

FCC Radio Test Report

FCC ID : HBW-GDOCAMV1
Equipment : Garage Camera Module
Brand Name : myQ
Model Name : GDOCAMV1
Applicant : The Chamberlain Group LLC
300 Windsor Drive Oak Brook, IL 60523 USA
Manufacturer : The Chamberlain Group, LLC
300 Windsor Drive Oak Brook, IL 60523 USA
Standard : 47 CFR FCC Part 15.247

The product was received on Dec. 10, 2024, and testing was started from Dec. 18, 2024 and completed on May 06, 2025. We, SPORTON INTERNATIONAL INC. Hsinhua 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. Hsinhua Laboratory, the test report shall not be reproduced except in full.


Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



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Summary of Test Result

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

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and explanations:

None

Reviewed by: Ben Tseng

Report Producer: Amber Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

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

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-LE(1Mbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(2Mbps)	2.0	1TX

Note:

- ♦ Bluetooth LE uses a GFSK (1Mbps/2Mbps) modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support
1	Primax	12-91601CG01	PCB Antenna	I-PEX	2.4G+BT

Ant.	Gain (dBi)	
	2.4G	BT
1	3.31	3.31

Note 1: The EUT has one antenna.

For 2.4GHz function:

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

Ant. 1 could transmit/receive.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 1 could transmit/receive.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From DC Power supply		
EUT Function	☒ Point-to-multipoint	☐ Point-to-point	
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.: ...		
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.: ...		
☐	Other:		

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF (dB)	T (s)	VBW (Hz) 1/T
BT-LE(1Mbps)	0.637	1.96	398.438u	3k
BT-LE(2Mbps)	0.338	4.71	212.812u	10k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.1.5 Table for Multiple Listing

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

SKU	Description
1	shielding
2	non-shielding

The SKU 2 configuration was selected as the main model to perform all test items. The SKU 1 configuration performed the radiation emission below 1 GHz only.

1.2 Testing Applied Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013

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

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

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Andy Wang	21.3~21.8℃ / 53~57%	29/Dec/2024
☒ Wenhua 3rd. (TAF: 3785)	ADD: No. 58, Aly. 75, Ln. 564, Wenhua 3rd Rd., Guishan Dist. Taoyuan City 333, Taiwan (R.O.C.)			
	TEL: 886-3-327-0868			
Test site Designation No. TW0036 with FCC				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
Radiated	03CH25-HY	Rian Chung	19.1~20.9℃ / 51~54%	18/Dec/2024~06/May/2025
RF Conducted	TH06-HY	Johnny Yu	23.4~23.9℃ / 52~55%	19/Dec/2024, 05/May/2025

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
AC Power-line Conducted Emissions	4.53 dB	Confidence levels of 95%
Bandwidth	3 MHz	Confidence levels of 95%
Maximum Conducted Output Power	2 dB	Confidence levels of 95%
Power Spectral Density	2 dB	Confidence levels of 95%
Emissions in Non-restricted Frequency Bands	0.14 dB	Confidence levels of 95%
Emissions in Restricted Frequency Bands	4.8 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software Version	Bluetooth RF Test Tool
Mode	Power Setting
BT-LE(1Mbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default
BT-LE(2Mbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	DC power supply Mode

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

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	DC power supply Mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	

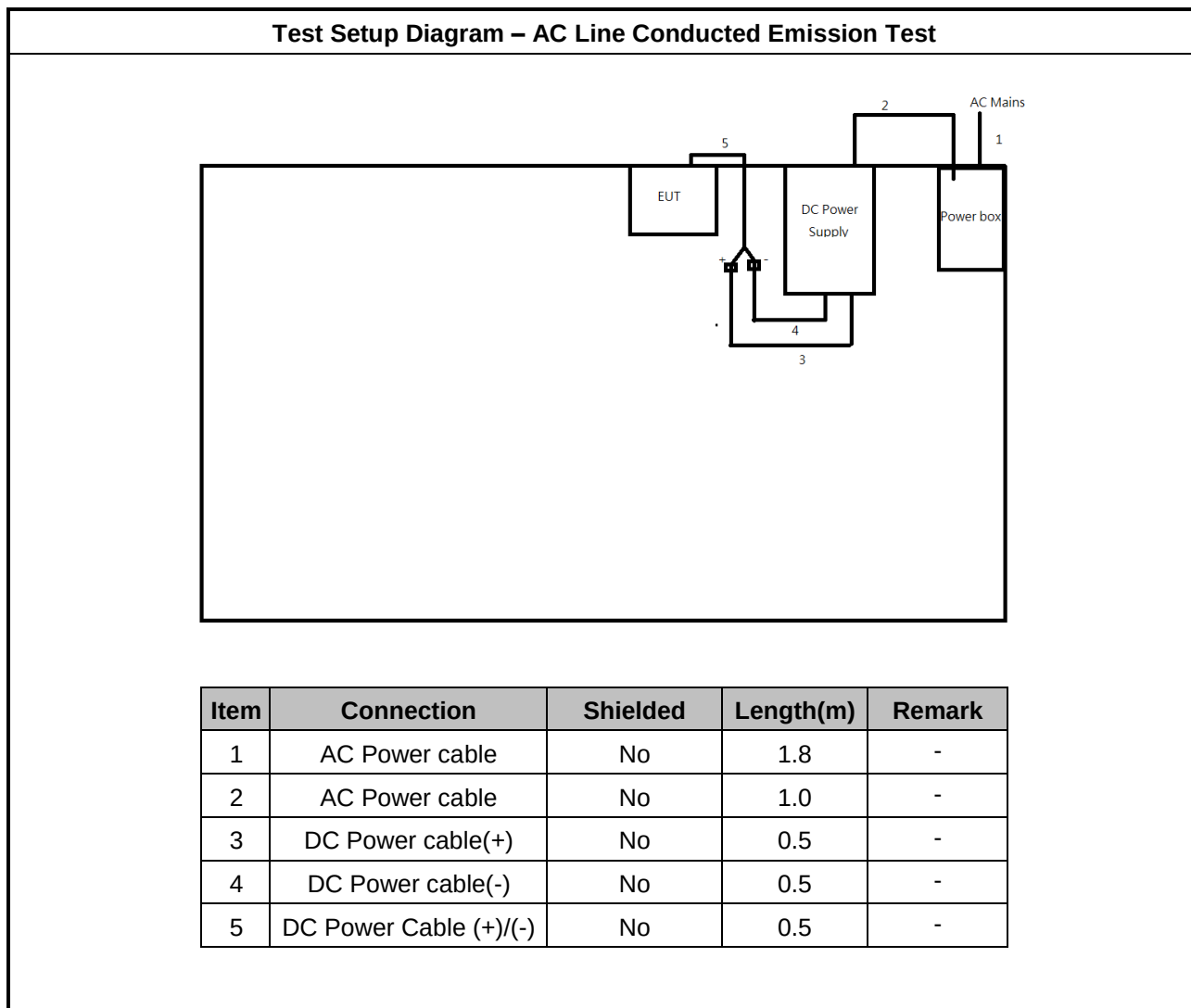
2.3 Support Equipment

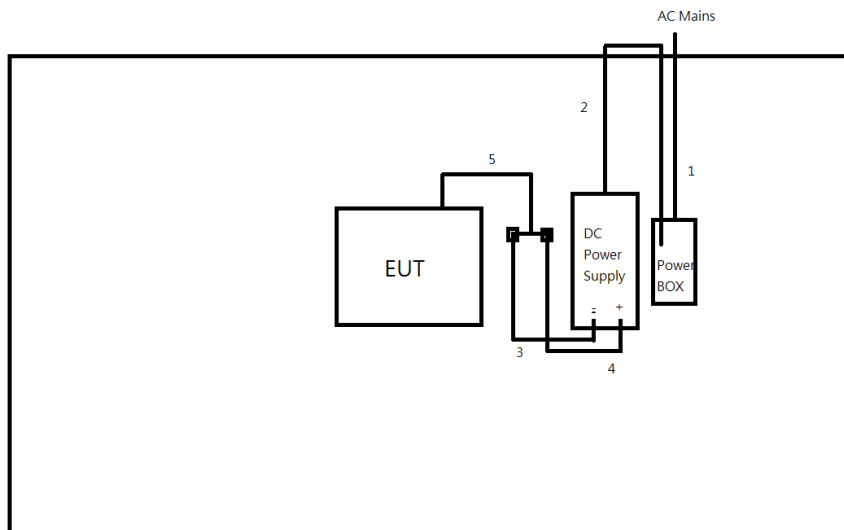
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	DC power cable	MiSUMi	WTN1228-RED	-	-
2	DC power cable	MiSUMi	WTN1228-BLACK	-	-
3	AC Power cable	Power sync	TPCPHN0006	-	-
4	DC Power Supply	GW	GPS-3030DD	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	Fixture	Sporton	Sporton	-	-

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	DC power cable	MiSUMi	WTN1228-RED	-	-
2	DC power cable	MiSUMi	WTN1228-BLACK	-	-
3	AC Power cable	Power sync	TPCPHN0006	-	-
4	DC Power Supply	GW	GPS-3030DD	-	-

2.4 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	AC Power cable	No	1.0	-
3	DC Power cable(+)	No	0.5	-
4	DC Power cable(-)	No	0.5	-
5	DC Power Cable (+)/(-)	No	0.5	-

