

FCC Test Report

Equipment : Furbo Dog Camera
Brand Name : Furbo
Model No. : furbo2
FCC ID : 2AIBVTFFBV2
Standard : 47 CFR FCC Part 15.247
Frequency : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant : Tomofun Co., Ltd.
4F., No.178, Sec. 3 , Minquan E,Rd.,Songshan Dist
Taipei City 105, Taiwan (R.O.C.)
Manufacturer : Chicony Electronics (Dong Guan) Co.,Ltd.
San Zhong Guan Li Qu, Qingxi Town, Dongguan City
Guangdong 523651 China

The product sample received on Jul. 17, 2017 and completely tested on Aug. 07, 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 INTERNATIONAL INC., the test report shall not be reproduced except in full.


Phoenix Chen
SPORTON INTERNATIONAL INC.



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Testing Applied Standards	6
1.3	Testing Location Information	6
1.4	Measurement Uncertainty	6
2	TEST CONFIGURATION OF EUT.....	7
2.1	Test Condition	7
2.2	Test Channel Mode	7
2.3	The Worst Case Measurement Configuration.....	8
2.4	Accessories	9
2.5	Support Equipment.....	9
2.6	Test Setup Diagram	10
3	TRANSMITTER TEST RESULT	11
3.1	AC Power-line Conducted Emissions	11
3.2	DTS Bandwidth.....	12
3.3	Maximum Conducted Output Power	13
3.4	Power Spectral Density	15
3.5	Emissions in Non-restricted Frequency Bands	16
3.6	Emissions in Restricted Frequency Bands.....	17
4	TEST EQUIPMENT AND CALIBRATION DATA	21
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS		
APPENDIX B. TEST RESULTS OF DTS BANDWIDTH		
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER		
APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY		
APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS		
APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS		
APPENDIX G. TEST PHOTOS		
PHOTOGRAPHS OF EUT V01		

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

[illegible]

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	WANSHIH	Furbo Wifi Antenna	PIFA Antenna	fixed on board	1.8

1.1.3 EUT Information

Operational Condition	
EUT Power Type	From AC Adapter
Type of EUT	
<input checked="" type="checkbox"/>	Stand-alone
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)
<input type="checkbox"/>	Combined Equipment - Brand Name / Model No.: ...
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)
<input type="checkbox"/>	Host System - Brand Name / Model No.: ...
<input type="checkbox"/>	Other:

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq \frac{1}{T}$
BT-LE(1Mbps)	0.625	2.041	390.625u	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			
<input checked="" type="checkbox"/>	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.			
<input type="checkbox"/>	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.			
<input checked="" type="checkbox"/>	LINKOU	ADD : No. 30-2, Dingfu Vil., Linkou Dist., New Taipei City, Taiwan (R.O.C.)	
		TEL : 886-2-2601-1640	FAX : 886-2-2601-1695
Test site Designation No. TW1095 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Gary	20.7°C / 61%	07/Aug/2017
Radiated	03CH02-HY	Andy	23.2°C / 58%	07/Aug/2017
AC Conduction	CO01-LK	Alex	28°C / 49%	04/Aug/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	DOS
---------------	-----

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	Normal Link
1	WiFi 2.4 link+ BT ON, CCD + MIC + ADAPTER(YJC010W-0502000U) with USB cable1
2	WiFi 2.4 link+ BT ON, CCD + MIC + ADAPTER(MX520U) with USB cable1
3	WiFi 2.4 link+ BT ON, CCD + MIC + ADAPTER(MX520U) with USB cable2
For operating mode 2 is the worst case and it was record in this test report.	

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	

2.4 Accessories

Accessories				
AC Adapter 1	Brand Name	FURBO	Model Name	YJC010W-0502000U
	Power Rating	I/P: 100-240Vac, 500 mA, O/P: 5 Vdc, 2000 mA		
	Manufacturer	Dongguan Yingju Power Co., Ltd.		
AC Adapter 2	Brand Name	FURBO	Model Name	MX520U
	Power Rating	I/P: 100 - 240Vac, 0.5 A, O/P: 5 Vdc, 2A		
USB Cable 1	Signal Line	1.8 meter, non-shielded cable, with ferrite core		
USB Cable 2	Signal Line	2 meter, non-shielded cable, w/o ferrite core		

2.5 Support Equipment

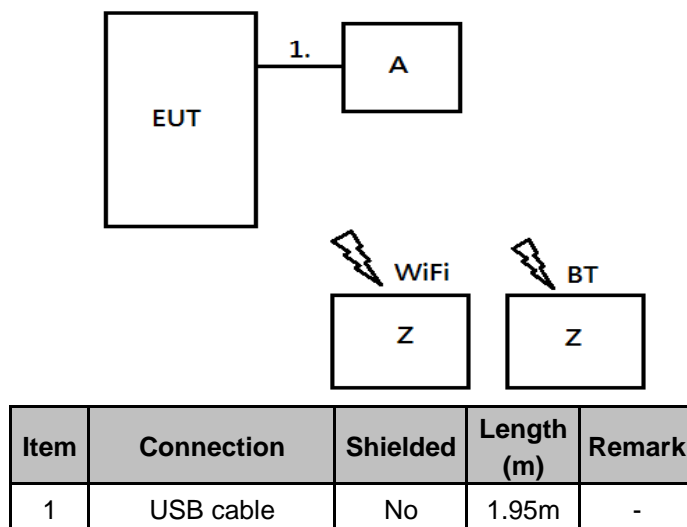
Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	-	-	-	-

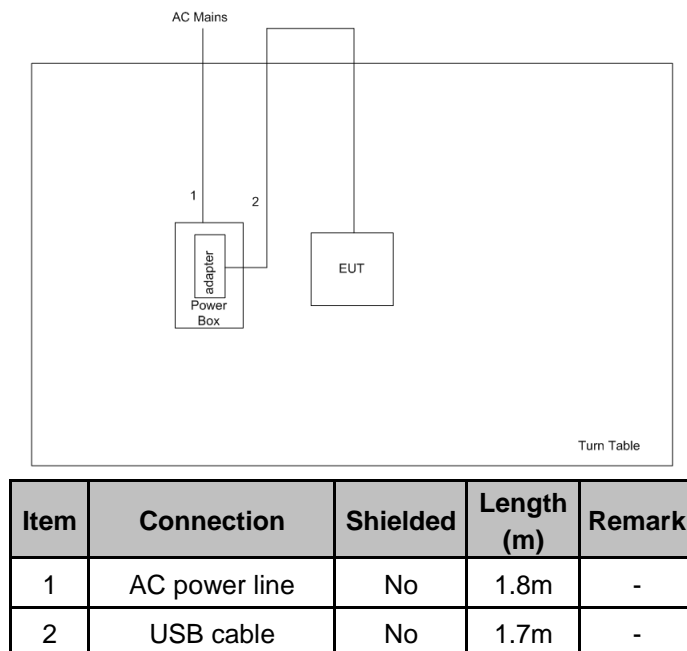
Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook (WiFi)	DELL	Latitude E5520	DoC
2	Notebook (BT)	DELL	Latitude E5520	DoC

2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Test Setup Diagram - Radiated Test



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.

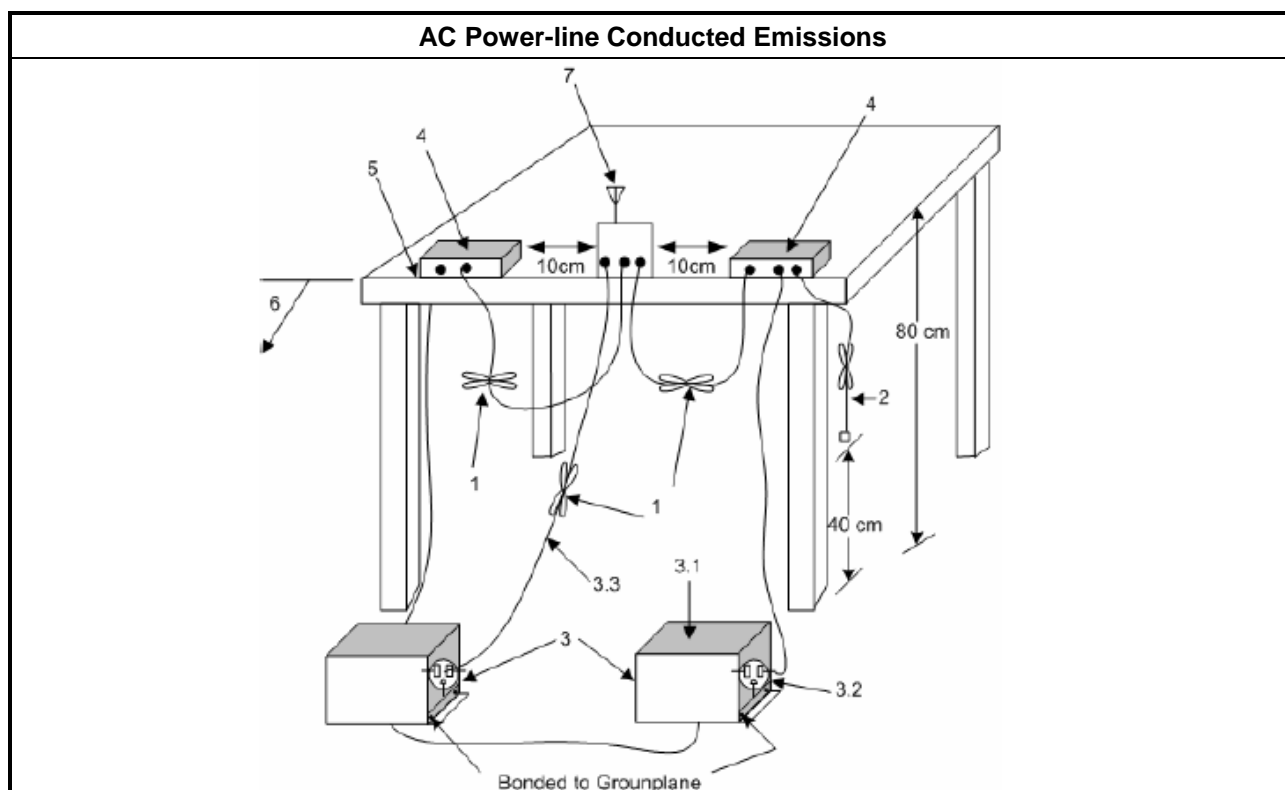
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as ANSI C63.10-2013, clause 6.2 foray power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

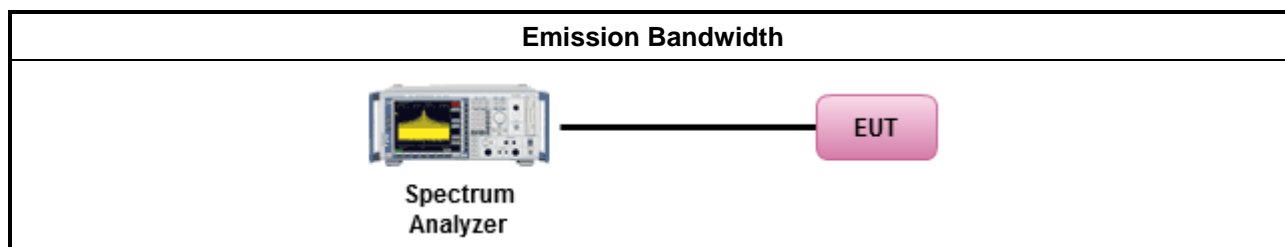
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as RSS-Gen, clause 6.6 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit		
	<ul style="list-style-type: none"> If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W) 	
	<ul style="list-style-type: none"> Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm 	
	<ul style="list-style-type: none"> Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm 	
	<ul style="list-style-type: none"> 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:		
	<ul style="list-style-type: none"> 2400-2483.5 MHz Band 	
	<ul style="list-style-type: none"> Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W) 	
	<ul style="list-style-type: none"> Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm 	
	<ul style="list-style-type: none"> Smart antenna system (SAS) 	
	-	Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	-	Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	-	Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.		

