FCC RADIO TEST REPORT

FCC ID	:	2AWNEKDE20101
Equipment	:	Home Entertainment Hub
Brand Name	:	E1 by Ericsson
Model Name	:	KDE20101
Applicant	:	Ericsson AB 21-23 Torshamnsgatan Stockholm, 16480 Sweden
Manufacturer	:	CyberTAN Technology Inc. No. 99, Park Avenue III Science-based Industrial Park Hsinchu Taiwan 308
Standard	:	47 CFR FCC Part 15.247

The product was received on Mar. 30, 2020, and testing was started from Mar. 30, 2020 and completed on May 04, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FR031633AB	01	Initial issue of report	Aug. 03, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen
Report Producer: Wendy Pan

1 General Description

1.1 Information

1.1.1 RF General Information

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

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

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
						WLAN 2.4GHz	Zigbee
1	1	Airgain	N2415GM	PCB Antenna	I-PEX	2.6	-
2	1	Airgain	N2420ZC	PCB Antenna	I-PEX	-	2.4

Note: The above information was declared by manufacturer.
Only Port 1 can be used as transmitting/receiving antenna.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.959	0.18	11.396m	100
802.11g	0.937	0.28	1.895m	1k
802.11n HT20	0.909	0.41	1.768m	1k

Note:
- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	RadioToolGUI(V1.0.3.7).exe			

Note: The above information was declared by manufacturer.

1.1.5 The EUT Support Function Information

Module	Function	Camera
AX (Contain module FCC ID: PD9AX200NG)	WLAN 2.4GHz, WLAN 5GHz and Bluetooth	Support
AI	WLAN 2.4GHz, Zigbee	Does not support

1.2 Applicable 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

The following reference test guidance is not within the scope of accreditation of TAF.

- FCC KDB 558074 D01 v05r02
- FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location			
☐	HWA YA	ADD :	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)
		TEL :	886-3-327-3456 FAX : 886-3-327-0973
☒	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	TH02-CB	Justin Lin	23-24.4°C / 53-56 %	Mar. 30, 2020 ~ Apr. 30, 2020
Radiated<1GHz	03CH05-CB	Justin Lin	22.2-23.4°C / 55-60%	Mar. 30, 2020 ~ May 04, 2020
Radiated>1GHz	03CH03-CB	Justin Lin	23-24°C / 52-55%	Mar. 30, 2020 ~ May 04, 2020
AC Conduction	CO01-CB	Wei Li	23-24°C / 71-72%	Apr. 01, 2020

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)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	0
2437MHz	0
2462MHz	0
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	0
2437MHz	0
2462MHz	0
802.11n HT20_Nss1,(MCS0)_1TX	-
2412MHz	0
2437MHz	0
2462MHz	0

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests					
Tests Item	AC power-line conducted emissions				
Condition	AC power-line conducted measurement for line and neutral				
Operating Mode	Normal Link				
Test Mode	**SD R/W**	**Camera**	**AX Module**	**AI Module**	**Adapter**
1	●	●	● WLAN 5GHz + Bluetooth	-	Adapter 1 + US cable
2	●	●	● WLAN 2.4GHz + Bluetooth	-	Adapter 1 + US cable
Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.					
3	●	-	● WLAN 5GHz + Bluetooth	● WLAN 2.4GHz + Zigbee	Adapter 1 + US cable
Mode 3 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 ~ Mode 5 will follow this same test mode.					
4	●	-	● WLAN 5GHz + Bluetooth	● WLAN 2.4GHz + Zigbee	Adapter 2 + US cable
5	●	-	● WLAN 5GHz + Bluetooth	● WLAN 2.4GHz + Zigbee	Adapter 3 + US cable
For operating mode 3 is the worst case and it was record in this test report.					

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	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	EUT - Zigbee (AI module) + Adapter 1
2	EUT - Zigbee (AI module) + Adapter 2
3	EUT - Zigbee (AI module) + Adapter 3
Mode 2 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT - WLAN 2.4GHz (AI module) + Adapter 2
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	AX module (WLAN 2.4GHz + Bluetooth) + AI module (WLAN 2.4GHz + Zigbee)
2	AX module (WLAN 5GHz + Bluetooth) + AI module (WLAN 2.4GHz + Zigbee)
Refer to Sporton Test Report No.: FA031633 for Co-location RF Exposure Evaluation.	

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

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Power	Brand	Model	Rating	DC Power cable length
Adapter 1	FSP	FSP100-A1AR3	Input: 100-240V ~ 50-60Hz, 1.4A Output: 5V, 3A / 9V, 3A 12V, 3A / 15V, 3A 20V, 5.0A 100W MAX.	Non-Shielded 1.6m
Adapter 2	DELTA	ADH-100CR B	Input: 100-240V ~ 1.8A , 50-60Hz Output: 5.0V, 3.0A 15.0W or 9.0V, 3.0A 15.0V, 3.0A or 20.0V, 5.0A, 100.0W	Non-Shielded 1.6m
Adapter 3	LEI	NUA0-B200500VI1	Input: 100-240V ~ 50/60Hz, 1.5A Output: 20V, 5A or 15V, 3A or 9V, 3A or 5V, 3A	Non-Shielded 1.6m
Others				
HDMI cable*1: Shielded, 1.5m USB-C to USB-A cable*1: Shielded, 0.1m Power cable*1: Non-Shielded, 1m				

2.5 Support Equipment

For AC Conduction:

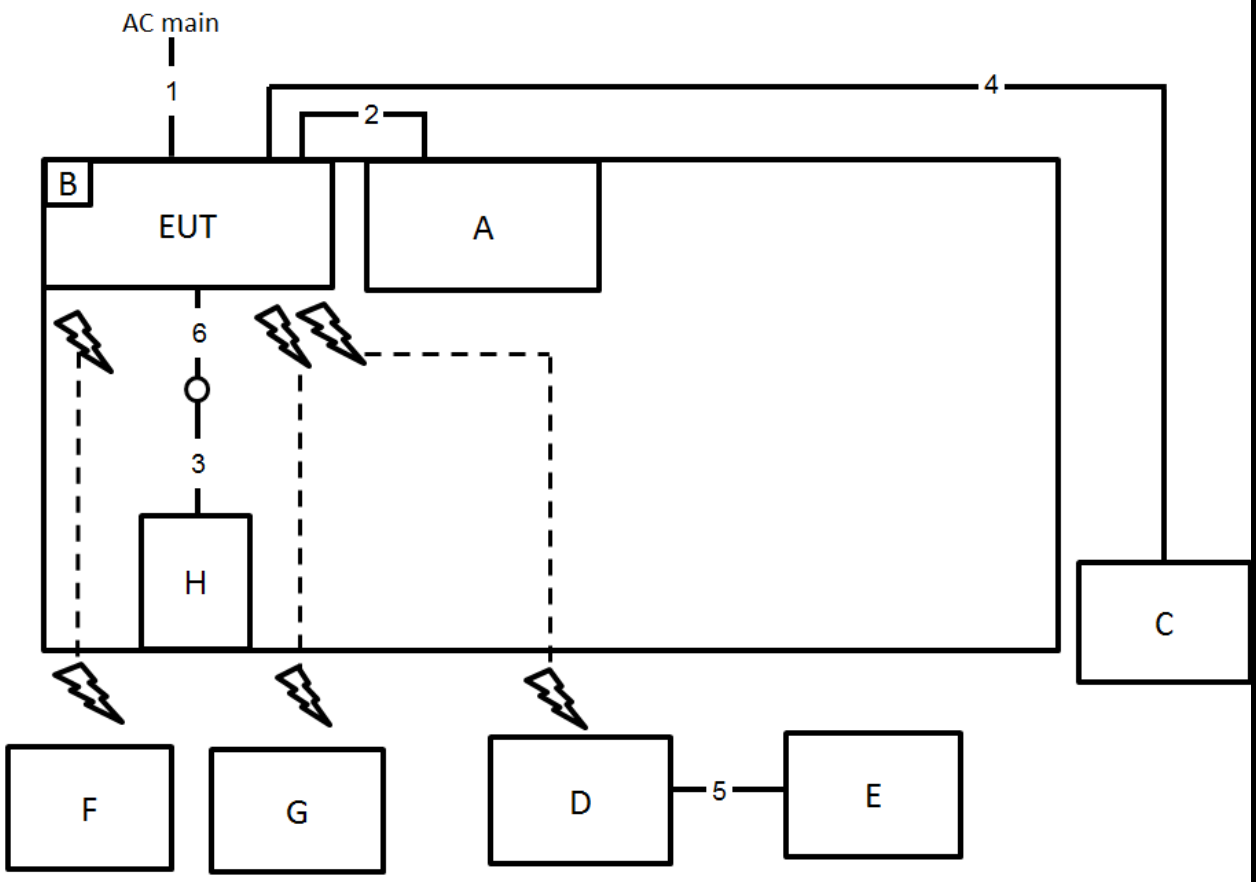
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	TV	ASUS	VP28U	N/A
B	Micro SD Card	Transcend	TS16GUSDHC10	N/A
C	LAN NB	DELL	E6430	N/A
D	AP Router	ASUS	RT-AX88U	MSQ-RTAXHP00
E	AP NB	DELL	E6430	N/A
F	Zigbee Device	Climax	PSM-29-ZBSR	N/A
G	Bluetooth Speaker	Wei Xuan	S06B	N/A
H	Air mouse	HENGCHUANGYU	HCY-57B	2AOBUHCY-57B

For Radiated and RF Conducted:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	DELL	E4300	N/A
C	Test Fixture	Cybertan	0X1894	N/A

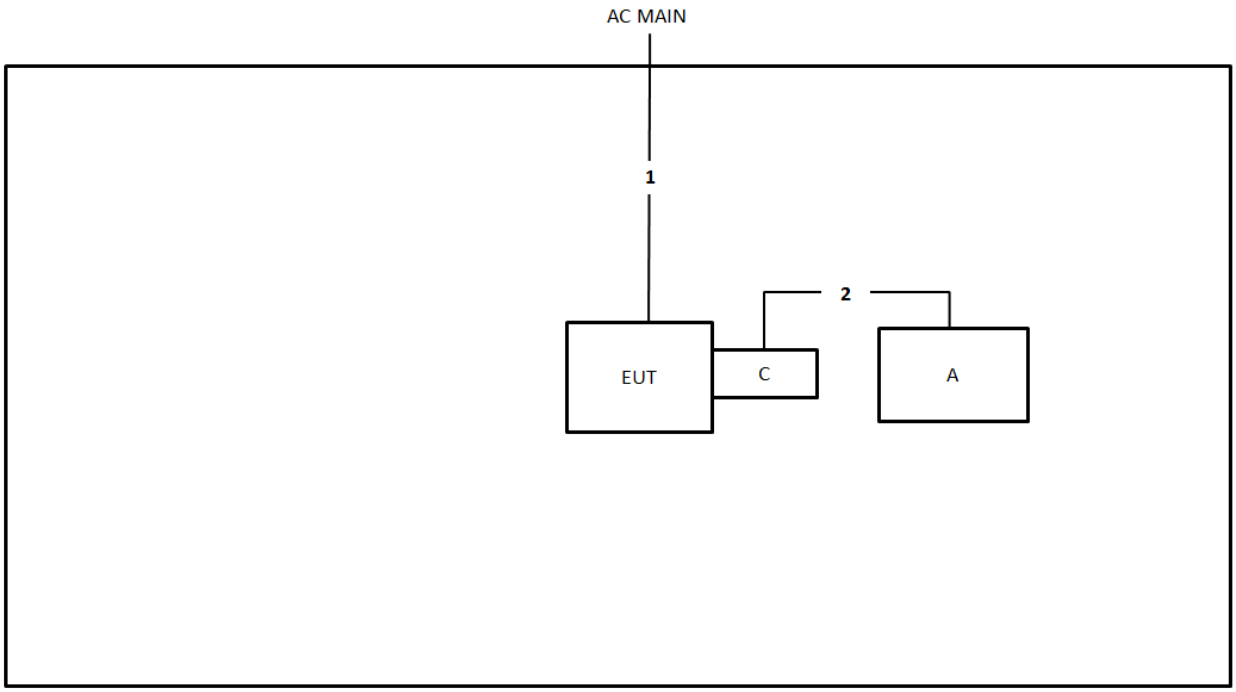
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



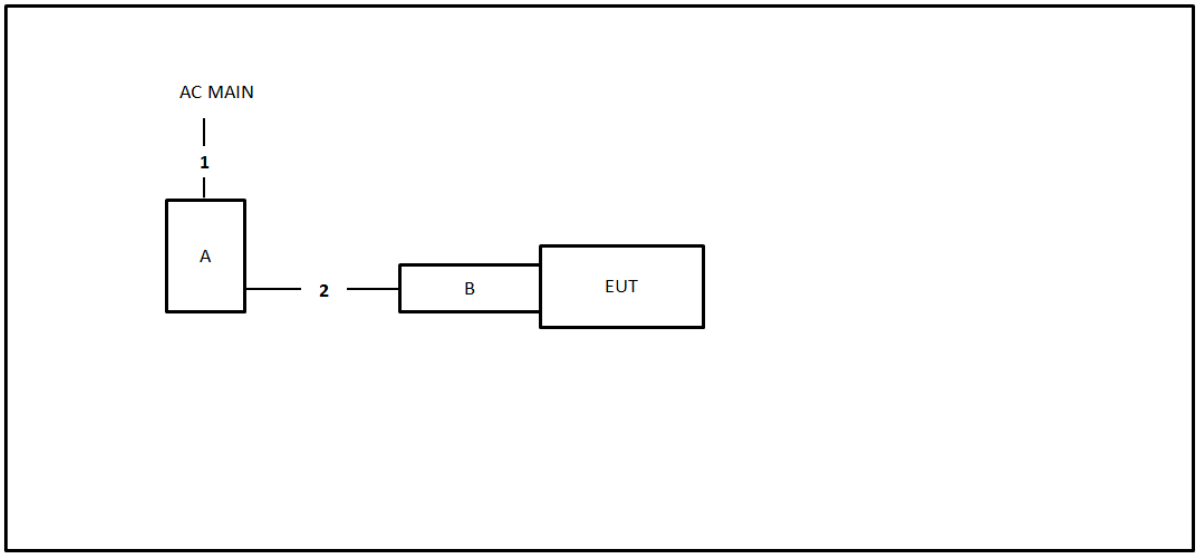
Item	Connection	Shielded	Length
1	Power cable	No	2.6m
2	HDMI cable	Yes	1.5m
3	USB Cable	Yes	0.9m
4	RJ-45 cable	No	10m
5	RJ-45 cable	No	3m
6	USB Cable	Yes	0.1m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	2.6m
2	USB cable	Yes	1.6m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	2.6m
2	USB cable	Yes	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

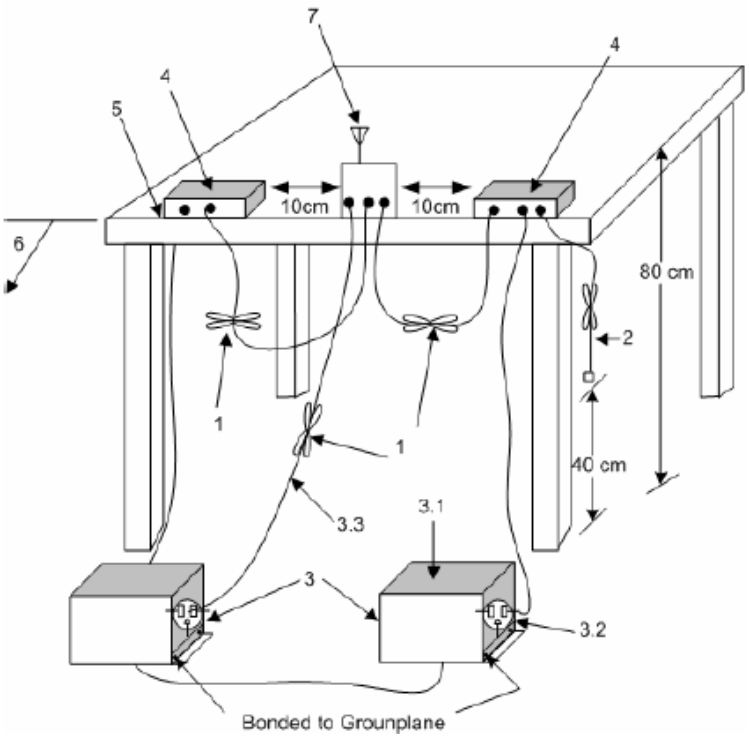
Refer a test equipment and calibration data table in this test report.

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

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.5 Measurement Results Calculation

The measured Level is calculated using:

a. Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level

b. Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

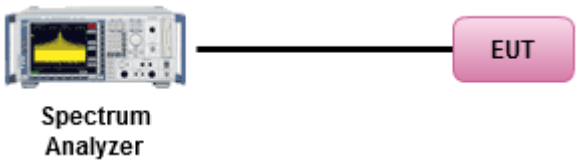
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
☐	Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Peak Conducted Output Power	
	☐ Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
	☐ Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
▪ Maximum Conducted Output Power	
	[duty cycle ≥ 98% or external video / power trigger]
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
	duty cycle < 98% and average over on/off periods with duty factor
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
	Measurement using a power meter (PM)
	☐ Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
	☒ Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

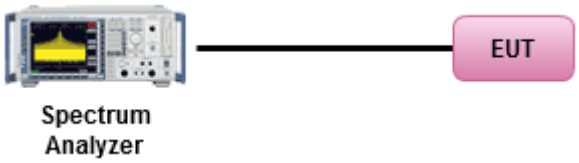
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method		
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).		
	☒ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.	
▪ For conducted measurement.		
	▪ If The EUT supports multiple transmit chains using options given below:	
		☐ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
		☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
		☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

3.4.4 Test Setup

Power Spectral Density


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 (dBc)**
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.	

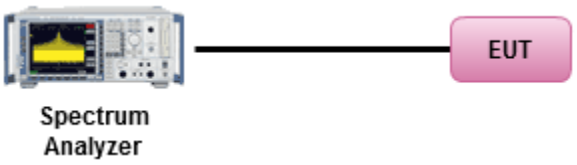
3.5.2 Measuring Instruments

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 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

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

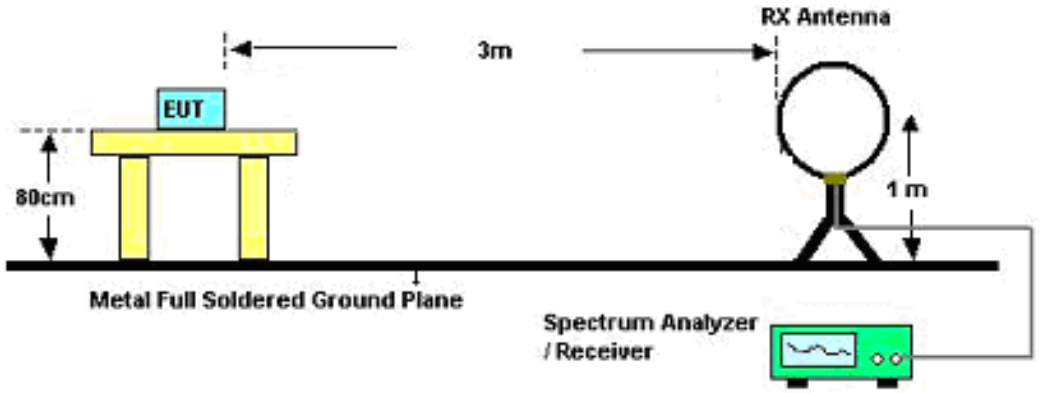
3.6.3 Test Procedures

Test Method			
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].			
▪ 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.			
▪ For the transmitter unwanted emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.		
		☐	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle ≥98%).
		☐	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
		☒	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW≥1/T).
		☐	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐	Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
		☒	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, 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 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.		
	▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).		
	▪ 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.		

