FCC Test Report

FCC ID	:	**VUI-DPCP700X**
Equipment	:	**IP Desktop Phone**
Brand Name	:	**Unify**
Model Name	:	**OpenScape Desk Phone CP700X**
Applicant	:	**PEGATRON CORPORATION 5F., NO. 76, LIGONG ST., BEITOU DISTRICT, TAIPEI CITY 11259 Taiwan**
Manufacturer	:	**PEGATRON CORPORATION 5F., NO. 76, LIGONG ST., BEITOU DISTRICT, TAIPEI CITY 11259 Taiwan**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Mar. 12, 2020, and testing was started from Mar. 22, 2020 and completed on Apr. 18, 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

Report No.	Version	Description	Issued Date
FR021914AL	01	Initial issue of report	May 21, 2020

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: Michelle Tsai

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

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	-	-	Printed	N/A

Ant.	Port	Gain (dBi)		
		2.4G	5G	BT
1	1	3.37	2.59	3.37

Note 1: The EUT has one antenna.

For 2.4GHz function:

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

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

For BT function:

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

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

For 5GHz function:

For IEEE 802.11 a/n/ac mode (1TX/1RX)

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

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From AC Adapter / PoE			
EUT Function	☒	Point-to-multipoint	☐	Point-to-point
Beamforming Function	☐	With beamforming	☒	Without beamforming

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

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-LE(1Mbps)	0.641	1.93	402.5u	3k
BT-LE(2Mbps)	0.551	2.59	1.08m	1k

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

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	21.4~22.5°C / 58~62%	23/Mar/2020~18/Apr/2020
RF Conducted	TH06-HY	Edward Wang	20.1~24.2°C / 57~63%	23/Mar/2020~25/Mar/2020
Radiated	03CH03-HY	Jeff Lin	21.4~25.5°C / 51~61%	22/Mar/2020~16/Apr/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	DoS

Mode	Power Setting
BT-LE(1Mbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default
BT-LE(2Mbps)	
2402MHz	Default
2440MHz	Default
2480MHz	Default

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	Adapter Mode
2	PoE 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	Adapter Mode		
2	PoE Mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT			V

2.4 Accessories

Accessories		
4P4C Cable	Power Cord	4.0 meter, Non-shielded cable

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

2.5 Support Equipment

Support Equipment – AC Conduction					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	PoE	CERIO	POE-S48G2	DoC	Note 1
2	Adapter for PoE	L.T.E	LTE36ES-S5-1	DoC	
3	AC Adapter	Salom Electric	S30122-H7726-X	DoC	

Note 1: Support equipment was provided by customer.

Support Equipment – Radiated					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	PoE (Remote)	CERIO	POE-S48G2	DoC	Note 1
2	Adapter for PoE (Remote)	L.T.E	LTE36ES-S5-1	DoC	
3	AC Adapter	Salom Electric	S30122-H7726-X	DoC	

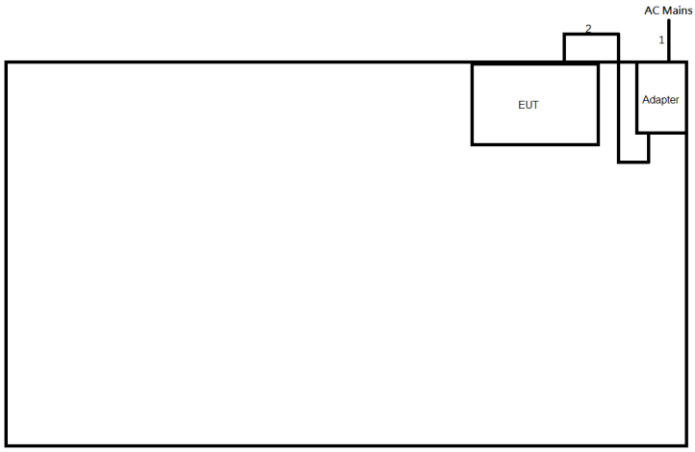
Note 1: Support equipment was provided by customer.

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

Note 1: Support equipment was provided by customer.

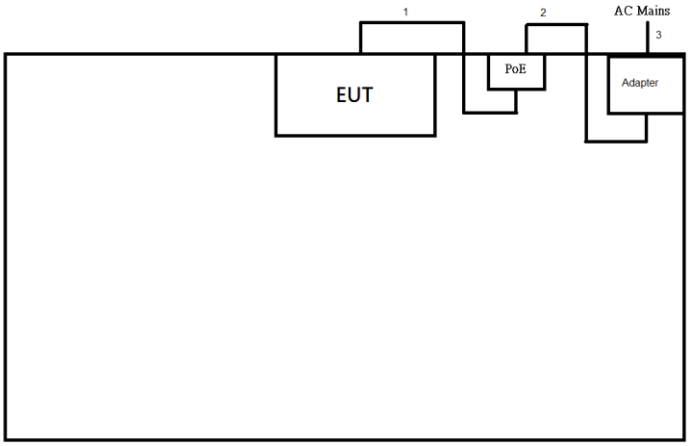
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test (Adapter Mode)



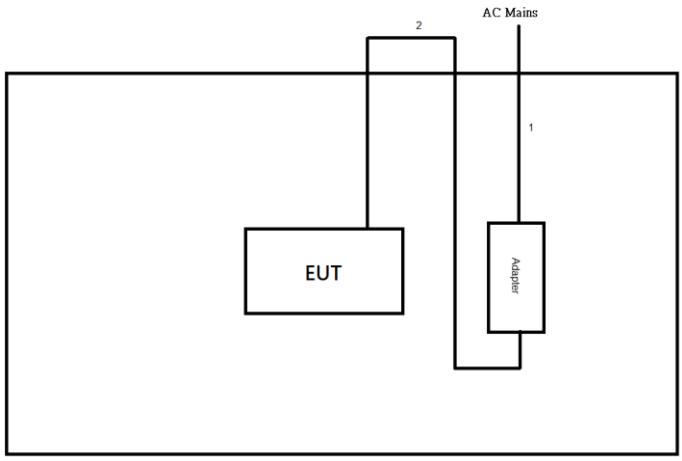
Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.5	-
2	RJ-11 Cable	No	2.0	-

Test Setup Diagram – AC Line Conducted Emission Test (PoE Mode)



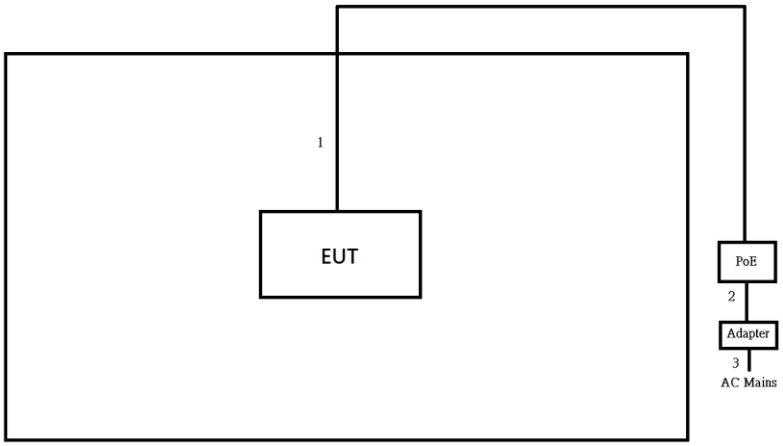
Item	Connection	Shielded	Length(m)	Remark
1	RJ45 cable	No	1.0	-
2	DC Power cable	No	1.8	-
3	AC Power cable	No	1.8	-

Test Setup Diagram - Radiated Test (Adapter Mode)



Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	1.5	-
2	RJ-11 Cable	No	2.0	-

Test Setup Diagram - Radiated Test (PoE Mode)



Item	Connection	Shielded	Length(m)	Remark
1	RJ45 cable	No	1.0	-
2	DC Power cable	No	1.8	-
3	AC Power cable	No	1.8	-

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

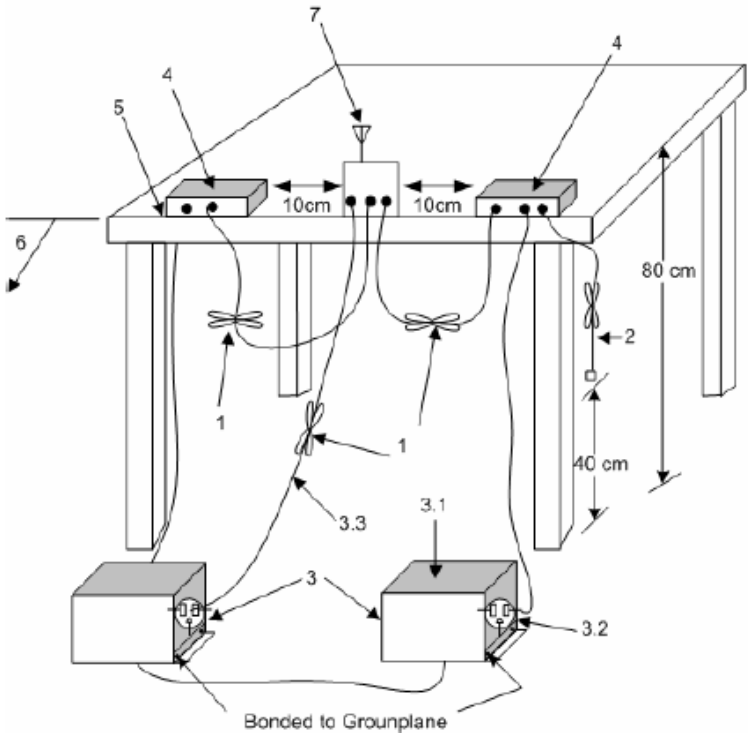
Refer a test equipment and calibration data table in this test report.

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

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50Ωloads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

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 ≥ 500 kHz.

3.2.2 Measuring Instruments

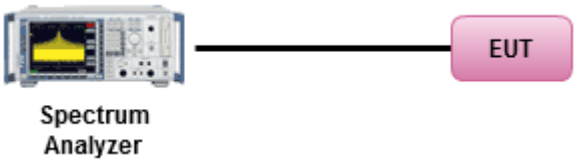
Refer a test equipment and calibration data table in this test report.

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 for occupied bandwidth testing.
	☐ Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth



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} ≤ 6 dBi, then P_{Out} ≤ 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 + 8dB dBm
e.i.r.p. Power Limit:		
▪ 2400-2483.5 MHz Band		
	▪ Point-to-multipoint systems (P2M): P_{eirp} ≤ 36 dBm (4 W)	
	▪ Point-to-point systems (P2P): P_{eirp} ≤ MAX(36, [P_{Out} + G_{TX}]) dBm	
	▪ Smart antenna system (SAS)	
		- Single beam: P_{eirp} ≤ MAX(36, P_{Out} + G_{TX}) dBm
		- Overlap beam: P_{eirp} ≤ MAX(36, P_{Out} + G_{TX}) dBm
		- Aggregate power on all beams: P_{eirp} ≤ 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: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


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

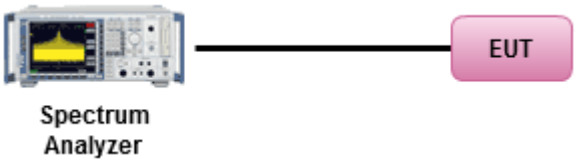
3.4.2 Measuring Instruments

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

Power Spectral Density


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.	

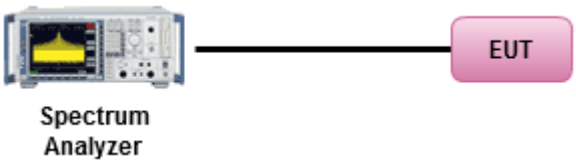
3.5.2 Measuring Instruments

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

Emissions in Non-restricted Frequency Bands


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 below30 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.

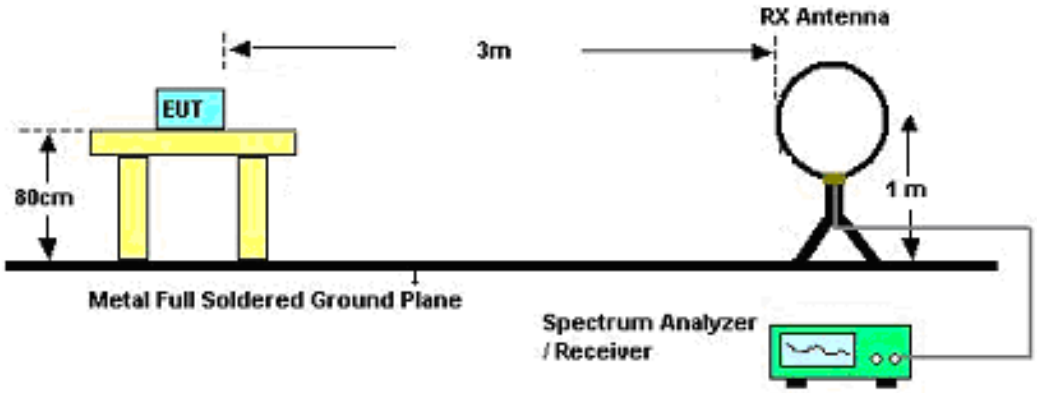
3.6.3 Test Procedures

Test Method	
▪	The average emission levels shall be measured in [duty cycle ≥ 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 ≥ 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.

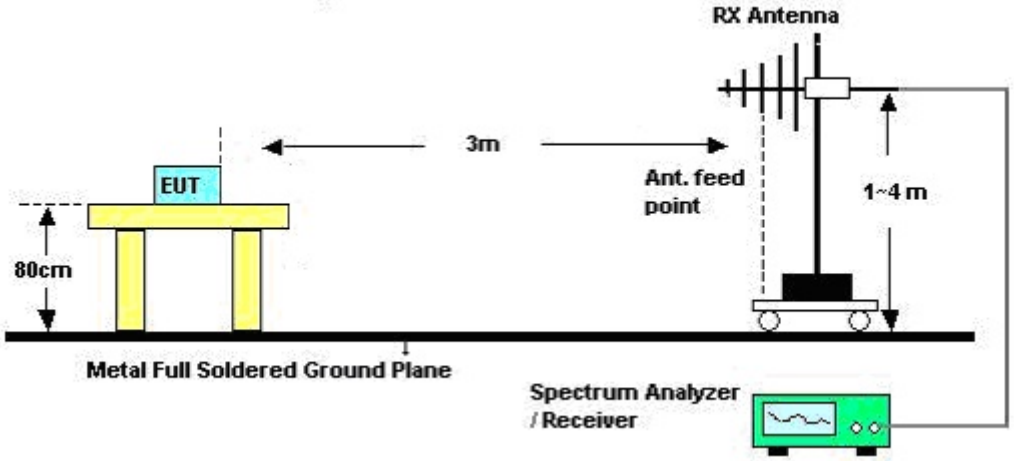
3.6.4 Test Setup

Emissions in Restricted Frequency Bands

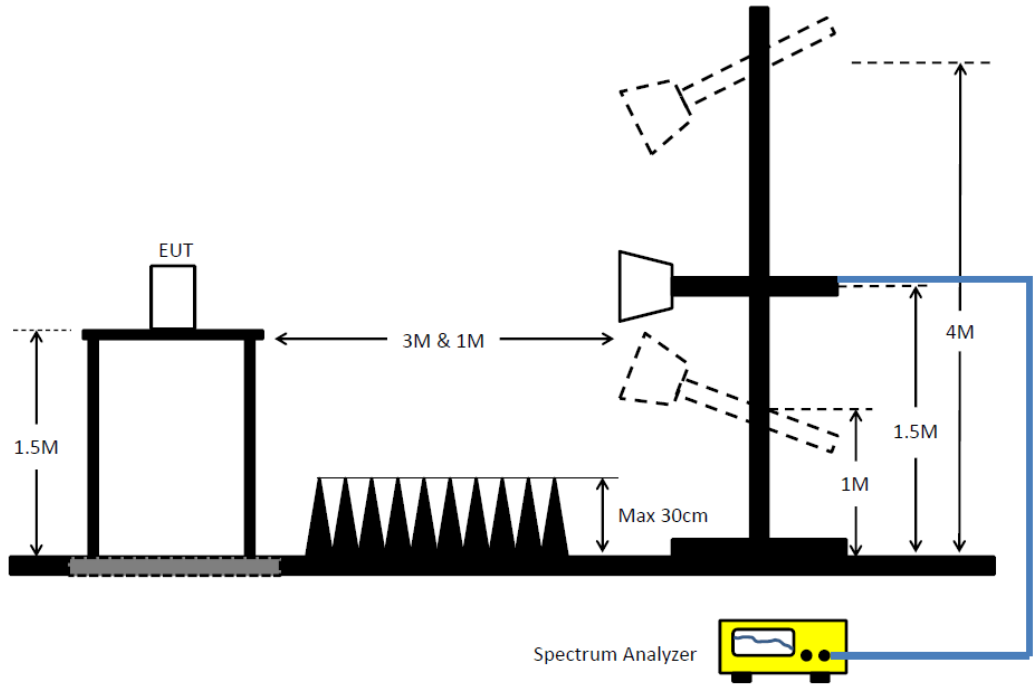
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



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	ESR3	102051	9kHz ~ 3.6GHz	28/May/2019	27/May/2020
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	04/Nov/2019	05/Nov/2020
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	12/Sep/2019	11/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 Radiated Test

