



## **COMPLIANCE WORLDWIDE INC. TEST REPORT 237-21**

In Accordance with the Requirements of

Federal Communications Commission CFR Title 47 Part 15.249, Subpart C

Innovation, Science and Economic Development Canada **RSS 210, Issue 10** 

Low Power License-Exempt Radio Communication Devices Intentional Radiators

> Issued to **PICA Product Development, LLC 4 Ash Street Extension** Derry, NH 03038

for the Skyhawk Trapmate mini Models: SHMSEW, SHMSEG

## FCC ID: UOXSKYHAWKMSESEN2

Report Issued on June 30, 2021

Tested by

Reviewed by

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## 1. Scope

This test report certifies that the PICA Product Development Skyhawk Trapmate mini Models SHMSEW, SHMSEG, as tested, meets the FCC Part 15, Subpart C and Industry Canada RSS 210, Issue 10 requirements. The scope of this test report is limited to the test sample provided by the client, only in as much as that sample represents other production units. If any significant changes are made to the unit, the changes shall be evaluated and a retest may be required.

## 2. Product Details

2.1. Manufacturer:	PICA Product Development
2.2. Model Numbers:	SHMSEW, SHMSEG
2.3 Serial Number:	MSE21110004
2.4 Description of EUT:	Remote monitoring of animal traps
2.5 Power Source:	3 VDC (2 – AAA Batteries)
2.6 Hardware Revision:	Rev F
2.7 Software Revision:	N/A
2.8. Modulation Type:	Gaussian frequency shift keying

- **2.9. Operating Frequency:** 915 MHz
- 2.10. EMC Modifications: None

## 3. Product Configuration

## 3.1. EUT Hardware

Manufacturer	Model	Serial Number	Input Volts	Freq (Hz) Or DC	Description/Function
PICA Product Development	SHMSEG	MSE21110004	3	DC	Animal Trap Sensor

## 3.2. Support Equipment

Device	Manufacturer	Model	Serial No.	Comment	
None					

## 3.3. Cables

Cable Type	Length	Shield	From	То
None				





## 3. Product Configuration (continued)

#### 3.4. Operational Characteristics & Software

The EUT was configured for continuous transmit operation once the batteries are installed and the button is pushed.

#### 3.5. Block Diagram



## 4. Measurements Parameters

#### 4.1. Measurement Equipment Used to Perform Test

Device	Manufacturer	Model No.	Serial No.	Cal Due	Interval		
EMI Test Receiver, 9kHz - 7GHz <sup>1</sup>	Rohde & Schwarz	ESR7	101156	10/16/2022	2 Years		
EMI Test Receiver, 10 Hz - 7GHz <sup>1</sup>	Rohde & Schwarz	ESR7	101770	7/17/2022	2 Years		
Spectrum Analyzer, 2 Hz to 26.5 GHz <sup>2</sup>	Rohde & Schwarz	FSW26	102057	9/13/2021	3 Years		
Spectrum Analyzer, 9 kHz to 40 GHz <sup>3</sup>	Rohde & Schwarz	FSV40	100899	8/12/2022	2 Years		
Spectrum Analyzer 10 Hz – 40 GHz <sup>1</sup>	Rohde & Schwarz	FSVR40	100909	9/18/2022	2 Years		
Loop Antenna 9 kHz - 30 MHz	EMCO	6512	9309-1139	1/28/2022	3 Years		
Biconilog Antenna, 30 MHz - 2 GHz	Sunol Sciences	JB1	A050913	7/1/2023	2 Years		
Dbl Ridged Guide Antenna 1- 18 GHz	ETS-Lindgren	3117	00143292	3/21/2022	2 Years		
Horn Antenna, 18 GHz to 40 GHz	Com-Power	AH-840	101032	9/8/2021	3 Years		
Preamplifier, 1 GHz to 26.5 GHz	Hewlett Packard	8449B	3008A01323	9/11/2021	3 Years		
1.8 GHz - 9.3 GHz Passband Filter	Mini-Circuits	VHP-16	0341	3/23/2022	2 Years		
Band Reject Filter (Notch), 2.4 GHz	Micro-Tronics	BRM50702	150	3/23/2022	2 Years		
Digital Barometer	Control Company	4195	ID236	4/3/2021	3 Years		
Temperature Chamber	Associated Environmental	SD-308	10782	CNR	N/A		
<ul> <li><sup>1</sup> ESR7 Firmware revision: V3.48 SP3, Date installed: 09/30/2020</li> <li><sup>2</sup> FSW26 Firmware revision: V4.71 SP1, Date installed: 11/16/2020</li> <li><sup>3</sup> FSV40 Firmware revision: V2.30 SP4, Date installed: 05/04/2016</li> <li>Previous V3.48 SP2, installed 07/23/2020</li> </ul>							

<sup>4</sup> FSVR40 Firmware revision: V2.23 SP1, Date installed: 08/19/2016 Previous V2.23,

installed 10/22/2014.





