Testing Laboratory 3787

RADIO TEST REPORT

FCC ID	:	UDX-600200010
Equipment	:	Cisco Wireless 9178I Series Wi-Fi 7 Access Point
Brand Name	:	CISCO
Model Name	:	CW9178I
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. 17, 2024, and testing was started from Feb. 21, 2024 and completed on Jun. 11, 2024. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Rex Liao

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

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History of this test report

Report No.	Version	Description	Issued Date
FR411617AE	01	Initial issue of report	Sep. 06, 2024

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/manufacturer 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: Cathy Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std.	Ch. Frequency (MHz)	Channel Number
2400-2483.5	802.15.4	2405-2480	11-26 [16]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	Zigbee	3	1TX/1RX

Note:
- Zigbee uses a O-QPSK (250kbps) modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand Name	Model Name	Antenna Type	Connector	Support Function	Gain (dBi)
1	WNC	95XEAK15.G98	PIFA	I-PEX	Radio 1 2.4GHz and Radio 2 5GHz UNII 1~2A	Note2
2	WNC	95XEAK15.G96	PCB	I-PEX	Radio 1 2.4GHz and Radio 2 5GHz UNII 1~2A	
3	WNC	95XEAK15.G97	PCB	I-PEX	Radio 1 2.4GHz and Radio 2 5GHz UNII 1~2A	
4	WNC	95XEAK15.G99	PIFA	I-PEX	Radio 1 2.4GHz and Radio 2 5GHz UNII 1~2A	
5	WNC	95XEAK15.GA3	PIFA	I-PEX	Radio 3 5GHz UNII 1~3	
6	WNC	95XEAK15.GA1	PCB	I-PEX	Radio 3 5GHz UNII 1~3	
7	WNC	95XEAK15.GA2	PCB	I-PEX	Radio 3 5GHz UNII 1~3	
8	WNC	95XEAK15.GA4	PIFA	I-PEX	Radio 3 5GHz UNII 1~3	
9	WNC	95XEAK15.GA7	PIFA	I-PEX	Radio 4 6GHz UNII 5~8	
10	WNC	95XEAK15.GA5	PCB	I-PEX	Radio 4 6GHz UNII 5~8	
11	WNC	95XEAK15.GA6	PCB	I-PEX	Radio 4 6GHz UNII 5~8	
12	WNC	95XEAK15.GA8	PIFA	I-PEX	Radio 4 6GHz UNII 5~8	
13	WNC	95XEAK15.GAB	PIFA	I-PEX	Radio 5 2.4GHz, 5GHz UNII 1~3 and 6GHz UNII 5~8	
14	WNC	95XEAK15.GAC	PIFA	I-PEX	Radio 5 2.4GHz, 5GHz UNII 1~3 and 6GHz UNII 5~8	
15	WNC	95XEAK15.GA9	PIFA	I-PEX	Radio 6 Bluetooth and Zigbee	
16	WNC	95XEAK15.GBM	PIFA	I-PEX	Radio 7 UWB	
17	WNC	95XEAK15.GBD	PCB	I-PEX	Radio 7 UWB	
18	WNC	95XEAK15.GAA	PIFA	I-PEX	Radio 8 GPS	

Ant.	Port															
	R1: WLAN 2.4GHz			R2: WLAN 5GHz UNII 1~2A			R3: WLAN 5GHz UNII 1~3			R4: WLAN 6GHz UNII 5~8			R5: WLAN 2.4GHz, WLAN 5GHz UNII 1~3, WLAN 6GHz UNII 5~8	R6: Bluetooth /Zigbee	R7: UWB	R8: GPS
	1TX	2TX	4TX	1TX	2TX	4TX	1TX	2TX	4TX	1TX	2TX	4TX	1TX	1TX	2TX	1RX
1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-
2	-	-	4	-	-	4	-	-	-	-	-	-	-	-	-	-
3	-	2	2	-	2	2	-	-	-	-	-	-	-	-	-	-
4	-	-	3	-	-	3	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-
6	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-
11	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

Note 1: R means Radio.

Note 2:

Ant.	Antenna Gain (dBi)								
	R1: WLAN 2.4GHz	R2: WLAN 5GHz UNII 1~2A							
		5.2G			5.3G				
1	2.85	3.51			3.24				
2	3.82	3.53			2.9				
3	3.85	3.93			3.85				
4	2.41	4.97			3.73				
Ant.	R3: WLAN 5GHz UNII 1~3								
	5.2G		5.3G		5.6G		5.785G		
5	3.19		2.63		3.54		3.53		
6	4.83		3.89		4.03		3.86		
7	4.73		3.86		4.54		3.48		
8	3.64		2.51		3.91		3.45		
Ant.	R4: WLAN 6GHz UNII 5~8								
	6.175G		6.475G		6.695G		6.995G		
9	4.69		3.74		4.57		5.38		
10	4.68		5.42		5.56		4.3		
11	4.77		4.82		4.67		4.42		
12	4.7		2.33		3.23		3.98		
Ant.	R5: WLAN 2.4GHz/5GHz UNII 1~3/WLAN 6GHz UNII 5~8								
	2.45G	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
13	2.17	2.74	3.39	4.78	3.51	3.96	4.67	4.31	4.8
14	1.83	5.46	4.17	6.68	6.06	5.1	4.49	4.37	4.7
Ant.	R6: Bluetooth/Zigbee								
15	2.91								
Ant.	R7: UWB								
16	6.3								
17	6.5								
Ant.	R8: GPS								
	1.16GHz~1.19GHz				1.56GHz~1.59GHz				
18	2.3				4.9				

Note 3:

Item	Directional Gain (dBi)							
	R1: WLAN 2.4GHz	R2: WLAN 5GHz UNII 1~2A						
		5.2G			5.3G			
2T1S	4.47	3.93			3.85			
2T2S	3.85	3.93			3.85			
4T1S	7.01	5.11			4.06			
4T2S	4.01	4.97			3.85			
4T4S	3.85	4.97			3.85			
Item	R3: WLAN 5GHz UNII 1~3 / R4: WLAN 6GHz UNII 5~8							
	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
2T1S	4.83	3.89	4.03	3.86	4.97	4.82	4.67	4.42
2T2S	4.83	3.89	4.03	3.86	4.77	4.82	4.67	4.42
4T1S	6.96	5.69	6.34	5.28	6.14	6.09	6.02	5.46
4T2S	4.83	3.89	4.54	3.86	4.77	5.42	5.56	5.38
4T4S	4.83	3.89	4.54	3.86	4.77	5.42	5.56	5.38

Note 4: The above information (excepting antenna gain of Radio 1~6) was declared by manufacturer.

Note 5: Radio 1~5: Maximum Directional Gain following KDB662911 D03.

For WLAN 2.4GHz function (Radio 1):

For IEEE 802.11b/g/n/VHT/ax/be mode (1TX,2TX,4TX/4RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Only Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For 4TX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.

For 4RX
Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.
Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.
For WLAN 5GHz UNII 1~2A function (Radio 2):
For IEEE 802.11a/n/ac/ax/be mode (1TX,2TX,4TX/4RX):
For 1TX
Only Port 1 can be use as transmitting antenna.
For 2TX
Only Port 1 and Port 2 can be use as transmitting antenna.
Port 1 and Port 2 could transmit simultaneously.
For 4TX
Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.
For 4RX
Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.
Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.
For WLAN 5GHz UNII 1~3 function (Radio 3):
For IEEE 802.11a/n/ac/ax/be mode (1TX,2TX,4TX/4RX)
For 1TX
Only Port 1 can be use as transmitting antenna.
For 2TX
Only Port 1 and Port 2 can be use as transmitting antenna.
Port 1 and Port 2 could transmit simultaneously.
For 4TX
Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.
For 4RX
Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.
Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

For WLAN 6GHz UNII 5~8 function (Radio 4):
For IEEE 802.11ax/be mode (1TX,2TX,4TX/4RX)
For 1TX
Only Port 1 can be use as transmitting antenna.
For 2TX
Only Port 1 and Port 2 can be use as transmitting antenna.
Port 1 and Port 2 could transmit simultaneously.
For 4TX
Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.
For 4RX
Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.
Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

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

Only Port 1 can be use as transmitting antenna.
For 2RX
Port 1 and Port 2 can be used as receiving antennas.
Port 1 and Port 2 could receive simultaneously.
For WLAN 6GHz UNII 5~8:
For IEEE 802.11ax mode (1TX/2RX):
For 1TX
Only Port 1 can be use as transmitting antenna.
For 2RX
Port 1 and Port 2 can be used as receiving antennas.
Port 1 and Port 2 could receive simultaneously.

For Bluetooth/Zigbee function (Radio 6):
For Bluetooth/Zigbee mode (1TX/1RX):
Only Port 1 can be used as transmitting/receiving antenna.

For UWB function (Radio 7):
For UWB mode (2TX/4RX):
For 2TX
Port 1 and Port 2 can be use as transmitting antenna.
Port 1 and Port 2 could transmit simultaneously.
For 4RX
Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.
Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

For GPS function (Radio 8):
For GPS mode (1RX):
Only Port 1 can be used as receiving antenna.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz)_1/T
Zigbee	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)

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

1.1.4 EUT Operational Condition

EUT Power Type	From PoE
Test Software Version	Tera Term v4.75

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT Support Function

Function	Supports Band
AP	2.4GHz, 5GHz UNII 1~3, 6GHz UNII 5~8, Bluetooth, Zigbee, UWB and GPS
Mesh	6GHz UNII 5~8

Note: The above information was declared by manufacturer.

1.1.6 Table for Multiple Listing

Equipment Name	Model Name	Software	Frequencies supported by 320MHz
Cisco Wireless 9178I Series Wi-Fi 7 Access Point	CW9178I	Cisco	6105, 6265, 6425, 6745 MHz
		Meraki	6105, 6265, 6425, 6585, 6745, 6905 MHz

Note: The above information was declared by manufacturer.

1.1.7 Table for Radio function

Function / Radio	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz	Bluetooth	Zigbee	UWB	GPS
1	V	-	-	-	-	-	-
2	-	V (UNII 1~2A)	-	-	-	-	-
3	-	V (UNII 2C~3/UNII 1~3)	-	-	-	-	-
4	-	-	V	-	-	-	-
5 (Scanning Radio)	V	V (UNII 1~3)	V	-	-	-	-
6	-	-	-	V	V	-	-
7	-	-	-	-	-	V	-
8	-	-	-	-	-	-	V

Note1: The above information was declared by manufacturer.
Note2: For WLAN 2.4GHz: The Radio 1 and Radio 5 can't operate at the same frequency.
For WLAN 5GHz: The Radio 2, 3, 5 can't operate at the same frequency.
For WLAN 6GHz: The Radio 4 and Radio 5 can't operate at the same frequency simultaneously.

