FCC Test Report

Equipment	:	Philips Wireless Gateway
Brand Name	:	PHILIPS
Model No.	:	LCN1840/05
FCC ID	:	2AGBW-LCN1840
Standard	:	47 CFR FCC Part 15.247
Operating Band	:	2400 MHz – 2483.5 MHz
Function	:	☒Point-to-multipoint; ☐Point-to-point
Applicant / Manufacturer	:	Philips Lighting(China) Investment Co., Ltd. Building 9, Lane 888, Tianlin Road, Minhang District, Shanghai 200233 China

The product sample received on Oct. 19, 2017 and completely tested on Nov. 16, 2017. 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.

Phoenix Chen / Assistant Manager

Testing Laboratory
1190

Table of Contents

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
FR7O1918AL	Rev. 01	Initial issue of report	Dec. 12, 2017

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	-	-	Printed PIFA Antenna	Murata	1.7

1.1.3 EUT Information

Identify EUT		
BT Chip	Brand: SiliconLabs / Model Name: EFR32MG12P432F1024IM48-B	
Operational Condition		
EUT Power Type	From AC Adapter	
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)	0.617	2.097	385.625u	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	TH01-HY	Tim	24.3°C / 65.2%	09/Nov/2017
Radiated	03CH09-HY	Eric	23°C / 60%	16/Nov/2017
AC Conduction	CO04-HY	Thor Wei	23°C / 60%	10/Nov/2017

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 (30MHz ~ 1,000MHz)	2.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	2.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	2.9 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	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	BGTool 2.4.2-2500

Mode	Power Setting
BT-LE(1Mbps)	-
2402MHz	20
2440MHz	20
2480MHz	20

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	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT		V	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	WLAN 2.4GHz+BT
	WLAN 2.4GHz+Zigbee
Refer to Sporton Test Report No.: FA7O1918 for Co-location RF Exposure Evaluation.	

2.4 Accessories

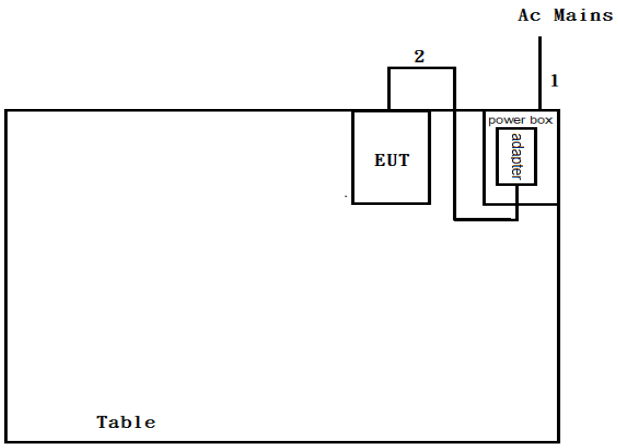
Accessories				
AC Adapter	Brand Name	PHILIPS	Model Name	S005BMM0500100
	Power Rating	I/P: 100 - 240Vac, 300m A, O/P: 5 Vdc, 5 W		
	Power Cord	1.5 meter, Non-Shielded cable, w/o ferrite core		

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	AC Source	G.W	APS-9102	-

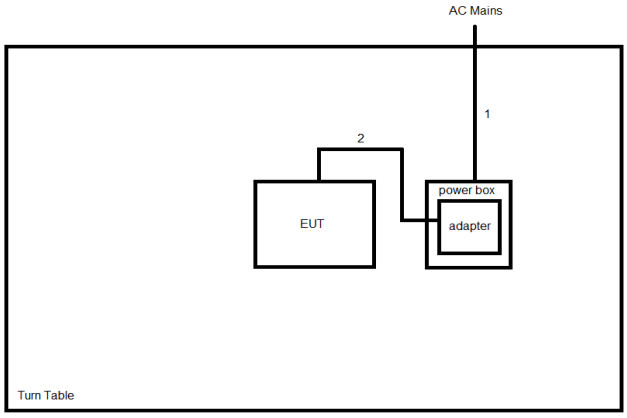
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



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

Test Setup Diagram - Radiated Test



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

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

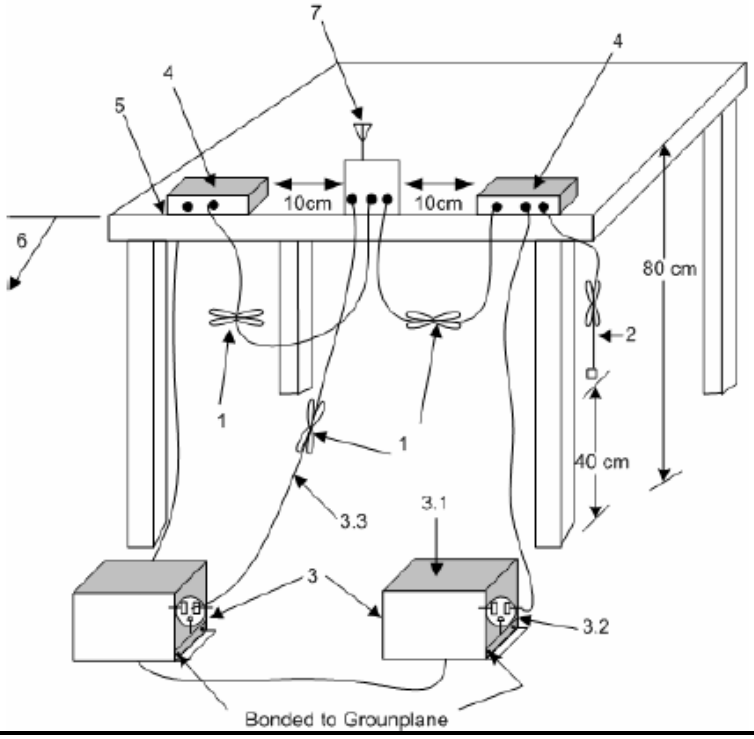
Refer a test equipment and calibration data table in this test report.

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.

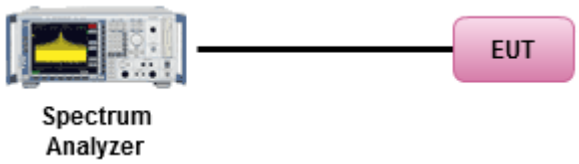
3.2.2 Measuring Instruments

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

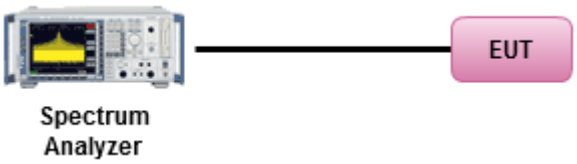
3.4.2 Measuring Instruments

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

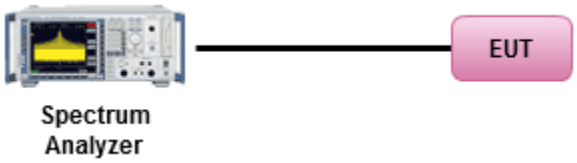
Refer a test equipment and calibration data table in this test report.

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.

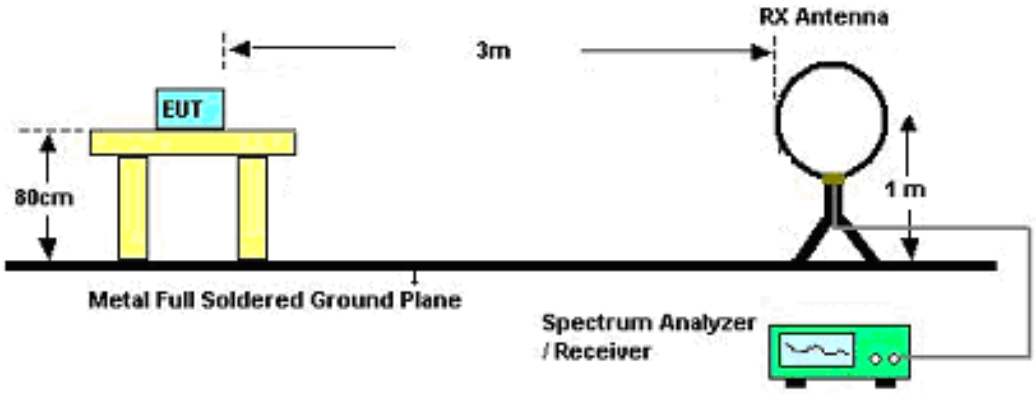
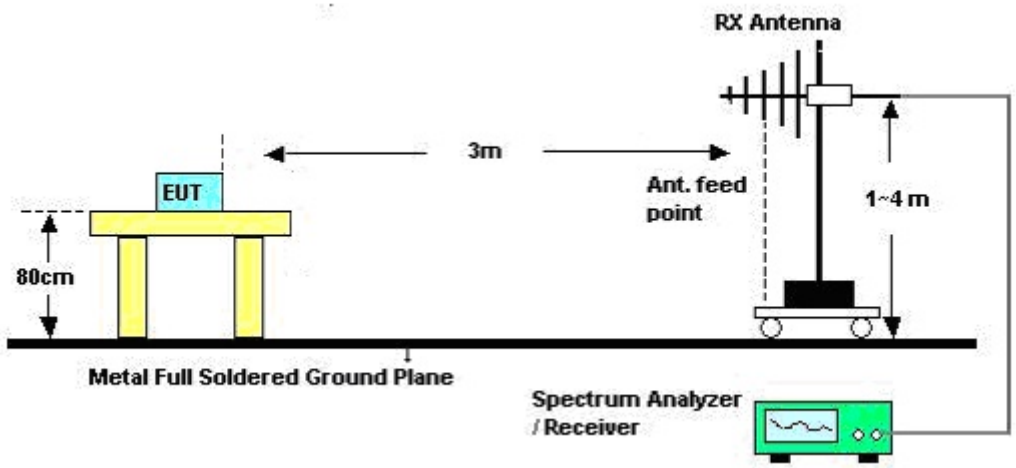
3.6.2 Measuring Instruments