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

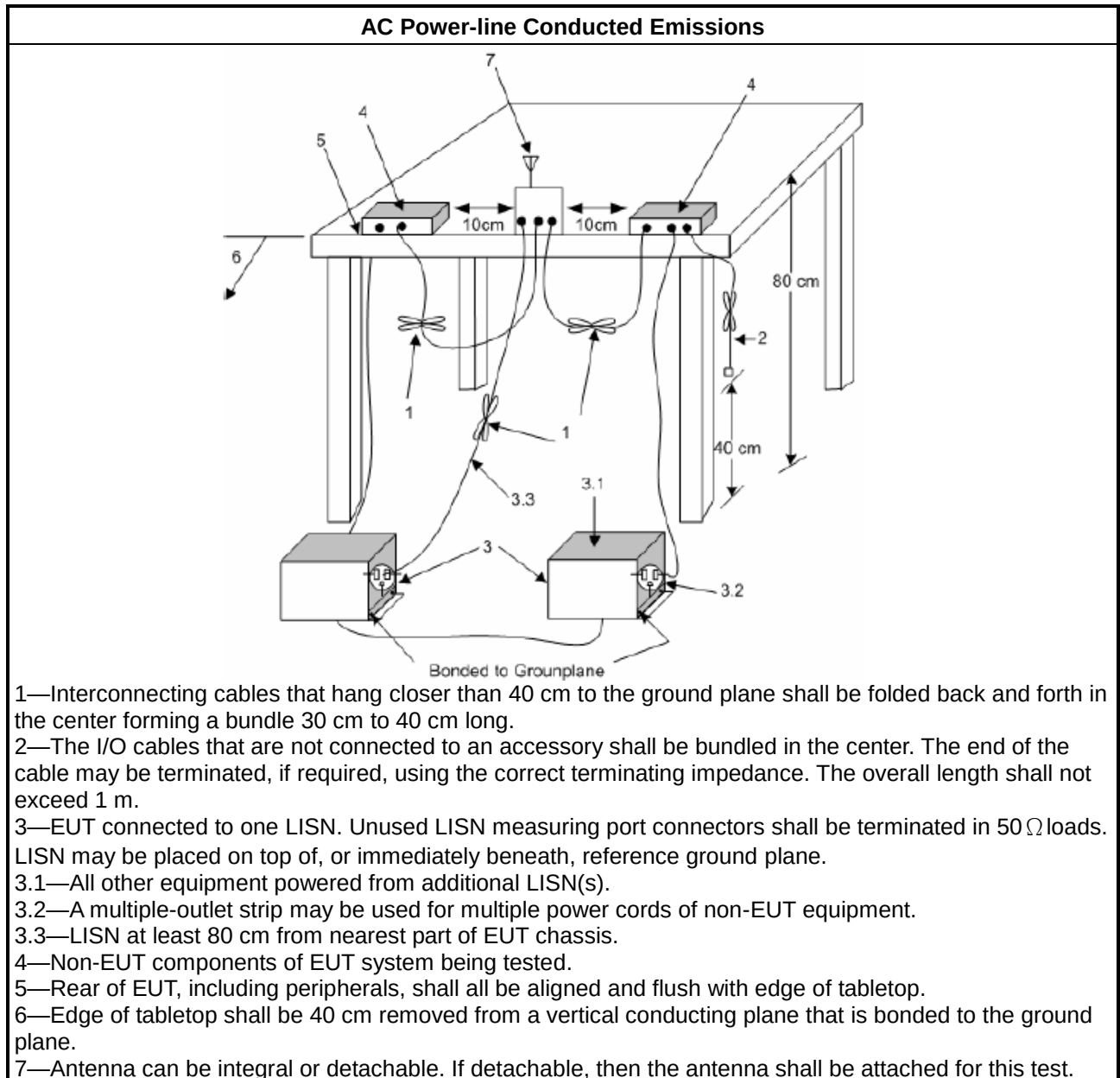
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 foray power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

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

3.1.5 Test Setup



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 $\geq$ 500 kHz.

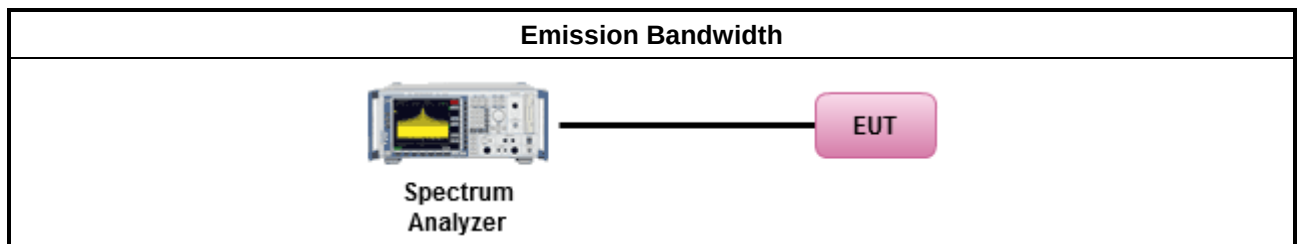
3.2.2 Measuring Instruments

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 KDB 558074, clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
☐	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
☐	Refer as ANSI C63.10, clause 6.9.3 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
e.i.r.p. Power Limit:	
	2400-2483.5 MHz Band
	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	Smart antenna system (SAS)
	- Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ 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.	

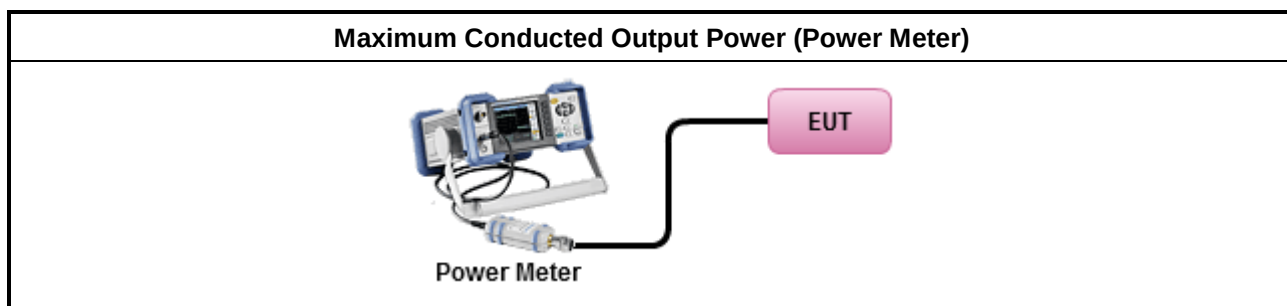
3.3.2 Measuring Instruments

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 KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
☐	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
☐	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
Maximum Average Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
☒	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as 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

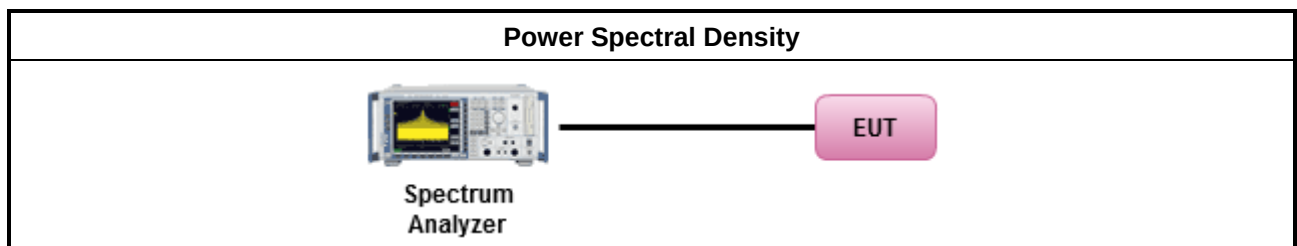
3.4.2 Measuring Instruments

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 KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
For conducted measurement.
If The EUT supports multiple transmit chains using options given below:
Measure and sum the spectra across the outputs. Refer as 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.

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 (dB)
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 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 level.	

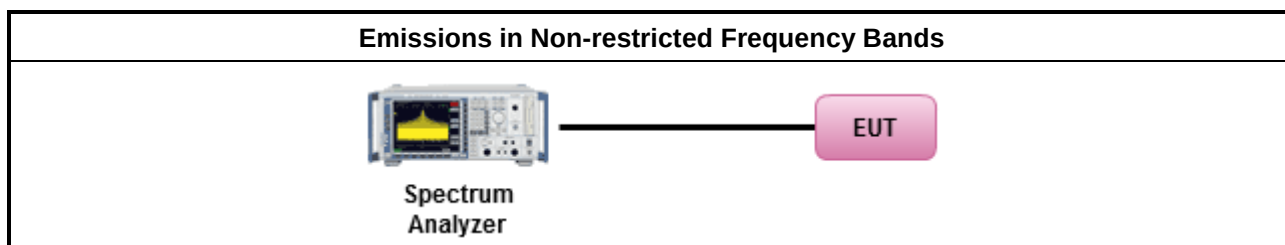
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency 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

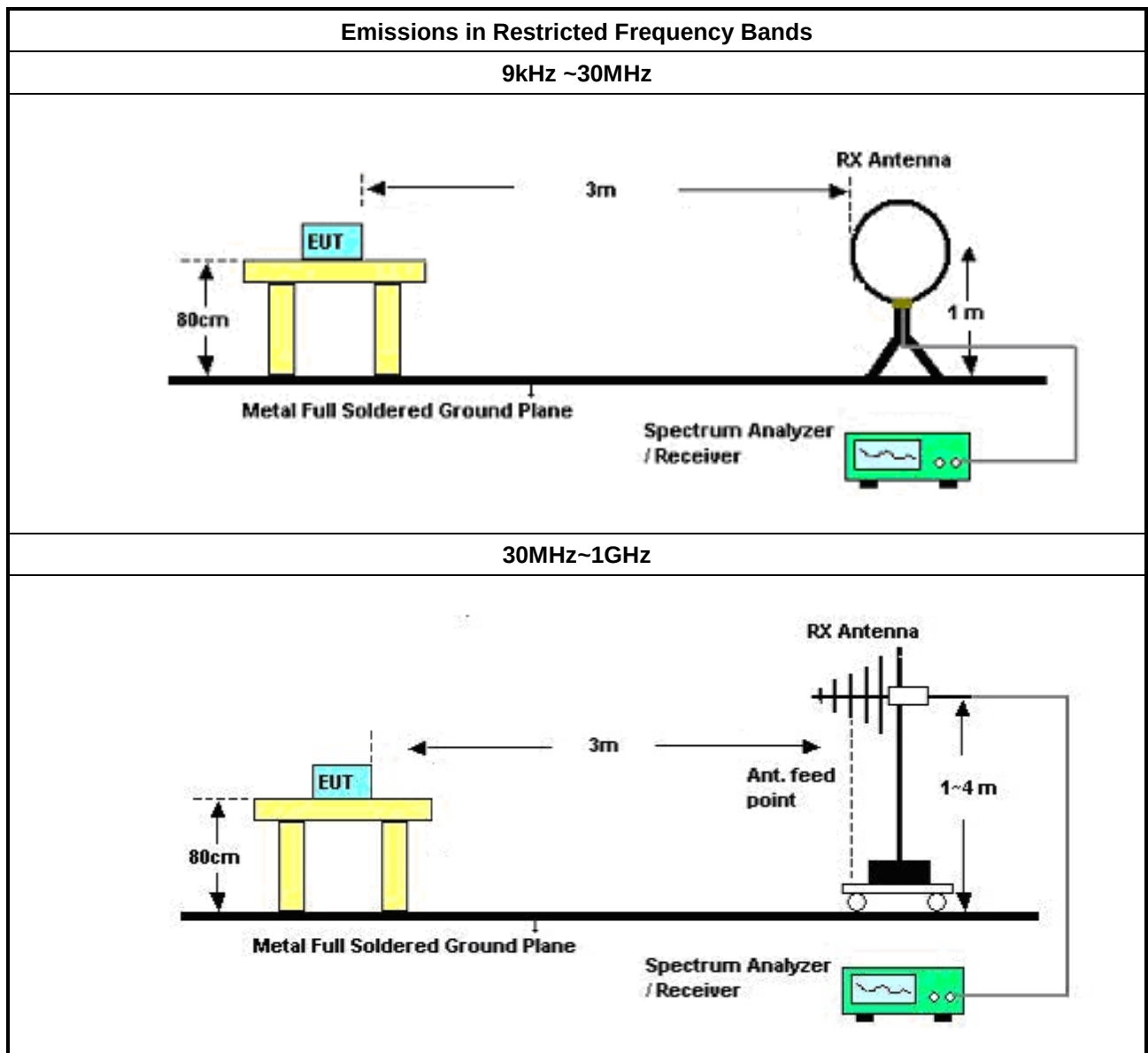
Test Method	
	The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].
	Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	For the transmitter unwanted emissions shall be measured using following options below:
	Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
	For the transmitter band-edge emissions shall be measured using following options below:
	Refer as KDB 558074 clause 8.7.1, 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 KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
	Use the following spectrum analyzer settings:
	Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
	KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
	Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

