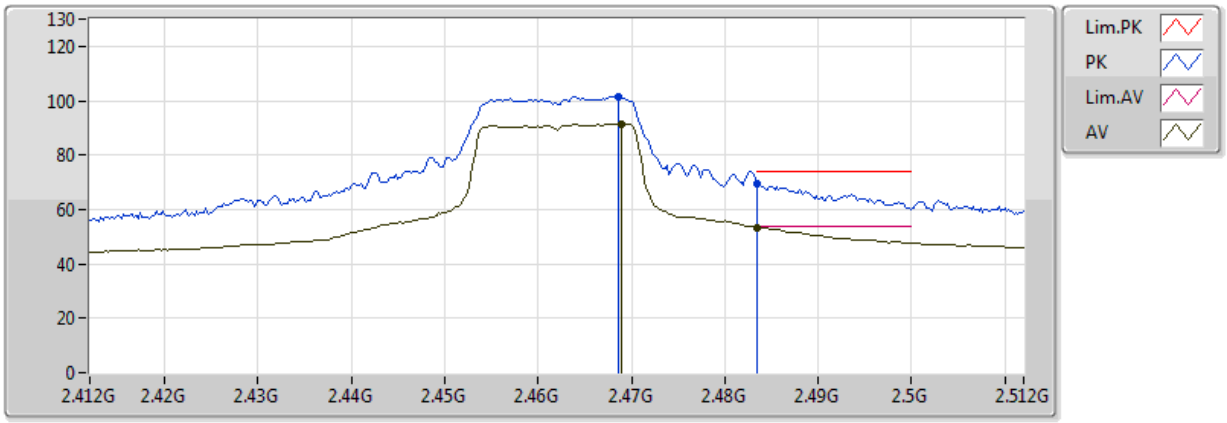


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8741G	42.83	54.00	-11.17	6.09	3	H	306	1.07	-
PK	4.87416G	56.20	74.00	-17.80	6.09	3	H	306	1.07	-

802.11g_(6Mbps)_1TX

2462MHz_TX

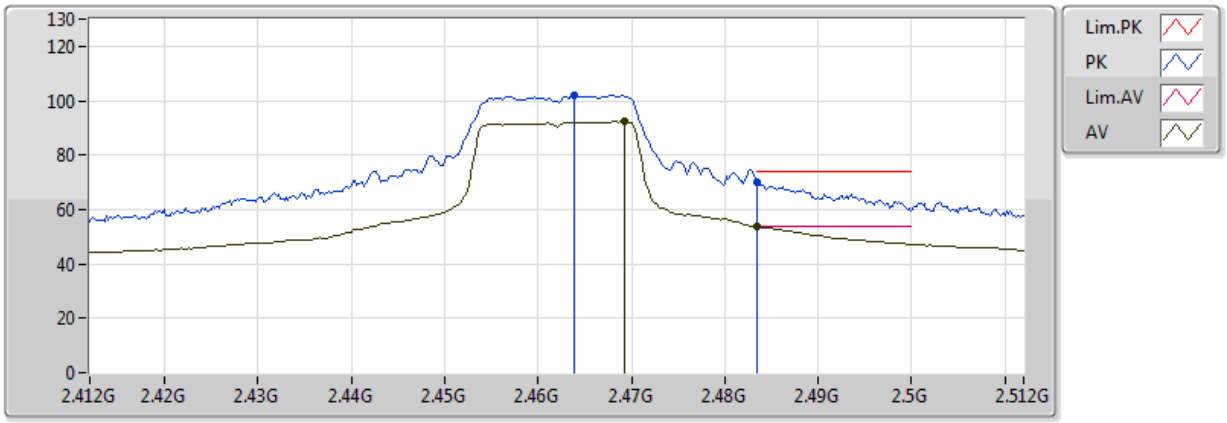


20170119
EUT Z_1TX
Setting 61
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.469G	91.53	Inf	-Inf	30.98	3	V	173	1.75	-
AV	2.483502G	53.51	54.00	-0.49	31.03	3	V	173	1.75	-
PK	2.4686G	101.33	Inf	-Inf	30.98	3	V	173	1.75	-
PK	2.483502G	69.74	74.00	-4.26	31.03	3	V	173	1.75	-

802.11g_(6Mbps)_1TX

2462MHz_TX

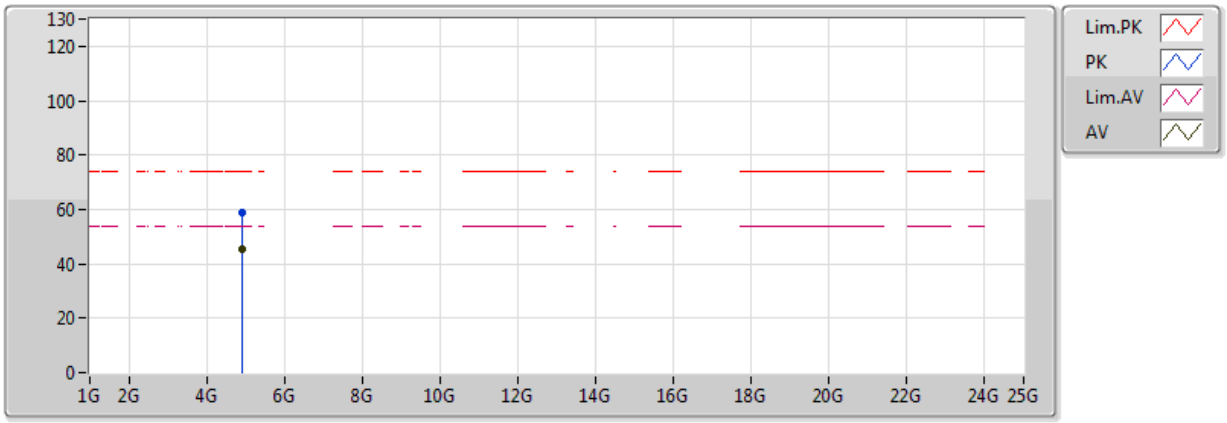


20170119
EUT Z_1TX
Setting 61
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4692G	92.40	Inf	-Inf	30.98	3	H	138	2.34	-
AV	2.483502G	53.94	54.00	-0.06	31.03	3	H	138	2.34	-
PK	2.4638G	102.18	Inf	-Inf	30.96	3	H	138	2.34	-
PK	2.483502G	70.02	74.00	-3.98	31.03	3	H	138	2.34	-

802.11g_(6Mbps)_1TX

2462MHz_TX

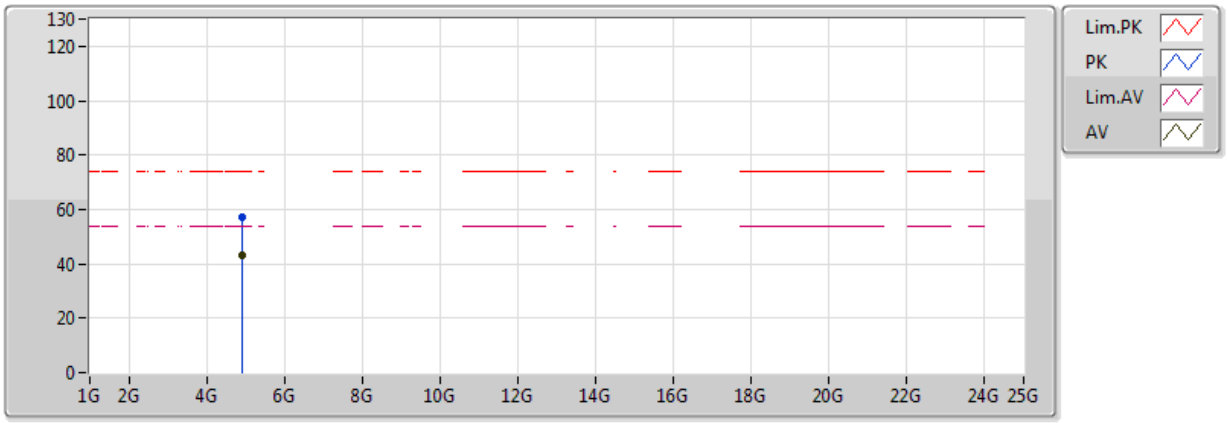


20170119
EUT Z_1TX
Setting 61
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92407G	45.15	54.00	-8.85	6.27	3	V	102	1.92	-
PK	4.92426G	59.03	74.00	-14.97	6.27	3	V	102	1.92	-