## 4. Measurements Parameters (continued)

### 4.2. Software Used to Perform Test

Manufacturer	Manufacturer Software Description		Rev.	Report Sections
Compliance Worldwide	Test Report Generation Software	Test Report Generator	1.0	Used to process conducted emissions data

## 4.3. Measurement & Equipment Setup

Test Dates:	6/14/2021, 6/15/2021, 6/18/2021	
Test Engineers:	Sean Defelice	
Normal Site Temperature (15 - 35°C):	21.5	
Relative Humidity (20 -75%RH):	42	
Frequency Range:	30 kHz to 10 GHz	
Measurement Distance:	3 Meters	
EMI Receiver IF Bandwidth:	200 Hz – 10 kHz to 150 kHz 9 kHz – 150 kHz to 30 MHz 120 kHz – 30 MHz to 1 GHz 1 MHz – Above 1 GHz	
EMI Receiver Average Bandwidth: Detector Function:	>= 3 * RBW Peak, Quasi-Peak & Average	
Measurement Distance: EMI Receiver IF Bandwidth: EMI Receiver Average Bandwidth:	3 Meters 200 Hz – 10 kHz to 150 kHz 9 kHz – 150 kHz to 30 MHz 120 kHz – 30 MHz to 1 GHz 1 MHz – Above 1 GHz >= 3 * RBW	

#### 4.4. Measurement Procedures

Test measurements were made in accordance FCC Part 15.249, ISED RSS-210 B.10: Operation within the bands <u>902 - 928 MHz</u>, 2400 - 2483.5 MHz, 5725 - 5875 MHz, and 24.0 - 24.25 GHz.

The test methods used to generate the data in this test report are in accordance with ANSI C63.10: 2013, American National Standard for Testing Unlicensed Wireless Devices.

ISED RSS-210, Issue 10; RSS-GEN, Issue 5

#### 4.5. Choice of Operating Frequencies

The device under test utilizes one operating frequency at 915.0 MHz

#### 4.6. EUT Positions for Emissions Measurements

The device under test was tested in three orthogonal positions in accordance with ANSI C63.10-2013, Section 5.10.1.





## 5. Measurement Summary

Test Requirement	FCC Requirement	ISED Requirement	Test Section	Result	Comment
Antenna Requirement	15.203	RSS-GEN 6.7	6.1	Compliant	
Radiated Field Strength of Fundamental	15.249 (a),(c)	RSS-210 B.10	6.2	Compliant	
Radiated Field Strength of Harmonics	15.249 (a),(c)	RSS-210 B.10	6.3	Compliant	
Fixed, Point-to-Point Operation	15.249 (b)	N/A		Not Required	
Band Edge Measurements	15.249 (d) 15.209	N/A	6.4	Compliant	
Spurious Radiated Emissions	15.249 (d), 15.209	RSS-210 B.10	6.5	Compliant	
Occupied Bandwidth (-20 dB)	ANSI C63.4 § 13.1.7	N/A	6.6	Compliant	
99% Power Bandwidth	N/A	RSS-GEN 6.6	6.7	Compliant	
AC Power Line Conducted Emissions	15.207	RSS-GEN 8.8	6.8	N/A	EUT is battery powered
Public Exposure to Radio Frequency Energy Levels	2.1093 1.1307 (b)(1))	RSS-102 Issue 5	6.9	Compliant	

## 6. Measurement Data

## 6.1. Antenna Requirement (Section 15.203, RSS-GEN, Issue 5)

- Requirement: 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.
- Result: The unit under test utilizes an internal, PCB etch, non-user accessible antenna.





# 6.2. Radiated Field Strength of Fundamental (15.249, Section (a), (c), ISED RSS-210 B.10)

Requirement: The 3 meter field strength of the fundamental emissions from intentional radiators operating within the 2400 – 2483.5 MHz frequency band shall comply with the following requirement: 50 millivolts/meter (94 dBµV/m) Quasi-Peak mode measurement and 500 millivolts/meter (114 dBµV/m) peak mode measurement.

Frequency (MHz)	(dBµ	olitude <sup>1</sup> ıV/m) at Aeters	(dBµ	Limit (dBµV/m) at 3 Meters		argin V/m) at leters	Ant Polarity	Ant Height	Turntable Azimuth	Result
	Peak	Quasi-Pk	Peak	Quasi-Pk	Peak	Quasi-Pk	H/V	cm	Deg	
915	90.48	90.29	114.00	94.00	-23.52	-3.71	V	113	214	Compliant

<sup>1</sup> All correction factors are included in measurement values.

