FCC Test Report

FCC ID	:	**QYL8265BB1**
Equipment	:	**Notebook**
Brand Name	:	**Getac**
Model Name	:	**B300**
Applicant	:	**Getac Technology Corporation. 5F., Building A, No. 209, Sec.1, Nangang Rd.,Nangang Dist., Taipei City 11568, Taiwan, R.O.C.**
Manufacturer	:	**Getac Technology(Kunshan)Co., LTD. No. 269, No. 2 Avenue, Kunshan Comprehensive Free Trade Zone, Jiangsu Province, P.R.C**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Jul. 17, 2019, and testing was started from Jul. 25, 2019 and completed on Jul. 31, 2019. 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
FR372342-19AL	01	Initial issue of report	Aug. 21, 2019

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	FCC 15.203
3.1	15.207	AC Power-line Conducted Emissions	PASS	FCC 15.207
3.2	15.247(a)	DTS Bandwidth	PASS	≥500kHz
3.3	15.247(b)	Maximum Conducted Output Power	PASS	Power [dBm]:30
3.4	15.247(e)	Power Spectral Density	PASS	PSD [dBm/3kHz]:8
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	Non-Restricted Bands: >30 dBc
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	Restricted Bands: FCC 15.209

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: Jenny Yang

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

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1 (Main)	-	-	PIFA antenna	I-PEX
2 (Aux)	-	-	PIFA antenna	I-PEX

Ant.	Port	Gain (dBi)					
		2.4G	5G				BT
			U-NII-1	U-NII-2A	U-NII-2C	U-NII-3	
1	1	2.75	-1.01	-1.01	-0.3	-2.43	-
2	2	2.54	3.3	3.3	2.22	3.2	2.54

Note 1: The EUT has two antennas.

For 2.4GHz function:

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

Support diversity function and pre-tested on each single chain.

For IEEE 802.11 b/g/n mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

For 5GHz function:

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

Support diversity function and pre-tested on each single chain, the worst case was Ant. 2(port 2) and it was record in this test report.

For IEEE 802.11 a/n/ac mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

For BT function:

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

Ant. 2 (port 2) can be used as transmitting/receiving antenna.

1.1.3 EUT Information

Identify EUT				
WLAN Module	Brand Name: Intel / Model Name: 8265NGW			
Operational Condition				
EUT Power Type	From AC Adapter / Battery			
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) ≥ 1/T
BT-LE(1Mbps)	0.632	1.99	396.875u	3k

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
- KDB 558074 D01 v05r02

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.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Jeff	21.8~24.2°C / 51.3~53.1%	31/Jul/2019
RF Conducted	TH06-HY	Dexter	25.0~25.4°C / 57~59%	25/Jul/2019~ 29/Jul/2019
Radiated	03CH09-HY	Lego	22.1~22.3°C / 51.2~51.8%	30/Jul/2019

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)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	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	DRYU 1.9.1-04115

Mode	Power Setting
BT-LE(1Mbps)	-
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

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
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	**Z Plane**
	
Worst Planes of EUT	V

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 5GHz Main + Bluetooth Aux
2	WLAN 2.4GHz Main + Bluetooth Aux

2.4 Accessories and Support Equipment

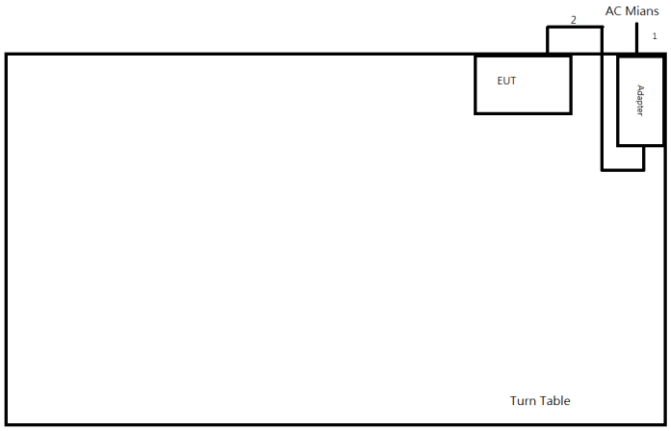
Accessories				
AC Adapter	Brand Name	Chicony	Model Name	A10-090P3A
	Power Rating	I/P: 100-240Vac, 1.5A, O/P: 19Vdc, 4.74 A, 90W		
	AC Power Cord	1.7 meter, non-shielded cable, w/o ferrite core		
	DC Power Cable	1.75 meter, non-shielded cable, with ferrite core		
Battery 1 (Main)	Brand Name	Getac	Model Name	BP3S3P2900
	Power Rating	10.8Vdc, 8100mAh	Type	Li-ion
Battery 2	Brand Name	Getac	Model Name	BP3S3P2900-2
	Power Rating	10.8Vdc, 8700mAh	Type	Li-ion

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

Support Equipment – RF Conducted				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	AC Power Source	GW	APS-9102	-

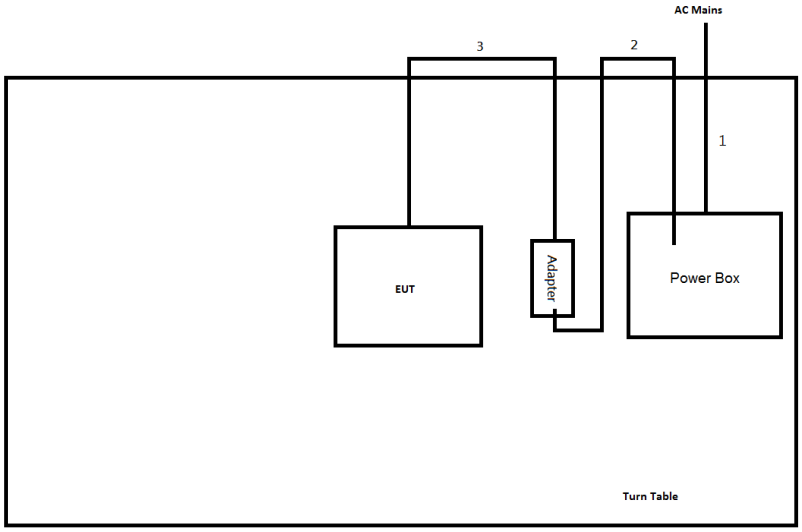
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	Power Cable	No	1.8	-
2	DC Power line	No	1.75	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	AC Power line	No	1.7	-
3	DC Power line	No	1.75	-

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

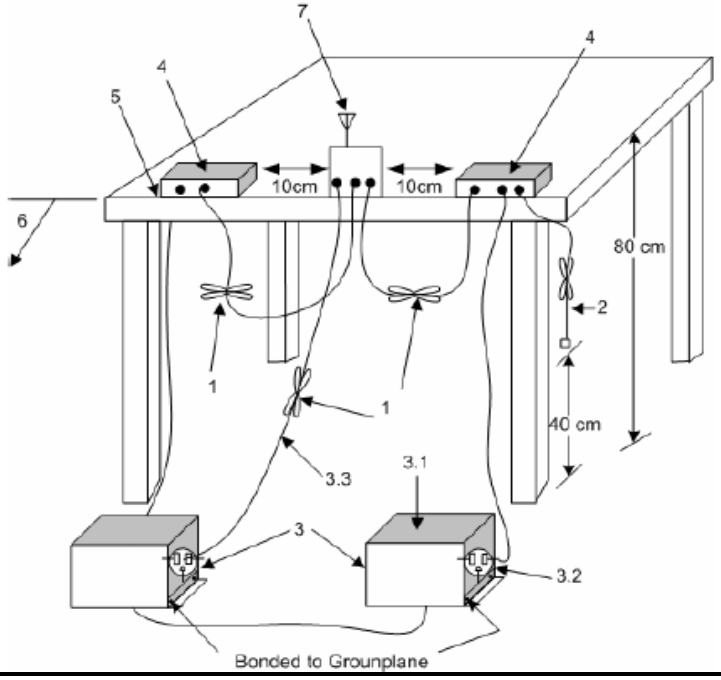
Refer a test equipment and calibration data table in this test report.

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



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.

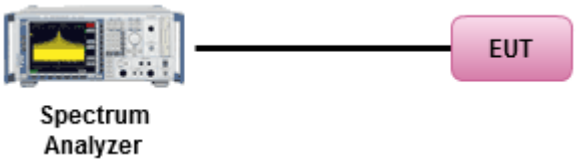
3.2.2 Measuring Instruments

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 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

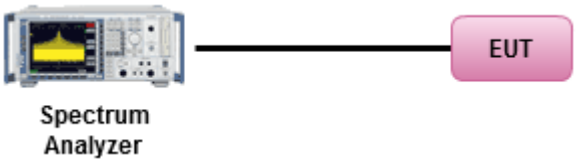
3.4.2 Measuring Instruments

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) Method PKPSD.	
▪ 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.	

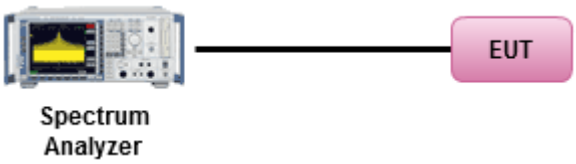
3.5.2 Measuring Instruments

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.

