

FCC Test Report

FCC ID : NM82Q9R100
Equipment : Headset
Brand Name : VIVE
Model Name : 2Q9R100
Applicant : HTC Corporation
No.88, Sec. 3, Zhongxing Rd., Xindian Dist., New Taipei
City 231, Taiwan (R.O.C.)
Manufacturer : HTC Corporation
No.23, Xinghua Rd., Taoyuan District, Taoyuan City,
Taiwan 330
Standard : 47 CFR FCC Part 15.247

The product was received on Aug. 05, 2020, and testing was started from Aug. 12, 2020 and completed on Aug. 22, 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 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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PHOTOGRAPHS OF EUT V01

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: Yunha Liou

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Mode	Ch. Frequency (MHz)	Channel Number
2400-2483.5	LE	2402-2480	0-39 [40]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-LE(1Mbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(2Mbps)	2.0	1TX

Note:

- ♦ Bluetooth LE uses a GFSK (1Mbps/2Mbps) modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	-	-	Dipole	HRS
2	-	-	Dipole	HRS

Ant.	Port	Gain (dBi)					BT
		2.4G	5G				
			U-NII-1	U-NII-2A	U-NII-2C	U-NII-3	
1	1	1	1.5	1.5	2.0	2.0	1

Note 1: The EUT has two antennas.

For 2.4GHz function:

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

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

For BT function:

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

Ant. 1 (port 1) could transmit/receive.

For 5GHz function:

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

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

1.1.3 EUT Information

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

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-LE(1Mbps)	0.854	0.69	2.136m	1k
BT-LE(2Mbps)	0.541	2.67	1.08m	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

The following reference test guidance is not within the scope of accreditation of TAF:

- ♦ KDB 558074 D01 v05r02
- ♦ KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location		
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.		
<input type="checkbox"/>	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.) TEL : 886-3-656-9065 FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.		
<input type="checkbox"/>	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	22.5~24.3°C / 54~58%	22/Aug/2020
RF Conducted	TH06-HY	Vivi	20.1~26.5°C / 50~60%	12/Aug/2020~ 19/Aug/2020
Radiated	03CH03-HY	Edward	20.1~24.9°C / 56~66%	14/Aug/2020~ 17/Aug/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	QRCT_4.0.00147.0
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Mode	Power Setting
BT-LE(1Mbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default
BT-LE(2Mbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	1. USB mode; CTX
	2. Adapter Charging mode; Normal

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	1. USB mode; CTX		
	2. Adapter Charging mode; Normal		
Operating Mode > 1GHz	1. USB mode; CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	

2.4 Accessories

Accessories				
AC Adapter	Brand Name	hTC	Model Name	TC P5000-US
	Power Rating	I/P:100 - 240 Vac, 500mA, O/P: 5Vdc, 2500mA		
Battery	Brand Name	hTC	Model Name	B2PXH100
	Power Rating	3.85Vdc, 4000mAh	Type	Li-ion
USB Cable 1	Brand Name	LUXSHARE-ICT	Model Name	DC M700
	Signal Line	1.15 meter, non-shielded cable, w/o ferrite core		
USB Cable 2	Brand Name	Panpei	Model Name	DC M700
	Signal Line	1.15 meter, non-shielded cable, w/o ferrite core		
Controller	Brand Name	VIVE	Model Name	2Q6M200

Reminder: Regarding to more detail and other information, please refer to user manual.

2.5 Support Equipment

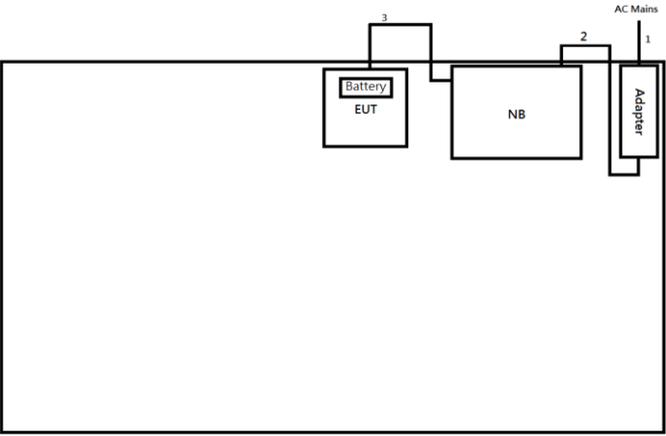
Support Equipment – AC Conduction / Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	HP	5220m	-	-
2	Adapter for NB	HP	PPP012H-S	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	Fixture	-	-	-	Note 1

Note: No.3 was provided by customer.

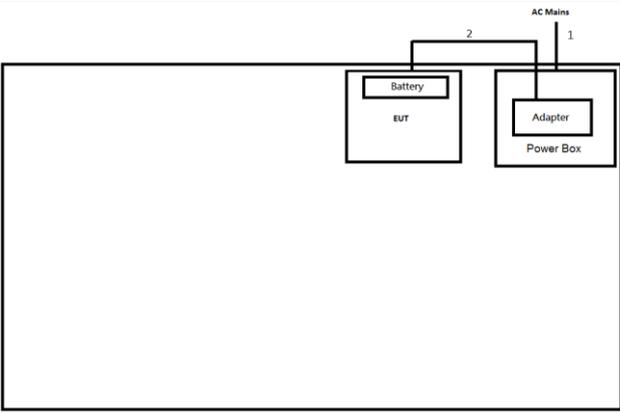
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test - USB Mode; CTX



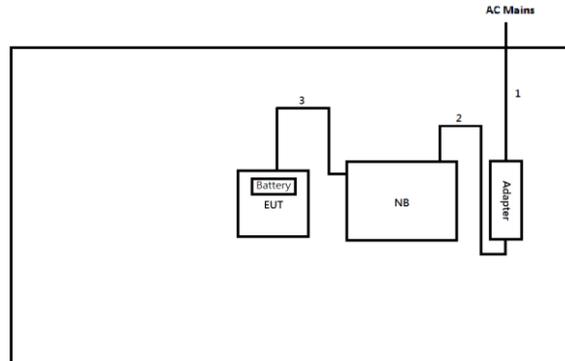
Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.5	-
3	USB cable	No	1.0	-

Test Setup Diagram – AC Line Conducted Emission Test - Adapter Charging Mode; Normal



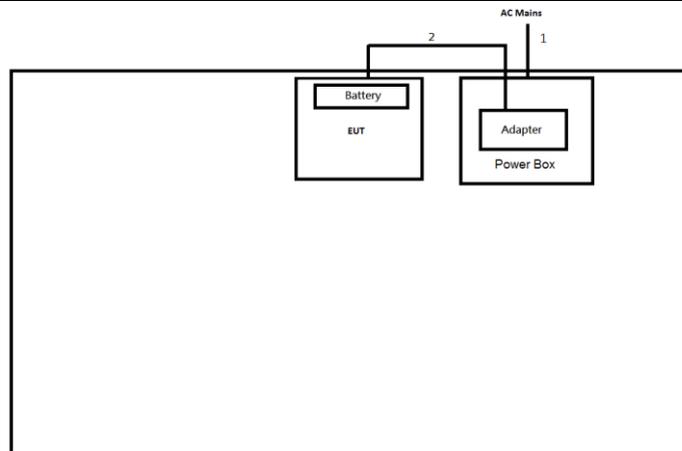
Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	USB Cable	No	1.0	-

Test Setup Diagram - Radiated Test - USB mode; CTX



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.5	-
3	USB cable	No	1.0	-

Test Setup Diagram - Radiated Test - Adapter Charging mode; Normal



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	USB Cable	No	1.0	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

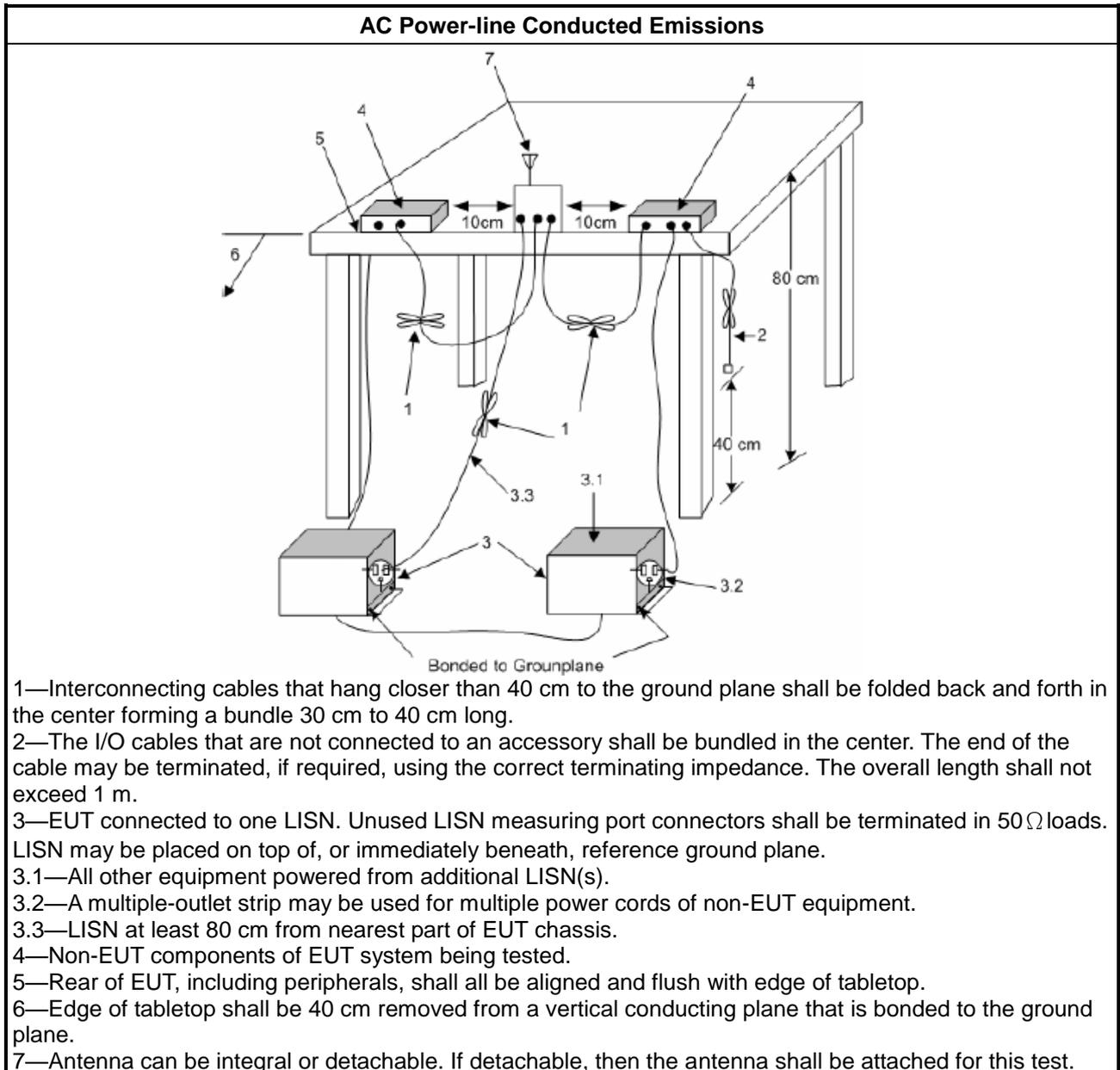
Test Method
<ul style="list-style-type: none"> Refer as ANSI C63.10-2013, clause 6.2 foray power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup



3.1.6 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:
<ul style="list-style-type: none"> ▪ 6 dB bandwidth \geq 500 kHz.

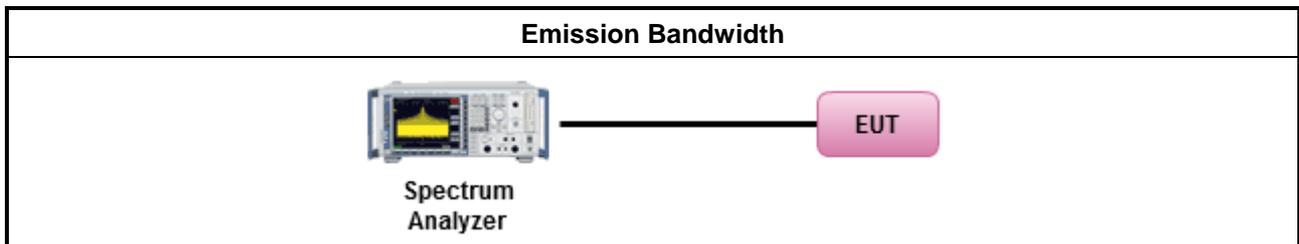
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/> Refer as KDB 558074, clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
<input type="checkbox"/> Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
<input type="checkbox"/> 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	
	<ul style="list-style-type: none"> ▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS):
	<ul style="list-style-type: none"> - Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:	
	<ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS)
	<ul style="list-style-type: none"> - Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

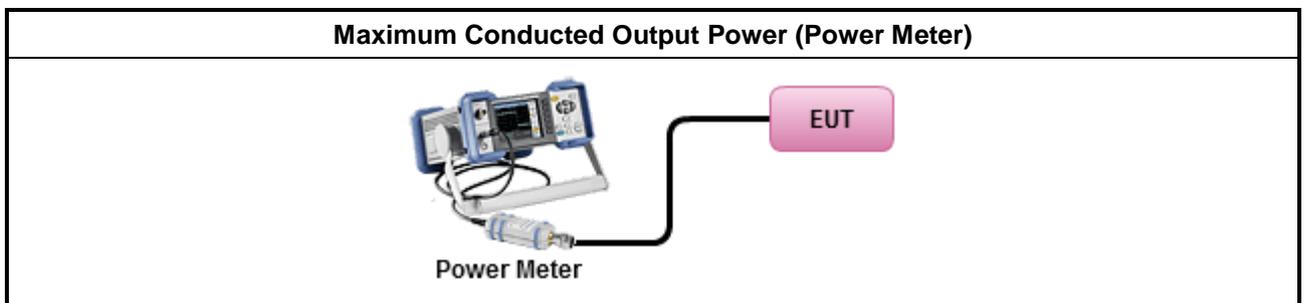
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
<ul style="list-style-type: none"> ▪ Maximum Average Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. 	
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
<ul style="list-style-type: none"> ▪ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

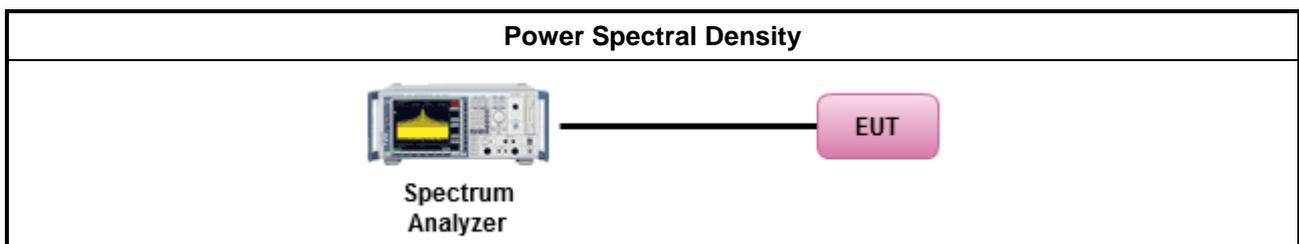
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> ▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
	<ul style="list-style-type: none"> ▪ For conducted measurement.
	<ul style="list-style-type: none"> ▪ If The EUT supports multiple transmit chains using options given below:
	<ul style="list-style-type: none"> ▪ 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.

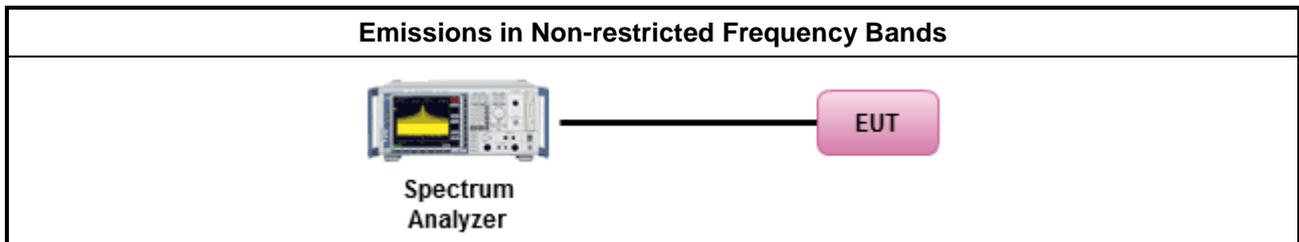
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> 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

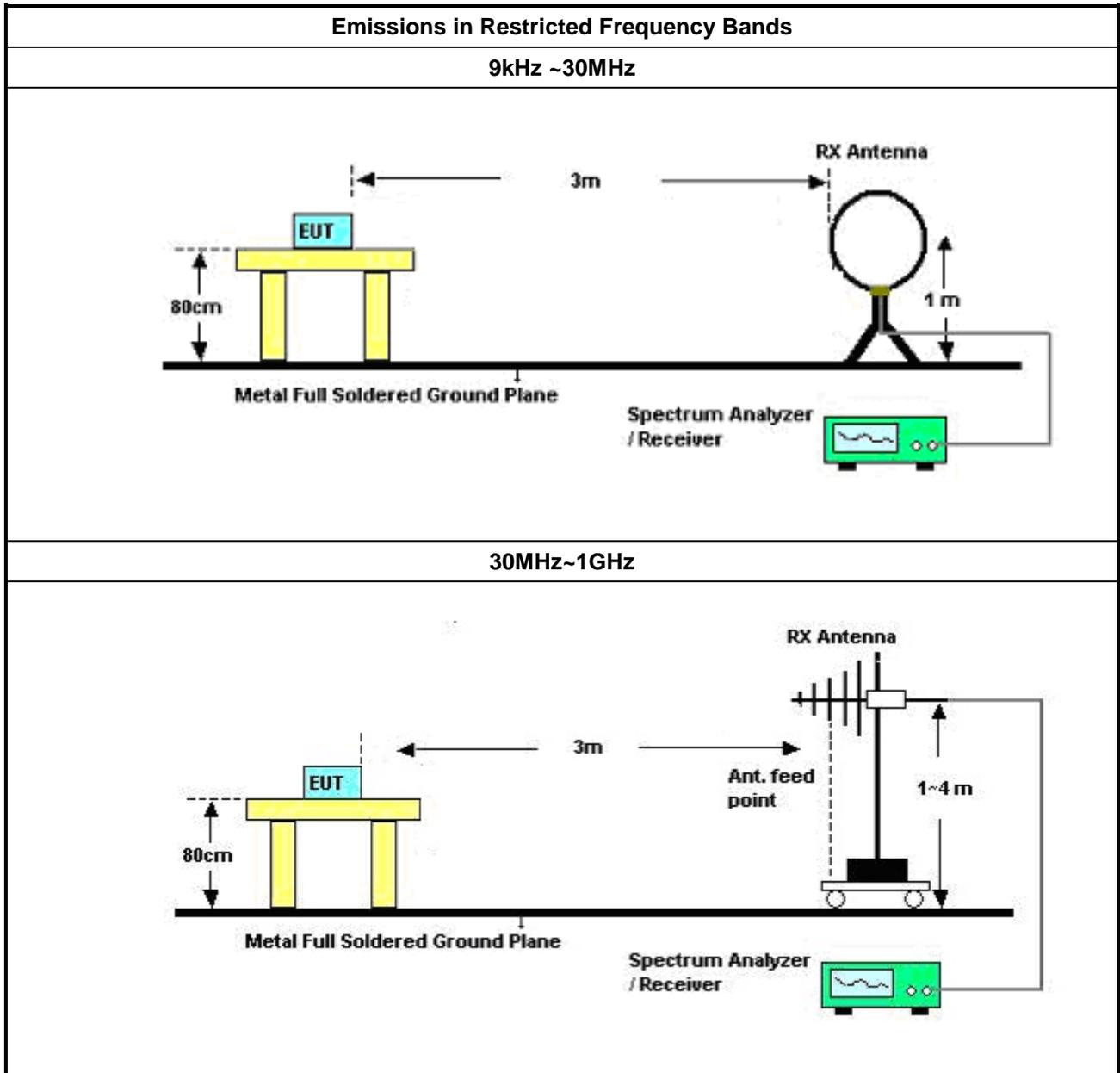
Test Method	
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor].
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: <ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
	<ul style="list-style-type: none"> ▪ For the transmitter band-edge emissions shall be measured using following options below: <ul style="list-style-type: none"> ▪ Refer as KDB 558074 clause 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.
	<ul style="list-style-type: none"> ▪ Use the following spectrum analyzer settings: <ul style="list-style-type: none"> ▪ 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.
	<ul style="list-style-type: none"> ▪ KDB 414788 Open-Field Test Sites and Chamber Correlation Justification. <ul style="list-style-type: none"> ▪ 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.

