

Patrol 6, LLC

TEST REPORT

SCOPE OF WORK

FCC TESTING—P1

REPORT NUMBER

260317073SZN-002

ISSUE DATE

22 April 2026

[REVISED DATE]

[-----]

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Patrol 6, LLCApplication
For
Certification**FCC ID: 2BVFCP6-BC-V1****Body worn camera****Model: P1****Brand Name: Patrol 6****2.4GHz Transceiver****Report No.: 260317073SZN-002**

We hereby certify that the sample of the above item is considered to comply with the requirements of FCC Part 15, Subpart C for Intentional Radiator, mention 47 CFR [10-1-24]

Prepared and Checked by:



Draven Li
Sr. Project Engineer

Approved by:



Johnny Wang
Project Engineer
Date: 22 April 2026

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MEASUREMENT/TECHNICAL REPORT

This report concerns (check one:) Original Grant X Class I Change _____

Equipment Type: DXX - Part 15 Low Power Communication Device Transmitter

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? Yes _____ No X

If yes, defer until: _____
date

Company Name agrees to notify the Commission by: _____
date
of the intended date of announcement of the product so that the grant can be issued on that date.

Transition Rules Request per 15.37? Yes _____ No X

If no, assumed Part 15, Subpart C for intentional radiator – the new 47 CFR [10-1-24 Edition] provision.

Report prepared by:

Draven Li
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1.0 Summary of Test Result

Applicant: Patrol 6, LLC

Applicant Address: 2843 E. Robin Lane Phoenix, AZ 85050 USA

Manufacturer: Patrol 6, LLC

Manufacturer Address: 2843 E. Robin Lane Phoenix, AZ 85050 USA

MODEL:P1

FCC ID: 2BVFCP6-BC-V1

Test Specification	Reference	Results
Transmitter Radiated Emission	15.249 &15.209 &15.205	Pass
Conducted Emission	15.207	Pass
Band edge	15.249 &15.209 &15.205	Pass
20dB Bandwidth	15.215(c)	Pass

Notes: The EUT uses an Integral Antenna which in accordance to Section 15.203 is considered sufficient to comply with the provisions of this section.

2.0 General Description

2.1 Product Description

The equipment under test (EUT) is a Body worn camera with Bluetooth 4.1(dual-mode) function operating in 2402-2480MHz, 2.4G WIFI function operating in 2412-2462MHz and 5G WIFI function operating in 5150MHz~5250 MHz, 5725MHz~5850MHz, LTE function operating in Band 2/4/5/12/17/30/66/71, NFC function operating in 13.56MHz. The EUT is powered by DC 5V 2A by adapter or DC 3.8V rechargeable battery. For more detail information pls. refer to the user manual. Bluetooth Version: 4.1

Antenna Type: Integral antenna

Antenna Gain: 1.46 dBi max (This information is provided by applicant, and the applicant is responsible for the authenticity of the provided information.)

Modulation Type: GFSK

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

2.2 Related Submittal(s) Grants

This is an application for certification of a transceiver for the Body worn camera which has Bluetooth (BLE) function.

For the Bluetooth (EDR) function was reported in report: 260317073SZN-001.

For the 2.4G WIFI function was reported in report: 260317073SZN-003.

For the 5G WIFI function was reported in report: 260317073SZN-004.

For the LTE function was reported in report: 260317073SZN-005.

For the NFC function was reported in report: 260317073SZN-006.

For other digital functions were reported in the SDOC report: 260317073SZN-008.

2.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.10 (2020). Radiated emission measurement was performed in Semi-anechoic chamber and conducted emission measurement was performed in shield room. For radiated emission measurement, preliminary scans were performed in the semi-anechoic chamber only to determine the worst-case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "Justification Section" of this Application. All other measurements were made in accordance with the procedures in part 2 of CFR 47.

2.4 Test Facility

The Semi-Anechoic chamber and shield room used to collect the radiated data and conducted data are **Intertek Testing Services Shenzhen Ltd. Longhua Branch** and located at 101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu Subdistrict, LongHua District, ShenZhen, P.R. China. This test facility and site measurement data have been fully placed on file with the FCC (Registration Number: CN1188).

3.0 System Test Configuration

3.1 Justification

The system was configured for testing in a typical fashion (as a customer would normally use it), and in the confines as outlined in ANSI C63.10 (2020).

The EUT is powered by DC 3.8V full rechargeable battery or DC 5V/2A by adapter during the test, only the worst data was reported in this report.

For maximizing emissions below 30 MHz, the EUT was rotated through 360°, the bottom of the loop antenna was placed 1 meter above the ground, and the antenna polarization was changed. For maximizing emissions, the EUT was rotated through 360°, the antenna height was varied from 1 meter to 4 meters above the ground plane, and the antenna polarization was changed. This step by step procedure for maximizing emissions led to the data reported in Section 4.

The EUT and transmitting antenna was centered on the turntable.

The equipment under test (EUT) was configured for testing in a typical fashion (as a customer would normally use it). The EUT was placed on a turn table, which enabled the engineer to maximize emissions through its placement in the three orthogonal axes.

3.2 EUT Exercising Software

The EUT exercise program (provided by client) used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use. The worst case configuration is used in all specified testing.

The parameters of test software setting:

During the test, Channel and power controlling software provided by the applicant was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the application and is going to be fixed on the firmware of the end product.

Test Software: Nonsignaling operation platform

3.3 Special Accessories

No special accessories used.

3.4 Equipment Modification

Any modifications installed previous to testing by Patrol 6, LLC will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Longhua Branch.

3.5 Measurement Uncertainty

When determining the test conclusion, the Measurement Uncertainty of test has been considered.

