RADIO TEST REPORT

FCC ID	:	NKR-DHURAZ63
Equipment	:	DHUR-AZ63 11a/b/g/n/ac 2x2 module
Brand Name	:	WNC
Model Name	:	DHUR-AZ63
Applicant	:	Wistron NeWeb Corporation 20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan
Manufacturer	:	Wistron NeWeb Corporation 20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan
Standard	:	47 CFR FCC Part 15.247

The product was received on Oct. 27, 2021, and testing was started from Nov. 05, 2021 and completed on Nov. 30, 2021. We, Sporton International Inc. Hsinchu 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 test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory
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Photographs of EUT v01

History of this test report

Report No.	Version	Description	Issued Date
FR1O2738AD	01	Initial issue of report.	Dec. 13, 2021

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: Sandy Chuang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Mode	Ch. Frequency (MHz)	Channel Number
2400-2483.5	LE	2402-2480	0-39 [40]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-LE(1Mbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(500Kb/s)	1.0	1TX
2.4-2.4835GHz	BT-LE(125Kb/s)	1.0	1TX
2.4-2.4835GHz	BT-LE(2Mbps)	2.0	1TX

Note:
- Bluetooth LE uses a GFSK modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Set	Ant.	Port			Brand	Part Number	Antenna Type	Connector	Support Type	Equip EUT
		WLAN 2.4GHz (WLAN/BT)	WLAN 5GHz	BT						
1	1	1	1	-	WNC	Wifi Ant0	Printed	N/A	WLAN	1
	2	2	2	-	WNC	Wifi Ant1	Printed	N/A		
2	1	1	1	-	WNC	81.EK615.GAA	PIFA	I-PEX	WLAN	2
	2	2	2	-						
3	1	1	1	-	WNC	81.EK615.GAF	PIFA	I-PEX	WLAN	2
	2	2	2	-						
4	1	-	-	1	WNC	81.EK615.GAM	PIFA	I-PEX	BT	1 or 2
5	1	-	-	1	WNC	81.EK615.GAV	PIFA	I-PEX	BT	1 or 2
6	1	-	-	1	WNC	81.EK615.G90	PIFA	I-PEX	BT	1 or 2

Note1:

Set	Ant.	Port			Antenna Gain (dBi)		
		WLAN 2.4GHz (WLAN/BT)	WLAN 5GHz	BT	WLAN 2.4GHz	WLAN 5GHz	Bluetooth
1	1	1	1	-	5.31	5.92	-
	2	2	2	-	5.26	5.91	-
2	1	1	1	-	2.26	6.93	-
	2	2	2	-	2.26	6.93	-
3	1	1	1	-	3.09	5.35	-
	2	2	2	-	3.09	5.35	-
4	1	-	-	1	-	-	4.04
5	1	-	-	1	-	-	4.87
6	1	-	-	1	-	-	0.75

Note2: The above information was declared by manufacturer.

Only the highest gain antenna was selected from each different type of antenna to test. Thus, antenna set 1, 3 were selected to perform the WLAN 2.4GHz test, antenna set 1, 2 were selected to perform the WLAN 5GHz test, and antenna set 5 was selected to perform the Bluetooth test.

Note3:

<WLAN 2.4GHz Function>

For IEEE 802.11b/g/n/ax (2TX/2RX):

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

Port 1 and Port 2 could transmit/receive simultaneously.

<WLAN 5GHz Function>

For IEEE 802.11a/n/ac (2TX/2RX):

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

Port 1 and Port 2 could transmit/receive simultaneously.

<Bluetooth Function> (1TX/1RX)

Only Port 1 can be used as transmitting/receiving.

Note 4: Directional gain information

Maximum Output Power	Power Spectral Density
Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4	$Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left[\sum_{k=1}^{N_{ANT}} g_{j,k}\right]^2}{N_{ANT}}\right]$

Ex.

Directional Gain (NSS1) formula : $Directiona\ lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left[\sum_{k=1}^{N_{ANT}} g_{j,k}\right]^2}{N_{ANT}}\right]$

NSS1(g1,1) = $10^{G1/20}$; NSS1(g1,2)= $10^{G2/20}$

gj,k =(Nss1(g1,1) + Nss1(g1,2)

DG = 10 log[(Nss1(g1,1) + Nss1(g1,2) / N_{ANT}] => 10 log[($10^{G1/20}$ + $10^{G2/20}$ + / N_{ANT}]

Where ;

G1 = Ant 1 Gain ; G2 = Ant 2 Gain

<For EUT 1>

2.4GHz DG = 8.30 dBi

5 GHz U-NII-1 DG = 8.93 dBi

5 GHz U-NII-2A DG = 8.93 dBi

5 GHz U-NII-2C DG = 8.93 dBi

5 GHz U-NII-3 DG = 8.93 dBi

<For EUT 2>

2.4GHz DG = 6.10 dBi

5 GHz U-NII-1 DG = 9.94 dBi

5 GHz U-NII-2A DG = 9.94 dBi

5 GHz U-NII-2C DG = 9.94 dBi

5 GHz U-NII-3 DG = 9.94 dBi

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-LE(1Mbps)	0.615	2.11	384.219u	3k
BT-LE(2Mbps)	0.584	2.34	1.072m	1k

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

1.1.4 EUT Operational Condition

EUT Power Type	From host system			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	WCN_Combo_Tool.exe			
Support Mode	☒	LE 1M PHY: 1 Mb/s		
	☒	LE Coded PHY (S=2): 500 Kb/s		
	☒	LE Coded PHY (S=8): 125 Kb/s		
	☒	LE 2M PHY: 2 Mb/s		

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT Information

EUT	WLAN Antenna	Bluetooth Antenna	Equip Antenna Set
1	Internal	External	Set 1, 4~6
2	External	External	Set 2~6

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 Information	
Test Lab.：Sporton International Inc. Hsinchu Laboratory	
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065 FAX: 886-3-656-9085 Test site Designation No. TW3787 with FCC. Conformity Assessment Body Identifier (CABID) TW3787 with ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	Jay Lo	23.4-25.7 / 64-66	Nov. 15, 2021~ Nov. 17, 2021
Radiated (Below 1GHz)	03CH05-CB	Ken Yeh	19.6~20.1 / 64~68	Nov. 18, 2021~ Nov. 19, 2021
Radiated (Above 1GHz)	03CH05-CB	Kevin Huang	24.1-25.2 / 55-58	Nov. 05, 2021~ Nov. 16, 2021
AC Conduction	CO01-CB	Ryan Huang	22~23 / 66~67	Nov. 30, 2021

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 (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
BT-LE(1Mbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default
BT-LE(2Mbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default

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
1	EUT 1 with 2.4GHz WLAN (Ant. Set 1) + Bluetooth (Ant. Set 5)
2	EUT 1 with 5GHz WLAN (Ant. Set 1) + Bluetooth (Ant. Set 5)
3	EUT 2 with 2.4GHz WLAN (Ant. Set 3) + Bluetooth (Ant. Set 5)
4	EUT 2 with 5GHz WLAN (Ant. Set 2) + Bluetooth (Ant. Set 5)
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
1	EUT 2 with Set 5

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	Normal Link
1	EUT 1 in Z axis with 2.4GHz WLAN (Ant. Set 1) + Bluetooth (Ant. Set 5)
2	EUT 1 in Y axis with 2.4GHz WLAN (Ant. Set 1) + Bluetooth (Ant. Set 5)
3	EUT 1 in X axis with 2.4GHz WLAN (Ant. Set 1) + Bluetooth (Ant. Set 5)
Mode 1 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 1 in Z axis with 5GHz WLAN (Ant. Set 1) + Bluetooth (Ant. Set 5)
5	EUT 2 in Z axis with 2.4GHz WLAN (Ant. Set 3) + Bluetooth (Ant. Set 5)
6	EUT 2 in Y axis with 2.4GHz WLAN (Ant. Set 3) + Bluetooth (Ant. Set 5)
7	EUT 2 in X axis with 2.4GHz WLAN (Ant. Set 3) + Bluetooth (Ant. Set 5)
Mode 5 has been evaluated to be the worst case among Mode 5~7, thus measurement for Mode 8 will follow this same test mode	
8	EUT 2 in Z axis with 5GHz WLAN (Ant. Set 2) + Bluetooth (Ant. Set 5)
For operating mode 5 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, and the worst case as below:	
1	EU 2 in X axis with Set 5

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	EUT 1 with 2.4GHz WLAN (Ant. Set 1) + Bluetooth (Ant. Set 5)
2	EUT 1 with 5GHz WLAN (Ant. Set 1) + Bluetooth (Ant. Set 5)
3	EUT 2 with 2.4GHz WLAN (Ant. Set 3) + Bluetooth (Ant. Set 5)
4	EUT 2 with 5GHz WLAN (Ant. Set 2) + Bluetooth (Ant. Set 5)
Refer to Sporton Test Report No.: FA1O2738 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link Mode:

During the test, the EUT operation to normal function.

2.4 Accessories

N/A

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB1	DELL	E6430	N/A
B	NB2	DELL	E6430	N/A
C	Bluetooth Speaker	MARUS	MSK06C-RD	N/A
D	AP Router	ASUS	RP-N53	MSQ-RPN53
E	Mouse	Logitech	M-U0026	N/A
F	Earphone	SHYARO CHI	MIC-04	N/A
G	Test fixture	WNC	48DHUR09.SGB	N/A

For Radiated (below 1GHz):

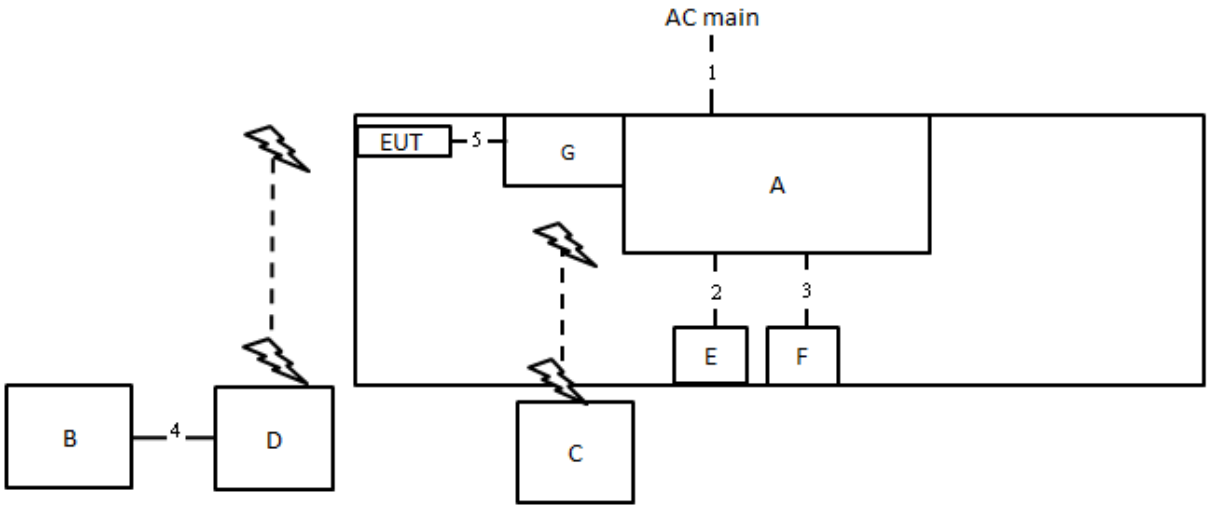
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB1	DELL	E4300	N/A
B	NB2	DELL	E4300	N/A
C	WLAN AP	D-LINK	DIR860L	KA2IR860LA1
D	Bluetooth Speaker	MI	XMYX02YM	2AJ7PXMYX02YM
E	Mouse	HP	FM100	N/A
F	Earphone	e-Power	S90W	N/A
G	Fixture	WNC	48DHUR09.SGB	N/A

For Radiated (above 1GHz) and RF Conducted:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	Fixture	WNC	48DHUR09.SGB	N/A

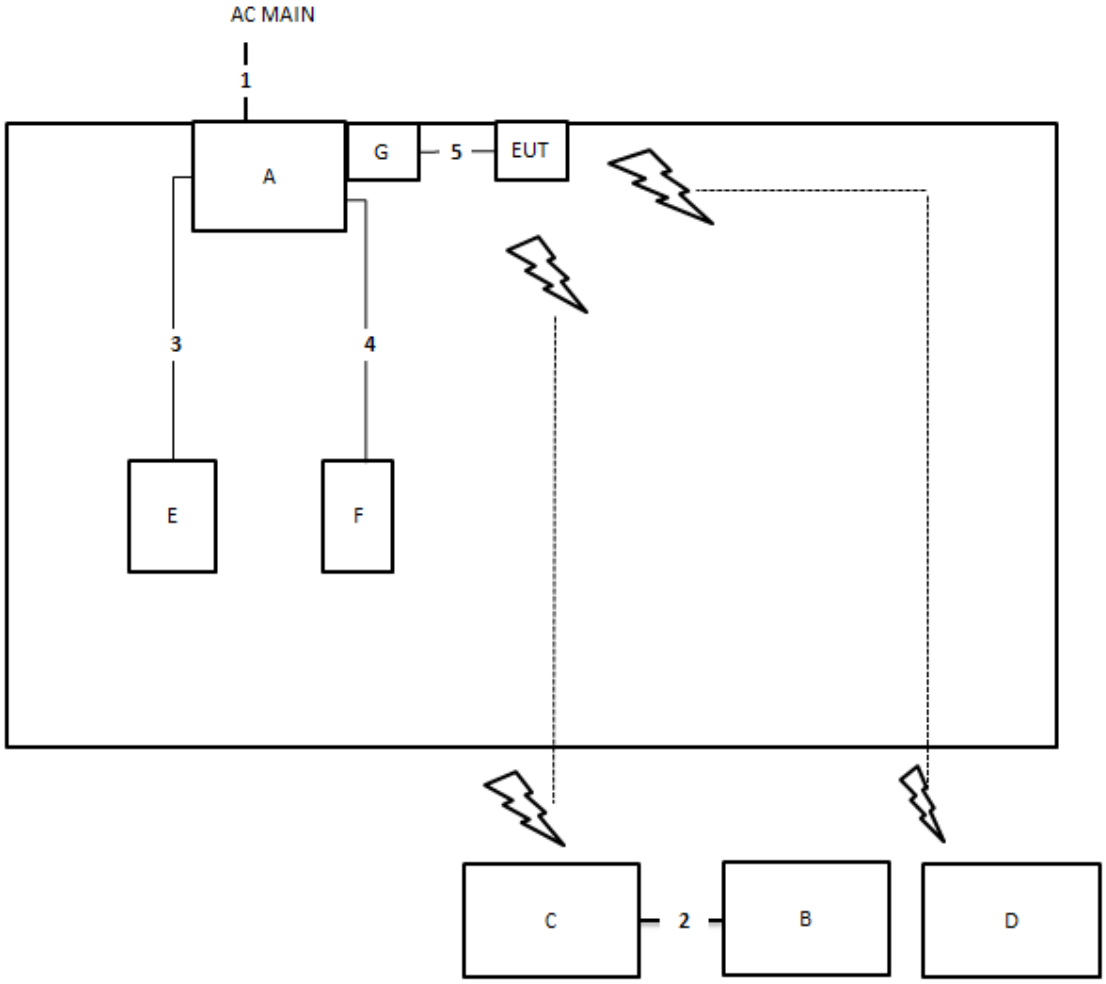
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



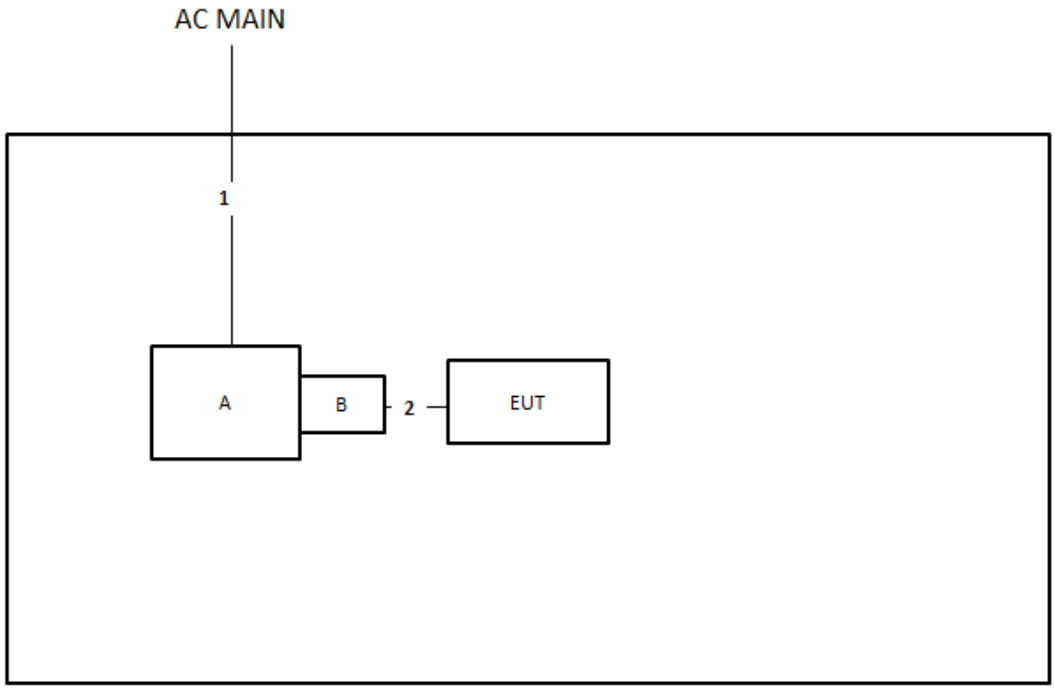
Item	Connection	Shielded	Length
1	Power cable	No	2.8m
2	USB cable	No	1m
3	Audio cable	No	1m
4	RJ45 cable	No	1.5m
5	Console cable	No	0.05m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ45 cable	No	1.5m
3	USB Cable	Yes	1m
4	Audio cable	No	1m
5	Console cable	No	0.05m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	Console cable	No	0.05m

