

FCC Radio Test Report

FCC ID : VUIM2U350
Equipment : 5G FR2 ODU
Brand Name : PEGATRON
Model Name : M2U350, M2U300, M2UXXX-XXX(where X can be a combination of alphanumeric, none or blank)
Applicant : PEGATRON CORPORATION
5F., No.76, LIGONG ST., BEITOU DISTRICT,
TAIPEI CITY, Taiwan, 11259
Manufacturer : PEGATRON CORPORATION
5F., No.76, LIGONG ST., BEITOU DISTRICT,
TAIPEI CITY, Taiwan, 11259
Standard : 47 CFR FCC Part 15.247

The product was received on Oct. 01, 2024, and testing was started from Oct. 14, 2024 and completed on Oct. 24, 2024. 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 variant 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.)



Table of Contents

HISTORY OF THIS TEST REPORT	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Information.....	5
1.2 Testing Applied Standards	7
1.3 Testing Location Information	7
1.4 Measurement Uncertainty	7
2 TEST CONFIGURATION OF EUT.....	8
2.1 Test Channel Mode	8
2.2 The Worst Case Measurement Configuration.....	9
2.3 Accessories	10
2.4 Support Equipment.....	10
2.5 Test Setup Diagram	11
3 TRANSMITTER TEST RESULT	13
3.1 AC Power-line Conducted Emissions	13
3.2 20dB Bandwidth and Carrier Frequency Separation.....	15
3.3 Maximum Conducted Output Power	16
3.4 Number of Hopping Frequencies and Hopping Bandedge	17
3.5 Time of Occupancy (Dwell Time)	18
3.6 Emissions in Non-restricted Frequency Bands	19
3.7 Emissions in Restricted Frequency Bands.....	20
4 TEST EQUIPMENT AND CALIBRATION DATA	23
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS	
APPENDIX B. TEST RESULTS OF 20DB BANDWIDTH AND CARRIER FREQUENCY SEPARATION	
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER	
APPENDIX D. TEST RESULTS OF NUMBER OF HOPPING FREQUENCIES AND HOPPING BANDEDGE	
APPENDIX E. TEST RESULTS OF TIME OF OCCUPANCY (DWELL TIME)	
APPENDIX F. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS	
APPENDIX G. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS	
APPENDIX H. TEST PHOTOS	
PHOTOGRAPHS OF EUT V01	



History of this test report

[illegible]

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)	20dB Bandwidth	PASS	-
3.2	15.247(a)	Carrier Frequency Separation	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(a)	Number of Hopping Frequencies and Hopping Bandedge	PASS	-
3.5	15.247(a)	Time of Occupancy (Dwell Time)	PASS	-
3.6	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.7	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 Version	Ch. Frequency (MHz)	Channel Number
2400-2483.5	BR / EDR	2402-2480	0-78 [79]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-BR(1Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(2Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(3Mbps)	1	1TX

Note:

- ♦ Bluetooth BR uses a GFSK (1Mbps).
- ♦ Bluetooth EDR uses a combination of $\pi/4$ -DQPSK (2Mbps) and 8DPSK (3Mbps).
- ♦ Bluetooth BR/EDR uses as a system using FHSS modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	INPAQ	WA-P-LA-11-004(1415-0AQ4000)	PIFA	I-PEX

Ant.	Port	2.4G/BT Gain (dBi)						
		2300 MHz	2350 MHz	2400 MHz	2450 MHz	2500 MHz	2550 MHz	2600 MHz
1	1	3.83	3.19	2.84	4.45	4.46	4.81	4.73

Note 1: The EUT has one antenna.

For 2.4GHz function:

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

Ant. 1 (port 1) could transmit/receive.

For BT function:

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

Ant. 1 (port 1) could transmit/receive.

1.1.3 EUT Information

Operational Condition	
EUT Power Type	From PoE
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-BR(1Mbps)	0.762	1.18	2.87m	1k
BT-EDR(2Mbps)	0.765	1.16	2.881m	1k
BT-EDR(3Mbps)	0.765	1.16	2.886m	1k

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

1.1.5 Table for Multiple Listing

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

Model Name	Description
M2U350	All the models are identical, the different model served as marketing strategy.
M2U300	
M2UXXX-XXX(where X can be a combination of alphanumeric, none or blank)	

From the above models, model: M2U350 was selected as representative model for the test and its data was recorded in this report.

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	Rian Chung	21.5~23.7°C / 54~58%	23/Oct/2024~24/Oct/2024
RF Conducted	TH01-HY	Sonic Li	23.4~23.9°C / 52~55%	22/Oct/2024
☒ Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
Radiated	03CH09-HY	Henry Ho	21.7~22.6°C / 51~56%	14/Oct/2024~15/Oct/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 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%
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	Dos 6.1
Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	30
2440MHz	30
2480MHz	30
BT-EDR(2Mbps)	-
2402MHz	30
2440MHz	30
2480MHz	30
BT-EDR(3Mbps)	-
2402MHz	30
2440MHz	30
2480MHz	30

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	PoE Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	20dB Bandwidth Carrier Frequency Separation Maximum Conducted Output Power Number of Hopping Frequencies Hopping Bandedge Time of Occupancy (Dwell Time) Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains ☒ Non-adaptive frequency hopping systems (Non-AFH) ☒ adaptive frequency hopping systems (AFH)
Non-AFH Mode configuration was found to be the worst case and measured during the test.	

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	PoE Mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	Y Plane
	

2.3 Accessories

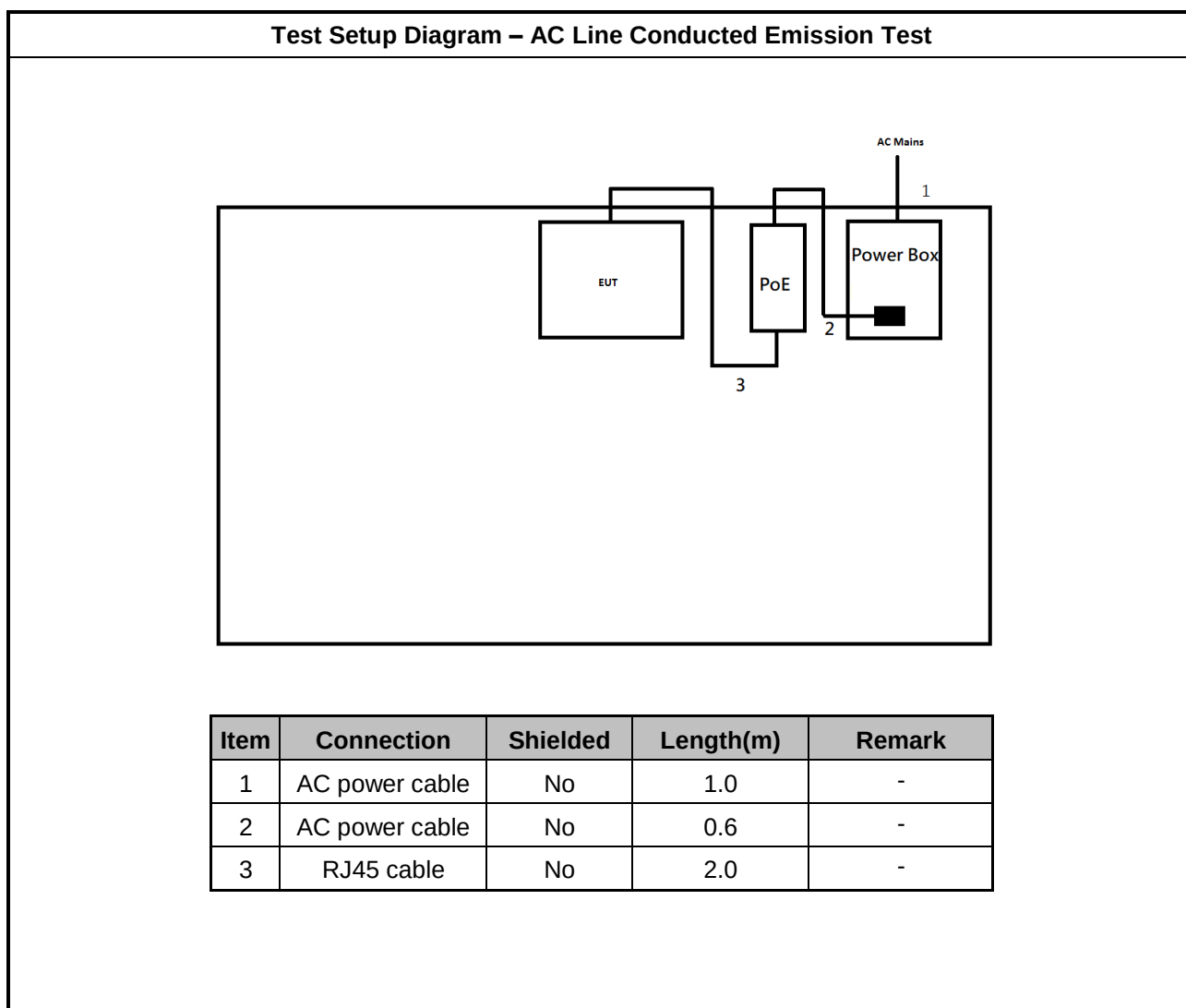
Accessories				
PoE injector	Brand Name	RISUNIC	Model Name	RP029-5601080YX
	Power Rating	I/P: 100- 240Vac, 1.5 A, O/P: 56Vdc, 1.08 A, 60.48W		
AC power cord	Brand Name	HONGLIN	Model Name	200-18511
	Power Cord	0.6m cable		
Bottom port cover with flat Ethernet cable	Brand Name	TUNG-LI	Model Name	CT041-046
RJ45 ethernet cable	Brand Name	TUNG-LI	Model Name	6F424-003

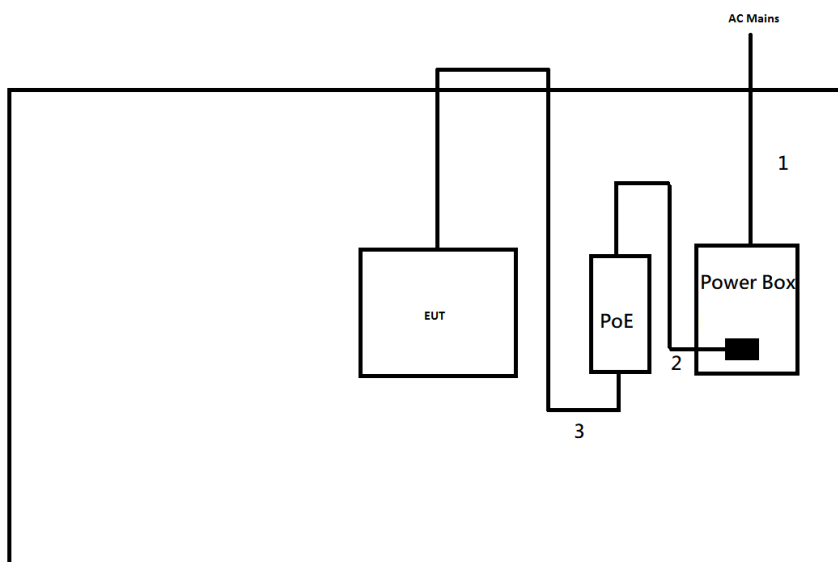
Reminder: Regarding to more detail and other information, please refer to user manual.

2.4 Support Equipment

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

2.5 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	0.6	-
3	RJ45 cable	No	2.0	-

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

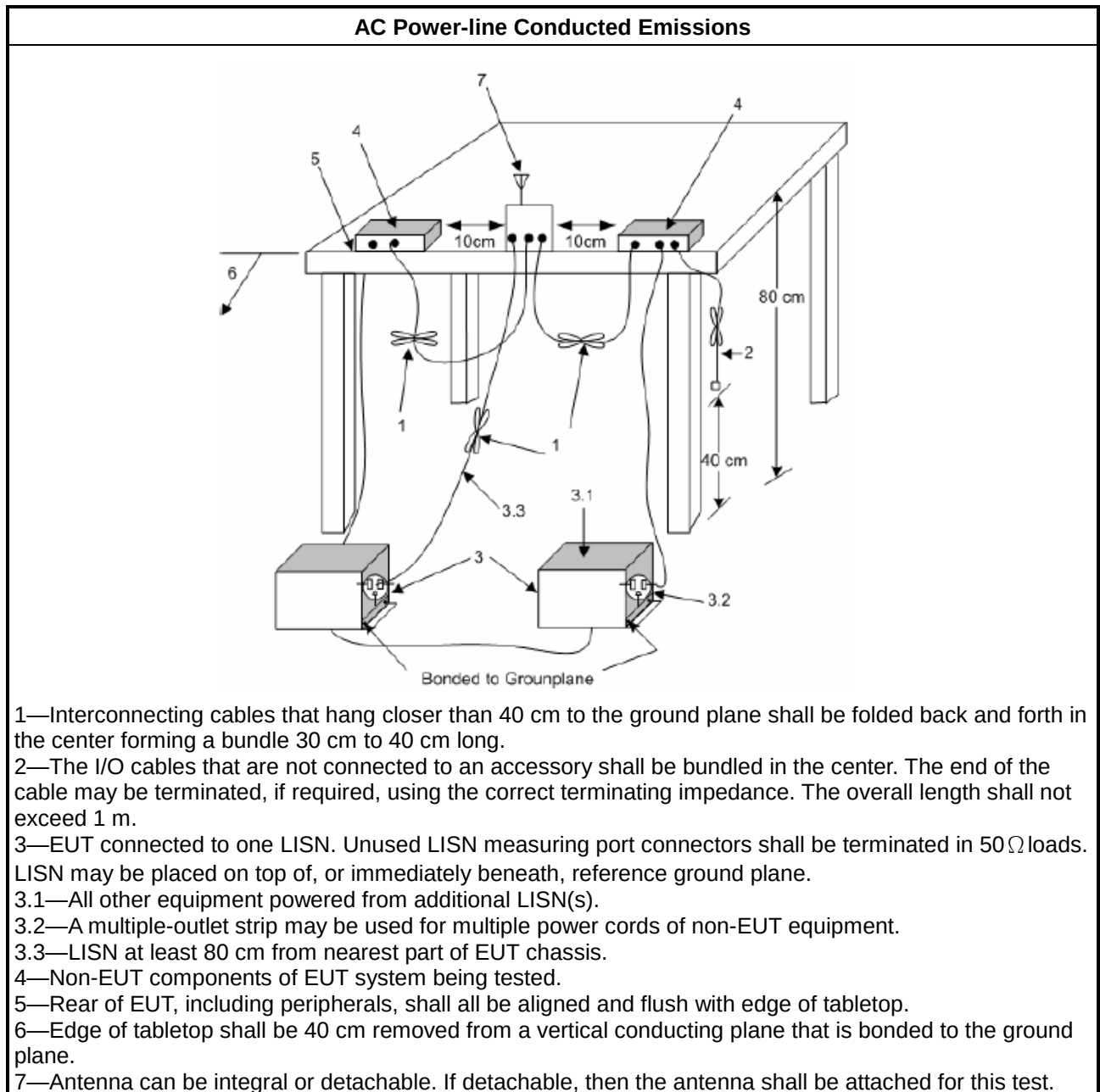
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 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 20dB Bandwidth and Carrier Frequency Separation

3.2.1 20dB Bandwidth and Carrier Frequency Separation Limit

20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems	
▪ 2400-2483.5 MHz Band:	
	▪ $N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz).
	▪ $75 > N \geq 15$ and $ChS \geq MAX$ (20 dB bandwidth 2/3, 25 kHz).
N: Number of Hopping Frequencies; ChS: Hopping Channel Separation	

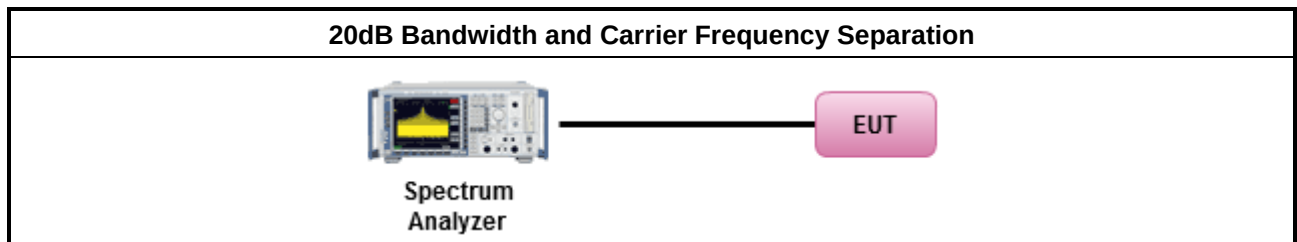
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 6.9.2 for 20 dB bandwidth measurement.
▪ Refer as ANSI C63.10-2013, clause 7.8.2 for carrier frequency separation measurement.