1.1.8 Table for EUT Operation Function

Mode	Operation Function
1	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 2.4GHz+R6: Bluetooth+R7: UWB
2	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 5GHz+R6: Bluetooth+R7: UWB
3	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 6GHz+R6: Bluetooth+R7: UWB
4	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 2.4GHz+R6: Zigbee+R7: UWB
5	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 5GHz+R6: Zigbee+R7: UWB
6	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 6GHz+R6: Zigbee+R7: UWB

Note: 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 C63.10-2013

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

- FCC KDB 558074 D01 v05r02
- FCC KDB 662911 D03 v01
- 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	TH03-CB	Ken Yeh	21.4~22.7 / 66~69	Mar. 04, 2024~ May 24, 2024
Radiated (below 1GHz)	03CH05-CB	Gordon Hung	21.6-22.7 / 56-59	May 30, 2024
Radiated (above 1GHz)	03CH04-CB	Gordon Hung	22.7-23.8 / 56-59	Feb. 21, 2024~ Apr. 24, 2024
AC Conduction	CO01-CB	Bob Chang	22~23 / 55~56	Jun. 06, 2024~ Jun. 11, 2024

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: Date Before May 28, 2024

Test Items	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.2%	Confidence levels of 95%

Test Date: Date After May 27, 2024

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.2 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode
802.15.4_5MHz_Nss1_1TX
2405MHz
2440MHz
2475MHz
2480MHz

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 + Radio 1(2.4GHz) + LAN 0 port + PoE 1
2	EUT + Radio 1(2.4GHz) + LAN 1 port + PoE 1
Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3~9 will follow this same test mode.	
3	EUT + Radio 1(2.4GHz) + LAN 1 port + PoE 2
4	EUT + Radio 1(2.4GHz) + LAN 1 port + PoE 3
5	EUT + Radio 1(2.4GHz) + LAN 1 port + PoE 4
6	EUT + Radio 1(2.4GHz) + LAN 1 port + PoE 5
7	EUT + Radio 1(2.4GHz) + LAN 1 port + PoE 6
8	EUT + Radio 1(2.4GHz) + LAN 1 port + PoE 7
9	EUT + Radio 1(2.4GHz) + LAN 1 port + PoE 8
Mode 5 has been evaluated to be the worst case among Mode 1~9, thus measurement for Mode 10~17 will follow this same test mode.	
10	EUT + Radio 2(5GHz Low Band) + LAN 1 port + PoE 4
11	EUT + Radio 3(5GHz Full Band/High Band) + LAN 1 port + PoE 4
12	EUT + Radio 4(6GHz Full Band) + LAN 1 port + PoE 4
13	EUT + Scanning Radio 5(2.4GHz) + LAN 1 port + PoE 4
14	EUT + Scanning Radio 5(5GHz Full Band) + LAN 1 port + PoE 4
15	EUT + Scanning Radio 5(6GHz Full Band) + LAN 1 port + PoE 4
16	EUT + Radio 6(Bluetooth) + LAN 1 port + PoE 4
17	EUT + Radio 6(Zigbee) + LAN 1 port + PoE 4
For operating mode 5 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains
1	Radio 6

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
After evaluating, the worst case was found at as below for Emissions in Restricted Frequency Bands above 1GHz. Thus, the measurement will follow this same test configuration.	
1	EUT in Y-axis + Radio 1(2.4GHz) + LAN0 port + PoE 1
2	EUT in Y-axis + Radio 1(2.4GHz) + LAN1 port + PoE 1
Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3~9 will follow this same test mode.	
3	EUT in Y-axis + Radio 1(2.4GHz) + LAN1 port + PoE 2
4	EUT in Y-axis + Radio 1(2.4GHz) + LAN1 port + PoE 3
5	EUT in Y-axis + Radio 1(2.4GHz) + LAN1 port + PoE 4
6	EUT in Y-axis + Radio 1(2.4GHz) + LAN1 port + PoE 5
7	EUT in Y-axis + Radio 1(2.4GHz) + LAN1 port + PoE 6
8	EUT in Y-axis + Radio 1(2.4GHz) + LAN1 port + PoE 7
9	EUT in Y-axis + Radio 1(2.4GHz) + LAN1 port + PoE 8
Mode 6 has been evaluated to be the worst case among Mode 1~9, thus measurement for Mode 10~17 will follow this same test mode.	
10	EUT in X-axis + Radio 2(5GHz Low Band) + LAN1 port + PoE 5
11	EUT in Z-axis + Radio 3(5GHz Full Band/High Band) + LAN1 port + PoE 5
12	EUT in X-axis + Radio 4(6GHz Full Band) + LAN1 port + PoE 5
13	EUT in Z-axis + Scanning Radio 5(2.4GHz) + LAN1 port + PoE 5
14	EUT in Y-axis + Scanning Radio 5(5GHz Full Band) + LAN1 port + PoE 5
15	EUT in Z-axis + Scanning Radio 5(6GHz Full Band) + LAN1 port + PoE 5
16	EUT in X-axis + Radio 6(Bluetooth) + LAN1 port + PoE 5
17	EUT in X-axis + Radio 6(Zigbee) + LAN1 port + PoE 5
For operating mode 15 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
After evaluating, and the worst case was found at X-axis, so it was selected to perform test and its test result was written in the report.	
1	EUT in X-axis + Radio 6(Zigbee)

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(2.4GHz) + Radio 6(Bluetooth) + Radio 7(UWB)
2	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(5GHz) + Radio 6(Bluetooth) + Radio 7(UWB)
3	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(6GHz) + Radio 6(Bluetooth) + Radio 7(UWB)
4	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(2.4GHz) + Radio 6(Zigbee) + Radio 7(UWB)
5	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(5GHz) + Radio 6(Zigbee) + Radio 7(UWB)
6	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(6GHz) + Radio 6(Zigbee) + Radio 7(UWB)
Refer to Sporton Test Report No.: FA411617 for Co-location RF Exposure Evaluation.	

Note: The PoEs are for measurement only, would not be marketed.
The information of PoE as below:

Power	Brand Name	Model Name
PoE 1	Microsemi	PD-9001GR/AT/AC
PoE 2	PHIHONG	POE29U-1AT(PL)
PoE 3	DELTA	ADH-65AR B
PoE 4	PHIHONG	POEA33U-1ATE
PoE 5	PHIHONG	POE60U-1BT-X
PoE 6	PHIHONG	POE60U-BTA(X66M-R)
PoE 7	PHIHONG	POE60U-BTA(X664-R)
PoE 8	DELTA	ADH-65AR P

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories
Bracket 1*1
Bracket 2*1

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	PoE 4	PHIHONG	POEA33U-1ATE	N/A
B	PC	ASUS	S300TA	TX2-RTL8821CE
C	Flash disk3.0	Transcend	JetFlash-703	N/A

For Radiated:

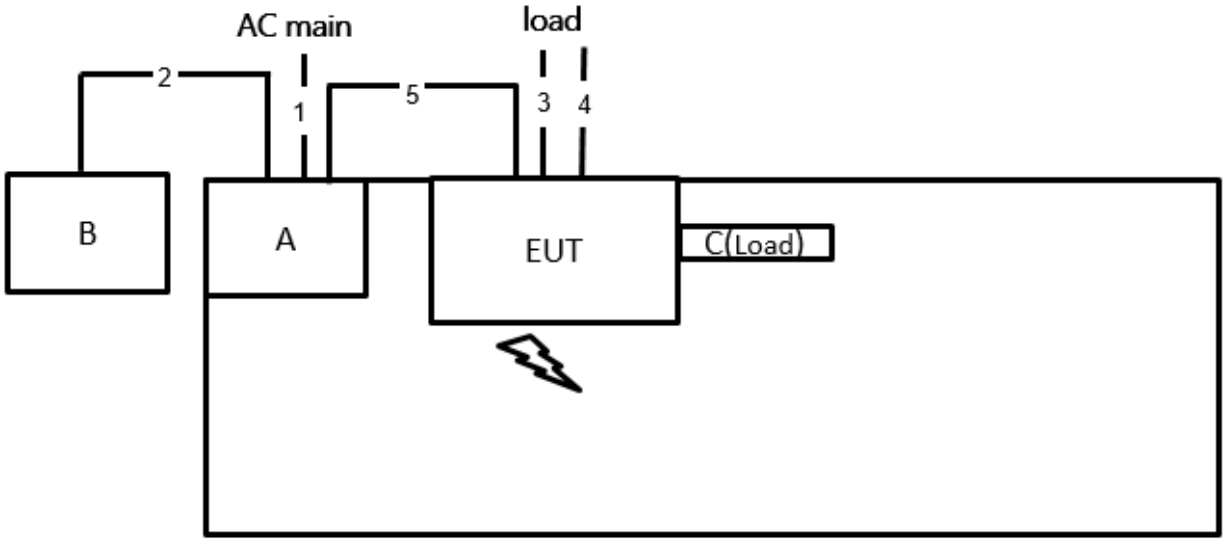
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	DELL	E4300	N/A
B	PoE 5	PHIHONG	POE60U-1BT-X	N/A

For RF Conducted:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	Lenovo	L440	N/A
B	PoE 2	PHIHONG	POE29U-1AT(PL)	N/A

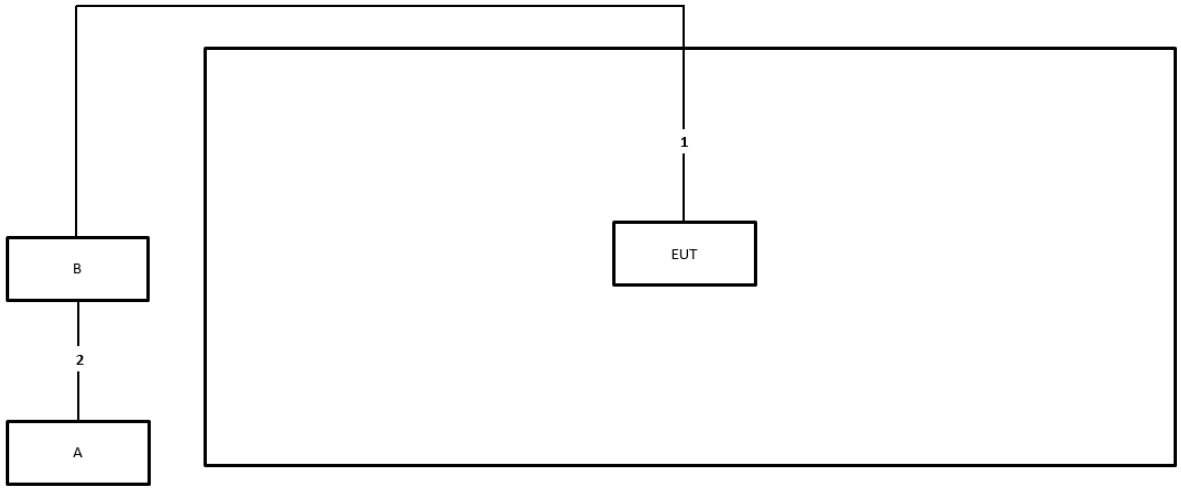
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



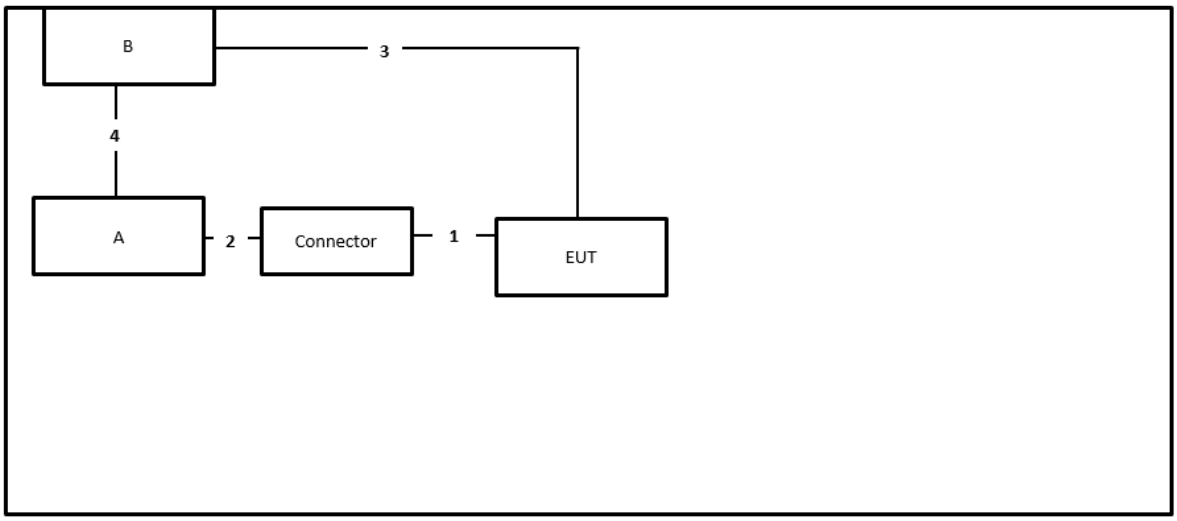
Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m
4	Console cable	No	1.5m
5	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test < 1GHz