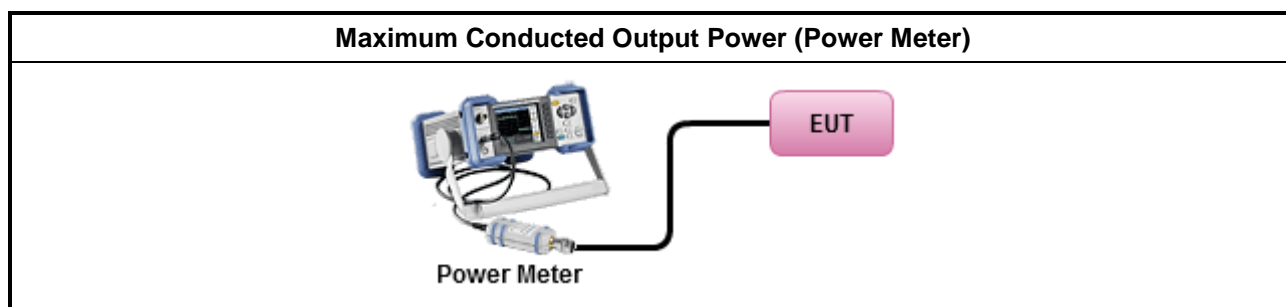
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.2 Option 2 (integrated band power method)
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.3 Option 3 (peak power meter for VBW ≥ DTS BW)
<ul style="list-style-type: none"> Maximum Average Conducted Output Power 	
Duty cycle ≥ 98%	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
Duty cycle < 98%	
<input type="checkbox"/>	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	
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 9.2.3.1 Method AVGPM (using an RF average power meter).
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> 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. 	
<ul style="list-style-type: none"> If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

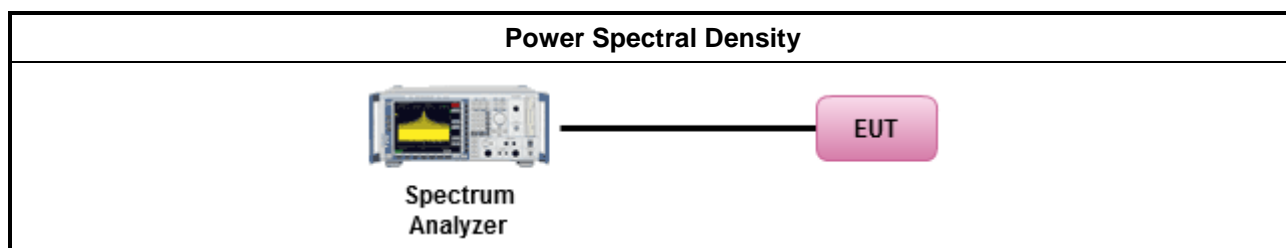
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
<p>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.</p> <p>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.</p>	

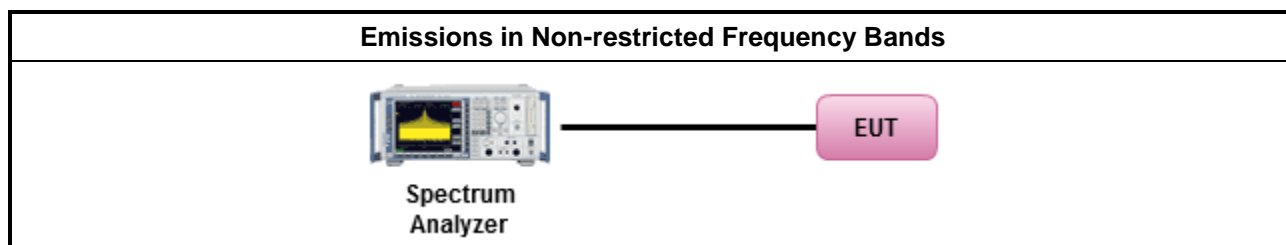
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as KDB 558074, clause 11 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

