FCC Test Report

Equipment	:	Bluetooth Earphone
Brand Name	:	Bang & Olufsen
Model No.	:	Beoplay E6
FCC ID	:	TTUBEOPLAYE6
Standard	:	47 CFR FCC Part 15.247
Operating Band	:	2400 MHz – 2483.5 MHz
Function	:	☐Point-to-multipoint; ☒Point-to-point
Applicant	:	Bang & Olufsen a/s Peter Bangs Vej 15, DK-7600 Struer, Denmark
Manufacturer	:	Bang & Olufsen a/s Peter Bangs Vej 15, DK-7600 Struer, Denmark

The product sample received on Jan. 24, 2018 and completely tested on Feb. 05, 2018. We, SPORTON, 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 test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONALINC., the test report shall not be reproduced except in full.

Allen Lin

Allen Lin

Testing Laboratory
1190

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Summary of Test Result

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

Revision History

Report No.	Version	Description	Issued Date
FR811610AL	Rev. 01	Initial issue of report	Mar. 13, 2018

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.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	Sage Elephant Tech co., Ltd	F0352104001-A	PIFA Antenna	fixed on board	-0.68

1.1.3 EUT Information

Operational Condition		
EUT Power Type	From host system / Battery	
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)	0.635	1.972	413.75u	3k

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 v04

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
RF Conducted	TH06-HY	Tim	22.5°C / 65%	05/Feb/2018
Radiated	03CH02-HY	Eric	24.4°C / 63%	05/Feb/2018
AC Conduction	CO04-HY	Eric	24.4°C / 63%	06/Feb/2018

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)	3.6 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.0 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 ℃	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	3.7V

2.2 Test Channel Mode

Test Software Version	BlueSuite_2_6_2_632

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	USB Mode

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

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

2.4 Accessories

Accessories				
Built-Battery 1	Brand Name	VARTA	Model Name	CP1254 A3
	Power Rating	3.7 Vdc, 60 mAh	Type	Li-ion, Button cell
Built-Battery 2	Brand Name	VDL	Model Name	ZJ1254
	Power Rating	3.7 Vdc, 55 mAh	Type	Li-ion, Button cell
E6 Charging dongle	Brand Name	Bang & Olufsen	Model Name	1140800
	Power Cord	1.2 meter, Shielded cable		

2.5 Support Equipment

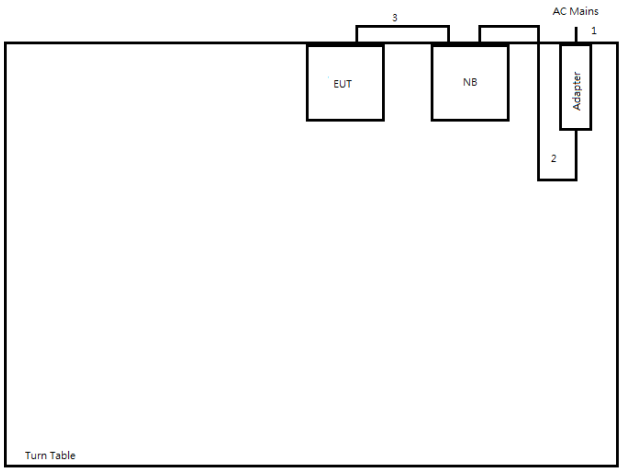
Support Equipment – RF Conducted				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	DC Source	GW	GPS-3030DD	-

Support Equipment – Radiated Emission				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E4300	DoC
2	AC adapter for NB	DELL	LA65NS2-01	-

Support Equipment – AC Conduction				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E4300	DoC
2	AC adapter for NB	DELL	LA65NS2-01	-

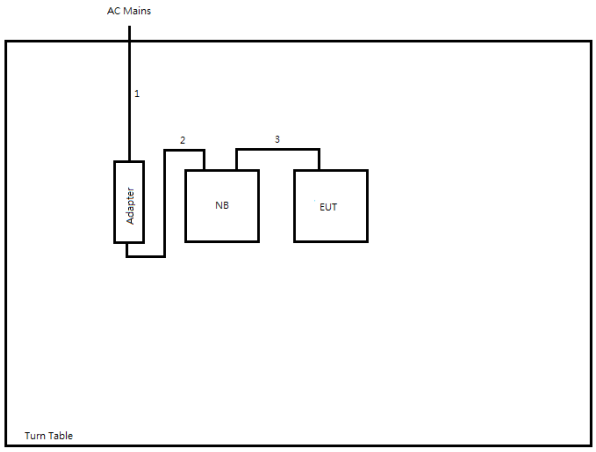
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8m	-
2	DC Power cable	No	1.5m	-
3	E6 Charging dongle	D	1.2m	-

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8m	-
2	DC Power cable	No	1.5m	-
3	E6 Charging dongle	D	1.2m	-

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

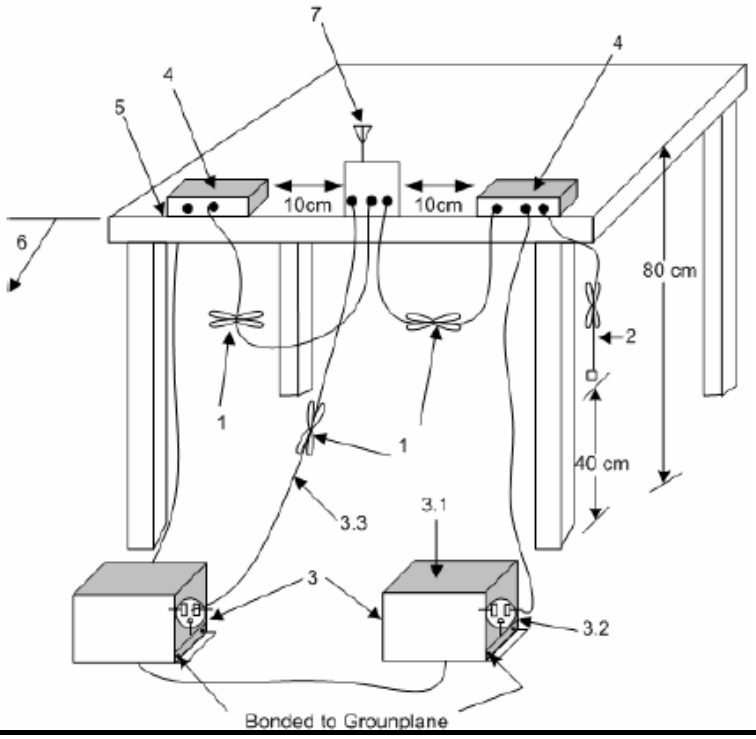
Refer a test equipment and calibration data table in this test report.

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.

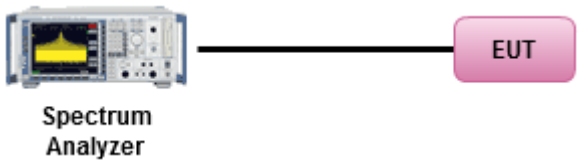
3.2.2 Measuring Instruments

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 8.1 Option 1 for 6 dB bandwidth measurement.
	☐ Refer as KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
	☐ Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
	☐ Refer as RSS-Gen, clause 6.6 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 $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)		
	▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)$ dBm		
	▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm		
	▪ Smart antenna system (SAS):		
		- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm	
		- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm	
		- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3 + 8$dB dBm	
e.i.r.p. Power Limit:			
▪ 2400-2483.5 MHz Band			
	▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)		
	▪ Point-to-point systems (P2P): $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX}])$ dBm		
	▪ Smart antenna system (SAS)		
		- Single beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm	
		- Overlap beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm	
		- Aggregate power on all beams: $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX} + 8])$ 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 9.1.1 Option 1 (RBW ≥ EBW method).
	☐ Refer as KDB 558074, clause 9.1.2 Option 2 (integrated band power method)
	☐ Refer as KDB 558074, clause 9.1.3 Option 3 (peak power meter for VBW ≥ DTS BW)
▪ Maximum Average Conducted Output Power	
	Duty cycle ≥ 98%
	☐ Refer as KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
	Duty cycle < 98%
	☐ Refer as KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
	RF power meter and average over on/off periods with duty factor or gated trigger
	☒ Refer as KDB 558074, clause 9.2.3.1 Method AVGPM (using an RF average 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

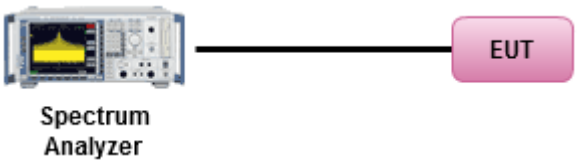
3.4.2 Measuring Instruments

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 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak).	
▪ 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 PSD 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 PSD level.	

3.5.2 Measuring Instruments

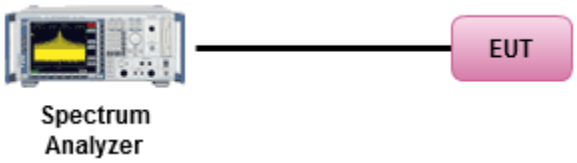
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
▪ Refer as KDB 558074, clause 11 for unwanted emissions into non-restricted 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.

