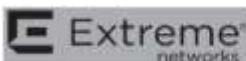


FCC Test Report

FCC ID : QXO-AP360
Equipment : Wireless Access Point
Brand Name :  or Extreme Networks
Model Name : AP360i, AP360e
Applicant : Extreme Networks, Inc.
6480 Via Del Oro, San Jose, CA 95119, United States
Manufacturer : Extreme Networks, Inc.
6480 Via Del Oro, San Jose, CA 95119, United States
Standard : 47 CFR FCC Part 15.247

The product was received on Nov. 27, 2019, and testing was started from Jan. 23, 2020 and completed on Mar. 07, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

[illegible]

Summary of Test Result

Report Clause	Ref.Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and explanations:

None

Reviewed by: Sam Tsai

Report Producer: Ann Hou

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	Thread	5	11-26 [16]

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

Note:

- ♦ Thread uses a O-QPSK modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

(AP360i) Internal Antenna

Ant.	Brand	Model Number (P/N)	Antenna Type	Connector	Antenna Gain (dBi)			Remark
					2.4GHz	5GHz	BLE/Thread	
1	Senao	5718A0490300	PIFA	IPEX	4.53	4.8	-	Radio 1
2	Senao	5718A0491300	PIFA	IPEX	4.3	5.09	-	Radio 1
3	Senao	5718A0492300	PIFA	IPEX	-	4.94	-	Radio 2
4	Senao	5718A0493300	PIFA	IPEX	-	5.1	-	Radio 2
5	Senao	5718A0494300	PIFA	IPEX	-	-	4.99	Radio 3

(AP360e) External Antenna

Group	Brand	Model Number (P/N)	Antenna Type	Connector	Antenna Gain (dBi)		
					2.4GHz	5GHz	BLE/Thread
1	Extreme	ML-2452-APA2-01	Omni	Reverse SMA	3.17	4.85	-
2	Extreme	ML-2452-HPA5-036	Omni	Reverse SMA	3.9	5.7	-
3	Extreme	ML-2452-HPAG4A6-01	Omni	N-type	4	7.3	-
4	Extreme	ML-2452-PTA4M4-036	Omni	Reverse SMA	5	6.6	-
5	Extreme	ML-2452-HPAG5A8-01	Omni	N-type	5	8	-
6	Extreme	30724 WS-AO-DQ04360N	Omni	N-type	5.5	6	-
7	Extreme	AI-DQ04360S	Omni	Reverse SMA	5.5	6	-
8	Extreme	ML-2452-PNA5-01R	Panel	N-type	4.5	5	-
9	Extreme	ML-2452-SEC6M4-036, WS-AI-DQ05120 (30702)	Panel	Reverse SMA	6.92	7.23	-
10	Extreme	30705 WS-AI-DE07025	Panel	Reverse SMA	7.5	6.5	-
11	Extreme	ML-2452-PNA7-01R	Panel 1	N-type	7.8	10.7	7.8
12	Extreme	30707 WS-AI-DE10055	Panel 2	Reverse SMA	10.5	7.5	-
13	Extreme	ML-2452-APA2-02	Omni	Reverse SMA	3.17	4.85	-
14	Extreme	ML-2499-HPA8-01	Dipole	N-type	-	-	8

Note 1: Group 5, 11 and 12 were measured during the test for WLAN 2.4G Mode.

Note 2: Group 11 and 14 were measured during the test for Bluetooth/Thread Mode.

Note 3: Group 5 and 11 were measured during the test for WLAN 5G Mode.

For 2.4GHz function:

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

Only port 1 can be used as transmitting/receiving antenna.

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

Port 1 and port 2 could transmit/receive simultaneously.

For BT function:

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

Only port 1 can be used as transmitting/receiving antenna.

For Thread function:

For IEEE 802.15.4 Thread mode (1TX/1RX)

Only port 1 can be used as transmitting/receiving antenna.

For 5GHz function:

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

Only port 1 can be used as transmitting/receiving antenna.

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

Port 1 and port 2 could transmit/receive simultaneously.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From PoE		
EUT Function	☒ Point-to-multipoint	☐ Point-to-point	
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.:		...
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.:		...
☐	Other:		

1.1.4 Table for Multiple Listing

Sample Number	Model Name	Description
1	AP360i	The "i" in AP360i indicates that it comes with internal antennas and the "e" in AP360e indicates that the access point comes with external antenna connectors.
2	AP360e	

1.1.5 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
Thread_Nss1_1TX	0.889	0.51	2.665m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ KDB 558074 D01 v05r02
- ♦ KDB 414788 D01 v01r01

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.				
☐	Wen Shan	ADD : No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)		
		TEL : 886-3-318-0787	FAX : 886-3-318-0287	
Test site Designation No. TW1097 with FCC.				

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Edward	20.3~21.9°C / 55~69%	07/Mar/2020
RF Conducted	TH01-HY	Barry	25.7~26.3°C / 60~66%	31/Jan/2020~ 25/Feb/2020
Radiated	03CH02-HY	Daniel	22.1~24.6°C / 40~55%	23/Jan/2020~ 26/Feb/2020

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)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Test Software Version	CMD
-----------------------	-----

Sample 1

Mode	Power Setting
Thread_Nss1_1TX	-
2405MHz	32
2440MHz	32
2480MHz	21

Sample 2_Dipole

Mode	Power Setting
Thread_Nss1_1TX	-
2405MHz	32
2440MHz	32
2480MHz	14

Sample 2_Panel 1

Mode	Power Setting
Thread_Nss1_1TX	-
2405MHz	32
2440MHz	32
2480MHz	15

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	PoE mode (Sample 1)
2	PoE mode (Sample 2)

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 (Sample 1)		
2	PoE mode (Sample 2_Dipole Antenna)		
3	PoE mode (Sample 2_Panel 1 Antenna)		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT	V (Sample 1 , Sample 2_Dipole)	V (Sample 2_Panel 1)	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	Radio 1(WLAN 2.4GHz)+Radio 2(WLAN 5GHz)+Bluetooth
2	Radio 1(WLAN 2.4GHz)+Radio 2(WLAN 5GHz)+Thread
3	Radio 1(WLAN 5GHz)+Radio 2(WLAN 5GHz)+Bluetooth
4	Radio 1(WLAN 5GHz)+Radio 2(WLAN 5GHz)+Thread
Refer to Sporton Test Report No.: FA992618 for Co-location RF Exposure Evaluation.	

2.4 Support Equipment

Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 Cable	Power Sync	CAT-6E-10	-	-
2	PoE	EnGenius	EPA5006GP	-	-
3	AC Power Cable	Power sync	PW-GPC180-3	-	-

Note 1: Support equipment No. 2 was provided by customer.

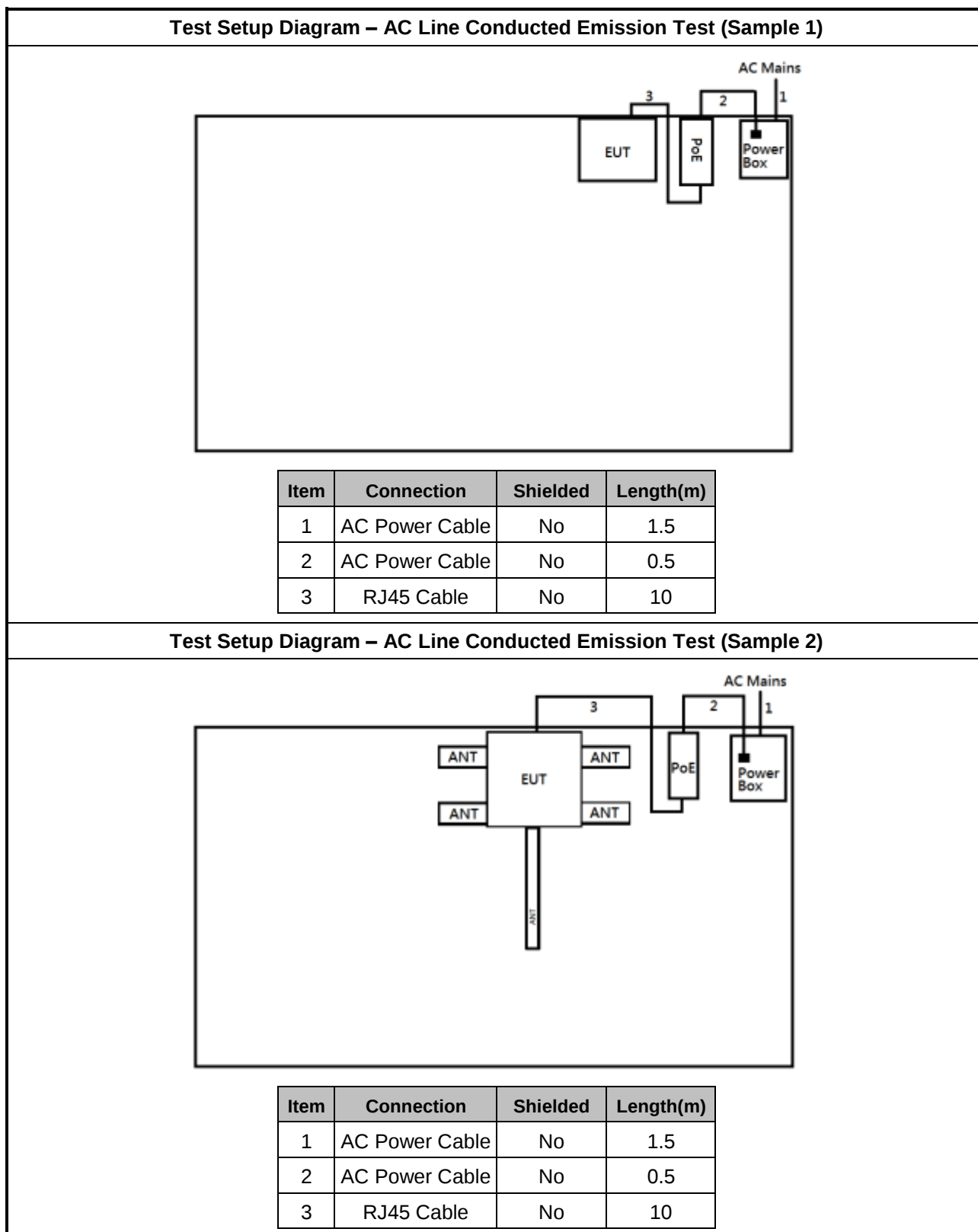
Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	PP13S	DoC	-
2	Adapter for NB	DELL	AA90PM111	DoC	-
3	Notebook	DELL	PP13S	DoC	-
4	Adapter for NB	DELL	AA90PM111	DoC	-
5	PoE	EnGenius	EPA5006GP	-	-

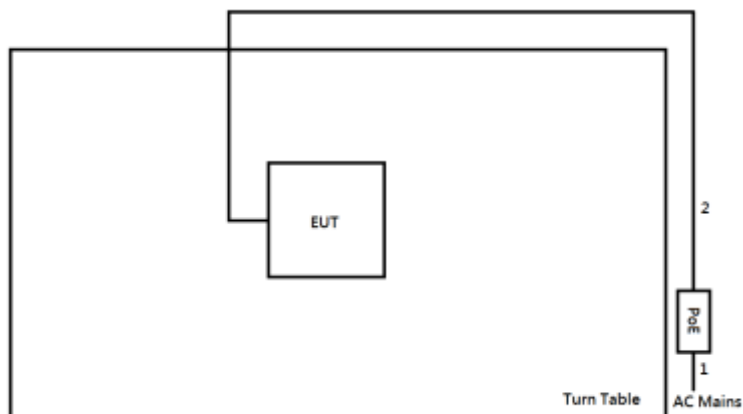
Note 1: Support equipment No. 5 was provided by customer.

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 Cable	Power Sync	CAT-6E-10	-	-
2	PoE	EnGenius	EPA5006GP	-	Remote
3	AC Power Cable	-	-	-	Remote

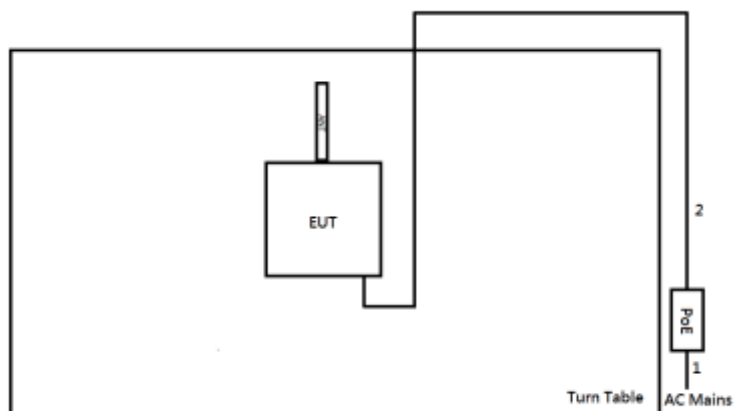
Note 1: Support equipment No. 2, 3 was provided by customer.

2.5 Test Setup Diagram

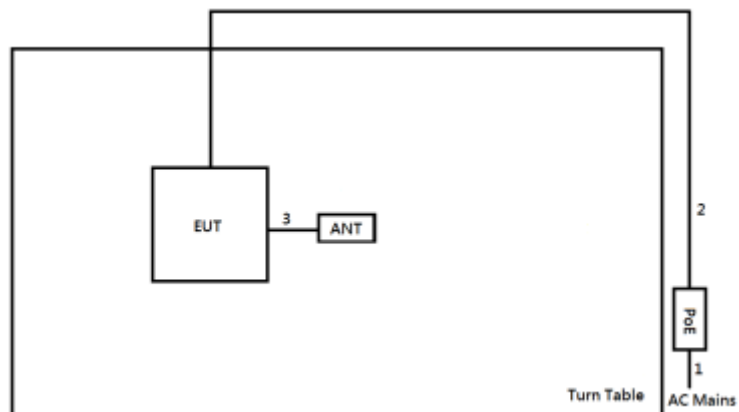


Test Setup Diagram - Radiated Test (Sample 1)


Item	Connection	Shielded	Length
1	AC Power Cable	No	0.5
2	RJ45 Cable	No	10

Test Setup Diagram - Radiated Test (Sample 2_Dipole Antenna)


Item	Connection	Shielded	Length
1	AC Power Cable	No	0.5
2	RJ45 Cable	No	10

Test Setup Diagram - Radiated Test (Sample 2_Panel 1 Antenna)


Item	Connection	Shielded	Length
1	AC Power Cable	No	0.5
2	RJ45 Cable	No	10
3	Antenna Cable	No	0.3

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.		

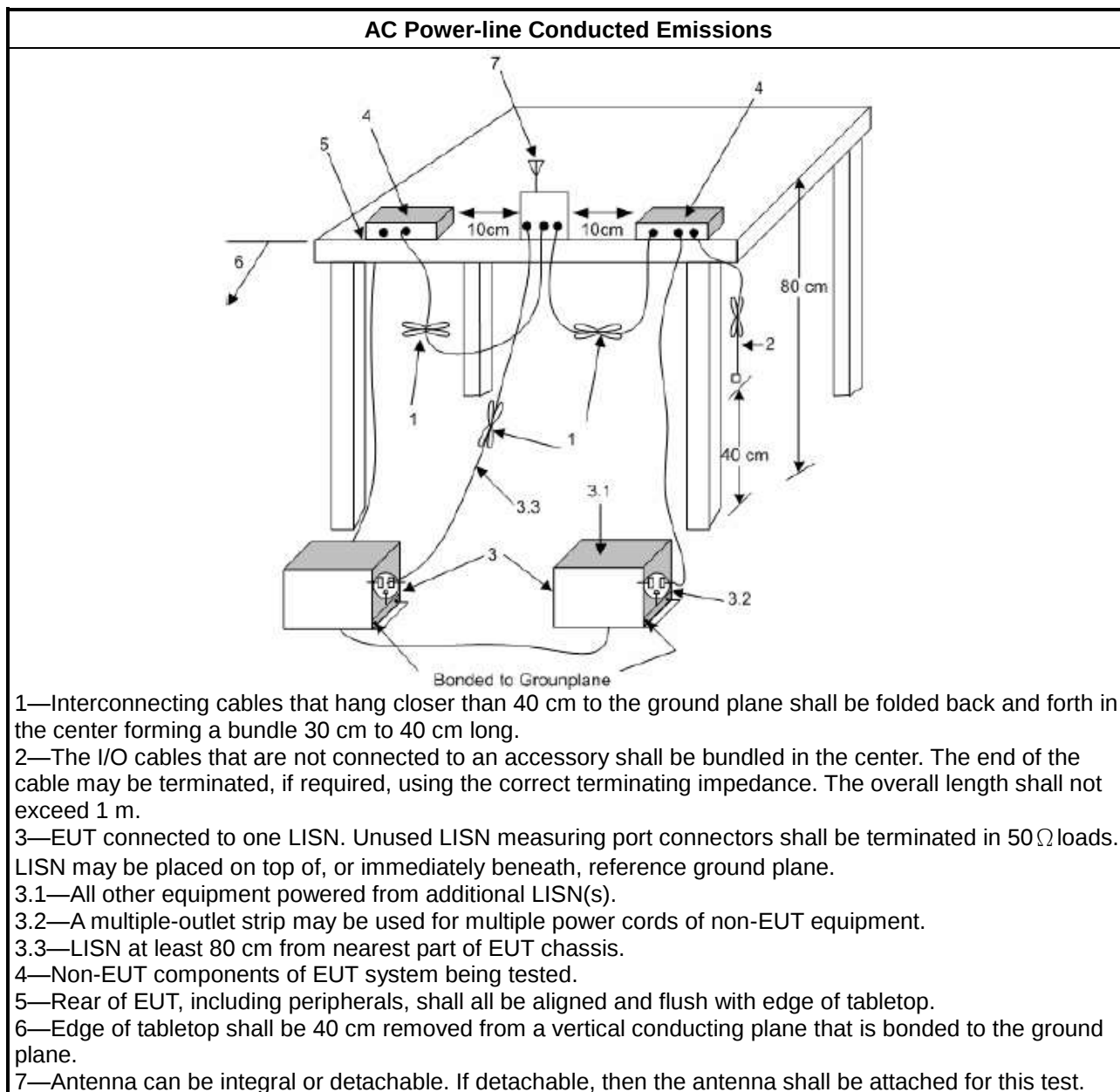
3.1.2 Measuring Instruments

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



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.

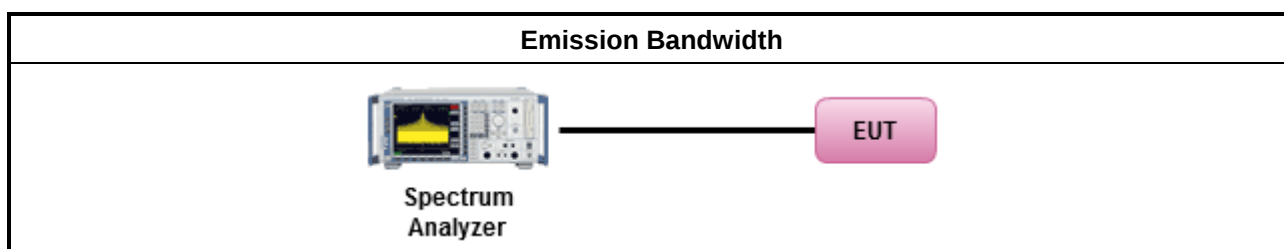
3.2.2 Measuring Instruments

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 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
☐	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



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 $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ 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.	

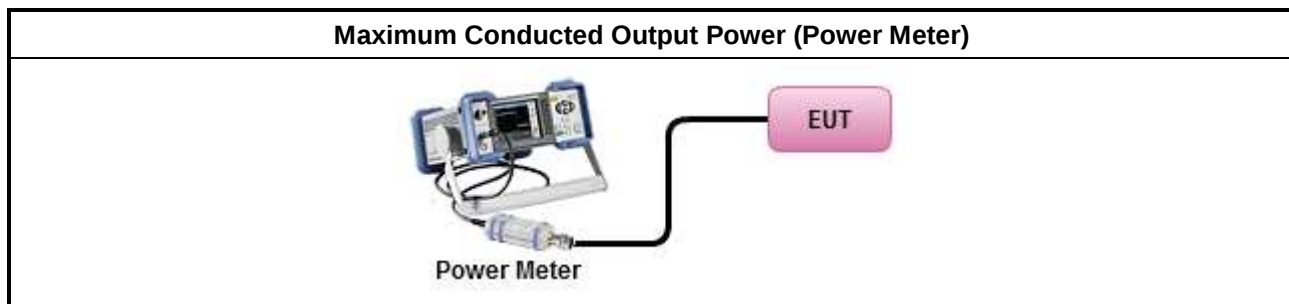
3.3.2 Measuring Instruments

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 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
☐	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
☐	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
Maximum Average Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
☒	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (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

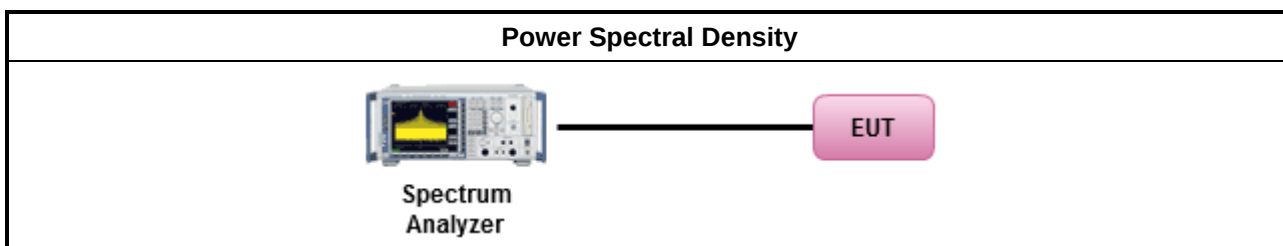
3.4.2 Measuring Instruments

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).
☒	Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Method PKPSD.
▪	For conducted measurement.
▪	If The EUT supports multiple transmit chains using options given below:
▪	Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average level.	

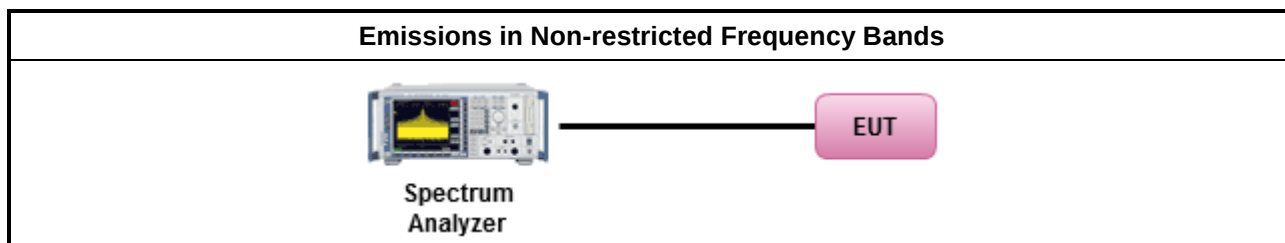
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup



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.

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.

