

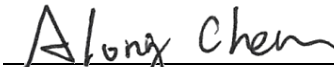
ISED Test Report

IC : 3147A-BL54L15
Equipment : Bluetooth LE + 802.15.4 + NFC module
Model No. : BL54L15
Brand Name : Ezurio
Applicant : Ezurio LLC
Address : W66N220 Commerce Court, Cedarburg, WI
53012, USA
Manufacturer : Ezurio LLC
Address : W66N220 Commerce Court, Cedarburg, WI
53012 United States Of America
Standard : RSS-247 Issue 3 August 2023
Received Date : Dec. 20, 2024
Tested Date : Dec. 25 ~ Dec. 26, 2024

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

Approved by:


Along Chen / Assistant Manager


Gary Chang / Manager

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Appendix A. 6dB and Occupied Bandwidth

Appendix B. Conducted Output Power

Appendix C. Power Spectral Density

Appendix D. Unwanted Emissions into Restricted Frequency Bands

Appendix E. Emissions in Non-Restricted Frequency Bands

Appendix F. AC Power Line Conducted Emissions

Release Record

Report No.	Version	Description	Issued Date
CR4D2002AE	Rev. 01	Initial issue	Jan. 23, 2025

Summary of Test Results

IC Rules	Test Items	Measured	Result
RSS-Gen Section 8.8	AC Power Line Conducted Emissions	[dBuV]: 19.224MHz 33.37 (Margin -16.63dB) - AV	Pass
RSS-247 Section 5.5 RSS-Gen Section 8.9	Unwanted Emissions	[dBuV/m at 3m]: 4.96GHz 47.44 (Margin -6.56dB) - AV	Pass
RSS-247 Section 5.4 (d)	Conducted Output Power	Power [dBm]: 6.91	Pass
RSS-247 Section 5.2 (a)	6dB Bandwidth	Meet the requirement of limit	Pass
RSS-247 Section 5.2 (b)	Power Spectral Density	Meet the requirement of limit	Pass
N/A	Antenna Requirement	Meet the requirement of limit	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:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information				
Frequency Range (MHz)	Bluetooth Mode	Ch. Freq. (MHz)	Channel Number	Data Rate
2400-2483.5	LE	2402-2480	40	125 kbps
				500 kbps
				1 Mbps
		2404-2478	37	2 Mbps
Note: Bluetooth LE (Low energy) uses GFSK modulation.				

1.1.2 Antenna Details

External Antenna list for BL54L15 MHF4 module variant (453-00044)

Manufacturer	Model	Part Number	Type	Connector	2400-2500 (MHz)	2400-2480 (MHz)
Ezurio	NanoBlue	EBL2400A1-10 MH4L	PCB Dipole	IPEX MHF4	2 dBi	-
Ezurio	FlexPIFA	001-0022	FlexPIFA	IPEX MHF4L	-	2 dBi
Mag.Layers	EDA-8709-2G4C 1-B27-CY	0600-00057	Dipole	IPEX MHF4	2.32 dBi	-
Ezurio	mFlexPIFA	EFA2400A3S-10 MH4L	PIFA	IPEX MHF4L	-	2 dBi
Ezurio	i-FlexPIFATM Mini Series	EFG2401A3S-1 0MH4L	i-FlexPIFA	IPEX MHF4L	-	2 dBi
Ezurio	Ezurio NFC	0600-00061	Coiled Inductor	FFC/FPC Connector	-	-

Note: Please refer to antenna report for more details about antenna pattern and other information.

Integrated Antenna BL54L15 PCB printed antenna module variant (453-00001)

Manufacturer	Model	Part Number	Type	Connector	2400-2500 (MHz)
Ezurio	BL54L15 Printed PCB Antenna	N/A	Printed PCB	N/A	0 dBi
Ezurio	Ezurio NFC	0600-00061	Coiled Inductor	FFC/FPC Connector	-

Note: Please refer to antenna report for more details about antenna pattern and other information.

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	1.8Vdc from host
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1.1.4 Accessories

N/A

1.1.5 Test Sample Information

Serial Number of Test Sample	Radiated Emission: 00003 AC Power Line Conducted Emission: 00003 Antenna Port Conducted: 00003
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1.1.6 Channel List

Frequency band (MHz)				2402-2480 / BT-LE(125kbps / 500kbps / 1Mbps)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
37	2402	9	2422	18	2442	28	2462
0	2404	10	2424	19	2444	29	2464
1	2406	38	2426	20	2446	30	2466
2	2408	11	2428	21	2448	31	2468
3	2410	12	2430	22	2450	32	2470
4	2412	13	2432	23	2452	33	2472
5	2414	14	2434	24	2454	34	2474
6	2416	15	2436	25	2456	35	2476
7	2418	16	2438	26	2458	36	2478
8	2420	17	2440	27	2460	39	2480

Frequency band (MHz)				2404-2478 / BT-LE(2Mbps)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2404	10	2424	20	2446	30	2466
1	2406	11	2428	21	2448	31	2468
2	2408	12	2430	22	2450	32	2470
3	2410	13	2432	23	2452	33	2472
4	2412	14	2434	24	2454	34	2474
5	2414	15	2436	25	2456	35	2476
6	2416	16	2438	26	2458	36	2478
7	2418	17	2440	27	2460	--	--
8	2420	18	2442	28	2462	--	--
9	2422	19	2444	29	2464	--	--

1.1.7 Test Tool and Duty Cycle

Test Tool	PuTTY, Version: 0.60	
Modulation Mode	Duty Cycle Of Test Signal (%)	Duty Factor (dB)
BT-LE(125kbps)	100.00%	0.00
BT-LE(500kbps)	100.00%	0.00
BT-LE(1Mbps)	100.00%	0.00
BT-LE(2Mbps)	100.00%	0.00

1.1.8 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)		
	2402	2440	2480
BT-LE(125kbps)	pos7dBm	pos7dBm	pos7dBm
BT-LE(500kbps)	pos7dBm	pos7dBm	pos7dBm
BT-LE(1Mbps)	pos7dBm	pos7dBm	pos7dBm

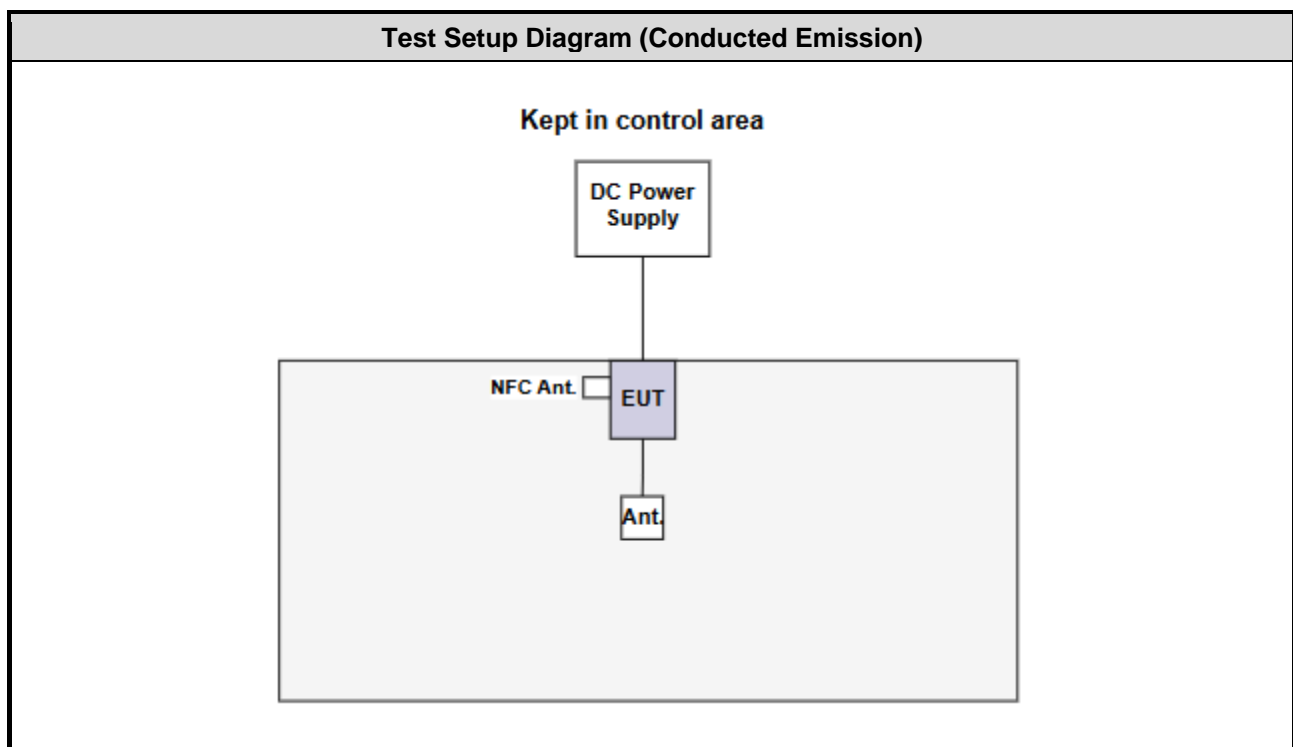
Modulation Mode	Test Frequency (MHz)		
	2404	2440	2478
BT-LE(2Mbps)	pos7dBm	pos7dBm	pos7dBm

1.2 Local Support Equipment List

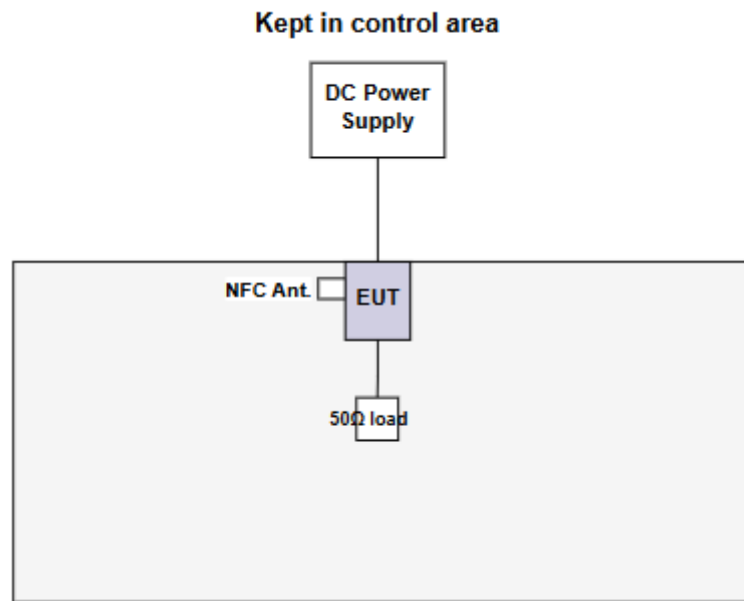
Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Laptop	DELL	Latitude E5400	DoC	---
2	50 ohm load	---	---	---	Provided by applicant.

Note: The support laptop was disconnected from EUT and was removed from test table after sending command from laptop to control EUT to transmit continuously.

1.3 Test Setup Chart



Test Setup Diagram (Radiated Emission)



1.4 Test Equipment List and Calibration Data

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Dec. 26, 2024				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101658	Feb. 23, 2024	Feb. 22, 2025
LISN	R&S	ENV216	101579	May 09, 2024	May 08, 2025
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan. 10, 2024	Jan. 09, 2025
DC POWER SOURCE	GW INSTEK	GPC-6030D	GES855395	Nov. 06, 2024	Nov. 05, 2025
50 ohm terminal	NA	50	01	Jun. 19, 2024	Jun. 18, 2025
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	Dec. 25, 2024				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Mar. 05, 2024	Mar. 04, 2025
Spectrum Analyzer	R&S	FSV40	101499	Apr. 02, 2024	Apr. 01, 2025
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 05, 2024	Nov. 04, 2025
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Jul. 02, 2024	Jul. 01, 2025
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 20, 2024	Dec. 19, 2025
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 18, 2024	Nov. 17, 2025
Preamplifier	EMC	EMC02325	980187	Jun. 27, 2024	Jun. 26, 2025
Preamplifier	EMC	EMC118A45SE	980897	Aug. 05, 2024	Aug. 04, 2025
Preamplifier	EMC	EMC184045SE	980903	Jul. 30, 2024	Jul. 29, 2025
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 02, 2024	Oct. 01, 2025
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 20, 2024	Sep. 19, 2025
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 20, 2024	Sep. 19, 2025
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 20, 2024	Sep. 19, 2025
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 20, 2024	Sep. 19, 2025
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 20, 2024	Sep. 19, 2025
Attenuator	Pasternack	PE7005-10	10-3	Sep. 20, 2024	Sep. 19, 2025
HIGHPASS FILTER	WI	WHK3.1-18G-10SS	43	Sep. 20, 2024	Sep. 19, 2025
Measurement Software	Sporton	SENSE-15247_FS	V5.11	NA	NA
Measurement Software	Sporton	SENSE-15247_EMI	V5.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Dec. 25, 2024				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101910	Apr. 18, 2024	Apr. 17, 2025
Power Meter	Anritsu	ML2495A	1241002	Nov. 26, 2024	Nov. 25, 2025
Power Sensor	Anritsu	MA2411B	1207366	Nov. 26, 2024	Nov. 25, 2025
Attenuator	Pasternack	PE7005-10	10-2	Oct. 04, 2024	Oct. 03, 2025
HIGHPASS FILTER 3.1-18G	WHK	WHK3.1/18G-10SS	39	Oct. 02, 2024	Oct. 01, 2025
Measurement Software	Sporton	SENSE-15247_FS	V5.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

RSS-247 Issue 3 August 2023

RSS-Gen Issue 5 February 2021 Amendment 2

ANSI C63.10-2013

1.6 Reference Guidance

FCC KDB 558074 D01 15.247 Meas Guidance v05r02

1.7 Deviation from Test Standard and Measurement Procedure

None

1.8 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ($k=2$)).

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	± 34.130 Hz
Conducted power	± 0.808 dB
Power density	± 0.583 dB
Conducted emission	± 2.715 dB
AC conducted emission	± 2.92 dB
Unwanted Emission ≤ 1 GHz	± 3.96 dB
Unwanted Emission > 1 GHz	± 4.51 dB

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	CO01-WS, TH01-WS
Address of Test Site	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)
Test Site	03CH03-WS
Address of Test Site	No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- ISSED#: 10807C
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Test Configuration
AC Power Line Conducted Emissions	BT-LE(1Mbps)	2480	---
Unwanted Emissions ≤ 1GHz	BT-LE(1Mbps)	2480	---
Unwanted Emissions > 1GHz	BT-LE(1Mbps) BT-LE(2Mbps)	2402, 2440, 2480 2404, 2440, 2478	---
Conducted Output Power 6dB bandwidth Power spectral density	BT-LE(125kbps) BT-LE(500kbps) BT-LE(1Mbps) BT-LE(2Mbps)	2402, 2440, 2480 2402, 2440, 2480 2402, 2440, 2480 2404, 2440, 2478	---
NOTE:			
1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.			

3 Transmitter Test Results

3.1 6dB and Occupied Bandwidth

3.1.1 Limit of 6dB Bandwidth

The minimum 6dB bandwidth shall be at least 500 kHz.

3.1.2 Test Procedures

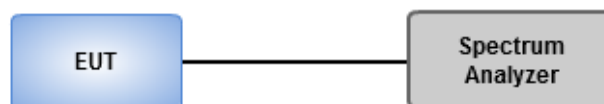
6dB Bandwidth

1. Set resolution bandwidth (RBW) = 1% to 5% of the anticipated emission, Video bandwidth = 3x the RBW.
2. Detector = Peak, Trace mode = max hold.
3. Sweep = auto couple, Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6dB relative to the maximum level measured in the fundamental emission.

Occupied Bandwidth

1. Set resolution bandwidth (RBW) = 1% ~ 5 % of OBW, Video bandwidth = 3 x RBW
2. Detector = Sample, Trace mode = max hold.
3. Sweep = auto couple, Allow the trace to stabilize.
4. Use the OBW measurement function of spectrum analyzer to measure the occupied bandwidth.

3.1.3 Test Setup



3.1.4 Test Results

Ambient Condition	22°C / 66%	Tested By	Roger Lu
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Refer to Appendix A.

3.2 Conducted Output Power

3.2.1 Limit of Conducted Output Power

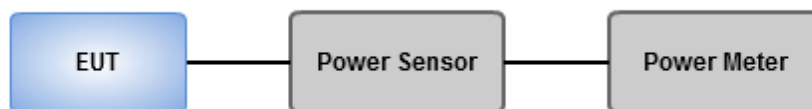
Conducted power shall not exceed 1Watt.

Antenna gain $\leq 6\text{dBi}$, no any corresponding reduction is in output power limit.

3.2.2 Test Procedures

A broadband RF power meter is used for output power measurement. The video bandwidth of power meter is greater than DTS bandwidth of EUT. If duty cycle of test signal is not 100 %, trigger and gating function of power meter will be enabled to capture transmission burst for measuring output power.

3.2.3 Test Setup



3.2.4 Test Results

Ambient Condition	22°C / 66%	Tested By	Roger Lu
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Refer to Appendix B.

3.3 Power Spectral Density

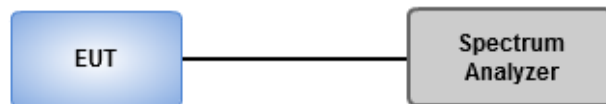
3.3.1 Limit of Power Spectral Density

Power spectral density shall not be greater than 8 dBm in any 3 kHz band.

3.3.2 Test Procedures

1. Set the RBW = 3 kHz, VBW = 10 kHz.
2. Detector = Peak, Sweep time = auto couple.
3. Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

3.3.3 Test Setup



3.3.4 Test Results

Ambient Condition	22°C / 66%	Tested By	Roger Lu
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Refer to Appendix C.

3.4 Unwanted Emissions in Restricted Frequency Bands

3.4.1 Limit of Unwanted Emissions in Restricted Frequency Bands

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:
Quasi-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

3.4.2 Test Procedures

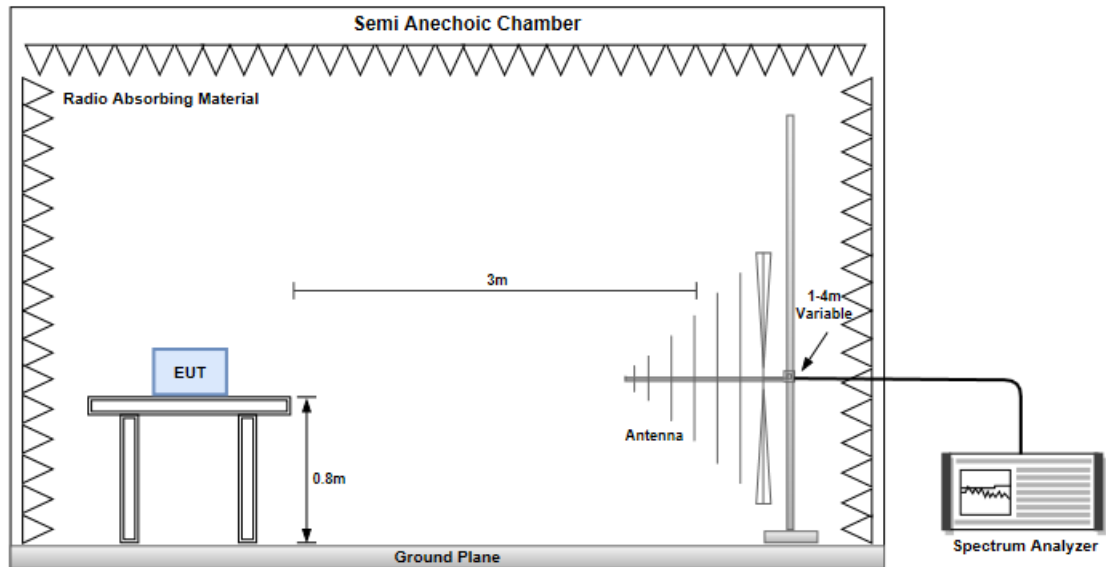
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

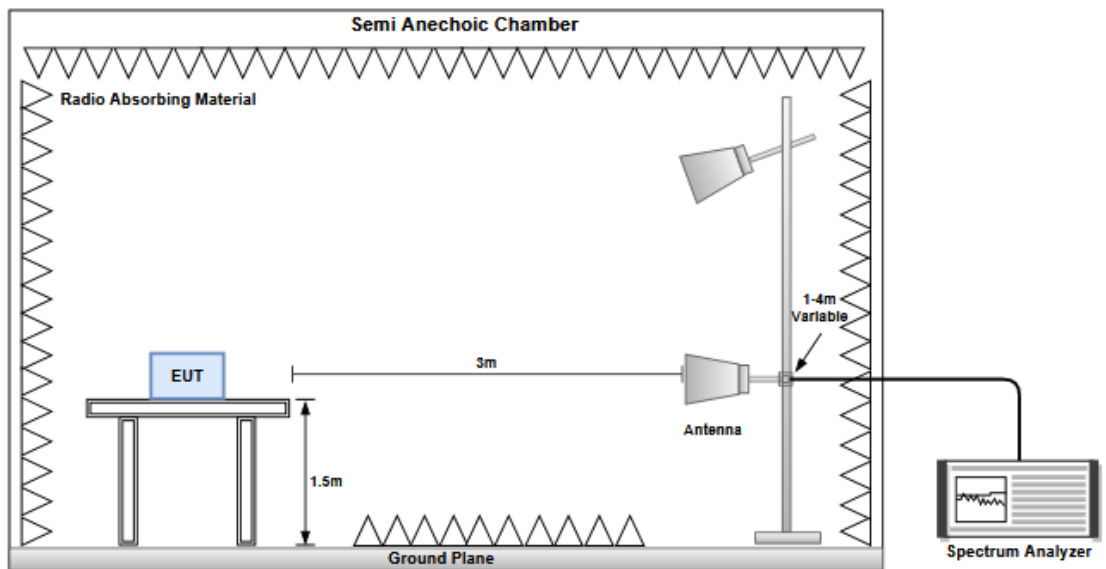
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.4.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.4.4 Test Results

Refer to Appendix D.

3.5 Emissions in non-restricted Frequency Bands

3.5.1 Emissions in non-restricted frequency bands limit

Peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz.

3.5.2 Test Procedures

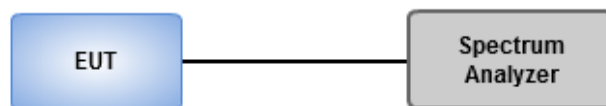
Reference level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Use the peak marker function to determine the maximum PSD level

Emission level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Scan Frequency range is up to 25GHz
4. Use the peak marker function to determine the maximum amplitude level

3.5.3 Test Setup



3.5.4 Test Results

Ambient Condition	20°C / 63%	Tested By	Akun Chung
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Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

3.6.1 Limit of AC Power Line Conducted Emissions

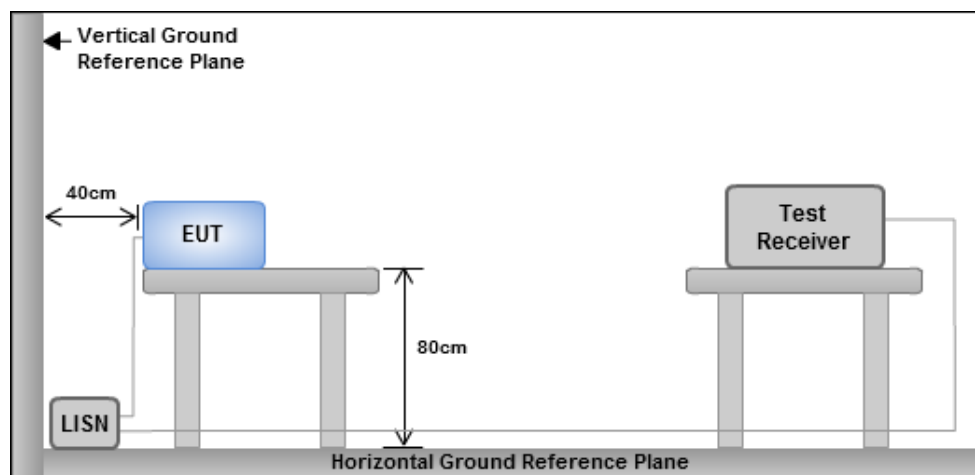
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.6.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V/60Hz

3.6.3 Test Setup



- Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.6.4 Test Results

Refer to Appendix F.

