NCC RADIO TEST REPORT

Equipment	:	Premium Outdoor 802.11ax WiFi and BLE Array AP
Brand Name	:	Mist
Model Name	:	AP63, AP63E
Applicant	:	Juniper Networks, Inc. 1133 Innovation Way, Sunnyvale, CA 94089, USA
Manufacturer	:	Juniper Networks, Inc. 1133 Innovation Way, Sunnyvale, CA 94089, USA
Standard	:	LP0002 Section 3.10.1 (2018-01-10)

The product was received on Apr. 16, 2020, and testing was started from Jul. 03, 2020 and completed on Aug. 20, 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 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: Cliff Chang

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Table of Contents

History of this test report **3**

Summary of Test Result **4**

1 General Description **5**

1.1 Information 5
1.2 Applicable Standards 11
1.3 Testing Location Information 11
1.4 Measurement Uncertainty 12

2 Test Configuration of EUT **13**

2.1 Test Channel Mode 13
2.2 The Worst Case Measurement Configuration 14
2.3 EUT Operation during Test 18
2.4 Accessories 18
2.5 Support Equipment 19
2.6 Test Setup Diagram 21

3 Transmitter Test Result **25**

3.1 AC Power-line Conducted Emissions 25
3.2 DTS Bandwidth 27
3.3 Maximum Conducted Output Power 28
3.4 Power Spectral Density 31
3.5 Emissions in Non-restricted Frequency Bands 33
3.6 Emissions in Restricted Frequency Bands 34

4 Test Equipment and Calibration Data **40**

Appendix A. Test Results of AC Power-line Conducted Emissions
Appendix B. Test Results of DTS Bandwidth
Appendix C. Test Results of Maximum Conducted Output Power
Appendix D. Test Results of Power Spectral Density
Appendix E. Test Results of Emissions in Non-restricted Frequency Bands
Appendix F. Test Results of Emissions in Restricted Frequency Bands
Appendix G. Test Photos
Photographs of EUT v02

History of this test report

Report No.	Version	Description	Issued Date
TR041650AA	01	Initial issue of report	Aug. 25, 2020
TR041650AA	02	1. Add the external photo of EUT 1 for the photographs of EUT. 2. Update the accessories information on section 2.4.	Sep. 02, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	3.10.1.4	Antenna Requirement	PASS	-
3.1	2.3	AC Power-line Conducted Emissions	PASS	-
3.2	3.10.1.6	DTS Bandwidth	PASS	-
3.3	3.10.1.2	Maximum Conducted Output Power	PASS	-
3.4	3.10.1.6	Power Spectral Density	PASS	-
3.5	3.10.1.5	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	3.10.1.5	Emissions in Restricted Frequency Bands	PASS	-
The test results of this report reference the Sporton Report No.: FR041650AA. After evaluating, the test results comply with the test standard LP0002 (2018-01-10).				

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

Band	Mode	BWch (MHz)	Nant
2.4G	BT-LE(1Mbps)	1	1
2.4G	BT-LE(2Mbps)	2	1

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

1.1.2 Antenna Information

For Configuration 1 / Internal Antenna of EUT:

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Antenna Gain(dBi)			Radio
						WLAN 2.4GHz	WLAN 5GHz	Bluetooth	
1 ~ 4	1~4	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	-	6	-	R1-5GHz
5~8	1~4	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	4	-	-	R2-2.4GHz
9~10	1~2	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	2.3	4.7	-	R3-2.4GHz R3-5GHz
11 ~ 18	1	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	-	-	5.1	R4
19	1	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	-	-	4.3	R4
20	1	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	-	-	1.4	R4

Note: The above information was declared by manufacturer.

For Radio 1 / 5GHz function:
For IEEE 802.11a/n/ac/ax mode (4TX/4RX):
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
For Radio 2 / 2.4GHz function:
For IEEE 802.11b/g/n/ax and VHT mode (4TX/4RX):
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
For Radio 3 / 2.4GHz function:
For IEEE 802.11b/g/n/ax and VHT mode (2TX/2RX):
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
For Radio 3 / 5GHz function:
For IEEE 802.11a/n/ac/ax mode (2TX/2RX):
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
For Radio 4 / Bluetooth function (1TX/1RX):
Only Port 1 can be use as transmitting/receiving antenna.

For Configuration 3 / Internal Antenna of EUT:

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Antenna Gain(dBi)					Radio
						WLAN 2.4GHz	WLAN 5GHz			Bluetooth	
							B1 B2 (R1)	B3 B4 (R2)	B1 B2 B3 B4 (R3)		
1 ~ 4	R1:4~1 R2:1~4	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	4	6	-	-	-	R1-5GHz R2-2.4GHz
5~8	1~4	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	-	-	6	-	-	R2-5GHz
9~10	1~2	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	2.3	-	-	4.7	-	R3-2.4GHz R3-5GHz
11~18	1	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	-	-	-	-	5.1	R4
19	1	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	-	-	-	-	4.3	R4
20	1	Juniper	81XKAF15,G35	PIFA Antenna	I-PEX	-	-	-	-	1.4	R4

Note: The above information was declared by manufacturer.

For Radio 1 / 5GHz function:
For IEEE 802.11a/n/ac/ax mode (4TX/4RX):
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
For Radio 2 / 2.4GHz function:
For IEEE 802.11b/g/n/ax and VHT mode (4TX/4RX):
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
For Radio 2 / 5GHz Band 4 function:
For IEEE 802.11b/g/n/ac/ax mode (4TX/4RX):
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
For Radio 3 / 2.4GHz function:
For IEEE 802.11b/g/n/ax and VHT mode (2TX/2RX):
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
For Radio 3 / 5GHz function:
For IEEE 802.11a/n/ac/ax mode (2TX/2RX):
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
For Radio 4 / Bluetooth function (1TX/1RX):
Only Port 1 can be use as transmitting/receiving antenna.

For Configuration 2 / External Antenna of EUT:

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Antenna Gain(dBi)			Radio
						WLAN 2.4GHz	WLAN 5GHz	Bluetooth	
1	1~4	AccelTex	ATS-OO-245-46-6NP-36	Omni Antenna	N-Style	4	6	-	R2-2.4GHz R1-5GHz
	1~2	AccelTex	ATS-OO-245-46-6NP-36	Omni Antenna	N-Style	4	6	-	R3-2.4GHz R3-5GHz
2	1~4	AccelTex	ATS-OP-245-810-6NP-36	Patch Antenna	N-Style	8	10	-	R2-2.4GHz R1-5GHz
	1~2	AccelTex	ATS-OP-245-810-6NP-36	Patch Antenna	N-Style	8	10	-	R3-2.4GHz R3-5GHz
3 ~ 10	1	Juniper	81XKAF15,G36	PIFA Antenna	I-PEX	-	-	5.1	R4
11	1	Juniper	81XKAF15,G36	PIFA Antenna	I-PEX	-	-	4.3	R4
12	1	Juniper	81XKAF15,G36	PIFA Antenna	I-PEX	-	-	1.4	R4

Note: The above information was declared by manufacturer.

For Radio 1 / 5GHz function:
For IEEE 802.11a/n/ac/ax mode (4TX/4RX):
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
For Radio 2 / 2.4GHz function:
For IEEE 802.11b/g/n/ax and VHT mode (4TX/4RX):
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
For Radio 3 / 2.4GHz function:
For IEEE 802.11b/g/n/ax and VHT mode (2TX/2RX):
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
For Radio 3 / 5GHz function:
For IEEE 802.11a/n/ac/ax mode (2TX/2RX):
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
For Radio 4 / Bluetooth function (1TX/1RX):
Only Port 1 can be use as transmitting/receiving antenna.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-LE(1Mbps)	0.632	1.99	395u	3k
BT-LE(2Mbps)	0.333	4.78	209u	10k

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

1.1.4 EUT Operational Condition

EUT Power Type	From PoE			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	usb2i2c V3.3			
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 Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	EUT	Description
AP63	EUT 1	The model name: AP63 indicates that it comes with internal antennas and The model name: AP63E indicates that the access point comes with external antenna connectors.
AP63E	EUT 2	

1.1.6 Table for EUT Configuration

Configuration	EUT	Radio 1	Radio 2	Radio 3	Radio 4
1	1	WLAN 5GHz (Full Band)	WLAN 2.4GHz	WLAN 2.4GHz + WLAN 5GHz (Full Band)	Bluetooth
2	2	WLAN 5GHz (Full Band)	WLAN 2.4GHz	WLAN 2.4GHz + WLAN 5GHz (Full Band)	Bluetooth
3	1	WLAN 5GHz (Band 1 ~ Band 2)	WLAN 2.4GHz + WLAN 5GHz (Band 3 ~ Band 4)	WLAN 2.4GHz + WLAN 5GHz (Full Band)	Bluetooth

Note: 1. The Bluetooth antennas are the same for EUT 1 and EUT 2, so there's only EUT 1 was tested and recorded in the report.
2. The above information was declared by manufacturer.

1.2 Applicable Standards

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

- NCC LP0002 (2018-01-10)
- 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	TH03-CB	Benson Su	24.8-26.6°C / 56-61%	Jul. 07, 2020 ~ Jul. 27, 2020
Radiated<1GHz (Unintentional)	10CH01-CB	Ryo Fan	22~23°C / 61~62%	Aug. 04, 2020 ~ Aug. 05, 2020
Radiated>1GHz (Unintentional)	10CH01-CB	Ryo Fan	21~22°C / 64~65%	Aug. 17, 2020
Radiated<1GHz (Intentional)	10CH01-CB	Ryo Fan	22~23°C / 62~63 %	Aug. 19, 2020~ Aug. 20, 2020
Radiated>1GHz (Intentional)	03CH03-CB	Eason Chen	25.7-27.2°C / 58-61%	Jul. 03, 2020 ~ Jul. 24, 2020
	03CH06-CB	Eason Chen	25.1-26.9°C / 58-60%	Jul. 03, 2020 ~ Jul. 24, 2020
AC Conduction	CO01-CB	Max Lin	20~22°C / 58~60%	Aug. 04, 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)	4.8 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.6 dB	Confidence levels of 95%
Conducted Emission	2.8 dB	Confidence levels of 95%
Output Power Measurement	1.4 dB	Confidence levels of 95%
Power Density Measurement	2.8 dB	Confidence levels of 95%
Bandwidth Measurement	0.39%	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	Unintentional - Normal Link						
Test Mode	**Configuration**	**EUT**	**Radio 1**	**Radio 2**	**Radio 3**	**Radio 4**	**Power supply**
1	Configuration 1	EUT 1	WLAN 5GHz	WLAN 2.4GHz	WLAN 2.4GHz	Bluetooth	PoE
2	Configuration 1	EUT 1	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	PoE
3	Configuration 2 + External Ant.2	EUT 2	WLAN 5GHz	WLAN 2.4GHz	WLAN 2.4GHz	Bluetooth	PoE
4	Configuration 2 + External Ant.2	EUT 2	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	PoE
5	Configuration 3	EUT 1	WLAN 5GHz (Low Band)	WLAN 2.4GHz	WLAN 2.4GHz	Bluetooth	PoE
6	Configuration 3	EUT 1	WLAN 5GHz (Low Band)	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	PoE
7	Configuration 3	EUT 1	WLAN 5GHz (Low Band)	WLAN 5GHz (High Band)	WLAN 2.4GHz	Bluetooth	PoE
8	Configuration 3	EUT 1	WLAN 5GHz (Low Band)	WLAN 5GHz (High Band)	WLAN 5GHz	Bluetooth	PoE
For operating mode 4 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	
	For Ant.11 ~ Ant.18 can be used as transmitting/receiving functions, but only one antenna can be used as transmitting/receiving functions at one time and the worst case was found at Ant.17. So the measurement will follow this same test configuration.	
Test Mode	1	EUT 1 + Ant. 17 (Directional Mode / Beam 7)
	2	EUT 1 + Ant. 19 (Beam 9)
	3	EUT 1 + Ant. 20 (Omni Mode)

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	Unintentional - Normal Link						
Test Mode	**Configuration**	**EUT**	**Radio 1**	**Radio 2**	**Radio 3**	**Radio 4**	**Power supply**
1	Configuration 1	EUT 1 in Y axis	WLAN 5GHz	WLAN 2.4GHz	WLAN 2.4GHz	Bluetooth	PoE
2	Configuration 1	EUT 1 in Z axis	WLAN 5GHz	WLAN 2.4GHz	WLAN 2.4GHz	Bluetooth	PoE
Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 ~ 9 will follow this same test mode.							
3	Configuration 1	EUT 1 in Y axis	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	PoE
4	Configuration 2 + External Ant.2	EUT 2 in Y axis	WLAN 5GHz	WLAN 2.4GHz	WLAN 2.4GHz	Bluetooth	PoE
5	Configuration 2 + External Ant.2	EUT 2 in Y axis	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	PoE
6	Configuration 3	EUT 1 in Y axis	WLAN 5GHz (Low Band)	WLAN 2.4GHz	WLAN 2.4GHz	Bluetooth	PoE
7	Configuration 3	EUT 1 in Y axis	WLAN 5GHz (Low Band)	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	PoE
8	Configuration 3	EUT 1 in Y axis	WLAN 5GHz (Low Band)	WLAN 5GHz (High Band)	WLAN 2.4GHz	Bluetooth	PoE
9	Configuration 3	EUT 1 in Y axis	WLAN 5GHz (Low Band)	WLAN 5GHz (High Band)	WLAN 5GHz	Bluetooth	PoE
For operating mode 3 is the worst case and it was record in this test report.							

Operating Mode < 1GHz	Intentional - CTX
This tests with highest power setting for WLAN and highest gain for Bluetooth. The External Ant.1 was performed at 90° and 180° position and the worst case was found at 180°. So the measurement will follow this same test configuration. **For WLAN 2.4GHz:** Radio 2 has been evaluated to be the worst case for Emissions in Restricted Frequency Bands Intentional above 1GHz test. Consequently, measurement for Emissions in Restricted Frequency Bands Intentional below 1GHz will follow this same test mode. The EUT was performed at X、Y axis and Z axis position for Emissions in Restricted Frequency Bands Intentional above 1GHz test and the worst case was found at below: 1. EUT 1 in Z axis 2. EUT 2 in X axis + external Ant.1 3. EUT 2 in X axis + external Ant.2 **For WLAN 5GHz:** For EUT 1 is Radio 2 and EUT 2 is Radio 3 has been evaluated to be the worst case for Unwanted EmissionsIntentional above 1GHz test. Consequently, measurement for Unwanted EmissionsIntentional below 1GHz will follow this same test mode. The EUT was performed at X、Y axis and Z axis position for Unwanted Emissions Intentional above 1GHz test and the worst case was found at below: 1. EUT 1 in Y axis 2. EUT 2 in X axis + external Ant.1 3. EUT 2 in X axis + external Ant.2 **For Bluetooth Ant. 11 ~ Ant.18 (Directional Mode):** Ant.11 ~ Ant.18 can be used as transmitting/receiving functions, but only one antenna can be used as transmitting/receiving functions at one time and the worst case was found at Ant.17. So the measurement will follow this same test configuration. The EUT was performed at X、Y axis and Z axis and the worst case was found at Y axis. So the measurement will follow this same test configuration.	
1	EUT 1 in Z axis + WLAN 2.4GHz (Radio 2)
2	EUT 2 in X axis + external Ant.1 + WLAN 2.4GHz (Radio 2)
3	EUT 2 in X axis + external Ant.2 + WLAN 2.4GHz (Radio 2)
4	EUT 1 in Y axis + WLAN 5GHz (Radio 2)
5	EUT 2 in X axis + external Ant.1 + WLAN 5GHz (Radio 3)
6	EUT 2 in X axis + external Ant.2 + WLAN 5GHz (Radio 3)
7	EUT 1 in Y axis + Ant. 17 (Directional Mode / Beam 7)
For operating mode 1 is the worst case and it was record in this test report.	

Operating Mode > 1GHz	Unintentional - Normal Link						
Mode 3 generated the worst test result for Emissions in Restricted Frequency Bands unintentional below 1GHz test, thus the measurement for Emissions in Restricted Frequency Bands unintentional 1GHz~5th Harmonic test will follow this same test configuration.							
Test Mode	**Configuration**	**EUT**	**Radio 1**	**Radio 2**	**Radio 3**	**Radio 4**	**Power supply**
1	Configuration 1	EUT 1 in Y axis	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	PoE
Operating Mode > 1GHz	Intentional - CTX						
For Ant. 11 ~ Ant.18 (Directional Mode): Ant.11 ~ Ant.18 can be used as transmitting/receiving functions, but only one antenna can be used as transmitting/receiving functions at one time and the worst case was found at Ant.17. So the measurement will follow this same test configuration. The EUT was performed at X、Y axis and Z axis and the worst case was found at Y axis. So the measurement will follow this same test configuration. **For Ant. 19 (Beam 9):** The EUT was performed at X、Y axis and Z axis and the worst case was found at Z axis. So the measurement will follow this same test configuration. **For Ant. 20 (Omni Mode):** The EUT was performed at X、Y axis and Z axis and the worst case was found at Y axis. So the measurement will follow this same test configuration.							
1	EUT 1 in Y axis + Ant. 17 (Directional Mode / Beam 7)						
2	EUT 1 in Z axis + Ant. 19 (Beam 9)						
3	EUT 1 in Y axis + Ant. 20 (Omni Mode)						

Note: 1.The PoE is for measurement only, would not be marketed.
PoE information as below:

Power	Brand	Model	Remark
PoE 1	YAMAHA	YPS-PoE-AT	Provided by applicant
PoE 2	Buffalo	BIJ-POE-1P:T	Provided by applicant

2.The applicant declared that the accessories of this case were for measurement only and it would not be marketed. The accessories will be provided and inspected by the laboratory (or the applicant).

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Equipment Name	Brand Holder	Model Name
Flush Mount Bracket*1	Juniper Networks, Inc.	APOUTBR-FN
Mounting Bracket*2	Juniper Networks, Inc.	APOUTBR-ART2
Seal*2	Juniper Networks, Inc.	AP63

2.5 Support Equipment

For AC Conduction and Radiated (Unintentional):

Support Equipment					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
A	2.4G NB	DELL	E6430	N/A	Provided by Lab
B	5G-1 NB	DELL	E6430	N/A	Provided by Lab
C	5G-2 NB	DELL	E6430	N/A	Provided by Lab
D	2.5G LAN PC	DELL	T3400	N/A	Provided by Lab
E	Monitor	DELL	1704FPTt	N/A	Provided by Lab
F	Keyboard	iCooky	SK068	N/A	Provided by Lab
G	Mouse	HP	FM100	N/A	Provided by Lab
H	Modem	ACEEX	DM1414	N/A	Provided by Lab
I	Printer	EPSON	LQ-300+	N/A	Provided by Lab
J	PoE 1	YAMAHA	YPS-PoE-AT	N/A	Provided by applicant
K	Smart Phone	Samsung	Galaxy J2	N/A	Provided by Lab
L	PoE LOAD	N/A	N/A	N/A	Provided by applicant
M	PoE LOAD NB	DELL	E6430	N/A	Provided by Lab

For Radiated Below 1GHz (Intentional):

Support Equipment					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
A	PoE 1	YAMAHA	YPS-PoE-AT	N/A	Provided by applicant
B	Notebook	DELL	E6430	N/A	Provided by Lab

For Radiated Above 1GHz (Intentional):

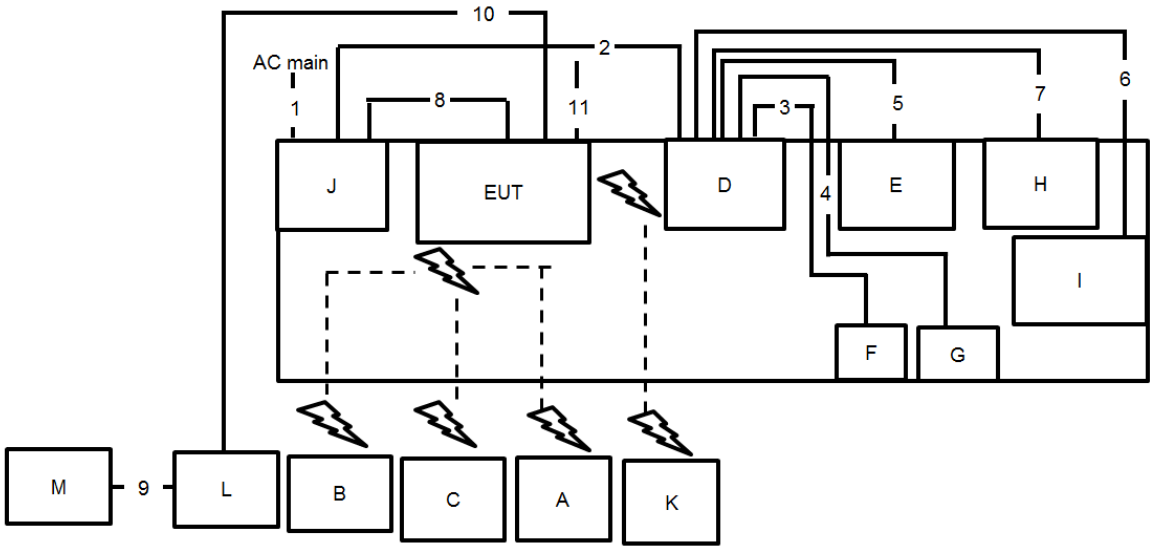
Support Equipment					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
A	PoE 2	Buffalo	BIJ-POE-1P:T	N/A	Provided by applicant
B	Notebook	DELL	E4300	N/A	Provided by Lab
E	Bluetooth Test set	Anritsu	MT8852B	N/A	Provided by applicant

For RF Conducted:

Support Equipment					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
A	Notebook	DELL	E4300	N/A	Provided by Lab
B	PoE 2	Buffalo	BIJ-POE-1P:T	N/A	Provided by applicant

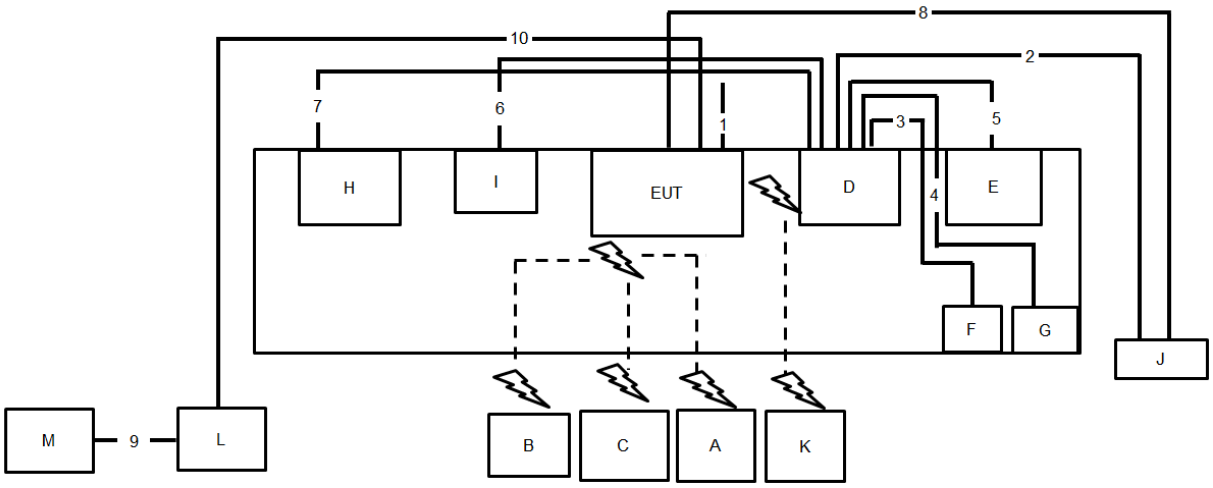
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



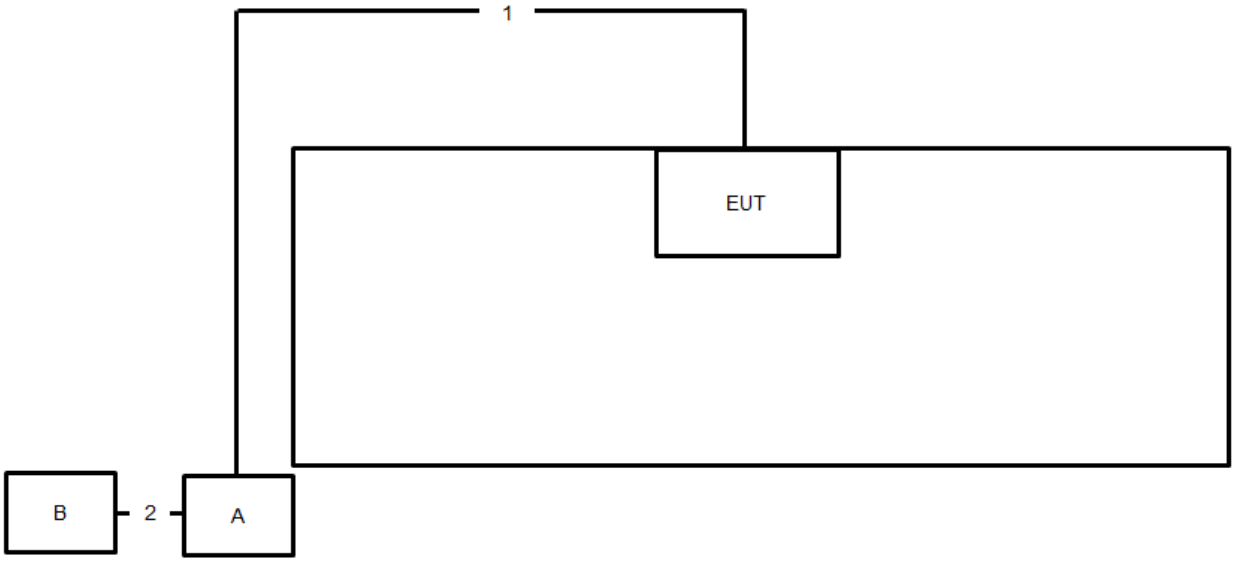
Item	Connection	Shielded	Length	Brand Name	Model Name	Remark
1	Power cable	No	1.8m	-	-	Provided by Lab
2	RJ-45 cable	No	1.5m	-	-	Provided by Lab
3	USB cable	Yes	1.8m	-	-	Provided by Lab
4	USB cable	Yes	1.8m	-	-	Provided by Lab
5	VGA cable	Yes	1.8m	-	-	Provided by Lab
6	USB cable	Yes	1.8m	-	-	Provided by Lab
7	RS-232 cable	Yes	1.8m	-	-	Provided by Lab
8	RJ-45 cable	No	1.5m	PowerSync	CLN5GBR9020	Provided by Lab
9	RJ-45 cable	No	1.5m	-	-	Provided by Lab
10	RJ-45 cable	No	10m	PowerSync	CLN5GBR9020	Provided by Lab
11	Ground cable	No	1.5m	-	-	Provided by Lab

Test Setup Diagram - Radiated Test / Unintentional - Normal Link



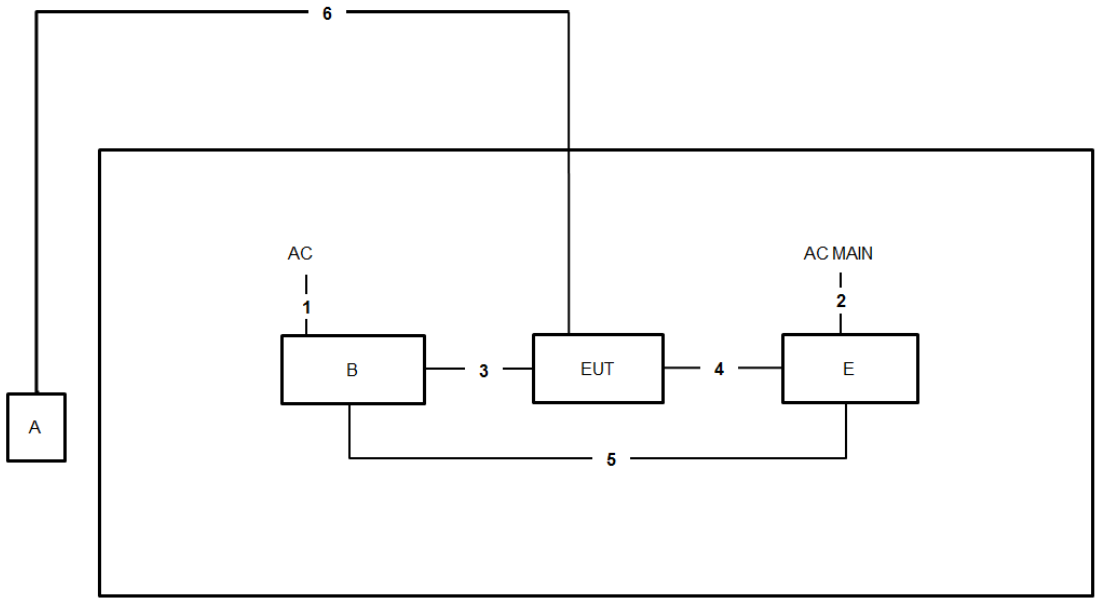
Item	Connection	Shielded	Length	Brand Name	Model Name	Remark
1	Ground cable	No	1.5m	-	-	Provided by Lab
2	RJ-45 cable	No	10m	-	-	Provided by Lab
3	USB cable	Yes	1.8m	-	-	Provided by Lab
4	USB cable	Yes	1.8m	-	-	Provided by Lab
5	VGA cable	Yes	1.8m	-	-	Provided by Lab
6	USB cable	Yes	1.8m	-	-	Provided by Lab
7	RS-232 cable	Yes	1.8m	-	-	Provided by Lab
8	RJ-45 cable	No	10m	PowerSync	CLN5GBR9020	Provided by Lab
9	RJ-45 cable	No	3m	-	-	Provided by Lab
10	RJ-45 cable	No	10m	PowerSync	CLN5GBR9020	Provided by Lab

Test Setup Diagram - Radiated < 1GHz Test / Intentional - CTX



Item	Connection	Shielded	Length	Brand Name	Model Name	Remark
1	RJ-45 cable	No	10m	PowerSync	CLN5GBR9020	Provided by Lab
2	RJ-45 cable	No	1.5m	-	-	Provided by Lab

Test Setup Diagram - Radiated > 1GHz Test / Intentional - CTX



Item	Connection	Shielded	Length	Brand Name	Model Name	Remark
1	Power cable	No	2.6m	-	-	Provided by Lab
2	Power cable	No	1.9m	-	-	Provided by applicant
3	USB to Console	Yes	1.8m	電子也工藝	USB212C	Provided by applicant
4	Control to RS-232	No	1.4m	Delta	N/A	Provided by applicant
5	GBIP to USB	Yes	2m	-	-	Provided by applicant
6	Power cable	No	10m	PowerSync	CLN5GBR9020	Provided by Lab

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

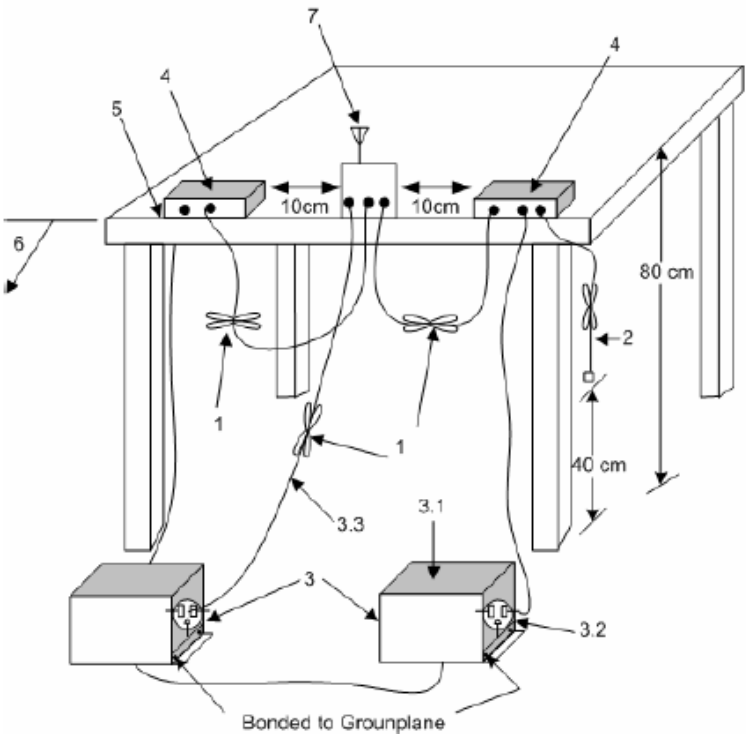
Refer a test equipment and calibration data table in this test report.

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 (dBuV) = LISN Factor + Cable Loss + Read Level = Level

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

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.

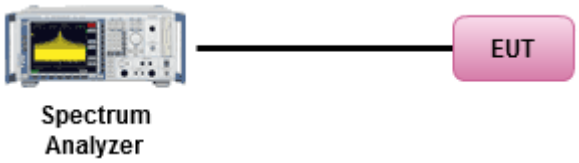
3.2.2 Measuring Instruments

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

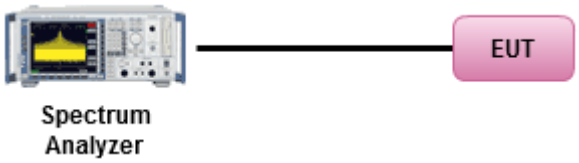
Refer a test equipment and calibration data table in this test report.

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

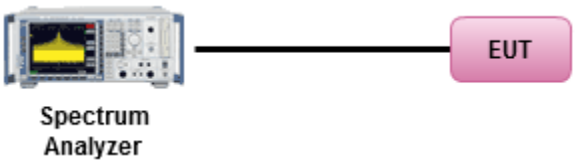
Refer a test equipment and calibration data table in this test report.

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.

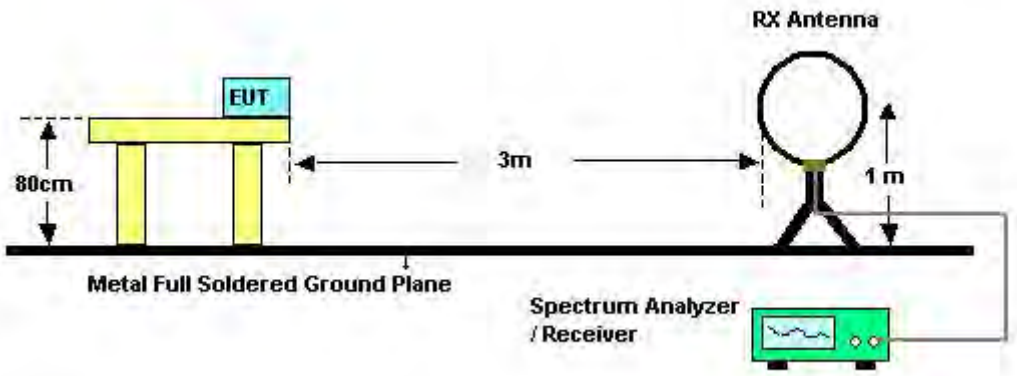
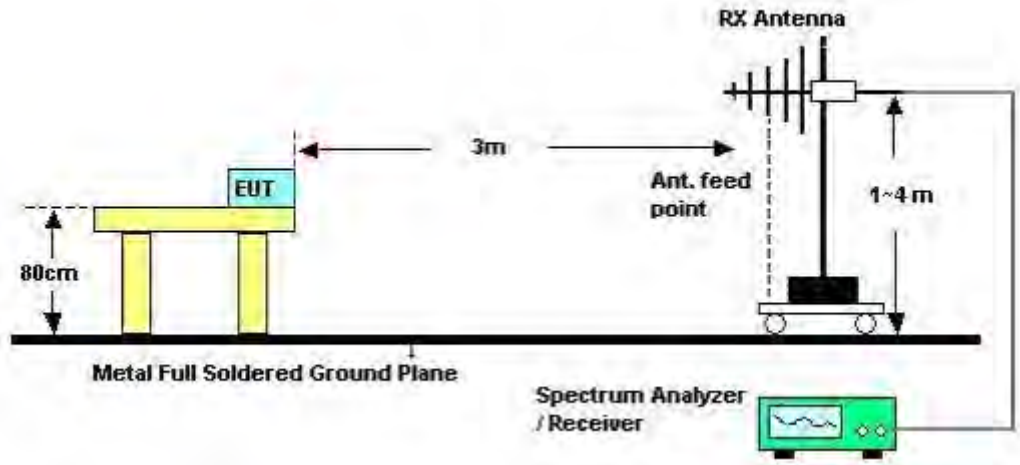
3.6.2 Measuring Instruments

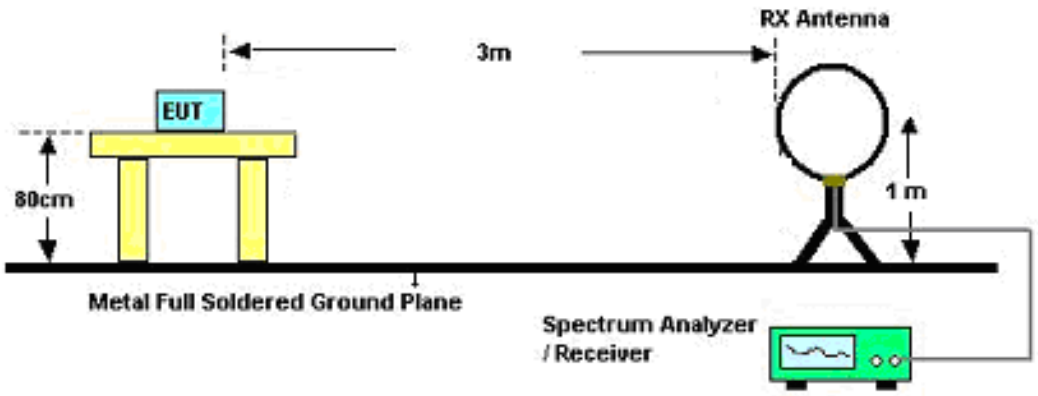
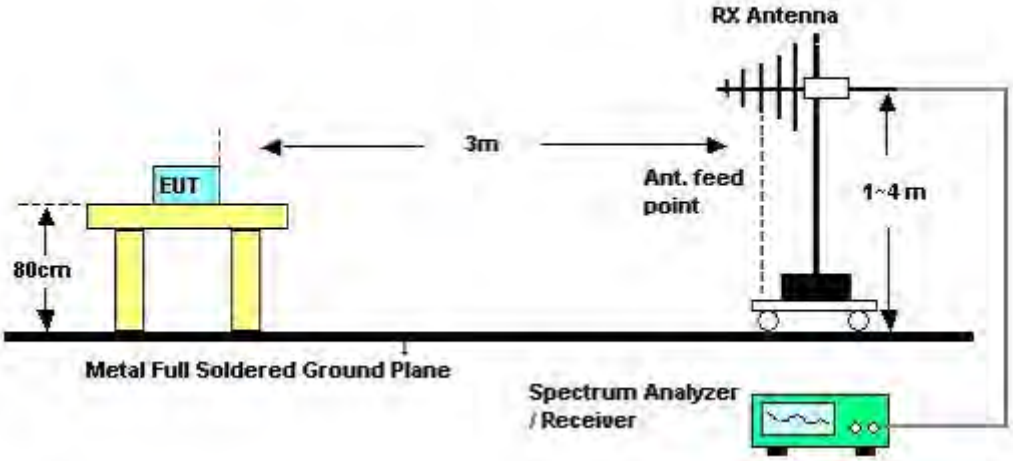
Refer a test equipment and calibration data table in this test report.

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.		