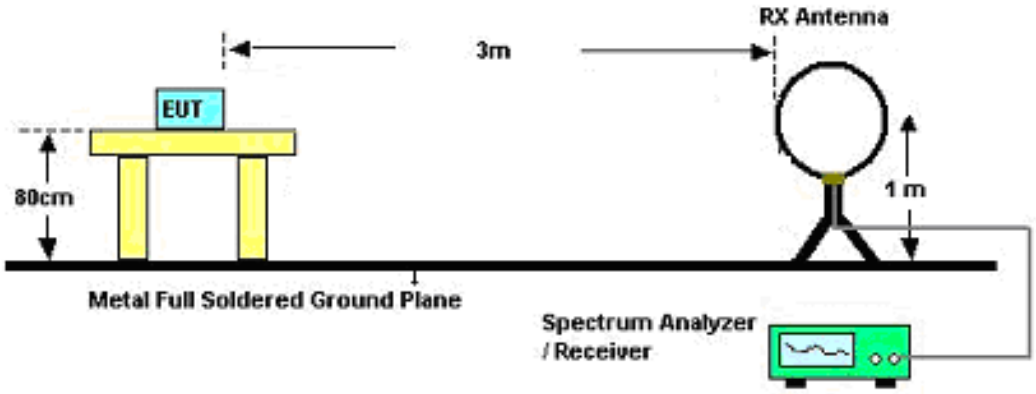
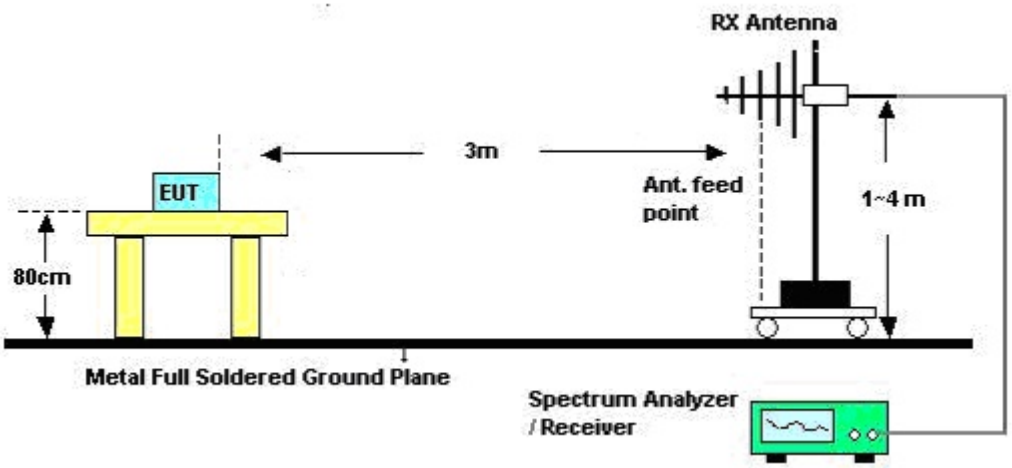
3.6.2 Measuring Instruments

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

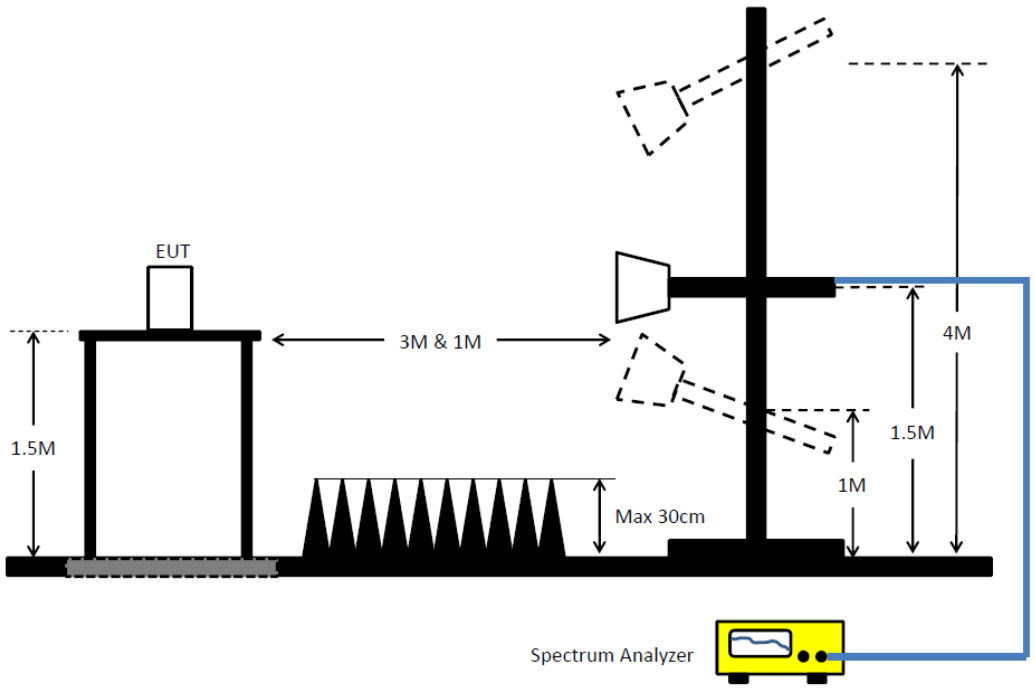
3.6.3 Test Procedures

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 12 for unwanted emissions into restricted bands.
☒ Refer as KDB 558074, clause 12.2.5.3 (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW≥1/T.
☒ Refer as KDB 558074, clause 12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:
▪ Refer as KDB 558074 clause 13.1, 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 13.2 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
▪ Refer as KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
▪ For conducted and cabinet radiation measurement, refer as KDB 558074, clause 12.2.2.
▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
▪ For KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

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	29/Apr/2017	28/Apr/2018
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	06/Oct/2017	05/Oct/2018
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/2017	11/Oct/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	17/Nov/2017	16/Nov/2018

NCR : Non-Calibration Require

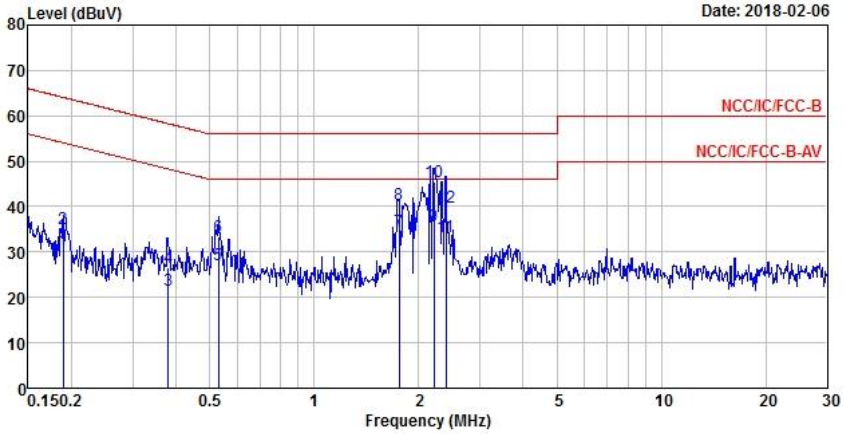
Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100305	9KHz - 40GHz	12/Dec/2017	11/Dec/2018
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz-1GHz	20/Oct/2017	19/Oct/2018
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	27/Oct/2017	26/Oct/2018
Amplifier	Agilent	8447D	2944A11149	100KHz-1.3GHz	29/Jun/2017	28/Jun/2018
Amplifier	Ketsight	8449B	3008A02602	1GHz-26.5GHz	19/Sep/2017	18/Sep/2018
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01531	1GHz-18GHz	11/May/2017	10/May/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA 9170221	18GHz-40GHz	10/Mar/2017	09/Mar/2018
Bilog Antenna	SCHAFFNER	CBL6112B	2723	30MHz-1GHz	09/Sep/2017	08/Sep/2018
Amplifier	MITEQ	TTA1840-35-HG	1864481	18GHz-40GHz	24/Aug/2017	23/Aug/2018
Loop Antenna	TESEQ	HLA 6120	31244	9KHz-30MHz	02/Mar/2017	01/Mar/2018
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	19/Jan/2018	18/Jan/2019
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	19/Jan/2018	18/Jan/2019
Receiver	R&S	ESU3	102052	9kHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101515	9kHz~40GHz	08/Dec/2017	07/Dec/2018
Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY677/3	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY678/3	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10717/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018

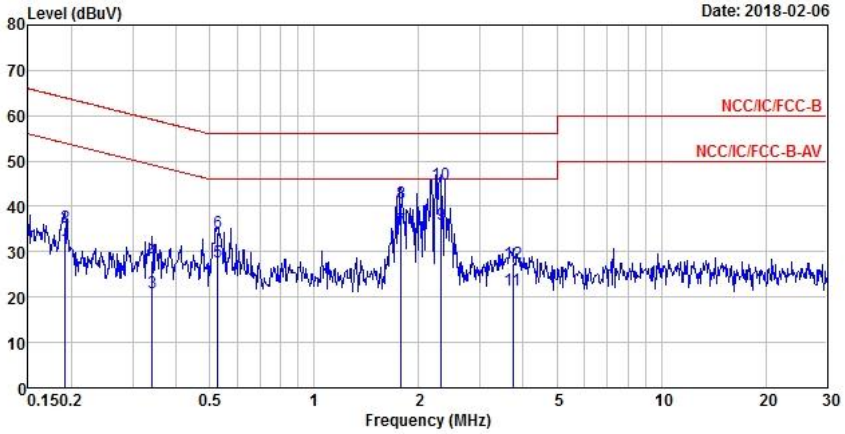
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	USB mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1894	30.30	-23.76	54.06	20.67	9.62	0.01	Average
2	0.1894	35.25	-28.81	64.06	25.62	9.62	0.01	QP
3	0.3791	21.42	-26.88	48.30	11.72	9.61	0.09	Average
4	0.3791	26.57	-31.73	58.30	16.87	9.61	0.09	QP
5	0.5293	27.19	-18.81	46.00	17.51	9.61	0.07	Average
6	0.5293	33.40	-22.60	56.00	23.72	9.61	0.07	QP
7	1.7529	34.55	-11.45	46.00	24.92	9.63	0.00	Average
8	1.7529	40.43	-15.57	56.00	30.80	9.63	0.00	QP
9 MAX	2.2132	35.77	-10.23	46.00	26.13	9.63	0.01	Average
10	2.2132	45.49	-10.51	56.00	35.85	9.63	0.01	QP
11	2.3962	33.22	-12.78	46.00	23.57	9.63	0.02	Average
12	2.3962	39.96	-16.04	56.00	30.31	9.63	0.02	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