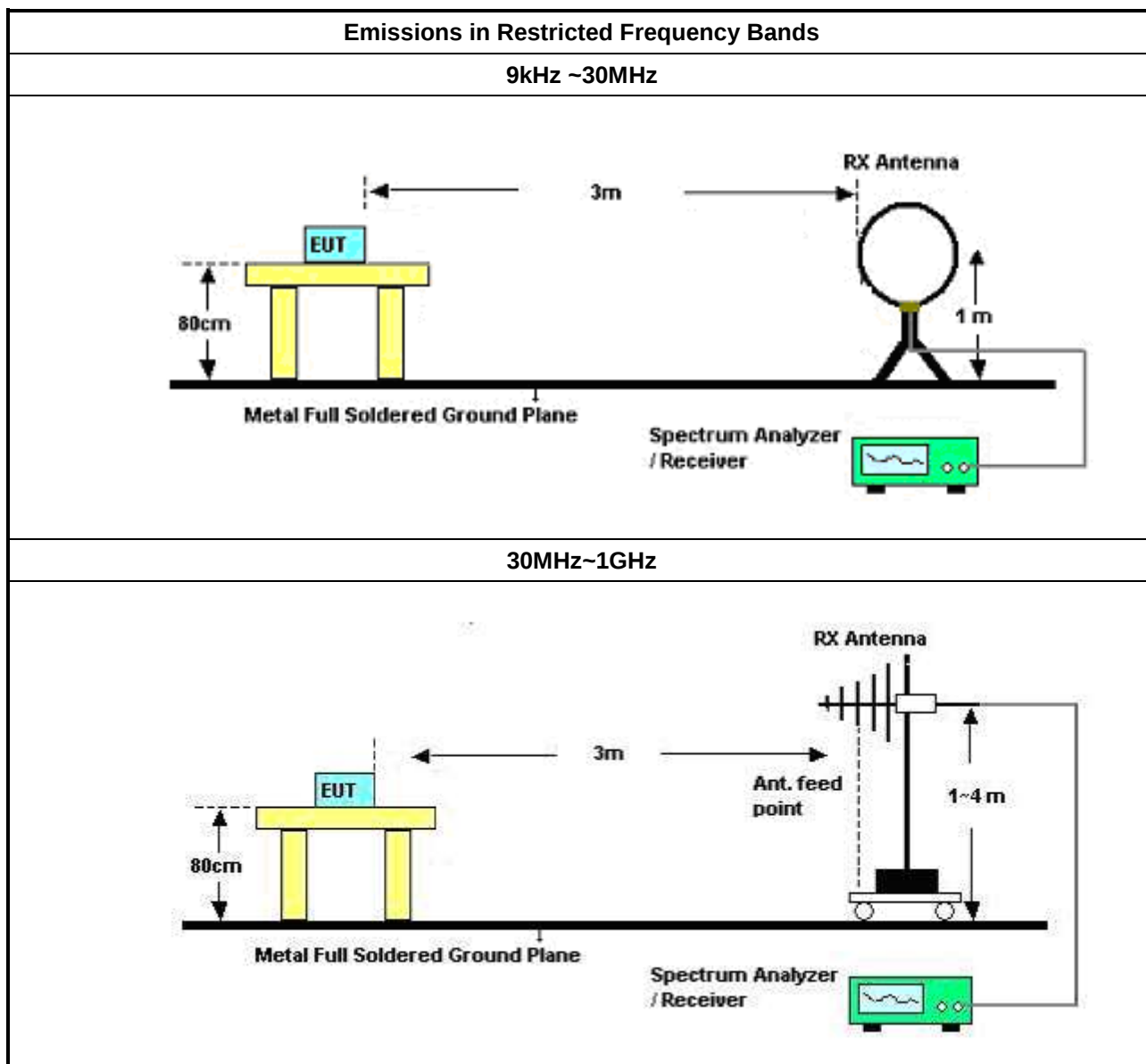
3.6.2 Measuring Instruments

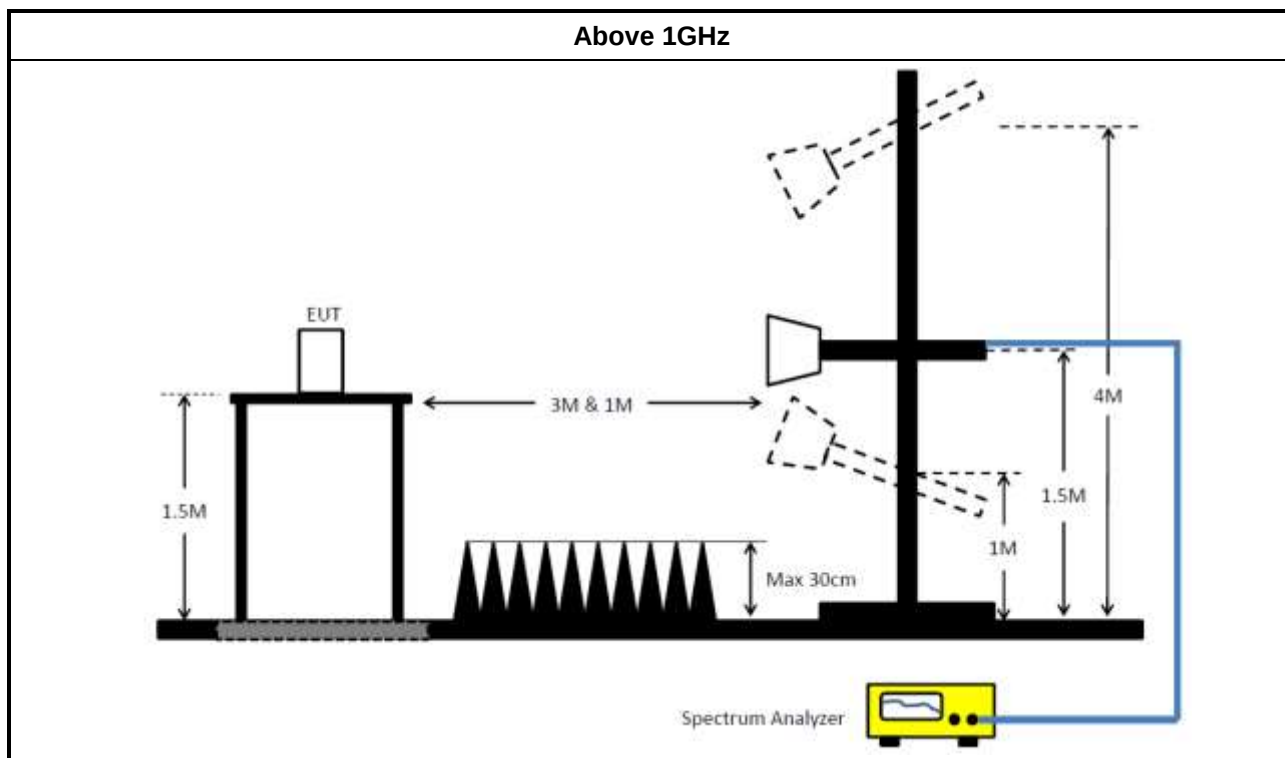
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
For the transmitter band-edge emissions shall be measured using following options below:	
	Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
Use the following spectrum analyzer settings:	
	Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.	
	Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

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.

3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	04/Nov/2019	05/Nov/2020
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	12/Sep/2019	11/Sep/2020
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	24/Sep/2019	23/Sep/2020

NCR: Non-Calibration Require

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
Pulse Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	14/Mar/2019	13/Mar/2020
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	14/Mar/2019	13/Mar/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

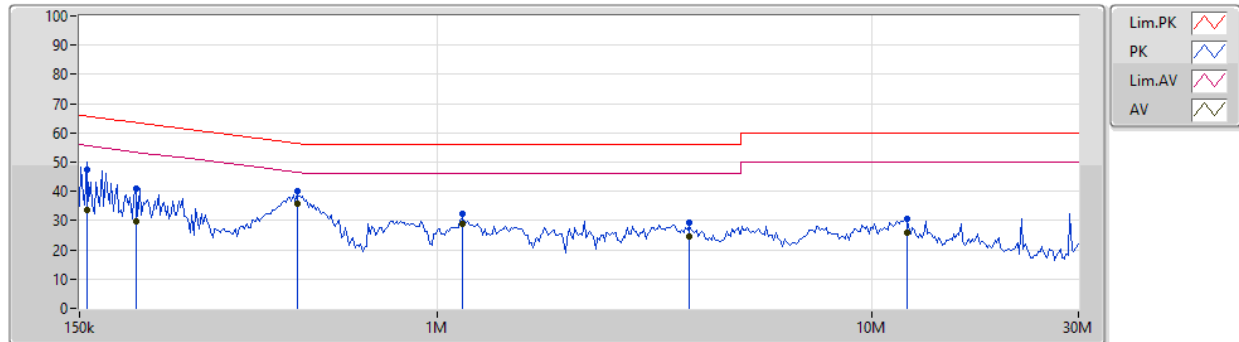
Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	29/Aug/2019	28/Aug/2020
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	29/Aug/2019	28/Aug/2020
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	02/Jul/2019	01/Jul/2020
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	16/Oct/2019	15/Oct/2020
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40 GHz	15/ Aug/2019	14/ Aug /2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	26/Mar/2019	25/Mar/2020
RF Cable-high 6m	SUHNER	SUCOFLEX104	10567868 / SN805193/4	1GHz~40GHz	09/Apr/2019	08/Apr/2020
RF Cable-high 7m	SUHNER	SUCOFLEX104	10567868 / SN805192/4	1GHz~40GHz	09/Apr/2019	08/Apr/2020
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz ~ 1GHz	11/Oct/2019	10/Oct/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170339	18GHz ~ 40GHz	19/Apr/2019	18/Apr/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	05/Aug/2019	04/Aug/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 01543	1GHz ~ 18GHz	03/Jun/2019	02/Jun/2020

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Sample 1; PoE mode; Thread 2.4G TX		

07/03/2020

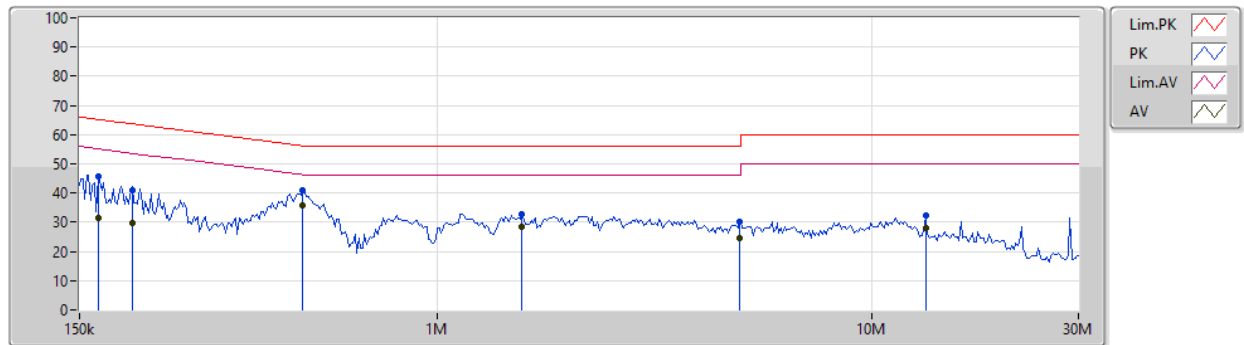


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	156.091k	47.40	65.67	-18.27	19.63	Neutral	-	27.77	9.65	0.11	9.87			
AV	156.091k	33.41	55.67	-22.26	19.63	Neutral	-	13.78	9.65	0.11	9.87			
QP	202.177k	40.84	63.51	-22.67	19.62	Neutral	-	21.22	9.64	0.11	9.87			
AV	202.177k	29.63	53.51	-23.88	19.62	Neutral	-	10.01	9.64	0.11	9.87			
QP	475.741k	40.09	56.42	-16.33	19.63	Neutral	-	20.46	9.63	0.13	9.87			
AV	475.741k	35.67	46.42	-10.75	19.63	Neutral	"Worst"	16.04	9.63	0.13	9.87			
QP	1.142M	32.54	56.00	-23.46	19.63	Neutral	-	12.91	9.63	0.12	9.88			
AV	1.142M	28.96	46.00	-17.04	19.63	Neutral	-	9.33	9.63	0.12	9.88			
QP	3.807M	29.38	56.00	-26.62	19.72	Neutral	-	9.66	9.66	0.18	9.88			
AV	3.807M	24.65	46.00	-21.35	19.72	Neutral	-	4.93	9.66	0.18	9.88			
QP	12.073M	30.78	60.00	-29.22	19.88	Neutral	-	10.90	9.71	0.29	9.88			
AV	12.073M	25.71	50.00	-24.29	19.88	Neutral	-	5.83	9.71	0.29	9.88			

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Sample 1; PoE mode; Thread 2.4G TX		

07/03/2020

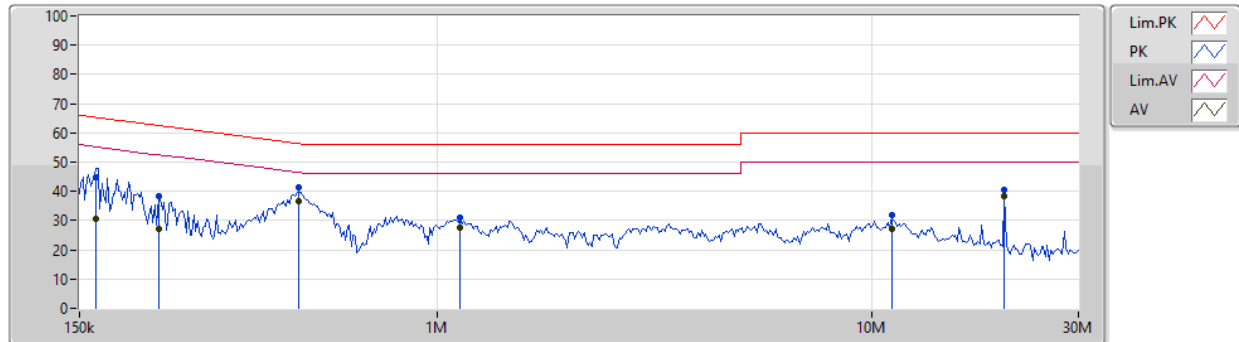


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	165.693k	45.71	65.18	-19.47	19.64	Line	-	26.07	9.66	0.11	9.87			
AV	165.693k	31.51	55.18	-23.67	19.64	Line	-	11.87	9.66	0.11	9.87			
QP	198.194k	41.08	63.69	-22.61	19.63	Line	-	21.45	9.65	0.11	9.87			
AV	198.194k	29.72	53.69	-23.97	19.63	Line	-	10.09	9.65	0.11	9.87			
QP	490.156k	41.05	56.17	-15.12	19.64	Line	-	21.41	9.64	0.13	9.87			
AV	490.156k	35.71	46.17	-10.46	19.64	Line	"Worst"	16.07	9.64	0.13	9.87			
QP	1.57M	32.90	56.00	-23.10	19.66	Line	-	13.24	9.65	0.14	9.87			
AV	1.57M	28.27	46.00	-17.73	19.66	Line	-	8.61	9.65	0.14	9.87			
QP	4.98M	30.16	56.00	-25.84	19.75	Line	-	10.41	9.67	0.20	9.88			
AV	4.98M	24.60	46.00	-21.40	19.75	Line	-	4.85	9.67	0.20	9.88			
QP	13.336M	32.30	60.00	-27.70	19.85	Line	-	12.45	9.67	0.30	9.88			
AV	13.336M	28.10	50.00	-21.90	19.85	Line	-	8.25	9.67	0.30	9.88			

AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Neutral
Operating Function	Sample 2; PoE mode; Thread 2.4G TX		

07/03/2020

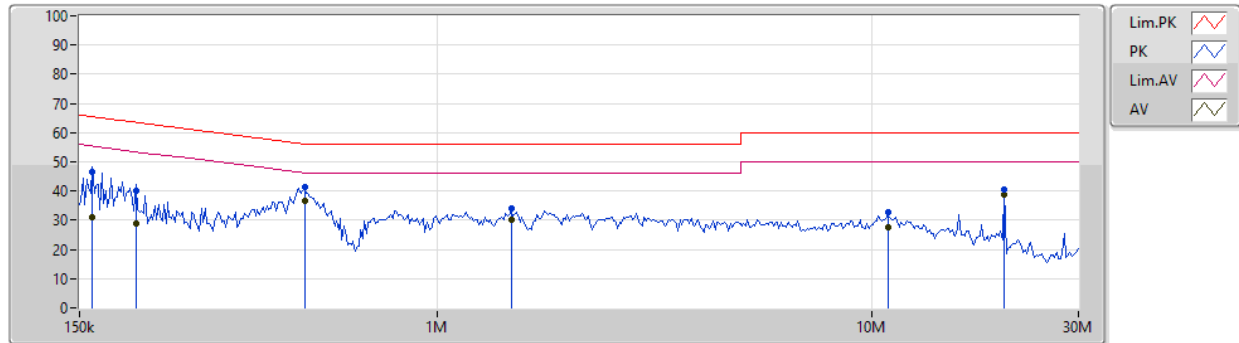


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	164.053k	44.92	65.25	-20.33	19.63	Neutral	-	25.29	9.65	0.11	9.87			
AV	164.053k	30.71	55.25	-24.54	19.63	Neutral	-	11.08	9.65	0.11	9.87			
QP	227.818k	38.23	62.52	-24.29	19.63	Neutral	-	18.60	9.64	0.12	9.87			
AV	227.818k	27.26	52.52	-25.26	19.63	Neutral	-	7.63	9.64	0.12	9.87			
QP	480.498k	41.27	56.33	-15.06	19.63	Neutral	-	21.64	9.63	0.13	9.87			
AV	480.498k	36.65	46.33	-9.68	19.63	Neutral	"Worst"	17.02	9.63	0.13	9.87			
QP	1.131M	31.11	56.00	-24.89	19.63	Neutral	-	11.48	9.63	0.12	9.88			
AV	1.131M	27.74	46.00	-18.26	19.63	Neutral	-	8.11	9.63	0.12	9.88			
QP	11.149M	32.10	60.00	-27.90	19.86	Neutral	-	12.24	9.70	0.28	9.88			
AV	11.149M	27.07	50.00	-22.93	19.86	Neutral	-	7.21	9.70	0.28	9.88			
QP	20.255M	40.34	60.00	-19.66	19.97	Neutral	-	20.37	9.72	0.36	9.89			
AV	20.255M	38.53	50.00	-11.47	19.97	Neutral	-	18.56	9.72	0.36	9.89			

AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Line
Operating Function	Sample 2; PoE mode; Thread 2.4G TX		

07/03/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	160.82k	46.70	65.43	-18.73	19.64	Line	-	27.06	9.66	0.11	9.87			
AV	160.82k	30.98	55.43	-24.45	19.64	Line	-	11.34	9.66	0.11	9.87			
QP	202.177k	40.06	63.51	-23.45	19.63	Line	-	20.43	9.65	0.11	9.87			
AV	202.177k	28.70	53.51	-24.81	19.63	Line	-	9.07	9.65	0.11	9.87			
QP	495.058k	41.53	56.08	-14.55	19.64	Line	-	21.89	9.64	0.13	9.87			
AV	495.058k	36.79	46.08	-9.29	19.64	Line	"Worst"	17.15	9.64	0.13	9.87			
QP	1.479M	34.11	56.00	-21.89	19.65	Line	-	14.46	9.65	0.13	9.87			
AV	1.479M	30.38	46.00	-15.62	19.65	Line	-	10.73	9.65	0.13	9.87			
QP	10.93M	32.72	60.00	-27.28	19.84	Line	-	12.88	9.68	0.28	9.88			
AV	10.93M	27.47	50.00	-22.53	19.84	Line	-	7.63	9.68	0.28	9.88			
QP	20.255M	40.62	60.00	-19.38	19.89	Line	-	20.73	9.64	0.36	9.89			
AV	20.255M	38.64	50.00	-11.36	19.89	Line	-	18.75	9.64	0.36	9.89			



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
Thread_Nss1_1TX	1.6M	2.38M	2M38D1D	1.563M	2.361M

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;

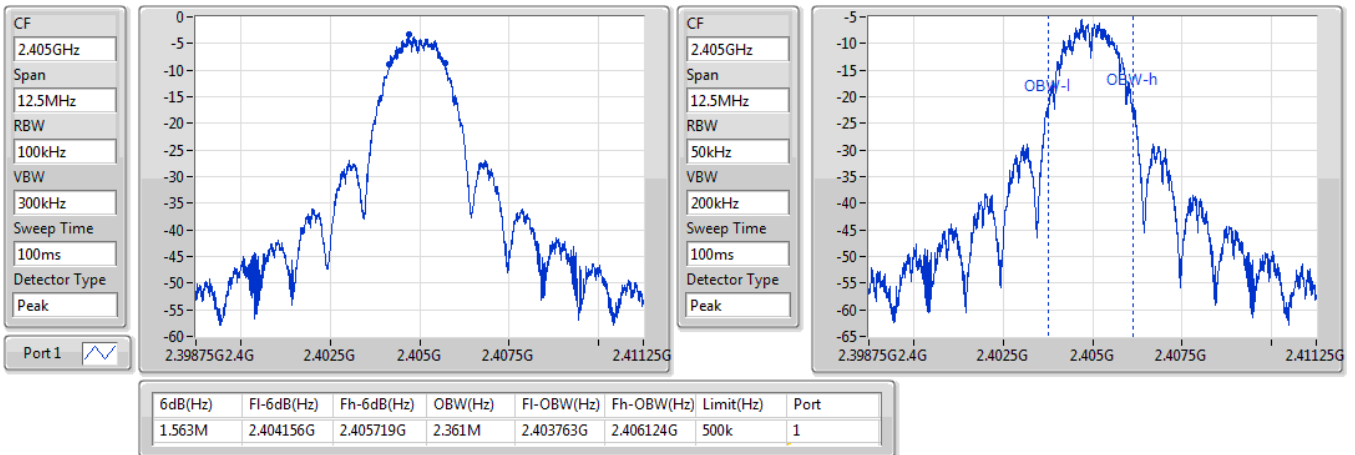
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
Thread_Nss1_1TX	-	-	-	-
2405MHz	Pass	500k	1.563M	2.361M
2440MHz	Pass	500k	1.6M	2.361M
2480MHz	Pass	500k	1.6M	2.38M

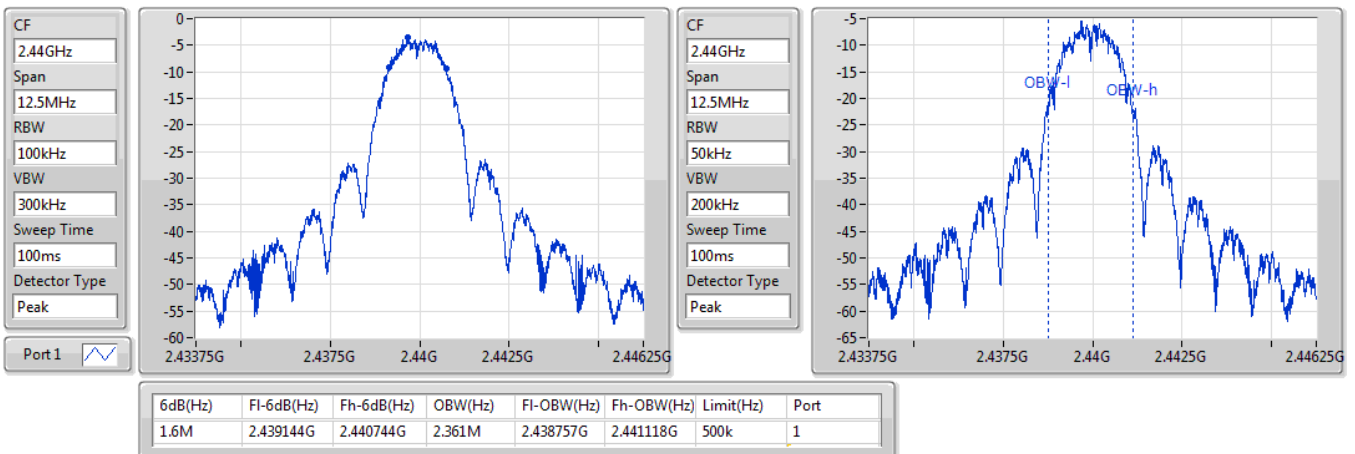
Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

Thread_Nss1_1TX
EBW
2405MHz

11/02/2020


Thread_Nss1_1TX
EBW
2440MHz

11/02/2020

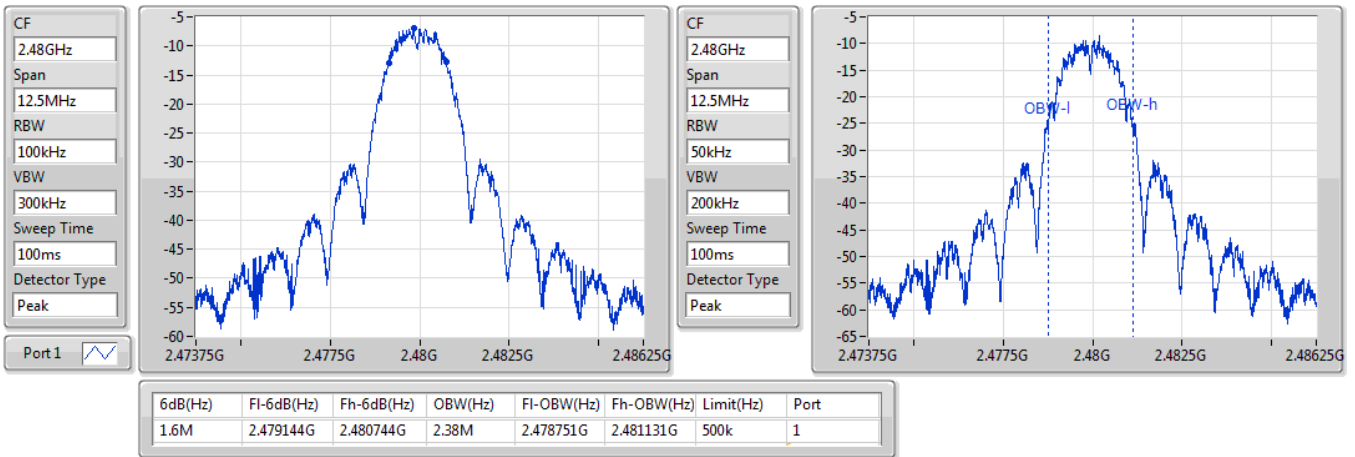


Thread_Nss1_1TX

2480MHz

EBW

11/02/2020





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
Thread_Nss1_1TX	1.6M	2.355M	2M36D1D	1.588M	2.355M

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;