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

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Console cable (RS232 to RJ45)	No	1m
2	Console cable (RS232 to USB)	No	1m
3	RJ-45 cable	No	1m
4	RJ-45 cable	No	1m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

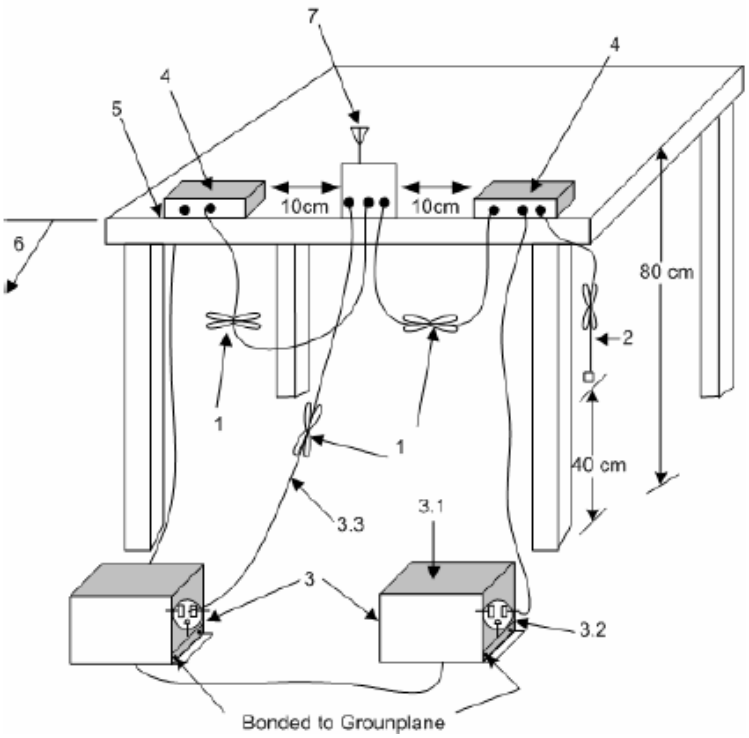
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup

AC Power-line Conducted Emissions



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

3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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

b. Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

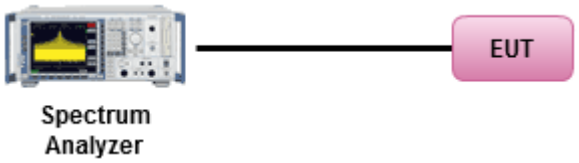
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	▪ If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

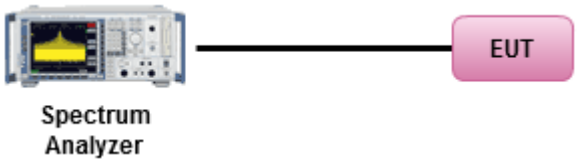
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dBc)**
Peak output power procedure	20
Average output power procedure	30

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

3.5.2 Measuring Instruments

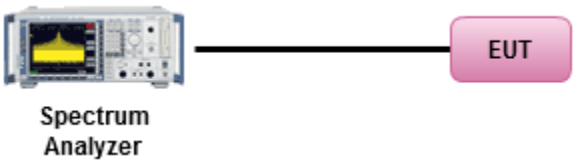
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
▪ Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

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

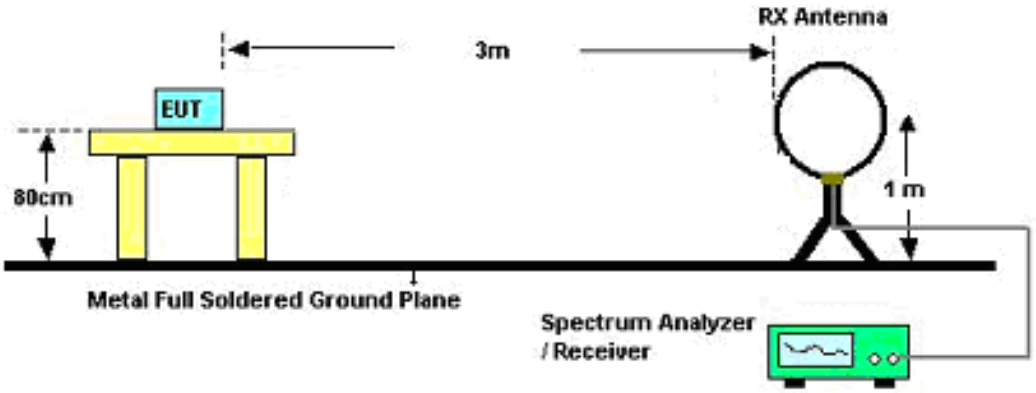
3.6.3 Test Procedures

Test Method			
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].			
▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.			
▪ For the transmitter unwanted emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.		
		☐	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle ≥98%).
		☐	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
		☒	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW≥1/T).
		☐	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐	Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
		☒	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 558074 clause 8.7 & c63.10 clause 11.13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.		
	▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.		
	▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).		
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB		
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.		

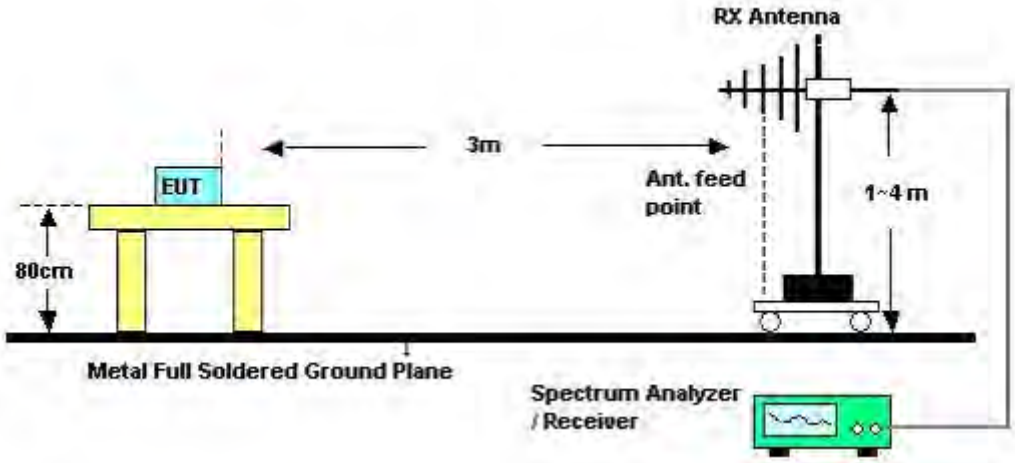
3.6.4 Test Setup

Emissions in Restricted Frequency Bands

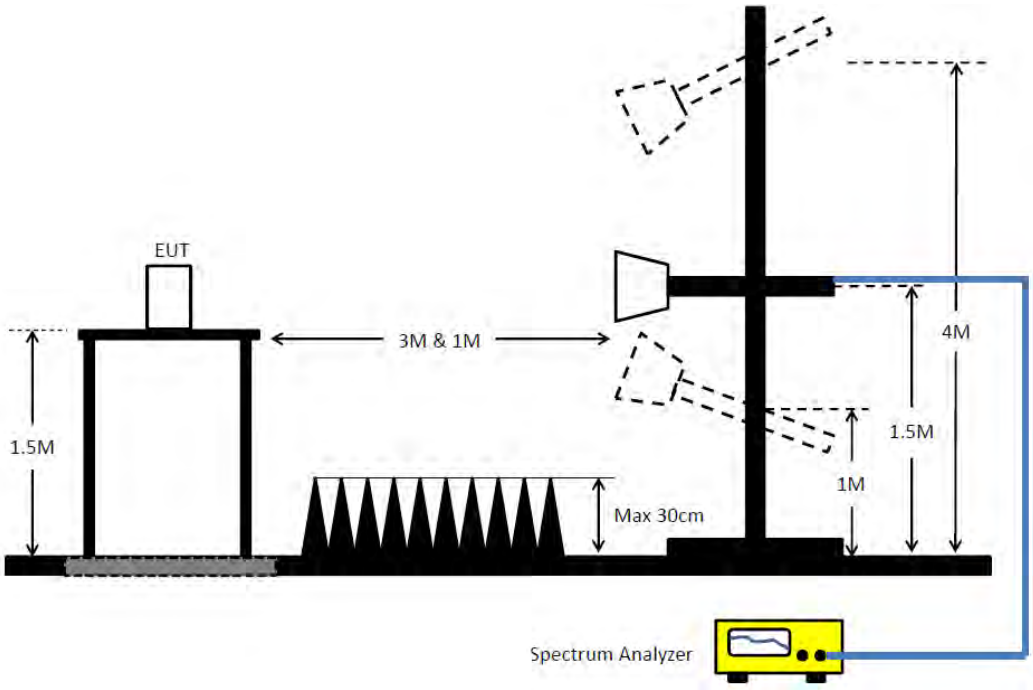
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.6.5 Measurement Results Calculation

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

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 01, 2024	Feb. 28, 2025	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 19, 2024	Feb. 18, 2025	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 24, 2024	Apr. 23, 2025	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 08, 2024	Feb. 07, 2025	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 17, 2023	Oct. 16, 2024	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6121	65417	9kHz - 30 MHz	Oct. 13, 2023	Oct. 12, 2024	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 02, 2023	Aug. 01, 2024	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 23, 2024	Mar. 22, 2025	Radiation (03CH05-CB)
Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 02, 2024	May 01, 2025	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 17, 2024	Apr. 16, 2025	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Dec. 06, 2023	Dec. 05, 2024	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 23, 2023	Feb. 22, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 22, 2024	Feb. 21, 2025	Radiation (03CH04-CB)
Horn Antenna	ETS·Lindgren	3115	00143147	750MHz~18GHz	Oct. 04, 2023	Oct. 03, 2024	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH04-CB)

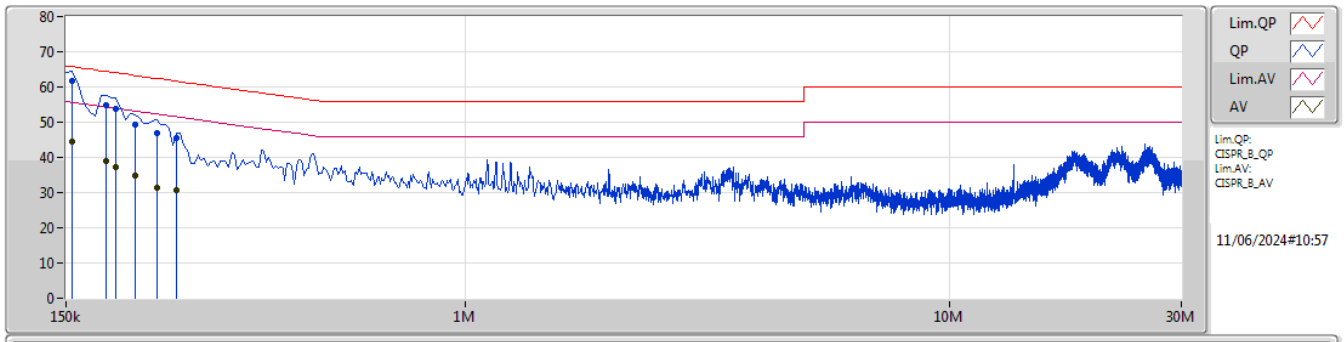
Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 21, 2023	Mar. 20, 2024	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 19, 2024	Mar. 18, 2025	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 22, 2023	Dec. 21, 2024	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-11	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-12	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-13	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 ~26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.

