

FCC Test Report

Equipment : 802.11a/b/g/n/ac 2Tx2R USB Combo Module
Brand Name : LITE-ON
Model No. : WN4519L
FCC ID : PPQ-WN4519L
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant : Lite-On Technology Corp.
Bldg. C, 90, Chien 1 Road, Chung Ho, New Taipei City
23585, Taiwan, R.O.C
Manufacturer : LITE-ON TECHNOLOGY (Changzhou) CO., LTD
A9 Building, No.88 Yanghu Road, Wujin Hi-Tech
Industrial Development Zone, Changzhou City,
Jiangsu Province 213100 China

The product sample received on Dec. 28, 2016 and completely tested on Feb. 06, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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


Cliff Chang
SPORTON INTERNATIONAL INC.





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Summary of Test Result

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



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FCC ID: PPQ-WN4519L

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11n HT20	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX

Note:

- ♦ 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.	Port	Brand	P/N	Antenna Type	Connector	Gain (dBi)	Cable Length (mm)	Remark
						2.4GHz		
1	1	PSA	RFMTA401029IMLB701	PIFA Antenna	I-PEX	2.60	300	External Antenna
2	1	PSA	RFMTA401040IMLB701	PIFA Antenna	I-PEX	1.89	400	
3	1	PSA	RFMTA401045IMLB701	PIFA Antenna	I-PEX	1.75	450	
4	1	PSA	RFMTA401050IMLB701	PIFA Antenna	I-PEX	1.71	500	
5	1	PSA	RFMTA401055IMLB701	PIFA Antenna	I-PEX	1.72	550	
6	1	PSA	RFMTA401060IMLB701	PIFA Antenna	I-PEX	1.62	600	
7	2	PSA	RFMTA100600NNLB001	PIFA Antenna	N/A	0.52	-	On board Antenna

Note 1: The EUT has seven antennas.

Note 2: The difference for Ant. 1~6 is cable length. Only cable length: 300mm was tested because it has highest gain.

<For 2.4GHz Band>

For IEEE 802.11b/g/n mode<2TX/2RX>:

Port 1 and Port 2 will transmit/receive the same signal simultaneously.

Port 1 and Port 2 can be used as transmitting/receiving antennas.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11g	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11n HT20	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11n HT40	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

1.1.4 EUT Operational Condition

EUT Power Type	From Host System			
Beamforming Function	☐	With beamforming	☒	Without beamforming

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 v01

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	Gino Huang	22°C / 58%	Jan. 23, 2017
Radiated	03CH01-CB	DK Chang 、Justin Lin	20.7°C / 63%	Jan. 06, 2017~ Feb. 06, 2017
AC Conduction	CO01-CB	Deven Huang	23°C / 60%	Jan. 10, 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)_2TX	-
2412MHz	63/59
2437MHz	63/58
2462MHz	63/59
802.11g_(6Mbps)_2TX	-
2412MHz	63/49
2437MHz	63/47
2462MHz	63/47
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	52/39
2437MHz	63/51
2462MHz	45/33
802.11n HT40_Nss1,(MCS0)_2TX	-
2422MHz	48/36
2437MHz	62/47
2452MHz	42/28

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	CTX

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 9kHz~30MHz	CTX
1	Place EUT in X axis
2	Place EUT in Y axis
3	Place EUT in Z axis
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode 30MHz~1GHz	CTX
1	Place EUT in X axis
2	Place EUT in Y axis
3	Place EUT in Z axis
For operating mode 3 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT was performed at X axis, Y axis and Z axis position. The worst case was found at Y axis, so it was selected to perform test and its test result was written in the report.	

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

N/A

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E6430	DoC
2	Test fixture	LiteOn	TB006	DoC

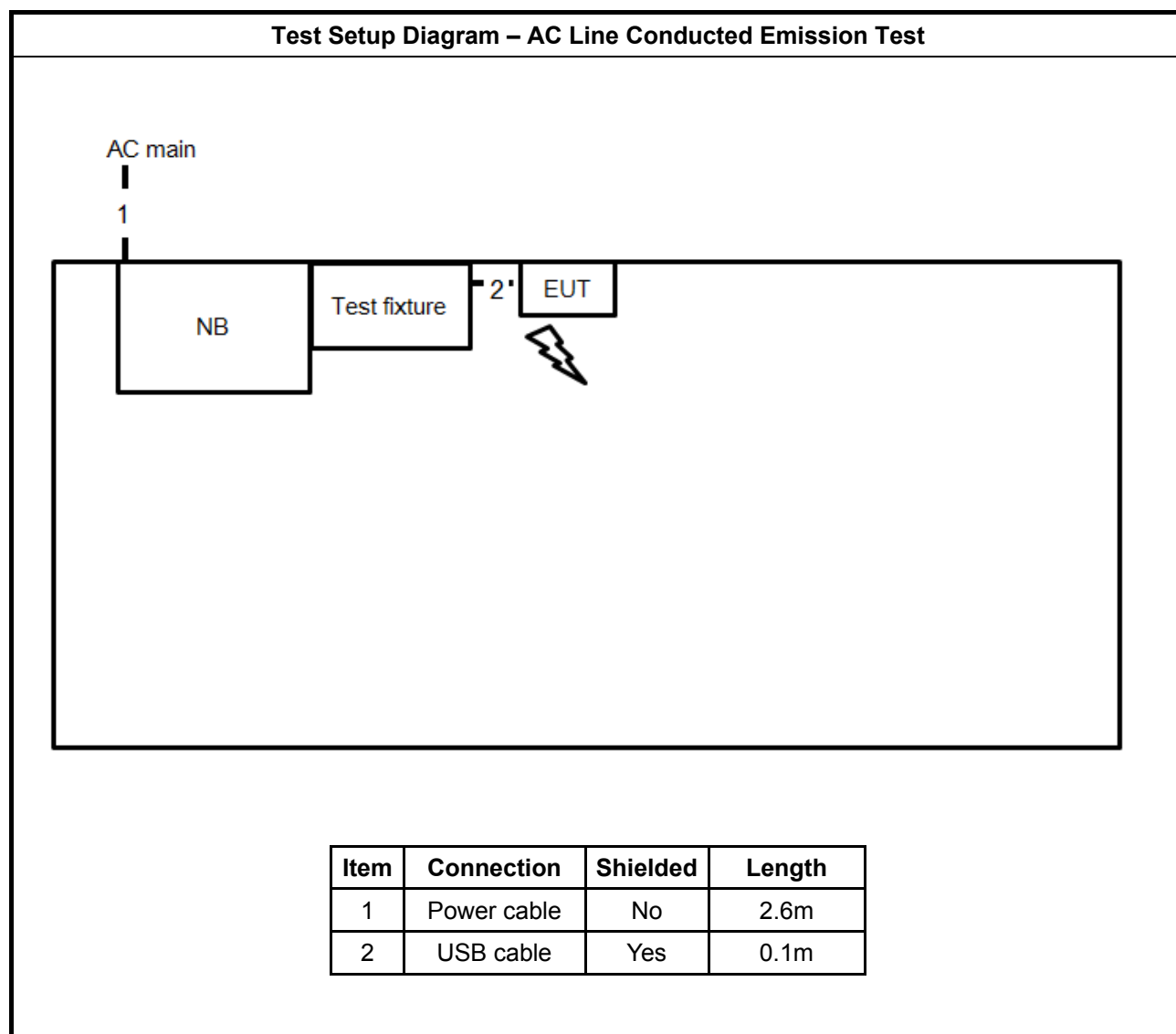
For Test Site No: 03CH01-CB

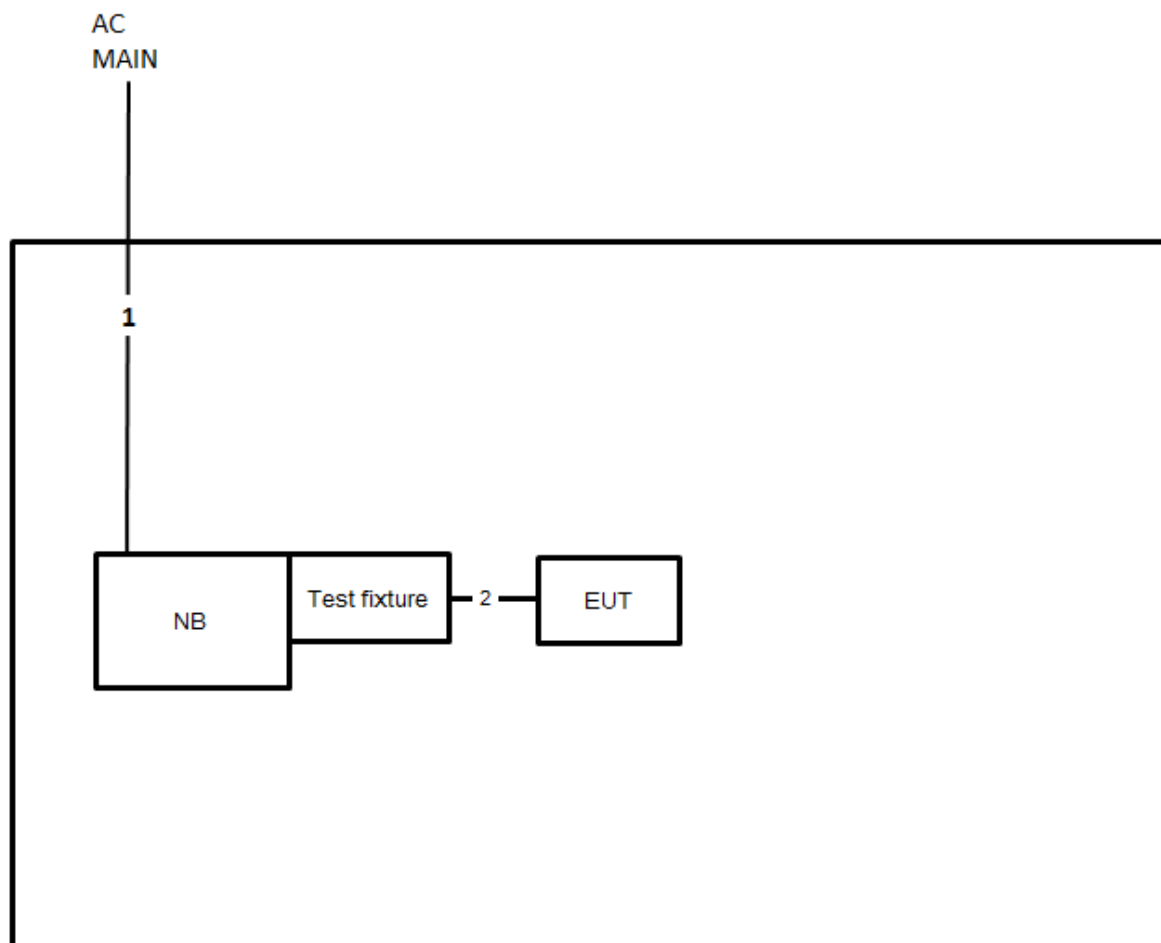
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DoC
2	Test fixture	Liteon	TB006	DoC

For Test Site No: TH01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DoC
2	Test fixture	Liteon	TB006	DoC

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	USB cable	Yes	0.1m

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.

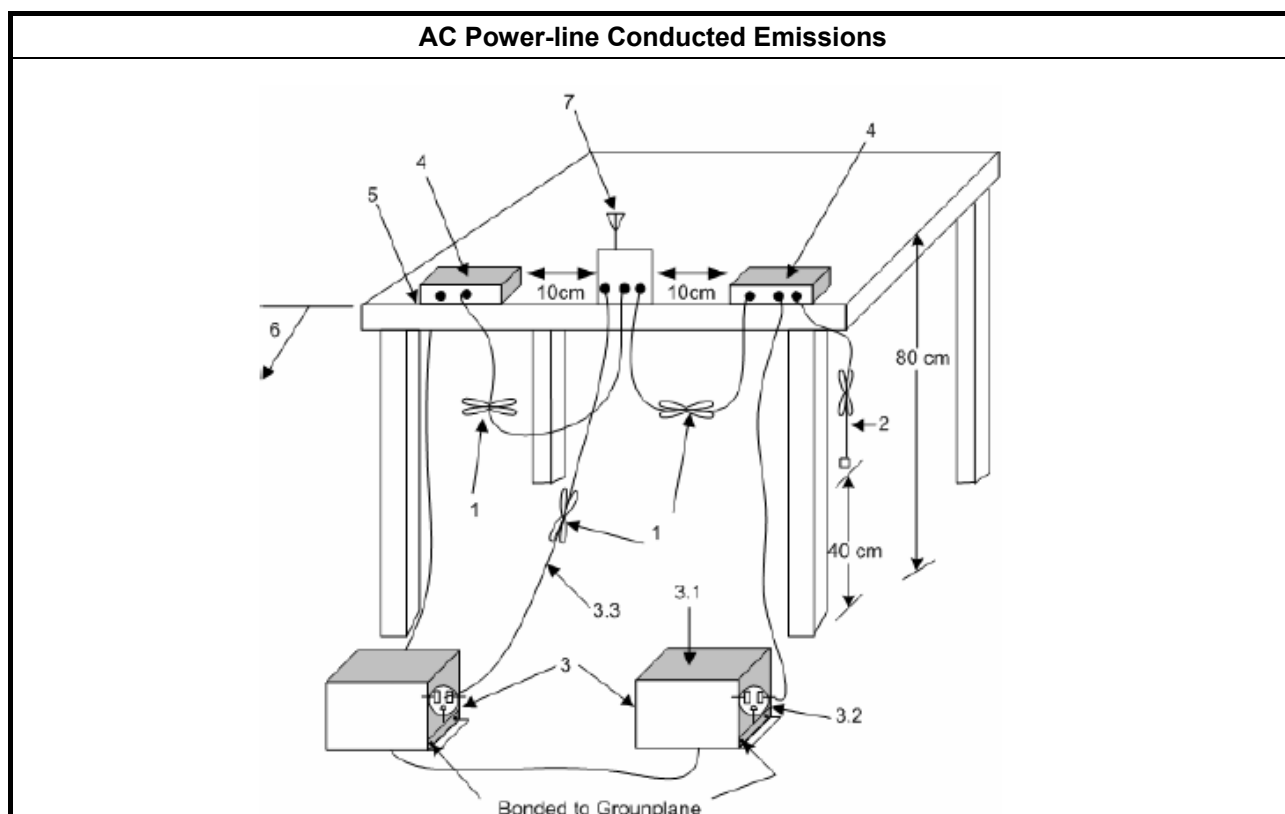
3.1.2 Measuring Instruments

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





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.

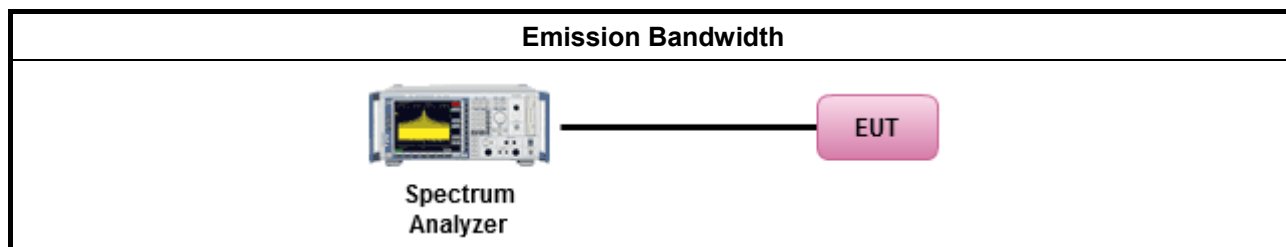
3.2.2 Measuring Instruments

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:
☒	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



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.	

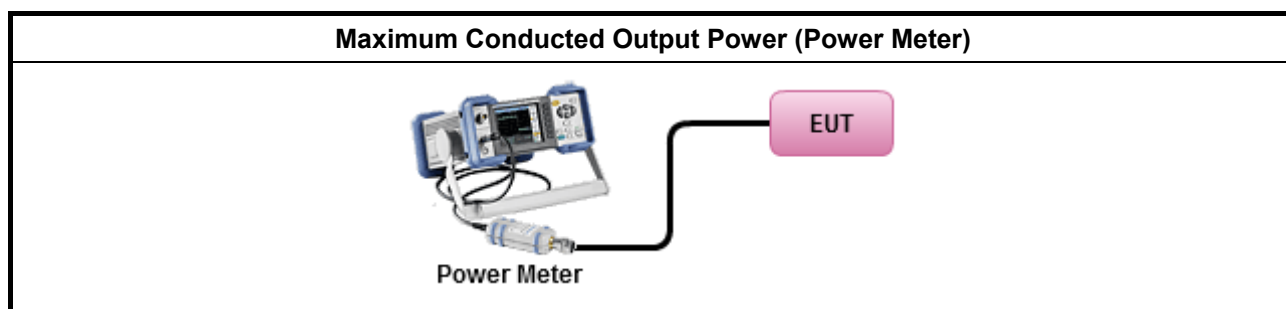
3.3.2 Measuring Instruments

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: $P_{total} = P_1 + P_2 + \dots + P_n$ (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

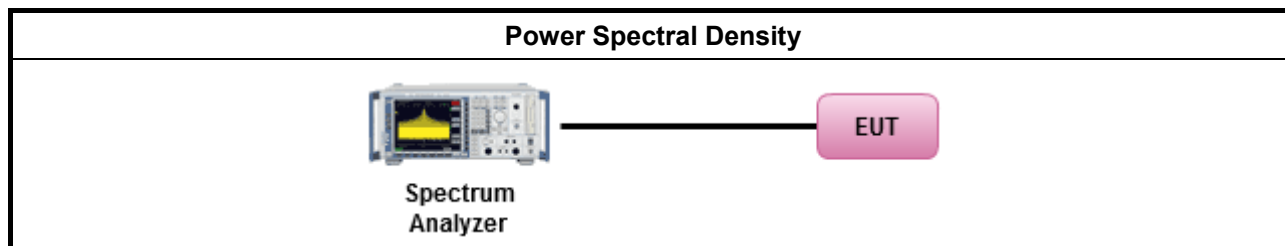
3.4.2 Measuring Instruments

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



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.	

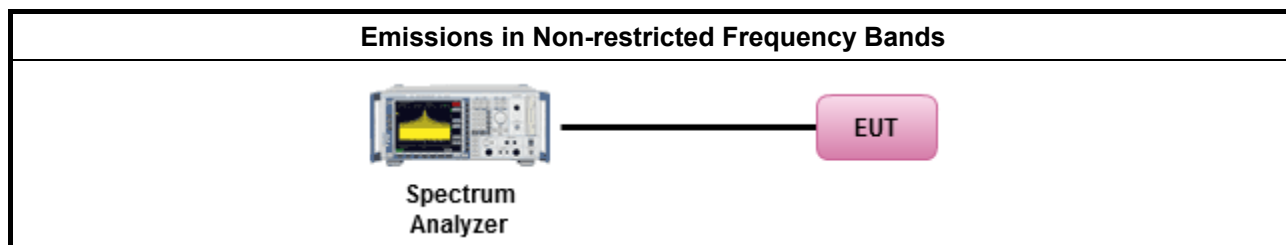
3.5.2 Measuring Instruments

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



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.

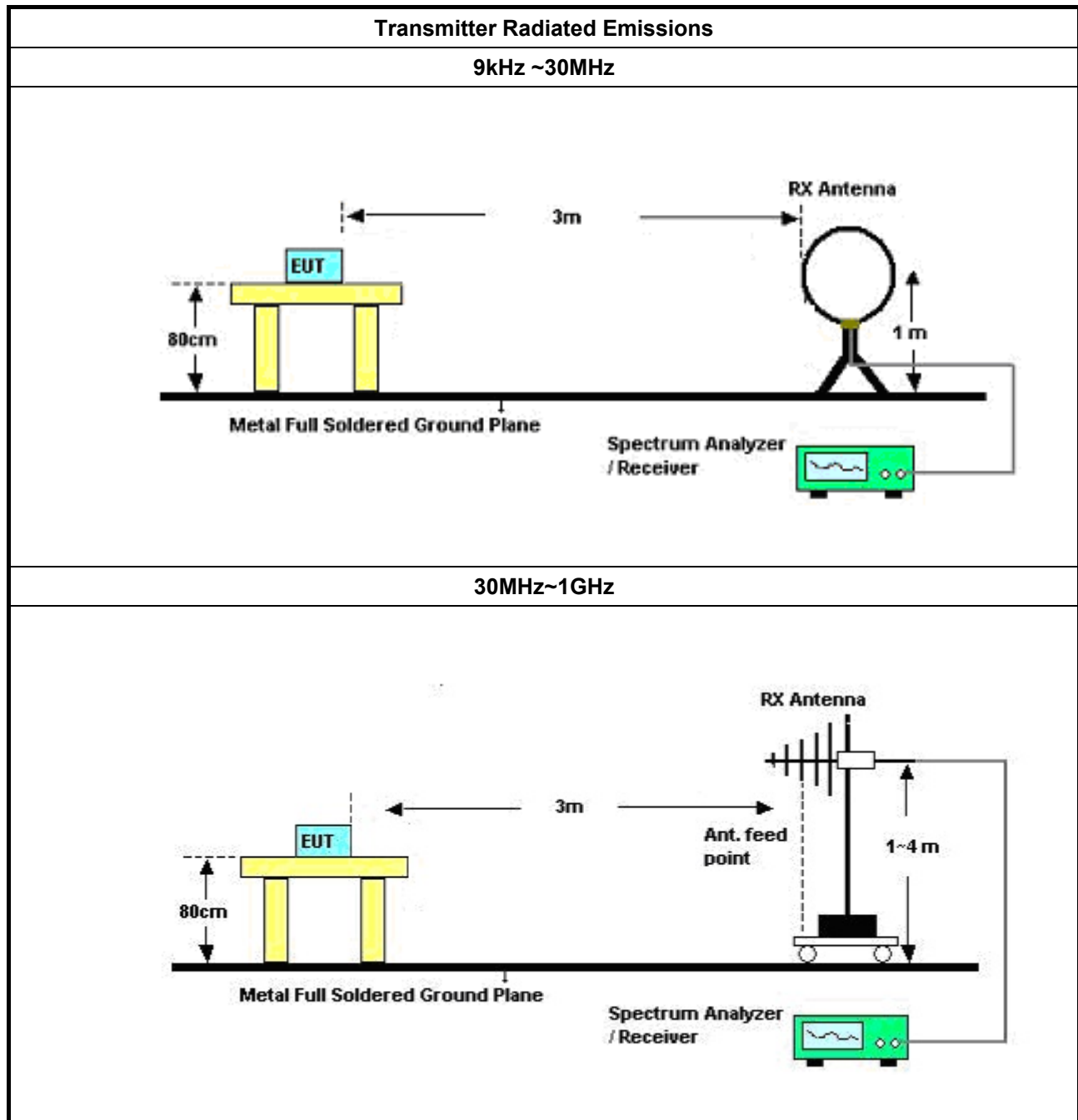
3.6.2 Measuring Instruments

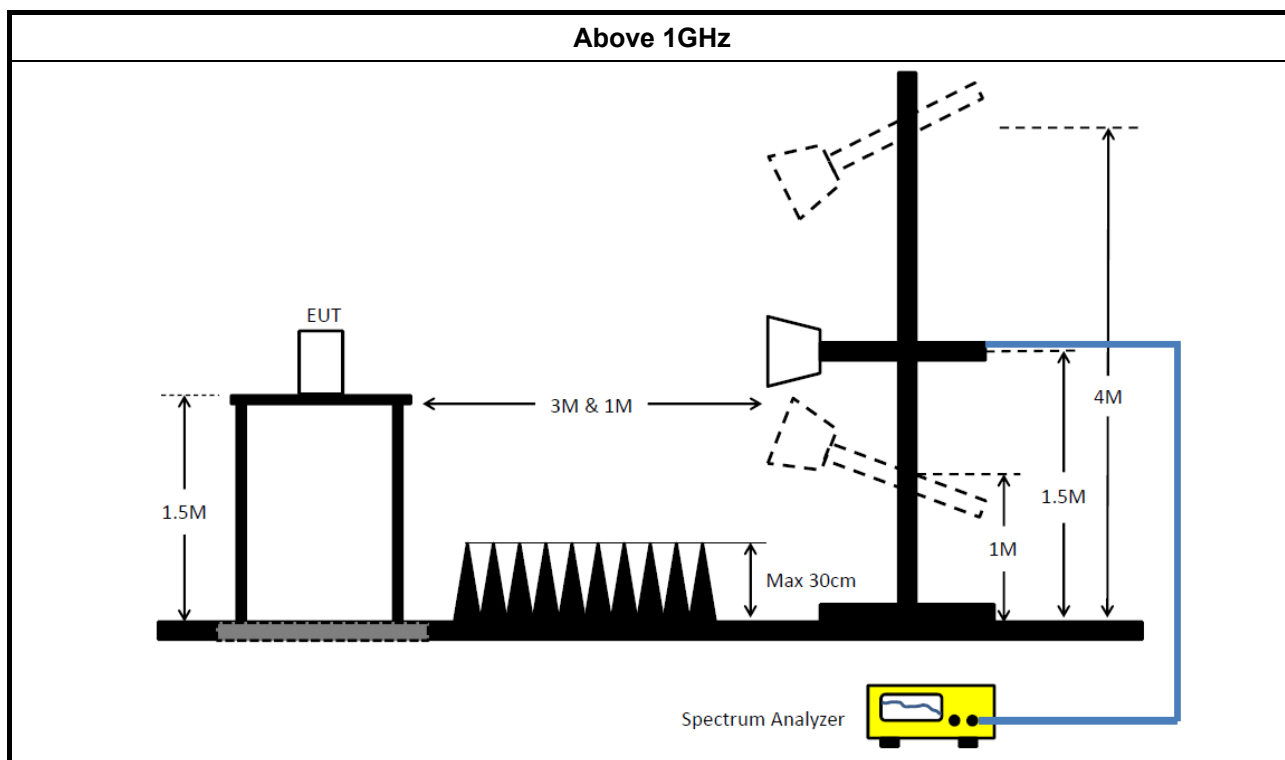
Refer a test equipment and calibration data table in this test report.

