41039 Boyce Road
Fremont, CA. 94538
510-578-3500 Phone

# *EMC Test Report-EAR Controlled Data*

## *Application for FCC Grant of Equipment Authorization*
## *Canada Certification*

## *Innovation, Science and Economic Development Canada*
## *RSS-Gen Issue 5 / RSS-247 Issue 3*
## *FCC Part 15 Subpart C*

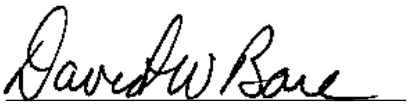
## *Model: ICON Remote Control*

| | |
|---|---|
| IC CERTIFICATION #: | 8392A-RCICON |
| FCC ID: | XFJRCICON |
| APPLICANT: | XP Metal Detectors<br>8 rue du développement ZI de VIC<br>31320 Castanet-Tolosan, France |
| TEST SITE(S): | Element Materials Technology Fremont<br>AKA: NTS Labs, LLC<br>41039 Boyce Road<br>Fremont, CA. 94538-2435 |
| IC SITE REGISTRATION #: | 2845B-5 & 2845B-7 |
| PROJECT NUMBER: | PR185733 |
| REPORT DATE: | January 20, 2025 |
| RE-ISSUED DATE: | June 4, 2025 |
| FINAL TEST DATES: | October 23, November 4, 5 and December 13, 2024 and January 7, 2025 |
| TOTAL NUMBER OF PAGES: | 54 |

A2LA ACCREDITED
Testing Cert #0214.26

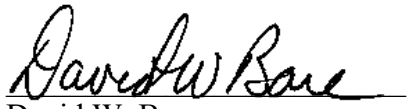
## *VALIDATING SIGNATORIES*

PROGRAM MGR



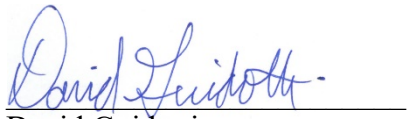
David W. Bare
Chief Engineer

TECHNICAL REVIEWER:



David W. Bare
Chief Engineer

FINAL REPORT PREPARER:



David Guidotti
Senior Technical Writer

QUALITY ASSURANCE DELEGATE

Gary Izard
Senior Technical Writer

## *REVISION HISTORY*

| Rev# | Date | Comments | Modified By |
|---|---|---|---|
| - | January 20, 2025 | First release | |
| 1 | May 16, 2025 | Updated ANSI C63.10 reference, added sample serial number used for CE and RE< 1GHz | dwb |
| 2 | June 4, 2025 | Added serial number of 1 to one of the samples. Changed power setting unit from dB to dBm | dwb |

## TABLE OF CONTENTS

## SCOPE

An electromagnetic emissions test has been performed on the XP Metal Detectors model ICON Remote Control, pursuant to the following rules:

RSS-GEN Issue 6 " General Requirements for Compliance of Radio Apparatus"
RSS 247 Issue 3 "Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSS) and Licence-Exempt Local Area Network (LE-LAN) Devices"
FCC Part 15 Subpart C

Conducted and radiated emissions data has been collected, reduced, and analyzed within this report in accordance with measurement guidelines set forth in the following reference standards and as outlined in Element Materials Technology Fremont test procedures:

ANSI C63.10-2013
FCC DTS Measurement Guidance KDB558074 D01

The intentional radiator above has been tested in a simulated typical installation to demonstrate compliance with the relevant Industry Canada performance and procedural standards.

Final system data was gathered in a mode that tended to maximize emissions by varying orientation of EUT, orientation of power and I/O cabling, antenna search height, and antenna polarization.

Every practical effort was made to perform an impartial test using appropriate test equipment of known calibration. All pertinent factors have been applied to reach the determination of compliance.

Element Materials Technology Fremont is accredited by the A2LA, certificate number 0214.26, to perform the test(s) listed in this report, except where noted otherwise.

## OBJECTIVE

The primary objective of the manufacturer is compliance with the regulations outlined in the previous section.

Prior to marketing in the USA, all unlicensed transmitters and transceivers require certification. Receive-only devices operating between 30 MHz and 960 MHz are subject to either certification or a manufacturer's declaration of conformity, with all other receive-only devices exempt from the technical requirements.

Prior to marketing in Canada, Class I transmitters, receivers and transceivers require certification. Class II devices are required to meet the appropriate technical requirements but are exempt from certification requirements.

Certification is a procedure where the manufacturer submits test data and technical information to a certification body and receives a certificate or grant of equipment authorization upon successful completion of the certification body's review of the submitted documents. Once the equipment authorization has been obtained, the label indicating compliance must be attached to all identical units, which are subsequently manufactured.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product which may result in increased emissions should be checked to ensure compliance has been maintained (i.e., printed circuit board layout changes, different line filter, different power supply, harnessing or I/O cable changes, etc.).

## *STATEMENT OF COMPLIANCE*

The tested sample of XP Metal Detectors model ICON Remote Control complied with the requirements of the following regulations:

RSS-GEN Issue 6 " General Requirements for Compliance of Radio Apparatus"
RSS 247 Issue 3 "Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSS) and Licence-Exempt Local Area Network (LE-LAN) Devices"
RSS-210 Issue 11 "Licence-Exempt Radio Apparatus: Category I Equipment"
FCC Part 15 Subpart C

Maintenance of compliance is the responsibility of the manufacturer. Any modifications to the product should be assessed to determine their potential impact on the compliance status of the device with respect to the standards detailed in this test report.

The test results recorded herein are based on a single type test of XP Metal Detectors model ICON Remote Control and therefore apply only to the tested sample(s). The sample(s) were selected and prepared by Huong Monnier of XP Metal Detectors.

## *DEVIATIONS FROM THE STANDARDS*

No deviations were made from the published requirements listed in the scope of this report.

## *TEST RESULTS SUMMARY*

### *DIGITAL TRANSMISSION SYSTEMS (2400 – 2483.5MHz)*

| FCC Rule Part | RSS Rule Part | Description | Measured Value / Comments | Limit / Requirement | Result |
|---|---|---|---|---|---|
| 15.247(a) | RSS 247 5.2 | Digital Modulation | Systems uses GFSK modulation | System must utilize a digital transmission technology | Complies |
| 15.247 (a) (2) | RSS 247 5.2 (1) | 6dB Bandwidth | 510 kHz | >500kHz | Complies |
| 15.247 (b) (3) | RSS 247 5.4 (4) | Output Power (multipoint systems) | -0.5 dBm (0.0009 Watts) EIRP = 0.0009 W Note 1 | 1Watt, EIRP limited to 4 Watts. | Complies |
| 15.247(e) | RSS 247 5.2 (2) | Power Spectral Density | Total power is less than PSD limit | 8dBm/3kHz | Complies |
| 15.247(d) | RSS 247 5.5 | Antenna Port Spurious Emissions 30MHz – 25 GHz | < -20dBc | < -20dBc | Complies |
| 15.247(d) / 15.209 | RSS 247 5.5 | Radiated Spurious Emissions 30MHz – 25 GHz | 50.3 dBµV/m @ 4952.0 MHz (-3.7 dB) | Refer to the limits section (p20) for restricted bands, all others < -20dBc | Complies |

Note 1 EIRP calculated using antenna gains of 0.2 dBi for the highest EIRP system.
Note 2 Pass/Fail criteria defined by standards listed above.

***GENERAL REQUIREMENTS APPLICABLE TO ALL BANDS***

| FCC Rule Part | RSS Rule part | Description | Measured Value / Comments | Limit / Requirement | Result (margin) |
|---|---|---|---|---|---|
| 15.203 | - | RF Connector | Integral antenna | Unique or integral antenna required | Complies |
| 15.407(b) (9) | RSS-Gen Table 4 | AC Conducted Emissions | 23.2 dBµV @ 28.960 MHz(-26.8 dB) | Refer to page 20 | Complies |
| 15.247 (i) 15.407 (f) | RSS 102 | RF Exposure Requirements | Refer to MPE calculations in separate exhibit, RSS 102 declaration and User Manual statements. | Refer to OET 65, FCC Part 1 and RSS 102 | Complies |
| - | RSS-Gen 6.8 | User Manual | Integral antenna | Statement for products with detachable antenna | N/A |
| - | RSS-Gen 8.4 | User Manual | | Statement for all products | Complies |
| - | RSP-100 RSS-Gen 6.7 | Occupied Bandwidth | 561 kHz | Information only | N/A |
| Note 3 Pass/Fail criteria defined by standards listed above. | | | | | |

***MEASUREMENT UNCERTAINTIES***

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level and were calculated in accordance with UKAS document LAB 34.

| Measurement Type | Measurement Unit | Frequency Range | Expanded Uncertainty |
|---|---|---|---|
| RF power, conducted (power meter) | dBm | 25 to 7000 MHz | ± 0.52 dB |
| RF power, conducted (Spectrum analyzer) | dBm | 25 to 7000 MHz | ± 0.7 dB |
| Conducted emission of transmitter | dBm | 25 to 26500 MHz | ± 0.7 dB |
| Conducted emission of receiver | dBm | 25 to 26500 MHz | ± 0.7 dB |
| Radiated emission (substitution method) | dBm | 25 to 26500 MHz | ± 2.5 dB |
| Radiated emission (field strength) | dBµV/m | 25 to 1000 MHz | ± 3.6 dB |
| | | 1000 to 40000 MHz | ± 6.0 dB |
| Conducted Emissions (AC Power) | dBµV | 0.15 to 30 MHz | ± 2.4 dB |

## EQUIPMENT UNDER TEST (EUT) DETAILS

### GENERAL

The XP Metal Detectors model ICON Remote Control is a wireless remote control that is designed to be used with metal detector. Since the EUT could be placed in any position during operation, the EUT was treated as tabletop equipment during testing to simulate the end-user environment. The electrical rating of the EUT is 3.7 VDC supplied by an internal rechargeable battery.

The samples were received on October 18, 2024 and tested on October 23, November 4, 5 and December 13, 2024 and January 7, 2025. The following samples of the EUT were used for testing:

| Company | Model | Description | Serial Number | FCC ID |
|---|---|---|---|---|
| XPLORER | ICON | Remote control for metal detector | CE0005 | XFJRCICON |
| XPLORER | ICON | Remote control for metal detector | CE0011 | XFJRCICON |
| XPLORER | ICON | Remote control for metal detector | 1 | XFJRCICON |
| XPLORER | ICON | Remote control for metal detector | CE001C | XFJRCICON |

### ANTENNA SYSTEM

The antenna is an integral trace for the 2.4 GHz ISM band radio.

### ENCLOSURE

The EUT enclosure is primarily constructed of plastic. It measures approximately 9.5 cm wide by 2.0 cm deep by 7.5 cm high.

### OTHER EUT INFORMATION

The EUT 2.4GHz ISM radio can operate between 2404 and 2476MHz with a 2MHz channel separation.