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

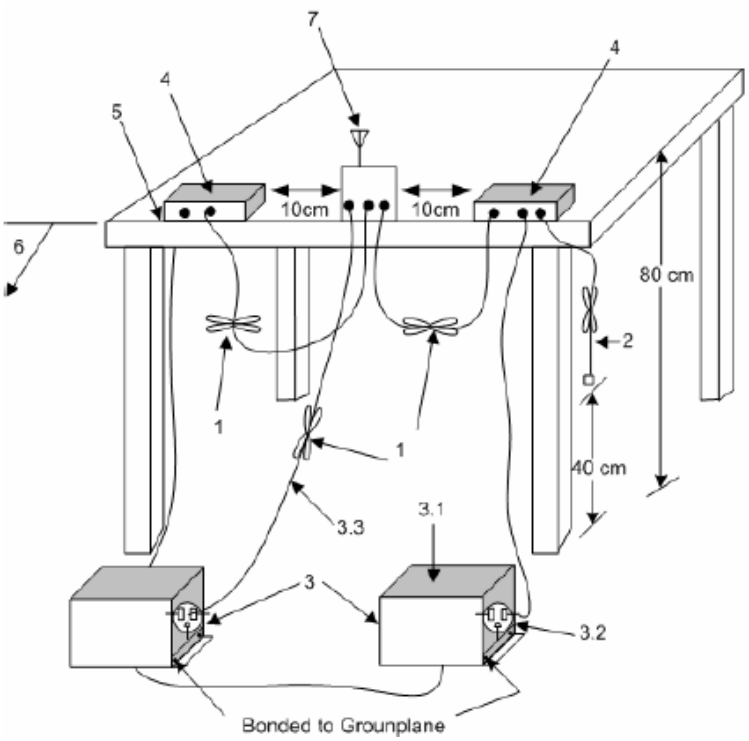
Refer a test equipment and calibration data table in this test report.

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.

1.1.1. Measurement Results Calculation

The measured Level is calculated using:

a. Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level

b. Margin = -Limit + Level

3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

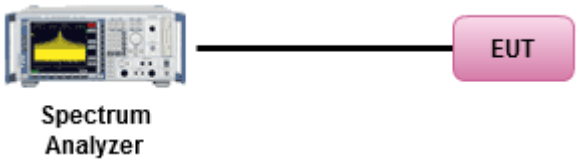
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as FCC KDB 558074, clause 8.2 & 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

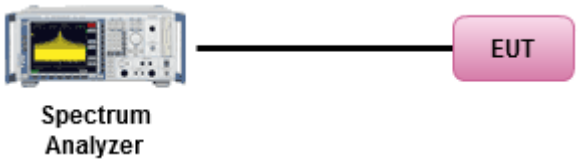
3.4.2 Measuring Instruments

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.	
	[duty cycle ≥ 98% or external video / power trigger]	
▪ 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.	

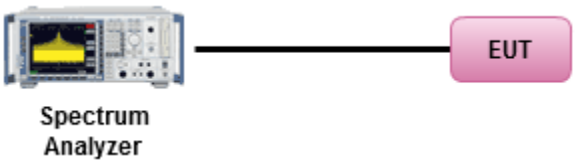
3.5.2 Measuring Instruments

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 below30 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.

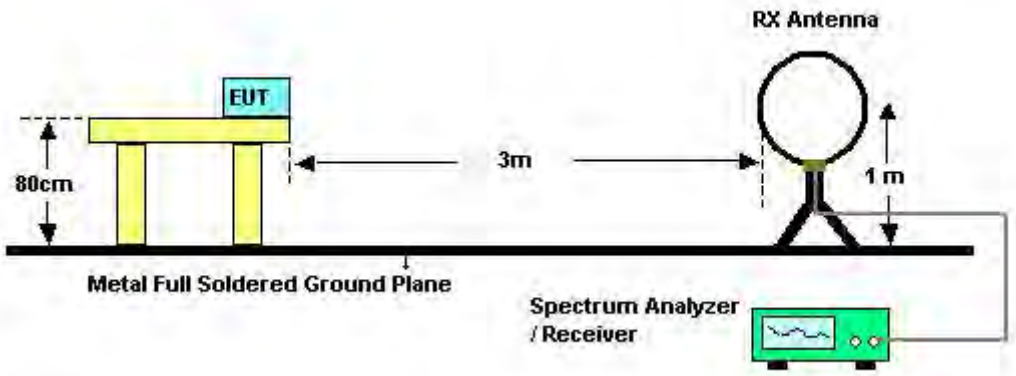
3.6.3 Test Procedures

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.

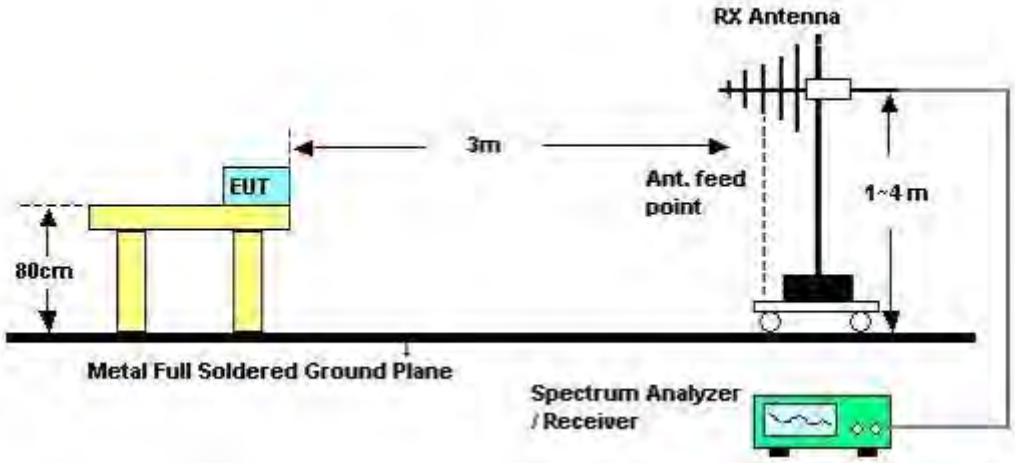
3.6.4 Test Setup

Emissions in Restricted Frequency Bands

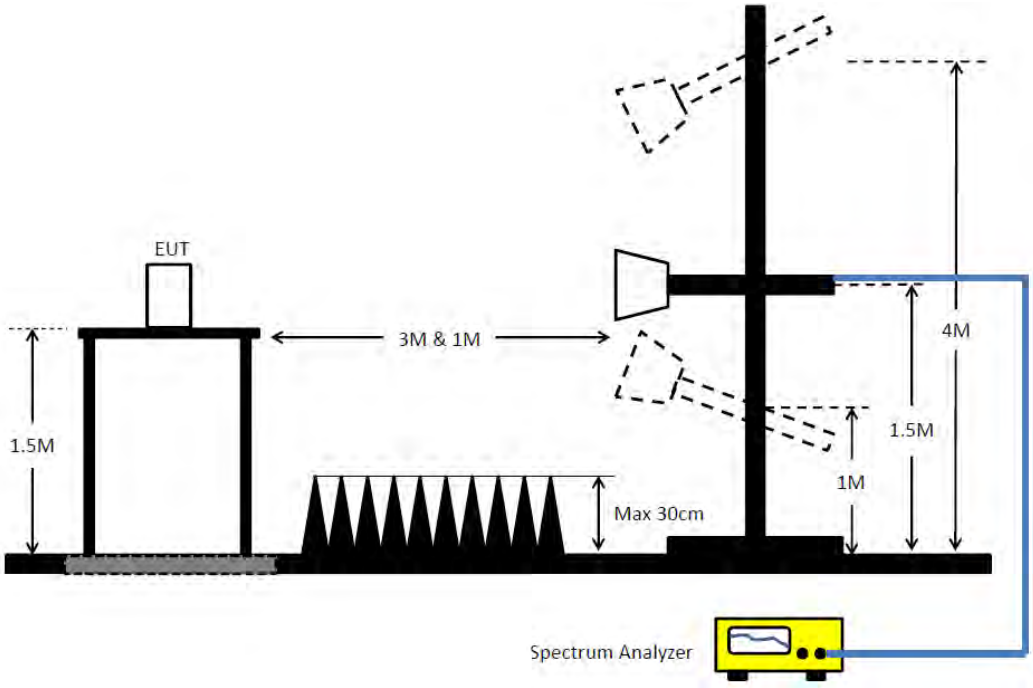
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.6.5 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(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 10th 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	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 08, 2020	Nov. 07, 2021	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 07, 2021	Nov. 06, 2022	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 26, 2021	Mar. 25, 2022	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Oct. 14, 2021	Oct. 13, 2022	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH05-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 02, 2021	Aug. 01, 2022	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 25, 2021	Oct. 24, 2022	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 25, 2021	Oct. 24, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

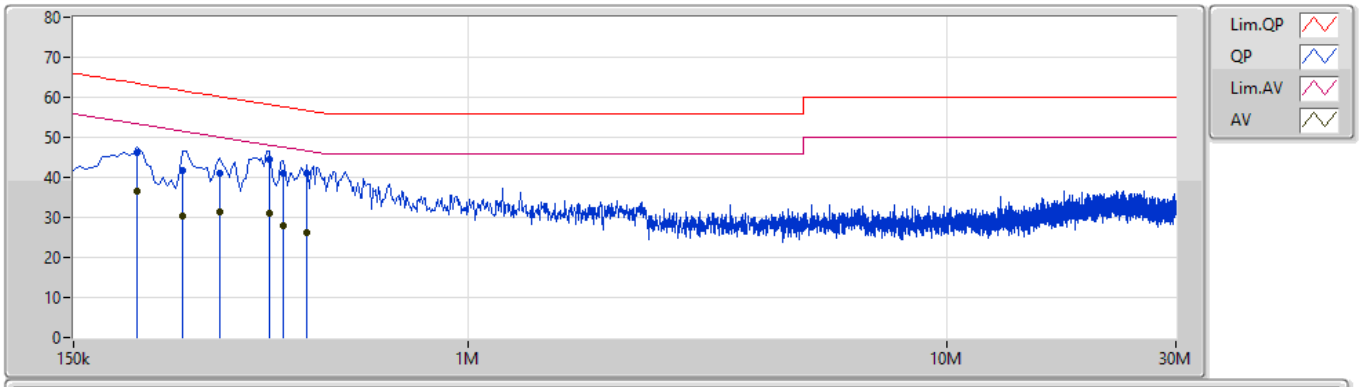
N.C.R. means Non-Calibration required.

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 3	Pass	QP	384k	44.45	58.20	-13.75	Neutral

Mode 3

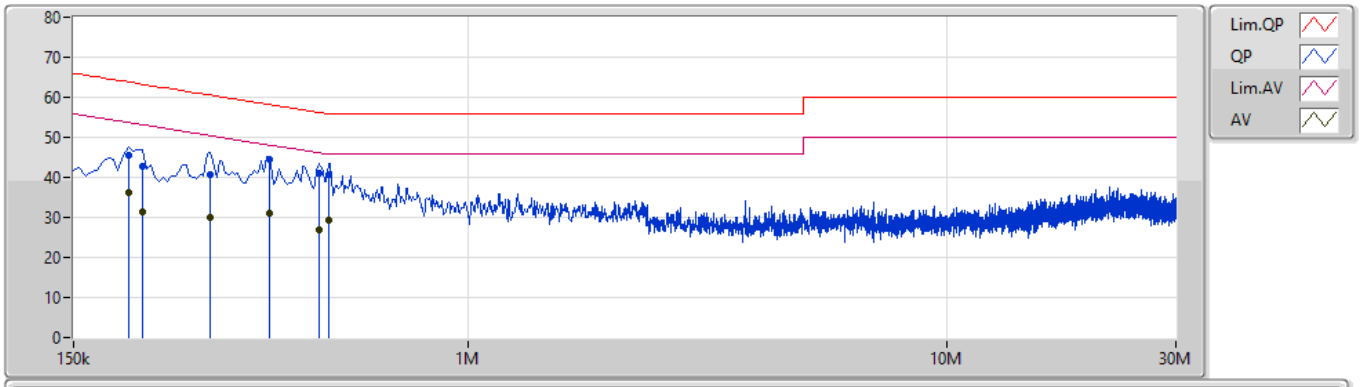
30/11/2021



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	204k	46.24	63.44	-17.20	9.89	Line	-	36.35	0.04	0.04	9.81
AV	204k	36.71	53.44	-16.73	9.89	Line	-	26.82	0.04	0.04	9.81
QP	253.5k	41.82	61.64	-19.82	9.89	Line	-	31.93	0.04	0.04	9.81
AV	253.5k	30.32	51.64	-21.32	9.89	Line	-	20.43	0.04	0.04	9.81
QP	303k	41.20	60.17	-18.97	9.90	Line	-	31.30	0.04	0.04	9.82
AV	303k	31.41	50.17	-18.76	9.90	Line	-	21.51	0.04	0.04	9.82
QP	384k	44.44	58.20	-13.76	9.90	Line	"Worst"	34.54	0.04	0.04	9.82
AV	384k	31.20	48.20	-17.00	9.90	Line	-	21.30	0.04	0.04	9.82
QP	411k	41.02	57.63	-16.61	9.90	Line	-	31.12	0.04	0.04	9.82
AV	411k	27.76	47.63	-19.87	9.90	Line	-	17.86	0.04	0.04	9.82
QP	460.5k	41.05	56.69	-15.64	9.90	Line	-	31.15	0.04	0.04	9.82
AV	460.5k	26.20	46.69	-20.49	9.90	Line	-	16.30	0.04	0.04	9.82

Mode 3

30/11/2021



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	195k	45.61	63.82	-18.21	9.88	Neutral	-	35.73	0.03	0.04	9.81
AV	195k	36.13	53.82	-17.69	9.88	Neutral	-	26.25	0.03	0.04	9.81
QP	208.5k	42.78	63.27	-20.49	9.88	Neutral	-	32.90	0.03	0.04	9.81
AV	208.5k	31.45	53.27	-21.82	9.88	Neutral	-	21.57	0.03	0.04	9.81
QP	289.5k	40.61	60.53	-19.92	9.89	Neutral	-	30.72	0.03	0.04	9.82
AV	289.5k	30.12	50.53	-20.41	9.89	Neutral	-	20.23	0.03	0.04	9.82
QP	384k	44.45	58.20	-13.75	9.89	Neutral	"Worst"	34.56	0.03	0.04	9.82
AV	384k	31.19	48.20	-17.01	9.89	Neutral	-	21.30	0.03	0.04	9.82
QP	487.5k	40.92	56.21	-15.29	9.89	Neutral	-	31.03	0.03	0.04	9.82
AV	487.5k	26.84	46.21	-19.37	9.89	Neutral	-	16.95	0.03	0.04	9.82
QP	510k	40.55	56.00	-15.45	9.90	Neutral	-	30.65	0.04	0.04	9.82
AV	510k	29.26	46.00	-16.74	9.90	Neutral	-	19.36	0.04	0.04	9.82

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(1Mbps)	695k	1.039M	1M04F1D	681.25k	1.034M
BT-LE(2Mbps)	1.165M	2.086M	2M09F1D	1.148M	2.079M

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

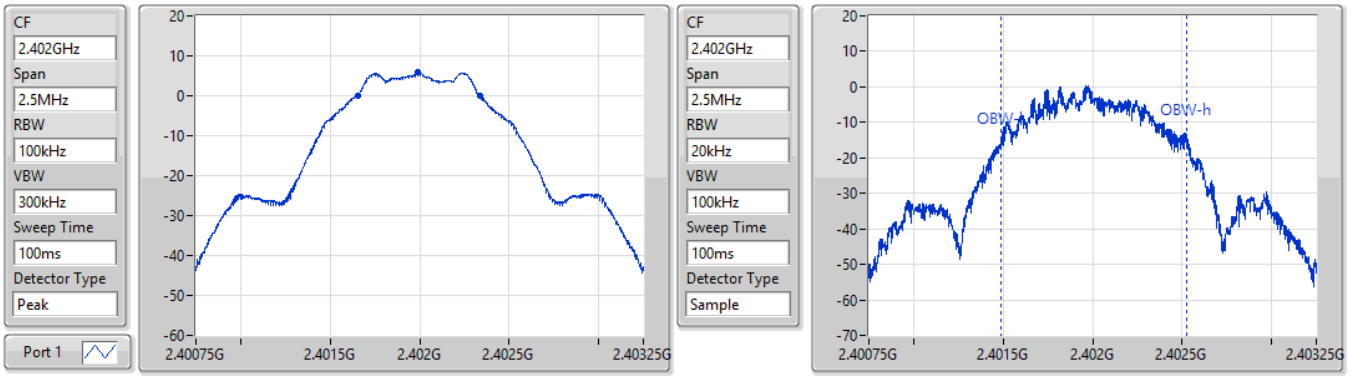
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	681.25k	1.037M
2440MHz	Pass	500k	695k	1.039M
2480MHz	Pass	500k	695k	1.034M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.148M	2.079M
2440MHz	Pass	500k	1.165M	2.079M
2480MHz	Pass	500k	1.155M	2.086M