802.11g_(6Mbps)_1TX

2462MHz_TX

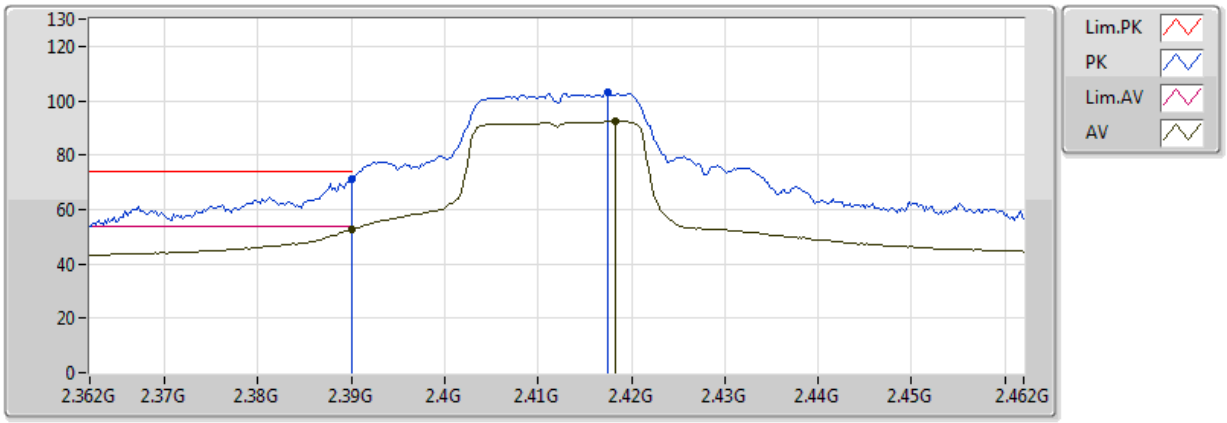


20170119
EUT Z_1TX
Setting 61
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92414G	43.17	54.00	-10.83	6.27	3	H	217	2.02	-
PK	4.92443G	57.05	74.00	-16.95	6.27	3	H	217	2.02	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

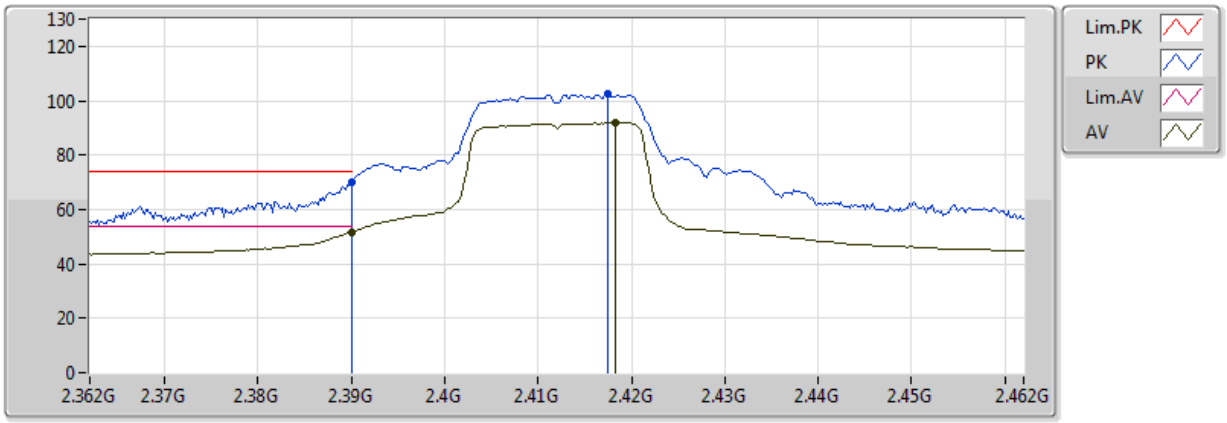


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

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	52.61	54.00	-1.39	30.73	3	V	171	2.04	-
AV	2.4182G	92.60	Inf	-Inf	30.82	3	V	171	2.04	-
PK	2.39G	71.18	74.00	-2.82	30.73	3	V	171	2.04	-
PK	2.4174G	103.15	Inf	-Inf	30.82	3	V	171	2.04	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

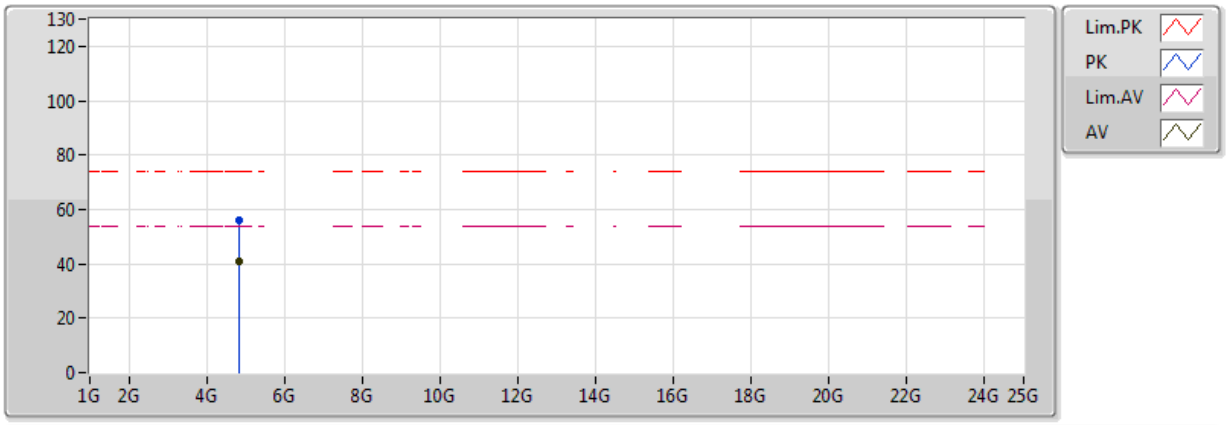


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

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	51.67	54.00	-2.33	30.73	3	H	153	1.50	-
AV	2.4182G	92.17	Inf	-Inf	30.82	3	H	153	1.50	-
PK	2.39G	70.10	74.00	-3.90	30.73	3	H	153	1.50	-
PK	2.4174G	102.63	Inf	-Inf	30.82	3	H	153	1.50	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

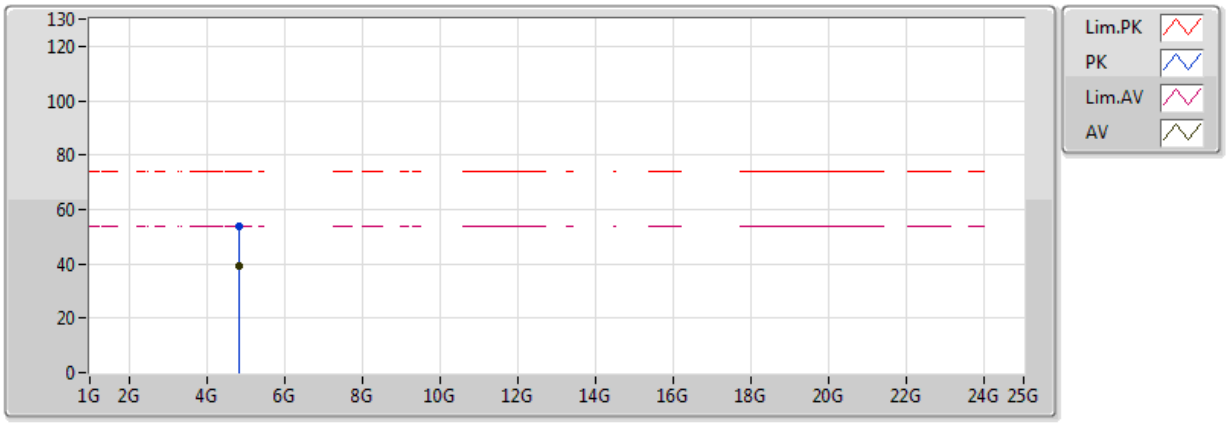


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82465G	41.10	54.00	-12.90	5.92	3	V	66	2.16	-
PK	4.8261G	56.19	74.00	-17.81	5.93	3	V	66	2.16	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