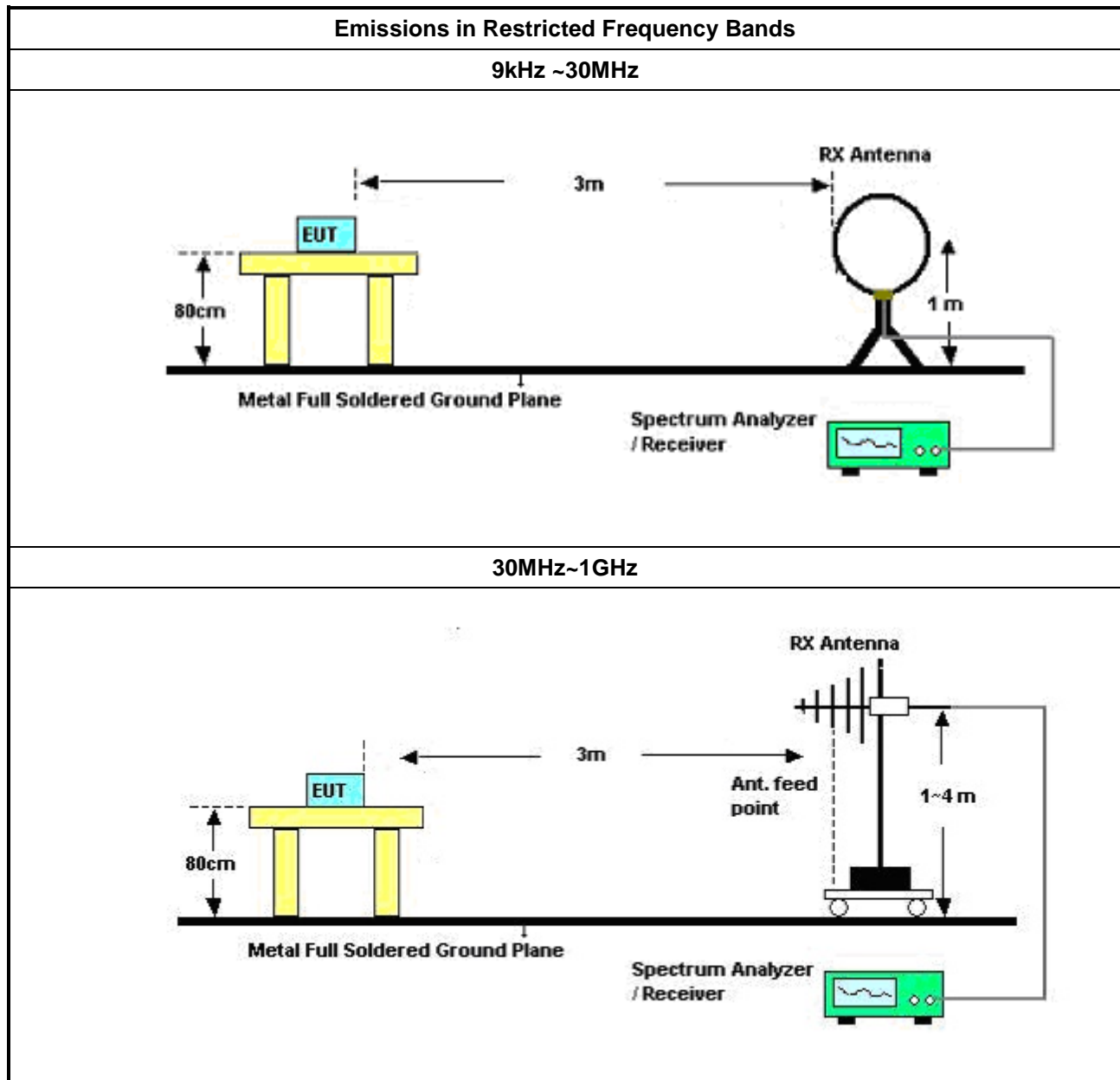
3.6.2 Measuring Instruments

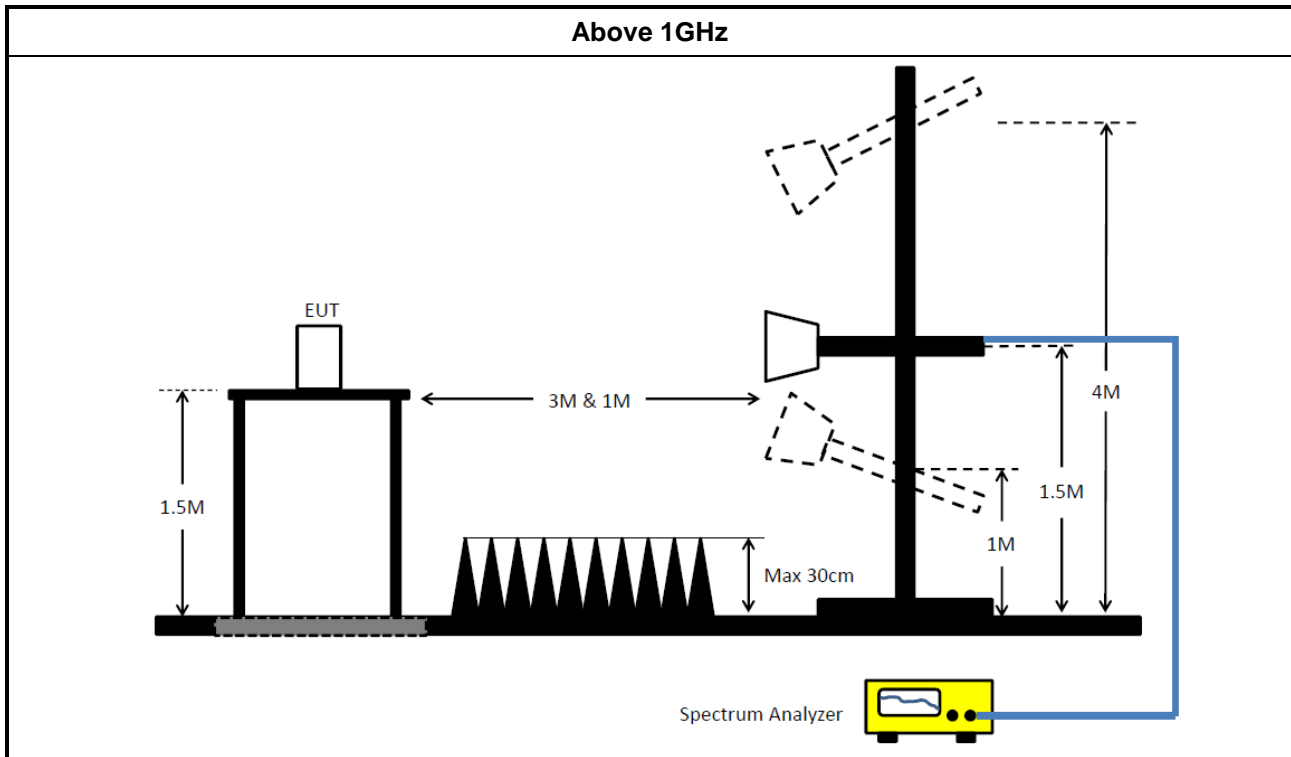
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> The average emission levels shall be measured in [duty cycle \geq 98 or duty factor]. 	
<ul style="list-style-type: none"> 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. 	
<ul style="list-style-type: none"> For the transmitter unwanted emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> Refer as KDB 558074, clause 12 for unwanted emissions into restricted bands.
	<input checked="" type="checkbox"/> Refer as KDB 558074, clause 12.2.5.3 (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW \geq 1/T.
	<input checked="" type="checkbox"/> Refer as KDB 558074, clause 12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> For the transmitter band-edge emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> Refer as KDB 558074, clause 13.2 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> 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).
<ul style="list-style-type: none"> For conducted and cabinet radiation measurement, refer as KDB 558074, clause 12.2.2. 	
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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





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. All amplitude of spurious emissions that are attenuated by more than 20 dB 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
Test Receiver	R&S	ESR3	102051	9 KHz ~ 3.6 GHz	29/Apr/2017	28/Apr/2018
Two-Line V-Network	R&S	ENV 216	100003	9 kHz ~ 30 MHz	30/Aug/2016	29/Aug/2017
RF Cable-CON	Weiyang	WY200	CB018	9 kHz ~ 30 MHz	07/Feb/2017	06/Feb/2018
Impul sbegrenzer Pulse Limiter	R&S	ESH3-Z2	100921	10 kHz ~ 30 MHz	20/Oct/2016	19/Oct/2017

Instrument for Radiated Test

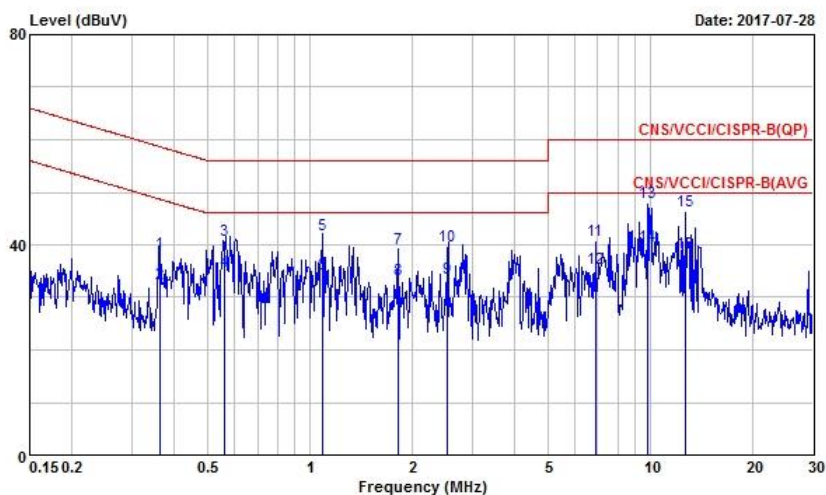
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100593	9KHz - 40GHz	26/Oct/2016	25/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz-1GHz	21/Oct/2016	20/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	12/Dec/2016	11/Dec/2017
Amplifier	Agilent	8447D	2944A11149	100KHz-1.3GHz	29/Jun/2017	28/Jun/2018
Amplifier	Agilent	8449B	3008A02373	1GHz-26.5GHz	02/Sep/2016	01/Sep/2017
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01531	1GHz-18GHz	25/Apr/2017	24/Apr/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz-40GHz	06/Feb/2017	05/Feb/2018
Bilog Antenna	SCHAFFNER	CBL6112B	2723	30MHz-1GHz	01/Oct/2016	30/Sep/2017
Loop Antenna	TESEQ	HLA 6120	31244	9KHz-30MHz	02/Mar/2017	01/Mar/2018

**Instrument for Conducted Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	30/Dec/2016	29/Dec/2017
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	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY678/3	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10717/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017

AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Neutral
Operating Function	WiFi 2.4 link+ BT ON, CCD + MIC + ADAPTER(MX520U) with USB cable1		

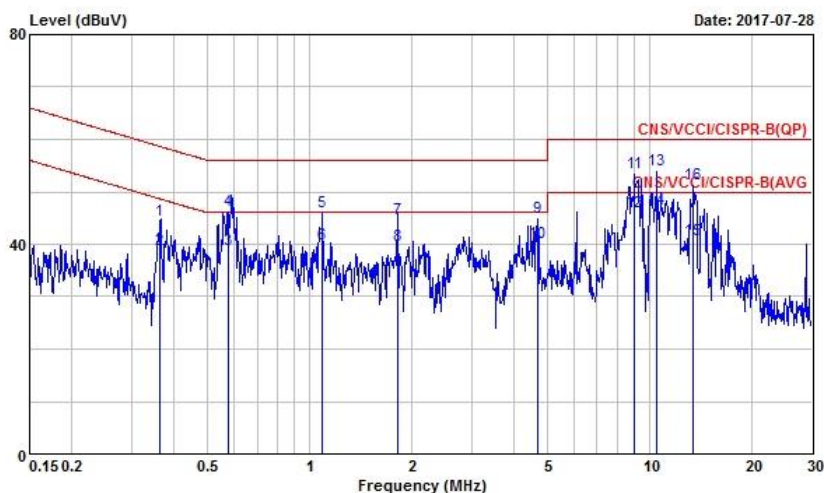


	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.363	38.52	-20.14	58.66	28.76	9.72	0.04	QP
2	0.363	32.45	-16.21	48.66	22.69	9.72	0.04	Average
3	0.558	40.84	-15.16	56.00	31.07	9.72	0.05	QP
4	0.558	35.03	-10.97	46.00	25.26	9.72	0.05	Average
5	1.086	41.91	-14.09	56.00	32.12	9.70	0.09	QP
6	1.086	34.47	-11.53	46.00	24.68	9.70	0.09	Average
7	1.810	39.17	-16.83	56.00	29.38	9.67	0.12	QP
8	1.810	33.37	-12.63	46.00	23.58	9.67	0.12	Average
9	2.533	33.63	-12.37	46.00	23.79	9.68	0.16	Average
10	2.533	39.61	-16.39	56.00	29.77	9.68	0.16	QP
11	6.875	40.74	-19.26	60.00	30.68	9.80	0.26	QP
12	6.875	35.56	-14.44	50.00	25.50	9.80	0.26	Average
13	9.770	47.96	-12.04	60.00	37.81	9.85	0.30	QP
14	9.770	39.71	-10.29	50.00	29.56	9.85	0.30	Average
15	12.664	46.36	-13.64	60.00	36.13	9.90	0.33	QP
16	12.664	38.35	-11.65	50.00	28.12	9.90	0.33	Average

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	2	Power Phase	Line
Operating Function	WiFi 2.4 link+ BT ON, CCD + MIC + ADAPTER(MX520U) with USB cable1		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.362	44.55	-14.12	58.67	34.78	9.73	0.04	QP
2	0.362	38.98	-9.69	48.67	29.21	9.73	0.04	Average
3	0.577	38.86	-7.14	46.00	29.09	9.72	0.05	Average
4	0.577	46.42	-9.58	56.00	36.65	9.72	0.05	QP
5	1.083	46.23	-9.77	56.00	36.46	9.68	0.09	QP
6	1.083	40.01	-5.99	46.00	30.24	9.68	0.09	Average
7	1.806	44.92	-11.08	56.00	35.16	9.64	0.12	QP
8	1.806	39.69	-6.31	46.00	29.93	9.64	0.12	Average
9	4.697	45.14	-10.86	56.00	35.18	9.74	0.22	QP
10	4.697	40.20	-5.80	46.00	30.24	9.74	0.22	Average
11	9.037	53.58	-6.42	60.00	43.42	9.87	0.29	QP
12	9.037	46.02	-3.98	50.00	35.86	9.87	0.29	Average
13	10.485	54.10	-5.90	60.00	43.91	9.88	0.31	QP
14	10.490	46.61	-3.39	50.00	36.42	9.88	0.31	Average
15	13.379	40.67	-9.33	50.00	30.48	9.85	0.34	Average
16	13.379	51.42	-8.58	60.00	41.23	9.85	0.34	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)
BT-LE(1Mbps)	-	-	-	-	-
2.4-2.4835GHz	691.25k	1.048M	1M05F1D	680k	1.043M

