



RADIO TEST REPORT

FCC ID : UDX-CW9177I
Equipment : Cisco Wireless 9177D Series Wi-Fi 7 Access Point
Brand Name : CISCO
Model Name : CW9177D
Applicant : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134 USA
Manufacturer : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134 USA
Standard : 47 CFR FCC Part 15.247

The product was received on Jan. 05, 2026, and testing was started from Feb. 03, 2026 and completed on Jul. 09, 2026. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2020 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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	12
1.3 Testing Location Information	12
1.4 Measurement Uncertainty	13
2 Test Configuration of EUT	14
2.1 Test Channel Mode	14
2.2 The Worst Case Measurement Configuration	14
2.3 EUT Operation during Test	16
2.4 Accessories	16
2.5 Support Equipment.....	17
2.6 Test Setup Diagram	18
3 Transmitter Test Result	21
3.1 AC Power-line Conducted Emissions	21
3.2 DTS Bandwidth.....	23
3.3 Maximum Conducted Output Power	24
3.4 Power Spectral Density	26
3.5 Emissions in Non-restricted Frequency Bands	28
3.6 Emissions in Restricted Frequency Bands.....	29
4 Test Equipment and Calibration Data	33
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 v01	



TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_6 Ver1.3



Summary of Test Result

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

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen**Report Producer: Sophia Shiung**



1 General Description

1.1 Information

1.1.1 RF General Information

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

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

Note:

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Cross-polar	Radio (R)
1	WNC	95XPAN15.G13	Dipole	I-Pex	V	R1/3
2	WNC	95XPAN15.G14	Dipole	I-Pex	H	R1/3
3	WNC	95XPAN15.G15	Dipole	I-Pex	V	R1/3
4	WNC	95XPAN15.G16	Dipole	I-Pex	H	R1/3
5	WNC	95XPAN15.G17	Dipole	I-Pex	V	R2
6	WNC	95XPAN15.G18	Dipole	I-Pex	H	R2
7	WNC	95XPAN15.G19	Dipole	I-Pex	V	R2
8	WNC	95XPAN15.G20	Dipole	I-Pex	H	R2
9	WNC	95XPAN15.G21	Dipole	I-Pex	H	R0
10	WNC	95XPAN15.G22	Dipole	I-Pex	V	R0
11	WNC	95XPAN15.G23	PIFA	I-Pex	V	R4
12	WNC	95XPAN15.G12	PIFA	I-Pex	V	R5
13	WNC	81VEAR15.G01	Patch	SMA	V	R5

Ant.	Port / Radio (R)		Composite Gain (dBi)					Ant. Gain above 30 degrees (dBi)
	WLAN 2.4GHz	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz				WLAN 5GHz
	R1	R3		UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 1
1	1	1	6.6	6.05	6.07	6.48	6.78	1.8
2	2	2	7.82	5.86	6.07	6.44	6.46	0.4
3	3	3	8.06	5.52	5.77	6.54	6.7	2.2
4	4	4	6.2	5.79	6.22	6.49	6.61	1.8

Ant.	Port / Radio (R)		Composite Gain (dBi)					Ant. Gain above 30 degrees (dBi)		
	WLAN 5/6GHz		WLAN 5GHz		WLAN 6GHz			WLAN 6GHz		
	R2		UNII 2C	UNII 3	UNII 5	UNII 6	UNII 7	UNII 5	UNII 6	UNII 7
5	1		5.54	5.95	5.63	5.57	5.81	2.2	2.1	2.1
6	2		6.32	6	5.23	6.38	6.4	0.9	1.1	0.9
7	3		6.53	6.63	7.35	7.9	8.02	0.7	0.2	-0.6
8	4		6.79	7.03	7.46	7.9	8.28	-0.1	-1.3	-1.3

Ant.	Port / Radio (R)	Composite Gain (dBi)							
	WLAN 2.4/5/6GHz	WLAN	WLAN 5GHz				WLAN 6GHz		
	R0	2.4GHz	UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 5	UNII 6	UNII 7
9	1	6.28	6.32	6.45	6.86	7.53	7.43	8.09	8.93
10	2	6.87	6.49	7.06	6.94	7.22	7.74	9.59	9.56

Ant.	Port / Radio (R)		Ant. Gain above 30 degrees (dBi)			
	WLAN 2.4/5/6GHz		WLAN 5GHz		WLAN 6GHz	
	R0		UNII 1	UNII 5	UNII 6	UNII 7
9	1		0.9	-0.9	-2.2	-2.8
10	2		1	0.4	-2	-1.8



Ant.	Port / Radio (R)		Gain (dBi)	
	BT / IEEE 802.15.4	GPS	BT / IEEE 802.15.4	GPS
	R4	R5		
11	1	-	3.4	-
12	-	1	-	3.3
13	-	1	-	2.98

Note 1: The above information was declared by manufacturer.

Note 2: States antenna 6GHz transmission will be restricted per country's regulation.

Note 3: Directional gain information

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

Ex.

Directional Gain (NSS1) formula :

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

For 2TX:

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

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2))^2 / N_{ANT}] \Rightarrow 10 \log[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}]$$

For 4TX:

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,3) = 10^{G3/20} ; NSS1(g1,4) = 10^{G4/20}$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2 / N_{ANT}] \Rightarrow 10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$$

Where;

Radio	Mode		Max Gain (dBi)				DG (dBi)	Remark
			G1	G2	G3	G4		
0	2.4GHz	2TX	6.28	6.87	-	-	6.87	Cross-Polarized Antenna
	5GHz UNII-1	2TX	6.32	6.49	-	-	6.49	
	5GHz UNII-2A	2TX	6.45	7.06	-	-	7.06	
	5GHz UNII-2C	2TX	6.86	6.94	-	-	6.94	
	5GHz UNII-3	2TX	7.53	7.22	-	-	7.53	
	6GHz UNII-5	2TX	7.43	7.74	-	-	7.74	
	6GHz UNII-6	2TX	8.09	9.59	-	-	9.59	
	6GHz UNII-7	2TX	8.93	9.56	-	-	9.56	



Radio	Mode		Max Gain (dBi)				DG (dBi)	Remark
			G1	G2	G3	G4		
1	2.4GHz	2TX	6.60	7.82	-	-	7.82	Cross-Polarized Antenna
		4TX	6.60	7.82	8.06	6.20	10.25	
2	5GHz UNII-2C	2TX	5.54	6.32	-	-	6.32	
		4TX	5.54	6.32	6.53	6.79	9.33	
	5GHz UNII-3	2TX	5.95	6.00	-	-	6.00	
		4TX	5.95	6.00	6.63	7.03	9.44	
	6GHz UNII-5	2TX	5.63	5.23	-	-	5.63	
		4TX	5.63	5.23	7.35	7.46	9.54	
	6GHz UNII-6	2TX	5.57	6.38	-	-	6.38	
		4TX	5.57	6.38	7.90	7.90	10.06	
	6GHz UNII-7	2TX	5.81	6.40	-	-	6.40	
		4TX	5.81	6.40	8.02	8.28	10.26	
3	5GHz UNII-1	2TX	6.05	5.86	-	-	6.05	
		4TX	6.05	5.86	5.52	5.79	8.82	
	5GHz UNII-2A	2TX	6.07	6.07	-	-	6.07	
		4TX	6.07	6.07	5.77	6.22	9.05	
	5GHz UNII-2C	2TX	6.48	6.44	-	-	6.48	
		4TX	6.48	6.44	6.54	6.49	9.50	
	5GHz UNII-3	2TX	6.78	6.46	-	-	6.78	
		4TX	6.78	6.46	6.70	6.61	9.65	

For Antenna Gain above 30 degrees:

Radio	Mode		Max Gain (dBi)				DG (dBi)	Remark
			G1	G2	G3	G4		
2	6G UNII-5	2TX	2.20	0.90	-	-	2.20	Cross-Polarized Antenna
		4TX	2.20	0.90	0.70	-0.10	4.00	
	6G UNII-6	2TX	2.10	1.10	-	-	2.10	
		4TX	2.10	1.10	0.20	-1.30	3.69	
	6G UNII-7	2TX	2.10	0.90	-	-	2.10	
		4TX	2.10	0.90	-0.60	-1.30	3.47	
3	5G UNII-1	2TX	1.80	0.40	-	-	1.80	
		4TX	1.80	0.40	2.20	1.80	4.60	

Note 4: <Scan Radio 0>

For 2.4GHz function:

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

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

Port 1~2 could transmit/receive simultaneously.

For 5GHz function:

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

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

Port 1~2 could transmit/receive simultaneously.

For 6GHz function:

For IEEE 802.11 ax (2TX/2RX):

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

Port 1~2 could transmit/receive simultaneously.

**<Radio 1>****For 2.4GHz function:****For IEEE 802.11 b/g/n/VHT/ax/be (1TX, 2TX, 4TX/4RX):****1TX:**

Only Port 1 can be used as transmitting antenna.

2TX:

Both Port 1 and 2 can be used as transmitting antenna.

Port 1~2 could transmit simultaneously.

4TX:

Port 1~4 can be used as transmitting antenna.

Port 1~4 could transmit simultaneously.

4RX:

Port 1~4 can be used as receiving antenna.

Port 1~4 could receive simultaneously.

<Radio 2>**For 5GHz function:****For IEEE 802.11 a/n/ac/ax/be (1TX, 2TX, 4TX/4RX):****1TX:**

Only Port 1 can be used as transmitting antenna.

2TX:

Both Port 1 and 2 can be used as transmitting antenna.

Port 1~2 could transmit simultaneously.

4TX:

Port 1~4 can be used as transmitting antenna.

Port 1~4 could transmit simultaneously.

4RX:

Port 1~4 can be used as receiving antenna.

Port 1~4 could receive simultaneously.

For 6GHz function:**For IEEE 802.11 ax/be (1TX, 2TX, 4TX/4RX):****1TX:**

Only Port 1 can be used as transmitting antenna.

2TX:

Both Port 1 and 2 can be used as transmitting antenna.

Port 1~2 could transmit simultaneously.

4TX:

Port 1~4 can be used as transmitting antenna.

Port 1~4 could transmit simultaneously.

4RX:

Port 1~4 can be used as receiving antenna.

Port 1~4 could receive simultaneously.

**<Radio 3>****For 5GHz function:****For IEEE 802.11 a/n/ac/ax/be (1TX, 2TX, 4TX/4RX):****1TX:**

Only Port 1 can be used as transmitting antenna.

2TX:

Both Port 1 and 2 can be used as transmitting antenna.

Port 1~2 could transmit simultaneously.

4TX:

Port 1~4 can be used as transmitting antenna.

Port 1~4 could transmit simultaneously.

4RX:

Port 1~4 can be used as receiving antenna.

Port 1~4 could receive simultaneously.

<Radio 4>**For Bluetooth function (1TX/1RX):**

Only Port 1 can be used as transmitting/receiving antenna.

For IEEE 802.15.4 function (1TX/1RX):

Only Port 1 can be used as transmitting/receiving antenna.

<Radio 5>**For GPS function (1RX):**

Ant. 12~13 can be used as receiving antenna, but only one of them will be used at one time.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF (dB)	T (s)	VBW (Hz) 1/T
BT-LE(1Mbps)	0.621	2.07	389.375u	3k
BT-LE(2Mbps)	0.327	4.85	204.375u	5k

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From PoE, adapter or DC power supply (24~56Vdc)			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	DOS [ver 6.1.7601]			
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		
Serial Number	For Others: WTT294903TQ For AC Conduction and Radiated below 1GHz tests: WTT294903U0			

Note: The above information was declared by manufacturer.



1.1.5 Table for SW Information

SW	BW of 5GHz Mode (MHz)	6GHz Mode	Support Function
Catalyst	20/40/80/160	Standard Power Access Point.	AP
			CURWB P2MP Master
		-	CURWB P2MP client with radar detection
Meraki	20/40/80	Standard Power Access Point.	AP

Note 1: The SW Catalyst_AP mode was tested and recorded in this test report.

Note 2: The above information was declared by manufacturer.

1.1.6 Table for Radio Function

Radio (R)	Support Function	WLAN 2.4GHz	WLAN 5GHz		WLAN 6GHz	BT / IEEE 802.15.4	GPS
			UNII 1~2A	UNII 2C~3			
R0 (Scan Radio)	AP	✓	✓	✓	✓	-	-
	CURWB P2MP Master	-	✓	✓	✓	-	-
	CURWB P2MP client with radar detection	-	✓	✓	-	-	-
R1	AP	✓	-	-	-	-	-
R2	AP & CURWB P2MP Master	-	-	✓	✓	-	-
	CURWB P2MP client with radar detection	-	-	✓	-	-	-
R3 (Note 1)	AP, CURWB P2MP Master & CURWB P2MP client with radar detection	-	✓	✓	-	-	-
R4	AP	-	-	-	-	✓	-
R5	AP	-	-	-	-	-	✓

Note 1: Radio 3 supports operation in 5GHz full band (UNII 1~3) or low band (UNII 1~2A).

Note 2: For WLAN 2.4GHz, R0 and R1 can't operate at the same frequency simultaneously.

For WLAN 5GHz, R0, R2 and R3 can't operate at the same frequency simultaneously.

For WLAN 6GHz, R0 and R2 can't operate at the same frequency simultaneously.

Note 3: 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:

- ♦ 47 CFR FCC Part 15.247
- ♦ ANSI C63.10-2020

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	Ken Yeh	23.6~24.8 / 61~64	Feb. 18, 2026~ Jun. 13, 2026
Radiated < 1GHz	10CH01-CB	Stim Sung	23~24 / 56~57	Jun. 17, 2026~ Jul. 09, 2026
Radiated > 1GHz	03CH05-CB	Lex Lee	23.8~23.9 / 68~69	Feb. 03, 2026~ Jul. 06, 2026
AC Conduction	CO01-CB	Allen Chung	21~22 / 57~58	Jun. 15, 2026~ Jul. 06, 2026



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 Date: Before May 28, 2026

Test Items	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.0 dB	Confidence levels of 95%
Bandwidth Measurement	1.0 %	Confidence levels of 95%

Test Date: May 28, 2026~Jun. 30, 2026

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.8 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.5 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.3 dB	Confidence levels of 95%
Conducted Emission	3.8 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	3.5 dB	Confidence levels of 95%
Bandwidth Measurement	1.6 %	Confidence levels of 95%

Test Date: After Jun. 30, 2026

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.5 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.3 dB	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode
BT-LE(1Mbps)
2402MHz
2440MHz
2478MHz
2480MHz
BT-LE(2Mbps)
2402MHz
2440MHz
2478MHz
2480MHz

Note:

- ♦ 1Mbps, 500Kb/s, and 125Kb/s modes were the same bandwidth. The 1Mbps mode generated the worst case; thus it was selected to test.

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 Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	EUT + PoE_R0: 2.4GHz
2	EUT + Adapter_R0: 2.4GHz
3	EUT + DC power supply_R0: 2.4GHz
Mode 3 has been evaluated to be the worst case among Mode 1~3, so the measurement for Mode 4~11 will follow this same test mode.	
4	EUT + DC power supply_R0: 5GHz
5	EUT + DC power supply_R0: 6GHz
6	EUT + DC power supply_R1: 2.4GHz
7	EUT + DC power supply_R2: 5GHz
8	EUT + DC power supply_R2: 6GHz
9	EUT + DC power supply_R3: 5GHz
10	EUT + DC power supply_R4: BT
11	EUT + DC power supply_R4: IEEE 802.15.4
For operating, mode 11 is the worst case and it was record in this test report.	



The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
	"EUT in Z axis" for R4: BT and "EUT in Y axis" for others generated the worst cases at Radiated measurement above 1GHz. Consequently, the measurement will follow these same test modes.
	1 EUT in Y axis + PoE_R0: 2.4GHz
	2 EUT in Y axis + Adapter_R0: 2.4GHz
	3 EUT in Y axis + DC power supply_R0: 2.4GHz
Mode 1 has been evaluated to be the worst case among Mode 1~3, so the measurement for Mode 4~11 will follow this same test mode.	
4	EUT in Y axis + PoE_R0: 5GHz
5	EUT in Y axis + PoE_R0: 6GHz
6	EUT in Y axis + PoE_R1: 2.4GHz
7	EUT in Y axis + PoE_R2: 5GHz
8	EUT in Y axis + PoE_R2: 6GHz
9	EUT in Y axis + PoE_R3: 5GHz
10	EUT in Z axis + PoE_R4: BT
11	EUT in Y axis + PoE_R4: IEEE 802.15.4
For operating, mode 10 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
	After evaluating, EUT in Z axis was the worst case, so the measurement will follow this same test configuration.
1	EUT in Z axis



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	R0: 2.4GHz + R1: 2.4GHz + R2: 6GHz + R3: 5GHz UNII 1~3 + R4: BT
2	R0: 2.4GHz + R1: 2.4GHz + R2: 6GHz + R3: 5GHz UNII 1~3 + R4: IEEE 802.15.4
3	R0: 5GHz + R1: 2.4GHz + R2: 6GHz + R3: 5GHz UNII 1~3 + R4: BT
4	R0: 5GHz + R1: 2.4GHz + R2: 6GHz + R3: 5GHz UNII 1~3 + R4: IEEE 802.15.4
5	R0: 6GHz + R1: 2.4GHz + R2: 6GHz + R3: 5GHz UNII 1~3 + R4: BT
6	R0: 6GHz + R1: 2.4GHz + R2: 6GHz + R3: 5GHz UNII 1~3 + R4: IEEE 802.15.4
7	R0: 2.4GHz + R1: 2.4GHz + R2: 5GHz + R3: 5GHz UNII 1~2A + R4: BT
8	R0: 2.4GHz + R1: 2.4GHz + R2: 5GHz + R3: 5GHz UNII 1~2A + R4: IEEE 802.15.4
9	R0: 5GHz + R1: 2.4GHz + R2: 5GHz + R3: 5GHz UNII 1~2A + R4: BT
10	R0: 5GHz + R1: 2.4GHz + R2: 5GHz + R3: 5GHz UNII 1~2A + R4: IEEE 802.15.4
11	R0: 6GHz + R1: 2.4GHz + R2: 5GHz + R3: 5GHz UNII 1~2A + R4: BT
12	R0: 6GHz + R1: 2.4GHz + R2: 5GHz + R3: 5GHz UNII 1~2A + R4: IEEE 802.15.4
Refer to Sporton Test Report No.: FA5D2458AB for Co-location RF Exposure Evaluation.	