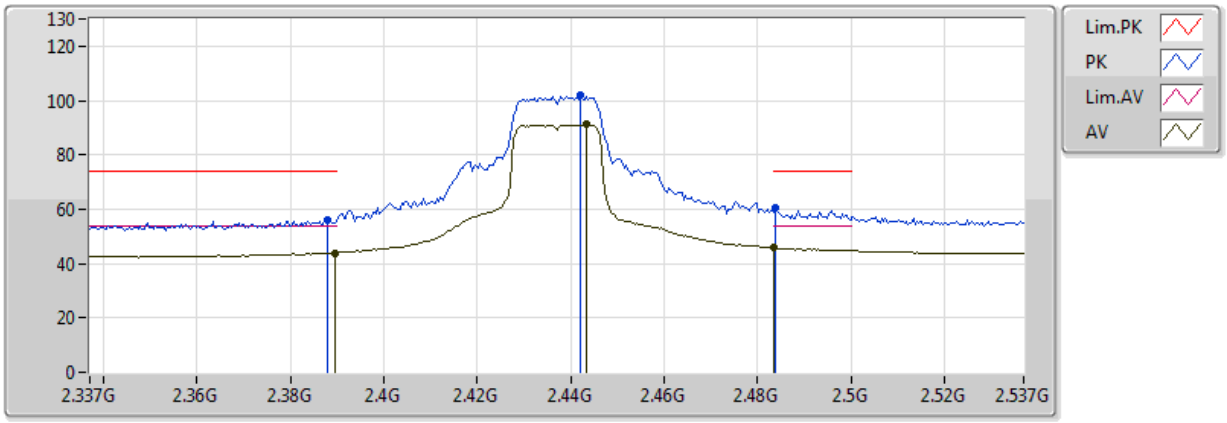


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82505G	39.09	54.00	-14.91	5.93	3	H	314	2.43	-
PK	4.82438G	54.01	74.00	-19.99	5.92	3	H	314	2.43	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

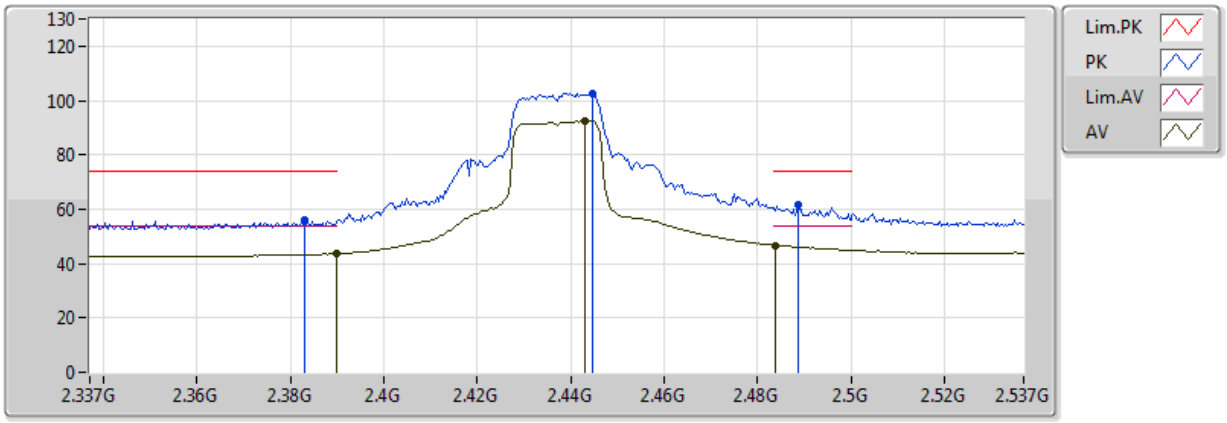


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

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	43.91	54.00	-10.09	30.73	3	V	266	1.50	-
AV	2.4434G	91.23	Inf	-Inf	30.90	3	V	266	1.50	-
AV	2.483502G	46.13	54.00	-7.87	31.03	3	V	266	1.50	-
PK	2.3878G	55.78	74.00	-18.22	30.72	3	V	266	1.50	-
PK	2.4422G	101.72	Inf	-Inf	30.90	3	V	266	1.50	-
PK	2.4838G	60.29	74.00	-13.71	31.03	3	V	266	1.50	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

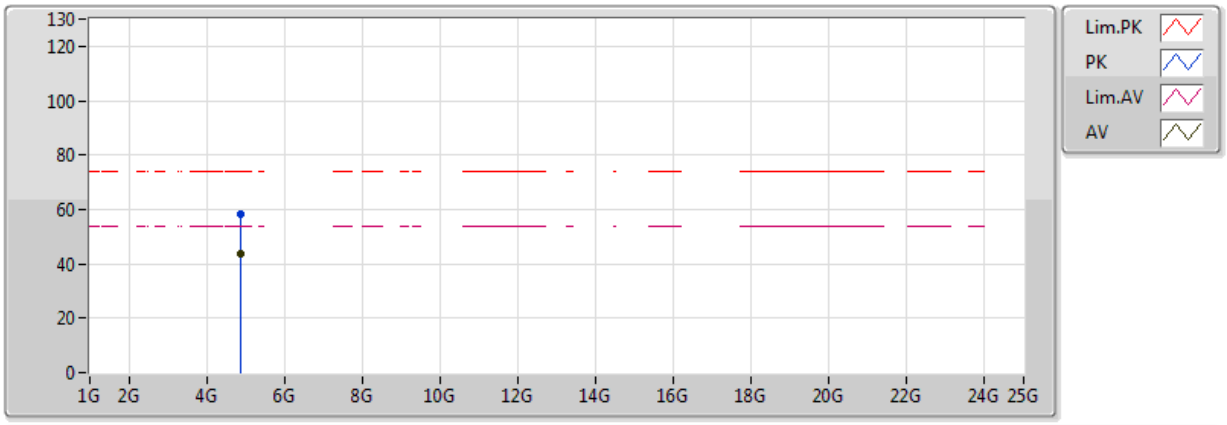


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	43.65	54.00	-10.35	30.73	3	H	147	2.62	-
AV	2.443G	92.67	Inf	-Inf	30.90	3	H	147	2.62	-
AV	2.4838G	46.74	54.00	-7.26	31.03	3	H	147	2.62	-
PK	2.383G	56.11	74.00	-17.89	30.70	3	H	147	2.62	-
PK	2.4446G	102.49	Inf	-Inf	30.90	3	H	147	2.62	-
PK	2.4886G	61.61	74.00	-12.39	31.04	3	H	147	2.62	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

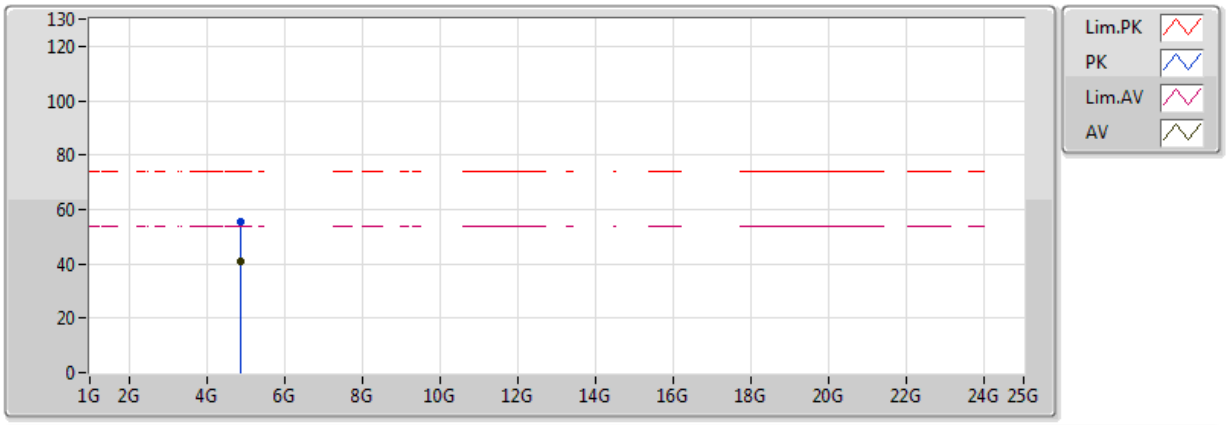


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87501G	43.54	54.00	-10.46	6.10	3	V	67	2.06	-
PK	4.87613G	58.22	74.00	-15.78	6.10	3	V	67	2.06	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