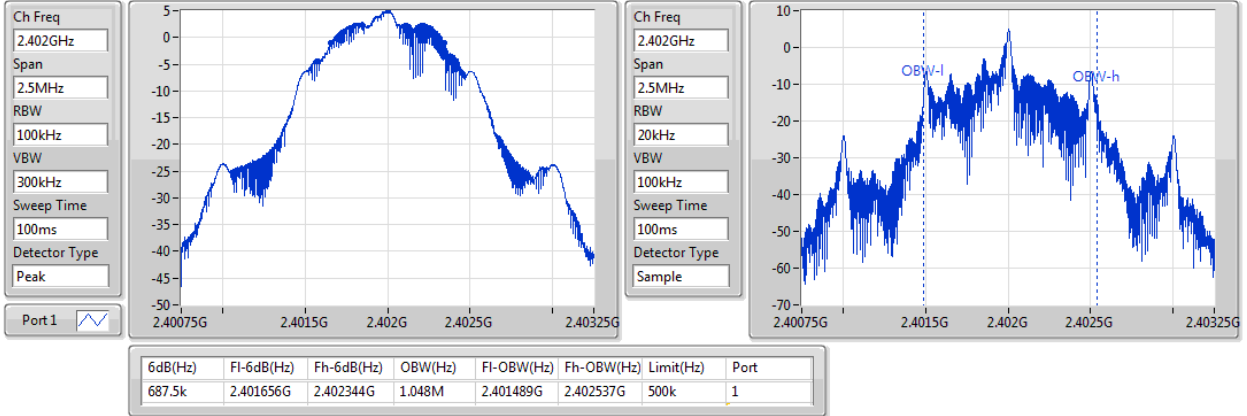
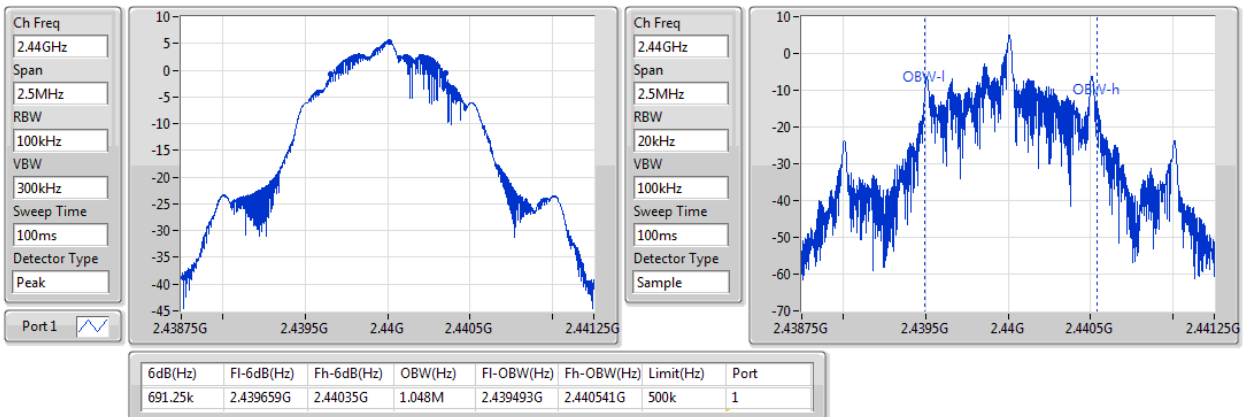
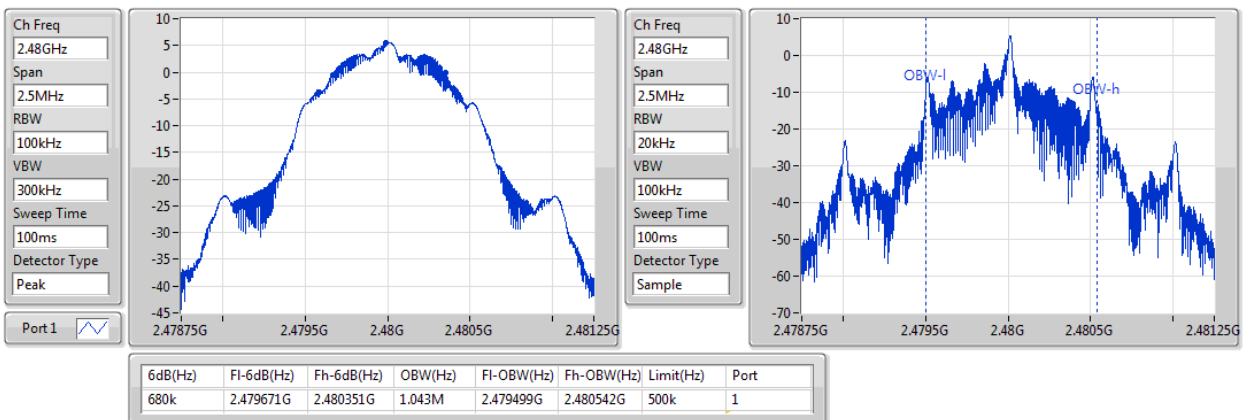
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	687.5k	1.048M
2440MHz	Pass	500k	691.25k	1.048M
2480MHz	Pass	500k	680k	1.043M

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

BT-LE(1Mbps)
EBW
2402MHz

BT-LE(1Mbps)
EBW
2440MHz

BT-LE(1Mbps)
EBW
2480MHz


Summary

Mode	Power	Power
	(dBm)	(W)
BT-LE(1Mbps)	-	-
2.4-2.4835GHz	9.36	0.00863

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	1.80	8.98	30.00
2440MHz	Pass	1.80	9.22	30.00
2480MHz	Pass	1.80	9.36	30.00

Summary

Mode	PD (dBm/RBW)
BT-LE(1Mbps)	-
2.4-2.4835GHz	7.73

RBW=3kHz.

Result

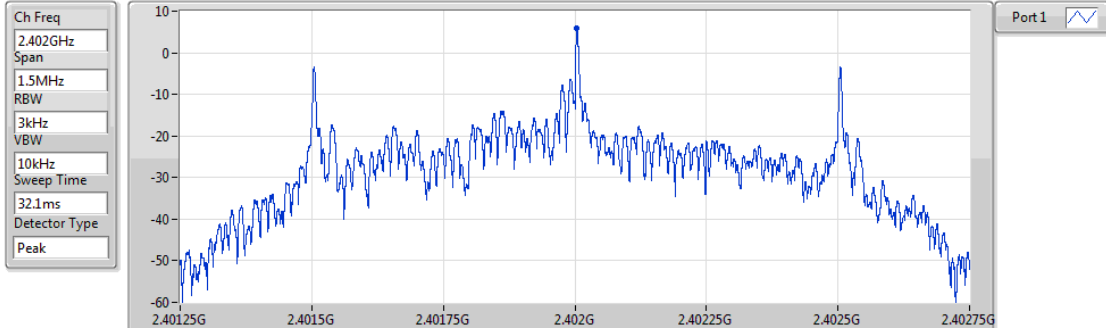
Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	1.80	5.79	8.00
2440MHz	Pass	1.80	7.73	8.00
2480MHz	Pass	1.80	6.22	8.00

RBW=3kHz.

BT-LE(1Mbps)

PSD

2402MHz

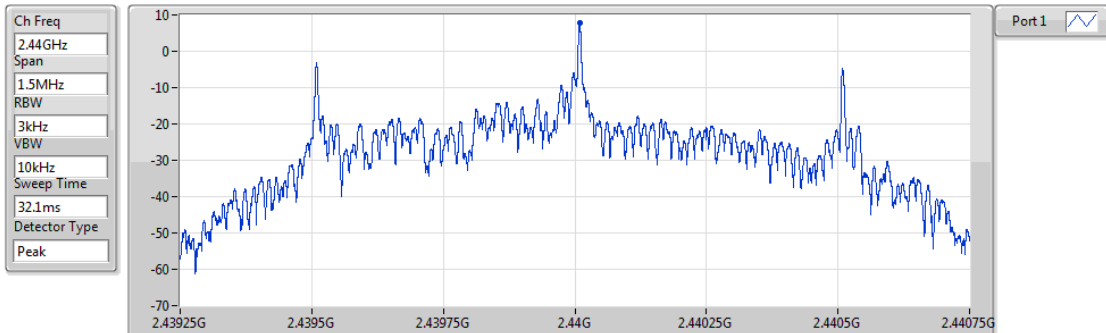


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.79	5.79	5.79

BT-LE(1Mbps)

PSD

2440MHz

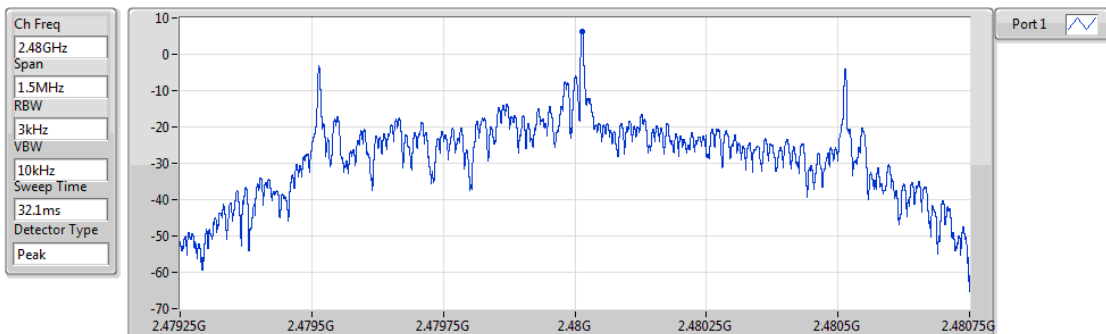


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.73	7.73	7.73

BT-LE(1Mbps)

PSD

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.22	6.22	6.22

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
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.48016G	5.60	-24.40	2.133968G	-58.49	2.399368G	-59.46	2.483752G	-50.05	6.979957G	-52.63	1

