FCC Test Report

FCC ID	:	**R3UDSBT2**
Product Description	:	**Wireless headphone**
Model No.	:	**DSBT2 ; DSBT3 ; DSBT6** **(see item 1.1.1 for more details)**
Brand Name	:	**EPOS**
Applicant	:	**DSEA A/S**
Address	:	**Kongebakken 9, DK-2765 Smoerum, Denmark**
Standard	:	**47 CFR FCC Part 15.247**
Received Date	:	**Jan. 31, 2023**
Tested Date	:	**Feb. 15 ~ Feb. 24, 2023**

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**

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR313102AD	Rev. 01	Initial issue	Mar. 30, 2023

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emission	[dBuV]: 3.156MHz 35.66 (Margin -10.34dB) - AV	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 48.28MHz 39.46 (Margin -0.54dB) - QP	Pass
15.247(d)	Band Edge	Meet the requirement of limit	Pass
15.247(b)(1)	Conducted Output Power	Power [dBm]: 9.85	Pass
15.247(a)(1)(iii)	Number of Hopping Channels	Meet the requirement of limit	Pass
15.247(a)(1)	Hopping Channel Separation	Meet the requirement of limit	Pass
15.247(a)(1)(iii)	Dwell Time	Meet the requirement of limit	Pass
15.203	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 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Description	Remarks
EPOS	DSBT2	Wireless headphone	with ANC (binaural only)
	DSBT3		w/o ANC (binaural)
	DSBT6		w/o ANC (monaural)

1.1.2 Specification of the Equipment under Test (EUT)

RF General Information				
Frequency Range (MHz)	**Bluetooth Mode**	**Ch. Frequency (MHz)**	**Channel Number**	**Data Rate**
2400-2483.5	BR	2402-2480	0-78 [79]	1 Mbps
2400-2483.5	EDR	2402-2480	0-78 [79]	2 Mbps
2400-2483.5	EDR	2402-2480	0-78 [79]	3 Mbps
Note 1: RF output power specifies that Maximum Peak Conducted Output Power. Note 2: Bluetooth BR uses a GFSK. Note 3: Bluetooth EDR uses a combination of π/4-DQPSK and 8DPSK.				

1.1.3 Antenna Details

Ant. No.	Brand	Model	Type	Connector	Gain (dBi)
1	ANYE	254-04706-001-049	Dipole	R-SMA	3

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	DC 3.8V from battery DC 5V from host

1.1.5 Accessories

No.	Equipment	Description
1	Battery	Brand: Synergy Model: AHB552826HPCT Rating: 3.8Vdc, 450mAh
2	USB cable	Brand: EPOS Model: DSDUC120 length: 1.20m shielded USB-C twisted pair without core
3	Bluetooth dongle	Brand: EPOS Model: DSBT1
4	Charge stand contactless	Brand: EPOS Model: DSWD6 length: 1.31m shielded without core

1.1.6 Channel List

Frequency band (MHz)				2400~2483.5			
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461	---	---

1.1.7 Test Tool and Duty Cycle

Test Tool	BlueTest3, V3.3.12 Bluetooth simulator: Brand: R&S, Model: CMW270	
Modulation Mode	**Duty Cycle Of Test Signal (%)**	**Duty Factor (dB)**
DH5	78.93%	1.03
2DH5	78.68%	1.04
3DH5	77.99%	1.08

1.1.8 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)		
	2402	**2441**	**2480**
GFSK / 1Mbps	default(6)	default(6)	default(6)
π/4-DQPSK / 2Mbps	default(6)	default(6)	default(6)
8DPSK / 3Mbps	default(6)	default(6)	default(6)

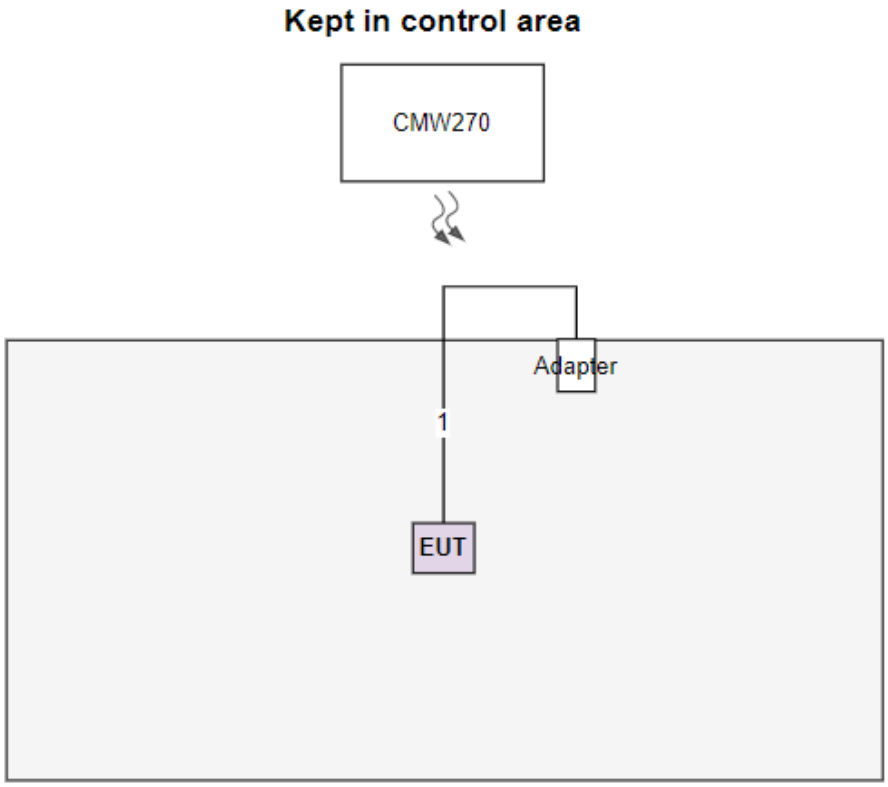
1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Notebook	DELL	Latitude E5400	DoC	---
2	Adapter	Philips	DLP6341C	---	---

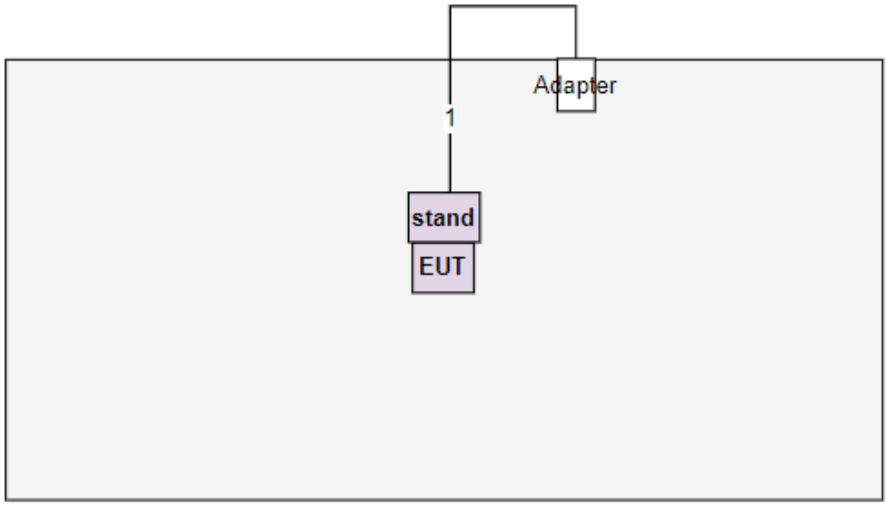
Note: The support notebook is disconnected from EUT and is removed from test table after sending command from notebook to control EUT to transmit and receive continuously.

1.3 Test Setup Chart

Test Setup Diagram



No.	Signal cable / Length (m)
1	USB-C, 1.20m shielded.

Test Setup Diagram	
	
No.	**Signal cable / Length (m)**
1	USB-C, 1.31m shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Feb. 24, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 15, 2022	Mar. 14, 2023
LISN	R&S	ENV216	101579	Apr. 21, 2022	Apr. 20, 2023
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan. 02, 2023	Jan. 01, 2024
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 17, 2022	Oct. 16, 2023
50 ohm terminal (Support Unit)	NA	50	01	May 10, 2022	May 09, 2023
Measurement SW	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Feb. 15 ~ Feb. 23, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Wireless connectivity tester	R&S	CMW270	100856	Nov. 16, 2022	Nov. 15, 2023
Receiver	R&S	ESR3	101657	Mar. 15, 2022	Mar. 14, 2023
Spectrum Analyzer	R&S	FSV40	101498	Nov. 21, 2022	Nov. 20, 2023
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 01, 2022	Oct. 31, 2023
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Aug. 03, 2022	Aug. 02, 2023
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Nov. 25, 2022	Nov. 24, 2023
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 27, 2022	Oct. 26, 2023
Preamplifier	EMC	EMC02325	980225	Jun. 28, 2022	Jun. 27, 2023
Preamplifier	EMC	EMC118A45SE	980898	Jul. 16, 2022	Jul. 15, 2023
Preamplifier	EMC	EMC184045SE	980903	Jul. 16, 2022	Jul. 15, 2023
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 04, 2022	Oct. 03, 2023
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 04, 2022	Oct. 03, 2023
LF cable 11M	EMC	EMCCFD400-NW-NW-11000	200801	Oct. 04, 2022	Oct. 03, 2023
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 04, 2022	Oct. 03, 2023
RF Cable	EMC	EMC104-35M-35M-8000	210920	Oct. 04, 2022	Oct. 03, 2023
RF Cable	EMC	EMC104-35M-35M-3000	210922	Oct. 04, 2022	Oct. 03, 2023
Measurement SW	Sporton	SENSE-15247_FS	V5.10.8	NA	NA
Measurement SW	Sporton	SENSE-EMI	V5.10.8	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Feb. 24, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Wireless connectivity tester	R&S	CMW270	100856	Nov. 16, 2022	Nov. 15, 2023
Spectrum Analyzer	R&S	FSV40	101910	Apr. 08, 2022	Apr. 07, 2023
Power Meter	Anritsu	ML2495A	1241002	Nov. 23, 2022	Nov. 22, 2023
Power Sensor	Anritsu	MA2411B	1207366	Nov. 23, 2022	Nov. 22, 2023
Measurement SW	Sporton	SENSE-15247_FS	V5.10.8	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 15.247
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 ≤ 1GHz	±3.41 dB
Unwanted Emission > 1GHz	±4.59 dB
Time	±0.1%

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	CO01-WS, 03CH01-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.)

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps)	Test Mode
AC Power Line Conducted Emissions	8DPSK	2402	3Mbps	1, 2, 3
	WPC charging	---	---	4, 5, 6
Unwanted Emissions ≤ 30MHz	WPC charging	---	---	4, 5, 6
Unwanted Emissions ≤ 1GHz	8DPSK	2402	3Mbps	1, 2, 3
	WPC charging	---	---	4, 5, 6
Unwanted Emissions > 1GHz	GFSK 8DPSK	2402, 2441, 2480 2402, 2441, 2480	1Mbps 3Mbps	1
Conducted Output Power	GFSK Л/4 DQPSK 8DPSK	2402, 2441, 2480 2402, 2441, 2480 2402, 2441, 2480	1Mbps 2Mbps 3Mbps	1
Number of Hopping Channels	GFSK Л/4 DQPSK 8DPSK	2402~2480 2402~2480 2402~2480	1Mbps 2Mbps 3Mbps	1
Hopping Channel Separation 20dB and Occupied bandwidth	GFSK Л/4 DQPSK 8DPSK	2402, 2441, 2480 2402, 2441, 2480 2402, 2441, 2480	1Mbps 2Mbps 3Mbps	1
Dwell Time	GFSK Л/4 DQPSK 8DPSK	2402 2402 2402	1Mbps 2Mbps 3Mbps	1

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.
2. Test modes are listed as follows:
   1) Test mode 1: DSBT2 USB charger with adapter+TX
   2) Test mode 2: DSBT3 USB charger with adapter+TX
   3) Test mode 3: DSBT6 USB charger with adapter+TX
   4) Test mode 4: DSBT2 WPC (Stand) charger with adapter
   5) Test mode 5: DSBT3 WPC (Stand) charger with adapter
   6) Test mode 6: DSBT6 WPC (Stand) charger with adapter

3 Transmitter Test Results

3.1 Unwanted Emissions into Restricted Frequency Bands

3.1.1 Limit of Unwanted Emissions into 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:
Qusai-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.

3.1.2 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:

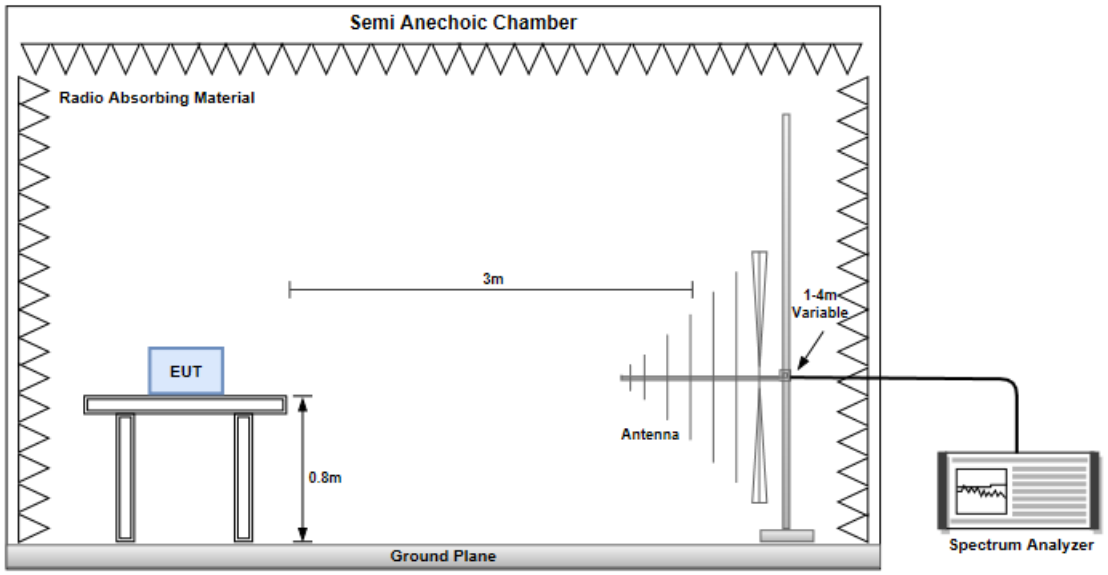
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. Radiated emission above 1GHz / Peak value
   RBW=1MHz, VBW=3MHz and Peak detector
3. Radiated emission above 1GHz / Average value for harmonics
   The average value is: Average = Peak value + 20log(Duty cycle) Where the duty factor is calculated from following formula for DH5 packet type which has worst duty factor:

$$20\log(\text{Duty cycle}) = 20\log\frac{1\text{s} / 1600 * 5}{100\text{ ms}} = -30.1\text{dB}$$

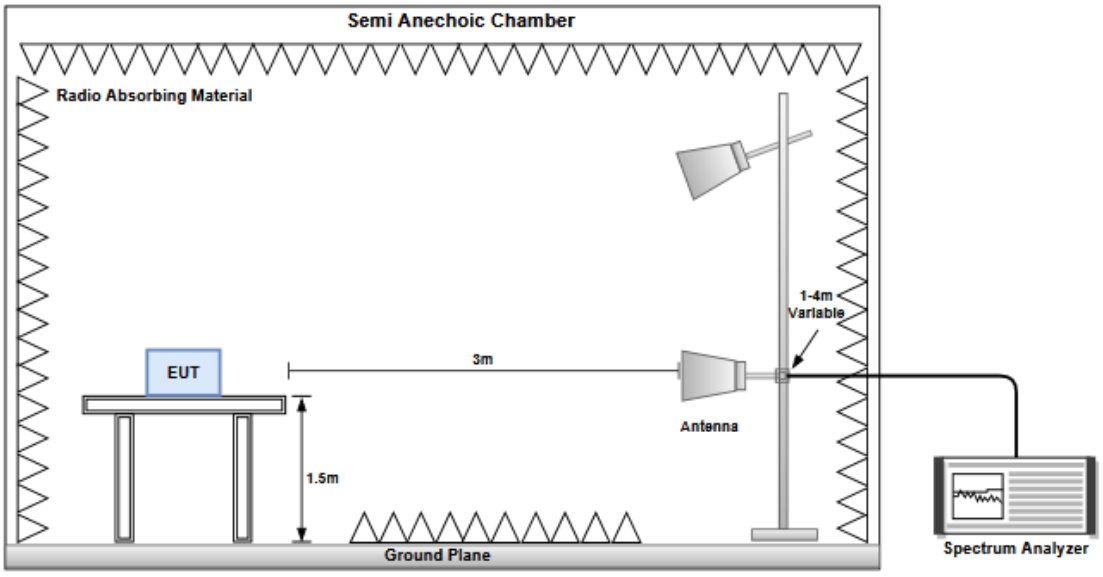
4. Radiated emission above 1GHz / Average value for other emissions
   RBW=1MHz, VBW=1/T and Peak detector

3.1.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.1.4 Test Results

Ambient Condition	22-23°C / 62-63%	Tested By	Sean Yu / Brad Wu

Refer to Appendix A.

3.2 Unwanted Emissions into Non-Restricted Frequency Bands

3.2.1 Limit of Unwanted Emissions into Non-Restricted Frequency Bands

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.

3.2.2 Test Procedures

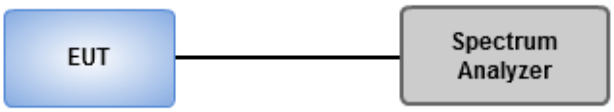
Reference level measurement

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

3.2.3 Test Setup



3.2.4 Test Results

Ambient Condition	21°C / 66%	**Tested By**	Akun Chung

Refer to Appendix B.

3.3 Conducted Output Power

3.3.1 Limit of Conducted Output Power

☐ 1 Watt
For frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band.

☒ 0.125 Watt
For all other frequency hopping systems in the 2400–2483.5 MHz band.

☐ 0.125 Watt
For Frequency hopping systems operating in the 2400–2483.5 MHz band have hopping channel carrier frequencies that are separated by two-thirds of the 20 dB bandwidth of the hopping channel.

3.3.2 Test Procedures

1. A wideband power meter is used for power measurement. Bandwidth of power senor and meter is 50MHz

2 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

3.3.3 Test Setup

3.3.4 Test Results

Ambient Condition	21°C / 66%	**Tested By**	Akun Chung

Refer to Appendix C.

3.4 Number of Hopping Frequency

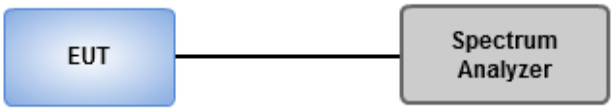
3.4.1 Limit of Number of Hopping Frequency

Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels.

3.4.2 Test Procedures

1. Set RBW = 100kHz, VBW = 300kHz, Sweep time = Auto, Detector = Peak Trace max hold.
2 Allow trace to stabilize.

3.4.3 Test Setup



3.4.4 Test Results

Ambient Condition	21°C / 66%	**Tested By**	Akun Chung

Refer to Appendix D.

3.5 20dB and Occupied Bandwidth

3.5.1 Test Procedures

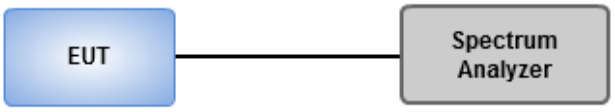
20dB Bandwidth

1. Set RBW=20kHz, VBW=100kHz, Sweep time = Auto, Detector=Peak , Trace max hold
2 Allow trace to stabilize
3 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 20 dB relative to the maximum level measured in the fundamental emission.

Occupied Bandwidth

1. Set RBW=20kHz, VBW=100kHz, Sweep time = Auto, Detector=Sample , Trace max hold
2 Allow trace to stabilize
3. Use Occupied bandwidth function of spectrum analyzer to measuring 99% occupied bandwidth

3.5.2 Test Setup



3.5.3 Test Results

Ambient Condition	21°C / 66%	**Tested By**	Akun Chung

Refer to Appendix E.

3.6 Channel Separation

3.6.1 Limit of Channel Separation

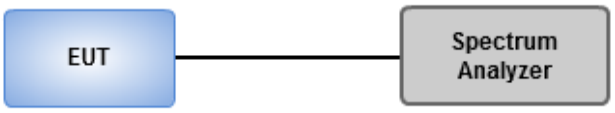
☐ Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

☒ Frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

3.6.2 Test Procedures

1. Set RBW=30kHz, VBW=100kHz,Sweep time = Auto, Detector=Peak Trace max hold
2. Allow trace to stabilize
3. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. The EUT shall show compliance with the appropriate regulatory limit

3.6.3 Test Setup



3.6.4 Test Results

Ambient Condition	21°C / 66%	Tested By	Akun Chung

Refer to Appendix F.

3.7 Number of Dwell Time

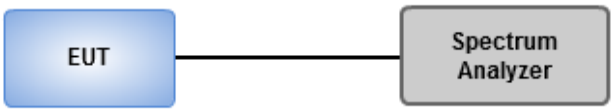
3.7.1 Limit of Dwell time

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

3.7.2 Test Procedures

1. Set RBW=300 kHz, VBW=1 MHz, Sweep time=8 ms, Detector=Peak, Span=0 Hz,Trace max hold.
2 Enable gating and trigger function of spectrum analyzer to measure burst on time.
3. Set RBW=300 kHz, VBW=1 MHz, Sweep time=5 s / 2 s, Detector=Peak, Span=0 Hz,Trace max hold.
4. Enable gating and trigger function of spectrum analyzer to measure burst on number of transmission.
5 Set RBW=300 kHz, VBW=1 MHz, Sweep time=31.6 s / 8 s, Detector=Peak, Span=0 Hz,Trace max hold.
6 Enable gating and trigger function of spectrum analyzer to measure burst on number of transmission of entire time cycle.

3.7.3 Test Setup



3.7.4 Test Results

Ambient Condition	21°C / 66%	Tested By	Akun Chung

Refer to Appendix G.

3.8 AC Power Line Conducted Emissions

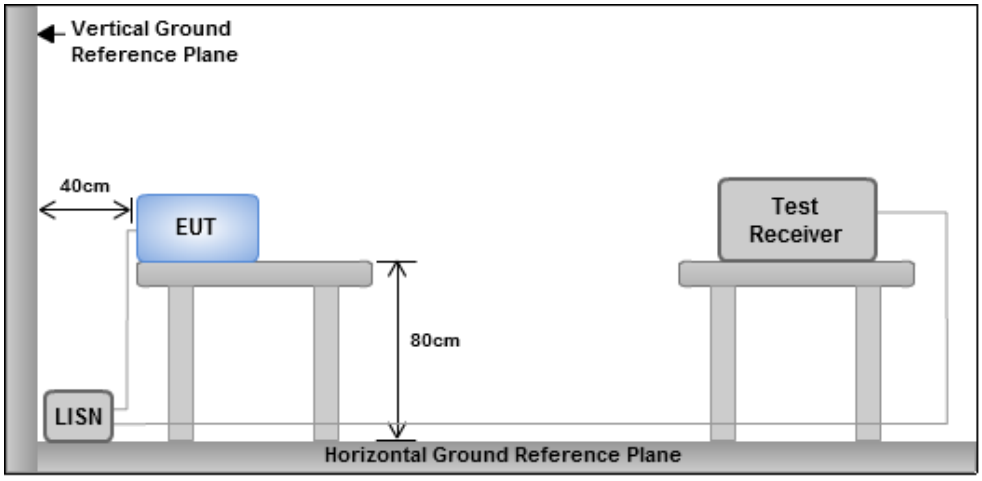
3.8.1 Limit of AC Power Line Conducted Emissions

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.		

3.8.2 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

3.8.3 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

3.8.4 Test Results

Refer to Appendix H.