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



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1914	30.72	-23.26	53.98	21.09	9.62	0.01	Average
2	0.1914	35.56	-28.42	63.98	25.93	9.62	0.01	QP
3	0.3410	21.10	-28.08	49.18	11.41	9.61	0.08	Average
4	0.3410	28.13	-31.05	59.18	18.44	9.61	0.08	QP
5	0.5265	27.86	-18.14	46.00	18.18	9.61	0.07	Average
6	0.5265	34.38	-21.62	56.00	24.70	9.61	0.07	QP
7	1.7810	34.86	-11.14	46.00	25.24	9.62	0.00	Average
8	1.7810	40.73	-15.27	56.00	31.11	9.62	0.00	QP
9 MAX	2.3213	35.95	-10.05	46.00	26.31	9.62	0.02	Average
10	2.3213	44.78	-11.22	56.00	35.14	9.62	0.02	QP
11	3.7395	21.41	-24.59	46.00	11.70	9.63	0.08	Average
12	3.7395	27.58	-28.42	56.00	17.87	9.63	0.08	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

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)	690k	1.028M	1M03F1D	683.75k	1.018M

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

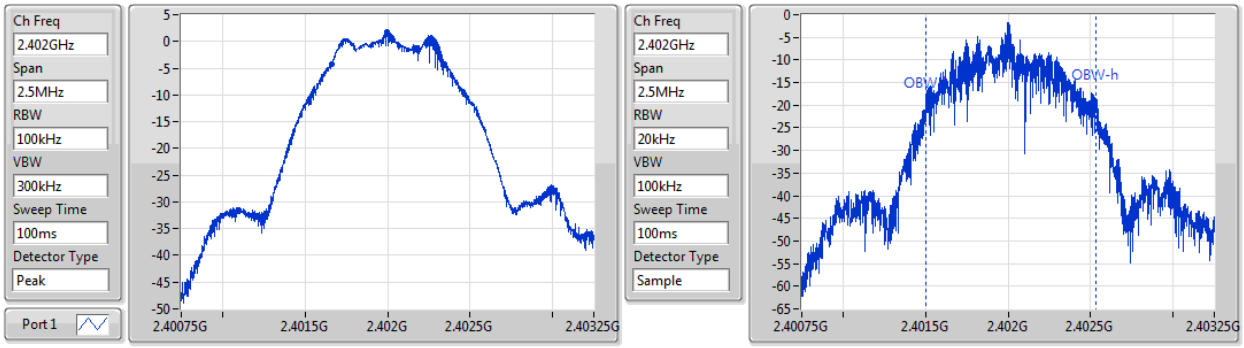
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	500k	683.75k	1.028M
2440MHz_TnomVnom	Pass	500k	690k	1.018M
2480MHz_TnomVnom	Pass	500k	688.75k	1.018M

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

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

2402MHz

05/02/2018

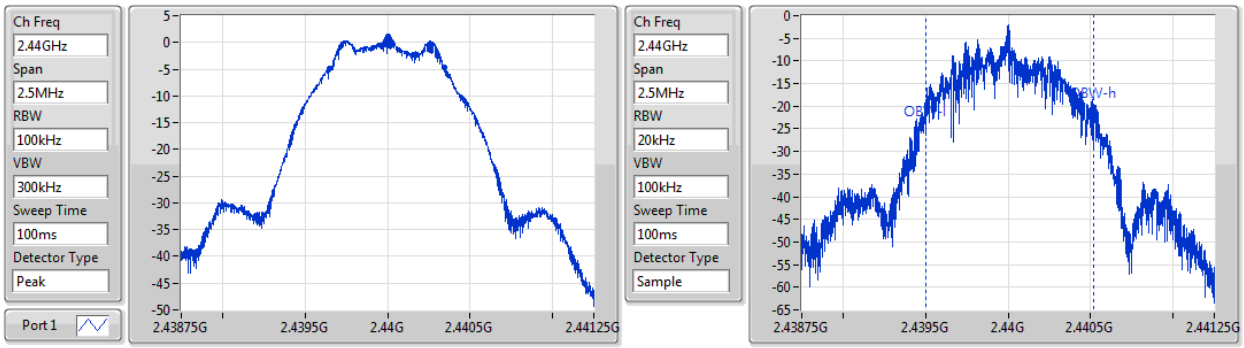


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
683.75k	2.401661G	2.402345G	1.028M	2.401504G	2.402532G	500k	1

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

2440MHz

05/02/2018

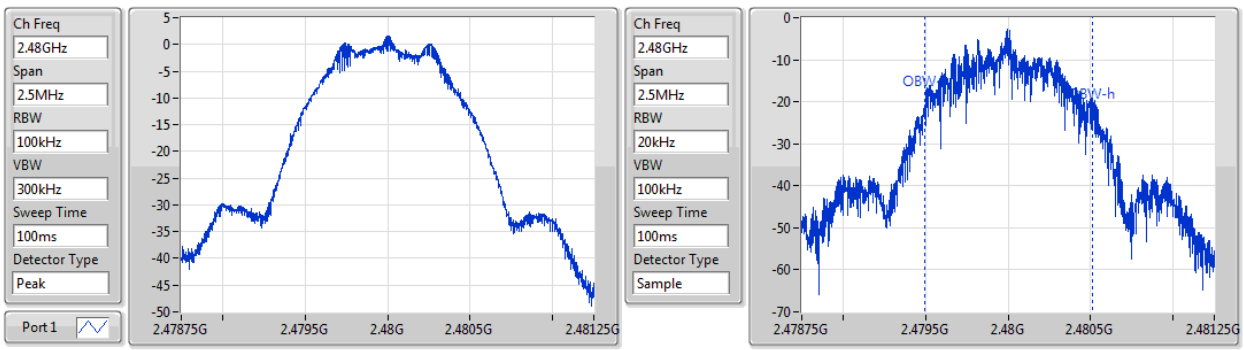


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
690k	2.439651G	2.440341G	1.018M	2.439499G	2.440517G	500k	1

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

2480MHz

05/02/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
688.75k	2.479649G	2.480338G	1.018M	2.479497G	2.480515G	500k	1

Summary

Mode	Power	Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	1.45	0.00140

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-0.68	1.45	30.00
2440MHz_TnomVnom	Pass	-0.68	0.95	30.00
2480MHz_TnomVnom	Pass	-0.68	0.90	30.00

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-14.29

RBW=3kHz.

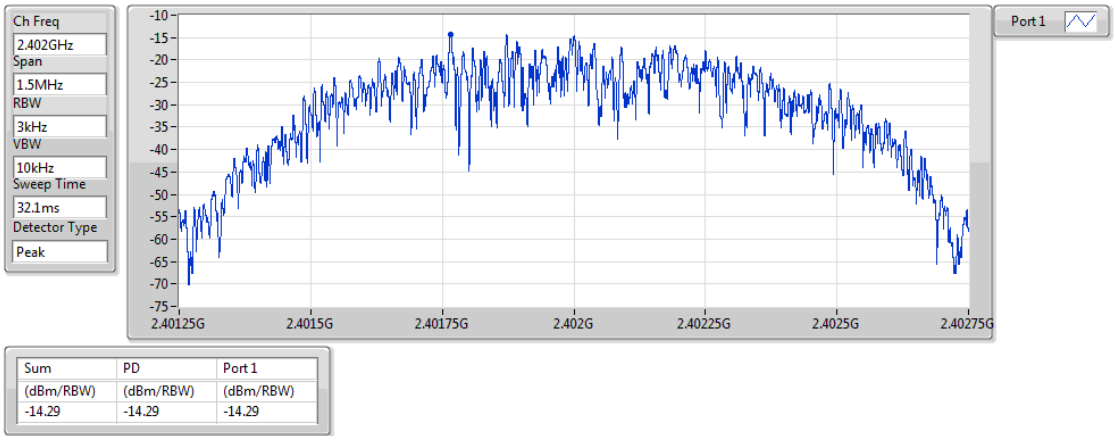
Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-0.68	-14.29	8.00
2440MHz_TnomVnom	Pass	-0.68	-15.11	8.00
2480MHz_TnomVnom	Pass	-0.68	-15.77	8.00

RBW=3kHz.

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

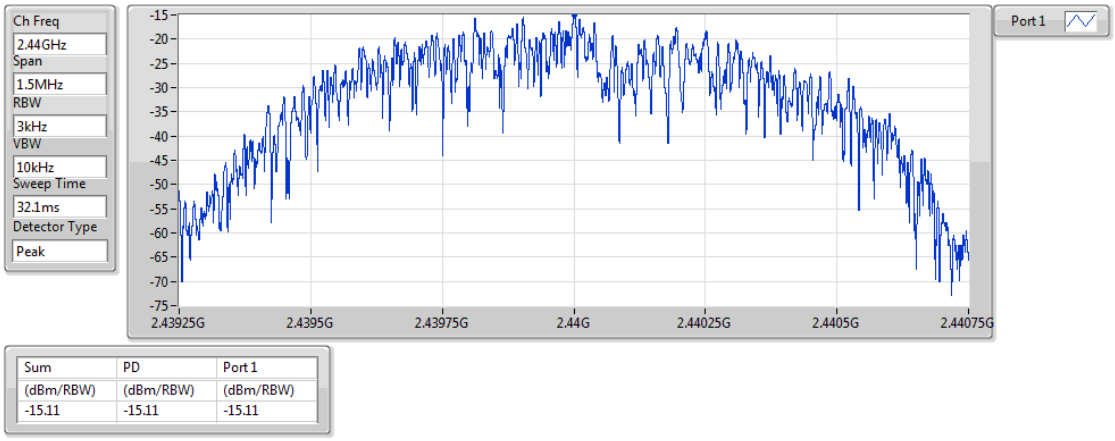
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.29	-14.29	-14.29

