

FCC Test Report

Equipment : Petcube Play
Brand Name : Petcube
Model No. : PP211NV5LC
FCC ID : 2AK4CPP211NV5LC
Standard : 47 CFR FCC Part 15.247
Frequency : 2400 MHz – 2483.5 MHz
FCC Classification : DTS
Applicant : Petcube, Inc.
2711 CENTERVILLE RD., STE 400, WILMINGTON, DE,
19808, USA
Manufacturer : Chicony Electronics (Dong Guan) Co.,Ltd.
San Zhong Guan Li Qu, Qingxi Town, Dongguan City
Guangdong 523651 China

The product sample received on Jan. 16, 2017 and completely tested on Mar. 07, 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.

Reviewed by:


Phoenix Chen / Assistant Manager



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Testing Applied Standards	7
1.3	Testing Location Information	7
1.4	Measurement Uncertainty	8
2	TEST CONFIGURATION OF EUT.....	9
2.1	Test Condition	9
2.2	Test Channel Mode	9
2.3	The Worst Case Measurement Configuration.....	10
2.4	Accessories and Support Equipment	11
2.5	Test Setup Diagram	12
3	TRANSMITTER TEST RESULT	13
3.1	AC Power-line Conducted Emissions	13
3.2	DTS Bandwidth.....	14
3.3	Fundamental Emission Output Power.....	15
3.4	Power Spectral Density	17
3.5	Emissions in Non-restricted Frequency Bands	19
3.6	Emissions in Restricted Frequency Bands.....	20
4	TEST EQUIPMENT AND CALIBRATION DATA	24
APPENDIX A. TEST RESULT OF AC POWER-LINE CONDUCTED EMISSIONS		
APPENDIX B. TEST RESULT OF EMISSION BANDWIDTH		
APPENDIX C. TEST RESULT OF MAXIMUM CONDUCTED OUTPUT POWER		
APPENDIX D. TEST RESULT OF POWER SPECTRAL DENSITY		
APPENDIX E. TEST RESULT OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS		
APPENDIX F. TEST RESULT OF EMISSIONS IN RESTRICTED FREQUENCY BANDS		
APPENDIX G. TEST PHOTOS		
PHOTOGRAPHS OF EUT v01		

Summary of Test Result

Conformance Test Specifications				
Report Clause	Ref. Std. Clause	Description	Limit	Result
1.1.3	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)	Fundamental Emission 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: > 20 dBc	Complied
3.6	15.247(d)	Emissions in Restricted Frequency Bands	Restricted Bands: FCC 15.209	Complied



SPORTON INTERNATIONAL INC.
TEL : 886-3-327-3456
FAX : 886-3-327-0973

1 General Description

1.1 Information

1.1.1 SKU List

Sample No.	Enclosure color
1	Rose Gold
2	Black
3	Silver

Note 1: The difference of above samples is enclosure.

Note 2: EUT was pre-tested sample 1, 2 and 3 for using; the worst case was sample 3 and result of that was recorded as the final test result.

1.1.2 RF General Information

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

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

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.3 Antenna Information

Antenna Category	
<input checked="" type="checkbox"/>	Integral antenna (antenna permanently attached)
<input checked="" type="checkbox"/>	Temporary RF connector provided
<input type="checkbox"/>	No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.
<input type="checkbox"/>	External antenna (dedicated antennas)
<input type="checkbox"/>	Single power level with corresponding antenna(s).
<input type="checkbox"/>	Multiple power level and corresponding antenna(s).

Antenna General Information			
No.	Ant. Cat.	Ant. Type	Gain (dBi)
1	Integral	PIFA	1.22

1.1.4 Type of EUT

Identify EUT	
EUT Serial Number	N/A
Presentation of Equipment	<input checked="" type="checkbox"/> Production ; <input type="checkbox"/> Pre-Production ; <input type="checkbox"/> Prototype
Type of EUT	
<input checked="" type="checkbox"/>	Stand-alone
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device) Combined Equipment - Brand Name / Model No.: ...
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems) Host System - Brand Name / Model No.: ...
<input type="checkbox"/>	Other:

1.1.5 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.996	0.017	n/a (DC≥0.98)	n/a (DC≥0.98)
802.11g	0.972	0.123	1.398m	1k
802.11n HT20	0.971	0.128	1.309m	1k

1.1.6 EUT Operational Condition

Supply Voltage	<input checked="" type="checkbox"/> AC mains	<input type="checkbox"/> DC	
Type of DC Source	<input checked="" type="checkbox"/> From AC Adapter	<input type="checkbox"/> From Host System	<input type="checkbox"/> Battery

1.1.7 EUT Operate Information

Items	Description			
Beamforming Function	<input type="checkbox"/>	With beamforming	<input checked="" type="checkbox"/>	Without beamforming
Operate Condition	<input checked="" type="checkbox"/>	Point-to-multipoint (P2M)	<input type="checkbox"/>	Point-to-point (P2P)

1.2 Testing Applied Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ KDB 558074 D01 v03r05

1.3 Testing Location Information

Testing Location				
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.		
		TEL : 886-3-327-3456 FAX : 886-3-327-6973		
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Bear	21.4°C / 50%	07/Mar/2017
RF Conducted	TH01-HY	Gray	21.5°C / 62%	08/Feb/2017
Radiated	03CH02-HY	Streak	21.7°C / 63%	06/Feb/2017

Test site registered number [553509] with FCC.

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))

Measurement Uncertainty		
Test Item		Uncertainty
AC power-line conducted emissions		±2.3 dB
Emission bandwidth, 6dB bandwidth		±0.6 %
RF output power, conducted		±0.1 dB
Power density, conducted		±0.6 dB
Unwanted emissions, conducted	9 – 150 kHz	±0.4 dB
	0.15 – 30 MHz	±0.4 dB
	30 – 1000 MHz	±0.6 dB
	1 – 18 GHz	±0.5 dB
	18 – 40 GHz	±0.5 dB
	40 – 200 GHz	N/A
All emissions, radiated	9 – 150 kHz	±2.5 dB
	0.15 – 30 MHz	±2.3 dB
	30 – 1000 MHz	±2.6 dB
	1 – 18 GHz	±3.6 dB
	18 – 40 GHz	±3.8 dB
	40 – 200 GHz	N/A
Temperature		±0.8 °C
Humidity		±5 %
DC and low frequency voltages		±0.9%
Time		±1.4 %
Duty Cycle		±0.6 %

2 Test Configuration of EUT

2.1 Test Condition

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

2.2 Test Channel Mode



Test Software	putty
---------------	-------

Mode	Power Setting
802.11b_(1Mbps)_1TX	-
2412MHz	20
2437MHz	21
2462MHz	20
802.11g_(6Mbps)_1TX	-
2412MHz	21
2437MHz	21
2462MHz	17
802.11n HT20_Nss1,(MCS0)_1TX	-
2412MHz	19
2437MHz	21
2462MHz	17

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	Operating Mode Description
1	Adapter mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth, Fundamental Emission 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.	
User Position	<input type="checkbox"/> EUT will be placed in fixed position.	
	<input checked="" type="checkbox"/> EUT will be placed in mobile position and operating multiple positions.	
	<input type="checkbox"/> EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.	
Operating Mode < 1GHz	<input checked="" type="checkbox"/> 1. Adapter mode	
Orthogonal Planes of EUT	Y Plane	Z Plane
		
Worst Planes of EUT	V	

2.4 Accessories and Support Equipment

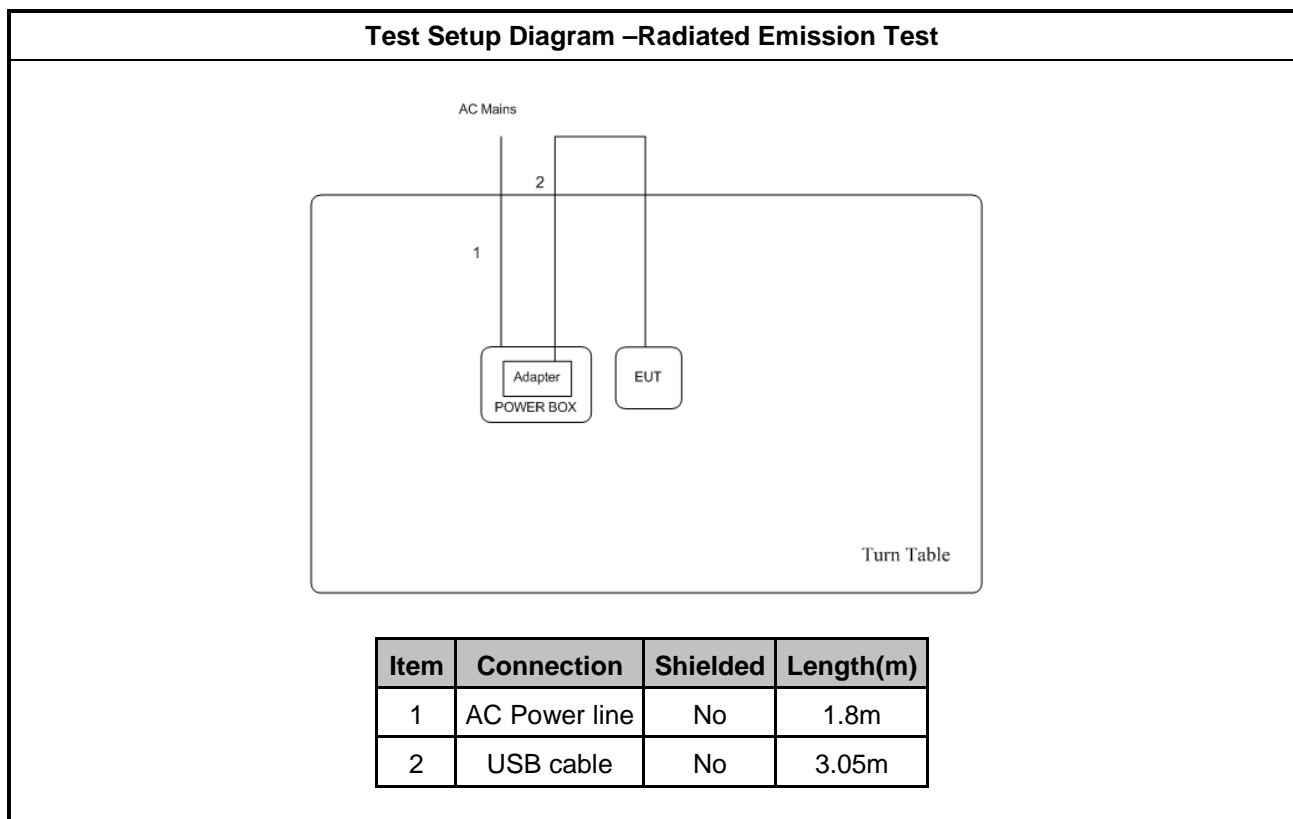
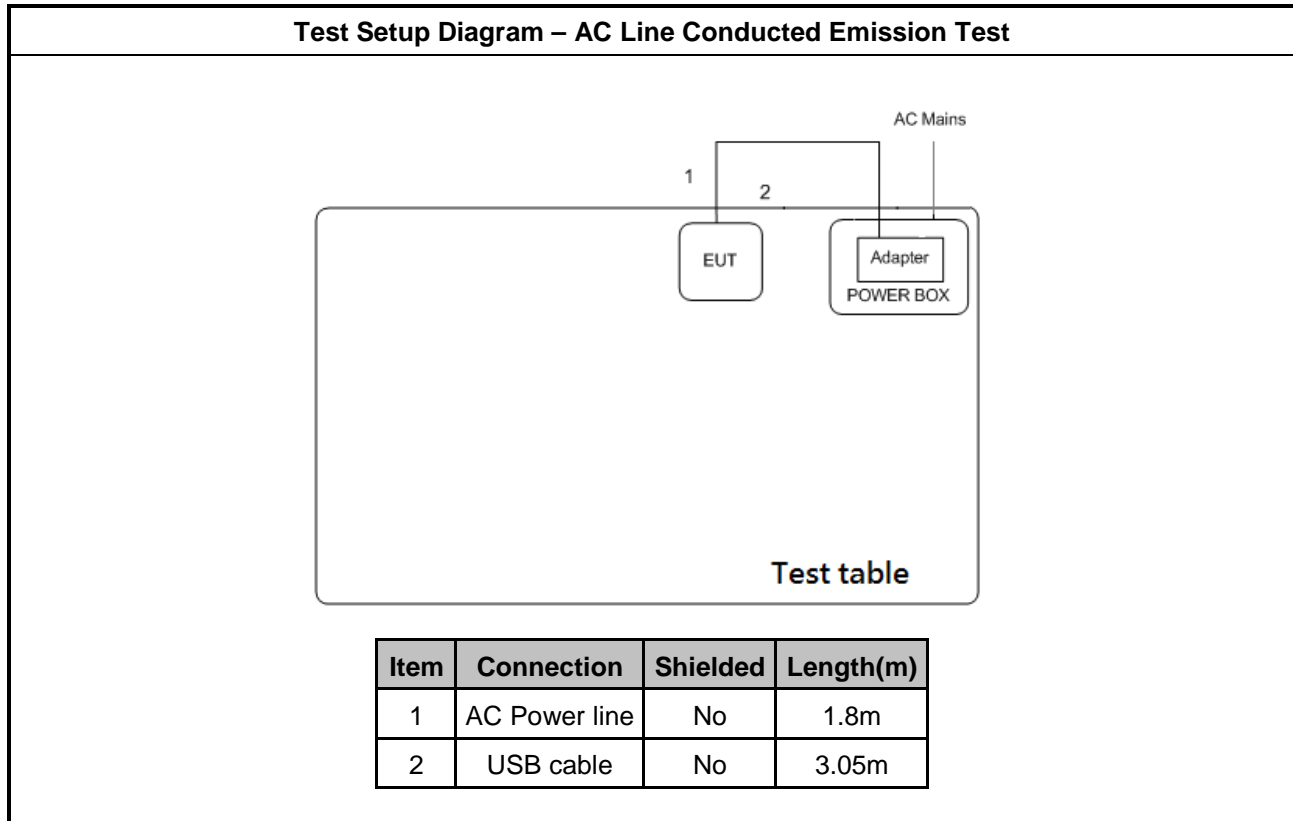
Accessories Information				
AC Adapter (US Plug)	Brand Name	Ktec	Model Name	KSA298B0500200D5
	Power Rating	I/P: 100- 240Vac, 0.5A O/P: 5.0Vdc, 2.0A		
	Power Cord	1.8 meter, non-shielded cable, w/o ferrite core		
USB Cable	Signal Line	3.05 meter, non-shielded cable, w/o ferrite core		

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

Support Equipment - RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5540-01	DOC
2	AC Adapter for NB	DELL	HA65NM130	DOC

Support Equipment - AC Conduction and Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	-	-	-	-

2.5 Test Setup Diagram



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.

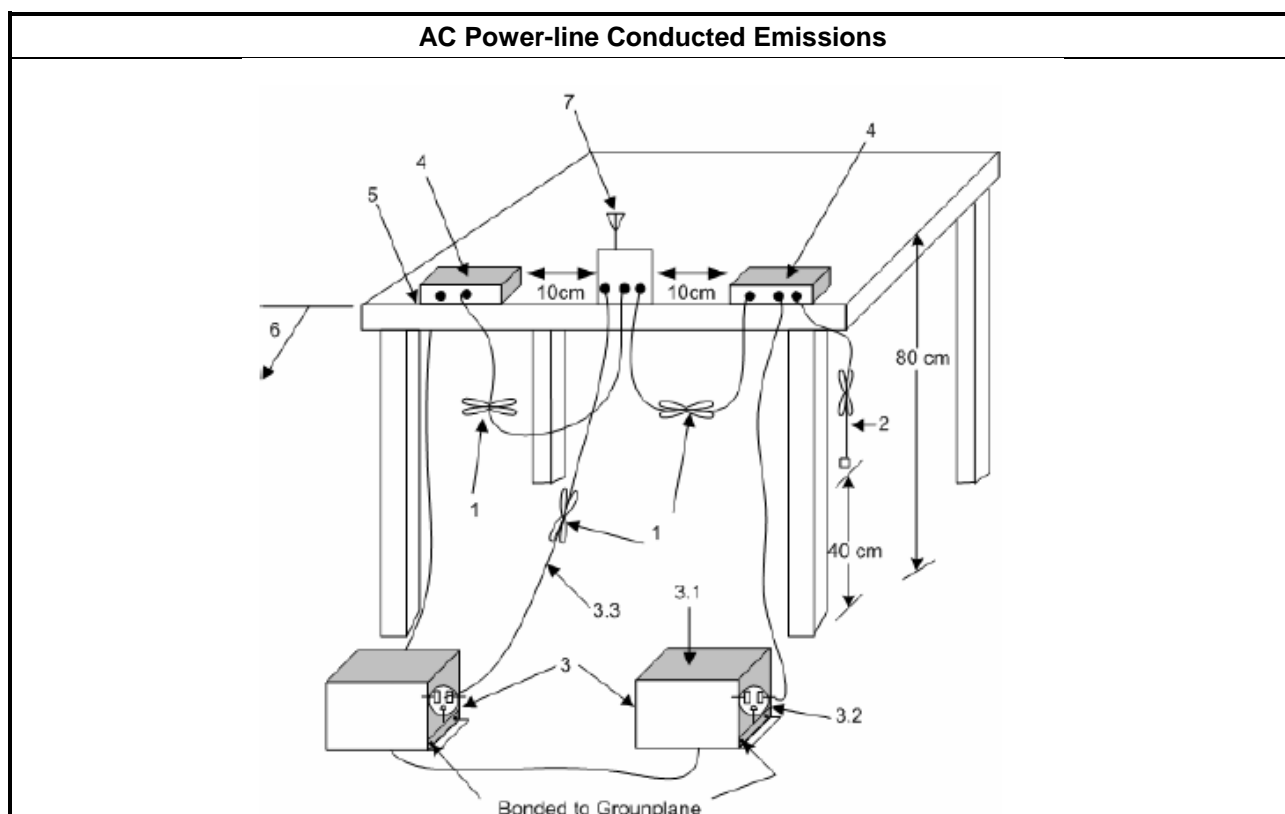
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

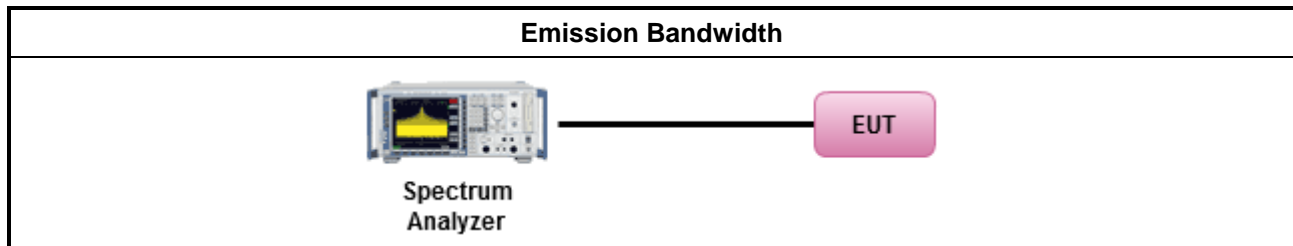
3.2.2 Measuring Instruments

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 KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Fundamental Emission Output Power

3.3.1 Fundamental Emission Output Power Limit

Maximum Peak Conducted Output Power or Maximum Conducted Output Power Limit		
▪ 2400-2483.5 MHz Band:		
	▪ 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
e.i.r.p. Power Limit:		
▪ 2400-2483.5 MHz Band		
	▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)	
	▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm	
	▪ Smart antenna system (SAS)	
		- Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
		- Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
		- Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ 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. P_{eirp} = e.i.r.p. Power in dBm.		

