

FCC Test Report

FCC ID : NDD9576112002
Equipment : Bluetooth 5.0 Nano USB Adapter
Brand Name : EDIMAX
Model Name : BT-8500, EW-7611UB5
Applicant : EDIMAX TECHNOLOGY CO., LTD.
No.278, Xinhua 1st Rd., Neihu Dist., Taipei City, Taiwan
Manufacturer : EDIMAX TECHNOLOGY CO., LTD.
No.278, Xinhua 1st Rd., Neihu Dist., Taipei City, Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Jun. 12, 2020, and testing was started from Jun. 17, 2020 and completed on Jun. 20, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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

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History of this test report

[illegible]

Summary of Test Result

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

Declaration of Conformity:

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

Comments and explanations:

None

Reviewed by: Sam Tsai

Report Producer: Amber Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

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

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-LE(1Mbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(2Mbps)	2.0	1TX
2.4-2.4835GHz	BT-LE(125kbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(500kbps)	1.0	1TX

Note:

- Bluetooth LE uses a GFSK (1Mbps/2Mbps/125kbps/500kbps) modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	LYNwave	ALX19M-052AA3	PIFA Antenna	N/A	-1.2

Note 1: The EUT has one antenna.

For Bluetooth function:

For Bluetooth mode (1TX/1RX)

Only Ant. 1 can be used as transmitting/receiving antenna.

1.1.3 EUT Information

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

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq$ 1/T
BT-LE(1Mbps)	0.856	0.68	2.139m	1k
BT-LE(125kbps)	0.974	0.11	17.061m	100
BT-LE(500kbps)	0.912	0.4	4.561m	300
BT-LE(2Mbps)	0.576	2.4	1.084m	1k

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

1.1.5 Table for Multiple Listing

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

Model Name	Description
BT-8500	All the models are identical, the difference model served as marketing strategy.
EW-7611UB5	

1.2 Testing Applied Standards

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

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

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

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

1.3 Testing Location Information

Testing Location			
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			
☒	Wen Shan	ADD : No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)	
		TEL : 886-3-318-0787	FAX : 886-3-318-0287
Test site Designation No. TW1097 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Edward Wang	23.4~24.1°C / 57~63%	20/Jun/2020
RF Conducted	TH07-HY	Justin Pan	20~24°C / 50~55%	17/Jun/2020~ 18/Jun/2020
Radiated	03CH09-HY	Ryan Hsiao	22.4~23.5°C / 42~54%	18/Jun/2020~ 19/Jun/2020

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Test Software Version	RTLBTAPP v5.2.2.57
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Mode	Power Setting
BT-LE(1Mbps)	-
2402MHz	08
2440MHz	08
2480MHz	0A
BT-LE(2Mbps)	-
2402MHz	08
2440MHz	09
2480MHz	0A
BT-LE(125kbps)	-
2402MHz	08
2440MHz	08
2480MHz	09
BT-LE(500kbps)	-
2402MHz	08
2440MHz	08
2480MHz	09

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	USB Mode

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

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

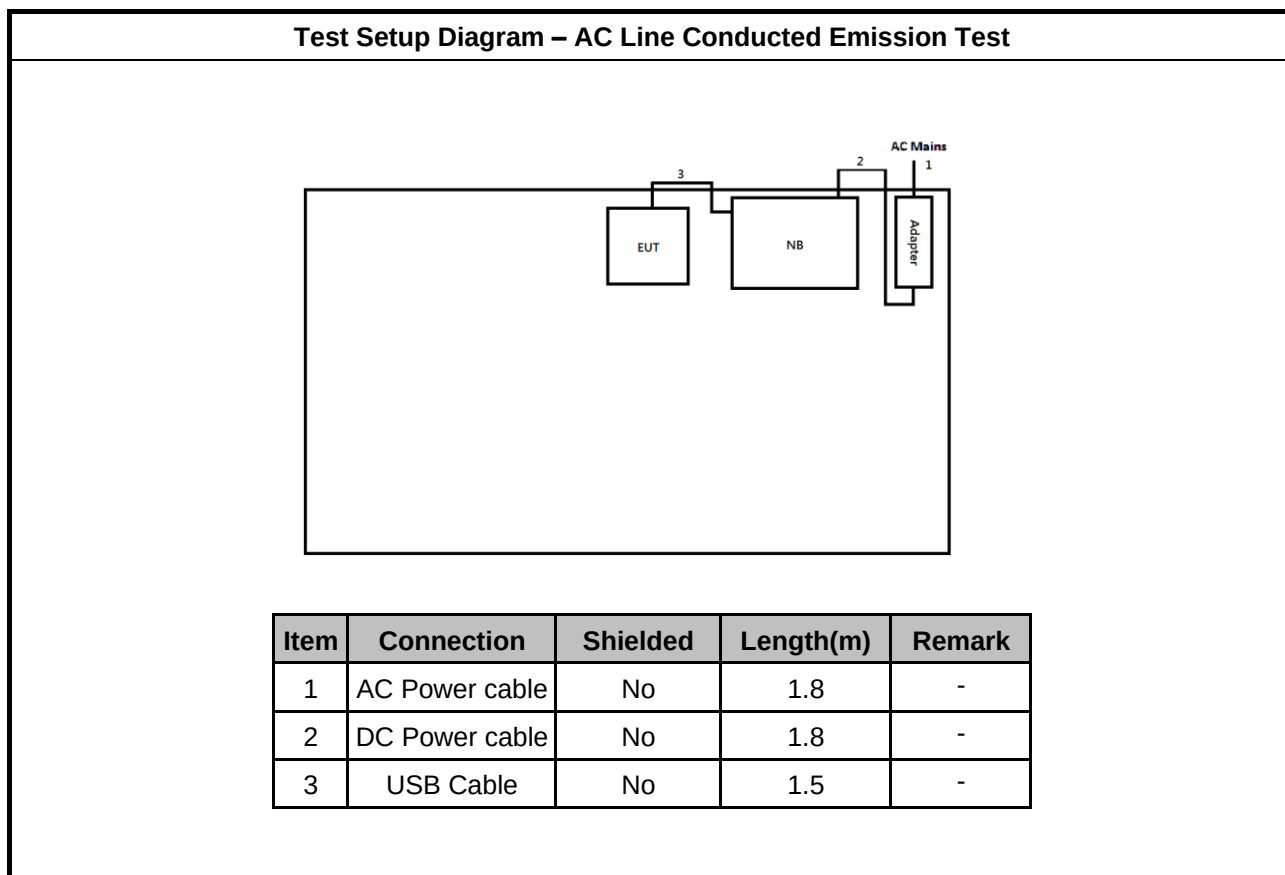
2.4 Support Equipment

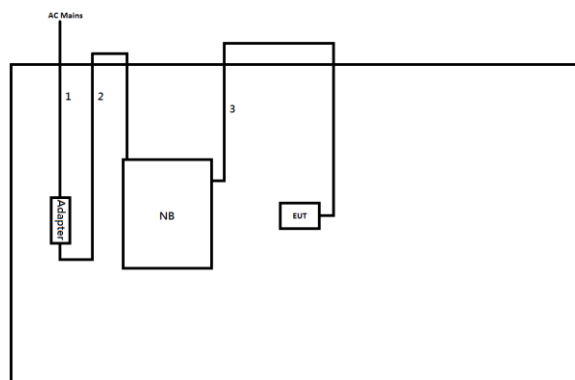
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	Dell	E6400	-	-
2	Adapter for NB	Dell	HA65NM130	-	-
3	AC Power Cable	Power sync	TPCMRN0018	-	-
4	USB cable	Sporton	Sporton	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	PP13S	-	-
2	Adapter for NB	DELL	AA90PM111	-	-

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	Dell	E6400	-	-
2	Adapter for NB	Dell	HA65NM130	-	-
3	AC Power Cable	Power sync	TPCMRN0018	-	-
4	USB cable	Sporton	Sporton	-	-

2.5 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.8	-
3	USB cable	No	1.5	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

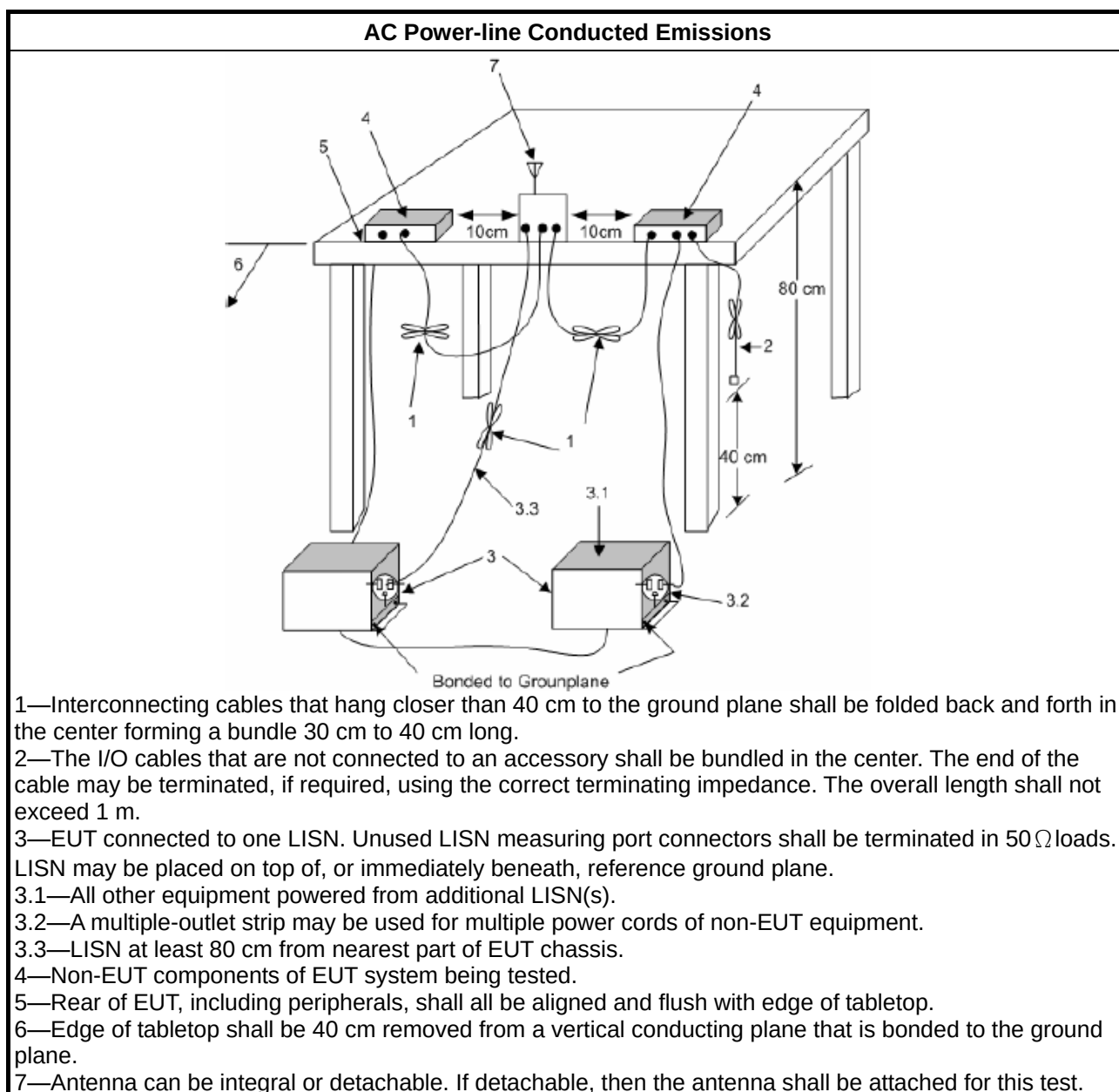
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
▪	6 dB bandwidth $\geq$ 500 kHz.

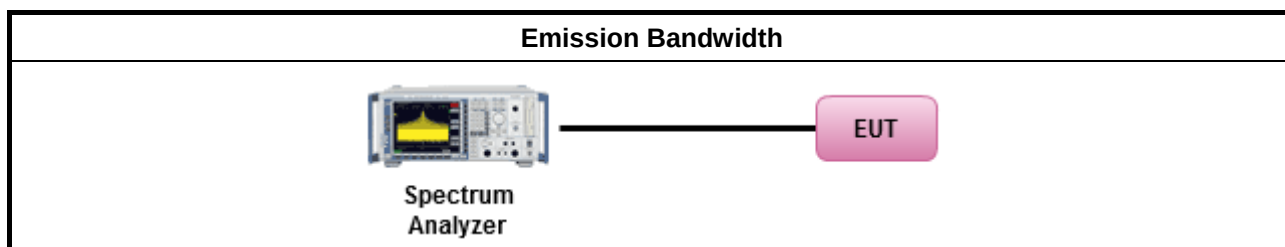
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as KDB 558074, clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
☐	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dBm
e.i.r.p. Power Limit:	
	2400-2483.5 MHz Band
	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	Smart antenna system (SAS)
	- Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

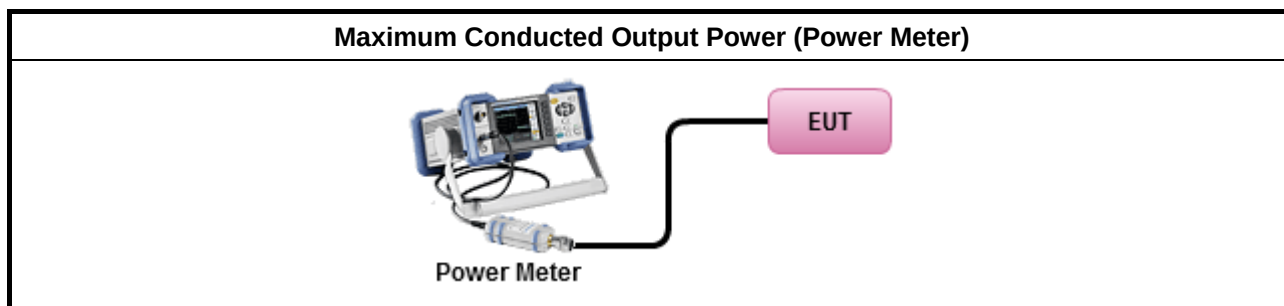
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
☐	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
☐	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
Maximum Average Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
☒	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit	
▪	Power Spectral Density (PSD) ≤ 8 dBm/3kHz

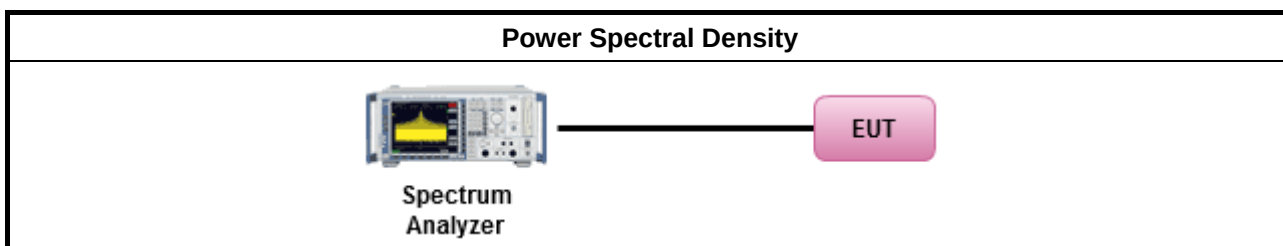
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
▪	Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
☒	Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
▪	For conducted measurement.
▪	If The EUT supports multiple transmit chains using options given below:
▪	Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average level.	

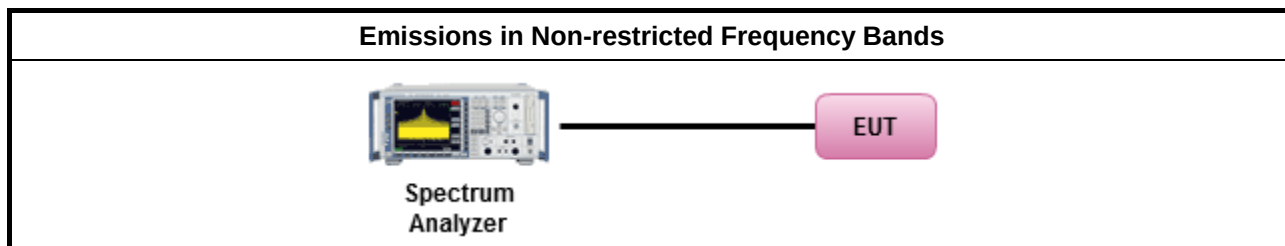
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB / decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

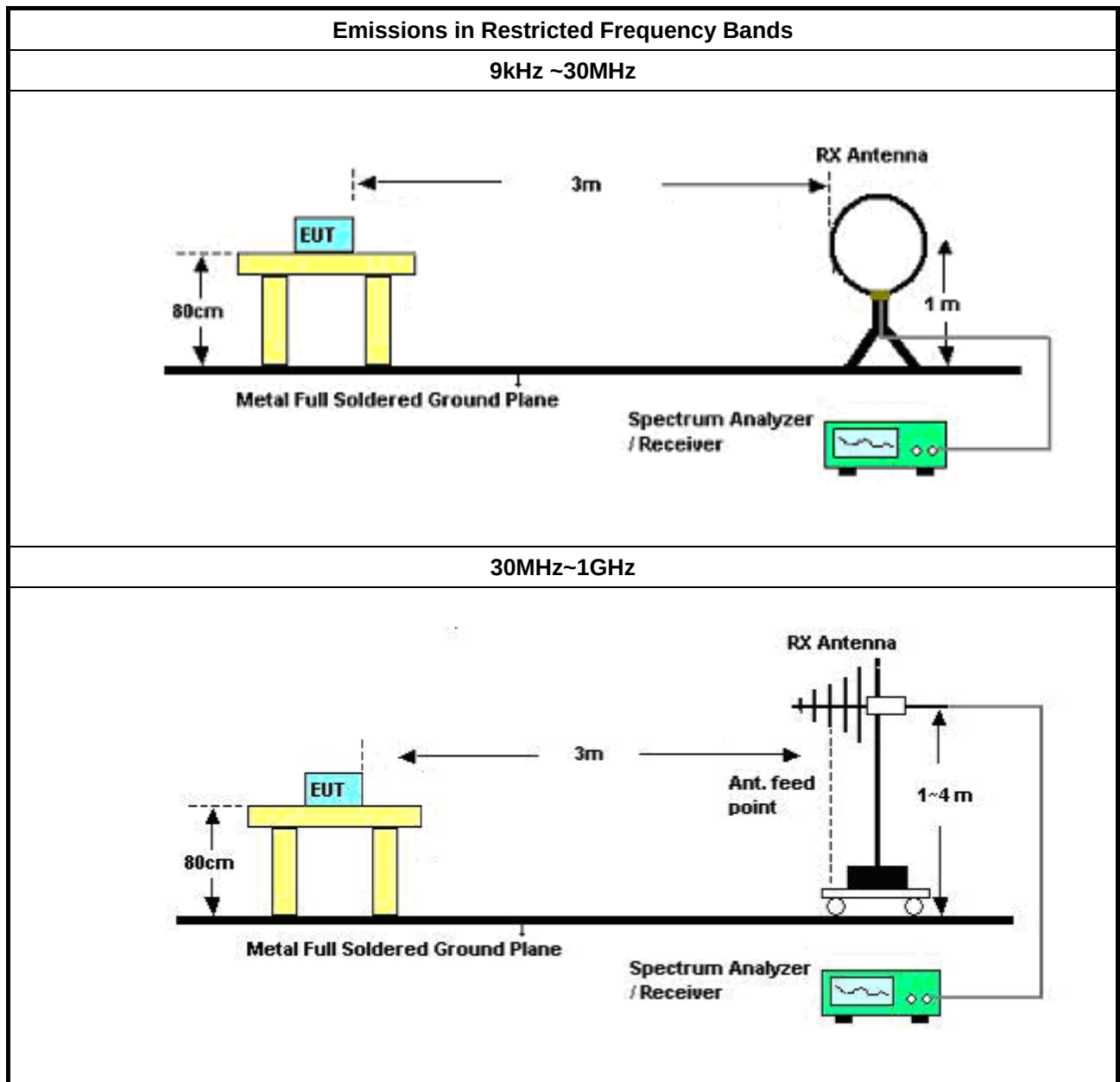
3.6.2 Measuring Instruments

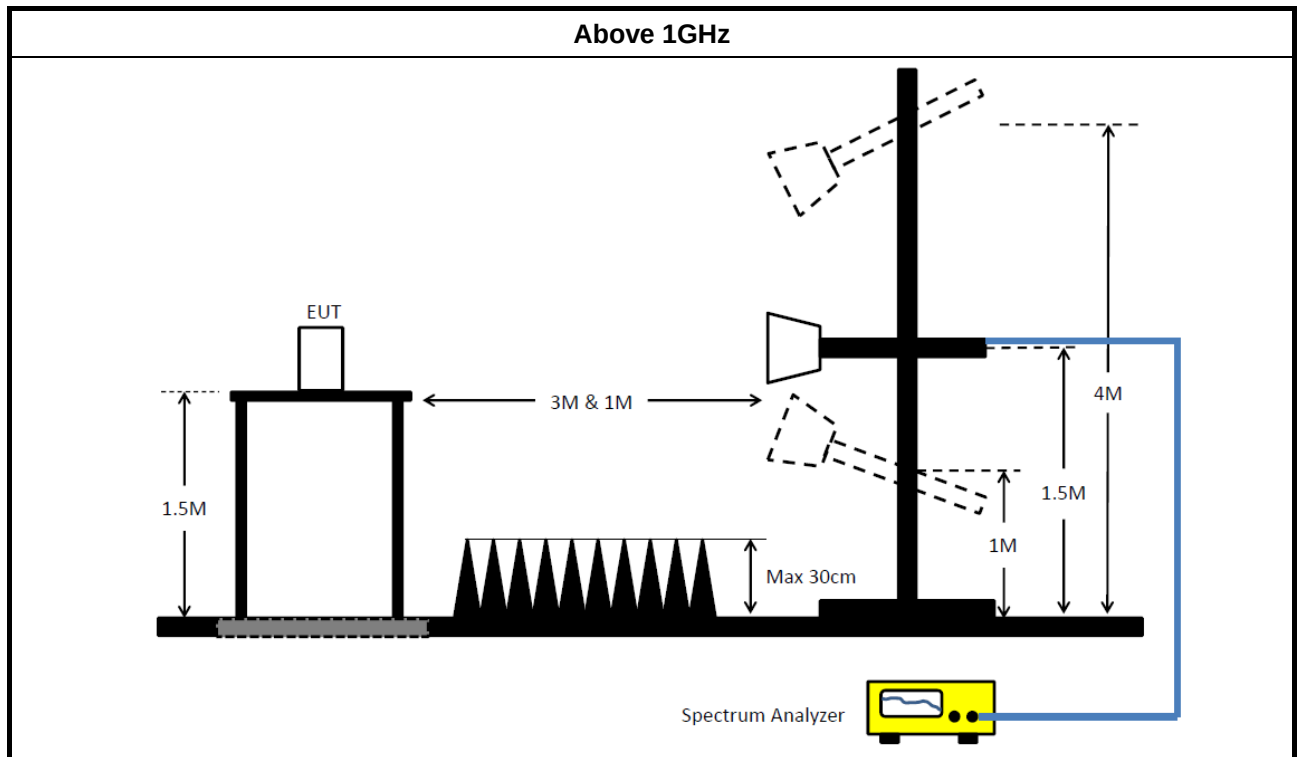
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

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

3.6.4 Test Setup





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

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

3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR	102051	9kHz ~ 3.6GHz	29/May/2020	28/May/2021
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	05/Nov/2019	04/Nov/2020
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	23/Sep/2019	22/Sep/2020
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	24/Sep/2019	23/Sep/2020

NCR : Non-Calibration Require

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101515	10Hz~40GHz	15/Feb/2020	14/Feb/2021
Pulse Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	25/Nov/2019	24/Nov/2020
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	25/Nov/2019	24/Nov/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	11/Nov/2020

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	27/Mar/2020	26/Mar/2021
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	19/Mar/2020	18/Mar/2021
Microwave Preamplifier	Agilent	8449B	3008A02326	1GHz ~ 26.5GHz	15/Jul/2019	14/Jul/2020
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	14/Apr/2020	13/Apr/2021
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	29/May/2020	28/May/2021
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	07/Aug/2019	06/Aug/2020
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	30/Sep/2019	29/Sep/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	28/May/2020	27May/2021
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170221	18GHz~40GHz	13/Mar/2020	12/Mar/2021
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	10/Mar/2020	09/Mar/2021
Loop Antenna	TESEQ	HLA 6120	31244	9kHz-30MHz	16/Mar/2020	15/Mar/2021
RF Cable-low	Jye Bao	RG142	CB031+324530/4	9kHz ~ 1GHz	12/Feb/2020	11/Feb/2021
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	324530/4+17173/4	1GHz ~ 40GHz	12/Feb/2020	11/Feb/2021

**Summary**

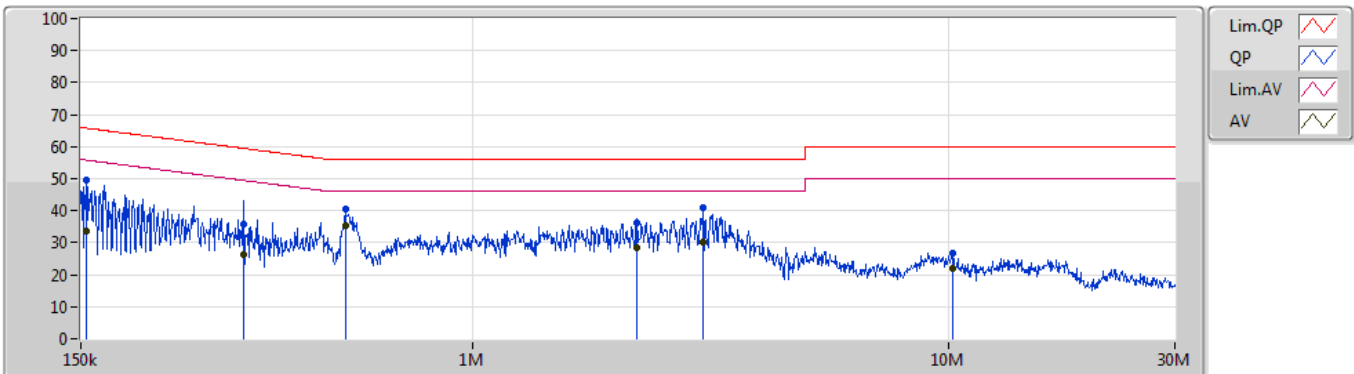
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	553.37k	35.91	46.00	-10.09	Line

Mode Configure

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	159.893k	49.32	65.46	-16.14	Line	-
Mode 1	Pass	AV	159.893k	33.98	55.46	-21.48	Line	-
Mode 1	Pass	QP	252.043k	39.41	61.70	-22.29	Line	-
Mode 1	Pass	AV	252.043k	29.79	51.70	-21.91	Line	-
Mode 1	Pass	QP	553.37k	41.57	56.00	-14.43	Line	-
Mode 1	Pass	AV	553.37k	35.91	46.00	-10.09	Line	"Worst"
Mode 1	Pass	QP	3.031M	39.76	56.00	-16.24	Line	-
Mode 1	Pass	AV	3.031M	29.47	46.00	-16.53	Line	-
Mode 1	Pass	QP	5.407M	27.44	60.00	-32.56	Line	-
Mode 1	Pass	AV	5.407M	22.70	50.00	-27.30	Line	-
Mode 1	Pass	QP	8.977M	27.43	60.00	-32.57	Line	-
Mode 1	Pass	AV	8.977M	22.93	50.00	-27.07	Line	-
Mode 1	Pass	QP	154.251k	49.06	65.77	-16.71	Neutral	-
Mode 1	Pass	AV	154.251k	32.51	55.77	-23.26	Neutral	-
Mode 1	Pass	QP	258.152k	39.81	61.49	-21.68	Neutral	-
Mode 1	Pass	AV	258.152k	33.71	51.49	-17.78	Neutral	-
Mode 1	Pass	QP	517.062k	36.68	56.00	-19.32	Neutral	-
Mode 1	Pass	AV	517.062k	30.77	46.00	-15.23	Neutral	"Worst"
Mode 1	Pass	QP	1.483M	29.72	56.00	-26.28	Neutral	-
Mode 1	Pass	AV	1.483M	22.56	46.00	-23.44	Neutral	-
Mode 1	Pass	QP	3.296M	38.77	56.00	-17.23	Neutral	-
Mode 1	Pass	AV	3.296M	29.49	46.00	-16.51	Neutral	-
Mode 1	Pass	QP	10.119M	19.43	60.00	-40.57	Neutral	-
Mode 1	Pass	AV	10.119M	16.11	50.00	-33.89	Neutral	-