Measurement Uncertainty	Uncertainty
Channel Bandwidth	$\pm 3.46\%$
Conducted Unwanted Emission	$\pm 0.55\text{dB}$
Spurious emission (Above 18GHz)	$\pm 5.3\text{dB}$
Spurious emission (6GHz to 18GHz)	$\pm 5.1\text{dB}$
Radiated emission (1GHz to 6GHz)	$\pm 4.8\text{dB}$
Radiated emission (Up to 1GHz)	$\pm 4.8\text{dB}$
AC Conducted emission	$\pm 3.2\text{ dB}$
Temperature	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$

3.6 Support Equipment List and Description

Description	Manufacturer	Model No.
Laptop (Provided by Intertek)	DELL	Latitude 3480
Router (Provided by Intertek)	NETGEAR	Model: R7800
Adapter (Provided by Applicant)	Dongguan Kaisheng electronic technology co., LTD	Input: 100-240V~ 50/60Hz 0.3A Output: 5V $\overline{\text{---}}$ 2A
Type-C Cable (Provided by Applicant)	N/A	Unshielded, Length 1.0m

4.0 Emission Results

Data is included worst-case configuration (the configuration which resulted in the highest emission levels).

4.1 Radiated Test Results

A sample calculation, configuration photographs and data tables of the emissions are included.

4.1.1 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

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

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/m

AG = Amplifier Gain in dB

PD = Pulse Desensitization in dB

AV = Average Factor in -dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

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

Assume a receiver reading of 62.0 dB μ V is obtained. The antenna factor of 7.4 dB/m and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB, and the resultant average factor was -10 dB. The net field strength for comparison to the appropriate emission limit is 32 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

$$RA = 62.0 \text{ dB}\mu\text{V}$$

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

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

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

$$PD = 0 \text{ dB}$$

$$AV = -10 \text{ dB}$$

$$FS = 62 + 7.4 + 1.6 - 29 + 0 = 42 \text{ dB}\mu\text{V/m}$$

$$\text{Level in } \mu\text{V/m} = \text{Common Antilogarithm } [(42 \text{ dB}\mu\text{V/m})/20] = 125.9 \mu\text{V/m}$$

4.1.2 Radiated Emission Configuration Photograph

For electronic filing, the worst case radiated emission configuration photograph is saved with filename: radiated photos. pdf.

4.1.3 Radiated Emissions

The data on the following page lists the significant emission frequencies, the limit and the margin of compliance. Numbers with a positive sign are below the limit.

Worst Case Radiated Emission
at
959.971333 MHz

Judgement: Passed by 11.1 dB

TEST PERSONNEL:

Sign on file

Draven Li, Sr. Project Engineer
Typed/Printed Name

30 March 2026
Date

Applicant: Patrol 6, LLC

Date of Test: 30 March 2026

Worst Case Operating Mode:

Modulation type:

Worst Case Test Voltage:

Model: P1

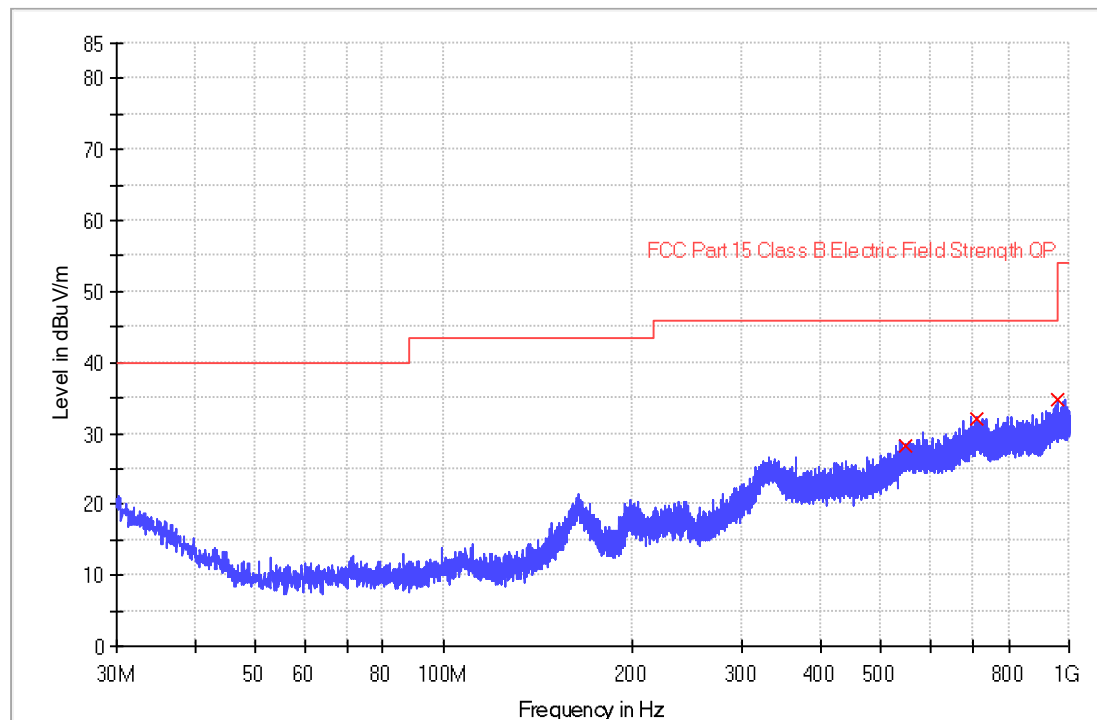
Transmission (2402MHz)

GFSK

AC 120V/60Hz

ANT Polarity: Horizontal

FCC Part 15



Frequency (MHz)	Quasi Peak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
548.012333	28.3	1000.0	120.000	100.0	H	29.1	17.7	46.0
710.034667	32.0	1000.0	120.000	100.0	H	31.2	14.0	46.0
959.971333	34.9	1000.0	120.000	100.0	H	33.9	11.1	46.0

Remark:

1. Corr. (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)
2. Quasi Peak (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
3. Margin (dB) = Limit Line (dBμV/m) – Level (dBμV/m)