### MODIFICATIONS

The following modifications were made to the EUT during the time the product was at Element Materials Technology Fremont:

| Mod. # | Test | Date | Modification |
|---|---|---|---|
| 1 | RE | 11/4/2024 | New sample provided by customer |

***SUPPORT EQUIPMENT***

The following equipment was used as support equipment only for conducted emissions testing:

| Company | Model | Description | Serial Number | FCC ID |
|---|---|---|---|---|
| Shenzhen Tongxingrui Technology | U001-1 | AC Adapter | None | - |

No remote support equipment was used during testing.

***EUT INTERFACE PORTS***

The I/O cabling configuration during testing was as follows:

| Port | Connected To | Cable(s) | | |
|---|---|---|---|---|
| | | Description | Shielded or Unshielded | Length(m) |
| Charge | AC Adapter | Multiwire | Shielded | 0.7 |

***EUT OPERATION***

During emissions testing the EUT was programmed to transmit continuously with modulation on a selected channel at maximum power.

## TEST SITE

### GENERAL INFORMATION

Final test measurements were taken at the test sites listed below. Pursuant to section 2.948 of the FCC's Rules and section 6.2 of RSS-GEN, NTS has been recognized as an accredited test laboratory by the Commission and Innovation, Science and Economic Development Canada. A description of the facilities employed for testing is maintained by NTS.

| Site | Company / Registration Numbers | | Location |
|---|---|---|---|
| | FCC | Canada | |
| Chamber 5 | US1031 | 2845B (Wireless Test Lab #US0027) | 41039 Boyce Road Fremont, CA 94538-2435 |

ANSI C63.4 recommends that ambient noise at the test site be at least 6 dB below the allowable limits. Ambient levels are below this requirement. The test site(s) contain separate areas for radiated and conducted emissions testing. Results from testing performed in this chamber have been correlated with results from an open area test site. Considerable engineering effort has been expended to ensure that the facilities conform to all pertinent requirements of ANSI C63.4.

### CONDUCTED EMISSIONS CONSIDERATIONS

Conducted emissions testing is performed in conformance with ANSI C63.10. Measurements are made with the EUT connected to the public power network through a nominal, standardized RF impedance, which is provided by a line impedance stabilization network, known as a LISN. A LISN is inserted in series with each current-carrying conductor in the EUT power cord.

### RADIATED EMISSIONS CONSIDERATIONS

The FCC has determined that radiation measurements made in a shielded enclosure are not suitable for determining levels of radiated emissions. Radiated measurements are performed in an open field environment or in a semi-anechoic chamber. The test sites are maintained free of conductive objects within the CISPR defined elliptical area incorporated in ANSI C63.4 guidelines and meet the Normalized Site Attenuation (NSA) requirements of ANSI C63.4.

## MEASUREMENT INSTRUMENTATION

### RECEIVER SYSTEM

An EMI receiver as specified in CISPR 16-1-1 is used for emissions measurements. The receivers used can measure over the frequency range of 9 kHz up to 2000 MHz. These receivers allow both ease of measurement and high accuracy to be achieved. The receivers have Peak, Average, and CISPR (Quasi-peak) detectors built into their design so no external adapters are necessary. The receiver automatically sets the required bandwidth for the CISPR detector used during measurements. If the repetition frequency of the signal being measured is below 20Hz, peak measurements are made in lieu of Quasi-Peak measurements.

For measurements above the frequency range of the receivers, a spectrum analyzer is utilized because it provides visibility of the entire spectrum along with the precision and versatility required to support engineering analysis. Average measurements above 1000MHz are performed on the spectrum analyzer using the linear-average method with a resolution bandwidth of 1 MHz and a video bandwidth of 10 Hz, unless the signal is pulsed in which case the average (or video) bandwidth of the measuring instrument is reduced to onset of pulse desensitization and then increased.

### INSTRUMENT CONTROL COMPUTER

Software is used to view and convert receiver measurements to the field strength at an antenna or voltage developed at the LISN measurement port, which is then compared directly with the appropriate specification limit. This provides faster, more accurate readings by performing the conversions described under Sample Calculations within the Test Procedures section of this report. Results are printed in a graphic and/or tabular format, as appropriate. A personal computer is used to record all measurements made with the receivers. The software used for radiated and conducted emissions measurements is NTS EMI Test Software (rev 2.10)

### LINE IMPEDANCE STABILIZATION NETWORK (LISN)

Line conducted measurements utilize a fifty microhenry Line Impedance Stabilization Network as the monitoring point. The LISN used also contains a 250 uH CISPR adapter. This network provides for calibrated radio frequency noise measurements by the design of the internal low pass and high pass filters on the EUT and measurement ports, respectively.

***FILTERS/ATTENUATORS***

External filters and precision attenuators are often connected between the receiving antenna or LISN and the receiver. This eliminates saturation effects and non-linear operation due to high amplitude transient events.

***ANTENNAS***

A loop antenna is used below 30 MHz. For the measurement range 30 MHz to 1000 MHz either a combination of a biconical antenna and a log periodic or a bi-log antenna is used. Above 1000 MHz, horn antennas are used. The antenna calibration factors to convert the received voltage to an electric field strength are included with appropriate cable loss and amplifier gain factors to determine an overall site factor, which is then programmed into the test receivers or incorporated into the test software.

***ANTENNA MAST AND EQUIPMENT TURNTABLE***

The antennas used to measure the radiated electric field strength are mounted on a non-conductive antenna mast equipped with a motor-drive to vary the antenna height. Measurements below 30 MHz are made with the loop antenna at a fixed height of 1m above the ground plane.

ANSI C63.10 specifies that the test height above ground for table mounted devices shall be 80 centimeters for testing below 1 GHz and 1.5m for testing above 1 GHz. Floor mounted equipment shall be placed on the ground plane if the device is normally used on a conductive floor or separated from the ground plane by insulating material from 3 to 12 mm if the device is normally used on a non-conductive floor as specified in ANSI C63.4. During radiated measurements, the EUT is positioned on a motorized turntable in conformance with this requirement.

***INSTRUMENT CALIBRATION***

All test equipment is regularly checked to ensure that performance is maintained in accordance with the manufacturer's specifications. All antennas are calibrated at regular intervals with respect to tuned half-wave dipoles. An exhibit of this report contains the list of test equipment used and calibration information.

## TEST PROCEDURES

### EUT AND CABLE PLACEMENT

The regulations require that interconnecting cables be connected to the available ports of the unit and that the placement of the unit and the attached cables simulate the worst case orientation that can be expected from a typical installation, so far as practicable. To this end, the position of the unit and associated cabling is varied within the guidelines of ANSI C63.10, and the worst-case orientation is used for final measurements.

### CONDUCTED EMISSIONS

Conducted emissions are measured at the plug end of the power cord supplied with the EUT. Excess power cord length is wrapped in a bundle between 30 and 40 centimeters in length near the center of the cord. Preliminary measurements are made to determine the highest amplitude emission relative to the specification limit for all the modes of operation. Placement of system components and varying of cable positions are performed in each mode. A final peak mode scan is then performed in the position and mode for which the highest emission was noted on all current carrying conductors of the power cord.