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou
District, New Taipei City, Taiwan
(R.O.C.)

Kwei Shan

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)
No.2-1, Lane 6, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd
St., Kwei Shan Dist., Tao Yuan
City 33381, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(125kbps)	685k	1.088M	1M09F1D	675k	1.078M
BT-LE(500kbps)	708.75k	1.053M	1M05F1D	686.25k	1.043M
BT-LE(1Mbps)	740k	1.083M	1M08F1D	705k	1.071M
BT-LE(2Mbps)	1.318M	2.151M	2M15F1D	1.28M	2.126M

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(125kbps)	-	-	-	-
2402MHz	Pass	500k	680k	1.078M
2440MHz	Pass	500k	685k	1.082M
2480MHz	Pass	500k	675k	1.088M
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	500k	695k	1.052M
2440MHz	Pass	500k	708.75k	1.053M
2480MHz	Pass	500k	686.25k	1.043M
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	705k	1.071M
2440MHz	Pass	500k	726.25k	1.083M
2480MHz	Pass	500k	740k	1.078M
BT-LE(2Mbps)	-	-	-	-
2404MHz	Pass	500k	1.285M	2.151M
2440MHz	Pass	500k	1.28M	2.126M
2478MHz	Pass	500k	1.318M	2.14M

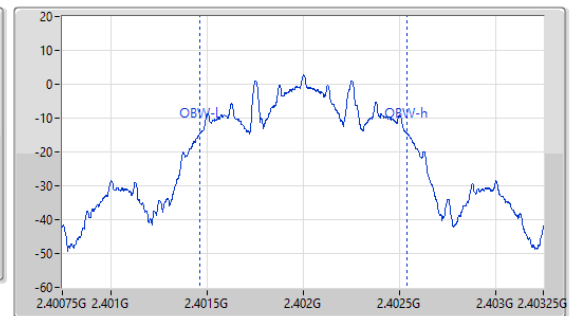
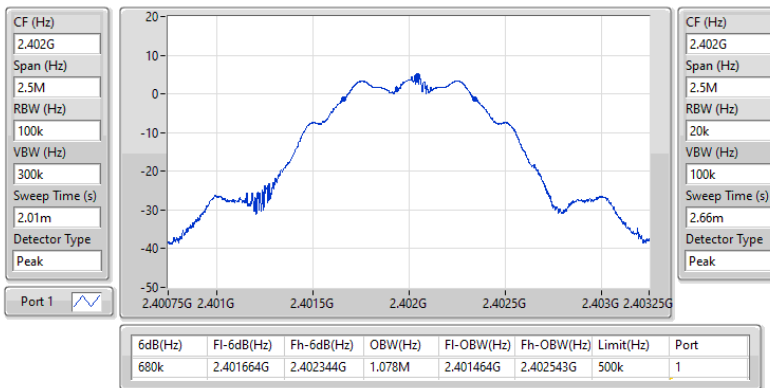
Port X-N dB = Port X 6dB down bandwidth;

Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_BT-LE(125kbps)

EBW-DTS

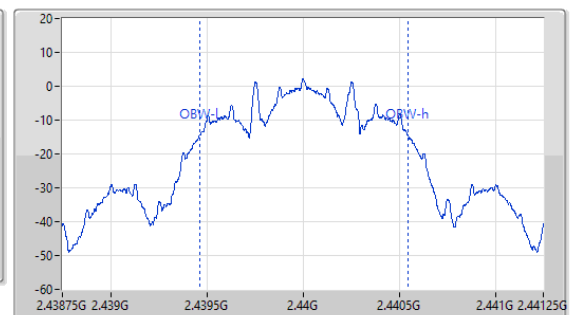
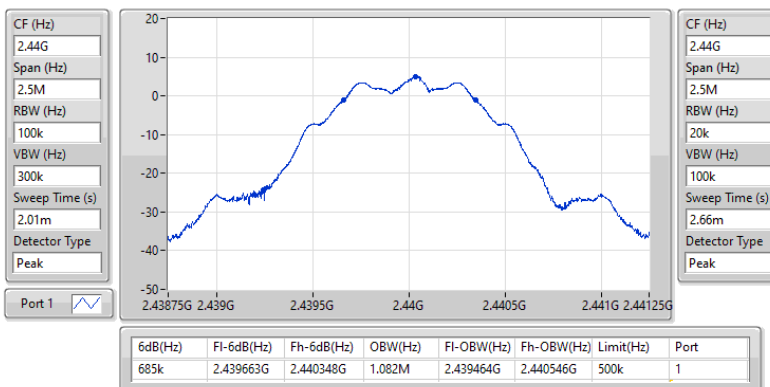
2402MHz



2.4-2.4835GHz_BT-LE(125kbps)

EBW-DTS

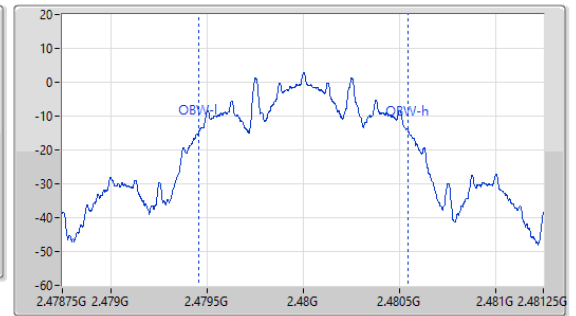
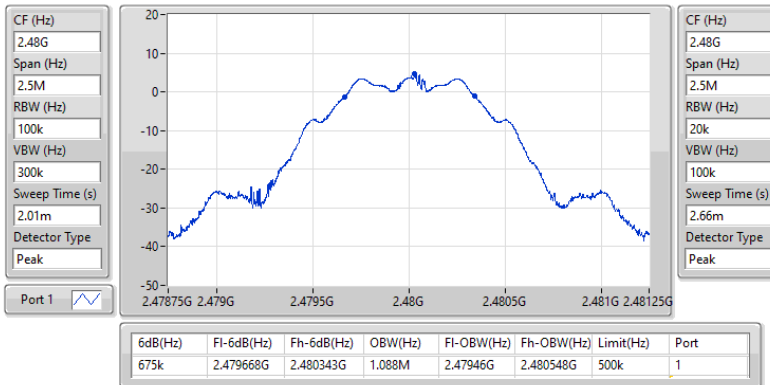
2440MHz



2.4-2.4835GHz_BT-LE(125kbps)

EBW-DTS

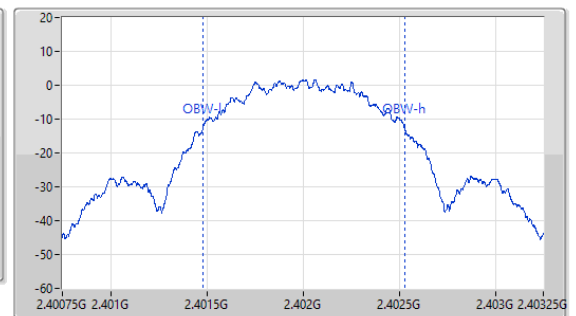
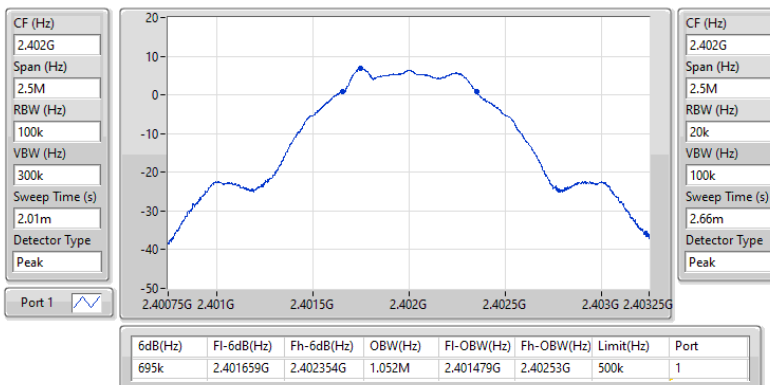
2480MHz



2.4-2.4835GHz_BT-LE(500kbps)

EBW-DTS

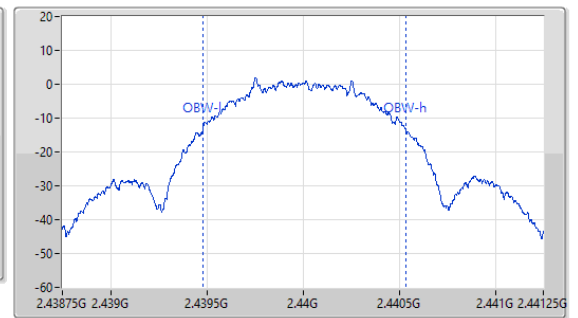
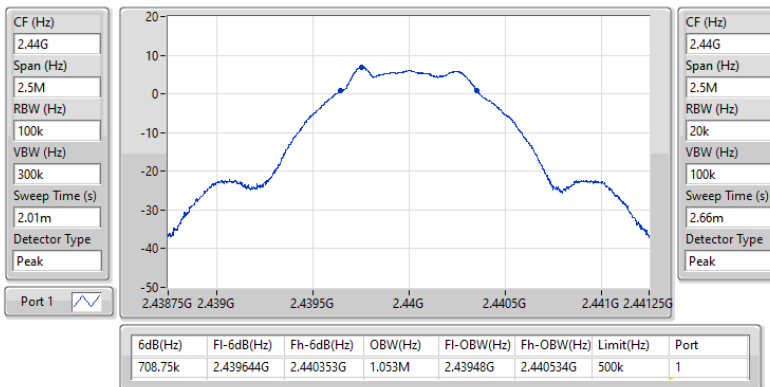
2402MHz



2.4-2.4835GHz_BT-LE(500kbps)

EBW-DTS

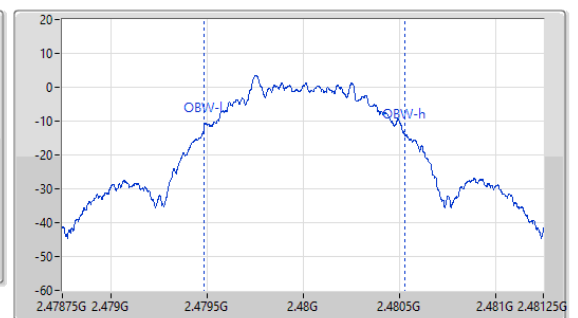
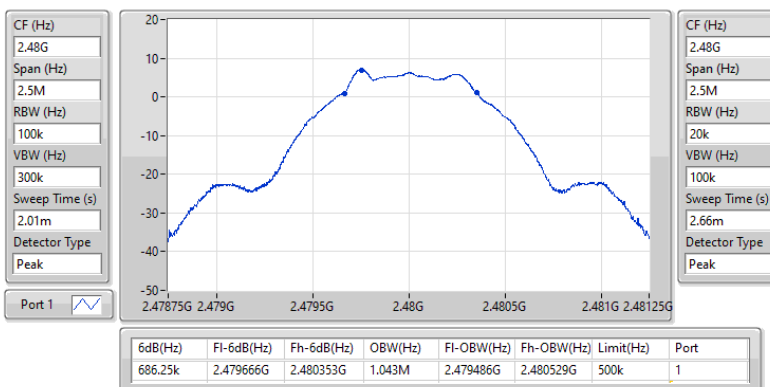
2440MHz



2.4-2.4835GHz_BT-LE(500kbps)

EBW-DTS

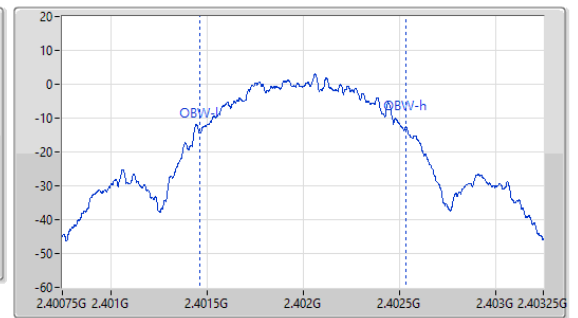
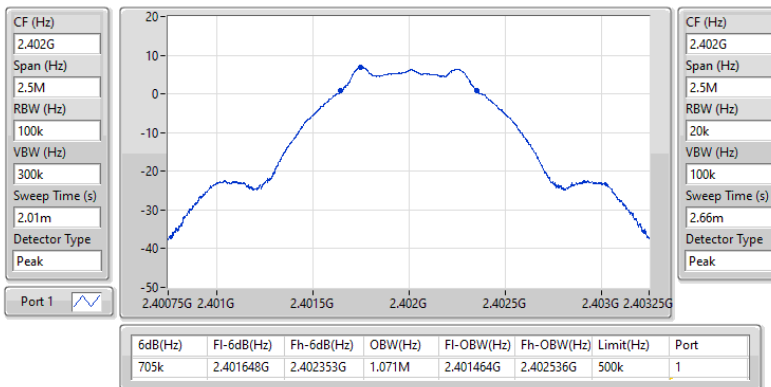
2480MHz



2.4-2.4835GHz_BT-LE(1Mbps)

EBW-DTS

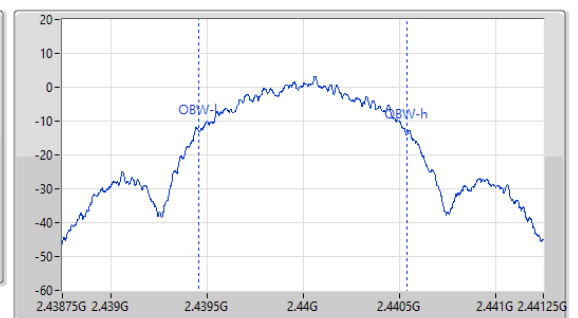
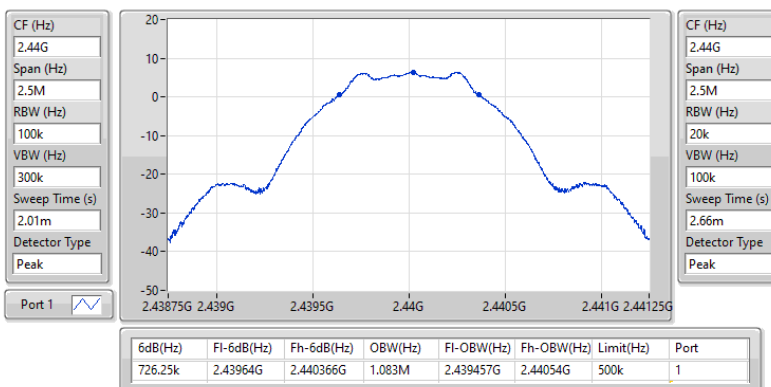
2402MHz



2.4-2.4835GHz_BT-LE(1Mbps)

EBW-DTS

2440MHz

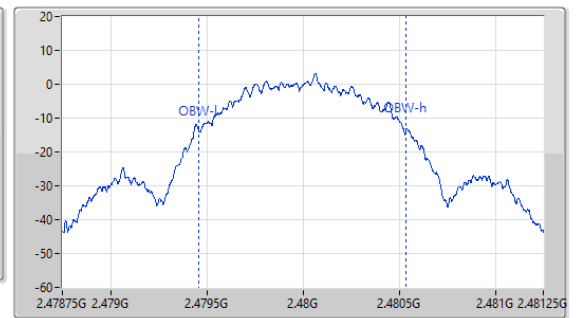
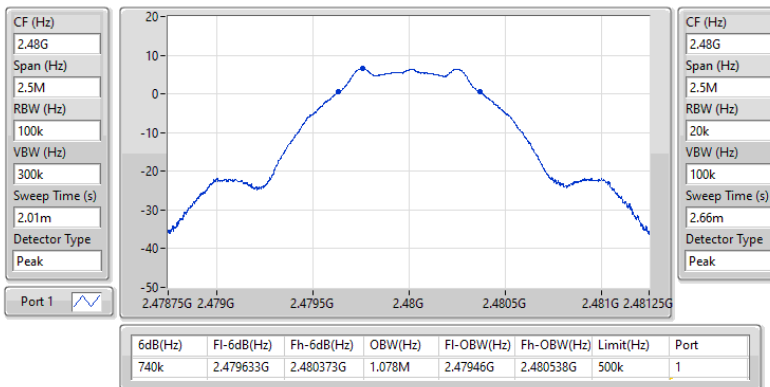




2.4-2.4835GHz_BT-LE(1Mbps)

EBW-DTS

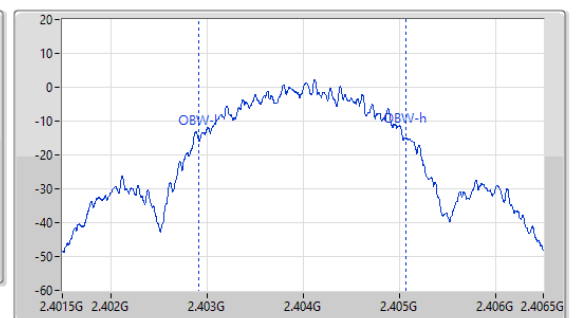
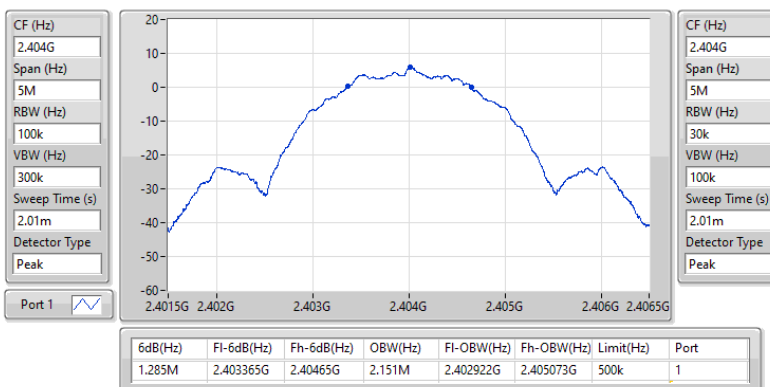
2480MHz



2.4-2.4835GHz_BT-LE(2Mbps)

EBW-DTS

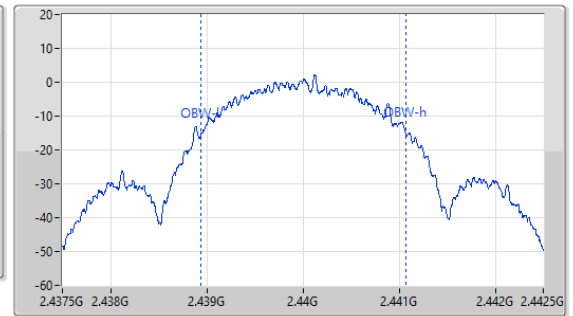
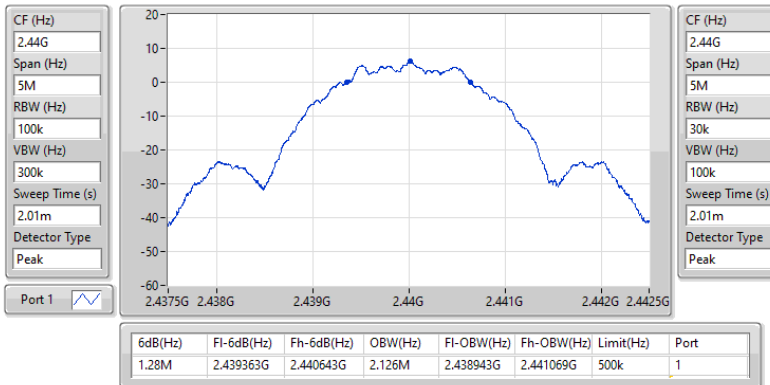
2404MHz



2.4-2.4835GHz_BT-LE(2Mbps)

EBW-DTS

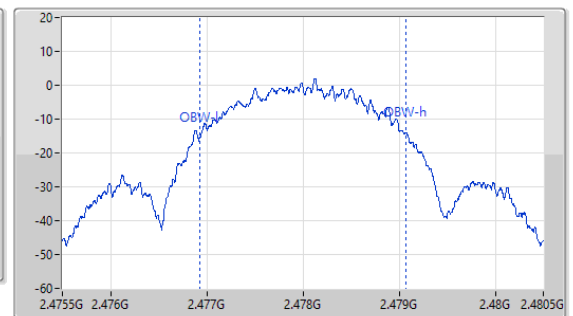
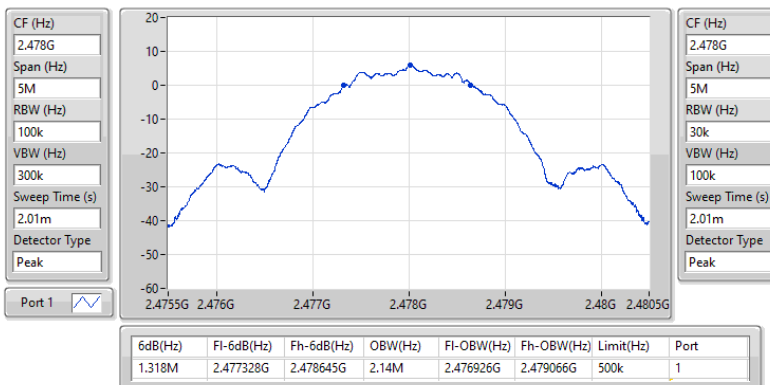
2440MHz



2.4-2.4835GHz_BT-LE(2Mbps)

EBW-DTS

2478MHz



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-LE(125kbps)	6.89	0.00489
BT-LE(500kbps)	6.86	0.00485
BT-LE(1Mbps)	6.91	0.00491
BT-LE(2Mbps)	6.90	0.00490

Result

Mode	Result	Antenna Gain (dBi)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
BT-LE(125kbps)	-	-	-	-	-	-
2402MHz	Pass	2.32	6.82	30.00	9.14	36.00
2440MHz	Pass	2.32	6.87	30.00	9.19	36.00
2480MHz	Pass	2.32	6.89	30.00	9.21	36.00
BT-LE(500kbps)	-	-	-	-	-	-
2402MHz	Pass	2.32	6.80	30.00	9.12	36.00
2440MHz	Pass	2.32	6.86	30.00	9.18	36.00
2480MHz	Pass	2.32	6.86	30.00	9.18	36.00
BT-LE(1Mbps)	-	-	-	-	-	-
2402MHz	Pass	2.32	6.84	30.00	9.16	36.00
2440MHz	Pass	2.32	6.89	30.00	9.21	36.00
2480MHz	Pass	2.32	6.91	30.00	9.23	36.00
BT-LE(2Mbps)	-	-	-	-	-	-
2404MHz	Pass	2.32	6.83	30.00	9.15	36.00
2440MHz	Pass	2.32	6.88	30.00	9.20	36.00
2478MHz	Pass	2.32	6.90	30.00	9.22	36.00



Conducted Output Power (Average)

Appendix B.2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-LE(125kbps)	6.75	0.00473
BT-LE(500kbps)	6.73	0.00471
BT-LE(1Mbps)	6.77	0.00475
BT-LE(2Mbps)	6.76	0.00474

Result

Mode	Result	Antenna Gain (dBi)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
BT-LE(125kbps)	-	-	-	-	-	-
2402MHz	Pass	2.32	6.68	-	9.00	-
2440MHz	Pass	2.32	6.73	-	9.05	-
2480MHz	Pass	2.32	6.75	-	9.07	-
BT-LE(500kbps)	-	-	-	-	-	-
2402MHz	Pass	2.32	6.66	-	8.98	-
2440MHz	Pass	2.32	6.72	-	9.04	-
2480MHz	Pass	2.32	6.73	-	9.05	-
BT-LE(1Mbps)	-	-	-	-	-	-
2402MHz	Pass	2.32	6.70	-	9.02	-
2440MHz	Pass	2.32	6.75	-	9.07	-
2480MHz	Pass	2.32	6.77	-	9.09	-
BT-LE(2Mbps)	-	-	-	-	-	-
2404MHz	Pass	2.32	6.69	-	9.01	-
2440MHz	Pass	2.32	6.74	-	9.06	-
2478MHz	Pass	2.32	6.76	-	9.08	-

Note: Average power is for reference only.