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

BT-LE(1Mbps) **EBW-DTS**

2402MHz

15/11/2021

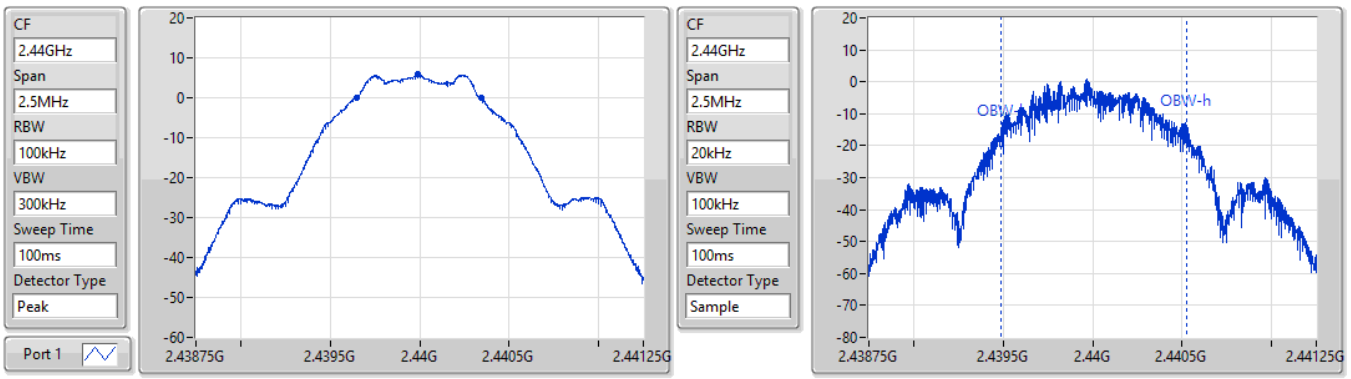


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
681.25k	2.401655G	2.402336G	1.037M	2.401487G	2.402523G	500k	1

BT-LE(1Mbps) **EBW-DTS**

2440MHz

15/11/2021



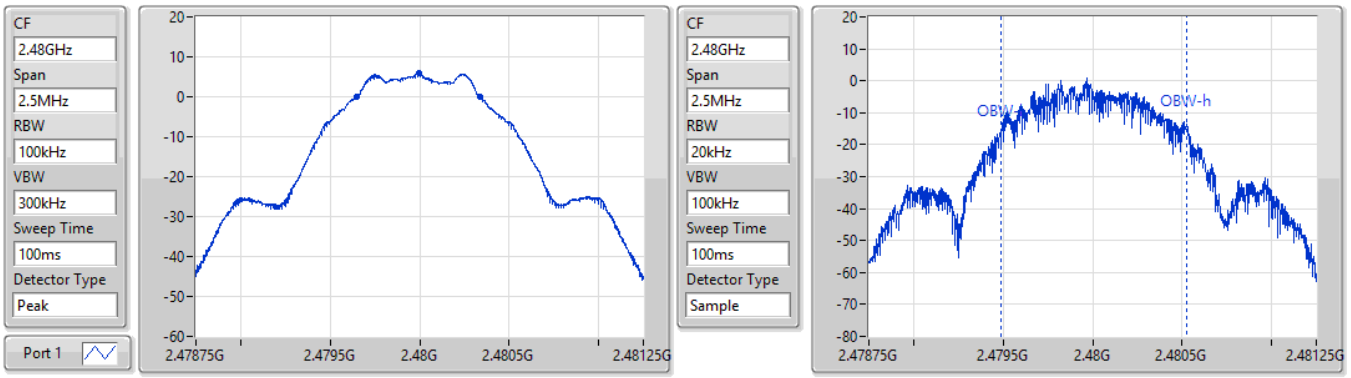
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
695k	2.439646G	2.440341G	1.039M	2.439485G	2.440525G	500k	1

BT-LE(1Mbps)

EBW-DTS

2480MHz

15/11/2021



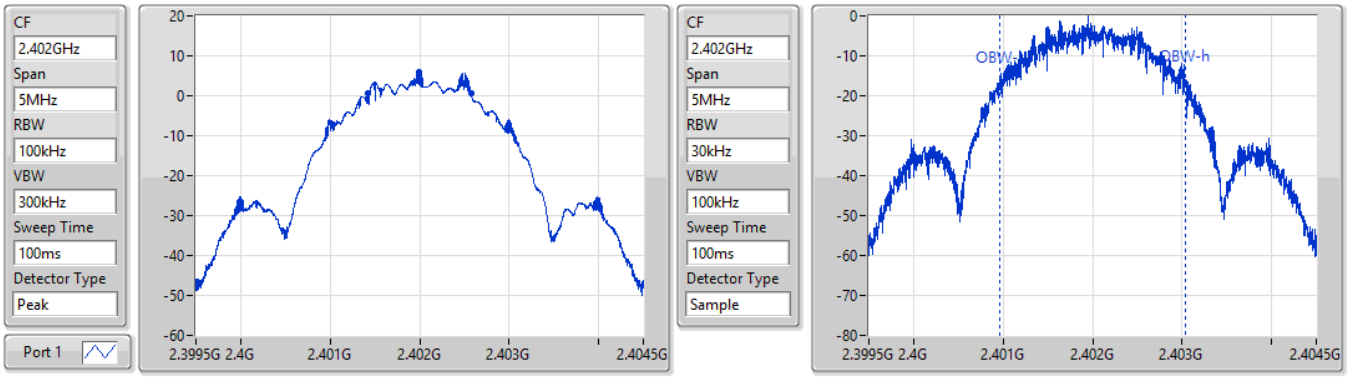
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
695k	2.479645G	2.48034G	1.034M	2.479492G	2.480526G	500k	1

BT-LE(2Mbps)

EBW-DTS

2402MHz

15/11/2021

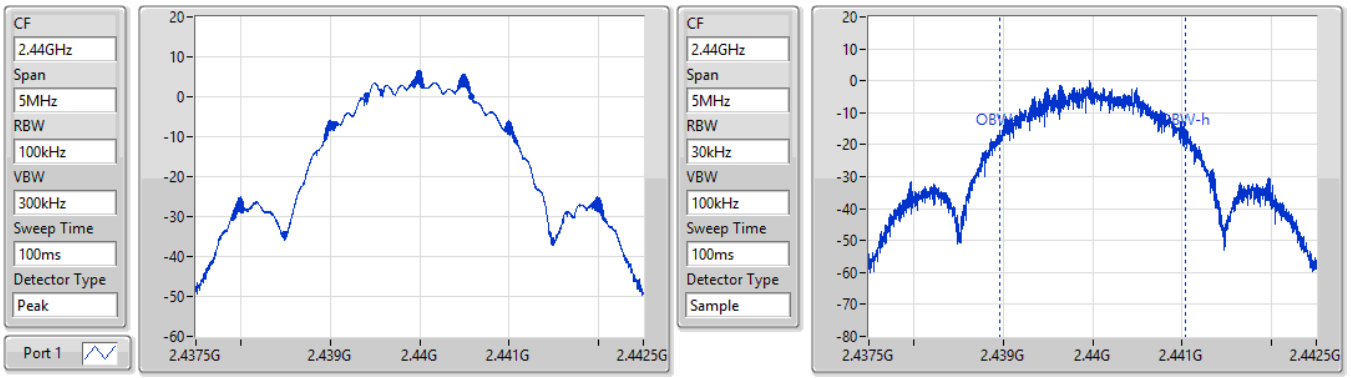


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.148M	2.401428G	2.402575G	2.079M	2.400958G	2.403037G	500k	1

BT-LE(2Mbps) EBW-DTS

2440MHz

15/11/2021

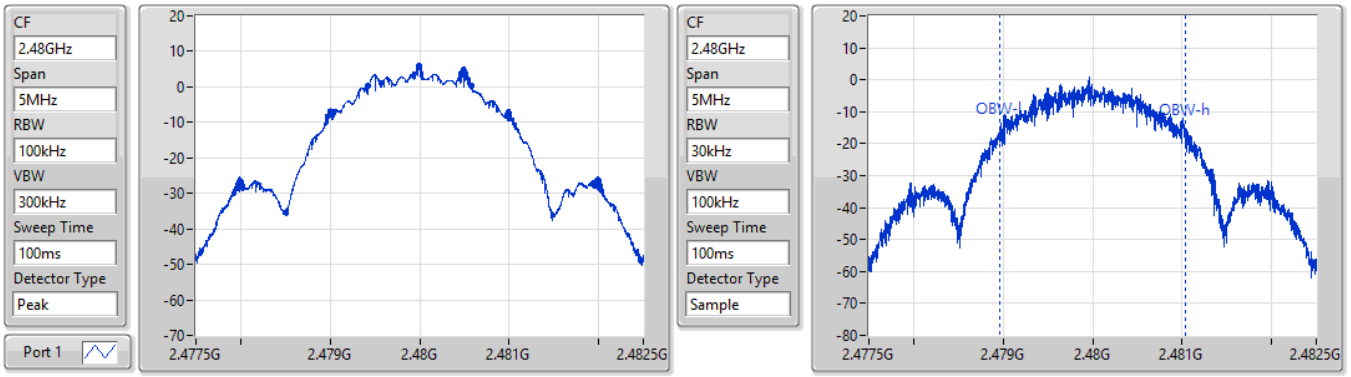


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.165M	2.439415G	2.44058G	2.079M	2.438961G	2.441039G	500k	1

BT-LE(2Mbps) EBW-DTS

2480MHz

15/11/2021



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.155M	2.479423G	2.480578G	2.086M	2.478956G	2.481042G	500k	1

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	6.00	0.00398
BT-LE(2Mbps)	6.29	0.00426

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	4.87	6.00	30.00
2440MHz	Pass	4.87	5.85	30.00
2480MHz	Pass	4.87	5.82	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	4.87	6.29	30.00
2440MHz	Pass	4.87	6.13	30.00
2480MHz	Pass	4.87	5.88	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-8.86
BT-LE(2Mbps)	-12.28

RBW = 3kHz;

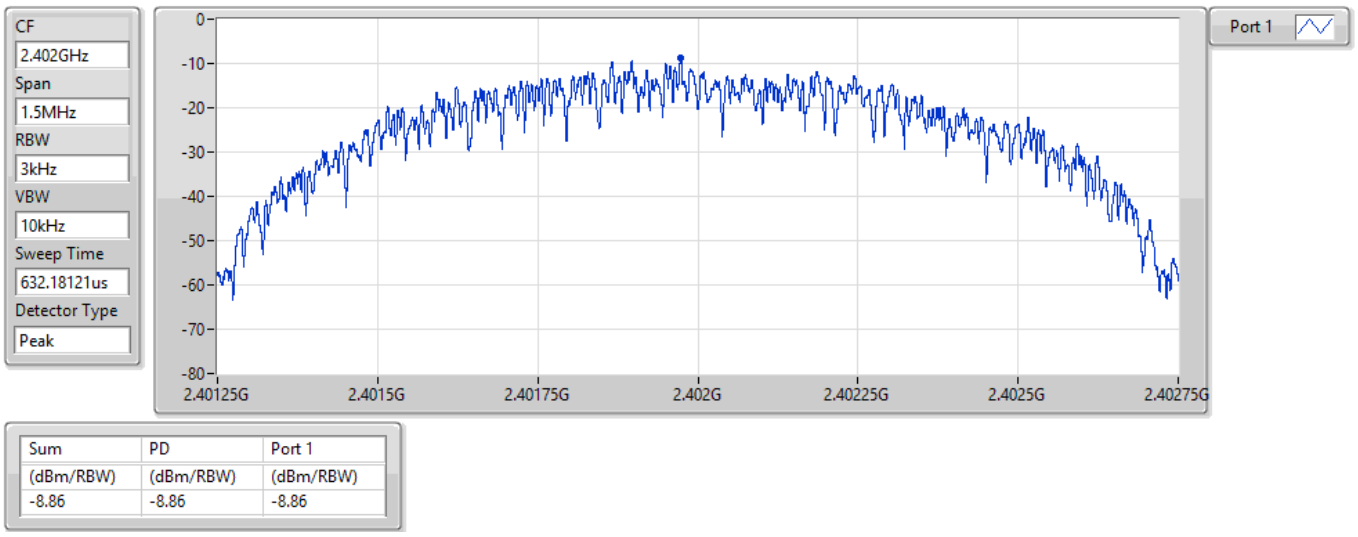
Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	4.87	-8.86	8.00
2440MHz	Pass	4.87	-8.96	8.00
2480MHz	Pass	4.87	-9.21	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	4.87	-14.90	8.00
2440MHz	Pass	4.87	-12.31	8.00
2480MHz	Pass	4.87	-12.28	8.00

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

BT-LE(1Mbps) PSD

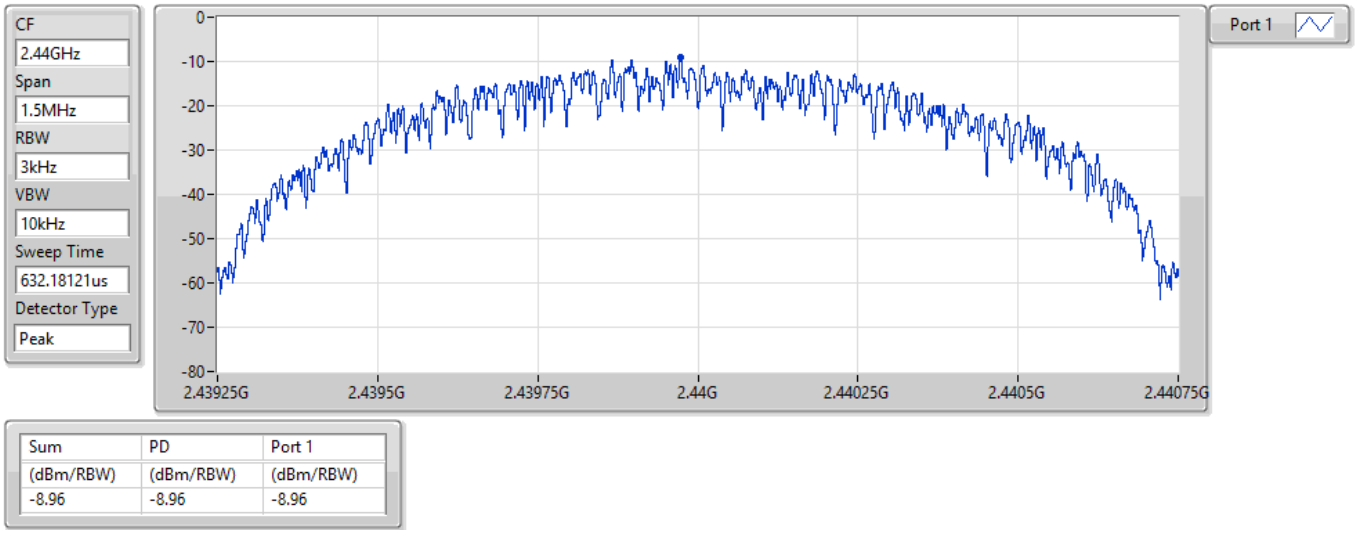
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.86	-8.86	-8.86

BT-LE(1Mbps) PSD

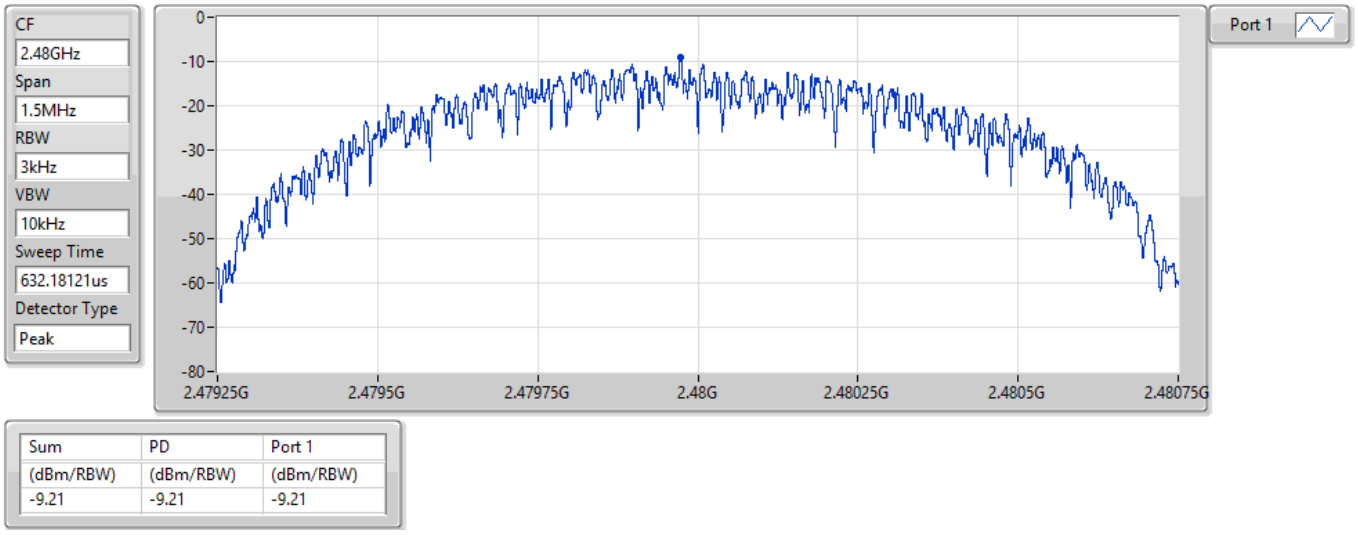
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.96	-8.96	-8.96