## 6.2.1. Radiated Field Strength of Fundamental, 915 MHz (Worst case - Y Axis)

Receiver	Spe	ctrum	×							
		K) 120 kHz		00 ms			1007 0314	CBL 3M PORT	r (.01 - 200	0 MHz).TDF
Input 1 AC			Preamp			TD Scan				
237-21 Pica	PD Mouse	Sensor Sca	an 😑 1Pk Ma	xe2QP	Max					
							1[1]			ŧ8 dΒμV/m
95 dBµV/m+							.000 s 2[2]———			80000 MHz 29 dBµV/m
FCC15.249 90	)2-928 MHz				M2		2[2] .000 s			29 UBH¥7M 80000 MHz
90 dBµV/m+					-		+			
85 dBµV/m+										
			1	Y		(				
80 dBµV/m+							N			
75 dBuV/m										
70 dBuV/m+							$  \rangle$			
65 dBµV/m+							$\left  \right\rangle$			
									_	
60 dBµV/m	-									
55 dBµV/m+			1							
50 dBµV/m+			/							
			1							
45 dBµV/m+										L
TF Start 914.5	MHz								Ston 9	915.5 MHz
Julie Jino					1	Marr	uring			6/14/2021
						Meas	uring			:55:26 PM

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## 6.3. Radiated Field Strength of Harmonics (15.249, Section (a), ISED RSS-210 A.1.4 (d))

Requirement: The 3 meter field strength of the harmonic emissions from intentional radiators operated within the 2400 to 2483.5 MHz frequency bands shall comply with the following: 500 microvolts/meter (54 dBµV/m), average mode measurement. Peak field strength may not be greater than 20 dB above the average limit (74 dBµV/m).

Test Results : Compliant

Notes: All correction factors are included in the field strength values. The tabled values represent the worst case orthogonal position of the DUT.

Freq. (MHz)		Strength µV/m)		Limit (dBµV/m)		rgin ıV/m)	Antenna Polarity	Result
()	Peak	Average	Peak	Average	Peak	Average	(H/V)	
1830.00	44.02	32.02	74.00	54.00	-29.98	-21.98	Н	Compliant
2745.00	49.07	38.34	74.00	54.00	-24.93	-15.66	V	Compliant
3660.00	48.03	35.93	74.00	54.00	-25.97	-18.07	V	Compliant
4575.00	48.93	37.41	74.00	54.00	-25.07	-16.59	V	Compliant
5490.00	49.38	37.16	74.00	54.00	-24.62	-16.84	V	Compliant
6405.00	51.57	38.95	74.00	54.00	-22.43	-15.05	Н	Compliant
7320.00	52.16	39.35	74.00	54.00	-21.84	-14.65	V	Compliant
8235.00	53.15	41.56	74.00	54.00	-20.85	-12.44	н	Compliant
9150.00	53.57	41.56	74.00	54.00	-20.43	-12.44	Н	Compliant

6.3.1. Fundamental Frequency = 915 MHz





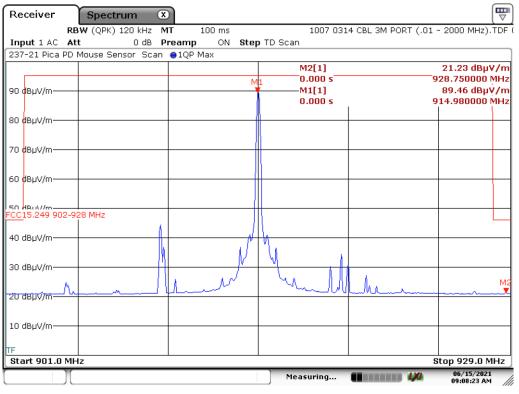
#### 6.4. Band Edge Measurements (15.249, Section (d), ISED RSS-210 A.1.4 (d))

- Requirement: Emissions radiated outside of the specified frequency band of 902 to 928 MHz, 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 Section 15.209, whichever is the lesser attenuation.
- Test Note: The upper and lower band edge peak mode measurements meet the FCC Part 15, Section 15.209 quasi-peak requirement of 46 dBµV/m.

#### 6.4.1. Band Edge

Freq.		litude IV/m)			l Edge JV/m)	Limit (dBµV/m)	Result		
(MHz)	Peak	Quasi Peak	Band Edge	Freq MHz	Peak	Quasi Peak	15.209 QP	15.209 QP	
915.0	90.48	90.29	Lower	902	22		46.00	-24.00	Compliant
915.0	90.46	90.29	Upper	928	21.23		46.00	-24.77	Compliant

#### 6.4.2. 915.0 MHz, Modulated Carrier



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- 6.5. Spurious Radiated Emissions, 32 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 4
  - Requirement: 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 Section 15.209, whichever is the lesser attenuation.
  - Test Notes: Spurious emissions screen captures are located in appendices A and B.