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

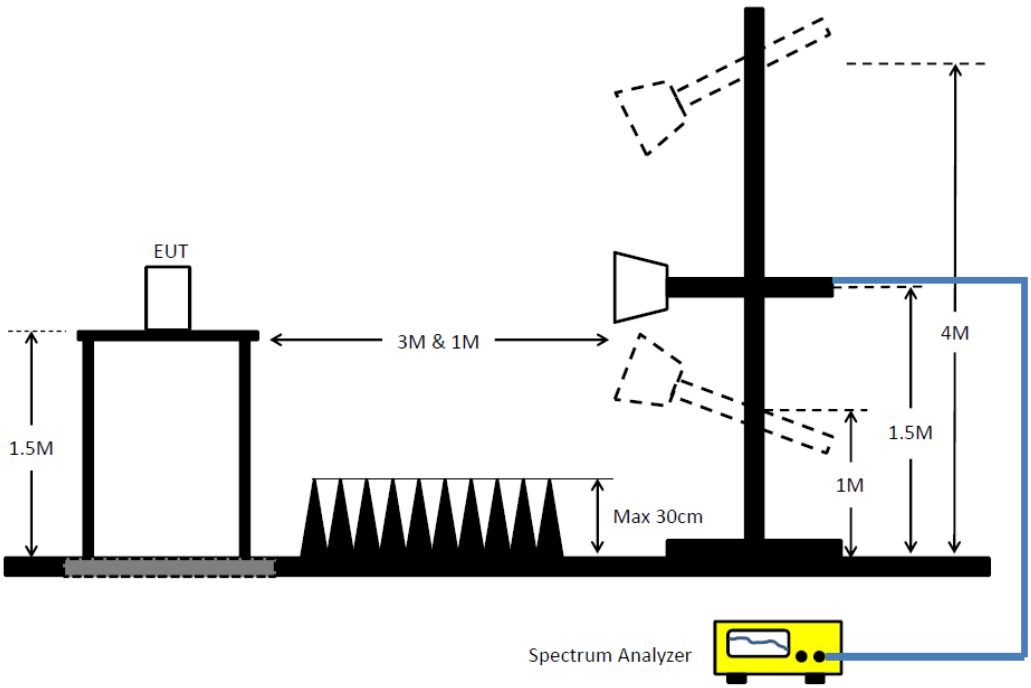
3.6.3 Test Procedures

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
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	15/Nov/2016	14/Nov/2017
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	R&S	ESH3-Z2	100921	10 kHz ~ 30 MHz	12/Oct/2017	11/Oct/2018

NCR : Non-Calibration Require

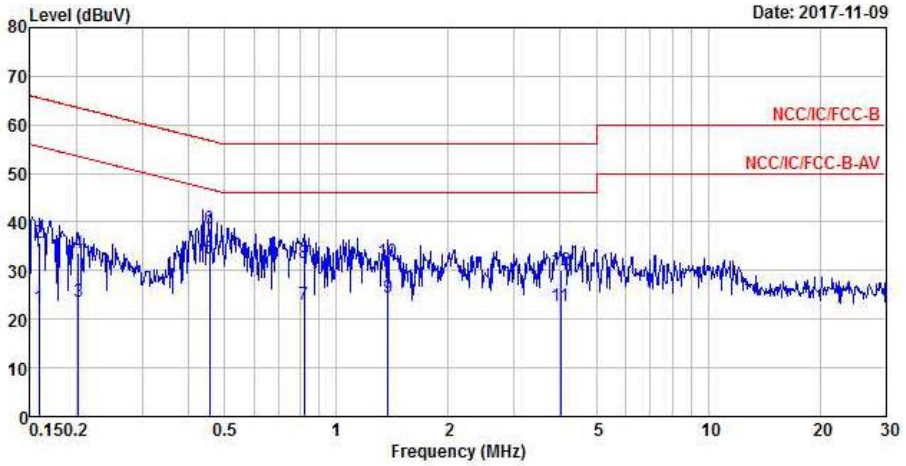
Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	25/Apr/2017	24/Apr/2018
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	21/Jun/2017	20/Jun/2018
Amplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	25/Apr/2017	24/Apr/2018
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	25/Apr/2017	24/Apr/2018
Spectrum Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	20/Jul/2017	19/Jul/2018
Bilog Antenna	TESEQ	CBL 6111D	35418	30MHz~1GHz	09/Sep/2017	08/Sep/2018
Horn Antenna	SCHWARZBECK	BBHA 9120D	BBHA9120D 1534	1GHz~18GHz	28/Apr/2017	27/Apr/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170614	18GHz ~ 40GHz	06/Feb/2017	05/Feb/2018
Loop Antenna	TESTQ	HLA 6120	31244	9 kHz~30 MHz	02/Mar/2017	01/Mar/2018
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	02/Feb/2017	01/Feb/2018
RF Cable-high	Jye Bao	RG142	03CH09-HY	1GHz ~ 40GHz	02/Feb/2017	01/Feb/2018
Receiver	R&S	ESR3	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	101013	9kHz~40GHz	30/Dec/2016	29/Dec/2017
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10712/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018

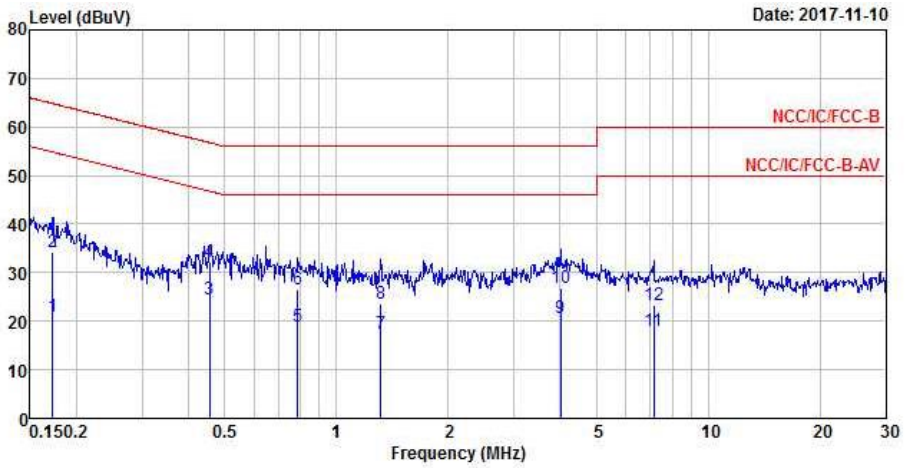
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Adapter Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15816	22.50	-33.06	55.56	12.86	9.61	0.03	Average
2	0.15816	35.82	-29.74	65.56	26.18	9.61	0.03	QP
3	0.20181	23.71	-29.83	53.54	14.04	9.67	0.00	Average
4	0.20181	33.76	-29.78	63.54	24.09	9.67	0.00	QP
5 MAX	0.45636	32.37	-14.39	46.76	22.66	9.62	0.09	Average
6	0.45636	38.57	-18.19	56.76	28.86	9.62	0.09	QP
7	0.81737	22.95	-23.05	46.00	13.33	9.60	0.02	Average
8	0.81737	31.45	-24.55	56.00	21.83	9.60	0.02	QP
9	1.37380	24.57	-21.43	46.00	14.95	9.62	0.00	Average
10	1.37380	31.82	-24.18	56.00	22.20	9.62	0.00	QP
11	4.00618	22.76	-23.24	46.00	12.96	9.71	0.09	Average
12	4.00618	30.05	-25.95	56.00	20.25	9.71	0.09	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	Adapter Mode		



		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.17215	20.96	-33.90	54.86	11.28	9.66	0.02	Average
2		0.17215	34.30	-30.56	64.86	24.62	9.66	0.02	QP
3	MAX	0.45636	24.43	-22.33	46.76	14.67	9.67	0.09	Average
4		0.45636	32.24	-24.52	56.76	22.48	9.67	0.09	QP
5		0.78761	18.91	-27.09	46.00	9.24	9.64	0.03	Average
6		0.78761	26.60	-29.40	56.00	16.93	9.64	0.03	QP
7		1.31678	17.32	-28.68	46.00	7.63	9.69	0.00	Average
8		1.31678	23.49	-32.51	56.00	13.80	9.69	0.00	QP
9		4.00618	20.70	-25.30	46.00	10.84	9.77	0.09	Average
10		4.00618	26.75	-29.25	56.00	16.89	9.77	0.09	QP
11		7.13743	17.99	-32.01	50.00	8.08	9.75	0.16	Average
12		7.13743	23.40	-36.60	60.00	13.49	9.75	0.16	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)	696.25k	1.046M	1M05F1D	687.5k	1.041M