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

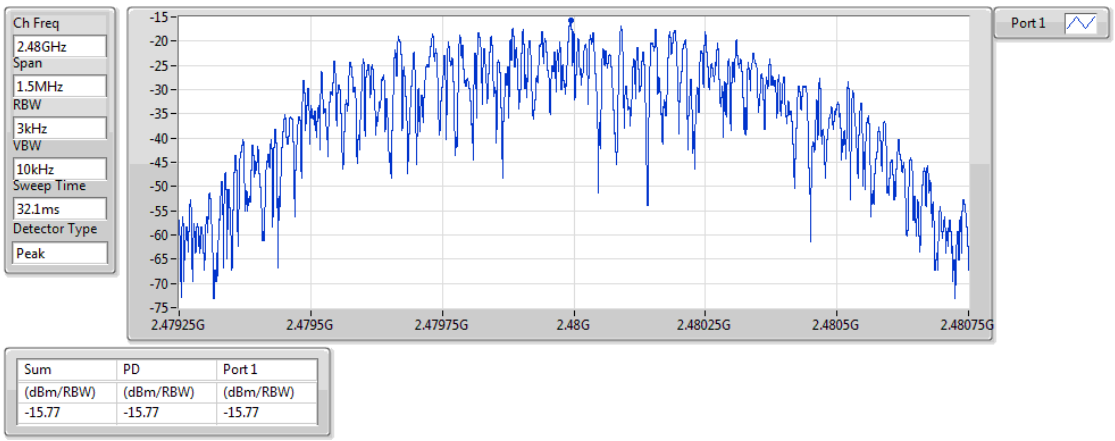
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.11	-15.11	-15.11

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

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.77	-15.77	-15.77

Summary

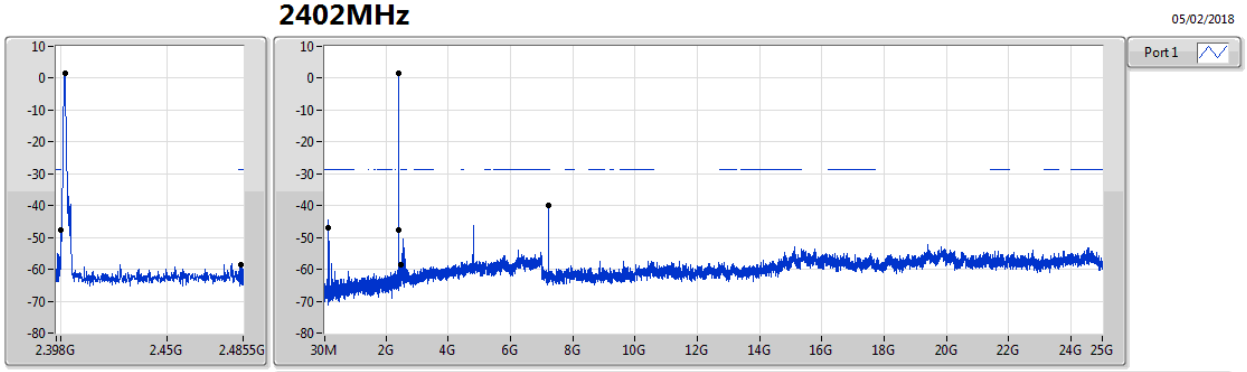
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.402004G	1.43	-28.57	147.216M	-46.79	2.399984G	-47.69	2.484624G	-58.43	7.205102G	-39.89	1

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	2.402004G	1.43	-28.57	147.216M	-46.79	2.399984G	-47.69	2.484624G	-58.43	7.205102G	-39.89	1
2440MHz_TnomVnom	Pass	2.402004G	1.43	-28.57	147.216M	-47.02	2.399932G	-52.93	2.484892G	-59.11	2.595258G	-46.92	1
2480MHz_TnomVnom	Pass	2.402004G	1.43	-28.57	147.216M	-46.73	2.3999G	-57.02	2.48356G	-58.14	2.634659G	-50.21	1

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

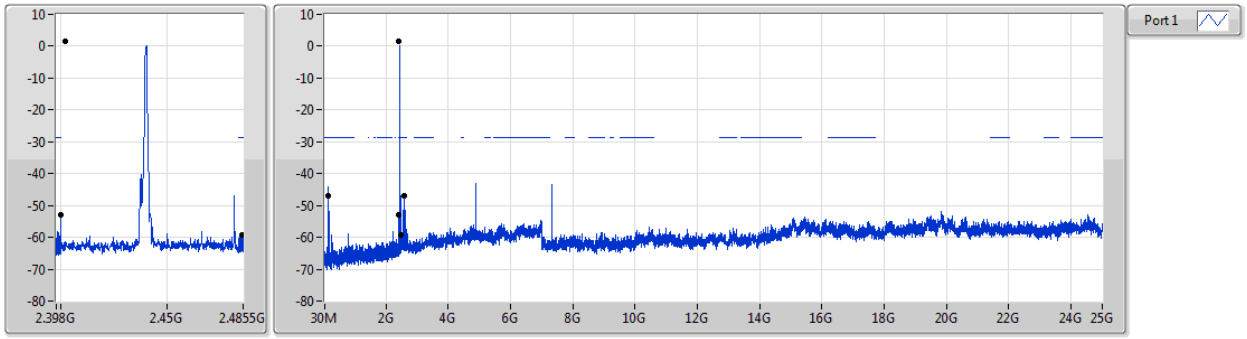
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402004G	1.43	-28.57	147.216M	-46.79	2.399984G	-47.69	2.484624G	-58.43	7.205102G	-39.89	1

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

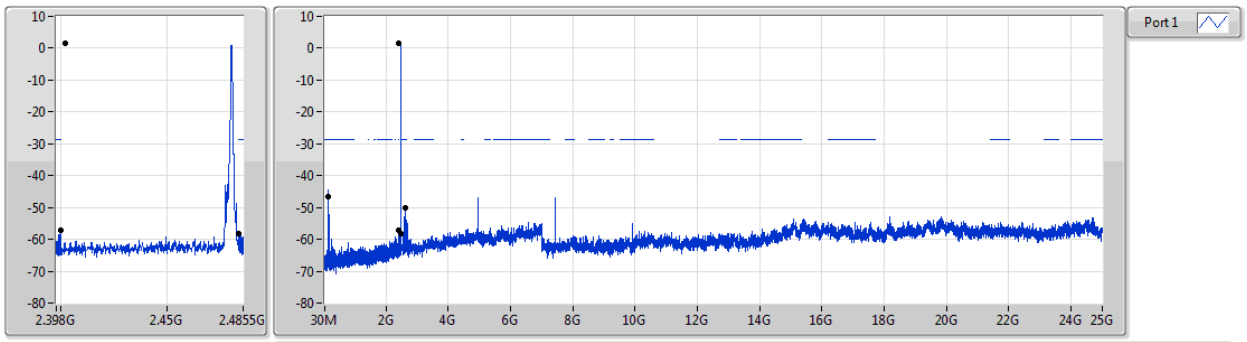
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402004G	1.43	-28.57	147.216M	-47.02	2.399932G	-52.93	2.484892G	-59.11	2.595258G	-46.92	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
2.402004G	1.43	-28.57	147.216M	-46.73	2.3999G	-57.02	2.48356G	-58.14	2.634659G	-50.21	1

Summary

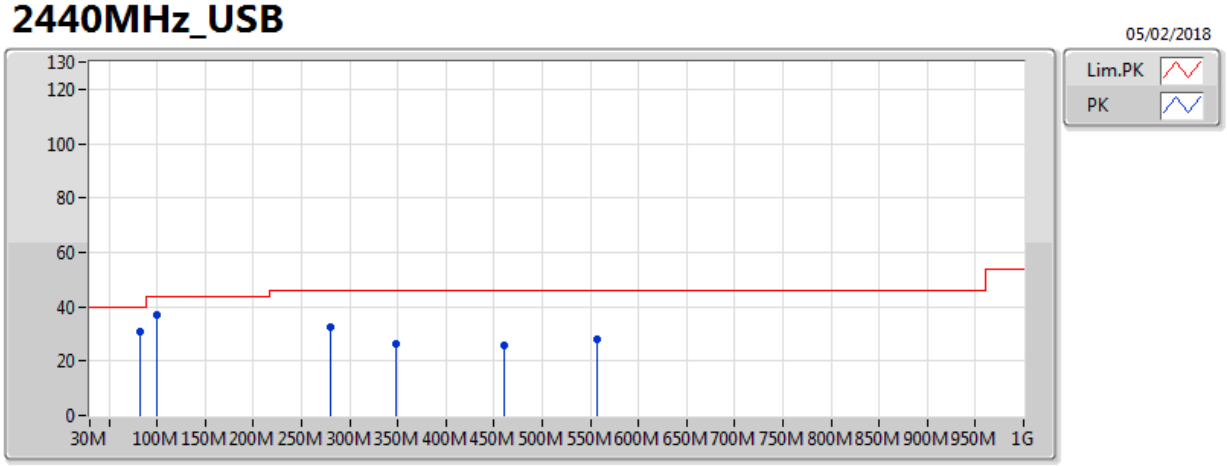
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	PK	117.3M	37.88	43.50	-5.62	-8.86	3	Horizontal	0	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	117.3M	37.88	43.50	-5.62	-8.86	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	158.04M	35.31	43.50	-8.19	-10.41	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	231.76M	36.41	46.00	-9.59	-9.18	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	350.1M	30.93	46.00	-15.07	-4.83	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	394.72M	35.96	46.00	-10.04	-3.92	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	513.06M	30.29	46.00	-15.71	-2.39	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	99.84M	37.02	43.50	-6.48	-10.37	3	Vertical	360	1.00	-
2440MHz	Pass	PK	280.26M	32.51	46.00	-13.49	-6.28	3	Vertical	360	1.00	-
2440MHz	Pass	PK	348.16M	26.42	46.00	-19.58	-4.91	3	Vertical	360	1.00	-
2440MHz	Pass	PK	460.68M	25.64	46.00	-20.36	-2.74	3	Vertical	360	1.00	-
2440MHz	Pass	PK	557.68M	27.91	46.00	-18.09	-0.89	3	Vertical	360	1.00	-
2440MHz	Pass	QP	82.38M	30.84	40.00	-9.16	-14.01	3	Vertical	285	1.56	-

BT-LE(1Mbps)