Conducted Emissions at Powerline_Mode 1

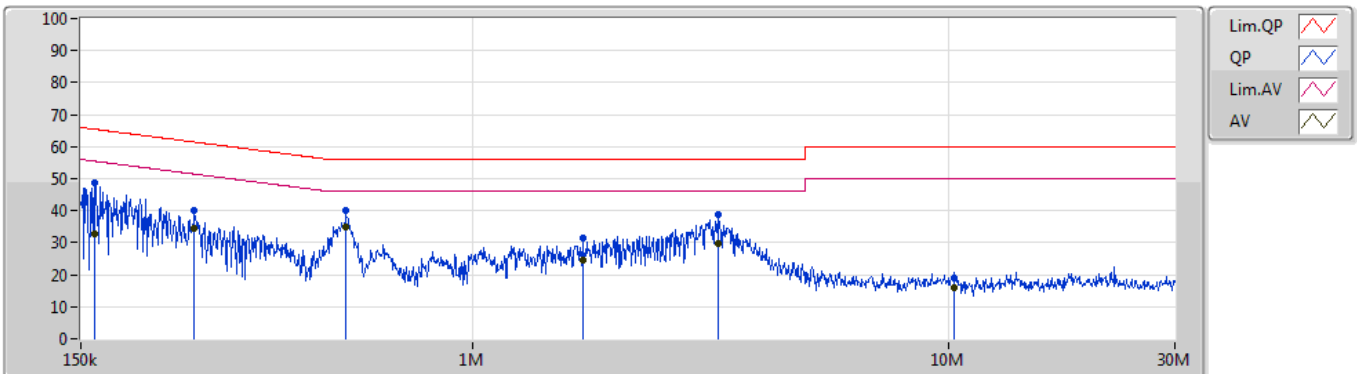
20/06/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	153.636k	49.56	65.81	-16.25	19.64	Line	-	29.92	9.66	0.11	9.87			
AV	153.636k	33.76	55.81	-22.05	19.64	Line	-	14.12	9.66	0.11	9.87			
QP	329.331k	35.57	59.46	-23.89	19.63	Line	-	15.94	9.64	0.12	9.87			
AV	329.331k	26.21	49.46	-23.25	19.63	Line	-	6.58	9.64	0.12	9.87			
QP	540.273k	40.72	56.00	-15.28	19.63	Line	-	21.09	9.64	0.12	9.87			
AV	540.273k	35.27	46.00	-10.73	19.63	Line	"Worst"	15.64	9.64	0.12	9.87			
QP	2.211M	36.34	56.00	-19.66	19.67	Line	-	16.67	9.65	0.15	9.87			
AV	2.211M	28.28	46.00	-17.72	19.67	Line	-	8.61	9.65	0.15	9.87			
QP	3.055M	40.95	56.00	-15.05	19.70	Line	-	21.25	9.66	0.16	9.88			
AV	3.055M	30.36	46.00	-15.64	19.70	Line	-	10.66	9.66	0.16	9.88			
QP	10.241M	26.75	60.00	-33.25	19.84	Line	-	6.91	9.69	0.27	9.88			
AV	10.241M	21.99	50.00	-28.01	19.84	Line	-	2.15	9.69	0.27	9.88			

Conducted Emissions at Powerline_Mode 1

20/06/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	160.533k	48.75	65.43	-16.68	19.63	Neutral	-	29.12	9.65	0.11	9.87			
AV	160.533k	32.97	55.43	-22.46	19.63	Neutral	-	13.34	9.65	0.11	9.87			
QP	260.222k	40.07	61.43	-21.36	19.63	Neutral	-	20.44	9.64	0.12	9.87			
AV	260.222k	34.59	51.43	-16.84	19.63	Neutral	-	14.96	9.64	0.12	9.87			
QP	542.434k	40.02	56.00	-15.98	19.62	Neutral	-	20.40	9.63	0.12	9.87			
AV	542.434k	34.71	46.00	-11.29	19.62	Neutral	"Worst"	15.09	9.63	0.12	9.87			
QP	1.706M	31.47	56.00	-24.53	19.65	Neutral	-	11.82	9.65	0.13	9.87			
AV	1.706M	24.41	46.00	-21.59	19.65	Neutral	-	4.76	9.65	0.13	9.87			
QP	3.296M	38.85	56.00	-17.15	19.71	Neutral	-	19.14	9.66	0.17	9.88			
AV	3.296M	29.63	46.00	-16.37	19.71	Neutral	-	9.92	9.66	0.17	9.88			
QP	10.282M	18.94	60.00	-41.06	19.85	Neutral	-	-0.91	9.70	0.27	9.88			
AV	10.282M	15.96	50.00	-34.04	19.85	Neutral	-	-3.89	9.70	0.27	9.88			

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(1Mbps)	660k	1.036M	1M04F1D	657.5k	1.033M
BT-LE(2Mbps)	1.125M	2.067M	2M07F1D	1.123M	2.061M
BT-LE(125kbps)	600k	1.059M	1M06F1D	595k	1.059M
BT-LE(500kbps)	657.5k	1.023M	1M02F1D	657.5k	1.023M

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

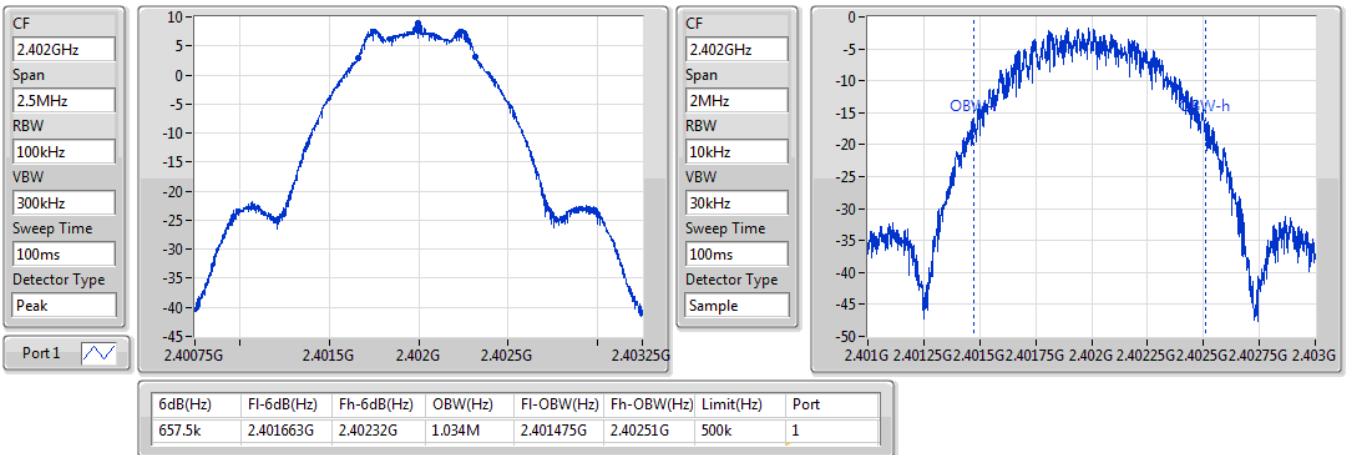
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	657.5k	1.034M
2440MHz	Pass	500k	660k	1.036M
2480MHz	Pass	500k	660k	1.033M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.123M	2.061M
2440MHz	Pass	500k	1.125M	2.067M
2480MHz	Pass	500k	1.125M	2.061M
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	500k	600k	1.059M
2440MHz	Pass	500k	600k	1.059M
2480MHz	Pass	500k	595k	1.059M
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	500k	657.5k	1.023M
2440MHz	Pass	500k	657.5k	1.023M
2480MHz	Pass	500k	657.5k	1.023M

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

BT-LE(1Mbps)

2402MHz

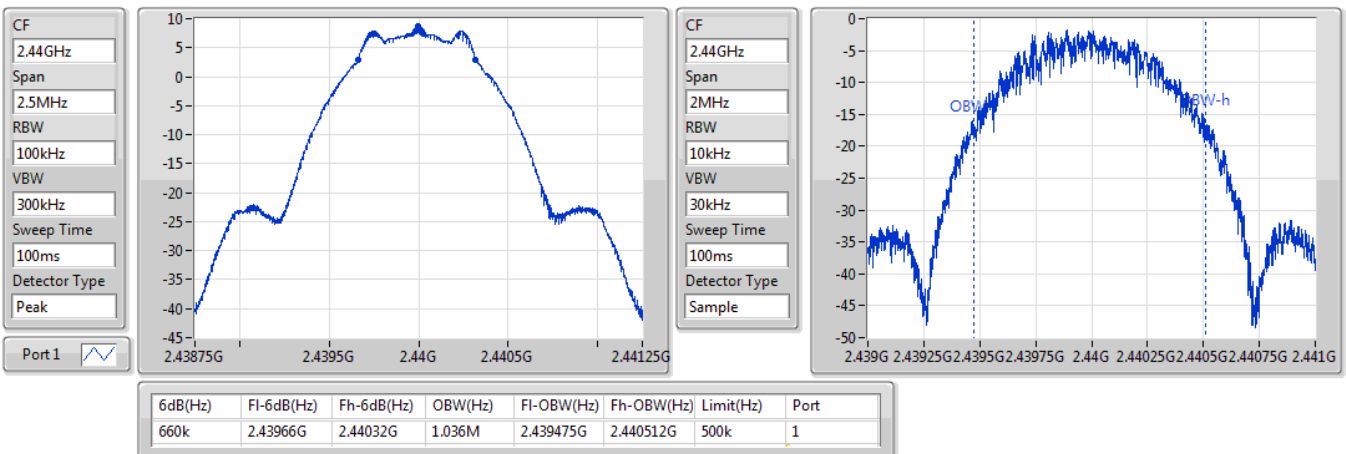
18/06/2020



BT-LE(1Mbps)

2440MHz

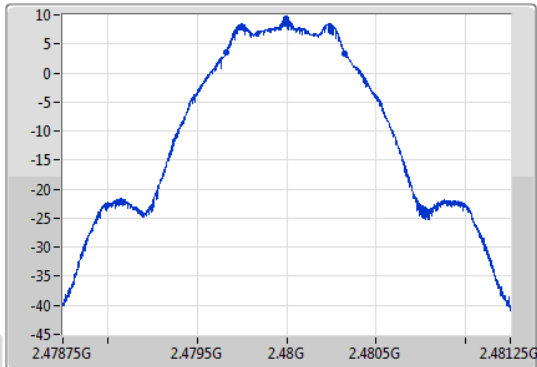
18/06/2020



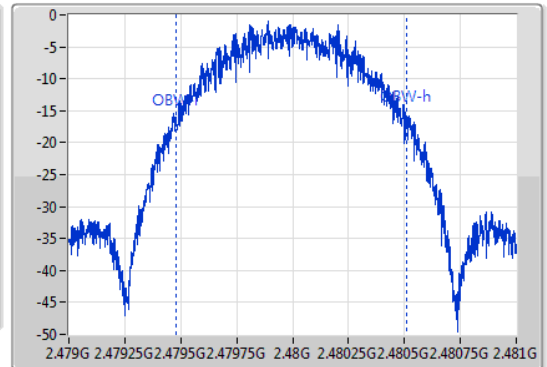
BT-LE(1Mbps)
2480MHz

18/06/2020

CF
2.48GHz
Span
2.5MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
2.48GHz
Span
2MHz
RBW
10kHz
VBW
30kHz
Sweep Time
100ms
Detector Type
Sample

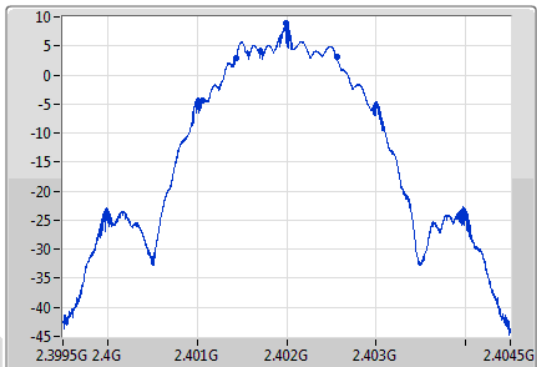


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
660k	2.479664G	2.480324G	1.033M	2.479477G	2.480511G	500k	1

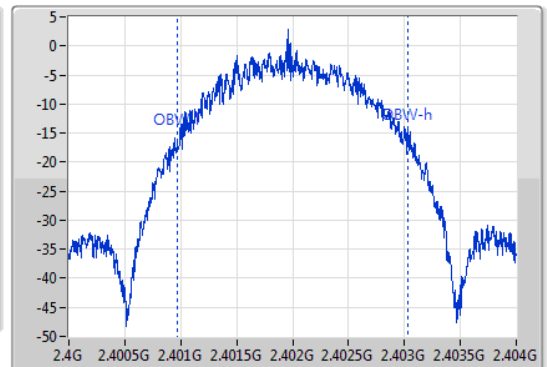
BT-LE(2Mbps)
2402MHz

18/06/2020

CF
2.402GHz
Span
5MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak
Port 1



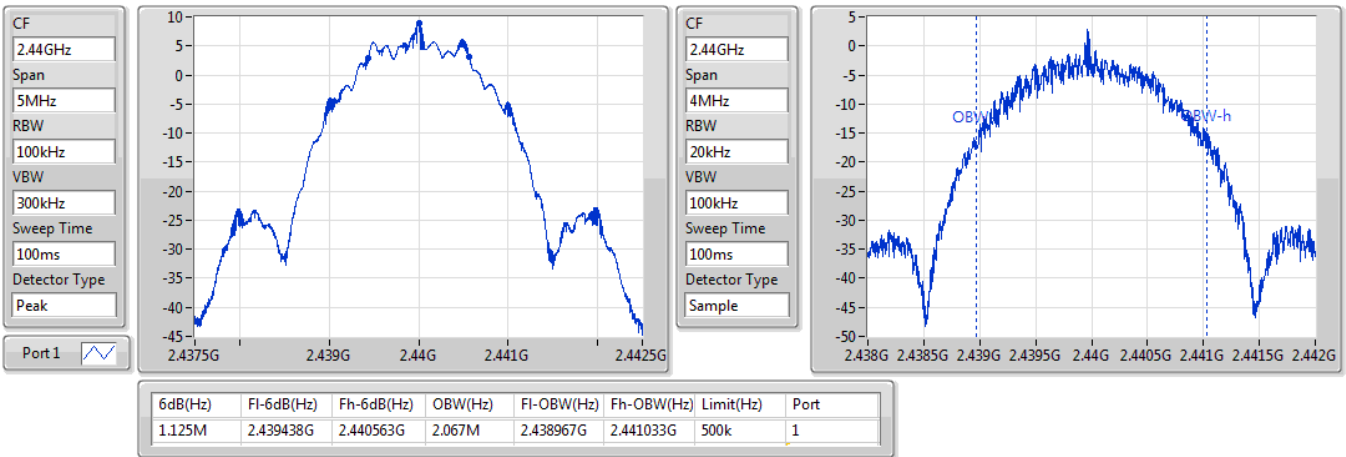
CF
2.402GHz
Span
4MHz
RBW
20kHz
VBW
100kHz
Sweep Time
100ms
Detector Type
Sample



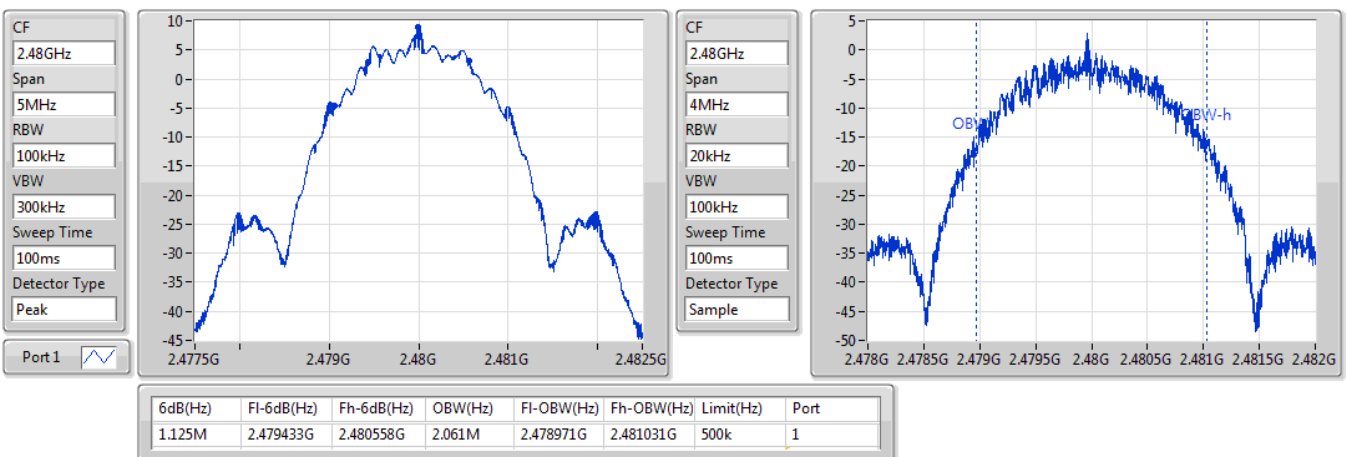
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.123M	2.401435G	2.402558G	2.061M	2.400973G	2.403033G	500k	1

BT-LE(2Mbps)
EBW
2440MHz

18/06/2020

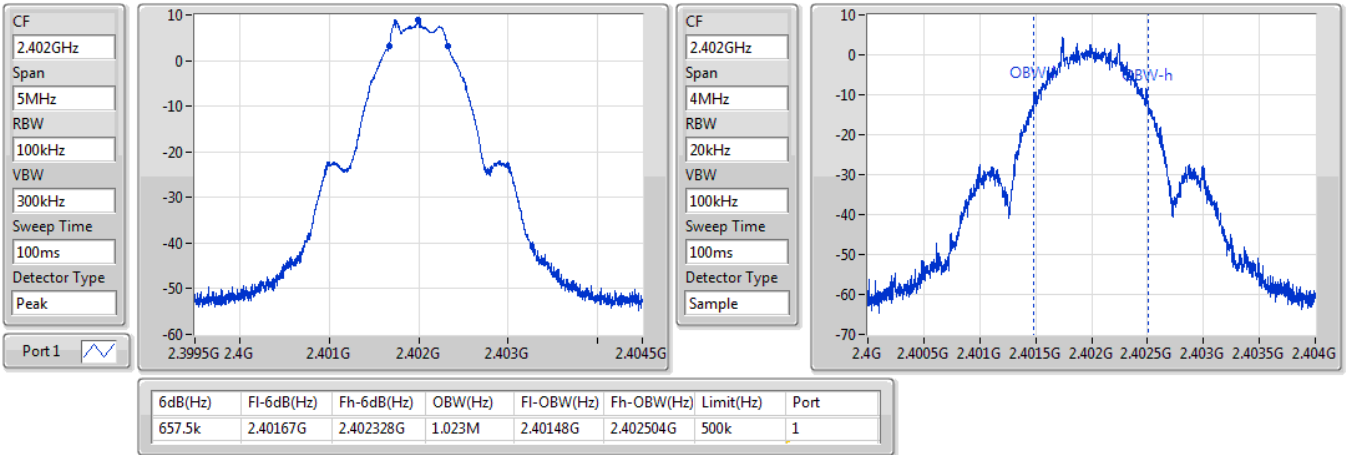

BT-LE(2Mbps)
EBW
2480MHz

18/06/2020

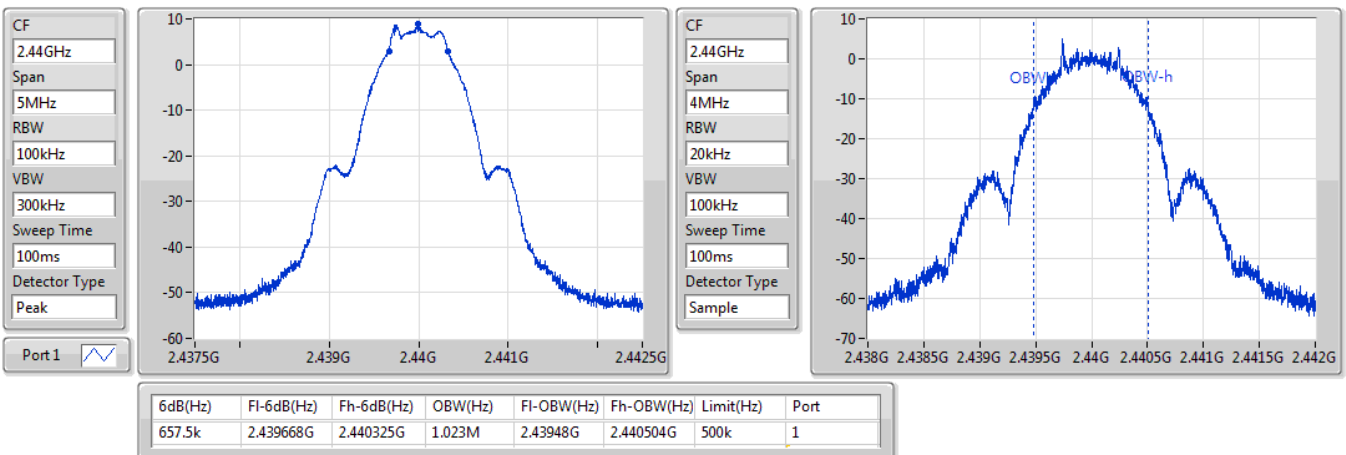


BT-LE(500kbps)
2402MHz

18/06/2020

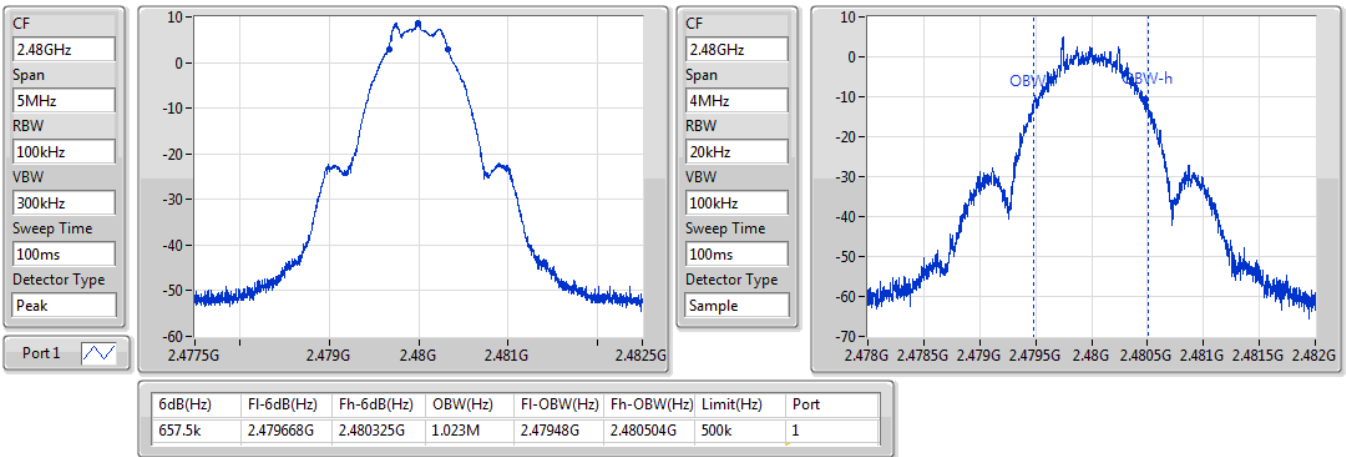

BT-LE(500kbps)
2440MHz

18/06/2020

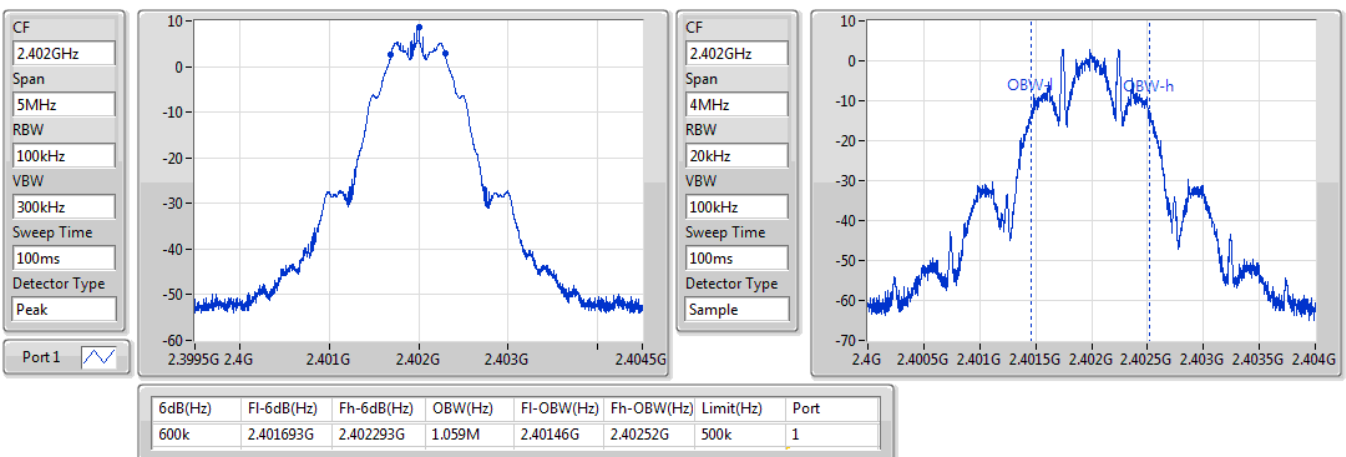


BT-LE(500kbps)
EBW
2480MHz

18/06/2020

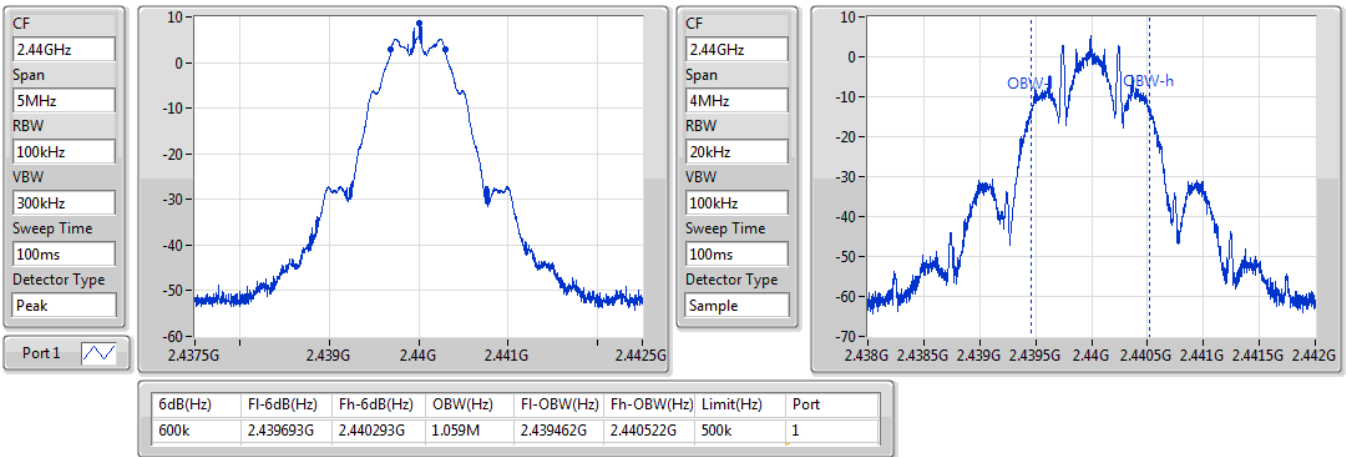

BT-LE(125kbps)
EBW
2402MHz

18/06/2020

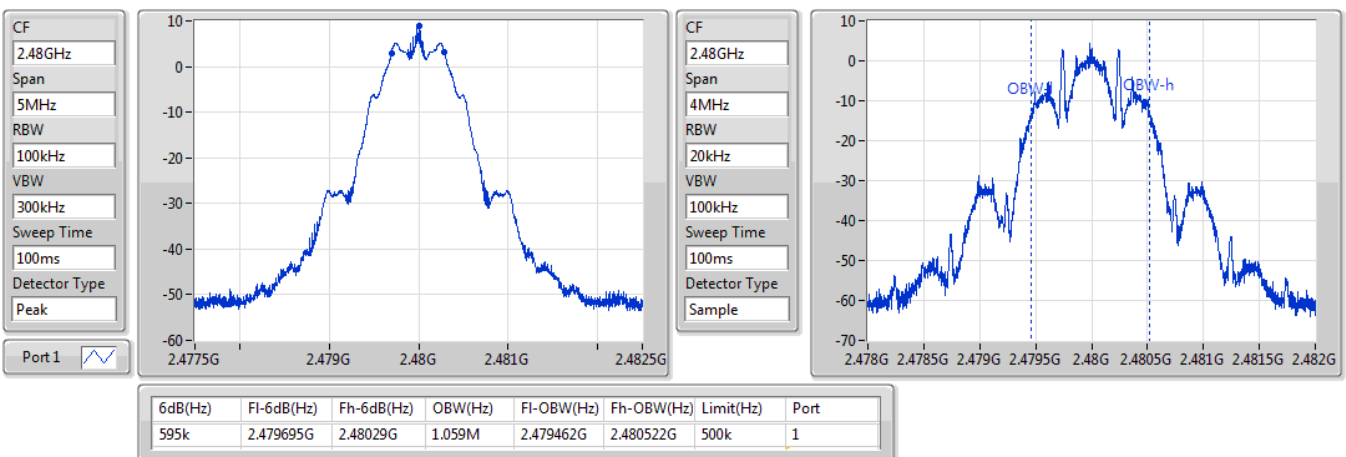


BT-LE(125kbps)
EBW
2440MHz

18/06/2020


BT-LE(125kbps)
EBW
2480MHz

18/06/2020





Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	9.25	0.00841
BT-LE(2Mbps)	9.28	0.00847
BT-LE(500kbps)	9.25	0.00841
BT-LE(125kbps)	9.19	0.00830

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	-1.20	9.13	30.00
2440MHz	Pass	-1.20	9.00	30.00
2480MHz	Pass	-1.20	9.25	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	-1.20	9.24	30.00
2440MHz	Pass	-1.20	9.25	30.00
2480MHz	Pass	-1.20	9.28	30.00
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	-1.20	9.25	30.00
2440MHz	Pass	-1.20	9.15	30.00
2480MHz	Pass	-1.20	9.14	30.00
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	-1.20	9.12	30.00
2440MHz	Pass	-1.20	9.10	30.00
2480MHz	Pass	-1.20	9.19	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-7.30
BT-LE(2Mbps)	-8.90
BT-LE(500kbps)	2.11
BT-LE(125kbps)	2.60

RBW=3 kHz.

Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	-1.20	-8.70	8.00
2440MHz	Pass	-1.20	-7.94	8.00
2480MHz	Pass	-1.20	-7.30	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	-1.20	-12.80	8.00
2440MHz	Pass	-1.20	-8.90	8.00
2480MHz	Pass	-1.20	-13.56	8.00
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	-1.20	-5.92	8.00
2440MHz	Pass	-1.20	-6.00	8.00
2480MHz	Pass	-1.20	2.11	8.00
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	-1.20	2.60	8.00
2440MHz	Pass	-1.20	2.60	8.00
2480MHz	Pass	-1.20	2.52	8.00

DG = Directional Gain; RBW=3 kHz;

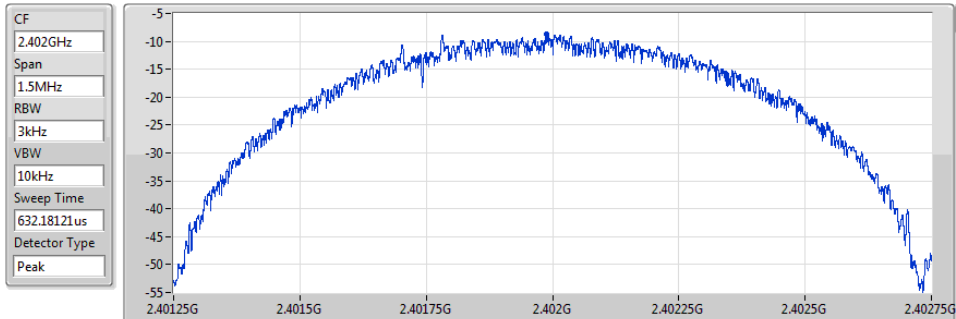
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

BT-LE(1Mbps)

PSD

2402MHz

18/06/2020



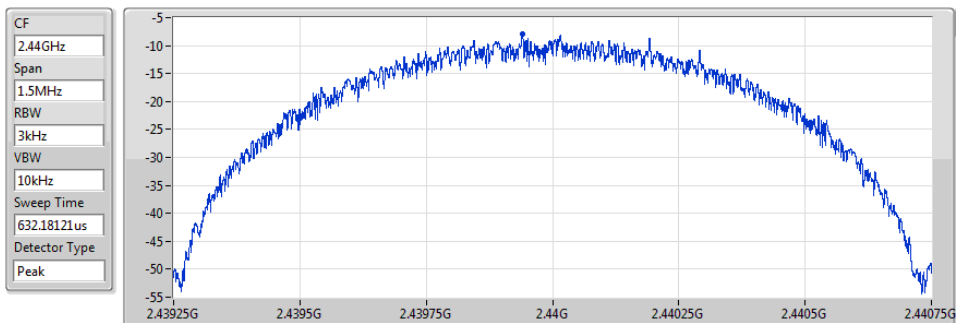
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.70	-8.70	-8.70

BT-LE(1Mbps)

PSD

2440MHz

18/06/2020



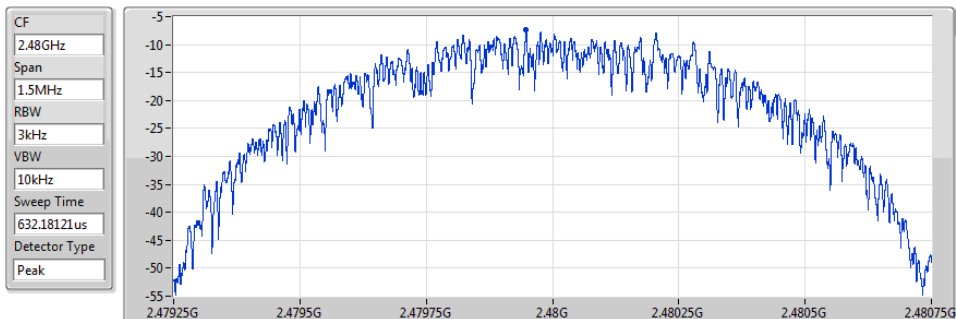
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.94	-7.94	-7.94

BT-LE(1Mbps)

PSD

2480MHz

18/06/2020



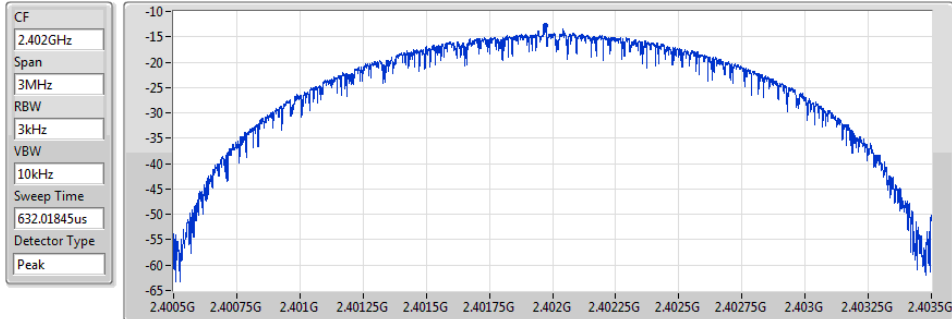
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.30	-7.30	-7.30

BT-LE(2Mbps)

PSD

2402MHz

18/06/2020



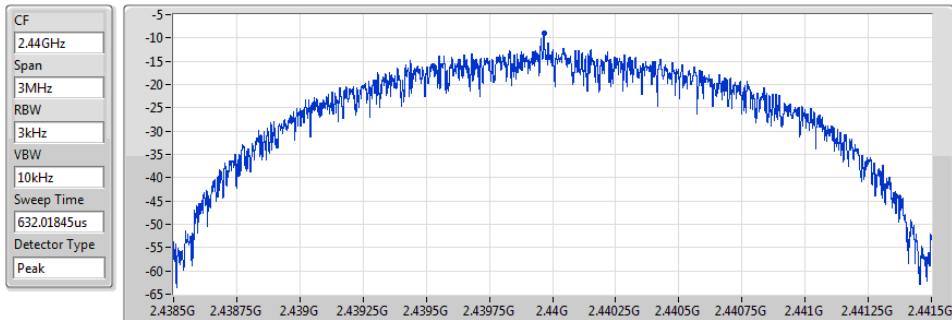
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.80	-12.80	-12.80

BT-LE(2Mbps)

PSD

2440MHz

18/06/2020



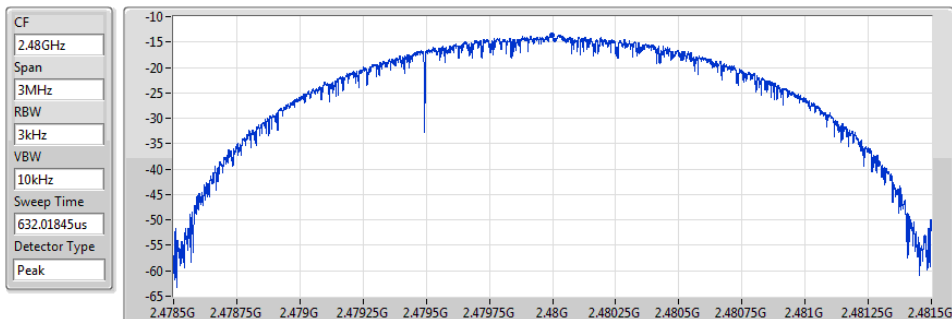
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.90	-8.90	-8.90

BT-LE(2Mbps)

PSD

2480MHz

18/06/2020



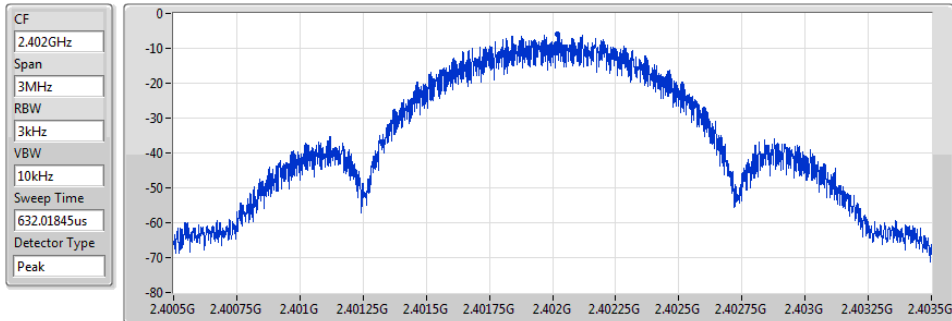
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.56	-13.56	-13.56

BT-LE(500kbps)

PSD

2402MHz

18/06/2020



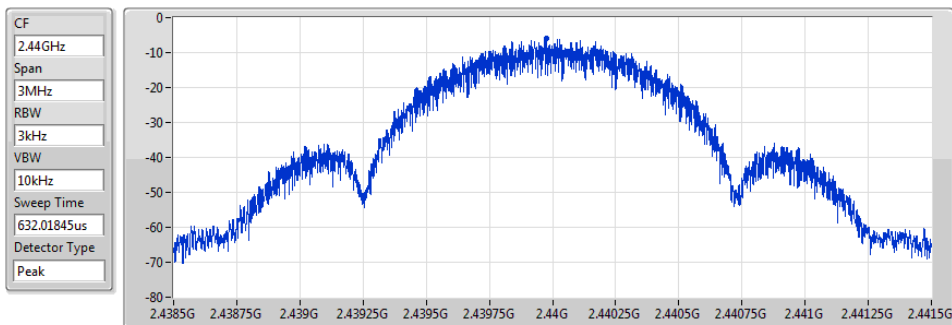
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.92	-5.92	-5.92

BT-LE(500kbps)

PSD

2440MHz

18/06/2020



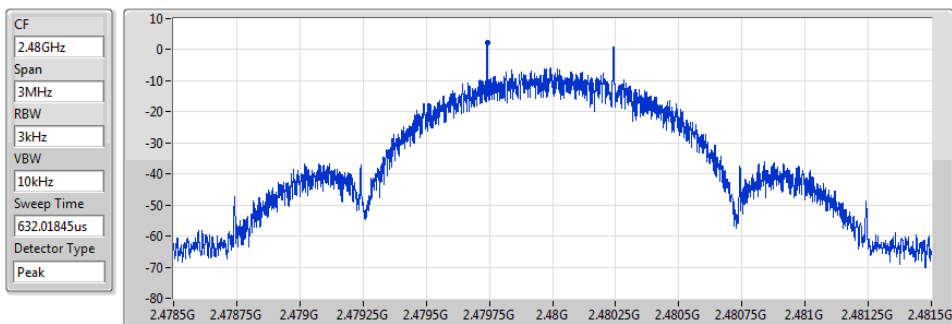
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.00	-6.00	-6.00

BT-LE(500kbps)

PSD

2480MHz

18/06/2020



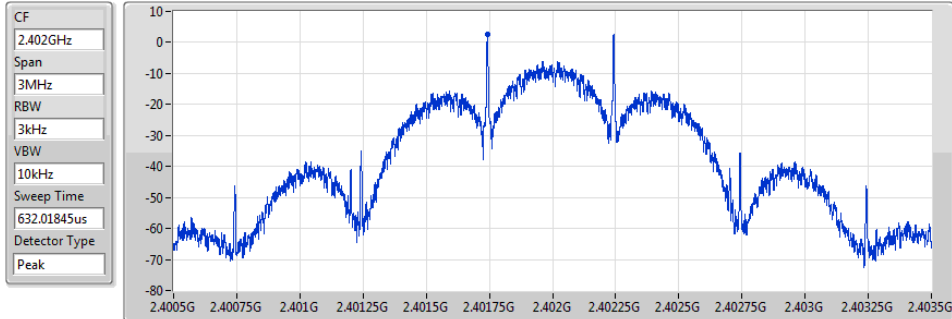
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.11	2.11	2.11

BT-LE(125kbps)

PSD

2402MHz

18/06/2020

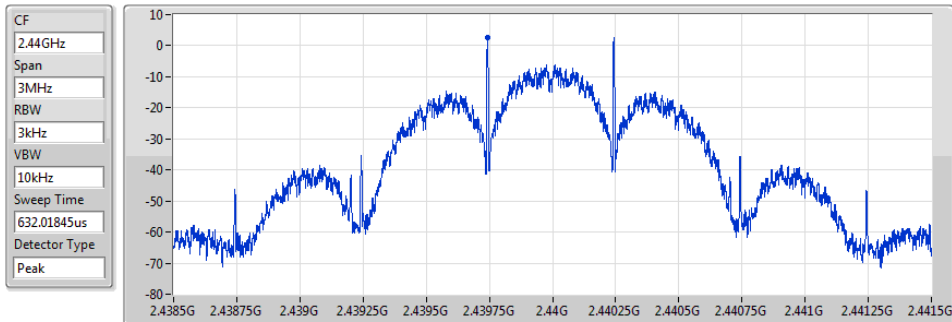


BT-LE(125kbps)

PSD

2440MHz

18/06/2020

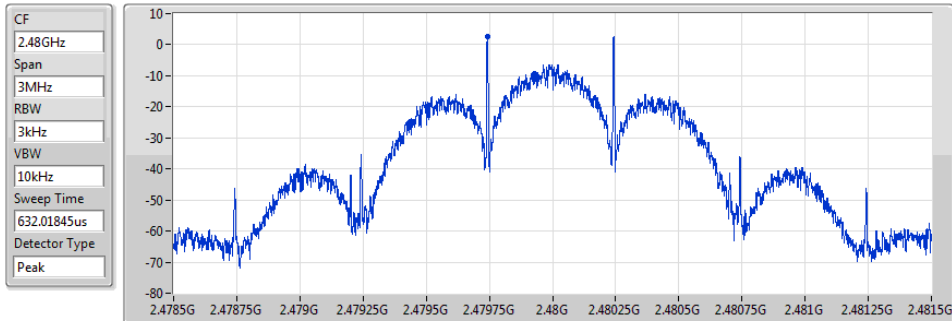


BT-LE(125kbps)

PSD

2480MHz

18/06/2020



**Summary**

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.48024G	6.27	-23.73	1.99548G	-55.24	2.39614G	-54.82	2.4835G	-56.13	2.49571G	-52.02	24.82846G	-42.04	1
BT-LE(2Mbps)	Pass	2.47995G	4.49	-25.51	2.15734G	-55.71	2.39997G	-26.85	2.4G	-26.56	2.48377G	-53.16	24.88752G	-43.43	1
BT-LE(125kbps)	Pass	2.48003G	3.39	-26.61	2.13942G	-55.14	2.39997G	-51.53	2.4G	-54.78	2.48885G	-53.56	16.68473G	-43.54	1
BT-LE(500kbps)	Pass	2.40196G	6.88	-23.12	2.12473G	-55.72	2.3997G	-52.65	2.4G	-54.04	2.48514G	-53.46	23.51523G	-43.31	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.48024G	6.27	-23.73	2.19435G	-56.07	2.3995G	-53.25	2.4G	-53.65	2.49972G	-53.29	24.55569G	-43.18	1
2440MHz	Pass	2.48024G	6.27	-23.73	2.18906G	-55.78	2.4G	-54.15	2.4835G	-55.82	2.49037G	-52.84	24.90158G	-43.65	1
2480MHz	Pass	2.48024G	6.27	-23.73	1.99548G	-55.24	2.39614G	-54.82	2.4835G	-56.13	2.49571G	-52.02	24.82846G	-42.04	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.47995G	4.49	-25.51	2.15734G	-55.71	2.39997G	-26.85	2.4G	-26.56	2.48377G	-53.16	24.88752G	-43.43	1
2440MHz	Pass	2.47995G	4.49	-25.51	2.30098G	-55.11	2.39897G	-53.90	2.4835G	-55.93	2.49837G	-53.64	14.99187G	-42.93	1
2480MHz	Pass	2.47995G	4.49	-25.51	1.87328G	-55.24	2.39648G	-54.74	2.4835G	-53.47	2.48356G	-52.67	16.85064G	-42.74	1
BT-LE(125kbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.48003G	3.39	-26.61	2.13942G	-55.14	2.39997G	-51.53	2.4G	-54.78	2.48885G	-53.56	16.68473G	-43.54	1
2440MHz	Pass	2.48003G	3.39	-26.61	2.1403G	-55.82	2.39647G	-54.27	2.4835G	-57.13	2.48506G	-53.68	16.68192G	-43.29	1
2480MHz	Pass	2.48003G	3.39	-26.61	2.3095G	-54.77	2.39195G	-53.80	2.4835G	-54.59	2.50251G	-53.03	15.07904G	-42.56	1
BT-LE(500kbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40196G	6.88	-23.12	2.12473G	-55.72	2.3997G	-52.65	2.4G	-54.04	2.48514G	-53.46	23.51523G	-43.31	1
2440MHz	Pass	2.40196G	6.88	-23.12	2.12062G	-55.26	2.39993G	-54.68	2.4835G	-55.53	2.50067G	-53.31	16.86752G	-43.36	1
2480MHz	Pass	2.40196G	6.88	-23.12	2.18965G	-55.21	2.39342G	-54.61	2.4835G	-55.79	2.4861G	-53.23	16.8169G	-42.67	1

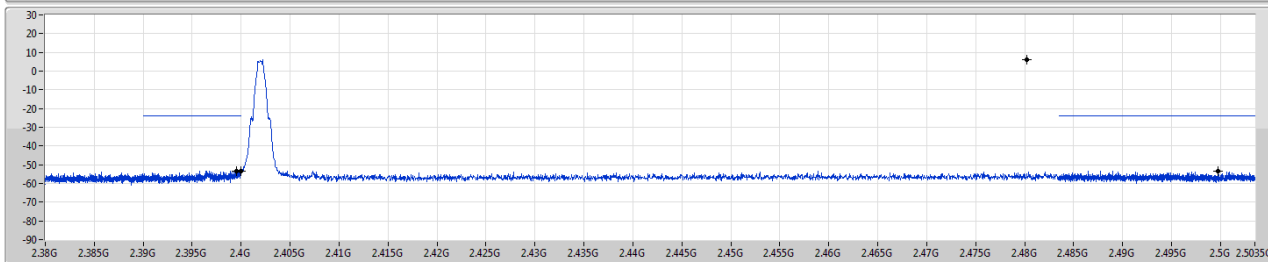
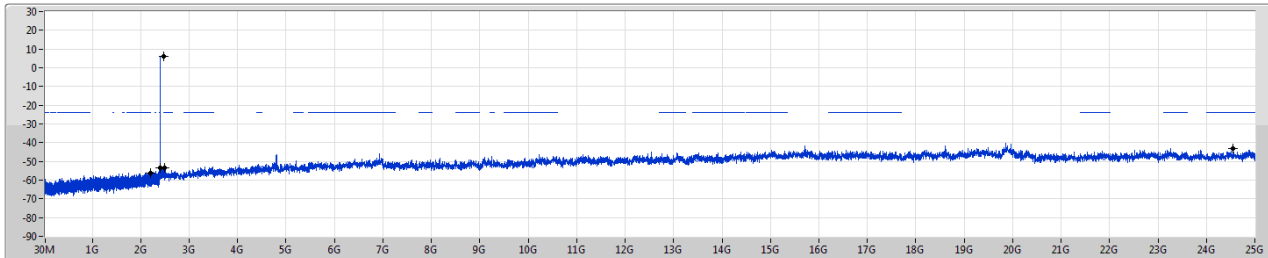
BT-LE(1Mbps)

2402MHz

CSE NdB

18/06/2020

Port1



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

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48024G	6.27	-23.73	2.19435G	-56.07	2.3995G	-53.25	2.4G	-53.65	2.49972G	-53.29	2.55509G	-43.18	1

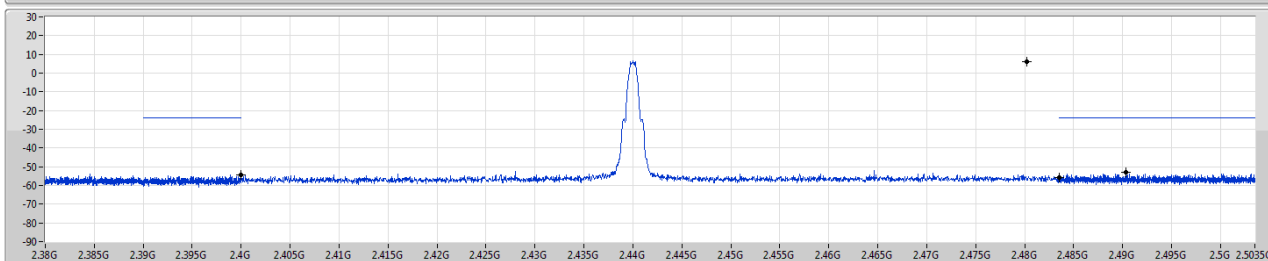
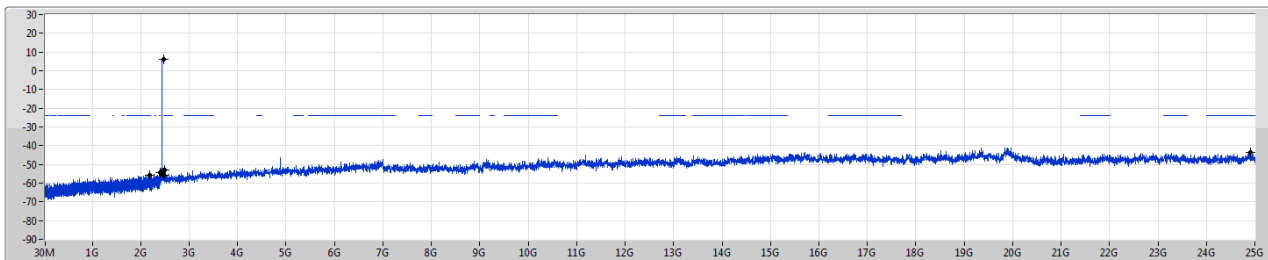
BT-LE(1Mbps)

2440MHz

CSE NdB

18/06/2020

Port1



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

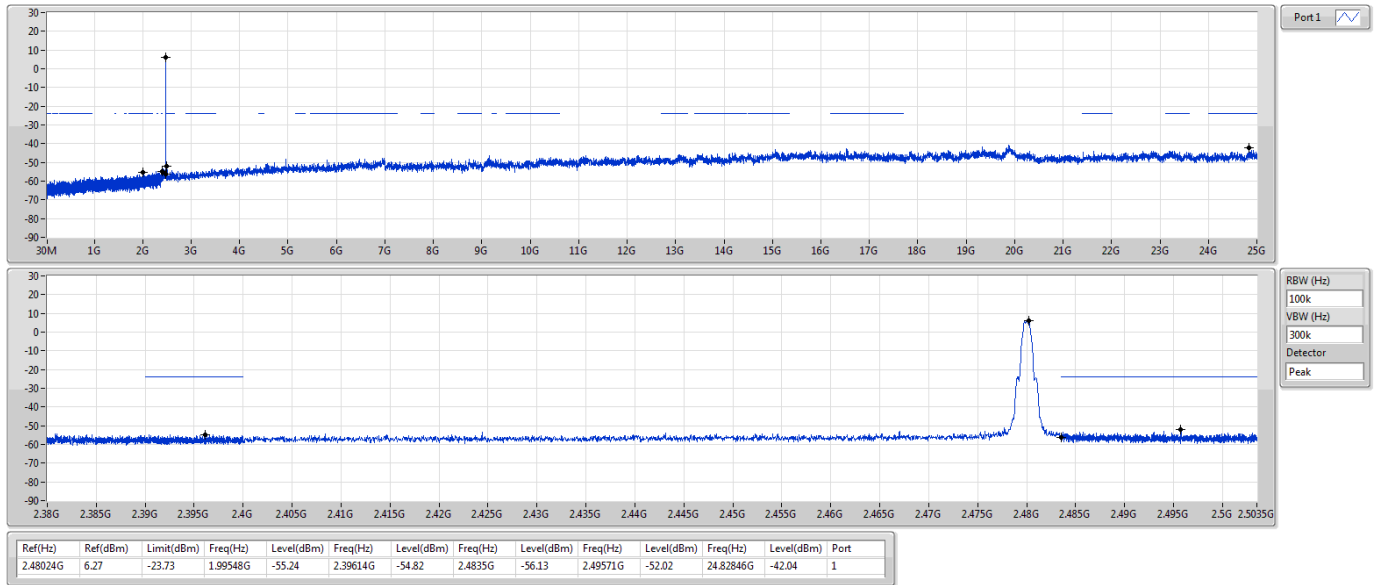
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48024G	6.27	-23.73	2.18906G	-55.78	2.4G	-54.15	2.4835G	-55.82	2.49037G	-52.84	2.49158G	-43.65	1

BT-LE(1Mbps)

2480MHz

CSE NdB

18/06/2020

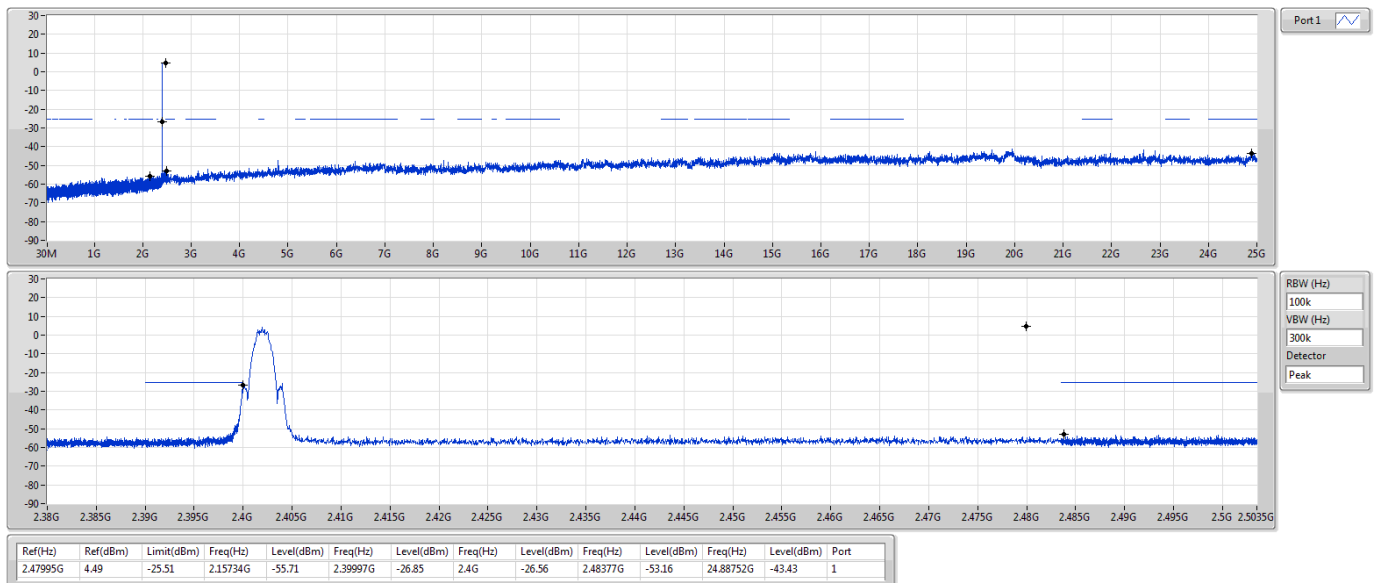


BT-LE(2Mbps)

