



RADIO TEST REPORT

FCC ID : 2AI5IMTX2
Equipment : MEATER PRO XL
Brand Name : MEATER
Model Name : MT-CX20 / MT-MX201
Applicant : Apption Labs Limited
66 Commercial Square, Leicester, LE2 7SR United Kingdom
Manufacturer (1) : AboCom Systems, Inc.
No. 77, Yu-Yih Rd, Chu-Nan Chen, Miao-Lih
Hsuan, Taiwan, R.O.C.
Manufacturer (2) : Jin Yeong Hann Technology CO., LTD
No. 6, Lane 187, Sec. 2, Chung Cheng Rd, Hu Kou
Hsiang, Hsin Chu Hsieh, Taiwan, R.O.C.
Standard : 47 CFR FCC Part 15.247

The product was received on Mar. 01, 2024, and testing was started from Apr. 17, 2024 and completed on Jul. 23, 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: 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	7
1.3 Testing Location Information	7
1.4 Measurement Uncertainty	8
2 Test Configuration of EUT.....	9
2.1 Test Channel Mode	9
2.2 The Worst Case Measurement Configuration.....	10
2.3 EUT Operation during Test	11
2.4 Accessories	11
2.5 Support Equipment.....	11
2.6 Test Setup Diagram	12
3 Transmitter Test Result	15
3.1 AC Power-line Conducted Emissions	15
3.2 DTS Bandwidth.....	17
3.3 Maximum Conducted Output Power	18
3.4 Power Spectral Density	21
3.5 Emissions in Non-restricted Frequency Bands	23
3.6 Emissions in Restricted Frequency Bands.....	24
4 Test Equipment and Calibration Data	28
Appendix A. Test Results of AC Power-line Conducted Emissions	
Appendix B. Test Results of DTS Bandwidth	
Appendix C. Test Results of Maximum Conducted Output Power	
Appendix D. Test Results of Power Spectral Density	
Appendix E. Test Results of Emissions in Non-restricted Frequency Bands	
Appendix F. Test Results of Emissions in Restricted Frequency Bands	
Appendix G. Test Photos	
Photographs of EUT v02	



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	Note
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	-

Note:

For Battery Mode: The EUT was powered by battery; it's not necessary to apply to AC Power Port Conducted Emission.

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: Sandy Chuang



1 General Description

1.1 Information

1.1.1 RF General Information

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

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

Note:

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

1.1.2 Antenna Information

Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
	WLAN 2.4GHz	Bluetooth					WLAN 2.4GHz	Bluetooth
1	1	-	ApptionLabs	WIFI-01	PCB	N/A	1.74	-
2	-	1	ApptionLabs	BT-01	PCB	N/A	-	0.55

Note 1: The above information was declared by manufacturer.

Note 2:

For WLAN 2.4GHz function:

For IEEE 802.11 b/g/n (1TX/1RX):

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

For Bluetooth function (1TX/1RX):

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

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF	T	VBW
		(dB)	(s)	(Hz)_1/T
BT-LE(1Mbps)	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 Battery or host system with USB type-C cable		
Function	☒ Point-to-multipoint	☐ Point-to-point	
Test Software Version	SmartRF Studio 7 v2.13.1		
Support Mode	☒ LE 1M PHY: 1 Mb/s		
	☐ LE Coded PHY (S=2): 500 Kb/s		
	☐ LE Coded PHY (S=8): 125 Kb/s		
	☐ LE 2M PHY: 2 Mb/s		

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

Model Name	Equipped with probe
MT-CX20	No
MT-MX201	Yes

Note 1: From the above models, model: MT-CX20 as selected to test all items, and the model: MT-MX201 were selected to test the AC Power-line Conducted Emissions and Emissions in Restricted Frequency Bands below 1GHz tests (Charge Mode).

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

- ♦ 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 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	KJ Chang	23.9~25.4 / 63~64	Jun. 24, 2024
Radiated (Below 1GHz)	03CH04-CB	Gordon Hung	22.7-23.8 / 56-59	Apr. 17, 2024
Radiated (Above 1GHz)	03CH02-CB	Viola Huang	21.8-22.9 / 55-58	Jul. 23, 2024
AC Conduction	CO01-CB	Joe Chu	23~24 / 58~60	Apr. 18, 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: Before May 28, 2024

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 dB	Confidence levels of 95%

Test Date: After May 27, 2024

Test Items	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.0 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	2.1 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode
BT-LE(1Mbps)
2402MHz
2440MHz
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	Normal Link
1	Charge Mode: EUT (EUT powered by host system with USB type-C cable)

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	Normal Link
After evaluating, EUT in Z axis was the worst case, so the measurement will follow this same test configuration.	
1	Battery Mode: EUT in Z axis (powered by battery)
2	Charge Mode: EUT in Z axis (powered by host system with USB type-C cable)
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
After evaluating, EUT in Y axis was the worst case, so the measurement will follow this same test configuration.	
1	EUT in Y axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + Bluetooth LE
Refer to Sporton Test Report No.: FA422340 for Co-location RF Exposure Evaluation.	



2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link Mode:

During the test, the EUT operation to normal function.

2.4 Accessories

Model Name	Accessories
MT-CX20	USB type-C cable*1: Shielded, 1.0m
MT-MX201	Probe*4
	USB type-C cable*1: Shielded, 1.0m

2.5 Support Equipment

For AC Conduction:

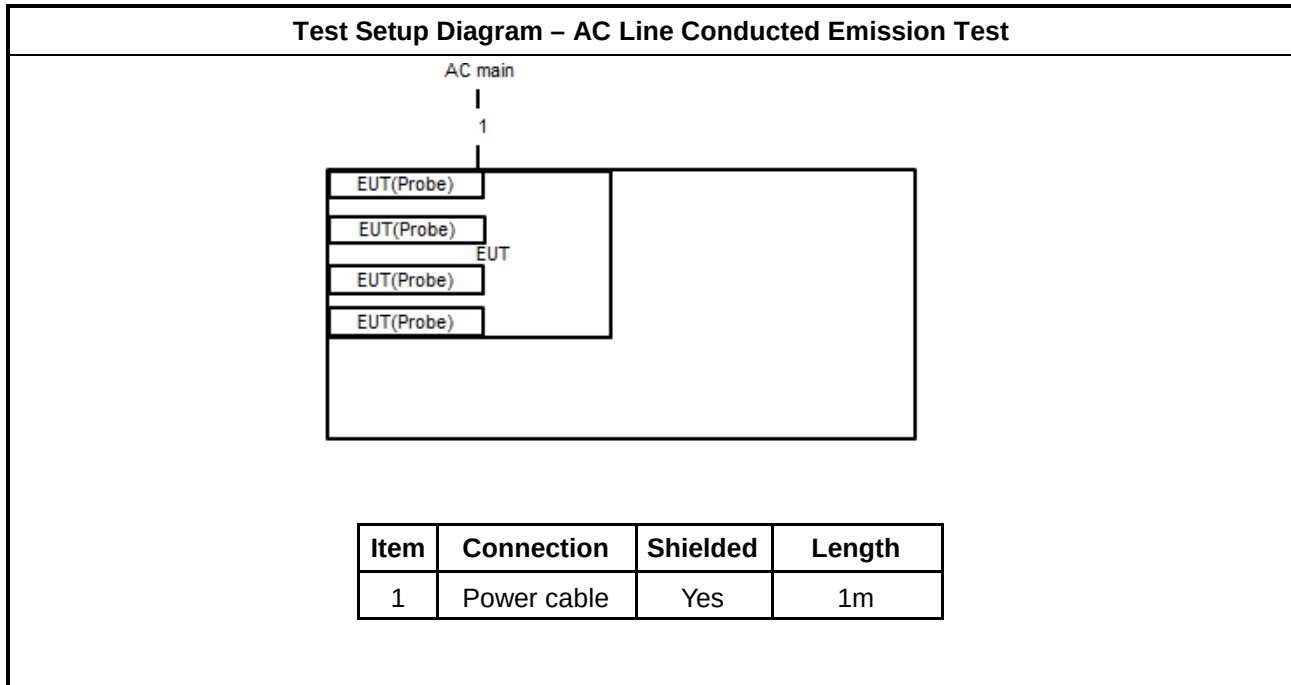
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Adapter	XIAOMI	MDY-09-EA	N/A

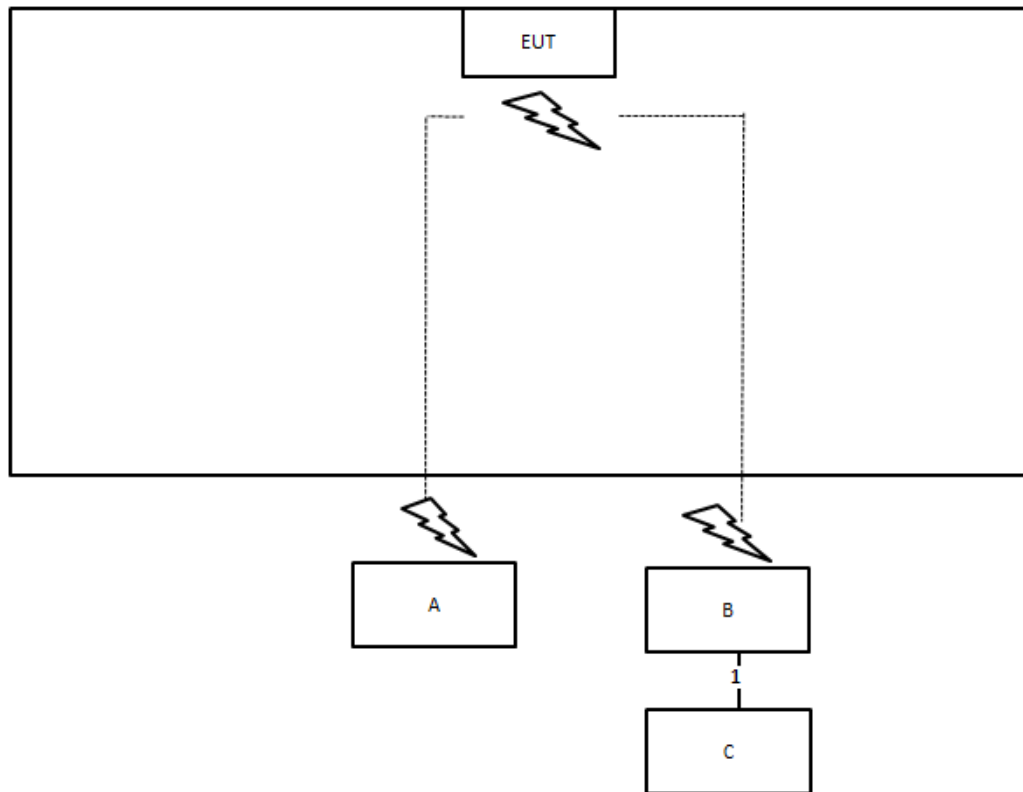
For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Phone	OTTERBOX	VQP9MW0Y54	N/A
B	AP	ASUS	AX88U	N/A
C	Notebook	DELL	E4300	N/A

For Radiated (above 1GHz) and RF Conducted: N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


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



Test Setup Diagram - Radiated Test > 1GHz

EUT



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.		