BT-LE(1Mbps) PSD

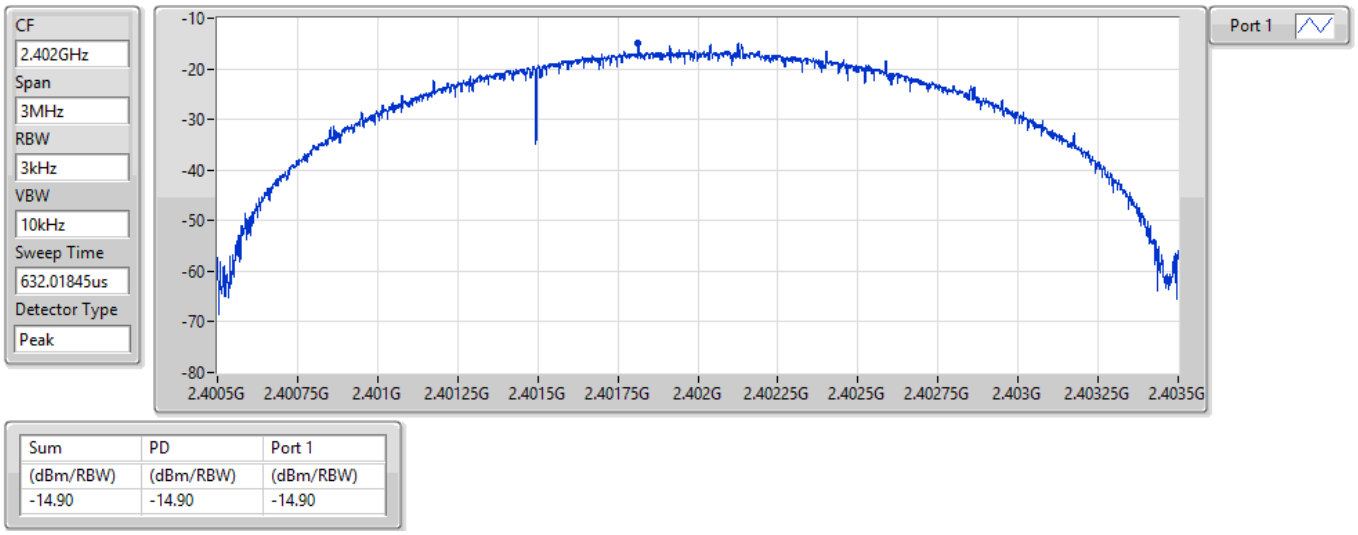
2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.21	-9.21	-9.21

BT-LE(2Mbps) PSD

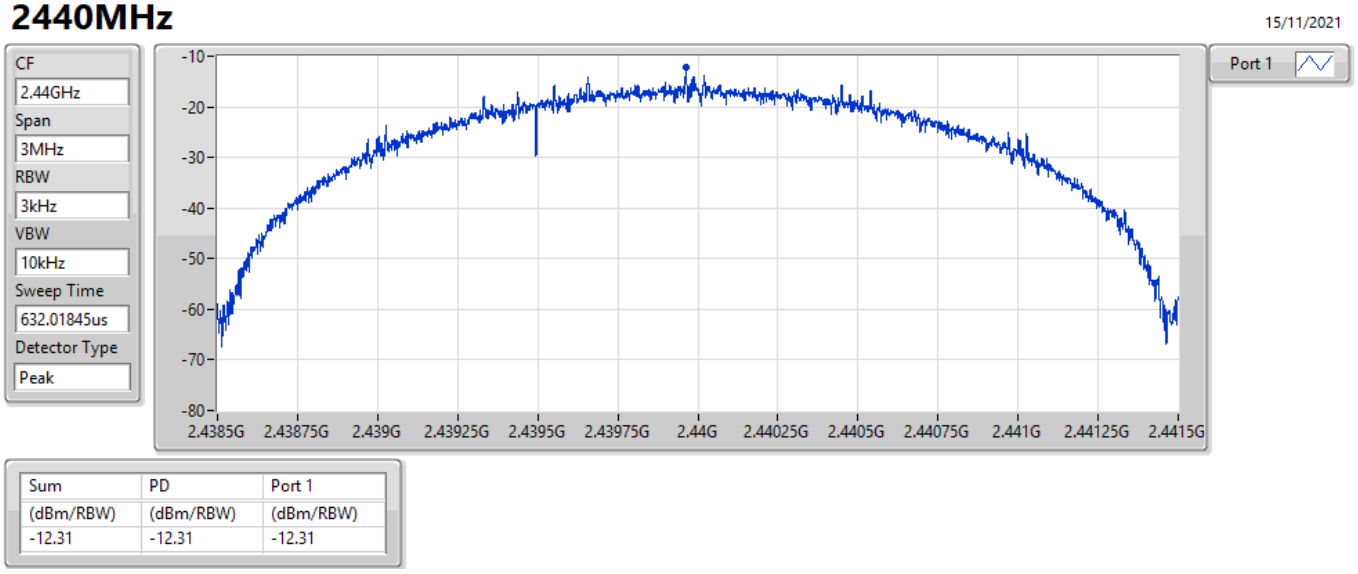
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.90	-14.90	-14.90

BT-LE(2Mbps) PSD

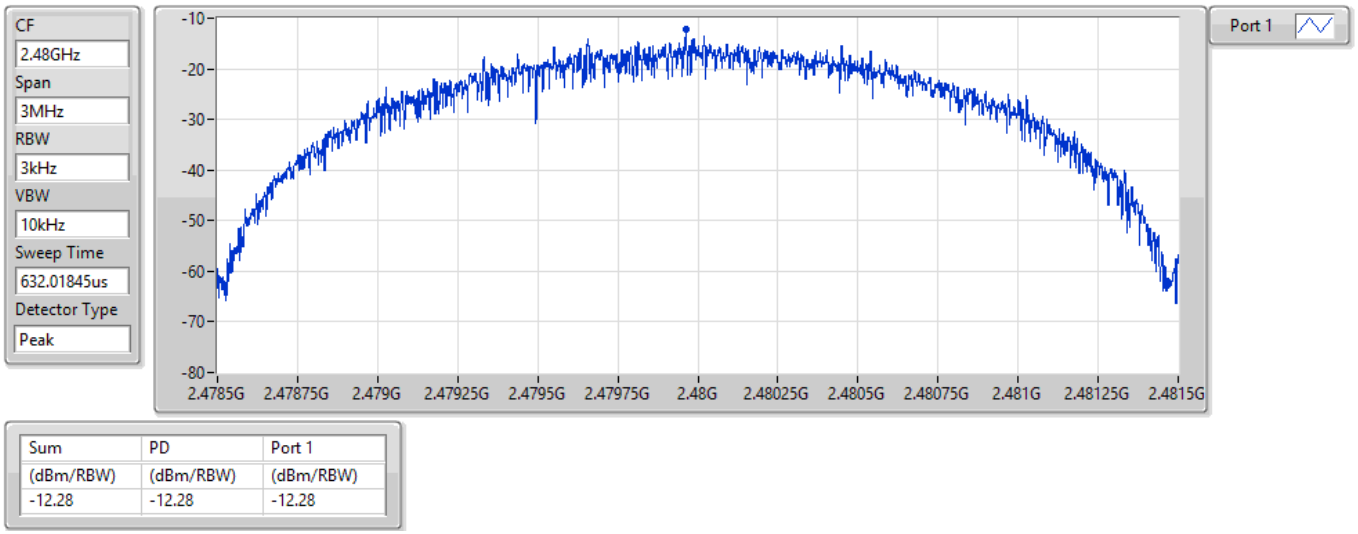
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.31	-12.31	-12.31

BT-LE(2Mbps) PSD

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.28	-12.28	-12.28

Summary

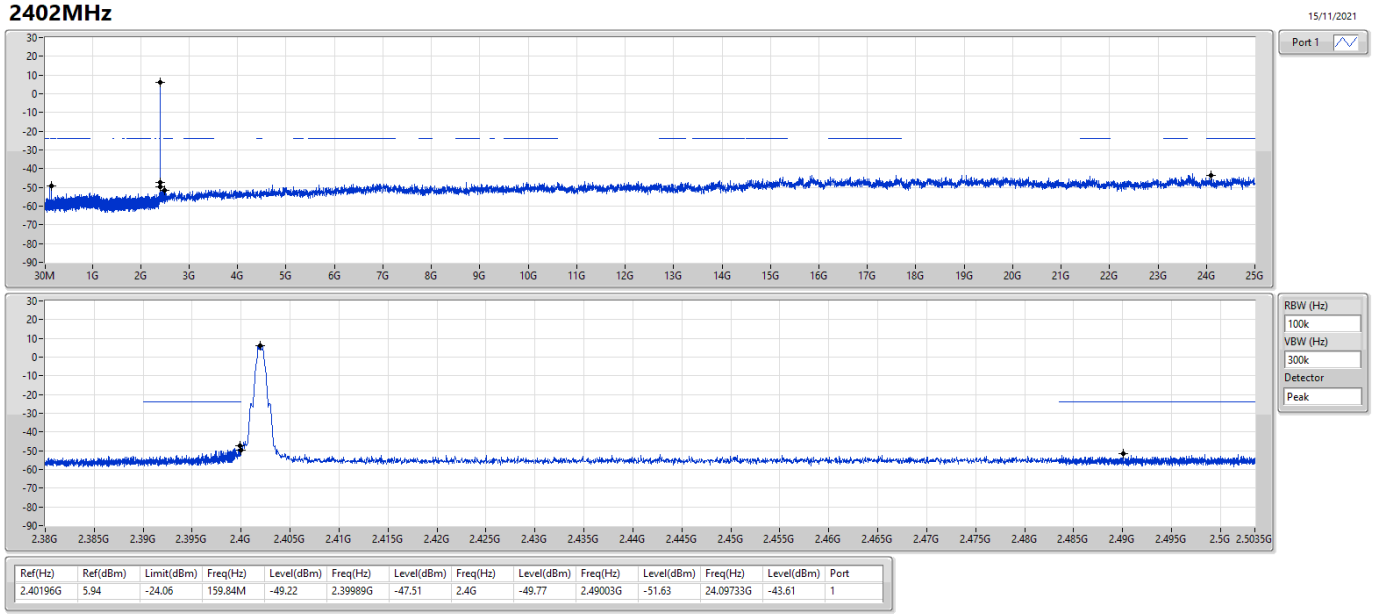
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.40196G	5.94	-24.06	159.84M	-46.85	2.39889G	-51.69	2.4835G	-54.32	2.4888G	-51.21	24.96907G	-43.44	1
BT-LE(2Mbps)	Pass	2.40196G	6.08	-23.92	159.84M	-49.35	2.4G	-25.38	2.4G	-28.60	2.49592G	-51.92	24.68505G	-43.37	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
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40196G	5.94	-24.06	159.84M	-49.22	2.39989G	-47.51	2.4G	-49.77	2.49003G	-51.63	24.09733G	-43.61	1
2440MHz	Pass	2.40196G	5.94	-24.06	159.84M	-48.56	2.39802G	-52.57	2.4835G	-55.89	2.49278G	-51.56	16.91532G	-43.09	1
2480MHz	Pass	2.40196G	5.94	-24.06	159.84M	-46.85	2.39889G	-51.69	2.4835G	-54.32	2.4888G	-51.21	24.96907G	-43.44	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40196G	6.08	-23.92	159.84M	-49.35	2.4G	-25.38	2.4G	-28.60	2.49592G	-51.92	24.68505G	-43.37	1
2440MHz	Pass	2.40196G	6.08	-23.92	159.84M	-50.74	2.39499G	-52.47	2.4G	-55.39	2.50086G	-52.10	23.25933G	-43.37	1
2480MHz	Pass	2.40196G	6.08	-23.92	159.84M	-47.77	2.39888G	-52.79	2.4835G	-50.71	2.48354G	-49.53	16.21512G	-43.57	1

BT-LE(1Mbps) **CSENdB-DTS**

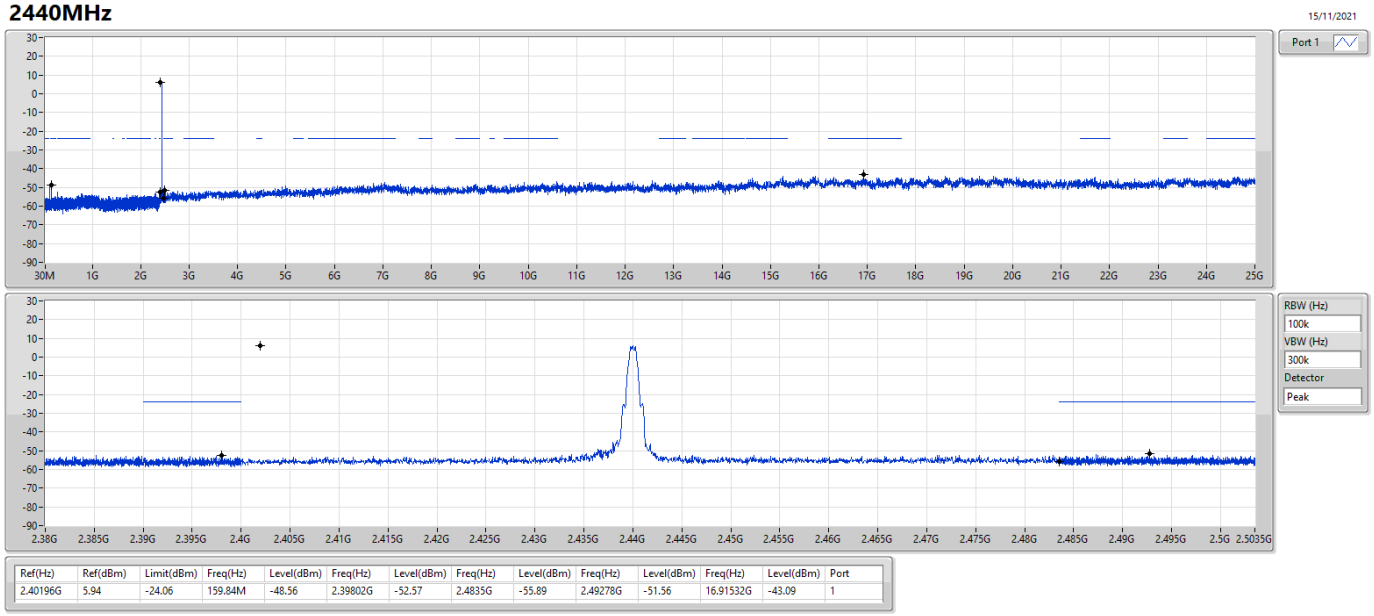
2402MHz



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
2.40196G	5.94	-24.06	159.84M	-49.22	2.39989G	-47.51	2.4G	-49.77	2.49003G	-51.63	24.09733G	-43.61	1

BT-LE(1Mbps) **CSENdB-DTS**

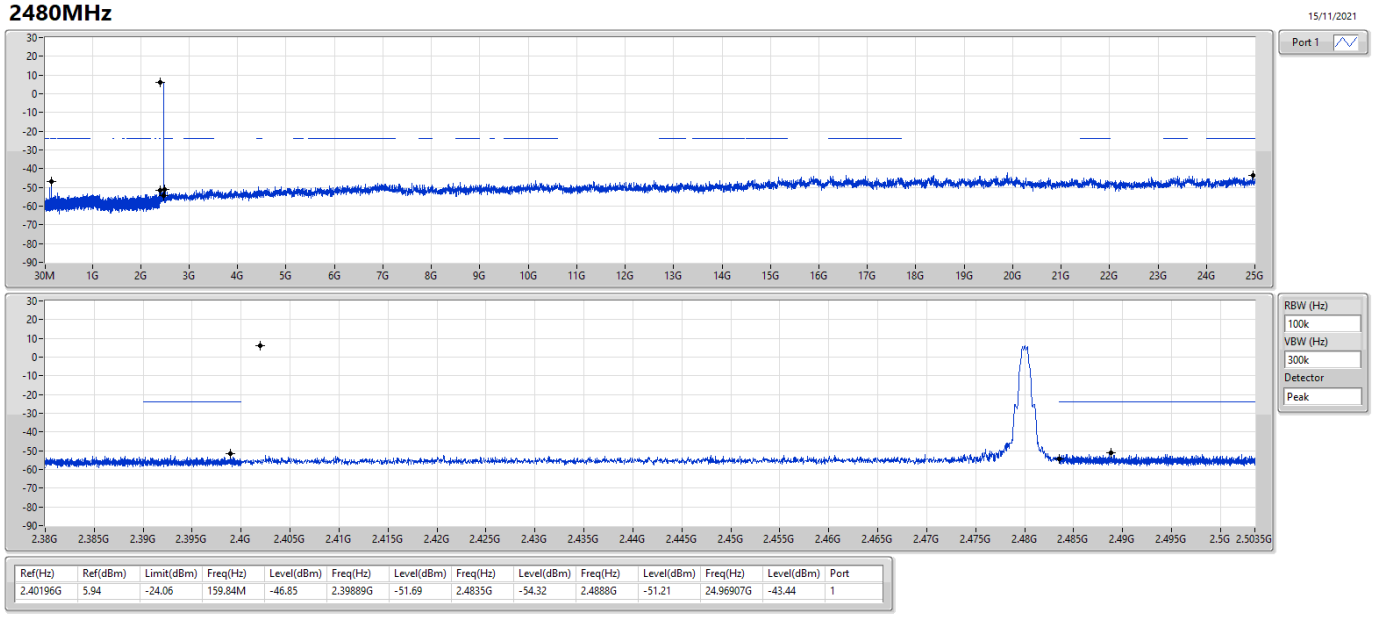
2440MHz



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
2.40196G	5.94	-24.06	159.84M	-48.56	2.39802G	-52.57	2.4835G	-55.89	2.49278G	-51.56	16.91532G	-43.09	1