Summary

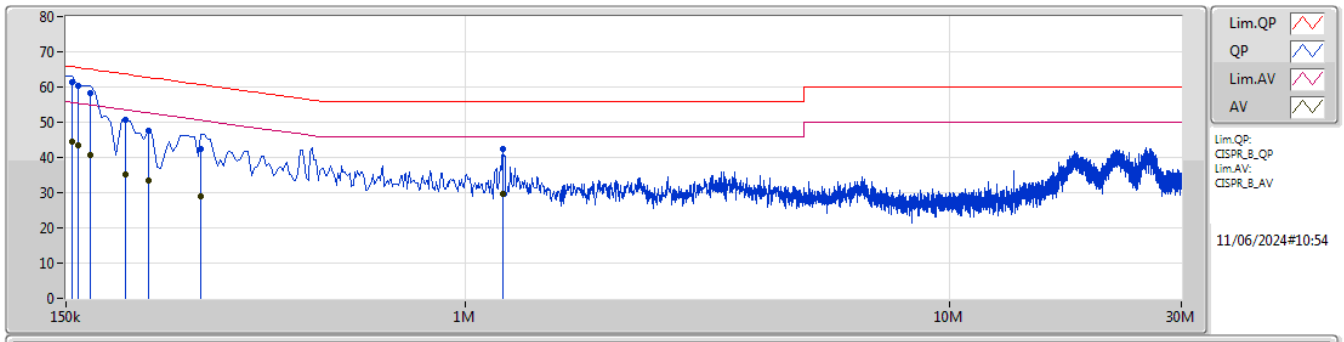
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 5	Pass	QP	154.5k	61.65	65.75	-4.10	Line

Mode 5



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	61.65	65.75	-4.10	10.09	Line	"Worst"	51.56	0.05	0.03	10.01
AV	154.5k	44.43	55.75	-11.32	10.09	Line	-	34.34	0.05	0.03	10.01
QP	181.5k	54.97	64.41	-9.44	10.08	Line	-	44.89	0.05	0.03	10.00
AV	181.5k	38.89	54.41	-15.52	10.08	Line	-	28.81	0.05	0.03	10.00
QP	190.5k	53.96	64.01	-10.05	10.07	Line	-	43.89	0.05	0.03	9.99
AV	190.5k	37.08	54.01	-16.93	10.07	Line	-	27.01	0.05	0.03	9.99
QP	208.5k	49.18	63.27	-14.09	10.07	Line	-	39.11	0.05	0.03	9.99
AV	208.5k	34.75	53.27	-18.52	10.07	Line	-	24.68	0.05	0.03	9.99
QP	231k	46.88	62.41	-15.53	10.07	Line	-	36.81	0.05	0.03	9.99
AV	231k	31.51	52.41	-20.90	10.07	Line	-	21.44	0.05	0.03	9.99
QP	253.5k	45.39	61.64	-16.25	10.07	Line	-	35.32	0.05	0.03	9.99
AV	253.5k	30.72	51.64	-20.92	10.07	Line	-	20.65	0.05	0.03	9.99

Mode 5



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	61.42	65.75	-4.33	10.09	Neutral	"Worst"	51.33	0.05	0.03	10.01
AV	154.5k	44.39	55.75	-11.36	10.09	Neutral	-	34.30	0.05	0.03	10.01
QP	159k	60.31	65.52	-5.21	10.09	Neutral	-	50.22	0.05	0.03	10.01
AV	159k	43.60	55.52	-11.92	10.09	Neutral	-	33.51	0.05	0.03	10.01
QP	168k	58.25	65.06	-6.81	10.09	Neutral	-	48.16	0.05	0.03	10.01
AV	168k	40.83	55.06	-14.23	10.09	Neutral	-	30.74	0.05	0.03	10.01
QP	199.5k	50.86	63.63	-12.77	10.07	Neutral	-	40.79	0.05	0.03	9.99
AV	199.5k	35.13	53.63	-18.50	10.07	Neutral	-	25.06	0.05	0.03	9.99
QP	222k	47.58	62.75	-15.17	10.07	Neutral	-	37.51	0.05	0.03	9.99
AV	222k	33.39	52.75	-19.36	10.07	Neutral	-	23.32	0.05	0.03	9.99
QP	285k	42.27	60.67	-18.40	10.08	Neutral	-	32.19	0.05	0.03	10.00
AV	285k	29.07	50.67	-21.60	10.08	Neutral	-	18.99	0.05	0.03	10.00
QP	1.194M	42.32	56.00	-13.68	10.11	Neutral	-	32.21	0.07	0.04	10.00
AV	1.194M	29.65	46.00	-16.35	10.11	Neutral	-	19.54	0.07	0.04	10.00

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
Zigbee_Nss1_1TX	1.725M	2.258M	2M26D1D	1.613M	2.227M

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

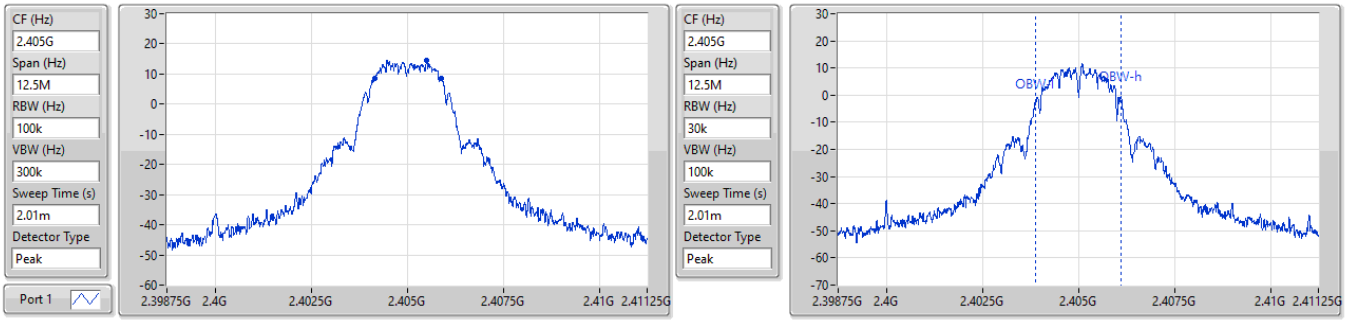
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
Zigbee_Nss1_1TX	-	-	-	-
2405MHz	Pass	500k	1.725M	2.227M
2440MHz	Pass	500k	1.656M	2.23M
2480MHz	Pass	500k	1.613M	2.258M

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

2.4-2.4835GHz_Zigbee_Nss1_1TX **EBW-DTS**

2405MHz

15/03/2024

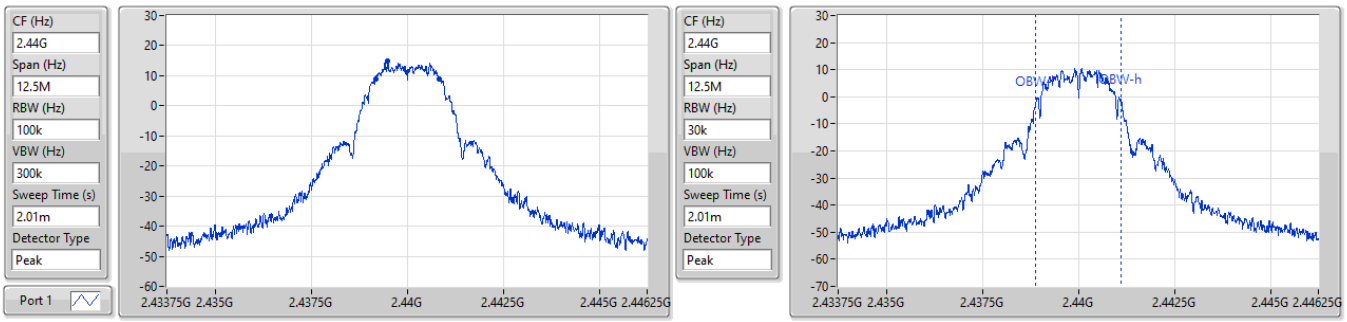


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.725M	2.404175G	2.4059G	2.227M	2.403892G	2.406119G	500k	1

2.4-2.4835GHz_Zigbee_Nss1_1TX **EBW-DTS**

2440MHz

15/03/2024

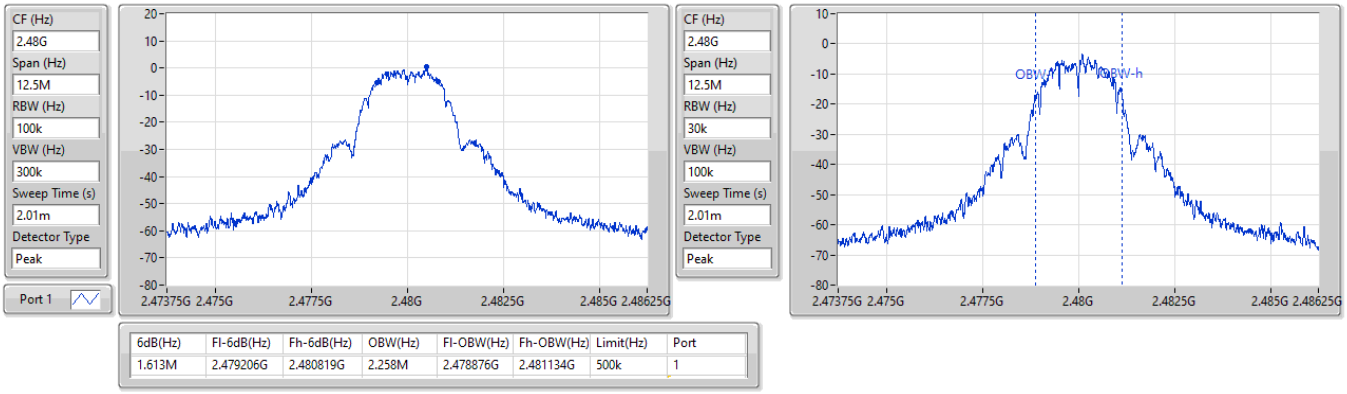


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.656M	2.439188G	2.440844G	2.23M	2.438892G	2.441122G	500k	1

2.4-2.4835GHz_Zigbee_Nss1_1TX **EBW-DTS**

2480MHz

15/03/2024



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.613M	2.479206G	2.480819G	2.258M	2.478876G	2.481134G	500k	1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
Zigbee_Nss1_1TX	19.61	0.09141

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
Zigbee_Nss1_1TX	-	-	-	-
2405MHz	Pass	2.91	19.61	30.00
2440MHz	Pass	2.91	19.59	30.00
2475MHz	Pass	2.91	19.57	30.00
2480MHz	Pass	2.91	4.37	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
Zigbee_Nss1_1TX	3.27

RBW = 3kHz;

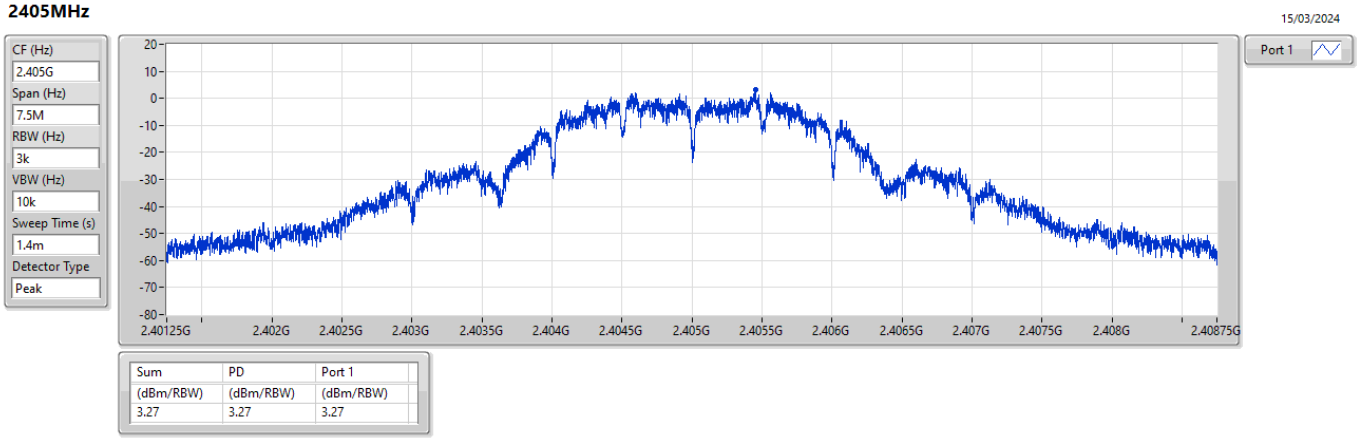
Result

Mode	Result	DG (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
Zigbee_Nss1_1TX	-	-	-	-
2405MHz	Pass	2.91	3.27	8.00
2440MHz	Pass	2.91	2.95	8.00
2480MHz	Pass	2.91	-11.69	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;