Note: The PoEs and adapter were for measurement only and would not be marketed. Their information is listed below:

Equipment	Brand Name	Model Name
PoE 1	DELTA	ADH-65AR P
PoE 2	CISCO	POEO75U-1BT-C-R
Adapter	MW	GS60A48-CIS5UGS60A48-CIS5

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories
M25 cap*4
DC jack cap*1
SMA Sealed cap*1
M25 RJ-45 Cable gland*2
Bracket (Optional)*1



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Power Supply	MOTECH	LPS-305	N/A
B	Notebook	DELL	E6430	N/A

For Radiated < 1GHz:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE 2	CISCO	POE75U-1BT-C-R	N/A
B	Notebook	DELL	E6430	N/A

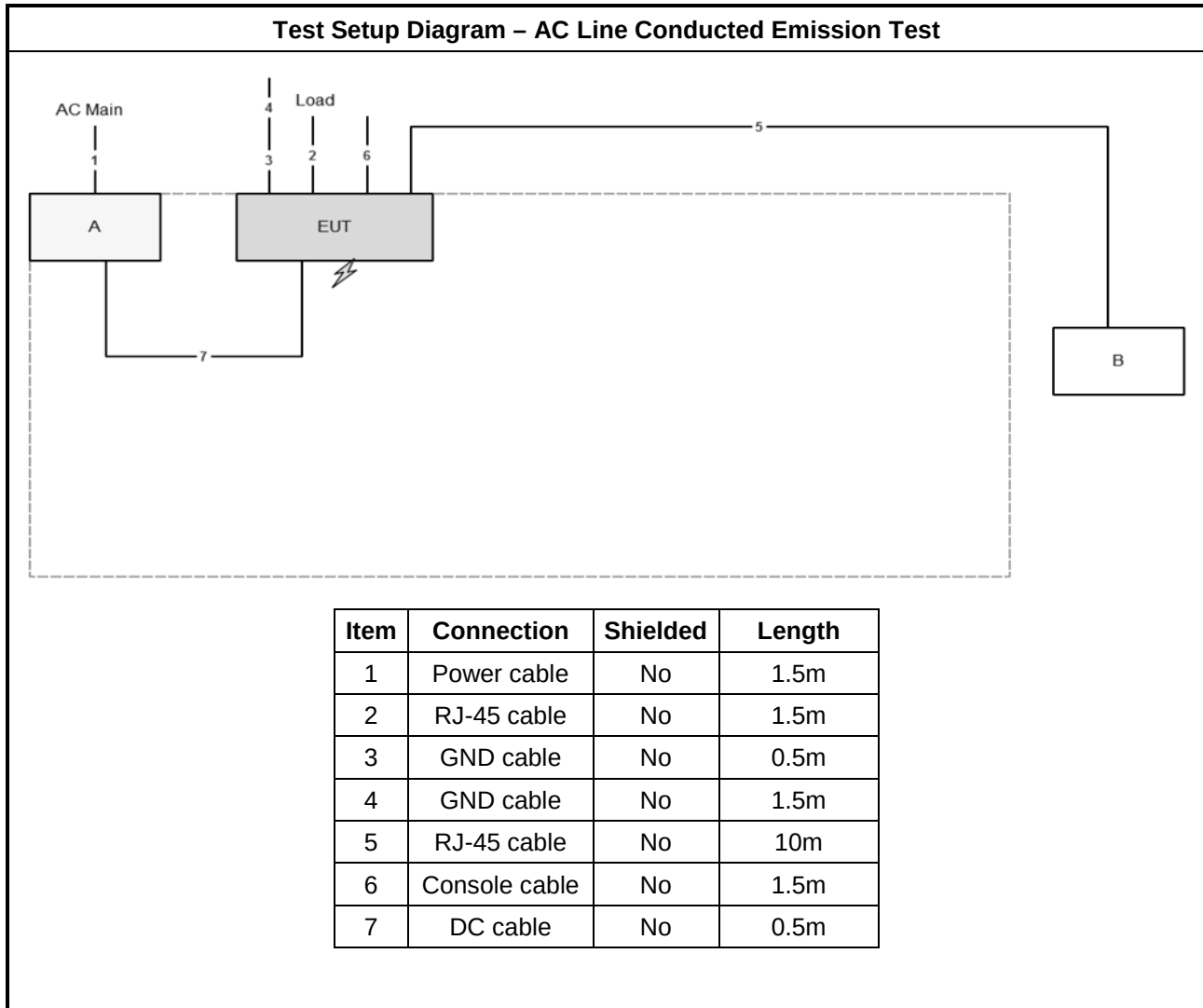
For Radiated > 1GHz:

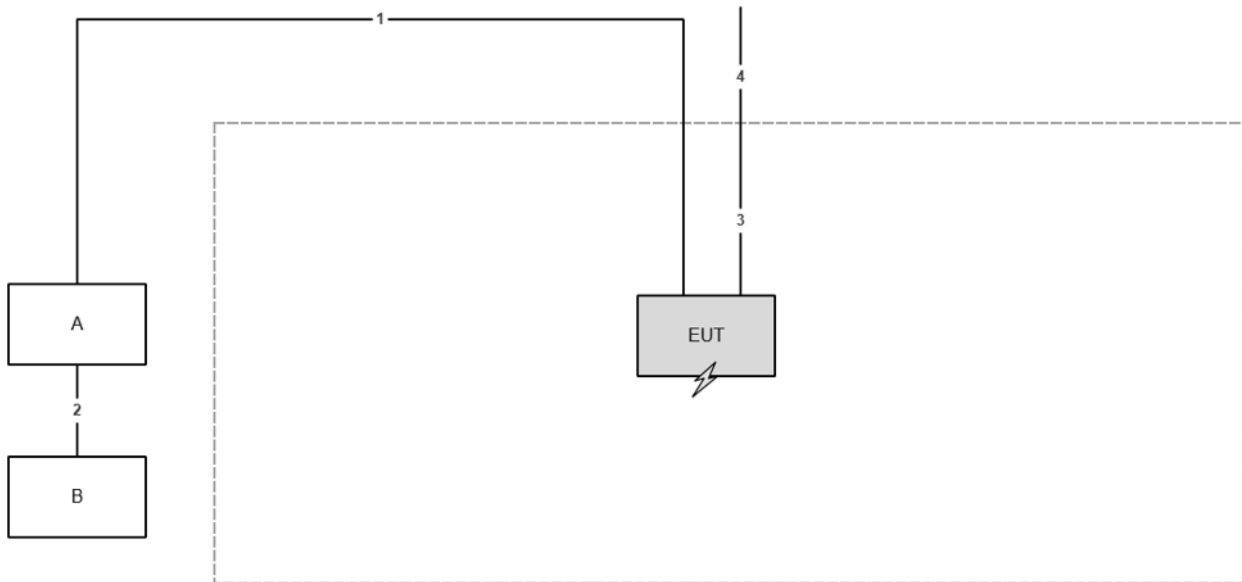
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE 1	DELTA	ADH-65AR P	N/A
B	Notebook	Lenovo	L440	N/A

For RF Conducted:

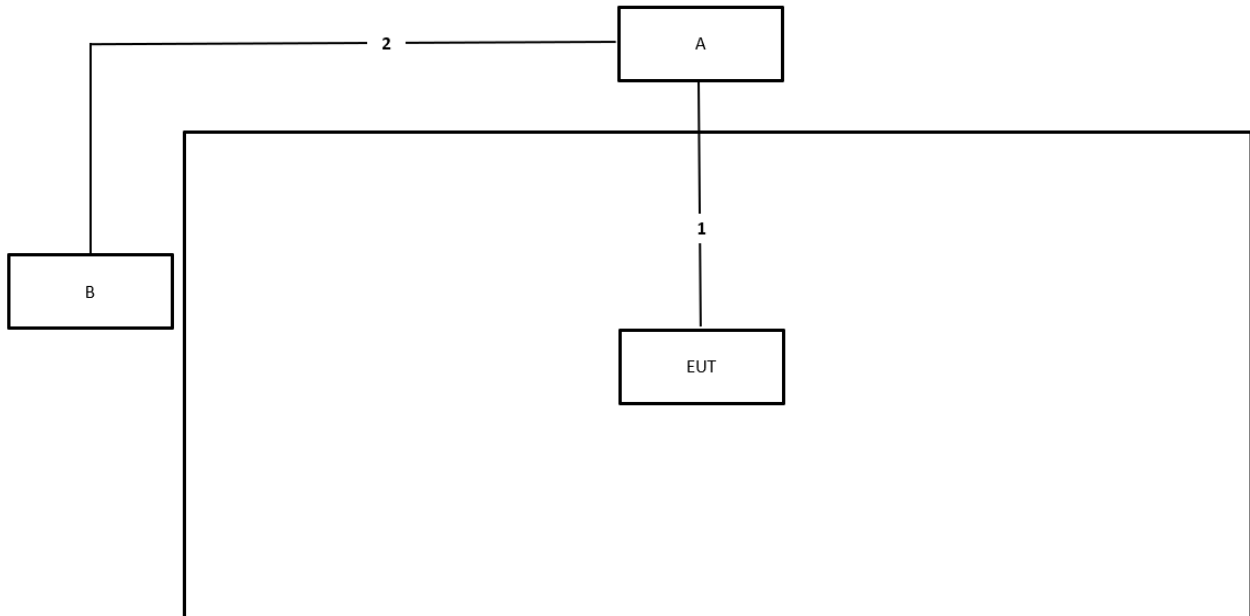
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	Lenovo	L440	N/A
B	PoE 1	DELTA	ADH-65AR P	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	1.5m
3	GND cable	No	0.5m
4	GND cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	1.5m

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.

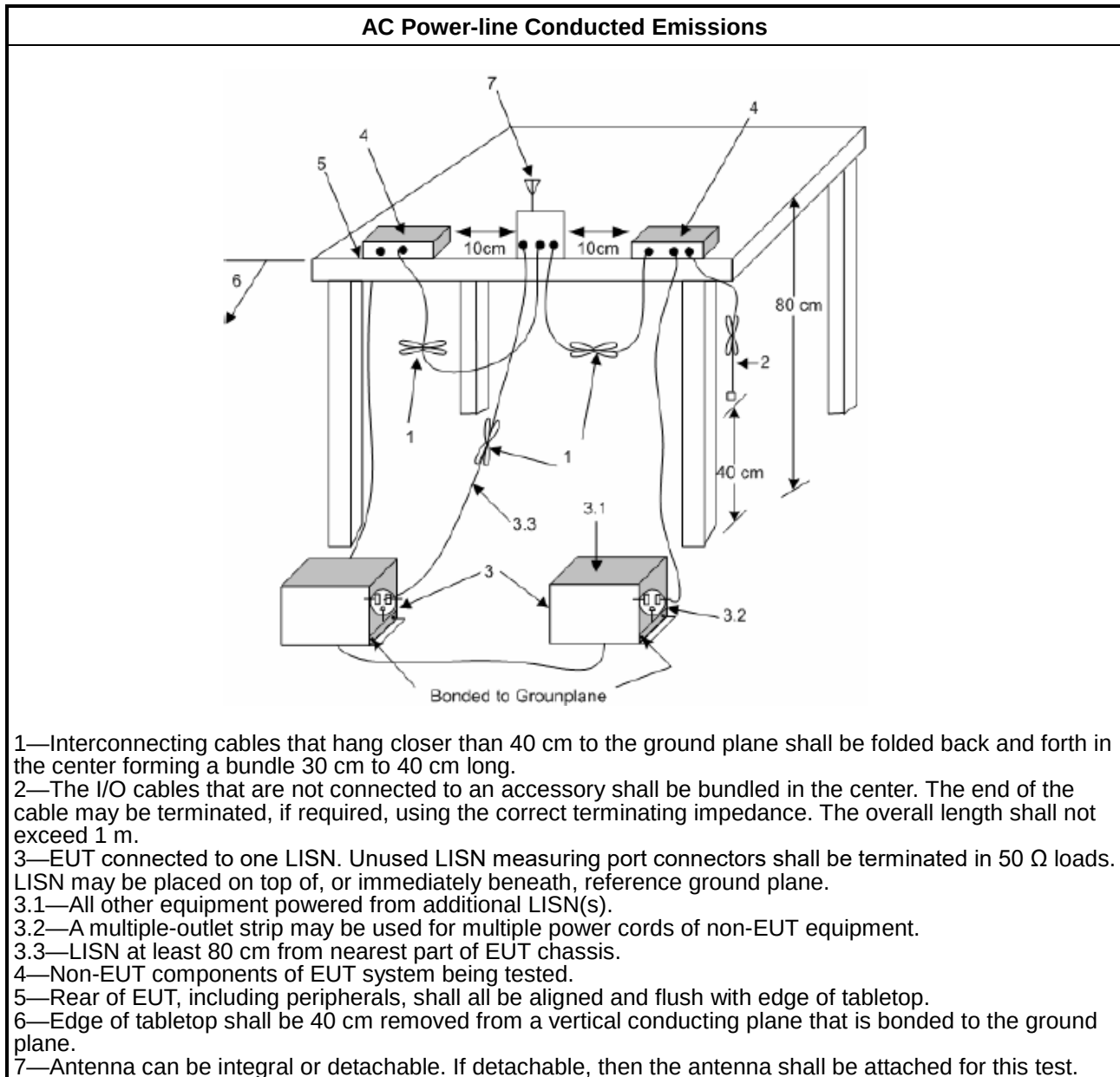
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2020, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



1.1.1. Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- Margin = -Limit + Level

3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

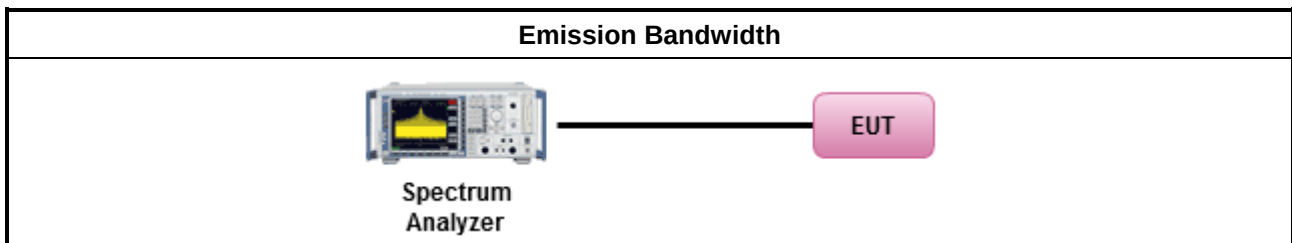
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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



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 $\geq$ 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 $\geq$ 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:

$$P_{\text{total}} = P_1 + P_2 + \dots + P_n$$
 (calculated in linear unit [mW] and transfer to log unit [dBm])

$$\text{EIRP}_{\text{total}} = P_{\text{total}} + \text{DG}$$

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

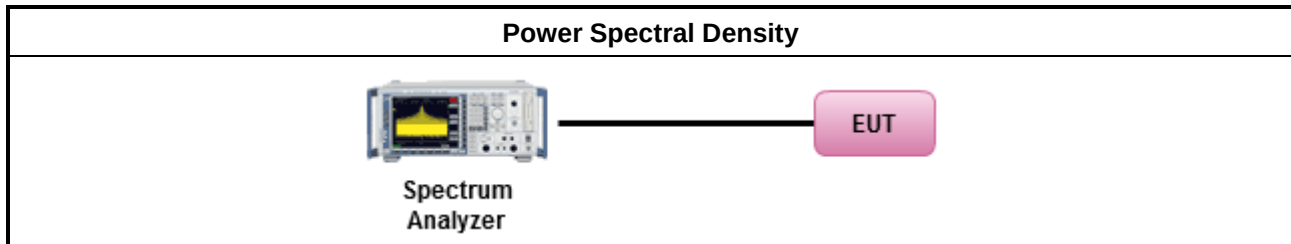
3.4.2 Measuring Instruments

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 $\geq 98\%$ 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



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.	