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: 886-3-318-0345
Email: ICC_Service@icertifi.com.tw

==END==

Mode 4

Loop Pol.	open					
Emission Freq. (MHz)	**Emission Level (dBuV/m)**	**FS max Limit (dBuV/m)**	**Margin (dB)**	**SA Reading (dBuV)**	**Factor (dB/m)**	**Remark**
5.41	32.84	58.92	-26.08	11.64	21.2	QP
10.78	34.56	52.93	-18.37	11.02	23.54	QP
14.25	35.99	50.51	-14.52	11.38	24.61	QP

Loop Pol.	close					
Emission Freq. (MHz)	**Emission Level (dBuV/m)**	**FS max Limit (dBuV/m)**	**Margin (dB)**	**SA Reading (dBuV)**	**Factor (dB/m)**	**Remark**
3.49	39.73	62.73	-23	18.83	20.9	QP
11.83	36.25	52.12	-15.87	12.35	23.9	QP
16.23	42.46	49.54	-7.08	18.35	24.11	QP

Note: Emission Level = SA Reading + Factor

Mode 5

Loop Pol.	open					
Emission Freq. (MHz)	**Emission Level (dBuV/m)**	**FS max Limit (dBuV/m)**	**Margin (dB)**	**SA Reading (dBuV)**	**Factor (dB/m)**	**Remark**
3.49	37.54	62.73	-25.19	16.64	20.9	QP
6.85	33.56	56.87	-23.31	11.57	21.99	QP
11.53	35.68	52.35	-16.67	11.88	23.8	QP

Loop Pol.	close					
Emission Freq. (MHz)	**Emission Level (dBuV/m)**	**FS max Limit (dBuV/m)**	**Margin (dB)**	**SA Reading (dBuV)**	**Factor (dB/m)**	**Remark**
3.38	39.38	63	-23.62	18.49	20.89	QP
11.92	37.17	52.06	-14.89	13.24	23.93	QP
16.23	42.6	49.54	-6.94	18.49	24.11	QP

Note: Emission Level = SA Reading + Factor

Mode 6

Loop Pol.	open					
Emission Freq. (MHz)	**Emission Level (dBuV/m)**	**FS max Limit (dBuV/m)**	**Margin (dB)**	**SA Reading (dBuV)**	**Factor (dB/m)**	**Remark**
2.74	34.75	64.83	-30.08	13.8	20.95	QP
6.4	33.08	57.46	-24.38	11.32	21.76	QP
14.58	35.36	50.31	-14.95	10.66	24.7	QP

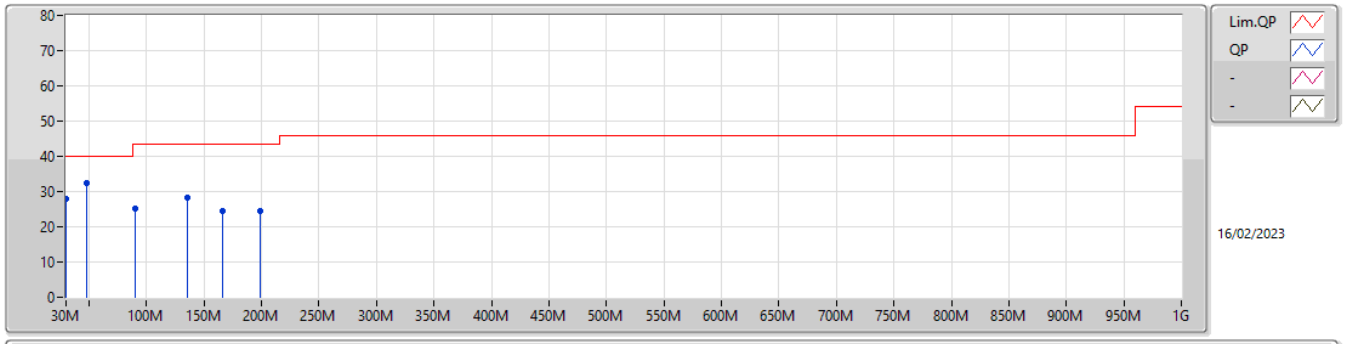
Loop Pol.	close					
Emission Freq. (MHz)	**Emission Level (dBuV/m)**	**FS max Limit (dBuV/m)**	**Margin (dB)**	**SA Reading (dBuV)**	**Factor (dB/m)**	**Remark**
3.49	39.48	62.73	-23.25	18.58	20.9	QP
12.19	36.77	51.86	-15.09	12.76	24.01	QP
16.23	42.65	49.54	-6.89	18.54	24.11	QP

Note: Emission Level = SA Reading + Factor

Summary

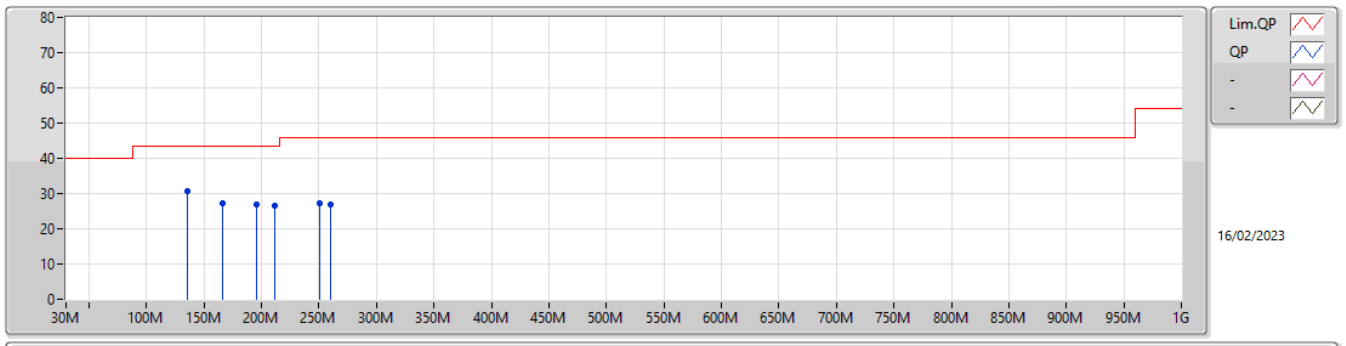
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	48.28M	32.32	40.00	-7.68	Vertical
Mode 2	Pass	PK	48.28M	32.33	40.00	-7.67	Vertical
Mode 3	Pass	PK	51.09M	32.82	40.00	-7.18	Vertical
Mode 4	Pass	QP	48.28M	39.46	40.00	-0.54	Vertical
Mode 5	Pass	QP	49.68M	39.35	40.00	-0.65	Vertical
Mode 6	Pass	QP	49.19M	39.25	40.00	-0.75	Vertical

Mode 1



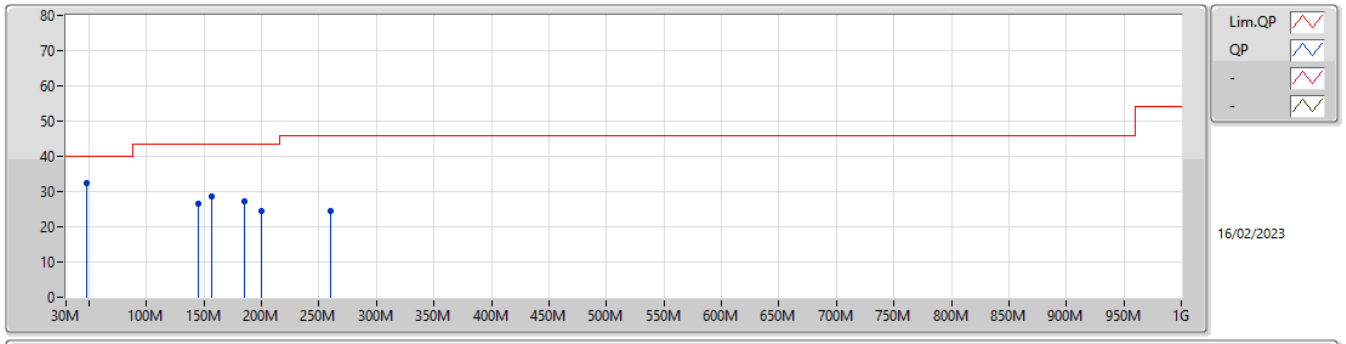
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	30M	27.93	40.00	-12.07	-10.05	3	Vertical	-	-	-	37.98	17.50	0.56	28.11
PK	48.28M	32.32	40.00	-7.68	-8.15	3	Vertical	-	-	-	40.47	19.27	0.70	28.12
PK	90.45M	25.30	43.50	-18.20	-14.48	3	Vertical	-	-	-	39.78	12.95	0.90	28.33
PK	135.43M	28.29	43.50	-15.21	-9.80	3	Vertical	-	-	-	38.09	17.59	1.03	28.42
PK	166.36M	24.44	43.50	-19.06	-9.25	3	Vertical	-	-	-	33.69	18.06	1.14	28.45
PK	198.7M	24.54	43.50	-18.96	-11.77	3	Vertical	-	-	-	36.31	15.40	1.32	28.49

Mode 1



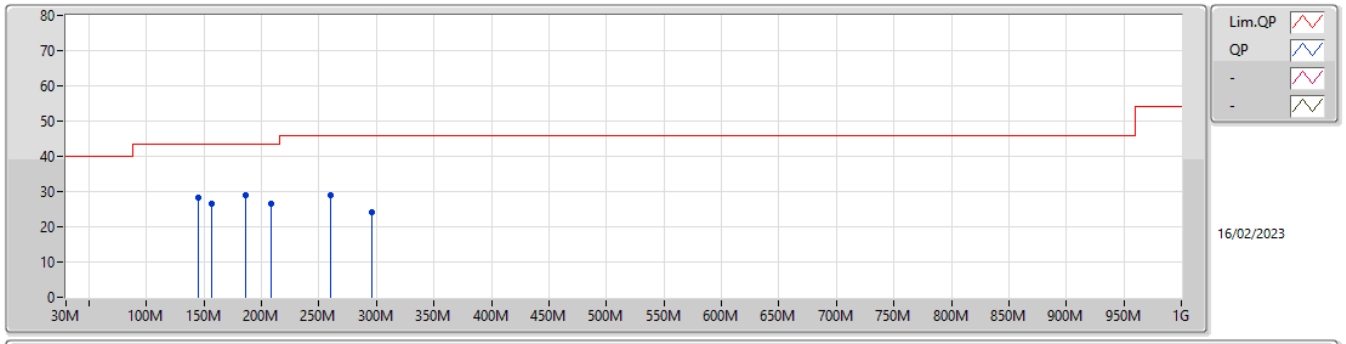
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	135.43M	30.63	43.50	-12.87	-9.80	3	Horizontal	-	-	-	40.43	17.59	1.03	28.42
PK	166.36M	27.27	43.50	-16.23	-9.25	3	Horizontal	-	-	-	36.52	18.06	1.14	28.45
PK	195.88M	26.83	43.50	-16.67	-11.68	3	Horizontal	-	-	-	38.51	15.50	1.31	28.49
PK	211.35M	26.72	43.50	-16.78	-11.94	3	Horizontal	-	-	-	38.66	15.20	1.35	28.49
PK	250.71M	27.26	46.00	-18.74	-10.03	3	Horizontal	-	-	-	37.29	17.03	1.42	28.48
PK	260.55M	26.97	46.00	-19.03	-9.48	3	Horizontal	-	-	-	36.45	17.54	1.46	28.48

Mode 2



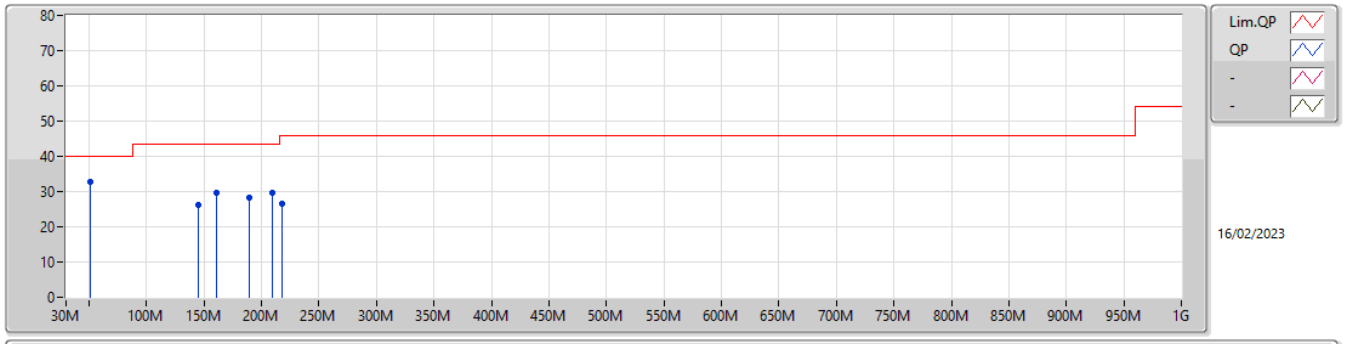
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	48.28M	32.33	40.00	-7.67	-8.15	3	Vertical	-	-	-	40.48	19.27	0.70	28.12
PK	145.28M	26.53	43.50	-16.97	-9.07	3	Vertical	-	-	-	35.60	18.30	1.06	28.43
PK	156.52M	28.45	43.50	-15.05	-8.99	3	Vertical	-	-	-	37.44	18.35	1.10	28.44
PK	184.64M	27.35	43.50	-16.15	-10.96	3	Vertical	-	-	-	38.31	16.27	1.24	28.47
PK	200.1M	24.39	43.50	-19.11	-11.86	3	Vertical	-	-	-	36.25	15.30	1.33	28.49
PK	260.55M	24.43	46.00	-21.57	-9.48	3	Vertical	-	-	-	33.91	17.54	1.46	28.48

Mode 2



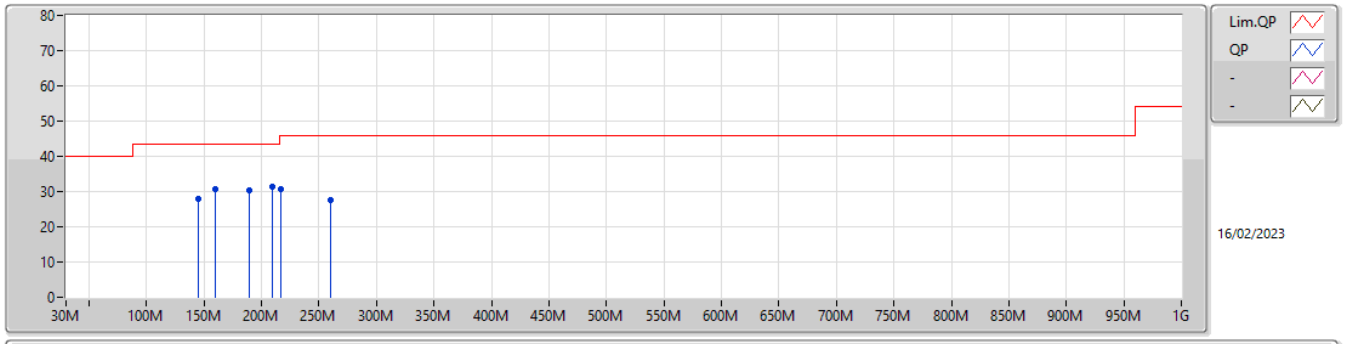
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	145.28M	28.26	43.50	-15.24	-9.07	3	Horizontal	-	-	-	37.33	18.30	1.06	28.43
PK	156.52M	26.39	43.50	-17.11	-8.99	3	Horizontal	-	-	-	35.38	18.35	1.10	28.44
PK	186.04M	28.80	43.50	-14.70	-11.22	3	Horizontal	-	-	-	40.02	16.00	1.25	28.47
PK	208.54M	26.43	43.50	-17.07	-11.94	3	Horizontal	-	-	-	38.37	15.20	1.35	28.49
PK	260.55M	28.87	46.00	-17.13	-9.48	3	Horizontal	-	-	-	38.35	17.54	1.46	28.48
PK	295.7M	24.22	46.00	-21.78	-8.29	3	Horizontal	-	-	-	32.51	18.61	1.58	28.48

Mode 3



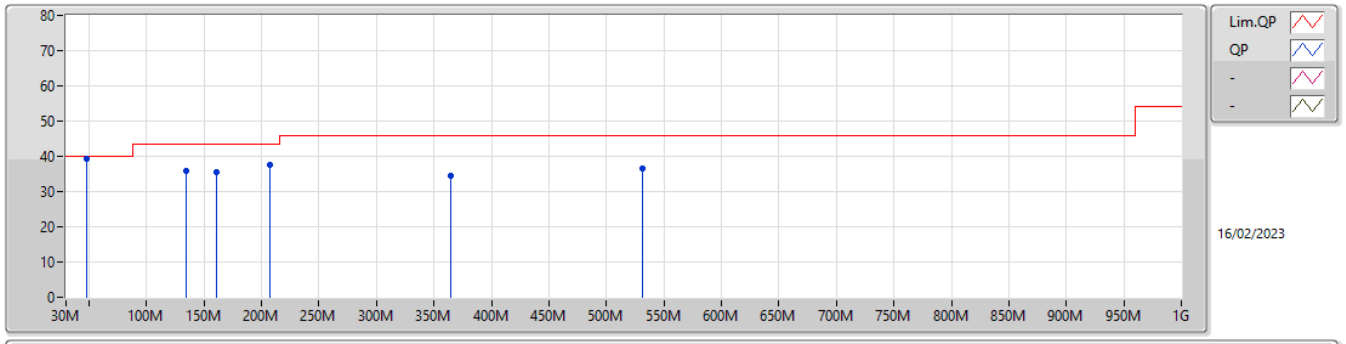
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	51.09M	32.82	40.00	-7.18	-8.14	3	Vertical	-	-	-	40.96	19.27	0.72	28.13
PK	145.28M	26.15	43.50	-17.35	-9.07	3	Vertical	-	-	-	35.22	18.30	1.06	28.43
PK	160.74M	29.58	43.50	-13.92	-9.04	3	Vertical	-	-	-	38.62	18.30	1.11	28.45
PK	188.86M	28.34	43.50	-15.16	-11.49	3	Vertical	-	-	-	39.83	15.73	1.26	28.48
PK	209.94M	29.49	43.50	-14.01	-11.94	3	Vertical	-	-	-	41.43	15.20	1.35	28.49
PK	218.38M	26.40	46.00	-19.60	-11.93	3	Vertical	-	-	-	38.33	15.20	1.36	28.49

Mode 3



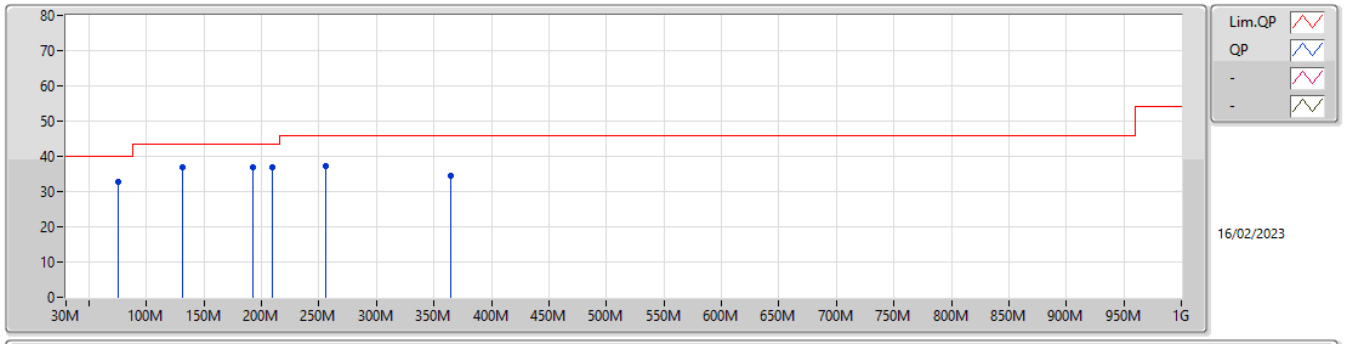
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	145.28M	27.94	43.50	-15.56	-9.07	3	Horizontal	-	-	-	37.01	18.30	1.06	28.43
PK	159.33M	30.52	43.50	-12.98	-9.04	3	Horizontal	-	-	-	39.56	18.30	1.11	28.45
PK	188.86M	30.47	43.50	-13.03	-11.49	3	Horizontal	-	-	-	41.96	15.73	1.26	28.48
PK	209.94M	31.52	43.50	-11.98	-11.94	3	Horizontal	-	-	-	43.46	15.20	1.35	28.49
PK	216.97M	30.74	46.00	-15.26	-11.93	3	Horizontal	-	-	-	42.67	15.20	1.36	28.49
PK	260.55M	27.65	46.00	-18.35	-9.48	3	Horizontal	-	-	-	37.13	17.54	1.46	28.48

Mode 4



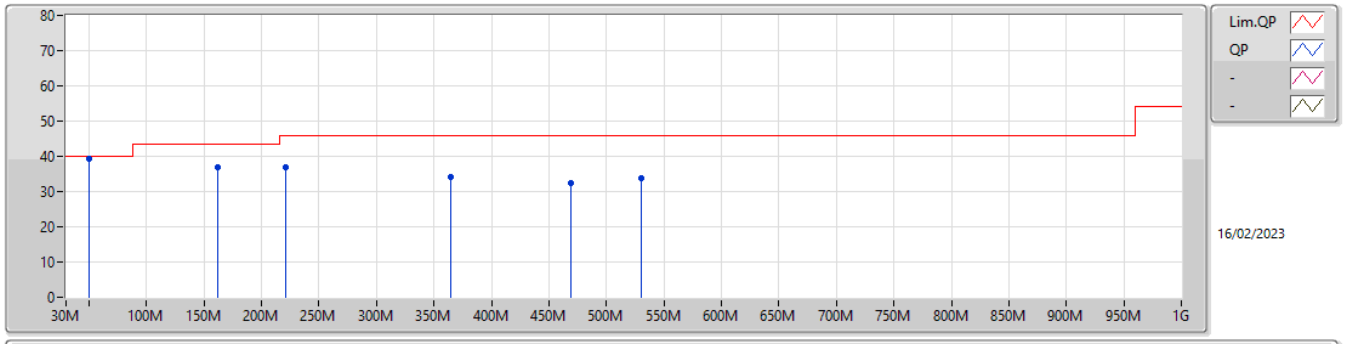
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
QP	48.28M	39.46	40.00	-0.54	-8.15	3	Vertical	1	1.00	-	47.61	19.27	0.70	28.12
PK	134.03M	35.72	43.50	-7.78	-9.89	3	Vertical	-	-	-	45.61	17.50	1.03	28.42
PK	160.74M	35.59	43.50	-7.91	-9.04	3	Vertical	-	-	-	44.63	18.30	1.11	28.45
QP	207.13M	37.65	43.50	-5.85	-11.95	3	Vertical	15	1.00	-	49.60	15.20	1.34	28.49
PK	364.58M	34.52	46.00	-11.48	-6.70	3	Vertical	-	-	-	41.22	19.98	1.72	28.40
PK	531.87M	36.61	46.00	-9.39	-2.73	3	Vertical	-	-	-	39.34	23.40	2.11	28.24

Mode 4



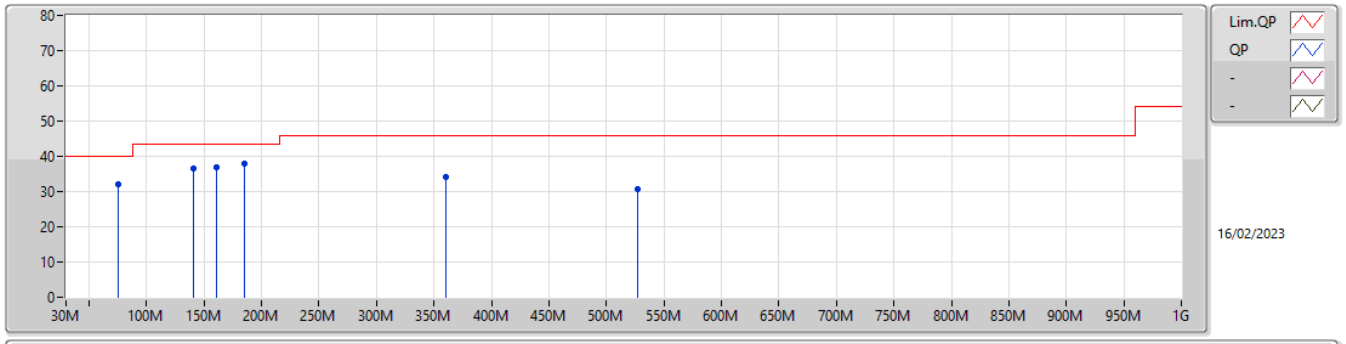
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	74.99M	32.85	40.00	-7.15	-12.31	3	Horizontal	-	-	-	45.16	15.10	0.84	28.25
PK	131.22M	36.95	43.50	-6.55	-10.13	3	Horizontal	-	-	-	47.08	17.26	1.02	28.41
QP	193.07M	36.96	43.50	-6.54	-11.60	3	Horizontal	129	1.51	-	48.56	15.59	1.29	28.48
QP	209.94M	36.86	43.50	-6.64	-11.94	3	Horizontal	119	1.74	-	48.80	15.20	1.35	28.49
PK	256.33M	37.18	46.00	-8.82	-9.76	3	Horizontal	-	-	-	46.94	17.28	1.44	28.48
PK	364.58M	34.54	46.00	-11.46	-6.70	3	Horizontal	-	-	-	41.24	19.98	1.72	28.40