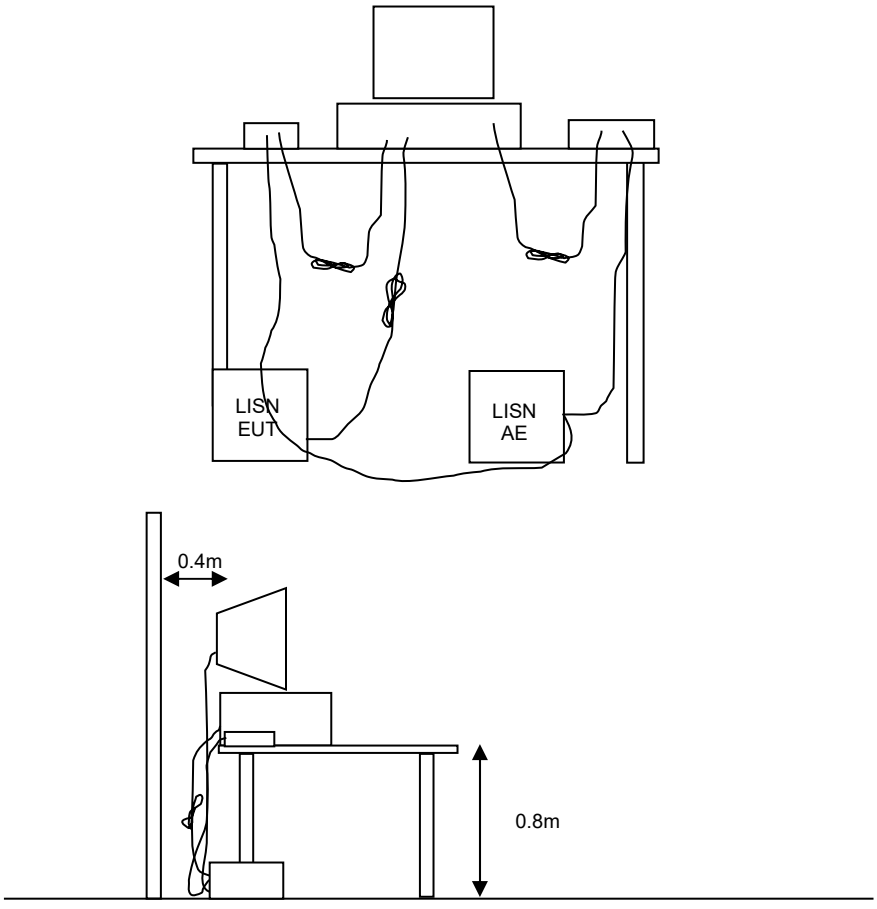



**Figure 1 Typical Conducted Emissions Test Configuration**

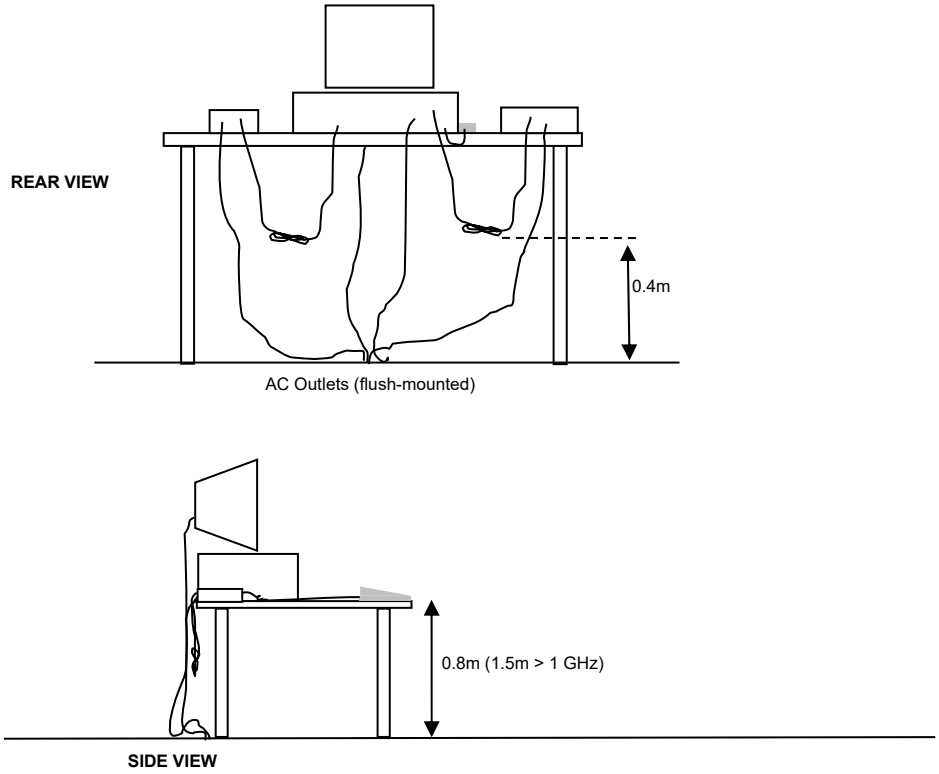
***RADIATED EMISSIONS***

A preliminary scan of the radiated emissions is performed in which all significant EUT frequencies are identified with the system in a nominal configuration. At least two scans are performed, one scan for each antenna polarization (horizontal and vertical; loop parallel and perpendicular to the EUT). During the preliminary scans, the EUT is rotated through 360˚, the antenna height is varied (for measurements above 30 MHz) and cable positions are varied to determine the highest emission relative to the limit. Preliminary scans may be performed in a fully anechoic chamber for the purposes of identifying the frequencies of the highest emissions from the EUT.

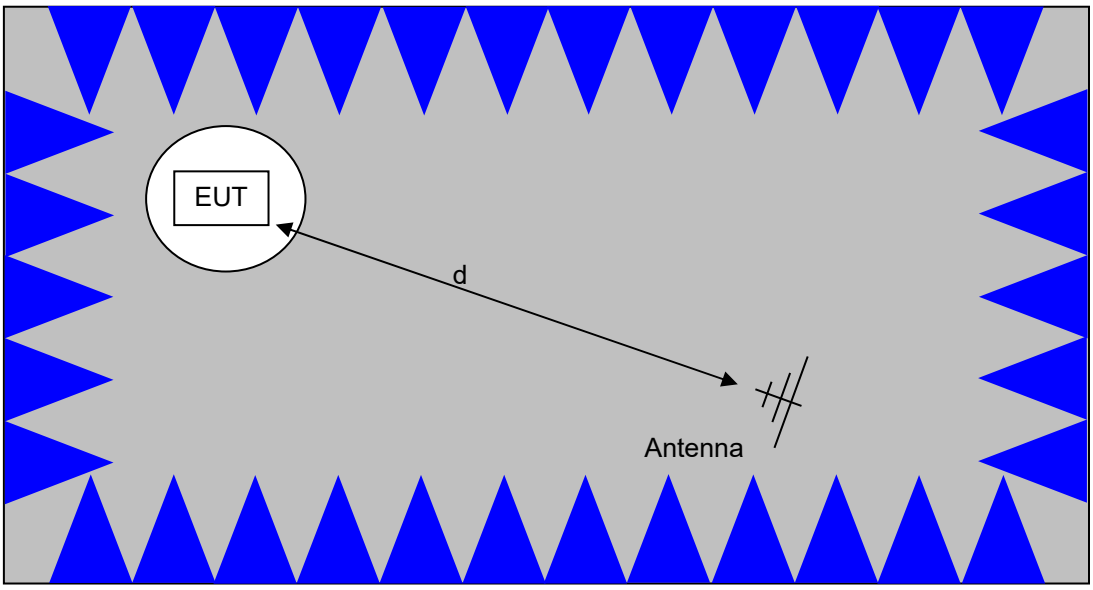
A speaker is provided in the receiver to aid in discriminating between EUT and ambient emissions. Other methods used during the preliminary scan for EUT emissions involve scanning with near field magnetic loops, monitoring I/O cables with RF current clamps, and cycling power to the EUT.

Final maximization is a phase in which the highest amplitude emissions identified in the spectral search are viewed while the EUT azimuth angle is varied from 0 to 360 degrees relative to the receiving antenna. The azimuth, which results in the highest emission is then maintained while varying the antenna height from one to four meters (for measurements above 30 MHz, measurements below 30 MHz are made with the loop antenna at a fixed height of 1m). The result is the identification of the highest amplitude for each of the highest peaks. Each recorded level is corrected in the receiver using appropriate factors for cables, connectors, antennas, and preamplifier gain.

When testing above 18 GHz, the receive antenna is located at 1meter from the EUT and the antenna height is restricted to a maximum of 2.5 meters.

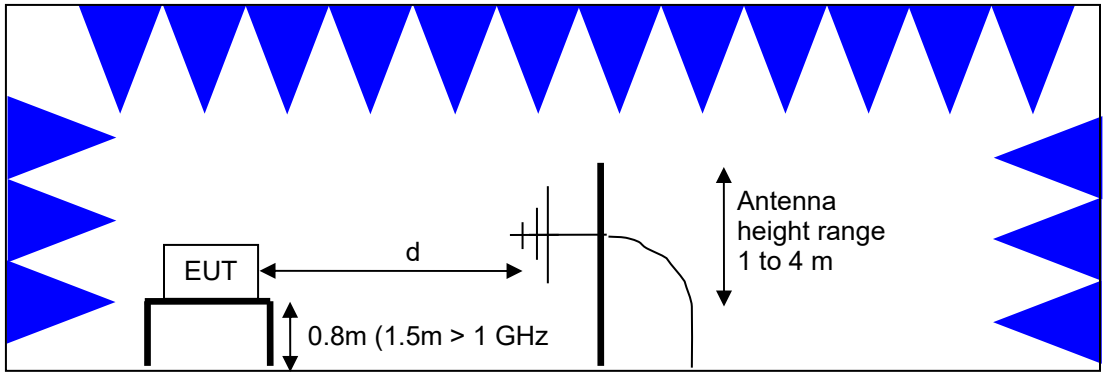



Typical Test Configuration for Radiated Field Strength Measurements




The anechoic materials on the walls and ceiling ensure compliance with the normalized site attenuation requirements of CISPR 16 / CISPR 22 / ANSI C63.4 for an alternate test site at the measurement distances used.

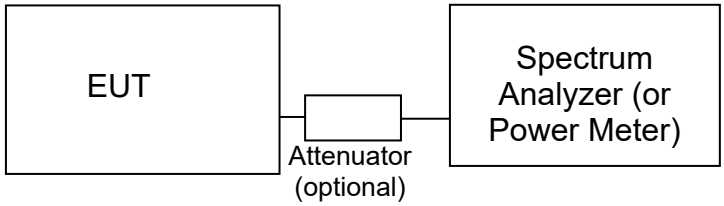
Floor-standing equipment is placed on the floor with insulating supports between the unit and the ground plane.




Test Configuration for Radiated Field Strength Measurements
Semi-Anechoic Chamber, Plan and Side Views

***CONDUCTED EMISSIONS FROM ANTENNA PORT***

Direct measurements of power, bandwidth and power spectral density are performed, where possible, with the antenna port of the EUT connected to either the power meter or spectrum analyzer via a suitable attenuator and/or filter. These are used to ensure that the front end of the measurement instrument is not overloaded by the fundamental transmission.




Test Configuration for Antenna Port Measurements

Measurement bandwidths (video and resolution) are set in accordance with the relevant standards and NTS Silicon Valley's test procedures for the type of radio being tested. When power measurements are made using a resolution bandwidth less than the signal bandwidth the power is calculated by summing the power across the signal bandwidth using either the analyzer channel power function or by capturing the trace data and calculating the power using software. In both cases the summed power is corrected to account for the equivalent noise bandwidth (ENBW) of the resolution bandwidth used.

If power averaging is used (typically for certain digital modulation techniques), the EUT is configured to transmit continuously. Power averaging is performed using either the built-in function of the analyzer or, if the analyzer does not feature power averaging, using external software. In both cases the average power is calculated over a number of sweeps (typically 100). When the EUT cannot be configured to continuously transmit then either the analyzer is configured to perform a gated sweep to ensure that the power is averaged over periods that the device is transmitting or power averaging is disabled and a max-hold feature is used.

If a power meter is used to make output power measurements the sensor head type (peak or average) is stated in the test data table.

***BANDWIDTH MEASUREMENTS***

The 6dB, 20dB, 26dB and/or 99% signal bandwidth are measured using the bandwidths recommended by ANSI C63.10 and RSS GEN.

***SPECIFICATION LIMITS AND SAMPLE CALCULATIONS***

The limits for conducted emissions are given in units of microvolts, and the limits for radiated emissions are given in units of microvolts per meter at a specified test distance. Data is measured in the logarithmic form of decibels relative to one microvolt, or dB microvolts (dBuV). For radiated emissions, the measured data is converted to the field strength at the antenna in dB microvolts per meter (dBuV/m). The results are then converted to the linear forms of uV and uV/m for comparison to published specifications.

For reference, converting the specification limits from linear to decibel form is accomplished by taking the base ten logarithm, then multiplying by 20. These limits in both linear and logarithmic form are as follows:

***CONDUCTED EMISSIONS SPECIFICATION LIMITS: FCC 15.207; RSS GEN***

The table below shows the limits for the emissions on the AC power line from an intentional radiator and a receiver.

| Frequency (MHz) | Average Limit (dBuV) | Quasi Peak Limit (dBuV) |
|---|---|---|
| 0.150 to 0.500 | Linear decrease on logarithmic frequency axis between 56.0 and 46.0 | Linear decrease on logarithmic frequency axis between 66.0 and 56.0 |
| 0.500 to 5.000 | 46.0 | 56.0 |
| 5.000 to 30.000 | 50.0 | 60.0 |

***GENERAL TRANSMITTER RADIATED EMISSIONS SPECIFICATION LIMITS***

The table below shows the limits for the spurious emissions from transmitters that fall in restricted bands1.

| Frequency Range (MHz) | Limit (uV/m) | Limit (dBuV/m @ 3m) |
|---|---|---|
| 0.009-0.490 | $2400/F_{KHz}$ @ 300m | $67.6-20*\log_{10}(F_{KHz})$ @ 300m |
| 0.490-1.705 | $24000/F_{KHz}$ @ 30m | $87.6-20*\log_{10}(F_{KHz})$ @ 30m |
| 1.705 to 30 | 30 @ 30m | 29.5 @ 30m |
| 30 to 88 | 100 @ 3m | 40 @ 3m |
| 88 to 216 | 150 @ 3m | 43.5 @ 3m |
| 216 to 960 | 200 @ 3m | 46.0 @ 3m |
| Above 960 | 500 @ 3m | 54.0 @ 3m |

Below 30 MHz, the RSS-Gen general field strength limits are expressed in terms of magnetic field in uA/m equivalent to the electric field limits in the table assuming free space conditions.

