



# REPORT

For

**RIMEX Supply Ltd.**

5929 274 Street  
Langley, B.C V4W 0B8, Canada

Date:	June 18, 2024
Report No.:	20.01.22248-1
Revision No.:	0
Project No.:	22248
Equipment:	Tire Pressure Measurement System
Model No.:	TRS-SENSOR-DRY /B TRS-SENSOR-DIA /B
FCC ID:	RHC-TRS-S200
IC ID:	4719A-TRSS200

ISO 17025 ACCREDITED

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205 – 8291 92 Street, Delta, BC  
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Phone: 604-247-0444  
Fax: 604-247-0442  
[www.labtestcert.com](http://www.labtestcert.com)

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Prepared by: LabTest Certification Inc.  
Date Issued: July 10, 2024  
Project No.: 22248



Client: RIMEX Supply Ltd.  
Report No.: 20.01.22248-1  
Revision No.: 0

## Abbreviations

For the present document, the following abbreviations apply:

AF: Antenna Factor  
AM: Amplitude Modulation  
AVG: Average  
BW: Bandwidth  
CAV: CISPR Average  
CDN: Coupling Decoupling Network  
EUT: Equipment Under Test  
GRP: Ground Reference Plane  
HCP: Horizontal Coupling Plane  
IHC: In House Calibration  
N/A: Not Applicable  
N/M: Not Measured  
OATS: Open Area Test Site  
PM: Pulse Modulation  
QP: Quasi-Peak  
RBW: Resolution Bandwidth  
SAC: Semi-Anechoic Chamber  
 $U_N$ : Nominal Voltage  
VBW: Video Bandwidth  
VCP: Vertical Coupling Plane

## Electromagnetic Compatibility (EMC) Test Report

Report Reference No	20.01.22248-1	
Tested by (+ signature)	Jack Qin	
Approved by (+ signature)	Zara Vali	
Testing Laboratory	LabTest Certification Inc.	
Address	Unit 205 – 8291 92ST, Delta, BC, V4G 0A4 Canada Unit 3128–20800 Westminster Hwy, Richmond, BC, V6V 2W3 Canada	
FCC site registration number	CA5970	
IC site registration number	5970A-2	
General Condition	<ol style="list-style-type: none"><li>1. This report is only referred to the item that has undergone the test.</li><li>2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.</li><li>3. This document is only valid if complete; no partial reproduction can be made without previous written permission of LabTest.</li><li>4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of LabTest.</li></ol>	

## Document History

Revision	Date	Reason for Change	Author(s)
0	10 July 2024	Initial	Jack Qin

## Competences and Guarantees

We, LabTest, are a testing laboratory competent to carry out the tests described in this report. In order to ensure traceability to other national and international laboratories, we have a calibration and maintenance program for our measurement equipment.

We guarantee the reliability of the data presented in this report, which is the result of the measurements and tests performed on the item under test on the date and under the conditions stated in the report and is based on the knowledge and technical facilities available at LabTest at the time of the performance of all tests.

We are liable to the client for maintaining the confidentiality of all information related to the item under test and the results of our tests.

All results presented in this Test Report apply only to the particular item under test established in this document. LabTest does not make any claims of compliance for samples or variants that were not tested.

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## 1.0 Summary of Test Results

The tables provided outline the test items and their respective results, conducted following the standards specified in the quote "LC20415DJ02". It's important to mention that the tests listed may not cover all aspects of the standards' requirements. For test methods, the latest versions are referenced unless otherwise stated.


The tests listed in the table below were conducted in accordance with the standards: FCC §15.249, §15.203, §15.215, §1.1310 and ISSED RSS-210 Issue 10, RSS-Gen Issue 5, RSS-102 Issue 6

Test Item	Applicable Rules Part No.	Result
Antenna Requirements	FCC §15.203, RSS-Gen	Complies
Field strength of fundamental	FCC §15.249(a), RSS-210	Complies
Duty Cycle Correction	FCC Part 15.35(C) RSS-GEN,RSS-210	Complies
Radiated Spurious Emissions	FCC §15.249, §15.205, RSS-210, RSS-Gen	Complies
20dB Occupied Bandwidth	FCC §2.1051, §15.215	Complies
99% Occupied Bandwidth	FCC §2.1049, RSS-Gen	Complies
Band Edge	FCC §15.249, RSS-210	Complies
Frequency Stability	FCC §15.215, RSS-Gen	Complies
RF Exposure Evaluation	FCC §1.1310; RSS-102	Complies

Test Conditions			
Measurement uncertainties	<p>For all measurements where guidance for the calculation of the instrumentation uncertainty of a measurement is specified in CISPR 16-4-2/EN55016-4-2, IEC/EN 61000-4 series or a product standard, the measurement instrumentation uncertainty has been calculated and applied in accordance with these standards.</p> <p>Uncertainties have been calculated according to the LabTest internal document, DCN. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%</p> <p>Refer to the Annex 1 for further information.</p>		
Environmental reference conditions	<p>The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment.</p> <p>The climatic conditions during the tests were within the following limits:</p>		
	Temperature	Humidity	Atmospheric pressure
	15 °C – 35 °C	30 % - 60 %	86 kPa – 106 kPa
	<p>If explicitly required in the basic standard or applied product standard the climatic values are recorded and documented separately in this test report.</p>		
Test date	June 13, 2024 to May 25, 2024		

## 2.0 General Information

### 2.1 General description of EUT

Equipment Under Test	Tire Pressure Measurement System (TPMS)
Description	TPMS (Tire Pressure Monitoring System) sensor for use with TyreSense GEN3 and GEN4 controllers.
Model Number	TRS-SENSOR-DRY /B TRS-SENSOR-DIA /B
Serial Number	TBD
Manufacturer	RIMEX Supply Ltd.
Address	5929 274 Street, Langley, B.C V4W 0B8, Canada
Trademark	
Input Power	Battery powered for self-powered tests. 3.6VDC for voltage-controlled tests.
Software/Firmware	5.4
Maximum clock frequency	4Mhz CPU Crystal. 26Mhz Transmitter Crystal. 38400bps Transmit baud rate
EUT FCC ID	RHC-TRS-S200
EUT IC ID	4719A-TRSS200
Transmitter carrier frequency	916.48MHz
Dimensions (W x H x D)	TRS-SENSOR-DRY /B: 78mm 24mm 41mm TRS-SENSOR-DIA /B: 63mm 44mm 63mm
EUT Picture	



Note: The two products are the same circuit board. The transmitter antenna is a PCB trace antenna. TRS-SENSOR-DRY /A has a 1000mA battery. TRS-SENSOR-DIA /A has a 1700mA battery.

## 2.2 The environment(s) in which the EUT is intended to be used

No	Residential (domestic) environment.
Yes	Commercial and light-industrial environment.
Yes	Industrial environment.

## 2.3 Operating modes and functional performance

Mode	Description
1	DUT with batteries installed. <b>Storage/Idle mode</b> – Wake every 1 second to internally measure pressure/temperature. No intended transmissions.
2	<b>Flood mode</b> – Induce sensor with magnet for 5 seconds to trigger TX flood (0xAA/55 @ 38400) for 30 minutes. Induce sensor with magnet for 5 seconds to re-enter Storage/Idle mode. Note: Storage/Idle mode is a standard operating mode and is used for storage or shipment. Flood mode is for EMC testing only.
3	Normal mode – Wake every 1 second to internally measure pressure/temperature. Transmit data every 15 seconds. Data transmission is approx ~5ms Note: Normal mode is the standard operating mode when a sensor is installed in a tire.

Note: During the tests, the EUT was set to mode 2.

