

# Electromagnetic Compatibility Test Report

Test Report No: LIF 110521 Rev.2 Issued on: October 17, 2021

Product Name BCone Pool Unit

Tested According to FCC 47 CFR, Part 15, Subparts C Industry Canada ICES-003:07

# Tests Performed for Lifebuoy Ltd.

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**EMC Test Report: LIF 110521** 

Date: 17.10.2021, Rev. 2

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**QualiTech EMC Laboratory** 



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## **Test Report details:**

Test commencement date: 15.11.2020
Test completion date: 31.12.2020
Customer's Representative: Yuval Tepper
Issued on: 17.10.2021

#### **Revision details:**

Version	Date	Details/Reasons
Rev. 1	11.05.2021	-
Rev.2	17.10.2021	Test report updated to include correct model name and IC Canada ID

#### **Assessment information:**

This report contains an assessment of the EUT against Electromagnetic Compatibility based upon tests carried out on the samples submitted. The results contained in this report relate only to the items tested. Manufactured products will not necessarily give identical results due to production and measurement tolerances. QualiTech, EMC Lab does not assume responsibility for any conclusion and generalization drawn from the test results with regards to other specimens or samples of type of the equipment represented by test item.

The EUT was setup and exercised using the configuration, modes of operation and arrangements defined in this report only.

#### **Modifications:**

Modifications made to the EUT

None

**Modifications made to the Test Standard** 

None

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# **Summary of Compliance Status**

The EUT was tested according to the following test methods. Test results are given in full in section 4.

Test Case	Test Spec. Clause	Remarks
6dB Bandwidth	47 CFR §15.247 (a) (2),ANSI C63.10 Subclause 11.8.2 Option 2	Pass
Maximum Peak Output Power	47 CFR §15.247 (b) (3), ANSI C63.10 Subclause 11.9.1.1	Pass
DTS maximum power spectral density level in the fundamental emission	47 CFR §15.247 (e) (1),ANSI C63.10 Subclause 11.10.2	Pass
Conducted Spurious Emission in non-restricted frequency bands	47 CFR §15.247 (d),ANSI C63.10 Subclause 11.11.1(a)	Pass
Radiated Spurious Emissions, Restricted Bands	47 CFR \$15.247 (d), \$15.205, \$15.209(a), ANSI C63.10. Subclause 11.12.1	Pass
Band-edge compliance of RF Conducted Emission	47 CFR §15.247 (d), ANSI C63.10. Subclause 11.13.2	Pass
Antenna Connector Requirements	47 CFR §15.203	Pass
Power line Emission measurements	47 CFR §15.207	N/A



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#### 1. General

#### 1.1. **Referenced documents:**

FCC Part 15	Code of Federal Regulations (Washington, DC: Federal Communications Commission), Title 47, Part 15, Subpart C
ANSI C63.10:2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
ICES-003	Industry Canada

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#### 1.2. General Description

**BCone Pool Unit model: LBPABCPU01** 

**BCone Pool Unit FCC ID: 2AOXNBCPU1** 

BCone Pool Unit IC Canada ID: 27681-BCPU1

#### **EUT Description**

The Pool Unit consists of a RF transceiver, motion sensor and siren.

When the pool unit senses motion in the pool that can be related to a child fall into the pool, it triggers the siren and send and RF message over 433Mhz to the Home Unit.

#### **Description:**

Maximum Radiated Peak Output Power: 57.68 mW.

Frequency range: 2400-2483.5 GHz

#### **Type of Modulation:**

Protocol	Modulation	
Bluetooth	2GFSK	

#### **Antenna Specification:**

Type:

Antenna Gain: 2dBi in the range 2.4 - 2.5 GHz

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#### 2. Method of Measurements

#### 2.1. Radiated Emissions Measurements in the restricted bands:

For radiated emissions, which fall in the restricted bands the spectrum from 9 kHz to 25GHz was investigated following the guidelines in ANSI C63.10-2013, with the transmitter set to the lowest, middle and highest channel frequencies. Measurements were performed with peak detector and repeated averaged with VBW=10Hz. Only Peak detection plots are presented.

#### 2.2. Radiated Emission measurements:

Measurements were performed at a 3-meter measurement distance in the semi-anechoic chamber in order to evaluate the radiated electromagnetic interference characteristics of the EUT. The EUT was placed on a non-metallic table/support, 0.8m for frequency below 1GHz and 1.5m for frequency above 1GHz above the turntable, was configured, arranged and operated in a manner consistent with typical application and load conditions. The test program of exercising the equipment ensured that various parts of the EUT were exercised to permit detection of all EUT disturbances.

An appropriate antenna depending upon the frequency range, per ANSI C63.10-2013 was used. While the turntable was being rotated, the height of the antenna was scanned from 1 to 4m. The highest radiated emission was detected by manipulating the system cables to the worst-case position. This process was repeated for both antenna polarizations. The spectrum up to 40GHz was investigated for spurious emissions, using a band-reject filter where appropriate.

The amplitudes of worst-case emission were measured with the detector modes and resolution bandwidths over various frequency ranges according to the requirements of ANSI C63.10-2013.

#### 2.3. Power Line Emission measurements:

N/A

The EUT is battery operated.

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#### 3. Test Facility & Uncertainty of Measurement

#### 3.1. Accreditation/ Registration reference:

#### 3.2. Accreditation/ Registration reference:

A2LA Certificate Number: 1633.01FCC Designation Number :IL1006

- Industry Canada File Number: IC4808A-1

#### 3.3. Test Facility description

The tests were performed at the EMC Laboratory, QualiTech Division, ECI Telecom

Address: 30, Hasivim St., Petah Tikva, Israel.

