

Angel Aerial Systems, Inc.

TEST REPORT

SCOPE OF WORK

EMC TESTING – SCOUT 1.0

REPORT NUMBER

106417534LEX-002.1

ISSUE DATE

2/25/2026

PAGES

34

DOCUMENT CONTROL NUMBER

Non-Specific EMC Report Shell Rev. December 2017
© 2017 INTERTEK



EMC TEST REPORT (FULL COMPLIANCE)

Report Number: 106417534LEX-002.1

Project Number: G106417534

Report Issue Date: 2/25/2026

Model(s) Tested: Scout 1.0

Standards: FCC Title 47CFR Part 15B
ICES-003 Issue 7
FCC Part 15C
(Limited to Radiated Spurious Emissions)
RSS-247 Issue 4
(Limited to Radiated Spurious Emissions)

Tested by:
Intertek Testing Services NA, Inc.
731 Enterprise Dr.
Lexington, KY 40510
USA

Client:
Angel Aerial Systems, Inc.
10385 Spartan Dr.
Cincinnati, OH 45215
USA

Report prepared by



Leo Richter,
EMC Engineer

Report reviewed by



Michael Carlson,
Staff Engineer

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.





Table of Contents

1	<i>Introduction and Conclusion</i>	<i>4</i>
2	<i>Test Summary.....</i>	<i>4</i>
3	<i>Client Information</i>	<i>5</i>
4	<i>Description of Equipment under Test and Variant Models</i>	<i>6</i>
5	<i>System Setup and Method</i>	<i>7</i>
6	<i>Radiated Emissions</i>	<i>10</i>
7	<i>Baseline Scan, 30MHz – 1GHz (All Radios Inactive, and EUT Connected to Controller)</i>	<i>19</i>
8	<i>FCC Part 15.247 Radiated Spurious Emissions (900MHz).....</i>	<i>20</i>
9	<i>FCC Part 15.247 Radiated Spurious Emissions (2.4GHz).....</i>	<i>22</i>
10	<i>Band Edge.....</i>	<i>29</i>
11	<i>Conducted Emissions</i>	<i>33</i>
12	<i>Revision History</i>	<i>34</i>



1 Introduction and Conclusion

The tests indicated in section 2.0 were performed on the product constructed as described in section 4.0. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test Method, a list of the actual Test Equipment Used, documentation Photos, Results and raw Data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded the product tested **complies** with the requirements of the standard(s) indicated. The results obtained in this test report pertain only to the item(s) tested. Intertek does not make any claims of compliance for samples or variants which were not tested.

2 Test Summary

Section	Test full name	Result
6	Radiated Emissions (Transmitters Idle) (ANSI C63.4:2014)	Pass
6	Radiated Spurious Emissions (Transmitters Active) (ANSI C63.10:2020)	Pass
7	Conducted Emissions (ANSI C63.4:2014)	N/A ¹

¹This device was DC powered and will never connect to AC Mains.



3 Client Information

This product was tested at the request of the following:

Client Information	
Client Name:	Angel Aerial Systems, Inc.
Address:	10385 Spartan Dr. Cincinnati, OH 45215 USA
Contact:	Dennis Krause
Telephone:	513-604-8166
Email:	Dennis@angelaerialsystems.com
Manufacturer Information	
Manufacturer Name:	Angel Aerial Systems, Inc.
Manufacturer Address:	10385 Spartan Dr. Cincinnati, OH 45215 USA



4 Description of Equipment under Test and Variant Models

Equipment Under Test	
Product Name	Scout 1.0
Model Number	V1.0
Embedded Module(s)	Microhard pMDDL2450 OEM Microhard HP900 OEM DroneTag DRI OEM
FCC ID	pMDDL2450: 2BUWQ18PMDDL2450 HP900: 2BUWQHP900 DRI: XPYANNAB4
Wireless Technology	pMDDL2450 2.4 GHz 2x2 MIMO HP900 900 MHz FHSS (ISM band) DRI Bluetooth Low Energy
Supported Transmit Bands	pMDDL2450 2.4GHz (2400-2483.5 MHz ISM band) HP900 902-928MHz DRI 2.4GHz (2400 – 2500MHz)
Description of Equipment Under Test (provided by client)	
The UAV is a remotely operated aerial platform incorporating certified RF modules operating in the 900 MHz and 2.4 GHz bands for command, control, and video communication with the Ground Control Station. The RF modules and antennas are permanently installed within the airframe. During normal operation, the UAV is maintained at a separation distance greater than 20 cm from the operator and is not intended for handheld use while transmitting.	

4.1 Variant Models:

There were no variant models covered by this evaluation.



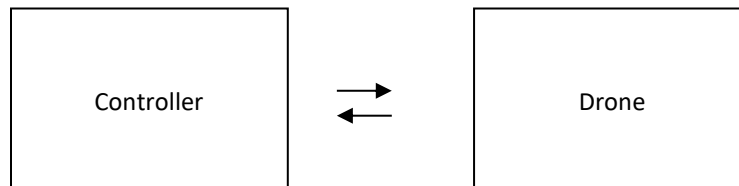
5 System Setup and Method

5.1 Method:

Configuration as required by ANSI C63.4:2014 and ANSI C63.10:2020.

No.	Descriptions of EUT Exercising
1	The drone lights indicated that the controller was connected.
2	The controller was connected to the drone and was verified on the controller screen.
3	The drone motors were powered on and rotating. The camera attached to the drone was powered on and displayed on the controller.

5.2 EUT Block Diagram:





5.3 EUT Photo (Front):





5.4 EUT Photo (Back):





6 Radiated Emissions

6.1 Method

Tests are performed in accordance with ANSI C63.4:2014 and ANSI C63.10:2020.

TEST SITE: 10m ALSE

Site Designation: 10m Chamber

Measurement Uncertainty

Measurement	Frequency Range	Expanded Uncertainty (k=2)	U_{CISPR}
Radiated Emissions, 10m	30-1000 MHz	3.9dB	6.3 dB
Radiated Emissions, 3m	30-1000 MHz	4.0dB	6.3 dB
Radiated Emissions, 3m	1-6 GHz	4.7dB	5.2 dB
Radiated Emissions, 3m	6-15 GHz	4.7dB	5.5 dB
Radiated Emissions, 3m	15-18 GHz	4.7dB	5.5 dB
Radiated Emissions, 3m	18-40 GHz	4.7dB	5.5 dB

As shown in the table above our radiated emissions U_{Lab} is less than the corresponding U_{CISPR} reference value in CISPR 16-4-2 Table 1, hence the compliance of the product is only based on the measured value, and no measurement uncertainty correction is required.



6.2 Sample Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF - AG$$

Where

FS = Field Strength in dB μ V/m

RA = Receiver Amplitude (including preamplifier) in dB μ V

CF = Cable Attenuation Factor in dB

AF = Antenna Factor in dB

AG = Amplifier Gain in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows.

Assume a receiver reading of 52.0 dB μ V is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted, giving a field strength of 32 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

$$RA = 52.0 \text{ dB}\mu\text{V}$$

$$AF = 7.4 \text{ dB/m}$$

$$CF = 1.6 \text{ dB}$$

$$AG = 29.0 \text{ dB}$$

$$FS = 32 \text{ dB}\mu\text{V/m}$$

To convert from dB μ V to μ V or mV the following was used:

$$UF = 10^{(NF / 20)} \text{ where } UF = \text{Net Reading in } \mu\text{V}$$

$$NF = \text{Net Reading in dB}\mu\text{V}$$

Example:

$$FS = RA + AF + CF - AG = 52.0 + 7.4 + 1.6 - 29.0 = 32.0$$

$$UF = 10^{(32 \text{ dB}\mu\text{V} / 20)} = 39.8 \mu\text{V/m}$$



6.3 Test Equipment Used:

Description	Asset	Manufacturer	Model	Calibration Date	Calibration Due
EMI Test Receiver	8258	Rohde & Schwarz	ESW44	5/5/2025	5/5/2026
Bilog Antenna (30MHz-1GHz)	7085	SunAR	JB6	3/14/2025	3/14/2026
Horn Antenna (1-18GHz)	3780	ETS	3117	7/16/2025	7/16/2026
Horn Antenna (18-40GHz)	3779	ETS	3116c	9/17/2025	9/17/2026
System Controller	4096	ETS Lindgren	2090	Verify at Time of Use	Verify at Time of Use
System Controller	3957	Sunol Sciences	SC99V	Verify at Time of Use	Verify at Time of Use
Preamplifier (30MHz-1GHz)	3919	Rohde & Schwarz	TS-PR3	11/18/2025	11/18/2026
10m Signal Path with Preamplifier (30MHz-1GHz)	8311 3919 3172 2590 8187 8186	-	-	11/18/2025	11/18/2026
3m Signal Path without Preamplifier (30MHz-1GHz)	8311 2593 8188 8185	-	-	11/18/2025	11/18/2026
Preamplifier	3918	Rohde & Schwarz	TS-PR18	11/18/2025	11/18/2026
3m Signal Path with Preamplifier (1-18GHz)	3074 3918 8310 2593 8188 8185	-	-	11/18/2025	11/18/2026
Preamplifier (18-40GHz)	3921	Rohde & Schwarz	TS-PR40	11/18/2025	11/18/2026
3m Signal Path with Preamplifier (18-40GHz)	7020 3921 7021	-	-	11/18/2025	11/18/2026