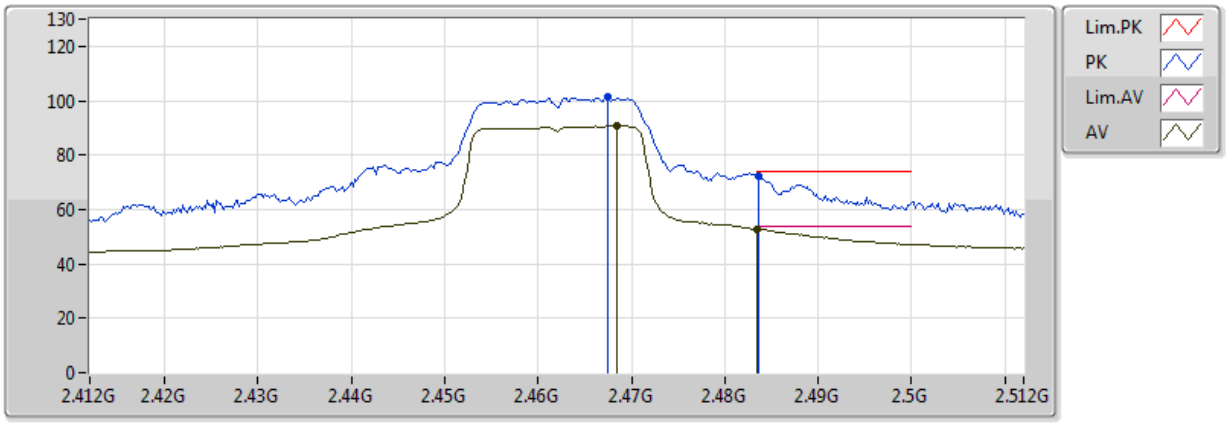


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87491G	40.90	54.00	-13.10	6.09	3	H	223	1.99	-
PK	4.8742G	55.72	74.00	-18.28	6.09	3	H	223	1.99	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

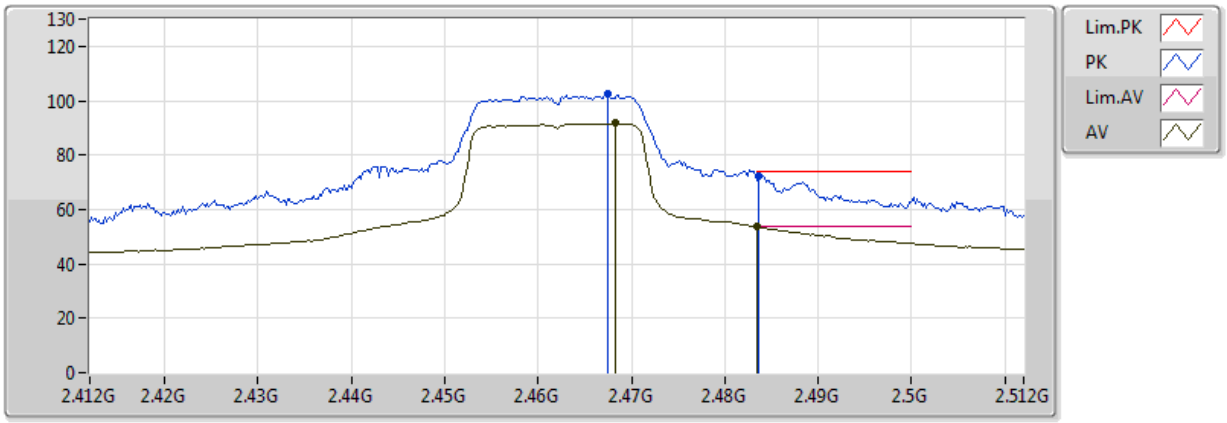


20170119
EUT Z_1TX
Setting 60
03-M-1
FSP(100142)

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	90.89	Inf	-Inf	30.98	3	V	174	1.78	-
AV	2.483502G	52.85	54.00	-1.15	31.03	3	V	174	1.78	-
PK	2.4674G	101.38	Inf	-Inf	30.98	3	V	174	1.78	-
PK	2.4836G	72.37	74.00	-1.63	31.03	3	V	174	1.78	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

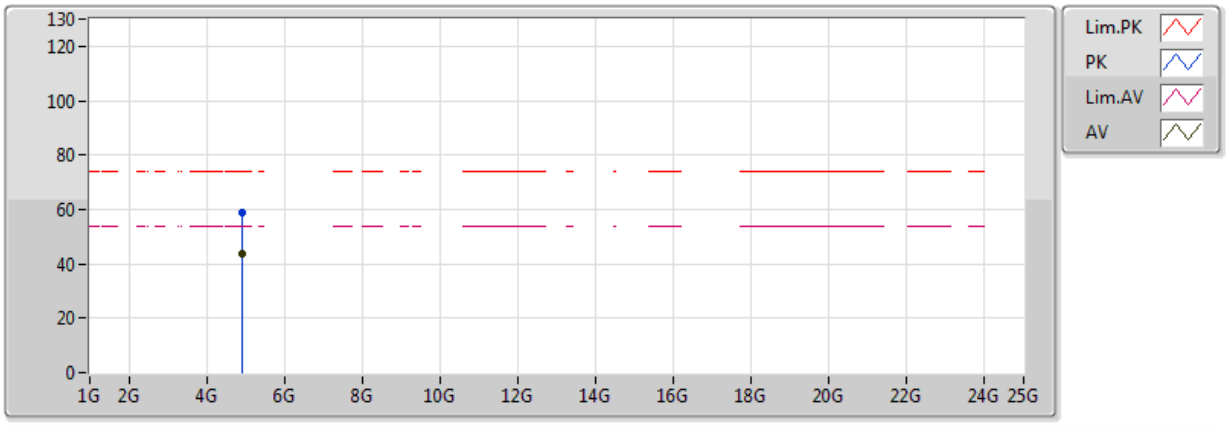


20170119
EUT Z_1TX
Setting 60
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4682G	91.81	Inf	-Inf	30.98	3	H	137	2.33	-
AV	2.483502G	53.65	54.00	-0.35	31.03	3	H	137	2.33	-
PK	2.4674G	102.36	Inf	-Inf	30.98	3	H	137	2.33	-
PK	2.4836G	72.51	74.00	-1.49	31.03	3	H	137	2.33	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

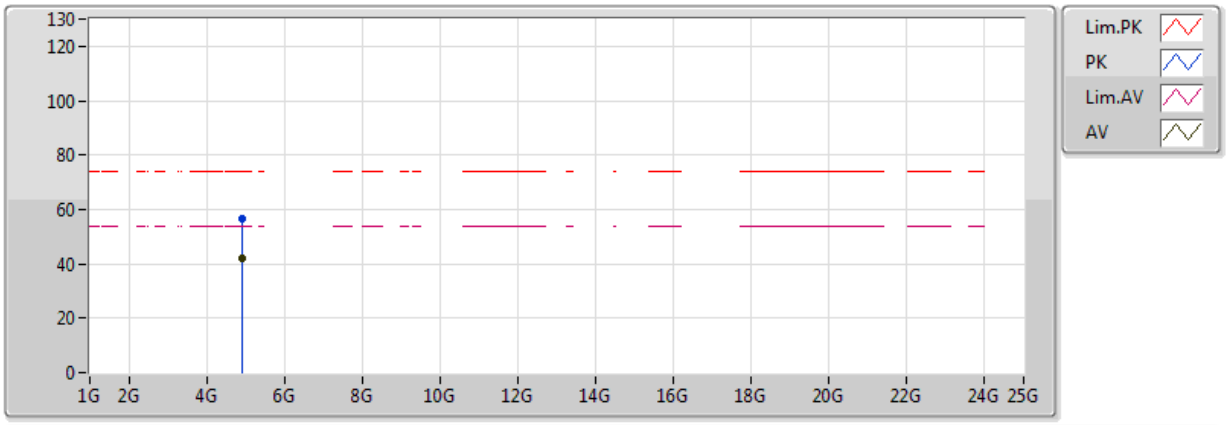


20170119
EUT Z_1TX
Setting 60
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92478G	43.77	54.00	-10.23	6.27	3	V	103	1.91	-
PK	4.9245G	58.57	74.00	-15.43	6.27	3	V	103	1.91	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

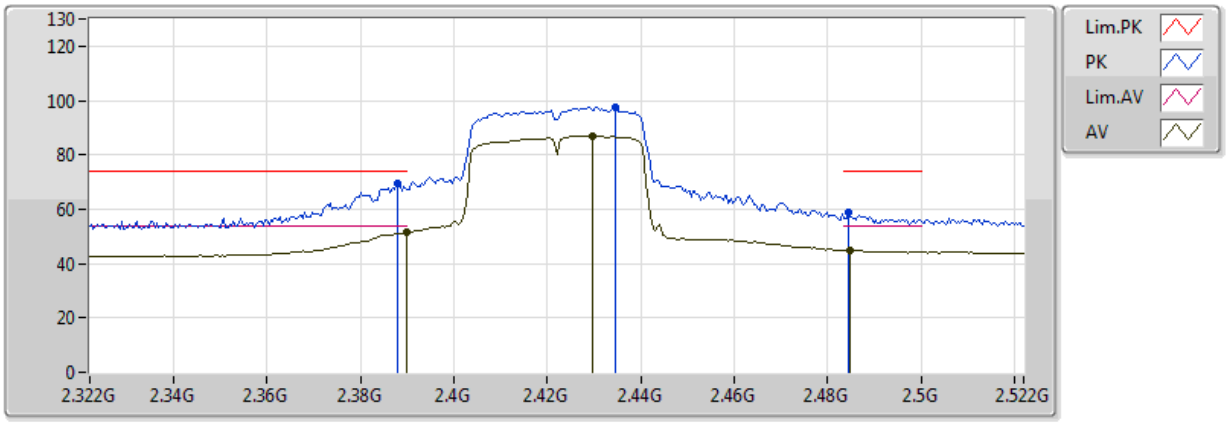


20170119
EUT Z_1TX
Setting 60
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92513G	41.78	54.00	-12.22	6.27	3	H	81	1.82	-
PK	4.92613G	56.32	74.00	-17.68	6.27	3	H	81	1.82	-