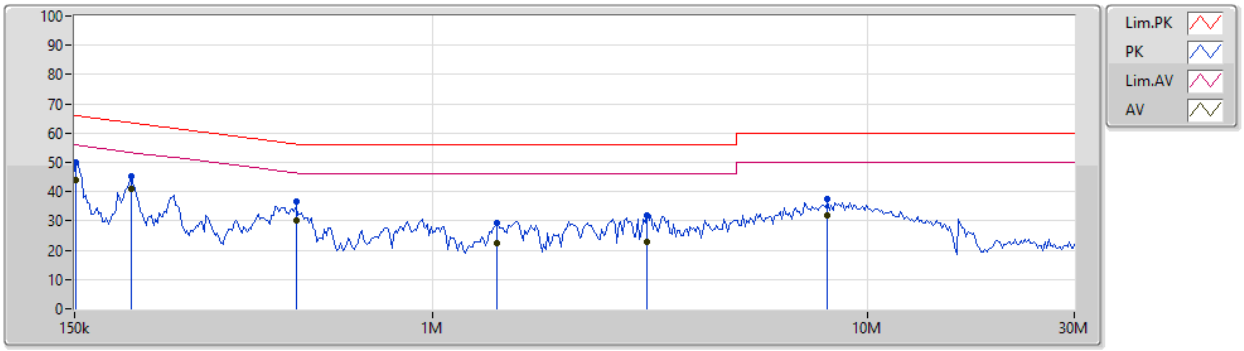
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	30/Aug/2019	29/Aug/2020
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	30/Aug/2019	29/Aug/2020
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	14/Apr/2020	13/Apr/2021
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	22/Apr/2019	21/Apr/2020
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	28/May/2019	27/May/2020
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112D / MTJ6102-05	2723 / 2	30MHz ~ 1GHz	28/Feb/2020	27/Feb/2021
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz ~ 26.5GHz	09/Sep/2019	08/Sep/2020
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	15/Aug/2019	14/Aug/2020
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	18/Mar/2020	17/Mar/2021
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	SN 805801/4+SN 804300/4	1GHz ~ 40GHz	18/Mar/2020	17/Mar/2021
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170614	18GHz~40GHz	22/May/2019	21/May/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1543	1GHz ~ 18GHz	02/Jun/2019	01/Jun/2020
Preamplifier	MITEQ	TTA1840-35-H G	1864481	18GHz ~ 40GHz	10/Mar/2020	09/Mar/2021
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	16/Mar/2020	15/Mar/2021

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101029	10kHz ~ 40GHz	01/Oct/2019	30/Sep/2020
Pulse Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	18/Mar/2020	17/Mar/2021
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	18/Mar/2020	17/Mar/2021
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

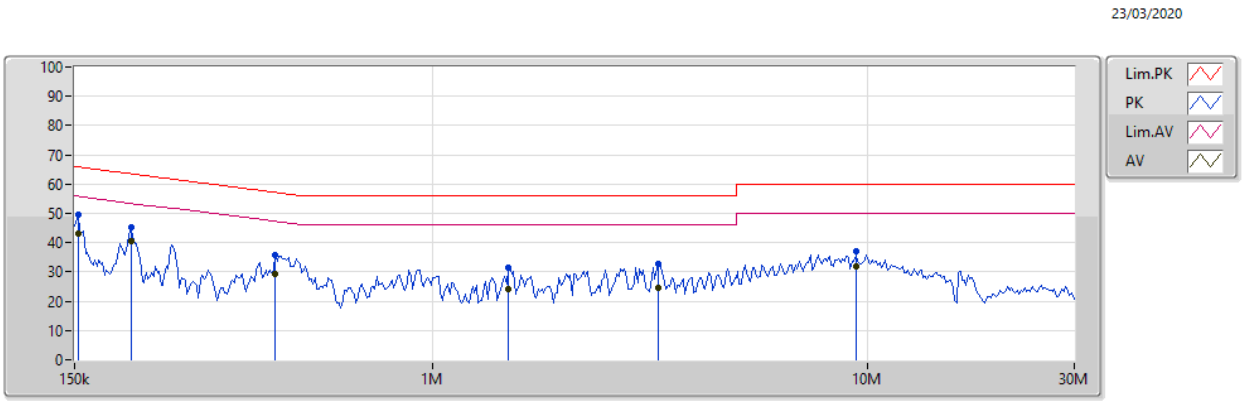
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Adapter Mode		

23/03/2020



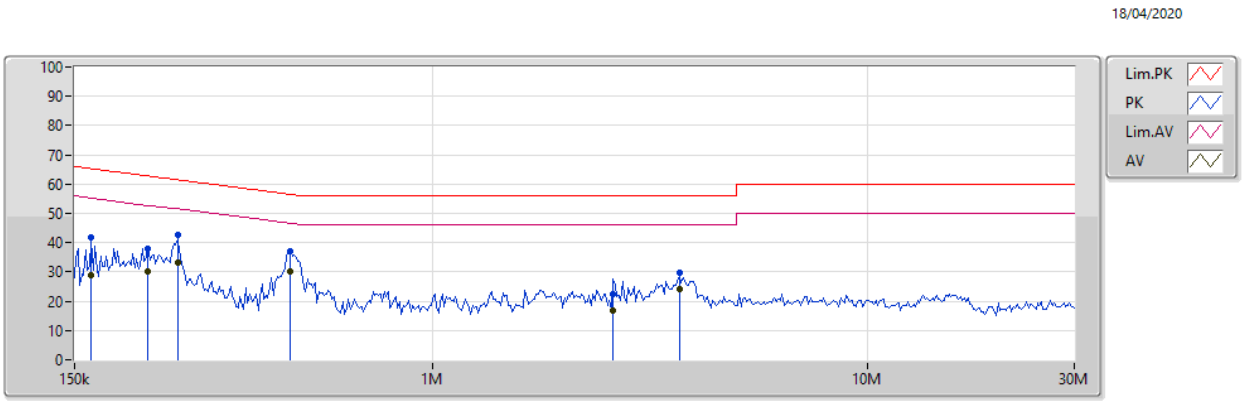
Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	151.5k	50.01	65.92	-15.91	19.63	Neutral	-	30.38	9.65	0.11	9.87
AV	151.5k	44.00	55.92	-11.92	19.63	Neutral	"Worst"	24.37	9.65	0.11	9.87
QP	202.177k	45.13	63.51	-18.38	19.62	Neutral	-	25.51	9.64	0.11	9.87
AV	202.177k	40.92	53.51	-12.59	19.62	Neutral	-	21.30	9.64	0.11	9.87
QP	485.303k	36.54	56.25	-19.71	19.63	Neutral	-	16.91	9.63	0.13	9.87
AV	485.303k	30.27	46.25	-15.98	19.63	Neutral	-	10.64	9.63	0.13	9.87
QP	1.407M	29.49	56.00	-26.51	19.65	Neutral	-	9.84	9.64	0.13	9.88
AV	1.407M	22.59	46.00	-23.41	19.65	Neutral	-	2.94	9.64	0.13	9.88
QP	3.12M	32.09	56.00	-23.91	19.71	Neutral	-	12.38	9.66	0.17	9.88
AV	3.12M	22.92	46.00	-23.08	19.71	Neutral	-	3.21	9.66	0.17	9.88
QP	8.109M	37.52	60.00	-22.48	19.82	Neutral	-	17.70	9.69	0.25	9.88
AV	8.109M	32.00	50.00	-18.00	19.82	Neutral	-	12.18	9.69	0.25	9.88

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Adapter Mode		



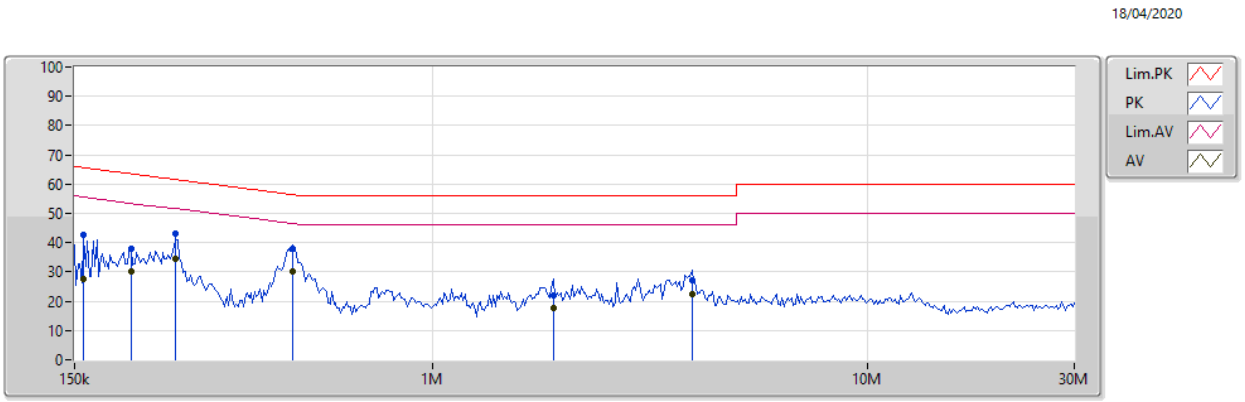
Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	153.015k	49.65	65.83	-16.18	19.64	Line	-	30.01	9.66	0.11	9.87
AV	153.015k	43.00	55.83	-12.83	19.64	Line	"Worst"	23.36	9.66	0.11	9.87
QP	202.177k	45.30	63.51	-18.21	19.63	Line	-	25.67	9.65	0.11	9.87
AV	202.177k	40.45	53.51	-13.06	19.63	Line	-	20.82	9.65	0.11	9.87
QP	434.989k	35.79	57.17	-21.38	19.64	Line	-	16.15	9.64	0.13	9.87
AV	434.989k	29.42	47.17	-17.75	19.64	Line	-	9.78	9.64	0.13	9.87
QP	1.494M	31.26	56.00	-24.74	19.65	Line	-	11.61	9.65	0.13	9.87
AV	1.494M	24.30	46.00	-21.70	19.65	Line	-	4.65	9.65	0.13	9.87
QP	3.312M	32.92	56.00	-23.08	19.72	Line	-	13.20	9.66	0.18	9.88
AV	3.312M	24.54	46.00	-21.46	19.72	Line	-	4.82	9.66	0.18	9.88
QP	9.414M	37.13	60.00	-22.87	19.83	Line	-	17.30	9.69	0.26	9.88
AV	9.414M	31.70	50.00	-18.30	19.83	Line	-	11.87	9.69	0.26	9.88

AC Power-line Conducted Emissions Result			
Operating Mode	2	**Power Phase**	Neutral
Operating Function	PoE Mode		



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	164.053k	41.99	65.25	-23.26	19.63	Neutral	-	22.36	9.65	0.11	9.87
AV	164.053k	28.68	55.25	-26.57	19.63	Neutral	-	9.05	9.65	0.11	9.87
QP	221.118k	37.80	62.77	-24.97	19.62	Neutral	-	18.18	9.64	0.11	9.87
AV	221.118k	30.20	52.77	-22.57	19.62	Neutral	-	10.58	9.64	0.11	9.87
QP	259.279k	42.52	61.45	-18.93	19.63	Neutral	-	22.89	9.64	0.12	9.87
AV	259.279k	33.37	51.45	-18.08	19.63	Neutral	-	13.74	9.64	0.12	9.87
QP	471.031k	37.26	56.50	-19.24	19.63	Neutral	-	17.63	9.63	0.13	9.87
AV	471.031k	30.01	46.50	-16.49	19.63	Neutral	"Worst"	10.38	9.63	0.13	9.87
QP	2.608M	22.40	56.00	-33.60	19.68	Neutral	-	2.72	9.65	0.16	9.87
AV	2.608M	16.67	46.00	-29.33	19.68	Neutral	-	-3.01	9.65	0.16	9.87
QP	3.695M	29.63	56.00	-26.37	19.72	Neutral	-	9.91	9.66	0.18	9.88
AV	3.695M	24.15	46.00	-21.85	19.72	Neutral	-	4.43	9.66	0.18	9.88

AC Power-line Conducted Emissions Result			
Operating Mode	2	**Power Phase**	Line
Operating Function	PoE Mode		



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	157.652k	42.64	65.58	-22.94	19.64	Line	-	23.00	9.66	0.11	9.87
AV	157.652k	27.75	55.58	-27.83	19.64	Line	-	8.11	9.66	0.11	9.87
QP	202.177k	37.84	63.51	-25.67	19.63	Line	-	18.21	9.65	0.11	9.87
AV	202.177k	30.37	53.51	-23.14	19.63	Line	-	10.74	9.65	0.11	9.87
QP	256.712k	43.06	61.54	-18.48	19.64	Line	-	23.42	9.65	0.12	9.87
AV	256.712k	34.47	51.54	-17.07	19.64	Line	-	14.83	9.65	0.12	9.87
QP	475.741k	37.80	56.42	-18.62	19.64	Line	-	18.16	9.64	0.13	9.87
AV	475.741k	30.04	46.42	-16.38	19.64	Line	"Worst"	10.40	9.64	0.13	9.87
QP	1.897M	21.99	56.00	-34.01	19.67	Line	-	2.32	9.65	0.15	9.87
AV	1.897M	17.51	46.00	-28.49	19.67	Line	-	-2.16	9.65	0.15	9.87
QP	3.961M	26.98	56.00	-29.02	19.73	Line	-	7.25	9.66	0.19	9.88
AV	3.961M	22.27	46.00	-23.73	19.73	Line	-	2.54	9.66	0.19	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)	713.75k	1.053M	1M05F1D	710k	1.052M
BT-LE(2Mbps)	1.1M	2.106M	2M11F1D	1.098M	2.099M

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;

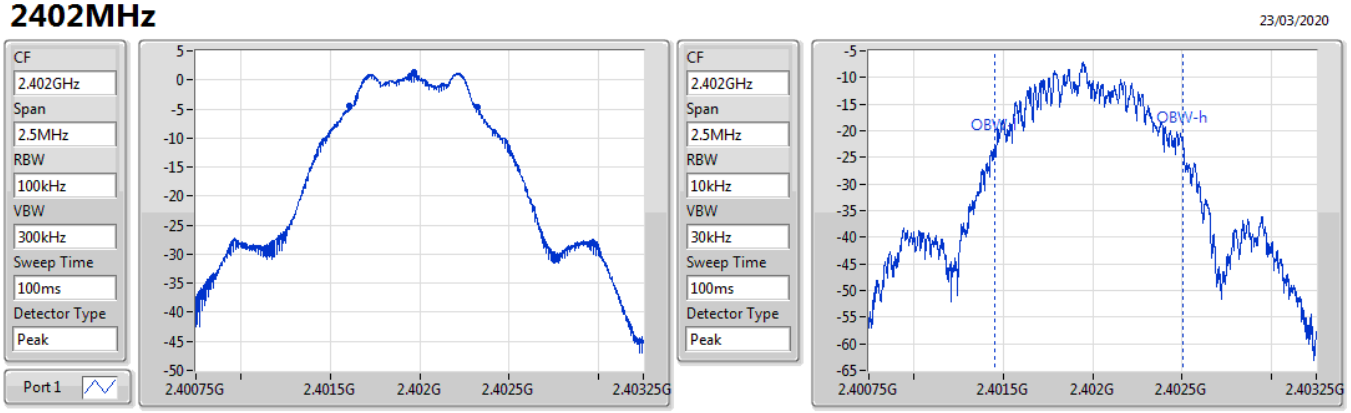
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	712.5k	1.052M
2440MHz	Pass	500k	713.75k	1.053M
2480MHz	Pass	500k	710k	1.052M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.1M	2.099M
2440MHz	Pass	500k	1.1M	2.099M
2480MHz	Pass	500k	1.098M	2.106M

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

BT-LE(1Mbps) EBW

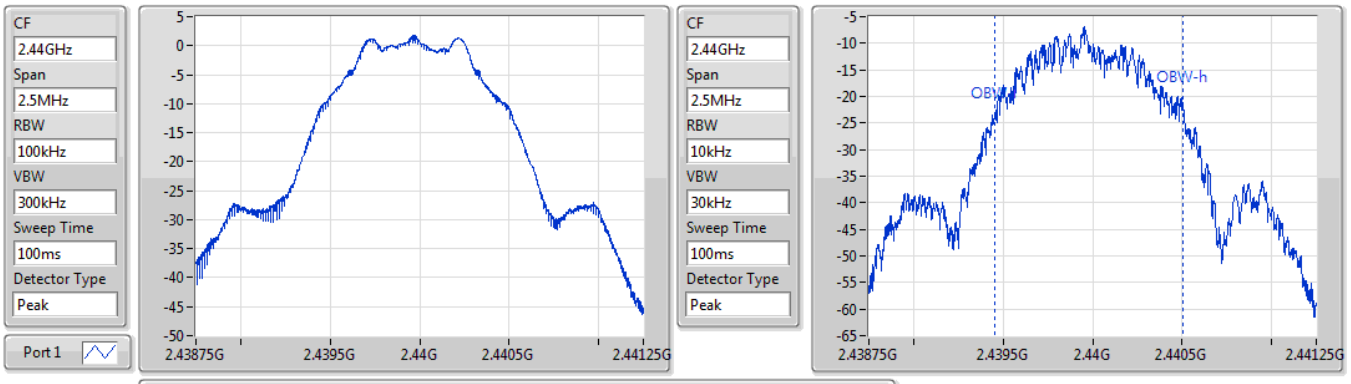
2402MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
712.5k	2.401609G	2.402321G	1.052M	2.401452G	2.402503G	500k	1