Mode 5



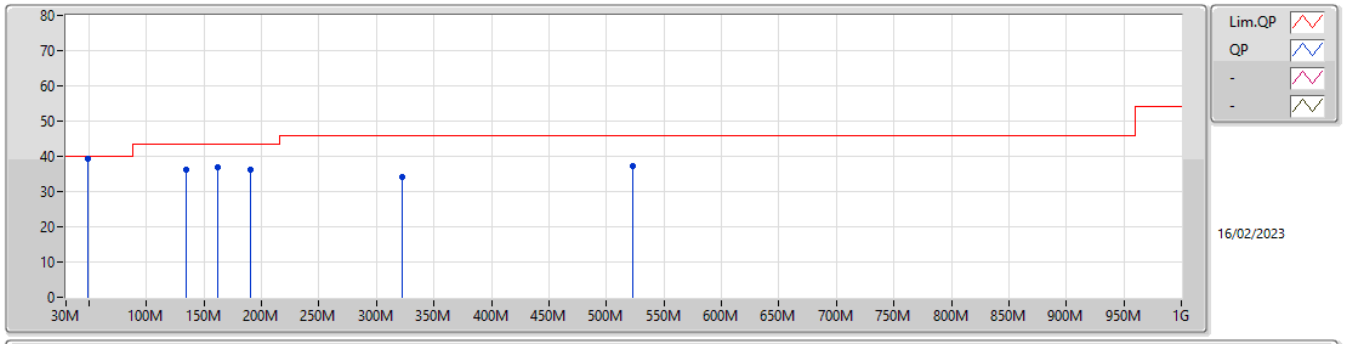
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
QP	49.68M	39.35	40.00	-0.65	-8.34	3	Vertical	199	1.00	-	47.69	19.06	0.72	28.12
PK	162.14M	36.95	43.50	-6.55	-9.22	3	Vertical	-	-	-	46.17	18.11	1.12	28.45
PK	221.19M	36.97	46.00	-9.03	-11.97	3	Vertical	-	-	-	48.94	15.15	1.37	28.49
PK	364.58M	34.15	46.00	-11.85	-6.70	3	Vertical	-	-	-	40.85	19.98	1.72	28.40
PK	468.61M	32.34	46.00	-13.66	-3.84	3	Vertical	-	-	-	36.18	22.50	1.94	28.28
PK	530.46M	33.68	46.00	-12.32	-2.74	3	Vertical	-	-	-	36.42	23.40	2.10	28.24

Mode 5



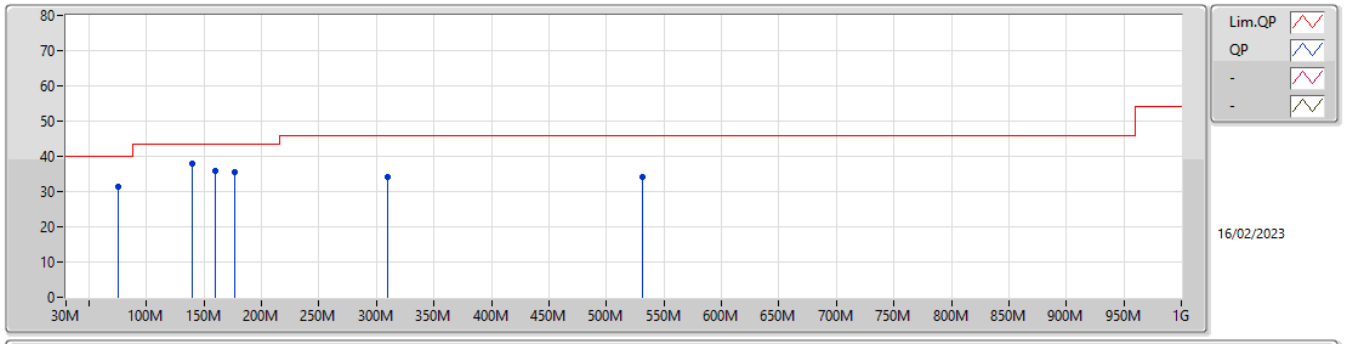
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	74.99M	31.93	40.00	-8.07	-12.31	3	Horizontal	-	-	-	44.24	15.10	0.84	28.25
QP	141.06M	36.72	43.50	-6.78	-9.28	3	Horizontal	141	1.74	-	46.00	18.11	1.04	28.43
QP	160.74M	36.77	43.50	-6.73	-9.04	3	Horizontal	152	1.61	-	45.81	18.30	1.11	28.45
QP	184.64M	37.84	43.50	-5.66	-10.96	3	Horizontal	-	-	-	48.80	16.27	1.24	28.47
PK	360.36M	34.07	46.00	-11.93	-6.89	3	Horizontal	-	-	-	40.96	19.81	1.71	28.41
PK	527.65M	30.52	46.00	-15.48	-2.79	3	Horizontal	-	-	-	33.31	23.35	2.10	28.24

Mode 6



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
QP	49.19M	39.25	40.00	-0.75	-8.25	3	Vertical	52	1.00	-	47.50	19.16	0.71	28.12
PK	134.03M	36.26	43.50	-7.24	-9.89	3	Vertical	-	-	-	46.15	17.50	1.03	28.42
PK	162.14M	36.87	43.50	-6.63	-9.22	3	Vertical	-	-	-	46.09	18.11	1.12	28.45
PK	190.26M	36.12	43.50	-7.38	-11.54	3	Vertical	-	-	-	47.66	15.67	1.27	28.48
PK	322.41M	34.09	46.00	-11.91	-7.52	3	Vertical	-	-	-	41.61	19.30	1.63	28.45
PK	523.43M	37.07	46.00	-8.93	-2.82	3	Vertical	-	-	-	39.89	23.33	2.09	28.24

Mode 6



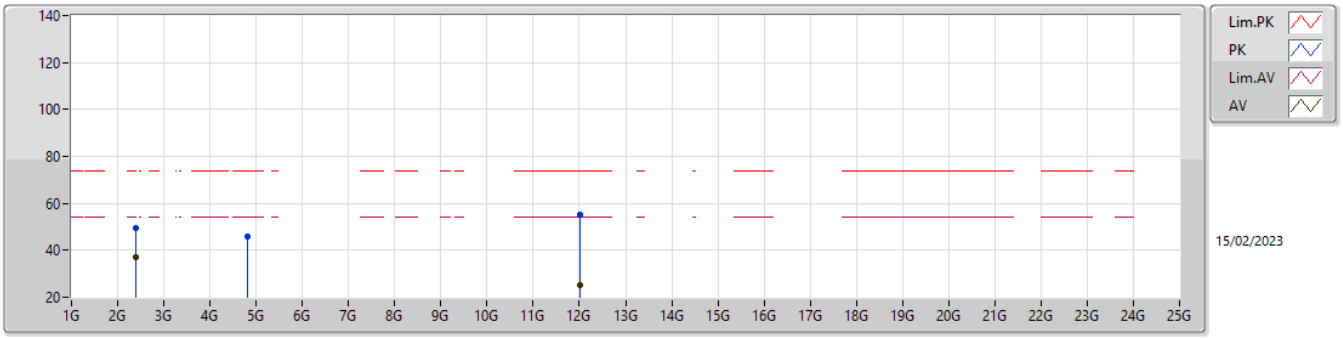
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	74.99M	31.54	40.00	-8.46	-12.31	3	Horizontal	-	-	-	43.85	15.10	0.84	28.25
QP	139.65M	37.95	43.50	-5.55	-9.45	3	Horizontal	112	1.88	-	47.40	17.93	1.04	28.42
QP	159.33M	35.96	43.50	-7.54	-9.04	3	Horizontal	265	1.84	-	45.00	18.30	1.11	28.45
QP	176.2M	35.61	43.50	-7.89	-9.99	3	Horizontal	137	1.33	-	45.60	17.28	1.19	28.46
PK	309.75M	34.31	46.00	-11.69	-7.87	3	Horizontal	-	-	-	42.18	18.99	1.61	28.47
PK	531.87M	34.08	46.00	-11.92	-2.73	3	Horizontal	-	-	-	36.81	23.40	2.11	28.24

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-BR(1Mbps)	Pass	PK	2.4835G	62.70	74.00	-11.30	3	Vertical	118	1.00	-
BT-EDR(3Mbps)	Pass	AV	2.4835G	41.44	54.00	-12.56	3	Vertical	121	1.00	-

2.4-2.4835GHz_BT-BR(1Mbps)

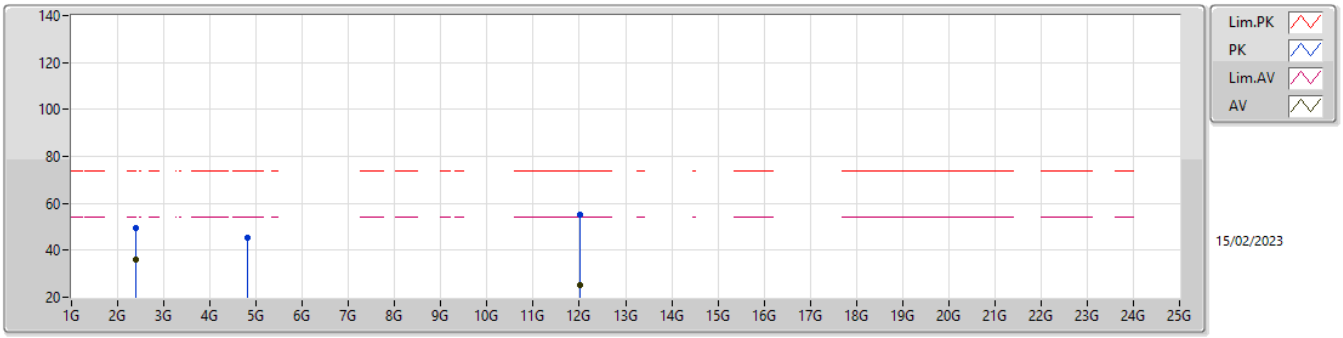
2402MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	49.59	74.00	-24.41	54.24	3	Vertical	77	1.00	-	27.72	4.67	37.04
AV	2.39G	36.83	54.00	-17.17	41.48	3	Vertical	77	1.00	-	27.72	4.67	37.04
PK	4.804G	46.00	74.00	-28.00	46.52	3	Vertical	74	1.00	-	31.40	6.71	38.63
AV	4.804G	15.90	54.00	-38.10	16.42	3	Vertical	74	1.00	-	31.40	6.71	38.63
PK	12.01G	55.34	74.00	-18.66	49.21	3	Vertical	173	1.00	-	39.45	9.71	43.03
AV	12.01G	25.24	54.00	-28.76	19.11	3	Vertical	173	1.00	-	39.45	9.71	43.03

2.4-2.4835GHz_BT-BR(1Mbps)

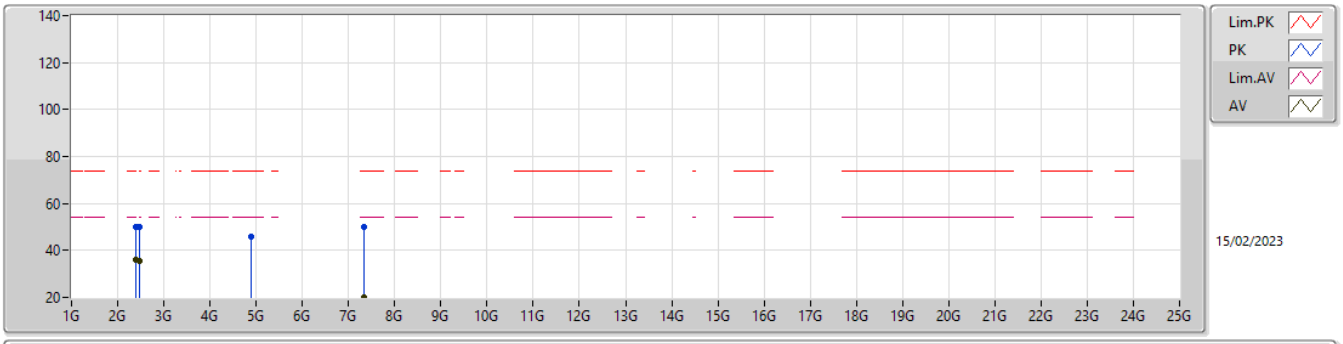
2402MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	49.54	74.00	-24.46	54.19	3	Horizontal	215	1.00	-	27.72	4.67	37.04
AV	2.39G	36.11	54.00	-17.89	40.76	3	Horizontal	215	1.00	-	27.72	4.67	37.04
PK	4.804G	45.14	74.00	-28.86	45.66	3	Horizontal	227	1.00	-	31.40	6.71	38.63
AV	4.804G	15.04	54.00	-38.96	15.56	3	Horizontal	227	1.00	-	31.40	6.71	38.63
PK	12.01G	55.02	74.00	-18.98	48.89	3	Horizontal	108	1.00	-	39.45	9.71	43.03
AV	12.01G	24.92	54.00	-29.08	18.79	3	Horizontal	108	1.00	-	39.45	9.71	43.03

2.4-2.4835GHz_BT-BR(1Mbps)

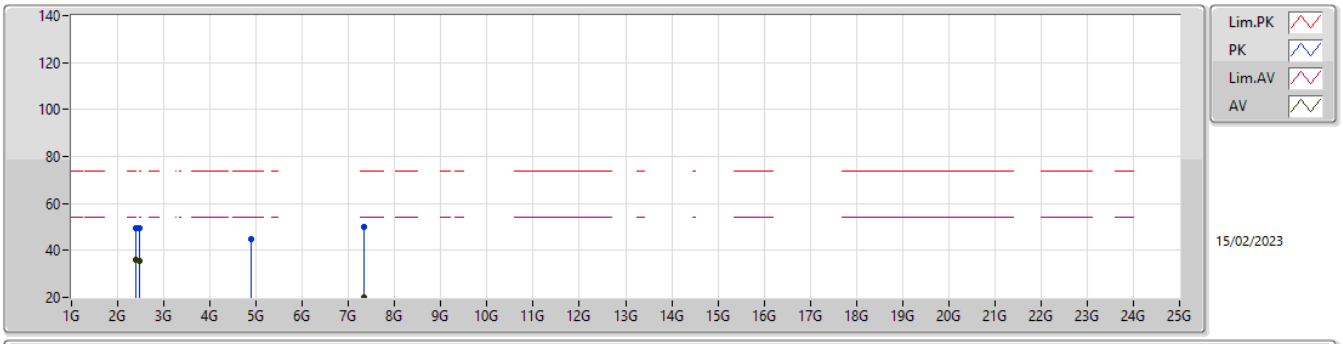
2441MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	49.78	74.00	-24.22	54.43	3	Vertical	121	1.00	-	27.72	4.67	37.04
AV	2.39G	35.93	54.00	-18.07	40.58	3	Vertical	121	1.00	-	27.72	4.67	37.04
PK	2.4835G	49.94	74.00	-24.06	54.83	3	Vertical	121	1.00	-	27.50	4.73	37.12
AV	2.4835G	35.74	54.00	-18.26	40.63	3	Vertical	121	1.00	-	27.50	4.73	37.12
PK	4.882G	45.69	74.00	-28.31	46.23	3	Vertical	75	1.00	-	31.40	6.74	38.68
AV	4.882G	15.59	54.00	-38.41	16.13	3	Vertical	75	1.00	-	31.40	6.74	38.68
PK	7.323G	50.10	74.00	-23.90	44.92	3	Vertical	344	1.00	-	36.45	8.23	39.50
AV	7.323G	20.00	54.00	-34.00	14.82	3	Vertical	344	1.00	-	36.45	8.23	39.50

2.4-2.4835GHz_BT-BR(1Mbps)

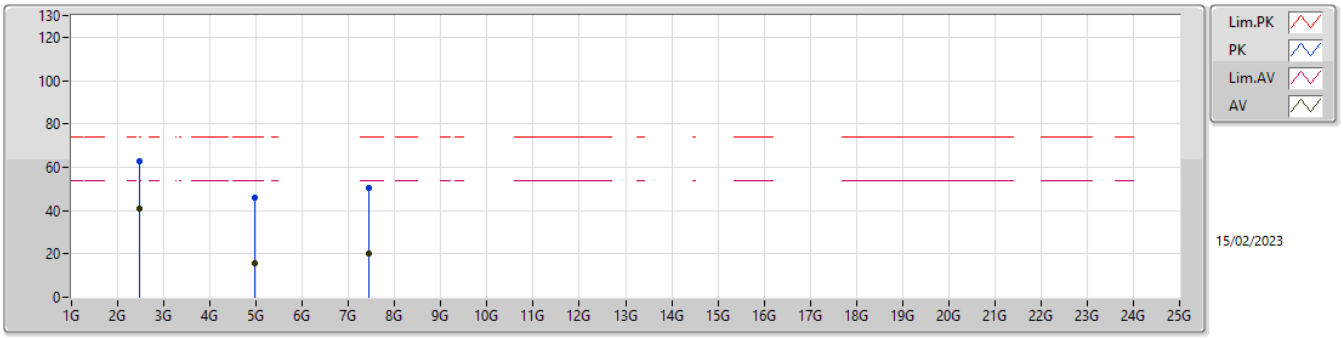
2441MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	49.50	74.00	-24.50	54.15	3	Horizontal	107	1.24	-	27.72	4.67	37.04
AV	2.39G	35.93	54.00	-18.07	40.58	3	Horizontal	107	1.24	-	27.72	4.67	37.04
PK	2.4835G	49.46	74.00	-24.54	54.35	3	Horizontal	107	1.24	-	27.50	4.73	37.12
AV	2.4835G	35.67	54.00	-18.33	40.56	3	Horizontal	107	1.24	-	27.50	4.73	37.12
PK	4.882G	44.92	74.00	-29.08	45.46	3	Horizontal	318	1.00	-	31.40	6.74	38.68
AV	4.882G	14.82	54.00	-39.18	15.36	3	Horizontal	318	1.00	-	31.40	6.74	38.68
PK	7.323G	49.97	74.00	-24.03	44.79	3	Horizontal	103	1.00	-	36.45	8.23	39.50
AV	7.323G	19.87	54.00	-34.13	14.69	3	Horizontal	103	1.00	-	36.45	8.23	39.50

2.4-2.4835GHz_BT-BR(1Mbps)

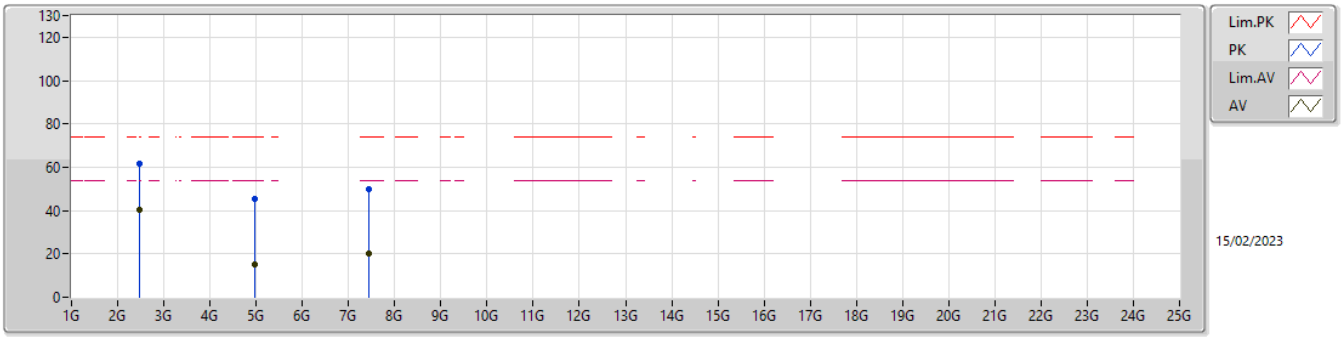
2480MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4835G	62.70	74.00	-11.30	67.59	3	Vertical	118	1.00	-	27.50	4.73	37.12
AV	2.4835G	41.00	54.00	-13.00	45.89	3	Vertical	118	1.00	-	27.50	4.73	37.12
PK	4.96G	45.93	74.00	-28.07	46.37	3	Vertical	77	1.00	-	31.52	6.77	38.73
AV	4.96G	15.83	54.00	-38.17	16.27	3	Vertical	77	1.00	-	31.52	6.77	38.73
PK	7.44G	50.38	74.00	-23.62	45.27	3	Vertical	210	1.00	-	36.48	8.28	39.65
AV	7.44G	20.28	54.00	-33.72	15.17	3	Vertical	210	1.00	-	36.48	8.28	39.65

2.4-2.4835GHz_BT-BR(1Mbps)

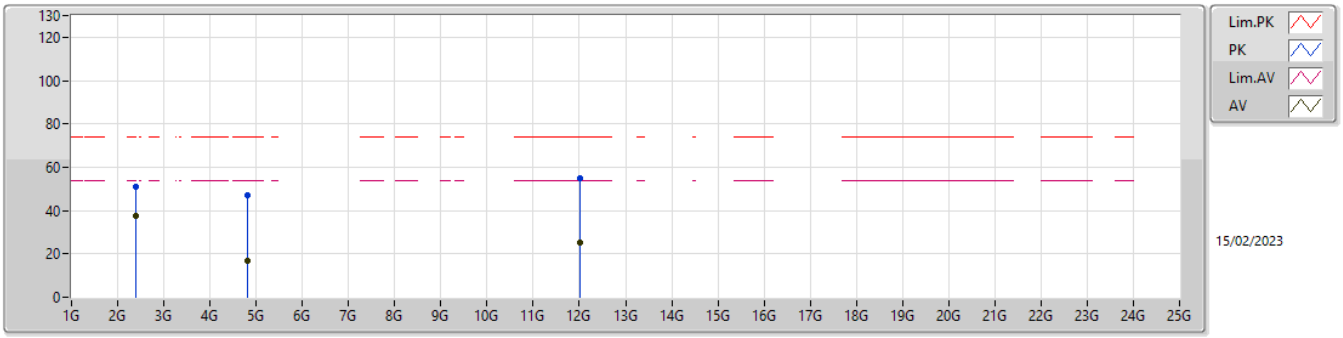
2480MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4835G	61.58	74.00	-12.42	66.47	3	Horizontal	105	1.20	-	27.50	4.73	37.12
AV	2.4835G	40.35	54.00	-13.65	45.24	3	Horizontal	105	1.20	-	27.50	4.73	37.12
PK	4.96G	45.23	74.00	-28.77	45.67	3	Horizontal	227	1.00	-	31.52	6.77	38.73
AV	4.96G	15.13	54.00	-38.87	15.57	3	Horizontal	227	1.00	-	31.52	6.77	38.73
PK	7.44G	50.04	74.00	-23.96	44.93	3	Horizontal	105	1.00	-	36.48	8.28	39.65
AV	7.44G	19.94	54.00	-34.06	14.83	3	Horizontal	105	1.00	-	36.48	8.28	39.65

2.4-2.4835GHz_BT-EDR(3Mbps)

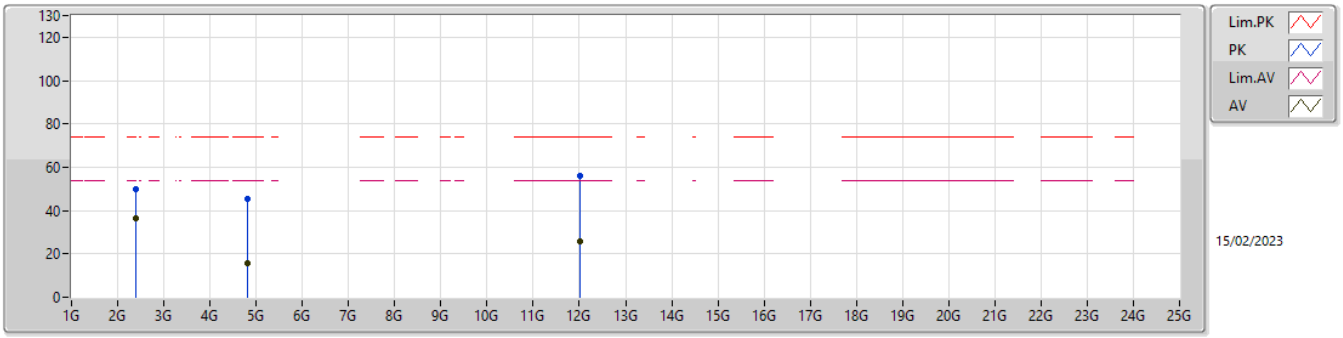
2402MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	50.95	74.00	-23.05	55.60	3	Vertical	77	1.00	-	27.72	4.67	37.04
AV	2.39G	37.53	54.00	-16.47	42.18	3	Vertical	77	1.00	-	27.72	4.67	37.04
PK	4.804G	47.14	74.00	-26.86	47.66	3	Vertical	75	1.00	-	31.40	6.71	38.63
AV	4.804G	17.04	54.00	-36.96	17.56	3	Vertical	75	1.00	-	31.40	6.71	38.63
PK	12.01G	55.09	74.00	-18.91	48.96	3	Vertical	223	1.00	-	39.45	9.71	43.03
AV	12.01G	24.99	54.00	-29.01	18.86	3	Vertical	223	1.00	-	39.45	9.71	43.03

2.4-2.4835GHz_BT-EDR(3Mbps)