Summary

Mode	PD (dBm/3kHz)
2.4-2.4835GHz	-
BT-LE(125kbps)	0.93
BT-LE(500kbps)	0.65
BT-LE(1Mbps)	-5.92
BT-LE(2Mbps)	-8.37

Result

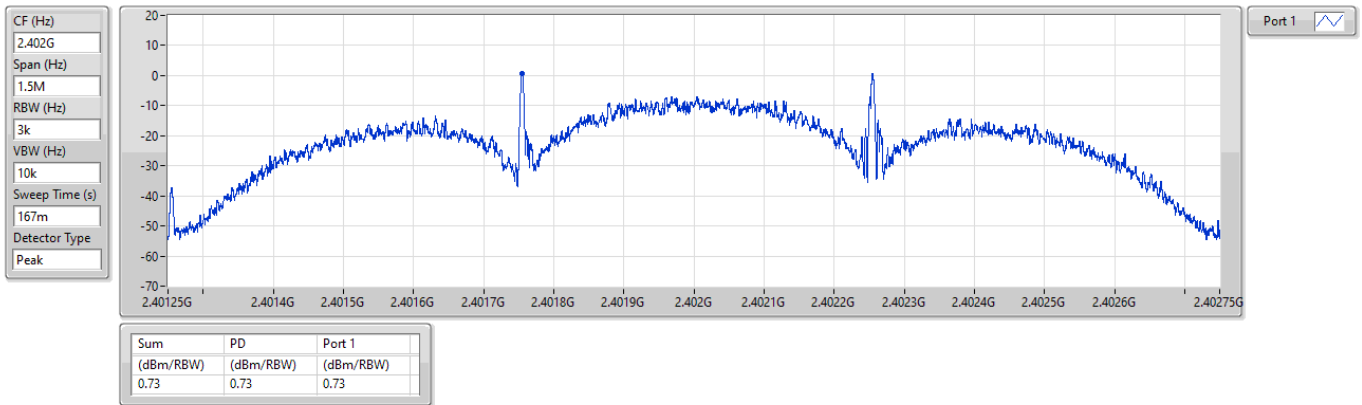
Mode	Result	Antenna Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/3kHz)
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	2.32	0.73	8.00
2440MHz	Pass	2.32	0.92	8.00
2480MHz	Pass	2.32	0.93	8.00
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	2.32	0.49	8.00
2440MHz	Pass	2.32	0.59	8.00
2480MHz	Pass	2.32	0.65	8.00
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	2.32	-6.12	8.00
2440MHz	Pass	2.32	-6.03	8.00
2480MHz	Pass	2.32	-5.92	8.00
BT-LE(2Mbps)	-	-	-	-
2404MHz	Pass	2.32	-8.37	8.00
2440MHz	Pass	2.32	-8.91	8.00
2478MHz	Pass	2.32	-9.50	8.00



2.4-2.4835GHz_BT-LE(125kbps)

PSD

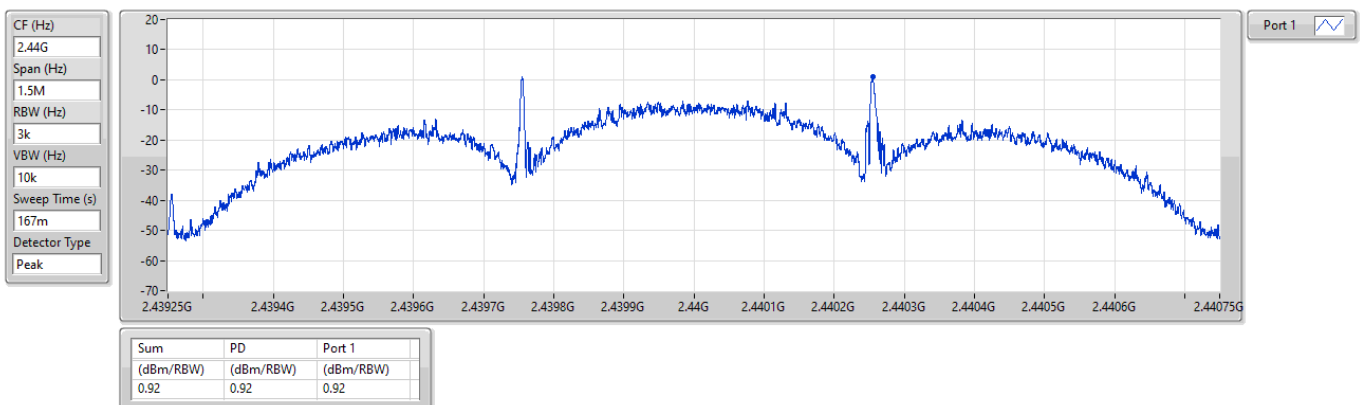
2402MHz



2.4-2.4835GHz_BT-LE(125kbps)

PSD

2440MHz

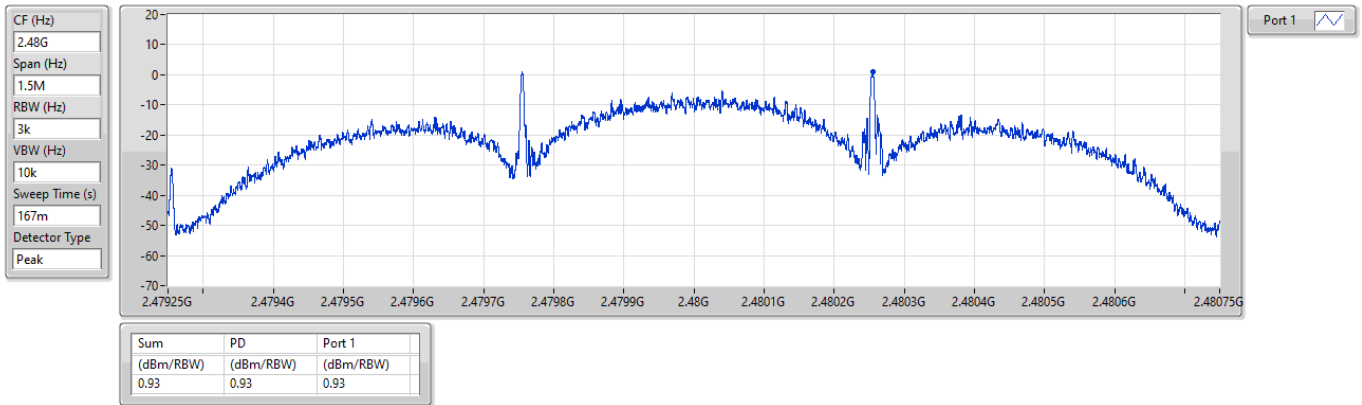




2.4-2.4835GHz_BT-LE(125kbps)

PSD

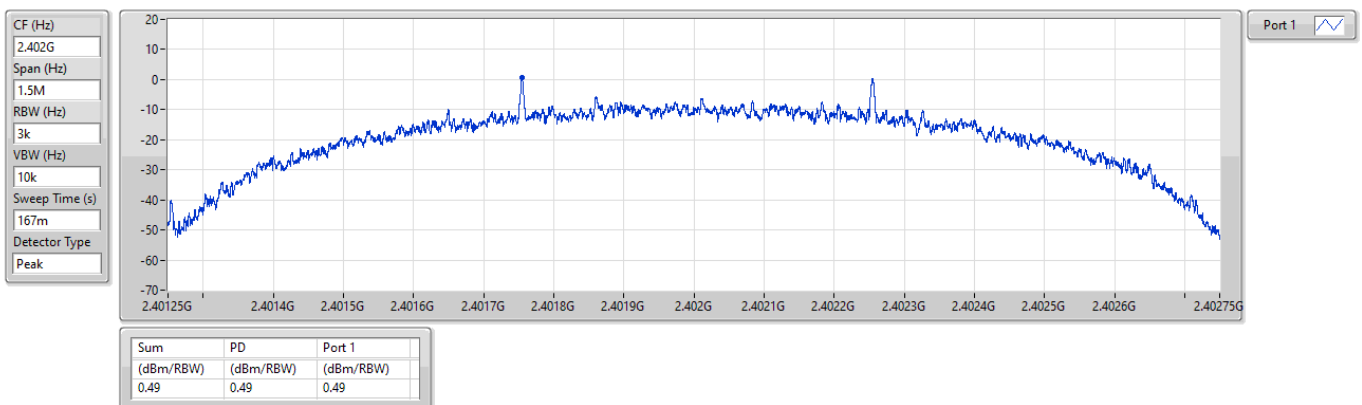
2480MHz



2.4-2.4835GHz_BT-LE(500kbps)

PSD

2402MHz

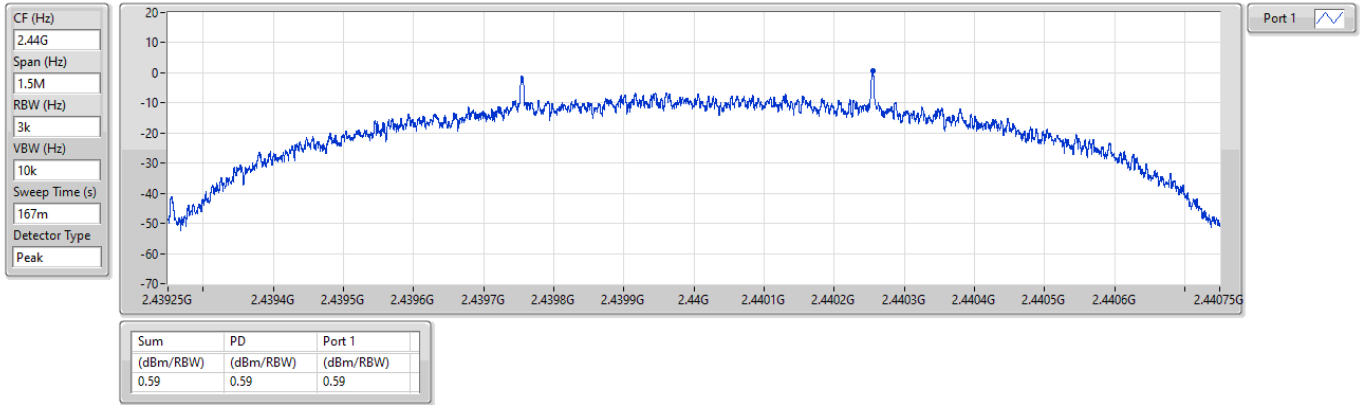




2.4-2.4835GHz_BT-LE(500kbps)

PSD

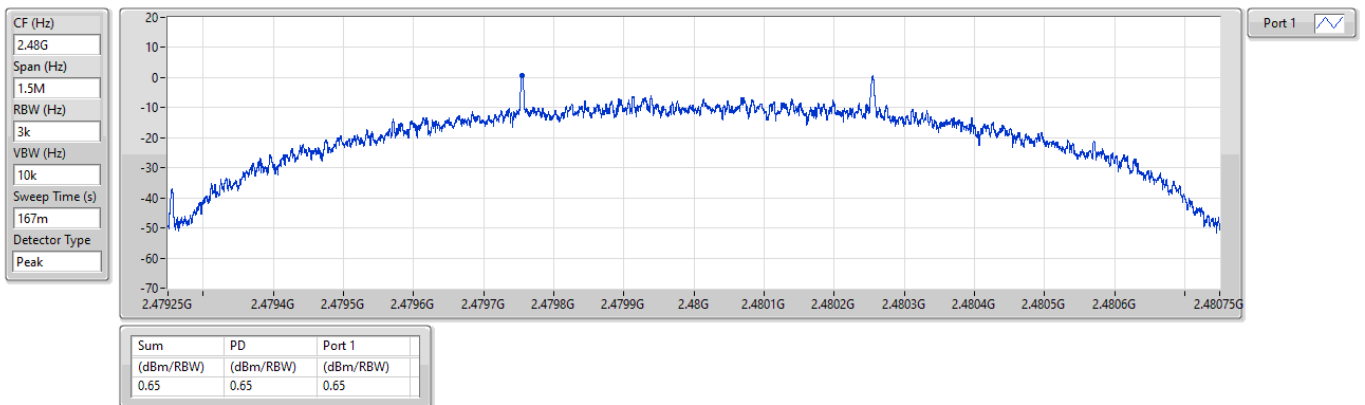
2440MHz



2.4-2.4835GHz_BT-LE(500kbps)

PSD

2480MHz

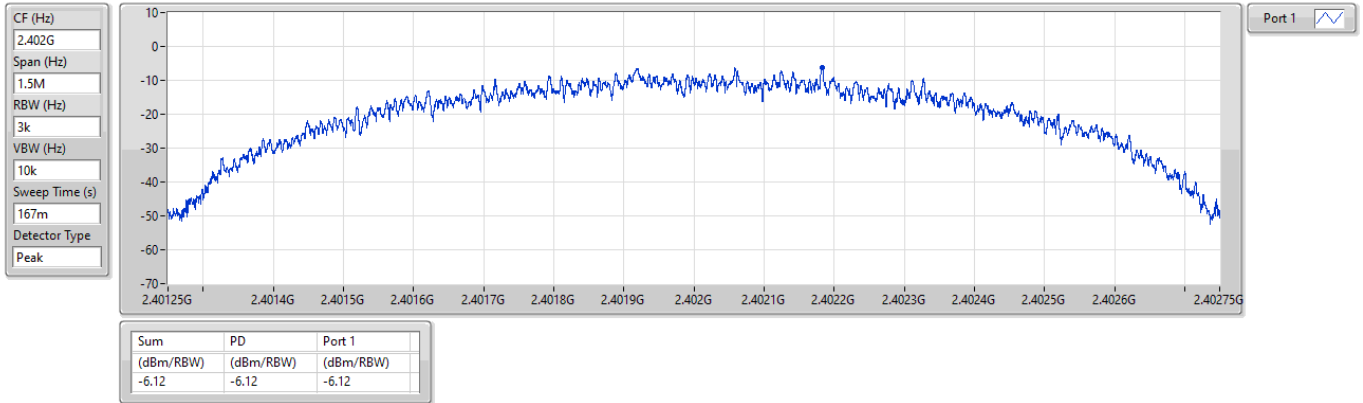




2.4-2.4835GHz_BT-LE(1Mbps)

PSD

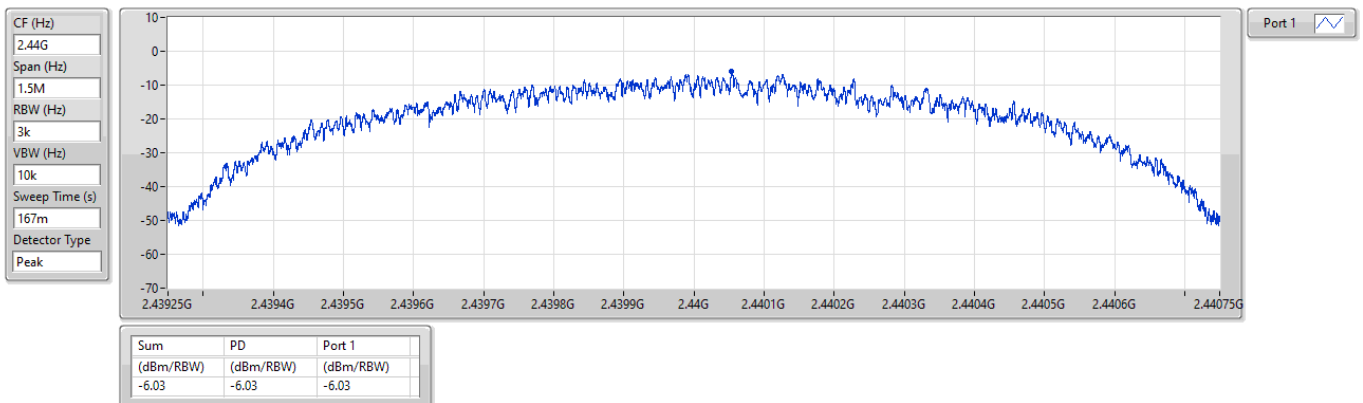
2402MHz



2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2440MHz

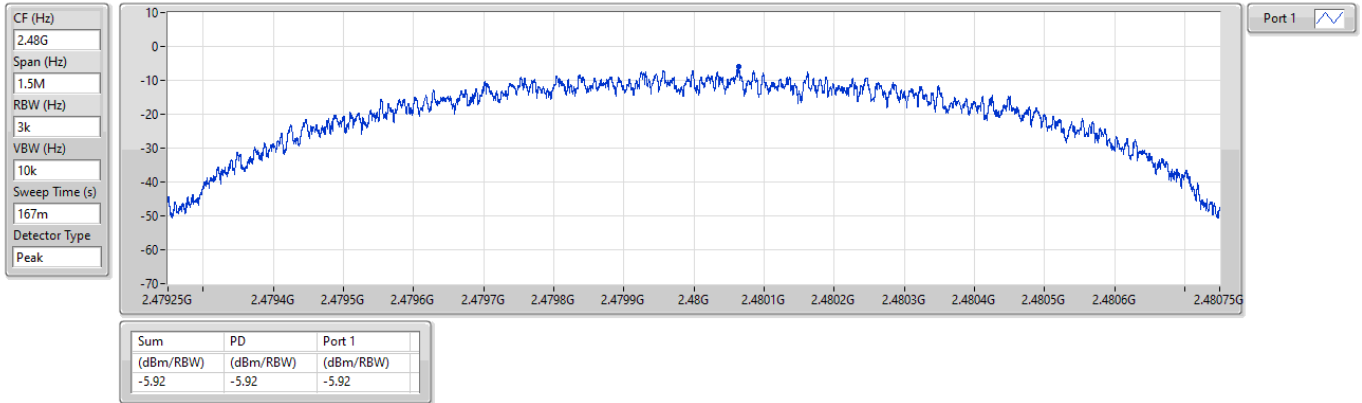




2.4-2.4835GHz_BT-LE(1Mbps)

PSD

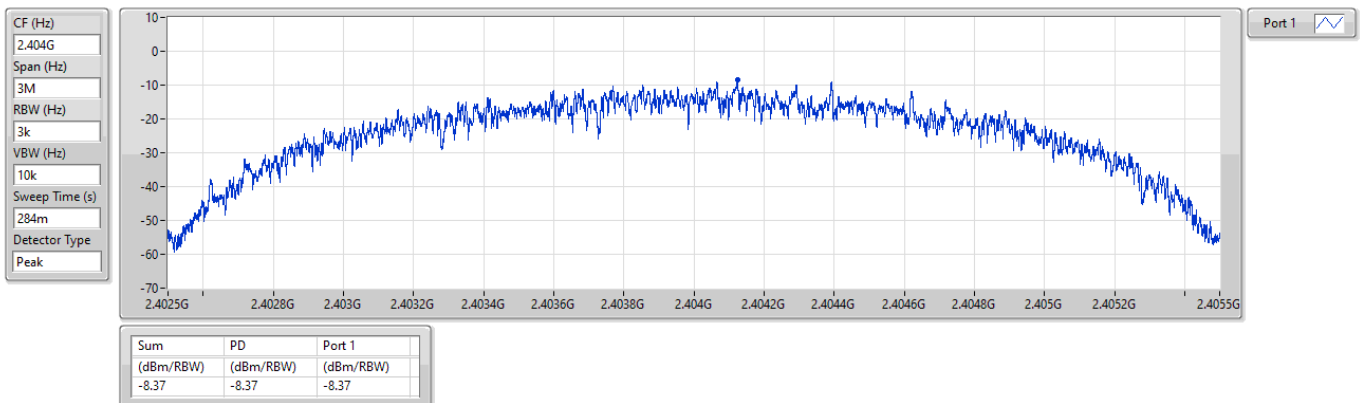
2480MHz



2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2404MHz

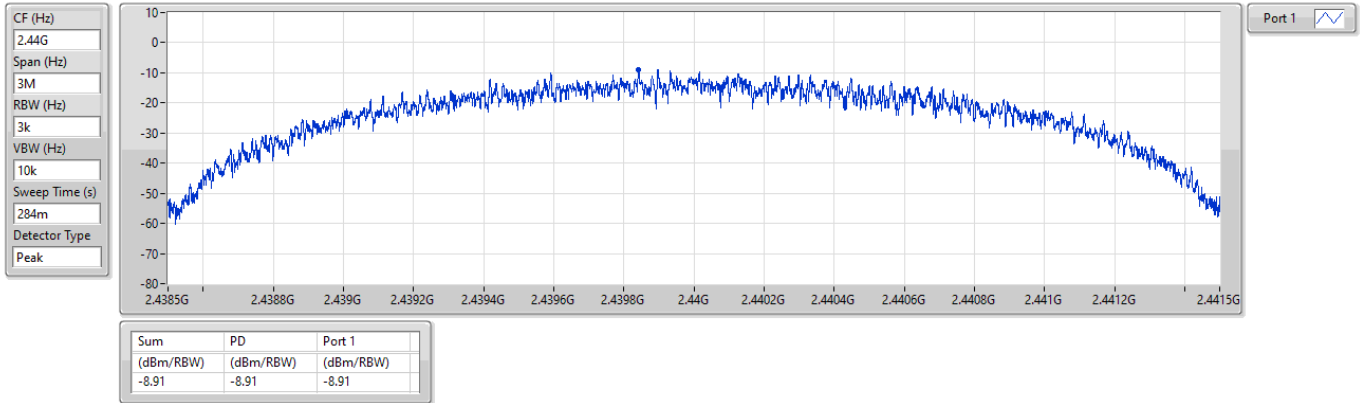




2.4-2.4835GHz_BT-LE(2Mbps)

PSD

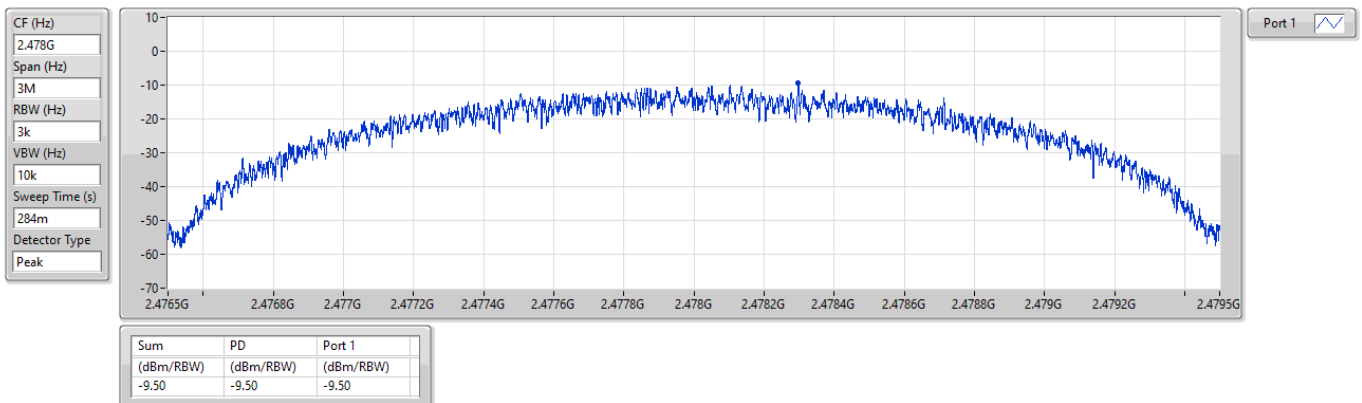
2440MHz



2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2478MHz





Unwanted Conducted Emissions into Restricted Frequency Bands – 30MHz ~ 1GHz

Appendix D.1

Summary

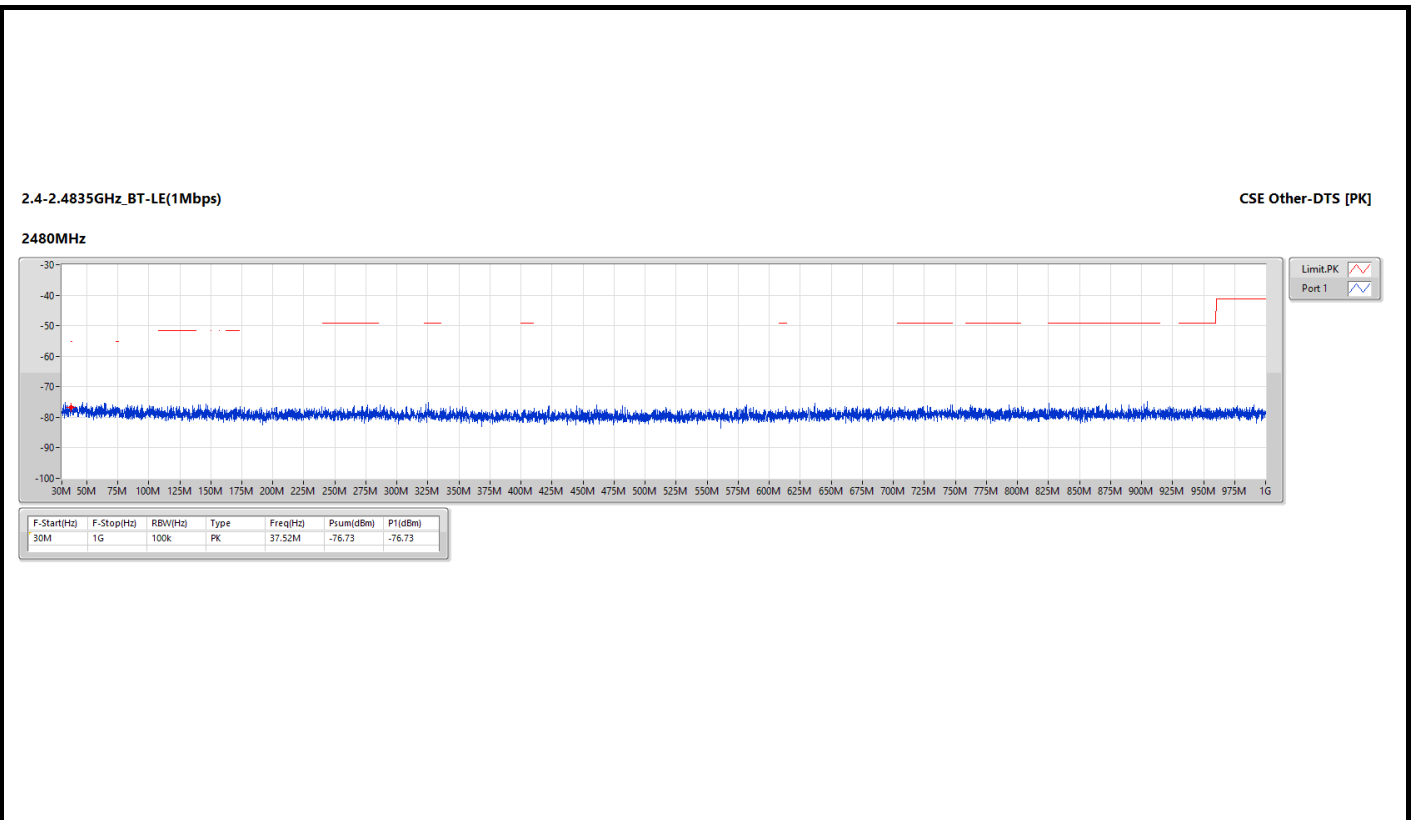
Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	GRF (dB)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	30M	1G	PK	37.52M	2.32	4.7	-76.73	-69.71	-55.20	-14.51