[1] The restricted bands are detailed in FCC §15.205 and RSS-Gen Table 7

***OUTPUT POWER LIMITS – DIGITAL TRANSMISSION SYSTEMS***

The table below shows the limits for output power and output power density. Where the signal bandwidth is less than 20 MHz the maximum output power is reduced to the power spectral density limit plus 10 times the log of the bandwidth (in MHz).

| Operating Frequency (MHz) | Output Power | Power Spectral Density |
|---|---|---|
| 902 – 928 | 1 Watt (30 dBm) | 8 dBm/3kHz |
| 2400 – 2483.5 | 1 Watt (30 dBm) | 8 dBm/3kHz |
| 5725 – 5850 | 1 Watt (30 dBm) | 8 dBm/3kHz |

The maximum permitted output power is reduced by 1dB for every dB the antenna gain exceeds 6dBi. For FCC, fixed point to point applications using the 2400-2483.5 MHz band may use antennas with more than 6 dBi gain but output power is reduced by 1 dB for every 3dB that the antenna gain exceeds 6 dBi. For Canada, fixed point-to-point applications using the 2400-2483.5 MHz band are not subject to this restriction. Fixed point-to-point applications using the 5725 – 5850 MHz band are also not subject to this restriction. Certification of DTS systems operating in the 5725-5850 MHz band is no longer allowed under FCC Rules per §15.37(h).

***TRANSMIT MODE SPURIOUS RADIATED EMISSIONS LIMITS – FHSS and DTS SYSTEMS***

The limits for unwanted (spurious) emissions from the transmitter falling in the restricted bands are those specified in the general limits sections of FCC Part 15 and RSS GEN. All other unwanted (spurious) emissions shall be at least 20dB below the level of the highest in-band signal level (30dB if the power is measured using the sample detector/power averaging method).

***SAMPLE CALCULATIONS - CONDUCTED EMISSIONS***

Receiver readings are compared directly to the conducted emissions specification limit (decibel form) as follows:

$$R_r - S = M$$

where:
$R_r$ = Receiver Reading in dBuV
S = Specification Limit in dBuV
M = Margin to Specification in +/- dB

***SAMPLE CALCULATIONS - RADIATED EMISSIONS***

Receiver readings are compared directly to the specification limit (decibel form). The receiver internally corrects for cable loss, preamplifier gain, and antenna factor. The calculations are in the reverse direction of the actual signal flow, thus cable loss is added and the amplifier gain is subtracted. The Antenna Factor converts the voltage at the antenna coaxial connector to the field strength at the antenna elements.

A distance factor, when used for electric field measurements above 30MHz, is calculated by using the following formula:

$$F_d = 20*LOG_{10} (D_m/D_s)$$

where:
$F_d$ = Distance Factor in dB
$D_m$ = Measurement Distance in meters
$D_s$ = Specification Distance in meters

For electric field measurements below 30MHz the extrapolation factor is either determined by making measurements at multiple distances or a theoretical value is calculated using the formula:

$$F_d = 40*LOG_{10} (D_m/D_s)$$

Measurement Distance is the distance at which the measurements were taken and Specification Distance is the distance at which the specification limits are based. The antenna factor converts the voltage at the antenna coaxial connector to the field strength at the antenna elements.

The margin of a given emission peak relative to the limit is calculated as follows:

$$R_c = R_r + F_d$$

and

$$M = R_c - L_s$$

where:
$R_r$ = Receiver Reading in dBuV/m
$F_d$ = Distance Factor in dB
$R_c$ = Corrected Reading in dBuV/m
$L_s$ = Specification Limit in dBuV/m
M = Margin in dB Relative to Spec

***SAMPLE CALCULATIONS - FIELD STRENGTH TO EIRP CONVERSION***

Where the radiated electric field strength is expressed in terms of the equivalent isotropic radiated power (eirp), or where a field strength measurement of output power is made in lieu of a direct measurement, the following formula is used to convert between eirp and field strength at a distance of d (meters) from the equipment under test:

$$E = \frac{1000000 \sqrt{30 P}}{d} \quad \text{microvolts per meter}$$

where P is the eirp (Watts)

For a measurement at 3m the conversion from a logarithmic value for field strength (dBuV/m) to an eirp power (dBm) is -95.3dB.

# *Appendix A Test Equipment Calibration Data*

| Manufacturer | Description | Model | Asset # | Calibrated | Cal Due |
|---|---|---|---|---|---|
| **Radiated Emissions, 1 - 18 GHz, 23-Oct-24** | | | | | |
| National Technical Systems | NTS EMI Software (rev 2.10) | N/A | WC022452 | N/A | |
| ETS-Lindgren | EMC Chamber #5, Inner Dimensions (LxWxH): 24' x 38' x 20' | CH 5 (FACT-5) | WC055567 | 5/24/2024 | 5/24/2027 |
| Hewlett Packard | Spectrum Analyzer (Purple) | 8564E | WC055660 | 6/7/2024 | 6/30/2025 |
| Hewlett Packard | Microwave Preamplifier, 1-26.5GHz | 8449B | WC064416 | 10/7/2024 | 10/7/2025 |
| EMCO | Antenna, Horn, 1-18 GHz (SA40-Blue) | 3115 | WC064442 | 11/18/2022 | 11/18/2024 |
| Hewlett Packard | High Pass filter, 3.5 GHz | 84300-80038 | WC064495 | 9/6/2024 | 9/6/2025 |
| Semflex Microwave Solutions | RF Coaxial Cable, 1 m blue | N1S3HPT19039 .4 (HPT 190) | WC064542 | 4/12/2024 | 4/12/2025 |
| Semflex Microwave Solutions | RF Coaxial Cable, 3.5m blue | N1N1HPT30138 (HPT 305) | WC064587 | 3/11/2024 | 3/11/2025 |
| **Conducted Emissions - AC Power Ports, 23-Oct-24** | | | | | |
| National Technical Systems | NTS EMI Software (rev 2.10) | N/A | WC022452 | N/A | |
| ETS-Lindgren | EMC Chamber #5, Inner Dimensions (LxWxH): 24' x 38' x 20' | CH 5 (FACT-5) | WC055567 | 5/24/2024 | 5/24/2027 |
| EMCO | LISN, 10 kHz-100 MHz | 3825/2 | WC064399 | 1/25/2024 | 1/25/2025 |
| Rohde & Schwarz | Pulse Limiter | ESH3 Z2 | WC064445 | 6/21/2024 | 6/21/2025 |
| Andrew | LDF4-50A, Heliax 17m | Cable Assembly | WC064471 | 2/8/2024 | 2/8/2025 |
| Coleman Company | RG223, Coax, 4.0m | Cable Assembly | WC064824 | 3/11/2024 | 3/11/2025 |
| Belden | RG214, coaxial cable, 4.0 m | Cable Assembly | WC064843 | 4/12/2024 | 4/12/2025 |
| Rhode & Schwarz | EMI Test Receiver, 20Hz-26.5GHz | ESI | WC071498 | 7/17/2024 | 7/17/2025 |
| **Radiated Emissions, 1 - 18 GHz, 04-Nov-24** | | | | | |
| National Technical Systems | NTS EMI Software (rev 2.10) | N/A | WC022452 | N/A | |
| Hewlett Packard | Spectrum Analyzer (Purple) | 8564E | WC055660 | 6/7/2024 | 6/30/2025 |
| Hewlett Packard | Microwave Preamplifier, 1-26.5GHz | 8449B | WC064416 | 10/7/2024 | 10/7/2025 |
| EMCO | Antenna, Horn, 1-18 GHz | 3115 | WC064417 | 9/10/2024 | 9/10/2026 |
| Micro-Tronics | Band Reject Filter, 2400-2500 MHz | BRM50702-02 | WC064593 | 12/22/2023 | 12/22/2024 |
| **Radiated Emissions, 1 - 25 GHz, 05-Nov-24** | | | | | |
| **Manufacturer** | **Description** | **Model** | **Asset #** | **Calibrated** | **Cal Due** |
| National Technical Systems | NTS EMI Software (rev 2.10) | N/A | WC022452 | N/A | |
| Hewlett Packard | Microwave Preamplifier Head, 18-40 GHz (Purple) | 84125C Head | WC055610 | 6/12/2024 | 6/12/2025 |
| Hewlett Packard | Spectrum Analyzer (Purple) | 8564E | WC055660 | 6/7/2024 | 6/30/2025 |

| Manufacturer | Description | Model | Asset # | Calibrated | Cal Due |
|---|---|---|---|---|---|
| Hewlett Packard | Microwave Preamplifier, 1-26.5GHz | 8449B | WC064416 | 10/7/2024 | 10/7/2025 |
| EMCO | Antenna, Horn, 1-18 GHz | 3115 | WC064417 | 9/10/2024 | 9/10/2026 |
| A. H. Systems | Antenna, Horn, 18-40GHz | SAS-574 | WC064555 | 8/28/2023 | 8/28/2025 |
| Micro-Tronics | Band Reject Filter, 2400-2500 MHz | BRM50702-02 | WC064593 | 12/22/2023 | 12/22/2024 |
| **Radio Antenna Port (Power and Spurious Emissions), 05-Nov-24** | | | | | |
| National Technical Systems | NTS EMI Software (rev 2.10) | N/A | WC022452 | N/A | |
| National Technical Systems | NTS Capture Analyzer Software (rev 4.0) | N/A | WC022706 | N/A | |
| National Technical Systems | EMC Lab #4A | None | WC055574 | N/A | |
| Agilent Technologies | PSA Spectrum Analyzer | E4446A | WC055650 | 11/10/2023 | 11/30/2024 |
| Fairview Microwave | Attenuator 6dB 5Watt | SA18N5W-06 | WC078729 | N/A | |
| **Radiated Emissions, 30 - 1,000 MHz, 07-Nov-24** | | | | | |
| National Technical Systems | NTS EMI Software (rev 2.10) | N/A | WC022452 | N/A | |
| ETS-Lindgren | EMC Chamber #7, Inner Dimensions (LxWxH): 24' x 38' x 20' | CH 7 (FACT-5) | WC055569 | 2/2/2023 | 8/8/2025 |
| Sunol Sciences | Biconilog, 30-3000 MHz | JB3 | WC064478 | 1/18/2024 | 1/18/2026 |
| Rohde & Schwarz | EMI Test Receiver, 20Hz-7GHz | ESIB 7 | WC064989 | 12/28/2023 | 12/28/2024 |
| Com-Power | Preamplifier, 1-1000MHz | PAM-103 | WC080961 | 4/18/2024 | 4/18/2025 |
| **Radio Antenna Port (Power and Spurious Emissions), 19-Nov-24** | | | | | |
| National Technical Systems | NTS EMI Software (rev 2.10) | N/A | WC022452 | N/A | |
| National Technical Systems | NTS Capture Analyzer Software (rev 4.0) | N/A | WC022706 | N/A | |
| Agilent Technologies | PSA Spectrum Analyzer | E4446A | WC055670 | 10/14/2024 | 10/14/2025 |
| **Radio Antenna Port (Bandwidth), 12-Dec-24** | | | | | |
| Rohde & Schwarz | Signal Analyzer OTA | FSV13 | WC064873 | 10/10/2024 | 10/31/2025 |
| **Radiated Emissions, 30 - 1,000 MHz, 13-Dec-24** | | | | | |
| National Technical Systems | NTS EMI Software (rev 2.10) | N/A | WC022452 | N/A | |
| ETS-Lindgren | EMC Chamber #5, Inner Dimensions (LxWxH): 24' x 38' x 20' | CH 5 (FACT-5) | WC055567 | 5/24/2024 | 5/24/2027 |
| Sunol Sciences | Biconilog, 30-3000 MHz | JB3 | WC064582 | 8/18/2022 | 3/24/2025 |
| Rohde & Schwarz | EMI Test Receiver, 9kHz-7GHz | ESR 7 | WC078725 | 4/15/2024 | 4/15/2025 |
| Com-Power | Preamplifier, 1-1000MHz | PAM-103 | WC080961 | 4/18/2024 | 4/18/2025 |
| **OTA, 07-Jan-25** | | | | | |
| Rohde & Schwarz | Signal Analyzer OTA | FSV13 | WC064873 | 10/10/2024 | 10/31/2025 |