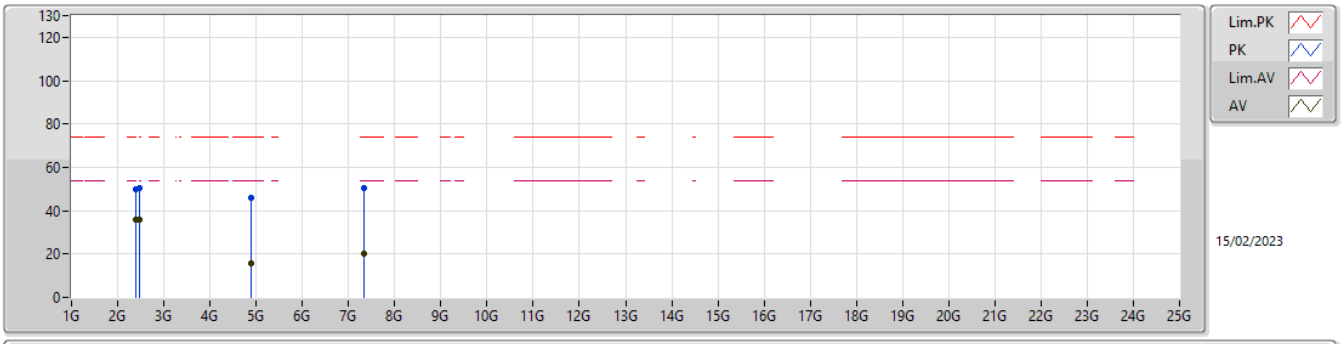
2402MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	49.95	74.00	-24.05	54.60	3	Horizontal	207	1.00	-	27.72	4.67	37.04
AV	2.39G	36.51	54.00	-17.49	41.16	3	Horizontal	207	1.00	-	27.72	4.67	37.04
PK	4.804G	45.61	74.00	-28.39	46.13	3	Horizontal	279	1.00	-	31.40	6.71	38.63
AV	4.804G	15.51	54.00	-38.49	16.03	3	Horizontal	279	1.00	-	31.40	6.71	38.63
PK	12.01G	55.76	74.00	-18.24	49.63	3	Horizontal	183	1.00	-	39.45	9.71	43.03
AV	12.01G	25.66	54.00	-28.34	19.53	3	Horizontal	183	1.00	-	39.45	9.71	43.03

2.4-2.4835GHz_BT-EDR(3Mbps)

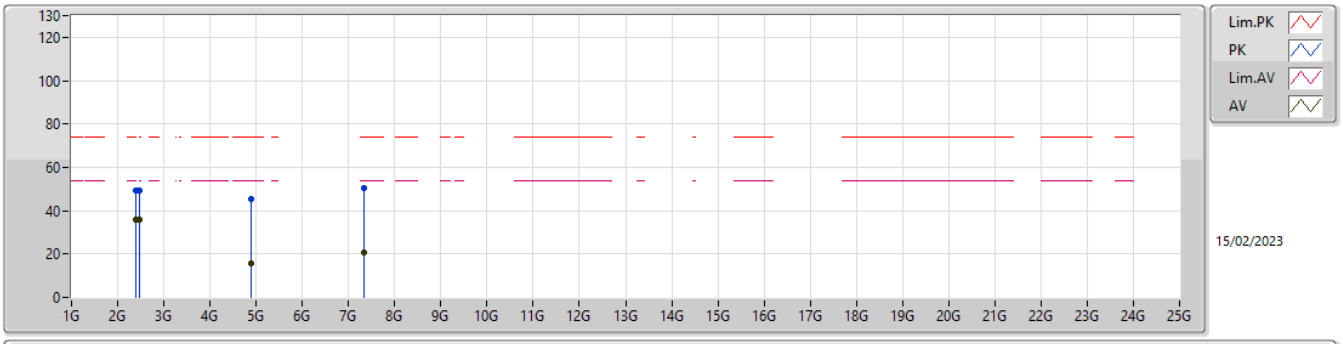
2441MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	49.64	74.00	-24.36	54.29	3	Vertical	122	1.00	-	27.72	4.67	37.04
AV	2.39G	35.76	54.00	-18.24	40.41	3	Vertical	122	1.00	-	27.72	4.67	37.04
PK	2.4835G	50.18	74.00	-23.82	55.07	3	Vertical	122	1.00	-	27.50	4.73	37.12
AV	2.4835G	35.65	54.00	-18.35	40.54	3	Vertical	122	1.00	-	27.50	4.73	37.12
PK	4.882G	45.68	74.00	-28.32	46.22	3	Vertical	77	1.00	-	31.40	6.74	38.68
AV	4.882G	15.58	54.00	-38.42	16.12	3	Vertical	77	1.00	-	31.40	6.74	38.68
PK	7.323G	50.41	74.00	-23.59	45.23	3	Vertical	277	1.00	-	36.45	8.23	39.50
AV	7.323G	20.31	54.00	-33.69	15.13	3	Vertical	277	1.00	-	36.45	8.23	39.50

2.4-2.4835GHz_BT-EDR(3Mbps)

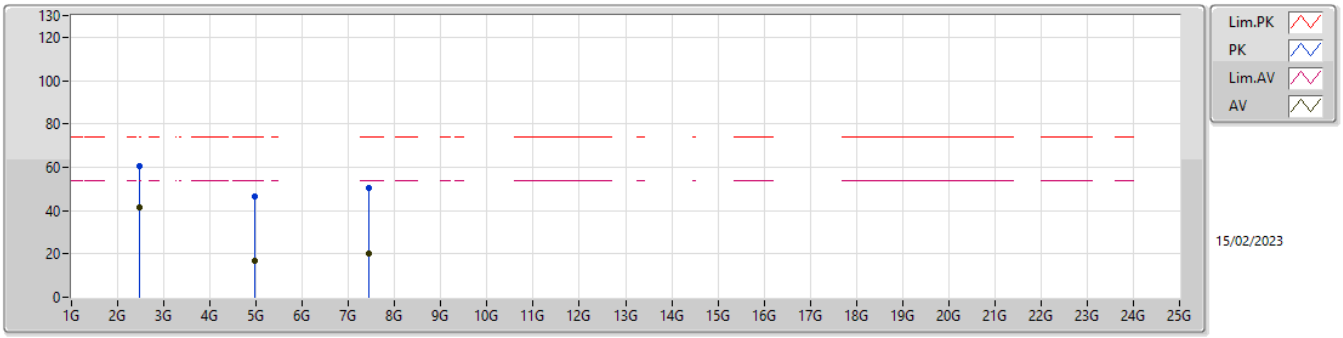
2441MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	49.30	74.00	-24.70	53.95	3	Horizontal	109	1.21	-	27.72	4.67	37.04
AV	2.39G	35.76	54.00	-18.24	40.41	3	Horizontal	109	1.21	-	27.72	4.67	37.04
PK	2.4835G	49.27	74.00	-24.73	54.16	3	Horizontal	109	1.21	-	27.50	4.73	37.12
AV	2.4835G	35.69	54.00	-18.31	40.58	3	Horizontal	109	1.21	-	27.50	4.73	37.12
PK	4.882G	45.66	74.00	-28.34	46.20	3	Horizontal	318	1.00	-	31.40	6.74	38.68
AV	4.882G	15.56	54.00	-38.44	16.10	3	Horizontal	318	1.00	-	31.40	6.74	38.68
PK	7.323G	50.66	74.00	-23.34	45.48	3	Horizontal	101	1.00	-	36.45	8.23	39.50
AV	7.323G	20.56	54.00	-33.44	15.38	3	Horizontal	101	1.00	-	36.45	8.23	39.50

2.4-2.4835GHz_BT-EDR(3Mbps)

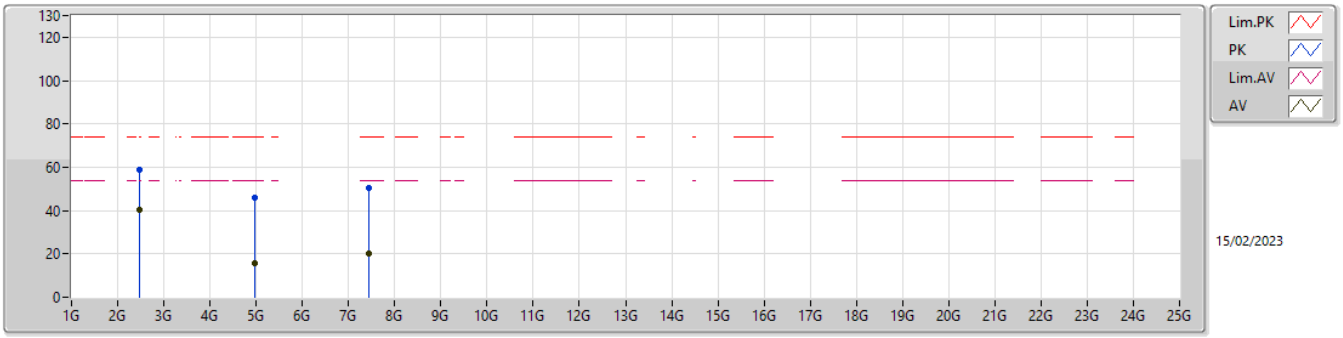
2480MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4835G	60.30	74.00	-13.70	65.19	3	Vertical	121	1.00	-	27.50	4.73	37.12
AV	2.4835G	41.44	54.00	-12.56	46.33	3	Vertical	121	1.00	-	27.50	4.73	37.12
PK	4.96G	46.78	74.00	-27.22	47.22	3	Vertical	76	1.00	-	31.52	6.77	38.73
AV	4.96G	16.68	54.00	-37.32	17.12	3	Vertical	76	1.00	-	31.52	6.77	38.73
PK	7.44G	50.23	74.00	-23.77	45.12	3	Vertical	227	1.00	-	36.48	8.28	39.65
AV	7.44G	20.13	54.00	-33.87	15.02	3	Vertical	227	1.00	-	36.48	8.28	39.65

2.4-2.4835GHz_BT-EDR(3Mbps)

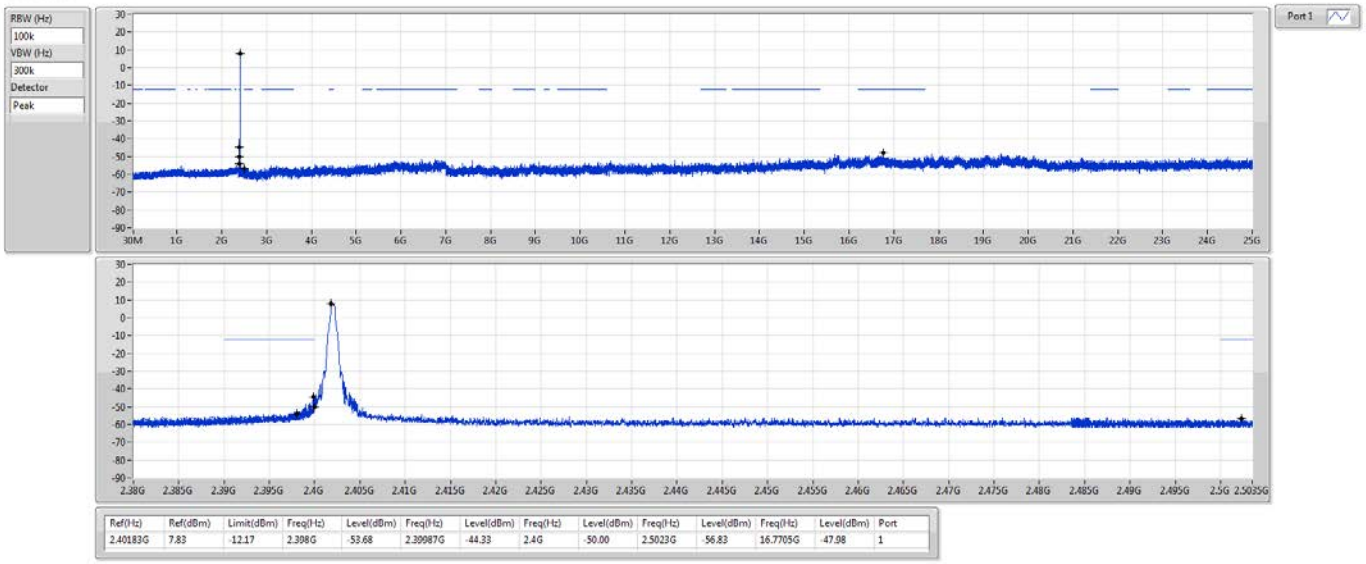
2480MHz_TX



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4835G	58.78	74.00	-15.22	63.67	3	Horizontal	108	1.20	-	27.50	4.73	37.12
AV	2.4835G	40.59	54.00	-13.41	45.48	3	Horizontal	108	1.20	-	27.50	4.73	37.12
PK	4.96G	45.88	74.00	-28.12	46.32	3	Horizontal	221	1.00	-	31.52	6.77	38.73
AV	4.96G	15.78	54.00	-38.22	16.22	3	Horizontal	221	1.00	-	31.52	6.77	38.73
PK	7.44G	50.32	74.00	-23.68	45.21	3	Horizontal	108	1.00	-	36.48	8.28	39.65
AV	7.44G	20.22	54.00	-33.78	15.11	3	Horizontal	108	1.00	-	36.48	8.28	39.65

2.4-2.4835GHz_BT-BR(1Mbps) **CSENdB-FS**

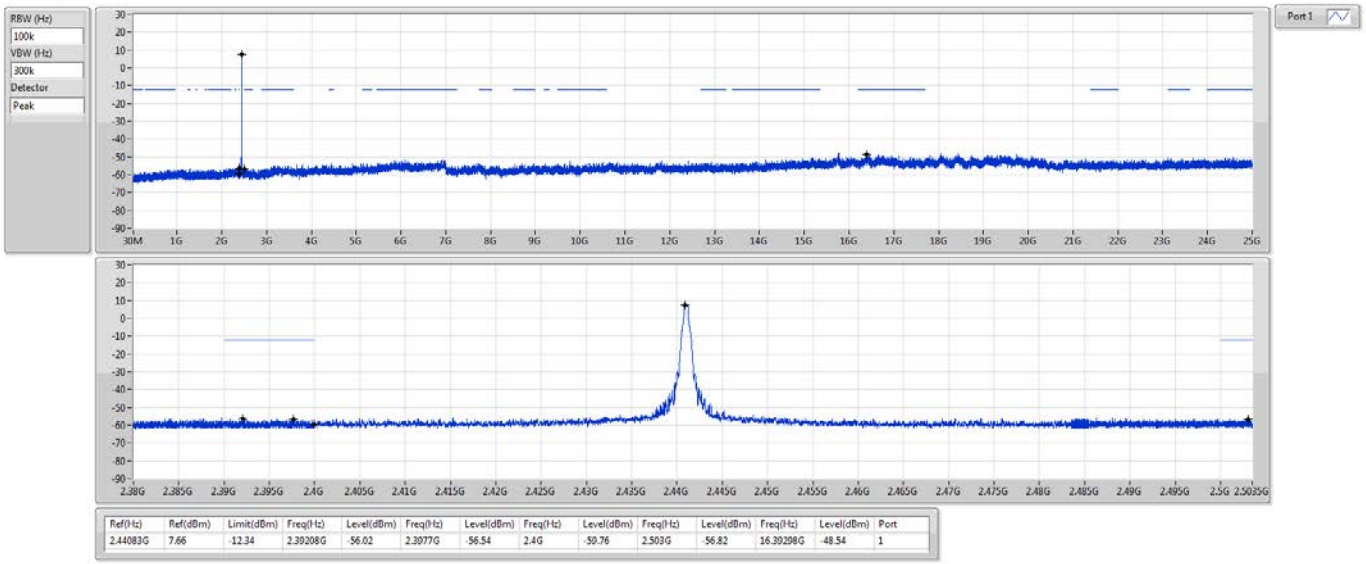
2402MHz



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
2.40183G	7.83	-12.17	2.398G	-53.68	2.39987G	-44.33	2.4G	-50.00	2.5023G	-56.83	16.7705G	-47.98	1

2.4-2.4835GHz_BT-BR(1Mbps) **CSENdB-FS**

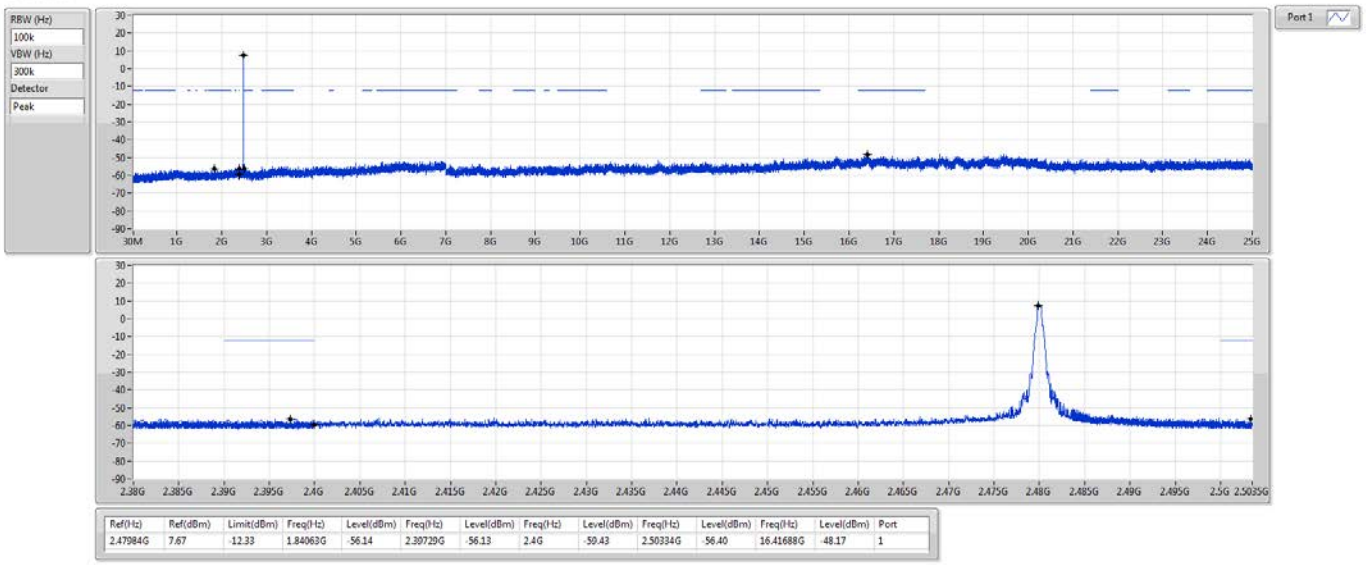
2441MHz



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
2.44083G	7.66	-12.34	2.39208G	-56.02	2.3977G	-56.54	2.4G	-50.76	2.503G	-56.82	16.39298G	-48.54	1

2.4-2.4835GHz_BT-BR(1Mbps) **CSENdB-FS**

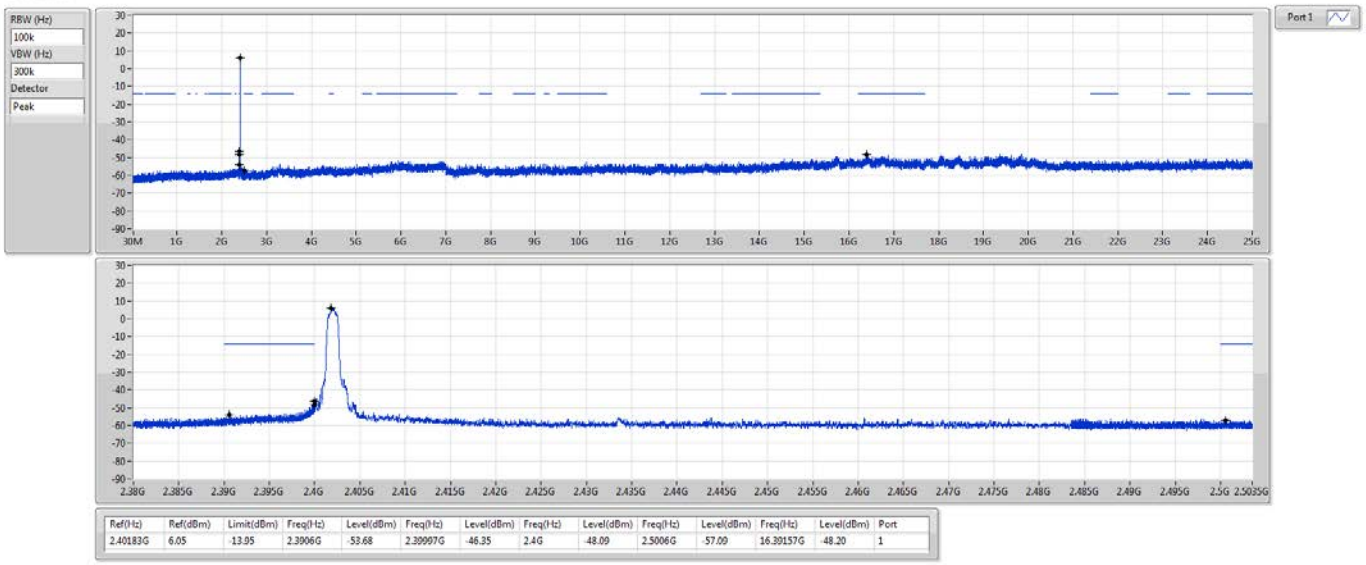
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47984G	7.67	-12.33	1.84063G	-56.14	2.39729G	-56.13	2.4G	-59.43	2.50334G	-56.40	16.41688G	-48.17	1

2.4-2.4835GHz_BT-EDR(2Mbps) **CSENdB-FS**

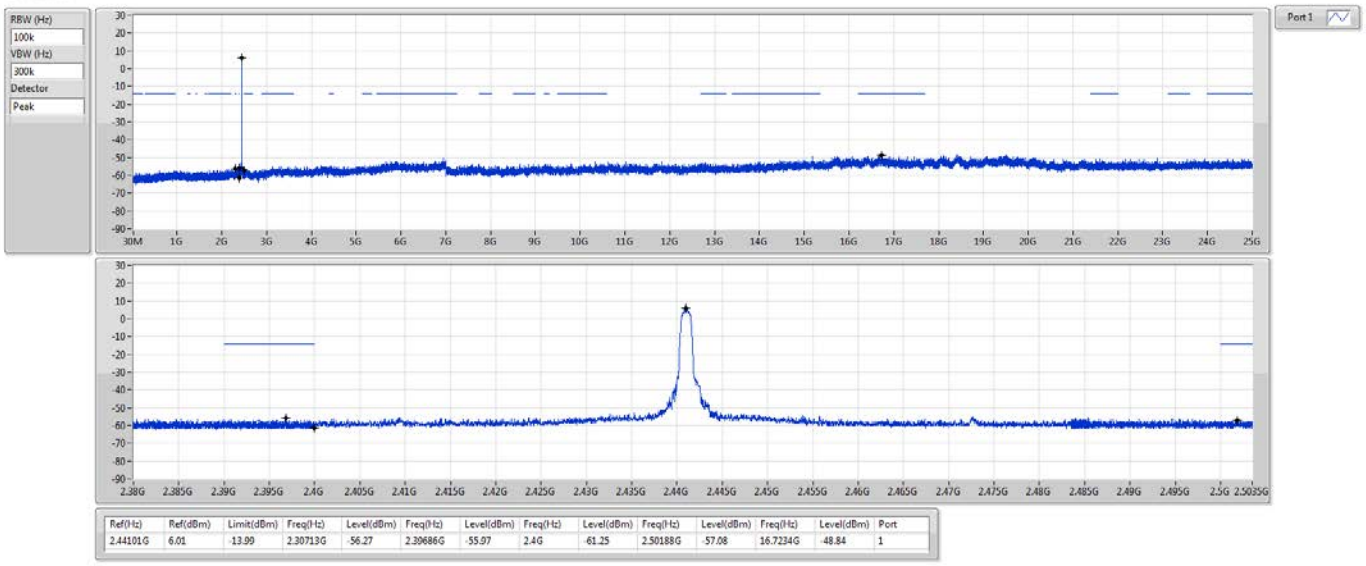
2402MHz



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
2.40183G	6.05	-13.95	2.3906G	-53.68	2.39997G	-46.35	2.4G	-48.09	2.5006G	-57.09	16.39157G	-48.20	1