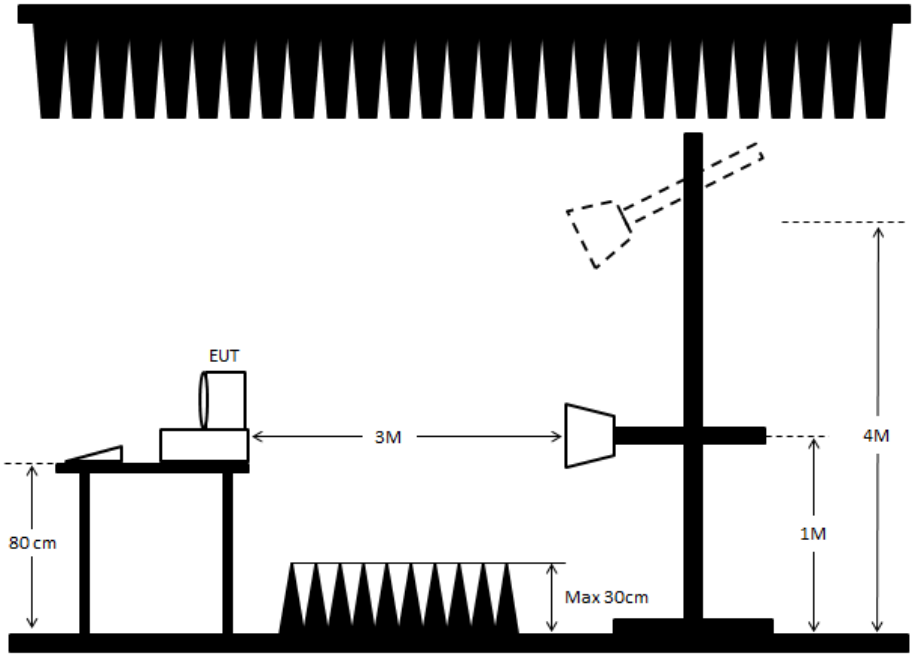
3.6.4 Test Setup

Emissions in Restricted Frequency Bands / Unintentional
9kHz ~30MHz

30MHz~1GHz


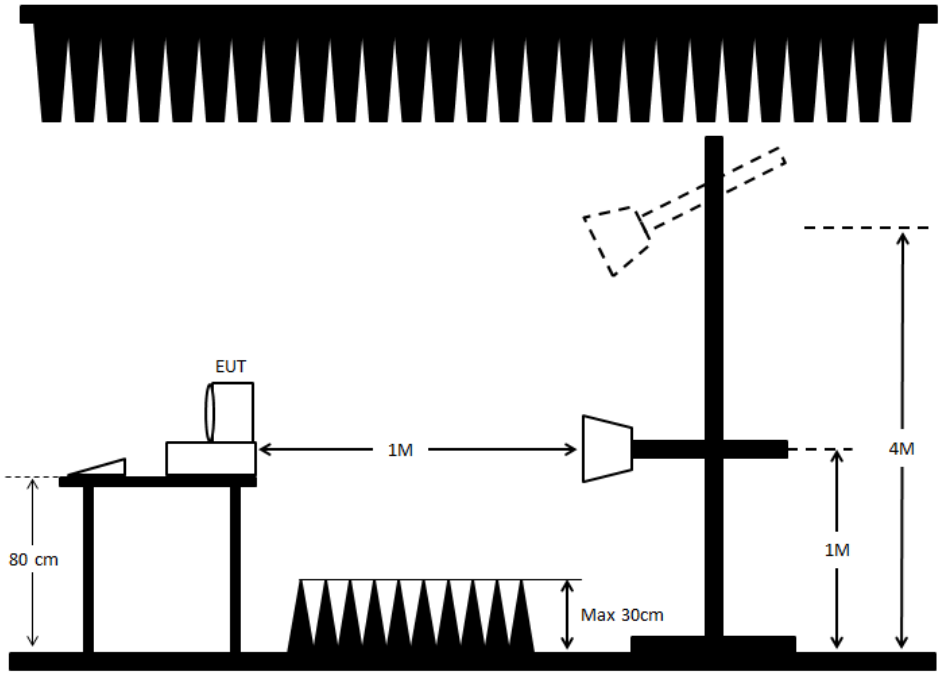
Emissions in Restricted Frequency Bands / Intentional
9kHz ~30MHz

30MHz~1GHz


Above 1GHz / Unintentional

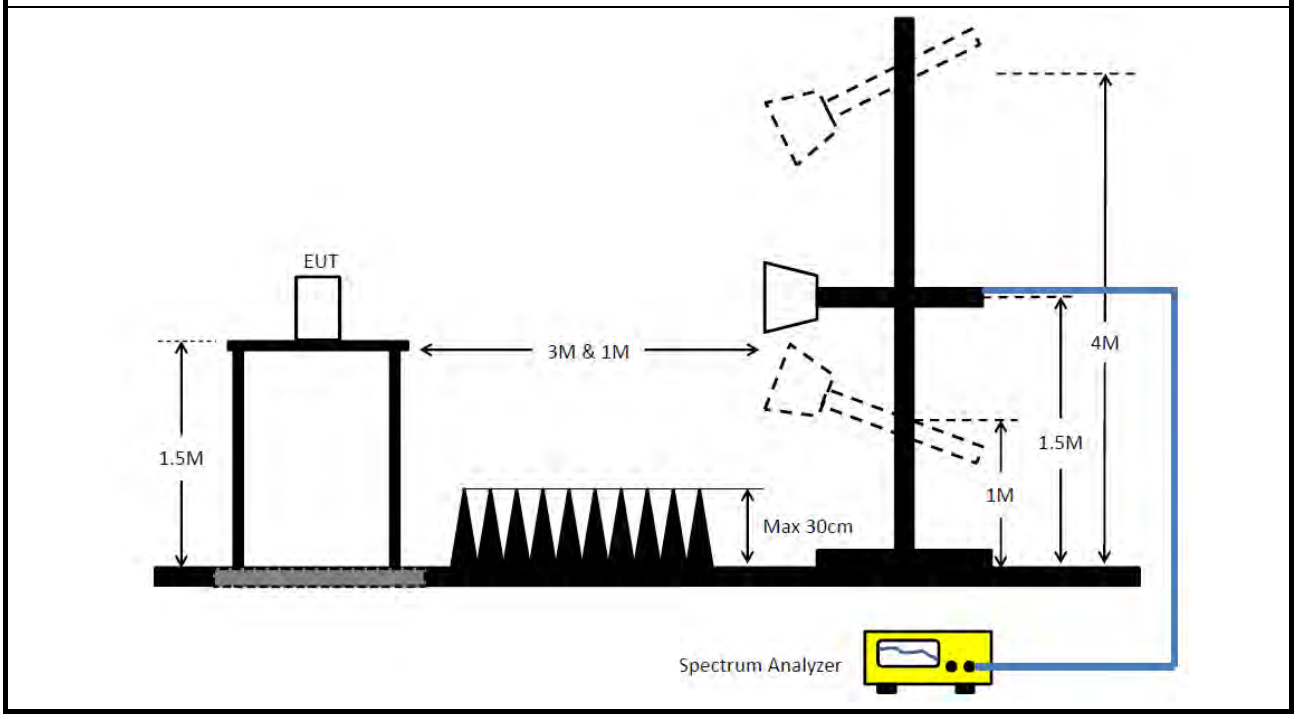
1,000~18,000 MHz



18,000~30,000 MHz



Above 1GHz / Intentional



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 20, 2020	May 19, 2021	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (10CH01-CB)
10m Semi Anechoic Chamber	TDK	NSA	10CH01-CB	30MHz~1GHz 10m,3m	Jan. 30, 2020	Jan. 29, 2021	Radiation (10CH01-CB)
10m Semi Anechoic Chamber	TDK	VSWR	10CH01-CB	1GHz ~18GHz 3m	Mar. 13, 2020	Mar. 12, 2021	Radiation (10CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10783	9kHz ~ 1.3GHz	Mar. 19, 2020	Mar. 18, 2021	Radiation (10CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10784	9kHz ~ 1.3GHz	Mar. 11, 2020	Mar. 10, 2021	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-01	25MHz ~ 1GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (10CH01-CB)
High Cable	Woken	SUCOFLEX 104	low cable-02	25MHz ~ 1GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (10CH01-CB)
Biconical Antenna	Schwarzbeck	VHBB 9124	324	30MHz ~ 200MHz	Apr. 20, 2020	Apr. 19, 2021	Radiation (10CH01-CB)
Log Antenna	Schwarzbeck	VUSLP 9111	247	200MHz ~ 1GHz	May 25, 2020	May 24, 2021	Radiation (10CH01-CB)
EMI Test Receiver	Rohde&Schwarz	ESCI	100186	9kHz ~ 3GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (10CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Apr. 16, 2020	Apr. 15, 2021	Radiation (10CH01-CB)
Horn Antenna	ESCO	3117	00081283	1GHz ~ 18GHz	Nov. 27, 2019	Nov. 26, 2020	Radiation (10CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (10CH01-CB)
Amplifier	Agilent	8449B	3008A02660	1GHz ~ 26.5GHz	May 21, 2020	May 20, 2021	Radiation (10CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (10CH01-CB)
CABLE (1~40G)	Woken	SUCOFLEX 104	high cable-01	1GHz ~ 40GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (10CH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Software	Audix	E3	6.120210m	-	N.C.R.	N.C.R.	Radiation (10CH01-CB)
Horn Antenna	ETS・Lindgren	3115	6821	750MHz~18GHz	Jan. 20, 2020	Jan. 19, 2021	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 11, 2020	Jun. 10, 2021	Radiation (03CH03-CB)
Pre-Amplifier	EMCI	EMC12630SE	980383	1GHz ~ 26.5GHz	Aug. 02, 2019	Aug. 01, 2020	Radiation (03CH03-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun. 19, 2020	Jun. 18, 2021	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+27(spare)	1GHz ~ 18GHz	Jul. 03, 2020	Jun. 02, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-27(spare)	1GHz ~ 18GHz	Jul. 03, 2020	Jun. 02, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 17, 2019	Jul. 16, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1291	1GHz~18GHz	Oct. 05, 2019	Oct. 04, 2020	Radiation (03CH06-CB)
Horn Antenna	COM-POWER	AH-118	071028	1GHz ~ 18GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 11, 2020	Jun. 10, 2021	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 07, 2020	May 06, 2021	Radiation (03CH06-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun. 19, 2020	Jun. 18, 2021	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-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. 16, 2020	Jul. 15, 2021	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Nov. 01, 2019	Oct. 31, 2020	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 13, 2019	Aug. 12, 2020	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 13, 2019	Aug. 12, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)

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

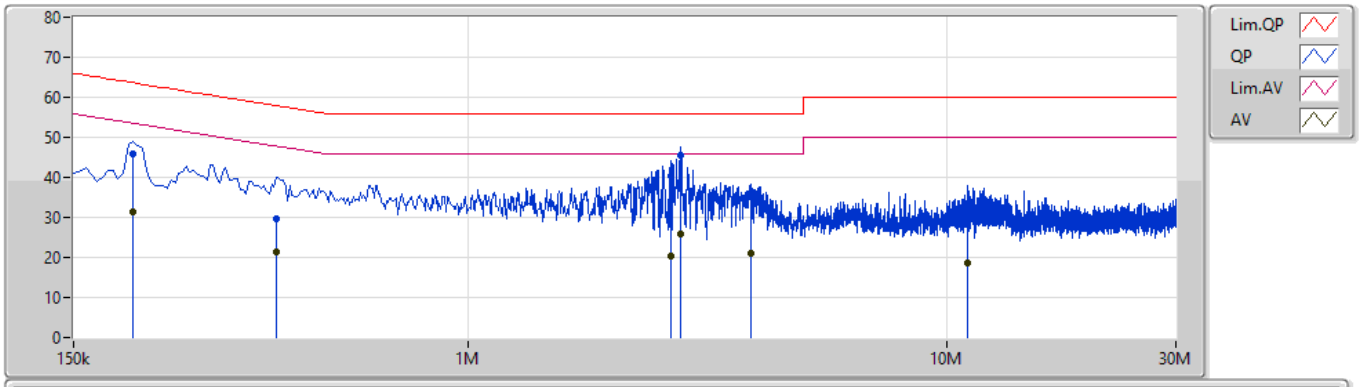
N.C.R. means Non-Calibration required.

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 4	Pass	QP	2.783M	45.41	56.00	-10.59	9.99	Line

Mode 4

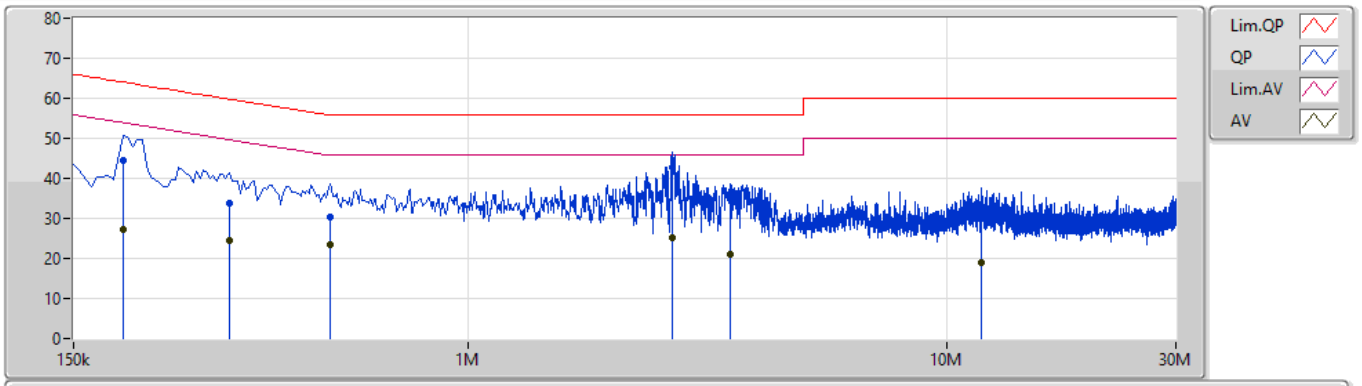
04/08/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	199.5k	45.88	63.63	-17.75	9.86	Line	-	36.02	0.04	0.03	9.79
AV	199.5k	31.44	53.63	-22.19	9.86	Line	-	21.58	0.04	0.03	9.79
QP	397.5k	29.65	57.91	-28.26	9.88	Line	-	19.77	0.04	0.03	9.81
AV	397.5k	21.50	47.91	-26.41	9.88	Line	-	11.62	0.04	0.03	9.81
QP	2.643M	40.41	56.00	-15.59	9.98	Line	-	30.43	0.07	0.09	9.82
AV	2.643M	20.39	46.00	-25.61	9.98	Line	-	10.41	0.07	0.09	9.82
QP	2.783M	45.41	56.00	-10.59	9.99	Line	"Worst"	35.42	0.07	0.10	9.82
AV	2.783M	25.91	46.00	-20.09	9.99	Line	-	15.92	0.07	0.10	9.82
QP	3.899M	35.34	56.00	-20.66	10.03	Line	-	25.31	0.09	0.13	9.81
AV	3.899M	21.03	46.00	-24.97	10.03	Line	-	11.00	0.09	0.13	9.81
QP	11.022M	30.00	60.00	-30.00	10.27	Line	-	19.73	0.18	0.17	9.92
AV	11.022M	18.63	50.00	-31.37	10.27	Line	-	8.36	0.18	0.17	9.92

Mode 4

04/08/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	190.5k	44.39	64.01	-19.62	9.86	Neutral	-	34.53	0.04	0.03	9.79
AV	190.5k	27.14	54.01	-26.87	9.86	Neutral	-	17.28	0.04	0.03	9.79
QP	316.5k	33.69	59.80	-26.11	9.87	Neutral	-	23.82	0.04	0.03	9.80
AV	316.5k	24.54	49.80	-25.26	9.87	Neutral	-	14.67	0.04	0.03	9.80
QP	514.5k	30.21	56.00	-25.79	9.89	Neutral	-	20.32	0.05	0.03	9.81
AV	514.5k	23.51	46.00	-22.49	9.89	Neutral	-	13.62	0.05	0.03	9.81
QP	2.661M	42.60	56.00	-13.40	9.99	Neutral	"Worst"	32.61	0.08	0.09	9.82
AV	2.661M	25.08	46.00	-20.92	9.99	Neutral	-	15.09	0.08	0.09	9.82
QP	3.534M	34.99	56.00	-21.01	10.02	Neutral	-	24.97	0.09	0.12	9.81
AV	3.534M	21.04	46.00	-24.96	10.02	Neutral	-	11.02	0.09	0.12	9.81
QP	11.783M	30.52	60.00	-29.48	10.28	Neutral	-	20.24	0.18	0.18	9.92
AV	11.783M	18.81	50.00	-31.19	10.28	Neutral	-	8.53	0.18	0.18	9.92

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)
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)	717.5k	1.052M	1M05F1D	702.5k	1.044M
BT-LE(2Mbps)	1.145M	2.059M	2M06F1D	1.138M	2.044M

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;

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	702.5k	1.044M
2440MHz	Pass	500k	711.25k	1.049M
2480MHz	Pass	500k	717.5k	1.052M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.14M	2.044M
2440MHz	Pass	500k	1.138M	2.046M
2480MHz	Pass	500k	1.145M	2.059M

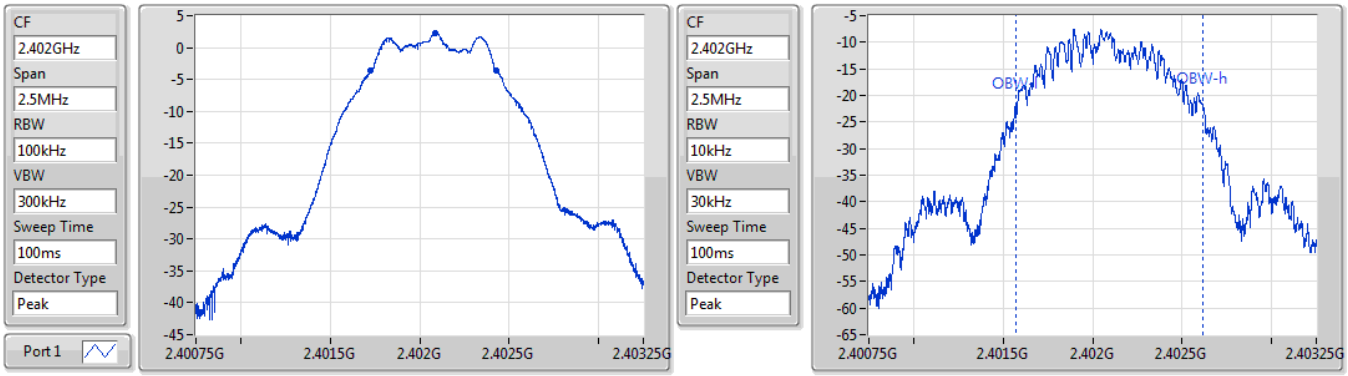
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps) EBW

2402MHz

08/07/2020

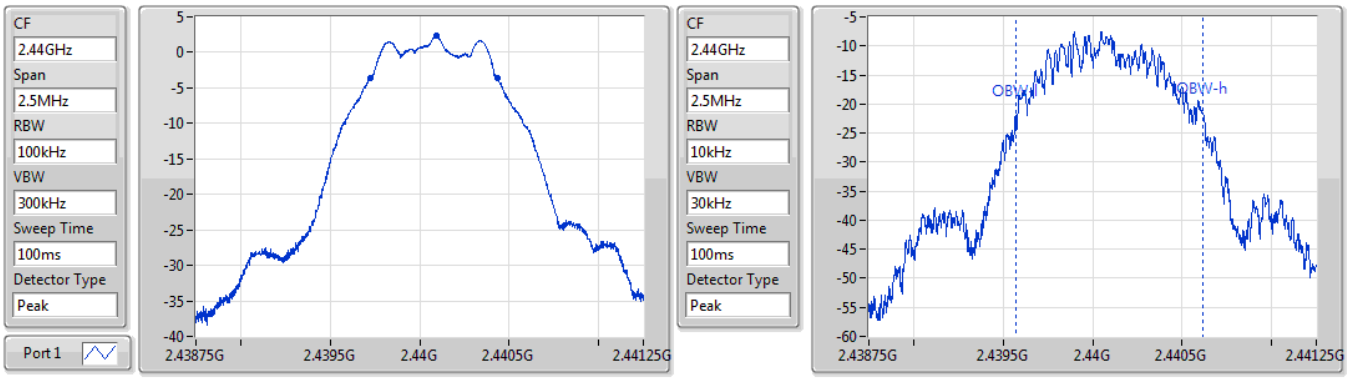


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
702.5k	2.401728G	2.40243G	1.044M	2.40157G	2.402615G	500k	1

BT-LE(1Mbps) EBW

2440MHz

08/07/2020



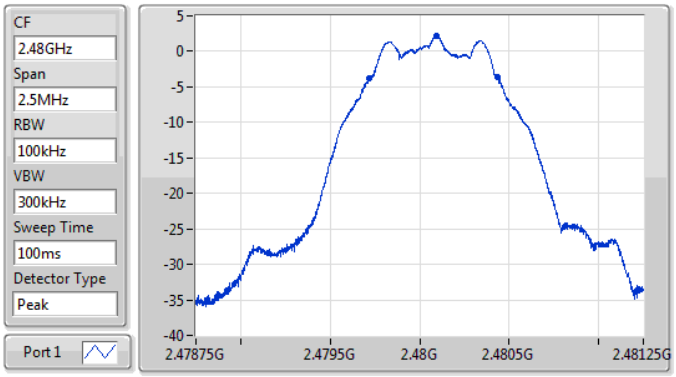
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
711.25k	2.439723G	2.440434G	1.049M	2.439569G	2.440618G	500k	1

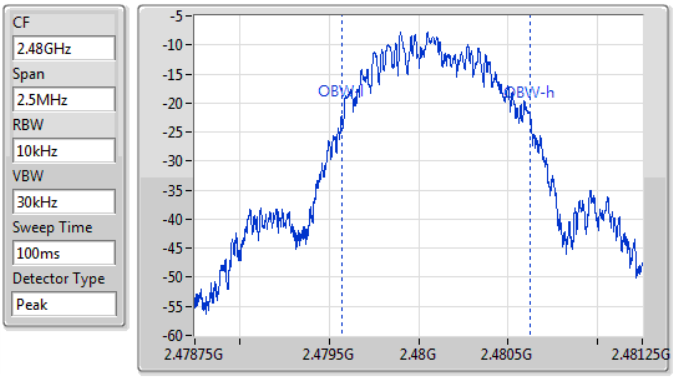
Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps) EBW

2480MHz

08/07/2020



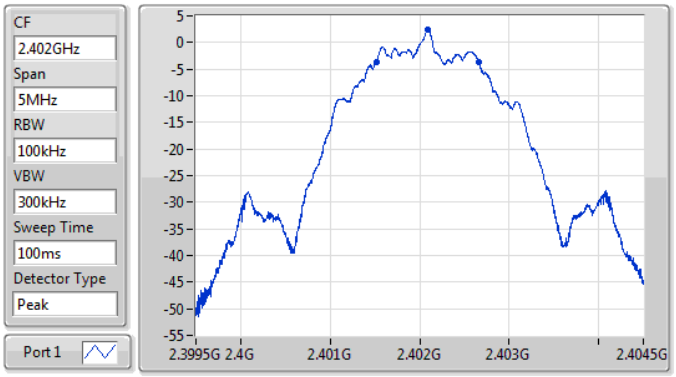


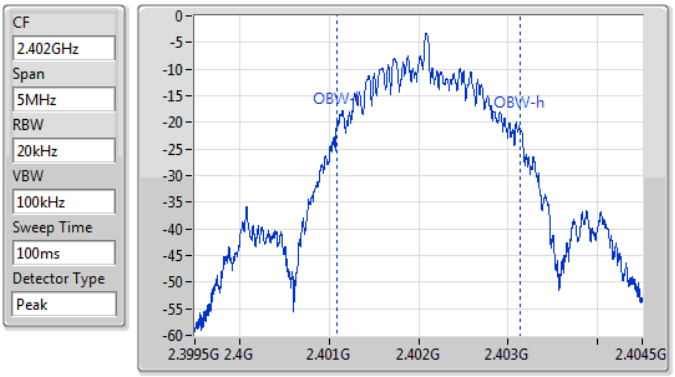
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
717.5k	2.47972G	2.480438G	1.052M	2.47957G	2.480622G	500k	1

BT-LE(2Mbps) EBW

2402MHz

08/07/2020





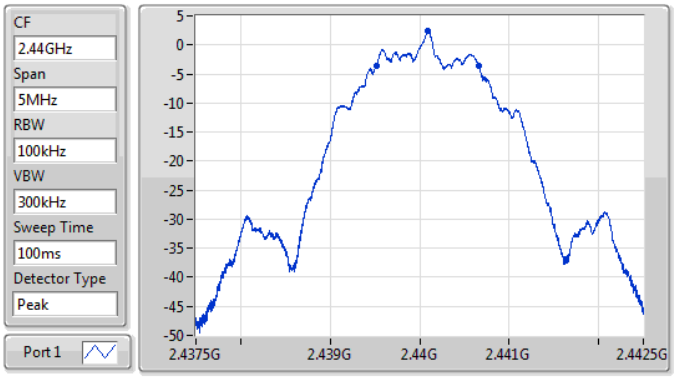
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.14M	2.401523G	2.402663G	2.044M	2.401085G	2.403129G	500k	1

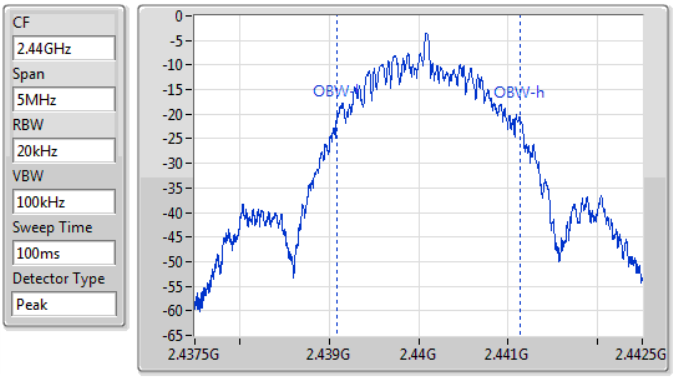
Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps) EBW

2440MHz

08/07/2020



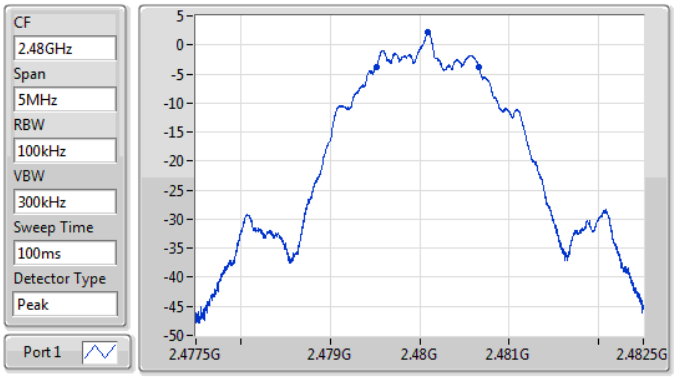


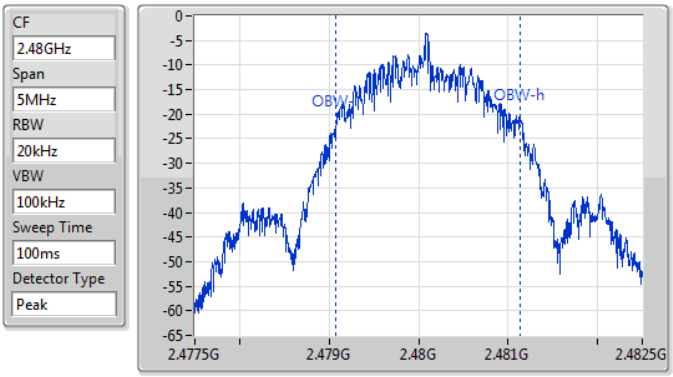
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.138M	2.43952G	2.440658G	2.046M	2.439085G	2.441132G	500k	1

BT-LE(2Mbps) EBW

2480MHz

08/07/2020





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.145M	2.479515G	2.48066G	2.059M	2.47908G	2.481139G	500k	1

Test Mode: EUT 1 + Ant.19 (Beam 9)

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)	717.5k	1.052M	1M05F1D	702.5k	1.044M
BT-LE(2Mbps)	1.145M	2.059M	2M06F1D	1.138M	2.044M

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	702.5k	1.044M
2440MHz	Pass	500k	711.25k	1.049M
2480MHz	Pass	500k	717.5k	1.052M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.14M	2.044M
2440MHz	Pass	500k	1.138M	2.046M
2480MHz	Pass	500k	1.145M	2.059M

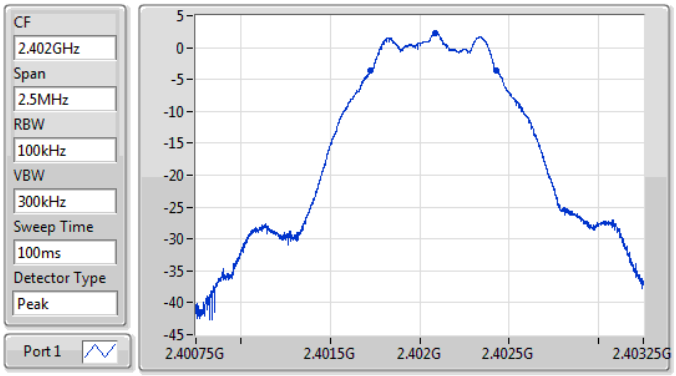
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

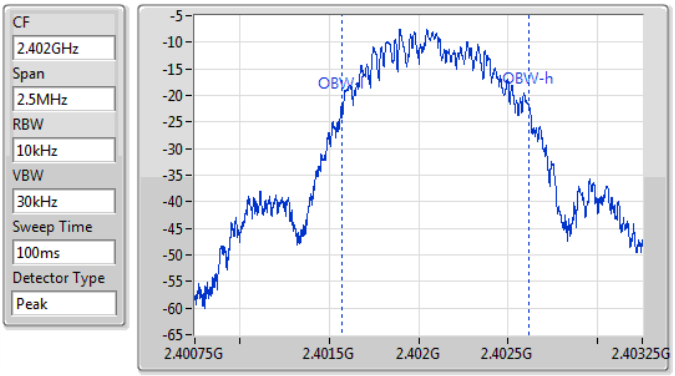
Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps) EBW

2402MHz

08/07/2020



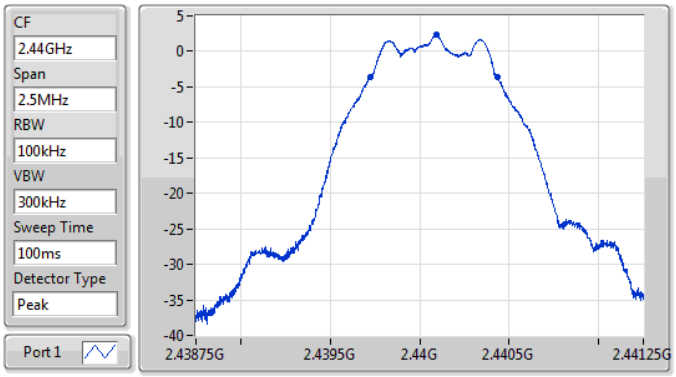


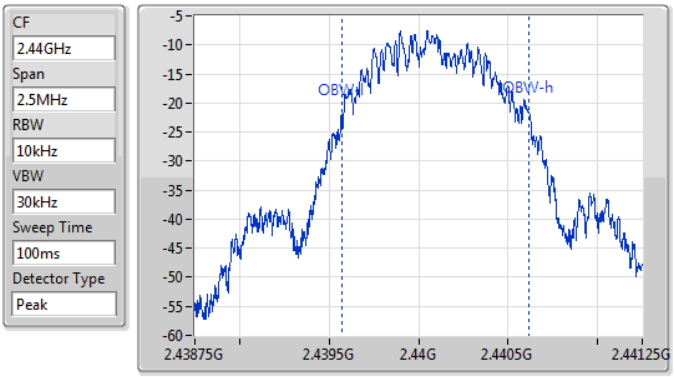
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
702.5k	2.401728G	2.40243G	1.044M	2.40157G	2.402615G	500k	1

BT-LE(1Mbps) EBW

2440MHz

08/07/2020





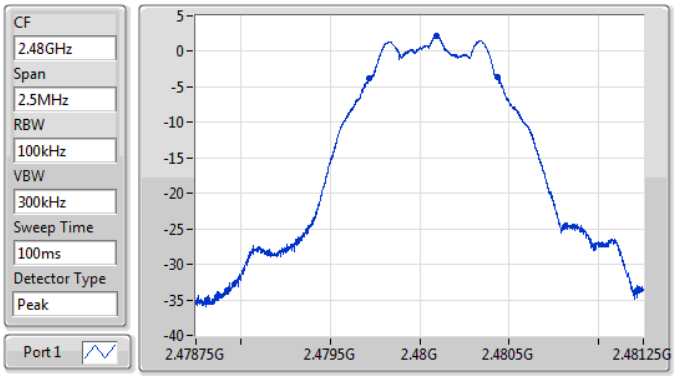
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
711.25k	2.439723G	2.440434G	1.049M	2.439569G	2.440618G	500k	1

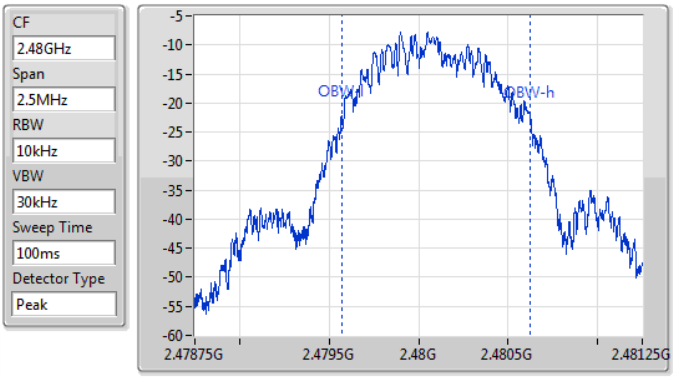
Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps) EBW

2480MHz

08/07/2020



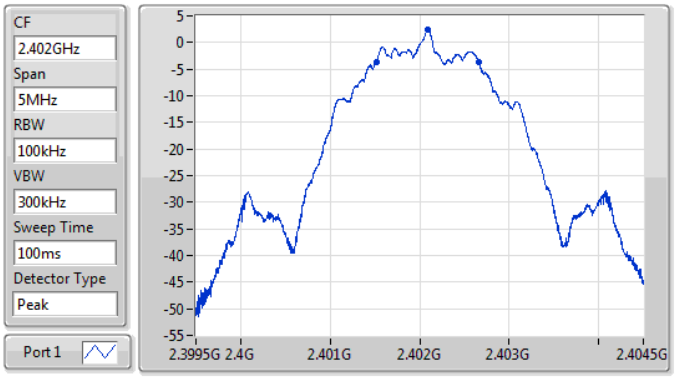


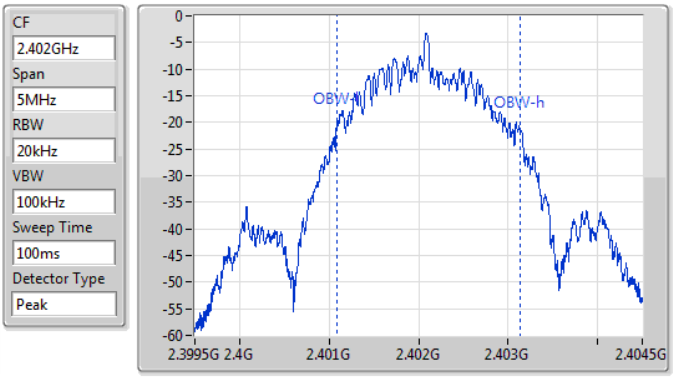
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
717.5k	2.47972G	2.480438G	1.052M	2.47957G	2.480622G	500k	1

BT-LE(2Mbps) EBW

2402MHz

08/07/2020





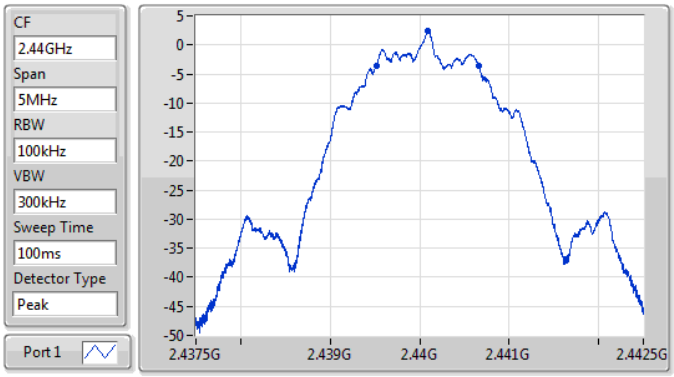
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.14M	2.401523G	2.402663G	2.044M	2.401085G	2.403129G	500k	1

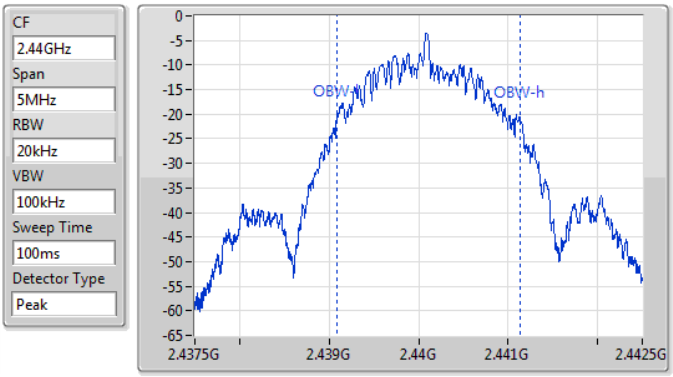
Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps) EBW

2440MHz

08/07/2020



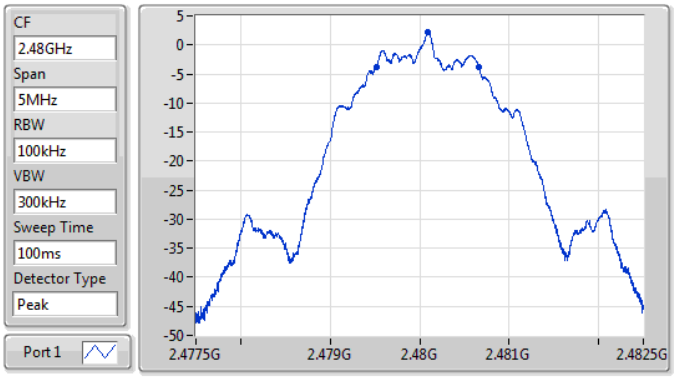


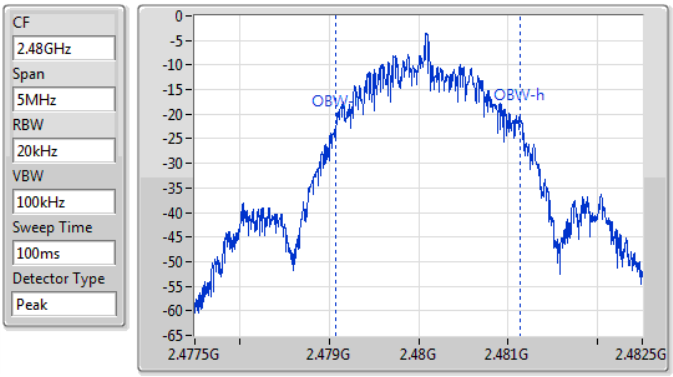
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.138M	2.43952G	2.440658G	2.046M	2.439085G	2.441132G	500k	1

BT-LE(2Mbps) EBW

2480MHz

08/07/2020





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.145M	2.479515G	2.48066G	2.059M	2.47908G	2.481139G	500k	1

Test Mode: EUT 1 + Ant.20 (Omni Mode)
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)	717.5k	1.052M	1M05F1D	702.5k	1.044M
BT-LE(2Mbps)	1.145M	2.059M	2M06F1D	1.138M	2.044M

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;

Test Mode: EUT 1 + Ant.20 (Omni Mode)
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	702.5k	1.044M
2440MHz	Pass	500k	711.25k	1.049M
2480MHz	Pass	500k	717.5k	1.052M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.14M	2.044M
2440MHz	Pass	500k	1.138M	2.046M
2480MHz	Pass	500k	1.145M	2.059M

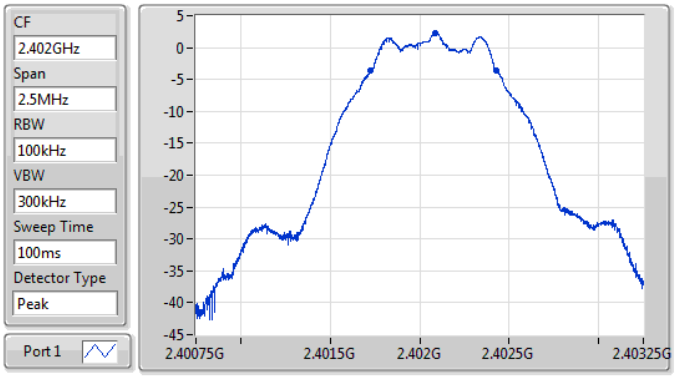
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

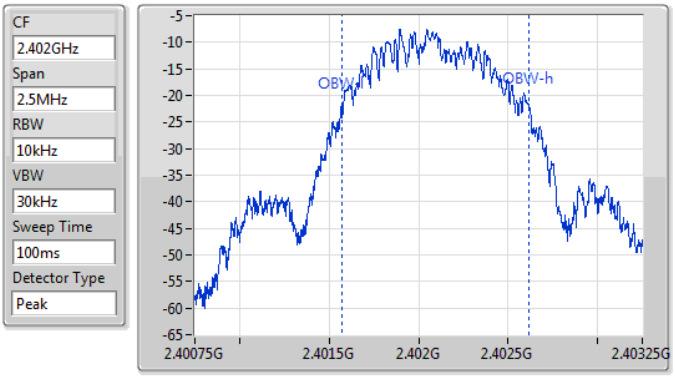
Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps) EBW