2.4-2.4835GHz_Zigbee_Nss1_1TX **PSD**

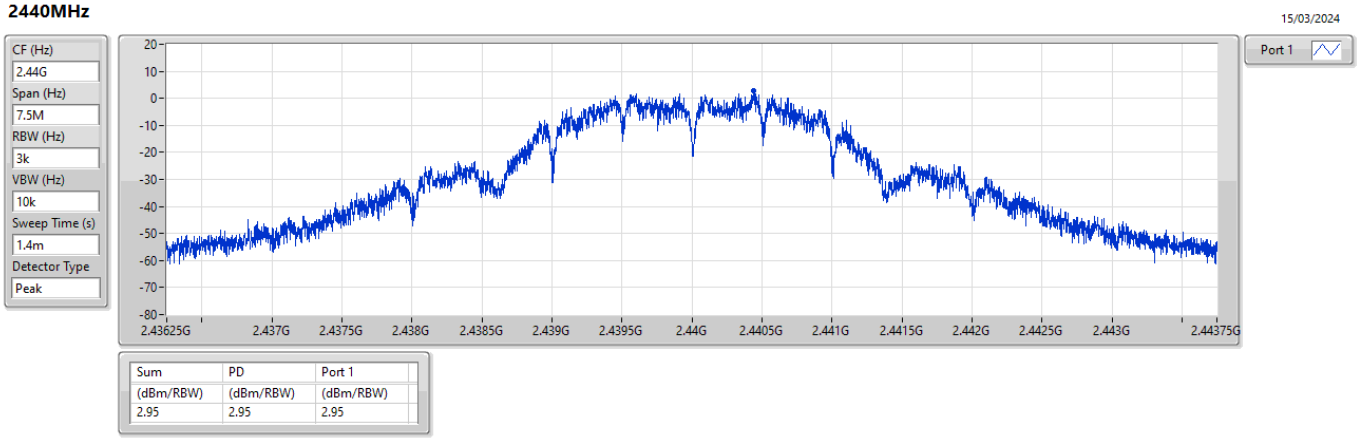
2405MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.27	3.27	3.27

2.4-2.4835GHz_Zigbee_Nss1_1TX **PSD**

2440MHz

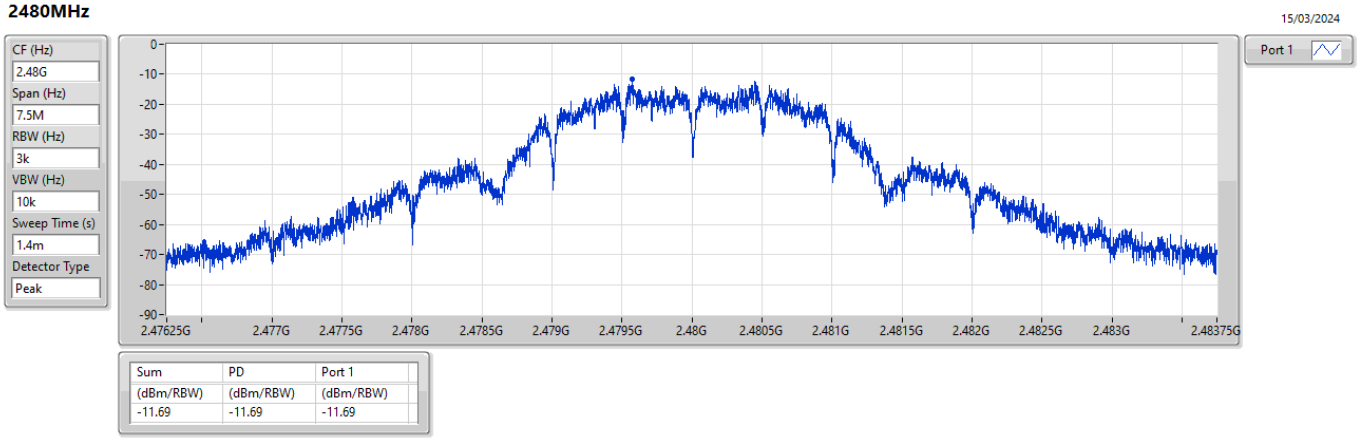


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.95	2.95	2.95

2.4-2.4835GHz_Zigbee_Nss1_1TX

PSD

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.69	-11.69	-11.69

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zigbee_Nss1_1TX	Pass	2.40551G	15.57	-14.43	2.13208G	-54.32	2.4G	-35.75	2.4G	-36.46	2.5009G	-51.74	21.80268G	-48.39	1

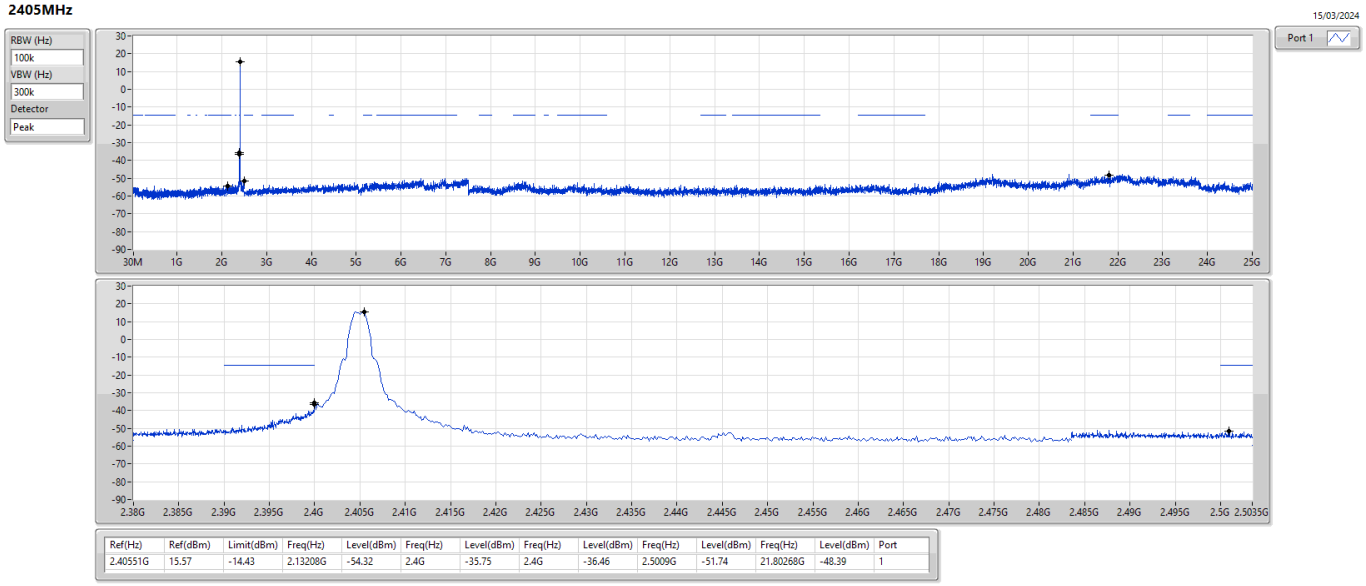
Result

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
Zigbee_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2405MHz	Pass	2.40551G	15.57	-14.43	2.13208G	-54.32	2.4G	-35.75	2.4G	-36.46	2.5009G	-51.74	21.80268G	-48.39	1
2440MHz	Pass	2.40551G	15.57	-14.43	1.74903G	-54.25	2.39936G	-50.59	2.4G	-55.06	2.5021G	-52.38	21.85893G	-48.32	1
2480MHz	Pass	2.40551G	15.57	-14.43	1.85478G	-54.26	2.39288G	-50.75	2.4G	-56.21	2.50302G	-52.37	21.6902G	-48.34	1

2.4-2.4835GHz_Zigbee_Nss1_1TX

CSENdB-DTS

2405MHz

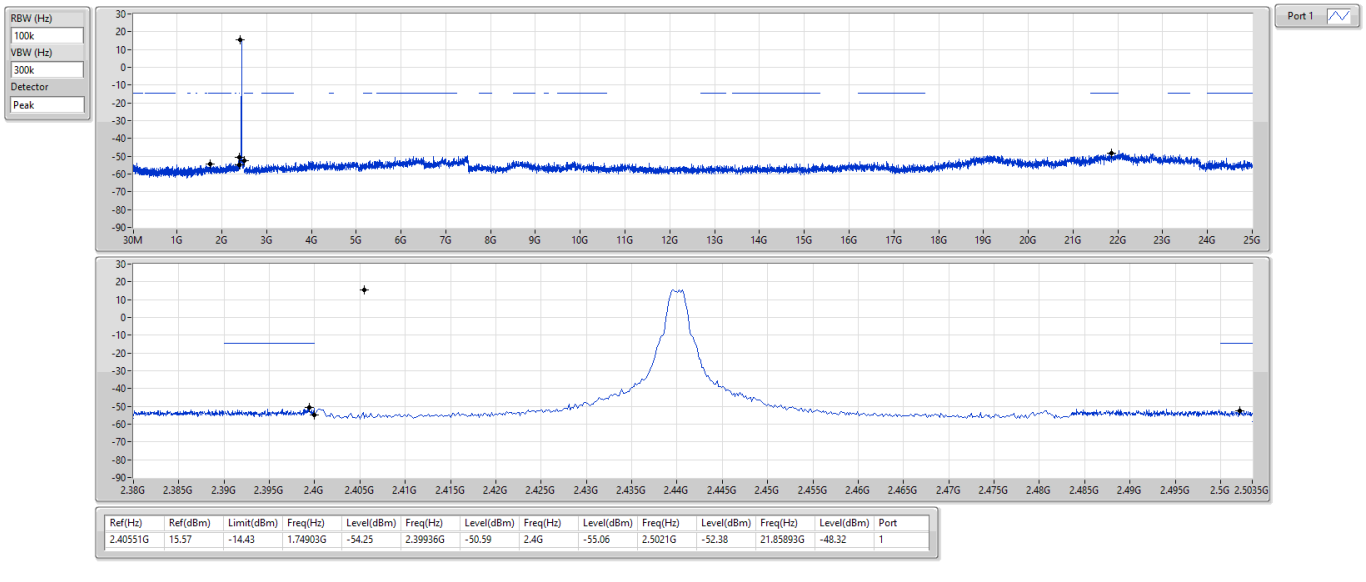


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40551G	15.57	-14.43	2.13208G	-54.32	2.4G	-35.75	2.4G	-36.46	2.5009G	-51.74	21.80268G	-48.39	1

