

FCC Test Report

Equipment : net4more borderROUTER PoE-Thread
Brand Name : Tridonic
Model No. : 28001581
FCC ID : 2AMXZ28001581
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant : Tridonic GmbH & Co KG
Faerbergasse 15, 6851 Dornbirn, Austria
Manufacturer : XAVi Technologies Corp.
22F., No.69, Sec. 2, Guangfu Rd., Sanchong Dist.,
New Taipei City 241, Taiwan (R.O.C.)

The product sample received on Jul. 12, 2017 and completely tested on Aug. 14, 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.

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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

[illegible]

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std.	Ch. Frequency (MHz)	Channel Number
2400-2483.5	802.15.4	2405-2480	11-26 [16]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	Zigbee	5	1TX

Note:.

- ♦ Zigbee uses a O-QPSK (250kbps) 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	-	-	PIFA	Fixed on Board	2.8

1.1.3 EUT Information

Operational Condition	
EUT Power Type	From AC Adapter / POE
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) $\geq 1/T$
Zigbee	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

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.			
☒	DONG HU	ADD : No. 3, Ln. 238, Kangle St., Neihu Dist., Taipei City, Taiwan (R.O.C.)	
		TEL : 886-2-2631-5551	FAX : 886-2-2631-9740
Test site Designation No. TW1094 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH06-HY	Lisa	23.6°C / 63.6%	14/Aug/2017
Radiated	03CH09-HY	Jerry	27.5°C / 45%	09/Aug/2017
AC Conduction	CO01-NH	Willy	26°C / 54%	19/Jul/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	2.6 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	tara term
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Mode	Power Setting
Zigbee	-
2405MHz	0
2440MHz	0
2480MHz	12

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	LAN 1Gbps +NFC+ZIGBEE

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

2.4 Support Equipment

Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	R33002 / DOC
2	Adapter for NB	DELL	HA65NM130	R35737 / DOC

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE	Gigabit	PSE305	-

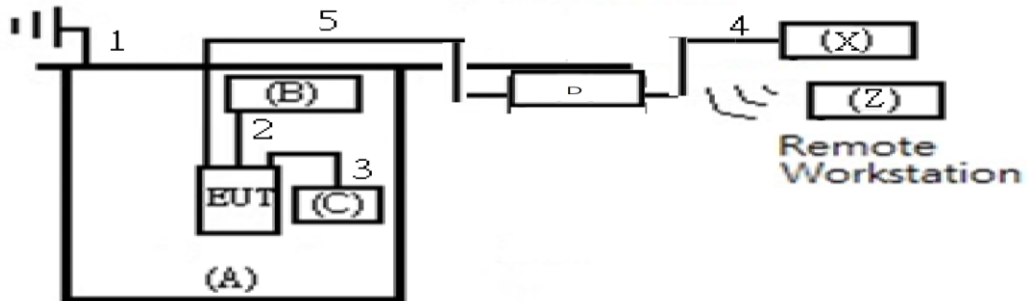
Note. Support equipment No.1 was provided by customer.

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Lightboxes	-	-	XX
B	Sensor	BOSCH	BMP280	N/A
C	USB 3.0 Flash Disk	Transcend	JetFlash 700	DoC
D	PoE	802.3at	PSE305	DoC
X	NB	DELL	E5520	DoC
Z	Zigbee Receiver(RX)	Xavi	DMC120	DoC

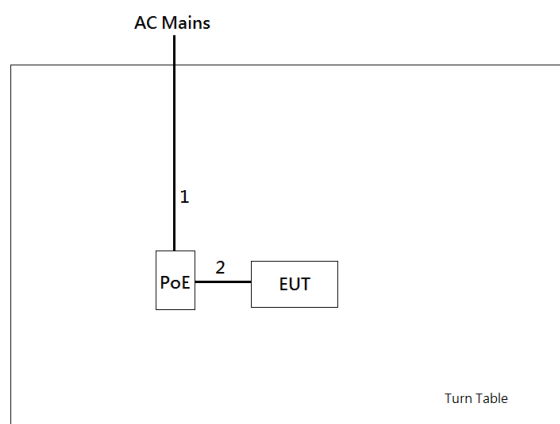
Note. Support equipment No. A & No. D was provided by customer.

2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	GND	Non-Shielded	1.5	-
2	RJ10	Non-Shielded	0.03	-
3	USB	D-Shielded	0.8	-
4	RJ45	Non-Shielded	20	-
5	RJ45	Non-Shielded	1	-
1	GND	Non-Shielded	1.5	-

Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	2.0m	-
2	RJ45 Cable	No	0.6m	-

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.

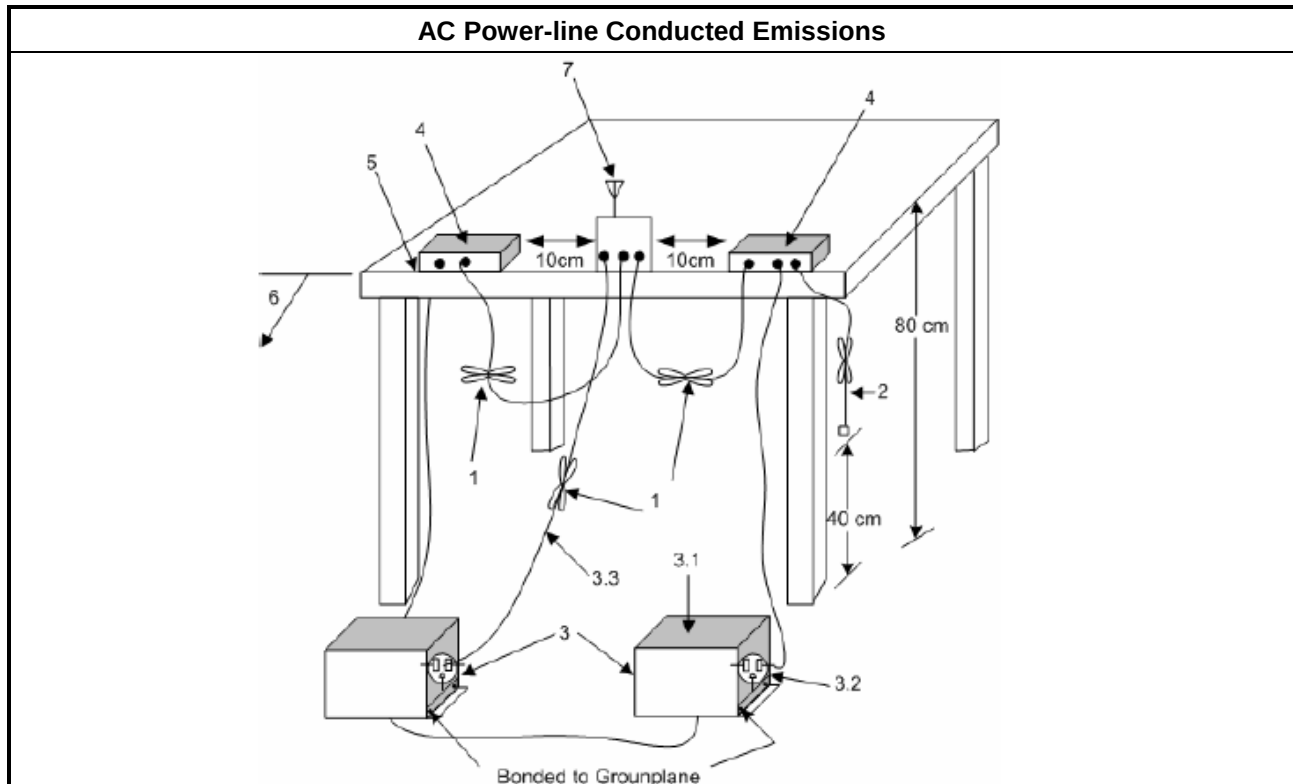
3.1.2 Measuring Instruments

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 for AC 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.

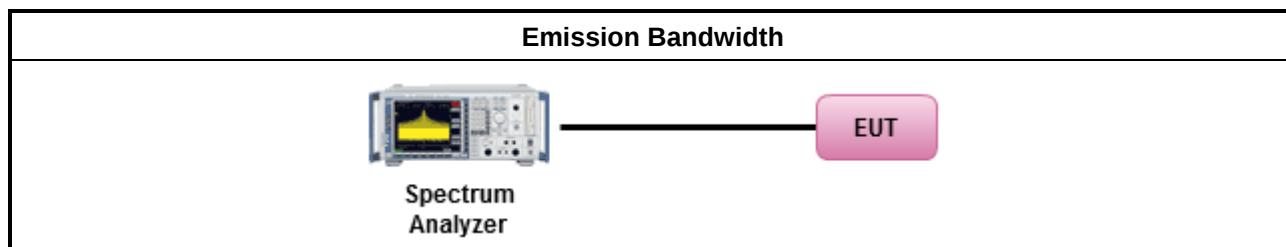
3.2.2 Measuring Instruments

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:
☒	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.

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		
	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): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm	
	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.		