2402MHz

CSE NdB

18/06/2020



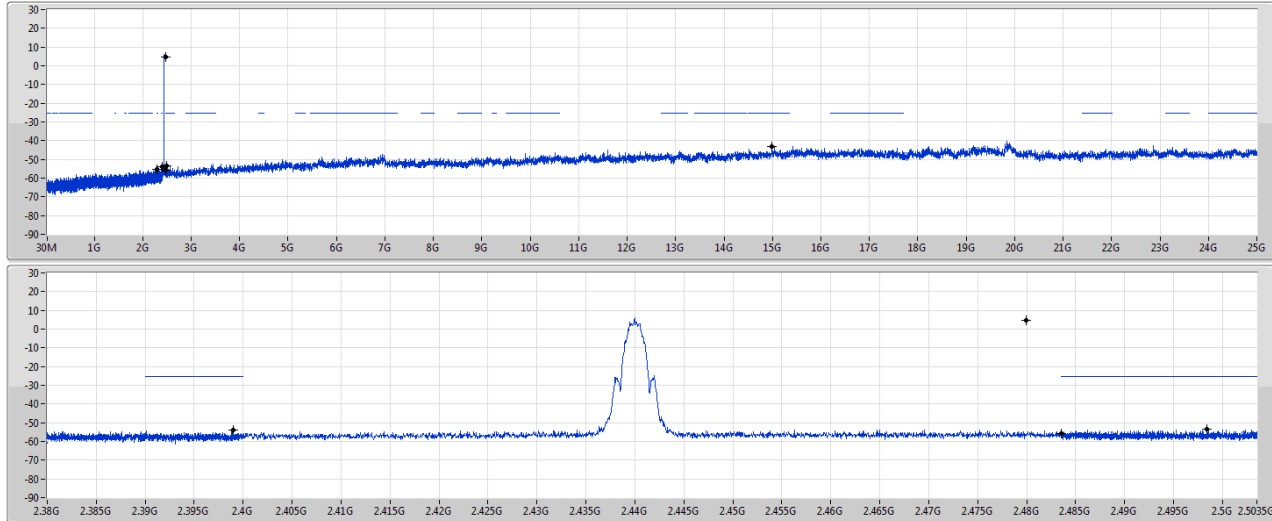
BT-LE(2Mbps)

2440MHz

CSE NdB

18/06/2020

Port 1



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

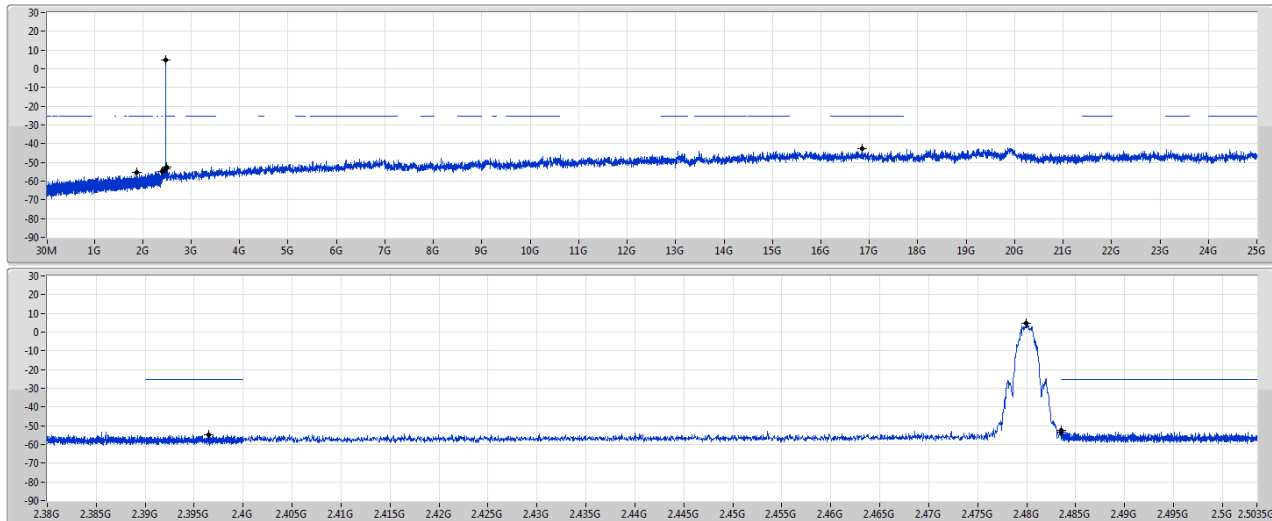
BT-LE(2Mbps)

2480MHz

CSE NdB

18/06/2020

Port 1



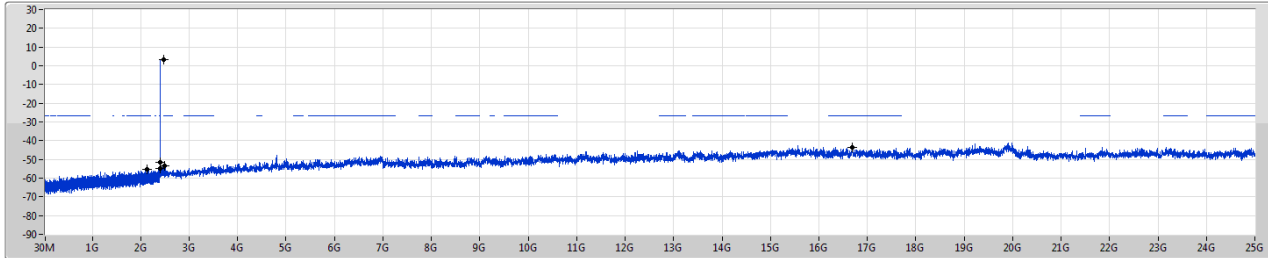
RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

BT-LE(125kbps)

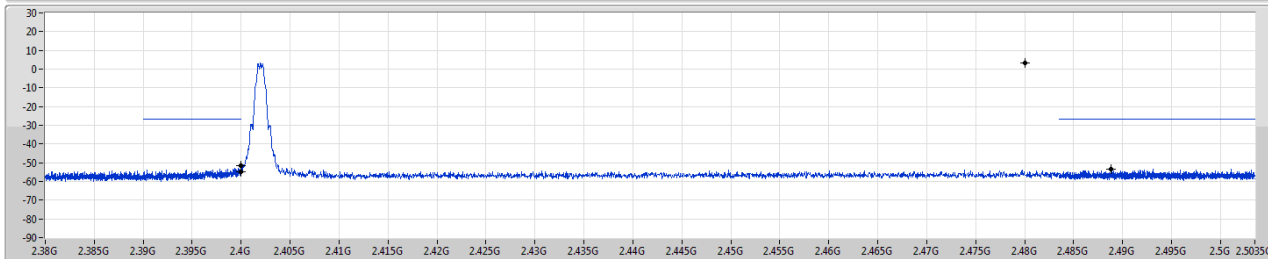
2402MHz

CSE NdB

18/06/2020



Port 1



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

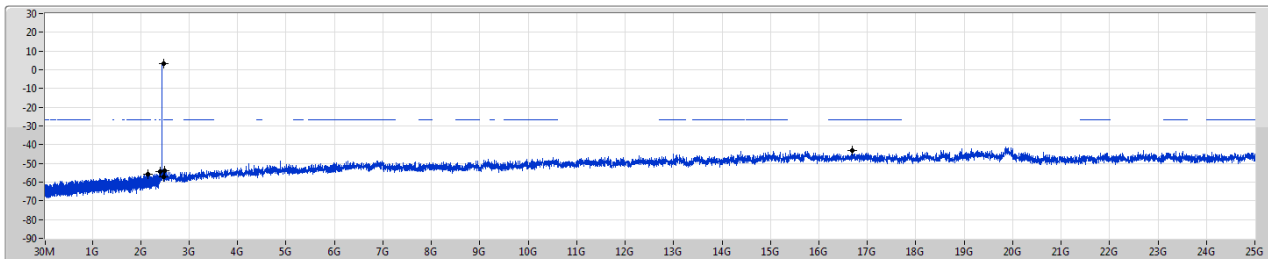
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48003G	3.39	-26.61	2.13942G	-55.14	2.39997G	-51.53	2.4G	-54.78	2.48885G	-53.56	16.68473G	-43.54	1

BT-LE(125kbps)

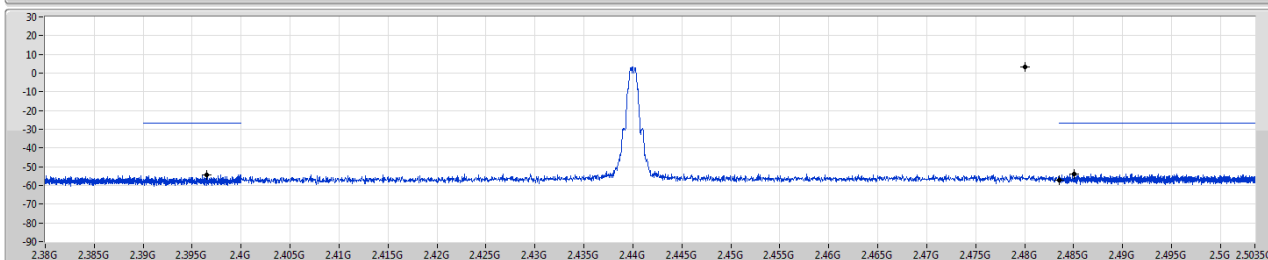
2440MHz

CSE NdB

18/06/2020



Port 1



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

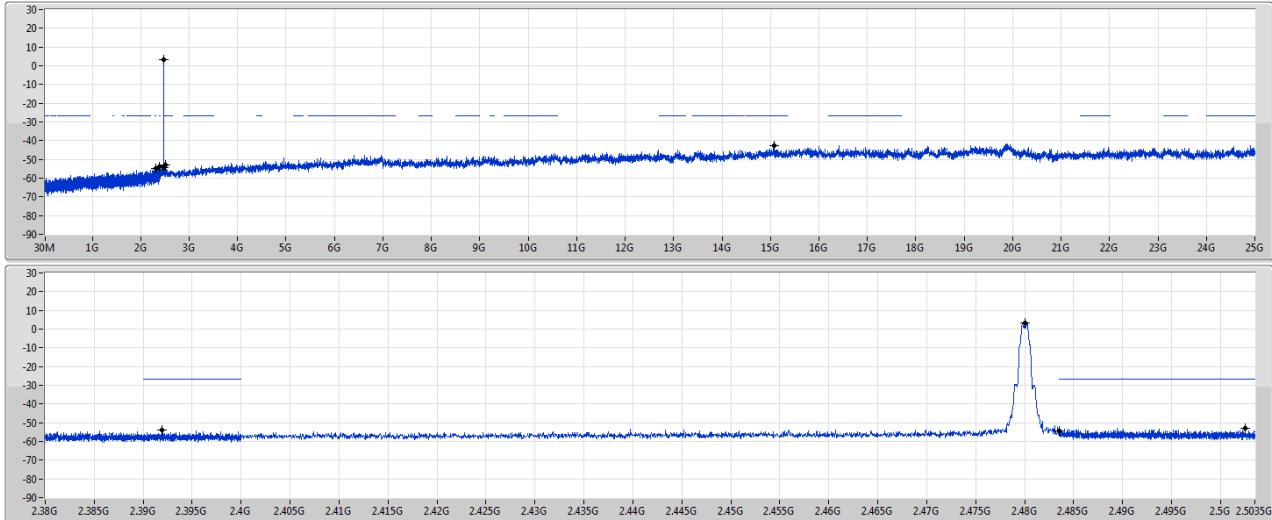
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48003G	3.39	-26.61	2.1403G	-55.82	2.39647G	-54.27	2.4835G	-57.13	2.48506G	-53.68	16.68192G	-43.29	1

BT-LE(125kbps)

2480MHz

CSE NdB

18/06/2020

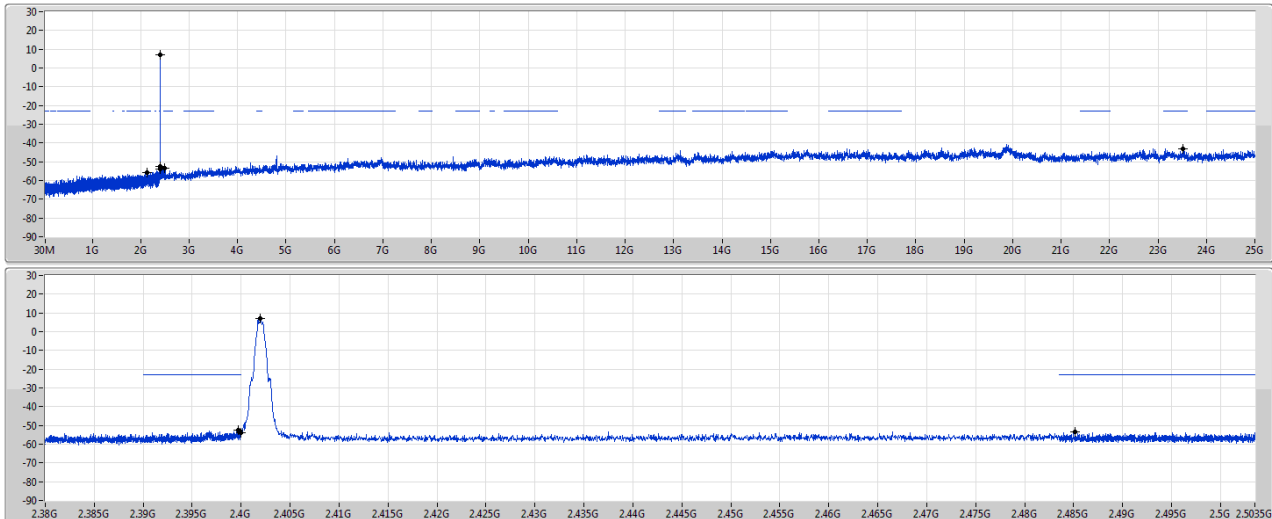


BT-LE(500kbps)

2402MHz

CSE NdB

18/06/2020

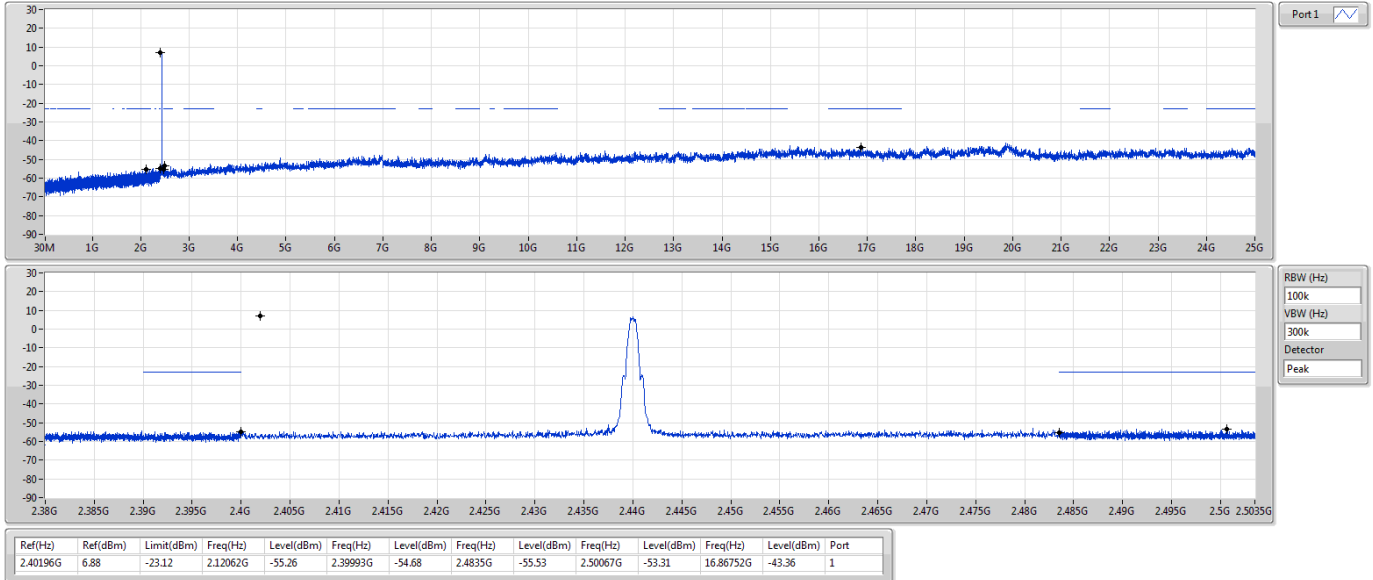


BT-LE(500kbps)

2440MHz

CSE NdB

18/06/2020

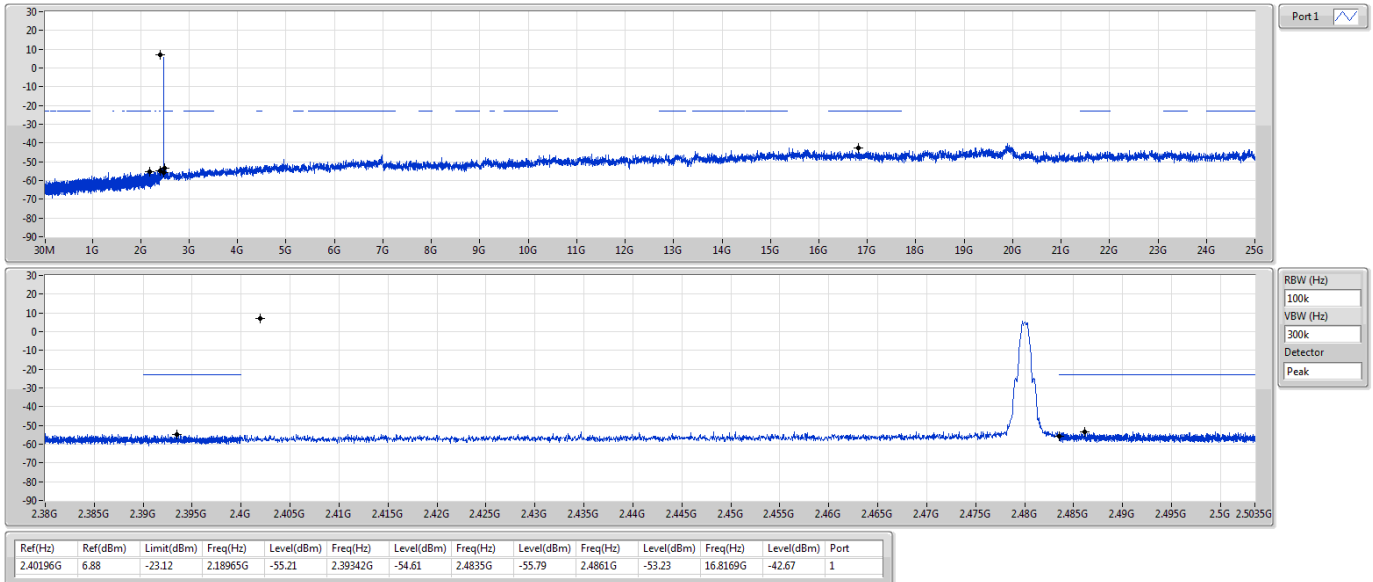


BT-LE(500kbps)

2480MHz

CSE NdB

18/06/2020





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(2Mbps)	Pass	PK	72.68M	36.78	40.00	-3.22	3	Horizontal	360	1.00	-

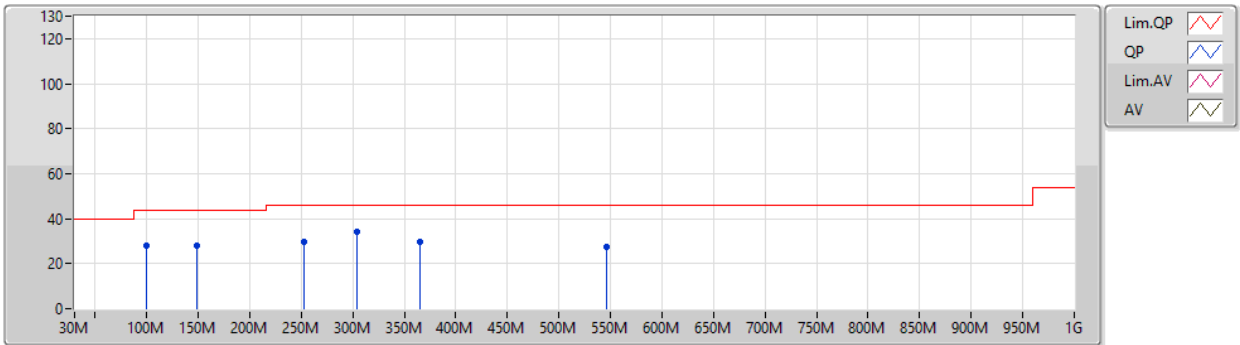
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	99.84M	28.00	43.50	-15.50	3	Vertical	0	1.00	-
2440MHz	Pass	PK	148.34M	27.80	43.50	-15.70	3	Vertical	0	1.00	-
2440MHz	Pass	PK	253.1M	29.89	46.00	-16.11	3	Vertical	0	1.00	-
2440MHz	Pass	PK	303.54M	34.10	46.00	-11.90	3	Vertical	0	1.00	-
2440MHz	Pass	PK	365.62M	29.49	46.00	-16.51	3	Vertical	0	1.00	-
2440MHz	Pass	PK	546.04M	27.66	46.00	-18.34	3	Vertical	0	1.00	-
2440MHz	Pass	PK	72.68M	36.78	40.00	-3.22	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	99.84M	37.07	43.50	-6.43	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	144.46M	32.25	43.50	-11.25	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	216M	31.39	46.00	-14.61	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	274.44M	34.36	46.00	-11.64	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	346.22M	31.53	46.00	-14.47	3	Horizontal	360	1.00	-

BT-LE(2Mbps)

2440MHz_USB

19/06/2020

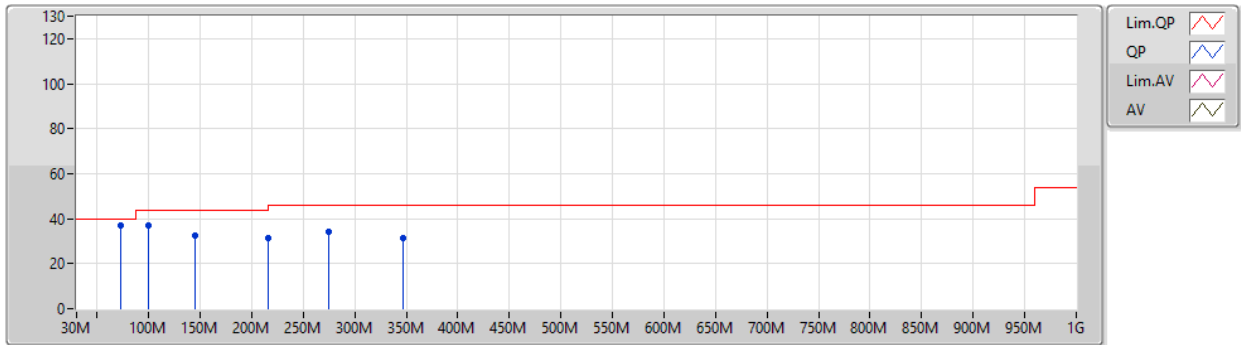


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	99.84M	28.00	43.50	-15.50	-20.78	3	Vertical	0	1.00	-	48.78	14.98	0.80	36.56
PK	148.34M	27.80	43.50	-15.70	-19.09	3	Vertical	0	1.00	-	46.89	16.30	0.94	36.33
PK	253.1M	29.89	46.00	-16.11	-17.07	3	Vertical	0	1.00	-	46.96	18.05	1.31	36.43
PK	303.54M	34.10	46.00	-11.90	-16.68	3	Vertical	0	1.00	-	50.78	18.27	1.41	36.36
PK	365.62M	29.49	46.00	-16.51	-15.15	3	Vertical	0	1.00	-	44.64	19.77	1.56	36.48
PK	546.04M	27.66	46.00	-18.34	-11.49	3	Vertical	0	1.00	-	39.15	23.60	1.99	37.08

BT-LE(2Mbps)

2440MHz_USB

19/06/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	72.68M	36.78	40.00	-3.22	-24.76	3	Horizontal	360	1.00	-	61.54	11.42	0.65	36.83
PK	99.84M	37.07	43.50	-6.43	-20.78	3	Horizontal	360	1.00	-	57.85	14.98	0.80	36.56
PK	144.46M	32.25	43.50	-11.25	-18.98	3	Horizontal	360	1.00	-	51.23	16.44	0.92	36.34
PK	216M	31.39	46.00	-14.61	-21.11	3	Horizontal	360	1.00	-	52.50	13.99	1.16	36.26
PK	274.44M	34.36	46.00	-11.64	-17.12	3	Horizontal	360	1.00	-	51.48	17.92	1.35	36.39
PK	346.22M	31.53	46.00	-14.47	-15.70	3	Horizontal	360	1.00	-	47.23	19.30	1.49	36.49