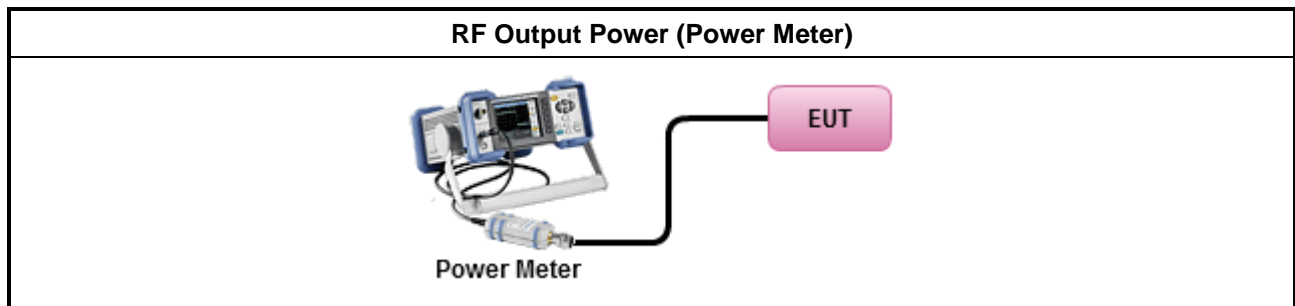
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit	
▪	Power Spectral Density (PSD) \leq 8 dBm/3kHz

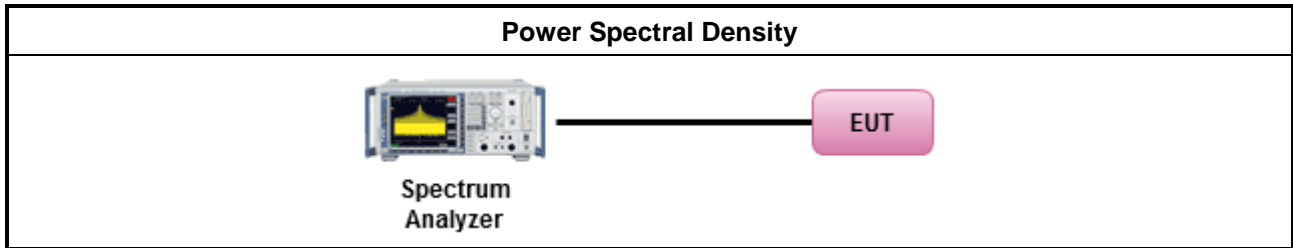
3.4.2 Measuring Instruments

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 KDB 558074, clause 10.2 Method PKPSD. (RBW=3-100kHz; Detector=peak)
	Duty cycle \geq 98%
<input type="checkbox"/>	Refer as KDB 558074, clause 10.5 Method AVGPSD-2. (spectral trace averaging)
	Duty cycle $<$ 98% and average over on/off periods with duty factor
<input type="checkbox"/>	Refer as 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:
<input checked="" type="checkbox"/>	Option 1: Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the N_{TX} 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 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>	

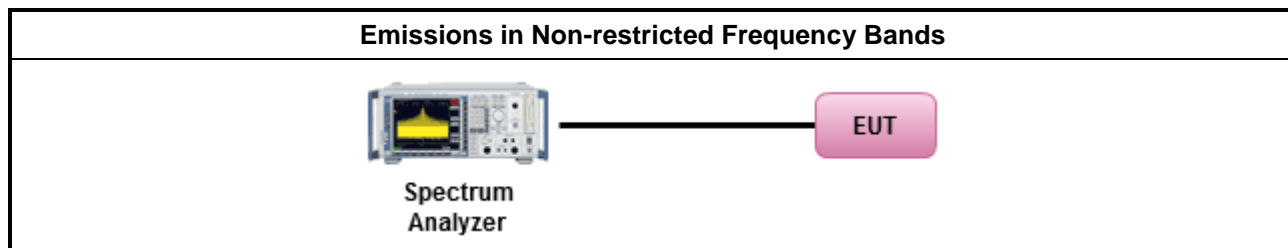
3.5.2 Measuring Instruments

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"> Refer as KDB 558074, clause 11 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

3.6.2 Measuring Instruments

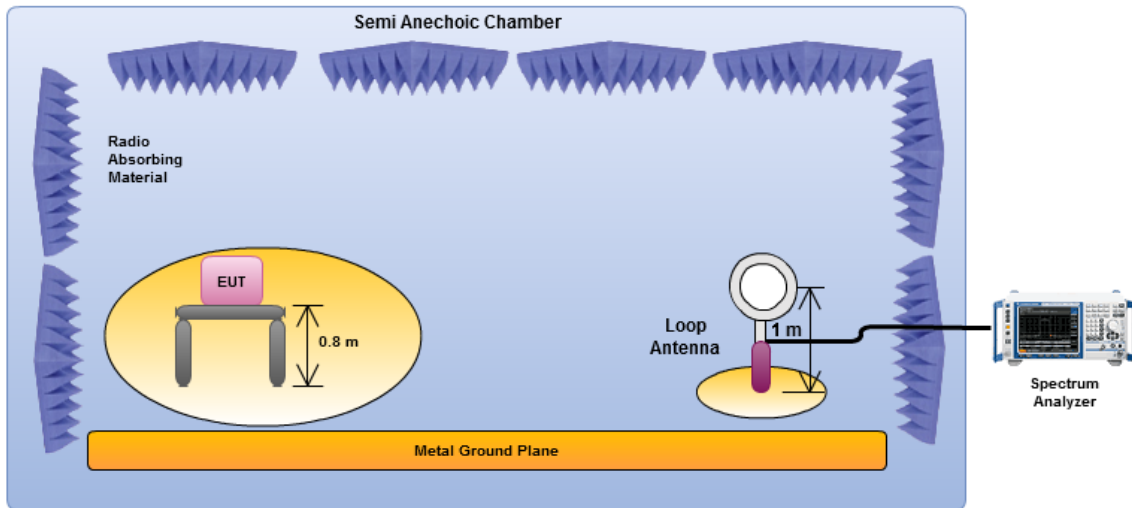
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor]. 	
<ul style="list-style-type: none"> Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band. 	
<ul style="list-style-type: none"> For the transmitter unwanted emissions shall be measured using following options below: 	
<ul style="list-style-type: none"> Refer as KDB 558074, clause 12 for unwanted emissions into restricted bands. 	<input type="checkbox"/> Refer as KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle $\geq 98\%$)
	<input type="checkbox"/> Refer as KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW $\geq 1/T$).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as KDB 558074, clause 11.3 and 12.2.4 measurement procedure peak limit.
	<input type="checkbox"/> Refer as KDB 558074, clause 12.2.3 measurement procedure Quasi-Peak limit.
	<ul style="list-style-type: none"> For the transmitter band-edge emissions shall be measured using following options below:
<ul style="list-style-type: none"> Refer as KDB 558074 clause 13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below. 	<ul style="list-style-type: none"> Refer as KDB 558074, clause 13.2 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> Refer as KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	<ul style="list-style-type: none"> For conducted and cabinet radiation measurement, refer as KDB 558074, clause 12.2.2.
<ul style="list-style-type: none"> For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB 	<ul style="list-style-type: none"> For KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

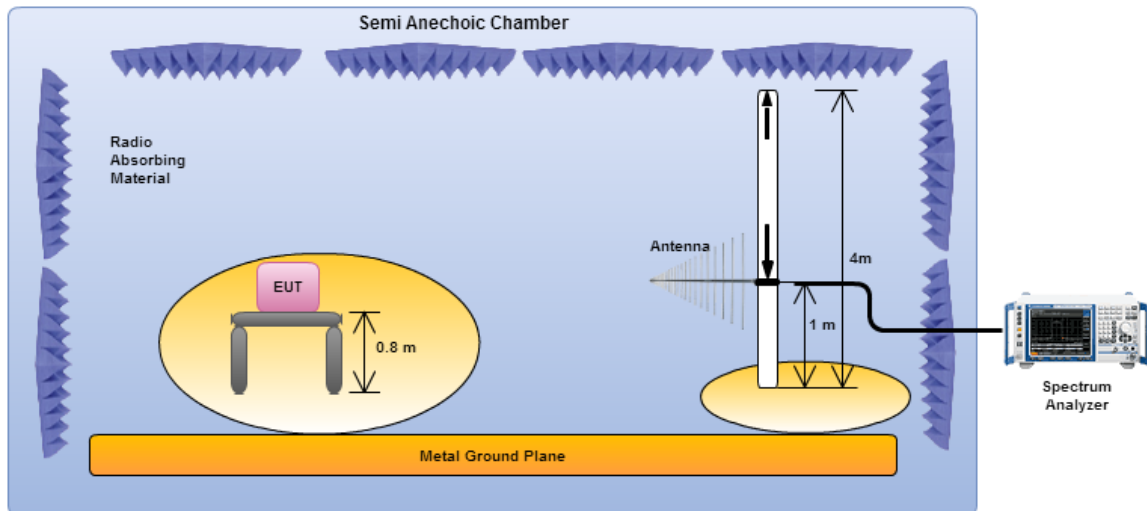
3.6.4 Test Setup

Transmitter Spurious and Out of Band Emissions (9 kHz - 30 MHz)

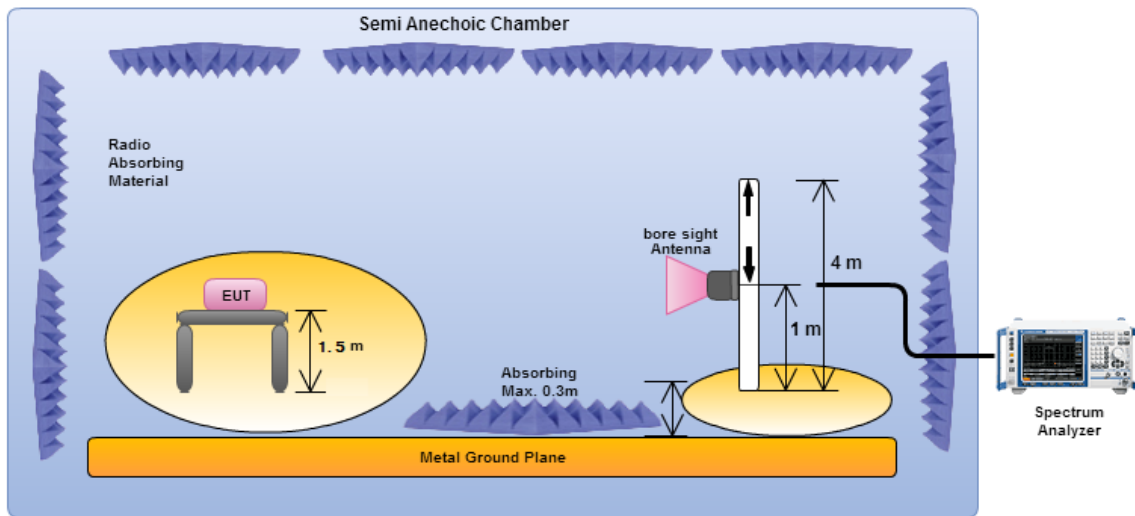


Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna.

Transmitter Radiated Unwanted Emissions (below 1GHz)



Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna.

Transmitter Radiated Unwanted Emissions (above 1GHz)


Electric field tests shall be performed in the frequency range of 1 GHz to 10th harmonic of highest fundamental frequency or 40 GHz using a calibrated horn antenna.

3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported. Any spurious which has more than 20 dB of margin compared to the applicable limit is not necessarily reported.

3.6.6 Transmitter Radiated Unwanted Emissions

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102051	9KHz~3.6GHz	15/Apr/2016	14/Apr/2017
LISN	R&S	ENV216	101295	9kHz~30MHz	15/Nov/2016	14/Nov/2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz~30MHz	24/Oct/2016	23/Oct/2017

Instrument for Radiated Test

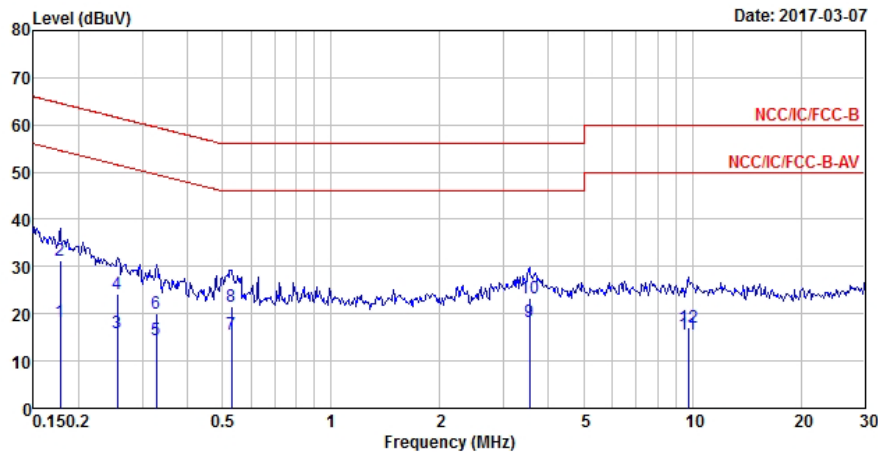
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100593	9KHz - 40GHz	26/Oct/2016	25/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz-1GHz 3M	03/Jun/2016	02/Jun/2017
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	06/Jun/2016	05/Jun/2017
Amplifier	Agilent	8447D	2944A11149	100KHz-1.3GHz	01/Jul/2016	30/Jun/2017
Amplifier	Agilent	8449B	3008A02373	1GHz-26.5GHz	02/Sep/2016	01/Sep/2017
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01543	1GHz-18GHz	22/Apr/2016	21/Apr/2017
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz-40GHz	18/Feb/2016	17/Feb/2017
Bilog Antenna	SCHAFFNER	CBL6112B	2723	30MHz-1GHz	01/Oct/2016	30/Sep/2017
Loop Antenna	TESEQ	HLA 6120	24155	9KHz-30MHz	16/Mar/2016	15/Mar/2017
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	26/Jan/2017	25/Jan/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	26/Jan/2017	25/Jan/2018

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101500	9kHz~40GHz	12/May/2016	11/May/ 2017
Power Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	22/Feb/2016	21/Feb/2017
Power Meter	Anritsu	ML2495A	1124009	300MHz~40GHz	22/Feb/2016	21/Feb/2017
Signal Generator	R&S	SMR40	100116	10MHz~40GHz	21/Jul/2016	20/Jul/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Adapter Mode		

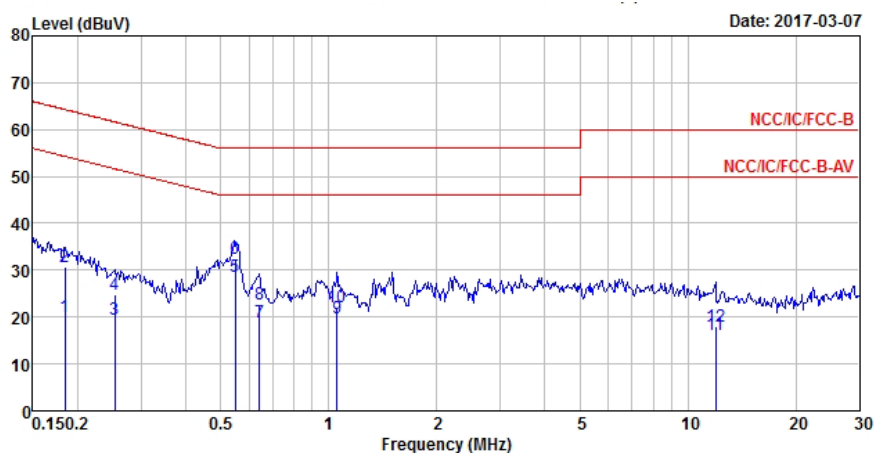


	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.18	18.35	-36.24	54.59	8.44	9.64	0.27	Average
2	0.18	31.31	-33.28	64.59	21.40	9.64	0.27	QP
3	0.26	15.92	-35.64	51.56	6.03	9.66	0.23	Average
4	0.26	24.35	-37.21	61.56	14.46	9.66	0.23	QP
5	0.33	14.46	-35.03	49.49	4.66	9.64	0.16	Average
6	0.33	20.02	-39.47	59.49	10.22	9.64	0.16	QP
7	0.53	15.62	-30.38	46.00	5.90	9.62	0.10	Average
8	0.53	21.66	-34.34	56.00	11.94	9.62	0.10	QP
9 MAX	3.55	18.19	-27.81	46.00	8.36	9.70	0.13	Average
10	3.55	23.33	-32.67	56.00	13.50	9.70	0.13	QP
11	9.76	15.57	-34.43	50.00	5.63	9.74	0.20	Average
12	9.76	17.09	-42.91	60.00	7.15	9.74	0.20	QP

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

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Adapter Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.18	20.10	-34.18	54.28	10.17	9.65	0.28	Average
2	0.18	30.80	-33.48	64.28	20.87	9.65	0.28	QP
3	0.25	19.51	-32.13	51.64	9.62	9.66	0.23	Average
4	0.25	24.68	-36.96	61.64	14.79	9.66	0.23	QP
5 MAX	0.55	28.73	-17.27	46.00	18.97	9.66	0.10	Average
6	0.55	32.48	-23.52	56.00	22.72	9.66	0.10	QP
7	0.64	19.00	-27.00	46.00	9.25	9.65	0.10	Average
8	0.64	22.82	-33.18	56.00	13.07	9.65	0.10	QP
9	1.05	19.65	-26.35	46.00	9.90	9.64	0.11	Average
10	1.05	22.20	-33.80	56.00	12.45	9.64	0.11	QP
11	11.93	16.09	-33.91	50.00	6.11	9.78	0.20	Average
12	11.93	17.94	-42.06	60.00	7.96	9.78	0.20	QP

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

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2.4-2.4835GHz	9.475M	14.493M	14M5G1D	8.025M	14.318M
802.11g_(6Mbps)_1TX	-	-	-	-	-
2.4-2.4835GHz	14.975M	16.417M	16M4D1D	12.9M	16.292M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2.4-2.4835GHz	15.025M	17.541M	17M5D1D	14.975M	17.466M

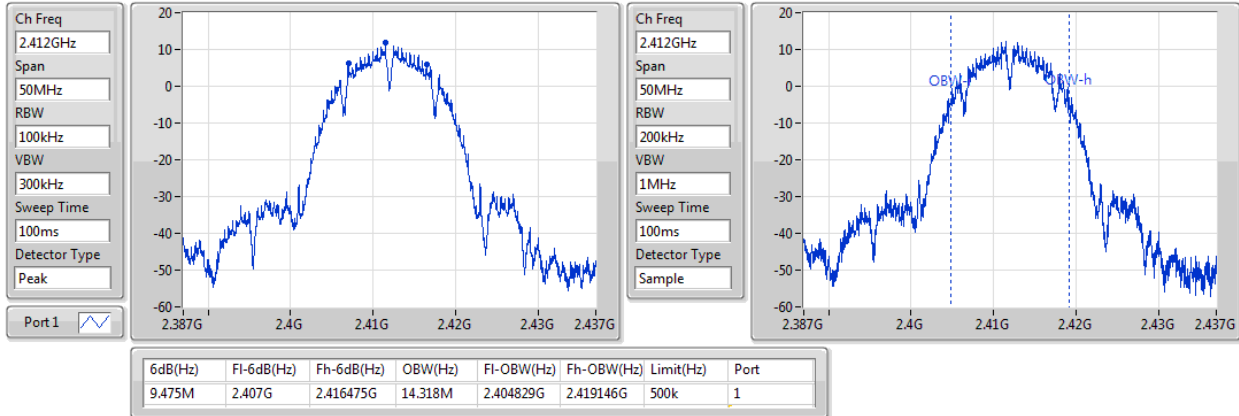
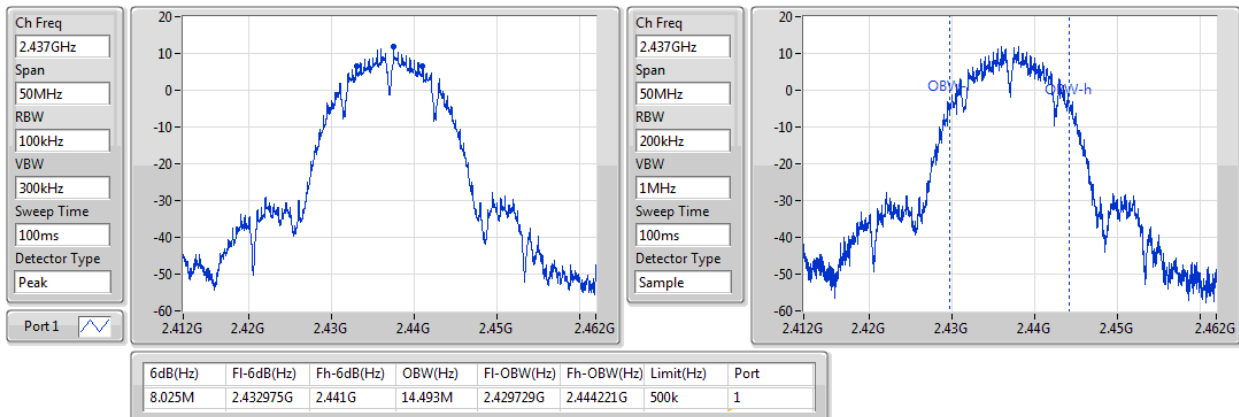
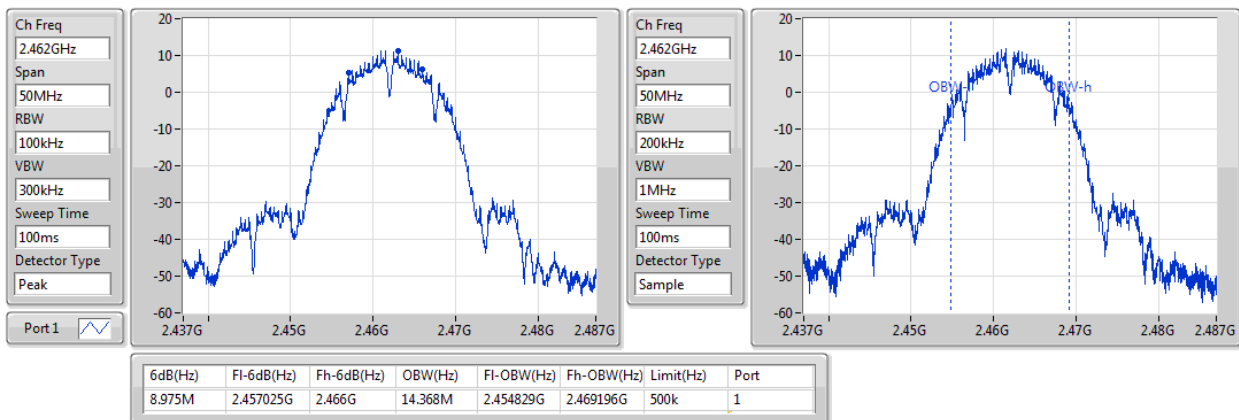
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