6.4 Software Utilized:

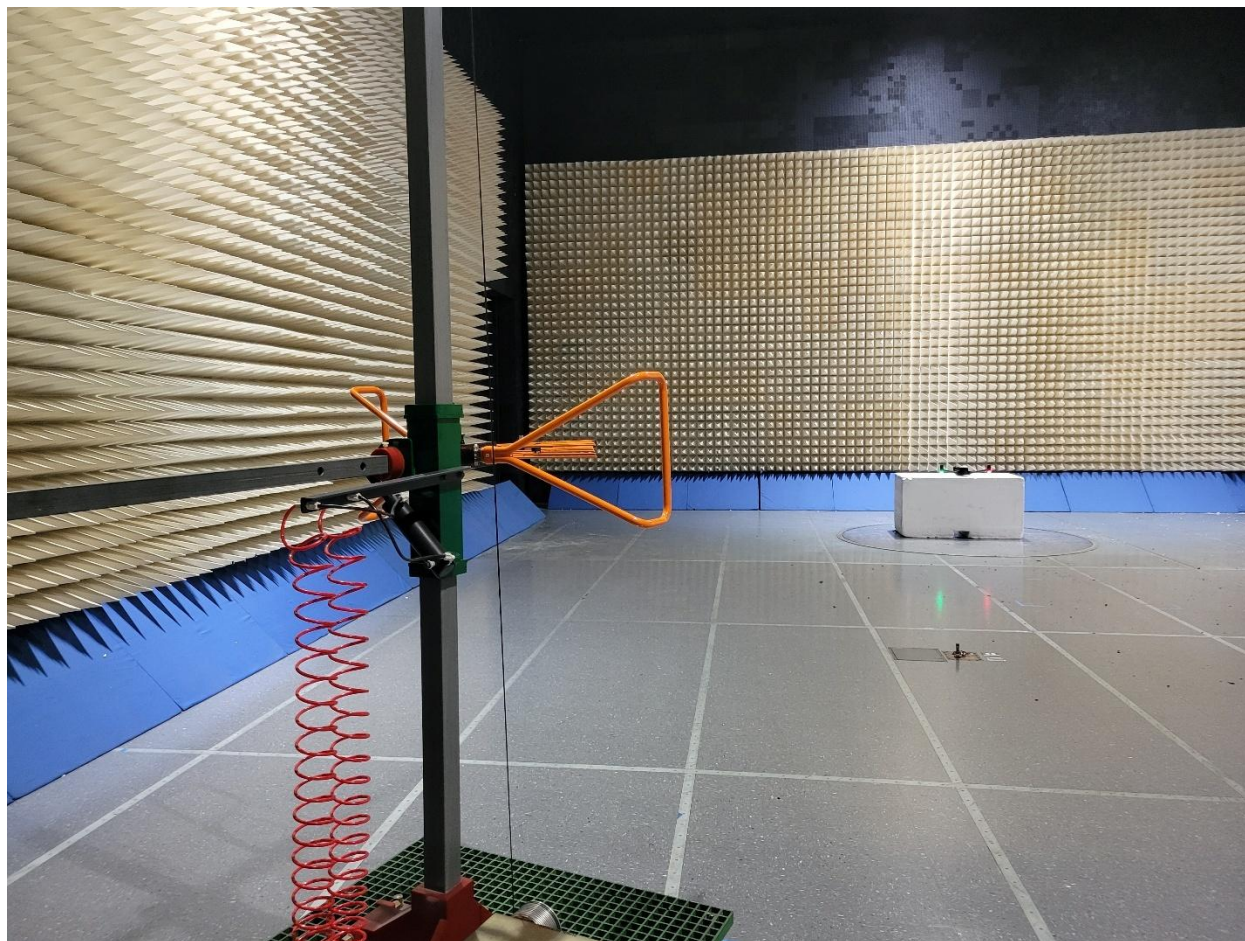
Name	Manufacturer	Version
EMC32	Rohde & Schwarz	Version 10.60.20

6.5 Results:

The sample tested was found to Comply.