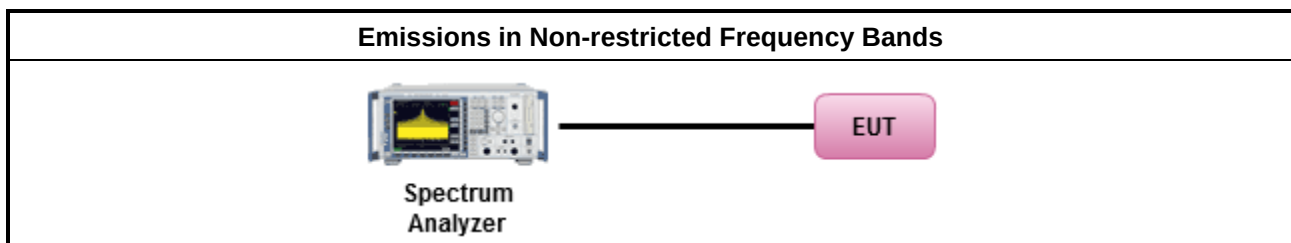
3.5.2 Measuring Instruments

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



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

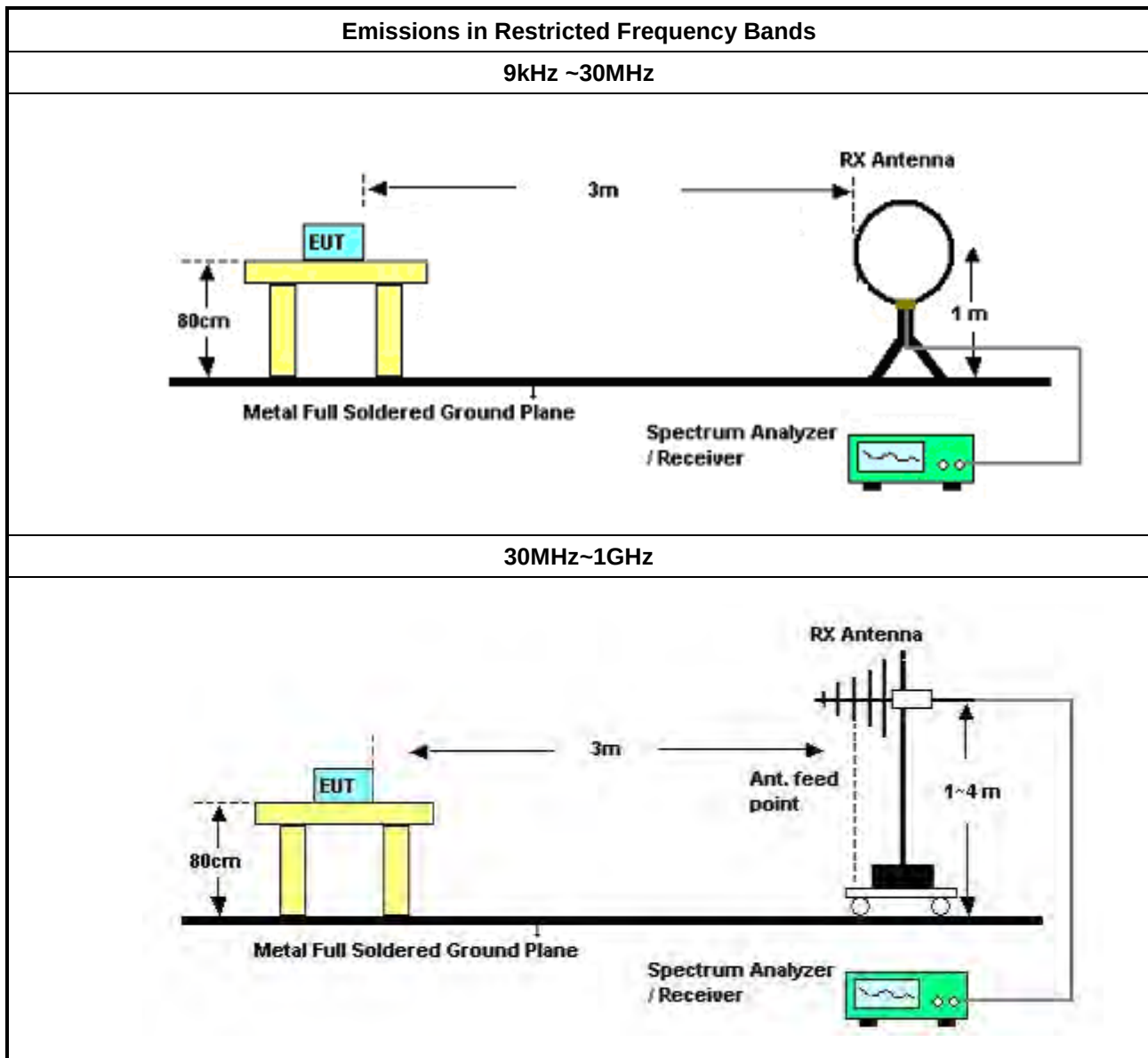
3.6.2 Measuring Instruments

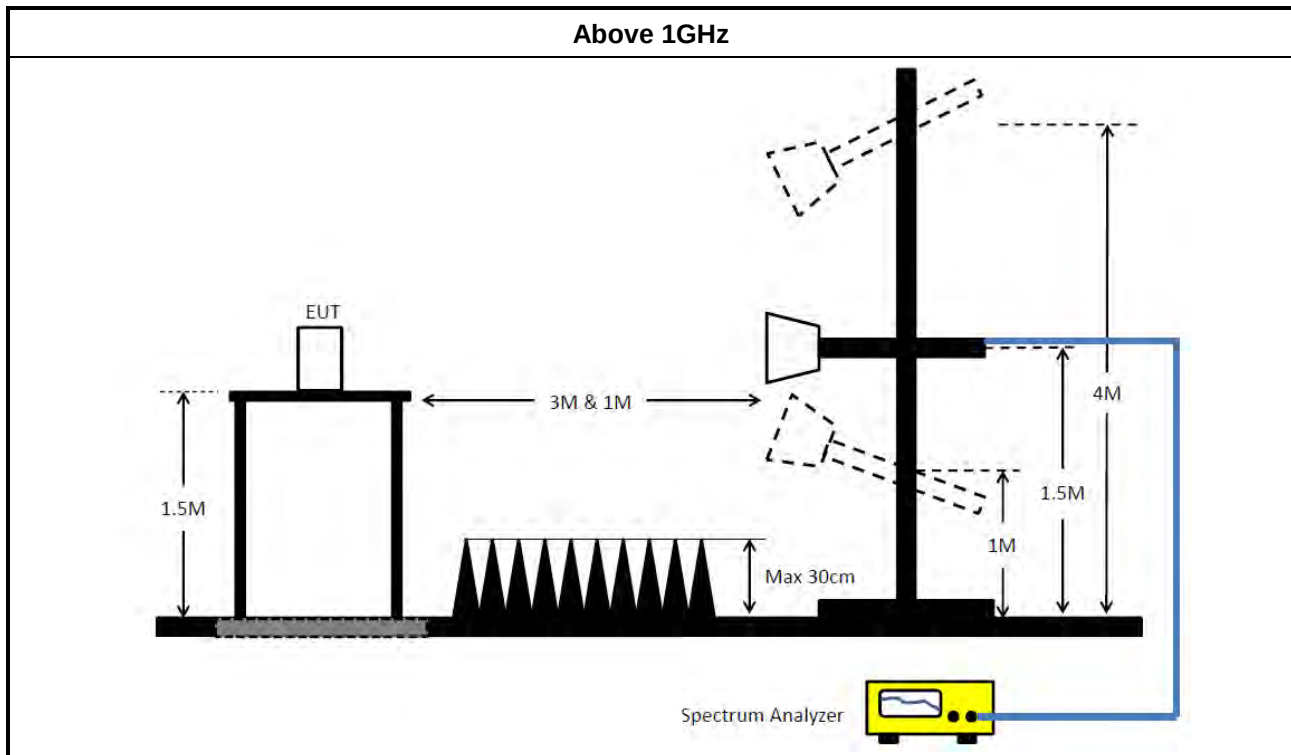
Refer a test equipment and calibration data table in this test report.

**3.6.3 Test Procedures**

Test Method	
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
	☐ 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 $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, 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





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 12, 2026	Mar. 11, 2027	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 04, 2026	Feb. 03, 2027	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 10, 2026	Apr. 09, 2027	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Sep. 14, 2025	Sep. 13, 2026	Conduction (CO01-CB)
COND Cable	Woken	Cable	CO01	9kHz ~ 30MHz	Sep. 14, 2025	Sep. 13, 2026	Conduction (CO01-CB)
Test Software	SPORTON	SENSE-EMI	V5.11	150kHz-30MHz	N.C.R.	N.C.R.	Conduction (CO01-CB)
10m Semi Anechoic Chamber NSA	TDK	SAC-10M	10CH01-CB	30MHz~1GHz 10m,3m	Jan. 14, 2026	Jan. 13, 2027	Radiation (10CH01-CB)
Amplifier	Agilent	8447D	2944A10783	9kHz ~ 1.3GHz	Mar. 07, 2026	Mar. 06, 2027	Radiation (10CH01-CB)
Amplifier	Agilent	8447D	2944A10784	9kHz ~ 1.3GHz	Mar. 07, 2026	Mar. 06, 2027	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-01	25MHz ~ 1GHz	Oct. 14, 2025	Oct. 13, 2026	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-02	25MHz ~ 1GHz	Oct. 14, 2025	Oct. 13, 2026	Radiation (10CH01-CB)
EMI Test Receiver	Rohde&Schwarz	ESR7	103076	9 kHz ~ 7GHz	Aug. 27, 2025	Aug. 26, 2026	Radiation (10CH01-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Sep. 03, 2025	Sep. 02, 2026	Radiation (10CH01-CB)
High Cable	TITAN	T318E	High cable01	30MHz ~ 18GHz	Nov. 14, 2025	Nov. 13, 2026	Radiation (10CH01-CB)
Bilog Ant & 6dB Attenuator	SCHWARZBECK & EMCI	VULB 9168 & N-6-06	1469 & AT-N06021	30MHz ~ 1GHz	Jan. 08, 2026	Jan. 07, 2027	Radiation (10CH01-CB)
Amplifier	EM	EM101	060703	10MHz ~ 1GHz	Oct. 15, 2025	Oct. 14, 2026	Radiation (10CH01-CB)
Loop Antenna	Teseq	HLA 6121	65417	9kHz - 30MHz	Oct. 20, 2025	Oct. 19, 2026	Radiation (10CH01-CB)
Test Software	SPORTON	SENSE-EMI	V5.11	30MHz-40GHz	N.C.R.	N.C.R.	Radiation (10CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Sep. 27, 2025	Sep. 26, 2026	Radiation (03CH05-CB)
Horn Antenna	ETS-Lindgren	3115	00143147	750MHz~18GHz	Nov. 05, 2025	Nov. 04, 2026	Radiation (03CH05-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Oct. 07, 2025	Oct. 06, 2026	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Jun. 28, 2025	Jun. 27, 2026	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Jun. 27, 2026	Jun. 26, 2027	Radiation (03CH05-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Jun. 10, 2025	Jun. 09, 2026	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	May 08, 2026	May 07, 2027	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Sep. 25, 2025	Sep. 24, 2026	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Sep. 25, 2025	Sep. 24, 2026	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Nov. 13, 2025	Nov. 12, 2026	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE-15247_FS	V5.11.27	2.4GHz-2.4835GHz	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Signal Analyzer	R&S	FSV3044	101321	9kHz ~ 44GHz	Jul. 01, 2025	Jun. 30, 2026	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 28, 2025	Oct. 27, 2026	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 28, 2025	Oct. 27, 2026	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Sep. 30, 2025	Sep. 29, 2026	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Sep. 30, 2025	Sep. 29, 2026	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Sep. 30, 2025	Sep. 29, 2026	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Sep. 30, 2025	Sep. 29, 2026	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Sep. 30, 2025	Sep. 29, 2026	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1–18 GHz	Sep. 20, 2025	Sep. 19, 2026	Conducted (TH02-CB)
Test Software	SPORTON	SENSE-15247_FS	V5.11.27	2.4GHz-2.4835GHz	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

NCR means Non-Calibration required.



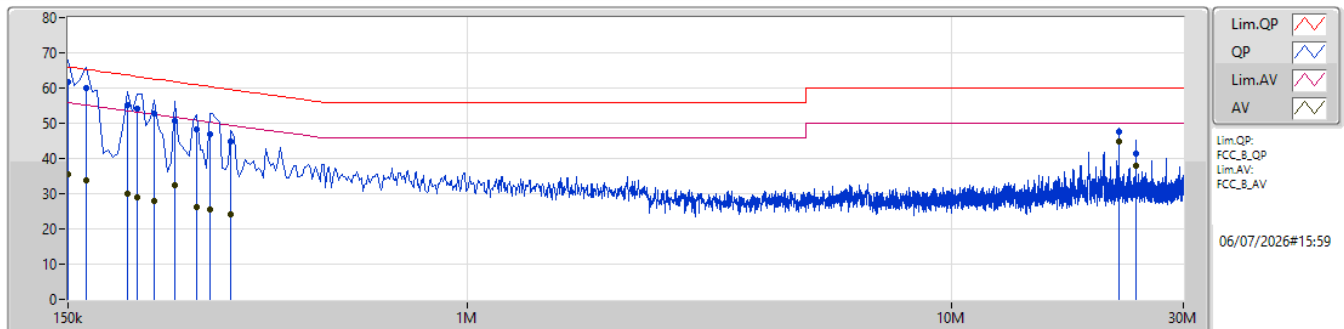
Conducted Emissions at Powerline

Appendix A

Summary

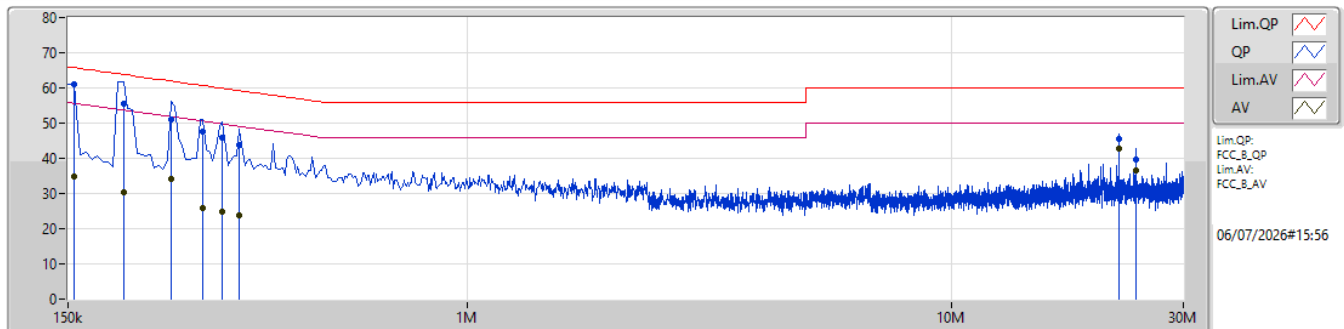
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 11	Pass	QP	150k	61.87	66.00	-4.13	Line

Mode 11



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	150k	61.87	66.00	-4.13	10.06	Line	"Worst"	51.81	0.08	0.10	9.88						
AV	150k	35.38	56.00	-20.62	10.06	Line	-	25.32	0.08	0.10	9.88						
QP	163.5k	59.85	65.27	-5.42	10.01	Line	-	49.84	0.08	0.09	9.84						
AV	163.5k	33.70	55.27	-21.57	10.01	Line	-	23.69	0.08	0.09	9.84						
QP	199.5k	55.01	63.63	-8.62	9.90	Line	-	45.11	0.08	0.06	9.76						
AV	199.5k	29.90	53.63	-23.73	9.90	Line	-	20.00	0.08	0.06	9.76						
QP	208.5k	54.23	63.27	-9.04	9.91	Line	-	44.32	0.08	0.06	9.77						
AV	208.5k	29.11	53.27	-24.16	9.91	Line	-	19.20	0.08	0.06	9.77						
QP	226.5k	52.80	62.58	-9.78	9.94	Line	-	42.86	0.08	0.07	9.79						
AV	226.5k	27.95	52.58	-24.63	9.94	Line	-	18.01	0.08	0.07	9.79						
QP	249k	50.64	61.79	-11.15	9.96	Line	-	40.68	0.08	0.08	9.80						
AV	249k	32.57	51.79	-19.22	9.96	Line	-	22.61	0.08	0.08	9.80						
QP	276k	48.43	60.93	-12.50	10.00	Line	-	38.43	0.08	0.09	9.83						
AV	276k	26.35	50.93	-24.58	10.00	Line	-	16.35	0.08	0.09	9.83						
QP	294k	47.00	60.42	-13.42	10.01	Line	-	36.99	0.08	0.09	9.84						
AV	294k	25.58	50.42	-24.84	10.01	Line	-	15.57	0.08	0.09	9.84						
QP	325.5k	44.86	59.56	-14.70	10.04	Line	-	34.82	0.08	0.10	9.86						
AV	325.5k	24.31	49.56	-25.25	10.04	Line	-	14.27	0.08	0.10	9.86						
QP	22.119M	47.46	60.00	-12.54	11.02	Line	-	36.44	0.30	0.38	10.34						
AV	22.119M	44.86	50.00	-5.14	11.02	Line	-	33.84	0.30	0.38	10.34						
QP	23.964M	41.22	60.00	-18.78	11.03	Line	-	30.19	0.31	0.41	10.31						
AV	23.964M	38.07	50.00	-11.93	11.03	Line	-	27.04	0.31	0.41	10.31						

Mode 11



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	154.5k	61.07	65.75	-4.68	10.01	Neutral	"Worst"	51.06	0.06	0.09	9.86						
AV	154.5k	34.75	55.75	-21.00	10.01	Neutral	-	24.74	0.06	0.09	9.86						
QP	195k	55.53	63.82	-8.29	9.89	Neutral	-	45.64	0.06	0.06	9.77						
AV	195k	30.39	53.82	-23.43	9.89	Neutral	-	20.50	0.06	0.06	9.77						
QP	244.5k	51.00	61.95	-10.95	9.94	Neutral	-	41.06	0.06	0.08	9.80						
AV	244.5k	34.26	51.95	-17.69	9.94	Neutral	-	24.32	0.06	0.08	9.80						
QP	285k	47.59	60.67	-13.08	9.98	Neutral	-	37.61	0.06	0.09	9.83						
AV	285k	25.79	50.67	-24.88	9.98	Neutral	-	15.81	0.06	0.09	9.83						
QP	312k	45.92	59.92	-14.00	10.01	Neutral	-	35.91	0.06	0.10	9.85						
AV	312k	24.87	49.92	-25.05	10.01	Neutral	-	14.86	0.06	0.10	9.85						
QP	339k	43.95	59.23	-15.28	10.04	Neutral	-	33.91	0.06	0.11	9.87						
AV	339k	23.76	49.23	-25.47	10.04	Neutral	-	13.72	0.06	0.11	9.87						
QP	22.119M	45.49	60.00	-14.51	11.00	Neutral	-	34.49	0.28	0.38	10.34						
AV	22.119M	42.83	50.00	-7.17	11.00	Neutral	-	31.83	0.28	0.38	10.34						
QP	23.964M	39.57	60.00	-20.43	11.02	Neutral	-	28.55	0.30	0.41	10.31						
AV	23.964M	36.41	50.00	-13.59	11.02	Neutral	-	25.39	0.30	0.41	10.31						



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)	691.25k	1.052M	1M05F1D	651.25k	1.031M
BT-LE(2Mbps)	1.345M	2.076M	2M08F1D	1.268M	2.061M

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

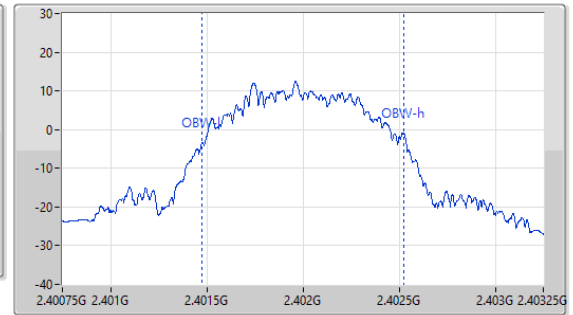
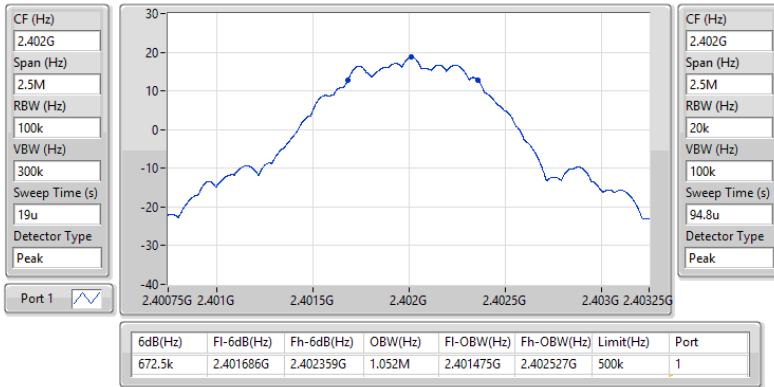
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	672.5k	1.052M
2440MHz	Pass	500k	651.25k	1.042M
2480MHz	Pass	500k	691.25k	1.031M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.333M	2.061M
2440MHz	Pass	500k	1.268M	2.076M
2480MHz	Pass	500k	1.345M	2.071M