Applicant: Patrol 6, LLC

Date of Test: 30 March 2026

Worst Case Operating Mode:

Modulation type:

Worst Case Test Voltage:

Model: P1

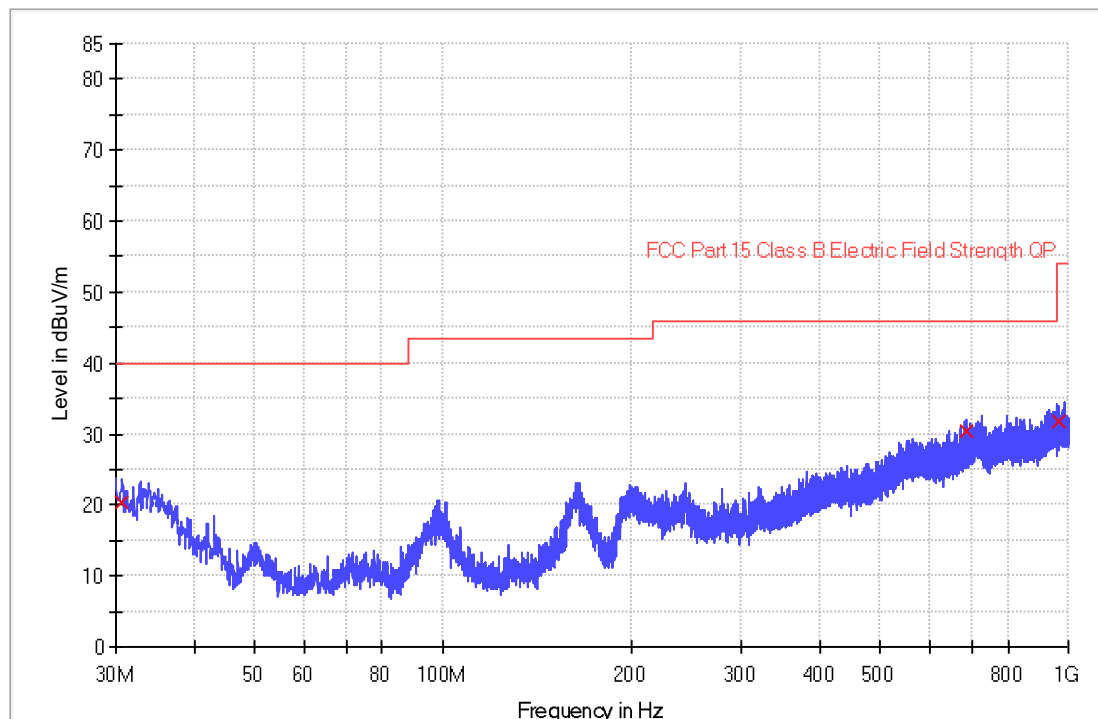
BLE Transmission (2402MHz)

GFSK

AC 120V/60Hz

ANT Polarity: Vertical

FCC Part 15



Frequency (MHz)	Quasi Peak (dBuV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBuV/m)
30.711333	20.3	1000.0	120.000	100.0	V	21.9	19.7	40.0
688.824000	30.4	1000.0	120.000	100.0	V	30.8	15.6	46.0
965.565000	31.9	1000.0	120.000	100.0	V	33.9	22.1	54.0

Remark:

1. Corr. (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)
2. Quasi Peak (dBuV/m) = Corr. (dB/m) + Read Level (dBuV)
3. Margin (dB) = Limit Line (dBuV/m) – Level (dBuV/m)

4.1.4 Transmitter Spurious Emissions (Radiated)

Worst Case Radiated Emission
at
2400.000 MHz

For electronic filing, the worst case radiated emission configuration photograph is saved with filename: radiated photos. pdf.

The data on the following page lists the significant emission frequencies, the limit and the margin of compliance. Numbers with a minus sign are below the limit.

Judgement: Passed by 3.1 dB

TEST PERSONNEL:

Sign on file

Draven Li, Sr. Project Engineer

Typed/Printed Name

30 March 2026

Date

Applicant: Patrol 6, LLC

Date of Test: 30 March 2026

Worst Case Operating Mode:

Modulation type:

Model: P1

Transmitting(2402MHz)

GFSK

Table 1

Radiated Emissions

(2402MHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB/m)	Net at 3m (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	2402.000	96.8	36.7	28.1	88.2	114.0	-25.8
Horizontal	4804.000	51.8	36.7	35.5	50.6	74.0	-23.4
Horizontal	7206.000	52.2	36.1	36.5	52.6	74.0	-21.4
Horizontal	9608.000	53.9	36.2	37.0	54.7	74.0	-19.3

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB/m)	Net at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	2402.000	81.8	36.7	28.1	73.2	94.0	-20.8
Horizontal	4804.000	40.5	36.7	35.5	39.3	54.0	-14.7
Horizontal	7206.000	42.0	36.1	36.5	42.4	54.0	-11.6
Horizontal	9608.000	44.6	36.2	37.0	45.4	54.0	-8.6

Notes: 1. Peak detector is used for the emission measurement.

2. All measurements were made at 3 meter. Harmonic emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna is used for the emission over 1000MHz.

5. Tests were conducted in both the horizontal and vertical directions, but only worst-case data record in report.

Test Engineer: Draven Li

Applicant: Patrol 6, LLC

Date of Test: 30 March 2026

Worst Case Operating Mode:

Modulation type:

Model: P1

Transmitting(2440MHz)

GFSK

Table 2

Radiated Emissions

(2440MHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB/m)	Net at 3m (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	2440.000	95.5	36.7	28.1	86.9	114.0	-27.1
Horizontal	4880.000	51.6	36.7	35.5	50.4	74.0	-23.6
Horizontal	7320.000	50.3	36.1	37.2	51.4	74.0	-22.6
Horizontal	9760.000	52.6	36.2	37.0	53.4	74.0	-20.6

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB/m)	Net at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	2440.000	81.1	36.7	28.1	72.5	94.0	-21.5
Horizontal	4880.000	38.1	36.7	35.5	36.9	54.0	-17.1
Horizontal	7320.000	41.8	36.1	37.2	42.9	54.0	-11.1
Horizontal	9760.000	44.1	36.2	37.0	44.9	54.0	-9.1

Notes: 1. Peak detector is used for the emission measurement.