**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	7.31938G	53.19	54.00	-0.81	3	Horizontal	135	1.03	-
BT-LE(2Mbps)	Pass	AV	7.31886G	52.74	54.00	-1.26	3	Horizontal	137	1.00	-
BT-LE(125kbps)	Pass	AV	7.32044G	53.76	54.00	-0.24	3	Horizontal	135	1.00	-
BT-LE(500kbps)	Pass	AV	7.31947G	53.27	54.00	-0.73	3	Horizontal	134	1.03	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3634G	45.33	54.00	-8.67	3	Vertical	95	2.16	-
2402MHz	Pass	AV	2.402G	105.32	Inf	-Inf	3	Vertical	95	2.16	-
2402MHz	Pass	PK	2.3844G	57.79	74.00	-16.21	3	Vertical	95	2.16	-
2402MHz	Pass	PK	2.4018G	106.31	Inf	-Inf	3	Vertical	95	2.16	-
2402MHz	Pass	AV	2.3886G	45.35	54.00	-8.65	3	Horizontal	117	1.14	-
2402MHz	Pass	AV	2.402G	110.22	Inf	-Inf	3	Horizontal	117	1.14	-
2402MHz	Pass	PK	2.3742G	57.83	74.00	-16.17	3	Horizontal	117	1.14	-
2402MHz	Pass	PK	2.4018G	111.17	Inf	-Inf	3	Horizontal	117	1.14	-
2402MHz	Pass	AV	4.80399G	45.37	54.00	-8.63	3	Vertical	94	1.43	-
2402MHz	Pass	PK	4.80346G	52.70	74.00	-21.30	3	Vertical	94	1.43	-
2402MHz	Pass	AV	4.804G	49.53	54.00	-4.47	3	Horizontal	107	1.00	-
2402MHz	Pass	PK	4.8034G	55.64	74.00	-18.36	3	Horizontal	107	1.00	-
2440MHz	Pass	AV	2.3728G	45.38	54.00	-8.62	3	Vertical	75	2.30	-
2440MHz	Pass	AV	2.44G	105.27	Inf	-Inf	3	Vertical	75	2.30	-
2440MHz	Pass	AV	2.532G	45.82	54.00	-8.18	3	Vertical	75	2.30	-
2440MHz	Pass	PK	2.3664G	57.53	74.00	-16.47	3	Vertical	75	2.30	-
2440MHz	Pass	PK	2.44G	106.37	Inf	-Inf	3	Vertical	75	2.30	-
2440MHz	Pass	PK	2.5136G	58.41	74.00	-15.59	3	Vertical	75	2.30	-
2440MHz	Pass	AV	2.36G	45.22	54.00	-8.78	3	Horizontal	119	1.00	-
2440MHz	Pass	AV	2.44G	110.20	Inf	-Inf	3	Horizontal	119	1.00	-
2440MHz	Pass	AV	2.526G	46.01	54.00	-7.99	3	Horizontal	119	1.00	-
2440MHz	Pass	PK	2.3556G	57.92	74.00	-16.08	3	Horizontal	119	1.00	-
2440MHz	Pass	PK	2.4396G	111.16	Inf	-Inf	3	Horizontal	119	1.00	-
2440MHz	Pass	PK	2.5048G	57.99	74.00	-16.01	3	Horizontal	119	1.00	-
2440MHz	Pass	AV	4.88003G	43.78	54.00	-10.22	3	Vertical	83	1.63	-
2440MHz	Pass	AV	7.3205G	51.65	54.00	-2.35	3	Vertical	97	1.04	-
2440MHz	Pass	PK	4.87953G	51.73	74.00	-22.27	3	Vertical	83	1.63	-
2440MHz	Pass	PK	7.32065G	61.13	74.00	-12.87	3	Vertical	97	1.04	-
2440MHz	Pass	AV	4.88004G	48.30	54.00	-5.70	3	Horizontal	124	1.00	-
2440MHz	Pass	AV	7.31938G	53.19	54.00	-0.81	3	Horizontal	135	1.03	-
2440MHz	Pass	PK	4.87948G	54.70	74.00	-19.30	3	Horizontal	124	1.00	-
2440MHz	Pass	PK	7.32004G	63.09	74.00	-10.91	3	Horizontal	135	1.03	-
2480MHz	Pass	AV	2.48G	103.81	Inf	-Inf	3	Vertical	92	2.28	-
2480MHz	Pass	AV	2.4842G	45.88	54.00	-8.12	3	Vertical	92	2.28	-
2480MHz	Pass	PK	2.48G	104.99	Inf	-Inf	3	Vertical	92	2.28	-
2480MHz	Pass	PK	2.4842G	58.27	74.00	-15.73	3	Vertical	92	2.28	-
2480MHz	Pass	AV	2.48G	106.24	Inf	-Inf	3	Horizontal	111	1.32	-
2480MHz	Pass	AV	2.4835G	45.96	54.00	-8.04	3	Horizontal	111	1.32	-
2480MHz	Pass	PK	2.48G	107.34	Inf	-Inf	3	Horizontal	111	1.32	-
2480MHz	Pass	PK	2.4844G	58.12	74.00	-15.88	3	Horizontal	111	1.32	-
2480MHz	Pass	AV	4.95997G	41.19	54.00	-12.81	3	Vertical	277	2.37	-
2480MHz	Pass	AV	7.43942G	47.17	54.00	-6.83	3	Vertical	89	1.01	-
2480MHz	Pass	PK	4.96046G	50.38	74.00	-23.62	3	Vertical	277	2.37	-
2480MHz	Pass	PK	7.43923G	57.81	74.00	-16.19	3	Vertical	89	1.01	-
2480MHz	Pass	AV	4.95996G	42.72	54.00	-11.28	3	Horizontal	123	1.50	-
2480MHz	Pass	AV	7.44058G	49.51	54.00	-4.49	3	Horizontal	134	1.02	-
2480MHz	Pass	PK	4.96035G	51.03	74.00	-22.97	3	Horizontal	123	1.50	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	PK	7.43921G	59.66	74.00	-14.34	3	Horizontal	134	1.02	-
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3676G	45.20	54.00	-8.80	3	Vertical	95	2.16	-
2402MHz	Pass	AV	2.402G	103.55	Inf	-Inf	3	Vertical	95	2.16	-
2402MHz	Pass	PK	2.3762G	58.01	74.00	-15.99	3	Vertical	95	2.16	-
2402MHz	Pass	PK	2.402G	106.74	Inf	-Inf	3	Vertical	95	2.16	-
2402MHz	Pass	AV	2.3898G	45.33	54.00	-8.67	3	Horizontal	116	1.11	-
2402MHz	Pass	AV	2.402G	108.60	Inf	-Inf	3	Horizontal	116	1.11	-
2402MHz	Pass	PK	2.3884G	58.17	74.00	-15.83	3	Horizontal	116	1.11	-
2402MHz	Pass	PK	2.402G	111.82	Inf	-Inf	3	Horizontal	116	1.11	-
2402MHz	Pass	AV	4.80486G	42.27	54.00	-11.73	3	Vertical	93	1.43	-
2402MHz	Pass	PK	4.80286G	52.76	74.00	-21.24	3	Vertical	93	1.43	-
2402MHz	Pass	AV	4.80487G	45.65	54.00	-8.35	3	Horizontal	106	1.01	-
2402MHz	Pass	PK	4.80313G	55.84	74.00	-18.16	3	Horizontal	106	1.01	-
2440MHz	Pass	AV	2.354G	45.21	54.00	-8.79	3	Vertical	73	2.29	-
2440MHz	Pass	AV	2.44G	101.82	Inf	-Inf	3	Vertical	73	2.29	-
2440MHz	Pass	AV	2.492G	45.82	54.00	-8.18	3	Vertical	73	2.29	-
2440MHz	Pass	PK	2.386G	58.04	74.00	-15.96	3	Vertical	73	2.29	-
2440MHz	Pass	PK	2.4396G	105.90	Inf	-Inf	3	Vertical	73	2.29	-
2440MHz	Pass	PK	2.5204G	57.84	74.00	-16.16	3	Vertical	73	2.29	-
2440MHz	Pass	AV	2.3612G	45.26	54.00	-8.74	3	Horizontal	119	1.09	-
2440MHz	Pass	AV	2.44G	107.64	Inf	-Inf	3	Horizontal	119	1.09	-
2440MHz	Pass	AV	2.5104G	45.82	54.00	-8.18	3	Horizontal	119	1.09	-
2440MHz	Pass	PK	2.3812G	57.87	74.00	-16.13	3	Horizontal	119	1.09	-
2440MHz	Pass	PK	2.44G	111.19	Inf	-Inf	3	Horizontal	119	1.09	-
2440MHz	Pass	PK	2.5132G	58.78	74.00	-15.22	3	Horizontal	119	1.09	-
2440MHz	Pass	AV	4.88094G	42.07	54.00	-11.93	3	Vertical	82	1.73	-
2440MHz	Pass	AV	7.3189G	50.56	54.00	-3.44	3	Vertical	96	1.04	-
2440MHz	Pass	PK	4.87909G	52.41	74.00	-21.59	3	Vertical	82	1.73	-
2440MHz	Pass	PK	7.32142G	60.33	74.00	-13.67	3	Vertical	96	1.04	-
2440MHz	Pass	AV	4.8791G	45.29	54.00	-8.71	3	Horizontal	126	1.00	-
2440MHz	Pass	AV	7.31886G	52.74	54.00	-1.26	3	Horizontal	137	1.00	-
2440MHz	Pass	PK	4.87906G	55.48	74.00	-18.52	3	Horizontal	126	1.00	-
2440MHz	Pass	PK	7.31994G	62.39	74.00	-11.61	3	Horizontal	137	1.00	-
2480MHz	Pass	AV	2.48G	101.43	Inf	-Inf	3	Vertical	92	2.28	-
2480MHz	Pass	AV	2.4835G	47.08	54.00	-6.92	3	Vertical	92	2.28	-
2480MHz	Pass	PK	2.48G	104.60	Inf	-Inf	3	Vertical	92	2.28	-
2480MHz	Pass	PK	2.4902G	58.21	74.00	-15.79	3	Vertical	92	2.28	-
2480MHz	Pass	AV	2.48G	104.01	Inf	-Inf	3	Horizontal	111	1.31	-
2480MHz	Pass	AV	2.4835G	47.84	54.00	-6.16	3	Horizontal	111	1.31	-
2480MHz	Pass	PK	2.48G	107.24	Inf	-Inf	3	Horizontal	111	1.31	-
2480MHz	Pass	PK	2.4838G	58.80	74.00	-15.20	3	Horizontal	111	1.31	-
2480MHz	Pass	AV	4.9591G	38.28	54.00	-15.72	3	Vertical	78	1.61	-
2480MHz	Pass	AV	7.4388G	47.82	54.00	-6.18	3	Vertical	97	1.11	-
2480MHz	Pass	PK	4.95884G	49.65	74.00	-24.35	3	Vertical	78	1.61	-
2480MHz	Pass	PK	7.44157G	58.09	74.00	-15.91	3	Vertical	97	1.11	-
2480MHz	Pass	AV	4.96088G	41.30	54.00	-12.70	3	Horizontal	123	1.50	-
2480MHz	Pass	AV	7.43888G	49.83	54.00	-4.17	3	Horizontal	134	1.00	-
2480MHz	Pass	PK	4.95992G	52.03	74.00	-21.97	3	Horizontal	123	1.50	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	PK	7.4385G	59.77	74.00	-14.23	3	Horizontal	134	1.00	-
BT-LE(125kbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3622G	44.44	54.00	-9.56	3	Vertical	95	2.17	-
2402MHz	Pass	AV	2.4022G	103.34	Inf	-Inf	3	Vertical	95	2.17	-
2402MHz	Pass	PK	2.3882G	58.11	74.00	-15.89	3	Vertical	95	2.17	-
2402MHz	Pass	PK	2.4018G	105.72	Inf	-Inf	3	Vertical	95	2.17	-
2402MHz	Pass	AV	2.3848G	44.64	54.00	-9.36	3	Horizontal	116	1.12	-
2402MHz	Pass	AV	2.402G	109.19	Inf	-Inf	3	Horizontal	116	1.12	-
2402MHz	Pass	PK	2.382G	58.44	74.00	-15.56	3	Horizontal	116	1.12	-
2402MHz	Pass	PK	2.4022G	110.43	Inf	-Inf	3	Horizontal	116	1.12	-
2402MHz	Pass	AV	4.80396G	44.69	54.00	-9.31	3	Vertical	84	1.57	-
2402MHz	Pass	PK	4.80352G	52.40	74.00	-21.60	3	Vertical	84	1.57	-
2402MHz	Pass	AV	4.80398G	48.34	54.00	-5.66	3	Horizontal	107	1.00	-
2402MHz	Pass	PK	4.80351G	55.40	74.00	-18.60	3	Horizontal	107	1.00	-
2440MHz	Pass	AV	2.3444G	44.45	54.00	-9.55	3	Vertical	90	1.92	-
2440MHz	Pass	AV	2.44G	104.30	Inf	-Inf	3	Vertical	90	1.92	-
2440MHz	Pass	AV	2.4964G	44.85	54.00	-9.15	3	Vertical	90	1.92	-
2440MHz	Pass	PK	2.352G	57.86	74.00	-16.14	3	Vertical	90	1.92	-
2440MHz	Pass	PK	2.4396G	105.51	Inf	-Inf	3	Vertical	90	1.92	-
2440MHz	Pass	PK	2.496G	58.00	74.00	-16.00	3	Vertical	90	1.92	-
2440MHz	Pass	AV	2.36G	44.49	54.00	-9.51	3	Horizontal	120	1.00	-
2440MHz	Pass	AV	2.44G	109.56	Inf	-Inf	3	Horizontal	120	1.00	-
2440MHz	Pass	AV	2.4936G	45.00	54.00	-9.00	3	Horizontal	120	1.00	-
2440MHz	Pass	PK	2.3612G	57.60	74.00	-16.40	3	Horizontal	120	1.00	-
2440MHz	Pass	PK	2.4404G	111.26	Inf	-Inf	3	Horizontal	120	1.00	-
2440MHz	Pass	PK	2.4848G	57.78	74.00	-16.22	3	Horizontal	120	1.00	-
2440MHz	Pass	AV	4.87998G	40.45	54.00	-13.55	3	Vertical	85	1.50	-
2440MHz	Pass	AV	7.32038G	51.20	54.00	-2.80	3	Vertical	98	1.00	-
2440MHz	Pass	PK	4.87966G	50.52	74.00	-23.48	3	Vertical	85	1.50	-
2440MHz	Pass	PK	7.31919G	62.58	74.00	-11.42	3	Vertical	98	1.00	-
2440MHz	Pass	AV	4.87996G	45.03	54.00	-8.97	3	Horizontal	126	1.00	-
2440MHz	Pass	AV	7.32044G	53.76	54.00	-0.24	3	Horizontal	135	1.00	-
2440MHz	Pass	PK	4.87957G	53.13	74.00	-20.87	3	Horizontal	126	1.00	-
2440MHz	Pass	PK	7.31926G	65.15	74.00	-8.85	3	Horizontal	135	1.00	-
2480MHz	Pass	AV	2.48G	103.69	Inf	-Inf	3	Vertical	93	2.12	-
2480MHz	Pass	AV	2.4835G	45.10	54.00	-8.90	3	Vertical	93	2.12	-
2480MHz	Pass	PK	2.4798G	104.94	Inf	-Inf	3	Vertical	93	2.12	-
2480MHz	Pass	PK	2.5142G	59.15	74.00	-14.85	3	Vertical	93	2.12	-
2480MHz	Pass	AV	2.48G	105.88	Inf	-Inf	3	Horizontal	112	1.08	-
2480MHz	Pass	AV	2.4835G	45.47	54.00	-8.53	3	Horizontal	112	1.08	-
2480MHz	Pass	PK	2.4802G	108.04	Inf	-Inf	3	Horizontal	112	1.08	-
2480MHz	Pass	PK	2.5148G	58.25	74.00	-15.75	3	Horizontal	112	1.08	-
2480MHz	Pass	AV	4.9599G	40.28	54.00	-13.72	3	Vertical	321	1.00	-
2480MHz	Pass	AV	7.4394G	46.68	54.00	-7.32	3	Vertical	95	1.00	-
2480MHz	Pass	PK	4.95947G	51.32	74.00	-22.68	3	Vertical	321	1.00	-
2480MHz	Pass	PK	7.43918G	58.13	74.00	-15.87	3	Vertical	95	1.00	-
2480MHz	Pass	AV	4.95999G	41.48	54.00	-12.52	3	Horizontal	122	1.50	-
2480MHz	Pass	AV	7.44053G	47.58	54.00	-6.42	3	Horizontal	135	1.00	-
2480MHz	Pass	PK	4.9595G	51.60	74.00	-22.40	3	Horizontal	122	1.50	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	PK	7.44065G	59.14	74.00	-14.86	3	Horizontal	135	1.00	-
BT-LE(500kbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.386G	44.81	54.00	-9.19	3	Vertical	96	2.22	-
2402MHz	Pass	AV	2.402G	106.15	Inf	-Inf	3	Vertical	96	2.22	-
2402MHz	Pass	PK	2.3892G	57.93	74.00	-16.07	3	Vertical	96	2.22	-
2402MHz	Pass	PK	2.4018G	107.32	Inf	-Inf	3	Vertical	96	2.22	-
2402MHz	Pass	AV	2.3898G	45.27	54.00	-8.73	3	Horizontal	115	1.50	-
2402MHz	Pass	AV	2.402G	109.94	Inf	-Inf	3	Horizontal	115	1.50	-
2402MHz	Pass	PK	2.3786G	58.15	74.00	-15.85	3	Horizontal	115	1.50	-
2402MHz	Pass	PK	2.4018G	111.18	Inf	-Inf	3	Horizontal	115	1.50	-
2402MHz	Pass	AV	4.80398G	45.91	54.00	-8.09	3	Vertical	83	1.56	-
2402MHz	Pass	PK	4.80341G	52.88	74.00	-21.12	3	Vertical	83	1.56	-
2402MHz	Pass	AV	4.80399G	49.21	54.00	-4.79	3	Horizontal	105	1.00	-
2402MHz	Pass	PK	4.80441G	55.48	74.00	-18.52	3	Horizontal	105	1.00	-
2440MHz	Pass	AV	2.3476G	44.68	54.00	-9.32	3	Vertical	75	2.22	-
2440MHz	Pass	AV	2.44G	105.58	Inf	-Inf	3	Vertical	75	2.22	-
2440MHz	Pass	AV	2.512G	45.24	54.00	-8.76	3	Vertical	75	2.22	-
2440MHz	Pass	PK	2.346G	58.03	74.00	-15.97	3	Vertical	75	2.22	-
2440MHz	Pass	PK	2.44G	106.74	Inf	-Inf	3	Vertical	75	2.22	-
2440MHz	Pass	PK	2.4904G	58.50	74.00	-15.50	3	Vertical	75	2.22	-
2440MHz	Pass	AV	2.3804G	44.69	54.00	-9.31	3	Horizontal	120	1.00	-
2440MHz	Pass	AV	2.44G	109.76	Inf	-Inf	3	Horizontal	120	1.00	-
2440MHz	Pass	AV	2.5036G	45.27	54.00	-8.73	3	Horizontal	120	1.00	-
2440MHz	Pass	PK	2.3532G	58.18	74.00	-15.82	3	Horizontal	120	1.00	-
2440MHz	Pass	PK	2.4396G	111.04	Inf	-Inf	3	Horizontal	120	1.00	-
2440MHz	Pass	PK	2.5308G	58.48	74.00	-15.52	3	Horizontal	120	1.00	-
2440MHz	Pass	AV	4.88G	43.11	54.00	-10.89	3	Vertical	81	1.50	-
2440MHz	Pass	AV	7.32045G	51.24	54.00	-2.76	3	Vertical	97	1.03	-
2440MHz	Pass	PK	4.87957G	51.53	74.00	-22.47	3	Vertical	81	1.50	-
2440MHz	Pass	PK	7.31916G	61.65	74.00	-12.35	3	Vertical	97	1.03	-
2440MHz	Pass	AV	4.87997G	48.38	54.00	-5.62	3	Horizontal	124	1.00	-
2440MHz	Pass	AV	7.31947G	53.27	54.00	-0.73	3	Horizontal	134	1.03	-
2440MHz	Pass	PK	4.88027G	54.97	74.00	-19.03	3	Horizontal	124	1.00	-
2440MHz	Pass	PK	7.31923G	62.67	74.00	-11.33	3	Horizontal	134	1.03	-
2480MHz	Pass	AV	2.48G	104.24	Inf	-Inf	3	Vertical	93	2.12	-
2480MHz	Pass	AV	2.5226G	45.29	54.00	-8.71	3	Vertical	93	2.12	-
2480MHz	Pass	PK	2.48G	105.43	Inf	-Inf	3	Vertical	93	2.12	-
2480MHz	Pass	PK	2.527G	58.58	74.00	-15.42	3	Vertical	93	2.12	-
2480MHz	Pass	AV	2.48G	106.62	Inf	-Inf	3	Horizontal	112	1.50	-
2480MHz	Pass	AV	2.4835G	45.53	54.00	-8.47	3	Horizontal	112	1.50	-
2480MHz	Pass	PK	2.4802G	107.73	Inf	-Inf	3	Horizontal	112	1.50	-
2480MHz	Pass	PK	2.5228G	59.17	74.00	-14.83	3	Horizontal	112	1.50	-
2480MHz	Pass	AV	4.96003G	40.58	54.00	-13.42	3	Vertical	321	1.12	-
2480MHz	Pass	AV	7.44049G	46.74	54.00	-7.26	3	Vertical	97	1.11	-
2480MHz	Pass	PK	4.9604G	49.88	74.00	-24.12	3	Vertical	321	1.12	-
2480MHz	Pass	PK	7.44065G	57.38	74.00	-16.62	3	Vertical	97	1.11	-
2480MHz	Pass	AV	4.95996G	44.23	54.00	-9.77	3	Horizontal	122	1.00	-
2480MHz	Pass	AV	7.44048G	48.60	54.00	-5.40	3	Horizontal	132	1.00	-
2480MHz	Pass	PK	4.96044G	52.42	74.00	-21.58	3	Horizontal	122	1.00	-



RSE TX above 1GHz

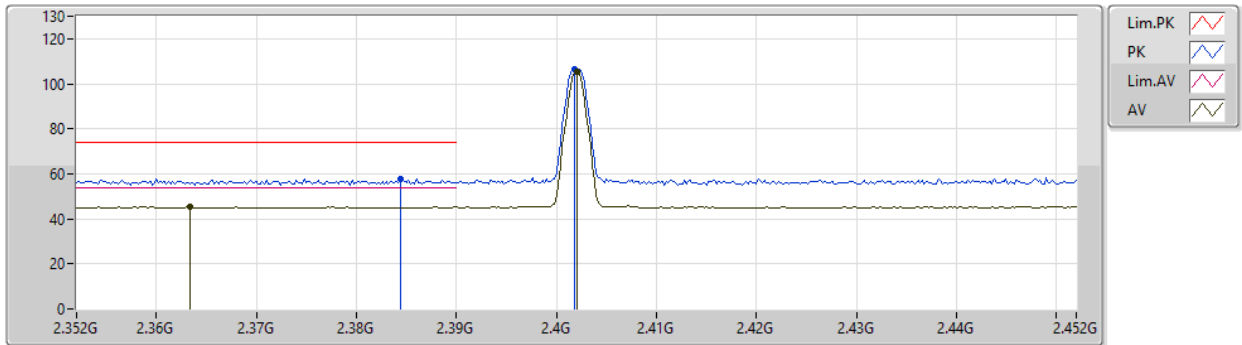
Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	PK	7.4407G	59.33	74.00	-14.67	3	Horizontal	132	1.00	-

BT-LE(1Mbps)

2402MHz_TX

18/06/2020

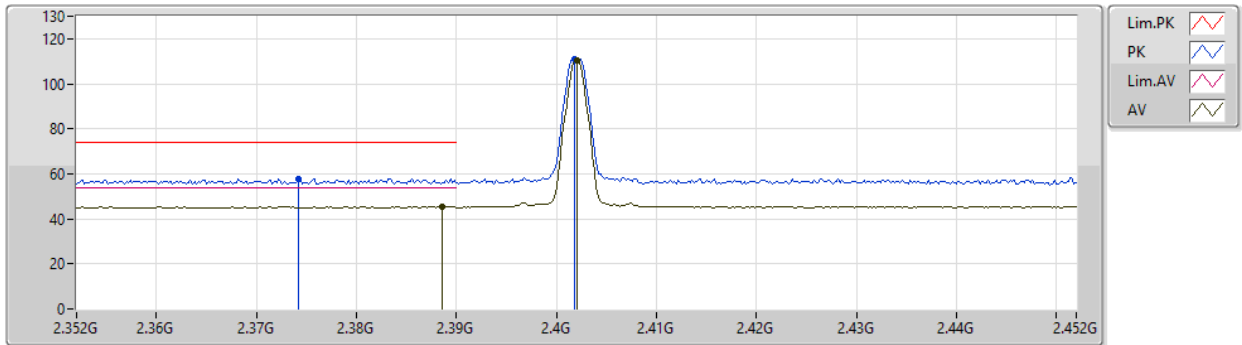


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3634G	45.33	54.00	-8.67	32.78	3	Vertical	95	2.16	-	12.55	27.75	5.03	-
AV	2.402G	105.32	Inf	-Inf	32.70	3	Vertical	95	2.16	-	72.62	27.60	5.10	-
PK	2.3844G	57.79	74.00	-16.21	32.73	3	Vertical	95	2.16	-	25.06	27.66	5.07	-
PK	2.4018G	106.31	Inf	-Inf	32.70	3	Vertical	95	2.16	-	73.61	27.60	5.10	-

BT-LE(1Mbps)

2402MHz_TX

18/06/2020

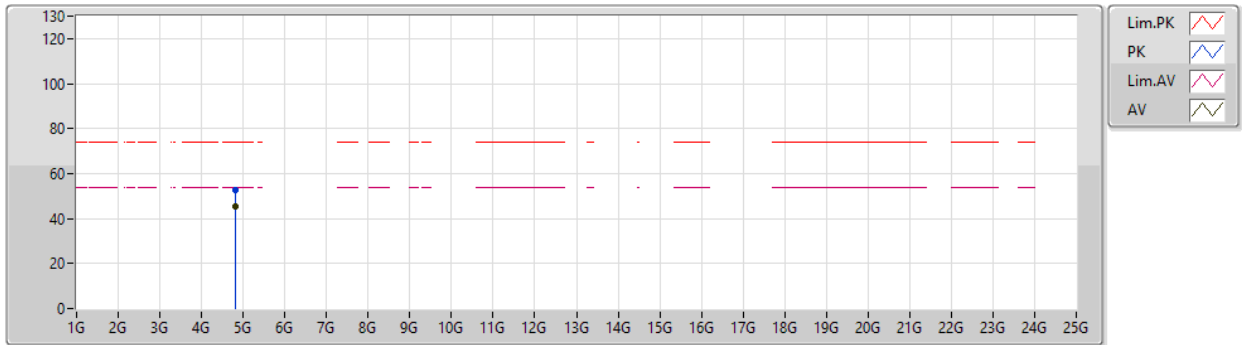


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3886G	45.35	54.00	-8.65	32.73	3	Horizontal	117	1.14	-	12.62	27.65	5.08	-
AV	2.402G	110.22	Inf	-Inf	32.70	3	Horizontal	117	1.14	-	77.52	27.60	5.10	-
PK	2.3742G	57.83	74.00	-16.17	32.75	3	Horizontal	117	1.14	-	25.08	27.70	5.05	-
PK	2.4018G	111.17	Inf	-Inf	32.70	3	Horizontal	117	1.14	-	78.47	27.60	5.10	-

BT-LE(1Mbps)

2402MHz_TX

18/06/2020

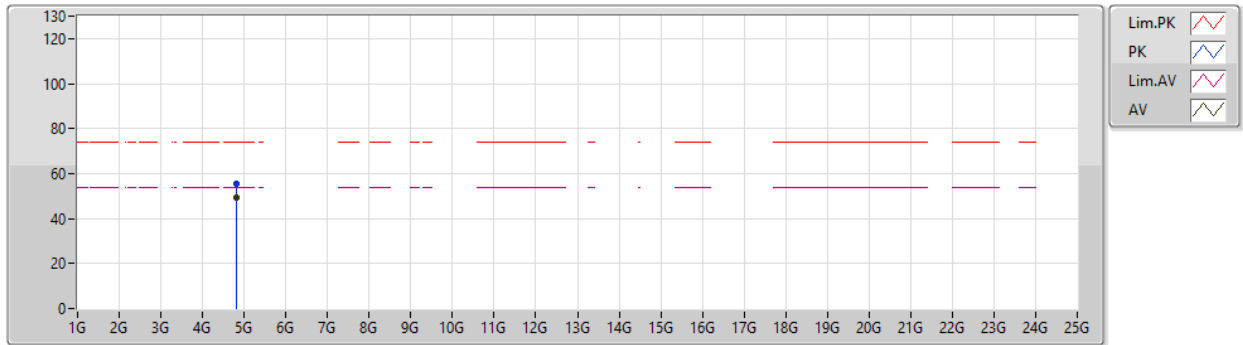


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80399G	45.37	54.00	-8.63	4.31	3	Vertical	94	1.43	-	41.06	31.12	7.30	34.11
PK	4.80346G	52.70	74.00	-21.30	4.30	3	Vertical	94	1.43	-	48.40	31.11	7.30	34.11

BT-LE(1Mbps)

18/06/2020

2402MHz_TX

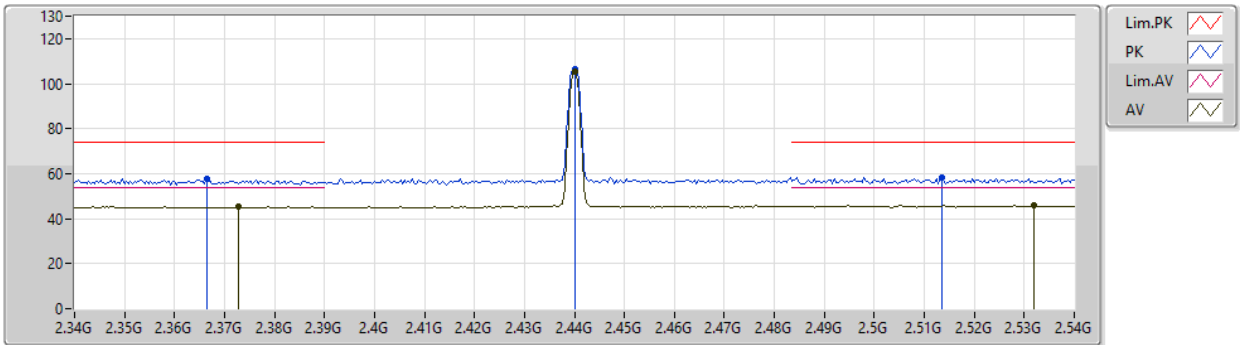


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.804G	49.53	54.00	-4.47	4.31	3	Horizontal	107	1.00	-	45.22	31.12	7.30	34.11
PK	4.8034G	55.64	74.00	-18.36	4.30	3	Horizontal	107	1.00	-	51.34	31.11	7.30	34.11

BT-LE(1Mbps)

2440MHz_TX

18/06/2020

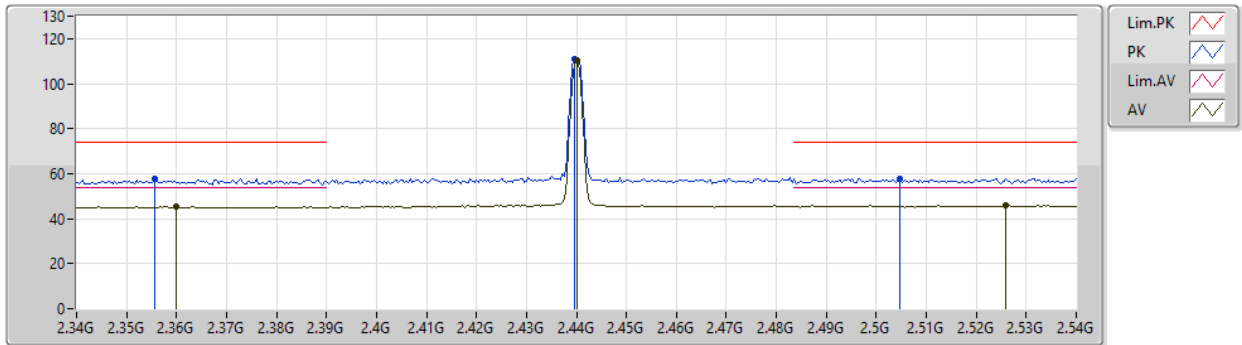


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3728G	45.38	54.00	-8.62	32.76	3	Vertical	75	2.30	-	12.62	27.71	5.05	-
AV	2.44G	105.27	Inf	-Inf	32.76	3	Vertical	75	2.30	-	72.51	27.60	5.16	-
AV	2.532G	45.82	54.00	-8.18	32.84	3	Vertical	75	2.30	-	12.98	27.54	5.30	-
PK	2.3664G	57.53	74.00	-16.47	32.76	3	Vertical	75	2.30	-	24.77	27.73	5.03	-
PK	2.44G	106.37	Inf	-Inf	32.76	3	Vertical	75	2.30	-	73.61	27.60	5.16	-
PK	2.5136G	58.41	74.00	-15.59	32.84	3	Vertical	75	2.30	-	25.57	27.57	5.27	-