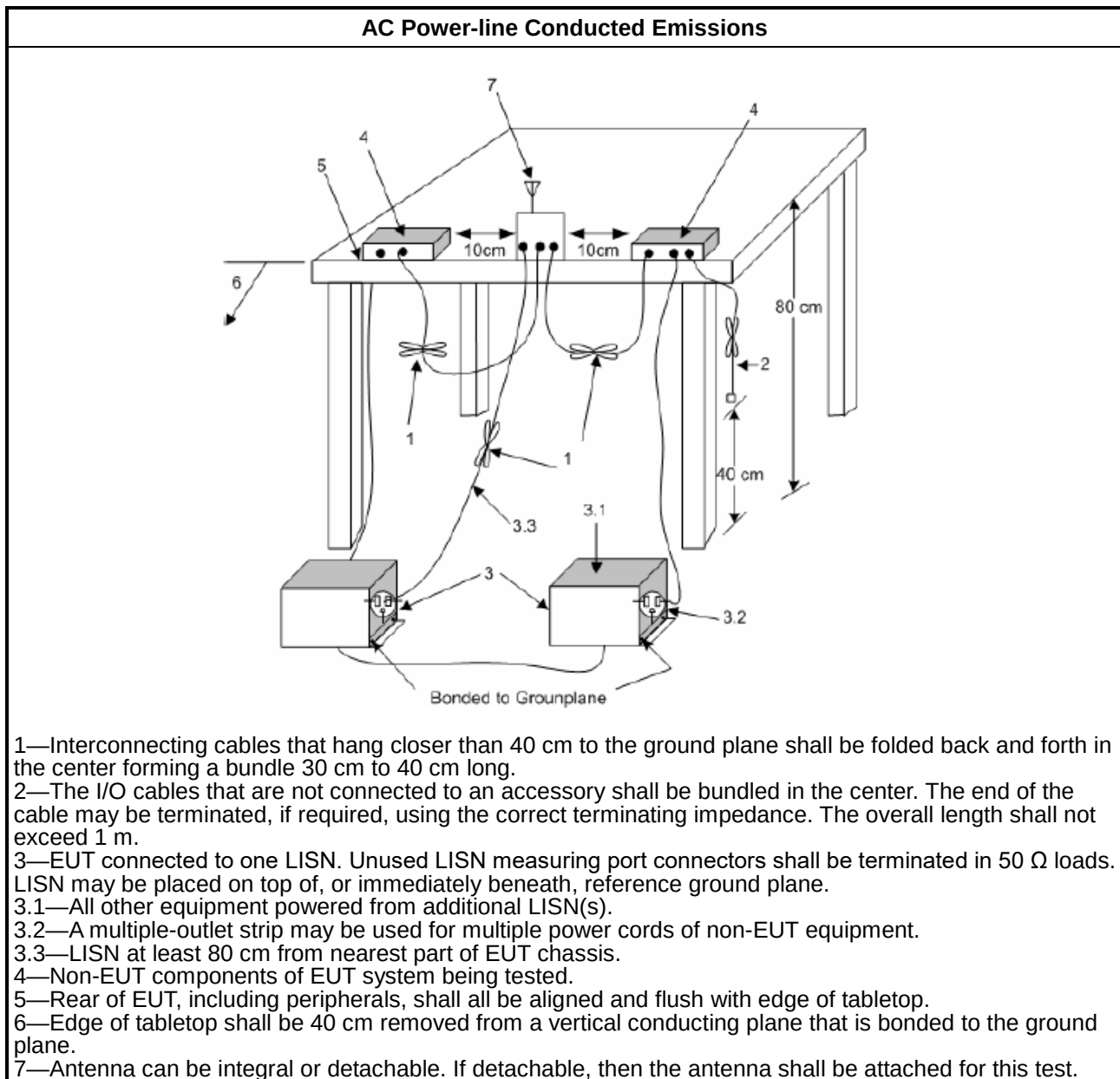
3.1.2 Measuring Instruments

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



1.1.1. Measurement Results Calculation

The measured Level is calculated using:

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

3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

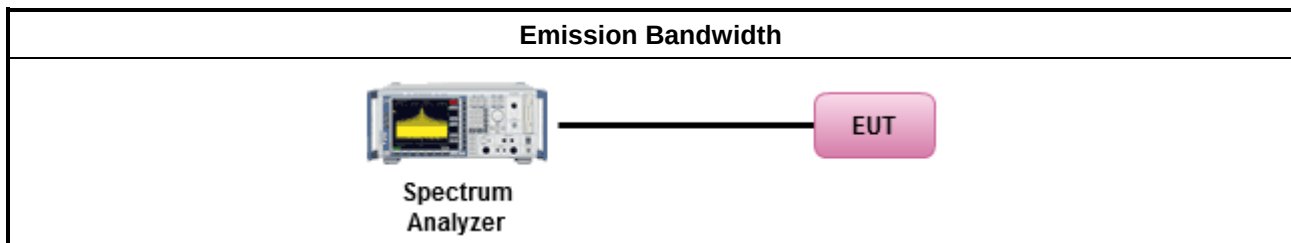
3.2.2 Measuring Instruments

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

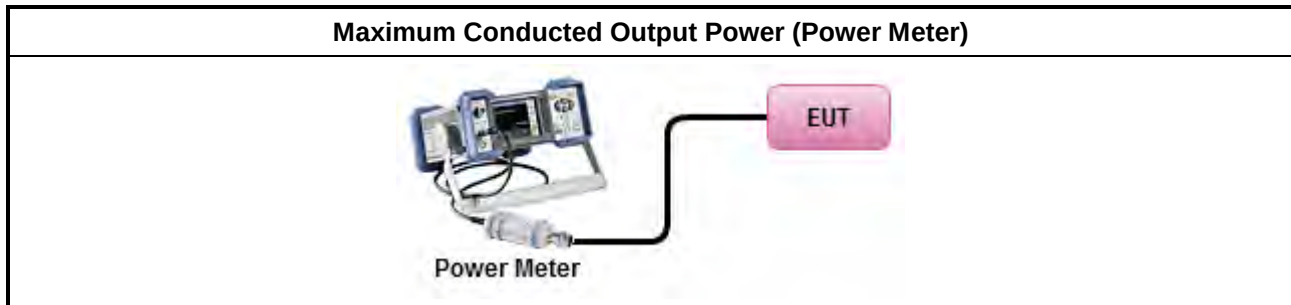
Refer a test equipment and calibration data table in this test report.



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

3.3.4 Test Setup



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

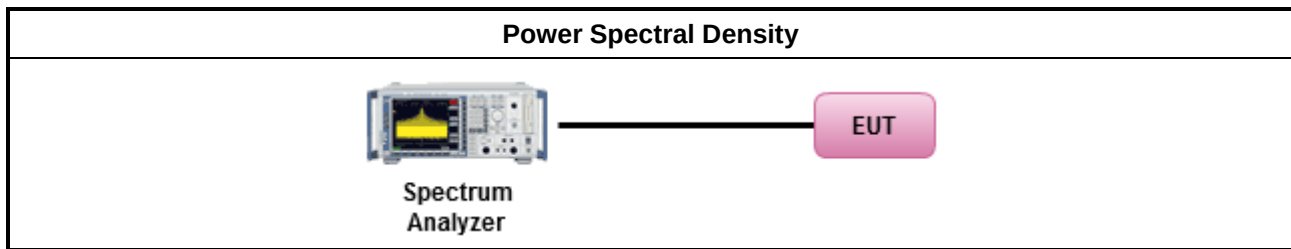
3.4.2 Measuring Instruments

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.	

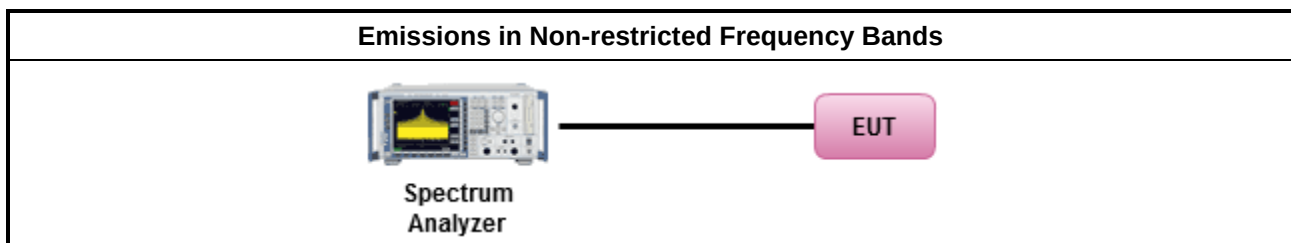
3.5.2 Measuring Instruments

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.