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

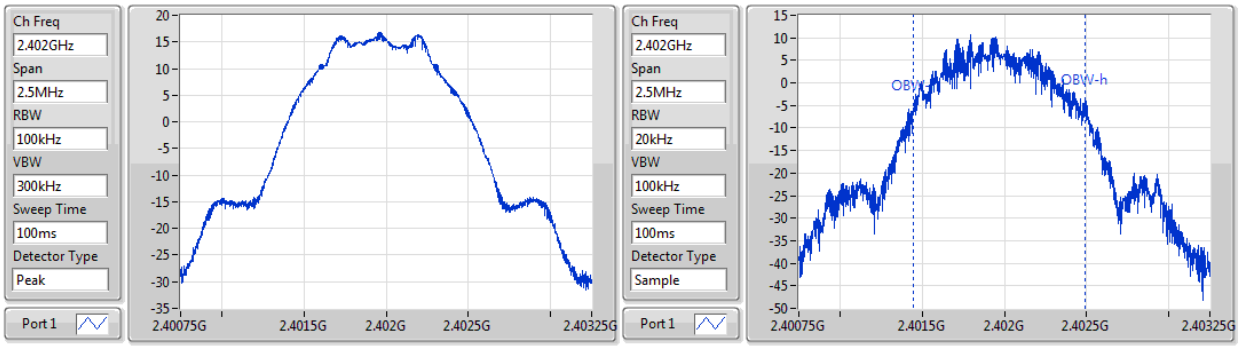
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	500k	696.25k	1.046M
2440MHz_TnomVnom	Pass	500k	695k	1.046M
2480MHz_TnomVnom	Pass	500k	687.5k	1.041M

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

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

2402MHz

09/11/2017

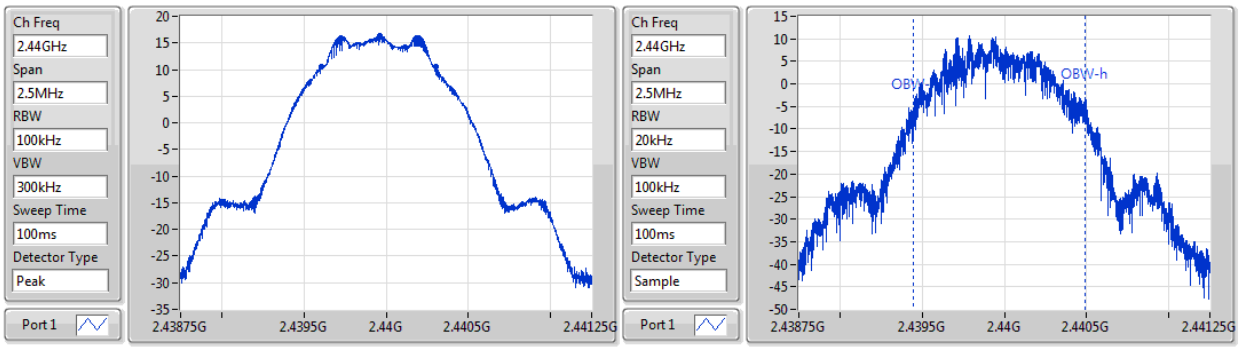


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
696.25k	2.401608G	2.402304G	1.046M	2.401447G	2.402492G	500k	1

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

2440MHz

09/11/2017

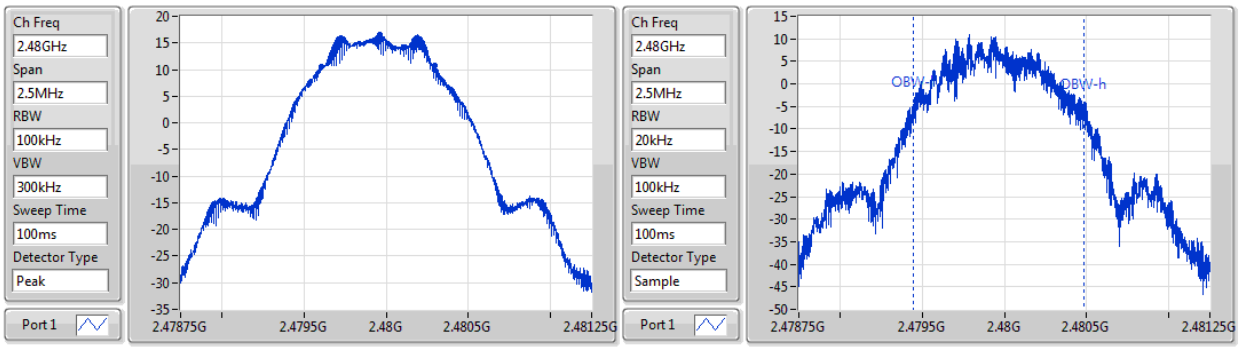


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
695k	2.439605G	2.4403G	1.046M	2.439447G	2.440492G	500k	1

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

2480MHz

09/11/2017



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
687.5k	2.479605G	2.480293G	1.041M	2.479445G	2.480486G	500k	1

Summary

Mode	Power	Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	16.98	0.04989

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.70	16.66	30.00
2440MHz_TnomVnom	Pass	1.70	16.82	30.00
2480MHz_TnomVnom	Pass	1.70	16.98	30.00

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	1.32

RBW=3kHz.

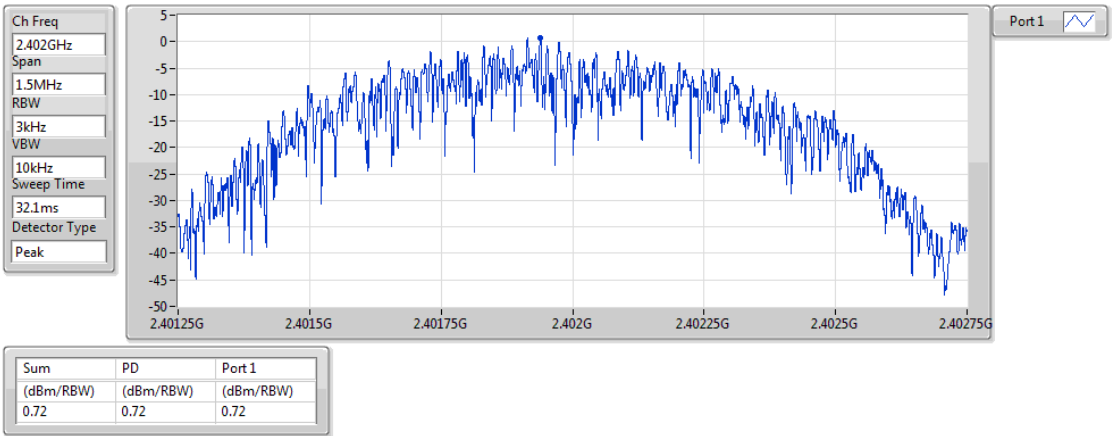
Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.70	0.72	8.00
2440MHz_TnomVnom	Pass	1.70	1.13	8.00
2480MHz_TnomVnom	Pass	1.70	1.32	8.00

RBW=3kHz.

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

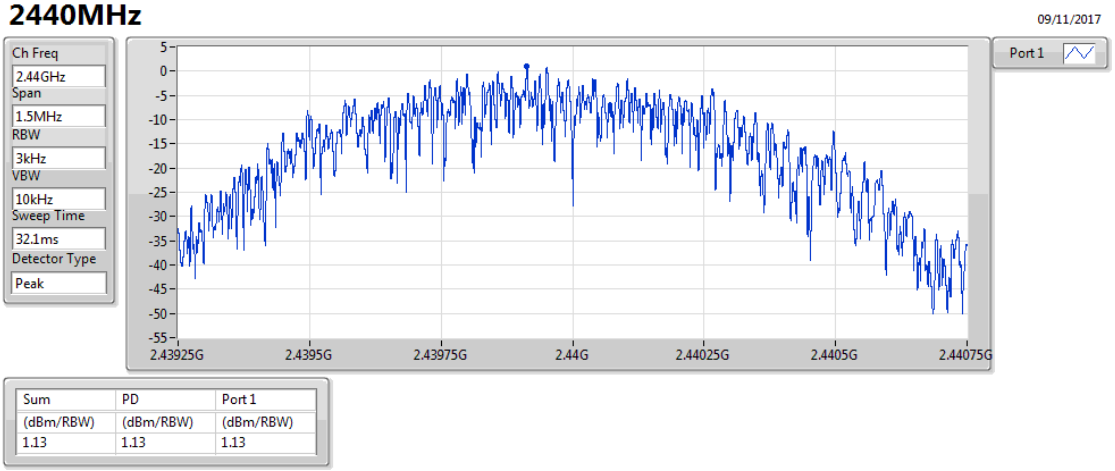
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.72	0.72	0.72