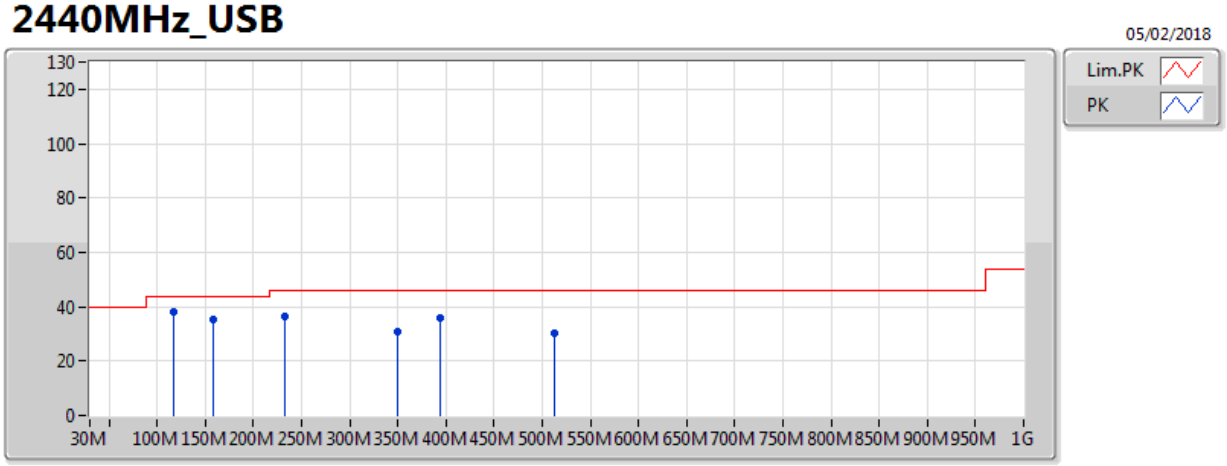
2440MHz_USB



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	99.84M	37.02	43.50	-6.48	-10.37	3	Vertical	360	1.00	-	47.39	15.97	1.47	27.81
PK	280.26M	32.51	46.00	-13.49	-6.28	3	Vertical	360	1.00	-	38.79	18.08	2.88	27.25
PK	348.16M	26.42	46.00	-19.58	-4.91	3	Vertical	360	1.00	-	31.33	19.56	3.10	27.57
PK	460.68M	25.64	46.00	-20.36	-2.74	3	Vertical	360	1.00	-	28.38	22.29	3.25	28.28
PK	557.68M	27.91	46.00	-18.09	-0.89	3	Vertical	360	1.00	-	28.80	24.03	3.61	28.53
QP	82.38M	30.84	40.00	-9.16	-14.01	3	Vertical	285	1.56	-	44.85	12.43	1.28	27.72

BT-LE(1Mbps)

2440MHz_USB



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	117.3M	37.88	43.50	-5.62	-8.86	3	Horizontal	0	1.00	-	46.74	17.24	1.64	27.75
PK	158.04M	35.31	43.50	-8.19	-10.41	3	Horizontal	0	1.00	-	45.72	15.25	1.93	27.60
PK	231.76M	36.41	46.00	-9.59	-9.18	3	Horizontal	0	1.00	-	45.59	15.57	2.61	27.36
PK	350.1M	30.93	46.00	-15.07	-4.83	3	Horizontal	0	1.00	-	35.76	19.65	3.10	27.58
PK	394.72M	35.96	46.00	-10.04	-3.92	3	Horizontal	0	1.00	-	39.88	20.82	3.18	27.92
PK	513.06M	30.29	46.00	-15.71	-2.39	3	Horizontal	0	1.00	-	32.68	22.73	3.39	28.50

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	2.5G	49.15	54.00	-4.85	35.44	3	Horizontal	130	3.69	-

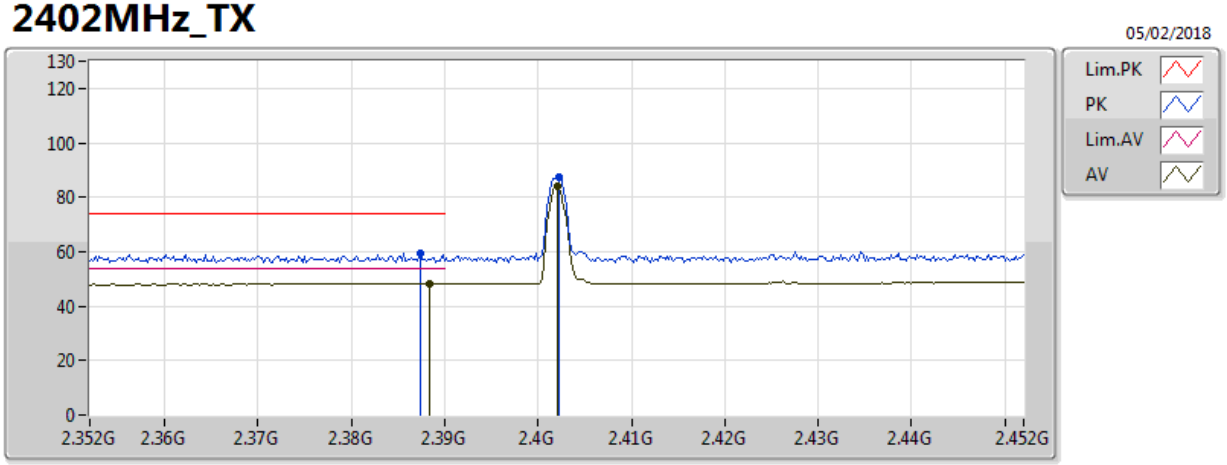
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3774G	48.53	54.00	-5.47	34.86	3	Horizontal	335	3.45	-
2402MHz	Pass	AV	2.402G	88.36	Inf	-Inf	34.98	3	Horizontal	335	3.45	-
2402MHz	Pass	PK	2.3594G	59.19	74.00	-14.81	34.78	3	Horizontal	335	3.45	-
2402MHz	Pass	PK	2.4024G	90.47	Inf	-Inf	34.98	3	Horizontal	335	3.45	-
2402MHz	Pass	AV	2.3884G	48.06	54.00	-5.94	34.92	3	Vertical	118	1.50	-
2402MHz	Pass	AV	2.402G	83.89	Inf	-Inf	34.98	3	Vertical	118	1.50	-
2402MHz	Pass	PK	2.3874G	59.20	74.00	-14.80	34.91	3	Vertical	118	1.50	-
2402MHz	Pass	PK	2.4022G	87.23	Inf	-Inf	34.98	3	Vertical	118	1.50	-
2402MHz	Pass	AV	4.82676G	30.14	54.00	-23.86	3.14	3	Horizontal	120	1.50	-
2402MHz	Pass	PK	4.81856G	43.90	74.00	-30.10	3.12	3	Horizontal	120	1.50	-
2402MHz	Pass	AV	4.8274G	30.09	54.00	-23.91	3.14	3	Vertical	270	1.85	-
2402MHz	Pass	PK	4.82884G	43.68	74.00	-30.32	3.14	3	Vertical	270	1.85	-
2440MHz	Pass	AV	2.39G	48.21	54.00	-5.79	34.92	3	Horizontal	130	3.69	-
2440MHz	Pass	AV	2.44G	85.87	Inf	-Inf	35.16	3	Horizontal	130	3.69	-
2440MHz	Pass	AV	2.5G	49.15	54.00	-4.85	35.44	3	Horizontal	130	3.69	-
2440MHz	Pass	PK	2.3516G	59.03	74.00	-14.97	34.74	3	Horizontal	130	3.69	-
2440MHz	Pass	PK	2.4396G	88.87	Inf	-Inf	35.16	3	Horizontal	130	3.69	-
2440MHz	Pass	PK	2.492G	60.62	74.00	-13.38	35.40	3	Horizontal	130	3.69	-
2440MHz	Pass	AV	2.3864G	48.19	54.00	-5.81	34.91	3	Vertical	322	1.49	-
2440MHz	Pass	AV	2.44G	86.21	Inf	-Inf	35.16	3	Vertical	322	1.49	-
2440MHz	Pass	AV	2.5G	49.12	54.00	-4.88	35.44	3	Vertical	322	1.49	-
2440MHz	Pass	PK	2.3632G	60.02	74.00	-13.98	34.80	3	Vertical	322	1.49	-
2440MHz	Pass	PK	2.4396G	89.22	Inf	-Inf	35.16	3	Vertical	322	1.49	-
2440MHz	Pass	PK	2.4916G	59.53	74.00	-14.47	35.40	3	Vertical	322	1.49	-
2440MHz	Pass	AV	4.87994G	43.80	54.00	-10.20	3.26	3	Horizontal	253	2.35	-
2440MHz	Pass	AV	7.3194G	45.90	54.00	-8.10	9.29	3	Horizontal	131	1.10	-
2440MHz	Pass	PK	4.87994G	54.89	74.00	-19.11	3.26	3	Horizontal	253	2.35	-
2440MHz	Pass	PK	7.31916G	59.52	74.00	-14.48	9.29	3	Horizontal	131	1.10	-
2440MHz	Pass	AV	4.87988G	42.93	54.00	-11.07	3.26	3	Vertical	238	2.27	-
2440MHz	Pass	AV	7.3194G	44.81	54.00	-9.19	9.29	3	Vertical	159	1.14	-
2440MHz	Pass	PK	4.87946G	53.87	74.00	-20.13	3.25	3	Vertical	238	2.27	-
2440MHz	Pass	PK	7.31916G	58.89	74.00	-15.11	9.29	3	Vertical	159	1.14	-
2480MHz	Pass	AV	2.48G	77.25	Inf	-Inf	35.35	3	Horizontal	323	1.50	-
2480MHz	Pass	AV	2.4976G	49.00	54.00	-5.00	35.43	3	Horizontal	323	1.50	-
2480MHz	Pass	PK	2.4798G	80.86	Inf	-Inf	35.35	3	Horizontal	323	1.50	-
2480MHz	Pass	PK	2.495G	59.88	74.00	-14.12	35.42	3	Horizontal	323	1.50	-
2480MHz	Pass	AV	2.48G	85.21	Inf	-Inf	35.35	3	Vertical	348	1.49	-
2480MHz	Pass	AV	2.4984G	49.02	54.00	-4.98	35.43	3	Vertical	348	1.49	-
2480MHz	Pass	PK	2.4798G	88.29	Inf	-Inf	35.35	3	Vertical	348	1.49	-
2480MHz	Pass	PK	2.4866G	59.63	74.00	-14.37	35.38	3	Vertical	348	1.49	-
2480MHz	Pass	AV	4.95994G	40.81	54.00	-13.19	3.43	3	Horizontal	159	1.50	-
2480MHz	Pass	AV	7.43946G	46.23	54.00	-7.77	9.81	3	Horizontal	198	1.01	-
2480MHz	Pass	PK	4.95958G	51.58	74.00	-22.42	3.43	3	Horizontal	159	1.50	-
2480MHz	Pass	PK	7.4391G	59.64	74.00	-14.36	9.81	3	Horizontal	198	1.01	-
2480MHz	Pass	AV	4.95988G	41.75	54.00	-12.25	3.43	3	Vertical	220	1.10	-
2480MHz	Pass	AV	7.4394G	45.49	54.00	-8.51	9.81	3	Vertical	219	1.34	-
2480MHz	Pass	PK	4.95952G	52.83	74.00	-21.17	3.42	3	Vertical	220	1.10	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	PK	7.43916G	59.00	74.00	-15.00	9.81	3	Vertical	219	1.34	-