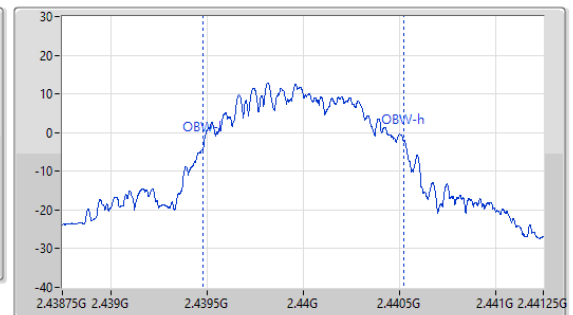
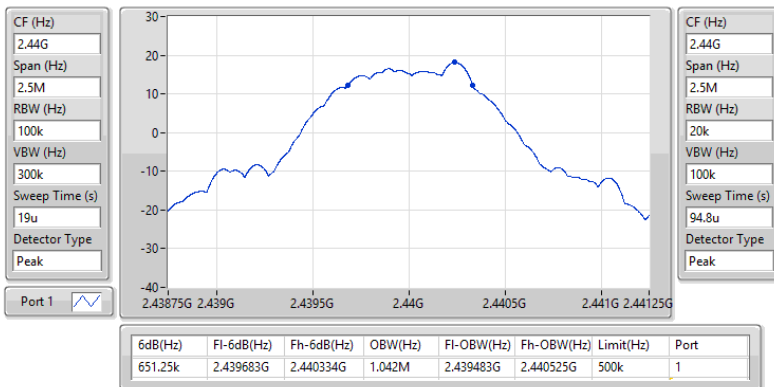
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_BT-LE(1Mbps)
EBW-DTS
2402MHz

05/03/2026

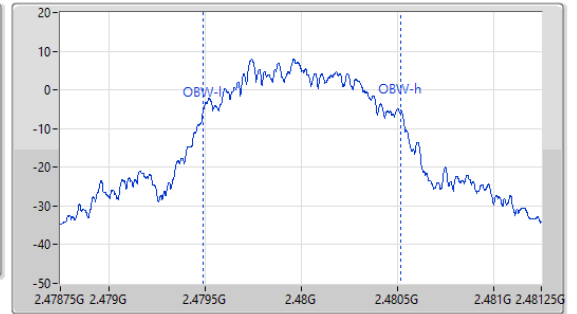
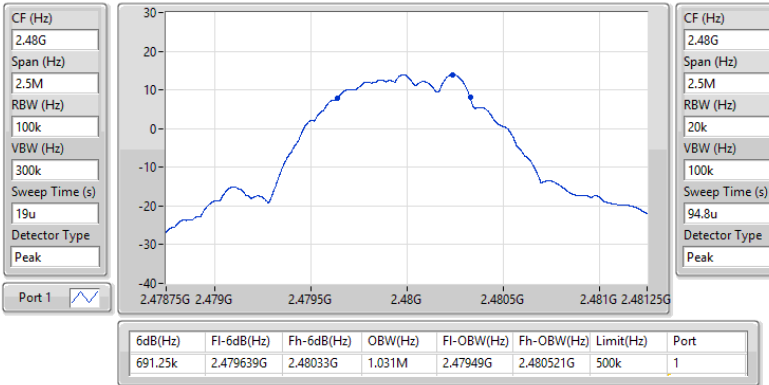

2.4-2.4835GHz_BT-LE(1Mbps)
EBW-DTS
2440MHz

05/03/2026

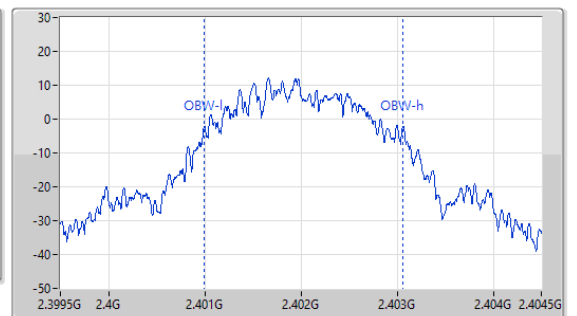
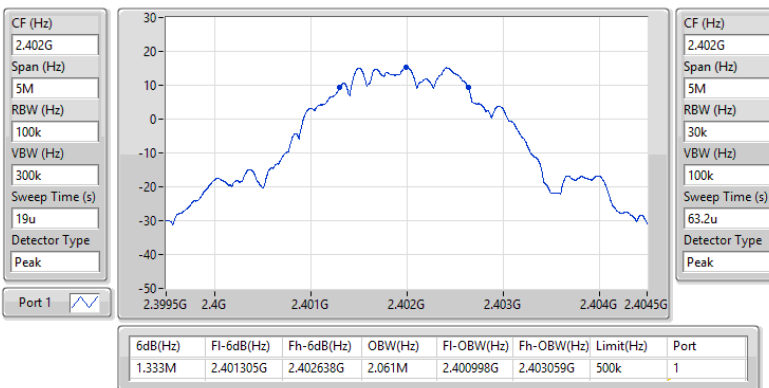


2.4-2.4835GHz_BT-LE(1Mbps)
EBW-DTS
2480MHz

05/03/2026

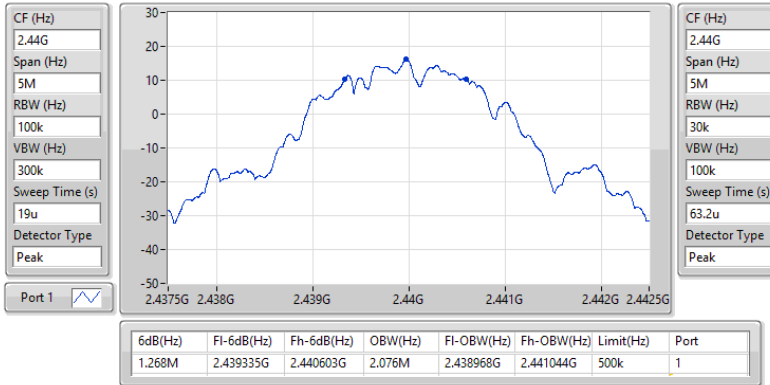

2.4-2.4835GHz_BT-LE(2Mbps)
EBW-DTS
2402MHz

05/03/2026

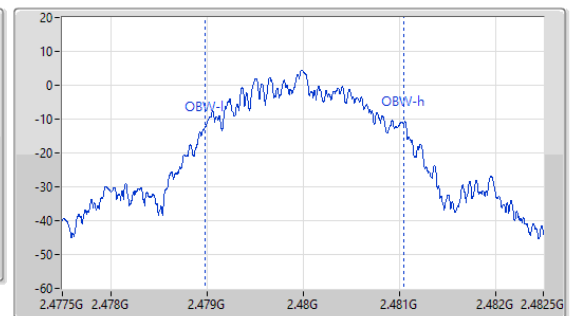
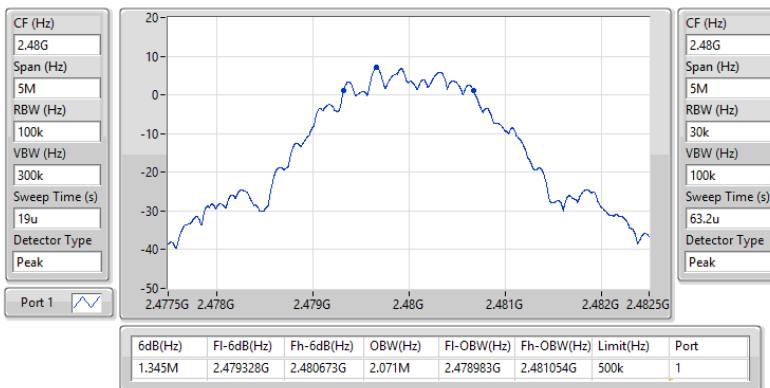


2.4-2.4835GHz_BT-LE(2Mbps)
EBW-DTS
2440MHz

05/03/2026


2.4-2.4835GHz_BT-LE(2Mbps)
EBW-DTS
2480MHz

05/03/2026





Average Power-DTS

Appendix C

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	19.24	0.08395
BT-LE(2Mbps)	19.21	0.08337



Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.40	19.18	30.00
2440MHz	Pass	3.40	19.24	30.00
2478MHz	Pass	3.40	19.12	30.00
2480MHz	Pass	3.40	14.41	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.40	19.17	30.00
2440MHz	Pass	3.40	19.21	30.00
2478MHz	Pass	3.40	19.15	30.00
2480MHz	Pass	3.40	10.35	30.00

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	3.74
BT-LE(2Mbps)	2.93

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.40	3.74	8.00
2440MHz	Pass	3.40	3.58	8.00
2480MHz	Pass	3.40	-0.84	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.40	2.86	8.00
2440MHz	Pass	3.40	2.93	8.00
2480MHz	Pass	3.40	-5.95	8.00

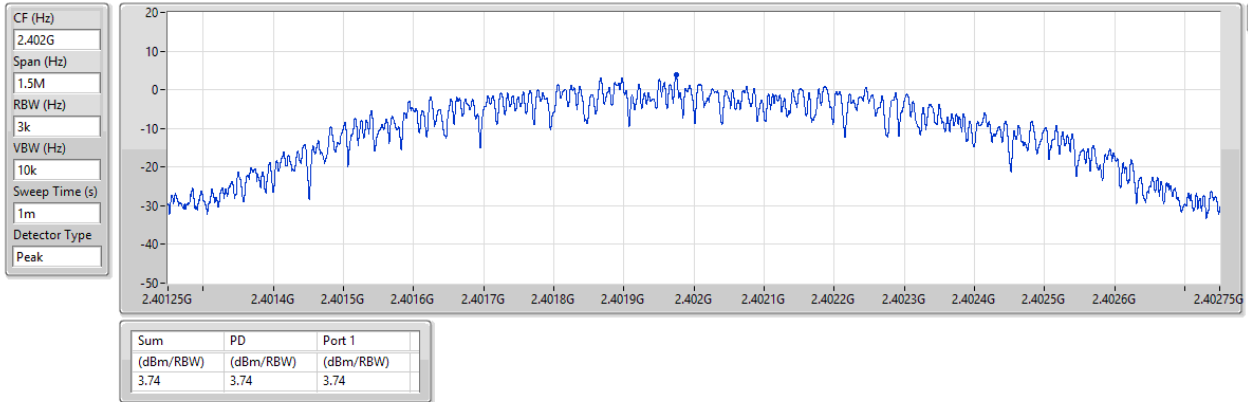
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2402MHz

05/03/2026

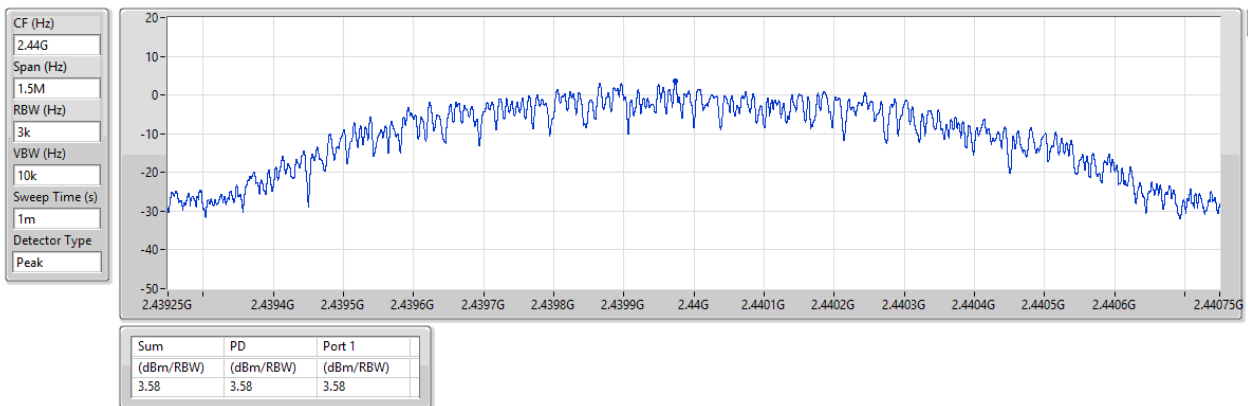


2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2440MHz

05/03/2026

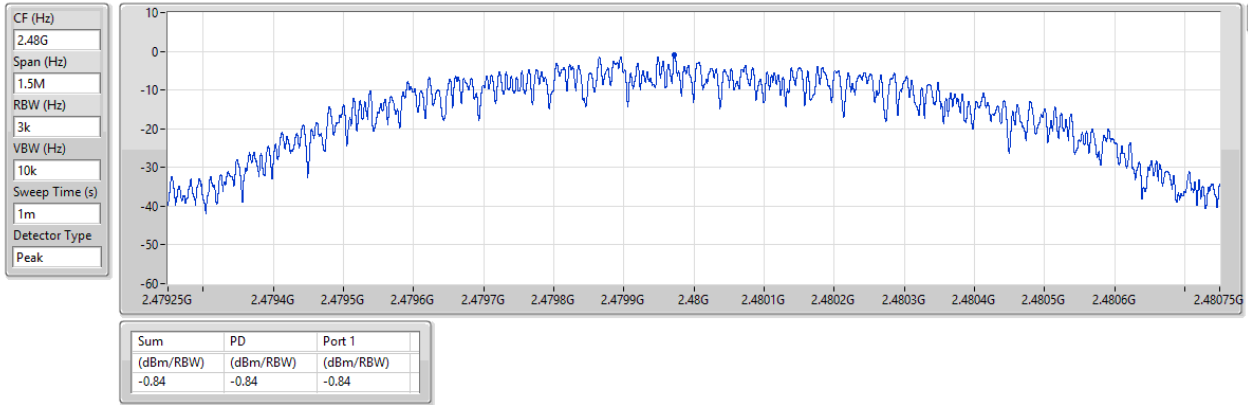


2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2480MHz

05/03/2026

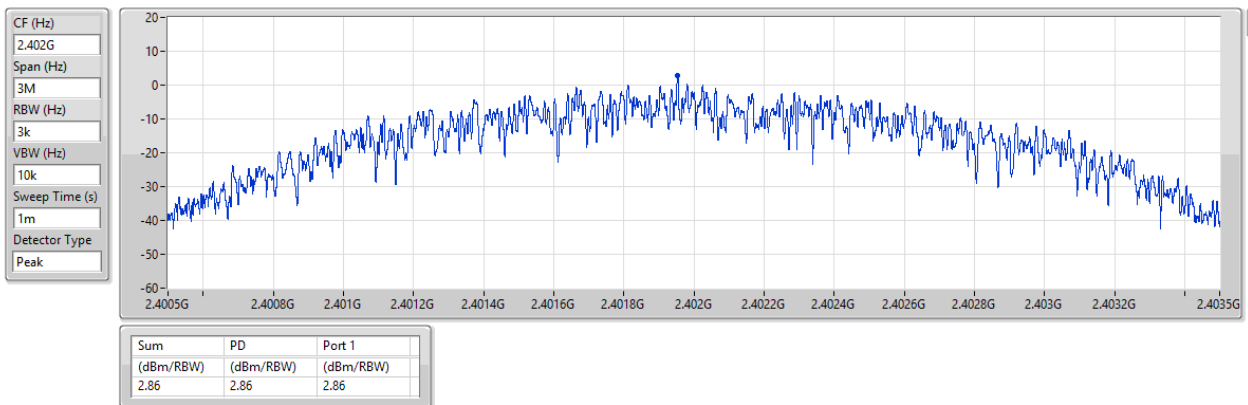


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2402MHz

05/03/2026

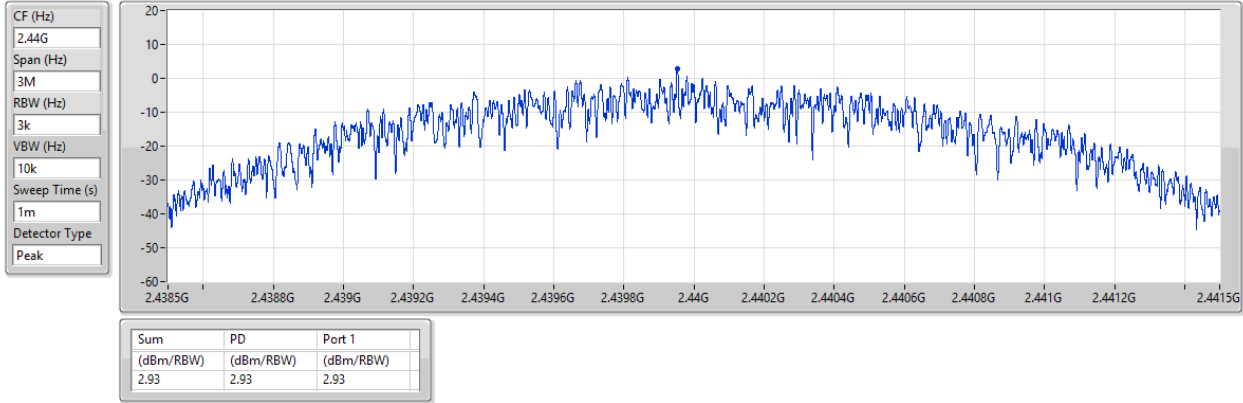


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2440MHz

05/03/2026

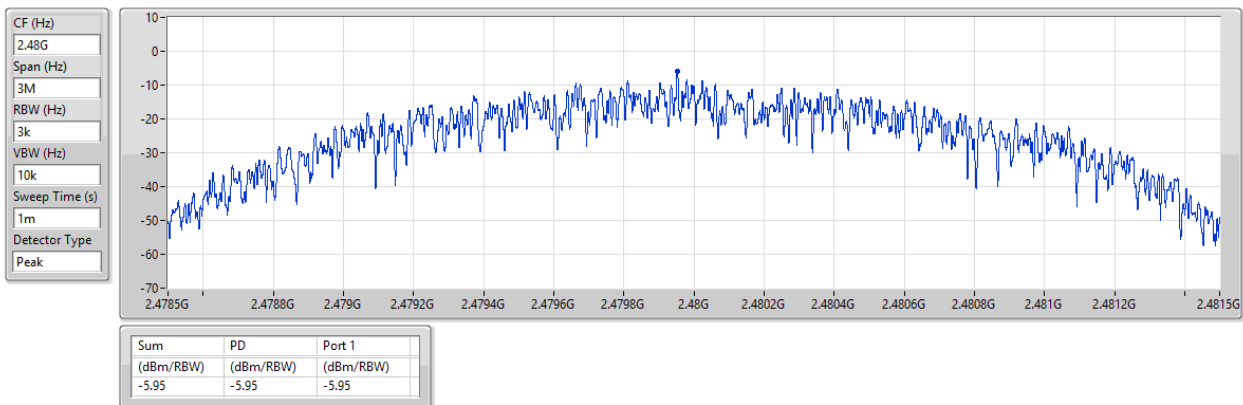


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2480MHz

05/03/2026



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	2.43991G	18.67	-11.33	873.65M	-52.08	2.4G	-20.52	2.4G	-24.12	2.50098G	-50.74	6.91844G	-45.42	1
BT-LE(2Mbps)	Pass	2.44008G	18.78	-11.22	2.30833G	-51.02	2.4G	-12.57	2.4G	-12.69	2.50146G	-51.39	6.03545G	-45.16	1