### 3.0 Intentional Emission Test Results

#### 3.1 Antenna Requirements

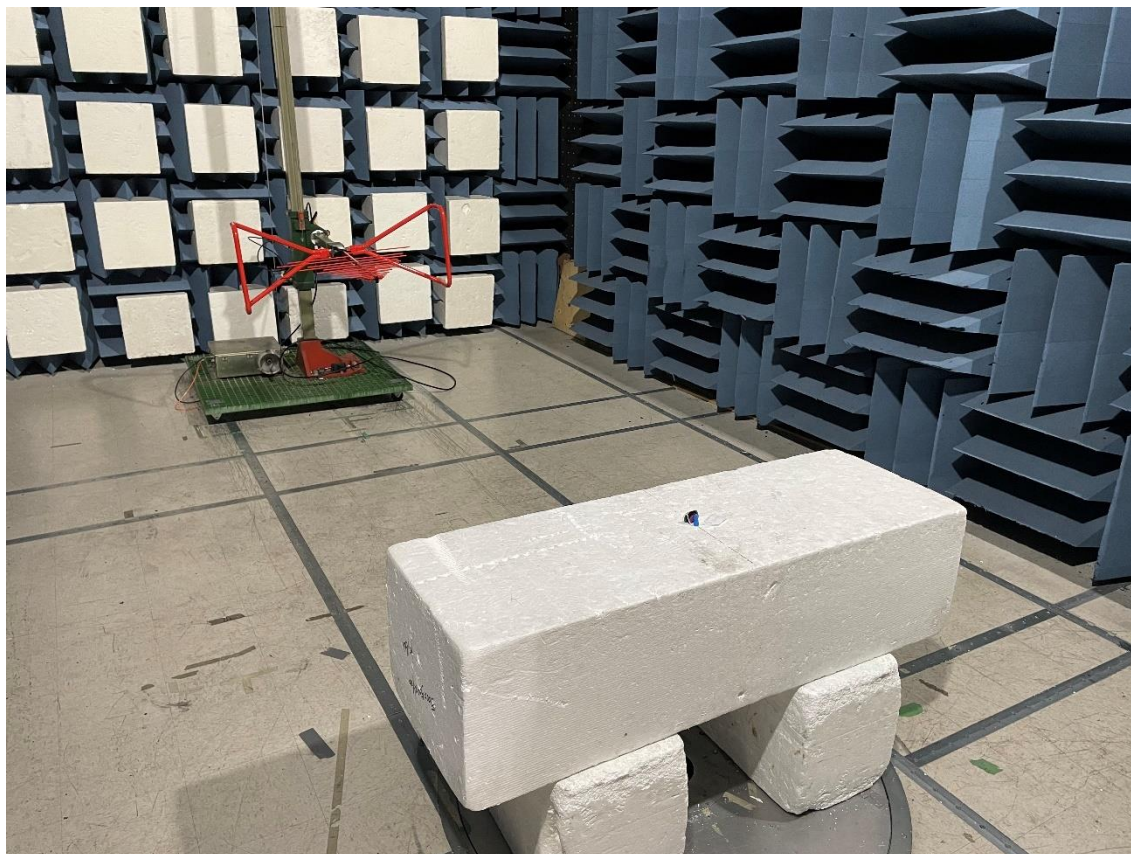
Rules Part No.	FCC §15.203, ISED RSS-Gen Issue 5
Test method	N/A
Test Engineer	Jack Qin
Test Location	EMC department at Richmond
Test Date	2024-05-15
Requirements	<p>“An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with 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 the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited.</p> <p>“The installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded.”</p>
Observation	The EUT is integrated with a PCB type antenna.
Result	Meets Requirements



### 3.2 Field strength of fundamental

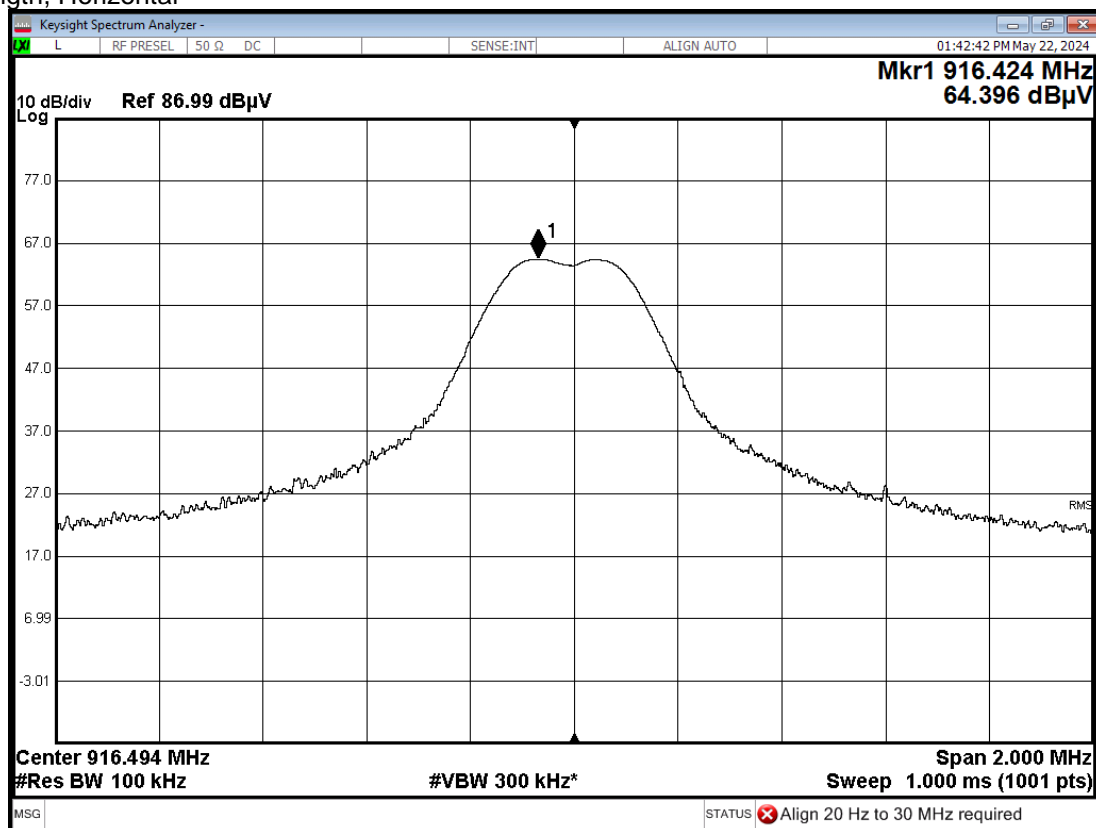
Rules Part No.	FCC §15.249(a), ISED RSS-210 B.10(a)	
Test method	ANSI C63.10 -2020	
Test Engineer	Jack Qin	
Test Location	EMC department at Richmond	
Test Date	2024-05-15	
Requirements	Frequency	Field Strength of Fundamental
	MHz	dBµV/m
	902-928	94
Result	Meets Requirements	