DG = Directional Gain ; PX=Port X; Psum=P1+P2+...PX

Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	GRF (dB)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2480MHz	Pass	30M	1G	PK	37.52M	2.32	4.7	-76.73	-69.71	-55.20	-14.51

DG = Directional Gain ; PX=Port X; Psum=P1+P2+...PX





Unwanted Conducted Emissions into Restricted Frequency Bands – 1GHz ~ 3.1GHz

Appendix D.2

Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.4835G	2.5G	AV	2.48356G	2.32	-49.45	-47.13	-41.20	-5.93
BT-LE(2Mbps)	Pass	2.4835G	2.5G	AV	2.4835G	2.32	-51.96	-49.64	-41.20	-8.44

DG = Directional Gain ; PX=Port X; Psum=P1+P2+...PX

Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	1G	2.31G	AV	2.13823G	2.32	-64.49	-62.17	-41.20	-20.97
2402MHz	Pass	2.31G	2.39G	AV	2.38608G	2.32	-57.42	-55.10	-41.20	-13.90
2402MHz	Pass	2.4835G	2.5G	AV	2.48368G	2.32	-65.00	-62.68	-41.20	-21.48
2402MHz	Pass	2.5G	3.1G	AV	2.8648G	2.32	-64.73	-62.41	-41.20	-21.21
2402MHz	Pass	1G	2.31G	PK	2.29101G	2.32	-54.07	-51.75	-21.20	-30.55
2402MHz	Pass	2.31G	2.39G	PK	2.38552G	2.32	-48.25	-45.93	-21.20	-24.73
2402MHz	Pass	2.4835G	2.5G	PK	2.49009G	2.32	-54.62	-52.30	-21.20	-31.10
2402MHz	Pass	2.5G	3.1G	PK	2.7124G	2.32	-54.50	-52.18	-21.20	-30.98
2440MHz	Pass	1G	2.31G	AV	2.25285G	2.32	-64.37	-62.05	-41.20	-20.85
2440MHz	Pass	2.31G	2.39G	AV	2.31604G	2.32	-65.88	-63.56	-41.20	-22.36
2440MHz	Pass	2.4835G	2.5G	AV	2.48845G	2.32	-64.84	-62.52	-41.20	-21.32
2440MHz	Pass	2.5G	3.1G	AV	2.8747G	2.32	-65.05	-62.73	-41.20	-21.53
2440MHz	Pass	1G	2.31G	PK	1.9432G	2.32	-53.63	-51.31	-21.20	-30.11
2440MHz	Pass	2.31G	2.39G	PK	2.3114G	2.32	-54.79	-52.47	-21.20	-31.27
2440MHz	Pass	2.4835G	2.5G	PK	2.48627G	2.32	-54.10	-51.78	-21.20	-30.58
2440MHz	Pass	2.5G	3.1G	PK	2.824G	2.32	-54.62	-52.30	-21.20	-31.10
2480MHz	Pass	1G	2.31G	AV	2.28773G	2.32	-64.20	-61.88	-41.20	-20.68
2480MHz	Pass	2.31G	2.39G	AV	2.3604G	2.32	-65.94	-63.62	-41.20	-22.42
2480MHz	Pass	2.4835G	2.5G	AV	2.48356G	2.32	-49.45	-47.13	-41.20	-5.93
2480MHz	Pass	2.5G	3.1G	AV	2.512G	2.32	-63.04	-60.72	-41.20	-19.52
2480MHz	Pass	1G	2.31G	PK	1.75784G	2.32	-53.79	-51.47	-21.20	-30.27
2480MHz	Pass	2.31G	2.39G	PK	2.33352G	2.32	-54.43	-52.11	-21.20	-30.91
2480MHz	Pass	2.4835G	2.5G	PK	2.48416G	2.32	-40.02	-37.70	-21.20	-16.50
2480MHz	Pass	2.5G	3.1G	PK	2.866G	2.32	-54.24	-51.92	-21.20	-30.72
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-
2404MHz	Pass	1G	2.31G	AV	2.28478G	2.32	-64.56	-62.24	-41.20	-21.04
2404MHz	Pass	2.31G	2.39G	AV	2.39G	2.32	-60.80	-58.48	-41.20	-17.28
2404MHz	Pass	2.4835G	2.5G	AV	2.48477G	2.32	-65.42	-63.10	-41.20	-21.90
2404MHz	Pass	2.5G	3.1G	AV	2.8186G	2.32	-65.07	-62.75	-41.20	-21.55
2404MHz	Pass	1G	2.31G	PK	2.27791G	2.32	-53.16	-50.84	-21.20	-29.64
2404MHz	Pass	2.31G	2.39G	PK	2.38996G	2.32	-50.52	-48.20	-21.20	-27.00
2404MHz	Pass	2.4835G	2.5G	PK	2.4835G	2.32	-54.35	-52.03	-21.20	-30.83
2404MHz	Pass	2.5G	3.1G	PK	2.8468G	2.32	-54.12	-51.80	-21.20	-30.60

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2440MHz	Pass	1G	2.31G	AV	2.23222G	2.32	-64.54	-62.22	-41.20	-21.02
2440MHz	Pass	2.31G	2.39G	AV	2.37592G	2.32	-65.95	-63.63	-41.20	-22.43
2440MHz	Pass	2.4835G	2.5G	AV	2.48765G	2.32	-64.95	-62.63	-41.20	-21.43
2440MHz	Pass	2.5G	3.1G	AV	2.7985G	2.32	-65.10	-62.78	-41.20	-21.58
2440MHz	Pass	1G	2.31G	PK	2.27201G	2.32	-53.31	-50.99	-21.20	-29.79
2440MHz	Pass	2.31G	2.39G	PK	2.33732G	2.32	-54.66	-52.34	-21.20	-31.14
2440MHz	Pass	2.4835G	2.5G	PK	2.48764G	2.32	-53.68	-51.36	-21.20	-30.16
2440MHz	Pass	2.5G	3.1G	PK	2.7232G	2.32	-53.90	-51.58	-21.20	-30.38
2478MHz	Pass	1G	2.31G	AV	2.16754G	2.32	-64.74	-62.42	-41.20	-21.22
2478MHz	Pass	2.31G	2.39G	AV	2.37112G	2.32	-65.69	-63.37	-41.20	-22.17
2478MHz	Pass	2.4835G	2.5G	AV	2.4835G	2.32	-51.96	-49.64	-41.20	-8.44
2478MHz	Pass	2.5G	3.1G	AV	2.5102G	2.32	-63.29	-60.97	-41.20	-19.77
2478MHz	Pass	1G	2.31G	PK	1.7467G	2.32	-54.34	-52.02	-21.20	-30.82
2478MHz	Pass	2.31G	2.39G	PK	2.3576G	2.32	-55.04	-52.72	-21.20	-31.52
2478MHz	Pass	2.4835G	2.5G	PK	2.48352G	2.32	-41.71	-39.39	-21.20	-18.19
2478MHz	Pass	2.5G	3.1G	PK	2.6584G	2.32	-54.00	-51.68	-21.20	-30.48

DG = Directional Gain ; PX=Port X; Psum=P1+P2+...PX



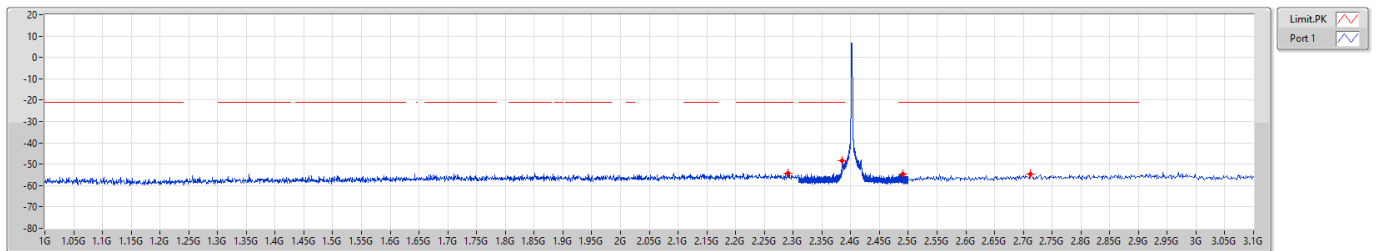
Unwanted Conducted Emissions into Restricted Frequency Bands – 1GHz ~ 3.1GHz

Appendix D.2

2.4-2.4835GHz_BT-LE(1Mbps)

CSE Bandedge-DTS [PK]

2402MHz

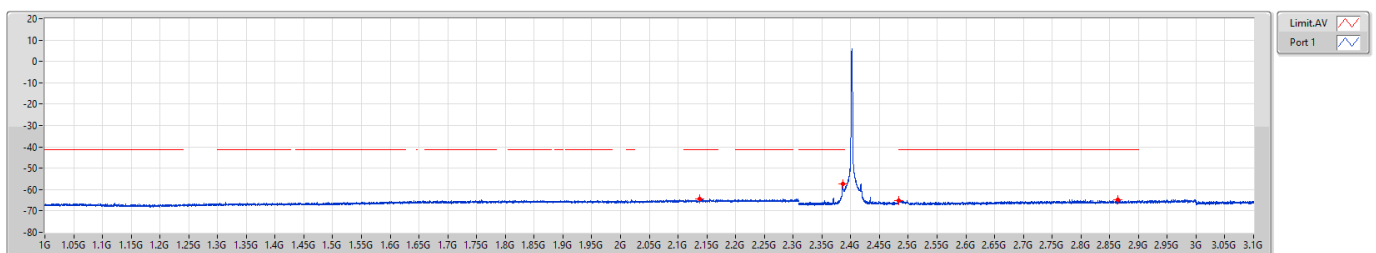


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	PK	2.29101G	-54.07	-54.07
2.31G	2.39G	1M	PK	2.38552G	-48.25	-48.25
2.4835G	2.5G	1M	PK	2.49009G	-54.62	-54.62
2.5G	3.1G	1M	PK	2.7124G	-54.50	-54.50

2.4-2.4835GHz_BT-LE(1Mbps)

CSE Bandedge-DTS [AV]

2402MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.13823G	-64.49	-64.49
2.31G	2.39G	1M	AV	2.38608G	-57.42	-57.42
2.4835G	2.5G	1M	AV	2.48368G	-65.00	-65.00
2.5G	3.1G	1M	AV	2.8648G	-64.73	-64.73



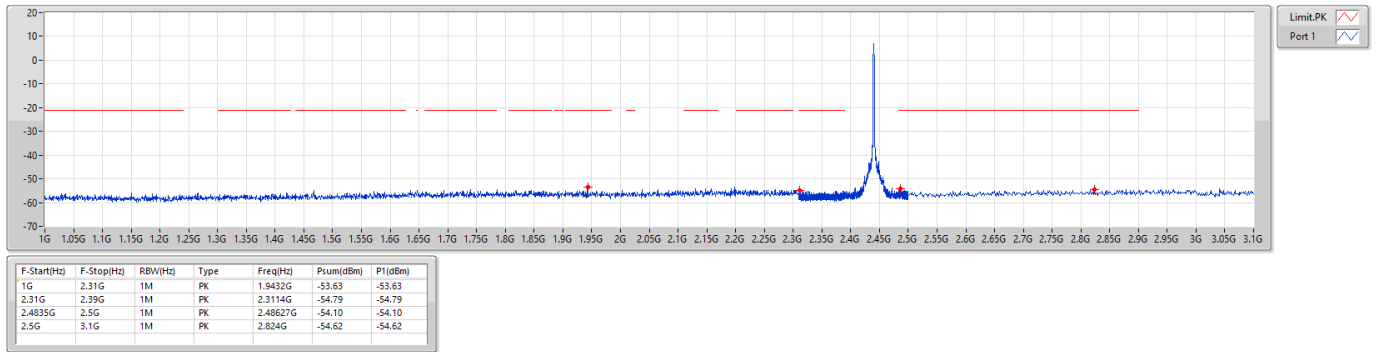
Unwanted Conducted Emissions into Restricted Frequency Bands – 1GHz ~ 3.1GHz

Appendix D.2

2.4-2.4835GHz_BT-LE(1Mbps)

CSE Bandedge-DTS [PK]

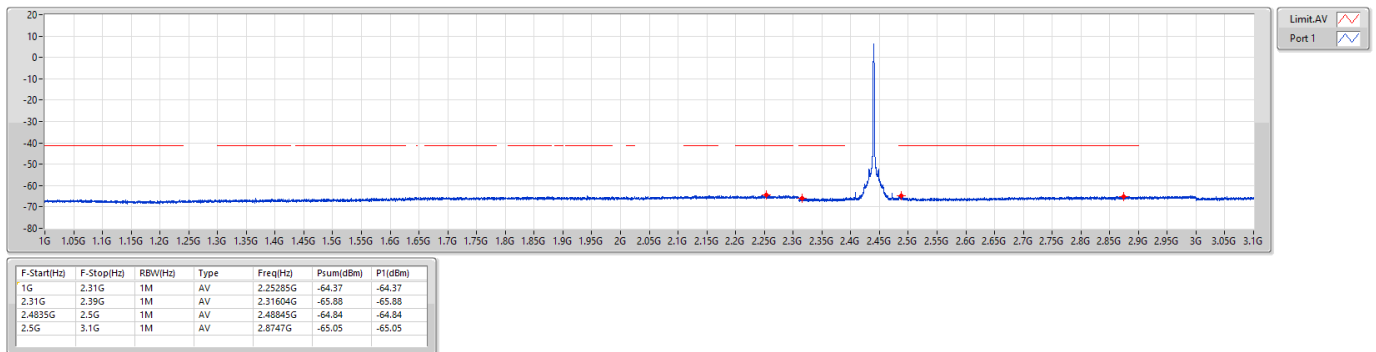
2440MHz



2.4-2.4835GHz_BT-LE(1Mbps)

CSE Bandedge-DTS [AV]

2440MHz





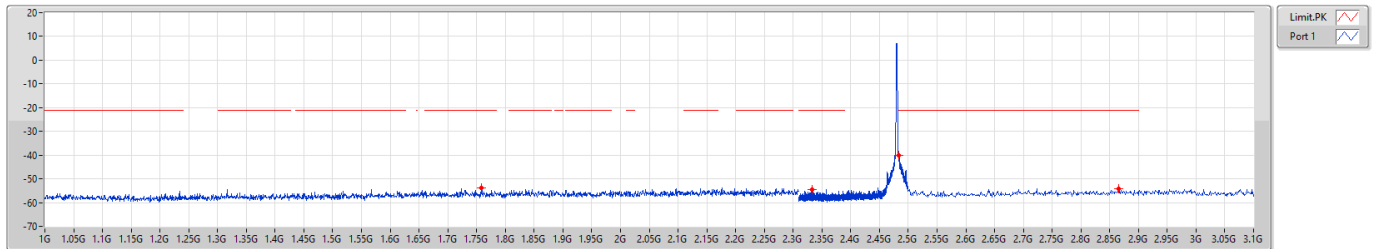
Unwanted Conducted Emissions into Restricted Frequency Bands – 1GHz ~ 3.1GHz

Appendix D.2

2.4-2.4835GHz_BT-LE(1Mbps)

CSE Bandedge-DTS [PK]

2480MHz

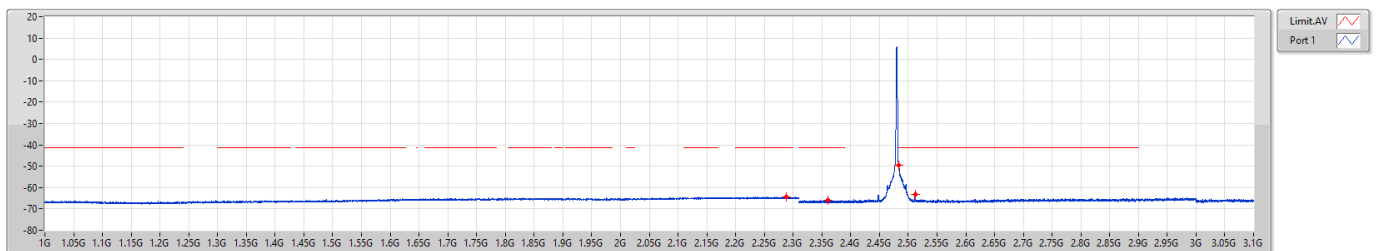


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	PK	1.75784G	-53.79	-53.79
2.31G	2.39G	1M	PK	2.33352G	-54.43	-54.43
2.4835G	2.5G	1M	PK	2.48416G	-40.02	-40.02
2.5G	3.1G	1M	PK	2.866G	-54.24	-54.24

2.4-2.4835GHz_BT-LE(1Mbps)

CSE Bandedge-DTS [AV]

2480MHz



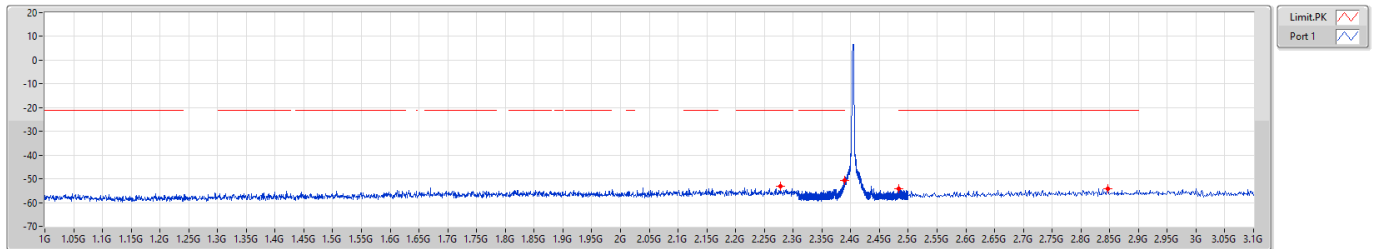
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.28773G	-64.20	-64.20
2.31G	2.39G	1M	AV	2.3604G	-65.94	-65.94
2.4835G	2.5G	1M	AV	2.48356G	-49.45	-49.45
2.5G	3.1G	1M	AV	2.512G	-65.04	-65.04



2.4-2.4835GHz_BT-LE(2Mbps)

CSE Bandedge-DTS [PK]

2404MHz

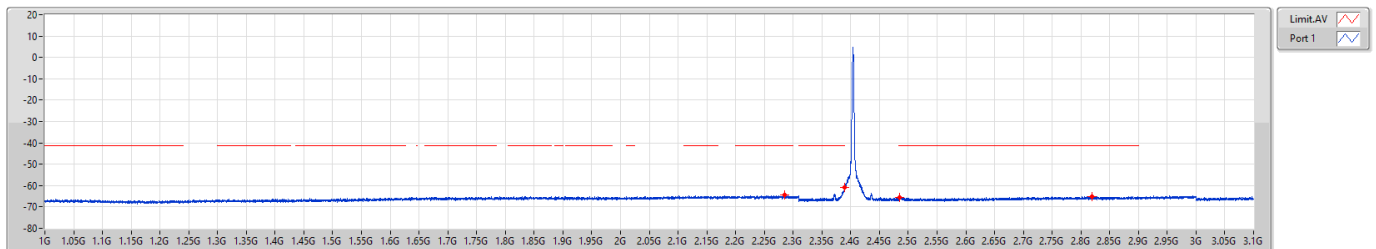


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	PK	2.27791G	-53.16	-53.16
2.31G	2.39G	1M	PK	2.38996G	-50.52	-50.52
2.4835G	2.5G	1M	PK	2.4835G	-54.35	-54.35
2.5G	3.1G	1M	PK	2.8468G	-54.12	-54.12

2.4-2.4835GHz_BT-LE(2Mbps)

CSE Bandedge-DTS [AV]

2404MHz



F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.28478G	-64.56	-64.56
2.31G	2.39G	1M	AV	2.39G	-60.80	-60.80
2.4835G	2.5G	1M	AV	2.48477G	-65.42	-65.42
2.5G	3.1G	1M	AV	2.8186G	-65.07	-65.07



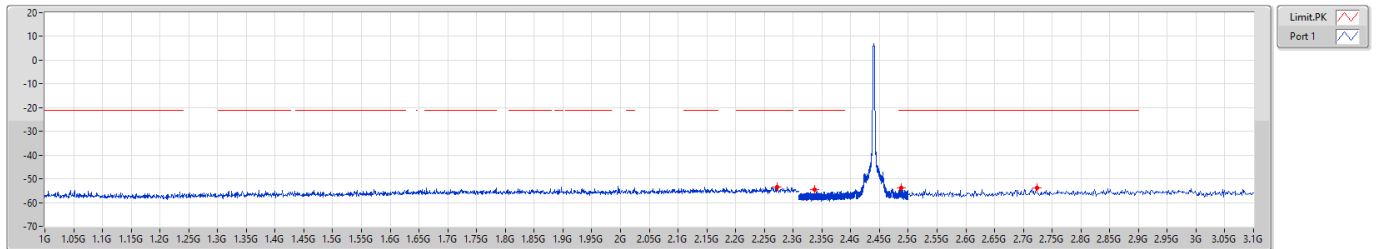
Unwanted Conducted Emissions into Restricted Frequency Bands – 1GHz ~ 3.1GHz

Appendix D.2

2.4-2.4835GHz_BT-LE(2Mbps)

CSE Bandedge-DTS [PK]