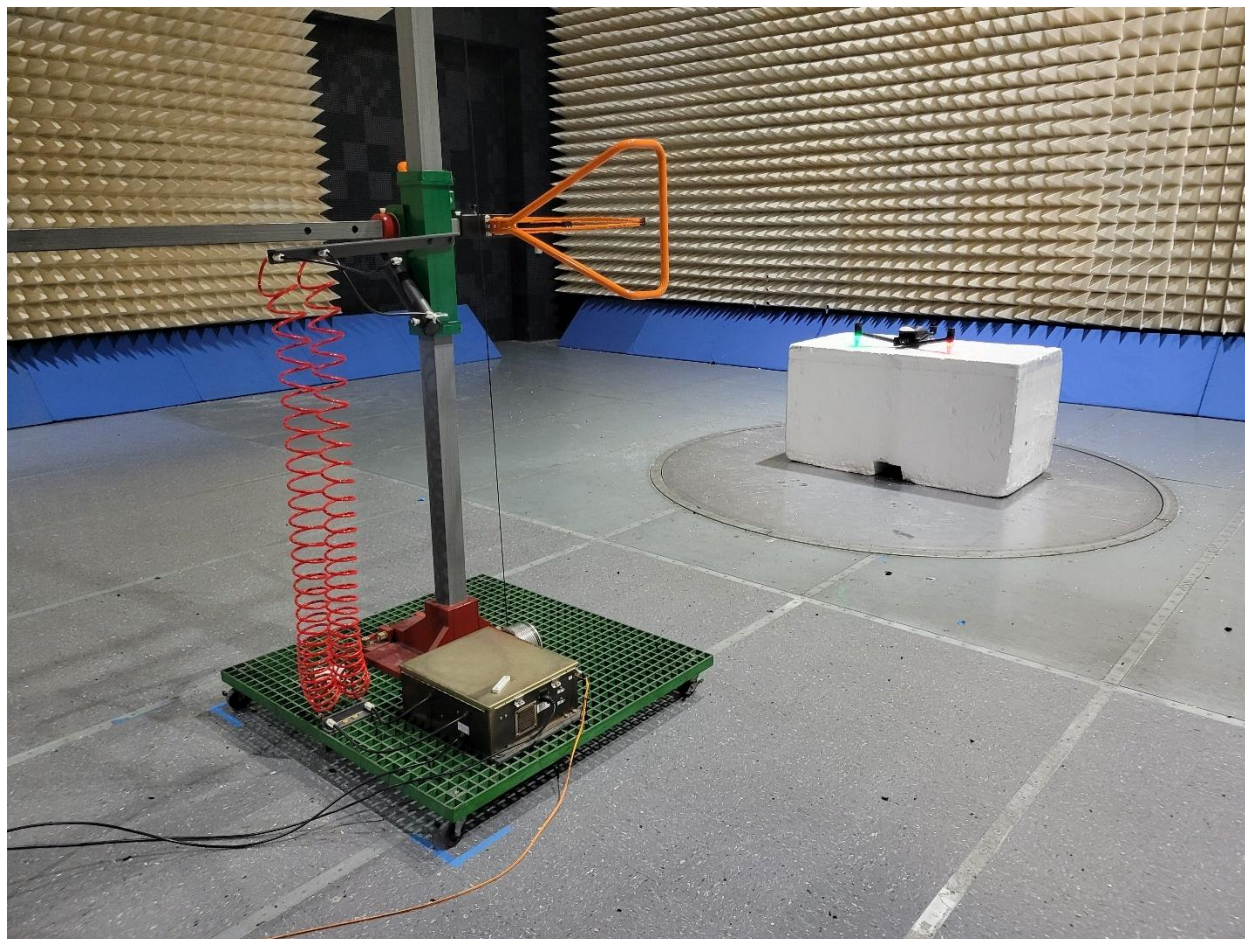


6.6 Setup Photographs: Radiated Emissions (FCC Part 15B Below 1GHz)



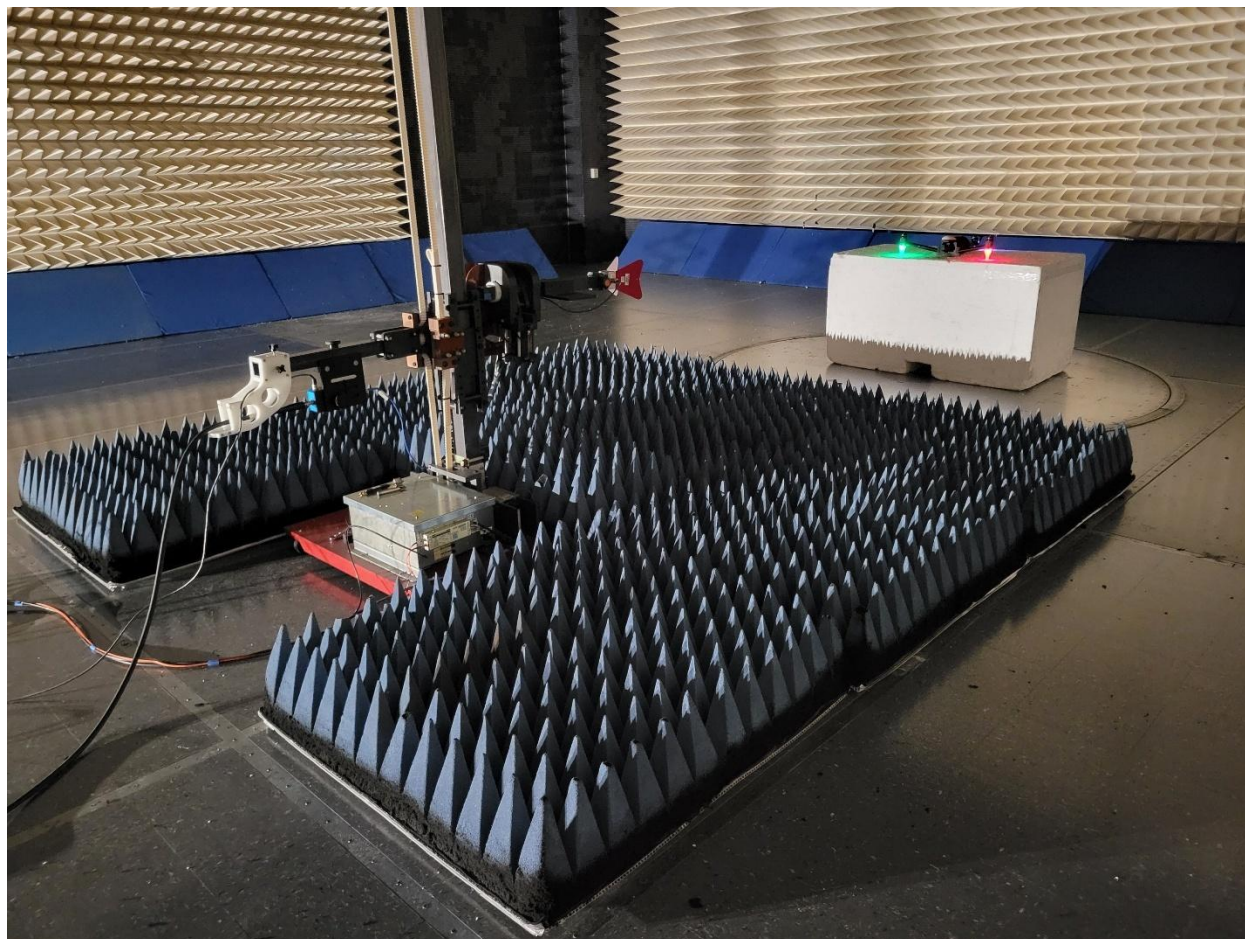


6.7 Setup Photographs: Radiated Emissions (FCC Part 15C Below 1GHz)



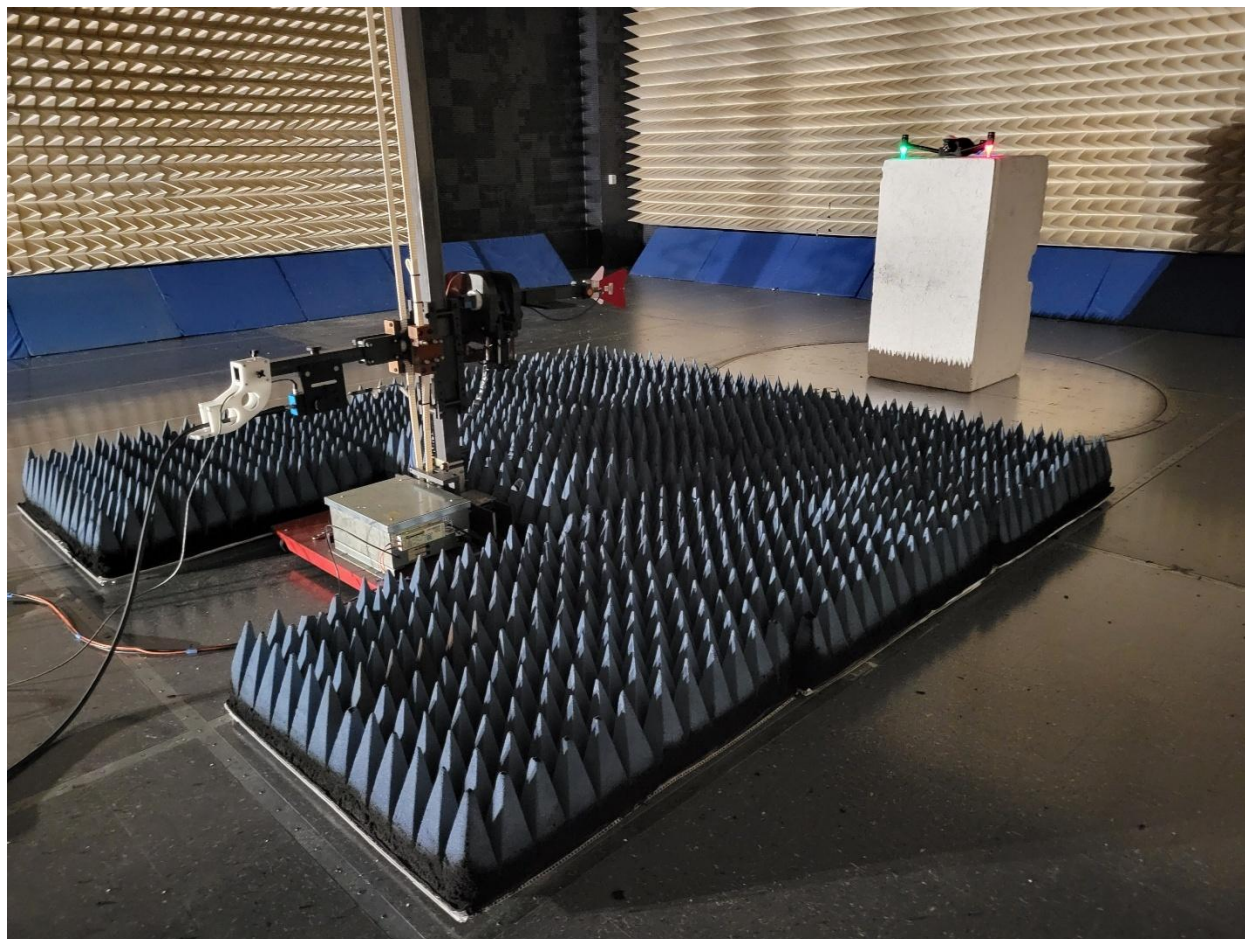


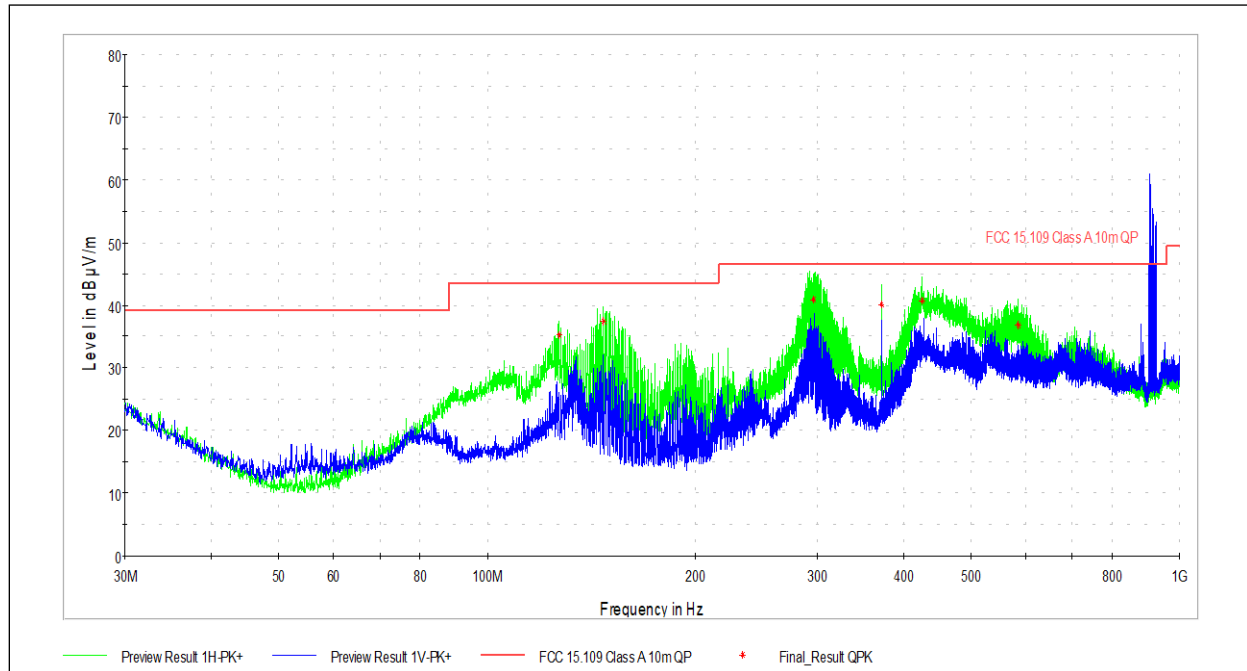
6.8 Setup Photographs: Radiated Emissions (FCC Part 15B Above 1GHz)