### Test Setup

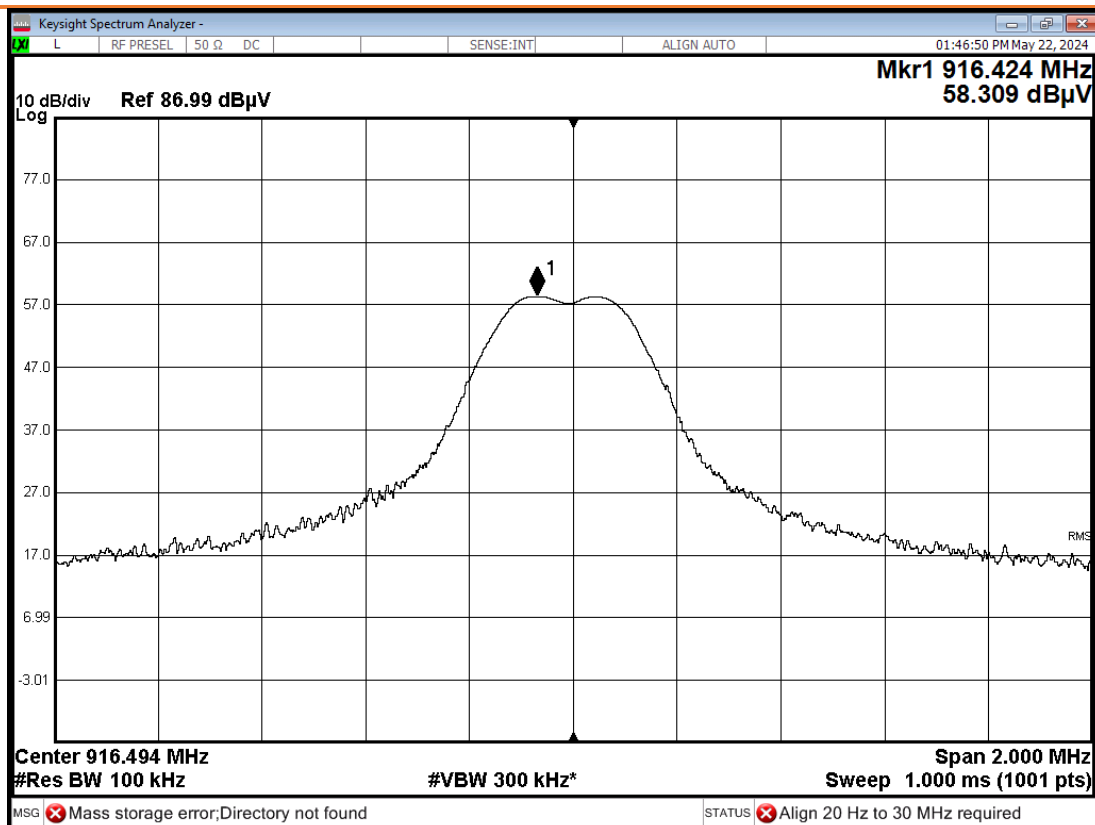


## Test Data

### Field Strength, Horizontal



### Field Strength, Vertical



Frequency	Antenna Polarization	Raw RMS	Antenna Factor	Cable Loss	Field Strength	Limit	Margin
MHz	H/V	dBuV	dB/m	dB	dBuV/m	dBuV/m	dB
916	H	64.396	26.9	3.05	90.221	94	3.779
	V	58.309	26.6	3.05	89.206	94	4.794

Field Strength = Raw RMS + Antenna Factor + Cable Loss

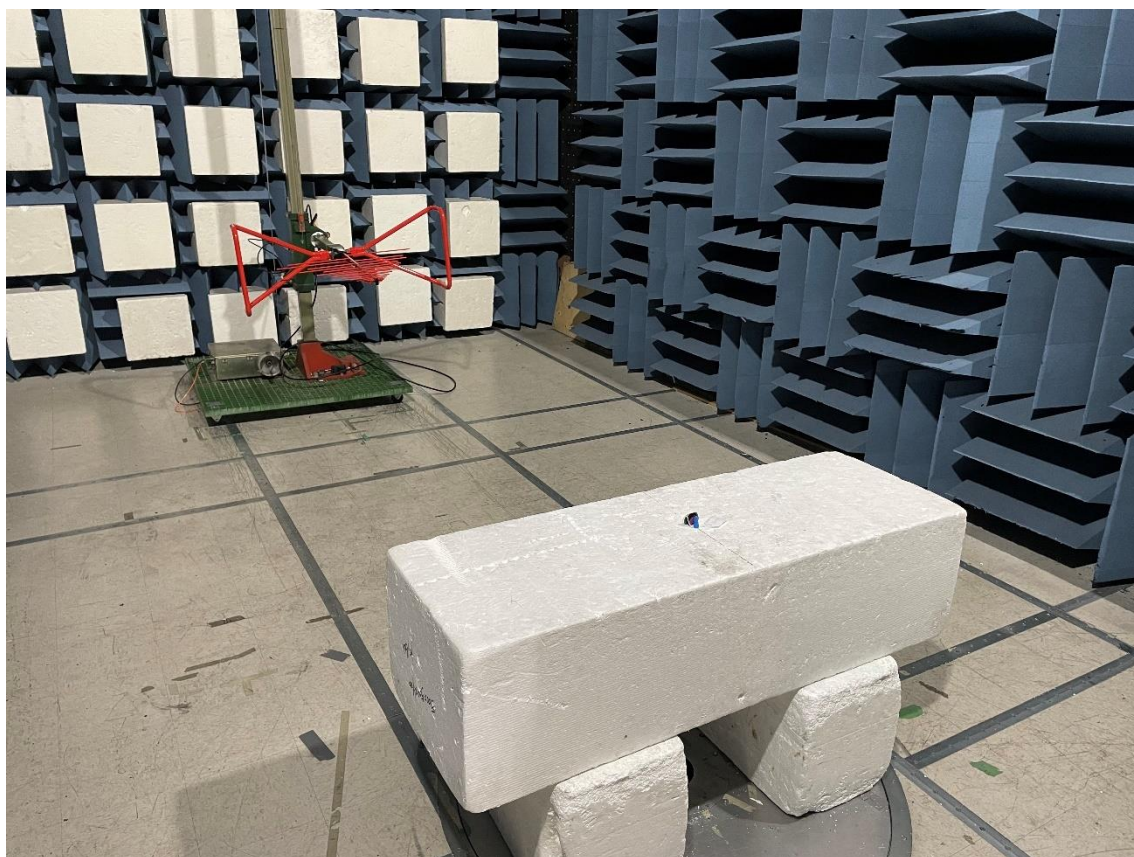
Margin = Limit - Field Strength

Note: The EUT was checked for its worst-case scenario in the pre-scan. The final measurement was conducted in the worst-case scenario.