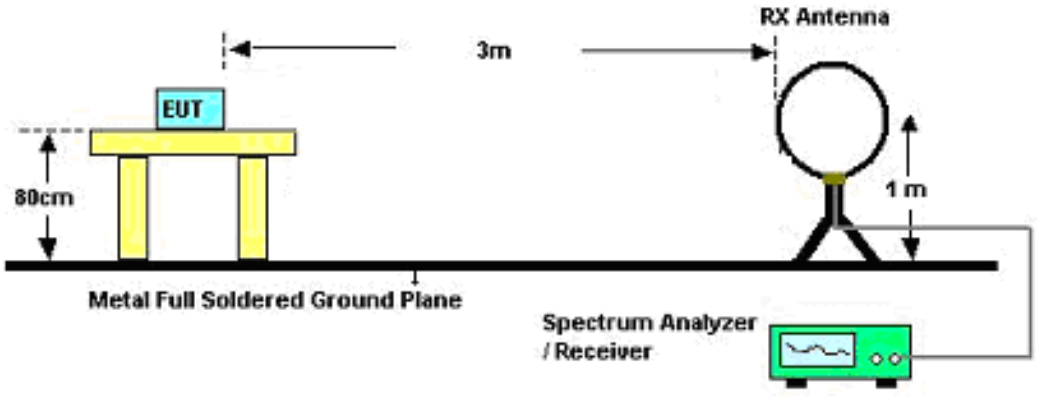
3.6.2 Measuring Instruments

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

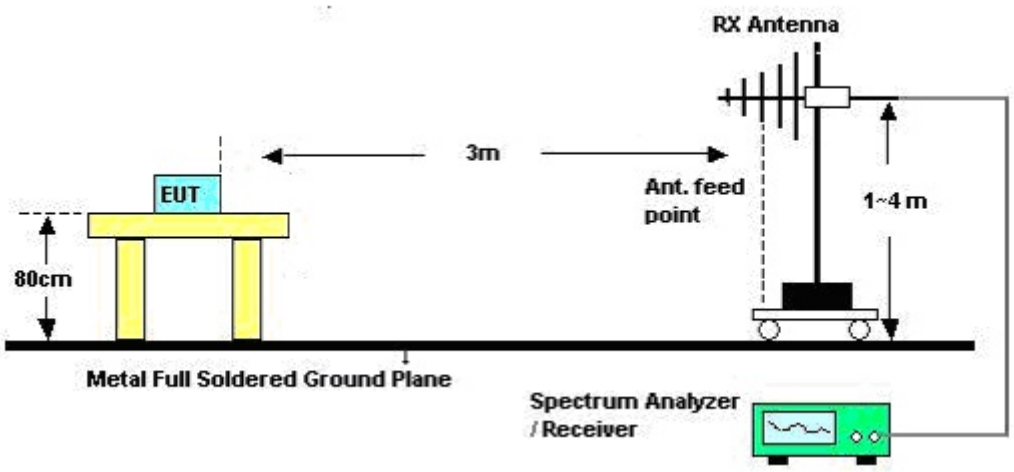
3.6.3 Test Procedures

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.

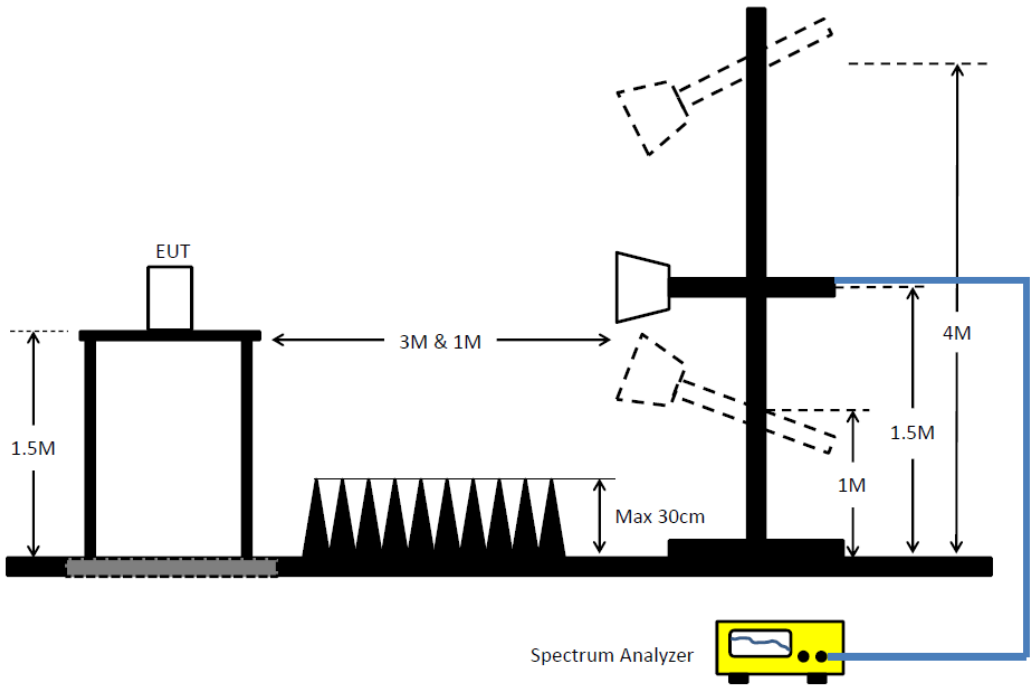
3.6.4 Test Setup

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	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	08/Nov/2018	07/Nov/2019
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	17/Sep/2018	16/Sep/2019
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	12/Oct/2018	11/Oct/2019

NCR : Non-Calibration Require

Instrument for Conducted Test

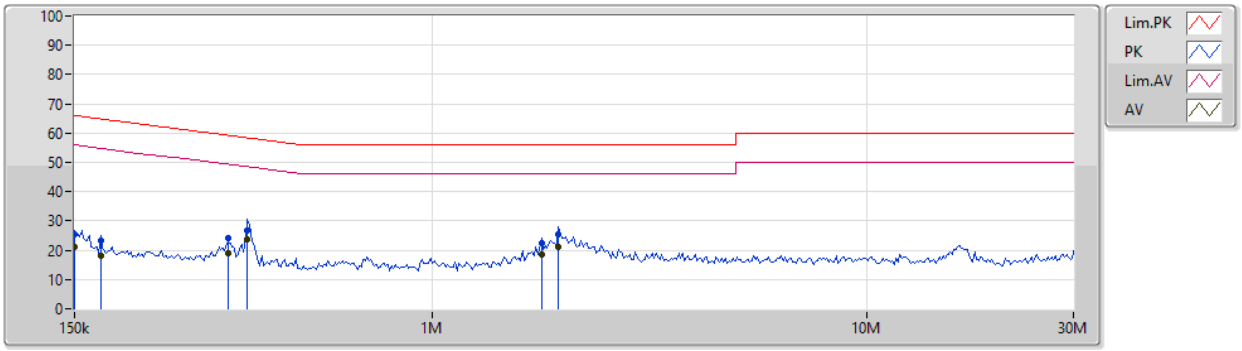
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz ~18G	10/Jan/2019	09/Jan/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/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	22/Apr/2019	21/Apr/2020
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	13/Jun/2019	12/Jun/2020
Microwave System Premplifier	KEYSIGHT	87422A	MY53270197	1GHz ~ 18GHz	30/Nov/2018	29/Nov/2019
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	22/Apr/2019	21/Apr/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	30/Jul/2019	29/Jul/2020
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	02/Oct/2018	03/Oct/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	22/May/2019	21/May/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170614	18GHz~40GHz	22/May/2019	21/May/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	15/Mar/2019	14/Mar/2020
LF-CABLE-2019 0218	Jye Bao	RG142	CB028	9kHz ~ 1GHz	18/Feb/2019	17/Feb/2020
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz ~ 40GHz	13/Mar/2019	12/Mar/2020
Turn Table	ChainTek	T-200S	1308028	-	NCR	NCR
Antenna Mast	ChainTek	MBS-400	1308049	-	NCR	NCR
Controller	ChainTek	3000	MF780208325	-	NCR	NCR
AC Power Source	G.W	AFC-1KW	F104070001	-	NCR	NCR
Soldering iron	XRTRONIC	1f15	-	-	NCR	NCR
Site V.S.W.R	Riken	3m SAC	03CH09-HY	-	13/Jun/2019	12/Jun/2020