3.2.4 Test Setup



3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix B

3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
▪ 2400-2483.5 MHz Band:	
	▪ $N \geq 75$; Power 30dBm; EIRP 36dBm
	▪ $75 > N \geq 15$; Power 21dBm; EIRP 27dBm
N: Number of Hopping Frequencies	

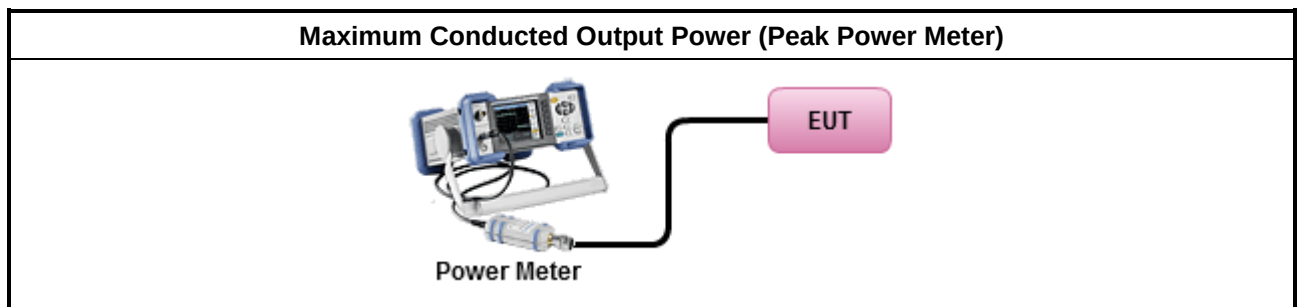
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 7.8.5 for output power measurement.

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Number of Hopping Frequencies and Hopping Bandedge

3.4.1 Number of Hopping Frequencies Limit

Number of Hopping Frequencies Limit	
2400-2483.5 MHz Band:	
	$N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz).
	$75 > N \geq 15$ and $ChS \geq MAX$ (20 dB bandwidth 2/3, 25 kHz).
N: Number of Hopping Frequencies; ChS : Hopping Channel Separation	

3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

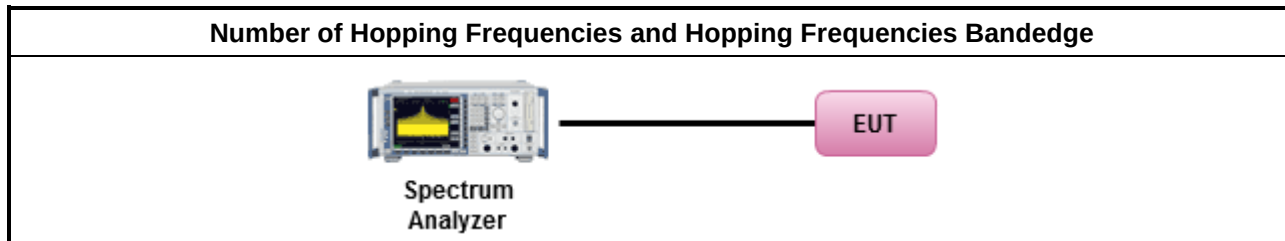
3.4.3 Measuring Instruments

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

3.4.4 Test Procedures

Test Method
Refer as ANSI C63.10-2013, clause 7.8.3 for number of hopping frequencies measurement.
Refer as ANSI C63.10-2013, clause 7.8.6 for hopping frequencies Bandedge measurement.

3.4.5 Test Setup



3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

3.5 Time of Occupancy (Dwell Time)

3.5.1 Time of Occupancy (Dwell Time) Limit

Time of Occupancy (Dwell Time) Limit for Frequency Hopping Systems	
2400-2483.5 MHz Band:	
	$N \geq 75$; 0.4s in $N \times 0.4$ period
	$75 > N \geq 15$; 0.4s in $N \times 0.4$ period
N: Number of Hopping Frequencies	

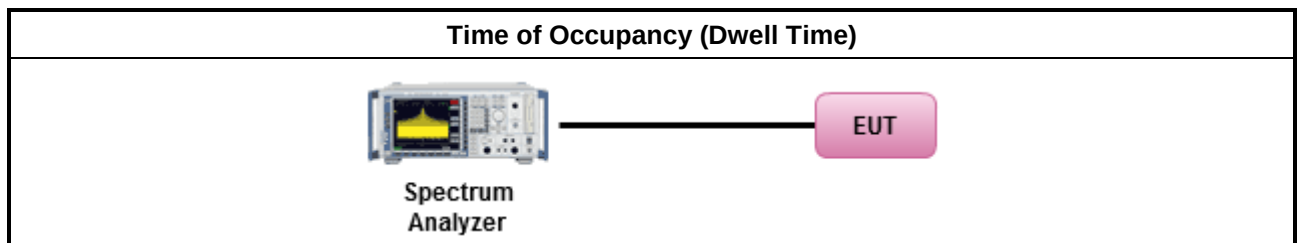
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method	
Refer as ANSI C63.10-2013, clause 7.8.4 for dwell time measurement.	
Bluetooth ACL packets can be 1, 3, or 5 time slots. Following as dwell time. Operate DH5 at maximum dwell time and maximum duty cycle.	
	The DH5 packet can cover up to 5 time slots. Operate DH5 at maximum dwell time and maximum duty cycle. A maximum length packet has duration of 5 time slots. The hopping rate is 1600 hops/second so the maximum dwell time is $5/1600$ seconds, or 3.125ms. DH5 Packet permit maximum $1600 / 79 / 6 = 3.37$ hops per second in each channel.

3.5.4 Test Setup



3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
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.	

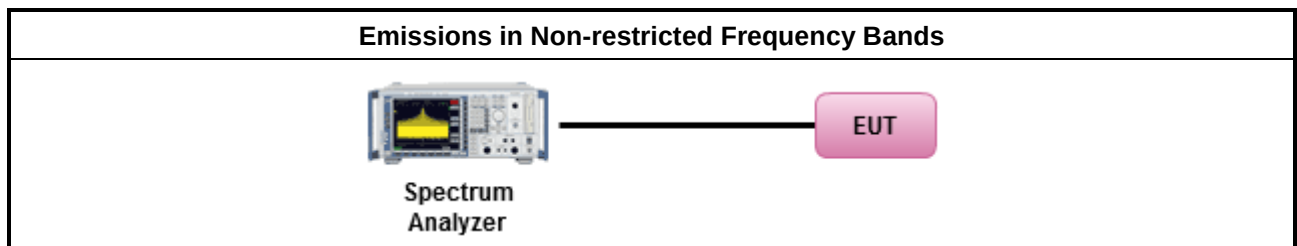
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method
Refer as ANSI C63.10-2013, clause 7.8.8 for unwanted emissions into non-restricted bands.

3.6.4 Test Setup



3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

3.7 Emissions in Restricted Frequency Bands

3.7.1 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.

3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

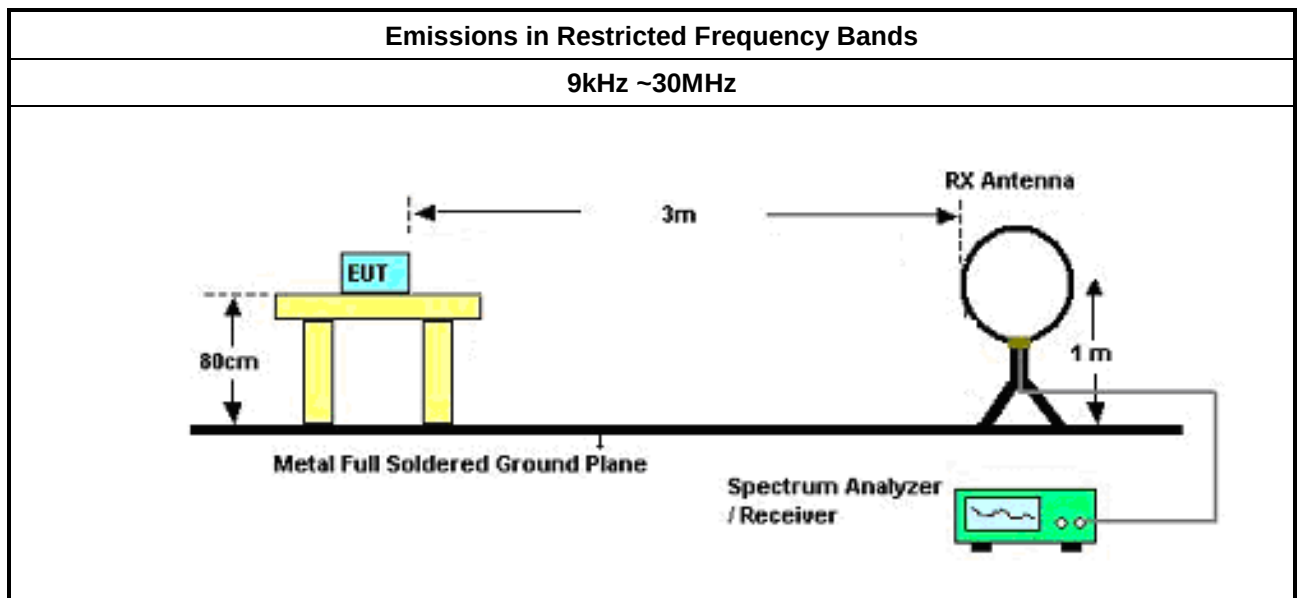
Test Method	
	The average emission levels shall be measured in [hopping duty factor].
	Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	For the transmitter unwanted emissions shall be measured using following options below:
	- Refer as ANSI C63.10, clause 4.1.4.2.1 QP value. - Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak. - Refer as ANSI C63.10, clause 4.1.4.2.4 average value of hopping pulsed emissions.
	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.

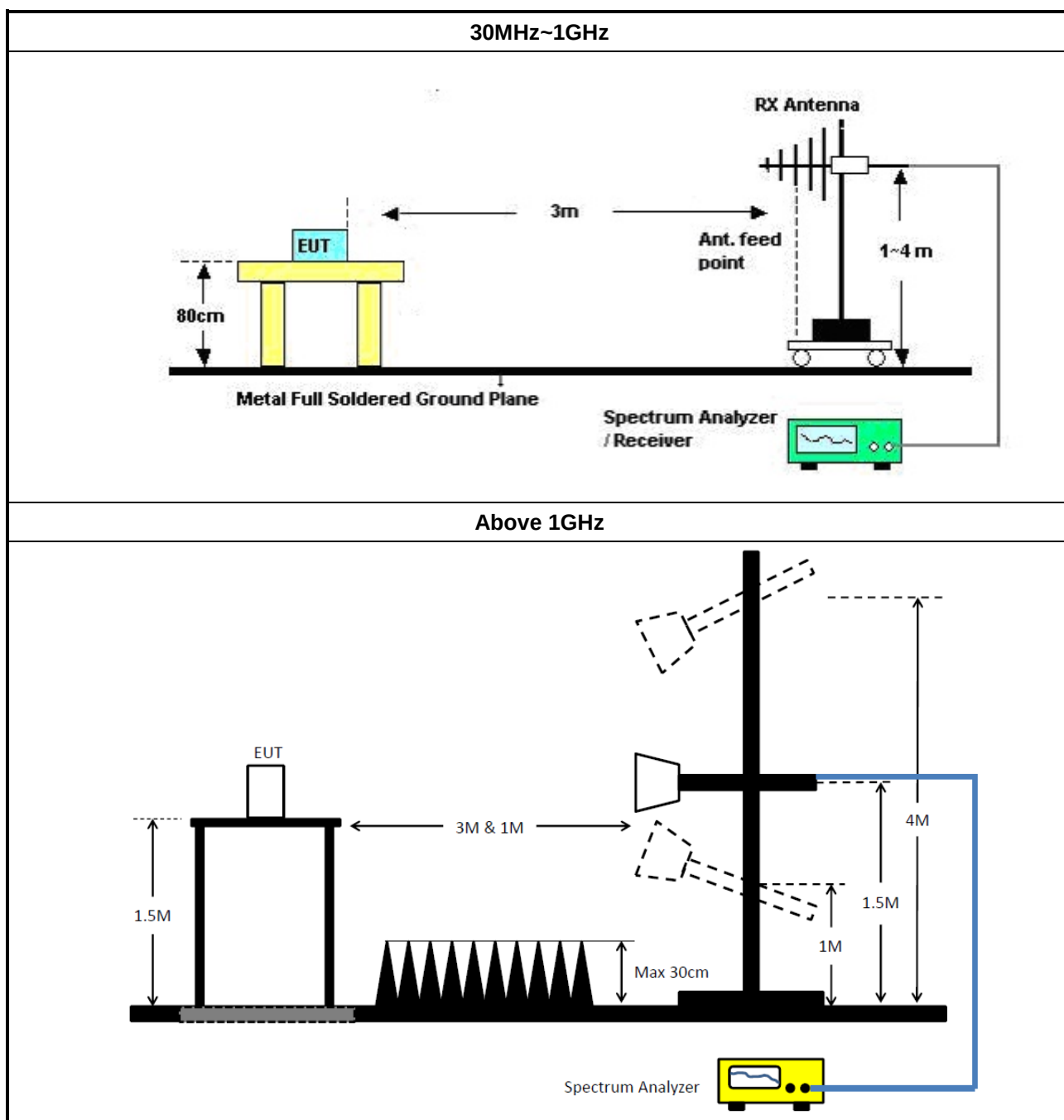
3.7.4 Measurement Results Calculation

The measured Level is calculated using:

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

3.7.5 Test Setup





3.7.6 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.