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

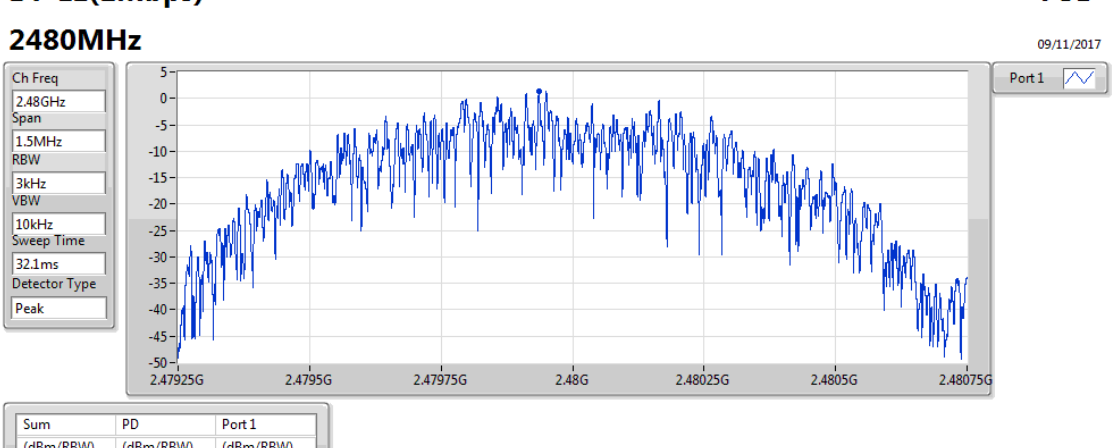
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.13	1.13	1.13

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

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.32	1.32	1.32

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	2.480327G	16.49	-13.51	2.398G	-45.71	2.399756G	-36.66	2.483756G	-58.95	7.205102G	-48.62	1

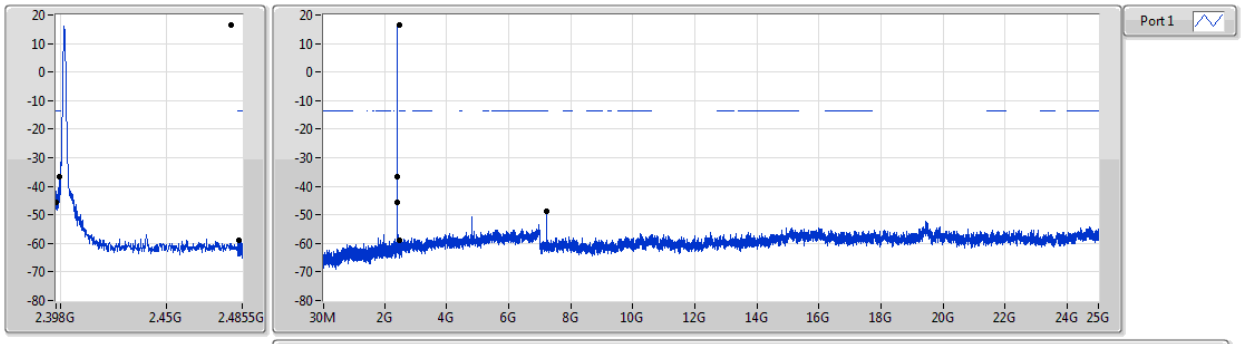
Result

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	2.480327G	16.49	-13.51	2.398G	-45.71	2.399756G	-36.66	2.483756G	-58.95	7.205102G	-48.62	1
2440MHz_TnomVnom	Pass	2.480327G	16.49	-13.51	1.840336G	-59.61	2.398664G	-59.13	2.4836G	-58.74	6.996843G	-53.83	1
2480MHz_TnomVnom	Pass	2.480327G	16.49	-13.51	1.875856G	-58.54	2.398112G	-59.53	2.483812G	-42.24	2.4855G	-48.78	1

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

2402MHz

09/11/2017

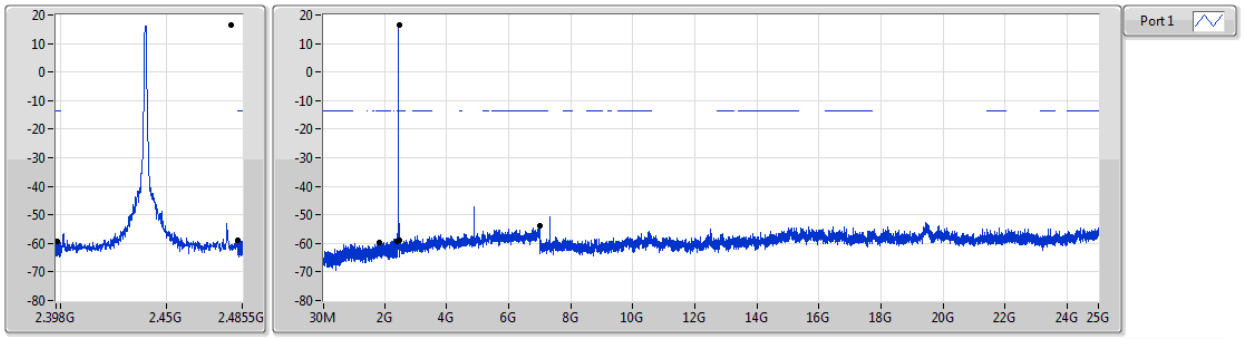


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.480327G	16.49	-13.51	2.398G	-45.71	2.399756G	-36.66	2.483756G	-58.95	7.205102G	-48.62	1

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

2440MHz

09/11/2017

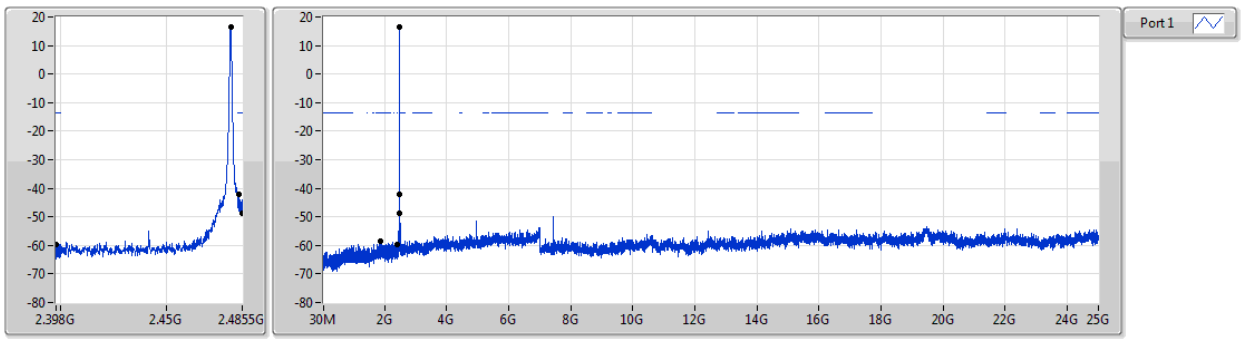


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.480327G	16.49	-13.51	1.840336G	-59.61	2.398664G	-59.13	2.4836G	-58.74	6.996843G	-53.83	1

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

2480MHz

09/11/2017



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.480327G	16.49	-13.51	1.875856G	-58.54	2.398112G	-59.53	2.483812G	-42.24	2.4855G	-48.78	1

Summary

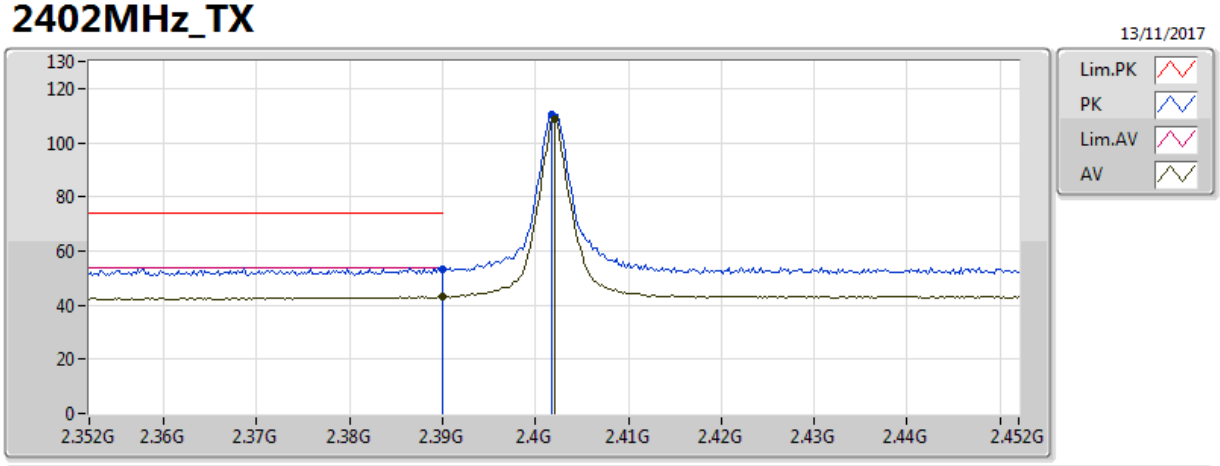
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	2.4836G	53.44	54.00	-0.56	33.09	3	Horizontal	0	2.47	-