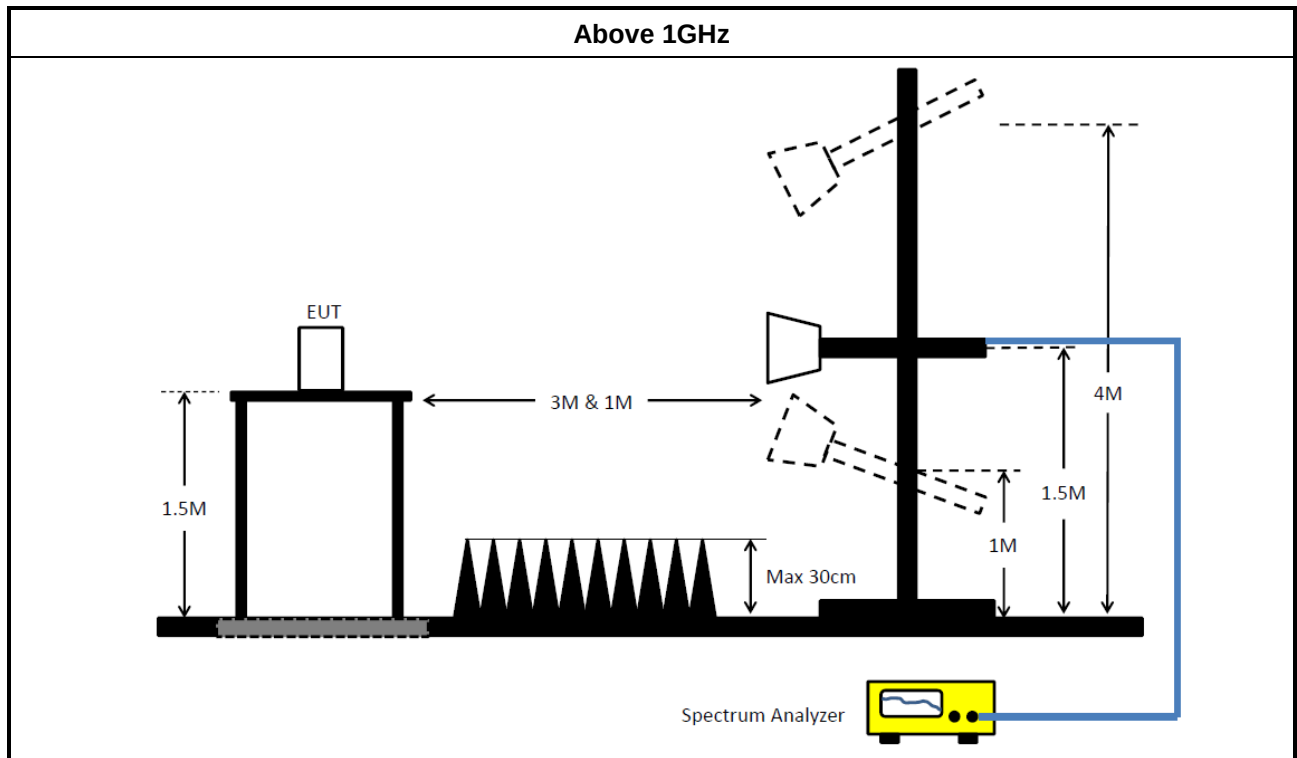
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.6.5 Test Setup





3.6.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	ROHDE & SCHWARZ	ESR3	102051	9kHz ~ 3.6GHz	17/May/2024	16/May/2025
Two-Line V-Network	ROHDE & SCHWARZ	ENV 216	101274	9kHz ~ 30MHz	18/Jun/2024	17/Jun/2025
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	27/Feb/2024	26/Feb/2025
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	17/Oct/2024	16/Oct/2025
Software	Sporton	SENSE-EMI	V5.11.3	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	28/Oct/2024	27/Oct/2025
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	16/Oct/2024	15/Oct/2025
Power Meter	Anritsu	ML2495A	1124009	300MHz~40GHz	28/Mar/2025	27/Mar/2026
Power Meter	Anritsu	ML2495A	1124009	300MHz~40GHz	01/Apr/2024	31/Mar/2025
Pulse Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	28/Mar/2025	27/Mar/2026
Pulse Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	02/Apr/2024	01/Apr/2025
SENSE-15247_FS	Sporton	V5.11.18	N/A	N/A	N/A	N/A

**Instrument for Radiated Test**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH25-HY	30MHz~1GHz 3m	20/Jul/2024	19/Jul/2025
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH25-HY	1GHz~18GHz 3m	08/Aug/2024	07/Aug/2025
ESR7 EMI Test Receiver	ROHDE & SCHWARZ	ESR7	102956	9kHz~3.6GHz	27/Aug/2024	26/Aug/2025
Signal Analyzer	ROHDE&SCHWARZ	FSV3044	101410	10Hz~44GHz	18/Nov/2024	17/Nov/2025
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	19/Mar/2024	18/Mar/2025
Bilog Antenna & 6dB Attenuator	TESEQ & VGT	CBL 6111D & VFA 04002-06	63537/001	30MHz~1GHz	30/May/2024	29/May/2025
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02876	1GHz~18GHz	11/Jul/2024	10/Jul/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz~40GHz	04/Jun/2024	03/Jun/2025
RF Cable	HUBER+SUHNER	SUOFLEX 104	CB007	9kHz~1GHz	24/Apr/2024	23/Apr/2025
RF Cable	HUBER+SUHNER	SUOFLEX 104	CB007	1GHz~40GHz	23/Apr/2024	22/Apr/2025
RF Cable	HUBER+SUHNER	SUOFLEX 104	CB007	1GHz~40GHz	15/Feb/2025	14/Feb/2026
Preamplifier	SGH	PRAMP 903	20230515-1	25MHz~3GHz	24/May/2024	23/May/2025
Preamplifier	SGH	PRAMP 118-H	20230515-3	1GHz~18GHz	24/May/2024	23/May/2025
Amplifier	EM	EM18G40GA	060874	18GHz ~ 40GHz	15/Apr/2024	14/Apr/2025
Amplifier	EM	EM18G40GA	060887	18GHz ~ 40GHz	07/Oct/2024	06/Oct/2025
SENSE-15247-FS	Sporton	V5.11.20	NA	NA	NA	NA



Conducted Emissions at Powerline

Appendix A

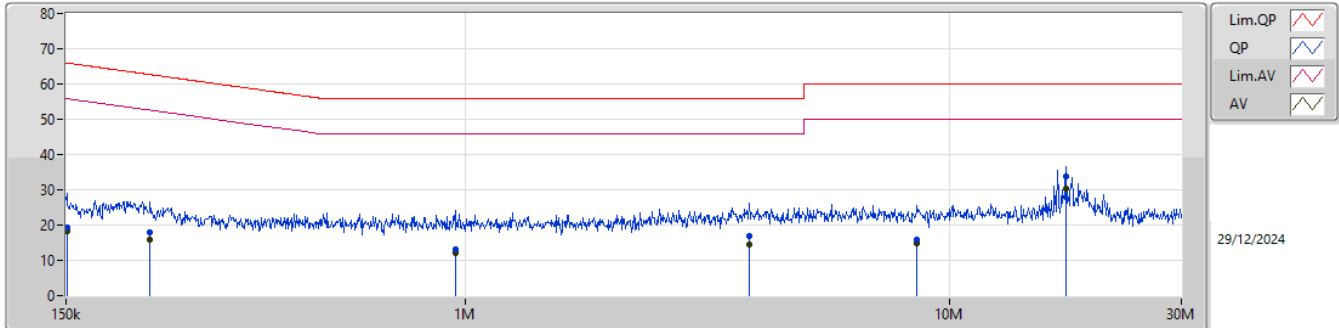
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	17.346M	30.99	50.00	-19.01	Neutral

Result

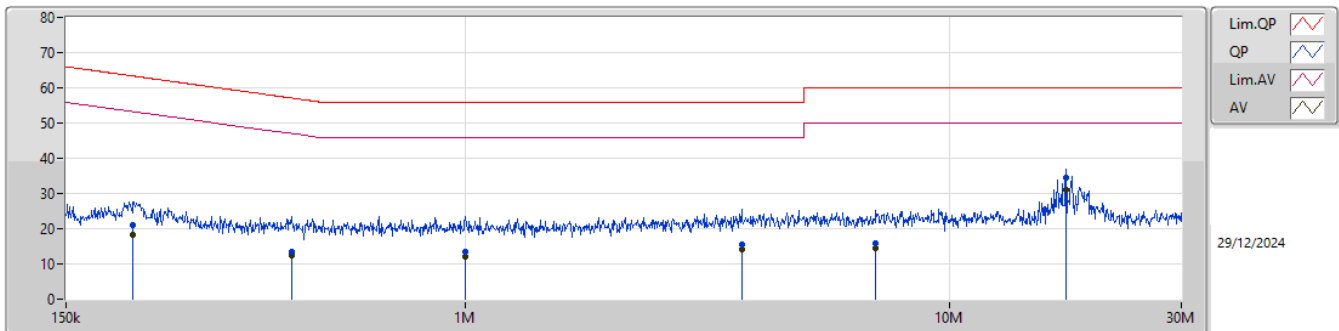
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	150.6k	19.35	65.96	-46.61	Line
Mode 1	Pass	AV	150.6k	18.18	55.96	-37.78	Line
Mode 1	Pass	QP	223.595k	17.99	62.69	-44.70	Line
Mode 1	Pass	AV	223.595k	15.73	52.69	-36.96	Line
Mode 1	Pass	QP	952.358k	13.23	56.00	-42.77	Line
Mode 1	Pass	AV	952.358k	12.07	46.00	-33.93	Line
Mode 1	Pass	QP	3.851M	16.80	56.00	-39.20	Line
Mode 1	Pass	AV	3.851M	14.59	46.00	-31.41	Line
Mode 1	Pass	QP	8.557M	16.01	60.00	-43.99	Line
Mode 1	Pass	AV	8.557M	14.84	50.00	-35.16	Line
Mode 1	Pass	QP	17.346M	33.87	60.00	-26.13	Line
Mode 1	Pass	AV	17.346M	30.42	50.00	-19.58	Line
Mode 1	Pass	QP	206.437k	20.87	63.34	-42.47	Neutral
Mode 1	Pass	AV	206.437k	18.41	53.34	-34.93	Neutral
Mode 1	Pass	QP	437.246k	13.48	57.11	-43.63	Neutral
Mode 1	Pass	AV	437.246k	12.30	47.11	-34.81	Neutral
Mode 1	Pass	QP	999.091k	13.33	56.00	-42.67	Neutral
Mode 1	Pass	AV	999.091k	12.05	46.00	-33.95	Neutral
Mode 1	Pass	QP	3.715M	15.63	56.00	-40.37	Neutral
Mode 1	Pass	AV	3.715M	14.24	46.00	-31.76	Neutral
Mode 1	Pass	QP	7.037M	15.88	60.00	-44.12	Neutral
Mode 1	Pass	AV	7.037M	14.62	50.00	-35.38	Neutral
Mode 1	Pass	QP	17.346M	34.46	60.00	-25.54	Neutral
Mode 1	Pass	AV	17.346M	30.99	50.00	-19.01	Neutral