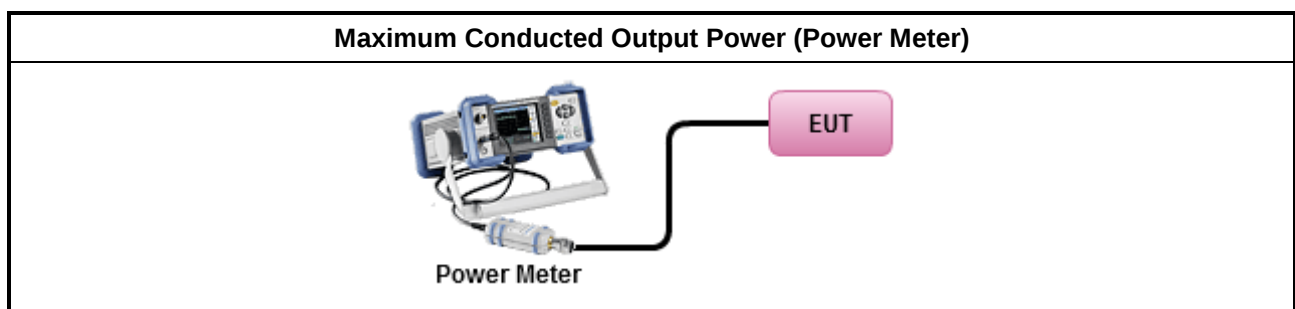
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
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: $P_{total} = P_1 + P_2 + \dots + P_n$ (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) $\leq$ 8 dBm/3kHz

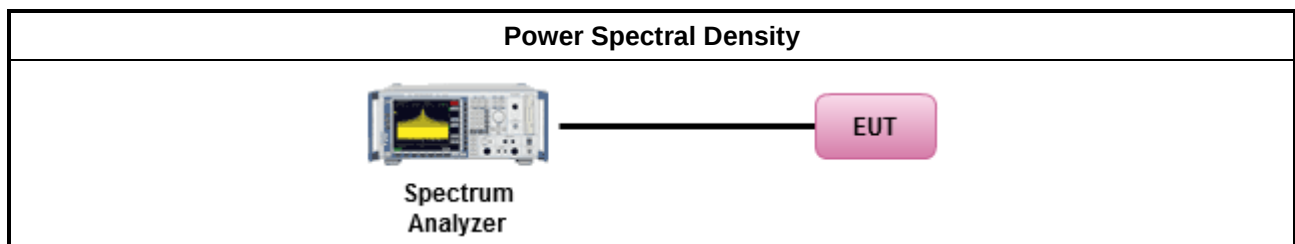
3.4.2 Measuring Instruments

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



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.	

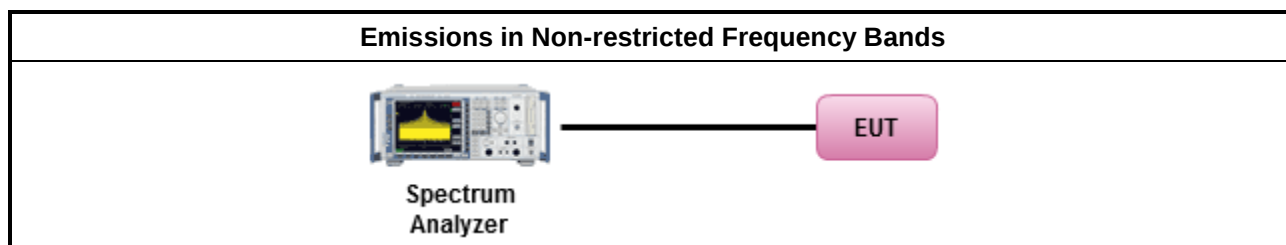
3.5.2 Measuring Instruments

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



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.

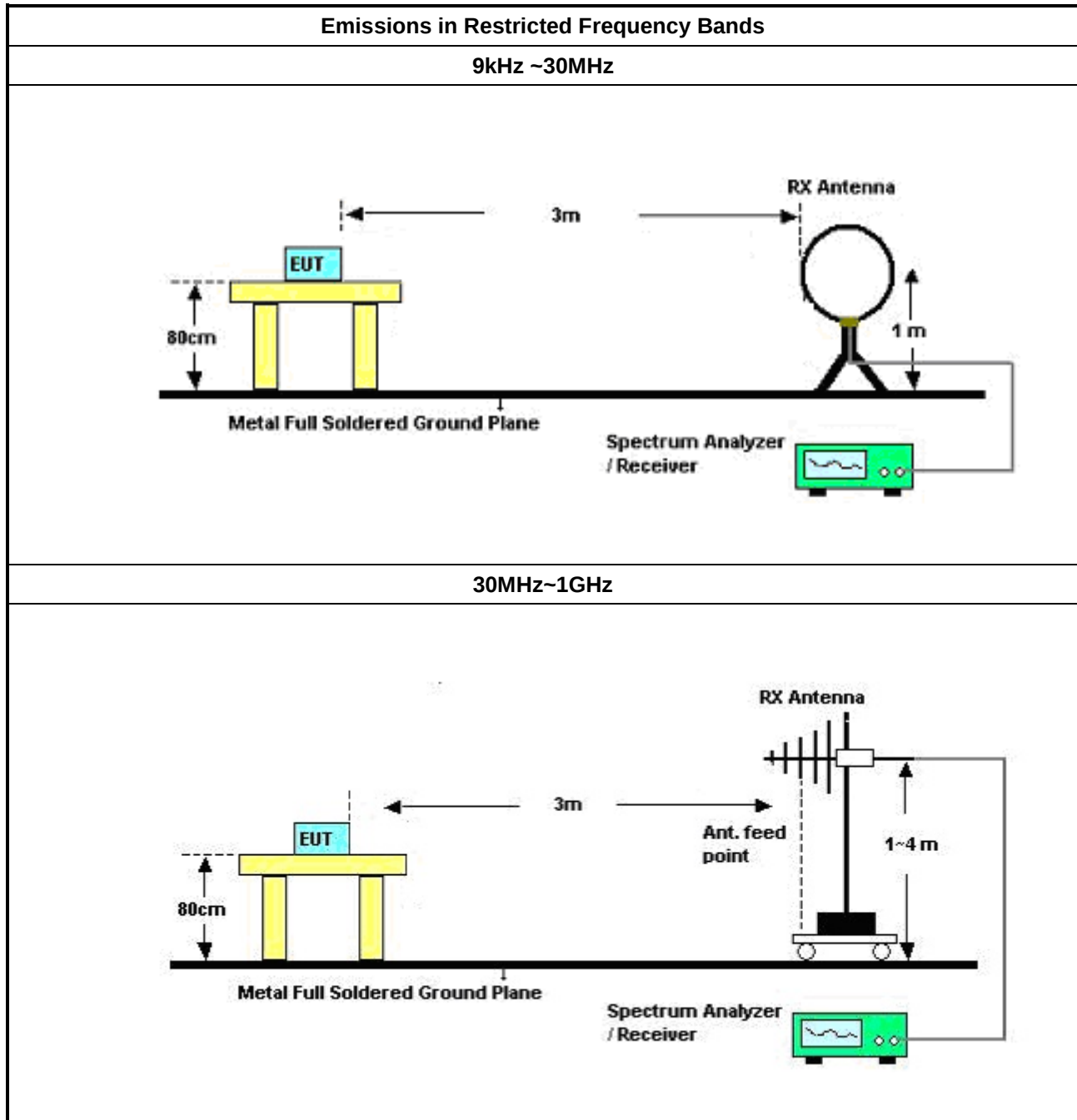
3.6.2 Measuring Instruments

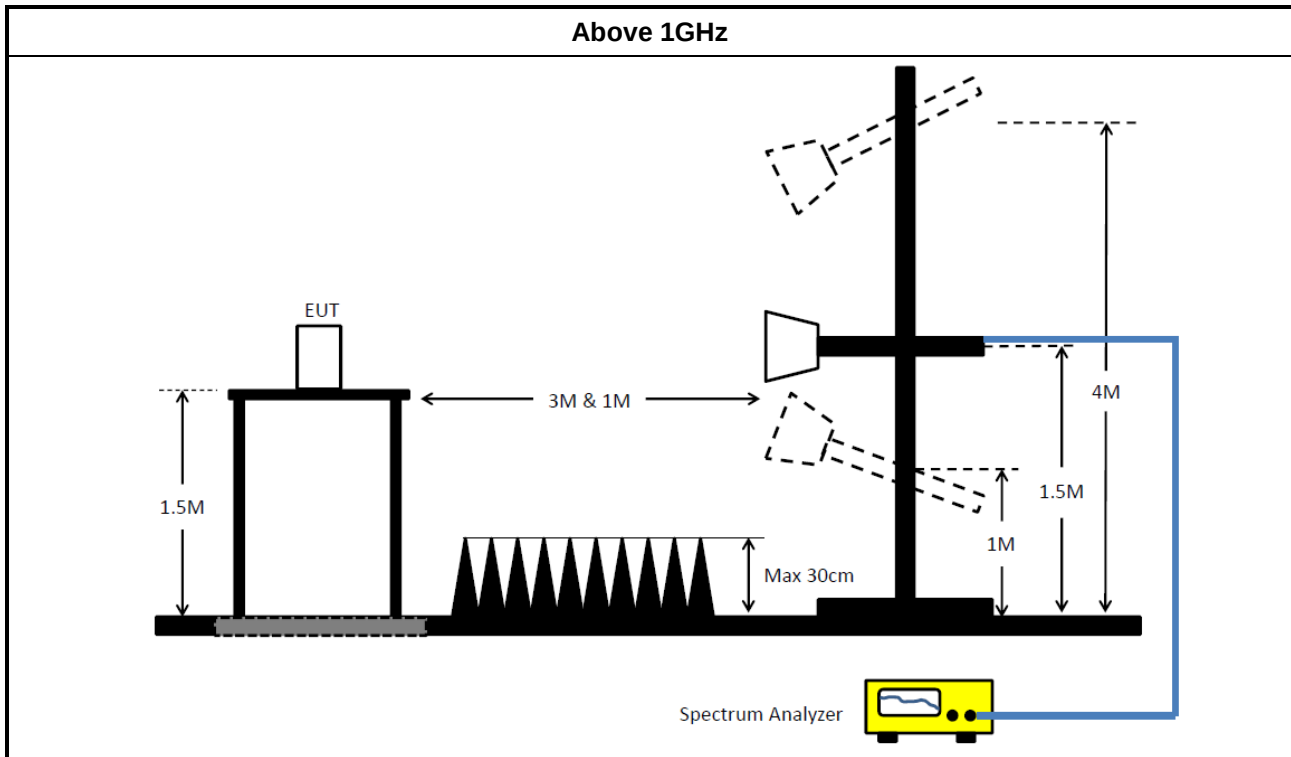
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
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 $\geq 1/T$.
	☒ 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





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
EMI Receiver	R&S	ESR3	102052	9K Hz – 3.6 GHz	Apr. 05, 2017	Apr. 04, 2018
LISN	SCHAFFNER	NNB41	04/10153	9kHz - 30MHz	Dec 19, 2016	Dec 18, 2017
LISN	KYORITSU	KNW-407	8-1010-15	9kHz – 30MHz	NCR	NCR
Power Filter	CORCOM	MR12030	N/A	30A*2	NCR	NCR
RF Cable-CON	Suhner Switzerland	RG223/U	CB004	9kHz - 30MHz	Dec. 12, 2016	Dec. 11, 2017
Impedance Stabilization Network	TESEQ GMBH	ISN T800	26105	150kHz - 30MHz	Nov. 14, 2016	Nov. 13, 2017