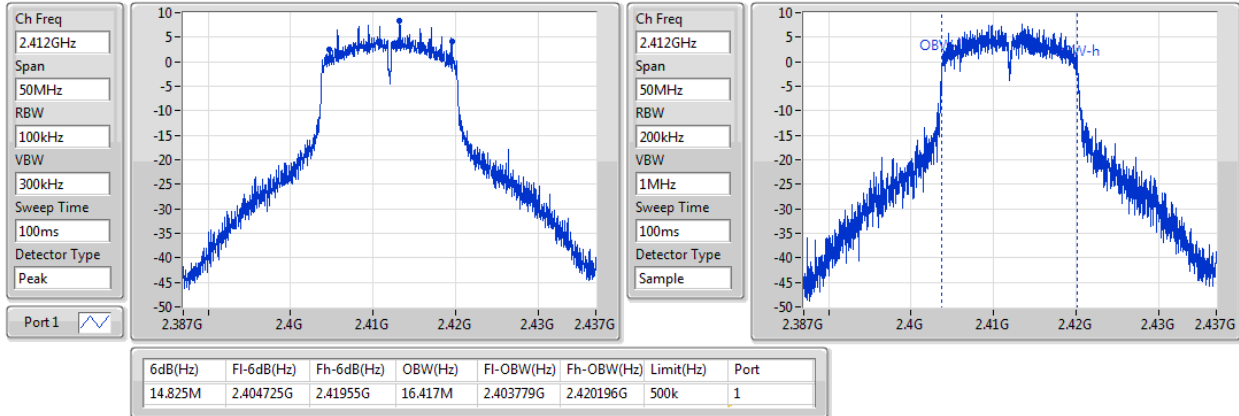
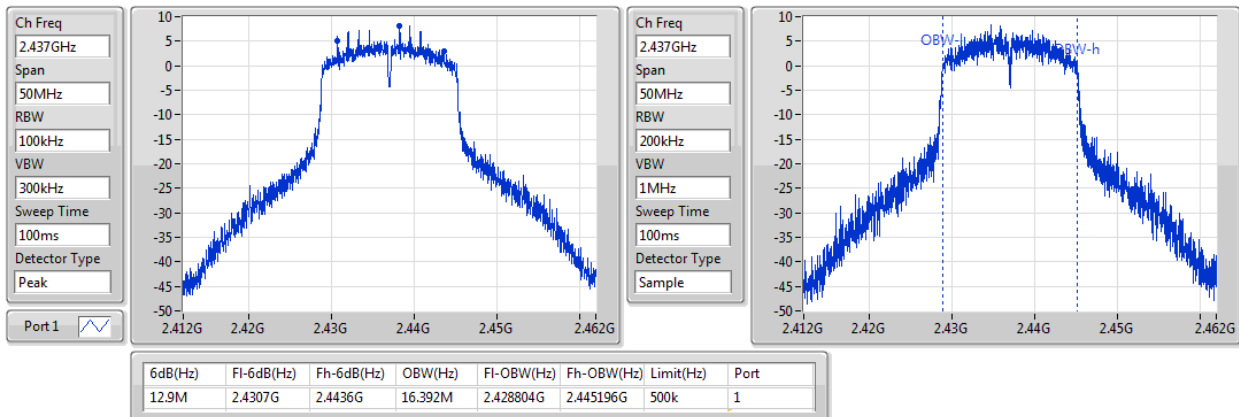
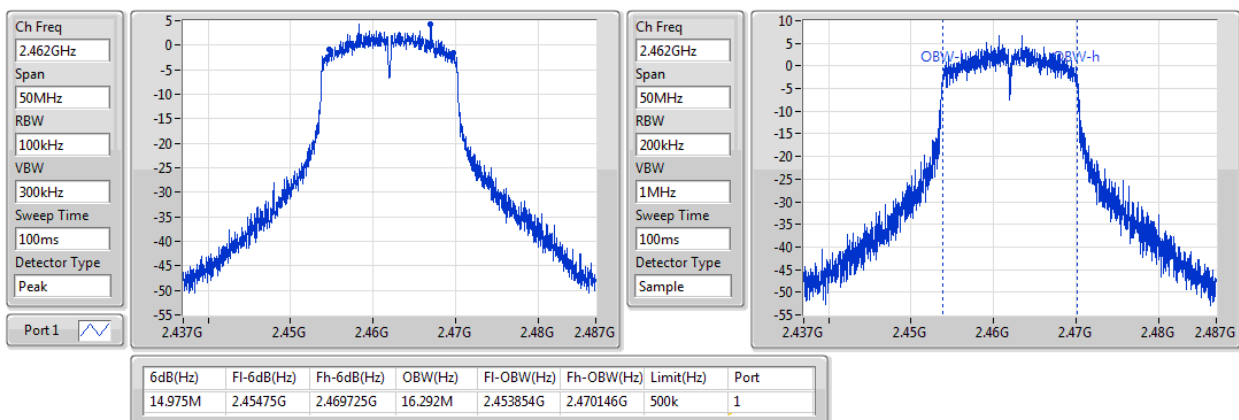
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

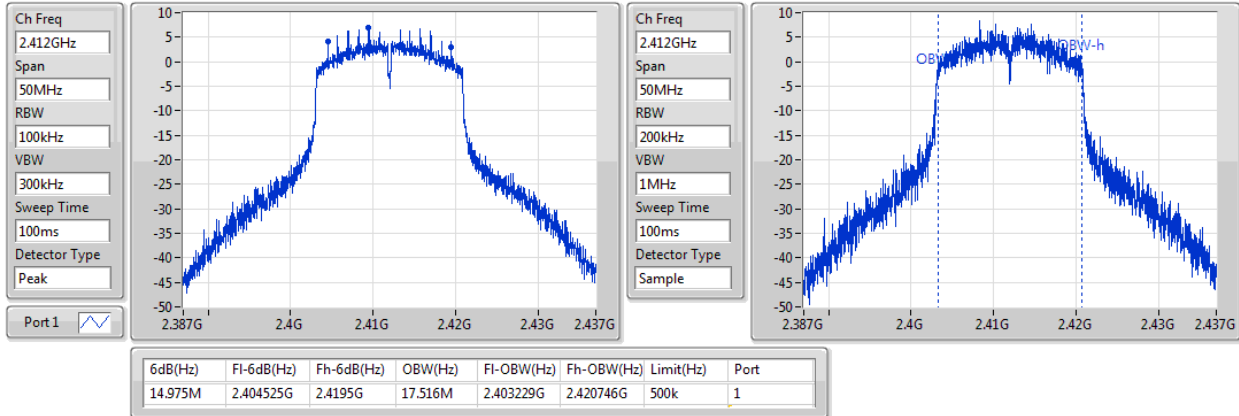
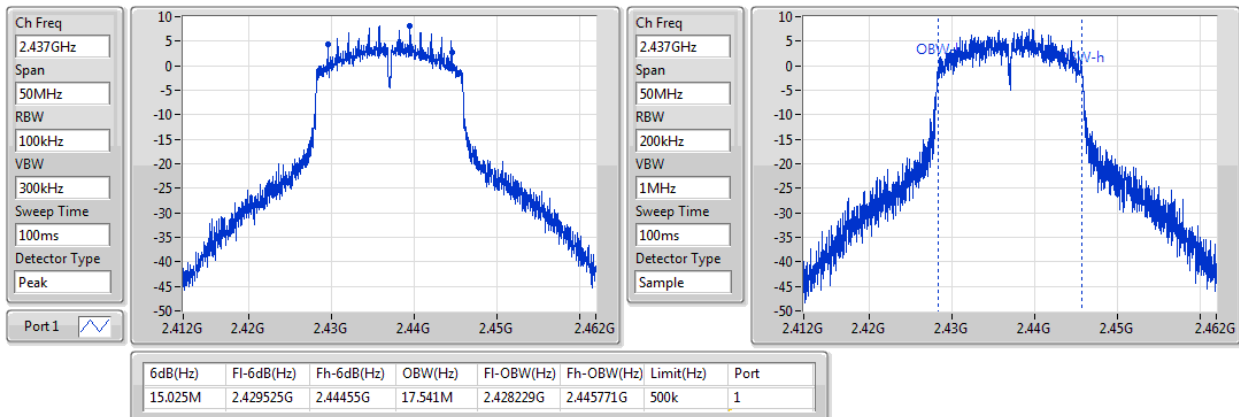
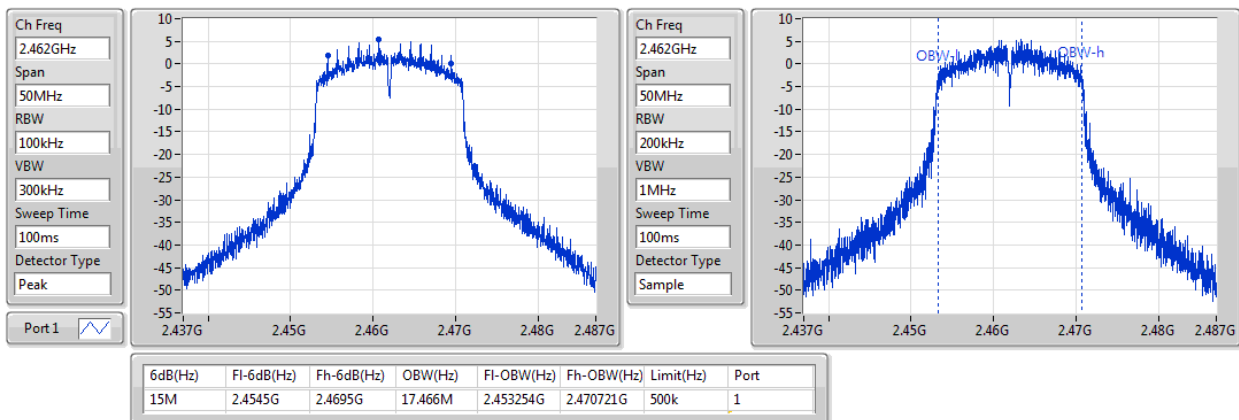
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	9.475M	14.318M
2437MHz	Pass	500k	8.025M	14.493M
2462MHz	Pass	500k	8.975M	14.368M
802.11g_(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	14.825M	16.417M
2437MHz	Pass	500k	12.9M	16.392M
2462MHz	Pass	500k	14.975M	16.292M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	14.975M	17.516M
2437MHz	Pass	500k	15.025M	17.541M
2462MHz	Pass	500k	15M	17.466M

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

802.11g_(6Mbps)_1TX
EBW
2437MHz

802.11g_(6Mbps)_1TX
EBW
2462MHz


802.11n HT20_Nss1,(MCS0)_1TX
EBW
2412MHz

802.11n HT20_Nss1,(MCS0)_1TX
EBW
2437MHz

802.11n HT20_Nss1,(MCS0)_1TX
EBW
2462MHz


Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_1TX	-	-
2.4-2.4835GHz	21.68	0.14723
802.11g_(6Mbps)_1TX	-	-
2.4-2.4835GHz	24.16	0.26062
802.11n HT20_Nss1,(MCS0)_1TX	-	-
2.4-2.4835GHz	24.13	0.25882

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	1.22	21.33	21.33	30.00
2437MHz	Pass	1.22	21.68	21.68	30.00
2462MHz	Pass	1.22	21.08	21.08	30.00
802.11g_(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	1.22	24.16	24.16	30.00
2437MHz	Pass	1.22	24.07	24.07	30.00
2462MHz	Pass	1.22	23.90	23.90	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	1.22	24.13	24.13	30.00
2437MHz	Pass	1.22	24.00	24.00	30.00
2462MHz	Pass	1.22	23.35	23.35	30.00

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

Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_1TX	-	-
2.4-2.4835GHz	19.63	0.09183
802.11g_(6Mbps)_1TX	-	-
2.4-2.4835GHz	18.24	0.06668
802.11n HT20_Nss1,(MCS0)_1TX	-	-
2.4-2.4835GHz	17.98	0.06281

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	1.22	19.15	19.15	30.00
2437MHz	Pass	1.22	19.63	19.63	30.00
2462MHz	Pass	1.22	18.92	18.92	30.00
802.11g_(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	1.22	18.24	18.24	30.00
2437MHz	Pass	1.22	18.10	18.10	30.00
2462MHz	Pass	1.22	15.90	15.90	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	1.22	17.70	17.70	30.00
2437MHz	Pass	1.22	17.98	17.98	30.00
2462MHz	Pass	1.22	15.75	15.75	30.00

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

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_1TX	-
2.4-2.4835GHz	-3.29
802.11g_(6Mbps)_1TX	-
2.4-2.4835GHz	-5.85
802.11n HT20_Nss1,(MCS0)_1TX	-
2.4-2.4835GHz	-6.69

RBW=3kHz.

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	1.22	-3.93	-3.93	8.00
2437MHz	Pass	1.22	-3.36	-3.36	8.00
2462MHz	Pass	1.22	-3.29	-3.29	8.00
802.11g_(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	1.22	-5.85	-5.85	8.00
2437MHz	Pass	1.22	-6.00	-6.00	8.00
2462MHz	Pass	1.22	-8.77	-8.77	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	1.22	-7.42	-7.42	8.00
2437MHz	Pass	1.22	-6.69	-6.69	8.00
2462MHz	Pass	1.22	-8.04	-8.04	8.00

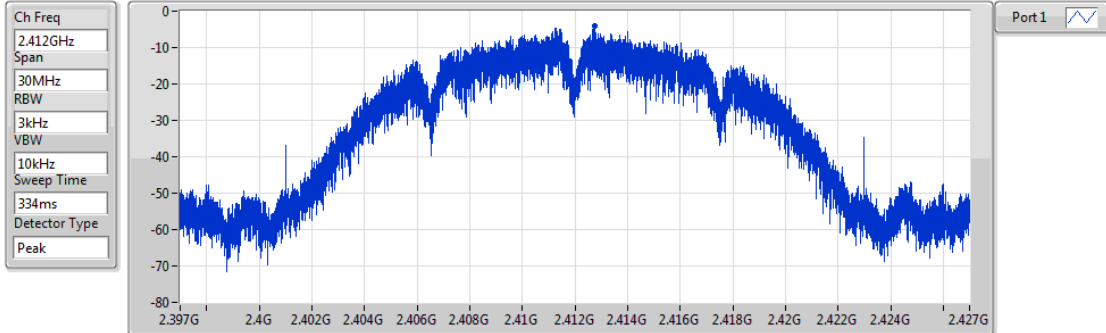
DG = Directional Gain; RBW=3kHz;

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

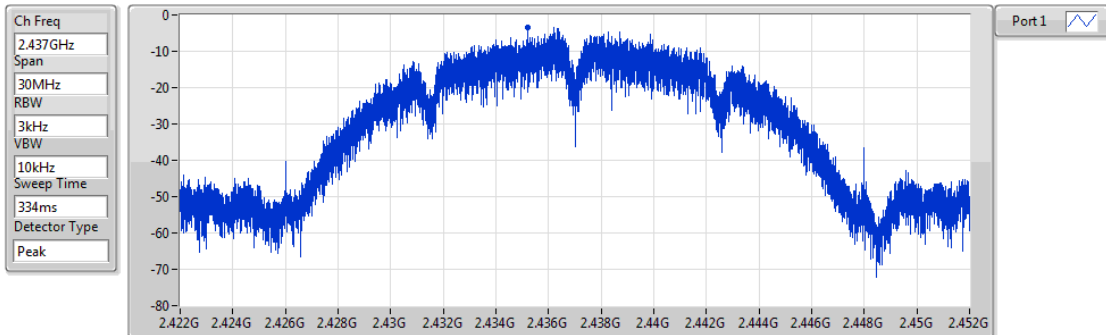


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.93	-3.93	-3.93

802.11b_(1Mbps)_1TX

PSD

2437MHz

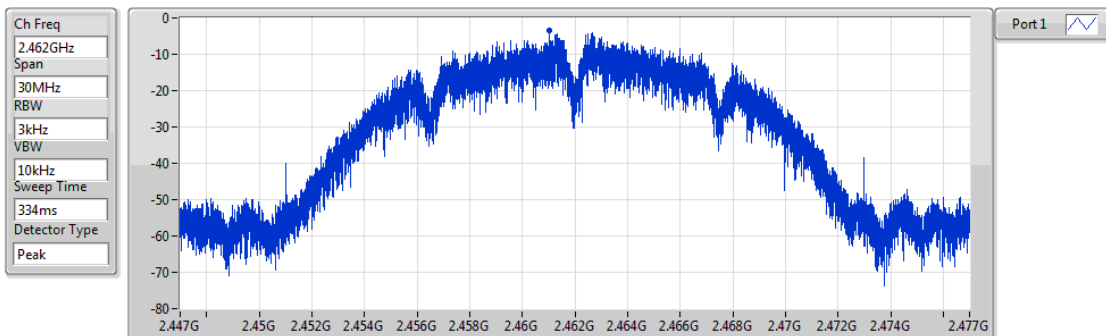


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.36	-3.36	-3.36

802.11b_(1Mbps)_1TX

PSD

2462MHz

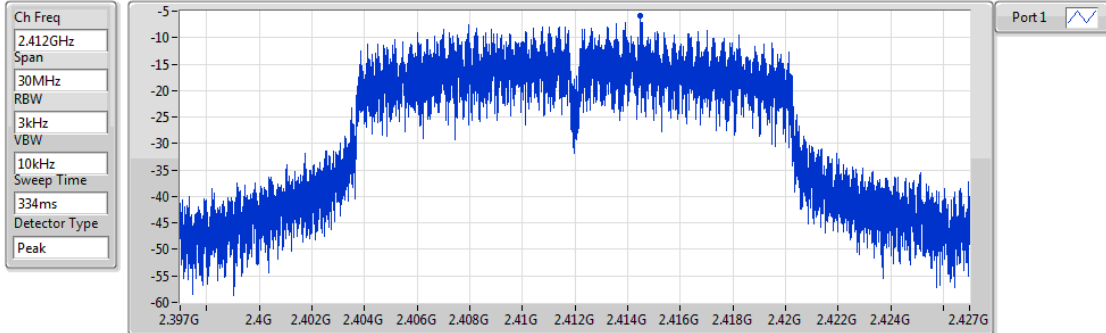


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.29	-3.29	-3.29

802.11g_(6Mbps)_1TX

PSD

2412MHz

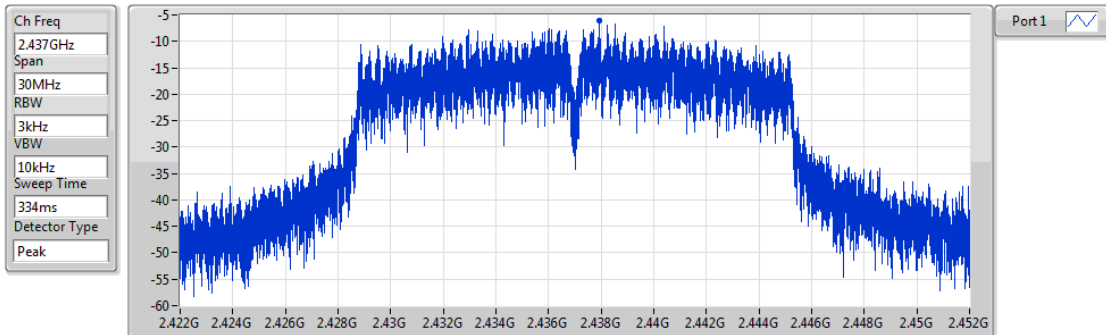


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.85	-5.85	-5.85

802.11g_(6Mbps)_1TX

PSD

2437MHz

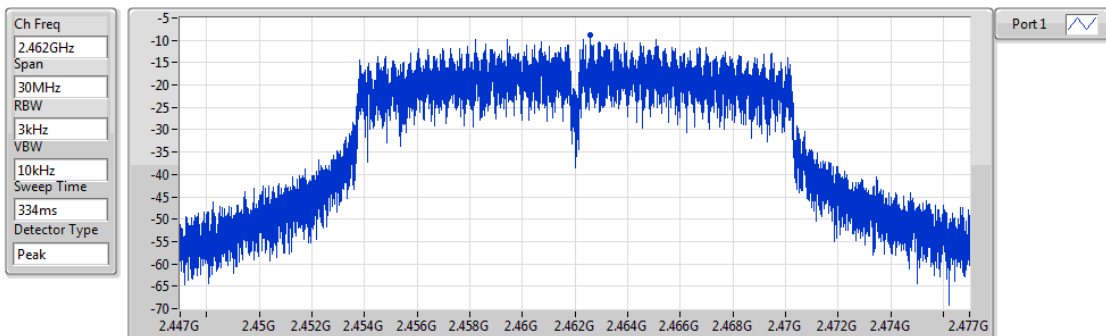


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.00	-6.00	-6.00

802.11g_(6Mbps)_1TX

PSD

2462MHz

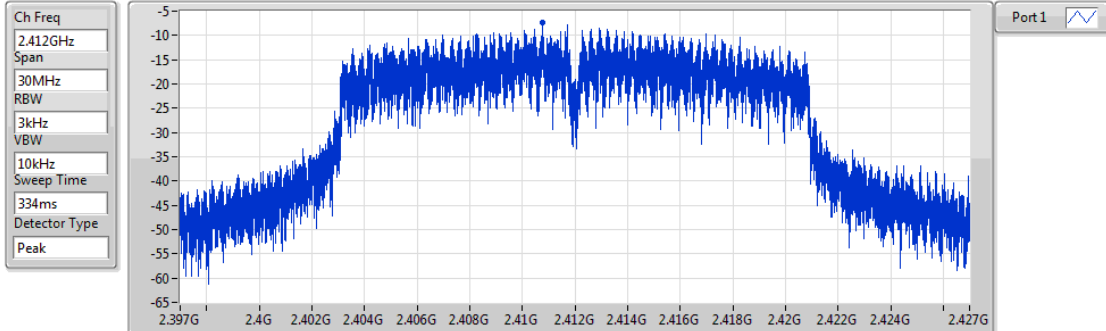


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.77	-8.77	-8.77

802.11n HT20_Nss1,(MCS0)_1TX

PSD

2412MHz

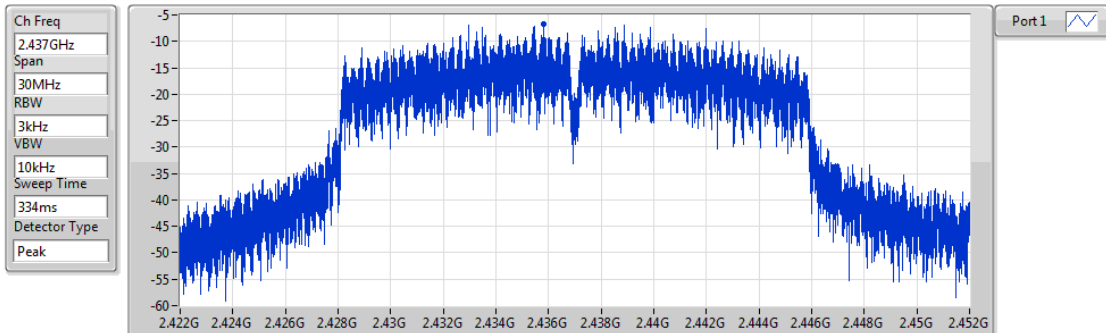


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.42	-7.42	-7.42

802.11n HT20_Nss1,(MCS0)_1TX

PSD

2437MHz

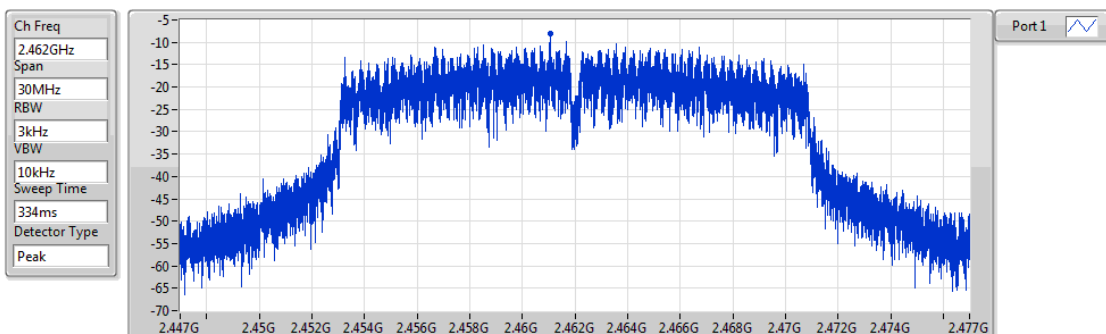


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.69	-6.69	-6.69

802.11n HT20_Nss1,(MCS0)_1TX

PSD

2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.04	-8.04	-8.04

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	2.408183G	6.15	-13.85	2.186415G	-56.57	2.39992G	-19.04	2.4855G	-52.62	7.240755G	-47.13	1