Result

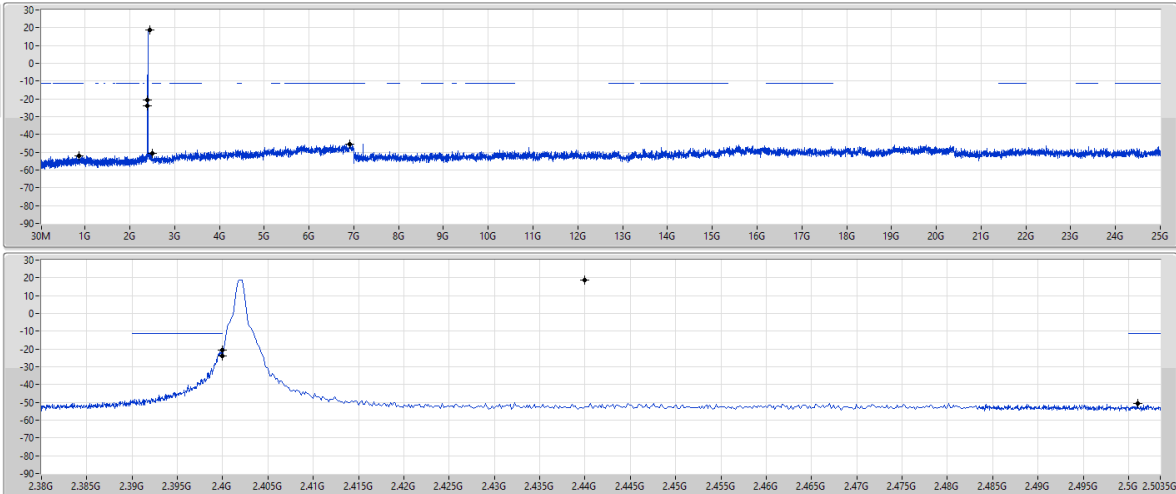
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.43991G	18.67	-11.33	873.65M	-52.08	2.4G	-20.52	2.4G	-24.12	2.50098G	-50.74	6.91844G	-45.42	1
2440MHz	Pass	2.43991G	18.67	-11.33	601.05M	-51.96	2.39984G	-49.81	2.4G	-52.19	2.50074G	-50.80	6.91844G	-44.55	1
2480MHz	Pass	2.43991G	18.67	-11.33	1.87593G	-51.24	2.39884G	-51.42	2.4G	-53.34	2.50306G	-51.39	5.9539G	-45.42	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44008G	18.78	-11.22	2.30833G	-51.02	2.4G	-12.57	2.4G	-12.69	2.50146G	-51.39	6.03545G	-45.16	1
2440MHz	Pass	2.44008G	18.78	-11.22	1.99343G	-51.63	2.39996G	-50.63	2.4G	-47.16	2.5005G	-51.04	6.94656G	-44.78	1
2480MHz	Pass	2.44008G	18.78	-11.22	2.06628G	-50.69	2.39132G	-50.40	2.4G	-52.96	2.50326G	-51.43	6.64567G	-45.15	1

2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2402MHz

05/03/2026

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

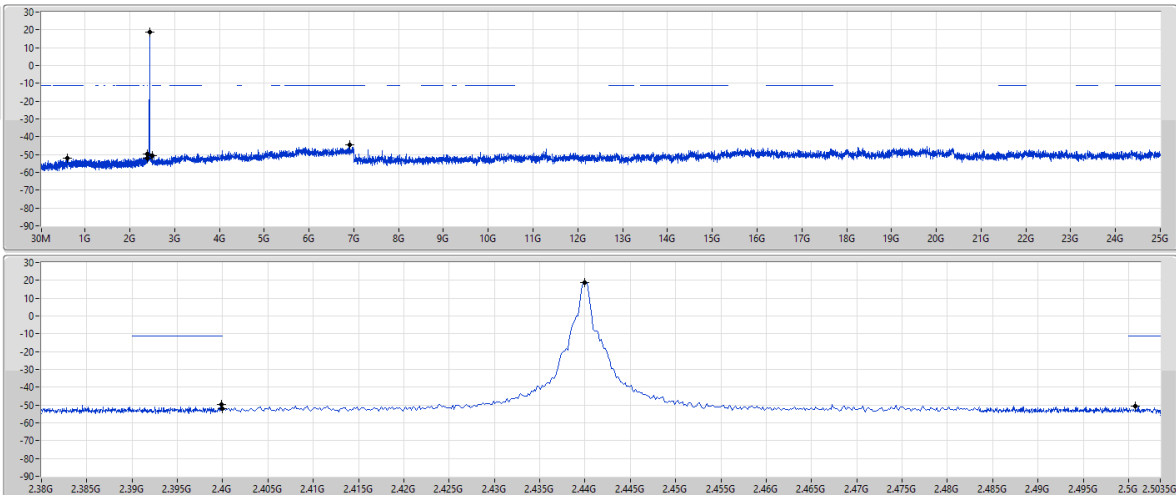
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43991G	18.67	-11.33	873.65M	-52.08	2.4G	-20.52	2.4G	-24.12	2.50098G	-50.74	6.91844G	-45.42	1

2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2440MHz

05/03/2026

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.43991G	18.67	-11.33	601.05M	-51.96	2.39984G	-49.81	2.4G	-52.19	2.50074G	-50.80	6.91844G	-44.55	1

2.4-2.4835GHz_BT-LE(1Mbps)

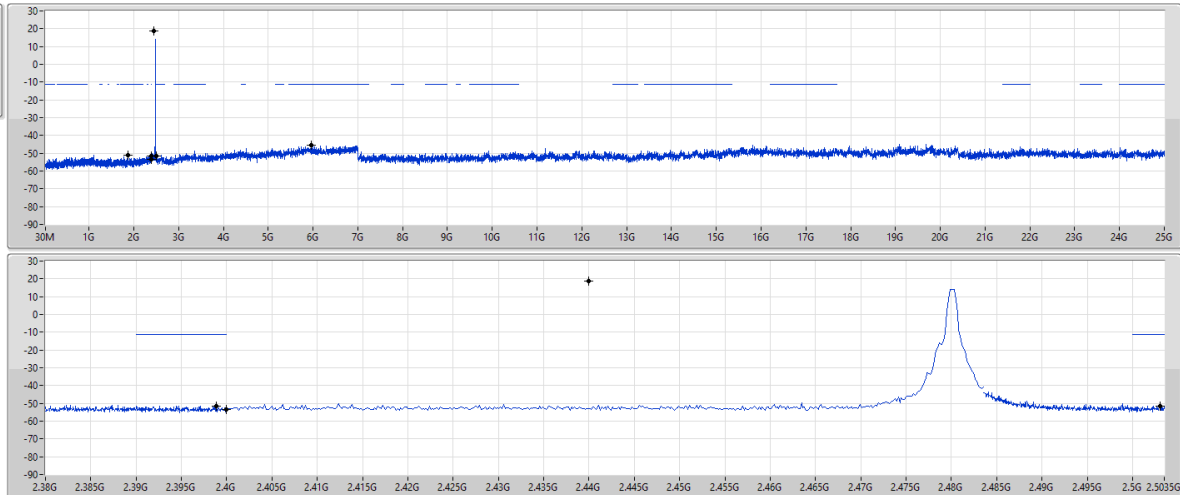
CSEndB-DTS

2480MHz

05/03/2026

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Port 1



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
2.43991G	18.67	-11.33	1.87593G	-51.24	2.39884G	-51.42	2.4G	-53.34	2.50306G	-51.39	5.9539G	-45.42	1

2.4-2.4835GHz_BT-LE(2Mbps)

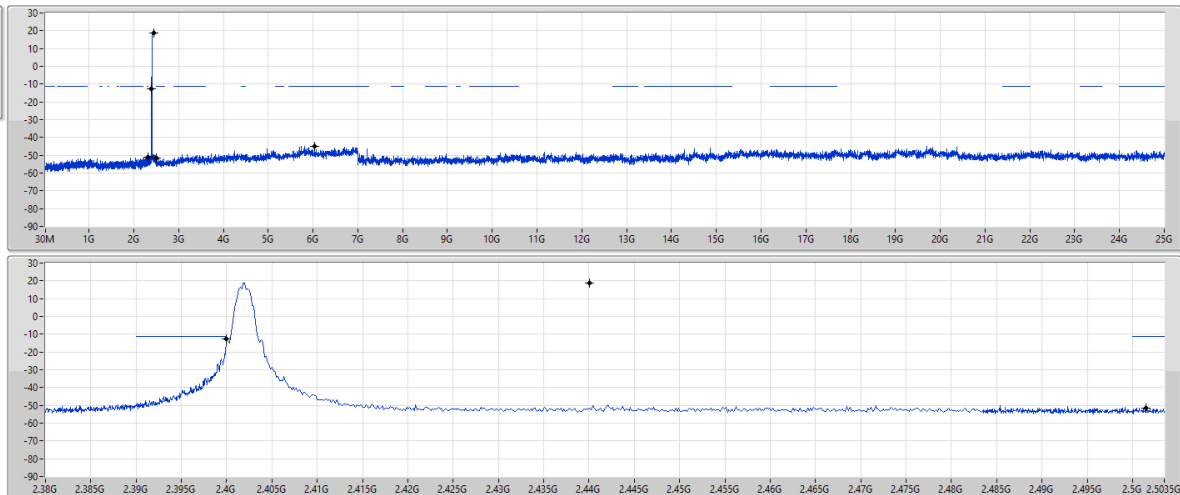
CSEndB-DTS

2402MHz

05/03/2026

RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Port 1



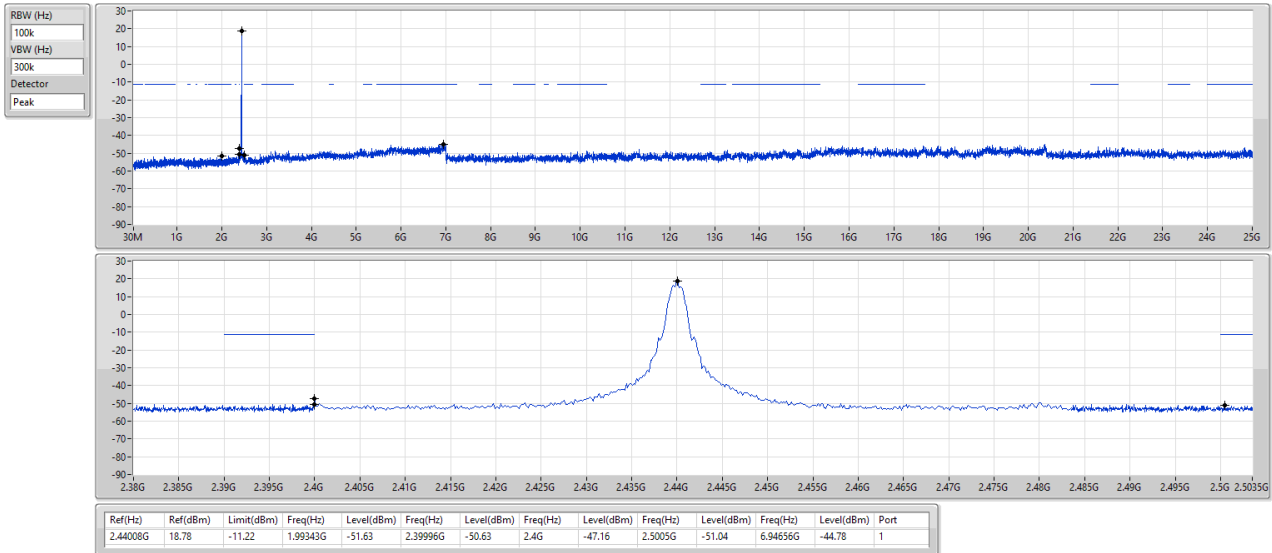
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44008G	18.78	-11.22	2.30833G	-51.02	2.4G	-12.57	2.4G	-12.69	2.50146G	-51.39	6.03545G	-45.16	1

2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

2440MHz

05/03/2026

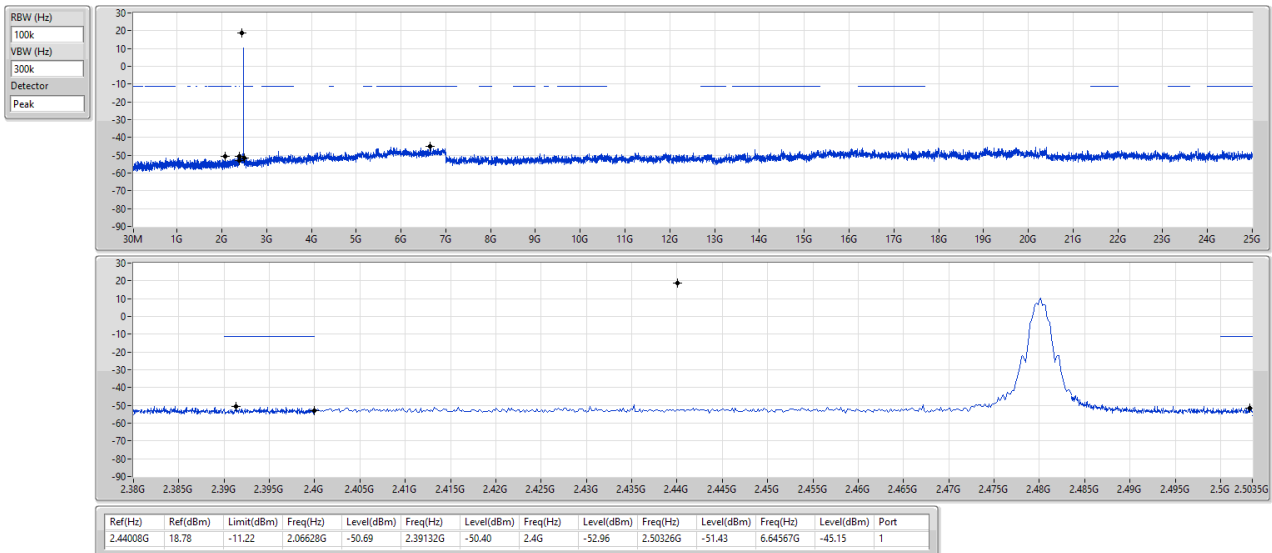


2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

2480MHz

05/03/2026





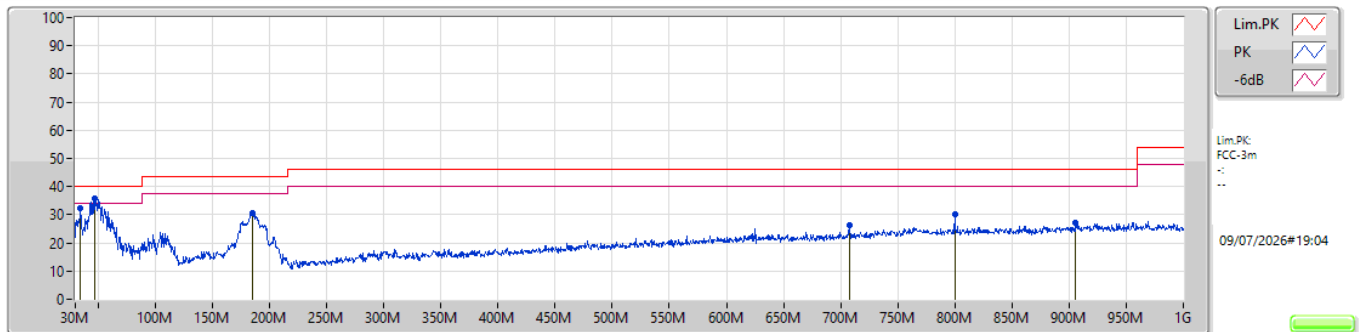
Radiated Emissions below 1GHz

Appendix F.1

Summary

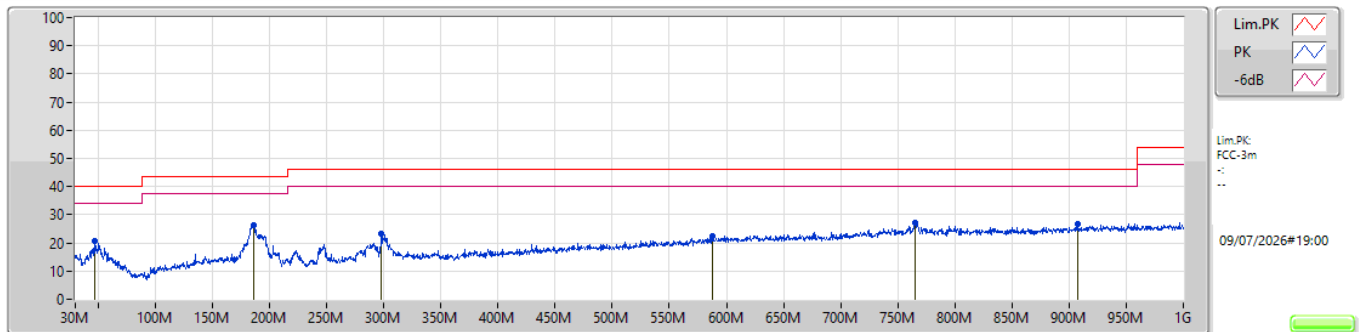
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 10	Pass	PK	47.46M	35.82	40.00	-4.18	Vertical

Mode 10



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)		
PK	34.37M	32.12	40.00	-7.88	-36.57	3	Vertical	167	1.00	-	68.69	18.15	0.15	54.87		
PK	47.46M	35.82	40.00	-4.18	-34.17	3	Vertical	223	1.00	"Worst"	69.99	19.51	0.28	53.96		
PK	184.72M	30.52	43.50	-12.98	-35.12	3	Vertical	29	1.00	-	65.64	16.91	1.57	53.60		
PK	707.55M	26.47	46.00	-19.53	-21.95	3	Vertical	319	2.00	-	48.42	26.92	3.68	52.55		
PK	800.18M	30.07	46.00	-15.93	-19.74	3	Vertical	166	3.00	-	49.81	28.09	4.04	51.87		
PK	905.91M	26.96	46.00	-19.04	-18.04	3	Vertical	87	2.00	-	45.00	29.13	4.58	51.75		

Mode 10



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)		
PK	47.46M	20.88	40.00	-19.12	-34.17	3	Horizontal	174	1.00	-	55.05	19.51	0.28	53.96		
PK	186.17M	26.34	43.50	-17.16	-35.32	3	Horizontal	211	2.00	"Worst"	61.66	16.73	1.58	53.63		
PK	298.21M	23.09	46.00	-22.91	-32.33	3	Horizontal	13	1.00	-	55.42	19.19	2.15	53.67		
PK	587.75M	22.58	46.00	-23.42	-24.34	3	Horizontal	189	3.00	-	46.92	25.32	3.33	52.99		
PK	764.78M	27.36	46.00	-18.64	-20.29	3	Horizontal	334	3.00	-	47.65	27.98	3.88	52.15		
PK	907.37M	26.65	46.00	-19.35	-17.97	3	Horizontal	151	1.00	-	44.62	29.19	4.58	51.74		