2440MHz

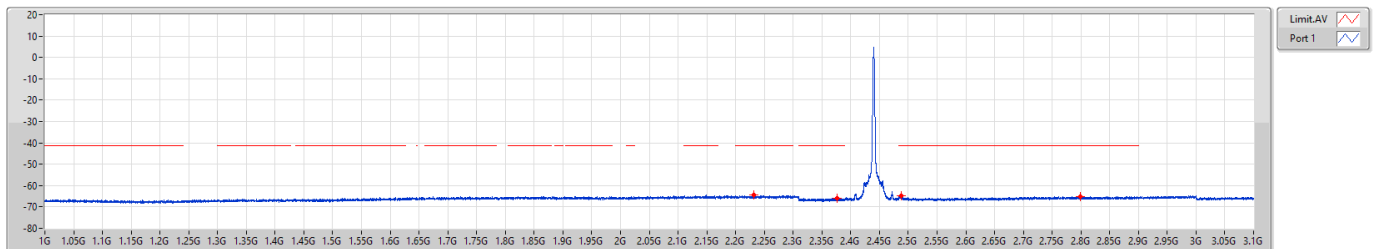


F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	PK	2.27201G	-53.31	-53.31
2.31G	2.39G	1M	PK	2.33732G	-54.66	-54.66
2.4835G	2.5G	1M	PK	2.48764G	-53.68	-53.68
2.5G	3.1G	1M	PK	2.7232G	-53.90	-53.90

2.4-2.4835GHz_BT-LE(2Mbps)

CSE Bandedge-DTS [AV]

2440MHz



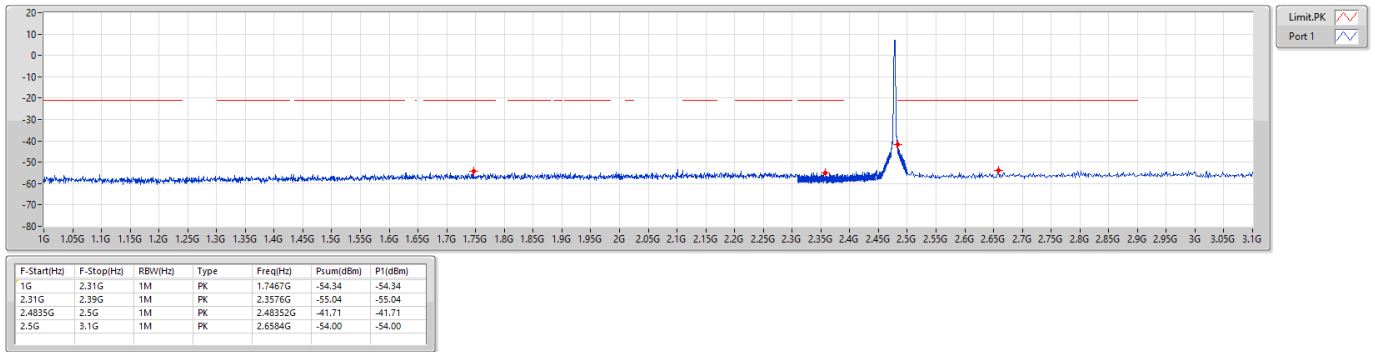
F-Start(Hz)	F-Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Psum(dBm)	P1(dBm)
1G	2.31G	1M	AV	2.23222G	-64.54	-64.54
2.31G	2.39G	1M	AV	2.37592G	-65.95	-65.95
2.4835G	2.5G	1M	AV	2.48765G	-64.95	-64.95
2.5G	3.1G	1M	AV	2.7985G	-65.10	-65.10



2.4-2.4835GHz_BT-LE(2Mbps)

CSE Bandedge-DTS [PK]

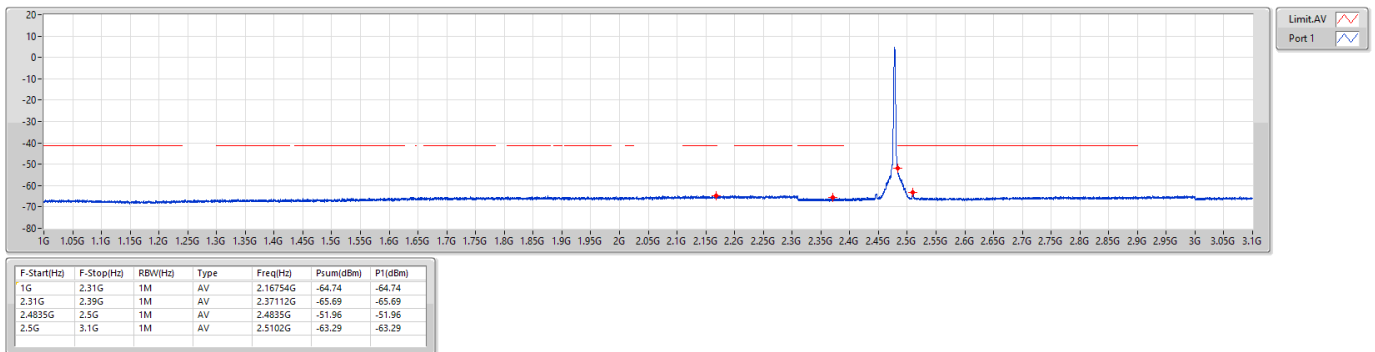
2478MHz



2.4-2.4835GHz_BT-LE(2Mbps)

CSE Bandedge-DTS [AV]

2478MHz





Unwanted Conducted Emissions into Restricted Frequency Bands – 3.1GHz ~ 25GHz

Appendix D.3

Summary

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	4G	5G	AV	4.80425G	2.32	-60.17	-57.85	-41.20	-16.65
BT-LE(2Mbps)	Pass	4G	5G	AV	4.80725G	2.32	-62.49	-60.17	-41.20	-18.97

DG = Directional Gain ; PX=Port X; Psum=P1+P2+...PX

Result

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	3.1G	4G	AV	3.99168G	2.32	-74.21	-71.89	-41.20	-30.69
2402MHz	Pass	4G	5G	AV	4.80425G	2.32	-60.17	-57.85	-41.20	-16.65
2402MHz	Pass	5G	7G	AV	5.4335G	2.32	-72.68	-70.36	-41.20	-29.16
2402MHz	Pass	7G	8G	AV	7.473G	2.32	-71.21	-68.89	-41.20	-27.69
2402MHz	Pass	8G	25G	AV	22.13231G	2.32	-64.60	-62.28	-41.20	-21.08
2402MHz	Pass	3.1G	4G	PK	3.93768G	2.32	-63.64	-61.32	-21.20	-40.12
2402MHz	Pass	4G	5G	PK	4.8045G	2.32	-55.28	-52.96	-21.20	-31.76
2402MHz	Pass	5G	7G	PK	5.366G	2.32	-62.13	-59.81	-21.20	-38.61
2402MHz	Pass	7G	8G	PK	7.5G	2.32	-61.02	-58.70	-21.20	-37.50
2402MHz	Pass	8G	25G	PK	22.12541G	2.32	-53.43	-51.11	-21.20	-29.91
2440MHz	Pass	3.1G	4G	AV	3.96288G	2.32	-74.20	-71.88	-41.20	-30.68
2440MHz	Pass	4G	5G	AV	4.88025G	2.32	-61.26	-58.94	-41.20	-17.74
2440MHz	Pass	5G	7G	AV	5.4225G	2.32	-72.98	-70.66	-41.20	-29.46
2440MHz	Pass	7G	8G	AV	7.47825G	2.32	-71.24	-68.92	-41.20	-27.72
2440MHz	Pass	8G	25G	AV	22.14613G	2.32	-64.60	-62.28	-41.20	-21.08
2440MHz	Pass	3.1G	4G	PK	3.96963G	2.32	-62.81	-60.49	-21.20	-39.29
2440MHz	Pass	4G	5G	PK	4.8805G	2.32	-56.95	-54.63	-21.20	-33.43
2440MHz	Pass	5G	7G	PK	5.4015G	2.32	-61.66	-59.34	-21.20	-38.14
2440MHz	Pass	7G	8G	PK	7.29975G	2.32	-61.21	-58.89	-21.20	-37.69
2440MHz	Pass	8G	25G	PK	22.13975G	2.32	-55.26	-52.94	-21.20	-31.74
2480MHz	Pass	3.1G	4G	AV	3.95343G	2.32	-73.66	-71.34	-41.20	-30.14
2480MHz	Pass	4G	5G	AV	4.95975G	2.32	-65.18	-62.86	-41.20	-21.66
2480MHz	Pass	5G	7G	AV	5.4195G	2.32	-72.98	-70.66	-41.20	-29.46
2480MHz	Pass	7G	8G	AV	7.4495G	2.32	-71.26	-68.94	-41.20	-27.74
2480MHz	Pass	8G	25G	AV	22.14825G	2.32	-64.72	-62.40	-41.20	-21.20
2480MHz	Pass	3.1G	4G	PK	3.9802G	2.32	-63.62	-61.30	-21.20	-40.10
2480MHz	Pass	4G	5G	PK	4.9605G	2.32	-57.19	-54.87	-21.20	-33.67
2480MHz	Pass	5G	7G	PK	5.456G	2.32	-62.66	-60.34	-21.20	-39.14
2480MHz	Pass	7G	8G	PK	7.45925G	2.32	-60.79	-58.47	-21.20	-37.27
2480MHz	Pass	8G	25G	PK	22.14294G	2.32	-54.34	-52.02	-21.20	-30.82
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-
2404MHz	Pass	3.1G	4G	AV	3.99865G	2.32	-74.07	-71.75	-41.20	-30.55
2404MHz	Pass	4G	5G	AV	4.80725G	2.32	-62.49	-60.17	-41.20	-18.97

Mode	Result	F-Start (Hz)	F-Stop (Hz)	Type	Freq (Hz)	DG (dBi)	Psum (dBm)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2404MHz	Pass	5G	7G	AV	5.3865G	2.32	-72.93	-70.61	-41.20	-29.41
2404MHz	Pass	7G	8G	AV	7.47575G	2.32	-71.19	-68.87	-41.20	-27.67
2404MHz	Pass	8G	25G	AV	22.15409G	2.32	-64.32	-62.00	-41.20	-20.80
2404MHz	Pass	3.1G	4G	PK	3.9937G	2.32	-63.12	-60.80	-21.20	-39.60
2404MHz	Pass	4G	5G	PK	4.807G	2.32	-55.26	-52.94	-21.20	-31.74
2404MHz	Pass	5G	7G	PK	5.4455G	2.32	-62.86	-60.54	-21.20	-39.34
2404MHz	Pass	7G	8G	PK	7.42025G	2.32	-61.11	-58.79	-21.20	-37.59
2404MHz	Pass	8G	25G	PK	22.06378G	2.32	-53.70	-51.38	-21.20	-30.18
2440MHz	Pass	3.1G	4G	AV	3.99978G	2.32	-74.14	-71.82	-41.20	-30.62
2440MHz	Pass	4G	5G	AV	4.879G	2.32	-63.54	-61.22	-41.20	-20.02
2440MHz	Pass	5G	7G	AV	5.433G	2.32	-72.97	-70.65	-41.20	-29.45
2440MHz	Pass	7G	8G	AV	7.49475G	2.32	-71.05	-68.73	-41.20	-27.53
2440MHz	Pass	8G	25G	AV	22.08875G	2.32	-64.62	-62.30	-41.20	-21.10
2440MHz	Pass	3.1G	4G	PK	3.9469G	2.32	-62.99	-60.67	-21.20	-39.47
2440MHz	Pass	4G	5G	PK	4.879G	2.32	-56.46	-54.14	-21.20	-32.94
2440MHz	Pass	5G	7G	PK	5.3765G	2.32	-62.26	-59.94	-21.20	-38.74
2440MHz	Pass	7G	8G	PK	7.47725G	2.32	-60.11	-57.79	-21.20	-36.59
2440MHz	Pass	8G	25G	PK	22.18597G	2.32	-54.82	-52.50	-21.20	-31.30
2478MHz	Pass	3.1G	4G	AV	3.937G	2.32	-74.24	-71.92	-41.20	-30.72
2478MHz	Pass	4G	5G	AV	4.95525G	2.32	-67.66	-65.34	-41.20	-24.14
2478MHz	Pass	5G	7G	AV	5.3775G	2.32	-73.06	-70.74	-41.20	-29.54
2478MHz	Pass	7G	8G	AV	7.49275G	2.32	-71.12	-68.80	-41.20	-27.60
2478MHz	Pass	8G	25G	AV	22.10203G	2.32	-64.81	-62.49	-41.20	-21.29
2478MHz	Pass	3.1G	4G	PK	3.84993G	2.32	-63.51	-61.19	-21.20	-39.99
2478MHz	Pass	4G	5G	PK	4.95525G	2.32	-60.24	-57.92	-21.20	-36.72
2478MHz	Pass	5G	7G	PK	5.456G	2.32	-61.34	-59.02	-21.20	-37.82
2478MHz	Pass	7G	8G	PK	7.35625G	2.32	-60.91	-58.59	-21.20	-37.39
2478MHz	Pass	8G	25G	PK	22.17481G	2.32	-54.76	-52.44	-21.20	-31.24

DG = Directional Gain ; PX=Port X; Psum=P1+P2+...PX



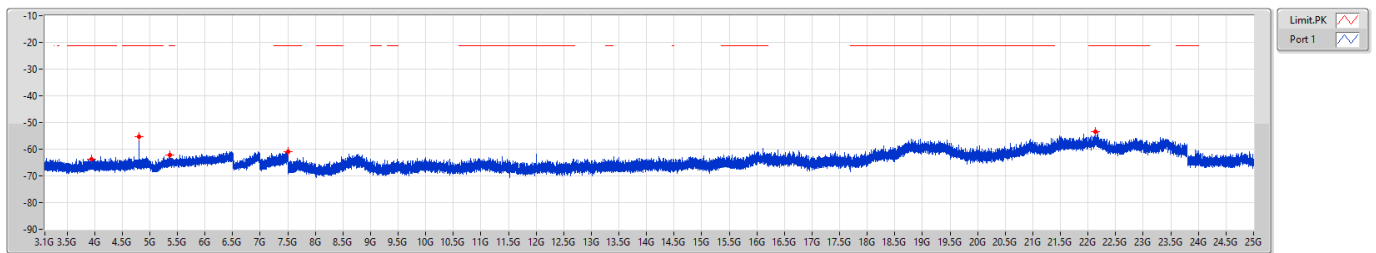
Unwanted Conducted Emissions into Restricted Frequency Bands – 3.1GHz ~ 25GHz

Appendix D.3

2.4-2.4835GHz_BT-LE(1Mbps)

CSE-DTS [PK]

2402MHz

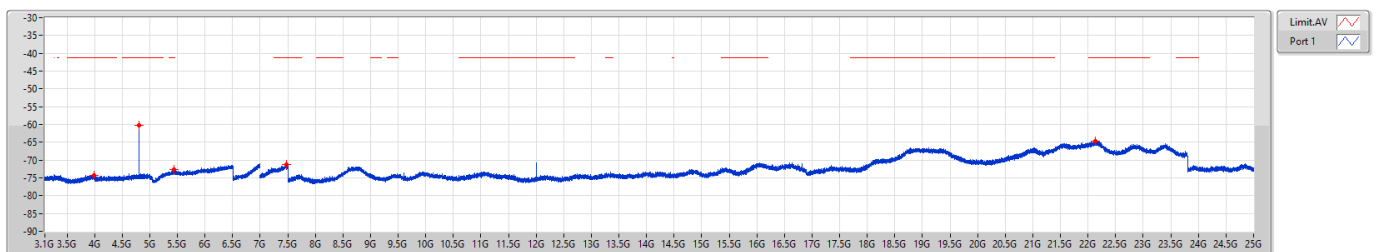


F.Start(Hz)	F.Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Prum(dBm)	P1(dBm)
3.1G	4G	1M	PK	3.93768G	-63.64	-63.64
4G	5G	1M	PK	4.8045G	-55.28	-55.28
5G	7G	1M	PK	5.366G	-62.13	-62.13
7G	8G	1M	PK	7.5G	-61.02	-61.02
8G	25G	1M	PK	22.12541G	-53.43	-53.43

2.4-2.4835GHz_BT-LE(1Mbps)

CSE-DTS [AV]

2402MHz



F.Start(Hz)	F.Stop(Hz)	RBW(Hz)	Type	Freq(Hz)	Prum(dBm)	P1(dBm)
3.1G	4G	1M	AV	3.99168G	-74.21	-74.21
4G	5G	1M	AV	4.80425G	-60.17	-60.17
5G	7G	1M	AV	5.4335G	-72.68	-72.68
7G	8G	1M	AV	7.473G	-71.21	-71.21
8G	25G	1M	AV	22.13231G	-64.60	-64.60



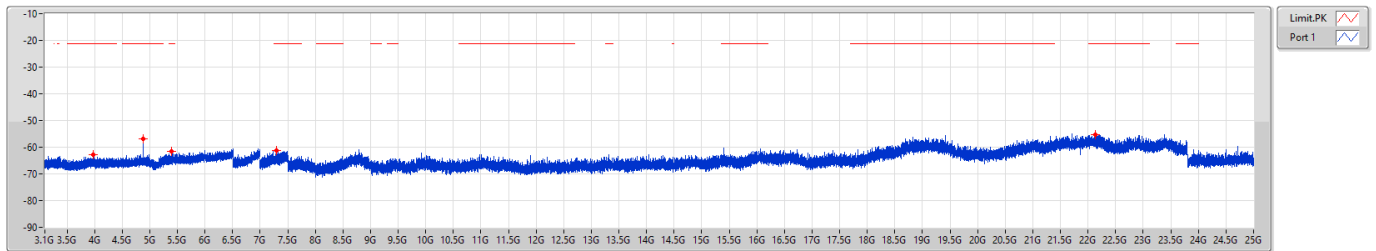
Unwanted Conducted Emissions into Restricted Frequency Bands – 3.1GHz ~ 25GHz

Appendix D.3

2.4-2.4835GHz_BT-LE(1Mbps)

CSE-DTS [PK]

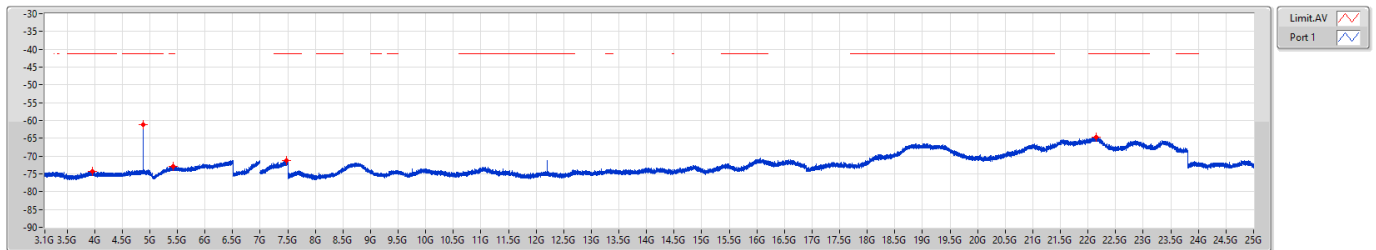
2440MHz



2.4-2.4835GHz_BT-LE(1Mbps)

CSE-DTS [AV]

2440MHz





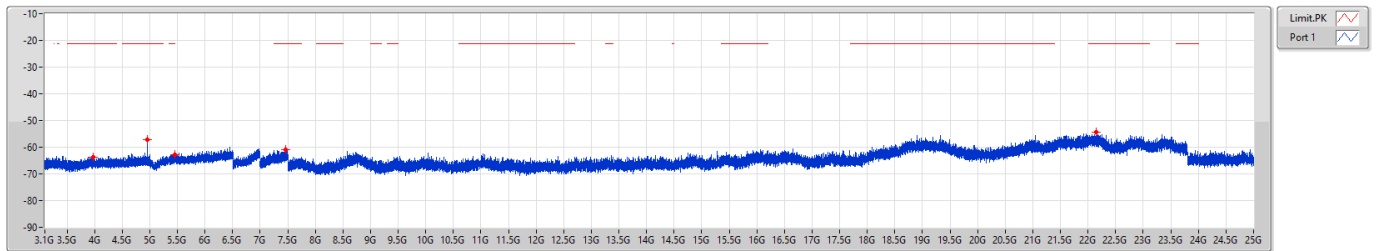
Unwanted Conducted Emissions into Restricted Frequency Bands – 3.1GHz ~ 25GHz

Appendix D.3

2.4-2.4835GHz_BT-LE(1Mbps)

CSE-DTS [PK]

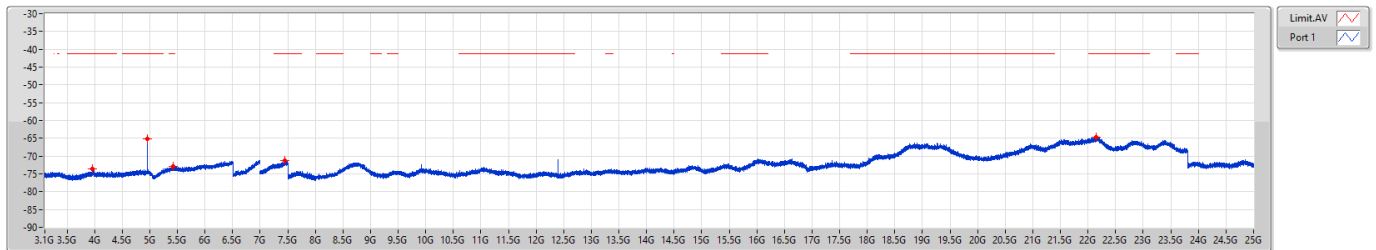
2480MHz



2.4-2.4835GHz_BT-LE(1Mbps)

CSE-DTS [AV]

2480MHz





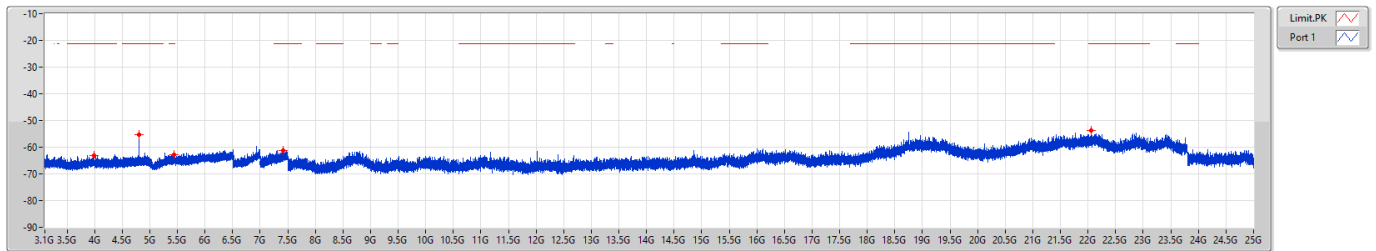
Unwanted Conducted Emissions into Restricted Frequency Bands – 3.1GHz ~ 25GHz

Appendix D.3

2.4-2.4835GHz_BT-LE(2Mbps)

CSE-DTS [PK]

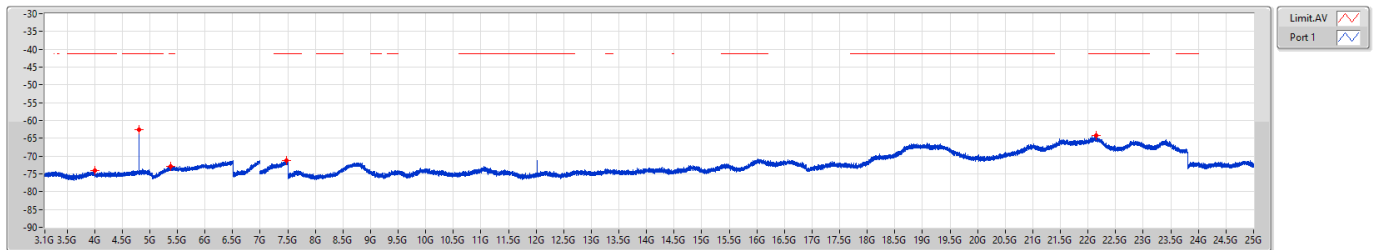
2404MHz



2.4-2.4835GHz_BT-LE(2Mbps)

CSE-DTS [AV]

2404MHz





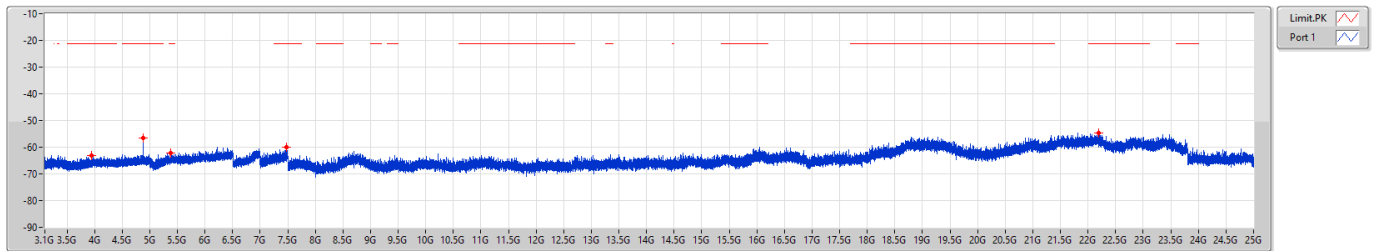
Unwanted Conducted Emissions into Restricted Frequency Bands – 3.1GHz ~ 25GHz