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	2.3898G	43.00	54.00	-11.00	30.93	3	Horizontal	346	1.68	-
2402MHz	Pass	AV	2.402G	109.37	Inf	-Inf	30.98	3	Horizontal	346	1.68	-
2402MHz	Pass	PK	2.3898G	53.02	74.00	-20.98	30.93	3	Horizontal	346	1.68	-
2402MHz	Pass	PK	2.402G	110.82	Inf	-Inf	30.98	3	Horizontal	346	1.68	-
2402MHz	Pass	AV	2.389998G	42.92	54.00	-11.08	30.93	3	Vertical	264	1.30	-
2402MHz	Pass	AV	2.402G	108.85	Inf	-Inf	30.98	3	Vertical	264	1.30	-
2402MHz	Pass	PK	2.389998G	52.96	74.00	-21.04	30.93	3	Vertical	264	1.30	-
2402MHz	Pass	PK	2.4018G	110.45	Inf	-Inf	30.98	3	Vertical	264	1.30	-
2402MHz	Pass	AV	4.804G	41.71	54.00	-12.29	2.04	3	Horizontal	210	2.70	-
2402MHz	Pass	PK	4.804G	49.01	74.00	-24.99	2.04	3	Horizontal	210	2.70	-
2402MHz	Pass	AV	4.804G	42.21	54.00	-11.79	2.04	3	Vertical	302	1.87	-
2402MHz	Pass	PK	4.804G	49.31	74.00	-24.69	2.04	3	Vertical	302	1.87	-
2440MHz	Pass	AV	2.3896G	44.20	54.00	-9.80	30.93	3	Horizontal	214	1.98	-
2440MHz	Pass	AV	2.44G	113.60	Inf	-Inf	31.11	3	Horizontal	214	1.98	-
2440MHz	Pass	AV	2.4984G	45.04	54.00	-8.96	31.32	3	Horizontal	214	1.98	-
2440MHz	Pass	PK	2.3892G	51.95	74.00	-22.05	30.93	3	Horizontal	214	1.98	-
2440MHz	Pass	PK	2.4396G	114.20	Inf	-Inf	31.11	3	Horizontal	214	1.98	-
2440MHz	Pass	PK	2.4992G	54.79	74.00	-19.21	31.33	3	Horizontal	214	1.98	-
2440MHz	Pass	AV	2.3896G	43.82	54.00	-10.18	30.93	3	Vertical	278	1.65	-
2440MHz	Pass	AV	2.44G	110.69	Inf	-Inf	31.11	3	Vertical	278	1.65	-
2440MHz	Pass	AV	2.5G	44.95	54.00	-9.05	31.33	3	Vertical	278	1.65	-
2440MHz	Pass	PK	2.3892G	53.40	74.00	-20.60	30.93	3	Vertical	278	1.65	-
2440MHz	Pass	PK	2.4404G	111.32	Inf	-Inf	31.12	3	Vertical	278	1.65	-
2440MHz	Pass	PK	2.4972G	54.82	74.00	-19.18	31.32	3	Vertical	278	1.65	-
2440MHz	Pass	AV	4.88G	40.35	54.00	-13.65	2.28	3	Horizontal	205	2.90	-
2440MHz	Pass	PK	4.88G	47.66	74.00	-26.34	2.28	3	Horizontal	205	2.90	-
2440MHz	Pass	AV	4.88G	39.32	54.00	-14.68	2.28	3	Vertical	299	1.95	-
2440MHz	Pass	PK	4.88G	46.88	74.00	-27.12	2.28	3	Vertical	299	1.95	-
2480MHz	Pass	AV	2.48G	110.14	Inf	-Inf	33.08	3	Horizontal	0	2.47	-
2480MHz	Pass	AV	2.4836G	53.44	54.00	-0.56	33.09	3	Horizontal	0	2.47	-
2480MHz	Pass	PK	2.4798G	111.09	Inf	-Inf	33.08	3	Horizontal	0	2.47	-
2480MHz	Pass	PK	2.4836G	64.87	74.00	-9.13	33.09	3	Horizontal	0	2.47	-
2480MHz	Pass	AV	2.48G	106.73	Inf	-Inf	33.08	3	Vertical	38	1.34	-
2480MHz	Pass	AV	2.4836G	50.56	54.00	-3.44	33.09	3	Vertical	38	1.34	-
2480MHz	Pass	PK	2.4798G	107.75	Inf	-Inf	33.08	3	Vertical	38	1.34	-
2480MHz	Pass	PK	2.4836G	62.73	74.00	-11.27	33.09	3	Vertical	38	1.34	-
2480MHz	Pass	AV	4.96G	39.20	54.00	-14.80	4.49	3	Horizontal	18	3.14	-
2480MHz	Pass	PK	4.96G	48.28	74.00	-25.72	4.49	3	Horizontal	18	3.14	-
2480MHz	Pass	AV	4.96G	36.78	54.00	-17.22	4.49	3	Vertical	353	1.01	-
2480MHz	Pass	PK	4.96G	47.02	74.00	-26.98	4.49	3	Vertical	353	1.01	-

BT-LE(1Mbps)

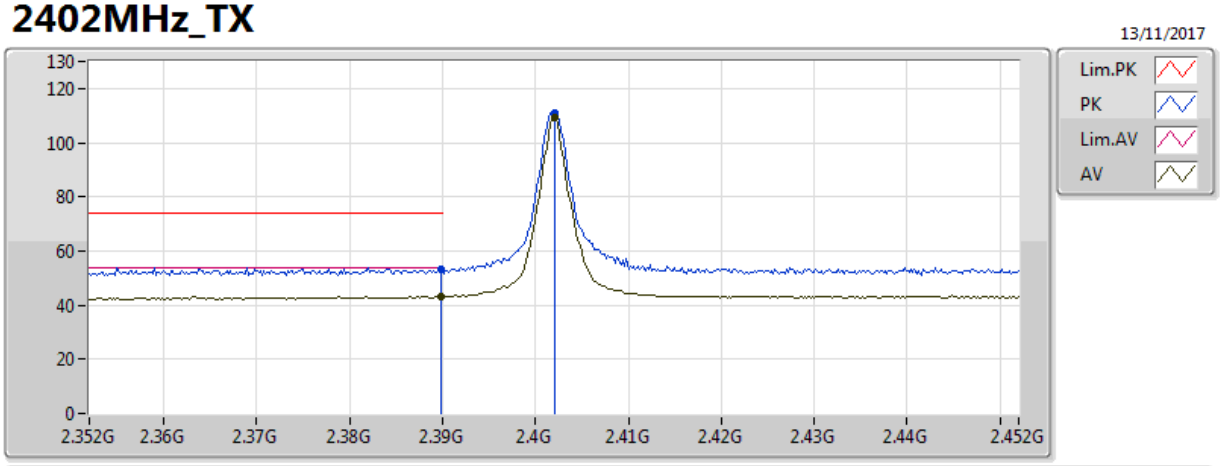
2402MHz_TX



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	2.389998G	42.92	54.00	-11.08	30.93	3	Vertical	264	1.30	-	11.99	27.31	3.62	-
AV	2.402G	108.85	Inf	-Inf	30.98	3	Vertical	264	1.30	-	77.88	27.35	3.63	-
PK	2.389998G	52.96	74.00	-21.04	30.93	3	Vertical	264	1.30	-	22.03	27.31	3.62	-
PK	2.4018G	110.45	Inf	-Inf	30.98	3	Vertical	264	1.30	-	79.47	27.34	3.63	-

BT-LE(1Mbps)

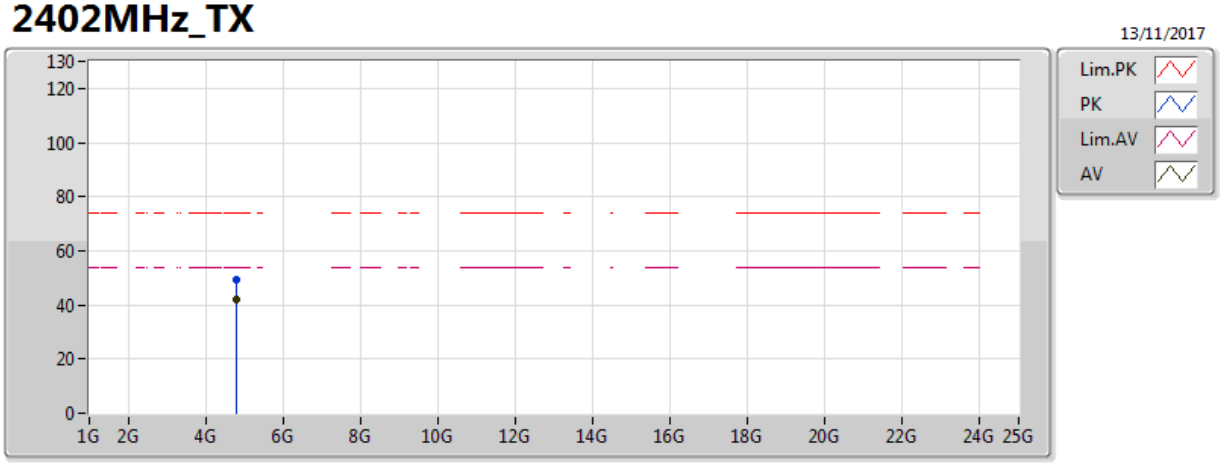
2402MHz_TX



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	2.3898G	43.00	54.00	-11.00	30.93	3	Horizontal	346	1.68	-	12.07	27.31	3.62	-
AV	2.402G	109.37	Inf	-Inf	30.98	3	Horizontal	346	1.68	-	78.39	27.35	3.63	-
PK	2.3898G	53.02	74.00	-20.98	30.93	3	Horizontal	346	1.68	-	22.09	27.31	3.62	-
PK	2.402G	110.82	Inf	-Inf	30.98	3	Horizontal	346	1.68	-	79.84	27.35	3.63	-

BT-LE(1Mbps)