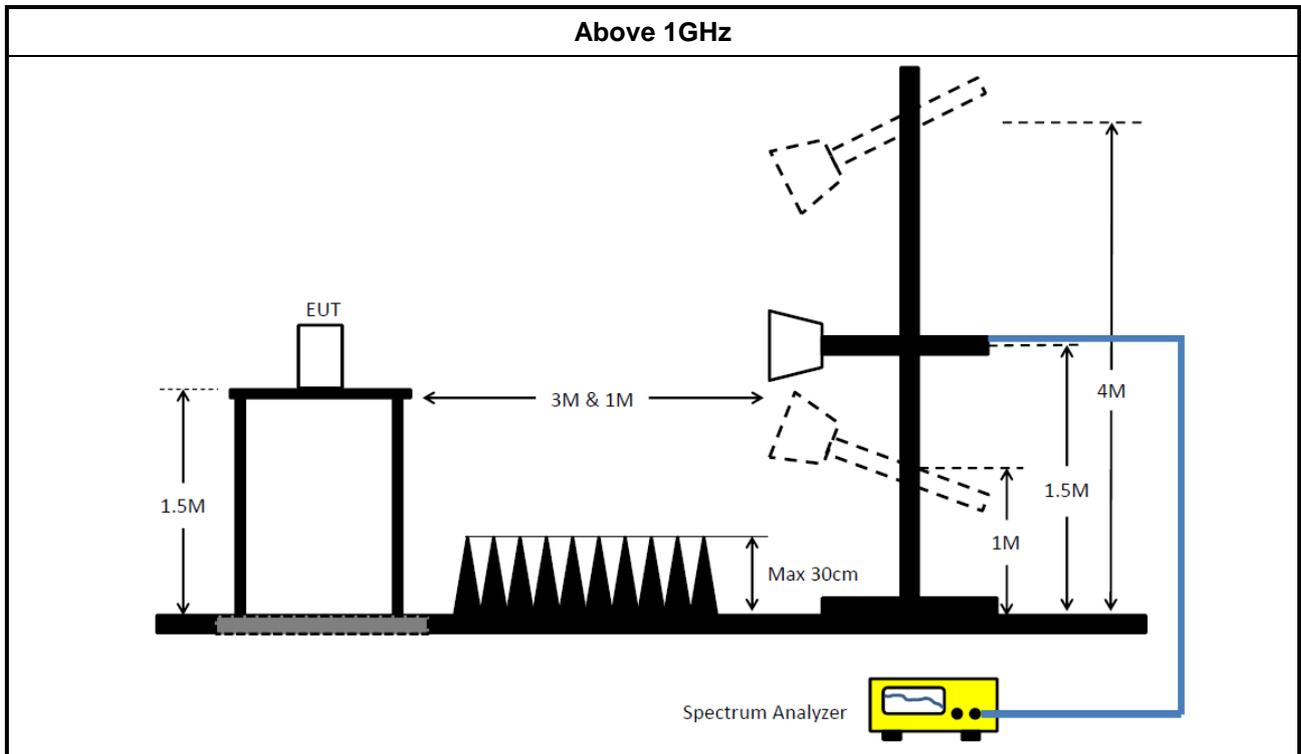
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.6.5 Test Setup





3.6.6 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.

3.6.7 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 Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	29/May/2020	28/May/2021
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	05/Nov/2019	04/Nov/2020
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	23/Sep/2019	22/Sep/2020
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	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
Signal Analyzer	R&S	FSV 40	101013	10Hz ~ 40GHz	19/Mar/2020	18/Mar/2021
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz ~ 40GHz	12/Nov/2018	11/Nov/2020
Pulse Sensor	Anritsu	MA2411B	917017	300MHz ~ 40GHz	17/Feb/2020	16/Feb/2021
Power Meter	Anritsu	ML2495A	949003	300MHz ~ 40GHz	17/Feb/2020	16/Feb/2021

**Instrument for Radiated Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	06/Aug/2020	05/Aug/2021
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	04/Aug/2020	03/Aug/2021
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	14/Apr/2020	13/Apr/2021
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz ~ 26.5GHz	09/Sep/2019	08/Sep/2020
Bilog Antenna & 6dB Attenuator	SCHAFFNER / EMCI	CBL6112B / N-6-05	22237 / AT-N-0603	30MHz ~ 1GHz	19/Apr/2020	18/Apr/2021
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz ~ 18GHz	26/Mar/2020	25/Mar/2021
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz ~ 1GHz	18/Mar/2020	17/Mar/2021
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	SN 805801/4+SN 804300/4	1GHz ~ 40GHz	18/Mar/2020	17/Mar/2021
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz ~ 40GHz	13/Mar/2020	12/Mar/2021
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	16/Mar/2020	15/Mar/2021
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	29/May/2020	28/May/2021
Signal Analyzer	R&S	FSV 40	101515	10Hz ~ 40GHz	15/Feb/2020	14/Feb/2021



Summary

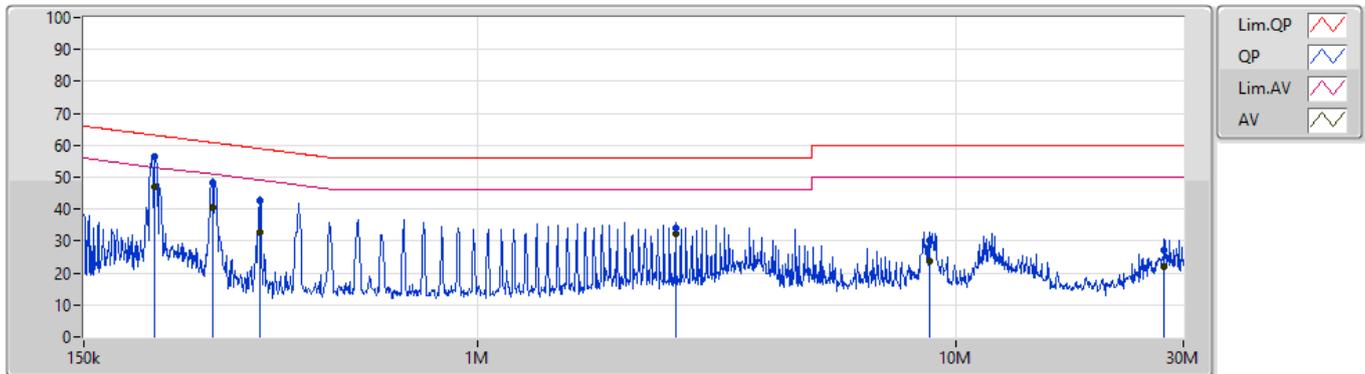
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	210.599k	47.02	53.19	-6.17	Line

Mode Configure

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	210.599k	56.59	63.19	-6.60	Line	-
Mode 1	Pass	AV	210.599k	47.02	53.19	-6.17	Line	"Worst"
Mode 1	Pass	QP	278.495k	48.44	60.86	-12.42	Line	-
Mode 1	Pass	AV	278.495k	40.47	50.86	-10.39	Line	-
Mode 1	Pass	QP	349.654k	42.56	58.96	-16.40	Line	-
Mode 1	Pass	AV	349.654k	32.96	48.96	-16.00	Line	-
Mode 1	Pass	QP	2.594M	33.93	56.00	-22.07	Line	-
Mode 1	Pass	AV	2.594M	32.32	46.00	-13.68	Line	-
Mode 1	Pass	QP	8.835M	30.13	60.00	-29.87	Line	-
Mode 1	Pass	AV	8.835M	23.55	50.00	-26.45	Line	-
Mode 1	Pass	QP	27.343M	26.98	60.00	-33.02	Line	-
Mode 1	Pass	AV	27.343M	21.94	50.00	-28.06	Line	-
Mode 1	Pass	QP	212.287k	55.73	63.11	-7.38	Neutral	-
Mode 1	Pass	AV	212.287k	46.13	53.11	-6.98	Neutral	"Worst"
Mode 1	Pass	QP	282.977k	48.53	60.72	-12.19	Neutral	-
Mode 1	Pass	AV	282.977k	39.90	50.72	-10.82	Neutral	-
Mode 1	Pass	QP	351.053k	42.13	58.94	-16.81	Neutral	-
Mode 1	Pass	AV	351.053k	33.22	48.94	-15.72	Neutral	-
Mode 1	Pass	QP	2.176M	31.71	56.00	-24.29	Neutral	-
Mode 1	Pass	AV	2.176M	29.15	46.00	-16.85	Neutral	-
Mode 1	Pass	QP	11.453M	31.24	60.00	-28.76	Neutral	-
Mode 1	Pass	AV	11.453M	26.00	50.00	-24.00	Neutral	-
Mode 1	Pass	QP	27.453M	28.05	60.00	-31.95	Neutral	-
Mode 1	Pass	AV	27.453M	23.26	50.00	-26.74	Neutral	-

Conducted Emissions at Powerline_Mode 1

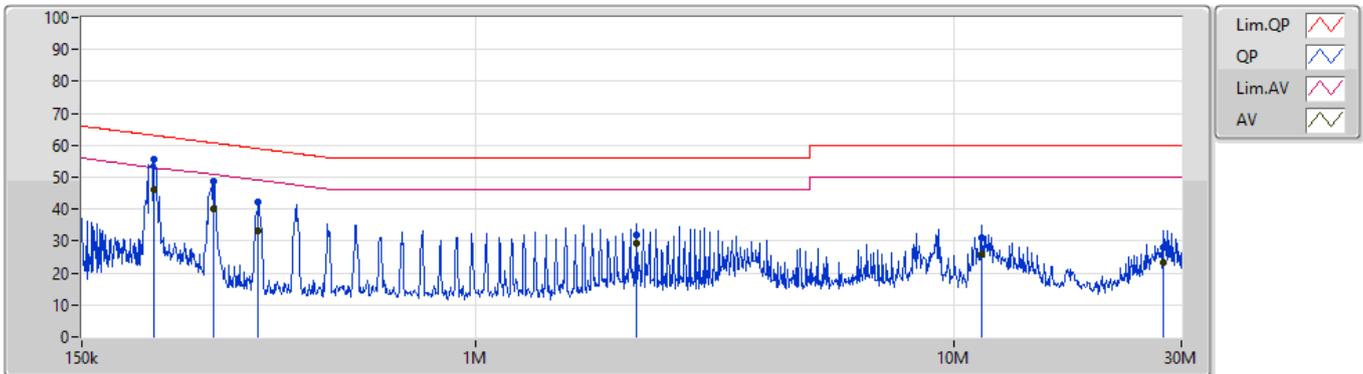
22/08/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	210.599k	56.59	63.19	-6.60	19.63	Line	-	36.96	9.65	0.11	9.87
AV	210.599k	47.02	53.19	-6.17	19.63	Line	"Worst"	27.39	9.65	0.11	9.87
QP	278.495k	48.44	60.86	-12.42	19.64	Line	-	28.80	9.65	0.12	9.87
AV	278.495k	40.47	50.86	-10.39	19.64	Line	-	20.83	9.65	0.12	9.87
QP	349.654k	42.56	58.96	-16.40	19.64	Line	-	22.92	9.64	0.13	9.87
AV	349.654k	32.96	48.96	-16.00	19.64	Line	-	13.32	9.64	0.13	9.87
QP	2.594M	33.93	56.00	-22.07	19.68	Line	-	14.25	9.65	0.16	9.87
AV	2.594M	32.32	46.00	-13.68	19.68	Line	-	12.64	9.65	0.16	9.87
QP	8.835M	30.13	60.00	-29.87	19.83	Line	-	10.30	9.69	0.26	9.88
AV	8.835M	23.55	50.00	-26.45	19.83	Line	-	3.72	9.69	0.26	9.88
QP	27.343M	26.98	60.00	-33.02	19.84	Line	-	7.14	9.53	0.43	9.88
AV	27.343M	21.94	50.00	-28.06	19.84	Line	-	2.10	9.53	0.43	9.88

Conducted Emissions at Powerline_Mode 1

22/08/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	212.287k	55.73	63.11	-7.38	19.62	Neutral	-	36.11	9.64	0.11	9.87			
AV	212.287k	46.13	53.11	-6.98	19.62	Neutral	"Worst"	26.51	9.64	0.11	9.87			
QP	282.977k	48.53	60.72	-12.19	19.62	Neutral	-	28.91	9.63	0.12	9.87			
AV	282.977k	39.90	50.72	-10.82	19.62	Neutral	-	20.28	9.63	0.12	9.87			
QP	351.053k	42.13	58.94	-16.81	19.63	Neutral	-	22.50	9.63	0.13	9.87			
AV	351.053k	33.22	48.94	-15.72	19.63	Neutral	-	13.59	9.63	0.13	9.87			
QP	2.176M	31.71	56.00	-24.29	19.66	Neutral	-	12.05	9.65	0.14	9.87			
AV	2.176M	29.15	46.00	-16.85	19.66	Neutral	-	9.49	9.65	0.14	9.87			
QP	11.453M	31.24	60.00	-28.76	19.86	Neutral	-	11.38	9.70	0.28	9.88			
AV	11.453M	26.00	50.00	-24.00	19.86	Neutral	-	6.14	9.70	0.28	9.88			
QP	27.453M	28.05	60.00	-31.95	19.98	Neutral	-	8.07	9.67	0.43	9.88			
AV	27.453M	23.26	50.00	-26.74	19.98	Neutral	-	3.28	9.67	0.43	9.88			



Summary

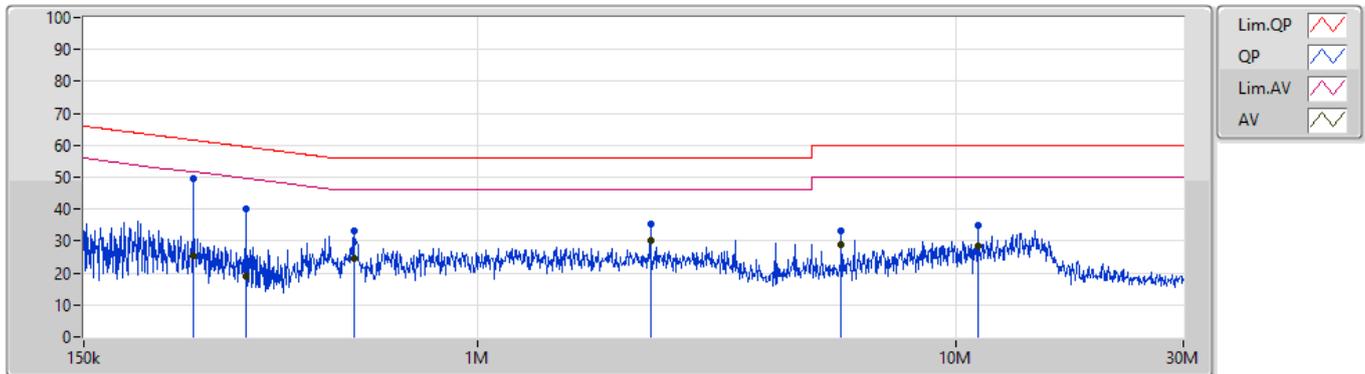
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	AV	2.301M	34.18	46.00	-11.82	Neutral

Mode Configure

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 2	Pass	QP	254.063k	49.49	61.62	-12.13	Line	"Worst"
Mode 2	Pass	AV	254.063k	25.48	51.62	-26.14	Line	-
Mode 2	Pass	QP	326.712k	40.16	59.54	-19.38	Line	-
Mode 2	Pass	AV	326.712k	18.88	49.54	-30.66	Line	-
Mode 2	Pass	QP	553.37k	33.26	56.00	-22.74	Line	-
Mode 2	Pass	AV	553.37k	24.54	46.00	-21.46	Line	-
Mode 2	Pass	QP	2.301M	35.44	56.00	-20.56	Line	-
Mode 2	Pass	AV	2.301M	30.33	46.00	-15.67	Line	-
Mode 2	Pass	QP	5.764M	33.36	60.00	-26.64	Line	-
Mode 2	Pass	AV	5.764M	28.89	50.00	-21.11	Line	-
Mode 2	Pass	QP	11.137M	34.95	60.00	-25.05	Line	-
Mode 2	Pass	AV	11.137M	28.28	50.00	-21.72	Line	-
Mode 2	Pass	QP	158.622k	33.44	65.54	-32.10	Neutral	-
Mode 2	Pass	AV	158.622k	21.35	55.54	-34.19	Neutral	-
Mode 2	Pass	QP	548.969k	36.65	56.00	-19.35	Neutral	-
Mode 2	Pass	AV	548.969k	23.90	46.00	-22.10	Neutral	-
Mode 2	Pass	QP	1.154M	35.38	56.00	-20.62	Neutral	-
Mode 2	Pass	AV	1.154M	26.74	46.00	-19.26	Neutral	-
Mode 2	Pass	QP	2.301M	40.64	56.00	-15.36	Neutral	-
Mode 2	Pass	AV	2.301M	34.18	46.00	-11.82	Neutral	"Worst"
Mode 2	Pass	QP	6.144M	38.12	60.00	-21.88	Neutral	-
Mode 2	Pass	AV	6.144M	30.49	50.00	-19.51	Neutral	-
Mode 2	Pass	QP	13.983M	35.84	60.00	-24.16	Neutral	-
Mode 2	Pass	AV	13.983M	27.78	50.00	-22.22	Neutral	-

Conducted Emissions at Powerline

22/08/2020

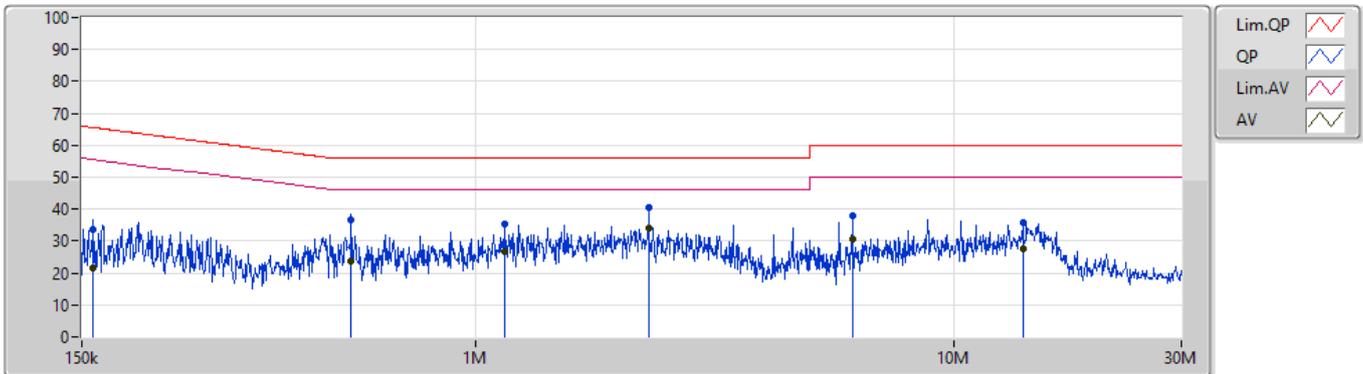


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	254.063k	49.49	61.62	-12.13	19.64	Line	"Worst"	29.85	9.65	0.12	9.87
AV	254.063k	25.48	51.62	-26.14	19.64	Line	-	5.84	9.65	0.12	9.87
QP	326.712k	40.16	59.54	-19.38	19.63	Line	-	20.53	9.64	0.12	9.87
AV	326.712k	18.88	49.54	-30.66	19.63	Line	-	-0.75	9.64	0.12	9.87
QP	553.37k	33.26	56.00	-22.74	19.63	Line	-	13.63	9.64	0.12	9.87
AV	553.37k	24.54	46.00	-21.46	19.63	Line	-	4.91	9.64	0.12	9.87
QP	2.301M	35.44	56.00	-20.56	19.67	Line	-	15.77	9.65	0.15	9.87
AV	2.301M	30.33	46.00	-15.67	19.67	Line	-	10.66	9.65	0.15	9.87
QP	5.764M	33.36	60.00	-26.64	19.77	Line	-	13.59	9.67	0.22	9.88
AV	5.764M	28.89	50.00	-21.11	19.77	Line	-	9.12	9.67	0.22	9.88
QP	11.137M	34.95	60.00	-25.05	19.84	Line	-	15.11	9.68	0.28	9.88
AV	11.137M	28.28	50.00	-21.72	19.84	Line	-	8.44	9.68	0.28	9.88



Conducted Emissions at Powerline

22/08/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	158.622k	33.44	65.54	-32.10	19.63	Neutral	-	13.81	9.65	0.11	9.87
AV	158.622k	21.35	55.54	-34.19	19.63	Neutral	-	1.72	9.65	0.11	9.87
QP	548.969k	36.65	56.00	-19.35	19.62	Neutral	-	17.03	9.63	0.12	9.87
AV	548.969k	23.90	46.00	-22.10	19.62	Neutral	-	4.28	9.63	0.12	9.87
QP	1.154M	35.38	56.00	-20.62	19.63	Neutral	-	15.75	9.63	0.12	9.88
AV	1.154M	26.74	46.00	-19.26	19.63	Neutral	-	7.11	9.63	0.12	9.88
QP	2.301M	40.64	56.00	-15.36	19.67	Neutral	-	20.97	9.65	0.15	9.87
AV	2.301M	34.18	46.00	-11.82	19.67	Neutral	"Worst"	14.51	9.65	0.15	9.87
QP	6.144M	38.12	60.00	-21.88	19.78	Neutral	-	18.34	9.68	0.22	9.88
AV	6.144M	30.49	50.00	-19.51	19.78	Neutral	-	10.71	9.68	0.22	9.88
QP	13.983M	35.84	60.00	-24.16	19.89	Neutral	-	15.95	9.71	0.30	9.88
AV	13.983M	27.78	50.00	-22.22	19.89	Neutral	-	7.89	9.71	0.30	9.88



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(1Mbps)	665k	1.02M	1M02F1D	660k	1.018M
BT-LE(2Mbps)	1.155M	1.995M	2M00F1D	1.135M	1.993M