6.9 Setup Photographs: Radiated Emissions (FCC Part 15C Above 1GHz)



**6.10 Plots/Data: Radiated Emissions, 30MHz – 1GHz**

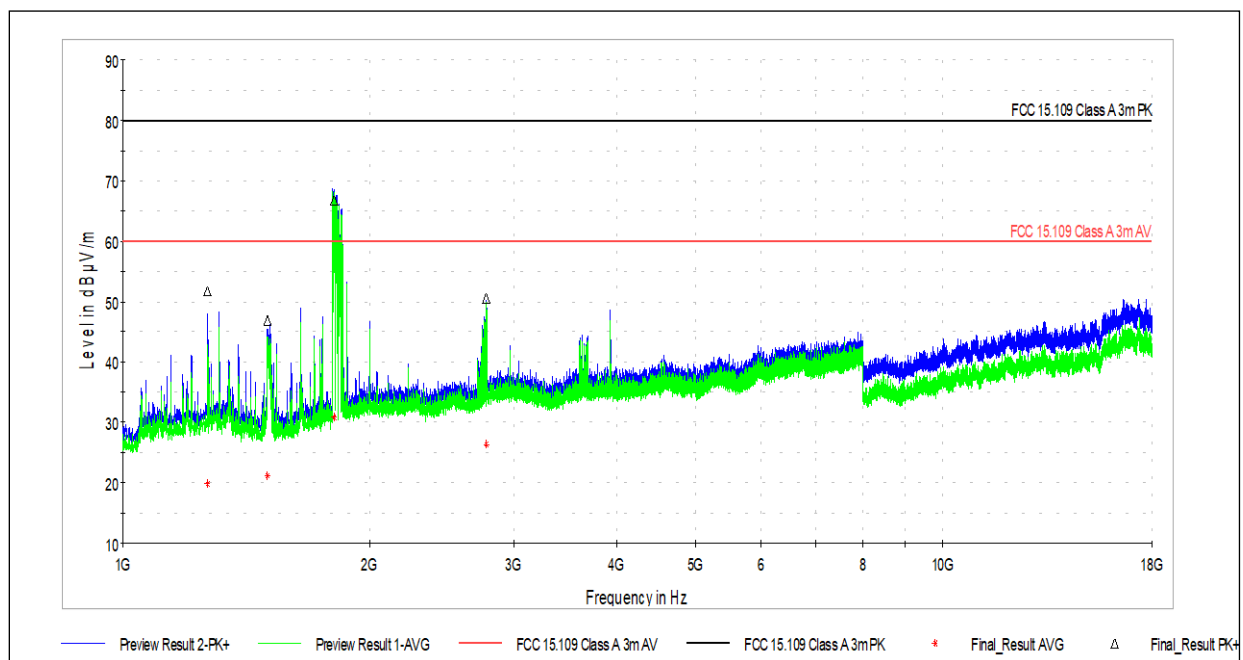
*The large peak shown is the fundamental frequency of the operating band.

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
126.946111	35.16	43.52	8.36	400.0	H	0.0	-8.5
147.208333	37.45	43.52	6.07	377.0	H	239.0	-9.4
296.211111	40.85	46.44	5.59	280.0	H	240.0	-8.1
371.170556	40.10	46.44	6.34	241.0	H	229.0	-6.8
424.682222	40.70	46.44	5.74	187.0	H	71.0	-5.4
585.702222	36.81	46.44	9.63	115.0	H	246.0	-2.0

Test Personnel: Leo Richter
Supervising/Reviewing Engineer: N/A
(Where Applicable) FCC Part 15B
Product Standard: ICES-003 Issue 7
Input Voltage: Battery
Pretest Verification w / Ambient Signals or BB Source: Yes

Test Date: 2/4/2026
Limit Applied: Class A
Ambient Temperature: 22.6 °C
Relative Humidity: 23.0 %
Atmospheric Pressure: 988.8 mbar

Deviations, Additions, or Exclusions: The FCC Part 15.109 limits are more stringent than the corresponding limits from ICES-003 Issue 7. The 900MHz radio is always active unless circuitry is removed. It was also required to activate full functionality of the EUT, and its motors.

**6.11 Plots/Data: Radiated Emissions, 1GHz – 18GHz**

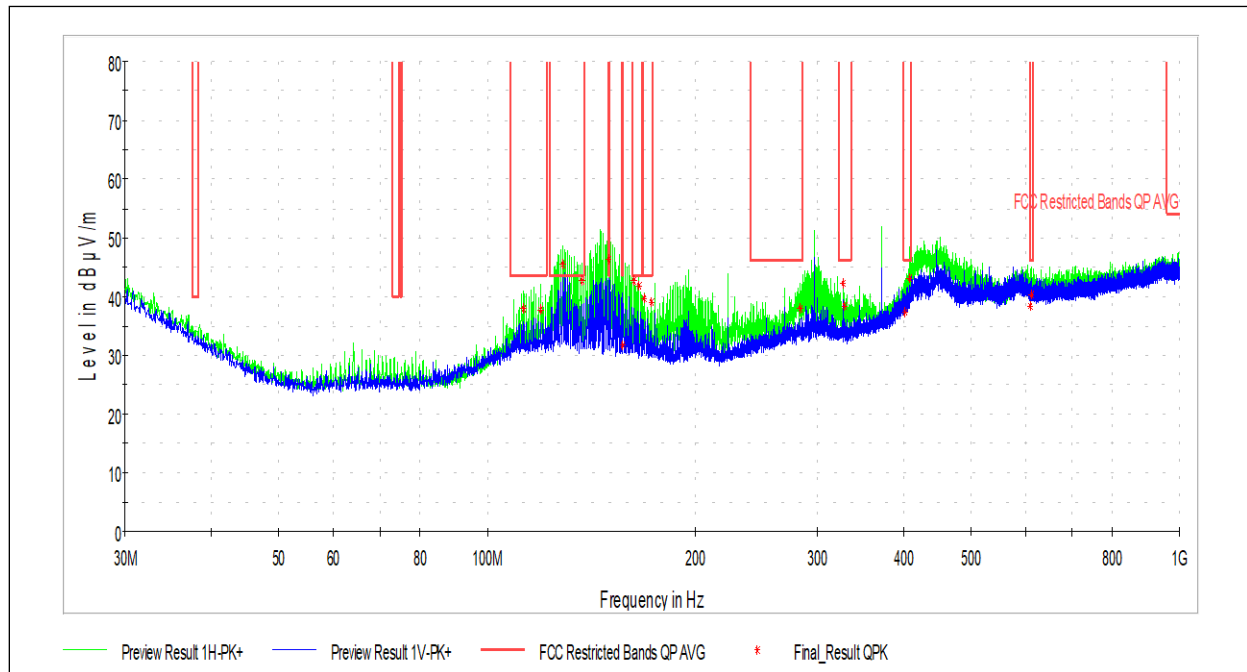
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1268.333333	51.75	80.00	28.25	184.0	H	315.0	0.5
1501.277778	46.94	80.00	33.06	398.0	H	10.0	-0.4
1809.666667	66.83	80.00	13.17	321.0	H	0.0	2.5
2778.000000	50.61	80.00	29.39	145.0	V	259.0	5.9

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1268.333333	19.86	60.00	40.14	184.0	H	315.0	0.5
1501.277778	21.14	60.00	38.86	398.0	H	10.0	-0.4
1809.666667	30.83	60.00	29.17	321.0	H	0.0	2.5
2778.000000	26.41	60.00	33.59	145.0	V	259.0	5.9

Test Personnel: Leo Richter
Supervising/Reviewing Engineer: N/A
(Where Applicable)
Product Standard: FCC Part 15B
Input Voltage: ICES-003 Issue 7
Pretest Verification w / Ambient Signals or BB Source: Battery
Yes

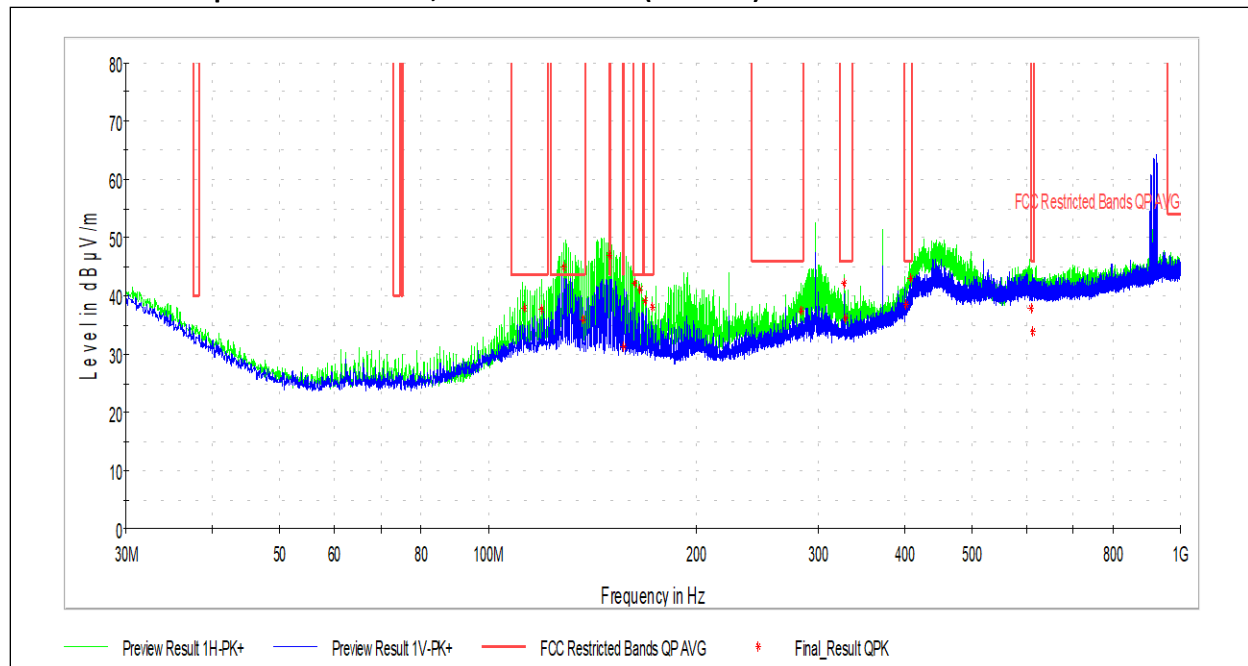
Test Date: 1/20/2026
Limit Applied: Class A
Ambient Temperature: 23.7 °C
Relative Humidity: 12.7%
Atmospheric Pressure: 995.6mbar

Deviations, Additions, or Exclusions: None

**7 Baseline Scan, 30MHz – 1GHz (All Radios Inactive, and EUT Connected to Controller)**

* The points that exceed the limit line are not due to the EUT radio transmissions and can be disregarded.