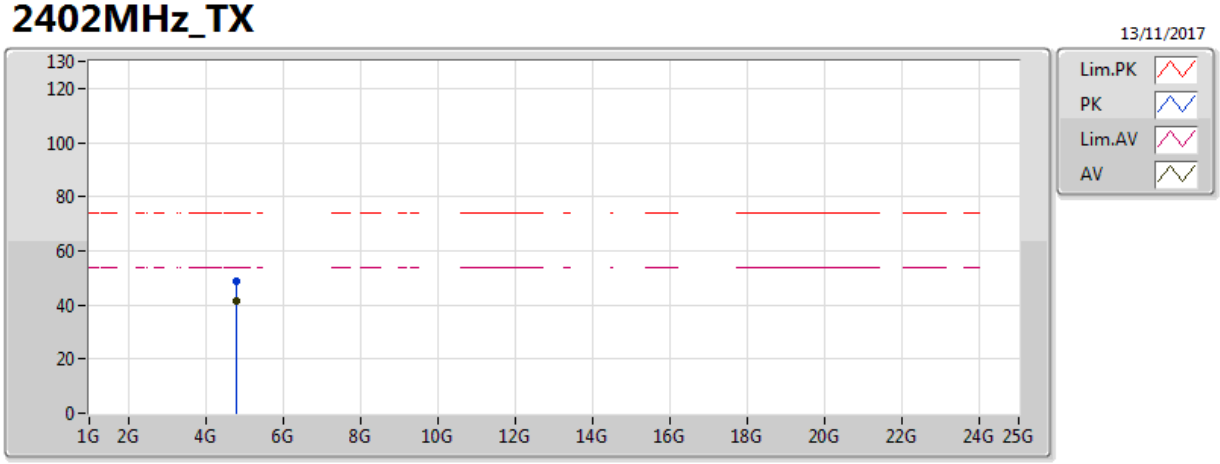
2402MHz_TX



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	4.804G	42.21	54.00	-11.79	2.04	3	Vertical	302	1.87	-	40.17	31.25	5.38	34.59
PK	4.804G	49.31	74.00	-24.69	2.04	3	Vertical	302	1.87	-	47.27	31.25	5.38	34.59

BT-LE(1Mbps)

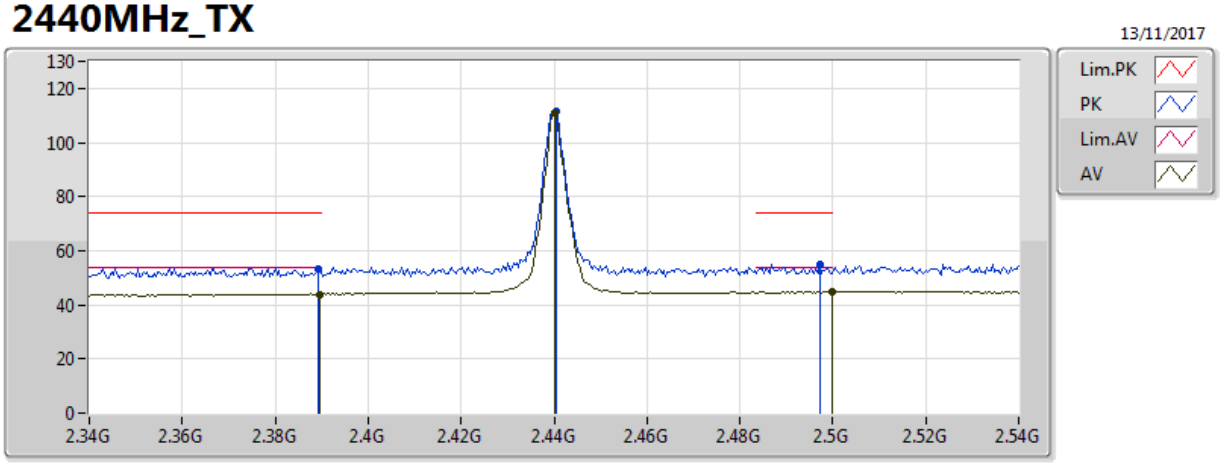
2402MHz_TX



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	4.804G	41.71	54.00	-12.29	2.04	3	Horizontal	210	2.70	-	39.67	31.25	5.38	34.59
PK	4.804G	49.01	74.00	-24.99	2.04	3	Horizontal	210	2.70	-	46.97	31.25	5.38	34.59

BT-LE(1Mbps)

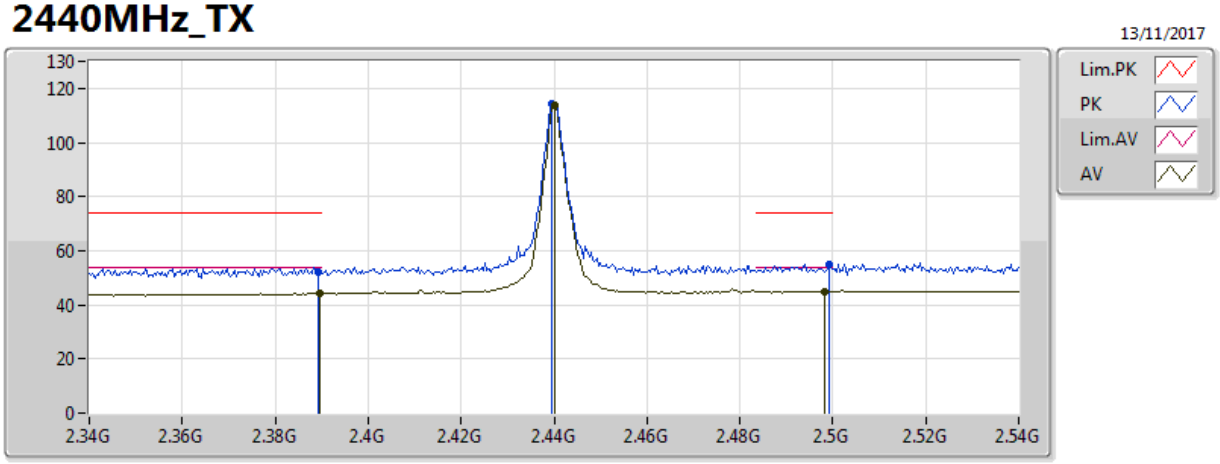
2440MHz_TX



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	2.3896G	43.82	54.00	-10.18	30.93	3	Vertical	278	1.65	-	12.89	27.31	3.62	-
AV	2.44G	110.69	Inf	-Inf	31.11	3	Vertical	278	1.65	-	79.58	27.44	3.67	-
AV	2.5G	44.95	54.00	-9.05	31.33	3	Vertical	278	1.65	-	13.62	27.60	3.73	-
PK	2.3892G	53.40	74.00	-20.60	30.93	3	Vertical	278	1.65	-	22.47	27.31	3.62	-
PK	2.4404G	111.32	Inf	-Inf	31.12	3	Vertical	278	1.65	-	80.20	27.45	3.67	-
PK	2.4972G	54.82	74.00	-19.18	31.32	3	Vertical	278	1.65	-	23.50	27.59	3.73	-

BT-LE(1Mbps)

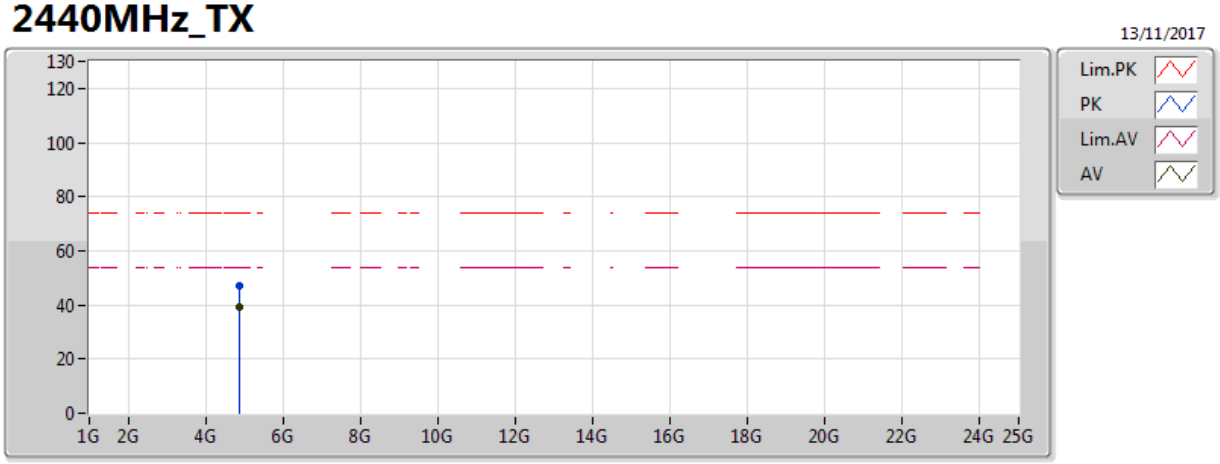
2440MHz_TX



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	2.3896G	44.20	54.00	-9.80	30.93	3	Horizontal	214	1.98	-	13.27	27.31	3.62	-
AV	2.44G	113.60	Inf	-Inf	31.11	3	Horizontal	214	1.98	-	82.48	27.44	3.67	-
AV	2.4984G	45.04	54.00	-8.96	31.32	3	Horizontal	214	1.98	-	13.72	27.60	3.73	-
PK	2.3892G	51.95	74.00	-22.05	30.93	3	Horizontal	214	1.98	-	21.02	27.31	3.62	-
PK	2.4396G	114.20	Inf	-Inf	31.11	3	Horizontal	214	1.98	-	83.09	27.44	3.67	-
PK	2.4992G	54.79	74.00	-19.21	31.33	3	Horizontal	214	1.98	-	23.47	27.60	3.73	-