3.7.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

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	101013	10Hz~40GHz	09/Apr/2024	08/Apr/2025
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	16/Oct/2024	15/Oct/2025
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	17/Feb/2024	16/Feb/2025
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	17/Feb/2024	16/Feb/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	03CH09-HY	30MHz~1GHz 3m	08/Mar/2024	07/Mar/2025
Site V.S.W.R	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	07/Mar/2024	06/Mar/2025
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	15/Aug/2024	14/Aug/2025
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	08/Apr/2024	07/Apr/2025
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz ~ 18GHz	20/Dec/2023	19/Dec/2024
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	19/Jul/2024	18/Jul/2025
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&MT J6102-05	35418 & 3	30MHz~1GHz	26/Aug/2024	25/Aug/2025
RF Cable-R03m	Jye Bao	RG142	03CH09-cable-01	9kHz~1GHz	20/Feb/2024	19/Feb/2025
RF CABLE 5m+3m+1m	HUBER+SUHNER	SUCOFLEX104	03CH09-cable-02	1GHz~40GHz	07/Oct/2024	06/Oct/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	1248	18GHz~40GHz	04/Oct/2024	03/Oct/2025
Amplifier	EMC INSTRUMENTS	EM18G40G	60604	18GHz~40GHz	19/Apr/2024	18/Apr/2025
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	19/Mar/2024	18/Mar/2025
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	03/May/2024	02/May/2025
SENSE-15247_FS	Sporton	V5.11.20	NA	NA	NA	NA



Conducted Emissions at Powerline

Appendix A

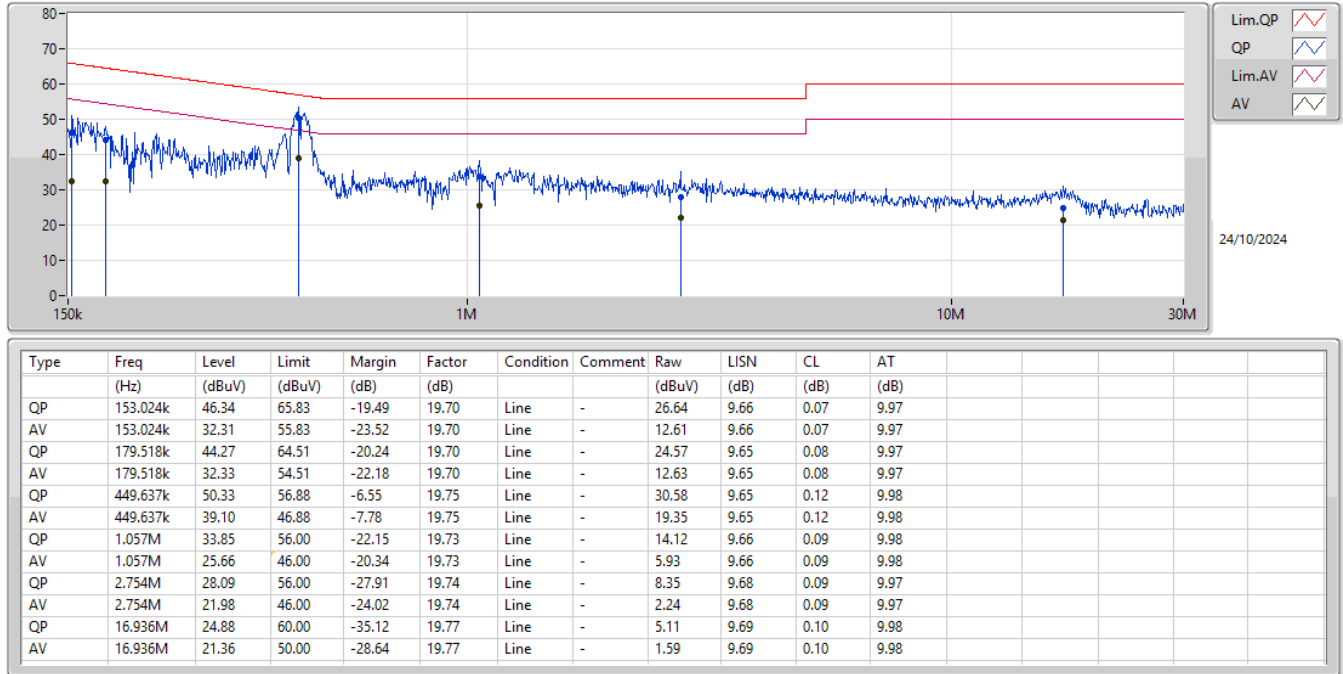
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	449.637k	50.33	56.88	-6.55	Line

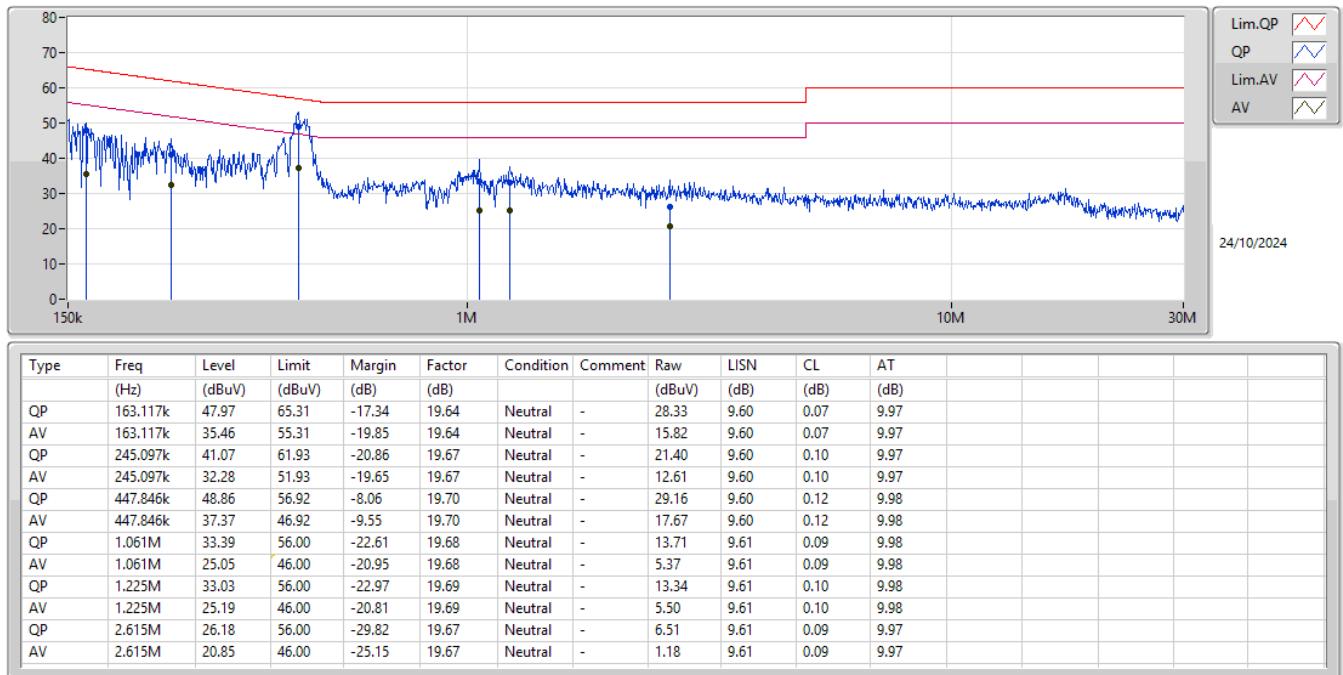
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	153.024k	46.34	65.83	-19.49	Line
Mode 1	Pass	AV	153.024k	32.31	55.83	-23.52	Line
Mode 1	Pass	QP	179.518k	44.27	64.51	-20.24	Line
Mode 1	Pass	AV	179.518k	32.33	54.51	-22.18	Line
Mode 1	Pass	QP	449.637k	50.33	56.88	-6.55	Line
Mode 1	Pass	AV	449.637k	39.10	46.88	-7.78	Line
Mode 1	Pass	QP	1.057M	33.85	56.00	-22.15	Line
Mode 1	Pass	AV	1.057M	25.66	46.00	-20.34	Line
Mode 1	Pass	QP	2.754M	28.09	56.00	-27.91	Line
Mode 1	Pass	AV	2.754M	21.98	46.00	-24.02	Line
Mode 1	Pass	QP	16.936M	24.88	60.00	-35.12	Line
Mode 1	Pass	AV	16.936M	21.36	50.00	-28.64	Line
Mode 1	Pass	QP	163.117k	47.97	65.31	-17.34	Neutral
Mode 1	Pass	AV	163.117k	35.46	55.31	-19.85	Neutral
Mode 1	Pass	QP	245.097k	41.07	61.93	-20.86	Neutral
Mode 1	Pass	AV	245.097k	32.28	51.93	-19.65	Neutral
Mode 1	Pass	QP	447.846k	48.86	56.92	-8.06	Neutral
Mode 1	Pass	AV	447.846k	37.37	46.92	-9.55	Neutral
Mode 1	Pass	QP	1.061M	33.39	56.00	-22.61	Neutral
Mode 1	Pass	AV	1.061M	25.05	46.00	-20.95	Neutral
Mode 1	Pass	QP	1.225M	33.03	56.00	-22.97	Neutral
Mode 1	Pass	AV	1.225M	25.19	46.00	-20.81	Neutral
Mode 1	Pass	QP	2.615M	26.18	56.00	-29.82	Neutral
Mode 1	Pass	AV	2.615M	20.85	46.00	-25.15	Neutral

Conducted Emissions at Powerline_Mode 1



Conducted Emissions at Powerline_Mode 1





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-BR(1Mbps)	932.25k	862.069k	862KF1D	926.75k	853.323k
BT-EDR(2Mbps)	1.315M	1.198M	1M20G1D	1.306M	1.184M
BT-EDR(3Mbps)	1.323M	1.198M	1M20G1D	1.26M	1.179M

Max-N dB = Maximum 20dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 20dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

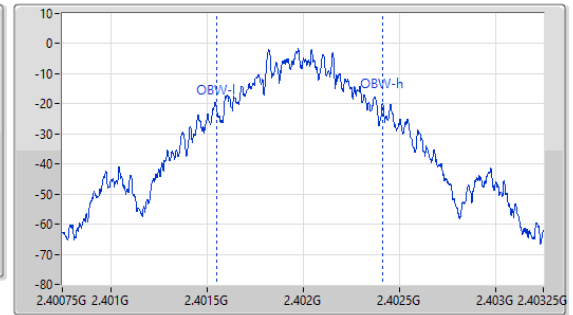
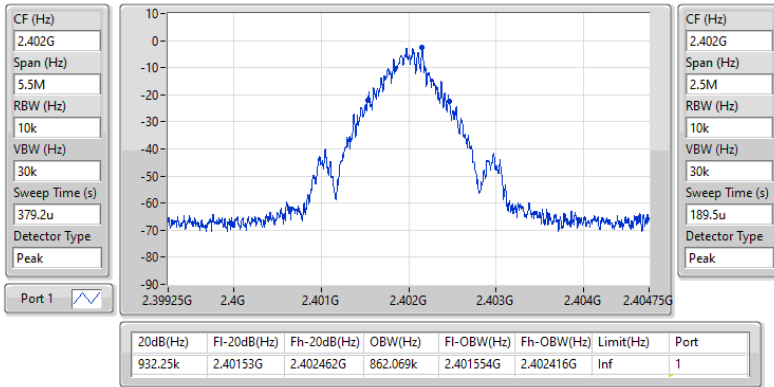
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	932.25k	862.069k
2440MHz	Pass	Inf	929.5k	853.323k
2480MHz	Pass	Inf	926.75k	859.57k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.306M	1.198M
2440MHz	Pass	Inf	1.312M	1.184M
2480MHz	Pass	Inf	1.315M	1.184M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.323M	1.179M
2440MHz	Pass	Inf	1.26M	1.188M
2480MHz	Pass	Inf	1.304M	1.198M

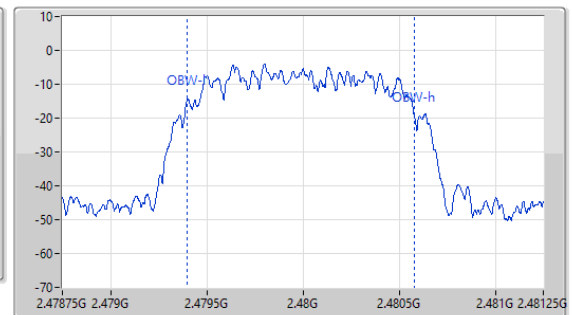
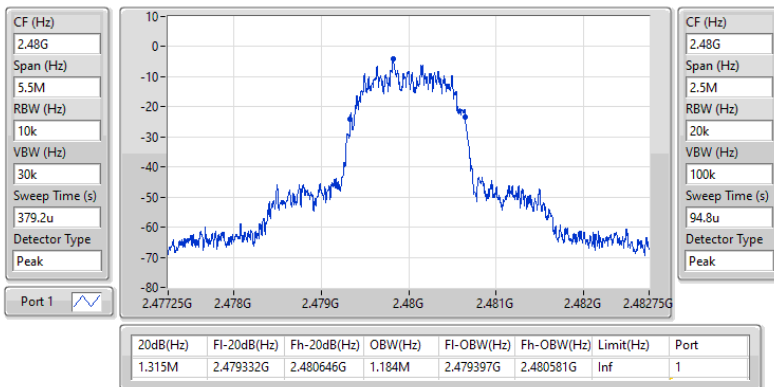
Port X-N dB = Port X 20dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_BT-BR(1Mbps)
EBW-FS
2402MHz

22/10/2024


2.4-2.4835GHz_BT-EDR(2Mbps)
EBW-FS
2480MHz

22/10/2024

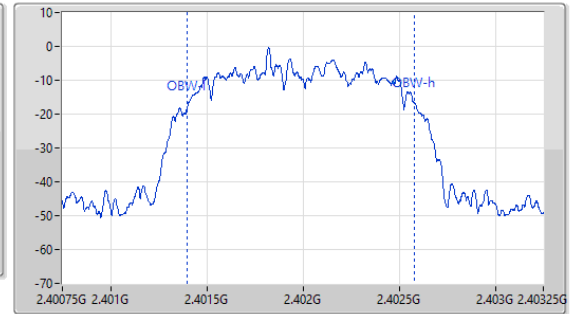
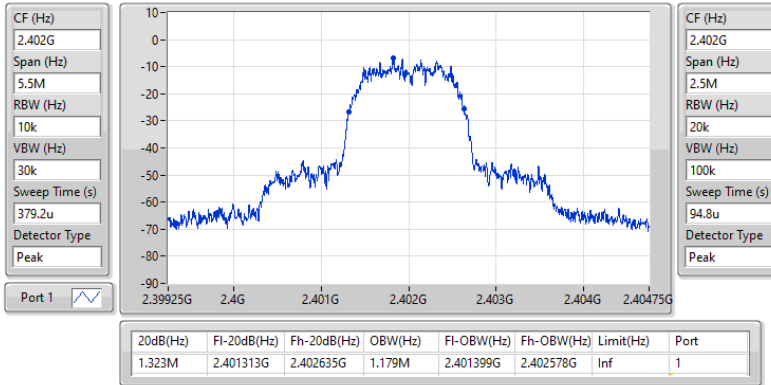


2.4-2.4835GHz_BT-EDR(3Mbps)

EBW-FS

2402MHz

22/10/2024





Summary

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.0005M	999k
BT-EDR(2Mbps)	1.0035M	997.5k
BT-EDR(3Mbps)	1.0005M	999k