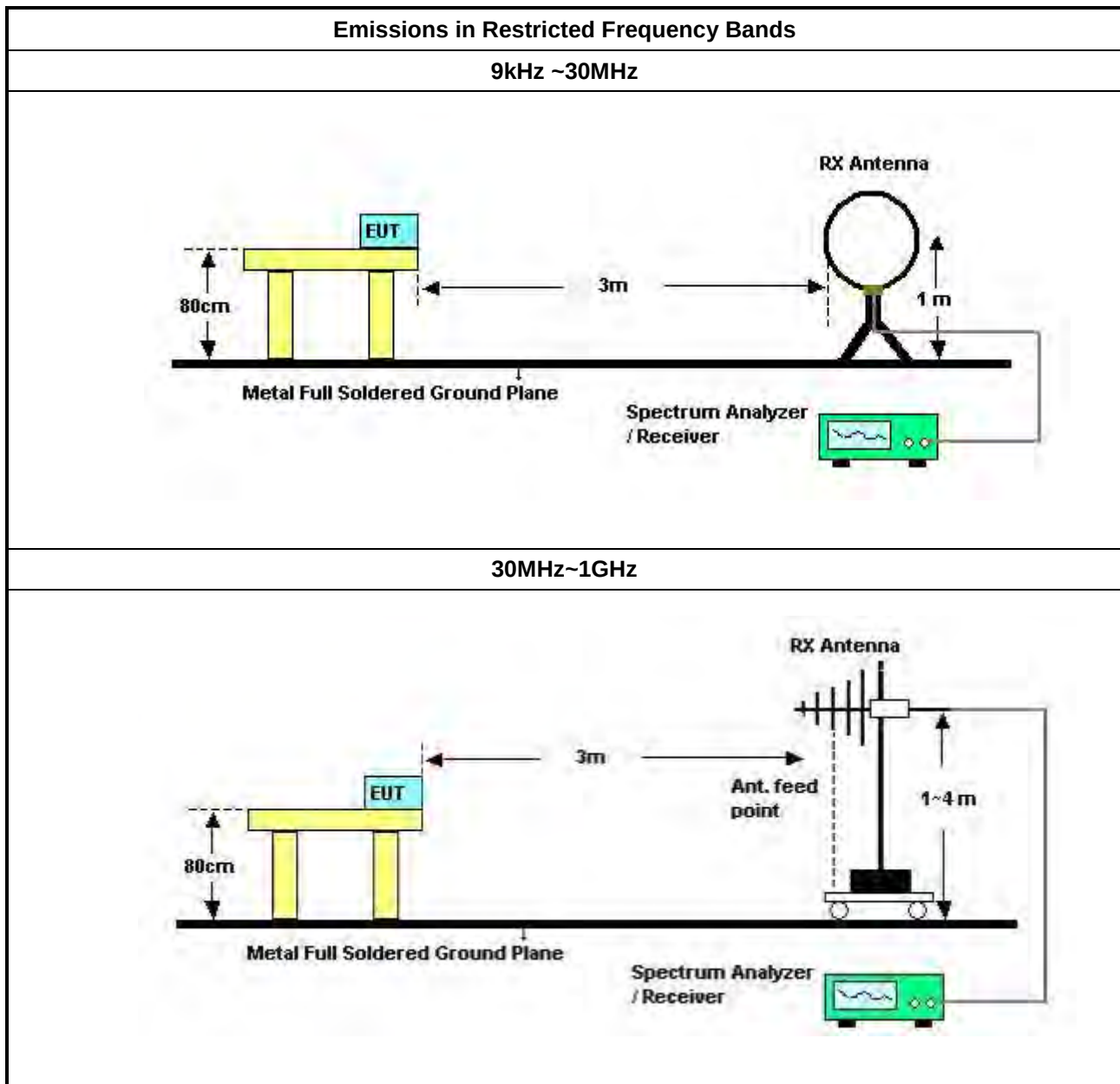
3.6.2 Measuring Instruments

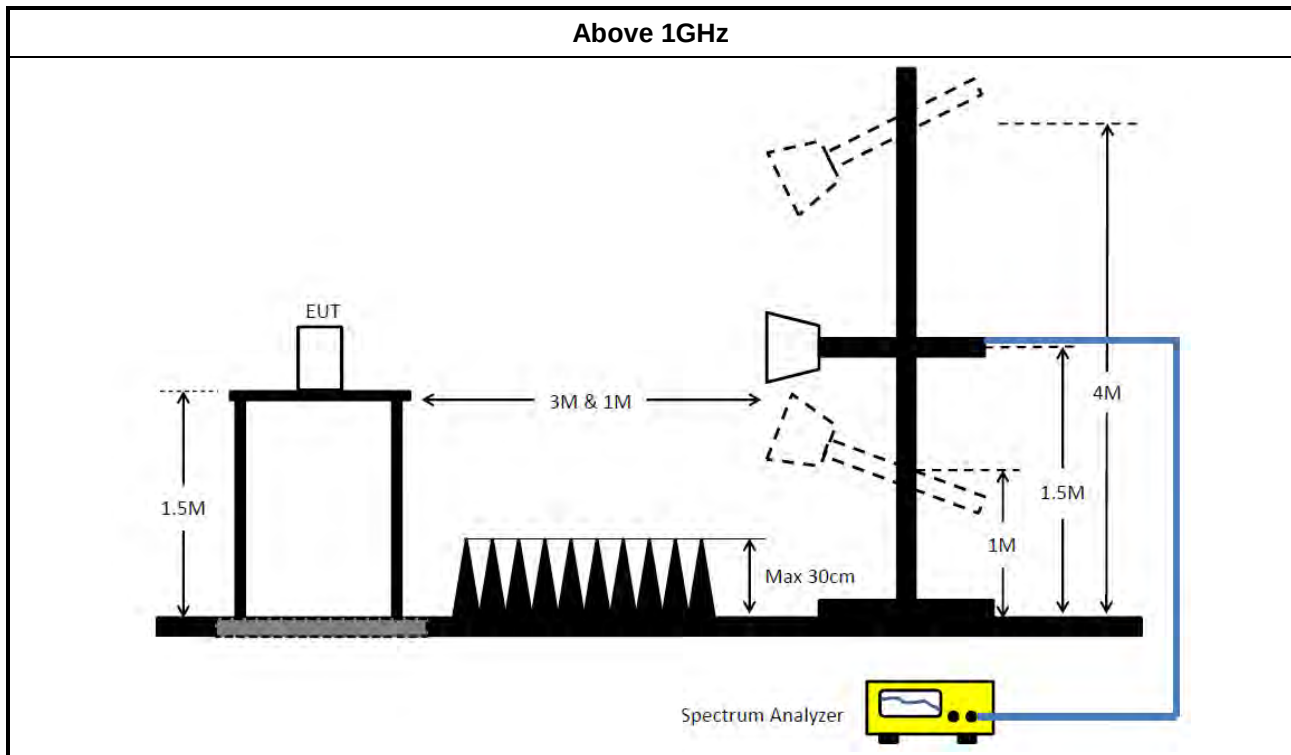
Refer a test equipment and calibration data table in this test report.

**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. 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. 27, 2023	Apr. 26, 2024	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 (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 01, 2023	Jul. 31, 2024	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 07, 2023	Oct. 06, 2024	Radiation (03CH04-CB)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 04, 2023	Oct. 03, 2024	Radiation (03CH04-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 03, 2023	May 02, 2024	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 19, 2024	Mar. 18, 2025	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz ~ 1GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 24, 2024	Mar. 23, 2025	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 12, 2024	Apr. 11, 2025	Radiation (03CH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jun. 29, 2024	Jun. 28, 2025	Radiation (03CH02-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH02-CB)
Signal Analyzer	R&S	FSV3044	101536	10kHz ~ 44GHz	Jul. 24, 2023	Jul. 23, 2024	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Feb. 29, 2024	Feb. 28, 2025	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Feb. 29, 2024	Feb. 28, 2025	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 14, 2023	Aug. 13, 2024	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 19, 2023	Oct. 18, 2024	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 19, 2023	Oct. 18, 2024	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1 –26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

NCR means Non-Calibration required.



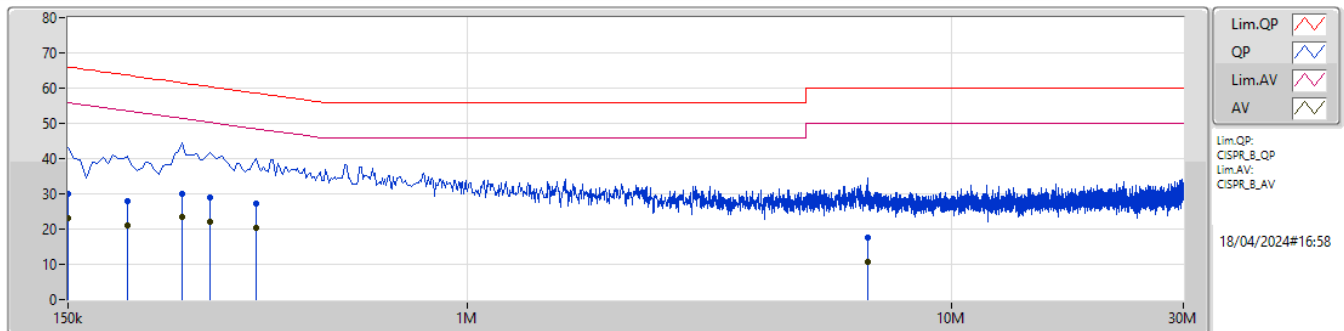
Conducted Emissions at Powerline

Appendix A

Summary

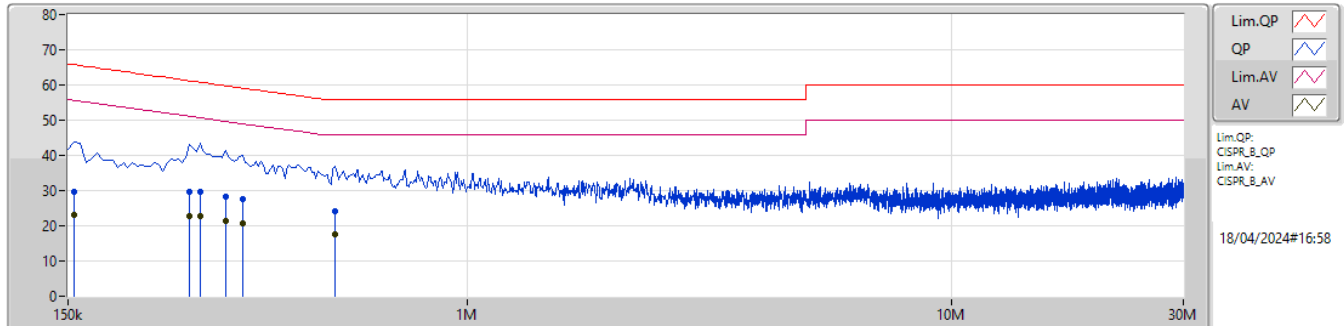
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	280.5k	22.82	50.80	-27.98	Neutral