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 $\geq 98\%$)
	☐ 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 $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW $\geq 1/T$, 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





3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

Refer as Appendix F

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. 27, 2016	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 24, 2016	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2016	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 15, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 18, 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-I0-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz ~ 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz ~ 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
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)

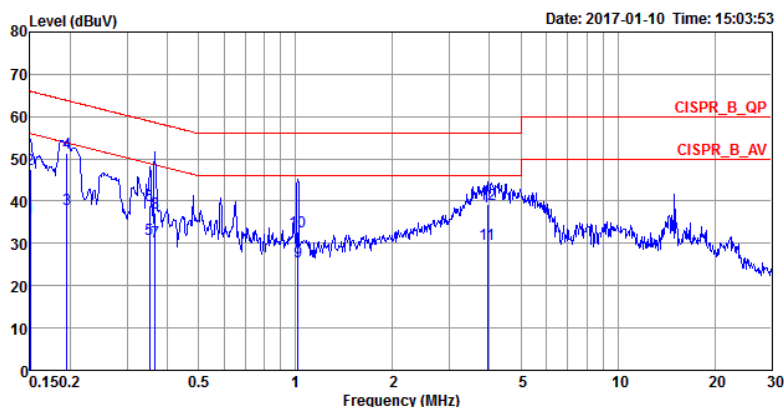
Note: Calibration Interval of instruments listed above is one year.

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

NCR means Non-Calibration required.

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	CTX		



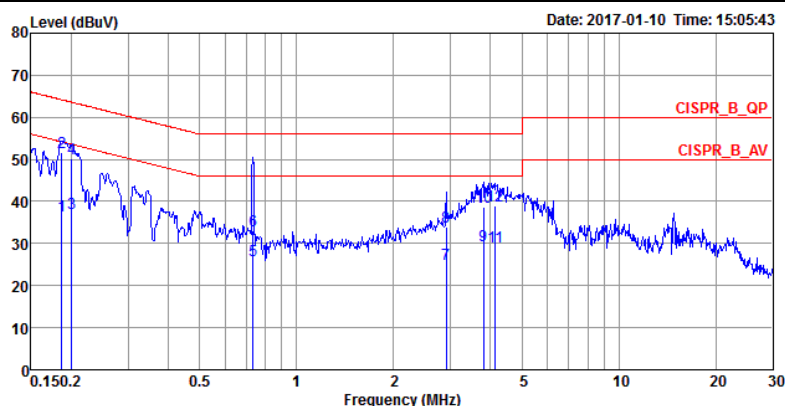
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1500	36.11	-19.89	56.00	26.13	9.94	0.04	Average	NEUTRAL
2	0.1500	47.38	-18.62	66.00	37.40	9.94	0.04	QP	NEUTRAL
3	0.1955	38.02	-15.78	53.80	27.99	9.98	0.05	Average	NEUTRAL
4	0.1955	51.36	-12.44	63.80	41.33	9.98	0.05	QP	NEUTRAL
5	0.3520	31.08	-17.83	48.91	21.08	9.96	0.04	Average	NEUTRAL
6	0.3520	38.93	-19.98	58.91	28.93	9.96	0.04	QP	NEUTRAL
7	0.3673	30.37	-18.19	48.56	20.37	9.96	0.04	Average	NEUTRAL
8	0.3673	37.19	-21.37	58.56	27.19	9.96	0.04	QP	NEUTRAL
9	1.0157	25.67	-20.33	46.00	15.62	9.99	0.06	Average	NEUTRAL
10	1.0157	32.70	-23.30	56.00	22.65	9.99	0.06	QP	NEUTRAL
11	3.9430	29.77	-16.23	46.00	19.56	10.08	0.13	Average	NEUTRAL
12	3.9430	39.33	-16.67	56.00	29.12	10.08	0.13	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	CTX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1864	36.60	-17.60	54.20	26.62	9.93	0.05	Average	LINE
2	0.1864	51.62	-12.58	64.20	41.64	9.93	0.05	QP	LINE
3	0.2007	37.30	-16.28	53.58	27.32	9.93	0.05	Average	LINE
4	0.2007	50.18	-13.40	63.58	40.20	9.93	0.05	QP	LINE
5	0.7313	25.92	-20.08	46.00	15.93	9.94	0.05	Average	LINE
6	0.7313	32.98	-23.02	56.00	22.99	9.94	0.05	QP	LINE
7	2.9152	25.17	-20.83	46.00	15.09	9.98	0.10	Average	LINE
8	2.9152	33.93	-22.07	56.00	23.85	9.98	0.10	QP	LINE
9	3.7994	29.54	-16.46	46.00	19.46	9.96	0.12	Average	LINE
10	3.7994	38.79	-17.21	56.00	28.71	9.96	0.12	QP	LINE
11	4.1356	29.24	-16.76	46.00	19.16	9.95	0.13	Average	LINE
12	4.1356	38.95	-17.05	56.00	28.87	9.95	0.13	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)_2TX	-	-	-	-	-
2.4-2.4835GHz	10.05M	14.118M	14M1G1D	9.55M	13.893M
802.11g_(6Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	16.5M	16.617M	16M6D1D	16.4M	16.517M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	17.675M	17.716M	17M7D1D	17.575M	17.591M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	36.45M	36.232M	36M2D1D	36.35M	36.132M

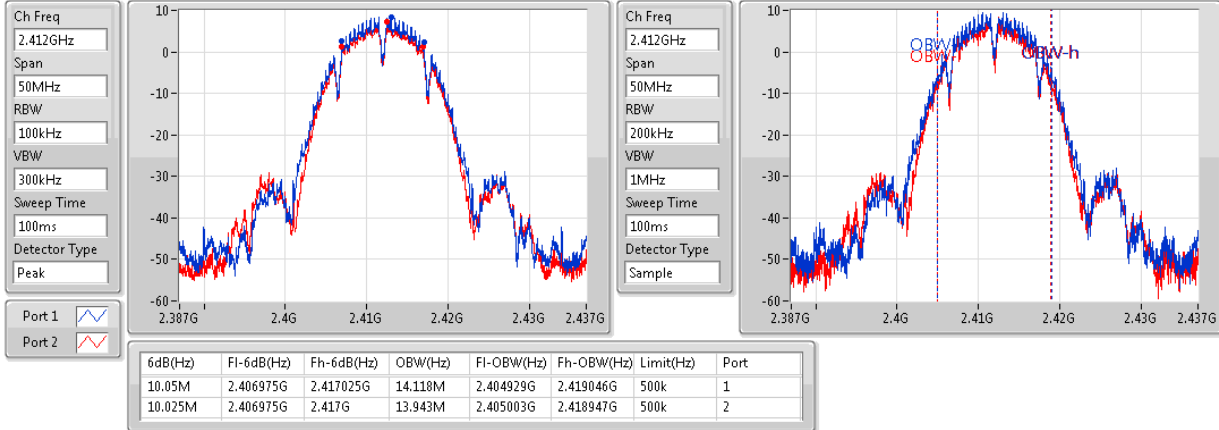
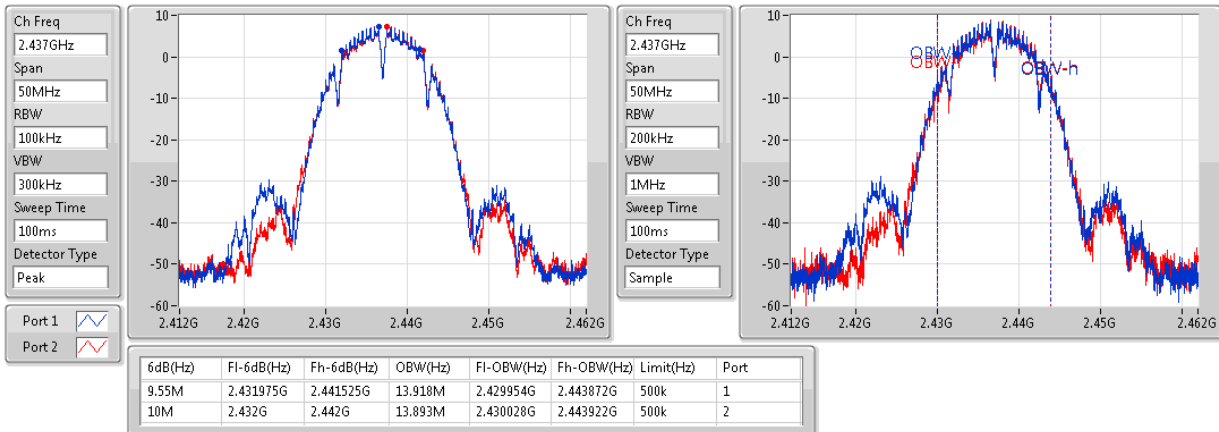
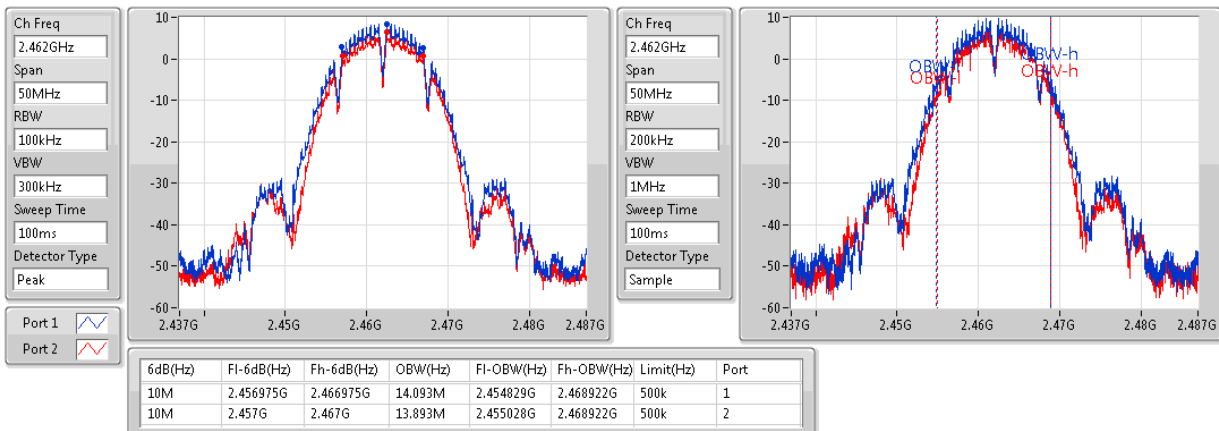
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

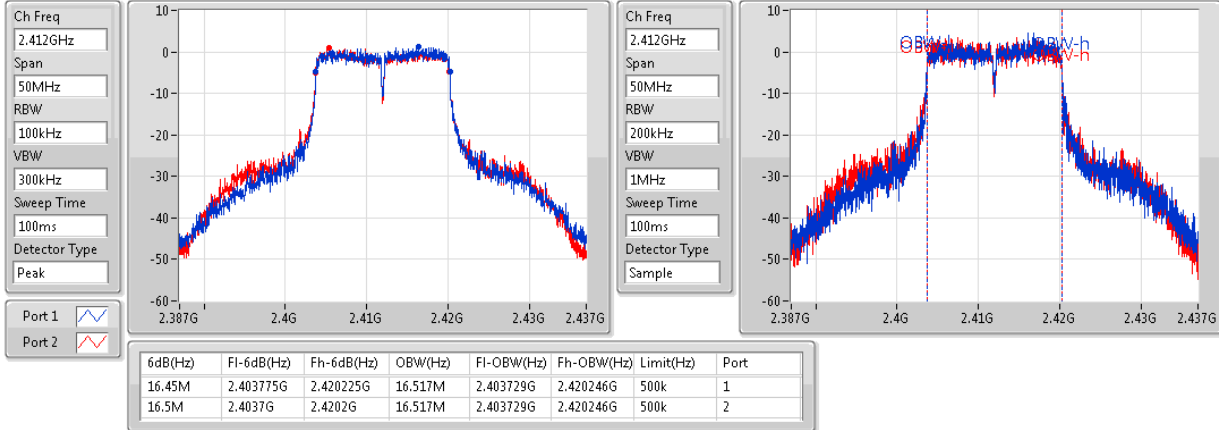
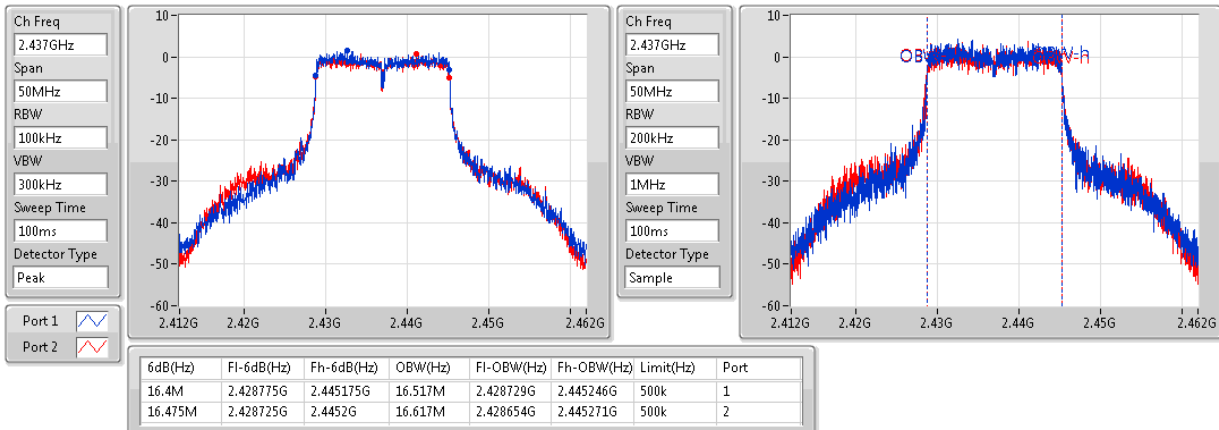
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

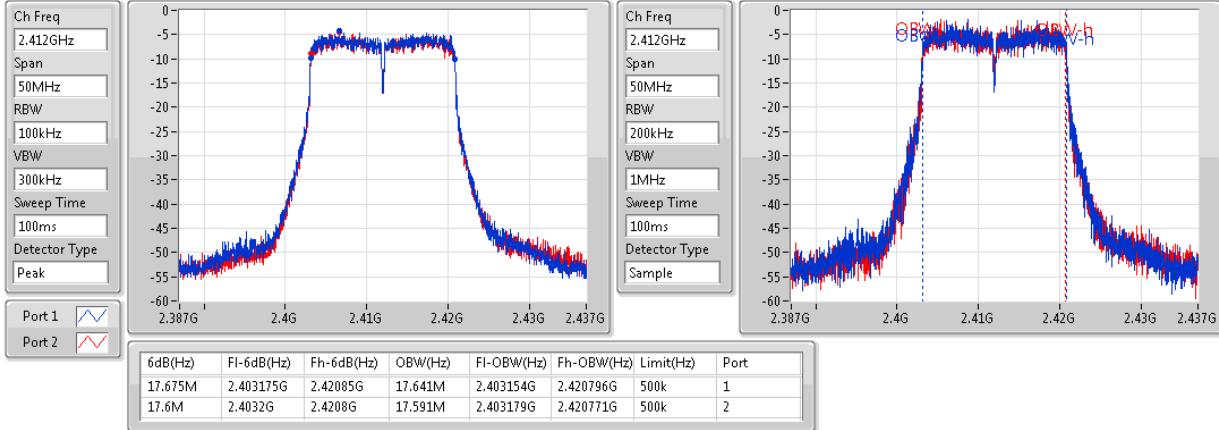
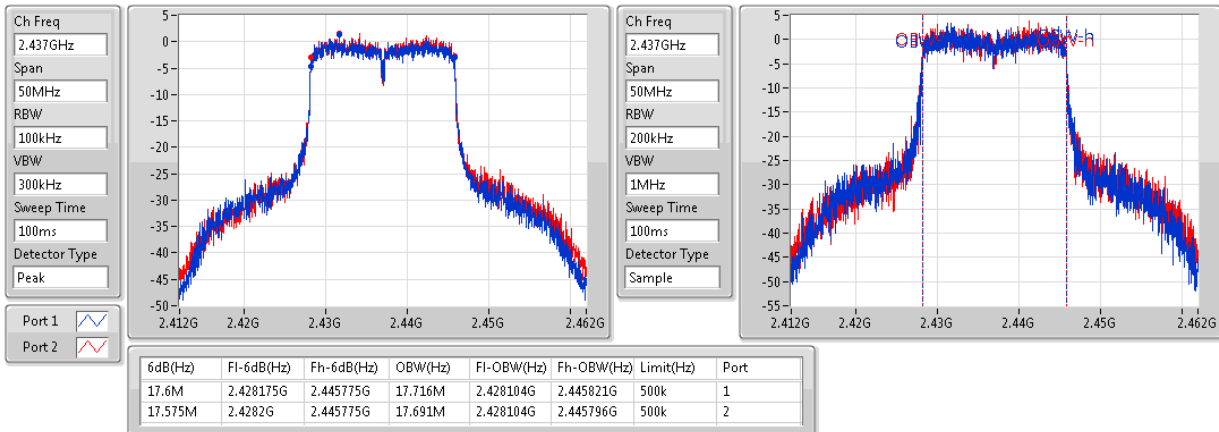
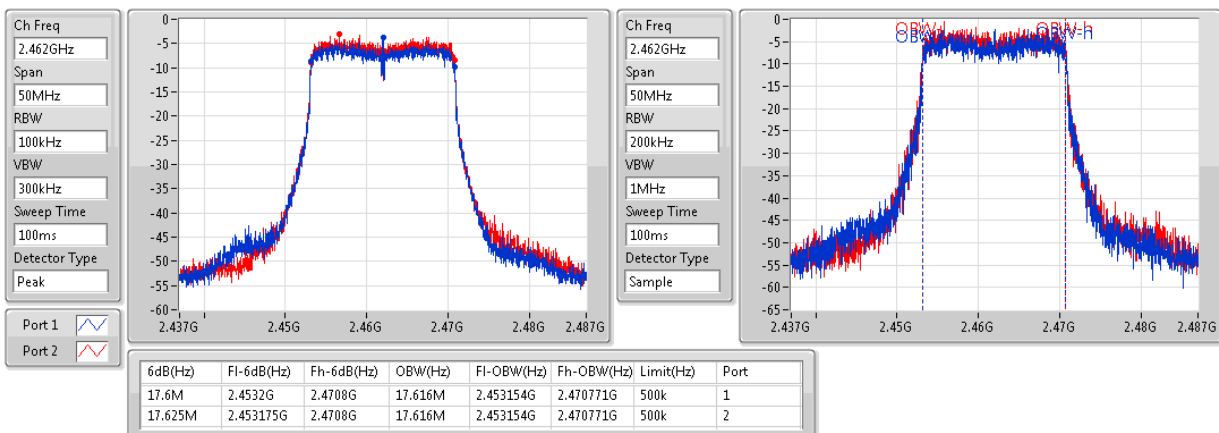
Result

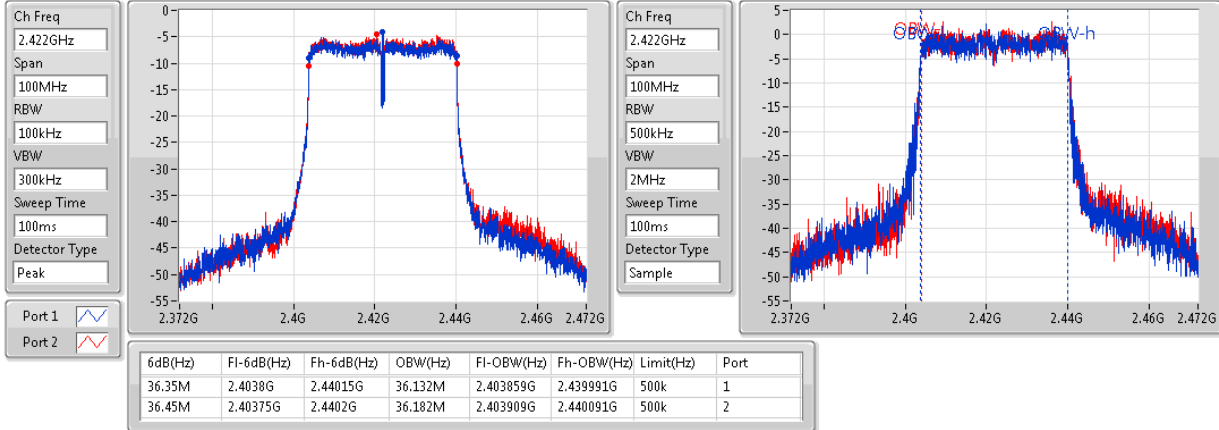
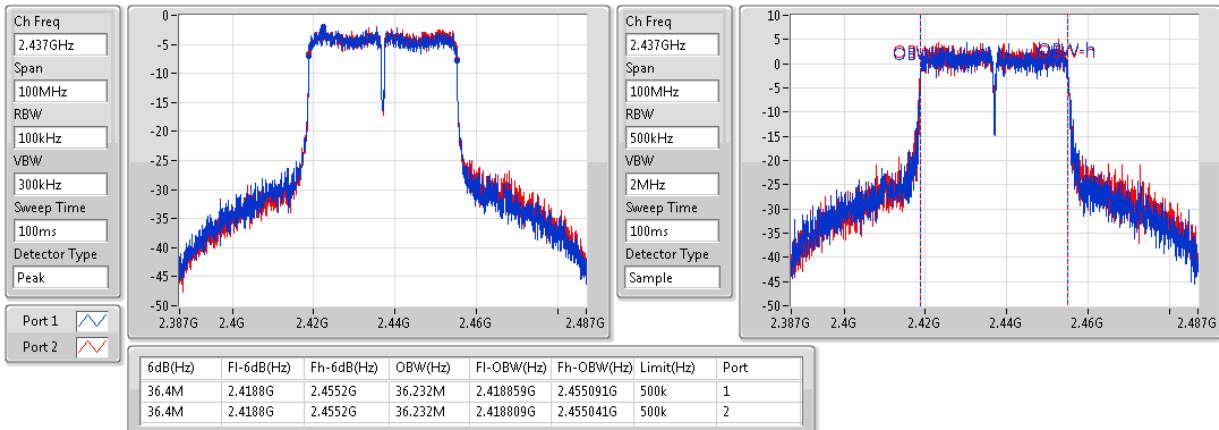
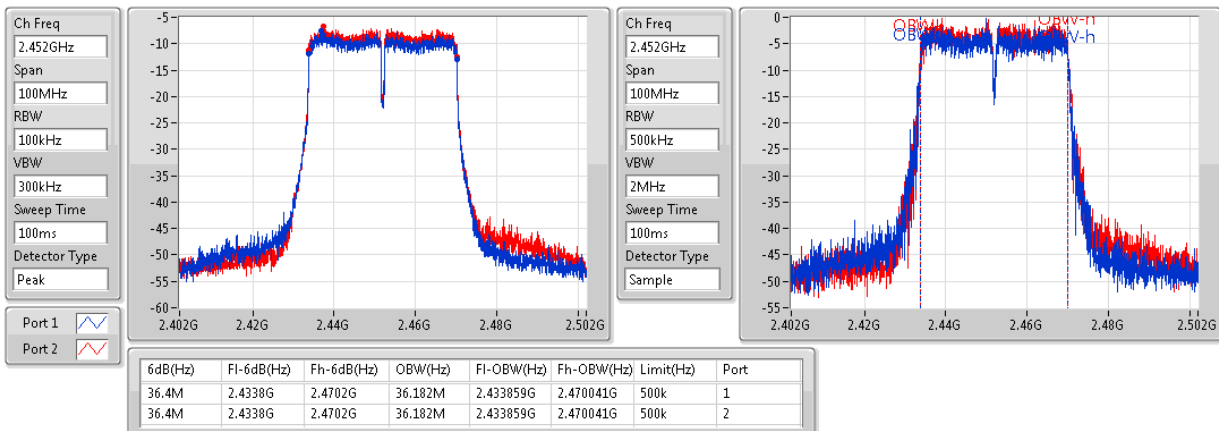
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	10.05M	14.118M	10.025M	13.943M
2437MHz	Pass	500k	9.55M	13.918M	10M	13.893M
2462MHz	Pass	500k	10M	14.093M	10M	13.893M
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.45M	16.517M	16.5M	16.517M
2437MHz	Pass	500k	16.4M	16.517M	16.475M	16.617M
2462MHz	Pass	500k	16.5M	16.567M	16.5M	16.567M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.675M	17.641M	17.6M	17.591M
2437MHz	Pass	500k	17.6M	17.716M	17.575M	17.691M
2462MHz	Pass	500k	17.6M	17.616M	17.625M	17.616M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.35M	36.132M	36.45M	36.182M
2437MHz	Pass	500k	36.4M	36.232M	36.4M	36.232M
2452MHz	Pass	500k	36.4M	36.182M	36.4M	36.182M

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

802.11b_(1Mbps)_2TX
EBW
2412MHz

802.11b_(1Mbps)_2TX
EBW
2437MHz

802.11b_(1Mbps)_2TX
EBW
2462MHz


802.11g_(6Mbps)_2TX
EBW
2412MHz

802.11g_(6Mbps)_2TX
EBW
2437MHz

802.11g_(6Mbps)_2TX
EBW
2462MHz


802.11n HT20_Nss1,(MCS0)_2TX
EBW
2412MHz

802.11n HT20_Nss1,(MCS0)_2TX
EBW
2437MHz

802.11n HT20_Nss1,(MCS0)_2TX
EBW
2462MHz


802.11n HT40_Nss1,(MCS0)_2TX
EBW
2422MHz

802.11n HT40_Nss1,(MCS0)_2TX
EBW
2437MHz

802.11n HT40_Nss1,(MCS0)_2TX
EBW
2452MHz


**Summary**

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_2TX	-	-
2.4-2.4835GHz	21.12	0.12942
802.11g_(6Mbps)_2TX	-	-
2.4-2.4835GHz	19.45	0.08810
802.11n HT20_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	20.44	0.11066
802.11n HT40_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	20.06	0.10139

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.60	17.91	18.01	20.97	30.00
2437MHz	Pass	2.60	17.98	18.24	21.12	30.00
2462MHz	Pass	2.60	17.91	17.99	20.96	30.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.60	16.35	16.45	19.41	30.00
2437MHz	Pass	2.60	16.37	16.51	19.45	30.00
2462MHz	Pass	2.60	16.24	16.49	19.38	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.60	15.55	15.49	18.53	30.00
2437MHz	Pass	2.60	17.35	17.51	20.44	30.00
2462MHz	Pass	2.60	12.86	12.81	15.85	30.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	2.60	13.59	13.55	16.58	30.00
2437MHz	Pass	2.60	17.08	17.01	20.06	30.00
2452MHz	Pass	2.60	11.67	11.54	14.62	30.00

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

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_2TX	-
2.4-2.4835GHz	-5.47
802.11g_(6Mbps)_2TX	-
2.4-2.4835GHz	-3.71
802.11n HT20_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-3.07
802.11n HT40_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-3.03

RBW=3kHz.