2.4-2.4835GHz_BT-EDR(2Mbps) **CSENdB-FS**

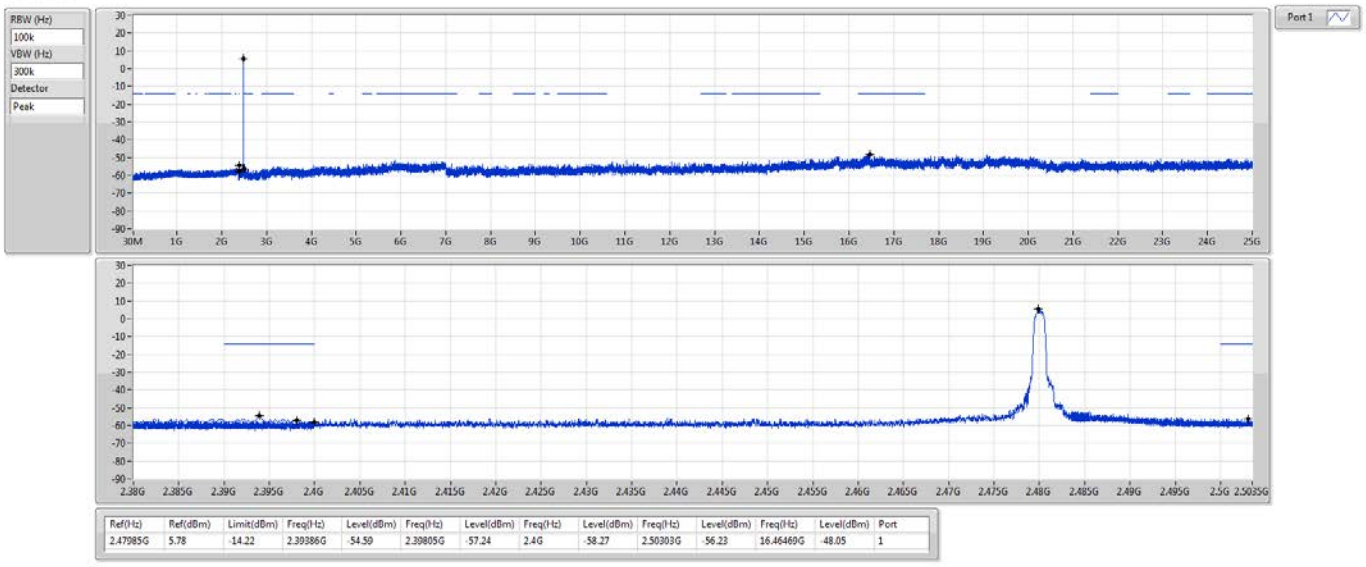
2441MHz



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
2.44101G	6.01	-13.99	2.30713G	-56.27	2.30686G	-55.97	2.4G	-61.25	2.50188G	-57.08	16.7234G	-48.84	1

2.4-2.4835GHz_BT-EDR(2Mbps) **CSENdB-FS**

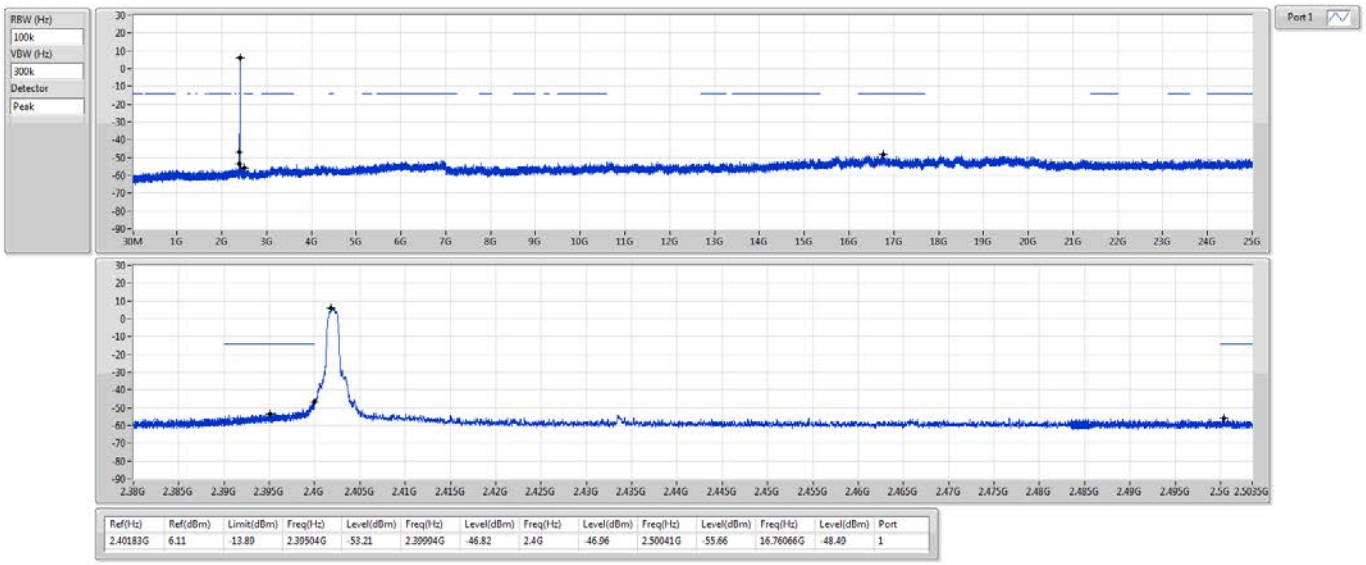
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47985G	5.78	-14.22	2.39386G	-54.50	2.39805G	-57.24	2.4G	-58.27	2.50303G	-56.23	16.46469G	-48.05	1

2.4-2.4835GHz_BT-EDR(3Mbps) **CSENdB-FS**

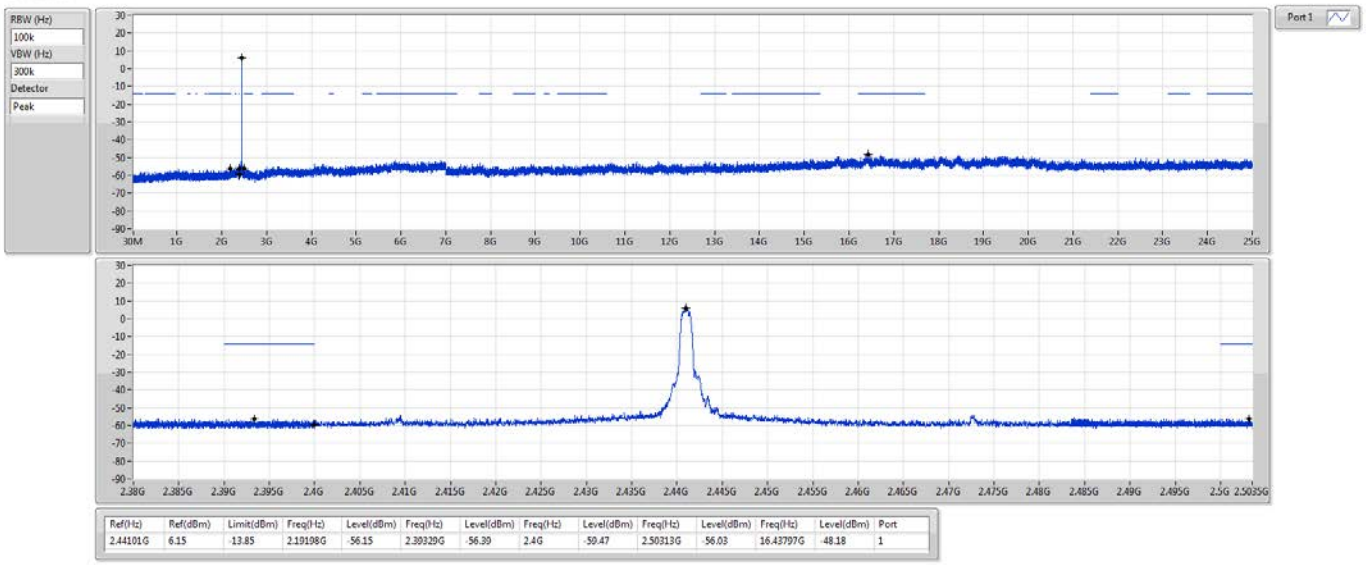
2402MHz



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
2.40183G	6.11	-13.89	2.39504G	-53.21	2.39994G	-46.82	2.4G	-46.96	2.50041G	-55.66	16.76066G	-48.49	1

2.4-2.4835GHz_BT-EDR(3Mbps) **CSENdB-FS**

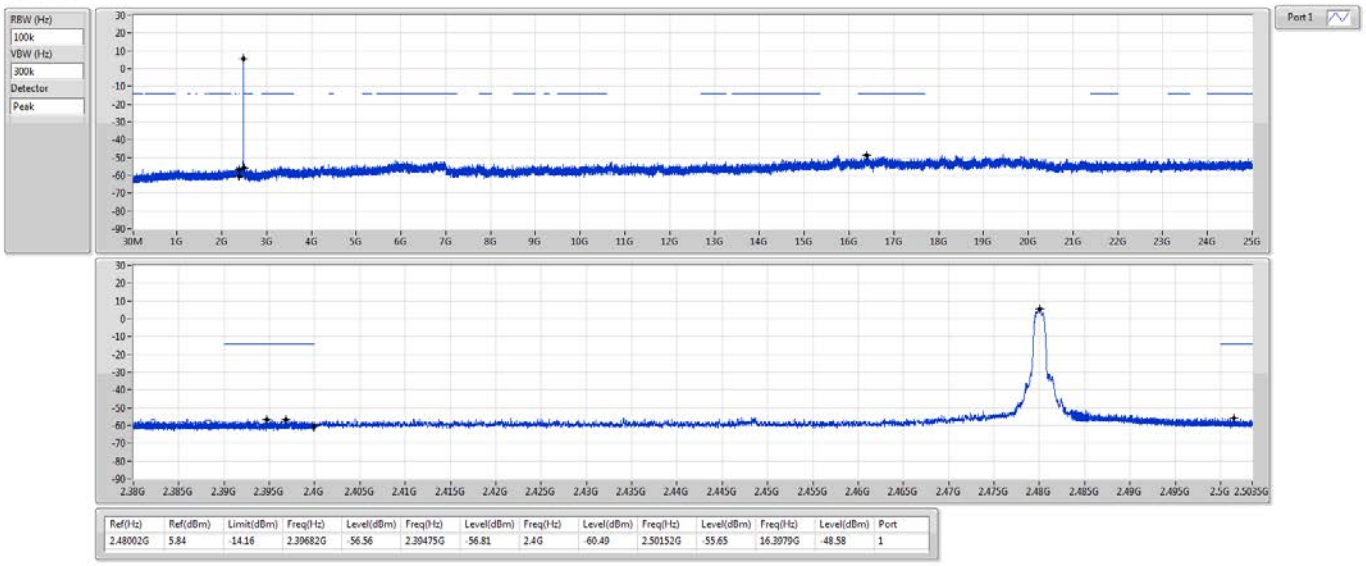
2441MHz



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
2.44101G	6.15	-13.85	2.19198G	-56.15	2.39329G	-56.39	2.4G	-50.47	2.50313G	-56.03	16.43797G	-48.18	1

2.4-2.4835GHz_BT-EDR(3Mbps) **CSENdB-FS**

2480MHz

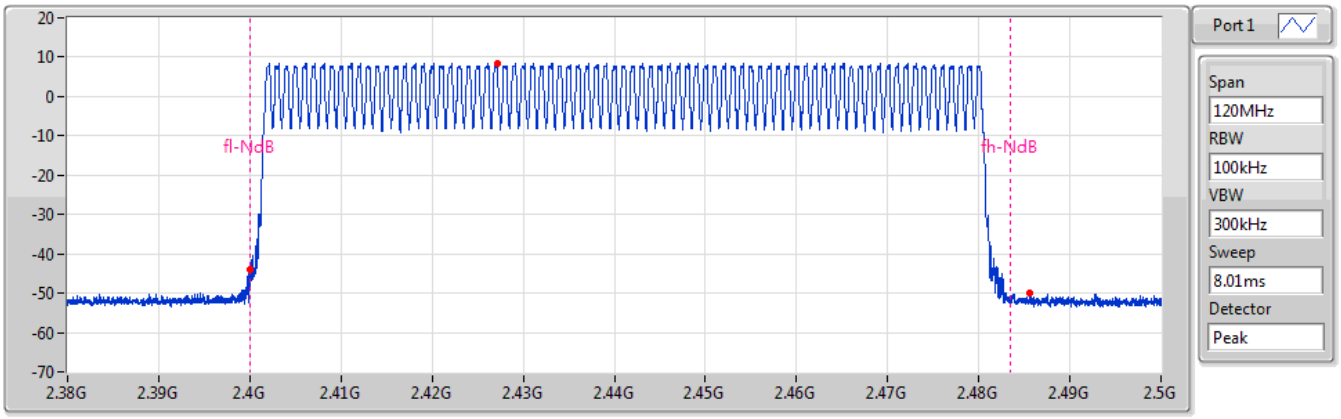


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48002G	5.84	-14.16	2.39682G	-56.56	2.39475G	-56.81	2.4G	-60.49	2.50152G	-55.65	16.3979G	-48.58	1

2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz

Hopping Ch Bandedge (Non-restricted Band)

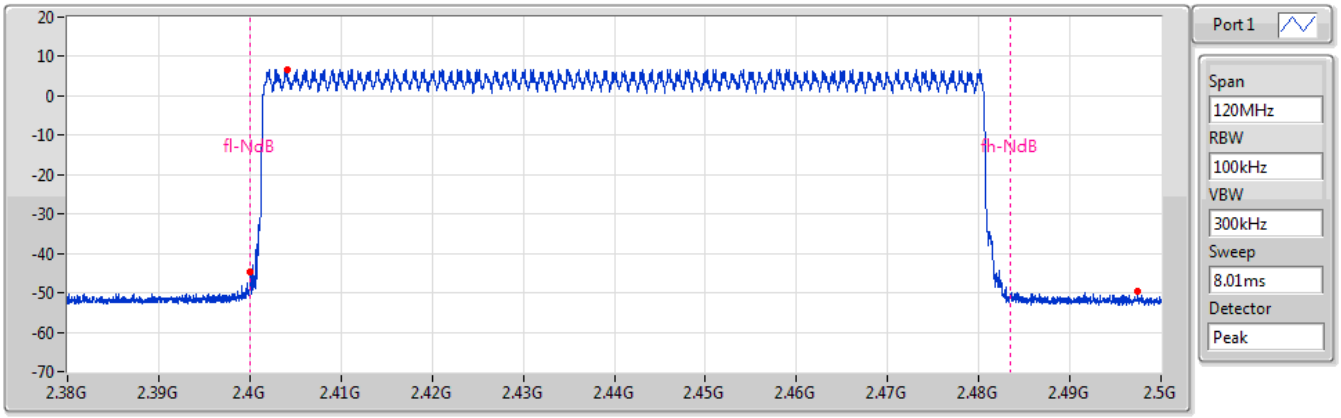


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-11.55	2.427175G	8.45	2.39995G	-44.04	2.485555G	-49.83

2.4-2.4835GHz_BT-EDR(2Mbps)

2402MHz

Hopping Ch Bandedge (Non-restricted Band)

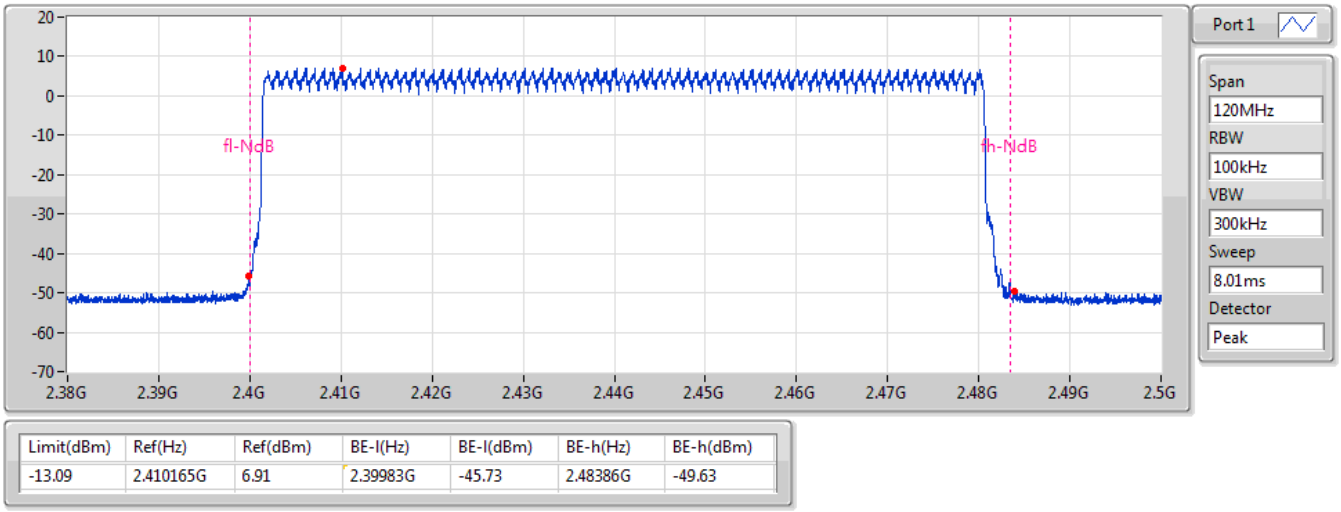


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-13.26	2.404165G	6.74	2.399995G	-44.67	2.49739G	-49.6

2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz

Hopping Ch Bandedge (Non-restricted Band)



Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-13.09	2.410165G	6.91	2.39983G	-45.73	2.48386G	-49.63

Summary

Mode	Total Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	8.42	0.00695
BT-EDR(2Mbps)	9.32	0.00855
BT-EDR(3Mbps)	9.85	0.00966

Result

Mode	Result	Antenna Gain (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	3.00	8.42	21.00
2441MHz	Pass	3.00	8.21	21.00
2480MHz	Pass	3.00	8.18	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	3.00	9.32	21.00
2441MHz	Pass	3.00	9.14	21.00
2480MHz	Pass	3.00	9.01	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	3.00	9.85	21.00
2441MHz	Pass	3.00	9.64	21.00
2480MHz	Pass	3.00	9.54	21.00

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

Summary

Mode	Total Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	8.33	0.00681
BT-EDR(2Mbps)	6.73	0.00471
BT-EDR(3Mbps)	6.74	0.00472

Result

Mode	Result	Antenna Gain (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	3.00	8.33	-
2441MHz	Pass	3.00	8.11	-
2480MHz	Pass	3.00	8.08	-
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	3.00	6.73	-
2441MHz	Pass	3.00	6.51	-
2480MHz	Pass	3.00	6.34	-
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	3.00	6.74	-
2441MHz	Pass	3.00	6.52	-
2480MHz	Pass	3.00	6.36	-

Note: Average power is for reference only

Summary

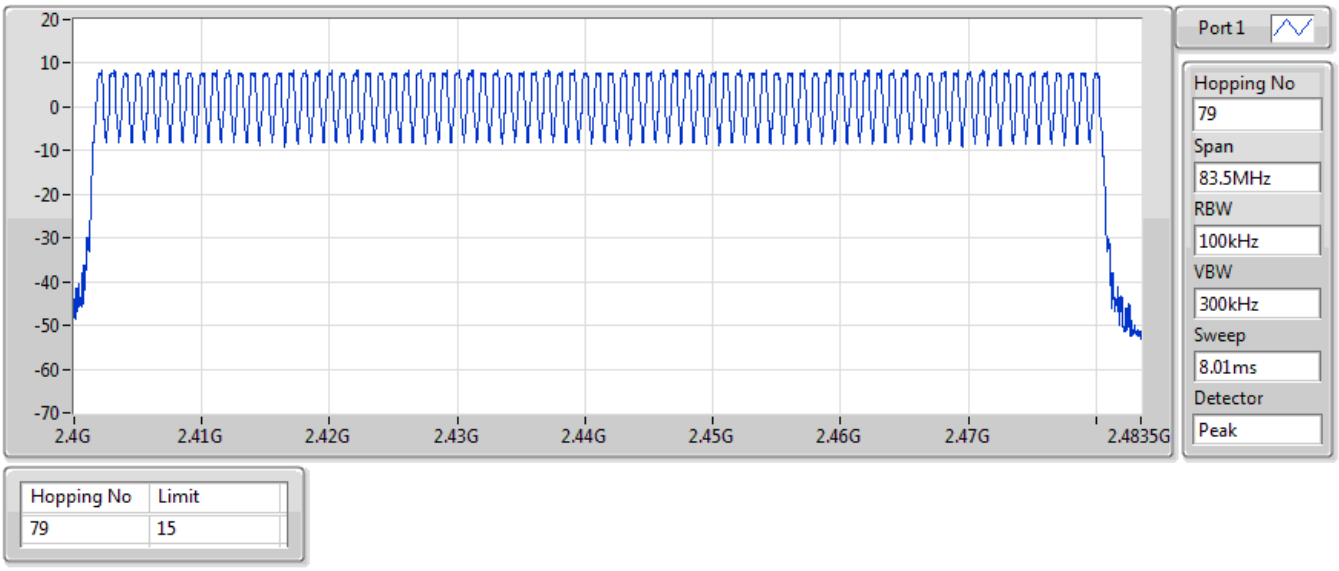
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

Result

Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2402MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2402MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2402MHz	Pass	79	15

2.4-2.4835GHz_BT-BR(1Mbps) Hopping-FS

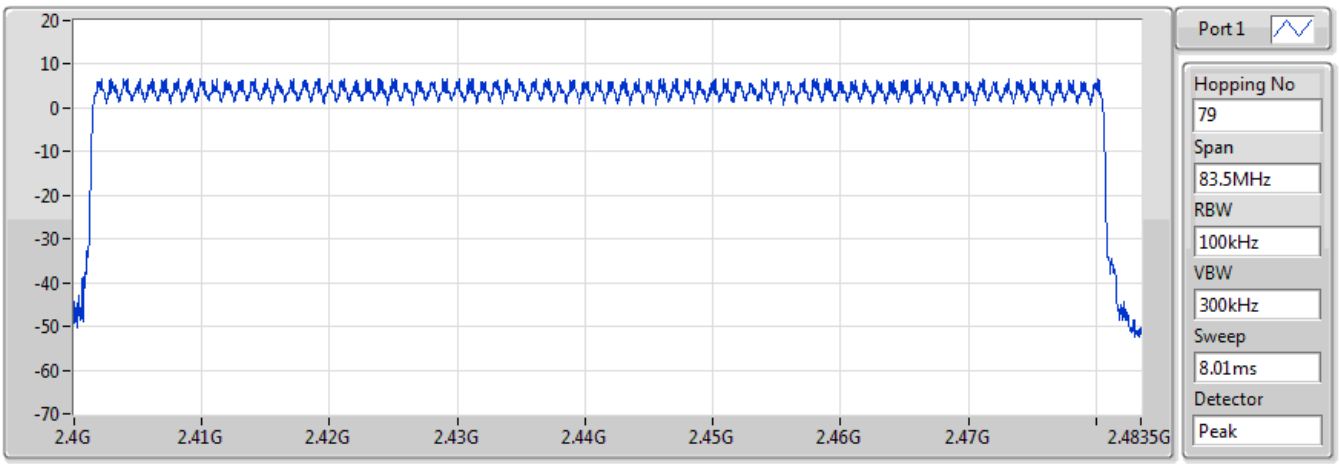
2402MHz



Hopping No	Limit
79	15

2.4-2.4835GHz_BT-EDR(2Mbps) Hopping-FS

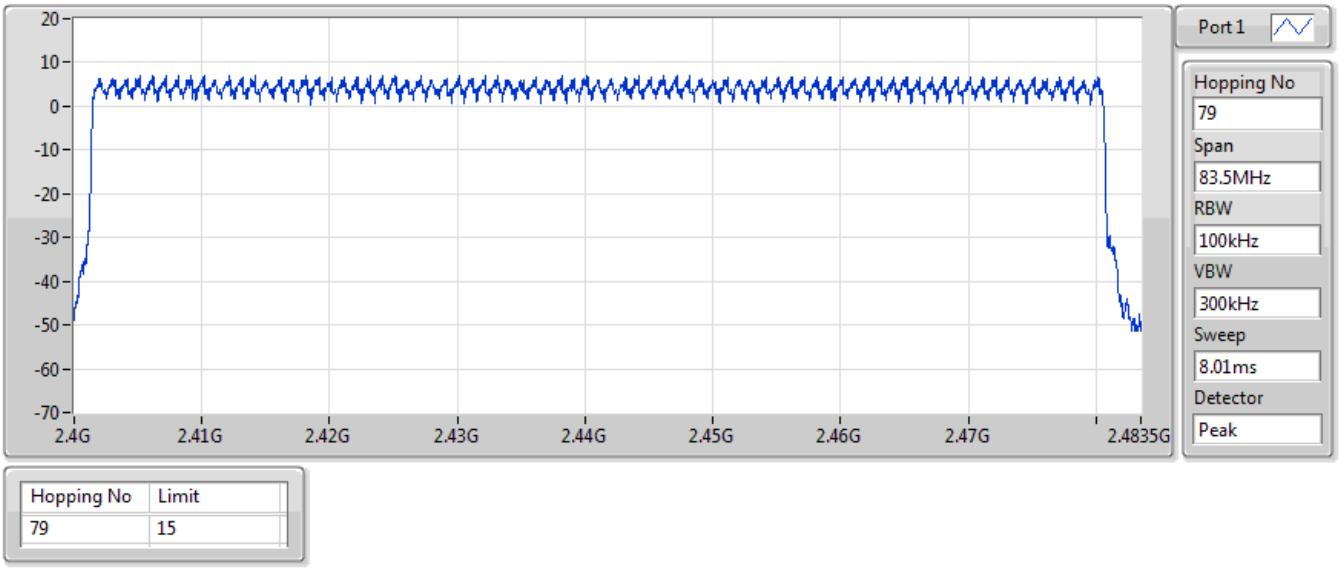
2402MHz



Hopping No	Limit
79	15

2.4-2.4835GHz_BT-EDR(3Mbps) **Hopping-FS**

2402MHz



Hopping No	Limit
79	15

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)	918.5k	864.568k	865KF1D	918.5k	862.069k
BT-EDR(2Mbps)	1.331M	1.189M	1M19G1D	1.32M	1.187M
BT-EDR(3Mbps)	1.284M	1.189M	1M19G1D	1.282M	1.188M