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

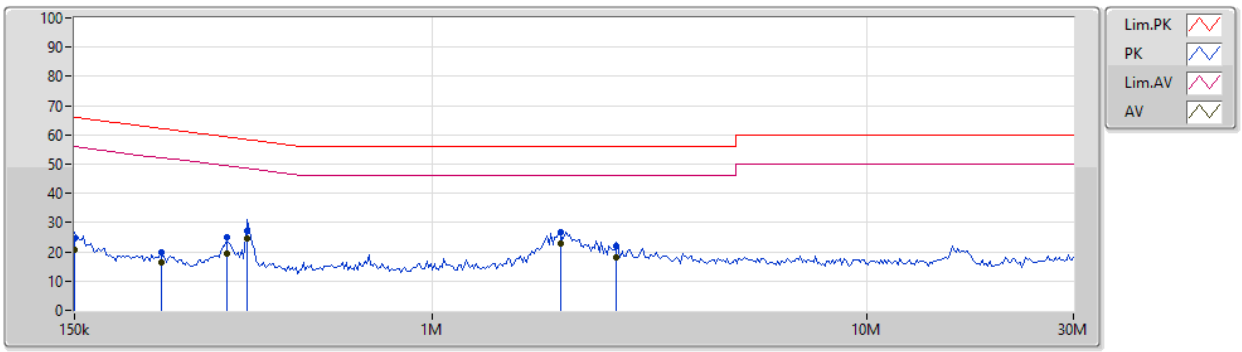
31/07/2019



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	25.42	66.00	-40.58	19.48	Neutral	-	5.94	9.60	0.01	9.87
AV	150k	21.03	56.00	-34.97	19.48	Neutral	-	1.55	9.60	0.01	9.87
QP	172.421k	23.33	64.83	-41.50	19.48	Neutral	-	3.85	9.60	0.01	9.87
AV	172.421k	18.21	54.83	-36.62	19.48	Neutral	-	-1.27	9.60	0.01	9.87
QP	339.191k	24.12	59.23	-35.11	19.48	Neutral	-	4.64	9.59	0.01	9.88
AV	339.191k	18.89	49.23	-30.34	19.48	Neutral	-	-0.59	9.59	0.01	9.88
QP	374.678k	26.61	58.39	-31.78	19.48	Neutral	-	7.13	9.59	0.01	9.88
AV	374.678k	23.74	48.39	-24.65	19.48	Neutral	"Worst"	4.26	9.59	0.01	9.88
QP	1.787M	22.27	56.00	-33.73	19.53	Neutral	-	2.74	9.61	0.03	9.89
AV	1.787M	18.69	46.00	-27.31	19.53	Neutral	-	-0.84	9.61	0.03	9.89
QP	1.954M	25.40	56.00	-30.60	19.53	Neutral	-	5.87	9.61	0.03	9.89
AV	1.954M	21.08	46.00	-24.92	19.53	Neutral	-	1.55	9.61	0.03	9.89

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

31/07/2019



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	24.55	66.00	-41.45	19.48	Line	-	5.07	9.60	0.01	9.87
AV	150k	20.74	56.00	-35.26	19.48	Line	-	1.26	9.60	0.01	9.87
QP	237.069k	19.96	62.20	-42.24	19.48	Line	-	0.48	9.60	0.01	9.87
AV	237.069k	16.44	52.20	-35.76	19.48	Line	-	-3.04	9.60	0.01	9.87
QP	335.832k	24.92	59.31	-34.39	19.48	Line	-	5.44	9.59	0.01	9.88
AV	335.832k	19.20	49.31	-30.11	19.48	Line	-	-0.28	9.59	0.01	9.88
QP	374.678k	27.13	58.39	-31.26	19.48	Line	-	7.65	9.59	0.01	9.88
AV	374.678k	24.37	48.39	-24.02	19.48	Line	-	4.89	9.59	0.01	9.88
QP	1.974M	26.82	56.00	-29.18	19.54	Line	-	7.28	9.62	0.03	9.89
AV	1.974M	22.64	46.00	-23.36	19.54	Line	"Worst"	3.10	9.62	0.03	9.89
QP	2.661M	22.16	56.00	-33.84	19.55	Line	-	2.61	9.62	0.04	9.89
AV	2.661M	18.01	46.00	-27.99	19.55	Line	-	-1.54	9.62	0.04	9.89

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)	647.5k	1.037M	1M04F1D	633.75k	1.033M

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;

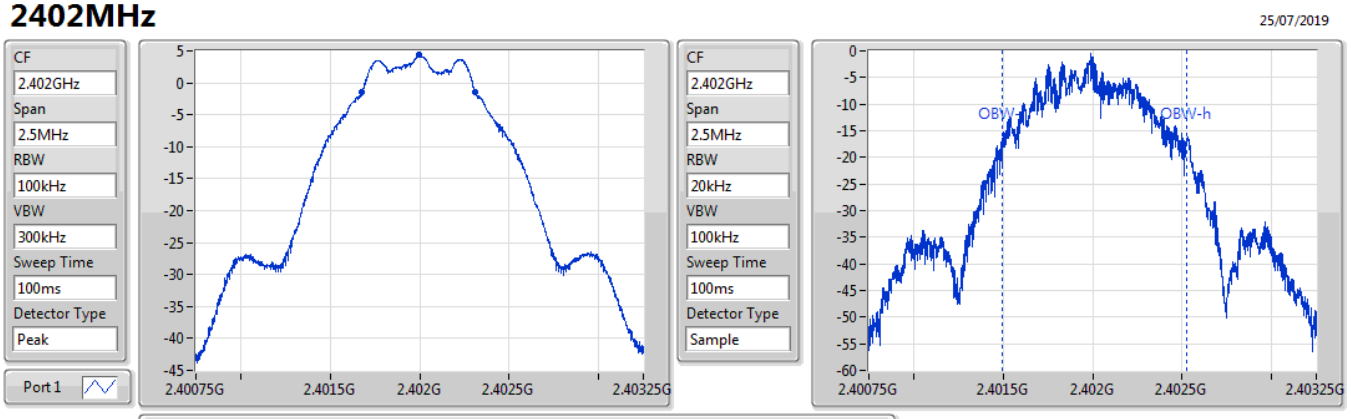
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	500k	633.75k	1.036M
2440MHz_TnomVnom	Pass	500k	645k	1.033M
2480MHz_TnomVnom	Pass	500k	647.5k	1.037M

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

BT-LE(1Mbps) EBW

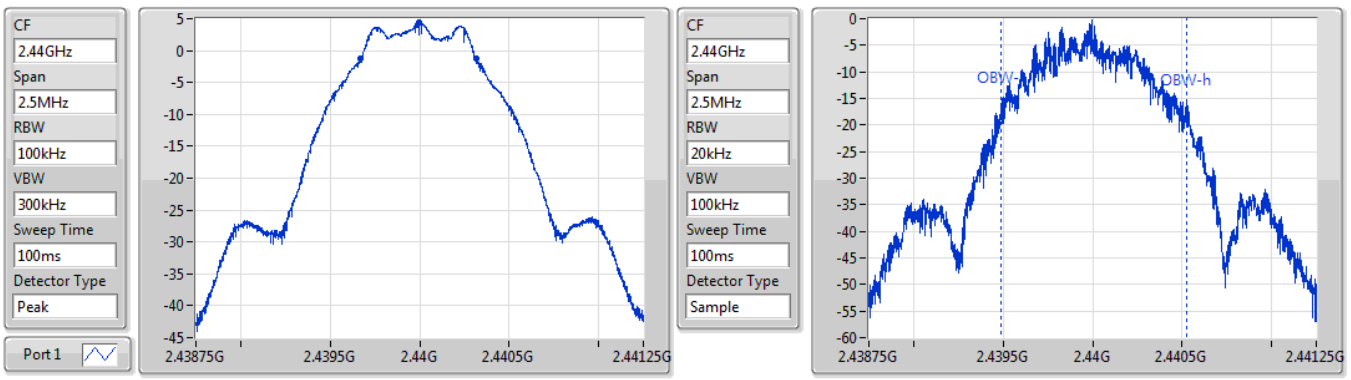
2402MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
633.75k	2.401679G	2.402313G	1.036M	2.401493G	2.402528G	500k	1

BT-LE(1Mbps) EBW

2440MHz

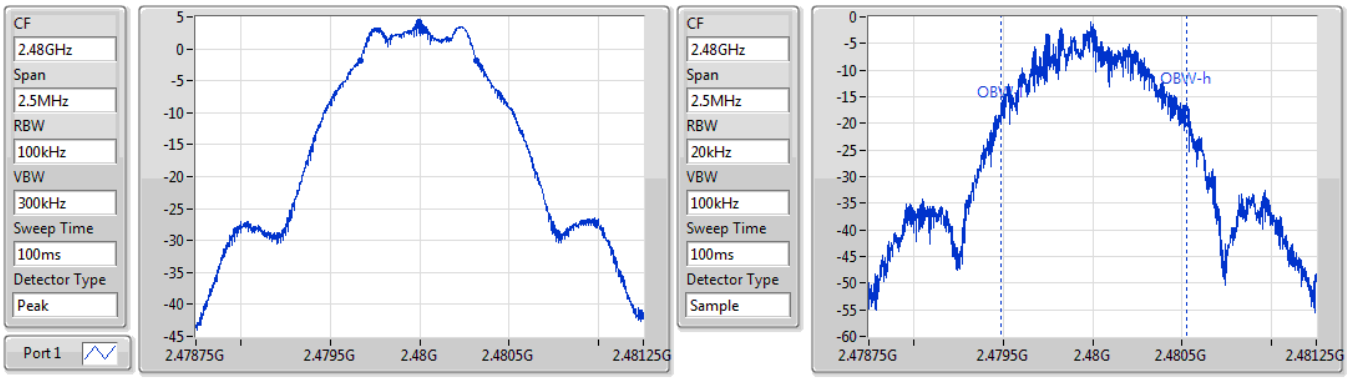


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
645k	2.439673G	2.440318G	1.033M	2.43949G	2.440523G	500k	1

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

2480MHz

25/07/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
647.5k	2.47967G	2.480318G	1.037M	2.479487G	2.480523G	500k	1

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	4.39	0.00275

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.54	4.03	30.00
2440MHz_TnomVnom	Pass	2.54	4.39	30.00
2480MHz_TnomVnom	Pass	2.54	4.16	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-10.62

RBW=3 kHz.