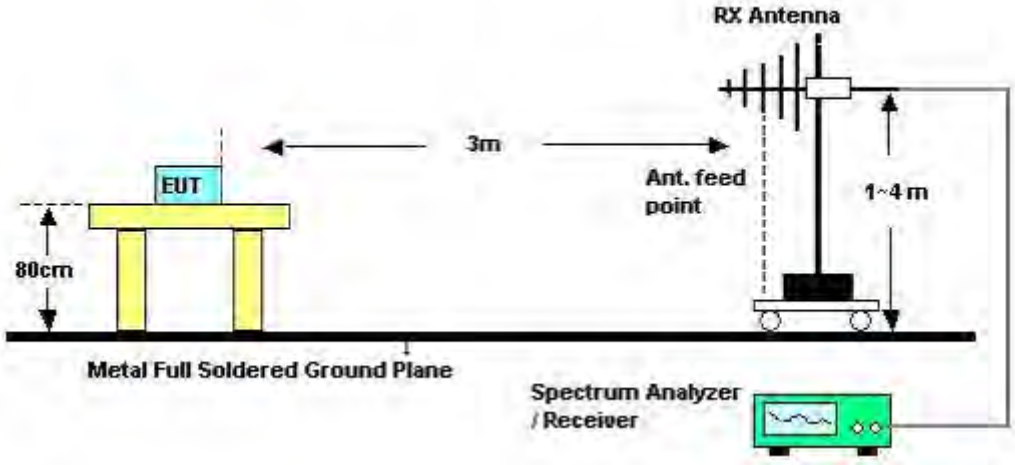
3.6.4 Test Setup

Radiated - Emissions in Restricted Frequency Bands

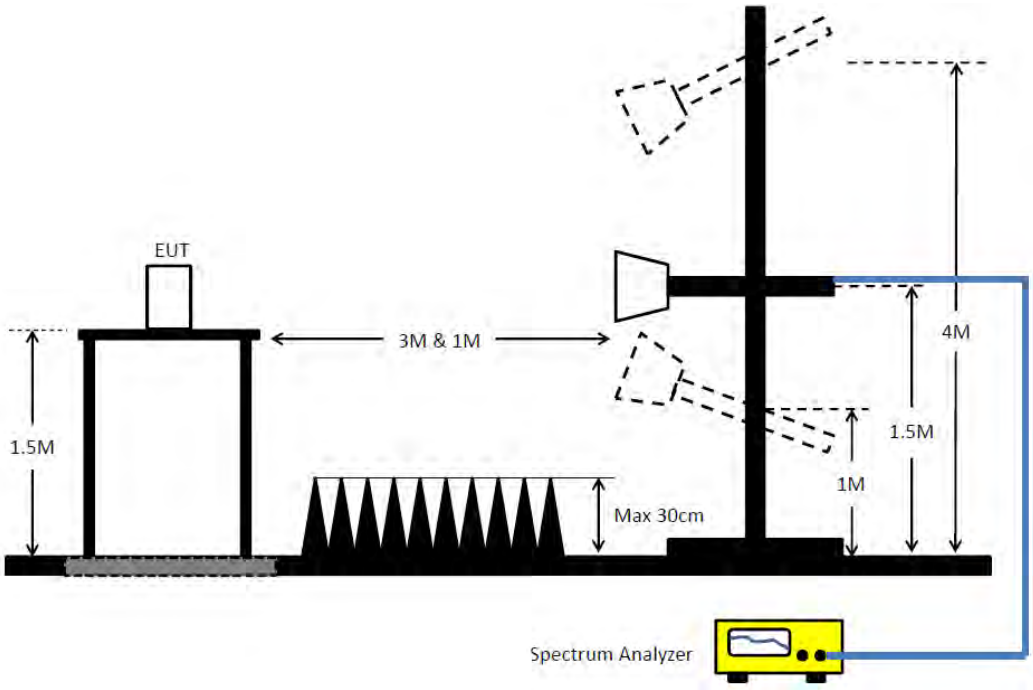
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.6.5 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor (if applicable) = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Feb. 26, 2020	Feb. 25, 2021	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Feb. 25, 2020	Feb. 24, 2021	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 31, 2020	Jan. 30, 2021	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 21, 2019	May 20, 2020	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 16, 2020	Mar. 15, 2021	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 27, 2020	Mar. 26, 2021	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 01, 2019	Apr. 30, 2020	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	Apr. 28, 2020	Apr. 27, 2021	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	LOW Cable-04+23	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
Horn Antenna	ETS・Lindgren	3115	6821	750MHz~18GHz	Jan. 20, 2020	Jan. 19, 2021	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Dec. 19, 2019	Dec.18, 2020	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 19, 2019	Jun. 18, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+27	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-27	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jul. 02, 2019	Jul. 01, 2020	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-3	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)

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

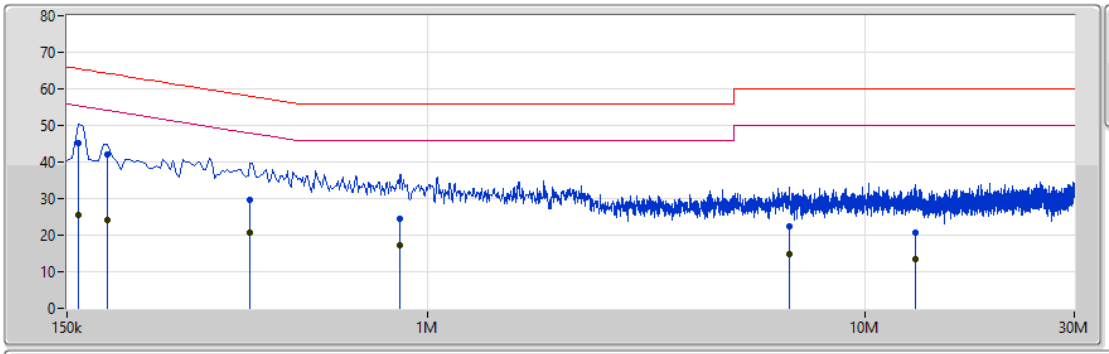
N.C.R. means Non-Calibration required.

Summary

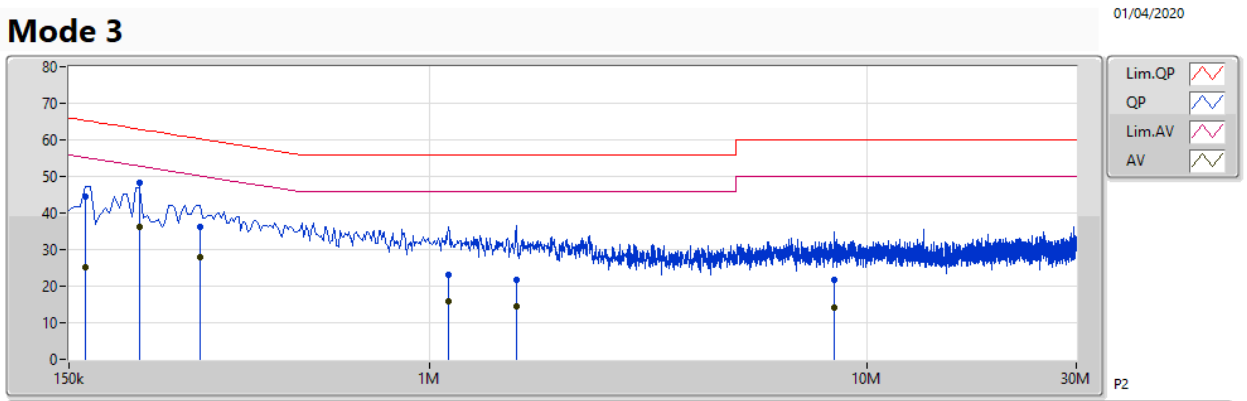
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 3	Pass	QP	217.5k	48.34	62.92	-14.58	9.89	Neutral

Mode 3

01/04/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	159k	45.03	65.52	-20.49	9.90	Line	"Worst"	35.13	0.05	0.06	9.79
AV	159k	25.50	55.52	-30.02	9.90	Line	-	15.60	0.05	0.06	9.79
QP	186k	42.13	64.20	-22.07	9.89	Line	-	32.24	0.04	0.06	9.79
AV	186k	24.04	54.20	-30.16	9.89	Line	-	14.15	0.04	0.06	9.79
QP	393k	29.57	58.01	-28.44	9.91	Line	-	19.66	0.04	0.06	9.81
AV	393k	20.60	48.01	-27.41	9.91	Line	-	10.69	0.04	0.06	9.81
QP	865.5k	24.43	56.00	-31.57	9.96	Line	-	14.47	0.05	0.09	9.82
AV	865.5k	17.07	46.00	-28.93	9.96	Line	-	7.11	0.05	0.09	9.82
QP	6.716M	22.48	60.00	-37.52	10.21	Line	-	12.27	0.14	0.20	9.87
AV	6.716M	14.76	50.00	-35.24	10.21	Line	-	4.55	0.14	0.20	9.87
QP	13.002M	20.58	60.00	-39.42	10.34	Line	-	10.24	0.20	0.22	9.92
AV	13.002M	13.61	50.00	-36.39	10.34	Line	-	3.27	0.20	0.22	9.92



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	163.5k	44.35	65.27	-20.92	9.89	Neutral	-	34.46	0.04	0.06	9.79
AV	163.5k	25.18	55.27	-30.09	9.89	Neutral	-	15.29	0.04	0.06	9.79
QP	217.5k	48.34	62.92	-14.58	9.89	Neutral	"Worst"	38.45	0.04	0.06	9.79
AV	217.5k	36.13	52.92	-16.79	9.89	Neutral	-	26.24	0.04	0.06	9.79
QP	298.5k	36.26	60.28	-24.02	9.90	Neutral	-	26.36	0.04	0.06	9.80
AV	298.5k	27.78	50.28	-22.50	9.90	Neutral	-	17.88	0.04	0.06	9.80
QP	1.104M	23.14	56.00	-32.86	9.97	Neutral	-	13.17	0.06	0.09	9.82
AV	1.104M	16.01	46.00	-29.99	9.97	Neutral	-	6.04	0.06	0.09	9.82
QP	1.577M	21.58	56.00	-34.42	10.01	Neutral	-	11.57	0.07	0.11	9.83
AV	1.577M	14.65	46.00	-31.35	10.01	Neutral	-	4.64	0.07	0.11	9.83
QP	8.426M	21.66	60.00	-38.34	10.28	Neutral	-	11.38	0.16	0.22	9.90
AV	8.426M	14.29	50.00	-35.71	10.28	Neutral	-	4.01	0.16	0.22	9.90

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	9.075M	13.954M	14M0G1D	9.05M	13.946M
802.11g_Nss1,(6Mbps)_1TX	15.05M	16.867M	16M9D1D	15.025M	16.365M
802.11n HT20_Nss1,(MCS0)_1TX	15.075M	17.643M	17M6D1D	14.975M	17.447M

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

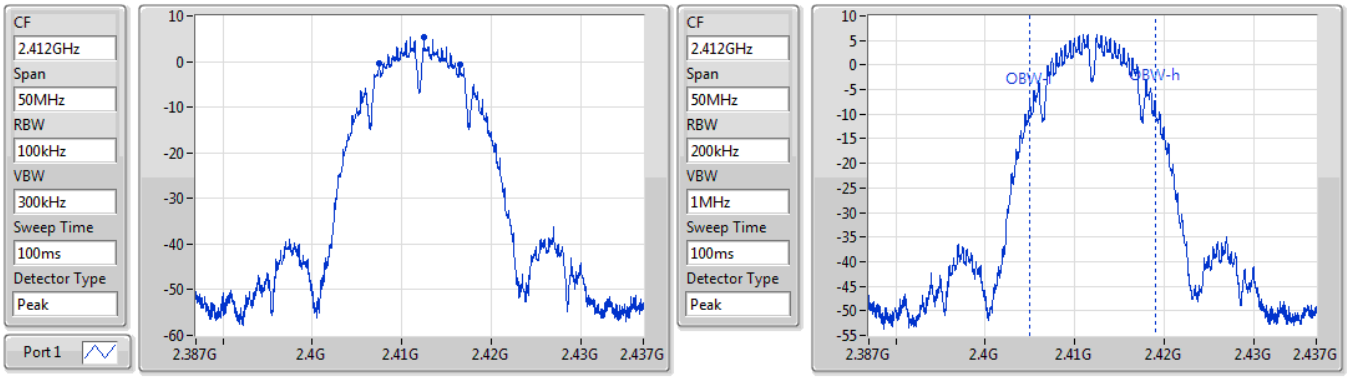
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	9.05M	13.95M
2437MHz	Pass	500k	9.075M	13.946M
2462MHz	Pass	500k	9.05M	13.954M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	15.05M	16.365M
2437MHz	Pass	500k	15.025M	16.867M
2462MHz	Pass	500k	15.025M	16.396M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	15.075M	17.447M
2437MHz	Pass	500k	15M	17.643M
2462MHz	Pass	500k	14.975M	17.456M

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

802.11b_Nss1,(1Mbps)_1TX EBW

2412MHz

30/03/2020

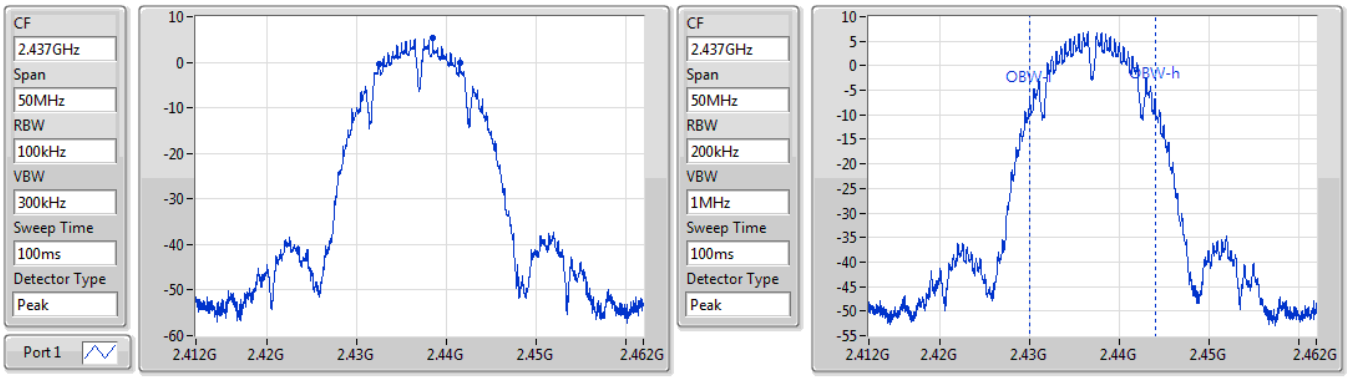


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.05M	2.40745G	2.4165G	13.95M	2.405034G	2.418984G	500k	1

802.11b_Nss1,(1Mbps)_1TX EBW

2437MHz

30/03/2020

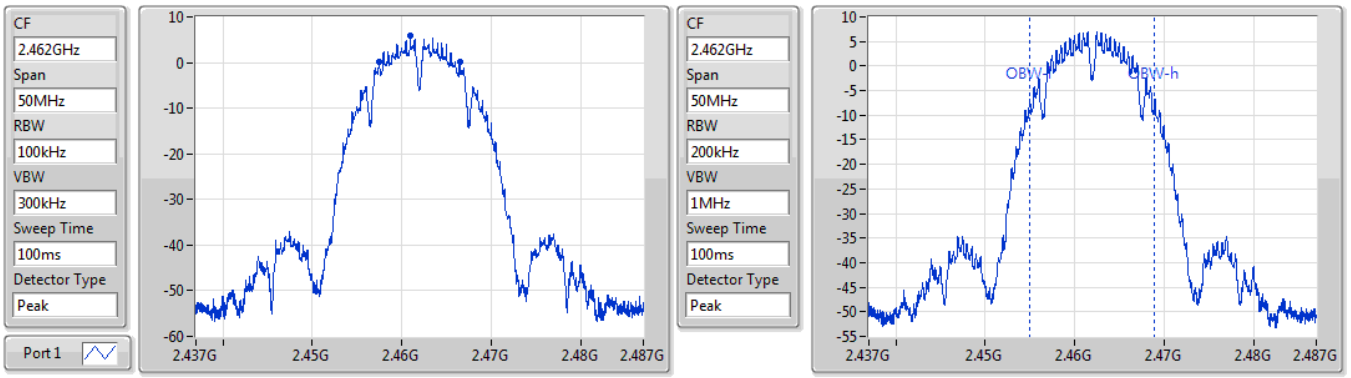


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.075M	2.432425G	2.4415G	13.946M	2.430029G	2.443975G	500k	1

802.11b_Nss1,(1Mbps)_1TX EBW

2462MHz

30/03/2020

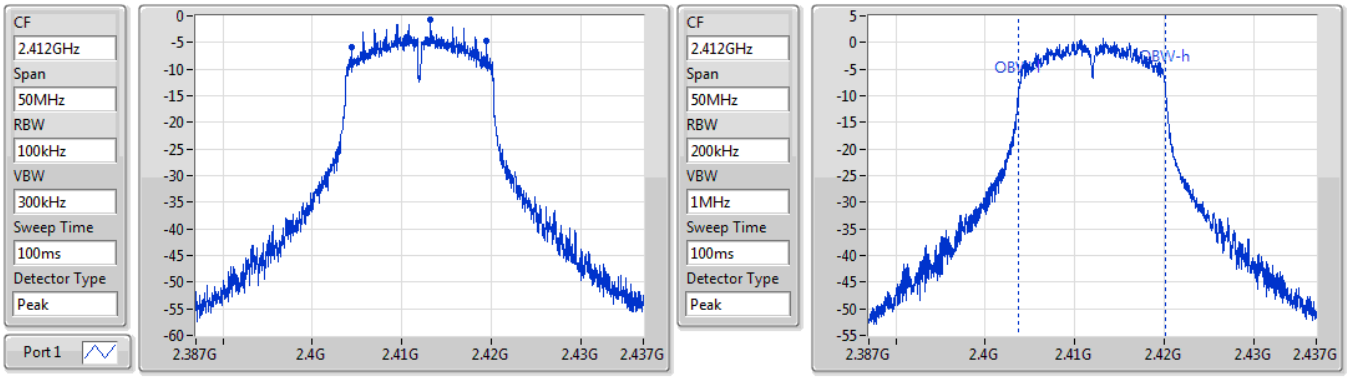


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.05M	2.45745G	2.4665G	13.954M	2.455006G	2.46896G	500k	1

802.11g_Nss1,(6Mbps)_1TX EBW

2412MHz

30/03/2020

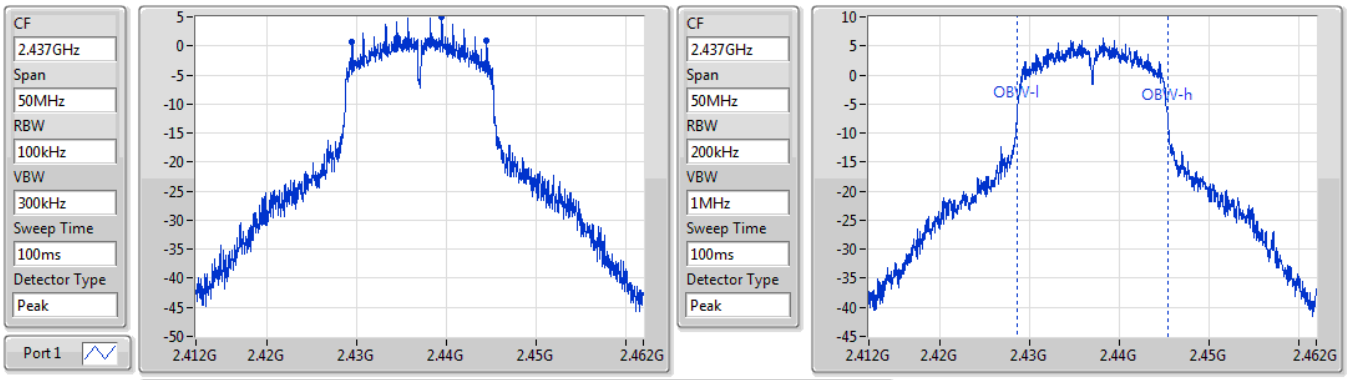


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.05M	2.40445G	2.4195G	16.365M	2.403753G	2.420118G	500k	1

