

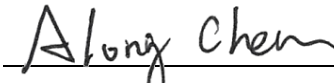
# FCC Test Report

**FCC ID** : XNAHWA11  
**Equipment** : HWA11  
**Model No.** : HWA11  
**Brand Name** : Withings  
**Applicant** : Withings  
**Address** : 2 rue Maurice Hartmann  
92130 Issy-Les-Moulineaux  
France  
**Standard** : 47 CFR FCC Part 15.247  
**Received Date** : May 25, 2023  
**Tested Date** : Jun. 15 ~ Jun. 21, 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

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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**

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## Release Record

Report No.	Version	Description	Issued Date
FR352501	Rev. 01	Initial issue	Jun. 30, 2023

## Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emissions	[dBuV]: 0.779MHz 23.76 (Margin -22.24dB) - AV	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 330MHz 42.39 (Margin -3.61dB) - QP	Pass
15.247(b)(3)	Conducted Output Power	Power [dBm]: 0.44	Pass
15.247(a)(2)	6dB Bandwidth	Meet the requirement of limit	Pass
15.247(e)	Power Spectral Density	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 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	0-39 [40]	1 Mbps
				2 Mbps
Note: Bluetooth LE (Low energy) uses GFSK modulation.				

### 1.1.2 Antenna Details

Ant. No.	Brand	Model	Type	Connector	Gain (dBi)
1	Wellink	ASM-13251	HWA	No	1.11

### 1.1.3 Power Supply Type of Equipment under Test (EUT)

<b>Power Supply Type</b>	3.87 Vdc from internal battery (for end user mode) 5Vdc (USB-C connector) from end user adapter not bundled/sold/delivered with HWA11 (for charging mode)
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### 1.1.4 Accessories

Accessories		
No.	Equipment	Description
1	Rechargeable li-ion battery	Brand: VDL Model: 232622SN5 Ratings :3.87 Vdc, 118mAh
2	Withings HWA11 Watch Charger	Brand: Withings Model: ASM-13945 Rating : 5 Vdc, 500mA Power line: 0.78m non-shielded without core

### 1.1.5 Test Sample Information

<b>MAC of Test Sample</b>	A47EFA16BED3 A47EFA16BF9D A47EFA16BEDB
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### 1.1.6 Channel List

Frequency band (MHz)				2400~2483.5			
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

### 1.1.7 Test Tool and Duty Cycle

Test Tool	nRFgo Studio, V1.21.0.2	
Modulation Mode	Duty Cycle Of Test Signal (%)	Duty Factor (dB)
BT-LE(1Mbps)	64.06%	1.93
BT-LE(2Mbps)	33.80%	4.71

### 1.1.8 Power Index of Test Tool

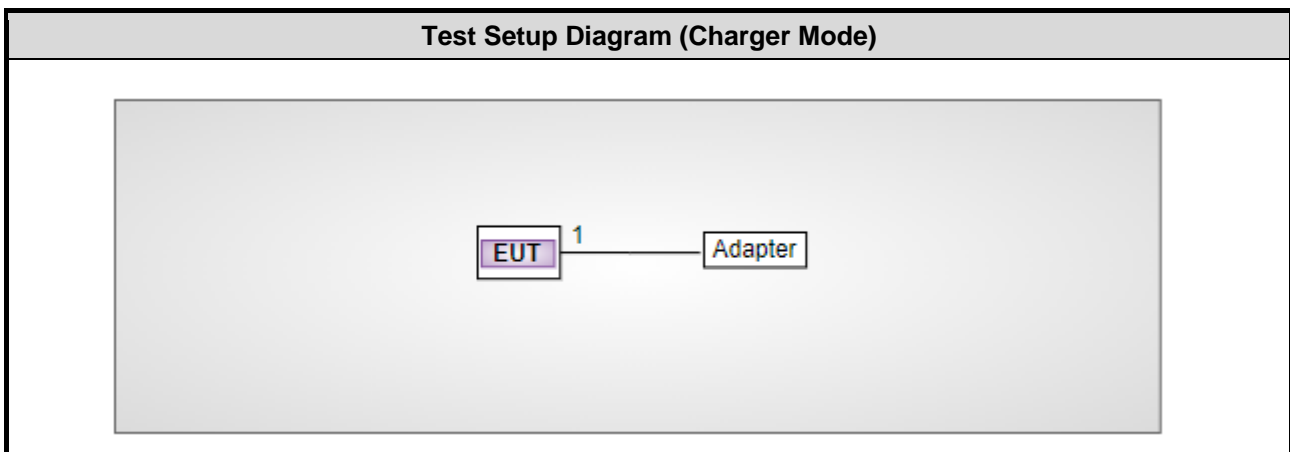
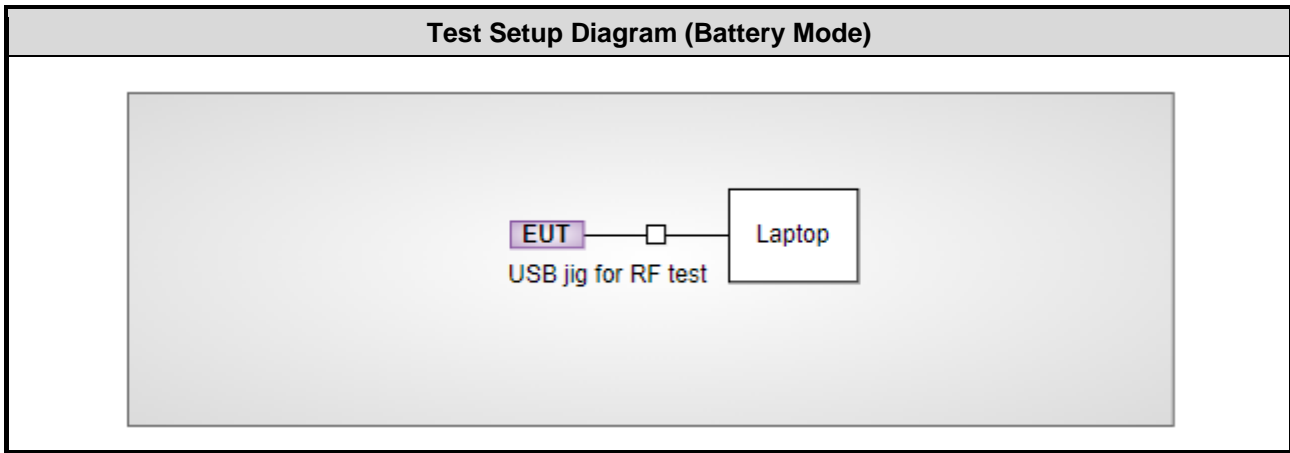
Modulation Mode	Test Frequency (MHz)		
	2402	2440	2480
BT-LE(1Mbps)	Default	Default	Default
BT-LE(2Mbps)	Default	Default	Default

## 1.2 Local Support Equipment List

Support Equipment List (Battery Mode)					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Laptop	DELL	Latitude 5400	DoC	---
2	USB jig for RF test	---	---	---	Provided by applicant.

Support Equipment List (Charging Mode)					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Adapter	apple	A1387	---	---

## 1.3 Test Setup Chart



No.	Signal cable / Length (m)
1	Withings USB Charger, 0.78m non-shielded.

## 1.4 Test Equipment List and Calibration Data

<b>Test Item</b>	Conducted Emission				
<b>Test Site</b>	Conduction room 1 / (CO01-WS)				
<b>Tested Date</b>	Jun. 21, 2023				
<b>Instrument</b>	<b>Brand</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Receiver	R&S	ESR3	101658	Feb. 17, 2023	Feb. 16, 2024
LISN	R&S	ENV216	101295	Jan. 31, 2023	Jan. 30, 2024
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan. 03, 2023	Jan. 02, 2024
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 17, 2022	Oct. 16, 2023
50 ohm terminal (Support Unit)	NA	50	01	Jun. 14, 2023	Jun. 13, 2024
Measurement S/W	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

<b>Test Item</b>	Radiated Emission				
<b>Test Site</b>	966 chamber3 / (03CH03-WS)				
<b>Tested Date</b>	Jun. 15, 2023				
<b>Instrument</b>	<b>Brand</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Receiver	R&S	ESR3	101657	Mar. 03, 2023	Mar. 02, 2024
Spectrum Analyzer	R&S	FSV40	101499	Mar. 16, 2023	Mar. 15, 2024
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 01, 2022	Oct. 31, 2023
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Jun. 28, 2022	Jun. 27, 2023
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 15, 2022	Dec. 14, 2023
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 27, 2022	Oct. 26, 2023
Preamplifier	EMC	EMC02325	980187	Jul. 16, 2022	Jul. 15, 2023
Preamplifier	EMC	EMC184045SE	980897	Aug. 01, 2022	Jul. 31, 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-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 23, 2022	Sep. 22, 2023
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 23, 2022	Sep. 22, 2023
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 23, 2022	Sep. 22, 2023
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 23, 2022	Sep. 22, 2023
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 23, 2022	Sep. 22, 2023
HIGHPASS FILTER	WI	WHK3.1-18G-10SS	43	Sep. 28, 2022	Sep. 27, 2023
Attenuator	Pasternack	PE7005-10	10-3	Oct. 14, 2022	Oct. 13, 2023
Measurement S/W	Sporton	SENSE-15247_FS	V5.10.8	NA	NA
Measurement S/W	Sporton	SENSE-EMI	V5.10.8	NA	NA
Note: Calibration Interval of instruments listed above is one year.					



<b>Test Item</b>	RF Conducted				
<b>Test Site</b>	(TH01-WS)				
<b>Tested Date</b>	Jun. 19, 2023				
<b>Instrument</b>	<b>Brand</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Calibration Date</b>	<b>Calibration Until</b>
Spectrum Analyzer	R&S	FSV40	101910	Apr. 14, 2023	Apr. 13, 2024
Power Meter	Anritsu	ML2495A	1241002	Nov. 23, 2022	Nov. 22, 2023
Power Sensor	Anritsu	MA2411B	1207366	Nov. 23, 2022	Nov. 22, 2023
Attenuator	woken	PE7013-10	10-1	Oct. 14, 2022	Oct. 13, 2023
Measurement S/W	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	±3.96 dB
Unwanted Emission > 1GHz	±4.51 dB

## 2 Test Configuration

### 2.1 Testing Facility

<b>Test Laboratory</b>	International Certification Corporation
<b>Test Site</b>	CO01-WS, TH01-WS
<b>Address of Test Site</b>	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)
<b>Test Site</b>	03CH03-WS
<b>Address of Test Site</b>	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
- ISED#: 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	Charger Mode	---	2
Unwanted Emissions $\leq$ 1GHz	BT-LE(1Mbps)	2402	1
	Charger Mode	---	2
Unwanted Emissions $>$ 1GHz Conducted Output Power 6dB bandwidth Power spectral density	BT-LE(1Mbps) BT-LE(2Mbps)	2402, 2440, 2480	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 **Z-plane** results were found as the worst case and were shown in this report.
2. The test configurations are listed as follows:  
Configuration 1: Battery mode  
Configuration 2: Charging mode

### 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

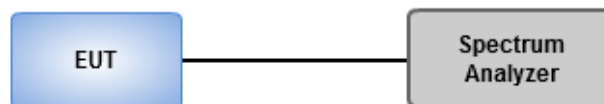
###### 6dB Bandwidth

1. Set resolution bandwidth (RBW) = 100 kHz, Video bandwidth = 300 kHz.
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

<b>Ambient Condition</b>	26°C / 64%	<b>Tested By</b>	Akun Chung
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Refer to Appendix A.

## 3.2 Conducted Output Power

### 3.2.1 Limit of Conducted Output Power

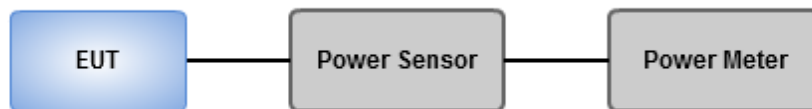
Conducted power shall not exceed 1Watt.

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

<b>Ambient Condition</b>	26°C / 64%	<b>Tested By</b>	Akun Chung
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Refer to Appendix B.

### 3.3 Power Spectral Density

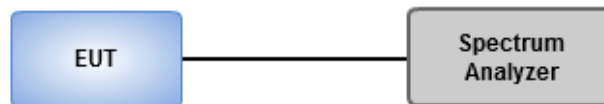
#### 3.3.1 Limit of Power Spectral Density

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

<b>Ambient Condition</b>	26°C / 64%	<b>Tested By</b>	Akun Chung
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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:**  
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.