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.61	-9.65	-7.78	-5.60	8.00
2437MHz	Pass	5.61	-9.58	-7.61	-5.47	8.00
2462MHz	Pass	5.61	-11.85	-13.79	-9.70	8.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.61	-13.56	-13.73	-10.77	8.00
2437MHz	Pass	5.61	-7.61	-5.98	-3.71	8.00
2462MHz	Pass	5.61	-14.47	-14.62	-12.14	8.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.61	-18.58	-18.73	-15.94	8.00
2437MHz	Pass	5.61	-5.79	-8.07	-3.77	8.00
2462MHz	Pass	5.61	-5.23	-7.15	-3.07	8.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.61	-4.87	-7.64	-3.03	8.00
2437MHz	Pass	5.61	-15.36	-13.30	-12.65	8.00
2452MHz	Pass	5.61	-21.69	-19.70	-18.55	8.00

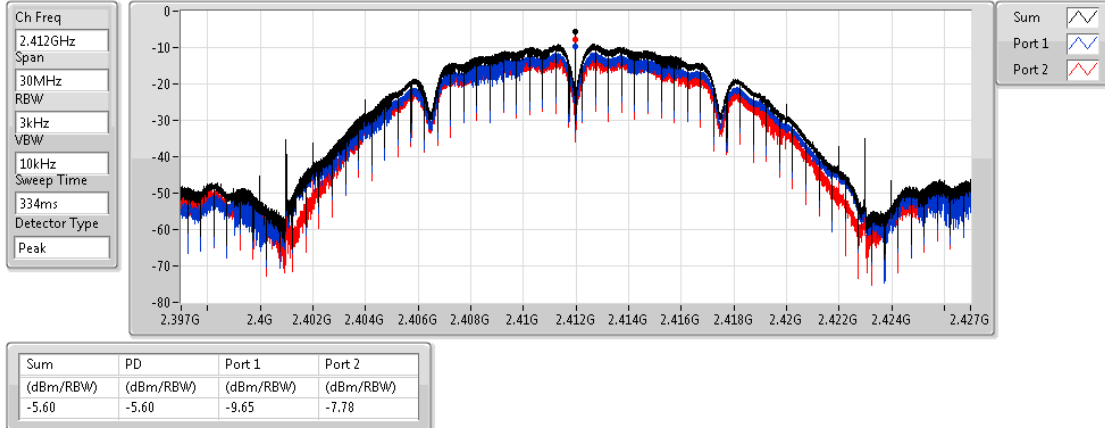
DG = Directional Gain; RBW=3kHz;

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)_2TX

PSD

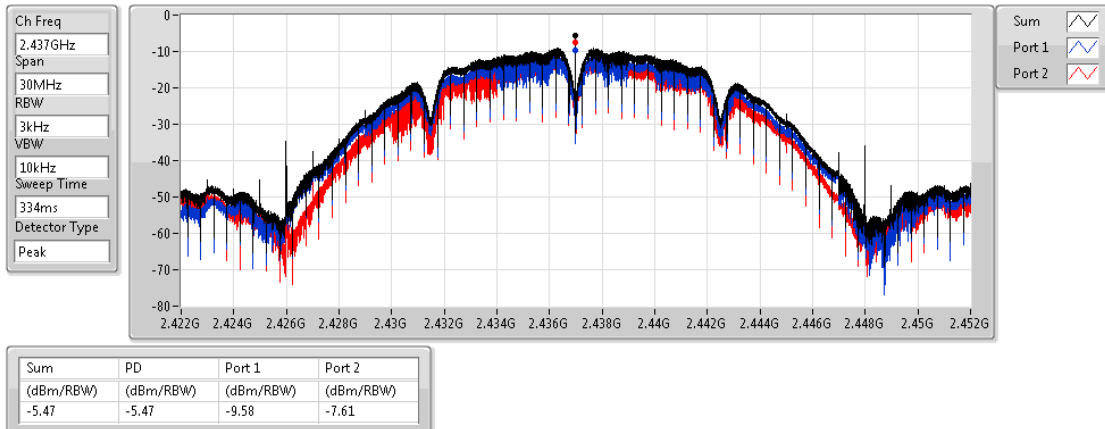
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802.11b_(1Mbps)_2TX

PSD

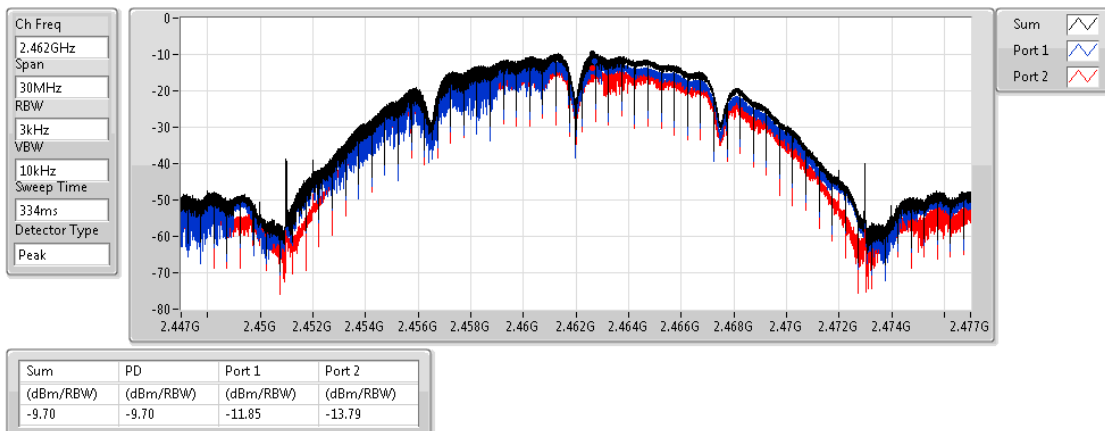
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802.11b_(1Mbps)_2TX

PSD

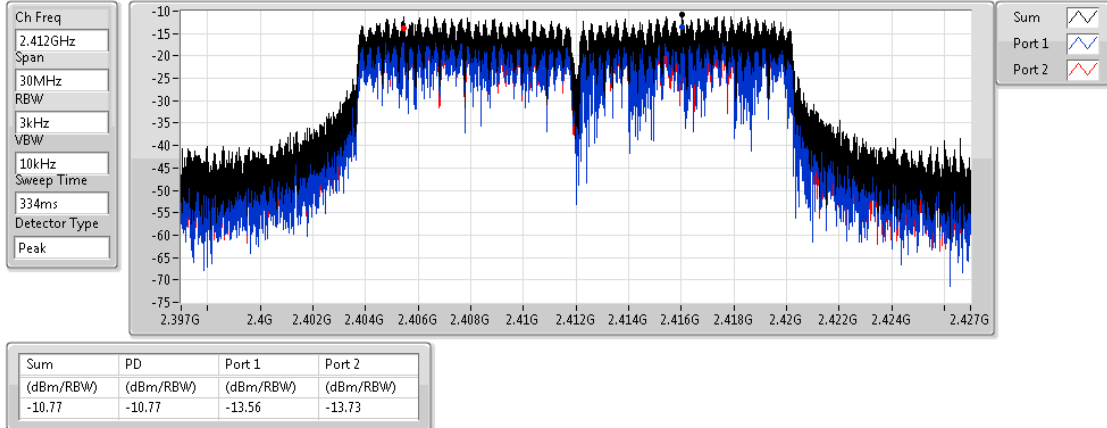
2462MHz



802.11g_(6Mbps)_2TX

PSD

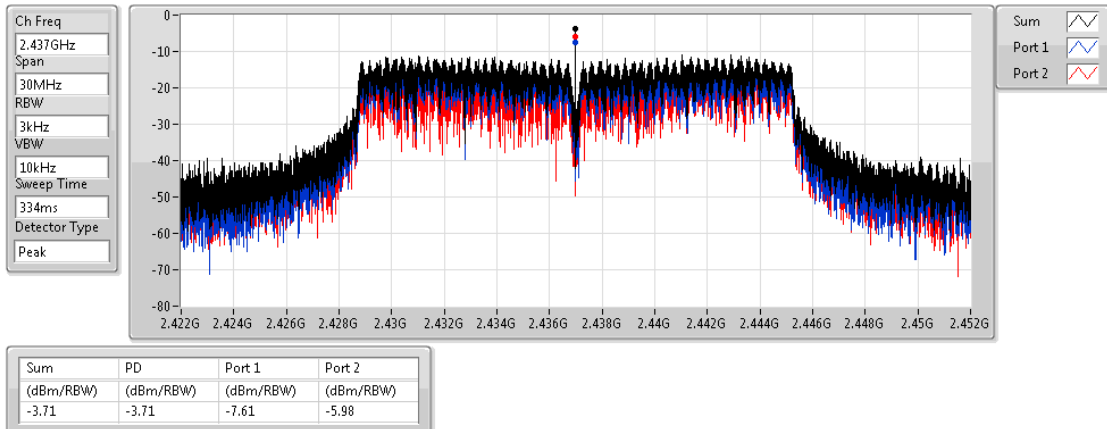
2412MHz



802.11g_(6Mbps)_2TX

PSD

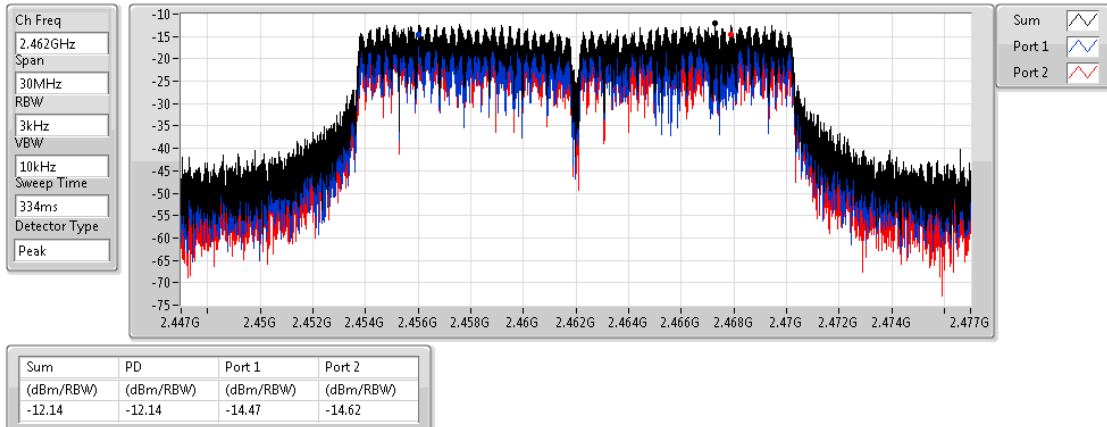
2437MHz



802.11g_(6Mbps)_2TX

PSD

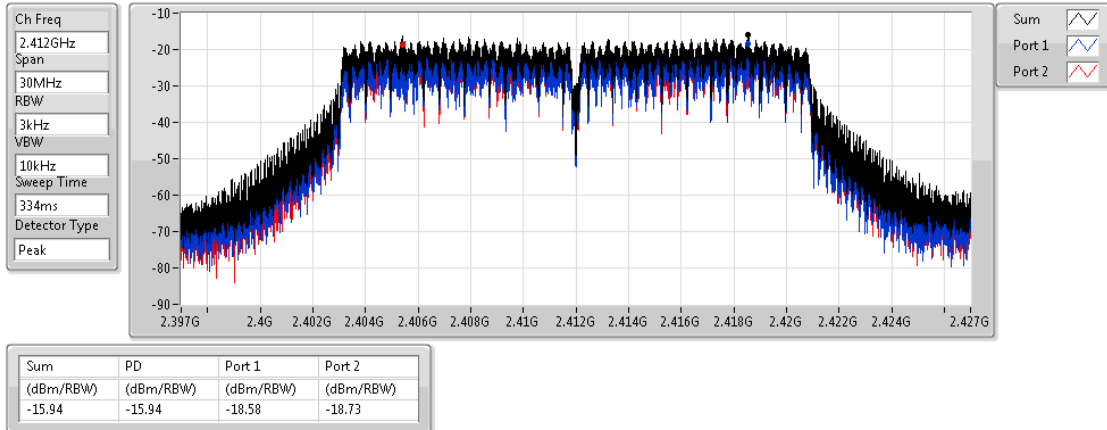
2462MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

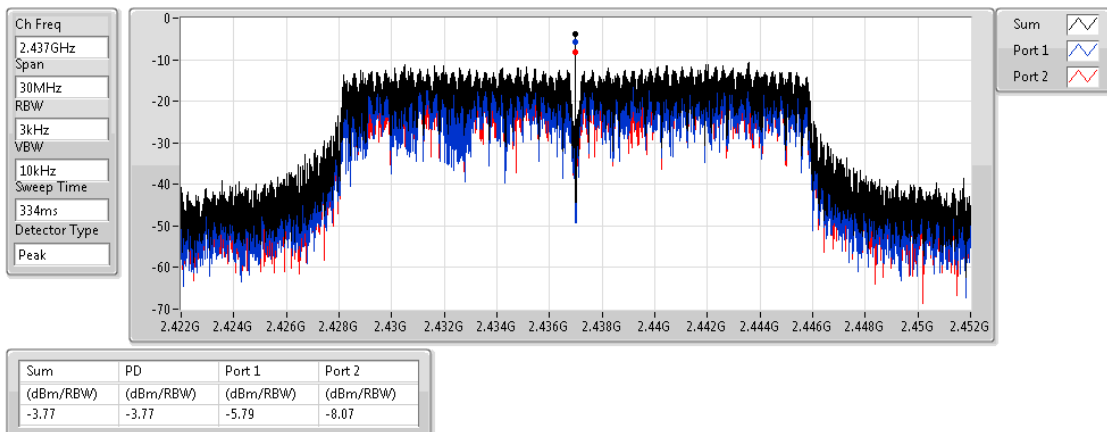
2412MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

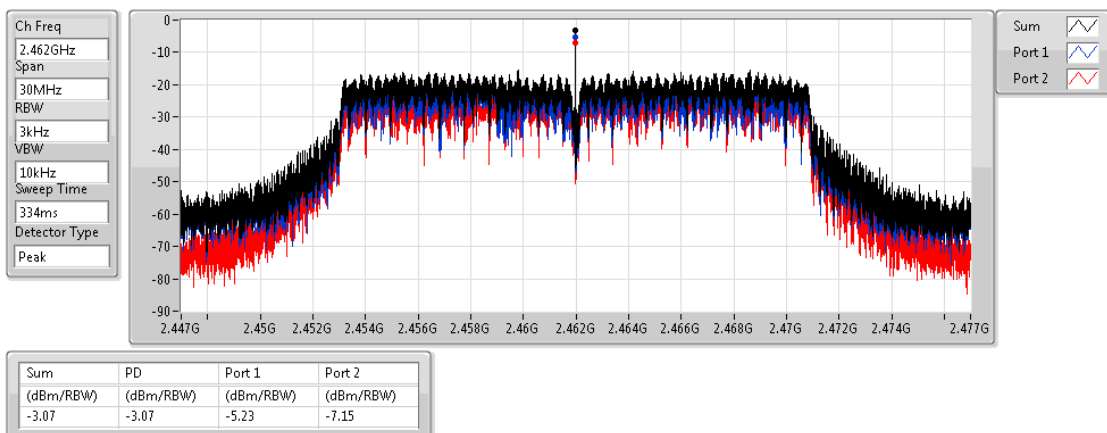
2437MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

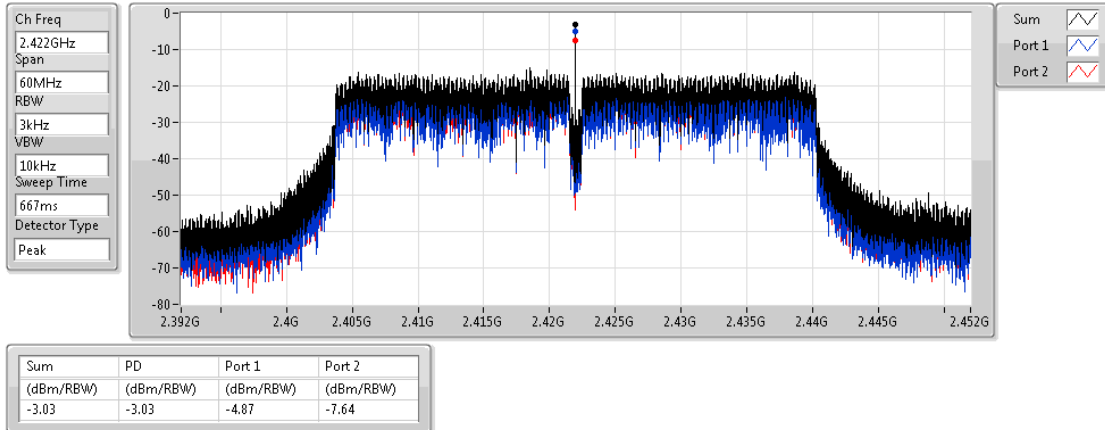
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

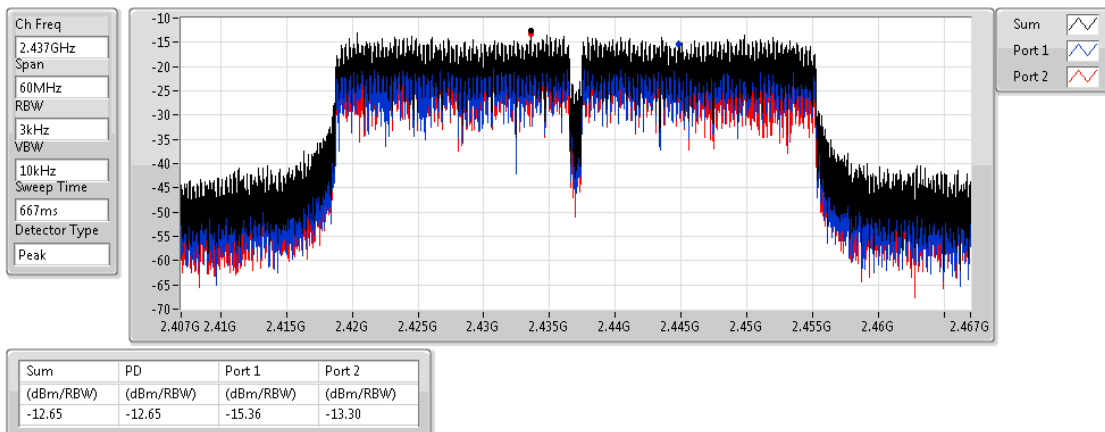
2422MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

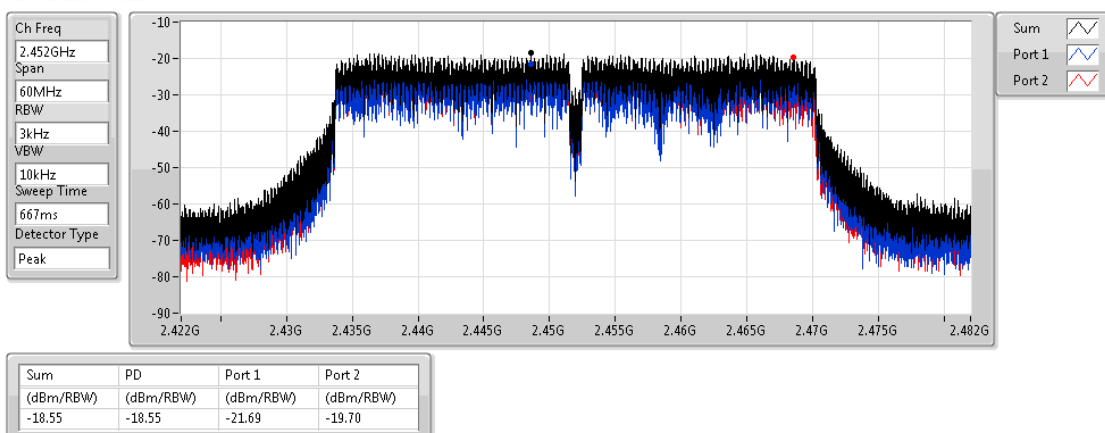
2437MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

2452MHz



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)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.443921G	3.17	-26.83	35.825M	-49.45	2.39736G	-27.50	2.50102G	-59.87	3.214652G	-52.53	1

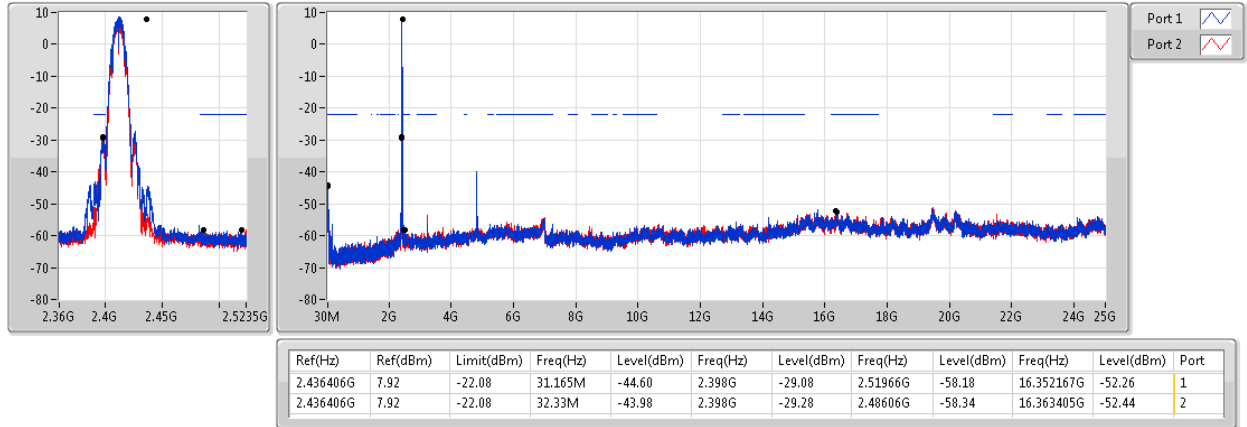
Result

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)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.436406G	7.92	-22.08	31.165M	-44.60	2.398G	-29.08	2.51966G	-58.18	16.352167G	-52.26	1
2412MHz	Pass	2.436406G	7.92	-22.08	32.33M	-43.98	2.398G	-29.28	2.48606G	-58.34	16.363405G	-52.44	2
2437MHz	Pass	2.436406G	7.92	-22.08	35.825M	-42.18	2.39536G	-58.60	2.48598G	-57.16	16.71741G	-53.51	1
2437MHz	Pass	2.436406G	7.92	-22.08	35.825M	-41.37	2.39808G	-57.42	2.48686G	-58.54	16.366214G	-52.14	2
2462MHz	Pass	2.436406G	7.92	-22.08	32.33M	-43.27	2.39528G	-58.56	2.48702G	-48.46	16.748315G	-53.40	1
2462MHz	Pass	2.436406G	7.92	-22.08	32.33M	-42.41	2.39512G	-59.03	2.48798G	-53.96	16.349357G	-53.14	2
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.443921G	3.17	-26.83	35.825M	-49.45	2.39736G	-27.50	2.50102G	-59.87	3.214652G	-52.53	1
2412MHz	Pass	2.443921G	3.17	-26.83	35.825M	-46.51	2.39744G	-32.07	2.5203G	-58.94	16.39712G	-53.19	2
2437MHz	Pass	2.443921G	3.17	-26.83	32.33M	-44.01	2.39784G	-49.16	2.48382G	-54.59	16.374643G	-52.96	1
2437MHz	Pass	2.443921G	3.17	-26.83	30M	-44.26	2.39512G	-58.82	2.49814G	-58.48	3.248367G	-52.35	2
2462MHz	Pass	2.455778G	3.17	-26.83	35.825M	-43.48	2.3972G	-59.06	2.48358G	-39.62	3.282082G	-52.06	1
2462MHz	Pass	2.457615G	3.17	-26.83	35.825M	-44.74	2.39688G	-59.80	2.48358G	-42.01	16.720219G	-53.02	2
802.11n HT20_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.442585G	1.79	-28.21	35.825M	-43.78	2.39512G	-33.43	2.51326G	-58.70	3.214652G	-51.25	1
2412MHz	Pass	2.442585G	1.79	-28.21	32.33M	-42.82	2.398G	-45.64	2.50694G	-59.01	16.354976G	-52.64	2
2437MHz	Pass	2.442585G	1.79	-28.21	32.33M	-44.84	2.39528G	-57.64	2.49662G	-58.23	3.248367G	-52.16	1
2437MHz	Pass	2.442585G	1.79	-28.21	30M	-44.01	2.39608G	-51.59	2.48382G	-55.92	16.745505G	-52.90	2
2462MHz	Pass	2.442585G	1.79	-28.21	32.33M	-44.48	2.3952G	-59.77	2.48478G	-48.81	3.282082G	-51.84	1
2462MHz	Pass	2.442585G	1.79	-28.21	35.825M	-44.38	2.39464G	-60.27	2.49374G	-58.55	16.700552G	-53.29	2
802.11n HT40_Nss1(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.42171G	-2.23	-32.23	32.29M	-45.89	2.39344G	-34.12	2.49038G	-55.96	3.228181G	-51.03	1
2422MHz	Pass	2.42171G	-2.23	-32.23	35.725M	-47.05	2.39056G	-53.52	2.5171G	-59.25	16.373166G	-53.80	2
2437MHz	Pass	2.42171G	-2.23	-32.23	35.725M	-45.78	2.39648G	-34.28	2.4867G	-42.94	3.247813G	-51.96	1
2437MHz	Pass	2.42171G	-2.23	-32.23	32.29M	-44.32	2.3936G	-36.46	2.48622G	-42.10	16.378775G	-53.54	2
2452MHz	Pass	2.43674G	-6.86	-32.23	32.29M	-44.03	2.39488G	-58.88	2.48766G	-48.51	3.267445G	-51.81	1
2452MHz	Pass	2.437408G	-12.16	-32.23	32.29M	-44.96	2.39472G	-59.67	2.49198G	-58.16	16.718127G	-52.99	2