BT-LE(1Mbps)

2440MHz_TX

18/06/2020

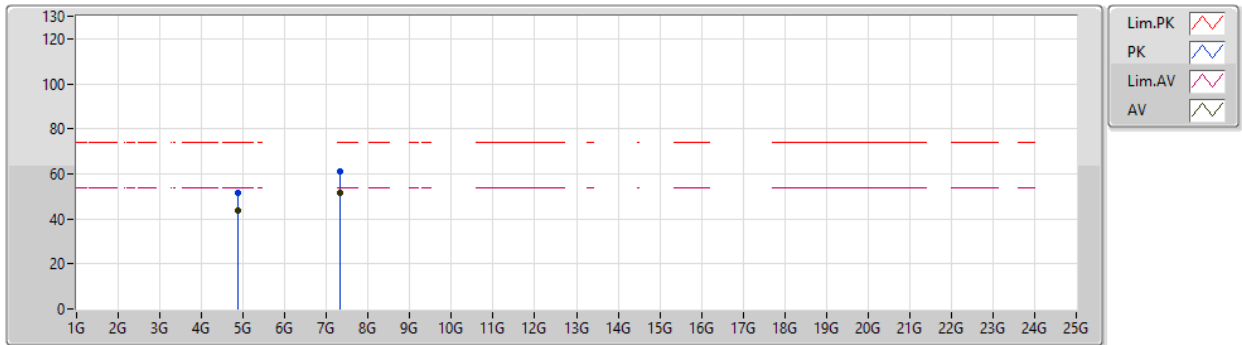


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.36G	45.22	54.00	-8.78	32.78	3	Horizontal	119	1.00	-	12.44	27.76	5.02	-
AV	2.44G	110.20	Inf	-Inf	32.76	3	Horizontal	119	1.00	-	77.44	27.60	5.16	-
AV	2.526G	46.01	54.00	-7.99	32.84	3	Horizontal	119	1.00	-	13.17	27.55	5.29	-
PK	2.3556G	57.92	74.00	-16.08	32.79	3	Horizontal	119	1.00	-	25.13	27.78	5.01	-
PK	2.4396G	111.16	Inf	-Inf	32.76	3	Horizontal	119	1.00	-	78.40	27.60	5.16	-
PK	2.5048G	57.99	74.00	-16.01	32.85	3	Horizontal	119	1.00	-	25.14	27.59	5.26	-

BT-LE(1Mbps)

2440MHz_TX

18/06/2020

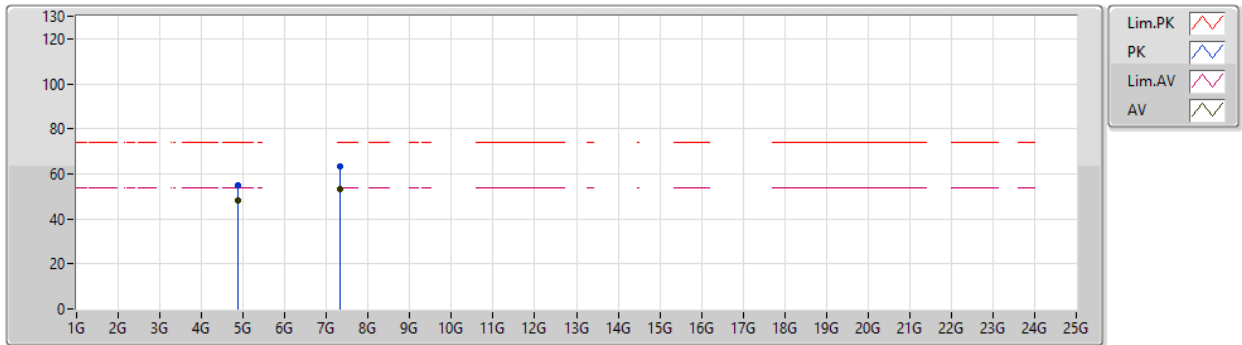


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88003G	43.78	54.00	-10.22	4.52	3	Vertical	83	1.63	-	39.26	31.24	7.38	34.10
AV	7.3205G	51.65	54.00	-2.35	10.58	3	Vertical	97	1.04	-	41.07	36.56	8.60	34.58
PK	4.87953G	51.73	74.00	-22.27	4.52	3	Vertical	83	1.63	-	47.21	31.24	7.38	34.10
PK	7.32065G	61.13	74.00	-12.87	10.58	3	Vertical	97	1.04	-	50.55	36.56	8.60	34.58

BT-LE(1Mbps)

2440MHz_TX

18/06/2020

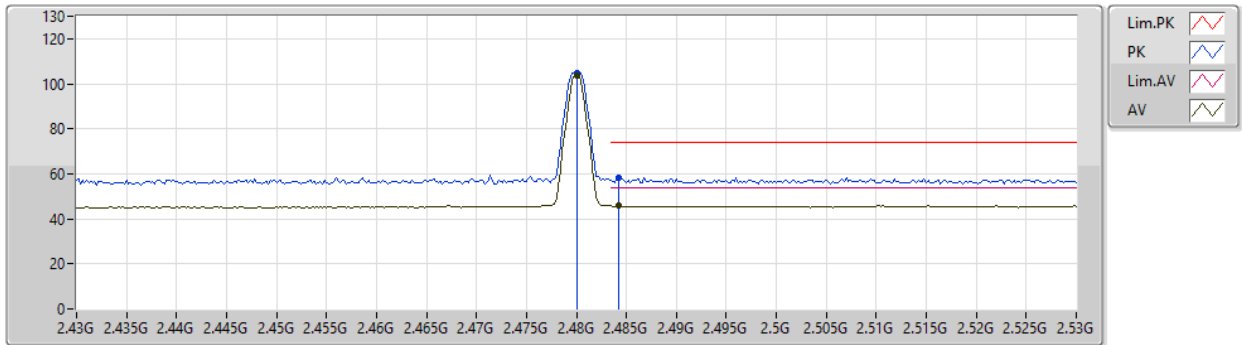


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88004G	48.30	54.00	-5.70	4.52	3	Horizontal	124	1.00	-	43.78	31.24	7.38	34.10
AV	7.31938G	53.19	54.00	-0.81	10.58	3	Horizontal	135	1.03	-	42.61	36.56	8.60	34.58
PK	4.87948G	54.70	74.00	-19.30	4.52	3	Horizontal	124	1.00	-	50.18	31.24	7.38	34.10
PK	7.32004G	63.09	74.00	-10.91	10.58	3	Horizontal	135	1.03	-	52.51	36.56	8.60	34.58

BT-LE(1Mbps)

2480MHz_TX

18/06/2020

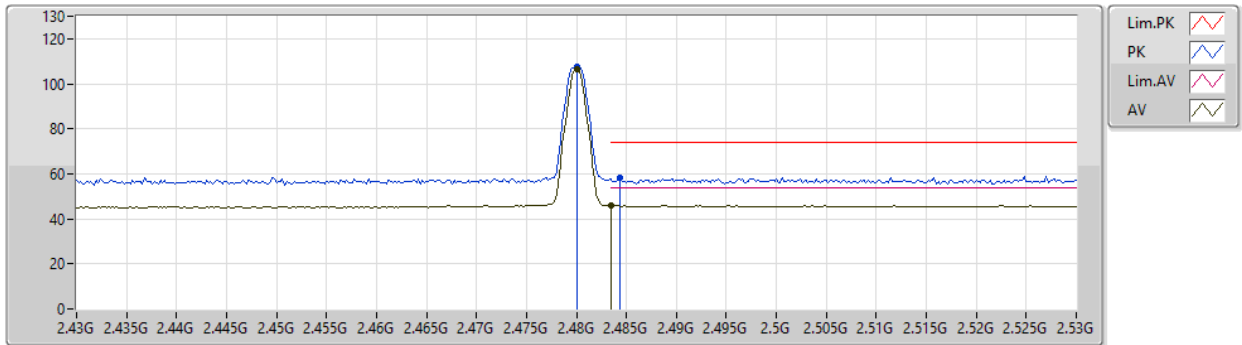


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	103.81	Inf	-Inf	32.82	3	Vertical	92	2.28	-	70.99	27.60	5.22	-
AV	2.4842G	45.88	54.00	-8.12	32.83	3	Vertical	92	2.28	-	13.05	27.60	5.23	-
PK	2.48G	104.99	Inf	-Inf	32.82	3	Vertical	92	2.28	-	72.17	27.60	5.22	-
PK	2.4842G	58.27	74.00	-15.73	32.83	3	Vertical	92	2.28	-	25.44	27.60	5.23	-

BT-LE(1Mbps)

2480MHz_TX

18/06/2020

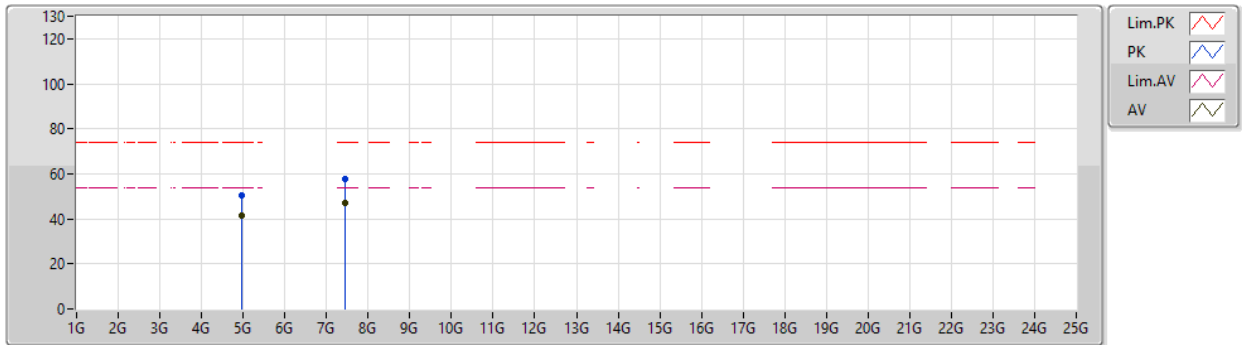


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	106.24	Inf	-Inf	32.82	3	Horizontal	111	1.32	-	73.42	27.60	5.22	-
AV	2.4835G	45.96	54.00	-8.04	32.83	3	Horizontal	111	1.32	-	13.13	27.60	5.23	-
PK	2.48G	107.34	Inf	-Inf	32.82	3	Horizontal	111	1.32	-	74.52	27.60	5.22	-
PK	2.4844G	58.12	74.00	-15.88	32.83	3	Horizontal	111	1.32	-	25.29	27.60	5.23	-

BT-LE(1Mbps)

2480MHz_TX

18/06/2020

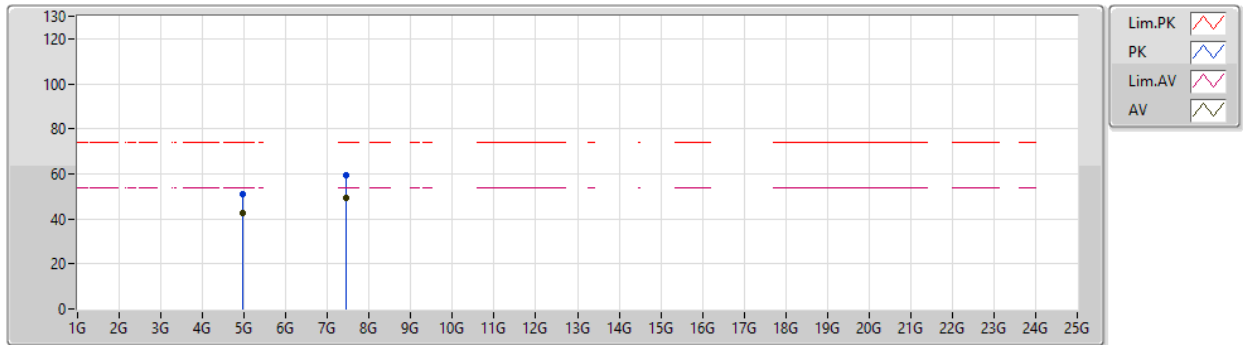


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95997G	41.19	54.00	-12.81	4.79	3	Vertical	277	2.37	-	36.40	31.42	7.46	34.09
AV	7.43942G	47.17	54.00	-6.83	10.56	3	Vertical	89	1.01	-	36.61	36.56	8.60	34.60
PK	4.96046G	50.38	74.00	-23.62	4.79	3	Vertical	277	2.37	-	45.59	31.42	7.46	34.09
PK	7.43923G	57.81	74.00	-16.19	10.56	3	Vertical	89	1.01	-	47.25	36.56	8.60	34.60

BT-LE(1Mbps)

2480MHz_TX

18/06/2020

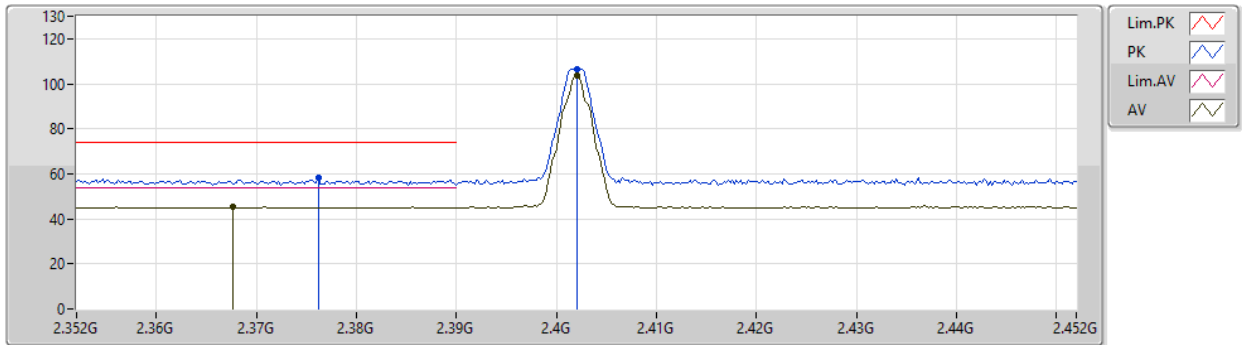


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95996G	42.72	54.00	-11.28	4.79	3	Horizontal	123	1.50	-	37.93	31.42	7.46	34.09
AV	7.44058G	49.51	54.00	-4.49	10.56	3	Horizontal	134	1.02	-	38.95	36.56	8.60	34.60
PK	4.96035G	51.03	74.00	-22.97	4.79	3	Horizontal	123	1.50	-	46.24	31.42	7.46	34.09
PK	7.43921G	59.66	74.00	-14.34	10.56	3	Horizontal	134	1.02	-	49.10	36.56	8.60	34.60

BT-LE(2Mbps)

2402MHz_TX

18/06/2020

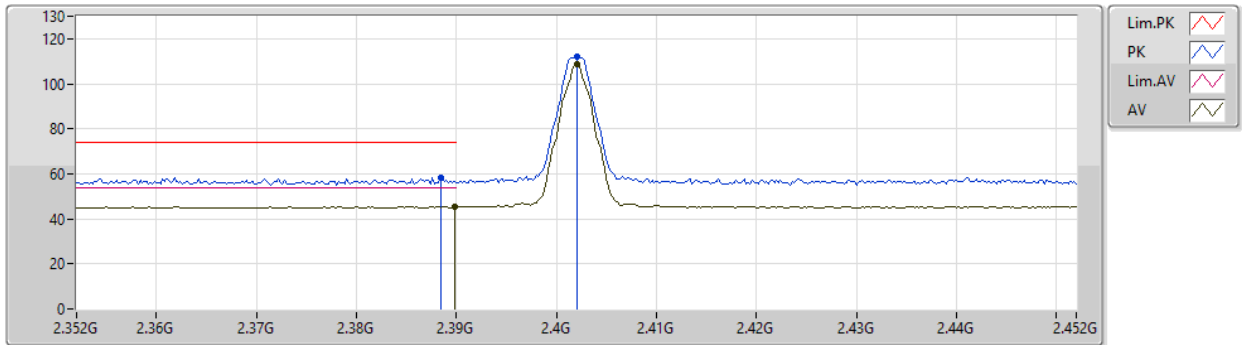


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3676G	45.20	54.00	-8.80	32.77	3	Vertical	95	2.16	-	12.43	27.73	5.04	-
AV	2.402G	103.55	Inf	-Inf	32.70	3	Vertical	95	2.16	-	70.85	27.60	5.10	-
PK	2.3762G	58.01	74.00	-15.99	32.75	3	Vertical	95	2.16	-	25.26	27.70	5.05	-
PK	2.402G	106.74	Inf	-Inf	32.70	3	Vertical	95	2.16	-	74.04	27.60	5.10	-

BT-LE(2Mbps)

2402MHz_TX

18/06/2020

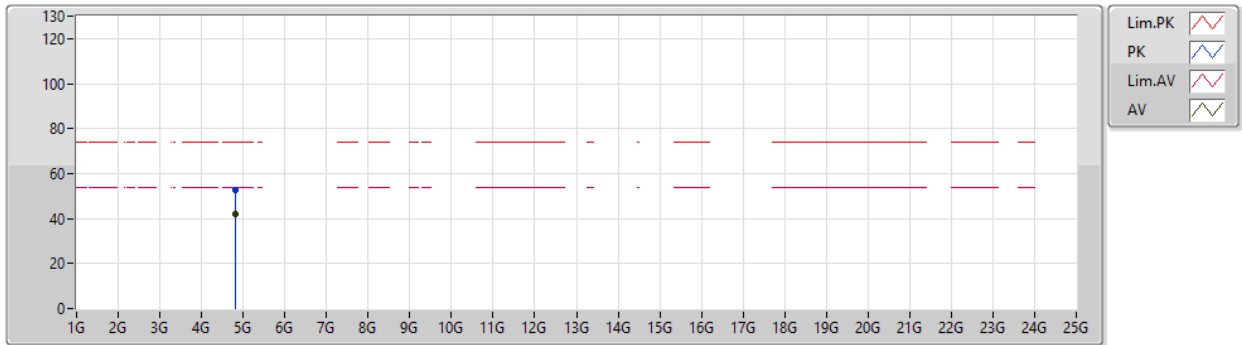


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	45.33	54.00	-8.67	32.72	3	Horizontal	116	1.11	-	12.61	27.64	5.08	-
AV	2.402G	108.60	Inf	-Inf	32.70	3	Horizontal	116	1.11	-	75.90	27.60	5.10	-
PK	2.3884G	58.17	74.00	-15.83	32.73	3	Horizontal	116	1.11	-	25.44	27.65	5.08	-
PK	2.402G	111.82	Inf	-Inf	32.70	3	Horizontal	116	1.11	-	79.12	27.60	5.10	-

BT-LE(2Mbps)

18/06/2020

2402MHz_TX

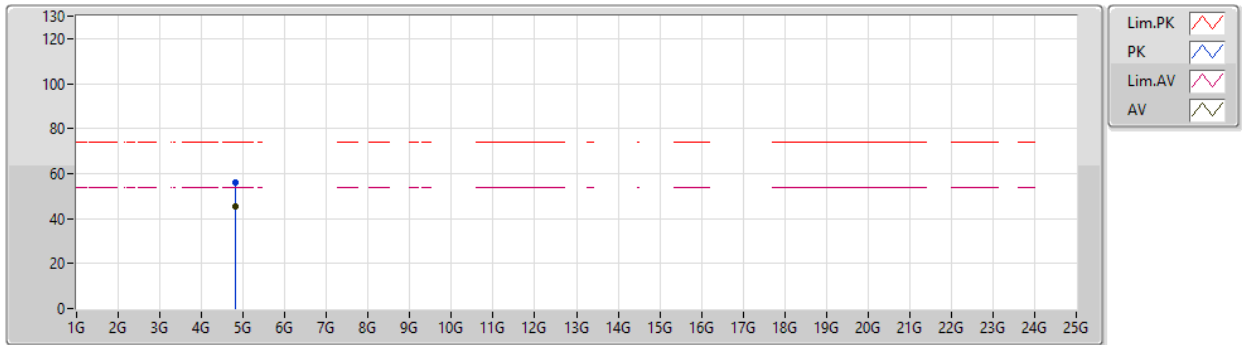


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80486G	42.27	54.00	-11.73	4.31	3	Vertical	93	1.43	-	37.96	31.12	7.30	34.11
PK	4.80286G	52.76	74.00	-21.24	4.30	3	Vertical	93	1.43	-	48.46	31.11	7.30	34.11

BT-LE(2Mbps)

2402MHz_TX

18/06/2020

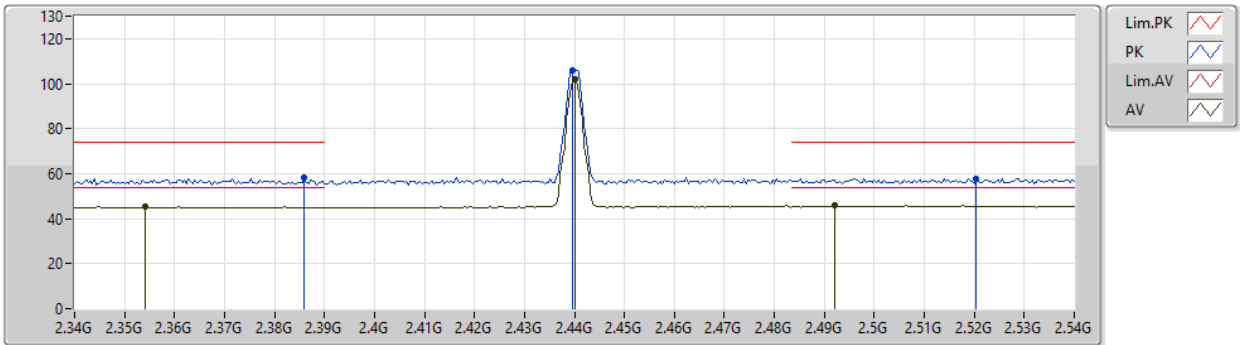


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80487G	45.65	54.00	-8.35	4.31	3	Horizontal	106	1.01	-	41.34	31.12	7.30	34.11
PK	4.80313G	55.84	74.00	-18.16	4.30	3	Horizontal	106	1.01	-	51.54	31.11	7.30	34.11

BT-LE(2Mbps)

2440MHz_TX

18/06/2020

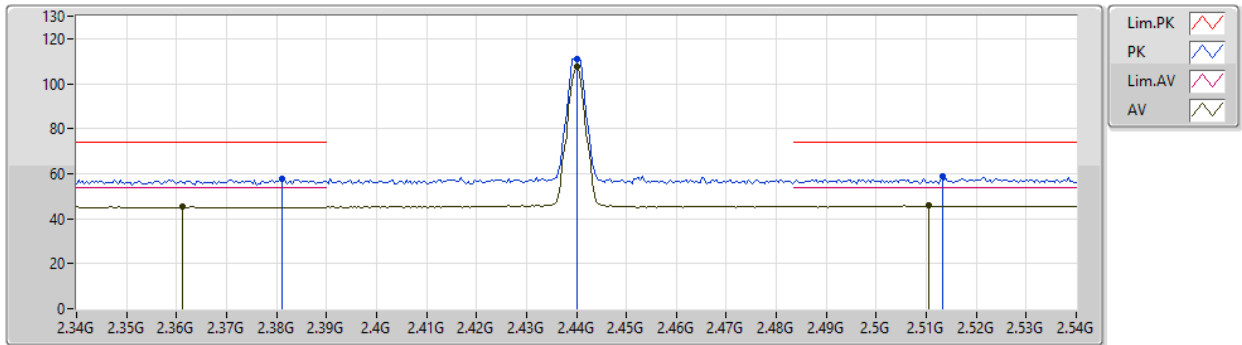


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.354G	45.21	54.00	-8.79	32.79	3	Vertical	73	2.29	-	12.42	27.78	5.01	-
AV	2.44G	101.82	Inf	-Inf	32.76	3	Vertical	73	2.29	-	69.06	27.60	5.16	-
AV	2.492G	45.82	54.00	-8.18	32.84	3	Vertical	73	2.29	-	12.98	27.60	5.24	-
PK	2.386G	58.04	74.00	-15.96	32.73	3	Vertical	73	2.29	-	25.31	27.66	5.07	-
PK	2.4396G	105.90	Inf	-Inf	32.76	3	Vertical	73	2.29	-	73.14	27.60	5.16	-
PK	2.5204G	57.84	74.00	-16.16	32.84	3	Vertical	73	2.29	-	25.00	27.56	5.28	-

BT-LE(2Mbps)

2440MHz_TX

18/06/2020

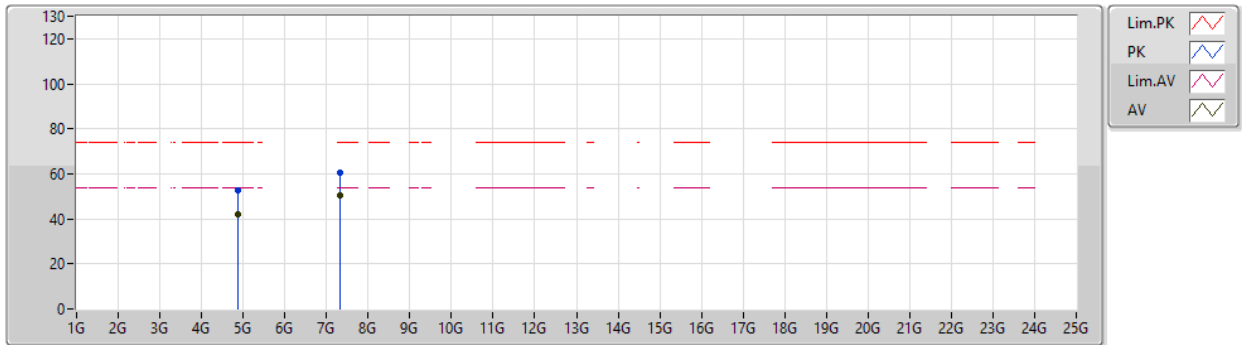


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3612G	45.26	54.00	-8.74	32.78	3	Horizontal	119	1.09	-	12.48	27.76	5.02	-
AV	2.44G	107.64	Inf	-Inf	32.76	3	Horizontal	119	1.09	-	74.88	27.60	5.16	-
AV	2.5104G	45.82	54.00	-8.18	32.85	3	Horizontal	119	1.09	-	12.97	27.58	5.27	-
PK	2.3812G	57.87	74.00	-16.13	32.74	3	Horizontal	119	1.09	-	25.13	27.68	5.06	-
PK	2.44G	111.19	Inf	-Inf	32.76	3	Horizontal	119	1.09	-	78.43	27.60	5.16	-
PK	2.5132G	58.78	74.00	-15.22	32.84	3	Horizontal	119	1.09	-	25.94	27.57	5.27	-

BT-LE(2Mbps)

2440MHz_TX

18/06/2020

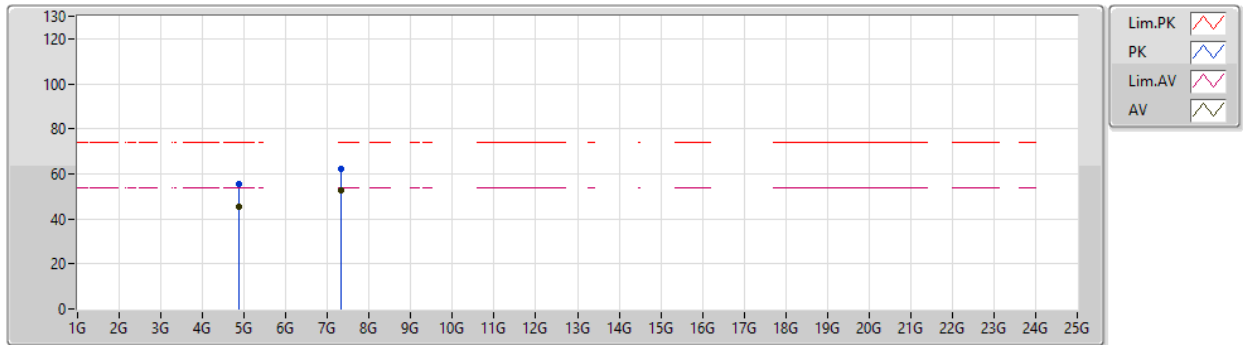


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88094G	42.07	54.00	-11.93	4.52	3	Vertical	82	1.73	-	37.55	31.24	7.38	34.10
AV	7.3189G	50.56	54.00	-3.44	10.58	3	Vertical	96	1.04	-	39.98	36.56	8.60	34.58
PK	4.87909G	52.41	74.00	-21.59	4.52	3	Vertical	82	1.73	-	47.89	31.24	7.38	34.10
PK	7.32142G	60.33	74.00	-13.67	10.58	3	Vertical	96	1.04	-	49.75	36.56	8.60	34.58