2402MHz

08/07/2020



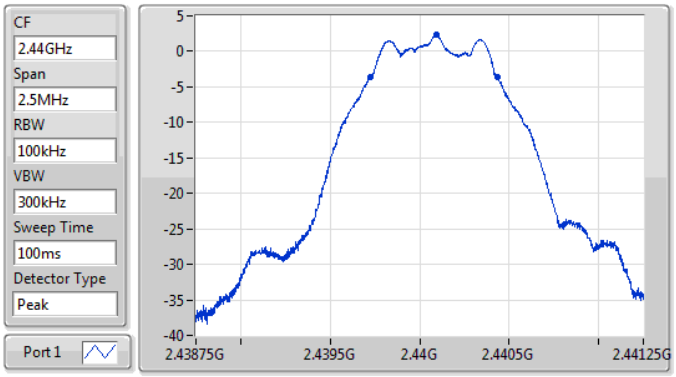


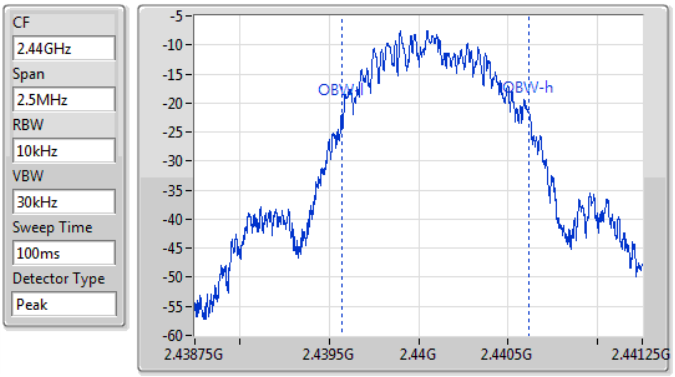
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
702.5k	2.401728G	2.40243G	1.044M	2.40157G	2.402615G	500k	1

BT-LE(1Mbps) EBW

2440MHz

08/07/2020





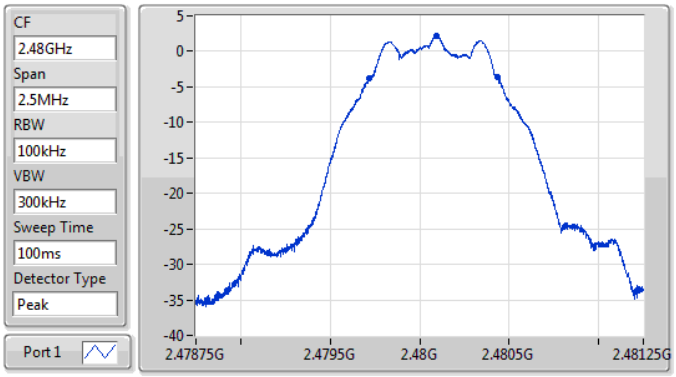
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
711.25k	2.439723G	2.440434G	1.049M	2.439569G	2.440618G	500k	1

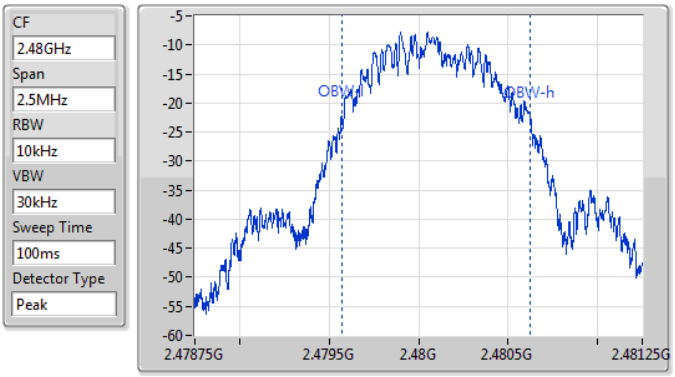
Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps) EBW

2480MHz

08/07/2020



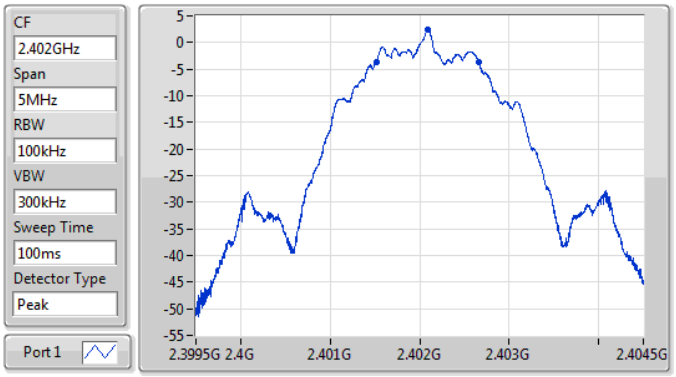


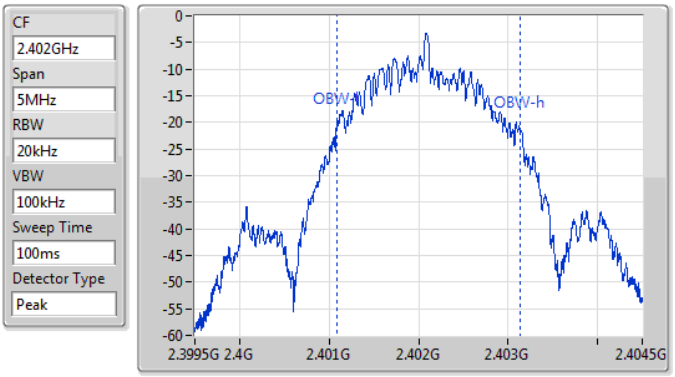
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
717.5k	2.47972G	2.480438G	1.052M	2.47957G	2.480622G	500k	1

BT-LE(2Mbps) EBW

2402MHz

08/07/2020





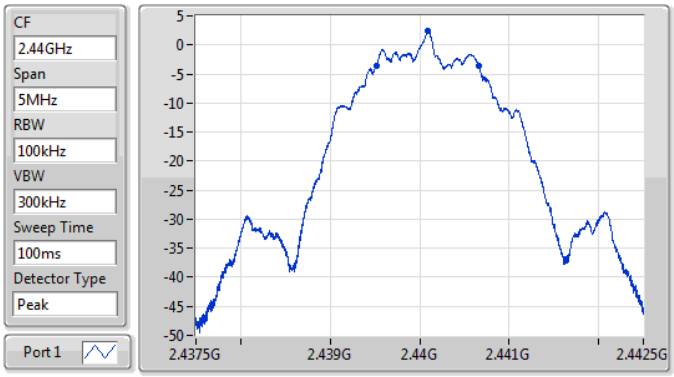
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.14M	2.401523G	2.402663G	2.044M	2.401085G	2.403129G	500k	1

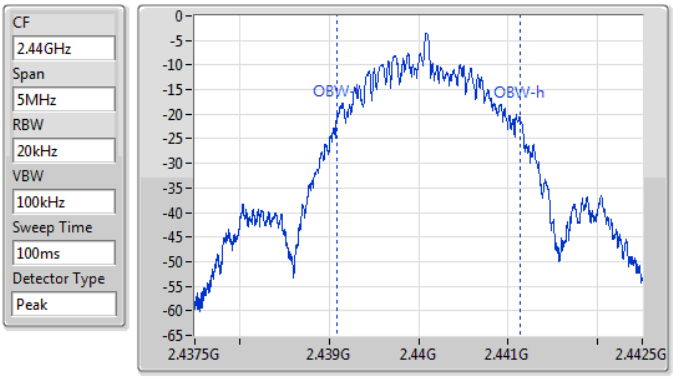
Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps) EBW

2440MHz

08/07/2020



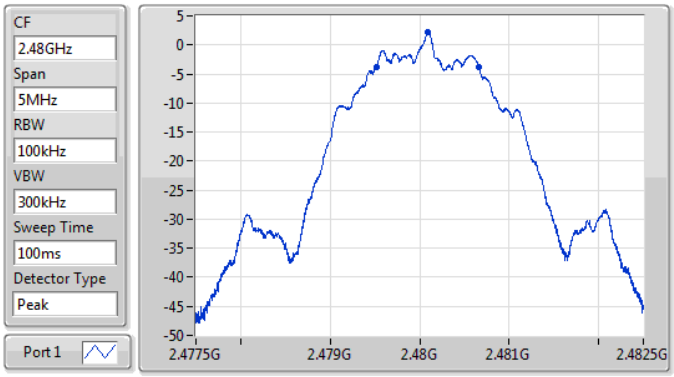


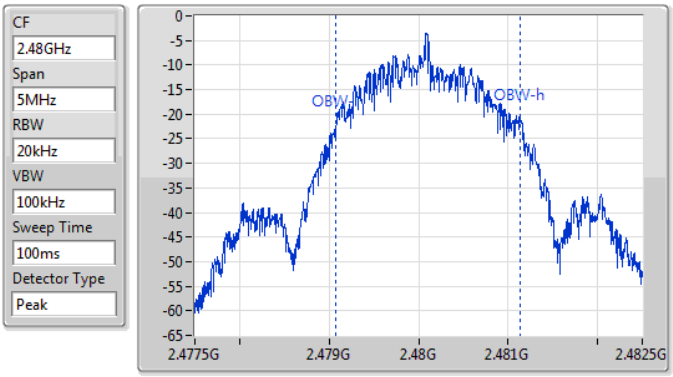
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.138M	2.43952G	2.440658G	2.046M	2.439085G	2.441132G	500k	1

BT-LE(2Mbps) EBW

2480MHz

08/07/2020





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.145M	2.479515G	2.48066G	2.059M	2.47908G	2.481139G	500k	1

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)
Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	2.24	0.00167
BT-LE(2Mbps)	2.25	0.00168

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)
Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	5.10	2.24	30.00
2440MHz	Pass	5.10	2.21	30.00
2480MHz	Pass	5.10	2.05	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	5.10	2.25	30.00
2440MHz	Pass	5.10	2.21	30.00
2480MHz	Pass	5.10	2.03	30.00

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

Test Mode: EUT 1 + Ant.19 (Beam 9)
Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	2.24	0.00167
BT-LE(2Mbps)	2.25	0.00168

Test Mode: EUT 1 + Ant.19 (Beam 9)
Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	4.30	2.24	30.00
2440MHz	Pass	4.30	2.21	30.00
2480MHz	Pass	4.30	2.05	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	4.30	2.25	30.00
2440MHz	Pass	4.30	2.21	30.00
2480MHz	Pass	4.30	2.03	30.00

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

Test Mode: EUT 1 + Ant.20 (Omni Mode)
Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	2.24	0.00167
BT-LE(2Mbps)	2.25	0.00168

Test Mode: EUT 1 + Ant.20 (Omni Mode)
Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	1.40	2.24	30.00
2440MHz	Pass	1.40	2.21	30.00
2480MHz	Pass	1.40	2.05	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	1.40	2.25	30.00
2440MHz	Pass	1.40	2.21	30.00
2480MHz	Pass	1.40	2.03	30.00

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

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)
Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-13.31
BT-LE(2Mbps)	-15.68

RBW=3 kHz.

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)
Result

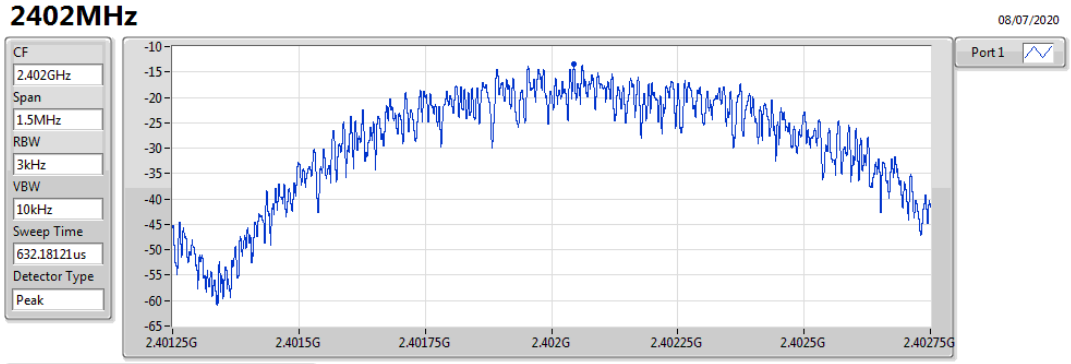
Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	5.10	-13.39	8.00
2440MHz	Pass	5.10	-13.64	8.00
2480MHz	Pass	5.10	-13.31	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	5.10	-15.68	8.00
2440MHz	Pass	5.10	-16.28	8.00
2480MHz	Pass	5.10	-16.38	8.00

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

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps) **PSD**

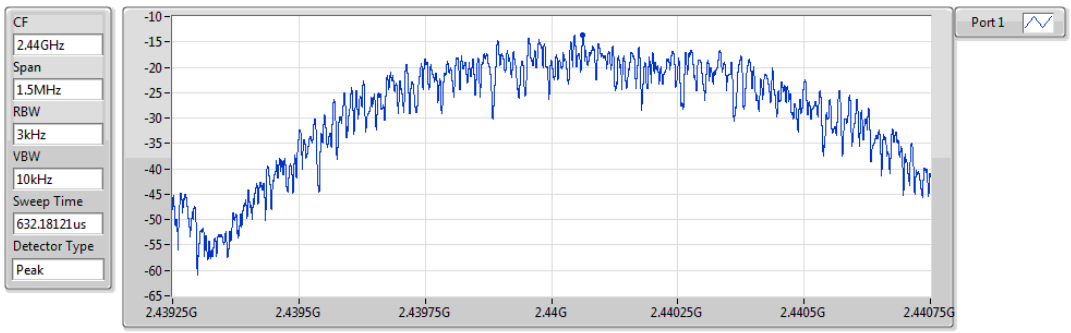
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.39	-13.39	-13.39

BT-LE(1Mbps) **PSD**

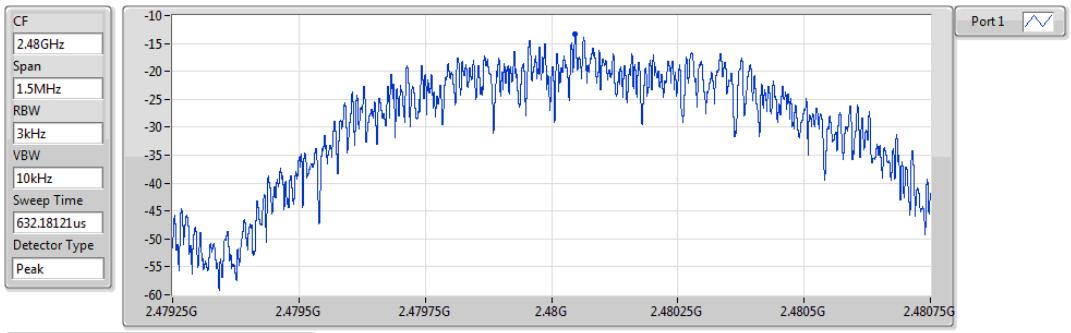
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.64	-13.64	-13.64

BT-LE(1Mbps) **PSD**

2480MHz

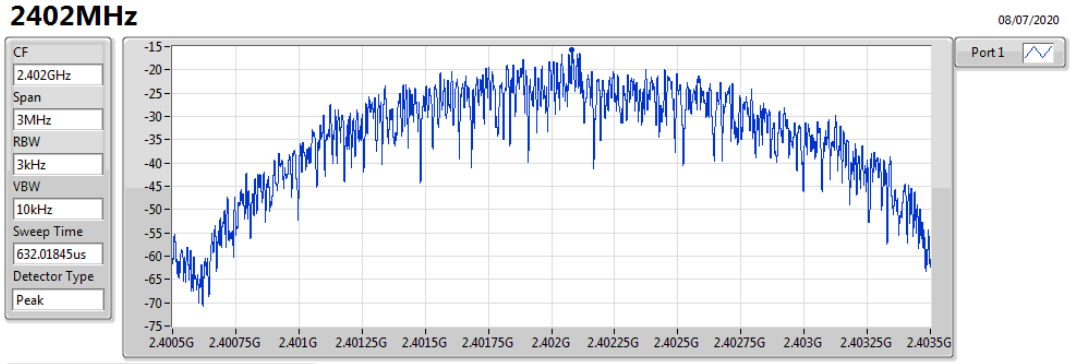


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.31	-13.31	-13.31

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps) **PSD**

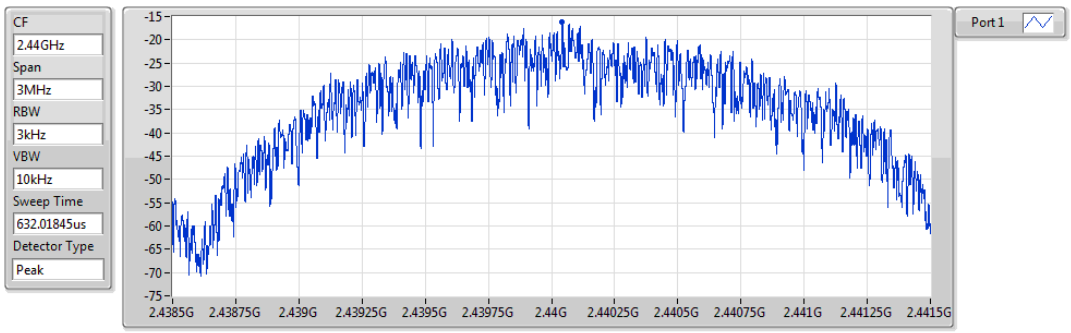
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.68	-15.68	-15.68

BT-LE(2Mbps) **PSD**

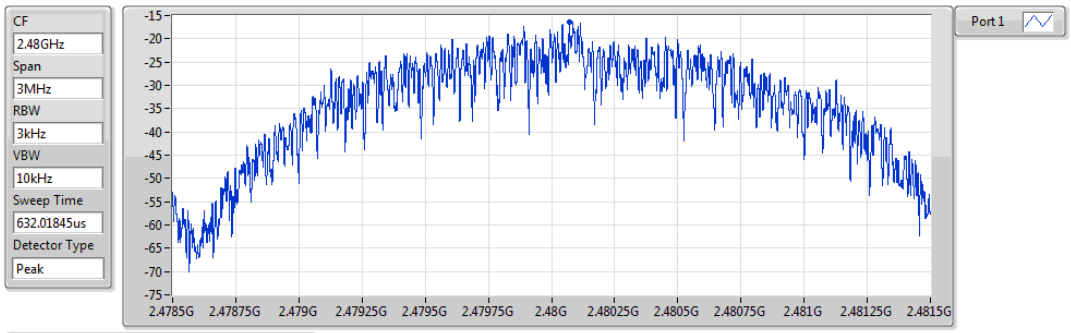
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-16.28	-16.28	-16.28

BT-LE(2Mbps) **PSD**

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-16.38	-16.38	-16.38

Test Mode: EUT 1 + Ant.19 (Beam 9)
Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-13.31
BT-LE(2Mbps)	-15.68

RBW=3 kHz.

Test Mode: EUT 1 + Ant.19 (Beam 9)
Result

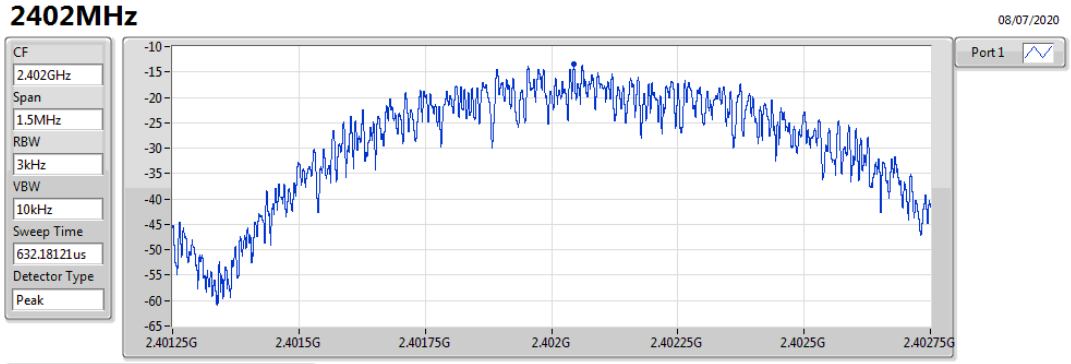
Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	4.30	-13.39	8.00
2440MHz	Pass	4.30	-13.64	8.00
2480MHz	Pass	4.30	-13.31	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	4.30	-15.68	8.00
2440MHz	Pass	4.30	-16.28	8.00
2480MHz	Pass	4.30	-16.38	8.00

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

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps) **PSD**

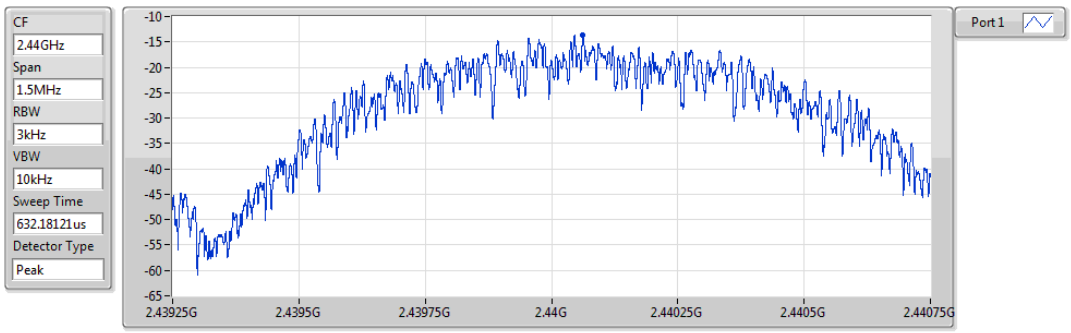
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.39	-13.39	-13.39

BT-LE(1Mbps) **PSD**

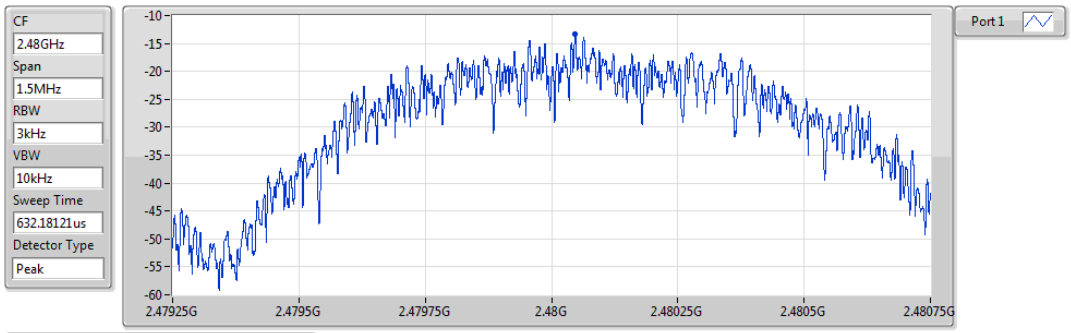
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.64	-13.64	-13.64

BT-LE(1Mbps) **PSD**

2480MHz

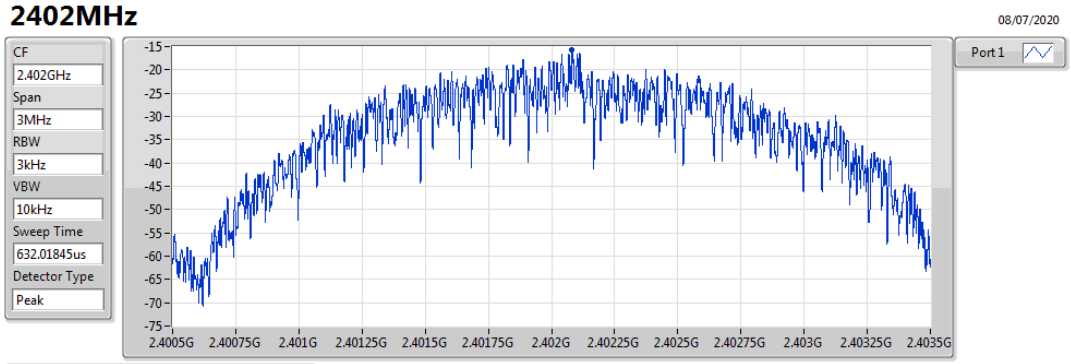


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.31	-13.31	-13.31

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps) **PSD**

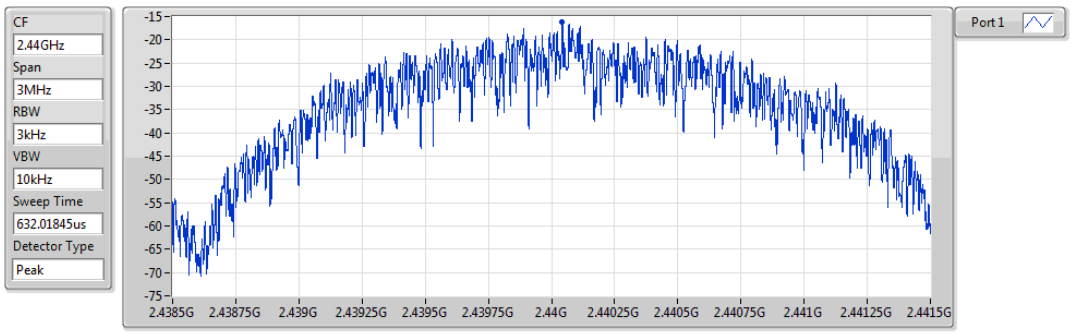
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.68	-15.68	-15.68

BT-LE(2Mbps) **PSD**

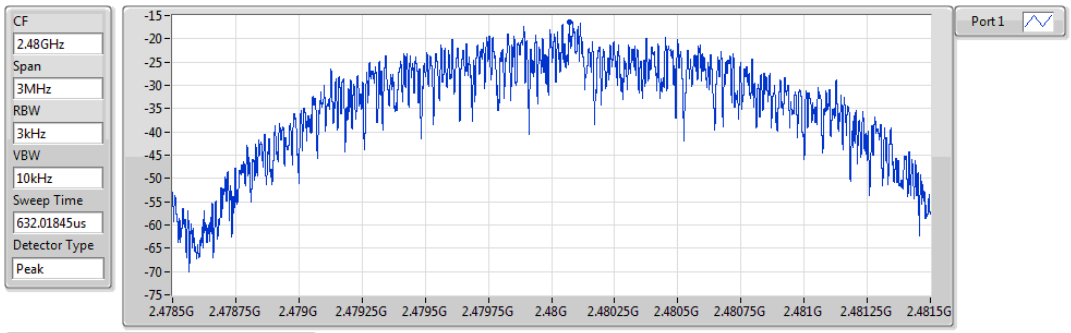
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-16.28	-16.28	-16.28

BT-LE(2Mbps) **PSD**

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-16.38	-16.38	-16.38

Test Mode: EUT 1 + Ant.20 (Omni Mode)
Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-13.31
BT-LE(2Mbps)	-15.68

RBW=3 kHz.

Test Mode: EUT 1 + Ant.20 (Omni Mode)
Result

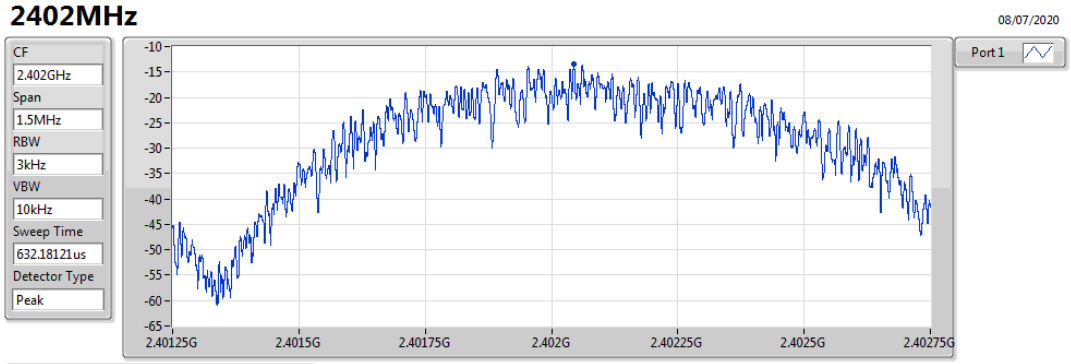
Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	1.40	-13.39	8.00
2440MHz	Pass	1.40	-13.64	8.00
2480MHz	Pass	1.40	-13.31	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	1.40	-15.68	8.00
2440MHz	Pass	1.40	-16.28	8.00
2480MHz	Pass	1.40	-16.38	8.00

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

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps) **PSD**

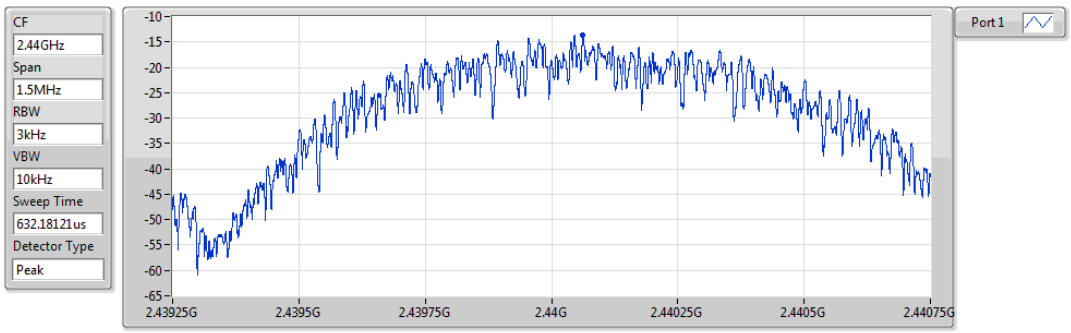
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.39	-13.39	-13.39

BT-LE(1Mbps) **PSD**

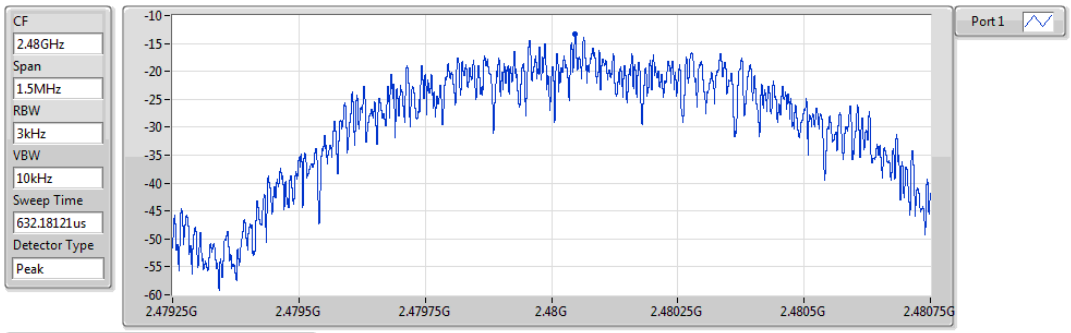
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.64	-13.64	-13.64

BT-LE(1Mbps) **PSD**

2480MHz

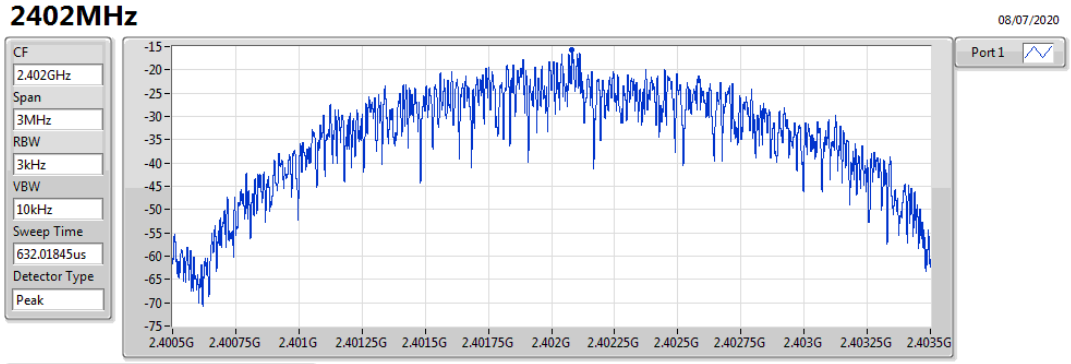


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.31	-13.31	-13.31

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps) **PSD**

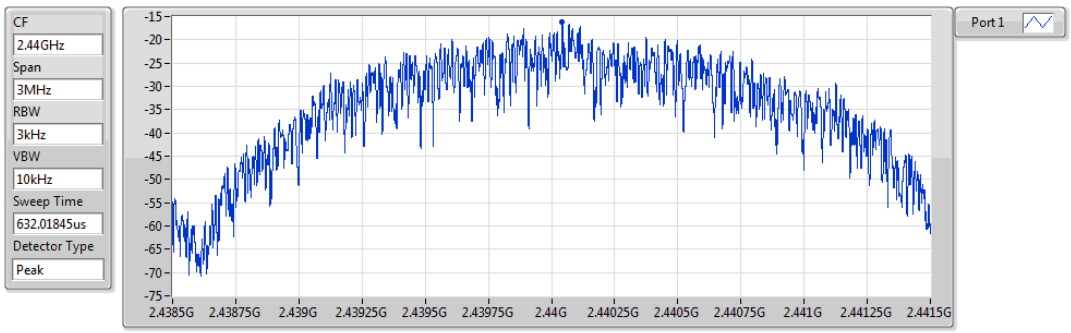
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.68	-15.68	-15.68

BT-LE(2Mbps) **PSD**

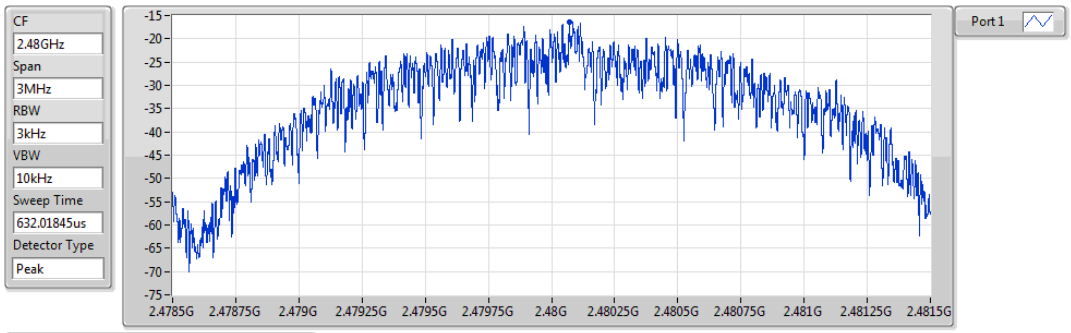
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-16.28	-16.28	-16.28

BT-LE(2Mbps) **PSD**

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-16.38	-16.38	-16.38

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)
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	2.40205G	2.10	-27.90	159.84M	-45.81	2.39996G	-42.79	2.4G	-43.30	2.49094G	-50.46	24.65974G	-43.54	1
BT-LE(2Mbps)	Pass	2.40205G	2.34	-27.66	159.84M	-46.51	2.4G	-32.39	2.4G	-33.15	2.48704G	-51.35	24.56975G	-43.19	1

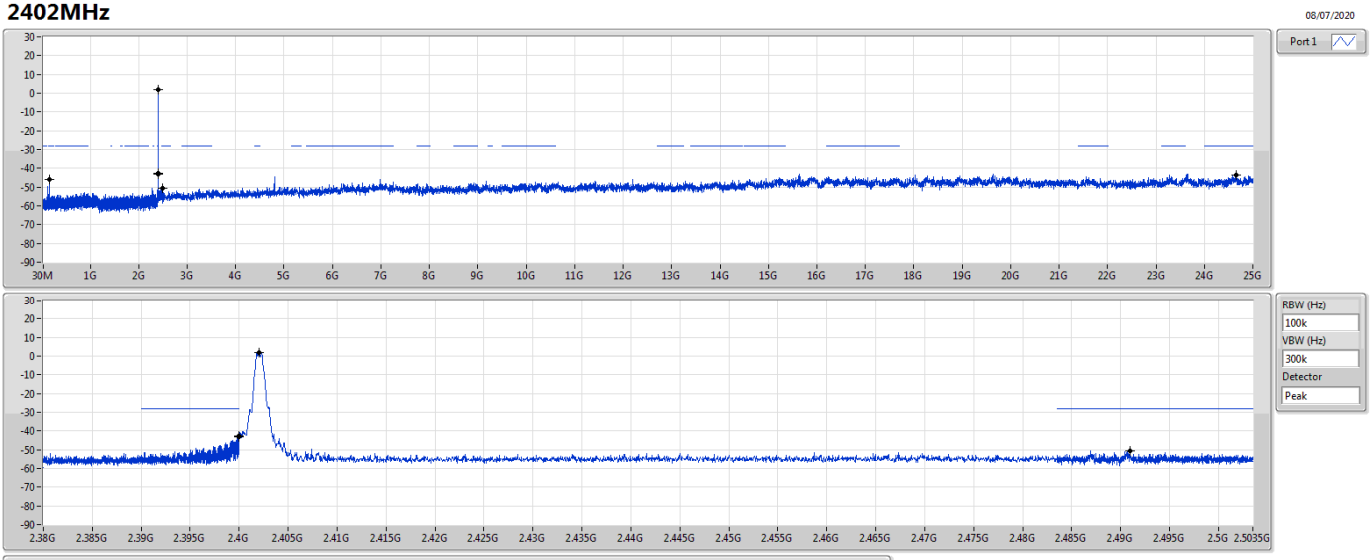
Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)
Result

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	2.40205G	2.10	-27.90	159.84M	-45.81	2.39996G	-42.79	2.4G	-43.30	2.49094G	-50.46	24.65974G	-43.54	1
2440MHz	Pass	2.40205G	2.10	-27.90	159.84M	-46.11	2.39088G	-52.32	2.4835G	-55.09	2.49508G	-51.80	24.60069G	-43.40	1
2480MHz	Pass	2.40205G	2.10	-27.90	159.84M	-47.80	2.3917G	-50.61	2.4835G	-53.18	2.48387G	-49.84	24.61756G	-42.67	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40205G	2.34	-27.66	159.84M	-46.51	2.4G	-32.39	2.4G	-33.15	2.48704G	-51.35	24.56975G	-43.19	1
2440MHz	Pass	2.40205G	2.34	-27.66	159.84M	-46.73	2.39308G	-52.50	2.4G	-55.33	2.48513G	-51.41	16.52163G	-43.05	1
2480MHz	Pass	2.40205G	2.34	-27.66	159.84M	-45.73	2.39149G	-51.09	2.4835G	-54.33	2.49323G	-49.66	23.30714G	-42.52	1

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps) **CSE NdB**

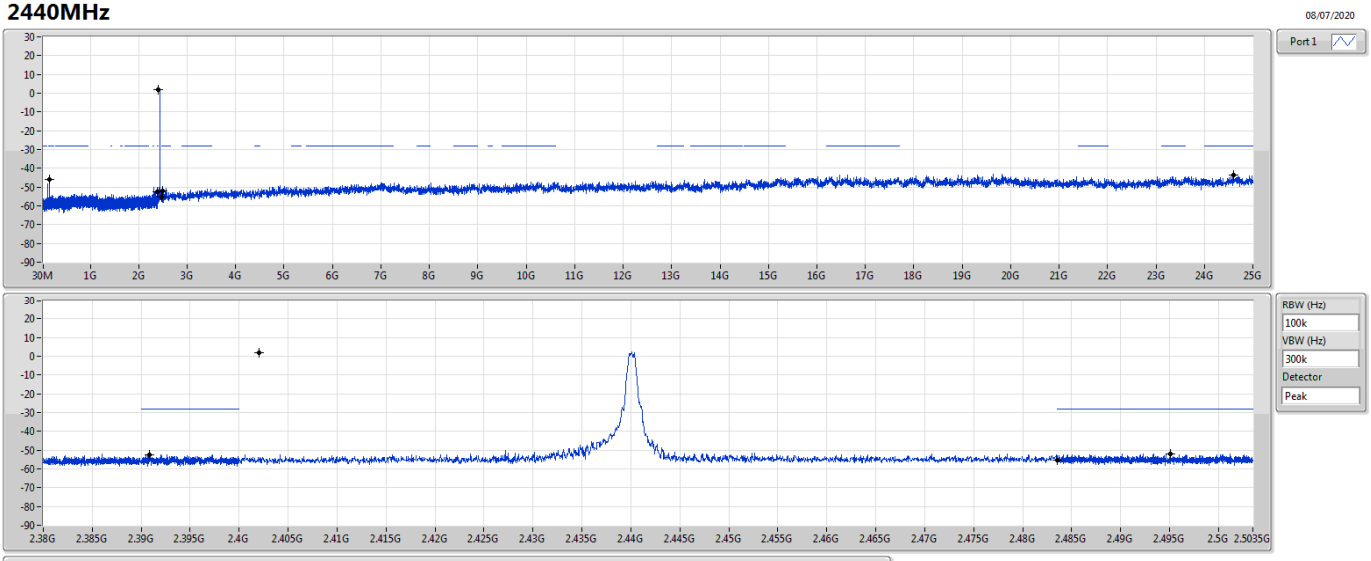
2402MHz



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
2.40205G	2.10	-27.90	159.84M	-45.81	2.39996G	-42.79	2.4G	-43.30	2.49094G	-50.46	24.65974G	-43.54	1