NCR : Non-Calibration Require

Instrument for Radiated Test

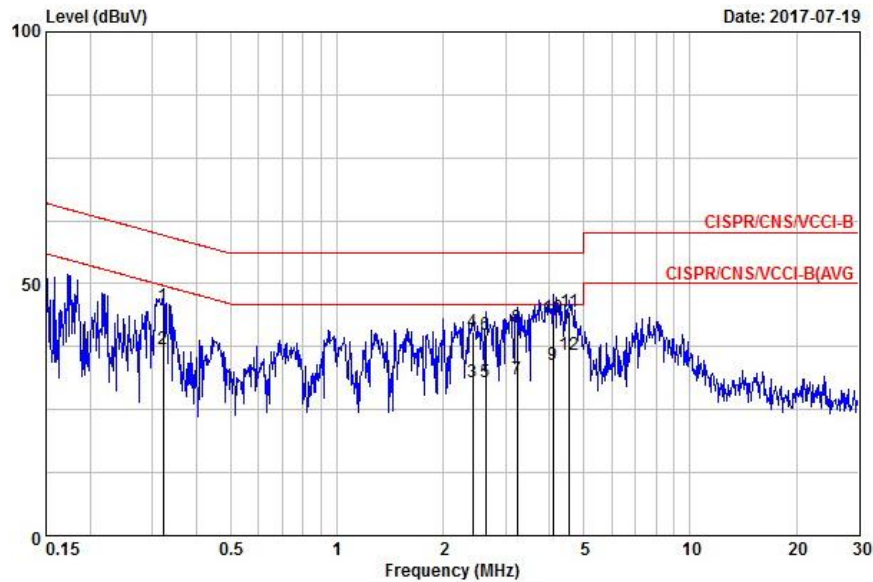
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	25/Apr/2017	24/Apr/2018
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	28/Jun/2017	27/Jun/2018
Amplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	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	01/Oct/2016	30/Sep/2017
Horn Antenna	SCHWARZBEC K	BBHA 9120D	BBHA9120D 1534	1GHz~18GHz	28/Apr/2017	27/Apr/2018
Horn Antenna	SCHWARZBEC K	BBHA9170	BBHA9170614	18GHz ~ 40GHz	06/Feb/2017	05/Feb/2018
Loop Antenna	R&S	HFH2-Z2	100330	9 kHz~30 MHz	10/Nov/2016	09/Nov/2017
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	ESU-26	100422/026	20Hz ~ 26.5GHz	21/Sep/2016	20/Sep/2017

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	1	Power Phase	Neutral
Operating Function	PoE Mode		

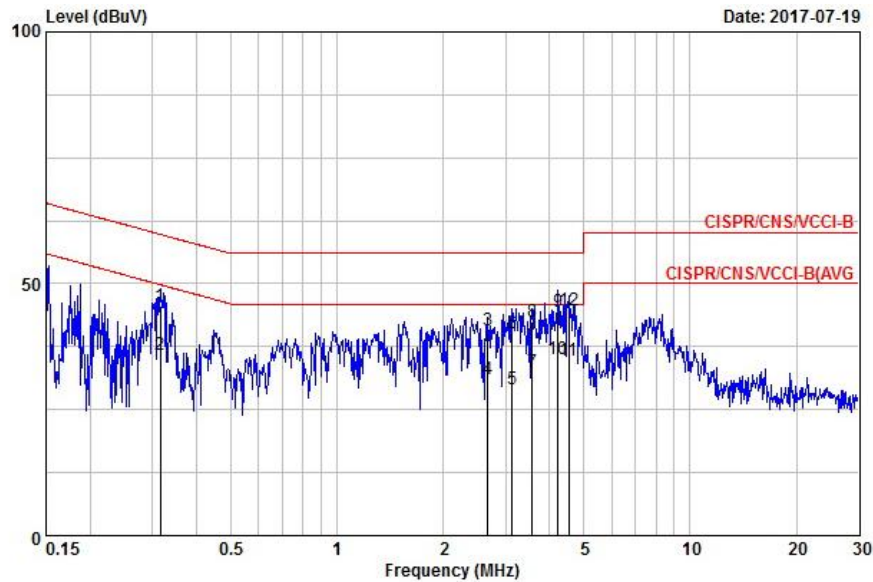


	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.322	45.66	-14.01	59.66	35.25	10.30	0.10	QP
2	0.322	37.08	-12.59	49.66	26.67	10.30	0.10	AVERAGE
3	2.422	30.63	-15.37	46.00	20.23	10.19	0.20	AVERAGE
4	2.422	40.52	-15.48	56.00	30.12	10.19	0.20	QP
5	2.636	30.39	-15.61	46.00	20.00	10.19	0.20	AVERAGE
6	2.636	39.89	-16.11	56.00	29.50	10.19	0.20	QP
7	3.241	31.19	-14.81	46.00	20.79	10.20	0.20	AVERAGE
8	3.241	41.41	-14.59	56.00	31.01	10.20	0.20	QP
9	4.092	33.95	-12.05	46.00	23.54	10.20	0.20	AVERAGE
10	4.092	43.39	-12.61	56.00	32.98	10.20	0.20	QP
11	4.549	44.43	-11.57	56.00	34.01	10.22	0.20	QP
12	4.549	35.84	-10.16	46.00	25.42	10.22	0.20	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	1	Power Phase	Line
Operating Function	PoE Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.317	45.54	-14.26	59.80	35.26	10.18	0.10	QP
2	0.317	35.88	-13.92	49.80	25.60	10.18	0.10	AVERAGE
3	2.678	40.69	-15.31	56.00	30.04	10.46	0.20	QP
4	2.678	30.95	-15.05	46.00	20.30	10.46	0.20	AVERAGE
5	3.140	29.00	-17.00	46.00	18.34	10.47	0.20	AVERAGE
6	3.140	40.28	-15.72	56.00	29.62	10.47	0.20	QP
7	3.565	32.42	-13.58	46.00	21.74	10.48	0.20	AVERAGE
8	3.565	42.55	-13.45	56.00	31.87	10.48	0.20	QP
9	4.224	44.42	-11.58	56.00	33.73	10.50	0.20	QP
10	4.224	34.91	-11.09	46.00	24.22	10.50	0.20	AVERAGE
11	4.525	34.87	-11.13	46.00	24.16	10.50	0.20	AVERAGE
12	4.525	44.65	-11.35	56.00	33.94	10.50	0.20	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)
Zigbee	-	-	-	-	-
2.4-2.4835GHz	1.613M	4.26M	4M26G1D	1.363M	2.374M

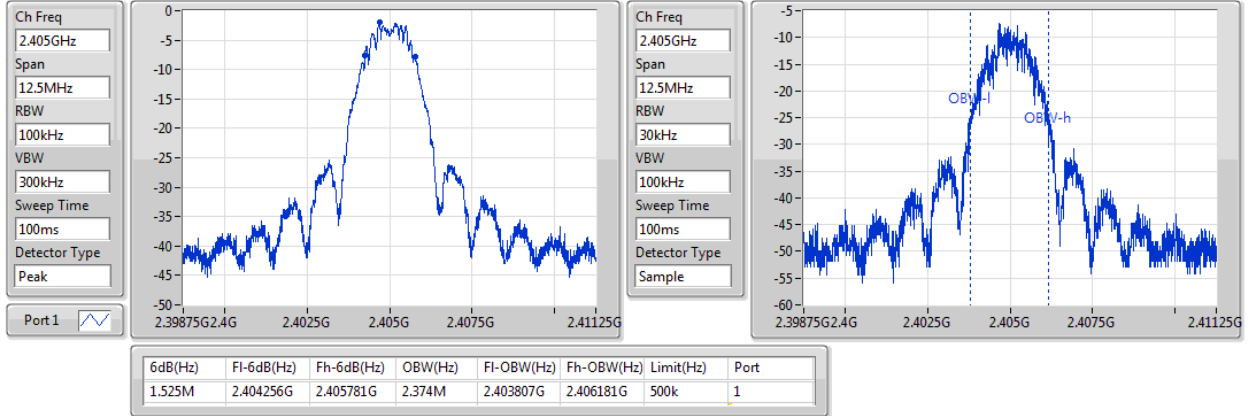
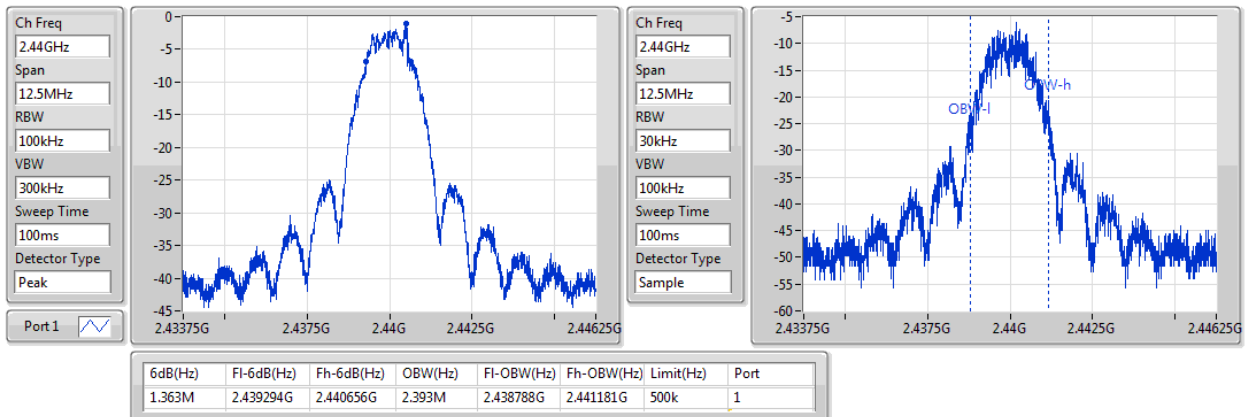
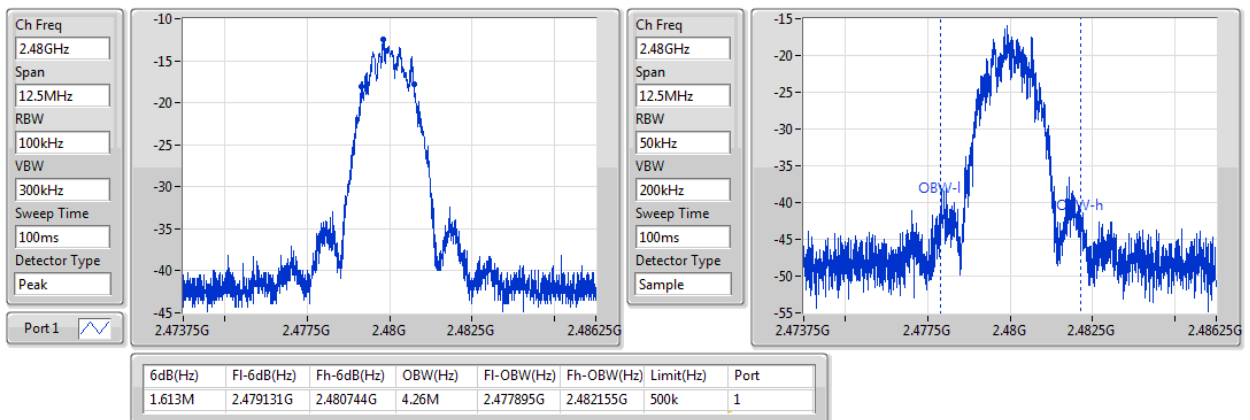
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