BT-LE(1Mbps)

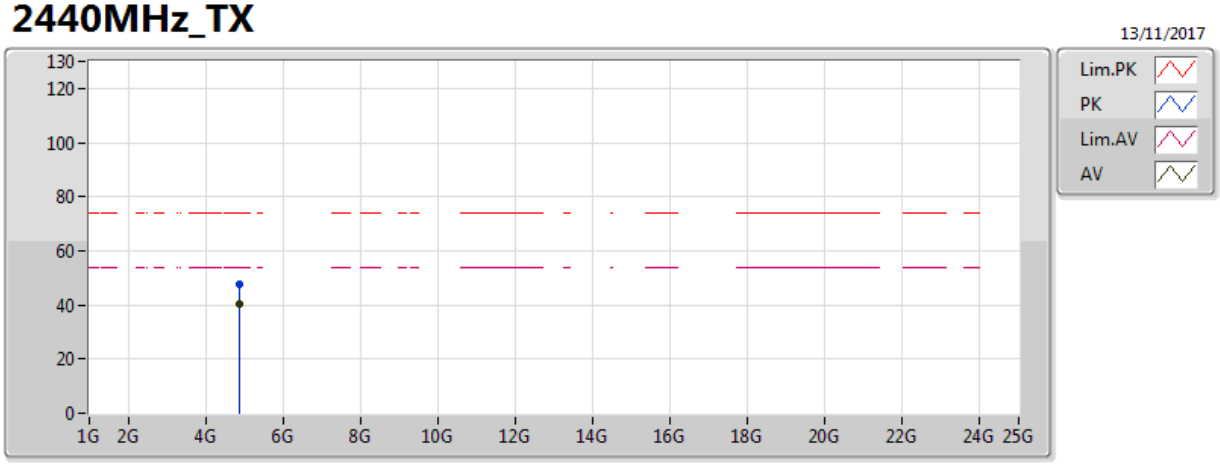
2440MHz_TX



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	4.88G	39.32	54.00	-14.68	2.28	3	Vertical	299	1.95	-	37.04	31.38	5.47	34.57
PK	4.88G	46.88	74.00	-27.12	2.28	3	Vertical	299	1.95	-	44.60	31.38	5.47	34.57

BT-LE(1Mbps)

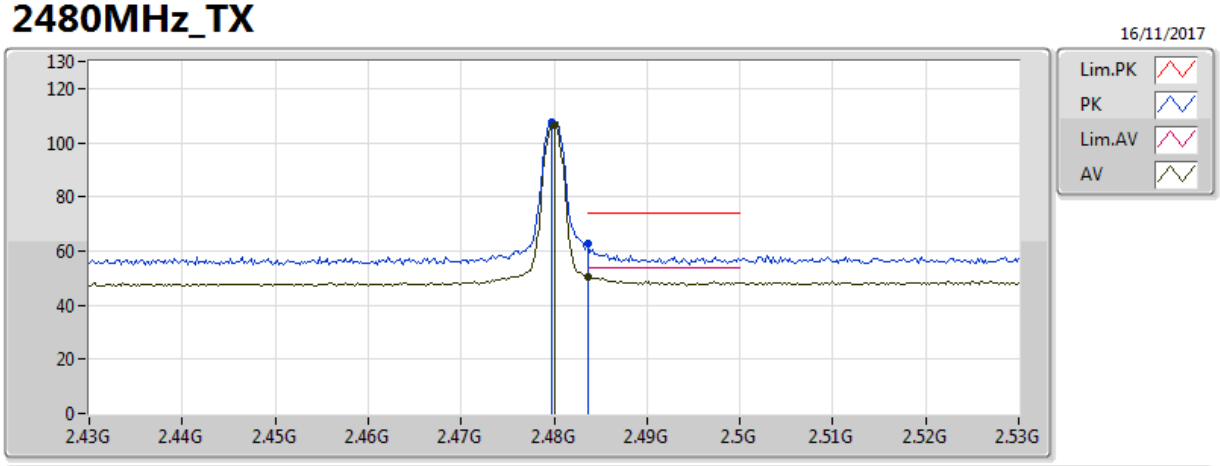
2440MHz_TX



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	4.88G	40.35	54.00	-13.65	2.28	3	Horizontal	205	2.90	-	38.07	31.38	5.47	34.57
PK	4.88G	47.66	74.00	-26.34	2.28	3	Horizontal	205	2.90	-	45.38	31.38	5.47	34.57

BT-LE(1Mbps)

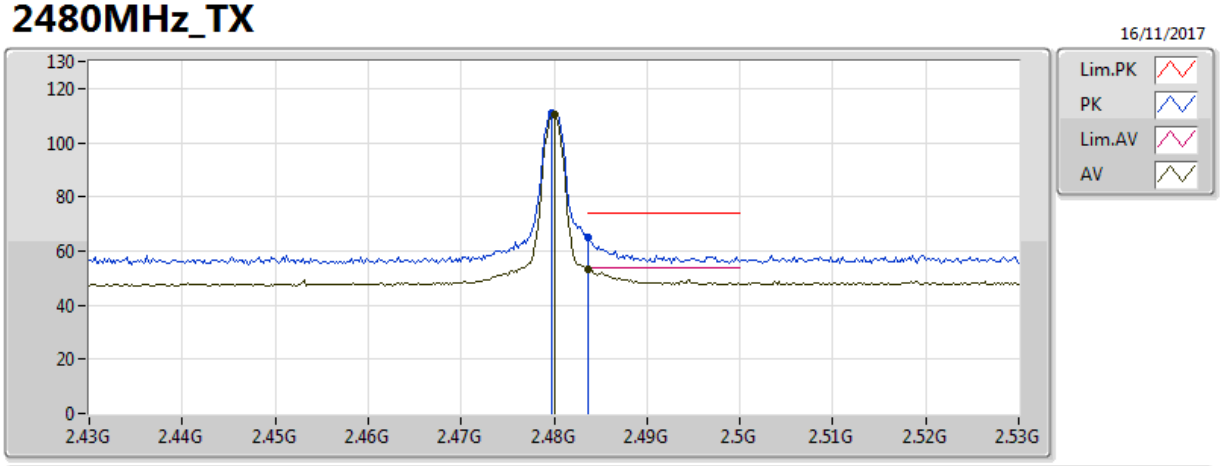
2480MHz_TX



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	106.73	Inf	-Inf	33.08	3	Vertical	38	1.34	-	73.65	27.24	5.84	-
AV	2.4836G	50.56	54.00	-3.44	33.09	3	Vertical	38	1.34	-	17.46	27.25	5.84	-
PK	2.4798G	107.75	Inf	-Inf	33.08	3	Vertical	38	1.34	-	74.68	27.24	5.84	-
PK	2.4836G	62.73	74.00	-11.27	33.09	3	Vertical	38	1.34	-	29.64	27.25	5.84	-

BT-LE(1Mbps)

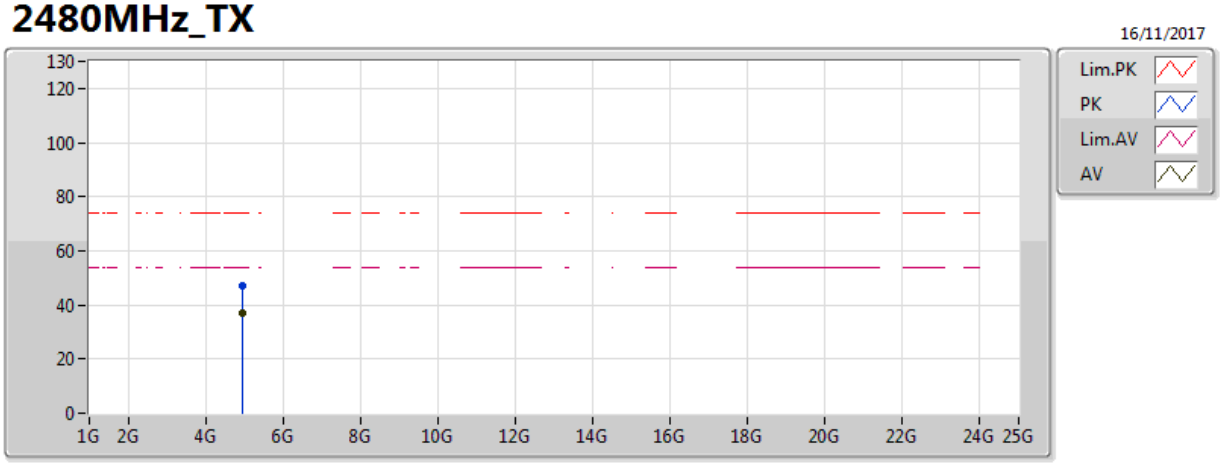
2480MHz_TX



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	110.14	Inf	-Inf	33.08	3	Horizontal	0	2.47	-	77.06	27.24	5.84	-
AV	2.4836G	53.44	54.00	-0.56	33.09	3	Horizontal	0	2.47	-	20.34	27.25	5.84	-
PK	2.4798G	111.09	Inf	-Inf	33.08	3	Horizontal	0	2.47	-	78.01	27.24	5.84	-
PK	2.4836G	64.87	74.00	-9.13	33.09	3	Horizontal	0	2.47	-	31.77	27.25	5.84	-