Result

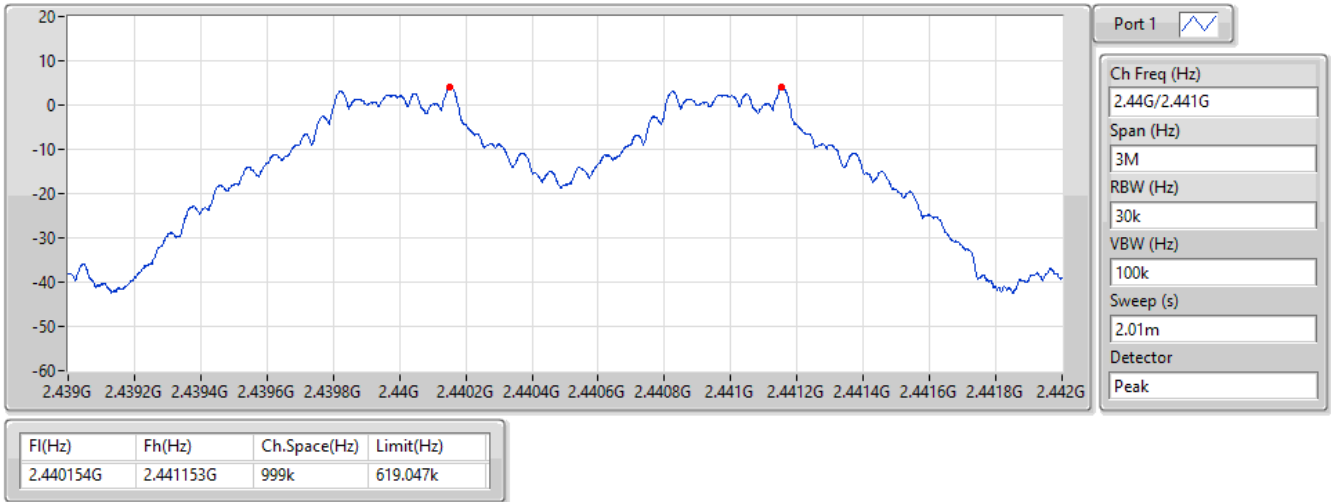
Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402155G	2.403156G	1.0005M	620.8785k
2440MHz	Pass	2.440154G	2.441153G	999k	619.047k
2480MHz	Pass	2.479155G	2.480156G	1.0005M	617.2155k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.402155G	2.403153G	997.5k	869.796k
2440MHz	Pass	2.440152G	2.441156G	1.0035M	873.792k
2480MHz	Pass	2.479155G	2.480156G	1.0005M	875.79k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.401822G	2.402823G	1.0005M	881.118k
2440MHz	Pass	2.439825G	2.440824G	999k	839.16k
2480MHz	Pass	2.478824G	2.479824G	1.0005M	868.464k

2.4-2.4835GHz_BT-BR(1Mbps)

Channel Separation-FS

2.44G/2.441GHz

22/10/2024

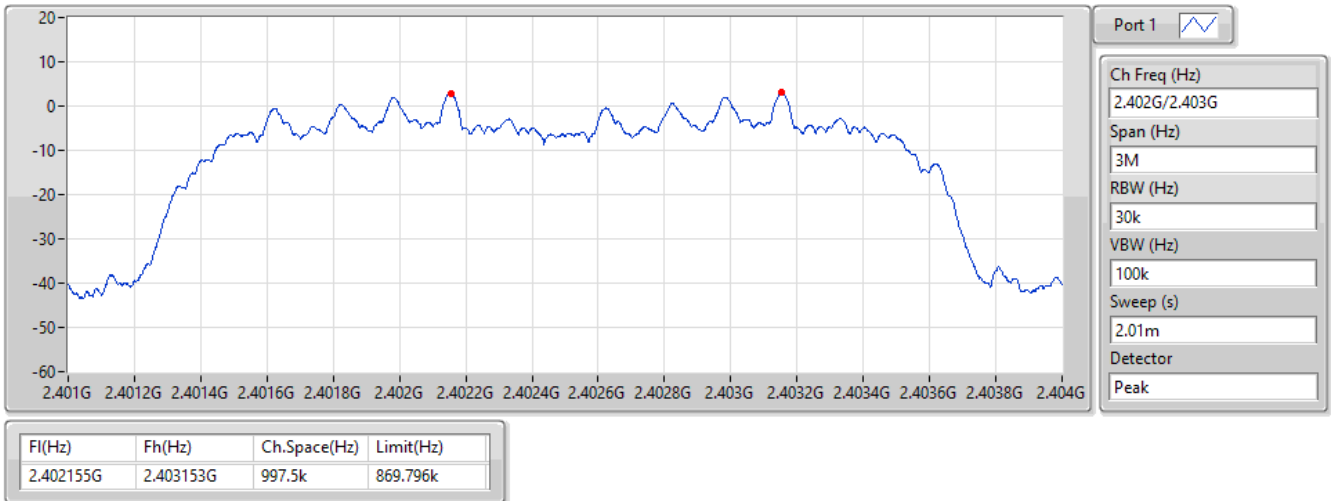


2.4-2.4835GHz_BT-EDR(2Mbps)

Channel Separation-FS

2.402G/2.403GHz

22/10/2024

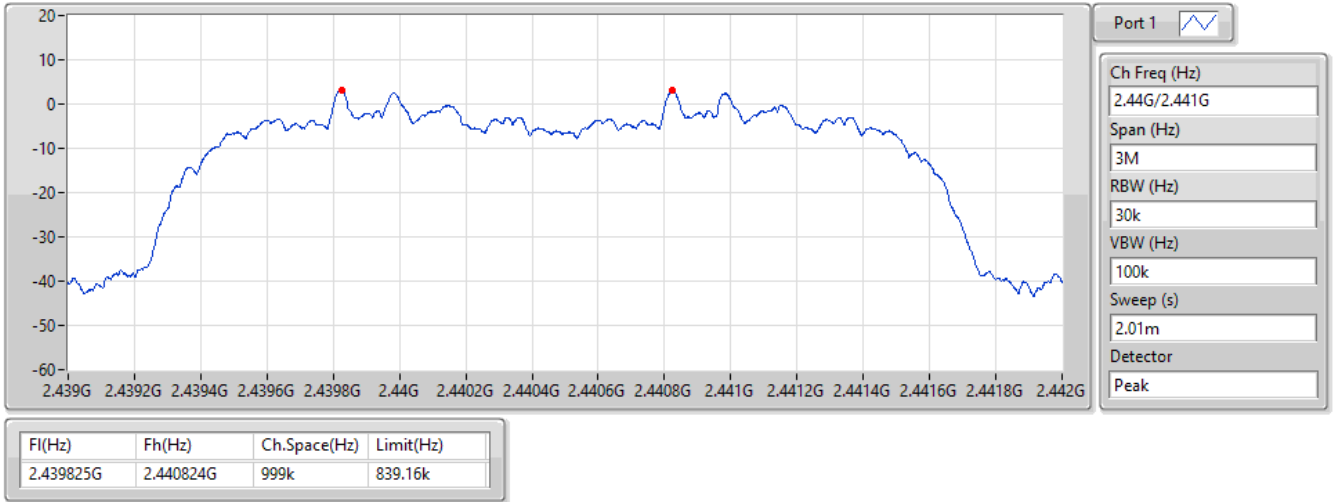


2.4-2.4835GHz_BT-EDR(3Mbps)

Channel Separation-FS

2.44G/2.441GHz

22/10/2024





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	5.97	0.00395
BT-EDR(2Mbps)	7.21	0.00526
BT-EDR(3Mbps)	7.81	0.00604

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	2.84	5.40	21.00
2440MHz	Pass	4.45	5.97	21.00
2480MHz	Pass	4.46	5.68	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	2.84	6.61	21.00
2440MHz	Pass	4.45	7.21	21.00
2480MHz	Pass	4.46	6.92	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	2.84	7.17	21.00
2440MHz	Pass	4.45	7.81	21.00
2480MHz	Pass	4.46	7.46	21.00

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	5.54	0.00358
BT-EDR(2Mbps)	4.67	0.00293
BT-EDR(3Mbps)	4.67	0.00293



Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	2.84	4.98	21.00
2440MHz	Pass	4.45	5.54	21.00
2480MHz	Pass	4.46	5.31	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	2.84	4.05	21.00
2440MHz	Pass	4.45	4.67	21.00
2480MHz	Pass	4.46	4.33	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	2.84	4.06	21.00
2440MHz	Pass	4.45	4.67	21.00
2480MHz	Pass	4.46	4.32	21.00

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



Summary

Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

Result

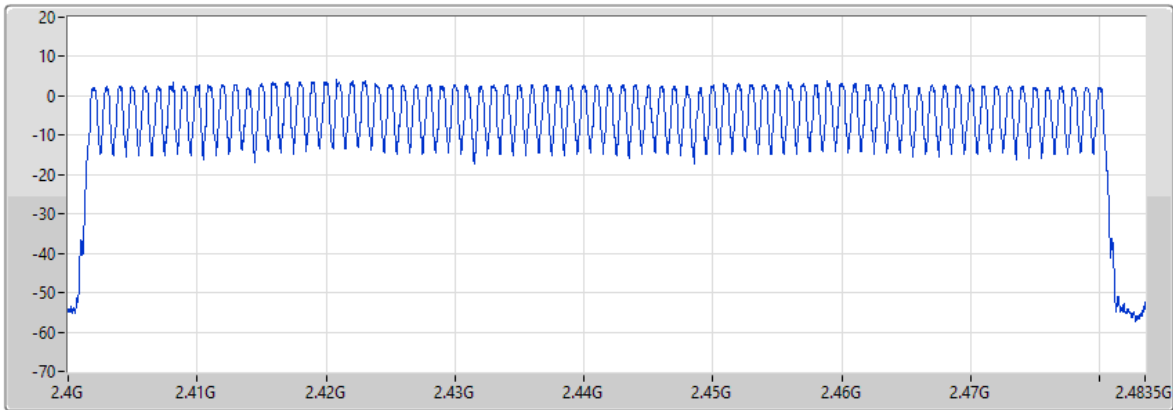
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15

2.4-2.4835GHz_BT-BR(1Mbps)

Hopping-FS

2440MHz

22/10/2024



Port 1 

Hopping No
79

Span (Hz)
83.5M

RBW (Hz)
100k

VBW (Hz)
300kHz

Sweep (s)
132.6us

Detector
Peak

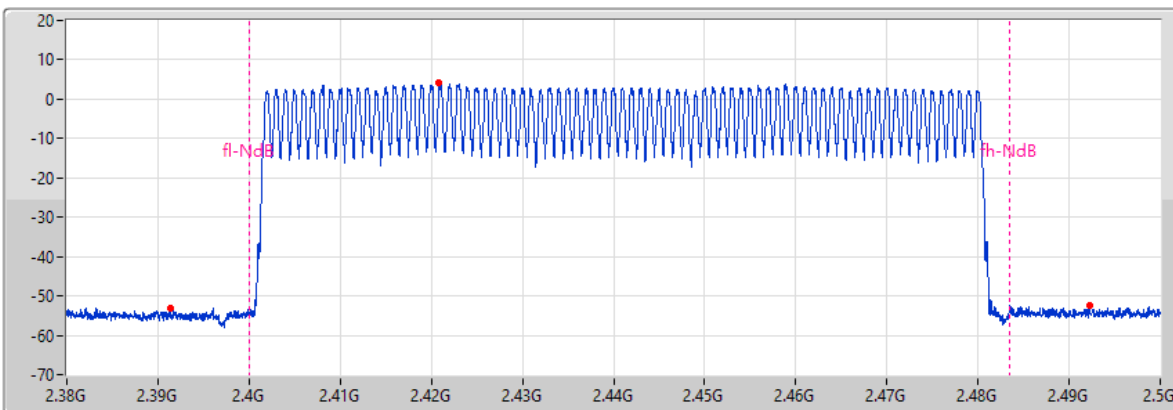
Hopping No	Limit
79	15

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

22/10/2024



Port 1 

Span (Hz)
120M

RBW (Hz)
100k

VBW (Hz)
300k

Sweep (s)
132.6u

Detector
Peak

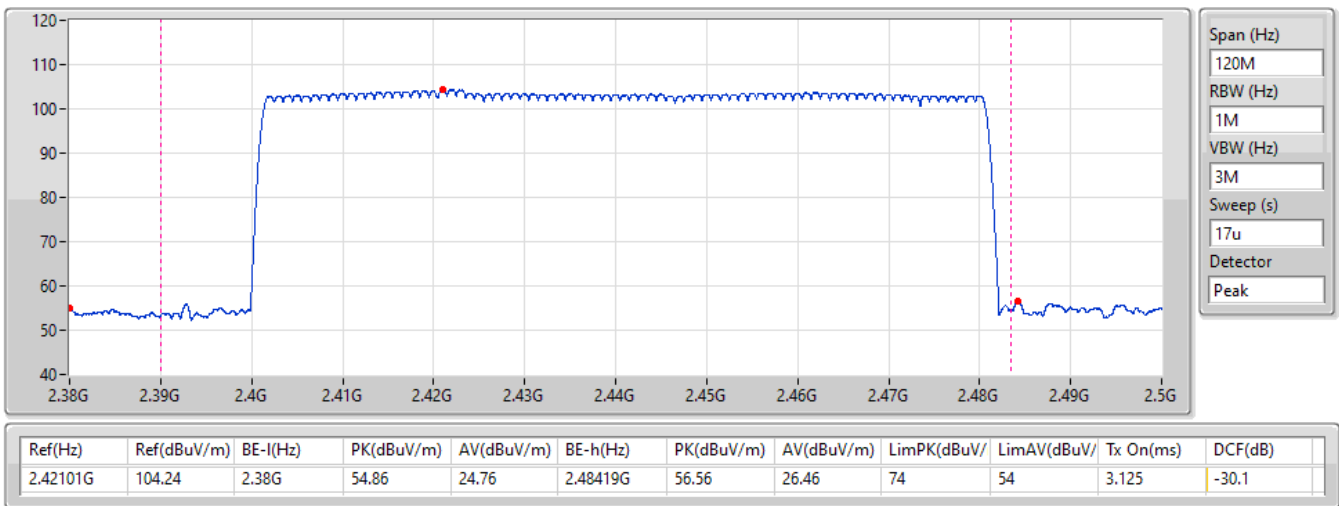
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.72	2.420815G	4.28	2.39137G	-53.1	2.492275G	-52.35