The lowest frequency generated by the device under test is 32.768 kHz.

6.5.1. Regulatory Limit: FCC Part 209, Quasi-Peak & Average

Frequency Range (MHz)	Distance (Meters)	Limit (dBµV/m)
0.009 to 0.490	3	128.5 to 93.8
0.490 to 1.705	3	73.8 to 63
1.705 to 30	3	69.5
30 to 88	3	40.0
88 to 216	3	43.5
216 to 960	3	46.0
Above 960	3	54.0

#### 6.5.2. Measurement Summary

Notes: Each of the tabled entries represents the worst case turntable position and receive height. All measurements were made using a peak detector.

Frequency Range (MHz)	Range (MHz)		FCC Part 15.209 Limit	Margin	Reference	Receive Antenna Polarity
()	(MHz)	(dBµV/m)	(dBµV/m)	(dB)	Appendix A	(H/V)
0.03 - 0.15	0.03200	70.12	117.99	-47.87	A.1.4	Parallel
0.15 - 30	0.15225	60.86	103.95	-43.09	A.2.2	Perpendicular
30 - 1000	225.00	22.00	46.00	-24.00	A.3.5	Н
1000 - 9400	8921.60	44.94	54.00	-9.06	A.4.3	Н

Transmit Frequency = 915 MHz

#### Sample Calculation:

Final Result ( $dB\mu V/m$ ) = Measurement Value ( $dB\mu V$ ) + Antenna Factor (dB/m) + Cable Loss (dB) – Pre-amplifier Gain (dB) Internal or External.

**Note:** All correction factors are loaded into the measurement instrument prior to testing to determine the final result.





### 6.6 Occupied Bandwidth (ANSI C63.10, Section 6.9.1 & ISED RSS-GEN, Issue 5)

- Requirement: The occupied bandwidth measurements on an intentional radiator shall be made in accordance with the requirements outlined in ANSI C63.10-2013, Section 6.9.1. If no bandwidth requirement is specified by the procuring or regulatory agency, the bandwidth will be measured at –20 dB with respect to the reference level.
- Test Notes: The span range for the SA display shall be between two times and five times the OBW. The nominal IF filter bandwidth (3 dB RBW) should be approximately 1% to 5% of the OBW, unless otherwise specified, depending on the applicable requirement. The dynamic range of the SA at the selected RBW shall be more than 10 dB below the target "dB down" (attenuation) requirement, i.e., if the requirement calls for measuring the 20 dB OBW, the SA noise floor at the selected RBW shall be at least 30 dB below the largest measured value on the display.

Frequency (MHz)	-20 dB Bandwidth (kHz)				
915.0	126.07				

#### 6.6.1. Occupied (-20 dB) Bandwidth, Fundamental Frequency = 915 MHz

Ref Level	95.00 dB	µV/m 💽	RBW 20 kHz				
Att		5 dB SWT 1 ms 🖷	<b>VBW</b> 100 kHz I	Mode Sweep Inpu	It 1 AC		
PS TDF							
237-21 Pica P	PD Mouse	Sensor 😑 1Pk View					
			11	M1[1]			67 dBµV/n
90 dBµV/m						914.9	73830 MH
				ndB			20.00 di
85 dBµV/m+				Bw		126.070	000000 kH
				Q factor	<b>N</b> 1		7257.
80 dBµV/m+							
75 dBµV/m+							
	T1				Ta		
70 dBµV/m+	and the second						
GE dD. Martin	~					$\mathbf{X}$	
65 dBuV/m+						1	
60 dBµV/m							
00 00 00 00 00 00 00 00 00 00 00 00 00						~	how
55 dBµV/m+							
50 dBµV/m+							
CF 915.0 MI	Ηz		1001 pt	s		Span	200.0 kHz
Marker							
	Trc	X-value	Y-value	Function	Func	tion Resul	t
M1	1	914.97383 MHz	89.67 dBµV/m	ndB down			126.07 kHz
Τ1	1	914.93247 MHz	69.67 dBµV/m	ndB			20.00 dB
T2	1	915.05854 MHz	69.66 dBµV/m	Q factor			7257.4

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### 6.7 99% Emission Bandwidth (ISED RSS-GEN)

- Requirement: When an occupied bandwidth value is not specified in the applicable RSS, the transmitted signal bandwidth to be reported is to be its 99% emission bandwidth, as calculated or measured.
- Test Notes: The transmitter shall be operated at its maximum carrier power measured under normal test conditions. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sampling detector shall be used given that a peak or peak hold may produce a wider bandwidth than actual.

Frequency (MHz)	99% Power Bandwidth (kHz) 81 718				
915.0	81.718				

#### 6.7.1. 99% Power Bandwidth, Fundamental Frequency = 915.0 MHz



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## 6.8. Conducted Emissions

Requirement: 15.207 With certain exceptions, an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a  $50\mu$ H/50 $\Omega$  line impedance stabilization network (LISN).