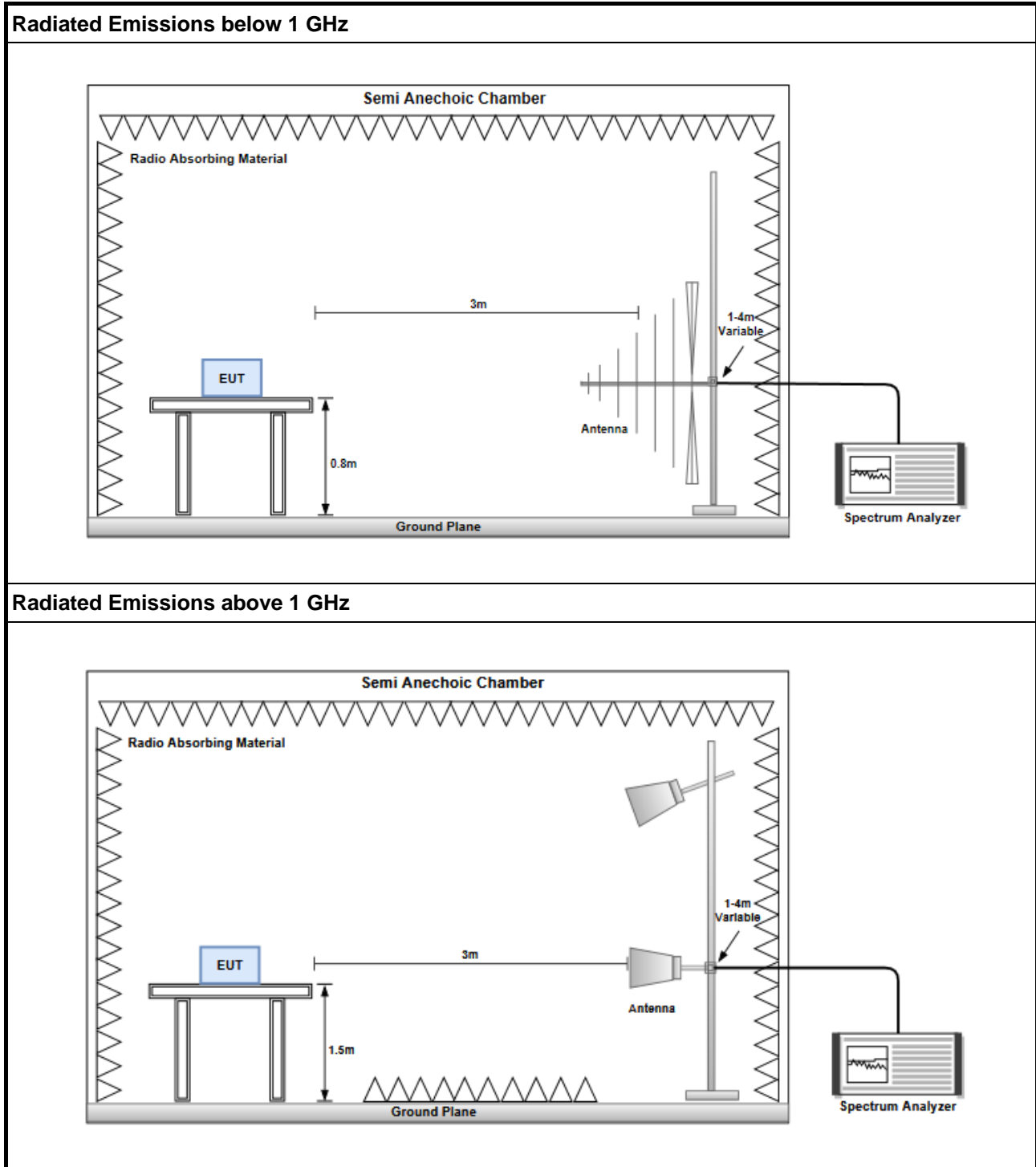
#### 3.4.2 Test Procedures

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



### 3.4.4 Test Results

<b>Ambient Condition</b>	25°C / 67%	<b>Tested By</b>	Paul Lin
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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

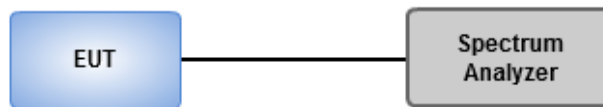
#### Reference level measurement

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

<b>Ambient Condition</b>	26°C / 64%	<b>Tested By</b>	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

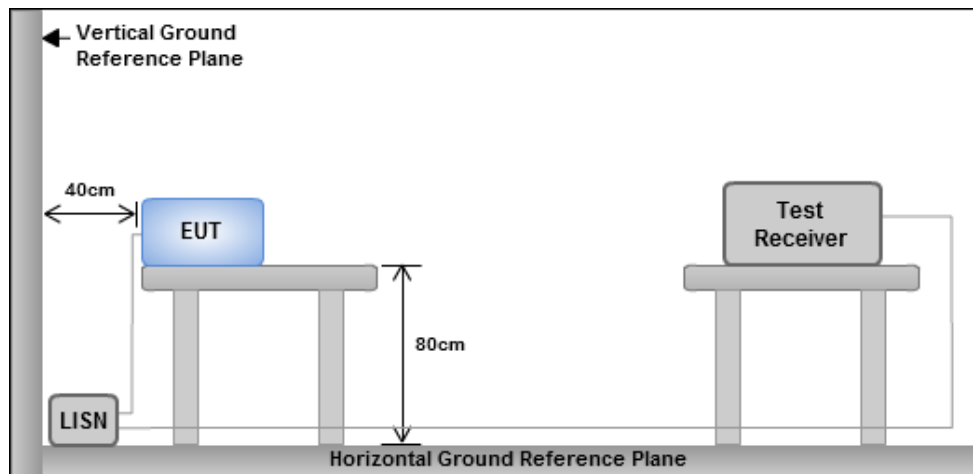
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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  $\Omega$  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](mailto: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(1Mbps)	700k	1.051M	1M05F1D	681.25k	1.043M
BT-LE(2Mbps)	1.143M	2.036M	2M04F1D	1.133M	2.026M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;  
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	700k	1.043M
2440MHz	Pass	500k	681.25k	1.046M
2480MHz	Pass	500k	691.25k	1.051M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.133M	2.026M
2440MHz	Pass	500k	1.143M	2.029M
2480MHz	Pass	500k	1.135M	2.036M

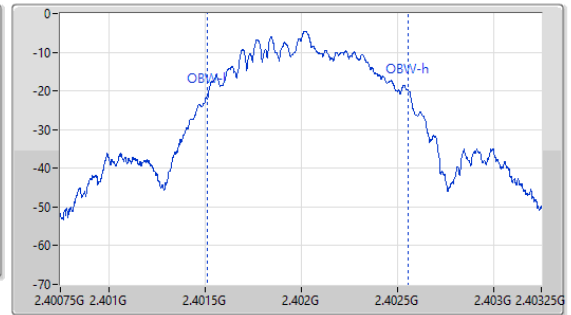
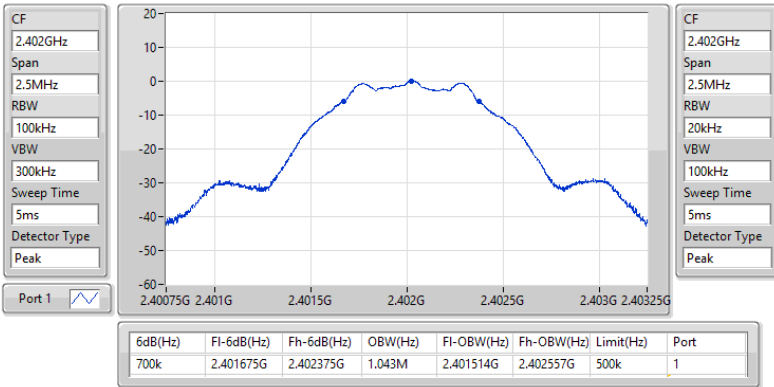
Port X-N dB = Port X 6dB down bandwidth;  
Port X-OBW = Port X 99% occupied bandwidth



2.4-2.4835GHz\_BT-LE(1Mbps)

EBW-DTS

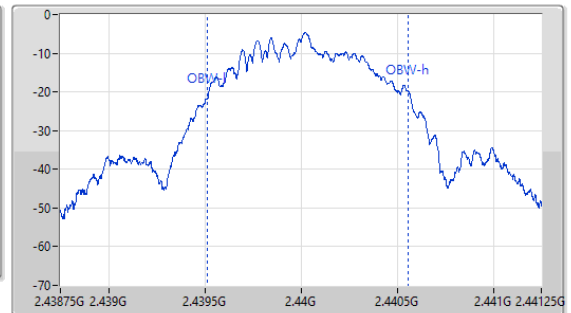
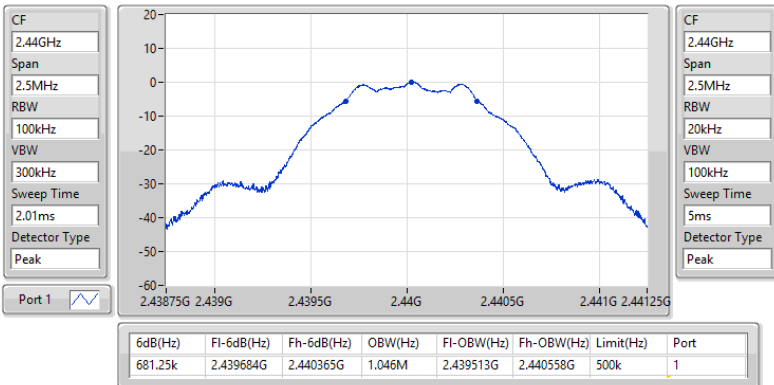
2402MHz



2.4-2.4835GHz\_BT-LE(1Mbps)

EBW-DTS

2440MHz

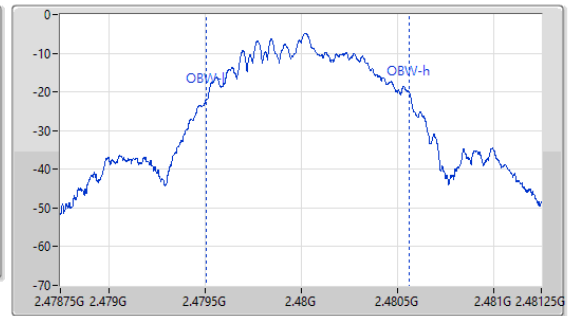
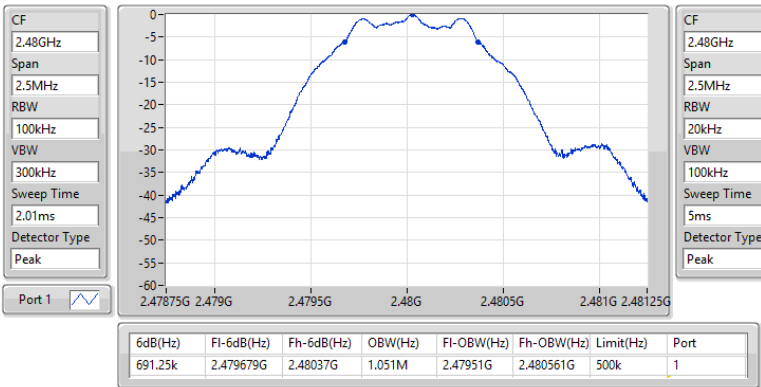




2.4-2.4835GHz\_BT-LE(1Mbps)

EBW-DTS

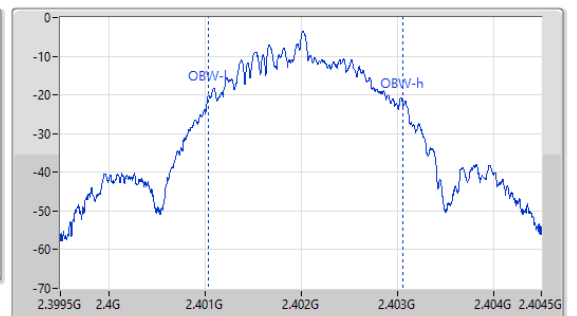
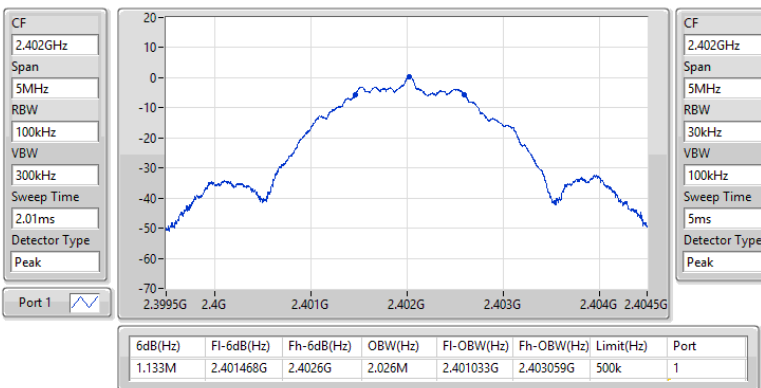
2480MHz



2.4-2.4835GHz\_BT-LE(2Mbps)

EBW-DTS

2402MHz

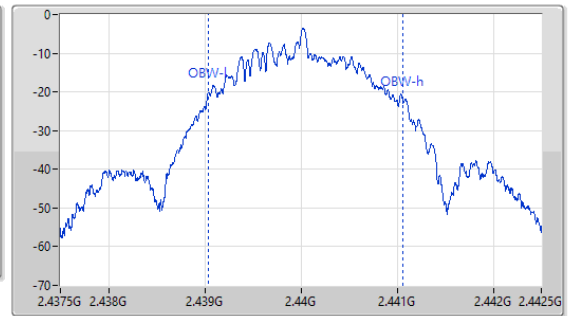
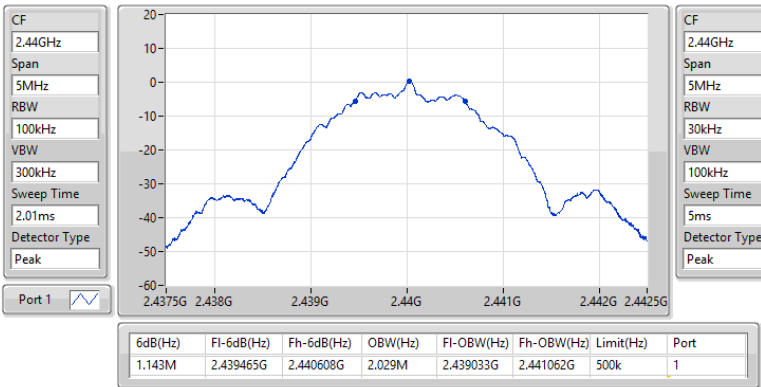