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	150k	30.08	66.00	-35.92	9.93	Line	-	20.15	0.04	0.02	9.87						
AV	150k	23.26	56.00	-32.74	9.93	Line	-	13.33	0.04	0.02	9.87						
QP	199.5k	27.84	63.63	-35.79	9.91	Line	-	17.93	0.04	0.02	9.85						
AV	199.5k	21.06	53.63	-32.57	9.91	Line	-	11.15	0.04	0.02	9.85						
QP	258k	30.11	61.49	-31.38	9.92	Line	-	20.19	0.04	0.02	9.86						
AV	258k	23.29	51.49	-28.20	9.92	Line	"Worst"	13.37	0.04	0.02	9.86						
QP	294k	28.95	60.42	-31.47	9.94	Line	-	19.01	0.05	0.02	9.87						
AV	294k	22.07	50.42	-28.35	9.94	Line	-	12.13	0.05	0.02	9.87						
QP	366k	27.10	58.60	-31.50	9.95	Line	-	17.15	0.05	0.02	9.88						
AV	366k	20.32	48.60	-28.28	9.95	Line	-	10.37	0.05	0.02	9.88						
QP	6.702M	17.55	60.00	-42.45	10.26	Line	-	7.29	0.21	0.14	9.91						
AV	6.702M	10.84	50.00	-39.16	10.26	Line	-	0.58	0.21	0.14	9.91						

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	154.5k	29.73	65.75	-36.02	9.94	Neutral	-	19.79	0.06	0.02	9.86						
AV	154.5k	23.06	55.75	-32.69	9.94	Neutral	-	13.12	0.06	0.02	9.86						
QP	267k	29.73	61.20	-31.47	9.95	Neutral	-	19.78	0.06	0.02	9.87						
AV	267k	22.93	51.20	-28.27	9.95	Neutral	-	12.98	0.06	0.02	9.87						
QP	280.5k	29.67	60.80	-31.13	9.95	Neutral	-	19.72	0.06	0.02	9.87						
AV	280.5k	22.82	50.80	-27.98	9.95	Neutral	"Worst"	12.87	0.06	0.02	9.87						
QP	316.5k	28.20	59.80	-31.60	9.96	Neutral	-	18.24	0.06	0.02	9.88						
AV	316.5k	21.44	49.80	-28.36	9.96	Neutral	-	11.48	0.06	0.02	9.88						
QP	343.5k	27.52	59.12	-31.60	9.96	Neutral	-	17.56	0.06	0.02	9.88						
AV	343.5k	20.70	49.12	-28.42	9.96	Neutral	-	10.74	0.06	0.02	9.88						
QP	532.5k	24.16	56.00	-31.84	9.98	Neutral	-	14.18	0.06	0.02	9.90						
AV	532.5k	17.49	46.00	-28.51	9.98	Neutral	-	7.51	0.06	0.02	9.90						



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)	715k	1.072M	1M07F1D	688.75k	1.051M

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

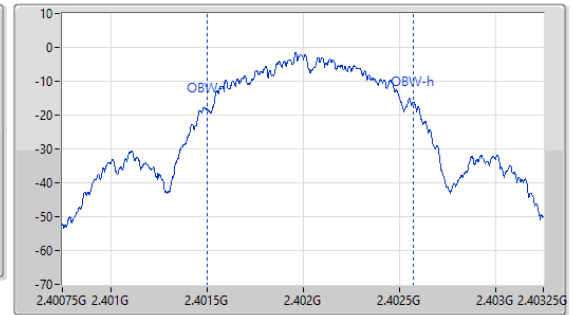
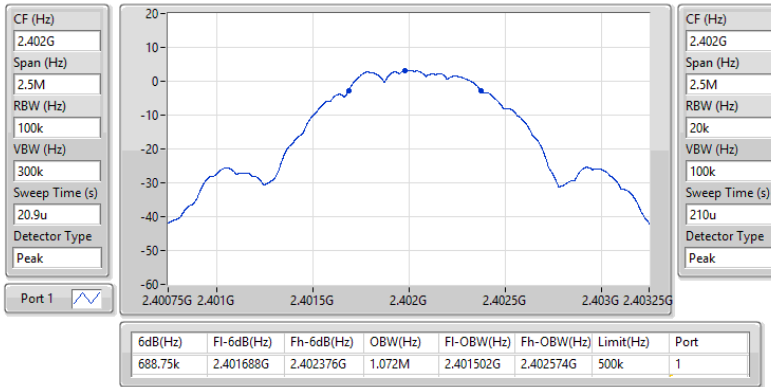
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	688.75k	1.072M
2440MHz	Pass	500k	697.5k	1.051M
2480MHz	Pass	500k	715k	1.052M

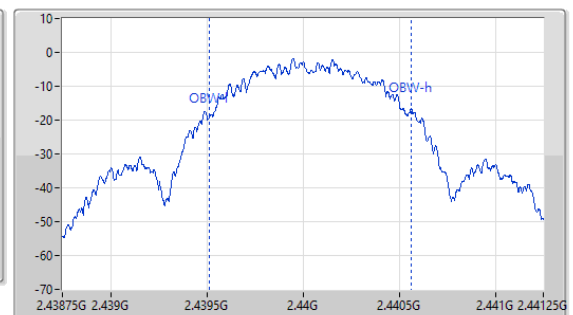
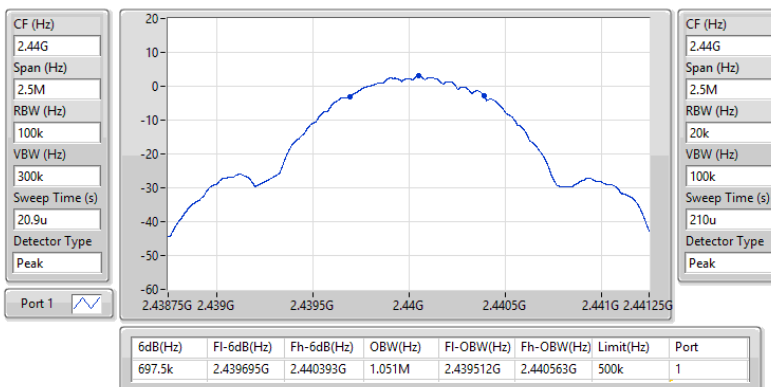
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

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

24/06/2024


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

24/06/2024

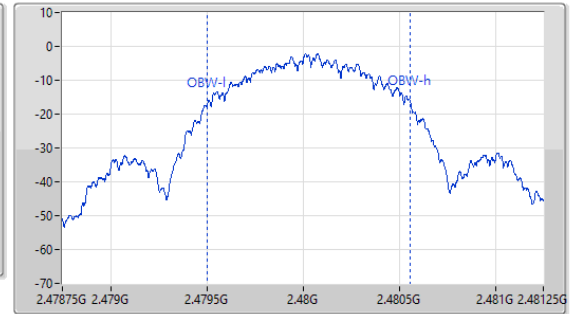
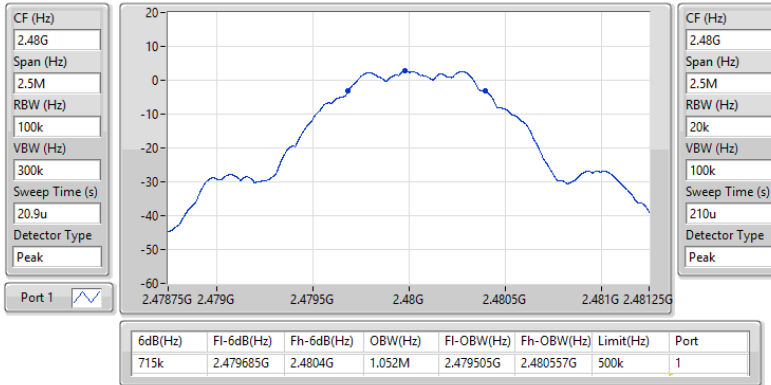


2.4-2.4835GHz_BT-LE(1Mbps)

EBW-DTS

2480MHz

24/06/2024





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	4.81	0.00303



Average Power-DTS

Appendix C

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	0.55	4.81	30.00
2440MHz	Pass	0.55	4.57	30.00
2480MHz	Pass	0.55	4.26	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-8.18

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	0.55	-8.18	8.00
2440MHz	Pass	0.55	-8.48	8.00
2480MHz	Pass	0.55	-9.39	8.00

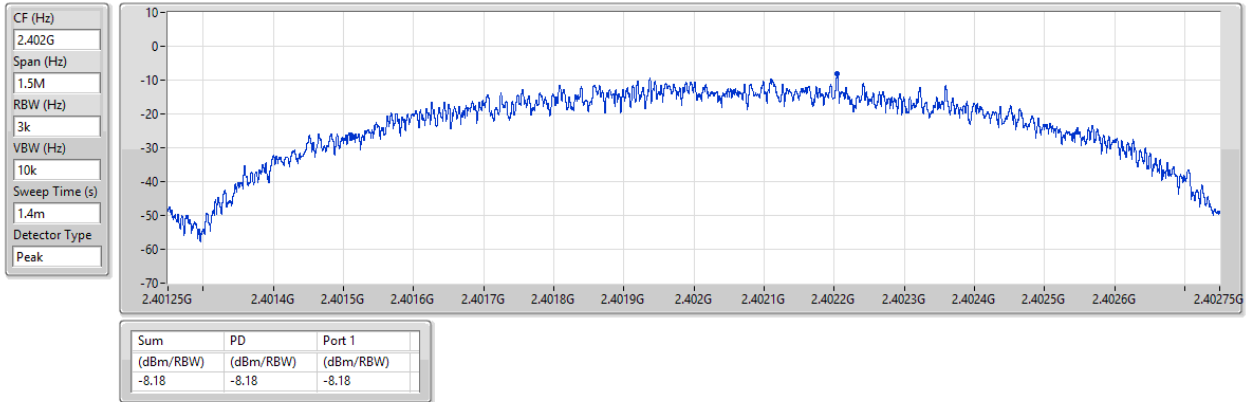
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2402MHz