BT-LE(1Mbps) **CSE NdB**

2440MHz

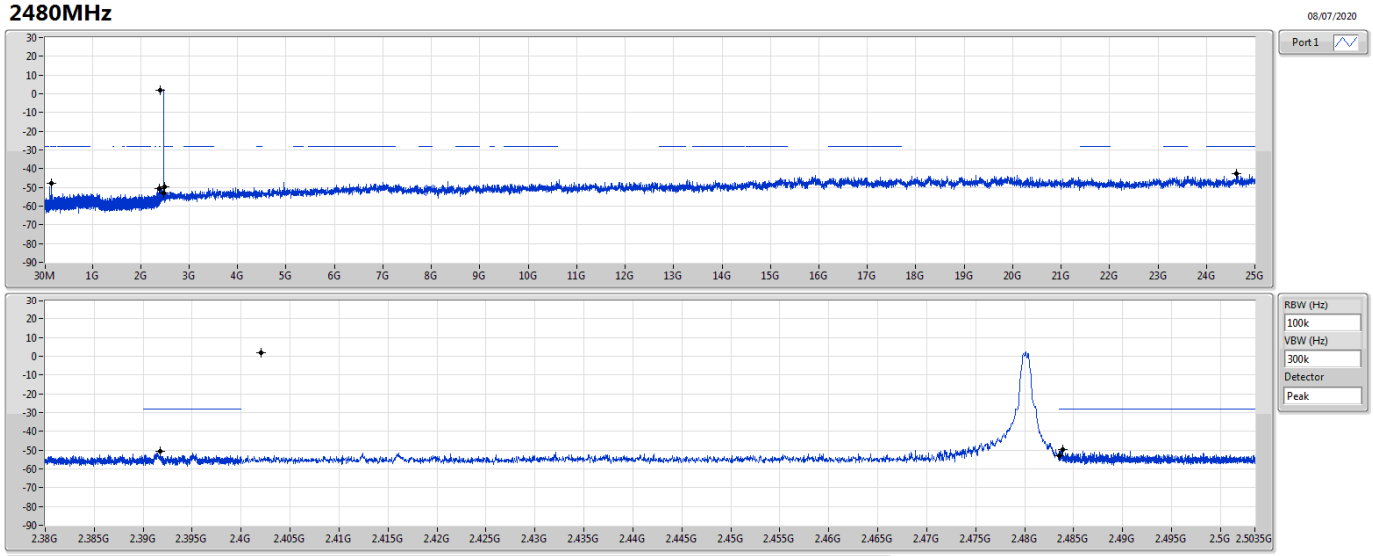


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40205G	2.10	-27.90	159.84M	-46.11	2.39088G	-52.32	2.4835G	-55.09	2.49508G	-51.80	24.60069G	-43.40	1

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps) **CSE NdB**

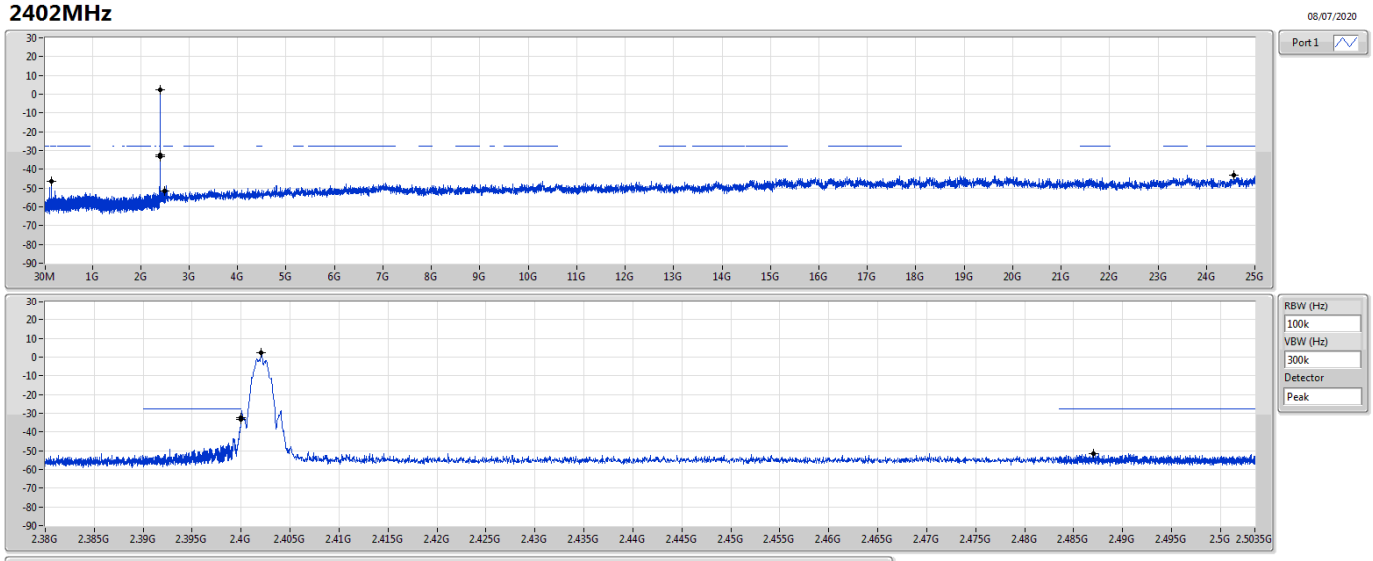
2480MHz



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
2.40205G	2.10	-27.90	159.84M	-47.80	2.3917G	-50.61	2.4835G	-53.18	2.48387G	-49.84	24.61756G	-42.67	1

BT-LE(2Mbps) **CSE NdB**

2402MHz

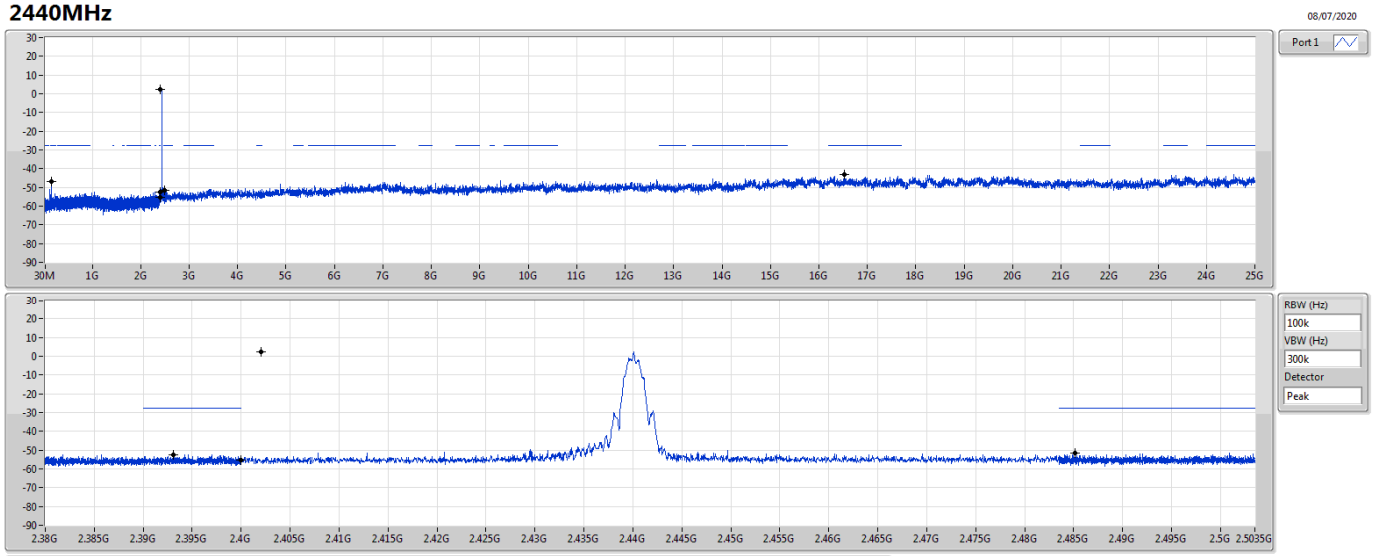


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40205G	2.34	-27.66	159.84M	-46.51	2.4G	-32.39	2.4G	-33.15	2.48704G	-51.35	24.56975G	-43.19	1

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps) **CSE NdB**

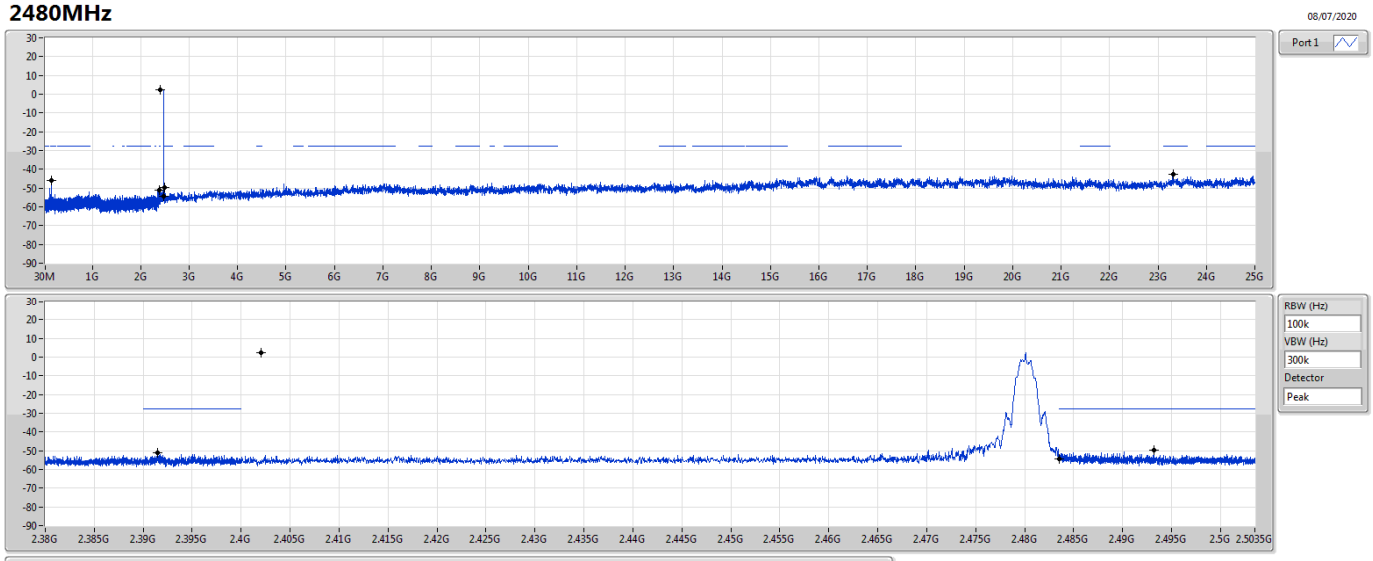
2440MHz



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
2.40205G	2.34	-27.66	159.84M	-46.73	2.39308G	-52.50	2.4G	-55.33	2.48513G	-51.41	16.52163G	-43.05	1

BT-LE(2Mbps) **CSE NdB**

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
2.40205G	2.34	-27.66	159.84M	-45.73	2.39149G	-51.09	2.4835G	-54.33	2.49323G	-49.66	23.30714G	-42.52	1

Test Mode: EUT 1 + Ant.19 (Beam 9)

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	2.40205G	2.10	-27.90	159.84M	-45.81	2.39996G	-42.79	2.4G	-43.30	2.49094G	-50.46	24.65974G	-43.54	1
BT-LE(2Mbps)	Pass	2.40205G	2.34	-27.66	159.84M	-46.51	2.4G	-32.39	2.4G	-33.15	2.48704G	-51.35	24.56975G	-43.19	1

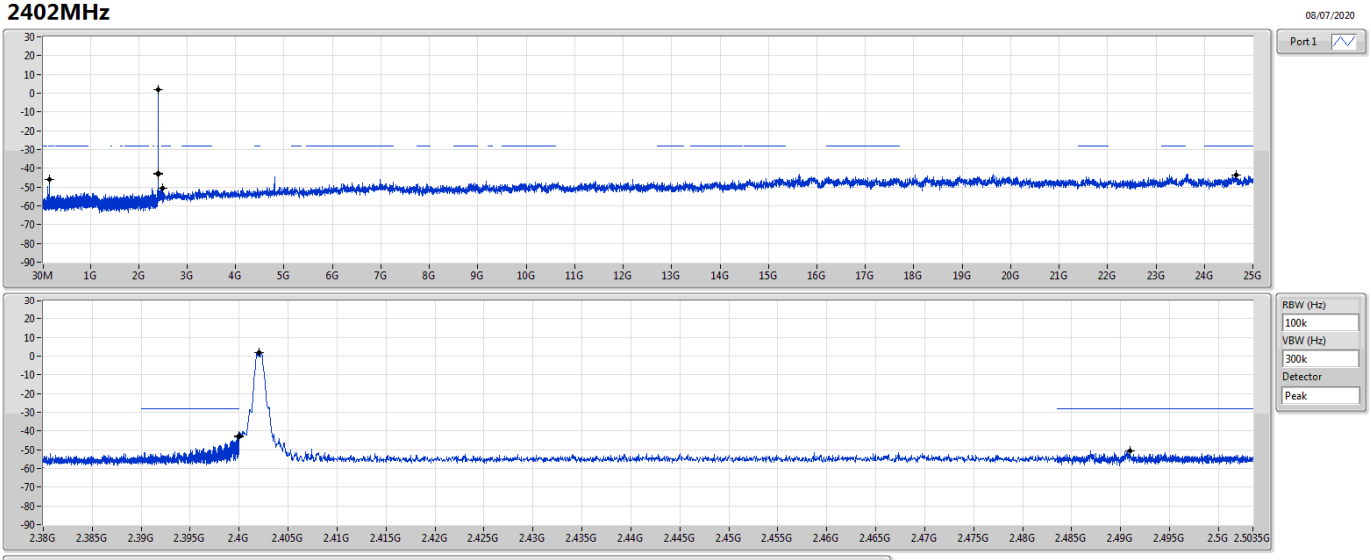
Result

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	2.40205G	2.10	-27.90	159.84M	-45.81	2.39996G	-42.79	2.4G	-43.30	2.49094G	-50.46	24.65974G	-43.54	1
2440MHz	Pass	2.40205G	2.10	-27.90	159.84M	-46.11	2.39088G	-52.32	2.4835G	-55.09	2.49508G	-51.80	24.60069G	-43.40	1
2480MHz	Pass	2.40205G	2.10	-27.90	159.84M	-47.80	2.3917G	-50.61	2.4835G	-53.18	2.48387G	-49.84	24.61756G	-42.67	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40205G	2.34	-27.66	159.84M	-46.51	2.4G	-32.39	2.4G	-33.15	2.48704G	-51.35	24.56975G	-43.19	1
2440MHz	Pass	2.40205G	2.34	-27.66	159.84M	-46.73	2.39308G	-52.50	2.4G	-55.33	2.48513G	-51.41	16.52163G	-43.05	1
2480MHz	Pass	2.40205G	2.34	-27.66	159.84M	-45.73	2.39149G	-51.09	2.4835G	-54.33	2.49323G	-49.66	23.30714G	-42.52	1

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps) **CSE NdB**

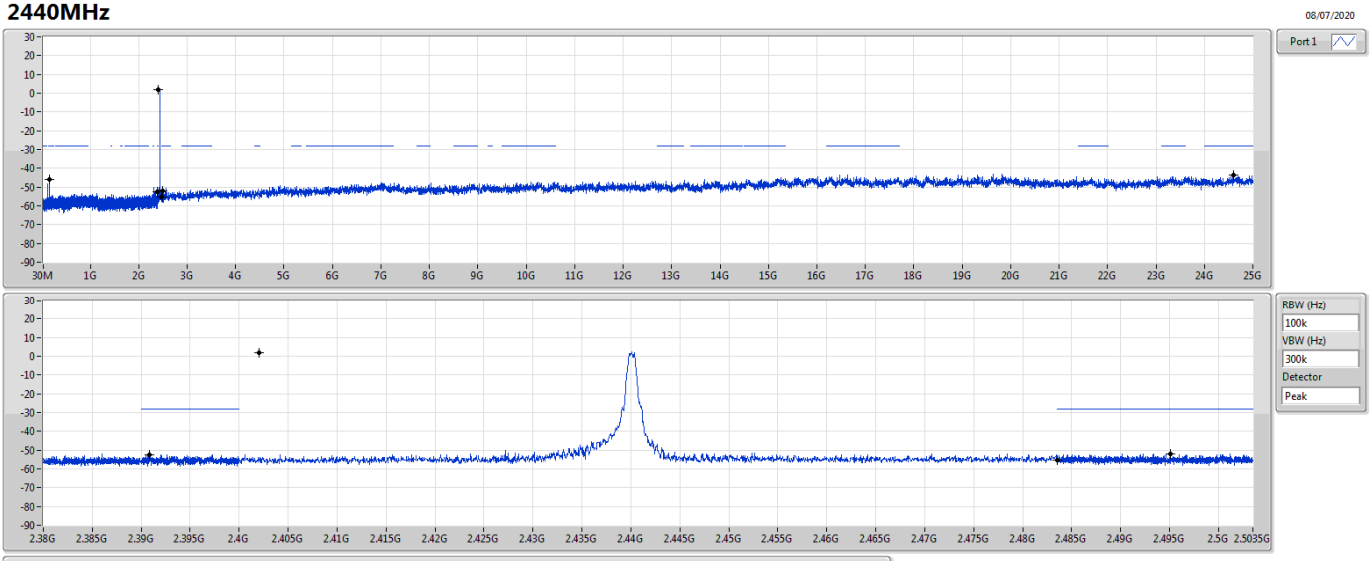
2402MHz



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
2.40205G	2.10	-27.90	159.84M	-45.81	2.39996G	-42.79	2.4G	-43.30	2.49094G	-50.46	24.65974G	-43.54	1

BT-LE(1Mbps) **CSE NdB**

2440MHz

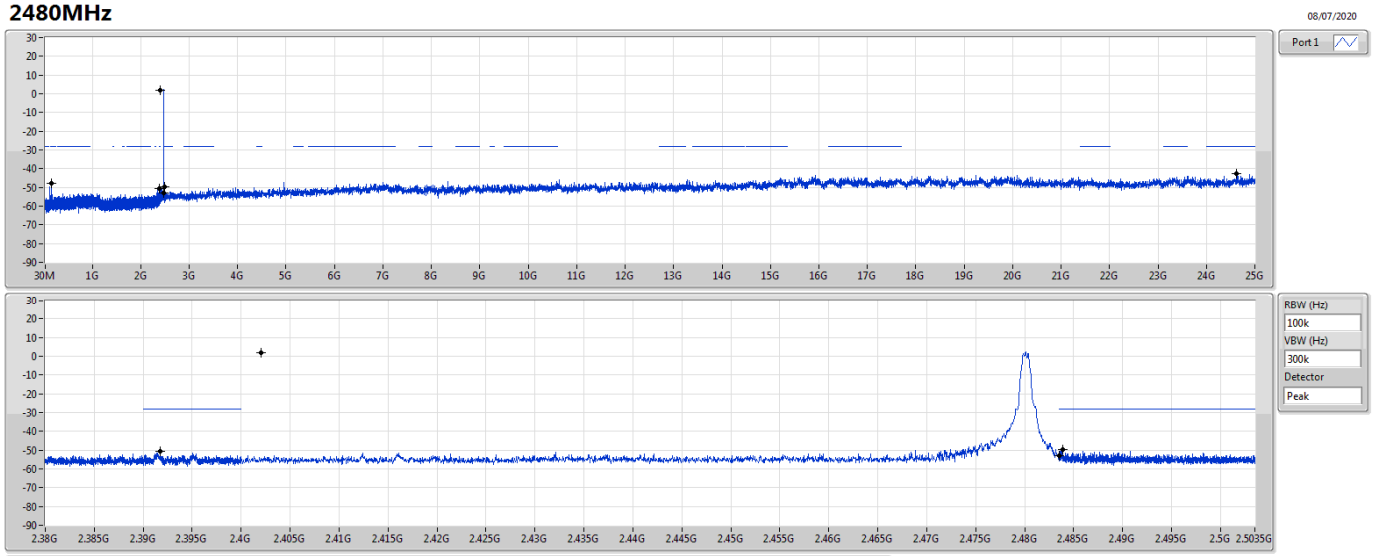


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40205G	2.10	-27.90	159.84M	-46.11	2.39088G	-52.32	2.4835G	-55.09	2.49508G	-51.80	24.60069G	-43.40	1

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps) **CSE NdB**

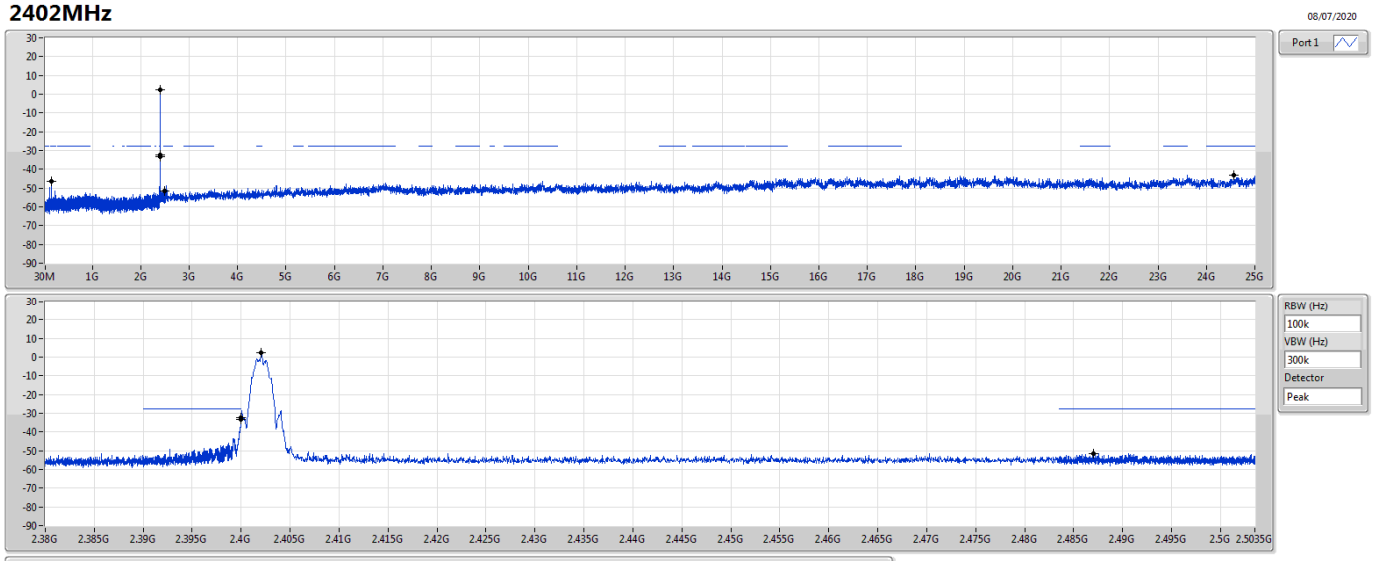
2480MHz



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
2.40205G	2.10	-27.90	159.84M	-47.80	2.3917G	-50.61	2.4835G	-53.18	2.48387G	-49.84	24.61756G	-42.67	1

BT-LE(2Mbps) **CSE NdB**

2402MHz

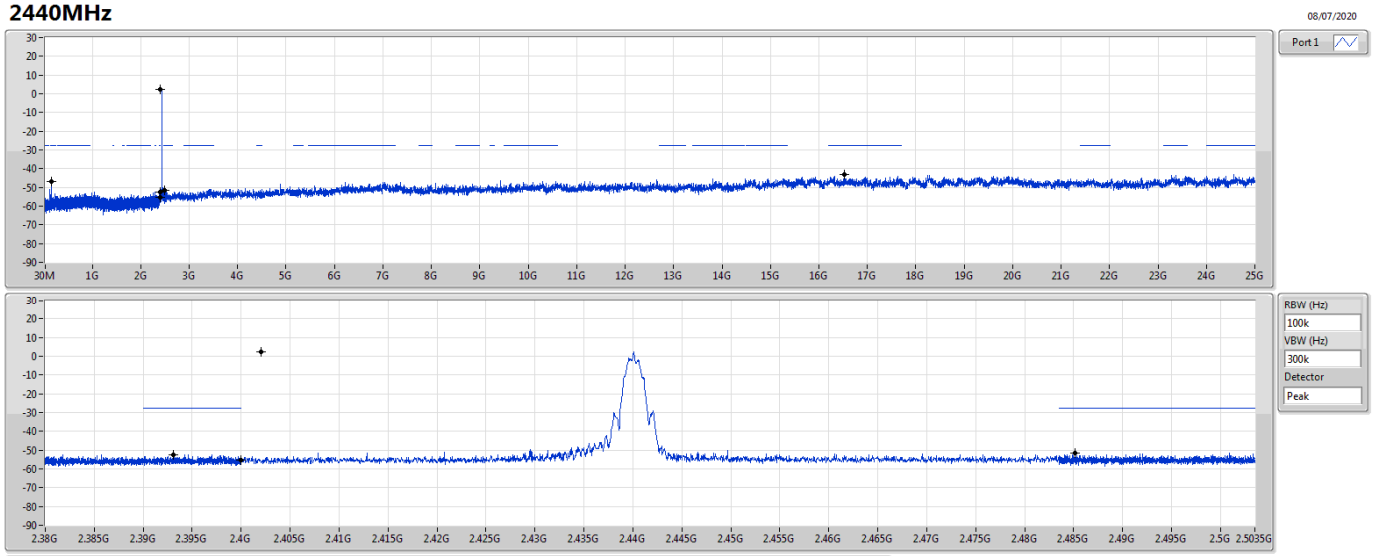


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40205G	2.34	-27.66	159.84M	-46.51	2.4G	-32.39	2.4G	-33.15	2.48704G	-51.35	24.56975G	-43.19	1

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps) **CSE NdB**

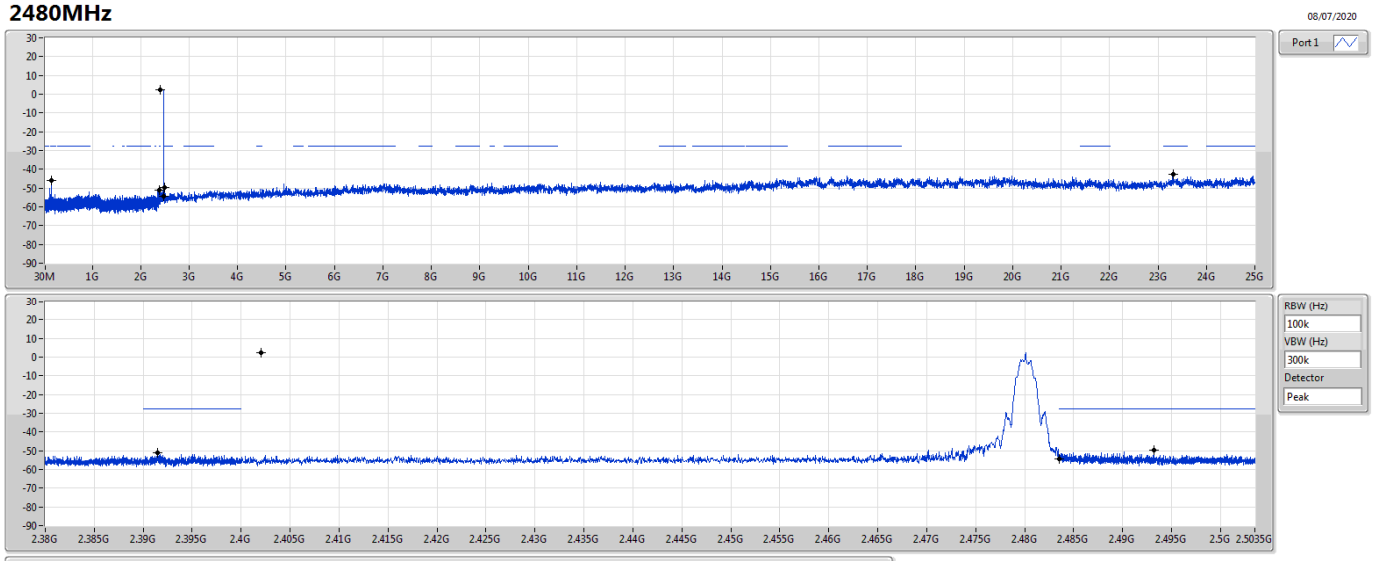
2440MHz



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
2.40205G	2.34	-27.66	159.84M	-46.73	2.39308G	-52.50	2.4G	-55.33	2.48513G	-51.41	16.52163G	-43.05	1

BT-LE(2Mbps) **CSE NdB**

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
2.40205G	2.34	-27.66	159.84M	-45.73	2.39149G	-51.09	2.4835G	-54.33	2.49323G	-49.66	23.30714G	-42.52	1

Test Mode: EUT 1 + Ant.20 (Omni Mode)
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	2.40205G	2.10	-27.90	159.84M	-45.81	2.39996G	-42.79	2.4G	-43.30	2.49094G	-50.46	24.65974G	-43.54	1
BT-LE(2Mbps)	Pass	2.40205G	2.34	-27.66	159.84M	-46.51	2.4G	-32.39	2.4G	-33.15	2.48704G	-51.35	24.56975G	-43.19	1

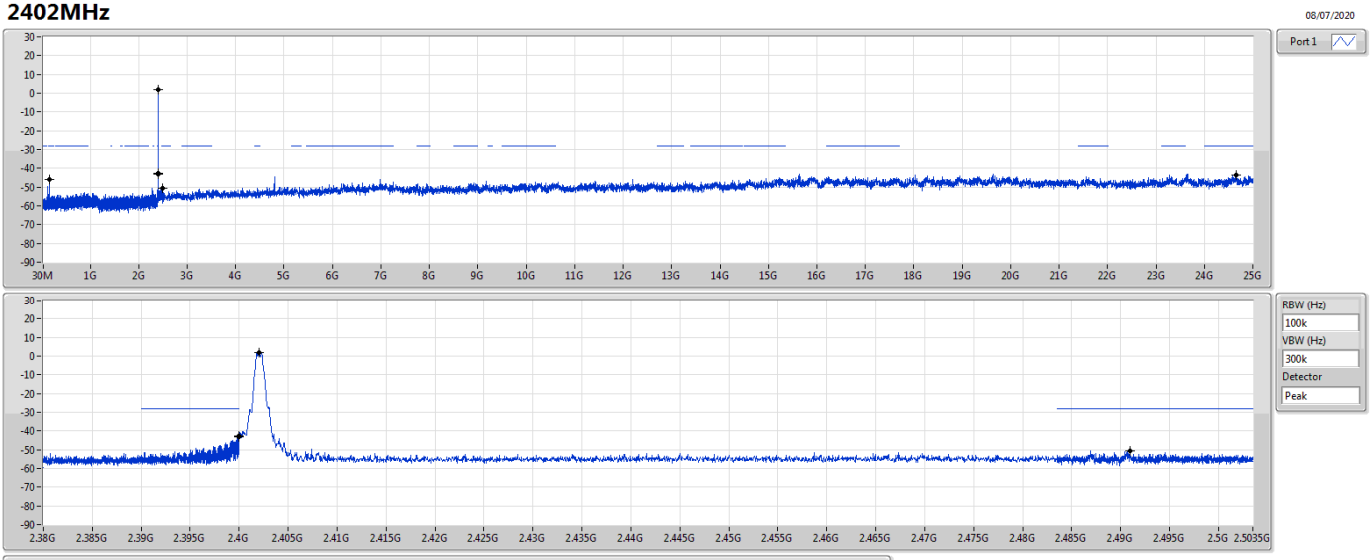
Test Mode: EUT 1 + Ant.20 (Omni Mode)
Result

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	2.40205G	2.10	-27.90	159.84M	-45.81	2.39996G	-42.79	2.4G	-43.30	2.49094G	-50.46	24.65974G	-43.54	1
2440MHz	Pass	2.40205G	2.10	-27.90	159.84M	-46.11	2.39088G	-52.32	2.4835G	-55.09	2.49508G	-51.80	24.60069G	-43.40	1
2480MHz	Pass	2.40205G	2.10	-27.90	159.84M	-47.80	2.3917G	-50.61	2.4835G	-53.18	2.48387G	-49.84	24.61756G	-42.67	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40205G	2.34	-27.66	159.84M	-46.51	2.4G	-32.39	2.4G	-33.15	2.48704G	-51.35	24.56975G	-43.19	1
2440MHz	Pass	2.40205G	2.34	-27.66	159.84M	-46.73	2.39308G	-52.50	2.4G	-55.33	2.48513G	-51.41	16.52163G	-43.05	1
2480MHz	Pass	2.40205G	2.34	-27.66	159.84M	-45.73	2.39149G	-51.09	2.4835G	-54.33	2.49323G	-49.66	23.30714G	-42.52	1

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps) **CSE NdB**

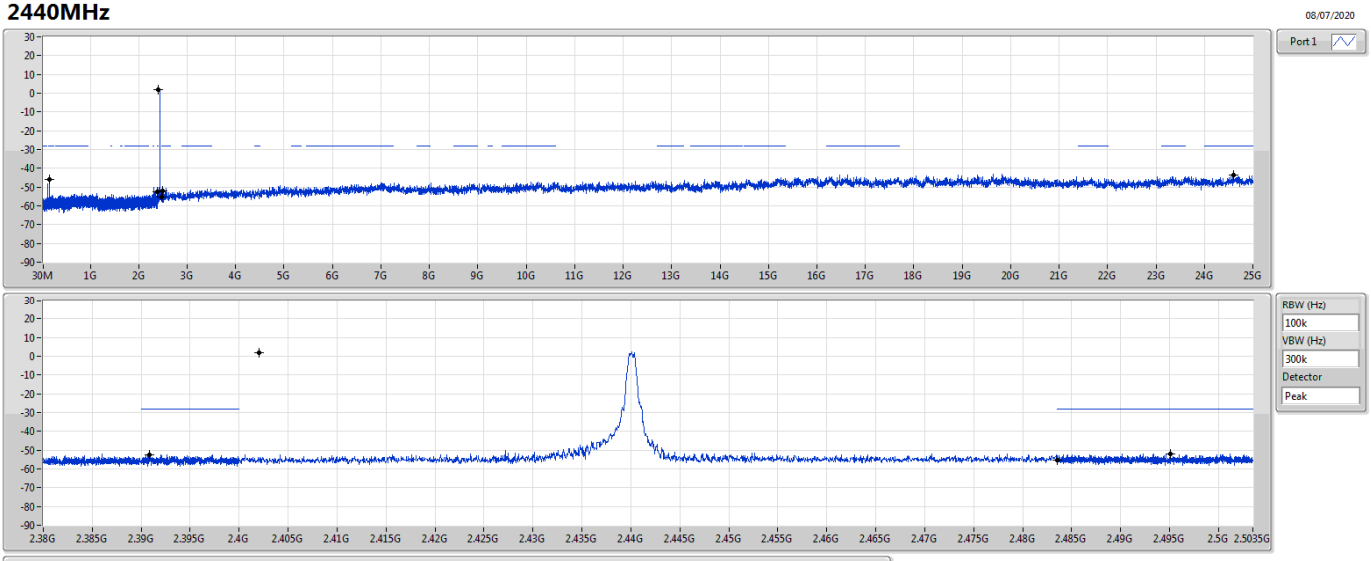
2402MHz



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
2.40205G	2.10	-27.90	159.84M	-45.81	2.39996G	-42.79	2.4G	-43.30	2.49094G	-50.46	24.65974G	-43.54	1

BT-LE(1Mbps) **CSE NdB**

2440MHz

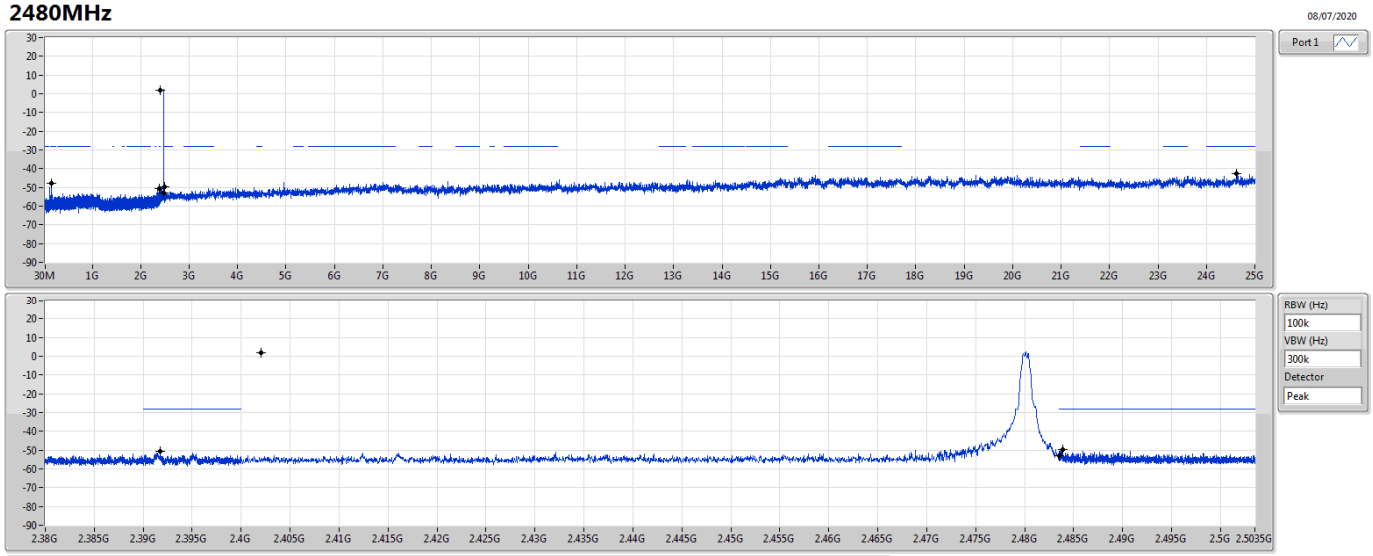


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40205G	2.10	-27.90	159.84M	-46.11	2.39088G	-52.32	2.4835G	-55.09	2.49508G	-51.80	24.60069G	-43.40	1

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps) **CSE NdB**

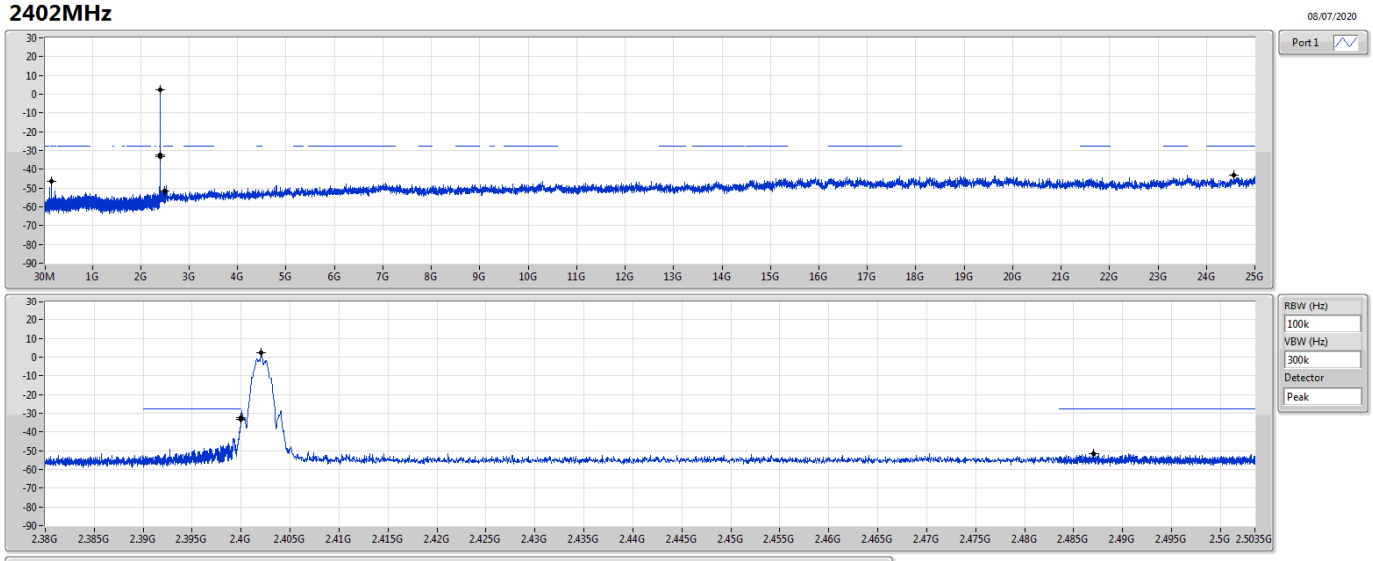
2480MHz



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
2.40205G	2.10	-27.90	159.84M	-47.80	2.3917G	-50.61	2.4835G	-53.18	2.48387G	-49.84	24.61756G	-42.67	1