802.11n HT40_Nss1,(MCS0)_1TX

2422MHz_TX

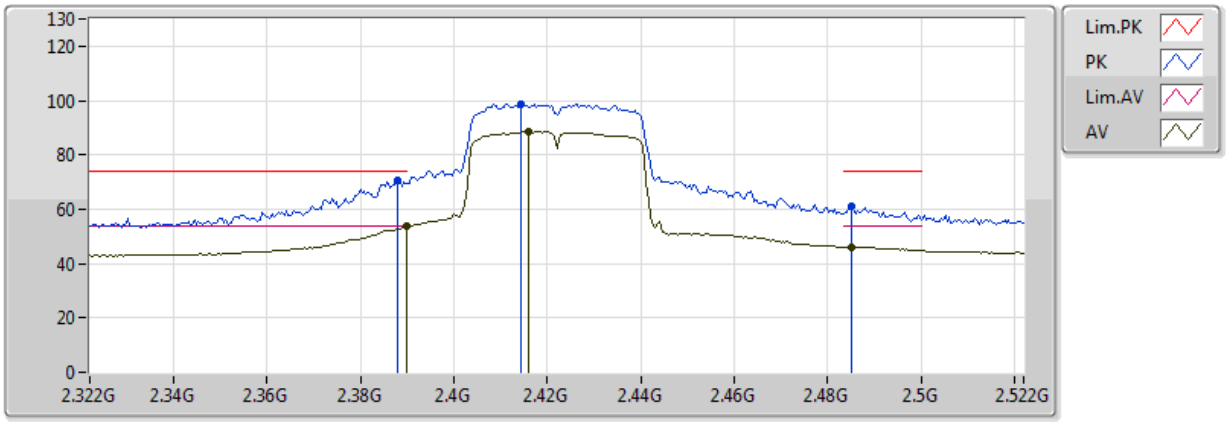


20170119
EUT Z_1TX
Setting 61
03-M-1
FSP(100142)

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	51.60	54.00	-2.40	30.73	3	V	270	1.97	-
AV	2.4296G	87.04	Inf	-Inf	30.85	3	V	270	1.97	-
AV	2.4848G	44.83	54.00	-9.17	31.03	3	V	270	1.97	-
PK	2.388G	69.31	74.00	-4.69	30.72	3	V	270	1.97	-
PK	2.4344G	97.74	Inf	-Inf	30.87	3	V	270	1.97	-
PK	2.4844G	58.74	74.00	-15.26	31.03	3	V	270	1.97	-

802.11n HT40_Nss1,(MCS0)_1TX

2422MHz_TX

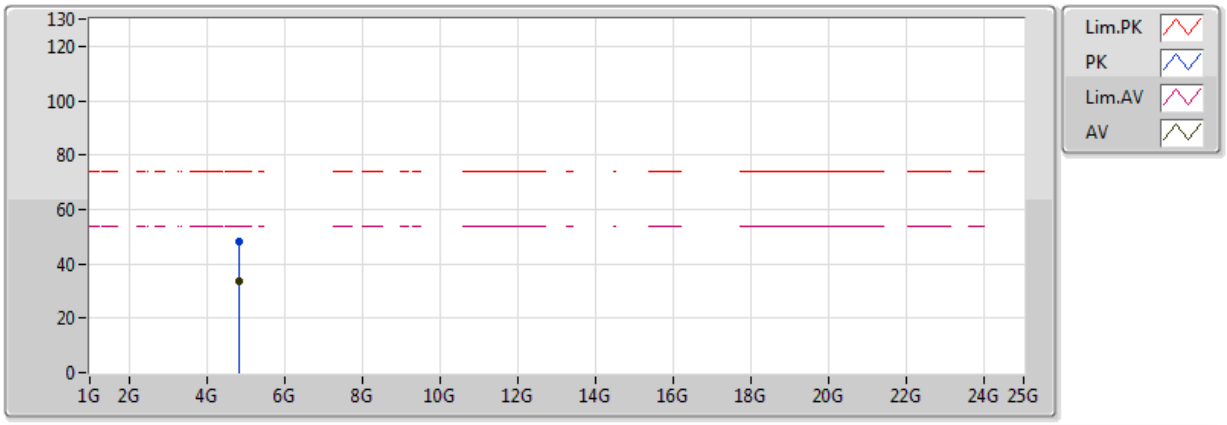


20170119
EUT Z_1TX
Setting 61
03-M-1
FSP(100142)

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	53.58	54.00	-0.42	30.73	3	H	151	1.53	-
AV	2.416G	88.46	Inf	-Inf	30.81	3	H	151	1.53	-
AV	2.4852G	46.05	54.00	-7.95	31.03	3	H	151	1.53	-
PK	2.388G	70.67	74.00	-3.33	30.72	3	H	151	1.53	-
PK	2.4144G	98.59	Inf	-Inf	30.81	3	H	151	1.53	-
PK	2.4852G	61.29	74.00	-12.71	31.03	3	H	151	1.53	-

802.11n HT40_Nss1,(MCS0)_1TX

2422MHz_TX

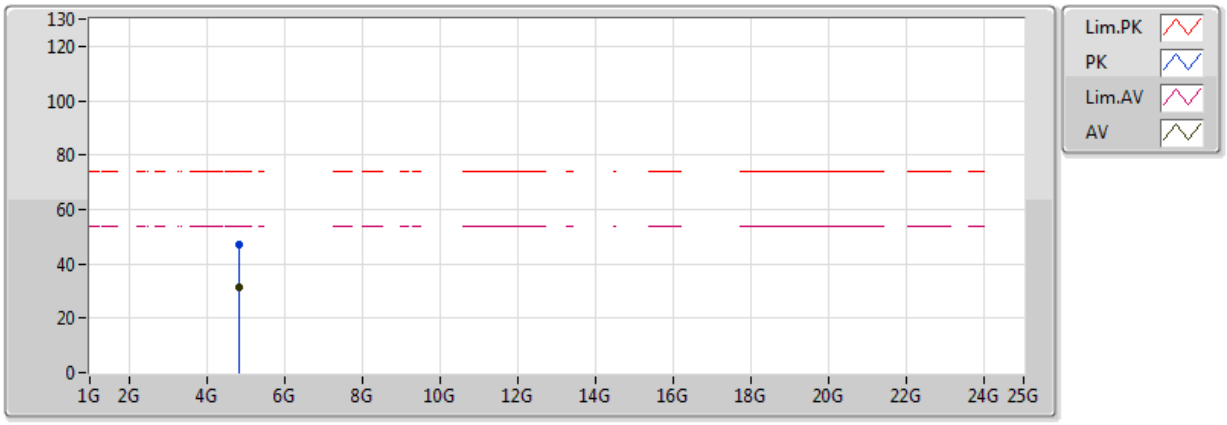


20170119
EUT Z_1TX
Setting 61
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84636G	33.42	54.00	-20.58	6.00	3	V	67	2.13	-
PK	4.84439G	48.05	74.00	-25.95	5.99	3	V	67	2.13	-