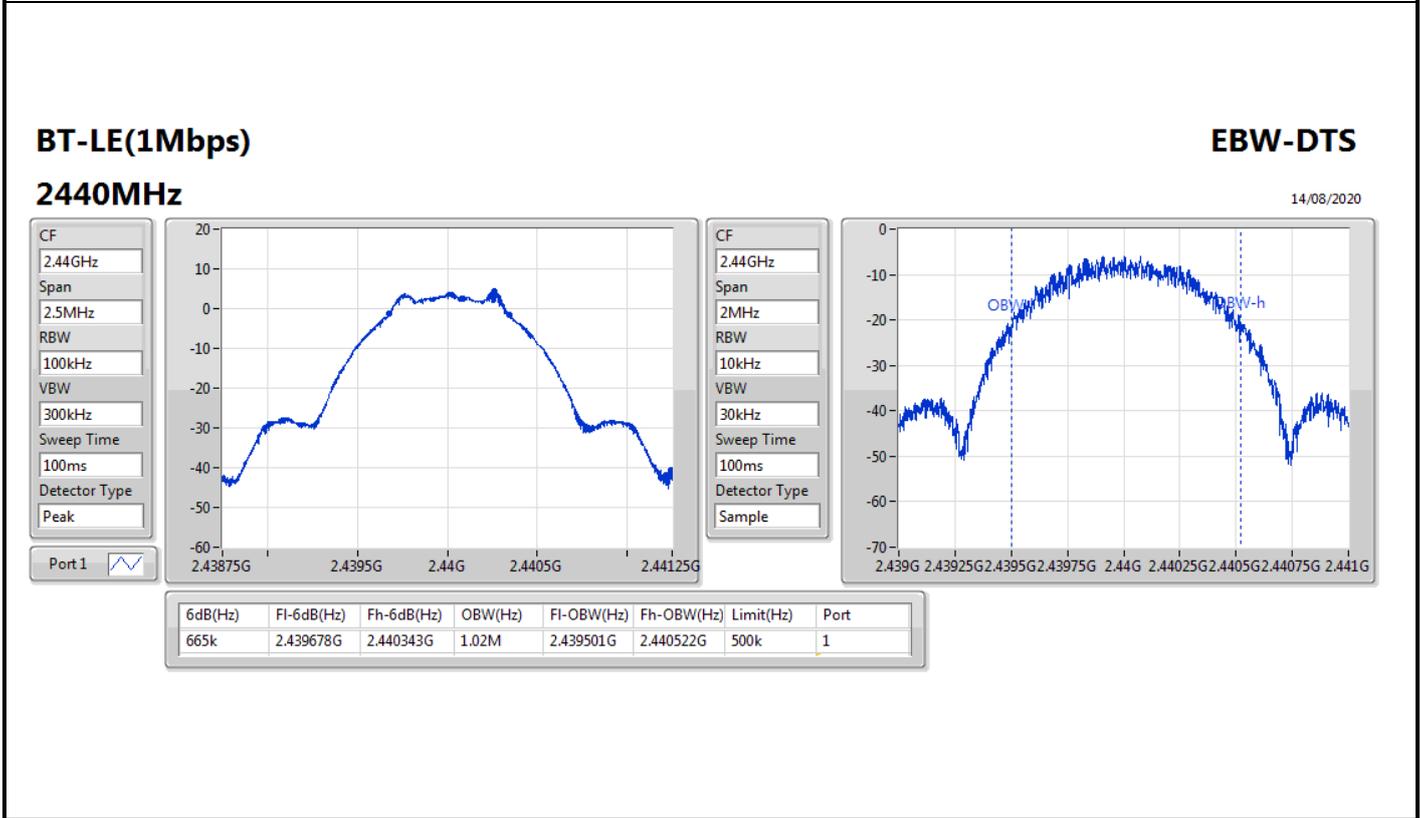
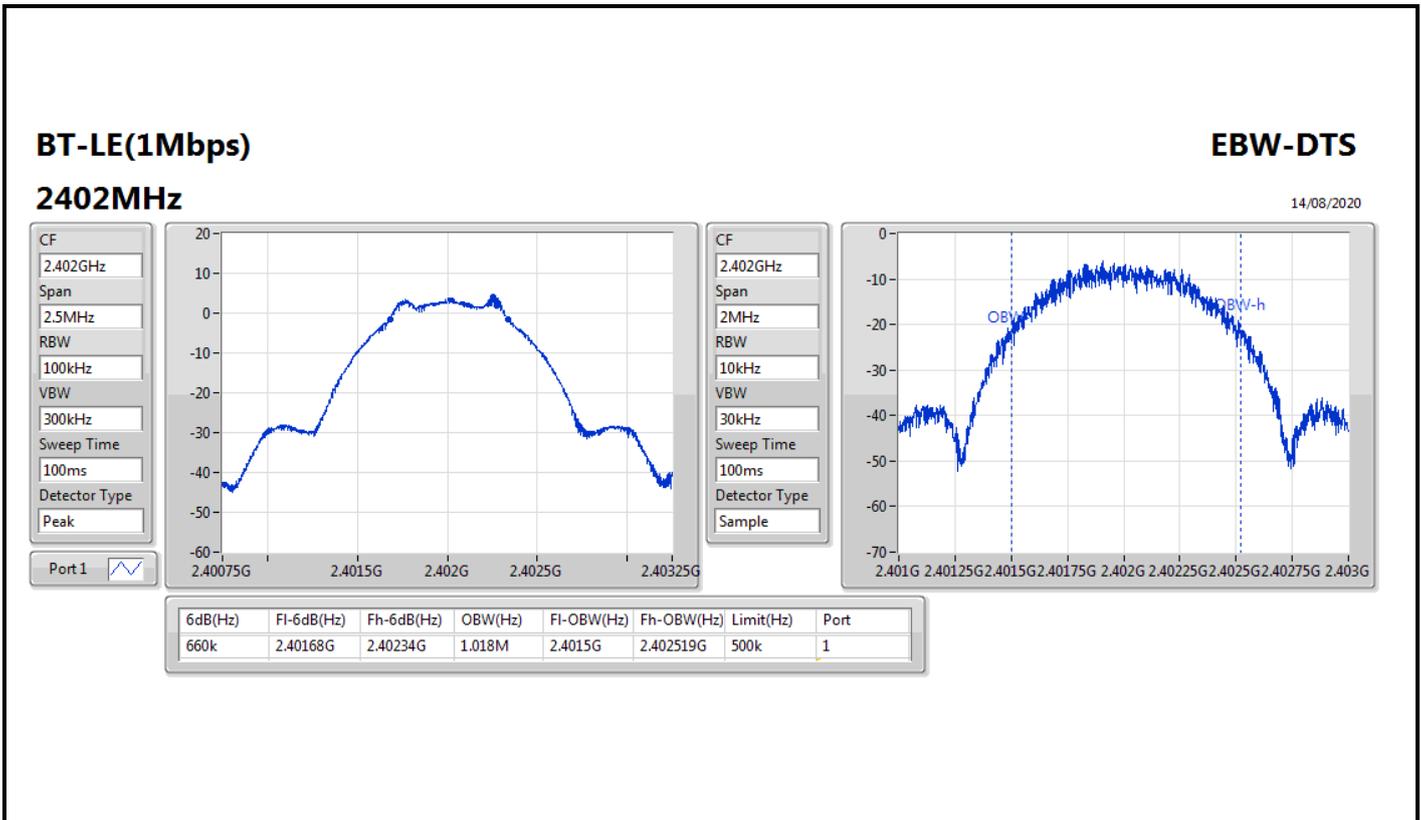
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

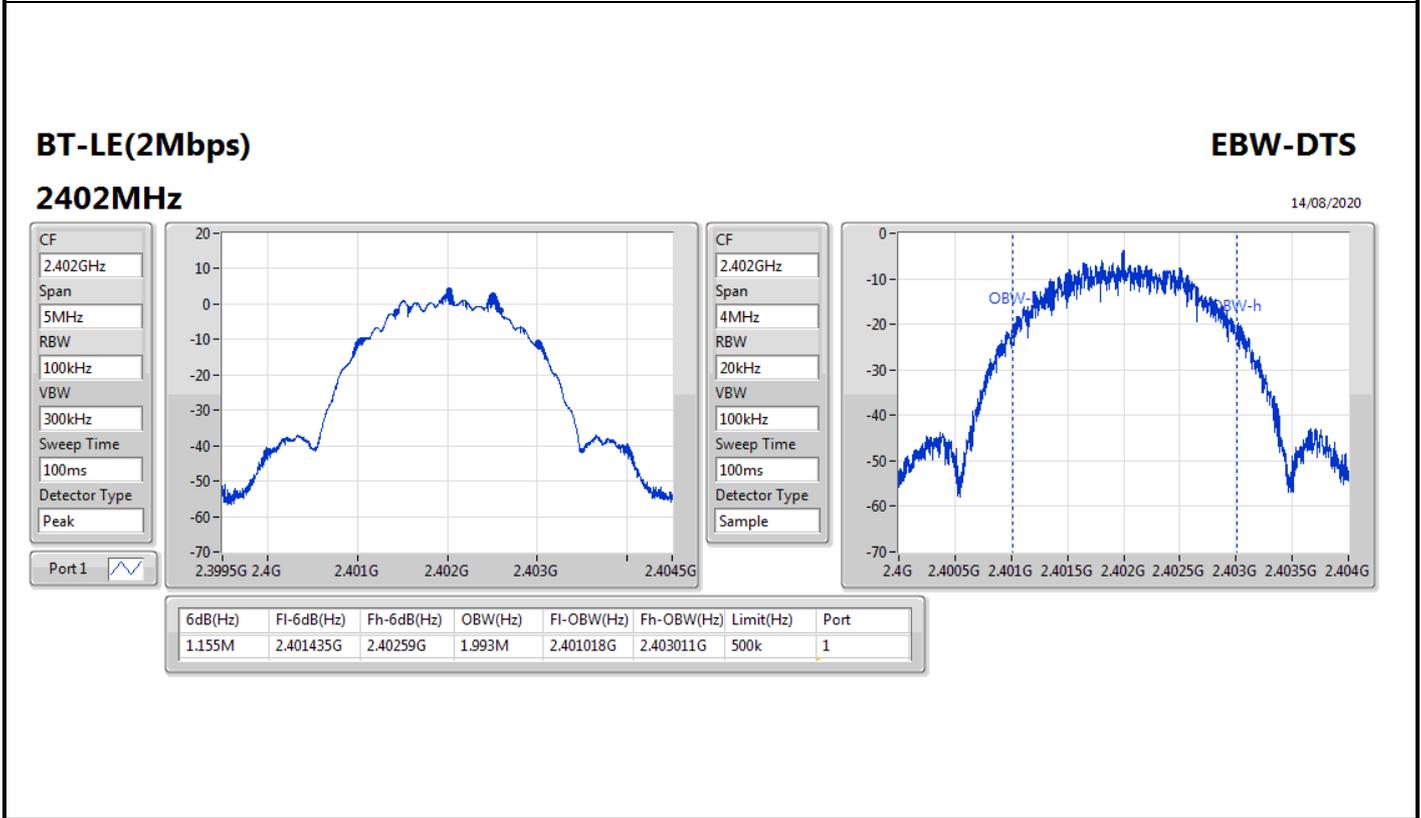
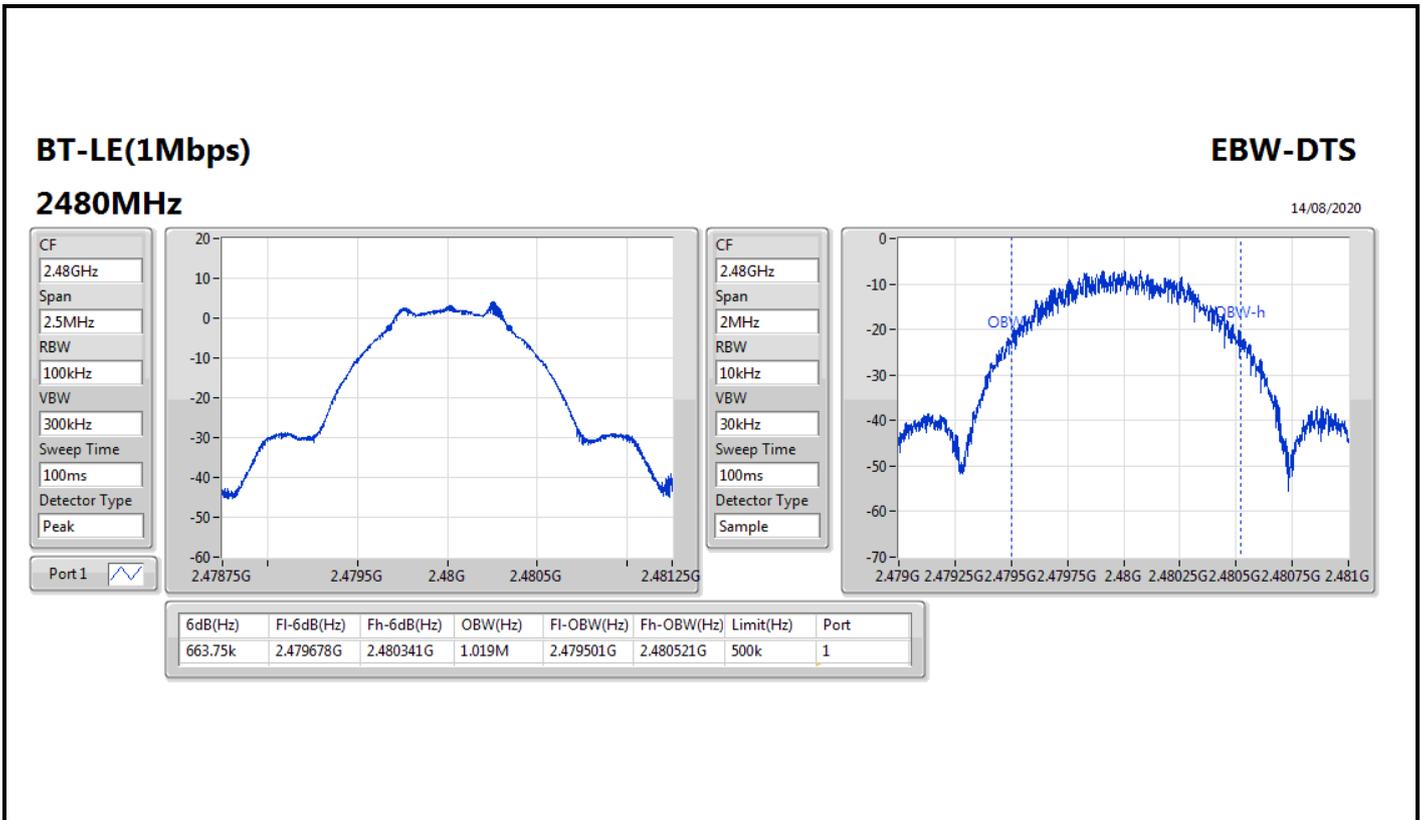


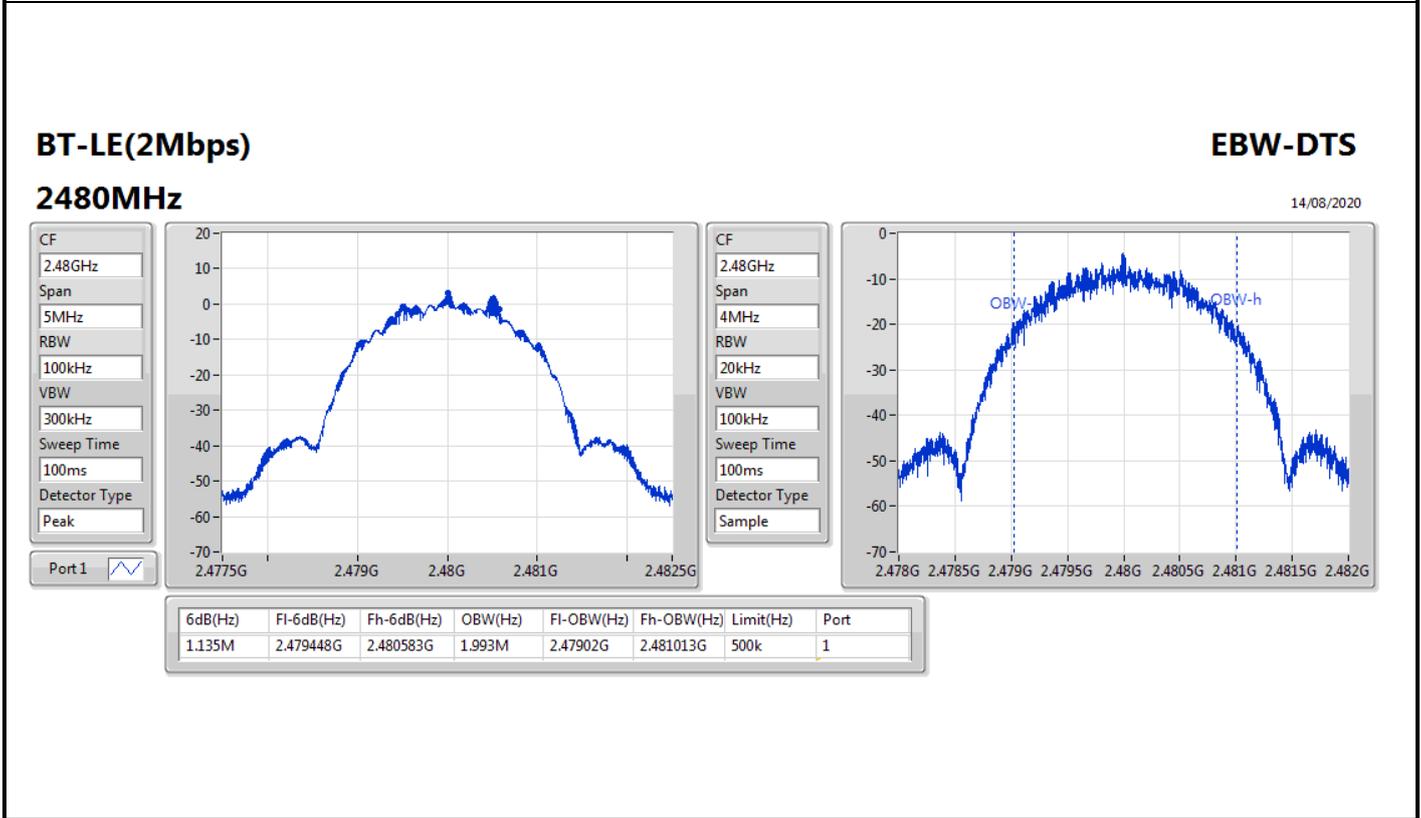
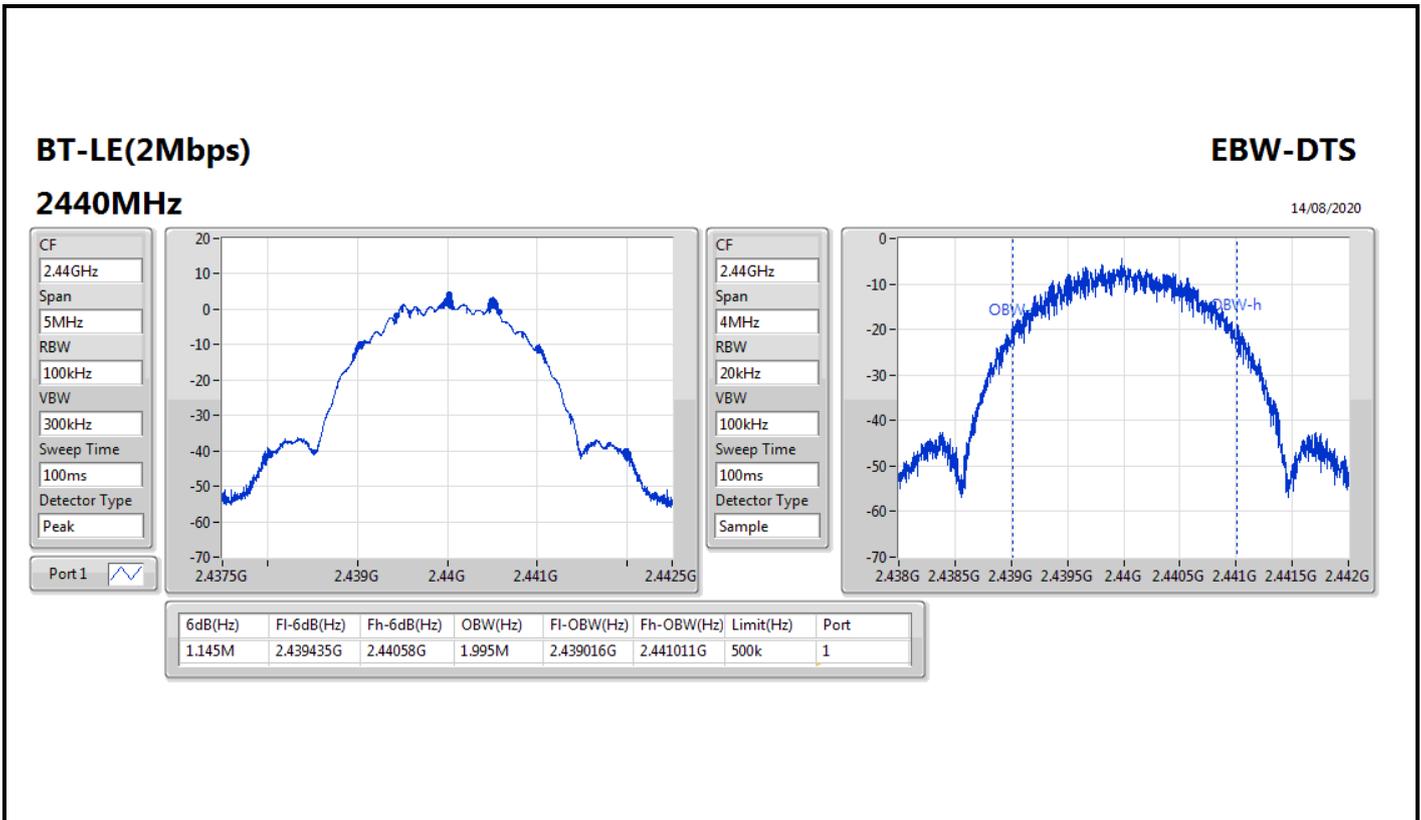
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	660k	1.018M
2440MHz	Pass	500k	665k	1.02M
2480MHz	Pass	500k	663.75k	1.019M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.155M	1.993M
2440MHz	Pass	500k	1.145M	1.995M
2480MHz	Pass	500k	1.135M	1.993M

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









Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	5.05	0.00320
BT-LE(2Mbps)	5.06	0.00321



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	1.00	4.80	30.00
2440MHz	Pass	1.00	5.05	30.00
2480MHz	Pass	1.00	4.06	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	1.00	4.78	30.00
2440MHz	Pass	1.00	5.06	30.00
2480MHz	Pass	1.00	4.06	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-12.30
BT-LE(2Mbps)	-14.94

RBW=3 kHz.