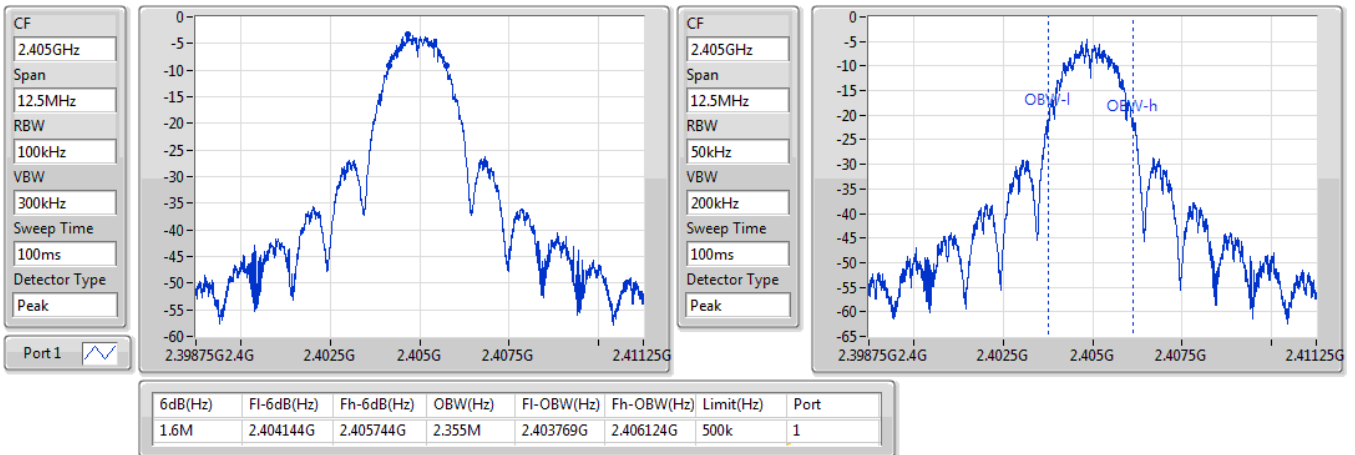
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
Thread_Nss1_1TX	-	-	-	-
2405MHz	Pass	500k	1.6M	2.355M
2440MHz	Pass	500k	1.588M	2.355M
2480MHz	Pass	500k	1.588M	2.355M

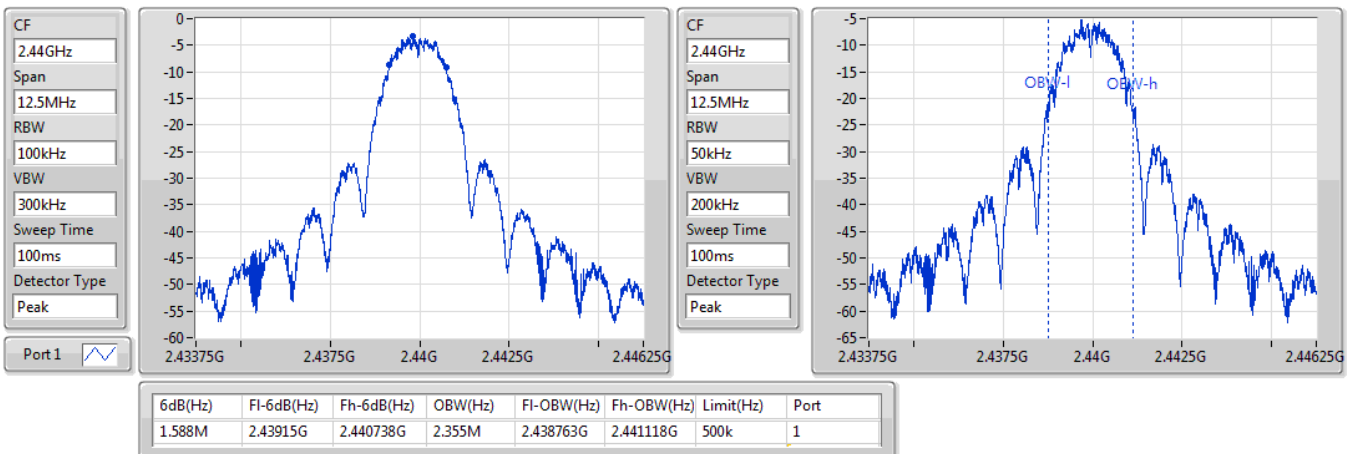
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

Thread_Nss1_1TX
EBW
2405MHz

14/02/2020


Thread_Nss1_1TX
EBW
2440MHz

14/02/2020

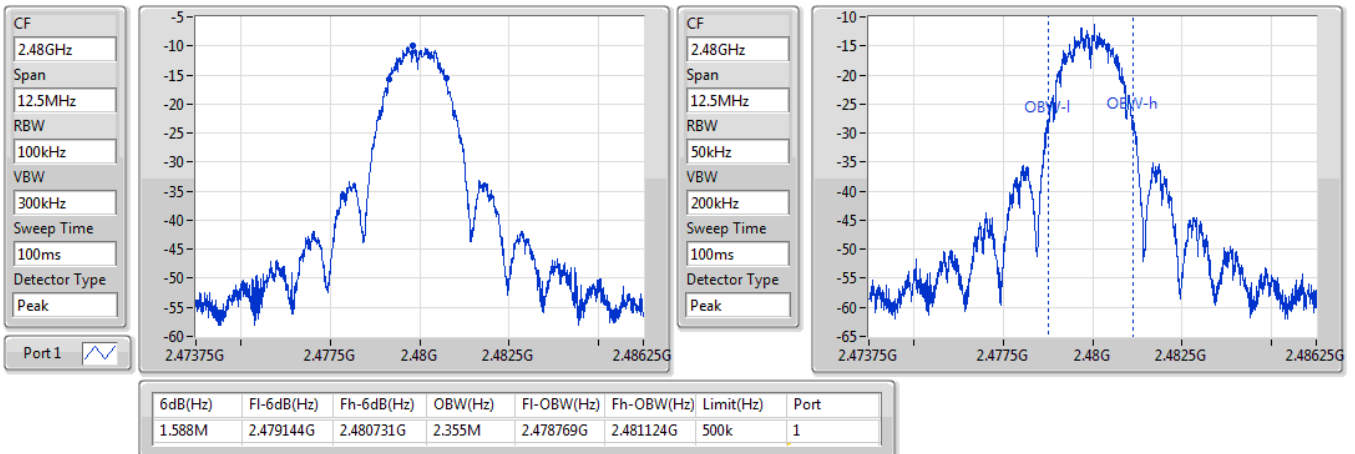


Thread_Nss1_1TX

EBW

2480MHz

14/02/2020





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
Thread_Nss1_1TX	1.6M	2.374M	2M37D1D	1.588M	2.355M

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;



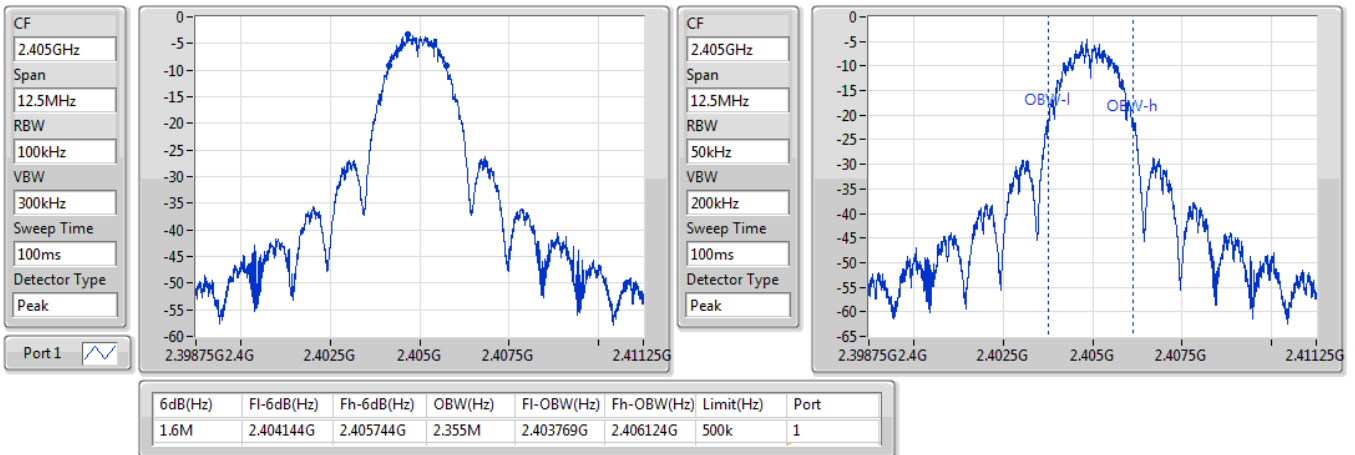
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
Thread_Nss1_1TX	-	-	-	-
2405MHz	Pass	500k	1.6M	2.355M
2440MHz	Pass	500k	1.588M	2.355M
2480MHz	Pass	500k	1.6M	2.374M

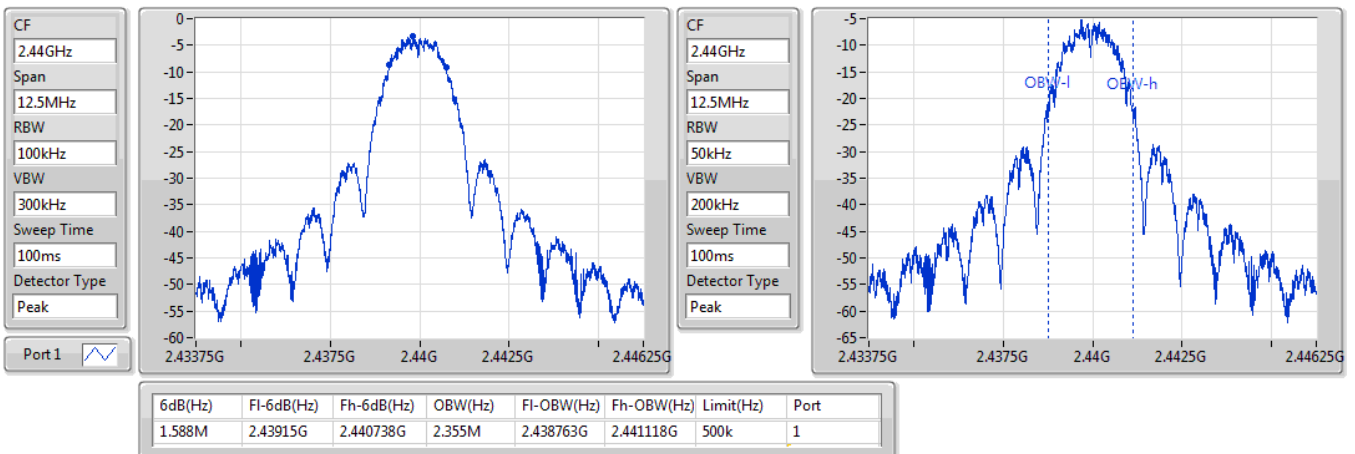
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

Thread_Nss1_1TX
EBW
2405MHz

14/02/2020


Thread_Nss1_1TX
EBW
2440MHz

14/02/2020

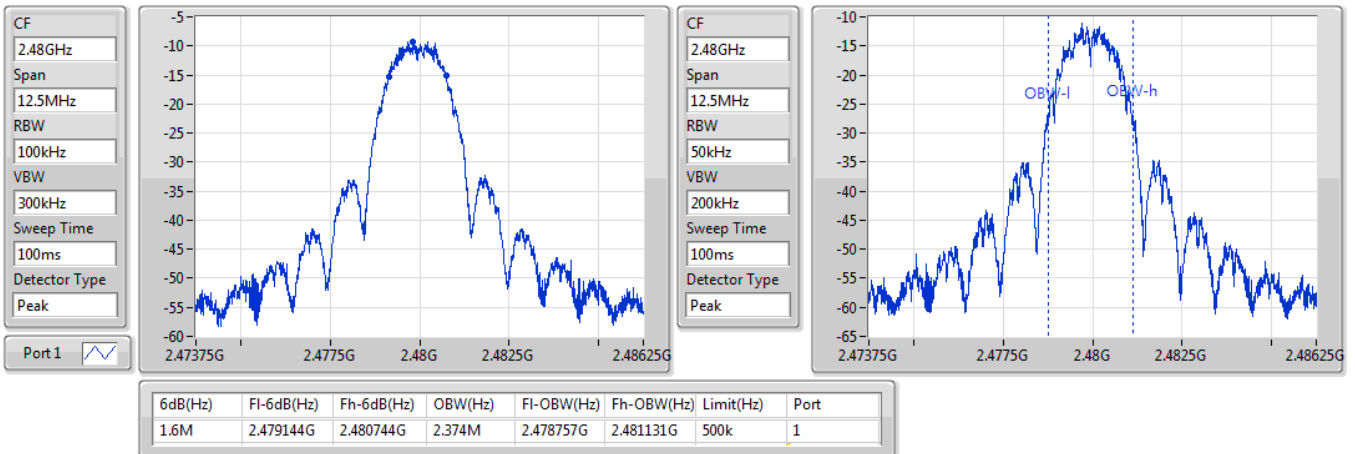


Thread_Nss1_1TX

EBW

2480MHz

14/02/2020





Average Power_Sample 1

Appendix C.1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
Thread_Nss1_1TX	1.08	0.00128



Average Power_Sample 1

Appendix C.1

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
Thread_Nss1_1TX	-	-	-	-	-
2405MHz	Pass	4.99	0.92	0.92	30.00
2440MHz	Pass	4.99	1.08	1.08	30.00
2480MHz	Pass	4.99	-2.00	-2.00	30.00

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
Thread_Nss1_1TX	0.83	0.00121



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
Thread_Nss1_1TX	-	-	-	-	-
2405MHz	Pass	8.00	0.83	0.83	28.00
2440MHz	Pass	8.00	0.67	0.67	28.00
2480MHz	Pass	8.00	-6.85	-6.85	28.00

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
Thread_Nss1_1TX	0.83	0.00121



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
Thread_Nss1_1TX	-	-	-	-	-
2405MHz	Pass	7.80	0.83	0.83	28.20
2440MHz	Pass	7.80	0.67	0.67	28.20
2480MHz	Pass	7.80	-5.81	-5.81	28.20

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
Thread_Nss1_1TX	-15.67

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
Thread_Nss1_1TX	-	-	-	-	-
2405MHz	Pass	4.99	-16.11	-16.11	8.00
2440MHz	Pass	4.99	-15.67	-15.67	8.00
2480MHz	Pass	4.99	-19.22	-19.22	8.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

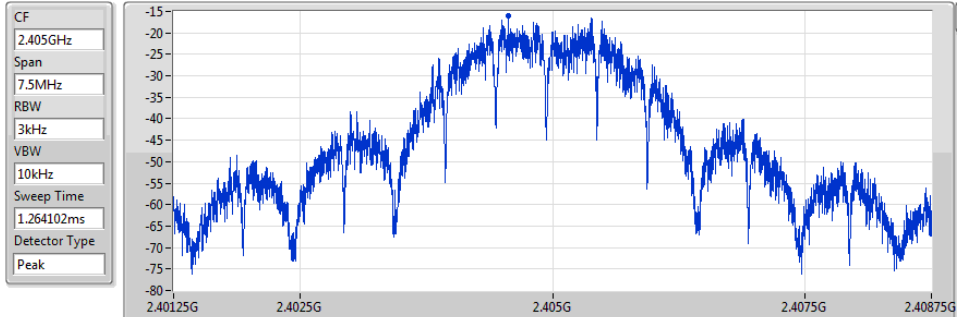
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

Thread_Nss1_1TX

PSD

2405MHz

11/02/2020



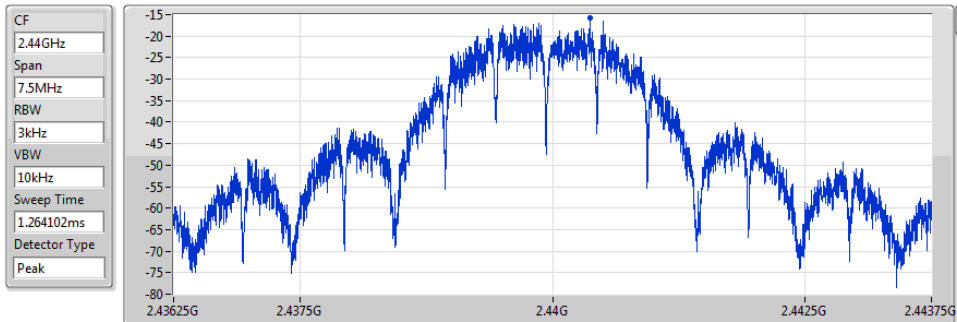
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-16.11	-16.11	-16.11

Thread_Nss1_1TX

PSD

2440MHz

11/02/2020



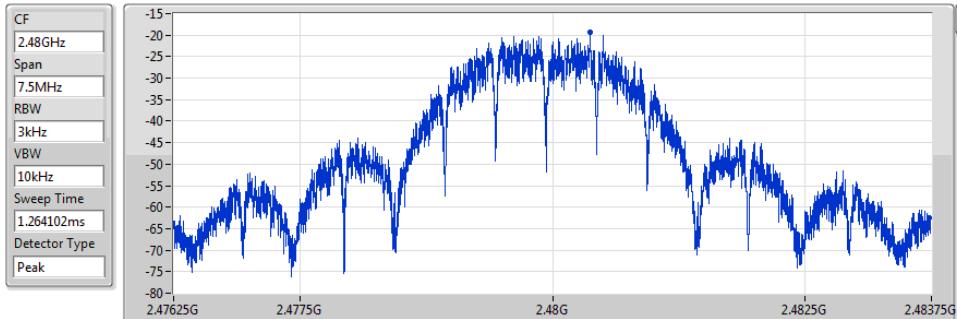
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.67	-15.67	-15.67

Thread_Nss1_1TX

PSD

2480MHz

11/02/2020



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-19.22	-19.22	-19.22



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
Thread_Nss1_1TX	-15.43

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
Thread_Nss1_1TX	-	-	-	-	-
2405MHz	Pass	8.00	-15.43	-15.43	6.00
2440MHz	Pass	8.00	-15.91	-15.91	6.00
2480MHz	Pass	8.00	-22.73	-22.73	6.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

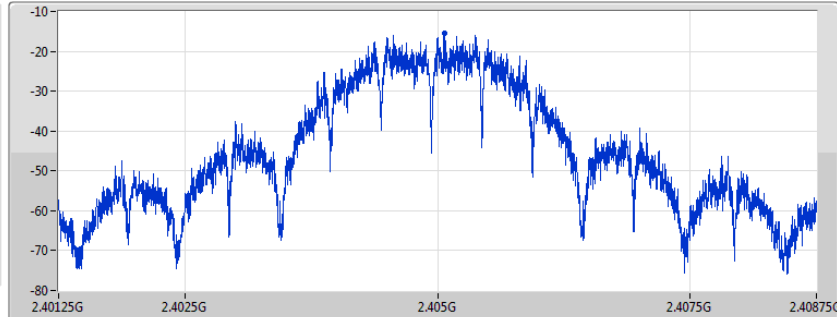
Thread_Nss1_1TX

PSD

2405MHz

14/02/2020

CF
2.405GHz
Span
7.5MHz
RBW
3kHz
VBW
10kHz
Sweep Time
1.264102ms
Detector Type
Peak



Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.43	-15.43	-15.43

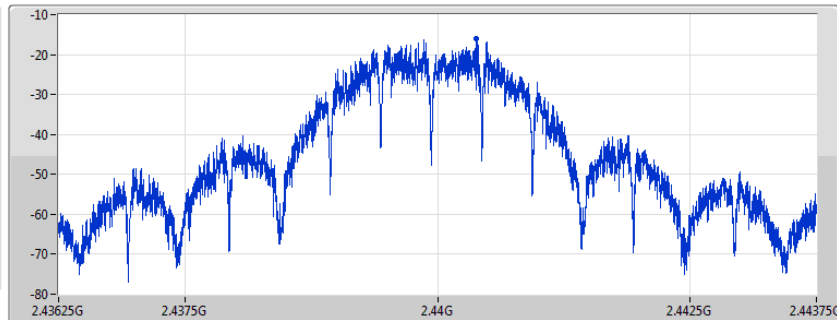
Thread_Nss1_1TX

PSD

2440MHz

14/02/2020

CF
2.44GHz
Span
7.5MHz
RBW
3kHz
VBW
10kHz
Sweep Time
1.264102ms
Detector Type
Peak



Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.91	-15.91	-15.91

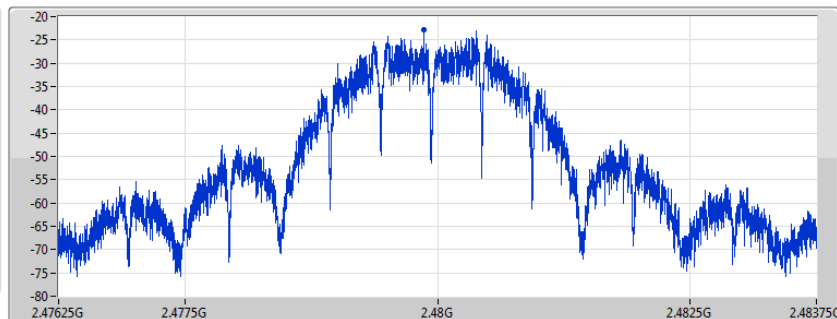
Thread_Nss1_1TX

PSD

2480MHz

14/02/2020

CF
2.48GHz
Span
7.5MHz
RBW
3kHz
VBW
10kHz
Sweep Time
1.264102ms
Detector Type
Peak



Port 1

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-22.73	-22.73	-22.73



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
Thread_Nss1_1TX	-15.43

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
Thread_Nss1_1TX	-	-	-	-	-
2405MHz	Pass	7.80	-15.43	-15.43	6.20
2440MHz	Pass	7.80	-15.91	-15.91	6.20
2480MHz	Pass	7.80	-21.36	-21.36	6.20

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

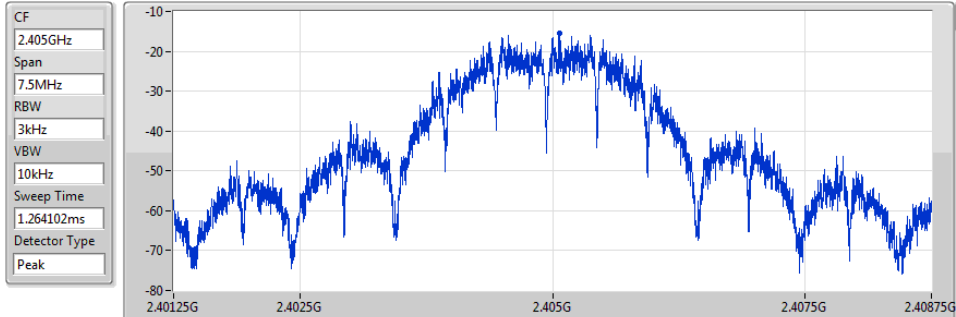
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

Thread_Nss1_1TX

PSD

2405MHz

14/02/2020



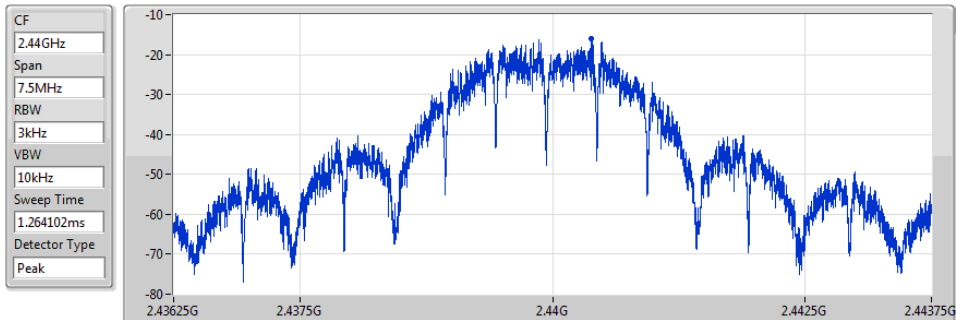
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.43	-15.43	-15.43

Thread_Nss1_1TX

PSD

2440MHz

14/02/2020



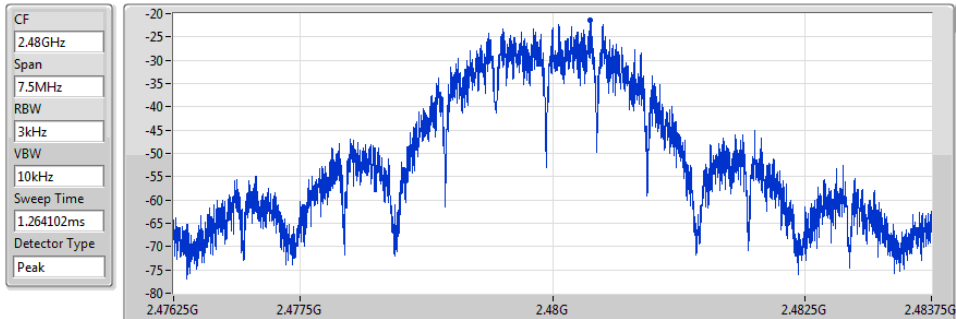
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.91	-15.91	-15.91

Thread_Nss1_1TX

PSD

2480MHz

14/02/2020



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-21.36	-21.36	-21.36



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)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thread_Nss1_1TX	Pass	2.43983G	-3.48	-33.48	2.30032G	-56.21	2.39326G	-55.21	2.4835G	-49.70	2.48381G	-43.74	16.25904G	-43.85	1