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

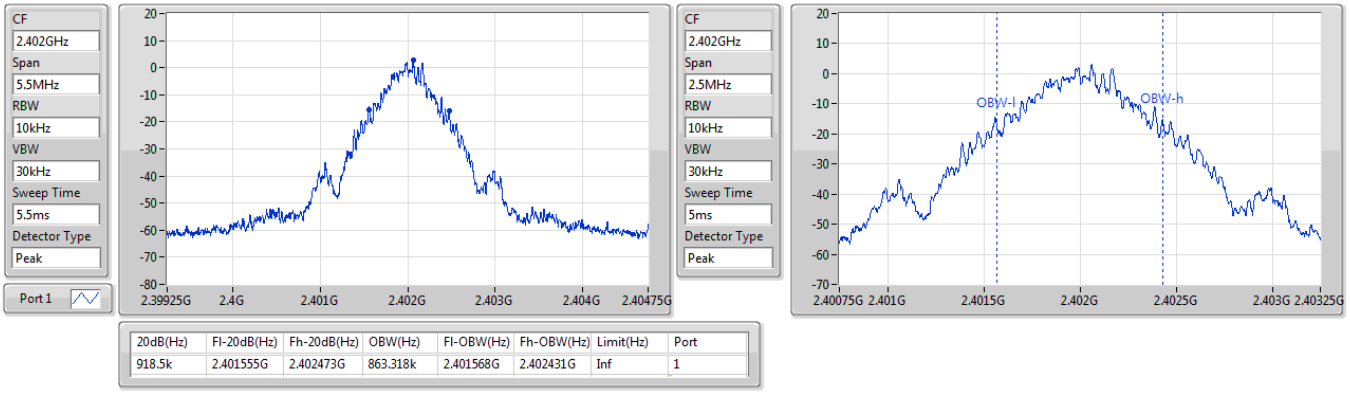
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	918.5k	863.318k
2441MHz	Pass	Inf	918.5k	864.568k
2480MHz	Pass	Inf	918.5k	862.069k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.32M	1.187M
2441MHz	Pass	Inf	1.331M	1.188M
2480MHz	Pass	Inf	1.326M	1.189M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.284M	1.189M
2441MHz	Pass	Inf	1.282M	1.188M
2480MHz	Pass	Inf	1.284M	1.188M

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**

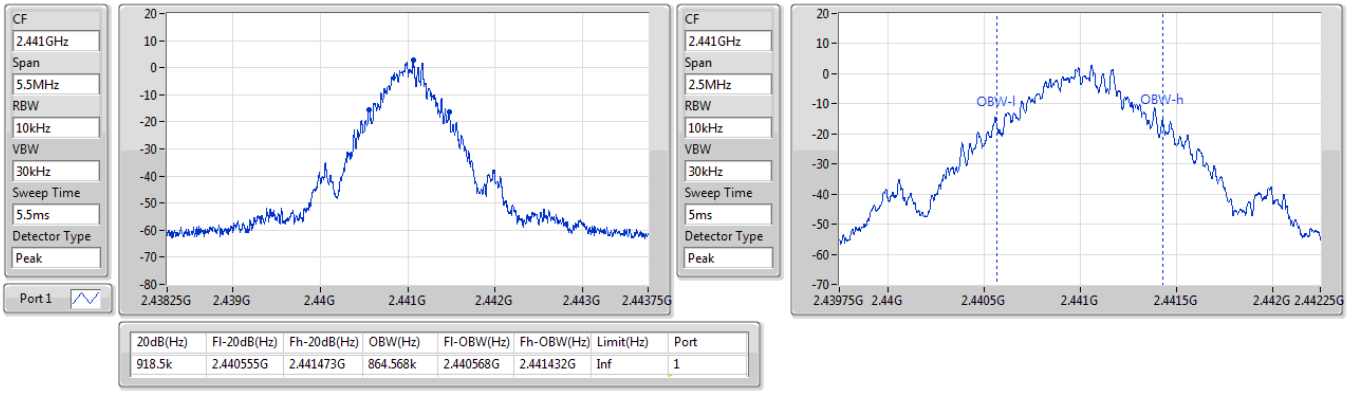
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
918.5k	2.401555G	2.402473G	863.318k	2.401568G	2.402431G	Inf	1

2.4-2.4835GHz_BT-BR(1Mbps) **EBW-FS**

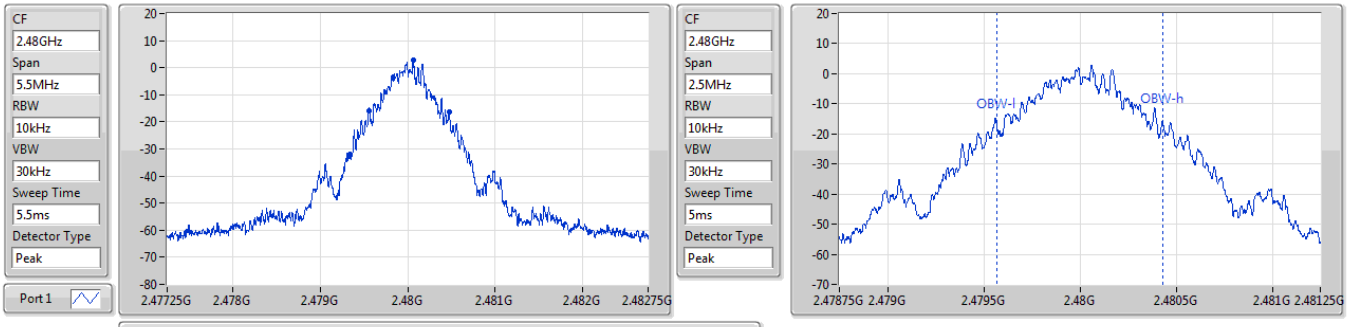
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
918.5k	2.440555G	2.441473G	864.568k	2.440568G	2.441432G	Inf	1

2.4-2.4835GHz_BT-BR(1Mbps) **EBW-FS**

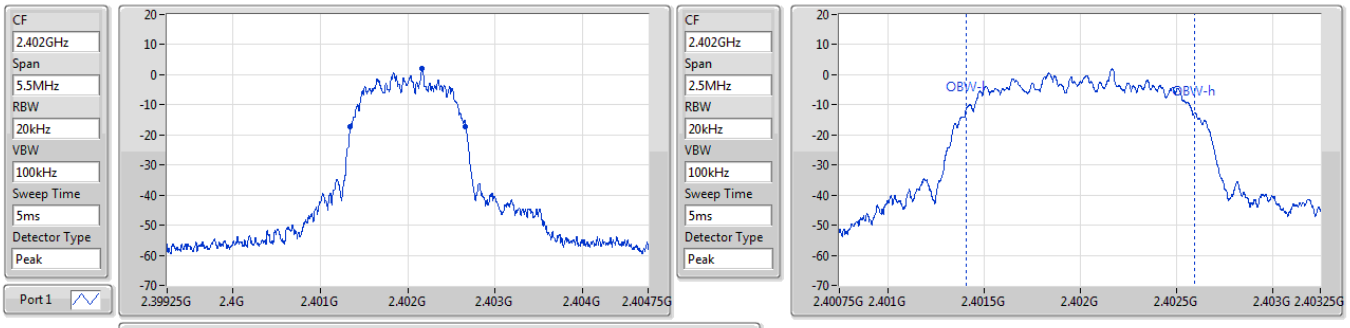
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
918.5k	2.479555G	2.480473G	862.069k	2.479569G	2.480431G	Inf	1

2.4-2.4835GHz_BT-EDR(2Mbps) **EBW-FS**

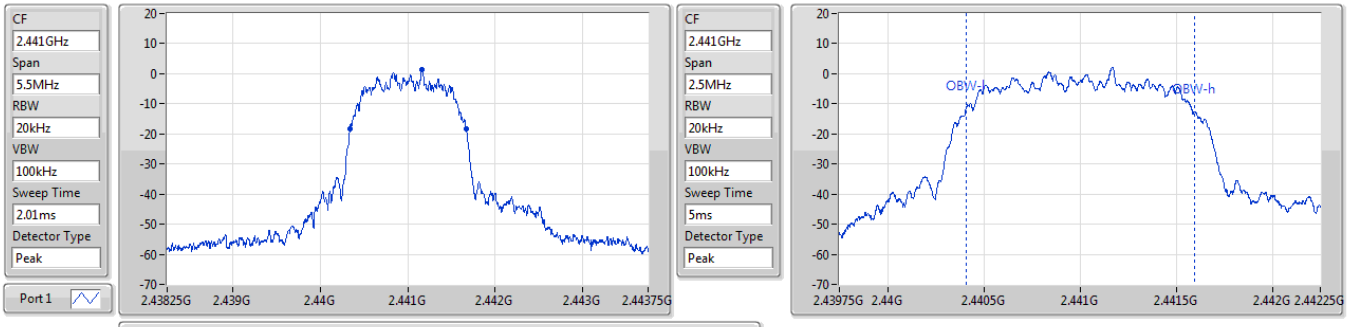
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.32M	2.401343G	2.402663G	1.187M	2.40141G	2.402597G	Inf	1

2.4-2.4835GHz_BT-EDR(2Mbps) **EBW-FS**

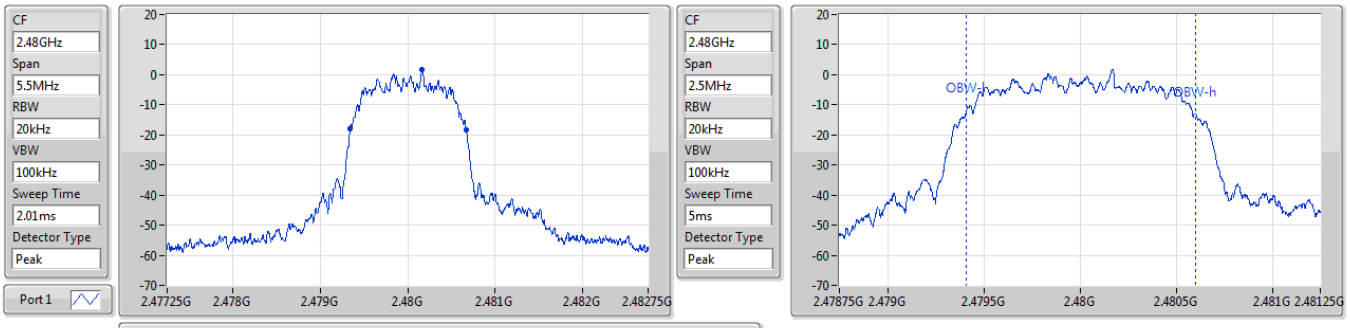
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.331M	2.44034G	2.441671G	1.188M	2.44041G	2.441598G	Inf	1

2.4-2.4835GHz_BT-EDR(2Mbps) **EBW-FS**

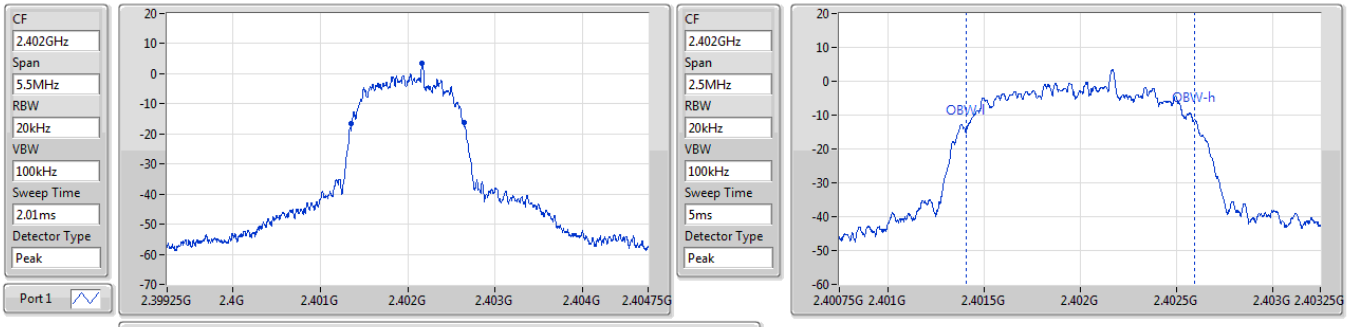
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.326M	2.479343G	2.480668G	1.189M	2.47941G	2.4806G	Inf	1

2.4-2.4835GHz_BT-EDR(3Mbps) **EBW-FS**

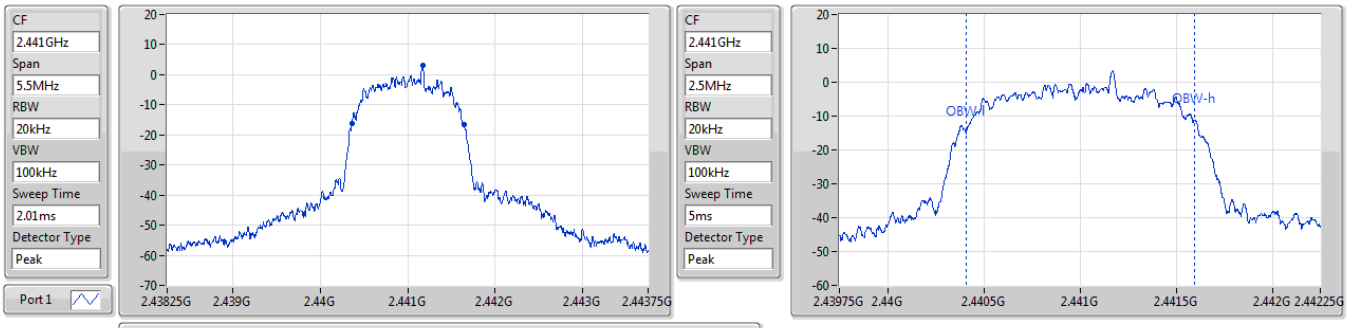
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.284M	2.401359G	2.402644G	1.189M	2.401408G	2.402597G	Inf	1

2.4-2.4835GHz_BT-EDR(3Mbps) **EBW-FS**

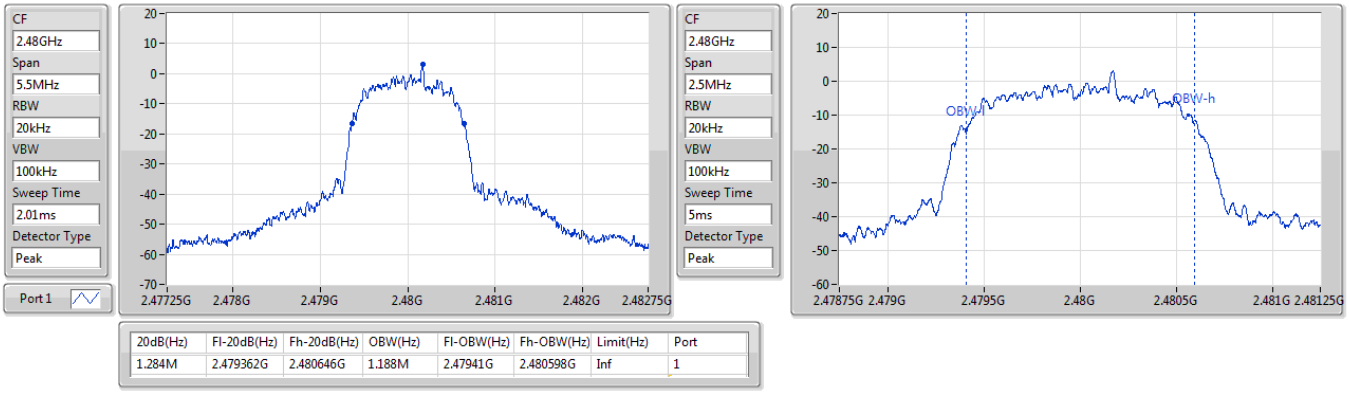
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.282M	2.440362G	2.441644G	1.188M	2.44041G	2.441598G	Inf	1

2.4-2.4835GHz_BT-EDR(3Mbps) **EBW-FS**

2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.284M	2.479362G	2.480646G	1.188M	2.47941G	2.480598G	Inf	1

Summary

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	1.0005M
BT-EDR(2Mbps)	1.002M	1.0005M
BT-EDR(3Mbps)	1.002M	1.0005M

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402058G	2.403058G	1.0005M	611.721k
2441MHz	Pass	2.441058G	2.44206G	1.002M	611.721k
2480MHz	Pass	2.479058G	2.480058G	1.0005M	611.721k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.401992G	2.402994G	1.002M	879.12k
2441MHz	Pass	2.44099G	2.441992G	1.002M	886.446k
2480MHz	Pass	2.47899G	2.479991G	1.0005M	883.116k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.401989G	2.402991G	1.002M	855.144k
2441MHz	Pass	2.440992G	2.441992G	1.0005M	853.812k
2480MHz	Pass	2.478993G	2.479994G	1.0005M	855.144k

2.4-2.4835GHz_BT-BR(1Mbps) Channel Separation-FS

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402058G	2.403058G	1.0005M	611.721k

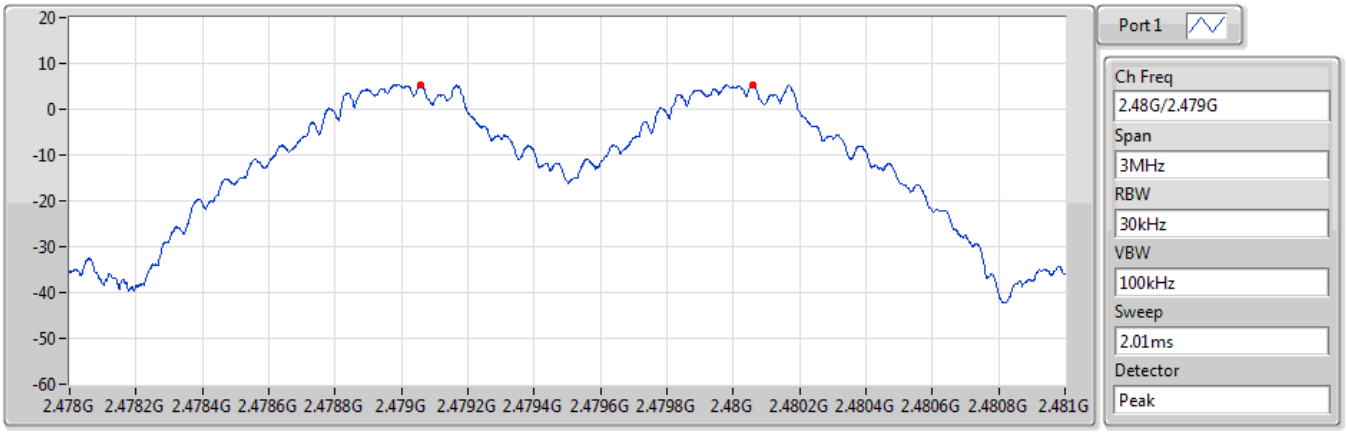
2.4-2.4835GHz_BT-BR(1Mbps) Channel Separation-FS

2.441G/2.442GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441058G	2.44206G	1.002M	611.721k

2.4-2.4835GHz_BT-BR(1Mbps) Channel Separation-FS

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479058G	2.480058G	1.0005M	611.721k

2.4-2.4835GHz_BT-EDR(2Mbps) Channel Separation-FS

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401992G	2.402994G	1.002M	879.12k

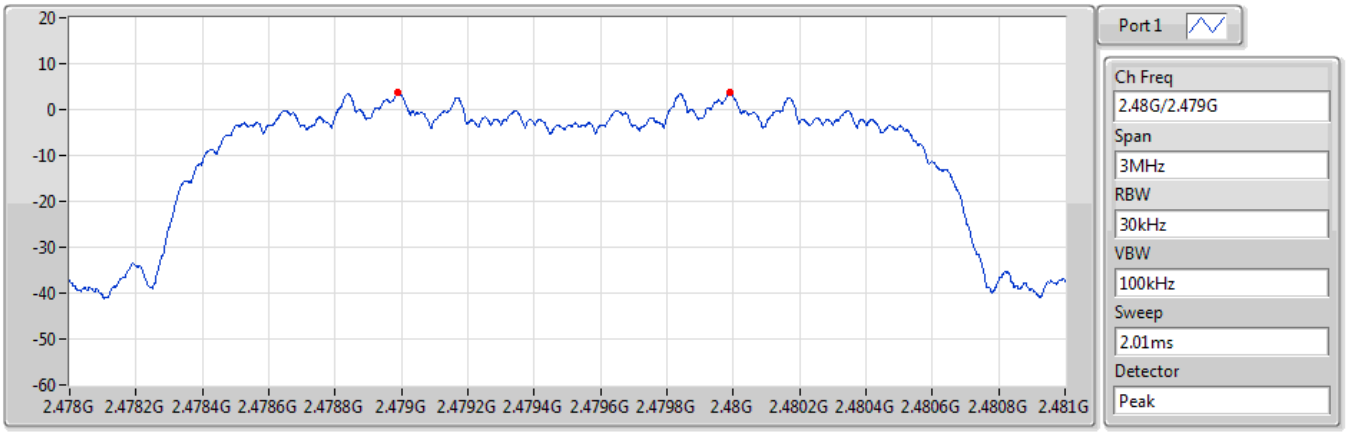
2.4-2.4835GHz_BT-EDR(2Mbps) Channel Separation-FS

2.441G/2.442GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.44099G	2.441992G	1.002M	886.446k

2.4-2.4835GHz_BT-EDR(2Mbps) Channel Separation-FS

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.47899G	2.479991G	1.0005M	883.116k

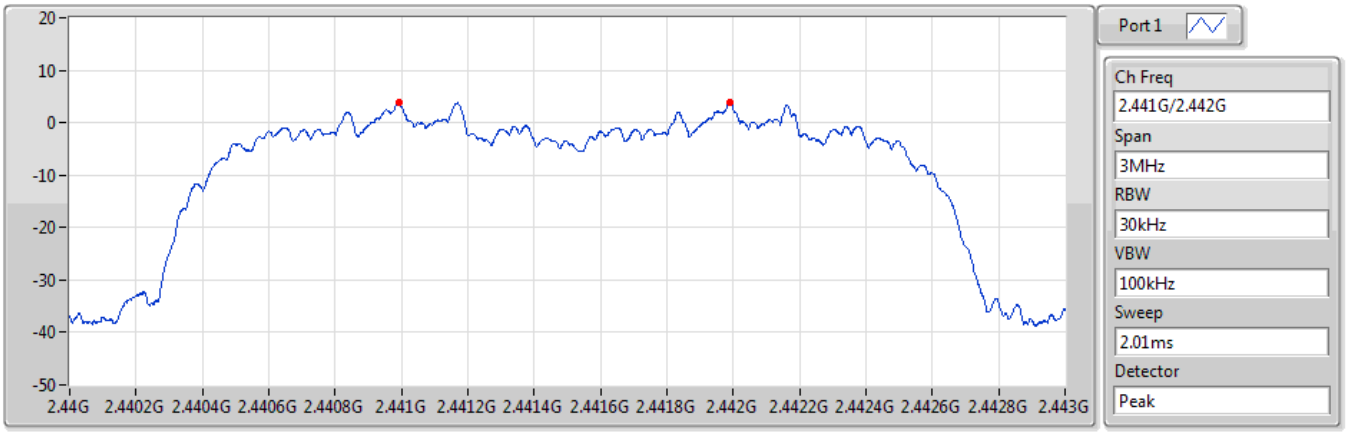
2.4-2.4835GHz_BT-EDR(3Mbps) Channel Separation-FS

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401989G	2.402991G	1.002M	855.144k

2.4-2.4835GHz_BT-EDR(3Mbps) Channel Separation-FS

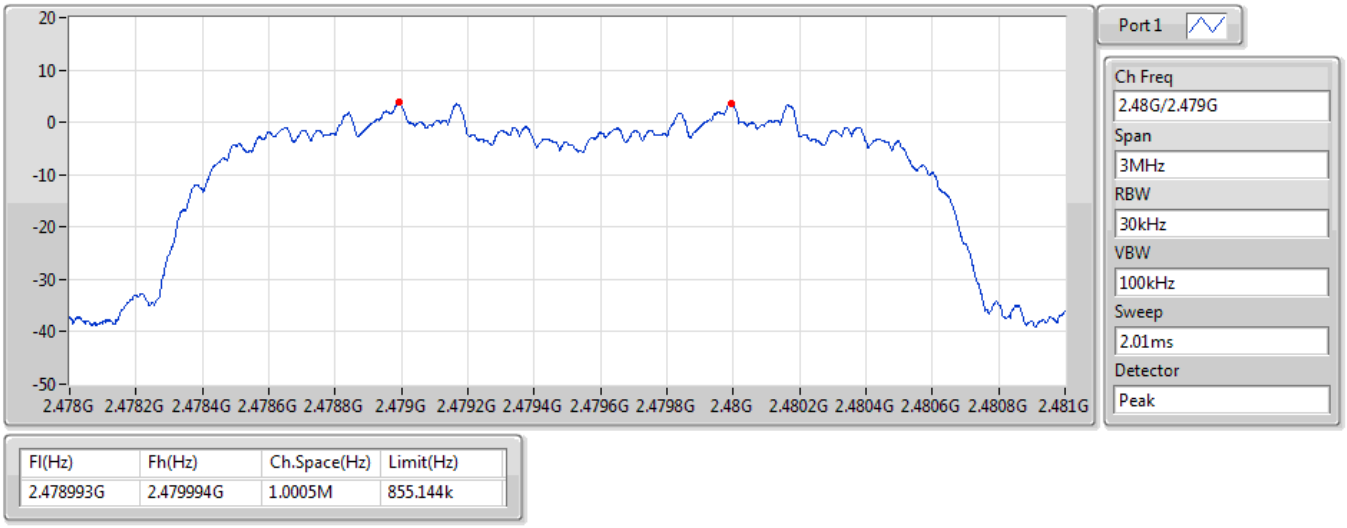
2.441G/2.442GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440992G	2.441992G	1.0005M	853.812k

2.4-2.4835GHz_BT-EDR(3Mbps) **Channel Separation-FS**

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478993G	2.479994G	1.0005M	855.144k

Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	329.02236m_DH5
BT-BR-AFH(1Mbps)	301.834m_DH5-AFH
BT-EDR(2Mbps)	311.87146m_DH5
BT-EDR-AFH(2Mbps)	290.25m_DH5-AFH
BT-EDR(3Mbps)	312.08634m_DH5
BT-EDR-AFH(3Mbps)	290.375m_DH5-AFH

Result/ Non AFH mode

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (ms)	Number of transmission in a 5 s
BT-BR(1Mbps)	-	-	-	-	-	-
2402MHz_DH5	PASS	31.6	0.32902	0.4	2.89225	18
BT-EDR(2Mbps)	-	-	-	-	-	-
2402MHz_DH5	PASS	31.6	0.31187	0.4	2.90275	17
BT-EDR(3Mbps)	-	-	-	-	-	-
2402MHz_DH5	PASS	31.6	0.31209	0.4	2.90475	17

Note 1: Dwell time =Number of transmission in a 5 second x Tx On Time x 6.32

Note 2: DH5 was the worst mode.