2.4-2.4835GHz_Zigbee_Nss1_1TX

CSENdB-DTS

2440MHz

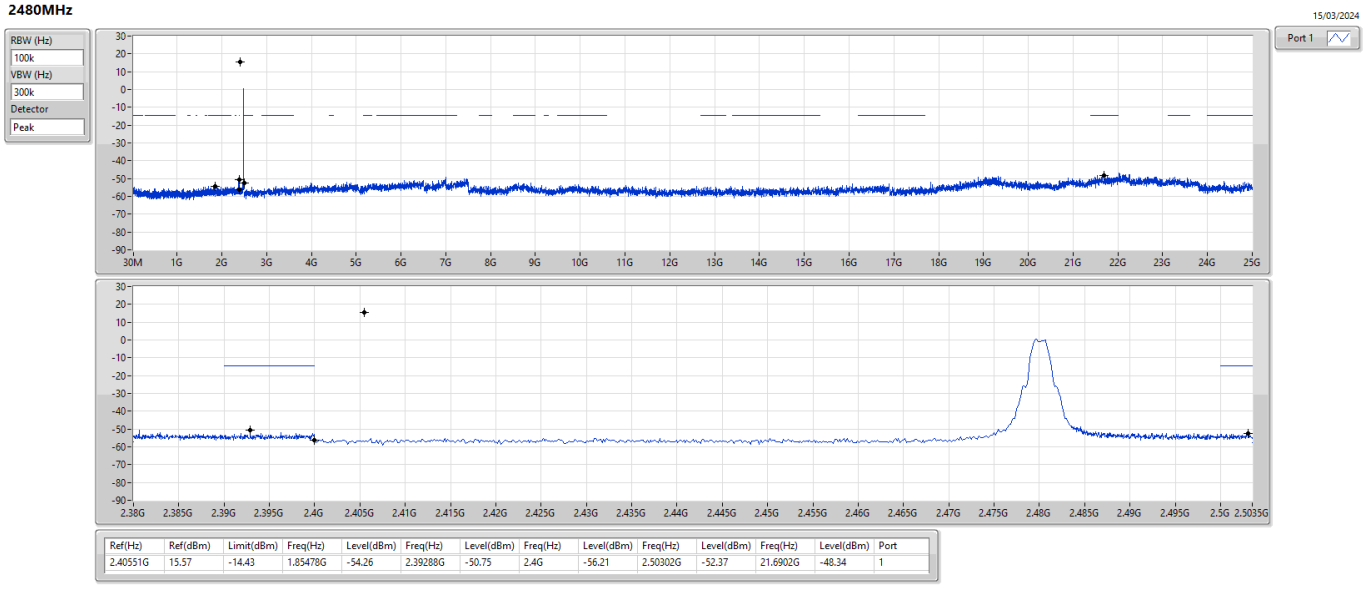


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40551G	15.57	-14.43	1.74903G	-54.25	2.39936G	-50.59	2.4G	-55.06	2.5021G	-52.38	21.85893G	-48.32	1

2.4-2.4835GHz_Zigbee_Nss1_1TX

CSENdB-DTS

2480MHz

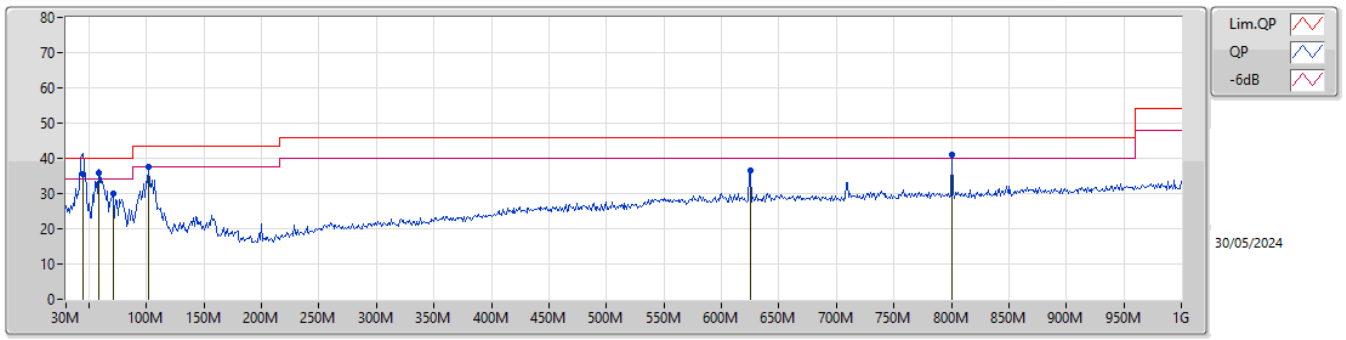


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40551G	15.57	-14.43	1.85478G	-54.26	2.39288G	-50.75	2.4G	-56.21	2.50302G	-52.37	21.6902G	-48.34	1

Summary

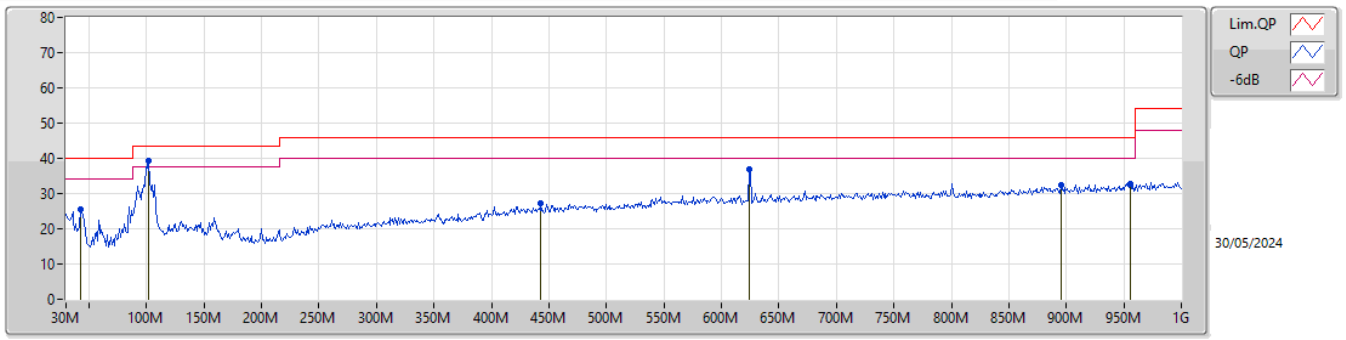
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 15	Pass	PK	101.78M	39.47	43.50	-4.03	Horizontal

Mode 15



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
QP	44.55M	35.45	40.00	-4.55	-13.75	3	Vertical	32	1.00	-	49.20	16.63	1.22	31.60
QP	58.13M	35.81	40.00	-4.19	-17.62	3	Vertical	358	1.00	"Worst"	53.43	12.68	1.37	31.67
PK	70.74M	30.16	40.00	-9.84	-17.69	3	Vertical	120	1.00	-	47.85	12.51	1.50	31.70
PK	101.78M	37.71	43.50	-5.79	-12.93	3	Vertical	188	1.50	-	50.64	17.04	1.77	31.74
PK	625.58M	36.65	46.00	-9.35	-2.92	3	Vertical	193	1.50	-	39.57	24.64	4.72	32.28
PK	800.18M	40.98	46.00	-5.02	-1.04	3	Vertical	182	1.00	-	42.02	25.87	5.43	32.34

Mode 15



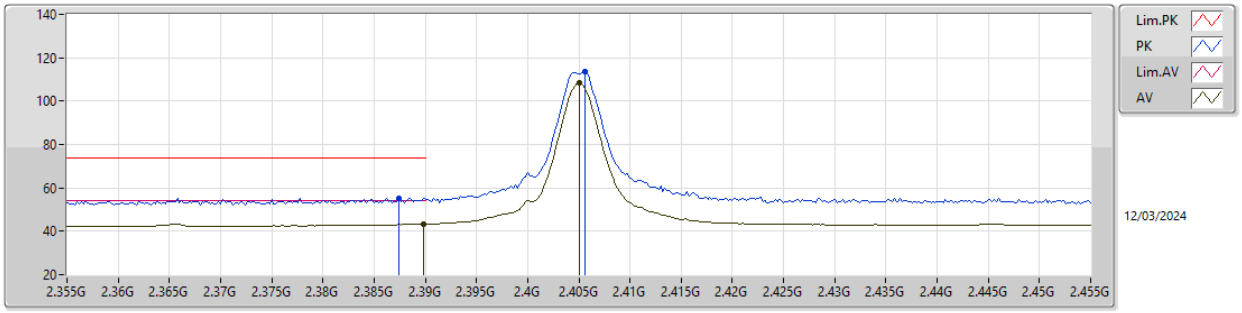
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	42.61M	25.66	40.00	-14.34	-12.77	3	Horizontal	267	1.50	-	38.43	17.61	1.20	31.58
PK	101.78M	39.47	43.50	-4.03	-12.93	3	Horizontal	258	1.50	"Worst"	52.40	17.04	1.77	31.74
PK	443.22M	27.26	46.00	-18.74	-5.67	3	Horizontal	106	1.00	-	32.93	22.45	3.91	32.03
PK	624.61M	36.99	46.00	-9.01	-2.92	3	Horizontal	253	1.50	-	39.91	24.64	4.71	32.27
PK	895.24M	32.58	46.00	-13.42	-0.14	3	Horizontal	144	1.00	-	32.72	26.40	5.82	32.36
PK	955.38M	32.74	46.00	-13.26	0.39	3	Horizontal	75	1.00	-	32.35	26.70	6.00	32.31

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	-	-	-	-	-	-	-	-	-	-	-
Zigbee_Nss1_1TX	Pass	AV	2.4835G	53.89	54.00	-0.11	3	Horizontal	66	2.21	-

2.4-2.4835GHz_Zigbee_Nss1_1TX

2405MHz_TX

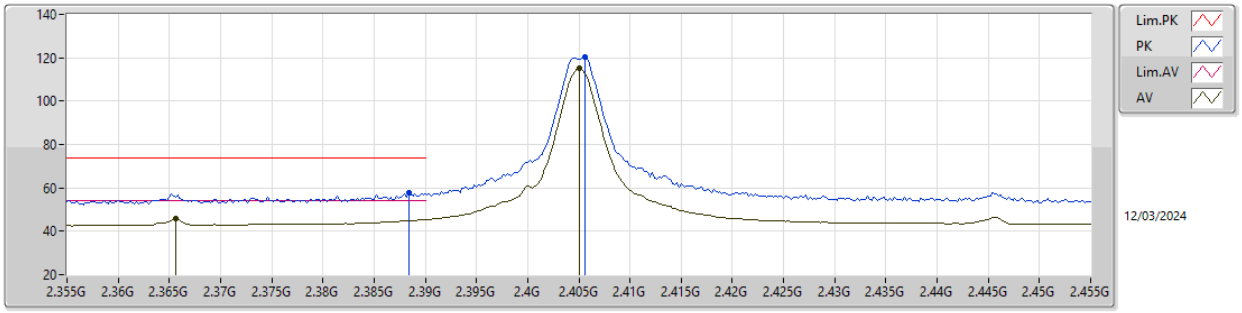


EUT X_1TX
Setting 21
04-H-R-7

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	2.3874G	55.42	74.00	-18.58	24.68	3	Vertical	-0	2.05	-	27.40	3.34	-
AV	2.3898G	43.34	54.00	-10.66	12.59	3	Vertical	-0	2.05	-	27.40	3.35	-
PK	2.4056G	113.46	Inf	-Inf	82.61	3	Vertical	-0	2.05	-	27.50	3.35	-
AV	2.405G	108.58	Inf	-Inf	77.73	3	Vertical	-0	2.05	-	27.50	3.35	-