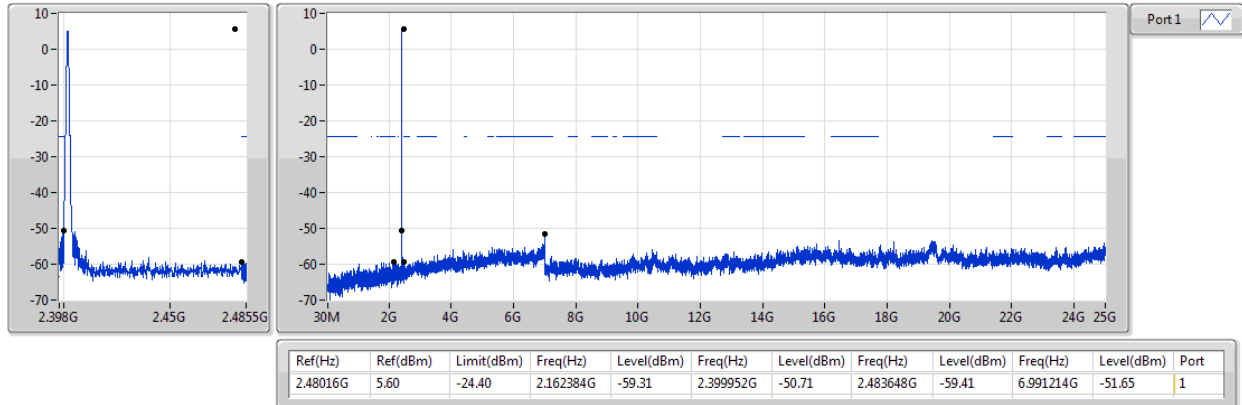
Result

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	Pass	2.48016G	5.60	-24.40	2.162384G	-59.31	2.399952G	-50.71	2.483648G	-59.41	6.991214G	-51.65	1
2440MHz	Pass	2.48016G	5.60	-24.40	1.933872G	-59.54	2.398044G	-59.60	2.48514G	-58.87	6.971514G	-53.37	1
2480MHz	Pass	2.48016G	5.60	-24.40	2.133968G	-58.49	2.399368G	-59.46	2.483752G	-50.05	6.979957G	-52.63	1

BT-LE(1Mbps)

CSE NdB

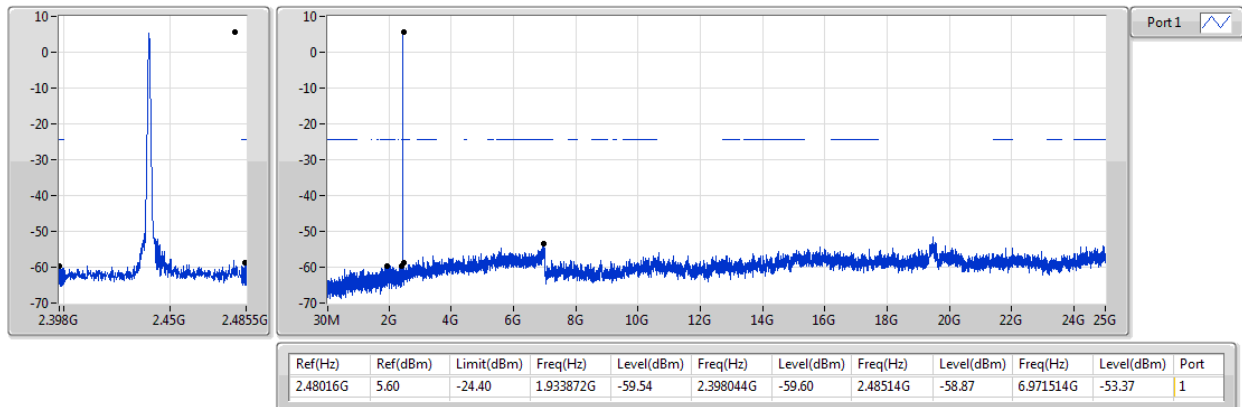
2402MHz



BT-LE(1Mbps)

CSE NdB

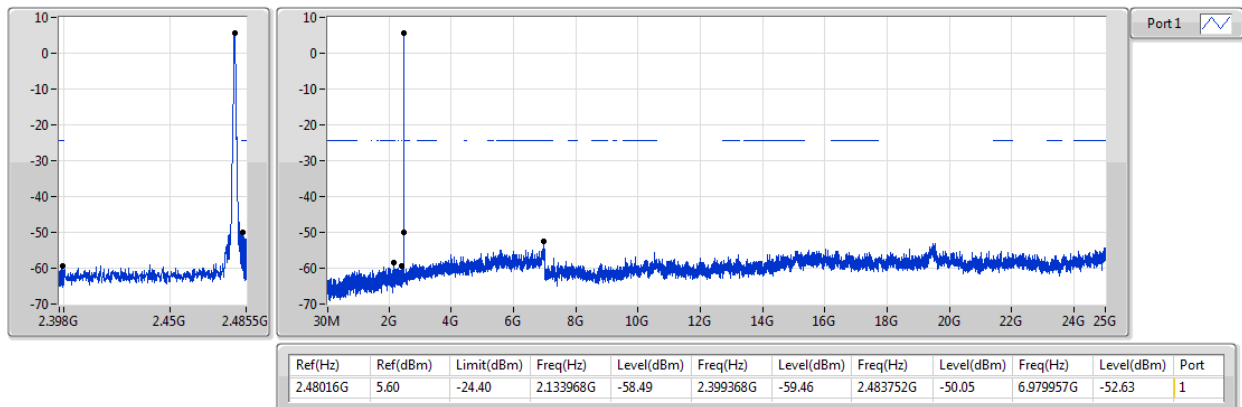
2440MHz



BT-LE(1Mbps)

CSE NdB

2480MHz



Summary

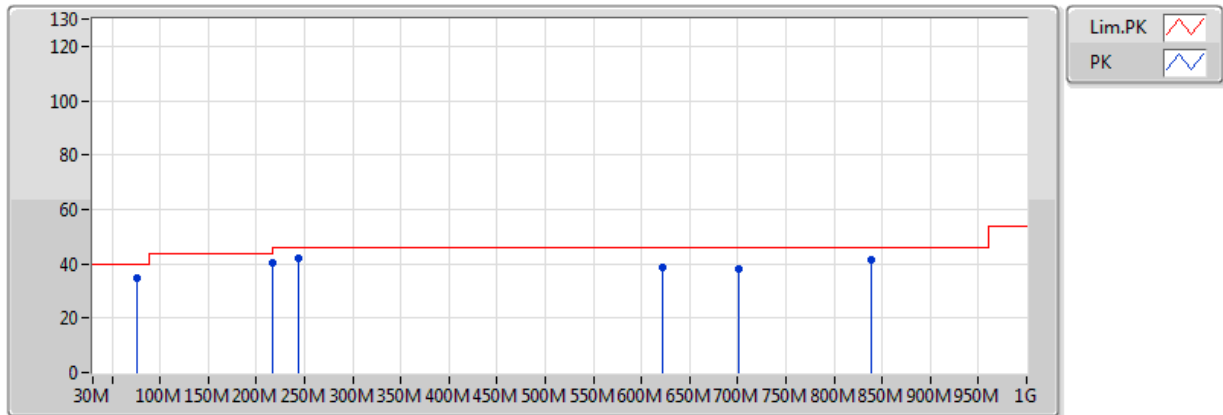
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	PK	350.1M	42.90	46.00	-3.10	-5.52	3	Horizontal	360	1.00	-

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	130.88M	34.89	43.50	-8.61	-9.10	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	268.62M	41.89	46.00	-4.11	-6.92	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	295.78M	41.88	46.00	-4.12	-6.54	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	350.1M	42.90	46.00	-3.10	-5.52	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	431.58M	42.15	46.00	-3.85	-3.48	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	701.24M	39.28	46.00	-6.72	-0.32	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	216.24M	40.62	46.00	-5.38	-11.02	3	Vertical	0	1.00	-
2440MHz	Pass	PK	243.4M	42.05	46.00	-3.95	-8.38	3	Vertical	0	1.00	-
2440MHz	Pass	PK	621.7M	38.64	46.00	-7.36	-0.99	3	Vertical	0	1.00	-
2440MHz	Pass	PK	701.24M	38.04	46.00	-7.96	-0.32	3	Vertical	0	1.00	-
2440MHz	Pass	PK	838.98M	41.46	46.00	-4.54	1.88	3	Vertical	0	1.00	-
2440MHz	Pass	QP	76.56M	34.61	40.00	-5.39	-14.69	3	Vertical	80	1.00	-

BT-LE(1Mbps)

2440MHz_Adapter

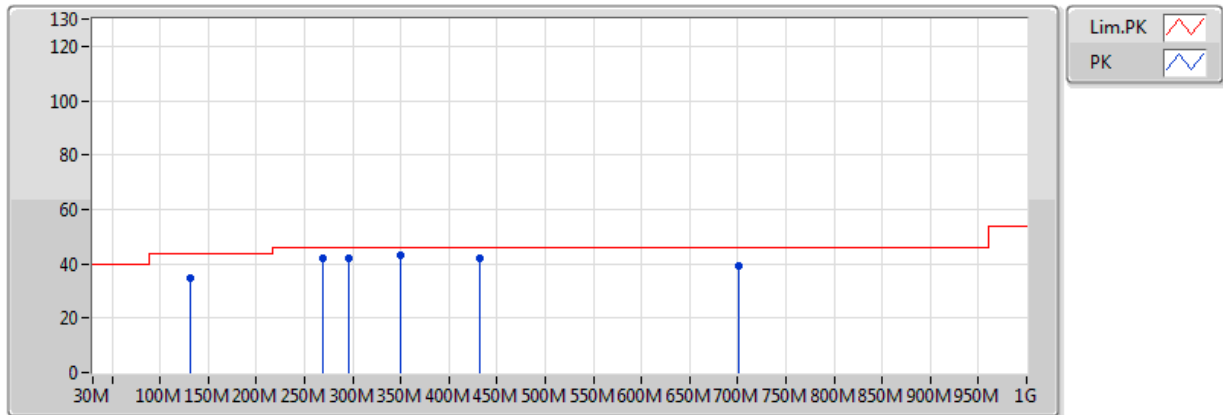


EUT = Y

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	216.24M	40.62	46.00	-5.38	-11.02	3	Vertical	0	1.00	-	51.64	14.16	2.22	27.40
PK	243.4M	42.05	46.00	-3.95	-8.38	3	Vertical	0	1.00	-	50.43	16.75	2.21	27.33
PK	621.7M	38.64	46.00	-7.36	-0.99	3	Vertical	0	1.00	-	39.63	23.82	3.70	28.52
PK	701.24M	38.04	46.00	-7.96	-0.32	3	Vertical	0	1.00	-	38.36	23.96	4.10	28.38
PK	838.98M	41.46	46.00	-4.54	1.88	3	Vertical	0	1.00	-	39.58	25.15	4.64	27.91
QP	76.56M	34.61	40.00	-5.39	-14.69	3	Vertical	80	1.00	-	49.30	11.79	1.22	27.69

BT-LE(1Mbps)