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)
Zigbee	-	-	-	-
2405MHz	Pass	500k	1.525M	2.374M
2440MHz	Pass	500k	1.363M	2.393M
2480MHz	Pass	500k	1.613M	4.26M

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

Zigbee
EBW
2405MHz

Zigbee
EBW
2440MHz

Zigbee
EBW
2480MHz


**Summary**

Mode	Total Power (dBm)	Total Power (W)
Zigbee	-	-
2.4-2.4835GHz	1.76	0.00150

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
Zigbee	-	-	-	-	-
2405MHz	Pass	2.80	1.61	1.61	30.00
2440MHz	Pass	2.80	1.76	1.76	30.00
2480MHz	Pass	2.80	-6.33	-6.33	30.00

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

**Summary**

Mode	PD (dBm/RBW)
Zigbee	-
2.4-2.4835GHz	-14.72

RBW=3kHz.

Result

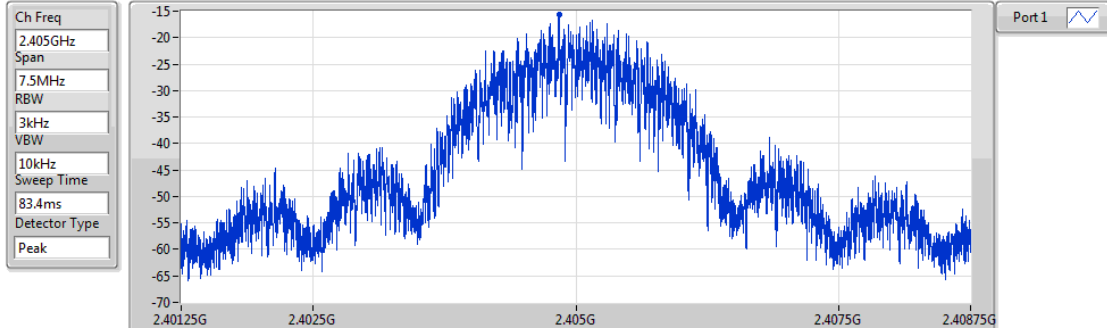
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
Zigbee	-	-	-	-	-
2405MHz	Pass	2.80	-15.57	-15.57	8.00
2440MHz	Pass	2.80	-14.72	-14.72	8.00
2480MHz	Pass	2.80	-26.72	-26.72	8.00

DG = Directional Gain; RBW=3kHz;**PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

Zigbee

PSD

2405MHz

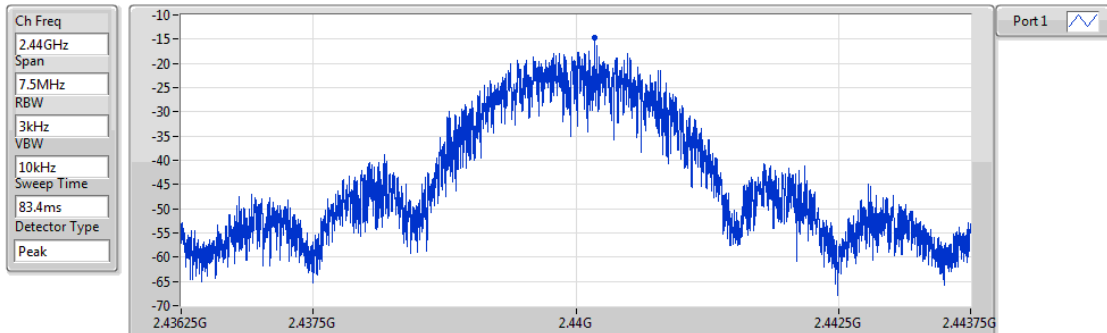


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.57	-15.57	-15.57

Zigbee

PSD

2440MHz

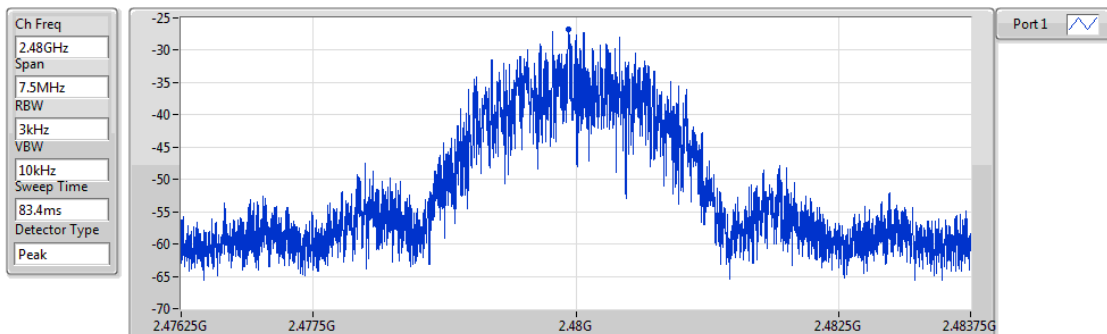


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.72	-14.72	-14.72

Zigbee

PSD

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-26.72	-26.72	-26.72

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
Zigbee	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.439913G	-2.63	-32.63	2.06786G	-59.86	2.39994G	-43.27	2.4848G	-58.89	24.305112G	-53.82	1

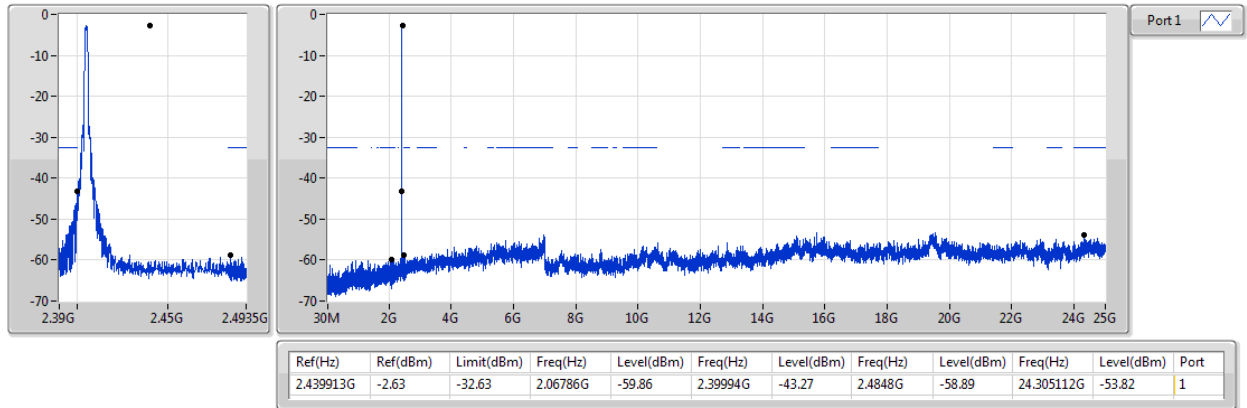
Result

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
Zigbee	-	-	-	-	-	-	-	-	-	-	-	-	-
2405MHz	Pass	2.439913G	-2.63	-32.63	2.06786G	-59.86	2.39994G	-43.27	2.4848G	-58.89	24.305112G	-53.82	1
2440MHz	Pass	2.439913G	-2.63	-32.63	2.11388G	-60.16	2.39634G	-59.12	2.48376G	-59.16	16.47285G	-53.61	1
2480MHz	Pass	2.439913G	-2.63	-32.63	2.00178G	-59.68	2.39982G	-60.57	2.48382G	-47.86	15.06338G	-53.70	1