Frequency Range (MHz)	Limits (dBµV)					
(	Quasi-Peak	Average				
0.15 to 0.50	66 to 56*	56 to 46*				
0.50 to 5.0	56	46				
5.0 to 30.0	60	50				
* Decreases with the lo	garithm of the frequency.					

- Procedure: This test was performed in accordance with the procedure detailed in ANSI C63.10-2013, Section 6.2: Standard test method for ac power-line conducted emissions from unlicensed wireless devices.
- Test Notes: The device under test is only battery powered.
- Results: N/A

Measurement & Equipment Setup	
Test Date:	N/A
Test Engineer:	N/A
Site Temperature (°C):	22.8
Relative Humidity (%RH):	48.3
Frequency Range:	0.15 MHz to 30 MHz
EMI Receiver IF Bandwidth:	9 kHz
EMI Receiver Avg Bandwidth:	30 kHz
Detector Functions:	Peak, Quasi-Peak & Average





- 6.9. Public Exposure to Radio Frequency Energy Levels ((1.1307 (b)(1)) RSS-GEN, ISSUE 5, RSS 102)
  - 6.9.1. 1.1307 (b)(1) Requirements
    - Requirement: Portable devices are subject to radio frequency radiation exposure requirements.

For a 1-g SAR, the test exclusion result must be  $\leq$  3.0.

Test Notes: The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by the following formula:

SAR Test Exclusion =  $\frac{P_{MAX}}{d_{MIN}} \times \sqrt{f_{(GHz)}}$  (1)

- $\begin{array}{lll} P_{MAX} & mW & Maximum power of channel, including tune-up tolerance \\ d_{MIN} & mm & Minimum test separation distance, mm (\leq 50 mm) \end{array}$
- $f_{(GHz)}$  GHz  $f_{(GHz)}$  is the RF channel transmit frequency in GHz (>100 MHz and <6 GHz)
- (1) FCC OET 447498 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.
- Conclusion: Compliant The device under test meets the exclusion requirement detailed in FCC OET 447498.

Input:	$P_{MAX}^1$	(mW)	0.3351
	dмın	(mm)	5.0000
	$\mathbf{f}_{(GHz)}$		0.9150
Test Ex	clusion	0.06410	
Limit E	xemptic	on:	3.00000

<sup>1</sup> Taken from column 5 of the table in Section 7.4 of this test report.

#### 6.9.2. RSS-102 Issue 5 Requirements

Requirement: SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 1. Portable devices are subject to radio frequency radiation exposure requirements.

Test Notes: The limit was taken from Table 1 of RSS-102 Issue 5.

Frequency	Separation Distance	Maximum Power	RSS-102 Limit	Result
(MHz)	(mm)	(mW)	(mW)	
915.00	≤5	0.3351	16.25	Compliant





7.1 Radiated Spurious Emissions 30 MHz to 1 GHz, Front View



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7.2 Radiated Spurious Emissions < 30 MHz, Rear View



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7.3 Radiated Field Strength and Spurious Emissions, 30 MHz to 1 GHz, Rear View



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7.4. Radiated Harmonics and Spurious Emissions >1 GHz, Front View



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7.5. Radiated Harmonics and Spurious Emissions >1 GHz, Rear View



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### 8. Test Site Description

Compliance Worldwide is located at 357 Main Street in Sandown, New Hampshire. The test sites at Compliance Worldwide are used for conducted and radiated emissions testing in accordance with the Federal Communications Commission (FCC) and Industry Canada standards. Through our American Association for Laboratory Accreditation (A2LA) ISO Guide 17025 Accreditation our test sites are designated with the FCC (designation number **US1091**), Industry Canada (file number **IC 3023A-1)** and VCCI (Member number 3168) under registration number A-0274.

Compliance Worldwide is also designated as a Phase 1 CAB under APEC-MRA (US0132) for Australia/New Zealand AS/NZS CISPR 32, Chinese-Taipei (Taiwan) BSMI CNS 13438 and Korea (RRA) KN 11, KN 13, KN 14-1, KN 22, KN 32, KN 61000-6-3, KN 61000-6-4.

The radiated emissions test site is a 3 and 10 meter enclosed open area test site (OATS). Personnel, support equipment and test equipment are located in the basement beneath the OATS ground plane.

The conducted emissions site is part of a 16' x 20' x 12' ferrite tile chamber and uses one of the walls for the vertical ground plane. A second conducted emissions site is also located in the basement of the OATS site with a 2.3 x 2.5 meter ground plane and a 2.4 x 2.4 meter vertical wall.