802.11g_Nss1,(6Mbps)_1TX EBW

2437MHz

30/03/2020

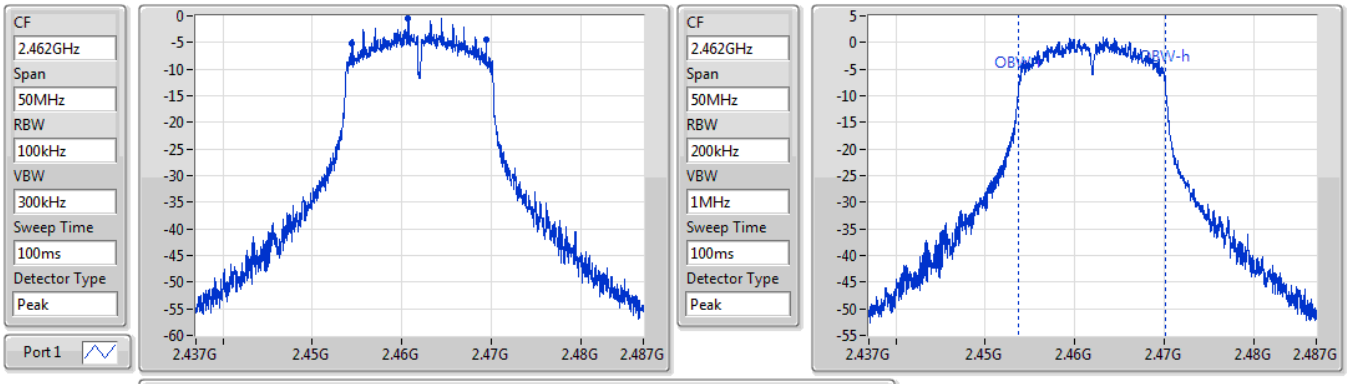


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.025M	2.429475G	2.4445G	16.867M	2.428551G	2.445418G	500k	1

802.11g_Nss1,(6Mbps)_1TX EBW

2462MHz

30/03/2020

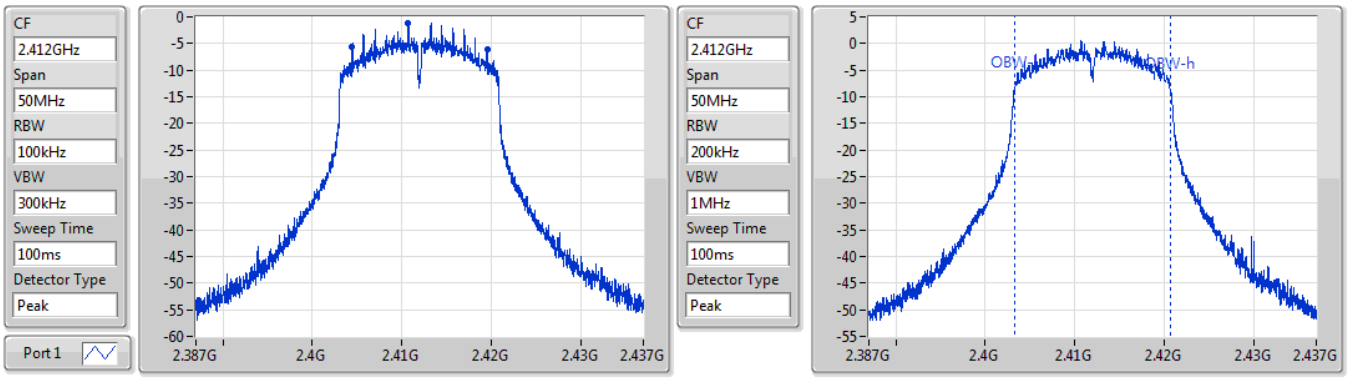


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.025M	2.45445G	2.469475G	16.396M	2.453718G	2.470113G	500k	1

802.11n HT20_Nss1,(MCS0)_1TX EBW

2412MHz

30/03/2020

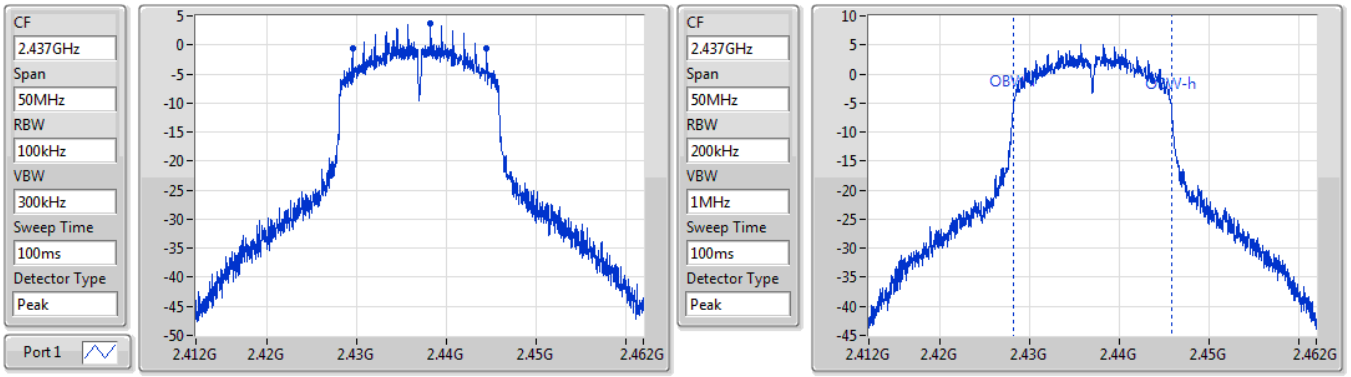


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.075M	2.40445G	2.419525G	17.447M	2.403263G	2.42071G	500k	1

802.11n HT20_Nss1,(MCS0)_1TX EBW

2437MHz

30/03/2020

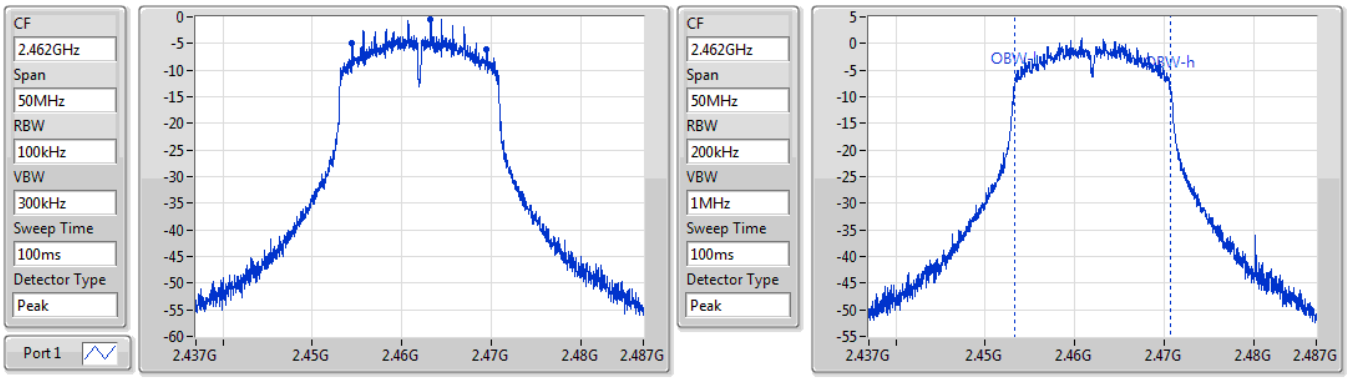


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15M	2.4295G	2.4445G	17.643M	2.428159G	2.445802G	500k	1

802.11n HT20_Nss1,(MCS0)_1TX EBW

2462MHz

30/03/2020



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.975M	2.45445G	2.469425G	17.456M	2.453247G	2.470703G	500k	1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	15.27	0.03365
802.11g_Nss1,(6Mbps)_1TX	15.02	0.03177
802.11n HT20_Nss1,(MCS0)_1TX	14.31	0.02698

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.60	14.46	14.46	30.00
2437MHz	Pass	2.60	15.06	15.06	30.00
2462MHz	Pass	2.60	15.27	15.27	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.60	14.47	14.47	30.00
2437MHz	Pass	2.60	15.02	15.02	30.00
2462MHz	Pass	2.60	14.55	14.55	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	2.60	14.27	14.27	30.00
2437MHz	Pass	2.60	14.31	14.31	30.00
2462MHz	Pass	2.60	13.84	13.84	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-10.22
802.11g_Nss1,(6Mbps)_1TX	-12.38
802.11n HT20_Nss1,(MCS0)_1TX	-13.62

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

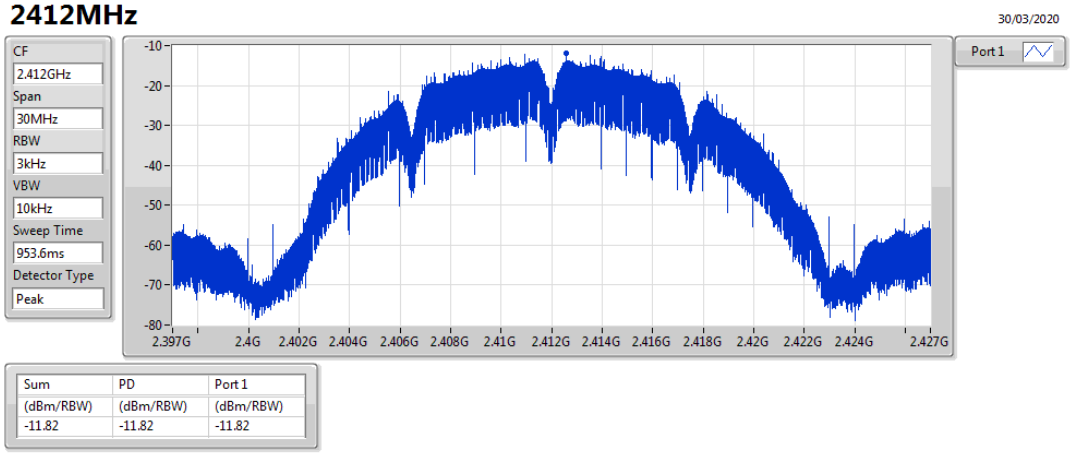
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.60	-11.82	-11.82	8.00
2437MHz	Pass	2.60	-10.41	-10.41	8.00
2462MHz	Pass	2.60	-10.22	-10.22	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.60	-13.05	-13.05	8.00
2437MHz	Pass	2.60	-12.38	-12.38	8.00
2462MHz	Pass	2.60	-13.19	-13.19	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	2.60	-14.38	-14.38	8.00
2437MHz	Pass	2.60	-13.87	-13.87	8.00
2462MHz	Pass	2.60	-13.62	-13.62	8.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11b_Nss1,(1Mbps)_1TX PSD

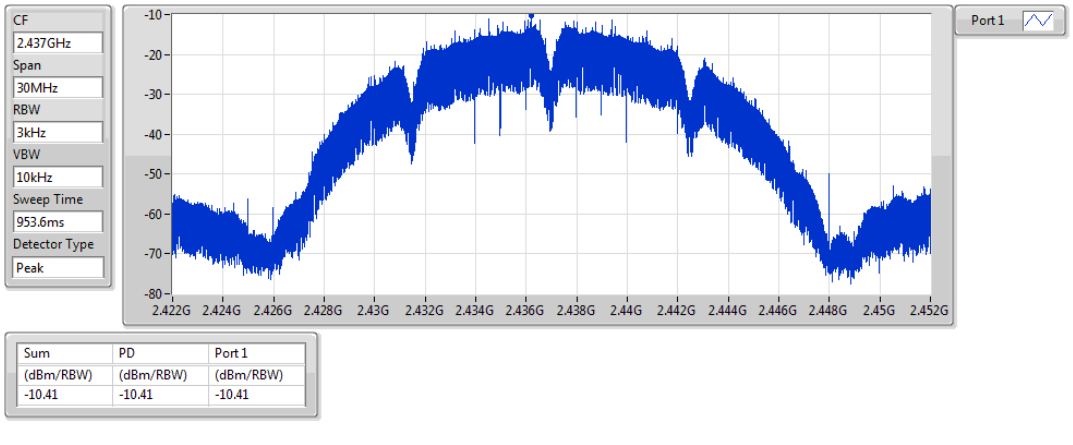
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.82	-11.82	-11.82

802.11b_Nss1,(1Mbps)_1TX PSD

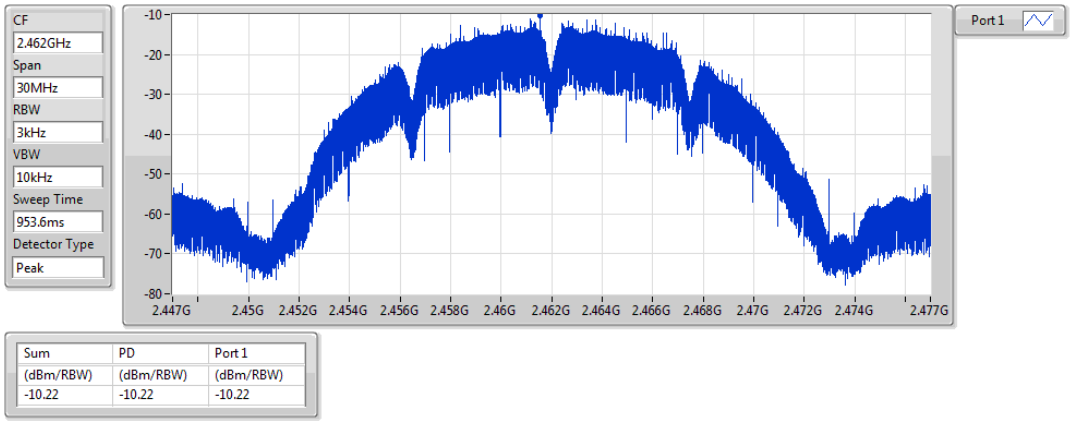
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.41	-10.41	-10.41

802.11b_Nss1,(1Mbps)_1TX PSD

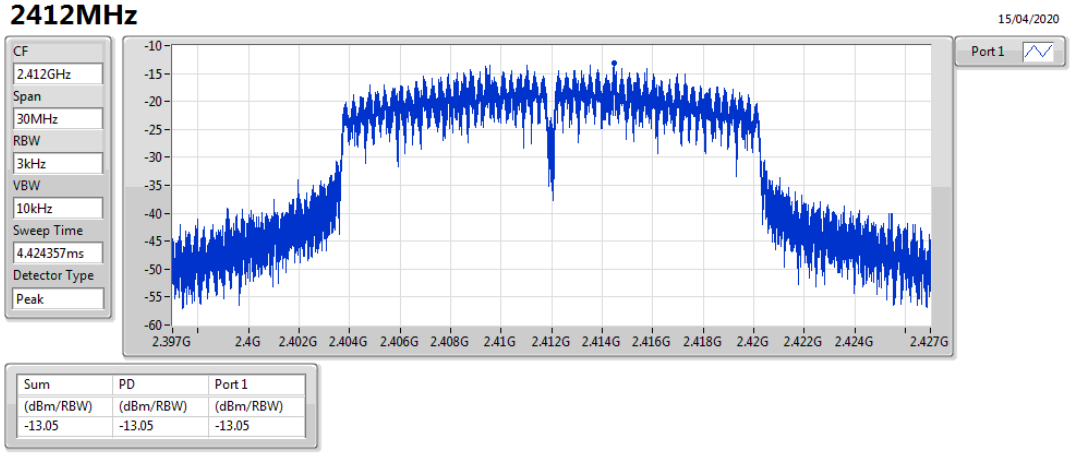
2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.22	-10.22	-10.22

802.11g_Nss1,(6Mbps)_1TX PSD

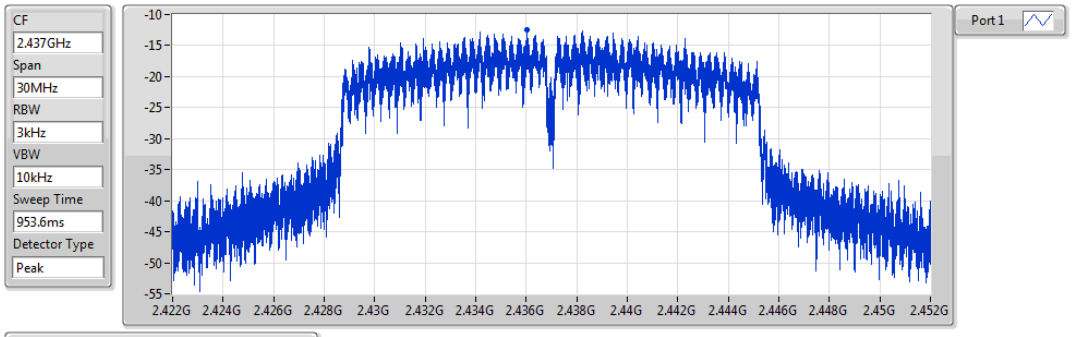
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.05	-13.05	-13.05

802.11g_Nss1,(6Mbps)_1TX PSD

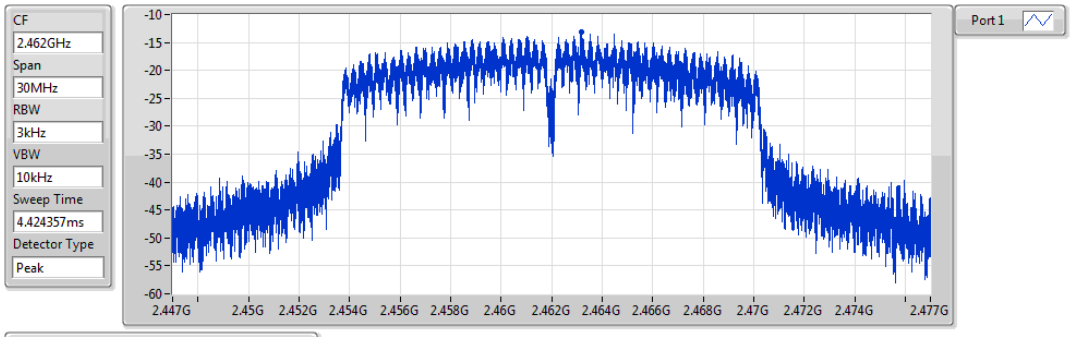
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.38	-12.38	-12.38

802.11g_Nss1,(6Mbps)_1TX PSD

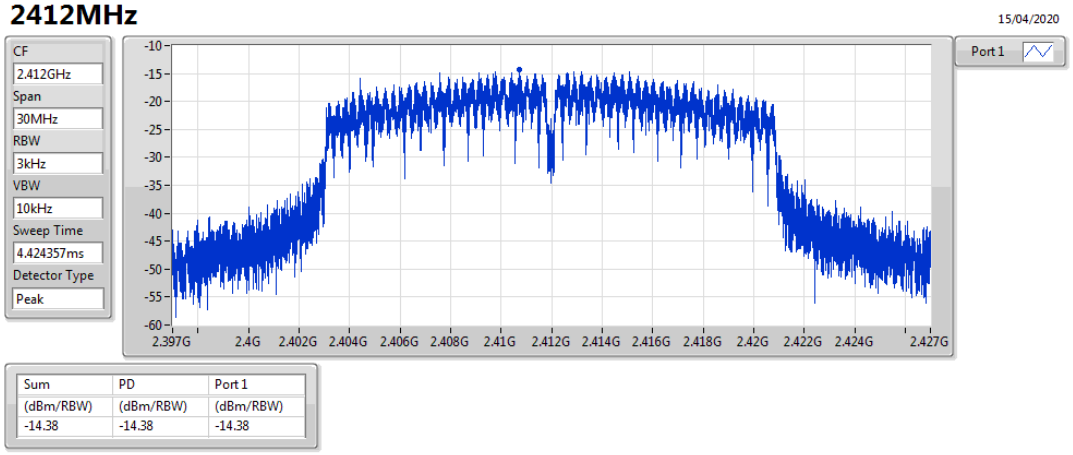
2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.19	-13.19	-13.19

802.11n HT20_Nss1,(MCS0)_1TX PSD

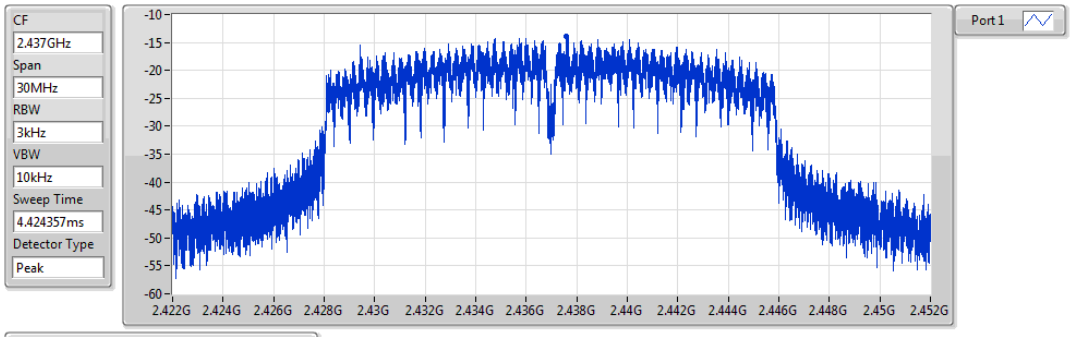
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.38	-14.38	-14.38