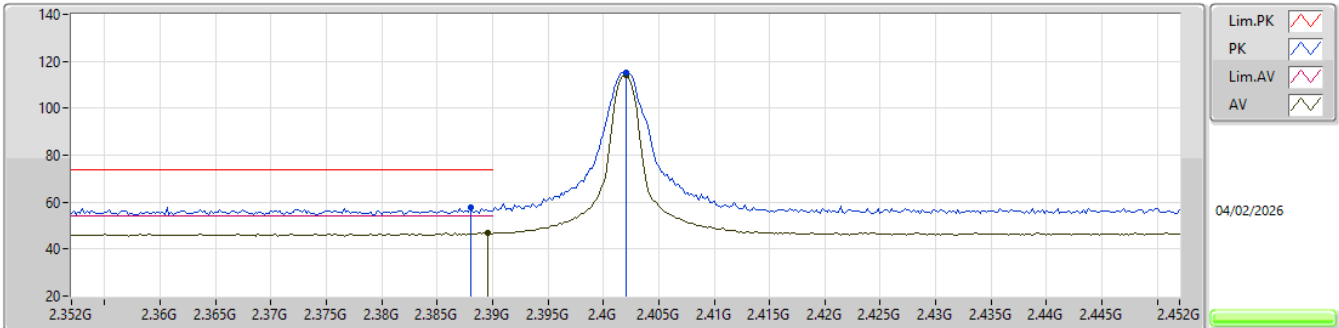


Summary

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	53.96	54.00	-0.04	3	Vertical	230	2.78	-

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

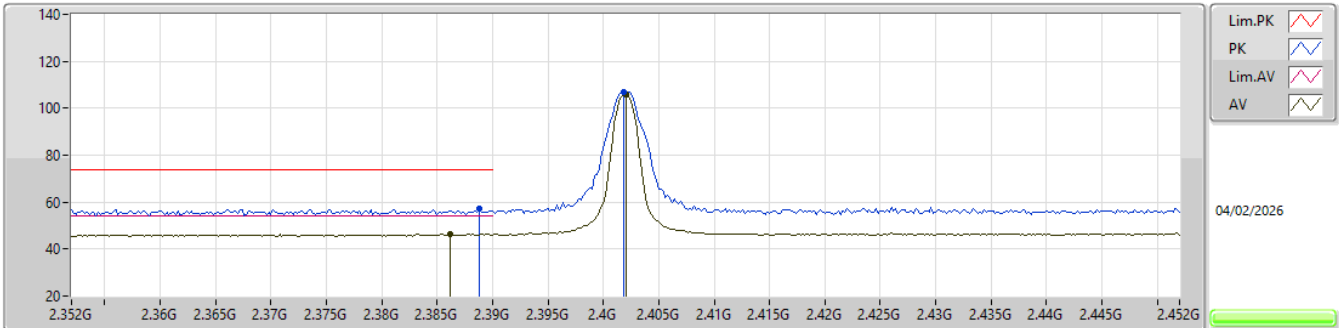


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.388G	57.74	74.00	-16.26	25.46	3	Vertical	238	2.09	-	27.28	5.00	-			
AV	2.3896G	46.83	54.00	-7.17	14.53	3	Vertical	238	2.09	-	27.30	5.00	-			
PK	2.402G	114.97	Inf	-Inf	82.54	3	Vertical	238	2.09	-	27.42	5.01	-			
AV	2.402G	114.06	Inf	-Inf	81.63	3	Vertical	238	2.09	-	27.42	5.01	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

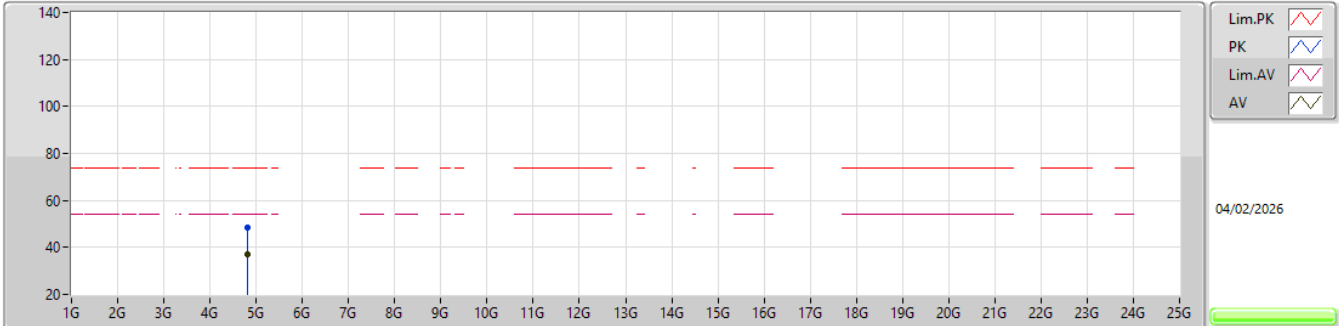


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3888G	57.00	74.00	-17.00	24.71	3	Horizontal	221	1.80	-	27.29	5.00	-				
AV	2.3862G	46.48	54.00	-7.52	14.22	3	Horizontal	221	1.80	-	27.26	5.00	-				
PK	2.4018G	107.02	Inf	-Inf	74.59	3	Horizontal	221	1.80	-	27.42	5.01	-				
AV	2.402G	106.11	Inf	-Inf	73.68	3	Horizontal	221	1.80	-	27.42	5.01	-				

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

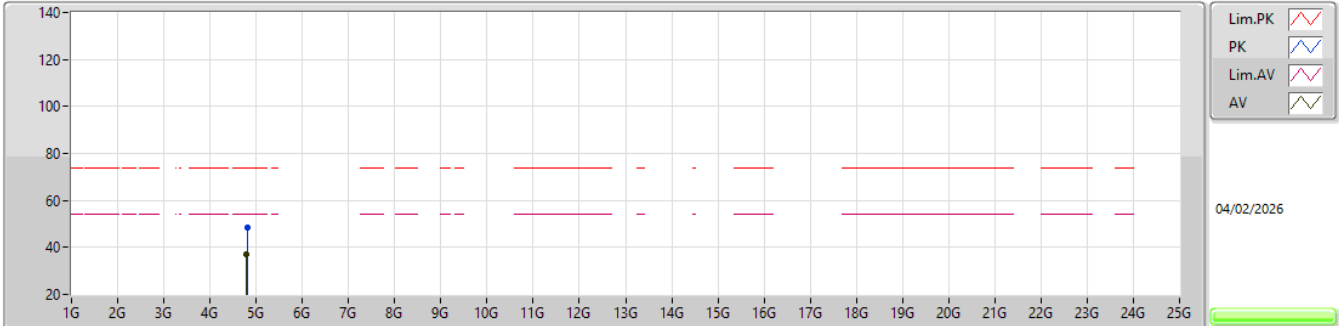


EUT_Z_1TX
Setting 200
05-X-J-11

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	4.80394G	48.36	74.00	-25.64	40.06	3	Vertical	224	2.18	-	32.33	7.07	31.10			
AV	4.81678G	36.83	54.00	-17.17	28.40	3	Vertical	224	2.18	-	32.43	7.09	31.09			

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

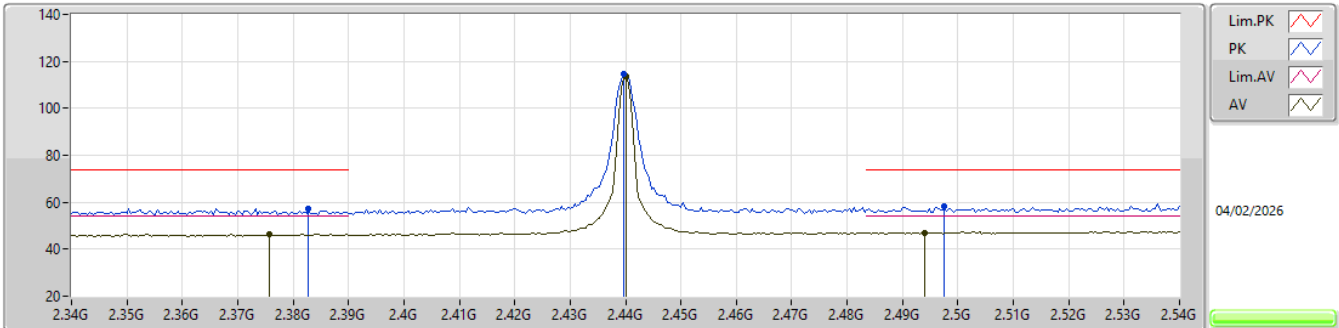


EUT_Z_1TX
Setting 200
05-X-J-11

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	4.80736G	48.41	74.00	-25.59	40.07	3	Horizontal	28	2.19	-	32.36	7.08	31.10			
AV	4.79134G	36.88	54.00	-17.12	28.65	3	Horizontal	28	2.19	-	32.27	7.07	31.11			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

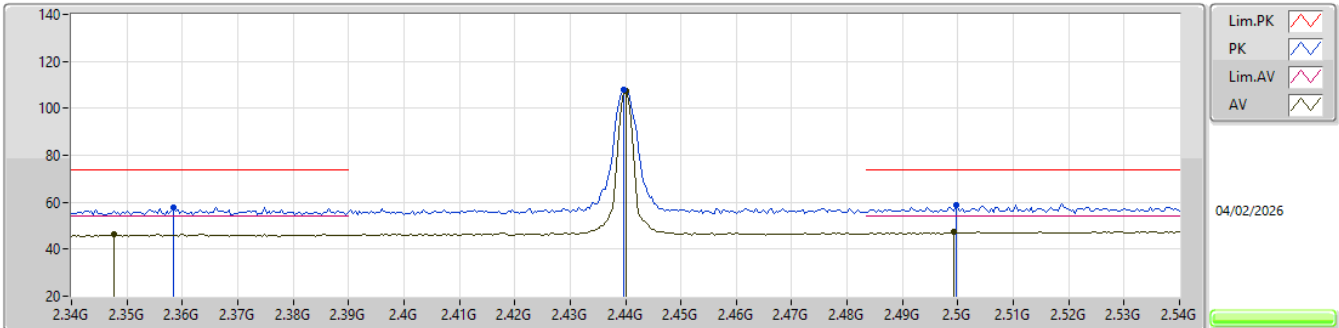


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3828G	57.36	74.00	-16.64	25.14	3	Vertical	233	2.02	-	27.23	4.99	-				
AV	2.3756G	46.42	54.00	-7.58	14.23	3	Vertical	233	2.02	-	27.20	4.99	-				
PK	2.4396G	114.61	Inf	-Inf	82.04	3	Vertical	233	2.02	-	27.50	5.07	-				
AV	2.44G	113.73	Inf	-Inf	81.16	3	Vertical	233	2.02	-	27.50	5.07	-				
PK	2.4976G	58.31	74.00	-15.69	25.18	3	Vertical	233	2.02	-	27.98	5.15	-				
AV	2.494G	47.08	54.00	-6.92	14.00	3	Vertical	233	2.02	-	27.94	5.14	-				

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

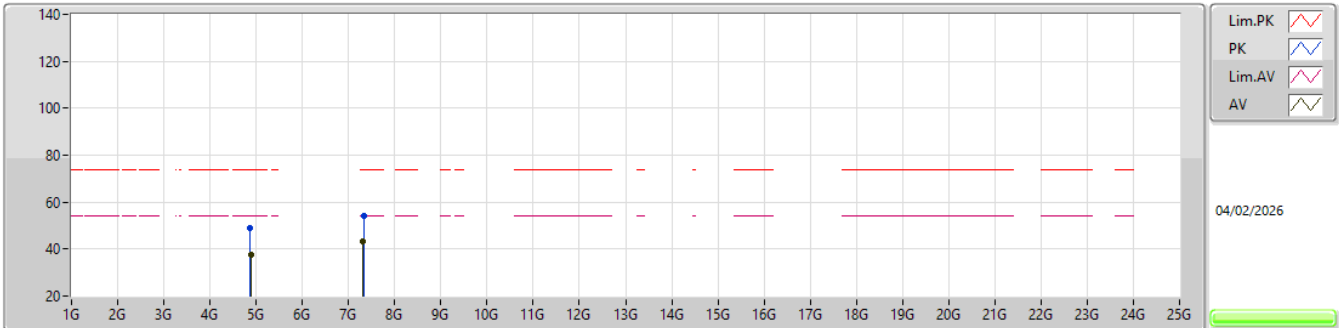


EUT_Z_1TX
Setting 200
05-X-J-11

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	2.3584G	57.75	74.00	-16.25	25.58	3	Horizontal	235	1.56	-	27.20	4.97	-					
AV	2.3476G	46.33	54.00	-7.67	14.19	3	Horizontal	235	1.56	-	27.18	4.96	-					
PK	2.4396G	108.12	Inf	-Inf	75.55	3	Horizontal	235	1.56	-	27.50	5.07	-					
AV	2.44G	107.21	Inf	-Inf	74.64	3	Horizontal	235	1.56	-	27.50	5.07	-					
PK	2.4996G	58.54	74.00	-15.46	25.39	3	Horizontal	235	1.56	-	28.00	5.15	-					
AV	2.4992G	47.45	54.00	-6.55	14.31	3	Horizontal	235	1.56	-	27.99	5.15	-					

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

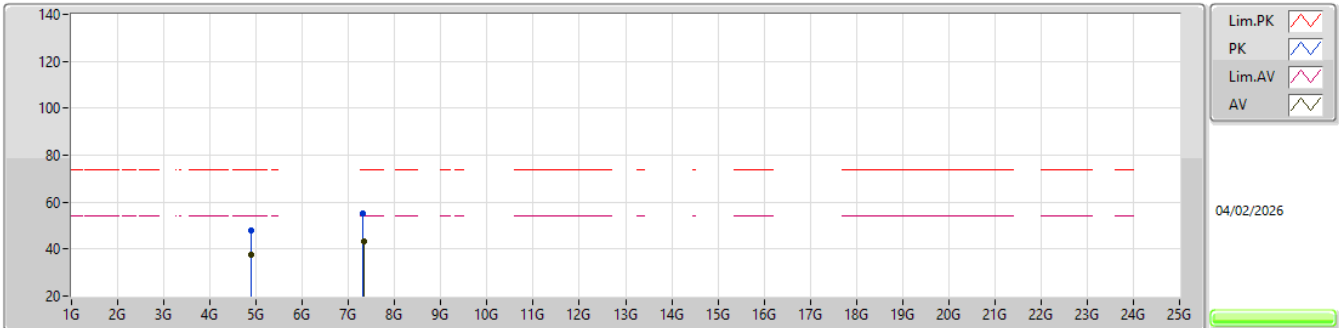


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.8701G	48.81	74.00	-25.19	39.95	3	Vertical	231	1.78	-	32.78	7.14	31.06				
AV	4.8818G	37.56	54.00	-16.44	28.63	3	Vertical	231	1.78	-	32.83	7.15	31.05				
PK	7.33038G	54.05	74.00	-19.95	40.96	3	Vertical	227	2.12	-	37.04	8.60	32.55				
AV	7.31544G	43.49	54.00	-10.51	30.35	3	Vertical	227	2.12	-	37.07	8.59	32.52				

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

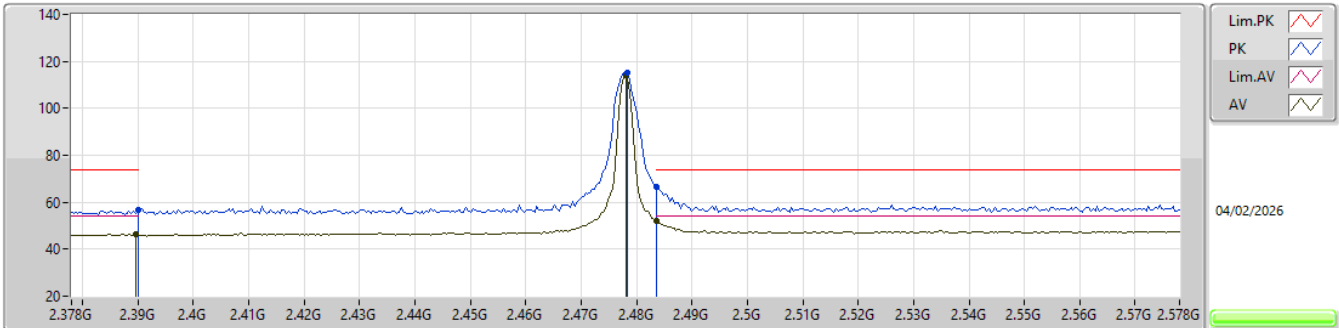


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.88G	48.07	74.00	-25.93	39.15	3	Horizontal	357	2.34	-	32.82	7.15	31.05				
AV	4.88354G	37.36	54.00	-16.64	28.43	3	Horizontal	357	2.34	-	32.83	7.15	31.05				
PK	7.31976G	55.02	74.00	-18.98	41.90	3	Horizontal	171	2.95	-	37.06	8.59	32.53				
AV	7.32984G	43.12	54.00	-10.88	30.02	3	Horizontal	171	2.95	-	37.04	8.60	32.54				

2.4-2.4835GHz_BT-LE(1Mbps)

2478MHz_TX

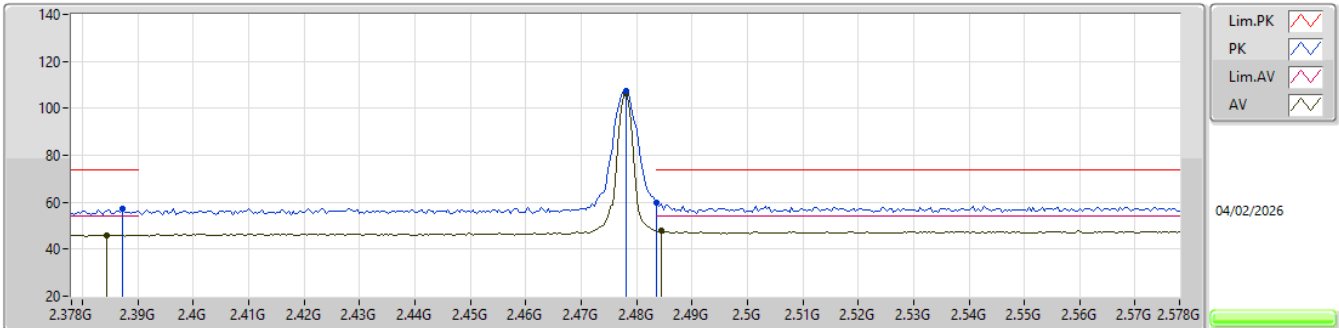


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.39G	56.58	74.00	-17.42	24.28	3	Vertical	234	2.77	-	27.30	5.00	-			
AV	2.3896G	46.39	54.00	-7.61	14.09	3	Vertical	234	2.77	-	27.30	5.00	-			
PK	2.4784G	115.11	Inf	-Inf	82.21	3	Vertical	234	2.77	-	27.78	5.12	-			
AV	2.478G	114.16	Inf	-Inf	81.26	3	Vertical	234	2.77	-	27.78	5.12	-			
PK	2.4835G	66.79	74.00	-7.21	33.82	3	Vertical	234	2.77	-	27.84	5.13	-			
AV	2.4835G	51.98	54.00	-2.02	19.01	3	Vertical	234	2.77	-	27.84	5.13	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2478MHz_TX