802.11n HT40_Nss1,(MCS0)_1TX

2422MHz_TX

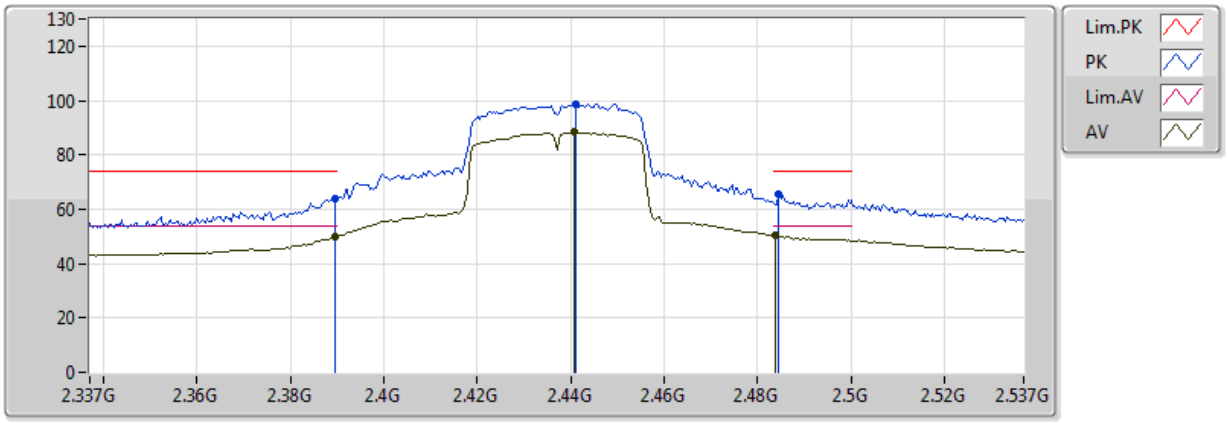


20170119
EUT Z_1TX
Setting 61
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84646G	31.26	54.00	-22.74	6.00	3	H	171	1.76	-
PK	4.84626G	47.02	74.00	-26.98	6.00	3	H	171	1.76	-

802.11n HT40_Nss1,(MCS0)_1TX

2437MHz_TX

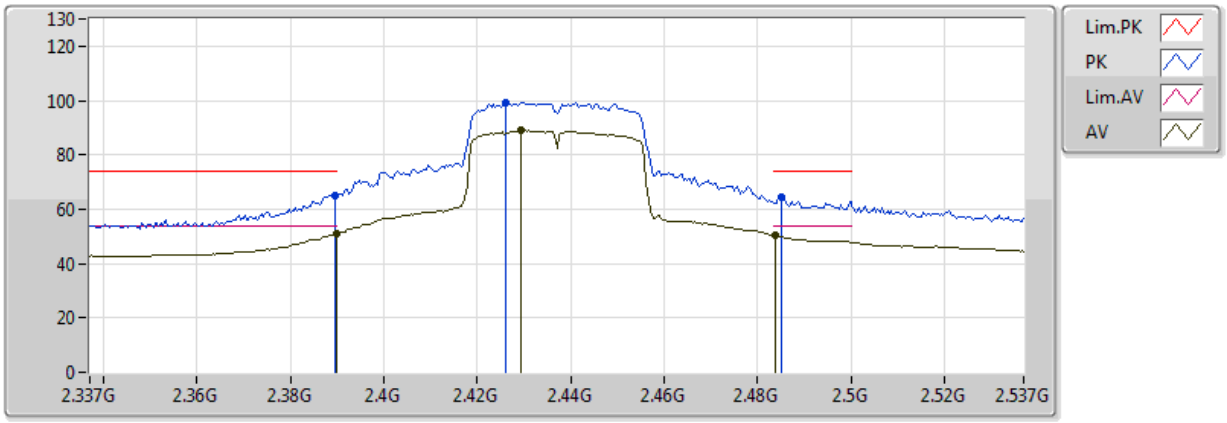


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

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	49.69	54.00	-4.31	30.73	3	V	268	1.74	-
AV	2.4406G	88.34	Inf	-Inf	30.89	3	V	268	1.74	-
AV	2.4838G	50.25	54.00	-3.75	31.03	3	V	268	1.74	-
PK	2.3894G	64.11	74.00	-9.89	30.73	3	V	268	1.74	-
PK	2.441G	98.75	Inf	-Inf	30.89	3	V	268	1.74	-
PK	2.4846G	65.51	74.00	-8.49	31.03	3	V	268	1.74	-

802.11n HT40_Nss1,(MCS0)_1TX

2437MHz_TX

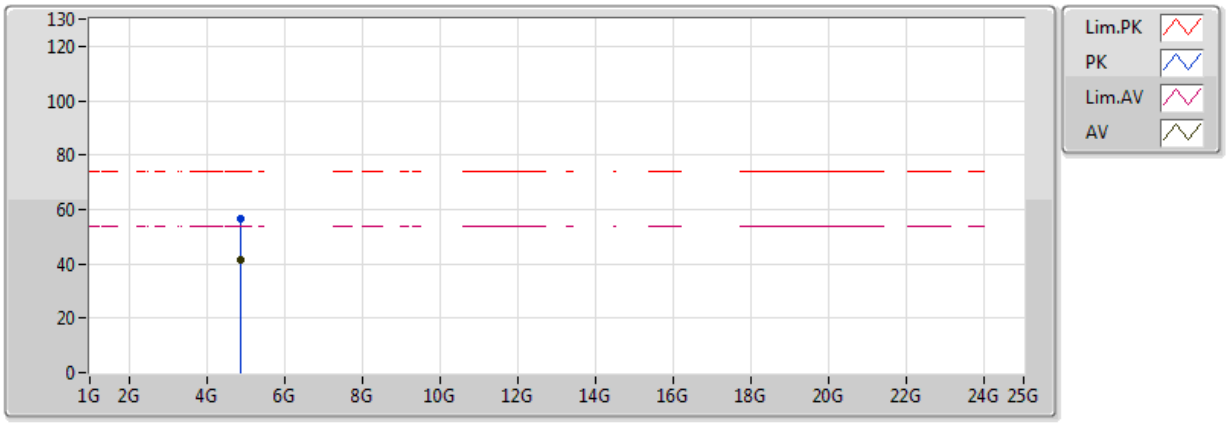


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	51.18	54.00	-2.82	30.73	3	H	153	2.43	-
AV	2.4294G	89.03	Inf	-Inf	30.85	3	H	153	2.43	-
AV	2.4838G	50.26	54.00	-3.74	31.03	3	H	153	2.43	-
PK	2.3894G	65.18	74.00	-8.82	30.73	3	H	153	2.43	-
PK	2.4262G	99.19	Inf	-Inf	30.84	3	H	153	2.43	-
PK	2.485G	64.46	74.00	-9.54	31.03	3	H	153	2.43	-

802.11n HT40_Nss1,(MCS0)_1TX

2437MHz_TX

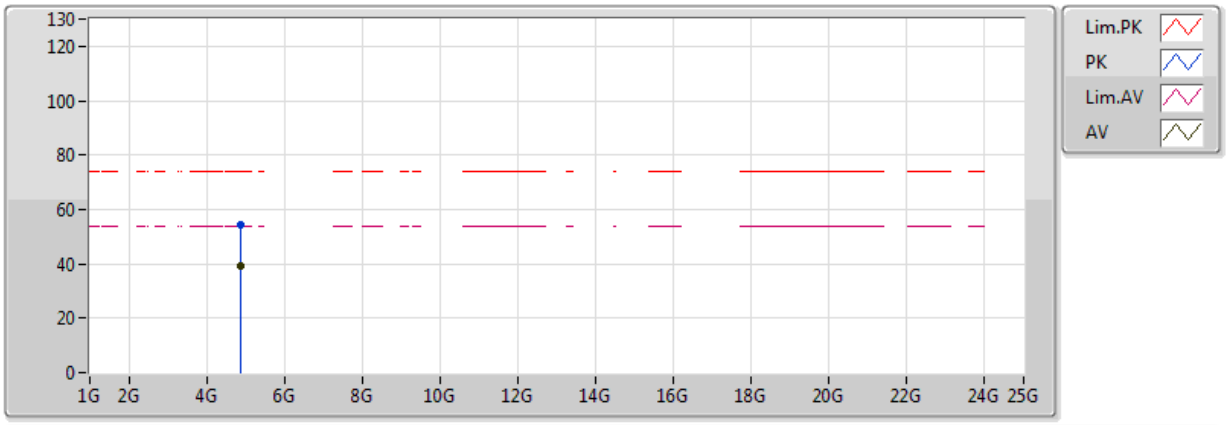


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87343G	41.43	54.00	-12.57	6.09	3	V	68	2.23	-
PK	4.87467G	56.56	74.00	-17.44	6.09	3	V	68	2.23	-