802.11b_(1Mbps)_2TX

CSE NdB

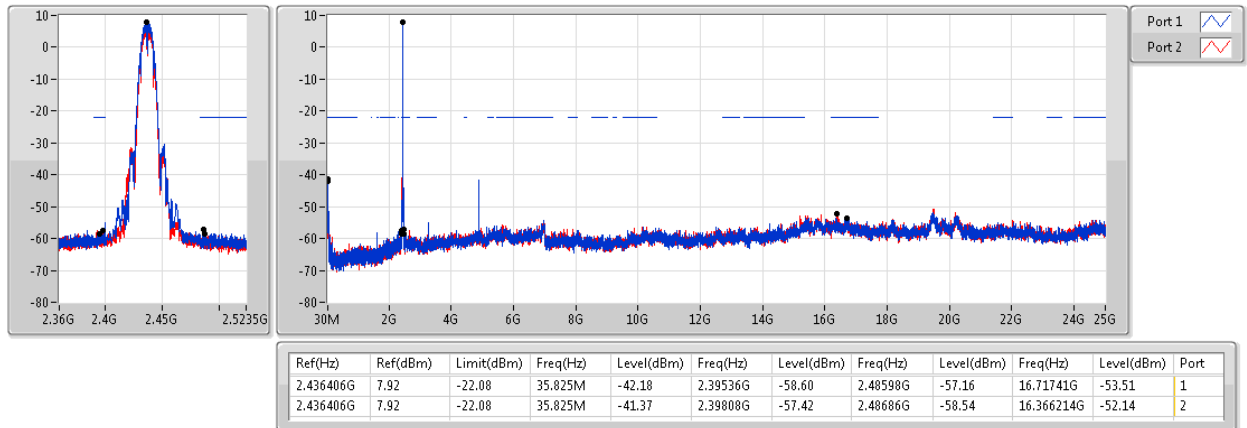
2412MHz



802.11b_(1Mbps)_2TX

CSE NdB

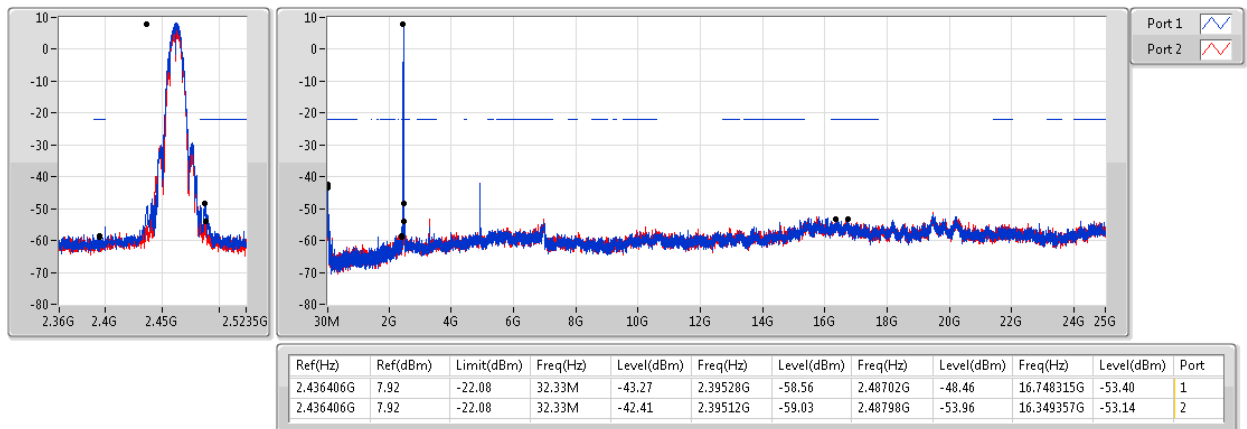
2437MHz



802.11b_(1Mbps)_2TX

CSE NdB

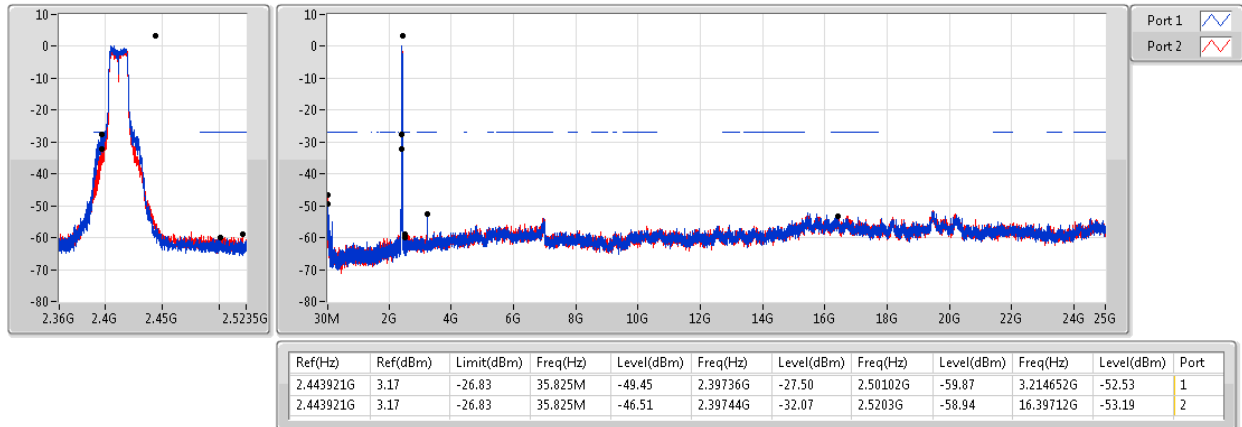
2462MHz



802.11g_(6Mbps)_2TX

CSE NdB

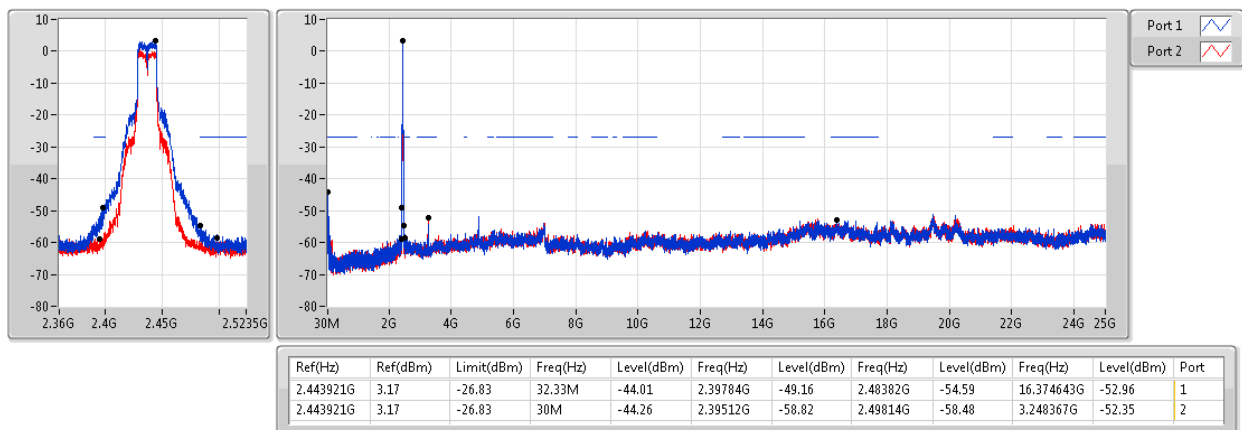
2412MHz



802.11g_(6Mbps)_2TX

CSE NdB

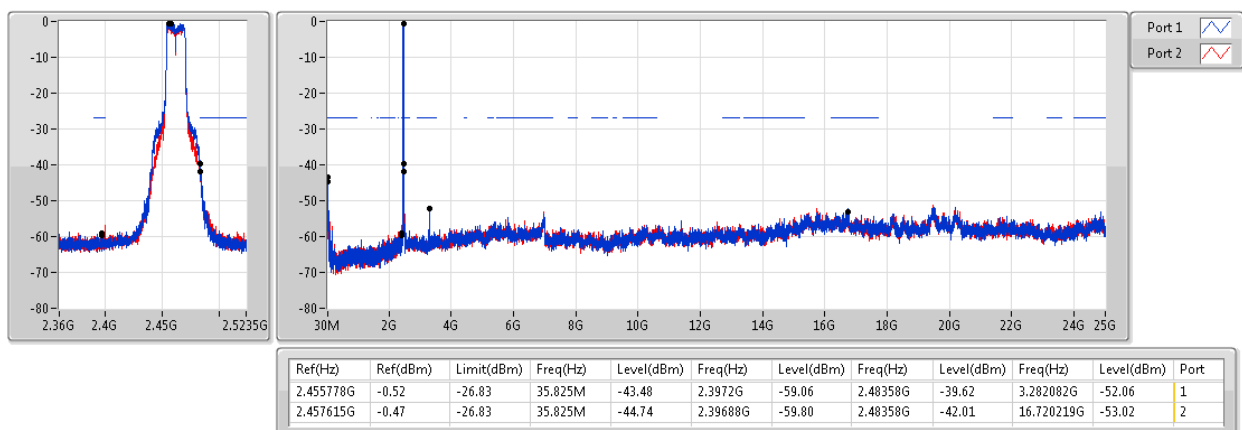
2437MHz



802.11g_(6Mbps)_2TX

CSE NdB

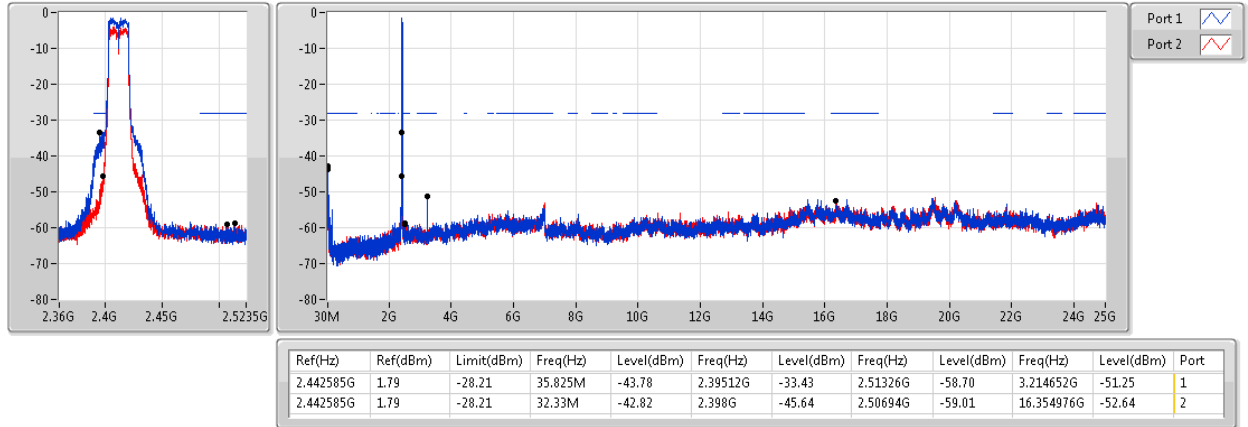
2462MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

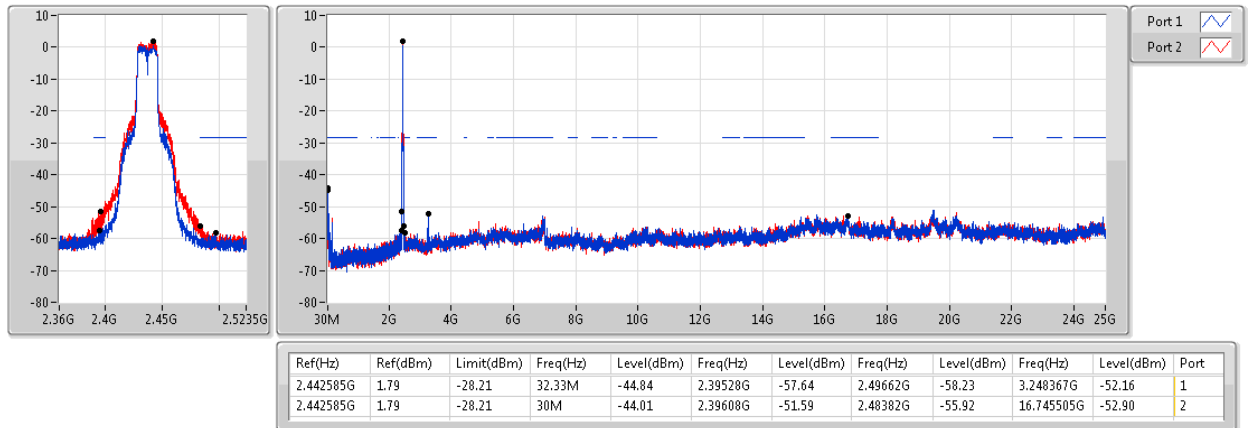
2412MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

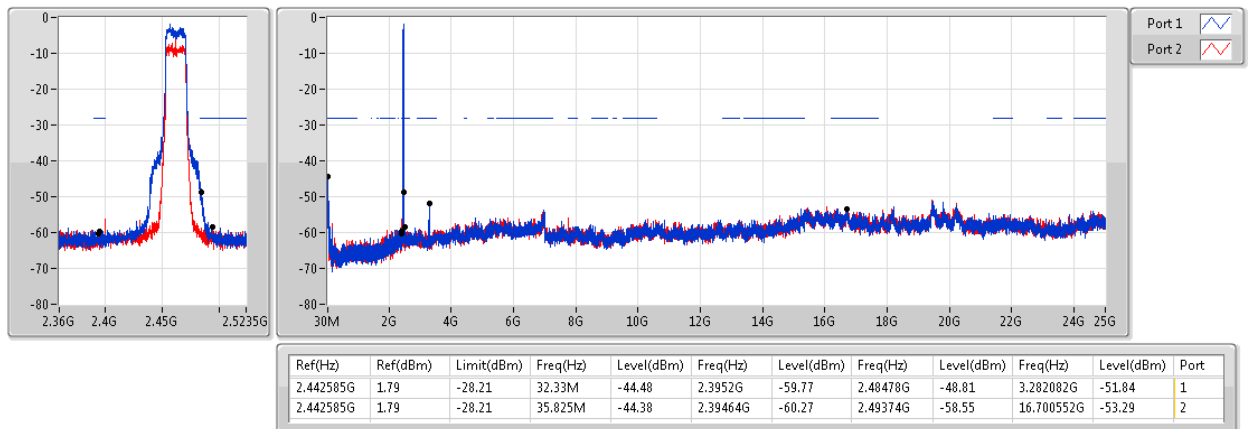
2437MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

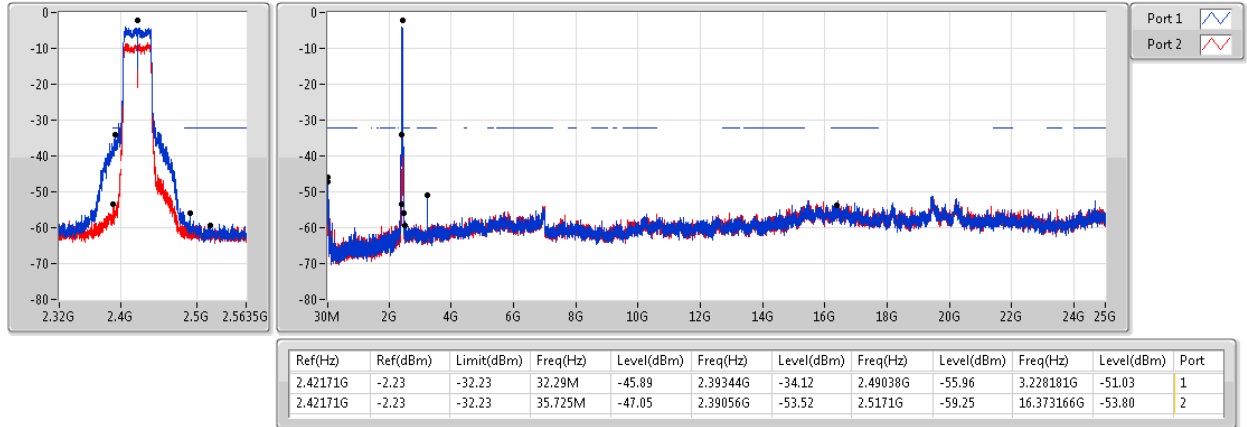
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