BT-LE(2Mbps) **CSE NdB**

2402MHz

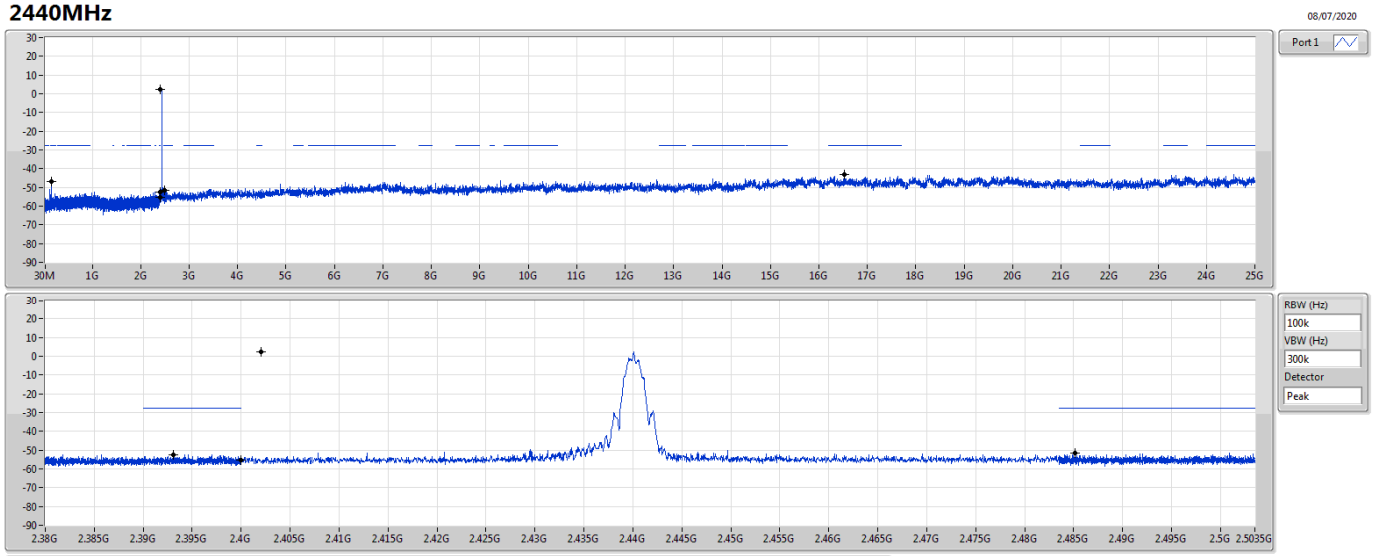


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40205G	2.34	-27.66	159.84M	-46.51	2.4G	-32.39	2.4G	-33.15	2.48704G	-51.35	24.56975G	-43.19	1

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps) **CSE NdB**

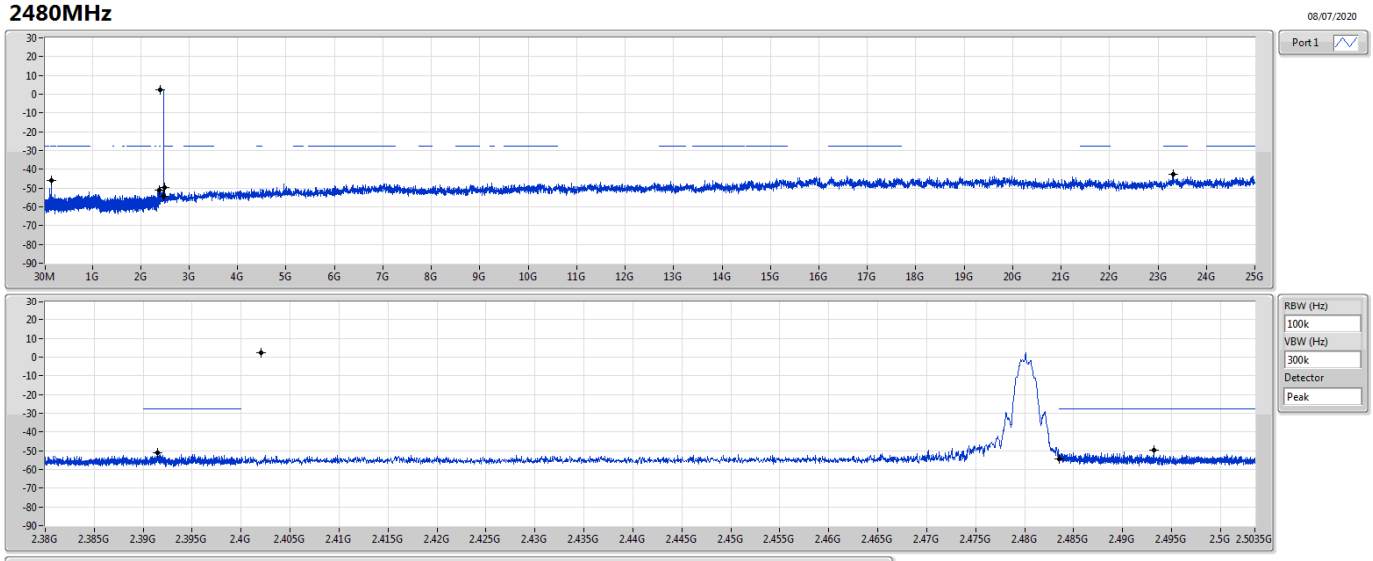
2440MHz



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
2.40205G	2.34	-27.66	159.84M	-46.73	2.39308G	-52.50	2.4G	-55.33	2.48513G	-51.41	16.52163G	-43.05	1

BT-LE(2Mbps) **CSE NdB**

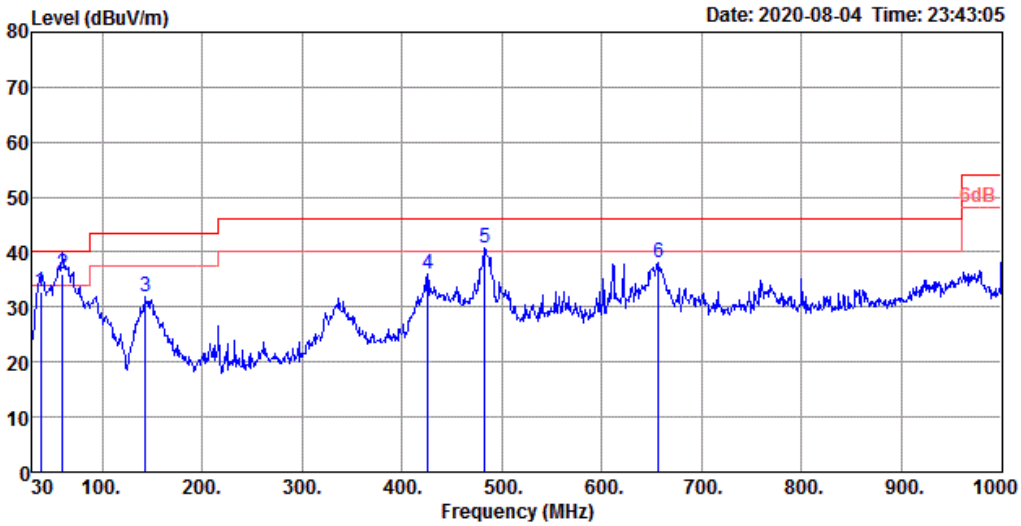
2480MHz



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
2.40205G	2.34	-27.66	159.84M	-45.73	2.39149G	-51.09	2.4835G	-54.33	2.49323G	-49.66	23.30714G	-42.52	1

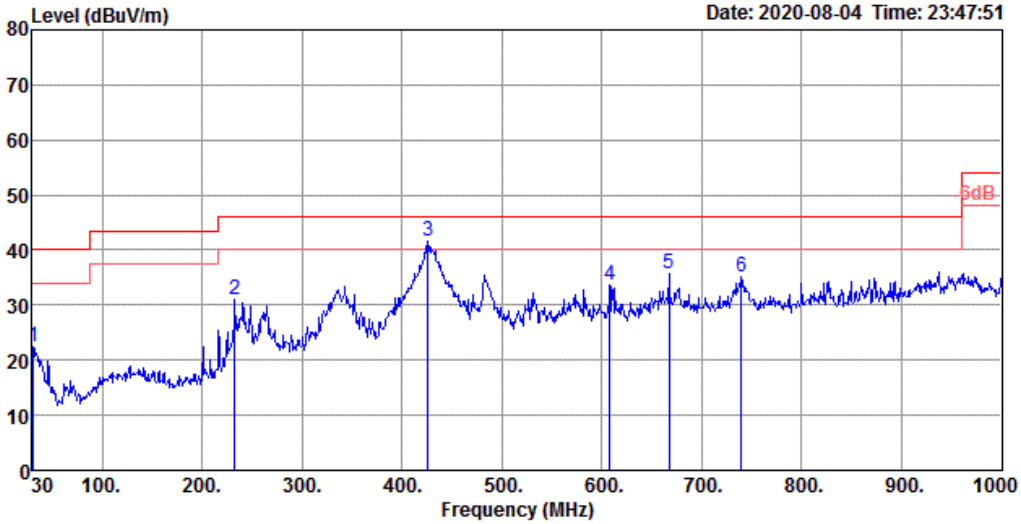
Test Mode	Mode 3 / Unintentional	Frequency Range	30 MHz to 1,000 MHz

Vertical 30 MHz to 1,000 MHz



	Freq	Level	Limit Line	Over Limit	Read Level	Preamp Factor	Antenna Factor	Cable Loss	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	38.73	32.70	40.00	-7.30	39.91	27.85	18.55	2.09	QP	200	4	VERTICAL
2	60.07	36.00	40.00	-4.00	49.69	27.81	11.59	2.53	QP	100	351	VERTICAL
3	143.49	31.80	43.50	-11.70	39.59	27.60	16.02	3.79	Peak	100	180	VERTICAL
4	425.76	36.06	46.00	-9.94	36.03	28.24	21.74	6.53	Peak	100	188	VERTICAL
5	482.99	40.78	46.00	-5.22	39.76	28.56	22.65	6.93	Peak	300	356	VERTICAL
6	656.62	38.19	46.00	-7.81	34.33	28.56	24.29	8.13	Peak	400	192	VERTICAL

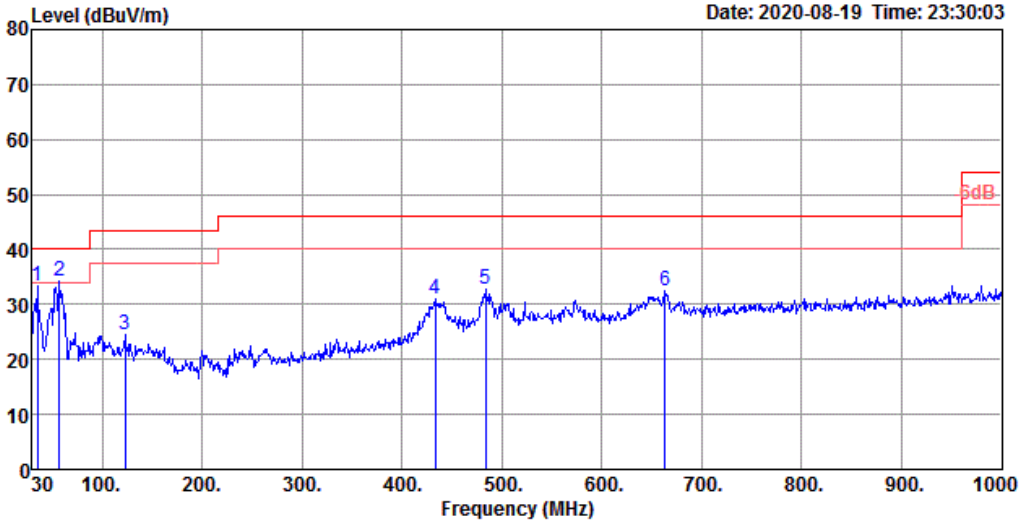
Horizontal 30 MHz to 1,000 MHz



	Freq	Level	Limit Line	Over Limit	Read Level	Preamp Factor	Antenna Factor	Cable Loss	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	30.97	22.49	40.00	-17.51	25.91	27.85	22.59	1.84	Peak	100	96	HORIZONTAL
2	232.73	30.98	46.00	-15.02	37.82	27.27	15.62	4.81	Peak	200	175	HORIZONTAL
3	425.76	41.68	46.00	-4.32	41.65	28.24	21.74	6.53	Peak	400	180	HORIZONTAL
4	608.12	33.61	46.00	-12.39	30.49	28.63	23.92	7.83	Peak	100	191	HORIZONTAL
5	667.29	35.65	46.00	-10.35	31.61	28.50	24.31	8.23	Peak	300	129	HORIZONTAL
6	740.04	35.18	46.00	-10.82	29.91	28.11	24.73	8.65	Peak	100	186	HORIZONTAL

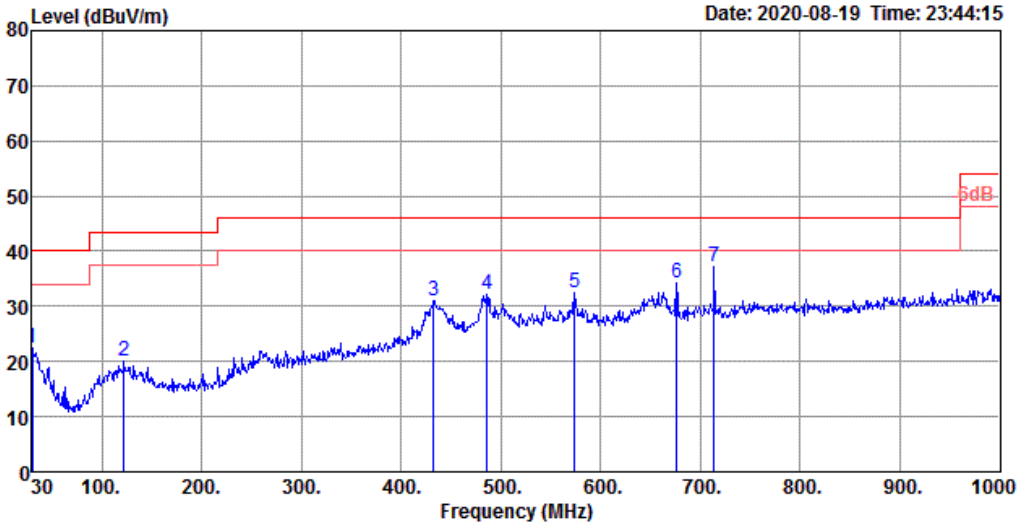
Test Mode	Mode 1 / Intentional	Frequency Range	30 MHz to 1,000 MHz

Vertical 30 MHz to 1,000 MHz



	Freq	Level	Limit Line	Over Limit	Read Level	Preamp Factor	Antenna Factor	Cable Loss	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	34.85	33.37	40.00	-6.63	38.53	27.83	20.70	1.97	Peak	100	305	VERTICAL
2	57.16	34.14	40.00	-5.86	47.90	27.83	11.59	2.48	Peak	100	189	VERTICAL
3	123.12	24.50	43.50	-19.00	31.52	27.68	17.14	3.52	Peak	100	92	VERTICAL
4	433.52	30.96	46.00	-15.04	30.98	28.31	21.69	6.60	Peak	100	262	VERTICAL
5	483.96	32.91	46.00	-13.09	31.89	28.57	22.66	6.93	Peak	400	332	VERTICAL
6	663.41	32.46	46.00	-13.54	28.52	28.53	24.28	8.19	Peak	200	357	VERTICAL

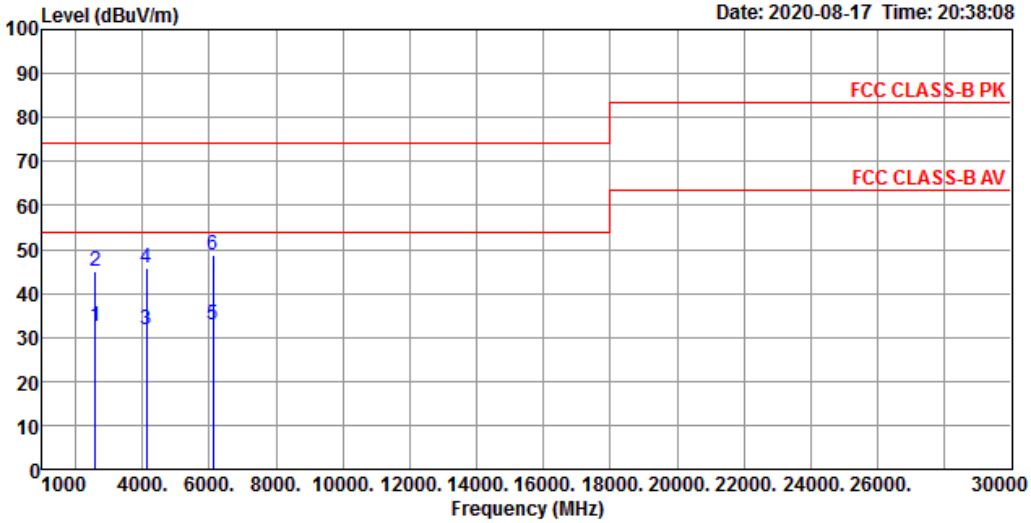
Horizontal 30 MHz to 1,000 MHz



	Freq	Level	Limit Line	Over Limit	Read Level	Preamp Factor	Antenna Factor	Cable Loss	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	30.00	22.37	40.00	-17.63	25.19	27.85	23.22	1.81	Peak	100	25	HORIZONTAL
2	122.15	20.09	43.50	-23.41	26.93	27.68	17.33	3.51	Peak	400	1	HORIZONTAL
3	432.55	31.06	46.00	-14.94	31.08	28.30	21.69	6.59	Peak	100	253	HORIZONTAL
4	485.90	32.10	46.00	-13.90	31.07	28.58	22.67	6.94	Peak	200	322	HORIZONTAL
5	574.17	32.58	46.00	-13.42	29.55	28.64	24.08	7.59	Peak	100	89	HORIZONTAL
6	676.02	34.15	46.00	-11.85	30.01	28.46	24.30	8.30	Peak	100	238	HORIZONTAL
7	713.85	37.08	46.00	-8.92	32.53	28.25	24.24	8.56	Peak	300	16	HORIZONTAL

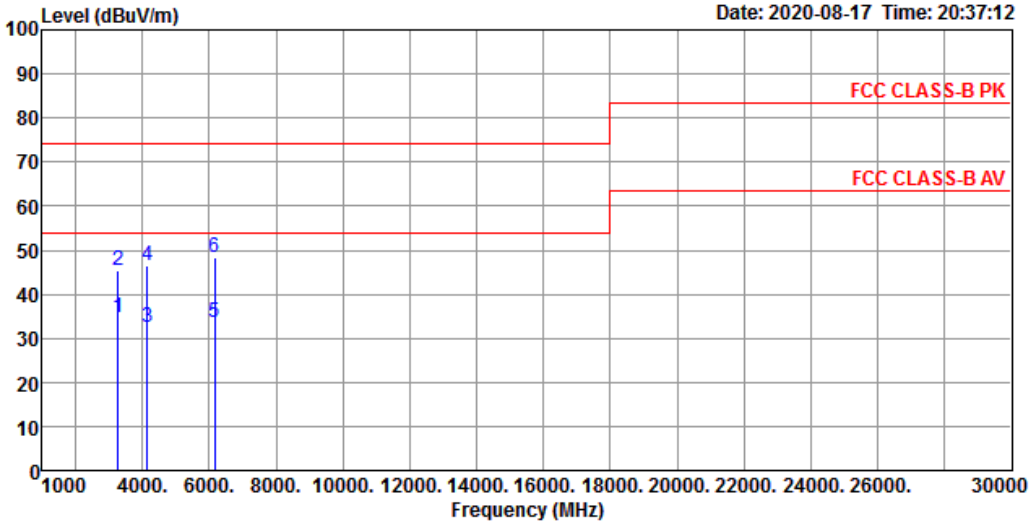
Test Mode	Mode 1 / Unintentional	Frequency Range	1,000 MHz to 30,000 MHz

Vertical 1,000 MHz to 30,000 MHz



	Freq	Level	Limit Line	Over Limit	Read Level	Preamp Factor	Antenna Factor	Cable Loss	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	2598.00	32.30	54.00	-21.70	30.12	36.28	32.66	5.80	Average	200	254	VERTICAL
2	2598.00	45.15	74.00	-28.85	42.97	36.28	32.66	5.80	Peak	200	254	VERTICAL
3	4111.00	31.88	54.00	-22.12	27.12	36.22	33.50	7.48	Average	200	199	VERTICAL
4	4111.00	45.59	74.00	-28.41	40.83	36.22	33.50	7.48	Peak	200	199	VERTICAL
5	6117.00	32.81	54.00	-21.19	24.12	36.17	35.78	9.08	Average	200	47	VERTICAL
6	6117.00	48.75	74.00	-25.25	40.06	36.17	35.78	9.08	Peak	200	47	VERTICAL

Horizontal 1,000 MHz to 30,000 MHz



	Freq	Level	Limit Line	Over Limit	Read Level	Preamp Factor	Antenna Factor	Cable Loss	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3261.00	34.54	54.00	-19.46	30.98	36.18	33.04	6.70	Average	200	352	HORIZONTAL
2	3261.00	45.50	74.00	-28.50	41.94	36.18	33.04	6.70	Peak	200	352	HORIZONTAL
3	4145.00	32.34	54.00	-21.66	27.54	36.24	33.50	7.54	Average	200	352	HORIZONTAL
4	4145.00	46.58	74.00	-27.42	41.78	36.24	33.50	7.54	Peak	200	352	HORIZONTAL
5	6168.00	33.40	54.00	-20.60	24.63	36.17	35.74	9.20	Average	200	4	HORIZONTAL
6	6168.00	48.20	74.00	-25.80	39.43	36.17	35.74	9.20	Peak	200	4	HORIZONTAL

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)
Summary

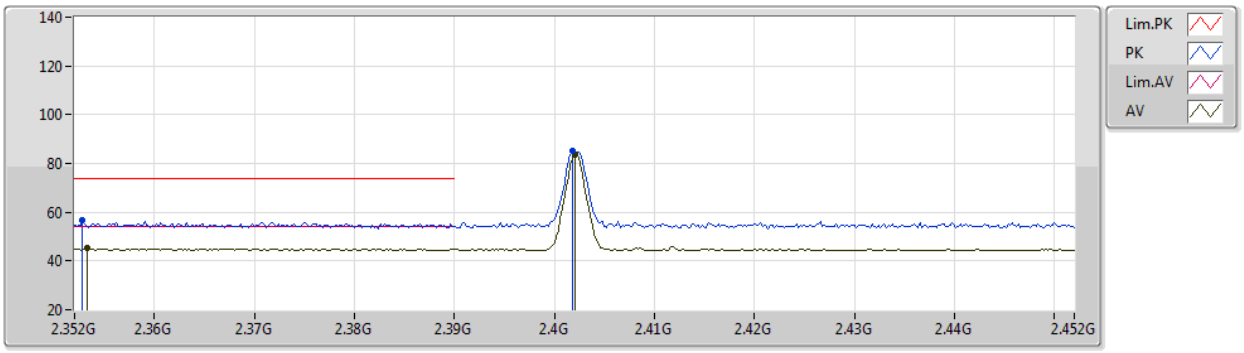
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	4.8041G	53.57	54.00	-0.43	3	Horizontal	172	1.46	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

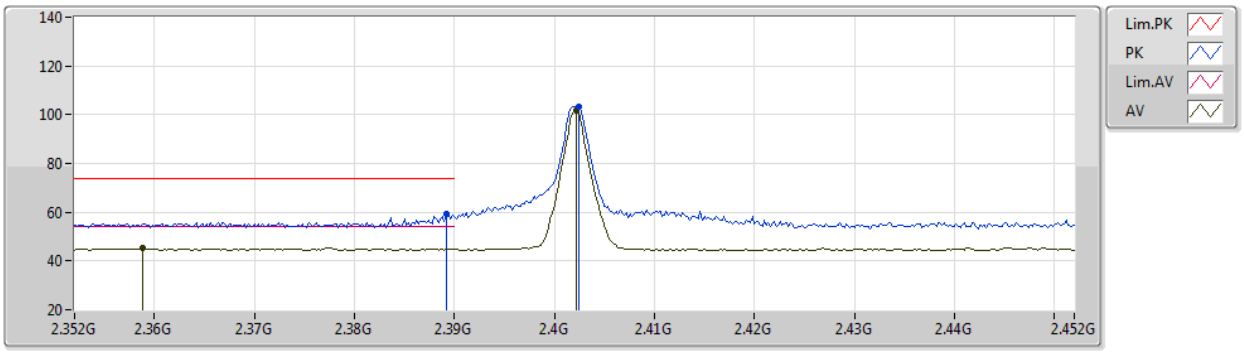
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3528G	56.89	74.00	-17.11	25.17	3	Vertical	328	2.21	-	27.74	3.98	-
AV	2.3532G	45.10	54.00	-8.90	13.38	3	Vertical	328	2.21	-	27.74	3.98	-
PK	2.4018G	84.94	Inf	-Inf	53.35	3	Vertical	328	2.21	-	27.59	4.00	-
AV	2.402G	83.43	Inf	-Inf	51.84	3	Vertical	328	2.21	-	27.59	4.00	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

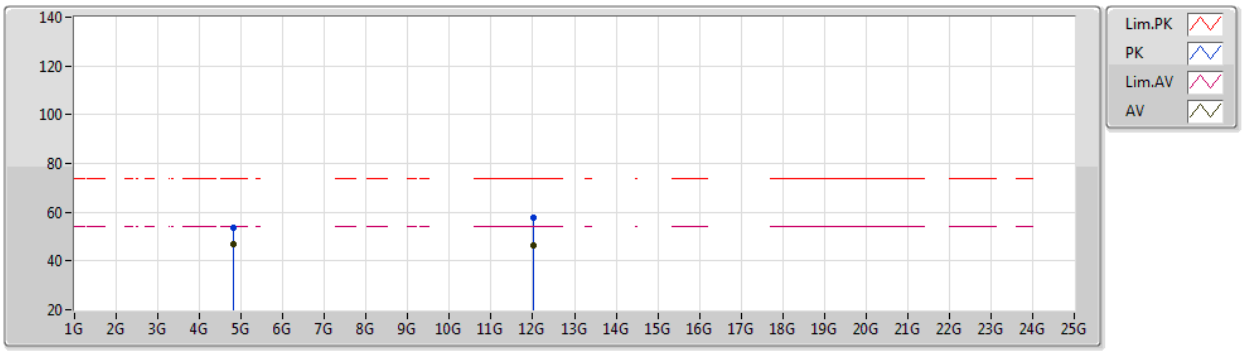
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3892G	59.35	74.00	-14.65	27.73	3	Horizontal	122	1.89	-	27.63	3.99	-
AV	2.3588G	45.26	54.00	-8.74	13.56	3	Horizontal	122	1.89	-	27.72	3.98	-
PK	2.4024G	103.29	Inf	-Inf	71.70	3	Horizontal	122	1.89	-	27.59	4.00	-
AV	2.4022G	101.73	Inf	-Inf	70.14	3	Horizontal	122	1.89	-	27.59	4.00	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

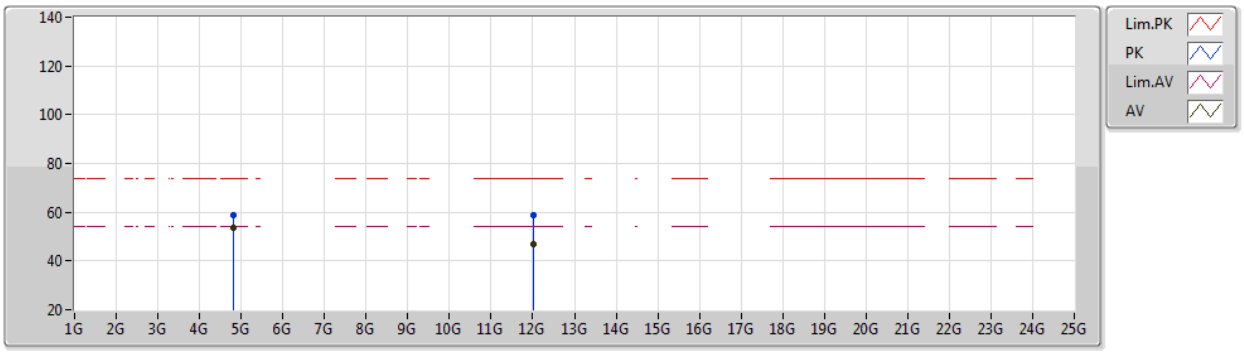
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.80474G	53.79	74.00	-20.21	49.23	3	Vertical	200	1.85	-	31.00	5.31	31.75
AV	4.80408G	47.02	54.00	-6.98	42.47	3	Vertical	200	1.85	-	31.00	5.31	31.76
PK	12.01184G	57.98	74.00	-16.02	44.94	3	Vertical	124	2.50	-	38.91	8.30	34.17
AV	12.01156G	46.14	54.00	-7.86	33.10	3	Vertical	124	2.50	-	38.91	8.30	34.17

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

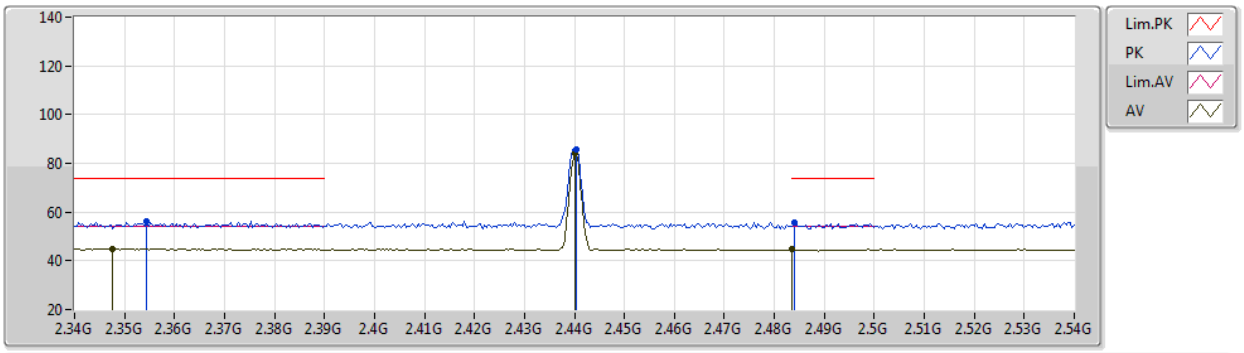
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8047G	59.05	74.00	-14.95	54.49	3	Horizontal	172	1.46	-	31.00	5.31	31.75
AV	4.8041G	53.57	54.00	-0.43	49.02	3	Horizontal	172	1.46	-	31.00	5.31	31.76
PK	12.00942G	58.58	74.00	-15.42	45.54	3	Horizontal	183	2.73	-	38.91	8.30	34.17
AV	12.01116G	46.87	54.00	-7.13	33.83	3	Horizontal	183	2.73	-	38.91	8.30	34.17

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

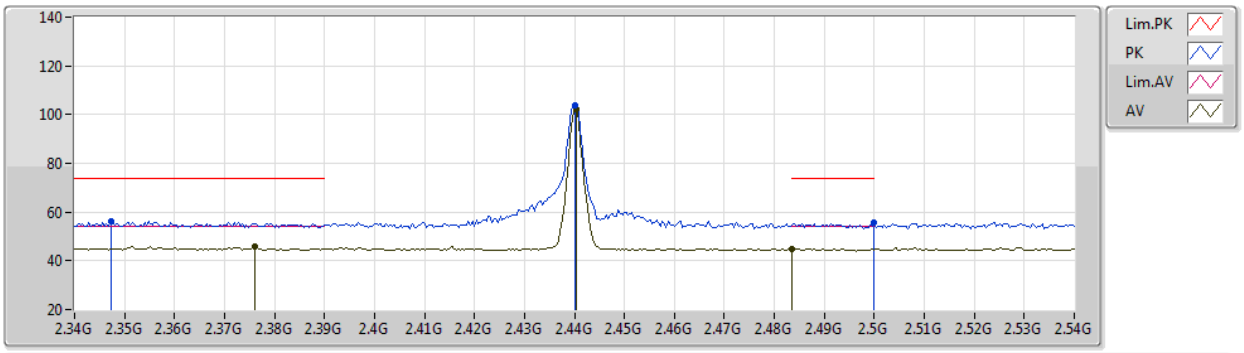
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3544G	56.03	74.00	-17.97	24.31	3	Vertical	233	2.26	-	27.74	3.98	-
AV	2.3476G	45.03	54.00	-8.97	13.30	3	Vertical	233	2.26	-	27.76	3.97	-
PK	2.4404G	85.90	Inf	-Inf	54.40	3	Vertical	233	2.26	-	27.48	4.02	-
AV	2.44G	84.32	Inf	-Inf	52.82	3	Vertical	233	2.26	-	27.48	4.02	-
PK	2.484G	55.61	74.00	-18.39	24.22	3	Vertical	233	2.26	-	27.35	4.04	-
AV	2.4835G	44.63	54.00	-9.37	13.24	3	Vertical	233	2.26	-	27.35	4.04	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

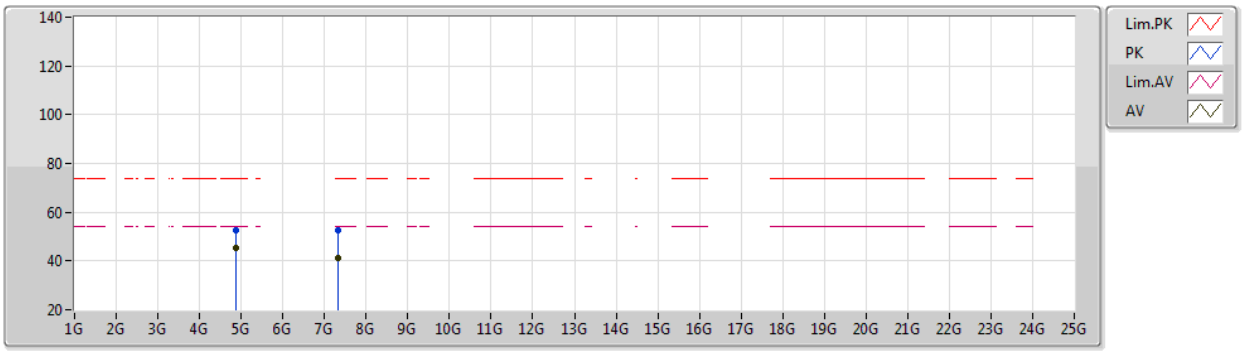
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3472G	56.45	74.00	-17.55	24.72	3	Horizontal	121	1.80	-	27.76	3.97	-
AV	2.376G	45.80	54.00	-8.20	14.14	3	Horizontal	121	1.80	-	27.67	3.99	-
PK	2.44G	103.64	Inf	-Inf	72.14	3	Horizontal	121	1.80	-	27.48	4.02	-
AV	2.4404G	102.23	Inf	-Inf	70.73	3	Horizontal	121	1.80	-	27.48	4.02	-
PK	2.5G	55.70	74.00	-18.30	24.35	3	Horizontal	121	1.80	-	27.30	4.05	-
AV	2.4835G	44.87	54.00	-9.13	13.48	3	Horizontal	121	1.80	-	27.35	4.04	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

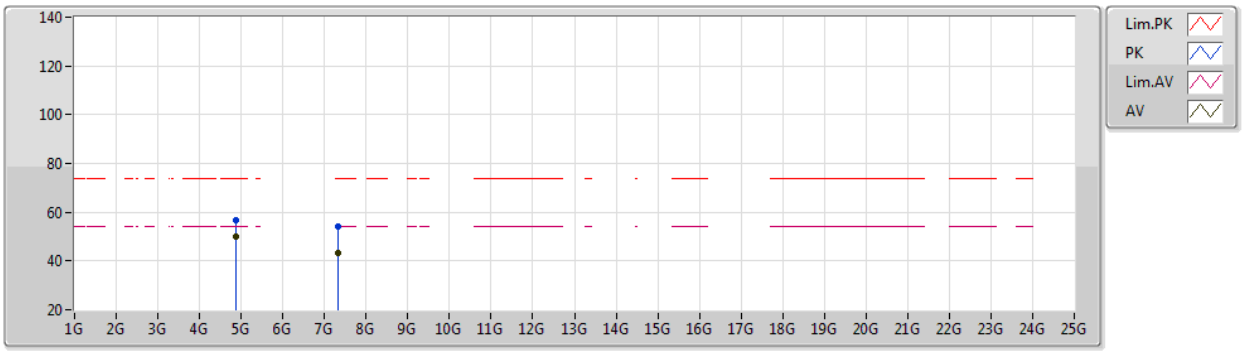
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.88066G	52.77	74.00	-21.23	47.94	3	Vertical	247	2.89	-	31.08	5.41	31.66
AV	4.87992G	45.46	54.00	-8.54	40.63	3	Vertical	247	2.89	-	31.08	5.41	31.66
PK	7.31912G	52.52	74.00	-21.48	42.33	3	Vertical	288	1.67	-	36.40	6.96	33.17
AV	7.31966G	41.25	54.00	-12.75	31.06	3	Vertical	288	1.67	-	36.40	6.96	33.17

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

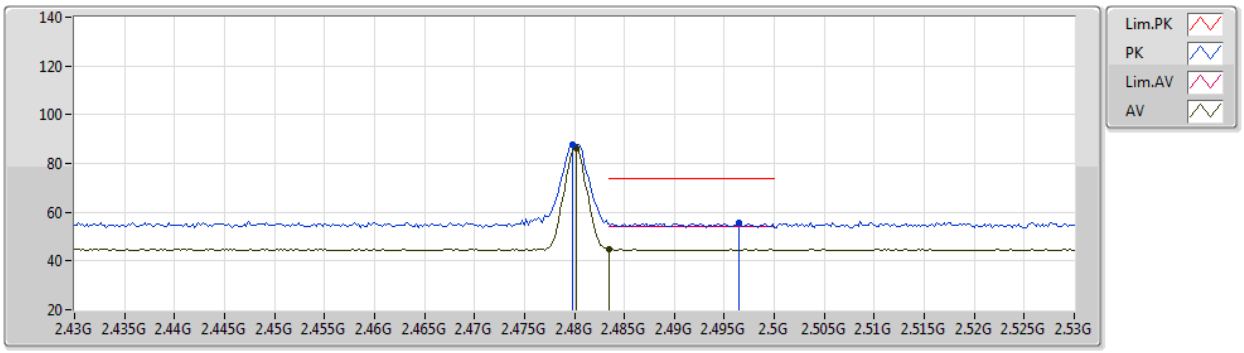
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87956G	56.63	74.00	-17.37	51.80	3	Horizontal	172	1.59	-	31.08	5.41	31.66
AV	4.88012G	50.18	54.00	-3.82	45.35	3	Horizontal	172	1.59	-	31.08	5.41	31.66
PK	7.3196G	54.24	74.00	-19.76	44.05	3	Horizontal	201	2.43	-	36.40	6.96	33.17
AV	7.32094G	43.18	54.00	-10.82	32.99	3	Horizontal	201	2.43	-	36.40	6.96	33.17

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

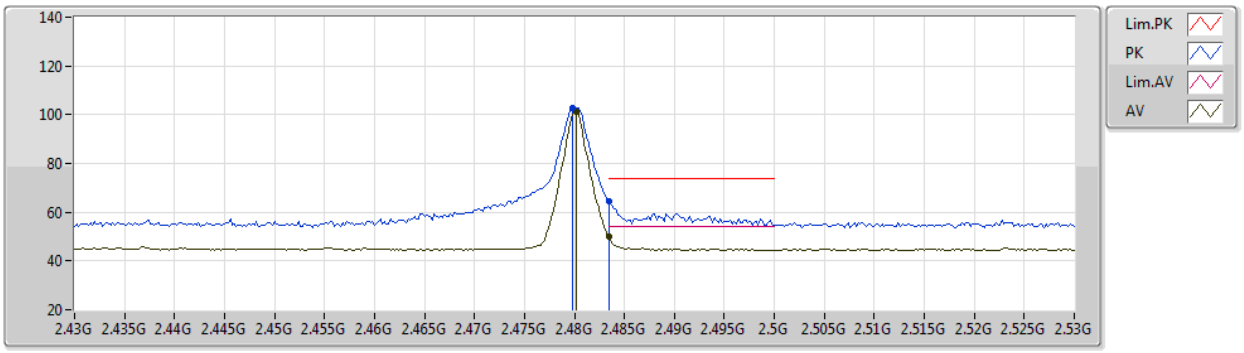
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4798G	87.95	Inf	-Inf	56.55	3	Vertical	210	2.24	-	27.36	4.04	-
AV	2.4802G	86.45	Inf	-Inf	55.05	3	Vertical	210	2.24	-	27.36	4.04	-
PK	2.4964G	55.50	74.00	-18.50	24.14	3	Vertical	210	2.24	-	27.31	4.05	-
AV	2.4835G	44.74	54.00	-9.26	13.35	3	Vertical	210	2.24	-	27.35	4.04	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