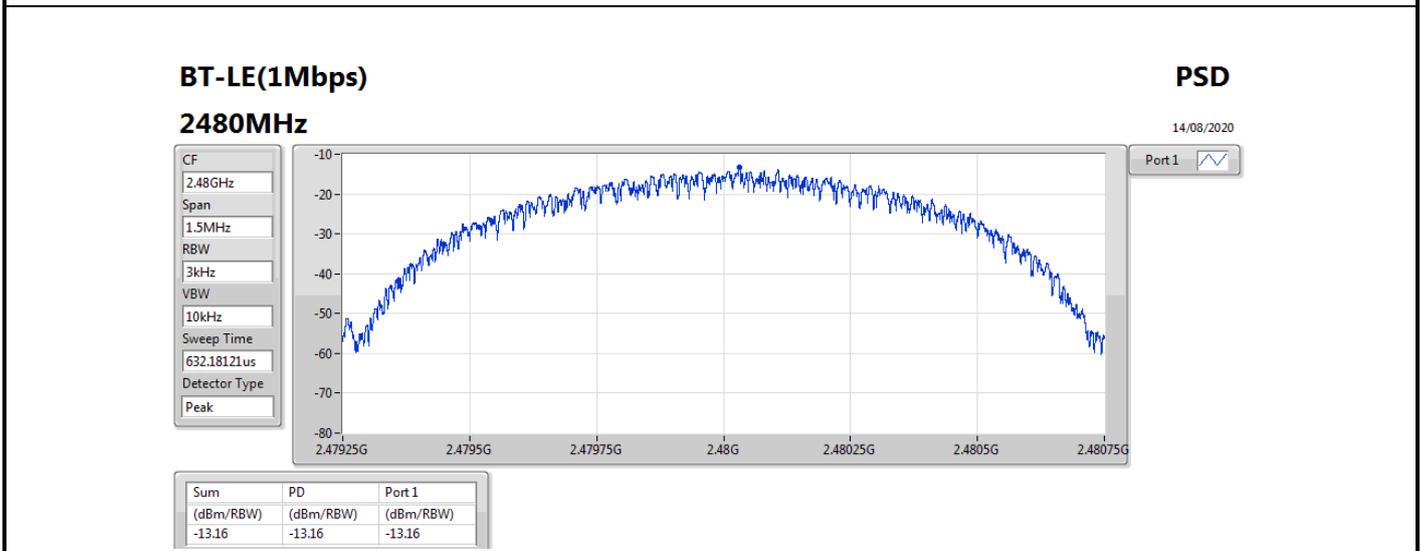
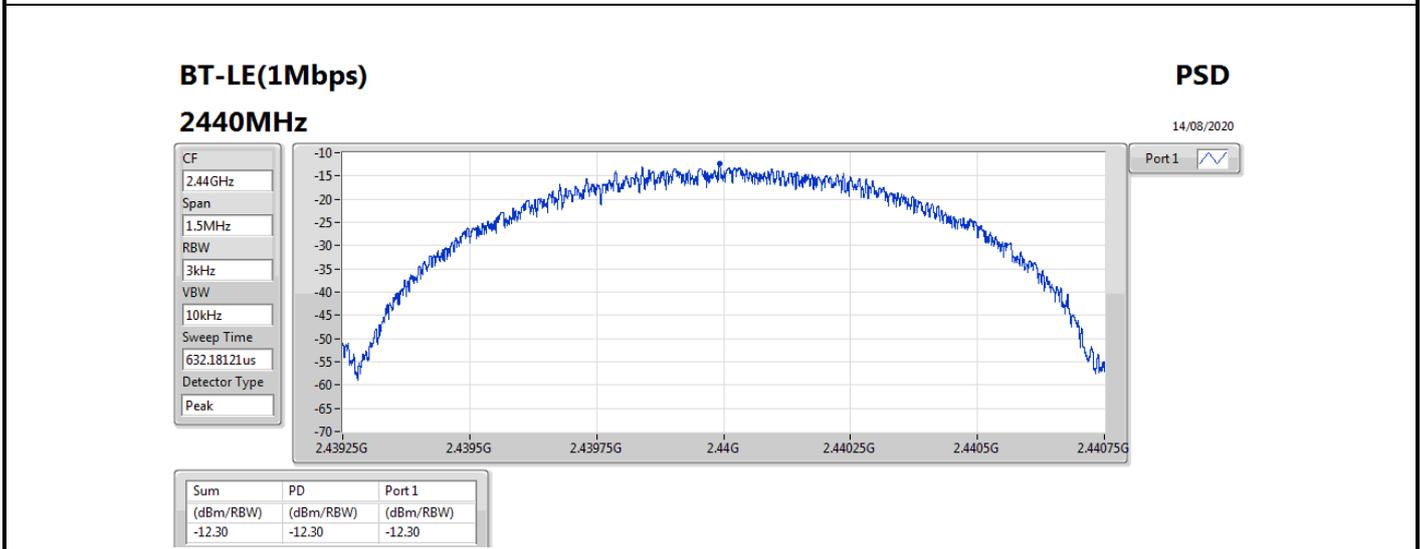
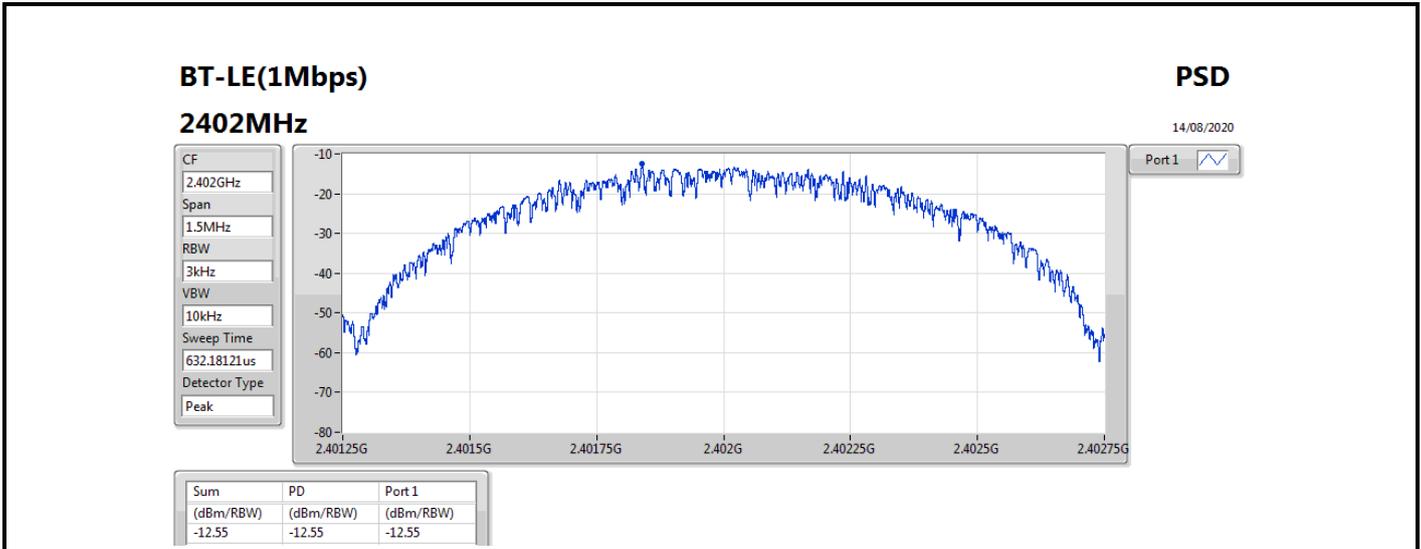


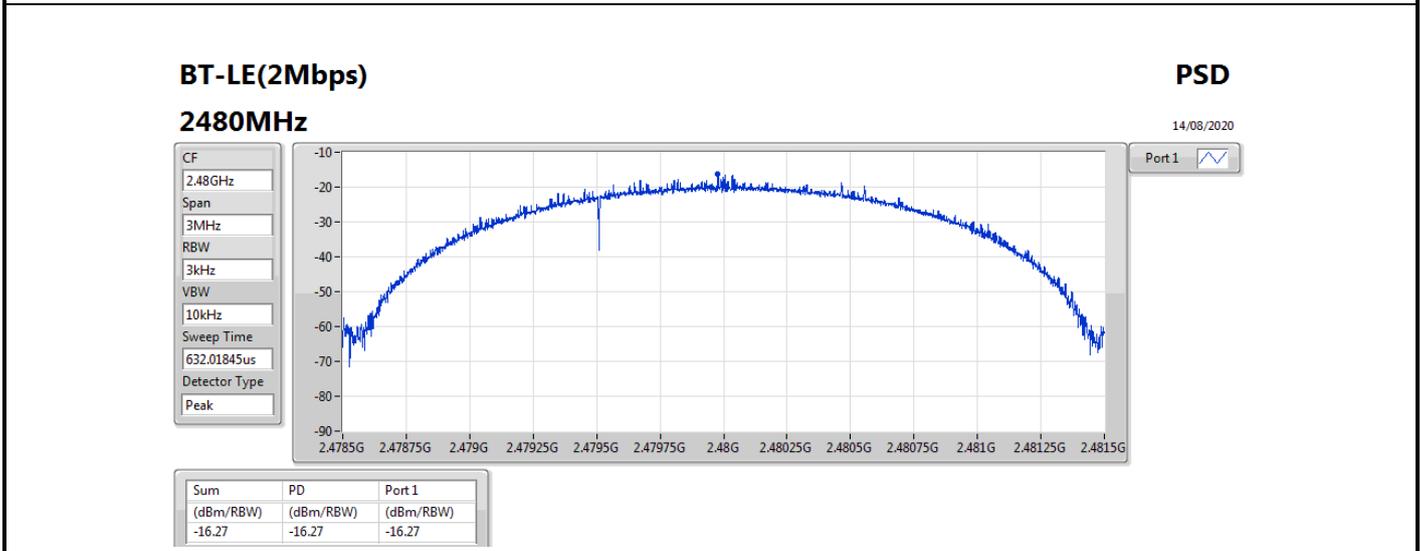
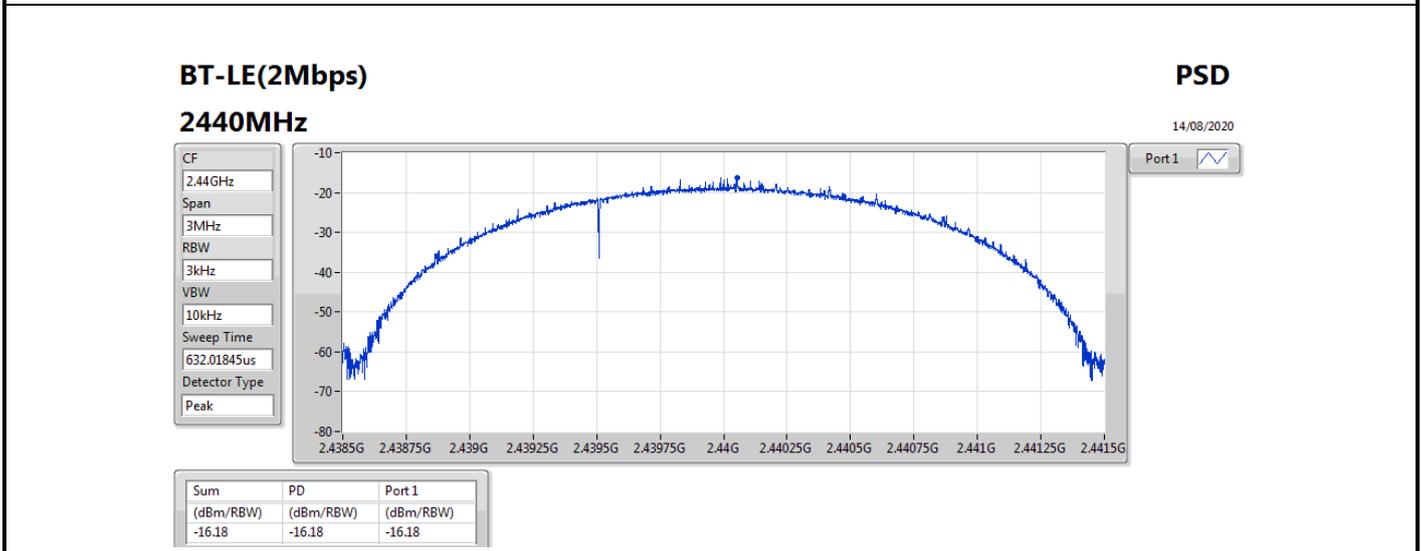
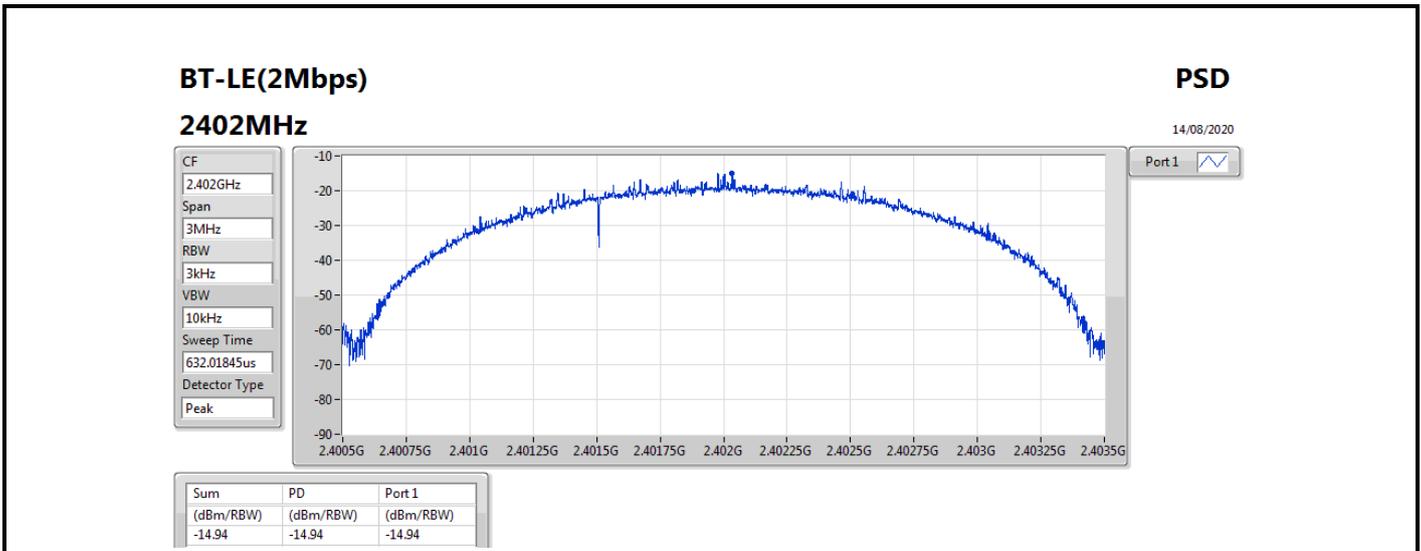
Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	1.00	-12.55	8.00
2440MHz	Pass	1.00	-12.30	8.00
2480MHz	Pass	1.00	-13.16	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	1.00	-14.94	8.00
2440MHz	Pass	1.00	-16.18	8.00
2480MHz	Pass	1.00	-16.27	8.00

DG = Directional Gain; RBW=3 kHz;

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







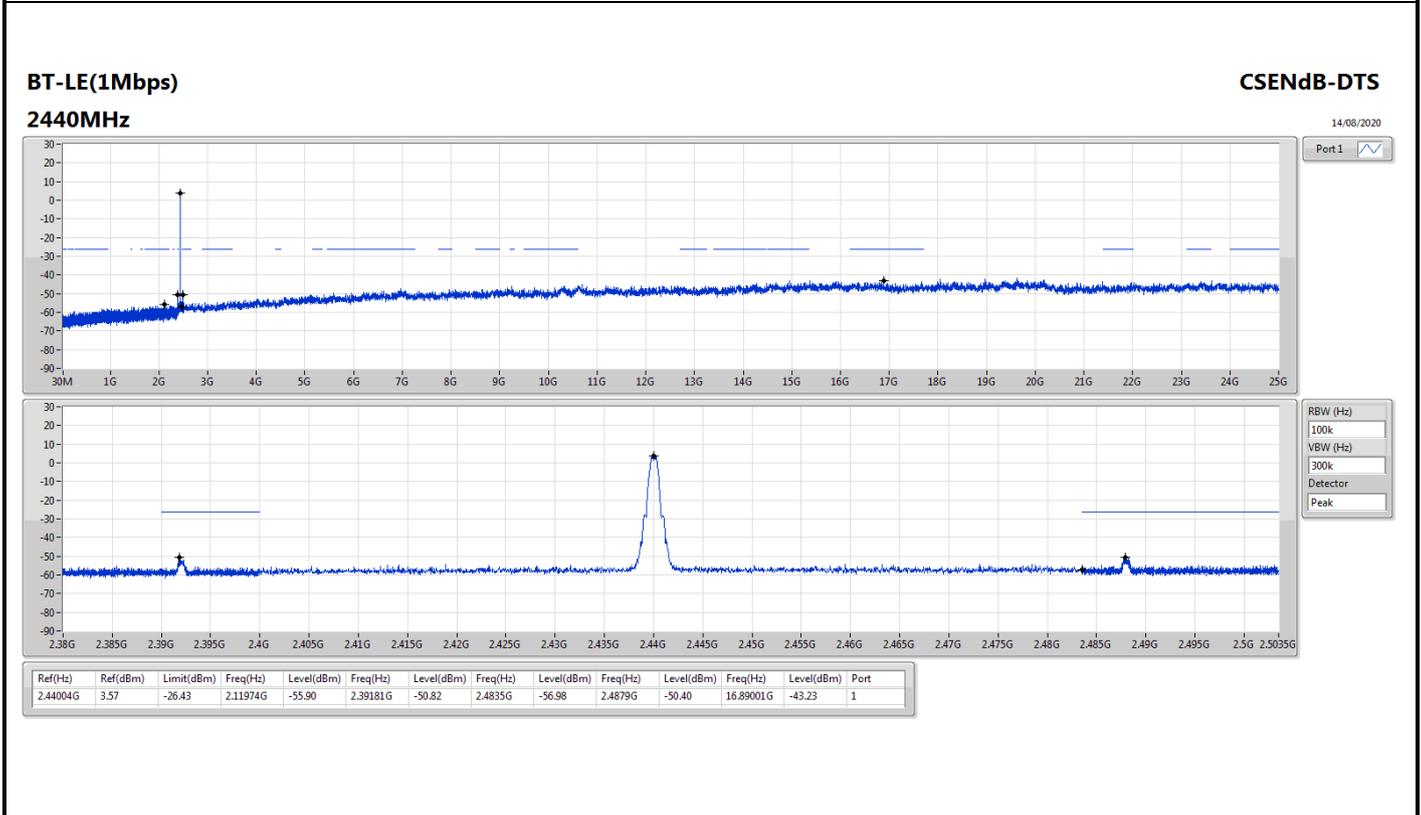
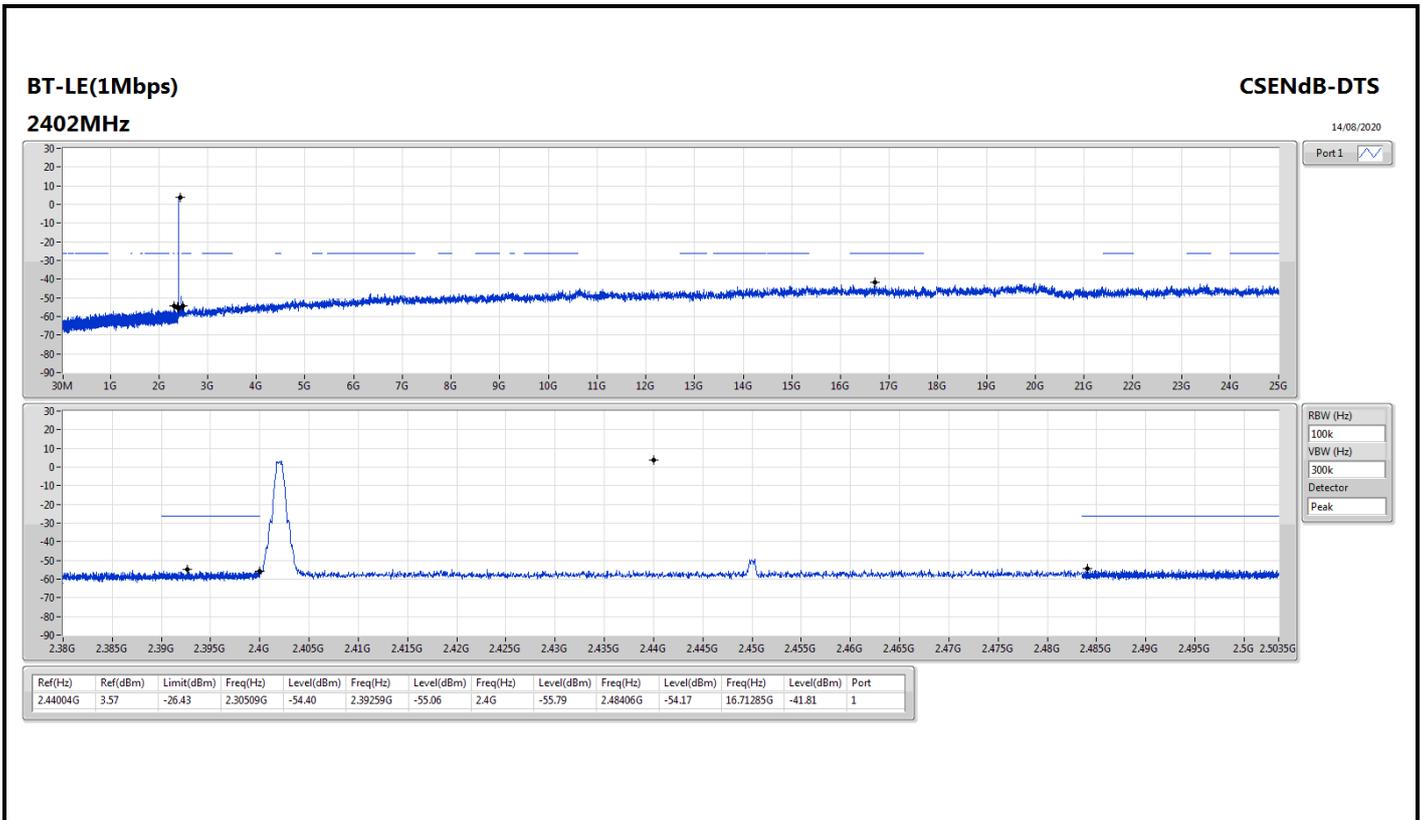
Summary