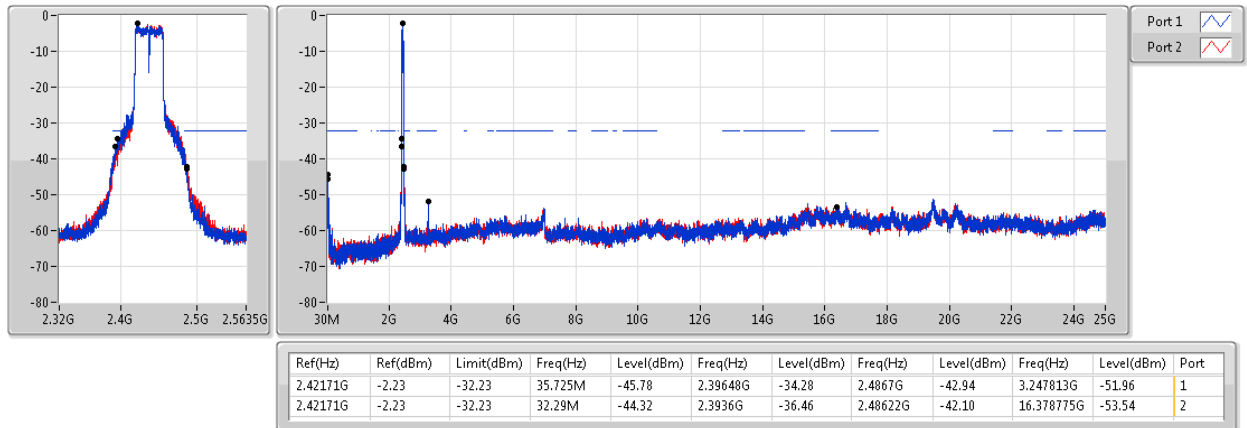
2422MHz



802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

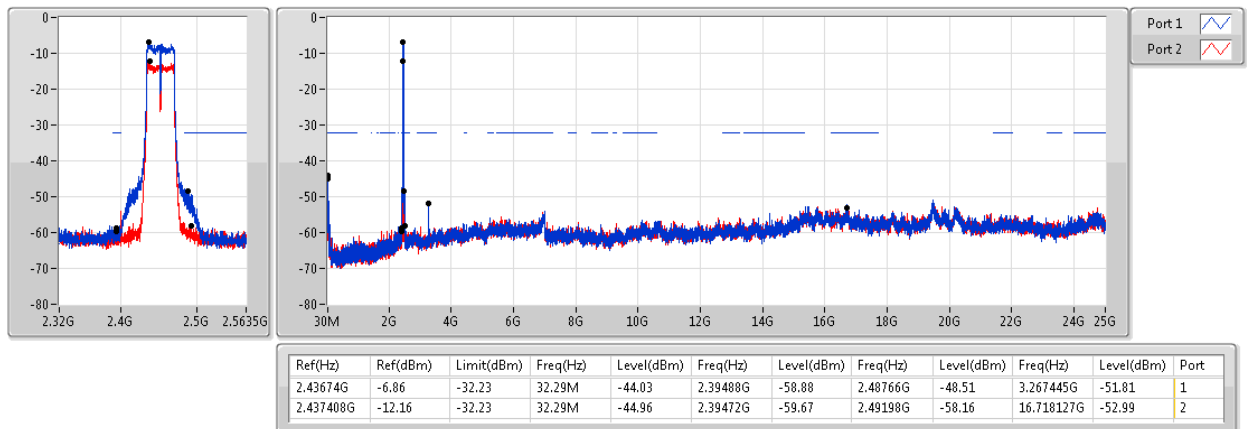
2437MHz



802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

2452MHz



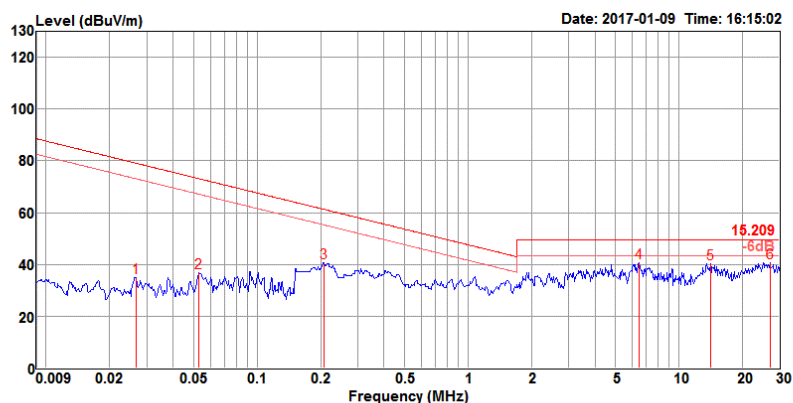
RSE 9kHz~30MHz Result

Operating Mode

1

Operating Function

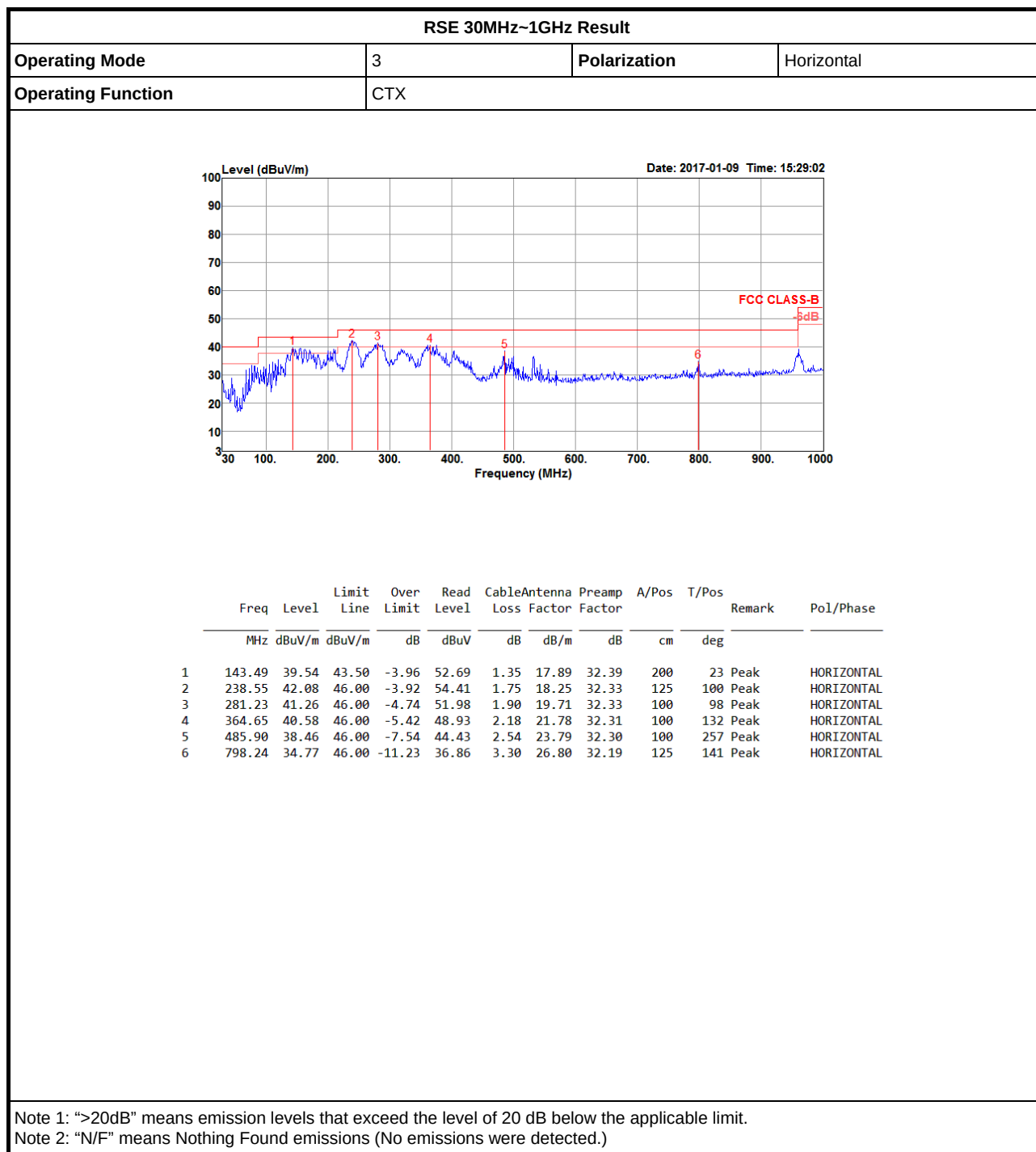
CTX

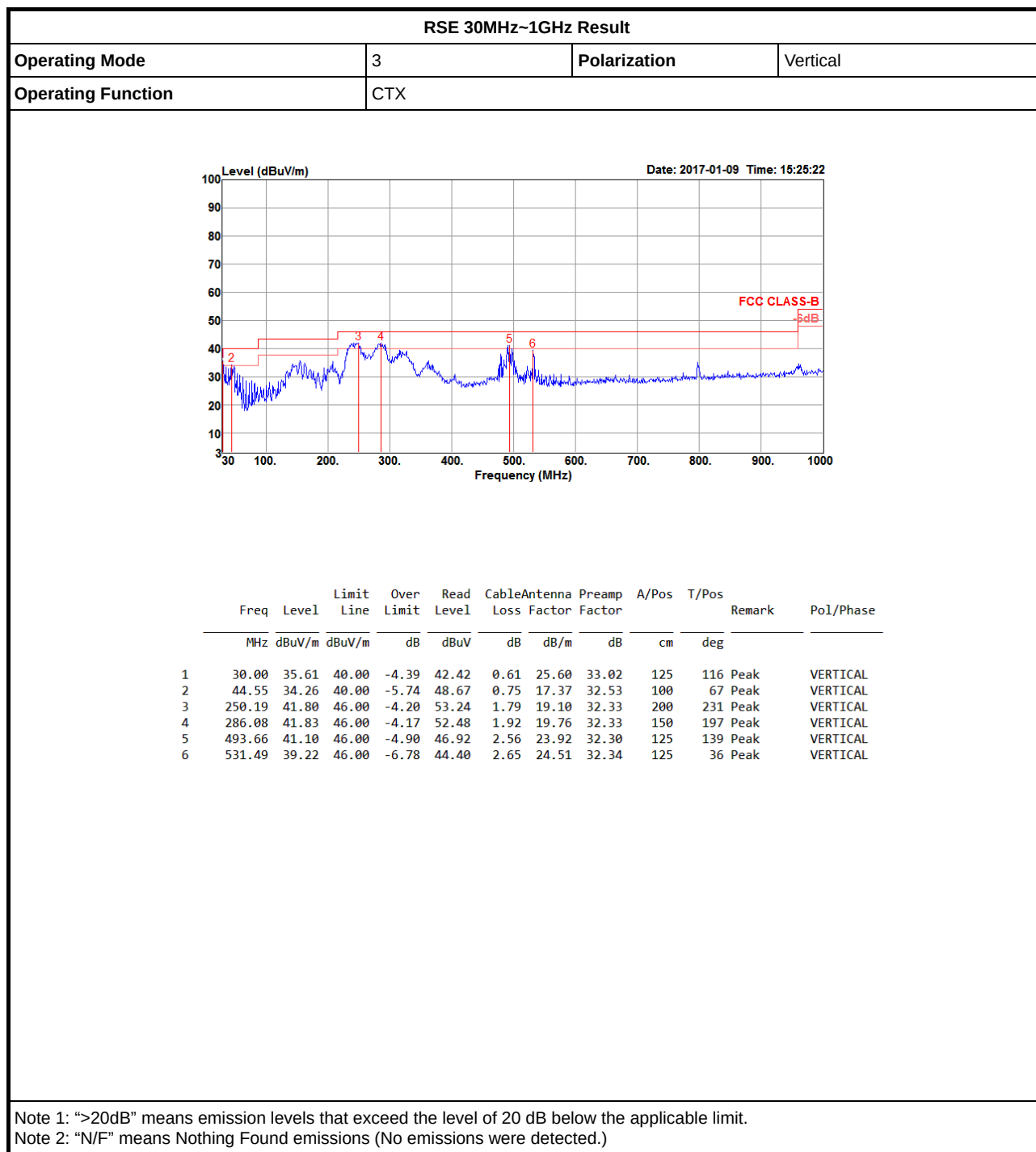


	Freq	Level	Limit	Over	Read	CableAntenna	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	cm	deg
1	0.03	35.07	79.08	-44.01	12.49	1.00	21.58	100	96 Peak
2	0.05	36.69	73.16	-36.47	14.64	1.00	21.05	100	86 Peak
3	0.21	40.53	61.25	-20.72	19.16	1.00	20.37	100	213 Peak
4	6.48	40.50	49.54	-9.04	18.67	1.17	20.66	100	137 Peak
5	14.11	40.31	49.54	-9.23	17.13	1.39	21.79	100	19 Peak
6	27.00	40.83	49.54	-8.71	16.14	1.75	22.94	100	171 Peak

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.)



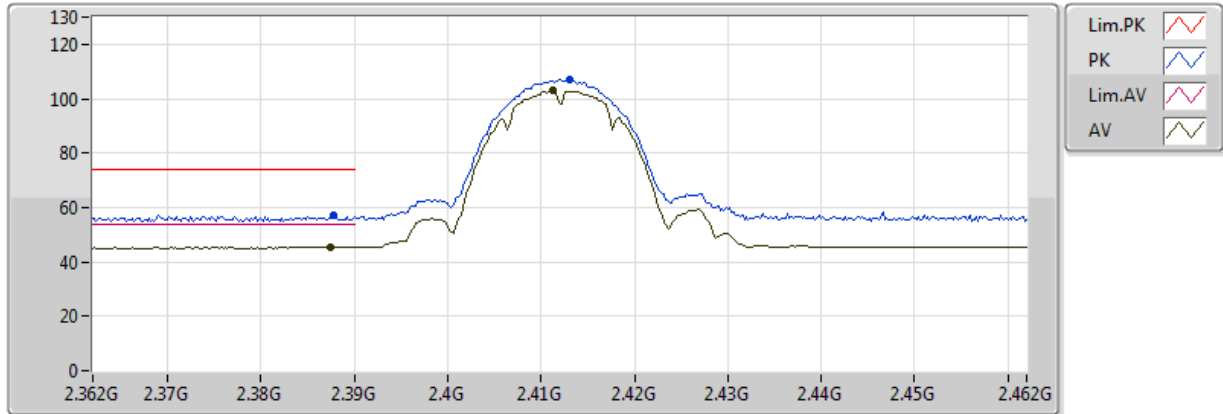


**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.39G	53.93	54.00	-0.07	33.16	3	H	360	2.08	-

802.11b_(1Mbps)_2TX

2412MHz_TX

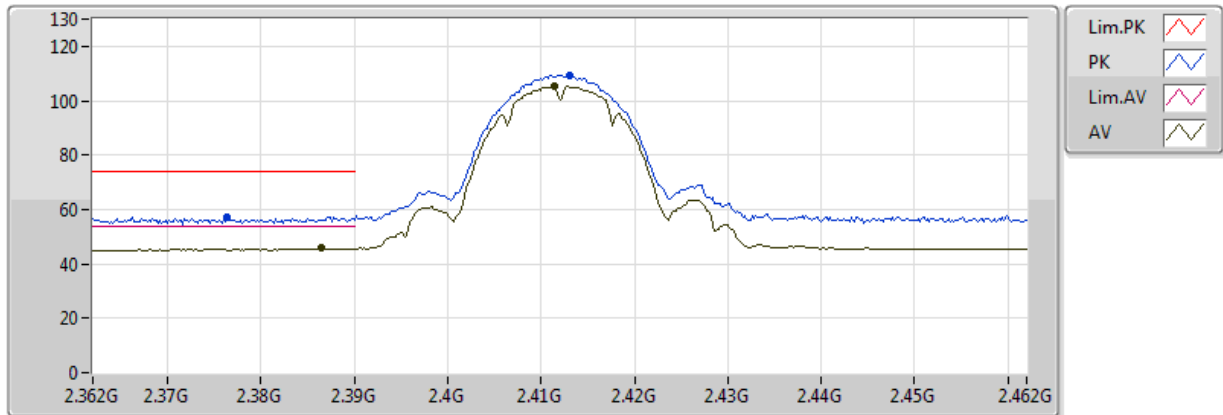


20170117
EUT Y_2TX_Non-TXBF
Setting 63/59
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3874G	45.51	54.00	-8.49	33.15	3	V	231	1.47	-
AV	2.4112G	102.87	Inf	-Inf	33.23	3	V	231	1.47	-
PK	2.3878G	57.15	74.00	-16.85	33.15	3	V	231	1.47	-
PK	2.413G	106.88	Inf	-Inf	33.24	3	V	231	1.47	-

802.11b_(1Mbps)_2TX

2412MHz_TX

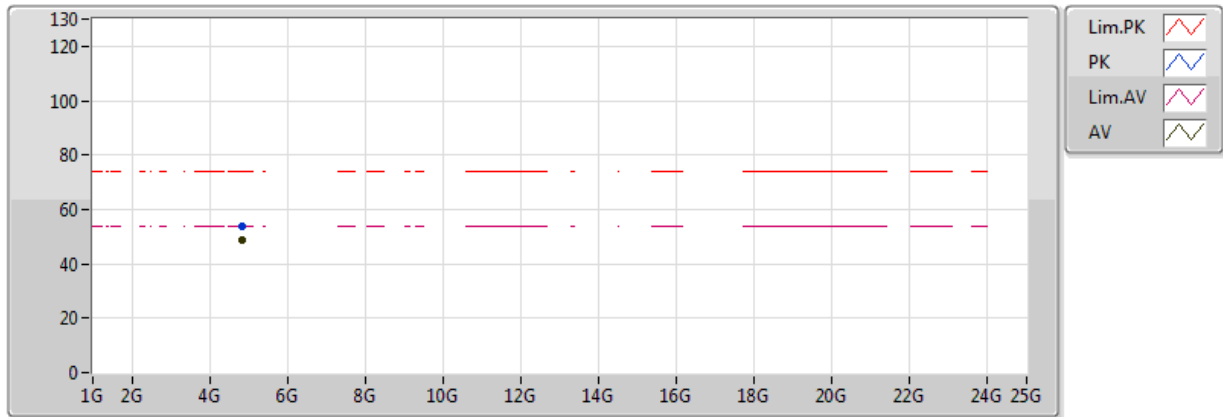


20170117
EUT Y_2TX_Non-TXBF
Setting 63/59
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3864G	45.70	54.00	-8.30	33.14	3	H	5	1.95	-
AV	2.4114G	105.27	Inf	-Inf	33.23	3	H	5	1.95	-
PK	2.3764G	57.23	74.00	-16.77	33.11	3	H	5	1.95	-
PK	2.413G	109.29	Inf	-Inf	33.24	3	H	5	1.95	-

802.11b_(1Mbps)_2TX

2412MHz_TX

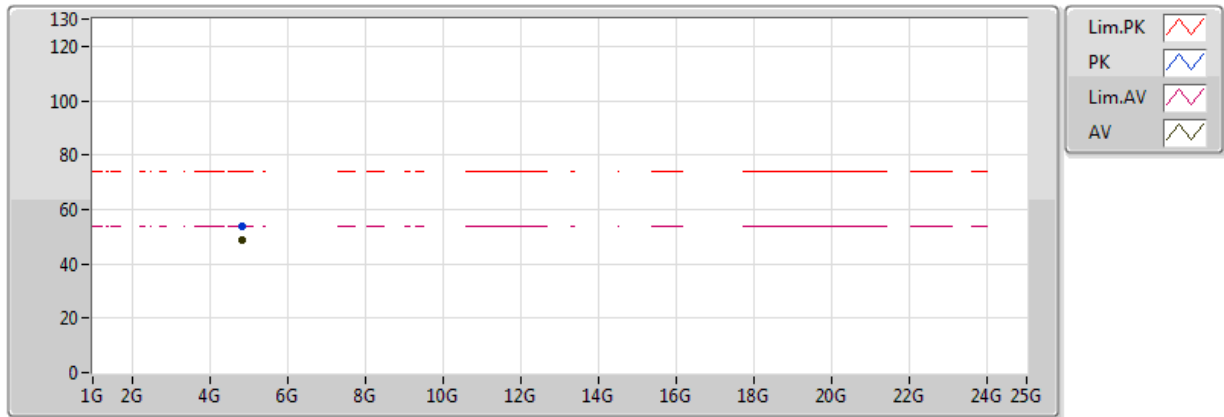


20170117
EUT Y_2TX_Non-TXBF
Setting 63/59
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82404G	48.60	54.00	-5.40	9.13	3	V	83	1.00	-
PK	4.82398G	53.82	74.00	-20.18	9.13	3	V	83	1.00	-

802.11b_(1Mbps)_2TX

2412MHz_TX

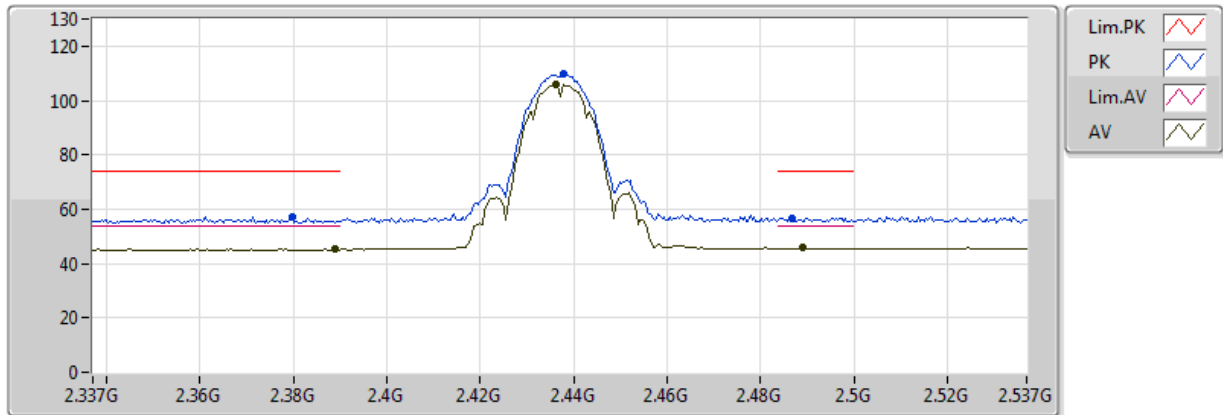


20170117
EUT Y_2TX_Non-TXBF
Setting 63/59
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82404G	48.86	54.00	-5.14	9.13	3	H	360	2.01	-
PK	4.82408G	53.94	74.00	-20.06	9.13	3	H	360	2.01	-

802.11b_(1Mbps)_2TX

2437MHz_TX

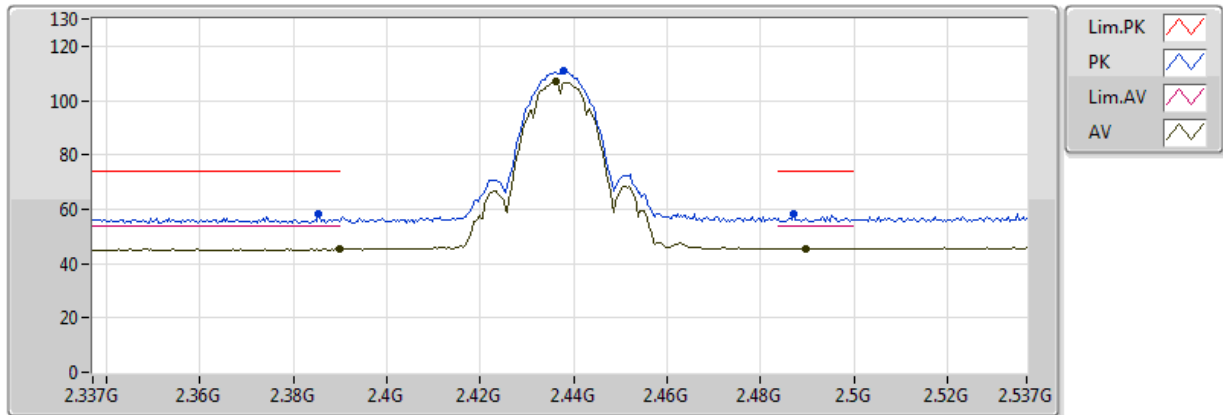


20170117
EUT Y_2TX_Non-TXBF
Setting 63/58
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389G	45.28	54.00	-8.72	33.15	3	V	179	2.88	-
AV	2.4362G	105.77	Inf	-Inf	33.32	3	V	179	2.88	-
AV	2.489G	45.67	54.00	-8.33	33.50	3	V	179	2.88	-
PK	2.3798G	57.14	74.00	-16.86	33.12	3	V	179	2.88	-
PK	2.4378G	109.70	Inf	-Inf	33.32	3	V	179	2.88	-
PK	2.4866G	56.86	74.00	-17.14	33.49	3	V	179	2.88	-

802.11b_(1Mbps)_2TX

2437MHz_TX

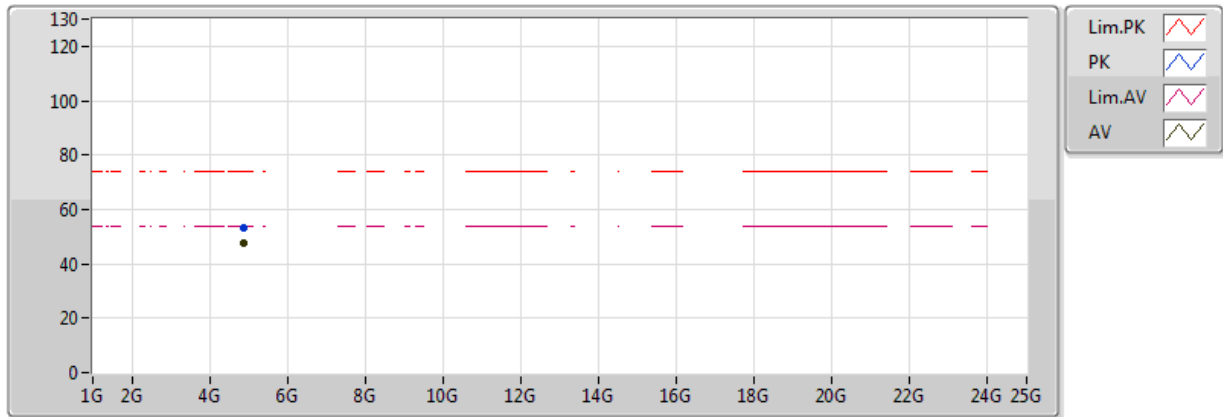


20170117
EUT Y_2TX_Non-TXBF
Setting 63/58
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	45.29	54.00	-8.71	33.15	3	H	358	1.90	-
AV	2.4362G	106.77	Inf	-Inf	33.32	3	H	358	1.90	-
AV	2.4898G	45.65	54.00	-8.35	33.50	3	H	358	1.90	-
PK	2.3854G	58.09	74.00	-15.91	33.14	3	H	358	1.90	-
PK	2.4378G	110.68	Inf	-Inf	33.32	3	H	358	1.90	-
PK	2.487G	58.20	74.00	-15.80	33.49	3	H	358	1.90	-

802.11b_(1Mbps)_2TX

2437MHz_TX

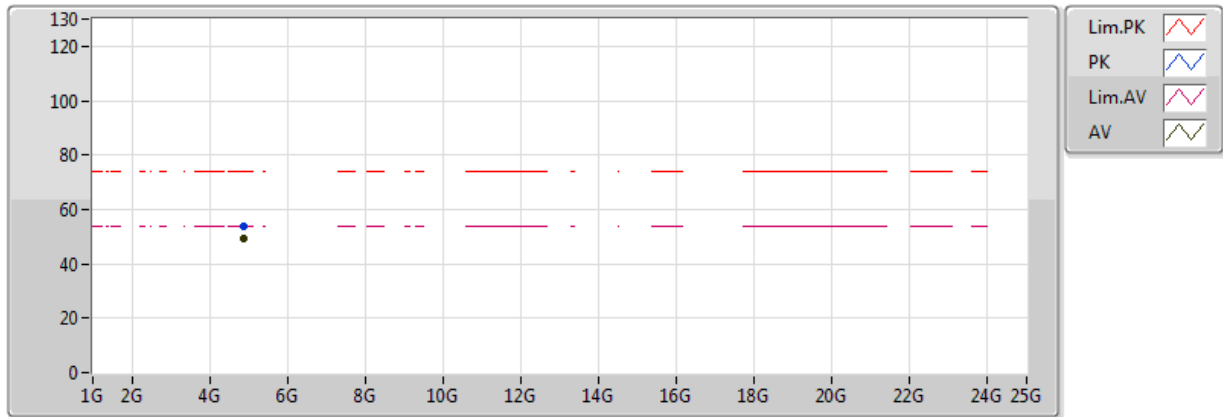


20170117
EUT Y_2TX_Non-TXBF
Setting 63/58
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87406G	47.90	54.00	-6.10	9.26	3	V	211	2.60	-
PK	4.87394G	53.50	74.00	-20.50	9.25	3	V	211	2.60	-

802.11b_(1Mbps)_2TX

2437MHz_TX

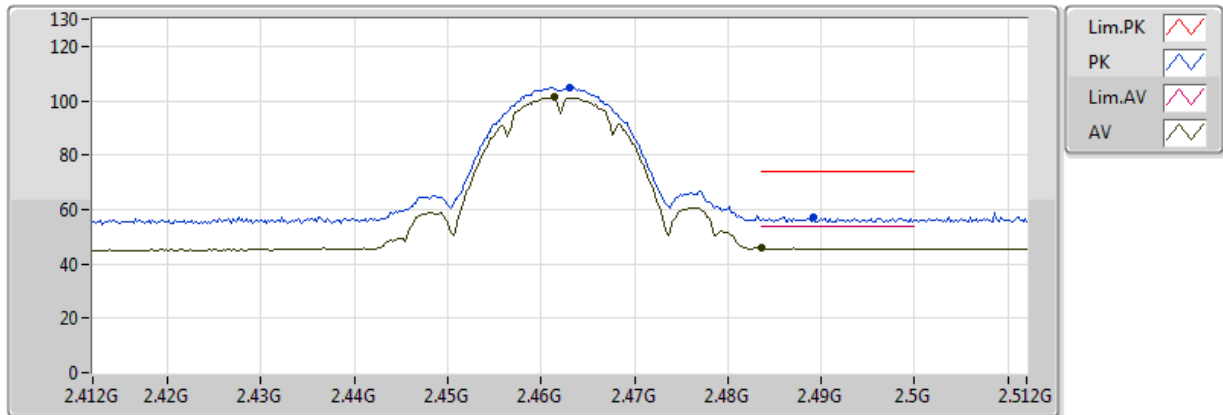


20170117
EUT Y_2TX_Non-TXBF
Setting 63/58
06-M-1-FSP

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	49.42	54.00	-4.58	9.26	3	H	44	1.00	-
PK	4.87386G	54.05	74.00	-19.95	9.25	3	H	44	1.00	-

802.11b_(1Mbps)_2TX

2462MHz_TX

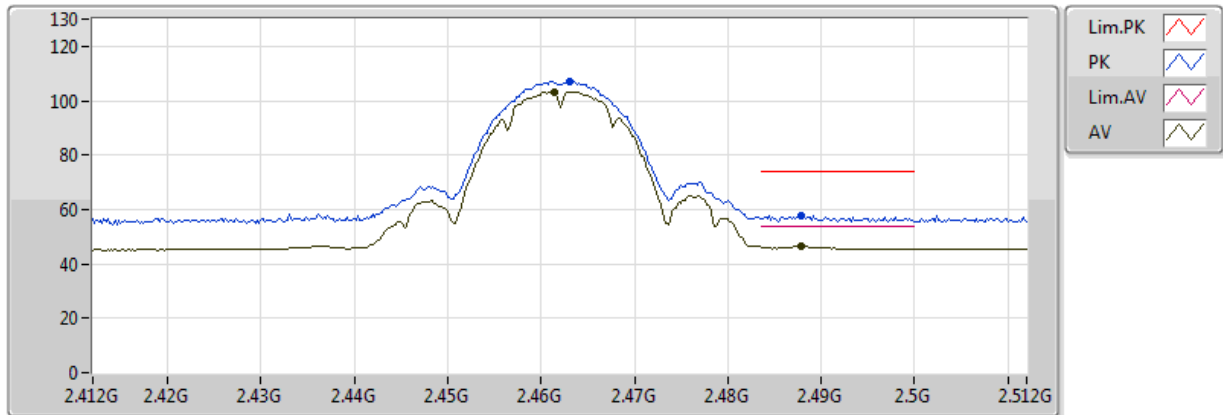


20170117
EUT Y_2TX_Non-TXBF
Setting 63/59
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4614G	101.21	Inf	-Inf	33.40	3	V	348	1.61	-
AV	2.4836G	45.71	54.00	-8.29	33.48	3	V	348	1.61	-
PK	2.463G	105.03	Inf	-Inf	33.41	3	V	348	1.61	-
PK	2.4892G	57.13	74.00	-16.87	33.50	3	V	348	1.61	-