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
113.042778	37.92	43.52	5.60	262.0	H	203.0	20.0
119.509444	37.85	43.52	5.67	233.0	H	204.0	20.6
*128.724444	45.40	43.52	-1.88	218.0	H	327.0	20.8
137.077222	42.76	43.52	0.76	188.0	H	340.0	20.6
*149.956667	46.28	43.52	-2.76	172.0	H	212.0	20.0
156.800556	31.65	43.52	11.88	159.0	H	218.0	20.1
162.943889	42.61	43.52	0.91	145.0	H	218.0	20.1
165.692222	41.76	43.52	1.76	145.0	H	213.0	19.9
168.440556	39.63	43.52	3.89	146.0	H	210.0	19.7
172.805556	38.95	43.52	4.57	146.0	H	61.0	19.3
283.277778	37.97	46.02	8.05	95.0	H	209.0	21.8
326.388889	42.33	46.02	3.69	95.0	H	320.0	22.6
328.167222	38.44	46.02	7.58	95.0	H	16.0	22.7
401.833333	37.34	46.02	8.69	252.0	H	298.0	24.5
408.030556	43.18	46.02	2.84	95.0	H	299.0	24.6
608.766667	38.28	46.02	7.74	102.0	H	103.0	28.7
610.814444	40.41	46.02	5.61	115.0	H	111.0	28.7

**8 FCC Part 15.247 Radiated Spurious Emissions (900MHz)****8.1 Radiated Spurious Emissions, 30 MHz – 1 GHz (900MHz)**

*The points that exceed the limit line are not due to the EUT Radio transmissions. See section 7 Baseline Scan.

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
113.042778	37.95	43.52	5.57	264.0	H	207.0	20.0
119.509444	37.67	43.52	5.85	248.0	H	203.0	20.6
*128.724444	44.95	43.52	-1.43	206.0	H	153.0	20.8
137.077222	35.89	43.52	7.64	255.0	V	254.0	20.9
*149.956667	47.01	43.52	-3.48	158.0	H	218.0	20.0
156.800556	31.29	43.52	12.23	161.0	H	217.0	20.1
162.943889	42.05	43.52	1.47	146.0	H	212.0	20.1
165.692222	41.17	43.52	2.35	134.0	H	207.0	19.9
168.440556	39.16	43.52	4.36	141.0	H	204.0	19.7
172.805556	38.12	43.52	5.40	145.0	H	62.0	19.3
283.277778	37.37	46.02	8.66	100.0	H	210.0	21.8
326.388889	42.13	46.02	3.89	100.0	H	142.0	22.6
328.167222	36.10	46.02	9.92	100.0	H	58.0	22.7
401.833333	38.52	46.02	7.50	209.0	H	169.0	24.5
408.030556	42.99	46.02	3.03	207.0	H	298.0	24.6
608.766667	37.79	46.02	8.23	247.0	H	112.0	28.7
610.814444	33.90	46.02	12.12	100.0	V	199.0	28.1

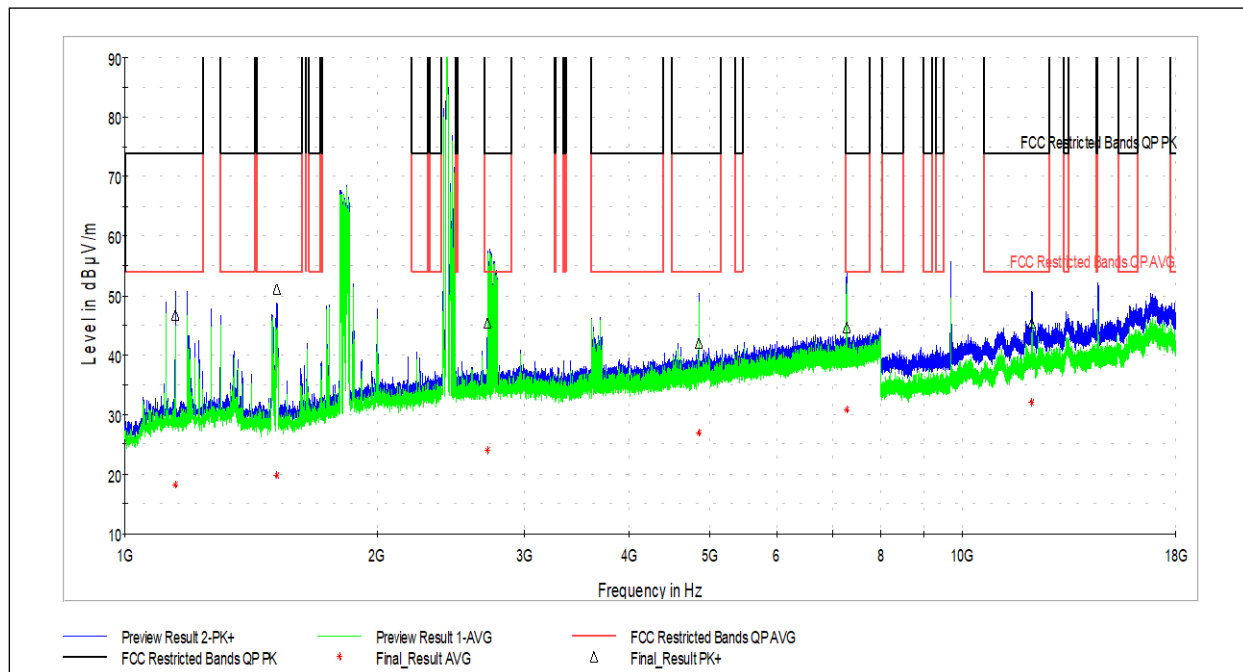
Test Personnel: Leo Richter
Supervising/Reviewing Engineer: N/A
(Where Applicable)
Product Standard: FCC Part 15.247
Input Voltage: RSS-247 Issue 4
Pretest Verification w / Ambient Signals or BB Source: Battery
Yes

Test Date: 2/6/2026
Limit Applied: FCC Part 15.209 in Restricted Bands from FCC Part 15.205
Ambient Temperature: 21.3 °C
Relative Humidity: 22.2%
Atmospheric Pressure: 971.8mbar

Deviations, Additions, or Exclusions: None



8.2 Radiated Spurious Emissions, 1 GHz – 18 GHz (900MHz)



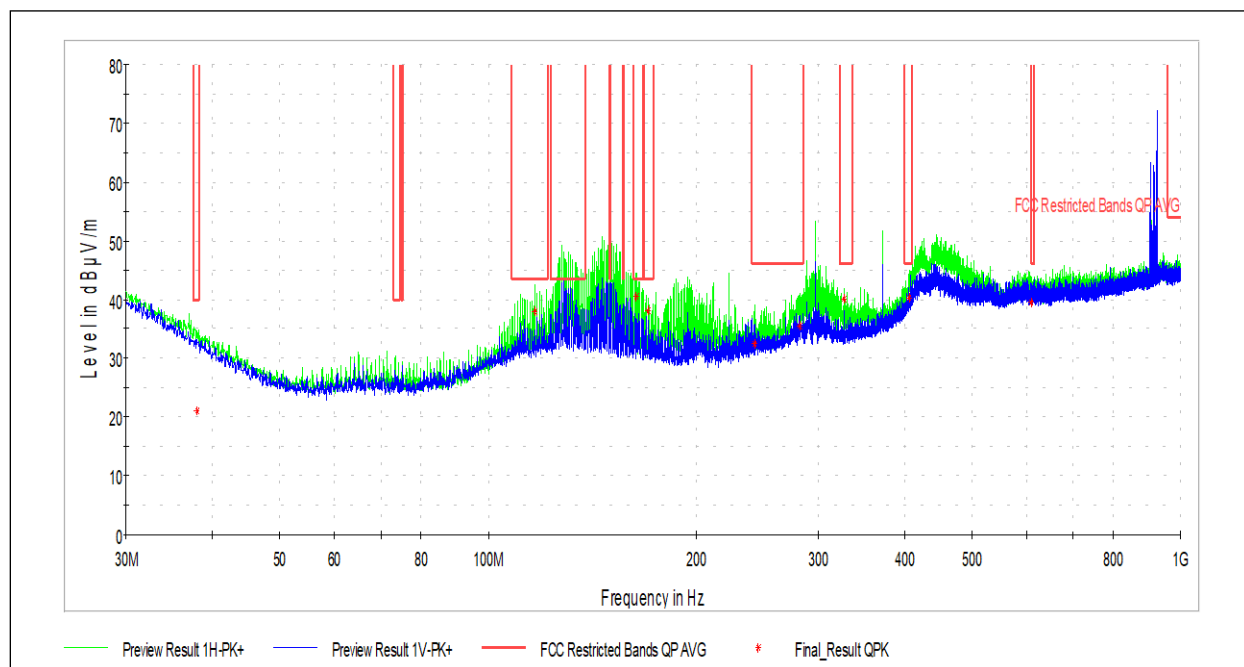
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1148.166667	46.80	73.98	27.18	343.0	H	0.0	-1.2
1518.777778	51.09	73.98	22.89	395.0	V	341.0	-0.3
2708.777778	45.29	73.98	28.69	316.0	H	37.0	5.8
4849.222222	42.04	73.98	31.94	410.0	V	275.0	9.8
7273.555556	44.60	73.98	29.38	410.0	V	0.0	13.3
12115.000000	45.40	73.98	28.58	100.0	V	-1.0	20.4

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1148.166667	18.28	53.98	35.70	343.0	H	0.0	-1.2
1518.777778	19.79	53.98	34.19	395.0	V	341.0	-0.3
2708.777778	23.94	53.98	30.04	316.0	H	37.0	5.8
4849.222222	26.92	53.98	27.06	410.0	V	275.0	9.8
7273.555556	30.89	53.98	23.09	410.0	V	0.0	13.3
12115.000000	32.11	53.98	21.87	100.0	V	-1.0	20.4

Test Personnel: Leo Richter
Supervising/Reviewing Engineer: N/A
(Where Applicable) FCC Part 15.247
Product Standard: RSS-247 Issue 4
Input Voltage: Battery
Pretest Verification w / Ambient Signals or BB Source: Yes

Test Date: 1/20/2026
Limit Applied: FCC Part 15.209 in Restricted Bands from FCC Part 15.205
Ambient Temperature: 23.7 °C
Relative Humidity: 12.7%
Atmospheric Pressure: 995.6mbar

Deviations, Additions, or Exclusions: None

**9 FCC Part 15.247 Radiated Spurious Emissions (2.4GHz)****9.1 Radiated Spurious Emissions, 30 MHz – 1 GHz (Mid Channel, 2445MHz)**

*The points that exceed the limit line are not due to the EUT Radio transmissions. See section 7 Baseline Scan.