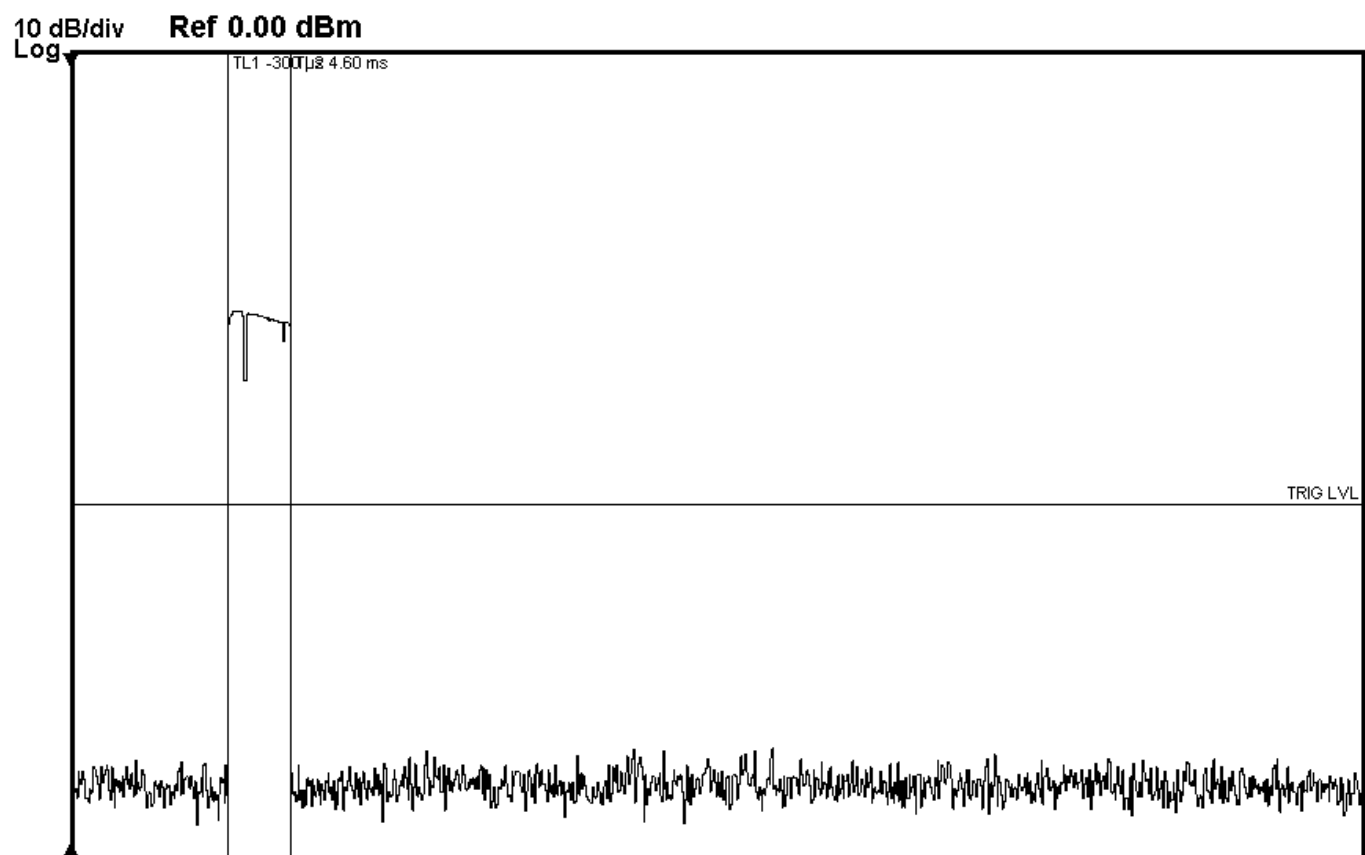
### 3.3 Duty Cycle Correction Factor

Rules Part No.	FCC Part 15.35 (d), FCC Part 15.209 (a) and ICES-003
Test method	ANSI C63.10 -2020
Test Engineer	Jack Qin
Test Location	EMC department at Richmond
Test Date	2024-05-15
Requirements	<p>The FCC regulations provide an allowance for correcting pulsed transmissions when the limits are expressed in terms of an average, and the average measurement may be derived from the peak pulse amplitude corrected for the duty cycle.</p> <p>As detailed in 47 CFR Part 15.35(c), the correction factor of a transmission is a 100 ms capture of a characteristic pulse train of “on time”. In the event that the pulse train is greater than 100 ms, the 100 ms pulse train captured must include a representation of worst-case “on time” pulses.</p>
Result	-26.8 dB

### Test Setup



## Test Data



Center 916.430000 MHz Span 0 Hz  
Res BW (CISPR) 120 kHz VBW 91 kHz Sweep 100.0 ms (1001 pts)

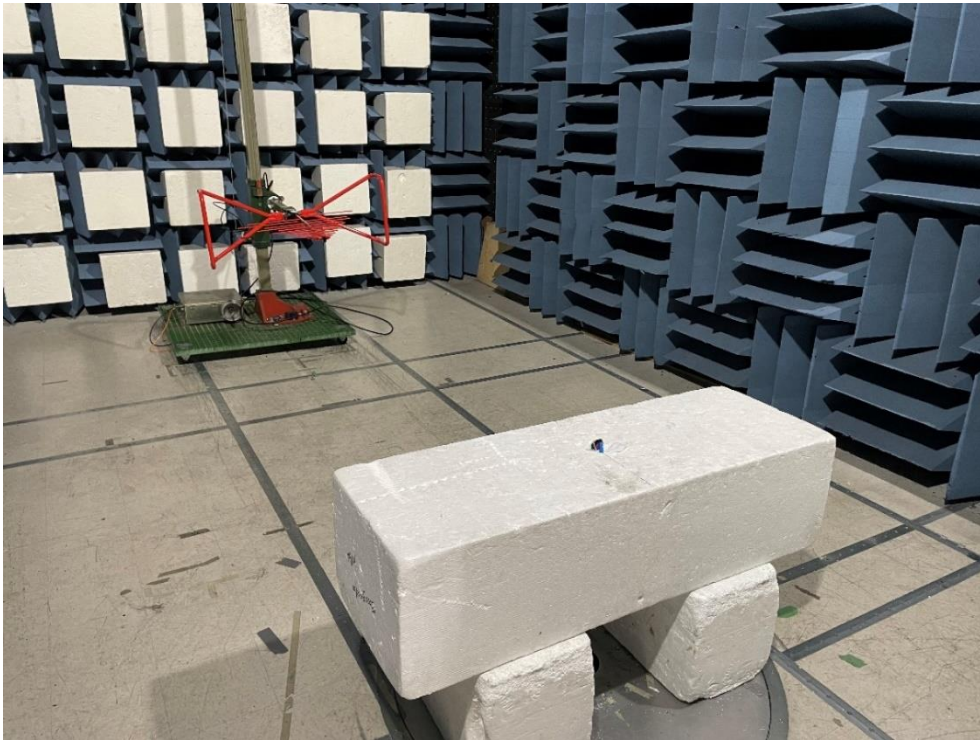
Duty Cycle Correction Factor =  $20 \times \log(4.6\text{ms}/100\text{ms}) = -26.8 \text{ dB}$

### 3.4 Radiated Spurious Emissions

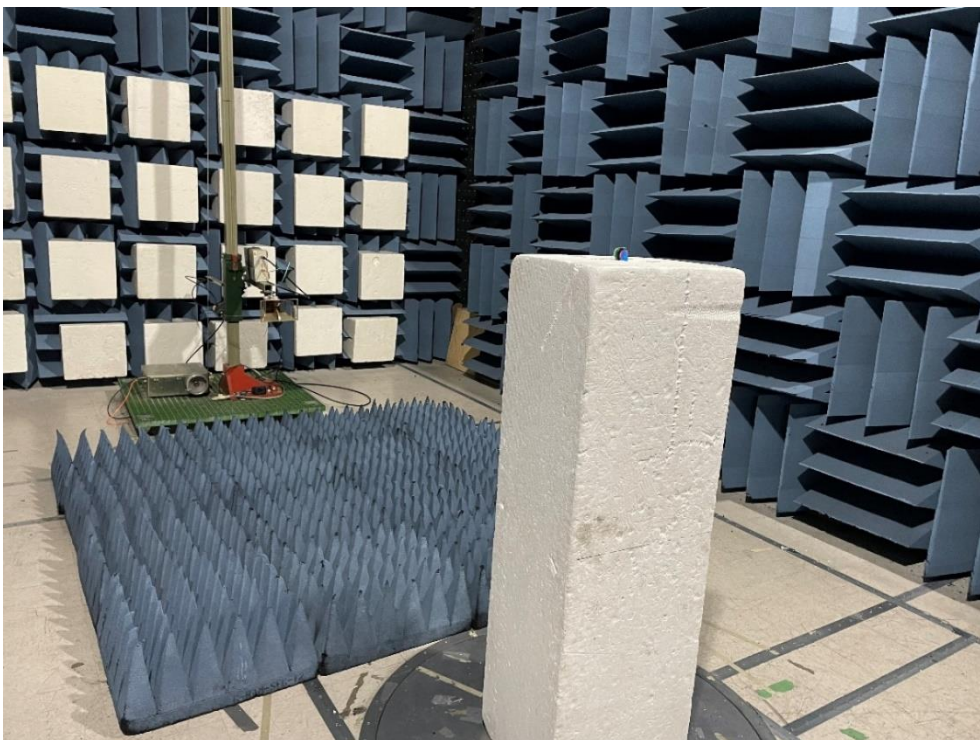
Standard	FCC §15.249 (d)(e), §15.205, IC RSS-210 § A2.9(b), RSS-Gen Issue 5																				
Test method	ANSI C63.10 -2020																				
Test Engineer	Jack Qin																				
Test Location	EMC department at Richmond																				
Test Date	2024-05-15																				
Requirements	<p>1) General field strength limits:</p> <table border="1"> <thead> <tr> <th>Frequency (MHz)</th><th>Field strength (dB <math>\mu</math>V/m at 3 m)</th></tr> </thead> <tbody> <tr> <td>30 – 88</td><td>40</td></tr> <tr> <td>88 – 216</td><td>43.5</td></tr> <tr> <td>216 - 960</td><td>46</td></tr> <tr> <td>Above 960</td><td>54</td></tr> </tbody> </table> <p>Note 1. The lower limit shall apply at the transition frequency  Note 2. Additional provisions may be required for cases where interference occurs</p> <p>2) Emissions radiated outside of the specified frequency bands, except for harmonic emissions, shall be attenuated by at least 50 dB below the level of the fundamental emissions or to the general field strength limits, whichever is less stringent.</p> <p>3) Field strength limits of harmonics:</p> <table border="1"> <thead> <tr> <th>Fundamental frequency</th><th>Field Strength (dB <math>\mu</math>V/m at 3 m)</th></tr> </thead> <tbody> <tr> <td>902-928 MHz</td><td>54</td></tr> <tr> <td>2400-2483.5 MHz</td><td>54</td></tr> <tr> <td>5725-5875 MHz</td><td>54</td></tr> <tr> <td>24.0-24.25 GHz</td><td>68</td></tr> </tbody> </table> <p>4) Unwanted emissions that fall into the restricted frequency bands shall comply with “General field strength limits.”</p>	Frequency (MHz)	Field strength (dB $\mu$ V/m at 3 m)	30 – 88	40	88 – 216	43.5	216 - 960	46	Above 960	54	Fundamental frequency	Field Strength (dB $\mu$ V/m at 3 m)	902-928 MHz	54	2400-2483.5 MHz	54	5725-5875 MHz	54	24.0-24.25 GHz	68
Frequency (MHz)	Field strength (dB $\mu$ V/m at 3 m)																				
30 – 88	40																				
88 – 216	43.5																				
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Above 960	54																				
Fundamental frequency	Field Strength (dB $\mu$ V/m at 3 m)																				
902-928 MHz	54																				
2400-2483.5 MHz	54																				
5725-5875 MHz	54																				
24.0-24.25 GHz	68																				
Result	Meets Requirements																				