Tel: +972-52-4006068

#### **Semi Anechoic Configuration:**

Measurement distance	3m	
Chamber dimensions	9.5m x 6.5m x 5.2m	
Antenna height	1 - 4m	
Shielding Effectiveness	Magnetic field ≥80dB at 15 kHz ≥90dB at 100 kHz Electric field >120dB from 1MHz to 1GHz >110dB from 1GHz to 10GHz	
Absorbing material	Ferrite tiles on the walls and ceiling Emerson and Cuming absorbing material in selected positions on the walls	
Normalized Site Attenuation measured at 5 positions	±3.9dB, 30MHz to 200MHz ±3dB, 200MHz to 1000MHz	
Transmission Loss measured at 5 positions, at 1.5m height	±3dB, 1GHz to 18GHz	

#### **3.4.** The measurement software used:

Software Name	Software Version
Test Software "TILE	Version 7.1.4.1

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#### **BLE: Report of Measurements and examinations** 4.

#### The minimum 6dB DTS bandwidth 4.1.

Reference document:	47 CFR §15.247 (a) (2),ANSI C63.10 Subclause 11.8.2 Option 2				
Test Requirements:	The minimum 6dB Bandwidth of DTS				
Operating conditions:	Under normal test conditions				
Method of testing:	Radiated				
S.A. Settings:	RBW: 100kHz, VBW: 300kHz, Span: 3MHz	Pass			
Hopping function:	Disabled				
Environment conditions:	Ambient Temperature: 24.3 °C	Relative Humidity: 49.8% Atmospheric Pressure 1011.4 hPa			
Test Result:	See below	See Plot 4.1.1 – 4.1.3			

#### **Test results:**

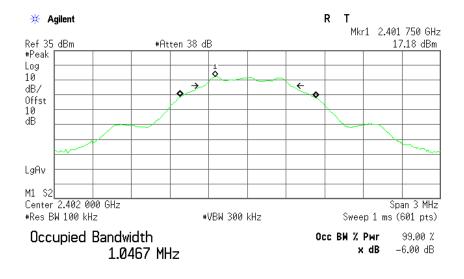
Channel	Frequency, [MHz]	6dB BW, [kHz]	LIMIT([kHz]	Margin	Pass/Fail
Low	2402	664.616	>500	164.616	Pass
Mid	2440	663.557	>500	163.557	Pass
High	2480	663.273	>500	163.273	Pass

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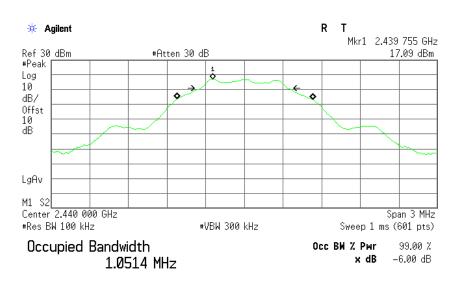
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Plot 4.1.1: 6 dB bandwidth test results, 2GFSK, channel 0 (Low) power setting 190, PHY 1M



Transmit Freq Error 5.773 kHz x dB Bandwidth 664.616 kHz

Plot 4.1.2: 6 dB bandwidth test results, 2GFSK, channel 19 (MID) power setting 190, PHY 1M



Transmit Freq Error 4.768 kHz 4683.557 kHz

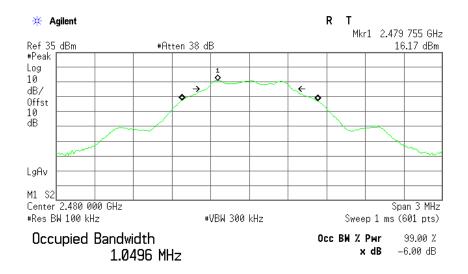
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Plot 4.1.3: 6dB bandwidth test results, 2GFSK, channel 39 (HIGH) power setting 190, PHY 1M



Transmit Freq Error 4.193 kHz x dB Bandwidth 663.273 kHz

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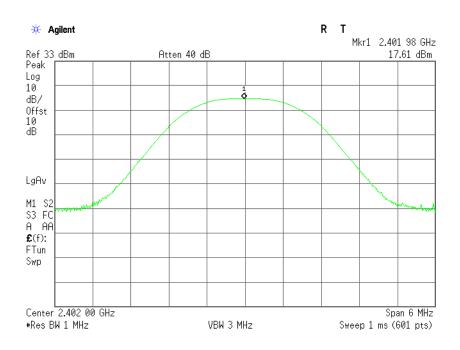
## 4.2. Maximum Peak Output Power

Reference document:	47 CFR §15.247 (b) (1), ANSI C63.10 Subclause 11.9.1.1				
Test Requirements:	The maximum peak output power shall not exceed 1Watt (30dBm)				
Operating conditions:	Under normal test conditions				
Method of testing:	Conducted				
S.A. Settings:	RBW: 1MHz, VBW: 3MHz,	Pass			
Hopping function:	Disabled				
Environment conditions:	Ambient Temperature: 24.9°C	Relative Humidity: Atmospheric Pressure: 1011.4 hPa			
Test Result:	See below	See Plot 4.2.1 – Plot 4.2.3			

#### **Test results:**

Type of Modulation	Channel	Frequency, [MHz]	Max. Peak Conducted Output power [dBm]	Limit, [dBm]	Delta, [dB]	Pass/ Fail
	Low 0	2.402	17.61	30.00	-12.39	Pass
2GFSK/BLE	Mid 19	2.440	17.33	30.00	-12.67	Pass
	High 39	2.480	17.01	30.00	-12.99	Pass

Plot 4.2.1: Maximum Peak Output Power test results, 2GFSK, channel 0 power setting 190, PHY 1M

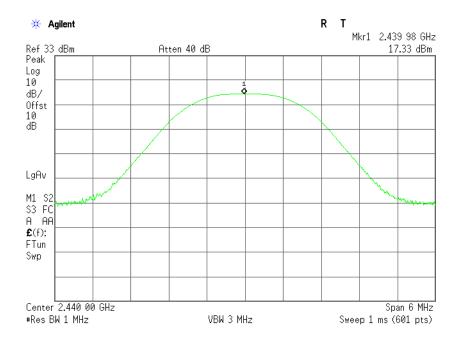


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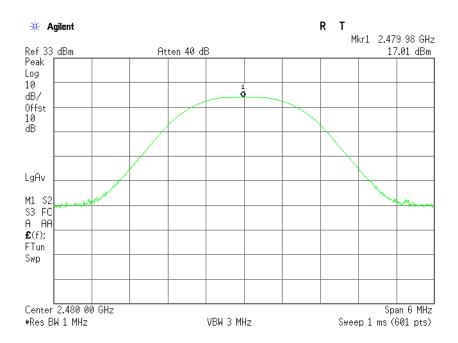
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Plot 4.2.2: Maximum Peak Output Power test results, 2GFSK, channel 19 power setting 190, PHY 1M