802.11b_(1Mbps)_2TX

2462MHz_TX

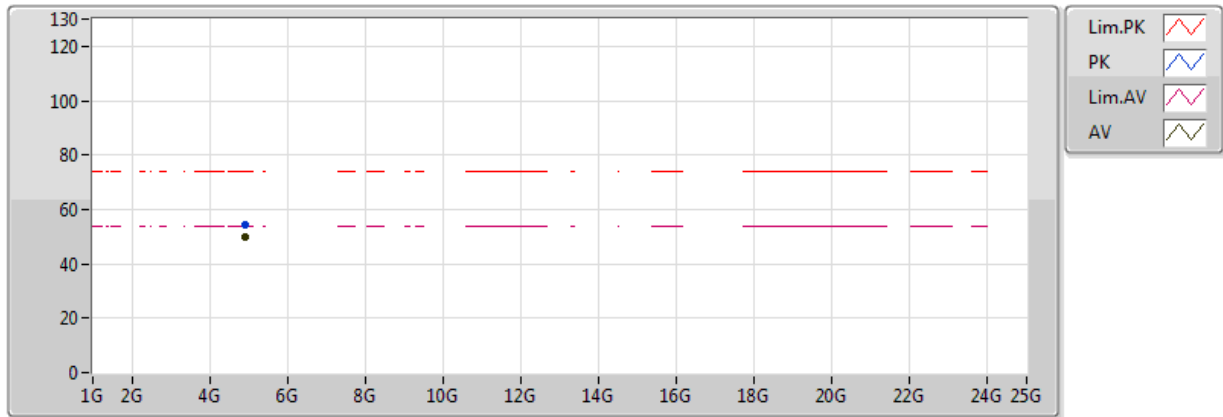


20170117
EUT Y_2TX_Non-TXBF
Setting 63/59
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4614G	103.38	Inf	-Inf	33.40	3	H	250	1.92	-
AV	2.4878G	46.57	54.00	-7.43	33.50	3	H	250	1.92	-
PK	2.463G	107.30	Inf	-Inf	33.41	3	H	250	1.92	-
PK	2.4878G	57.91	74.00	-16.09	33.50	3	H	250	1.92	-

802.11b_(1Mbps)_2TX

2462MHz_TX

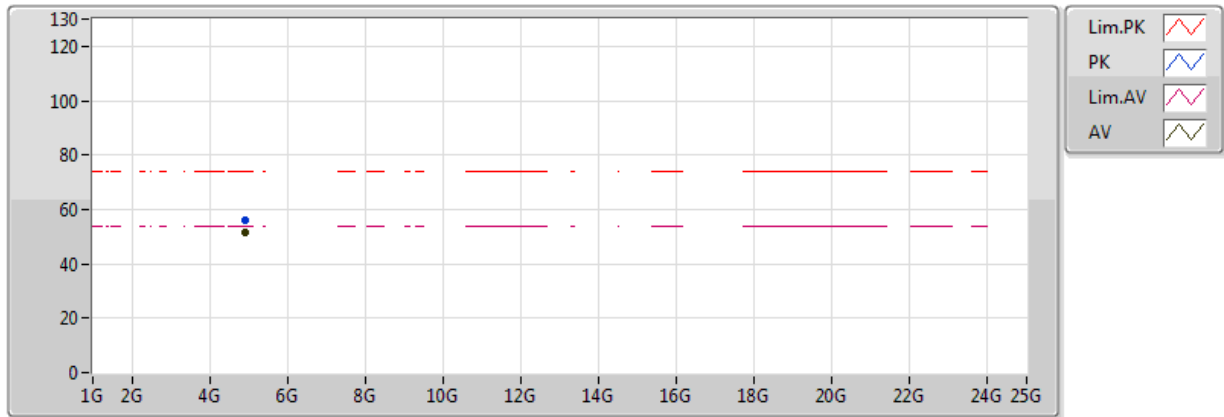


20170117
EUT Y_2TX_Non-TXBF
Setting 63/59
06-M-1-FSP

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	49.92	54.00	-4.08	9.38	3	V	195	2.36	-
PK	4.92394G	54.56	74.00	-19.44	9.38	3	V	195	2.36	-

802.11b_(1Mbps)_2TX

2462MHz_TX

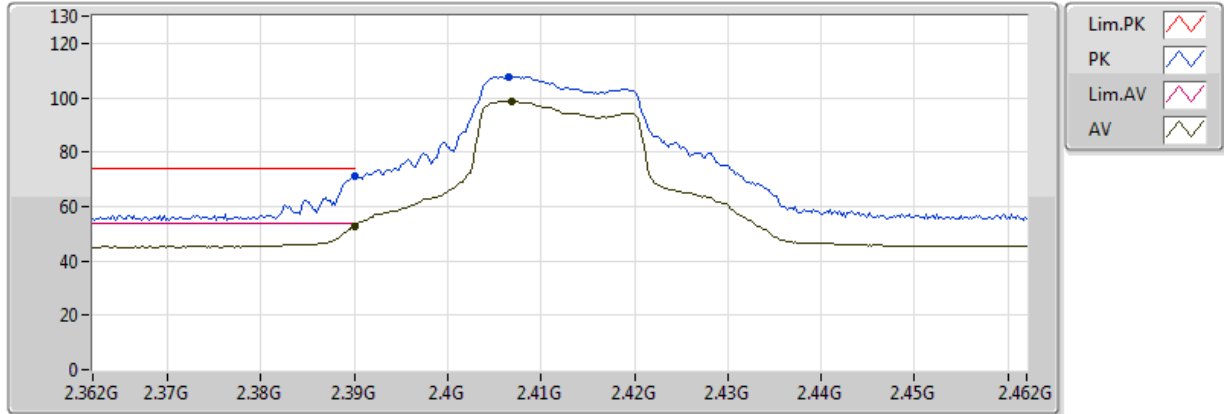


20170117
EUT Y_2TX_Non-TXBF
Setting 63/59
06-M-1-FSP

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	51.73	54.00	-2.27	9.38	3	H	337	2.88	-
PK	4.92408G	55.84	74.00	-18.16	9.38	3	H	337	2.88	-

802.11g_(6Mbps)_2TX

2412MHz_TX

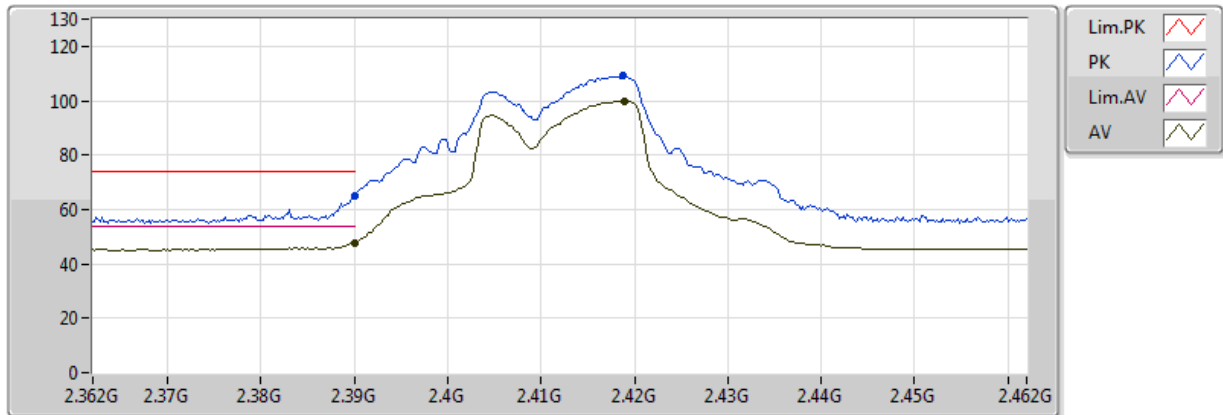


20170117
EUT Y_2TX_Non-TXBF
Setting 63/49
06-M-1-FSP

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	52.95	54.00	-1.05	33.16	3	V	232	2.31	-
AV	2.4068G	98.71	Inf	-Inf	33.21	3	V	232	2.31	-
PK	2.39G	71.04	74.00	-2.96	33.16	3	V	232	2.31	-
PK	2.4066G	107.77	Inf	-Inf	33.21	3	V	232	2.31	-

802.11g_(6Mbps)_2TX

2412MHz_TX

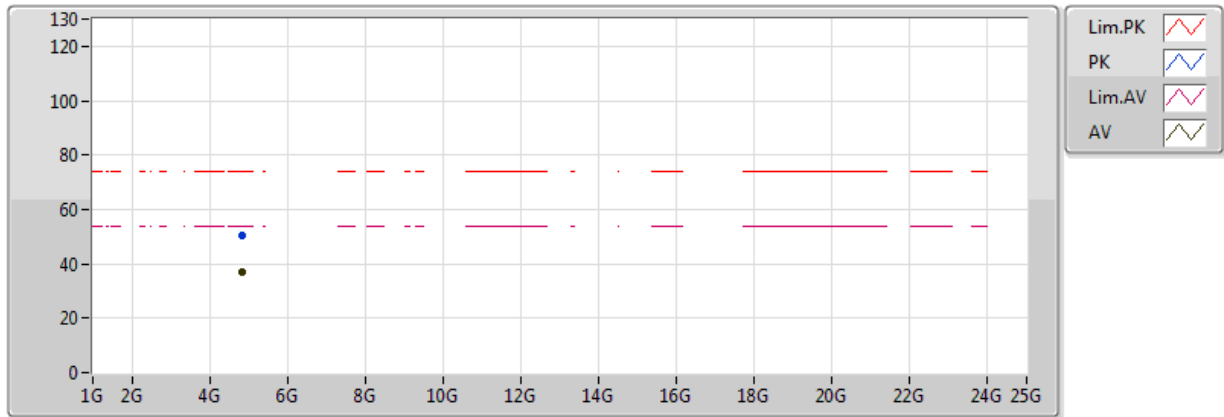


20170117
EUT Y_2TX_Non-TXBF
Setting 63/49
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.39G	47.83	54.00	-6.17	33.16	3	H	360	2.13	-
AV	2.419G	99.91	Inf	-Inf	33.26	3	H	360	2.13	-
PK	2.39G	64.95	74.00	-9.05	33.16	3	H	360	2.13	-
PK	2.4188G	109.13	Inf	-Inf	33.26	3	H	360	2.13	-

802.11g_(6Mbps)_2TX

2412MHz_TX

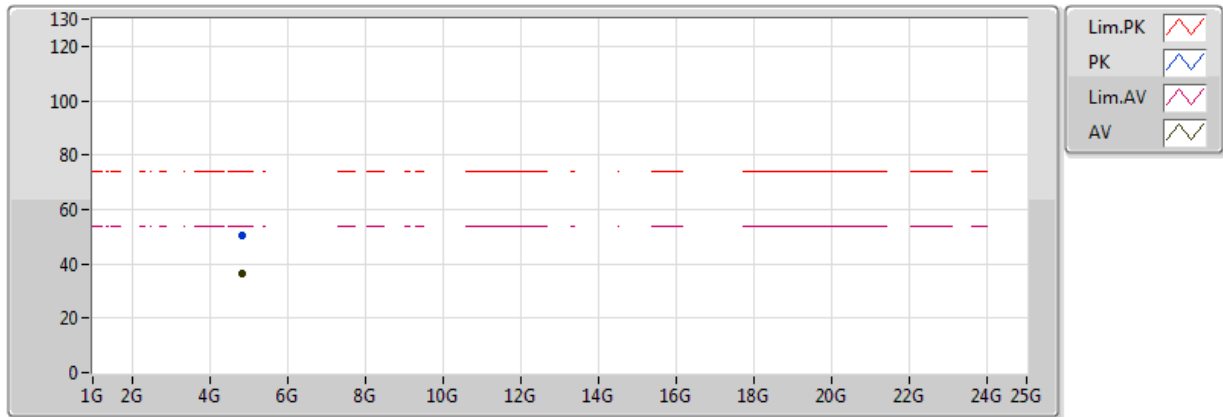


20170117
EUT Y_2TX_Non-TXBF
Setting 63/49
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82427G	36.84	54.00	-17.16	9.13	3	V	195	2.18	-
PK	4.82253G	50.46	74.00	-23.54	9.13	3	V	195	2.18	-

802.11g_(6Mbps)_2TX

2412MHz_TX

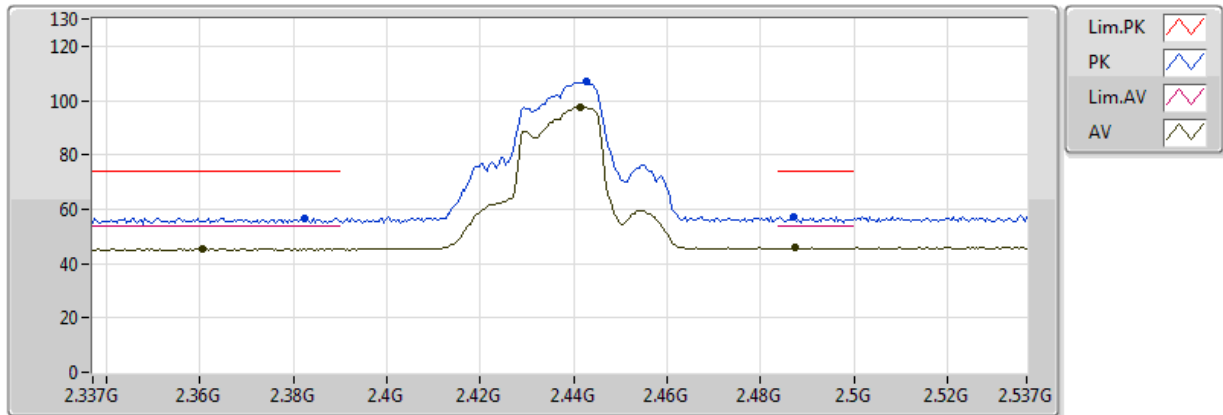


20170117
EUT Y_2TX_Non-TXBF
Setting 63/59
06-M-1-FSP

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	36.42	54.00	-17.58	9.13	3	H	294	2.11	-
PK	4.82314G	50.16	74.00	-23.84	9.13	3	H	294	2.11	-

802.11g_(6Mbps)_2TX

2437MHz_TX

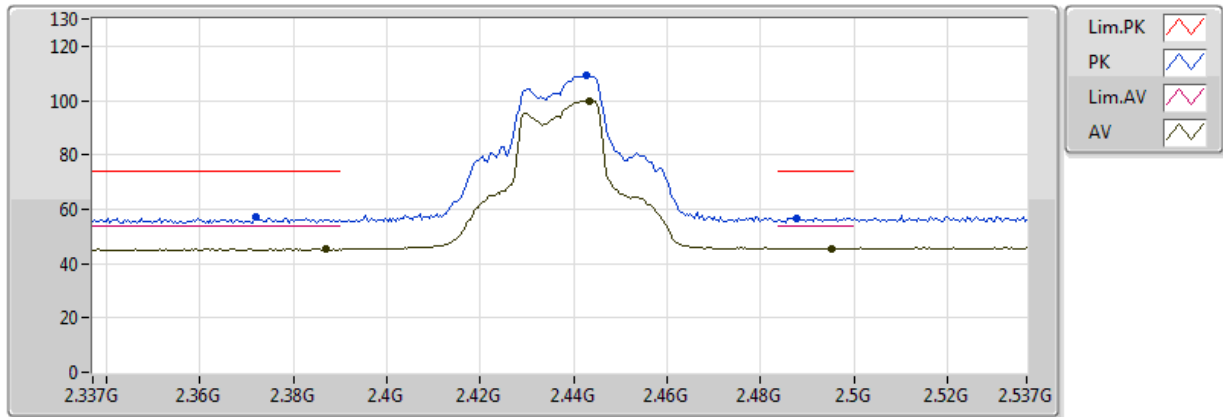


20170117
EUT Y_2TX_Non-TXBF
Setting 63/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3606G	45.27	54.00	-8.73	33.05	3	V	232	1.46	-
AV	2.4414G	97.47	Inf	-Inf	33.33	3	V	232	1.46	-
AV	2.4874G	45.71	54.00	-8.29	33.50	3	V	232	1.46	-
PK	2.3822G	56.86	74.00	-17.14	33.13	3	V	232	1.46	-
PK	2.4426G	106.81	Inf	-Inf	33.34	3	V	232	1.46	-
PK	2.487G	57.12	74.00	-16.88	33.49	3	V	232	1.46	-

802.11g_(6Mbps)_2TX

2437MHz_TX

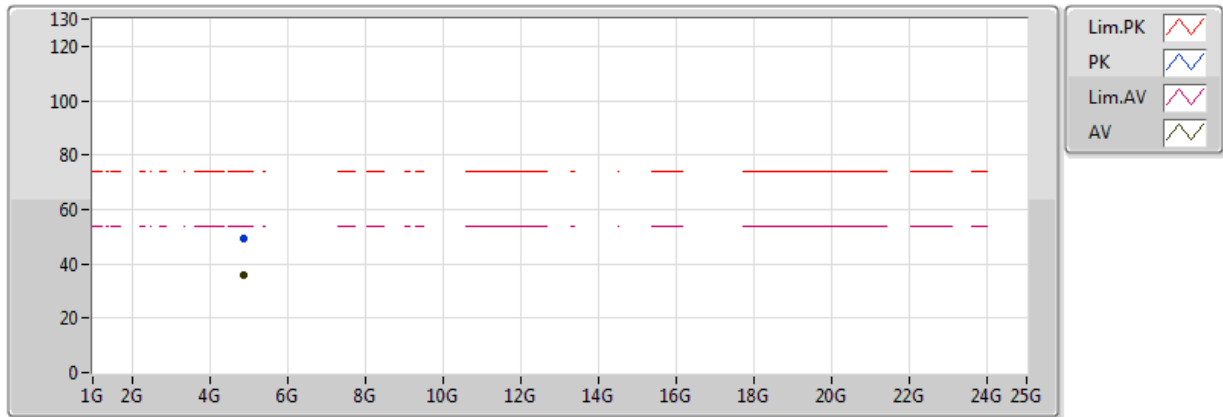


20170117
EUT Y_2TX_Non-TXBF
Setting 63/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.387G	45.30	54.00	-8.70	33.14	3	H	5	1.94	-
AV	2.4434G	99.96	Inf	-Inf	33.34	3	H	5	1.94	-
AV	2.4954G	45.66	54.00	-8.34	33.52	3	H	5	1.94	-
PK	2.3718G	56.96	74.00	-17.04	33.09	3	H	5	1.94	-
PK	2.4426G	109.33	Inf	-Inf	33.34	3	H	5	1.94	-
PK	2.4878G	56.84	74.00	-17.16	33.50	3	H	5	1.94	-

802.11g_(6Mbps)_2TX

2437MHz_TX

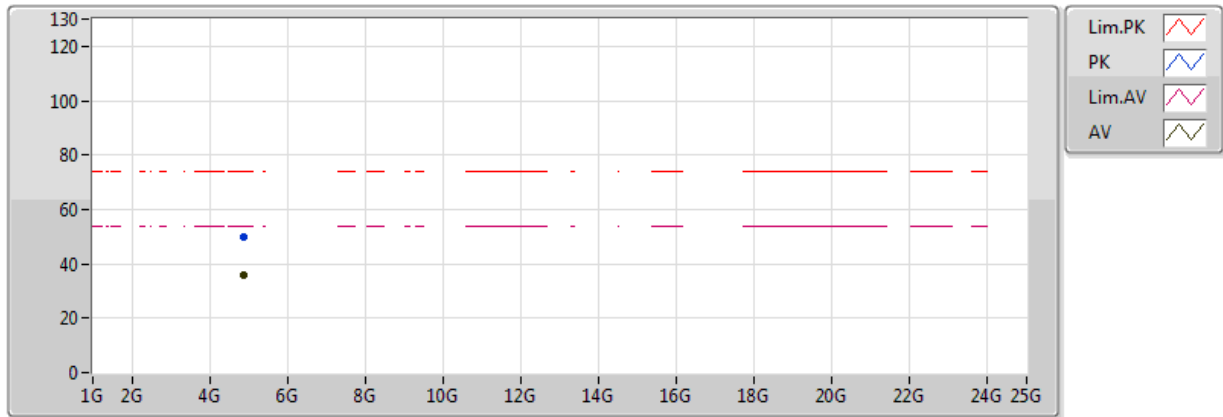


20170117
EUT Y_2TX_Non-TXBF
Setting 63/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8717G	35.93	54.00	-18.07	9.25	3	V	247	1.87	-
PK	4.87378G	49.39	74.00	-24.61	9.25	3	V	247	1.87	-

802.11g_(6Mbps)_2TX

2437MHz_TX

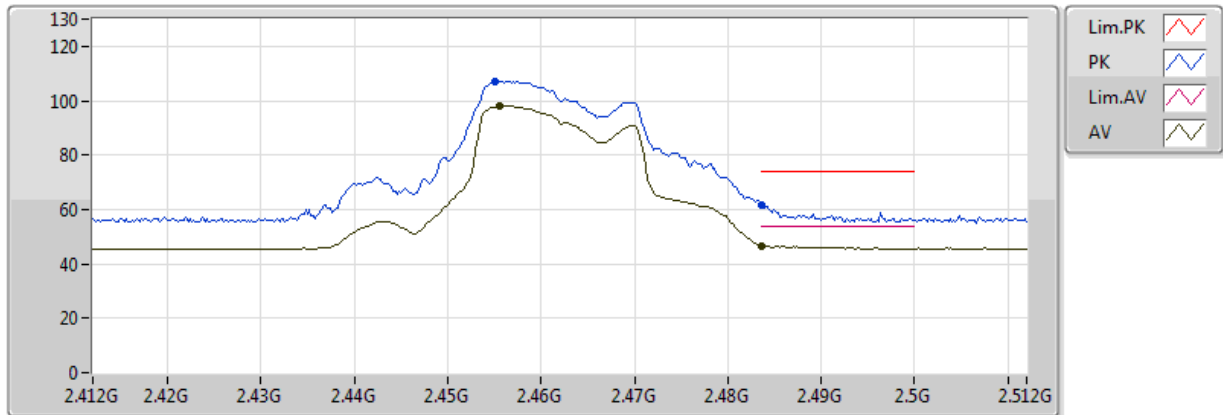


20170117
EUT Y_2TX_Non-TXBF
Setting 63/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8736G	35.94	54.00	-18.06	9.25	3	H	317	1.88	-
PK	4.87257G	49.63	74.00	-24.37	9.25	3	H	317	1.88	-

802.11g_(6Mbps)_2TX

2462MHz_TX

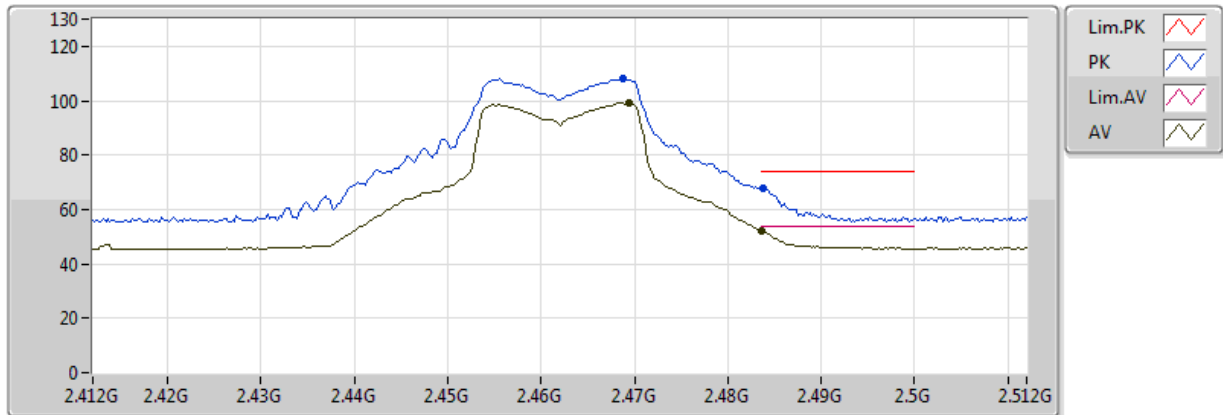


20170117
EUT Y_2TX_Non-TXBF
Setting 63/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4556G	98.12	Inf	-Inf	33.38	3	V	228	2.05	-
AV	2.4836G	46.70	54.00	-7.30	33.48	3	V	228	2.05	-
PK	2.455G	107.22	Inf	-Inf	33.38	3	V	228	2.05	-
PK	2.4836G	61.70	74.00	-12.30	33.48	3	V	228	2.05	-

802.11g_(6Mbps)_2TX

2462MHz_TX

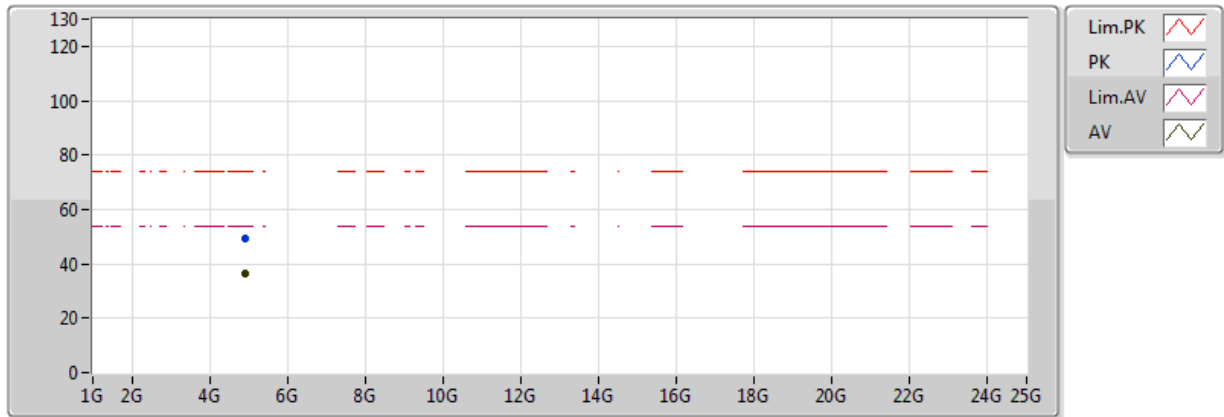


20170117
EUT Y_2TX_Non-TXBF
Setting 63/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4694G	99.01	Inf	-Inf	33.43	3	H	0	2.09	-
AV	2.4836G	52.13	54.00	-1.87	33.48	3	H	0	2.09	-
PK	2.4688G	107.98	Inf	-Inf	33.43	3	H	0	2.09	-
PK	2.4838G	68.04	74.00	-5.96	33.48	3	H	0	2.09	-