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT						
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)						
QP	150.6k	19.35	65.96	-46.61	19.70	Line	-	-0.35	9.66	0.07	9.97						
AV	150.6k	18.18	55.96	-37.78	19.70	Line	-	-1.52	9.66	0.07	9.97						
QP	223.595k	17.99	62.69	-44.70	19.71	Line	-	-1.72	9.65	0.09	9.97						
AV	223.595k	15.73	52.69	-36.96	19.71	Line	-	-3.98	9.65	0.09	9.97						
QP	952.358k	13.23	56.00	-42.77	19.73	Line	-	-6.50	9.66	0.09	9.98						
AV	952.358k	12.07	46.00	-33.93	19.73	Line	-	-7.66	9.66	0.09	9.98						
QP	3.851M	16.80	56.00	-39.20	19.74	Line	-	-2.94	9.69	0.07	9.98						
AV	3.851M	14.59	46.00	-31.41	19.74	Line	-	-5.15	9.69	0.07	9.98						
QP	8.557M	16.01	60.00	-43.99	19.74	Line	-	-3.73	9.71	0.05	9.98						
AV	8.557M	14.84	50.00	-35.16	19.74	Line	-	-4.90	9.71	0.05	9.98						
QP	17.346M	33.87	60.00	-26.13	19.78	Line	-	14.09	9.69	0.11	9.98						
AV	17.346M	30.42	50.00	-19.58	19.78	Line	-	10.64	9.69	0.11	9.98						

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)							
QP	206.437k	20.87	63.34	-42.47	19.66	Neutral	-	1.21	9.60	0.09	9.97							
AV	206.437k	18.41	53.34	-34.93	19.66	Neutral	-	-1.25	9.60	0.09	9.97							
QP	437.246k	13.48	57.11	-43.63	19.70	Neutral	-	-6.22	9.60	0.12	9.98							
AV	437.246k	12.30	47.11	-34.81	19.70	Neutral	-	-7.40	9.60	0.12	9.98							
QP	999.091k	13.33	56.00	-42.67	19.68	Neutral	-	-6.35	9.61	0.09	9.98							
AV	999.091k	12.05	46.00	-33.95	19.68	Neutral	-	-7.63	9.61	0.09	9.98							
QP	3.715M	15.63	56.00	-40.37	19.67	Neutral	-	-4.04	9.62	0.07	9.98							
AV	3.715M	14.24	46.00	-31.76	19.67	Neutral	-	-5.43	9.62	0.07	9.98							
QP	7.037M	15.88	60.00	-44.12	19.68	Neutral	-	-3.80	9.64	0.06	9.98							
AV	7.037M	14.62	50.00	-35.38	19.68	Neutral	-	-5.06	9.64	0.06	9.98							
QP	17.346M	34.46	60.00	-25.54	19.76	Neutral	-	14.70	9.67	0.11	9.98							
AV	17.346M	30.99	50.00	-19.01	19.76	Neutral	-	11.23	9.67	0.11	9.98							

**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)	660k	1.043M	1M04F1D	617.5k	1.027M
BT-LE(2Mbps)	1.108M	2.066M	2M07F1D	755k	2.051M

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

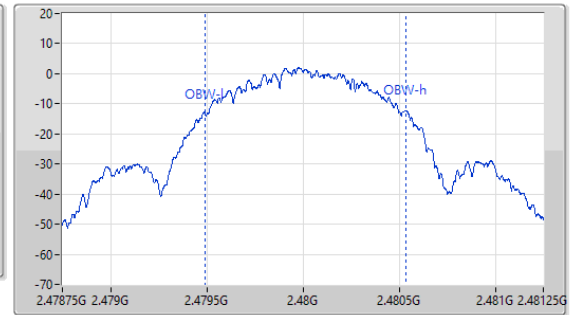
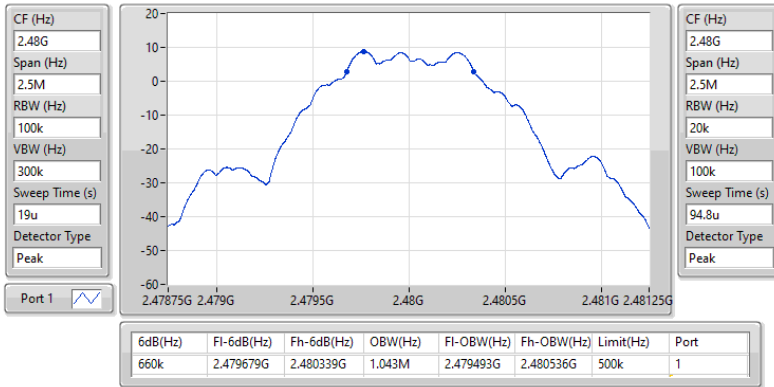
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	618.75k	1.027M
2440MHz	Pass	500k	617.5k	1.037M
2480MHz	Pass	500k	660k	1.043M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.108M	2.051M
2440MHz	Pass	500k	755k	2.066M
2480MHz	Pass	500k	860k	2.066M

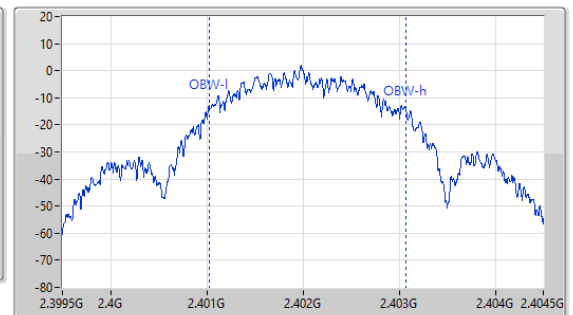
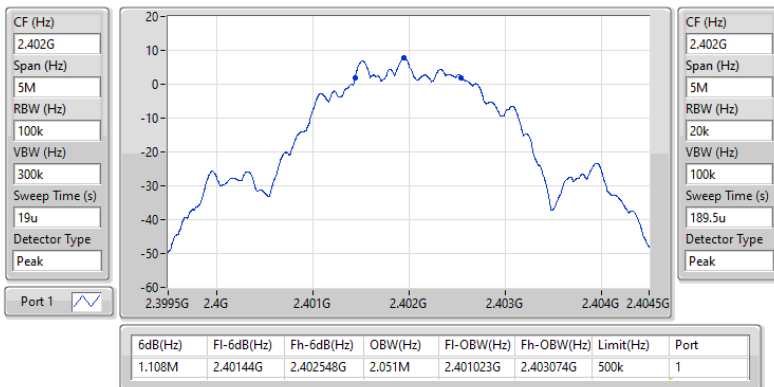
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

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

05/05/2025


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

19/12/2024





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	10.13	0.01030
BT-LE(2Mbps)	9.82	0.00959

**Result**

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.31	10.13	30.00
2440MHz	Pass	3.31	10.00	30.00
2480MHz	Pass	3.31	9.65	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.31	9.82	30.00
2440MHz	Pass	3.31	9.70	30.00
2480MHz	Pass	3.31	9.04	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-4.77
BT-LE(2Mbps)	-6.71

RBW = 3kHz;

**Result**

Mode	Result	DG (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.31	-4.77	8.00
2440MHz	Pass	3.31	-6.36	8.00
2480MHz	Pass	3.31	-6.24	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.31	-6.71	8.00
2440MHz	Pass	3.31	-8.05	8.00
2480MHz	Pass	3.31	-8.01	8.00

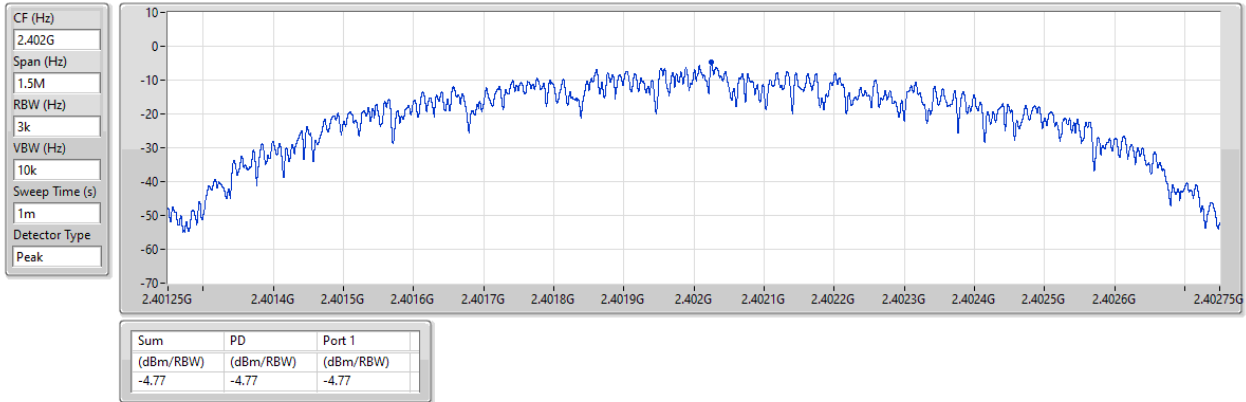
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
Inf = There's no restriction for the limit.