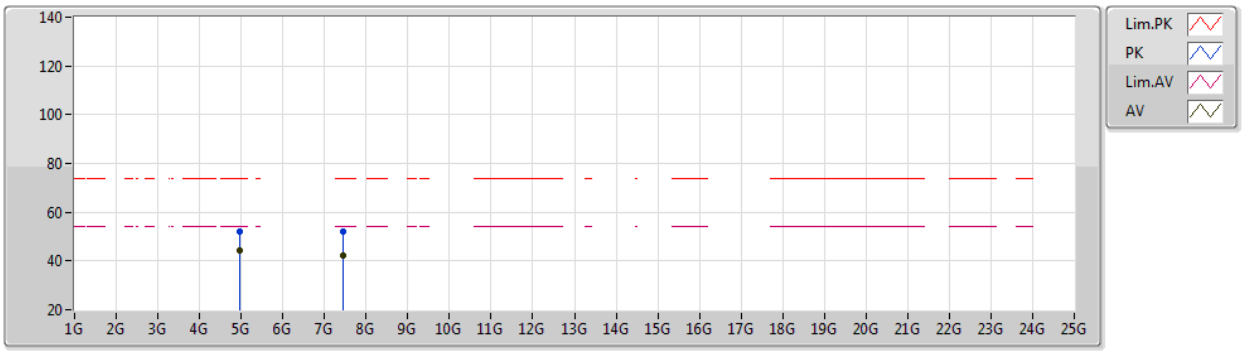
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4798G	102.73	Inf	-Inf	71.33	3	Horizontal	115	2.12	-	27.36	4.04	-
AV	2.4802G	101.23	Inf	-Inf	69.83	3	Horizontal	115	2.12	-	27.36	4.04	-
PK	2.4835G	64.74	74.00	-9.26	33.35	3	Horizontal	115	2.12	-	27.35	4.04	-
AV	2.4835G	49.94	54.00	-4.06	18.55	3	Horizontal	115	2.12	-	27.35	4.04	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

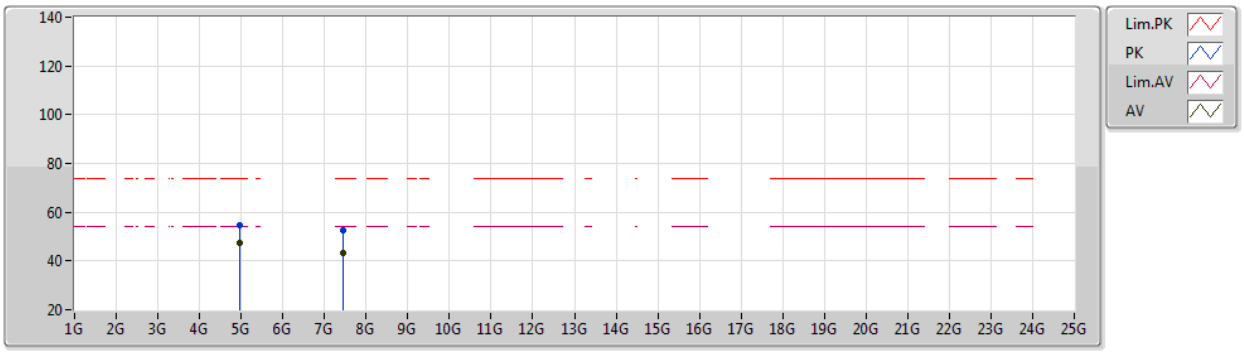
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.96052G	51.89	74.00	-22.11	46.58	3	Vertical	240	2.33	-	31.34	5.54	31.57
AV	4.96016G	44.20	54.00	-9.80	38.89	3	Vertical	240	2.33	-	31.34	5.54	31.57
PK	7.4382G	51.88	74.00	-22.12	41.62	3	Vertical	250	2.88	-	36.48	7.00	33.22
AV	7.44196G	42.30	54.00	-11.70	32.04	3	Vertical	250	2.88	-	36.48	7.00	33.22

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

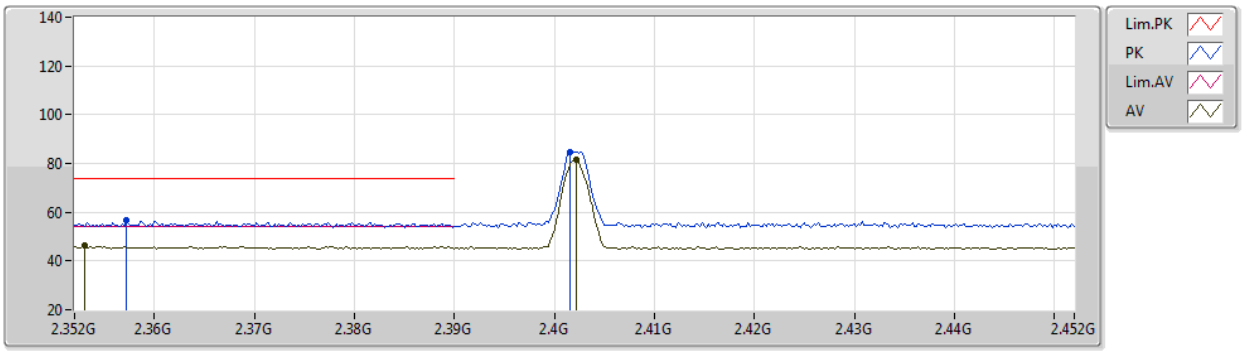
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.95968G	54.69	74.00	-19.31	49.38	3	Horizontal	145	1.78	-	31.34	5.54	31.57
AV	4.96016G	47.65	54.00	-6.35	42.34	3	Horizontal	145	1.78	-	31.34	5.54	31.57
PK	7.44175G	52.52	74.00	-21.48	42.26	3	Horizontal	211	2.07	-	36.48	7.00	33.22
AV	7.44237G	43.36	54.00	-10.64	33.10	3	Horizontal	211	2.07	-	36.48	7.00	33.22

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

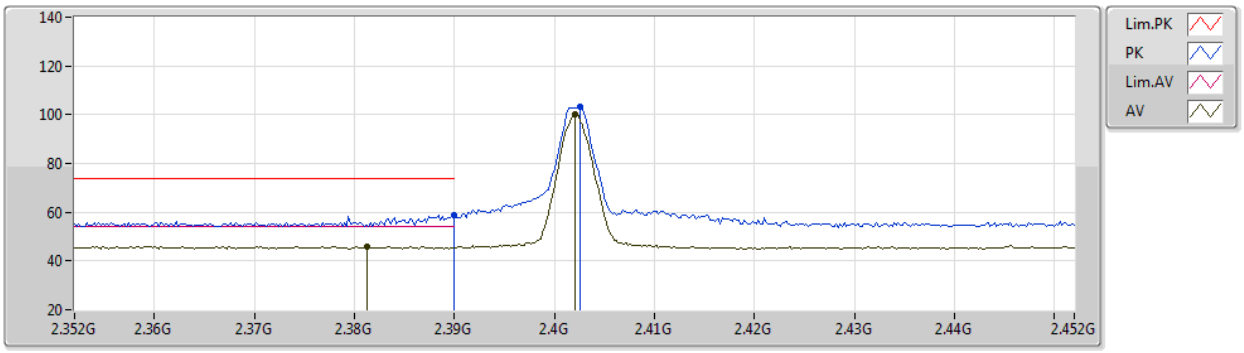
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3572G	56.55	74.00	-17.45	24.84	3	Vertical	276	1.31	-	27.73	3.98	-
AV	2.353G	46.20	54.00	-7.80	14.48	3	Vertical	276	1.31	-	27.74	3.98	-
PK	2.4016G	84.65	Inf	-Inf	53.05	3	Vertical	276	1.31	-	27.60	4.00	-
AV	2.4022G	81.76	Inf	-Inf	50.17	3	Vertical	276	1.31	-	27.59	4.00	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

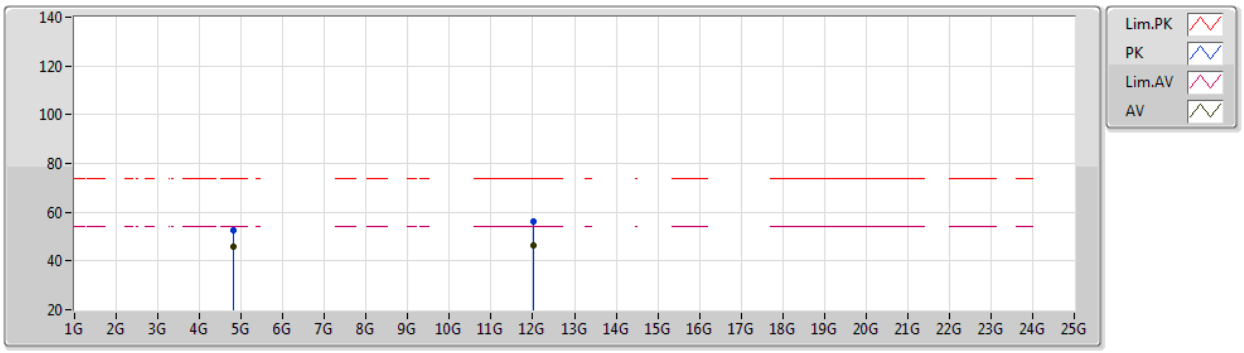
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	58.78	74.00	-15.22	27.15	3	Horizontal	298	1.88	-	27.63	4.00	-
AV	2.3812G	45.90	54.00	-8.10	14.25	3	Horizontal	298	1.88	-	27.66	3.99	-
PK	2.4026G	103.02	Inf	-Inf	71.43	3	Horizontal	298	1.88	-	27.59	4.00	-
AV	2.402G	100.19	Inf	-Inf	68.60	3	Horizontal	298	1.88	-	27.59	4.00	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

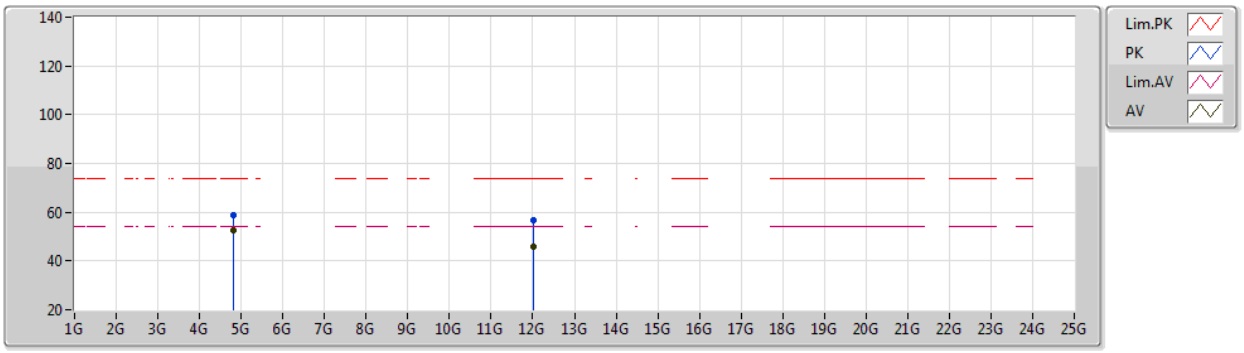
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.80418G	52.65	74.00	-21.35	48.09	3	Vertical	41	1.87	-	31.00	5.31	31.75
AV	4.8041G	45.65	54.00	-8.35	41.10	3	Vertical	41	1.87	-	31.00	5.31	31.76
PK	12.0142G	56.15	74.00	-17.85	43.11	3	Vertical	223	2.48	-	38.91	8.30	34.17
AV	12.0228G	46.15	54.00	-7.85	33.10	3	Vertical	223	2.48	-	38.91	8.31	34.17

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

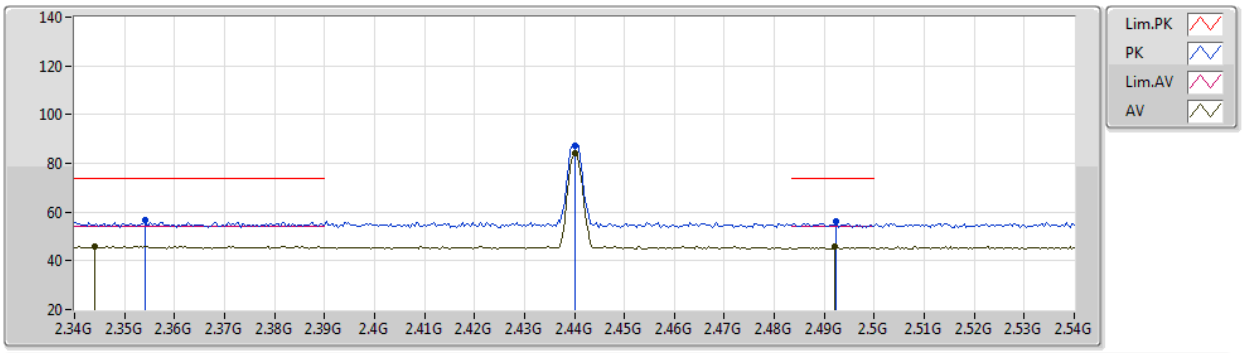
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8052G	59.02	74.00	-14.98	54.45	3	Horizontal	354	1.65	-	31.01	5.31	31.75
AV	4.80414G	52.78	54.00	-1.22	48.23	3	Horizontal	354	1.65	-	31.00	5.31	31.76
PK	12.01338G	56.48	74.00	-17.52	43.44	3	Horizontal	357	1.30	-	38.91	8.30	34.17
AV	12.01194G	45.68	54.00	-8.32	32.64	3	Horizontal	357	1.30	-	38.91	8.30	34.17

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

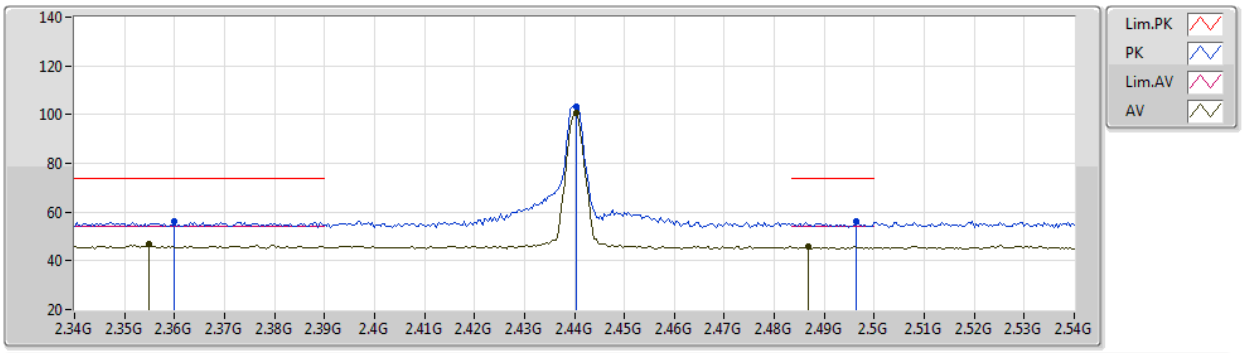
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.354G	56.53	74.00	-17.47	24.81	3	Vertical	35	2.07	-	27.74	3.98	-
AV	2.344G	46.03	54.00	-7.97	14.29	3	Vertical	35	2.07	-	27.77	3.97	-
PK	2.44G	87.13	Inf	-Inf	55.63	3	Vertical	35	2.07	-	27.48	4.02	-
AV	2.44G	84.20	Inf	-Inf	52.70	3	Vertical	35	2.07	-	27.48	4.02	-
PK	2.4924G	56.11	74.00	-17.89	24.74	3	Vertical	35	2.07	-	27.32	4.05	-
AV	2.492G	45.76	54.00	-8.24	14.39	3	Vertical	35	2.07	-	27.32	4.05	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

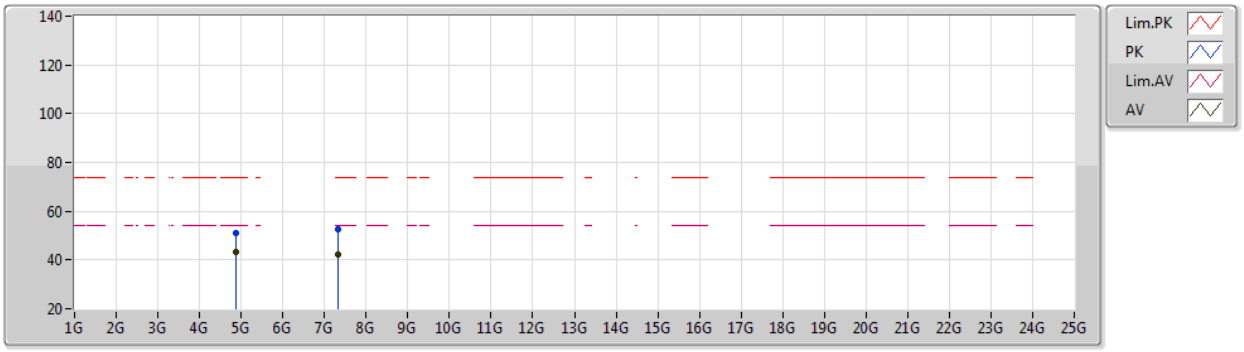
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.36G	56.08	74.00	-17.92	24.38	3	Horizontal	303	1.96	-	27.72	3.98	-
AV	2.3548G	46.78	54.00	-7.22	15.06	3	Horizontal	303	1.96	-	27.74	3.98	-
PK	2.4404G	103.45	Inf	-Inf	71.95	3	Horizontal	303	1.96	-	27.48	4.02	-
AV	2.4404G	100.62	Inf	-Inf	69.12	3	Horizontal	303	1.96	-	27.48	4.02	-
PK	2.4964G	56.13	74.00	-17.87	24.77	3	Horizontal	303	1.96	-	27.31	4.05	-
AV	2.4868G	45.82	54.00	-8.18	14.44	3	Horizontal	303	1.96	-	27.34	4.04	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

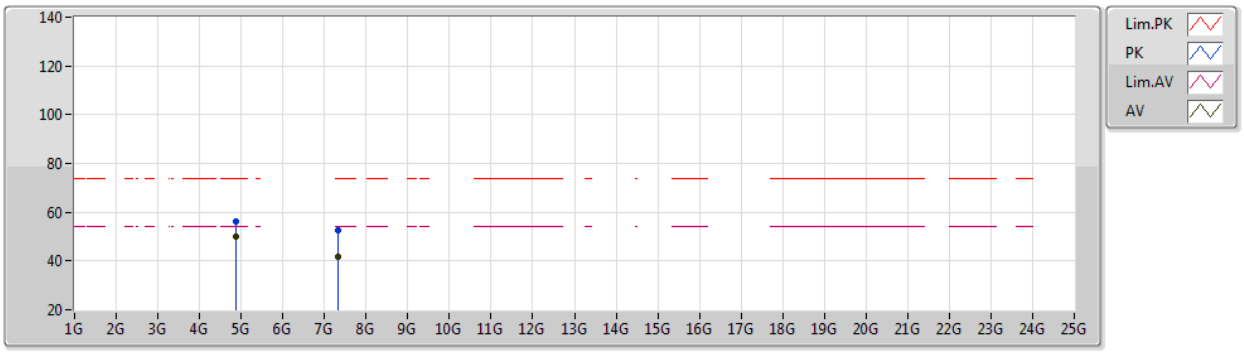
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.879G	50.92	74.00	-23.08	46.10	3	Vertical	145	2.48	-	31.08	5.41	31.67
AV	4.88028G	43.44	54.00	-10.56	38.61	3	Vertical	145	2.48	-	31.08	5.41	31.66
PK	7.32074G	52.52	74.00	-21.48	42.33	3	Vertical	168	2.33	-	36.40	6.96	33.17
AV	7.3216G	42.24	54.00	-11.76	32.05	3	Vertical	168	2.33	-	36.40	6.96	33.17

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

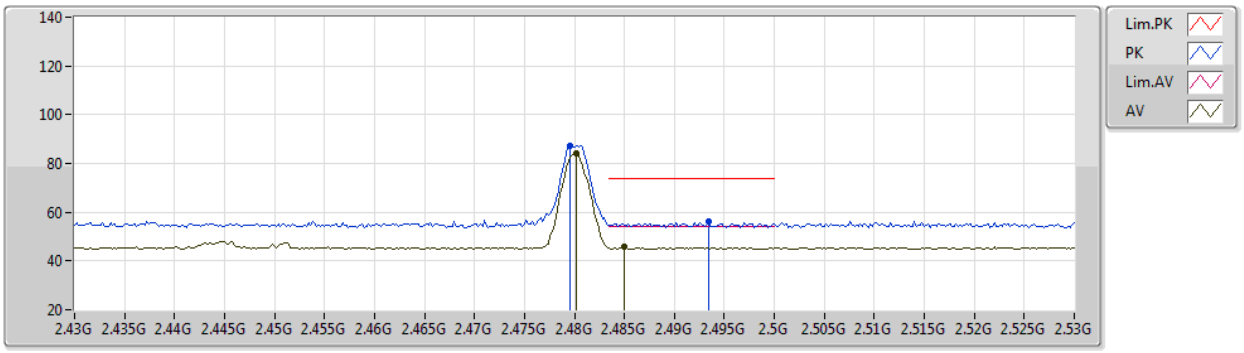
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.88008G	56.36	74.00	-17.64	51.53	3	Horizontal	351	1.62	-	31.08	5.41	31.66
AV	4.87908G	50.02	54.00	-3.98	45.20	3	Horizontal	351	1.62	-	31.08	5.41	31.67
PK	7.32326G	52.52	74.00	-21.48	42.33	3	Horizontal	333	2.38	-	36.40	6.96	33.17
AV	7.32018G	41.60	54.00	-12.40	31.41	3	Horizontal	333	2.38	-	36.40	6.96	33.17

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

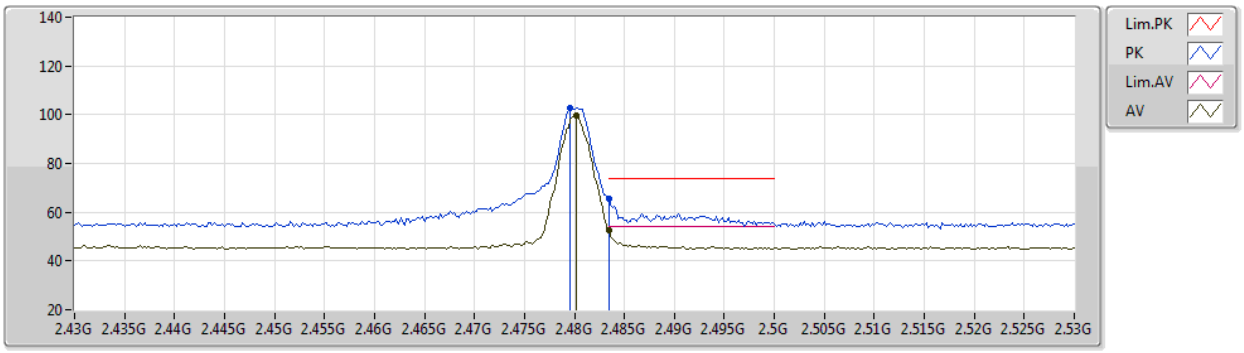
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4796G	87.14	Inf	-Inf	55.74	3	Vertical	28	2.06	-	27.36	4.04	-
AV	2.4802G	84.22	Inf	-Inf	52.82	3	Vertical	28	2.06	-	27.36	4.04	-
PK	2.4934G	56.19	74.00	-17.81	24.82	3	Vertical	28	2.06	-	27.32	4.05	-
AV	2.485G	45.64	54.00	-8.36	14.26	3	Vertical	28	2.06	-	27.34	4.04	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

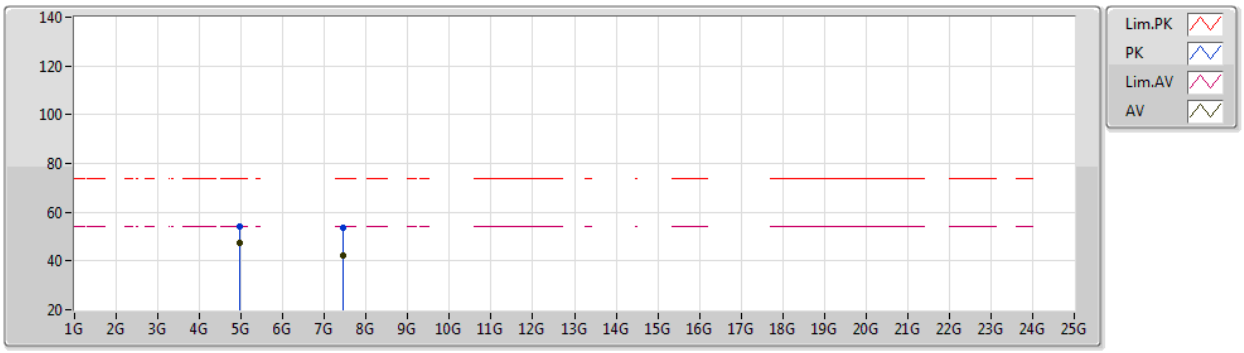
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4796G	102.56	Inf	-Inf	71.16	3	Horizontal	303	2.11	-	27.36	4.04	-
AV	2.4802G	99.70	Inf	-Inf	68.30	3	Horizontal	303	2.11	-	27.36	4.04	-
PK	2.4835G	65.46	74.00	-8.54	34.07	3	Horizontal	303	2.11	-	27.35	4.04	-
AV	2.4835G	52.41	54.00	-1.59	21.02	3	Horizontal	303	2.11	-	27.35	4.04	-

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

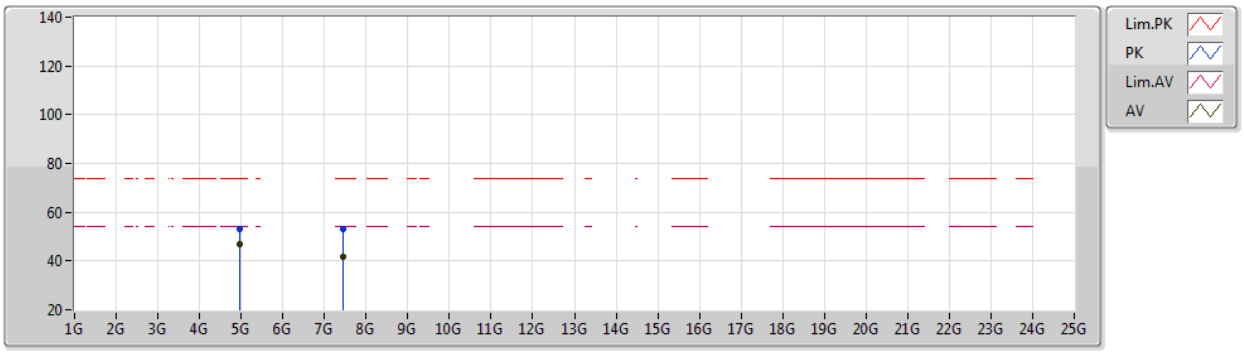
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.9592G	54.09	74.00	-19.91	48.79	3	Vertical	67	3.00	-	31.34	5.53	31.57
AV	4.9592G	47.44	54.00	-6.56	42.14	3	Vertical	67	3.00	-	31.34	5.53	31.57
PK	7.44058G	53.51	74.00	-20.49	43.25	3	Vertical	102	2.14	-	36.48	7.00	33.22
AV	7.44026G	42.03	54.00	-11.97	31.77	3	Vertical	102	2.14	-	36.48	7.00	33.22

Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

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	4.96118G	53.30	74.00	-20.70	47.99	3	Horizontal	323	1.77	-	31.34	5.54	31.57
AV	4.96016G	46.91	54.00	-7.09	41.60	3	Horizontal	323	1.77	-	31.34	5.54	31.57
PK	7.4404G	53.30	74.00	-20.70	43.04	3	Horizontal	298	2.53	-	36.48	7.00	33.22
AV	7.4389G	41.82	54.00	-12.18	31.56	3	Horizontal	298	2.53	-	36.48	7.00	33.22

Test Mode: EUT 1 + Ant.19 (Beam 9)
Summary

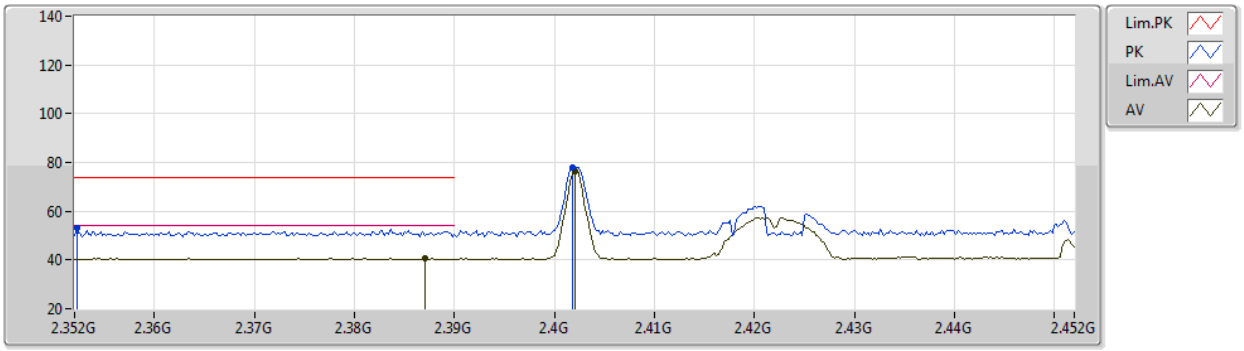
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	4.96009G	51.63	54.00	-2.37	3	Vertical	318	3.00	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

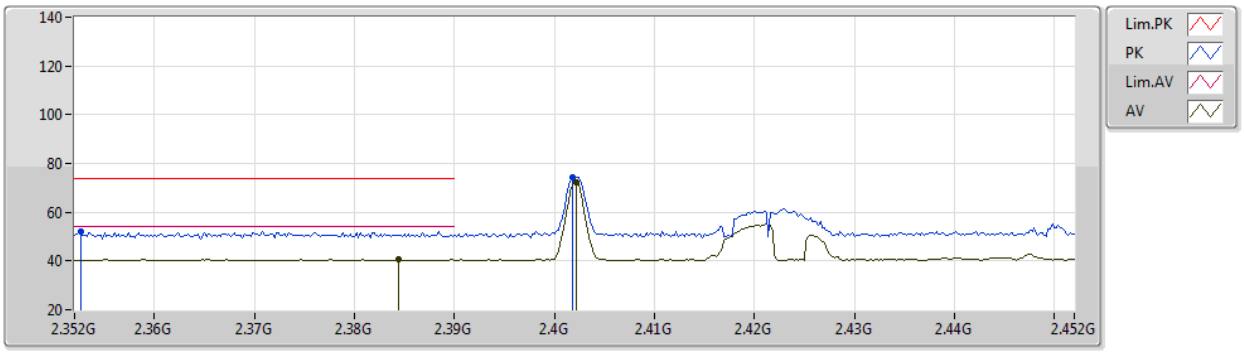
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3522G	52.90	74.00	-21.10	24.42	3	Vertical	251	1.97	-	28.00	0.48	-
AV	2.387G	40.71	54.00	-13.29	12.15	3	Vertical	251	1.97	-	28.07	0.49	-
PK	2.4018G	77.90	Inf	-Inf	49.29	3	Vertical	251	1.97	-	28.11	0.50	-
AV	2.402G	76.31	Inf	-Inf	47.70	3	Vertical	251	1.97	-	28.11	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

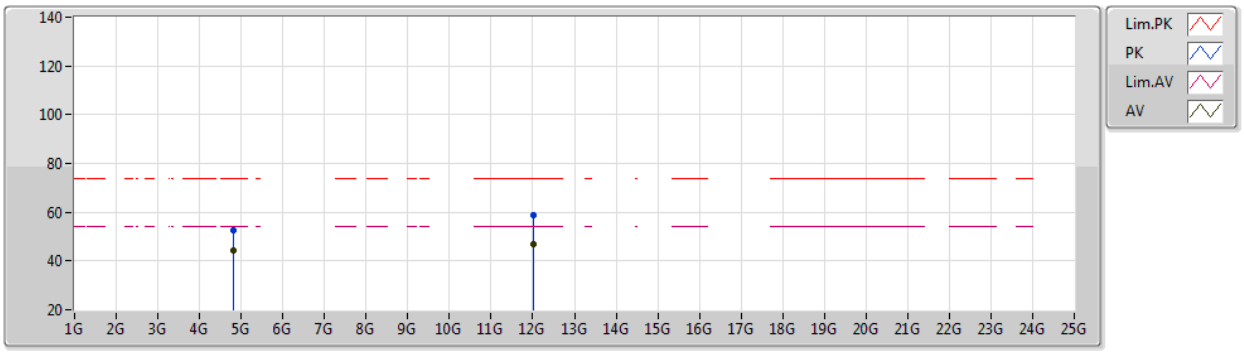
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3526G	52.23	74.00	-21.77	23.74	3	Horizontal	311	2.75	-	28.01	0.48	-
AV	2.3844G	40.66	54.00	-13.34	12.10	3	Horizontal	311	2.75	-	28.07	0.49	-
PK	2.4018G	74.17	Inf	-Inf	45.56	3	Horizontal	311	2.75	-	28.11	0.50	-
AV	2.4022G	72.43	Inf	-Inf	43.82	3	Horizontal	311	2.75	-	28.11	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

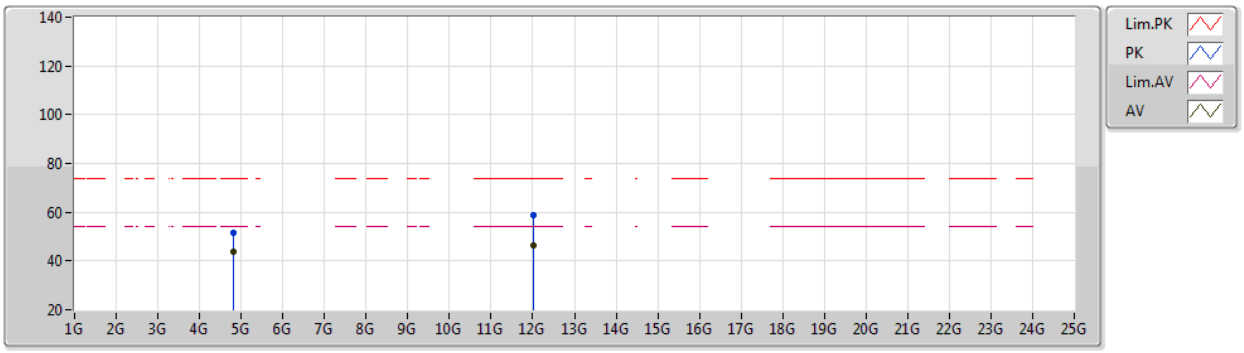
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.80379G	52.34	74.00	-21.66	48.16	3	Vertical	47	2.39	-	33.22	5.80	34.84
AV	4.80413G	44.54	54.00	-9.46	40.36	3	Vertical	47	2.39	-	33.22	5.80	34.84
PK	12.0102G	58.60	74.00	-15.40	41.86	3	Vertical	240	1.20	-	39.10	12.40	34.76
AV	12.009G	46.65	54.00	-7.35	29.91	3	Vertical	240	1.20	-	39.10	12.40	34.76

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

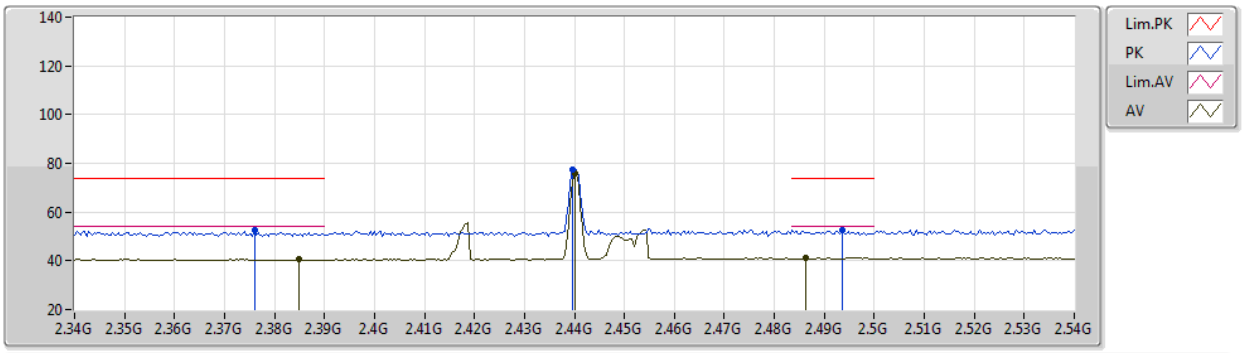
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8045G	51.66	74.00	-22.34	47.48	3	Horizontal	206	2.30	-	33.22	5.80	34.84
AV	4.80398G	43.58	54.00	-10.42	39.40	3	Horizontal	206	2.30	-	33.22	5.80	34.84
PK	12.01082G	58.75	74.00	-15.25	42.01	3	Horizontal	202	1.41	-	39.10	12.40	34.76
AV	12.01028G	46.53	54.00	-7.47	29.79	3	Horizontal	202	1.41	-	39.10	12.40	34.76

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

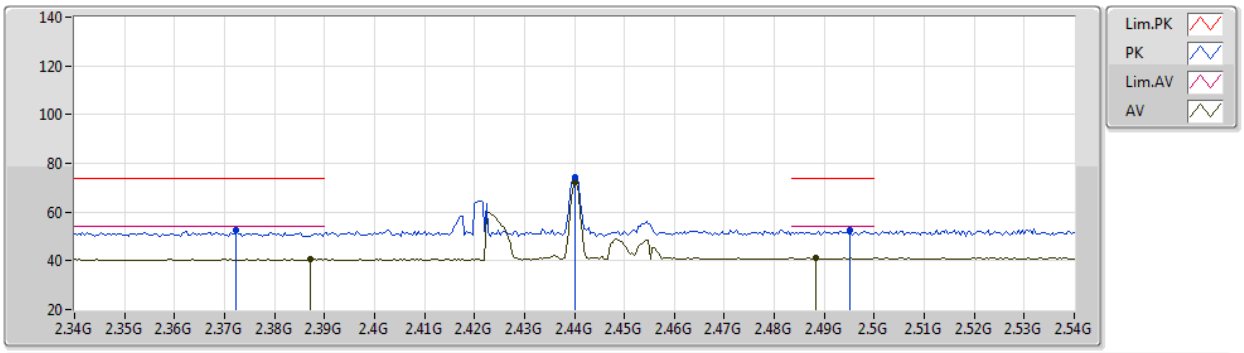
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.376G	52.72	74.00	-21.28	24.18	3	Vertical	208	2.44	-	28.05	0.49	-
AV	2.3848G	40.68	54.00	-13.32	12.12	3	Vertical	208	2.44	-	28.07	0.49	-
PK	2.4396G	77.52	Inf	-Inf	48.76	3	Vertical	208	2.44	-	28.26	0.50	-
AV	2.44G	75.84	Inf	-Inf	47.08	3	Vertical	208	2.44	-	28.26	0.50	-
PK	2.4936G	52.62	74.00	-21.38	23.65	3	Vertical	208	2.44	-	28.47	0.50	-
AV	2.4864G	41.23	54.00	-12.77	12.28	3	Vertical	208	2.44	-	28.45	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

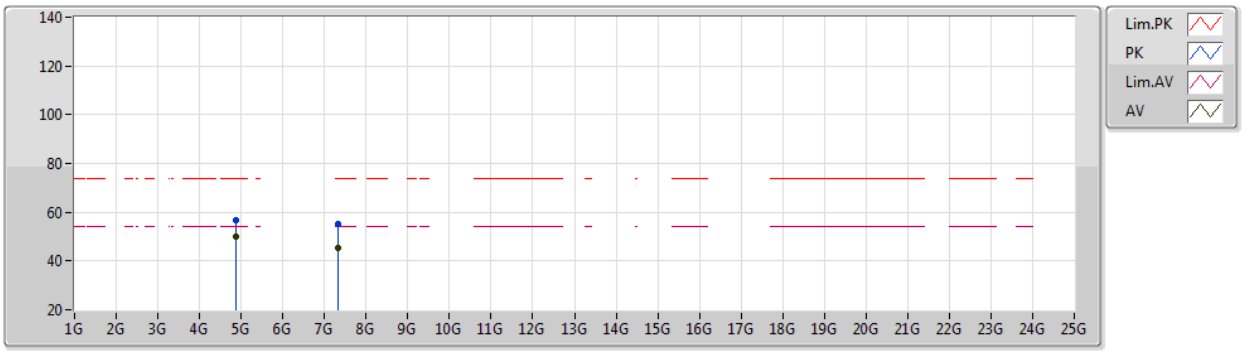
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3724G	52.68	74.00	-21.32	24.15	3	Horizontal	309	2.94	-	28.04	0.49	-
AV	2.3872G	40.63	54.00	-13.37	12.07	3	Horizontal	309	2.94	-	28.07	0.49	-
PK	2.44G	74.12	Inf	-Inf	45.36	3	Horizontal	309	2.94	-	28.26	0.50	-
AV	2.44G	72.40	Inf	-Inf	43.64	3	Horizontal	309	2.94	-	28.26	0.50	-
PK	2.4952G	52.47	74.00	-21.53	23.49	3	Horizontal	309	2.94	-	28.48	0.50	-
AV	2.4884G	41.16	54.00	-12.84	12.21	3	Horizontal	309	2.94	-	28.45	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