24/06/2024

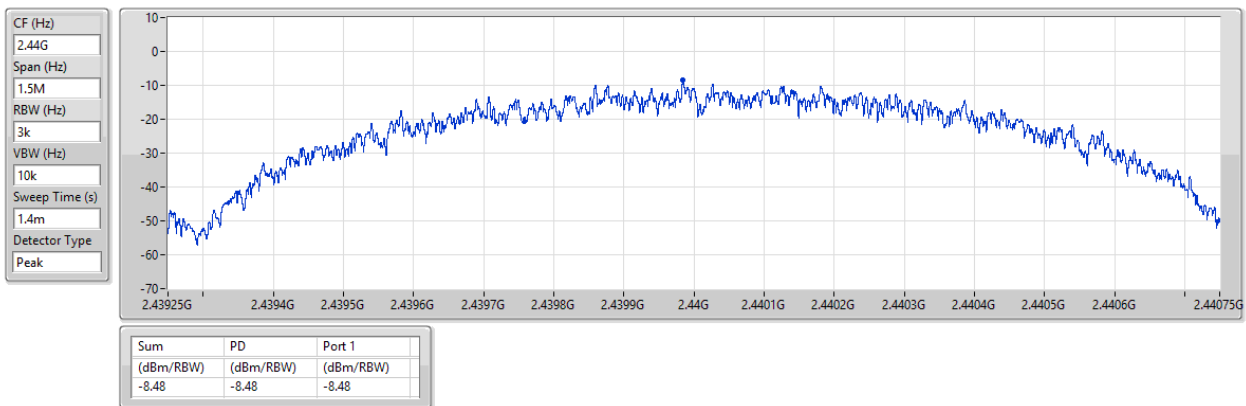


2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2440MHz

24/06/2024

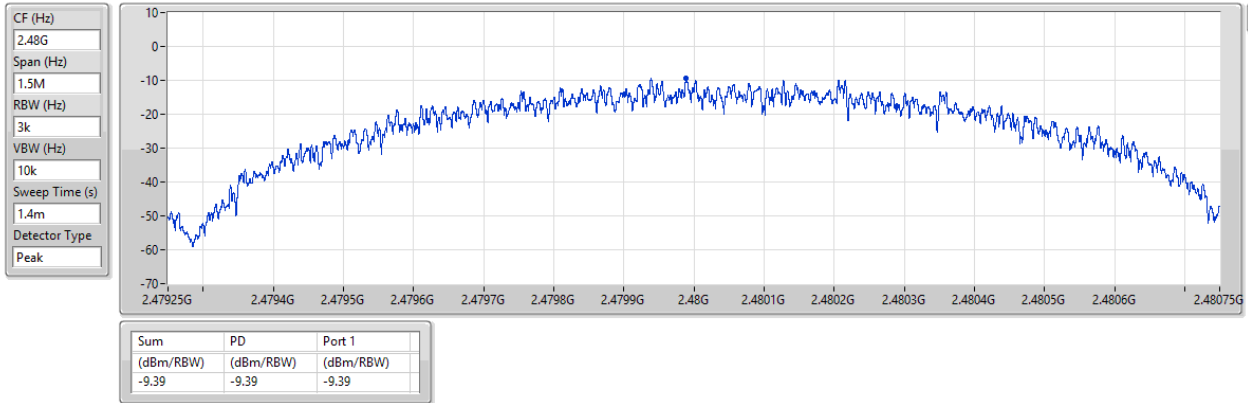


2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2480MHz

24/06/2024





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	2.40167G	4.08	-25.92	47.63M	-46.49	2.39992G	-45.83	2.4G	-44.01	2.50078G	-51.13	21.77738G	-47.19	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40167G	4.08	-25.92	47.63M	-46.49	2.39992G	-45.83	2.4G	-44.01	2.50078G	-51.13	21.77738G	-47.19	1
2440MHz	Pass	2.40167G	4.08	-25.92	49.98M	-48.83	2.39624G	-50.70	2.4G	-55.99	2.5033G	-50.63	21.75769G	-46.67	1
2480MHz	Pass	2.40167G	4.08	-25.92	47.63M	-46.61	2.39936G	-50.20	2.4G	-55.62	2.50322G	-50.91	21.62271G	-47.29	1

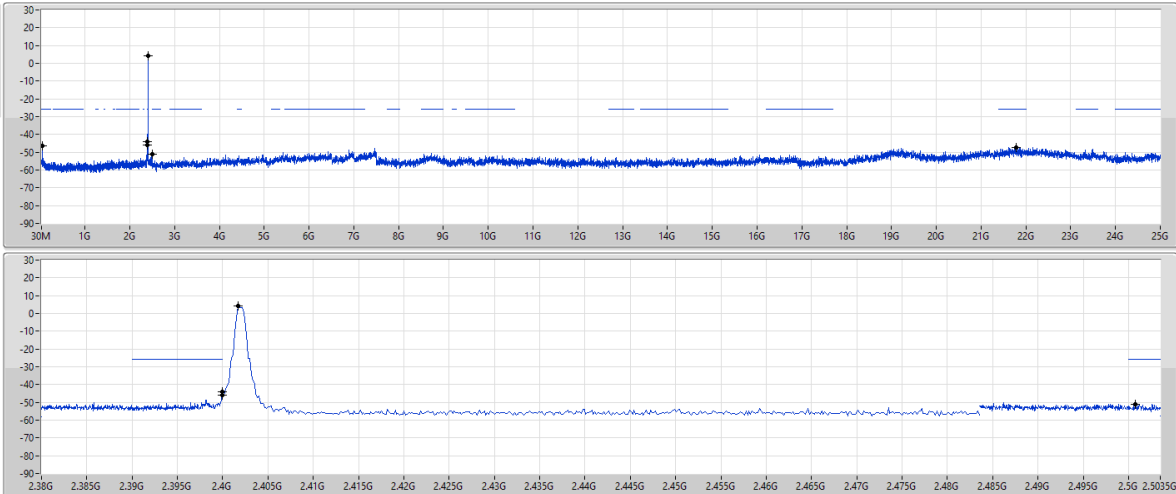
2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2402MHz

24/06/2024

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
2.40167G	4.08	-25.92	47.63M	-46.49	2.39992G	-45.83	2.4G	-44.01	2.50078G	-51.13	21.77738G	-47.19	1

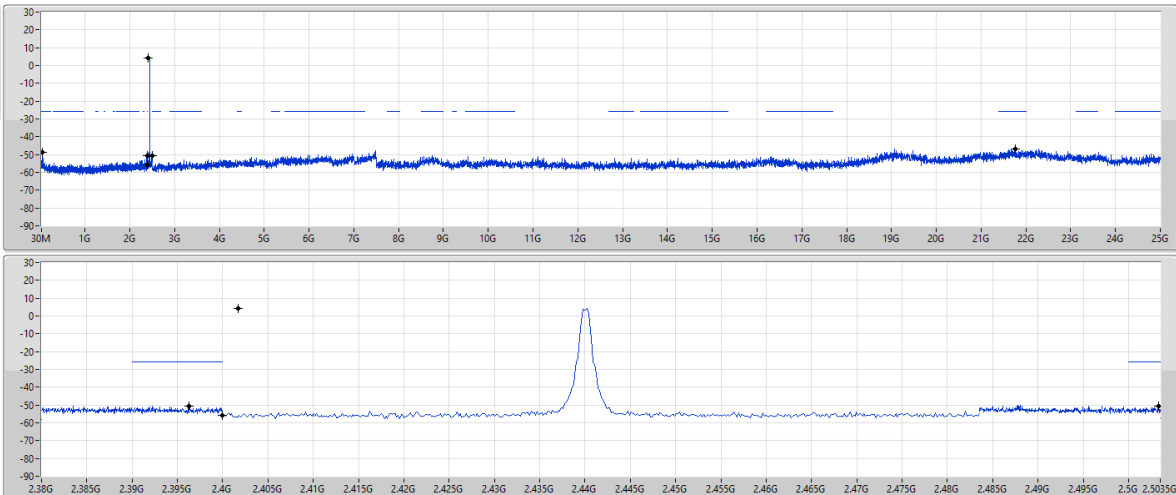
2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2440MHz

24/06/2024

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
2.40167G	4.08	-25.92	49.98M	-48.83	2.39624G	-50.70	2.4G	-55.99	2.5033G	-50.63	21.75769G	-46.67	1

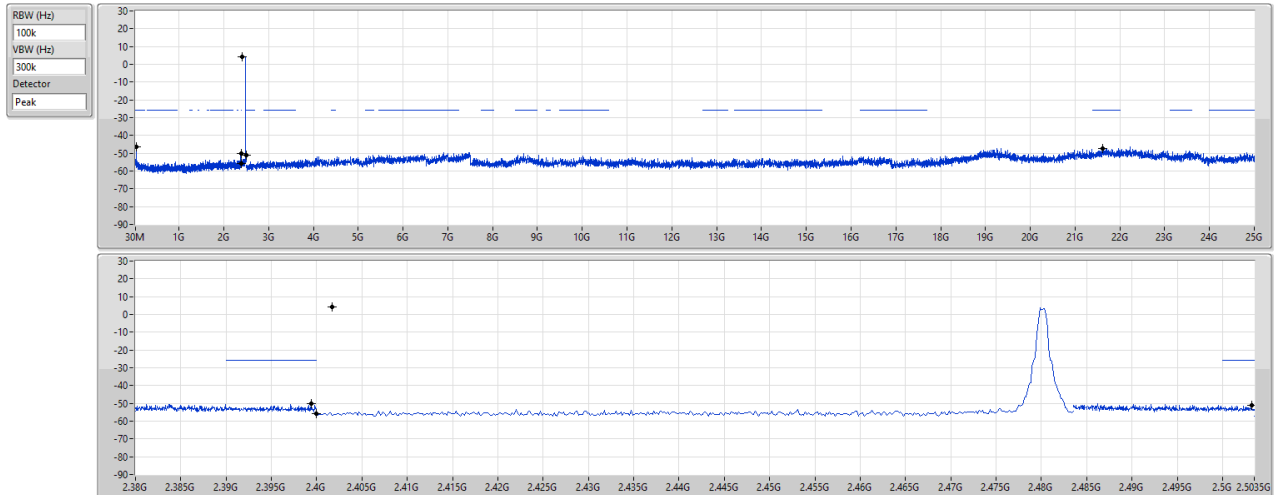
2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2480MHz