2.4-2.4835GHz_Zigbee_Nss1_1TX

2405MHz_TX

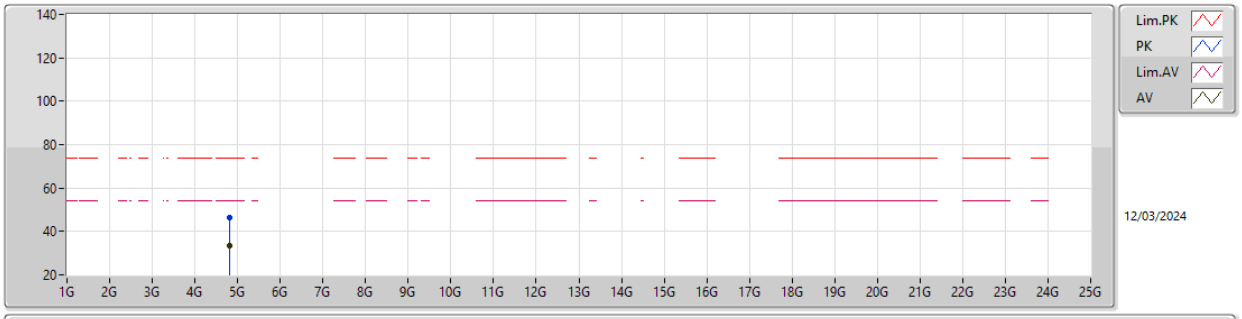


EUT X_1TX
Setting 21
04-H-R-7

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	2.3884G	57.81	74.00	-16.19	27.06	3	Horizontal	40	2.53	-	27.40	3.35	-
AV	2.3656G	45.63	54.00	-8.37	14.83	3	Horizontal	40	2.53	-	27.46	3.34	-
PK	2.4056G	120.09	Inf	-Inf	89.24	3	Horizontal	40	2.53	-	27.50	3.35	-
AV	2.405G	115.39	Inf	-Inf	84.54	3	Horizontal	40	2.53	-	27.50	3.35	-

2.4-2.4835GHz_Zigbee_Nss1_1TX

2405MHz_TX

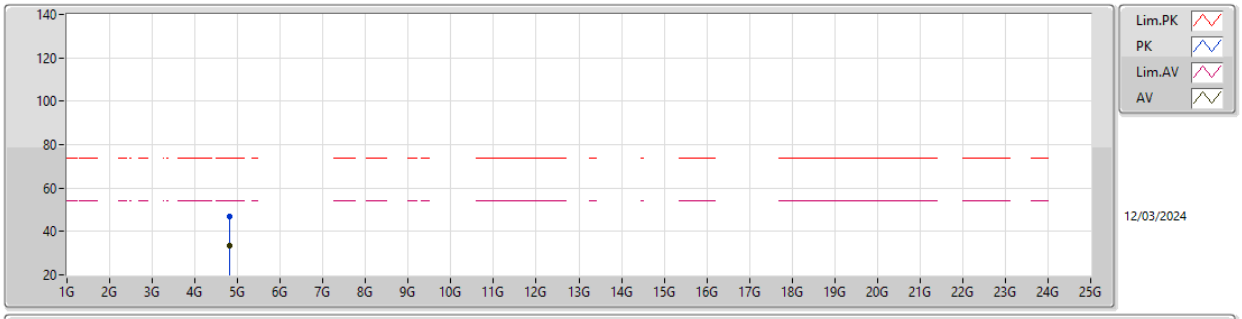


EUT X_1TX
Setting 21
04-H-R-7

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	4.81534G	46.58	74.00	-27.42	41.87	3	Vertical	299	2.19	-	32.33	5.66	33.28
AV	4.82434G	33.37	54.00	-20.63	28.62	3	Vertical	299	2.19	-	32.35	5.67	33.27

2.4-2.4835GHz_Zigbee_Nss1_1TX

2405MHz_TX

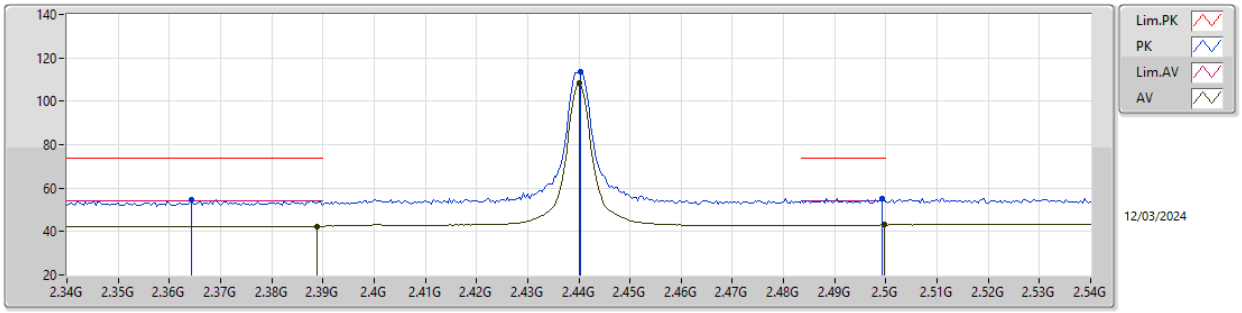


EUT X_1TX
Setting 21
04-H-R-7

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	4.8145G	46.81	74.00	-27.19	42.10	3	Horizontal	337	1.25	-	32.33	5.66	33.28
AV	4.8241G	33.28	54.00	-20.72	28.53	3	Horizontal	337	1.25	-	32.35	5.67	33.27

2.4-2.4835GHz_Zigbee_Nss1_1TX

2440MHz_TX

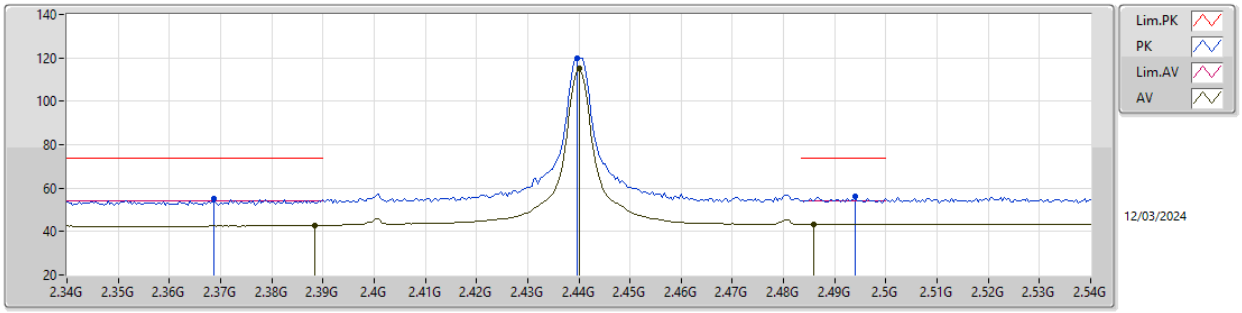


EUT X_1TX
Setting 21
04-H-R-7

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	2.3644G	54.72	74.00	-19.28	23.94	3	Vertical	357	2.80	-	27.44	3.34	-
AV	2.3888G	42.49	54.00	-11.51	11.74	3	Vertical	357	2.80	-	27.40	3.35	-
PK	2.4404G	113.45	Inf	-Inf	82.48	3	Vertical	357	2.80	-	27.60	3.37	-
AV	2.44G	108.56	Inf	-Inf	77.59	3	Vertical	357	2.80	-	27.60	3.37	-
PK	2.4992G	55.42	74.00	-18.58	24.32	3	Vertical	357	2.80	-	27.70	3.40	-
AV	2.4996G	43.06	54.00	-10.94	11.96	3	Vertical	357	2.80	-	27.70	3.40	-

2.4-2.4835GHz_Zigbee_Nss1_1TX

2440MHz_TX

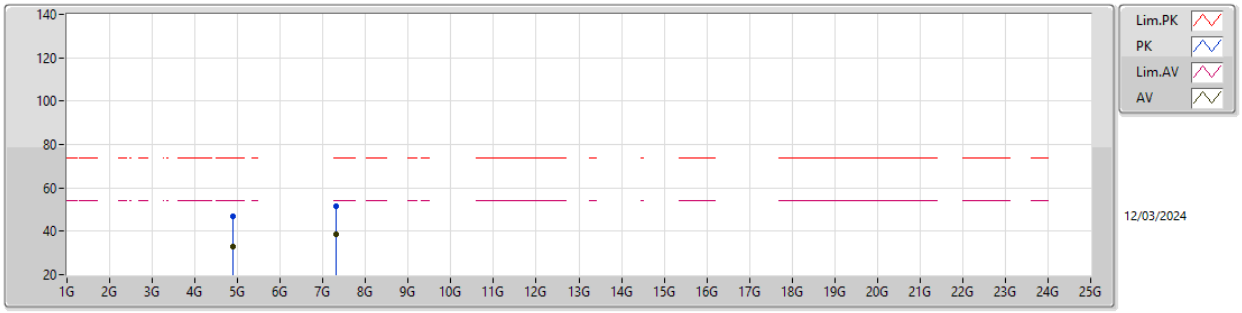


EUT X_1TX
Setting 21
04-H-R-7

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	2.3688G	55.21	74.00	-18.79	24.38	3	Horizontal	38	2.76	-	27.49	3.34	-
AV	2.3884G	42.90	54.00	-11.10	12.15	3	Horizontal	38	2.76	-	27.40	3.35	-
PK	2.4396G	119.84	Inf	-Inf	88.87	3	Horizontal	38	2.76	-	27.60	3.37	-
AV	2.44G	115.02	Inf	-Inf	84.05	3	Horizontal	38	2.76	-	27.60	3.37	-
PK	2.494G	56.38	74.00	-17.62	25.28	3	Horizontal	38	2.76	-	27.70	3.40	-
AV	2.486G	43.43	54.00	-10.57	12.37	3	Horizontal	38	2.76	-	27.66	3.40	-

2.4-2.4835GHz_Zigbee_Nss1_1TX

2440MHz_TX

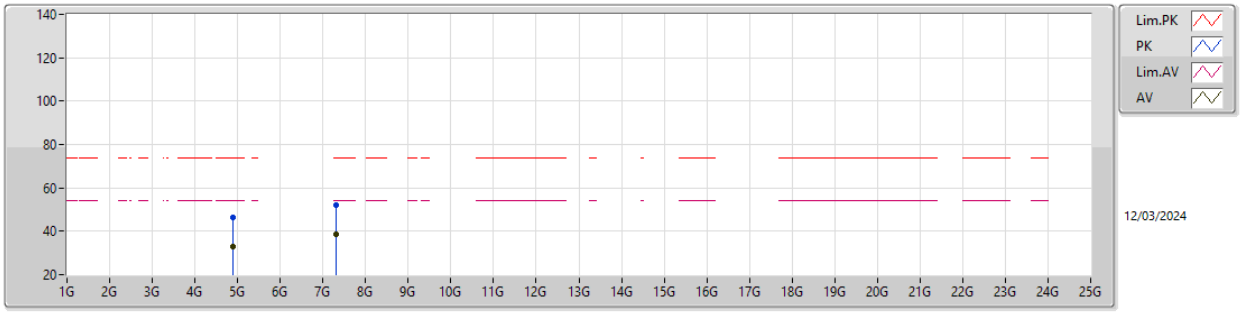


EUT X_1TX
Setting 21
04-H-R-7

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	4.8947G	46.84	74.00	-27.16	41.77	3	Vertical	10	2.26	-	32.58	5.74	33.25
AV	4.89314G	32.87	54.00	-21.13	27.82	3	Vertical	10	2.26	-	32.57	5.73	33.25
PK	7.31106G	51.59	74.00	-22.41	41.36	3	Vertical	254	2.75	-	37.20	7.12	34.09
AV	7.32006G	38.47	54.00	-15.53	28.24	3	Vertical	254	2.75	-	37.20	7.13	34.10