Appendix D.3

2.4-2.4835GHz_BT-LE(2Mbps)

CSE-DTS [PK]

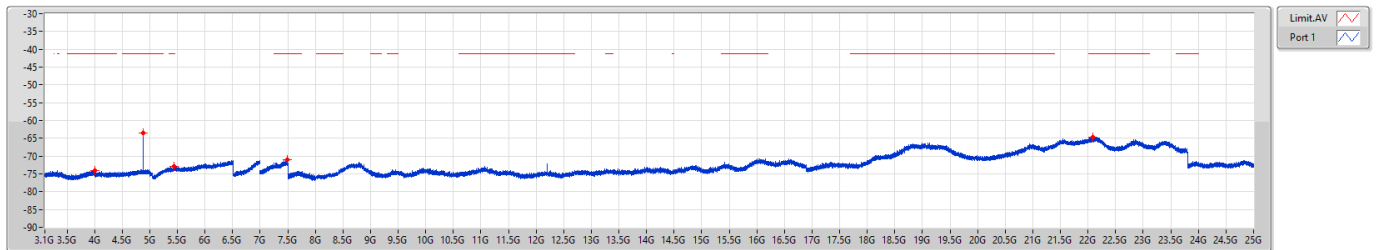
2440MHz



2.4-2.4835GHz_BT-LE(2Mbps)

CSE-DTS [AV]

2440MHz





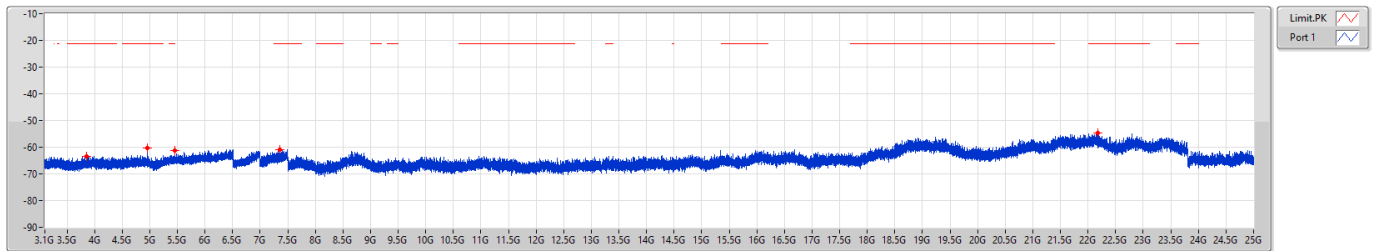
Unwanted Conducted Emissions into Restricted Frequency Bands – 3.1GHz ~ 25GHz

Appendix D.3

2.4-2.4835GHz_BT-LE(2Mbps)

CSE-DTS [PK]

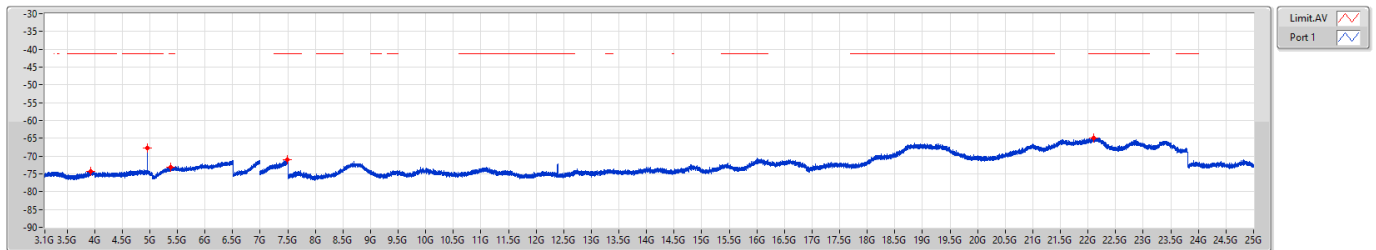
2478MHz



2.4-2.4835GHz_BT-LE(2Mbps)

CSE-DTS [AV]

2478MHz





Summary

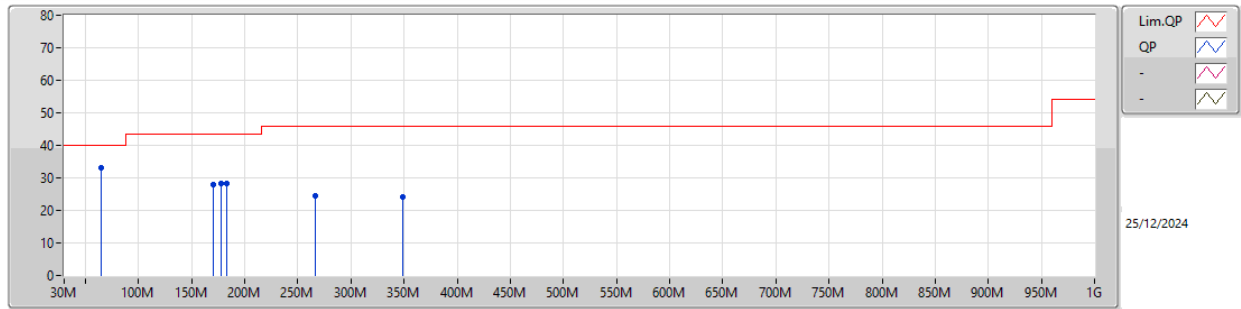
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	65.3M	33.01	40.00	-6.99	Horizontal



Unwanted Emissions into Restricted Frequency Bands Below 1GHz

Appendix D.4

Mode 1



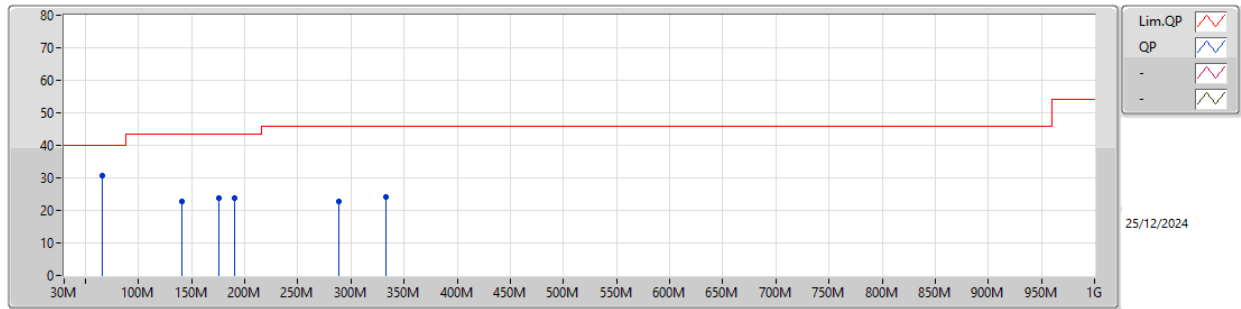
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB/m)	CL (dB)	PA (dB)		
PK	65.3M	33.01	40.00	-6.99	-10.29	3	Horizontal	-	-	-	43.30	17.05	0.71	28.05		
PK	170.7M	28.03	43.50	-15.47	-9.16	3	Horizontal	-	-	-	37.19	17.67	1.28	28.11		
PK	177.5M	28.39	43.50	-15.11	-9.91	3	Horizontal	-	-	-	38.30	16.90	1.30	28.11		
PK	183M	28.30	43.50	-15.20	-10.49	3	Horizontal	-	-	-	38.79	16.30	1.33	28.12		
PK	266.6M	24.44	46.00	-21.56	-9.36	3	Horizontal	-	-	-	33.80	17.16	1.66	28.18		
PK	348.7M	24.29	46.00	-21.71	-6.94	3	Horizontal	-	-	-	31.23	19.17	1.99	28.10		



Unwanted Emissions into Restricted Frequency Bands Below 1GHz

Appendix D.4

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB/m)	CL (dB)	PA (dB)		
PK	65.7M	30.60	40.00	-9.40	-10.49	3	Vertical	-	-	-	41.09	16.85	0.71	28.05		
PK	140.5M	22.74	43.50	-20.76	-9.04	3	Vertical	-	-	-	31.78	17.90	1.14	28.08		
PK	175.9M	23.87	43.50	-19.63	-9.60	3	Vertical	-	-	-	33.47	17.21	1.30	28.11		
PK	190M	23.81	43.50	-19.69	-11.25	3	Vertical	-	-	-	35.06	15.50	1.37	28.12		
PK	288.3M	22.87	46.00	-23.13	-8.37	3	Vertical	-	-	-	31.24	18.07	1.75	28.19		
PK	332.9M	24.12	46.00	-21.88	-7.10	3	Vertical	-	-	-	31.22	19.10	1.93	28.13		



**Unwanted Emissions into Restricted Frequency Bands
Above 1GHz**

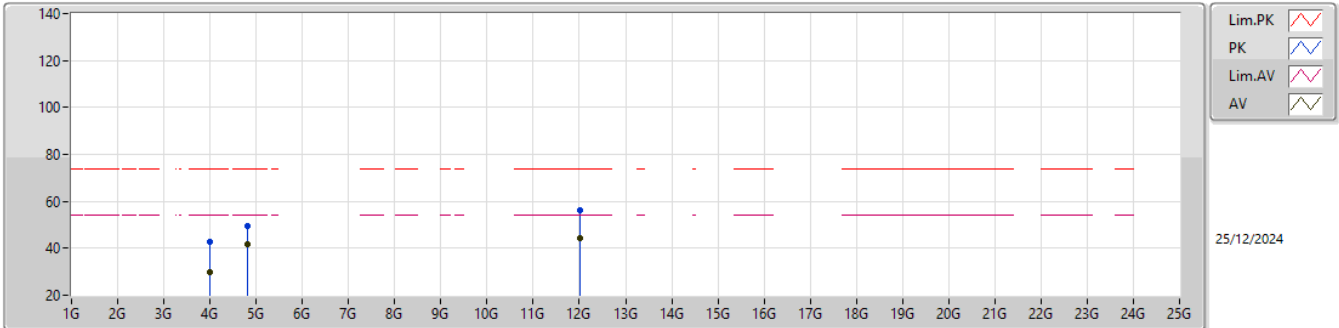
Appendix D.5

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	4.96G	47.44	54.00	-6.56	3	Vertical	42	2.23	-
BT-LE(2Mbps)	Pass	AV	12.39G	44.19	54.00	-9.81	3	Vertical	133	2.86	-

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

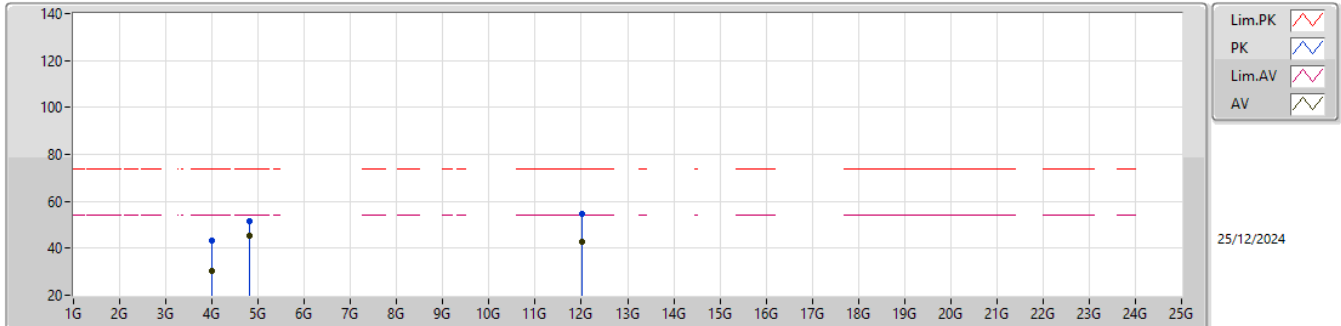


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	4G	29.88	54.00	-24.12	31.59	3	Horizontal	229	1.00	-	29.70	6.17	37.58			
PK	4G	42.86	74.00	-31.14	44.57	3	Horizontal	229	1.00	-	29.70	6.17	37.58			
AV	4.804G	41.92	54.00	-12.08	42.18	3	Horizontal	214	2.33	-	31.20	6.74	38.20			
PK	4.804G	49.33	74.00	-24.67	49.59	3	Horizontal	214	2.33	-	31.20	6.74	38.20			
AV	12.01G	44.11	54.00	-9.89	36.89	3	Horizontal	151	2.21	-	38.82	10.54	42.14			
PK	12.01G	56.22	74.00	-17.78	49.00	3	Horizontal	151	2.21	-	38.82	10.54	42.14			



2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

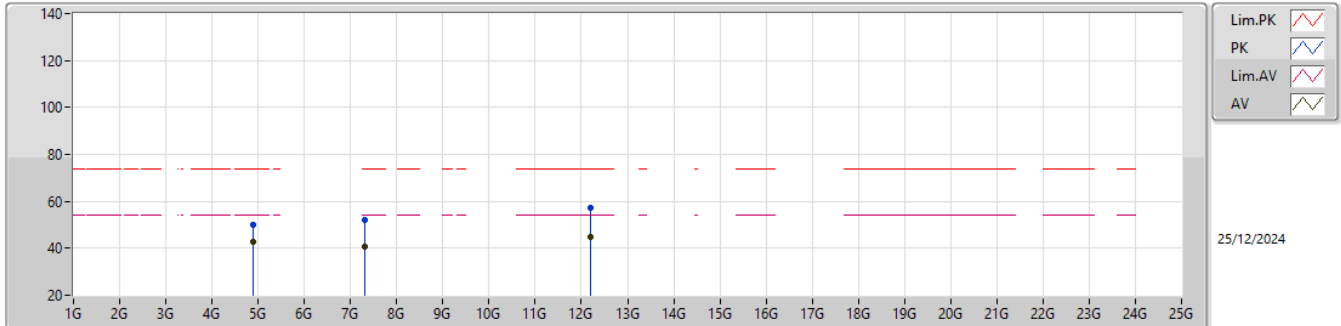


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	4G	30.27	54.00	-23.73	31.98	3	Vertical	45	1.00	-	29.70	6.17	37.58			
PK	4G	43.24	74.00	-30.76	44.95	3	Vertical	45	1.00	-	29.70	6.17	37.58			
AV	4.804G	45.43	54.00	-8.57	45.69	3	Vertical	37	2.15	-	31.20	6.74	38.20			
PK	4.804G	51.74	74.00	-22.26	52.00	3	Vertical	37	2.15	-	31.20	6.74	38.20			
AV	12.01G	42.63	54.00	-11.37	35.41	3	Vertical	134	2.86	-	38.82	10.54	42.14			
PK	12.01G	54.73	74.00	-19.27	47.51	3	Vertical	134	2.86	-	38.82	10.54	42.14			



2.4-2.4835GHz_BT-LE(1Mbps)

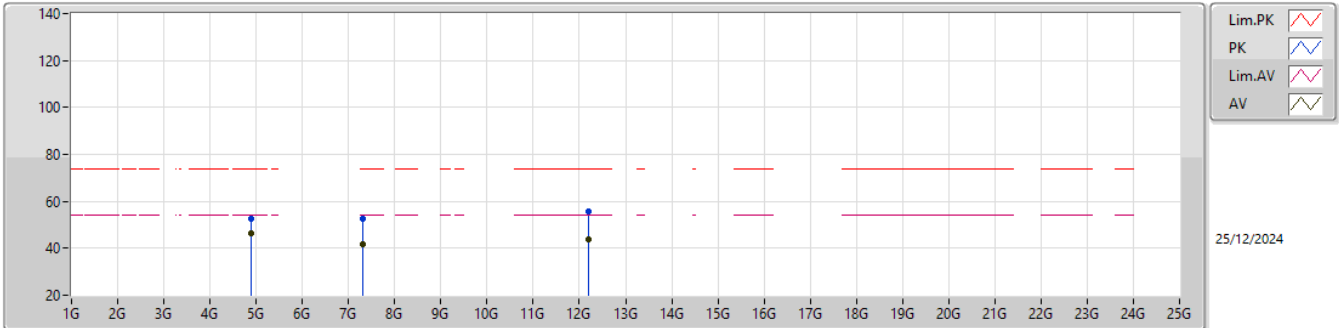
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	4.88G	42.88	54.00	-11.12	43.15	3	Horizontal	218	2.36	-	31.20	6.78	38.25			
PK	4.88G	50.21	74.00	-23.79	50.48	3	Horizontal	218	2.36	-	31.20	6.78	38.25			
AV	7.32G	40.60	54.00	-13.40	35.11	3	Horizontal	244	2.71	-	36.40	8.25	39.16			
PK	7.32G	52.24	74.00	-21.76	46.75	3	Horizontal	244	2.71	-	36.40	8.25	39.16			
AV	12.2G	45.03	54.00	-8.97	37.93	3	Horizontal	155	2.26	-	38.80	10.61	42.31			
PK	12.2G	57.14	74.00	-16.86	50.04	3	Horizontal	155	2.26	-	38.80	10.61	42.31			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

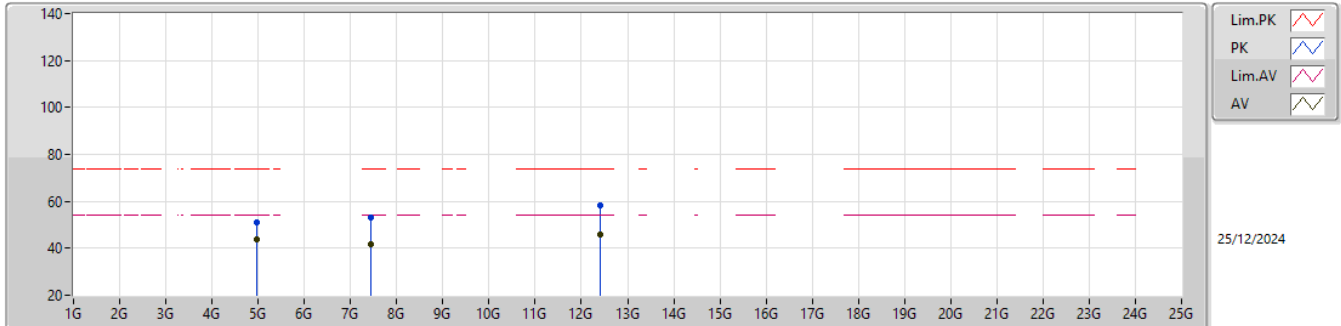


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	4.88G	46.32	54.00	-7.68	46.59	3	Vertical	39	2.19	-	31.20	6.78	38.25			
PK	4.88G	52.69	74.00	-21.31	52.96	3	Vertical	39	2.19	-	31.20	6.78	38.25			
AV	7.32G	41.75	54.00	-12.25	36.26	3	Vertical	49	2.08	-	36.40	8.25	39.16			
PK	7.32G	52.48	74.00	-21.52	46.99	3	Vertical	49	2.08	-	36.40	8.25	39.16			
AV	12.2G	43.59	54.00	-10.41	36.49	3	Vertical	131	2.82	-	38.80	10.61	42.31			
PK	12.2G	55.65	74.00	-18.35	48.55	3	Vertical	131	2.82	-	38.80	10.61	42.31			



2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

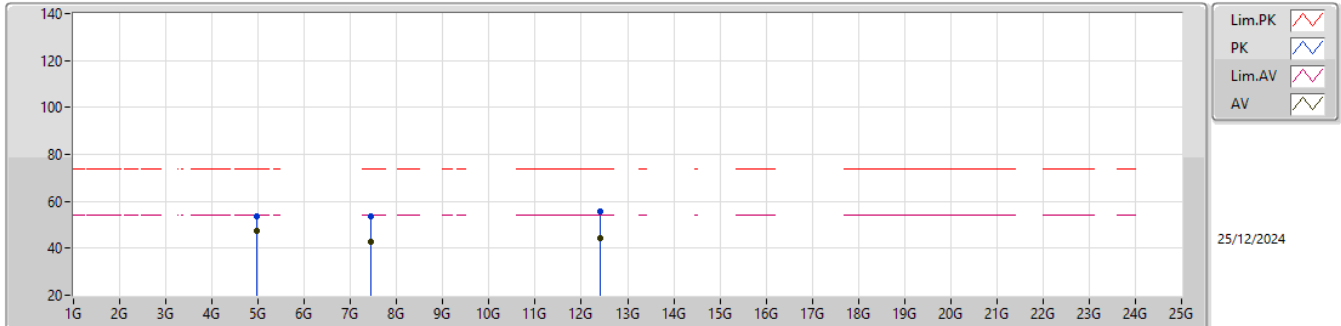


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)				
AV	4.96G	43.77	54.00	-10.23	43.80	3	Horizontal	220	2.39	-	31.44	6.83	38.30				
PK	4.96G	51.18	74.00	-22.82	51.21	3	Horizontal	220	2.39	-	31.44	6.83	38.30				
AV	7.44G	41.54	54.00	-12.46	36.16	3	Horizontal	247	2.76	-	36.38	8.30	39.30				
PK	7.44G	53.19	74.00	-20.81	47.81	3	Horizontal	247	2.76	-	36.38	8.30	39.30				
AV	12.4G	46.09	54.00	-7.91	39.60	3	Horizontal	156	2.29	-	38.30	10.68	42.49				
PK	12.4G	58.05	74.00	-15.95	51.56	3	Horizontal	156	2.29	-	38.30	10.68	42.49				



2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

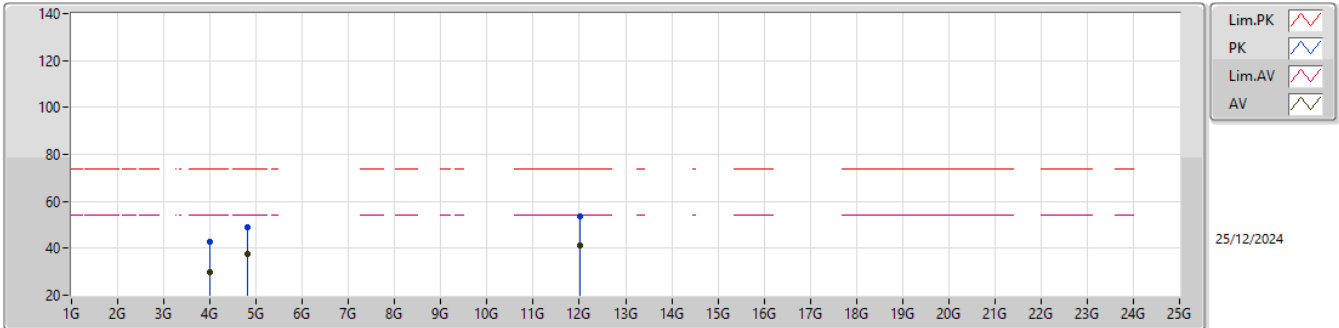


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	4.96G	47.44	54.00	-6.56	47.47	3	Vertical	42	2.23	-	31.44	6.83	38.30			
PK	4.96G	53.73	74.00	-20.27	53.76	3	Vertical	42	2.23	-	31.44	6.83	38.30			
AV	7.44G	42.69	54.00	-11.31	37.31	3	Vertical	51	2.11	-	36.38	8.30	39.30			
PK	7.44G	53.39	74.00	-20.61	48.01	3	Vertical	51	2.11	-	36.38	8.30	39.30			
AV	12.4G	44.48	54.00	-9.52	37.99	3	Vertical	132	2.84	-	38.30	10.68	42.49			
PK	12.4G	55.54	74.00	-18.46	49.05	3	Vertical	132	2.84	-	38.30	10.68	42.49			



2.4-2.4835GHz_BT-LE(2Mbps)