BT-LE(2Mbps)

2440MHz_TX

18/06/2020

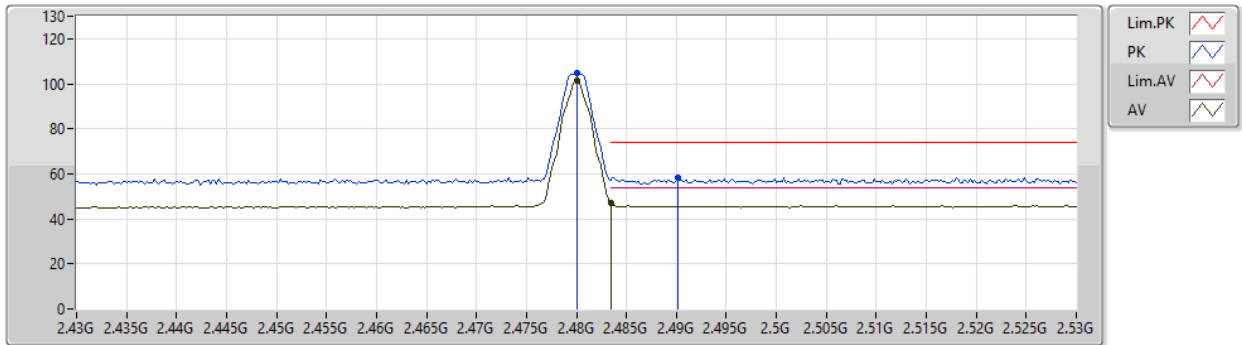


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8791G	45.29	54.00	-8.71	4.52	3	Horizontal	126	1.00	-	40.77	31.24	7.38	34.10
AV	7.3188G	52.74	54.00	-1.26	10.58	3	Horizontal	137	1.00	-	42.16	36.56	8.60	34.58
PK	4.87906G	55.48	74.00	-18.52	4.52	3	Horizontal	126	1.00	-	50.96	31.24	7.38	34.10
PK	7.31994G	62.39	74.00	-11.61	10.58	3	Horizontal	137	1.00	-	51.81	36.56	8.60	34.58

BT-LE(2Mbps)

2480MHz_TX

18/06/2020

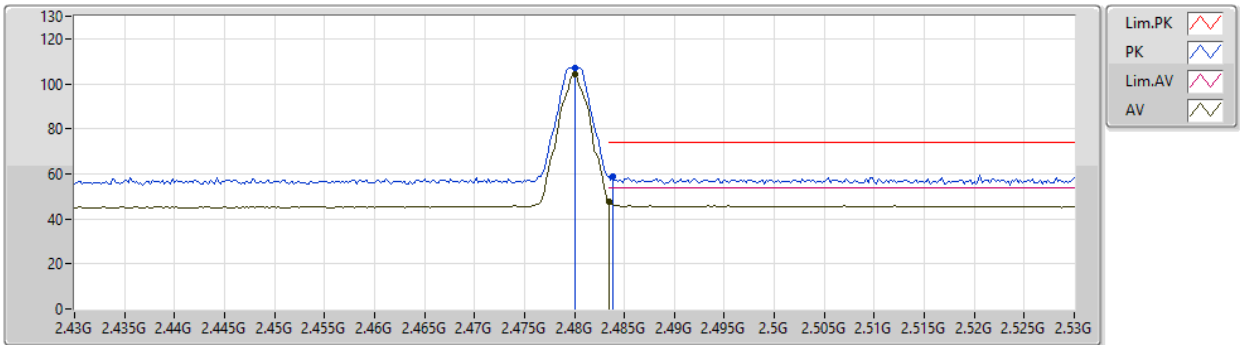


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	101.43	Inf	-Inf	32.82	3	Vertical	92	2.28	-	68.61	27.60	5.22	-
AV	2.4835G	47.08	54.00	-6.92	32.83	3	Vertical	92	2.28	-	14.25	27.60	5.23	-
PK	2.48G	104.60	Inf	-Inf	32.82	3	Vertical	92	2.28	-	71.78	27.60	5.22	-
PK	2.4902G	58.21	74.00	-15.79	32.84	3	Vertical	92	2.28	-	25.37	27.60	5.24	-

BT-LE(2Mbps)

2480MHz_TX

18/06/2020

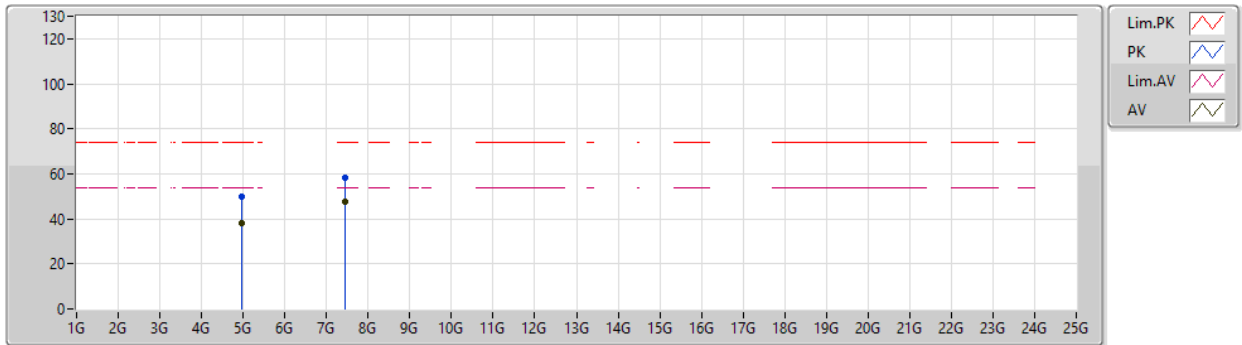


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	104.01	Inf	-Inf	32.82	3	Horizontal	111	1.31	-	71.19	27.60	5.22	-
AV	2.4835G	47.84	54.00	-6.16	32.83	3	Horizontal	111	1.31	-	15.01	27.60	5.23	-
PK	2.48G	107.24	Inf	-Inf	32.82	3	Horizontal	111	1.31	-	74.42	27.60	5.22	-
PK	2.4838G	58.80	74.00	-15.20	32.83	3	Horizontal	111	1.31	-	25.97	27.60	5.23	-

BT-LE(2Mbps)

2480MHz_TX

18/06/2020

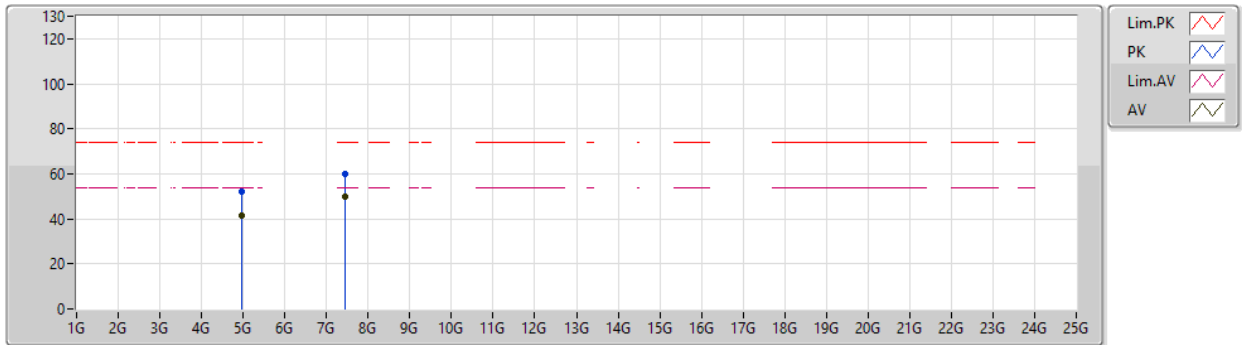


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9591G	38.28	54.00	-15.72	4.79	3	Vertical	78	1.61	-	33.49	31.42	7.46	34.09
AV	7.4388G	47.82	54.00	-6.18	10.56	3	Vertical	97	1.11	-	37.26	36.56	8.60	34.60
PK	4.95884G	49.65	74.00	-24.35	4.79	3	Vertical	78	1.61	-	44.86	31.42	7.46	34.09
PK	7.44157G	58.09	74.00	-15.91	10.57	3	Vertical	97	1.11	-	47.52	36.57	8.60	34.60

BT-LE(2Mbps)

2480MHz_TX

18/06/2020

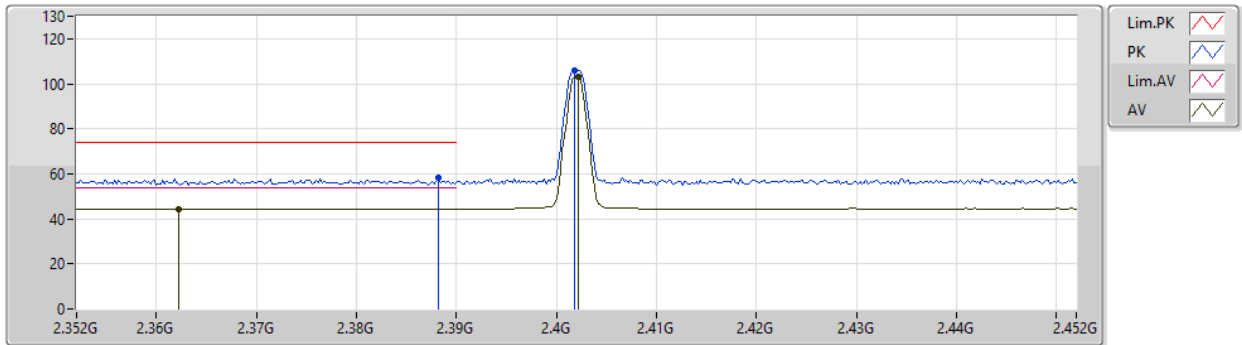


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96088G	41.30	54.00	-12.70	4.79	3	Horizontal	123	1.50	-	36.51	31.42	7.46	34.09
AV	7.43888G	49.83	54.00	-4.17	10.56	3	Horizontal	134	1.00	-	39.27	36.56	8.60	34.60
PK	4.95992G	52.03	74.00	-21.97	4.79	3	Horizontal	123	1.50	-	47.24	31.42	7.46	34.09
PK	7.4385G	59.77	74.00	-14.23	10.55	3	Horizontal	134	1.00	-	49.22	36.55	8.60	34.60

BT-LE(125kbps)

18/06/2020

2402MHz_TX

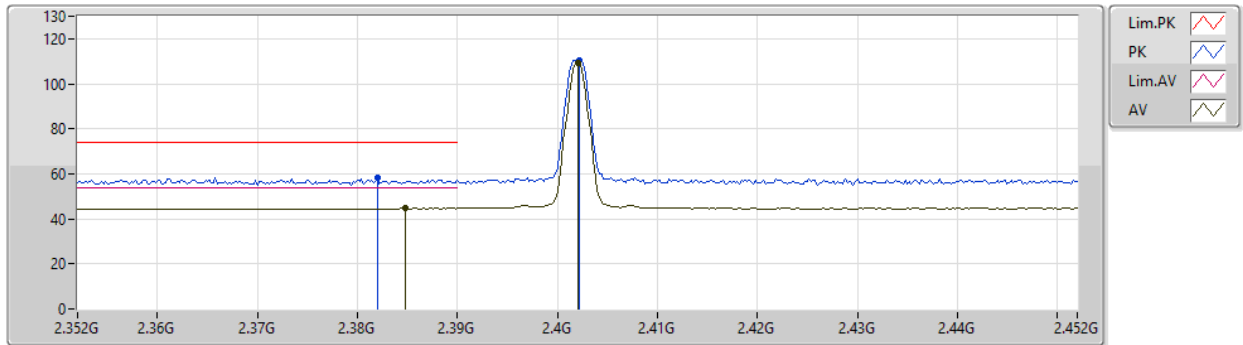


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3622G	44.44	54.00	-9.56	32.77	3	Vertical	95	2.17	-	11.67	27.75	5.02	-
AV	2.4022G	103.34	Inf	-Inf	32.70	3	Vertical	95	2.17	-	70.64	27.60	5.10	-
PK	2.3882G	58.11	74.00	-15.89	32.73	3	Vertical	95	2.17	-	25.38	27.65	5.08	-
PK	2.4018G	105.72	Inf	-Inf	32.70	3	Vertical	95	2.17	-	73.02	27.60	5.10	-

BT-LE(125kbps)

2402MHz_TX

18/06/2020

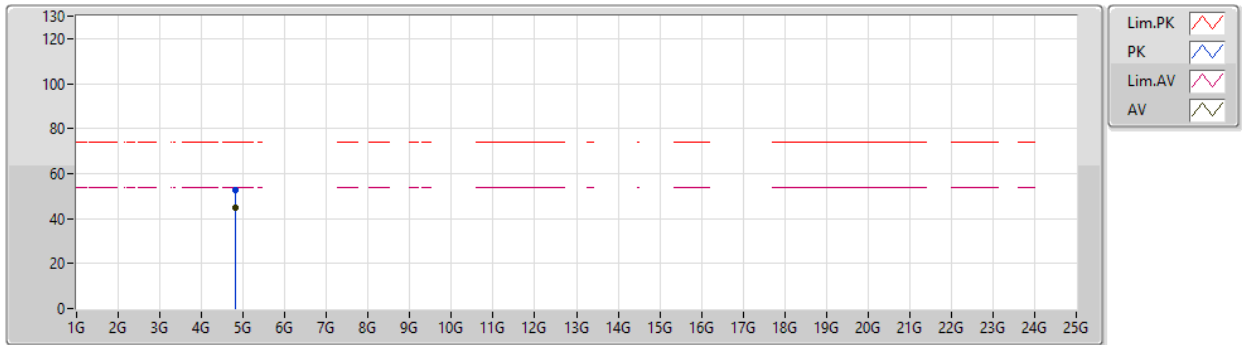


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3848G	44.64	54.00	-9.36	32.73	3	Horizontal	116	1.12	-	11.91	27.66	5.07	-
AV	2.402G	109.19	Inf	-Inf	32.70	3	Horizontal	116	1.12	-	76.49	27.60	5.10	-
PK	2.382G	58.44	74.00	-15.56	32.73	3	Horizontal	116	1.12	-	25.71	27.67	5.06	-
PK	2.402G	110.43	Inf	-Inf	32.70	3	Horizontal	116	1.12	-	77.73	27.60	5.10	-

BT-LE(125kbps)

18/06/2020

2402MHz_TX

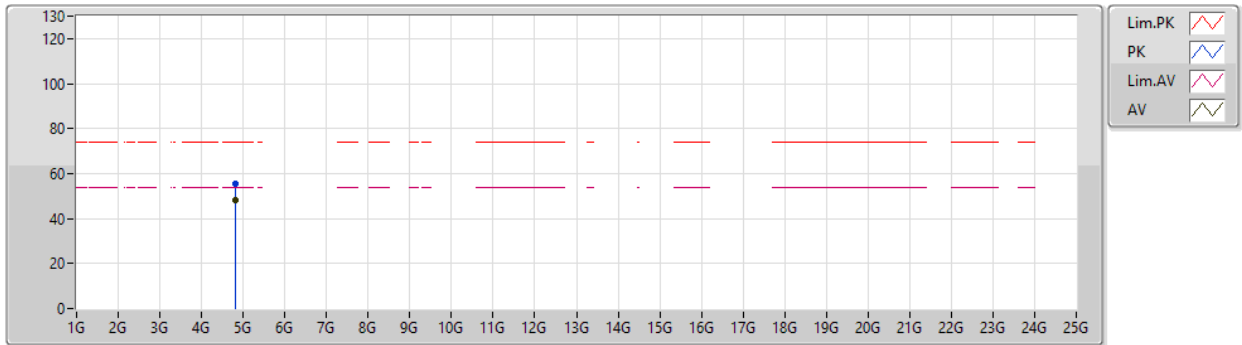


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80396G	44.69	54.00	-9.31	4.31	3	Vertical	84	1.57	-	40.38	31.12	7.30	34.11
PK	4.80352G	52.40	74.00	-21.60	4.30	3	Vertical	84	1.57	-	48.10	31.11	7.30	34.11

BT-LE(125kbps)

18/06/2020

2402MHz_TX

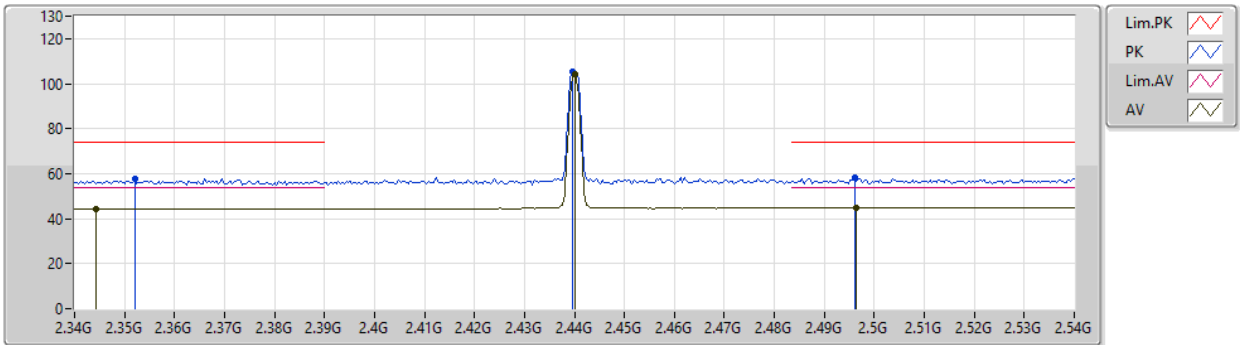


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80398G	48.34	54.00	-5.66	4.31	3	Horizontal	107	1.00	-	44.03	31.12	7.30	34.11
PK	4.80351G	55.40	74.00	-18.60	4.30	3	Horizontal	107	1.00	-	51.10	31.11	7.30	34.11

BT-LE(125kbps)

2440MHz_TX

18/06/2020

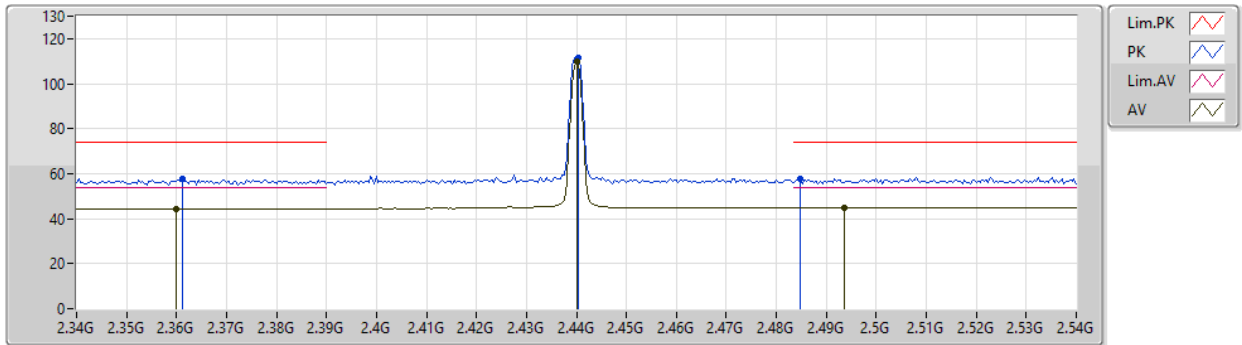


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3444G	44.45	54.00	-9.55	32.80	3	Vertical	90	1.92	-	11.65	27.81	4.99	-
AV	2.44G	104.30	Inf	-Inf	32.76	3	Vertical	90	1.92	-	71.54	27.60	5.16	-
AV	2.4964G	44.85	54.00	-9.15	32.84	3	Vertical	90	1.92	-	12.01	27.60	5.24	-
PK	2.352G	57.86	74.00	-16.14	32.79	3	Vertical	90	1.92	-	25.07	27.79	5.00	-
PK	2.4396G	105.51	Inf	-Inf	32.76	3	Vertical	90	1.92	-	72.75	27.60	5.16	-
PK	2.496G	58.00	74.00	-16.00	32.84	3	Vertical	90	1.92	-	25.16	27.60	5.24	-

BT-LE(125kbps)

2440MHz_TX

18/06/2020

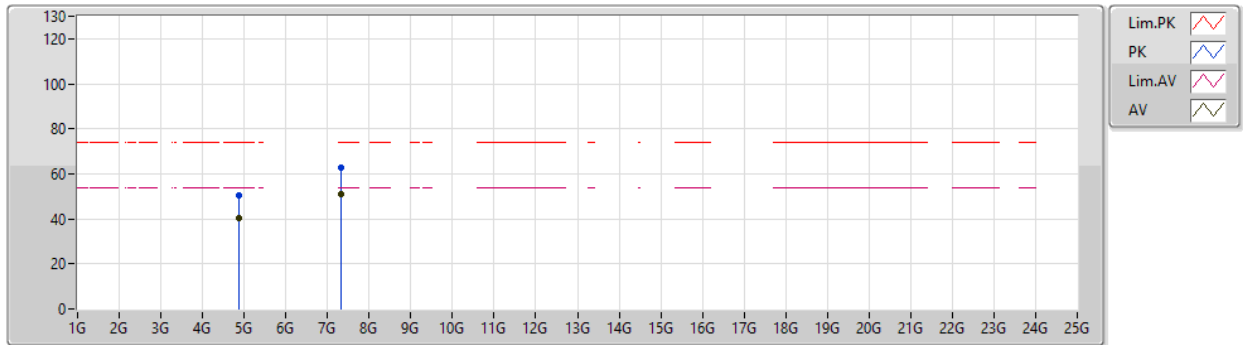


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.36G	44.49	54.00	-9.51	32.78	3	Horizontal	120	1.00	-	11.71	27.76	5.02	-
AV	2.44G	109.56	Inf	-Inf	32.76	3	Horizontal	120	1.00	-	76.80	27.60	5.16	-
AV	2.4936G	45.00	54.00	-9.00	32.84	3	Horizontal	120	1.00	-	12.16	27.60	5.24	-
PK	2.3612G	57.60	74.00	-16.40	32.78	3	Horizontal	120	1.00	-	24.82	27.76	5.02	-
PK	2.4404G	111.26	Inf	-Inf	32.76	3	Horizontal	120	1.00	-	78.50	27.60	5.16	-
PK	2.4848G	57.78	74.00	-16.22	32.83	3	Horizontal	120	1.00	-	24.95	27.60	5.23	-

BT-LE(125kbps)

2440MHz_TX

18/06/2020

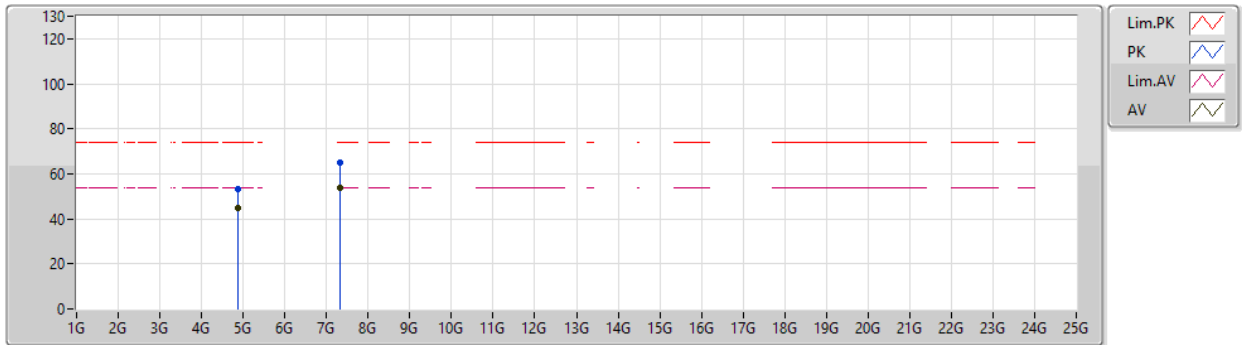


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87998G	40.45	54.00	-13.55	4.52	3	Vertical	85	1.50	-	35.93	31.24	7.38	34.10
AV	7.32038G	51.20	54.00	-2.80	10.58	3	Vertical	98	1.00	-	40.62	36.56	8.60	34.58
PK	4.87966G	50.52	74.00	-23.48	4.52	3	Vertical	85	1.50	-	46.00	31.24	7.38	34.10
PK	7.31919G	62.58	74.00	-11.42	10.58	3	Vertical	98	1.00	-	52.00	36.56	8.60	34.58

BT-LE(125kbps)

2440MHz_TX

18/06/2020

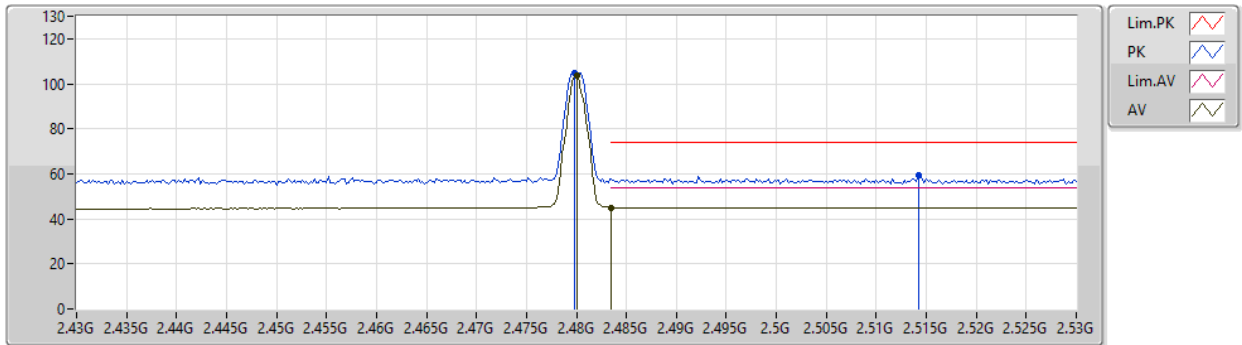


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87996G	45.03	54.00	-8.97	4.52	3	Horizontal	126	1.00	-	40.51	31.24	7.38	34.10
AV	7.32044G	53.76	54.00	-0.24	10.58	3	Horizontal	135	1.00	-	43.18	36.56	8.60	34.58
PK	4.87957G	53.13	74.00	-20.87	4.52	3	Horizontal	126	1.00	-	48.61	31.24	7.38	34.10
PK	7.31926G	65.15	74.00	-8.85	10.58	3	Horizontal	135	1.00	-	54.57	36.56	8.60	34.58

BT-LE(125kbps)

2480MHz_TX

18/06/2020

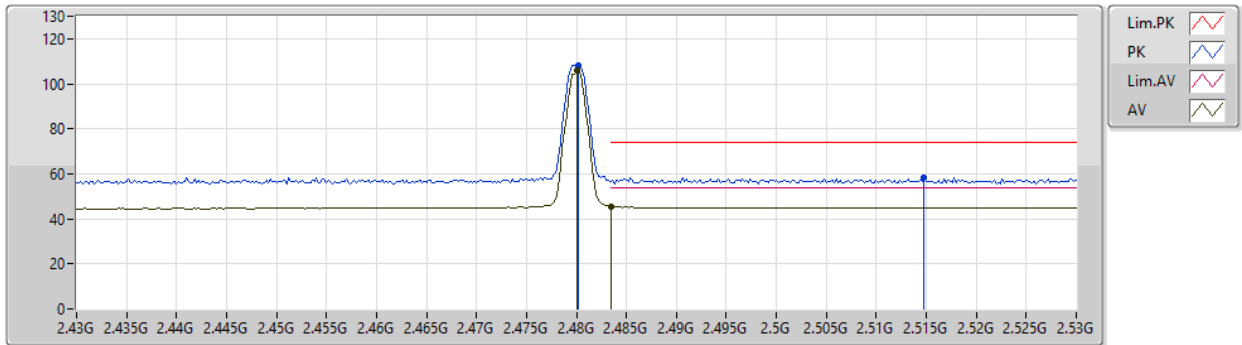


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	103.69	Inf	-Inf	32.82	3	Vertical	93	2.12	-	70.87	27.60	5.22	-
AV	2.4835G	45.10	54.00	-8.90	32.83	3	Vertical	93	2.12	-	12.27	27.60	5.23	-
PK	2.4798G	104.94	Inf	-Inf	32.82	3	Vertical	93	2.12	-	72.12	27.60	5.22	-
PK	2.5142G	59.15	74.00	-14.85	32.84	3	Vertical	93	2.12	-	26.31	27.57	5.27	-

BT-LE(125kbps)