BT-LE(1Mbps) EBW

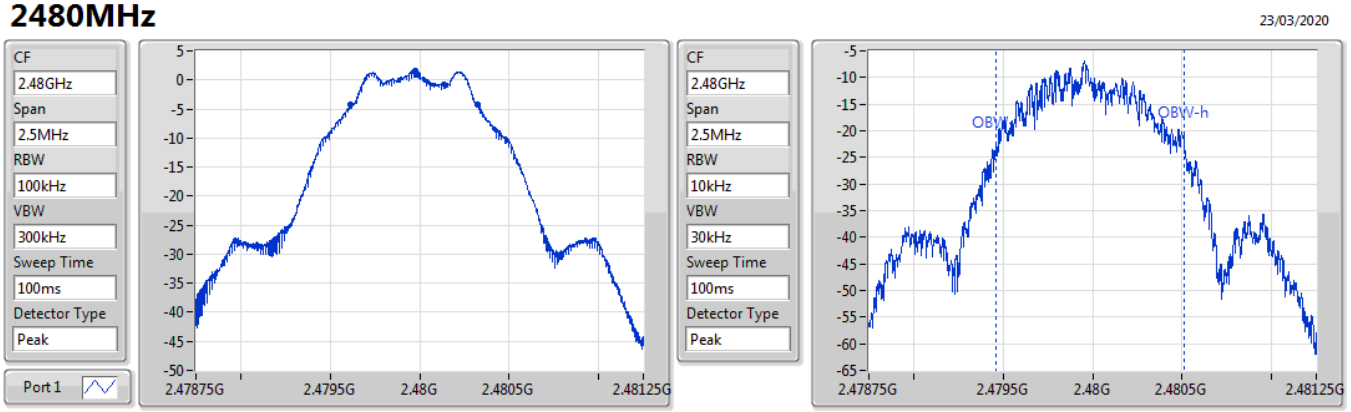
2440MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
713.75k	2.439611G	2.440325G	1.053M	2.439454G	2.440507G	500k	1

BT-LE(1Mbps) EBW

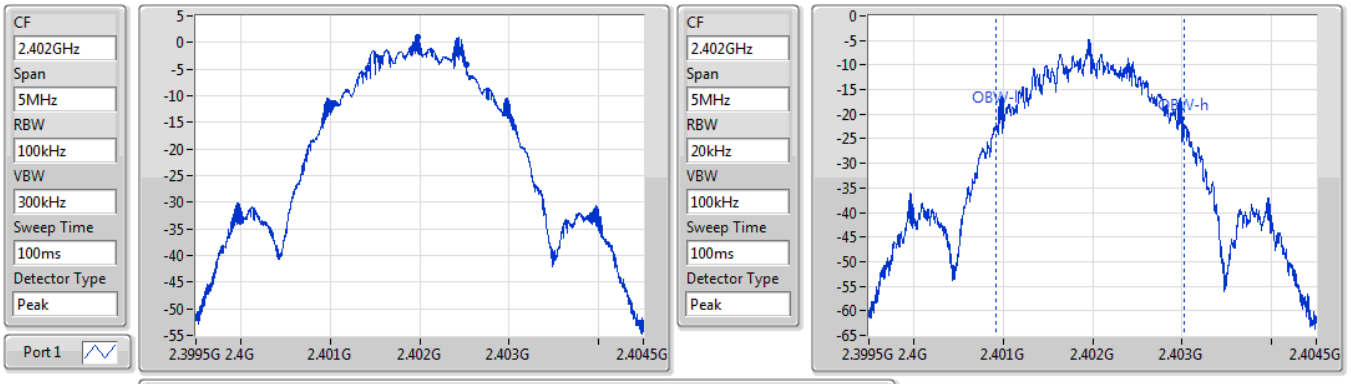
2480MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
710k	2.479616G	2.480326G	1.052M	2.47946G	2.480512G	500k	1

BT-LE(2Mbps) EBW

2402MHz

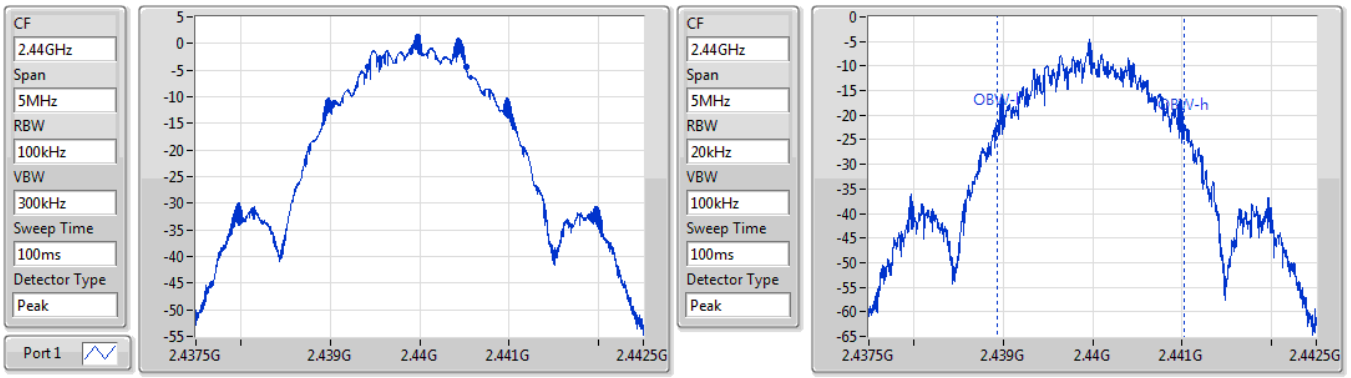


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.1M	2.401418G	2.402518G	2.099M	2.400926G	2.403024G	500k	1

BT-LE(2Mbps) EBW

2440MHz

23/03/2020

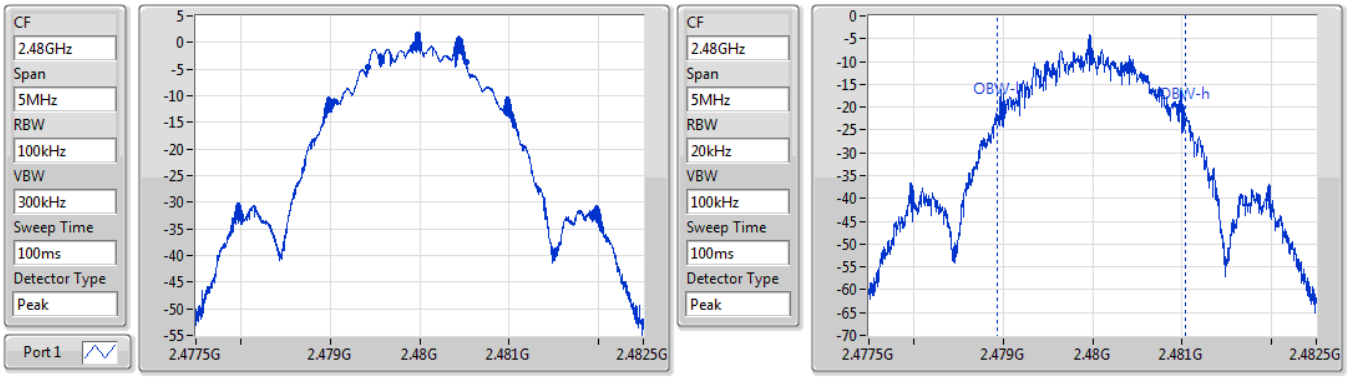


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.1M	2.439425G	2.440525G	2.099M	2.438931G	2.441029G	500k	1

BT-LE(2Mbps) EBW

2480MHz

23/03/2020



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.098M	2.479425G	2.480523G	2.106M	2.478931G	2.481037G	500k	1

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	2.74	0.00188
BT-LE(2Mbps)	2.80	0.00191

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.37	2.38	30.00
2440MHz	Pass	3.37	2.50	30.00
2480MHz	Pass	3.37	2.74	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.37	2.32	30.00
2440MHz	Pass	3.37	2.28	30.00
2480MHz	Pass	3.37	2.80	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-12.00
BT-LE(2Mbps)	-15.20

RBW=3 kHz.

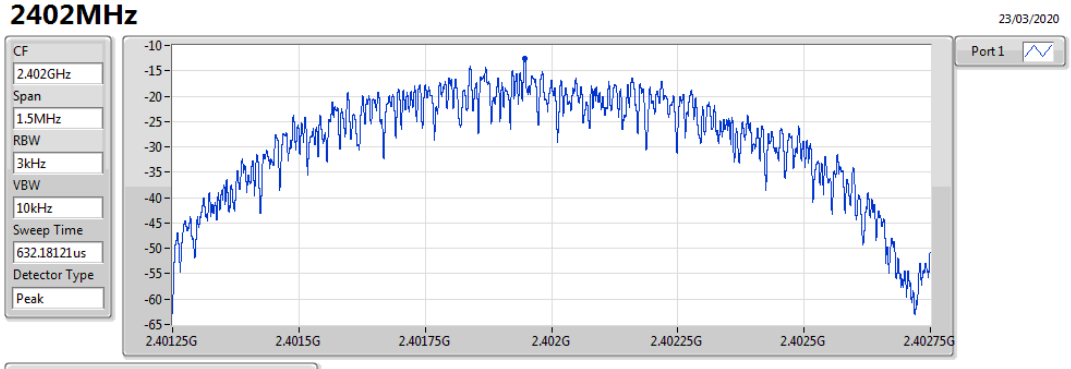
Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.37	-12.50	8.00
2440MHz	Pass	3.37	-12.18	8.00
2480MHz	Pass	3.37	-12.00	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.37	-15.81	8.00
2440MHz	Pass	3.37	-15.20	8.00
2480MHz	Pass	3.37	-15.85	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**

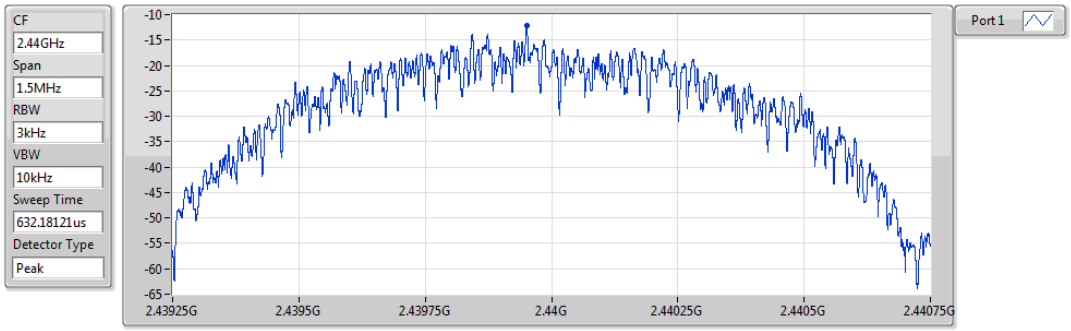
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.50	-12.50	-12.50

BT-LE(1Mbps) **PSD**

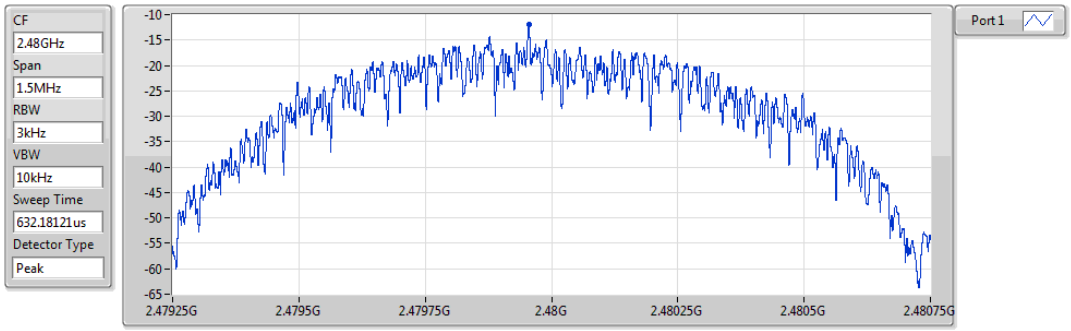
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.18	-12.18	-12.18

BT-LE(1Mbps) **PSD**

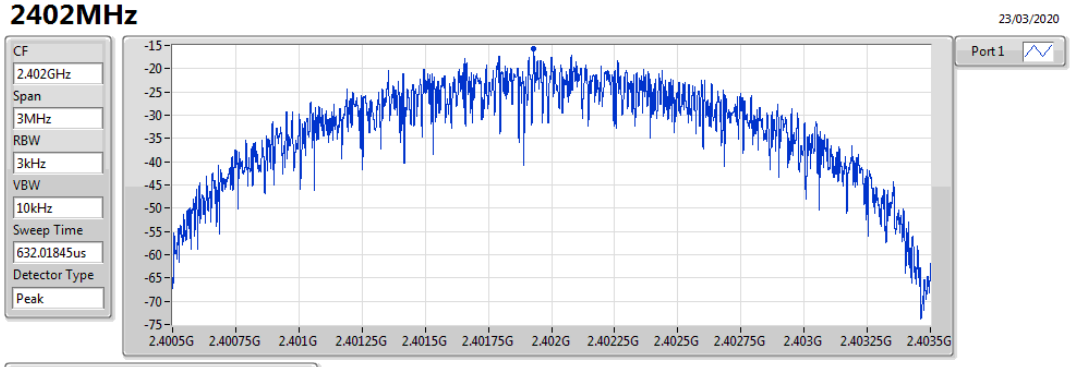
2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.00	-12.00	-12.00

BT-LE(2Mbps) **PSD**

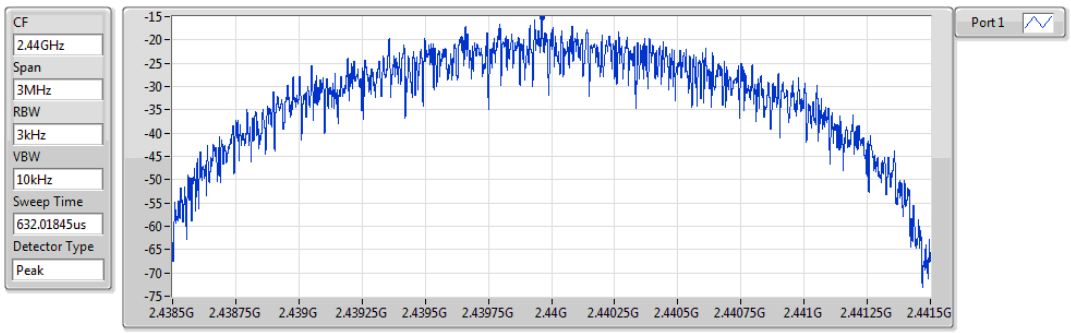
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.81	-15.81	-15.81

BT-LE(2Mbps) **PSD**

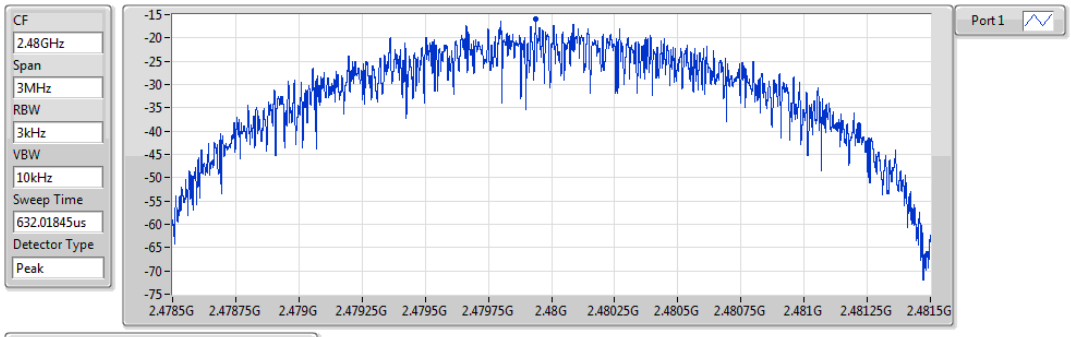
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.20	-15.20	-15.20