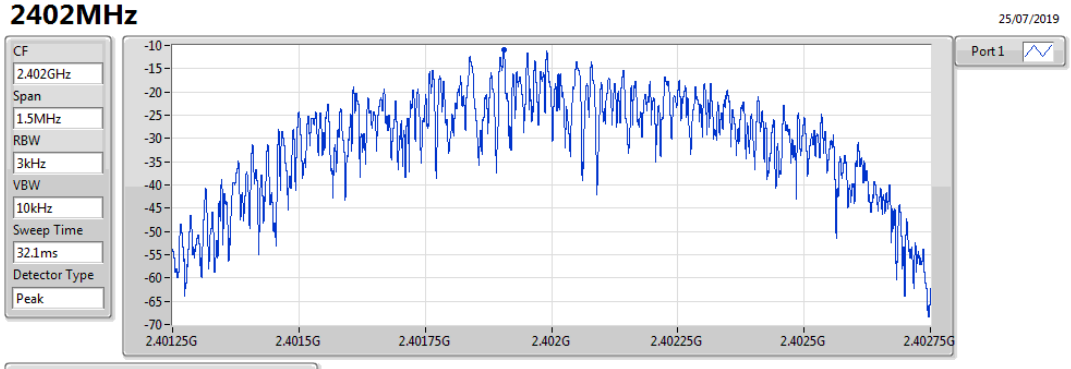
Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.54	-10.97	8.00
2440MHz_TnomVnom	Pass	2.54	-10.86	8.00
2480MHz_TnomVnom	Pass	2.54	-10.62	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**

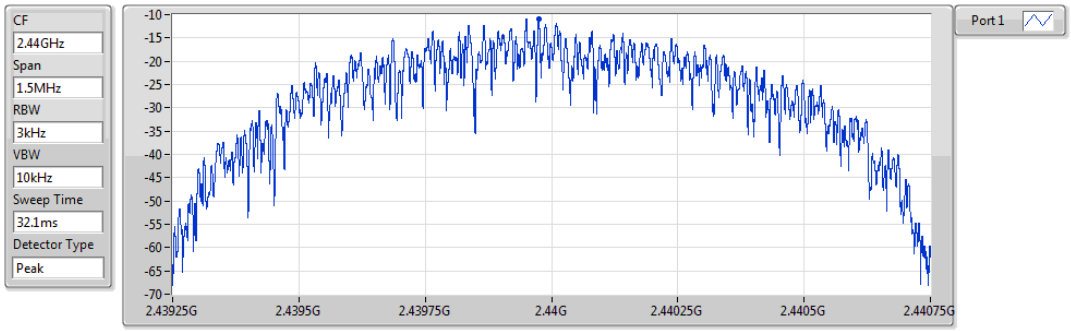
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.97	-10.97	-10.97

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

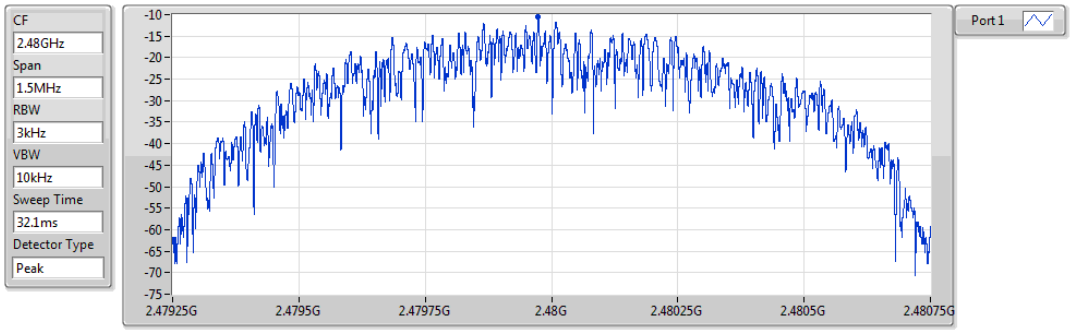
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.86	-10.86	-10.86

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

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.62	-10.62	-10.62

Summary

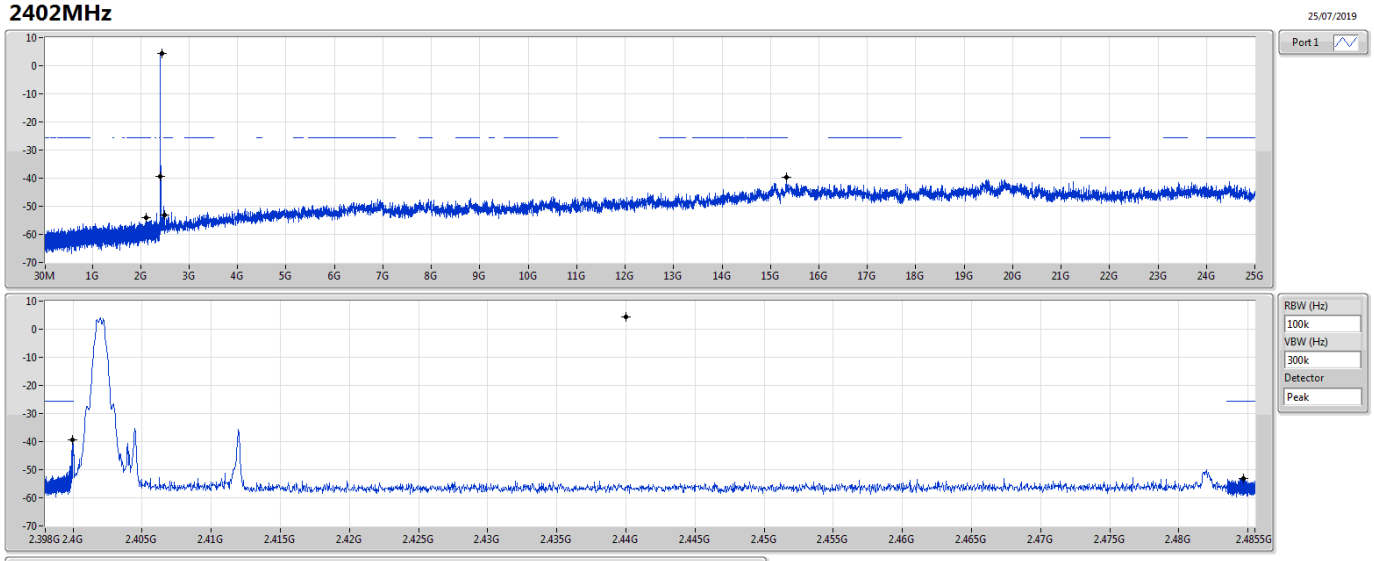
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.44G	4.47	-25.53	2.11325G	-54.08	2.39998G	-39.31	2.48469G	-52.98	15.33002G	-39.67	1

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)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.44G	4.47	-25.53	2.11325G	-54.08	2.39998G	-39.31	2.48469G	-52.98	15.33002G	-39.67	1
2440MHz_TnomVnom	Pass	2.44G	4.47	-25.53	1.87556G	-54.78	2.3985G	-53.74	2.48353G	-52.67	16.87508G	-41.08	1
2480MHz_TnomVnom	Pass	2.44G	4.47	-25.53	2.30624G	-55.14	2.4G	-47.25	2.48364G	-51.60	15.34128G	-41.71	1

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

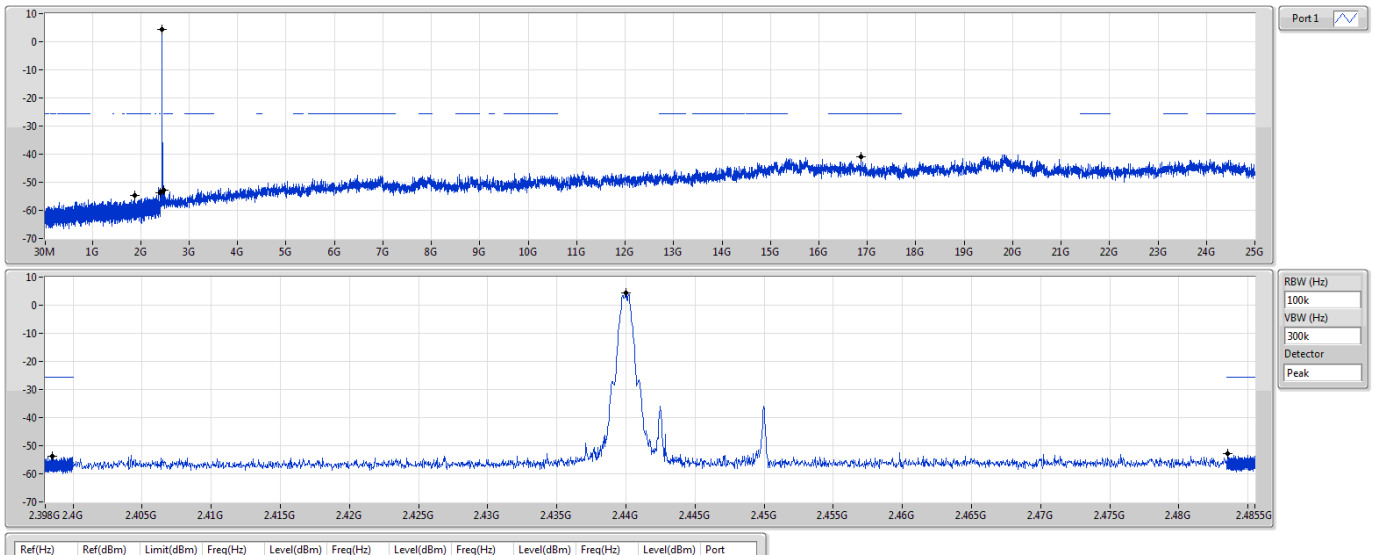
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44G	4.47	-25.53	2.11325G	-54.08	2.39998G	-39.31	2.48469G	-52.98	15.33002G	-39.67	1