802.11n HT20_Nss1,(MCS0)_1TX PSD

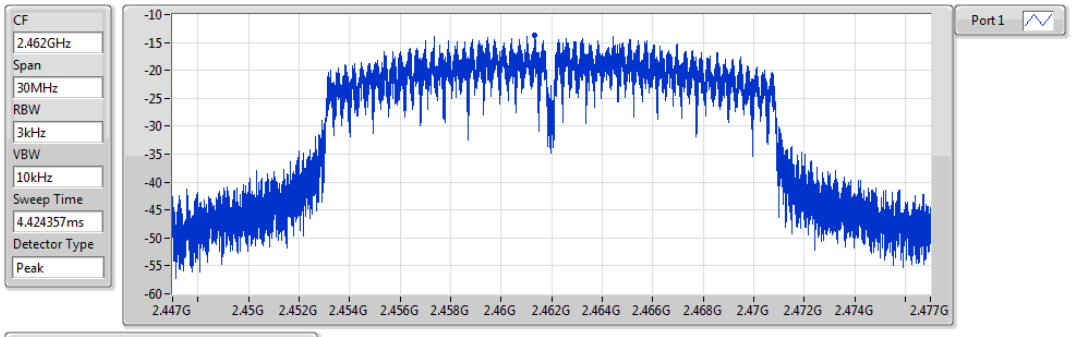
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.87	-13.87	-13.87

802.11n HT20_Nss1,(MCS0)_1TX PSD

2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.62	-13.62	-13.62

Summary

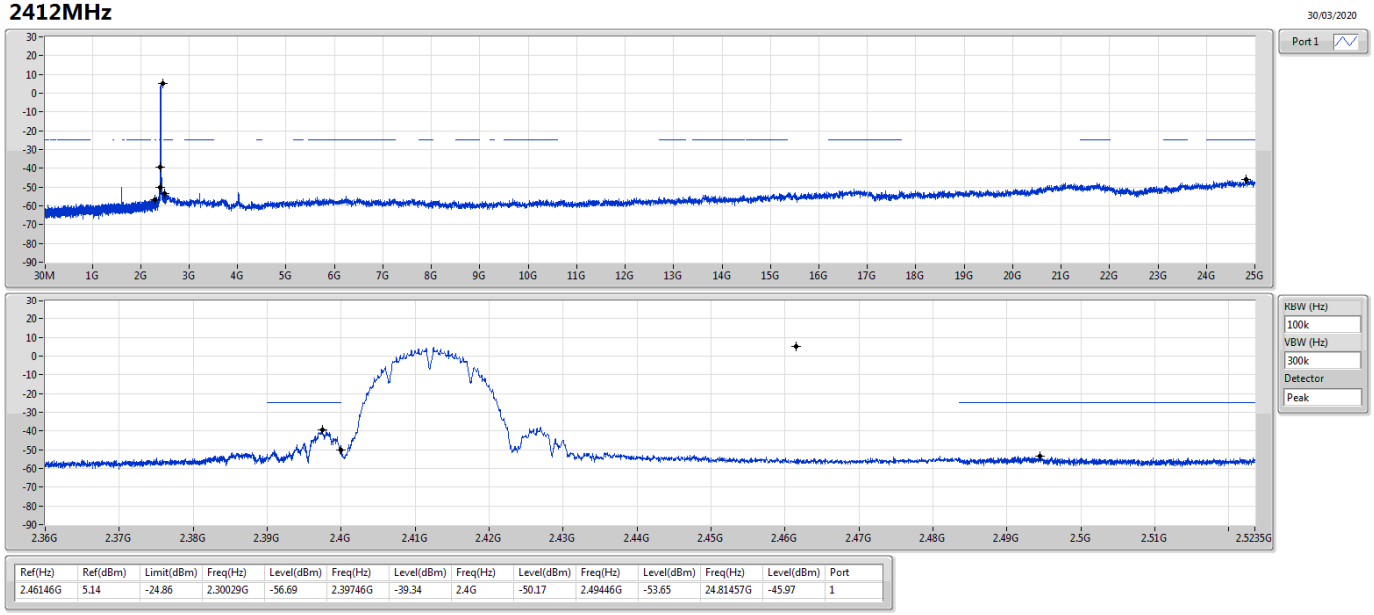
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.46146G	5.14	-24.86	2.30029G	-56.69	2.39746G	-39.34	2.4G	-50.17	2.49446G	-53.65	24.81457G	-45.97	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.44071G	2.45	-27.55	2.30728G	-56.96	2.39998G	-35.08	2.4G	-36.33	2.51624G	-54.17	24.86795G	-45.84	1
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.43824G	0.99	-29.01	2.18758G	-56.87	2.39996G	-35.27	2.4G	-34.27	2.49594G	-54.49	24.86514G	-45.69	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)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.46146G	5.14	-24.86	2.30029G	-56.69	2.39746G	-39.34	2.4G	-50.17	2.49446G	-53.65	24.81457G	-45.97	1
2437MHz	Pass	2.46146G	5.14	-24.86	1.62372G	-49.74	2.39794G	-54.14	2.4G	-54.91	2.50602G	-53.70	24.95505G	-45.58	1
2462MHz	Pass	2.46146G	5.14	-24.86	1.64032G	-49.71	2.39066G	-54.21	2.4835G	-52.16	2.4835G	-51.88	24.82019G	-45.73	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44071G	2.45	-27.55	2.30728G	-56.96	2.39998G	-35.08	2.4G	-36.33	2.51624G	-54.17	24.86795G	-45.84	1
2437MHz	Pass	2.44071G	2.45	-27.55	2.19836G	-56.27	2.39984G	-53.27	2.4G	-52.80	2.5214G	-54.06	24.48023G	-46.03	1
2462MHz	Pass	2.44071G	2.45	-27.55	2.17651G	-56.70	2.39942G	-55.33	2.4835G	-51.21	2.48352G	-49.98	24.646G	-44.57	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	0.99	-29.01	2.18758G	-56.87	2.39996G	-35.27	2.4G	-34.27	2.49594G	-54.49	24.86514G	-45.69	1
2437MHz	Pass	2.43824G	0.99	-29.01	2.30262G	-56.39	2.39852G	-54.41	2.4G	-54.16	2.4966G	-54.40	24.89605G	-45.26	1
2462MHz	Pass	2.43824G	0.99	-29.01	2.07108G	-56.28	2.39286G	-55.29	2.4835G	-51.76	2.48544G	-50.96	24.47742G	-45.57	1

802.11b_Nss1,(1Mbps)_1TX **CSE NdB**

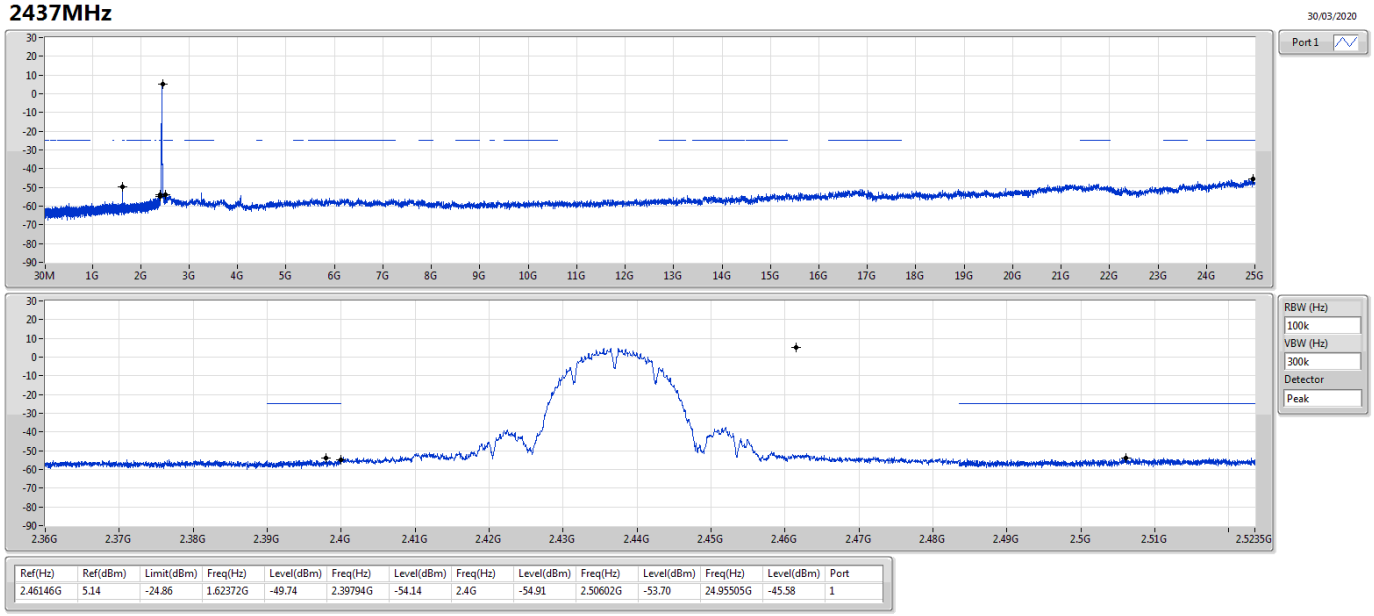
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46146G	5.14	-24.86	2.30029G	-56.69	2.39746G	-39.34	2.4G	-50.17	2.49446G	-53.65	24.81457G	-45.97	1

802.11b_Nss1,(1Mbps)_1TX **CSE NdB**

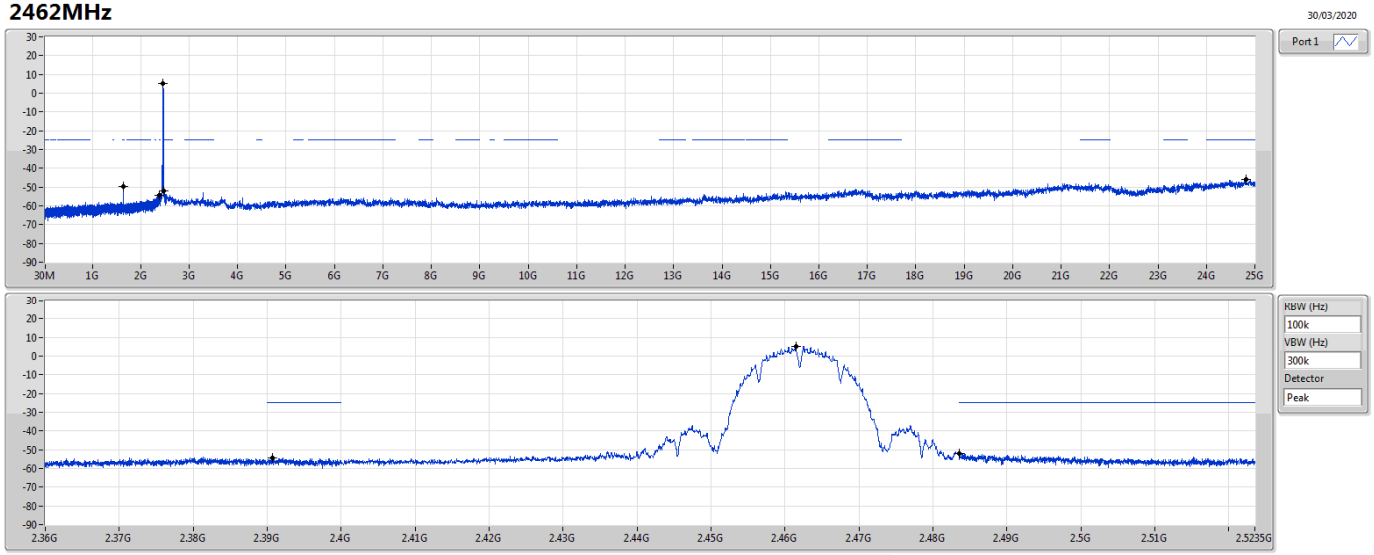
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46146G	5.14	-24.86	1.62372G	-49.74	2.39794G	-54.14	2.4G	-54.91	2.50602G	-53.70	24.95505G	-45.58	1

802.11b_Nss1,(1Mbps)_1TX **CSE NdB**

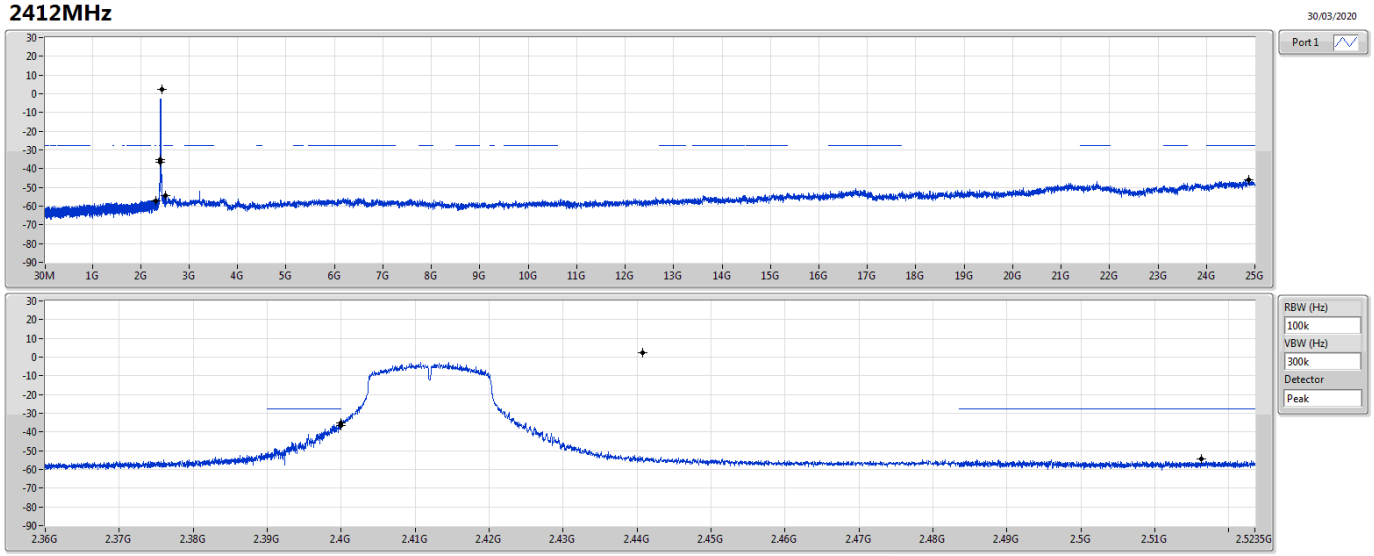
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46146G	5.14	-24.86	1.64032G	-49.71	2.39066G	-54.21	2.4835G	-52.16	2.4835G	-51.88	24.82019G	-45.73	1

802.11g_Nss1,(6Mbps)_1TX **CSE NdB**

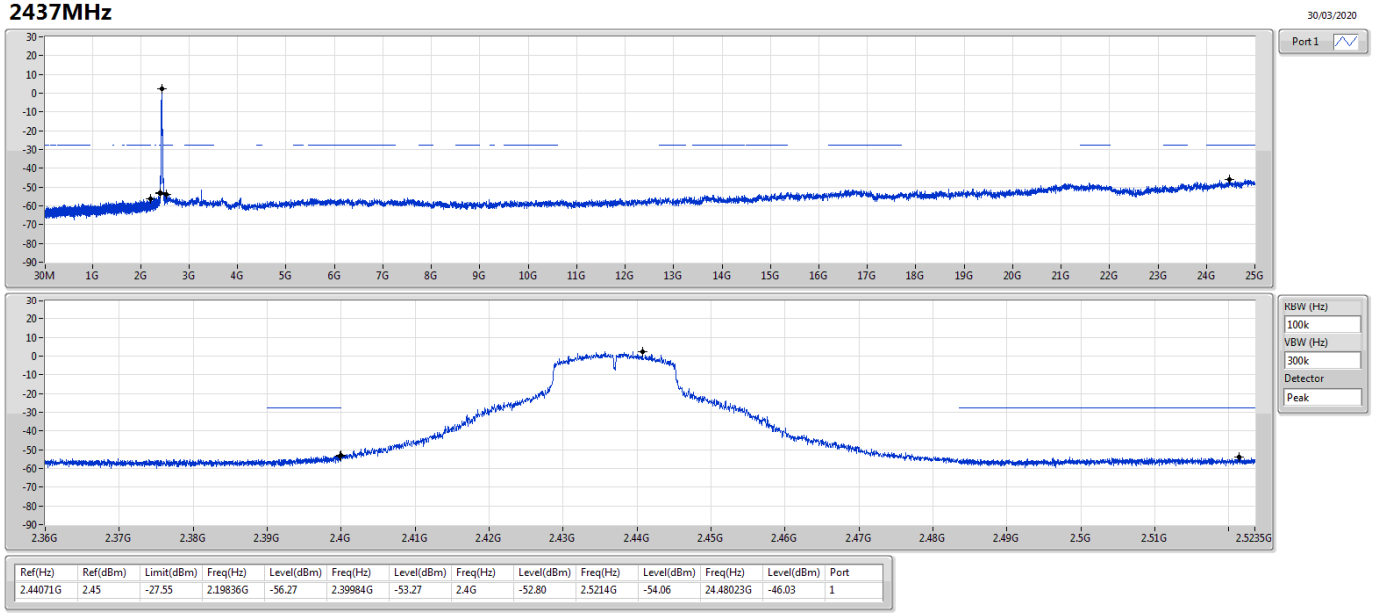
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44071G	2.45	-27.55	2.30728G	-56.96	2.39998G	-35.08	2.4G	-36.33	2.51624G	-54.17	24.86795G	-45.84	1

802.11g_Nss1,(6Mbps)_1TX **CSE NdB**

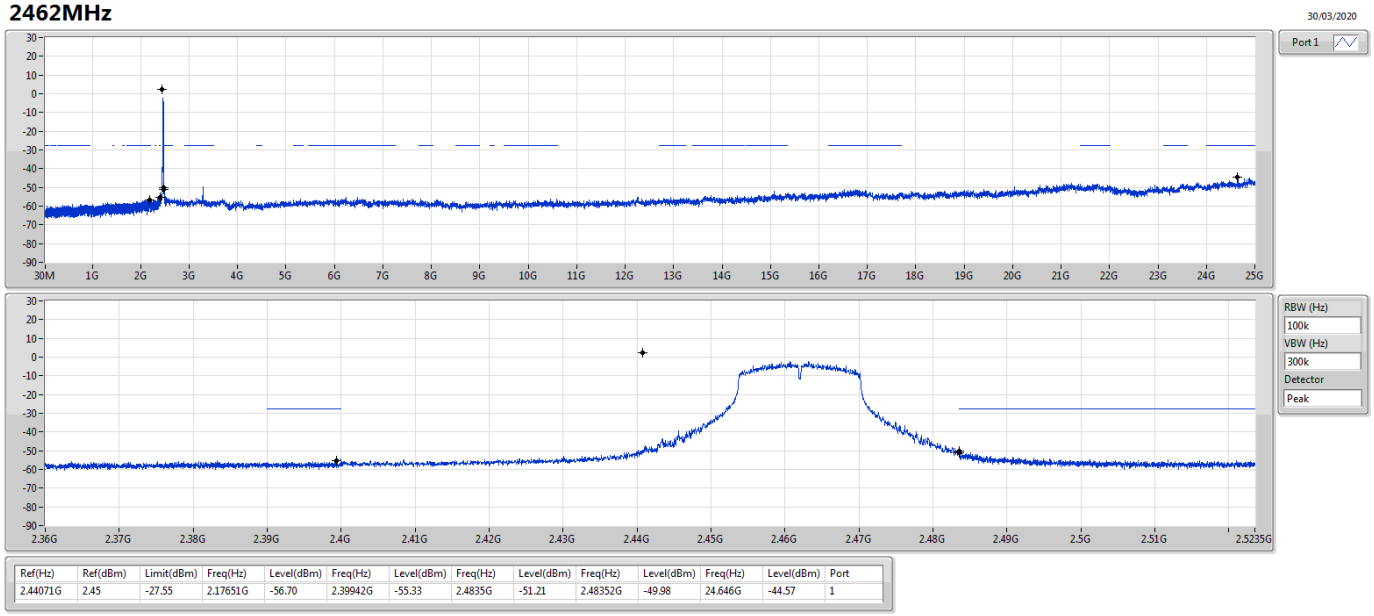
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44071G	2.45	-27.55	2.19836G	-56.27	2.39984G	-53.27	2.4G	-52.80	2.5214G	-54.06	24.48023G	-46.03	1