2. All measurements were made at 3 meter. Harmonic emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna is used for the emission over 1000MHz.

5. Tests were conducted in both the horizontal and vertical directions, but only worst-case data record in report.

Test Engineer: Draven Li

Applicant: Patrol 6, LLC

Date of Test: 30 March 2026

Worst Case Operating Mode:

Modulation type:

Model: P1

Transmitting(2480MHz)

GFSK

Table 3

Radiated Emissions

(2480MHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB/m)	Net at 3m (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	2480.000	97.6	36.7	28.1	89.0	114.0	-25.0
Horizontal	4960.000	49.4	36.7	35.5	48.2	74.0	-25.8
Horizontal	7440.000	49.3	36.1	37.2	50.4	74.0	-23.6
Horizontal	9920.000	49.9	36.3	38.9	52.5	74.0	-21.5

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB/m)	Net at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	2480.000	81.3	36.7	28.1	72.7	94.0	-21.3
Horizontal	4960.000	40.7	36.7	35.5	39.5	54.0	-14.5
Horizontal	7440.000	40.4	36.1	37.2	41.5	54.0	-12.5
Horizontal	9920.000	41.9	36.3	38.9	44.5	54.0	-9.5

Notes: 1. Peak detector is used for the emission measurement.

2. All measurements were made at 3 meter. Harmonic emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna is used for the emission over 1000MHz.

5. Tests were conducted in both the horizontal and vertical directions, but only worst-case data record in report.

Test Engineer: Draven Li

4.2 Conducted Emission Configuration Photograph

For electronic filing, the worst case radiated emission configuration photographs are saved with filename: conducted photos.pdf.

4.2.1 Conducted Emission

Worst Case Conducted Configuration
at
0.598000MHz

Judgement: Passed by 32.8dB margin

TEST PERSONNEL:

Sign on file

Draven Li, Project Engineer
Typed/Printed Name

26 March 2026
Date

Applicant: Patrol 6, LLC

Date of Test: 26 March 2026

Model: P1

Worst Case Operating Mode: BLE Transmission (2402MHz)

Modulation type: GFSK

Worst Case Test Voltage: AC 120V/60Hz

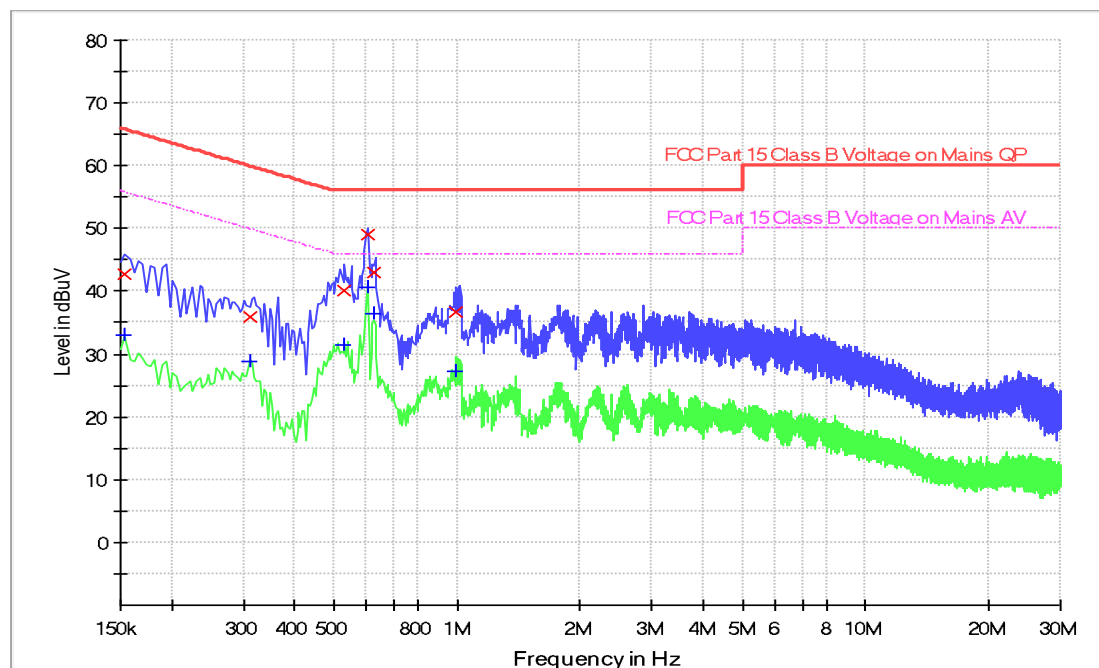
Phase: Live

Graphic / Data Table

Conducted Emissions

Pursuant to FCC 15.207: Emissions Requirement

Conducted Emission Test - FCC Part 15



Limit and Margin QP

Frequency (MHz)	Quasi Peak (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.154000	42.8	9.000	L1	9.8	23.0	65.8
0.310000	35.9	9.000	L1	9.8	24.1	60.0
0.530000	40.0	9.000	L1	9.8	16.0	56.0
0.602000	49.0	9.000	L1	9.8	7.0	56.0
0.626000	43.0	9.000	L1	9.8	13.0	56.0
0.994000	36.7	9.000	L1	9.8	19.3	56.0