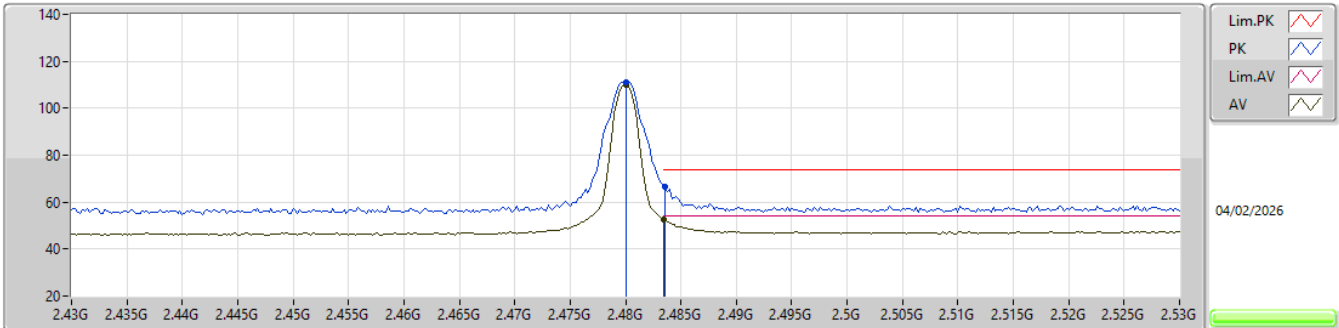


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3872G	57.15	74.00	-16.85	24.88	3	Horizontal	231	1.80	-	27.27	5.00	-				
AV	2.3844G	46.09	54.00	-7.91	13.85	3	Horizontal	231	1.80	-	27.24	5.00	-				
PK	2.478G	107.24	Inf	-Inf	74.34	3	Horizontal	231	1.80	-	27.78	5.12	-				
AV	2.478G	106.31	Inf	-Inf	73.41	3	Horizontal	231	1.80	-	27.78	5.12	-				
PK	2.4835G	59.62	74.00	-14.38	26.65	3	Horizontal	231	1.80	-	27.84	5.13	-				
AV	2.4844G	47.69	54.00	-6.31	14.72	3	Horizontal	231	1.80	-	27.84	5.13	-				

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

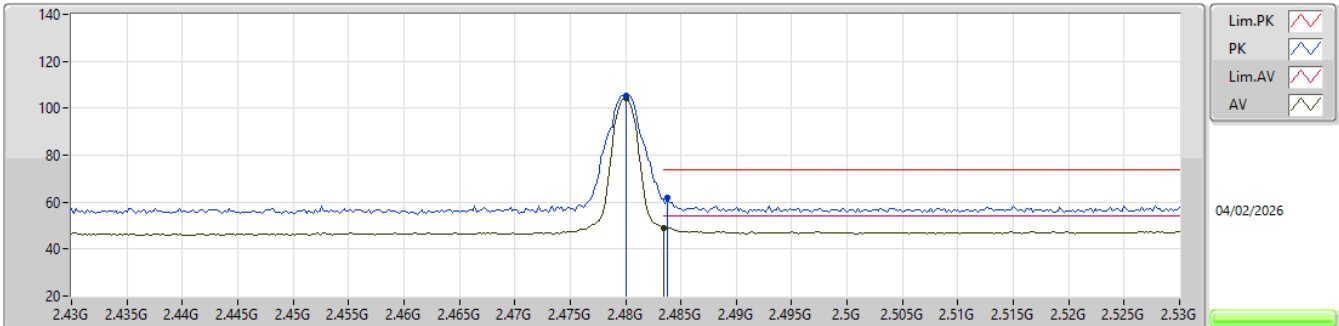


EUT_Z_1TX
Setting 149
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.48G	111.08	Inf	-Inf	78.16	3	Vertical	232	2.17	-	27.80	5.12	-				
AV	2.48G	110.19	Inf	-Inf	77.27	3	Vertical	232	2.17	-	27.80	5.12	-				
PK	2.4836G	66.70	74.00	-7.30	33.73	3	Vertical	232	2.17	-	27.84	5.13	-				
AV	2.4835G	52.59	54.00	-1.41	19.62	3	Vertical	232	2.17	-	27.84	5.13	-				

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

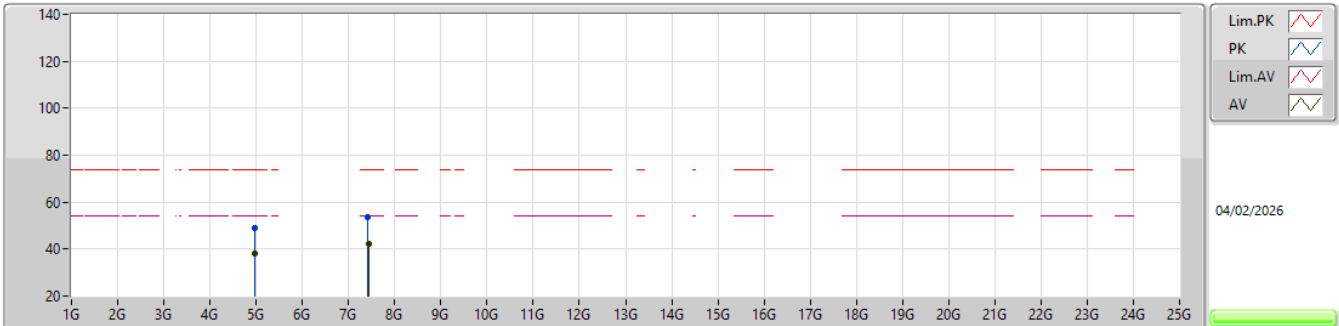


EUT_Z_1TX
Setting 149
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.48G	105.22	Inf	-Inf	72.30	3	Horizontal	112	2.59	-	27.80	5.12	-				
AV	2.48G	104.30	Inf	-Inf	71.38	3	Horizontal	112	2.59	-	27.80	5.12	-				
PK	2.4838G	62.14	74.00	-11.86	29.17	3	Horizontal	112	2.59	-	27.84	5.13	-				
AV	2.4835G	48.98	54.00	-5.02	16.01	3	Horizontal	112	2.59	-	27.84	5.13	-				

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

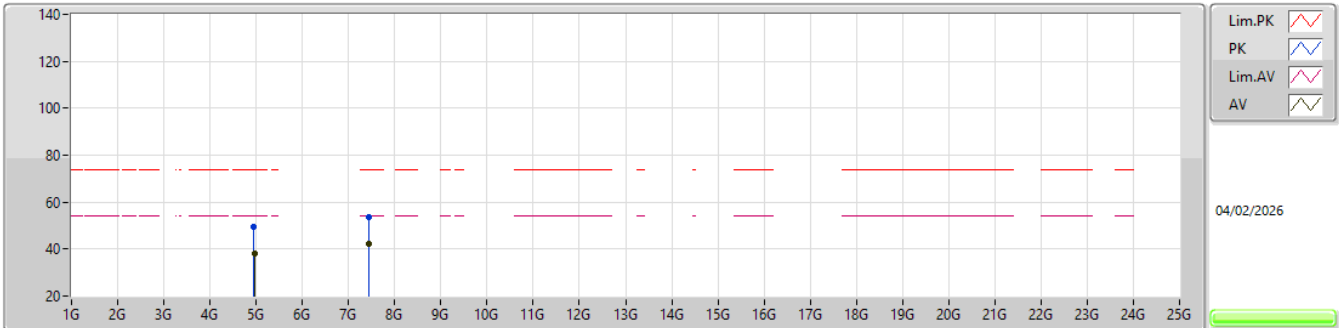


EUT_Z_1TX
Setting 149
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.97236G	48.82	74.00	-25.18	39.50	3	Vertical	40	1.89	-	33.09	7.23	31.00				
AV	4.97146G	37.96	54.00	-16.04	28.64	3	Vertical	40	1.89	-	33.09	7.23	31.00				
PK	7.42674G	53.82	74.00	-20.18	41.21	3	Vertical	33	2.81	-	36.55	8.74	32.68				
AV	7.44702G	42.49	54.00	-11.51	29.91	3	Vertical	33	2.81	-	36.51	8.78	32.71				

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

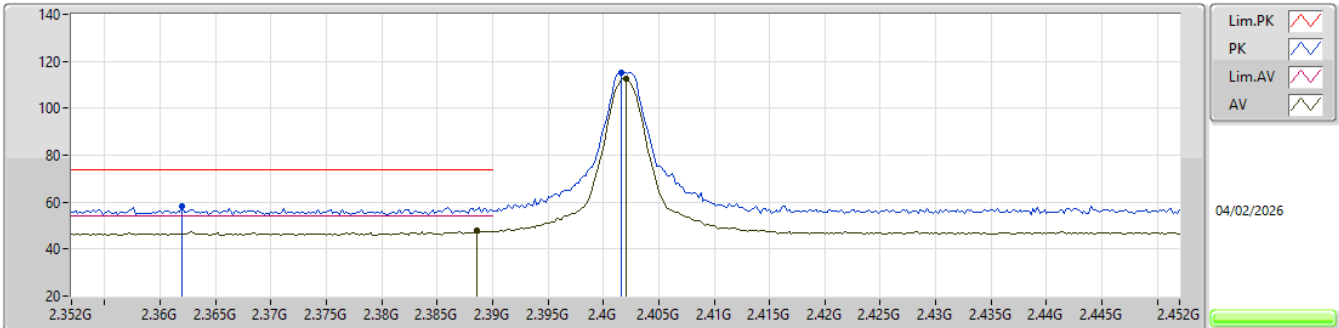


EUT_Z_1TX
Setting 149
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.94704G	49.38	74.00	-24.62	40.19	3	Horizontal	285	2.83	-	32.99	7.21	31.01				
AV	4.96918G	38.01	54.00	-15.99	28.70	3	Horizontal	285	2.83	-	33.08	7.23	31.00				
PK	7.44654G	53.72	74.00	-20.28	41.14	3	Horizontal	223	2.72	-	36.51	8.78	32.71				
AV	7.44006G	42.24	54.00	-11.76	29.65	3	Horizontal	223	2.72	-	36.52	8.77	32.70				

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

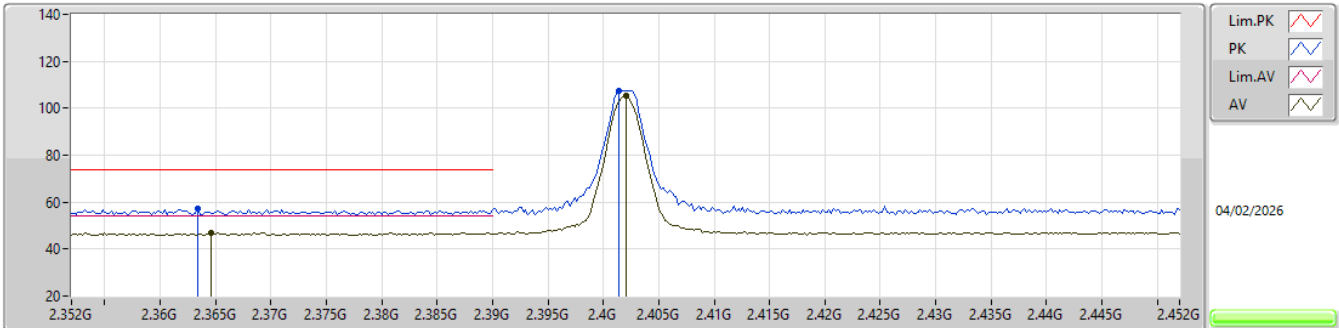


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.362G	58.08	74.00	-15.92	25.91	3	Vertical	238	2.07	-	27.20	4.97	-			
AV	2.3886G	47.81	54.00	-6.19	15.52	3	Vertical	238	2.07	-	27.29	5.00	-			
PK	2.4016G	114.96	Inf	-Inf	82.53	3	Vertical	238	2.07	-	27.42	5.01	-			
AV	2.402G	112.68	Inf	-Inf	80.25	3	Vertical	238	2.07	-	27.42	5.01	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

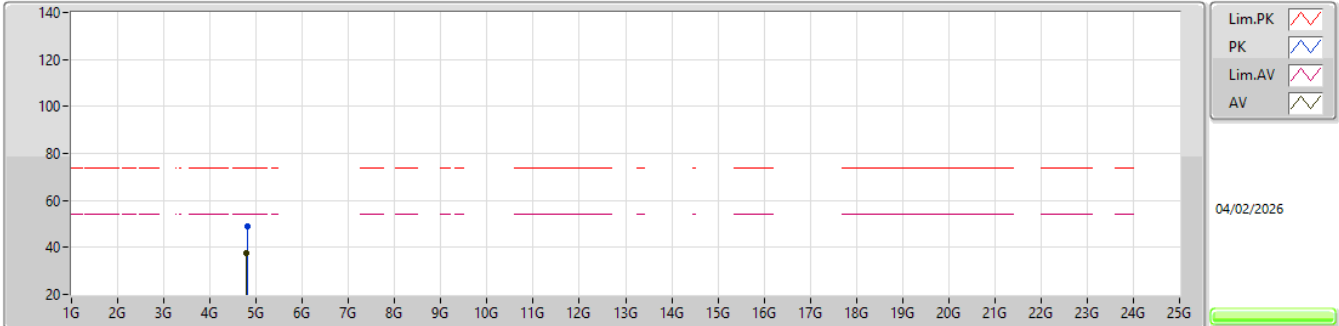


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3634G	57.03	74.00	-16.97	24.85	3	Horizontal	218	1.80	-	27.20	4.98	-			
AV	2.3646G	47.06	54.00	-6.94	14.88	3	Horizontal	218	1.80	-	27.20	4.98	-			
PK	2.4014G	107.57	Inf	-Inf	75.15	3	Horizontal	218	1.80	-	27.41	5.01	-			
AV	2.402G	105.27	Inf	-Inf	72.84	3	Horizontal	218	1.80	-	27.42	5.01	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

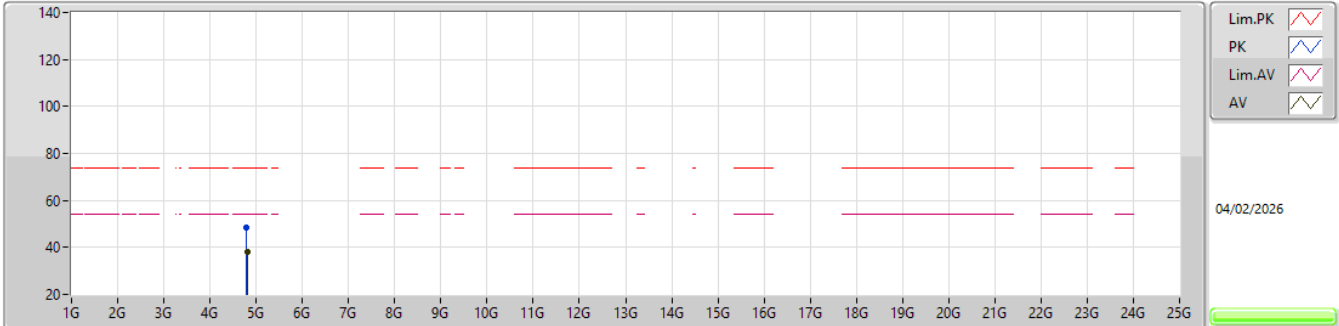


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.80424G	48.84	74.00	-25.16	40.54	3	Vertical	222	1.50	-	32.33	7.07	31.10			
AV	4.7956G	37.50	54.00	-16.50	29.25	3	Vertical	222	1.50	-	32.28	7.07	31.10			

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

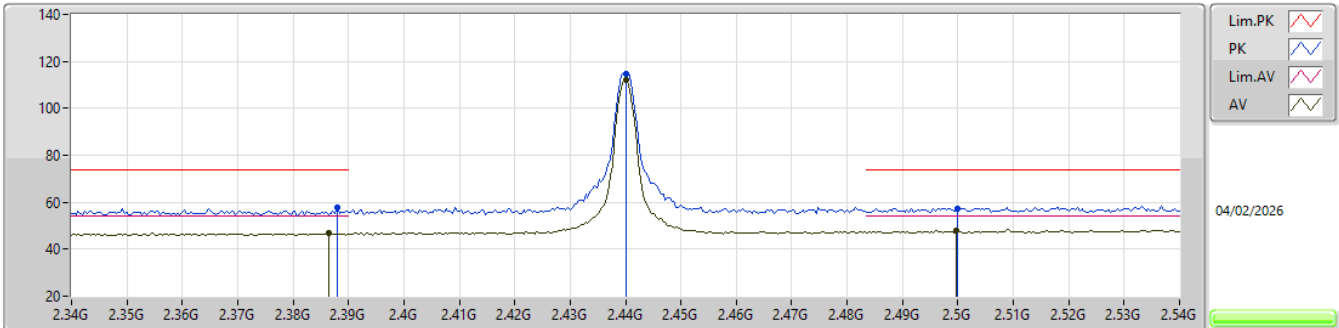


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.79182G	48.34	74.00	-25.66	40.10	3	Horizontal	152	2.73	-	32.27	7.07	31.10			
AV	4.80118G	37.89	54.00	-16.11	29.61	3	Horizontal	152	2.73	-	32.31	7.07	31.10			