# *Appendix B Test Data*

PR185733-RA-RC Pages 27 – 53

| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Product | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| System Configuration: | - | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Emissions Standard(s): | FCC Part 15, RSS-247 | Class: | - |
| Immunity Standard(s): | - | Environment: | Any |



# EMC Test Data

For The

# XPLORER

Product

**ICON Remote Control**

Date of Last Test: 1/7/2025

| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | - |

# Conducted Emissions

***(NTS Silicon Valley, Fremont Facility, Semi-Anechoic Chamber)***

## Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 10/23/2024
Test Engineer: M. Birgani
Test Location: Fremont Chamber #5

Config. Used: 1
Config Change: None
EUT Voltage: Refer to individual run

## General Test Configuration

The EUT was located on a foam table inside the semi-anechoic chamber, 40 cm from a vertical coupling plane and 80cm from the LISN.

## Ambient Conditions:

Temperature: 24-25 °C
Rel. Humidity: 36-37 %

## Summary of Results

| Run # | Test Performed | Limit | Result | Margin |
|---|---|---|---|---|
| 1 | CE, AC Power, 230V/50Hz | §15.207 | Pass | 33.0 dBµV @ 0.501 MHz (-13.0 dB) |
| 2 | CE, AC Power,120V/60Hz | §15.207 | Pass | 23.2 dBµV @ 28.960 MHz (-26.8 dB) |

## Modifications Made During Testing

No modifications were made to the EUT during testing

## Deviations From The Standard

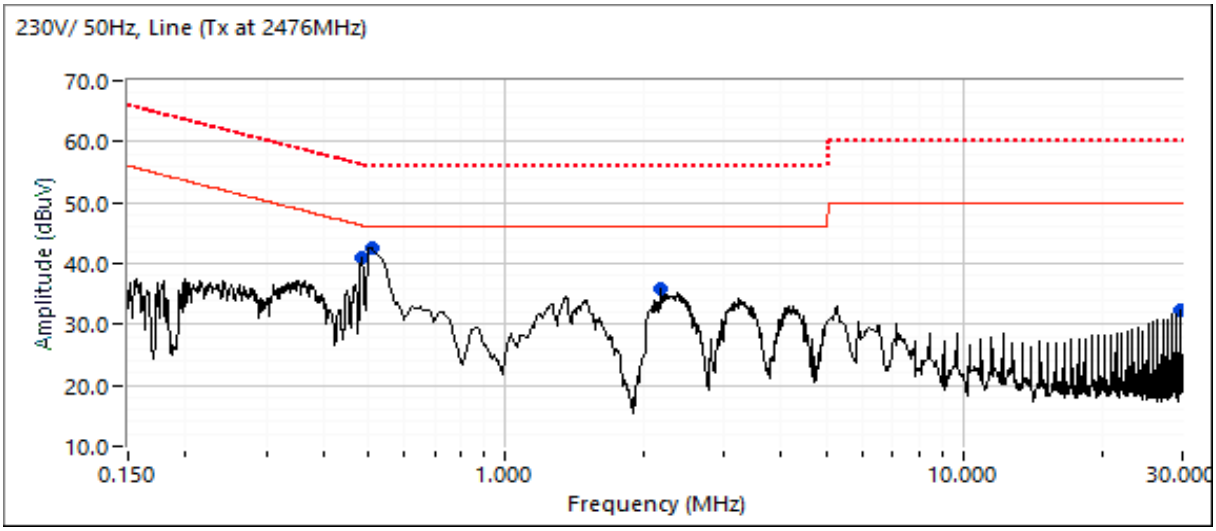
No deviations were made from the requirements of the standard.

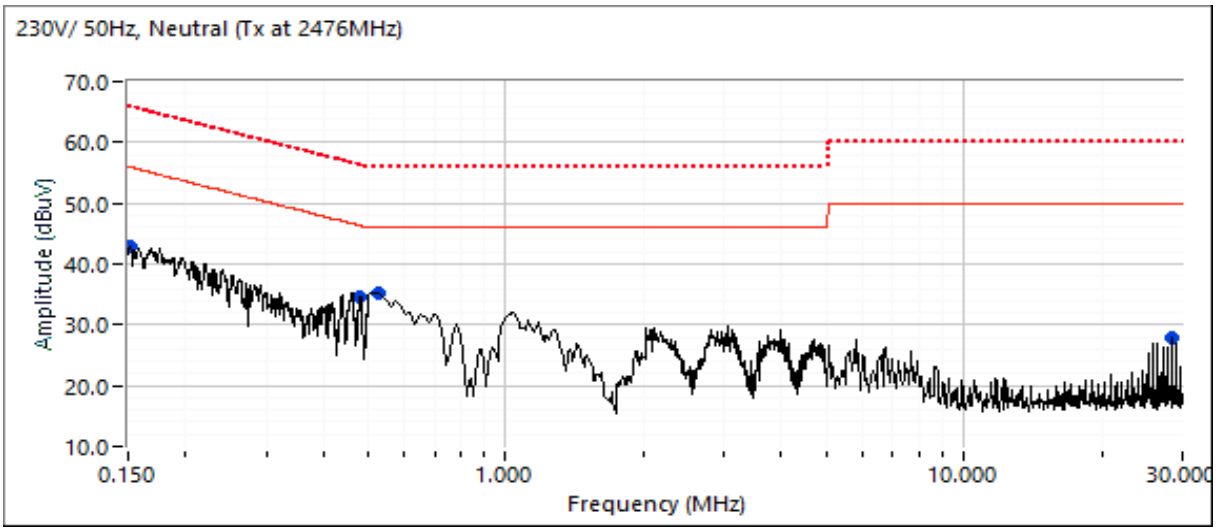
## Sample Notes

Sample S/N: CE0005

| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | - |

**Run #1: AC Power Port Conducted Emissions, 0.15 - 30MHz, 230V/50Hz**



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | - |

**Run #1: AC Power Port Conducted Emissions, 0.15 - 30MHz, 230V/50Hz**

**Peak readings captured during pre-scan (peak readings vs. average limit)**

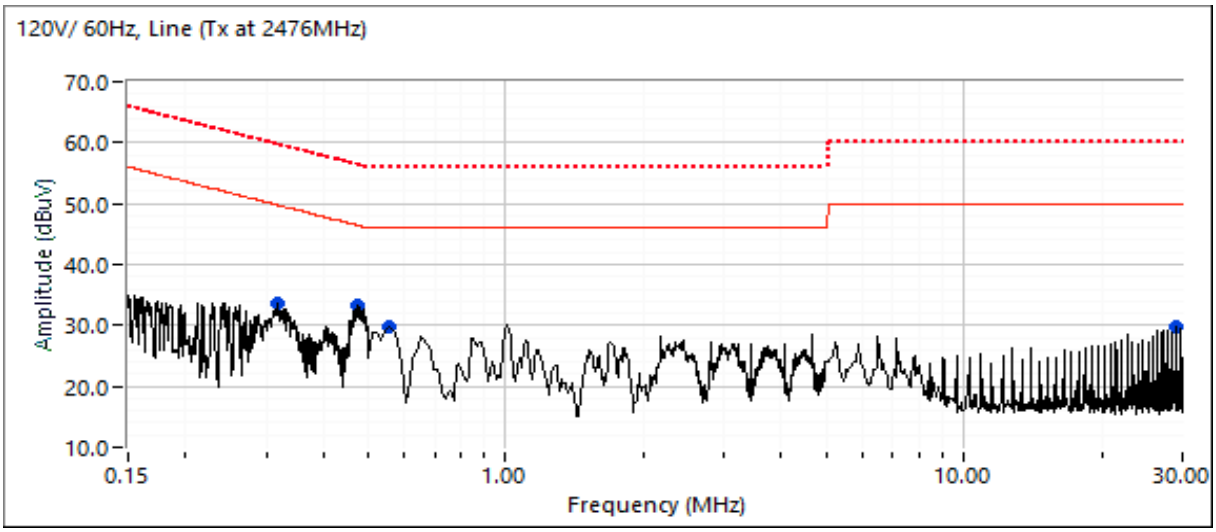
| Frequency MHz | Level dBµV | AC Line | §15.207 Limit | §15.207 Margin | Detector QP/AVG | Comments |
|---|---|---|---|---|---|---|
| 0.153 | 43.0 | Neutral | 55.9 | -12.9 | Peak | |
| 0.482 | 34.5 | Neutral | 46.3 | -11.8 | Peak | |
| 0.483 | 40.8 | Line | 46.3 | -5.5 | Peak | |
| 0.501 | 42.4 | Line | 46.0 | -3.6 | Peak | |
| 0.502 | 35.1 | Neutral | 46.0 | -10.9 | Peak | |
| 2.182 | 35.9 | Line | 46.0 | -10.1 | Peak | |
| 28.355 | 27.8 | Neutral | 50.0 | -22.2 | Peak | |
| 29.605 | 32.2 | Line | 50.0 | -17.8 | Peak | |