BT-LE(1Mbps) **CSENdB-DTS**

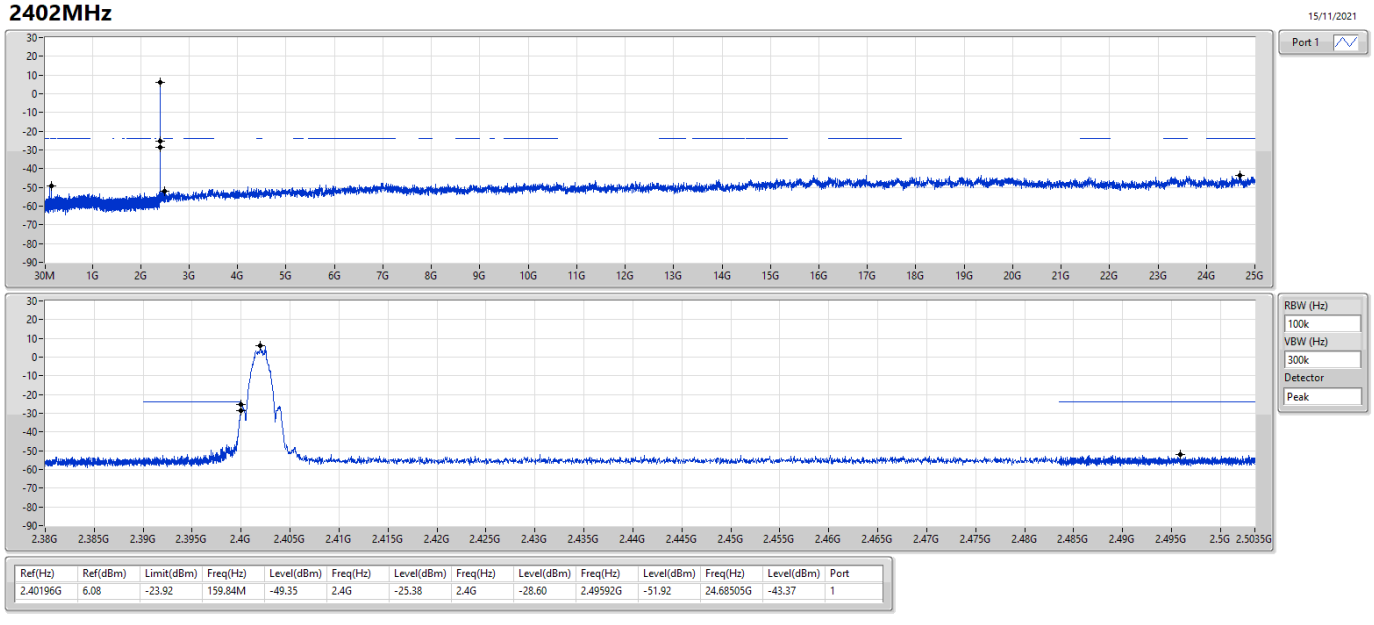
2480MHz



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
2.40196G	5.94	-24.06	159.84M	-46.85	2.39889G	-51.69	2.4835G	-54.32	2.4888G	-51.21	24.96907G	-43.44	1

BT-LE(2Mbps) **CSENdB-DTS**

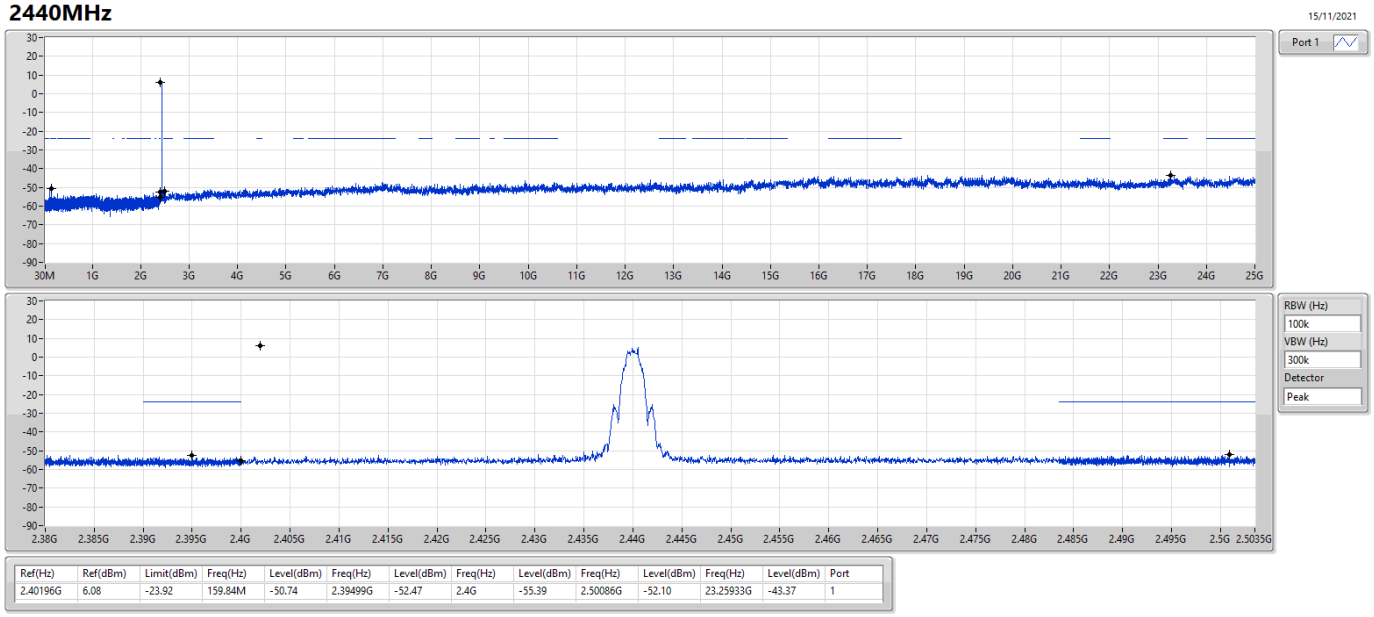
2402MHz



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
2.40196G	6.08	-23.92	159.84M	-49.35	2.4G	-25.38	2.4G	-28.60	2.49592G	-51.92	24.68505G	-43.37	1

BT-LE(2Mbps) **CSENdB-DTS**

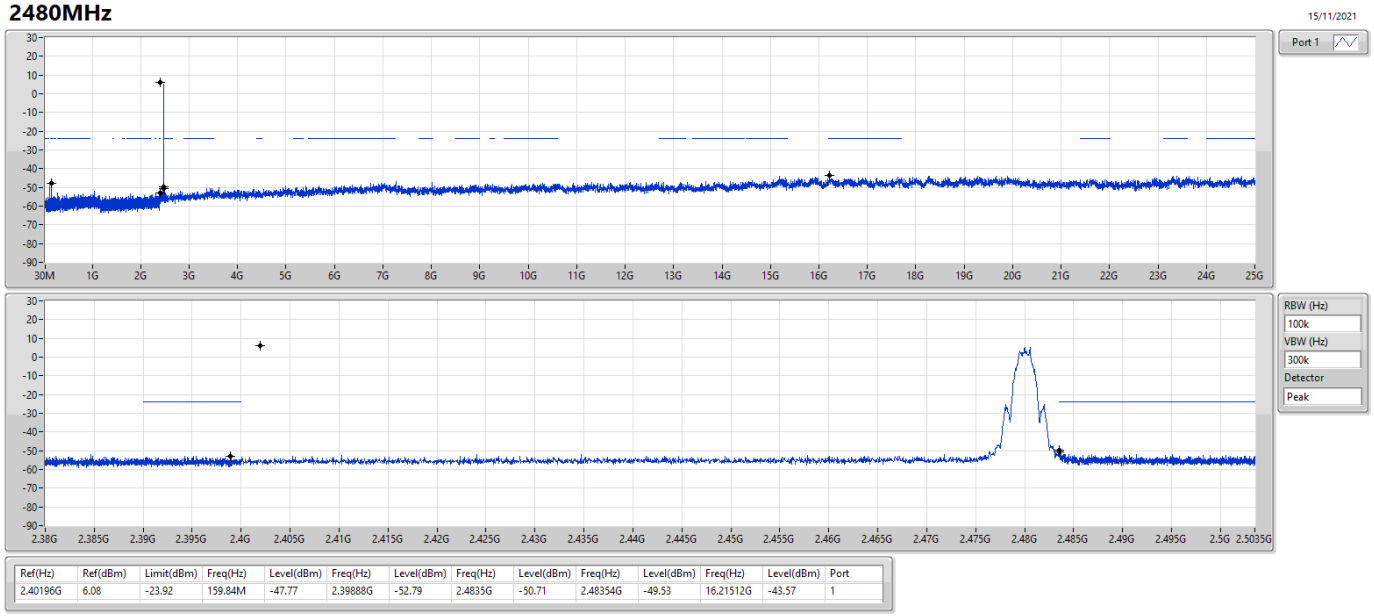
2440MHz



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
2.40196G	6.08	-23.92	159.84M	-50.74	2.39499G	-52.47	2.4G	-55.39	2.50086G	-52.10	23.25933G	-43.37	1

BT-LE(2Mbps) **CSENdB-DTS**

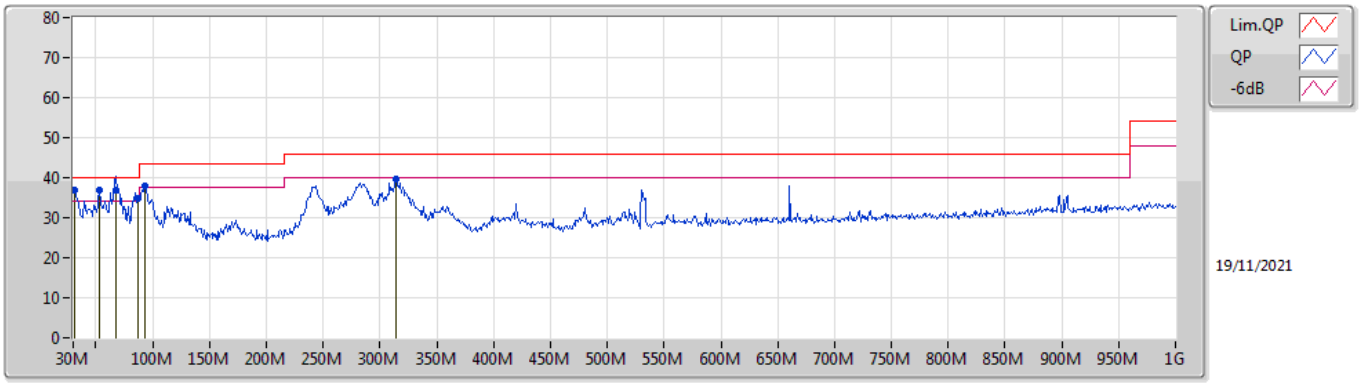
2480MHz



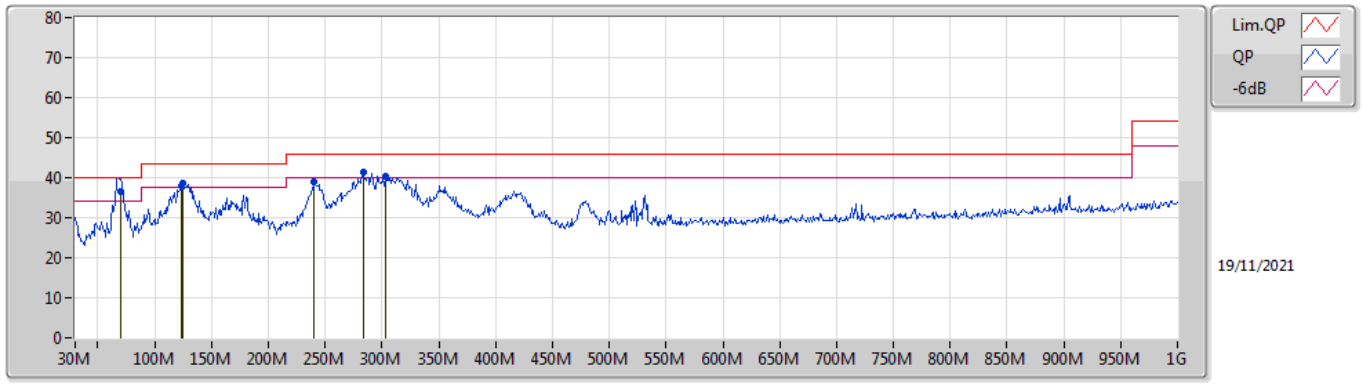
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40196G	6.08	-23.92	159.84M	-47.77	2.39888G	-52.79	2.4835G	-50.71	2.48354G	-49.53	16.21512G	-43.57	1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 5	Pass	QP	67.83M	36.93	40.00	-3.07	Vertical



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	30.97M	36.82	40.00	-3.18	-7.01	3	Vertical	351	1.00	-	43.83	23.68	0.82	31.51
PK	53.28M	36.80	40.00	-3.20	-17.85	3	Vertical	142	1.00	-	54.65	12.87	1.07	31.79
QP	67.83M	36.93	40.00	-3.07	-18.57	3	Vertical	49	1.25	"Worst"	55.50	12.05	1.26	31.88
PK	87.23M	34.88	40.00	-5.12	-16.46	3	Vertical	54	1.25	-	51.34	14.05	1.40	31.91
PK	93.05M	37.84	43.50	-5.66	-15.21	3	Vertical	5	1.25	-	53.05	15.22	1.46	31.89
PK	314.21M	39.54	46.00	-6.46	-9.93	3	Vertical	265	1.00	-	49.47	19.40	2.76	32.09



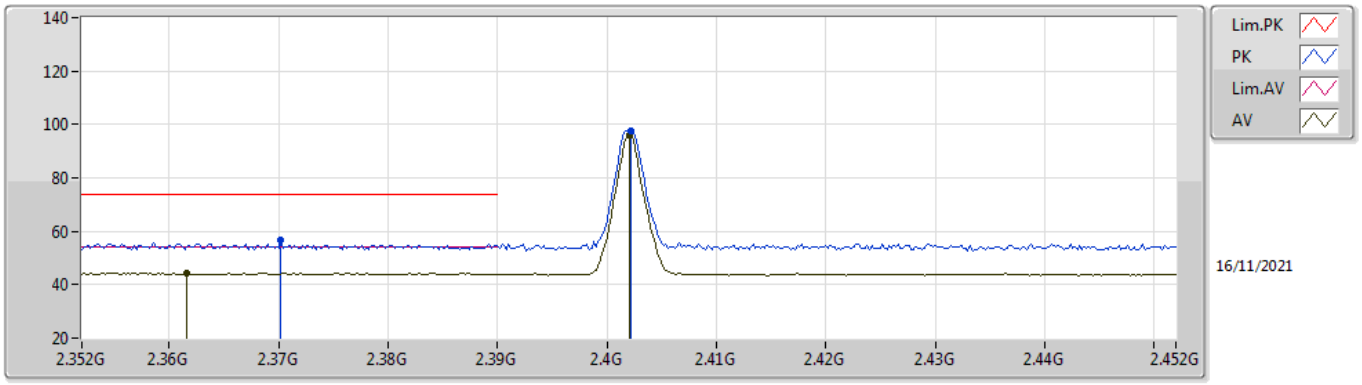
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
QP	69.77M	36.60	40.00	-3.40	-18.32	3	Horizontal	262	3.00	"Worst"	54.92	12.27	1.30	31.89
PK	123.12M	38.07	43.50	-5.43	-12.35	3	Horizontal	217	3.00	-	50.42	17.96	1.63	31.94
PK	124.09M	38.50	43.50	-5.00	-12.38	3	Horizontal	217	3.00	-	50.88	17.92	1.64	31.94
PK	240.49M	38.97	46.00	-7.03	-12.59	3	Horizontal	245	1.25	-	51.56	17.08	2.34	32.01
PK	283.17M	41.52	46.00	-4.48	-10.74	3	Horizontal	127	1.25	-	52.26	18.72	2.60	32.06
PK	302.57M	40.47	46.00	-5.53	-10.30	3	Horizontal	277	1.25	-	50.77	19.07	2.71	32.08