Result

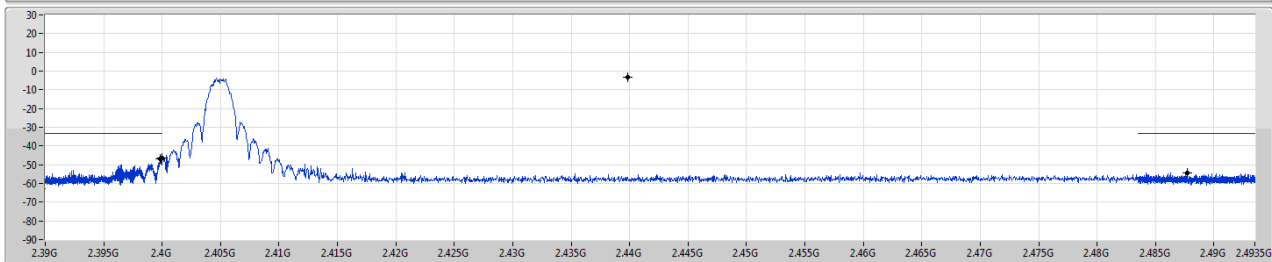
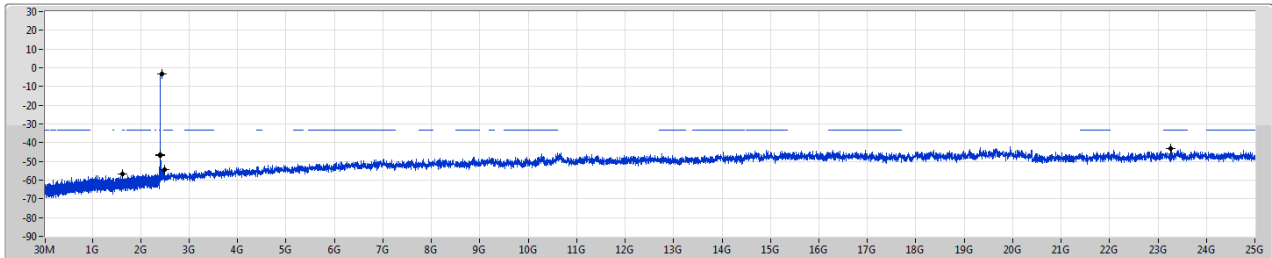
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
Thread_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2405MHz	Pass	2.43983G	-3.48	-33.48	1.61887G	-56.73	2.39986G	-47.02	2.4G	-46.39	2.48775G	-54.34	23.25293G	-43.26	1
2440MHz	Pass	2.43983G	-3.48	-33.48	2.19058G	-56.45	2.39699G	-55.62	2.4835G	-57.35	2.49151G	-53.74	16.28436G	-43.74	1
2480MHz	Pass	2.43983G	-3.48	-33.48	2.30032G	-56.21	2.39326G	-55.21	2.4835G	-49.70	2.48381G	-43.74	16.25904G	-43.85	1

Thread_Nss1_1TX

2405MHz

CSE NdB

11/02/2020



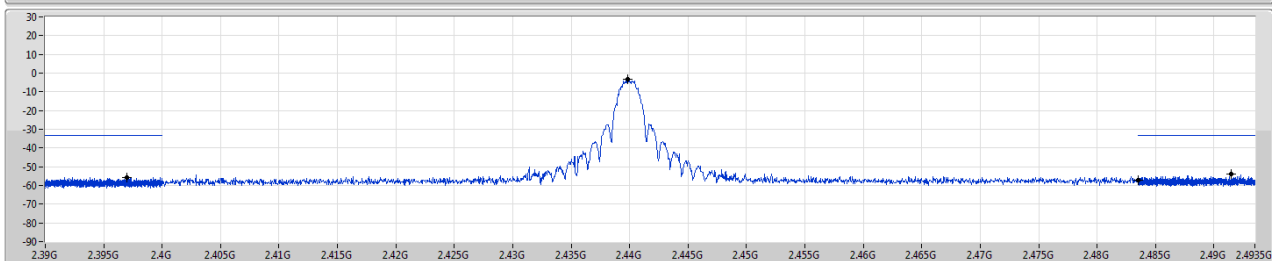
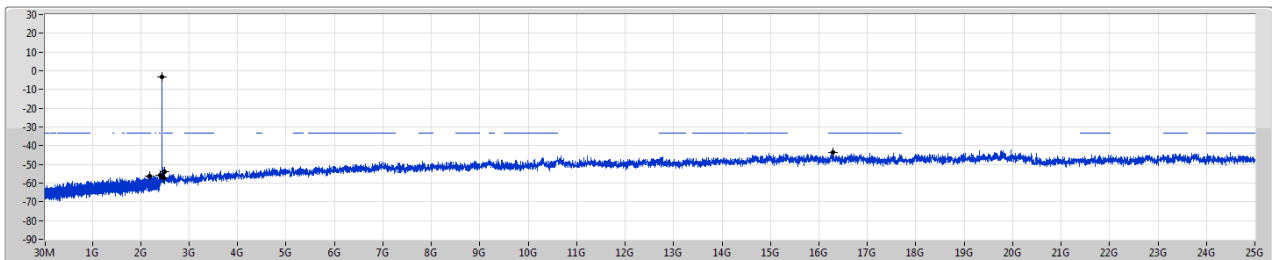
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43983G	-3.48	-33.48	1.61887G	-56.73	2.39986G	-47.02	2.4G	-46.39	2.48775G	-54.34	23.25293G	-43.26	1

Thread_Nss1_1TX

2440MHz

CSE NdB

11/02/2020



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43983G	-3.48	-33.48	2.19058G	-56.45	2.39699G	-55.62	2.4835G	-57.35	2.49151G	-53.74	16.28436G	-43.74	1

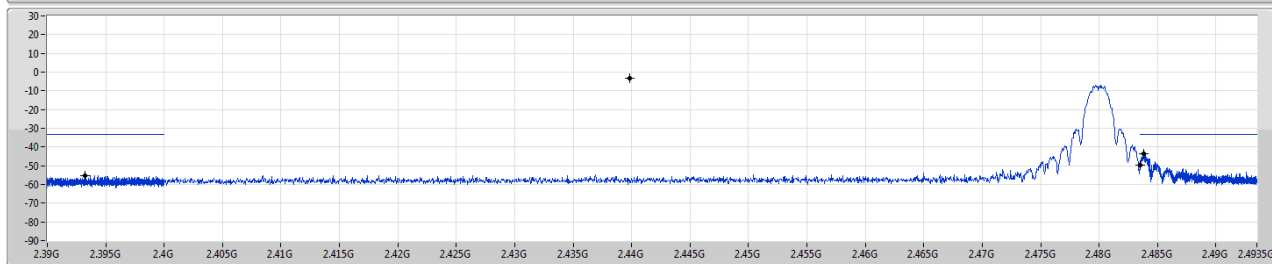
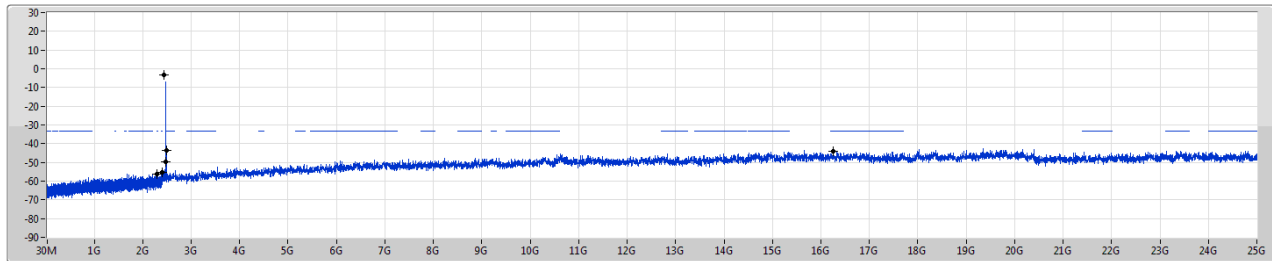
Thread_Nss1_1TX

2480MHz

CSE NdB

11/02/2020

Port 1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43983G	-3.48	-33.48	2.30032G	-56.21	2.39326G	-55.21	2.4835G	-49.70	2.48381G	-43.74	16.25904G	-43.85	1



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)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thread_Nss1_1TX	Pass	2.4048G	-3.13	-33.13	2.16049G	-55.55	2.4G	-45.75	2.4G	-45.82	2.49336G	-52.96	23.29513G	-41.69	1

Result

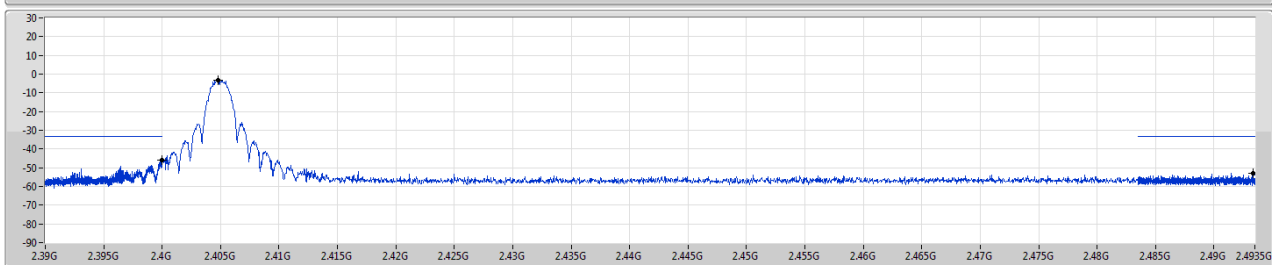
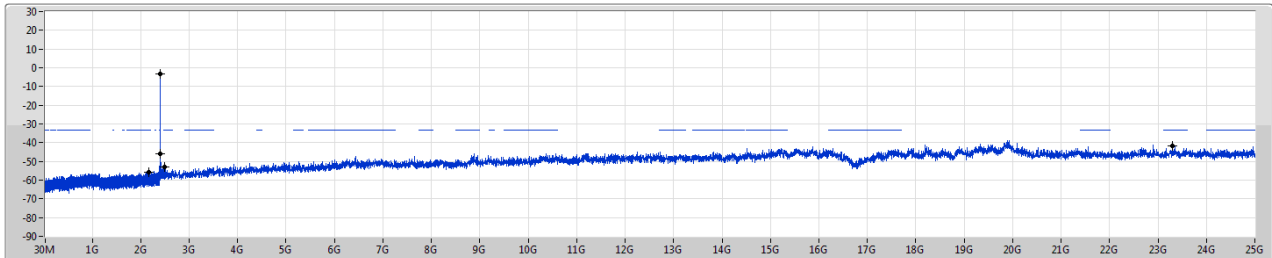
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
Thread_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2405MHz	Pass	2.4048G	-3.13	-33.13	2.16049G	-55.55	2.4G	-45.75	2.4G	-45.82	2.49336G	-52.96	23.29513G	-41.69	1
2440MHz	Pass	2.4048G	-3.13	-33.13	1.97169G	-55.35	2.39523G	-54.38	2.4835G	-56.29	2.48548G	-53.25	24.65396G	-42.33	1
2480MHz	Pass	2.4048G	-3.13	-33.13	2.14722G	-55.44	2.39212G	-53.39	2.4835G	-51.88	2.48403G	-46.15	23.57928G	-42.02	1

Thread_Nss1_1TX

2405MHz

CSE NdB

14/02/2020



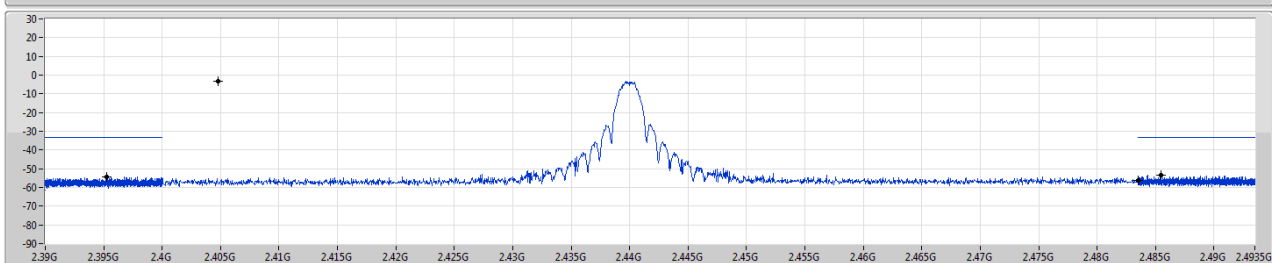
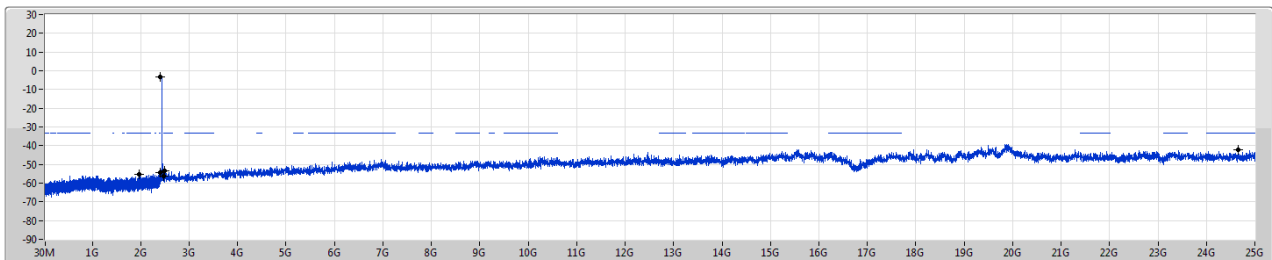
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4048G	-3.13	-33.13	2.16049G	-55.55	2.4G	-45.75	2.4G	-45.82	2.49336G	-52.96	23.29513G	-41.69	1

Thread_Nss1_1TX

2440MHz

CSE NdB

14/02/2020



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4048G	-3.13	-33.13	1.97169G	-55.35	2.39523G	-54.38	2.4835G	-56.29	2.48548G	-53.25	24.65396G	-42.33	1

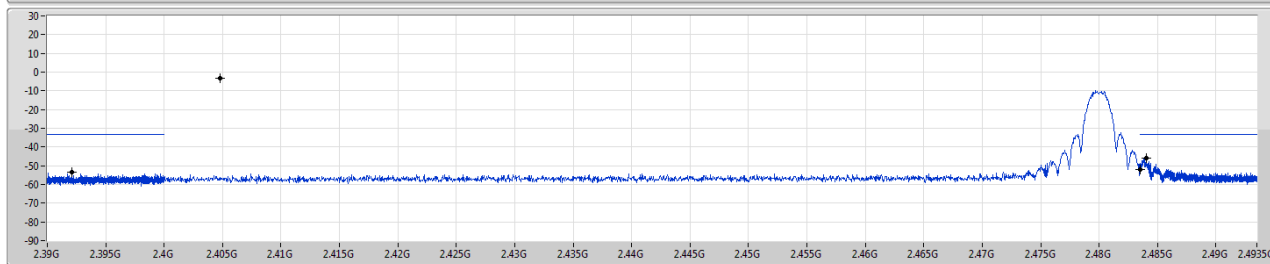
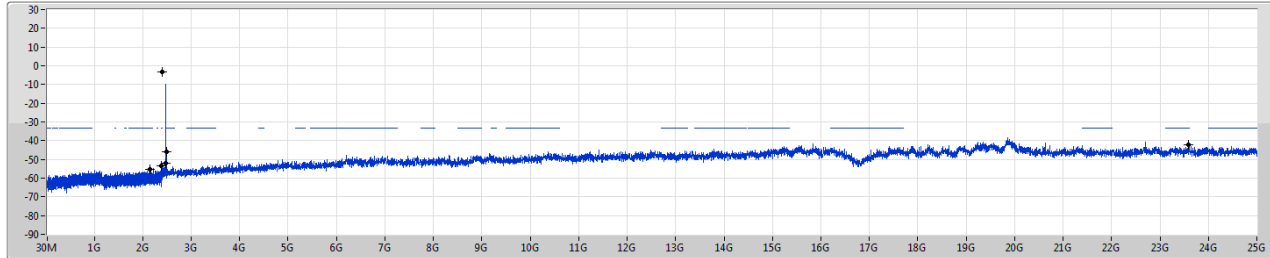
Thread_Nss1_1TX

2480MHz

CSE NdB

14/02/2020

Port 1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4048G	-3.13	-33.13	2.14722G	-55.44	2.39212G	-53.39	2.4835G	-51.88	2.48403G	-46.15	23.57928G	-42.02	1



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)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thread_Nss1_1TX	Pass	2.4048G	-3.13	-33.13	2.16049G	-55.55	2.4G	-45.75	2.4G	-45.82	2.49336G	-52.96	23.29513G	-41.69	1

Result

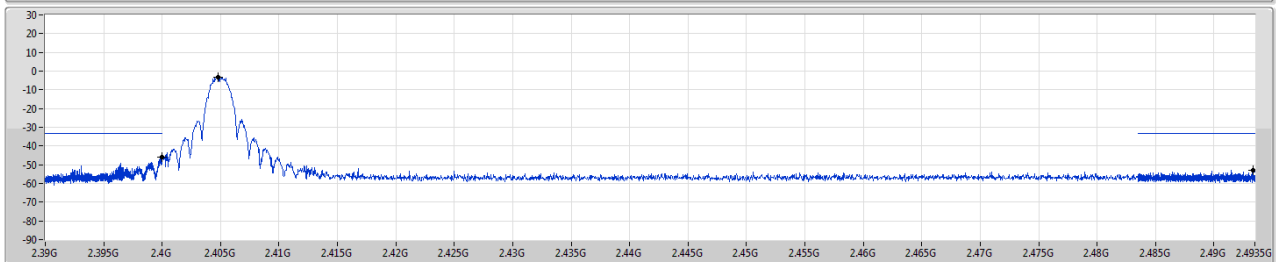
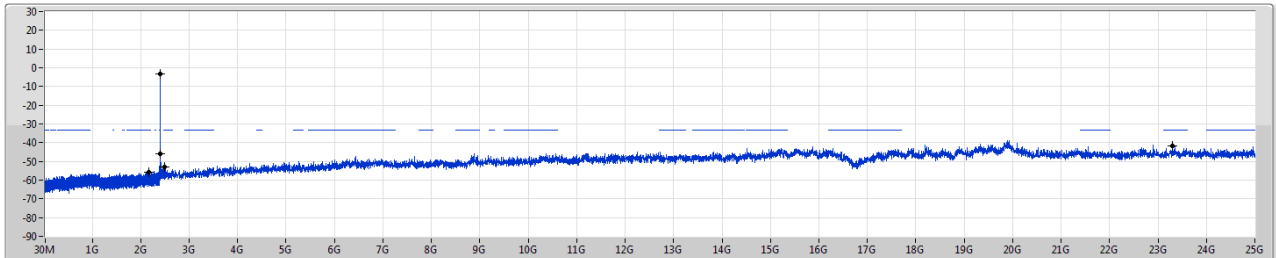
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
Thread_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2405MHz	Pass	2.4048G	-3.13	-33.13	2.16049G	-55.55	2.4G	-45.75	2.4G	-45.82	2.49336G	-52.96	23.29513G	-41.69	1
2440MHz	Pass	2.4048G	-3.13	-33.13	1.97169G	-55.35	2.39523G	-54.38	2.4835G	-56.29	2.48548G	-53.25	24.65396G	-42.33	1
2480MHz	Pass	2.4048G	-3.13	-33.13	1.78437G	-55.72	2.39896G	-54.50	2.4835G	-51.89	2.48385G	-46.20	23.37672G	-42.28	1

Thread_Nss1_1TX

2405MHz

CSE NdB

14/02/2020



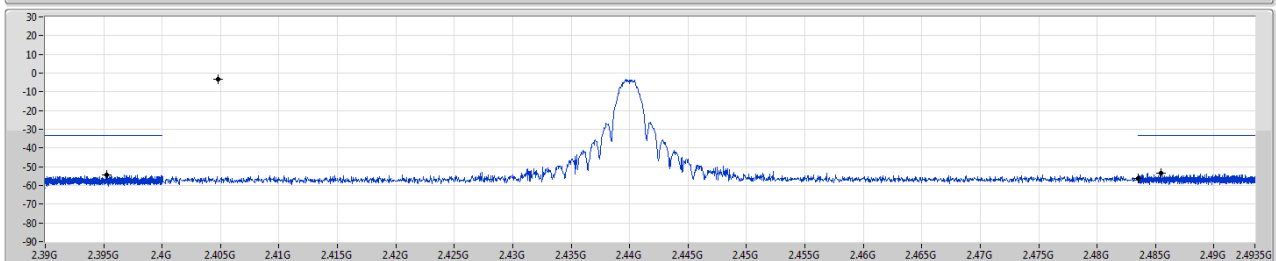
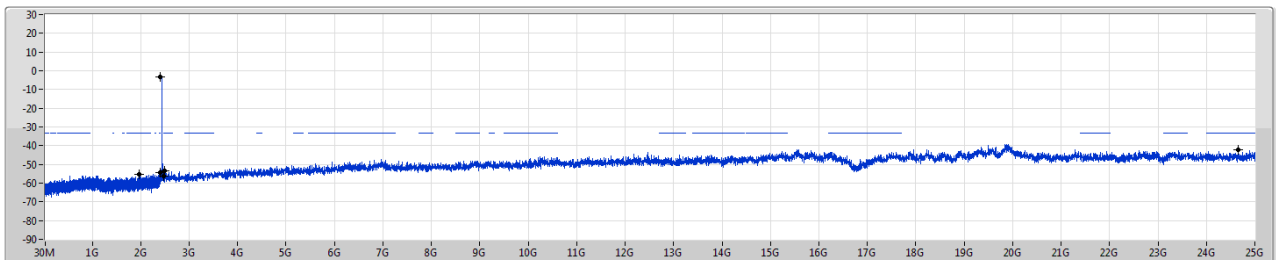
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4048G	-3.13	-33.13	2.16049G	-55.55	2.4G	-45.75	2.4G	-45.82	2.49336G	-52.96	23.29513G	-41.69	1

Thread_Nss1_1TX

2440MHz

CSE NdB

14/02/2020



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4048G	-3.13	-33.13	1.97169G	-55.35	2.39523G	-54.38	2.4835G	-56.29	2.48548G	-53.25	24.65396G	-42.33	1

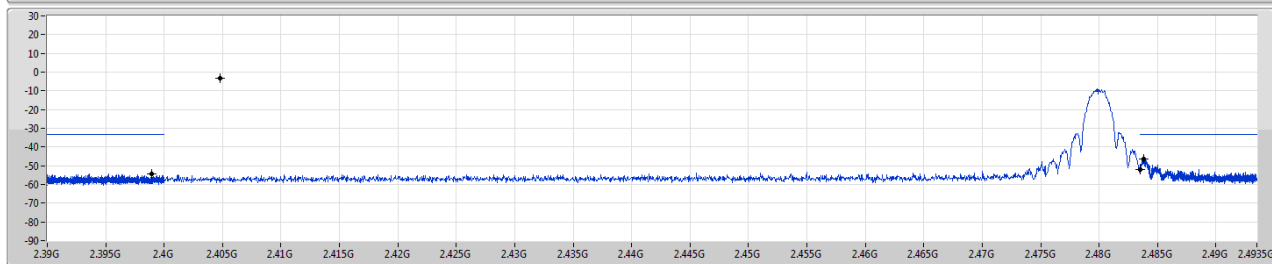
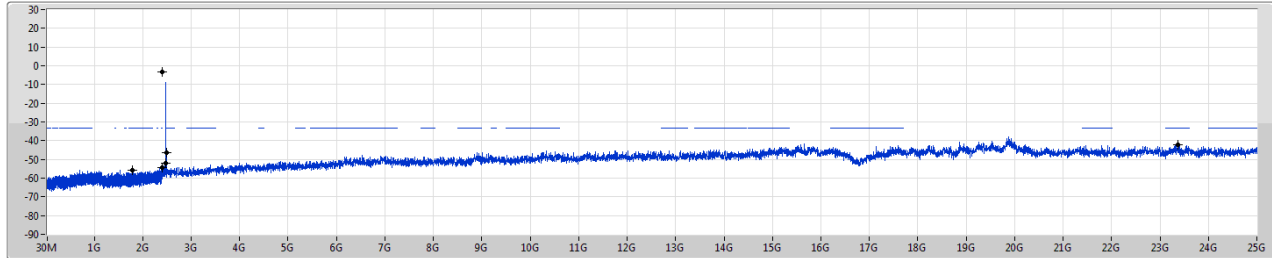
Thread_Nss1_1TX

2480MHz

CSE NdB

14/02/2020

Port 1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4048G	-3.13	-33.13	1.78437G	-55.72	2.39896G	-54.50	2.4835G	-51.89	2.48385G	-46.20	23.37672G	-42.28	1



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
Thread	Pass	PK	499.48M	41.76	46.00	-4.24	3	Vertical	360	1.00	-