2.4-2.4835GHz\_BT-LE(2Mbps)

EBW-DTS

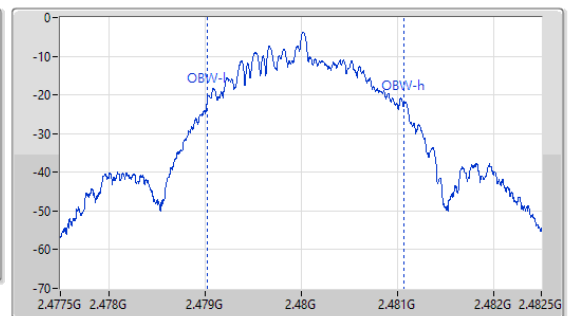
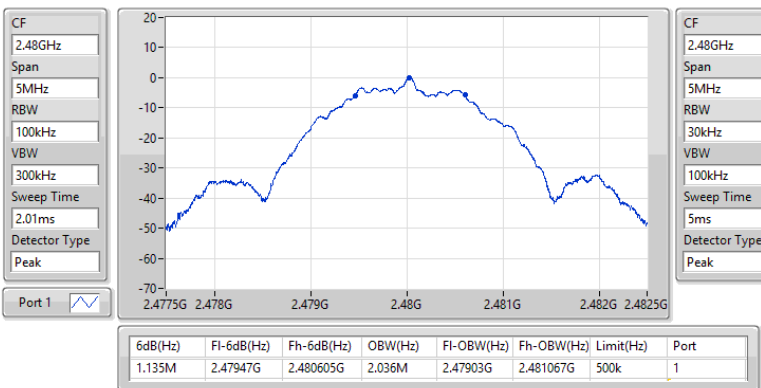
2440MHz



2.4-2.4835GHz\_BT-LE(2Mbps)

EBW-DTS

2480MHz





## Conducted Output Power (Peak)

Appendix B.1

### Summary

Mode	Total Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	0.44	0.00111
BT-LE(2Mbps)	0.42	0.00110

### Result

Mode	Result	Antenna Gain (dBi)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
BT-LE(1Mbps)	-	-	-	-	-	-
2402MHz	Pass	1.11	0.44	30.00	1.55	36.00
2440MHz	Pass	1.11	0.37	30.00	1.48	36.00
2480MHz	Pass	1.11	0.26	30.00	1.37	36.00
BT-LE(2Mbps)	-	-	-	-	-	-
2402MHz	Pass	1.11	0.42	30.00	1.53	36.00
2440MHz	Pass	1.11	0.36	30.00	1.47	36.00
2480MHz	Pass	1.11	0.25	30.00	1.36	36.00



## Conducted Output Power (Average)

## Appendix B.2

### Summary

Mode	Total Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	0.24	0.00106
BT-LE(2Mbps)	0.23	0.00105

### Result

Mode	Result	Antenna Gain (dBi)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
BT-LE(1Mbps)	-	-	-	-	-	-
2402MHz	Pass	1.11	0.24	-	1.35	-
2440MHz	Pass	1.11	0.16	-	1.27	-
2480MHz	Pass	1.11	0.04	-	1.15	-
BT-LE(2Mbps)	-	-	-	-	-	-
2402MHz	Pass	1.11	0.23	-	1.34	-
2440MHz	Pass	1.11	0.15	-	1.26	-
2480MHz	Pass	1.11	0.03	-	1.14	-

Note: Average power is for reference only.



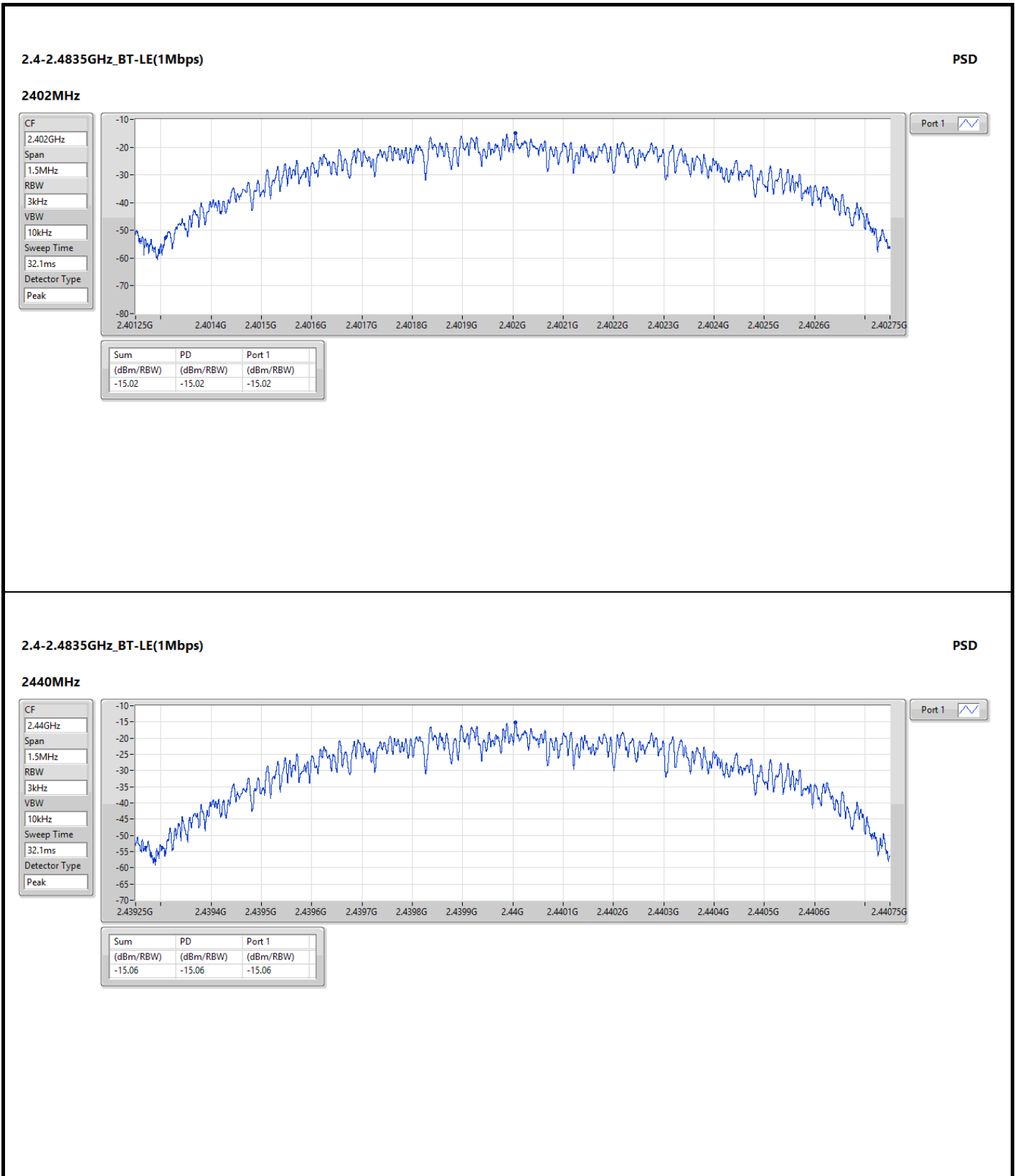


Summary

Mode	PD (dBm/3kHz)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-15.02
BT-LE(2Mbps)	-17.48

Result

Mode	Result	Antenna Gain (dBi)	Power Density (dBm/3kHz)	Power Density Limit (dBm/3kHz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	1.11	-15.02	8.00
2440MHz	Pass	1.11	-15.06	8.00
2480MHz	Pass	1.11	-15.42	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	1.11	-17.85	8.00
2440MHz	Pass	1.11	-17.48	8.00
2480MHz	Pass	1.11	-17.82	8.00



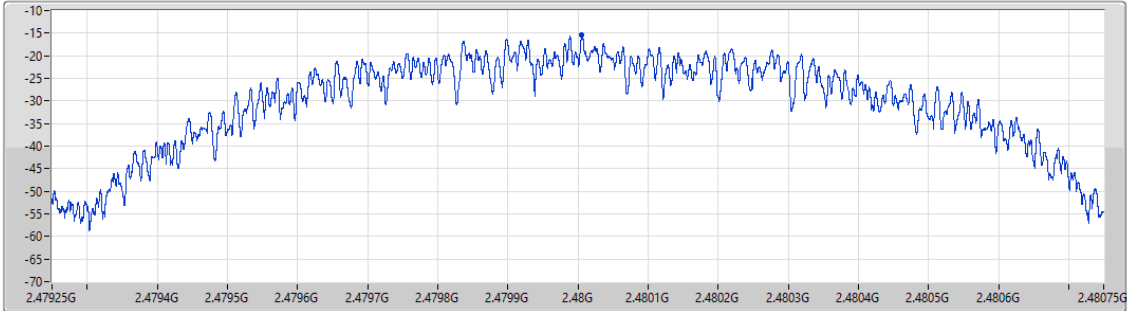


2.4-2.4835GHz\_BT-LE(1Mbps)

PSD

2480MHz

CF  
2.48GHz  
Span  
1.5MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
32.1ms  
Detector Type  
Peak



Port 1

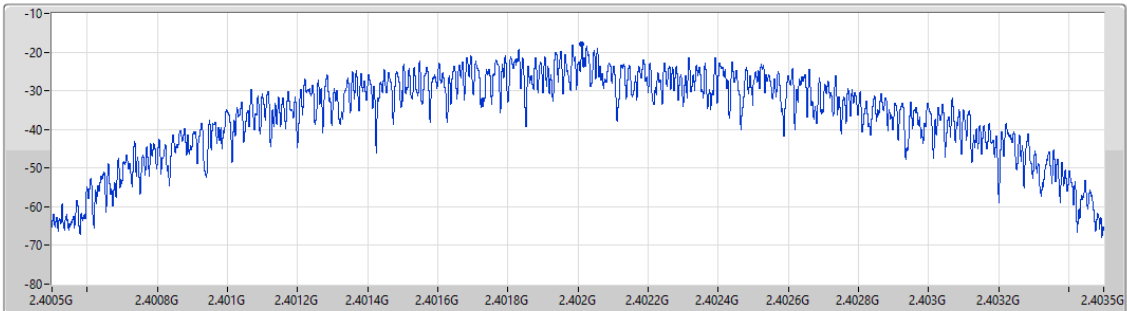
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.42	-15.42	-15.42

2.4-2.4835GHz\_BT-LE(2Mbps)

PSD

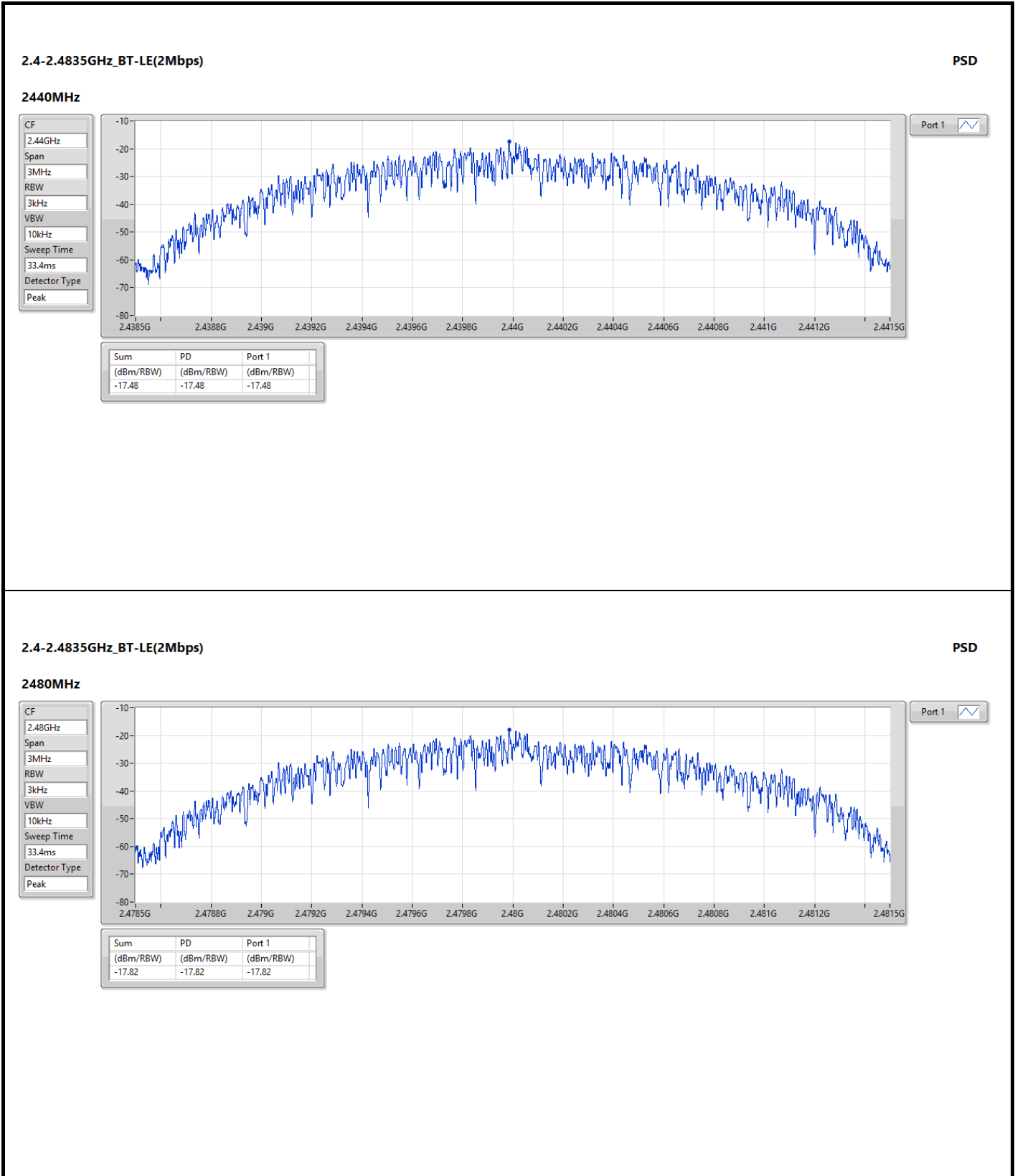
2402MHz

CF  
2.402GHz  
Span  
3MHz  
RBW  
3kHz  
VBW  
10kHz  
Sweep Time  
33.4ms  
Detector Type  
Peak



Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-17.85	-17.85	-17.85



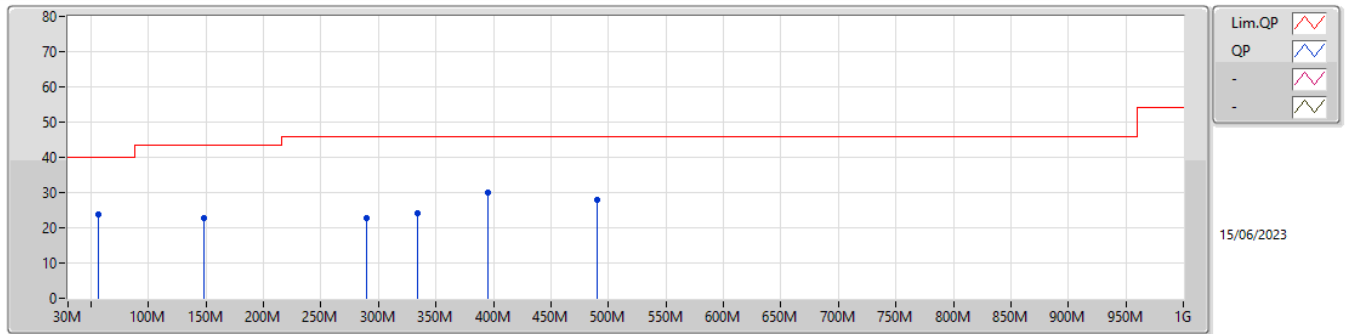


**Summary**

<b>Mode</b>	<b>Result</b>	<b>Type</b>	<b>Freq (Hz)</b>	<b>Level (dBuV/m)</b>	<b>Limit (dBuV/m)</b>	<b>Margin (dB)</b>	<b>Condition</b>
Mode 1	Pass	PK	491.4M	31.10	46.00	-14.90	Horizontal
Mode 2	Pass	QP	330M	42.39	46.00	-3.61	Vertical



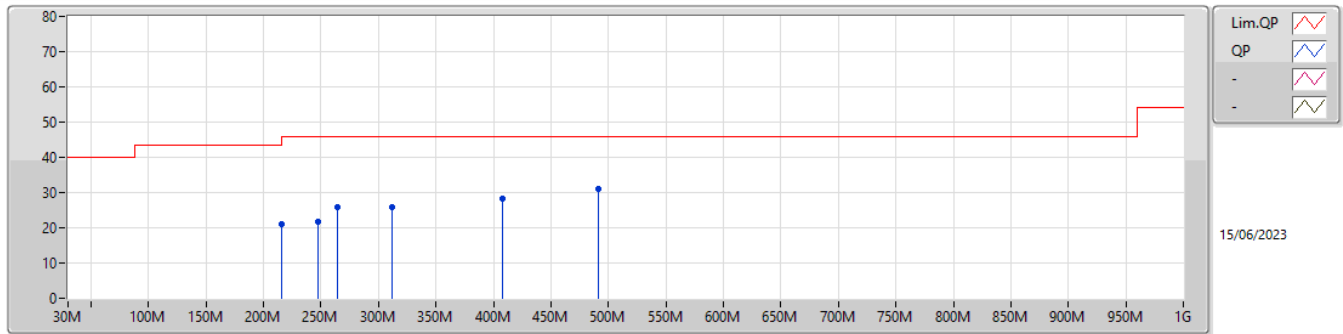
Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	148.5M	22.77	43.50	-20.73	-8.59	3	Vertical	-	-	-	31.36	18.35	1.21	28.15
PK	155.9M	23.68	40.00	-16.32	-8.62	3	Vertical	-	-	-	32.30	18.59	0.73	27.94
PK	290.1M	22.60	46.00	-23.40	-8.11	3	Vertical	-	-	-	30.71	18.20	1.86	28.17
PK	334.4M	24.19	46.00	-21.81	-6.78	3	Vertical	-	-	-	30.97	19.29	2.05	28.12
PK	395M	30.13	46.00	-15.87	-5.08	3	Vertical	-	-	-	35.21	20.60	2.35	28.03
PK	490.7M	28.10	46.00	-17.90	-2.64	3	Vertical	-	-	-	30.74	22.50	2.77	27.91



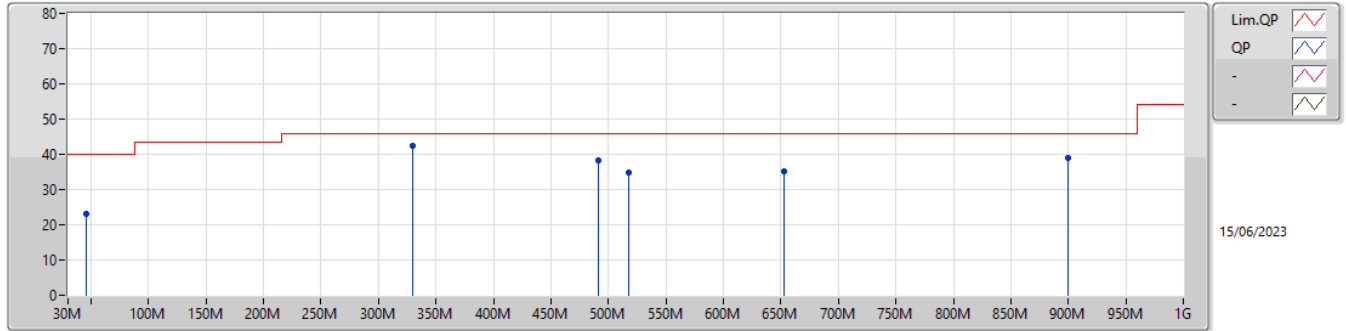
Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	491.4M	31.10	46.00	-14.90	-2.63	3	Horizontal	-	-	-	33.73	22.50	2.78	27.91
PK	408M	28.18	46.00	-17.82	-4.74	3	Horizontal	-	-	-	32.92	20.86	2.41	28.01
PK	312M	25.98	46.00	-20.02	-7.41	3	Horizontal	-	-	-	33.39	18.78	1.96	28.15
PK	264M	25.98	46.00	-20.02	-9.00	3	Horizontal	-	-	-	34.98	17.44	1.74	28.18
PK	216M	21.06	43.50	-22.44	-11.71	3	Horizontal	-	-	-	32.77	14.98	1.51	28.20
PK	247.6M	21.63	46.00	-24.37	-9.68	3	Horizontal	-	-	-	31.31	16.85	1.66	28.19



Mode 2

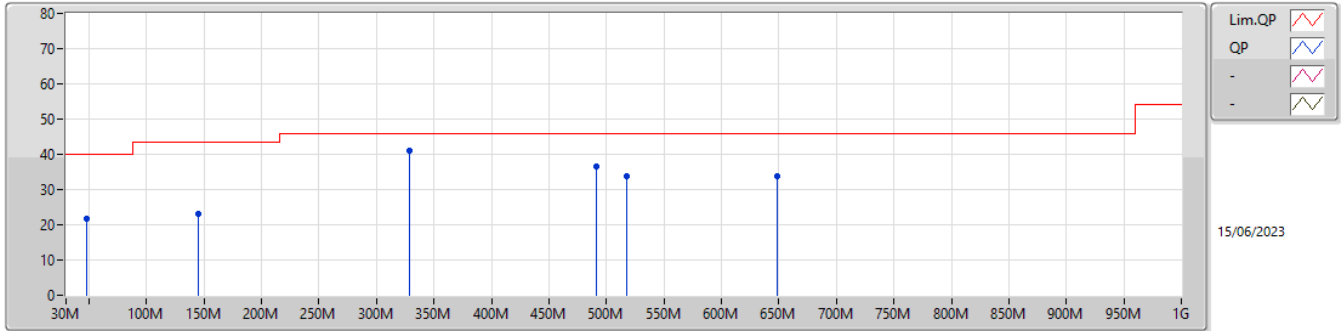


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
QP	330M	42.39	46.00	-3.61	-6.89	3	Vertical	160	1.25	-	49.28	19.20	2.03	28.12
PK	491.3M	38.36	46.00	-7.64	-2.63	3	Vertical	-	-	-	40.99	22.50	2.78	27.91
PK	517.7M	34.98	46.00	-11.02	-1.93	3	Vertical	-	-	-	36.91	23.05	2.91	27.89
PK	652.5M	35.01	46.00	-10.99	1.03	3	Vertical	-	-	-	33.98	25.30	3.52	27.79
PK	900.2M	39.12	46.00	-6.88	5.63	3	Vertical	-	-	-	33.49	28.10	4.60	27.07
PK	45.9M	23.09	40.00	-16.91	-8.44	3	Vertical	-	-	-	31.53	18.79	0.69	27.92





Mode 2



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
QP	328.5M	40.91	46.00	-5.09	-6.94	3	Horizontal	143	1.00	-	47.85	19.17	2.02	28.13
PK	491.1M	36.58	46.00	-9.42	-2.63	3	Horizontal	-	-	-	39.21	22.50	2.78	27.91
PK	517.7M	33.85	46.00	-12.15	-1.93	3	Horizontal	-	-	-	35.78	23.05	2.91	27.89
PK	144.9M	23.21	43.50	-20.29	-8.93	3	Horizontal	-	-	-	32.14	18.02	1.19	28.14
PK	47.9M	21.64	40.00	-18.36	-8.33	3	Horizontal	-	-	-	29.97	18.88	0.70	27.91
PK	649M	33.78	46.00	-12.22	1.01	3	Horizontal	-	-	-	32.77	25.30	3.51	27.80



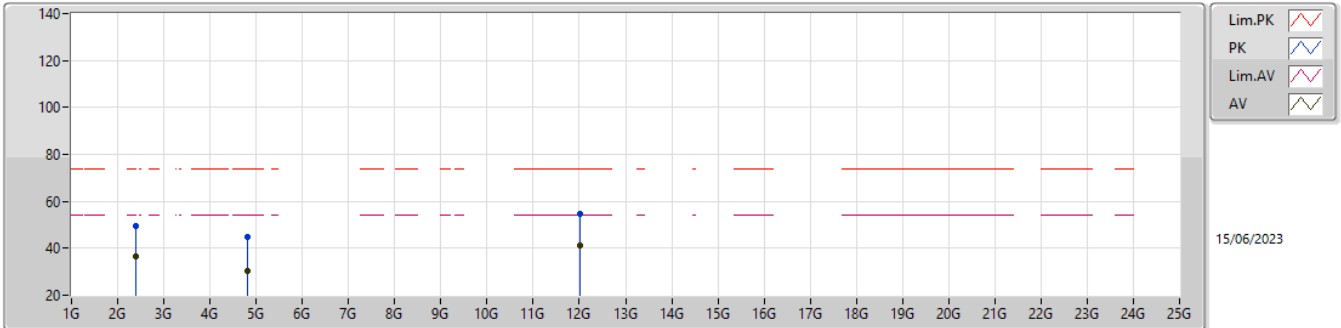
**Summary**

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	12.01G	41.28	54.00	-12.72	3	Horizontal	122	1.00	-
BT-LE(2Mbps)	Pass	AV	12.01G	41.22	54.00	-12.78	3	Horizontal	118	1.00	-



2.4-2.4835GHz\_BT-LE(1Mbps)

2402MHz\_TX

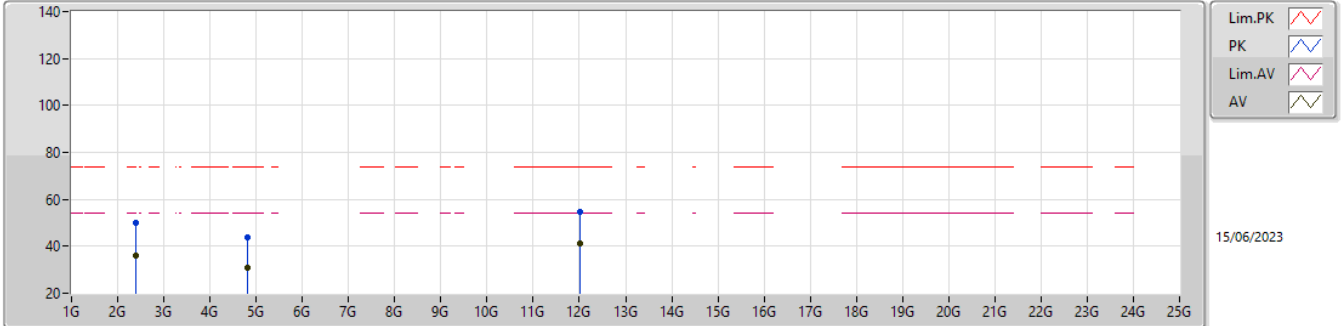


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	49.58	74.00	-24.42	53.37	3	Vertical	82	2.38	-	27.96	4.78	36.53
AV	2.39G	36.48	54.00	-17.52	40.27	3	Vertical	82	2.38	-	27.96	4.78	36.53
PK	4.804G	44.71	74.00	-29.29	44.68	3	Vertical	68	1.00	-	31.52	6.83	38.32
AV	4.804G	30.60	54.00	-23.40	30.57	3	Vertical	68	1.00	-	31.52	6.83	38.32
PK	12.01G	54.72	74.00	-19.28	46.96	3	Vertical	141	1.00	-	39.41	10.65	42.30
AV	12.01G	41.12	54.00	-12.88	33.36	3	Vertical	141	1.00	-	39.41	10.65	42.30