BT-LE(2Mbps) **PSD**

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.85	-15.85	-15.85

Summary

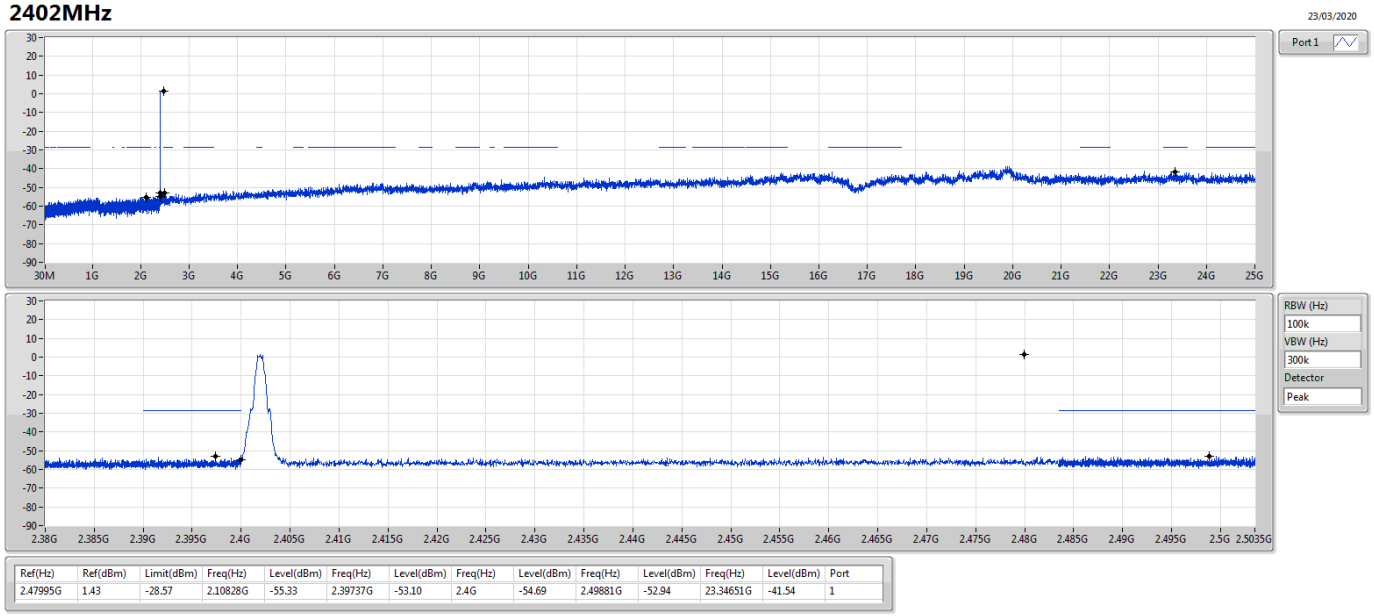
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.47995G	1.43	-28.57	2.10828G	-55.33	2.39737G	-53.10	2.4G	-54.69	2.49881G	-52.94	23.34651G	-41.54	1
BT-LE(2Mbps)	Pass	2.48045G	1.07	-28.93	2.13736G	-54.96	2.39999G	-30.46	2.4G	-30.99	2.50258G	-53.14	23.29308G	-42.08	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	2.47995G	1.43	-28.57	2.10828G	-55.33	2.39737G	-53.10	2.4G	-54.69	2.49881G	-52.94	23.34651G	-41.54	1
2440MHz	Pass	2.47995G	1.43	-28.57	2.16057G	-55.17	2.39756G	-53.49	2.4835G	-56.02	2.50144G	-52.95	21.88142G	-41.60	1
2480MHz	Pass	2.47995G	1.43	-28.57	1.99225G	-54.93	2.39314G	-54.16	2.4835G	-55.86	2.4911G	-52.94	24.91564G	-41.35	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.48045G	1.07	-28.93	2.13736G	-54.96	2.39999G	-30.46	2.4G	-30.99	2.50258G	-53.14	23.29308G	-42.08	1
2440MHz	Pass	2.48045G	1.07	-28.93	2.13736G	-53.85	2.39296G	-53.72	2.4G	-55.35	2.49553G	-53.21	23.24809G	-41.75	1
2480MHz	Pass	2.48045G	1.07	-28.93	824.01M	-55.02	2.39177G	-54.15	2.4G	-56.29	2.49493G	-52.81	23.49273G	-41.74	1

BT-LE(1Mbps) **CSE NdB**

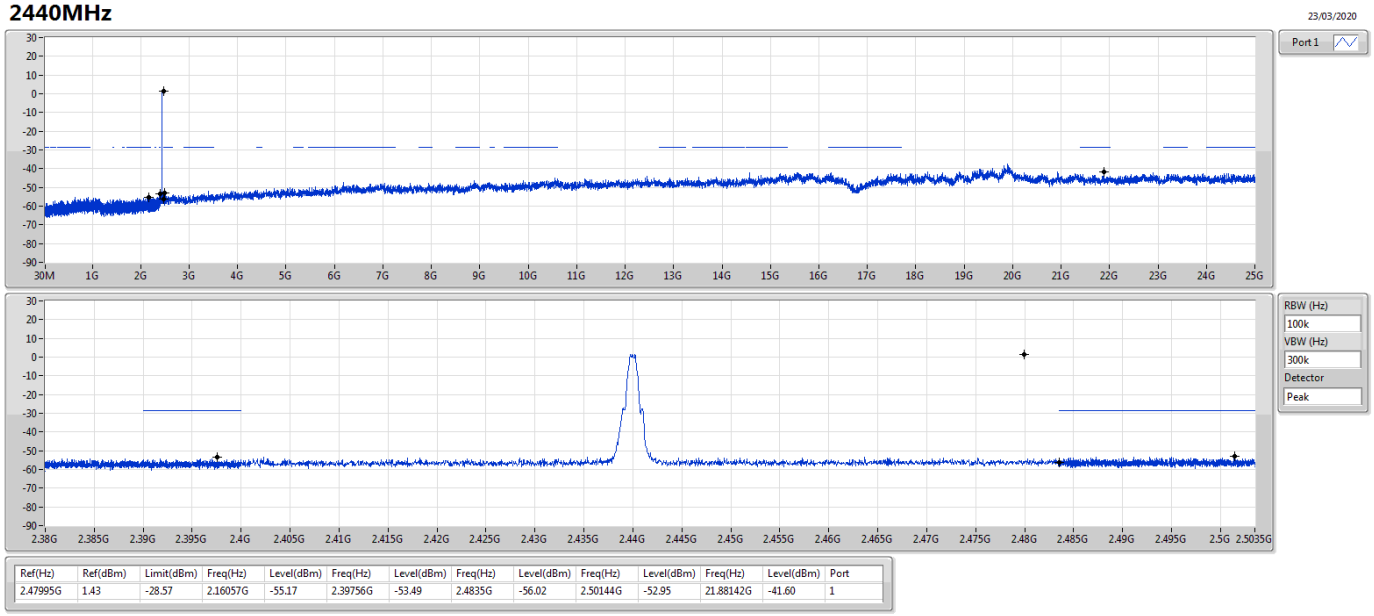
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47995G	1.43	-28.57	2.10828G	-55.33	2.39737G	-53.10	2.4G	-54.69	2.49881G	-52.94	23.34651G	-41.54	1

BT-LE(1Mbps) **CSE NdB**

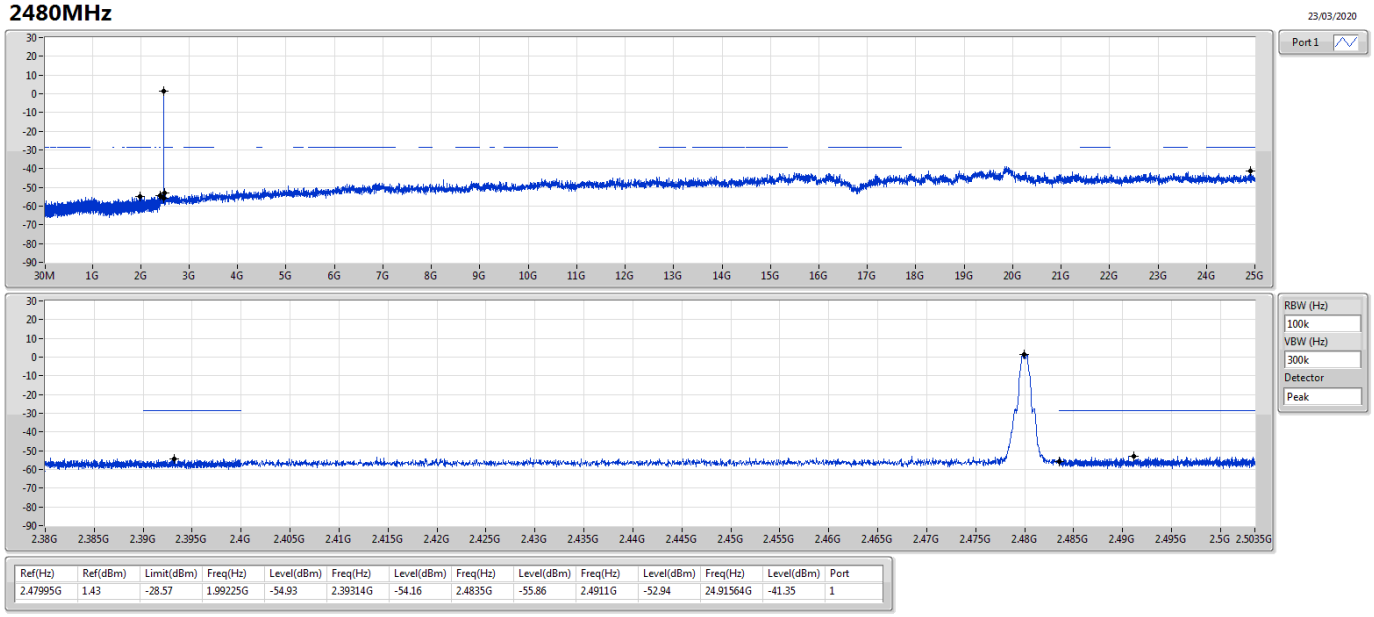
2440MHz



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
2.47995G	1.43	-28.57	2.16057G	-55.17	2.39756G	-53.49	2.4835G	-56.02	2.50144G	-52.95	21.88142G	-41.60	1

BT-LE(1Mbps) **CSE NdB**

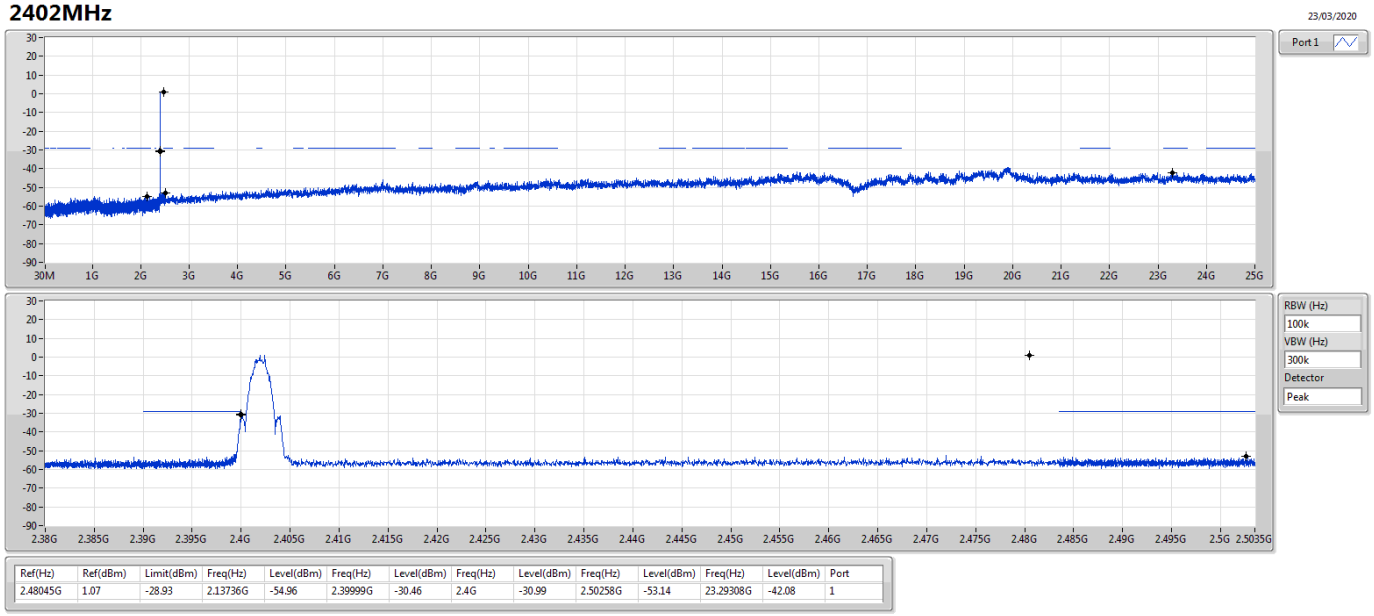
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47995G	1.43	-28.57	1.99225G	-54.93	2.39314G	-54.16	2.4835G	-55.86	2.4911G	-52.94	24.91564G	-41.35	1

BT-LE(2Mbps) **CSE NdB**

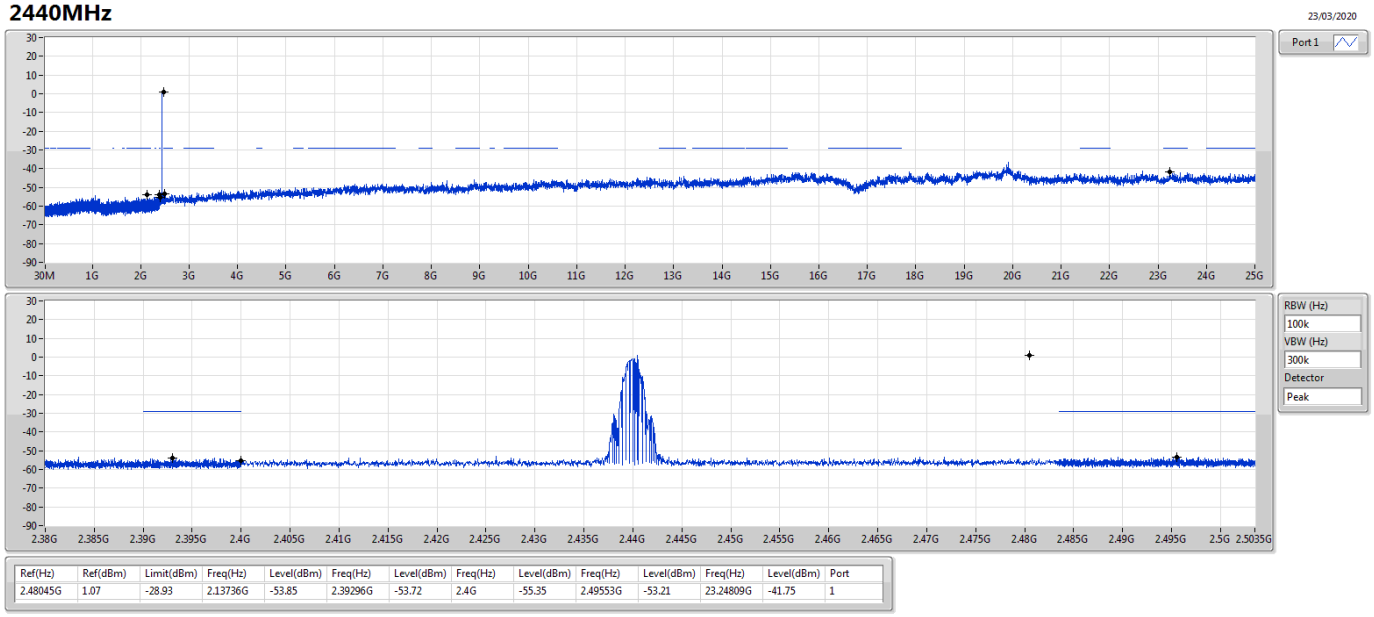
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48045G	1.07	-28.93	2.13736G	-54.96	2.39999G	-30.46	2.4G	-30.99	2.50258G	-53.14	23.29308G	-42.08	1

BT-LE(2Mbps) **CSE NdB**

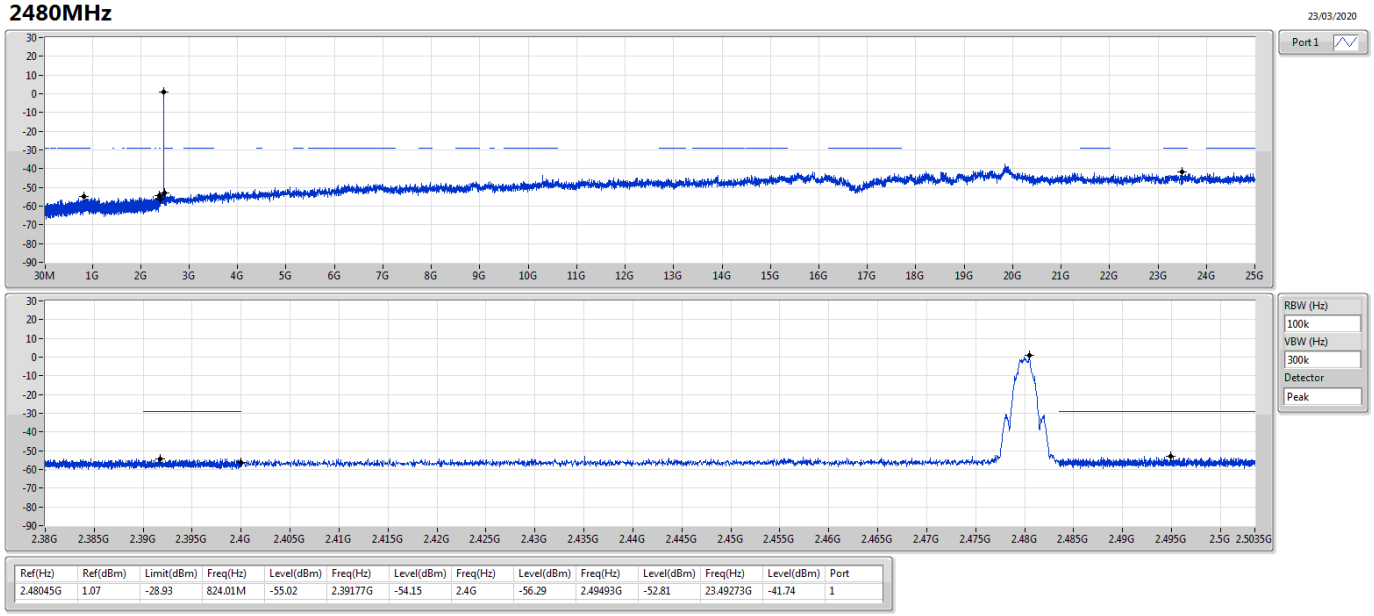
2440MHz



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
2.48045G	1.07	-28.93	2.13736G	-53.85	2.39296G	-53.72	2.4G	-55.35	2.49553G	-53.21	23.24809G	-41.75	1