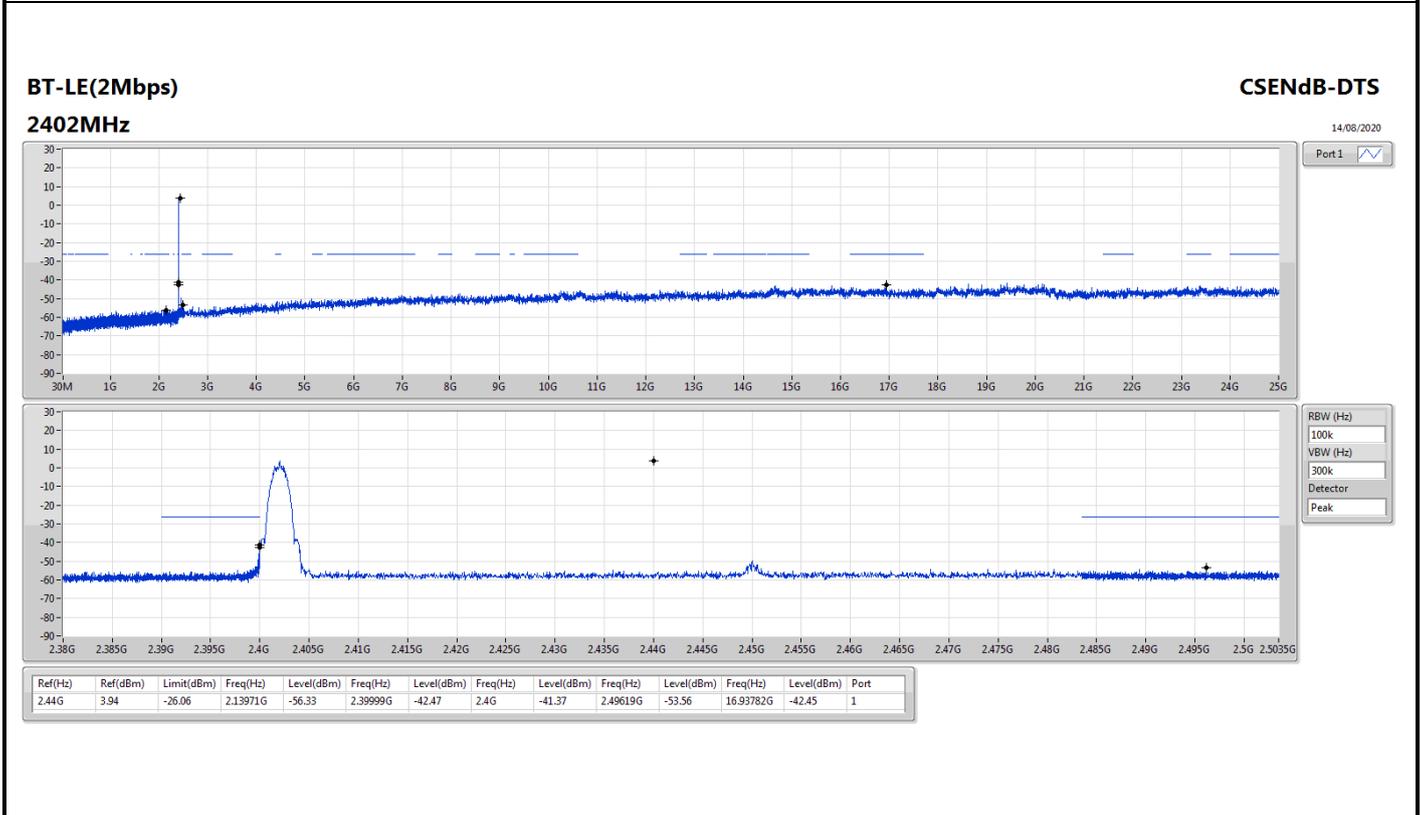
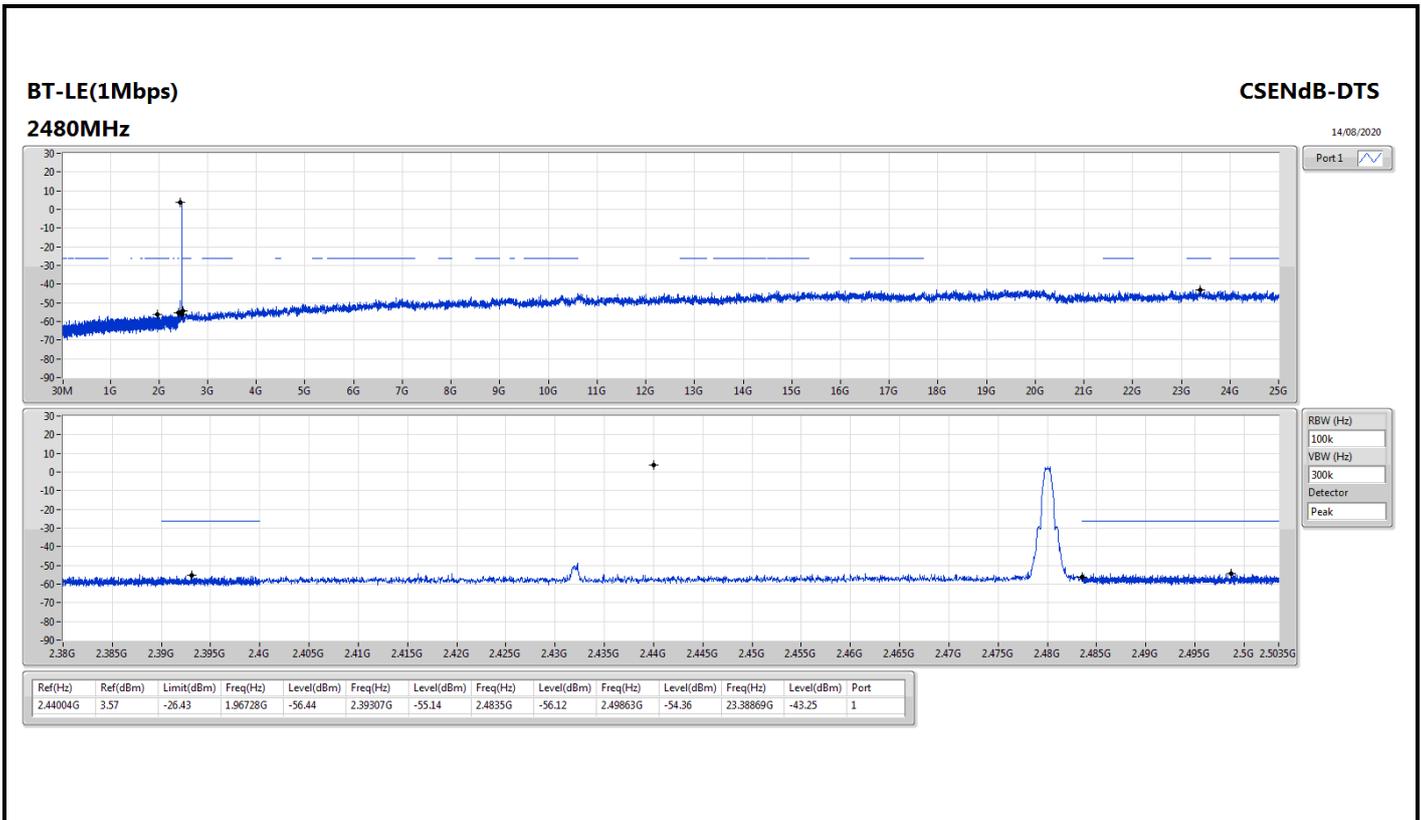
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Port								
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.44004G	3.57	-26.43	2.11974G	-55.90	2.39181G	-50.82	2.4835G	-56.98	2.4879G	-50.40	16.89001G	-43.23	1
BT-LE(2Mbps)	Pass	2.44G	3.94	-26.06	2.13971G	-56.33	2.39999G	-42.47	2.4G	-41.37	2.49619G	-53.56	16.93782G	-42.45	1

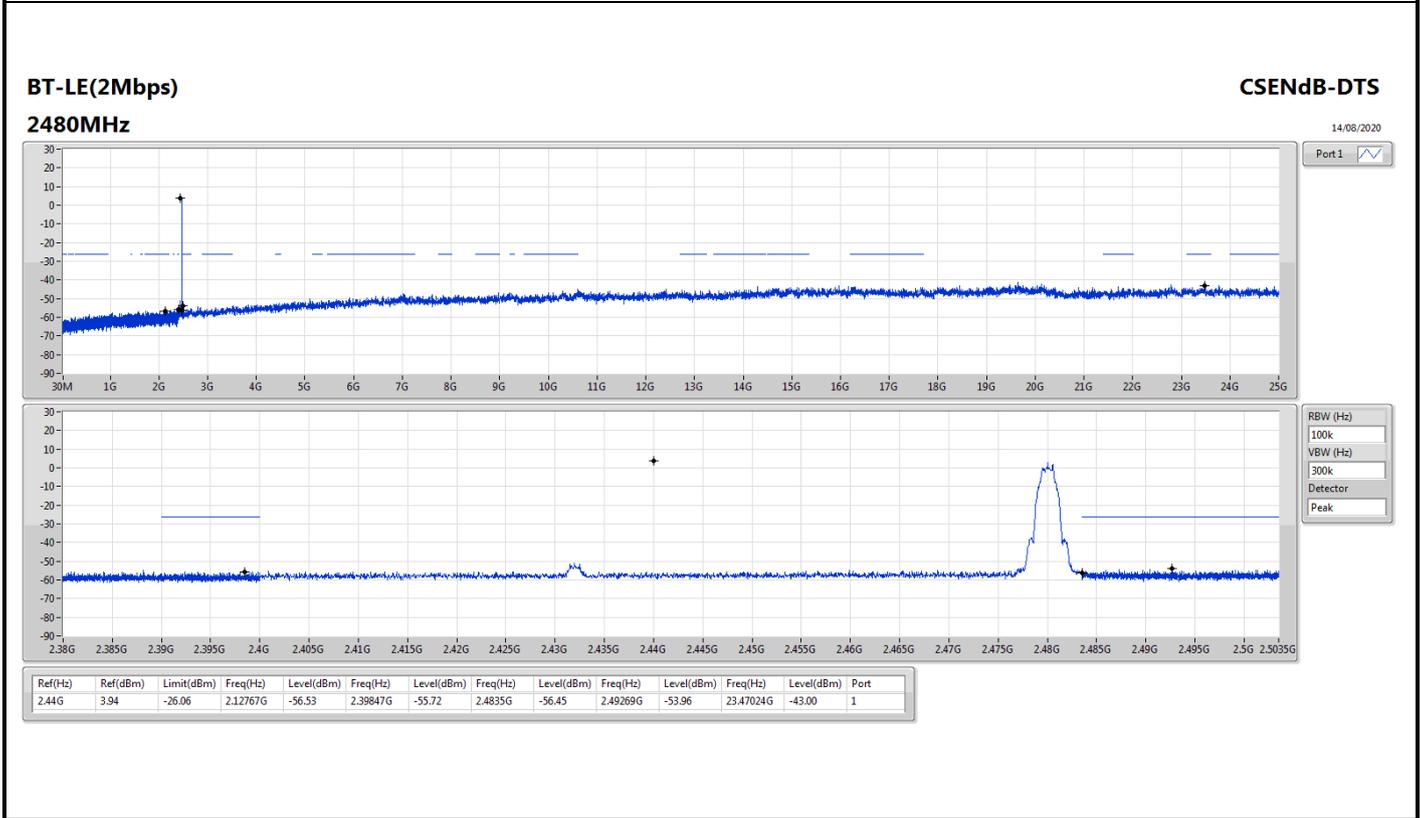
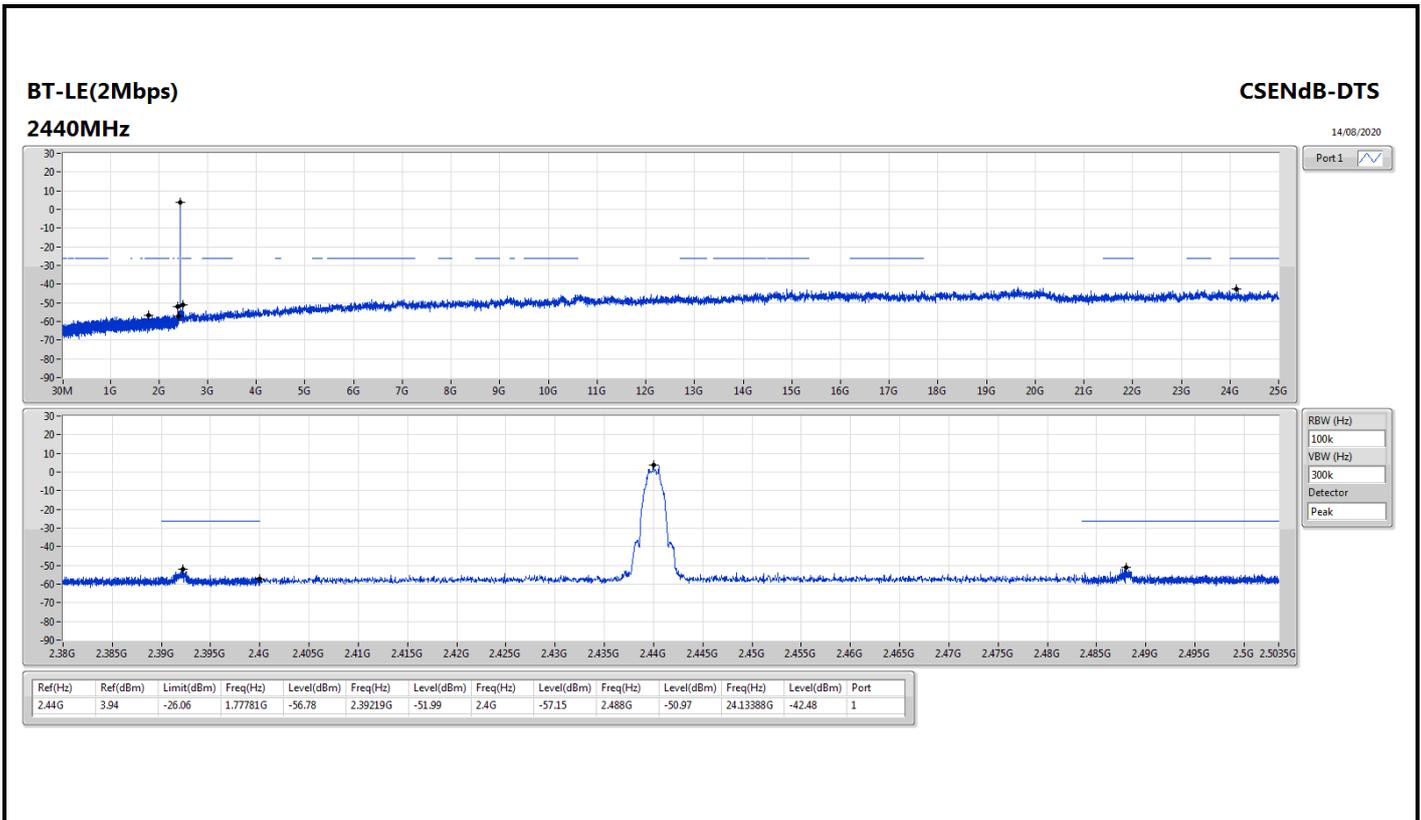


Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Port								
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44004G	3.57	-26.43	2.30509G	-54.40	2.39259G	-55.06	2.4G	-55.79	2.48406G	-54.17	16.71285G	-41.81	1
2440MHz	Pass	2.44004G	3.57	-26.43	2.11974G	-55.90	2.39181G	-50.82	2.4835G	-56.98	2.4879G	-50.40	16.89001G	-43.23	1
2480MHz	Pass	2.44004G	3.57	-26.43	1.96728G	-56.44	2.39307G	-55.14	2.4835G	-56.12	2.49863G	-54.36	23.38869G	-43.25	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44G	3.94	-26.06	2.13971G	-56.33	2.39999G	-42.47	2.4G	-41.37	2.49619G	-53.56	16.93782G	-42.45	1
2440MHz	Pass	2.44G	3.94	-26.06	1.77781G	-56.78	2.39219G	-51.99	2.4G	-57.15	2.488G	-50.97	24.13388G	-42.48	1
2480MHz	Pass	2.44G	3.94	-26.06	2.12767G	-56.53	2.39847G	-55.72	2.4835G	-56.45	2.49269G	-53.96	23.47024G	-43.00	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	-	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	QP	255.04M	42.90	46.00	-3.10	3	Horizontal	193	1.00	-

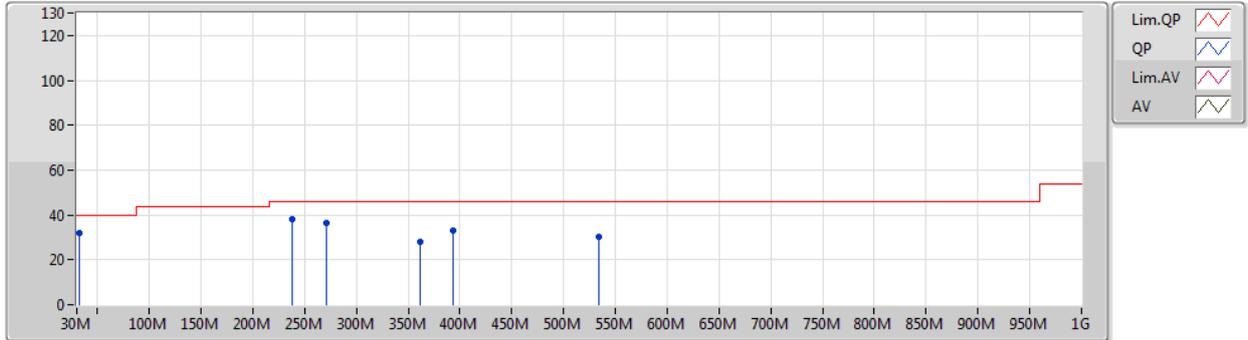


Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	31.94M	31.75	40.00	-8.25	3	Vertical	0	1.00	-
2440MHz	Pass	PK	237.58M	38.33	46.00	-7.67	3	Vertical	0	1.00	-
2440MHz	Pass	PK	270.56M	36.69	46.00	-9.31	3	Vertical	0	1.00	-
2440MHz	Pass	PK	361.74M	28.24	46.00	-17.76	3	Vertical	0	1.00	-
2440MHz	Pass	PK	392.78M	32.89	46.00	-13.11	3	Vertical	0	1.00	-
2440MHz	Pass	PK	534.4M	30.32	46.00	-15.68	3	Vertical	0	1.00	-
2440MHz	Pass	PK	344.28M	29.84	46.00	-16.16	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	392.78M	31.17	46.00	-14.83	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	474.26M	28.73	46.00	-17.27	3	Horizontal	360	1.00	-
2440MHz	Pass	QP	255.04M	42.90	46.00	-3.10	3	Horizontal	193	1.00	-
2440MHz	Pass	QP	237.58M	42.26	46.00	-3.74	3	Horizontal	200	1.34	-
2440MHz	Pass	QP	270.56M	40.18	46.00	-5.82	3	Horizontal	184	1.00	-