Zigbee

CSE NdB

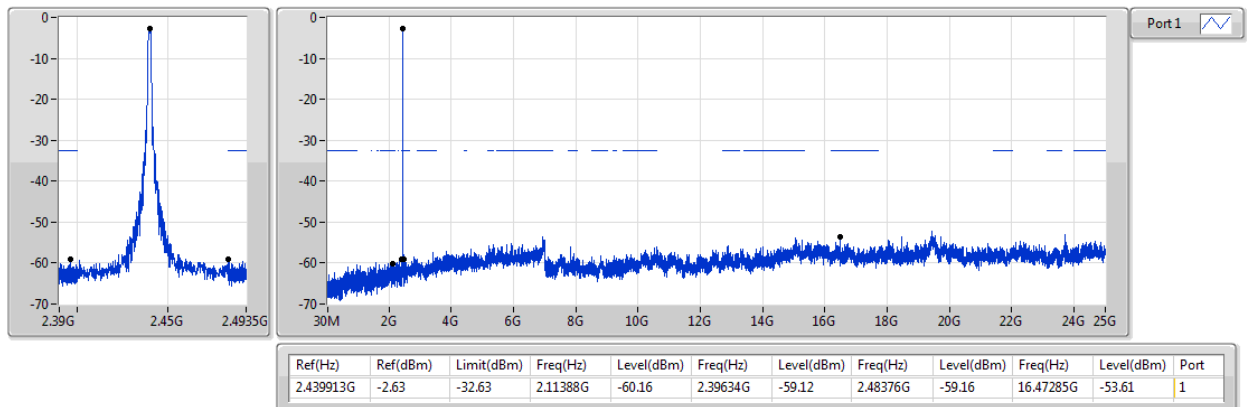
2405MHz



Zigbee

CSE NdB

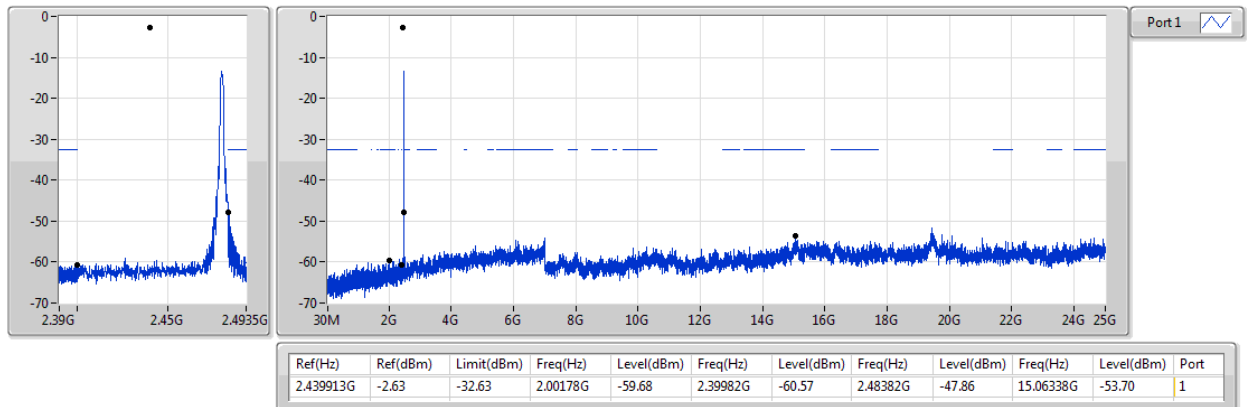
2440MHz



Zigbee

CSE NdB

2480MHz



Summary

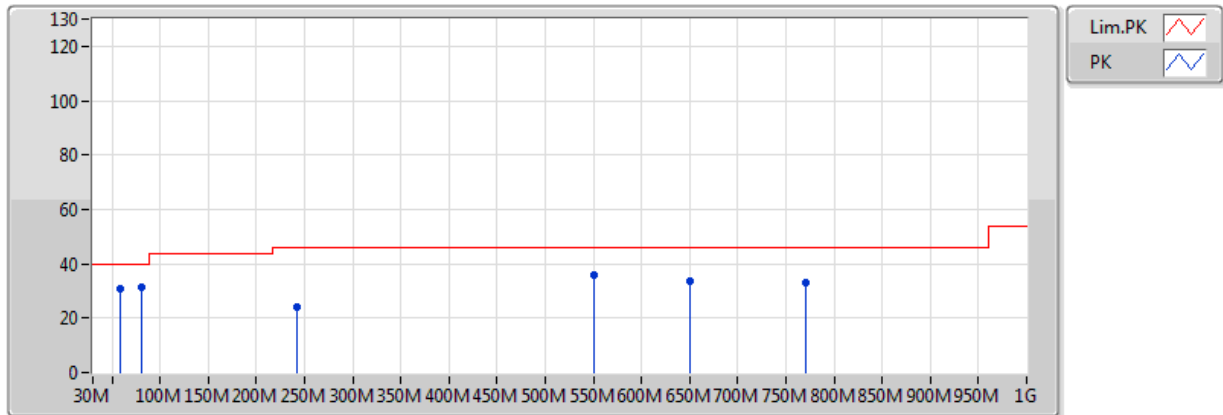
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Zigbee	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	PK	80.44M	31.45	40.00	-8.55	-22.94	3	Vertical	360	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Zigbee	-	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	95.96M	27.06	43.50	-16.44	-20.79	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	121.18M	32.61	43.50	-10.89	-18.56	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	247.28M	28.79	46.00	-17.21	-17.51	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	499.48M	35.42	46.00	-10.58	-12.01	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	759.44M	35.65	46.00	-10.35	-8.25	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	840.92M	36.39	46.00	-9.61	-7.23	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	59.1M	30.91	40.00	-9.09	-24.62	3	Vertical	360	1.00	-
2440MHz	Pass	PK	80.44M	31.45	40.00	-8.55	-22.94	3	Vertical	360	1.00	-
2440MHz	Pass	PK	241.46M	24.23	46.00	-21.77	-18.31	3	Vertical	360	1.00	-
2440MHz	Pass	PK	549.92M	35.86	46.00	-10.14	-10.74	3	Vertical	360	1.00	-
2440MHz	Pass	PK	650.8M	33.77	46.00	-12.23	-9.70	3	Vertical	360	1.00	-
2440MHz	Pass	PK	771.08M	32.85	46.00	-13.15	-8.16	3	Vertical	360	1.00	-

Zigbee

2440MHz_PoE

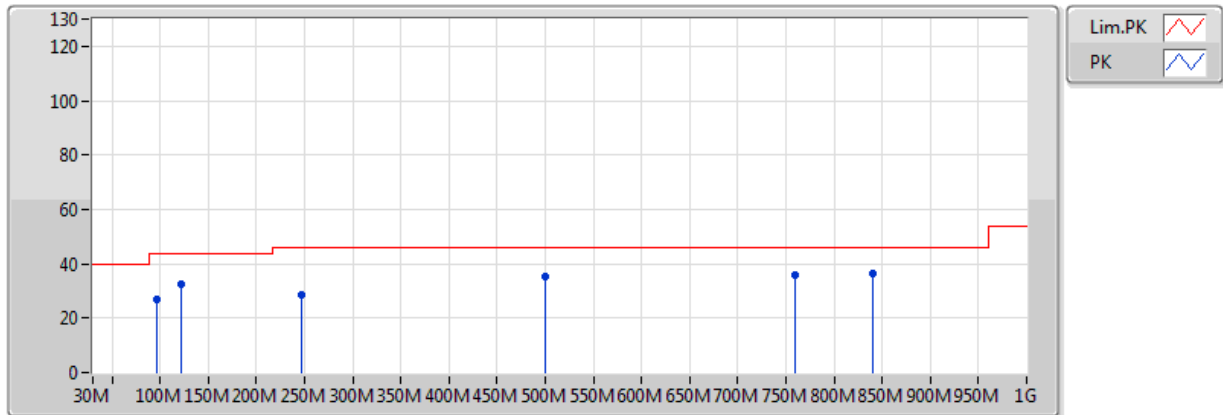


Eut : Y axis

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	59.1M	30.91	40.00	-9.09	-24.62	3	Vertical	360	1.00	-	55.53	10.91	1.56	37.09
PK	80.44M	31.45	40.00	-8.55	-22.94	3	Vertical	360	1.00	-	54.39	12.41	1.59	36.94
PK	241.46M	24.23	46.00	-21.77	-18.31	3	Vertical	360	1.00	-	42.54	16.31	1.78	36.40
PK	549.92M	35.86	46.00	-10.14	-10.74	3	Vertical	360	1.00	-	46.60	24.16	2.15	37.05
PK	650.8M	33.77	46.00	-12.23	-9.70	3	Vertical	360	1.00	-	43.47	25.30	2.27	37.27
PK	771.08M	32.85	46.00	-13.15	-8.16	3	Vertical	360	1.00	-	41.01	26.87	2.42	37.44

Zigbee

2440MHz_PoE



Eut : Y axis

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	95.96M	27.06	43.50	-16.44	-20.79	3	Horizontal	0	1.00	-	47.85	14.44	1.61	36.83
PK	121.18M	32.61	43.50	-10.89	-18.56	3	Horizontal	0	1.00	-	51.17	16.52	1.64	36.71
PK	247.28M	28.79	46.00	-17.21	-17.51	3	Horizontal	0	1.00	-	46.30	17.11	1.79	36.41
PK	499.48M	35.42	46.00	-10.58	-12.01	3	Horizontal	0	1.00	-	47.43	22.82	2.09	36.92
PK	759.44M	35.65	46.00	-10.35	-8.25	3	Horizontal	0	1.00	-	43.90	26.78	2.40	37.43
PK	840.92M	36.39	46.00	-9.61	-7.23	3	Horizontal	0	1.00	-	43.62	27.77	2.50	37.50