802.11n HT40_Nss1,(MCS0)_1TX

2437MHz_TX

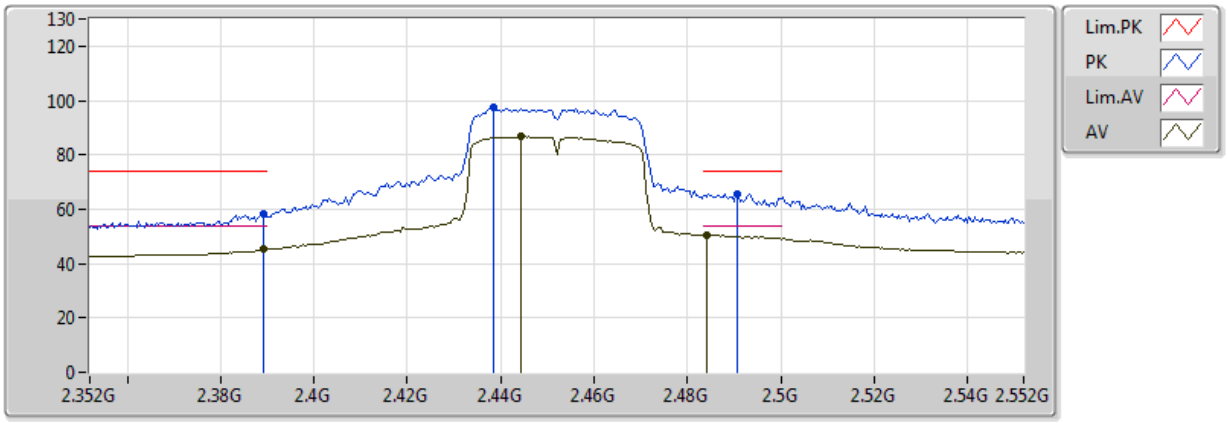


20170119
EUT Z_1TX
Setting 63
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8733G	39.38	54.00	-14.62	6.09	3	H	13	2.01	-
PK	4.87453G	54.37	74.00	-19.63	6.09	3	H	13	2.01	-

802.11n HT40_Nss1,(MCS0)_1TX

2452MHz_TX

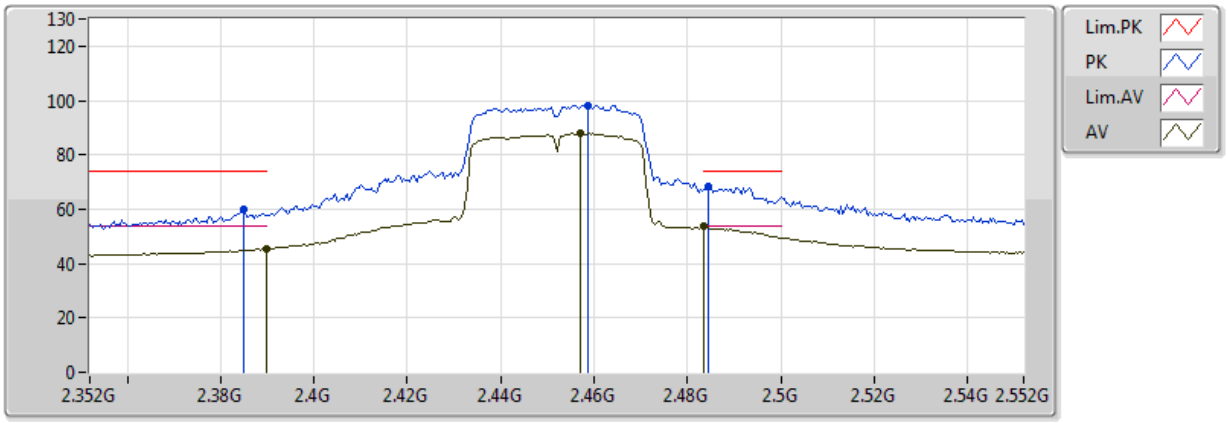


20170119
EUT Z_1TX
Setting 60
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3892G	45.25	54.00	-8.75	30.72	3	V	269	1.75	-
AV	2.4444G	86.87	Inf	-Inf	30.90	3	V	269	1.75	-
AV	2.484G	50.62	54.00	-3.38	31.03	3	V	269	1.75	-
PK	2.3892G	58.04	74.00	-15.96	30.72	3	V	269	1.75	-
PK	2.4384G	97.50	Inf	-Inf	30.88	3	V	269	1.75	-
PK	2.4908G	65.72	74.00	-8.28	31.05	3	V	269	1.75	-

802.11n HT40_Nss1,(MCS0)_1TX

2452MHz_TX

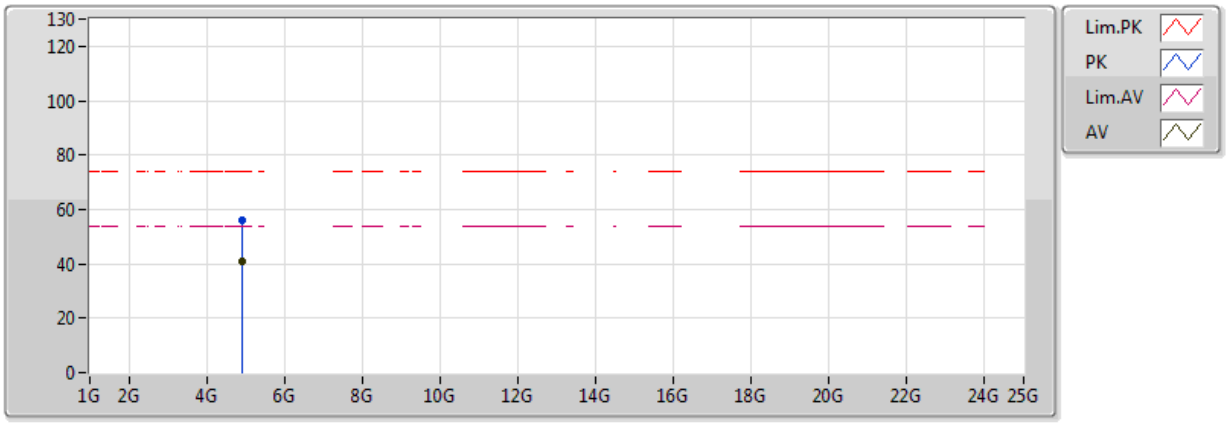


20170119
EUT Z_1TX
Setting 60
03-M-1
FSP(100142)

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	45.38	54.00	-8.62	30.73	3	H	152	1.50	-
AV	2.4572G	87.73	Inf	-Inf	30.94	3	H	152	1.50	-
AV	2.4836G	53.56	54.00	-0.44	31.03	3	H	152	1.50	-
PK	2.3848G	59.78	74.00	-14.22	30.71	3	H	152	1.50	-
PK	2.4588G	98.31	Inf	-Inf	30.95	3	H	152	1.50	-
PK	2.4844G	68.48	74.00	-5.52	31.03	3	H	152	1.50	-

802.11n HT40_Nss1,(MCS0)_1TX

2452MHz_TX

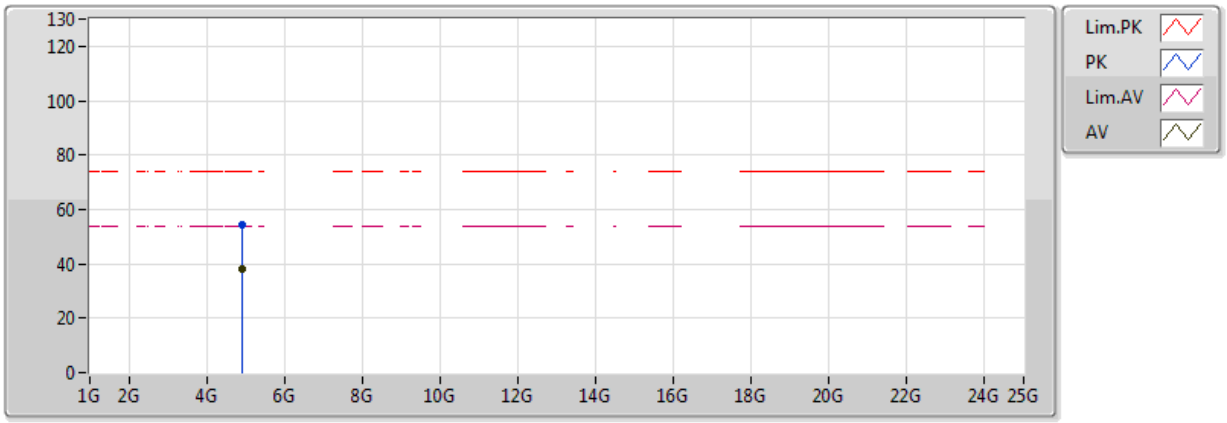


20170119
EUT Z_1TX
Setting 60
03-M-1
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90453G	40.79	54.00	-13.21	6.20	3	V	101	2.94	-
PK	4.90467G	56.16	74.00	-17.84	6.20	3	V	101	2.94	-