BT-LE(2Mbps) **CSE NdB**

2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48045G	1.07	-28.93	824.01M	-55.02	2.39177G	-54.15	2.4G	-56.29	2.49493G	-52.81	23.49273G	-41.74	1

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	QP	299.66M	43.33	46.00	-2.67	3	Horizontal	42	1.00	-

Result

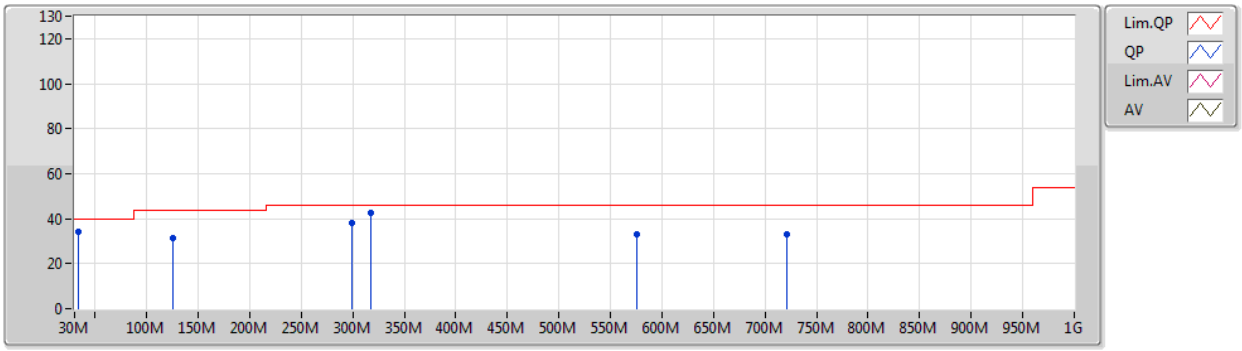
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	33.88M	34.38	40.00	-5.62	3	Vertical	0	1.00	-
2440MHz	Pass	PK	125.06M	31.55	43.50	-11.95	3	Vertical	0	1.00	-
2440MHz	Pass	PK	299.66M	38.19	46.00	-7.81	3	Vertical	0	1.00	-
2440MHz	Pass	PK	317.12M	42.32	46.00	-3.68	3	Vertical	0	1.00	-
2440MHz	Pass	PK	575.14M	32.99	46.00	-13.01	3	Vertical	0	1.00	-
2440MHz	Pass	PK	720.64M	33.07	46.00	-12.93	3	Vertical	0	1.00	-
2440MHz	Pass	PK	125.06M	34.70	43.50	-8.80	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	224M	35.07	46.00	-10.93	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	299.66M	40.95	46.00	-5.05	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	600.36M	34.77	46.00	-11.23	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	701.24M	34.42	46.00	-11.58	3	Horizontal	360	1.00	-
2440MHz	Pass	QP	319.06M	37.09	46.00	-8.91	3	Horizontal	240	1.06	-
2440MHz	Pass	PK	74.62M	32.03	40.00	-7.97	3	Vertical	360	1.00	-
2440MHz	Pass	PK	274.44M	30.34	46.00	-15.66	3	Vertical	360	1.00	-
2440MHz	Pass	PK	299.66M	37.45	46.00	-8.55	3	Vertical	360	1.00	-
2440MHz	Pass	PK	375.32M	28.12	46.00	-17.88	3	Vertical	360	1.00	-
2440MHz	Pass	PK	524.7M	30.57	46.00	-15.43	3	Vertical	360	1.00	-
2440MHz	Pass	PK	575.14M	31.37	46.00	-14.63	3	Vertical	360	1.00	-
2440MHz	Pass	PK	30M	22.11	40.00	-17.89	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	274.44M	37.81	46.00	-8.19	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	363.68M	34.30	46.00	-11.70	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	425.76M	30.62	46.00	-15.38	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	800.18M	39.40	46.00	-6.60	3	Horizontal	0	1.00	-
2440MHz	Pass	QP	299.66M	43.33	46.00	-2.67	3	Horizontal	42	1.00	-

Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

BT-LE(2Mbps)

2440MHz_PoE

16/04/2020

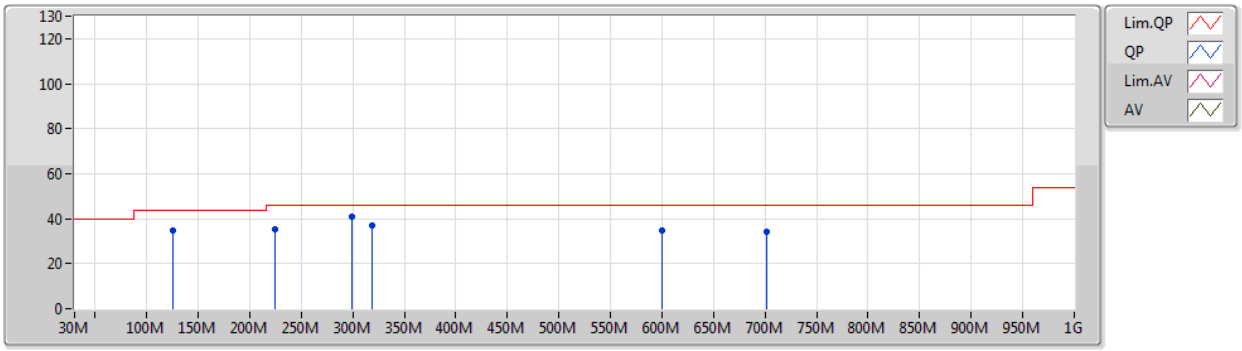


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	33.88M	34.38	40.00	-5.62	-5.33	3	Vertical	0	1.00	-	39.71	21.37	0.86	27.56
PK	125.06M	31.55	43.50	-11.95	-8.37	3	Vertical	0	1.00	-	39.92	17.20	1.72	27.29
PK	299.66M	38.19	46.00	-7.81	-5.54	3	Vertical	0	1.00	-	43.73	18.41	2.75	26.70
PK	317.12M	42.32	46.00	-3.68	-5.24	3	Vertical	0	1.00	-	47.56	18.73	2.83	26.80
PK	575.14M	32.99	46.00	-13.01	-0.02	3	Vertical	0	1.00	-	33.01	24.10	3.93	28.05
PK	720.64M	33.07	46.00	-12.93	0.75	3	Vertical	0	1.00	-	32.32	24.37	4.42	28.04

BT-LE(2Mbps)

2440MHz_PoE

16/04/2020

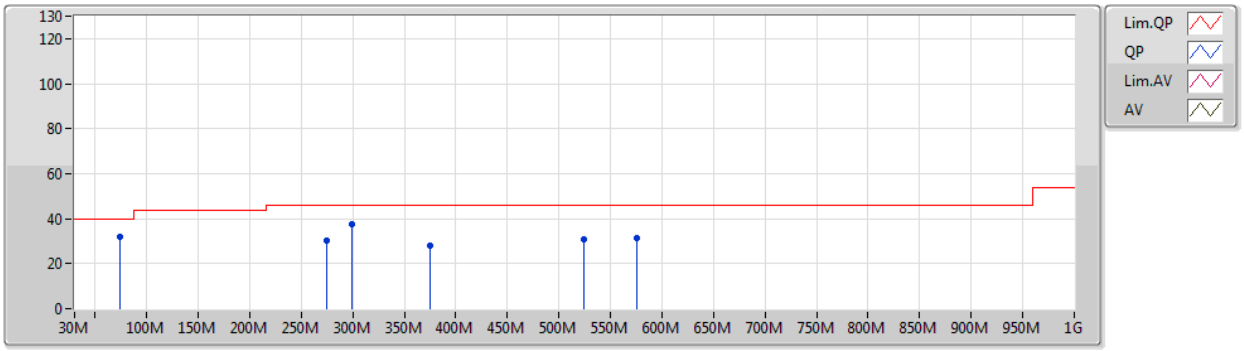


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	125.06M	34.70	43.50	-8.80	-8.37	3	Horizontal	360	1.00	-	43.07	17.20	1.72	27.29
PK	224M	35.07	46.00	-10.93	-9.82	3	Horizontal	360	1.00	-	44.89	14.68	2.34	26.84
PK	299.66M	40.95	46.00	-5.05	-5.54	3	Horizontal	360	1.00	-	46.49	18.41	2.75	26.70
PK	600.36M	34.77	46.00	-11.23	-0.20	3	Horizontal	360	1.00	-	34.97	23.77	4.08	28.05
PK	701.24M	34.42	46.00	-11.58	0.34	3	Horizontal	360	1.00	-	34.08	24.02	4.36	28.04
QP	319.06M	37.09	46.00	-8.91	-5.23	3	Horizontal	240	1.06	-	42.32	18.74	2.84	26.81

BT-LE(2Mbps)

2440MHz_Adapter

23/03/2020

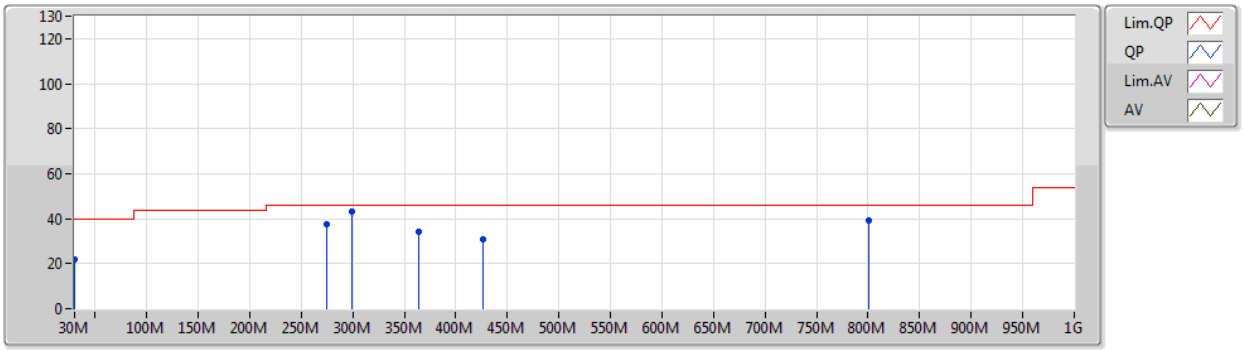


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	74.62M	32.03	40.00	-7.97	-14.63	3	Vertical	360	1.00	-	46.66	11.51	1.30	27.44
PK	274.44M	30.34	46.00	-15.66	-6.09	3	Vertical	360	1.00	-	36.43	18.02	2.61	26.72
PK	299.66M	37.45	46.00	-8.55	-5.54	3	Vertical	360	1.00	-	42.99	18.41	2.75	26.70
PK	375.32M	28.12	46.00	-17.88	-3.96	3	Vertical	360	1.00	-	32.08	20.10	3.08	27.14
PK	524.7M	30.57	46.00	-15.43	-1.45	3	Vertical	360	1.00	-	32.02	22.79	3.69	27.93
PK	575.14M	31.37	46.00	-14.63	-0.02	3	Vertical	360	1.00	-	31.39	24.10	3.93	28.05

BT-LE(2Mbps)

2440MHz_Adapter

23/03/2020



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)
PK	30M	22.11	40.00	-17.89	-3.29	3	Horizontal	0	1.00	-	25.40	23.48	0.80	27.57
PK	274.44M	37.81	46.00	-8.19	-6.09	3	Horizontal	0	1.00	-	43.90	18.02	2.61	26.72
PK	363.68M	34.30	46.00	-11.70	-4.08	3	Horizontal	0	1.00	-	38.38	19.96	3.02	27.06
PK	425.76M	30.62	46.00	-15.38	-2.41	3	Horizontal	0	1.00	-	33.03	21.80	3.29	27.50
PK	800.18M	39.40	46.00	-6.60	1.77	3	Horizontal	0	1.00	-	37.63	24.88	4.75	27.86
QP	299.66M	43.33	46.00	-2.67	-5.54	3	Horizontal	42	1.00	-	48.87	18.41	2.75	26.70

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	2.4892G	51.21	54.00	-2.79	3	Horizontal	19	2.70	-
BT-LE(2Mbps)	Pass	AV	2.4996G	50.27	54.00	-3.73	3	Vertical	0	2.78	-

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	2.3886G	49.65	54.00	-4.35	3	Vertical	246	1.21	-
2402MHz	Pass	AV	2.402G	96.27	Inf	-Inf	3	Vertical	246	1.21	-
2402MHz	Pass	PK	2.3622G	60.28	74.00	-13.72	3	Vertical	246	1.21	-
2402MHz	Pass	PK	2.4018G	97.28	Inf	-Inf	3	Vertical	246	1.21	-
2402MHz	Pass	AV	2.3856G	49.82	54.00	-4.18	3	Horizontal	35	1.51	-
2402MHz	Pass	AV	2.402G	95.77	Inf	-Inf	3	Horizontal	35	1.51	-
2402MHz	Pass	PK	2.3794G	61.08	74.00	-12.92	3	Horizontal	35	1.51	-
2402MHz	Pass	PK	2.4016G	96.76	Inf	-Inf	3	Horizontal	35	1.51	-
2402MHz	Pass	AV	4.80502G	36.48	54.00	-17.52	3	Vertical	281	1.84	-
2402MHz	Pass	PK	4.80292G	47.58	74.00	-26.42	3	Vertical	281	1.84	-
2402MHz	Pass	AV	4.80389G	36.73	54.00	-17.27	3	Horizontal	323	2.09	-
2402MHz	Pass	PK	4.80413G	47.60	74.00	-26.40	3	Horizontal	323	2.09	-
2440MHz	Pass	AV	2.38G	49.48	54.00	-4.52	3	Vertical	0	2.77	-
2440MHz	Pass	AV	2.44G	99.78	Inf	-Inf	3	Vertical	0	2.77	-
2440MHz	Pass	AV	2.4996G	51.07	54.00	-2.93	3	Vertical	0	2.77	-
2440MHz	Pass	PK	2.3824G	60.57	74.00	-13.43	3	Vertical	0	2.77	-
2440MHz	Pass	PK	2.4404G	100.75	Inf	-Inf	3	Vertical	0	2.77	-
2440MHz	Pass	PK	2.4835G	61.82	74.00	-12.18	3	Vertical	0	2.77	-
2440MHz	Pass	AV	2.3896G	49.67	54.00	-4.33	3	Horizontal	23	2.19	-
2440MHz	Pass	AV	2.44G	96.10	Inf	-Inf	3	Horizontal	23	2.19	-
2440MHz	Pass	AV	2.4992G	51.06	54.00	-2.94	3	Horizontal	23	2.19	-
2440MHz	Pass	PK	2.3412G	60.26	74.00	-13.74	3	Horizontal	23	2.19	-
2440MHz	Pass	PK	2.4396G	97.03	Inf	-Inf	3	Horizontal	23	2.19	-
2440MHz	Pass	PK	2.4932G	61.55	74.00	-12.45	3	Horizontal	23	2.19	-
2440MHz	Pass	AV	4.88053G	36.70	54.00	-17.30	3	Vertical	292	1.60	-
2440MHz	Pass	PK	4.87843G	47.88	74.00	-26.12	3	Vertical	292	1.60	-
2440MHz	Pass	AV	4.88015G	36.57	54.00	-17.43	3	Horizontal	136	1.90	-
2440MHz	Pass	PK	4.87939G	47.14	74.00	-26.86	3	Horizontal	136	1.90	-
2480MHz	Pass	AV	2.48G	99.52	Inf	-Inf	3	Vertical	360	2.95	-
2480MHz	Pass	AV	2.4982G	51.06	54.00	-2.94	3	Vertical	360	2.95	-
2480MHz	Pass	PK	2.4802G	100.46	Inf	-Inf	3	Vertical	360	2.95	-
2480MHz	Pass	PK	2.4948G	61.65	74.00	-12.35	3	Vertical	360	2.95	-
2480MHz	Pass	AV	2.48G	95.85	Inf	-Inf	3	Horizontal	19	2.70	-
2480MHz	Pass	AV	2.4892G	51.21	54.00	-2.79	3	Horizontal	19	2.70	-
2480MHz	Pass	PK	2.4802G	96.81	Inf	-Inf	3	Horizontal	19	2.70	-
2480MHz	Pass	PK	2.4842G	62.19	74.00	-11.81	3	Horizontal	19	2.70	-
2480MHz	Pass	AV	4.96159G	37.32	54.00	-16.68	3	Vertical	48	1.83	-
2480MHz	Pass	PK	4.96208G	48.61	74.00	-25.39	3	Vertical	48	1.83	-
2480MHz	Pass	AV	4.96016G	37.46	54.00	-16.54	3	Horizontal	140	1.56	-
2480MHz	Pass	PK	4.95826G	48.69	74.00	-25.31	3	Horizontal	140	1.56	-
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3896G	48.87	54.00	-5.13	3	Vertical	360	2.96	-
2402MHz	Pass	AV	2.402G	97.10	Inf	-Inf	3	Vertical	360	2.96	-
2402MHz	Pass	PK	2.361G	61.14	74.00	-12.86	3	Vertical	360	2.96	-
2402MHz	Pass	PK	2.4014G	99.64	Inf	-Inf	3	Vertical	360	2.96	-
2402MHz	Pass	AV	2.379G	48.94	54.00	-5.06	3	Horizontal	29	1.11	-
2402MHz	Pass	AV	2.402G	94.54	Inf	-Inf	3	Horizontal	29	1.11	-