Plot 4.2.3: Maximum Peak Output Power test results, 2GFSK, channel 39 power setting 190, PHY 1M



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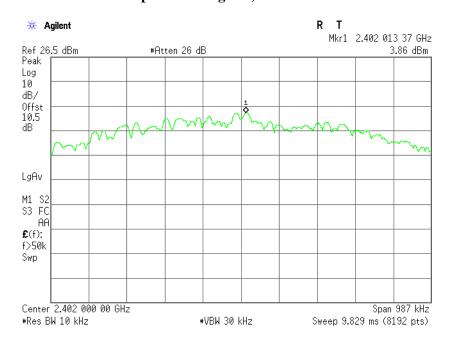
#### 4.3. DTS maximum power spectral density level in the fundamental emission

Reference document:	47 CFR §15.247 (e) (1), ANSI C63.10 Subclause 11.10.2					
Test Requirements:	DTS maximum power spectral density	DTS maximum power spectral density level in the fundamental emission				
Operating conditions:	Under normal test conditions					
Method of testing:	Radiated					
S.A. Settings:	RBW: 3KHz, VBW: 9.1KHz,	Pass				
Hopping function:	Disabled					
Environment conditions:	Ambient Temperature: 24.9°C	Relative Humidity: 50.1%	Atmospheric Pressure: 1011.4 hPa			
Test Result:	See below	See Plot 4.3.1 – Plot 4.3.3				

#### **Test results:**

Channel	Frequency, [MHz]	Max conducted power spectral density [dBm]	Limit, [dBm]	Delta, [dB]	Pass/ Fail
Low	2.402	3.86	8.00	-4.14	Pass
Mid	2.440	2.05	8.00	-5.95	Pass
High	2.480	1.52	8.00	-6.48	Pass

Plot 4.3.1: DTS maximum power spectral density level in the fundamental emission, channel 0 power setting 190, PHY 1M

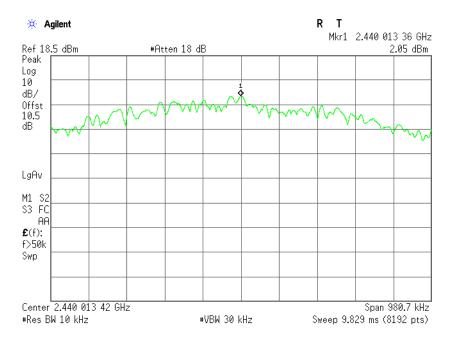


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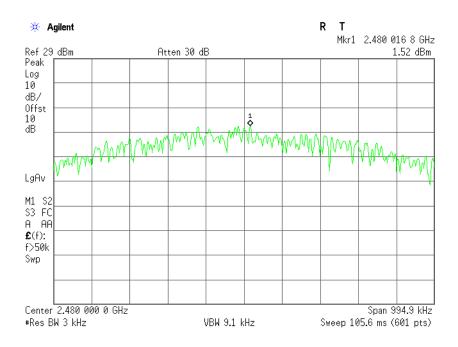
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Plot 4.3.2: DTS maximum power spectral density level in the fundamental emission, channel 19



Plot 4.3.3: DTS maximum power spectral density level in the fundamental emission, channel 39



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## 4.4. Spurious Emissions Conducted Measurements

Reference document:	47 CFR §15.247 (d), ANSI C63.10 Subclause 11.11.1(a)				
Test Requirements:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required.				
Operating conditions:	Under normal test conditions				
Method of testing:	Conducted	Pass			
S.A. Settings:	f >1GHz: Peak: RBW= 1MHz, VBW= 3MHz, Average: VBW= 1 kHz f<1GHz: RBW: 100kHz, VBW: 300kHz				
Hopping function:	Disabled (lowest, middle, and highest channels to be investigated)				
Environment conditions:	Ambient Temperature: 24.9°C	Relative Humidity: Atmospheric Pressure: hPa			
Test Result:	See below Plots 4.4.1 – Plot 4.4.10				

#### Test results below 1GHz:

Channel	Emission Frequency [MHz]	Detector Type	Antenna Polarization	Emission Level, [dBµV/m]	Ref.level, [dBµV/m]	Delta [dBc]	Limit, [dBc]	Pass/Fail
Low							• • •	_
Mid	All the emission are more 20dB below the limit					-20.0	Pass	
High								

#### Test results above 1GHz:

Channel	Emission Frequency [GHz]	Detector Type	Antenna Polarization,	Emission Level, [dBµV/m]	Reference Level,, [dBµV/m]	Delta, [dBc]	Limit Delta, [dBc]	Pass/Fail
Low								
Mid	All the emissions are more 20dB below the limit						-20.0	Pass
High								

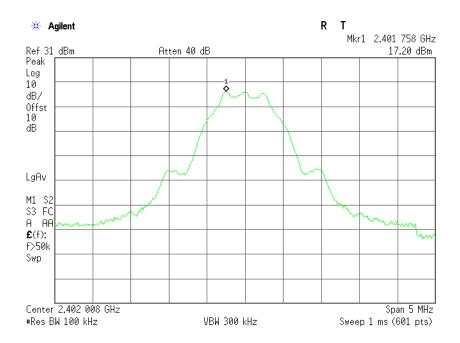
 $\textbf{Note} : Emission \ Level \ [dB\mu V/m] = Measured \ Emission \ [dB\mu V] + Correction-factor \ [dB\ (1/m)]$ 

Correction Factor = Antenna factor + Cable Loss + Filter I/L

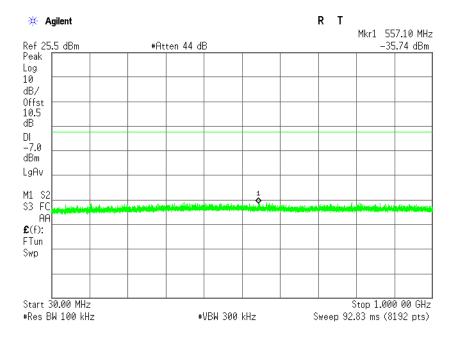
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Plot 4.4.1: The maximum PSD Reference level Vertical Polarization