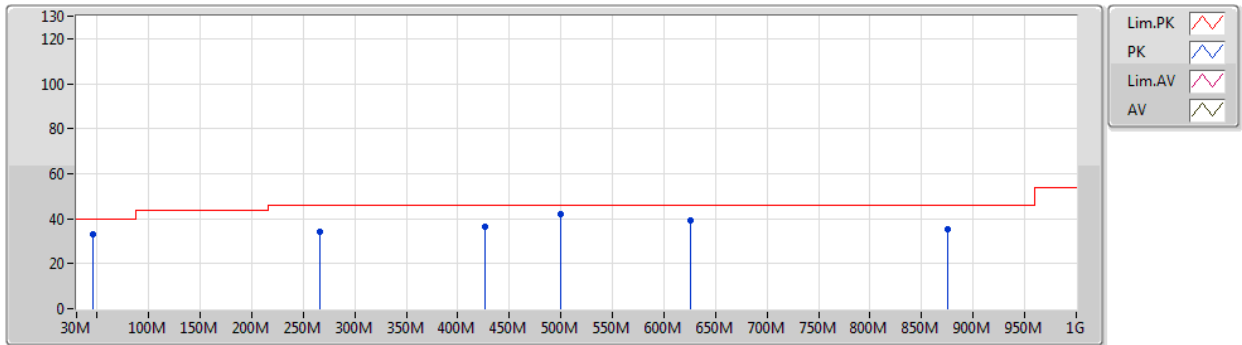
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Thread	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	45.52M	32.89	40.00	-7.11	3	Vertical	360	1.00	-
2440MHz	Pass	PK	266.68M	33.91	46.00	-12.09	3	Vertical	360	1.00	-
2440MHz	Pass	PK	425.76M	36.35	46.00	-9.65	3	Vertical	360	1.00	-
2440MHz	Pass	PK	499.48M	41.76	46.00	-4.24	3	Vertical	360	1.00	-
2440MHz	Pass	PK	625.58M	39.31	46.00	-6.69	3	Vertical	360	1.00	-
2440MHz	Pass	PK	875.84M	35.24	46.00	-10.76	3	Vertical	360	1.00	-
2440MHz	Pass	PK	64.92M	35.13	40.00	-4.87	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	270.56M	36.60	46.00	-9.40	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	311.3M	31.82	46.00	-14.18	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	499.48M	36.32	46.00	-9.68	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	749.74M	36.80	46.00	-9.20	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	875.84M	35.53	46.00	-10.47	3	Horizontal	0	1.00	-

Thread

2440MHz_PoE

10/02/2020

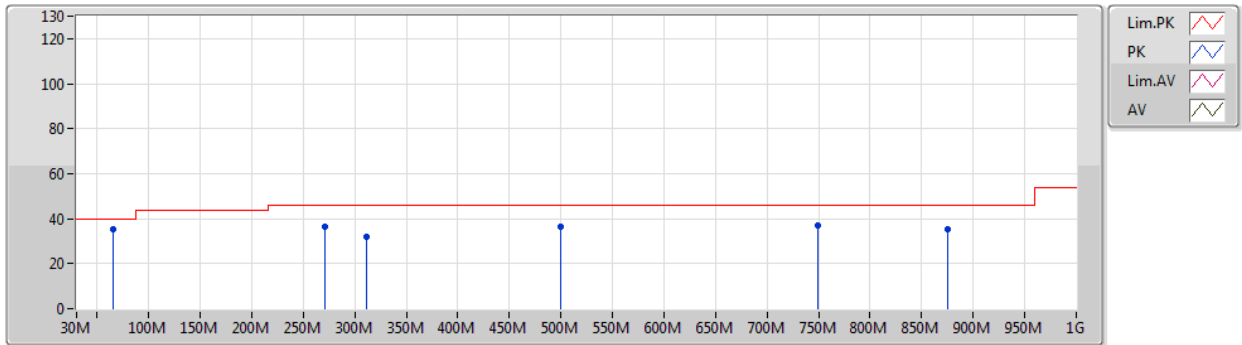


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	45.52M	32.89	40.00	-7.11	-20.87	3	Vertical	360	1.00	-	53.76	15.76	0.57	37.20
PK	266.68M	33.91	46.00	-12.09	-16.50	3	Vertical	360	1.00	-	50.41	18.60	1.34	36.44
PK	425.76M	36.35	46.00	-9.65	-13.15	3	Vertical	360	1.00	-	49.50	21.81	1.75	36.71
PK	499.48M	41.76	46.00	-4.24	-12.12	3	Vertical	360	1.00	-	53.88	22.92	1.88	36.92
PK	625.58M	39.31	46.00	-6.69	-9.95	3	Vertical	360	1.00	-	49.26	25.16	2.15	37.26
PK	875.84M	35.24	46.00	-10.76	-7.01	3	Vertical	360	1.00	-	42.25	27.97	2.52	37.50

Thread

2440MHz_PoE

10/02/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	64.92M	35.13	40.00	-4.87	-25.49	3	Horizontal	0	1.00	-	60.62	10.92	0.64	37.05
PK	270.56M	36.60	46.00	-9.40	-16.83	3	Horizontal	0	1.00	-	53.43	18.26	1.35	36.44
PK	311.3M	31.82	46.00	-14.18	-16.66	3	Horizontal	0	1.00	-	48.48	18.36	1.47	36.49
PK	499.48M	36.32	46.00	-9.68	-12.12	3	Horizontal	0	1.00	-	48.44	22.92	1.88	36.92
PK	749.74M	36.80	46.00	-9.20	-8.02	3	Horizontal	0	1.00	-	44.82	27.06	2.35	37.43
PK	875.84M	35.53	46.00	-10.47	-7.01	3	Horizontal	0	1.00	-	42.54	27.97	2.52	37.50



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
Thread	Pass	AV	2.4835G	52.78	54.00	-1.22	3	Horizontal	354	2.21	-

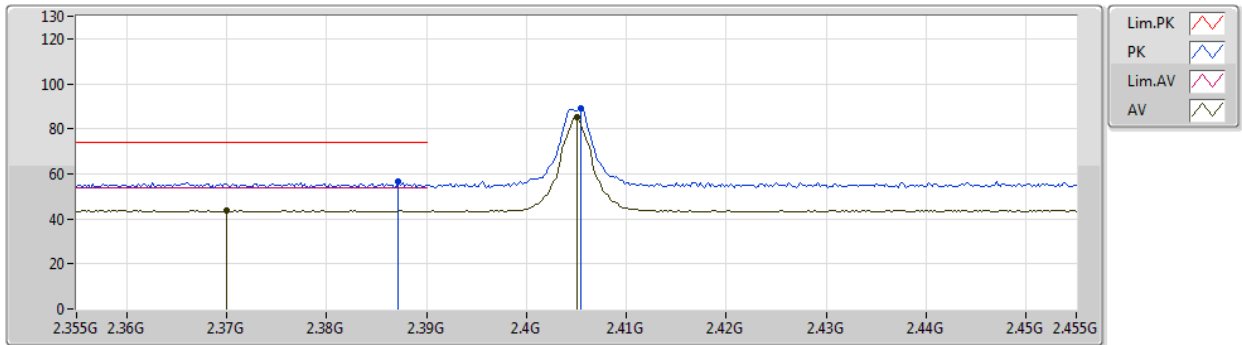
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Thread	-	-	-	-	-	-	-	-	-	-	-
2405MHz	Pass	AV	2.37G	43.74	54.00	-10.26	3	Vertical	303	2.49	-
2405MHz	Pass	AV	2.405G	85.16	Inf	-Inf	3	Vertical	303	2.49	-
2405MHz	Pass	PK	2.3872G	56.69	74.00	-17.31	3	Vertical	303	2.49	-
2405MHz	Pass	PK	2.4054G	88.82	Inf	-Inf	3	Vertical	303	2.49	-
2405MHz	Pass	AV	2.3886G	43.71	54.00	-10.29	3	Horizontal	19	2.35	-
2405MHz	Pass	AV	2.405G	95.34	Inf	-Inf	3	Horizontal	19	2.35	-
2405MHz	Pass	PK	2.3884G	57.47	74.00	-16.53	3	Horizontal	19	2.35	-
2405MHz	Pass	PK	2.4044G	98.93	Inf	-Inf	3	Horizontal	19	2.35	-
2405MHz	Pass	AV	4.81067G	33.07	54.00	-20.93	3	Vertical	321	1.02	-
2405MHz	Pass	PK	4.80939G	50.88	74.00	-23.12	3	Vertical	321	1.02	-
2405MHz	Pass	AV	4.8116G	32.84	54.00	-21.16	3	Horizontal	348	1.50	-
2405MHz	Pass	PK	4.81026G	45.81	74.00	-28.19	3	Horizontal	348	1.50	-
2440MHz	Pass	AV	2.3604G	43.73	54.00	-10.27	3	Vertical	302	3.00	-
2440MHz	Pass	AV	2.44G	87.73	Inf	-Inf	3	Vertical	302	3.00	-
2440MHz	Pass	AV	2.484G	43.78	54.00	-10.22	3	Vertical	302	3.00	-
2440MHz	Pass	PK	2.3412G	55.93	74.00	-18.07	3	Vertical	302	3.00	-
2440MHz	Pass	PK	2.4404G	91.43	Inf	-Inf	3	Vertical	302	3.00	-
2440MHz	Pass	PK	2.4844G	56.08	74.00	-17.92	3	Vertical	302	3.00	-
2440MHz	Pass	AV	2.354G	43.69	54.00	-10.31	3	Horizontal	1	2.21	-
2440MHz	Pass	AV	2.44G	93.94	Inf	-Inf	3	Horizontal	1	2.21	-
2440MHz	Pass	AV	2.494G	43.85	54.00	-10.15	3	Horizontal	1	2.21	-
2440MHz	Pass	PK	2.3816G	56.81	74.00	-17.19	3	Horizontal	1	2.21	-
2440MHz	Pass	PK	2.4396G	97.60	Inf	-Inf	3	Horizontal	1	2.21	-
2440MHz	Pass	PK	2.4908G	57.01	74.00	-16.99	3	Horizontal	1	2.21	-
2440MHz	Pass	AV	4.87753G	31.50	54.00	-22.50	3	Vertical	195	1.50	-
2440MHz	Pass	PK	4.87819G	44.09	74.00	-29.91	3	Vertical	195	1.50	-
2440MHz	Pass	AV	4.87759G	31.49	54.00	-22.51	3	Horizontal	190	2.54	-
2440MHz	Pass	PK	4.87802G	43.95	74.00	-30.05	3	Horizontal	190	2.54	-
2480MHz	Pass	AV	2.48G	86.31	Inf	-Inf	3	Vertical	303	1.91	-
2480MHz	Pass	AV	2.4835G	49.33	54.00	-4.67	3	Vertical	303	1.91	-
2480MHz	Pass	PK	2.4804G	89.86	Inf	-Inf	3	Vertical	303	1.91	-
2480MHz	Pass	PK	2.4844G	61.11	74.00	-12.89	3	Vertical	303	1.91	-
2480MHz	Pass	AV	2.48G	90.89	Inf	-Inf	3	Horizontal	354	2.21	-
2480MHz	Pass	AV	2.4835G	52.78	54.00	-1.22	3	Horizontal	354	2.21	-
2480MHz	Pass	PK	2.4804G	94.46	Inf	-Inf	3	Horizontal	354	2.21	-
2480MHz	Pass	PK	2.4838G	64.02	74.00	-9.98	3	Horizontal	354	2.21	-
2480MHz	Pass	AV	4.95894G	32.62	54.00	-21.38	3	Vertical	39	1.50	-
2480MHz	Pass	PK	4.95848G	46.14	74.00	-27.86	3	Vertical	39	1.50	-
2480MHz	Pass	AV	4.95897G	33.03	54.00	-20.97	3	Horizontal	70	1.94	-
2480MHz	Pass	PK	4.95945G	46.16	74.00	-27.84	3	Horizontal	70	1.94	-

Thread

2405MHz_TX

10/02/2020

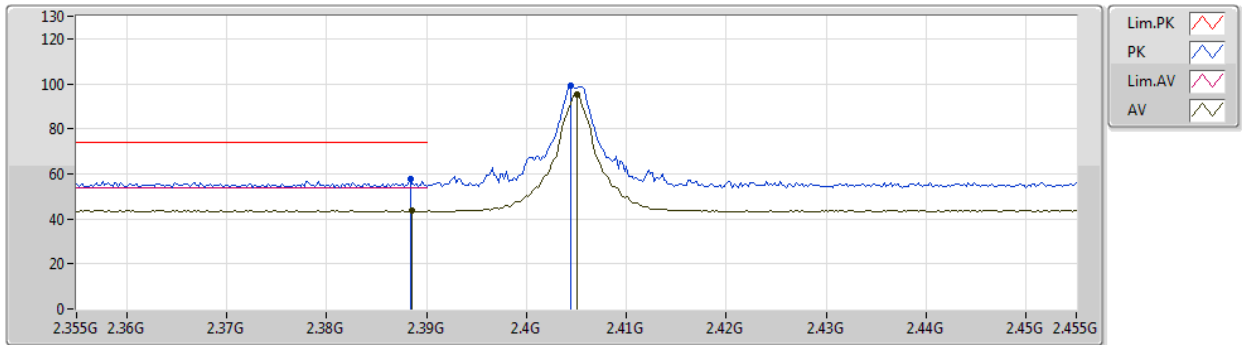


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.37G	43.74	54.00	-10.26	31.44	3	Vertical	303	2.49	-	12.30	27.72	3.72	-
AV	2.405G	85.16	Inf	-Inf	31.34	3	Vertical	303	2.49	-	53.82	27.60	3.74	-
PK	2.3872G	56.69	74.00	-17.31	31.38	3	Vertical	303	2.49	-	25.31	27.65	3.73	-
PK	2.4054G	88.82	Inf	-Inf	31.33	3	Vertical	303	2.49	-	57.49	27.59	3.74	-

Thread

2405MHz_TX

10/02/2020

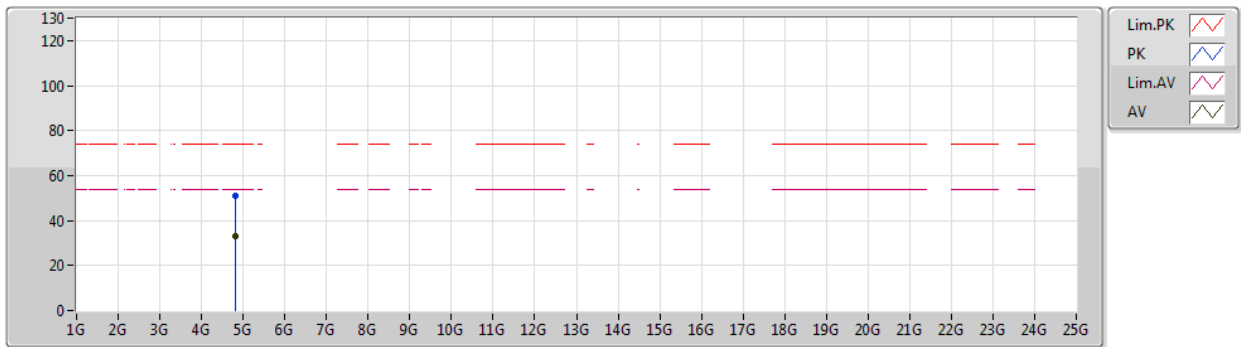


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3886G	43.71	54.00	-10.29	31.38	3	Horizontal	19	2.35	-	12.33	27.65	3.73	-
AV	2.405G	95.34	Inf	-Inf	31.34	3	Horizontal	19	2.35	-	64.00	27.60	3.74	-
PK	2.3884G	57.47	74.00	-16.53	31.38	3	Horizontal	19	2.35	-	26.09	27.65	3.73	-
PK	2.4044G	98.93	Inf	-Inf	31.34	3	Horizontal	19	2.35	-	67.59	27.60	3.74	-

Thread

2405MHz_TX

10/02/2020

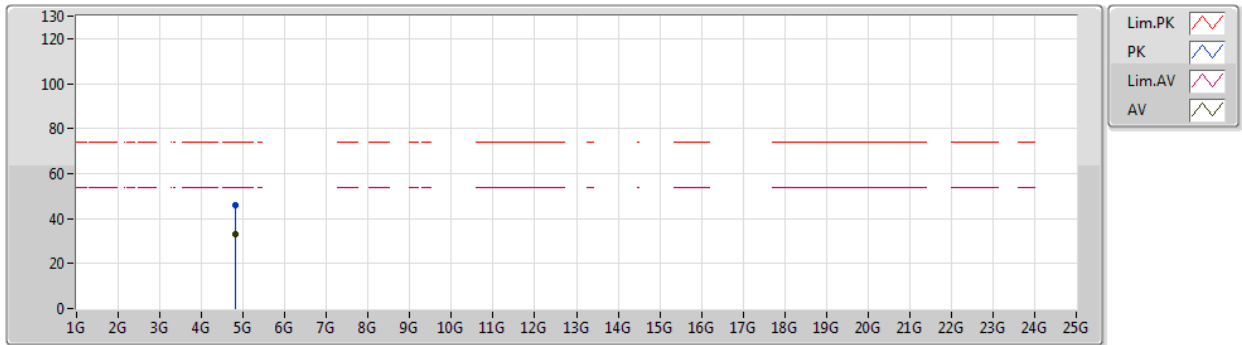


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.81067G	33.07	54.00	-20.93	2.60	3	Vertical	321	1.02	-	30.47	31.10	5.55	34.05
PK	4.80939G	50.88	74.00	-23.12	2.59	3	Vertical	321	1.02	-	48.29	31.10	5.54	34.05

Thread

2405MHz_TX

10/02/2020

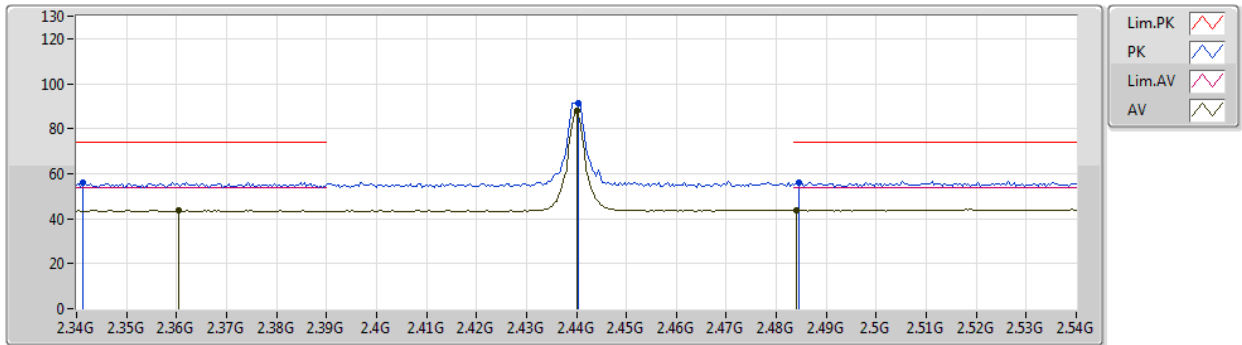


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8116G	32.84	54.00	-21.16	2.60	3	Horizontal	348	1.50	-	30.24	31.10	5.55	34.05
PK	4.81026G	45.81	74.00	-28.19	2.59	3	Horizontal	348	1.50	-	43.22	31.10	5.54	34.05

Thread

2440MHz_TX

10/02/2020

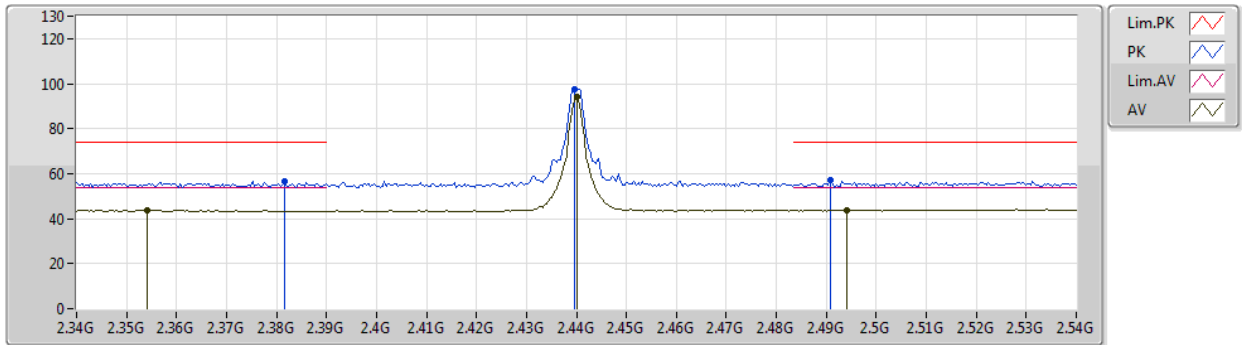


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3604G	43.73	54.00	-10.27	31.48	3	Vertical	302	3.00	-	12.25	27.76	3.72	-
AV	2.44G	87.73	Inf	-Inf	31.33	3	Vertical	302	3.00	-	56.40	27.56	3.77	-
AV	2.484G	43.78	54.00	-10.22	31.32	3	Vertical	302	3.00	-	12.46	27.52	3.80	-
PK	2.3412G	55.93	74.00	-18.07	31.55	3	Vertical	302	3.00	-	24.38	27.84	3.71	-
PK	2.4404G	91.43	Inf	-Inf	31.33	3	Vertical	302	3.00	-	60.10	27.56	3.77	-
PK	2.4844G	56.08	74.00	-17.92	31.32	3	Vertical	302	3.00	-	24.76	27.52	3.80	-

Thread

2440MHz_TX

10/02/2020

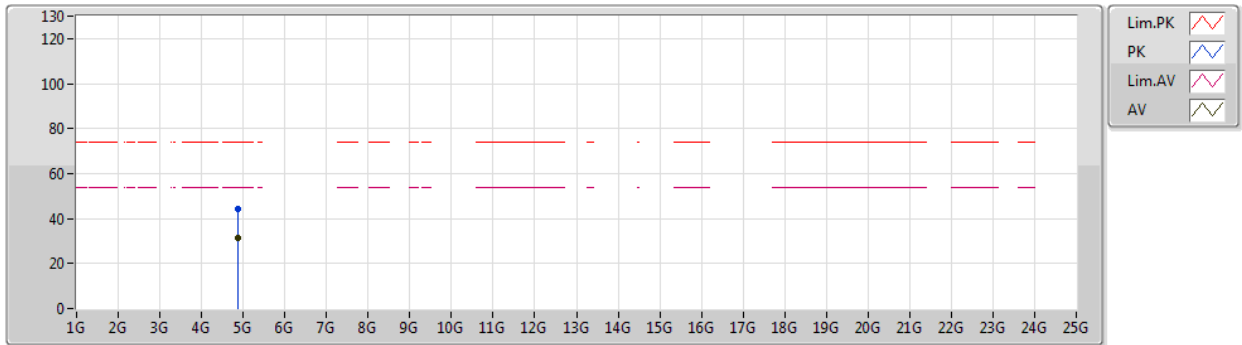


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.354G	43.69	54.00	-10.31	31.50	3	Horizontal	1	2.21	-	12.19	27.78	3.72	-
AV	2.44G	93.94	Inf	-Inf	31.33	3	Horizontal	1	2.21	-	62.61	27.56	3.77	-
AV	2.494G	43.85	54.00	-10.15	31.32	3	Horizontal	1	2.21	-	12.53	27.51	3.81	-
PK	2.3816G	56.81	74.00	-17.19	31.40	3	Horizontal	1	2.21	-	25.41	27.67	3.73	-
PK	2.4396G	97.60	Inf	-Inf	31.33	3	Horizontal	1	2.21	-	66.27	27.56	3.77	-
PK	2.4908G	57.01	74.00	-16.99	31.31	3	Horizontal	1	2.21	-	25.70	27.51	3.80	-

Thread

2440MHz_TX

10/02/2020

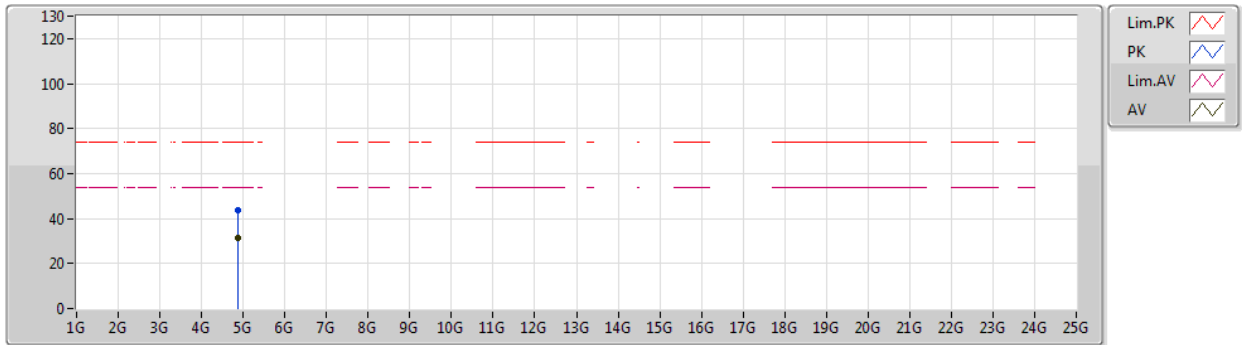


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87753G	31.50	54.00	-22.50	2.94	3	Vertical	195	1.50	-	28.56	31.10	5.89	34.05
PK	4.87819G	44.09	74.00	-29.91	2.95	3	Vertical	195	1.50	-	41.14	31.10	5.90	34.05