2404MHz_TX

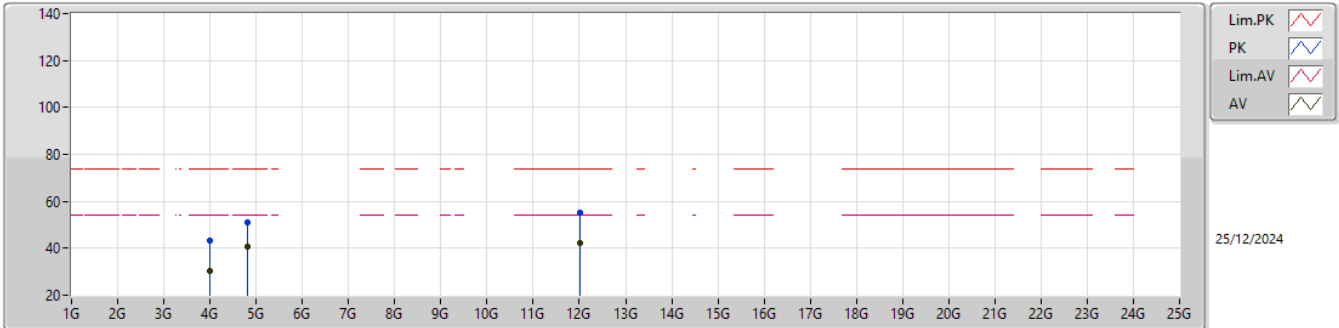


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	4G	29.84	54.00	-24.16	31.55	3	Horizontal	231	1.00	-	29.70	6.17	37.58			
PK	4G	42.83	74.00	-31.17	44.54	3	Horizontal	231	1.00	-	29.70	6.17	37.58			
AV	4.808G	37.44	54.00	-16.56	37.70	3	Horizontal	219	2.41	-	31.20	6.74	38.20			
PK	4.808G	48.83	74.00	-25.17	49.09	3	Horizontal	219	2.41	-	31.20	6.74	38.20			
AV	12.02G	41.02	54.00	-12.98	33.78	3	Horizontal	152	2.18	-	38.84	10.55	42.15			
PK	12.02G	53.44	74.00	-20.56	46.20	3	Horizontal	152	2.18	-	38.84	10.55	42.15			



2.4-2.4835GHz_BT-LE(2Mbps)

2404MHz_TX

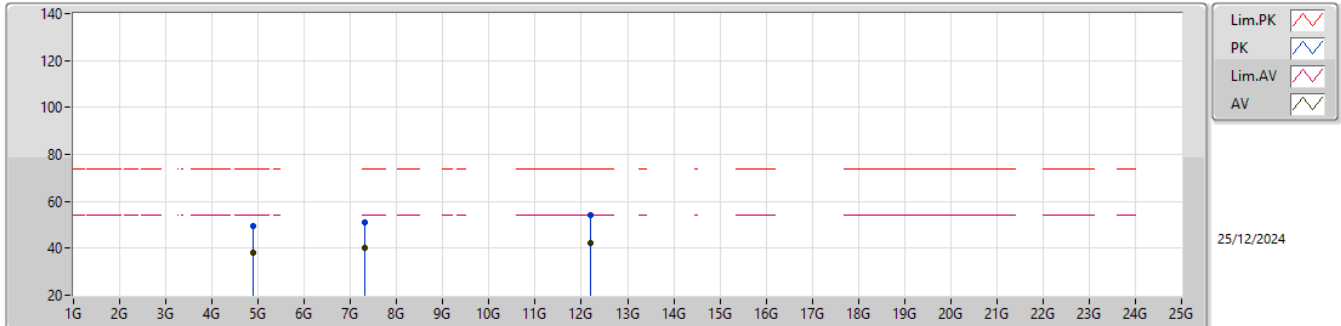


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)				
AV	4G	30.21	54.00	-23.79	31.92	3	Vertical	47	1.00	-	29.70	6.17	37.58				
PK	4G	43.18	74.00	-30.82	44.89	3	Vertical	47	1.00	-	29.70	6.17	37.58				
AV	4.808G	40.93	54.00	-13.07	41.19	3	Vertical	41	2.23	-	31.20	6.74	38.20				
PK	4.808G	51.11	74.00	-22.89	51.37	3	Vertical	41	2.23	-	31.20	6.74	38.20				
AV	12.02G	42.33	54.00	-11.67	35.09	3	Vertical	129	2.81	-	38.84	10.55	42.15				
PK	12.02G	54.93	74.00	-19.07	47.69	3	Vertical	129	2.81	-	38.84	10.55	42.15				



2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

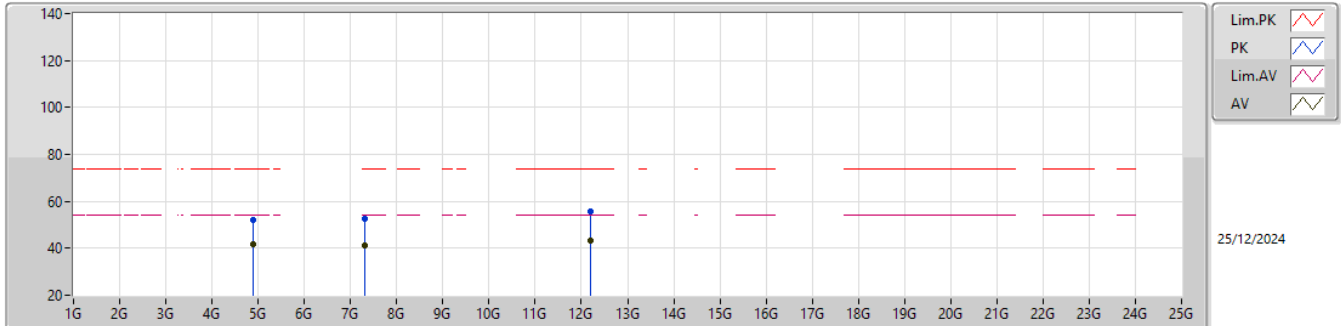


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)				
AV	4.88G	38.34	54.00	-15.66	38.61	3	Horizontal	221	2.39	-	31.20	6.78	38.25				
PK	4.88G	49.71	74.00	-24.29	49.98	3	Horizontal	221	2.39	-	31.20	6.78	38.25				
AV	7.32G	40.37	54.00	-13.63	34.88	3	Horizontal	243	2.75	-	36.40	8.25	39.16				
PK	7.32G	51.25	74.00	-22.75	45.76	3	Horizontal	243	2.75	-	36.40	8.25	39.16				
AV	12.2G	41.99	54.00	-12.01	34.89	3	Horizontal	154	2.24	-	38.80	10.61	42.31				
PK	12.2G	54.35	74.00	-19.65	47.25	3	Horizontal	154	2.24	-	38.80	10.61	42.31				



2.4-2.4835GHz_BT-LE(2Mbps)

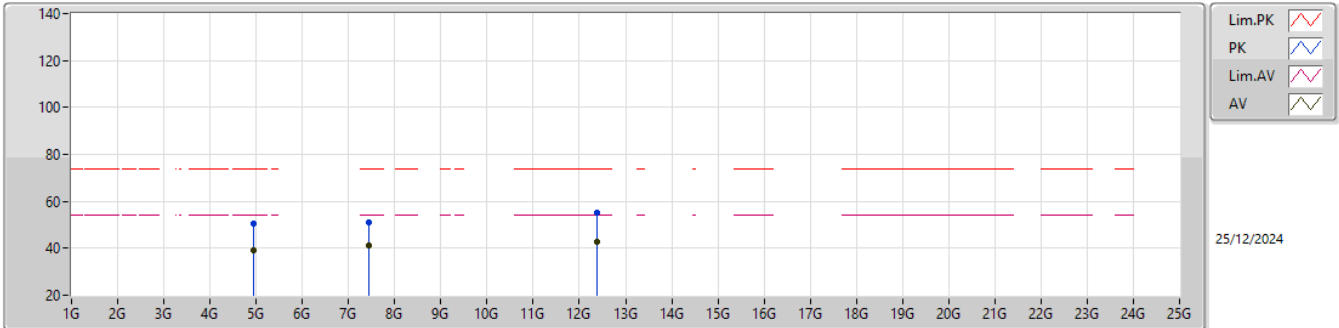
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	4.88G	41.82	54.00	-12.18	42.09	3	Vertical	42	2.25	-	31.20	6.78	38.25			
PK	4.88G	52.07	74.00	-21.93	52.34	3	Vertical	42	2.25	-	31.20	6.78	38.25			
AV	7.32G	41.09	54.00	-12.91	35.60	3	Vertical	50	2.07	-	36.40	8.25	39.16			
PK	7.32G	52.55	74.00	-21.45	47.06	3	Vertical	50	2.07	-	36.40	8.25	39.16			
AV	12.2G	43.21	54.00	-10.79	36.11	3	Vertical	132	2.83	-	38.80	10.61	42.31			
PK	12.2G	55.82	74.00	-18.18	48.72	3	Vertical	132	2.83	-	38.80	10.61	42.31			

2.4-2.4835GHz_BT-LE(2Mbps)

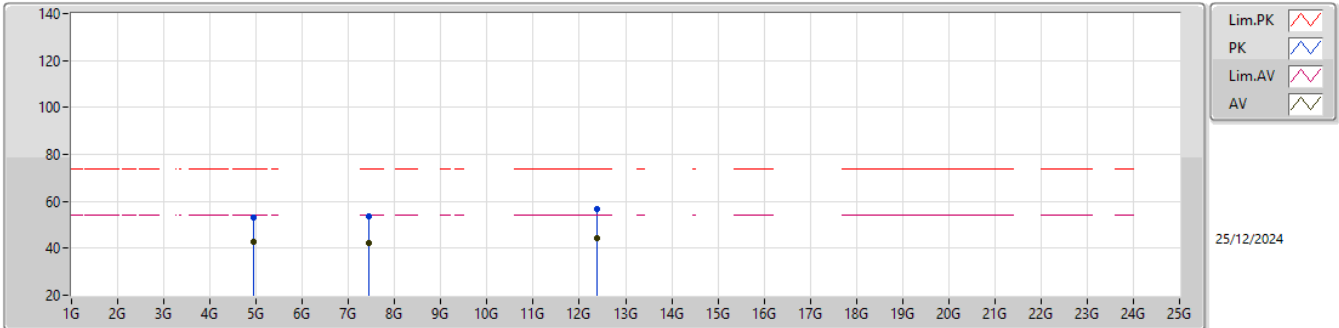
2478MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	4.956G	39.22	54.00	-14.78	39.27	3	Horizontal	222	2.43	-	31.42	6.83	38.30			
PK	4.956G	50.66	74.00	-23.34	50.71	3	Horizontal	222	2.43	-	31.42	6.83	38.30			
AV	7.434G	41.22	54.00	-12.78	35.84	3	Horizontal	244	2.79	-	36.37	8.30	39.29			
PK	7.434G	51.15	74.00	-22.85	45.77	3	Horizontal	244	2.79	-	36.37	8.30	39.29			
AV	12.39G	42.84	54.00	-11.16	36.29	3	Horizontal	156	2.27	-	38.36	10.67	42.48			
PK	12.39G	55.22	74.00	-18.78	48.67	3	Horizontal	156	2.27	-	38.36	10.67	42.48			

2.4-2.4835GHz_BT-LE(2Mbps)

2478MHz_TX



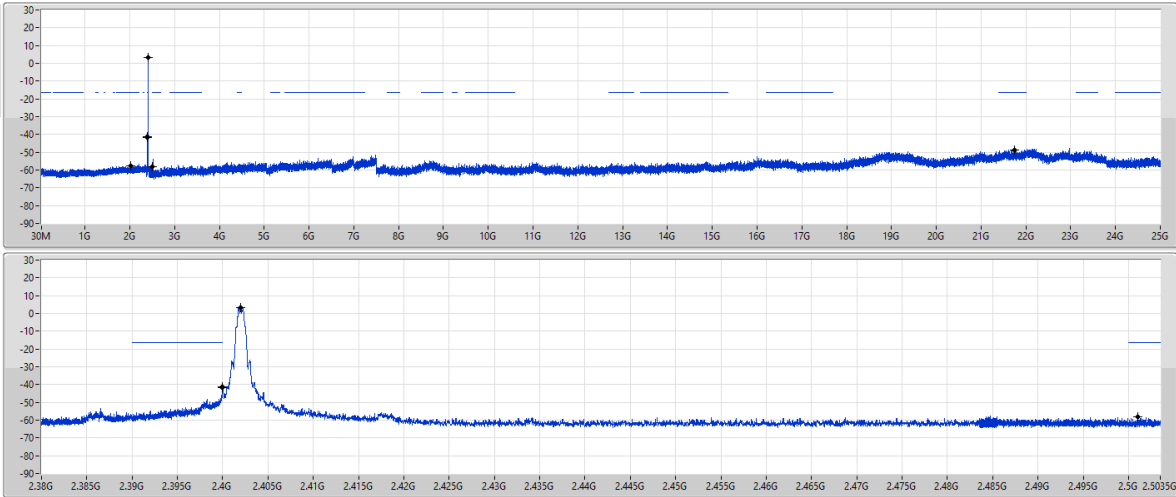
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	4.956G	42.77	54.00	-11.23	42.82	3	Vertical	44	2.26	-	31.42	6.83	38.30			
PK	4.956G	53.09	74.00	-20.91	53.14	3	Vertical	44	2.26	-	31.42	6.83	38.30			
AV	7.434G	42.04	54.00	-11.96	36.66	3	Vertical	53	2.09	-	36.37	8.30	39.29			
PK	7.434G	53.51	74.00	-20.49	48.13	3	Vertical	53	2.09	-	36.37	8.30	39.29			
AV	12.39G	44.19	54.00	-9.81	37.64	3	Vertical	133	2.86	-	38.36	10.67	42.48			
PK	12.39G	56.71	74.00	-17.29	50.16	3	Vertical	133	2.86	-	38.36	10.67	42.48			

2.4-2.4835GHz_BT-LE(125kbps)

CSEndB-DTS

2402MHz

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



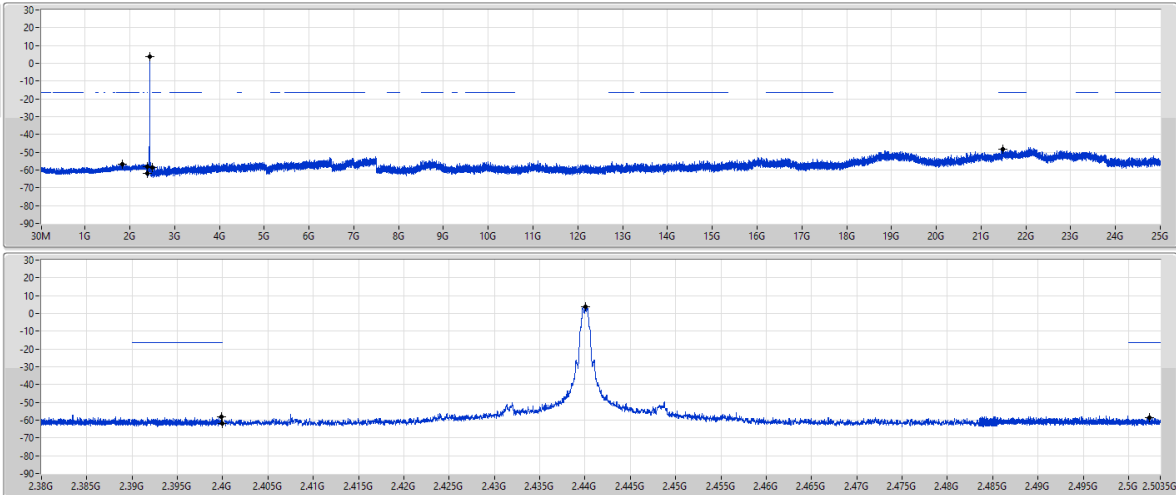
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40199G	3.50	-16.50	2.01751G	-57.62	2.39997G	-41.41	2.4G	-41.55	2.50099G	-58.29	21.74433G	-48.58	1

2.4-2.4835GHz_BT-LE(125kbps)

CSEndB-DTS

2440MHz

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

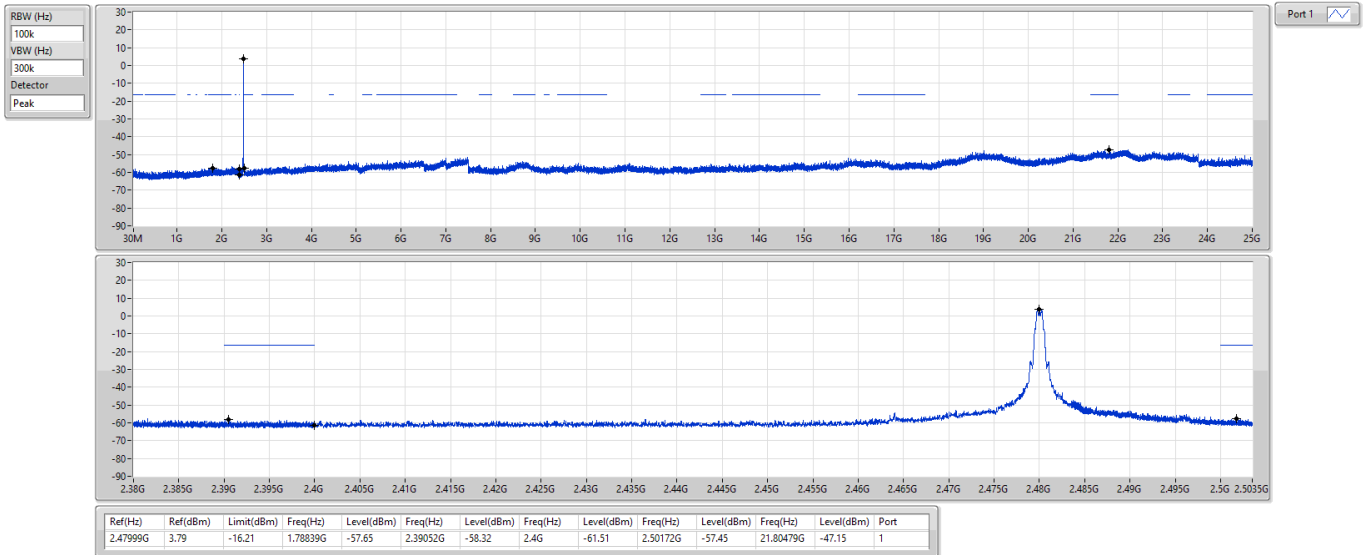


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44001G	3.56	-16.44	1.8395G	-56.75	2.39987G	-58.11	2.4G	-61.69	2.50232G	-58.71	21.4793G	-48.34	1

2.4-2.4835GHz_BT-LE(125kbps)

CSEndB-DTS

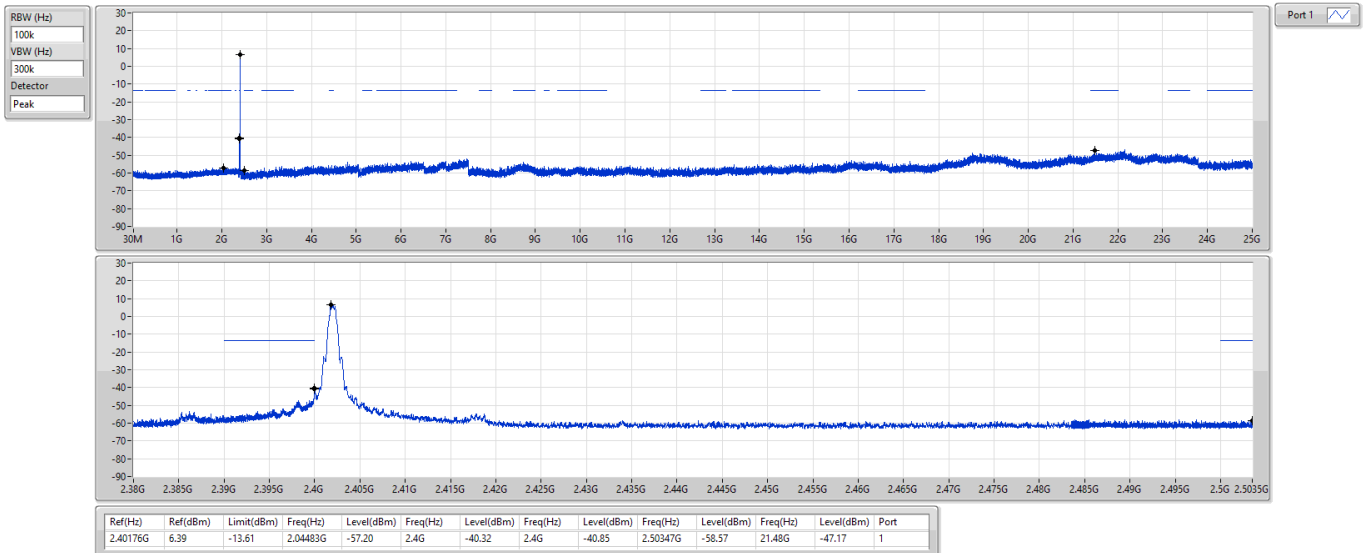
2480MHz



2.4-2.4835GHz_BT-LE(500kbps)

CSEndB-DTS

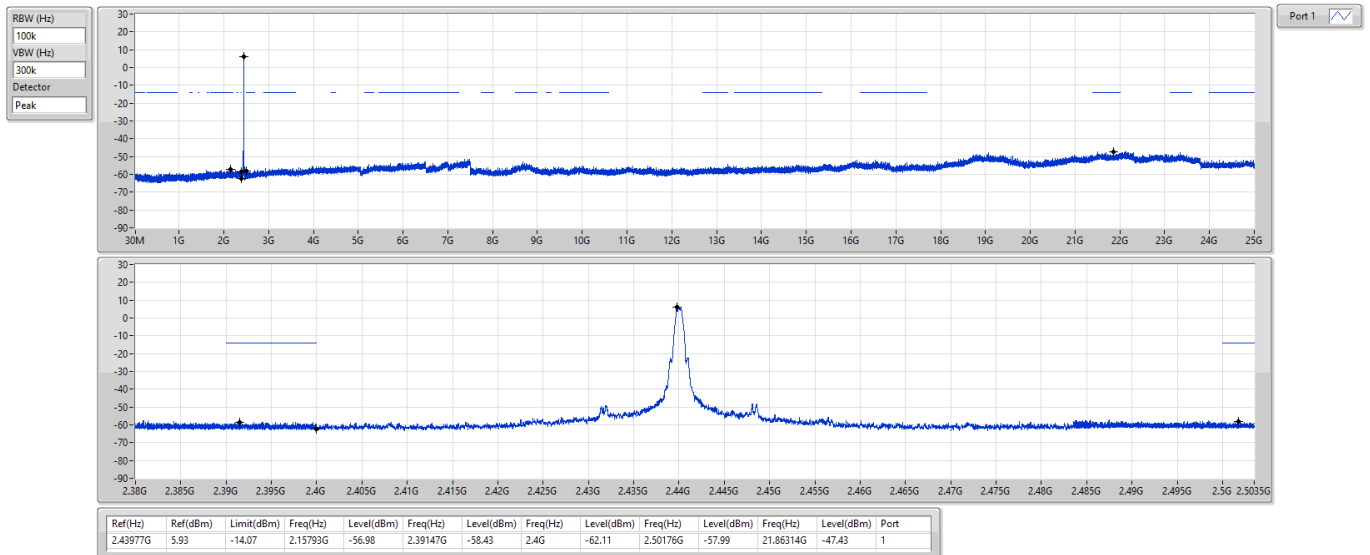
2402MHz



2.4-2.4835GHz_BT-LE(500kbps)