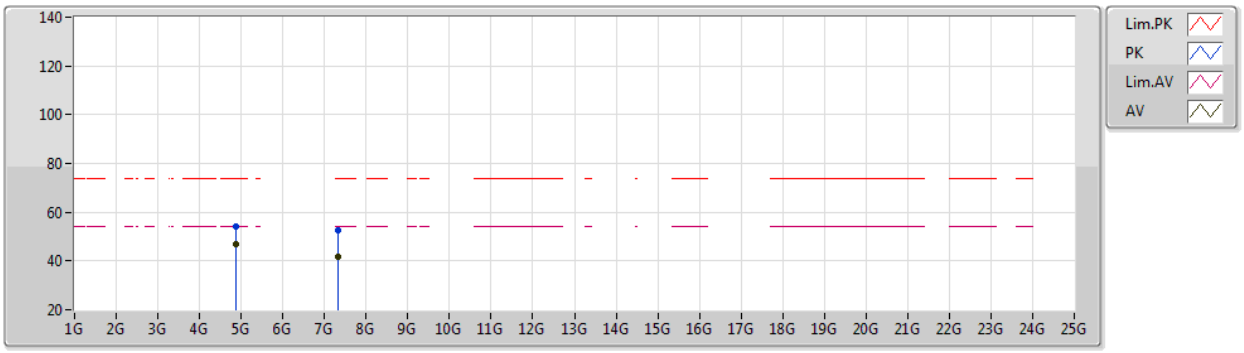
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.88072G	56.88	74.00	-17.12	52.34	3	Vertical	321	2.39	-	33.52	5.80	34.78
AV	4.88014G	49.89	54.00	-4.11	45.35	3	Vertical	321	2.39	-	33.52	5.80	34.78
PK	7.3211G	55.17	74.00	-18.83	46.44	3	Vertical	73	2.11	-	36.72	7.07	35.06
AV	7.31965G	45.09	54.00	-8.91	36.36	3	Vertical	73	2.11	-	36.72	7.07	35.06

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

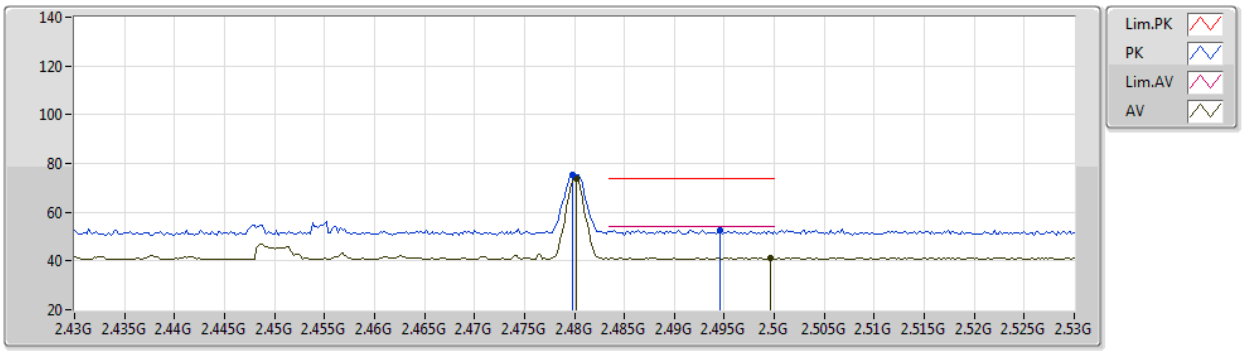
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8802G	54.15	74.00	-19.85	49.61	3	Horizontal	313	2.35	-	33.52	5.80	34.78
AV	4.8802G	46.82	54.00	-7.18	42.28	3	Horizontal	313	2.35	-	33.52	5.80	34.78
PK	7.32056G	52.43	74.00	-21.57	43.70	3	Horizontal	102	1.80	-	36.72	7.07	35.06
AV	7.31961G	41.89	54.00	-12.11	33.16	3	Horizontal	102	1.80	-	36.72	7.07	35.06

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

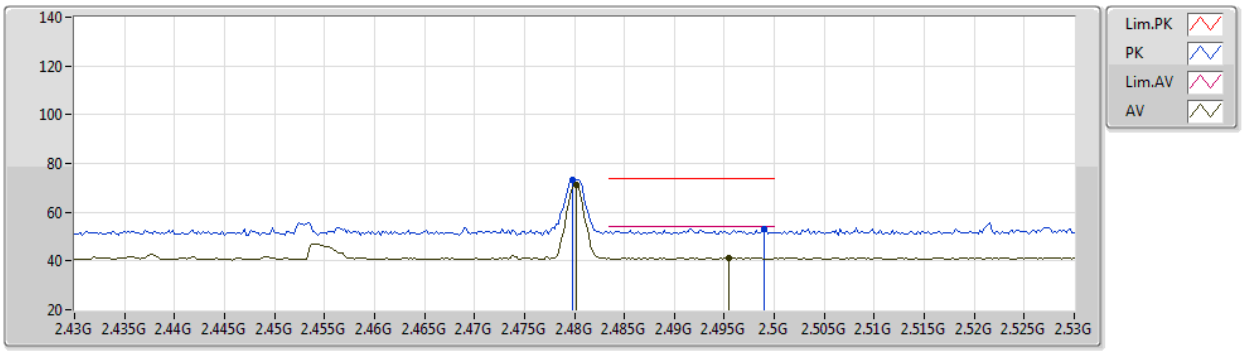
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4798G	75.41	Inf	-Inf	46.49	3	Vertical	196	2.61	-	28.42	0.50	-
AV	2.4802G	73.75	Inf	-Inf	44.83	3	Vertical	196	2.61	-	28.42	0.50	-
PK	2.4946G	52.71	74.00	-21.29	23.73	3	Vertical	196	2.61	-	28.48	0.50	-
AV	2.4996G	41.30	54.00	-12.70	12.30	3	Vertical	196	2.61	-	28.50	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

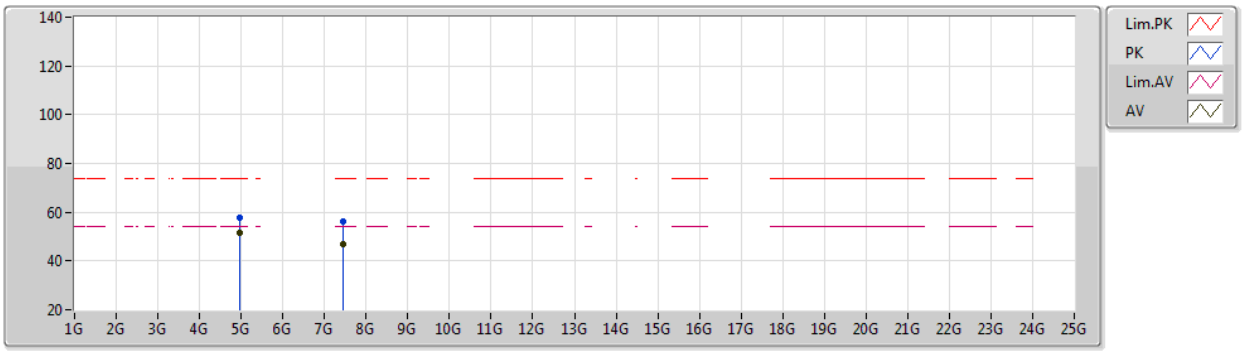
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4798G	73.44	Inf	-Inf	44.52	3	Horizontal	156	2.94	-	28.42	0.50	-
AV	2.4802G	71.34	Inf	-Inf	42.42	3	Horizontal	156	2.94	-	28.42	0.50	-
PK	2.499G	53.21	74.00	-20.79	24.21	3	Horizontal	156	2.94	-	28.50	0.50	-
AV	2.4954G	41.21	54.00	-12.79	12.23	3	Horizontal	156	2.94	-	28.48	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

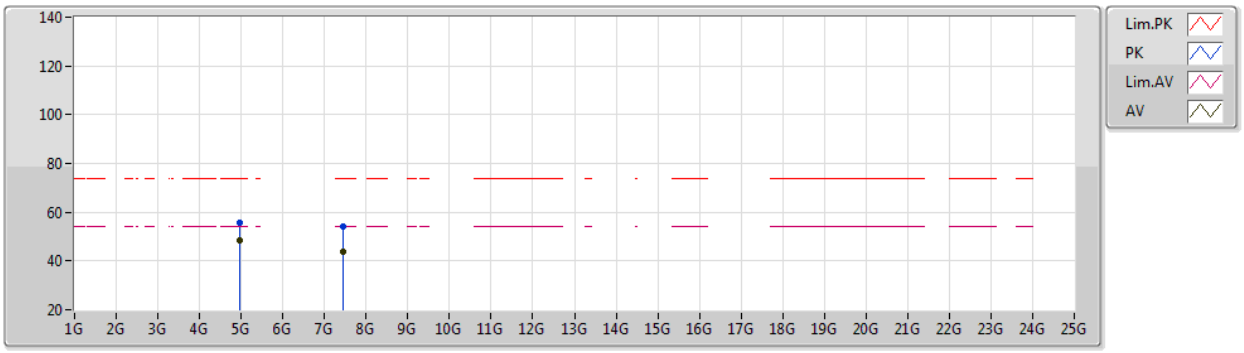
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.96022G	57.95	74.00	-16.05	53.20	3	Vertical	318	3.00	-	33.66	5.80	34.71
AV	4.96009G	51.63	54.00	-2.37	46.88	3	Vertical	318	3.00	-	33.66	5.80	34.71
PK	7.44094G	56.02	74.00	-17.98	47.17	3	Vertical	82	2.01	-	36.76	7.14	35.05
AV	7.43955G	46.86	54.00	-7.14	38.01	3	Vertical	82	2.01	-	36.76	7.14	35.05

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-J-7

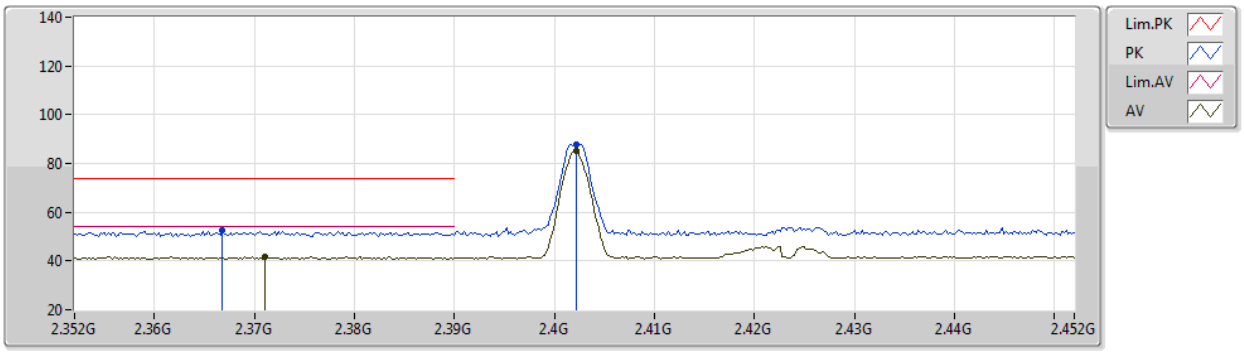
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.96056G	55.70	74.00	-18.30	50.95	3	Horizontal	187	2.14	-	33.66	5.80	34.71
AV	4.9601G	48.61	54.00	-5.39	43.86	3	Horizontal	187	2.14	-	33.66	5.80	34.71
PK	7.44089G	54.03	74.00	-19.97	45.18	3	Horizontal	10	1.87	-	36.76	7.14	35.05
AV	7.43965G	43.97	54.00	-10.03	35.12	3	Horizontal	10	1.87	-	36.76	7.14	35.05

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

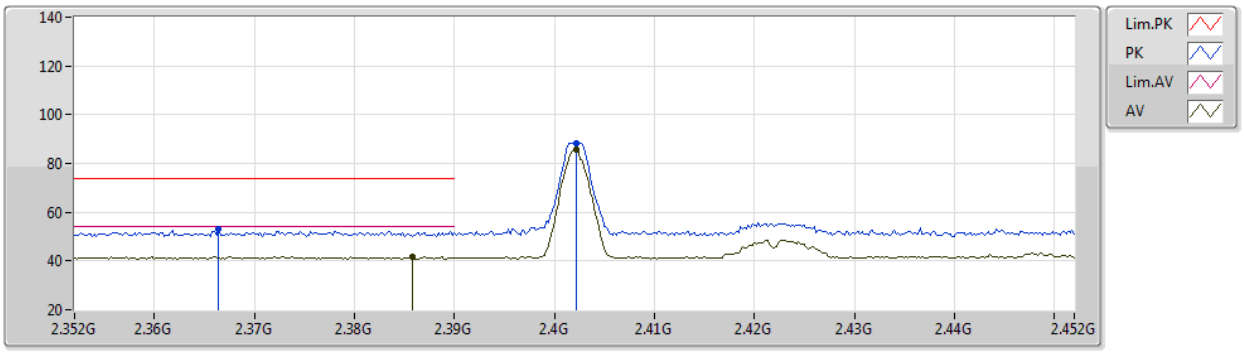
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3668G	52.49	74.00	-21.51	23.98	3	Vertical	233	3.00	-	28.03	0.48	-
AV	2.371G	41.72	54.00	-12.28	13.19	3	Vertical	233	3.00	-	28.04	0.49	-
PK	2.4022G	87.68	Inf	-Inf	59.07	3	Vertical	233	3.00	-	28.11	0.50	-
AV	2.4022G	84.93	Inf	-Inf	56.32	3	Vertical	233	3.00	-	28.11	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

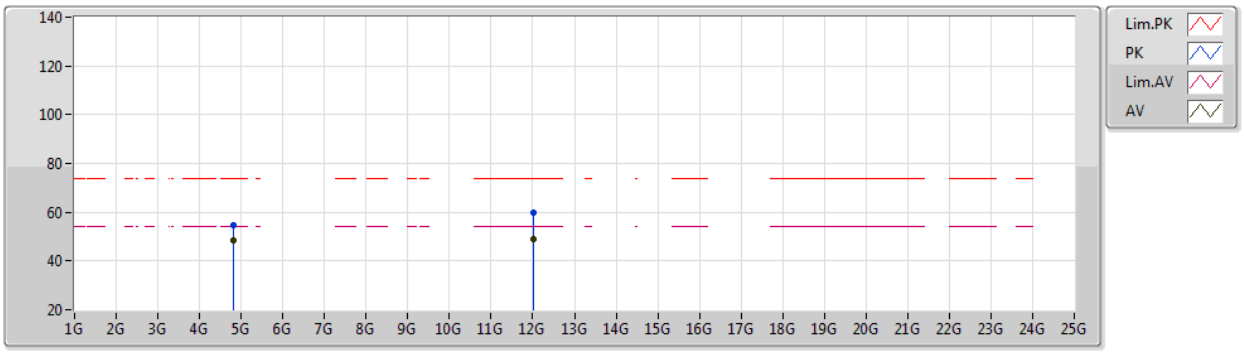
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3664G	53.07	74.00	-20.93	24.56	3	Horizontal	336	3.00	-	28.03	0.48	-
AV	2.3858G	41.94	54.00	-12.06	13.38	3	Horizontal	336	3.00	-	28.07	0.49	-
PK	2.4022G	88.38	Inf	-Inf	59.77	3	Horizontal	336	3.00	-	28.11	0.50	-
AV	2.4022G	85.53	Inf	-Inf	56.92	3	Horizontal	336	3.00	-	28.11	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

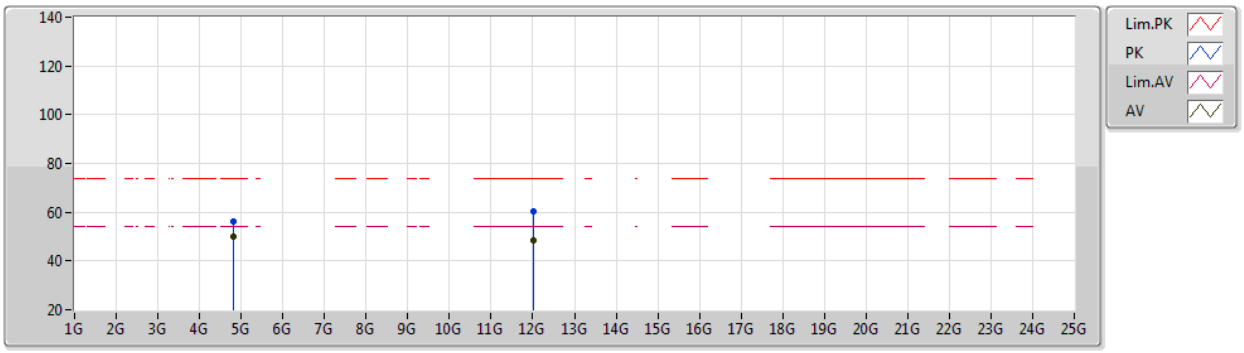
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.80418G	54.91	74.00	-19.09	50.73	3	Vertical	91	2.44	-	33.22	5.80	34.84
AV	4.8032G	48.66	54.00	-5.34	44.49	3	Vertical	91	2.44	-	33.21	5.80	34.84
PK	12.01044G	59.66	74.00	-14.34	42.92	3	Vertical	0	1.73	-	39.10	12.40	34.76
AV	12.01304G	49.22	54.00	-4.78	32.47	3	Vertical	0	1.73	-	39.10	12.40	34.75

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

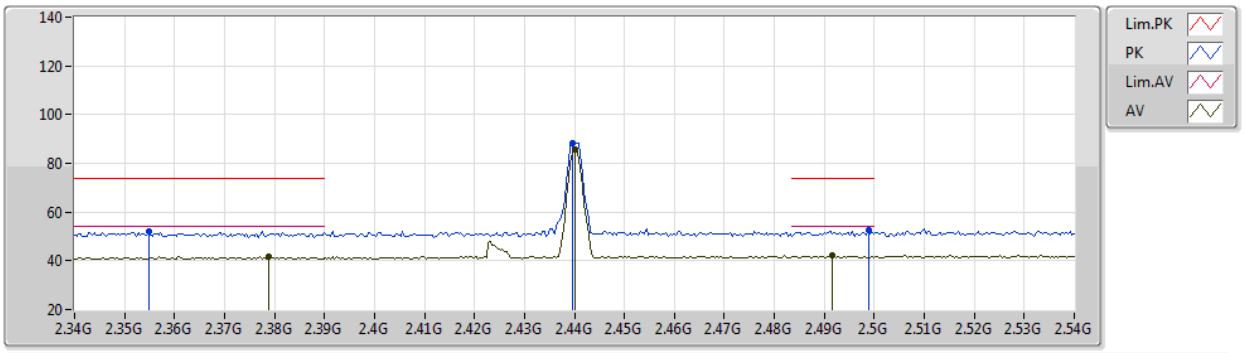
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8052G	56.25	74.00	-17.75	52.07	3	Horizontal	329	2.69	-	33.22	5.80	34.84
AV	4.80416G	50.05	54.00	-3.95	45.87	3	Horizontal	329	2.69	-	33.22	5.80	34.84
PK	12.00876G	60.09	74.00	-13.91	43.35	3	Horizontal	103	2.29	-	39.10	12.40	34.76
AV	12.00882G	48.62	54.00	-5.38	31.88	3	Horizontal	103	2.29	-	39.10	12.40	34.76

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

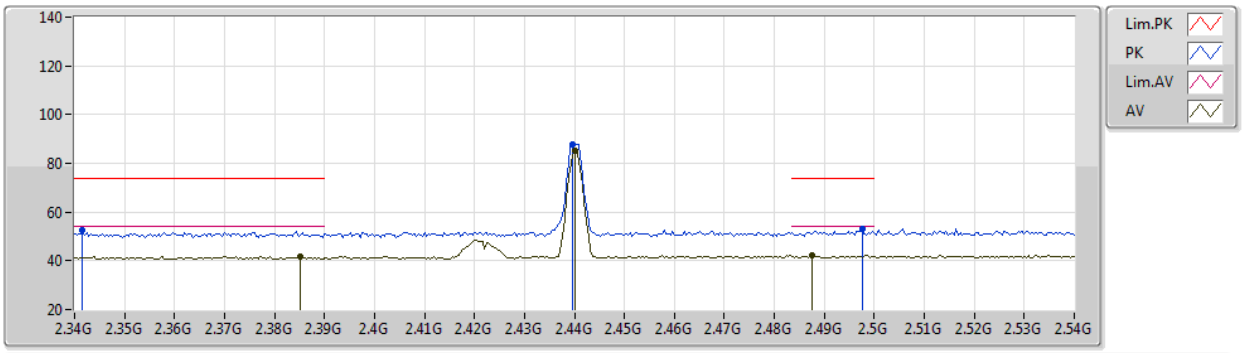
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3548G	51.98	74.00	-22.02	23.49	3	Vertical	215	2.74	-	28.01	0.48	-
AV	2.3788G	41.83	54.00	-12.17	13.28	3	Vertical	215	2.74	-	28.06	0.49	-
PK	2.4396G	88.50	Inf	-Inf	59.74	3	Vertical	215	2.74	-	28.26	0.50	-
AV	2.44G	85.68	Inf	-Inf	56.92	3	Vertical	215	2.74	-	28.26	0.50	-
PK	2.4988G	52.47	74.00	-21.53	23.47	3	Vertical	215	2.74	-	28.50	0.50	-
AV	2.4916G	41.99	54.00	-12.01	13.02	3	Vertical	215	2.74	-	28.47	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

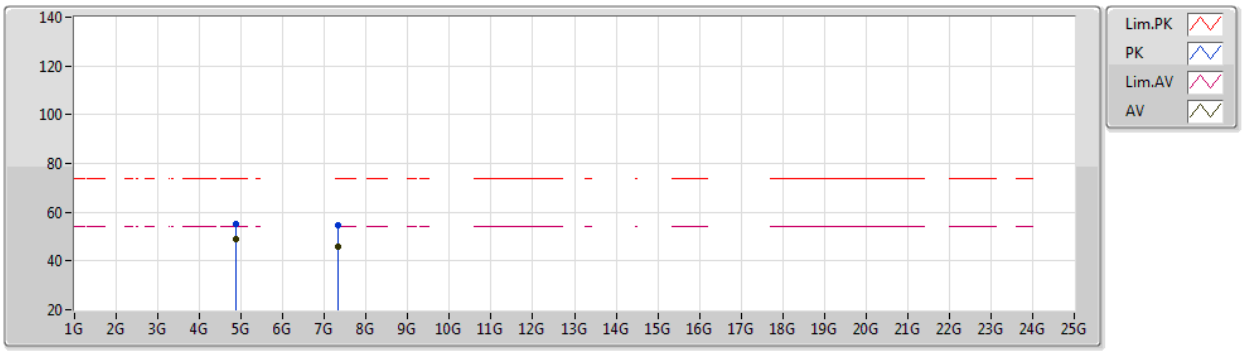
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3416G	52.47	74.00	-21.53	24.02	3	Horizontal	332	3.00	-	27.98	0.47	-
AV	2.3852G	41.67	54.00	-12.33	13.11	3	Horizontal	332	3.00	-	28.07	0.49	-
PK	2.4396G	87.96	Inf	-Inf	59.20	3	Horizontal	332	3.00	-	28.26	0.50	-
AV	2.44G	85.18	Inf	-Inf	56.42	3	Horizontal	332	3.00	-	28.26	0.50	-
PK	2.4976G	52.96	74.00	-21.04	23.97	3	Horizontal	332	3.00	-	28.49	0.50	-
AV	2.4876G	42.09	54.00	-11.91	13.14	3	Horizontal	332	3.00	-	28.45	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

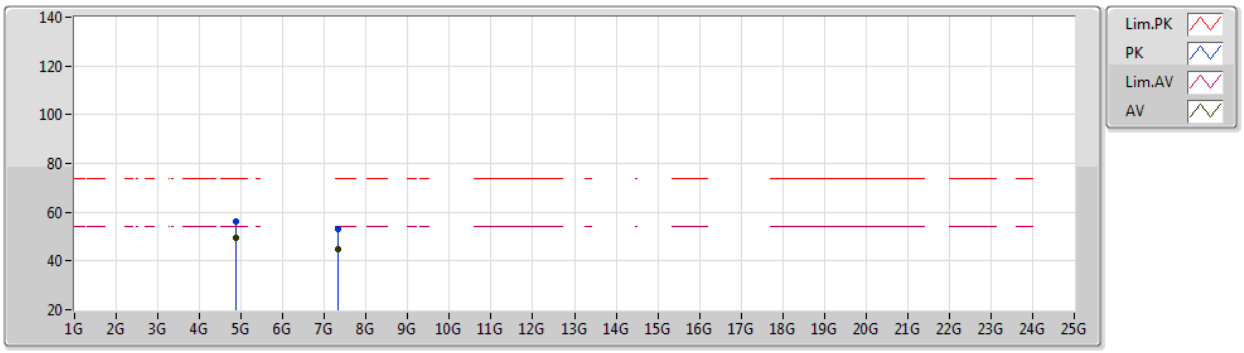
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.88026G	55.40	74.00	-18.60	50.86	3	Vertical	61	2.06	-	33.52	5.80	34.78
AV	4.8792G	49.08	54.00	-4.92	44.54	3	Vertical	61	2.06	-	33.52	5.80	34.78
PK	7.32018G	54.81	74.00	-19.19	46.08	3	Vertical	59	2.07	-	36.72	7.07	35.06
AV	7.31886G	46.12	54.00	-7.88	37.39	3	Vertical	59	2.07	-	36.72	7.07	35.06

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

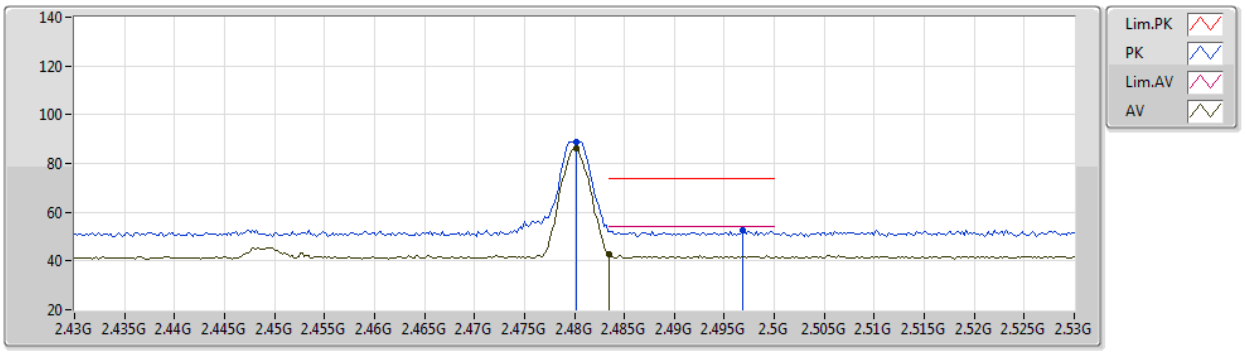
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87908G	56.09	74.00	-17.91	51.55	3	Horizontal	337	2.52	-	33.52	5.80	34.78
AV	4.87914G	49.46	54.00	-4.54	44.92	3	Horizontal	337	2.52	-	33.52	5.80	34.78
PK	7.3205G	53.11	74.00	-20.89	44.38	3	Horizontal	162	1.95	-	36.72	7.07	35.06
AV	7.31894G	44.67	54.00	-9.33	35.94	3	Horizontal	162	1.95	-	36.72	7.07	35.06

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

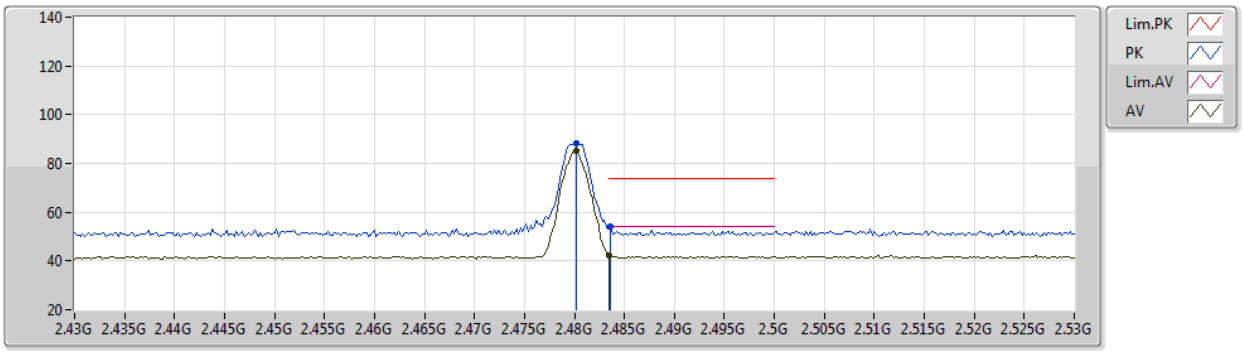
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4802G	88.97	Inf	-Inf	60.05	3	Vertical	206	2.72	-	28.42	0.50	-
AV	2.4802G	85.96	Inf	-Inf	57.04	3	Vertical	206	2.72	-	28.42	0.50	-
PK	2.4968G	52.61	74.00	-21.39	23.62	3	Vertical	206	2.72	-	28.49	0.50	-
AV	2.4835G	42.54	54.00	-11.46	13.61	3	Vertical	206	2.72	-	28.43	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

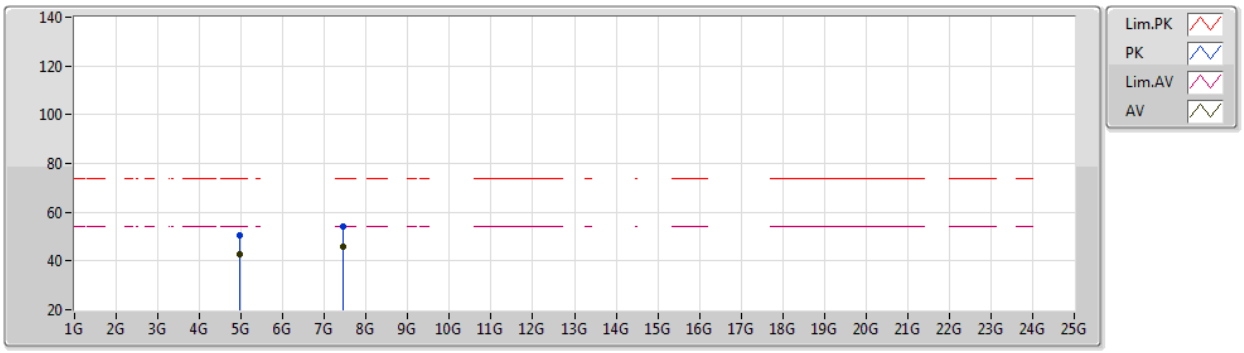
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4802G	88.02	Inf	-Inf	59.10	3	Horizontal	331	2.96	-	28.42	0.50	-
AV	2.4802G	85.14	Inf	-Inf	56.22	3	Horizontal	331	2.96	-	28.42	0.50	-
PK	2.4836G	54.22	74.00	-19.78	25.29	3	Horizontal	331	2.96	-	28.43	0.50	-
AV	2.4835G	42.39	54.00	-11.61	13.46	3	Horizontal	331	2.96	-	28.43	0.50	-

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

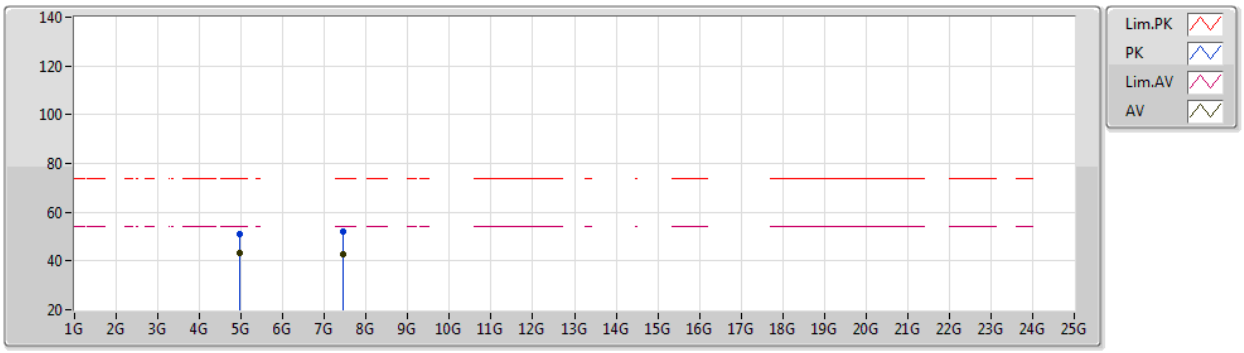
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.95922G	50.68	74.00	-23.32	45.93	3	Vertical	242	2.18	-	33.66	5.80	34.71
AV	4.96014G	42.67	54.00	-11.33	37.92	3	Vertical	242	2.18	-	33.66	5.80	34.71
PK	7.43888G	53.98	74.00	-20.02	45.13	3	Vertical	83	2.09	-	36.76	7.14	35.05
AV	7.4389G	45.64	54.00	-8.36	36.79	3	Vertical	83	2.09	-	36.76	7.14	35.05

Test Mode: EUT 1 + Ant.19 (Beam 9)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Z_1TX
Setting default
03-A-N-2

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	4.96018G	51.15	74.00	-22.85	46.40	3	Horizontal	291	2.39	-	33.66	5.80	34.71
AV	4.95918G	43.33	54.00	-10.67	38.58	3	Horizontal	291	2.39	-	33.66	5.80	34.71
PK	7.44174G	52.13	74.00	-21.87	43.28	3	Horizontal	66	1.93	-	36.76	7.14	35.05
AV	7.43904G	42.93	54.00	-11.07	34.08	3	Horizontal	66	1.93	-	36.76	7.14	35.05

Test Mode: EUT 1 + Ant.20 (Omni Mode)
Summary

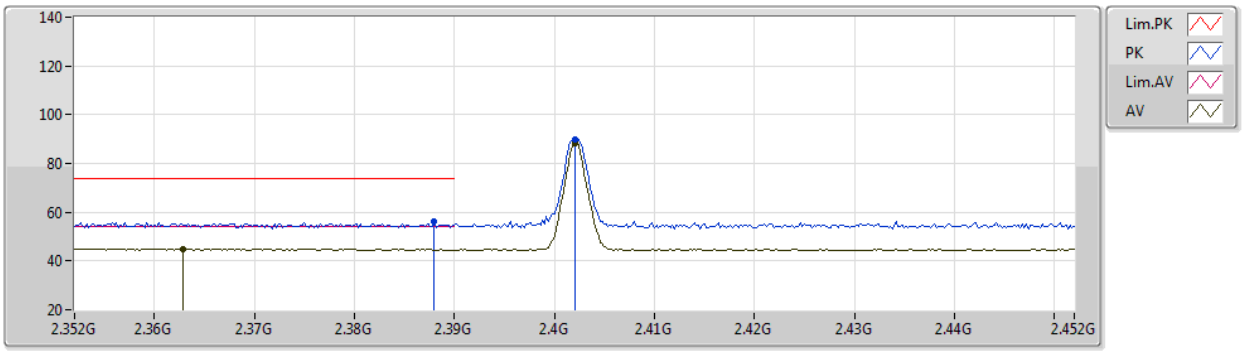
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	AV	2.4835G	50.67	54.00	-3.33	3	Horizontal	321	2.01	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

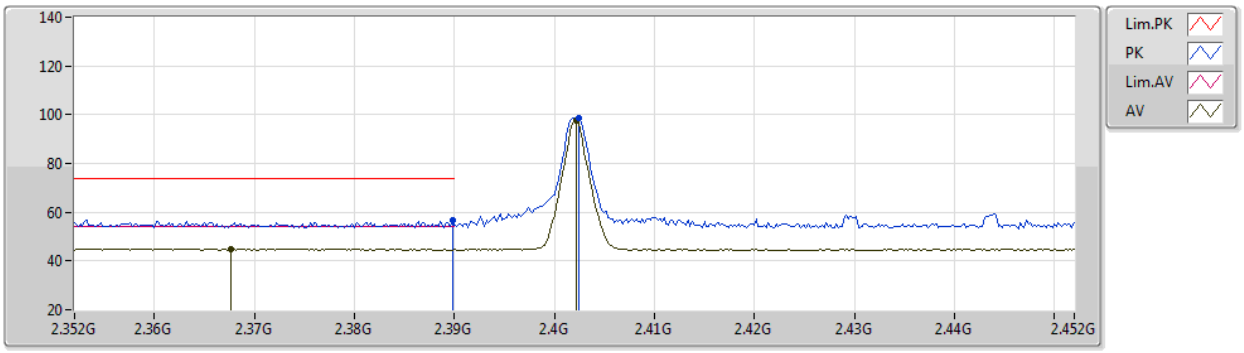
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.388G	56.08	74.00	-17.92	24.45	3	Vertical	169	2.00	-	27.64	3.99	-
AV	2.3628G	44.86	54.00	-9.14	13.17	3	Vertical	169	2.00	-	27.71	3.98	-
PK	2.402G	89.70	Inf	-Inf	58.11	3	Vertical	169	2.00	-	27.59	4.00	-
AV	2.402G	88.31	Inf	-Inf	56.72	3	Vertical	169	2.00	-	27.59	4.00	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

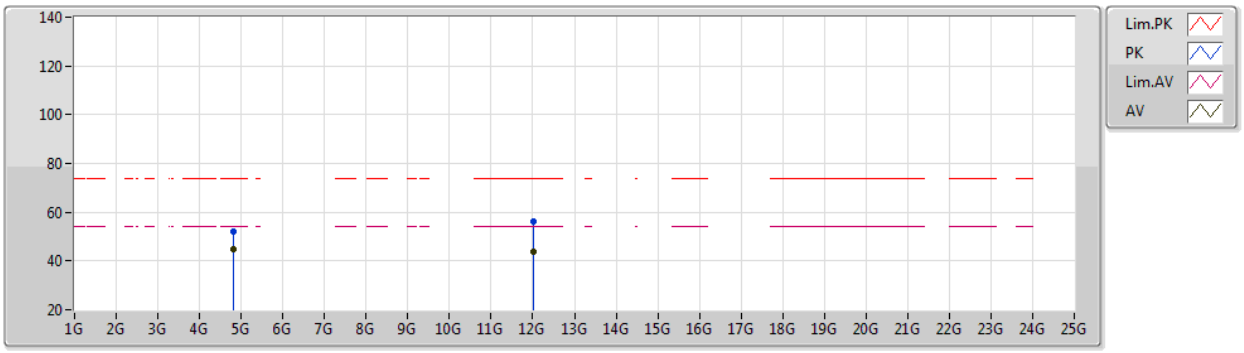
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	56.94	74.00	-17.06	25.32	3	Horizontal	238	1.87	-	27.63	3.99	-
AV	2.3676G	44.98	54.00	-9.02	13.30	3	Horizontal	238	1.87	-	27.70	3.98	-
PK	2.4024G	98.87	Inf	-Inf	67.28	3	Horizontal	238	1.87	-	27.59	4.00	-
AV	2.4022G	97.42	Inf	-Inf	65.83	3	Horizontal	238	1.87	-	27.59	4.00	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

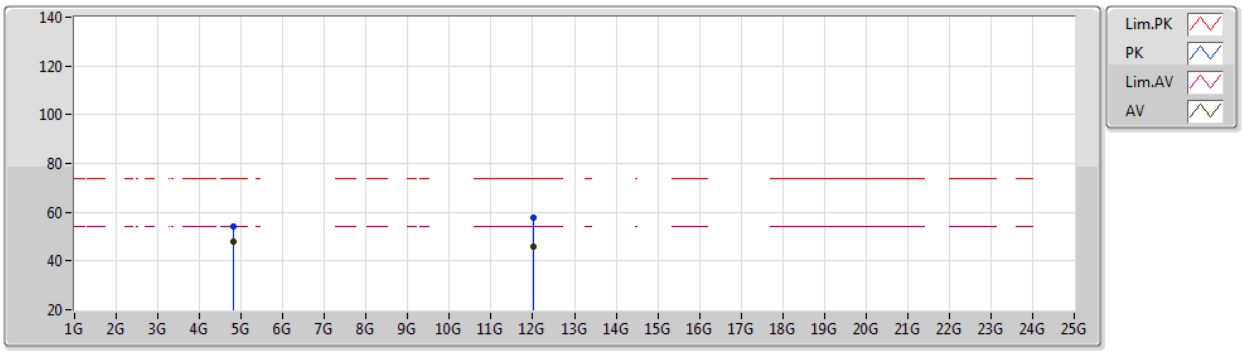
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.80472G	52.27	74.00	-21.73	47.71	3	Vertical	199	1.83	-	31.00	5.31	31.75
AV	4.80412G	44.81	54.00	-9.19	40.26	3	Vertical	199	1.83	-	31.00	5.31	31.76
PK	12.00937G	56.10	74.00	-17.90	43.06	3	Vertical	256	2.62	-	38.91	8.30	34.17
AV	12.01057G	43.73	54.00	-10.27	30.69	3	Vertical	256	2.62	-	38.91	8.30	34.17