Plot 4.4.2: Radiated Spurious Emission in 30 MHz – 1 GHz range, Fc = 2402 MHz,

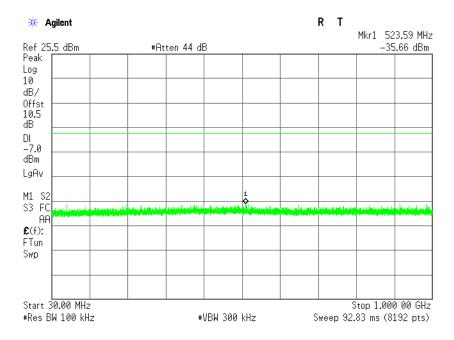


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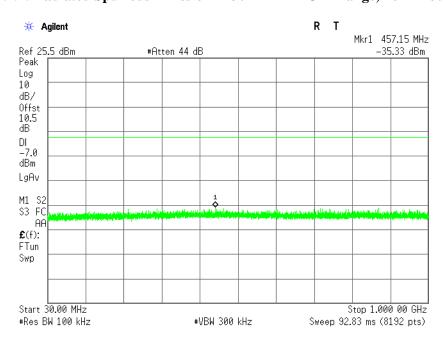
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Plot 4.4..3: Radiated Spurious Emission in 30 MHz - 1 GHz range, Fc = 2440 MHz,



Plot 4.4.4: Radiated Spurious Emission in 30 MHz – 1 GHz range, Fc = 2480 MHz,

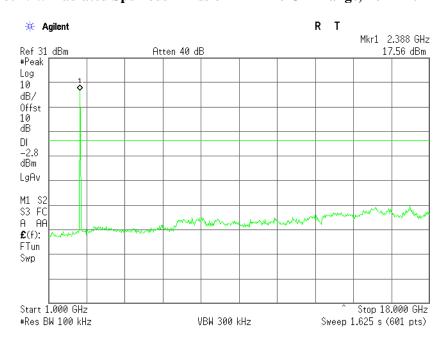


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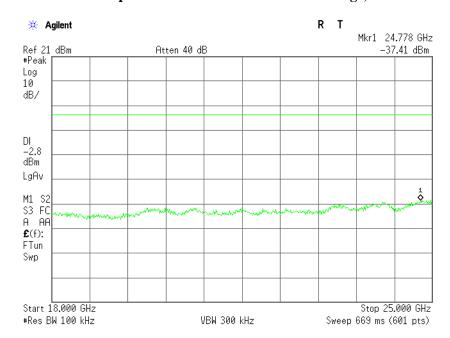
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Plot 4.4.5 Radiated Spurious Emission in 1 - 18 GHz range, Fc = 2402 MHz



Plot 4.4.6: Radiated Spurious Emission in 18 – 25 GHz range, Fc = 2402 MHz,

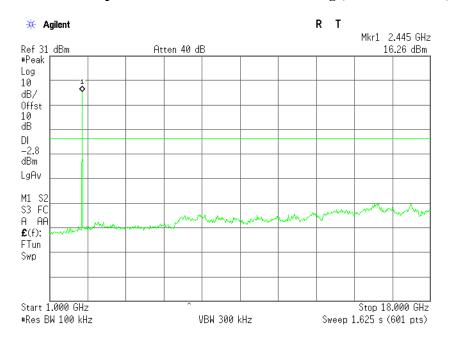


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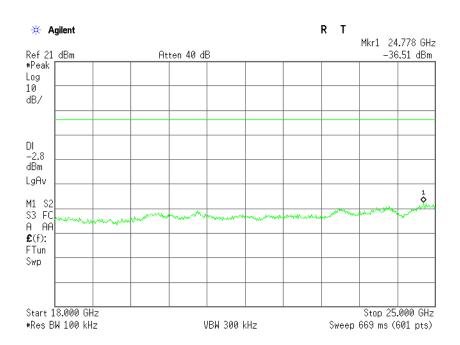
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Plot 4.4.7: Radiated Spurious Emission in 1 – 18 GHz range, Fc = 2440 MHz, Peak



Plot 4.4.8: Radiated Spurious Emission in 18 – 25 GHz range, Fc = 2440 MHz,

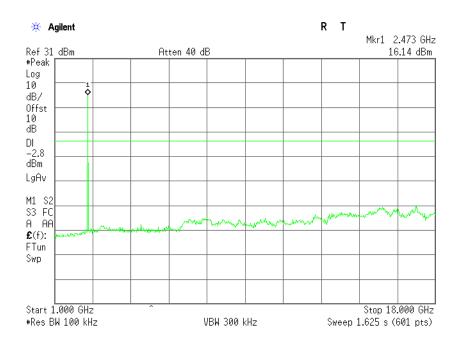


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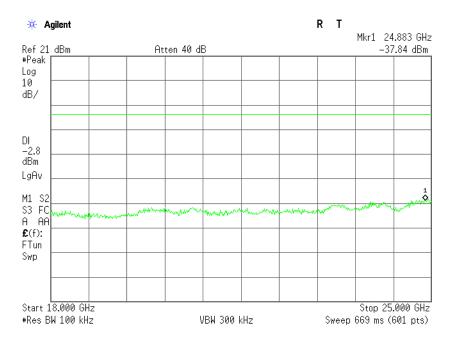
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Plot 4.4.9: Radiated Spurious Emission in 1 – 18 GHz range, Fc = 2480 MHz



Plot 4.4.10: Radiated Spurious Emission in  $18-25~\mathrm{GHz}$  range, Fc = 2480 MHz, Horizontal Polarization



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## 4.5. Spurious Emissions in Restricted Bands Radiated Measurements