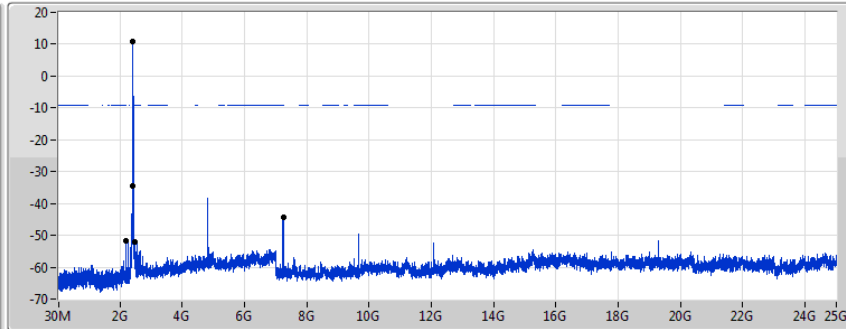
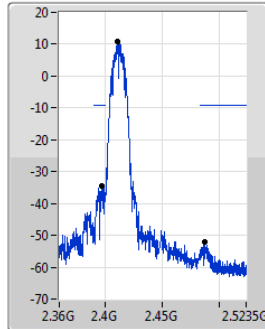
Result

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	2.411356G	10.81	-9.19	2.18758G	-51.67	2.39704G	-34.57	2.48726G	-51.94	7.235136G	-44.40	1
2437MHz	Pass	2.438577G	11.08	-8.92	2.13865G	-57.56	2.39928G	-47.53	2.5111G	-52.40	14.621476G	-50.90	1
2462MHz	Pass	2.460621G	9.65	-10.35	2.30874G	-53.76	2.39112G	-53.94	2.49198G	-48.01	2.610596G	-52.50	1
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.408183G	6.15	-13.85	2.186415G	-56.57	2.39992G	-19.04	2.4855G	-52.62	7.240755G	-47.13	1
2437MHz	Pass	2.433233G	7.02	-12.98	2.137485G	-58.37	2.39416G	-46.21	2.4927G	-51.46	6.830559G	-54.24	1
2462MHz	Pass	2.463293G	4.65	-15.35	2.309905G	-57.49	2.3904G	-54.46	2.48446G	-41.82	6.243361G	-53.75	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.409519G	6.75	-13.25	2.184085G	-56.54	2.3996G	-23.40	2.4855G	-54.49	7.235136G	-47.42	1
2437MHz	Pass	2.439412G	8.17	-11.83	2.137485G	-57.84	2.39344G	-44.67	2.48638G	-51.64	6.928894G	-53.77	1
2462MHz	Pass	2.459619G	5.11	-14.89	2.30874G	-57.29	2.39344G	-54.73	2.48446G	-41.22	6.973847G	-53.42	1

802.11b_(1Mbps)_1TX

CSE NdB

2412MHz



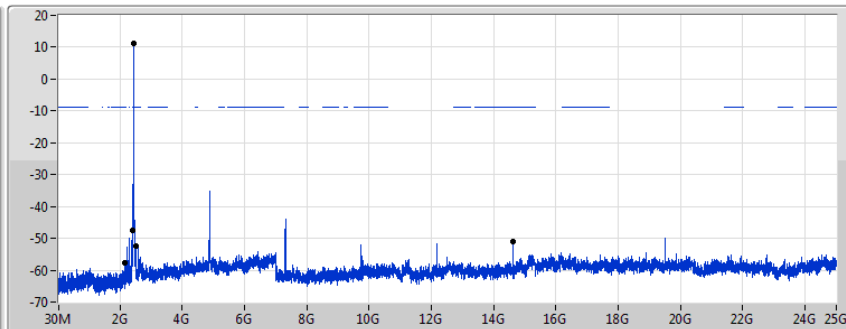
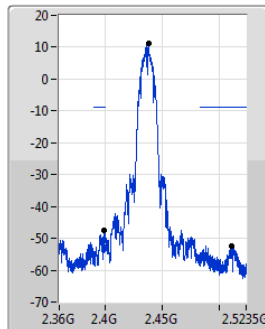
Port1

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.411356G	10.81	-9.19	2.18758G	-51.67	2.39704G	-34.57	2.48726G	-51.94	7.235136G	-44.40	1

802.11b_(1Mbps)_1TX

CSE NdB

2437MHz



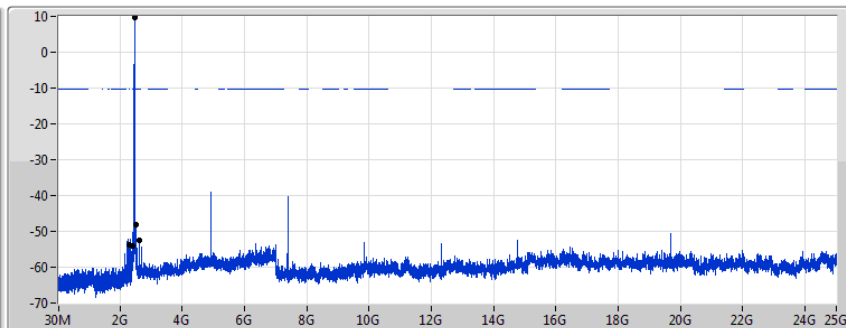
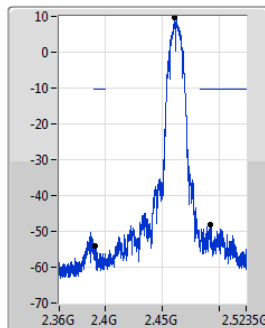
Port1

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.438577G	11.08	-8.92	2.13865G	-57.56	2.39928G	-47.53	2.5111G	-52.40	14.621476G	-50.90	1

802.11b_(1Mbps)_1TX

CSE NdB

2462MHz



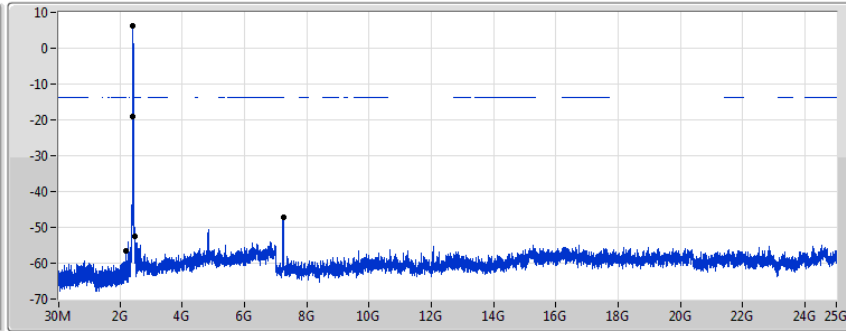
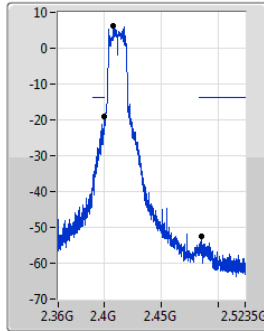
Port1

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.460621G	9.65	-10.35	2.30874G	-53.76	2.39112G	-53.94	2.49198G	-48.01	2.610596G	-52.50	1

802.11g_(6Mbps)_1TX

CSE NdB

2412MHz



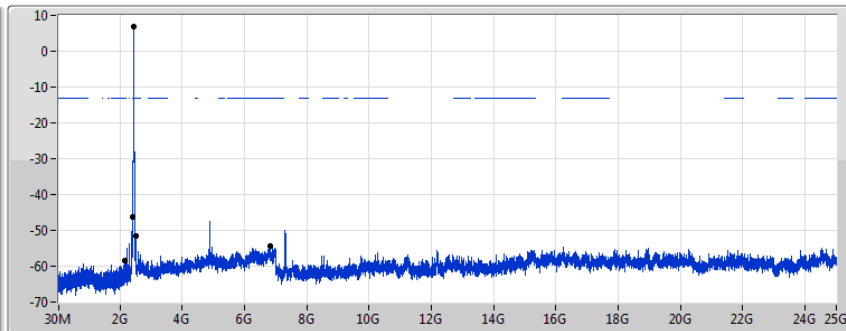
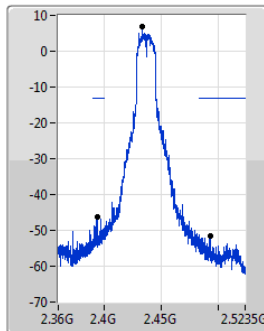
Port1

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.408183G	6.15	-13.85	2.186415G	-56.57	2.39992G	-19.04	2.4855G	-52.62	7.240755G	-47.13	1

802.11g_(6Mbps)_1TX

CSE NdB

2437MHz



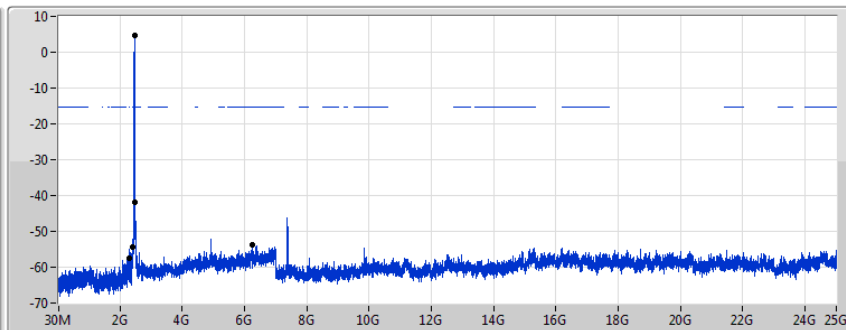
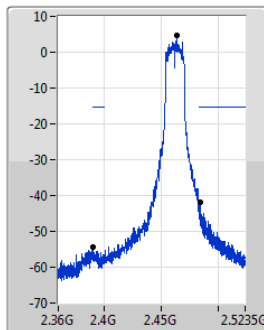
Port1

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.433233G	7.02	-12.98	2.137485G	-58.37	2.39416G	-46.21	2.4927G	-51.46	6.830559G	-54.24	1

802.11g_(6Mbps)_1TX

CSE NdB

2462MHz



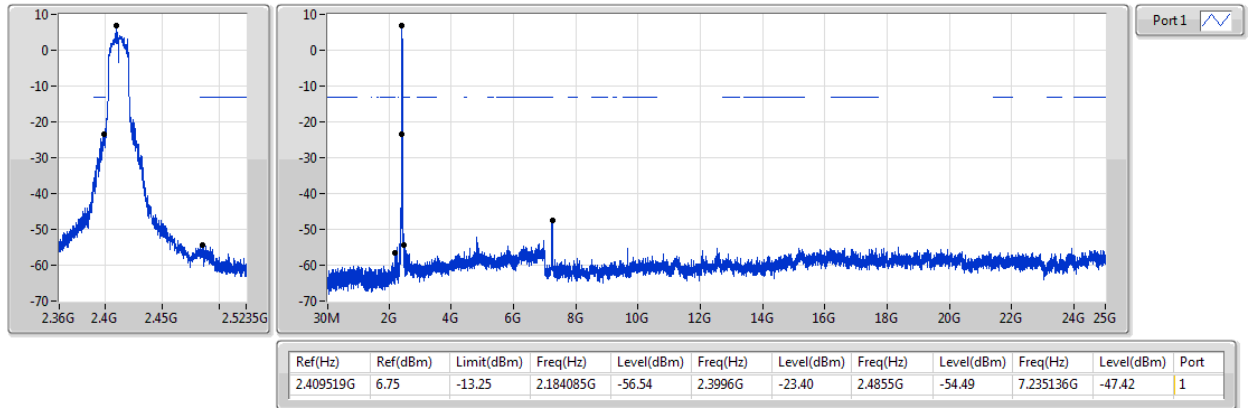
Port1

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.463293G	4.65	-15.35	2.309905G	-57.49	2.3904G	-54.46	2.48446G	-41.82	6.243361G	-53.75	1

802.11n HT20_Nss1,(MCS0)_1TX

CSE NdB

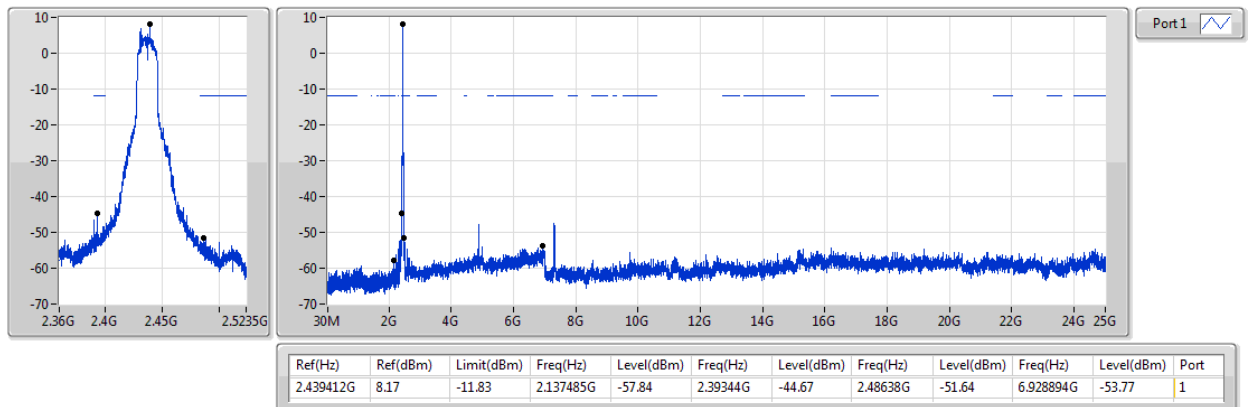
2412MHz



802.11n HT20_Nss1,(MCS0)_1TX

CSE NdB

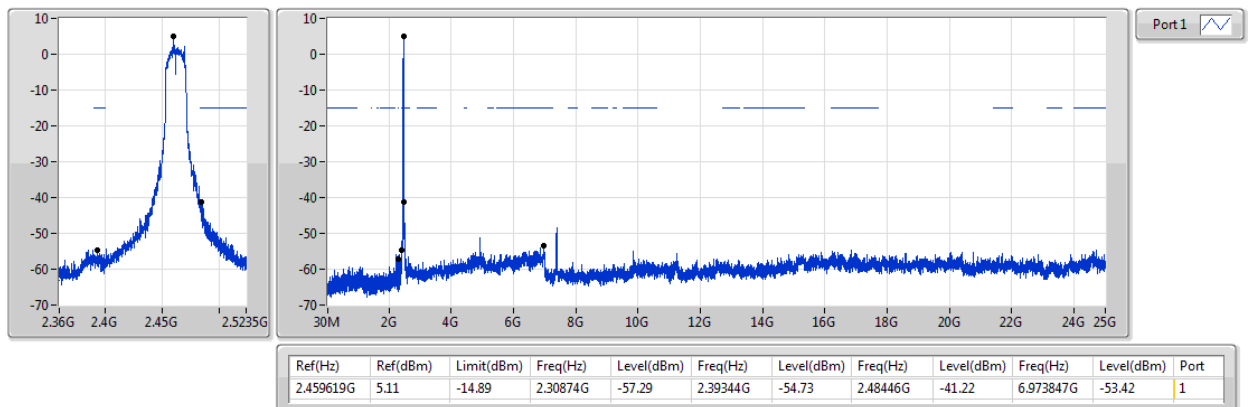
2437MHz



802.11n HT20_Nss1,(MCS0)_1TX

CSE NdB

2462MHz



**Summary**

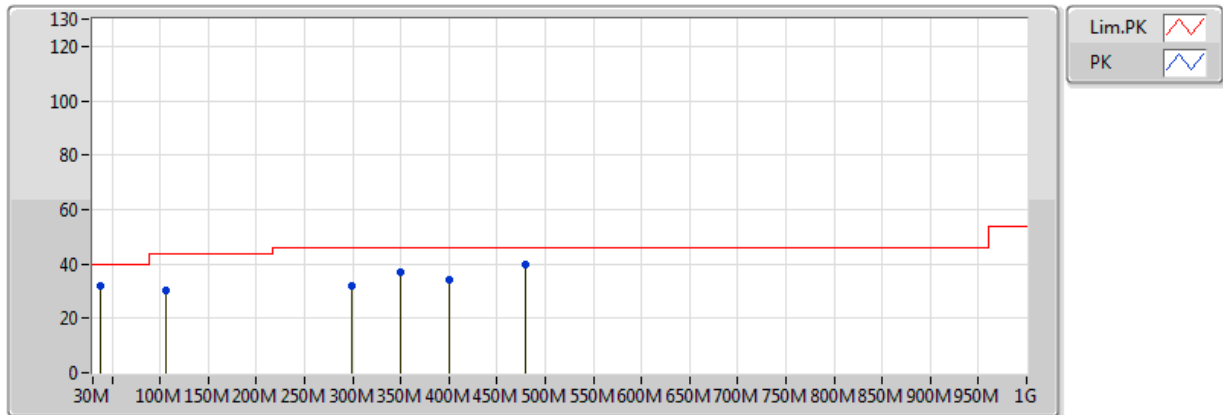
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	PK	480.08M	42.25	46.00	-3.75	-2.72	3	H	360	1	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	37.76M	31.99	40.00	-8.01	-8.08	3	V	0	1	-
2437MHz	Pass	PK	105.66M	30.05	43.50	-13.45	-9.85	3	V	0	1	-
2437MHz	Pass	PK	299.66M	31.75	46.00	-14.25	-6.42	3	V	0	1	-
2437MHz	Pass	PK	350.1M	36.93	46.00	-9.07	-5.39	3	V	0	1	-
2437MHz	Pass	PK	400.54M	34.44	46.00	-11.56	-3.96	3	V	0	1	-
2437MHz	Pass	PK	480.08M	39.79	46.00	-6.21	-2.72	3	V	0	1	-
2437MHz	Pass	PK	105.66M	28.11	43.50	-15.39	-9.85	3	H	360	1	-
2437MHz	Pass	PK	249.22M	37.11	46.00	-8.89	-7.56	3	H	360	1	-
2437MHz	Pass	PK	299.66M	33.52	46.00	-12.48	-6.42	3	H	360	1	-
2437MHz	Pass	PK	350.1M	37.71	46.00	-8.29	-5.39	3	H	360	1	-
2437MHz	Pass	PK	400.54M	40.78	46.00	-5.22	-3.96	3	H	360	1	-
2437MHz	Pass	PK	480.08M	42.25	46.00	-3.75	-2.72	3	H	360	1	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_adapter