## Test Setup



Test Setup for Measurements: 30 MHz – 1 GHz

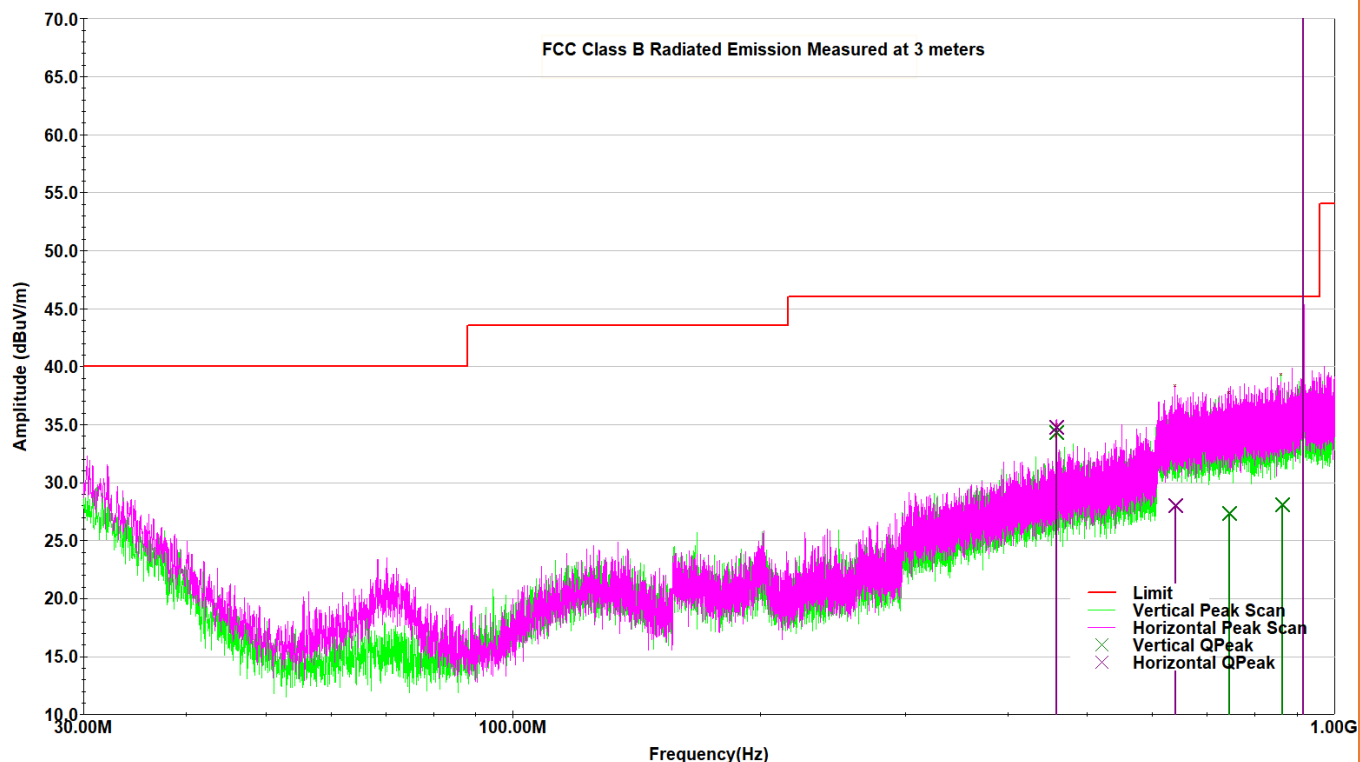


Test Setup for Measurements: Above 1 GHz

## Test Data

Note: 1) The EUT was checked for its worst-case scenario in the pre-scan. The final measurement was conducted in the worst-case scenario.

2) The spectrum was measured up to 25 GHz, only emissions within 20dB of the limit are reported.