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
37.975556	21.14	40.00	18.86	245.0	H	84.0	22.6
116.761111	37.80	43.52	5.72	250.0	H	210.0	20.4
163.806111	40.50	43.52	3.02	143.0	H	213.0	20.0
170.326667	38.15	43.52	5.37	144.0	H	212.0	19.5
242.322222	32.48	46.02	13.54	114.0	H	241.0	19.9
282.146111	35.58	46.02	10.44	95.0	H	208.0	21.7
326.388889	40.11	46.02	5.91	95.0	H	138.0	22.6
405.390000	40.27	46.02	5.75	95.0	H	292.0	24.5
608.820556	39.47	46.02	6.55	115.0	H	111.0	28.7

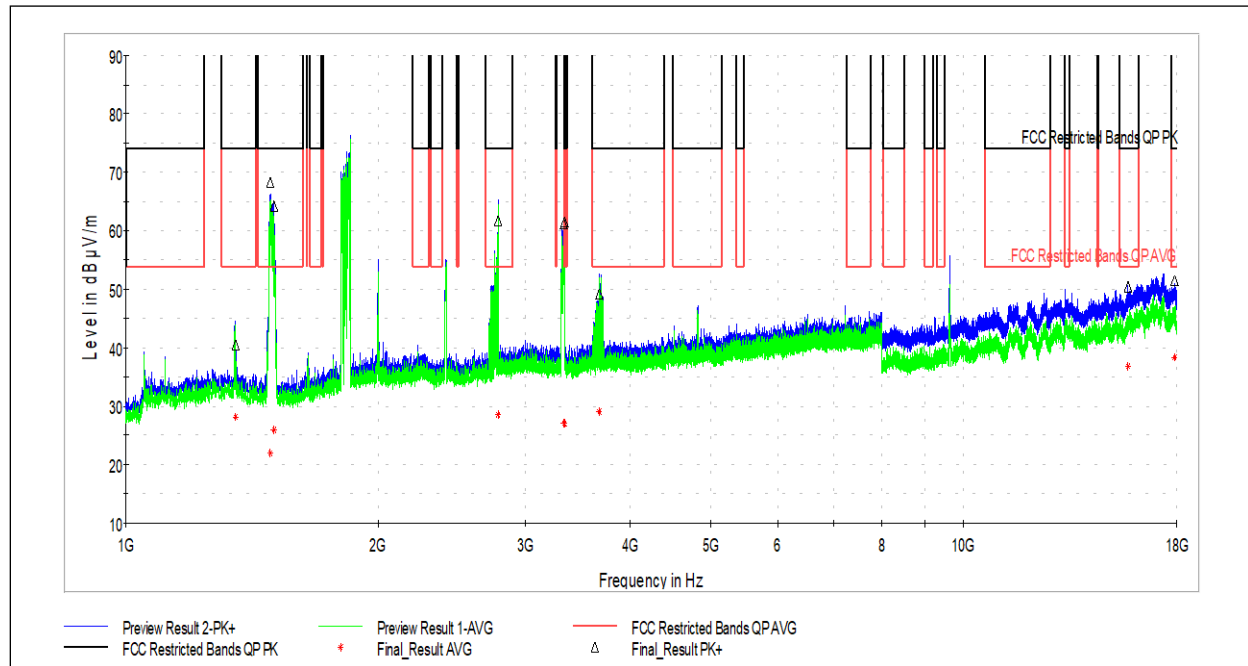
Test Personnel: Leo Richter
Supervising/Reviewing Engineer: N/A
(Where Applicable) FCC Part 15.247
Product Standard: RSS-247 Issue 4
Input Voltage: Battery
Pretest Verification w / Ambient Signals or BB Source: Yes

Test Date: 2/6/2026
Limit Applied: FCC Part 15.209 in Restricted Bands from FCC Part 15.205
Ambient Temperature: 21.3 °C
Relative Humidity: 22.2%
Atmospheric Pressure: 971.8mbar

Deviations, Additions, or Exclusions: None



9.2 Radiated Spurious Emissions, 1 GHz – 18 GHz (Low Channel, 2410MHz)



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1350.000000	40.45	73.98	33.53	273.0	H	60.0	0.6
1486.888889	68.32	73.98	5.66	346.0	V	318.0	-0.8
1500.888889	64.32	73.98	9.66	264.0	H	82.0	-0.4
2782.277778	61.67	73.98	12.31	181.0	H	0.0	6.0
3335.277778	61.09	73.98	12.89	189.0	V	155.0	7.0
3337.611111	61.53	73.98	12.45	118.0	V	84.0	7.0
3679.444444	49.23	73.98	24.75	371.0	H	35.0	7.9
15748.750000	50.46	73.98	23.52	410.0	H	0.0	23.6
17908.125000	51.61	73.98	22.37	410.0	V	60.0	26.1



Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1350.000000	28.08	53.98	25.90	273.0	H	60.0	0.6
1486.888889	21.97	53.98	32.01	346.0	V	318.0	-0.8
1500.888889	25.89	53.98	28.09	264.0	H	82.0	-0.4
2782.277778	28.58	53.98	25.40	181.0	H	0.0	6.0
3335.277778	27.04	53.98	26.94	189.0	V	155.0	7.0
3337.611111	27.04	53.98	26.94	118.0	V	84.0	7.0
3679.444444	28.99	53.98	24.99	371.0	H	35.0	7.9
15748.750000	36.77	53.98	17.21	410.0	H	0.0	23.6
17908.125000	38.32	53.98	15.66	410.0	V	60.0	26.1

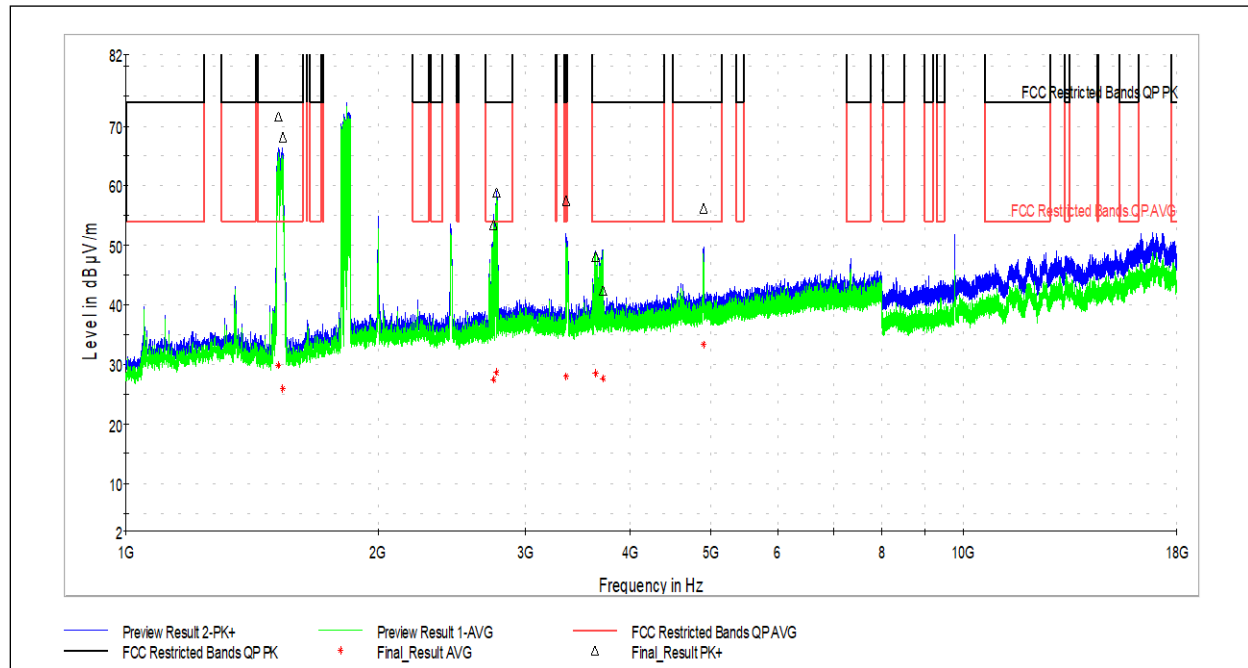
Test Personnel: Leo Richter
Supervising/Reviewing Engineer: _____
(Where Applicable) N/A
FCC Part 15.247
Product Standard: RSS-247 Issue 4
Input Voltage: Battery
Pretest Verification w / Ambient
Signals or BB Source: Yes

Test Date: 2/4/2026
FCC Part 15.209 in Restricted
Limit Applied: Bands from FCC Part 15.205
Ambient Temperature: 22.6 °C
Relative Humidity: 23.0%
Atmospheric Pressure: 988.8mbar