The radiated emissions test site for measurements above 1GHz is a 3 Meter open area test site (OATS) with a 3.6 by 3.6 meter anechoic absorber floor patch to achieve a quasi-free space measurement environment per ANSI C63.4/C63.10 and CISPR 16-1-4 standards.

The sites are designed to test products or systems 1.5 meters W x 1.5 meters L x 2.0 meters H, floor standing or table top.

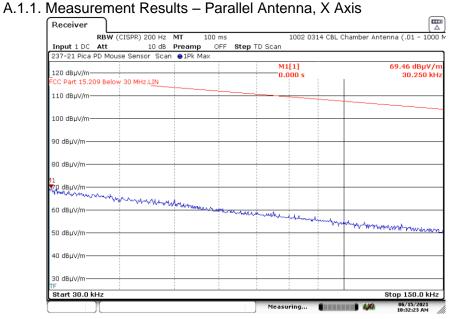




## Appendix A

# Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

A.1. Spurious Radiated Emissions (30 kHz to 150 kHz),



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## A.1.2. Measurement Results - Perpendicular Antenna, X Axis



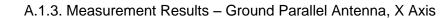
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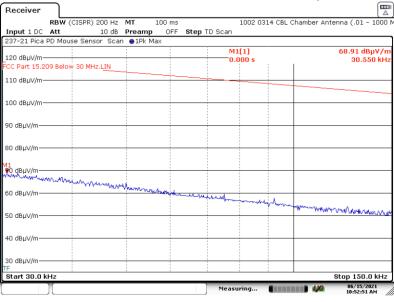




# Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

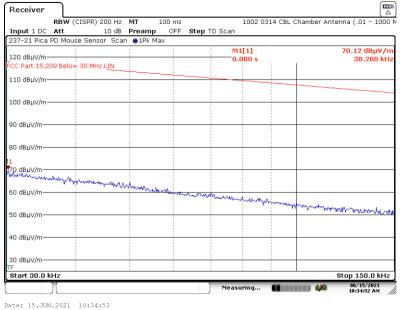
A.1. Spurious Radiated Emissions (30 kHz to 150 kHz)





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#### A.1.4. Measurement Results – Parallel Antenna, Y Axis



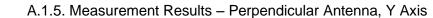
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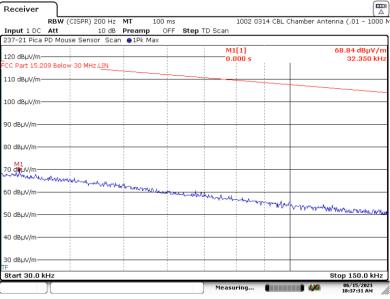




Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

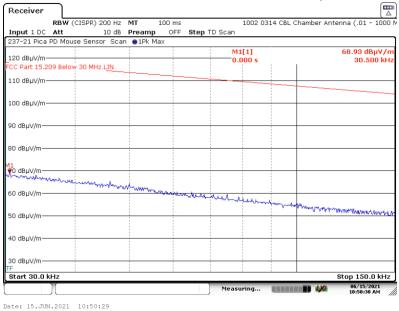
A.1. Spurious Radiated Emissions (30 kHz to 150 kHz)





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#### A.1.6. Measurement Results - Ground Parallel Antenna, Y Axis



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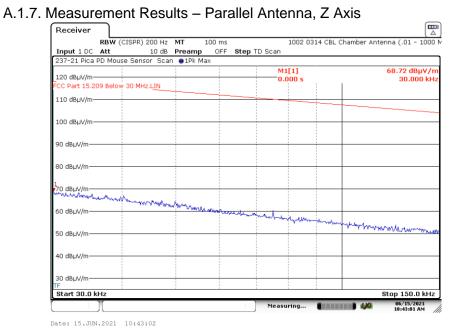




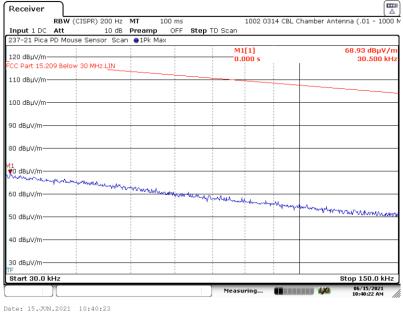
## Appendix A

# Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

A.1. Spurious Radiated Emissions (30 kHz to 150 kHz),



## A.1.8. Measurement Results - Perpendicular Antenna, Z Axis



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# Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

A.1. Spurious Radiated Emissions (30 kHz to 150 kHz)