2.4-2.4835GHz\_BT-LE(1Mbps)

2402MHz\_TX

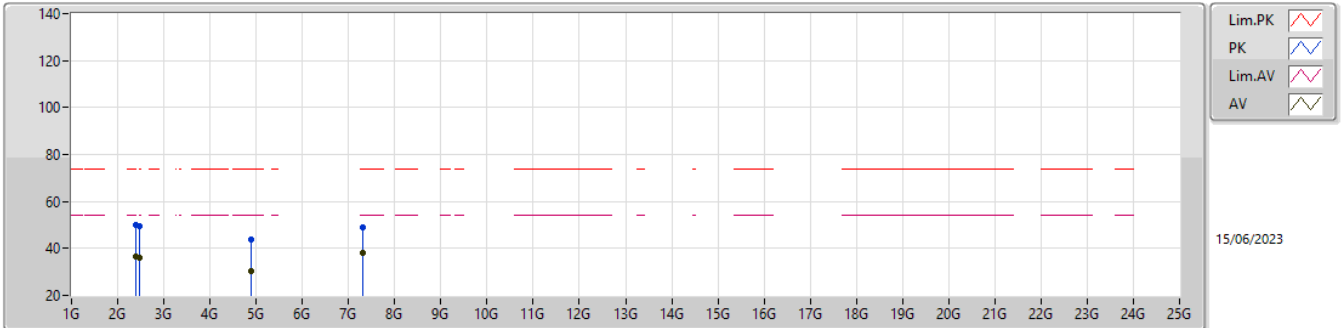


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	49.98	74.00	-24.02	53.77	3	Horizontal	19	2.66	-	27.96	4.78	36.53
AV	2.39G	36.27	54.00	-17.73	40.06	3	Horizontal	19	2.66	-	27.96	4.78	36.53
PK	4.804G	43.98	74.00	-30.02	43.95	3	Horizontal	156	1.00	-	31.52	6.83	38.32
AV	4.804G	30.72	54.00	-23.28	30.69	3	Horizontal	156	1.00	-	31.52	6.83	38.32
PK	12.01G	54.82	74.00	-19.18	47.06	3	Horizontal	122	1.00	-	39.41	10.65	42.30
AV	12.01G	41.28	54.00	-12.72	33.52	3	Horizontal	122	1.00	-	39.41	10.65	42.30



2.4-2.4835GHz\_BT-LE(1Mbps)

2440MHz\_TX

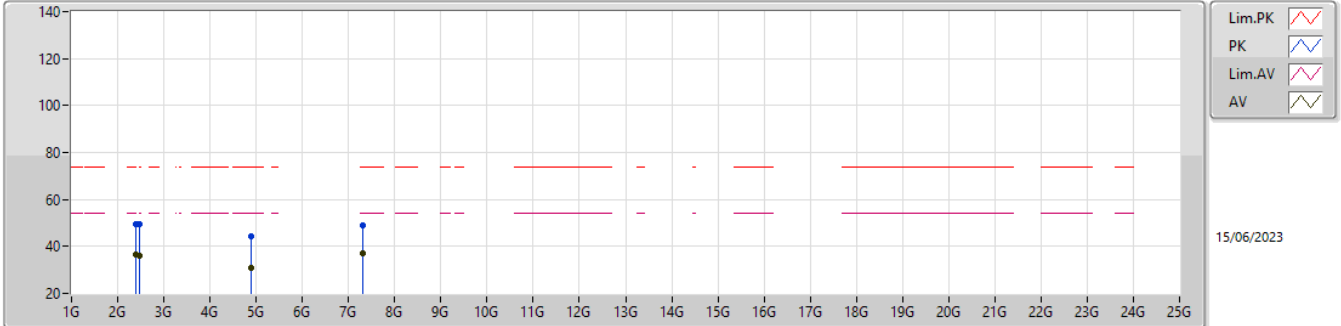


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	49.89	74.00	-24.11	53.68	3	Vertical	74	2.37	-	27.96	4.78	36.53
AV	2.39G	36.36	54.00	-17.64	40.15	3	Vertical	74	2.37	-	27.96	4.78	36.53
PK	2.4835G	49.56	74.00	-24.44	53.65	3	Vertical	74	2.37	-	27.73	4.80	36.62
AV	2.4835G	36.13	54.00	-17.87	40.22	3	Vertical	74	2.37	-	27.73	4.80	36.62
PK	4.88G	43.71	74.00	-30.29	43.61	3	Vertical	35	1.00	-	31.58	6.89	38.37
AV	4.88G	30.59	54.00	-23.41	30.49	3	Vertical	35	1.00	-	31.58	6.89	38.37
PK	7.32G	48.80	74.00	-25.20	42.89	3	Vertical	210	2.15	-	36.66	8.59	39.34
AV	7.32G	38.22	54.00	-15.78	32.31	3	Vertical	210	2.15	-	36.66	8.59	39.34



2.4-2.4835GHz\_BT-LE(1Mbps)

2440MHz\_TX

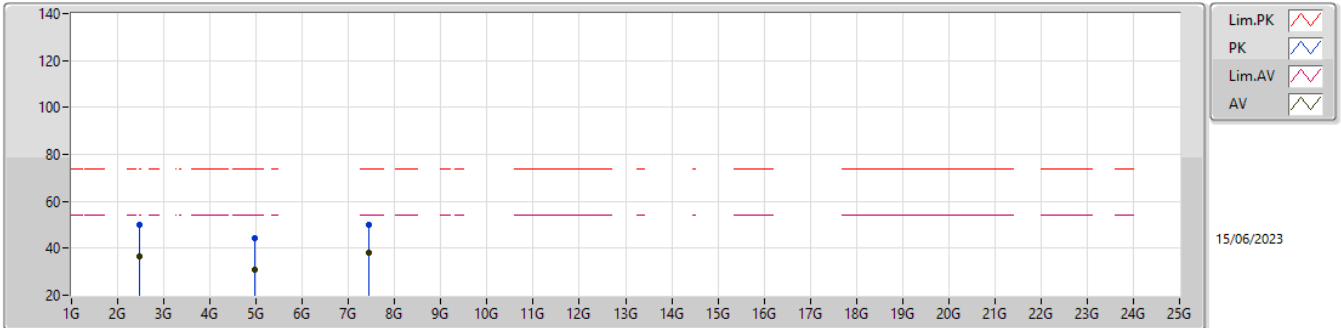


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	49.70	74.00	-24.30	53.49	3	Horizontal	22	2.16	-	27.96	4.78	36.53
AV	2.39G	36.47	54.00	-17.53	40.26	3	Horizontal	22	2.16	-	27.96	4.78	36.53
PK	2.4835G	49.62	74.00	-24.38	53.71	3	Horizontal	22	2.16	-	27.73	4.80	36.62
AV	2.4835G	36.27	54.00	-17.73	40.36	3	Horizontal	22	2.16	-	27.73	4.80	36.62
PK	4.88G	44.37	74.00	-29.63	44.27	3	Horizontal	94	1.00	-	31.58	6.89	38.37
AV	4.88G	30.66	54.00	-23.34	30.56	3	Horizontal	94	1.00	-	31.58	6.89	38.37
PK	7.32G	48.79	74.00	-25.21	42.88	3	Horizontal	193	2.61	-	36.66	8.59	39.34
AV	7.32G	37.11	54.00	-16.89	31.20	3	Horizontal	193	2.61	-	36.66	8.59	39.34



2.4-2.4835GHz\_BT-LE(1Mbps)

2480MHz\_TX

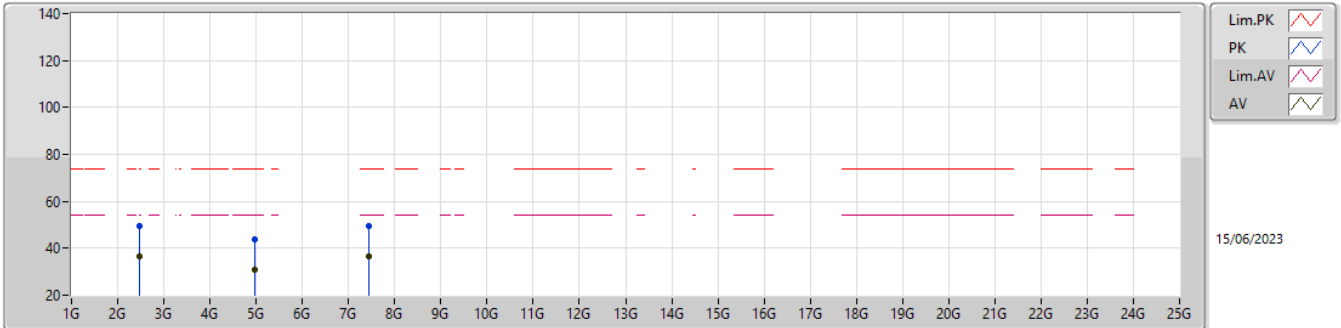


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4835G	49.86	74.00	-24.14	53.95	3	Vertical	82	2.64	-	27.73	4.80	36.62
AV	2.4835G	36.50	54.00	-17.50	40.59	3	Vertical	82	2.64	-	27.73	4.80	36.62
PK	4.96G	44.56	74.00	-29.44	44.38	3	Vertical	171	1.00	-	31.64	6.96	38.42
AV	4.96G	30.73	54.00	-23.27	30.55	3	Vertical	171	1.00	-	31.64	6.96	38.42
PK	7.44G	50.02	74.00	-23.98	44.06	3	Vertical	193	1.00	-	36.78	8.64	39.46
AV	7.44G	38.13	54.00	-15.87	32.17	3	Vertical	193	1.00	-	36.78	8.64	39.46



2.4-2.4835GHz\_BT-LE(1Mbps)

2480MHz\_TX



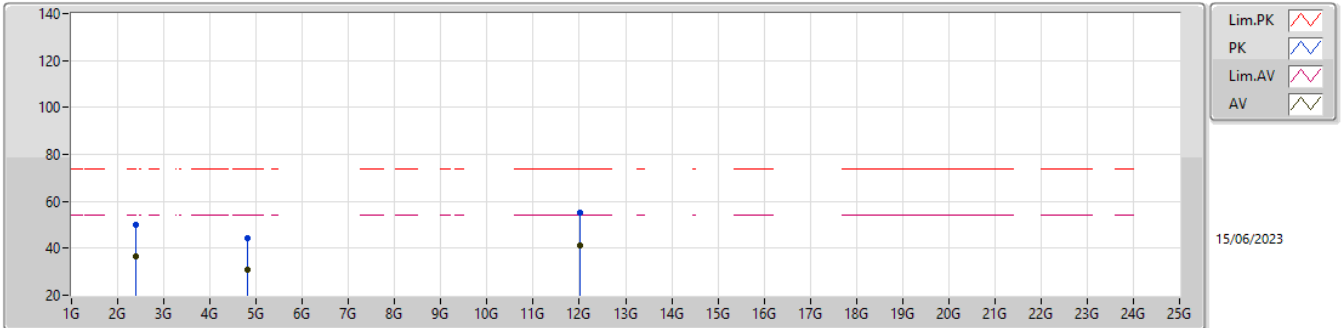
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4835G	49.23	74.00	-24.77	53.32	3	Horizontal	23	2.38	-	27.73	4.80	36.62
AV	2.4835G	36.47	54.00	-17.53	40.56	3	Horizontal	23	2.38	-	27.73	4.80	36.62
PK	4.96G	43.87	74.00	-30.13	43.69	3	Horizontal	106	1.00	-	31.64	6.96	38.42
AV	4.96G	30.85	54.00	-23.15	30.67	3	Horizontal	106	1.00	-	31.64	6.96	38.42
PK	7.44G	49.43	74.00	-24.57	43.47	3	Horizontal	182	1.00	-	36.78	8.64	39.46
AV	7.44G	36.40	54.00	-17.60	30.44	3	Horizontal	182	1.00	-	36.78	8.64	39.46





2.4-2.4835GHz\_BT-LE(2Mbps)