Limit and Margin AV

Frequency (MHz)	Average (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.154000	33.2	9.000	L1	9.8	22.6	55.8
0.310000	29.0	9.000	L1	9.8	21.0	50.0
0.530000	31.6	9.000	L1	9.8	14.4	46.0
0.602000	40.6	9.000	L1	9.8	5.4	46.0
0.626000	36.4	9.000	L1	9.8	9.6	46.0
0.994000	27.3	9.000	L1	9.8	18.7	46.0

Applicant: Patrol 6, LLC

Date of Test: 26 March 2026

Model: P1

Worst Case Operating Mode: BLE Transmission (2402MHz)

Modulation type: GFSK

Worst Case Test Voltage: AC 120V/60Hz

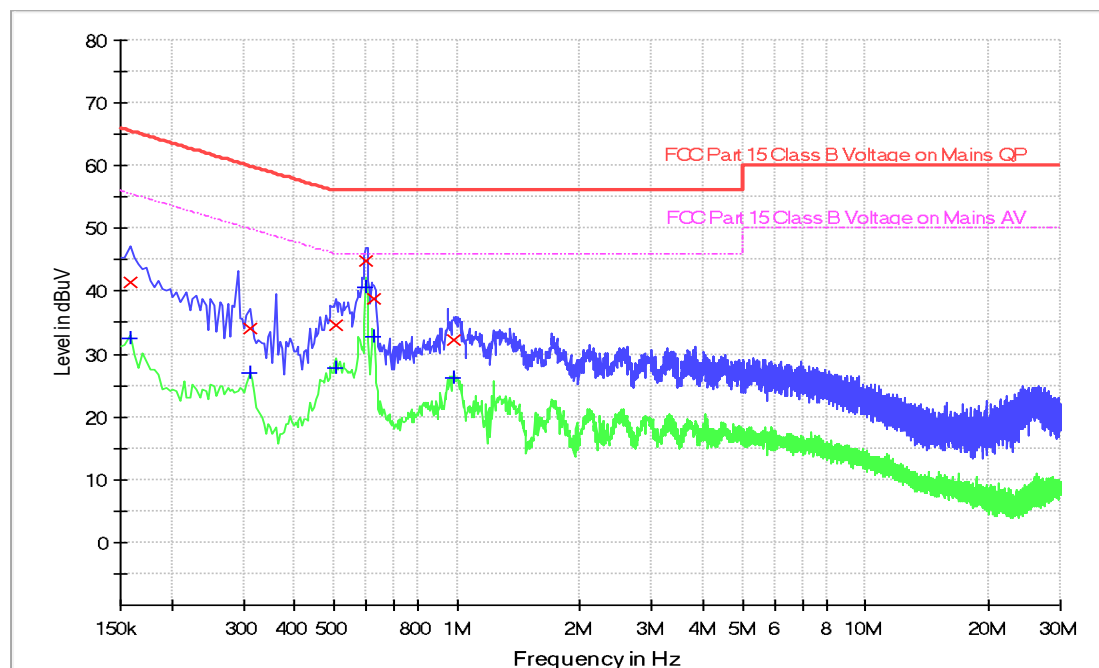
Phase: Neutral

Graphic / Data Table

Conducted Emissions

Pursuant to FCC 15.207: Emissions Requirement

Conducted Emission Test - FCC Part 15



Limit and Margin QP

Frequency (MHz)	Quasi Peak (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.158000	41.4	9.000	N	9.7	24.2	65.6
0.310000	34.0	9.000	N	9.7	26.0	60.0
0.506000	34.5	9.000	N	9.7	21.5	56.0
0.598000	45.0	9.000	N	9.7	11.0	56.0
0.626000	38.8	9.000	N	9.7	17.2	56.0
0.986000	32.3	9.000	N	9.7	23.7	56.0

Limit and Margin AV

Frequency (MHz)	Average (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.158000	32.5	9.000	N	9.7	23.1	55.6
0.310000	27.0	9.000	N	9.7	23.0	50.0
0.506000	27.7	9.000	N	9.7	18.3	46.0
0.598000	40.7	9.000	N	9.7	5.3	46.0
0.626000	32.7	9.000	N	9.7	13.3	46.0
0.986000	26.1	9.000	N	9.7	19.9	46.0

5.0 Equipment Photographs

For electronic filing, the photographs of the tested EUT are saved with filename: external photos.pdf & internal photos.pdf.

6.0 Product Labelling

For electronic filing, the FCC ID label artwork and the label location are saved with filename: label.pdf.

7.0 Technical Specifications

For electronic filing, the block diagram and schematics of the tested EUT are saved with filename: block.pdf and circuit.pdf respectively.

8.0 Instruction Manual

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold/leased in the United States.

9.0 Miscellaneous Information

This miscellaneous information includes details of the measured bandedge, 20dB Bandwidth, the test procedure and calculation of factor such as pulse desensitization.

9.1 Bandedge Plot

The test plots are attached as below. From the below plots, the field strength of any emissions outside of the specified frequency band are attenuated to the general radiated emission limits in section 15.209. It fulfils the requirement of 15.249(d).

Peak Measurement

Restricted-band band-edge tests shall be performed as radiated measurements, i.e (Band-edge Plot).