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	-	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	AV	2.4835G	45.56	54.00	-8.44	3	Horizontal	43	1.09	-

BT-LE(1Mbps)

2402MHz_TX

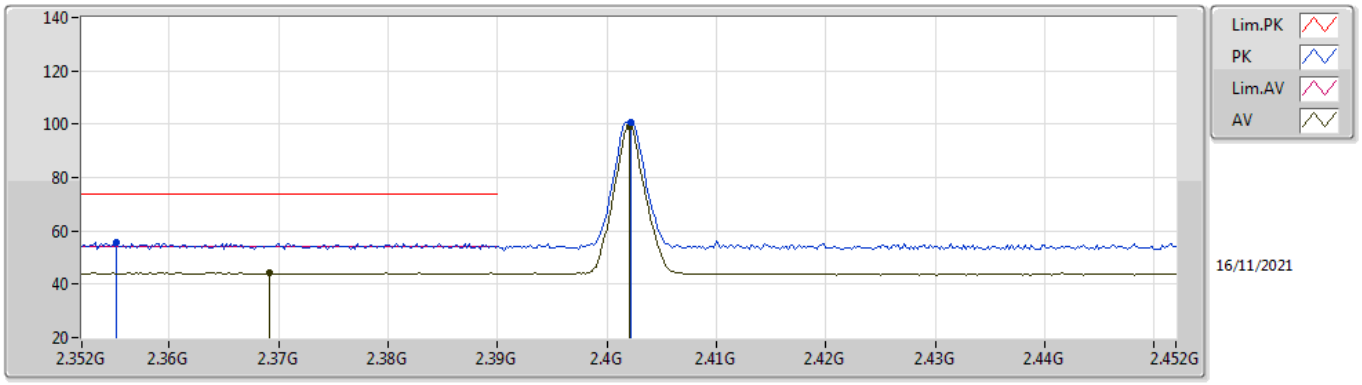


EUT X_1TX
Setting Default
01-C-K-4

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	56.48	74.00	-17.52	25.02	3	Vertical	308	2.43	-	27.66	3.80	-
AV	2.3616G	44.47	54.00	-9.53	12.99	3	Vertical	308	2.43	-	27.68	3.80	-
PK	2.4022G	97.46	Inf	-Inf	66.06	3	Vertical	308	2.43	-	27.60	3.80	-
AV	2.402G	96.01	Inf	-Inf	64.61	3	Vertical	308	2.43	-	27.60	3.80	-

BT-LE(1Mbps)

2402MHz_TX

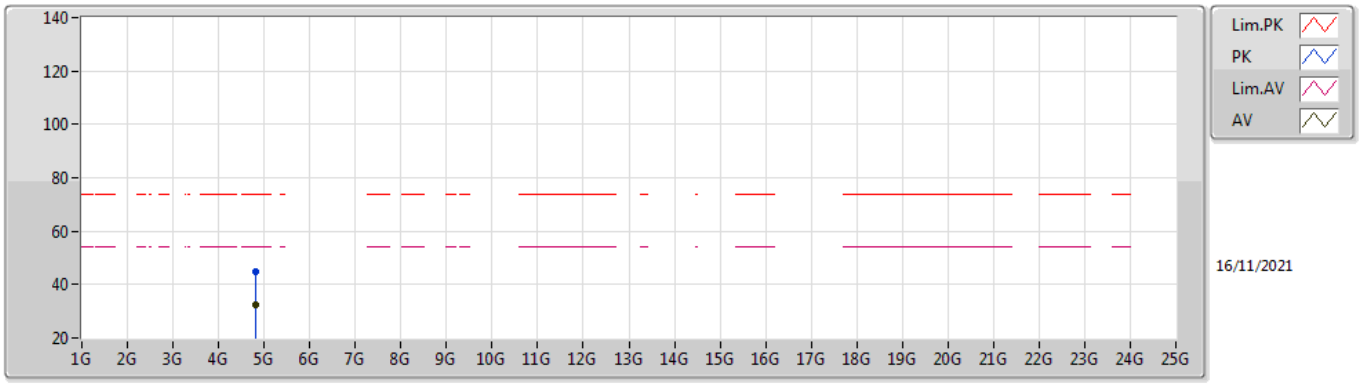


EUT X_1TX
Setting Default
01-C-K-4

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	2.3552G	55.86	74.00	-18.14	24.37	3	Horizontal	43	2.43	-	27.69	3.80	-
AV	2.3692G	44.46	54.00	-9.54	13.00	3	Horizontal	43	2.43	-	27.66	3.80	-
PK	2.4022G	100.59	Inf	-Inf	69.19	3	Horizontal	43	2.43	-	27.60	3.80	-
AV	2.402G	99.12	Inf	-Inf	67.72	3	Horizontal	43	2.43	-	27.60	3.80	-

BT-LE(1Mbps)

2402MHz_TX

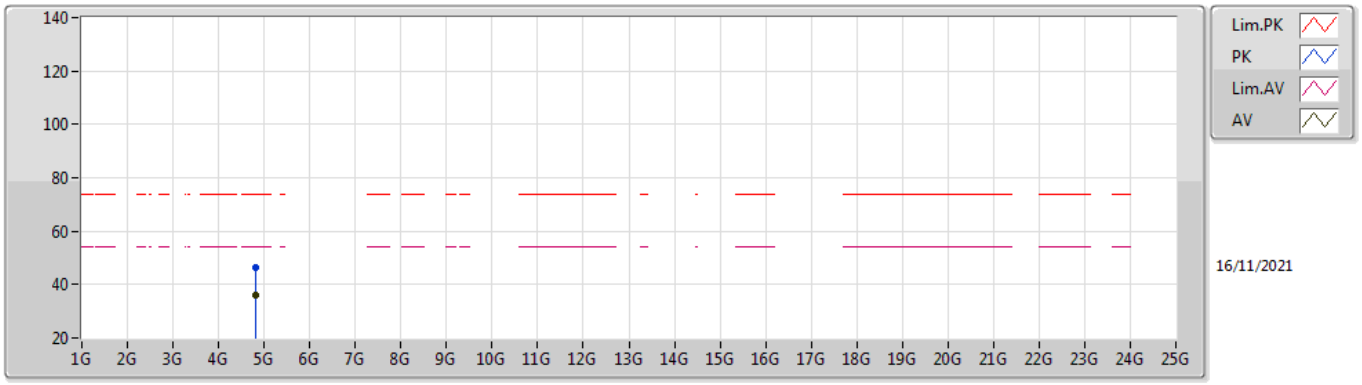


EUT X_1TX
Setting Default
01-C-K-4

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	4.80583G	44.82	74.00	-29.18	40.12	3	Vertical	348	2.45	-	31.39	6.30	32.99
AV	4.80369G	32.46	54.00	-21.54	27.76	3	Vertical	348	2.45	-	31.39	6.30	32.99

BT-LE(1Mbps)

2402MHz_TX

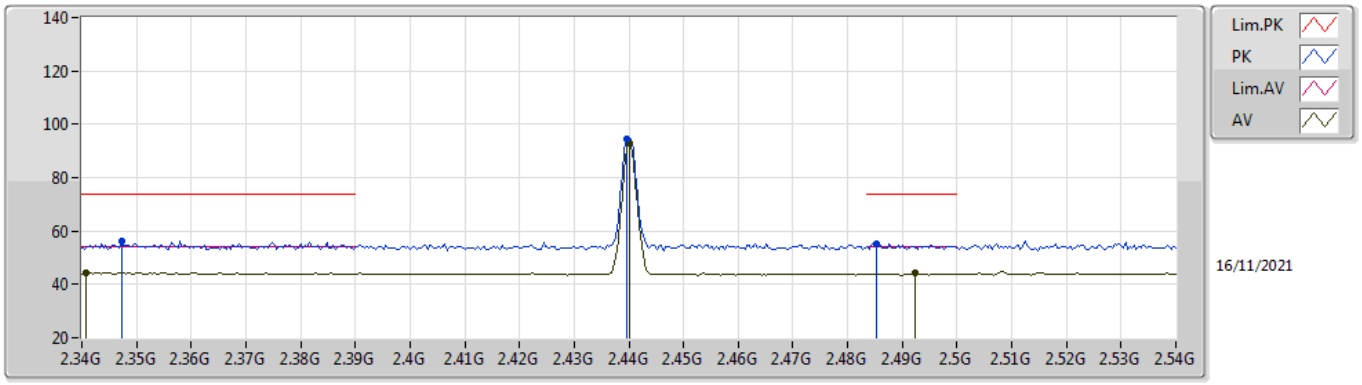


EUT X_1TX
Setting Default
01-C-K-4

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	4.80386G	46.30	74.00	-27.70	41.60	3	Horizontal	4	2.08	-	31.39	6.30	32.99
AV	4.80418G	36.02	54.00	-17.98	31.32	3	Horizontal	4	2.08	-	31.39	6.30	32.99

BT-LE(1Mbps)

2440MHz_TX

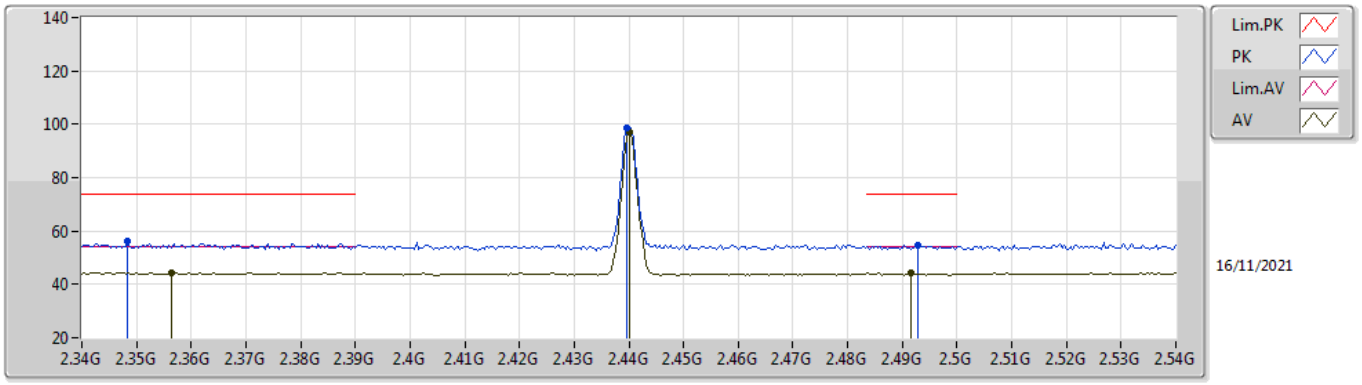


EUT X_1TX
Setting Default
01-C-K-4

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	2.3472G	56.33	74.00	-17.67	24.82	3	Vertical	307	2.29	-	27.71	3.80	-
AV	2.3408G	44.51	54.00	-9.49	12.99	3	Vertical	307	2.29	-	27.72	3.80	-
PK	2.4396G	94.55	Inf	-Inf	63.21	3	Vertical	307	2.29	-	27.52	3.82	-
AV	2.44G	93.11	Inf	-Inf	61.77	3	Vertical	307	2.29	-	27.52	3.82	-
PK	2.4852G	55.25	74.00	-18.75	23.91	3	Vertical	307	2.29	-	27.50	3.84	-
AV	2.4924G	44.14	54.00	-9.86	12.79	3	Vertical	307	2.29	-	27.50	3.85	-

BT-LE(1Mbps)

2440MHz_TX

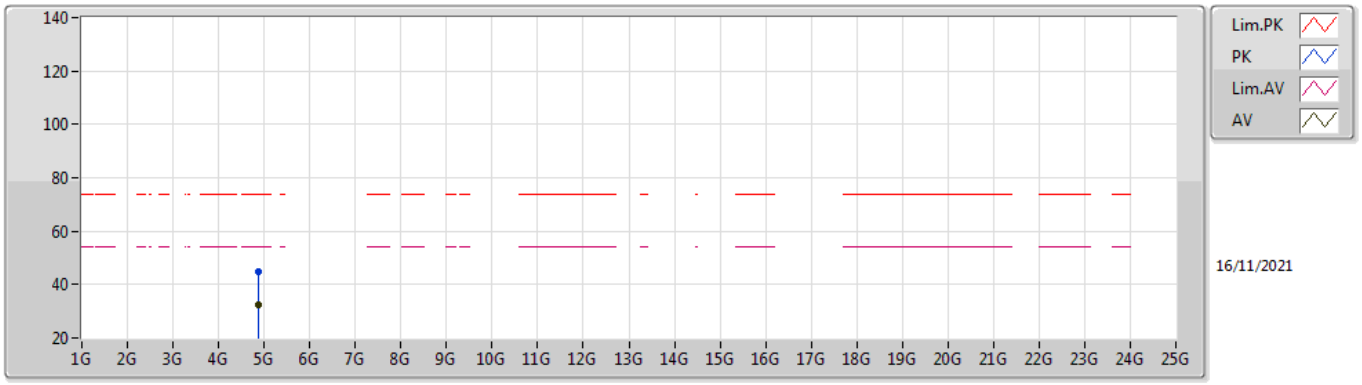


EUT X_1TX
Setting Default
01-C-K-4

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	2.3484G	56.08	74.00	-17.92	24.58	3	Horizontal	45	1.09	-	27.70	3.80	-
AV	2.3564G	44.47	54.00	-9.53	12.98	3	Horizontal	45	1.09	-	27.69	3.80	-
PK	2.4396G	98.62	Inf	-Inf	67.28	3	Horizontal	45	1.09	-	27.52	3.82	-
AV	2.44G	97.17	Inf	-Inf	65.83	3	Horizontal	45	1.09	-	27.52	3.82	-
PK	2.4928G	54.78	74.00	-19.22	23.43	3	Horizontal	45	1.09	-	27.50	3.85	-
AV	2.4916G	44.11	54.00	-9.89	12.76	3	Horizontal	45	1.09	-	27.50	3.85	-

BT-LE(1Mbps)

2440MHz_TX

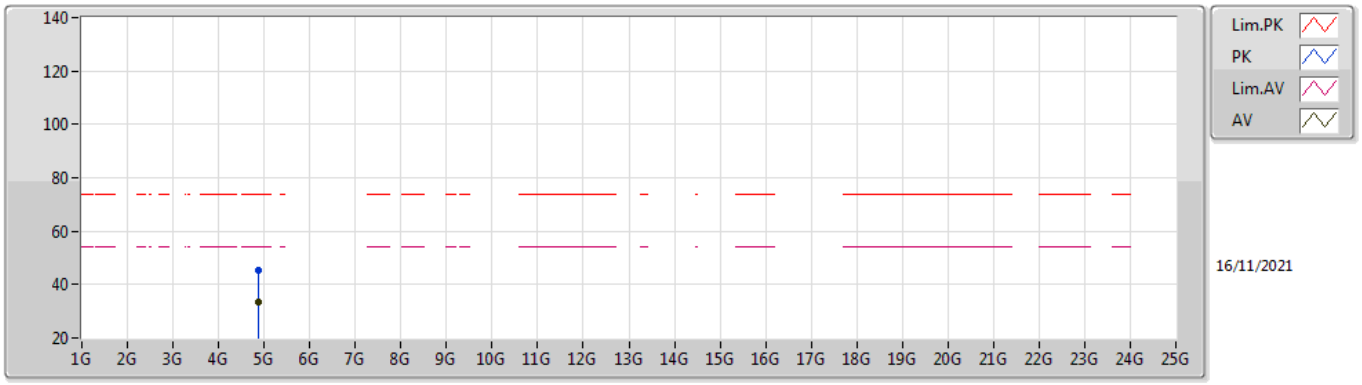


EUT X_1TX
Setting Default
01-C-K-4

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	4.88332G	44.87	74.00	-29.13	40.25	3	Vertical	238	2.26	-	31.30	6.30	32.98
AV	4.88016G	32.63	54.00	-21.37	28.01	3	Vertical	238	2.26	-	31.30	6.30	32.98

BT-LE(1Mbps)