2440MHz_Adapter



EUT = Y

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	130.88M	34.89	43.50	-8.61	-9.10	3	Horizontal	360	1.00	-	43.99	16.88	1.72	27.70
PK	268.62M	41.89	46.00	-4.11	-6.92	3	Horizontal	360	1.00	-	48.81	18.03	2.32	27.27
PK	295.78M	41.88	46.00	-4.12	-6.54	3	Horizontal	360	1.00	-	48.42	18.16	2.50	27.21
PK	350.1M	42.90	46.00	-3.10	-5.52	3	Horizontal	360	1.00	-	48.42	19.46	2.60	27.58
PK	431.58M	42.15	46.00	-3.85	-3.48	3	Horizontal	360	1.00	-	45.63	21.49	3.16	28.13
PK	701.24M	39.28	46.00	-6.72	-0.32	3	Horizontal	360	1.00	-	39.60	23.96	4.10	28.38

Summary

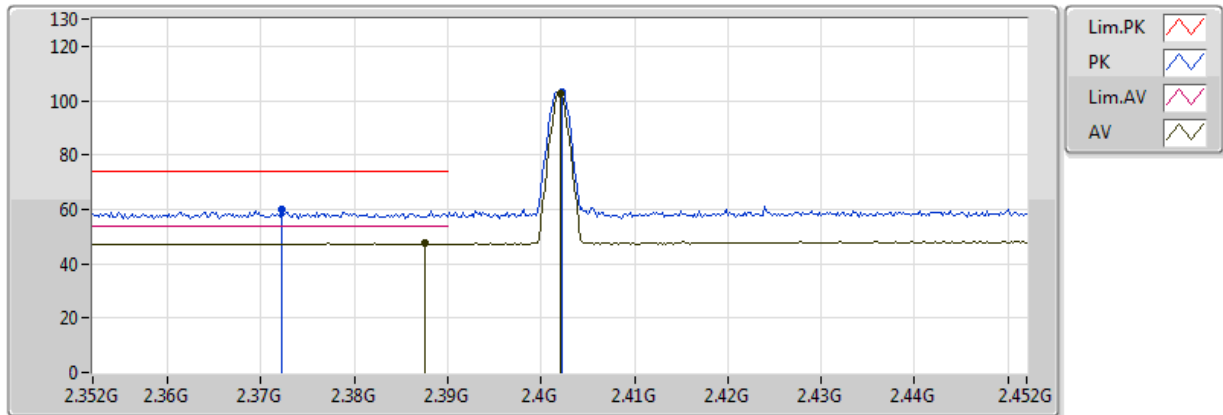
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.49G	48.10	54.00	-5.90	31.80	3	Horizontal	341	1.50	-

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	2.3568G	47.33	54.00	-6.67	31.33	3	Horizontal	319	1.10	-
2402MHz	Pass	AV	2.402G	95.59	Inf	-Inf	31.49	3	Horizontal	319	1.10	-
2402MHz	Pass	PK	2.3606G	59.29	74.00	-14.71	31.34	3	Horizontal	319	1.10	-
2402MHz	Pass	PK	2.4022G	96.15	Inf	-Inf	31.49	3	Horizontal	319	1.10	-
2402MHz	Pass	AV	2.3876G	47.45	54.00	-6.55	31.44	3	Vertical	40	3.23	-
2402MHz	Pass	AV	2.402G	102.66	Inf	-Inf	31.49	3	Vertical	40	3.23	-
2402MHz	Pass	PK	2.3722G	59.71	74.00	-14.29	31.38	3	Vertical	40	3.23	-
2402MHz	Pass	PK	2.4022G	103.21	Inf	-Inf	31.49	3	Vertical	40	3.23	-
2402MHz	Pass	AV	4.804G	32.59	54.00	-21.41	6.43	3	Horizontal	278	1.25	-
2402MHz	Pass	PK	4.804G	46.34	74.00	-27.66	6.43	3	Horizontal	278	1.25	-
2402MHz	Pass	AV	4.804G	33.65	54.00	-20.35	6.43	3	Vertical	90	1.87	-
2402MHz	Pass	PK	4.804G	46.84	74.00	-27.16	6.43	3	Vertical	90	1.87	-
2440MHz	Pass	AV	2.3724G	47.00	54.00	-7.00	31.38	3	Horizontal	311	1.98	-
2440MHz	Pass	AV	2.44G	95.25	Inf	-Inf	31.62	3	Horizontal	311	1.98	-
2440MHz	Pass	AV	2.4988G	47.92	54.00	-6.08	31.84	3	Horizontal	311	1.98	-
2440MHz	Pass	PK	2.3444G	59.23	74.00	-14.77	31.29	3	Horizontal	311	1.98	-
2440MHz	Pass	PK	2.4404G	95.84	Inf	-Inf	31.63	3	Horizontal	311	1.98	-
2440MHz	Pass	PK	2.4872G	59.62	74.00	-14.38	31.79	3	Horizontal	311	1.98	-
2440MHz	Pass	AV	2.3888G	47.34	54.00	-6.66	31.44	3	Vertical	162	1.50	-
2440MHz	Pass	AV	2.44G	99.40	Inf	-Inf	31.62	3	Vertical	162	1.50	-
2440MHz	Pass	AV	2.4872G	48.02	54.00	-5.98	31.79	3	Vertical	162	1.50	-
2440MHz	Pass	PK	2.3812G	59.34	74.00	-14.66	31.41	3	Vertical	162	1.50	-
2440MHz	Pass	PK	2.4404G	100.01	Inf	-Inf	31.63	3	Vertical	162	1.50	-
2440MHz	Pass	PK	2.498G	60.33	74.00	-13.67	31.83	3	Vertical	162	1.50	-
2440MHz	Pass	AV	4.88G	31.99	54.00	-22.01	6.62	3	Horizontal	352	1.50	-
2440MHz	Pass	PK	4.88G	46.74	74.00	-27.26	6.62	3	Horizontal	352	1.50	-
2440MHz	Pass	AV	4.88G	33.38	54.00	-20.62	6.62	3	Vertical	212	1.50	-
2440MHz	Pass	PK	4.88G	46.39	74.00	-27.61	6.62	3	Vertical	212	1.50	-
2480MHz	Pass	AV	2.48G	96.35	Inf	-Inf	31.77	3	Horizontal	341	1.50	-
2480MHz	Pass	AV	2.49G	48.10	54.00	-5.90	31.80	3	Horizontal	341	1.50	-
2480MHz	Pass	PK	2.48G	97.00	Inf	-Inf	31.77	3	Horizontal	341	1.50	-
2480MHz	Pass	PK	2.4836G	60.57	74.00	-13.43	31.78	3	Horizontal	341	1.50	-
2480MHz	Pass	AV	2.48G	101.69	Inf	-Inf	31.77	3	Vertical	279	1.26	-
2480MHz	Pass	AV	2.4912G	47.97	54.00	-6.03	31.81	3	Vertical	279	1.26	-
2480MHz	Pass	PK	2.48G	102.34	Inf	-Inf	31.77	3	Vertical	279	1.26	-
2480MHz	Pass	PK	2.4836G	61.92	74.00	-12.08	31.78	3	Vertical	279	1.26	-
2480MHz	Pass	AV	4.96G	33.12	54.00	-20.88	6.82	3	Horizontal	65	1.27	-
2480MHz	Pass	PK	4.96G	46.59	74.00	-27.41	6.82	3	Horizontal	65	1.27	-
2480MHz	Pass	AV	4.96G	34.34	54.00	-19.66	6.82	3	Vertical	214	1.76	-
2480MHz	Pass	PK	4.96G	47.48	74.00	-26.52	6.82	3	Vertical	214	1.76	-

BT-LE(1Mbps)

2402MHz_TX

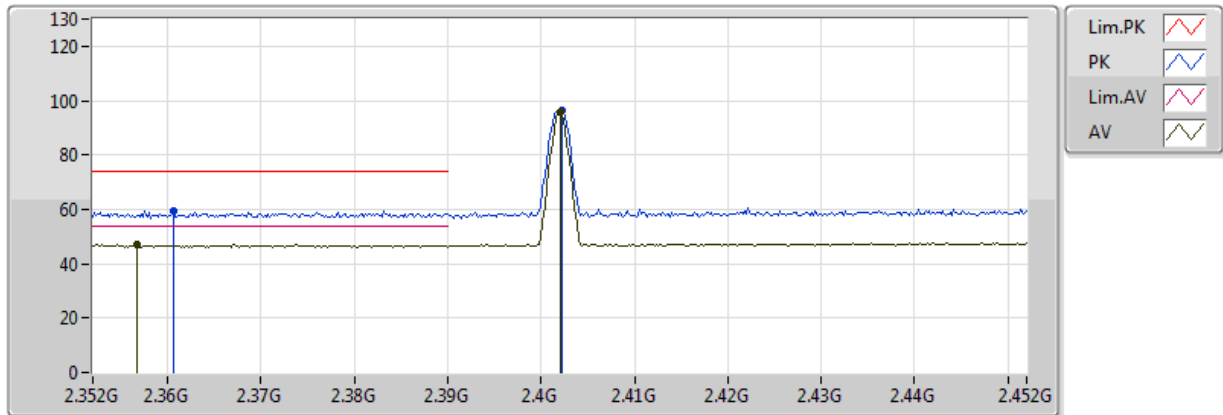


EUT : Y

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	2.3876G	47.45	54.00	-6.55	31.44	3	Vertical	40	3.23	-	16.01	27.21	4.23	-
AV	2.402G	102.66	Inf	-Inf	31.49	3	Vertical	40	3.23	-	71.17	27.25	4.24	-
PK	2.3722G	59.71	74.00	-14.29	31.38	3	Vertical	40	3.23	-	28.33	27.17	4.21	-
PK	2.4022G	103.21	Inf	-Inf	31.49	3	Vertical	40	3.23	-	71.72	27.25	4.24	-

BT-LE(1Mbps)