Deviations, Additions, or Exclusions: None



9.3 Radiated Spurious Emissions, 1 GHz – 18 GHz (Mid Channel, 2445MHz)



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1519.555556	71.53	73.98	2.45	392.0	V	108.0	-0.3
1539.777778	68.16	73.98	5.82	410.0	V	23.0	0.0
2746.500000	53.45	73.98	20.53	293.0	H	298.0	5.9
2768.666667	58.91	73.98	15.07	410.0	H	0.0	6.0
3352.000000	57.56	73.98	16.42	410.0	V	72.0	7.1
3638.222222	48.14	73.98	25.84	309.0	H	0.0	7.8
3709.777778	42.42	73.98	31.56	410.0	V	330.0	7.8
4893.555556	56.09	73.98	17.89	326.0	V	232.0	9.8



Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1519.555556	29.78	53.98	24.20	392.0	V	108.0	-0.3
1539.777778	26.02	53.98	27.96	410.0	V	23.0	0.0
2746.500000	27.46	53.98	26.52	293.0	H	298.0	5.9
2768.666667	28.71	53.98	25.27	410.0	H	0.0	6.0
3352.000000	28.02	53.98	25.96	410.0	V	72.0	7.1
3638.222222	28.53	53.98	25.45	309.0	H	0.0	7.8
3709.777778	27.65	53.98	26.33	410.0	V	330.0	7.8
4893.555556	33.33	53.98	20.65	326.0	V	232.0	9.8

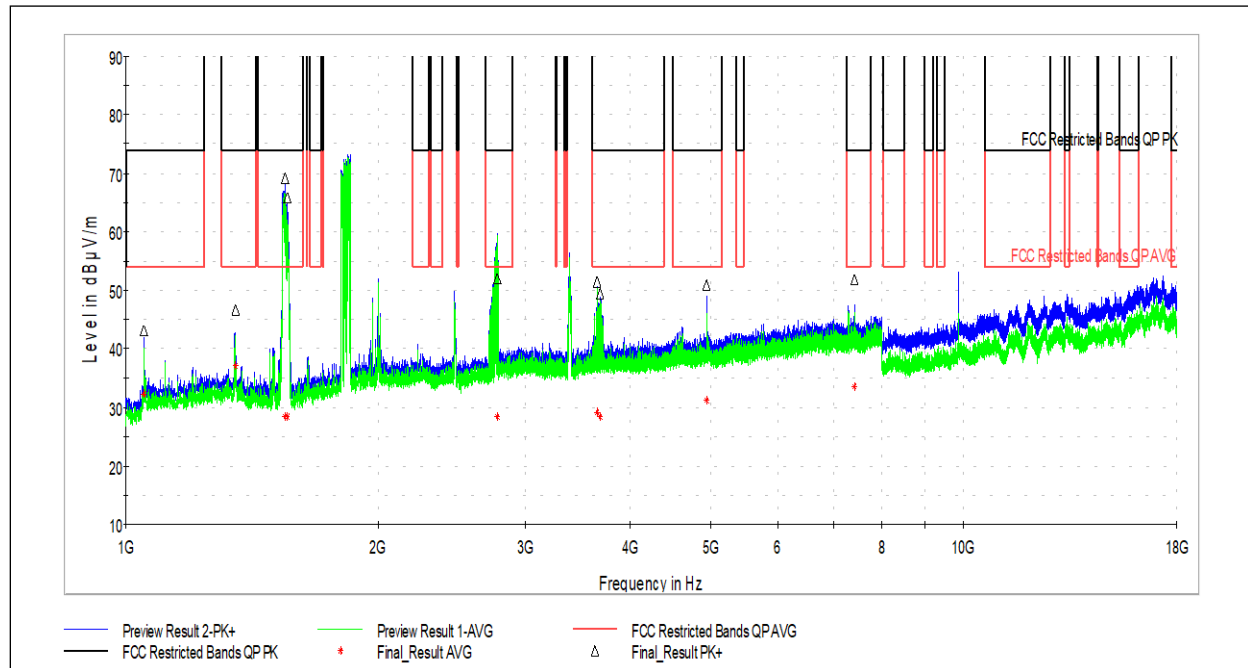
Test Personnel: Leo Richter
Supervising/Reviewing Engineer: _____
(Where Applicable) N/A
FCC Part 15.247
Product Standard: RSS-247 Issue 4
Input Voltage: Battery
Pretest Verification w / Ambient
Signals or BB Source: Yes

Test Date: 2/4/2026
Limit Applied: FCC Part 15.209 in Restricted
Bands from FCC Part 15.205
Ambient Temperature: 22.6 °C
Relative Humidity: 23.0%
Atmospheric Pressure: 988.8mbar

Deviations, Additions, or Exclusions: None



9.4 Radiated Spurious Emissions, 1 GHz – 18 GHz (High Channel, 2470MHz)



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1049.777778	43.23	73.98	30.75	229.0	V	-1.0	-2.8
1350.000000	46.69	73.98	27.29	277.0	H	0.0	0.6
1547.555556	69.16	73.98	4.82	237.0	V	280.0	0.1
1559.222222	65.94	73.98	8.04	265.0	V	0.0	0.1
2774.888889	52.01	73.98	21.97	157.0	H	201.0	6.0
3653.777778	51.39	73.98	22.59	368.0	H	63.0	7.9
3685.277778	49.47	73.98	24.51	263.0	H	298.0	7.9
4940.222222	50.98	73.98	23.00	221.0	V	0.0	9.8
7412.388889	51.86	73.98	22.12	206.0	V	-1.0	13.4



Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1049.777778	32.30	53.98	21.68	229.0	V	-1.0	-2.8
1350.000000	37.15	53.98	16.83	277.0	H	0.0	0.6
1547.555556	28.48	53.98	25.50	237.0	V	280.0	0.1
1559.222222	28.47	53.98	25.51	265.0	V	0.0	0.1
2774.888889	28.45	53.98	25.53	157.0	H	201.0	6.0
3653.777778	29.16	53.98	24.82	368.0	H	63.0	7.9
3685.277778	28.42	53.98	25.56	263.0	H	298.0	7.9
4940.222222	31.28	53.98	22.70	221.0	V	0.0	9.8
7412.388889	33.62	53.98	20.36	206.0	V	-1.0	13.4

Test Personnel: Leo Richter
Supervising/Reviewing Engineer: _____
(Where Applicable) N/A
FCC Part 15.247
Product Standard: RSS-247 Issue 4
Input Voltage: Battery
Pretest Verification w / Ambient
Signals or BB Source: Yes

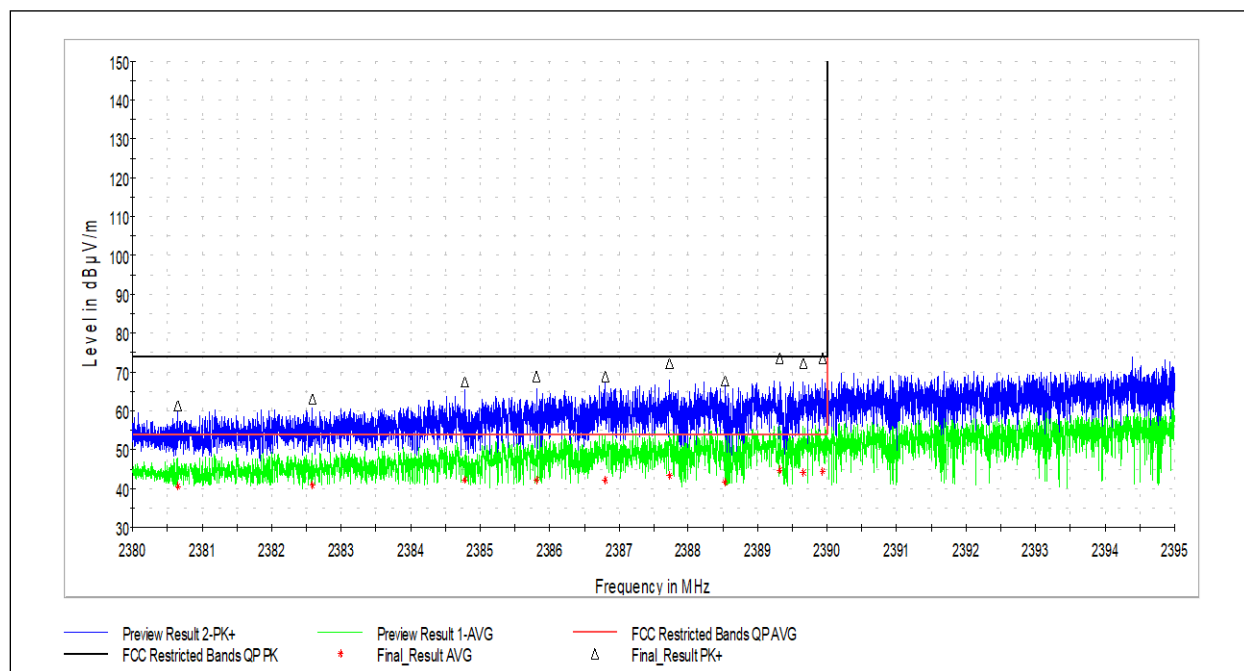
Test Date: 2/4/2026
FCC Part 15.209 in Restricted
Limit Applied: Bands from FCC Part 15.205
Ambient Temperature: 22.6 °C
Relative Humidity: 23.0%
Atmospheric Pressure: 988.8mbar