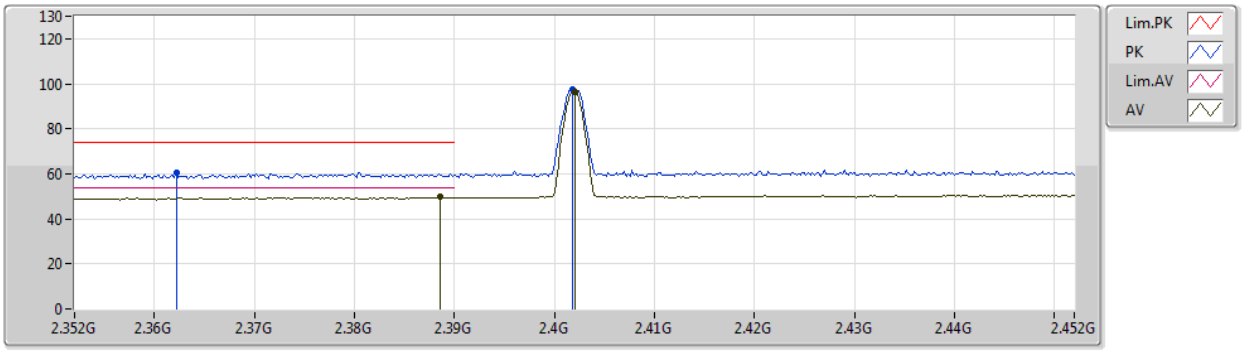
Level (dBuV/m) = Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	2.388G	60.61	74.00	-13.39	3	Horizontal	29	1.11	-
2402MHz	Pass	PK	2.4016G	97.03	Inf	-Inf	3	Horizontal	29	1.11	-
2402MHz	Pass	AV	4.8062G	35.72	54.00	-18.28	3	Vertical	56	1.63	-
2402MHz	Pass	PK	4.80613G	47.35	74.00	-26.65	3	Vertical	56	1.63	-
2402MHz	Pass	AV	4.80637G	35.85	54.00	-18.15	3	Horizontal	269	1.96	-
2402MHz	Pass	PK	4.80649G	48.39	74.00	-25.61	3	Horizontal	269	1.96	-
2440MHz	Pass	AV	2.3896G	48.87	54.00	-5.13	3	Vertical	0	2.78	-
2440MHz	Pass	AV	2.44G	98.36	Inf	-Inf	3	Vertical	0	2.78	-
2440MHz	Pass	AV	2.4996G	50.27	54.00	-3.73	3	Vertical	0	2.78	-
2440MHz	Pass	PK	2.3868G	61.01	74.00	-12.99	3	Vertical	0	2.78	-
2440MHz	Pass	PK	2.4396G	100.79	Inf	-Inf	3	Vertical	0	2.78	-
2440MHz	Pass	PK	2.496G	61.66	74.00	-12.34	3	Vertical	0	2.78	-
2440MHz	Pass	AV	2.3896G	48.87	54.00	-5.13	3	Horizontal	39	2.73	-
2440MHz	Pass	AV	2.44G	95.34	Inf	-Inf	3	Horizontal	39	2.73	-
2440MHz	Pass	AV	2.4988G	50.25	54.00	-3.75	3	Horizontal	39	2.73	-
2440MHz	Pass	PK	2.3536G	60.78	74.00	-13.22	3	Horizontal	39	2.73	-
2440MHz	Pass	PK	2.4396G	97.83	Inf	-Inf	3	Horizontal	39	2.73	-
2440MHz	Pass	PK	2.4992G	61.83	74.00	-12.17	3	Horizontal	39	2.73	-
2440MHz	Pass	AV	4.87858G	35.94	54.00	-18.06	3	Vertical	8	1.14	-
2440MHz	Pass	PK	4.88074G	48.40	74.00	-25.60	3	Vertical	8	1.14	-
2440MHz	Pass	AV	4.87975G	34.85	54.00	-19.15	3	Horizontal	49	1.52	-
2440MHz	Pass	PK	4.87878G	48.11	74.00	-25.89	3	Horizontal	49	1.52	-
2480MHz	Pass	AV	2.48G	97.97	Inf	-Inf	3	Vertical	360	2.96	-
2480MHz	Pass	AV	2.4998G	50.27	54.00	-3.73	3	Vertical	360	2.96	-
2480MHz	Pass	PK	2.4804G	100.44	Inf	-Inf	3	Vertical	360	2.96	-
2480MHz	Pass	PK	2.491G	62.11	74.00	-11.89	3	Vertical	360	2.96	-
2480MHz	Pass	AV	2.48G	94.31	Inf	-Inf	3	Horizontal	18	2.70	-
2480MHz	Pass	AV	2.4996G	50.27	54.00	-3.73	3	Horizontal	18	2.70	-
2480MHz	Pass	PK	2.4804G	96.84	Inf	-Inf	3	Horizontal	18	2.70	-
2480MHz	Pass	PK	2.4914G	62.39	74.00	-11.61	3	Horizontal	18	2.70	-
2480MHz	Pass	AV	4.96158G	36.55	54.00	-17.45	3	Vertical	168	1.41	-
2480MHz	Pass	PK	4.9602G	48.53	74.00	-25.47	3	Vertical	168	1.41	-
2480MHz	Pass	AV	4.96036G	36.69	54.00	-17.31	3	Horizontal	148	1.24	-
2480MHz	Pass	PK	4.9575G	48.43	74.00	-25.57	3	Horizontal	148	1.24	-

BT-LE(1Mbps)

22/03/2020

2402MHz_TX

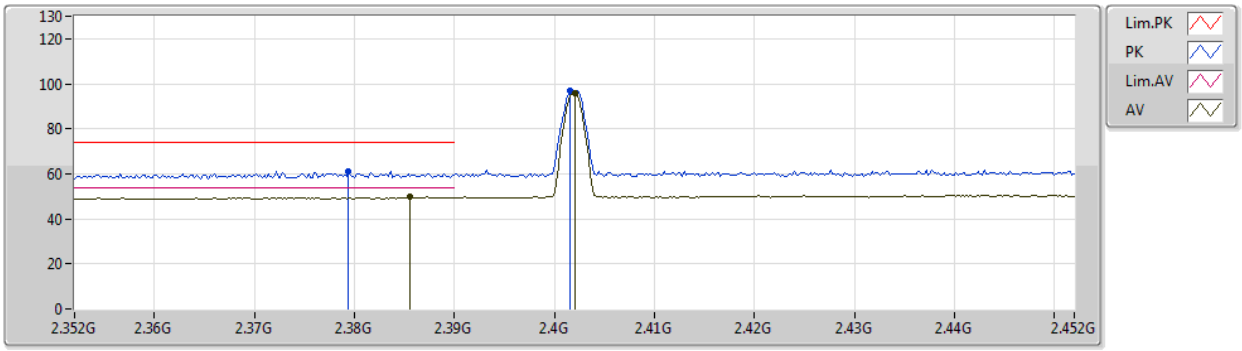


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3886G	49.65	54.00	-4.35	33.59	3	Vertical	246	1.21	-	16.06	29.59	4.00	-
AV	2.402G	96.27	Inf	-Inf	33.71	3	Vertical	246	1.21	-	62.56	29.70	4.01	-
PK	2.3622G	60.28	74.00	-13.72	33.29	3	Vertical	246	1.21	-	26.99	29.32	3.97	-
PK	2.4018G	97.28	Inf	-Inf	33.71	3	Vertical	246	1.21	-	63.57	29.70	4.01	-

BT-LE(1Mbps)

2402MHz_TX

22/03/2020

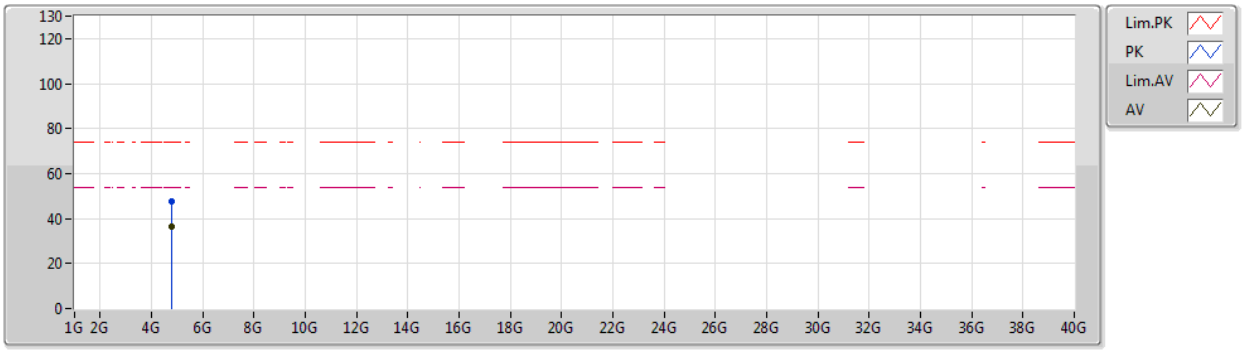


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3856G	49.82	54.00	-4.18	33.55	3	Horizontal	35	1.51	-	16.27	29.56	3.99	-
AV	2.402G	95.77	Inf	-Inf	33.71	3	Horizontal	35	1.51	-	62.06	29.70	4.01	-
PK	2.3794G	61.08	74.00	-12.92	33.48	3	Horizontal	35	1.51	-	27.60	29.49	3.99	-
PK	2.4016G	96.76	Inf	-Inf	33.71	3	Horizontal	35	1.51	-	63.05	29.70	4.01	-

BT-LE(1Mbps)

2402MHz_TX

22/03/2020

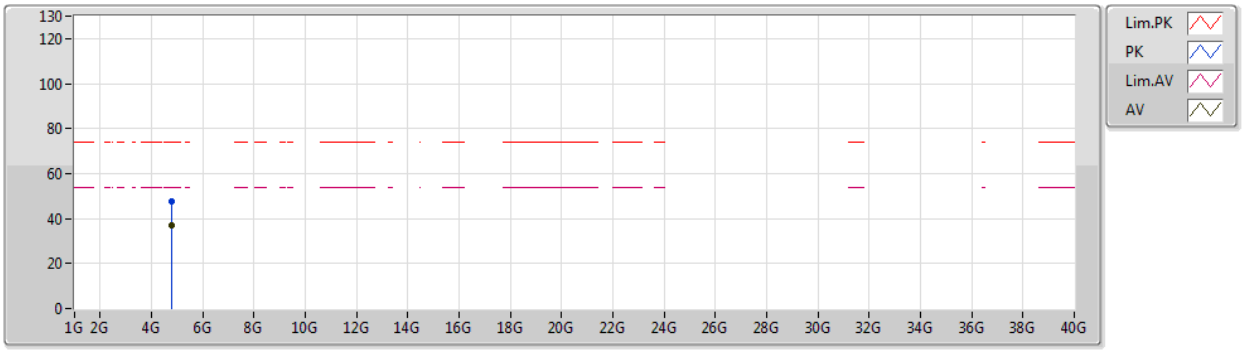


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80502G	36.48	54.00	-17.52	9.98	3	Vertical	281	1.84	-	26.50	33.61	5.78	29.41
PK	4.80292G	47.58	74.00	-26.42	9.98	3	Vertical	281	1.84	-	37.60	33.61	5.78	29.41

BT-LE(1Mbps)

2402MHz_TX

22/03/2020

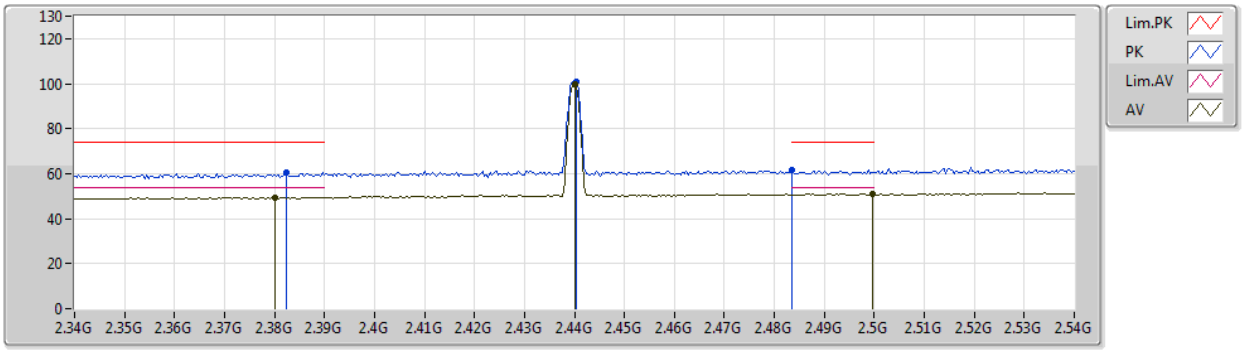


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80389G	36.73	54.00	-17.27	9.98	3	Horizontal	323	2.09	-	26.75	33.61	5.78	29.41
PK	4.80413G	47.60	74.00	-26.40	9.98	3	Horizontal	323	2.09	-	37.62	33.61	5.78	29.41

BT-LE(1Mbps)

2440MHz_TX

22/03/2020

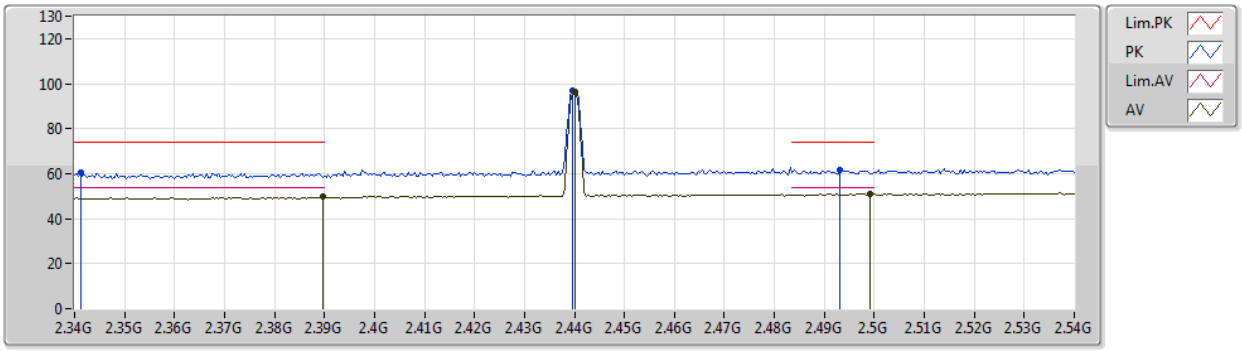


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.38G	49.48	54.00	-4.52	33.49	3	Vertical	0	2.77	-	15.99	29.50	3.99	-
AV	2.44G	99.78	Inf	-Inf	33.82	3	Vertical	0	2.77	-	65.96	29.78	4.04	-
AV	2.4996G	51.07	54.00	-2.93	34.30	3	Vertical	0	2.77	-	16.77	30.20	4.10	-
PK	2.3824G	60.57	74.00	-13.43	33.51	3	Vertical	0	2.77	-	27.06	29.52	3.99	-
PK	2.4404G	100.75	Inf	-Inf	33.82	3	Vertical	0	2.77	-	66.93	29.78	4.04	-
PK	2.4835G	61.82	74.00	-12.18	34.15	3	Vertical	0	2.77	-	27.67	30.07	4.08	-

BT-LE(1Mbps)