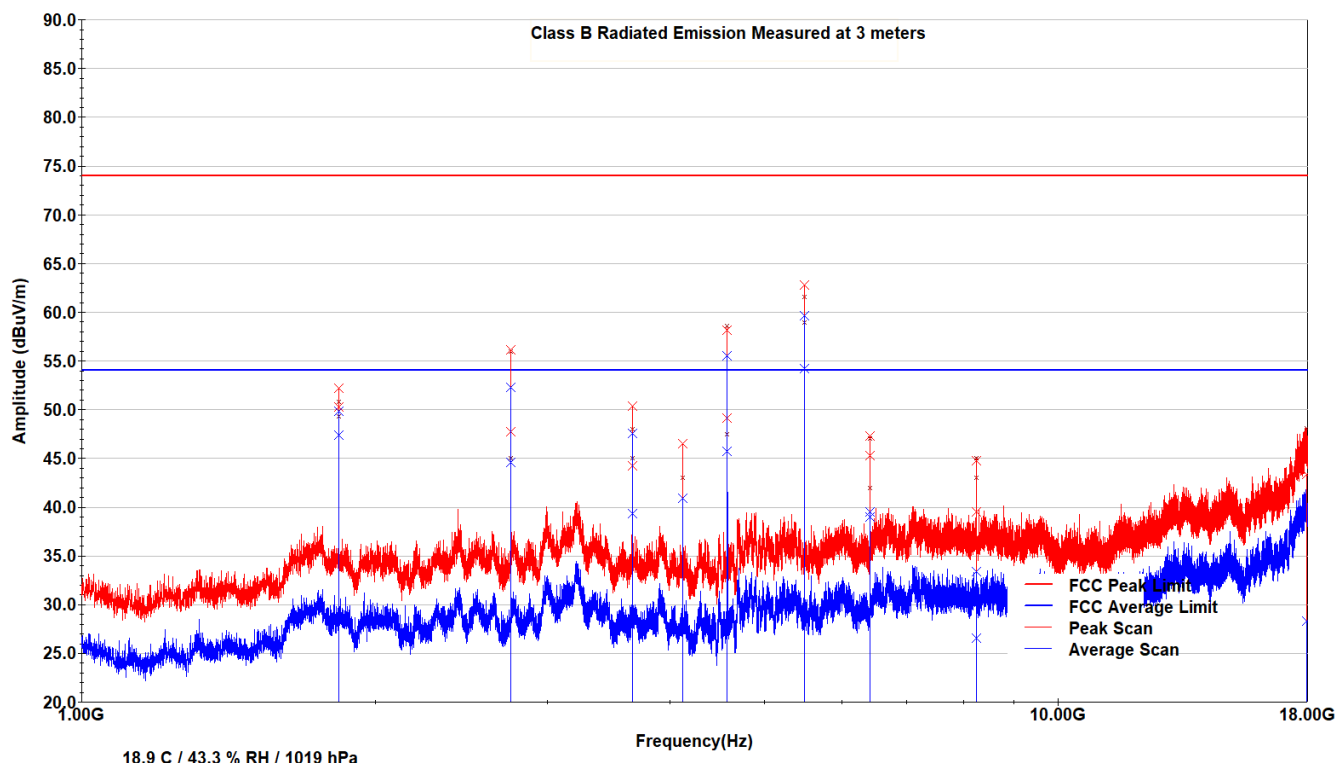


Frequency	Antenna Polarization	Raw Quasi-Peak	Antenna Factor	Correction Factor	Quasi Peak	Quasi Peak Margin	Quasi Peak Limit
MHz	V/H	dBuV	dB/m	dB	dBuV/m	dB	dBuV/m
458.3	V	11.3	20.9	2.1	34.3	11.7	46.0
744.1	V	-0.1	24.7	2.7	27.3	18.7	46.0
863.8	V	-0.9	26.0	2.9	28.1	17.9	46.0
458.2	H	11.4	21.3	2.1	34.8	11.2	46.0
640.6	H	1.1	24.4	2.5	28.0	18.0	46.0

Quasi Peak= RAW Quasi Peak+ Antenna Factor + Correction Factor

Quasi Peak Margin = Quasi Peak Limit – Quasi-Peak





Frequency	Antenna Polarization	Antenna Factor	Correction Factor	RAW Peak	Peak	Peak Margin	Peak Limit
MHz	V/H	dB/m	dB	dBuV	dBuV/m	dB	dBuV/m
1832.8	H	26.6	-26.6	52.16	52.18	21.82	74
2749.83	H	29.6	-26.1	52.62	56.17	17.83	74
3665.83	H	31.4	-26.1	45.08	50.39	23.61	74
4123.85	H	33.5	-24.5	37.49	46.5	27.5	74
4582.25	H	32.5	-24.7	50.41	58.18	15.82	74
5499.03	H	33.9	-24.2	53.03	62.76	11.24	74
6415.38	H	35.6	-23	32.7	45.29	28.72	74
8247.8	H	37.5	-21.8	23.84	39.53	34.47	74
1832.68	V	26.5	-26.6	50.36	50.24	23.76	74
2749.35	V	29.6	-26.1	44.23	47.7	26.3	74
3666.13	V	31.3	-26.1	39.01	44.21	29.79	74
4582.3	V	32.4	-24.7	41.44	49.13	24.88	74
5499.33	V	34	-24.2	49.81	59.61	14.39	74
6414.98	V	35.6	-23	34.73	47.32	26.68	74
8247.4	V	37.6	-21.8	29.01	44.75	29.25	74
17951.63	V	43.3	-10.2	10.24	43.36	30.64	74

Peak = RAW Peak + Antenna Factor + Correction Factor

Peak Margin = Peak Limit – Peak

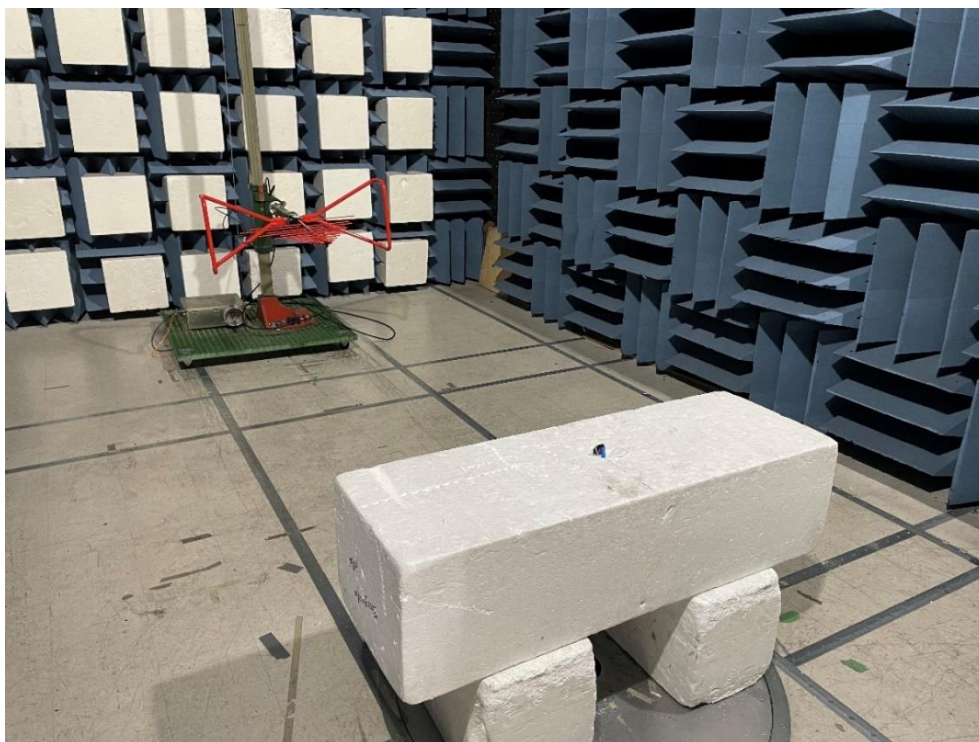
Frequency	Antenna Polarization	Peak	Duty Cycle	Average	Average Margin	Average Limit
MHz	V/H	dBuV/m	dB	dbuV/m	dB	dBuV/m
1832.8	H	52.18	-26.8	25.38	28.62	54
2749.83	H	56.17	-26.8	29.37	24.63	54
3665.83	H	50.39	-26.8	23.59	30.41	54
4123.85	H	46.5	-26.8	19.7	34.3	54
4582.25	H	58.18	-26.8	31.38	22.62	54
5499.03	H	62.76	-26.8	35.96	18.04	54
6415.38	H	45.29	-26.8	18.49	35.51	54
8247.8	H	39.53	-26.8	12.73	41.27	54
1832.68	V	50.24	-26.8	23.44	30.56	54
2749.35	V	47.7	-26.8	20.9	33.1	54
3666.13	V	44.21	-26.8	17.41	36.59	54
4582.3	V	49.13	-26.8	22.33	31.67	54
5499.33	V	59.61	-26.8	32.81	21.19	54
6414.98	V	47.32	-26.8	20.52	33.48	54
8247.4	V	44.75	-26.8	17.95	36.05	54
17951.63	V	43.36	-26.8	16.56	37.44	54

Average = Peak + Duty Cycle  
Average Margin = Average Limit – Average

### 3.5 Occupied Bandwidth

Standard	FCC §2.1051, §15.215 FCC §2.1049, RSS-Gen § 6.6
Test method	ANSI C63.10 -2020
Test Engineer	Jack Qin
Test Location	EMC department at Richmond
Test Date	2024-05-15
Requirements	Reporting Only
Result	20dB Occupied Bandwidth: 235.8 kHz 99% Occupied Bandwidth: 253.52 kHz