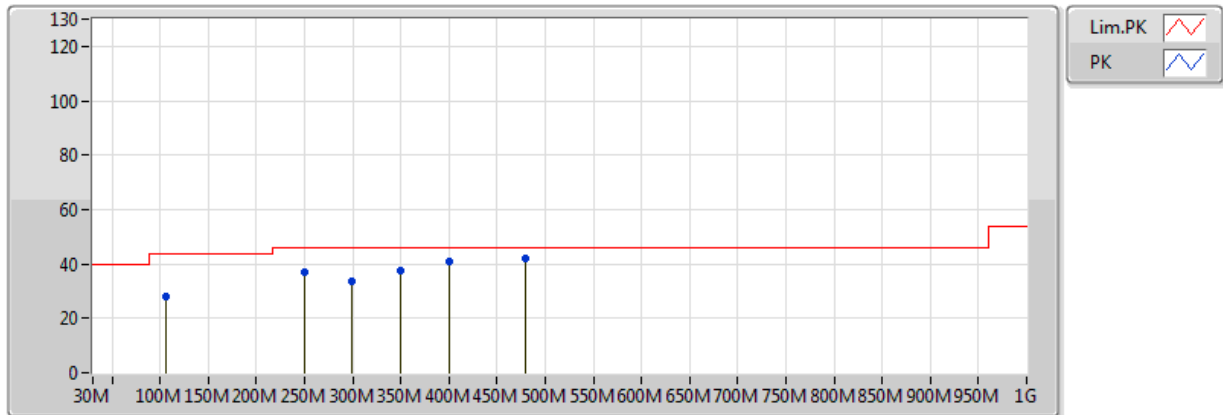


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	37.76M	31.99	40.00	-8.01	-8.08	3	V	0	1	-
PK	105.66M	30.05	43.50	-13.45	-9.85	3	V	0	1	-
PK	299.66M	31.75	46.00	-14.25	-6.42	3	V	0	1	-
PK	350.1M	36.93	46.00	-9.07	-5.39	3	V	0	1	-
PK	400.54M	34.44	46.00	-11.56	-3.96	3	V	0	1	-
PK	480.08M	39.79	46.00	-6.21	-2.72	3	V	0	1	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_adapter



EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	105.66M	28.11	43.50	-15.39	-9.85	3	H	360	1	-
PK	249.22M	37.11	46.00	-8.89	-7.56	3	H	360	1	-
PK	299.66M	33.52	46.00	-12.48	-6.42	3	H	360	1	-
PK	350.1M	37.71	46.00	-8.29	-5.39	3	H	360	1	-
PK	400.54M	40.78	46.00	-5.22	-3.96	3	H	360	1	-
PK	480.08M	42.25	46.00	-3.75	-2.72	3	H	360	1	-

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	2.385712G	53.90	54.00	-0.10	30.22	3	H	37	1.50	-

Result

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	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.385712G	51.82	54.00	-2.18	30.22	3	V	346	1.72	-
2412MHz	Pass	AV	2.411472G	103.43	Inf	-Inf	30.30	3	V	346	1.72	-
2412MHz	Pass	AV	4.824G	37.38	54.00	-16.62	0.95	3	V	32	1.74	-
2412MHz	Pass	PK	2.385936G	59.21	74.00	-14.79	30.22	3	V	346	1.72	-
2412MHz	Pass	PK	2.411024G	107.10	Inf	-Inf	30.30	3	V	346	1.72	-
2412MHz	Pass	PK	4.824G	45.33	74.00	-28.67	0.95	3	V	32	1.74	-
2412MHz	Pass	AV	2.385712G	53.90	54.00	-0.10	30.22	3	H	37	1.50	-
2412MHz	Pass	AV	2.412816G	106.20	Inf	-Inf	30.30	3	H	37	1.50	-
2412MHz	Pass	AV	4.824G	36.23	54.00	-17.77	0.95	3	H	5	1.06	-
2412MHz	Pass	PK	2.38504G	60.92	74.00	-13.08	30.21	3	H	37	1.50	-
2412MHz	Pass	PK	2.41304G	110.05	Inf	-Inf	30.30	3	H	37	1.50	-
2412MHz	Pass	PK	4.824G	45.14	74.00	-28.86	0.95	3	H	5	1.06	-
2437MHz	Pass	AV	2.38676G	43.25	54.00	-10.75	30.22	3	V	353	2.02	-
2437MHz	Pass	AV	2.43616G	104.05	Inf	-Inf	30.38	3	V	353	2.02	-
2437MHz	Pass	AV	2.48822G	43.08	54.00	-10.92	30.54	3	V	353	2.02	-
2437MHz	Pass	AV	7.311G	49.06	54.00	-4.94	6.44	3	V	342	1.02	-
2437MHz	Pass	PK	2.38562G	55.04	74.00	-18.96	30.22	3	V	353	2.02	-
2437MHz	Pass	PK	2.43806G	107.69	Inf	-Inf	30.38	3	V	353	2.02	-
2437MHz	Pass	PK	2.4981G	54.97	74.00	-19.03	30.57	3	V	353	2.02	-
2437MHz	Pass	PK	7.311G	55.07	74.00	-18.93	6.44	3	V	342	1.02	-
2437MHz	Pass	AV	2.38676G	43.15	54.00	-10.85	30.22	3	H	39	1.27	-
2437MHz	Pass	AV	2.43768G	107.74	Inf	-Inf	30.38	3	H	39	1.27	-
2437MHz	Pass	AV	2.48594G	45.89	54.00	-8.11	30.54	3	H	39	1.27	-
2437MHz	Pass	AV	7.311G	41.51	54.00	-12.49	6.44	3	H	14	1.17	-
2437MHz	Pass	PK	2.38676G	54.85	74.00	-19.15	30.22	3	H	39	1.27	-
2437MHz	Pass	PK	2.43806G	111.75	Inf	-Inf	30.38	3	H	39	1.27	-
2437MHz	Pass	PK	2.4867G	57.14	74.00	-16.86	30.54	3	H	39	1.27	-
2437MHz	Pass	PK	7.311G	51.34	74.00	-22.66	6.44	3	H	14	1.17	-
2462MHz	Pass	AV	2.4612G	104.11	Inf	-Inf	30.46	3	V	7	2.28	-
2462MHz	Pass	AV	2.4876G	45.49	54.00	-8.51	30.54	3	V	7	2.28	-
2462MHz	Pass	AV	7.386G	44.03	54.00	-9.97	6.62	3	V	341	1.08	-
2462MHz	Pass	PK	2.461G	107.79	Inf	-Inf	30.46	3	V	7	2.28	-
2462MHz	Pass	PK	2.4876G	55.99	74.00	-18.01	30.54	3	V	7	2.28	-
2462MHz	Pass	PK	7.386G	52.75	74.00	-21.25	6.62	3	V	341	1.08	-
2462MHz	Pass	AV	2.4612G	108.23	Inf	-Inf	30.46	3	H	43	1.51	-
2462MHz	Pass	AV	2.4876G	50.81	54.00	-3.19	30.54	3	H	43	1.51	-
2462MHz	Pass	AV	7.386G	37.79	54.00	-16.21	6.62	3	H	347	2.22	-
2462MHz	Pass	PK	2.461G	111.97	Inf	-Inf	30.46	3	H	43	1.51	-
2462MHz	Pass	PK	2.4914G	59.59	74.00	-14.41	30.55	3	H	43	1.51	-
2462MHz	Pass	PK	7.386G	50.13	74.00	-23.87	6.62	3	H	347	2.22	-
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.389998G	52.00	54.00	-2.00	30.23	3	V	346	1.72	-
2412MHz	Pass	AV	2.411024G	96.56	Inf	-Inf	30.30	3	V	346	1.72	-
2412MHz	Pass	AV	4.824G	29.60	54.00	-24.40	0.95	3	V	360	1.50	-
2412MHz	Pass	PK	2.389744G	71.52	74.00	-2.48	30.23	3	V	346	1.72	-
2412MHz	Pass	PK	2.409904G	107.60	Inf	-Inf	30.29	3	V	346	1.72	-
2412MHz	Pass	PK	4.824G	42.88	74.00	-31.12	0.95	3	V	360	1.50	-



RSE TX above 1GHz Result

Appendix F

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2412MHz	Pass	AV	2.389998G	53.85	54.00	-0.15	30.23	3	H	37	1.50	-
2412MHz	Pass	AV	2.413264G	98.69	Inf	-Inf	30.30	3	H	37	1.50	-
2412MHz	Pass	AV	4.824G	28.72	54.00	-25.28	0.95	3	H	0	1.25	-
2412MHz	Pass	PK	2.387952G	73.40	74.00	-0.60	30.22	3	H	37	1.50	-
2412MHz	Pass	PK	2.416848G	109.71	Inf	-Inf	30.31	3	H	37	1.50	-
2412MHz	Pass	PK	4.824G	42.82	74.00	-31.18	0.95	3	H	0	1.25	-
2437MHz	Pass	AV	2.3898G	42.41	54.00	-11.59	30.23	3	V	1	2.66	-
2437MHz	Pass	AV	2.43844G	97.64	Inf	-Inf	30.38	3	V	1	2.66	-
2437MHz	Pass	AV	2.48366G	42.83	54.00	-11.17	30.53	3	V	1	2.66	-
2437MHz	Pass	AV	7.311G	37.68	54.00	-16.32	6.44	3	V	360	1.50	-
2437MHz	Pass	PK	2.38182G	60.37	74.00	-13.63	30.20	3	V	1	2.66	-
2437MHz	Pass	PK	2.43806G	109.20	Inf	-Inf	30.38	3	V	1	2.66	-
2437MHz	Pass	PK	2.48404G	62.37	74.00	-11.63	30.53	3	V	1	2.66	-
2437MHz	Pass	PK	7.311G	52.75	74.00	-21.25	6.44	3	V	360	1.50	-
2437MHz	Pass	AV	2.389998G	42.59	54.00	-11.41	30.23	3	H	40	1.26	-
2437MHz	Pass	AV	2.43806G	100.91	Inf	-Inf	30.38	3	H	40	1.26	-
2437MHz	Pass	AV	2.48404G	44.54	54.00	-9.46	30.53	3	H	40	1.26	-
2437MHz	Pass	AV	7.311G	35.65	54.00	-18.35	6.44	3	H	0	1.50	-
2437MHz	Pass	PK	2.389998G	63.65	74.00	-10.35	30.23	3	H	40	1.26	-
2437MHz	Pass	PK	2.43692G	113.13	Inf	-Inf	30.38	3	H	40	1.26	-
2437MHz	Pass	PK	2.49088G	67.49	74.00	-6.51	30.55	3	H	40	1.26	-
2437MHz	Pass	PK	7.311G	49.54	74.00	-24.46	6.44	3	H	0	1.50	-
2462MHz	Pass	AV	2.4606G	95.89	Inf	-Inf	30.45	3	V	18	3.59	-
2462MHz	Pass	AV	2.483502G	47.94	54.00	-6.06	30.53	3	V	18	3.59	-
2462MHz	Pass	AV	7.386G	35.45	54.00	-18.55	6.62	3	V	339	1.24	-
2462MHz	Pass	PK	2.4596G	107.73	Inf	-Inf	30.45	3	V	18	3.59	-
2462MHz	Pass	PK	2.483502G	68.00	74.00	-6.00	30.53	3	V	18	3.59	-
2462MHz	Pass	PK	7.386G	50.11	74.00	-23.89	6.62	3	V	339	1.24	-
2462MHz	Pass	AV	2.4608G	99.54	Inf	-Inf	30.45	3	H	43	1.50	-
2462MHz	Pass	AV	2.483502G	52.69	54.00	-1.31	30.53	3	H	43	1.50	-
2462MHz	Pass	AV	7.386G	34.84	54.00	-19.16	6.62	3	H	357	1.01	-
2462MHz	Pass	PK	2.4594G	111.51	Inf	-Inf	30.45	3	H	43	1.50	-
2462MHz	Pass	PK	2.483502G	72.25	74.00	-1.75	30.53	3	H	43	1.50	-
2462MHz	Pass	PK	7.386G	48.98	74.00	-25.02	6.62	3	H	357	1.01	-
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.389998G	52.32	54.00	-1.68	30.23	3	V	329	1.70	-
2412MHz	Pass	AV	2.410576G	96.06	Inf	-Inf	30.29	3	V	329	1.70	-
2412MHz	Pass	AV	4.824G	28.99	54.00	-25.01	0.95	3	V	0	1.50	-
2412MHz	Pass	PK	2.389998G	72.58	74.00	-1.42	30.23	3	V	329	1.70	-
2412MHz	Pass	PK	2.410128G	108.27	Inf	-Inf	30.29	3	V	329	1.70	-
2412MHz	Pass	PK	4.824G	43.12	74.00	-30.88	0.95	3	V	0	1.50	-
2412MHz	Pass	AV	2.389998G	53.44	54.00	-0.56	30.23	3	H	38	1.49	-
2412MHz	Pass	AV	2.413488G	98.45	Inf	-Inf	30.30	3	H	38	1.49	-
2412MHz	Pass	AV	4.824G	28.88	54.00	-25.12	0.95	3	H	360	1.50	-
2412MHz	Pass	PK	2.389998G	71.77	74.00	-2.23	30.23	3	H	38	1.49	-
2412MHz	Pass	PK	2.414384G	110.43	Inf	-Inf	30.31	3	H	38	1.49	-
2412MHz	Pass	PK	4.824G	42.89	74.00	-31.11	0.95	3	H	360	1.50	-
2437MHz	Pass	AV	2.389998G	42.46	54.00	-11.54	30.23	3	V	13	3.66	-
2437MHz	Pass	AV	2.43844G	97.62	Inf	-Inf	30.38	3	V	13	3.66	-



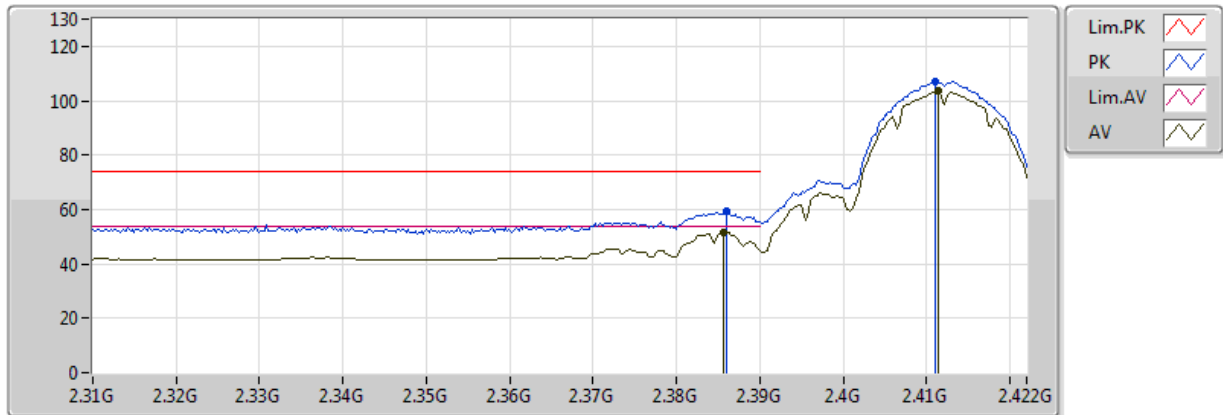
RSE TX above 1GHz Result

Appendix F

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	2.48366G	43.03	54.00	-10.97	30.53	3	V	13	3.66	-
2437MHz	Pass	AV	7.311G	38.51	54.00	-15.49	6.44	3	V	342	1.02	-
2437MHz	Pass	PK	2.38752G	56.11	74.00	-17.89	30.22	3	V	13	3.66	-
2437MHz	Pass	PK	2.43502G	109.37	Inf	-Inf	30.37	3	V	13	3.66	-
2437MHz	Pass	PK	2.49088G	59.08	74.00	-14.92	30.55	3	V	13	3.66	-
2437MHz	Pass	PK	7.311G	53.74	74.00	-20.26	6.44	3	V	342	1.02	-
2437MHz	Pass	AV	2.389998G	42.93	54.00	-11.07	30.23	3	H	43	1.51	-
2437MHz	Pass	AV	2.43844G	101.07	Inf	-Inf	30.38	3	H	43	1.51	-
2437MHz	Pass	AV	2.48404G	45.32	54.00	-8.68	30.53	3	H	43	1.51	-
2437MHz	Pass	AV	7.311G	34.25	54.00	-19.75	6.44	3	H	360	1.50	-
2437MHz	Pass	PK	2.38638G	58.93	74.00	-15.07	30.22	3	H	43	1.51	-
2437MHz	Pass	PK	2.4392G	112.93	Inf	-Inf	30.39	3	H	43	1.51	-
2437MHz	Pass	PK	2.4886G	64.39	74.00	-9.61	30.54	3	H	43	1.51	-
2437MHz	Pass	PK	7.311G	48.08	74.00	-25.92	6.44	3	H	360	1.50	-
2462MHz	Pass	AV	2.4604G	95.63	Inf	-Inf	30.45	3	V	20	3.53	-
2462MHz	Pass	AV	2.483502G	49.47	54.00	-4.53	30.53	3	V	20	3.53	-
2462MHz	Pass	AV	7.386G	35.24	54.00	-18.76	6.62	3	V	360	1.50	-
2462MHz	Pass	PK	2.4602G	107.36	Inf	-Inf	30.45	3	V	20	3.53	-
2462MHz	Pass	PK	2.483502G	71.42	74.00	-2.58	30.53	3	V	20	3.53	-
2462MHz	Pass	PK	7.386G	48.99	74.00	-25.01	6.62	3	V	360	1.50	-
2462MHz	Pass	AV	2.46G	99.65	Inf	-Inf	30.45	3	H	19	1.37	-
2462MHz	Pass	AV	2.483502G	53.28	54.00	-0.72	30.53	3	H	19	1.37	-
2462MHz	Pass	AV	7.386G	34.93	54.00	-19.07	6.62	3	H	0	1.50	-
2462MHz	Pass	PK	2.464G	111.37	Inf	-Inf	30.46	3	H	19	1.37	-
2462MHz	Pass	PK	2.4836G	73.39	74.00	-0.61	30.53	3	H	19	1.37	-
2462MHz	Pass	PK	7.386G	49.00	74.00	-25.00	6.62	3	H	0	1.50	-

802.11b_(1Mbps)_1TX

2412MHz_TX

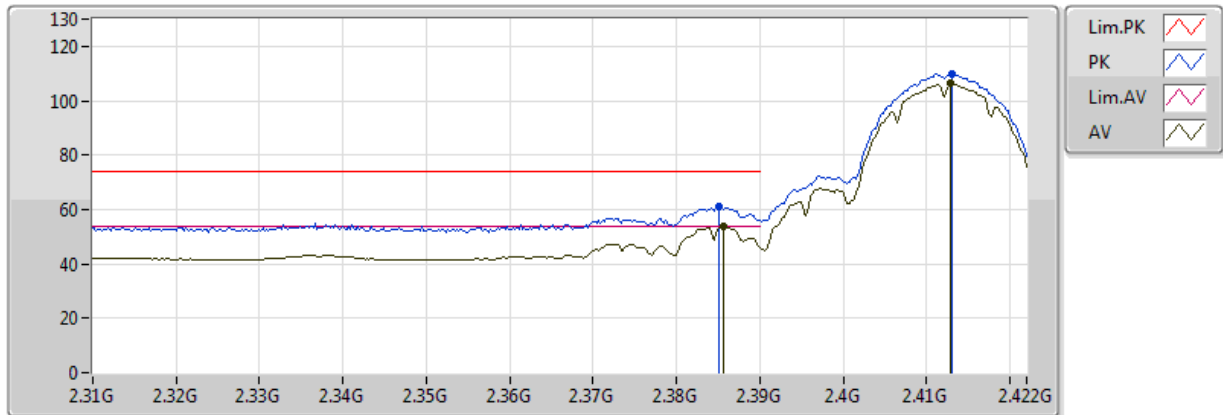


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.385712G	51.82	54.00	-2.18	30.22	3	V	346	1.72	-
AV	2.411472G	103.43	Inf	-Inf	30.30	3	V	346	1.72	-
PK	2.385936G	59.21	74.00	-14.79	30.22	3	V	346	1.72	-
PK	2.411024G	107.10	Inf	-Inf	30.30	3	V	346	1.72	-

802.11b_(1Mbps)_1TX

2412MHz_TX

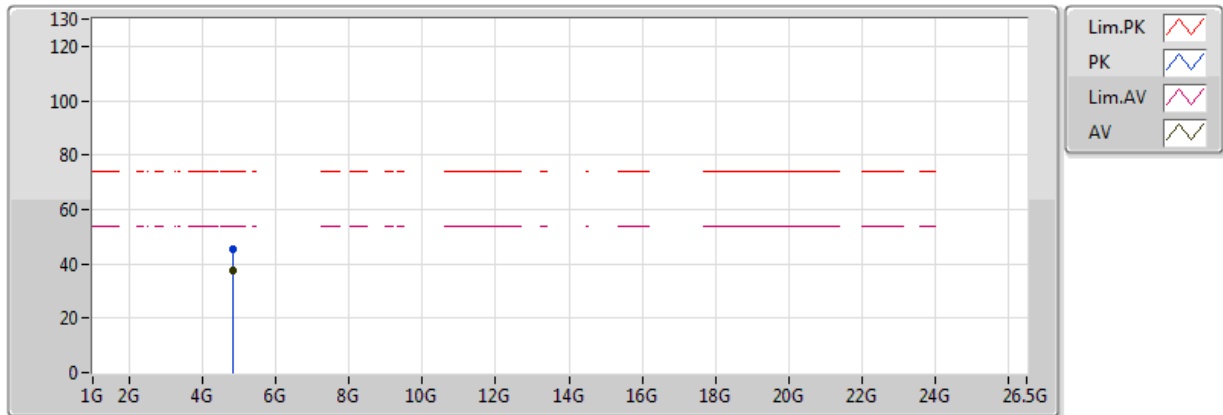


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.385712G	53.90	54.00	-0.10	30.22	3	H	37	1.50	-
AV	2.412816G	106.20	Inf	-Inf	30.30	3	H	37	1.50	-
PK	2.38504G	60.92	74.00	-13.08	30.21	3	H	37	1.50	-
PK	2.41304G	110.05	Inf	-Inf	30.30	3	H	37	1.50	-