Summary

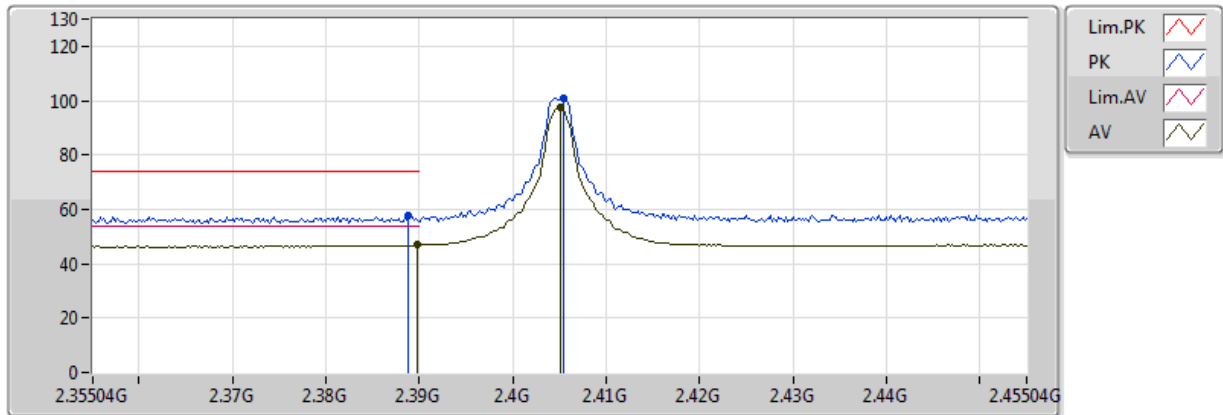
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Zigbee	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.483502G	53.63	54.00	-0.37	31.53	3	Vertical	97	3.69	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Zigbee	-	-	-	-	-	-	-	-	-	-	-	-
2405MHz	Pass	AV	2.38984G	46.74	54.00	-7.26	31.17	3	Horizontal	135	2.31	-
2405MHz	Pass	AV	2.40504G	97.25	Inf	-Inf	31.23	3	Horizontal	135	2.31	-
2405MHz	Pass	PK	2.37664G	57.17	74.00	-16.83	31.12	3	Horizontal	135	2.31	-
2405MHz	Pass	PK	2.40444G	100.45	Inf	-Inf	31.23	3	Horizontal	135	2.31	-
2405MHz	Pass	AV	2.38984G	46.79	54.00	-7.21	31.17	3	Vertical	95	3.69	-
2405MHz	Pass	AV	2.40504G	97.57	Inf	-Inf	31.23	3	Vertical	95	3.69	-
2405MHz	Pass	PK	2.38884G	57.82	74.00	-16.18	31.17	3	Vertical	95	3.69	-
2405MHz	Pass	PK	2.40544G	100.69	Inf	-Inf	31.23	3	Vertical	95	3.69	-
2405MHz	Pass	AV	4.81G	39.34	54.00	-14.66	2.46	3	Horizontal	360	1.50	-
2405MHz	Pass	PK	4.81G	45.52	74.00	-28.48	2.46	3	Horizontal	360	1.50	-
2405MHz	Pass	AV	4.81G	33.78	54.00	-20.22	2.46	3	Vertical	0	1.50	-
2405MHz	Pass	PK	4.81G	44.78	74.00	-29.22	2.46	3	Vertical	0	1.50	-
2440MHz	Pass	AV	2.3896G	46.23	54.00	-7.77	31.17	3	Horizontal	47	1.32	-
2440MHz	Pass	AV	2.44G	92.83	Inf	-Inf	31.36	3	Horizontal	47	1.32	-
2440MHz	Pass	AV	2.5G	47.13	54.00	-6.87	31.59	3	Horizontal	47	1.32	-
2440MHz	Pass	PK	2.374G	57.62	74.00	-16.38	31.11	3	Horizontal	47	1.32	-
2440MHz	Pass	PK	2.4396G	96.04	Inf	-Inf	31.36	3	Horizontal	47	1.32	-
2440MHz	Pass	PK	2.4956G	57.78	74.00	-16.22	31.57	3	Horizontal	47	1.32	-
2440MHz	Pass	AV	2.356G	46.19	54.00	-7.81	31.04	3	Vertical	102	3.69	-
2440MHz	Pass	AV	2.44G	97.23	Inf	-Inf	31.36	3	Vertical	102	3.69	-
2440MHz	Pass	AV	2.496G	47.10	54.00	-6.90	31.57	3	Vertical	102	3.69	-
2440MHz	Pass	PK	2.3472G	57.82	74.00	-16.18	31.00	3	Vertical	102	3.69	-
2440MHz	Pass	PK	2.4396G	100.44	Inf	-Inf	31.36	3	Vertical	102	3.69	-
2440MHz	Pass	PK	2.4948G	57.46	74.00	-16.54	31.57	3	Vertical	102	3.69	-
2440MHz	Pass	AV	4.88G	35.91	54.00	-18.09	2.56	3	Horizontal	360	1.50	-
2440MHz	Pass	PK	4.88G	45.45	74.00	-28.55	2.56	3	Horizontal	360	1.50	-
2440MHz	Pass	AV	4.88G	33.88	54.00	-20.12	2.56	3	Vertical	0	1.50	-
2440MHz	Pass	PK	4.88G	45.70	74.00	-28.30	2.56	3	Vertical	0	1.50	-
2480MHz	Pass	AV	2.48G	81.20	Inf	-Inf	31.51	3	Horizontal	38	1.51	-
2480MHz	Pass	AV	2.483502G	50.20	54.00	-3.80	31.53	3	Horizontal	38	1.51	-
2480MHz	Pass	PK	2.4806G	84.69	Inf	-Inf	31.52	3	Horizontal	38	1.51	-
2480MHz	Pass	PK	2.4836G	59.11	74.00	-14.89	31.53	3	Horizontal	38	1.51	-
2480MHz	Pass	AV	2.48G	86.14	Inf	-Inf	31.51	3	Vertical	97	3.69	-
2480MHz	Pass	AV	2.483502G	53.63	54.00	-0.37	31.53	3	Vertical	97	3.69	-
2480MHz	Pass	PK	2.4794G	89.56	Inf	-Inf	31.51	3	Vertical	97	3.69	-
2480MHz	Pass	PK	2.483502G	62.81	74.00	-11.19	31.53	3	Vertical	97	3.69	-
2480MHz	Pass	AV	4.96G	32.25	54.00	-21.75	2.68	3	Horizontal	360	1.50	-
2480MHz	Pass	PK	4.96G	43.42	74.00	-30.58	2.68	3	Horizontal	360	1.50	-
2480MHz	Pass	AV	4.96G	31.81	54.00	-22.19	2.68	3	Vertical	0	1.50	-
2480MHz	Pass	PK	4.96G	43.70	74.00	-30.30	2.68	3	Vertical	0	1.50	-

Zigbee

2405MHz_TX

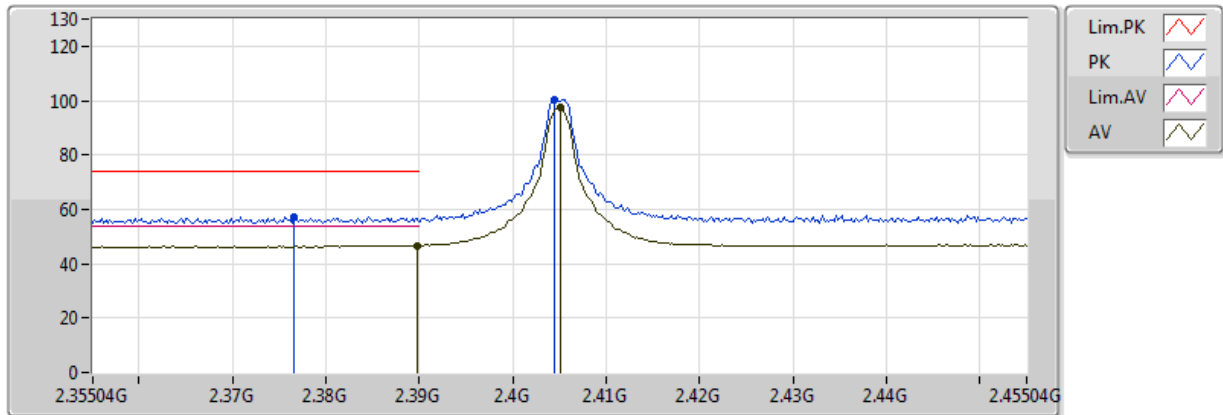


Eut : Y axis

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	2.38984G	46.79	54.00	-7.21	31.17	3	Vertical	95	3.69	-	15.62	26.99	4.18	-
AV	2.40504G	97.57	Inf	-Inf	31.23	3	Vertical	95	3.69	-	66.34	27.03	4.20	-
PK	2.38884G	57.82	74.00	-16.18	31.17	3	Vertical	95	3.69	-	26.65	26.99	4.18	-
PK	2.40544G	100.69	Inf	-Inf	31.23	3	Vertical	95	3.69	-	69.46	27.04	4.20	-

Zigbee

2405MHz_TX

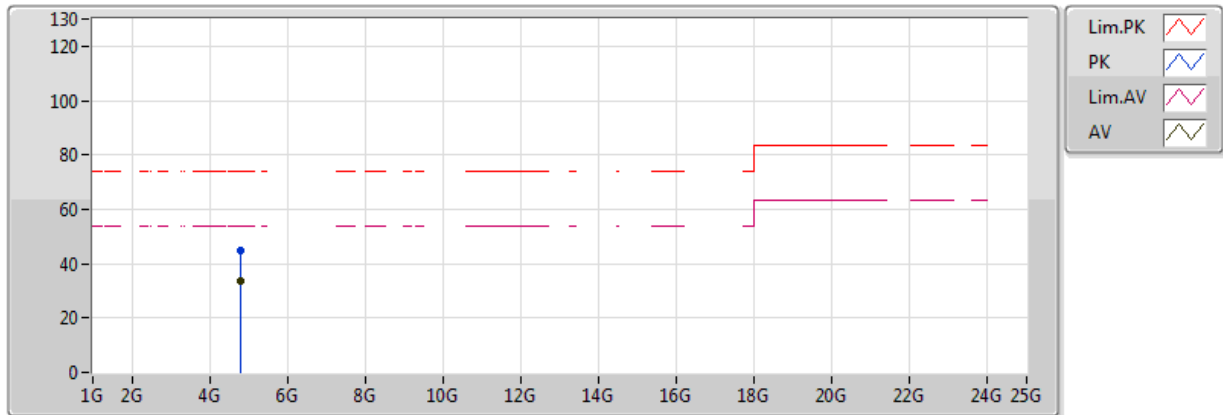


Eut : Y axis

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	2.38984G	46.74	54.00	-7.26	31.17	3	Horizontal	135	2.31	-	15.57	26.99	4.18	-
AV	2.40504G	97.25	Inf	-Inf	31.23	3	Horizontal	135	2.31	-	66.02	27.03	4.20	-
PK	2.37664G	57.17	74.00	-16.83	31.12	3	Horizontal	135	2.31	-	26.05	26.95	4.16	-
PK	2.40444G	100.45	Inf	-Inf	31.23	3	Horizontal	135	2.31	-	69.23	27.03	4.19	-