Reference document:	47 CFR §15.247 (d) & §15.205& §15.209(a), ANSI C63.10. Subclause 11.12.1					
Test Requirements:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a) (See section 15.205(c).					
Operating conditions:	Under normal test conditions					
Method of testing:	Radiated					
S.A. Settings:	f >1GHz: Peak: RBW= 1MHz, VBW= 3MHz, Average: VBW= 1 kHz f<1GHz: RBW: 100kHz,VBW: 300kHz	Pass				
Hopping function:	Disabled/Enabled					
Environment conditions:	Ambient Temperature: 23.8°c	Relative Humidity: Atmospheric Pressure: hPa 51.6%				
Test Result:	See below	See Plot 4.5.1 – Plot 4.5.25				

#### **Test results:**

Channel	Emission Frequency, [GHz]	Detector Type	Antenna Polarization,	Emission Level, [dBµV/m]	Limit, [dBµV/m]	Delta, [dB]	Pass/Fail
	4.8039	Peak	Н	48.41	74.00	-25.59	Pass
	4.8039	Average	Н	43.05	54.00	-10.96	Pass
	9.607	Peak	Н	41.99	74.00	-32.01	Pass
T	9.607	Average	Н	41.99	54.00	-12.01	Pass
Low	4.8039	Peak	V	48.77	74.00	-25.23	Pass
		Average	V	43.80	54.00	-10.21	Pass
	9.607	Peak	V	43.00	74.00	-31.00	Pass
		Average	V	43.00	54.00	-11.00	Pass
	4.8799	Peak	Н	48.40	74.00	-25.60	Pass
NC.1		Average	Н	44.15	54.00	-9.85	Pass
Mid	4.8799	Peak	V	46.94	74.00	-27.06	Pass
		Average	V	43.93	54.00	-10.07	Pass
	4.0507	Peak	Н	48.71	74.00	-25.29	Pass
High	4.9597	Average	Н	44.90	54.00	-9.10	Pass
	4.060	Peak	V	46.99	74.00	-27.01	Pass
	4.960	Average	V	43.28	54.00	-10.72	Pass

Note: Radiated Emission [dB $\mu$ V/m] = Measured Emission [dB $\mu$ V] + Correction-factor [dB (1/m)] Correction Factor = Antenna factor + Cable Loss

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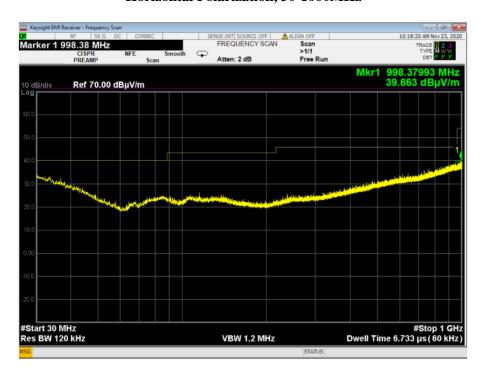
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Plot 4.5.1: Spurious Emissions in Restricted Bands, 9 k-30 MHz



Plot 4.5.2: Spurious Emissions in Restricted Bands, Single mode, Fc = 2402MHz, Horizontal Polarization, 30-1000MHz

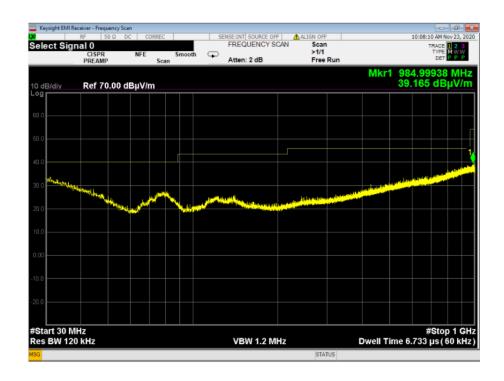


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Plot 4.5.3: Spurious Emissions in Restricted Bands, Single mode, Fc = 2402MHz, Vertical Polarization 30-1000MHz



Plot 4.5.4: Spurious Emissions in Restricted Bands, Single mode, Fc = 2440MHz, Horizontal Polarization, 30-1000MHz

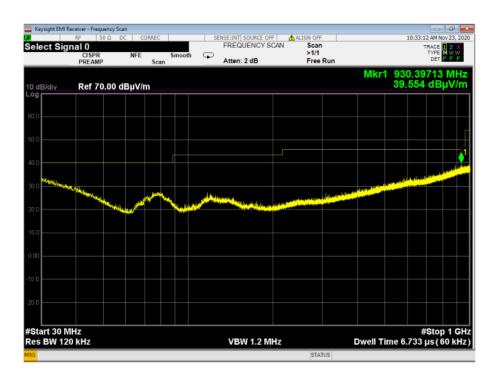


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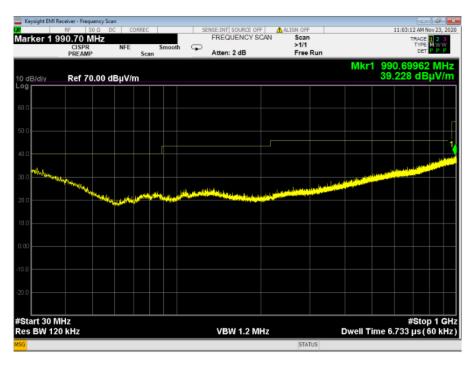
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Plot 4.5.5: Spurious Emissions in Restricted Bands, Single mode, Fc = 2440MHz, Vertical Polarization 30-1000MHz



Plot 4.5.6: Spurious Emissions in Restricted Bands, Single mode, Fc = 2480MHz, Horizontal Polarization, 30-1000MHz



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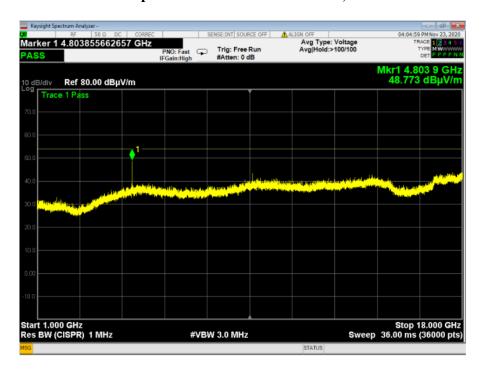
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Plot 4.5.7: Spurious Emissions in Restricted Bands, Single mode, Fc = 2480MHz, Vertical Polarization 30-1000MHz