802.11b_(1Mbps)_1TX

2412MHz_TX

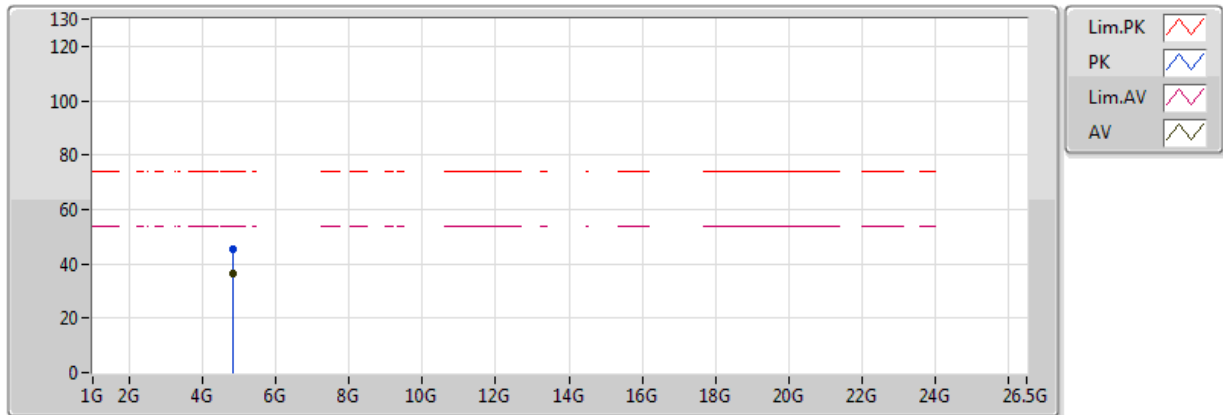


EUT = Y axis

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	37.38	54.00	-16.62	0.95	3	V	32	1.74	-
PK	4.824G	45.33	74.00	-28.67	0.95	3	V	32	1.74	-

802.11b_(1Mbps)_1TX

2412MHz_TX

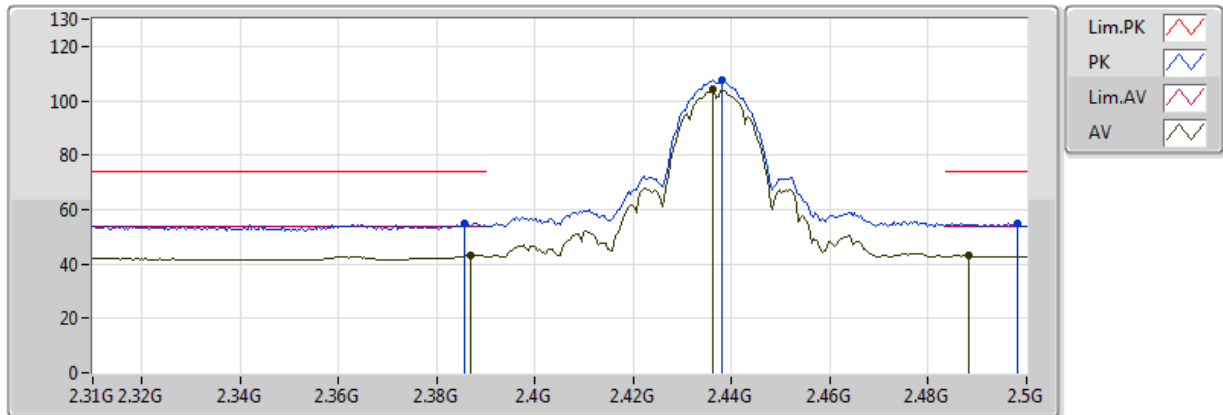


EUT = Y axis

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	36.23	54.00	-17.77	0.95	3	H	5	1.06	-
PK	4.824G	45.14	74.00	-28.86	0.95	3	H	5	1.06	-

802.11b_(1Mbps)_1TX

2437MHz_TX

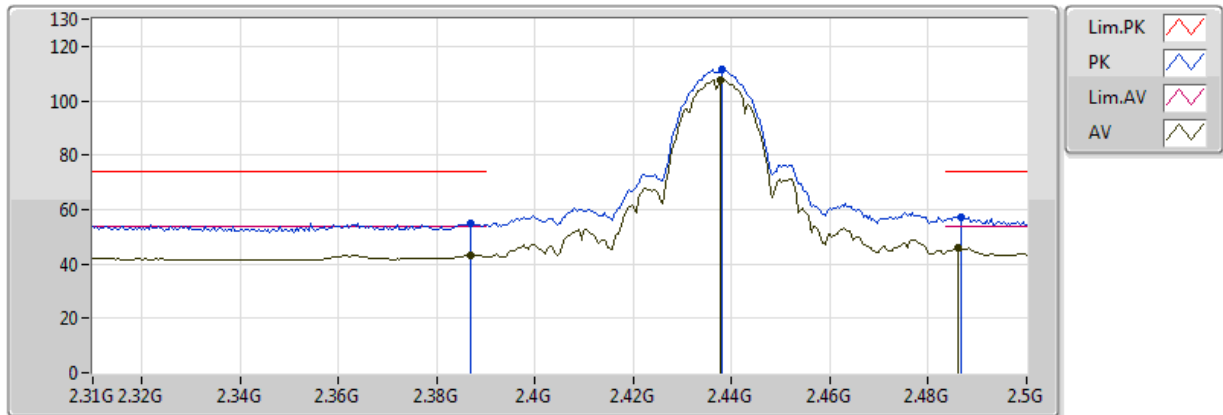


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.38676G	43.25	54.00	-10.75	30.22	3	V	353	2.02	-
AV	2.43616G	104.05	Inf	-Inf	30.38	3	V	353	2.02	-
AV	2.48822G	43.08	54.00	-10.92	30.54	3	V	353	2.02	-
PK	2.38562G	55.04	74.00	-18.96	30.22	3	V	353	2.02	-
PK	2.43806G	107.69	Inf	-Inf	30.38	3	V	353	2.02	-
PK	2.4981G	54.97	74.00	-19.03	30.57	3	V	353	2.02	-

802.11b_(1Mbps)_1TX

2437MHz_TX

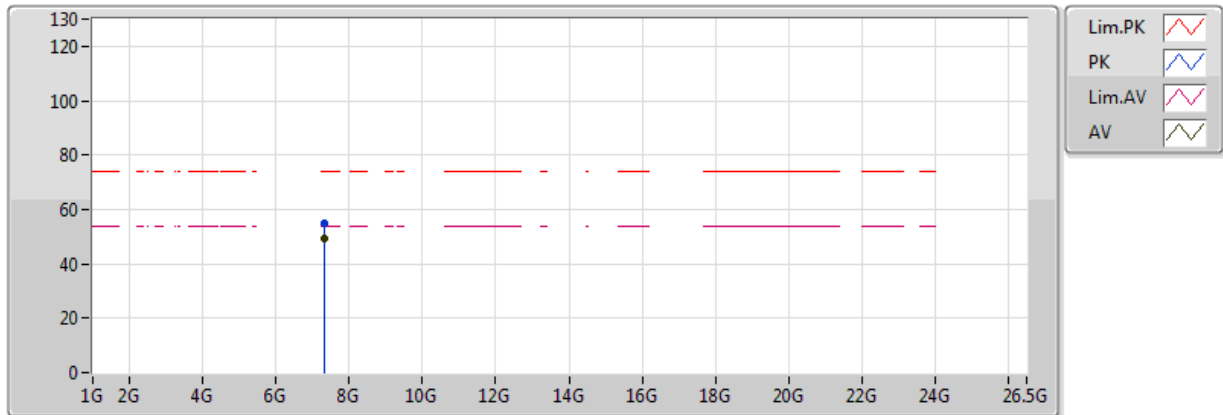


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.38676G	43.15	54.00	-10.85	30.22	3	H	39	1.27	-
AV	2.43768G	107.74	Inf	-Inf	30.38	3	H	39	1.27	-
AV	2.48594G	45.89	54.00	-8.11	30.54	3	H	39	1.27	-
PK	2.38676G	54.85	74.00	-19.15	30.22	3	H	39	1.27	-
PK	2.43806G	111.75	Inf	-Inf	30.38	3	H	39	1.27	-
PK	2.4867G	57.14	74.00	-16.86	30.54	3	H	39	1.27	-

802.11b_(1Mbps)_1TX

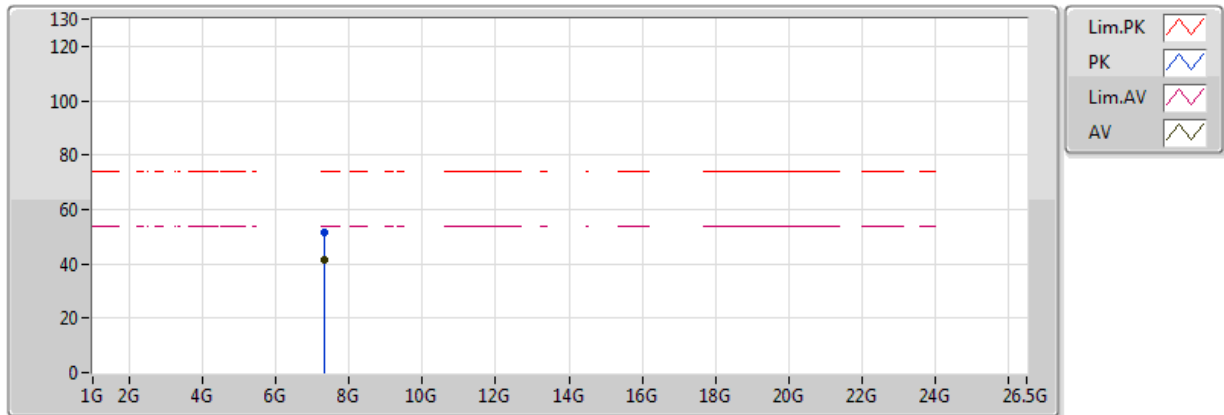
2437MHz_TX



Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	49.06	54.00	-4.94	6.44	3	V	342	1.02	-
PK	7.311G	55.07	74.00	-18.93	6.44	3	V	342	1.02	-

802.11b_(1Mbps)_1TX

2437MHz_TX

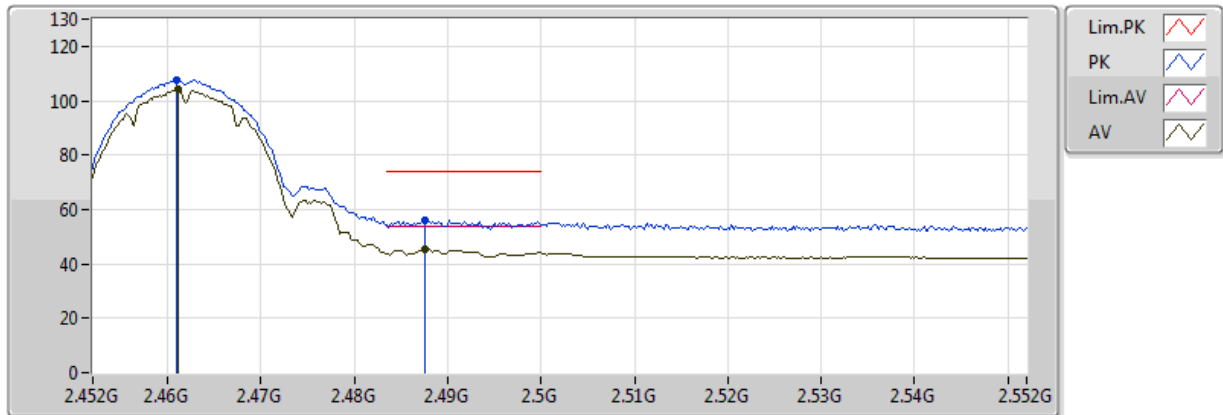


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	41.51	54.00	-12.49	6.44	3	H	14	1.17	-
PK	7.311G	51.34	74.00	-22.66	6.44	3	H	14	1.17	-

802.11b_(1Mbps)_1TX

2462MHz_TX

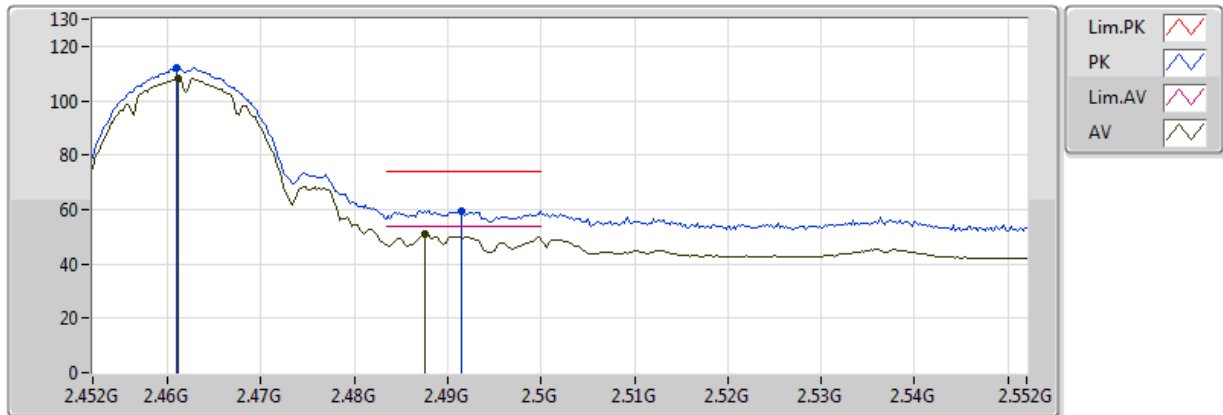


EUT = Y axis

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	104.11	Inf	-Inf	30.46	3	V	7	2.28	-
AV	2.4876G	45.49	54.00	-8.51	30.54	3	V	7	2.28	-
PK	2.461G	107.79	Inf	-Inf	30.46	3	V	7	2.28	-
PK	2.4876G	55.99	74.00	-18.01	30.54	3	V	7	2.28	-

802.11b_(1Mbps)_1TX

2462MHz_TX

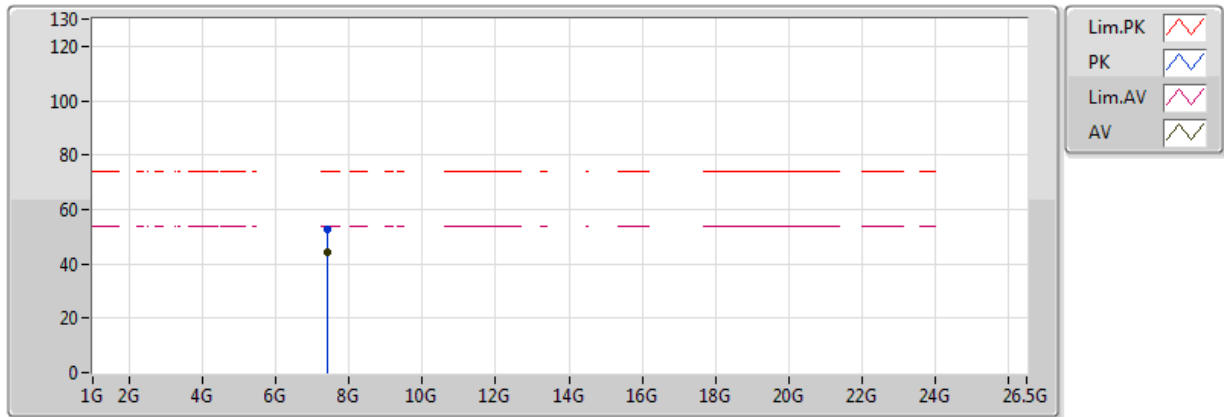


EUT = Y axis

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	108.23	Inf	-Inf	30.46	3	H	43	1.51	-
AV	2.4876G	50.81	54.00	-3.19	30.54	3	H	43	1.51	-
PK	2.461G	111.97	Inf	-Inf	30.46	3	H	43	1.51	-
PK	2.4914G	59.59	74.00	-14.41	30.55	3	H	43	1.51	-

802.11b_(1Mbps)_1TX

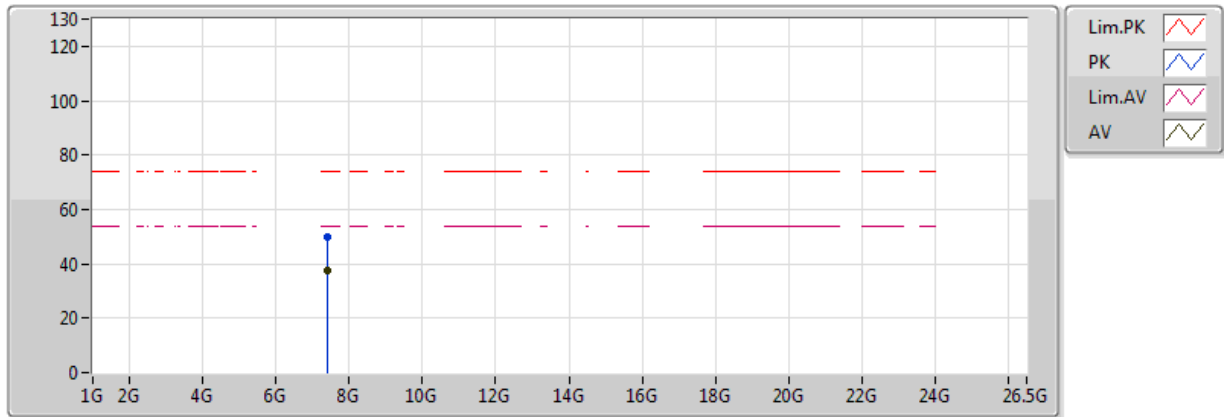
2462MHz_TX



Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.386G	44.03	54.00	-9.97	6.62	3	V	341	1.08	-
PK	7.386G	52.75	74.00	-21.25	6.62	3	V	341	1.08	-

802.11b_(1Mbps)_1TX

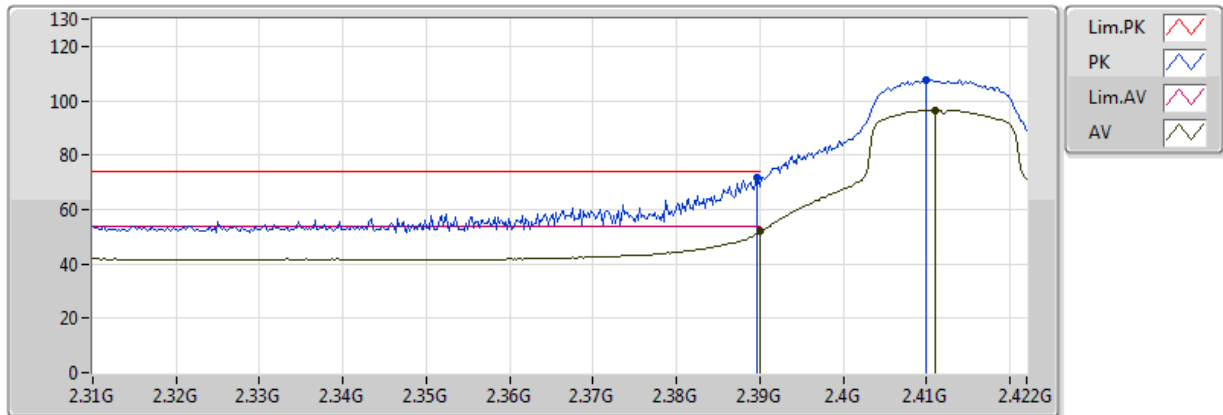
2462MHz_TX



Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.386G	37.79	54.00	-16.21	6.62	3	H	347	2.22	-
PK	7.386G	50.13	74.00	-23.87	6.62	3	H	347	2.22	-

802.11g_(6Mbps)_1TX

2412MHz_TX

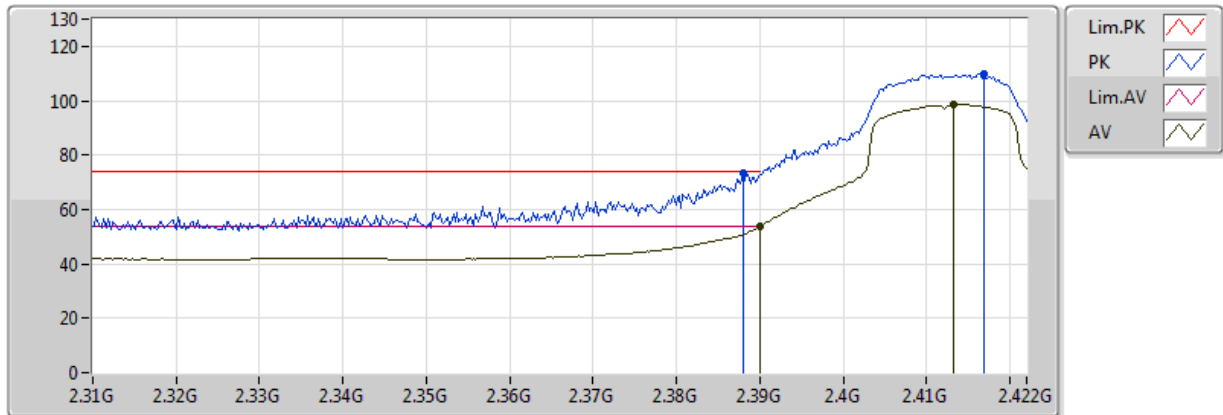


EUT = Y axis

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	52.00	54.00	-2.00	30.23	3	V	346	1.72	-
AV	2.411024G	96.56	Inf	-Inf	30.30	3	V	346	1.72	-
PK	2.389744G	71.52	74.00	-2.48	30.23	3	V	346	1.72	-
PK	2.409904G	107.60	Inf	-Inf	30.29	3	V	346	1.72	-