802.11g_Nss1,(6Mbps)_1TX **CSE NdB**

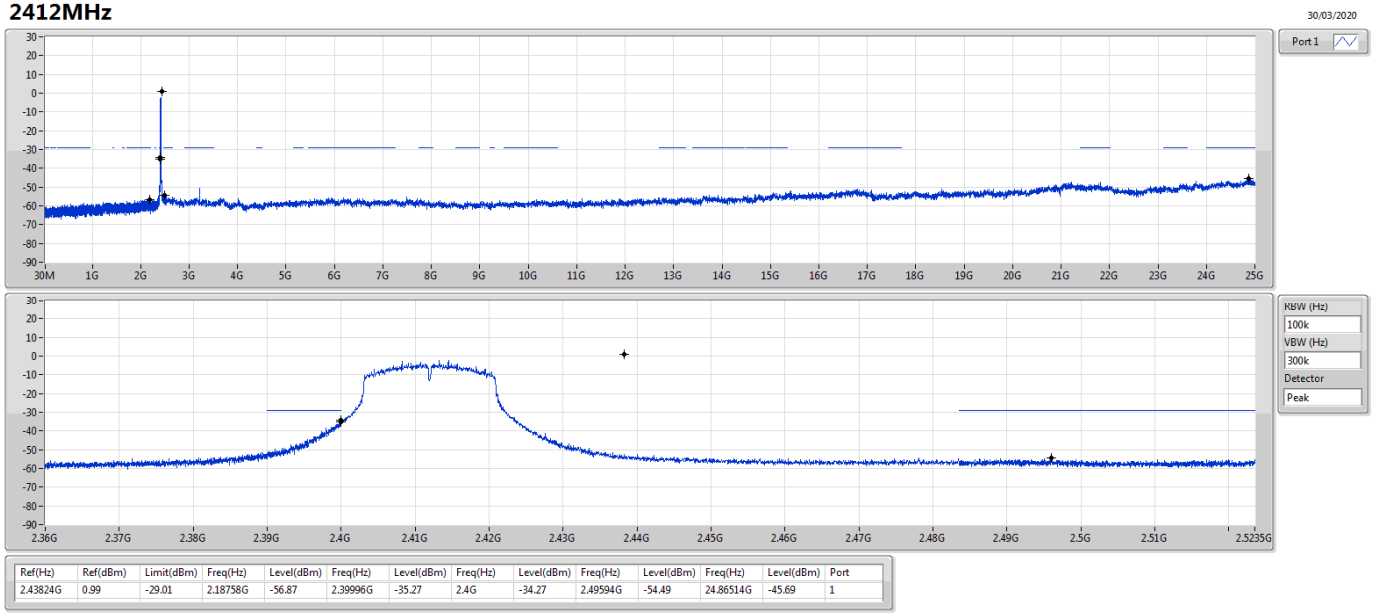
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44071G	2.45	-27.55	2.17651G	-56.70	2.39942G	-55.33	2.4835G	-51.21	2.48352G	-49.98	24.646G	-44.57	1

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

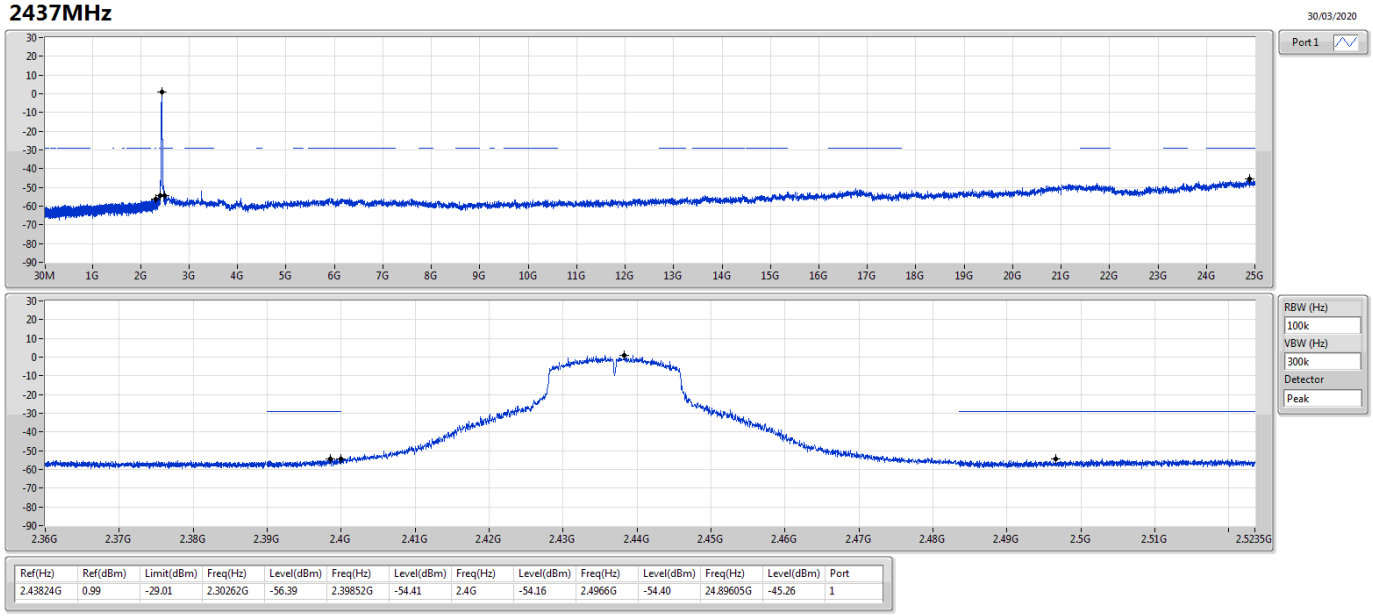
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	0.99	-29.01	2.18758G	-56.87	2.39996G	-35.27	2.4G	-34.27	2.49594G	-54.49	24.86514G	-45.69	1

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

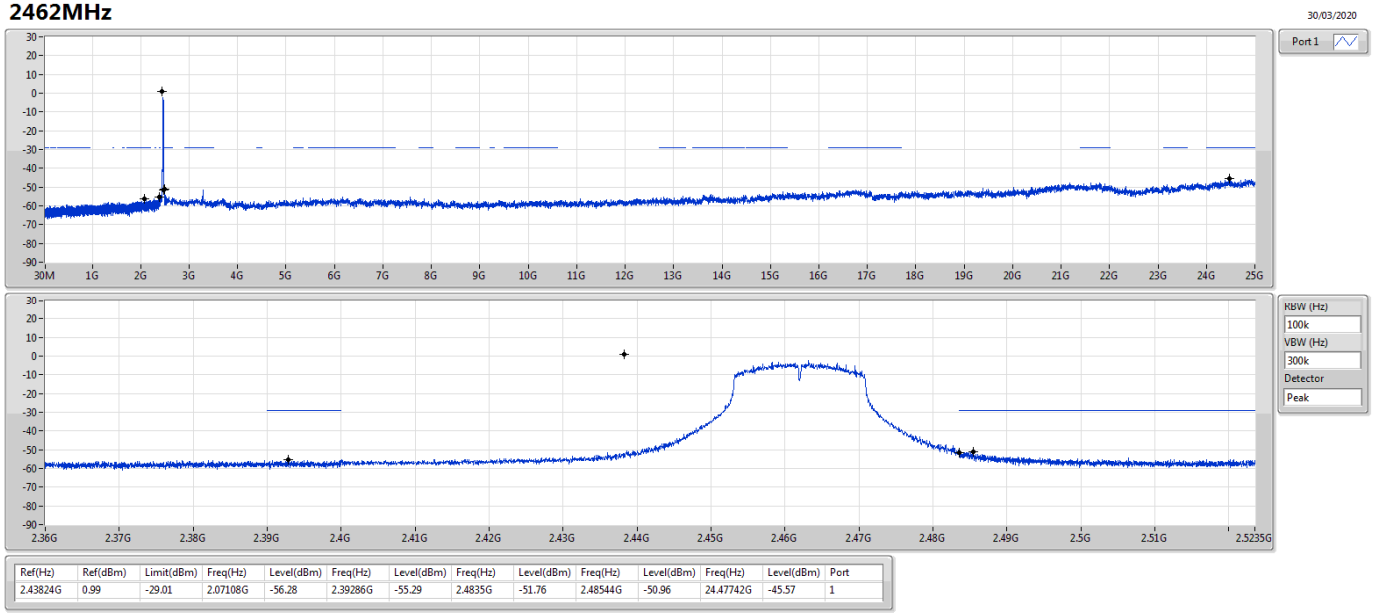
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	0.99	-29.01	2.30262G	-56.39	2.39852G	-54.41	2.4G	-54.16	2.4966G	-54.40	24.89605G	-45.26	1

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

2462MHz



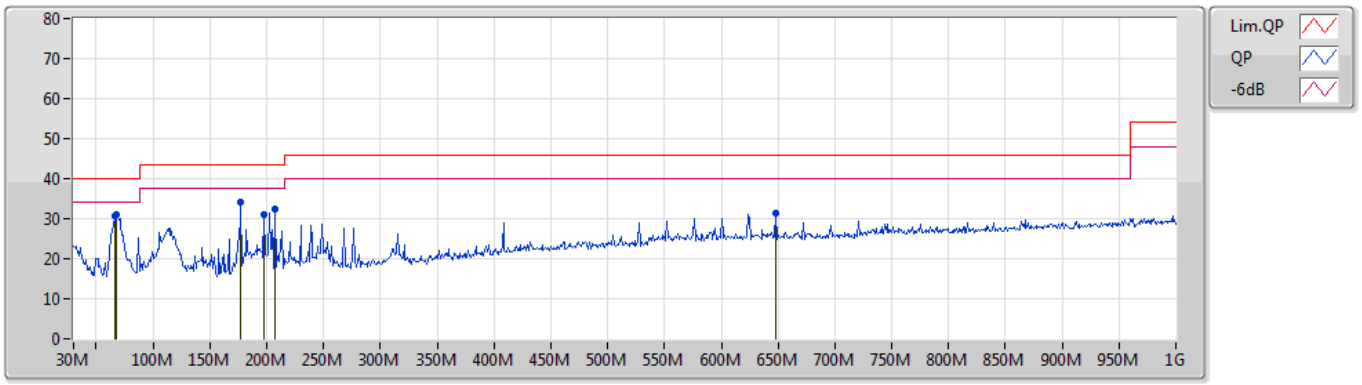
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	0.99	-29.01	2.07108G	-56.28	2.39286G	-55.29	2.4835G	-51.76	2.48544G	-50.96	24.47742G	-45.57	1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	PK	408.3M	38.05	46.00	-7.95	Horizontal

Mode 2

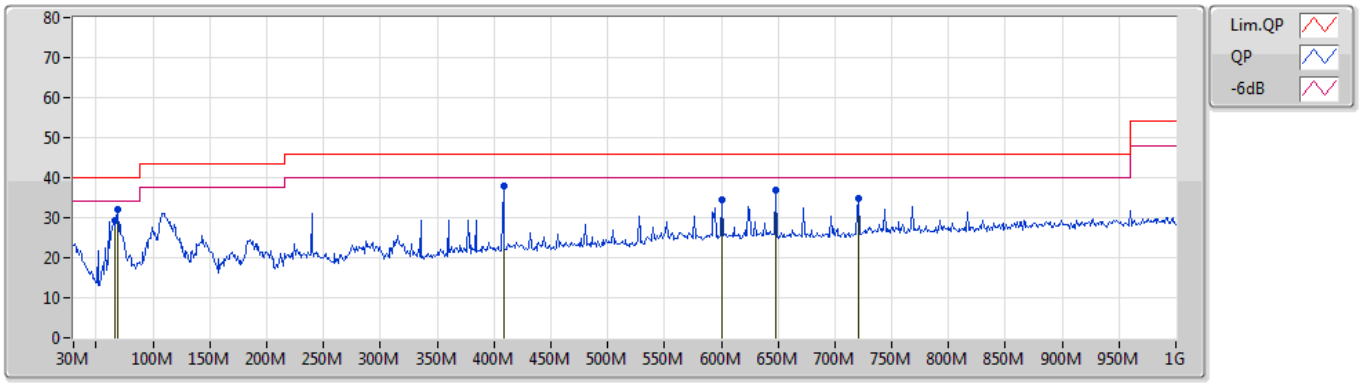
30/04/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	65.89M	30.63	40.00	-9.37	-18.13	3	Vertical	105	3.00	-	48.76	12.52	1.22	31.87
PK	67.83M	31.08	40.00	-8.92	-18.19	3	Vertical	88	3.00	"Worst"	49.27	12.43	1.26	31.88
PK	177.44M	34.23	43.50	-9.27	-14.83	3	Vertical	37	2.00	-	49.06	15.25	1.89	31.97
PK	197.81M	31.01	43.50	-12.49	-14.81	3	Vertical	105	2.00	-	45.82	15.15	1.99	31.95
PK	207.51M	32.27	43.50	-11.23	-15.11	3	Vertical	237	3.00	-	47.38	14.82	2.03	31.96
PK	647.89M	31.39	46.00	-14.61	-4.49	3	Vertical	180	1.50	-	35.88	24.44	3.60	32.53

Mode 2

30/04/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	65.89M	29.17	40.00	-10.83	-18.13	3	Horizontal	46	3.00	-	47.30	12.52	1.22	31.87
PK	68.8M	32.04	40.00	-7.96	-18.16	3	Horizontal	176	1.00	-	50.20	12.44	1.28	31.88
PK	408.3M	38.05	46.00	-7.95	-7.79	3	Horizontal	233	1.00	"Worst"	45.84	21.52	2.90	32.21
PK	600.36M	34.32	46.00	-11.68	-4.69	3	Horizontal	67	1.50	-	39.01	24.11	3.50	32.30
PK	647.89M	36.82	46.00	-9.18	-4.49	3	Horizontal	66	1.50	-	41.31	24.44	3.60	32.53
PK	720.64M	34.99	46.00	-11.01	-3.95	3	Horizontal	94	1.25	-	38.94	24.60	3.88	32.43

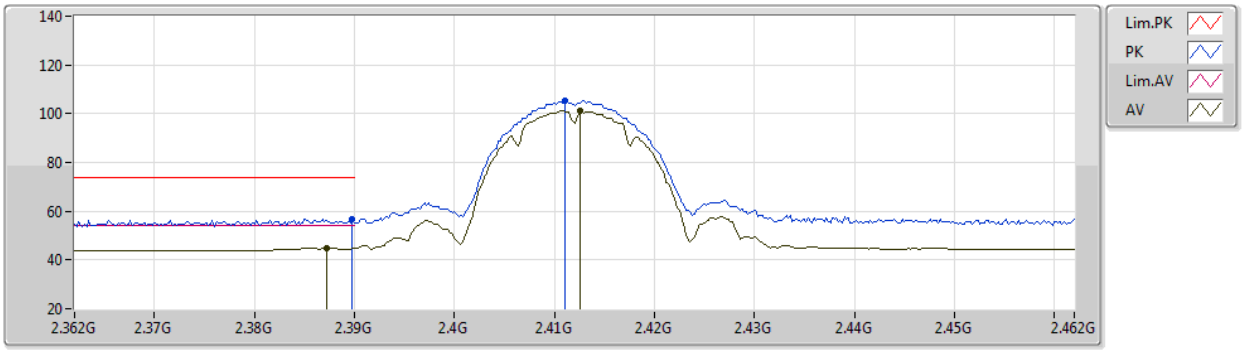
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11n HT20_Nss1,(MCS0)_1TX	Pass	AV	2.4835G	48.69	54.00	-5.31	3	Vertical	23	2.49	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

30/03/2020



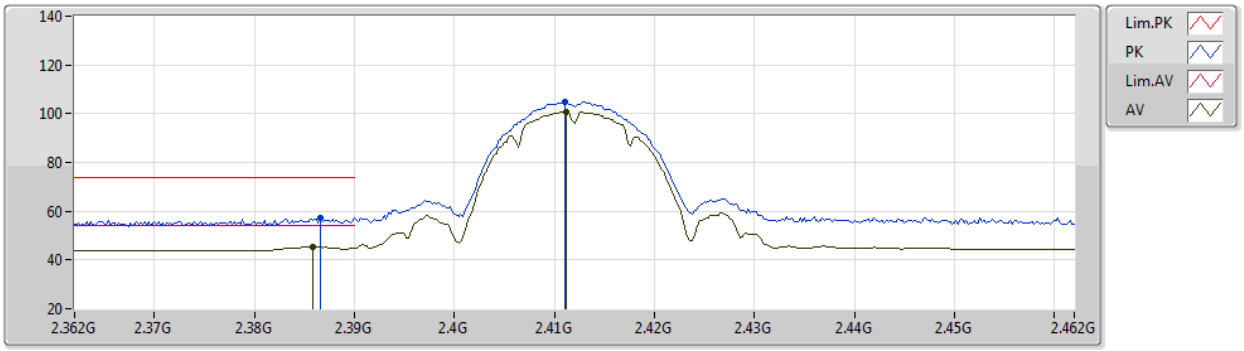
EUT Z_1TX
Setting 0
03-A-A-3

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	56.78	74.00	-17.22	24.77	3	Vertical	21	2.07	-	28.28	3.73	-
AV	2.3872G	44.80	54.00	-9.20	12.80	3	Vertical	21	2.07	-	28.27	3.73	-
PK	2.411G	105.32	Inf	-Inf	73.24	3	Vertical	21	2.07	-	28.33	3.75	-
AV	2.4126G	101.18	Inf	-Inf	69.09	3	Vertical	21	2.07	-	28.34	3.75	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

30/03/2020



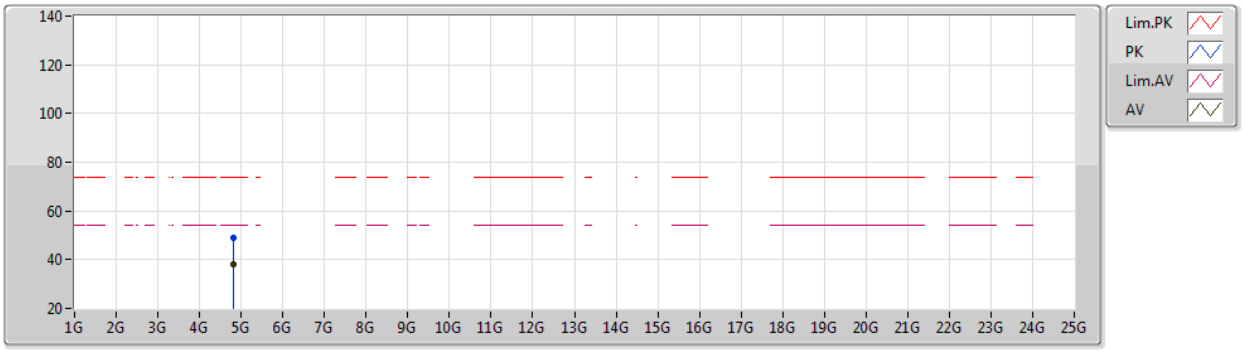
EUT Z_1TX
Setting 0
03-A-A-3

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3866G	57.24	74.00	-16.76	25.24	3	Horizontal	238	2.94	-	28.27	3.73	-
AV	2.3858G	45.24	54.00	-8.76	13.24	3	Horizontal	238	2.94	-	28.27	3.73	-
PK	2.411G	104.88	Inf	-Inf	72.80	3	Horizontal	238	2.94	-	28.33	3.75	-
AV	2.4112G	100.91	Inf	-Inf	68.83	3	Horizontal	238	2.94	-	28.33	3.75	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