2402MHz_TX

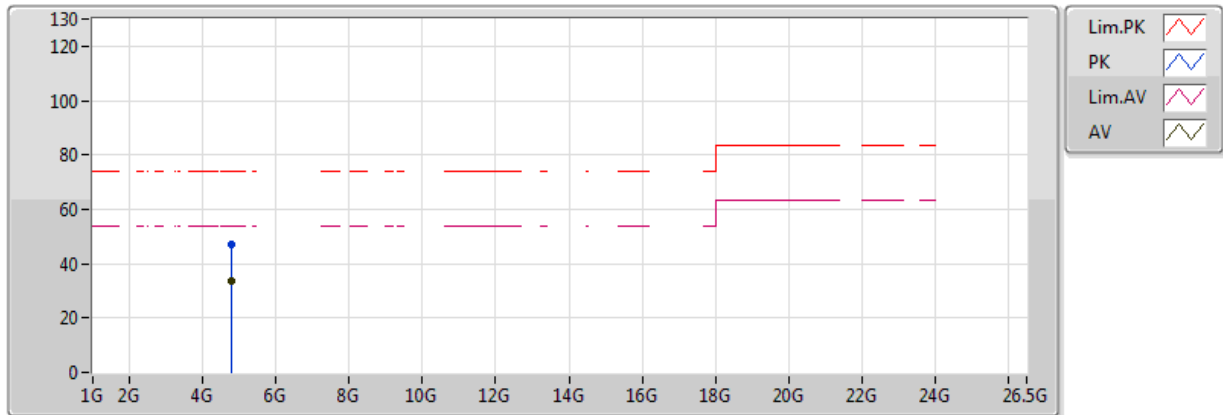


EUT : Y

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	2.3568G	47.33	54.00	-6.67	31.33	3	Horizontal	319	1.10	-	16.00	27.13	4.20	-
AV	2.402G	95.59	Inf	-Inf	31.49	3	Horizontal	319	1.10	-	64.11	27.25	4.24	-
PK	2.3606G	59.29	74.00	-14.71	31.34	3	Horizontal	319	1.10	-	27.95	27.14	4.20	-
PK	2.4022G	96.15	Inf	-Inf	31.49	3	Horizontal	319	1.10	-	64.67	27.25	4.24	-

BT-LE(1Mbps)

2402MHz_TX

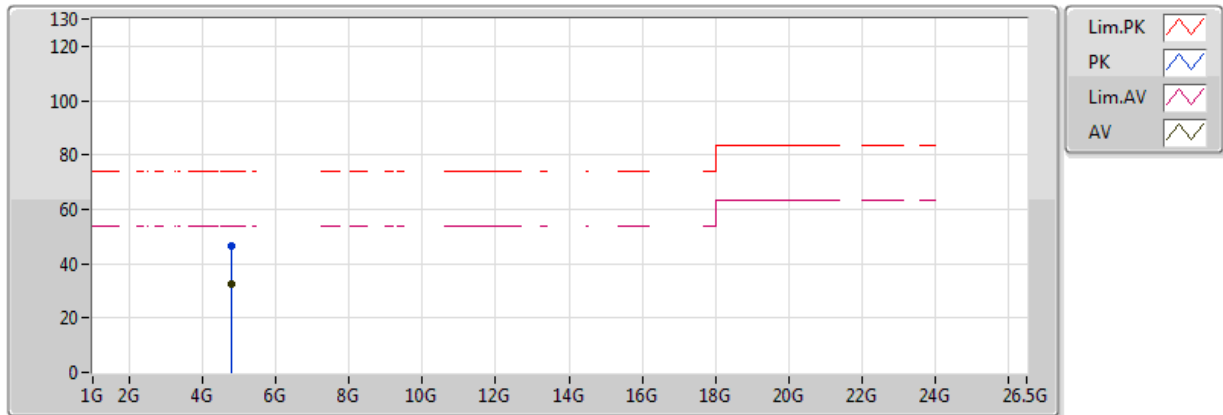


EUT : Y

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	33.65	54.00	-20.35	6.43	3	Vertical	90	1.87	-	27.22	31.19	5.35	30.11
PK	4.804G	46.84	74.00	-27.16	6.43	3	Vertical	90	1.87	-	40.41	31.19	5.35	30.11

BT-LE(1Mbps)

2402MHz_TX

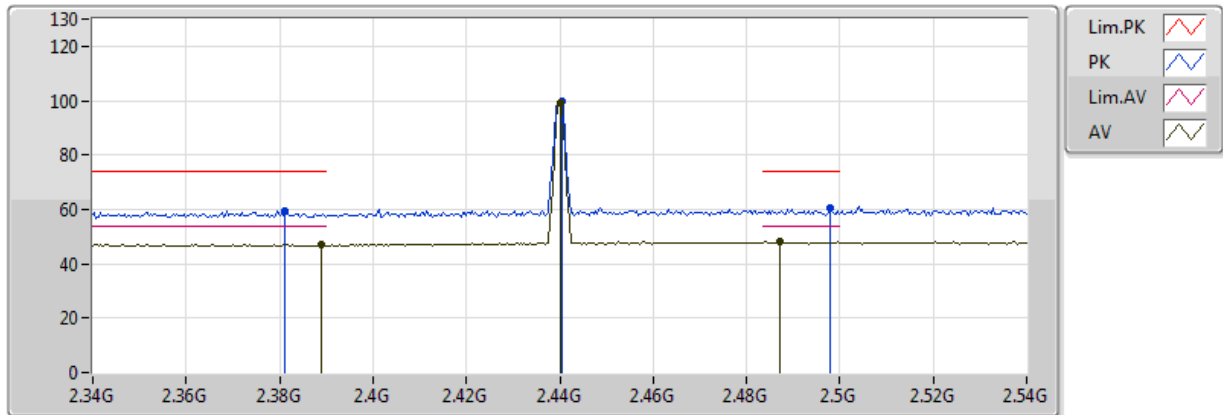


EUT : Y

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	32.59	54.00	-21.41	6.43	3	Horizontal	278	1.25	-	26.16	31.19	5.35	30.11
PK	4.804G	46.34	74.00	-27.66	6.43	3	Horizontal	278	1.25	-	39.91	31.19	5.35	30.11

BT-LE(1Mbps)

2440MHz_TX

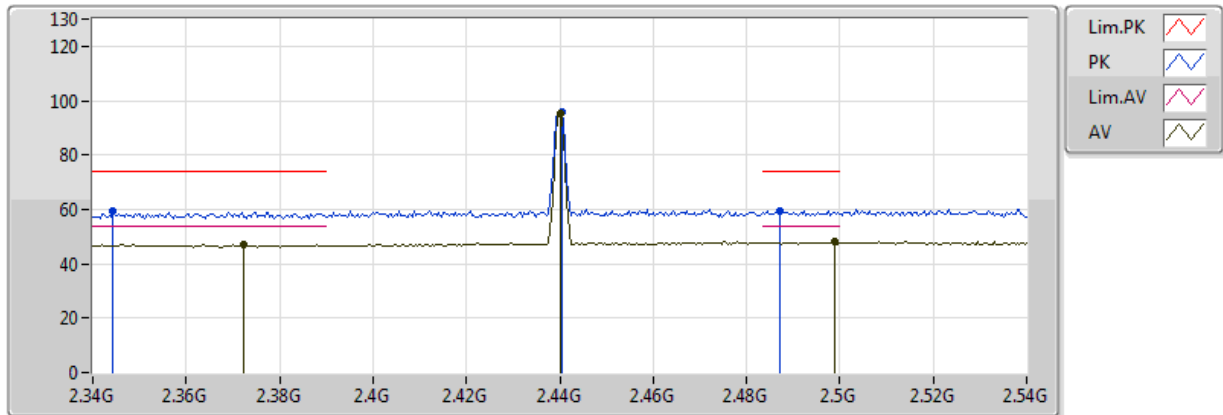


EUT : Y

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	2.3888G	47.34	54.00	-6.66	31.44	3	Vertical	162	1.50	-	15.90	27.21	4.23	-
AV	2.44G	99.40	Inf	-Inf	31.62	3	Vertical	162	1.50	-	67.78	27.34	4.28	-
AV	2.4872G	48.02	54.00	-5.98	31.79	3	Vertical	162	1.50	-	16.23	27.47	4.33	-
PK	2.3812G	59.34	74.00	-14.66	31.41	3	Vertical	162	1.50	-	27.93	27.19	4.22	-
PK	2.4404G	100.01	Inf	-Inf	31.63	3	Vertical	162	1.50	-	68.38	27.35	4.28	-
PK	2.498G	60.33	74.00	-13.67	31.83	3	Vertical	162	1.50	-	28.50	27.49	4.34	-

BT-LE(1Mbps)

2440MHz_TX

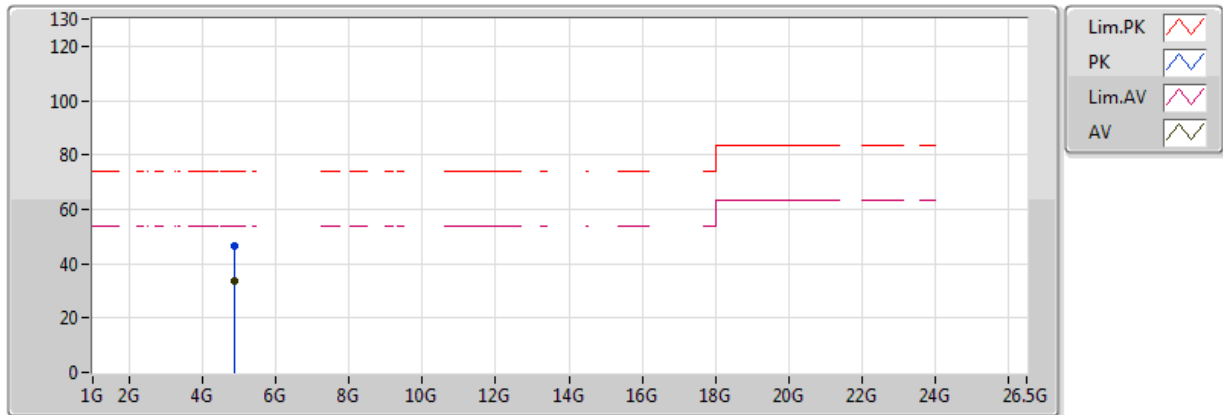


EUT : Y

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	2.3724G	47.00	54.00	-7.00	31.38	3	Horizontal	311	1.98	-	15.62	27.17	4.22	-
AV	2.44G	95.25	Inf	-Inf	31.62	3	Horizontal	311	1.98	-	63.62	27.34	4.28	-
AV	2.4988G	47.92	54.00	-6.08	31.84	3	Horizontal	311	1.98	-	16.08	27.50	4.34	-
PK	2.3444G	59.23	74.00	-14.77	31.29	3	Horizontal	311	1.98	-	27.95	27.10	4.19	-
PK	2.4404G	95.84	Inf	-Inf	31.63	3	Horizontal	311	1.98	-	64.22	27.35	4.28	-
PK	2.4872G	59.62	74.00	-14.38	31.79	3	Horizontal	311	1.98	-	27.82	27.47	4.33	-

BT-LE(1Mbps)