802.11g_(6Mbps)_1TX

2412MHz_TX

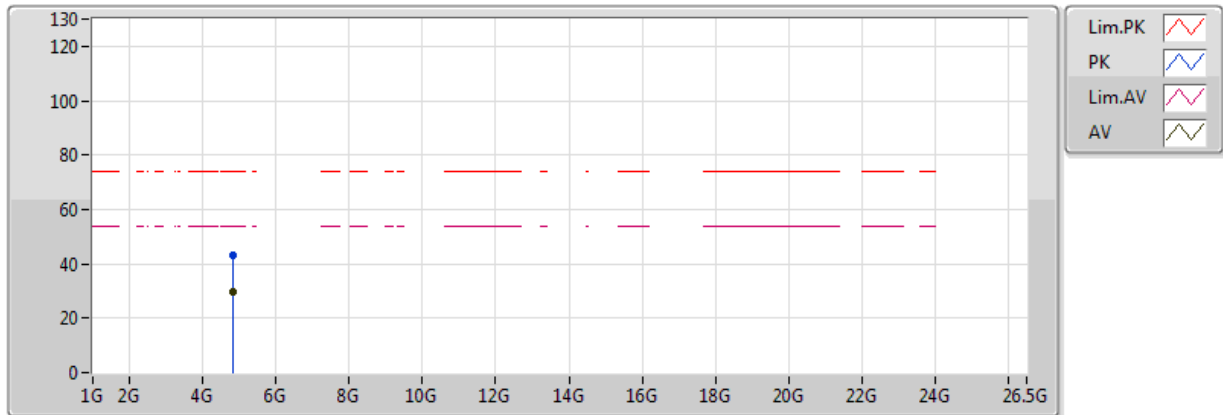


EUT = Y axis

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	53.85	54.00	-0.15	30.23	3	H	37	1.50	-
AV	2.413264G	98.69	Inf	-Inf	30.30	3	H	37	1.50	-
PK	2.387952G	73.40	74.00	-0.60	30.22	3	H	37	1.50	-
PK	2.416848G	109.71	Inf	-Inf	30.31	3	H	37	1.50	-

802.11g_(6Mbps)_1TX

2412MHz_TX

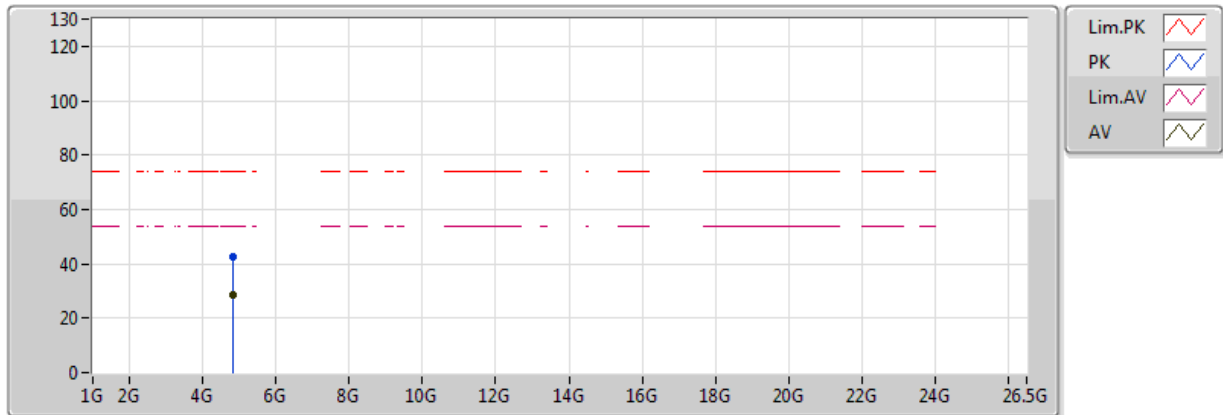


EUT = Y axis

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	29.60	54.00	-24.40	0.95	3	V	360	1.50	-
PK	4.824G	42.88	74.00	-31.12	0.95	3	V	360	1.50	-

802.11g_(6Mbps)_1TX

2412MHz_TX

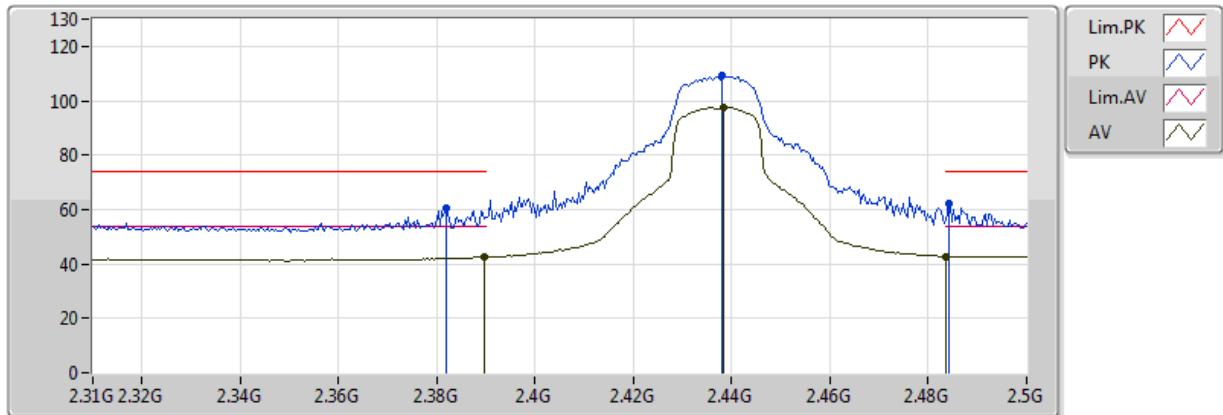


EUT = Y axis

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	28.72	54.00	-25.28	0.95	3	H	0	1.25	-
PK	4.824G	42.82	74.00	-31.18	0.95	3	H	0	1.25	-

802.11g_(6Mbps)_1TX

2437MHz_TX

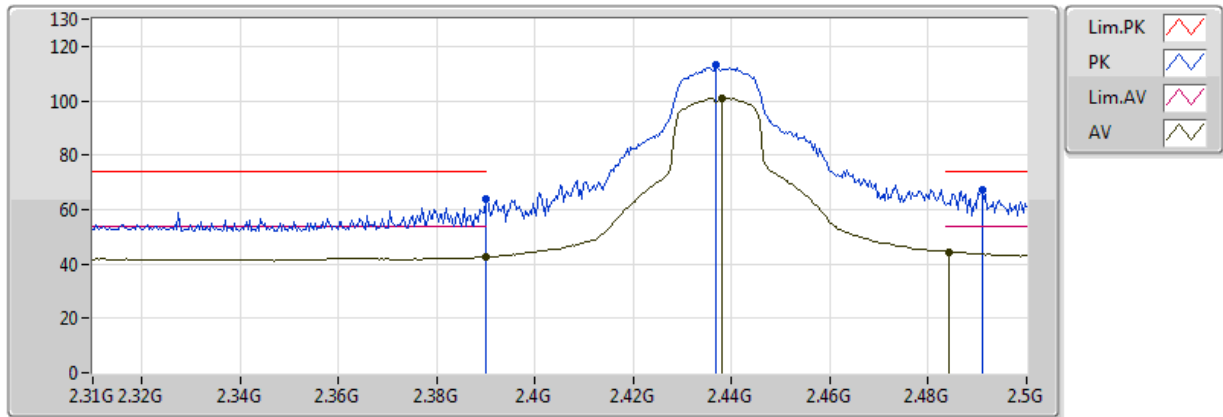


EUT = Y axis

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	42.41	54.00	-11.59	30.23	3	V	1	2.66	-
AV	2.43844G	97.64	Inf	-Inf	30.38	3	V	1	2.66	-
AV	2.48366G	42.83	54.00	-11.17	30.53	3	V	1	2.66	-
PK	2.38182G	60.37	74.00	-13.63	30.20	3	V	1	2.66	-
PK	2.43806G	109.20	Inf	-Inf	30.38	3	V	1	2.66	-
PK	2.48404G	62.37	74.00	-11.63	30.53	3	V	1	2.66	-

802.11g_(6Mbps)_1TX

2437MHz_TX

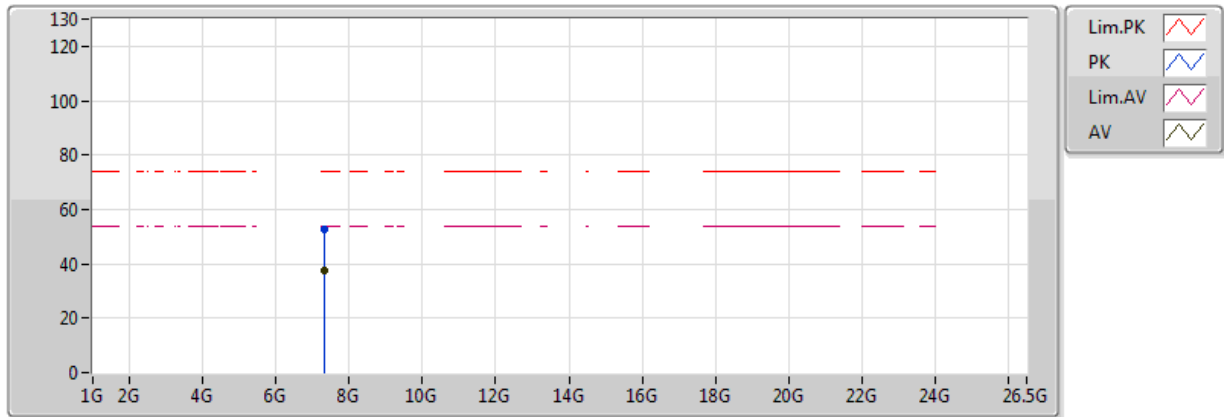


EUT = Y axis

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	42.59	54.00	-11.41	30.23	3	H	40	1.26	-
AV	2.43806G	100.91	Inf	-Inf	30.38	3	H	40	1.26	-
AV	2.48404G	44.54	54.00	-9.46	30.53	3	H	40	1.26	-
PK	2.389998G	63.65	74.00	-10.35	30.23	3	H	40	1.26	-
PK	2.43692G	113.13	Inf	-Inf	30.38	3	H	40	1.26	-
PK	2.49088G	67.49	74.00	-6.51	30.55	3	H	40	1.26	-

802.11g_(6Mbps)_1TX

2437MHz_TX

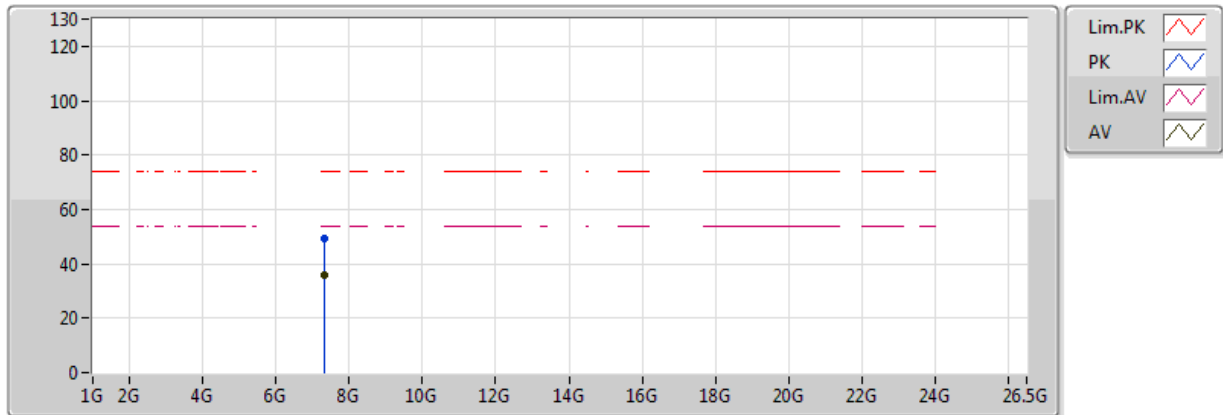


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	37.68	54.00	-16.32	6.44	3	V	360	1.50	-
PK	7.311G	52.75	74.00	-21.25	6.44	3	V	360	1.50	-

802.11g_(6Mbps)_1TX

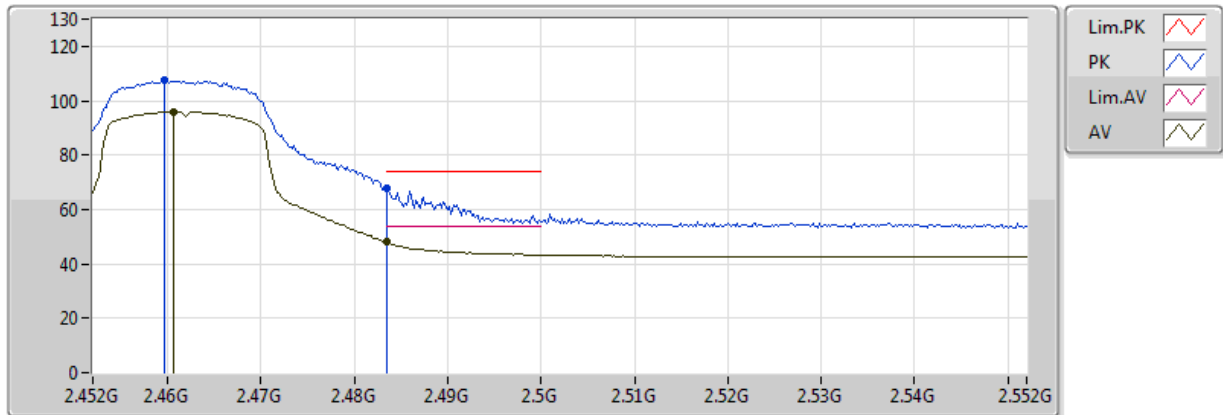
2437MHz_TX



Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	35.65	54.00	-18.35	6.44	3	H	0	1.50	-
PK	7.311G	49.54	74.00	-24.46	6.44	3	H	0	1.50	-

802.11g_(6Mbps)_1TX

2462MHz_TX

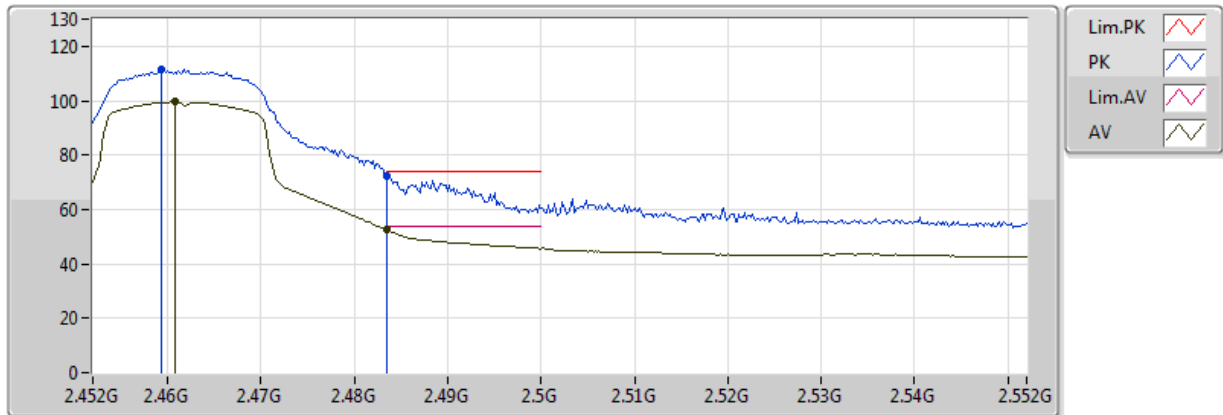


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4606G	95.89	Inf	-Inf	30.45	3	V	18	3.59	-
AV	2.483502G	47.94	54.00	-6.06	30.53	3	V	18	3.59	-
PK	2.4596G	107.73	Inf	-Inf	30.45	3	V	18	3.59	-
PK	2.483502G	68.00	74.00	-6.00	30.53	3	V	18	3.59	-

802.11g_(6Mbps)_1TX

2462MHz_TX

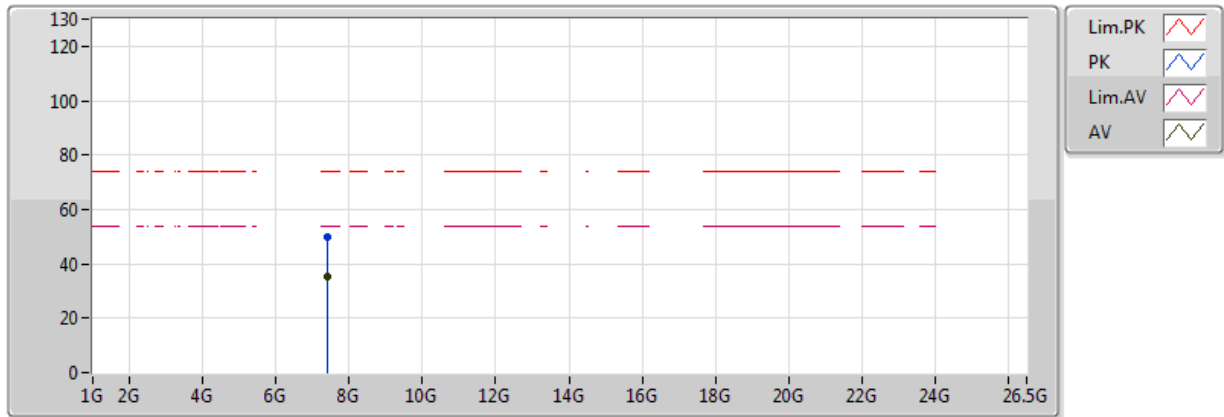


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4608G	99.54	Inf	-Inf	30.45	3	H	43	1.50	-
AV	2.483502G	52.69	54.00	-1.31	30.53	3	H	43	1.50	-
PK	2.4594G	111.51	Inf	-Inf	30.45	3	H	43	1.50	-
PK	2.483502G	72.25	74.00	-1.75	30.53	3	H	43	1.50	-

802.11g_(6Mbps)_1TX

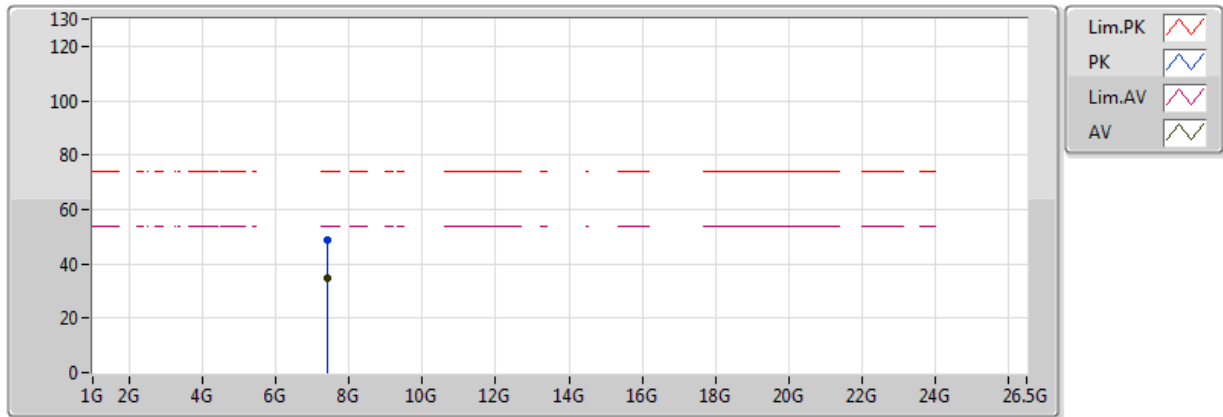
2462MHz_TX



Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.386G	35.45	54.00	-18.55	6.62	3	V	339	1.24	-
PK	7.386G	50.11	74.00	-23.89	6.62	3	V	339	1.24	-

802.11g_(6Mbps)_1TX

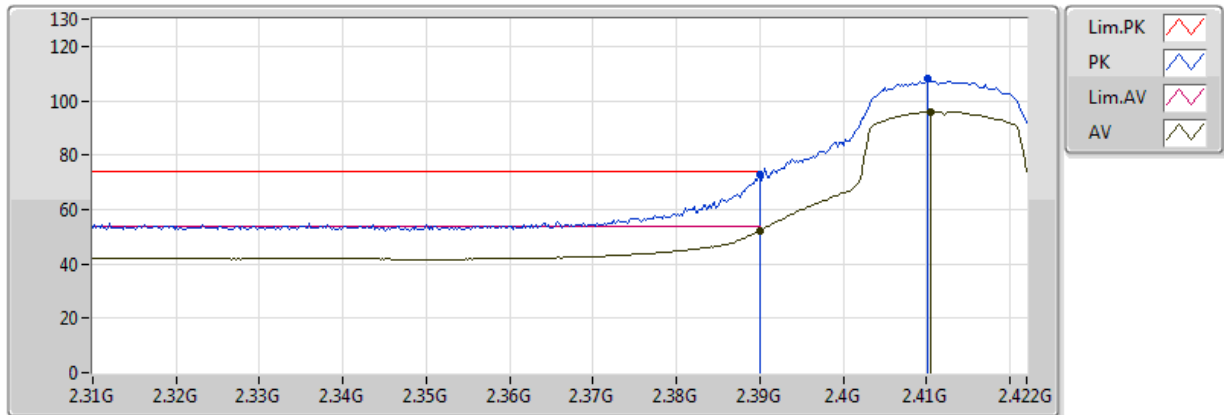
2462MHz_TX



Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.386G	34.84	54.00	-19.16	6.62	3	H	357	1.01	-
PK	7.386G	48.98	74.00	-25.02	6.62	3	H	357	1.01	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