Thread

2440MHz_TX

10/02/2020

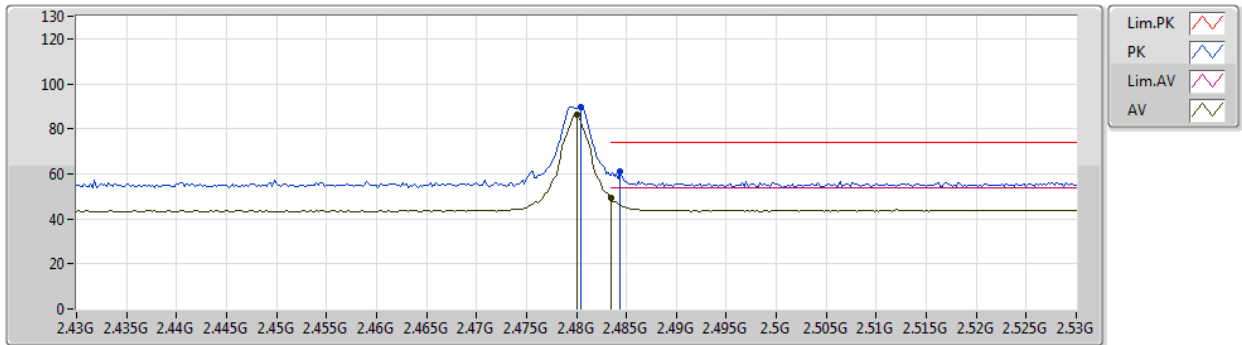


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87759G	31.49	54.00	-22.51	2.94	3	Horizontal	190	2.54	-	28.55	31.10	5.89	34.05
PK	4.87802G	43.95	74.00	-30.05	2.95	3	Horizontal	190	2.54	-	41.00	31.10	5.90	34.05

Thread

2480MHz_TX

10/02/2020

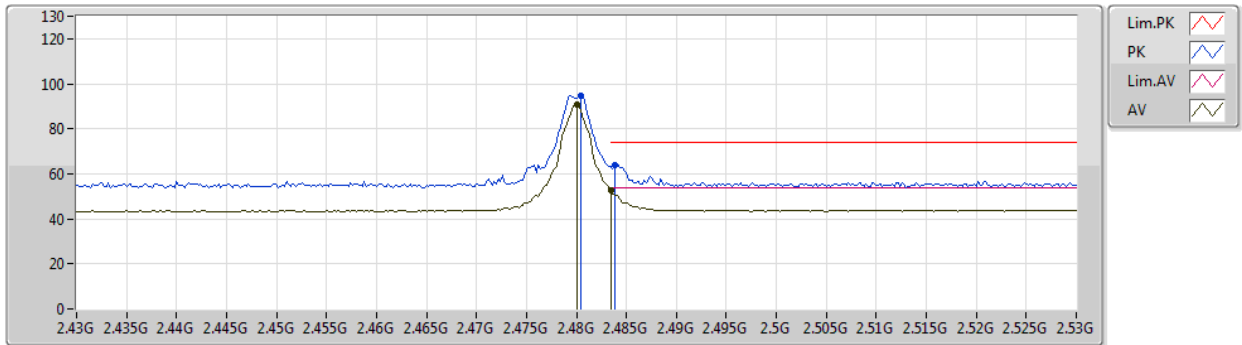


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	86.31	Inf	-Inf	31.32	3	Vertical	303	1.91	-	54.99	27.52	3.80	-
AV	2.4835G	49.33	54.00	-4.67	31.32	3	Vertical	303	1.91	-	18.01	27.52	3.80	-
PK	2.4804G	89.86	Inf	-Inf	31.32	3	Vertical	303	1.91	-	58.54	27.52	3.80	-
PK	2.4844G	61.11	74.00	-12.89	31.32	3	Vertical	303	1.91	-	29.79	27.52	3.80	-

Thread

2480MHz_TX

10/02/2020

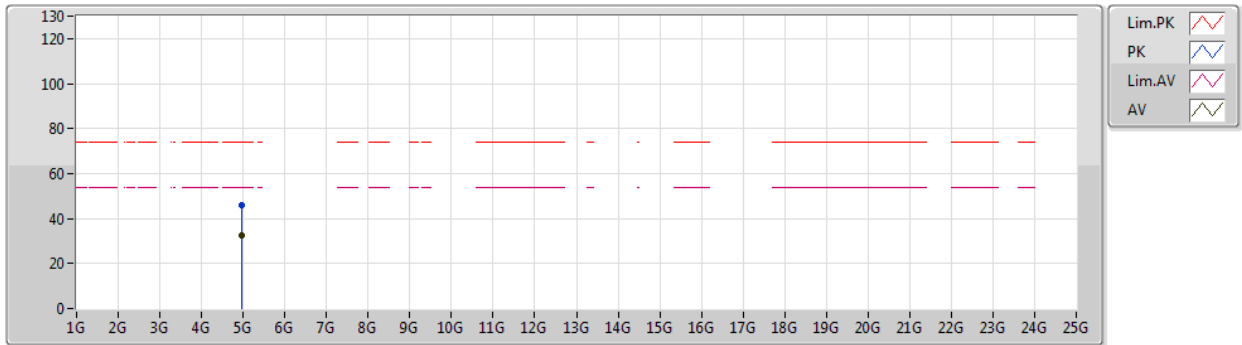


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	90.89	Inf	-Inf	31.32	3	Horizontal	354	2.21	-	59.57	27.52	3.80	-
AV	2.4835G	52.78	54.00	-1.22	31.32	3	Horizontal	354	2.21	-	21.46	27.52	3.80	-
PK	2.4804G	94.46	Inf	-Inf	31.32	3	Horizontal	354	2.21	-	63.14	27.52	3.80	-
PK	2.4838G	64.02	74.00	-9.98	31.32	3	Horizontal	354	2.21	-	32.70	27.52	3.80	-

Thread

2480MHz_TX

10/02/2020

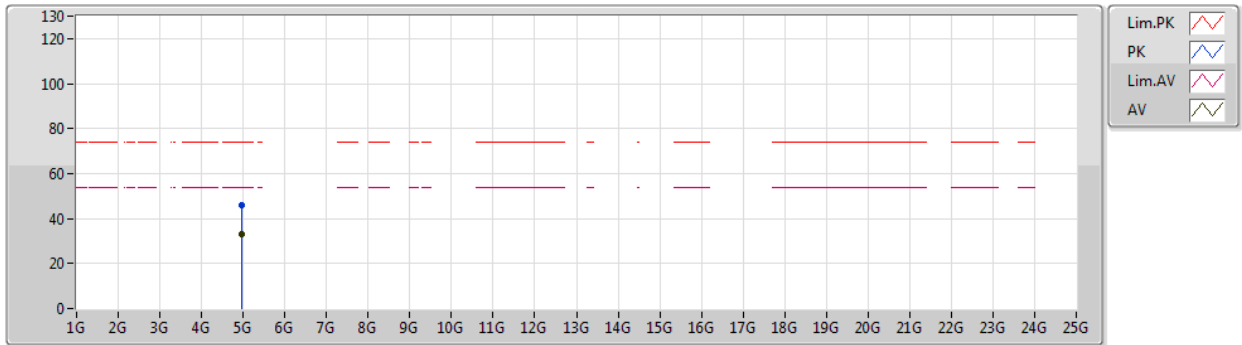


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95894G	32.62	54.00	-21.38	3.62	3	Vertical	39	1.50	-	29.00	31.34	6.32	34.04
PK	4.95848G	46.14	74.00	-27.86	3.60	3	Vertical	39	1.50	-	42.54	31.33	6.31	34.04

Thread

2480MHz_TX

10/02/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95897G	33.03	54.00	-20.97	3.62	3	Horizontal	70	1.94	-	29.41	31.34	6.32	34.04
PK	4.95945G	46.16	74.00	-27.84	3.62	3	Horizontal	70	1.94	-	42.54	31.34	6.32	34.04



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
Thread	Pass	PK	580.96M	39.56	46.00	-6.44	3	Horizontal	0	1.00	-

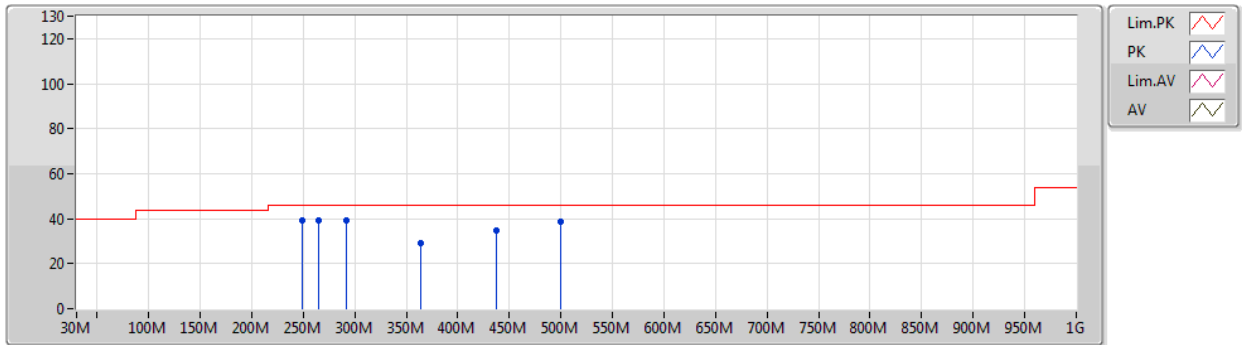
**Result**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Thread	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	249.22M	39.22	46.00	-6.78	3	Vertical	360	1.00	-
2440MHz	Pass	PK	264.74M	39.07	46.00	-6.93	3	Vertical	360	1.00	-
2440MHz	Pass	PK	291.9M	39.49	46.00	-6.51	3	Vertical	360	1.00	-
2440MHz	Pass	PK	363.68M	29.32	46.00	-16.68	3	Vertical	360	1.00	-
2440MHz	Pass	PK	437.4M	34.81	46.00	-11.19	3	Vertical	360	1.00	-
2440MHz	Pass	PK	499.48M	38.82	46.00	-7.18	3	Vertical	360	1.00	-
2440MHz	Pass	PK	97.9M	31.64	43.50	-11.86	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	268.62M	33.75	46.00	-12.25	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	289.96M	37.88	46.00	-8.12	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	350.1M	34.78	46.00	-11.22	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	553.8M	38.43	46.00	-7.57	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	580.96M	39.56	46.00	-6.44	3	Horizontal	0	1.00	-

Thread

2440MHz_PoE

14/02/2020

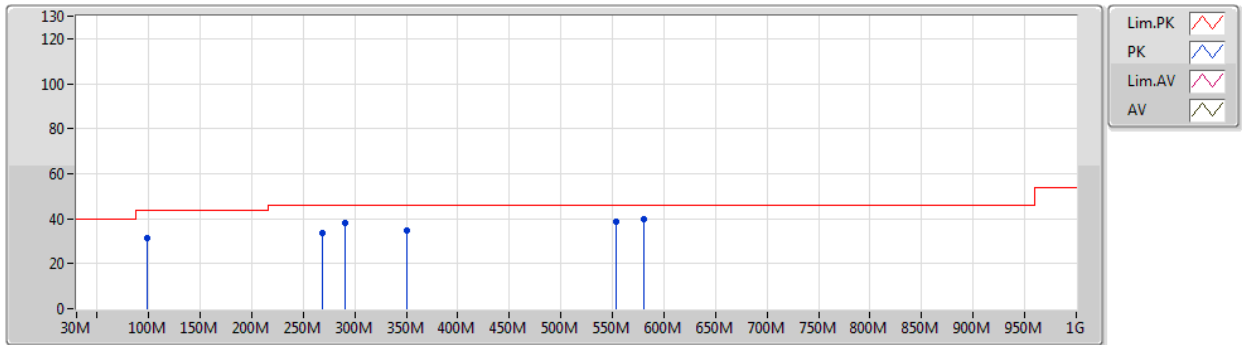


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	249.22M	39.22	46.00	-6.78	-17.62	3	Vertical	360	1.00	-	56.84	17.51	1.29	36.42
PK	264.74M	39.07	46.00	-6.93	-16.31	3	Vertical	360	1.00	-	55.38	18.79	1.33	36.43
PK	291.9M	39.49	46.00	-6.51	-16.88	3	Vertical	360	1.00	-	56.37	18.17	1.42	36.47
PK	363.68M	29.32	46.00	-16.68	-15.20	3	Vertical	360	1.00	-	44.52	19.77	1.61	36.58
PK	437.4M	34.81	46.00	-11.19	-13.01	3	Vertical	360	1.00	-	47.82	21.94	1.79	36.74
PK	499.48M	38.82	46.00	-7.18	-12.12	3	Vertical	360	1.00	-	50.94	22.92	1.88	36.92

Thread

2440MHz_PoE

14/02/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	97.9M	31.64	43.50	-11.86	-21.10	3	Horizontal	0	1.00	-	52.74	14.90	0.80	36.80
PK	268.62M	33.75	46.00	-12.25	-16.68	3	Horizontal	0	1.00	-	50.43	18.41	1.35	36.44
PK	289.96M	37.88	46.00	-8.12	-16.91	3	Horizontal	0	1.00	-	54.79	18.15	1.41	36.47
PK	350.1M	34.78	46.00	-11.22	-15.56	3	Horizontal	0	1.00	-	50.34	19.42	1.58	36.56
PK	553.8M	38.43	46.00	-7.57	-10.53	3	Horizontal	0	1.00	-	48.96	24.53	2.02	37.08
PK	580.96M	39.56	46.00	-6.44	-10.51	3	Horizontal	0	1.00	-	50.07	24.59	2.06	37.16



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
Thread	Pass	AV	2.4835G	53.90	54.00	-0.10	3	Horizontal	356	2.18	-

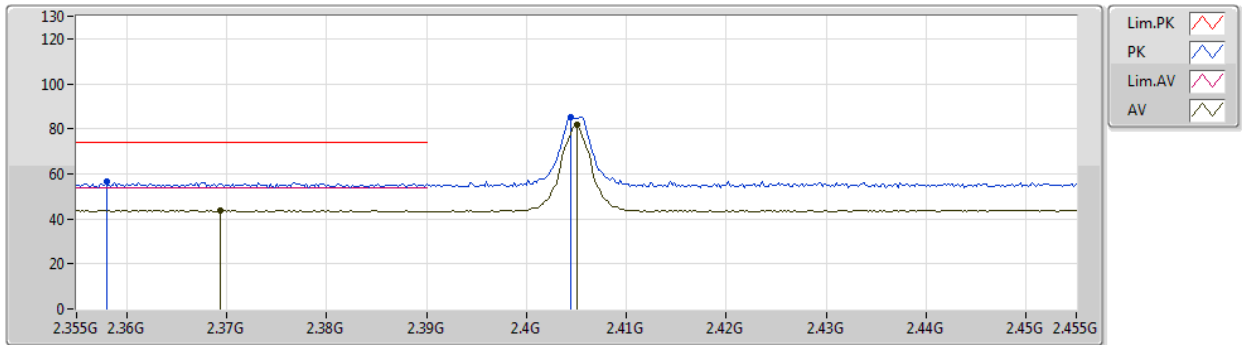
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Thread	-	-	-	-	-	-	-	-	-	-	-
2405MHz	Pass	AV	2.3694G	43.88	54.00	-10.12	3	Vertical	94	1.00	-
2405MHz	Pass	AV	2.405G	81.57	Inf	-Inf	3	Vertical	94	1.00	-
2405MHz	Pass	PK	2.358G	56.65	74.00	-17.35	3	Vertical	94	1.00	-
2405MHz	Pass	PK	2.4044G	85.30	Inf	-Inf	3	Vertical	94	1.00	-
2405MHz	Pass	AV	2.3606G	43.85	54.00	-10.15	3	Horizontal	357	2.37	-
2405MHz	Pass	AV	2.405G	99.06	Inf	-Inf	3	Horizontal	357	2.37	-
2405MHz	Pass	PK	2.3888G	57.59	74.00	-16.41	3	Horizontal	357	2.37	-
2405MHz	Pass	PK	2.4054G	102.68	Inf	-Inf	3	Horizontal	357	2.37	-
2405MHz	Pass	AV	4.80898G	32.84	54.00	-21.16	3	Vertical	323	1.50	-
2405MHz	Pass	PK	4.80928G	44.46	74.00	-29.54	3	Vertical	323	1.50	-
2405MHz	Pass	AV	4.80934G	31.61	54.00	-22.39	3	Horizontal	6	1.00	-
2405MHz	Pass	PK	4.80712G	44.38	74.00	-29.62	3	Horizontal	6	1.00	-
2440MHz	Pass	AV	2.3704G	43.74	54.00	-10.26	3	Vertical	350	2.18	-
2440MHz	Pass	AV	2.44G	85.73	Inf	-Inf	3	Vertical	350	2.18	-
2440MHz	Pass	AV	2.4872G	43.79	54.00	-10.21	3	Vertical	350	2.18	-
2440MHz	Pass	PK	2.3644G	56.58	74.00	-17.42	3	Vertical	350	2.18	-
2440MHz	Pass	PK	2.4404G	89.34	Inf	-Inf	3	Vertical	350	2.18	-
2440MHz	Pass	PK	2.4932G	57.00	74.00	-17.00	3	Vertical	350	2.18	-
2440MHz	Pass	AV	2.3828G	43.69	54.00	-10.31	3	Horizontal	356	1.58	-
2440MHz	Pass	AV	2.44G	99.39	Inf	-Inf	3	Horizontal	356	1.58	-
2440MHz	Pass	AV	2.4992G	43.96	54.00	-10.04	3	Horizontal	356	1.58	-
2440MHz	Pass	PK	2.3484G	57.69	74.00	-16.31	3	Horizontal	356	1.58	-
2440MHz	Pass	PK	2.4396G	102.97	Inf	-Inf	3	Horizontal	356	1.58	-
2440MHz	Pass	PK	2.4976G	56.24	74.00	-17.76	3	Horizontal	356	1.58	-
2440MHz	Pass	AV	4.87904G	33.12	54.00	-20.88	3	Vertical	324	1.41	-
2440MHz	Pass	PK	4.88084G	44.90	74.00	-29.10	3	Vertical	324	1.41	-
2440MHz	Pass	AV	4.8752G	31.69	54.00	-22.31	3	Horizontal	106	1.70	-
2440MHz	Pass	PK	4.87574G	44.75	74.00	-29.25	3	Horizontal	106	1.70	-
2480MHz	Pass	AV	2.48G	78.44	Inf	-Inf	3	Vertical	353	2.99	-
2480MHz	Pass	AV	2.4835G	45.15	54.00	-8.85	3	Vertical	353	2.99	-
2480MHz	Pass	PK	2.4804G	82.27	Inf	-Inf	3	Vertical	353	2.99	-
2480MHz	Pass	PK	2.4835G	57.49	74.00	-16.51	3	Vertical	353	2.99	-
2480MHz	Pass	AV	2.48G	92.28	Inf	-Inf	3	Horizontal	356	2.18	-
2480MHz	Pass	AV	2.4835G	53.90	54.00	-0.10	3	Horizontal	356	2.18	-
2480MHz	Pass	PK	2.4804G	95.91	Inf	-Inf	3	Horizontal	356	2.18	-
2480MHz	Pass	PK	2.4835G	65.87	74.00	-8.13	3	Horizontal	356	2.18	-
2480MHz	Pass	AV	4.95898G	33.89	54.00	-20.11	3	Vertical	315	2.01	-
2480MHz	Pass	PK	4.9588G	46.14	74.00	-27.86	3	Vertical	315	2.01	-
2480MHz	Pass	AV	4.9601G	32.41	54.00	-21.59	3	Horizontal	240	1.63	-
2480MHz	Pass	PK	4.95382G	45.87	74.00	-28.13	3	Horizontal	240	1.63	-

Thread

2405MHz_TX

14/02/2020

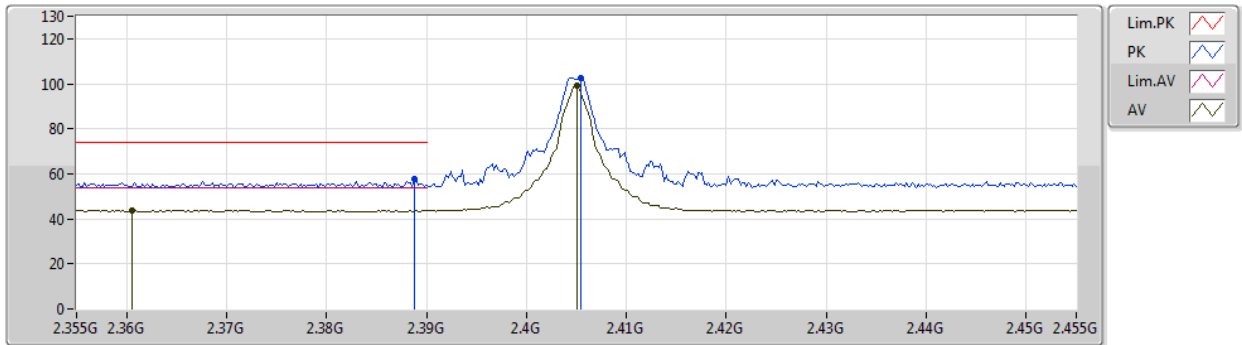


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3694G	43.88	54.00	-10.12	31.44	3	Vertical	94	1.00	-	12.44	27.72	3.72	-
AV	2.405G	81.57	Inf	-Inf	31.34	3	Vertical	94	1.00	-	50.23	27.60	3.74	-
PK	2.358G	56.65	74.00	-17.35	31.49	3	Vertical	94	1.00	-	25.16	27.77	3.72	-
PK	2.4044G	85.30	Inf	-Inf	31.34	3	Vertical	94	1.00	-	53.96	27.60	3.74	-

Thread

2405MHz_TX

14/02/2020

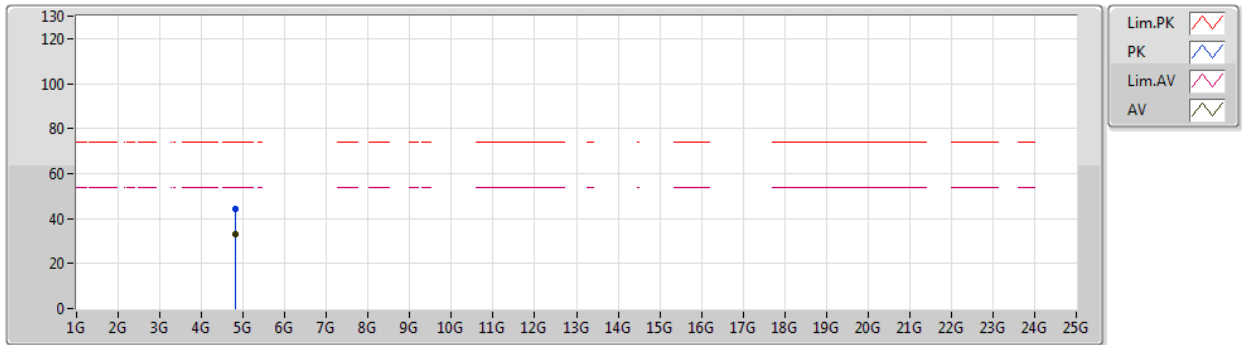


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3606G	43.85	54.00	-10.15	31.48	3	Horizontal	357	2.37	-	12.37	27.76	3.72	-
AV	2.405G	99.06	Inf	-Inf	31.34	3	Horizontal	357	2.37	-	67.72	27.60	3.74	-
PK	2.3888G	57.59	74.00	-16.41	31.37	3	Horizontal	357	2.37	-	26.22	27.64	3.73	-
PK	2.4054G	102.68	Inf	-Inf	31.33	3	Horizontal	357	2.37	-	71.35	27.59	3.74	-

Thread

2405MHz_TX

14/02/2020

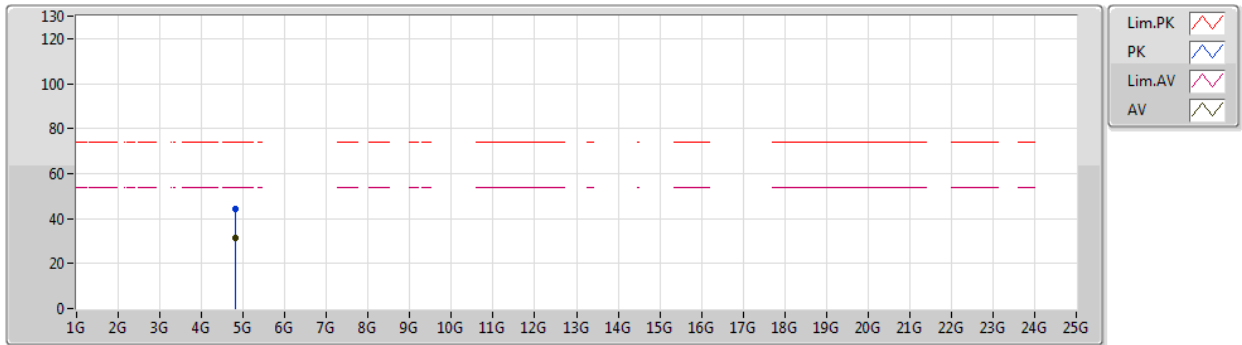


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80898G	32.84	54.00	-21.16	2.59	3	Vertical	323	1.50	-	30.25	31.10	5.54	34.05
PK	4.80928G	44.46	74.00	-29.54	2.59	3	Vertical	323	1.50	-	41.87	31.10	5.54	34.05