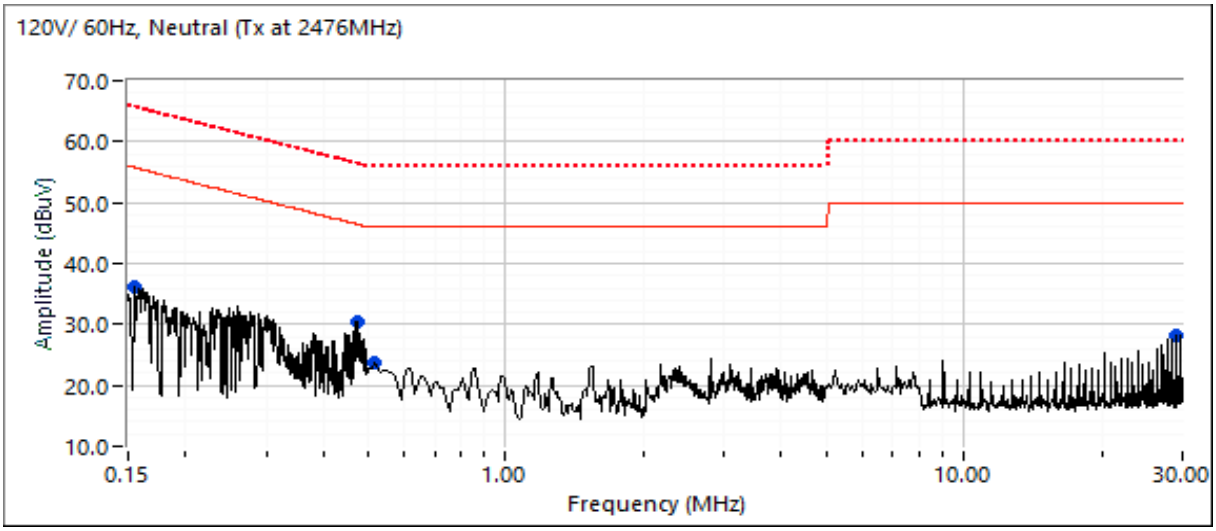
**Final quasi-peak and average readings**

| Frequency MHz | Level dBµV | AC Line | §15.207 Limit | §15.207 Margin | Detector QP/AVG | Comments |
|---|---|---|---|---|---|---|
| **0.501** | **33.0** | Line | 46.0 | **-13.0** | AVG | AVG (0.10s) |
| 0.483 | 32.6 | Line | 46.3 | -13.7 | AVG | AVG (0.10s) |
| 0.501 | 40.7 | Line | 56.0 | -15.3 | QP | QP (1.00s) |
| 0.483 | 40.3 | Line | 56.3 | -16.0 | QP | QP (1.00s) |
| 0.502 | 28.8 | Neutral | 46.0 | -17.2 | AVG | AVG (0.10s) |
| 0.482 | 28.9 | Neutral | 46.3 | -17.4 | AVG | AVG (0.10s) |
| 0.502 | 33.8 | Neutral | 56.0 | -22.2 | QP | QP (1.00s) |
| 0.482 | 33.4 | Neutral | 56.3 | -22.9 | QP | QP (1.00s) |
| 2.182 | 21.8 | Line | 46.0 | -24.2 | AVG | AVG (0.10s) |
| 2.182 | 30.8 | Line | 56.0 | -25.2 | QP | QP (1.00s) |
| 29.605 | 24.3 | Line | 50.0 | -25.7 | AVG | AVG (0.10s) |
| 29.605 | 30.2 | Line | 60.0 | -29.8 | QP | QP (1.00s) |
| 0.153 | 35.6 | Neutral | 65.8 | -30.2 | QP | QP (1.00s) |
| 28.355 | 19.2 | Neutral | 50.0 | -30.8 | AVG | AVG (0.10s) |
| 28.355 | 24.9 | Neutral | 60.0 | -35.1 | QP | QP (1.00s) |
| 0.153 | 17.0 | Neutral | 55.8 | -38.8 | AVG | AVG (0.10s) |

| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | - |

**Run #2: AC Power Port Conducted Emissions, 0.15 - 30MHz, 120V/60Hz**



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | - |

**Run #2: AC Power Port Conducted Emissions, 0.15 - 30MHz, 120V/60Hz**

**Peak readings captured during pre-scan (peak readings vs. average limit)**

| Frequency MHz | Level dBµV | AC Line | §15.207 Limit | §15.207 Margin | Detector QP/AVG | Comments |
|---|---|---|---|---|---|---|
| 0.155 | 36.1 | Neutral | 55.7 | -19.6 | Peak | |
| 0.316 | 33.5 | Line | 49.8 | -16.3 | Peak | |
| 0.476 | 33.3 | Line | 46.4 | -13.1 | Peak | |
| 0.477 | 30.5 | Neutral | 46.4 | -15.9 | Peak | |
| 0.520 | 23.7 | Neutral | 46.0 | -22.3 | Peak | |
| 0.527 | 29.8 | Line | 46.0 | -16.2 | Peak | |
| 28.959 | 28.1 | Neutral | 50.0 | -21.9 | Peak | |
| 28.960 | 29.7 | Line | 50.0 | -20.3 | Peak | |

**Final quasi-peak and average readings**

| Frequency MHz | Level dBµV | AC Line | Class A Limit | Class A Margin | Detector QP/AVG | Comments |
|---|---|---|---|---|---|---|
| **28.960** | **23.2** | Line | 50.0 | **-26.8** | AVG | AVG (0.10s) |
| 0.527 | 27.7 | Line | 56.0 | -28.3 | QP | QP (1.00s) |
| 0.476 | 27.9 | Line | 56.4 | -28.5 | QP | QP (1.00s) |
| 28.959 | 20.1 | Neutral | 50.0 | -29.9 | AVG | AVG (0.10s) |
| 28.960 | 29.1 | Line | 60.0 | -30.9 | QP | QP (1.00s) |
| 0.476 | 15.2 | Line | 46.4 | -31.2 | AVG | AVG (0.10s) |
| 0.527 | 14.8 | Line | 46.0 | -31.2 | AVG | AVG (0.10s) |
| 0.316 | 27.4 | Line | 59.8 | -32.4 | QP | QP (1.00s) |
| 0.316 | 17.3 | Line | 49.8 | -32.5 | AVG | AVG (0.10s) |
| 0.520 | 22.7 | Neutral | 56.0 | -33.3 | QP | QP (1.00s) |
| 0.520 | 11.5 | Neutral | 46.0 | -34.5 | AVG | AVG (0.10s) |
| 0.477 | 21.9 | Neutral | 56.4 | -34.5 | QP | QP (1.00s) |
| 28.959 | 25.5 | Neutral | 60.0 | -34.5 | QP | QP (1.00s) |
| 0.477 | 10.8 | Neutral | 46.4 | -35.6 | AVG | AVG (0.10s) |
| 0.155 | 28.1 | Neutral | 65.7 | -37.6 | QP | QP (1.00s) |
| 0.155 | 9.8 | Neutral | 55.7 | -45.9 | AVG | AVG (0.10s) |

| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | - |

# Radiated Emissions

***(NTS Silicon Valley, Fremont Facility, Semi-Anechoic Chamber)***

## Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

## Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 12/13/2024
Test Engineer: M. Birgani
Test Location: Fremont Chamber #5

Config. Used: 1
Config Change: None
EUT Voltage: Battery

## General Test Configuration

The EUT and any local support equipment were located on the turntable for radiated emissions testing.
The test distance and extrapolation factor (if applicable) are detailed under each run description.
Note, preliminary testing indicates that the emissions were maximized by orientation of the EUT and elevation of the measurement antenna. Maximized testing indicated that the emissions were maximized by orientation of the EUT, elevation of the measurement antenna, and manipulation of the EUT's interface cables.

## Ambient Conditions:

Temperature: 24-25 °C
Rel. Humidity: 36-37 %

## Summary of Results

| Run # | Test Performed | Limit | Result | Margin |
|---|---|---|---|---|
| 2 | Radiated Emissions<br>30 - 1000 MHz, Maximized | §15.209 | Pass | 15.1 dBµV/m @ 30.86 MHz<br>(-24.9 dB) |

## Modifications Made During Testing

No modifications were made to the EUT during testing

## Deviations From The Standard

No deviations were made from the requirements of the standard.

The unit was transmitting at low channel.