Deviations, Additions, or Exclusions: None



10 Band Edge

10.1 Radiated Spurious Emissions, 2380MHz – 2500MHz (Low Channel, 2414MHz)



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2380.645833	61.32	73.98	12.66	141.0	V	0.0	38.8
2382.585000	63.10	73.98	10.88	108.0	V	0.0	38.8
2384.780000	67.37	73.98	6.61	410.0	V	226.0	38.8
2385.815000	68.85	73.98	5.13	332.0	V	110.0	38.8
2386.797500	68.83	73.98	5.15	410.0	V	188.0	38.8
2387.729167	72.19	73.98	1.79	410.0	V	202.0	38.8
2388.528333	67.65	73.98	6.33	221.0	H	0.0	38.8
2389.310833	73.69	73.98	0.29	329.0	V	222.0	38.8
2389.655833	72.15	73.98	1.83	344.0	V	108.0	38.8
2389.928333	73.63	73.98	0.35	330.0	V	200.0	38.8



Frequency (MHz)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2380.645833	40.50	53.98	13.48	141.0	V	0.0	38.8
2382.585000	40.90	53.98	13.08	108.0	V	0.0	38.8
2384.780000	42.11	53.98	11.87	410.0	V	226.0	38.8
2385.815000	42.33	53.98	11.65	332.0	V	110.0	38.8
2386.797500	42.18	53.98	11.80	410.0	V	188.0	38.8
2387.729167	43.28	53.98	10.70	410.0	V	202.0	38.8
2388.528333	41.56	53.98	12.42	221.0	H	0.0	38.8
2389.310833	44.67	53.98	9.31	329.0	V	222.0	38.8
2389.655833	44.10	53.98	9.88	344.0	V	108.0	38.8
2389.928333	44.41	53.98	9.57	330.0	V	200.0	38.8

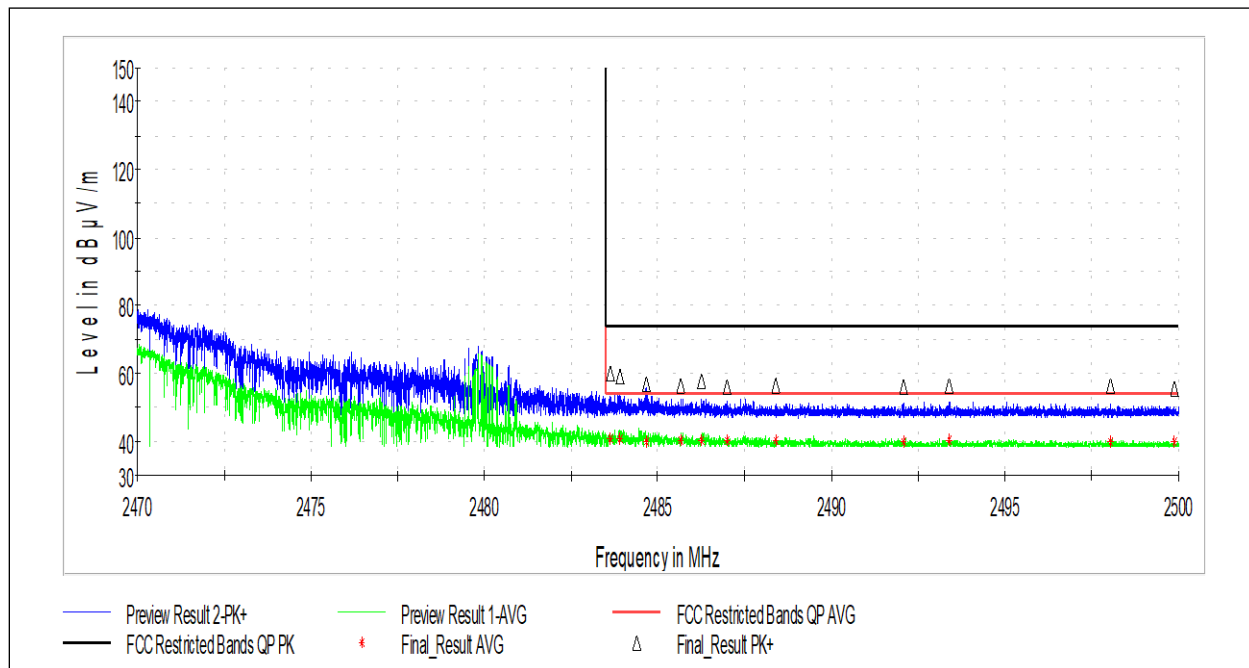
Test Personnel: Leo Richter
 Supervising/Reviewing Engineer: N/A
 (Where Applicable) FCC Part 15.247
 Product Standard: RSS-247 Issue 4
 Input Voltage: Battery
 Pretest Verification w / Ambient
 Signals or BB Source: Yes

Test Date: 2/9/2026
 Limit Applied: FCC Part 15.209 in Restricted Bands from FCC Part 15.205
 Ambient Temperature: 22.4 °C
 Relative Humidity: 18.5%
 Atmospheric Pressure: 988.8mbar

Deviations, Additions, or Exclusions: The EUT was changed to only operate on channels 2414MHz – 2460MHz. These values are required to meet the band edge limits.



10.2 Radiated Spurious Emissions, 2380MHz – 2500MHz (High Channel, 2460MHz)



*A 10 dB attenuator (9.9004dB) was inserted in the measurement setup. This ensured accurate and linear measurement of the emissions. The below values have been adjusted to account for the attenuator.

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.640000	*69.88	73.98	*4.10	248.0	V	188.0	39.3
2483.905000	*68.94	73.98	*5.04	271.0	V	146.0	39.3
2484.675000	*66.58	73.98	*7.40	154.0	V	347.0	39.3
2485.658333	*66.15	73.98	*7.83	341.0	V	148.0	39.3
2486.261667	*67.64	73.98	*6.34	228.0	V	153.0	39.3
2486.991667	*66.09	73.98	*7.89	119.0	V	348.0	39.3
2488.405000	*66.47	73.98	*7.51	192.0	V	169.0	39.3
2492.070000	*65.84	73.98	*8.14	119.0	V	9.0	39.2
2493.400000	*66.11	73.98	*7.87	345.0	V	180.0	39.2
2498.048333	*66.26	73.98	*7.72	100.0	V	0.0	39.2
2499.880000	*65.45	73.98	*8.53	323.0	V	146.0	39.2



Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.640000	*50.54	53.98	*3.44	248.0	V	188.0	39.3
2483.905000	*50.50	53.98	*3.48	271.0	V	146.0	39.3
2484.675000	*49.97	53.98	*4.01	154.0	V	347.0	39.3
2485.658333	*50.01	53.98	*3.97	341.0	V	148.0	39.3
2486.261667	*50.22	53.98	*3.76	228.0	V	153.0	39.3
2486.991667	*49.99	53.98	*3.99	119.0	V	348.0	39.3
2488.405000	*50.10	53.98	*3.88	192.0	V	169.0	39.3
2492.070000	*49.94	53.98	*4.04	119.0	V	9.0	39.2
2493.400000	*50.04	53.98	*3.94	345.0	V	180.0	39.2
2498.048333	*49.95	53.98	*4.03	100.0	V	0.0	39.2
2499.880000	*49.89	53.98	*4.09	323.0	V	146.0	39.2

Test Personnel: Leo Richter
Supervising/Reviewing Engineer: _____
(Where Applicable) N/A
FCC Part 15.247
Product Standard: RSS-247 Issue 4
Input Voltage: Battery
Pretest Verification w / Ambient
Signals or BB Source: Yes

Test Date: 2/9/2026
FCC Part 15.209 in Restricted
Limit Applied: Bands from FCC Part 15.205
Ambient Temperature: 22.4 °C
Relative Humidity: 18.5%
Atmospheric Pressure: 988.8mbar

Deviations, Additions, or Exclusions: The EUT was changed to only operate on channels 2414MHz – 2460MHz. These values are required to meet the band edge limits.



11 Conducted Emissions

11.1 Method

Tests are performed in accordance with ANSI C63.4:2014.

TEST SITE: Ground Plane

Site Designation: Ground Plane

Measurement Uncertainty

Measurement	Frequency Range	Expanded Uncertainty (k=2)	U_{CISPR}
Power Line Conducted Emissions	150 kHz - 30 MHz	3.1dB	3.4dB

As shown in the table above our conducted emissions U_{Lab} is less than the corresponding U_{CISPR} reference value in CISPR 16-4-2 Table 1, hence the compliance of the product is only based on the measured value, and no measurement uncertainty correction is required.

11.2 Sample Calculations

The following is how net line-conducted readings were determined:

$$NF = RF + LF + CF + AF$$

Where NF = Net Reading in dB μ V

RF = Reading from receiver in dB μ V

LF = LISN or ISN Correction Factor in dB

CF = Cable Correction Factor in dB

AF = Attenuator Loss Factor in dB

To convert from dB μ V to μ V or mV the following was used:

$$UF = 10^{(NF / 20)} \text{ where } UF = \text{Net Reading in } \mu\text{V}$$

NF = Net Reading in dB μ V

Example:

$$NF = RF + LF + CF + AF = 28.5 + 0.2 + 0.4 + 20.0 = 49.1 \text{ dB}\mu\text{V}$$

$$UF = 10^{(49.1 \text{ dB}\mu\text{V} / 20)} = 285.1 \mu\text{V/m}$$

11.3 Test Equipment Used:

Not Applicable

11.4 Software Utilized:

Not Applicable

11.5 Results:

Not Applicable



12 Revision History

Revision Level	Date	Report Number	Prepared By	Reviewed By	Notes
0	2/11/2026	106417534LEX-002	LAR	MC	Original Issue
1	2/25/2026	106417534LEX-002.1	LAR	MC	FCC ID change