Result/ AFH mode

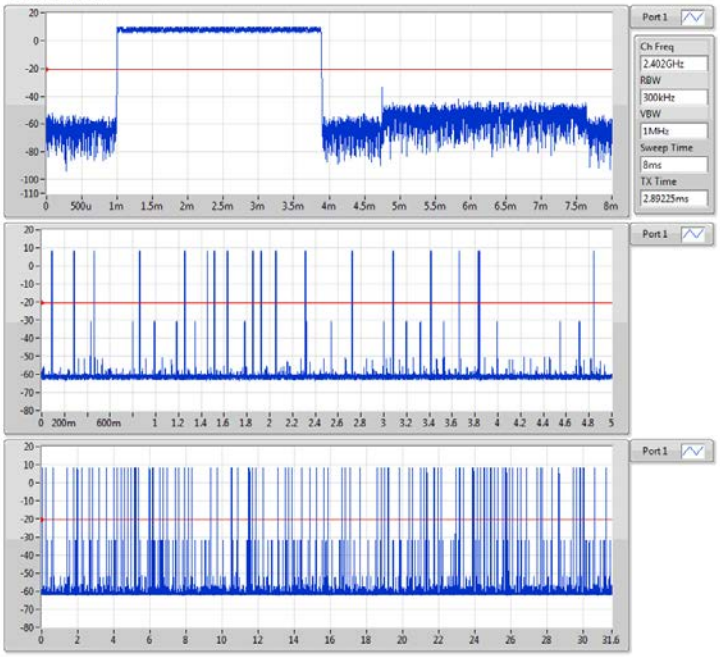
Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (ms)	Number of transmission in a 2 s
BT-BR-AFH(1Mbps)	-	-	-	-	-	-
2402MHz_DH5	PASS	8	0.30183	0.4	2.90225	26
BT-EDR-AFH(2Mbps)	-	-	-	-	-	-
2402MHz_DH5	PASS	8	0.29025	0.4	2.90250	25
BT-EDR-AFH(3Mbps)	-	-	-	-	-	-
2402MHz_DH5	PASS	8	0.29038	0.4	2.90375	25

Note 1: Dwell time =Number of transmission in a 2 second x Tx On Time x 4

Note 2: DH5 was the worst mode.

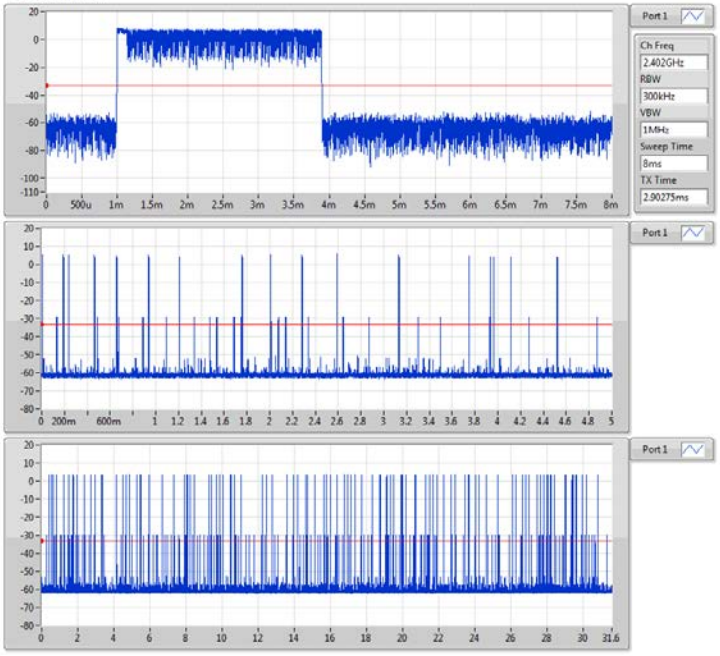
2.4-2.4835GHz_BT-BR(1Mbps) **Dwell-FS**

2402MHz



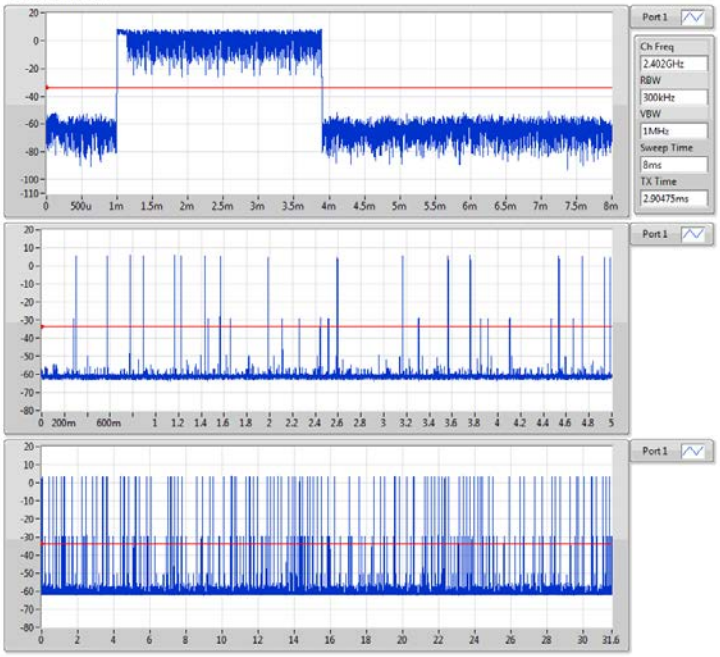
2.4-2.4835GHz_BT-EDR(2Mbps) **Dwell-FS**

2402MHz



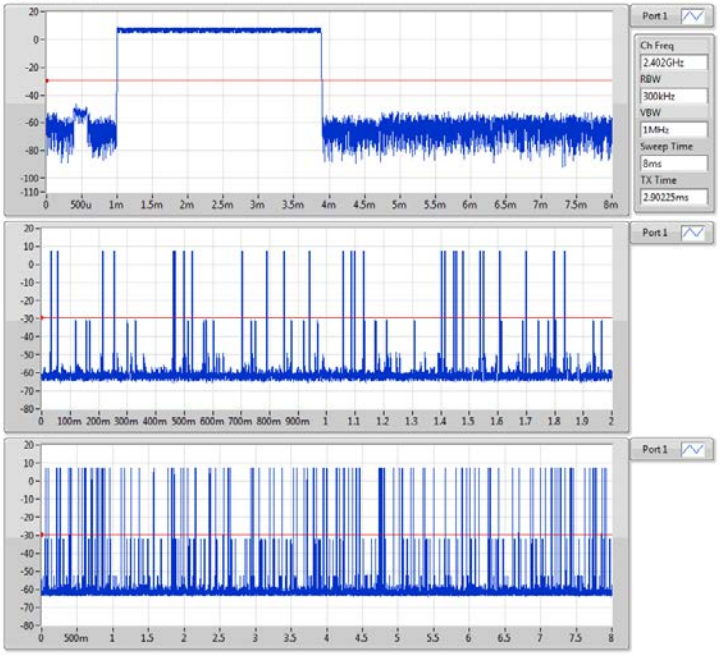
2.4-2.4835GHz_BT-EDR(3Mbps) **Dwell-FS**

2402MHz



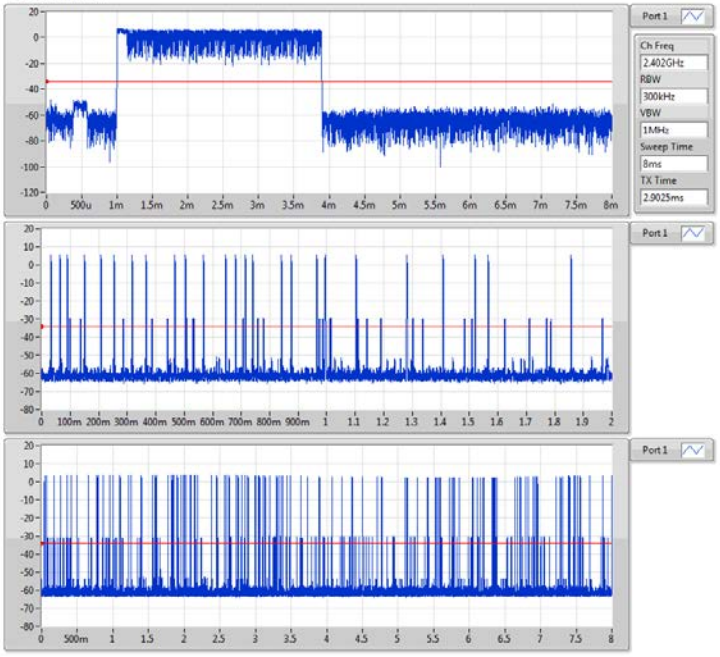
2.4-2.4835GHz_BT-BR-AFH(1Mbps) **Dwell-FS**

2402MHz



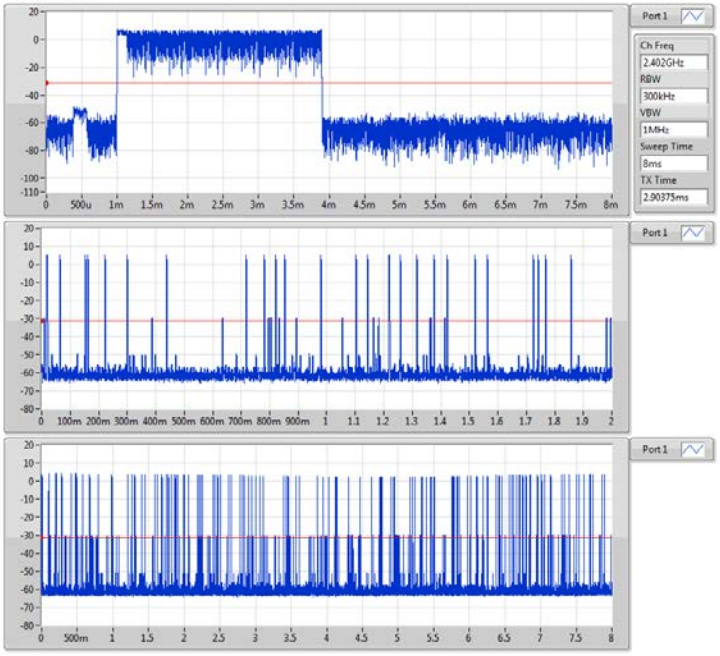
2.4-2.4835GHz_BT-EDR-AFH(2Mbps) **Dwell-FS**

2402MHz



2.4-2.4835GHz_BT-EDR-AFH(3Mbps) **Dwell-FS**

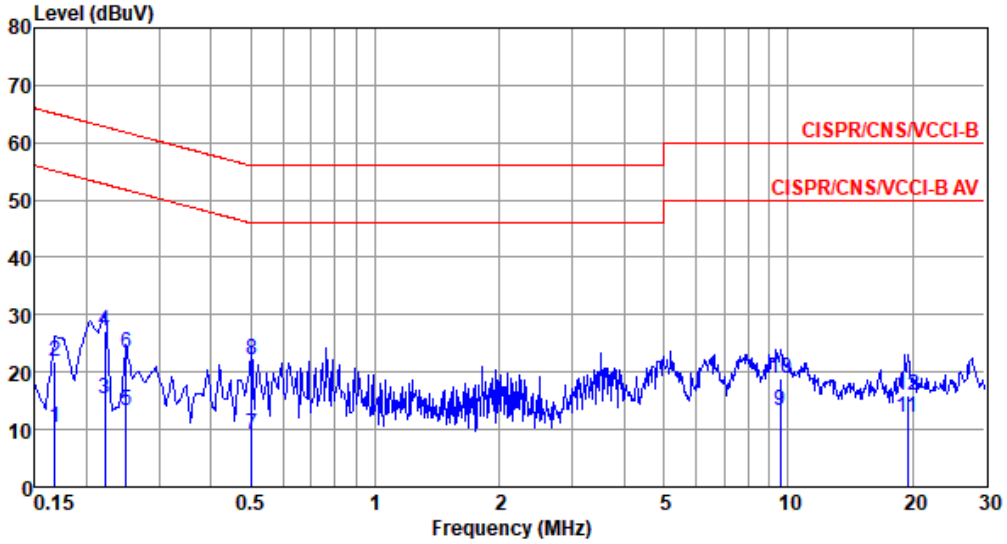
2402MHz



Mode 1

Modulation	8DPSK	**Test Freq. (MHz)**	2402
Power Phase	Line		

Test by : Joe Liao Temperature: 21°C Humidity: 61%

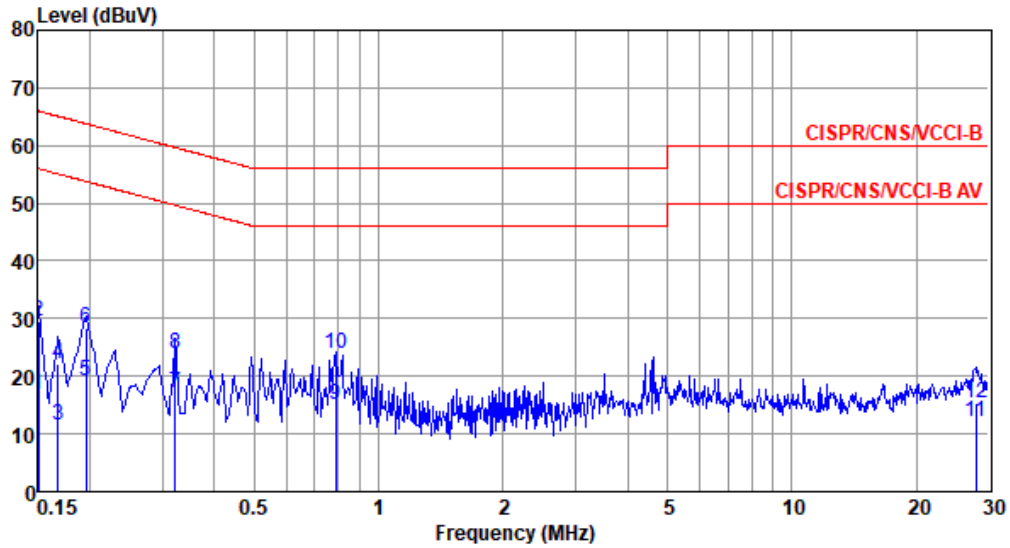


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.168	10.47	55.08	-44.61	0.55	9.68	0.06	0.18	Average
2	0.168	21.85	65.08	-43.23	11.93	9.68	0.06	0.18	QP
3	0.222	15.22	52.74	-37.52	5.27	9.68	0.06	0.21	Average
4	0.222	27.17	62.74	-35.57	17.22	9.68	0.06	0.21	QP
5	0.249	13.30	51.78	-38.48	3.33	9.68	0.06	0.23	Average
6	0.249	23.37	61.78	-38.41	13.40	9.68	0.06	0.23	QP
7	0.502	9.15	46.00	-36.85	-0.90	9.67	0.07	0.31	Average
8*	0.502	22.25	56.00	-33.75	12.20	9.67	0.07	0.31	QP
9	9.552	13.14	50.00	-36.86	2.61	9.74	0.35	0.44	Average
10	9.552	18.78	60.00	-41.22	8.25	9.74	0.35	0.44	QP
11	19.428	12.20	50.00	-37.80	1.45	9.73	0.50	0.52	Average
12	19.428	15.86	60.00	-44.14	5.11	9.73	0.50	0.52	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).

Modulation	8DPSK	**Test Freq. (MHz)**	2402
Power Phase	Neutral		

Test by : Joe Liao Temperature: 21°C Humidity: 61%



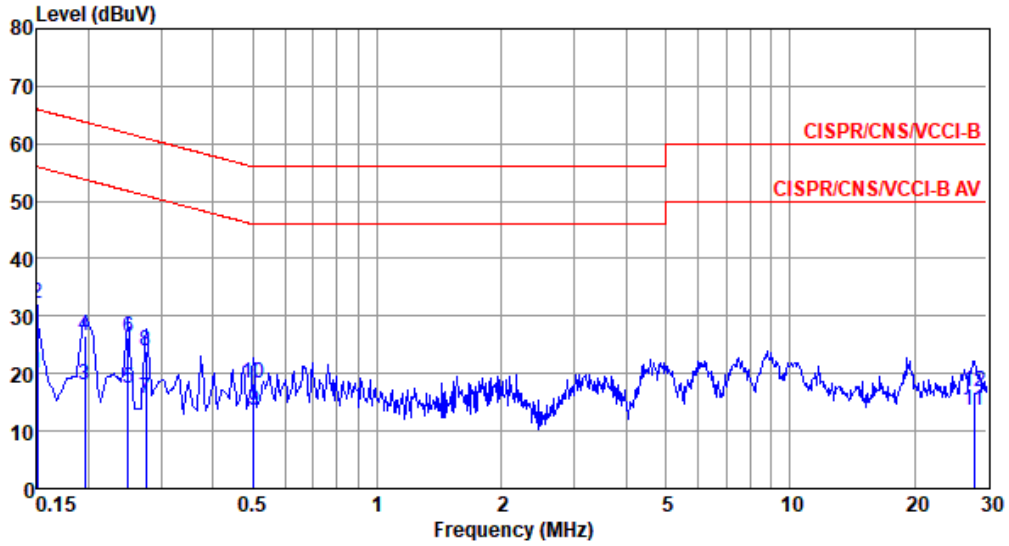
	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.150	16.83	56.00	-39.17	6.98	9.61	0.06	0.18	Average
2	0.150	29.60	66.00	-36.40	19.75	9.61	0.06	0.18	QP
3	0.168	11.53	55.08	-43.55	1.68	9.61	0.06	0.18	Average
4	0.168	22.15	65.08	-42.93	12.30	9.61	0.06	0.18	QP
5	0.195	19.26	53.80	-34.54	9.40	9.61	0.06	0.19	Average
6	0.195	28.30	63.80	-35.50	18.44	9.61	0.06	0.19	QP
7	0.322	17.04	49.66	-32.62	7.10	9.61	0.06	0.27	Average
8	0.322	23.84	59.66	-35.82	13.90	9.61	0.06	0.27	QP
9*	0.788	15.16	46.00	-30.84	5.13	9.61	0.10	0.32	Average
10	0.788	23.93	56.00	-32.07	13.90	9.61	0.10	0.32	QP
11	27.855	12.14	50.00	-37.86	1.04	9.77	0.59	0.74	Average
12	27.855	15.34	60.00	-44.66	4.24	9.77	0.59	0.74	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).

Mode 2

Modulation	8DPSK	Test Freq. (MHz)	2402
Power Phase	Line		

Test by : Joe Liao Temperature: 21°C Humidity: 61%

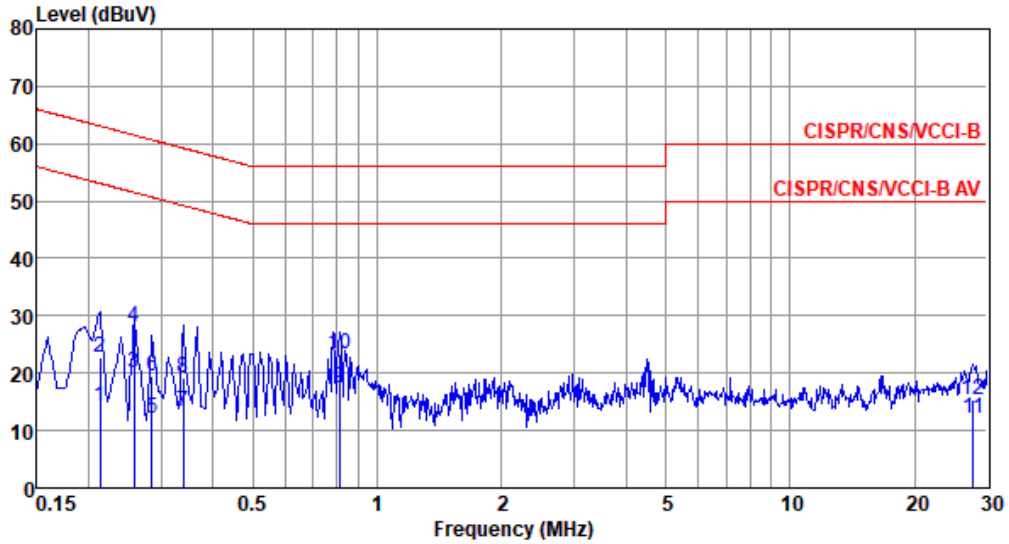


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.150	20.06	56.00	-35.94	10.14	9.68	0.06	0.18	Average
2	0.150	32.15	66.00	-33.85	22.23	9.68	0.06	0.18	QP
3	0.195	17.87	53.80	-35.93	7.94	9.68	0.06	0.19	Average
4	0.195	26.62	63.80	-37.18	16.69	9.68	0.06	0.19	QP
5	0.249	17.51	51.78	-34.27	7.54	9.68	0.06	0.23	Average
6	0.249	26.25	61.78	-35.53	16.28	9.68	0.06	0.23	QP
7	0.276	15.69	50.94	-35.25	5.71	9.68	0.06	0.24	Average
8	0.276	23.94	60.94	-37.00	13.96	9.68	0.06	0.24	QP
9*	0.502	13.52	46.00	-32.48	3.47	9.67	0.07	0.31	Average
10	0.502	18.18	56.00	-37.82	8.13	9.67	0.07	0.31	QP
11	27.855	13.70	50.00	-36.30	2.69	9.68	0.59	0.74	Average
12	27.855	16.97	60.00	-43.03	5.96	9.68	0.59	0.74	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).