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

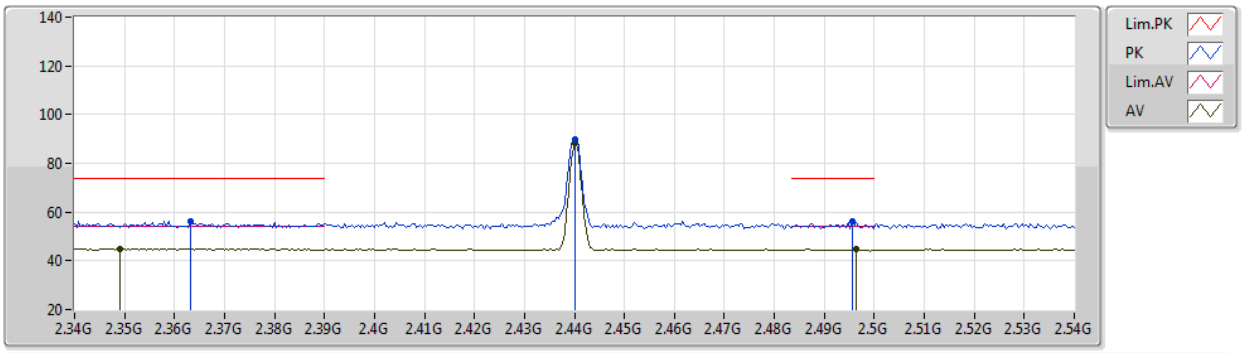
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.80362G	54.25	74.00	-19.75	49.70	3	Horizontal	149	1.60	-	31.00	5.31	31.76
AV	4.80422G	47.79	54.00	-6.21	43.23	3	Horizontal	149	1.60	-	31.00	5.31	31.75
PK	12.01159G	57.96	74.00	-16.04	44.92	3	Horizontal	330	2.45	-	38.91	8.30	34.17
AV	12.01163G	45.65	54.00	-8.35	32.61	3	Horizontal	330	2.45	-	38.91	8.30	34.17

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

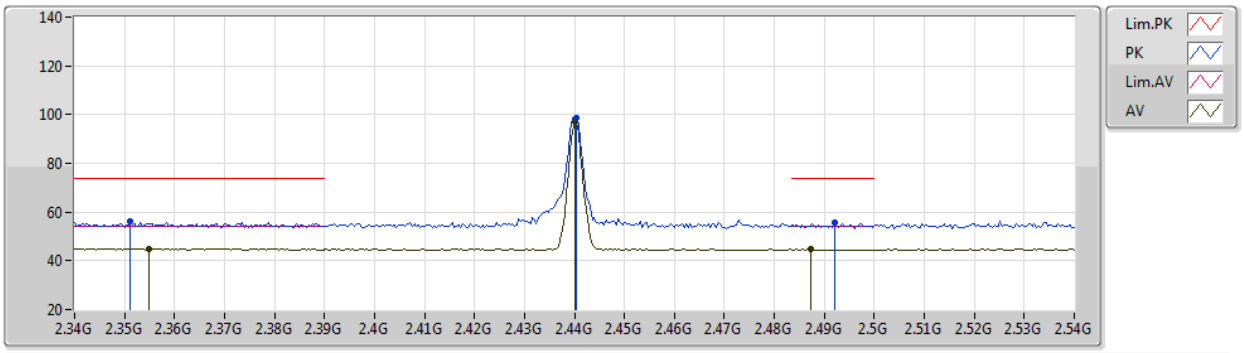
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3632G	56.45	74.00	-17.55	24.76	3	Vertical	164	1.74	-	27.71	3.98	-
AV	2.3492G	44.98	54.00	-9.02	13.26	3	Vertical	164	1.74	-	27.75	3.97	-
PK	2.44G	89.81	Inf	-Inf	58.31	3	Vertical	164	1.74	-	27.48	4.02	-
AV	2.44G	88.25	Inf	-Inf	56.75	3	Vertical	164	1.74	-	27.48	4.02	-
PK	2.4956G	56.09	74.00	-17.91	24.73	3	Vertical	164	1.74	-	27.31	4.05	-
AV	2.4964G	44.68	54.00	-9.32	13.32	3	Vertical	164	1.74	-	27.31	4.05	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

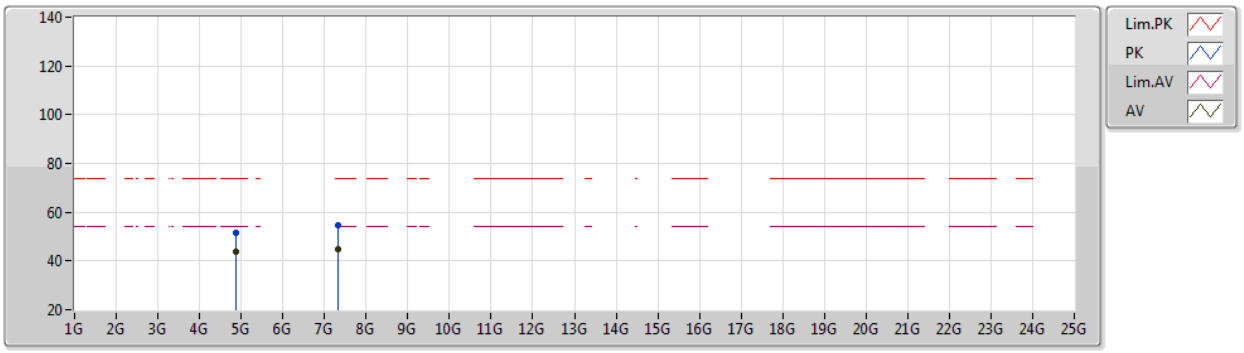
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3512G	56.21	74.00	-17.79	24.48	3	Horizontal	135	1.80	-	27.75	3.98	-
AV	2.3548G	44.99	54.00	-9.01	13.27	3	Horizontal	135	1.80	-	27.74	3.98	-
PK	2.4404G	98.65	Inf	-Inf	67.15	3	Horizontal	135	1.80	-	27.48	4.02	-
AV	2.44G	97.12	Inf	-Inf	65.62	3	Horizontal	135	1.80	-	27.48	4.02	-
PK	2.492G	55.72	74.00	-18.28	24.35	3	Horizontal	135	1.80	-	27.32	4.05	-
AV	2.4872G	44.68	54.00	-9.32	13.30	3	Horizontal	135	1.80	-	27.34	4.04	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

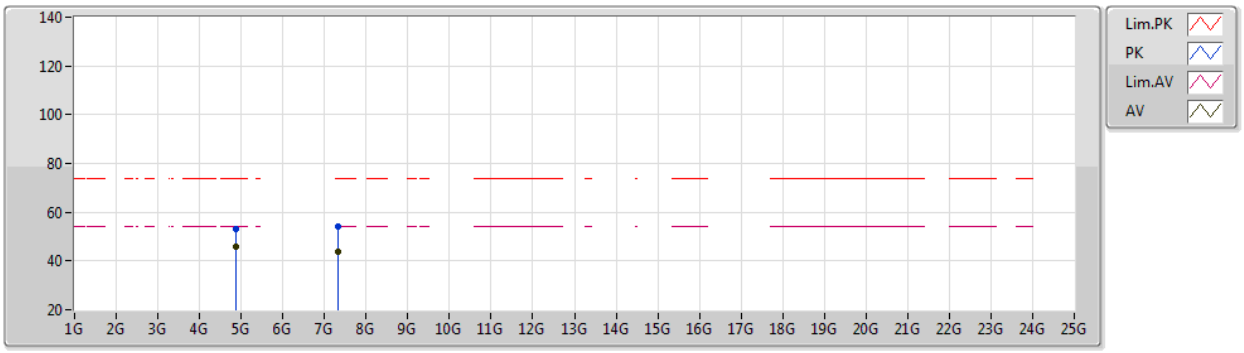
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87973G	51.46	74.00	-22.54	46.63	3	Vertical	252	2.06	-	31.08	5.41	31.66
AV	4.88012G	43.61	54.00	-10.39	38.78	3	Vertical	252	2.06	-	31.08	5.41	31.66
PK	7.3209G	54.57	74.00	-19.43	44.38	3	Vertical	175	1.00	-	36.40	6.96	33.17
AV	7.31933G	44.57	54.00	-9.43	34.38	3	Vertical	175	1.00	-	36.40	6.96	33.17

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

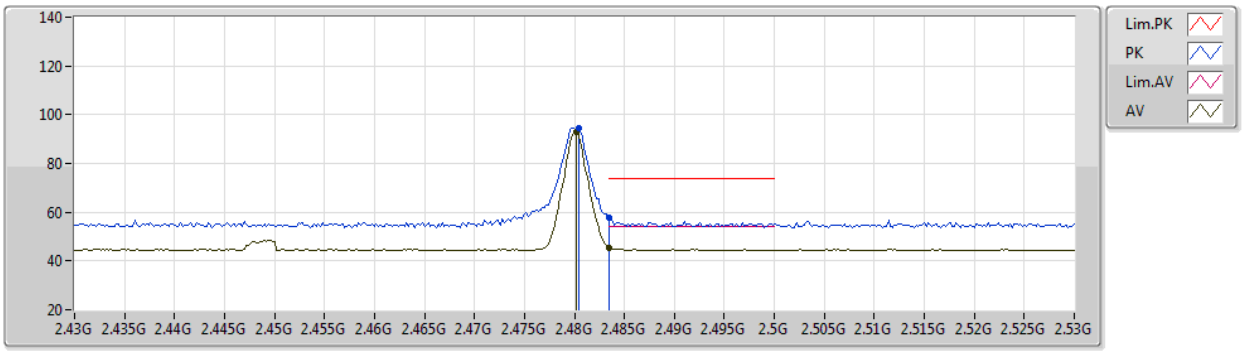
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.88061G	52.99	74.00	-21.01	48.16	3	Horizontal	174	2.37	-	31.08	5.41	31.66
AV	4.88009G	45.76	54.00	-8.24	40.93	3	Horizontal	174	2.37	-	31.08	5.41	31.66
PK	7.32115G	54.13	74.00	-19.87	43.94	3	Horizontal	116	1.03	-	36.40	6.96	33.17
AV	7.32081G	43.56	54.00	-10.44	33.37	3	Horizontal	116	1.03	-	36.40	6.96	33.17

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

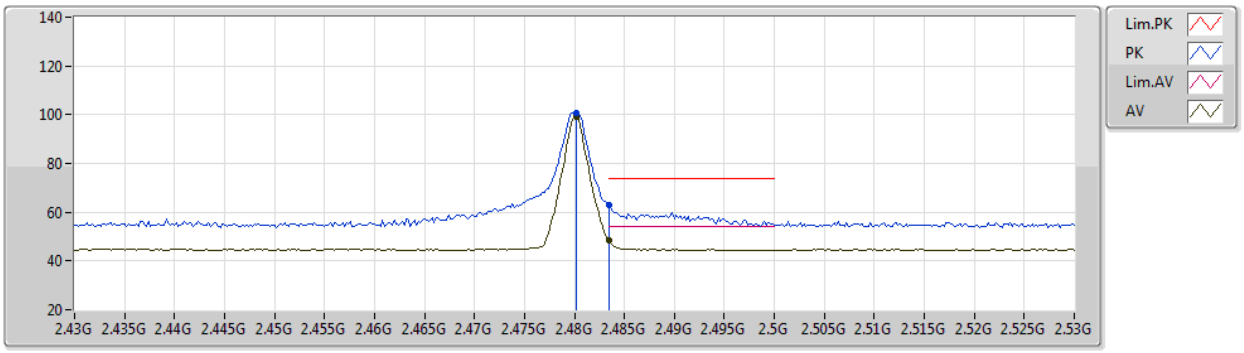
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4804G	94.26	Inf	-Inf	62.86	3	Vertical	213	2.97	-	27.36	4.04	-
AV	2.4802G	92.82	Inf	-Inf	61.42	3	Vertical	213	2.97	-	27.36	4.04	-
PK	2.4835G	57.94	74.00	-16.06	26.55	3	Vertical	213	2.97	-	27.35	4.04	-
AV	2.4835G	45.36	54.00	-8.64	13.97	3	Vertical	213	2.97	-	27.35	4.04	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

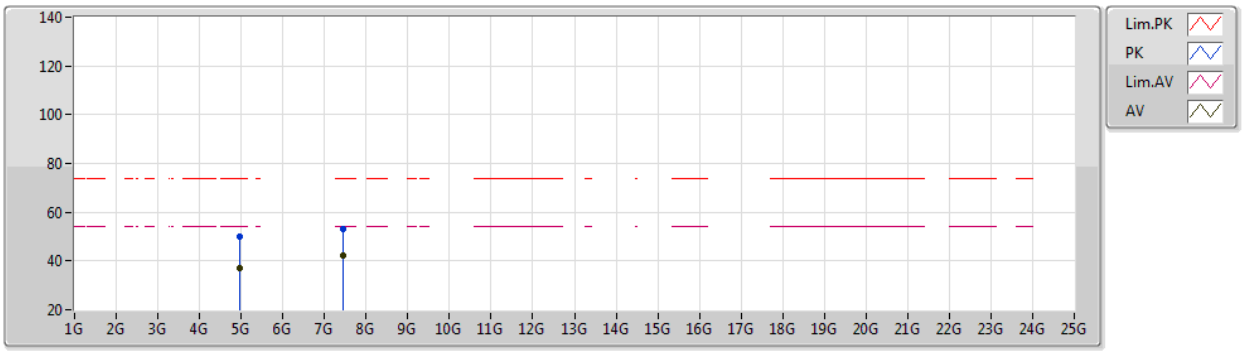
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4802G	100.53	Inf	-Inf	69.13	3	Horizontal	138	1.99	-	27.36	4.04	-
AV	2.4802G	99.02	Inf	-Inf	67.62	3	Horizontal	138	1.99	-	27.36	4.04	-
PK	2.4835G	62.83	74.00	-11.17	31.44	3	Horizontal	138	1.99	-	27.35	4.04	-
AV	2.4835G	48.32	54.00	-5.68	16.93	3	Horizontal	138	1.99	-	27.35	4.04	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

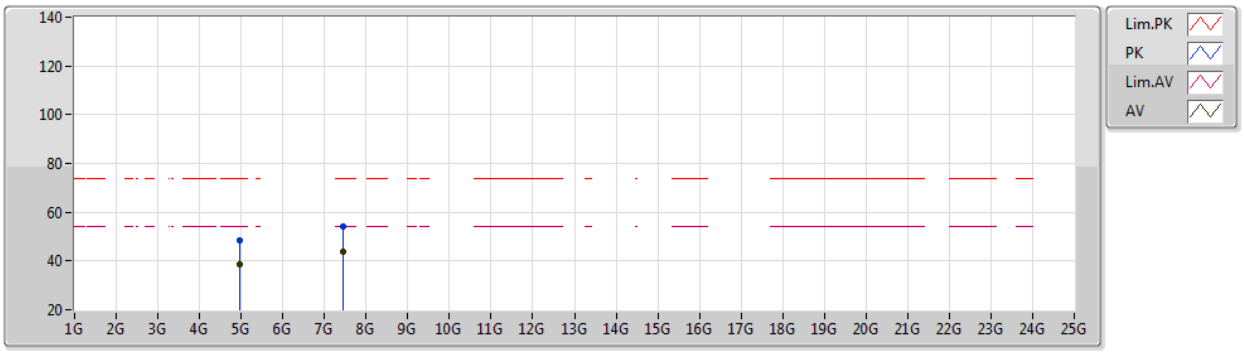
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.96052G	49.86	74.00	-24.14	44.55	3	Vertical	6	1.52	-	31.34	5.54	31.57
AV	4.96004G	37.27	54.00	-16.73	31.96	3	Vertical	6	1.52	-	31.34	5.54	31.57
PK	7.44153G	53.13	74.00	-20.87	42.87	3	Vertical	343	3.00	-	36.48	7.00	33.22
AV	7.44037G	42.06	54.00	-11.94	31.80	3	Vertical	343	3.00	-	36.48	7.00	33.22

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(1Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-M-1

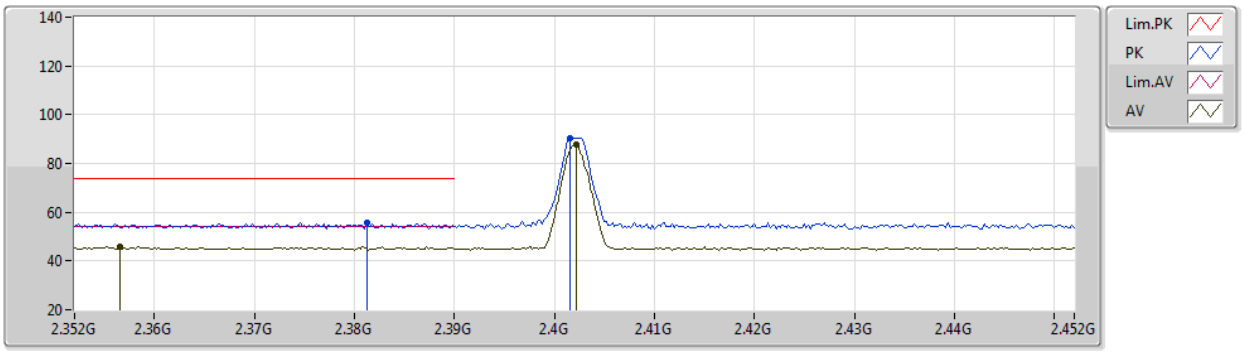
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.96078G	48.52	74.00	-25.48	43.21	3	Horizontal	356	1.59	-	31.34	5.54	31.57
AV	4.96018G	38.87	54.00	-15.13	33.56	3	Horizontal	356	1.59	-	31.34	5.54	31.57
PK	7.43796G	54.24	74.00	-19.76	43.98	3	Horizontal	175	1.47	-	36.48	7.00	33.22
AV	7.43996G	43.69	54.00	-10.31	33.43	3	Horizontal	175	1.47	-	36.48	7.00	33.22

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

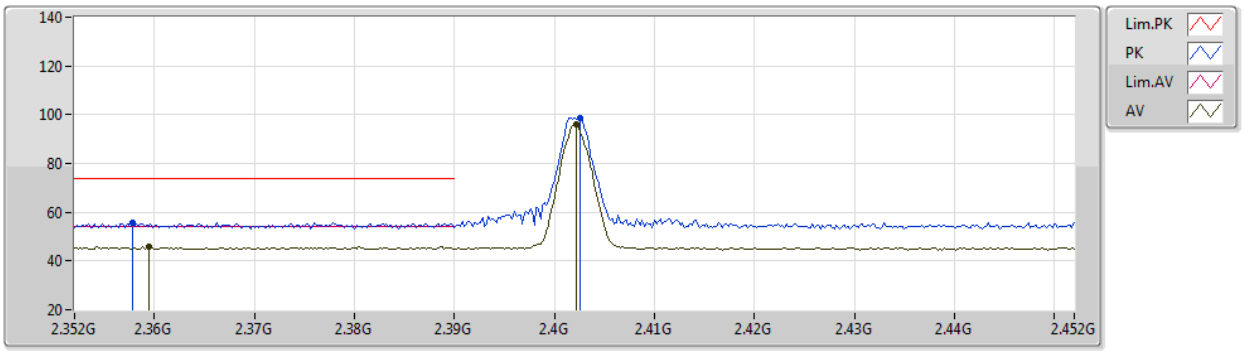
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3812G	55.77	74.00	-18.23	24.12	3	Vertical	346	1.97	-	27.66	3.99	-
AV	2.3566G	46.00	54.00	-8.00	14.29	3	Vertical	346	1.97	-	27.73	3.98	-
PK	2.4016G	90.40	Inf	-Inf	58.80	3	Vertical	346	1.97	-	27.60	4.00	-
AV	2.4022G	87.58	Inf	-Inf	55.99	3	Vertical	346	1.97	-	27.59	4.00	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

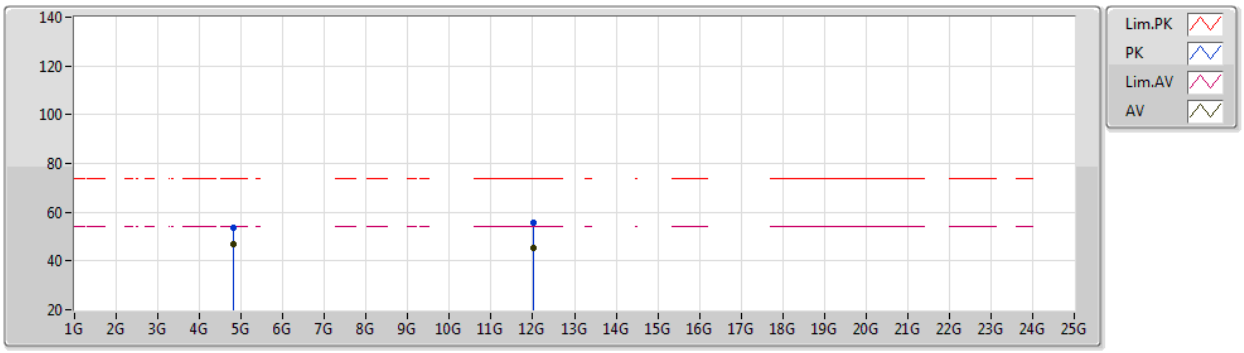
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3578G	55.94	74.00	-18.06	24.23	3	Horizontal	56	1.86	-	27.73	3.98	-
AV	2.3594G	45.91	54.00	-8.09	14.21	3	Horizontal	56	1.86	-	27.72	3.98	-
PK	2.4026G	98.59	Inf	-Inf	67.00	3	Horizontal	56	1.86	-	27.59	4.00	-
AV	2.4022G	95.86	Inf	-Inf	64.27	3	Horizontal	56	1.86	-	27.59	4.00	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

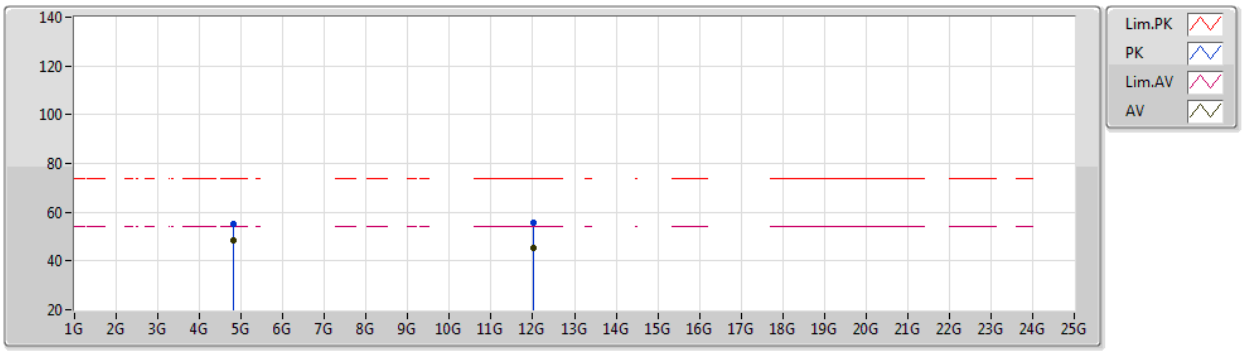
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.80428G	53.43	74.00	-20.57	48.87	3	Vertical	323	1.77	-	31.00	5.31	31.75
AV	4.8032G	46.71	54.00	-7.29	42.17	3	Vertical	323	1.77	-	31.00	5.30	31.76
PK	12.00822G	55.46	74.00	-18.54	42.43	3	Vertical	176	2.34	-	38.90	8.30	34.17
AV	12.0137G	45.32	54.00	-8.68	32.28	3	Vertical	176	2.34	-	38.91	8.30	34.17

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2402MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

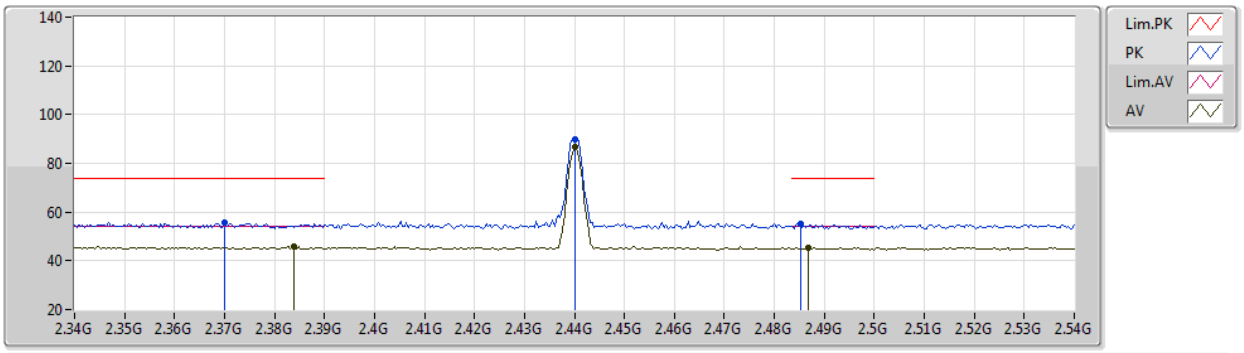
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8042G	55.37	74.00	-18.63	50.81	3	Horizontal	355	1.35	-	31.00	5.31	31.75
AV	4.80318G	48.31	54.00	-5.69	43.77	3	Horizontal	355	1.35	-	31.00	5.30	31.76
PK	12.00678G	55.72	74.00	-18.28	42.69	3	Horizontal	235	1.23	-	38.90	8.30	34.17
AV	12.0055G	45.12	54.00	-8.88	32.09	3	Horizontal	235	1.23	-	38.90	8.30	34.17

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

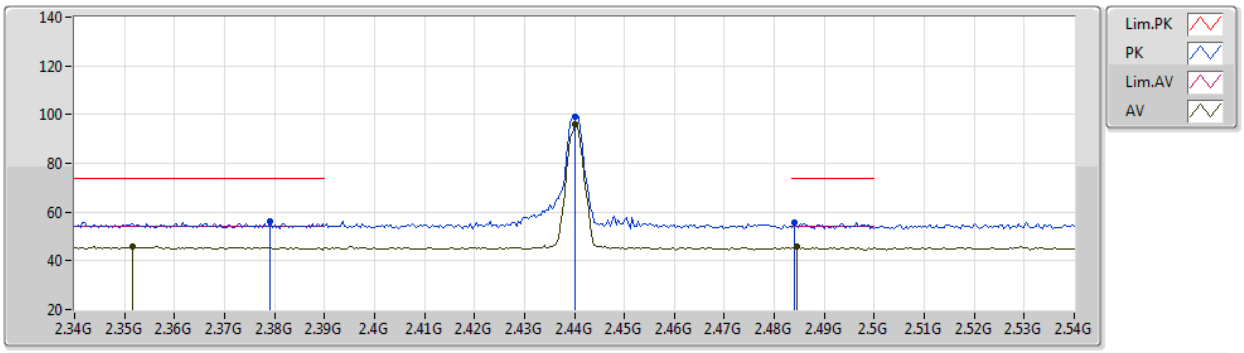
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.37G	55.83	74.00	-18.17	24.16	3	Vertical	343	1.76	-	27.69	3.98	-
AV	2.384G	45.96	54.00	-8.04	14.32	3	Vertical	343	1.76	-	27.65	3.99	-
PK	2.44G	89.67	Inf	-Inf	58.17	3	Vertical	343	1.76	-	27.48	4.02	-
AV	2.44G	86.83	Inf	-Inf	55.33	3	Vertical	343	1.76	-	27.48	4.02	-
PK	2.4852G	54.97	74.00	-19.03	23.59	3	Vertical	343	1.76	-	27.34	4.04	-
AV	2.4868G	45.55	54.00	-8.45	14.17	3	Vertical	343	1.76	-	27.34	4.04	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

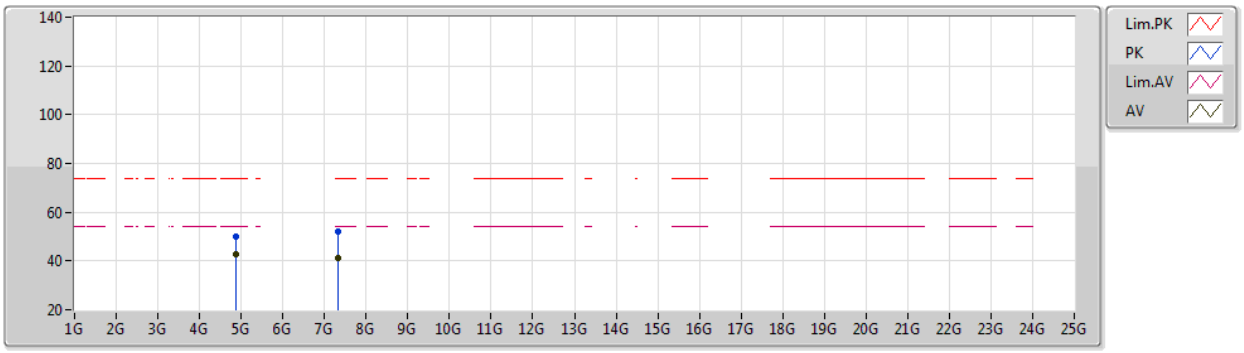
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3792G	56.26	74.00	-17.74	24.61	3	Horizontal	308	2.05	-	27.66	3.99	-
AV	2.3516G	45.63	54.00	-8.37	13.90	3	Horizontal	308	2.05	-	27.75	3.98	-
PK	2.44G	98.94	Inf	-Inf	67.44	3	Horizontal	308	2.05	-	27.48	4.02	-
AV	2.44G	96.03	Inf	-Inf	64.53	3	Horizontal	308	2.05	-	27.48	4.02	-
PK	2.484G	55.53	74.00	-18.47	24.14	3	Horizontal	308	2.05	-	27.35	4.04	-
AV	2.4844G	45.84	54.00	-8.16	14.45	3	Horizontal	308	2.05	-	27.35	4.04	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

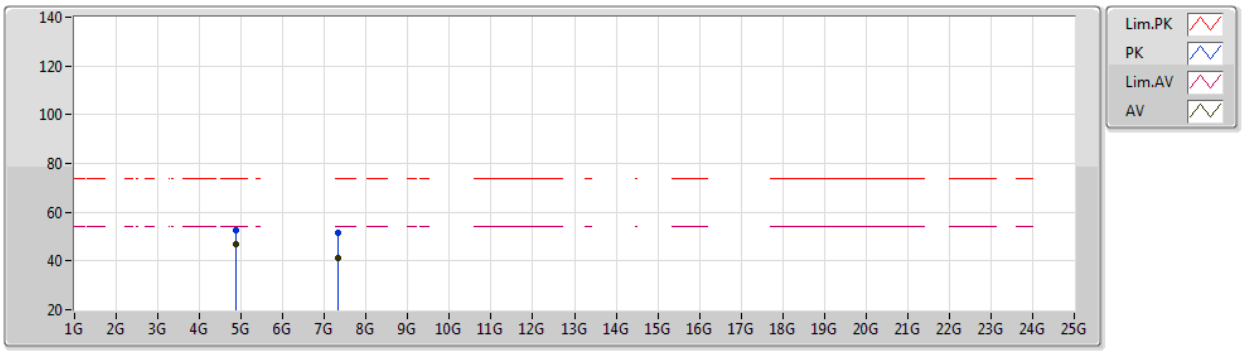
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87926G	50.01	74.00	-23.99	45.18	3	Vertical	84	2.27	-	31.08	5.41	31.66
AV	4.88016G	42.96	54.00	-11.04	38.13	3	Vertical	84	2.27	-	31.08	5.41	31.66
PK	7.31958G	51.99	74.00	-22.01	41.80	3	Vertical	228	2.01	-	36.40	6.96	33.17
AV	7.32076G	41.28	54.00	-12.72	31.09	3	Vertical	228	2.01	-	36.40	6.96	33.17

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2440MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

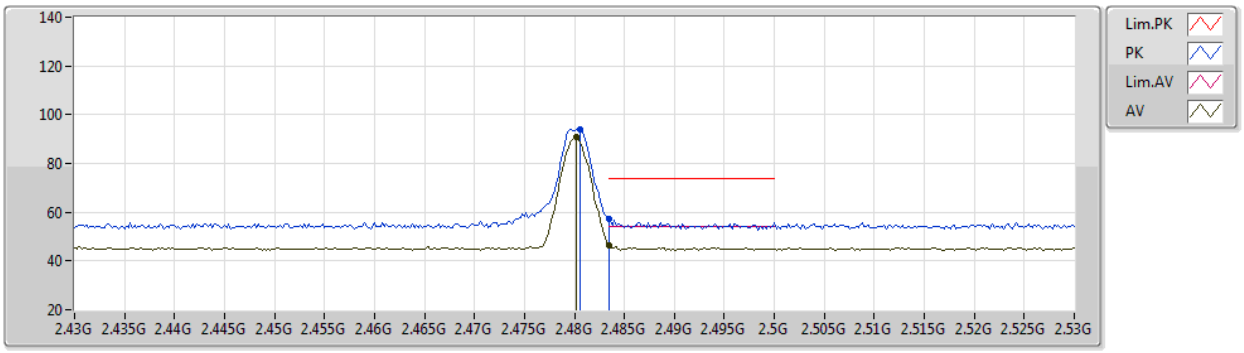
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87922G	52.46	74.00	-21.54	47.63	3	Horizontal	356	1.63	-	31.08	5.41	31.66
AV	4.88018G	46.96	54.00	-7.04	42.13	3	Horizontal	356	1.63	-	31.08	5.41	31.66
PK	7.32368G	51.80	74.00	-22.20	41.61	3	Horizontal	342	1.26	-	36.40	6.96	33.17
AV	7.32006G	41.38	54.00	-12.62	31.19	3	Horizontal	342	1.26	-	36.40	6.96	33.17

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

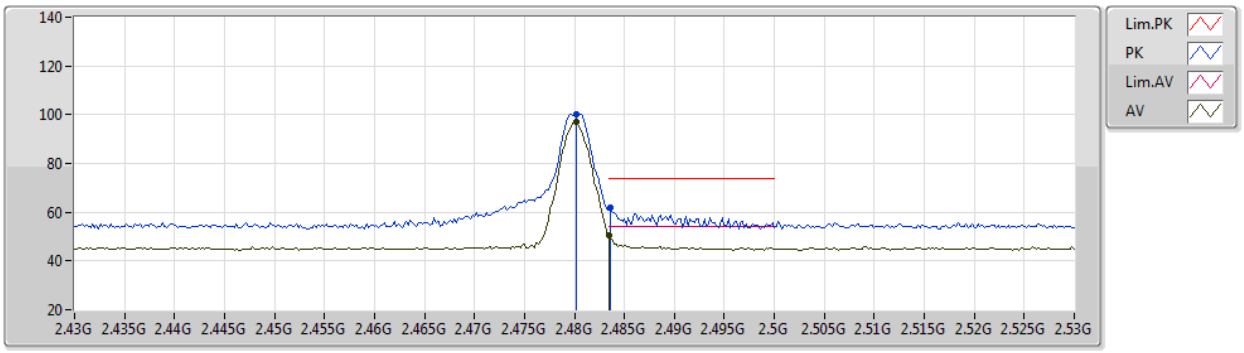
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4806G	93.93	Inf	-Inf	62.53	3	Vertical	31	2.97	-	27.36	4.04	-
AV	2.4802G	90.89	Inf	-Inf	59.49	3	Vertical	31	2.97	-	27.36	4.04	-
PK	2.4835G	57.27	74.00	-16.73	25.88	3	Vertical	31	2.97	-	27.35	4.04	-
AV	2.4835G	46.45	54.00	-7.55	15.06	3	Vertical	31	2.97	-	27.35	4.04	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

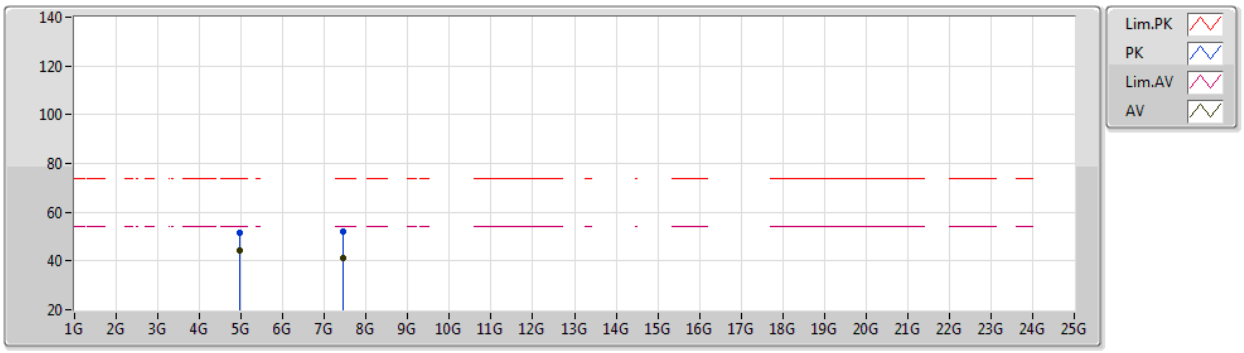
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4802G	100.16	Inf	-Inf	68.76	3	Horizontal	321	2.01	-	27.36	4.04	-
AV	2.4802G	97.29	Inf	-Inf	65.89	3	Horizontal	321	2.01	-	27.36	4.04	-
PK	2.4836G	61.81	74.00	-12.19	30.42	3	Horizontal	321	2.01	-	27.35	4.04	-
AV	2.4835G	50.67	54.00	-3.33	19.28	3	Horizontal	321	2.01	-	27.35	4.04	-

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

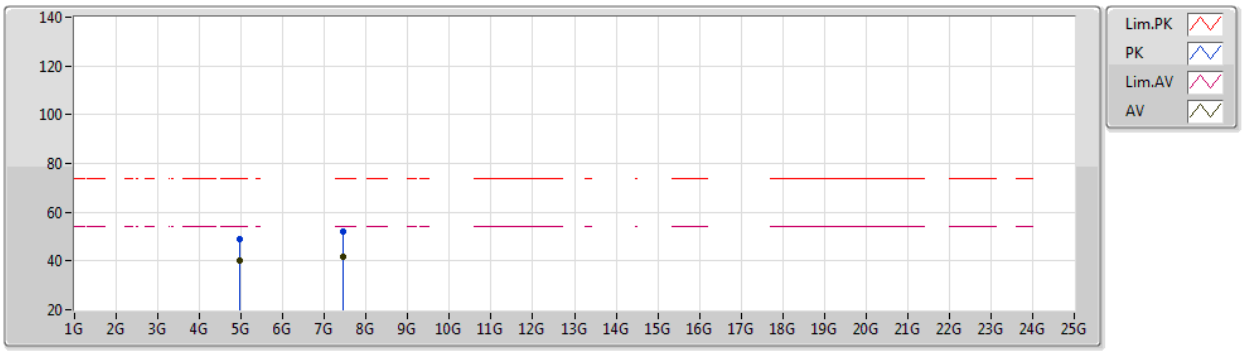
Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.96074G	51.61	74.00	-22.39	46.30	3	Vertical	237	1.95	-	31.34	5.54	31.57
AV	4.96G	44.19	54.00	-9.81	38.88	3	Vertical	237	1.95	-	31.34	5.54	31.57
PK	7.4444G	51.90	74.00	-22.10	41.63	3	Vertical	117	2.17	-	36.49	7.00	33.22
AV	7.44002G	41.46	54.00	-12.54	31.20	3	Vertical	117	2.17	-	36.48	7.00	33.22

Test Mode: EUT 1 + Ant.20 (Omni Mode)

BT-LE(2Mbps)

2480MHz_TX

07/07/2020



EUT Y_1TX
Setting default
06-F-O-1

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	4.9611G	48.96	74.00	-25.04	43.65	3	Horizontal	360	1.45	-	31.34	5.54	31.57
AV	4.96018G	40.38	54.00	-13.62	35.07	3	Horizontal	360	1.45	-	31.34	5.54	31.57
PK	7.4407G	52.17	74.00	-21.83	41.91	3	Horizontal	286	2.46	-	36.48	7.00	33.22
AV	7.43608G	41.72	54.00	-12.28	31.47	3	Horizontal	286	2.46	-	36.47	7.00	33.22