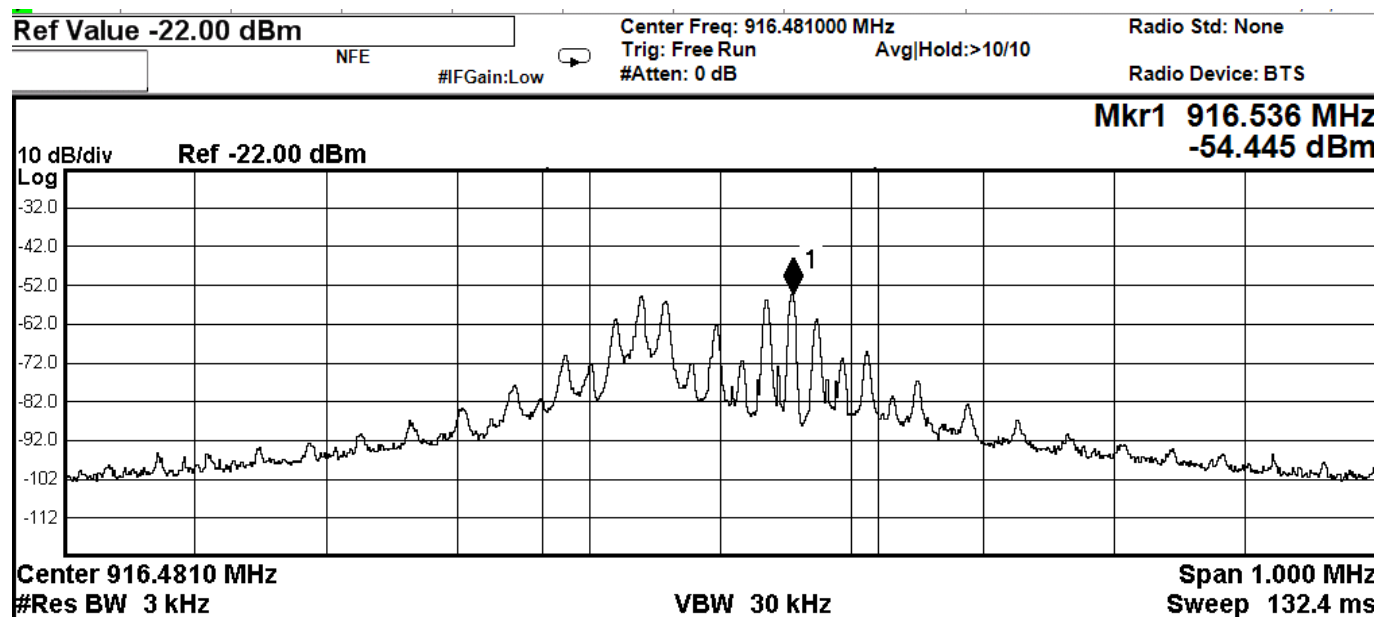
### Test Setup



Prepared by: LabTest Certification Inc.  
Date Issued: July 10, 2024  
Project No.: 22248

Client: RIMEX Supply Ltd.  
Report No.: 20.01.22248-1  
Revision No.: 0

## Test Data



Occupied Bandwidth	Total Power	-46.6 dBm
253.52 kHz		
Transmit Freq Error	-7.068 kHz	% of OBW Power 99.00 %
x dB Bandwidth	235.8 kHz	x dB -20.00 dB