2402MHz\_TX

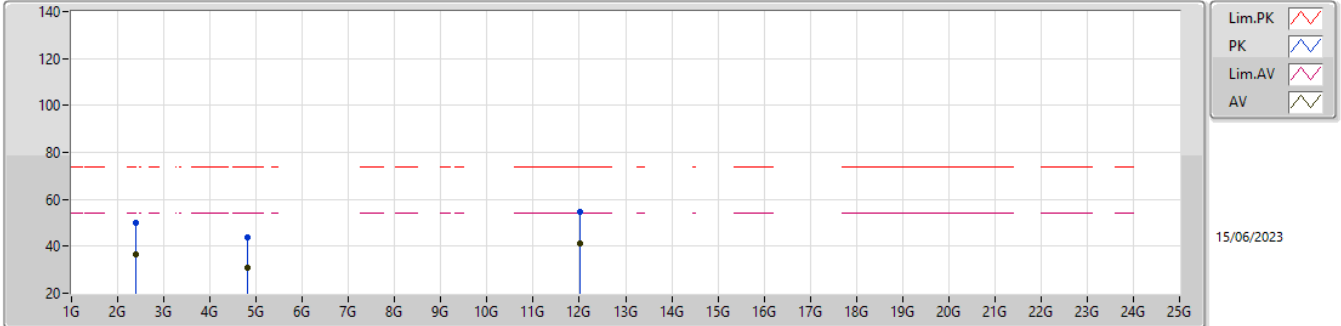


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	49.77	74.00	-24.23	53.56	3	Vertical	87	2.44	-	27.96	4.78	36.53
AV	2.39G	36.57	54.00	-17.43	40.36	3	Vertical	87	2.44	-	27.96	4.78	36.53
PK	4.804G	44.54	74.00	-29.46	44.51	3	Vertical	75	1.00	-	31.52	6.83	38.32
AV	4.804G	30.64	54.00	-23.36	30.61	3	Vertical	75	1.00	-	31.52	6.83	38.32
PK	12.01G	54.93	74.00	-19.07	47.17	3	Vertical	152	1.00	-	39.41	10.65	42.30
AV	12.01G	41.21	54.00	-12.79	33.45	3	Vertical	152	1.00	-	39.41	10.65	42.30



2.4-2.4835GHz\_BT-LE(2Mbps)

2402MHz\_TX

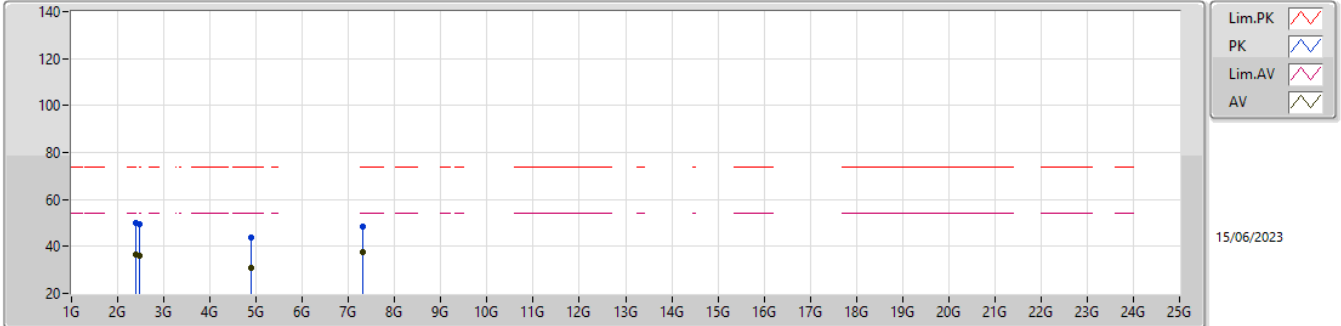


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	49.80	74.00	-24.20	53.59	3	Horizontal	21	2.23	-	27.96	4.78	36.53
AV	2.39G	36.34	54.00	-17.66	40.13	3	Horizontal	21	2.23	-	27.96	4.78	36.53
PK	4.804G	43.78	74.00	-30.22	43.75	3	Horizontal	171	1.00	-	31.52	6.83	38.32
AV	4.804G	30.61	54.00	-23.39	30.58	3	Horizontal	171	1.00	-	31.52	6.83	38.32
PK	12.01G	54.90	74.00	-19.10	47.14	3	Horizontal	118	1.00	-	39.41	10.65	42.30
AV	12.01G	41.22	54.00	-12.78	33.46	3	Horizontal	118	1.00	-	39.41	10.65	42.30



2.4-2.4835GHz\_BT-LE(2Mbps)

2440MHz\_TX

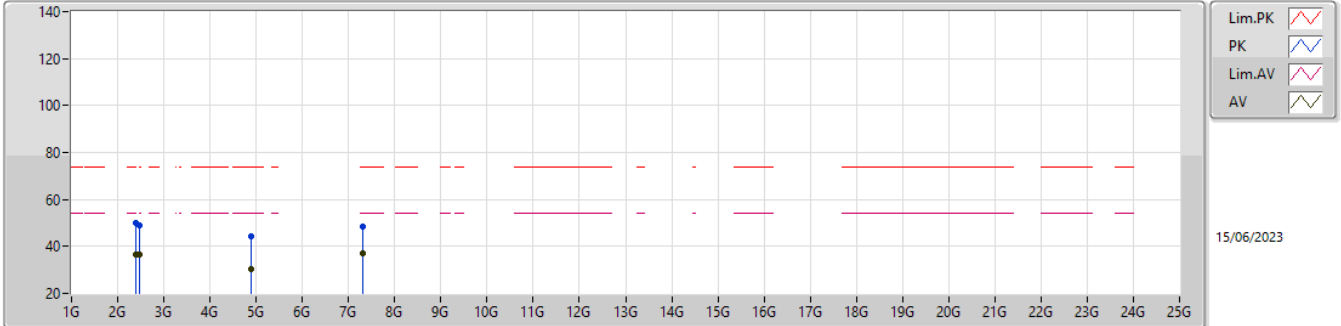


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	49.77	74.00	-24.23	53.56	3	Vertical	83	2.36	-	27.96	4.78	36.53
AV	2.39G	36.43	54.00	-17.57	40.22	3	Vertical	83	2.36	-	27.96	4.78	36.53
PK	2.4835G	49.49	74.00	-24.51	53.58	3	Vertical	83	2.36	-	27.73	4.80	36.62
AV	2.4835G	36.26	54.00	-17.74	40.35	3	Vertical	83	2.36	-	27.73	4.80	36.62
PK	4.88G	43.85	74.00	-30.15	43.75	3	Vertical	42	1.00	-	31.58	6.89	38.37
AV	4.88G	30.68	54.00	-23.32	30.58	3	Vertical	42	1.00	-	31.58	6.89	38.37
PK	7.32G	48.47	74.00	-25.53	42.56	3	Vertical	197	1.00	-	36.66	8.59	39.34
AV	7.32G	37.74	54.00	-16.26	31.83	3	Vertical	197	1.00	-	36.66	8.59	39.34



2.4-2.4835GHz\_BT-LE(2Mbps)

2440MHz\_TX

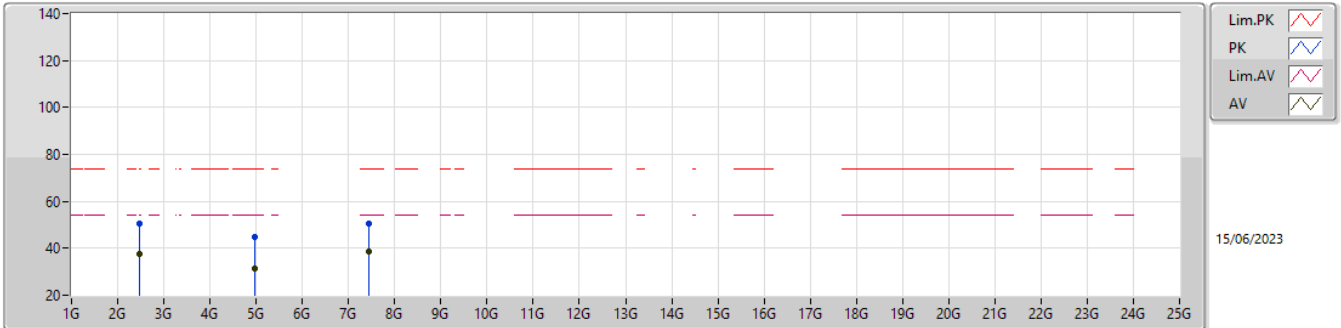


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	49.93	74.00	-24.07	53.72	3	Horizontal	25	2.20	-	27.96	4.78	36.53
AV	2.39G	36.52	54.00	-17.48	40.31	3	Horizontal	25	2.20	-	27.96	4.78	36.53
PK	2.4835G	49.18	74.00	-24.82	53.27	3	Horizontal	25	2.20	-	27.73	4.80	36.62
AV	2.4835G	36.32	54.00	-17.68	40.41	3	Horizontal	25	2.20	-	27.73	4.80	36.62
PK	4.88G	44.22	74.00	-29.78	44.12	3	Horizontal	102	1.00	-	31.58	6.89	38.37
AV	4.88G	30.59	54.00	-23.41	30.49	3	Horizontal	102	1.00	-	31.58	6.89	38.37
PK	7.32G	48.50	74.00	-25.50	42.59	3	Horizontal	197	1.00	-	36.66	8.59	39.34
AV	7.32G	36.93	54.00	-17.07	31.02	3	Horizontal	197	1.00	-	36.66	8.59	39.34



2.4-2.4835GHz\_BT-LE(2Mbps)

2480MHz\_TX

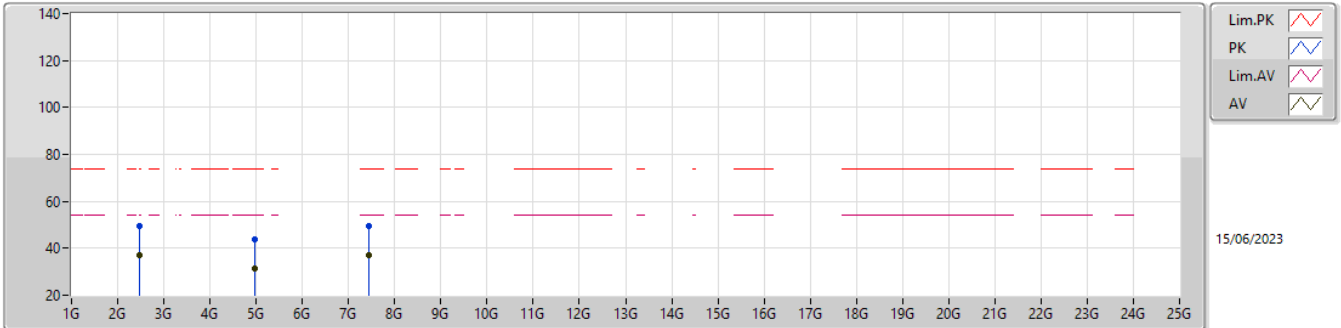


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4835G	50.29	74.00	-23.71	54.38	3	Vertical	81	2.56	-	27.73	4.80	36.62
AV	2.4835G	37.47	54.00	-16.53	41.56	3	Vertical	81	2.56	-	27.73	4.80	36.62
PK	4.96G	45.03	74.00	-28.97	44.85	3	Vertical	189	1.00	-	31.64	6.96	38.42
AV	4.96G	31.44	54.00	-22.56	31.26	3	Vertical	189	1.00	-	31.64	6.96	38.42
PK	7.44G	50.43	74.00	-23.57	44.47	3	Vertical	127	1.00	-	36.78	8.64	39.46
AV	7.44G	38.60	54.00	-15.40	32.64	3	Vertical	127	1.00	-	36.78	8.64	39.46