24/06/2024

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
2.40167G	4.08	-25.92	47.63M	-46.61	2.39936G	-50.20	2.4G	-55.62	2.50322G	-50.91	21.62271G	-47.29	1



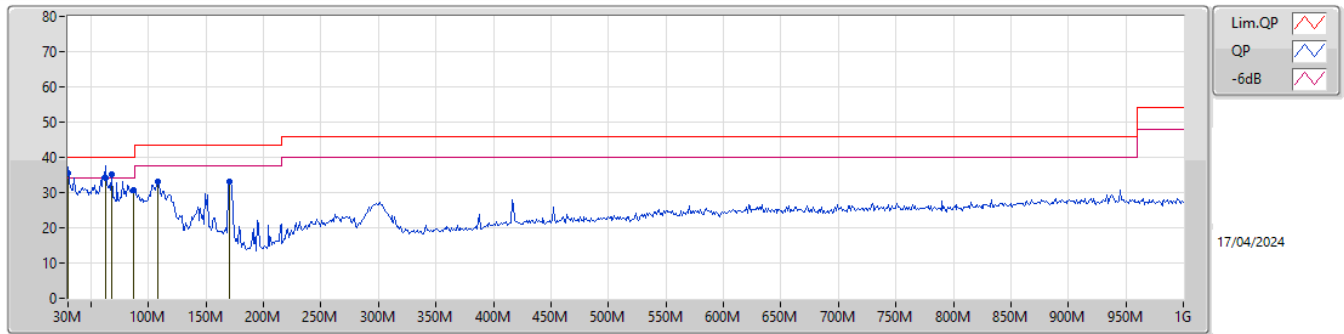
Radiated Emissions below 1GHz

Appendix F.1

Summary

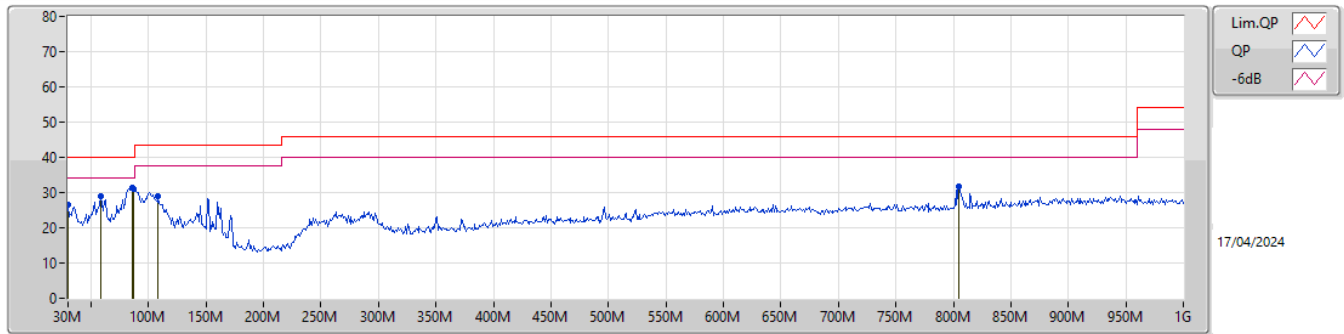
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	QP	30M	35.54	40.00	-4.46	Vertical

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)		
QP	30M	35.54	40.00	-4.46	-7.26	3	Vertical	107	1.25	"Worst"	42.80	23.56	0.33	31.15		
QP	62.98M	34.06	40.00	-5.94	-18.74	3	Vertical	339	1.00	-	52.80	12.41	0.61	31.76		
PK	67.83M	35.29	40.00	-4.71	-18.72	3	Vertical	306	1.00	-	54.01	12.38	0.64	31.74		
PK	87.23M	30.65	40.00	-9.35	-16.29	3	Vertical	200	1.00	-	46.94	14.62	0.78	31.69		
PK	107.6M	32.99	43.50	-10.51	-12.87	3	Vertical	292	1.00	-	45.86	17.84	0.87	31.58		
PK	170.65M	32.99	43.50	-10.51	-14.59	3	Vertical	352	1.00	-	47.58	15.94	1.16	31.69		

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)		
PK	30M	26.68	40.00	-13.32	-7.26	3	Horizontal	213	3.00	-	33.94	23.56	0.33	31.15		
PK	58.13M	29.01	40.00	-10.99	-18.42	3	Horizontal	339	1.25	-	47.43	12.72	0.58	31.72		
PK	86.26M	31.54	40.00	-8.46	-16.51	3	Horizontal	220	2.00	"Worst"	48.05	14.41	0.78	31.70		
PK	87.23M	31.00	40.00	-9.00	-16.29	3	Horizontal	101	2.00	-	47.29	14.62	0.78	31.69		
PK	108.57M	28.85	43.50	-14.65	-12.77	3	Horizontal	48	1.50	-	41.62	17.94	0.87	31.58		
PK	805.03M	31.64	46.00	-14.36	-3.43	3	Horizontal	67	1.25	-	35.07	25.95	2.92	32.30		

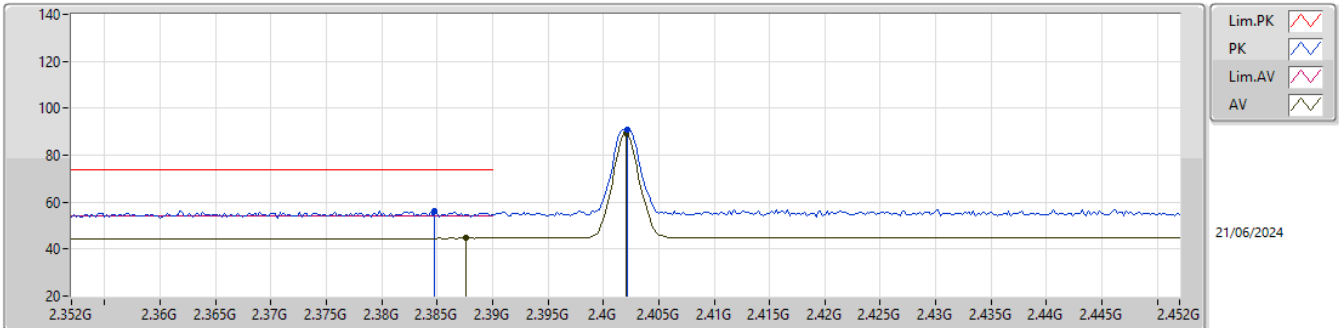


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	2.4835G	45.77	54.00	-8.23	3	Horizontal	253	2.75	-

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

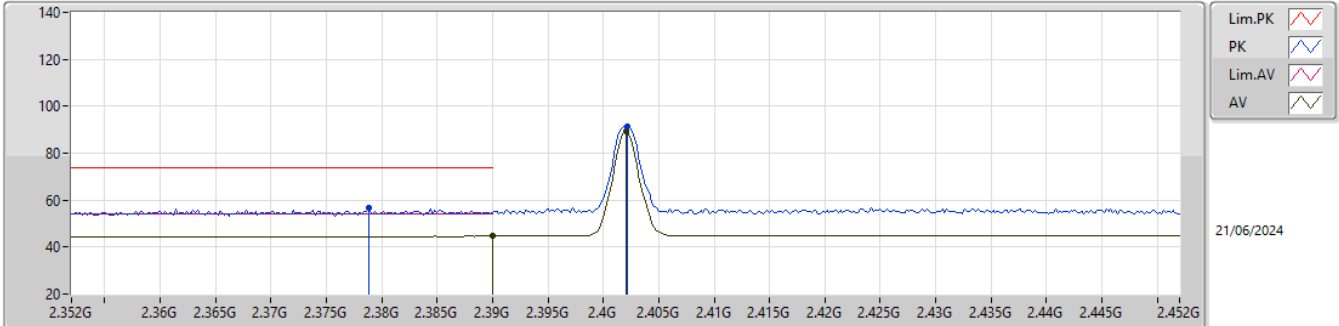


EUT_Y_1TX
Setting 5
02-E-V-1

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	2.3848G	56.41	74.00	-17.59	23.47	3	Vertical	190	1.00	-	28.45	4.49	-			
AV	2.3876G	44.66	54.00	-9.34	11.69	3	Vertical	190	1.00	-	28.48	4.49	-			
PK	2.4022G	90.91	Inf	-Inf	57.93	3	Vertical	190	1.00	-	28.48	4.50	-			
AV	2.402G	89.39	Inf	-Inf	56.41	3	Vertical	190	1.00	-	28.48	4.50	-			

2.4-2.4835GHz_BT-LE(1Mbps)