2440MHz_TX

22/03/2020

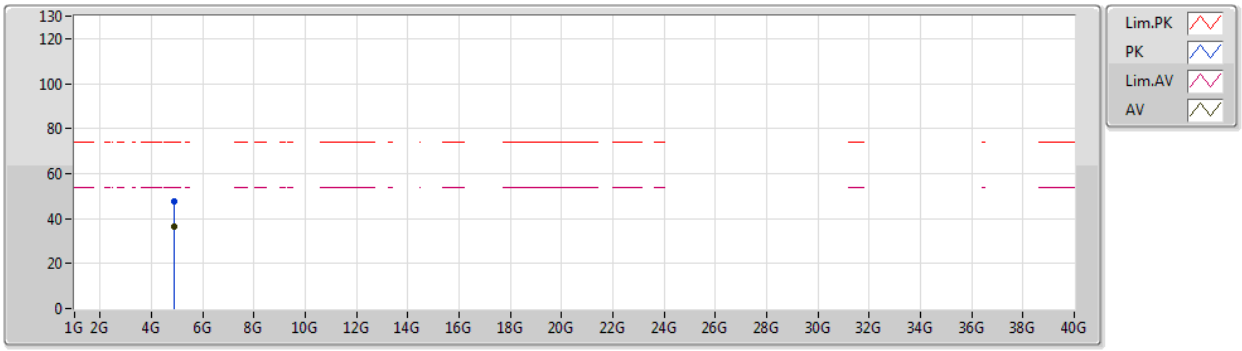


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3896G	49.67	54.00	-4.33	33.60	3	Horizontal	23	2.19	-	16.07	29.60	4.00	-
AV	2.44G	96.10	Inf	-Inf	33.82	3	Horizontal	23	2.19	-	62.28	29.78	4.04	-
AV	2.4992G	51.06	54.00	-2.94	34.29	3	Horizontal	23	2.19	-	16.77	30.19	4.10	-
PK	2.3412G	60.26	74.00	-13.74	33.20	3	Horizontal	23	2.19	-	27.06	29.25	3.95	-
PK	2.4396G	97.03	Inf	-Inf	33.82	3	Horizontal	23	2.19	-	63.21	29.78	4.04	-
PK	2.4932G	61.55	74.00	-12.45	34.24	3	Horizontal	23	2.19	-	27.31	30.15	4.09	-

BT-LE(1Mbps)

2440MHz_TX

22/03/2020

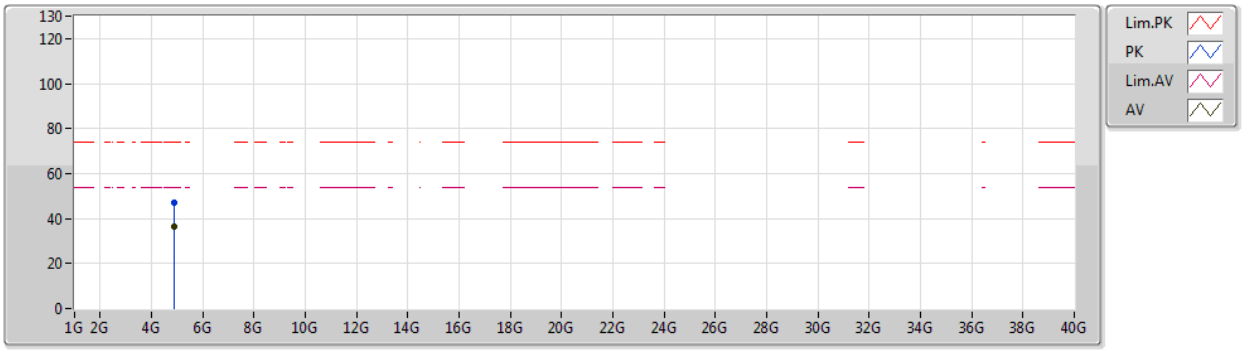


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88053G	36.70	54.00	-17.30	10.22	3	Vertical	292	1.60	-	26.48	33.76	5.83	29.37
PK	4.87843G	47.88	74.00	-26.12	10.21	3	Vertical	292	1.60	-	37.67	33.76	5.83	29.38

BT-LE(1Mbps)

2440MHz_TX

22/03/2020

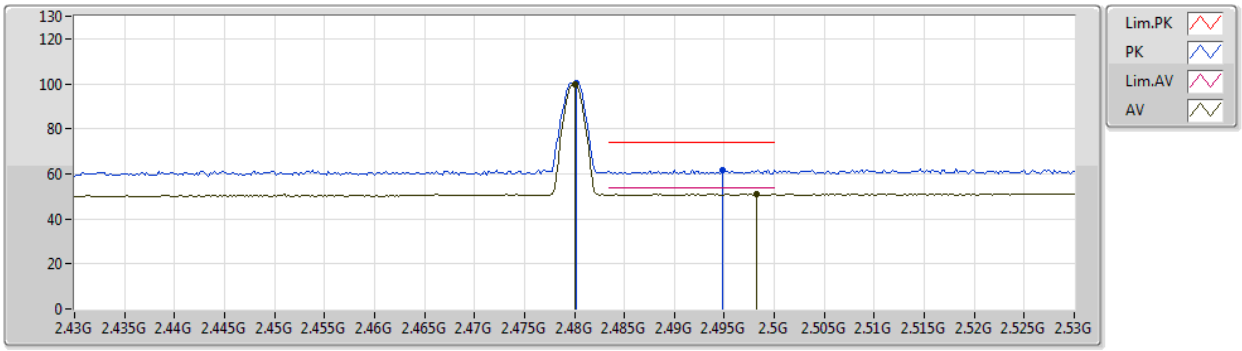


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88015G	36.57	54.00	-17.43	10.21	3	Horizontal	136	1.90	-	26.36	33.76	5.83	29.38
PK	4.87939G	47.14	74.00	-26.86	10.21	3	Horizontal	136	1.90	-	36.93	33.76	5.83	29.38

BT-LE(1Mbps)

2480MHz_TX

22/03/2020

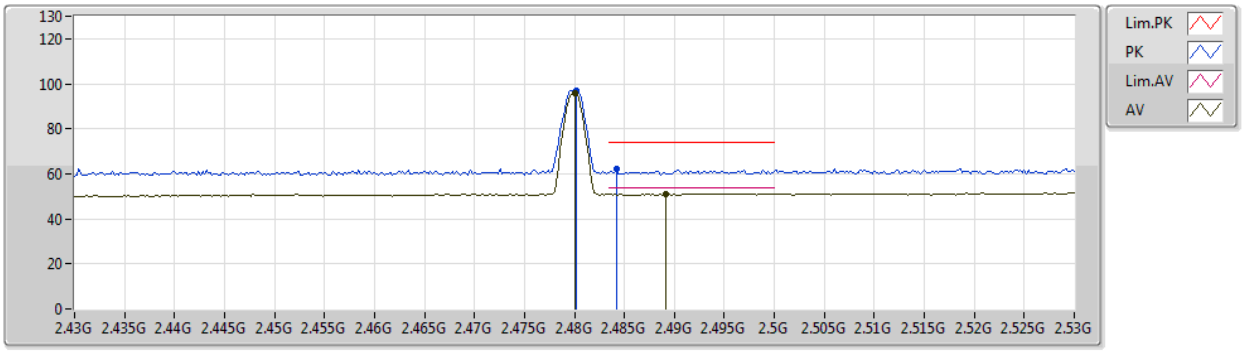


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	99.52	Inf	-Inf	34.12	3	Vertical	360	2.95	-	65.40	30.04	4.08	-
AV	2.4982G	51.06	54.00	-2.94	34.29	3	Vertical	360	2.95	-	16.77	30.19	4.10	-
PK	2.4802G	100.46	Inf	-Inf	34.12	3	Vertical	360	2.95	-	66.34	30.04	4.08	-
PK	2.4948G	61.65	74.00	-12.35	34.26	3	Vertical	360	2.95	-	27.39	30.16	4.10	-

BT-LE(1Mbps)

2480MHz_TX

22/03/2020

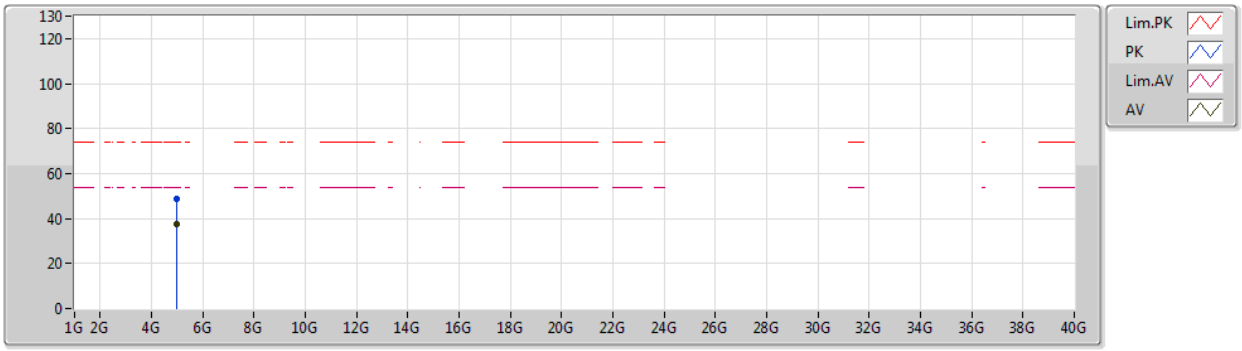


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	95.85	Inf	-Inf	34.12	3	Horizontal	19	2.70	-	61.73	30.04	4.08	-
AV	2.4892G	51.21	54.00	-2.79	34.20	3	Horizontal	19	2.70	-	17.01	30.11	4.09	-
PK	2.4802G	96.81	Inf	-Inf	34.12	3	Horizontal	19	2.70	-	62.69	30.04	4.08	-
PK	2.4842G	62.19	74.00	-11.81	34.16	3	Horizontal	19	2.70	-	28.03	30.07	4.09	-

BT-LE(1Mbps)

2480MHz_TX

22/03/2020

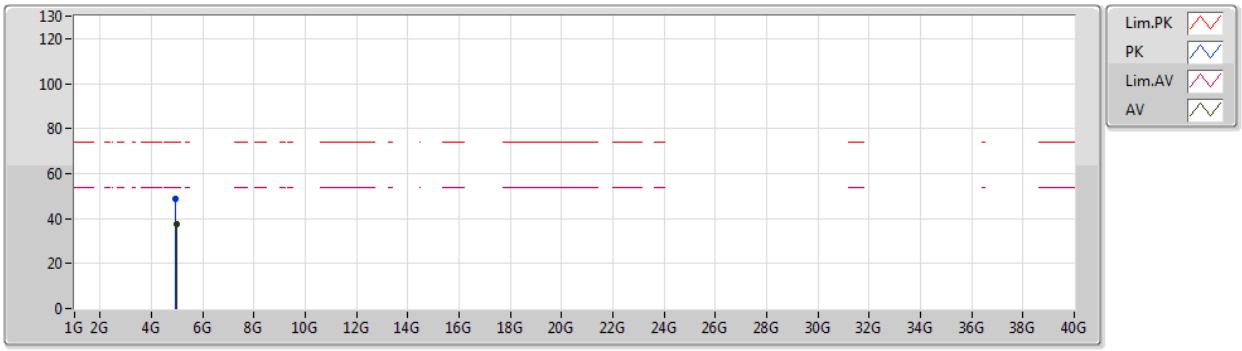


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.96159G	37.32	54.00	-16.68	10.47	3	Vertical	48	1.83	-	26.85	33.92	5.89	29.34
PK	4.96208G	48.61	74.00	-25.39	10.47	3	Vertical	48	1.83	-	38.14	33.92	5.89	29.34

BT-LE(1Mbps)

2480MHz_TX

22/03/2020

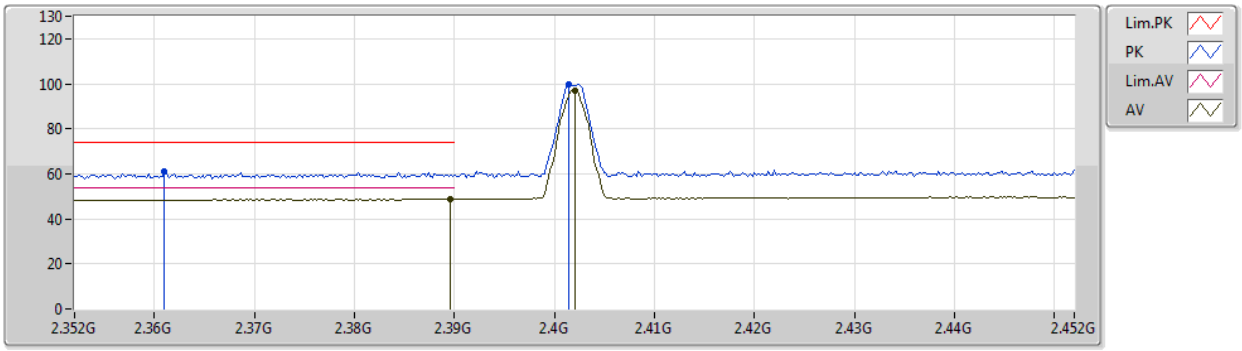


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.96016G	37.46	54.00	-16.54	10.47	3	Horizontal	140	1.56	-	26.99	33.92	5.89	29.34
PK	4.95826G	48.69	74.00	-25.31	10.47	3	Horizontal	140	1.56	-	38.22	33.92	5.89	29.34

BT-LE(2Mbps)

22/03/2020

2402MHz_TX

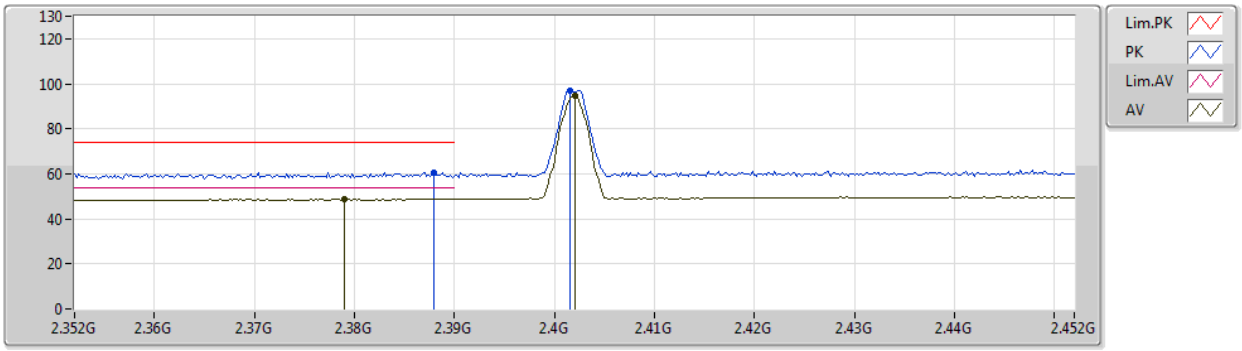


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3896G	48.87	54.00	-5.13	33.60	3	Vertical	360	2.96	-	15.27	29.60	4.00	-
AV	2.402G	97.10	Inf	-Inf	33.71	3	Vertical	360	2.96	-	63.39	29.70	4.01	-
PK	2.361G	61.14	74.00	-12.86	33.28	3	Vertical	360	2.96	-	27.86	29.31	3.97	-
PK	2.4014G	99.64	Inf	-Inf	33.71	3	Vertical	360	2.96	-	65.93	29.70	4.01	-

BT-LE(2Mbps)

22/03/2020

2402MHz_TX

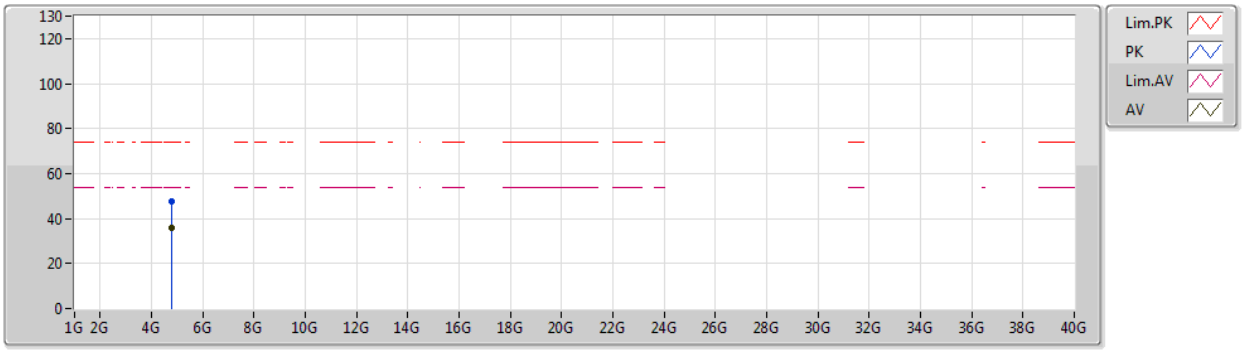


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.379G	48.94	54.00	-5.06	33.48	3	Horizontal	29	1.11	-	15.46	29.49	3.99	-
AV	2.402G	94.54	Inf	-Inf	33.71	3	Horizontal	29	1.11	-	60.83	29.70	4.01	-
PK	2.388G	60.61	74.00	-13.39	33.57	3	Horizontal	29	1.11	-	27.04	29.58	3.99	-
PK	2.4016G	97.03	Inf	-Inf	33.71	3	Horizontal	29	1.11	-	63.32	29.70	4.01	-

BT-LE(2Mbps)