BT-LE(2Mbps)
2440MHz_Adapter

16/08/2020

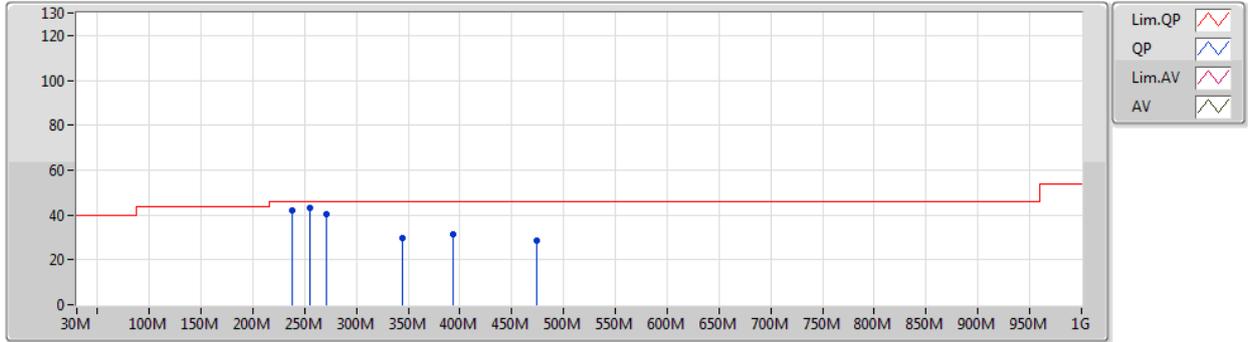


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	31.94M	31.75	40.00	-8.25	-4.71	3	Vertical	0	1.00	-	36.46	22.02	0.84	27.57
PK	237.58M	38.33	46.00	-7.67	-8.15	3	Vertical	0	1.00	-	46.48	16.08	2.53	26.76
PK	270.56M	36.69	46.00	-9.31	-6.02	3	Vertical	0	1.00	-	42.71	17.95	2.72	26.69
PK	361.74M	28.24	46.00	-17.76	-4.07	3	Vertical	0	1.00	-	32.31	19.79	3.15	27.01
PK	392.78M	32.89	46.00	-13.11	-3.23	3	Vertical	0	1.00	-	36.12	20.71	3.27	27.21
PK	534.4M	30.32	46.00	-15.68	-0.77	3	Vertical	0	1.00	-	31.09	23.34	3.84	27.95

BT-LE(2Mbps)

16/08/2020

2440MHz_Adapter



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	344.28M	29.84	46.00	-16.16	-4.59	3	Horizontal	360	1.00	-	34.43	19.24	3.08	26.91
PK	392.78M	31.17	46.00	-14.83	-3.23	3	Horizontal	360	1.00	-	34.40	20.71	3.27	27.21
PK	474.26M	28.73	46.00	-17.27	-1.69	3	Horizontal	360	1.00	-	30.42	22.50	3.55	27.74
QP	255.04M	42.90	46.00	-3.10	-5.78	3	Horizontal	193	1.00	-	48.68	18.29	2.63	26.70
QP	237.58M	42.26	46.00	-3.74	-8.15	3	Horizontal	200	1.34	-	50.41	16.08	2.53	26.76
QP	270.56M	40.18	46.00	-5.82	-6.02	3	Horizontal	184	1.00	-	46.20	17.95	2.72	26.69



Summary

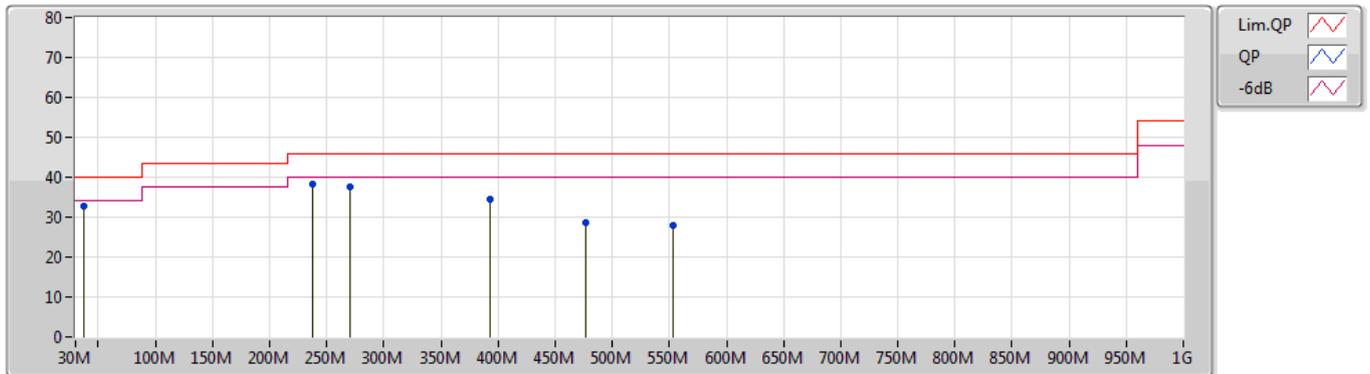
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	PK	270.56M	42.79	46.00	-3.21	Horizontal

Mode Configure

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 2	Pass	PK	37.76M	32.92	40.00	-7.08	3	Vertical	0	1.00	"Worst"
Mode 2	Pass	PK	237.58M	38.30	46.00	-7.70	3	Vertical	0	1.00	-
Mode 2	Pass	PK	270.56M	37.61	46.00	-8.39	3	Vertical	0	1.00	-
Mode 2	Pass	PK	392.78M	34.64	46.00	-11.36	3	Vertical	0	1.00	-
Mode 2	Pass	PK	476.2M	28.71	46.00	-17.29	3	Vertical	0	1.00	-
Mode 2	Pass	PK	553.8M	27.84	46.00	-18.16	3	Vertical	0	1.00	-
Mode 2	Pass	PK	270.56M	42.79	46.00	-3.21	3	Horizontal	360	1.00	"Worst"
Mode 2	Pass	PK	319.06M	32.11	46.00	-13.89	3	Horizontal	360	1.00	-
Mode 2	Pass	PK	392.78M	32.52	46.00	-13.48	3	Horizontal	360	1.00	-
Mode 2	Pass	PK	476.2M	29.97	46.00	-16.03	3	Horizontal	360	1.00	-
Mode 2	Pass	QP	237.58M	40.39	46.00	-5.61	3	Horizontal	257	1.21	-
Mode 2	Pass	QP	255.04M	41.09	46.00	-4.91	3	Horizontal	298	1.18	-

Radiated Emissions below 1GHz

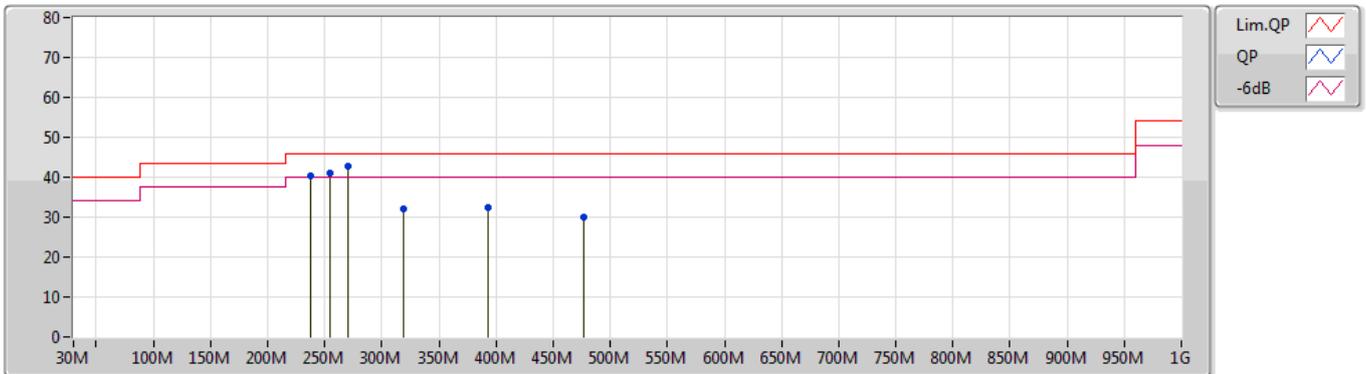
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Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	37.76M	32.92	40.00	-7.08	-7.60	3	Vertical	0	1.00	"Worst"	40.52	18.99	0.96	27.55
PK	237.58M	38.30	46.00	-7.70	-8.15	3	Vertical	0	1.00	-	46.45	16.08	2.53	26.76
PK	270.56M	37.61	46.00	-8.39	-6.02	3	Vertical	0	1.00	-	43.63	17.95	2.72	26.69
PK	392.78M	34.64	46.00	-11.36	-3.23	3	Vertical	0	1.00	-	37.87	20.71	3.27	27.21
PK	476.2M	28.71	46.00	-17.29	-1.68	3	Vertical	0	1.00	-	30.39	22.50	3.56	27.74
PK	553.8M	27.84	46.00	-18.16	-0.22	3	Vertical	0	1.00	-	28.06	23.88	3.92	28.02

Radiated Emissions below 1GHz

16/08/2020



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	270.56M	42.79	46.00	-3.21	-6.02	3	Horizontal	360	1.00	"Worst"	48.81	17.95	2.72	26.69
PK	319.06M	32.11	46.00	-13.89	-5.05	3	Horizontal	360	1.00	-	37.16	18.73	2.98	26.76
PK	392.78M	32.52	46.00	-13.48	-3.23	3	Horizontal	360	1.00	-	35.75	20.71	3.27	27.21
PK	476.2M	29.97	46.00	-16.03	-1.68	3	Horizontal	360	1.00	-	31.65	22.50	3.56	27.74
QP	237.58M	40.39	46.00	-5.61	-8.15	3	Horizontal	257	1.21	-	48.54	16.08	2.53	26.76
QP	255.04M	41.09	46.00	-4.91	-5.78	3	Horizontal	298	1.18	-	46.87	18.29	2.63	26.70



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	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	2.488G	49.59	54.00	-4.41	3	Horizontal	85	2.28	-
BT-LE(2Mbps)	Pass	AV	2.488G	49.34	54.00	-4.66	3	Horizontal	84	2.29	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.39G	47.70	54.00	-6.30	3	Vertical	189	2.13	-
2402MHz	Pass	AV	2.402G	95.28	Inf	-Inf	3	Vertical	189	2.13	-
2402MHz	Pass	PK	2.3602G	59.15	74.00	-14.85	3	Vertical	189	2.13	-
2402MHz	Pass	PK	2.4024G	96.22	Inf	-Inf	3	Vertical	189	2.13	-
2402MHz	Pass	AV	2.388G	47.68	54.00	-6.32	3	Horizontal	94	2.33	-
2402MHz	Pass	AV	2.402G	103.44	Inf	-Inf	3	Horizontal	94	2.33	-
2402MHz	Pass	PK	2.3816G	58.60	74.00	-15.40	3	Horizontal	94	2.33	-
2402MHz	Pass	PK	2.4018G	104.34	Inf	-Inf	3	Horizontal	94	2.33	-
2402MHz	Pass	AV	4.87944G	34.44	54.00	-19.56	3	Vertical	81	1.93	-
2402MHz	Pass	PK	4.88038G	46.21	74.00	-27.79	3	Vertical	81	1.93	-
2402MHz	Pass	AV	4.88069G	34.46	54.00	-19.54	3	Horizontal	76	1.01	-
2402MHz	Pass	PK	4.87945G	46.31	74.00	-27.69	3	Horizontal	76	1.01	-
2440MHz	Pass	AV	2.3404G	47.77	54.00	-6.23	3	Vertical	189	2.33	-
2440MHz	Pass	AV	2.44G	96.74	Inf	-Inf	3	Vertical	189	2.33	-
2440MHz	Pass	AV	2.4884G	48.56	54.00	-5.44	3	Vertical	189	2.33	-
2440MHz	Pass	PK	2.3856G	58.70	74.00	-15.30	3	Vertical	189	2.33	-
2440MHz	Pass	PK	2.4404G	97.71	Inf	-Inf	3	Vertical	189	2.33	-
2440MHz	Pass	PK	2.4884G	58.68	74.00	-15.32	3	Vertical	189	2.33	-
2440MHz	Pass	AV	2.3416G	47.75	54.00	-6.25	3	Horizontal	85	2.28	-
2440MHz	Pass	AV	2.44G	105.05	Inf	-Inf	3	Horizontal	85	2.28	-
2440MHz	Pass	AV	2.488G	49.59	54.00	-4.41	3	Horizontal	85	2.28	-
2440MHz	Pass	PK	2.3532G	58.98	74.00	-15.02	3	Horizontal	85	2.28	-
2440MHz	Pass	PK	2.4404G	106.01	Inf	-Inf	3	Horizontal	85	2.28	-
2440MHz	Pass	PK	2.488G	59.33	74.00	-14.67	3	Horizontal	85	2.28	-
2440MHz	Pass	AV	4.88071G	34.46	54.00	-19.54	3	Vertical	0	1.50	-
2440MHz	Pass	PK	4.87956G	45.70	74.00	-28.30	3	Vertical	0	1.50	-
2440MHz	Pass	AV	4.88048G	34.32	54.00	-19.68	3	Horizontal	214	1.50	-
2440MHz	Pass	PK	4.87926G	46.45	74.00	-27.55	3	Horizontal	214	1.50	-
2480MHz	Pass	AV	2.48G	97.65	Inf	-Inf	3	Vertical	188	2.44	-
2480MHz	Pass	AV	2.4852G	48.30	54.00	-5.70	3	Vertical	188	2.44	-
2480MHz	Pass	PK	2.4798G	98.57	Inf	-Inf	3	Vertical	188	2.44	-
2480MHz	Pass	PK	2.4882G	59.64	74.00	-14.36	3	Vertical	188	2.44	-
2480MHz	Pass	AV	2.48G	104.02	Inf	-Inf	3	Horizontal	86	2.35	-
2480MHz	Pass	AV	2.487G	48.30	54.00	-5.70	3	Horizontal	86	2.35	-
2480MHz	Pass	PK	2.4798G	104.93	Inf	-Inf	3	Horizontal	86	2.35	-
2480MHz	Pass	PK	2.4842G	59.56	74.00	-14.44	3	Horizontal	86	2.35	-
2480MHz	Pass	AV	4.96018G	35.00	54.00	-19.00	3	Vertical	0	1.50	-
2480MHz	Pass	PK	4.96061G	46.37	74.00	-27.63	3	Vertical	0	1.50	-
2480MHz	Pass	AV	4.96001G	34.86	54.00	-19.14	3	Horizontal	184	2.67	-
2480MHz	Pass	PK	4.95958G	46.86	74.00	-27.14	3	Horizontal	184	2.67	-
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3892G	47.69	54.00	-6.31	3	Vertical	189	2.13	-
2402MHz	Pass	AV	2.402G	93.75	Inf	-Inf	3	Vertical	189	2.13	-
2402MHz	Pass	PK	2.3732G	58.65	74.00	-15.35	3	Vertical	189	2.13	-
2402MHz	Pass	PK	2.4026G	96.33	Inf	-Inf	3	Vertical	189	2.13	-
2402MHz	Pass	AV	2.363G	47.85	54.00	-6.15	3	Horizontal	93	2.34	-
2402MHz	Pass	AV	2.402G	102.09	Inf	-Inf	3	Horizontal	93	2.34	-

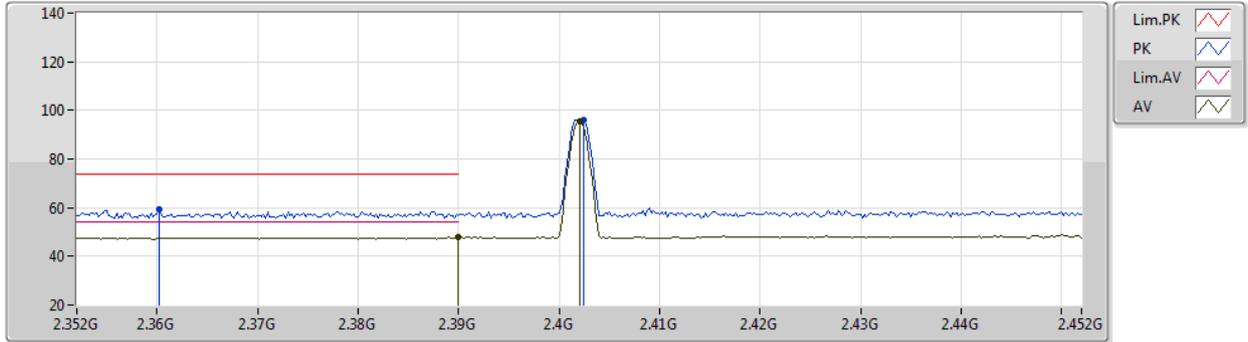


Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	2.3686G	58.95	74.00	-15.05	3	Horizontal	93	2.34	-
2402MHz	Pass	PK	2.4026G	104.60	Inf	-Inf	3	Horizontal	93	2.34	-
2402MHz	Pass	AV	4.80323G	34.07	54.00	-19.93	3	Vertical	79	3.00	-
2402MHz	Pass	PK	4.80431G	45.85	74.00	-28.15	3	Vertical	79	3.00	-
2402MHz	Pass	AV	4.80392G	34.35	54.00	-19.65	3	Horizontal	296	2.96	-
2402MHz	Pass	PK	4.80375G	46.00	74.00	-28.00	3	Horizontal	296	2.96	-
2440MHz	Pass	AV	2.3416G	47.75	54.00	-6.25	3	Vertical	189	2.33	-
2440MHz	Pass	AV	2.44G	94.76	Inf	-Inf	3	Vertical	189	2.33	-
2440MHz	Pass	AV	2.4876G	48.29	54.00	-5.71	3	Vertical	189	2.33	-
2440MHz	Pass	PK	2.3804G	58.60	74.00	-15.40	3	Vertical	189	2.33	-
2440MHz	Pass	PK	2.4408G	97.31	Inf	-Inf	3	Vertical	189	2.33	-
2440MHz	Pass	PK	2.4868G	59.72	74.00	-14.28	3	Vertical	189	2.33	-
2440MHz	Pass	AV	2.3584G	47.86	54.00	-6.14	3	Horizontal	84	2.29	-
2440MHz	Pass	AV	2.44G	103.40	Inf	-Inf	3	Horizontal	84	2.29	-
2440MHz	Pass	AV	2.488G	49.34	54.00	-4.66	3	Horizontal	84	2.29	-
2440MHz	Pass	PK	2.3776G	58.59	74.00	-15.41	3	Horizontal	84	2.29	-
2440MHz	Pass	PK	2.4408G	105.99	Inf	-Inf	3	Horizontal	84	2.29	-
2440MHz	Pass	PK	2.4904G	60.43	74.00	-13.57	3	Horizontal	84	2.29	-
2440MHz	Pass	AV	4.88062G	34.46	54.00	-19.54	3	Vertical	299	2.99	-
2440MHz	Pass	PK	4.88G	45.82	74.00	-28.18	3	Vertical	299	2.99	-
2440MHz	Pass	AV	4.8797G	34.44	54.00	-19.56	3	Horizontal	262	1.50	-
2440MHz	Pass	PK	4.87942G	46.48	74.00	-27.52	3	Horizontal	262	1.50	-
2480MHz	Pass	AV	2.48G	96.09	Inf	-Inf	3	Vertical	187	2.44	-
2480MHz	Pass	AV	2.4854G	48.30	54.00	-5.70	3	Vertical	187	2.44	-
2480MHz	Pass	PK	2.4796G	98.65	Inf	-Inf	3	Vertical	187	2.44	-
2480MHz	Pass	PK	2.4908G	59.25	74.00	-14.75	3	Vertical	187	2.44	-
2480MHz	Pass	AV	2.48G	102.34	Inf	-Inf	3	Horizontal	86	2.35	-
2480MHz	Pass	AV	2.4854G	48.57	54.00	-5.43	3	Horizontal	86	2.35	-
2480MHz	Pass	PK	2.4796G	104.95	Inf	-Inf	3	Horizontal	86	2.35	-
2480MHz	Pass	PK	2.496G	61.72	74.00	-12.28	3	Horizontal	86	2.35	-
2480MHz	Pass	AV	4.95991G	34.86	54.00	-19.14	3	Vertical	265	1.50	-
2480MHz	Pass	PK	4.95993G	47.18	74.00	-26.82	3	Vertical	265	1.50	-
2480MHz	Pass	AV	4.95923G	34.85	54.00	-19.15	3	Horizontal	32	2.62	-
2480MHz	Pass	PK	4.95919G	46.48	74.00	-27.52	3	Horizontal	32	2.62	-

BT-LE(1Mbps)

16/08/2020

2402MHz_TX

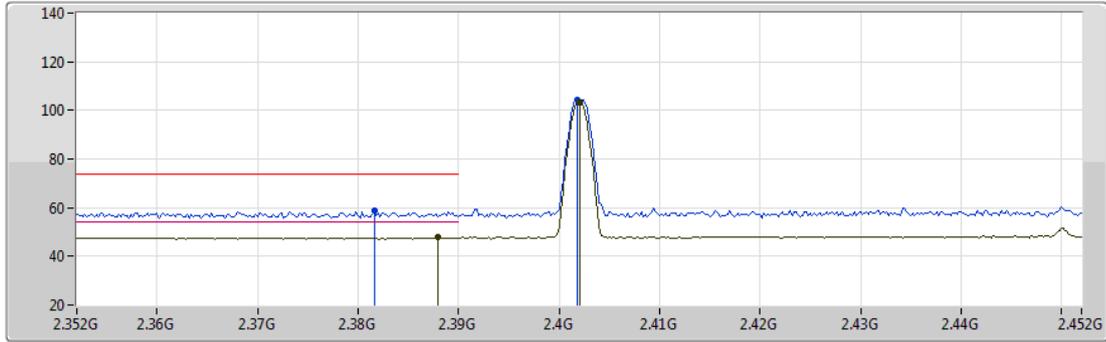


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	47.70	54.00	-6.30	31.91	3	Vertical	189	2.13	-	15.79	27.62	4.29	-
AV	2.402G	95.28	Inf	-Inf	31.90	3	Vertical	189	2.13	-	63.38	27.60	4.30	-
PK	2.3602G	59.15	74.00	-14.85	31.94	3	Vertical	189	2.13	-	27.21	27.68	4.26	-
PK	2.4024G	96.22	Inf	-Inf	31.90	3	Vertical	189	2.13	-	64.32	27.60	4.30	-