Plot 3.5.8 Transmitter unwanted emissions in the spurious domain in 1.0 GHz – 18 GHz, Vertical polarization BLE Fc=2402 MHz,

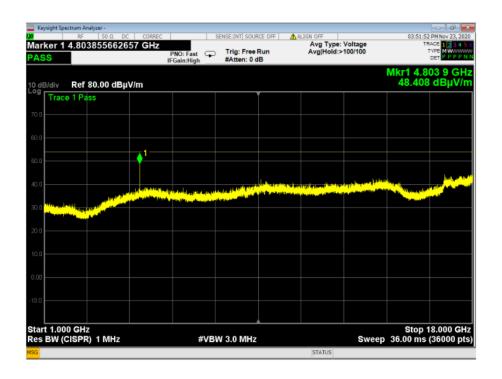


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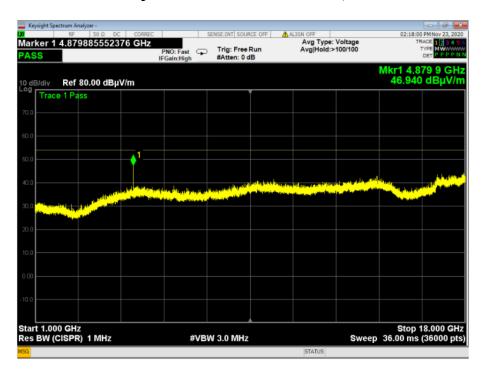
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Plot 3.5.9 Transmitter unwanted emissions in the spurious domain in 1.0 GHz – 18 GHz, Horizontal polarization BLE Fc=2402 MHz,



Plot 3.5.10 Transmitter unwanted emissions in the spurious domain in 1.0 GHz – 18 GHz, Vertical polarization BLE Fc=2440 MHz,

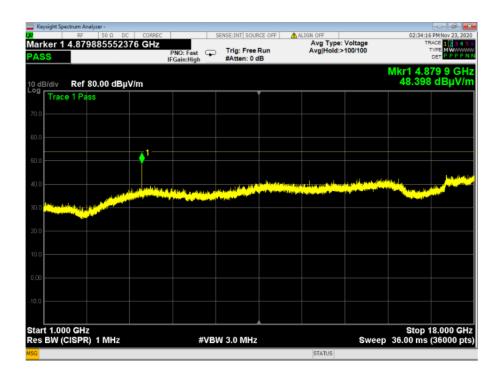


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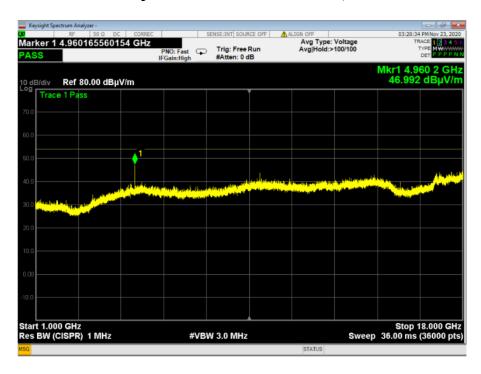
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Plot 3.5.11 Transmitter unwanted emissions in the spurious domain in 1.0 GHz – 18 GHz, Horizontal polarization BLE Fc=2440 MHz,



Plot 3.5.12 Transmitter unwanted emissions in the spurious domain in 1.0 GHz – 18GHz, Vertical polarization BLE Fc=2480 MHz,

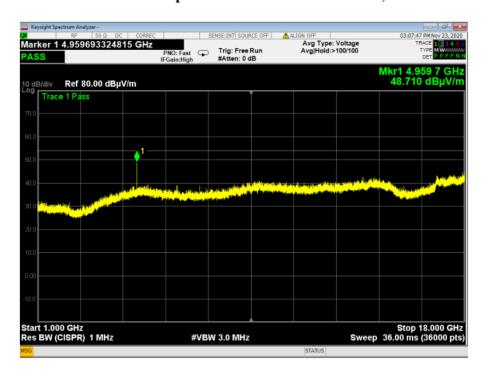


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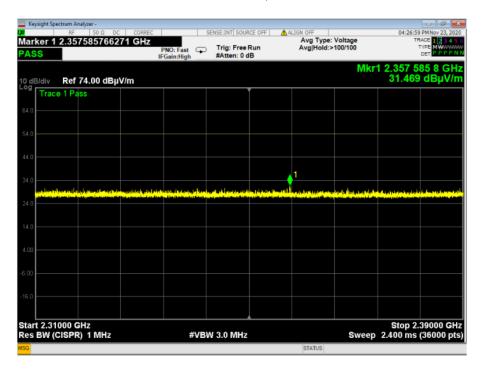
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Plot 3.5.13 Transmitter unwanted emissions in the spurious domain in 1.0 GHz – 18 GHz, Horizontal polarization- BLE Fc=2480 MHz,



Plot 4.5.14: Spurious Emissions in Restricted Bands, Single mode, Fc = 2402MHz, Horizontal Polarization, 2310-2390MHz

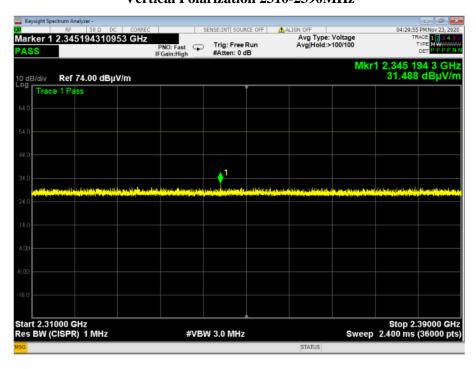


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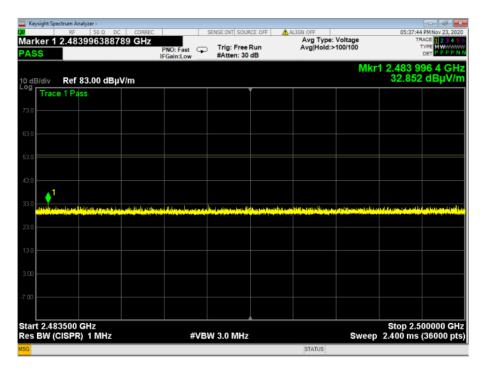
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Plot 4.5.15: Spurious Emissions in Restricted Bands, Single mode, Fc = 2402MHz, Vertical Polarization 2310-2390MHz