2402MHz_TX

22/03/2020

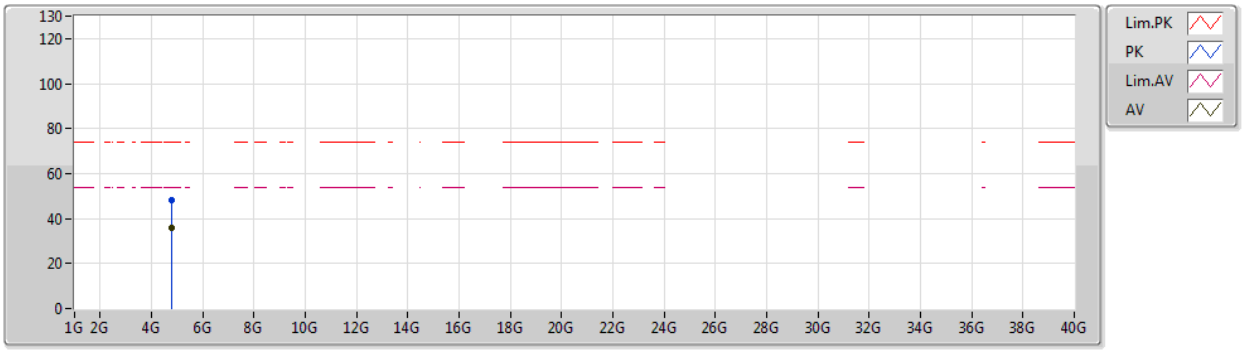


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8062G	35.72	54.00	-18.28	9.98	3	Vertical	56	1.63	-	25.74	33.61	5.78	29.41
PK	4.80613G	47.35	74.00	-26.65	9.98	3	Vertical	56	1.63	-	37.37	33.61	5.78	29.41

BT-LE(2Mbps)

2402MHz_TX

22/03/2020

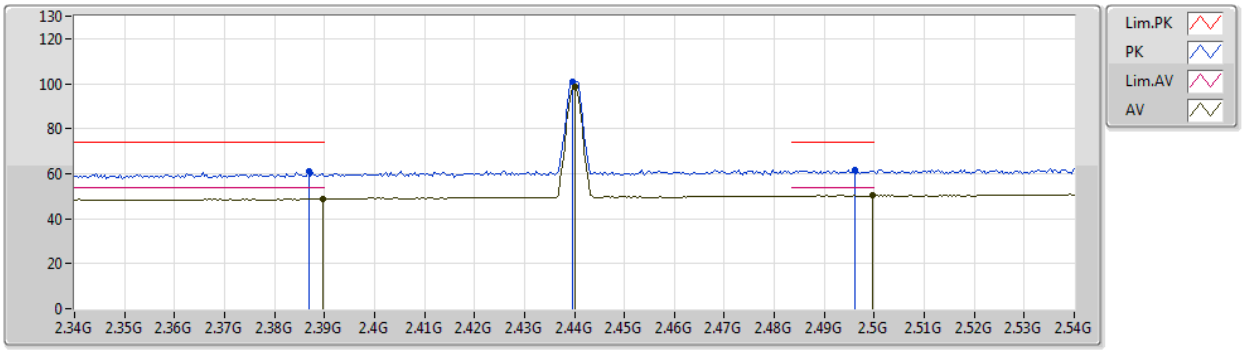


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80637G	35.85	54.00	-18.15	9.98	3	Horizontal	269	1.96	-	25.87	33.61	5.78	29.41
PK	4.80649G	48.39	74.00	-25.61	9.98	3	Horizontal	269	1.96	-	38.41	33.61	5.78	29.41

BT-LE(2Mbps)

2440MHz_TX

22/03/2020

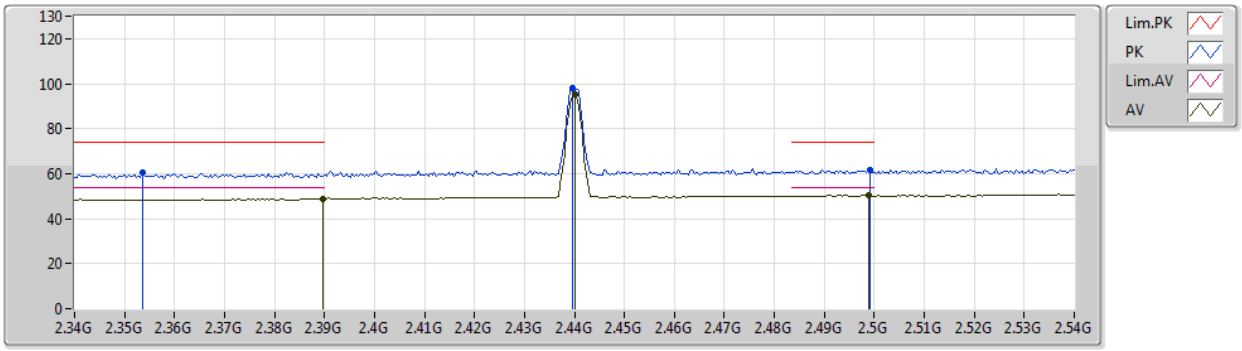


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3896G	48.87	54.00	-5.13	33.60	3	Vertical	0	2.78	-	15.27	29.60	4.00	-
AV	2.44G	98.36	Inf	-Inf	33.82	3	Vertical	0	2.78	-	64.54	29.78	4.04	-
AV	2.4996G	50.27	54.00	-3.73	34.30	3	Vertical	0	2.78	-	15.97	30.20	4.10	-
PK	2.3868G	61.01	74.00	-12.99	33.56	3	Vertical	0	2.78	-	27.45	29.57	3.99	-
PK	2.4396G	100.79	Inf	-Inf	33.82	3	Vertical	0	2.78	-	66.97	29.78	4.04	-
PK	2.496G	61.66	74.00	-12.34	34.27	3	Vertical	0	2.78	-	27.39	30.17	4.10	-

BT-LE(2Mbps)

2440MHz_TX

22/03/2020

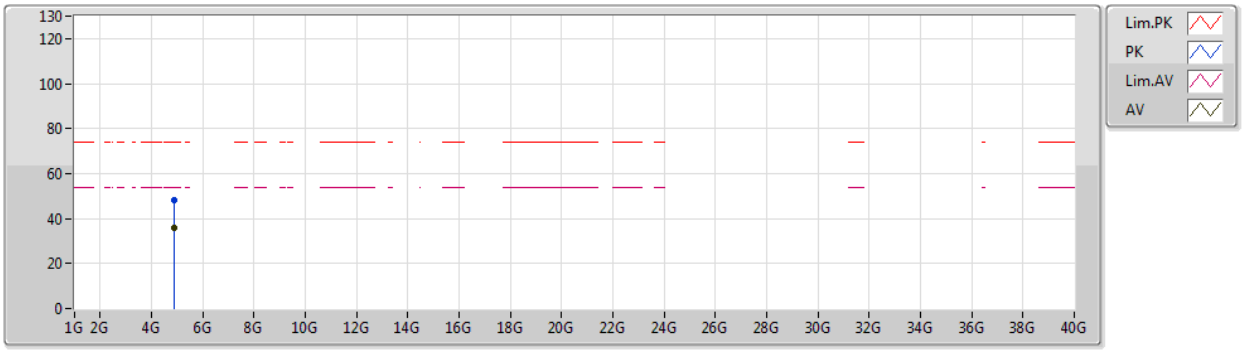


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3896G	48.87	54.00	-5.13	33.60	3	Horizontal	39	2.73	-	15.27	29.60	4.00	-
AV	2.44G	95.34	Inf	-Inf	33.82	3	Horizontal	39	2.73	-	61.52	29.78	4.04	-
AV	2.4988G	50.25	54.00	-3.75	34.29	3	Horizontal	39	2.73	-	15.96	30.19	4.10	-
PK	2.3536G	60.78	74.00	-13.22	33.20	3	Horizontal	39	2.73	-	27.58	29.24	3.96	-
PK	2.4396G	97.83	Inf	-Inf	33.82	3	Horizontal	39	2.73	-	64.01	29.78	4.04	-
PK	2.4992G	61.83	74.00	-12.17	34.29	3	Horizontal	39	2.73	-	27.54	30.19	4.10	-

BT-LE(2Mbps)

2440MHz_TX

22/03/2020

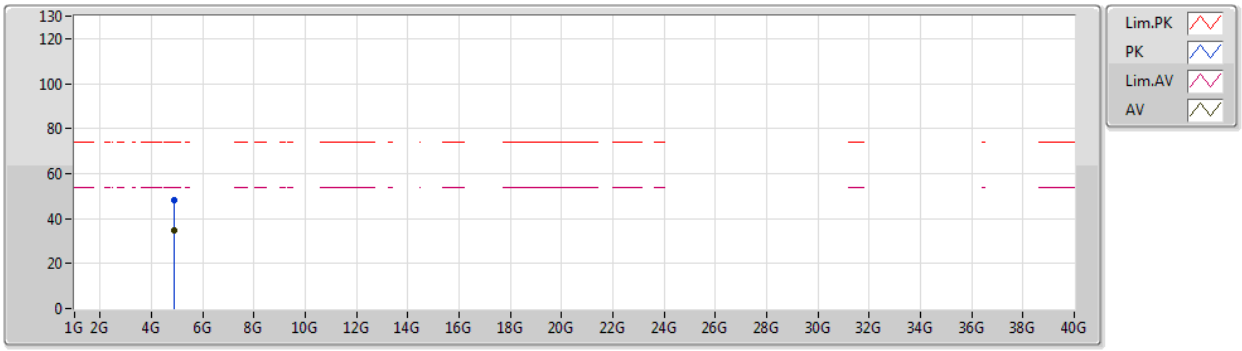


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87858G	35.94	54.00	-18.06	10.21	3	Vertical	8	1.14	-	25.73	33.76	5.83	29.38
PK	4.88074G	48.40	74.00	-25.60	10.22	3	Vertical	8	1.14	-	38.18	33.76	5.83	29.37

BT-LE(2Mbps)

2440MHz_TX

22/03/2020

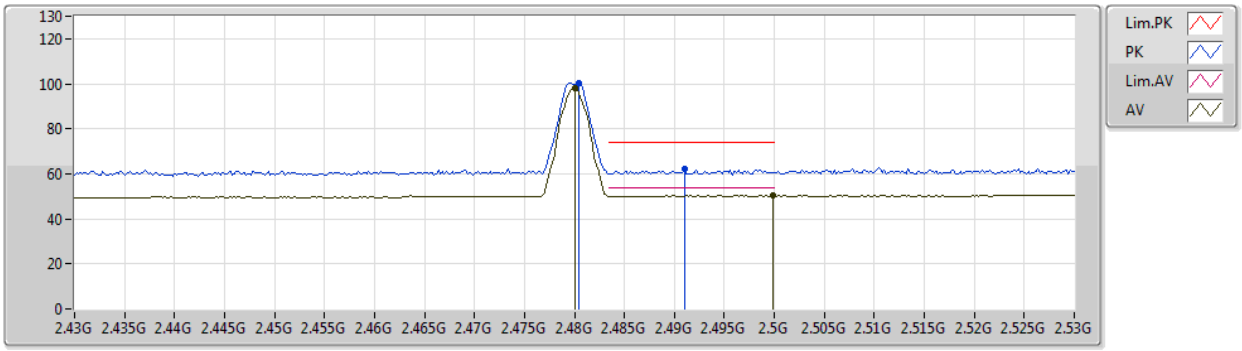


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87975G	34.85	54.00	-19.15	10.21	3	Horizontal	49	1.52	-	24.64	33.76	5.83	29.38
PK	4.87878G	48.11	74.00	-25.89	10.21	3	Horizontal	49	1.52	-	37.90	33.76	5.83	29.38

BT-LE(2Mbps)

2480MHz_TX

22/03/2020

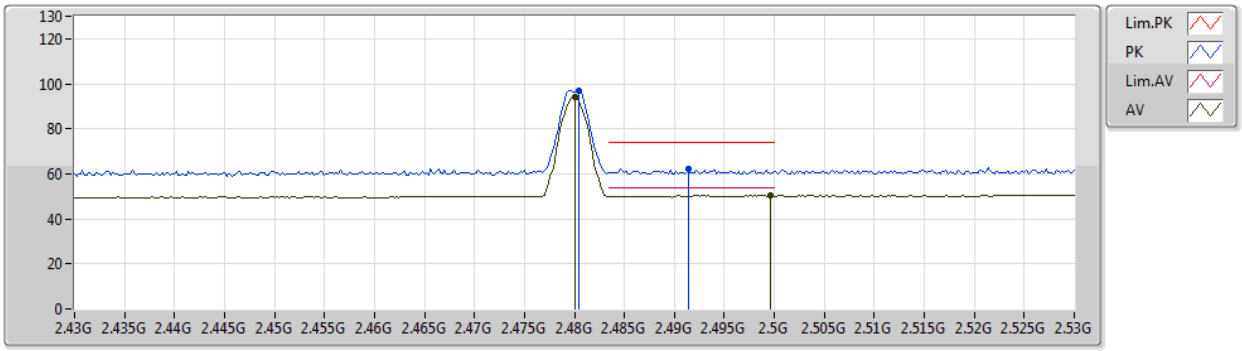


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	97.97	Inf	-Inf	34.12	3	Vertical	360	2.96	-	63.85	30.04	4.08	-
AV	2.4998G	50.27	54.00	-3.73	34.30	3	Vertical	360	2.96	-	15.97	30.20	4.10	-
PK	2.4804G	100.44	Inf	-Inf	34.12	3	Vertical	360	2.96	-	66.32	30.04	4.08	-
PK	2.491G	62.11	74.00	-11.89	34.22	3	Vertical	360	2.96	-	27.89	30.13	4.09	-

BT-LE(2Mbps)

2480MHz_TX

22/03/2020

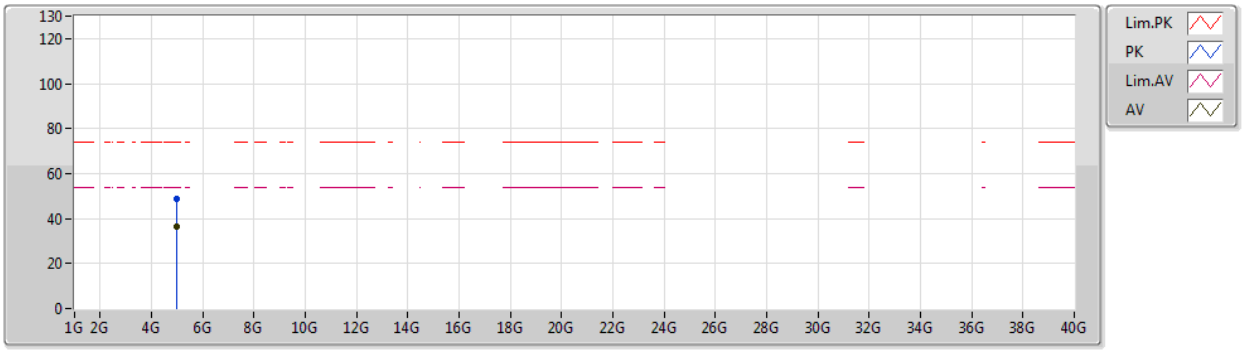


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	94.31	Inf	-Inf	34.12	3	Horizontal	18	2.70	-	60.19	30.04	4.08	-
AV	2.4996G	50.27	54.00	-3.73	34.30	3	Horizontal	18	2.70	-	15.97	30.20	4.10	-
PK	2.4804G	96.84	Inf	-Inf	34.12	3	Horizontal	18	2.70	-	62.72	30.04	4.08	-
PK	2.4914G	62.39	74.00	-11.61	34.22	3	Horizontal	18	2.70	-	28.17	30.13	4.09	-

BT-LE(2Mbps)

2480MHz_TX

22/03/2020

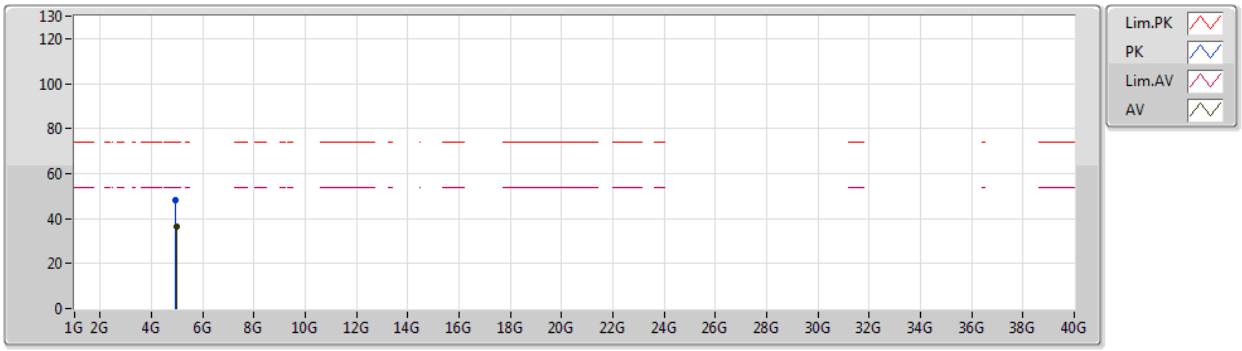


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.96158G	36.55	54.00	-17.45	10.47	3	Vertical	168	1.41	-	26.08	33.92	5.89	29.34
PK	4.9602G	48.53	74.00	-25.47	10.47	3	Vertical	168	1.41	-	38.06	33.92	5.89	29.34

BT-LE(2Mbps)

2480MHz_TX

22/03/2020



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	4.96036G	36.69	54.00	-17.31	10.47	3	Horizontal	148	1.24	-	26.22	33.92	5.89	29.34
PK	4.9575G	48.43	74.00	-25.57	10.46	3	Horizontal	148	1.24	-	37.97	33.91	5.89	29.34