30/03/2020



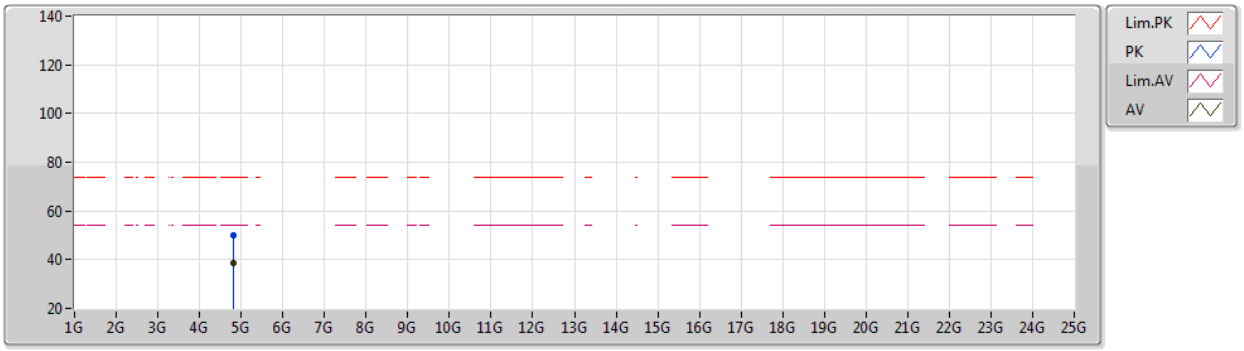
EUT Z_1TX
Setting 0
03-A-A-3

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8241G	48.78	74.00	-25.22	43.48	3	Vertical	23	2.55	-	33.55	6.57	34.82
AV	4.82392G	38.26	54.00	-15.74	32.96	3	Vertical	23	2.55	-	33.55	6.57	34.82

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

30/03/2020



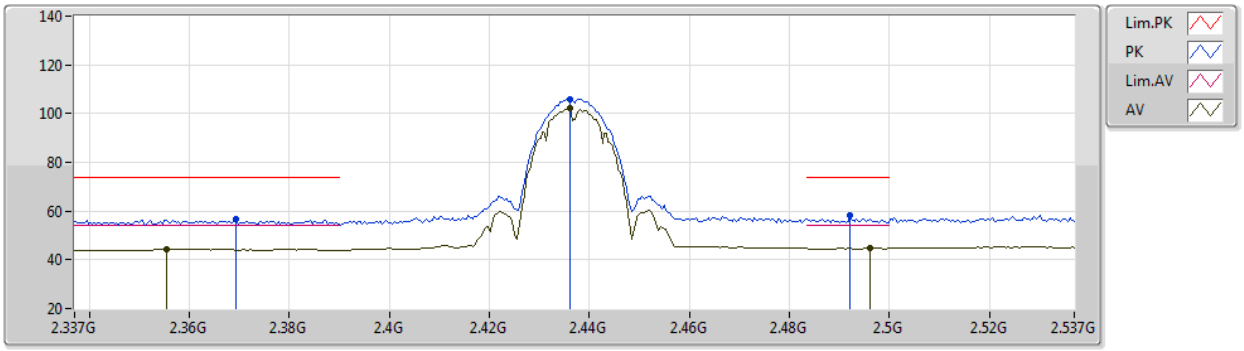
EUT Z_1TX
Setting 0
03-A-A-3

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82401G	49.83	74.00	-24.17	44.53	3	Horizontal	293	2.42	-	33.55	6.57	34.82
AV	4.8239G	38.86	54.00	-15.14	33.56	3	Horizontal	293	2.42	-	33.55	6.57	34.82

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

30/03/2020



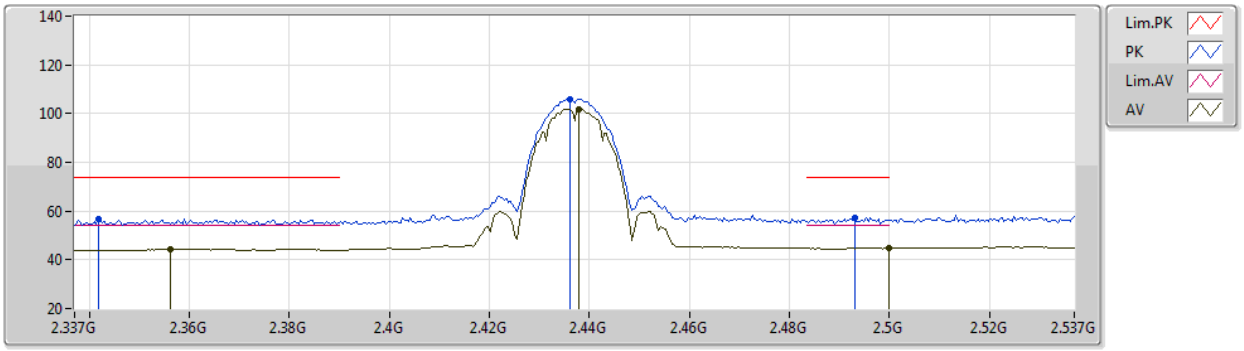
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3694G	56.64	74.00	-17.36	24.68	3	Vertical	23	2.32	-	28.24	3.72	-
AV	2.3554G	44.31	54.00	-9.69	12.39	3	Vertical	23	2.32	-	28.21	3.71	-
PK	2.4362G	106.09	Inf	-Inf	73.92	3	Vertical	23	2.32	-	28.41	3.76	-
AV	2.4362G	102.20	Inf	-Inf	70.03	3	Vertical	23	2.32	-	28.41	3.76	-
PK	2.4922G	58.25	74.00	-15.75	25.87	3	Vertical	23	2.32	-	28.58	3.80	-
AV	2.4962G	44.70	54.00	-9.30	12.31	3	Vertical	23	2.32	-	28.59	3.80	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

30/03/2020



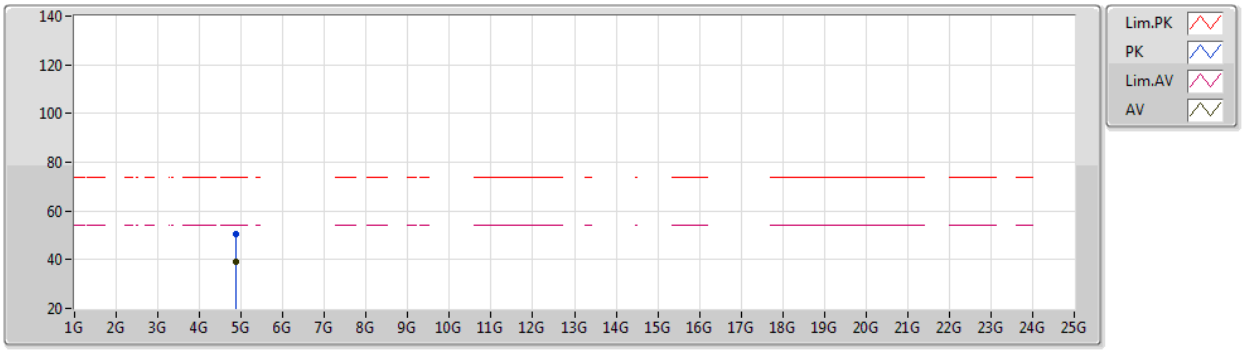
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3418G	56.78	74.00	-17.22	24.89	3	Horizontal	23	2.32	-	28.18	3.71	-
AV	2.3562G	44.35	54.00	-9.65	12.43	3	Horizontal	23	2.32	-	28.21	3.71	-
PK	2.4362G	106.12	Inf	-Inf	73.95	3	Horizontal	23	2.32	-	28.41	3.76	-
AV	2.4378G	101.92	Inf	-Inf	69.75	3	Horizontal	23	2.32	-	28.41	3.76	-
PK	2.493G	57.27	74.00	-16.73	24.89	3	Horizontal	23	2.32	-	28.58	3.80	-
AV	2.4998G	44.70	54.00	-9.30	12.30	3	Horizontal	23	2.32	-	28.60	3.80	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

30/03/2020



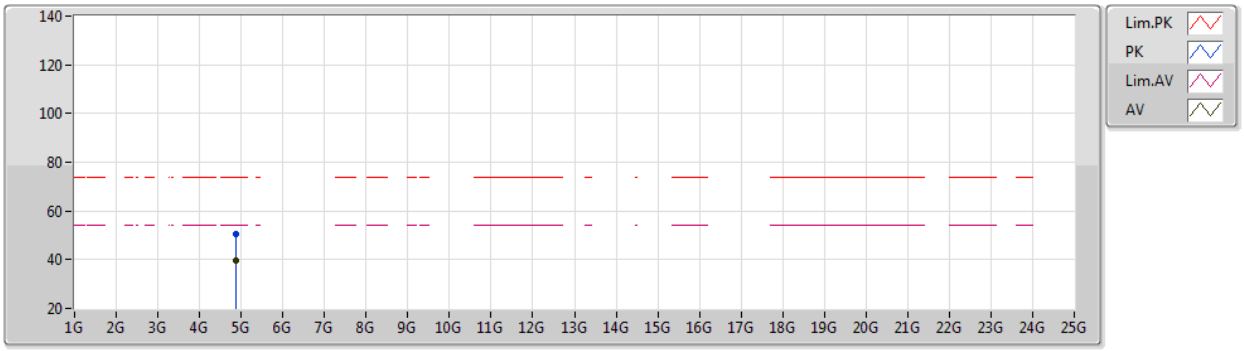
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87378G	50.55	74.00	-23.45	45.10	3	Vertical	29	2.29	-	33.65	6.58	34.78
AV	4.87398G	39.23	54.00	-14.77	33.78	3	Vertical	29	2.29	-	33.65	6.58	34.78

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

30/03/2020



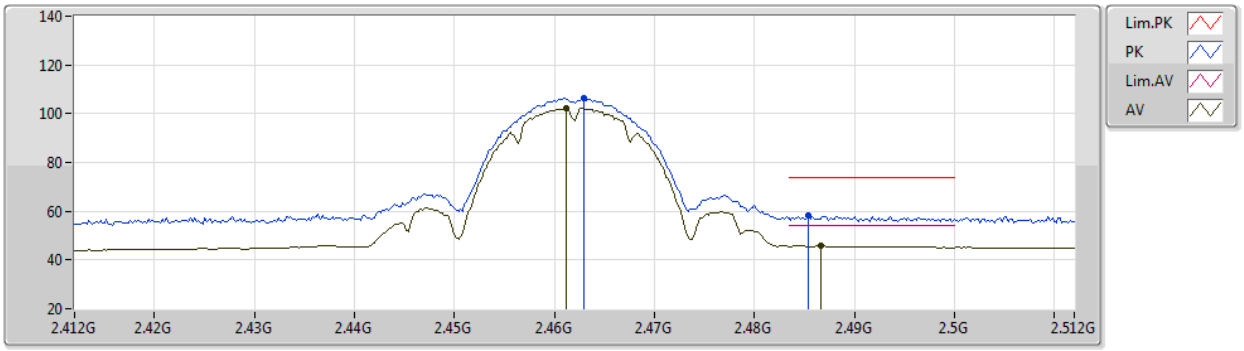
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87402G	50.31	74.00	-23.69	44.86	3	Horizontal	294	2.26	-	33.65	6.58	34.78
AV	4.87392G	39.76	54.00	-14.24	34.31	3	Horizontal	294	2.26	-	33.65	6.58	34.78

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

30/03/2020



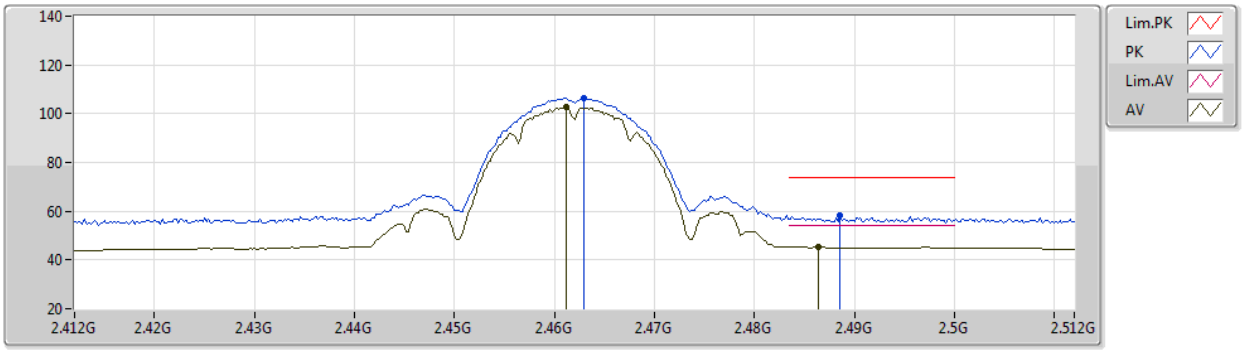
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.463G	106.26	Inf	-Inf	73.99	3	Vertical	24	2.90	-	28.49	3.78	-
AV	2.4612G	102.15	Inf	-Inf	69.89	3	Vertical	24	2.90	-	28.48	3.78	-
PK	2.4854G	58.13	74.00	-15.87	25.78	3	Vertical	24	2.90	-	28.56	3.79	-
AV	2.4866G	45.84	54.00	-8.16	13.49	3	Vertical	24	2.90	-	28.56	3.79	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

30/03/2020



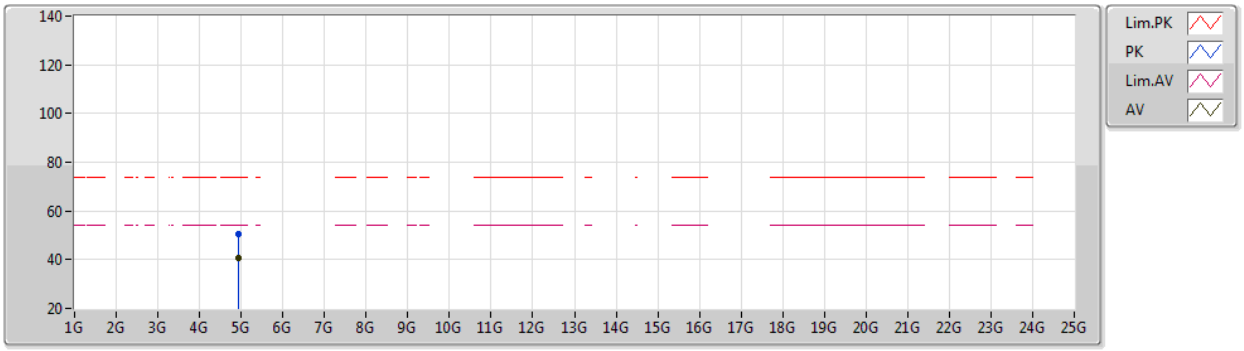
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.463G	106.47	Inf	-Inf	74.20	3	Horizontal	238	2.79	-	28.49	3.78	-
AV	2.4612G	102.52	Inf	-Inf	70.26	3	Horizontal	238	2.79	-	28.48	3.78	-
PK	2.4886G	58.30	74.00	-15.70	25.94	3	Horizontal	238	2.79	-	28.57	3.79	-
AV	2.4864G	45.32	54.00	-8.68	12.97	3	Horizontal	238	2.79	-	28.56	3.79	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

30/03/2020



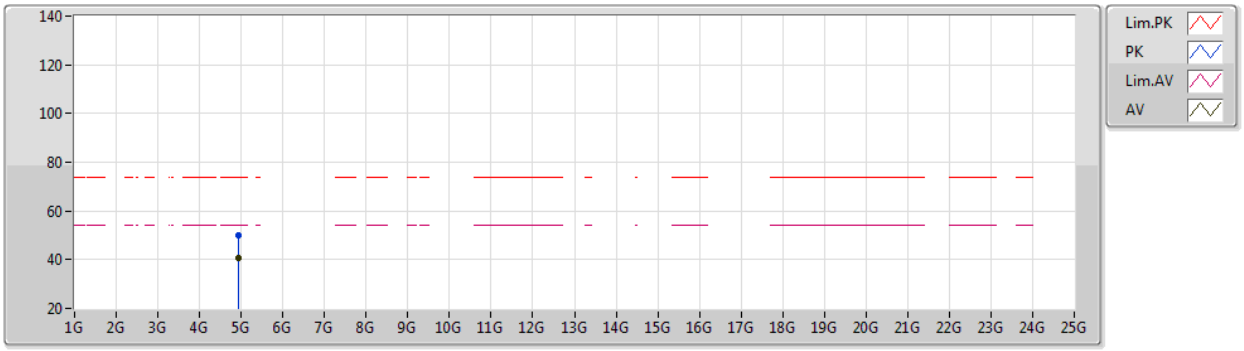
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92406G	50.34	74.00	-23.66	44.73	3	Vertical	29	2.38	-	33.75	6.60	34.74
AV	4.92394G	40.81	54.00	-13.19	35.20	3	Vertical	29	2.38	-	33.75	6.60	34.74

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

30/03/2020



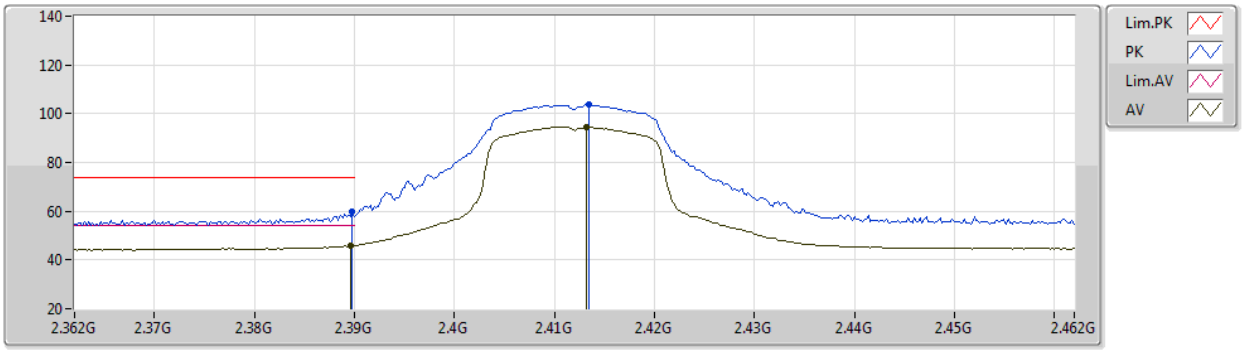
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92406G	50.09	74.00	-23.91	44.48	3	Horizontal	295	2.41	-	33.75	6.60	34.74
AV	4.9239G	40.85	54.00	-13.15	35.24	3	Horizontal	295	2.41	-	33.75	6.60	34.74

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

30/03/2020



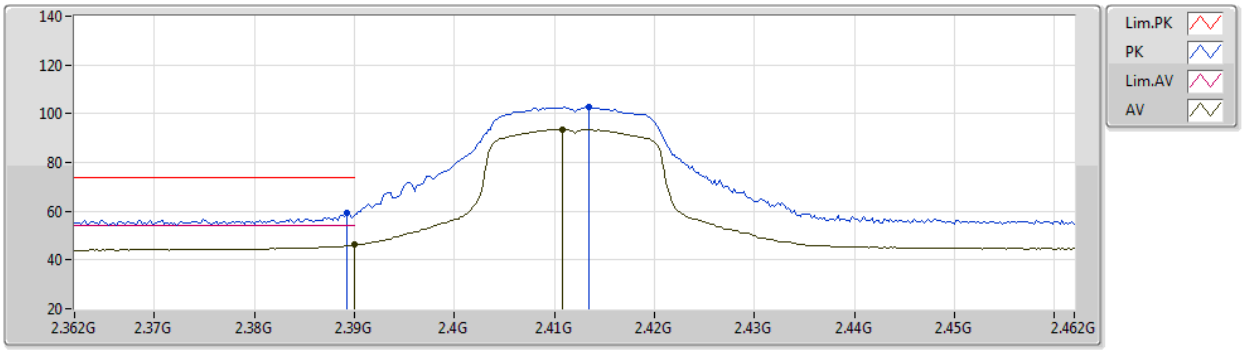
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	59.72	74.00	-14.28	27.71	3	Vertical	22	2.07	-	28.28	3.73	-
AV	2.3896G	45.80	54.00	-8.20	13.79	3	Vertical	22	2.07	-	28.28	3.73	-
PK	2.4134G	103.81	Inf	-Inf	71.72	3	Vertical	22	2.07	-	28.34	3.75	-
AV	2.4132G	94.55	Inf	-Inf	62.46	3	Vertical	22	2.07	-	28.34	3.75	-