CSEndB-DTS

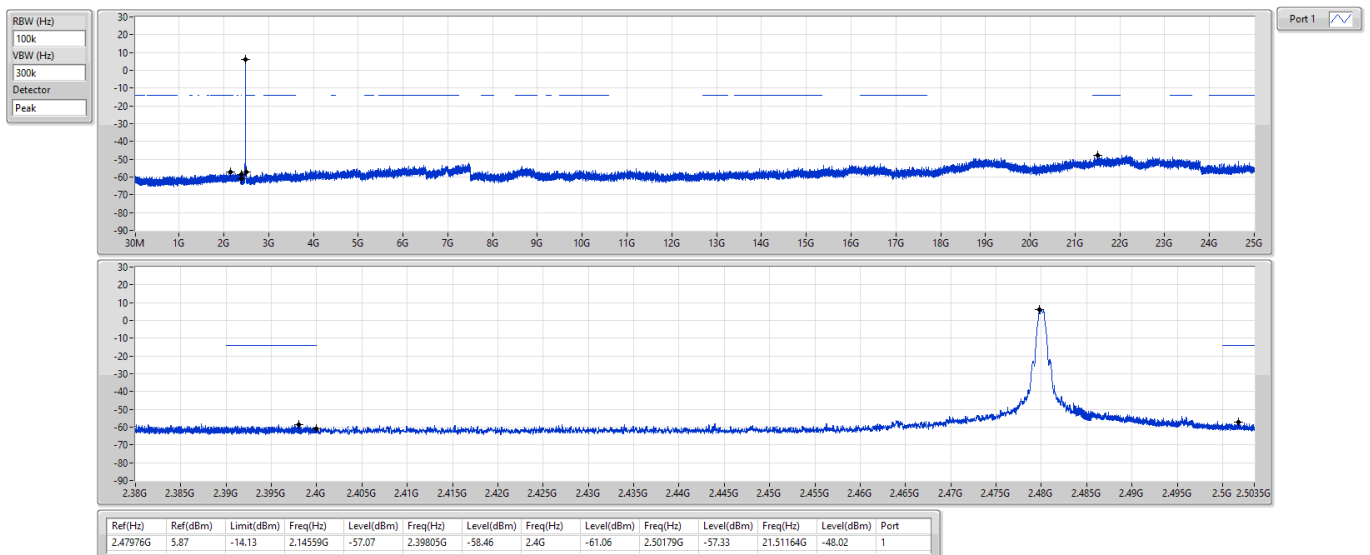
2440MHz



2.4-2.4835GHz_BT-LE(500kbps)

CSEndB-DTS

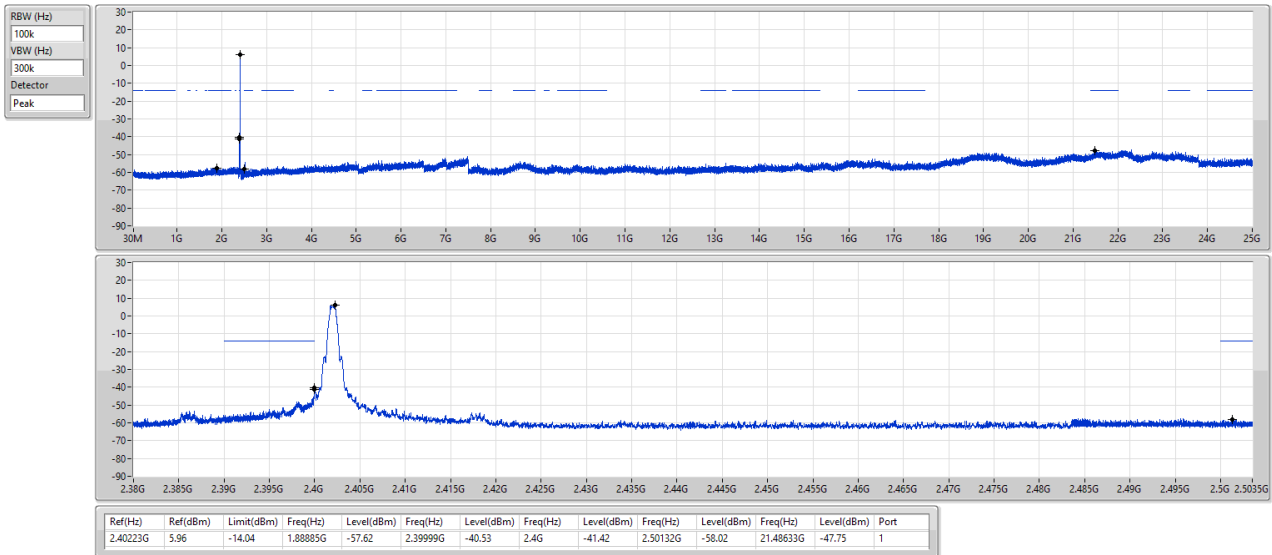
2480MHz



2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

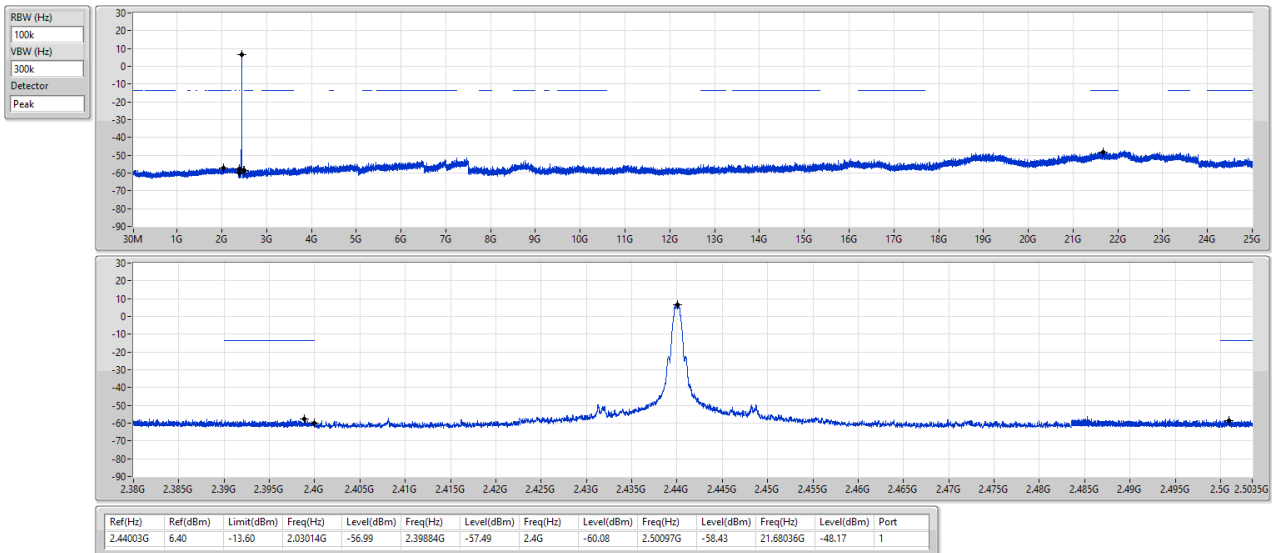
2402MHz



2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2440MHz



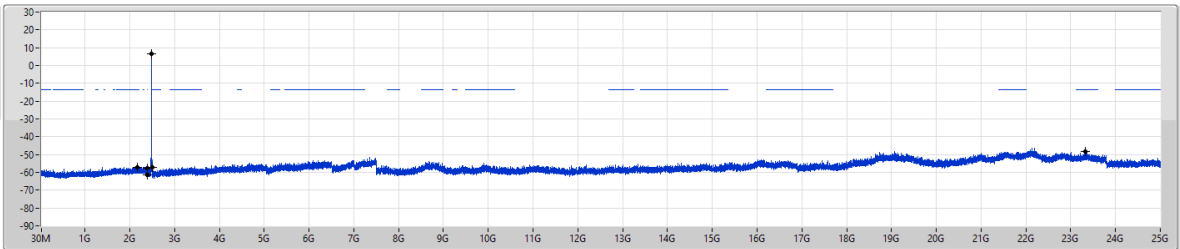


2.4-2.4835GHz_BT-LE(1Mbps)

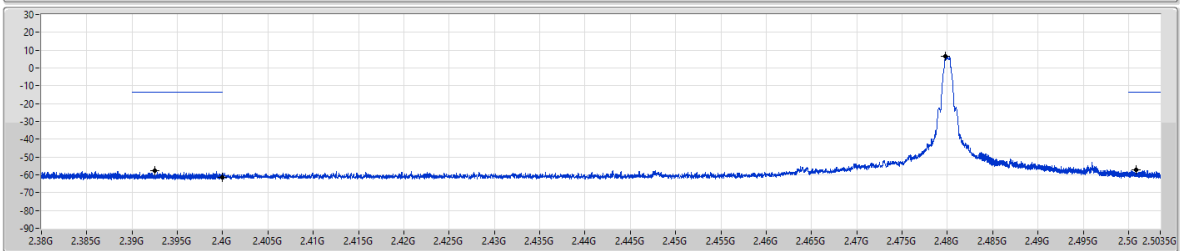
CSEndB-DTS

2480MHz

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



Port 1



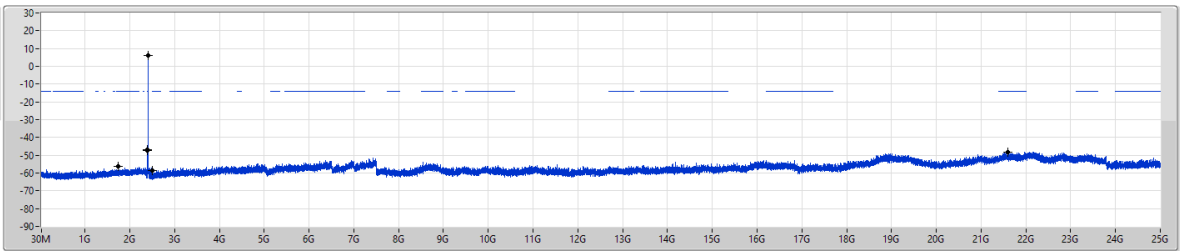
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47977G	6.49	-13.51	2.17467G	-57.05	2.39253G	-57.69	2.4G	-61.40	2.50087G	-57.31	23.33104G	-48.45	1

2.4-2.4835GHz_BT-LE(2Mbps)

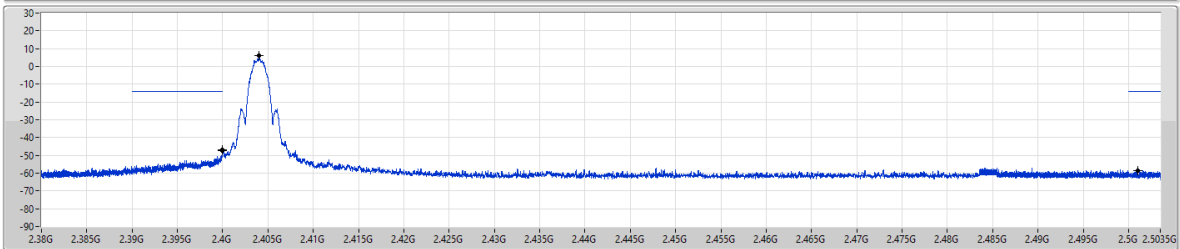
CSEndB-DTS

2404MHz

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



Port 1

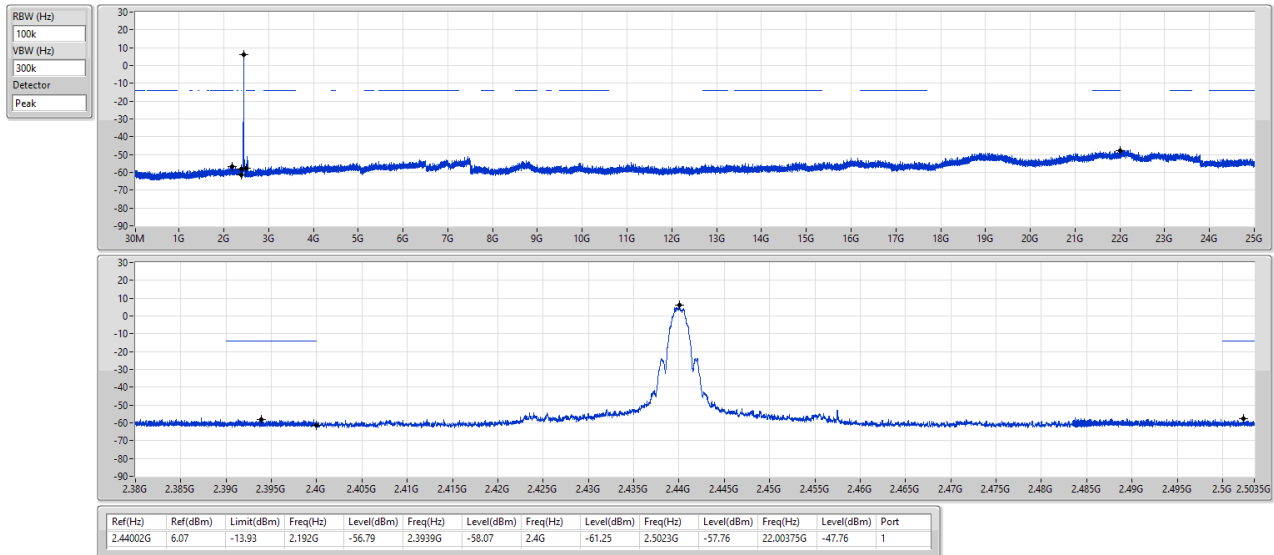


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40402G	6.01	-13.99	1.73199G	-56.45	2.39999G	-47.53	2.4G	-46.97	2.50102G	-58.63	21.59319G	-48.18	1

2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

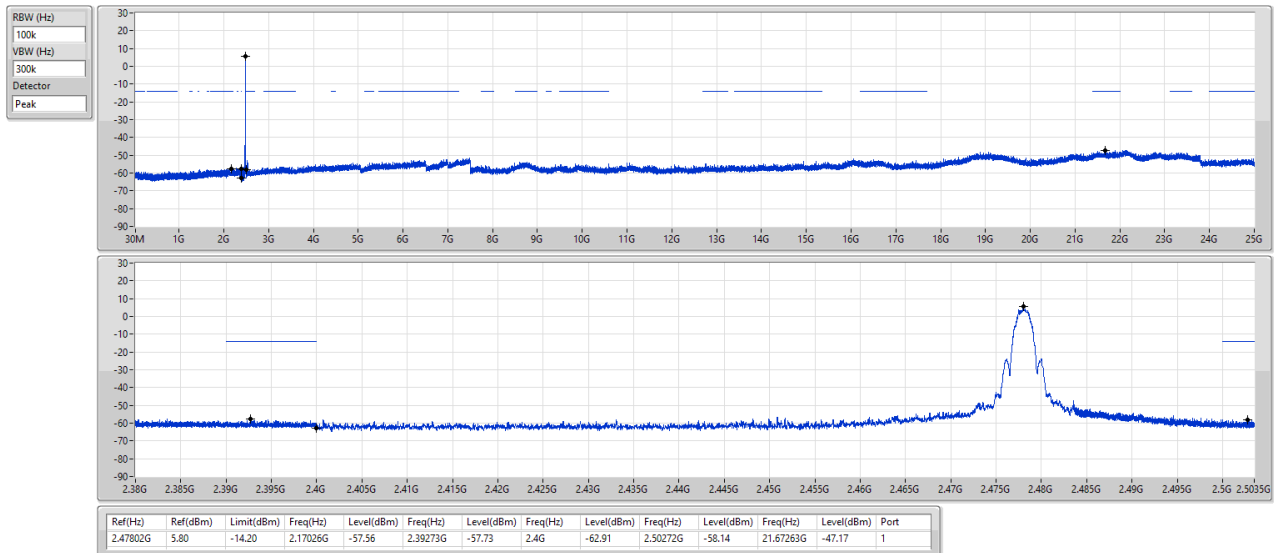
2440MHz

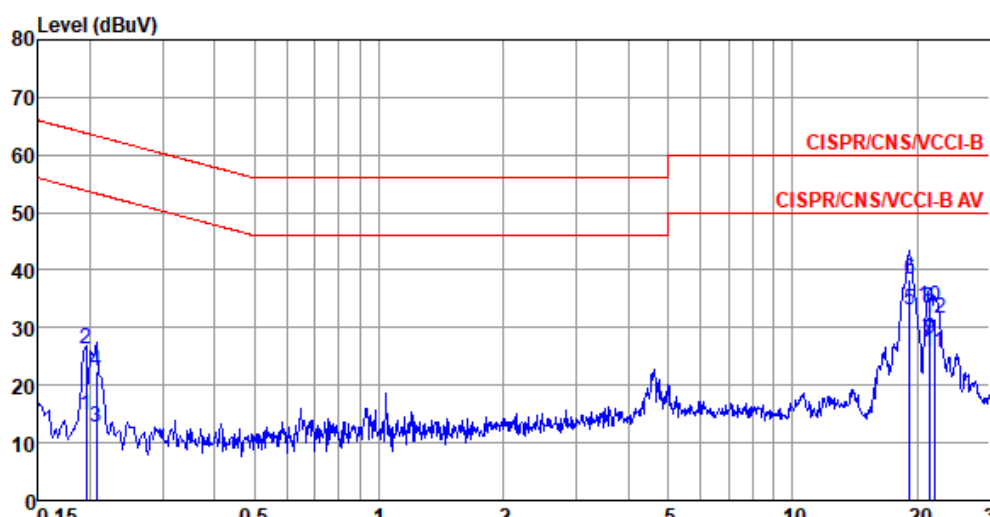


2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

2478MHz



Modulation Mode	BT-LE(1Mbps)	Test Freq. (MHz)	2480																																																																																																																																																						
Power Phase	Line																																																																																																																																																								
Test by : Akun Chung Temperature: 22°C Humidity: 62%																																																																																																																																																									
<div><div><div>Level (dBuV)</div><div></div></div><table><thead><tr><th></th><th>Freq</th><th>Level</th><th>Limit</th><th>Over</th><th>Read</th><th>Factor</th><th>Cable</th><th>Aux</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV</th><th>Line</th><th>Limit</th><th>Level</th><th>dB</th><th>loss</th><th>dB</th><th>Remark</th></tr><tr><th></th><th></th><th></th><th>dBuV</th><th>dB</th><th>dBuV</th><th></th><th>dB</th><th></th><th></th></tr></thead><tbody><tr><td>1</td><td>0.195</td><td>14.67</td><td>53.80</td><td>-39.13</td><td>4.94</td><td>9.65</td><td>0.08</td><td>0.00</td><td>Average</td></tr><tr><td>2</td><td>0.195</td><td>26.39</td><td>63.80</td><td>-37.41</td><td>16.66</td><td>9.65</td><td>0.08</td><td>0.00</td><td>QP</td></tr><tr><td>3</td><td>0.207</td><td>12.58</td><td>53.32</td><td>-40.74</td><td>2.85</td><td>9.65</td><td>0.08</td><td>0.00</td><td>Average</td></tr><tr><td>4</td><td>0.207</td><td>22.31</td><td>63.32</td><td>-41.01</td><td>12.58</td><td>9.65</td><td>0.08</td><td>0.00</td><td>QP</td></tr><tr><td>5*</td><td>19.224</td><td>32.93</td><td>50.00</td><td>-17.07</td><td>22.70</td><td>9.68</td><td>0.55</td><td>0.00</td><td>Average</td></tr><tr><td>6</td><td>19.224</td><td>38.26</td><td>60.00</td><td>-21.74</td><td>28.03</td><td>9.68</td><td>0.55</td><td>0.00</td><td>QP</td></tr><tr><td>7</td><td>21.373</td><td>27.64</td><td>50.00</td><td>-22.36</td><td>17.37</td><td>9.68</td><td>0.59</td><td>0.00</td><td>Average</td></tr><tr><td>8</td><td>21.373</td><td>33.22</td><td>60.00</td><td>-26.78</td><td>22.95</td><td>9.68</td><td>0.59</td><td>0.00</td><td>QP</td></tr><tr><td>9</td><td>21.486</td><td>28.17</td><td>50.00</td><td>-21.83</td><td>17.91</td><td>9.67</td><td>0.59</td><td>0.00</td><td>Average</td></tr><tr><td>10</td><td>21.486</td><td>33.51</td><td>60.00</td><td>-26.49</td><td>23.25</td><td>9.67</td><td>0.59</td><td>0.00</td><td>QP</td></tr><tr><td>11</td><td>22.063</td><td>25.80</td><td>50.00</td><td>-24.20</td><td>15.53</td><td>9.67</td><td>0.60</td><td>0.00</td><td>Average</td></tr><tr><td>12</td><td>22.063</td><td>31.50</td><td>60.00</td><td>-28.50</td><td>21.23</td><td>9.67</td><td>0.60</td><td>0.00</td><td>QP</td></tr></tbody></table></div> <div>Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB). 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).</div>					Freq	Level	Limit	Over	Read	Factor	Cable	Aux			MHz	dBuV	Line	Limit	Level	dB	loss	dB	Remark				dBuV	dB	dBuV		dB			1	0.195	14.67	53.80	-39.13	4.94	9.65	0.08	0.00	Average	2	0.195	26.39	63.80	-37.41	16.66	9.65	0.08	0.00	QP	3	0.207	12.58	53.32	-40.74	2.85	9.65	0.08	0.00	Average	4	0.207	22.31	63.32	-41.01	12.58	9.65	0.08	0.00	QP	5*	19.224	32.93	50.00	-17.07	22.70	9.68	0.55	0.00	Average	6	19.224	38.26	60.00	-21.74	28.03	9.68	0.55	0.00	QP	7	21.373	27.64	50.00	-22.36	17.37	9.68	0.59	0.00	Average	8	21.373	33.22	60.00	-26.78	22.95	9.68	0.59	0.00	QP	9	21.486	28.17	50.00	-21.83	17.91	9.67	0.59	0.00	Average	10	21.486	33.51	60.00	-26.49	23.25	9.67	0.59	0.00	QP	11	22.063	25.80	50.00	-24.20	15.53	9.67	0.60	0.00	Average	12	22.063	31.50	60.00	-28.50	21.23	9.67	0.60	0.00	QP
	Freq	Level	Limit	Over	Read	Factor	Cable	Aux																																																																																																																																																	
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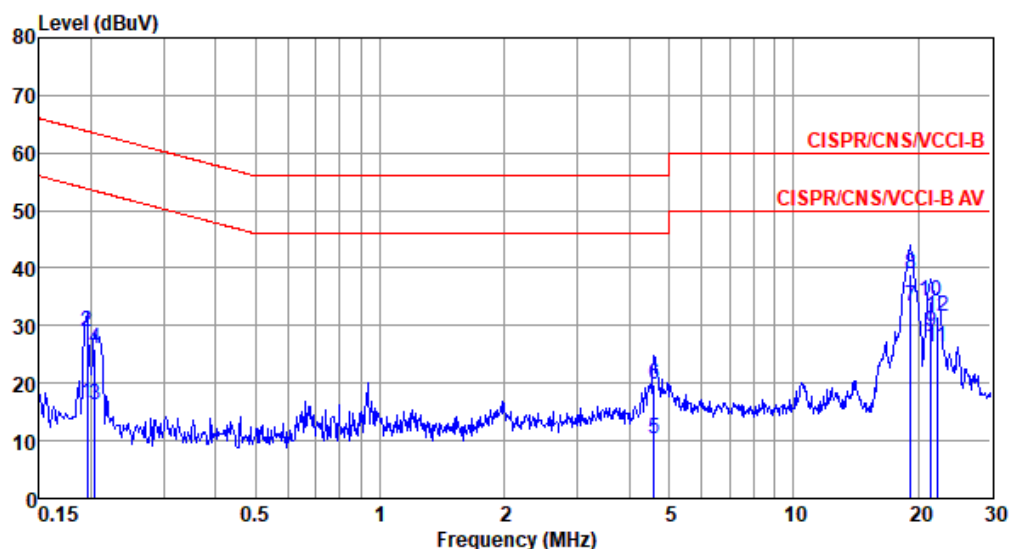


Modulation Mode	BT-LE(1Mbps)	Test Freq. (MHz)	2480
Power Phase	Neutral		

Test by : Akun Chung

Temperature: 22°C

Humidity: 62%



	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.195	16.67	53.80	-37.13	6.94	9.65	0.08	0.00	Average
2	0.195	29.00	63.80	-34.80	19.27	9.65	0.08	0.00	QP
3	0.204	16.15	53.45	-37.30	6.42	9.65	0.08	0.00	Average
4	0.204	26.05	63.45	-37.40	16.32	9.65	0.08	0.00	QP
5	4.598	10.29	46.00	-35.71	0.37	9.69	0.23	0.00	Average
6	4.598	19.82	56.00	-36.18	9.90	9.69	0.23	0.00	QP
7*	19.224	33.37	50.00	-16.63	23.00	9.82	0.55	0.00	Average
8	19.224	39.00	60.00	-21.00	28.63	9.82	0.55	0.00	QP
9	21.486	29.02	50.00	-20.98	18.59	9.84	0.59	0.00	Average
10	21.486	34.21	60.00	-25.79	23.78	9.84	0.59	0.00	QP
11	22.180	26.13	50.00	-23.87	15.69	9.84	0.60	0.00	Average
12	22.180	31.53	60.00	-28.47	21.09	9.84	0.60	0.00	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).

2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).