Plot 4.5.16: Spurious Emissions in Restricted Bands, Single mode, Fc = 2402MHz, Horizontal Polarization, 2483.5-2500MHz

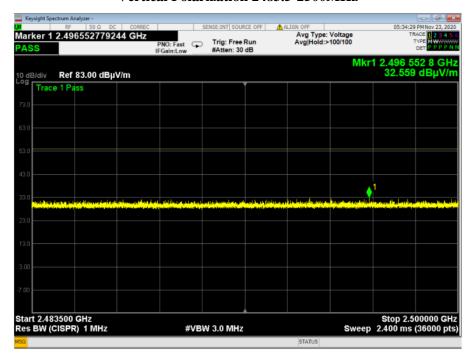


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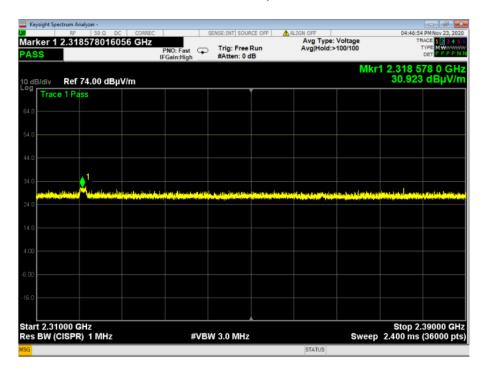
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Plot 4.5.17: Spurious Emissions in Restricted Bands, Single mode, Fc = 2402MHz, Vertical Polarization 2483.5-2500MHz



Plot 4.5.18 Spurious Emissions in Restricted Bands, Single mode, Fc = 2440MHz, Horizontal Polarization, 2310-2390MHz

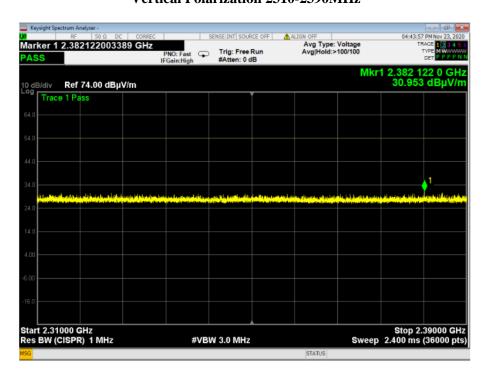


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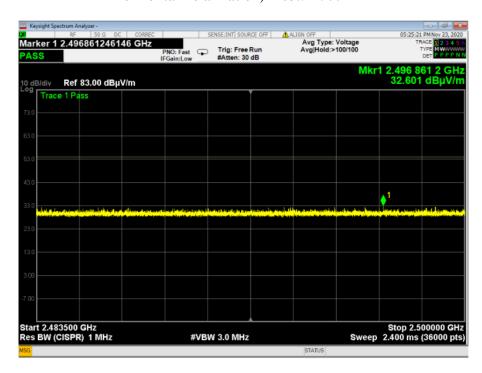
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Plot 4.5.19: Spurious Emissions in Restricted Bands, Single mode, Fc = 2440MHz, Vertical Polarization 2310-2390MHz



Plot 4.5.20: Spurious Emissions in Restricted Bands, Single mode, Fc = 2440MHz, Horizontal Polarization, 2483.5-2500MHz

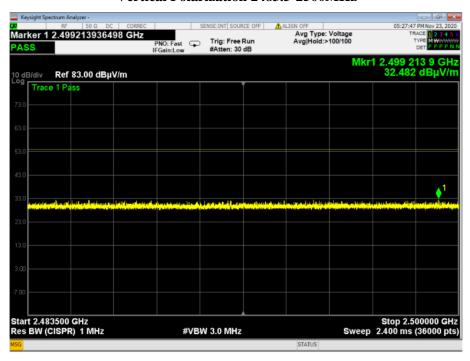


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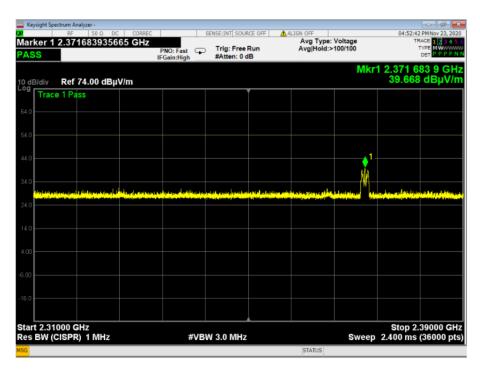
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Plot 4.5.21: Spurious Emissions in Restricted Bands, Single mode, Fc = 2440MHz, Vertical Polarization 2483.5-2500MHz



Plot 4.5.22: Spurious Emissions in Restricted Bands, Single mode, Fc = 2480MHz, Horizontal Polarization, 2310-2390MHz

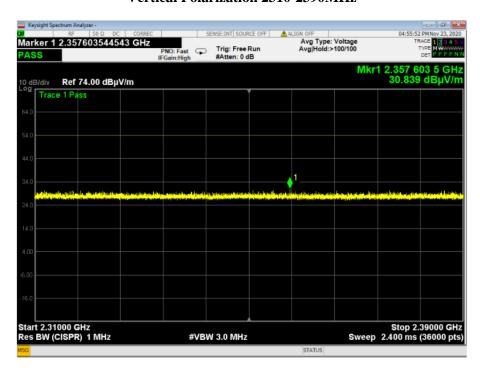


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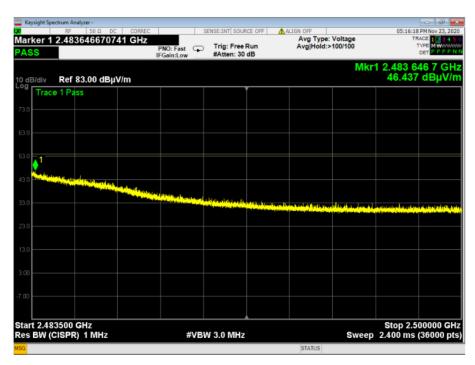
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Plot 4.5.23: Spurious Emissions in Restricted Bands, Single mode, Fc = 2480MHz, Vertical Polarization 2310-2390MHz