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

30/03/2020



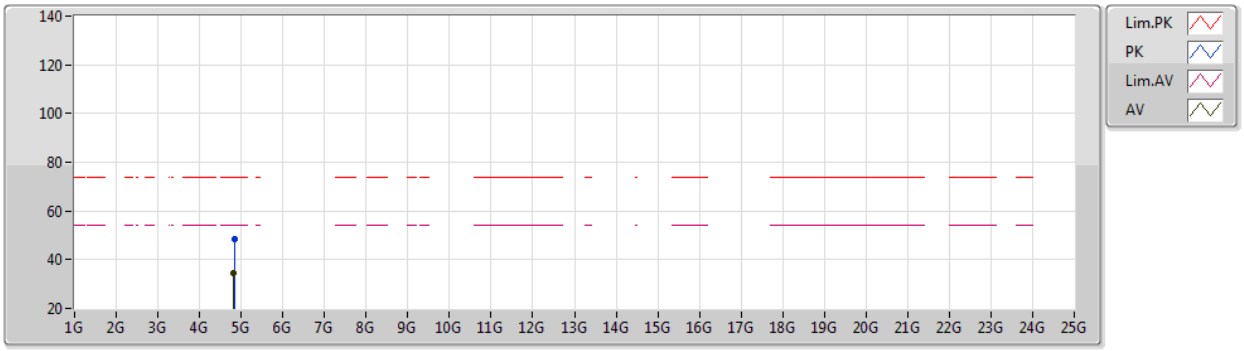
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3892G	59.24	74.00	-14.76	27.23	3	Horizontal	240	2.95	-	28.28	3.73	-
AV	2.39G	46.24	54.00	-7.76	14.23	3	Horizontal	240	2.95	-	28.28	3.73	-
PK	2.4134G	102.73	Inf	-Inf	70.64	3	Horizontal	240	2.95	-	28.34	3.75	-
AV	2.4108G	93.60	Inf	-Inf	61.52	3	Horizontal	240	2.95	-	28.33	3.75	-

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

30/03/2020



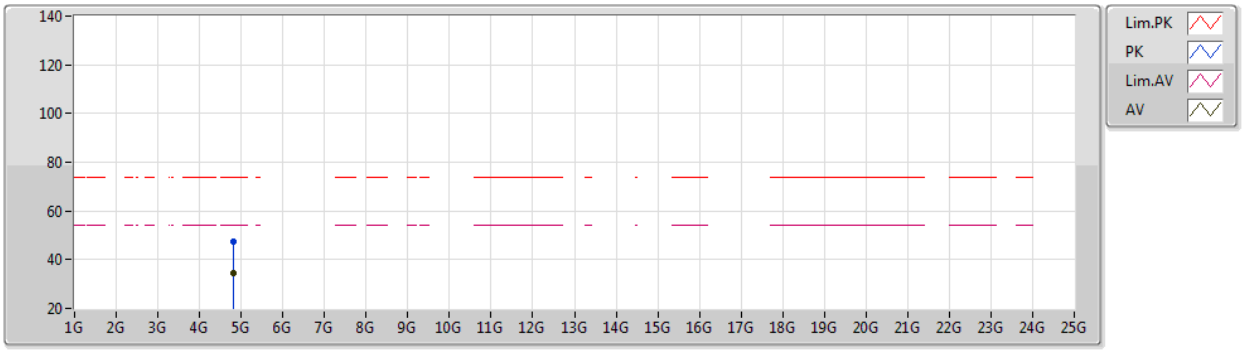
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8286G	48.42	74.00	-25.58	43.11	3	Vertical	145	2.05	-	33.56	6.57	34.82
AV	4.82538G	34.67	54.00	-19.33	29.37	3	Vertical	145	2.05	-	33.55	6.57	34.82

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

30/03/2020



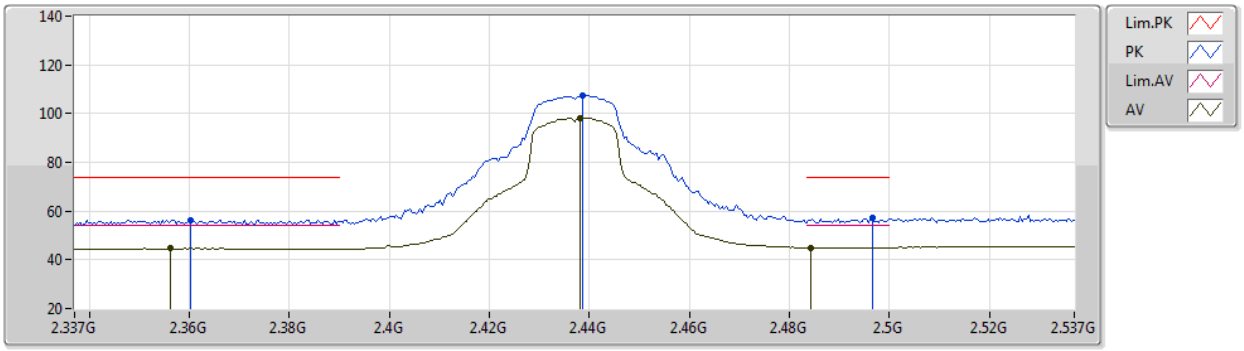
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82824G	47.31	74.00	-26.69	42.00	3	Horizontal	42	1.13	-	33.56	6.57	34.82
AV	4.8226G	34.54	54.00	-19.46	29.24	3	Horizontal	42	1.13	-	33.55	6.57	34.82

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

30/03/2020



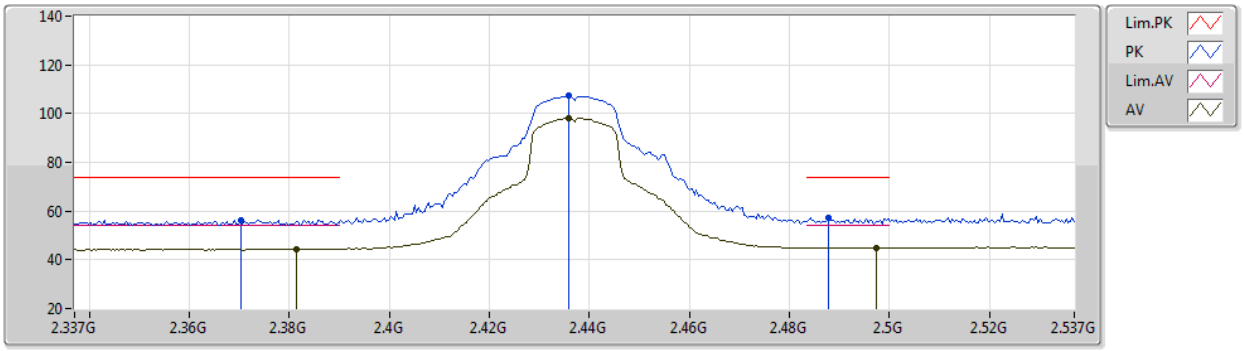
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3602G	56.46	74.00	-17.54	24.52	3	Vertical	19	2.25	-	28.22	3.72	-
AV	2.3562G	44.67	54.00	-9.33	12.75	3	Vertical	19	2.25	-	28.21	3.71	-
PK	2.4386G	107.37	Inf	-Inf	75.19	3	Vertical	19	2.25	-	28.42	3.76	-
AV	2.4382G	98.30	Inf	-Inf	66.13	3	Vertical	19	2.25	-	28.41	3.76	-
PK	2.4966G	57.17	74.00	-16.83	24.78	3	Vertical	19	2.25	-	28.59	3.80	-
AV	2.4842G	45.05	54.00	-8.95	12.71	3	Vertical	19	2.25	-	28.55	3.79	-

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

30/03/2020



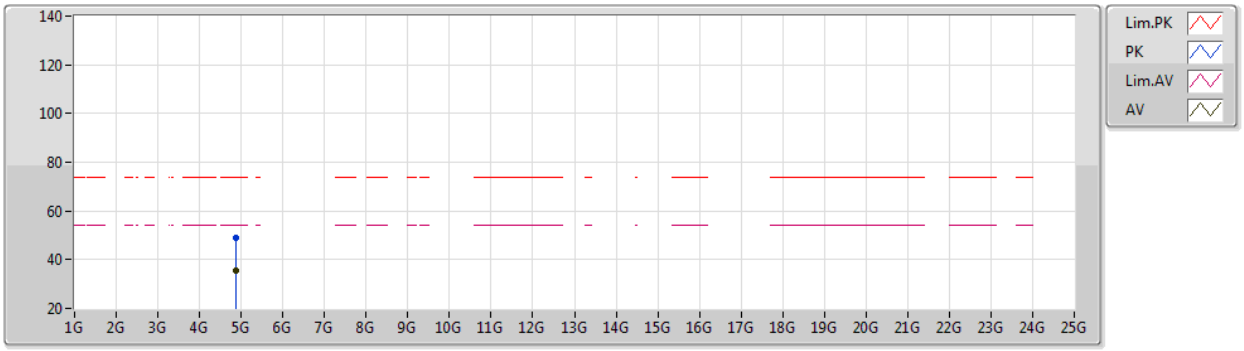
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3702G	56.41	74.00	-17.59	24.45	3	Horizontal	240	2.85	-	28.24	3.72	-
AV	2.3814G	44.46	54.00	-9.54	12.47	3	Horizontal	240	2.85	-	28.26	3.73	-
PK	2.4358G	107.28	Inf	-Inf	75.11	3	Horizontal	240	2.85	-	28.41	3.76	-
AV	2.4358G	98.07	Inf	-Inf	65.90	3	Horizontal	240	2.85	-	28.41	3.76	-
PK	2.4878G	57.37	74.00	-16.63	25.02	3	Horizontal	240	2.85	-	28.56	3.79	-
AV	2.4974G	44.94	54.00	-9.06	12.55	3	Horizontal	240	2.85	-	28.59	3.80	-

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

30/03/2020



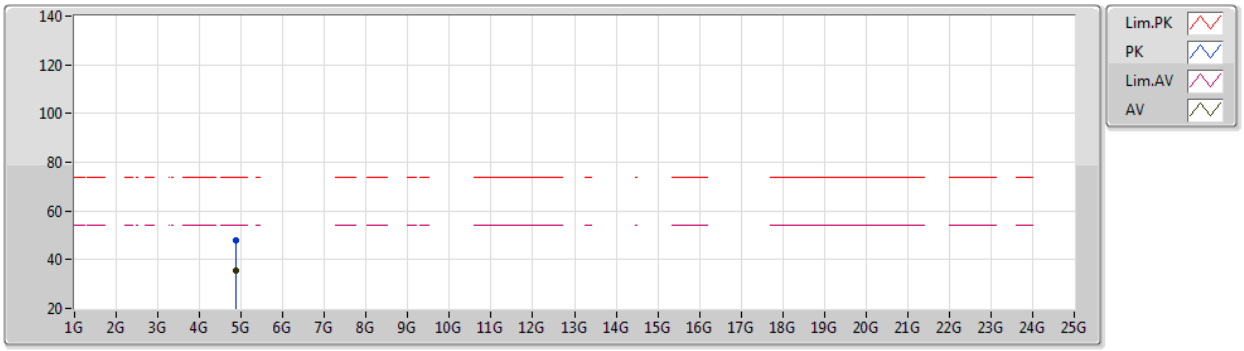
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8755G	49.21	74.00	-24.79	43.76	3	Vertical	108	2.82	-	33.65	6.58	34.78
AV	4.8738G	35.72	54.00	-18.28	30.27	3	Vertical	108	2.82	-	33.65	6.58	34.78

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

30/03/2020



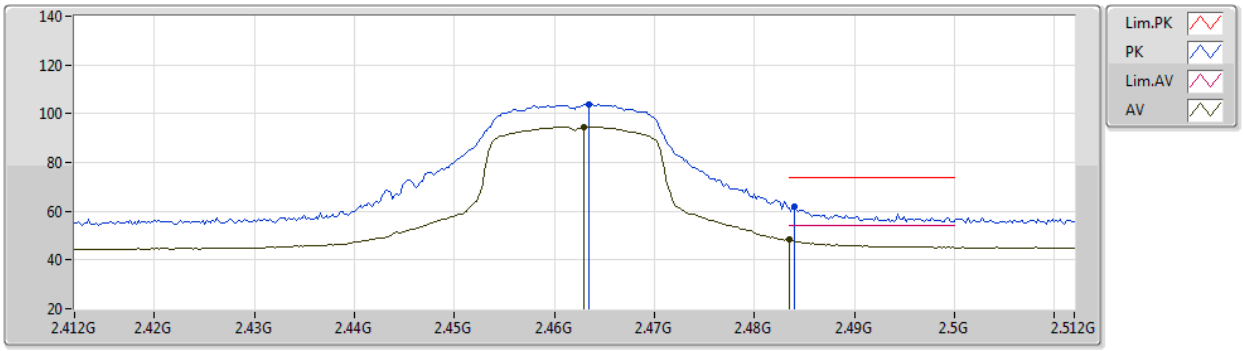
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87368G	48.08	74.00	-25.92	42.63	3	Horizontal	171	1.00	-	33.65	6.58	34.78
AV	4.87326G	35.65	54.00	-18.35	30.20	3	Horizontal	171	1.00	-	33.65	6.58	34.78

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

30/03/2020



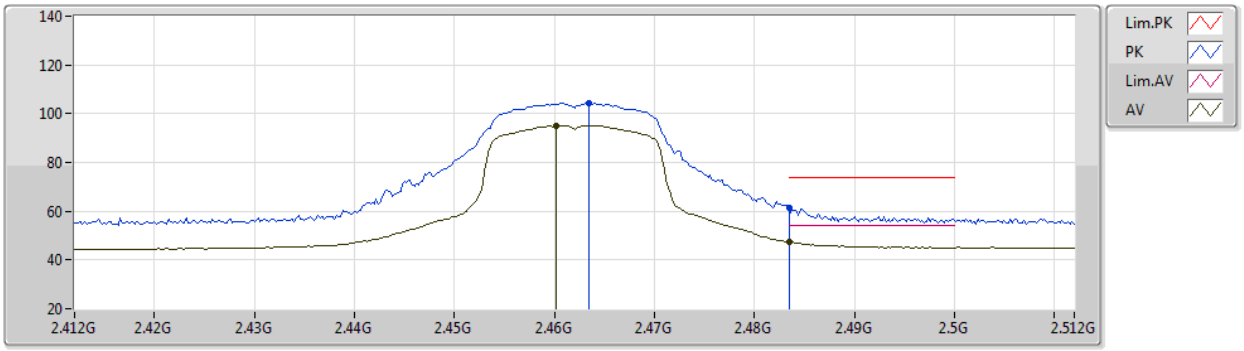
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4634G	104.00	Inf	-Inf	71.73	3	Vertical	24	2.92	-	28.49	3.78	-
AV	2.463G	94.63	Inf	-Inf	62.36	3	Vertical	24	2.92	-	28.49	3.78	-
PK	2.484G	61.73	74.00	-12.27	29.39	3	Vertical	24	2.92	-	28.55	3.79	-
AV	2.4835G	48.22	54.00	-5.78	15.88	3	Vertical	24	2.92	-	28.55	3.79	-

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

30/03/2020



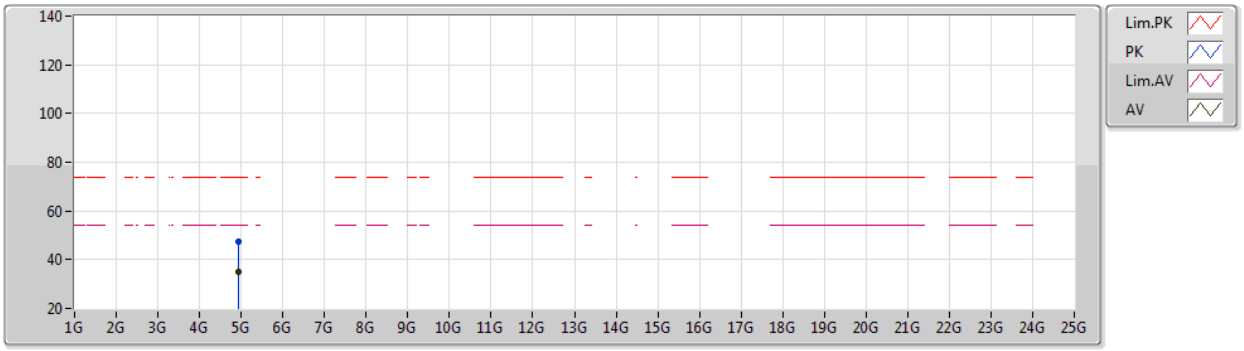
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4634G	104.41	Inf	-Inf	72.14	3	Horizontal	238	2.79	-	28.49	3.78	-
AV	2.4602G	95.16	Inf	-Inf	62.90	3	Horizontal	238	2.79	-	28.48	3.78	-
PK	2.4835G	61.36	74.00	-12.64	29.02	3	Horizontal	238	2.79	-	28.55	3.79	-
AV	2.4835G	47.32	54.00	-6.68	14.98	3	Horizontal	238	2.79	-	28.55	3.79	-

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

30/03/2020



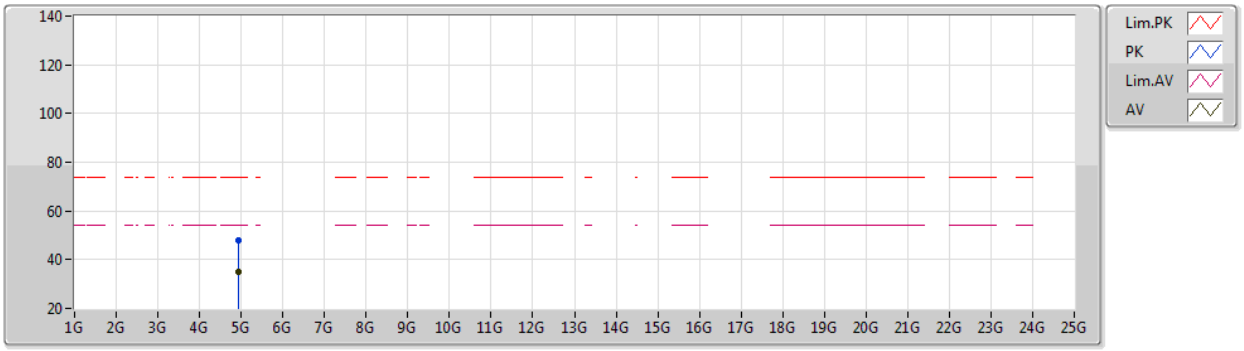
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92558G	47.62	74.00	-26.38	42.01	3	Vertical	238	2.65	-	33.75	6.60	34.74
AV	4.9219G	34.94	54.00	-19.06	29.34	3	Vertical	238	2.65	-	33.74	6.60	34.74

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

30/03/2020



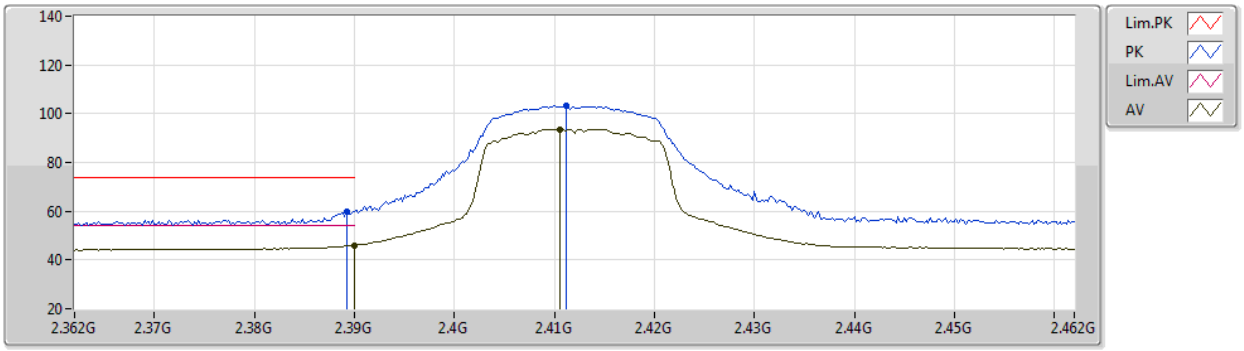
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92498G	47.97	74.00	-26.03	42.36	3	Horizontal	29	1.25	-	33.75	6.60	34.74
AV	4.92116G	34.83	54.00	-19.17	29.23	3	Horizontal	29	1.25	-	33.74	6.60	34.74