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

22/10/2024

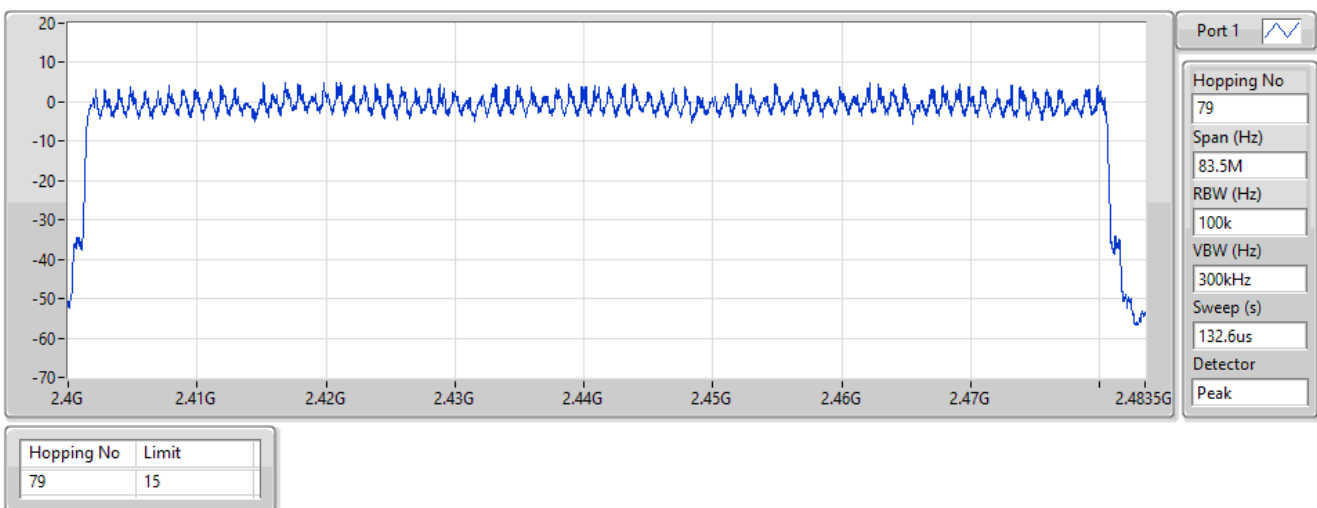


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping-FS

22/10/2024

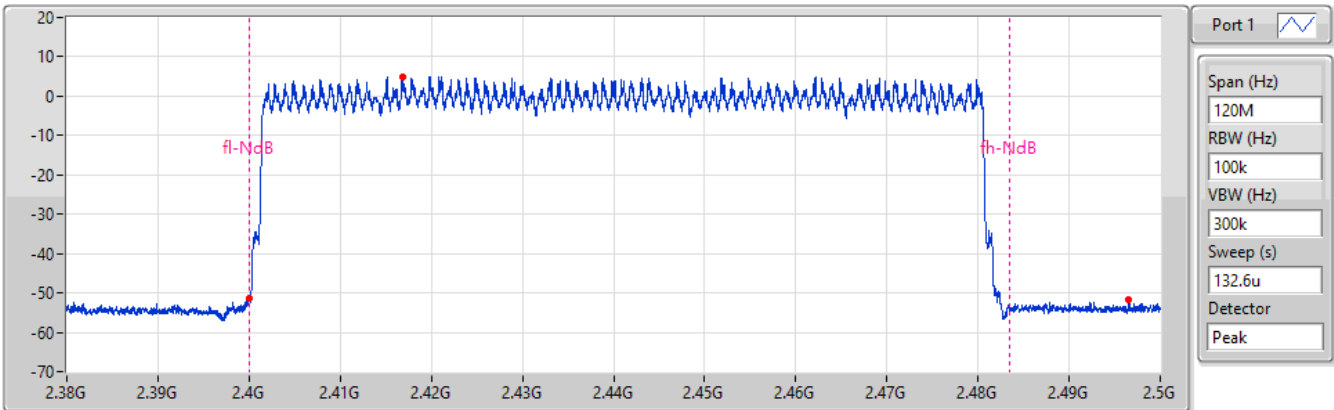


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

22/10/2024

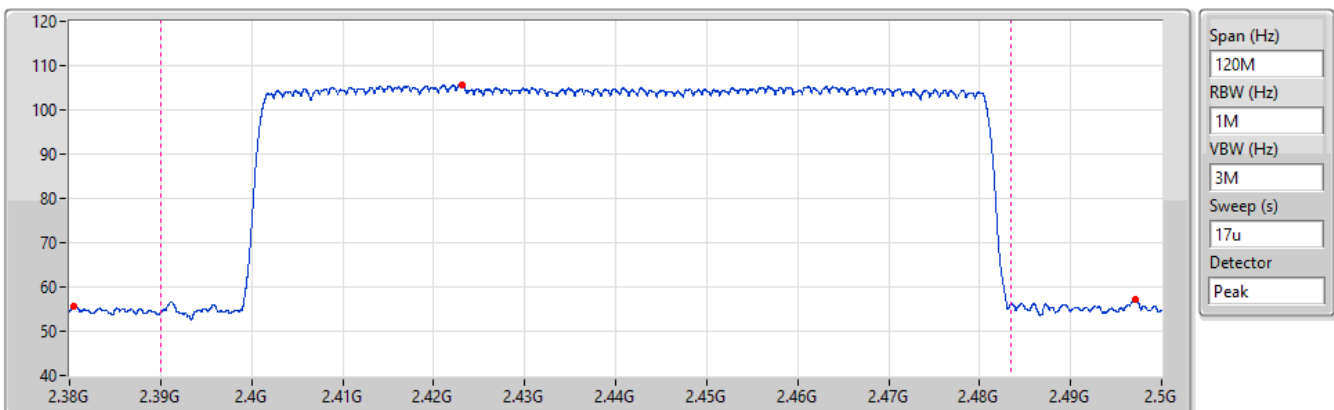


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

22/10/2024

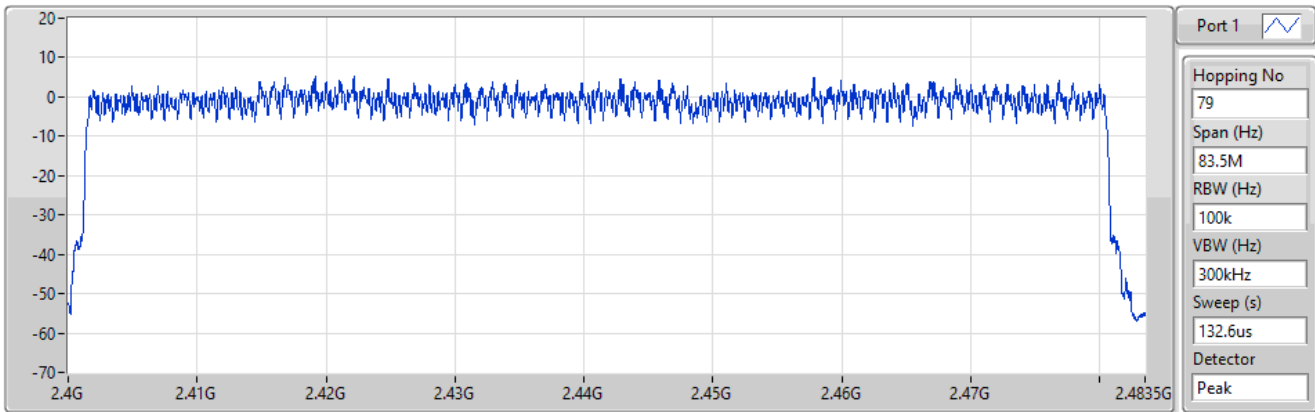


2.4-2.4835GHz_BT-EDR(3Mbps)

Hopping-FS

2440MHz

22/10/2024

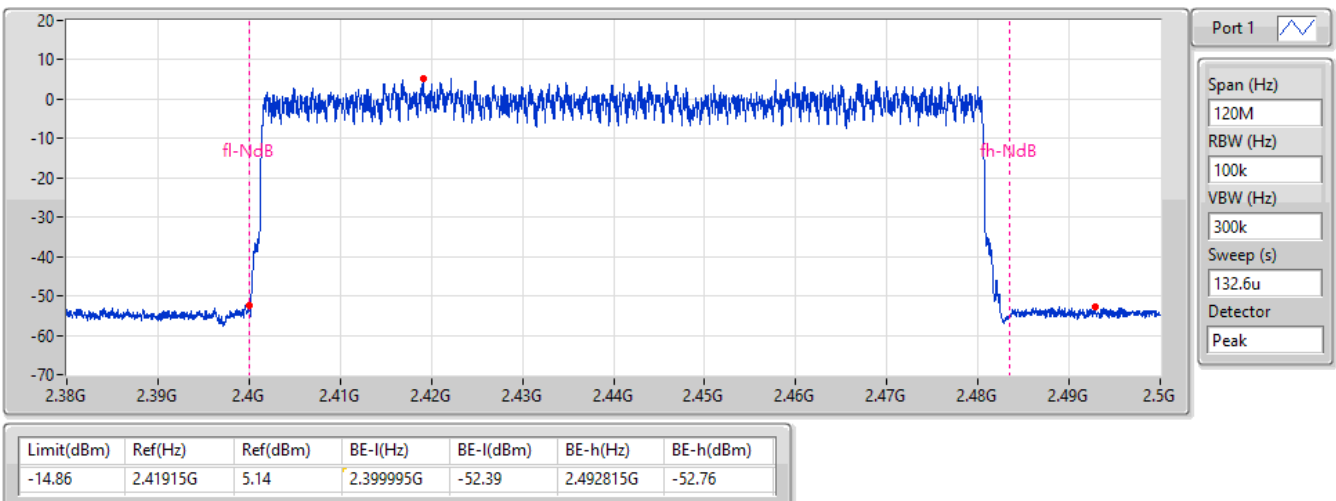


2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

22/10/2024

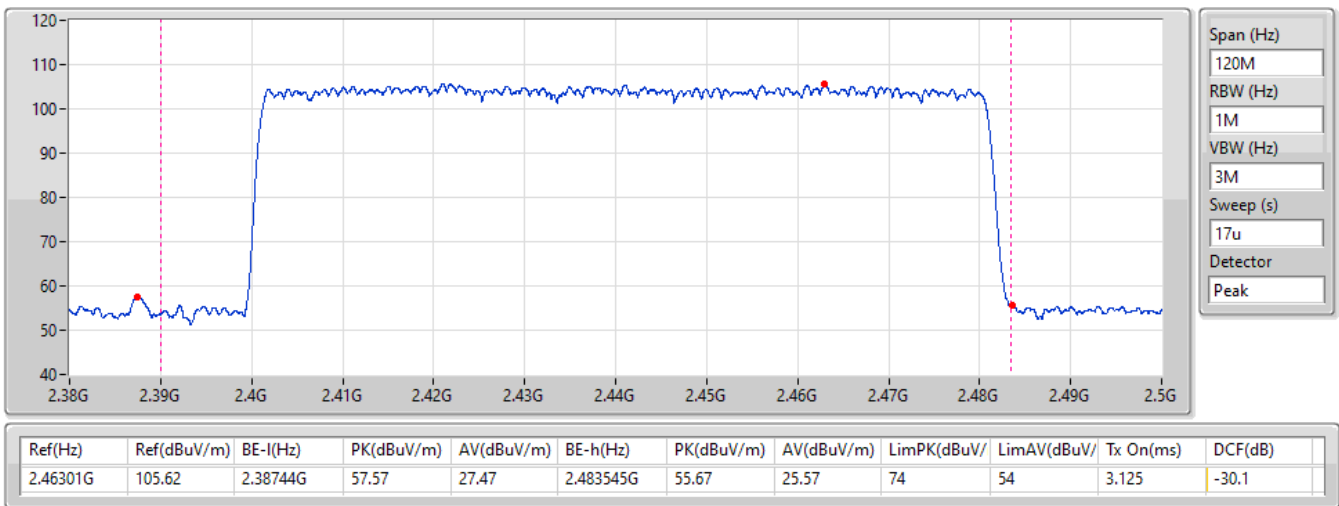


2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

22/10/2024





Summary

2.4-2.4835GHz	-
BT-BR(1Mbps)	305.96865m_DH5
BT-EDR(2Mbps)	16.5763m_DH5
BT-EDR(3Mbps)	17.1626m_DH5

Result

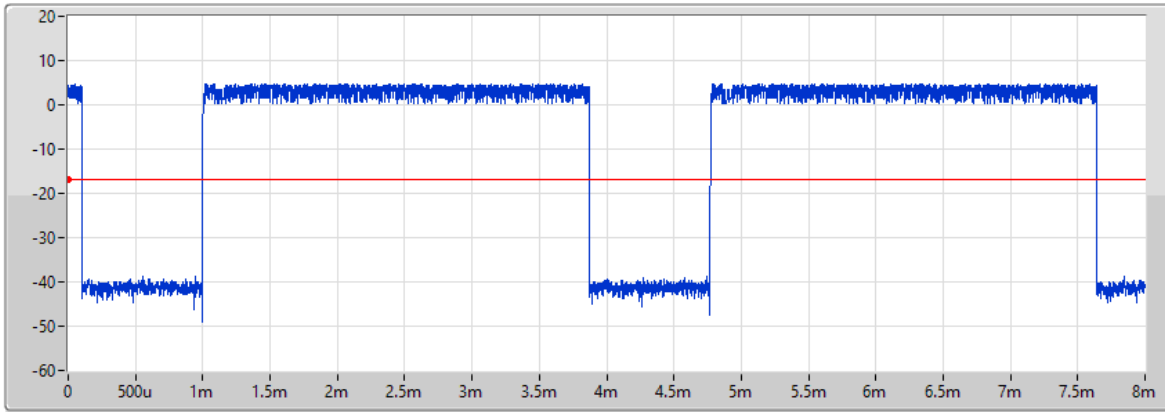
Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	305.96865m_DH5	400m	2.87025m
2440MHz	Pass	8	152.984325m_DH5-AFH	400m	2.87025m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	16.5763m_DH5	400m	155.5u
2440MHz	Pass	8	8.301475m_DH5-AFH	400m	155.75u
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	17.1626m_DH5	400m	161u
2440MHz	Pass	8	8.567975m_DH5-AFH	400m	160.75u

2.4-2.4835GHz_BT-BR(1Mbps)

Dwell-FS

2440MHz

22/10/2024



Port 1 

Ch Freq (Hz)
2.44G

RBW (Hz)
300k

VBW (Hz)
1M

Sweep Time (s)
8m

TX Time (s)
2.87025m

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	305.96865m_DH5	400m	2.87025m

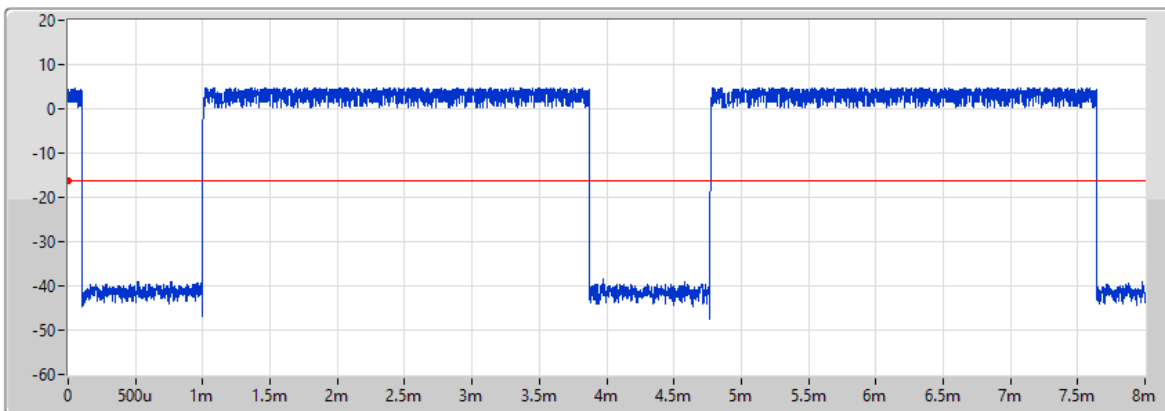
DH5

2.4-2.4835GHz_BT-BR(1Mbps)

Dwell-FS

2440MHz

22/10/2024



Port 1 

Ch Freq (Hz)
2.44G

RBW (Hz)
300k

VBW (Hz)
1M

Sweep Time (s)
8m

TX Time (s)
2.87025m

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	152.984325m_DH5-AFH	400m	2.87025m