(i) Lower channel 2402.000 MHz:

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB/m)	Net at 3m (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	2400.000	71.1	36.7	28.1	62.5	74.0	-11.5

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB/m)	Net at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	2400.000	59.5	36.7	28.1	50.9	54.0	-3.1

(ii) Upper channel 2480.000 MHz:

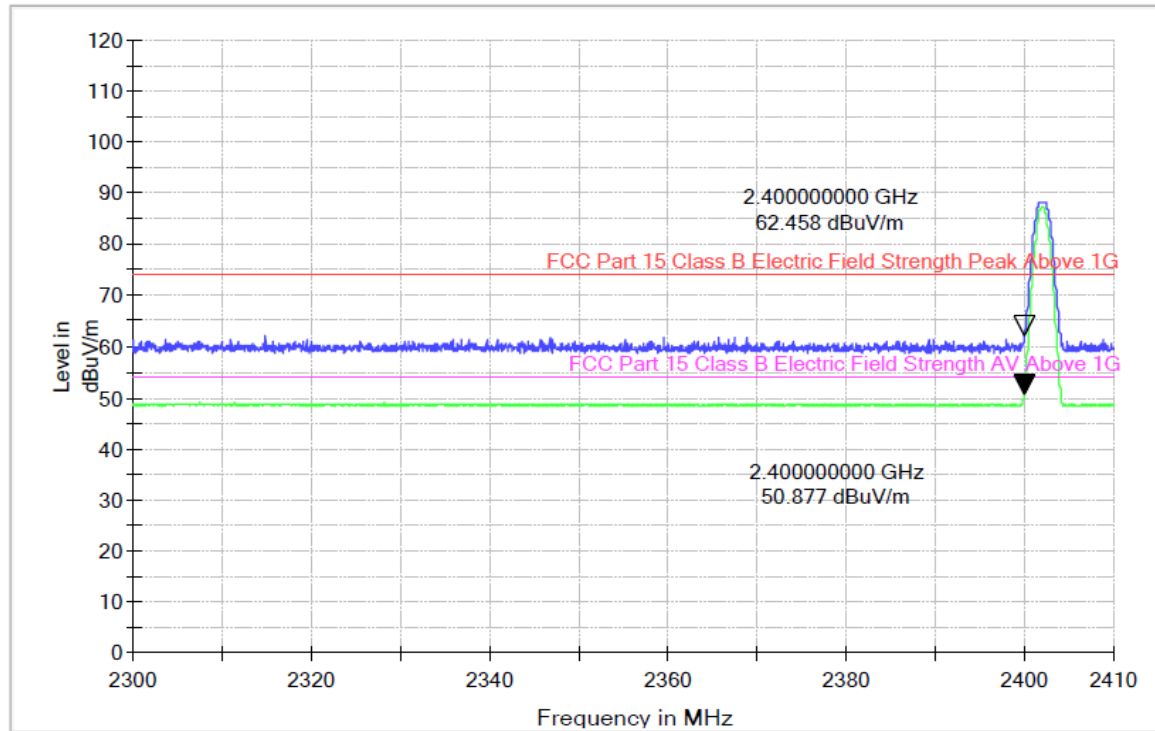
Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB/m)	Net at 3m (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	2483.500	67.6	36.8	29.1	59.9	74.0	-14.1

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB/m)	Net at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	2483.500	56.0	36.8	29.1	48.3	54.0	-5.7

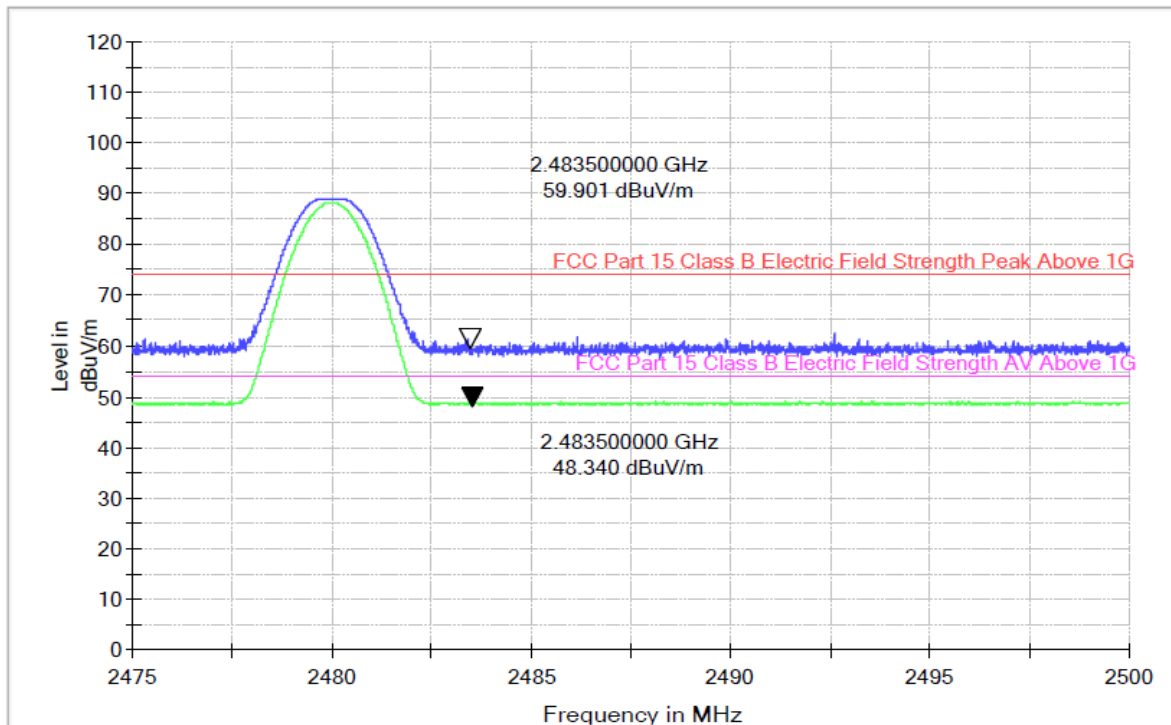
Notes:

- The resultant field strength meets the general radiated emission limit in section 15.209, which does not exceed 74dBμv/m (Peak Limit) and 54dBμv/m (Average Limit).
- Tests were conducted in both the horizontal and vertical directions, but only worst-case data record in report.