Modulation	8DPSK	**Test Freq. (MHz)**	2402
Power Phase	Neutral		

Test by : Joe Liao Temperature: 21°C Humidity: 61%



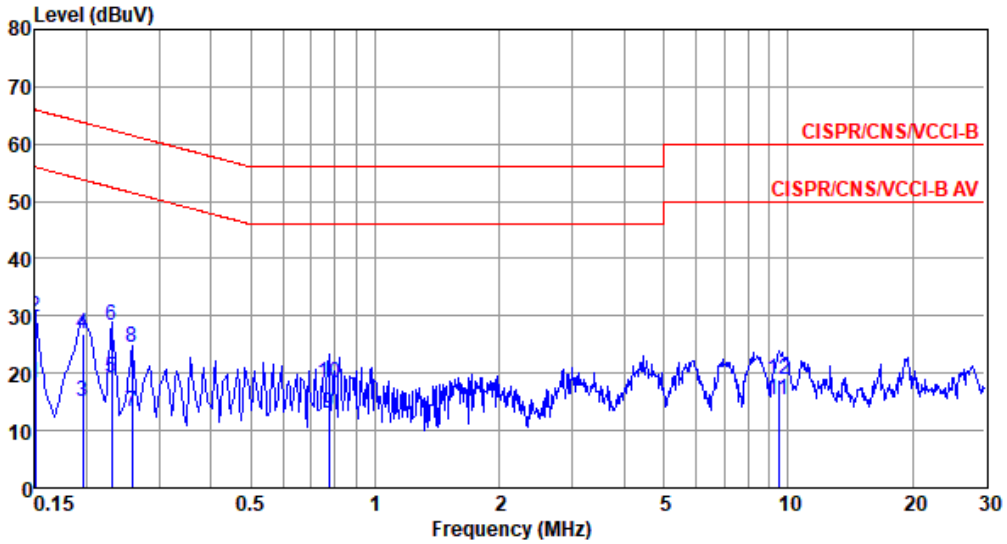
	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.213	14.05	53.10	-39.05	4.18	9.61	0.06	0.20	Average
2	0.213	22.79	63.10	-40.31	12.92	9.61	0.06	0.20	QP
3	0.258	19.99	51.51	-31.52	10.09	9.61	0.06	0.23	Average
4	0.258	28.06	61.51	-33.45	18.16	9.61	0.06	0.23	QP
5	0.285	12.10	50.68	-38.58	2.18	9.61	0.06	0.25	Average
6	0.285	19.34	60.68	-41.34	9.42	9.61	0.06	0.25	QP
7	0.339	13.36	49.22	-35.86	3.42	9.61	0.06	0.27	Average
8	0.339	19.28	59.22	-39.94	9.34	9.61	0.06	0.27	QP
9*	0.809	17.34	46.00	-28.66	7.31	9.61	0.10	0.32	Average
10	0.809	23.46	56.00	-32.54	13.43	9.61	0.10	0.32	QP
11	27.708	12.12	50.00	-37.88	1.02	9.77	0.59	0.74	Average
12	27.708	15.35	60.00	-44.65	4.25	9.77	0.59	0.74	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).

Mode 3

Modulation	8DPSK	Test Freq. (MHz)	2402
Power Phase	Line		

Test by : Joe Liao Temperature: 21°C Humidity: 61%

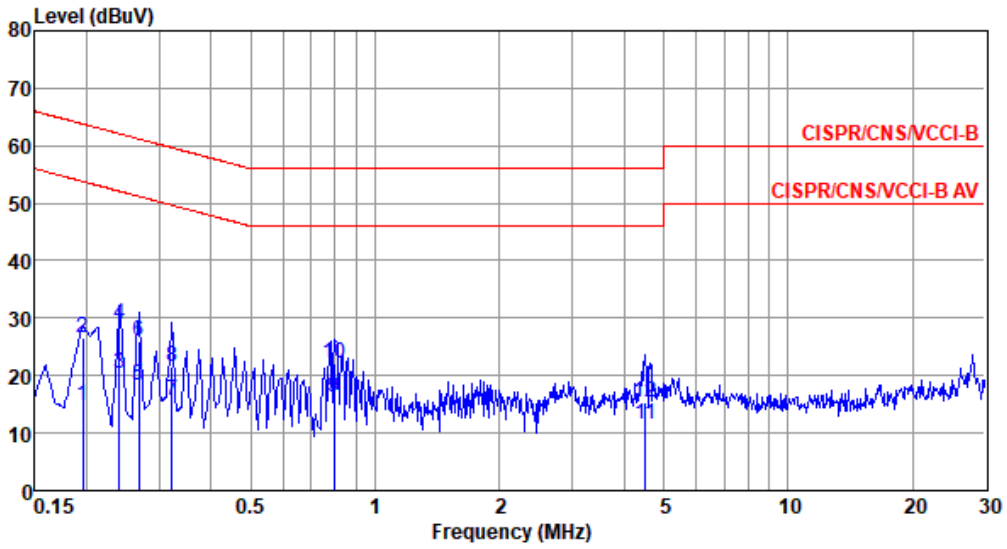


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.150	18.38	56.00	-37.62	8.46	9.68	0.06	0.18	Average
2	0.150	29.77	66.00	-36.23	19.85	9.68	0.06	0.18	QP
3	0.195	14.96	53.80	-38.84	5.03	9.68	0.06	0.19	Average
4	0.195	26.79	63.80	-37.01	16.86	9.68	0.06	0.19	QP
5	0.230	19.18	52.44	-33.26	9.23	9.68	0.06	0.21	Average
6	0.230	28.47	62.44	-33.97	18.52	9.68	0.06	0.21	QP
7	0.258	13.18	51.51	-38.33	3.21	9.68	0.06	0.23	Average
8	0.258	24.53	61.51	-36.98	14.56	9.68	0.06	0.23	QP
9*	0.771	13.02	46.00	-32.98	2.92	9.68	0.10	0.32	Average
10	0.771	18.24	56.00	-37.76	8.14	9.68	0.10	0.32	QP
11	9.502	15.31	50.00	-34.69	4.78	9.74	0.35	0.44	Average
12	9.502	18.87	60.00	-41.13	8.34	9.74	0.35	0.44	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).

Modulation	8DPSK	**Test Freq. (MHz)**	2402
Power Phase	Neutral		

Test by : Joe Liao Temperature: 21°C Humidity: 61%



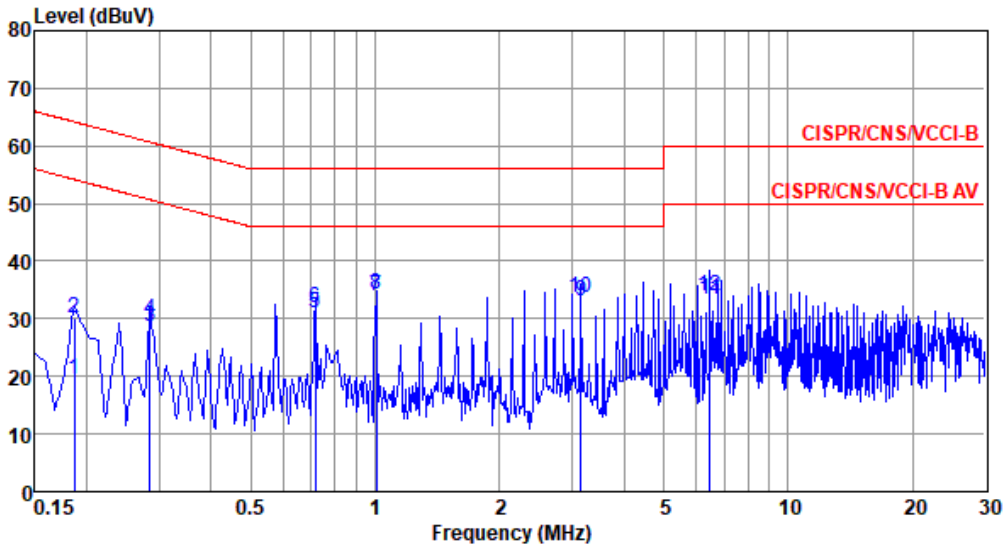
	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.195	14.64	53.80	-39.16	4.78	9.61	0.06	0.19	Average
2	0.195	26.48	63.80	-37.32	16.62	9.61	0.06	0.19	QP
3	0.240	20.38	52.08	-31.70	10.49	9.61	0.06	0.22	Average
4	0.240	29.00	62.08	-33.08	19.11	9.61	0.06	0.22	QP
5	0.267	18.38	51.20	-32.82	8.47	9.61	0.06	0.24	Average
6	0.267	25.99	61.20	-35.21	16.08	9.61	0.06	0.24	QP
7	0.322	15.70	49.66	-33.96	5.76	9.61	0.06	0.27	Average
8	0.322	21.64	59.66	-38.02	11.70	9.61	0.06	0.27	QP
9*	0.796	16.35	46.00	-29.65	6.32	9.61	0.10	0.32	Average
10	0.796	22.12	56.00	-33.88	12.09	9.61	0.10	0.32	QP
11	4.501	11.45	46.00	-34.55	1.18	9.65	0.20	0.42	Average
12	4.501	15.25	56.00	-40.75	4.98	9.65	0.20	0.42	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).

Mode 4

Mode	WPC charging mode
Power Phase	Line

Test by : Joe Liao Temperature: 21°C Humidity: 61%

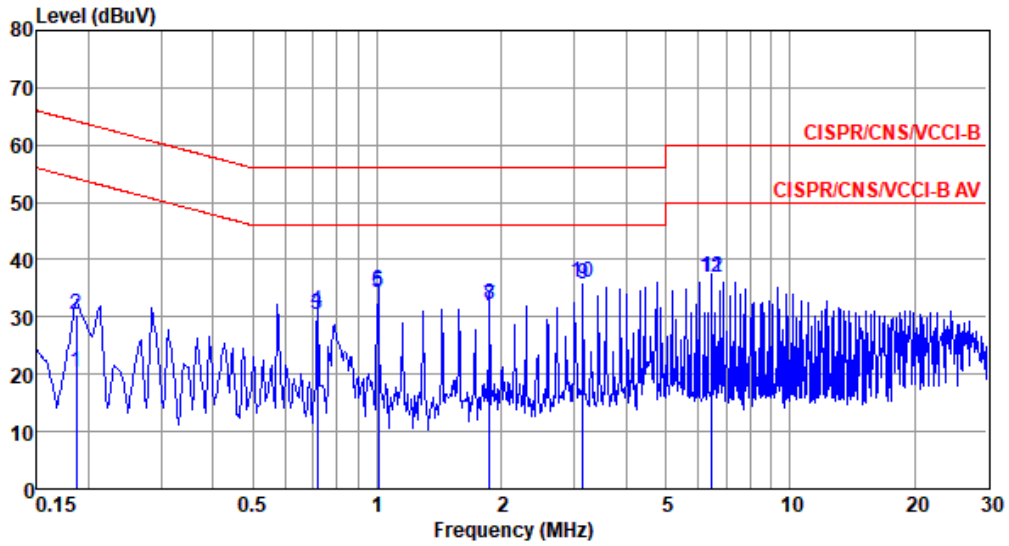


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.186	19.62	54.20	-34.58	9.69	9.68	0.06	0.19	Average
2	0.186	29.99	64.20	-34.21	20.06	9.68	0.06	0.19	QP
3	0.285	28.56	50.68	-22.12	18.58	9.67	0.06	0.25	Average
4	0.285	29.89	60.68	-30.79	19.91	9.67	0.06	0.25	QP
5	0.716	31.10	46.00	-14.90	21.01	9.68	0.09	0.32	Average
6	0.716	31.78	56.00	-24.22	21.69	9.68	0.09	0.32	QP
7*	1.005	33.80	46.00	-12.20	23.68	9.68	0.11	0.33	Average
8	1.005	34.12	56.00	-21.88	24.00	9.68	0.11	0.33	QP
9	3.156	33.08	46.00	-12.92	22.82	9.70	0.16	0.40	Average
10	3.156	33.61	56.00	-22.39	23.35	9.70	0.16	0.40	QP
11	6.454	33.24	50.00	-16.76	22.82	9.72	0.27	0.43	Average
12	6.454	33.95	60.00	-26.05	23.53	9.72	0.27	0.43	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).

Mode	WPC charging mode
Power Phase	Neutral

Test by : Joe Liao Temperature: 21°C Humidity: 61%



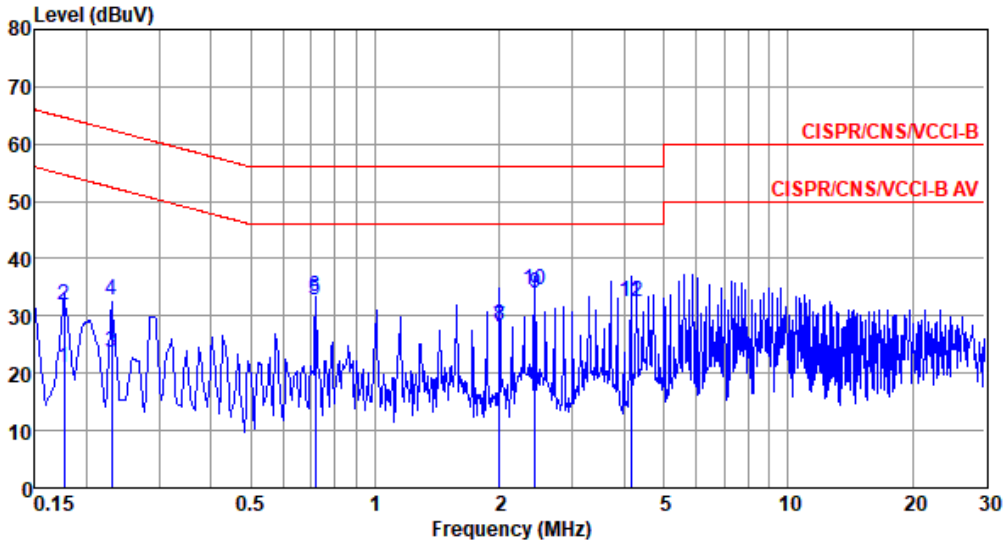
	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.186	20.33	54.20	-33.87	10.47	9.61	0.06	0.19	Average
2	0.186	30.32	64.20	-33.88	20.46	9.61	0.06	0.19	QP
3	0.716	30.46	46.00	-15.54	20.44	9.61	0.09	0.32	Average
4	0.716	30.97	56.00	-25.03	20.95	9.61	0.09	0.32	QP
5	1.005	34.29	46.00	-11.71	24.24	9.61	0.11	0.33	Average
6	1.005	34.59	56.00	-21.41	24.54	9.61	0.11	0.33	QP
7	1.868	31.87	46.00	-14.13	21.76	9.62	0.13	0.36	Average
8	1.868	32.32	56.00	-23.68	22.21	9.62	0.13	0.36	QP
9*	3.156	35.66	46.00	-10.34	25.47	9.63	0.16	0.40	Average
10	3.156	35.91	56.00	-20.09	25.72	9.63	0.16	0.40	QP
11	6.454	36.82	50.00	-13.18	26.45	9.67	0.27	0.43	Average
12	6.454	36.85	60.00	-23.15	26.48	9.67	0.27	0.43	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).

Mode 5

Mode	WPC charging mode
Power Phase	Line

Test by : Joe Liao Temperature: 21°C Humidity: 61%

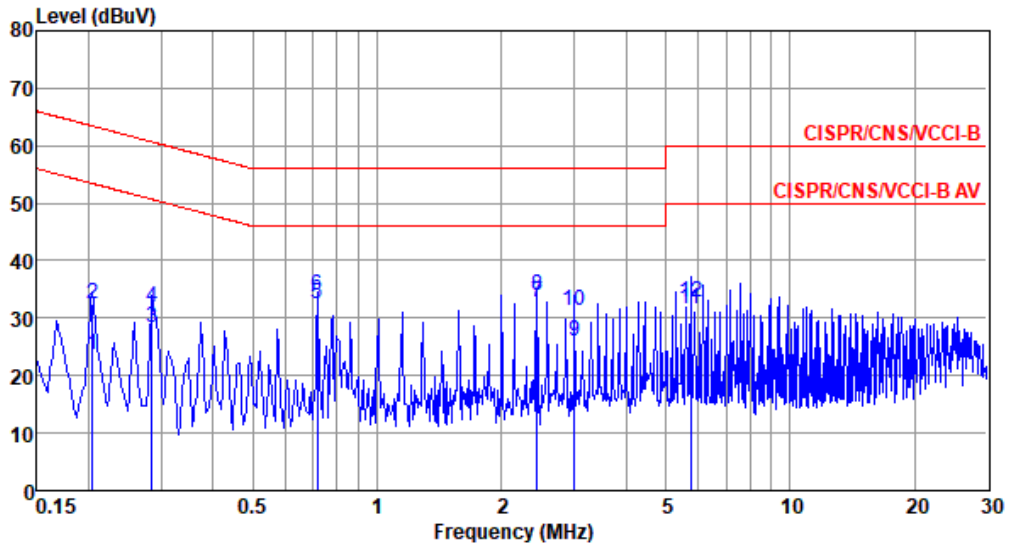


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.177	21.02	54.64	-33.62	11.09	9.68	0.06	0.19	Average
2	0.177	32.03	64.64	-32.61	22.10	9.68	0.06	0.19	QP
3	0.230	23.69	52.44	-28.75	13.74	9.68	0.06	0.21	Average
4	0.230	32.63	62.44	-29.81	22.68	9.68	0.06	0.21	QP
5	0.716	32.81	46.00	-13.19	22.72	9.68	0.09	0.32	Average
6	0.716	33.30	56.00	-22.70	23.21	9.68	0.09	0.32	QP
7	2.001	28.07	46.00	-17.93	17.89	9.69	0.13	0.36	Average
8	2.001	28.25	56.00	-27.75	18.07	9.69	0.13	0.36	QP
9*	2.435	33.90	46.00	-12.10	23.69	9.69	0.14	0.38	Average
10	2.435	34.43	56.00	-21.57	24.22	9.69	0.14	0.38	QP
11	4.158	32.43	46.00	-13.57	22.12	9.70	0.19	0.42	Average
12	4.158	32.59	56.00	-23.41	22.28	9.70	0.19	0.42	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).

Mode	WPC charging mode
Power Phase	Neutral

Test by : Joe Liao Temperature: 21°C Humidity: 61%



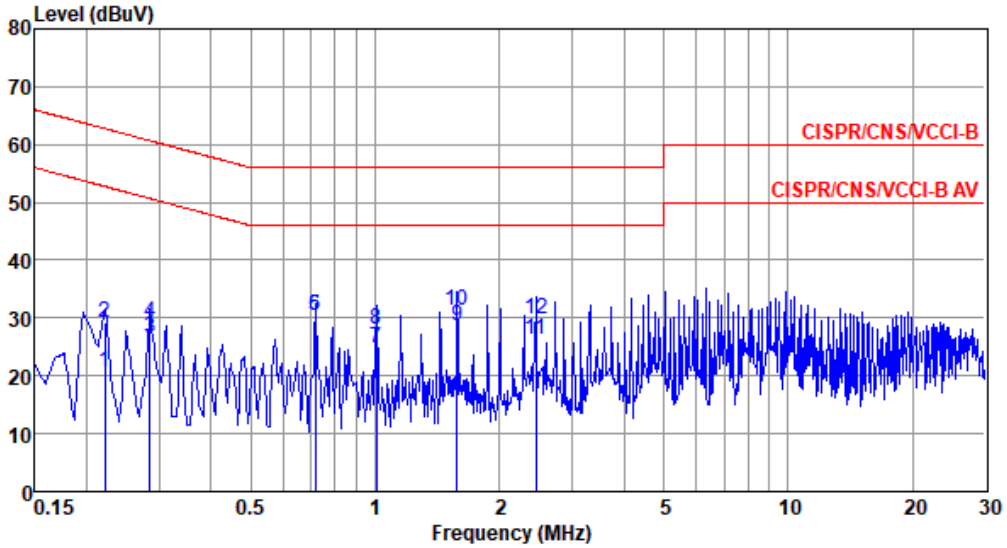
	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.204	23.56	53.45	-29.89	13.70	9.61	0.06	0.19	Average
2	0.204	32.36	63.45	-31.09	22.50	9.61	0.06	0.19	QP
3	0.285	28.25	50.68	-22.43	18.33	9.61	0.06	0.25	Average
4	0.285	31.99	60.68	-28.69	22.07	9.61	0.06	0.25	QP
5	0.716	32.34	46.00	-13.66	22.32	9.61	0.09	0.32	Average
6	0.716	33.81	56.00	-22.19	23.79	9.61	0.09	0.32	QP
7*	2.435	32.86	46.00	-13.14	22.71	9.63	0.14	0.38	Average
8	2.435	34.09	56.00	-21.91	23.94	9.63	0.14	0.38	QP
9	3.009	25.92	46.00	-20.08	15.73	9.63	0.16	0.40	Average
10	3.009	31.18	56.00	-24.82	20.99	9.63	0.16	0.40	QP
11	5.744	31.48	50.00	-18.52	21.14	9.66	0.25	0.43	Average
12	5.744	32.70	60.00	-27.30	22.36	9.66	0.25	0.43	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).

Mode 6

Mode	WPC charging mode
Power Phase	Line

Test by : Joe Liao Temperature: 21°C Humidity: 61%

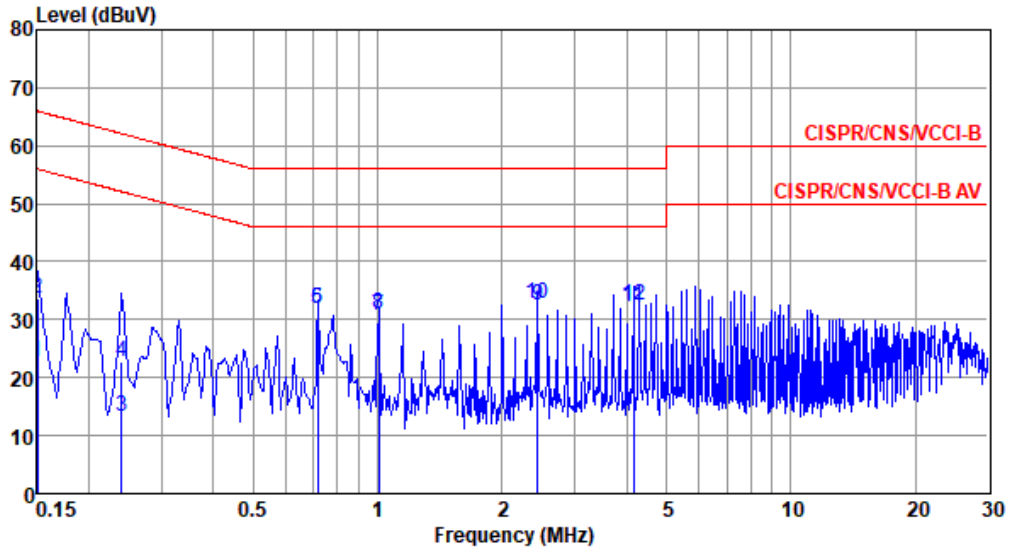


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.222	20.56	52.74	-32.18	10.61	9.68	0.06	0.21	Average
2	0.222	29.25	62.74	-33.49	19.30	9.68	0.06	0.21	QP
3	0.285	26.68	50.68	-24.00	16.70	9.67	0.06	0.25	Average
4	0.285	29.21	60.68	-31.47	19.23	9.67	0.06	0.25	QP
5*	0.716	30.48	46.00	-15.52	20.39	9.68	0.09	0.32	Average
6	0.716	30.50	56.00	-25.50	20.41	9.68	0.09	0.32	QP
7	1.005	24.77	46.00	-21.23	14.65	9.68	0.11	0.33	Average
8	1.005	27.92	56.00	-28.08	17.80	9.68	0.11	0.33	QP
9	1.577	28.55	46.00	-17.45	18.39	9.69	0.12	0.35	Average
10	1.577	31.32	56.00	-24.68	21.16	9.69	0.12	0.35	QP
11	2.448	26.36	46.00	-19.64	16.15	9.69	0.14	0.38	Average
12	2.448	29.94	56.00	-26.06	19.73	9.69	0.14	0.38	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).

Mode	WPC charging mode
Power Phase	Neutral

Test by : Joe Liao Temperature: 21°C Humidity: 61%



	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.150	22.78	56.00	-33.22	12.93	9.61	0.06	0.18	Average
2	0.150	33.55	66.00	-32.45	23.70	9.61	0.06	0.18	QP
3	0.240	13.33	52.08	-38.75	3.44	9.61	0.06	0.22	Average
4	0.240	22.84	62.08	-39.24	12.95	9.61	0.06	0.22	QP
5	0.716	31.82	46.00	-14.18	21.80	9.61	0.09	0.32	Average
6	0.716	31.84	56.00	-24.16	21.82	9.61	0.09	0.32	QP
7	1.005	30.61	46.00	-15.39	20.56	9.61	0.11	0.33	Average
8	1.005	30.89	56.00	-25.11	20.84	9.61	0.11	0.33	QP
9*	2.435	32.38	46.00	-13.62	22.23	9.63	0.14	0.38	Average
10	2.435	32.72	56.00	-23.28	22.57	9.63	0.14	0.38	QP
11	4.158	32.14	46.00	-13.86	21.89	9.64	0.19	0.42	Average
12	4.158	32.34	56.00	-23.66	22.09	9.64	0.19	0.42	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).