2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2402MHz

05/05/2025

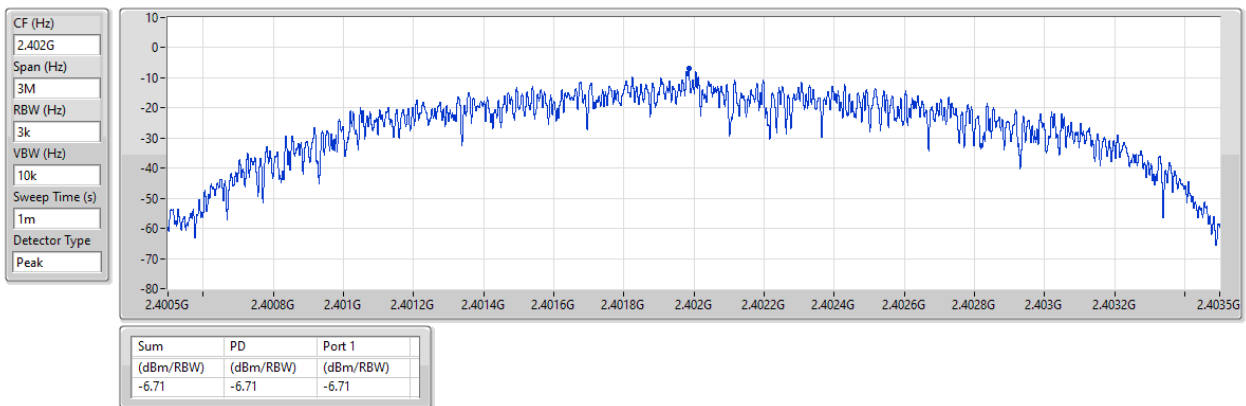


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2402MHz

19/12/2024





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	2.402G	10.23	-19.77	2.30833G	-54.86	2.39972G	-48.15	2.4G	-49.74	2.50094G	-54.22	16.21512G	-40.91	1
BT-LE(2Mbps)	Pass	2.402G	10.15	-19.85	1.9006G	-55.84	2.4G	-22.72	2.4G	-22.63	2.50226G	-53.96	16.2123G	-41.70	1

Result

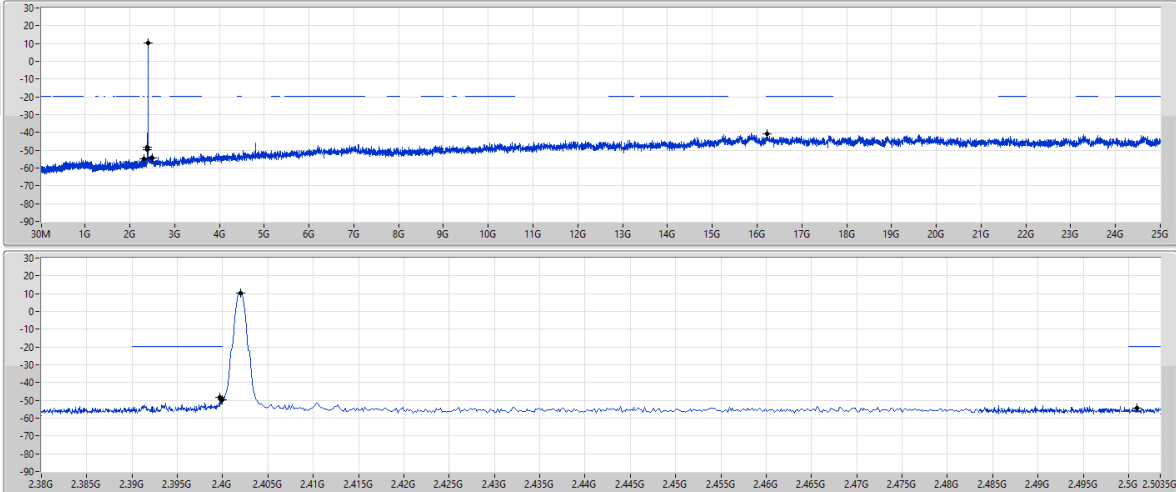
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	10.23	-19.77	2.30833G	-54.86	2.39972G	-48.15	2.4G	-49.74	2.50094G	-54.22	16.21512G	-40.91	1
2440MHz	Pass	2.402G	10.23	-19.77	847.8M	-55.59	2.39416G	-53.58	2.4G	-54.62	2.5017G	-53.59	17.18247G	-40.66	1
2480MHz	Pass	2.402G	10.23	-19.77	912.43M	-55.07	2.3996G	-53.34	2.4G	-56.47	2.50278G	-53.76	17.6099G	-40.84	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	10.15	-19.85	1.9006G	-55.84	2.4G	-22.72	2.4G	-22.63	2.50226G	-53.96	16.2123G	-41.70	1
2440MHz	Pass	2.402G	10.15	-19.85	2.0463G	-55.89	2.39956G	-54.40	2.4G	-55.78	2.50234G	-54.43	15.28714G	-42.59	1
2480MHz	Pass	2.402G	10.15	-19.85	2.3048G	-55.79	2.39332G	-52.58	2.4G	-56.55	2.50334G	-54.04	16.22918G	-40.81	1

2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2402MHz

05/05/2025

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

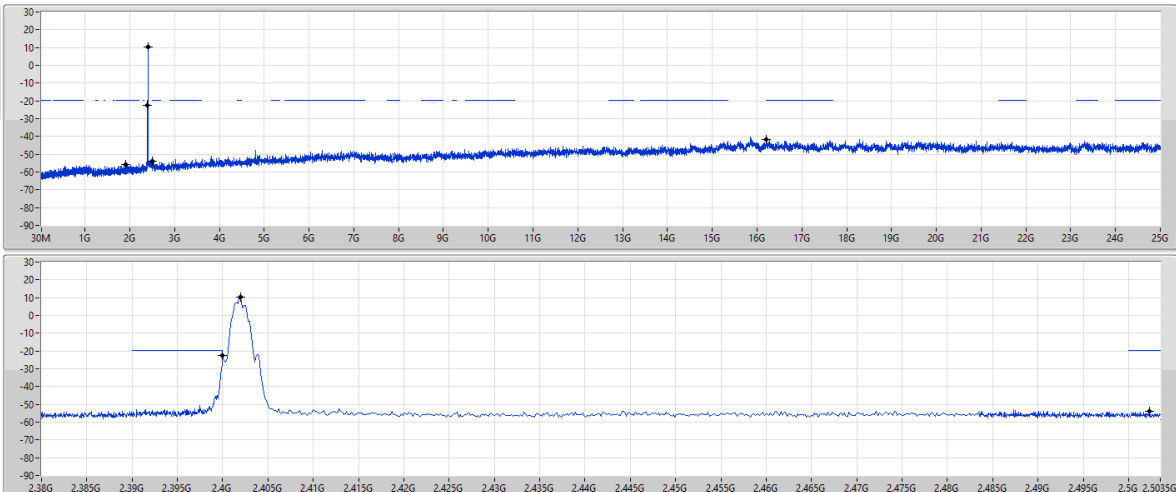
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402G	10.23	-19.77	2.30833G	-54.86	2.39972G	-48.15	2.4G	-49.74	2.50094G	-54.22	16.21512G	-40.91	1

2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

2402MHz

19/12/2024

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
2.402G	10.15	-19.85	1.9006G	-55.84	2.4G	-22.72	2.4G	-22.63	2.50226G	-53.96	16.2123G	-41.70	1



Summary

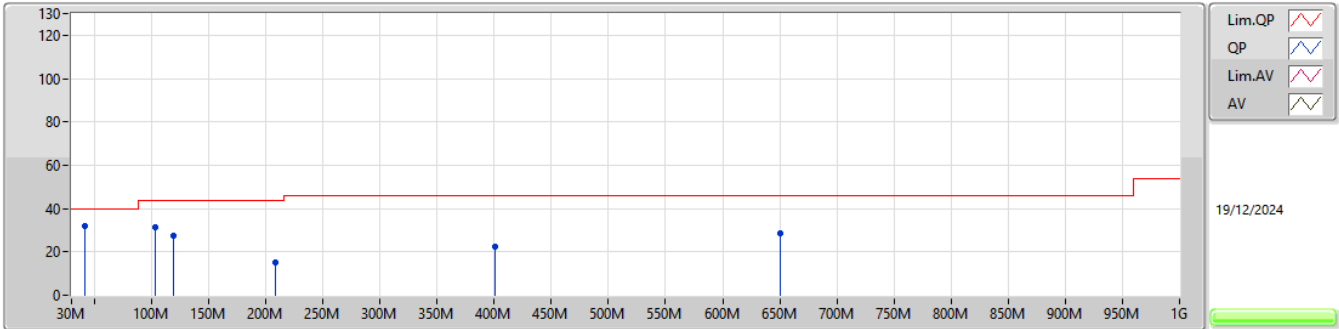
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	PK	41.64M	32.07	40.00	-7.93	3	Vertical	360	1.00

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	41.64M	32.07	40.00	-7.93	3	Vertical	360	1.00
2440MHz	Pass	PK	103.72M	31.36	43.50	-12.14	3	Vertical	360	1.00
2440MHz	Pass	PK	119.24M	27.37	43.50	-16.13	3	Vertical	360	1.00
2440MHz	Pass	PK	208.48M	15.25	43.50	-28.25	3	Vertical	360	1.00
2440MHz	Pass	PK	400.54M	22.51	46.00	-23.49	3	Vertical	360	1.00
2440MHz	Pass	PK	650.8M	28.83	46.00	-17.17	3	Vertical	360	1.00
2440MHz	Pass	PK	41.64M	22.89	40.00	-17.11	3	Horizontal	0	1.00
2440MHz	Pass	PK	115.36M	25.49	43.50	-18.01	3	Horizontal	0	1.00
2440MHz	Pass	PK	183.26M	22.46	43.50	-21.04	3	Horizontal	0	1.00
2440MHz	Pass	PK	235.64M	26.35	46.00	-19.65	3	Horizontal	0	1.00
2440MHz	Pass	PK	400.54M	27.01	46.00	-18.99	3	Horizontal	0	1.00
2440MHz	Pass	PK	714.82M	31.57	46.00	-14.43	3	Horizontal	0	1.00

2.4-2.4835GHz_BT-LE(2Mbps)

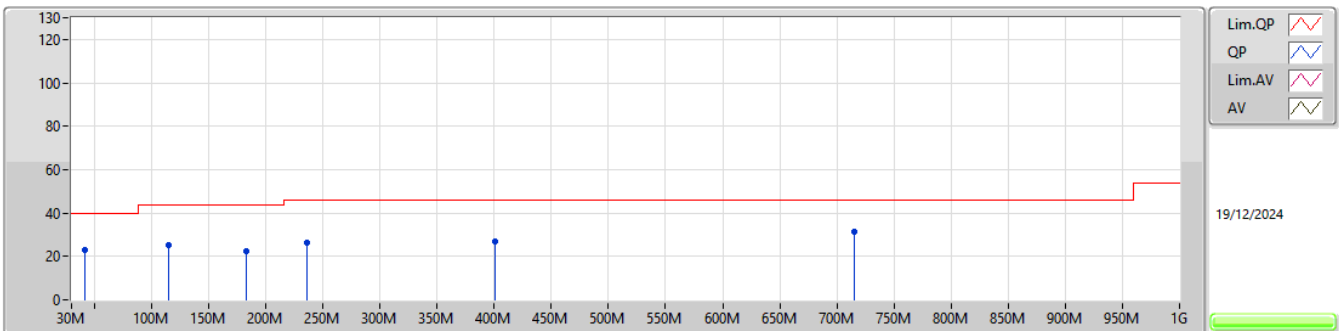
2440MHz_DC source supply



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	41.64M	32.07	40.00	-7.93	-25.05	3	Vertical	360	1.00	57.12	18.96	0.46	44.47
PK	103.72M	31.36	43.50	-12.14	-27.20	3	Vertical	360	1.00	58.56	16.51	0.82	44.53
PK	119.24M	27.37	43.50	-16.13	-26.21	3	Vertical	360	1.00	53.58	17.51	0.83	44.55
PK	208.48M	15.25	43.50	-28.25	-28.00	3	Vertical	360	1.00	43.25	15.33	1.13	44.46
PK	400.54M	22.51	46.00	-23.49	-20.57	3	Vertical	360	1.00	43.08	22.00	1.45	44.02
PK	650.8M	28.83	46.00	-17.17	-15.61	3	Vertical	360	1.00	44.44	26.46	1.79	43.86