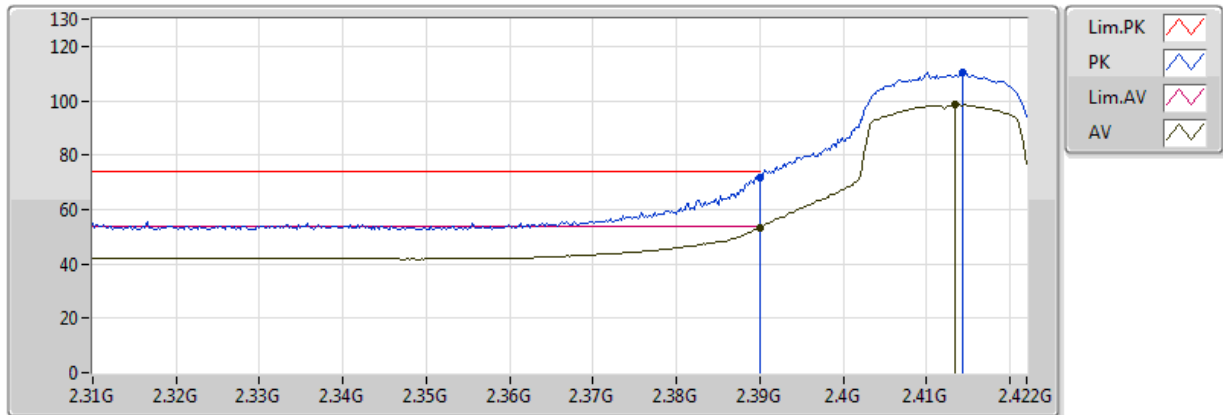


EUT = Y axis

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	52.32	54.00	-1.68	30.23	3	V	329	1.70	-
AV	2.410576G	96.06	Inf	-Inf	30.29	3	V	329	1.70	-
PK	2.389998G	72.58	74.00	-1.42	30.23	3	V	329	1.70	-
PK	2.410128G	108.27	Inf	-Inf	30.29	3	V	329	1.70	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

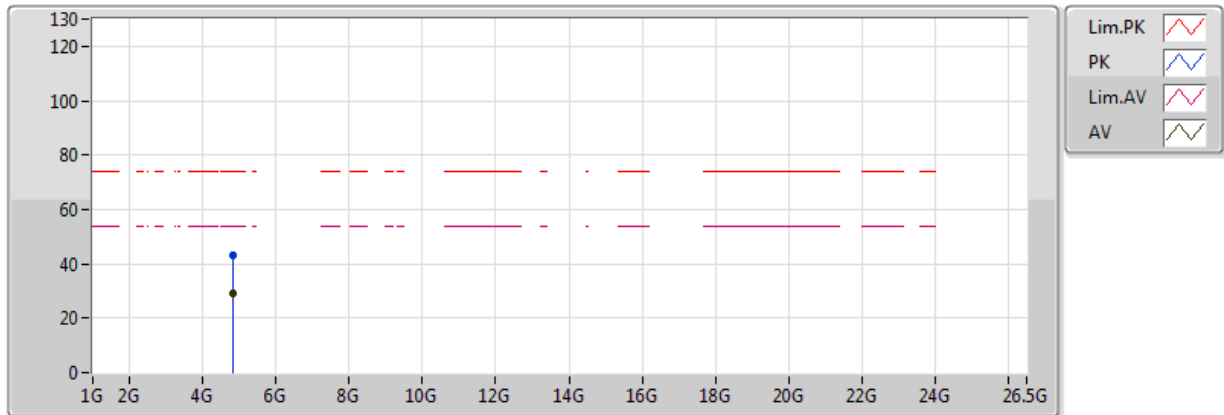


EUT = Y axis

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	53.44	54.00	-0.56	30.23	3	H	38	1.49	-
AV	2.413488G	98.45	Inf	-Inf	30.30	3	H	38	1.49	-
PK	2.389998G	71.77	74.00	-2.23	30.23	3	H	38	1.49	-
PK	2.414384G	110.43	Inf	-Inf	30.31	3	H	38	1.49	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

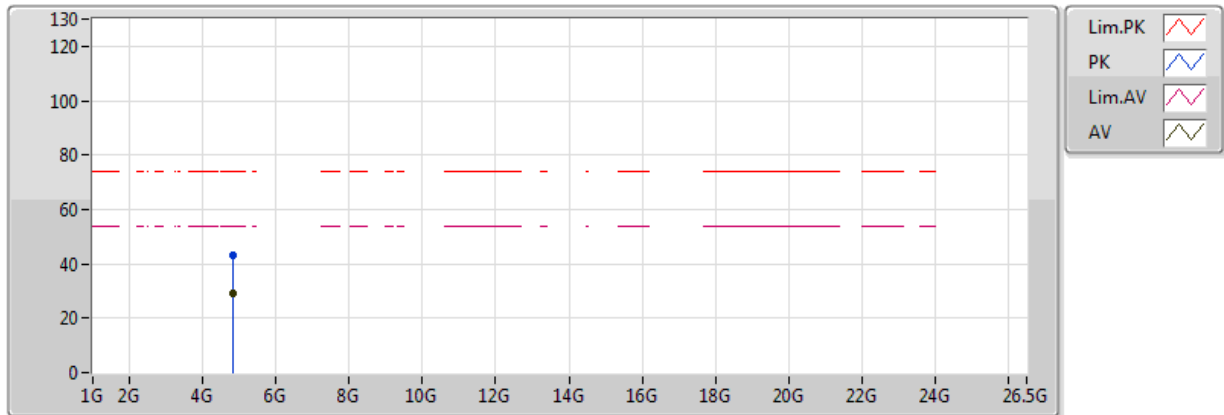


EUT = Y axis

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	28.99	54.00	-25.01	0.95	3	V	0	1.50	-
PK	4.824G	43.12	74.00	-30.88	0.95	3	V	0	1.50	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

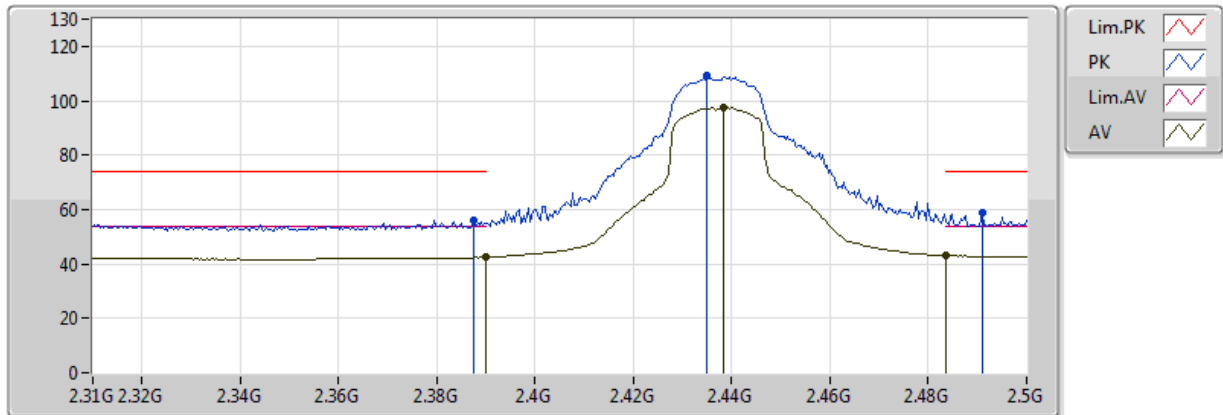


EUT = Y axis

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	28.88	54.00	-25.12	0.95	3	H	360	1.50	-
PK	4.824G	42.89	74.00	-31.11	0.95	3	H	360	1.50	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

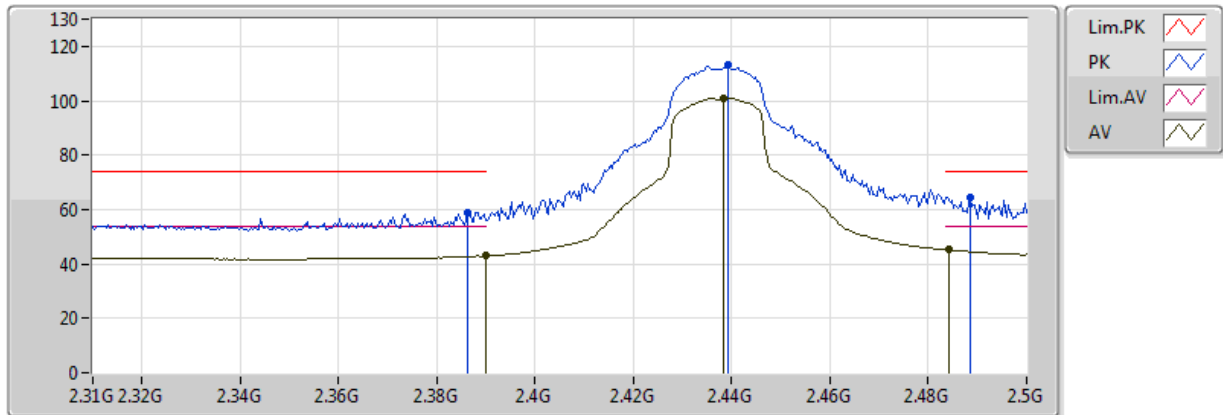


EUT = Y axis

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	42.46	54.00	-11.54	30.23	3	V	13	3.66	-
AV	2.43844G	97.62	Inf	-Inf	30.38	3	V	13	3.66	-
AV	2.48366G	43.03	54.00	-10.97	30.53	3	V	13	3.66	-
PK	2.38752G	56.11	74.00	-17.89	30.22	3	V	13	3.66	-
PK	2.43502G	109.37	Inf	-Inf	30.37	3	V	13	3.66	-
PK	2.49088G	59.08	74.00	-14.92	30.55	3	V	13	3.66	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

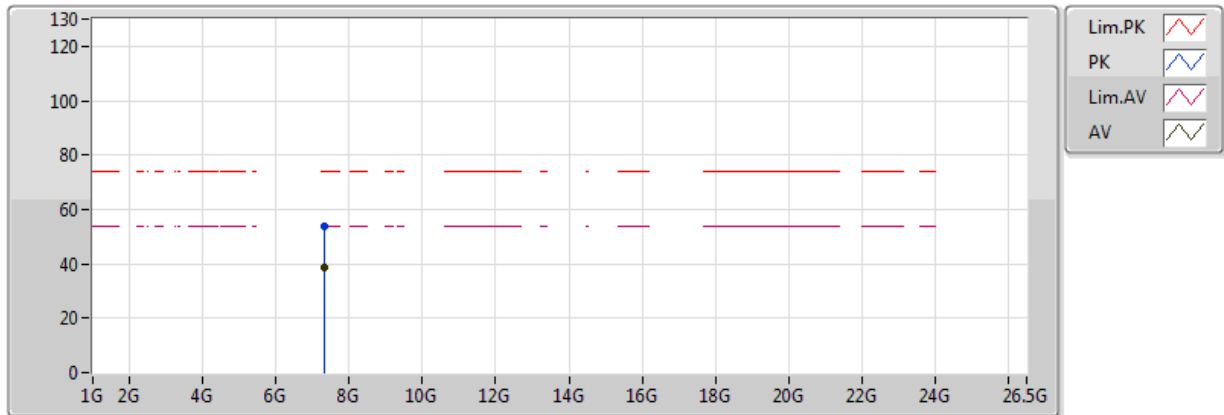


EUT = Y axis

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	42.93	54.00	-11.07	30.23	3	H	43	1.51	-
AV	2.43844G	101.07	Inf	-Inf	30.38	3	H	43	1.51	-
AV	2.48404G	45.32	54.00	-8.68	30.53	3	H	43	1.51	-
PK	2.38638G	58.93	74.00	-15.07	30.22	3	H	43	1.51	-
PK	2.4392G	112.93	Inf	-Inf	30.39	3	H	43	1.51	-
PK	2.4886G	64.39	74.00	-9.61	30.54	3	H	43	1.51	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

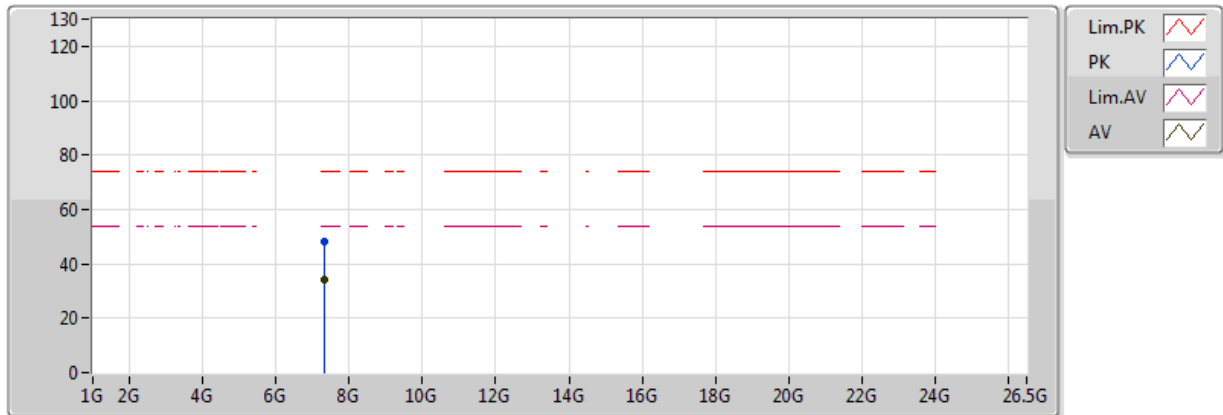


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	38.51	54.00	-15.49	6.44	3	V	342	1.02	-
PK	7.311G	53.74	74.00	-20.26	6.44	3	V	342	1.02	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

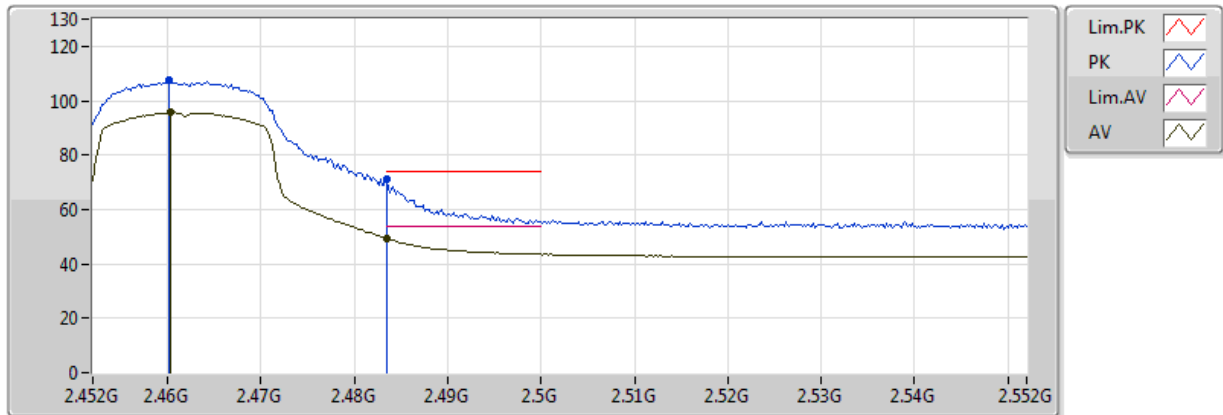


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.311G	34.25	54.00	-19.75	6.44	3	H	360	1.50	-
PK	7.311G	48.08	74.00	-25.92	6.44	3	H	360	1.50	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

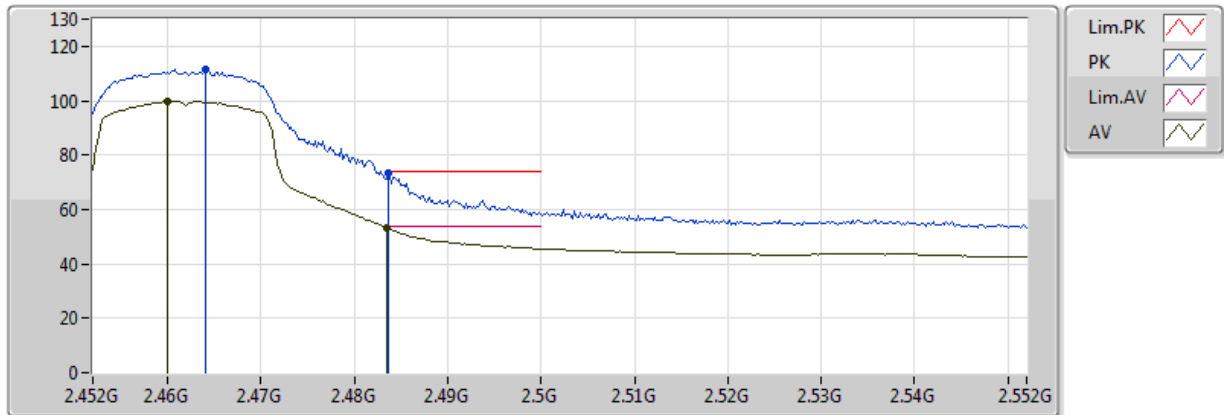


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4604G	95.63	Inf	-Inf	30.45	3	V	20	3.53	-
AV	2.483502G	49.47	54.00	-4.53	30.53	3	V	20	3.53	-
PK	2.4602G	107.36	Inf	-Inf	30.45	3	V	20	3.53	-
PK	2.483502G	71.42	74.00	-2.58	30.53	3	V	20	3.53	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

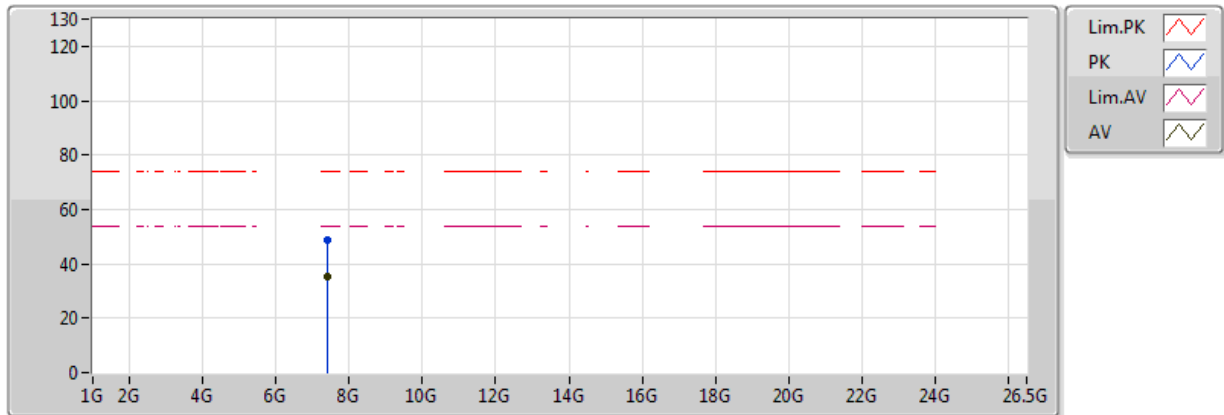


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.46G	99.65	Inf	-Inf	30.45	3	H	19	1.37	-
AV	2.483502G	53.28	54.00	-0.72	30.53	3	H	19	1.37	-
PK	2.464G	111.37	Inf	-Inf	30.46	3	H	19	1.37	-
PK	2.4836G	73.39	74.00	-0.61	30.53	3	H	19	1.37	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

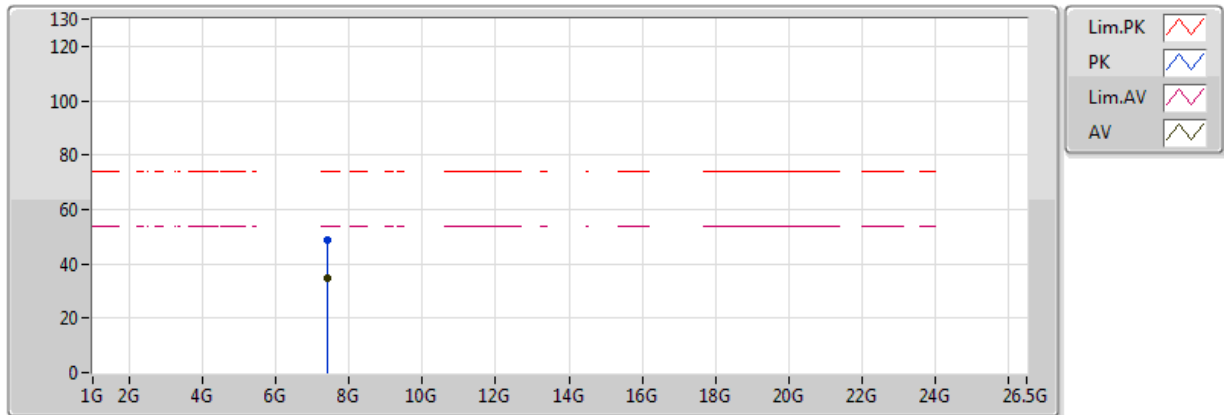


EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.386G	35.24	54.00	-18.76	6.62	3	V	360	1.50	-
PK	7.386G	48.99	74.00	-25.01	6.62	3	V	360	1.50	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX



EUT = Y axis

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.386G	34.93	54.00	-19.07	6.62	3	H	0	1.50	-
PK	7.386G	49.00	74.00	-25.00	6.62	3	H	0	1.50	-