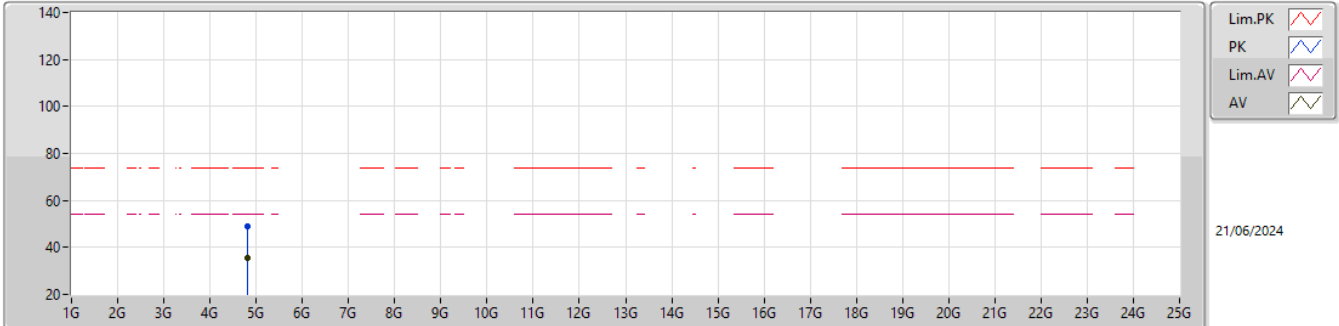
2402MHz_TX


EUT Y_1TX
Setting 5
02-E-V-1

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	2.3788G	56.59	74.00	-17.41	23.71	3	Horizontal	318	2.79	-	28.40	4.48	-				
AV	2.39G	44.68	54.00	-9.32	11.69	3	Horizontal	318	2.79	-	28.50	4.49	-				
PK	2.4022G	91.17	Inf	-Inf	58.19	3	Horizontal	318	2.79	-	28.48	4.50	-				
AV	2.402G	89.54	Inf	-Inf	56.56	3	Horizontal	318	2.79	-	28.48	4.50	-				

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

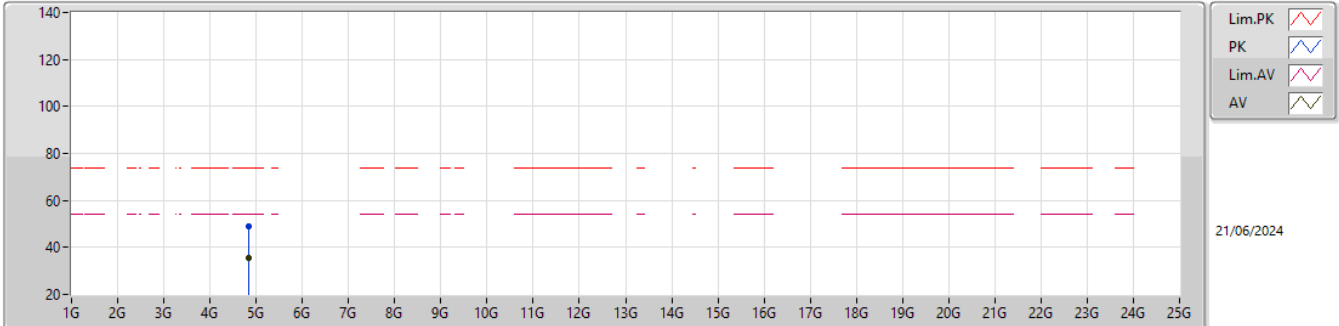


EUT_V_1TX
Setting 5
02-E-V-1

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	4.81522G	49.15	74.00	-24.85	38.64	3	Vertical	32	2.71	-	33.13	8.06	30.68			
AV	4.81702G	35.50	54.00	-18.50	24.99	3	Vertical	32	2.71	-	33.13	8.06	30.68			

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

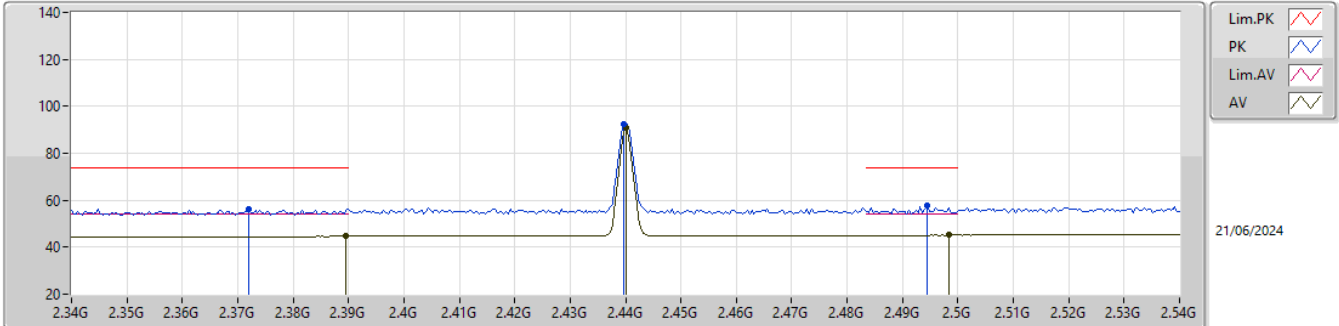


EUT_V_1TX
Setting 5
02-E-V-1

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	4.8504G	48.92	74.00	-25.08	38.27	3	Horizontal	191	1.41	-	33.20	8.11	30.66			
AV	4.8472G	35.77	54.00	-18.23	25.13	3	Horizontal	191	1.41	-	33.19	8.11	30.66			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

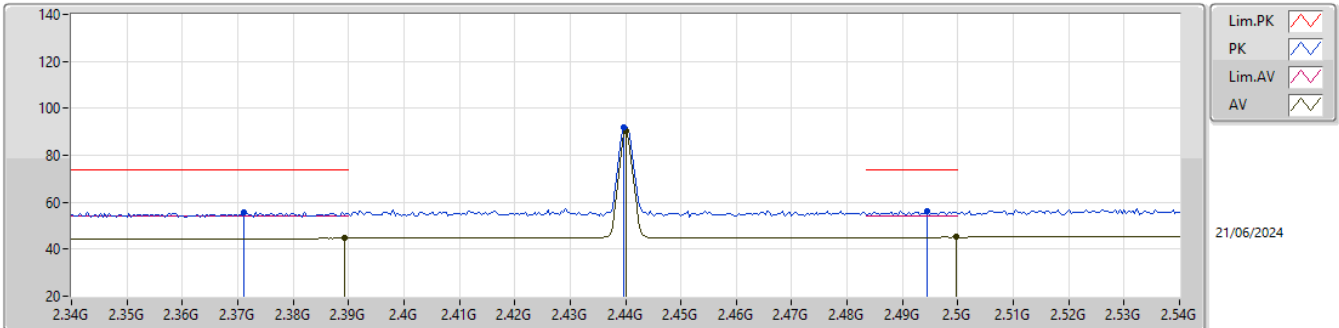


EUT_Y_1TX
Setting 5
02-E-V-1

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	2.372G	56.45	74.00	-17.55	23.58	3	Vertical	182	1.19	-	28.40	4.47	-			
AV	2.3896G	44.70	54.00	-9.30	11.71	3	Vertical	182	1.19	-	28.50	4.49	-			
PK	2.4396G	92.26	Inf	-Inf	59.22	3	Vertical	182	1.19	-	28.50	4.54	-			
AV	2.44G	90.73	Inf	-Inf	57.69	3	Vertical	182	1.19	-	28.50	4.54	-			
PK	2.4944G	57.70	74.00	-16.30	24.51	3	Vertical	182	1.19	-	28.60	4.59	-			
AV	2.4984G	45.15	54.00	-8.85	11.95	3	Vertical	182	1.19	-	28.60	4.60	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

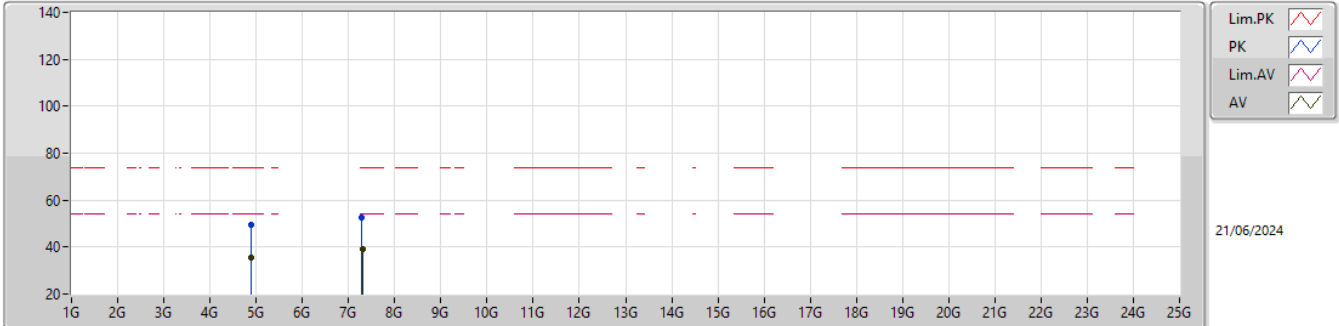


EUT_Y_1TX
Setting 5
02-E-V-1

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	2.3712G	55.74	74.00	-18.26	22.87	3	Horizontal	256	2.08	-	28.40	4.47	-				
AV	2.3892G	44.72	54.00	-9.28	11.74	3	Horizontal	256	2.08	-	28.49	4.49	-				
PK	2.4396G	92.06	Inf	-Inf	59.02	3	Horizontal	256	2.08	-	28.50	4.54	-				
AV	2.44G	90.47	Inf	-Inf	57.43	3	Horizontal	256	2.08	-	28.50	4.54	-				
PK	2.4944G	56.06	74.00	-17.94	22.87	3	Horizontal	256	2.08	-	28.60	4.59	-				
AV	2.4996G	45.14	54.00	-8.86	11.94	3	Horizontal	256	2.08	-	28.60	4.60	-				