BT-LE(1Mbps)

16/08/2020

2402MHz_TX

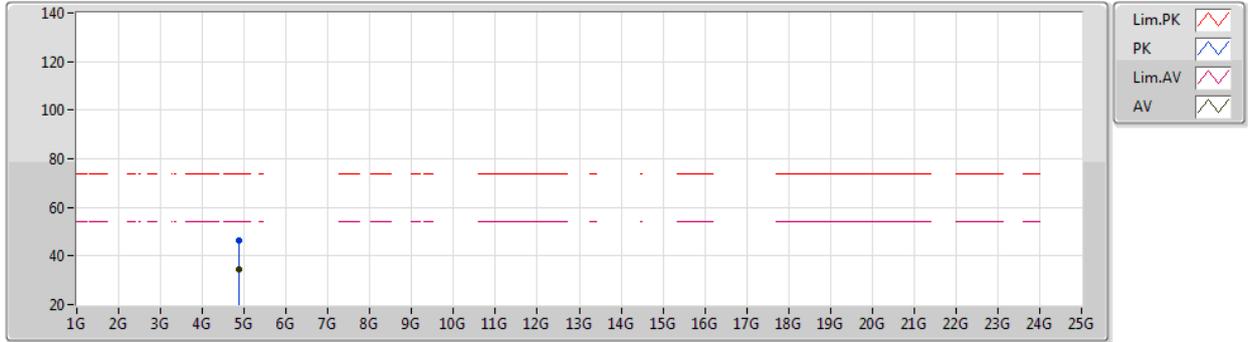


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.388G	47.68	54.00	-6.32	31.91	3	Horizontal	94	2.33	-	15.77	27.62	4.29	-
AV	2.402G	103.44	Inf	-Inf	31.90	3	Horizontal	94	2.33	-	71.54	27.60	4.30	-
PK	2.3816G	58.60	74.00	-15.40	31.92	3	Horizontal	94	2.33	-	26.68	27.64	4.28	-
PK	2.4018G	104.34	Inf	-Inf	31.90	3	Horizontal	94	2.33	-	72.44	27.60	4.30	-

BT-LE(1Mbps)

16/08/2020

2402MHz_TX

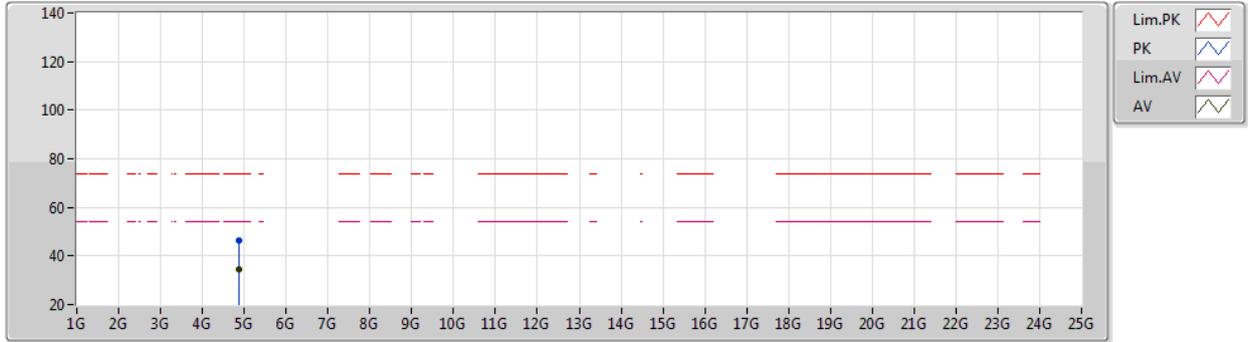


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87944G	34.44	54.00	-19.56	8.30	3	Vertical	81	1.93	-	26.14	31.10	6.58	29.38
PK	4.88038G	46.21	74.00	-27.79	8.30	3	Vertical	81	1.93	-	37.91	31.10	6.58	29.38

BT-LE(1Mbps)

16/08/2020

2402MHz_TX

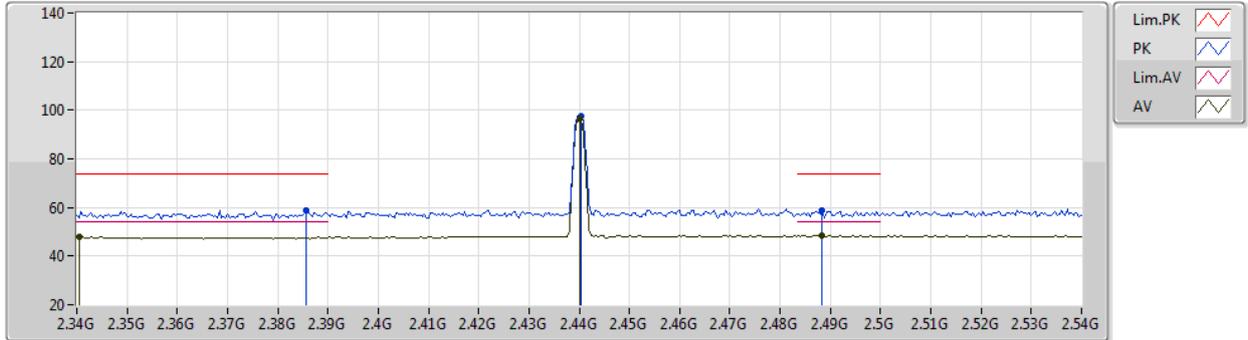


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88069G	34.46	54.00	-19.54	8.31	3	Horizontal	76	1.01	-	26.15	31.10	6.58	29.37
PK	4.87945G	46.31	74.00	-27.69	8.30	3	Horizontal	76	1.01	-	38.01	31.10	6.58	29.38

BT-LE(1Mbps)

16/08/2020

2440MHz_TX

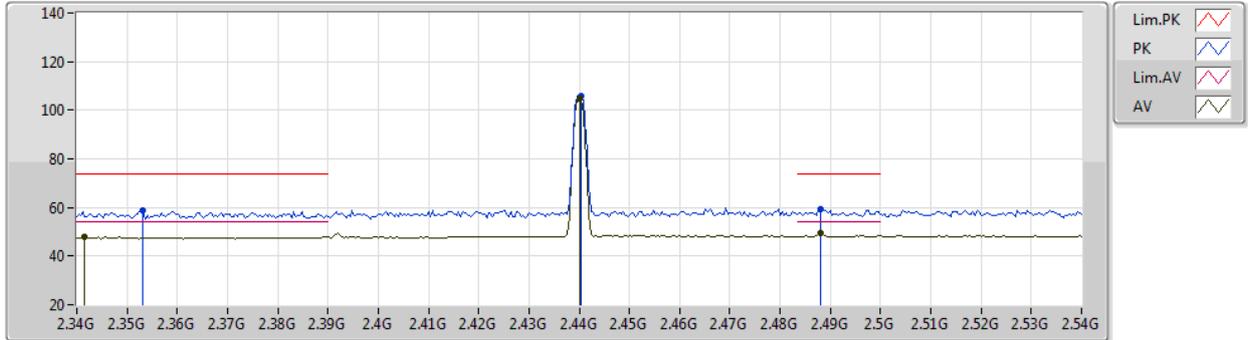


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3404G	47.77	54.00	-6.23	31.98	3	Vertical	189	2.33	-	15.79	27.74	4.24	-
AV	2.44G	96.74	Inf	-Inf	31.86	3	Vertical	189	2.33	-	64.88	27.52	4.34	-
AV	2.4884G	48.56	54.00	-5.44	31.81	3	Vertical	189	2.33	-	16.75	27.42	4.39	-
PK	2.3856G	58.70	74.00	-15.30	31.92	3	Vertical	189	2.33	-	26.78	27.63	4.29	-
PK	2.4404G	97.71	Inf	-Inf	31.86	3	Vertical	189	2.33	-	65.85	27.52	4.34	-
PK	2.4884G	58.68	74.00	-15.32	31.81	3	Vertical	189	2.33	-	26.87	27.42	4.39	-

BT-LE(1Mbps)

16/08/2020

2440MHz_TX

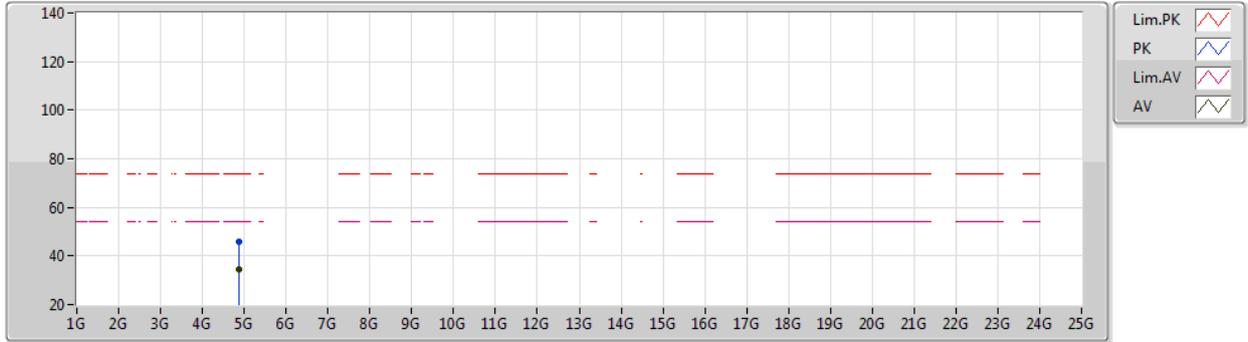


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3416G	47.75	54.00	-6.25	31.97	3	Horizontal	85	2.28	-	15.78	27.73	4.24	-
AV	2.44G	105.05	Inf	-Inf	31.86	3	Horizontal	85	2.28	-	73.19	27.52	4.34	-
AV	2.488G	49.59	54.00	-4.41	31.81	3	Horizontal	85	2.28	-	17.78	27.42	4.39	-
PK	2.3532G	58.98	74.00	-15.02	31.94	3	Horizontal	85	2.28	-	27.04	27.69	4.25	-
PK	2.4404G	106.01	Inf	-Inf	31.86	3	Horizontal	85	2.28	-	74.15	27.52	4.34	-
PK	2.488G	59.33	74.00	-14.67	31.81	3	Horizontal	85	2.28	-	27.52	27.42	4.39	-

BT-LE(1Mbps)

16/08/2020

2440MHz_TX

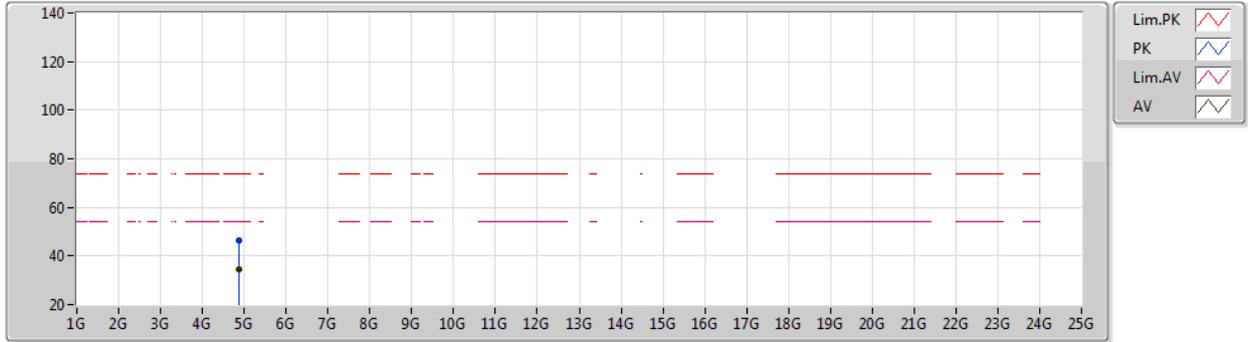


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88071G	34.46	54.00	-19.54	8.31	3	Vertical	0	1.50	-	26.15	31.10	6.58	29.37
PK	4.87956G	45.70	74.00	-28.30	8.30	3	Vertical	0	1.50	-	37.40	31.10	6.58	29.38

BT-LE(1Mbps)

16/08/2020

2440MHz_TX

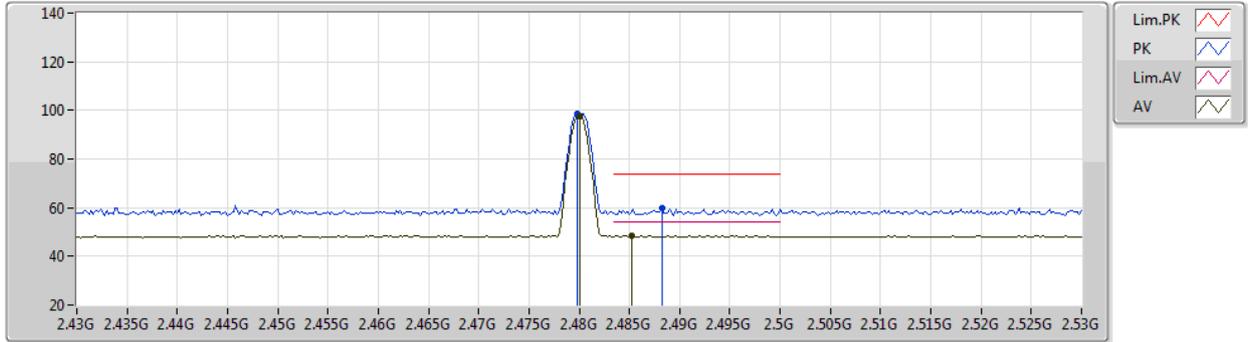


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88048G	34.32	54.00	-19.68	8.31	3	Horizontal	214	1.50	-	26.01	31.10	6.58	29.37
PK	4.87926G	46.45	74.00	-27.55	8.30	3	Horizontal	214	1.50	-	38.15	31.10	6.58	29.38

BT-LE(1Mbps)

16/08/2020

2480MHz_TX

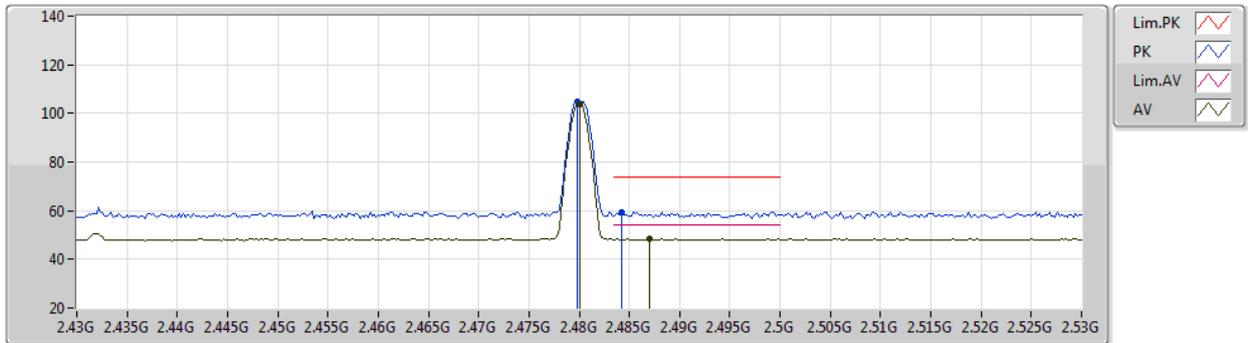


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	97.65	Inf	-Inf	31.82	3	Vertical	188	2.44	-	65.83	27.44	4.38	-
AV	2.4852G	48.30	54.00	-5.70	31.82	3	Vertical	188	2.44	-	16.48	27.43	4.39	-
PK	2.4798G	98.57	Inf	-Inf	31.82	3	Vertical	188	2.44	-	66.75	27.44	4.38	-
PK	2.4882G	59.64	74.00	-14.36	31.81	3	Vertical	188	2.44	-	27.83	27.42	4.39	-

BT-LE(1Mbps)

16/08/2020

2480MHz_TX

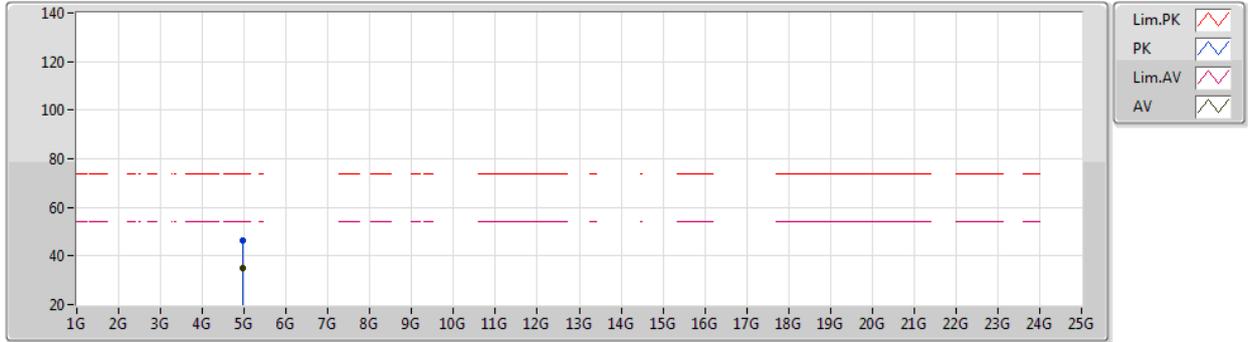


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	104.02	Inf	-Inf	31.82	3	Horizontal	86	2.35	-	72.20	27.44	4.38	-
AV	2.487G	48.30	54.00	-5.70	31.82	3	Horizontal	86	2.35	-	16.48	27.43	4.39	-
PK	2.4798G	104.93	Inf	-Inf	31.82	3	Horizontal	86	2.35	-	73.11	27.44	4.38	-
PK	2.4842G	59.56	74.00	-14.44	31.81	3	Horizontal	86	2.35	-	27.75	27.43	4.38	-

BT-LE(1Mbps)

16/08/2020

2480MHz_TX

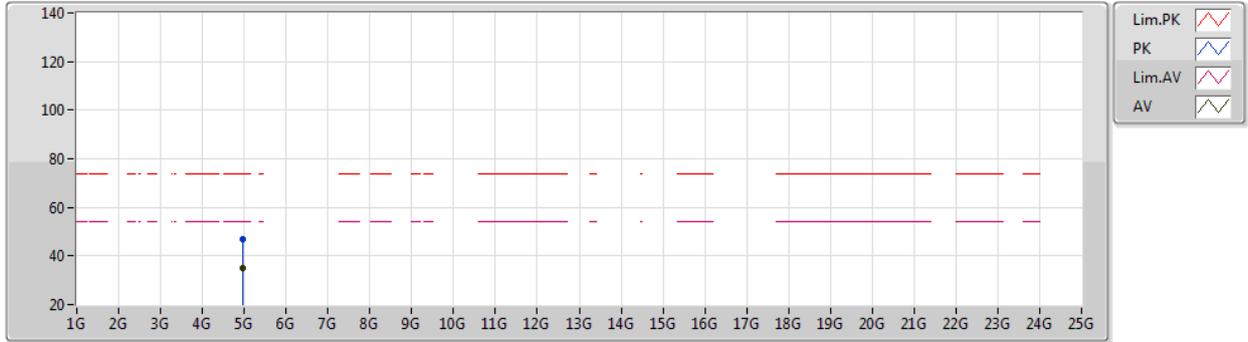


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96018G	35.00	54.00	-19.00	8.52	3	Vertical	0	1.50	-	26.48	31.20	6.66	29.34
PK	4.96061G	46.37	74.00	-27.63	8.52	3	Vertical	0	1.50	-	37.85	31.20	6.66	29.34

BT-LE(1Mbps)

16/08/2020

2480MHz_TX

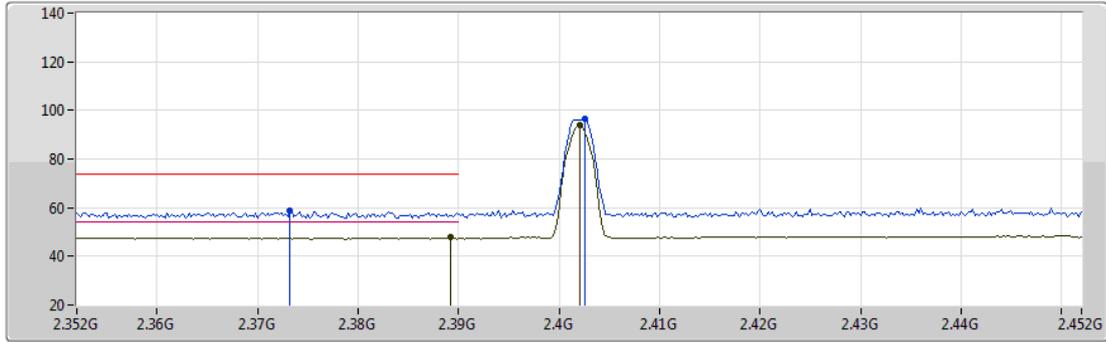


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96001G	34.86	54.00	-19.14	8.52	3	Horizontal	184	2.67	-	26.34	31.20	6.66	29.34
PK	4.95958G	46.86	74.00	-27.14	8.52	3	Horizontal	184	2.67	-	38.34	31.20	6.66	29.34

BT-LE(2Mbps)