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_DC source supply



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	41.64M	22.89	40.00	-17.11	-25.05	3	Horizontal	0	1.00	47.94	18.96	0.46	44.47
PK	115.36M	25.49	43.50	-18.01	-26.45	3	Horizontal	0	1.00	51.94	17.27	0.83	44.55
PK	183.26M	22.46	43.50	-21.04	-28.43	3	Horizontal	0	1.00	50.89	15.04	1.04	44.51
PK	235.64M	26.35	46.00	-19.65	-26.37	3	Horizontal	0	1.00	52.72	16.89	1.14	44.40
PK	400.54M	27.01	46.00	-18.99	-20.57	3	Horizontal	0	1.00	47.58	22.00	1.45	44.02
PK	714.82M	31.57	46.00	-14.43	-14.64	3	Horizontal	0	1.00	46.21	27.23	1.96	43.83



Summary

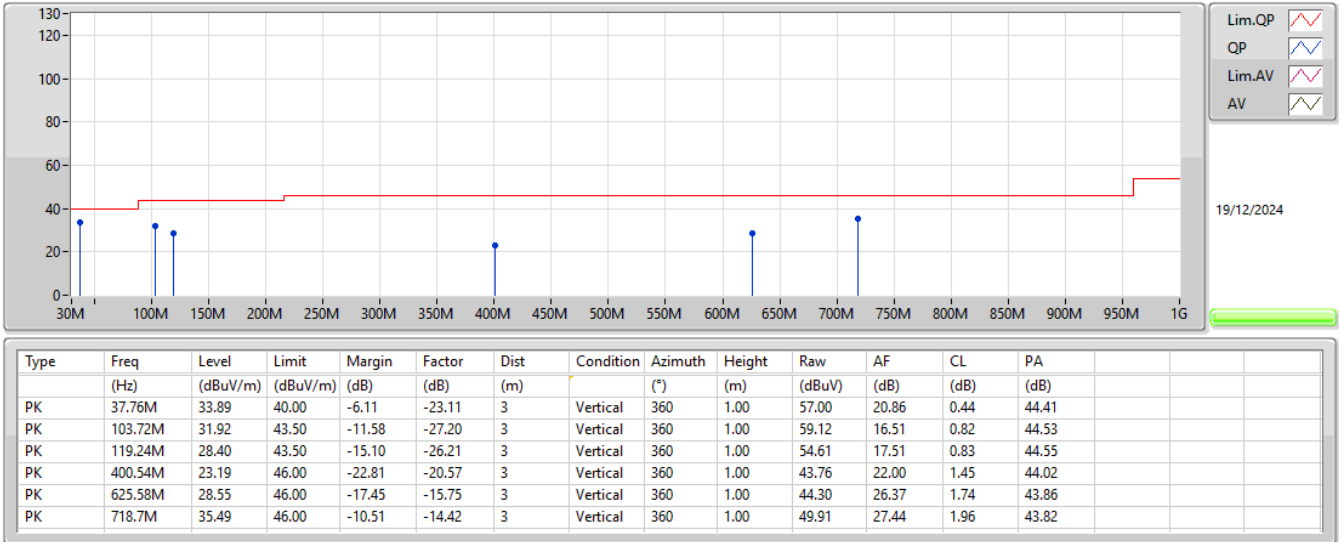
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	PK	37.76M	33.89	40.00	-6.11	3	Vertical	360	1.00

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	37.76M	33.89	40.00	-6.11	3	Vertical	360	1.00
2440MHz	Pass	PK	103.72M	31.92	43.50	-11.58	3	Vertical	360	1.00
2440MHz	Pass	PK	119.24M	28.40	43.50	-15.10	3	Vertical	360	1.00
2440MHz	Pass	PK	400.54M	23.19	46.00	-22.81	3	Vertical	360	1.00
2440MHz	Pass	PK	625.58M	28.55	46.00	-17.45	3	Vertical	360	1.00
2440MHz	Pass	PK	718.7M	35.49	46.00	-10.51	3	Vertical	360	1.00
2440MHz	Pass	PK	41.64M	24.97	40.00	-15.03	3	Horizontal	0	1.00
2440MHz	Pass	PK	119.24M	25.46	43.50	-18.04	3	Horizontal	0	1.00
2440MHz	Pass	PK	169.68M	19.71	43.50	-23.79	3	Horizontal	0	1.00
2440MHz	Pass	PK	260.86M	21.93	46.00	-24.07	3	Horizontal	0	1.00
2440MHz	Pass	PK	400.54M	27.88	46.00	-18.12	3	Horizontal	0	1.00
2440MHz	Pass	PK	633.34M	29.61	46.00	-16.39	3	Horizontal	0	1.00

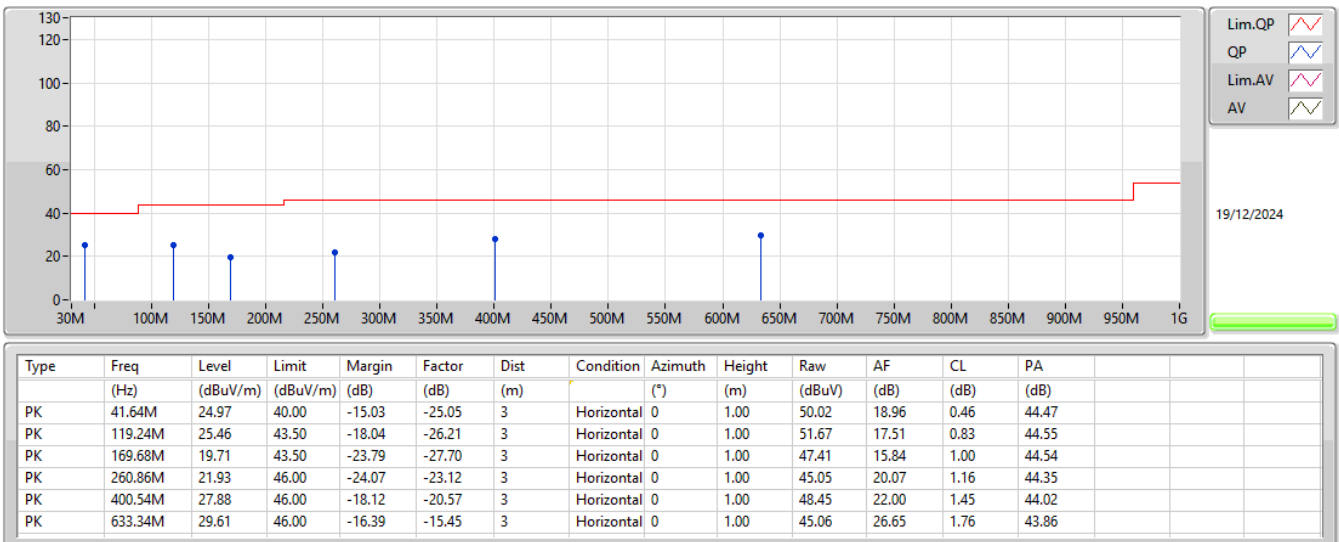
2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_DC source supply



2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_DC source supply





Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	2.491G	47.27	54.00	-6.73	3	Horizontal	348	1.50
BT-LE(2Mbps)	Pass	AV	2.4835G	46.12	54.00	-7.88	3	Vertical	45	1.15