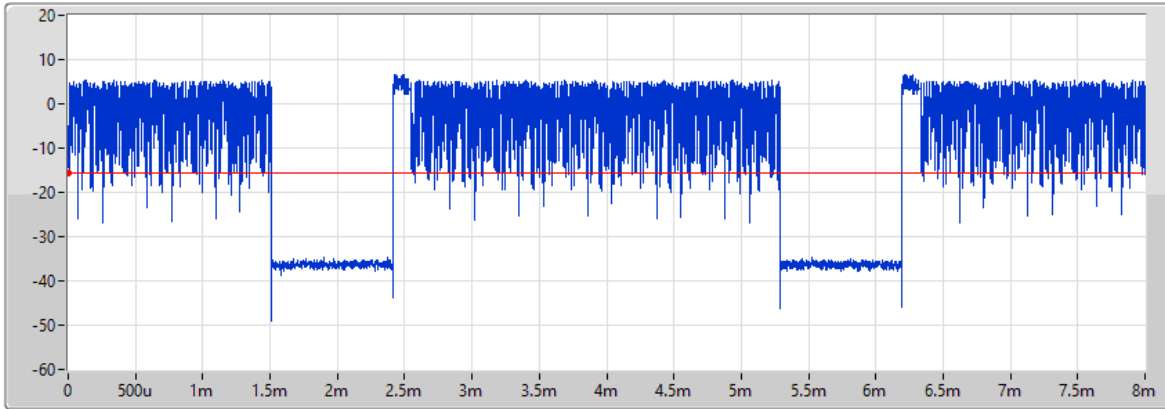
DH5-AFH

2.4-2.4835GHz_BT-EDR(2Mbps)

Dwell-FS

2440MHz

22/10/2024



Port 1 

Ch Freq (Hz)
2.44G

RBW (Hz)
300k

VBW (Hz)
1M

Sweep Time (s)
8m

TX Time (s)
155.5u

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	16.5763m_DH5	400m	155.5u

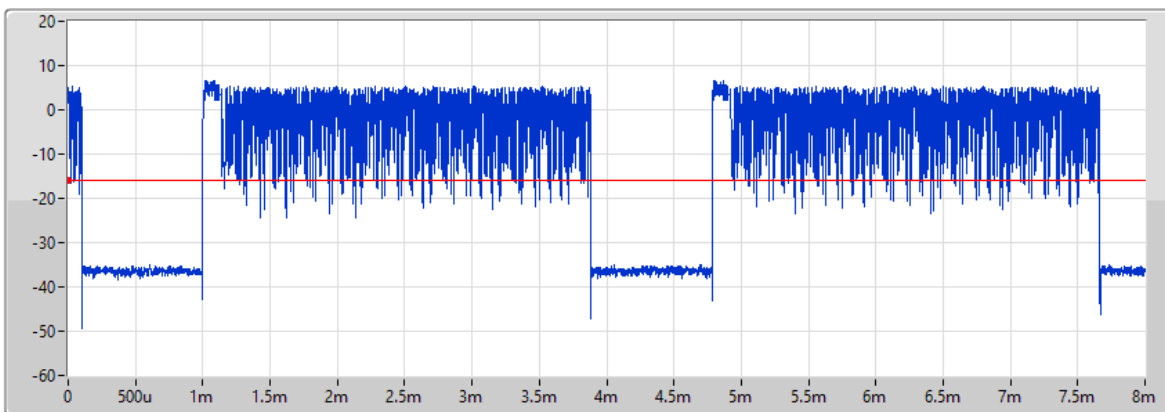
DH5

2.4-2.4835GHz_BT-EDR(2Mbps)

Dwell-FS

2440MHz

22/10/2024



Port 1 

Ch Freq (Hz)
2.44G

RBW (Hz)
300k

VBW (Hz)
1M

Sweep Time (s)
8m

TX Time (s)
155.75u

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	8.301475m_DH5-AFH	400m	155.75u

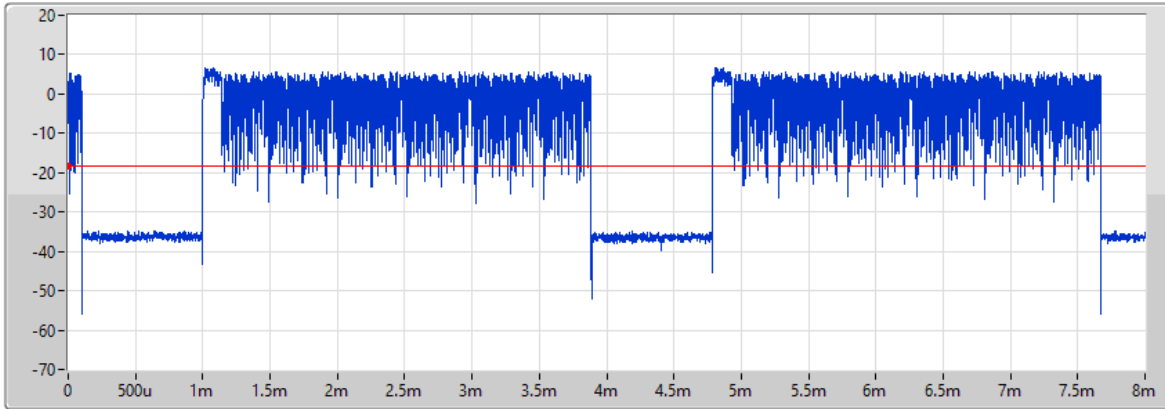
DH5-AFH

2.4-2.4835GHz_BT-EDR(3Mbps)

Dwell-FS

2440MHz

22/10/2024



Port 1 

Ch Freq (Hz)
2.44G

RBW (Hz)
300k

VBW (Hz)
1M

Sweep Time (s)
8m

TX Time (s)
161u

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	17.1626m_DH5	400m	161u

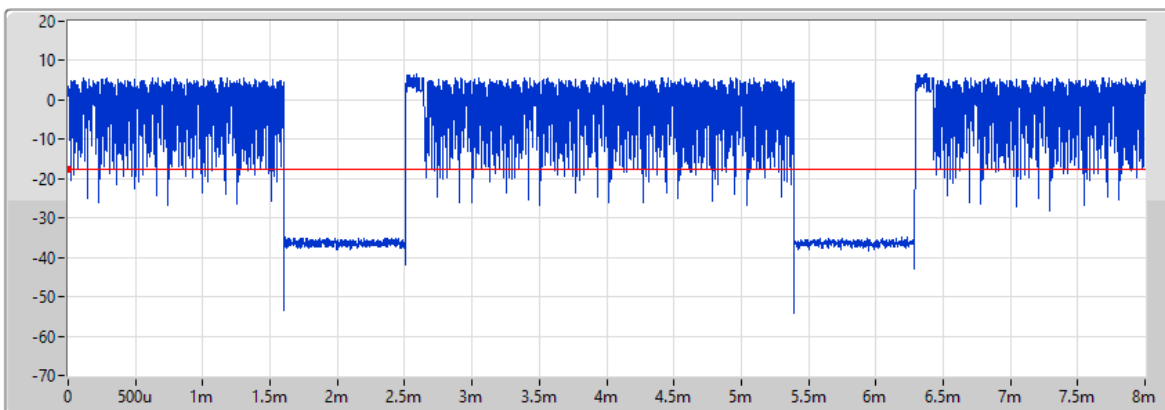
DH5

2.4-2.4835GHz_BT-EDR(3Mbps)

Dwell-FS

2440MHz

22/10/2024



Port 1 

Ch Freq (Hz)
2.44G

RBW (Hz)
300k

VBW (Hz)
1M

Sweep Time (s)
8m

TX Time (s)
160.75u

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	8.567975m_DH5-AFH	400m	160.75u

DH5-AFH

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-BR(1Mbps)	Pass	2.43991G	4.88	-15.12	2.19553G	-54.80	2.39932G	-53.16	2.4G	-54.09	2.50102G	-53.13	21.81112G	-40.59	1
BT-EDR(2Mbps)	Pass	2.43991G	3.36	-16.64	2.19553G	-54.37	2.4G	-50.98	2.4G	-51.55	2.5017G	-53.05	24.85096G	-40.21	1
BT-EDR(3Mbps)	Pass	2.43975G	3.49	-16.51	2.13678G	-54.58	2.39988G	-51.20	2.4G	-51.22	2.50282G	-52.95	24.07764G	-41.72	1

Result

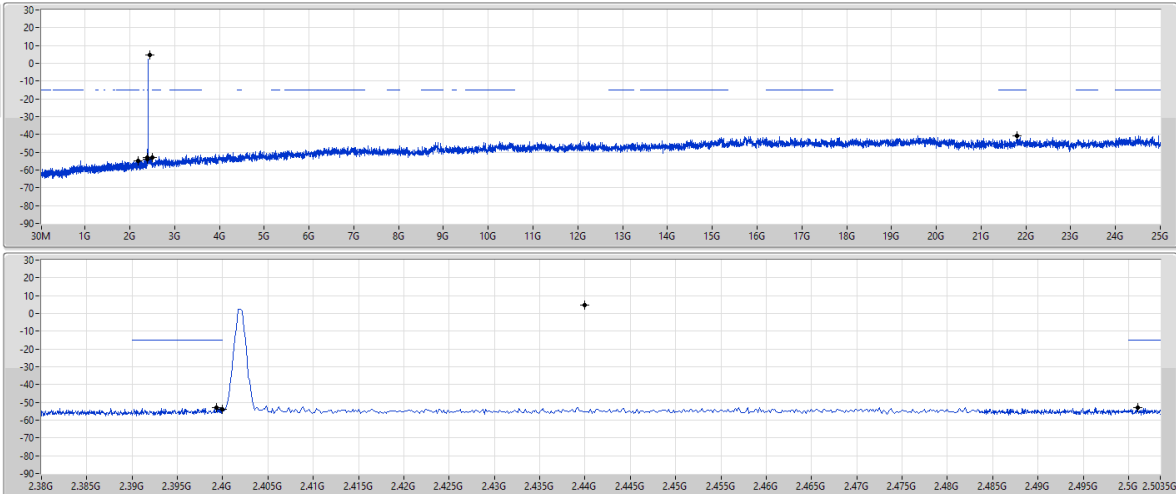
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.43991G	4.88	-15.12	2.19553G	-54.80	2.39932G	-53.16	2.4G	-54.09	2.50102G	-53.13	21.81112G	-40.59	1
2440MHz	Pass	2.43991G	4.88	-15.12	2.00635G	-54.49	2.39152G	-53.33	2.4G	-55.19	2.50086G	-53.25	15.1381G	-40.78	1
2480MHz	Pass	2.43991G	4.88	-15.12	2.13795G	-53.92	2.39812G	-53.84	2.4G	-55.14	2.50214G	-53.18	16.45977G	-41.09	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.43991G	3.36	-16.64	2.19553G	-54.37	2.4G	-50.98	2.4G	-51.55	2.5017G	-53.05	24.85096G	-40.21	1
2440MHz	Pass	2.43991G	3.36	-16.64	2.10623G	-54.24	2.39344G	-54.05	2.4G	-56.28	2.50198G	-53.59	15.19715G	-41.06	1
2480MHz	Pass	2.43991G	3.36	-16.64	2.13678G	-54.66	2.39004G	-52.99	2.4G	-55.68	2.50146G	-52.74	24.20981G	-40.93	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.43975G	3.49	-16.51	2.13678G	-54.58	2.39988G	-51.20	2.4G	-51.22	2.50282G	-52.95	24.07764G	-41.72	1
2440MHz	Pass	2.43975G	3.49	-16.51	2.14265G	-54.95	2.39756G	-53.50	2.4G	-55.90	2.50258G	-52.94	15.18028G	-39.71	1
2480MHz	Pass	2.43975G	3.49	-16.51	2.08155G	-54.42	2.39524G	-53.68	2.4G	-55.16	2.50042G	-52.51	16.36697G	-40.87	1

2.4-2.4835GHz_BT-BR(1Mbps)

CSEndB-FS

2402MHz

22/10/2024

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

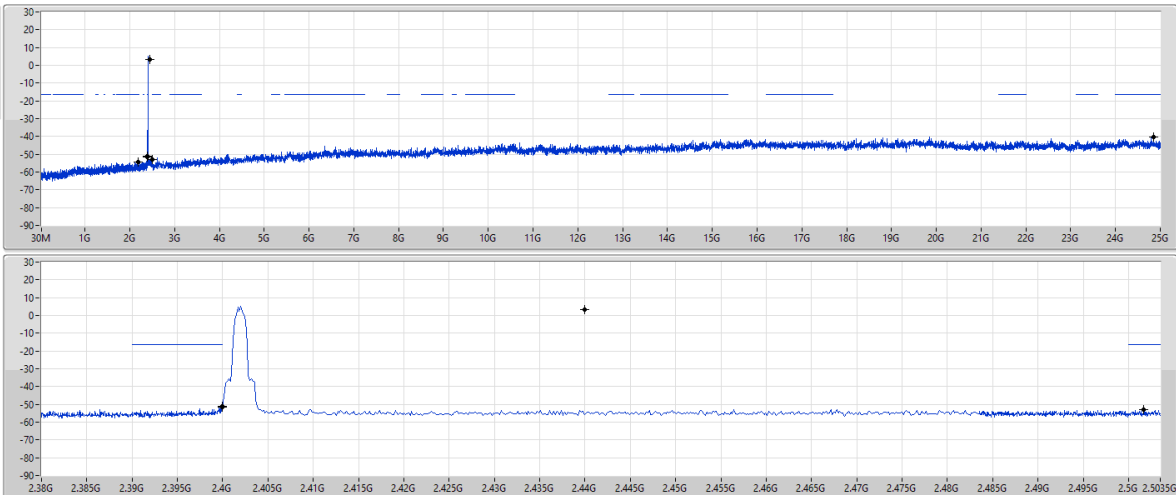
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43991G	4.88	-15.12	2.19553G	-54.80	2.39932G	-53.16	2.4G	-54.09	2.50102G	-53.13	21.81112G	-40.59	1

2.4-2.4835GHz_BT-EDR(2Mbps)

CSEndB-FS

2402MHz

22/10/2024

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

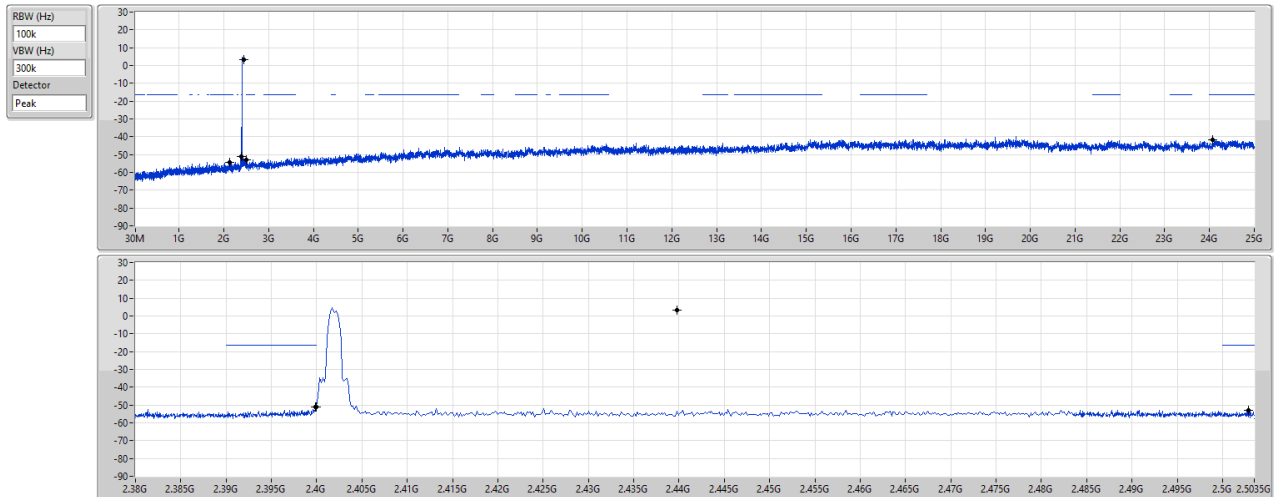
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43991G	3.36	-16.64	2.19553G	-54.37	2.4G	-50.98	2.4G	-51.55	2.5017G	-53.05	24.85096G	-40.21	1