2480MHz_TX

18/06/2020

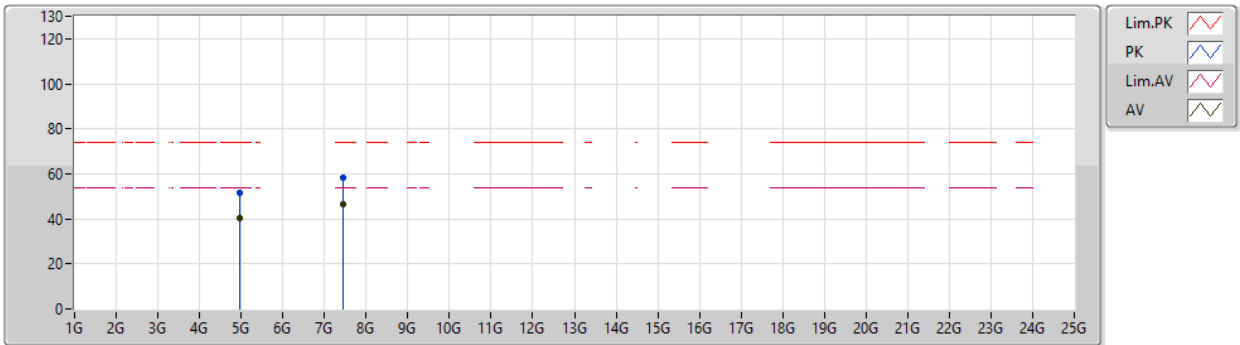


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	105.88	Inf	-Inf	32.82	3	Horizontal	112	1.08	-	73.06	27.60	5.22	-
AV	2.4835G	45.47	54.00	-8.53	32.83	3	Horizontal	112	1.08	-	12.64	27.60	5.23	-
PK	2.4802G	108.04	Inf	-Inf	32.82	3	Horizontal	112	1.08	-	75.22	27.60	5.22	-
PK	2.5148G	58.25	74.00	-15.75	32.84	3	Horizontal	112	1.08	-	25.41	27.57	5.27	-

BT-LE(125kbps)

2480MHz_TX

18/06/2020

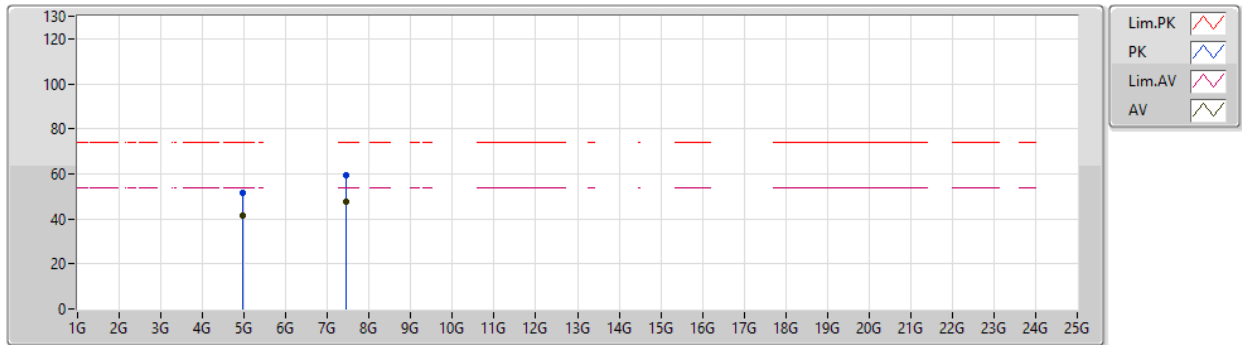


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9599G	40.28	54.00	-13.72	5.06	3	Vertical	321	1.00	-	35.22	31.42	7.46	33.82
AV	7.4394G	46.68	54.00	-7.32	11.05	3	Vertical	95	1.00	-	35.63	36.56	8.60	34.11
PK	4.95947G	51.32	74.00	-22.68	5.06	3	Vertical	321	1.00	-	46.26	31.42	7.46	33.82
PK	7.43918G	58.13	74.00	-15.87	11.05	3	Vertical	95	1.00	-	47.08	36.56	8.60	34.11

BT-LE(125kbps)

2480MHz_TX

18/06/2020

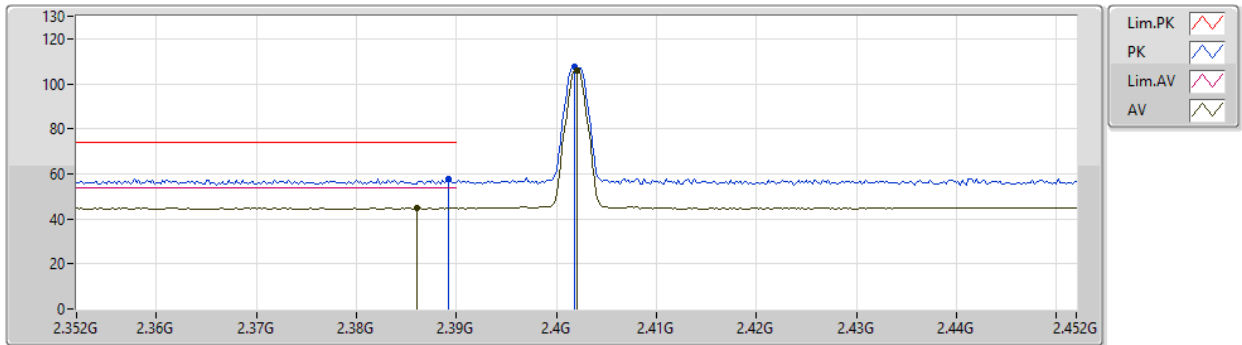


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95999G	41.48	54.00	-12.52	4.79	3	Horizontal	122	1.50	-	36.69	31.42	7.46	34.09
AV	7.44053G	47.58	54.00	-6.42	10.56	3	Horizontal	135	1.00	-	37.02	36.56	8.60	34.60
PK	4.9595G	51.60	74.00	-22.40	4.79	3	Horizontal	122	1.50	-	46.81	31.42	7.46	34.09
PK	7.44065G	59.14	74.00	-14.86	10.56	3	Horizontal	135	1.00	-	48.58	36.56	8.60	34.60

BT-LE(500kbps)

2402MHz_TX

18/06/2020

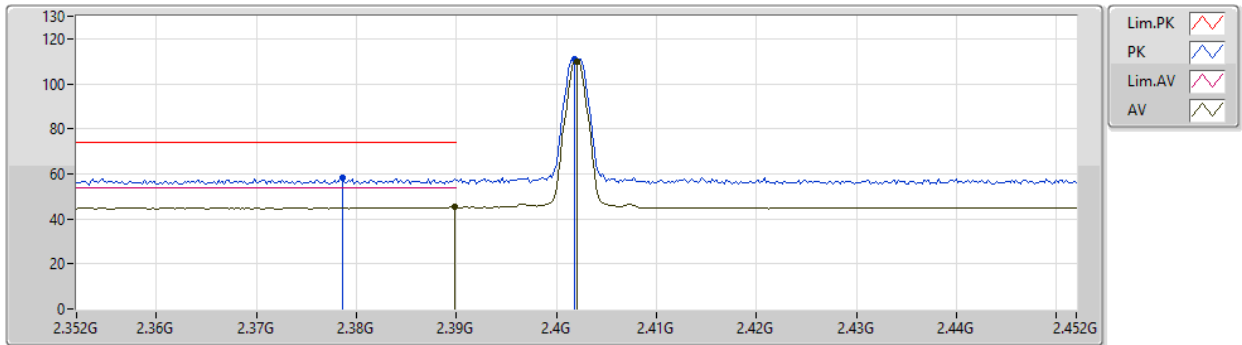


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.386G	44.81	54.00	-9.19	32.73	3	Vertical	96	2.22	-	12.08	27.66	5.07	-
AV	2.402G	106.15	Inf	-Inf	32.70	3	Vertical	96	2.22	-	73.45	27.60	5.10	-
PK	2.3892G	57.93	74.00	-16.07	32.72	3	Vertical	96	2.22	-	25.21	27.64	5.08	-
PK	2.4018G	107.32	Inf	-Inf	32.70	3	Vertical	96	2.22	-	74.62	27.60	5.10	-

BT-LE(500kbps)

18/06/2020

2402MHz_TX

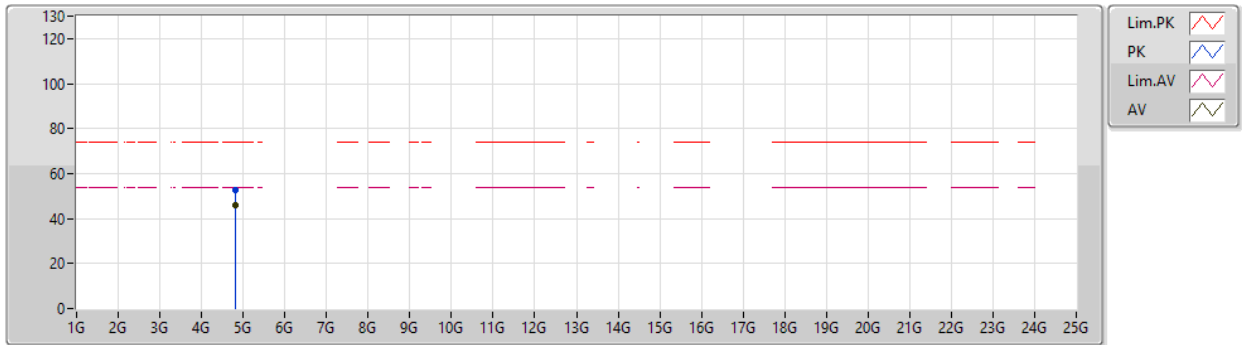


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	45.27	54.00	-8.73	32.72	3	Horizontal	115	1.50	-	12.55	27.64	5.08	-
AV	2.402G	109.94	Inf	-Inf	32.70	3	Horizontal	115	1.50	-	77.24	27.60	5.10	-
PK	2.3786G	58.15	74.00	-15.85	32.75	3	Horizontal	115	1.50	-	25.40	27.69	5.06	-
PK	2.4018G	111.18	Inf	-Inf	32.70	3	Horizontal	115	1.50	-	78.48	27.60	5.10	-

BT-LE(500kbps)

18/06/2020

2402MHz_TX

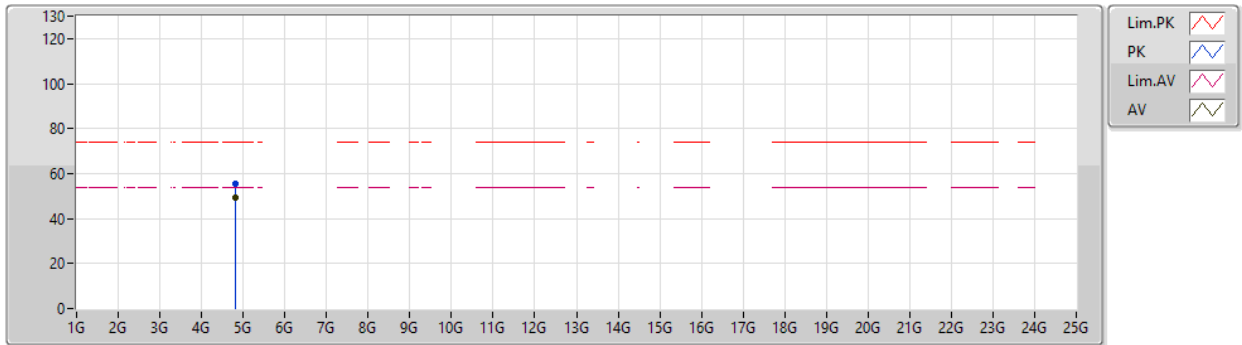


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80398G	45.91	54.00	-8.09	4.31	3	Vertical	83	1.56	-	41.60	31.12	7.30	34.11
PK	4.80341G	52.88	74.00	-21.12	4.30	3	Vertical	83	1.56	-	48.58	31.11	7.30	34.11

BT-LE(500kbps)

18/06/2020

2402MHz_TX

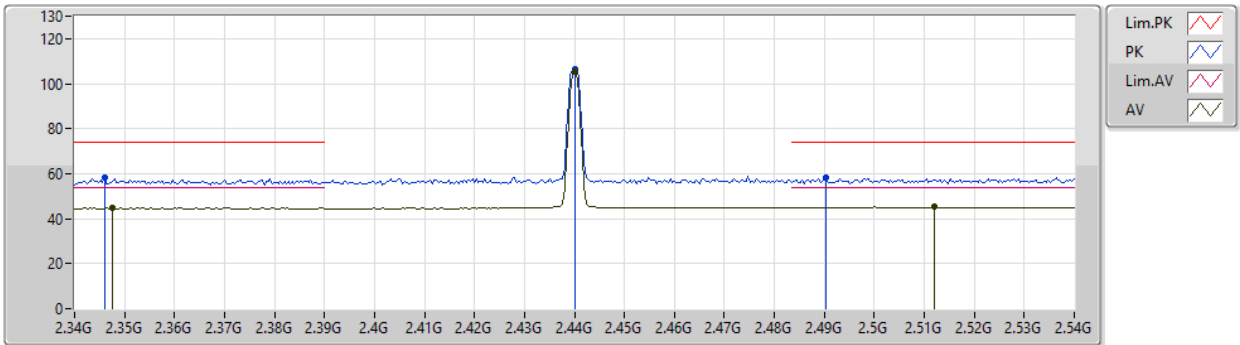


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80399G	49.21	54.00	-4.79	4.31	3	Horizontal	105	1.00	-	44.90	31.12	7.30	34.11
PK	4.80441G	55.48	74.00	-18.52	4.31	3	Horizontal	105	1.00	-	51.17	31.12	7.30	34.11

BT-LE(500kbps)

2440MHz_TX

18/06/2020

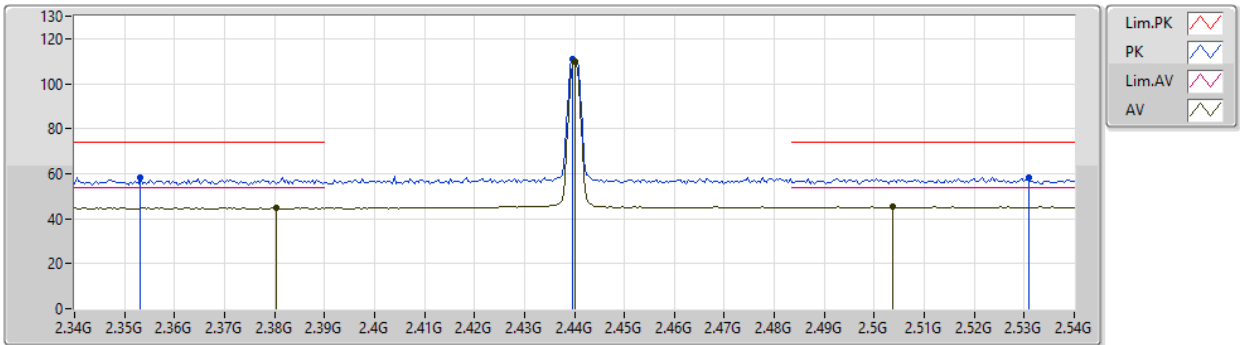


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3476G	44.68	54.00	-9.32	32.80	3	Vertical	75	2.22	-	11.88	27.80	5.00	-
AV	2.44G	105.58	Inf	-Inf	32.76	3	Vertical	75	2.22	-	72.82	27.60	5.16	-
AV	2.512G	45.24	54.00	-8.76	32.85	3	Vertical	75	2.22	-	12.39	27.58	5.27	-
PK	2.346G	58.03	74.00	-15.97	32.80	3	Vertical	75	2.22	-	25.23	27.81	4.99	-
PK	2.44G	106.74	Inf	-Inf	32.76	3	Vertical	75	2.22	-	73.98	27.60	5.16	-
PK	2.4904G	58.50	74.00	-15.50	32.84	3	Vertical	75	2.22	-	25.66	27.60	5.24	-

BT-LE(500kbps)

2440MHz_TX

18/06/2020

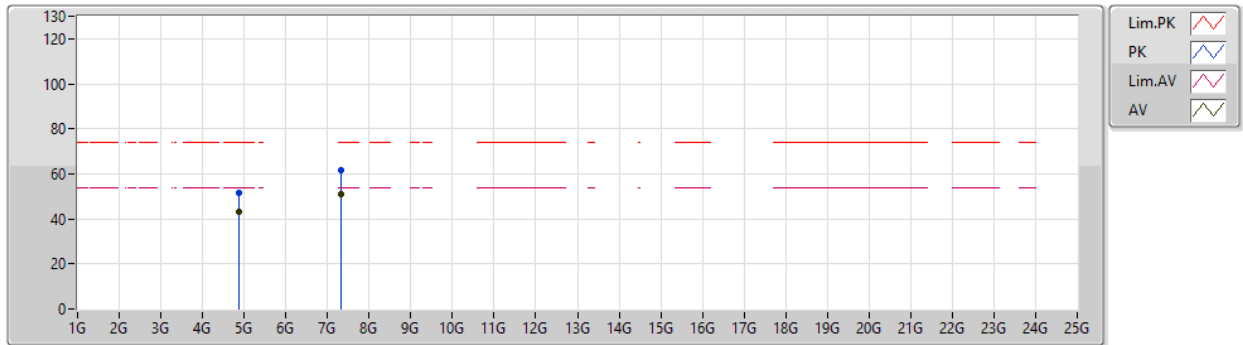


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3804G	44.69	54.00	-9.31	32.74	3	Horizontal	120	1.00	-	11.95	27.68	5.06	-
AV	2.44G	109.76	Inf	-Inf	32.76	3	Horizontal	120	1.00	-	77.00	27.60	5.16	-
AV	2.5036G	45.27	54.00	-8.73	32.85	3	Horizontal	120	1.00	-	12.42	27.59	5.26	-
PK	2.3532G	58.18	74.00	-15.82	32.80	3	Horizontal	120	1.00	-	25.38	27.79	5.01	-
PK	2.4396G	111.04	Inf	-Inf	32.76	3	Horizontal	120	1.00	-	78.28	27.60	5.16	-
PK	2.5308G	58.48	74.00	-15.52	32.84	3	Horizontal	120	1.00	-	25.64	27.54	5.30	-

BT-LE(500kbps)

2440MHz_TX

18/06/2020

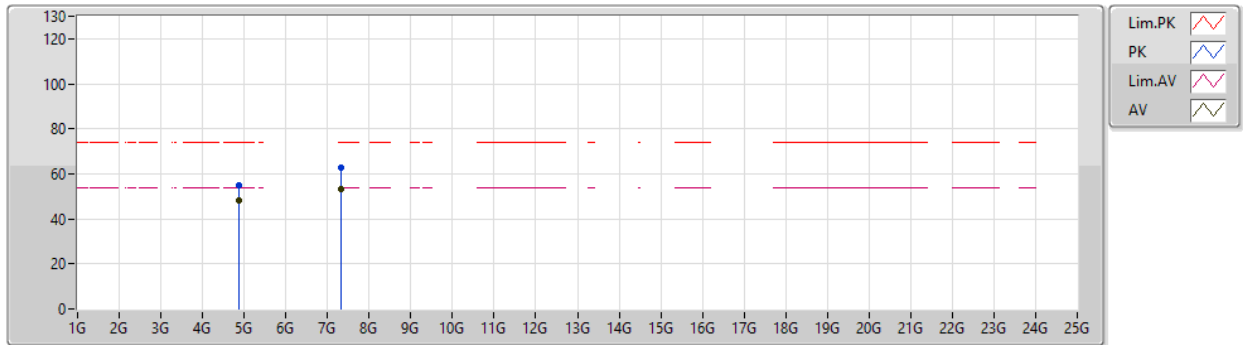


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88G	43.11	54.00	-10.89	4.52	3	Vertical	81	1.50	-	38.59	31.24	7.38	34.10
AV	7.32045G	51.24	54.00	-2.76	10.58	3	Vertical	97	1.03	-	40.66	36.56	8.60	34.58
PK	4.87957G	51.53	74.00	-22.47	4.52	3	Vertical	81	1.50	-	47.01	31.24	7.38	34.10
PK	7.31916G	61.65	74.00	-12.35	10.58	3	Vertical	97	1.03	-	51.07	36.56	8.60	34.58

BT-LE(500kbps)

2440MHz_TX

18/06/2020

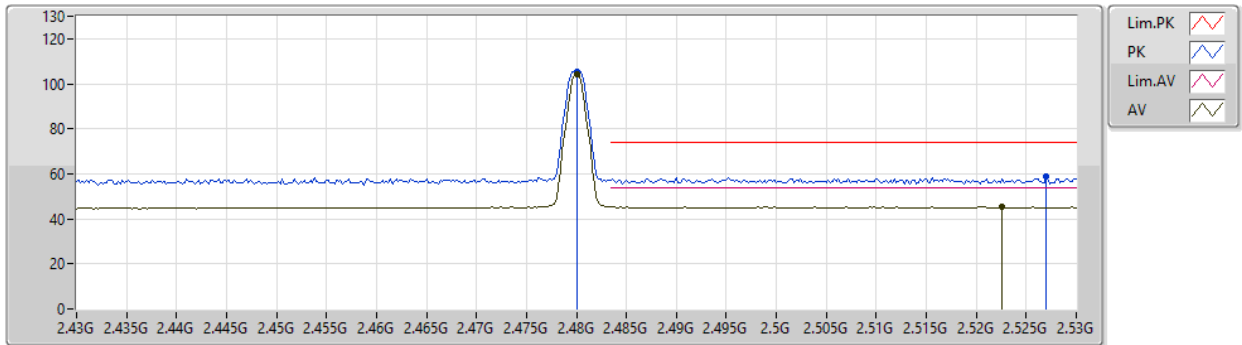


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87997G	48.38	54.00	-5.62	4.52	3	Horizontal	124	1.00	-	43.86	31.24	7.38	34.10
AV	7.31947G	53.27	54.00	-0.73	10.58	3	Horizontal	134	1.03	-	42.69	36.56	8.60	34.58
PK	4.88027G	54.97	74.00	-19.03	4.52	3	Horizontal	124	1.00	-	50.45	31.24	7.38	34.10
PK	7.31923G	62.67	74.00	-11.33	10.58	3	Horizontal	134	1.03	-	52.09	36.56	8.60	34.58

BT-LE(500kbps)

2480MHz_TX

18/06/2020

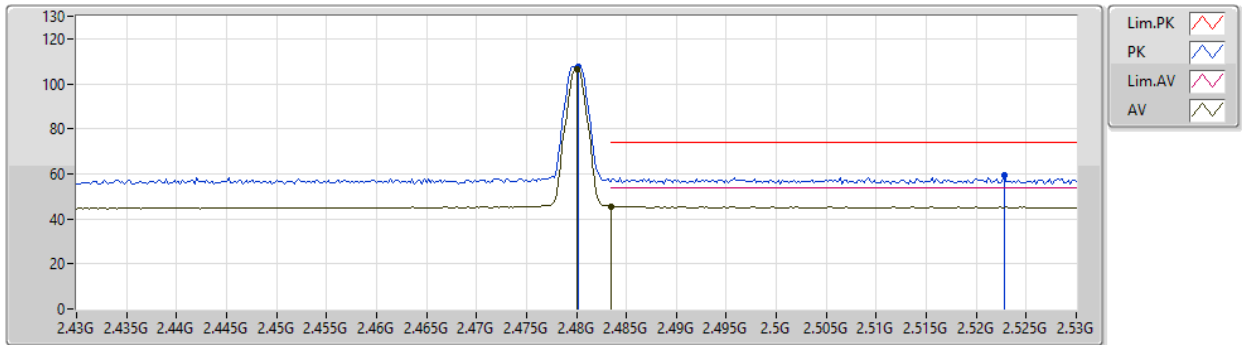


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	104.24	Inf	-Inf	32.82	3	Vertical	93	2.12	-	71.42	27.60	5.22	-
AV	2.5226G	45.29	54.00	-8.71	32.83	3	Vertical	93	2.12	-	12.46	27.55	5.28	-
PK	2.48G	105.43	Inf	-Inf	32.82	3	Vertical	93	2.12	-	72.61	27.60	5.22	-
PK	2.527G	58.58	74.00	-15.42	32.84	3	Vertical	93	2.12	-	25.74	27.55	5.29	-

BT-LE(500kbps)

2480MHz_TX

18/06/2020

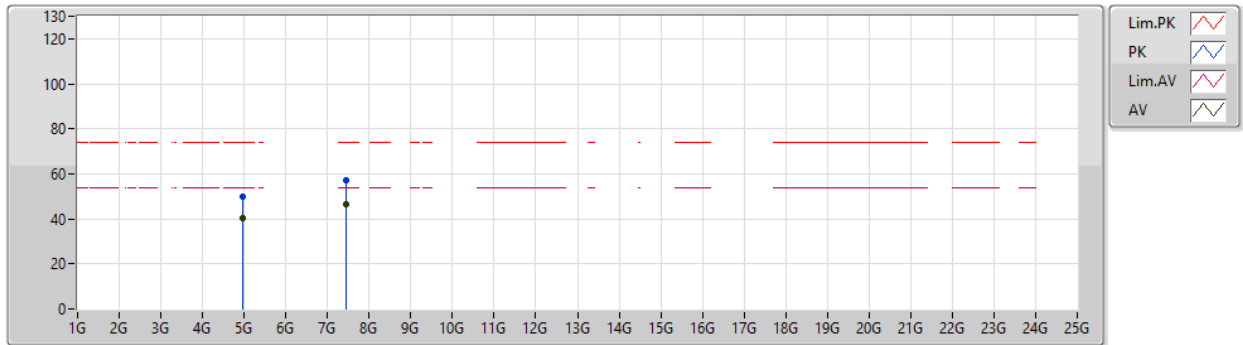


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	106.62	Inf	-Inf	32.82	3	Horizontal	112	1.50	-	73.80	27.60	5.22	-
AV	2.4835G	45.53	54.00	-8.47	32.83	3	Horizontal	112	1.50	-	12.70	27.60	5.23	-
PK	2.4802G	107.73	Inf	-Inf	32.82	3	Horizontal	112	1.50	-	74.91	27.60	5.22	-
PK	2.5228G	59.17	74.00	-14.83	32.83	3	Horizontal	112	1.50	-	26.34	27.55	5.28	-

BT-LE(500kbps)

18/06/2020

2480MHz_TX

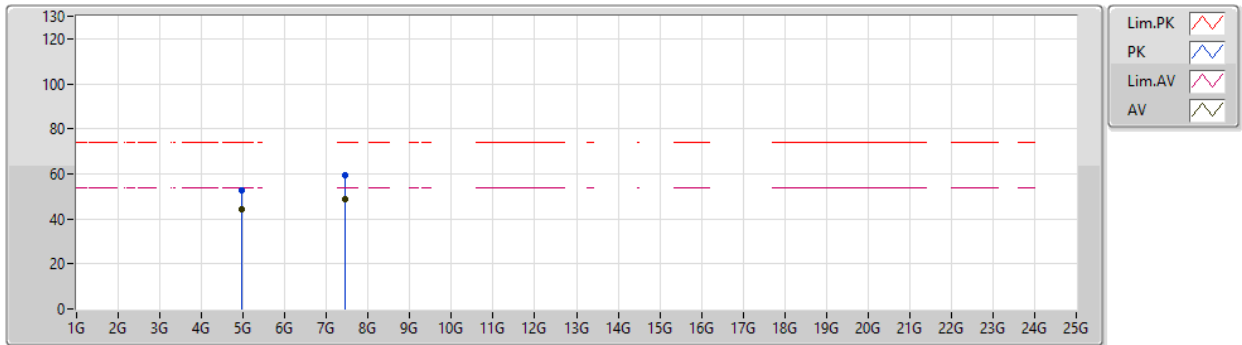


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96003G	40.58	54.00	-13.42	4.79	3	Vertical	321	1.12	-	35.79	31.42	7.46	34.09
AV	7.44049G	46.74	54.00	-7.26	10.56	3	Vertical	97	1.11	-	36.18	36.56	8.60	34.60
PK	4.9604G	49.88	74.00	-24.12	4.79	3	Vertical	321	1.12	-	45.09	31.42	7.46	34.09
PK	7.44065G	57.38	74.00	-16.62	10.56	3	Vertical	97	1.11	-	46.82	36.56	8.60	34.60

BT-LE(500kbps)

2480MHz_TX

18/06/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95996G	44.23	54.00	-9.77	4.79	3	Horizontal	122	1.00	-	39.44	31.42	7.46	34.09
AV	7.44048G	48.60	54.00	-5.40	10.56	3	Horizontal	132	1.00	-	38.04	36.56	8.60	34.60
PK	4.96044G	52.42	74.00	-21.58	4.79	3	Horizontal	122	1.00	-	47.63	31.42	7.46	34.09
PK	7.4407G	59.33	74.00	-14.67	10.56	3	Horizontal	132	1.00	-	48.77	36.56	8.60	34.60