## A.1.9. Measurement Results – Ground Parallel Antenna, Z Axis

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Input 1 DC						Step ⊺	D Scan				
237-21 Pica	PD Mo	use Sensor	Scan	●1Pk M	ax						
120 dBµV/m- FCC Part 15.2			Thi					[1] )00 s			68.77 dBµV∕ı 32.600 kH
110 dBµV/m-		50 MH2.									
100 dBµV/m-											
90 dBµV/m—											
80 dBµV/m—											
70 dBuV/m-	uhpun.	maria									un water and the second
60 dBµV/m—				mmun	mon	Min	Anter	Myn			
50 dBµV/m—										A Anna Anna An	www.hwww.www.huw
40 dBµV/m—											
30 dBµV/m— TF											
Start 30.0 k	Hz										Stop 150.0 kHz

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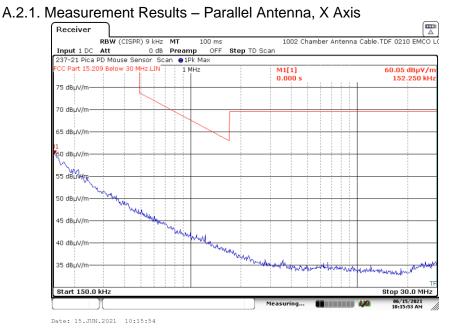
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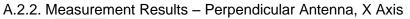




Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

A.2. Spurious Radiated Emissions (150 kHz to 30 MHz)







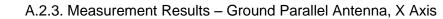
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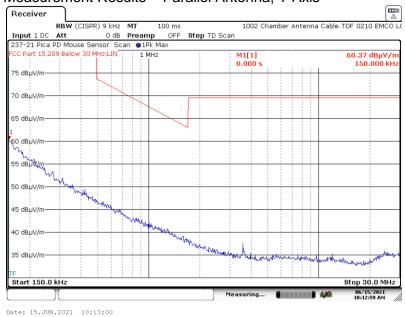
Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

A.2. Spurious Radiated Emissions (150 kHz to 30 MHz)





#### A.2.4. Measurement Results – Parallel Antenna, Y Axis



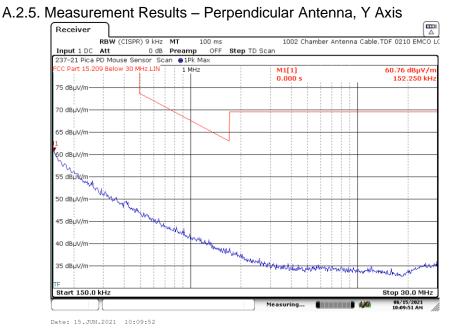
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Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

A.2. Spurious Radiated Emissions (150 kHz to 30 MHz)





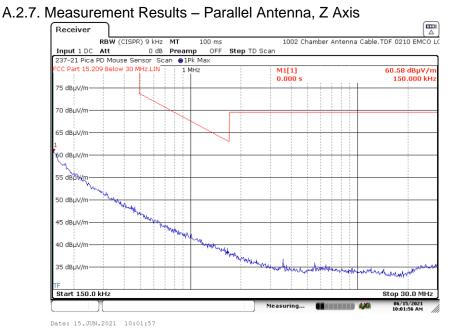


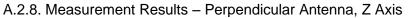




Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

A.2. Spurious Radiated Emissions (150 kHz to 30 MHz)







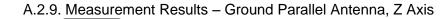
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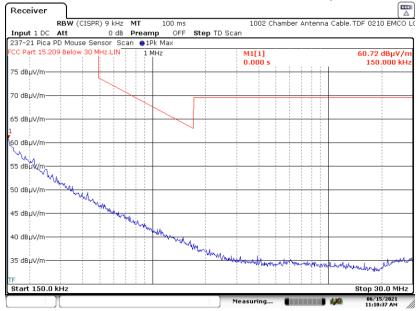




Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

A.2. Spurious Radiated Emissions (150 kHz to 30 MHz)





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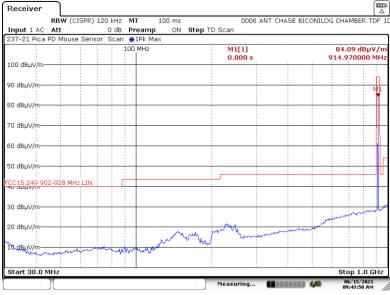




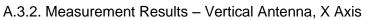
Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

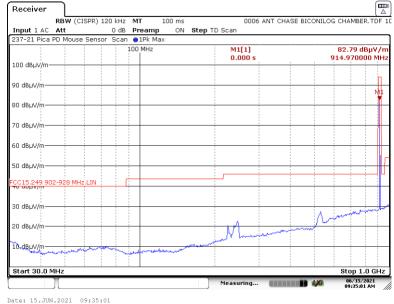
A.3. Spurious Radiated Emissions (30 MHz to 1 GHz)