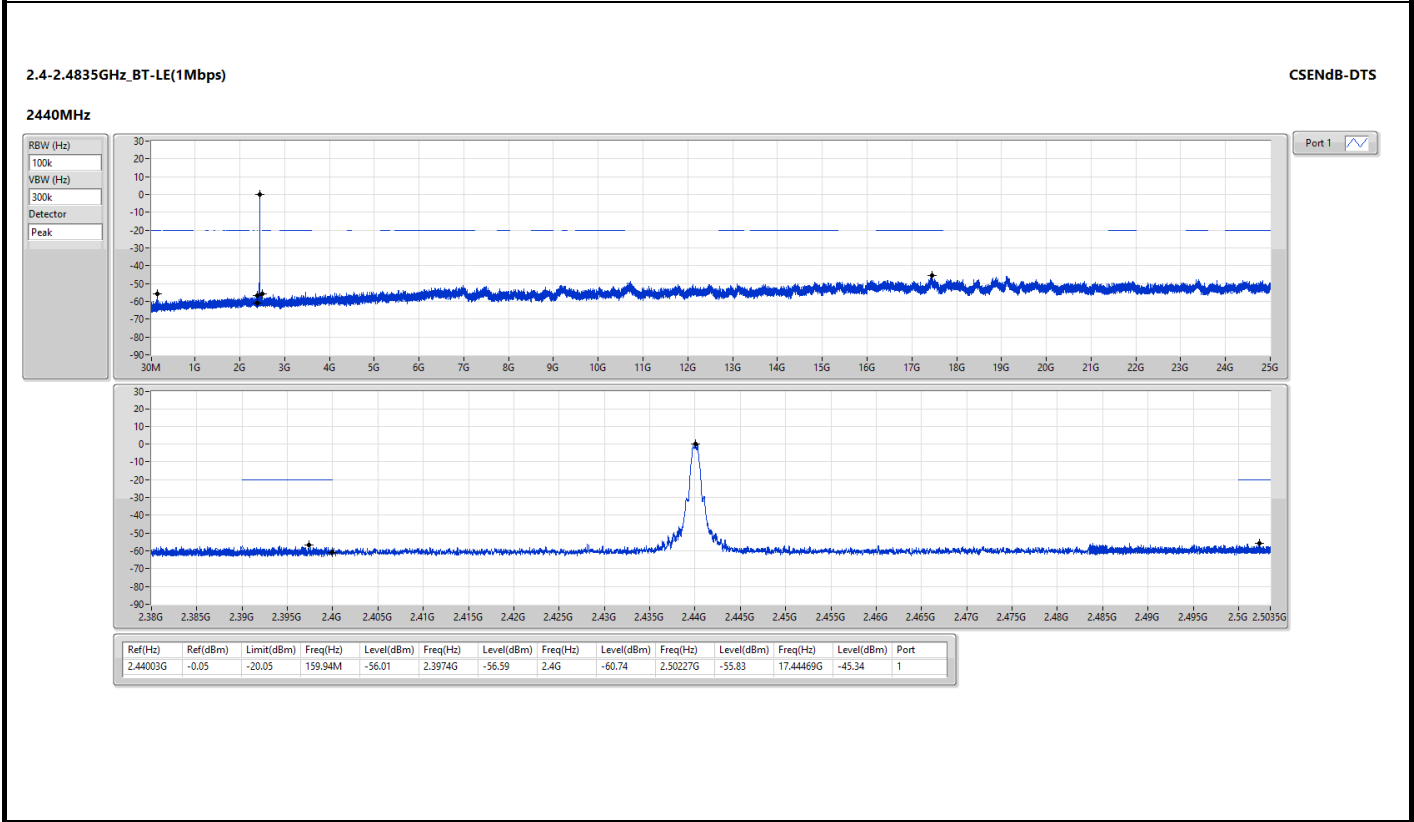
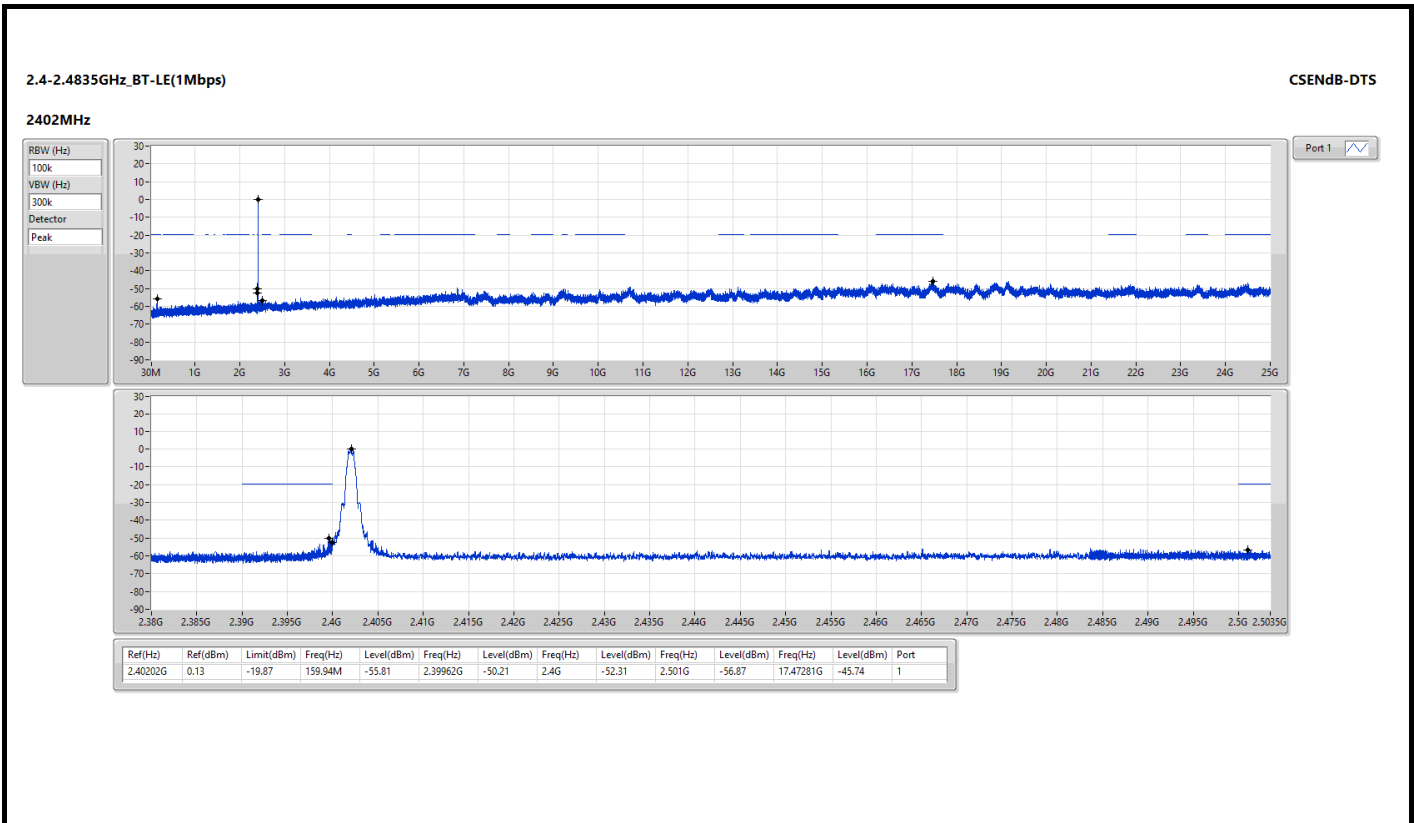


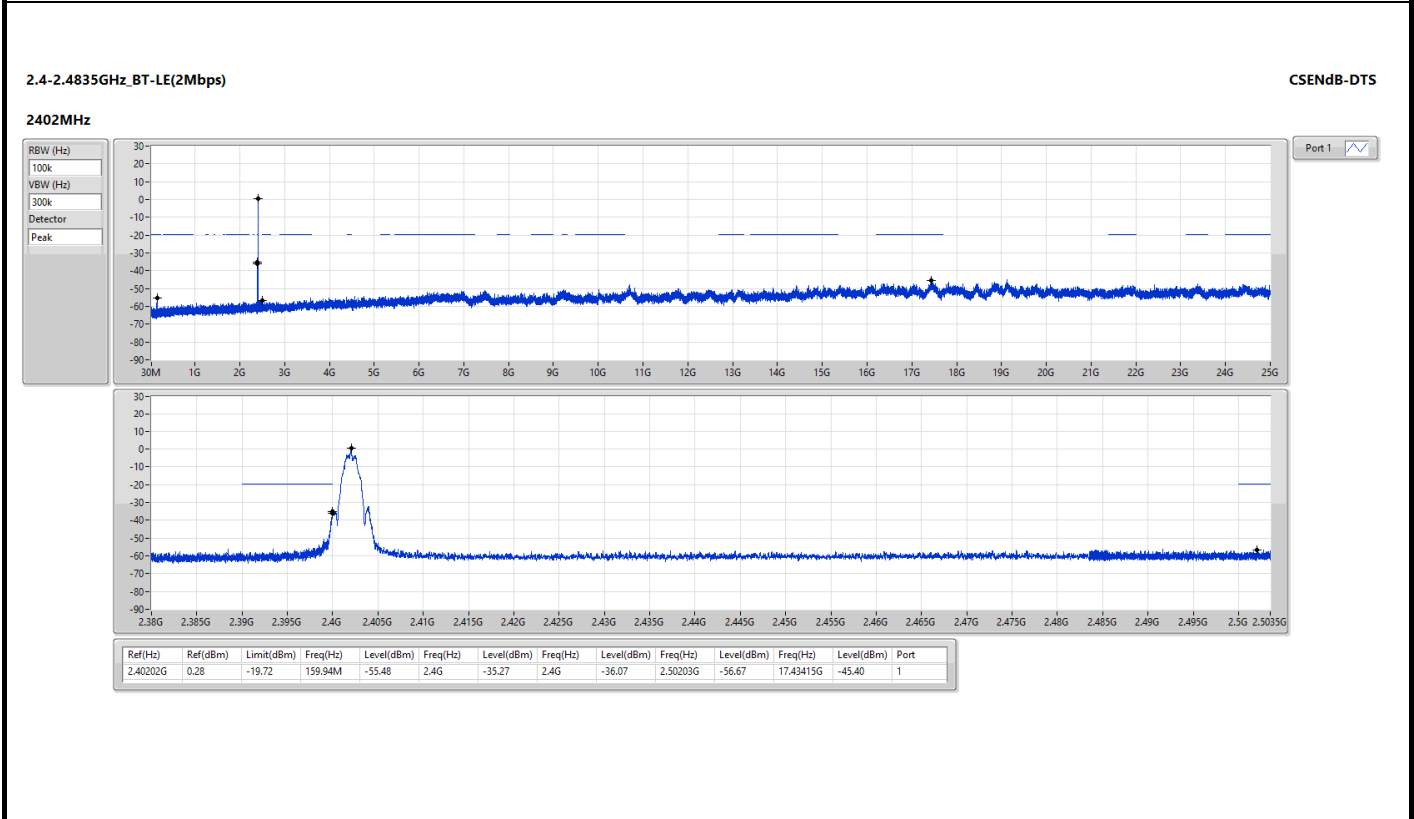
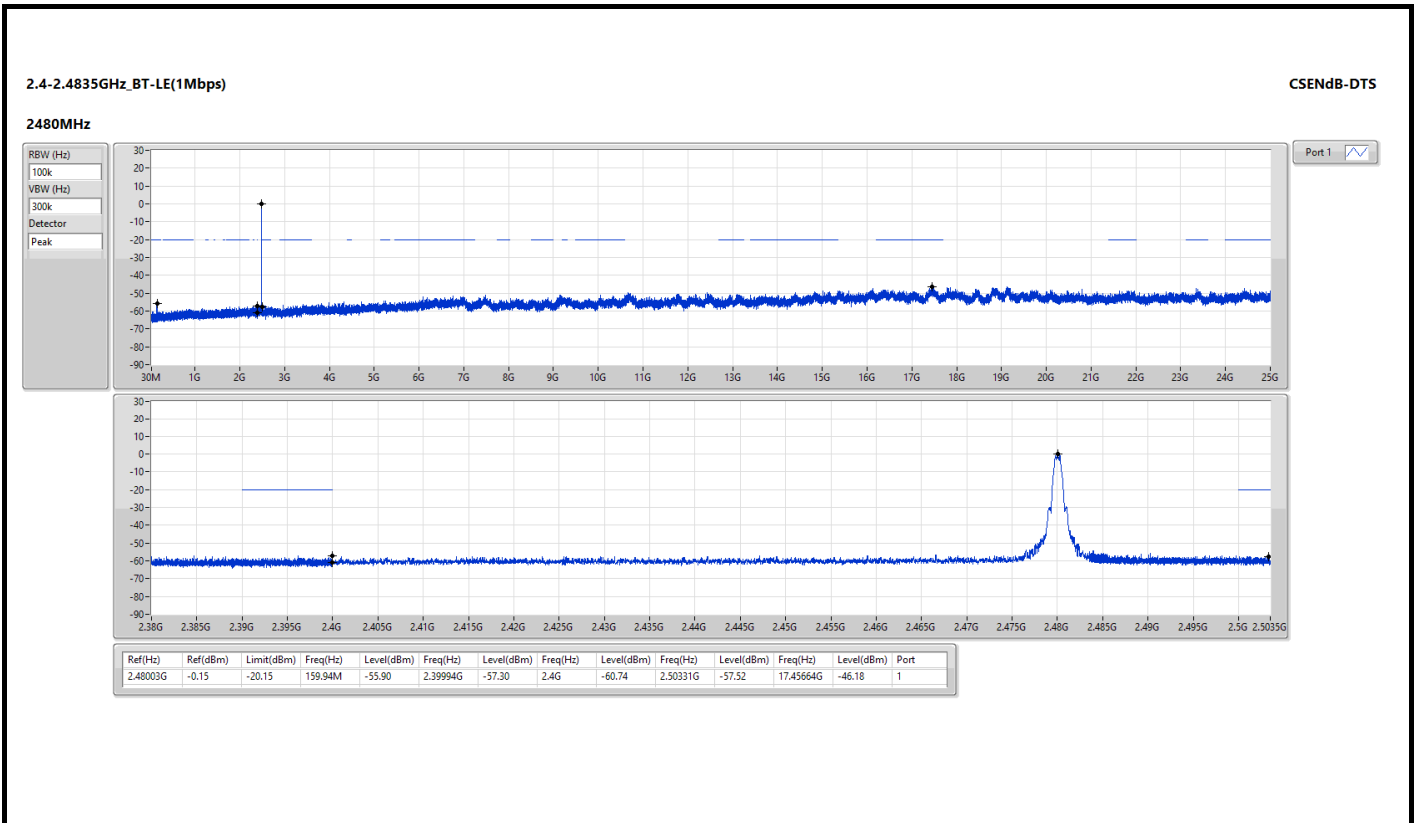
2.4-2.4835GHz\_BT-LE(2Mbps)