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

30/03/2020



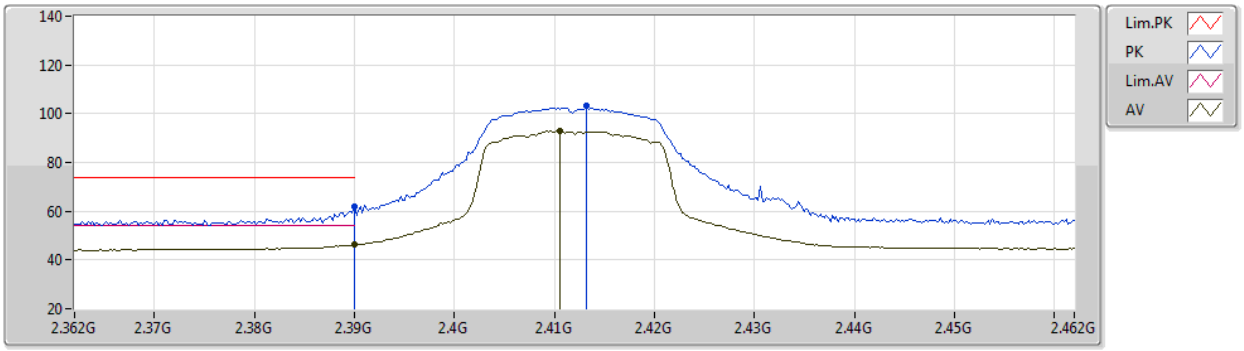
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3892G	59.66	74.00	-14.34	27.65	3	Vertical	25	2.14	-	28.28	3.73	-
AV	2.39G	46.07	54.00	-7.93	14.06	3	Vertical	25	2.14	-	28.28	3.73	-
PK	2.4112G	103.04	Inf	-Inf	70.96	3	Vertical	25	2.14	-	28.33	3.75	-
AV	2.4106G	93.68	Inf	-Inf	61.60	3	Vertical	25	2.14	-	28.33	3.75	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

30/03/2020



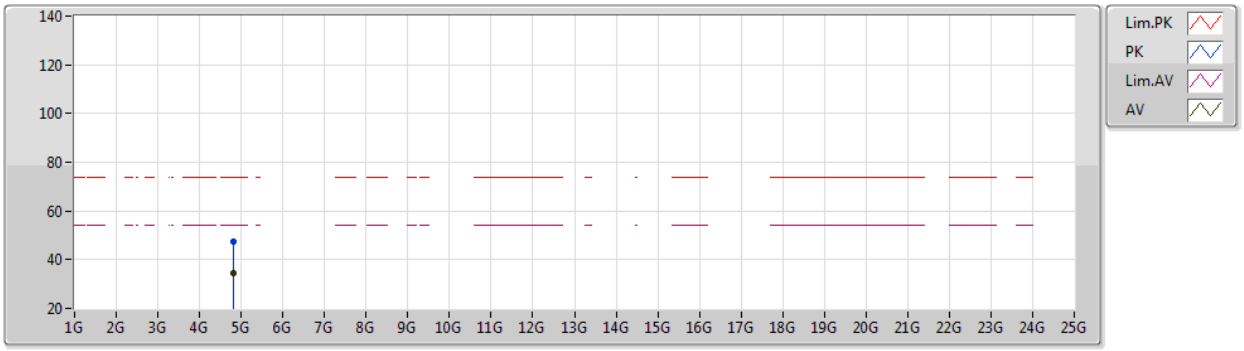
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	62.06	74.00	-11.94	30.05	3	Horizontal	237	2.92	-	28.28	3.73	-
AV	2.39G	46.18	54.00	-7.82	14.17	3	Horizontal	237	2.92	-	28.28	3.73	-
PK	2.4132G	103.51	Inf	-Inf	71.42	3	Horizontal	237	2.92	-	28.34	3.75	-
AV	2.4106G	92.82	Inf	-Inf	60.74	3	Horizontal	237	2.92	-	28.33	3.75	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

30/03/2020



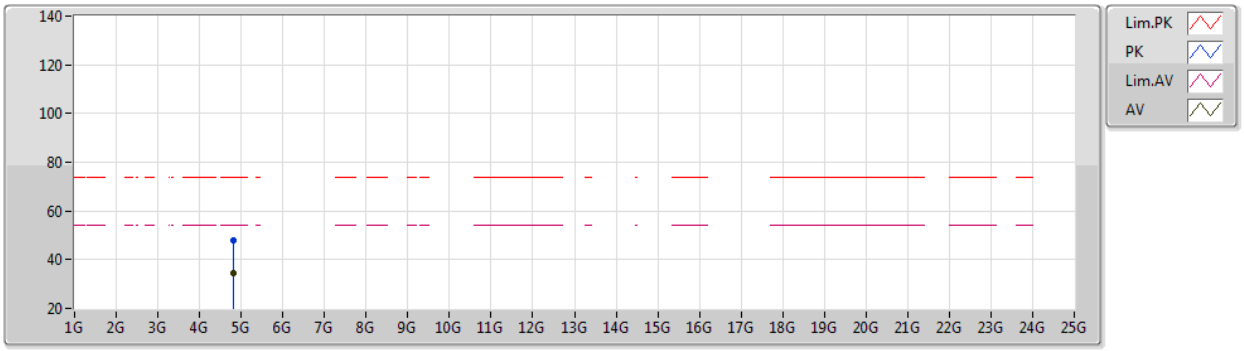
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82698G	47.53	74.00	-26.47	42.23	3	Vertical	248	1.66	-	33.55	6.57	34.82
AV	4.82354G	34.60	54.00	-19.40	29.30	3	Vertical	248	1.66	-	33.55	6.57	34.82

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

30/03/2020



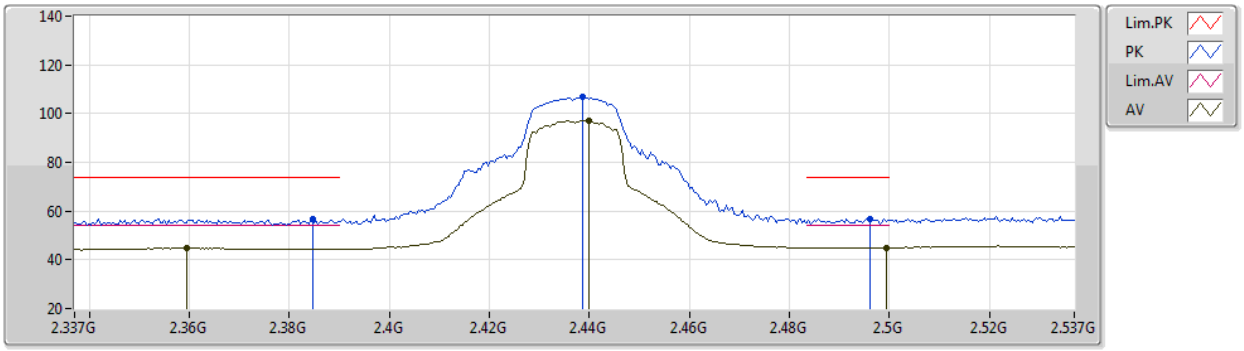
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82234G	48.01	74.00	-25.99	42.72	3	Horizontal	348	2.99	-	33.54	6.57	34.82
AV	4.82492G	34.56	54.00	-19.44	29.26	3	Horizontal	348	2.99	-	33.55	6.57	34.82

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

30/03/2020



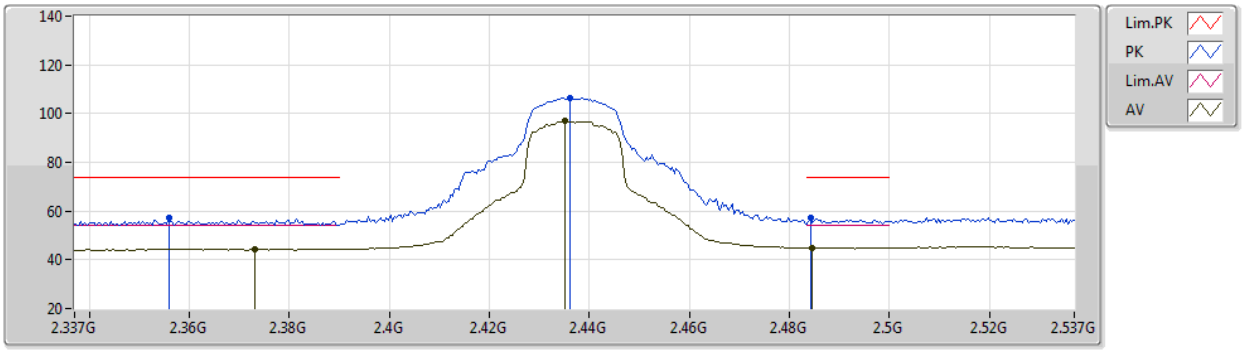
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3846G	56.97	74.00	-17.03	24.97	3	Vertical	20	2.25	-	28.27	3.73	-
AV	2.3594G	44.77	54.00	-9.23	12.83	3	Vertical	20	2.25	-	28.22	3.72	-
PK	2.4386G	106.72	Inf	-Inf	74.54	3	Vertical	20	2.25	-	28.42	3.76	-
AV	2.4398G	97.31	Inf	-Inf	65.13	3	Vertical	20	2.25	-	28.42	3.76	-
PK	2.4962G	56.71	74.00	-17.29	24.32	3	Vertical	20	2.25	-	28.59	3.80	-
AV	2.4994G	45.05	54.00	-8.95	12.65	3	Vertical	20	2.25	-	28.60	3.80	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

30/03/2020



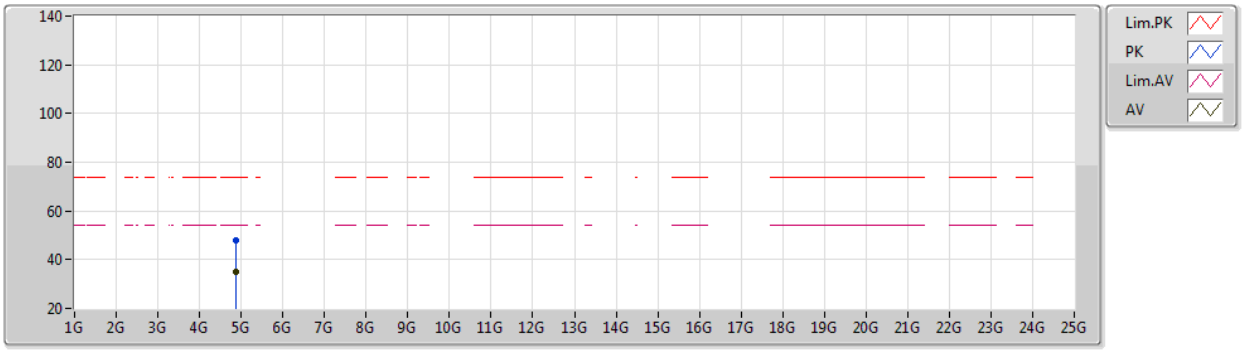
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3558G	57.16	74.00	-16.84	25.24	3	Horizontal	235	2.89	-	28.21	3.71	-
AV	2.373G	44.37	54.00	-9.63	12.40	3	Horizontal	235	2.89	-	28.25	3.72	-
PK	2.4362G	106.50	Inf	-Inf	74.33	3	Horizontal	235	2.89	-	28.41	3.76	-
AV	2.435G	96.89	Inf	-Inf	64.72	3	Horizontal	235	2.89	-	28.41	3.76	-
PK	2.4842G	57.33	74.00	-16.67	24.99	3	Horizontal	235	2.89	-	28.55	3.79	-
AV	2.4846G	44.97	54.00	-9.03	12.63	3	Horizontal	235	2.89	-	28.55	3.79	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

30/03/2020



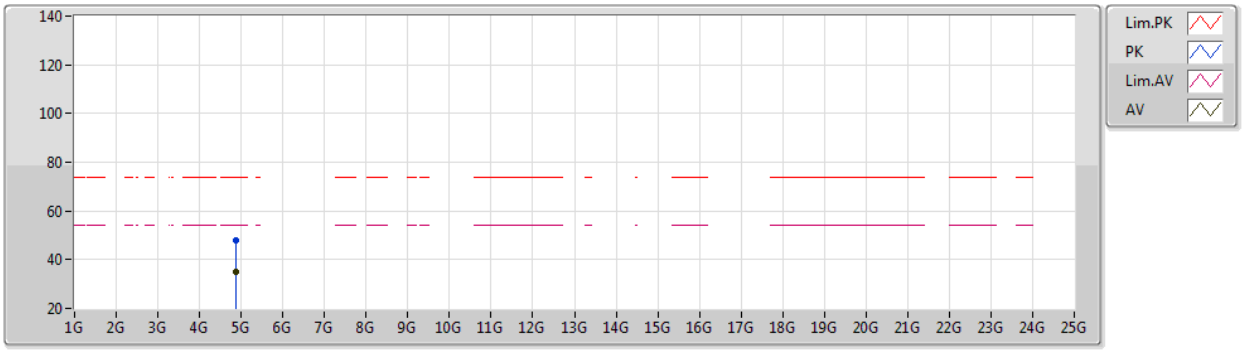
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87548G	48.00	74.00	-26.00	42.55	3	Vertical	93	2.41	-	33.65	6.58	34.78
AV	4.8733G	35.02	54.00	-18.98	29.57	3	Vertical	93	2.41	-	33.65	6.58	34.78

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

30/03/2020



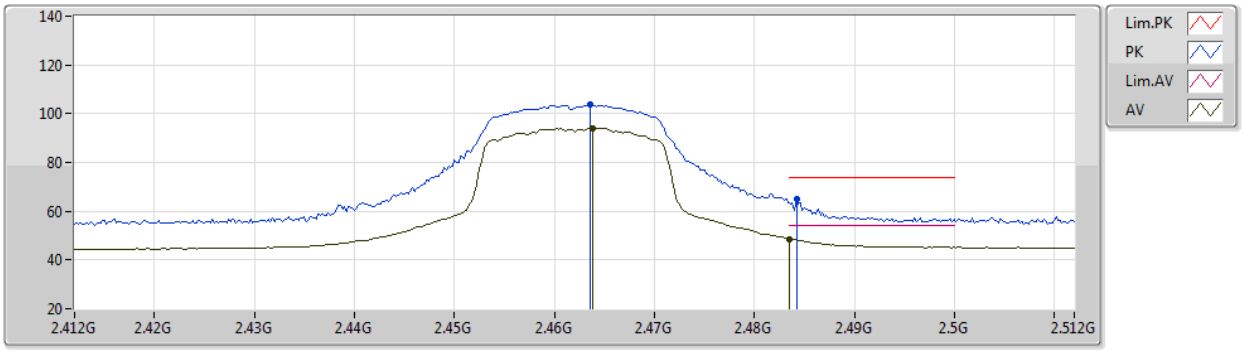
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87498G	48.06	74.00	-25.94	42.61	3	Horizontal	64	1.48	-	33.65	6.58	34.78
AV	4.87294G	35.07	54.00	-18.93	29.62	3	Horizontal	64	1.48	-	33.65	6.58	34.78

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

30/03/2020



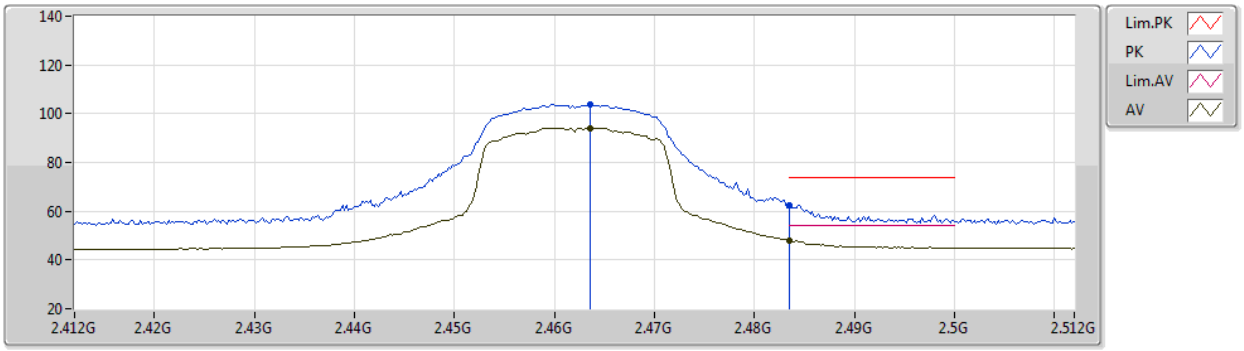
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4636G	103.56	Inf	-Inf	71.29	3	Vertical	23	2.49	-	28.49	3.78	-
AV	2.4638G	94.12	Inf	-Inf	61.85	3	Vertical	23	2.49	-	28.49	3.78	-
PK	2.4842G	65.09	74.00	-8.91	32.75	3	Vertical	23	2.49	-	28.55	3.79	-
AV	2.4835G	48.69	54.00	-5.31	16.35	3	Vertical	23	2.49	-	28.55	3.79	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

30/03/2020



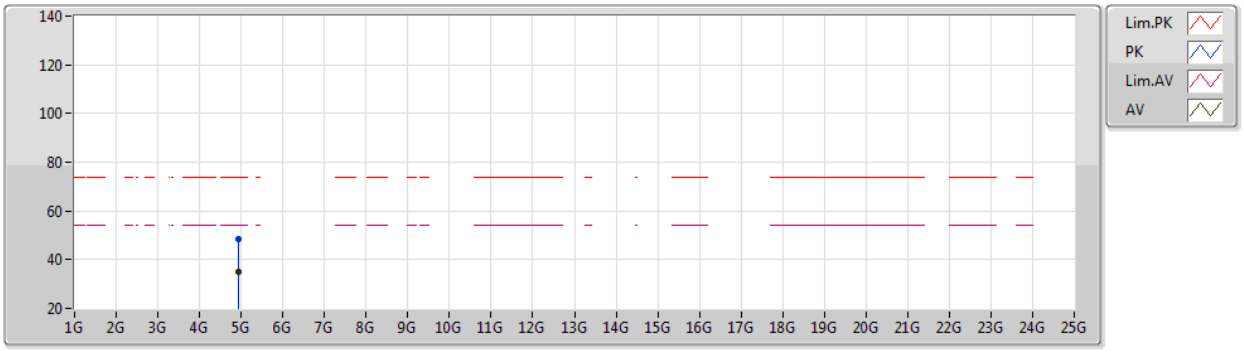
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4636G	103.56	Inf	-Inf	71.29	3	Horizontal	234	2.80	-	28.49	3.78	-
AV	2.4636G	94.22	Inf	-Inf	61.95	3	Horizontal	234	2.80	-	28.49	3.78	-
PK	2.4835G	62.27	74.00	-11.73	29.93	3	Horizontal	234	2.80	-	28.55	3.79	-
AV	2.4835G	47.80	54.00	-6.20	15.46	3	Horizontal	234	2.80	-	28.55	3.79	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

30/03/2020



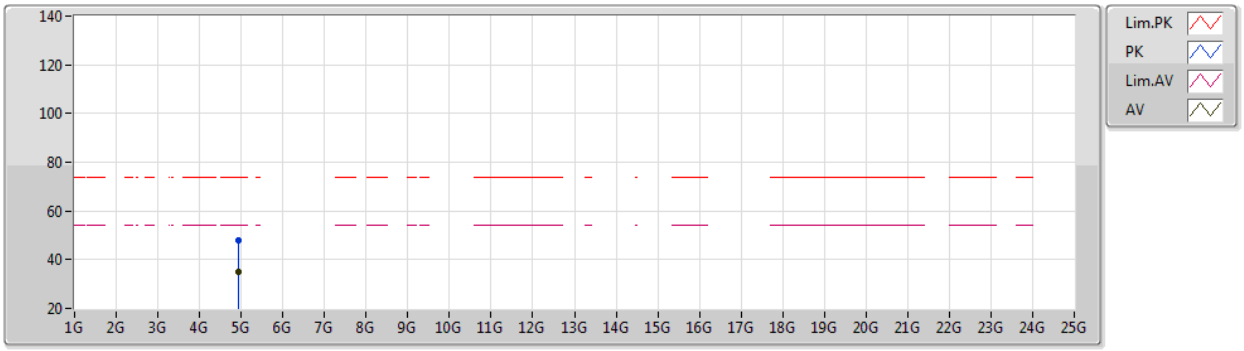
EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92184G	48.64	74.00	-25.36	43.04	3	Vertical	243	1.35	-	33.74	6.60	34.74
AV	4.92156G	34.75	54.00	-19.25	29.15	3	Vertical	243	1.35	-	33.74	6.60	34.74

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

30/03/2020



EUT Z_1TX
Setting 0
03-A-J-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92316G	47.82	74.00	-26.18	42.21	3	Horizontal	358	2.87	-	33.75	6.60	34.74
AV	4.92148G	34.89	54.00	-19.11	29.29	3	Horizontal	358	2.87	-	33.74	6.60	34.74