Thread

14/02/2020

2405MHz_TX

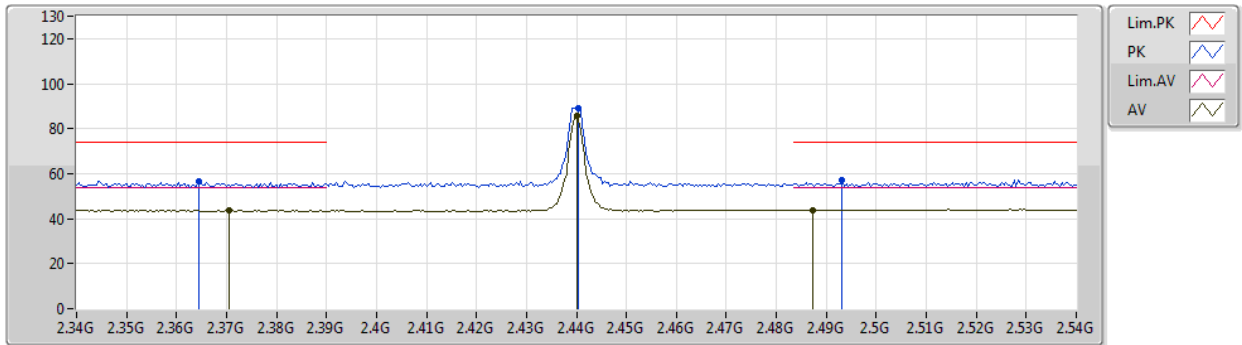


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80934G	31.61	54.00	-22.39	2.59	3	Horizontal	6	1.00	-	29.02	31.10	5.54	34.05
PK	4.80712G	44.38	74.00	-29.62	2.58	3	Horizontal	6	1.00	-	41.80	31.10	5.53	34.05

Thread

2440MHz_TX

14/02/2020

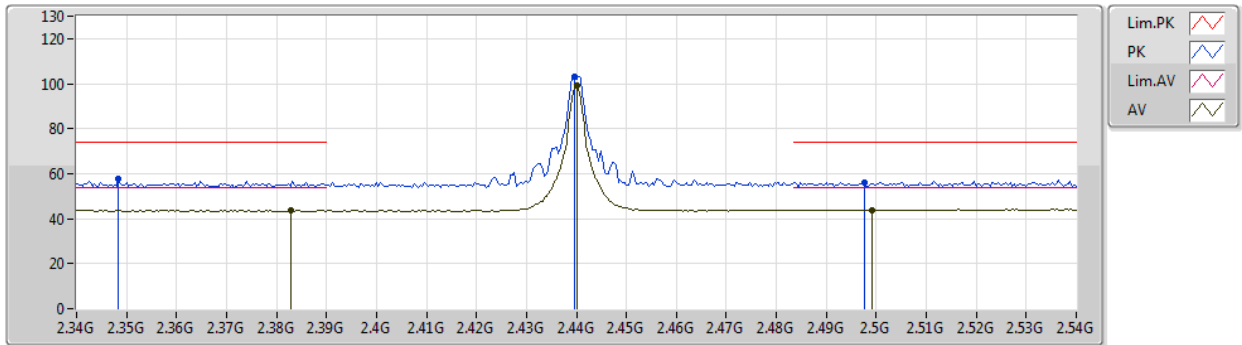


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3704G	43.74	54.00	-10.26	31.44	3	Vertical	350	2.18	-	12.30	27.72	3.72	-
AV	2.44G	85.73	Inf	-Inf	31.33	3	Vertical	350	2.18	-	54.40	27.56	3.77	-
AV	2.4872G	43.79	54.00	-10.21	31.31	3	Vertical	350	2.18	-	12.48	27.51	3.80	-
PK	2.3644G	56.58	74.00	-17.42	31.46	3	Vertical	350	2.18	-	25.12	27.74	3.72	-
PK	2.4404G	89.34	Inf	-Inf	31.33	3	Vertical	350	2.18	-	58.01	27.56	3.77	-
PK	2.4932G	57.00	74.00	-17.00	31.32	3	Vertical	350	2.18	-	25.68	27.51	3.81	-

Thread

2440MHz_TX

14/02/2020

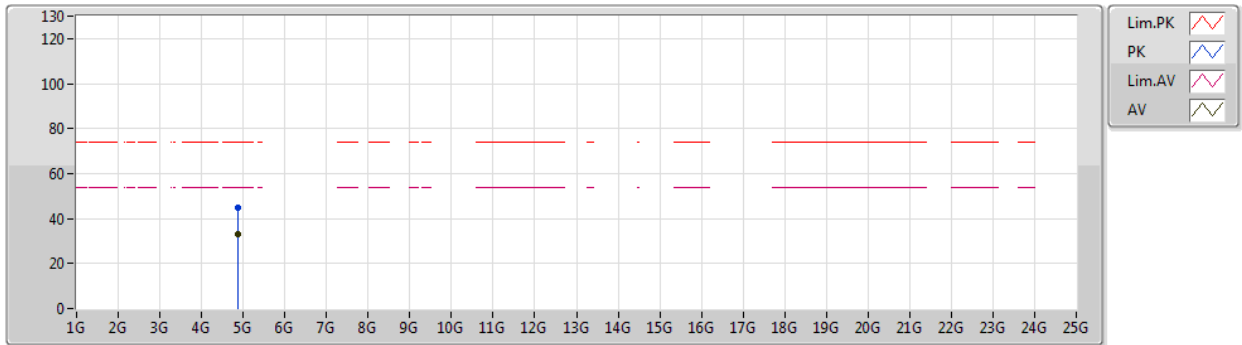


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3828G	43.69	54.00	-10.31	31.40	3	Horizontal	356	1.58	-	12.29	27.67	3.73	-
AV	2.44G	99.39	Inf	-Inf	31.33	3	Horizontal	356	1.58	-	68.06	27.56	3.77	-
AV	2.4992G	43.96	54.00	-10.04	31.31	3	Horizontal	356	1.58	-	12.65	27.50	3.81	-
PK	2.3484G	57.69	74.00	-16.31	31.52	3	Horizontal	356	1.58	-	26.17	27.81	3.71	-
PK	2.4396G	102.97	Inf	-Inf	31.33	3	Horizontal	356	1.58	-	71.64	27.56	3.77	-
PK	2.4976G	56.24	74.00	-17.76	31.31	3	Horizontal	356	1.58	-	24.93	27.50	3.81	-

Thread

2440MHz_TX

14/02/2020

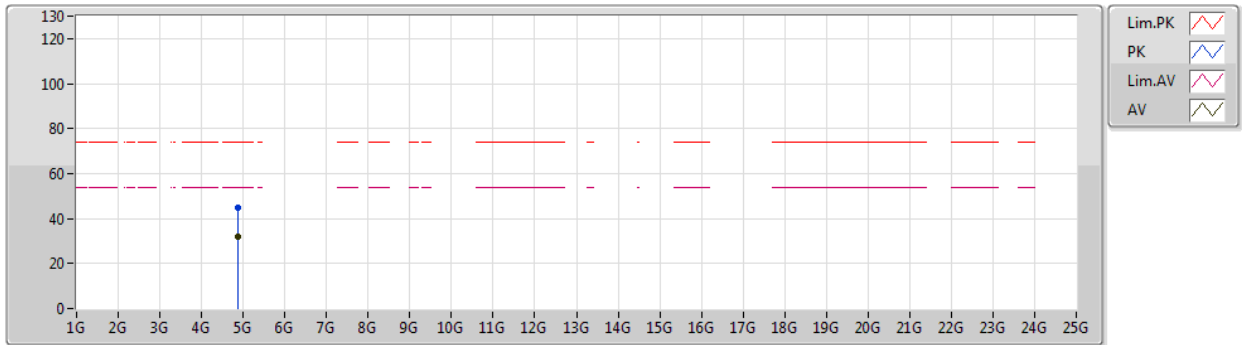


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87904G	33.12	54.00	-20.88	2.95	3	Vertical	324	1.41	-	30.17	31.10	5.90	34.05
PK	4.88084G	44.90	74.00	-29.10	2.96	3	Vertical	324	1.41	-	41.94	31.10	5.91	34.05

Thread

2440MHz_TX

14/02/2020

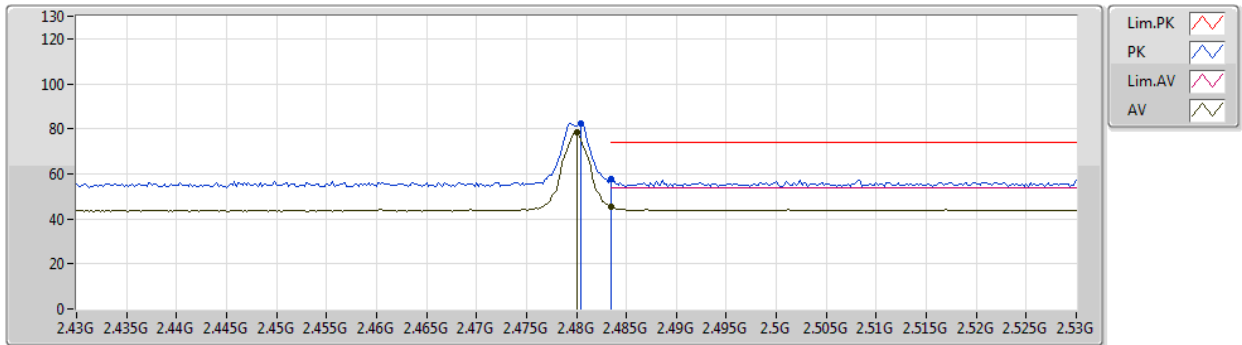


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8752G	31.69	54.00	-22.31	2.93	3	Horizontal	106	1.70	-	28.76	31.10	5.88	34.05
PK	4.87574G	44.75	74.00	-29.25	2.93	3	Horizontal	106	1.70	-	41.82	31.10	5.88	34.05

Thread

2480MHz_TX

14/02/2020

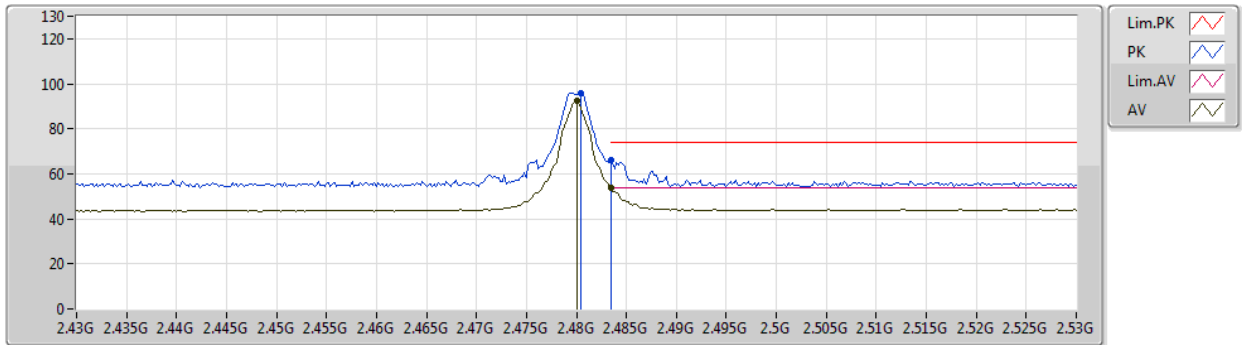


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	78.44	Inf	-Inf	31.32	3	Vertical	353	2.99	-	47.12	27.52	3.80	-
AV	2.4835G	45.15	54.00	-8.85	31.32	3	Vertical	353	2.99	-	13.83	27.52	3.80	-
PK	2.4804G	82.27	Inf	-Inf	31.32	3	Vertical	353	2.99	-	50.95	27.52	3.80	-
PK	2.4835G	57.49	74.00	-16.51	31.32	3	Vertical	353	2.99	-	26.17	27.52	3.80	-

Thread

2480MHz_TX

14/02/2020

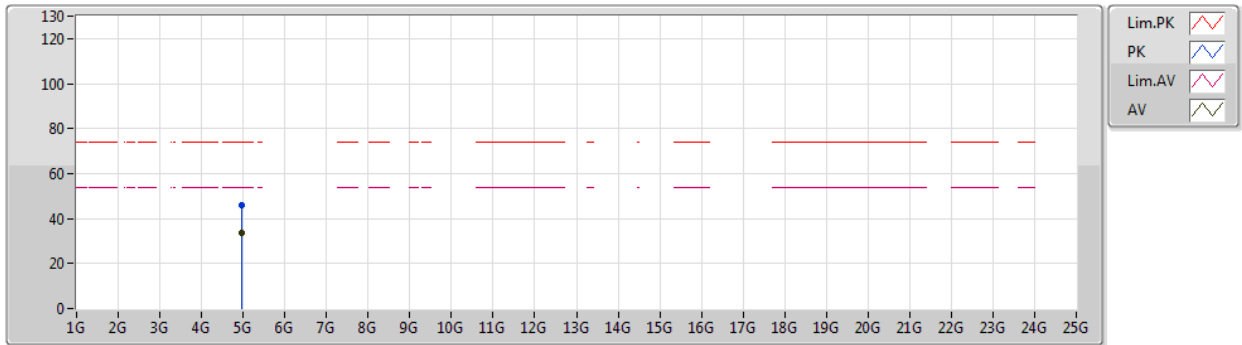


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	92.28	Inf	-Inf	31.32	3	Horizontal	356	2.18	-	60.96	27.52	3.80	-
AV	2.4835G	53.90	54.00	-0.10	31.32	3	Horizontal	356	2.18	-	22.58	27.52	3.80	-
PK	2.4804G	95.91	Inf	-Inf	31.32	3	Horizontal	356	2.18	-	64.59	27.52	3.80	-
PK	2.4835G	65.87	74.00	-8.13	31.32	3	Horizontal	356	2.18	-	34.55	27.52	3.80	-

Thread

2480MHz_TX

14/02/2020

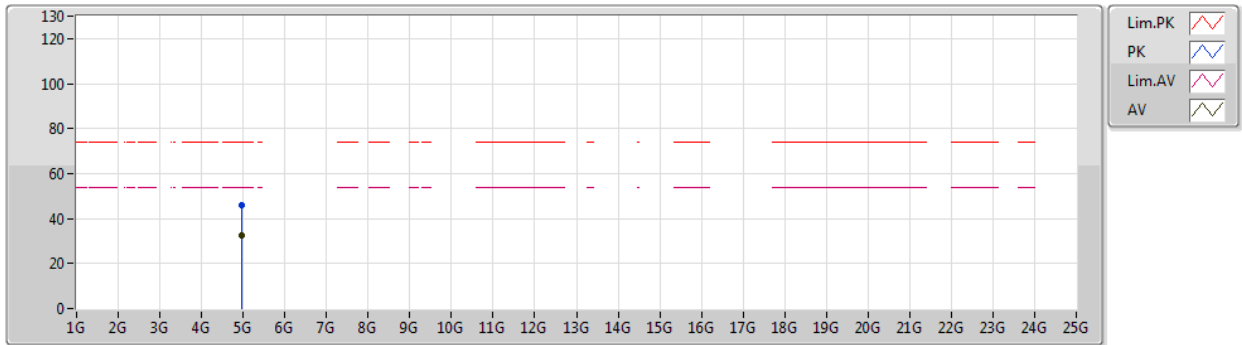


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95898G	33.89	54.00	-20.11	3.62	3	Vertical	315	2.01	-	30.27	31.34	6.32	34.04
PK	4.9588G	46.14	74.00	-27.86	3.62	3	Vertical	315	2.01	-	42.52	31.34	6.32	34.04

Thread

14/02/2020

2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9601G	32.41	54.00	-21.59	3.62	3	Horizontal	240	1.63	-	28.79	31.34	6.32	34.04
PK	4.95382G	45.87	74.00	-28.13	3.57	3	Horizontal	240	1.63	-	42.30	31.32	6.29	34.04



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
Thread	Pass	PK	105.66M	37.49	43.50	-6.01	3	Vertical	0	1.00	-



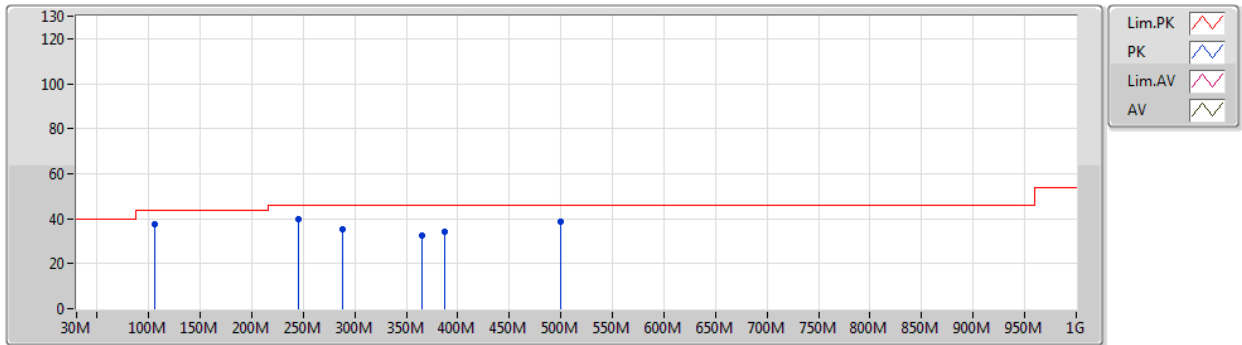
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Thread	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	105.66M	37.49	43.50	-6.01	3	Vertical	0	1.00	-
2440MHz	Pass	PK	245.34M	39.70	46.00	-6.30	3	Vertical	0	1.00	-
2440MHz	Pass	PK	288.02M	35.51	46.00	-10.49	3	Vertical	0	1.00	-
2440MHz	Pass	PK	365.62M	32.28	46.00	-13.72	3	Vertical	0	1.00	-
2440MHz	Pass	PK	386.96M	34.00	46.00	-12.00	3	Vertical	0	1.00	-
2440MHz	Pass	PK	499.48M	38.54	46.00	-7.46	3	Vertical	0	1.00	-
2440MHz	Pass	PK	105.66M	35.34	43.50	-8.16	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	266.68M	38.85	46.00	-7.15	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	282.2M	38.36	46.00	-7.64	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	344.28M	39.71	46.00	-6.29	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	499.48M	38.54	46.00	-7.46	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	567.38M	38.25	46.00	-7.75	3	Horizontal	360	1.00	-

Thread

2440MHz_PoE

14/02/2020

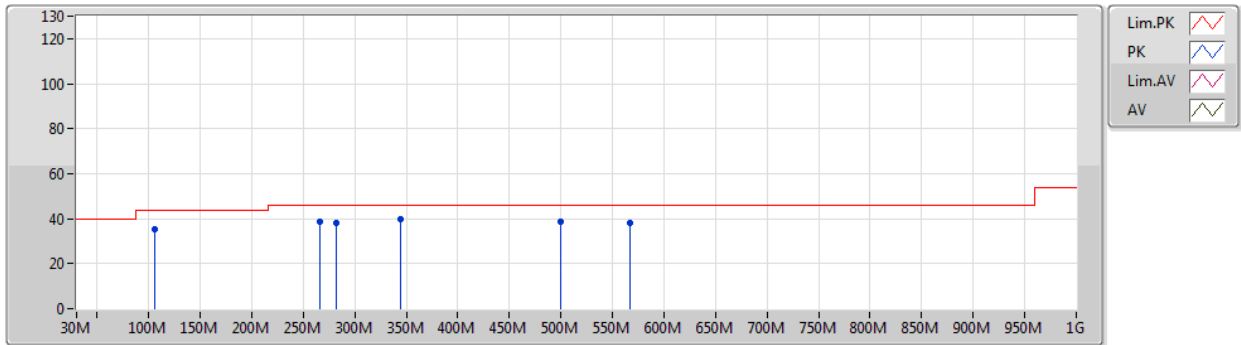


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	105.66M	37.49	43.50	-6.01	-20.41	3	Vertical	0	1.00	-	57.90	15.52	0.83	36.76
PK	245.34M	39.70	46.00	-6.30	-18.13	3	Vertical	0	1.00	-	57.83	17.01	1.28	36.42
PK	288.02M	35.51	46.00	-10.49	-16.98	3	Vertical	0	1.00	-	52.49	18.09	1.40	36.47
PK	365.62M	32.28	46.00	-13.72	-15.19	3	Vertical	0	1.00	-	47.47	19.78	1.61	36.58
PK	386.96M	34.00	46.00	-12.00	-14.59	3	Vertical	0	1.00	-	48.59	20.38	1.64	36.61
PK	499.48M	38.54	46.00	-7.46	-12.12	3	Vertical	0	1.00	-	50.66	22.92	1.88	36.92

Thread

2440MHz_PoE

14/02/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	105.66M	35.34	43.50	-8.16	-20.41	3	Horizontal	360	1.00	-	55.75	15.52	0.83	36.76
PK	266.68M	38.85	46.00	-7.15	-16.50	3	Horizontal	360	1.00	-	55.35	18.60	1.34	36.44
PK	282.2M	38.36	46.00	-7.64	-17.15	3	Horizontal	360	1.00	-	55.51	17.92	1.39	36.46
PK	344.28M	39.71	46.00	-6.29	-15.75	3	Horizontal	360	1.00	-	55.46	19.24	1.56	36.55
PK	499.48M	38.54	46.00	-7.46	-12.12	3	Horizontal	360	1.00	-	50.66	22.92	1.88	36.92
PK	567.38M	38.25	46.00	-7.75	-9.95	3	Horizontal	360	1.00	-	48.20	25.13	2.04	37.12



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
Thread	Pass	AV	2.4835G	53.87	54.00	-0.13	3	Vertical	360	1.20	-