BT-LE(1Mbps)

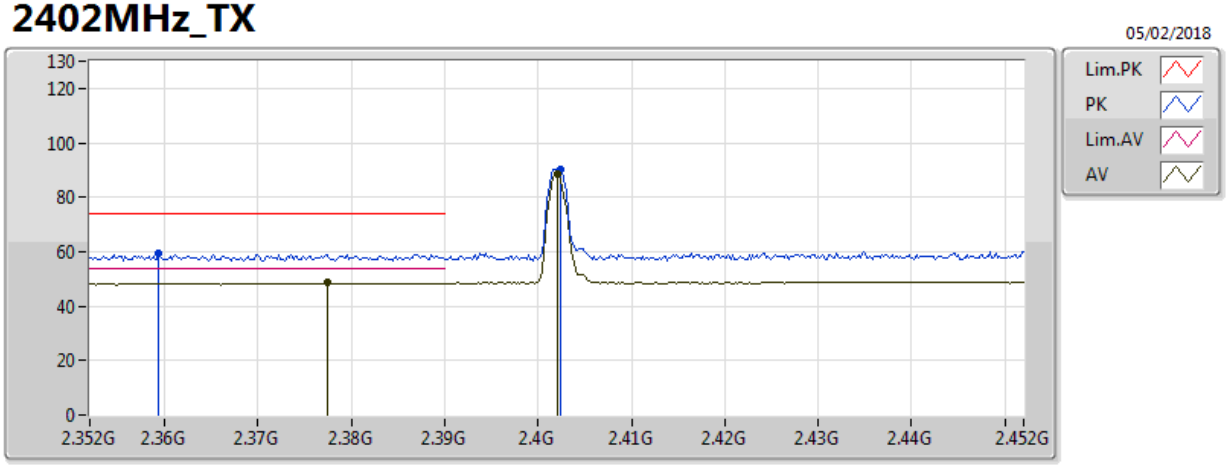
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3884G	48.06	54.00	-5.94	34.92	3	Vertical	118	1.50	-	13.14	26.99	7.93	-
AV	2.402G	83.89	Inf	-Inf	34.98	3	Vertical	118	1.50	-	48.91	27.03	7.95	-
PK	2.3874G	59.20	74.00	-14.80	34.91	3	Vertical	118	1.50	-	24.29	26.98	7.93	-
PK	2.4022G	87.23	Inf	-Inf	34.98	3	Vertical	118	1.50	-	52.25	27.03	7.95	-

BT-LE(1Mbps)

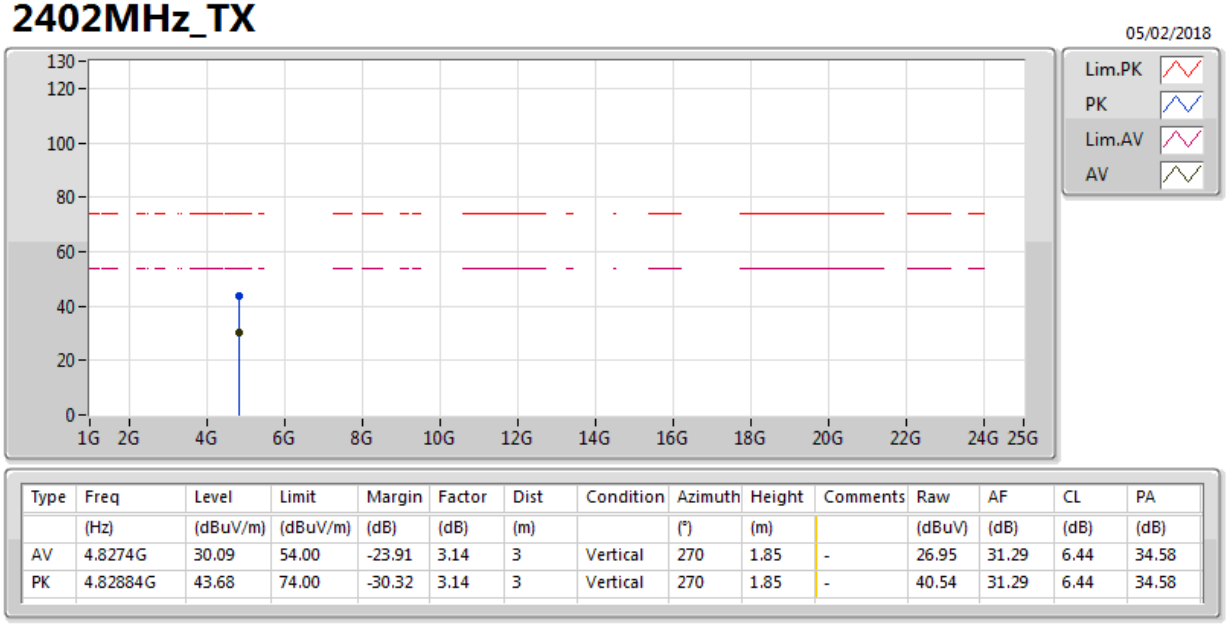
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3774G	48.53	54.00	-5.47	34.86	3	Horizontal	335	3.45	-	13.67	26.96	7.91	-
AV	2.402G	88.36	Inf	-Inf	34.98	3	Horizontal	335	3.45	-	53.38	27.03	7.95	-
PK	2.3594G	59.19	74.00	-14.81	34.78	3	Horizontal	335	3.45	-	24.41	26.91	7.87	-
PK	2.4024G	90.47	Inf	-Inf	34.98	3	Horizontal	335	3.45	-	55.48	27.03	7.95	-

BT-LE(1Mbps)

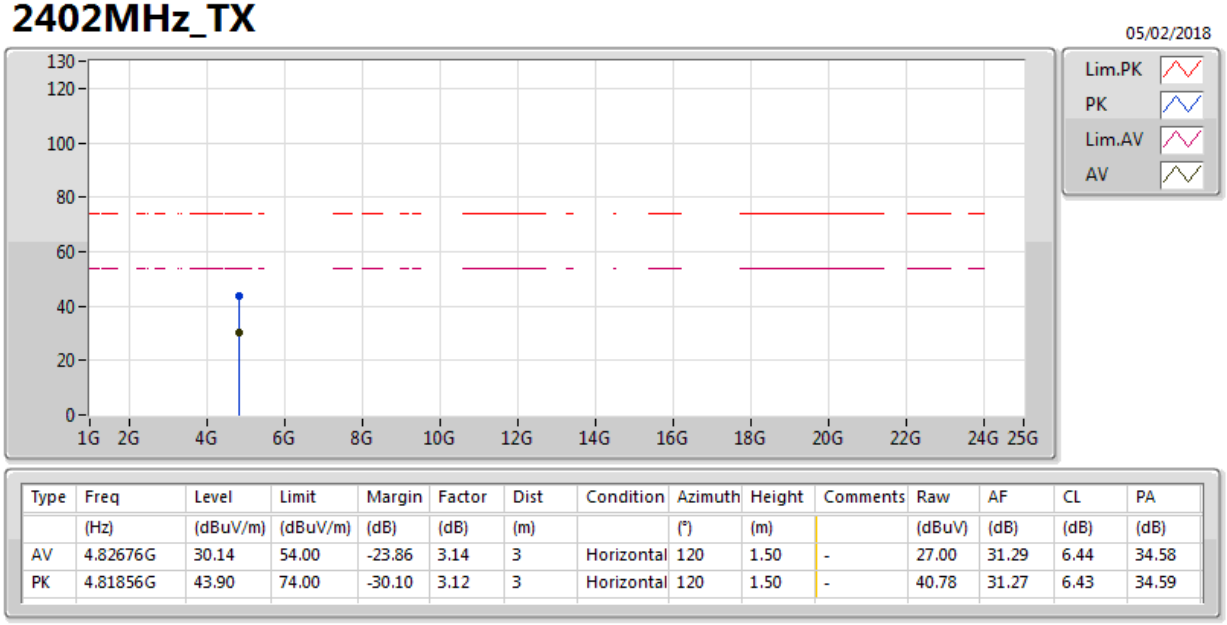
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8274G	30.09	54.00	-23.91	3.14	3	Vertical	270	1.85	-	26.95	31.29	6.44	34.58
PK	4.82884G	43.68	74.00	-30.32	3.14	3	Vertical	270	1.85	-	40.54	31.29	6.44	34.58

BT-LE(1Mbps)