2480MHz\_TX

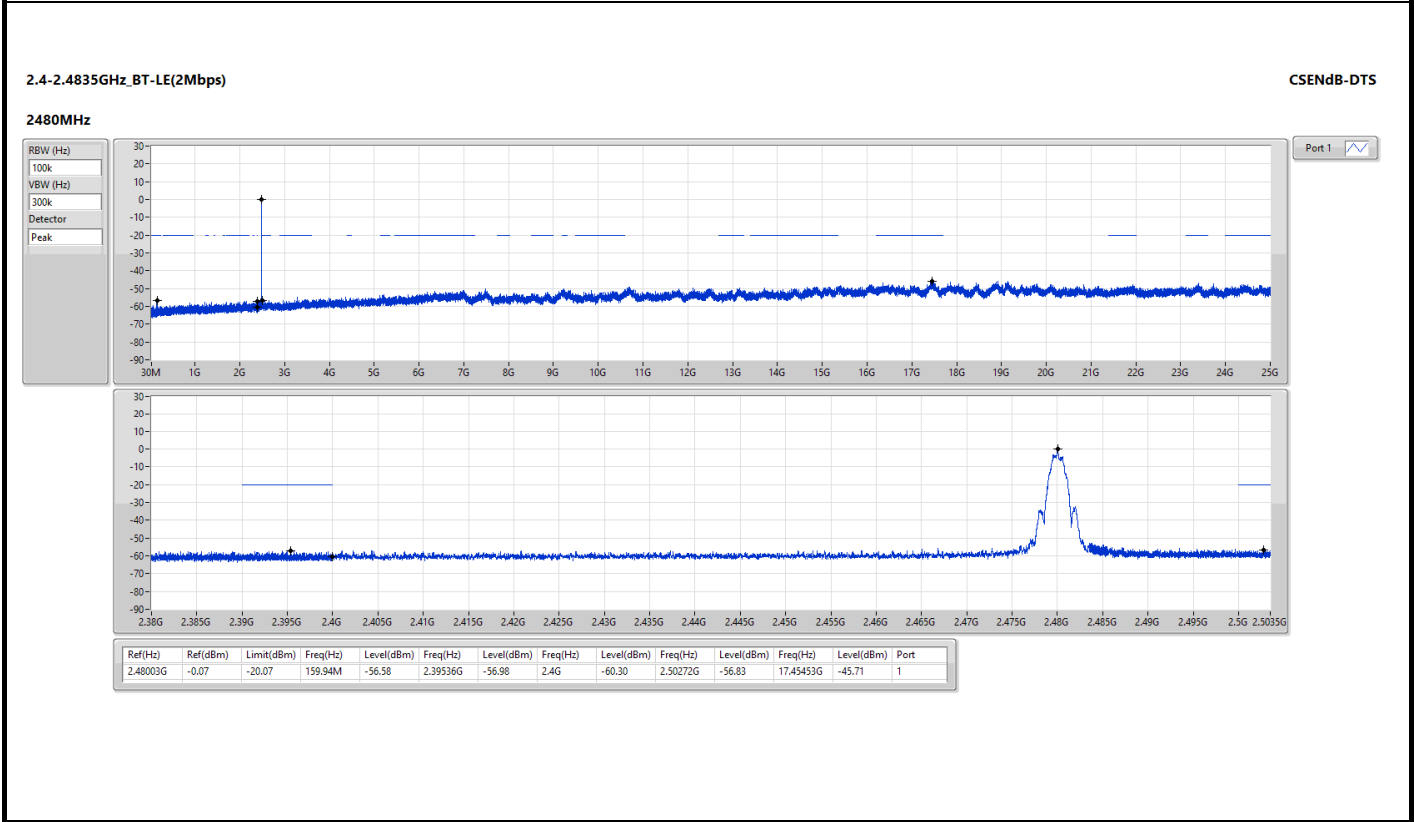
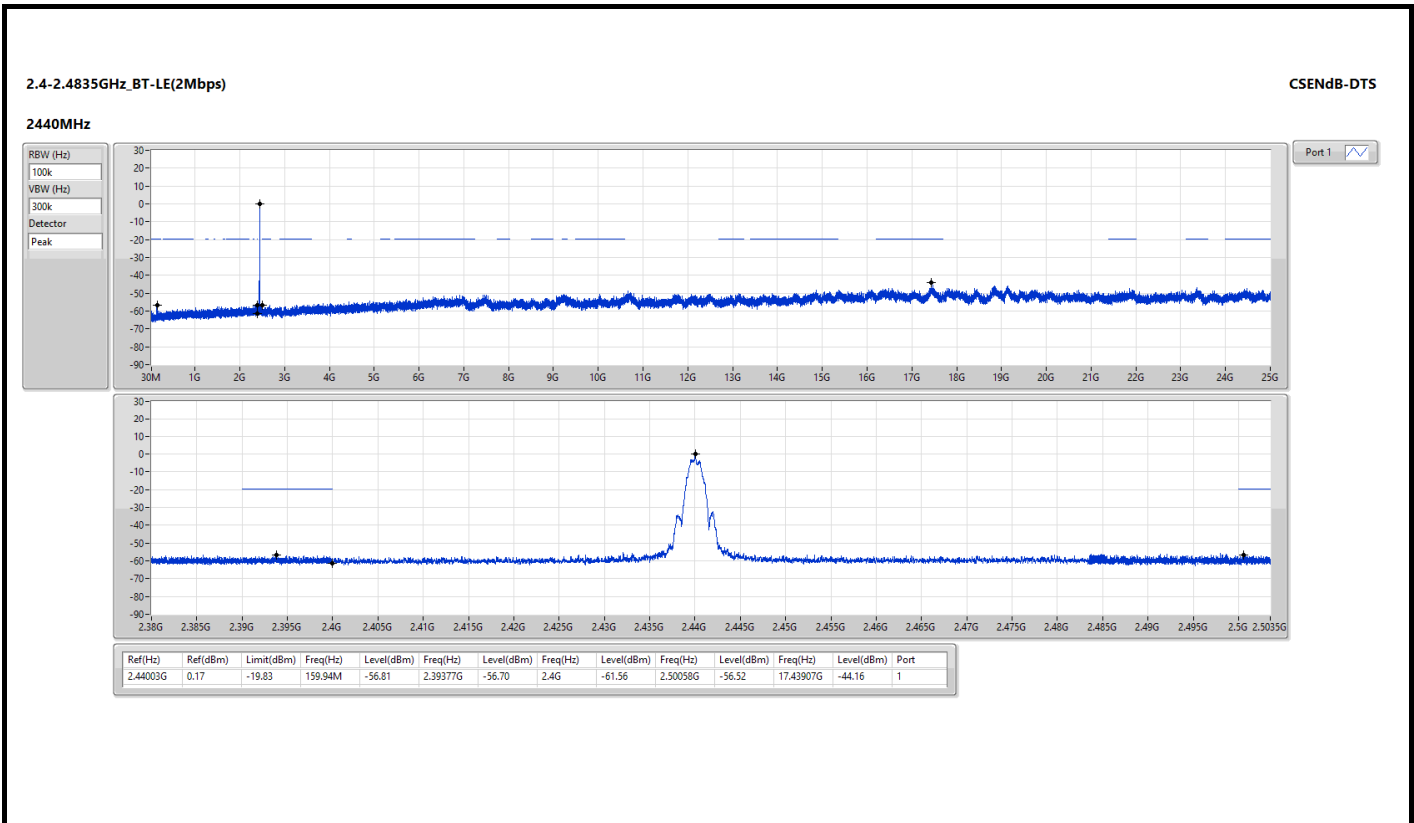


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4835G	49.57	74.00	-24.43	53.66	3	Horizontal	22	2.37	-	27.73	4.80	36.62
AV	2.4835G	37.18	54.00	-16.82	41.27	3	Horizontal	22	2.37	-	27.73	4.80	36.62
PK	4.96G	43.71	74.00	-30.29	43.53	3	Horizontal	112	1.00	-	31.64	6.96	38.42
AV	4.96G	31.33	54.00	-22.67	31.15	3	Horizontal	112	1.00	-	31.64	6.96	38.42
PK	7.44G	49.31	74.00	-24.69	43.35	3	Horizontal	191	1.00	-	36.78	8.64	39.46
AV	7.44G	37.18	54.00	-16.82	31.22	3	Horizontal	191	1.00	-	36.78	8.64	39.46





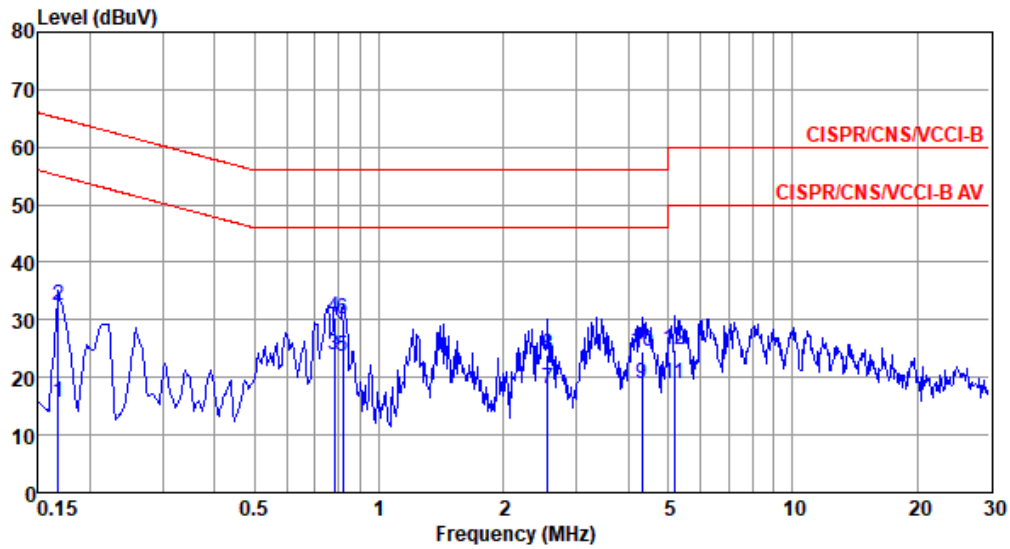






Mode	Charging mode
Power Phase	Line

Test by : Joe Liao      Temperature: 20°C      Humidity: 62%



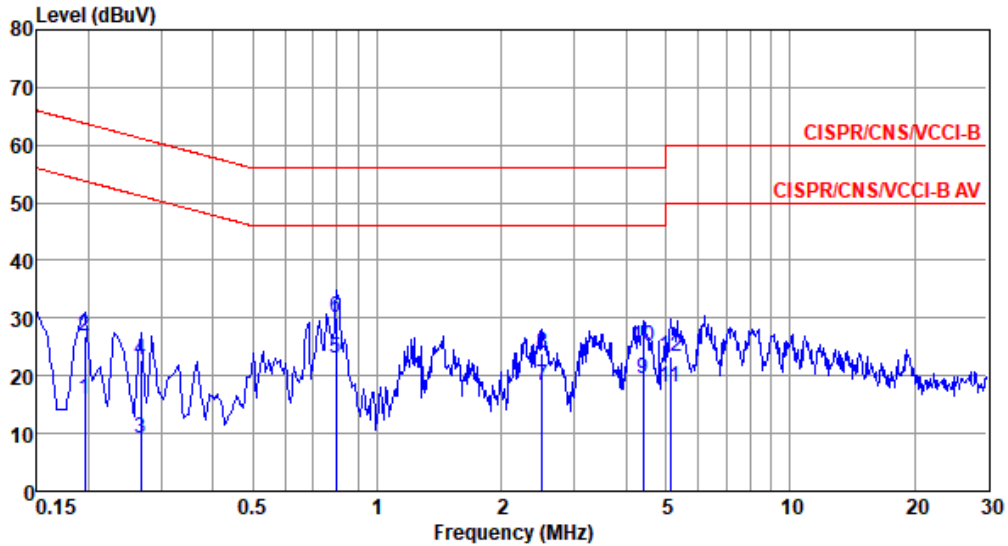
	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.168	15.69	55.08	-39.39	5.82	9.63	0.06	0.18	Average
2	0.168	32.35	65.08	-32.73	22.48	9.63	0.06	0.18	QP
3*	0.779	23.76	46.00	-22.24	13.71	9.63	0.10	0.32	Average
4	0.779	30.47	56.00	-25.53	20.42	9.63	0.10	0.32	QP
5	0.817	23.74	46.00	-22.26	13.69	9.63	0.10	0.32	Average
6	0.817	30.19	56.00	-25.81	20.14	9.63	0.10	0.32	QP
7	2.554	18.03	46.00	-27.97	7.86	9.64	0.15	0.38	Average
8	2.554	24.05	56.00	-31.95	13.88	9.64	0.15	0.38	QP
9	4.315	18.82	46.00	-27.18	8.56	9.65	0.19	0.42	Average
10	4.315	24.51	56.00	-31.49	14.25	9.65	0.19	0.42	QP
11	5.166	18.98	50.00	-31.02	8.66	9.66	0.23	0.43	Average
12	5.166	24.73	60.00	-35.27	14.41	9.66	0.23	0.43	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).  
 Note 2: Over Limit (dB) = Level (dBuV) - Limit Line (dBuV).



Mode	Charging mode
Power Phase	Neutral

Test by : Joe Liao      Temperature: 20°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	16.03	53.80	-37.77	6.15	9.63	0.06	0.19	Average
2	0.195	26.96	63.80	-36.84	17.08	9.63	0.06	0.19	QP
3	0.267	9.26	51.20	-41.94	-0.67	9.63	0.06	0.24	Average
4	0.267	22.60	61.20	-38.60	12.67	9.63	0.06	0.24	QP
5*	0.796	22.91	46.00	-23.09	12.86	9.63	0.10	0.32	Average
6	0.796	29.99	56.00	-26.01	19.94	9.63	0.10	0.32	QP
7	2.513	18.27	46.00	-27.73	8.10	9.64	0.15	0.38	Average
8	2.513	23.83	56.00	-32.17	13.66	9.64	0.15	0.38	QP
9	4.407	19.61	46.00	-26.39	9.33	9.66	0.20	0.42	Average
10	4.407	25.06	56.00	-30.94	14.78	9.66	0.20	0.42	QP
11	5.139	17.88	50.00	-32.12	7.55	9.67	0.23	0.43	Average
12	5.139	23.23	60.00	-36.77	12.90	9.67	0.23	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).