Lowest frequency Channel

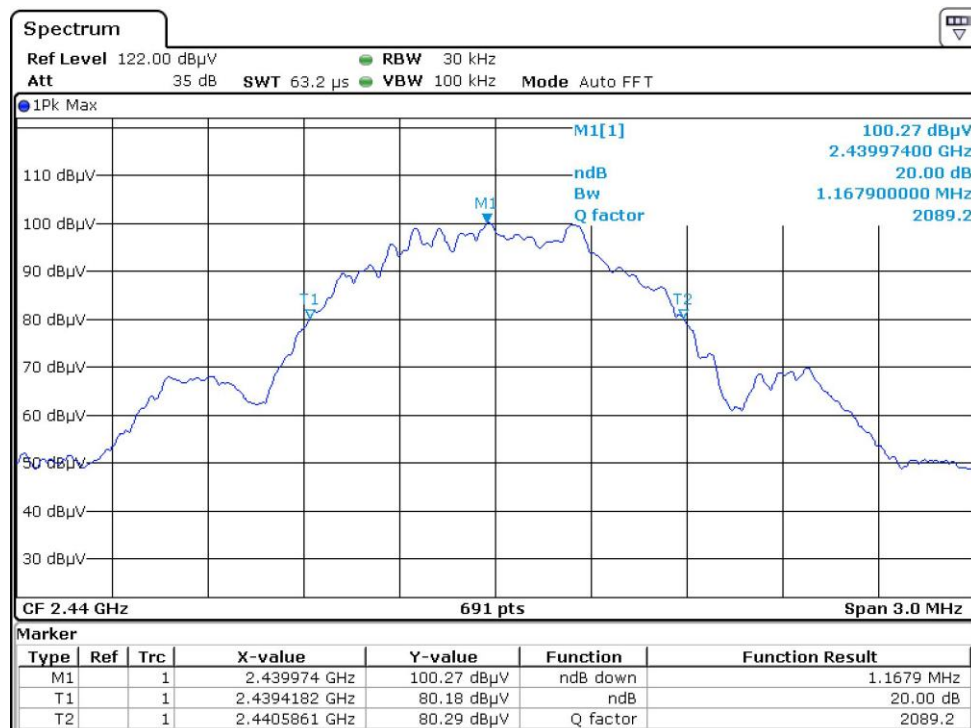
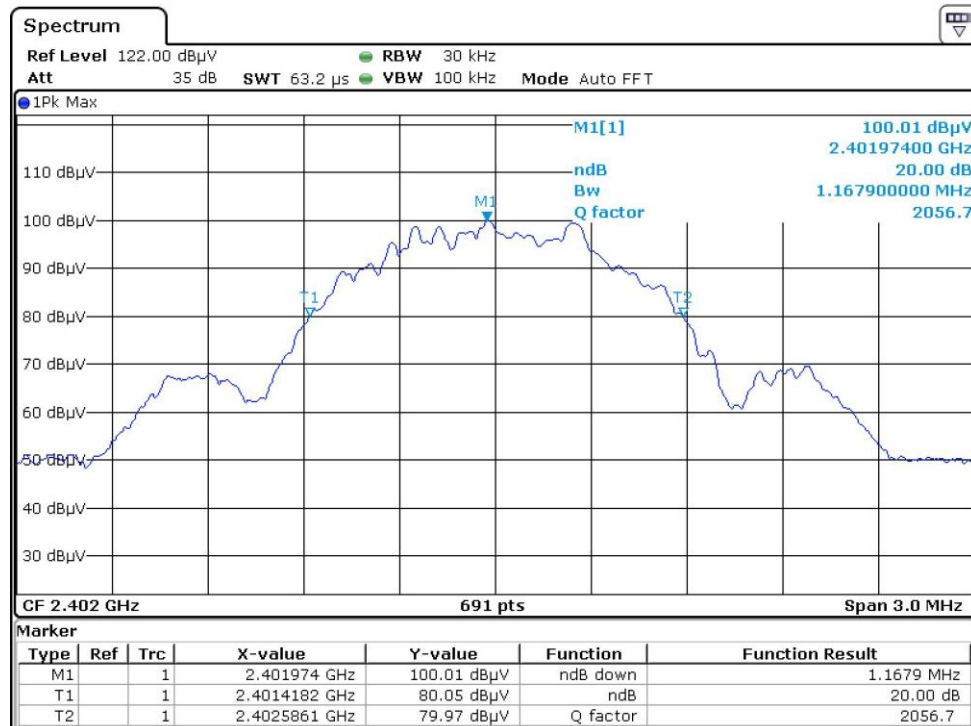