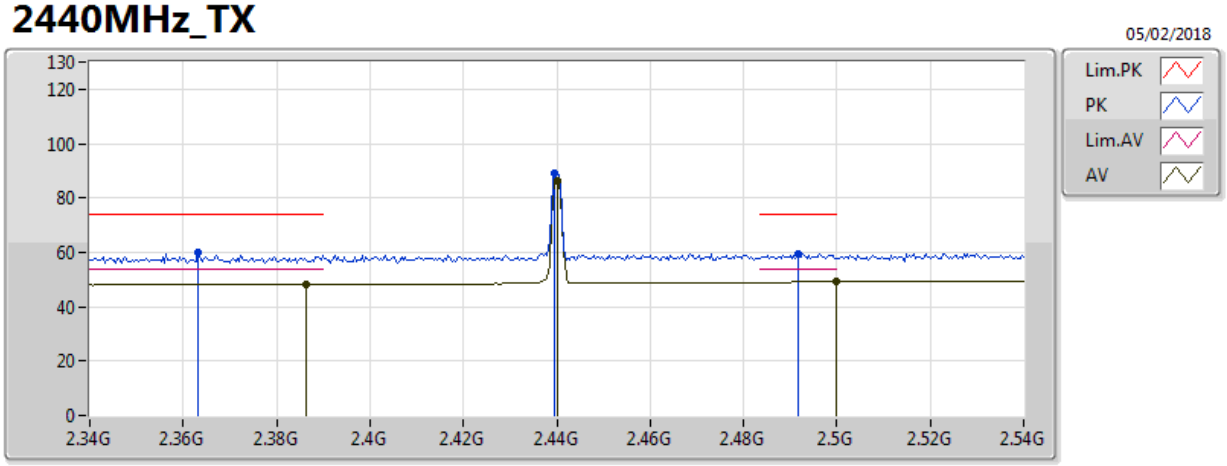
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.82676G	30.14	54.00	-23.86	3.14	3	Horizontal	120	1.50	-	27.00	31.29	6.44	34.58
PK	4.81856G	43.90	74.00	-30.10	3.12	3	Horizontal	120	1.50	-	40.78	31.27	6.43	34.59

BT-LE(1Mbps)

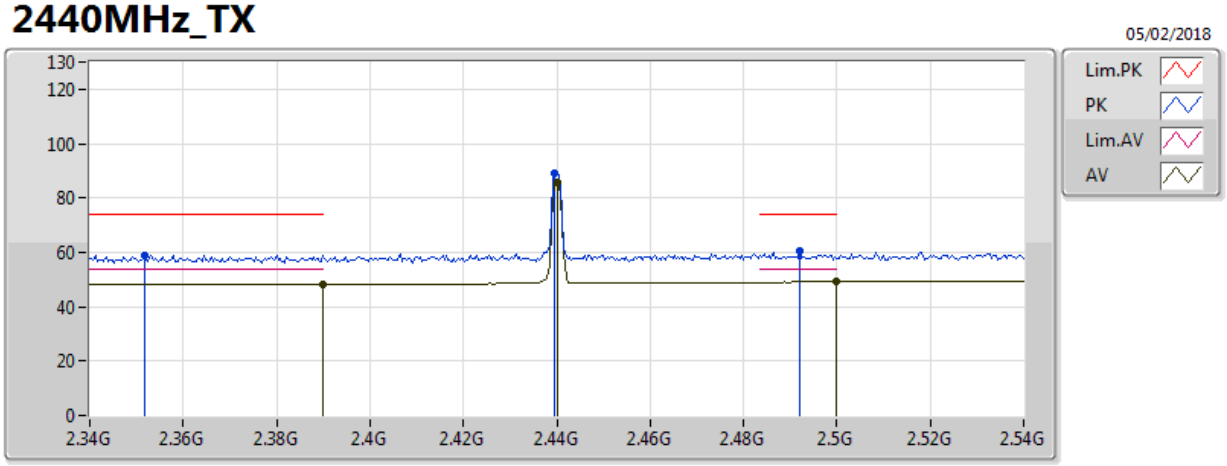
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3864G	48.19	54.00	-5.81	34.91	3	Vertical	322	1.49	-	13.28	26.98	7.92	-
AV	2.44G	86.21	Inf	-Inf	35.16	3	Vertical	322	1.49	-	51.06	27.13	8.03	-
AV	2.5G	49.12	54.00	-4.88	35.44	3	Vertical	322	1.49	-	13.68	27.30	8.14	-
PK	2.3632G	60.02	74.00	-13.98	34.80	3	Vertical	322	1.49	-	25.22	26.92	7.88	-
PK	2.4396G	89.22	Inf	-Inf	35.16	3	Vertical	322	1.49	-	54.07	27.13	8.03	-
PK	2.4916G	59.53	74.00	-14.47	35.40	3	Vertical	322	1.49	-	24.13	27.28	8.12	-

BT-LE(1Mbps)

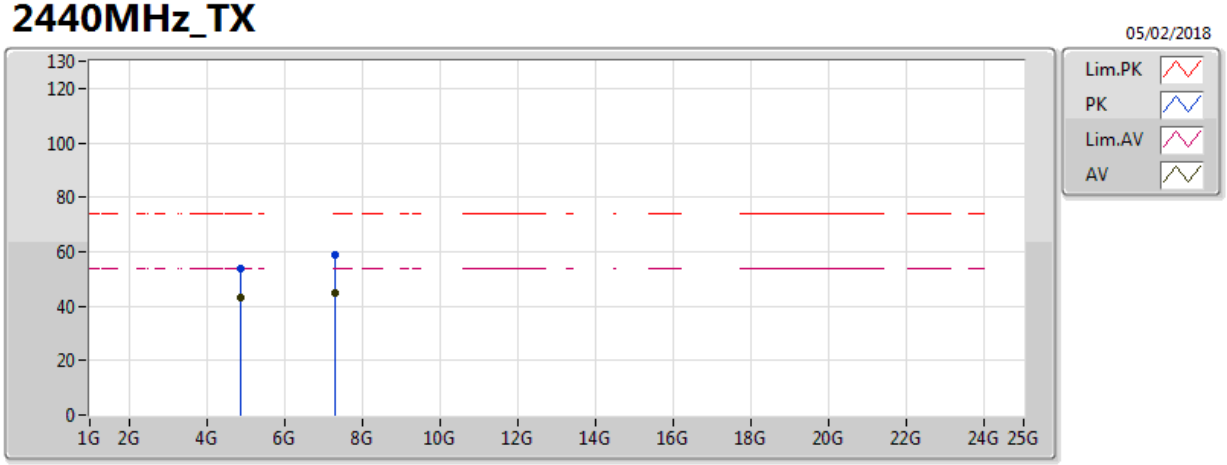
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	48.21	54.00	-5.79	34.92	3	Horizontal	130	3.69	-	13.28	26.99	7.93	-
AV	2.44G	85.87	Inf	-Inf	35.16	3	Horizontal	130	3.69	-	50.71	27.13	8.03	-
AV	2.5G	49.15	54.00	-4.85	35.44	3	Horizontal	130	3.69	-	13.71	27.30	8.14	-
PK	2.3516G	59.03	74.00	-14.97	34.74	3	Horizontal	130	3.69	-	24.29	26.88	7.86	-
PK	2.4396G	88.87	Inf	-Inf	35.16	3	Horizontal	130	3.69	-	53.71	27.13	8.03	-
PK	2.492G	60.62	74.00	-13.38	35.40	3	Horizontal	130	3.69	-	25.21	27.28	8.12	-

BT-LE(1Mbps)

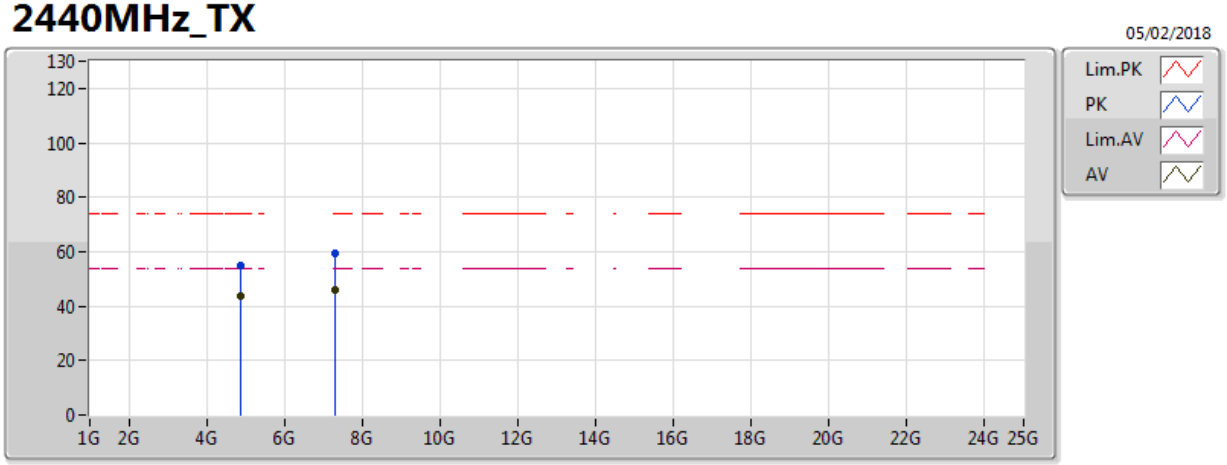
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87988G	42.93	54.00	-11.07	3.26	3	Vertical	238	2.27	-	39.68	31.38	6.45	34.57
AV	7.3194G	44.81	54.00	-9.19	9.29	3	Vertical	159	1.14	-	35.52	35.83	8.45	34.99
PK	4.87946G	53.87	74.00	-20.13	3.25	3	Vertical	238	2.27	-	50.62	31.38	6.45	34.57
PK	7.31916G	58.89	74.00	-15.11	9.29	3	Vertical	159	1.14	-	49.60	35.83	8.45	34.99

BT-LE(1Mbps)