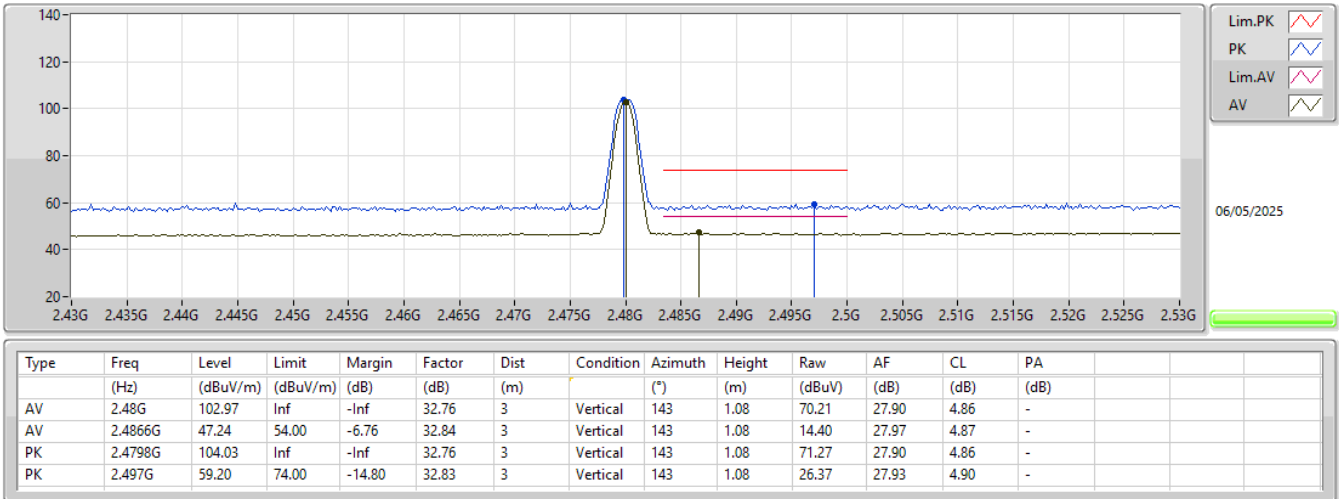
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3866G	46.38	54.00	-7.62	3	Vertical	142	1.01
2402MHz	Pass	AV	2.402G	103.35	Inf	-Inf	3	Vertical	142	1.01
2402MHz	Pass	PK	2.3768G	58.34	74.00	-15.66	3	Vertical	142	1.01
2402MHz	Pass	PK	2.4018G	104.40	Inf	-Inf	3	Vertical	142	1.01
2402MHz	Pass	AV	2.3752G	46.49	54.00	-7.51	3	Horizontal	290	2.76
2402MHz	Pass	AV	2.402G	105.35	Inf	-Inf	3	Horizontal	290	2.76
2402MHz	Pass	PK	2.3736G	59.05	74.00	-14.95	3	Horizontal	290	2.76
2402MHz	Pass	PK	2.4018G	106.39	Inf	-Inf	3	Horizontal	290	2.76
2402MHz	Pass	AV	4.80395G	42.50	54.00	-11.50	3	Vertical	328	2.49
2402MHz	Pass	PK	4.80444G	49.55	74.00	-24.45	3	Vertical	328	2.49
2402MHz	Pass	AV	4.80402G	38.94	54.00	-15.06	3	Horizontal	4	1.00
2402MHz	Pass	PK	4.80442G	47.29	74.00	-26.71	3	Horizontal	4	1.00
2404MHz	Pass	AV	2.3448G	46.15	54.00	-7.85	3	Vertical	169	1.00
2440MHz	Pass	AV	2.44G	99.96	Inf	-Inf	3	Vertical	169	1.00
2440MHz	Pass	AV	2.4936G	47.01	54.00	-6.99	3	Vertical	169	1.00
2440MHz	Pass	PK	2.3864G	58.77	74.00	-15.23	3	Vertical	169	1.00
2440MHz	Pass	PK	2.4404G	100.97	Inf	-Inf	3	Vertical	169	1.00
2440MHz	Pass	PK	2.4928G	59.07	74.00	-14.93	3	Vertical	169	1.00
2440MHz	Pass	AV	2.3616G	46.21	54.00	-7.79	3	Horizontal	290	2.61
2440MHz	Pass	AV	2.44G	103.37	Inf	-Inf	3	Horizontal	290	2.61
2440MHz	Pass	AV	2.4952G	47.23	54.00	-6.77	3	Horizontal	290	2.61
2440MHz	Pass	PK	2.3836G	58.51	74.00	-15.49	3	Horizontal	290	2.61
2440MHz	Pass	PK	2.4396G	104.41	Inf	-Inf	3	Horizontal	290	2.61
2440MHz	Pass	PK	2.4876G	59.40	74.00	-14.60	3	Horizontal	290	2.61
2440MHz	Pass	PK	4.88052G	48.76	74.00	-25.24	3	Vertical	40	1.70
2440MHz	Pass	AV	4.88009G	41.59	54.00	-12.41	3	Vertical	40	1.70
2440MHz	Pass	PK	7.31974G	50.80	74.00	-23.20	3	Vertical	230	1.29
2440MHz	Pass	AV	7.32047G	39.80	54.00	-14.20	3	Vertical	230	1.29
2440MHz	Pass	AV	4.88013G	39.37	54.00	-14.63	3	Horizontal	41	1.00
2440MHz	Pass	AV	7.32067G	39.91	54.00	-14.09	3	Horizontal	271	1.96
2440MHz	Pass	PK	4.88012G	47.64	74.00	-26.36	3	Horizontal	41	1.00
2440MHz	Pass	PK	7.32048G	50.76	74.00	-23.24	3	Horizontal	271	1.96
2480MHz	Pass	AV	2.48G	102.97	Inf	-Inf	3	Vertical	143	1.08
2480MHz	Pass	AV	2.4866G	47.24	54.00	-6.76	3	Vertical	143	1.08
2480MHz	Pass	PK	2.4798G	104.03	Inf	-Inf	3	Vertical	143	1.08
2480MHz	Pass	PK	2.497G	59.20	74.00	-14.80	3	Vertical	143	1.08
2480MHz	Pass	AV	2.48G	103.71	Inf	-Inf	3	Horizontal	348	1.50
2480MHz	Pass	AV	2.491G	47.27	54.00	-6.73	3	Horizontal	348	1.50
2480MHz	Pass	PK	2.4798G	104.74	Inf	-Inf	3	Horizontal	348	1.50
2480MHz	Pass	PK	2.4884G	59.23	74.00	-14.77	3	Horizontal	348	1.50
2480MHz	Pass	AV	4.96007G	43.55	54.00	-10.45	3	Vertical	45	1.82
2480MHz	Pass	AV	7.43951G	39.35	54.00	-14.65	3	Vertical	228	1.32
2480MHz	Pass	PK	4.96012G	50.69	74.00	-23.31	3	Vertical	45	1.82
2480MHz	Pass	PK	7.43938G	50.60	74.00	-23.40	3	Vertical	228	1.32
2480MHz	Pass	AV	4.96006G	40.35	54.00	-13.65	3	Horizontal	46	1.00
2480MHz	Pass	AV	7.43934G	39.22	54.00	-14.78	3	Horizontal	271	2.15
2480MHz	Pass	PK	4.96013G	48.63	74.00	-25.37	3	Horizontal	46	1.00
2480MHz	Pass	PK	7.43916G	50.26	74.00	-23.74	3	Horizontal	271	2.15
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3778G	45.11	54.00	-8.89	3	Vertical	42	1.49
2402MHz	Pass	AV	2.402G	100.64	Inf	-Inf	3	Vertical	42	1.49
2402MHz	Pass	PK	2.3834G	56.53	74.00	-17.47	3	Vertical	42	1.49
2402MHz	Pass	PK	2.402G	103.41	Inf	-Inf	3	Vertical	42	1.49
2402MHz	Pass	AV	2.3674G	45.33	54.00	-8.67	3	Horizontal	318	2.69
2402MHz	Pass	AV	2.402G	103.09	Inf	-Inf	3	Horizontal	318	2.69
2402MHz	Pass	PK	2.3584G	57.18	74.00	-16.82	3	Horizontal	318	2.69
2402MHz	Pass	PK	2.402G	105.93	Inf	-Inf	3	Horizontal	318	2.69
2402MHz	Pass	AV	4.805G	38.76	54.00	-15.24	3	Vertical	322	2.03
2402MHz	Pass	PK	4.80402G	47.64	74.00	-26.36	3	Vertical	322	2.03
2402MHz	Pass	AV	4.80306G	35.54	54.00	-18.46	3	Horizontal	0	1.05

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2402MHz	Pass	PK	4.8032G	45.64	74.00	-28.36	3	Horizontal	0	1.05
2440MHz	Pass	AV	2.3636G	44.87	54.00	-9.13	3	Vertical	45	1.65
2440MHz	Pass	AV	2.44G	100.48	Inf	-Inf	3	Vertical	45	1.65
2440MHz	Pass	AV	2.4896G	45.77	54.00	-8.23	3	Vertical	45	1.65
2440MHz	Pass	PK	2.3448G	57.50	74.00	-16.50	3	Vertical	45	1.65
2440MHz	Pass	PK	2.4396G	103.23	Inf	-Inf	3	Vertical	45	1.65
2440MHz	Pass	PK	2.496G	57.51	74.00	-16.49	3	Vertical	45	1.65
2440MHz	Pass	AV	2.3696G	44.90	54.00	-9.10	3	Horizontal	319	2.38
2440MHz	Pass	AV	2.44G	102.36	Inf	-Inf	3	Horizontal	319	2.38
2440MHz	Pass	AV	2.4848G	45.57	54.00	-8.43	3	Horizontal	319	2.38
2440MHz	Pass	PK	2.3536G	57.01	74.00	-16.99	3	Horizontal	319	2.38
2440MHz	Pass	PK	2.4396G	105.11	Inf	-Inf	3	Horizontal	319	2.38
2440MHz	Pass	PK	2.4852G	57.51	74.00	-16.49	3	Horizontal	319	2.38
2440MHz	Pass	AV	4.87908G	39.88	54.00	-14.12	3	Vertical	322	2.14
2440MHz	Pass	AV	7.31876G	40.32	54.00	-13.68	3	Vertical	261	2.76
2440MHz	Pass	PK	4.87912G	48.70	74.00	-25.30	3	Vertical	322	2.14
2440MHz	Pass	PK	7.32132G	50.77	74.00	-23.23	3	Vertical	261	2.76
2440MHz	Pass	AV	4.87898G	35.69	54.00	-18.31	3	Horizontal	284	2.96
2440MHz	Pass	AV	7.32118G	42.34	54.00	-11.66	3	Horizontal	253	2.00
2440MHz	Pass	PK	4.87992G	45.11	74.00	-28.89	3	Horizontal	284	2.96
2440MHz	Pass	PK	7.31984G	52.77	74.00	-21.23	3	Horizontal	253	2.00
2480MHz	Pass	AV	2.48G	99.30	Inf	-Inf	3	Vertical	45	1.15
2480MHz	Pass	AV	2.4835G	46.12	54.00	-7.88	3	Vertical	45	1.15
2480MHz	Pass	PK	2.4806G	101.94	Inf	-Inf	3	Vertical	45	1.15
2480MHz	Pass	PK	2.495G	57.49	74.00	-16.51	3	Vertical	45	1.15
2480MHz	Pass	AV	2.48G	100.82	Inf	-Inf	3	Horizontal	319	1.24
2480MHz	Pass	AV	2.491G	45.93	54.00	-8.07	3	Horizontal	319	1.24
2480MHz	Pass	PK	2.48G	103.48	Inf	-Inf	3	Horizontal	319	1.24
2480MHz	Pass	PK	2.4888G	57.31	74.00	-16.69	3	Horizontal	319	1.24
2480MHz	Pass	AV	4.96102G	38.61	54.00	-15.39	3	Vertical	257	1.43
2480MHz	Pass	AV	7.44126G	35.49	54.00	-18.51	3	Vertical	179	1.09
2480MHz	Pass	PK	4.95916G	48.14	74.00	-25.86	3	Vertical	257	1.43
2480MHz	Pass	PK	7.4388G	47.13	74.00	-26.87	3	Vertical	179	1.09
2480MHz	Pass	AV	4.9609G	35.29	54.00	-18.71	3	Horizontal	221	2.01
2480MHz	Pass	AV	7.43892G	35.01	54.00	-18.99	3	Horizontal	255	1.50
2480MHz	Pass	PK	4.96098G	46.08	74.00	-27.92	3	Horizontal	221	2.01
2480MHz	Pass	PK	7.44108G	46.68	74.00	-27.32	3	Horizontal	255	1.50

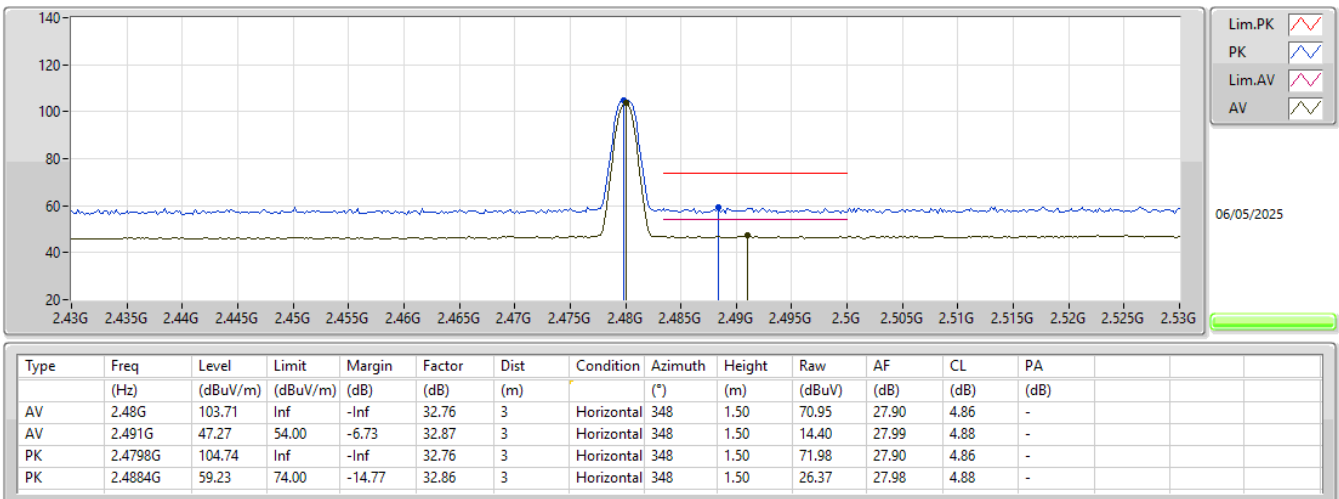
2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX