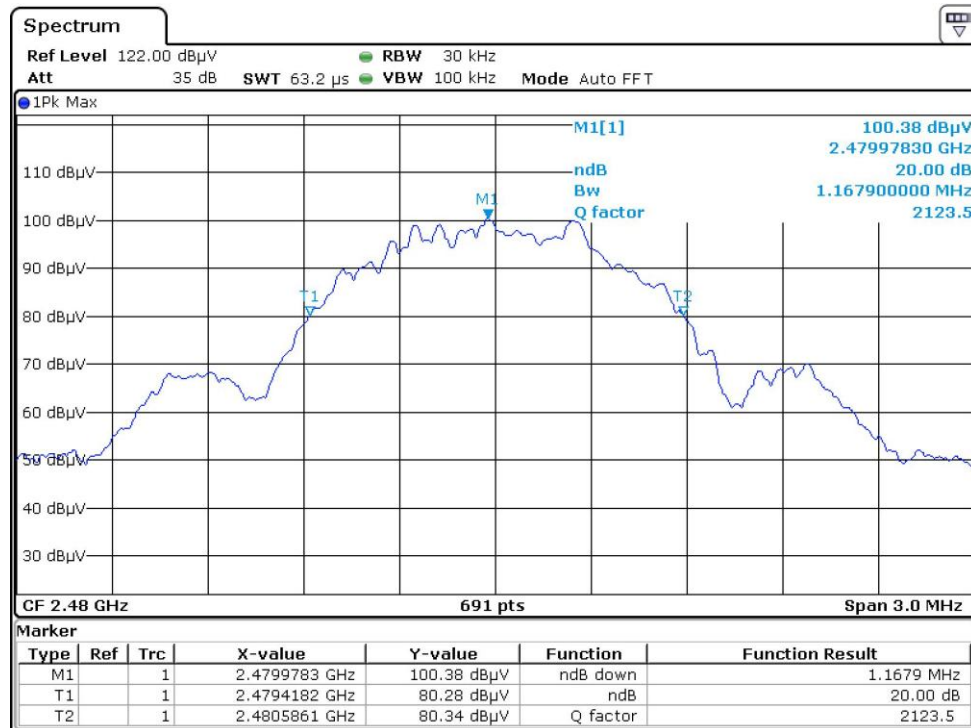
Highest frequency Channel



9.2 20dB bandwidth

Pursuant to FCC part 15 Section 15.215(c), the 20dB bandwidth of the emission was contained within the frequency band designated (mentioned as above) which the EUT operated. The effects, if any, from frequency sweeping, frequency hopping, other modulation techniques and frequency stability over excepted variations in temperature and supply voltage were considered. The test plots are reported as below.





9.3 Discussion of Pulse Desensitization

Pulse desensitivity is not applicable for this device since the transmitter transmits the RF signal continuously.

9.4 Transmitter Duty Cycle Calculation, FCC Rule 15.35(b, c)

The EUT antenna output port was connected to the input of the spectrum analyzer. The analyzer center frequency was set to EUT RF channel carrier. The SWEP function on the analyzer was set to ZERO SPAN. The Transmitter ON time was determined from the resultant time-amplitude display:

	See attached spectrum analyzer chart (s) for Transmitter timing
	See Transmitter timing diagram provided by manufacturer
x	Not applicable, duty cycle was not used.

9.5 Emissions Test Procedures

The following is a description of the test procedure used by Intertek Testing Services in the measurements of transmitters operating under Part 15, Subpart C rules.

The test set-up and procedures described below are designed to meet the requirements of ANSI C63.10 - 2020.

The transmitting equipment under test (EUT) is placed on a styrene turntable which is four feet in diameter and approximately 0.8 meter up to 1GHz and 1.5 meter above 1GHz in height above the ground plane. During the radiated emissions test, the turntable is rotated and any cables leaving the EUT are manipulated to find the configuration resulting in maximum emissions. The EUT is adjust through all three orthogonal axes to obtain maximum emission levels. The antenna height and polarization are varied during the testing to search for maximum signal levels.

Detector function for radiated emissions is in peak mode. Average readings, when required, are taken by measuring the duty cycle of the equipment under test and subtracting the corresponding amount in dB from the measured peak readings. A detailed description for the calculation of the average factor can be found in section 9.4.

The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower.

Detector function for conducted emissions is in QP & AV mode and IFBW setting is 9 kHz from the frequency band 150 kHz to 30MHz.

9.5 Emissions Test Procedures (cont'd)

The EUT is warmed up for 15 minutes prior to the test.

AC power to the unit is varied from 85% to 115% nominal and variation in the fundamental emission field strength is recorded. If battery powered, a new, fully charged battery is used.

Conducted measurements are made as described in ANSI C63.10 - 2020.

The IF bandwidth used for measurement of radiated signal strength was 10 kHz for emission below 30 MHz and 120 kHz for emission from 30 MHz to 1000 MHz. Where pulsed transmissions of short enough pulse duration warrant, a greater bandwidth is selected according to the recommendations of Hewlett Packard Application Note 150-2. Above 1000 MHz, a resolution bandwidth of 1 MHz is used (RBW 3MHz used for fundamental emission).

Transmitter measurements are normally conducted at a measurement distance of three meters. However, to assure low enough noise floor in the restricted bands and above 1 GHz, signals are acquired at a distance of one meter or less. All measurements are extrapolated to three meters using inverse scaling, but those measurements taken at a closer distance are so marked.

10.0 Test Equipment List

Equipment No.	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
SZ061-13	BiConiLog Antenna	ETS	3142E	00166158	29-May-2025	29-May-2028
SZ185-03	EMI Receiver	R&S	ESR7	101975	13-Apr-2025	13-Apr-2026
SZ061-08	Horn Antenna	ETS	3115	00092346	13-Sep-2024	13-Sep-2027
SZ061-06	Active Loop Antenna	Electro-Metrics	EM-6876	217	05-May-2024	05-May-2027
SZ056-03	Spectrum Analyzer	R&S	FSP 30	101148	21-Apr-2025	21-Apr-2026
SZ056-06	Signal Analyzer	R&S	FSV 40	101101	01-Dec-2025	01-Dec-2026
SZ181-04	Preamplifier	Agilent	8449B	3008A02474	21-Apr-2025	21-Apr-2026
SZ188-01	Anechoic Chamber	ETS	RFD-F/A-100	4102	12-Dec-2021	12-Dec-2026
SZ062-23	RF Cable	RADIALL	SF104PE	--	15-Sep-2025	15-Sep-2026
SZ062-35	RF Cable	RADIALL	A50-3.5M3.5M-8M	--	15-Sep-2025	15-Sep-2026
SZ067-04	Notch Filter	Micro-Tronics	BRM50702-02	--	21-Apr-2025	21-Apr-2026
SZ185-02	EMI Test Receiver	R&S	ESCI	100692	30-Jun-2025	30-Jun-2026
SZ187-01	Two-Line V-Network	R&S	ENV216	100072	27-Oct-2025	27-Oct-2026
SZ187-02	Two-Line V-Network	R&S	ENV216	100072	25-Apr-2025	25-Apr-2026
SZ062-16	RF Cable	HUBER+SUHNER	CBL2-BN-1m	110127-2231000	30-Jun-2025	30-Jun-2026
SZ188-03	Shielding Room	ETS	RFD-100	4100	20-Dec-2022	20-Dec-2027

***** End of Report*****