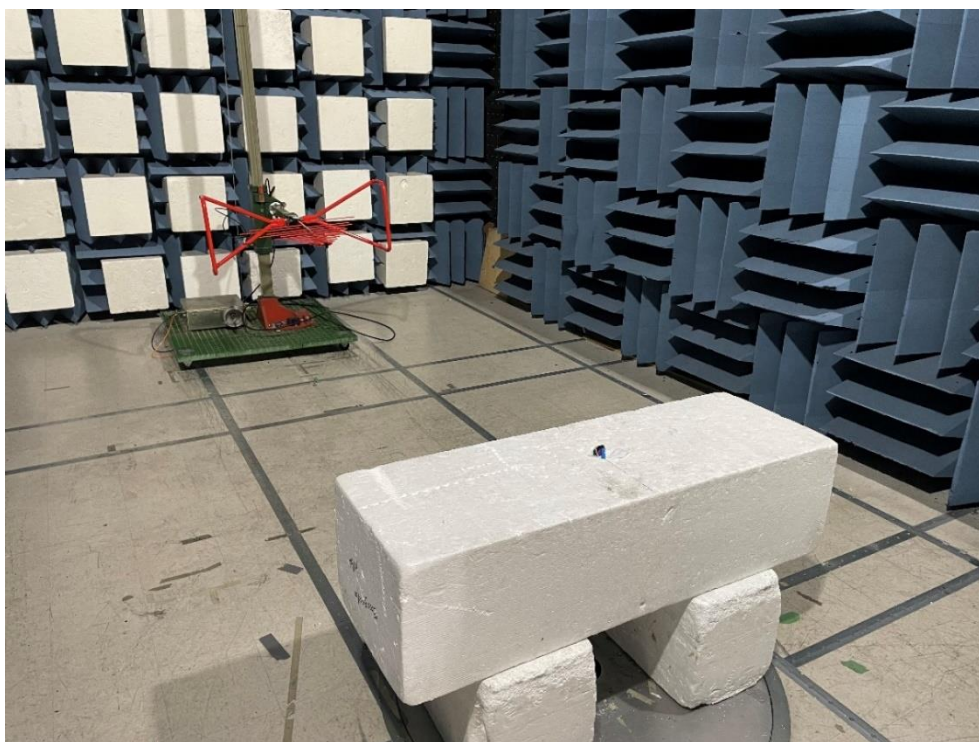
20dB Occupied Bandwidth: 235.8 kHz

99% Occupied Bandwidth: 253.52 kHz

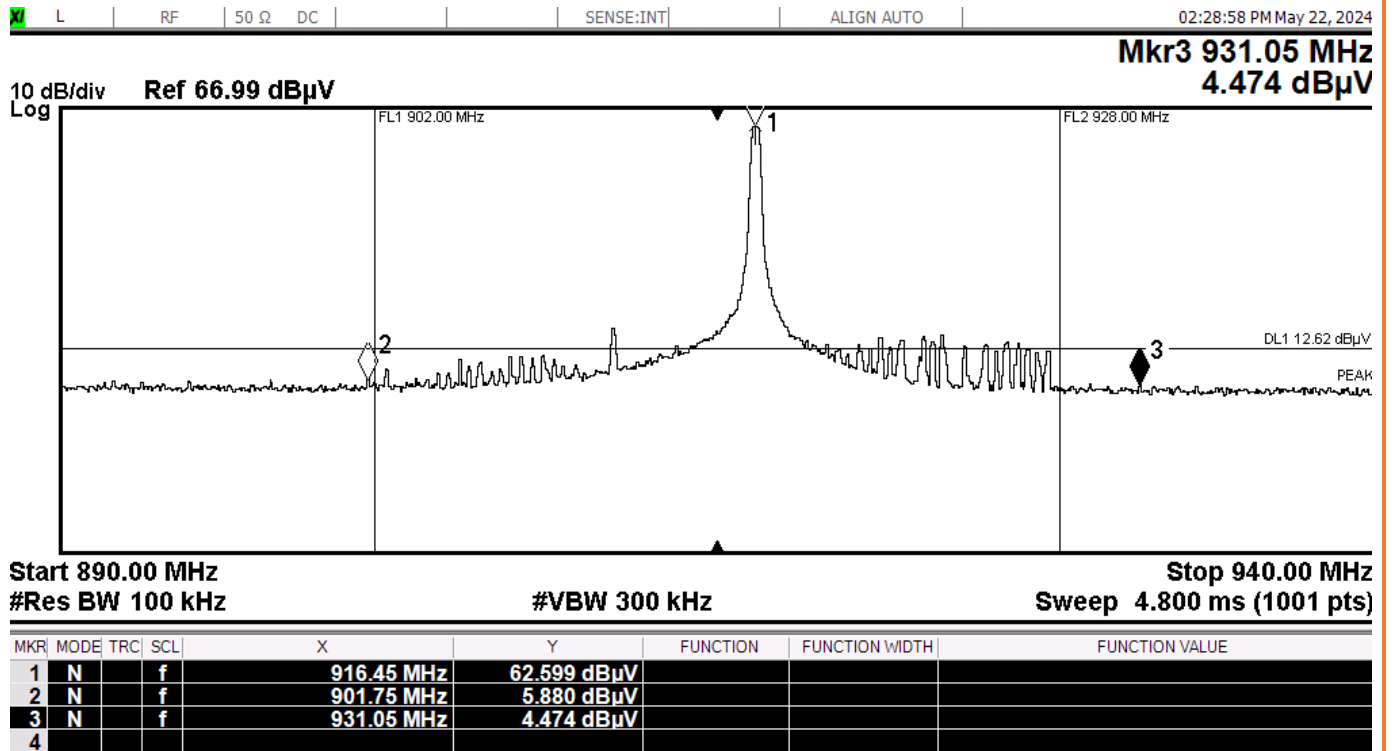
### 3.6 Band Edge

Rules Part No.	FCC §15.249(d), IC RSS-210 §A2.9(b)
Test method	ANSI C63.10 -2020
Test Engineer	Jack Qin
Test Location	EMC department at Richmond
Test Date	2024-05-15
Requirements	<p>As per §15.249(d): Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.</p> <p>As per RSS-210 F.1(e): Emissions radiated outside of the specified frequency bands, except for harmonic emissions, shall be attenuated by at least 50 dB below the level of the fundamental emissions or to the general field strength limits specified in RSS-Gen, whichever is less stringent.</p>
Result	Meets Requirements

### Test Setup



## Test Data



Note: The limit line is set at 50dB below the level of the fundamental.

### 3.7 Frequency Stability

Rules Part No.	FCC § 15.215, ISED RSS-Gen
Test method	ANSI C63.10 -2020
Test Engineer	Jack Qin
Test Location	EMC department at Delta
Test Date	2024-05-17
Requirements	<p>FCC 15.215: The 20dB bandwidth must remain within the designated frequency band over the expected variations in temperature and voltage range.</p> <p>Rss-Gen: Transmitter frequency stability for licence-exempt radio apparatus shall be measured in accordance with Section 6.11. For licence-exempt radio apparatus, the frequency stability shall be measured at temperatures of -20°C (-4°F), +20°C (+68°F) and +50°C (+122°F) instead of at the temperatures specified in Section 6.11. If the frequency stability of the licence-exempt radio apparatus is not specified in the applicable standard (RSS), measurement of the frequency stability is not required provided that the occupied bandwidth of the licence-exempt radio apparatus lies entirely outside the restricted bands and the prohibited TV bands of 54-72 MHz, 76-88 MHz, 174-216 MHz, 470-608 MHz and 614-806 MHz.</p>
Result	Meets Requirements

### Test Data

Temperature (°C)	Central frequency (MHz)	Field strength of fundamental (dBuV/m)
100	916.512485	N/A
80	916.517412	N/A
60	916.521355	N/A
40	916.525287	N/A
20	916.541067	N/A
0	916.546018	N/A
-20	916.549678	N/A
-30	916.552329	N/A

Voltage (V)	Central frequency (MHz)	Field strength of fundamental (dBuV/m)
4.2	916.541067	90.28
3.6	916.541067	90.18
3	916.541067	90.08
2.5	916.541067	90.08
2	916.541067	89.88
<1.8	No Function	

Note: During the tests, the EUT still met the standard requirements with the variation of frequency and output power.



### 3.8 RF Exposure Evaluation

#### FCC RF Exposure Evaluation (MPE) as per FCC §1.1310

##### Part 1.1310 Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposures</b>				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30–300	61.4	0.163	1.0	6
300–1500			f/300	6
1500–100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30–300	27.5	0.073	0.2	30
300–1500			f/1500	30
1500–100,000			1.0	30

f = frequency in MHz

\* = Plane-wave equivalent power density

NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

According to the above tables, at the frequency 916.48 MHz:

FCC limit: 916.48 /1500 = 0.61 (mW/cm<sup>2</sup>)

RF Exposure Evaluation Distance Calculation

Frequency	Field Strength at 3 m	EIRP		Power Density Limit Allowed (S)	Safe Distance(d)
MHz	dBuV/m	dBm	mW	mW/cm <sup>2</sup>	cm
916.48	90.2	-5.03	0.314	0.61	> 0.2

$$d = \sqrt{(EIRP/4\pi S)}$$

Where:

d = Distance to the center of radiation of the antenna (cm) for the allowable Power Density

S = Allowable Power Density Limit (mW/cm<sup>2</sup>)

EIRP = Equivalent isotopically radiated power (mW)

Conclusion: The EUT is installed inside a tire, with a distance greater than 0.2 cm. Therefore, the EUT meets the requirements.



## ISED RF Exposure Evaluation as per RSS-102 issue 6

### RSS-102 issue 6 Section 6.6 Field reference level exposure exemption limits

Field reference level (FRL) exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm (i.e. mobile devices), except when the device operates as follows:

- below 20 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 1 W (adjusted for tune-up tolerance)
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than  $4.49/f^{0.5}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance)
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than  $1.31 \times 10^{-2} f^{0.6834}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz
- at or above 6 GHz and the source-based, time-averaged maximum EIRP of the device is equal to or less than 5 W (adjusted for tune-up tolerance)

At the frequency 916.48 MHz:

ISED exposure exemption limit:  $0.0131 f^{0.6834} = 1.39$  W

The EUT EIRP: 0.314 mW (-5.03 dBm)

Conclusion: The EIRP of the EUT is 0.314 mW, which is less than 1390 mW. Therefore, the EUT meets the requirements of the exposure exemption limits.

## Annex 1 - List of test equipment

Equipment	Manufacturer	Model	LabTest ID	Calibration date	Calibration due*
EMC Analyzer	Agilent	E7405A	272	27-Sep-23	27-Sep-24
Broadband Antenna	Sunol	JB1	371	24-Oct-2022	24-Oct-2024
Horn Antenna	A.H Systems	SAS-571	227C	13-Sept-2022	13-Sept-2024
RF Preamplifier	Agilent	8449B	273	IHC <sup>6</sup>	IHC <sup>6</sup>
Used Software	Tile 7!, v7.3.0.6				

## Annex 2 – Measurement Uncertainties

The tables below show measurement uncertainties of the EMC test set-ups. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Emission tests	Uncertainty	U <sub>CISPR</sub> Limit
Radiated Emissions; 80MHz – 1000MHz	± 4.12 dB	5.34dB
Radiated Emissions; 1GHz – 18GHz	± 4.97 dB	6.32dB

## Annex 3 - ISO 17025 ACCREDITATION CERTIFICATE

For complete scope of certification use

[https://labtestcert.com/wp-content/uploads/2024/04/LabTest-Certification-Inc-Cert-and-Scope-File-03-12-2024\\_1710259791.pdf](https://labtestcert.com/wp-content/uploads/2024/04/LabTest-Certification-Inc-Cert-and-Scope-File-03-12-2024_1710259791.pdf)

Prepared by: LabTest Certification Inc.  
Date Issued: July 10, 2024  
Project No.: 22248

Client: RIMEX Supply Ltd.  
Report No.: 20.01.22248-1  
Revision No.: 0

**END OF REPORT**