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

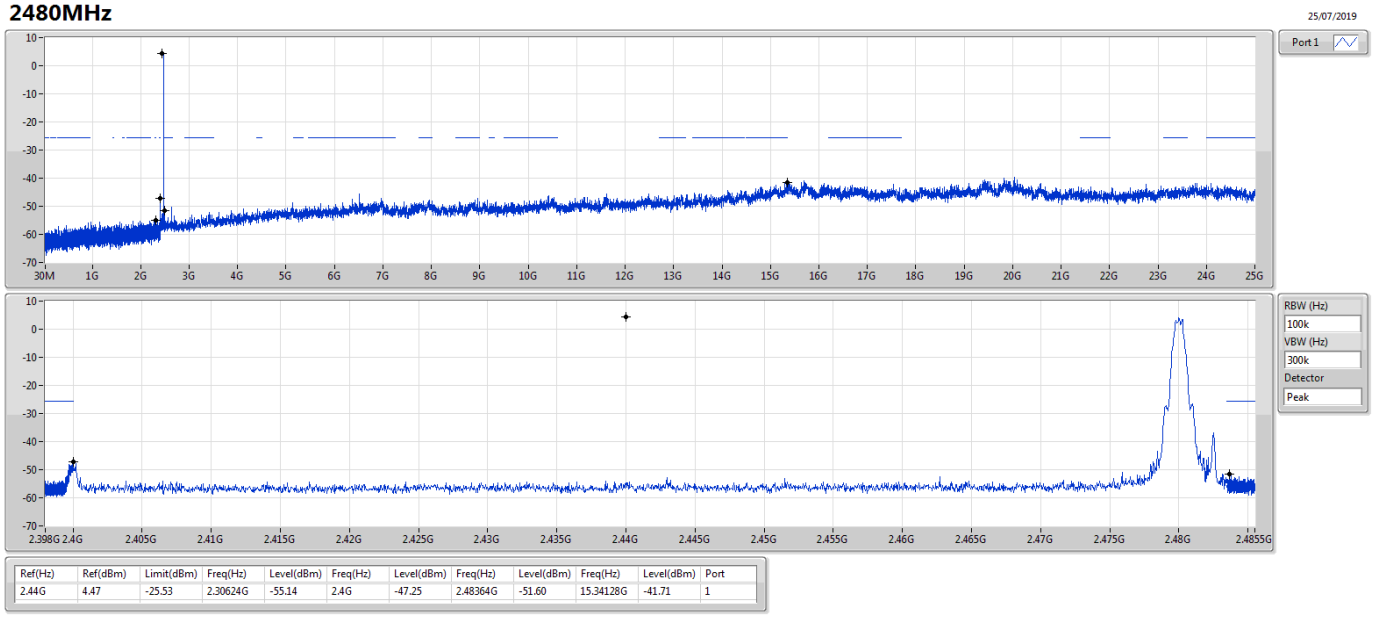
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44G	4.47	-25.53	1.87556G	-54.78	2.3985G	-53.74	2.48353G	-52.67	16.87508G	-41.08	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)	Port
2.44G	4.47	-25.53	2.30624G	-55.14	2.4G	-47.25	2.48364G	-51.60	15.34128G	-41.71	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(1Mbps)	Pass	PK	301.6M	39.43	46.00	-6.57	3	Horizontal	0	1.00	-

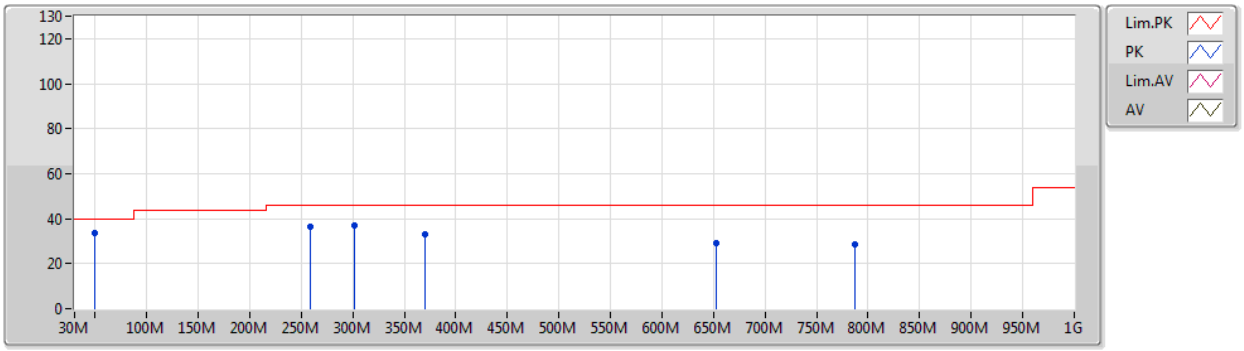
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	49.4M	33.35	40.00	-6.65	3	Vertical	360	2.00	-
2440MHz	Pass	PK	258.92M	36.61	46.00	-9.39	3	Vertical	360	2.00	-
2440MHz	Pass	PK	301.6M	37.06	46.00	-8.94	3	Vertical	360	2.00	-
2440MHz	Pass	PK	369.5M	32.98	46.00	-13.02	3	Vertical	360	2.00	-
2440MHz	Pass	PK	652.74M	29.23	46.00	-16.77	3	Vertical	360	2.00	-
2440MHz	Pass	PK	786.6M	28.70	46.00	-17.30	3	Vertical	360	2.00	-
2440MHz	Pass	PK	59.1M	33.17	40.00	-6.83	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	192.96M	30.94	43.50	-12.56	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	243.4M	35.89	46.00	-10.11	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	301.6M	39.43	46.00	-6.57	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	352.04M	33.26	46.00	-12.74	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	701.24M	32.75	46.00	-13.25	3	Horizontal	0	1.00	-

BT-LE(1Mbps)

2440MHz_Adapter

30/07/2019

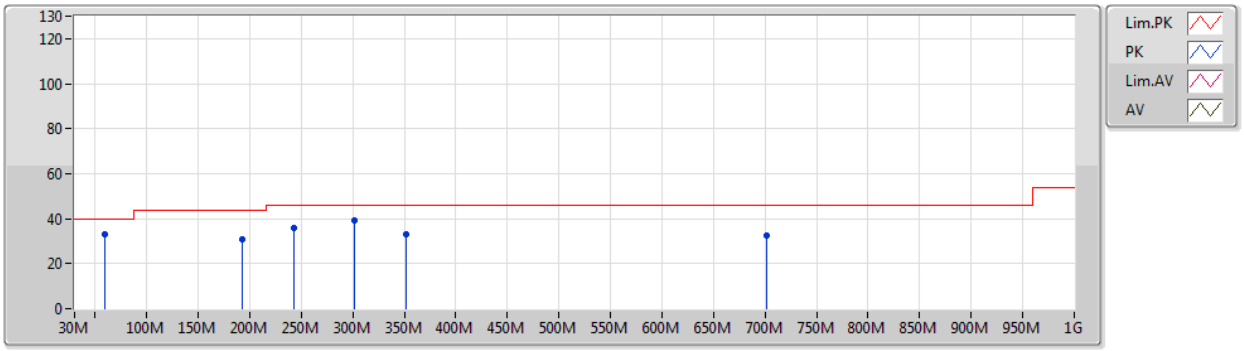


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	49.4M	33.35	40.00	-6.65	-22.99	3	Vertical	360	2.00	-	56.34	13.60	0.58	37.17
PK	258.92M	36.61	46.00	-9.39	-15.77	3	Vertical	360	2.00	-	52.38	19.34	1.32	36.43
PK	301.6M	37.06	46.00	-8.94	-16.64	3	Vertical	360	2.00	-	53.70	18.40	1.44	36.48
PK	369.5M	32.98	46.00	-13.02	-14.87	3	Vertical	360	2.00	-	47.85	20.10	1.62	36.59
PK	652.74M	29.23	46.00	-16.77	-9.50	3	Vertical	360	2.00	-	38.73	25.58	2.21	37.29
PK	786.6M	28.70	46.00	-17.30	-7.70	3	Vertical	360	2.00	-	36.40	27.35	2.43	37.48

BT-LE(1Mbps)

2440MHz_Adapter

30/07/2019



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	59.1M	33.17	40.00	-6.83	-25.39	3	Horizontal	0	1.00	-	58.56	11.08	0.62	37.09
PK	192.96M	30.94	43.50	-12.56	-21.21	3	Horizontal	0	1.00	-	52.15	14.02	1.16	36.39
PK	243.4M	35.89	46.00	-10.11	-18.09	3	Horizontal	0	1.00	-	53.98	17.04	1.28	36.41
PK	301.6M	39.43	46.00	-6.57	-16.64	3	Horizontal	0	1.00	-	56.07	18.40	1.44	36.48
PK	352.04M	33.26	46.00	-12.74	-15.34	3	Horizontal	0	1.00	-	48.60	19.64	1.58	36.56
PK	701.24M	32.75	46.00	-13.25	-9.27	3	Horizontal	0	1.00	-	42.02	25.81	2.28	37.36

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	2.4854G	48.89	54.00	-5.11	3	Vertical	267	2.04	-