2440MHz_TX

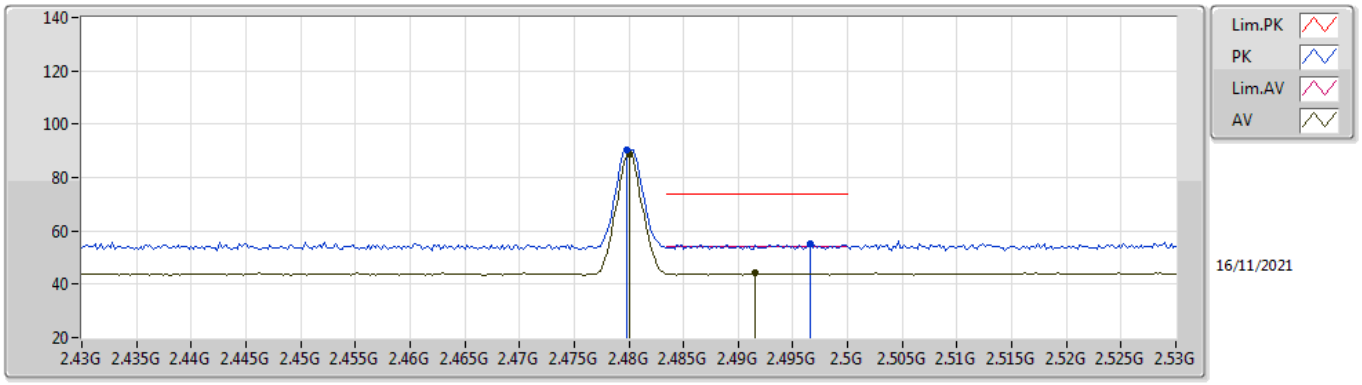


EUT X_1TX
Setting Default
01-C-K-4

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	4.87636G	45.31	74.00	-28.69	40.69	3	Horizontal	3	2.25	-	31.30	6.30	32.98
AV	4.8795G	33.36	54.00	-20.64	28.74	3	Horizontal	3	2.25	-	31.30	6.30	32.98

BT-LE(1Mbps)

2480MHz_TX

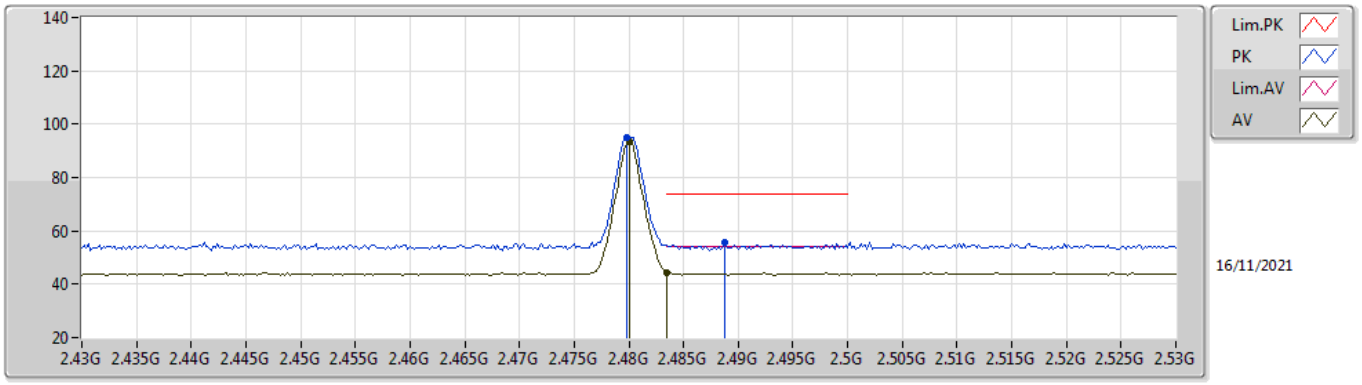


EUT X_1TX
Setting Default
01-C-K-4

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	2.4798G	90.44	Inf	-Inf	59.10	3	Vertical	304	2.53	-	27.50	3.84	-
AV	2.48G	89.01	Inf	-Inf	57.67	3	Vertical	304	2.53	-	27.50	3.84	-
PK	2.4966G	54.97	74.00	-19.03	23.62	3	Vertical	304	2.53	-	27.50	3.85	-
AV	2.4916G	44.08	54.00	-9.92	12.73	3	Vertical	304	2.53	-	27.50	3.85	-

BT-LE(1Mbps)

2480MHz_TX

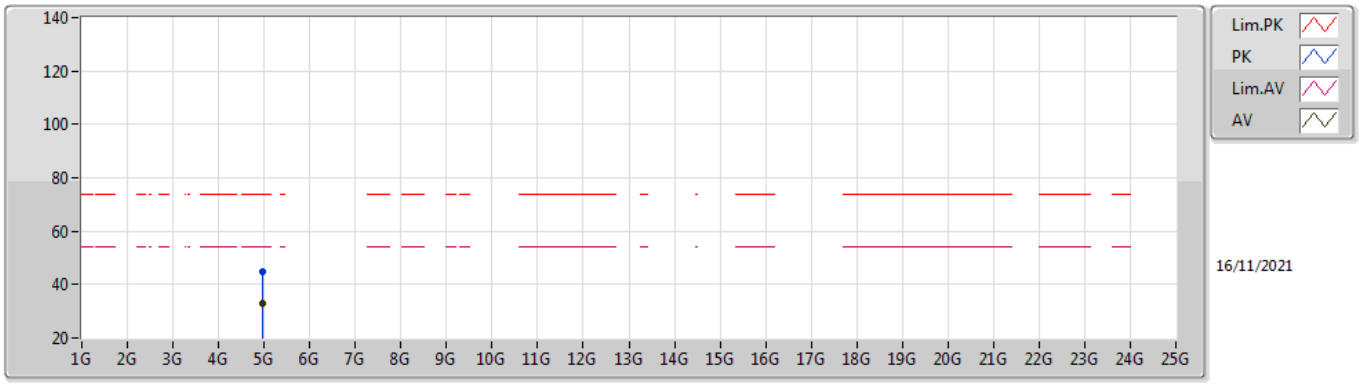


EUT X_1TX
Setting Default
01-C-K-4

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	2.4798G	94.99	Inf	-Inf	63.65	3	Horizontal	43	1.09	-	27.50	3.84	-
AV	2.48G	93.44	Inf	-Inf	62.10	3	Horizontal	43	1.09	-	27.50	3.84	-
PK	2.4888G	55.50	74.00	-18.50	24.16	3	Horizontal	43	1.09	-	27.50	3.84	-
AV	2.4835G	44.48	54.00	-9.52	13.14	3	Horizontal	43	1.09	-	27.50	3.84	-

BT-LE(1Mbps)

2480MHz_TX

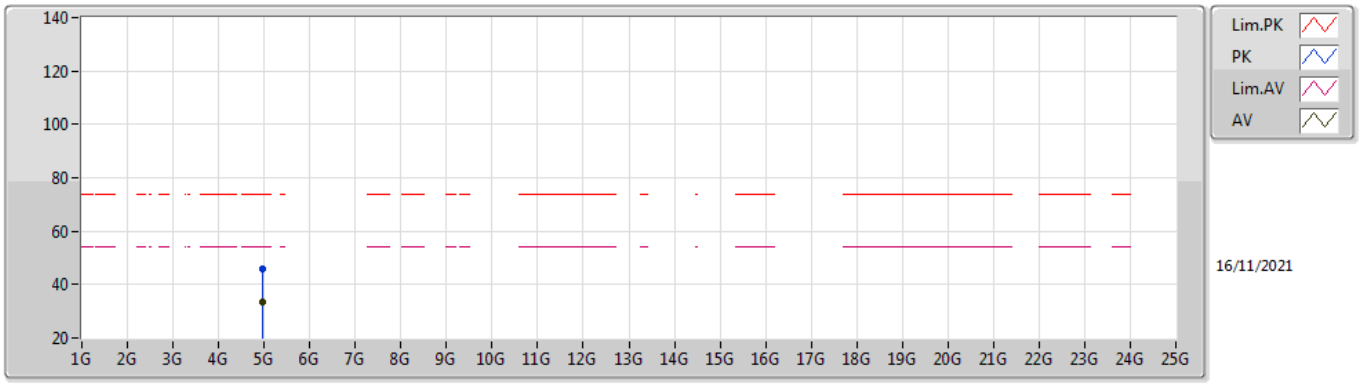


EUT X_1TX
Setting Default
01-C-K-4

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	4.95941G	45.02	74.00	-28.98	40.15	3	Vertical	153	1.58	-	31.54	6.30	32.97
AV	4.96024G	33.09	54.00	-20.91	28.22	3	Vertical	153	1.58	-	31.54	6.30	32.97

BT-LE(1Mbps)

2480MHz_TX

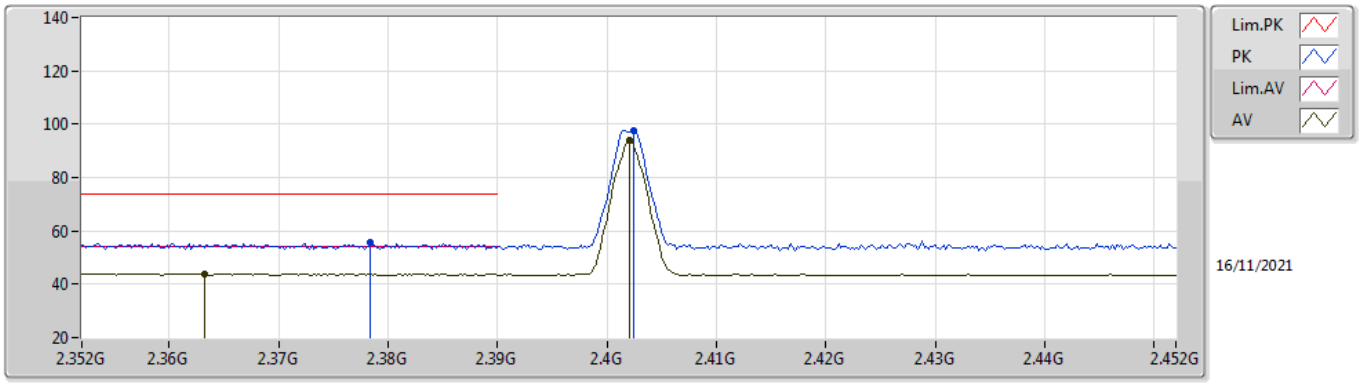


EUT X_1TX
Setting Default
01-C-K-4

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	4.95943G	45.72	74.00	-28.28	40.85	3	Horizontal	360	2.08	-	31.54	6.30	32.97
AV	4.95978G	33.70	54.00	-20.30	28.83	3	Horizontal	360	2.08	-	31.54	6.30	32.97

BT-LE(2Mbps)

2402MHz_TX

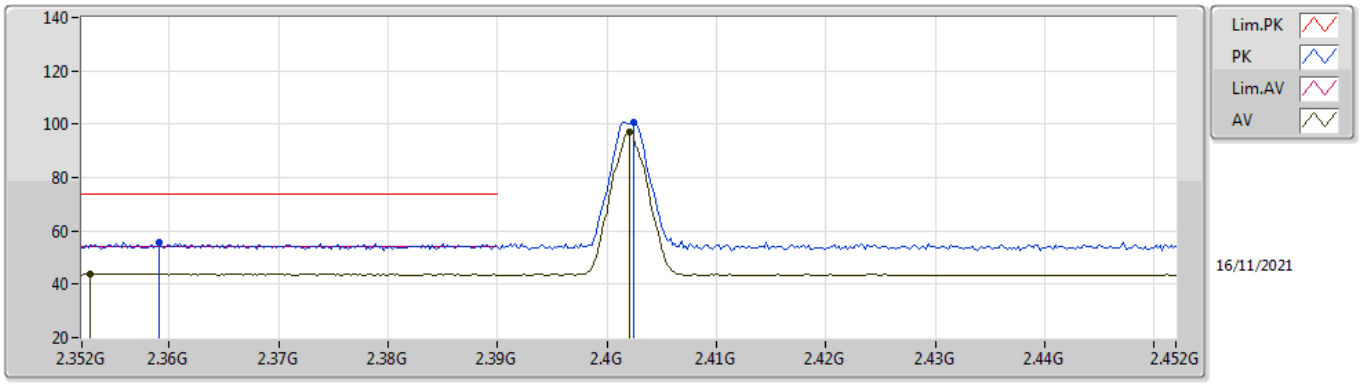


EUT X_1TX
Setting Default
01-C-K-4

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	2.3784G	55.53	74.00	-18.47	24.09	3	Vertical	308	2.42	-	27.64	3.80	-
AV	2.3632G	43.96	54.00	-10.04	12.49	3	Vertical	308	2.42	-	27.67	3.80	-
PK	2.4024G	97.45	Inf	-Inf	66.05	3	Vertical	308	2.42	-	27.60	3.80	-
AV	2.402G	93.87	Inf	-Inf	62.47	3	Vertical	308	2.42	-	27.60	3.80	-

BT-LE(2Mbps)

2402MHz_TX

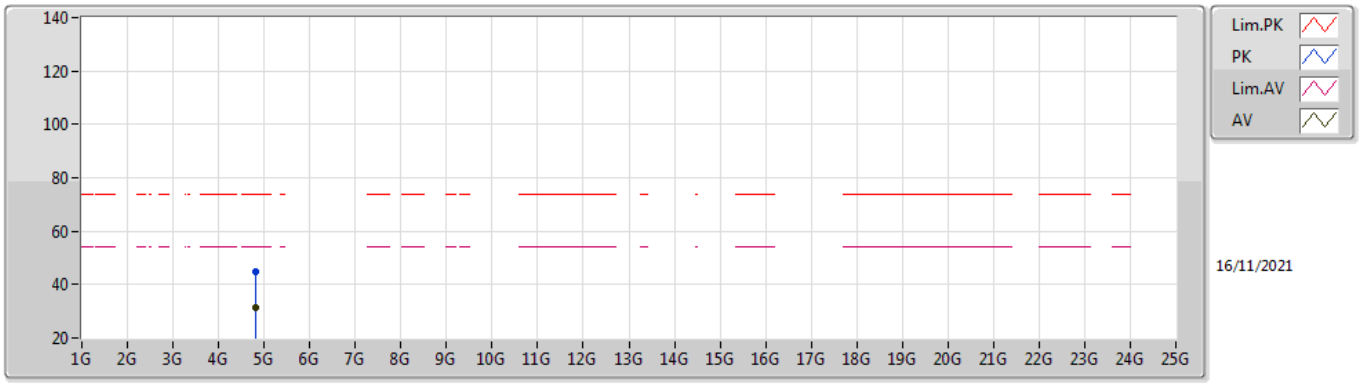


EUT X_1TX
Setting Default
01-C-K-4

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	2.359G	55.84	74.00	-18.16	24.36	3	Horizontal	42	2.47	-	27.68	3.80	-
AV	2.3528G	43.94	54.00	-10.06	12.45	3	Horizontal	42	2.47	-	27.69	3.80	-
PK	2.4024G	100.70	Inf	-Inf	69.30	3	Horizontal	42	2.47	-	27.60	3.80	-
AV	2.402G	97.15	Inf	-Inf	65.75	3	Horizontal	42	2.47	-	27.60	3.80	-

BT-LE(2Mbps)

2402MHz_TX

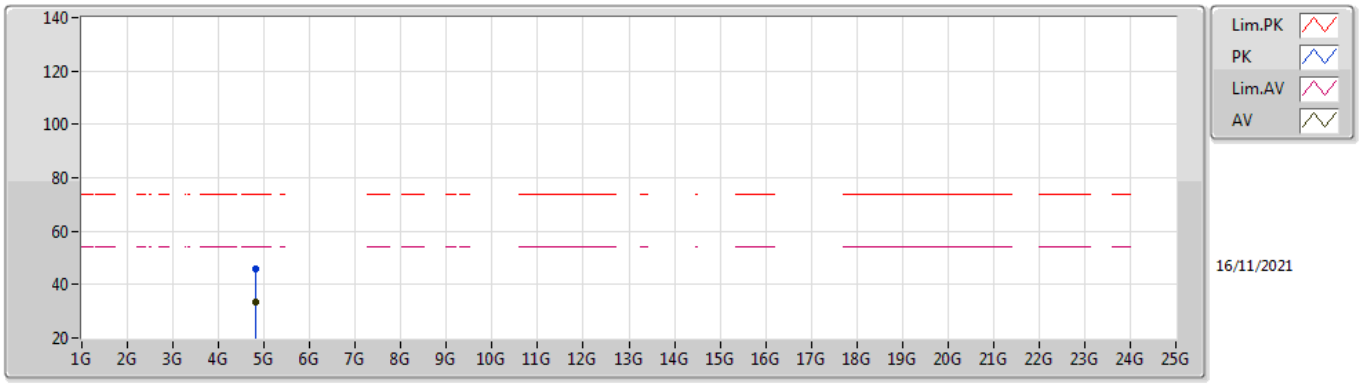


EUT X_1TX
Setting Default
01-C-K-4

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	4.80814G	44.90	74.00	-29.10	40.21	3	Vertical	360	1.86	-	31.38	6.30	32.99
AV	4.80452G	31.50	54.00	-22.50	26.80	3	Vertical	360	1.86	-	31.39	6.30	32.99

BT-LE(2Mbps)