2.4-2.4835GHz_BT-EDR(3Mbps)

CSEndB-FS

2402MHz

22/10/2024





Summary

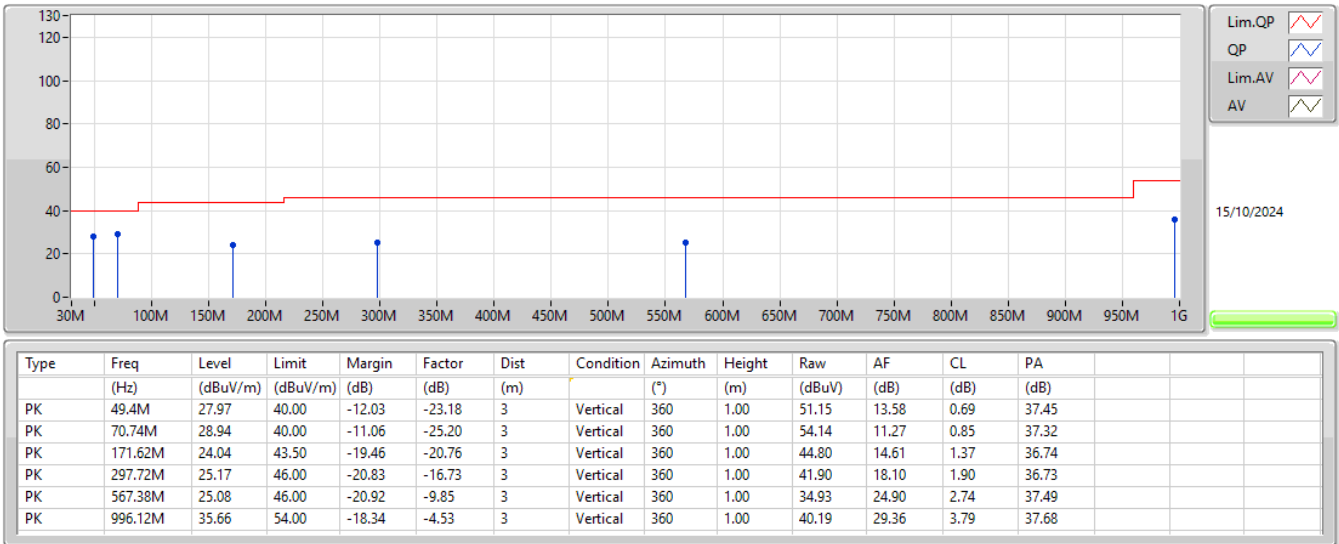
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	70.74M	28.94	40.00	-11.06	3	Vertical	360	1.00

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	49.4M	27.97	40.00	-12.03	3	Vertical	360	1.00
2440MHz	Pass	PK	70.74M	28.94	40.00	-11.06	3	Vertical	360	1.00
2440MHz	Pass	PK	171.62M	24.04	43.50	-19.46	3	Vertical	360	1.00
2440MHz	Pass	PK	297.72M	25.17	46.00	-20.83	3	Vertical	360	1.00
2440MHz	Pass	PK	567.38M	25.08	46.00	-20.92	3	Vertical	360	1.00
2440MHz	Pass	PK	996.12M	35.66	54.00	-18.34	3	Vertical	360	1.00
2440MHz	Pass	PK	115.36M	26.63	43.50	-16.87	3	Horizontal	0	1.00
2440MHz	Pass	PK	233.7M	23.35	46.00	-22.65	3	Horizontal	0	1.00
2440MHz	Pass	PK	278.32M	25.41	46.00	-20.59	3	Horizontal	0	1.00
2440MHz	Pass	PK	386.96M	24.29	46.00	-21.71	3	Horizontal	0	1.00
2440MHz	Pass	PK	749.74M	28.21	46.00	-17.79	3	Horizontal	0	1.00
2440MHz	Pass	PK	955.38M	31.09	46.00	-14.91	3	Horizontal	0	1.00

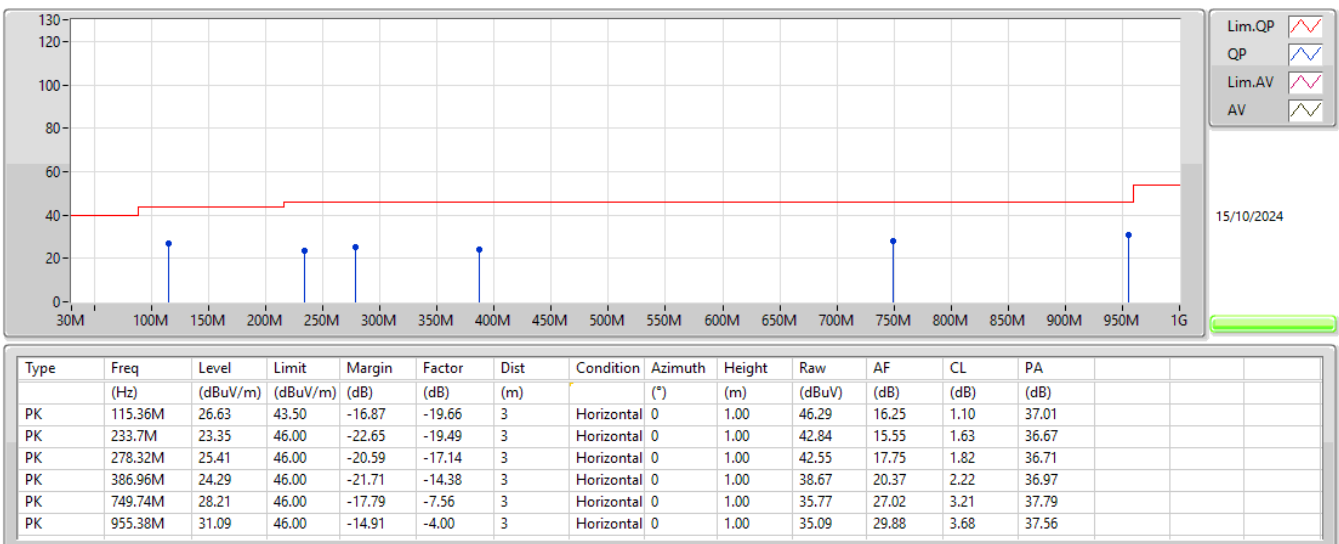
2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_PoE



2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_PoE





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-BR(1Mbps)	Pass	PK	2.4936G	60.34	74.00	-13.66	3	Vertical	37	1.00
BT-EDR(3Mbps)	Pass	PK	2.4835G	63.51	74.00	-10.49	3	Horizontal	360	1.50

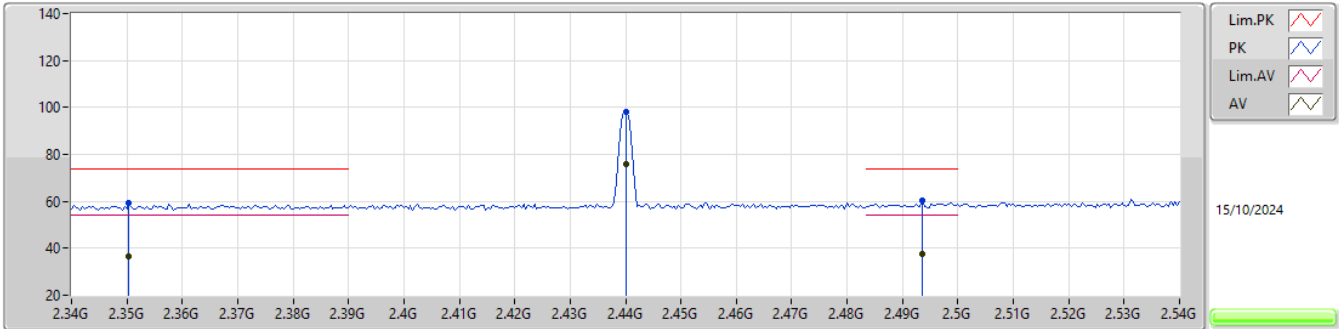
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3586G	37.21	54.00	-16.79	3	Vertical	24	3.00
2402MHz	Pass	AV	2.4022G	74.90	Inf	-Inf	3	Vertical	24	3.00
2402MHz	Pass	PK	2.3586G	59.71	74.00	-14.29	3	Vertical	24	3.00
2402MHz	Pass	PK	2.4022G	97.40	Inf	-Inf	3	Vertical	24	3.00
2402MHz	Pass	AV	2.3666G	36.44	54.00	-17.56	3	Horizontal	360	1.50
2402MHz	Pass	AV	2.4022G	85.15	Inf	-Inf	3	Horizontal	360	1.50
2402MHz	Pass	PK	2.3666G	58.94	74.00	-15.06	3	Horizontal	360	1.50
2402MHz	Pass	PK	2.4022G	107.65	Inf	-Inf	3	Horizontal	360	1.50
2402MHz	Pass	AV	4.81726G	24.84	54.00	-29.16	3	Vertical	175	1.76
2402MHz	Pass	PK	4.81726G	47.34	74.00	-26.66	3	Vertical	175	1.76
2402MHz	Pass	AV	4.80934G	25.32	54.00	-28.68	3	Horizontal	109	1.50
2402MHz	Pass	PK	4.80934G	47.82	74.00	-26.18	3	Horizontal	109	1.50
2440MHz	Pass	AV	2.3504G	36.70	54.00	-17.30	3	Vertical	37	1.00
2440MHz	Pass	AV	2.44G	75.74	Inf	-Inf	3	Vertical	37	1.00
2440MHz	Pass	AV	2.4936G	37.84	54.00	-16.16	3	Vertical	37	1.00
2440MHz	Pass	PK	2.3504G	59.20	74.00	-14.80	3	Vertical	37	1.00
2440MHz	Pass	PK	2.44G	98.24	Inf	-Inf	3	Vertical	37	1.00
2440MHz	Pass	PK	2.4936G	60.34	74.00	-13.66	3	Vertical	37	1.00
2440MHz	Pass	AV	2.348G	36.76	54.00	-17.24	3	Horizontal	360	1.50
2440MHz	Pass	AV	2.44G	84.99	Inf	-Inf	3	Horizontal	360	1.50
2440MHz	Pass	AV	2.4924G	37.19	54.00	-16.81	3	Horizontal	360	1.50
2440MHz	Pass	PK	2.348G	59.26	74.00	-14.74	3	Horizontal	360	1.50
2440MHz	Pass	PK	2.44G	107.49	Inf	-Inf	3	Horizontal	360	1.50
2440MHz	Pass	PK	2.4924G	59.69	74.00	-14.31	3	Horizontal	360	1.50
2440MHz	Pass	AV	4.88792G	25.06	54.00	-28.94	3	Vertical	31	2.36
2440MHz	Pass	PK	4.88792G	47.56	74.00	-26.44	3	Vertical	31	2.36
2440MHz	Pass	AV	4.87604G	24.80	54.00	-29.20	3	Horizontal	194	1.50
2440MHz	Pass	PK	4.87604G	47.30	74.00	-26.70	3	Horizontal	194	1.50
2480MHz	Pass	AV	2.4798G	75.44	Inf	-Inf	3	Vertical	32	1.50
2480MHz	Pass	AV	2.4884G	37.59	54.00	-16.41	3	Vertical	32	1.50
2480MHz	Pass	PK	2.4798G	97.94	Inf	-Inf	3	Vertical	32	1.50
2480MHz	Pass	PK	2.4884G	60.09	74.00	-13.91	3	Vertical	32	1.50
2480MHz	Pass	AV	2.4798G	85.62	Inf	-Inf	3	Horizontal	360	1.50
2480MHz	Pass	AV	2.497G	37.75	54.00	-16.25	3	Horizontal	360	1.50
2480MHz	Pass	PK	2.4798G	108.12	Inf	-Inf	3	Horizontal	360	1.50
2480MHz	Pass	PK	2.497G	60.25	74.00	-13.75	3	Horizontal	360	1.50
2480MHz	Pass	AV	4.96474G	25.22	54.00	-28.78	3	Vertical	191	1.50
2480MHz	Pass	PK	4.96474G	47.72	74.00	-26.28	3	Vertical	191	1.50
2480MHz	Pass	AV	4.9666G	25.21	54.00	-28.79	3	Horizontal	95	1.50
2480MHz	Pass	PK	4.9666G	47.71	74.00	-26.29	3	Horizontal	95	1.50
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3598G	36.87	54.00	-17.13	3	Vertical	316	2.83
2402MHz	Pass	AV	2.402G	77.55	Inf	-Inf	3	Vertical	316	2.83
2402MHz	Pass	PK	2.3598G	59.37	74.00	-14.63	3	Vertical	316	2.83
2402MHz	Pass	PK	2.402G	100.05	Inf	-Inf	3	Vertical	316	2.83
2402MHz	Pass	AV	2.3588G	36.65	54.00	-17.35	3	Horizontal	9	1.50
2402MHz	Pass	AV	2.402G	84.82	Inf	-Inf	3	Horizontal	9	1.50
2402MHz	Pass	PK	2.3588G	59.15	74.00	-14.85	3	Horizontal	9	1.50
2402MHz	Pass	PK	2.402G	107.32	Inf	-Inf	3	Horizontal	9	1.50
2402MHz	Pass	AV	4.81858G	24.13	54.00	-29.87	3	Vertical	171	2.58
2402MHz	Pass	PK	4.81858G	46.63	74.00	-27.37	3	Vertical	171	2.58
2402MHz	Pass	AV	4.81354G	24.19	54.00	-29.81	3	Horizontal	84	1.20
2402MHz	Pass	PK	4.81354G	46.69	74.00	-27.31	3	Horizontal	84	1.20
2440MHz	Pass	AV	2.3752G	37.00	54.00	-17.00	3	Vertical	30	3.00
2440MHz	Pass	AV	2.44G	75.87	Inf	-Inf	3	Vertical	30	3.00
2440MHz	Pass	AV	2.484G	37.05	54.00	-16.95	3	Vertical	30	3.00
2440MHz	Pass	PK	2.3752G	59.50	74.00	-14.50	3	Vertical	30	3.00
2440MHz	Pass	PK	2.44G	98.37	Inf	-Inf	3	Vertical	30	3.00
2440MHz	Pass	PK	2.484G	59.55	74.00	-14.45	3	Vertical	30	3.00
2440MHz	Pass	AV	2.3884G	36.61	54.00	-17.39	3	Horizontal	0	1.50