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

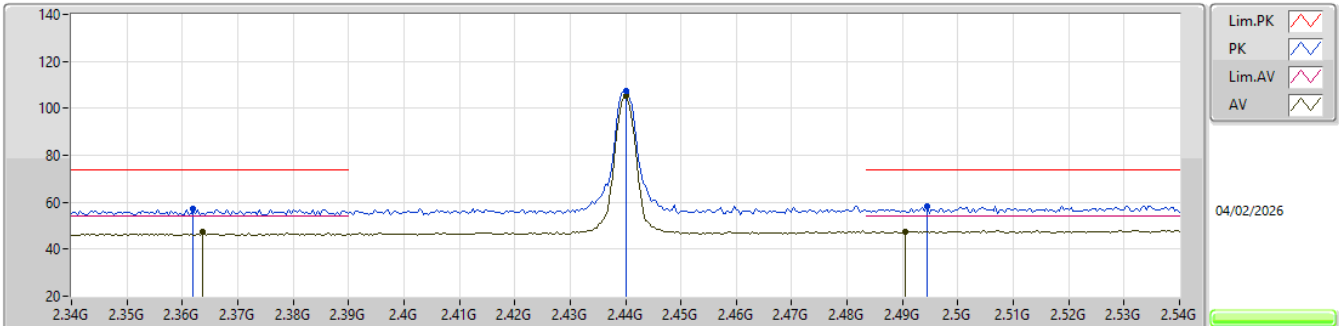


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.388G	57.90	74.00	-16.10	25.62	3	Vertical	234	1.80	-	27.28	5.00	-				
AV	2.3864G	46.82	54.00	-7.18	14.56	3	Vertical	234	1.80	-	27.26	5.00	-				
PK	2.44G	114.51	Inf	-Inf	81.94	3	Vertical	234	1.80	-	27.50	5.07	-				
AV	2.44G	112.16	Inf	-Inf	79.59	3	Vertical	234	1.80	-	27.50	5.07	-				
PK	2.5G	57.43	74.00	-16.57	24.28	3	Vertical	234	1.80	-	28.00	5.15	-				
AV	2.4996G	47.92	54.00	-6.08	14.77	3	Vertical	234	1.80	-	28.00	5.15	-				

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

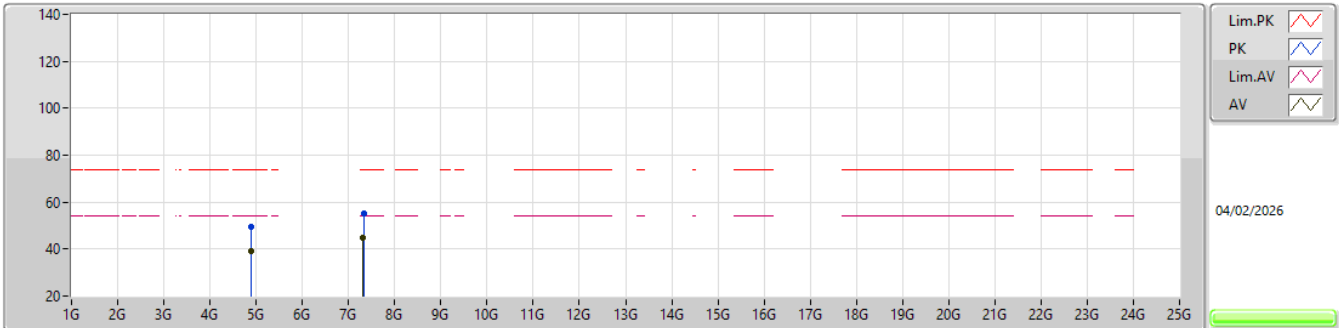


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.362G	57.00	74.00	-17.00	24.83	3	Horizontal	233	1.80	-	27.20	4.97	-				
AV	2.3636G	47.43	54.00	-6.57	15.25	3	Horizontal	233	1.80	-	27.20	4.98	-				
PK	2.44G	107.46	Inf	-Inf	74.89	3	Horizontal	233	1.80	-	27.50	5.07	-				
AV	2.44G	105.17	Inf	-Inf	72.60	3	Horizontal	233	1.80	-	27.50	5.07	-				
PK	2.4944G	58.18	74.00	-15.82	25.10	3	Horizontal	233	1.80	-	27.94	5.14	-				
AV	2.4904G	47.52	54.00	-6.48	14.48	3	Horizontal	233	1.80	-	27.90	5.14	-				

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

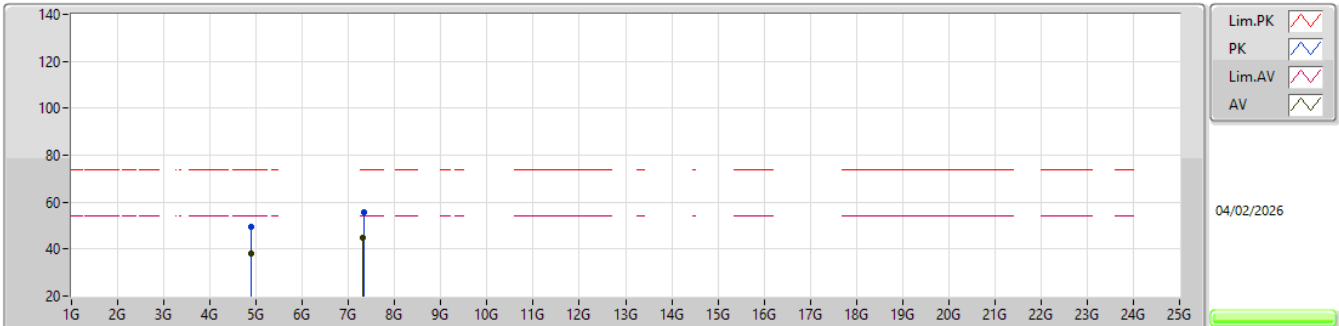


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.89032G	49.49	74.00	-24.51	39.50	3	Vertical	360.1	1.20	-	32.86	8.18	31.05				
AV	4.89326G	39.09	54.00	-14.91	29.08	3	Vertical	360.1	1.20	-	32.87	8.18	31.04				
PK	7.32426G	55.08	74.00	-18.92	40.87	3	Vertical	210	1.49	-	37.05	9.70	32.54				
AV	7.31874G	45.05	54.00	-8.95	30.82	3	Vertical	210	1.49	-	37.06	9.70	32.53				

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

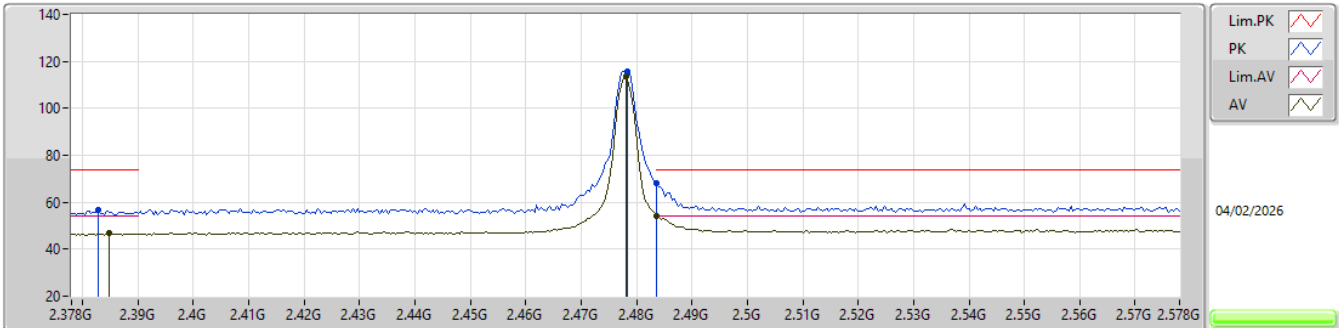


EUT_Z_1TX
Setting 200
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.88984G	49.58	74.00	-24.42	40.61	3	Horizontal	154.1	1.80	-	32.86	7.16	31.05			
AV	4.88906G	38.20	54.00	-15.80	29.24	3	Horizontal	154.1	1.80	-	32.86	7.15	31.05			
PK	7.33254G	55.48	74.00	-18.52	41.29	3	Horizontal	191.1	1.80	-	37.03	9.71	32.55			
AV	7.31946G	45.03	54.00	-8.97	30.80	3	Horizontal	191.1	1.80	-	37.06	9.70	32.53			

2.4-2.4835GHz_BT-LE(2Mbps)

2478MHz_TX

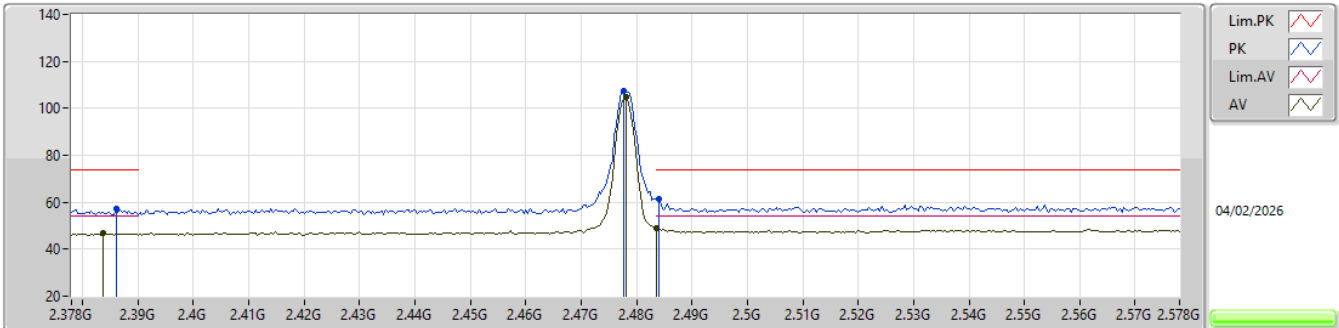


EUT_Z_1TX
Setting 195
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3828G	56.51	74.00	-17.49	24.29	3	Vertical	230	2.78	-	27.23	4.99	-				
AV	2.3848G	46.74	54.00	-7.26	14.49	3	Vertical	230	2.78	-	27.25	5.00	-				
PK	2.4784G	115.83	Inf	-Inf	82.93	3	Vertical	230	2.78	-	27.78	5.12	-				
AV	2.478G	113.50	Inf	-Inf	80.60	3	Vertical	230	2.78	-	27.78	5.12	-				
PK	2.4835G	68.08	74.00	-5.92	35.11	3	Vertical	230	2.78	-	27.84	5.13	-				
AV	2.4835G	53.96	54.00	-0.04	20.99	3	Vertical	230	2.78	-	27.84	5.13	-				

2.4-2.4835GHz_BT-LE(2Mbps)

2478MHz_TX

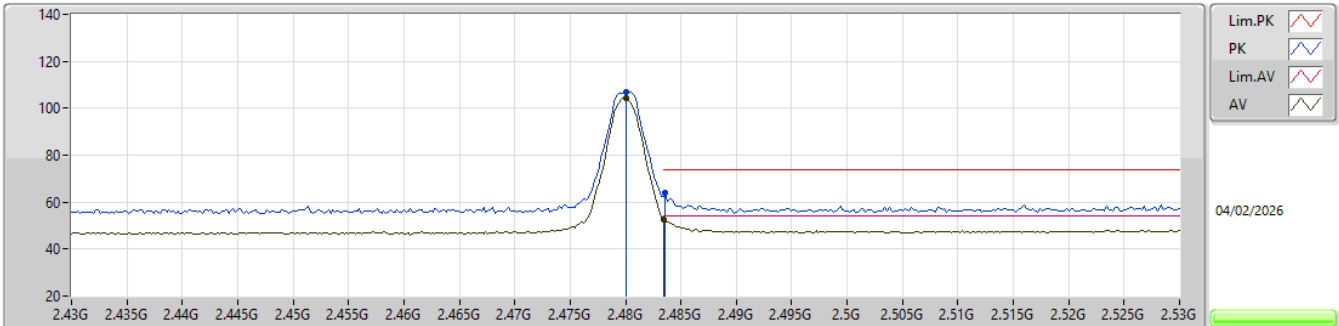


EUT_Z_1TX
Setting 195
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.386G	57.16	74.00	-16.84	24.90	3	Horizontal	231	1.80	-	27.26	5.00	-			
AV	2.3836G	46.79	54.00	-7.21	14.56	3	Horizontal	231	1.80	-	27.24	4.99	-			
PK	2.4776G	107.18	Inf	-Inf	74.28	3	Horizontal	231	1.80	-	27.78	5.12	-			
AV	2.478G	104.85	Inf	-Inf	71.95	3	Horizontal	231	1.80	-	27.78	5.12	-			
PK	2.484G	61.54	74.00	-12.46	28.57	3	Horizontal	231	1.80	-	27.84	5.13	-			
AV	2.4835G	48.77	54.00	-5.23	15.80	3	Horizontal	231	1.80	-	27.84	5.13	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX

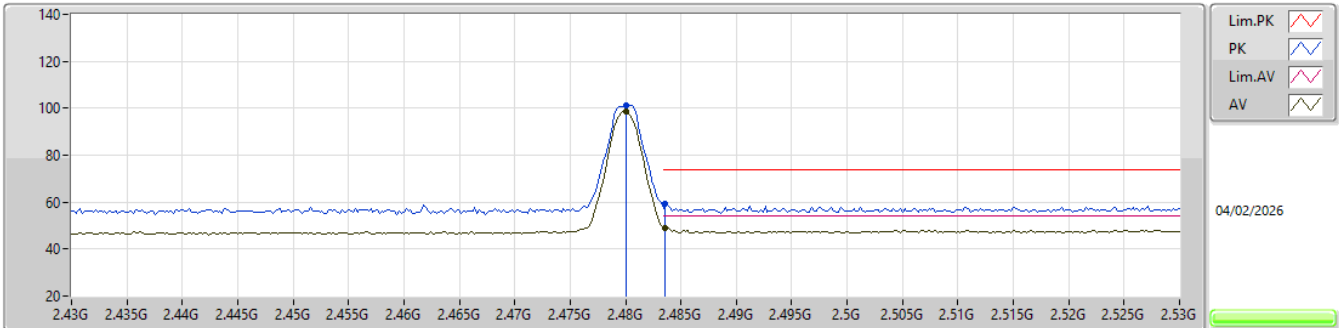


EUT_Z_1TX
Setting 109
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.48G	106.64	Inf	-Inf	73.72	3	Vertical	232	2.18	-	27.80	5.12	-				
AV	2.48G	104.33	Inf	-Inf	71.41	3	Vertical	232	2.18	-	27.80	5.12	-				
PK	2.4836G	63.93	74.00	-10.07	30.96	3	Vertical	232	2.18	-	27.84	5.13	-				
AV	2.4835G	52.46	54.00	-1.54	19.49	3	Vertical	232	2.18	-	27.84	5.13	-				

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX

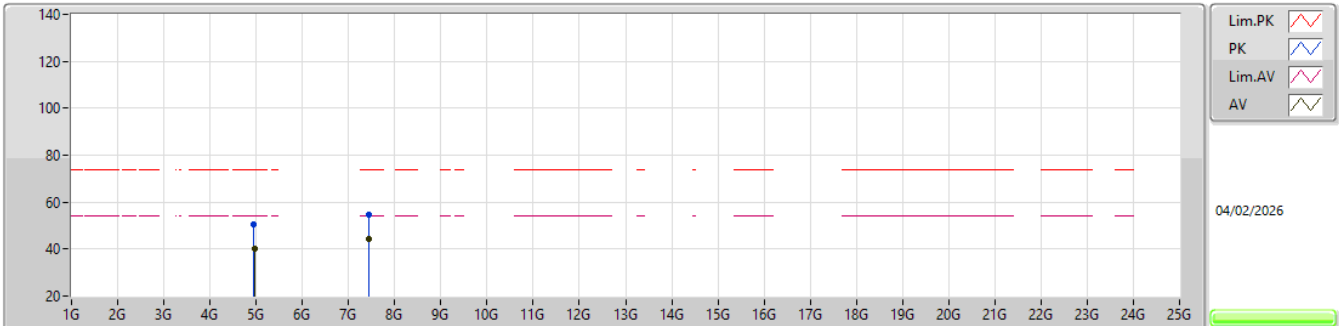


EUT_Z_1TX
Setting 109
05-X-J-11

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	2.48G	101.00	Inf	-Inf	68.08	3	Horizontal	110	2.59	-	27.80	5.12	-				
AV	2.48G	98.67	Inf	-Inf	65.75	3	Horizontal	110	2.59	-	27.80	5.12	-				
PK	2.4836G	59.31	74.00	-14.69	26.34	3	Horizontal	110	2.59	-	27.84	5.13	-				
AV	2.4836G	49.17	54.00	-4.83	16.20	3	Horizontal	110	2.59	-	27.84	5.13	-				

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX

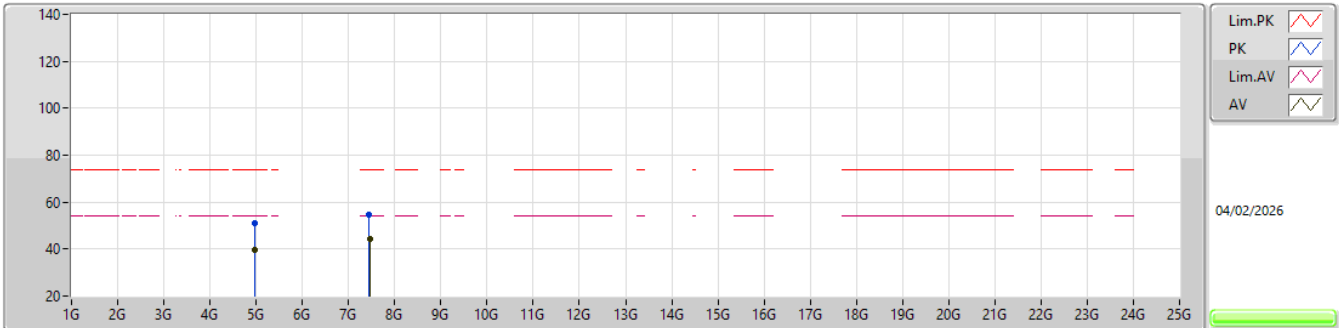


EUT_Z_1TX
Setting 109
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.95442G	50.66	74.00	-23.34	40.48	3	Vertical	149	1.80	-	33.02	8.17	31.01				
AV	4.97332G	40.06	54.00	-13.94	29.80	3	Vertical	149	1.80	-	33.09	8.17	31.00				
PK	7.44726G	54.79	74.00	-19.21	41.19	3	Vertical	127	1.80	-	36.51	9.80	32.71				
AV	7.43484G	44.23	54.00	-9.77	30.61	3	Vertical	127	1.80	-	36.53	9.79	32.70				

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX



EUT_Z_1TX
Setting 109
05-X-J-11

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.97488G	51.02	74.00	-22.98	40.75	3	Horizontal	257	1.01	-	33.10	8.17	31.00			
AV	4.96648G	39.87	54.00	-14.13	29.63	3	Horizontal	257	1.01	-	33.07	8.17	31.00			
PK	7.43328G	54.86	74.00	-19.14	41.23	3	Horizontal	110	1.80	-	36.53	9.79	32.69			
AV	7.45422G	44.08	54.00	-9.92	30.50	3	Horizontal	110	1.80	-	36.50	9.80	32.72			