Zigbee

2405MHz_TX

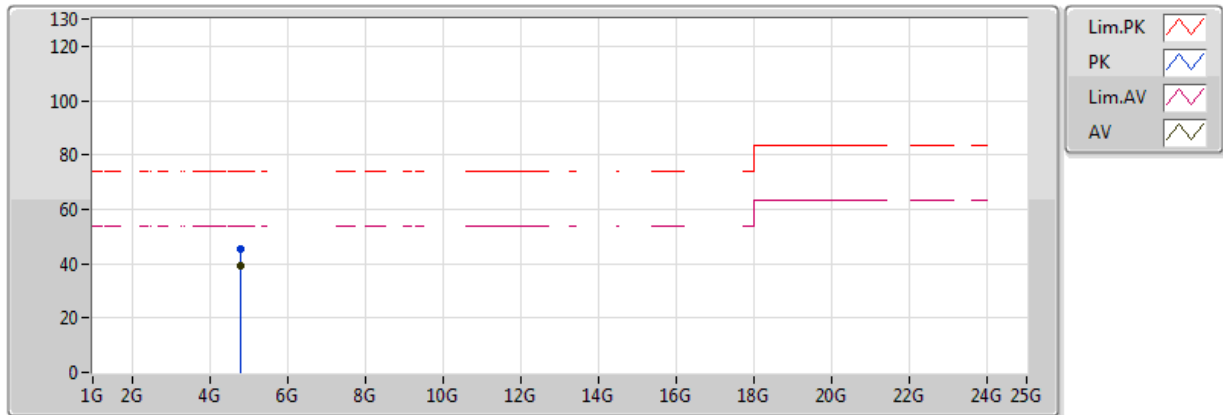


Eut : Y axis

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	4.81G	33.78	54.00	-20.22	2.46	3	Vertical	0	1.50	-	31.32	31.20	6.44	35.17
PK	4.81G	44.78	74.00	-29.22	2.46	3	Vertical	0	1.50	-	42.32	31.20	6.44	35.17

Zigbee

2405MHz_TX

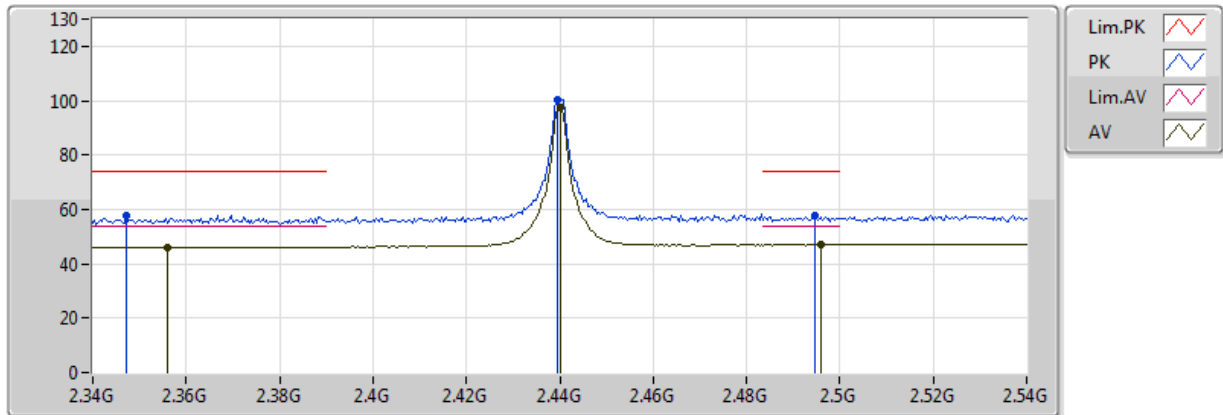


Eut : Y axis

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	4.81G	39.34	54.00	-14.66	2.46	3	Horizontal	360	1.50	-	36.88	31.20	6.44	35.17
PK	4.81G	45.52	74.00	-28.48	2.46	3	Horizontal	360	1.50	-	43.05	31.20	6.44	35.17

Zigbee

2440MHz_TX

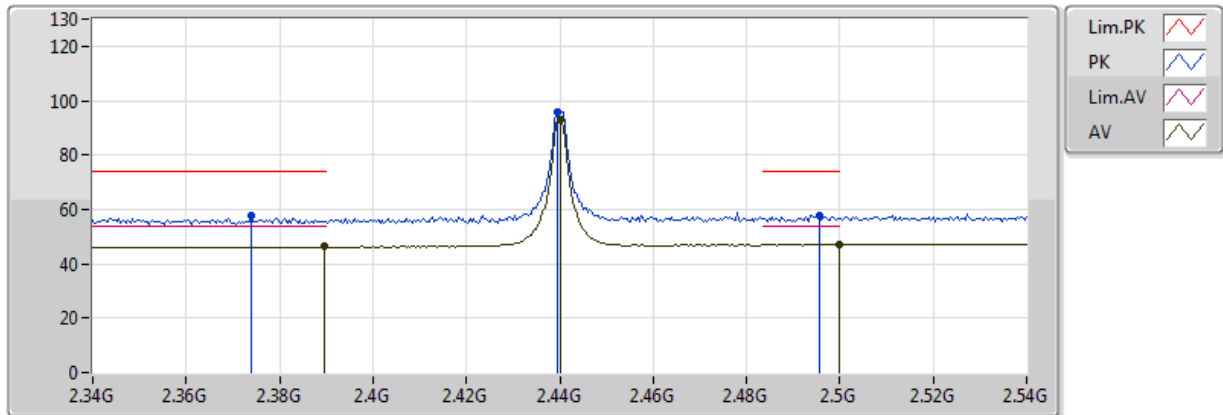


Eut : Y axis

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	2.356G	46.19	54.00	-7.81	31.04	3	Vertical	102	3.69	-	15.15	26.90	4.14	-
AV	2.44G	97.23	Inf	-Inf	31.36	3	Vertical	102	3.69	-	65.87	27.13	4.23	-
AV	2.496G	47.10	54.00	-6.90	31.57	3	Vertical	102	3.69	-	15.53	27.29	4.29	-
PK	2.3472G	57.82	74.00	-16.18	31.00	3	Vertical	102	3.69	-	26.82	26.87	4.13	-
PK	2.4396G	100.44	Inf	-Inf	31.36	3	Vertical	102	3.69	-	69.08	27.13	4.23	-
PK	2.4948G	57.46	74.00	-16.54	31.57	3	Vertical	102	3.69	-	25.89	27.29	4.28	-

Zigbee

2440MHz_TX

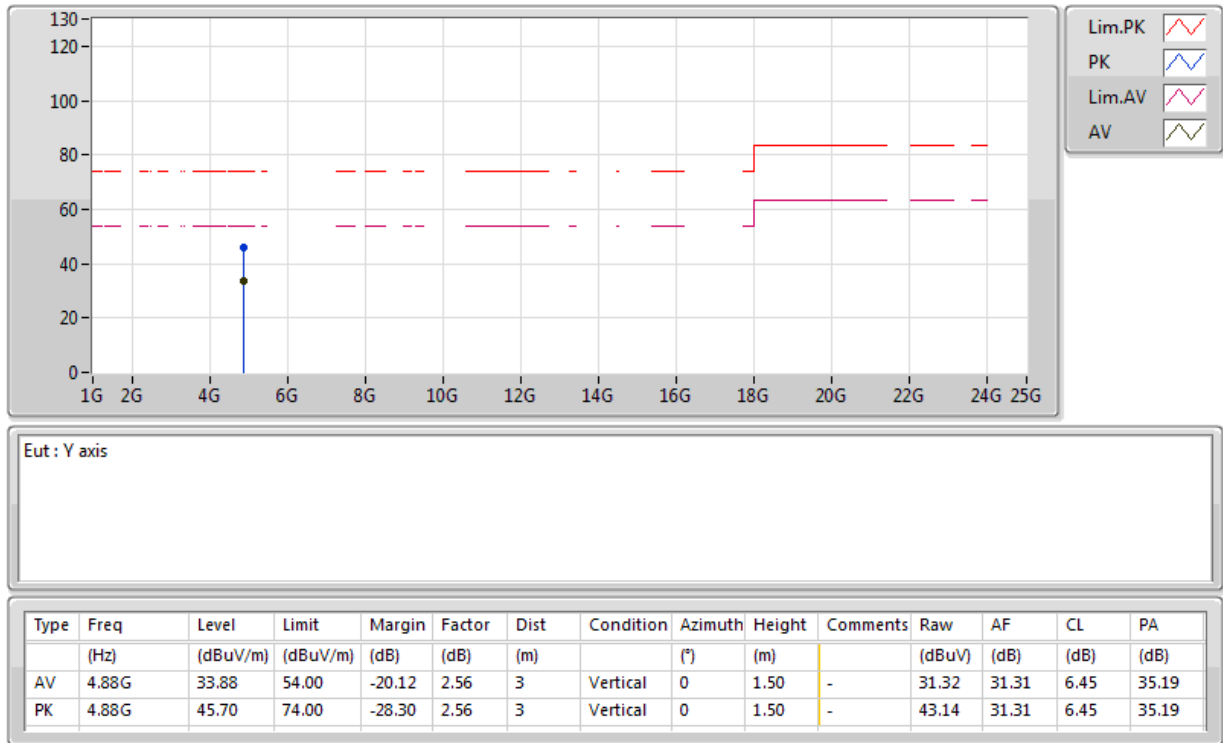


Eut : Y axis

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	2.44G	92.83	Inf	-Inf	31.36	3	Horizontal	47	1.32	-	61.47	27.13	4.23	-
AV	2.3896G	46.23	54.00	-7.77	31.17	3	Horizontal	47	1.32	-	15.06	26.99	4.18	-
AV	2.5G	47.13	54.00	-6.87	31.59	3	Horizontal	47	1.32	-	15.54	27.30	4.29	-
PK	2.4396G	96.04	Inf	-Inf	31.36	3	Horizontal	47	1.32	-	64.68	27.13	4.23	-
PK	2.374G	57.62	74.00	-16.38	31.11	3	Horizontal	47	1.32	-	26.51	26.95	4.16	-
PK	2.4956G	57.78	74.00	-16.22	31.57	3	Horizontal	47	1.32	-	26.21	27.29	4.29	-