A.3.1. Measurement Results – Horizontal Antenna, X Axis



Date: 15.JUN.2021 09:43:51







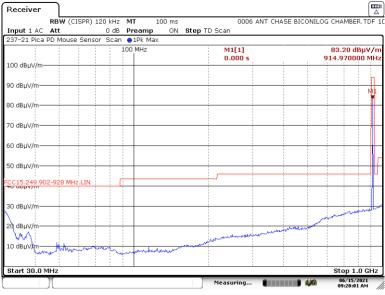




Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

A.3. Spurious Radiated Emissions (30 MHz to 1 GHz)

A.3.3. Measurement Results – Horizontal Antenna, Y Axis



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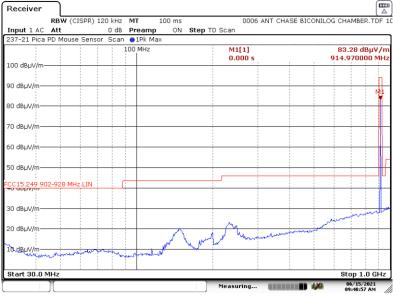




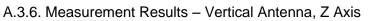
Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

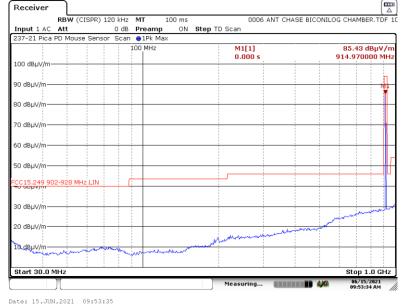
A.3. Spurious Radiated Emissions (30 MHz to 1 GHz)

A.3.5. Measurement Results – Horizontal Antenna, Z Axis



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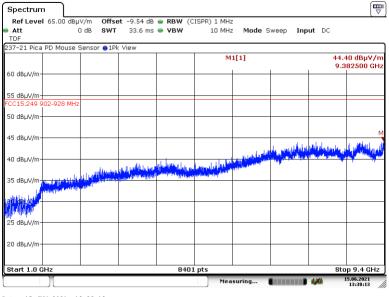




# Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

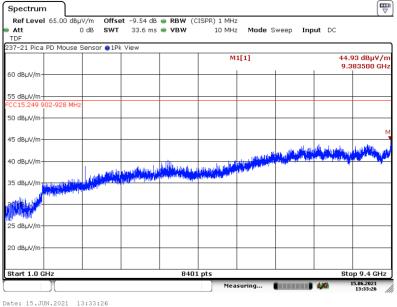
A.4. Spurious Radiated Emissions (1 to 9.4 GHz)

A.4.1. Measurement Results – Horizontal Antenna, X Axis



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#### A.4.2. Measurement Results - Vertical Antenna, X Axis



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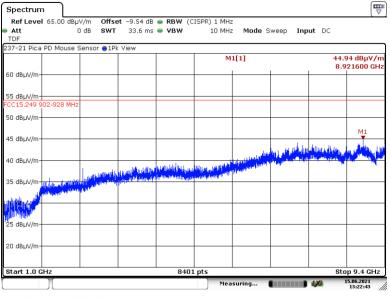




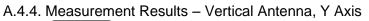
# Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

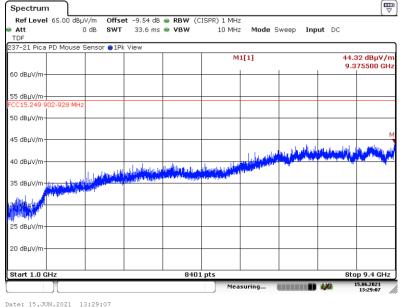
A.4. Spurious Radiated Emissions (1 to 9.4 GHz)

A.4.3. Measurement Results – Horizontal Antenna, Y Axis



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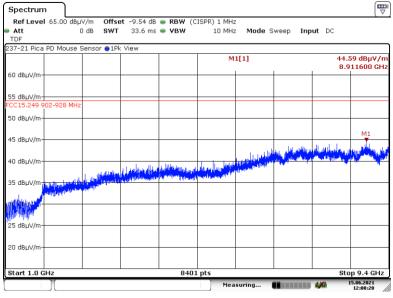




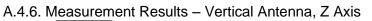
# Spurious Radiated Emissions, 30 kHz to EUT 10<sup>th</sup> Harmonic (15.249, Section (d)), ISED RSS-GEN, Issue 5 (continued)

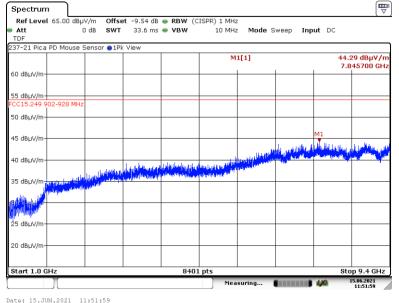
A.4. Spurious Radiated Emissions (1 to 9.4 GHz)

A.4.5. Measurement Results – Horizontal Antenna, Z Axis



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