16/08/2020

2402MHz_TX

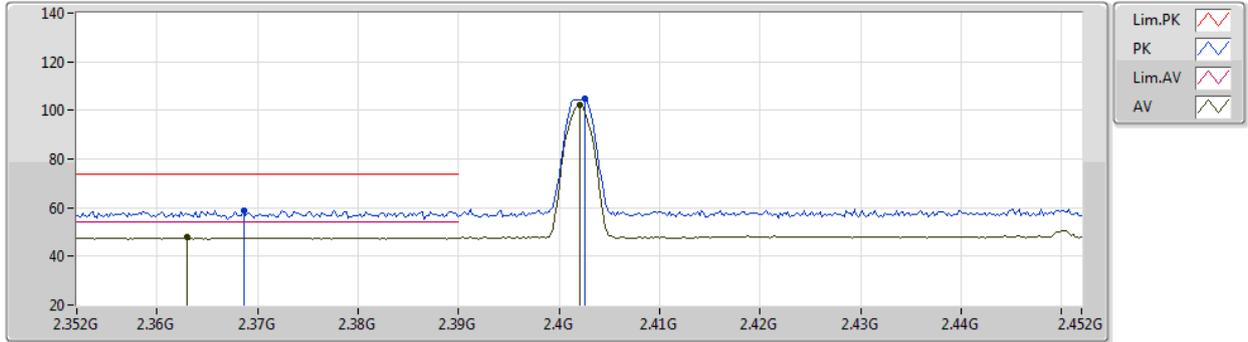


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3892G	47.69	54.00	-6.31	31.91	3	Vertical	189	2.13	-	15.78	27.62	4.29	-
AV	2.402G	93.75	Inf	-Inf	31.90	3	Vertical	189	2.13	-	61.85	27.60	4.30	-
PK	2.3732G	58.65	74.00	-15.35	31.92	3	Vertical	189	2.13	-	26.73	27.65	4.27	-
PK	2.4026G	96.33	Inf	-Inf	31.89	3	Vertical	189	2.13	-	64.44	27.59	4.30	-

BT-LE(2Mbps)

16/08/2020

2402MHz_TX

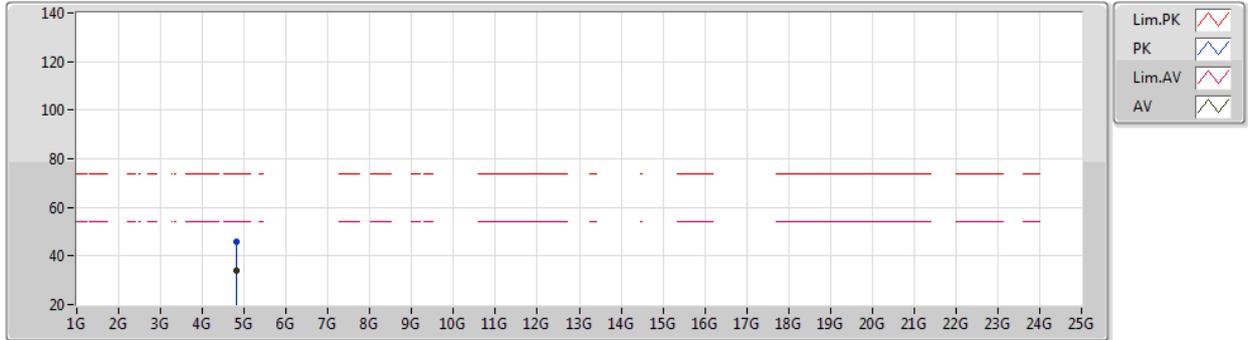


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.363G	47.85	54.00	-6.15	31.93	3	Horizontal	93	2.34	-	15.92	27.67	4.26	-
AV	2.402G	102.09	Inf	-Inf	31.90	3	Horizontal	93	2.34	-	70.19	27.60	4.30	-
PK	2.3686G	58.95	74.00	-15.05	31.93	3	Horizontal	93	2.34	-	27.02	27.66	4.27	-
PK	2.4026G	104.60	Inf	-Inf	31.89	3	Horizontal	93	2.34	-	72.71	27.59	4.30	-

BT-LE(2Mbps)

16/08/2020

2402MHz_TX



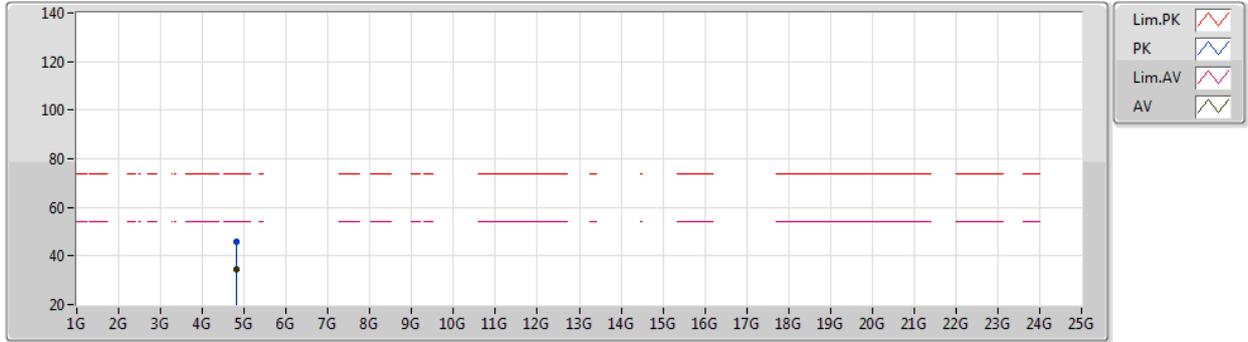
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AV	4.80323G	34.07	54.00	-19.93	8.19	3	Vertical	79	3.00	-	25.88	31.10	6.50	29.41
PK	4.80431G	45.85	74.00	-28.15	8.19	3	Vertical	79	3.00	-	37.66	31.10	6.50	29.41



BT-LE(2Mbps)

16/08/2020

2402MHz_TX

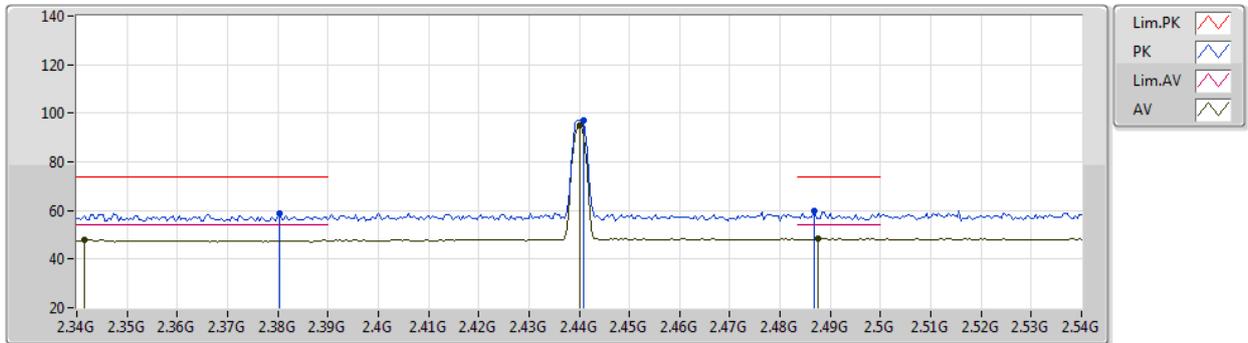


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80392G	34.35	54.00	-19.65	8.19	3	Horizontal	296	2.96	-	26.16	31.10	6.50	29.41
PK	4.80375G	46.00	74.00	-28.00	8.19	3	Horizontal	296	2.96	-	37.81	31.10	6.50	29.41

BT-LE(2Mbps)

16/08/2020

2440MHz_TX

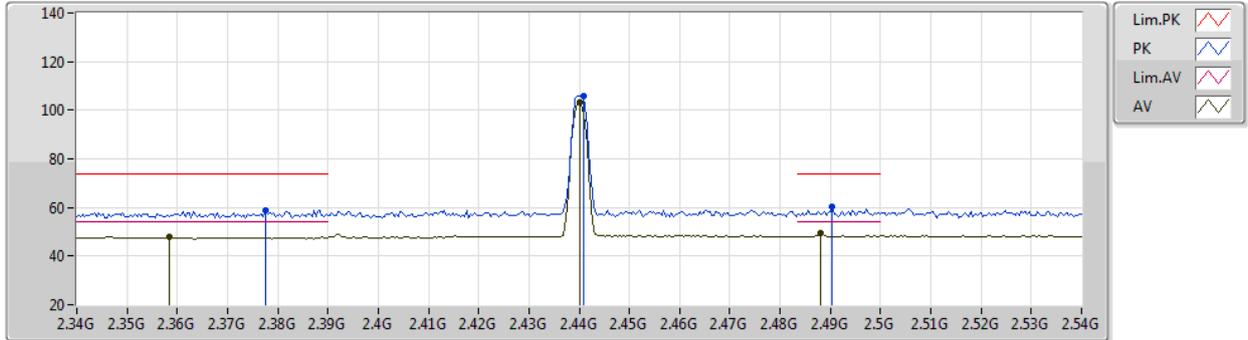


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3416G	47.75	54.00	-6.25	31.97	3	Vertical	189	2.33	-	15.78	27.73	4.24	-
AV	2.44G	94.76	Inf	-Inf	31.86	3	Vertical	189	2.33	-	62.90	27.52	4.34	-
AV	2.4876G	48.29	54.00	-5.71	31.81	3	Vertical	189	2.33	-	16.48	27.42	4.39	-
PK	2.3804G	58.60	74.00	-15.40	31.92	3	Vertical	189	2.33	-	26.68	27.64	4.28	-
PK	2.4408G	97.31	Inf	-Inf	31.86	3	Vertical	189	2.33	-	65.45	27.52	4.34	-
PK	2.4868G	59.72	74.00	-14.28	31.82	3	Vertical	189	2.33	-	27.90	27.43	4.39	-

BT-LE(2Mbps)

16/08/2020

2440MHz_TX

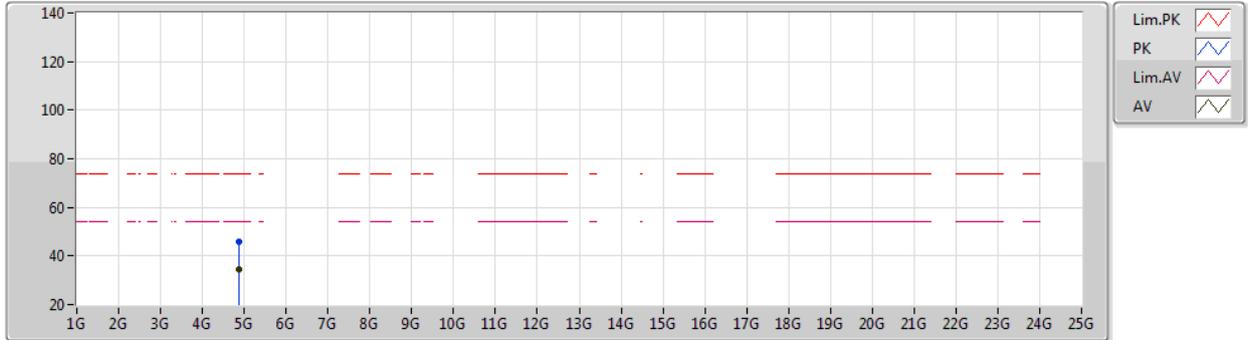


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3584G	47.86	54.00	-6.14	31.94	3	Horizontal	84	2.29	-	15.92	27.68	4.26	-
AV	2.44G	103.40	Inf	-Inf	31.86	3	Horizontal	84	2.29	-	71.54	27.52	4.34	-
AV	2.488G	49.34	54.00	-4.66	31.81	3	Horizontal	84	2.29	-	17.53	27.42	4.39	-
PK	2.3776G	58.59	74.00	-15.41	31.92	3	Horizontal	84	2.29	-	26.67	27.64	4.28	-
PK	2.4408G	105.99	Inf	-Inf	31.86	3	Horizontal	84	2.29	-	74.13	27.52	4.34	-
PK	2.4904G	60.43	74.00	-13.57	31.81	3	Horizontal	84	2.29	-	28.62	27.42	4.39	-

BT-LE(2Mbps)

16/08/2020

2440MHz_TX

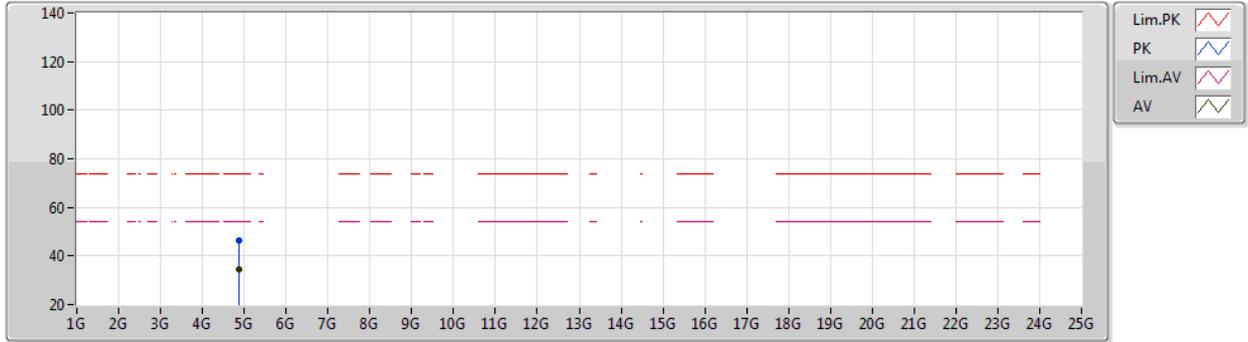


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88062G	34.46	54.00	-19.54	8.31	3	Vertical	299	2.99	-	26.15	31.10	6.58	29.37
PK	4.88G	45.82	74.00	-28.18	8.30	3	Vertical	299	2.99	-	37.52	31.10	6.58	29.38

BT-LE(2Mbps)

16/08/2020

2440MHz_TX

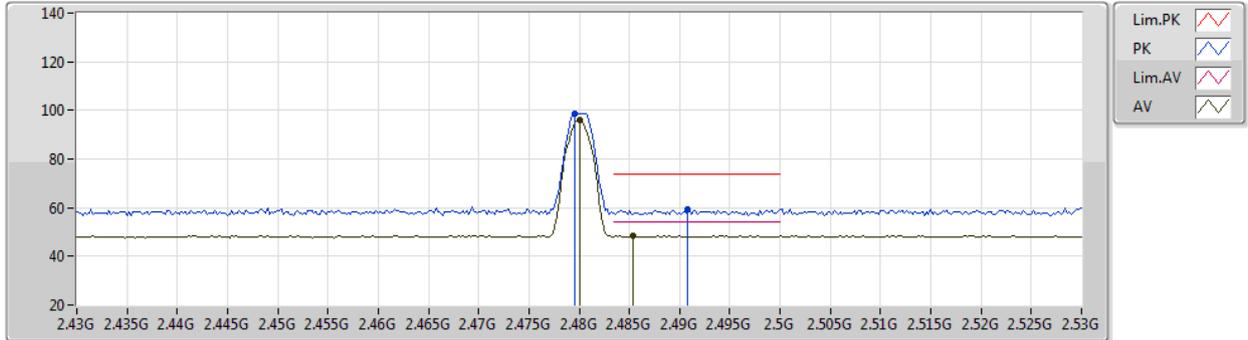


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8797G	34.44	54.00	-19.56	8.30	3	Horizontal	262	1.50	-	26.14	31.10	6.58	29.38
PK	4.87942G	46.48	74.00	-27.52	8.30	3	Horizontal	262	1.50	-	38.18	31.10	6.58	29.38

BT-LE(2Mbps)

16/08/2020

2480MHz_TX

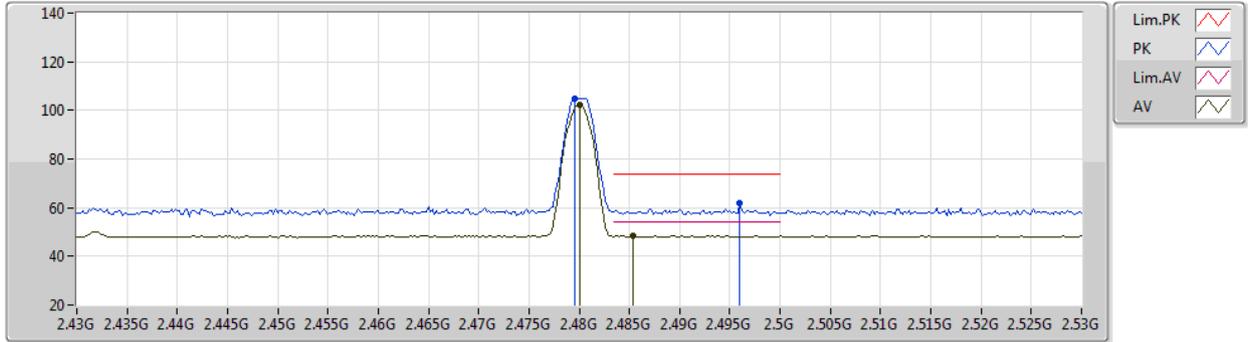


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	96.09	Inf	-Inf	31.82	3	Vertical	187	2.44	-	64.27	27.44	4.38	-
AV	2.4854G	48.30	54.00	-5.70	31.82	3	Vertical	187	2.44	-	16.48	27.43	4.39	-
PK	2.4796G	98.65	Inf	-Inf	31.82	3	Vertical	187	2.44	-	66.83	27.44	4.38	-
PK	2.4908G	59.25	74.00	-14.75	31.81	3	Vertical	187	2.44	-	27.44	27.42	4.39	-

BT-LE(2Mbps)

16/08/2020

2480MHz_TX

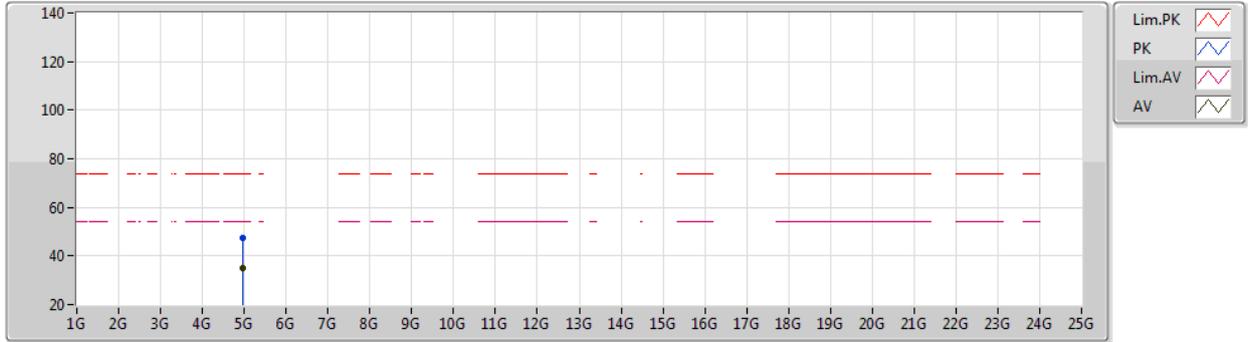


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	102.34	Inf	-Inf	31.82	3	Horizontal	86	2.35	-	70.52	27.44	4.38	-
AV	2.4854G	48.57	54.00	-5.43	31.82	3	Horizontal	86	2.35	-	16.75	27.43	4.39	-
PK	2.4796G	104.95	Inf	-Inf	31.82	3	Horizontal	86	2.35	-	73.13	27.44	4.38	-
PK	2.496G	61.72	74.00	-12.28	31.81	3	Horizontal	86	2.35	-	29.91	27.41	4.40	-

BT-LE(2Mbps)

16/08/2020

2480MHz_TX

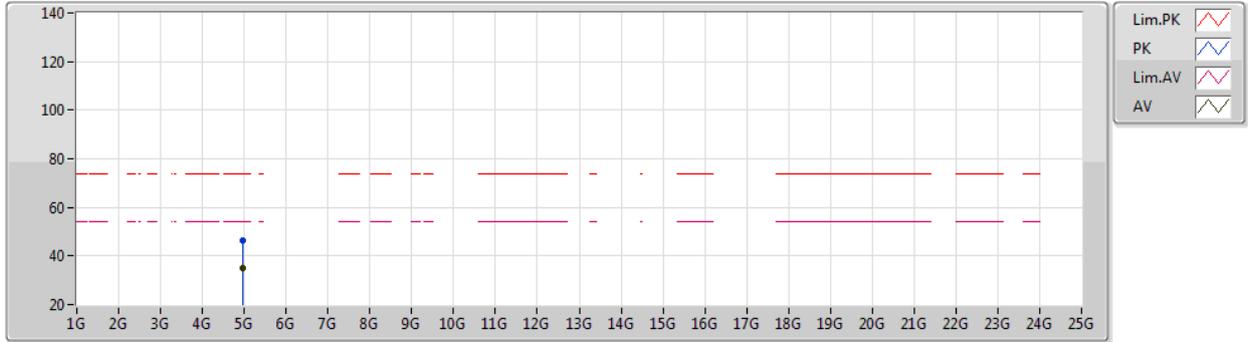


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95991G	34.86	54.00	-19.14	8.52	3	Vertical	265	1.50	-	26.34	31.20	6.66	29.34
PK	4.95993G	47.18	74.00	-26.82	8.52	3	Vertical	265	1.50	-	38.66	31.20	6.66	29.34

BT-LE(2Mbps)

16/08/2020

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	4.95923G	34.85	54.00	-19.15	8.52	3	Horizontal	32	2.62	-	26.33	31.20	6.66	29.34
PK	4.95919G	46.48	74.00	-27.52	8.52	3	Horizontal	32	2.62	-	37.96	31.20	6.66	29.34