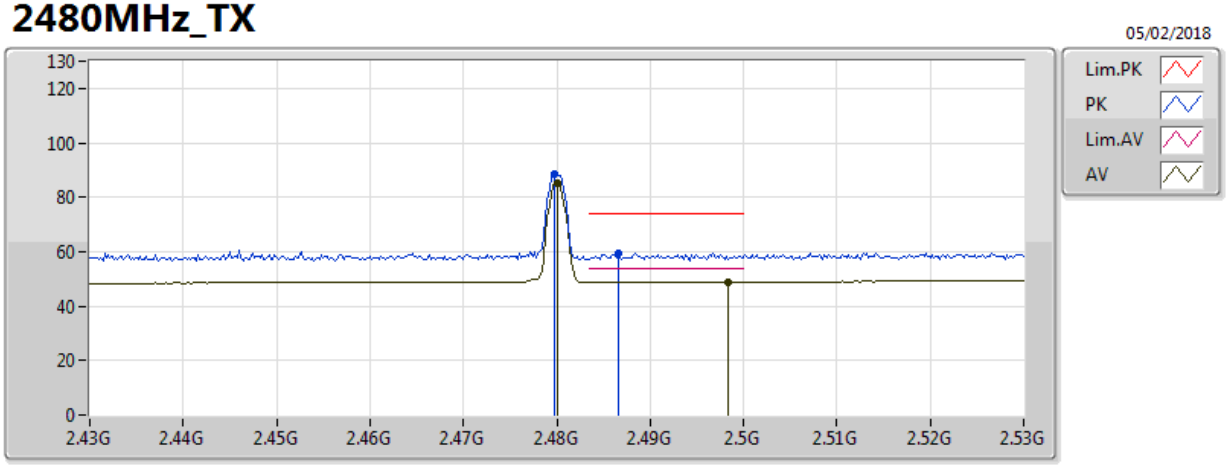
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87994G	43.80	54.00	-10.20	3.26	3	Horizontal	253	2.35	-	40.54	31.38	6.45	34.57
AV	7.3194G	45.90	54.00	-8.10	9.29	3	Horizontal	131	1.10	-	36.61	35.83	8.45	34.99
PK	4.87994G	54.89	74.00	-19.11	3.26	3	Horizontal	253	2.35	-	51.64	31.38	6.45	34.57
PK	7.31916G	59.52	74.00	-14.48	9.29	3	Horizontal	131	1.10	-	50.23	35.83	8.45	34.99

BT-LE(1Mbps)

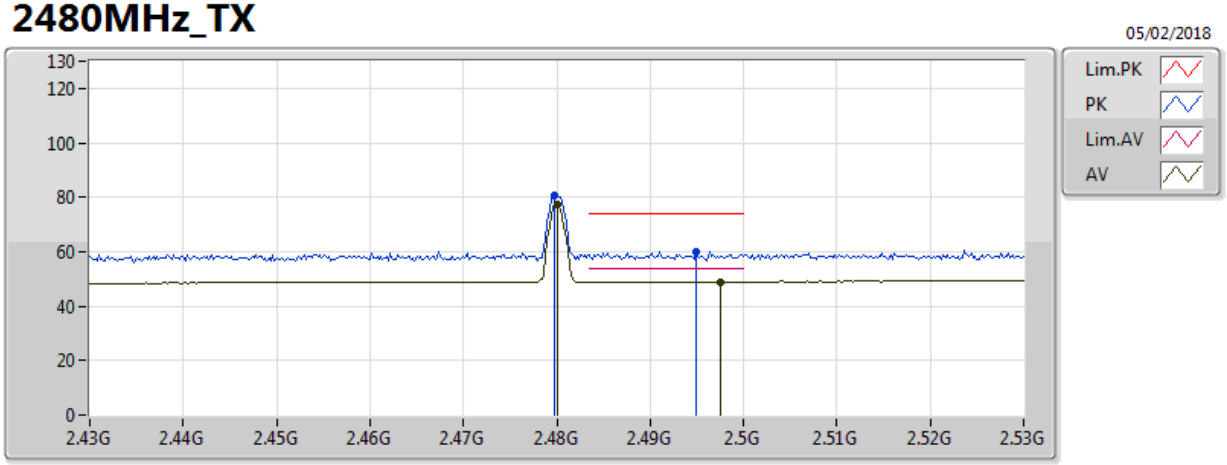
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	85.21	Inf	-Inf	35.35	3	Vertical	348	1.49	-	49.86	27.24	8.10	-
AV	2.4984G	49.02	54.00	-4.98	35.43	3	Vertical	348	1.49	-	13.58	27.30	8.14	-
PK	2.4798G	88.29	Inf	-Inf	35.35	3	Vertical	348	1.49	-	52.94	27.24	8.10	-
PK	2.4866G	59.63	74.00	-14.37	35.38	3	Vertical	348	1.49	-	24.26	27.26	8.11	-

BT-LE(1Mbps)

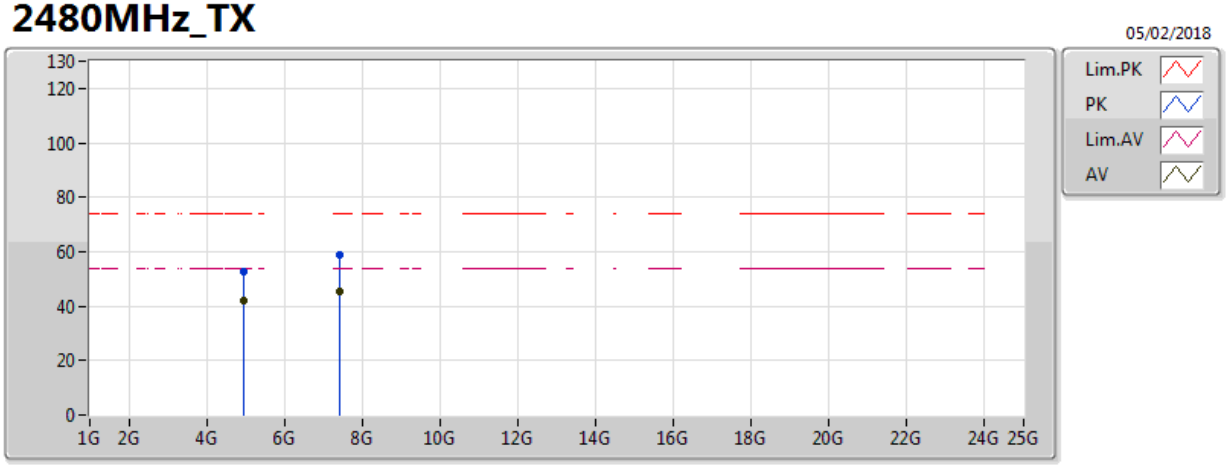
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	77.25	Inf	-Inf	35.35	3	Horizontal	323	1.50	-	41.90	27.24	8.10	-
AV	2.4976G	49.00	54.00	-5.00	35.43	3	Horizontal	323	1.50	-	13.57	27.29	8.14	-
PK	2.4798G	80.86	Inf	-Inf	35.35	3	Horizontal	323	1.50	-	45.51	27.24	8.10	-
PK	2.495G	59.88	74.00	-14.12	35.42	3	Horizontal	323	1.50	-	24.47	27.29	8.13	-

BT-LE(1Mbps)

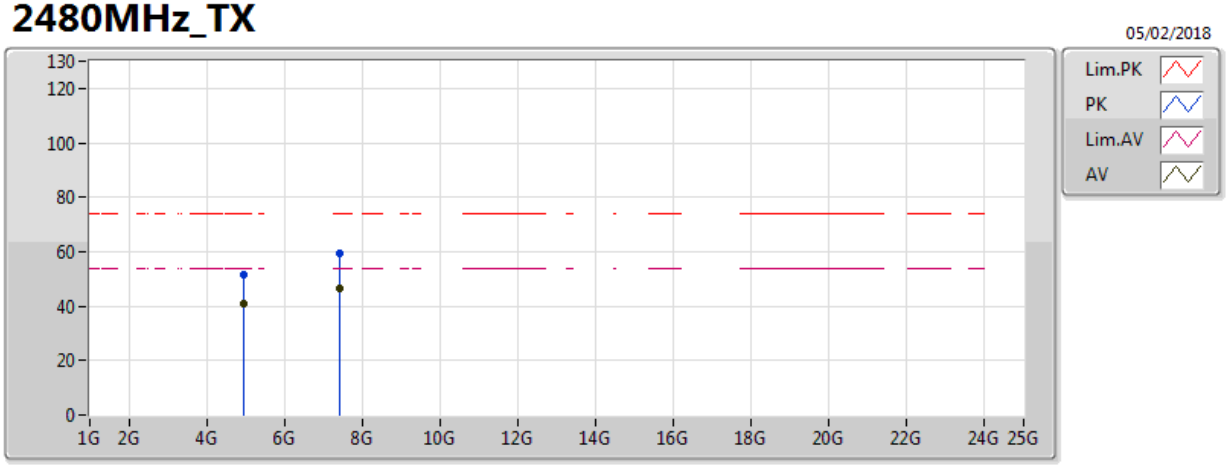
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95988G	41.75	54.00	-12.25	3.43	3	Vertical	220	1.10	-	38.32	31.53	6.46	34.56
AV	7.4394G	45.49	54.00	-8.51	9.81	3	Vertical	219	1.34	-	35.67	36.14	8.69	35.02
PK	4.95952G	52.83	74.00	-21.17	3.42	3	Vertical	220	1.10	-	49.40	31.53	6.46	34.56
PK	7.43916G	59.00	74.00	-15.00	9.81	3	Vertical	219	1.34	-	49.19	36.14	8.69	35.02

BT-LE(1Mbps)

2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95994G	40.81	54.00	-13.19	3.43	3	Horizontal	159	1.50	-	37.39	31.53	6.46	34.56
AV	7.43946G	46.23	54.00	-7.77	9.81	3	Horizontal	198	1.01	-	36.41	36.14	8.69	35.02
PK	4.95958G	51.58	74.00	-22.42	3.43	3	Horizontal	159	1.50	-	48.15	31.53	6.46	34.56
PK	7.4391G	59.64	74.00	-14.36	9.81	3	Horizontal	198	1.01	-	49.83	36.14	8.69	35.02