802.11n HT40_Nss1,(MCS0)_1TX

2452MHz_TX

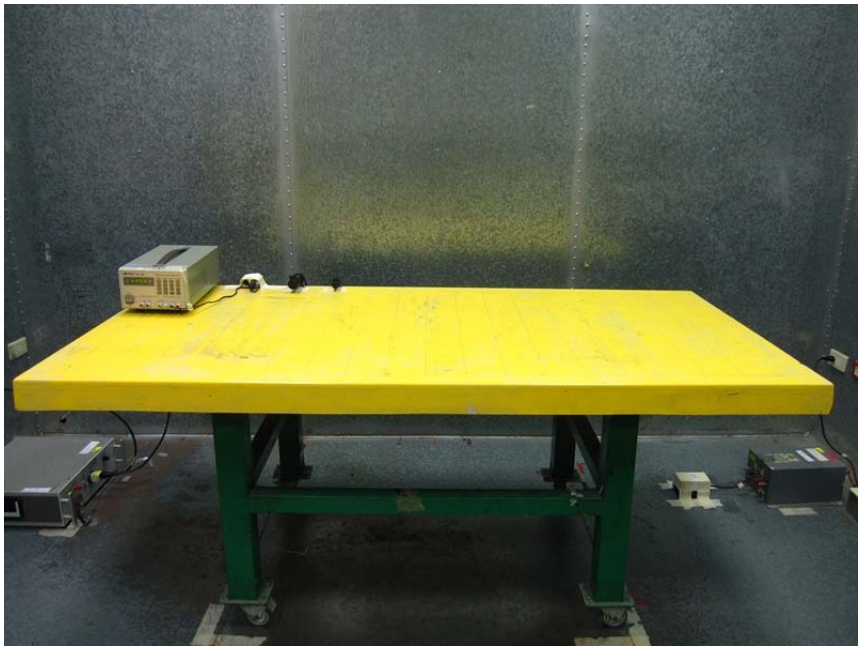


20170119
EUT Z_1TX
Setting 60
03-M-1
FSP(100142)

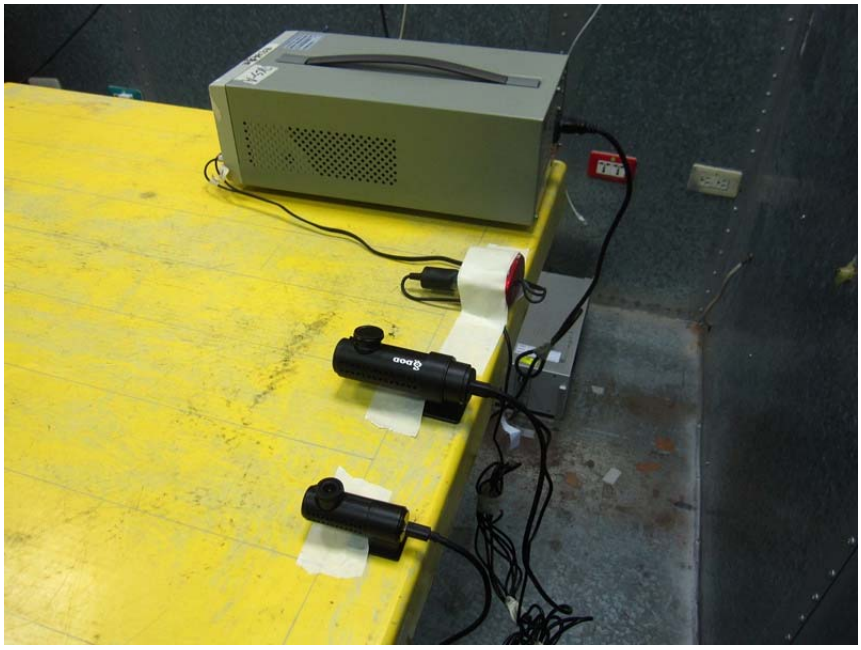
Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90484G	38.03	54.00	-15.97	6.20	3	H	226	1.49	-
PK	4.90463G	54.13	74.00	-19.87	6.20	3	H	226	1.49	-

1. Photographs of Conducted Emissions Test Configuration

FRONT VIEW



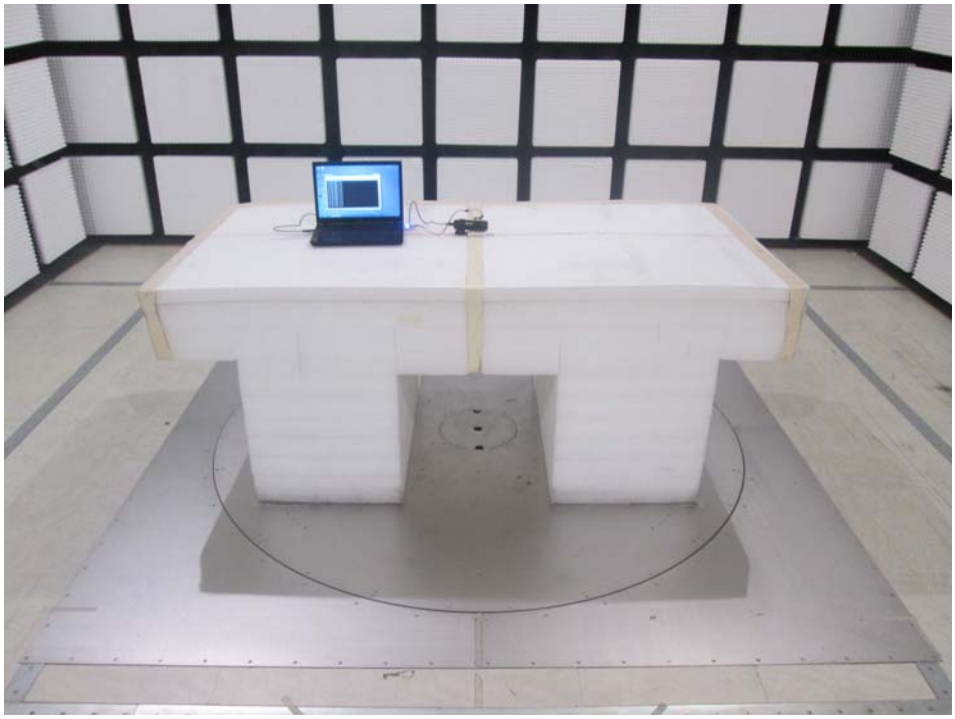
REAR VIEW



2. Photographs of Radiated Emissions Test Configuration

Test Configuration: 30MHz~1GHz

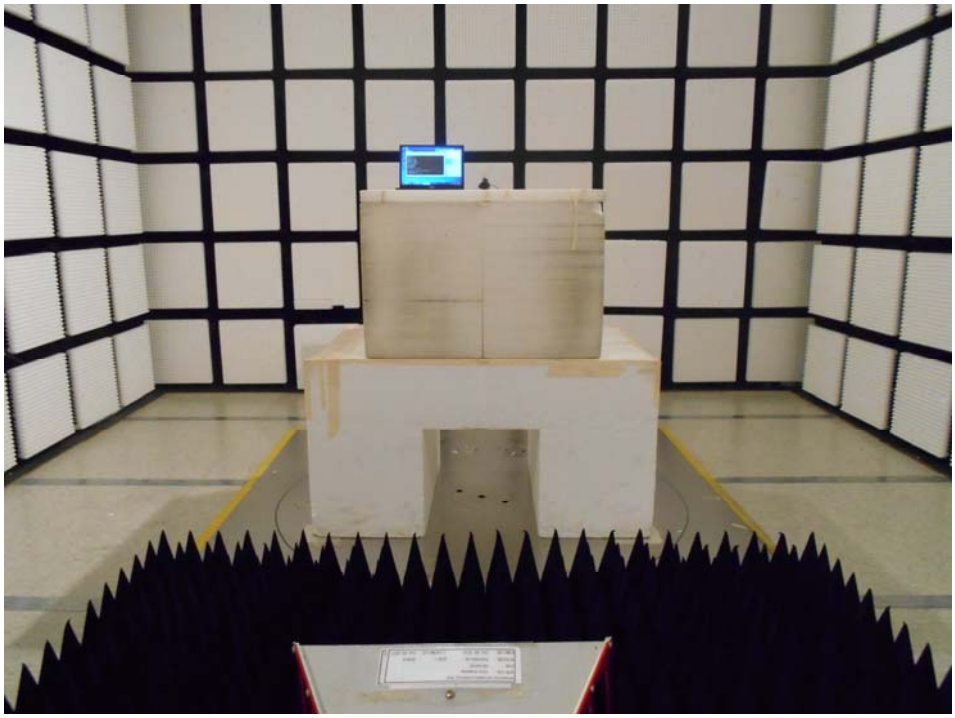
FRONT VIEW



REAR VIEW

Test Configuration: Above 1GHz

FRONT VIEW



REAR VIEW