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2440MHz	Pass	AV	2.44G	86.76	Inf	-Inf	3	Horizontal	0	1.50
2440MHz	Pass	AV	2.4896G	36.24	54.00	-17.76	3	Horizontal	0	1.50
2440MHz	Pass	PK	2.3884G	59.11	74.00	-14.89	3	Horizontal	0	1.50
2440MHz	Pass	PK	2.44G	109.26	Inf	-Inf	3	Horizontal	0	1.50
2440MHz	Pass	PK	2.4896G	58.74	74.00	-15.26	3	Horizontal	0	1.50
2440MHz	Pass	AV	4.87484G	24.33	54.00	-29.67	3	Vertical	341	1.50
2440MHz	Pass	PK	4.87484G	46.83	74.00	-27.17	3	Vertical	341	1.50
2440MHz	Pass	AV	4.86752G	24.66	54.00	-29.34	3	Horizontal	214	1.00
2440MHz	Pass	PK	4.87052G	47.16	74.00	-26.84	3	Horizontal	214	1.00
2480MHz	Pass	AV	2.4798G	75.99	Inf	-Inf	3	Vertical	39	1.00
2480MHz	Pass	AV	2.4914G	37.00	54.00	-17.00	3	Vertical	39	1.00
2480MHz	Pass	PK	2.4798G	98.49	Inf	-Inf	3	Vertical	39	1.00
2480MHz	Pass	PK	2.4914G	59.50	74.00	-14.50	3	Vertical	39	1.00
2480MHz	Pass	AV	2.4798G	84.37	Inf	-Inf	3	Horizontal	360	1.50
2480MHz	Pass	AV	2.4835G	41.01	54.00	-12.99	3	Horizontal	360	1.50
2480MHz	Pass	PK	2.4798G	106.87	Inf	-Inf	3	Horizontal	360	1.50
2480MHz	Pass	PK	2.4835G	63.51	74.00	-10.49	3	Horizontal	360	1.50
2480MHz	Pass	AV	4.95088G	25.22	54.00	-28.78	3	Vertical	237	1.72
2480MHz	Pass	PK	4.95088G	47.72	74.00	-26.28	3	Vertical	237	1.72
2480MHz	Pass	AV	4.94896G	25.20	54.00	-28.80	3	Horizontal	308	2.17
2480MHz	Pass	PK	4.94896G	47.70	74.00	-26.30	3	Horizontal	308	2.17

2.4-2.4835GHz_BT-BR(1Mbps)

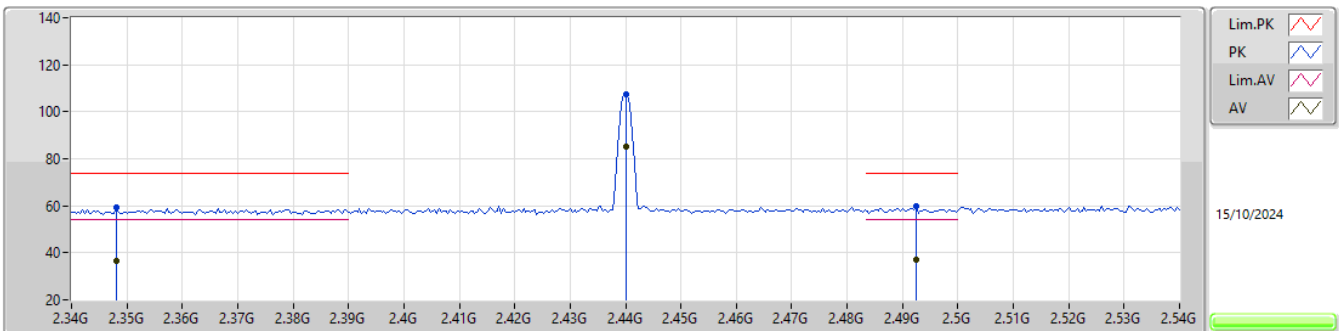
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.3504G	36.70	54.00	-17.30	33.12	3	Vertical	37	1.00	3.58	27.40	5.72	-
AV	2.44G	75.74	Inf	-Inf	33.51	3	Vertical	37	1.00	42.23	27.70	5.81	-
AV	2.4936G	37.84	54.00	-16.16	33.85	3	Vertical	37	1.00	3.99	28.00	5.85	-
PK	2.3504G	59.20	74.00	-14.80	33.12	3	Vertical	37	1.00	26.08	27.40	5.72	-
PK	2.44G	98.24	Inf	-Inf	33.51	3	Vertical	37	1.00	64.73	27.70	5.81	-
PK	2.4936G	60.34	74.00	-13.66	33.85	3	Vertical	37	1.00	26.49	28.00	5.85	-

2.4-2.4835GHz_BT-BR(1Mbps)

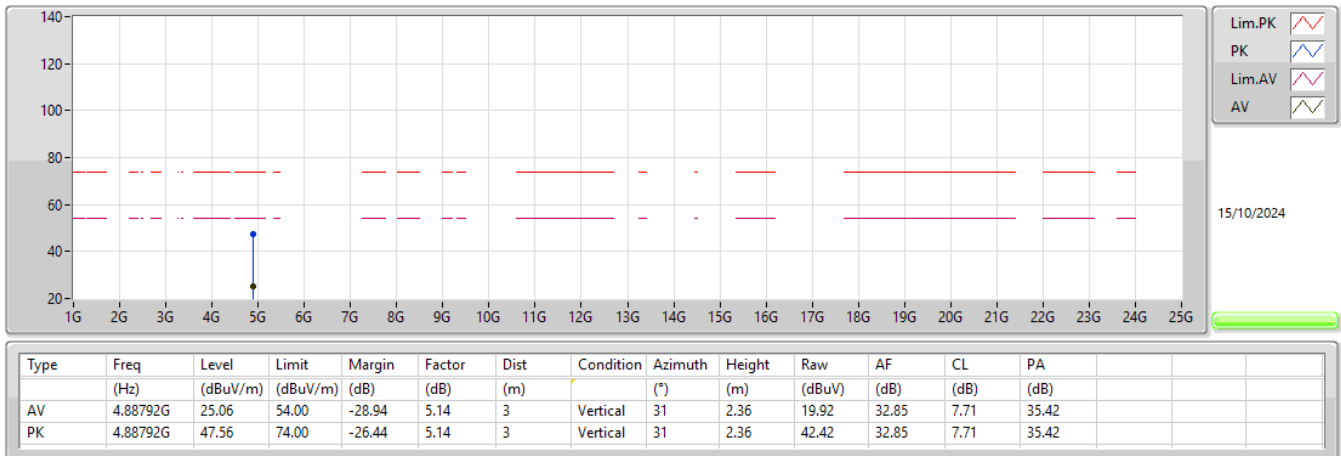
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.348G	36.76	54.00	-17.24	33.09	3	Horizontal	360	1.50	3.67	27.38	5.71	-
AV	2.44G	84.99	Inf	-Inf	33.51	3	Horizontal	360	1.50	51.48	27.70	5.81	-
AV	2.4924G	37.19	54.00	-16.81	33.85	3	Horizontal	360	1.50	3.34	28.00	5.85	-
PK	2.348G	59.26	74.00	-14.74	33.09	3	Horizontal	360	1.50	26.17	27.38	5.71	-
PK	2.44G	107.49	Inf	-Inf	33.51	3	Horizontal	360	1.50	73.98	27.70	5.81	-
PK	2.4924G	59.69	74.00	-14.31	33.85	3	Horizontal	360	1.50	25.84	28.00	5.85	-

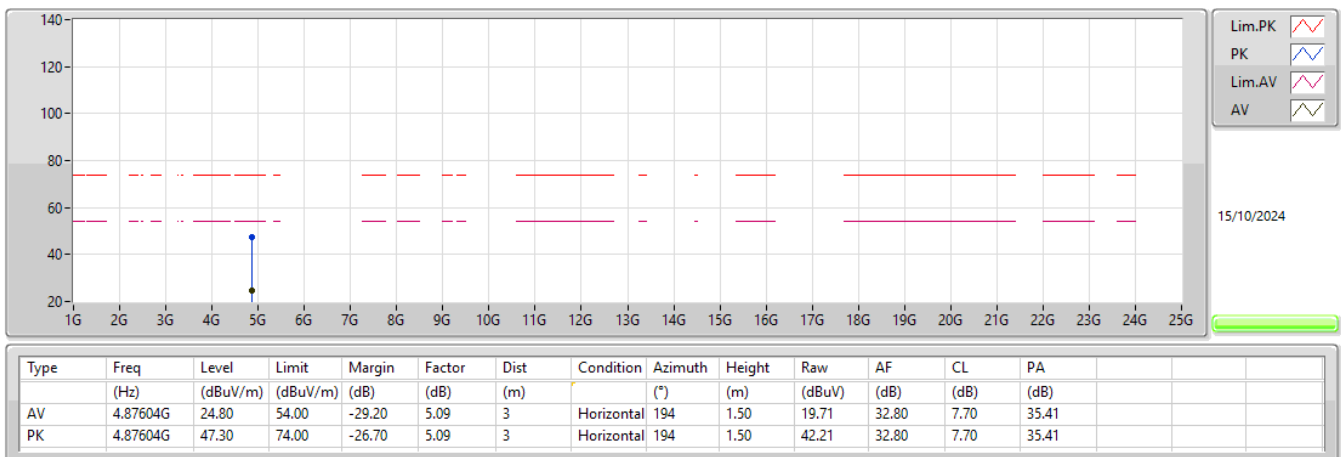
2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX



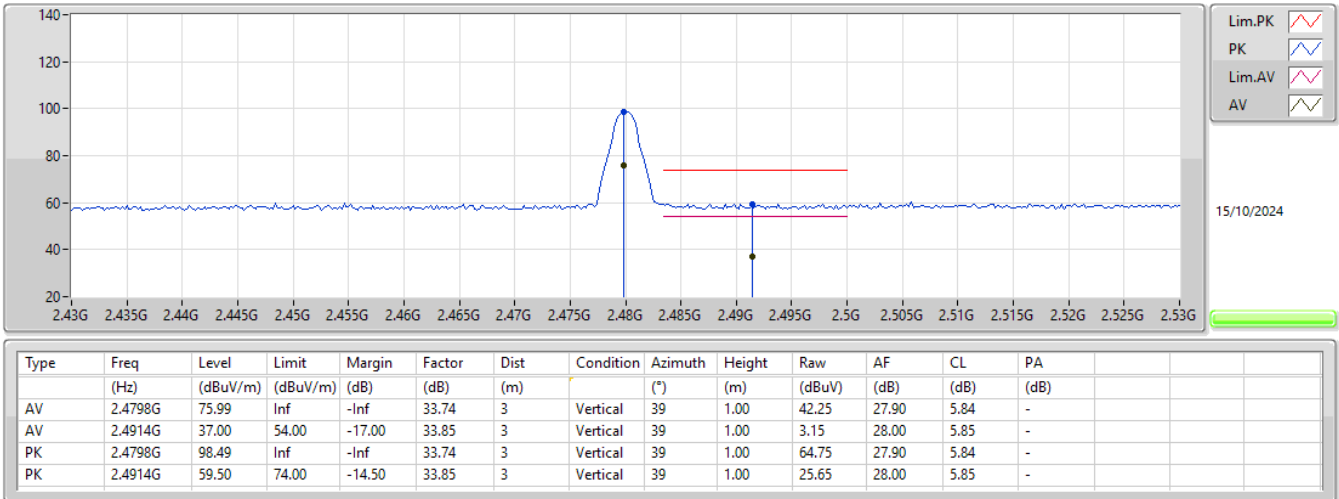
2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX



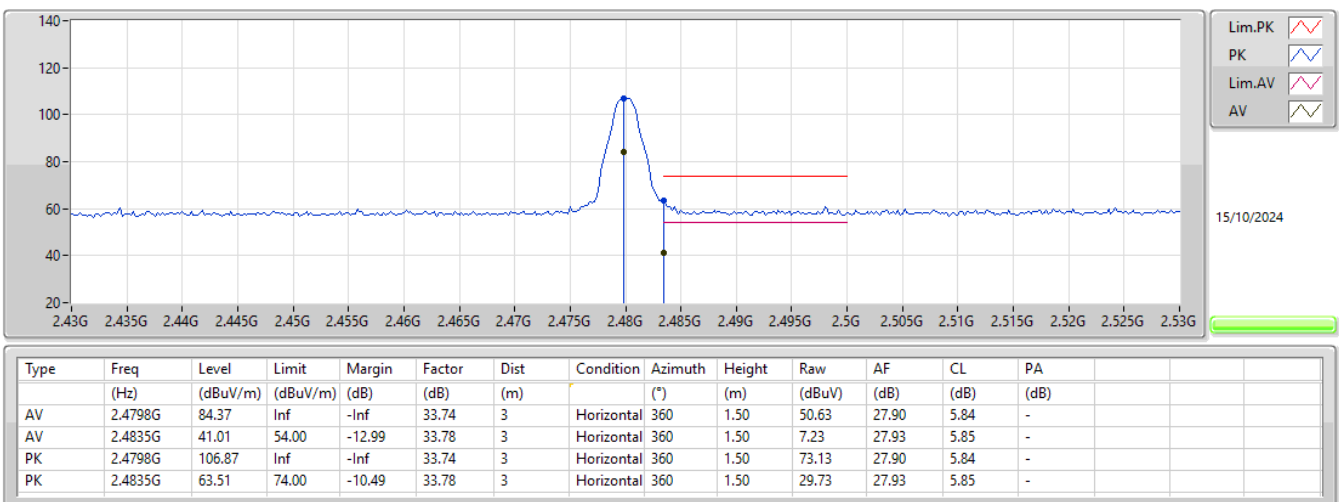
2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX



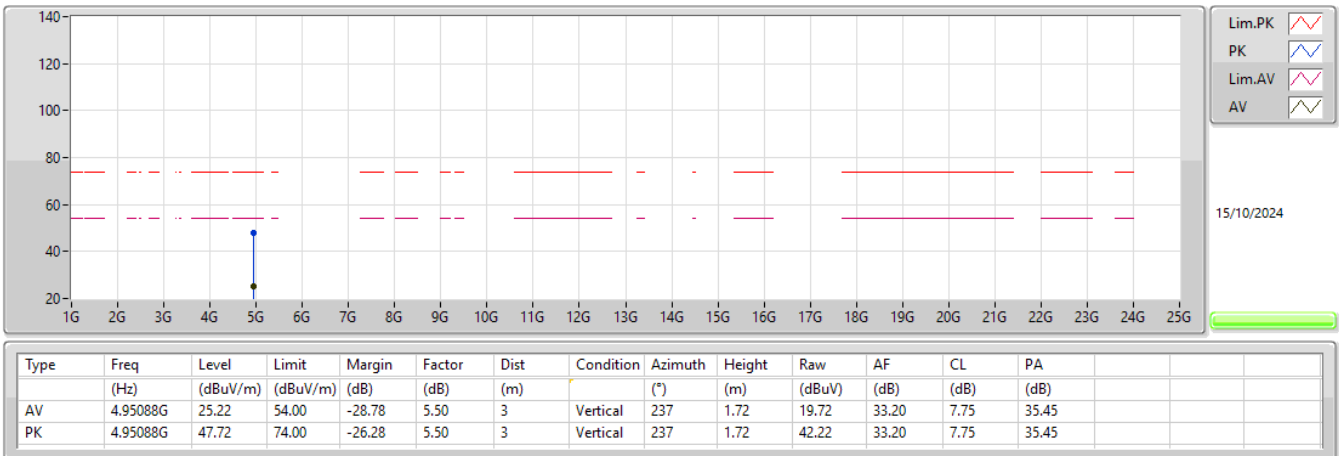
2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX