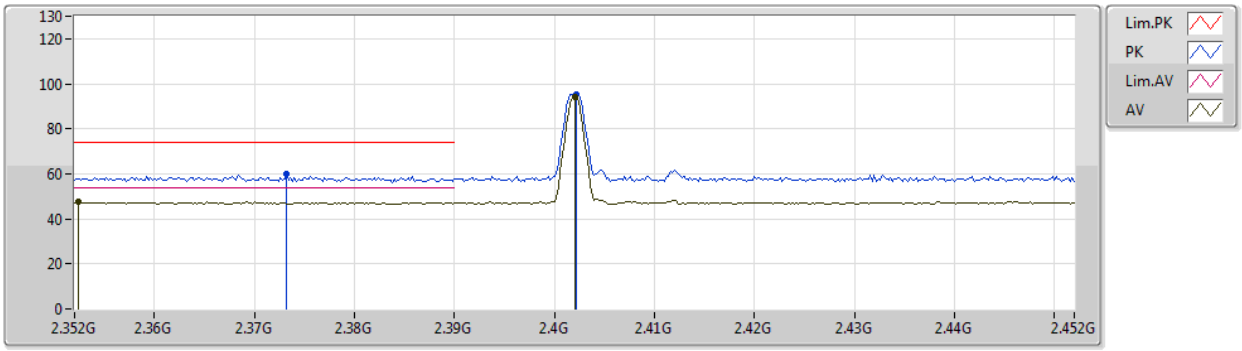
Result

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	2.3524G	47.49	54.00	-6.51	3	Vertical	185	1.50	-
2402MHz	Pass	AV	2.402G	94.27	Inf	-Inf	3	Vertical	185	1.50	-
2402MHz	Pass	PK	2.3732G	59.76	74.00	-14.24	3	Vertical	185	1.50	-
2402MHz	Pass	PK	2.4022G	95.19	Inf	-Inf	3	Vertical	185	1.50	-
2402MHz	Pass	AV	2.3888G	47.63	54.00	-6.37	3	Horizontal	160	1.50	-
2402MHz	Pass	AV	2.402G	93.57	Inf	-Inf	3	Horizontal	160	1.50	-
2402MHz	Pass	PK	2.3622G	59.49	74.00	-14.51	3	Horizontal	160	1.50	-
2402MHz	Pass	PK	2.4022G	94.45	Inf	-Inf	3	Horizontal	160	1.50	-
2402MHz	Pass	AV	4.80928G	35.16	54.00	-18.84	3	Vertical	16	1.75	-
2402MHz	Pass	PK	4.80184G	47.85	74.00	-26.15	3	Vertical	16	1.75	-
2402MHz	Pass	AV	4.80544G	35.33	54.00	-18.67	3	Horizontal	236	1.50	-
2402MHz	Pass	PK	4.8052G	47.03	74.00	-26.97	3	Horizontal	236	1.50	-
2440MHz	Pass	AV	2.3444G	47.64	54.00	-6.36	3	Vertical	187	1.13	-
2440MHz	Pass	AV	2.44G	93.50	Inf	-Inf	3	Vertical	187	1.13	-
2440MHz	Pass	AV	2.488G	47.60	54.00	-6.40	3	Vertical	187	1.13	-
2440MHz	Pass	PK	2.3604G	59.29	74.00	-14.71	3	Vertical	187	1.13	-
2440MHz	Pass	PK	2.4396G	94.42	Inf	-Inf	3	Vertical	187	1.13	-
2440MHz	Pass	PK	2.494G	58.86	74.00	-15.14	3	Vertical	187	1.13	-
2440MHz	Pass	AV	2.36G	47.66	54.00	-6.34	3	Horizontal	181	2.06	-
2440MHz	Pass	AV	2.44G	96.00	Inf	-Inf	3	Horizontal	181	2.06	-
2440MHz	Pass	AV	2.4848G	47.66	54.00	-6.34	3	Horizontal	181	2.06	-
2440MHz	Pass	PK	2.3656G	59.62	74.00	-14.38	3	Horizontal	181	2.06	-
2440MHz	Pass	PK	2.4396G	96.89	Inf	-Inf	3	Horizontal	181	2.06	-
2440MHz	Pass	PK	2.4944G	59.35	74.00	-14.65	3	Horizontal	181	2.06	-
2440MHz	Pass	AV	4.8908G	34.54	54.00	-19.46	3	Vertical	150	1.43	-
2440MHz	Pass	PK	4.88264G	46.89	74.00	-27.11	3	Vertical	150	1.43	-
2440MHz	Pass	AV	4.88018G	34.67	54.00	-19.33	3	Horizontal	8	1.50	-
2440MHz	Pass	PK	4.87688G	46.52	74.00	-27.48	3	Horizontal	8	1.50	-
2480MHz	Pass	AV	2.48G	95.33	Inf	-Inf	3	Vertical	267	2.04	-
2480MHz	Pass	AV	2.4854G	48.89	54.00	-5.11	3	Vertical	267	2.04	-
2480MHz	Pass	PK	2.4802G	96.21	Inf	-Inf	3	Vertical	267	2.04	-
2480MHz	Pass	PK	2.49G	60.62	74.00	-13.38	3	Vertical	267	2.04	-
2480MHz	Pass	AV	2.48G	95.63	Inf	-Inf	3	Horizontal	177	2.03	-
2480MHz	Pass	AV	2.4898G	48.57	54.00	-5.43	3	Horizontal	177	2.03	-
2480MHz	Pass	PK	2.4802G	96.52	Inf	-Inf	3	Horizontal	177	2.03	-
2480MHz	Pass	PK	2.49G	61.57	74.00	-12.43	3	Horizontal	177	2.03	-
2480MHz	Pass	AV	4.97152G	35.49	54.00	-18.51	3	Vertical	130	1.50	-
2480MHz	Pass	PK	4.9597G	47.44	74.00	-26.56	3	Vertical	130	1.50	-
2480MHz	Pass	AV	4.97218G	35.19	54.00	-18.81	3	Horizontal	298	1.29	-
2480MHz	Pass	PK	4.9708G	47.30	74.00	-26.70	3	Horizontal	298	1.29	-

BT-LE(1Mbps)

2402MHz_TX

30/07/2019

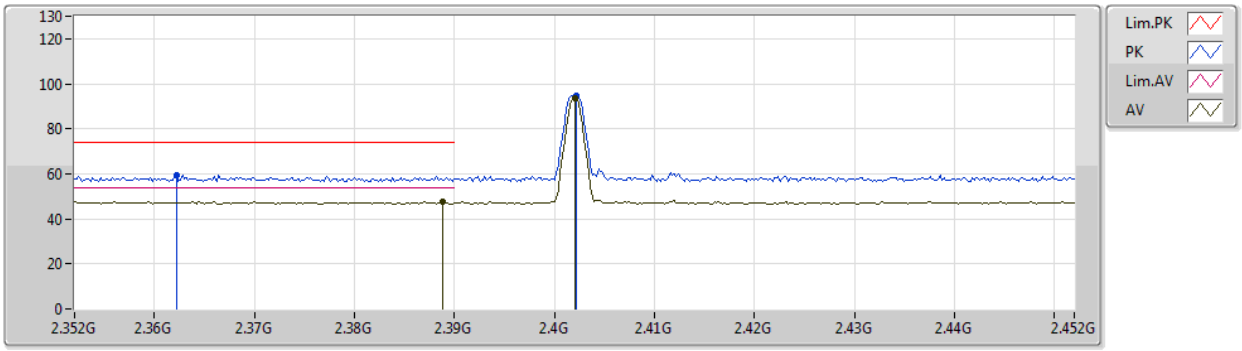


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3524G	47.49	54.00	-6.51	33.91	3	Vertical	185	1.50	-	13.58	27.79	6.12	-
AV	2.402G	94.27	Inf	-Inf	33.71	3	Vertical	185	1.50	-	60.56	27.60	6.11	-
PK	2.3732G	59.76	74.00	-14.24	33.83	3	Vertical	185	1.50	-	25.93	27.71	6.12	-
PK	2.4022G	95.19	Inf	-Inf	33.71	3	Vertical	185	1.50	-	61.48	27.60	6.11	-

BT-LE(1Mbps)

2402MHz_TX

30/07/2019

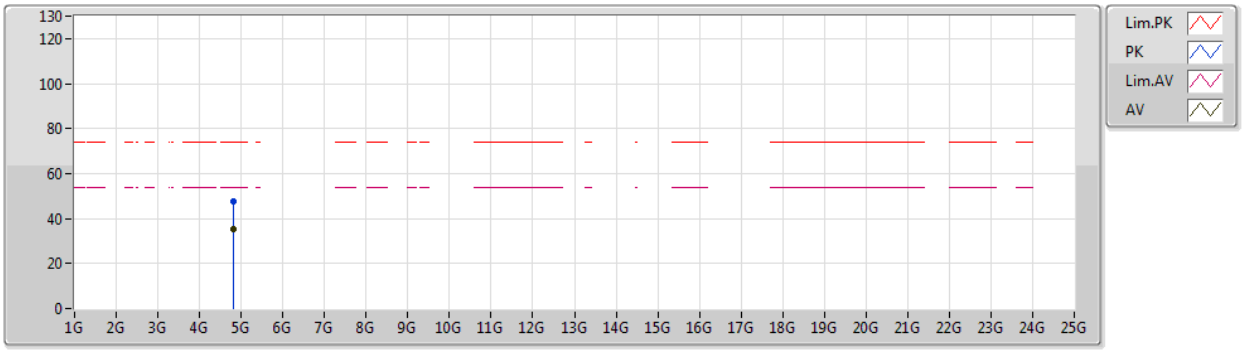


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3888G	47.63	54.00	-6.37	33.75	3	Horizontal	160	1.50	-	13.88	27.64	6.11	-
AV	2.402G	93.57	Inf	-Inf	33.71	3	Horizontal	160	1.50	-	59.86	27.60	6.11	-
PK	2.3622G	59.49	74.00	-14.51	33.87	3	Horizontal	160	1.50	-	25.62	27.75	6.12	-
PK	2.4022G	94.45	Inf	-Inf	33.71	3	Horizontal	160	1.50	-	60.74	27.60	6.11	-

BT-LE(1Mbps)

2402MHz_TX

30/07/2019

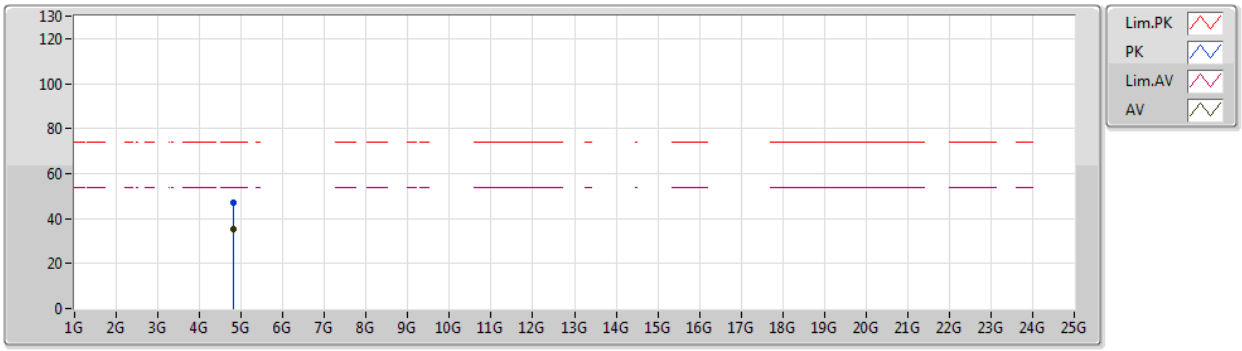


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80928G	35.16	54.00	-18.84	5.70	3	Vertical	16	1.75	-	29.46	31.10	8.90	34.30
PK	4.80184G	47.85	74.00	-26.15	5.70	3	Vertical	16	1.75	-	42.15	31.10	8.90	34.30

BT-LE(1Mbps)

2402MHz_TX

30/07/2019

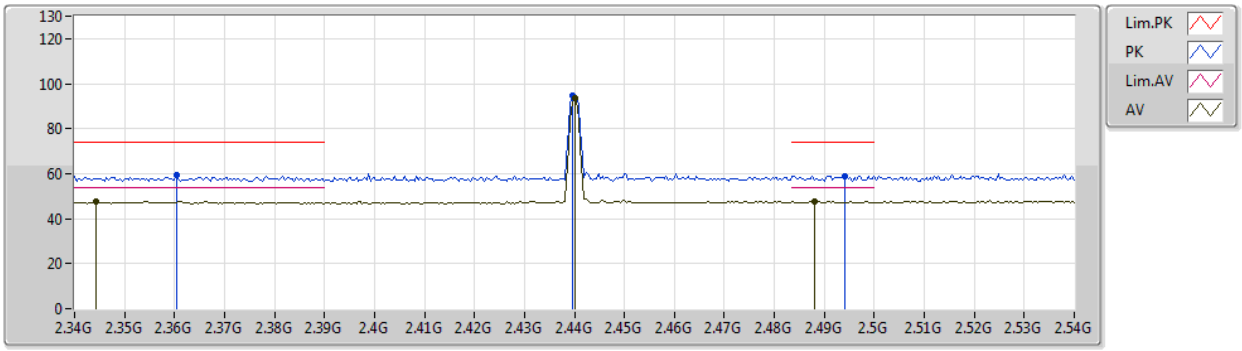


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80544G	35.33	54.00	-18.67	5.70	3	Horizontal	236	1.50	-	29.63	31.10	8.90	34.30
PK	4.8052G	47.03	74.00	-26.97	5.70	3	Horizontal	236	1.50	-	41.33	31.10	8.90	34.30

BT-LE(1Mbps)

2440MHz_TX

30/07/2019

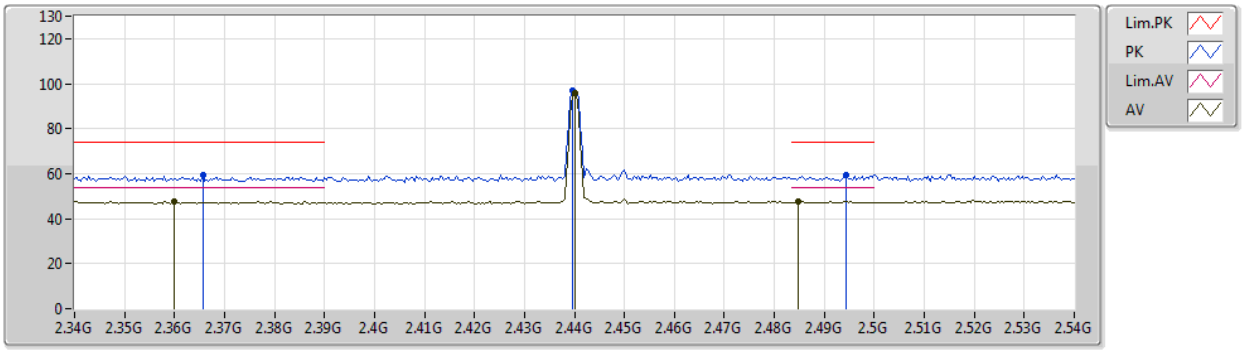


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3444G	47.64	54.00	-6.36	33.94	3	Vertical	187	1.13	-	13.70	27.82	6.12	-
AV	2.44G	93.50	Inf	-Inf	33.69	3	Vertical	187	1.13	-	59.81	27.56	6.13	-
AV	2.488G	47.60	54.00	-6.40	33.66	3	Vertical	187	1.13	-	13.94	27.51	6.15	-
PK	2.3604G	59.29	74.00	-14.71	33.88	3	Vertical	187	1.13	-	25.41	27.76	6.12	-
PK	2.4396G	94.42	Inf	-Inf	33.69	3	Vertical	187	1.13	-	60.73	27.56	6.13	-
PK	2.494G	58.86	74.00	-15.14	33.66	3	Vertical	187	1.13	-	25.20	27.51	6.15	-

BT-LE(1Mbps)

2440MHz_TX

30/07/2019

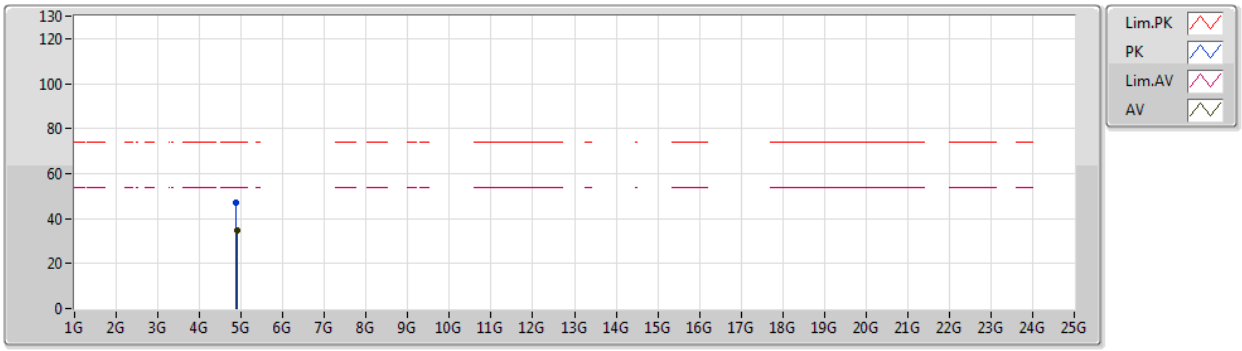


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.36G	47.66	54.00	-6.34	33.88	3	Horizontal	181	2.06	-	13.78	27.76	6.12	-
AV	2.44G	96.00	Inf	-Inf	33.69	3	Horizontal	181	2.06	-	62.31	27.56	6.13	-
AV	2.4848G	47.66	54.00	-6.34	33.67	3	Horizontal	181	2.06	-	13.99	27.52	6.15	-
PK	2.3656G	59.62	74.00	-14.38	33.86	3	Horizontal	181	2.06	-	25.76	27.74	6.12	-
PK	2.4396G	96.89	Inf	-Inf	33.69	3	Horizontal	181	2.06	-	63.20	27.56	6.13	-
PK	2.4944G	59.35	74.00	-14.65	33.66	3	Horizontal	181	2.06	-	25.69	27.51	6.15	-

BT-LE(1Mbps)

2440MHz_TX

30/07/2019

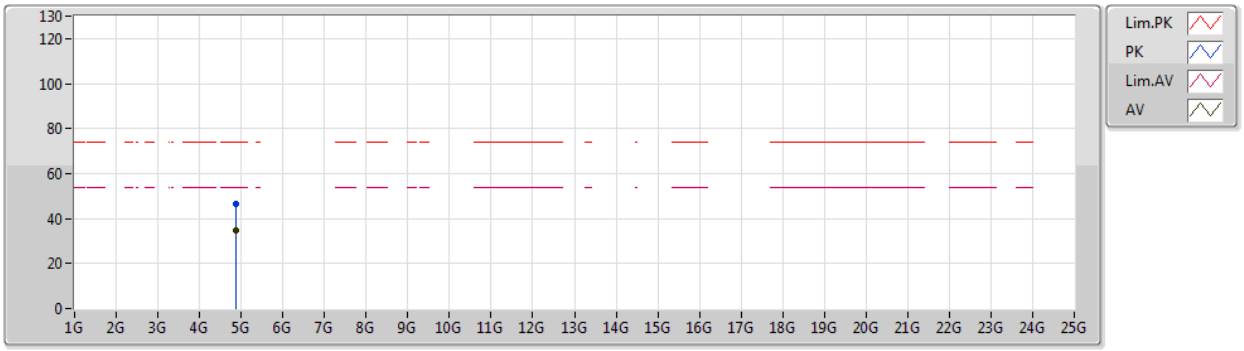


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8908G	34.54	54.00	-19.46	5.80	3	Vertical	150	1.43	-	28.74	31.10	8.97	34.27
PK	4.88264G	46.89	74.00	-27.11	5.78	3	Vertical	150	1.43	-	41.11	31.10	8.96	34.28

BT-LE(1Mbps)

2440MHz_TX

30/07/2019

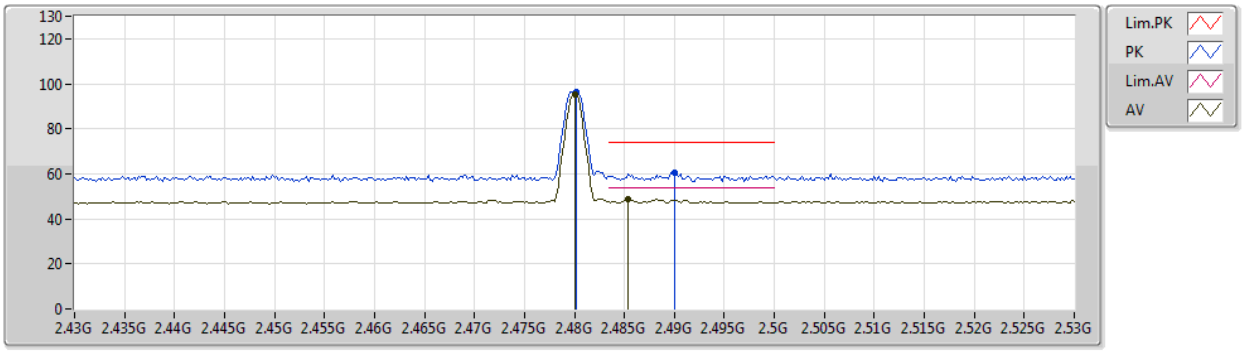


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88018G	34.67	54.00	-19.33	5.78	3	Horizontal	8	1.50	-	28.89	31.10	8.96	34.28
PK	4.87688G	46.52	74.00	-27.48	5.78	3	Horizontal	8	1.50	-	40.74	31.10	8.96	34.28

BT-LE(1Mbps)

2480MHz_TX

30/07/2019

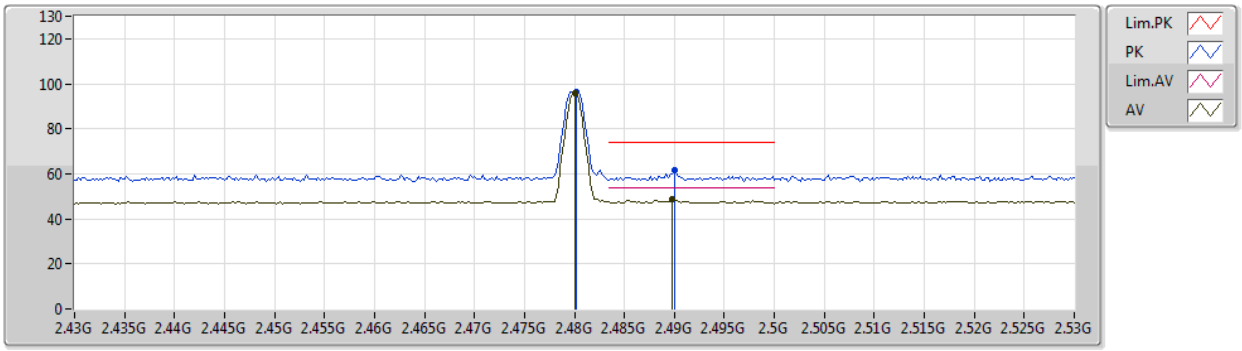


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	95.33	Inf	-Inf	33.67	3	Vertical	267	2.04	-	61.66	27.52	6.15	-
AV	2.4854G	48.89	54.00	-5.11	33.66	3	Vertical	267	2.04	-	15.23	27.51	6.15	-
PK	2.4802G	96.21	Inf	-Inf	33.67	3	Vertical	267	2.04	-	62.54	27.52	6.15	-
PK	2.49G	60.62	74.00	-13.38	33.66	3	Vertical	267	2.04	-	26.96	27.51	6.15	-

BT-LE(1Mbps)

2480MHz_TX

30/07/2019

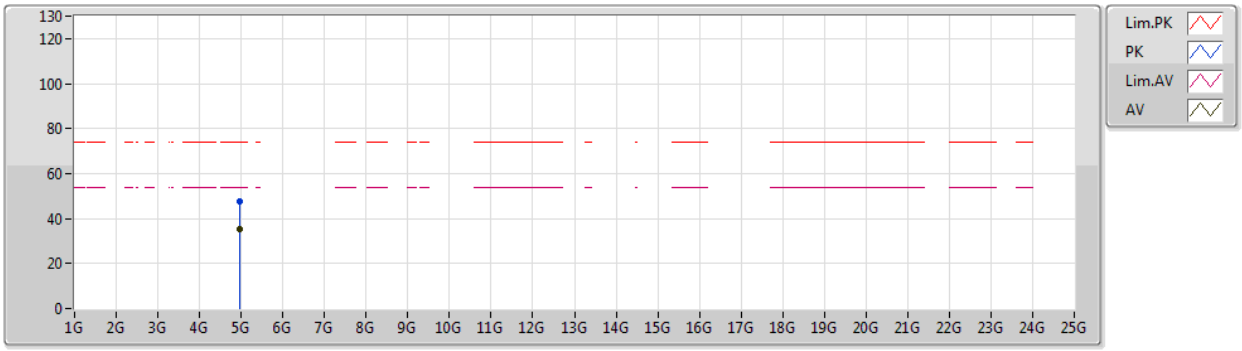


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	95.63	Inf	-Inf	33.67	3	Horizontal	177	2.03	-	61.96	27.52	6.15	-
AV	2.4898G	48.57	54.00	-5.43	33.66	3	Horizontal	177	2.03	-	14.91	27.51	6.15	-
PK	2.4802G	96.52	Inf	-Inf	33.67	3	Horizontal	177	2.03	-	62.85	27.52	6.15	-
PK	2.49G	61.57	74.00	-12.43	33.66	3	Horizontal	177	2.03	-	27.91	27.51	6.15	-

BT-LE(1Mbps)

2480MHz_TX

30/07/2019

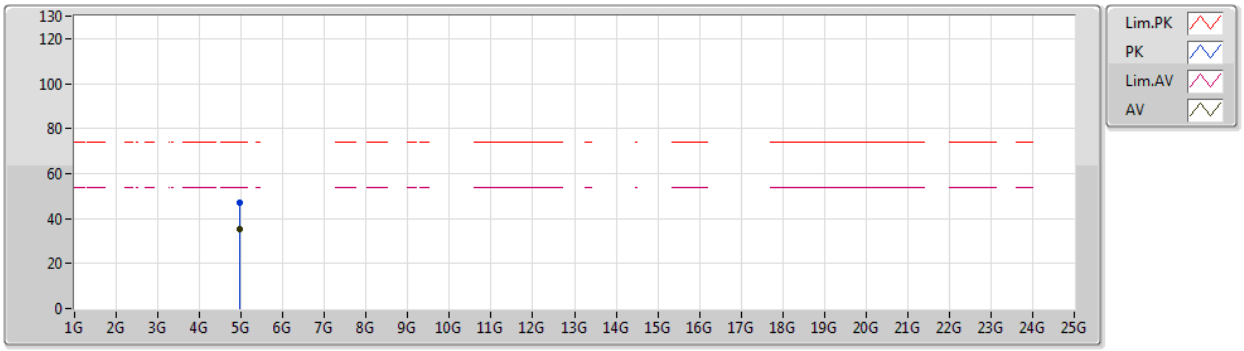


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.97152G	35.49	54.00	-18.51	6.30	3	Vertical	130	1.50	-	29.19	31.39	9.04	34.13
PK	4.9597G	47.44	74.00	-26.56	6.21	3	Vertical	130	1.50	-	41.23	31.34	9.03	34.16

BT-LE(1Mbps)

2480MHz_TX

30/07/2019



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	4.97218G	35.19	54.00	-18.81	6.30	3	Horizontal	298	1.29	-	28.89	31.39	9.04	34.13
PK	4.9708G	47.30	74.00	-26.70	6.27	3	Horizontal	298	1.29	-	41.03	31.38	9.03	34.14