BT-LE(1Mbps)

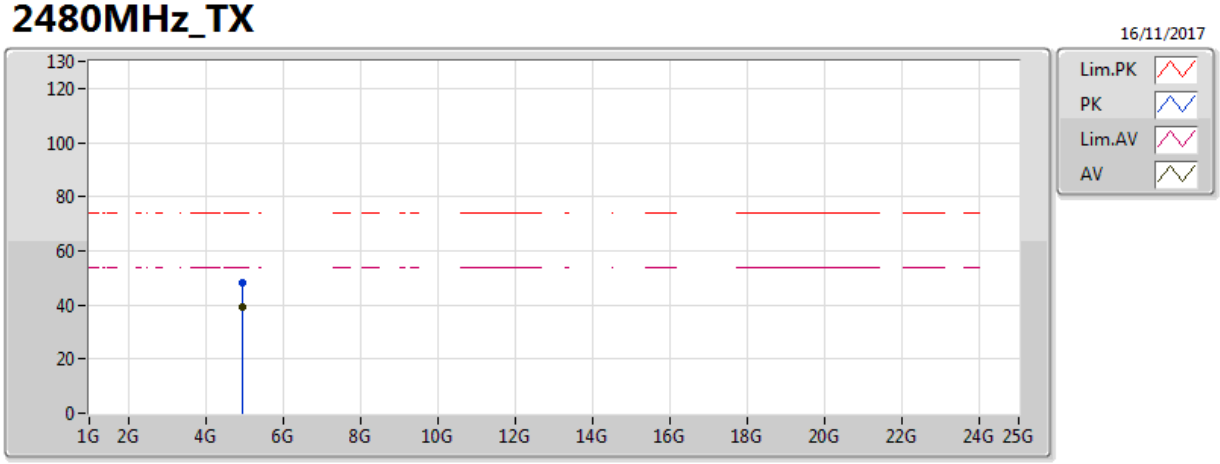
2480MHz_TX



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	4.96G	36.78	54.00	-17.22	4.49	3	Vertical	353	1.01	-	32.29	31.44	8.27	35.21
PK	4.96G	47.02	74.00	-26.98	4.49	3	Vertical	353	1.01	-	42.53	31.44	8.27	35.21

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	4.96G	39.20	54.00	-14.80	4.49	3	Horizontal	18	3.14	-	34.71	31.44	8.27	35.21
PK	4.96G	48.28	74.00	-25.72	4.49	3	Horizontal	18	3.14	-	43.79	31.44	8.27	35.21

Summary

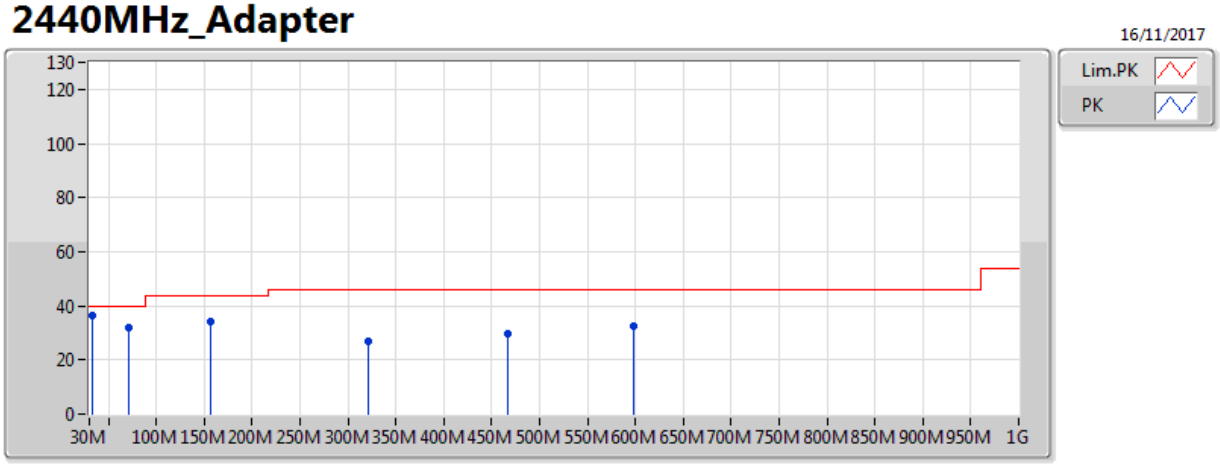
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	PK	33.88M	36.65	40.00	-3.35	-14.67	3	Vertical	360	1.00	-

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	70.74M	23.08	40.00	-16.92	-24.20	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	156.1M	35.78	43.50	-7.72	-18.55	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	217.21M	34.45	46.00	-11.55	-19.74	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	320.03M	31.56	46.00	-14.44	-14.80	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	597.45M	37.77	46.00	-8.23	-8.40	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	770.11M	36.49	46.00	-9.51	-5.45	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	33.88M	36.65	40.00	-3.35	-14.67	3	Vertical	360	1.00	-
2440MHz	Pass	PK	70.74M	32.00	40.00	-8.00	-24.20	3	Vertical	360	1.00	-
2440MHz	Pass	PK	156.1M	34.19	43.50	-9.31	-18.55	3	Vertical	360	1.00	-
2440MHz	Pass	PK	321M	26.77	46.00	-19.23	-14.77	3	Vertical	360	1.00	-
2440MHz	Pass	PK	467.47M	29.48	46.00	-16.52	-10.48	3	Vertical	360	1.00	-
2440MHz	Pass	PK	597.45M	32.50	46.00	-13.50	-8.40	3	Vertical	360	1.00	-

BT-LE(1Mbps)

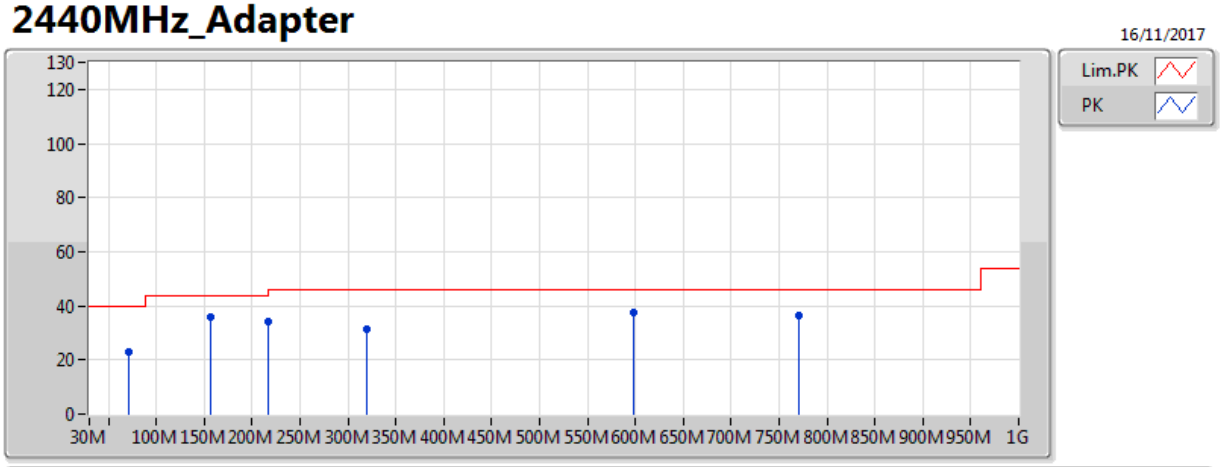
2440MHz_Adapter



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	33.88M	36.65	40.00	-3.35	-14.67	3	Vertical	360	1.00	-	51.32	21.64	0.99	37.30
PK	70.74M	32.00	40.00	-8.00	-24.20	3	Vertical	360	1.00	-	56.20	11.45	1.35	37.00
PK	156.1M	34.19	43.50	-9.31	-18.55	3	Vertical	360	1.00	-	52.74	15.95	2.07	36.57
PK	321M	26.77	46.00	-19.23	-14.77	3	Vertical	360	1.00	-	41.53	18.67	3.03	36.47
PK	467.47M	29.48	46.00	-16.52	-10.48	3	Vertical	360	1.00	-	39.96	22.67	3.67	36.82
PK	597.45M	32.50	46.00	-13.50	-8.40	3	Vertical	360	1.00	-	40.90	24.67	4.12	37.18

BT-LE(1Mbps)

2440MHz_Adapter



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	70.74M	23.08	40.00	-16.92	-24.20	3	Horizontal	0	1.00	-	47.28	11.45	1.35	37.00
PK	156.1M	35.78	43.50	-7.72	-18.55	3	Horizontal	0	1.00	-	54.33	15.95	2.07	36.57
PK	217.21M	34.45	46.00	-11.55	-19.74	3	Horizontal	0	1.00	-	54.19	14.27	2.39	36.39
PK	320.03M	31.56	46.00	-14.44	-14.80	3	Horizontal	0	1.00	-	46.36	18.64	3.03	36.47
PK	597.45M	37.77	46.00	-8.23	-8.40	3	Horizontal	0	1.00	-	46.17	24.67	4.12	37.18
PK	770.11M	36.49	46.00	-9.51	-5.45	3	Horizontal	0	1.00	-	41.94	27.31	4.68	37.44