802.11g_(6Mbps)_2TX

2462MHz_TX

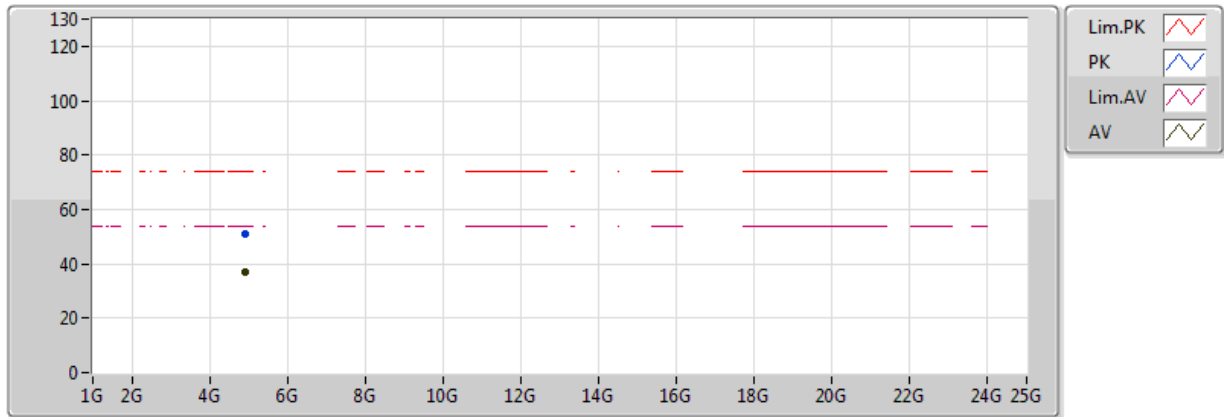


20170117
EUT Y_2TX_Non-TXBF
Setting 63/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92357G	36.27	54.00	-17.73	9.38	3	V	192	1.97	-
PK	4.92329G	49.50	74.00	-24.50	9.38	3	V	192	1.97	-

802.11g_(6Mbps)_2TX

2462MHz_TX

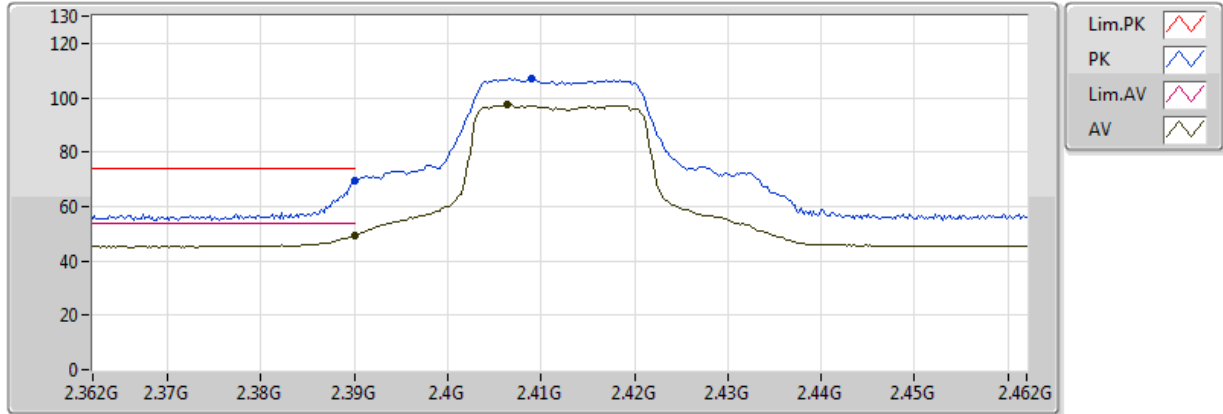


20170117
EUT Y_2TX_Non-TXBF
Setting 63/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92367G	37.19	54.00	-16.81	9.38	3	H	140	2.07	-
PK	4.92533G	50.74	74.00	-23.26	9.38	3	H	140	2.07	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

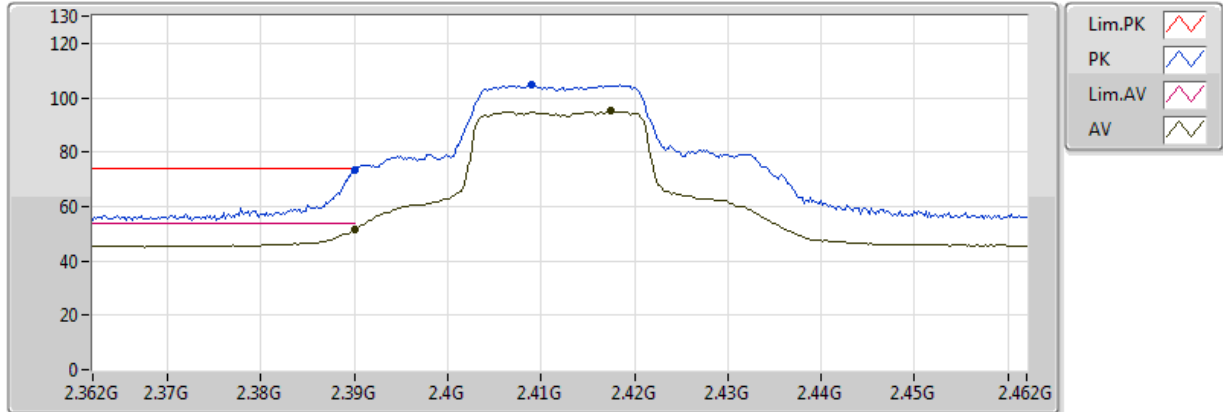


20170117
EUT Y_2TX_Non-TXBF
Setting 52/39
06-M-1-FSP

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	49.46	54.00	-4.54	33.16	3	V	182	2.65	-
AV	2.4064G	97.49	Inf	-Inf	33.21	3	V	182	2.65	-
PK	2.39G	69.58	74.00	-4.42	33.16	3	V	182	2.65	-
PK	2.409G	106.87	Inf	-Inf	33.22	3	V	182	2.65	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

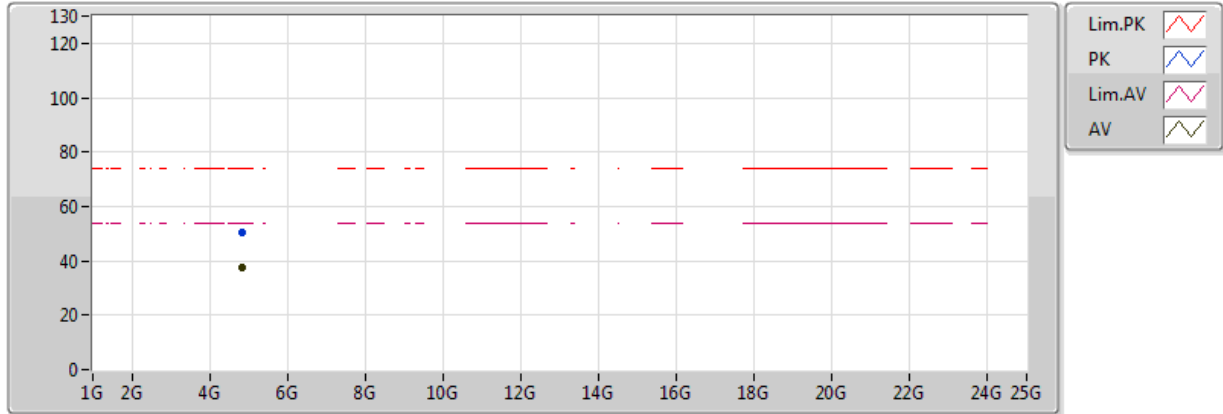


20170117
EUT Y_2TX_Non-TXBF
Setting 52/39
06-M-1-FSP

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	51.48	54.00	-2.52	33.16	3	H	3	1.93	-
AV	2.4174G	95.18	Inf	-Inf	33.25	3	H	3	1.93	-
PK	2.39G	73.38	74.00	-0.62	33.16	3	H	3	1.93	-
PK	2.409G	104.61	Inf	-Inf	33.22	3	H	3	1.93	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

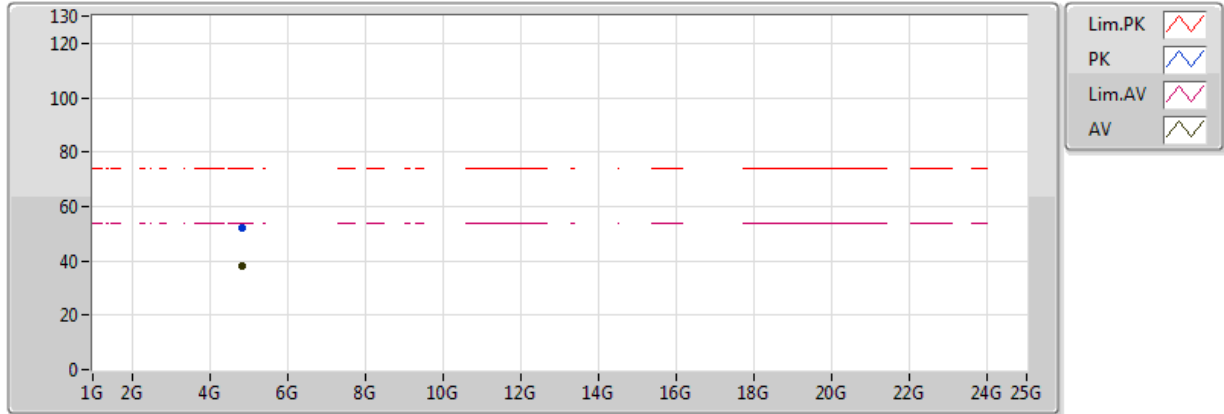


20170117
EUT Y_2TX_Non-TXBF
Setting 52/39
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82427G	37.35	54.00	-16.65	9.13	3	V	282	1.65	-
PK	4.82384G	50.36	74.00	-23.64	9.13	3	V	282	1.65	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

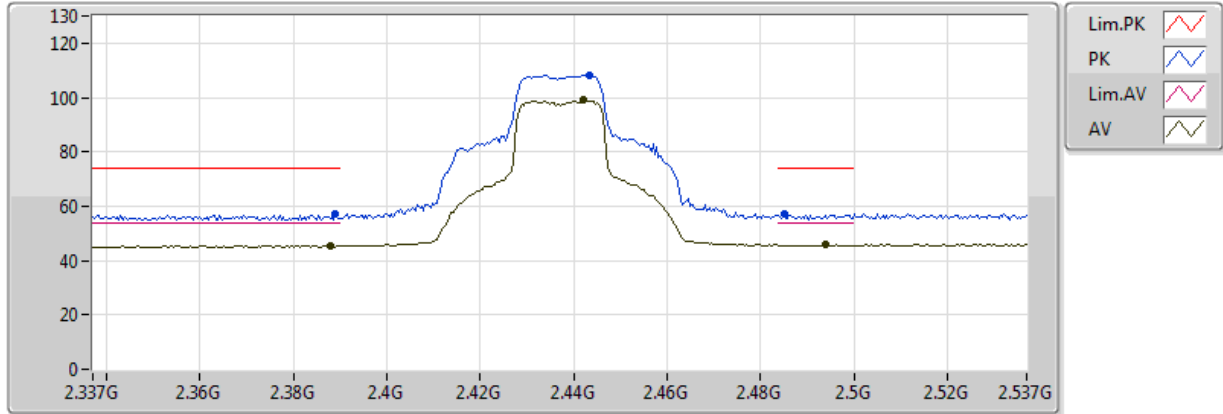


20170117
EUT Y_2TX_Non-TXBF
Setting 52/39
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82377G	38.29	54.00	-15.71	9.13	3	H	339	2.08	-
PK	4.8215G	52.03	74.00	-21.97	9.12	3	H	339	2.08	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

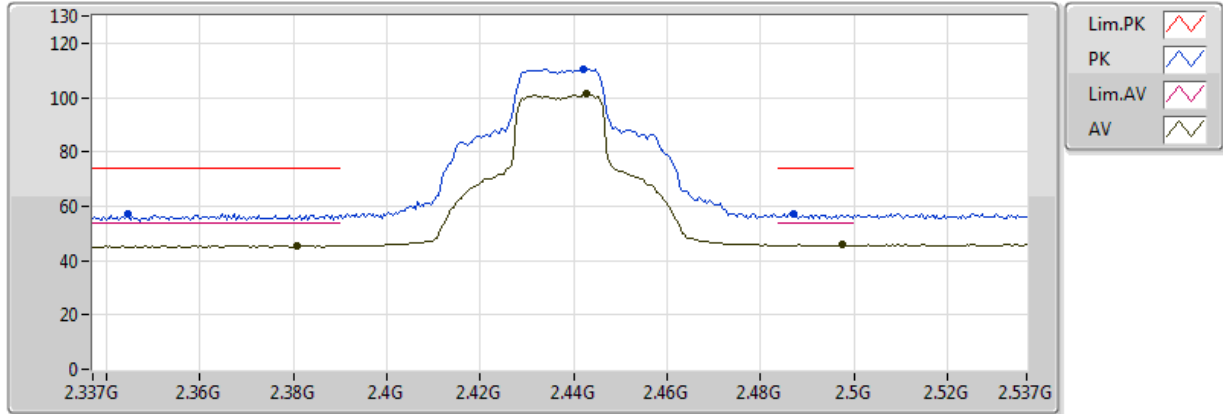


20170117
EUT Y_2TX_Non-TXBF
Setting 63/51
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3878G	45.33	54.00	-8.67	33.15	3	V	223	1.43	-
AV	2.4422G	99.01	Inf	-Inf	33.34	3	V	223	1.43	-
AV	2.4938G	45.85	54.00	-8.15	33.52	3	V	223	1.43	-
PK	2.389G	57.38	74.00	-16.62	33.15	3	V	223	1.43	-
PK	2.4434G	108.13	Inf	-Inf	33.34	3	V	223	1.43	-
PK	2.485G	56.92	74.00	-17.08	33.49	3	V	223	1.43	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

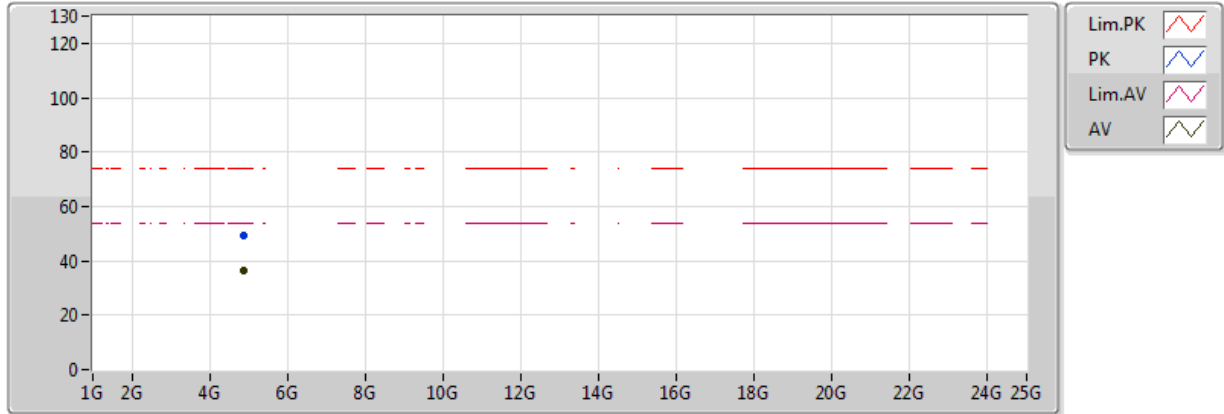


20170117
EUT Y_2TX_Non-TXBF
Setting 63/51
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3806G	45.41	54.00	-8.59	33.12	3	H	358	1.92	-
AV	2.4426G	101.25	Inf	-Inf	33.34	3	H	358	1.92	-
AV	2.4974G	45.69	54.00	-8.31	33.53	3	H	358	1.92	-
PK	2.3446G	57.23	74.00	-16.77	33.00	3	H	358	1.92	-
PK	2.4422G	110.48	Inf	-Inf	33.34	3	H	358	1.92	-
PK	2.487G	57.27	74.00	-16.73	33.49	3	H	358	1.92	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

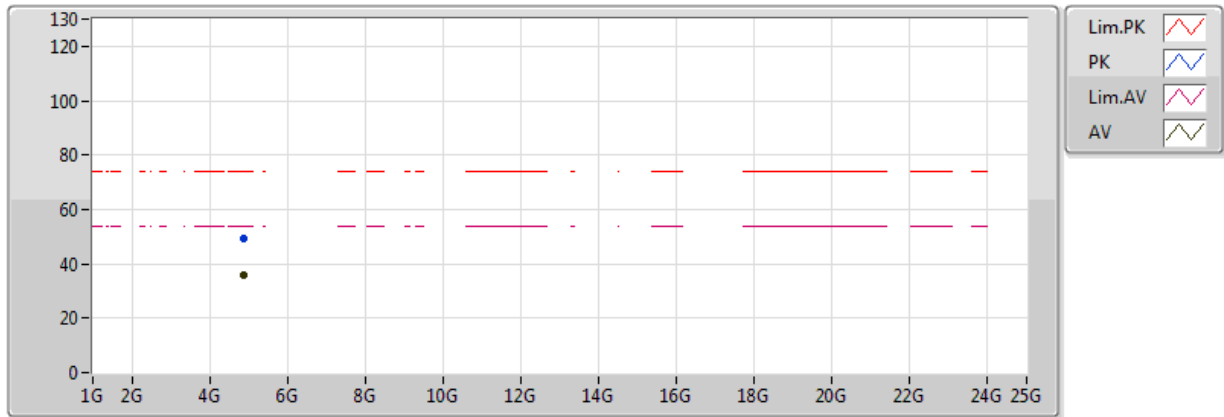


20170117
EUT Y_2TX_Non-TXBF
Setting 63/51
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87373G	36.39	54.00	-17.61	9.25	3	V	138	2.36	-
PK	4.87275G	49.42	74.00	-24.58	9.25	3	V	138	2.36	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

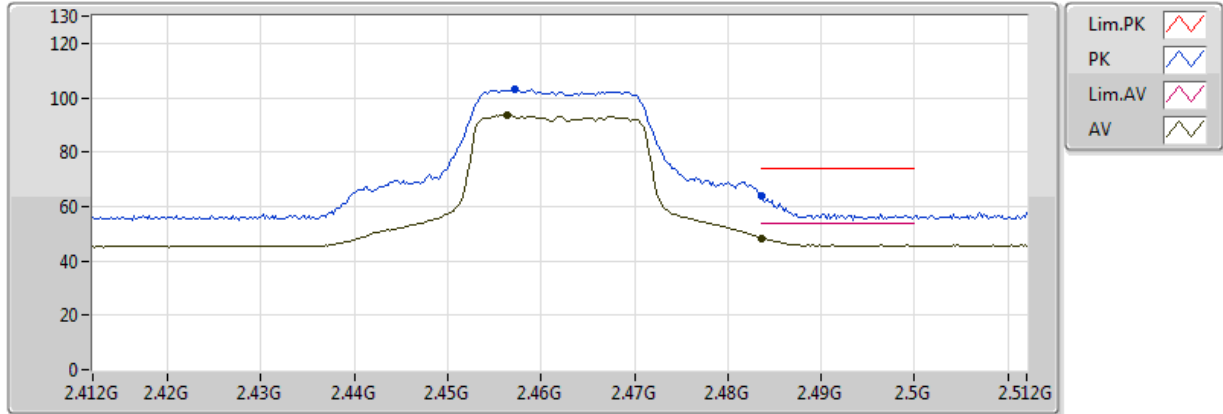


20170117
EUT Y_2TX_Non-TXBF
Setting 63/51
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87405G	36.06	54.00	-17.94	9.26	3	H	235	2.15	-
PK	4.87487G	49.38	74.00	-24.62	9.26	3	H	235	2.15	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

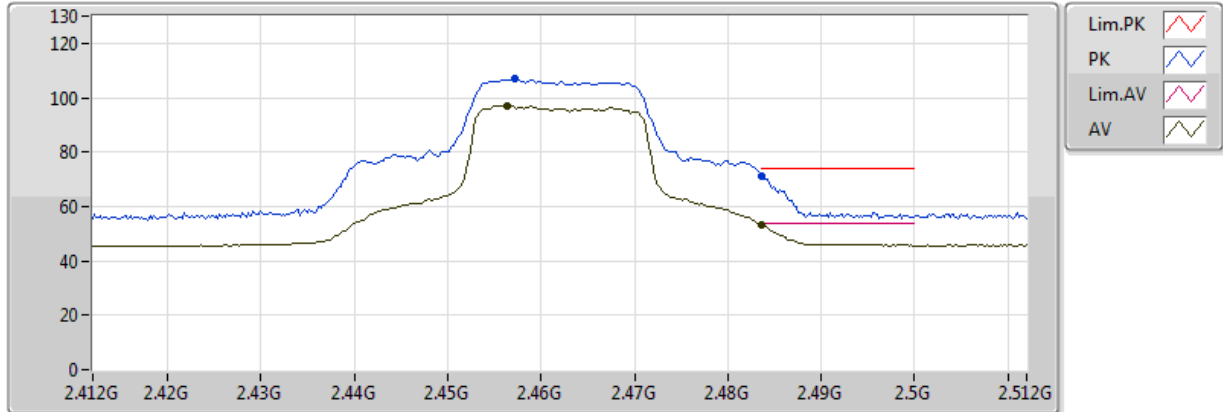


20170117
EUT Y_2TX_Non-TXBF
Setting 45/33
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4564G	93.65	Inf	-Inf	33.39	3	V	227	2.05	-
AV	2.4836G	48.46	54.00	-5.54	33.48	3	V	227	2.05	-
PK	2.4572G	102.84	Inf	-Inf	33.39	3	V	227	2.05	-
PK	2.4836G	63.88	74.00	-10.12	33.48	3	V	227	2.05	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

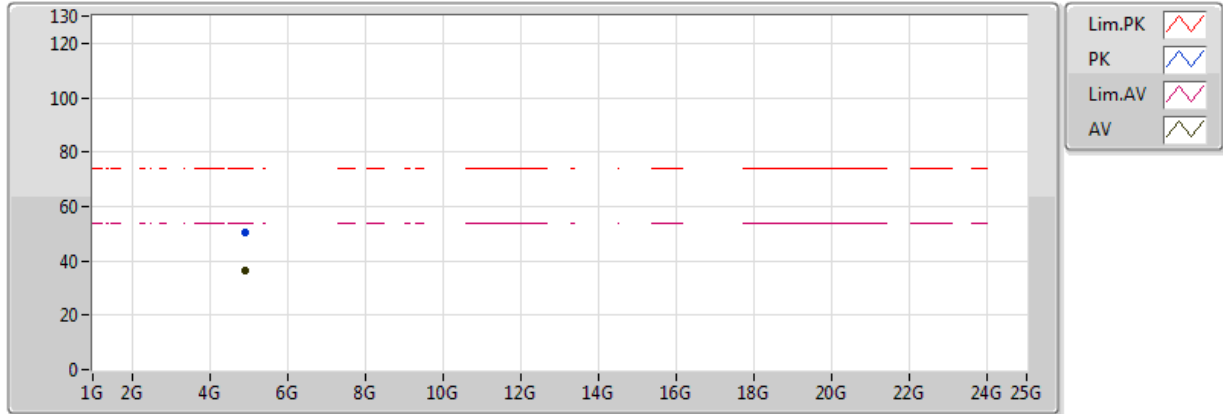


20170117
EUT Y_2TX_Non-TXBF
Setting 45/33
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4564G	97.20	Inf	-Inf	33.39	3	H	4	1.92	-
AV	2.4836G	53.51	54.00	-0.49	33.48	3	H	4	1.92	-
PK	2.4572G	106.84	Inf	-Inf	33.39	3	H	4	1.92	-
PK	2.4836G	71.39	74.00	-2.61	33.48	3	H	4	1.92	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