2440MHz_TX

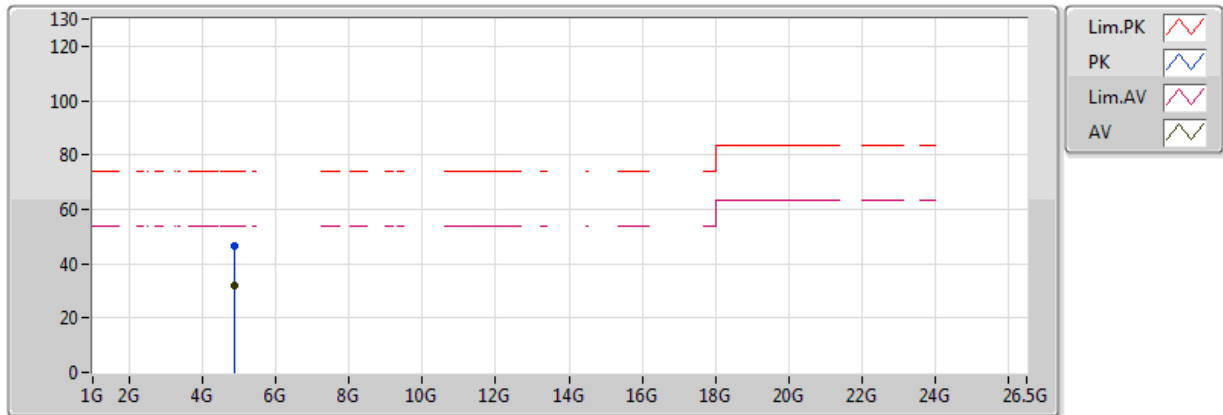


EUT : Y

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	33.38	54.00	-20.62	6.62	3	Vertical	212	1.50	-	26.76	31.31	5.41	30.09
PK	4.88G	46.39	74.00	-27.61	6.62	3	Vertical	212	1.50	-	39.77	31.31	5.41	30.09

BT-LE(1Mbps)

2440MHz_TX

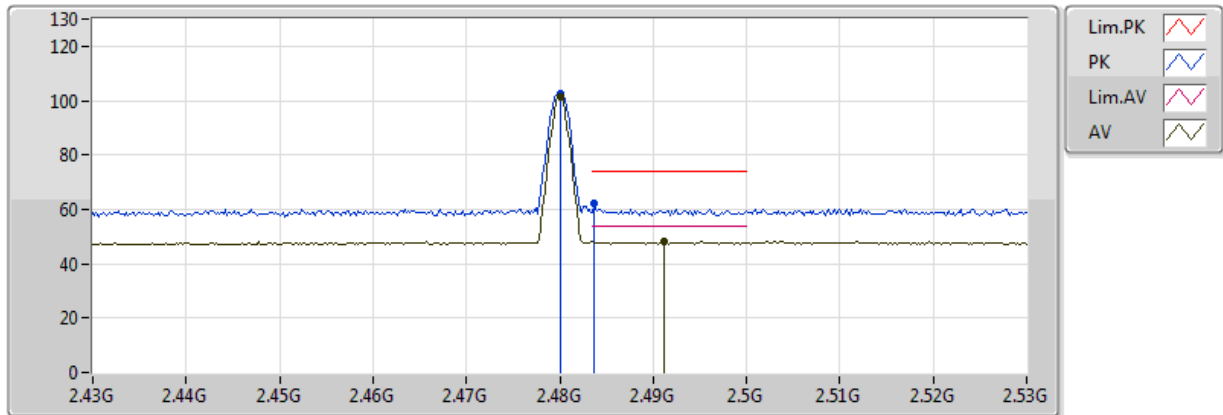


EUT : Y

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	31.99	54.00	-22.01	6.62	3	Horizontal	352	1.50	-	25.37	31.31	5.41	30.09
PK	4.88G	46.74	74.00	-27.26	6.62	3	Horizontal	352	1.50	-	40.12	31.31	5.41	30.09

BT-LE(1Mbps)

2480MHz_TX

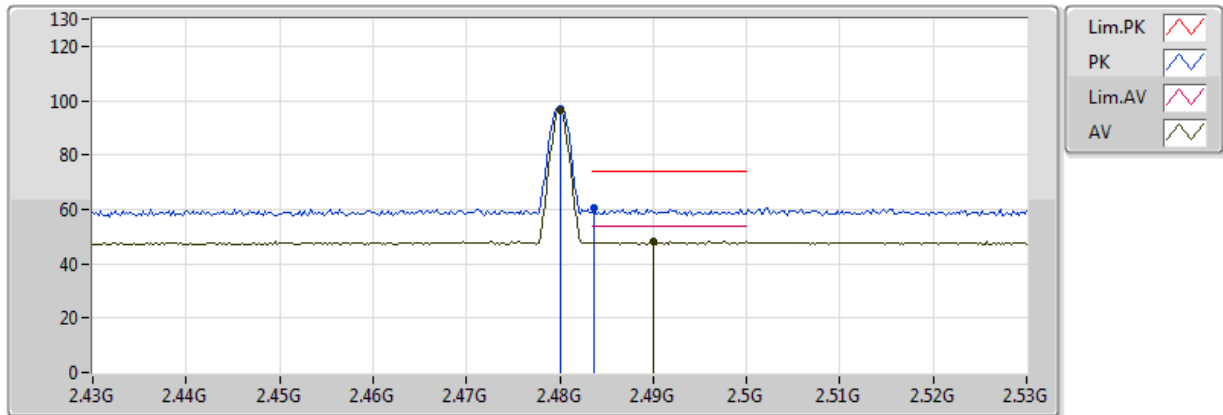


EUT : Y

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	101.69	Inf	-Inf	31.77	3	Vertical	279	1.26	-	69.92	27.45	4.32	-
AV	2.4912G	47.97	54.00	-6.03	31.81	3	Vertical	279	1.26	-	16.17	27.48	4.33	-
PK	2.48G	102.34	Inf	-Inf	31.77	3	Vertical	279	1.26	-	70.57	27.45	4.32	-
PK	2.4836G	61.92	74.00	-12.08	31.78	3	Vertical	279	1.26	-	30.14	27.46	4.32	-

BT-LE(1Mbps)

2480MHz_TX

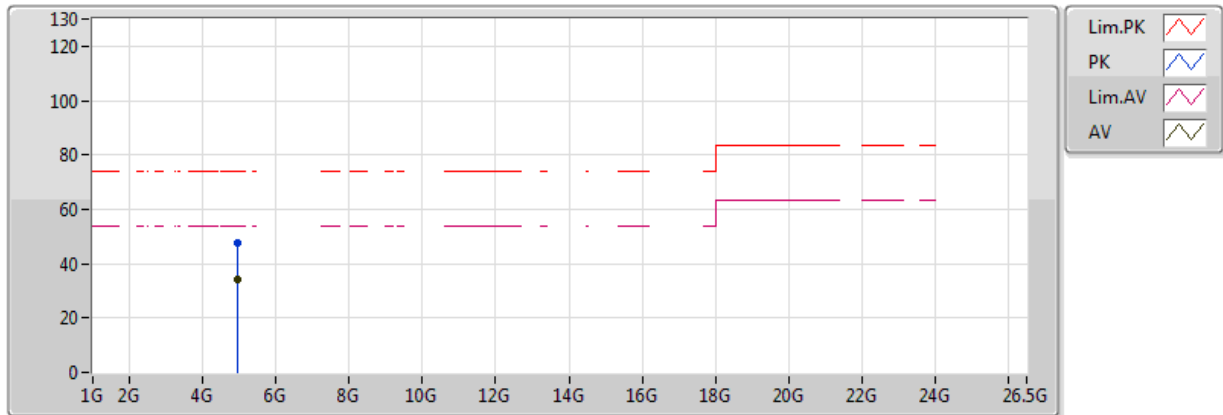


EUT : Y

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	96.35	Inf	-Inf	31.77	3	Horizontal	341	1.50	-	64.59	27.45	4.32	-
AV	2.49G	48.10	54.00	-5.90	31.80	3	Horizontal	341	1.50	-	16.29	27.47	4.33	-
PK	2.48G	97.00	Inf	-Inf	31.77	3	Horizontal	341	1.50	-	65.23	27.45	4.32	-
PK	2.4836G	60.57	74.00	-13.43	31.78	3	Horizontal	341	1.50	-	28.79	27.46	4.32	-

BT-LE(1Mbps)

2480MHz_TX

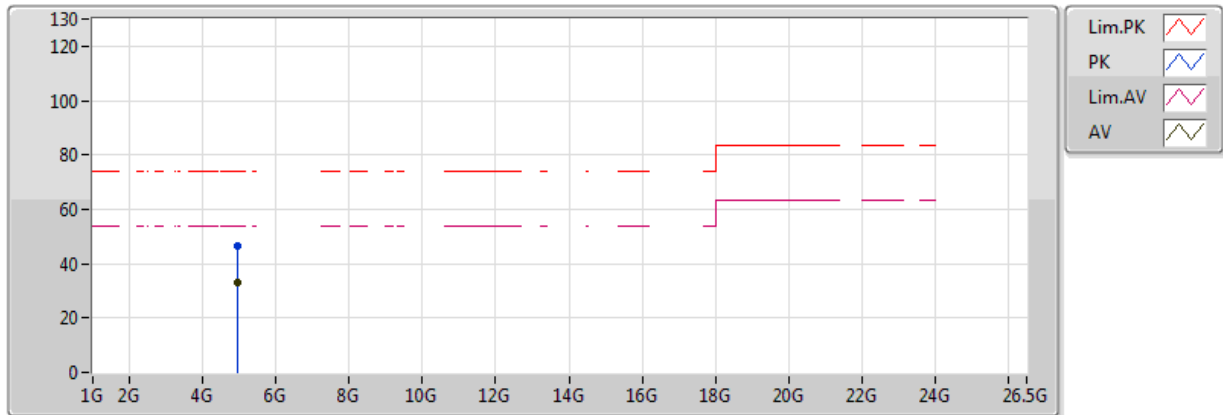


EUT : Y

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	34.34	54.00	-19.66	6.82	3	Vertical	214	1.76	-	27.52	31.44	5.46	30.08
PK	4.96G	47.48	74.00	-26.52	6.82	3	Vertical	214	1.76	-	40.66	31.44	5.46	30.08

BT-LE(1Mbps)

2480MHz_TX



EUT : Y

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	33.12	54.00	-20.88	6.82	3	Horizontal	65	1.27	-	26.30	31.44	5.46	30.08
PK	4.96G	46.59	74.00	-27.41	6.82	3	Horizontal	65	1.27	-	39.77	31.44	5.46	30.08