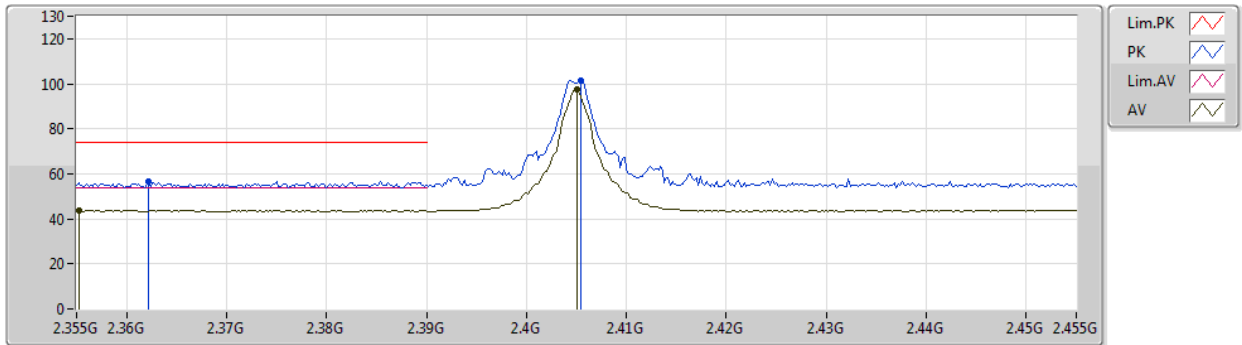
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Thread	-	-	-	-	-	-	-	-	-	-	-
2405MHz	Pass	AV	2.3552G	43.75	54.00	-10.25	3	Vertical	353	2.79	-
2405MHz	Pass	AV	2.405G	97.65	Inf	-Inf	3	Vertical	353	2.79	-
2405MHz	Pass	PK	2.3622G	56.41	74.00	-17.59	3	Vertical	353	2.79	-
2405MHz	Pass	PK	2.4054G	101.23	Inf	-Inf	3	Vertical	353	2.79	-
2405MHz	Pass	AV	2.3614G	43.77	54.00	-10.23	3	Horizontal	17	2.80	-
2405MHz	Pass	AV	2.405G	84.02	Inf	-Inf	3	Horizontal	17	2.80	-
2405MHz	Pass	PK	2.3574G	56.77	74.00	-17.23	3	Horizontal	17	2.80	-
2405MHz	Pass	PK	2.4044G	87.73	Inf	-Inf	3	Horizontal	17	2.80	-
2405MHz	Pass	PK	4.8104G	45.18	74.00	-28.82	3	Vertical	259	1.50	-
2405MHz	Pass	AV	4.80896G	31.87	54.00	-22.13	3	Vertical	259	1.50	-
2405MHz	Pass	AV	4.8088G	31.24	54.00	-22.76	3	Horizontal	215	2.55	-
2405MHz	Pass	PK	4.81406G	48.73	74.00	-25.27	3	Horizontal	215	2.55	-
2440MHz	Pass	AV	2.3456G	43.86	54.00	-10.14	3	Vertical	357	1.50	-
2440MHz	Pass	AV	2.44G	97.04	Inf	-Inf	3	Vertical	357	1.50	-
2440MHz	Pass	AV	2.4964G	44.13	54.00	-9.87	3	Vertical	357	1.50	-
2440MHz	Pass	PK	2.3804G	56.61	74.00	-17.39	3	Vertical	357	1.50	-
2440MHz	Pass	PK	2.4404G	100.74	Inf	-Inf	3	Vertical	357	1.50	-
2440MHz	Pass	PK	2.4868G	56.16	74.00	-17.84	3	Vertical	357	1.50	-
2440MHz	Pass	AV	2.3412G	43.64	54.00	-10.36	3	Horizontal	16	2.73	-
2440MHz	Pass	AV	2.44G	82.95	Inf	-Inf	3	Horizontal	16	2.73	-
2440MHz	Pass	AV	2.4872G	43.97	54.00	-10.03	3	Horizontal	16	2.73	-
2440MHz	Pass	PK	2.34G	56.90	74.00	-17.10	3	Horizontal	16	2.73	-
2440MHz	Pass	PK	2.4404G	86.70	Inf	-Inf	3	Horizontal	16	2.73	-
2440MHz	Pass	PK	2.4964G	56.48	74.00	-17.52	3	Horizontal	16	2.73	-
2440MHz	Pass	AV	4.8808G	32.65	54.00	-21.35	3	Vertical	263	1.44	-
2440MHz	Pass	PK	4.87792G	44.89	74.00	-29.11	3	Vertical	263	1.44	-
2440MHz	Pass	AV	4.875G	31.65	54.00	-22.35	3	Horizontal	314	1.13	-
2440MHz	Pass	PK	4.87758G	44.63	74.00	-29.37	3	Horizontal	314	1.13	-
2480MHz	Pass	AV	2.48G	92.33	Inf	-Inf	3	Vertical	360	1.20	-
2480MHz	Pass	AV	2.4835G	53.87	54.00	-0.13	3	Vertical	360	1.20	-
2480MHz	Pass	PK	2.4804G	95.93	Inf	-Inf	3	Vertical	360	1.20	-
2480MHz	Pass	PK	2.4838G	65.56	74.00	-8.44	3	Vertical	360	1.20	-
2480MHz	Pass	AV	2.48G	76.59	Inf	-Inf	3	Horizontal	342	2.92	-
2480MHz	Pass	AV	2.4835G	44.65	54.00	-9.35	3	Horizontal	342	2.92	-
2480MHz	Pass	PK	2.4804G	80.41	Inf	-Inf	3	Horizontal	342	2.92	-
2480MHz	Pass	PK	2.4838G	56.49	74.00	-17.51	3	Horizontal	342	2.92	-
2480MHz	Pass	AV	4.95908G	33.34	54.00	-20.66	3	Vertical	248	1.82	-
2480MHz	Pass	PK	4.95912G	45.59	74.00	-28.41	3	Vertical	248	1.82	-
2480MHz	Pass	AV	4.95896G	32.82	54.00	-21.18	3	Horizontal	231	2.79	-
2480MHz	Pass	PK	4.96038G	45.81	74.00	-28.19	3	Horizontal	231	2.79	-

Thread

2405MHz_TX

14/02/2020

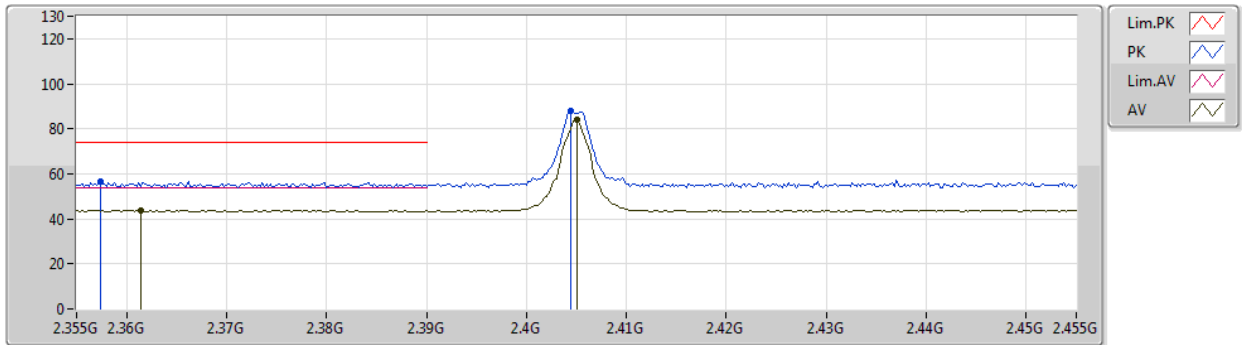


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3552G	43.75	54.00	-10.25	31.50	3	Vertical	353	2.79	-	12.25	27.78	3.72	-
AV	2.405G	97.65	Inf	-Inf	31.34	3	Vertical	353	2.79	-	66.31	27.60	3.74	-
PK	2.3622G	56.41	74.00	-17.59	31.47	3	Vertical	353	2.79	-	24.94	27.75	3.72	-
PK	2.4054G	101.23	Inf	-Inf	31.33	3	Vertical	353	2.79	-	69.90	27.59	3.74	-

Thread

2405MHz_TX

14/02/2020

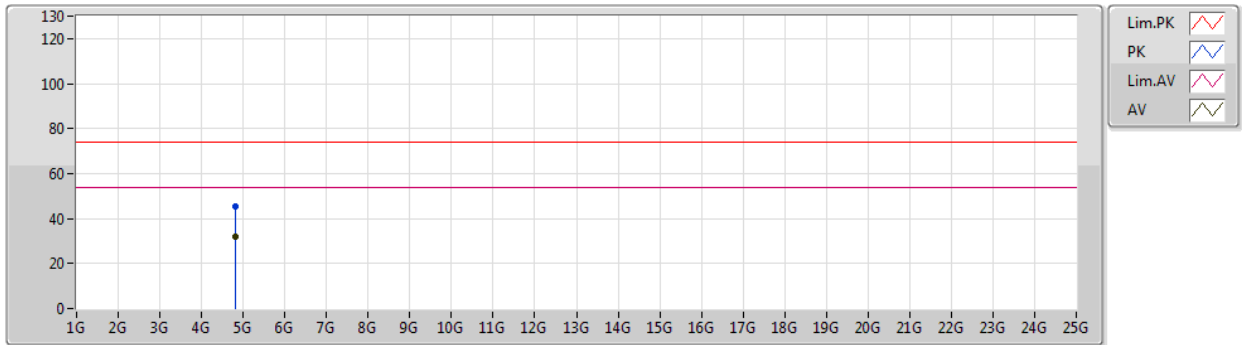


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3614G	43.77	54.00	-10.23	31.47	3	Horizontal	17	2.80	-	12.30	27.75	3.72	-
AV	2.405G	84.02	Inf	-Inf	31.34	3	Horizontal	17	2.80	-	52.68	27.60	3.74	-
PK	2.3574G	56.77	74.00	-17.23	31.49	3	Horizontal	17	2.80	-	25.28	27.77	3.72	-
PK	2.4044G	87.73	Inf	-Inf	31.34	3	Horizontal	17	2.80	-	56.39	27.60	3.74	-

Thread

2405MHz_TX

14/02/2020

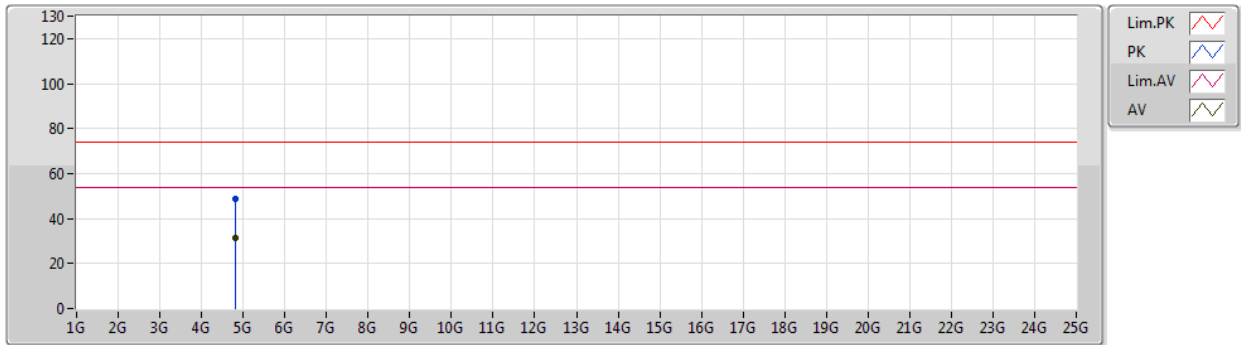


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	4.8104G	45.18	74.00	-28.82	2.59	3	Vertical	259	1.50	-	42.59	31.10	5.54	34.05
AV	4.80896G	31.87	54.00	-22.13	2.59	3	Vertical	259	1.50	-	29.28	31.10	5.54	34.05

Thread

2405MHz_TX

14/02/2020

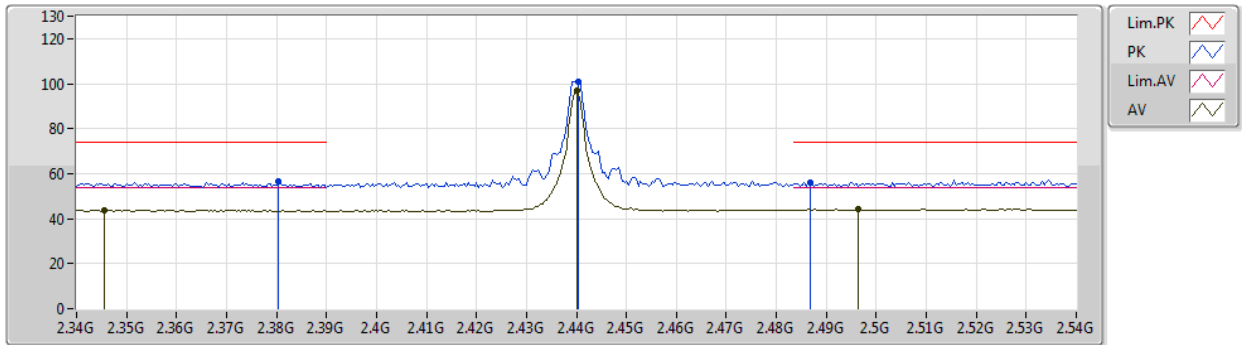


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8088G	31.24	54.00	-22.76	2.59	3	Horizontal	215	2.55	-	28.65	31.10	5.54	34.05
PK	4.81406G	48.73	74.00	-25.27	2.61	3	Horizontal	215	2.55	-	46.12	31.10	5.56	34.05

Thread

2440MHz_TX

14/02/2020

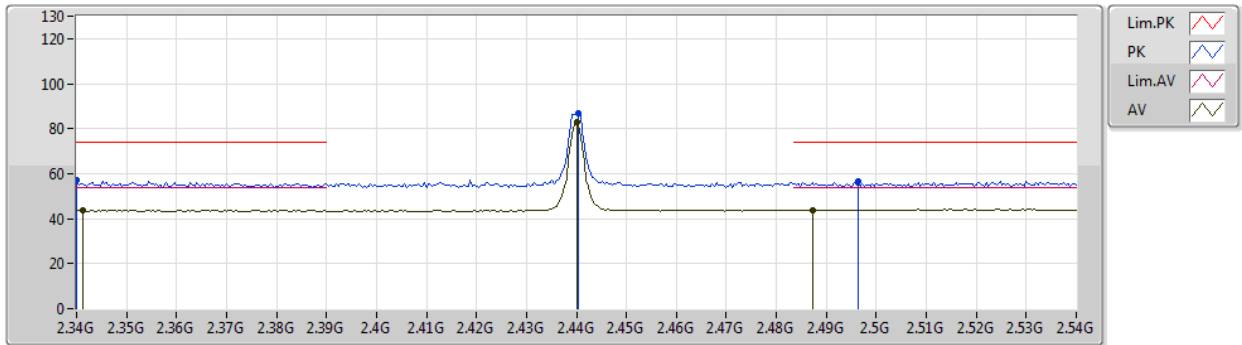


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3456G	43.86	54.00	-10.14	31.53	3	Vertical	357	1.50	-	12.33	27.82	3.71	-
AV	2.44G	97.04	Inf	-Inf	31.33	3	Vertical	357	1.50	-	65.71	27.56	3.77	-
AV	2.4964G	44.13	54.00	-9.87	31.31	3	Vertical	357	1.50	-	12.82	27.50	3.81	-
PK	2.3804G	56.61	74.00	-17.39	31.41	3	Vertical	357	1.50	-	25.20	27.68	3.73	-
PK	2.4404G	100.74	Inf	-Inf	31.33	3	Vertical	357	1.50	-	69.41	27.56	3.77	-
PK	2.4868G	56.16	74.00	-17.84	31.31	3	Vertical	357	1.50	-	24.85	27.51	3.80	-

Thread

2440MHz_TX

14/02/2020

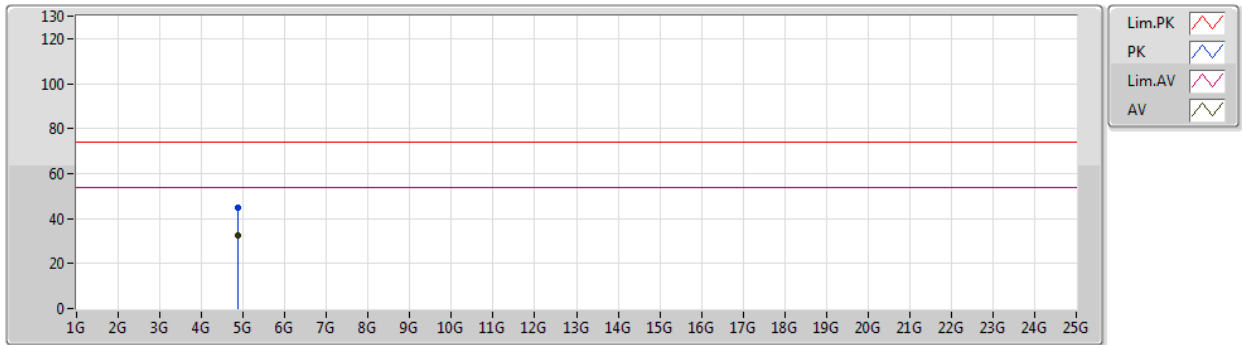


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3412G	43.64	54.00	-10.36	31.55	3	Horizontal	16	2.73	-	12.09	27.84	3.71	-
AV	2.44G	82.95	Inf	-Inf	31.33	3	Horizontal	16	2.73	-	51.62	27.56	3.77	-
AV	2.4872G	43.97	54.00	-10.03	31.31	3	Horizontal	16	2.73	-	12.66	27.51	3.80	-
PK	2.34G	56.90	74.00	-17.10	31.55	3	Horizontal	16	2.73	-	25.35	27.84	3.71	-
PK	2.4404G	86.70	Inf	-Inf	31.33	3	Horizontal	16	2.73	-	55.37	27.56	3.77	-
PK	2.4964G	56.48	74.00	-17.52	31.31	3	Horizontal	16	2.73	-	25.17	27.50	3.81	-

Thread

2440MHz_TX

14/02/2020

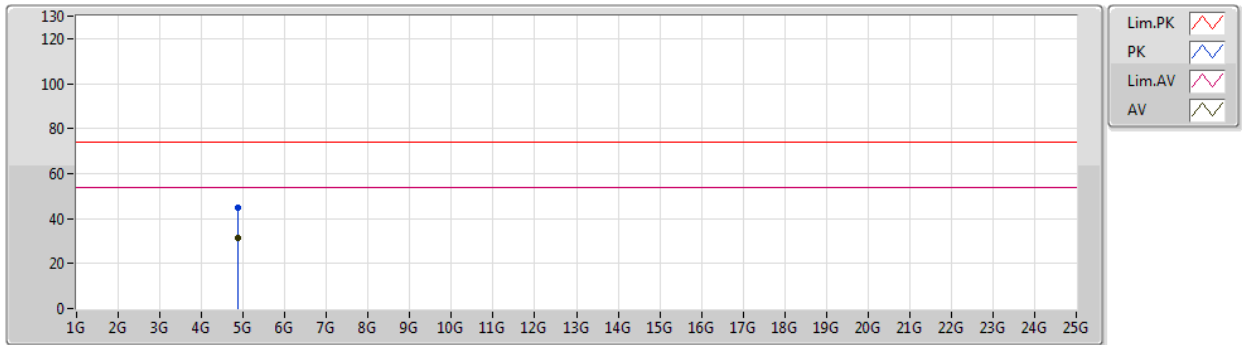


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8808G	32.65	54.00	-21.35	2.96	3	Vertical	263	1.44	-	29.69	31.10	5.91	34.05
PK	4.87792G	44.89	74.00	-29.11	2.95	3	Vertical	263	1.44	-	41.94	31.10	5.90	34.05

Thread

14/02/2020

2440MHz_TX

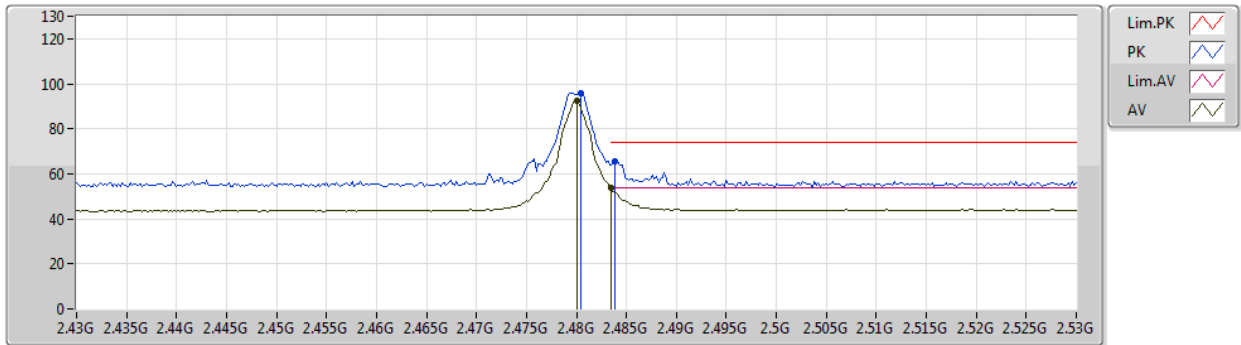


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.875G	31.65	54.00	-22.35	2.93	3	Horizontal	314	1.13	-	28.72	31.10	5.88	34.05
PK	4.87758G	44.63	74.00	-29.37	2.94	3	Horizontal	314	1.13	-	41.69	31.10	5.89	34.05

Thread

2480MHz_TX

14/02/2020

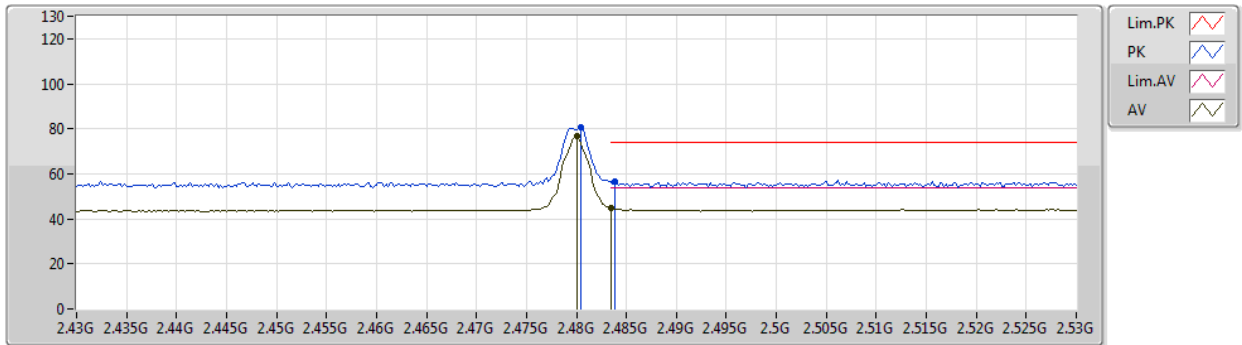


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	92.33	Inf	-Inf	31.32	3	Vertical	360	1.20	-	61.01	27.52	3.80	-
AV	2.4835G	53.87	54.00	-0.13	31.32	3	Vertical	360	1.20	-	22.55	27.52	3.80	-
PK	2.4804G	95.93	Inf	-Inf	31.32	3	Vertical	360	1.20	-	64.61	27.52	3.80	-
PK	2.4838G	65.56	74.00	-8.44	31.32	3	Vertical	360	1.20	-	34.24	27.52	3.80	-

Thread

2480MHz_TX

14/02/2020

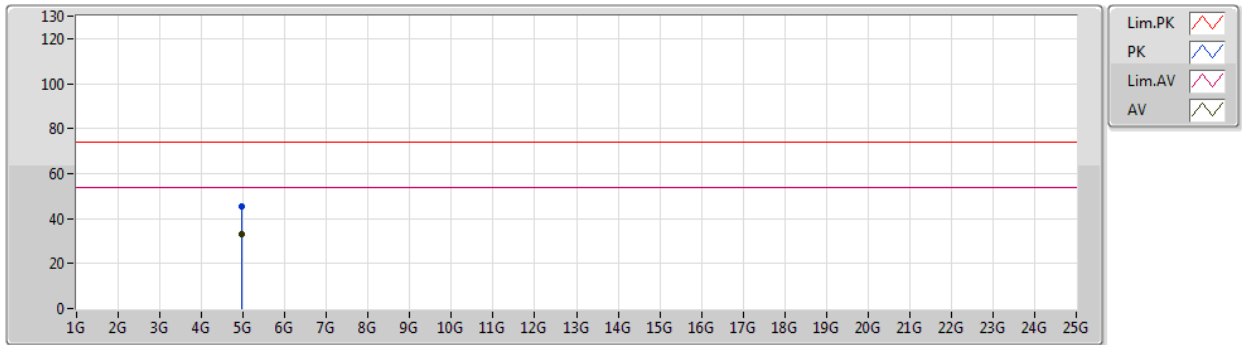


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	76.59	Inf	-Inf	31.32	3	Horizontal	342	2.92	-	45.27	27.52	3.80	-
AV	2.4835G	44.65	54.00	-9.35	31.32	3	Horizontal	342	2.92	-	13.33	27.52	3.80	-
PK	2.4804G	80.41	Inf	-Inf	31.32	3	Horizontal	342	2.92	-	49.09	27.52	3.80	-
PK	2.4838G	56.49	74.00	-17.51	31.32	3	Horizontal	342	2.92	-	25.17	27.52	3.80	-

Thread

2480MHz_TX

14/02/2020

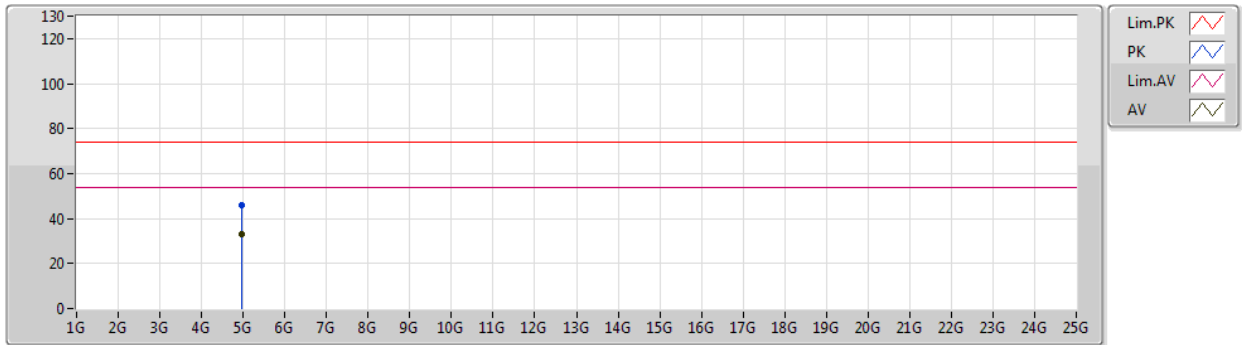


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95908G	33.34	54.00	-20.66	3.62	3	Vertical	248	1.82	-	29.72	31.34	6.32	34.04
PK	4.95912G	45.59	74.00	-28.41	3.62	3	Vertical	248	1.82	-	41.97	31.34	6.32	34.04

Thread

2480MHz_TX

14/02/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95896G	32.82	54.00	-21.18	3.62	3	Horizontal	231	2.79	-	29.20	31.34	6.32	34.04
PK	4.96038G	45.81	74.00	-28.19	3.62	3	Horizontal	231	2.79	-	42.19	31.34	6.32	34.04