Plot 4.5.24: Spurious Emissions in Restricted Bands, Single mode, Fc = 2480MHz, Horizontal Polarization, 2483.5-2500MHz



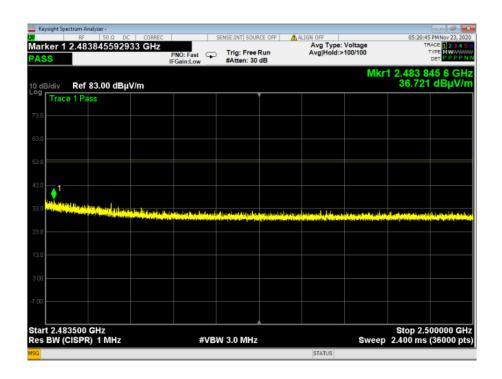
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Plot 4.5.25: Spurious Emissions in Restricted Bands, Single mode, Fc = 2480MHz, Vertical Polarization 2483.5-2500MHz



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#### **Band-edge compliance of RF conducted Emission 4.6.**

Reference document:	47 CFR §15.247 (d), ANSI C63.10:2013 section 11.13.2					
Test Requirements and limit:	In any 100 kHz bandwidth outside the frequency band in which the digitally modulated radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30dB instead of 20dB. Attenuation below the general limits specified in Section \$15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in \$15.205(a), must also comply with the radiated emission limits specified in \$15.209(a) (See \$15.205(c).					
Operating conditions:	Under normal test conditions					
Method of testing:	Radiated					
S.A. Settings:	RBW: 100kHz, VBW: 300kHz		Pass			
Hopping function:	NO					
Environment conditions:	Ambient Temperature: 23.6°C	Relative Humidity: Atmospheric Pressure: 1011.4 hPa				
Test Result:	See below	See Plot 4.6.1 – Plot 4.6.2				

#### **Test results**

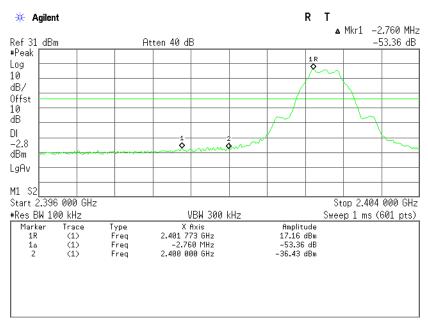
Channel	Measured emission, [dBc]	Limit, [dBc]	Margin(db)	Result
Low	53.36	20.00	33.36	Pass
High	53.56	20.00	33.56	Pass

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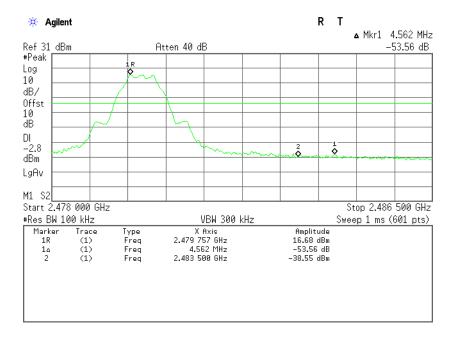
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Plot 4.6.1: Band-edge test results, GFSK, channel 0



Plot 4.6.2: Band-edge test results, GFSK, channel 39



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#### **Antenna Connector Requirements 4.7.**

Reference document:	47 CFR §15.203 RSS-Gen, Section 7.1.4
Test Requirements:	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with provisions of this section.
Verdict	Integral Antenna -Comply

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#### Appendix 5.

**Appendix A: Test Photographs** 

**Photograph 1: Radiated Emission Testing** 



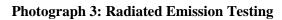
**Photograph 2: Radiated Emission Testing** 

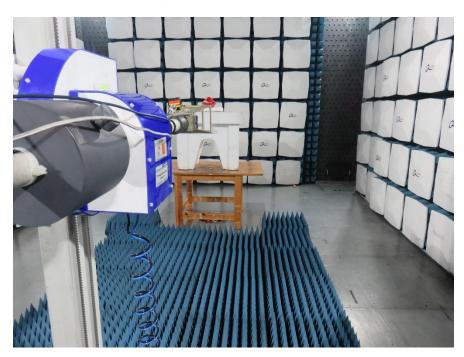


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**Photograph 4: Conducted Emission Testing** 



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## Appendix B: List of Measuring Equipment used:

Description	Manufacturer	Model	Serial No.	Last Cal	Cal Due
Temp & Hum Meter	Zico	Zi-9622	141101658	20-02-2020	20-08-2021
Anechoic new (large) chamber				11-02-2020	11-02-2022
Antenna, loop, 10 kHz to 30 MHz	EMCO	6502	3424	10-03-2020	10-03-2022
Bilog Antenna 30MHz - 1000MHz	Teseq	CBL 6141B	34119	18-03-2019	18-03-2022
Horn Antenna (EMM) 1-18GHz	A.R.A	DRG-118/A	17188	07-10-2020	07-10-2021
LNA 1-18GHz (New)	Spacek Labs	SL1018-56-5	17J29	08-01-2020	08-01-2021
MXE EMI RECEIVER 3Hz-44GHz	Keysight Technologies	N9038A	MY55420200	07-11-2019	07-08-2021
Spectrum Analyzer 3Hz-44GHz	Agilent	E4446A	MY43360126	14/01/2020	14/01/2022

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#### **Appendix C: Accreditation Certificate**



# **Accredited Laboratory**

A2LA has accredited

### QUALITECH

Petah-Tikva, Israel

for technical competence in the field of

## **Electrical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017

General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 22nd day of December 2020.

Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 1633.01 Valid to June 30, 2022

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

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End of the Test Report

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