2402MHz_TX

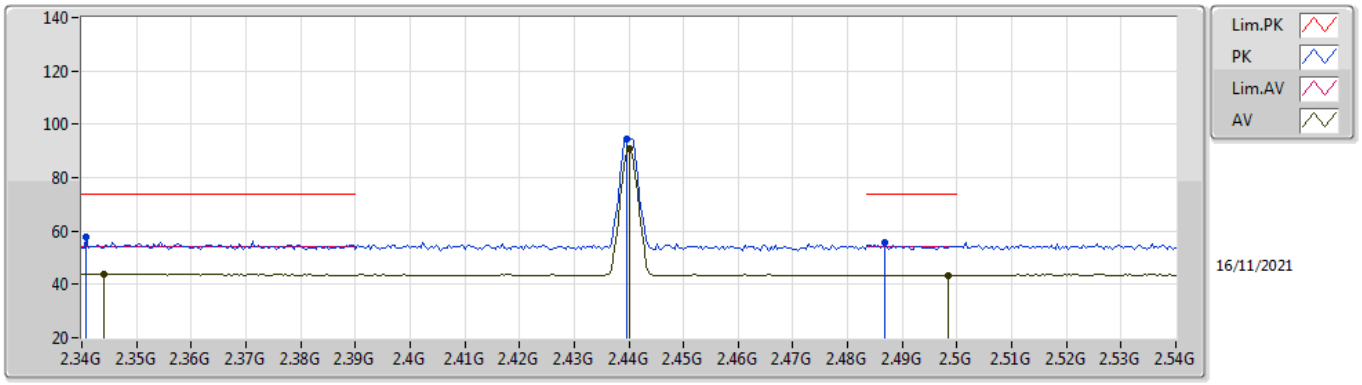


EUT X_1TX
Setting Default
01-C-K-4

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	4.8029G	45.95	74.00	-28.05	41.25	3	Horizontal	359	2.16	-	31.39	6.30	32.99
AV	4.80294G	33.32	54.00	-20.68	28.62	3	Horizontal	359	2.16	-	31.39	6.30	32.99

BT-LE(2Mbps)

2440MHz_TX

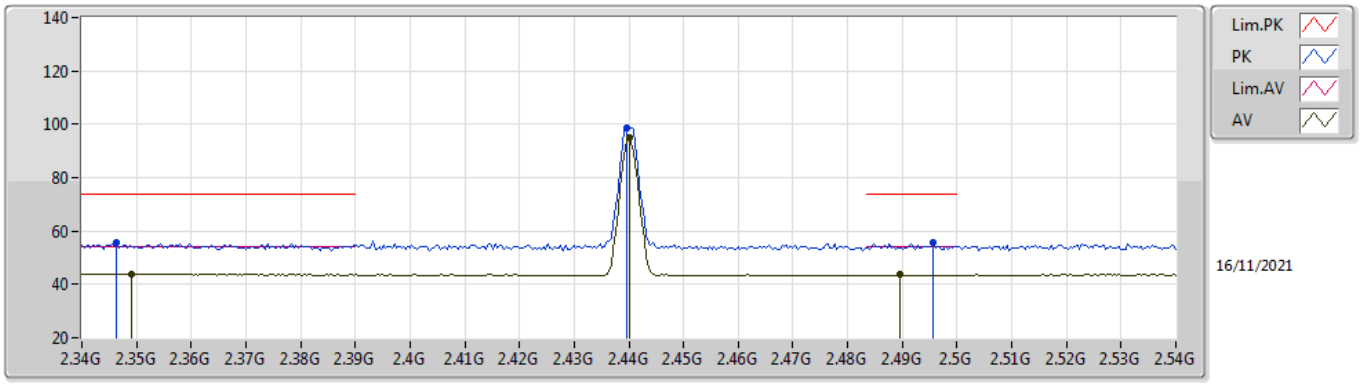


EUT X_1TX
Setting Default
01-C-K-4

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	2.3408G	57.63	74.00	-16.37	26.11	3	Vertical	309	2.28	-	27.72	3.80	-
AV	2.344G	43.87	54.00	-10.13	12.36	3	Vertical	309	2.28	-	27.71	3.80	-
PK	2.4396G	94.54	Inf	-Inf	63.20	3	Vertical	309	2.28	-	27.52	3.82	-
AV	2.44G	90.68	Inf	-Inf	59.34	3	Vertical	309	2.28	-	27.52	3.82	-
PK	2.4868G	55.59	74.00	-18.41	24.25	3	Vertical	309	2.28	-	27.50	3.84	-
AV	2.4984G	43.52	54.00	-10.48	12.17	3	Vertical	309	2.28	-	27.50	3.85	-

BT-LE(2Mbps)

2440MHz_TX

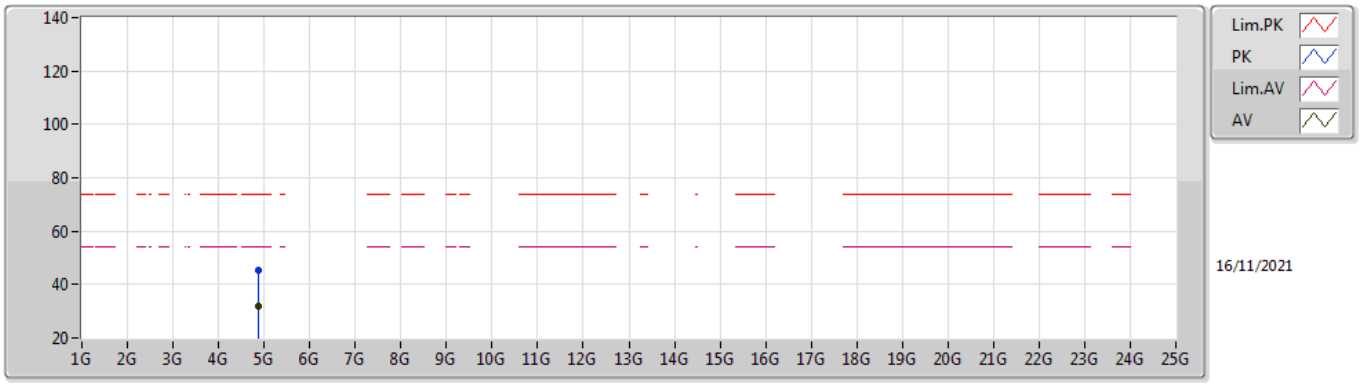


EUT X_1TX
Setting Default
01-C-K-4

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	2.3464G	55.50	74.00	-18.50	23.99	3	Horizontal	45	1.09	-	27.71	3.80	-
AV	2.3492G	43.92	54.00	-10.08	12.42	3	Horizontal	45	1.09	-	27.70	3.80	-
PK	2.4396G	98.62	Inf	-Inf	67.28	3	Horizontal	45	1.09	-	27.52	3.82	-
AV	2.44G	94.98	Inf	-Inf	63.64	3	Horizontal	45	1.09	-	27.52	3.82	-
PK	2.4956G	55.82	74.00	-18.18	24.47	3	Horizontal	45	1.09	-	27.50	3.85	-
AV	2.4896G	43.54	54.00	-10.46	12.20	3	Horizontal	45	1.09	-	27.50	3.84	-

BT-LE(2Mbps)

2440MHz_TX

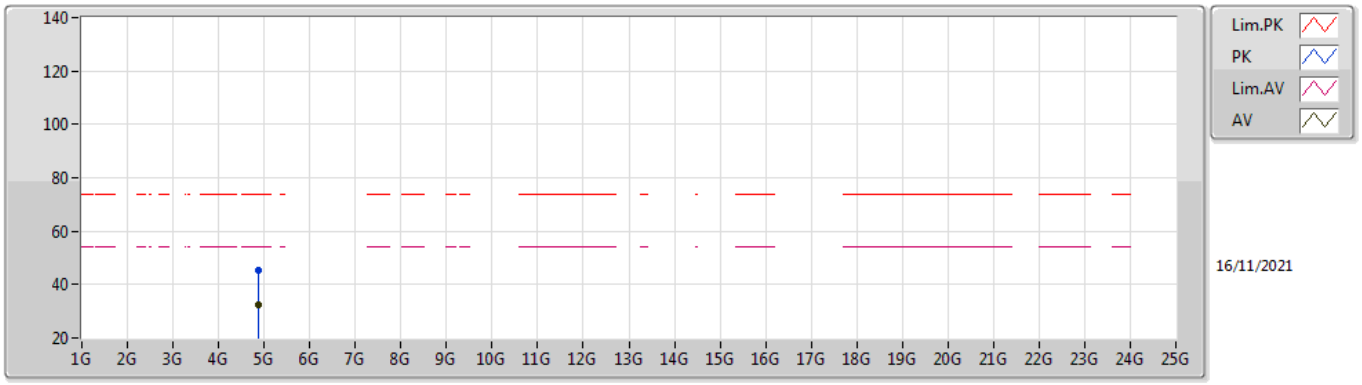


EUT X_1TX
Setting Default
01-C-K-4

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	4.88G	45.24	74.00	-28.76	40.62	3	Vertical	210	2.40	-	31.30	6.30	32.98
AV	4.88234G	31.68	54.00	-22.32	27.06	3	Vertical	210	2.40	-	31.30	6.30	32.98

BT-LE(2Mbps)

2440MHz_TX

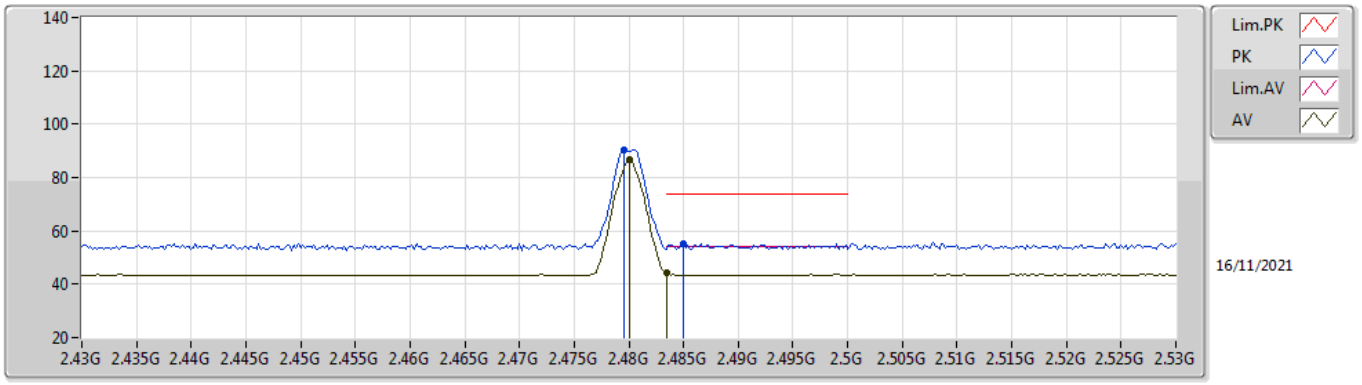


EUT X_1TX
Setting Default
01-C-K-4

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	4.87922G	45.58	74.00	-28.42	40.96	3	Horizontal	360	2.36	-	31.30	6.30	32.98
AV	4.87906G	32.27	54.00	-21.73	27.65	3	Horizontal	360	2.36	-	31.30	6.30	32.98

BT-LE(2Mbps)

2480MHz_TX

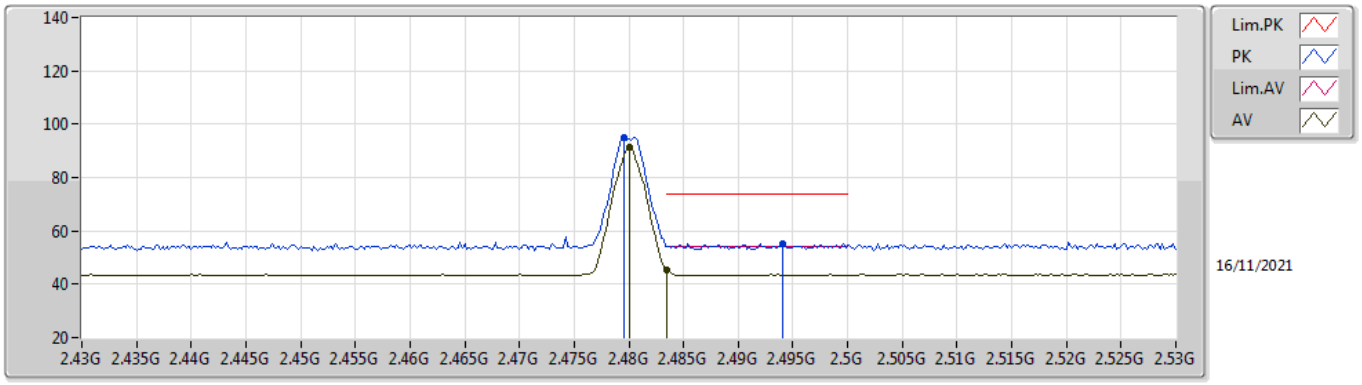


EUT X_1TX
Setting Default
01-C-K-4

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	2.4796G	90.51	Inf	-Inf	59.17	3	Vertical	305	2.29	-	27.50	3.84	-
AV	2.48G	86.90	Inf	-Inf	55.56	3	Vertical	305	2.29	-	27.50	3.84	-
PK	2.485G	55.18	74.00	-18.82	23.84	3	Vertical	305	2.29	-	27.50	3.84	-
AV	2.4835G	44.24	54.00	-9.76	12.90	3	Vertical	305	2.29	-	27.50	3.84	-

BT-LE(2Mbps)

2480MHz_TX

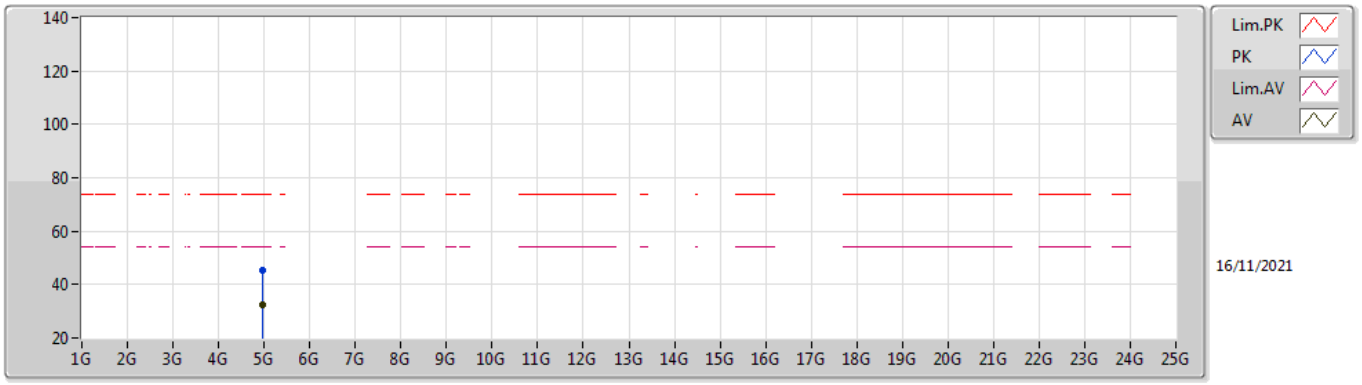


EUT X_1TX
Setting Default
01-C-K-4

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	2.4796G	94.89	Inf	-Inf	63.55	3	Horizontal	43	1.09	-	27.50	3.84	-
AV	2.48G	91.29	Inf	-Inf	59.95	3	Horizontal	43	1.09	-	27.50	3.84	-
PK	2.494G	55.36	74.00	-18.64	24.01	3	Horizontal	43	1.09	-	27.50	3.85	-
AV	2.4835G	45.56	54.00	-8.44	14.22	3	Horizontal	43	1.09	-	27.50	3.84	-

BT-LE(2Mbps)

2480MHz_TX

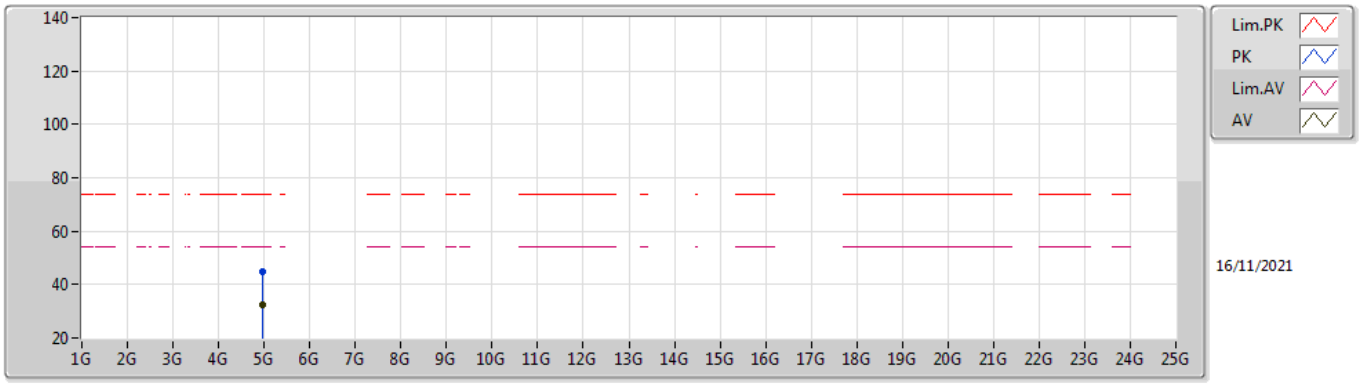


EUT X_1TX
Setting Default
01-C-K-4

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	4.9607G	45.57	74.00	-28.43	40.70	3	Vertical	35	2.87	-	31.54	6.30	32.97
AV	4.96356G	32.26	54.00	-21.74	27.38	3	Vertical	35	2.87	-	31.55	6.30	32.97

BT-LE(2Mbps)

2480MHz_TX



EUT X_1TX
Setting Default
01-C-K-4

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	4.96086G	45.06	74.00	-28.94	40.19	3	Horizontal	97	2.82	-	31.54	6.30	32.97
AV	4.96102G	32.60	54.00	-21.40	27.73	3	Horizontal	97	2.82	-	31.54	6.30	32.97