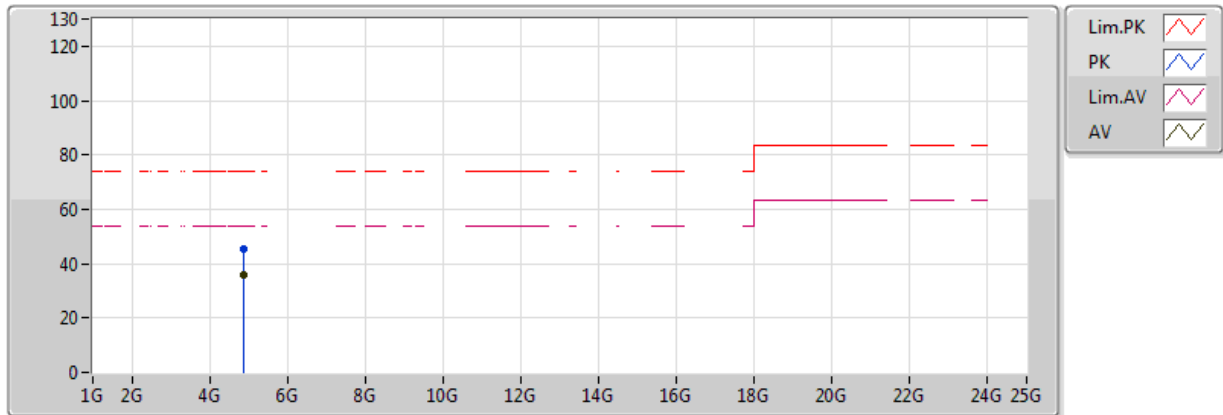
Zigbee

2440MHz_TX



Zigbee

2440MHz_TX

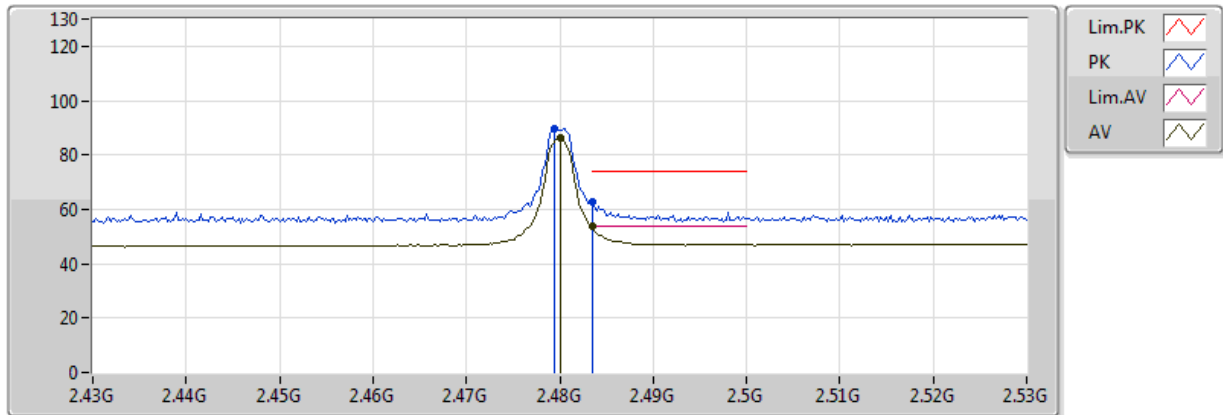


Eut : Y axis

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	35.91	54.00	-18.09	2.56	3	Horizontal	360	1.50	-	33.35	31.31	6.45	35.19
PK	4.88G	45.45	74.00	-28.55	2.56	3	Horizontal	360	1.50	-	42.88	31.31	6.45	35.19

Zigbee

2480MHz_TX

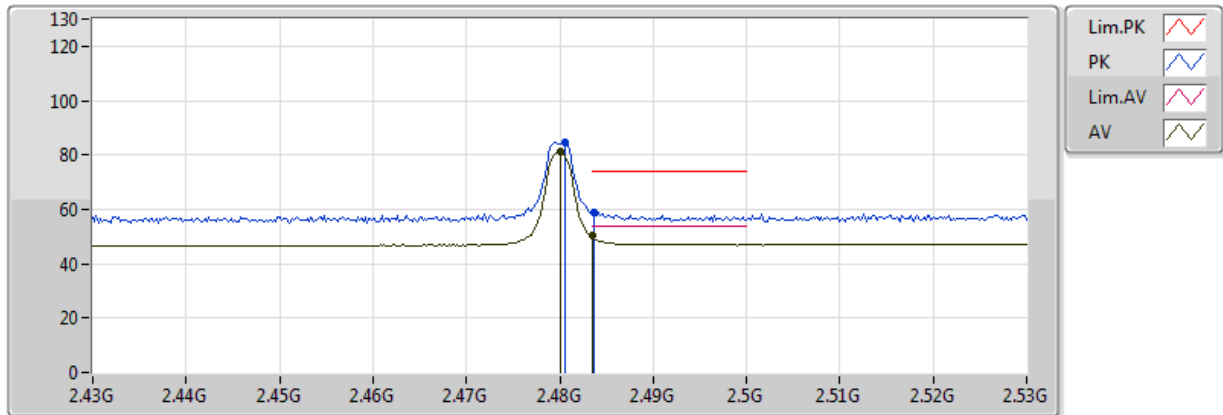


Eut : Y axis

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	86.14	Inf	-Inf	31.51	3	Vertical	97	3.69	-	54.63	27.24	4.27	-
AV	2.483502G	53.63	54.00	-0.37	31.53	3	Vertical	97	3.69	-	22.10	27.25	4.27	-
PK	2.4794G	89.56	Inf	-Inf	31.51	3	Vertical	97	3.69	-	58.05	27.24	4.27	-
PK	2.483502G	62.81	74.00	-11.19	31.53	3	Vertical	97	3.69	-	31.28	27.25	4.27	-

Zigbee

2480MHz_TX

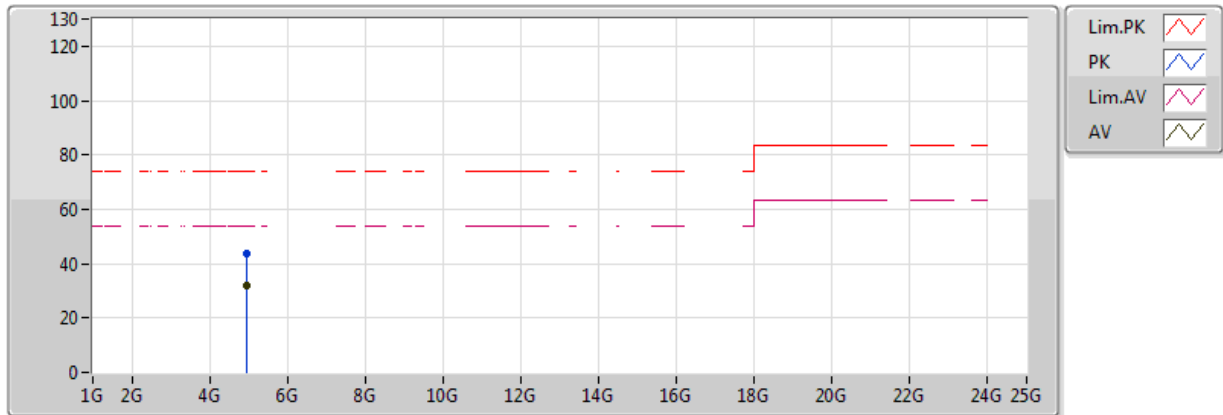


Eut : Y axis

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	81.20	Inf	-Inf	31.51	3	Horizontal	38	1.51	-	49.68	27.24	4.27	-
AV	2.483502G	50.20	54.00	-3.80	31.53	3	Horizontal	38	1.51	-	18.67	27.25	4.27	-
PK	2.4806G	84.69	Inf	-Inf	31.52	3	Horizontal	38	1.51	-	53.18	27.25	4.27	-
PK	2.4836G	59.11	74.00	-14.89	31.53	3	Horizontal	38	1.51	-	27.59	27.25	4.27	-

Zigbee

2480MHz_TX

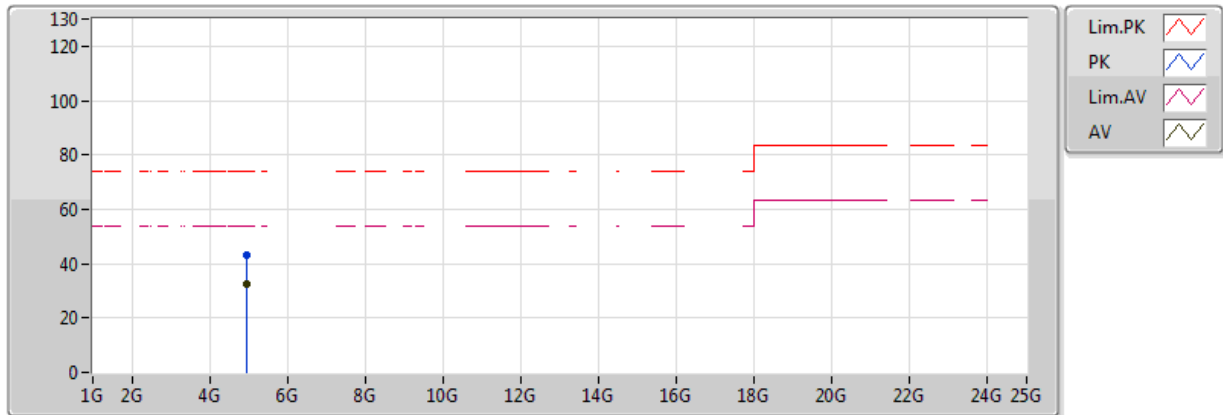


Eut : Y axis

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	31.81	54.00	-22.19	2.68	3	Vertical	0	1.50	-	29.13	31.44	6.46	35.21
PK	4.96G	43.70	74.00	-30.30	2.68	3	Vertical	0	1.50	-	41.02	31.44	6.46	35.21

Zigbee

2480MHz_TX



Eut : Y axis

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	32.25	54.00	-21.75	2.68	3	Horizontal	360	1.50	-	29.57	31.44	6.46	35.21
PK	4.96G	43.42	74.00	-30.58	2.68	3	Horizontal	360	1.50	-	40.74	31.44	6.46	35.21