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

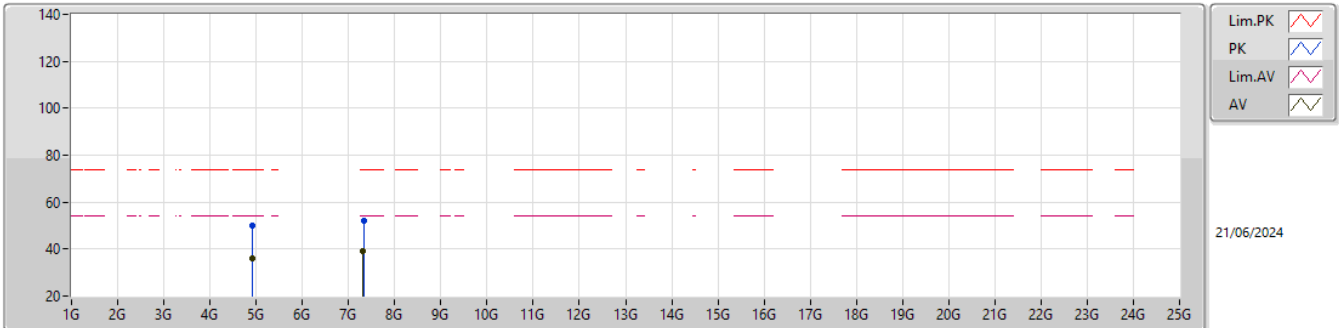


EUT_Y_1TX
Setting 5
02-E-V-1

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	4.89014G	49.45	74.00	-24.55	38.63	3	Vertical	102	1.30	-	33.28	8.17	30.63			
AV	4.89392G	35.75	54.00	-18.25	24.92	3	Vertical	102	1.30	-	33.29	8.17	30.63			
PK	7.2928G	52.36	74.00	-21.64	38.76	3	Vertical	93	1.85	-	36.37	9.33	32.10			
AV	7.32G	39.16	54.00	-14.84	25.48	3	Vertical	93	1.85	-	36.48	9.32	32.12			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

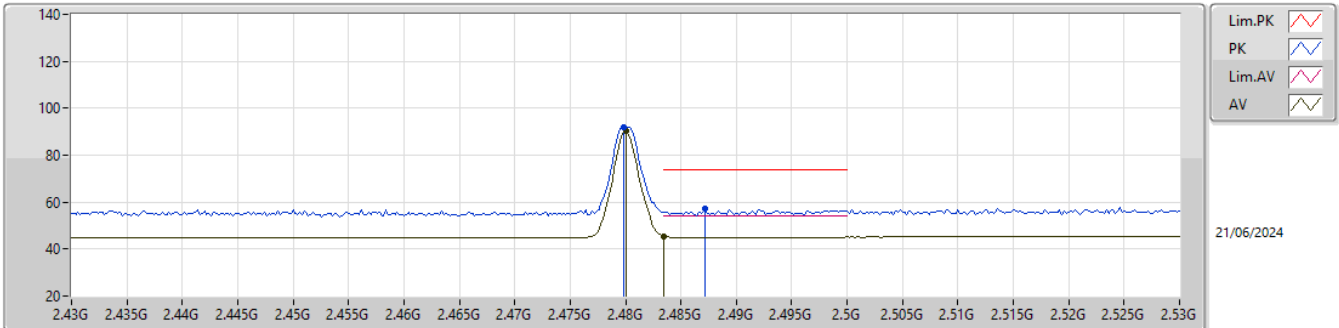


EUT_Y_1TX
Setting 5
02-E-V-1

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	4.9052G	49.85	74.00	-24.15	38.97	3	Horizontal	10	2.20	-	33.31	8.19	30.62			
AV	4.9196G	36.29	54.00	-17.71	25.35	3	Horizontal	10	2.20	-	33.34	8.21	30.61			
PK	7.3252G	51.93	74.00	-22.07	38.23	3	Horizontal	274	1.03	-	36.50	9.32	32.12			
AV	7.3204G	39.12	54.00	-14.88	25.44	3	Horizontal	274	1.03	-	36.48	9.32	32.12			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

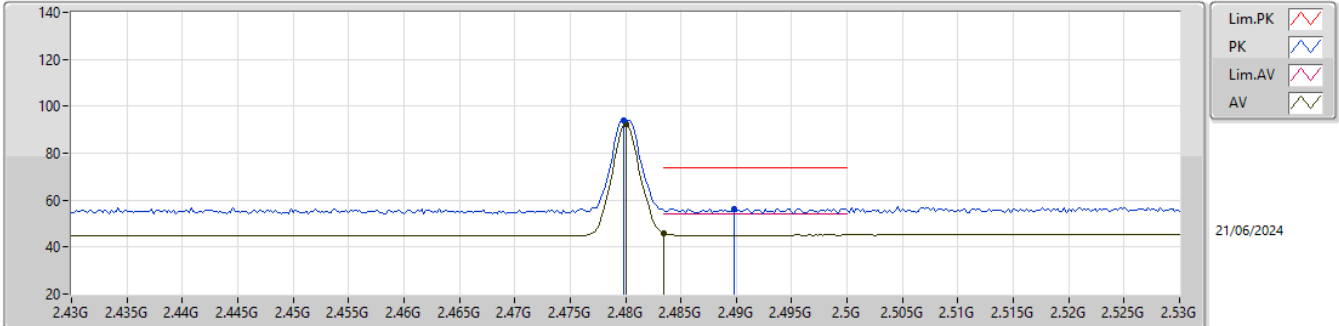


EUT_Y_1TX
Setting 5
02-E-V-1

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	2.4798G	91.91	Inf	-Inf	58.73	3	Vertical	181	1.68	-	28.60	4.58	-			
AV	2.48G	90.28	Inf	-Inf	57.10	3	Vertical	181	1.68	-	28.60	4.58	-			
PK	2.4872G	57.10	74.00	-16.90	23.91	3	Vertical	181	1.68	-	28.60	4.59	-			
AV	2.4835G	45.51	54.00	-8.49	12.33	3	Vertical	181	1.68	-	28.60	4.58	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

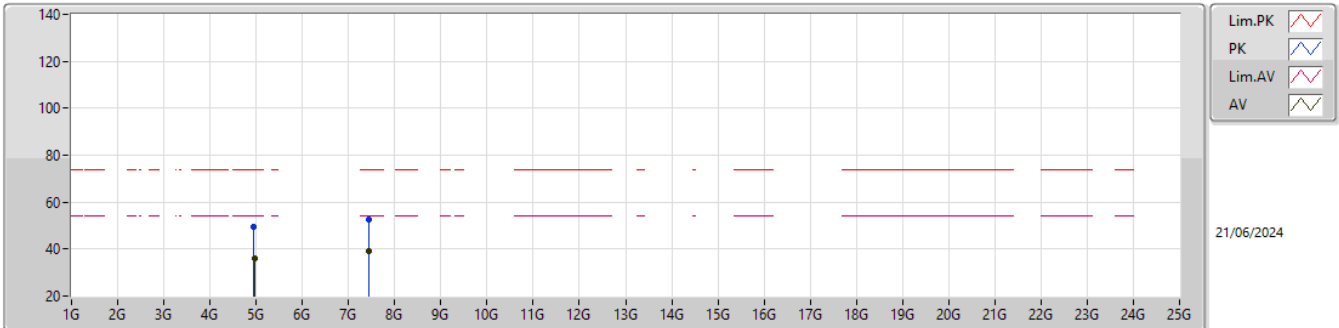


EUT_Y_1TX
Setting 5
02-E-V-1

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	2.4798G	94.12	Inf	-Inf	60.94	3	Horizontal	253	2.75	-	28.60	4.58	-			
AV	2.48G	92.50	Inf	-Inf	59.32	3	Horizontal	253	2.75	-	28.60	4.58	-			
PK	2.4898G	56.39	74.00	-17.61	23.20	3	Horizontal	253	2.75	-	28.60	4.59	-			
AV	2.4835G	45.77	54.00	-8.23	12.59	3	Horizontal	253	2.75	-	28.60	4.58	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

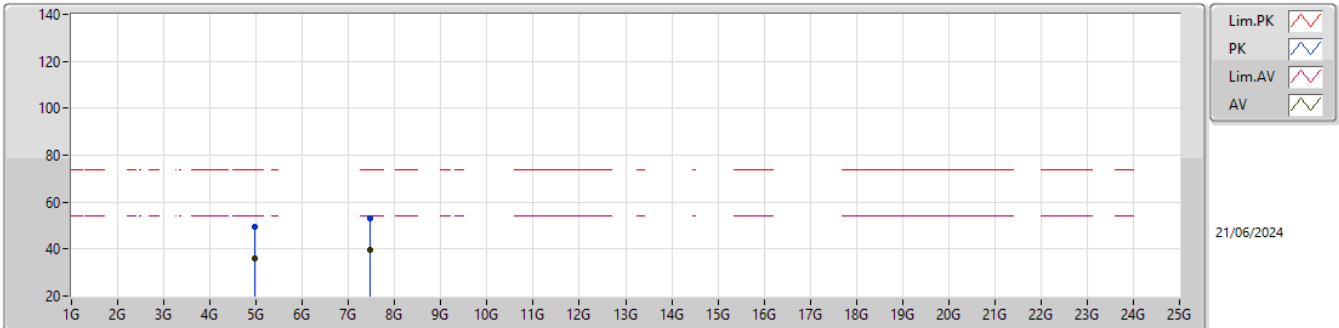


EUT_Y_1TX
Setting 5
02-E-V-1

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	4.94626G	49.53	74.00	-24.47	38.50	3	Vertical	132	1.23	-	33.39	8.24	30.60			
AV	4.97374G	35.87	54.00	-18.13	24.77	3	Vertical	132	1.23	-	33.40	8.28	30.58			
PK	7.4451G	52.50	74.00	-21.50	38.85	3	Vertical	194	2.78	-	36.60	9.24	32.19			
AV	7.45014G	38.90	54.00	-15.10	25.25	3	Vertical	194	2.78	-	36.60	9.24	32.19			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX



EUT_Y_1TX
Setting 5
02-E-V-1

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	4.957G	49.59	74.00	-24.41	38.52	3	Horizontal	249	1.27	-	33.40	8.26	30.59			
AV	4.9672G	35.92	54.00	-18.08	24.83	3	Horizontal	249	1.27	-	33.40	8.27	30.58			
PK	7.4658G	52.99	74.00	-21.01	39.40	3	Horizontal	73	1.70	-	36.57	9.22	32.20			
AV	7.4552G	39.40	54.00	-14.60	25.77	3	Horizontal	73	1.70	-	36.59	9.23	32.19			