2.4-2.4835GHz_Zigbee_Nss1_1TX

2440MHz_TX

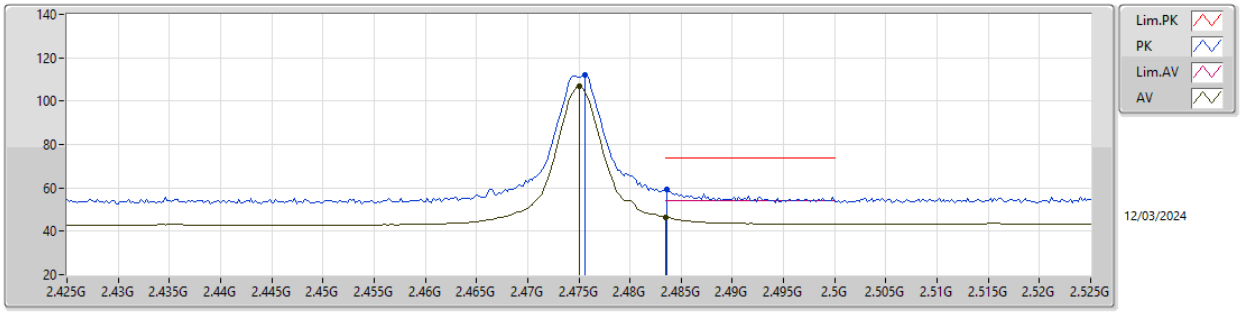


EUT X_1TX
Setting 21
04-H-R-7

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	4.8932G	46.62	74.00	-27.38	41.57	3	Horizontal	245	2.51	-	32.57	5.73	33.25
AV	4.89374G	32.78	54.00	-21.22	27.73	3	Horizontal	245	2.51	-	32.57	5.73	33.25
PK	7.3131G	51.97	74.00	-22.03	41.75	3	Horizontal	72	3.00	-	37.20	7.12	34.10
AV	7.31322G	38.41	54.00	-15.59	28.19	3	Horizontal	72	3.00	-	37.20	7.12	34.10

2.4-2.4835GHz_Zigbee_Nss1_1TX

2475MHz_TX

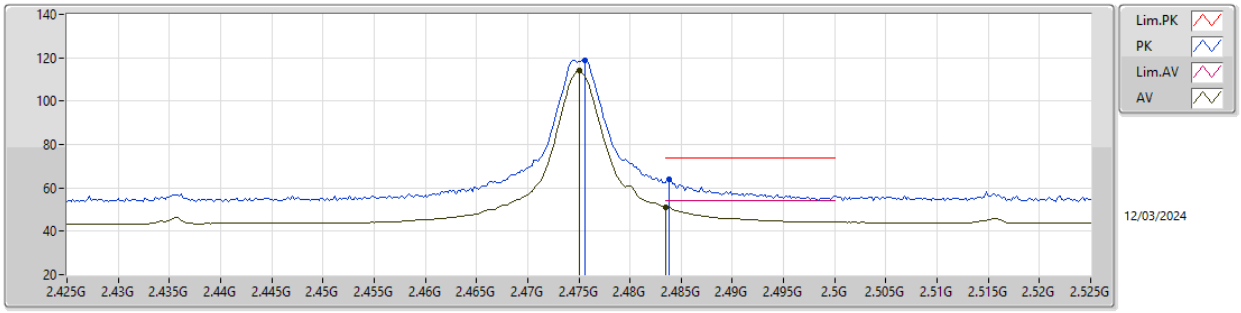


EUT X_1TX
Setting 21
04-H-R-7

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	2.4756G	111.85	Inf	-Inf	80.86	3	Vertical	358	2.41	-	27.60	3.39	-
AV	2.475G	107.12	Inf	-Inf	76.13	3	Vertical	358	2.41	-	27.60	3.39	-
PK	2.4836G	59.39	74.00	-14.61	28.35	3	Vertical	358	2.41	-	27.64	3.40	-
AV	2.4835G	46.55	54.00	-7.45	15.51	3	Vertical	358	2.41	-	27.64	3.40	-

2.4-2.4835GHz_Zigbee_Nss1_1TX

2475MHz_TX

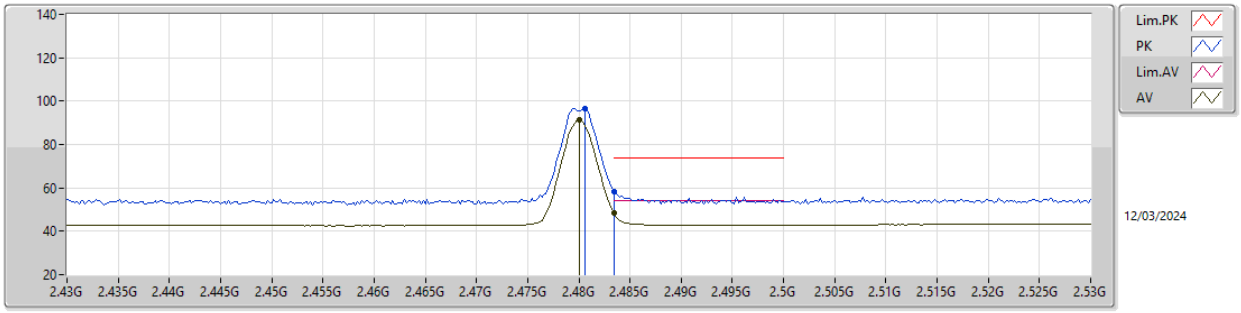


EUT X_1TX
Setting 21
04-H-R-7

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	2.4756G	118.90	Inf	-Inf	87.91	3	Horizontal	41	2.45	-	27.60	3.39	-
AV	2.475G	114.20	Inf	-Inf	83.21	3	Horizontal	41	2.45	-	27.60	3.39	-
PK	2.4838G	64.12	74.00	-9.88	33.08	3	Horizontal	41	2.45	-	27.64	3.40	-
AV	2.4835G	51.27	54.00	-2.73	20.23	3	Horizontal	41	2.45	-	27.64	3.40	-

2.4-2.4835GHz_Zigbee_Nss1_1TX

2480MHz_TX

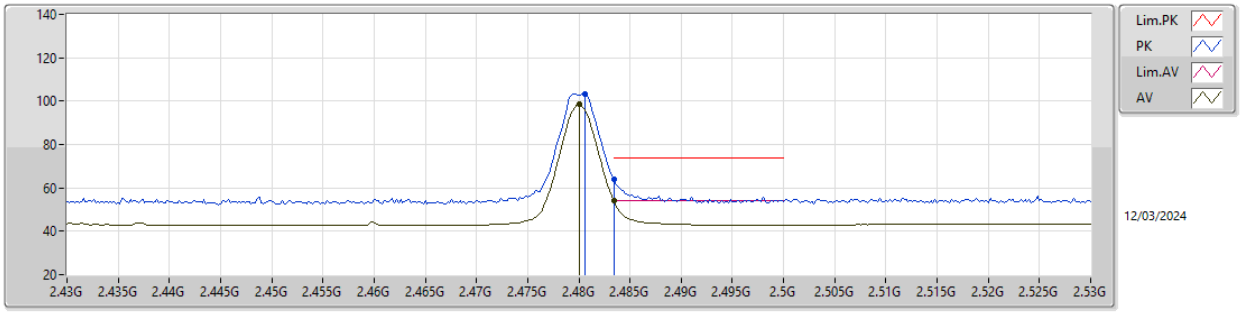


EUT X_1TX
Setting 5
04-H-R-7

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	2.4806G	96.44	Inf	-Inf	65.44	3	Vertical	257	2.00	-	27.61	3.39	-
AV	2.48G	91.61	Inf	-Inf	60.62	3	Vertical	257	2.00	-	27.60	3.39	-
PK	2.4835G	58.44	74.00	-15.56	27.40	3	Vertical	257	2.00	-	27.64	3.40	-
AV	2.4835G	48.23	54.00	-5.77	17.19	3	Vertical	257	2.00	-	27.64	3.40	-

2.4-2.4835GHz_Zigbee_Nss1_1TX

2480MHz_TX

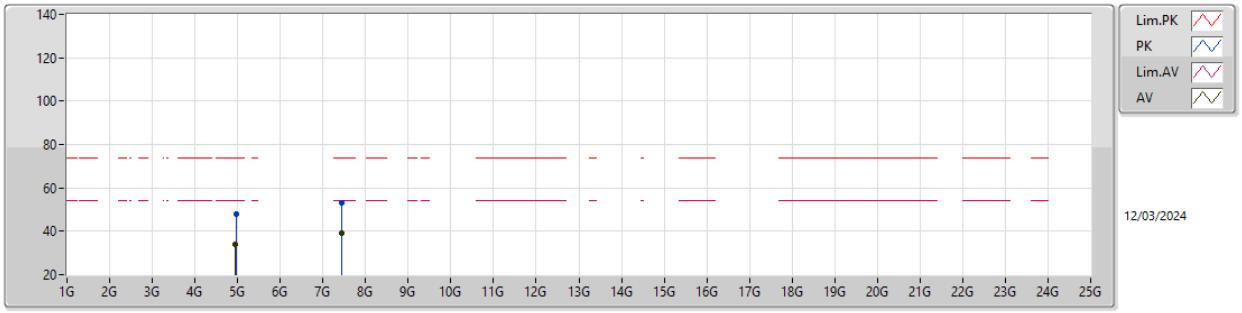


EUT X_1TX
Setting 5
04-H-R-7

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	2.4806G	103.38	Inf	-Inf	72.38	3	Horizontal	66	2.21	-	27.61	3.39	-
AV	2.48G	98.62	Inf	-Inf	67.63	3	Horizontal	66	2.21	-	27.60	3.39	-
PK	2.4835G	63.91	74.00	-10.09	32.87	3	Horizontal	66	2.21	-	27.64	3.40	-
AV	2.4835G	53.89	54.00	-0.11	22.85	3	Horizontal	66	2.21	-	27.64	3.40	-

2.4-2.4835GHz_Zigbee_Nss1_1TX

2480MHz_TX

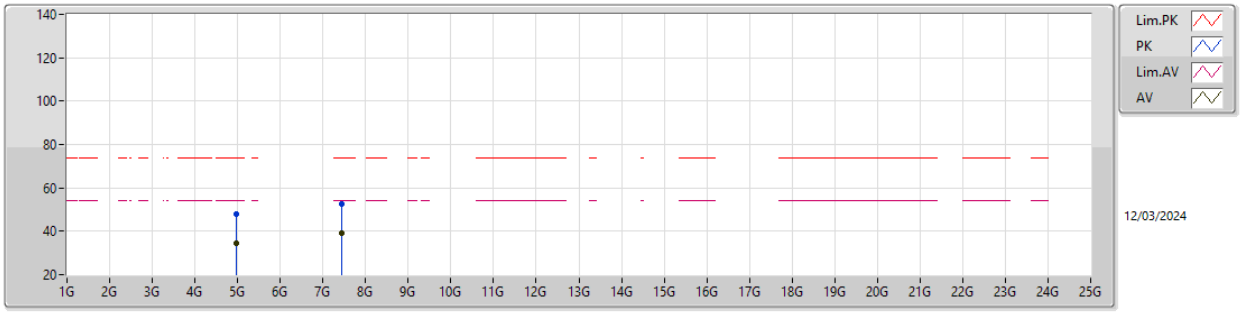


EUT X_1TX
Setting 5
04-H-R-7

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	4.97044G	48.09	74.00	-25.91	42.81	3	Vertical	255	2.33	-	32.70	5.80	33.22
AV	4.9471G	33.76	54.00	-20.24	28.52	3	Vertical	255	2.33	-	32.69	5.78	33.23
PK	7.44522G	53.11	74.00	-20.89	42.84	3	Vertical	99	1.16	-	37.20	7.22	34.15
AV	7.44834G	39.35	54.00	-14.65	29.08	3	Vertical	99	1.16	-	37.20	7.22	34.15

2.4-2.4835GHz_Zigbee_Nss1_1TX

2480MHz_TX



EUT X_1TX
Setting 5
04-H-R-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	4.96576G	48.11	74.00	-25.89	42.83	3	Horizontal	111	1.21	-	32.70	5.80	33.22
AV	4.96234G	34.66	54.00	-19.34	29.38	3	Horizontal	111	1.21	-	32.70	5.80	33.22
PK	7.44048G	52.42	74.00	-21.58	42.16	3	Horizontal	64	1.60	-	37.20	7.21	34.15
AV	7.449G	39.39	54.00	-14.61	29.12	3	Horizontal	64	1.60	-	37.20	7.22	34.15