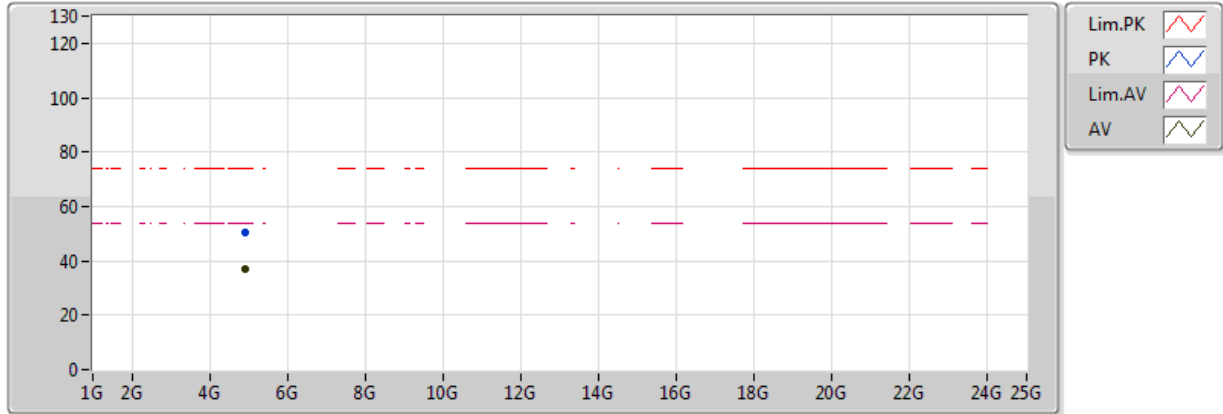


20170117
EUT Y_2TX_Non-TXBF
Setting 45/33
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92629G	36.45	54.00	-17.55	9.39	3	V	32	2.17	-
PK	4.92201G	50.21	74.00	-23.79	9.38	3	V	32	2.17	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

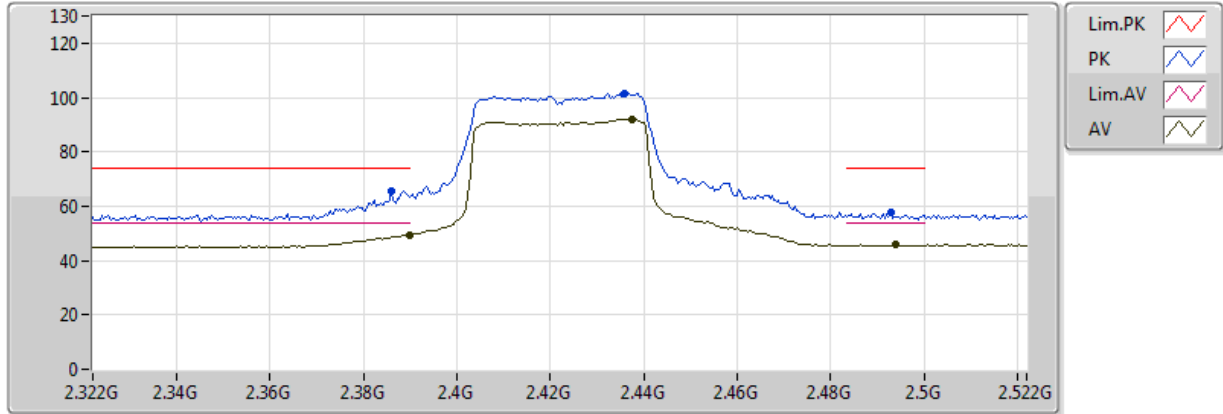


20170117
EUT Y_2TX_Non-TXBF
Setting 45/33
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9218G	37.02	54.00	-16.98	9.37	3	H	44	2.14	-
PK	4.92233G	50.31	74.00	-23.69	9.38	3	H	44	2.14	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

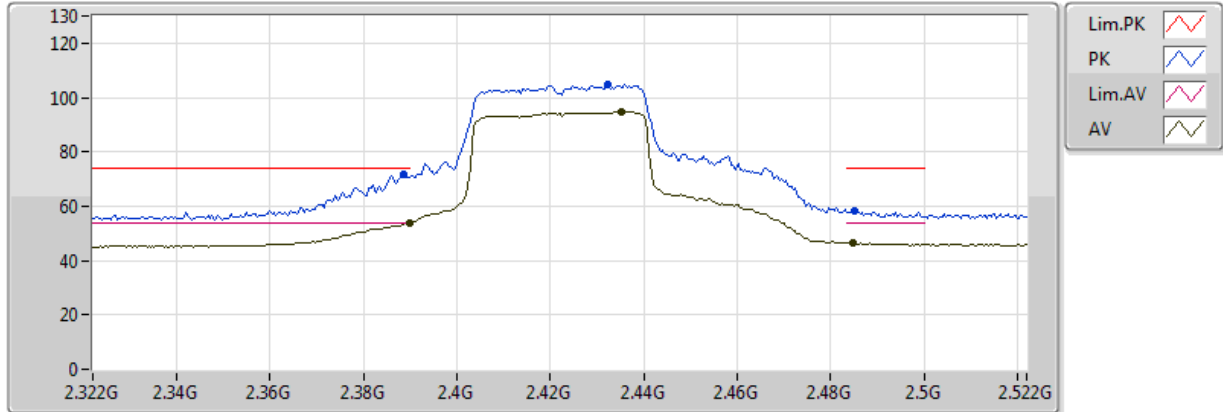


20170117
EUT Y_2TX_Non-TXBF
Setting 48/36
06-M-1-FSP

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	49.51	54.00	-4.49	33.16	3	V	223	1.41	-
AV	2.4376G	92.09	Inf	-Inf	33.32	3	V	223	1.41	-
AV	2.494G	45.71	54.00	-8.29	33.52	3	V	223	1.41	-
PK	2.386G	65.83	74.00	-8.17	33.14	3	V	223	1.41	-
PK	2.436G	101.49	Inf	-Inf	33.32	3	V	223	1.41	-
PK	2.4928G	57.49	74.00	-16.51	33.51	3	V	223	1.41	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

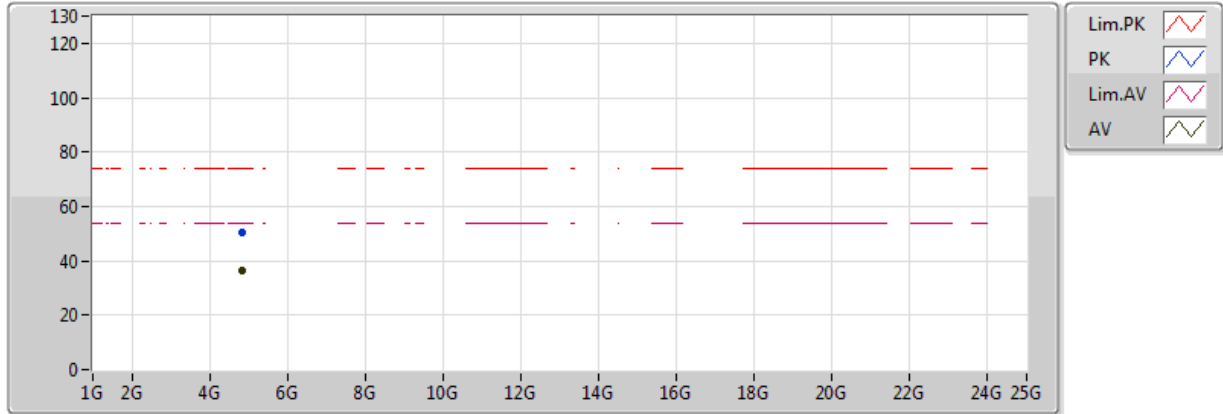


20170117
EUT Y_2TX_Non-TXBF
Setting 48/36
06-M-1-FSP

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	53.93	54.00	-0.07	33.16	3	H	360	2.08	-
AV	2.4352G	94.89	Inf	-Inf	33.31	3	H	360	2.08	-
AV	2.4848G	46.32	54.00	-7.68	33.49	3	H	360	2.08	-
PK	2.3884G	71.70	74.00	-2.30	33.15	3	H	360	2.08	-
PK	2.4324G	104.79	Inf	-Inf	33.30	3	H	360	2.08	-
PK	2.4852G	58.23	74.00	-15.77	33.49	3	H	360	2.08	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

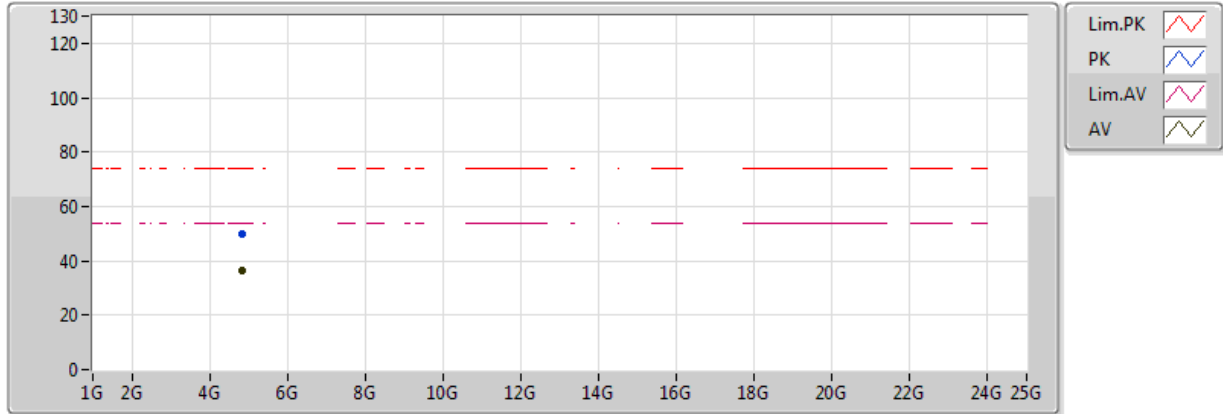


20170117
EUT Y_2TX_Non-TXBF
Setting 48/36
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84277G	36.55	54.00	-17.45	9.18	3	V	352	2.13	-
PK	4.84363G	50.50	74.00	-23.50	9.18	3	V	352	2.13	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

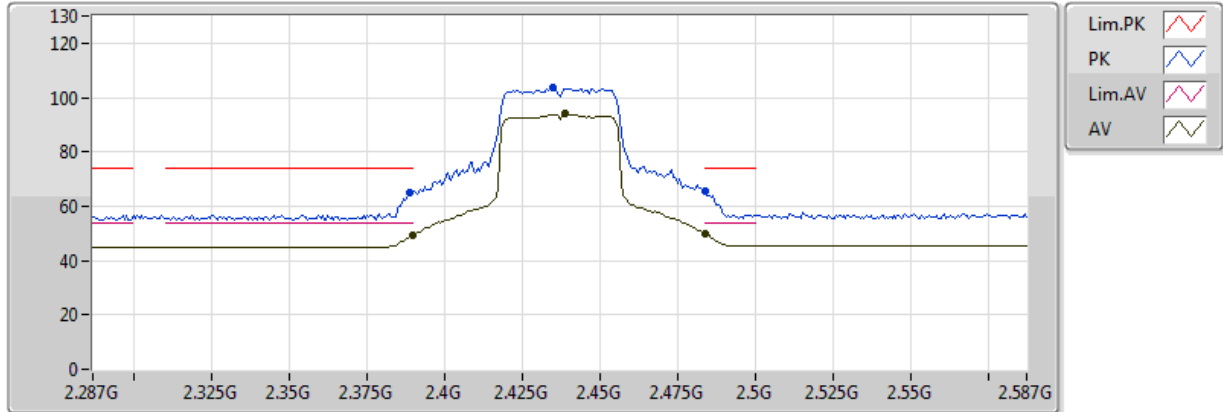


20170117
EUT Y_2TX_Non-TXBF
Setting 48/36
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.841722G	36.62	54.00	-17.38	9.17	3	H	110	1.30	-
PK	4.842222G	49.84	74.00	-24.16	9.18	3	H	110	1.30	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

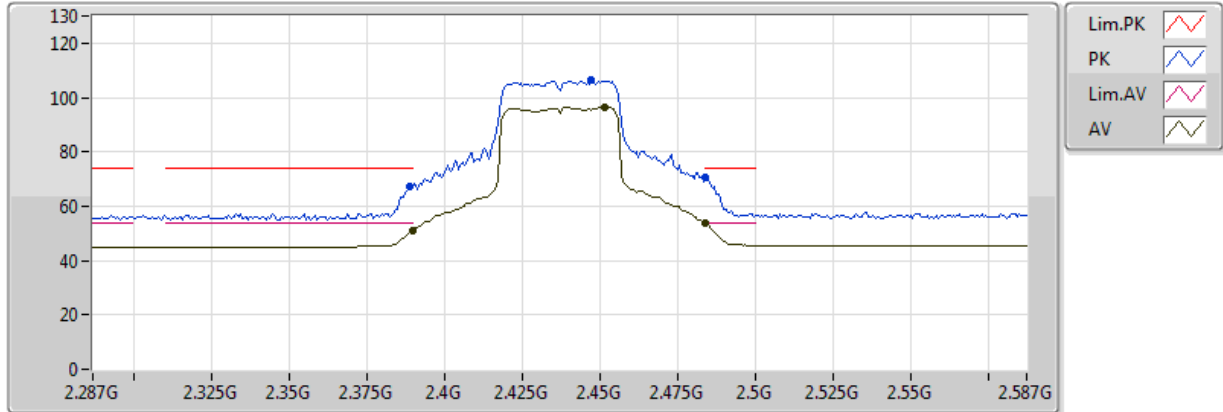


20170117
EUT Y_2TX_Non-TXBF
Setting 62/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	49.06	54.00	-4.94	33.15	3	V	235	1.44	-
AV	2.4388G	93.96	Inf	-Inf	33.33	3	V	235	1.44	-
AV	2.4838G	50.03	54.00	-3.97	33.48	3	V	235	1.44	-
PK	2.389G	65.06	74.00	-8.94	33.15	3	V	235	1.44	-
PK	2.4346G	103.91	Inf	-Inf	33.31	3	V	235	1.44	-
PK	2.4838G	65.83	74.00	-8.17	33.48	3	V	235	1.44	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

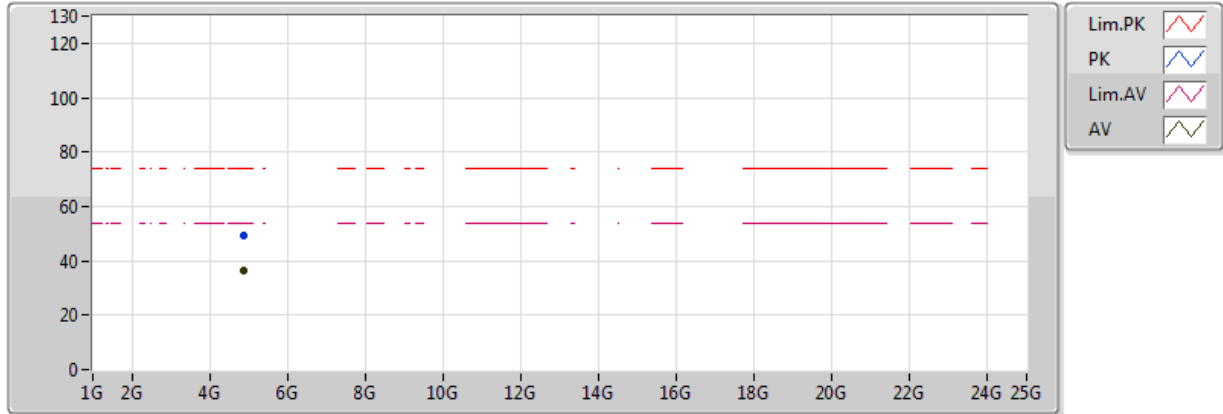


20170117
EUT Y_2TX_Non-TXBF
Setting 62/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	50.81	54.00	-3.19	33.15	3	H	6	1.94	-
AV	2.4514G	96.30	Inf	-Inf	33.37	3	H	6	1.94	-
AV	2.4838G	53.75	54.00	-0.25	33.48	3	H	6	1.94	-
PK	2.389G	66.98	74.00	-7.02	33.15	3	H	6	1.94	-
PK	2.4472G	106.42	Inf	-Inf	33.36	3	H	6	1.94	-
PK	2.4838G	70.53	74.00	-3.47	33.48	3	H	6	1.94	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

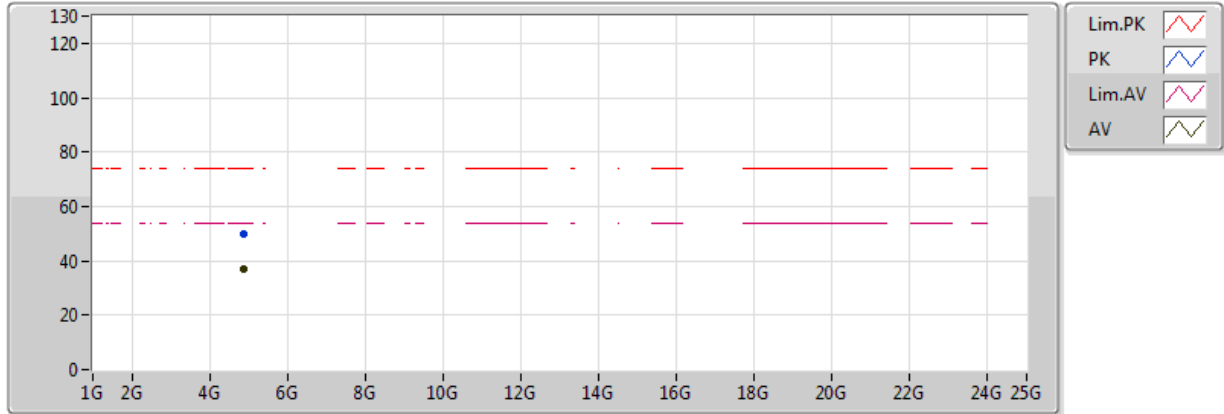


20170117
EUT Y_2TX_Non-TXBF
Setting 62/47
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87357G	36.36	54.00	-17.64	9.25	3	V	295	1.86	-
PK	4.87328G	49.53	74.00	-24.47	9.25	3	V	295	1.86	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

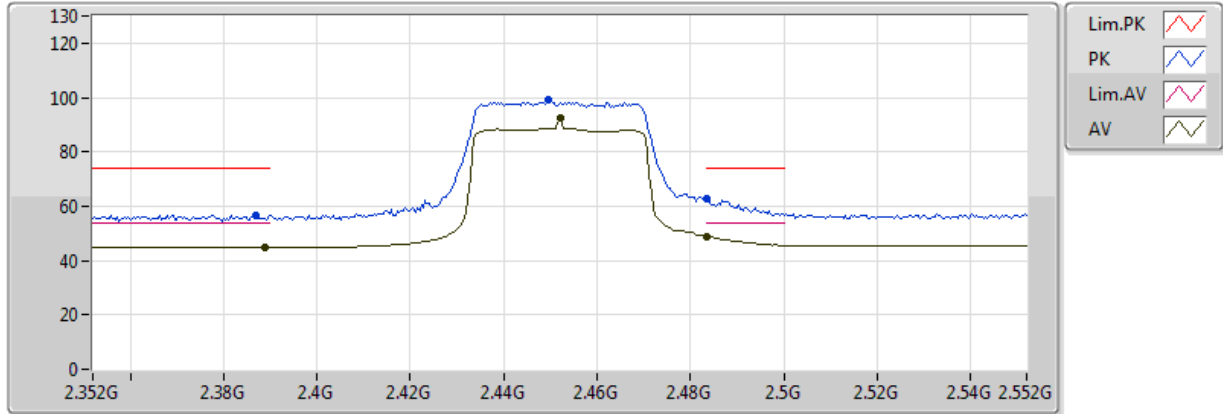


20170117
EUT Y_2TX_Non-TXBF
Setting 62/47
06-M-1-FSP

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	36.83	54.00	-17.17	9.26	3	H	341	1.29	-
PK	4.87507G	49.74	74.00	-24.26	9.26	3	H	341	1.29	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

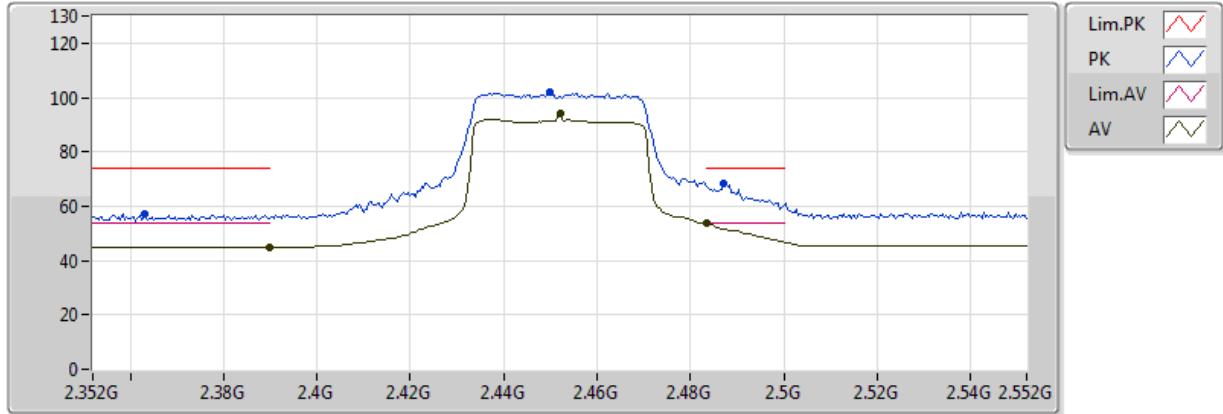


20170117
EUT Y_2TX_Non-TXBF
Setting 42/28
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3888G	44.77	54.00	-9.23	33.15	3	V	210	2.05	-
AV	2.452G	92.20	Inf	-Inf	33.37	3	V	210	2.05	-
AV	2.4836G	48.98	54.00	-5.02	33.48	3	V	210	2.05	-
PK	2.3868G	56.85	74.00	-17.15	33.14	3	V	210	2.05	-
PK	2.4496G	98.96	Inf	-Inf	33.36	3	V	210	2.05	-
PK	2.4836G	62.56	74.00	-11.44	33.48	3	V	210	2.05	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

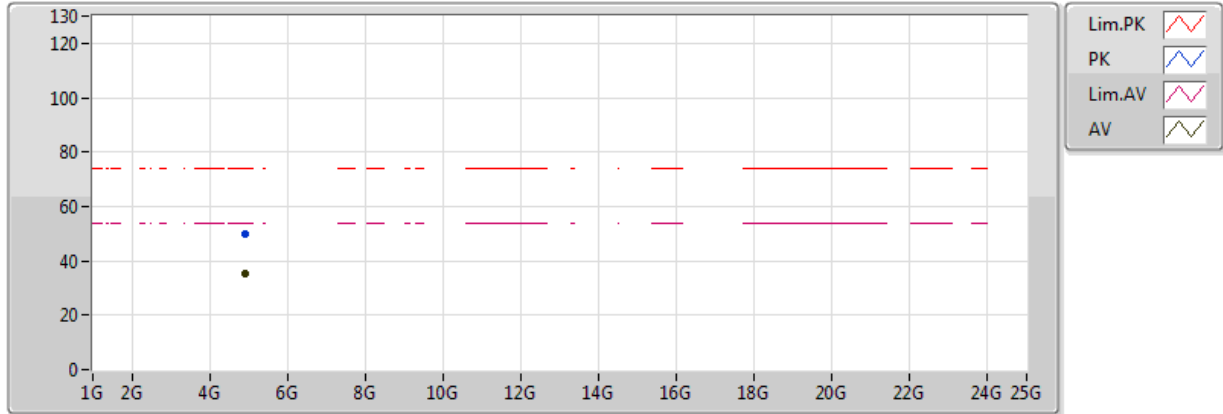


20170117
EUT Y_2TX_Non-TXBF
Setting 42/28
06-M-1-FSP

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	44.86	54.00	-9.14	33.16	3	H	2	1.92	-
AV	2.452G	93.90	Inf	-Inf	33.37	3	H	2	1.92	-
AV	2.4836G	53.52	54.00	-0.48	33.48	3	H	2	1.92	-
PK	2.3632G	57.07	74.00	-16.93	33.06	3	H	2	1.92	-
PK	2.45G	101.87	Inf	-Inf	33.37	3	H	2	1.92	-
PK	2.4872G	68.09	74.00	-5.91	33.50	3	H	2	1.92	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

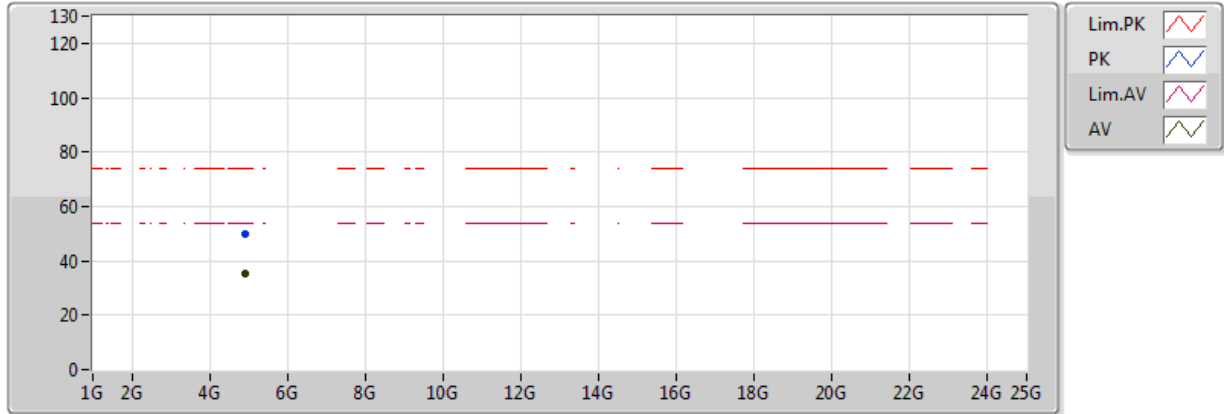


20170117
EUT Y_2TX_Non-TXBF
Setting 42/28
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90618G	35.45	54.00	-18.55	9.34	3	V	110	1.03	-
PK	4.90517G	49.86	74.00	-24.14	9.33	3	V	110	1.03	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX



20170117
EUT Y_2TX_Non-TXBF
Setting 42/28
06-M-1-FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90561G	35.50	54.00	-18.50	9.33	3	H	98	1.48	-
PK	4.90477G	49.98	74.00	-24.02	9.33	3	H	98	1.48	-