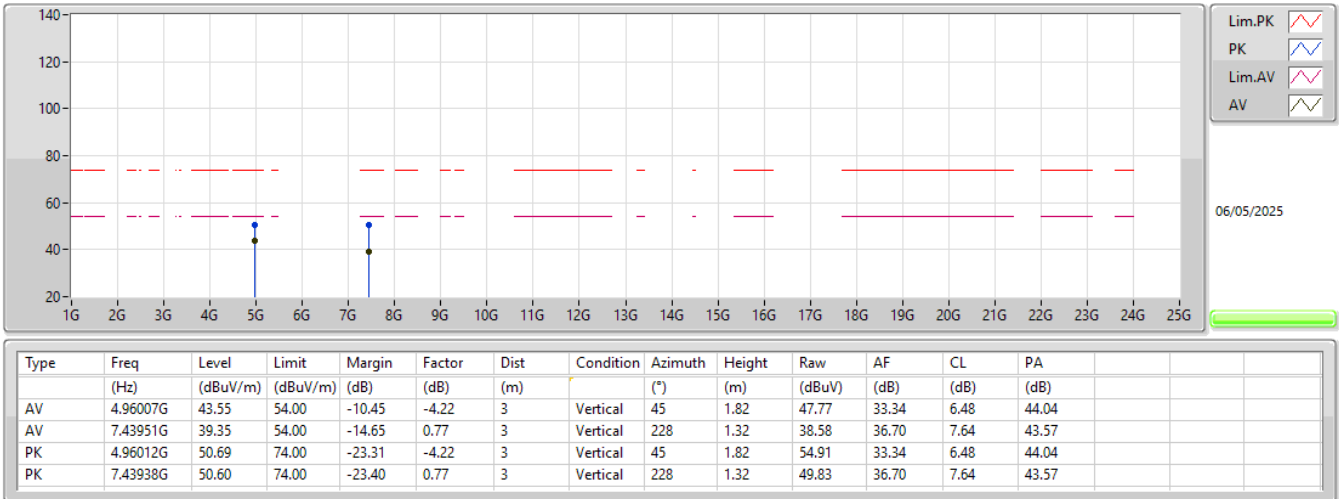
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2480MHz_TX



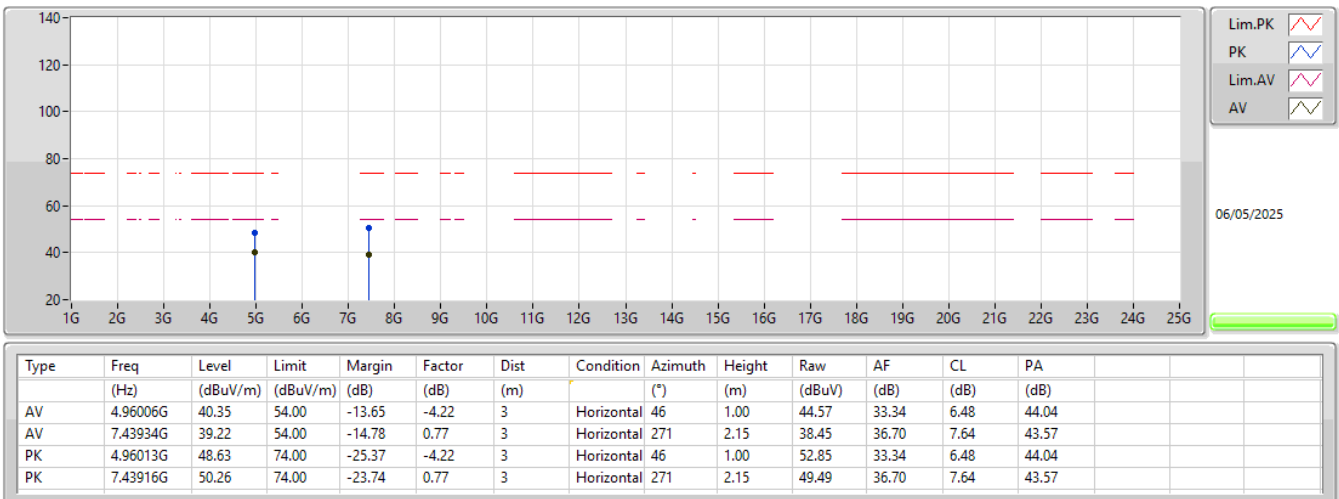
2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX



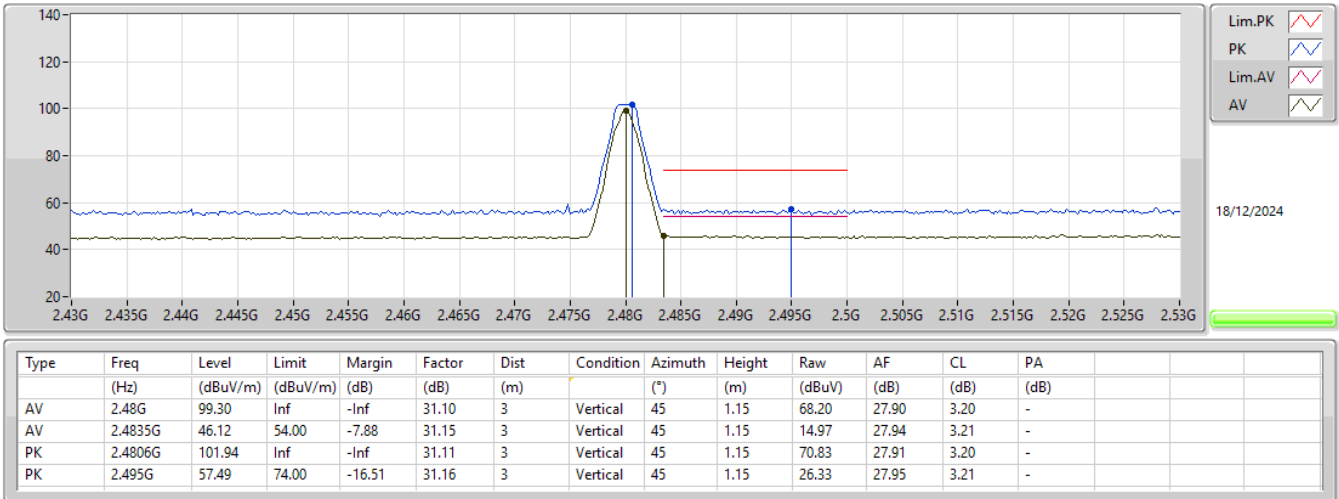
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2480MHz_TX



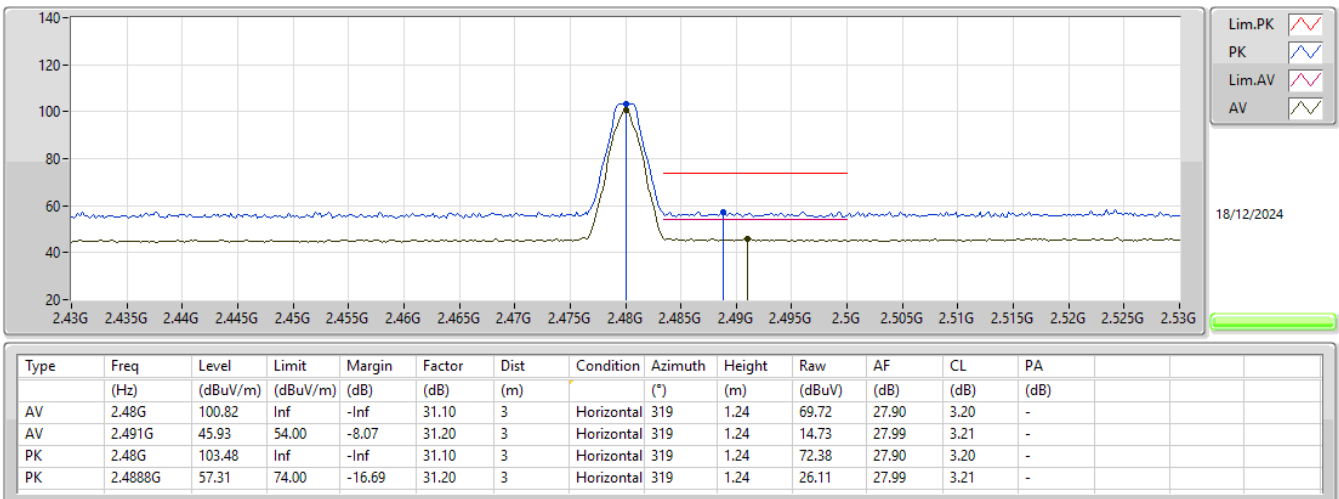
2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX



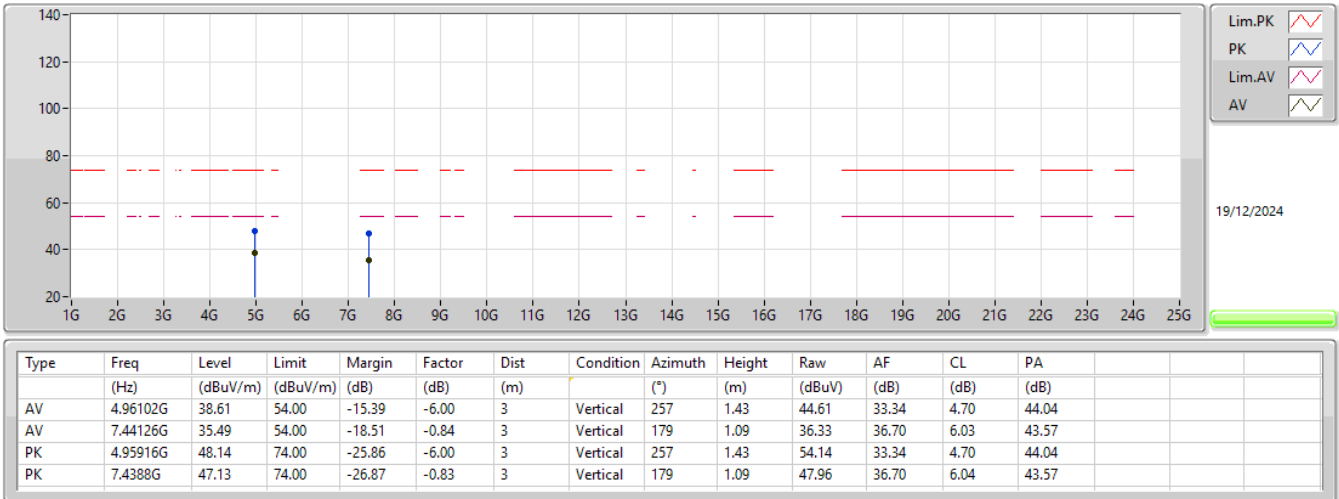
2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX