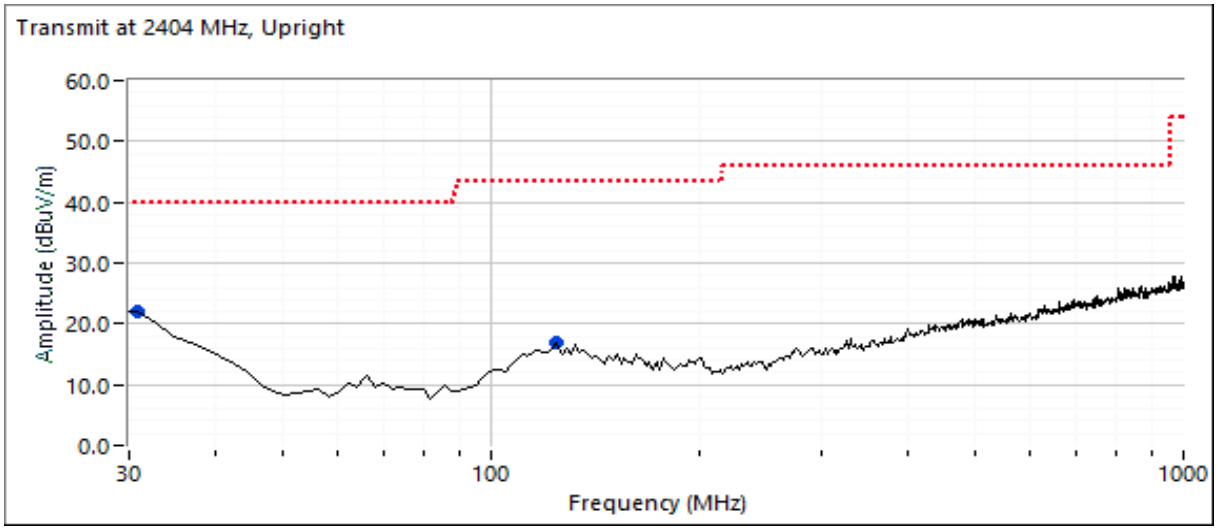
## Sample Notes

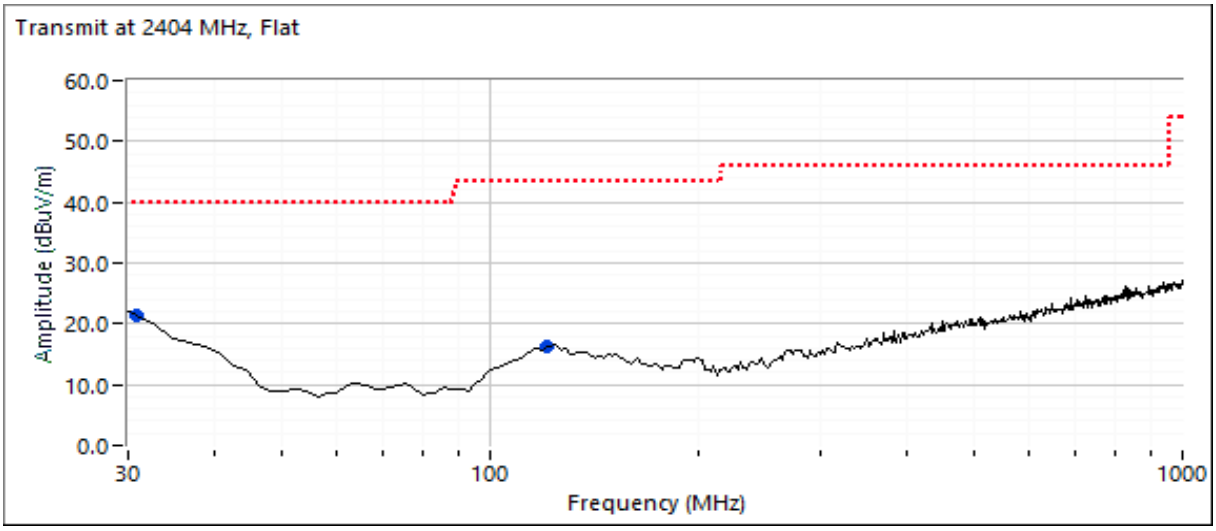
Sample S/N: CE0011

| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | - |

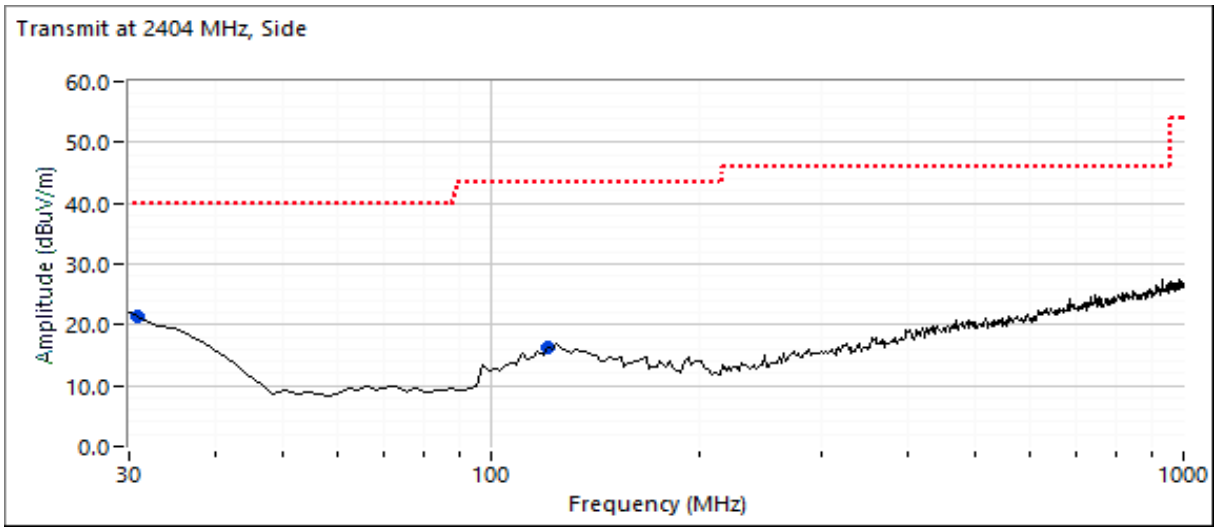
| Test Parameters for Preliminary Scan(s) | | | |
|---|---|---|---|
| Frequency Range (MHz) | Prescan Distance (meters) | Limit Distance (meters) | Extrapolation Factor (dB, applied to data) |
| 30 - 1000 | 3 | 3 | 0.0 |

**Run #1: Radiated Emissions, 30 - 1000 MHz**



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | - |




**Preliminary peak readings captured during pre-scan**

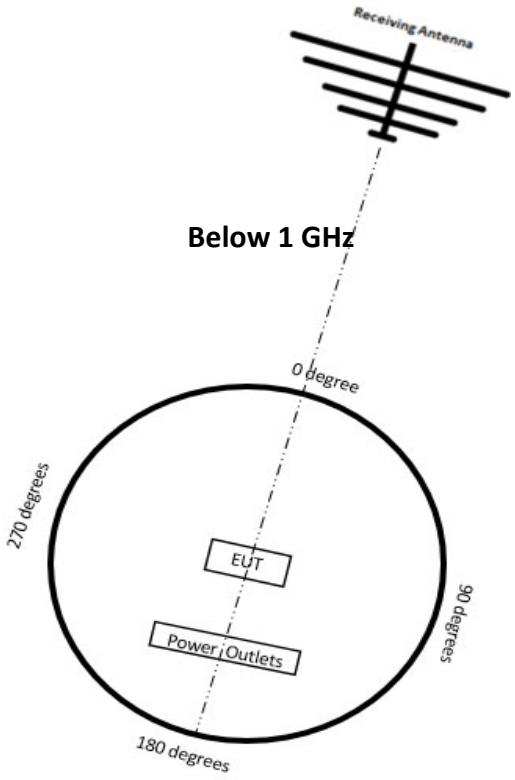
| Frequency | Level | Pol | §15.209 | | Detector | Azimuth | Height | Comments | |
|---|---|---|---|---|---|---|---|---|---|
| MHz | dBµV/m | v/h | Limit | Margin | PK/QP/AVG | degrees | meters | | |
| *30.862* | *22.1* | *H* | *40.0* | *-17.9* | *Peak* | *0* | *3.5* | *Upright* | *Noise Floor* |
| *124.649* | *16.9* | *H* | *43.5* | *-26.6* | *Peak* | *227* | *2.0* | *Upright* | *Noise Floor* |
| *30.862* | *21.4* | *V* | *40.0* | *-18.6* | *Peak* | *125* | *4.0* | *Flat* | *Noise Floor* |
| *120.741* | *16.4* | *H* | *43.5* | *-27.1* | *Peak* | *13* | *3.5* | *Flat* | *Noise Floor* |
| *30.862* | *21.3* | *V* | *40.0* | *-18.7* | *Peak* | *126* | *1.5* | *Side* | *Noise Floor* |
| *120.741* | *16.4* | *V* | *43.5* | *-27.1* | *Peak* | *242* | *1.5* | *Side* | *Noise Floor* |

| | |
|---|---|
| Note 1: | No emissions were observed above the noise flloor of the measurement equipment. Scan was performed at all 3 orientation and showed orientation does not make any difference. Other channels are not necessary for demponstrating complaince. |

**Run #2: Maximized Readings From Run #1**
**Maximized quasi-peak readings (includes manipulation of EUT interface cables)**

| Frequency | Level | Pol | §15.209 | | Detector | Azimuth | Height | Comments |
|---|---|---|---|---|---|---|---|---|
| MHz | dBµV/m | v/h | Limit | Margin | PK/QP/AVG | degrees | meters | |
| **30.862** | **15.1** | V | 40.0 | **-24.9** | QP | 127 | 1.5 | QP (1.00s) |
| 120.741 | 8.8 | V | 43.5 | -34.7 | QP | 242 | 1.5 | QP (1.00s) |

| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | - |



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

# RSS-247 and FCC 15.247 (DTS) Radiated Spurious Emissions

## Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

## General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing.

For radiated emissions testing the measurement antenna was located 3 meters from the EUT, unless otherwise noted.

## Ambient Conditions:

Temperature: 21-23 °C

Rel. Humidity: 40-43 %

## Summary of Results - Device Operating in the 2400-2483.5 MHz Band

| Run # | Channel | Power Setting | Test Performed | Limit | Result / Margin |
|---|---|---|---|---|---|
| 1 | Low | 0 dBm | Radiated Emissions, 1 - 25 GHz | FCC Part 15.209 / 15.247( c) | 49.8 dBµV/m @ 7212.0 MHz (-4.2 dB) |
| | | 0 dBm | Restriced Bandedge (2390 MHz) | FCC Part 15.209 / 15.247( c) | 52.0 dBµV/m @ 2386.4 MHz (-22.0 dB) |
| | Center | 0 dBm | Radiated Emissions, 1 - 25 GHz | FCC Part 15.209 / 15.247( c) | 48.4 dBµV/m @ 4880.1 MHz (-5.6 dB) |
| | High | 0 dBm | Radiated Emissions, 1 - 25 GHz | FCC Part 15.209 / 15.247( c) | 50.3 dBµV/m @ 4952.0 MHz (-3.7 dB) |
| | | 0 dBm | Restriced Bandedge (2483.5 MHz) | FCC Part 15.209 / 15.247( c) | 56.1 dBµV/m @ 2483.6 MHz (-17.9 dB) |

## Modifications Made During Testing

No modifications were made to the EUT during testing

## Deviations From The Standard

No deviations were made from the requirements of the standard.

## Sample Notes

Sample S/N: CE0011

| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

## Procedure Comments:

Measurements performed in accordance with ANSI C63.10
Measurements performed from 1-4GHz with preamp and no filter
Measurements performed from 4-11 GHz with preamp and 2.4GHz notch filter
Peak measurements performed with: RBW=1MHz, VBW=3MHz, peak detector, max hold, auto sweep time
Unless otherwise stated/noted, emission has duty cycle ≥ 98% and was measured using RBW=1MHz, VBW=10Hz, peak detector, linear voltage average, auto sweep time, max hold.

| Mode | Data Rate | Duty Cycle (x) | Constant DC? | T (ms) | Pwr Cor Factor* | Lin Volt Cor Factor** | Min VBW for FS (Hz) |
|---|---|---|---|---|---|---|---|
| - | 1Mbps | 99.6% | Yes | 33.179 | 0 | 0 | 10 |

## Measurement Specific Notes:

| | |
|---|---|
| Note 1: | Emission in non-restricted band, but limit of 15.209 used. |
| Note 2: | Emission in non-restricted band, the limit was set 30dB below the level of the fundamental and measured in 100kHz. |
| Note 3: | Emission has a duty cycle ≥ 98%, average measurement performed: RBW=1MHz, VBW=3MHz, RMS, Power averaging, auto sweep, trace average 100 traces |
| Note 4: | All three orientations were evaluated at low frequency. Only worse case (Upright) was tested at center and high channel. |

Date of Test: 11/4 & 11/5/2024
Test Engineer: David Bare, M. Birgani
Test Location: Fremont Chamber #5

Config. Used: 1
Config Change: None
Charger Voltage: 120 V / 60 Hz

| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

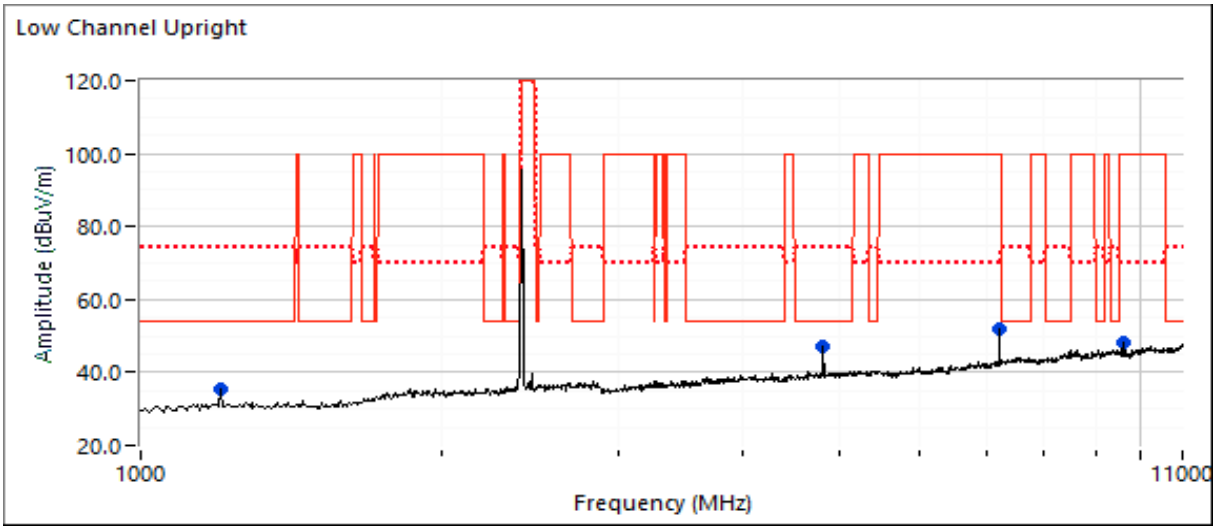
**Run #1: Radiated Spurious Emissions, 1,000 - 25000 MHz**

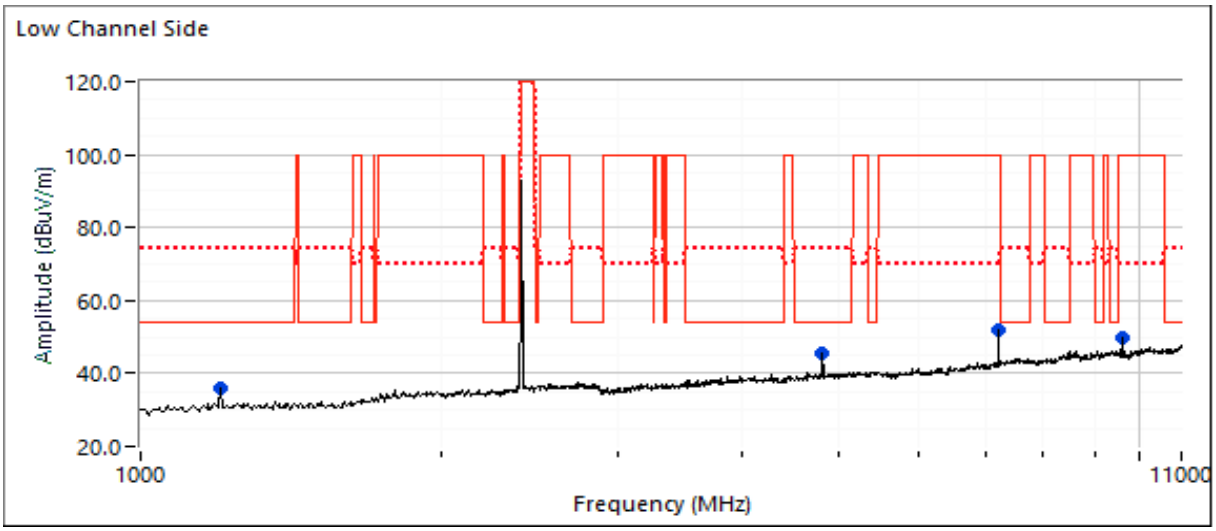
**Run #1a: Low Channel**

| Frequency | Level | Pol | 15.209 / 15.247 | | Detector | Azimuth | Height | Comments |
|---|---|---|---|---|---|---|---|---|
| MHz | dBµV/m | V/H | Limit | Margin | Pk/QP/Avg | degrees | meters | |
| 1202.010 | 34.1 | H | 54.0 | -19.9 | AVG | 344 | 2.4 | RB 1 MHz;VB 10 Hz;Upright |
| 1202.020 | 40.0 | H | 74.0 | -34.0 | PK | 344 | 2.4 | RB 1 MHz;VB 3 MHz;Upright |
| 4808.010 | 46.2 | H | 54.0 | -7.8 | AVG | 313 | 1.6 | RB 1 MHz;VB 10 Hz;Upright |
| 4807.570 | 51.6 | H | 74.0 | -22.4 | PK | 313 | 1.6 | RB 1 MHz;VB 3 MHz;Upright |
| 7212.000 | 49.2 | H | 54.0 | -4.8 | AVG | 199 | 2.2 | RB 1 MHz;VB 10 Hz;Upright;Note 1 |
| 7212.460 | 55.6 | H | 74.0 | -18.4 | PK | 199 | 2.2 | RB 1 MHz;VB 3 MHz;Upright;Note 1 |
| 9616.420 | 43.8 | H | 54.0 | -10.2 | AVG | 190 | 1.4 | RB 1 MHz;VB 10 Hz;Upright;Note 1 |
| 9616.470 | 53.9 | H | 74.0 | -20.1 | PK | 190 | 1.4 | RB 1 MHz;VB 3 MHz;Upright;Note 1 |
| 1202.010 | 34.7 | V | 54.0 | -19.3 | AVG | 329 | 1.0 | RB 1 MHz;VB 10 Hz;Side |
| 1202.020 | 41.0 | V | 74.0 | -33.0 | PK | 329 | 1.0 | RB 1 MHz;VB 3 MHz;Side |
| 4807.970 | 44.0 | H | 54.0 | -10.0 | AVG | 109 | 2.0 | RB 1 MHz;VB 10 Hz;Side |
| 4807.600 | 50.3 | H | 74.0 | -23.7 | PK | 109 | 2.0 | RB 1 MHz;VB 3 MHz;Side |
| 7212.040 | 49.8 | V | 54.0 | -4.2 | AVG | 197 | 1.5 | RB 1 MHz;VB 10 Hz;Side;Note 1 |
| 7212.410 | 55.8 | V | 74.0 | -18.2 | PK | 197 | 1.5 | RB 1 MHz;VB 3 MHz;Side;Note 1 |
| 9615.920 | 48.2 | V | 54.0 | -5.8 | AVG | 312 | 2.2 | RB 1 MHz;VB 10 Hz;Side;Note 1 |
| 9616.630 | 56.5 | V | 74.0 | -17.5 | PK | 312 | 2.2 | RB 1 MHz;VB 3 MHz;Side;Note 1 |
| 12011.470 | 20.6 | V | 54.0 | -33.4 | AVG | 360 | 1.3 | RB 1 MHz;VB 10 Hz;Side |
| 12010.180 | 33.4 | V | 74.0 | -40.6 | PK | 360 | 1.3 | RB 1 MHz;VB 3 MHz;Side |
| 1202.030 | 34.4 | H | 54.0 | -19.6 | AVG | 299 | 1.3 | RB 1 MHz;VB 10 Hz;Flat |
| 1201.770 | 40.3 | H | 74.0 | -33.7 | PK | 299 | 1.3 | RB 1 MHz;VB 3 MHz;Flat |
| 4808.050 | 44.0 | V | 54.0 | -10.0 | AVG | 122 | 1.1 | RB 1 MHz;VB 10 Hz;Flat |
| 4808.370 | 50.2 | V | 74.0 | -23.8 | PK | 122 | 1.1 | RB 1 MHz;VB 3 MHz;Flat |
| 7212.070 | 48.0 | H | 54.0 | -6.0 | AVG | 276 | 1.0 | RB 1 MHz;VB 10 Hz;Flat;Note 1 |
| 7211.520 | 54.4 | H | 74.0 | -19.6 | PK | 276 | 1.0 | RB 1 MHz;VB 3 MHz;Flat;Note 1 |
| 9616.300 | 47.2 | H | 54.0 | -6.8 | AVG | 359 | 1.1 | RB 1 MHz;VB 10 Hz;Flat;Note 1 |
| 9616.380 | 55.5 | H | 74.0 | -18.5 | PK | 359 | 1.1 | RB 1 MHz;VB 3 MHz;Flat;Note 1 |

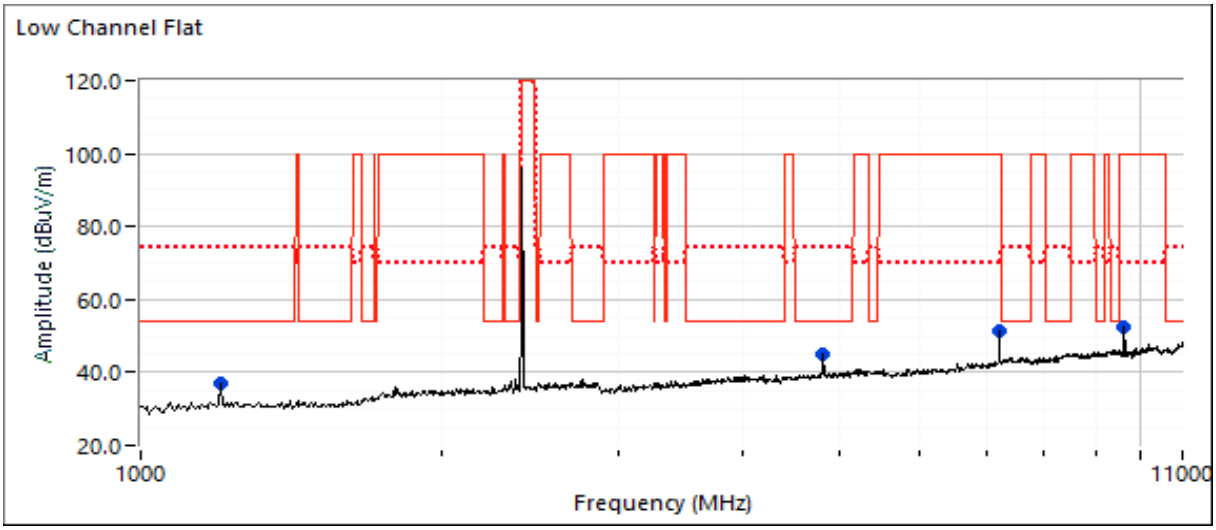
| | |
|---|---|
| Note: | Scans made between 18 - 25 GHz with the measurement antenna moved around the EUT 30cm from the device indicated there were no significant emissions in this frequency range. The emisison observed at 12 GHz is below the noise floor at 3m |

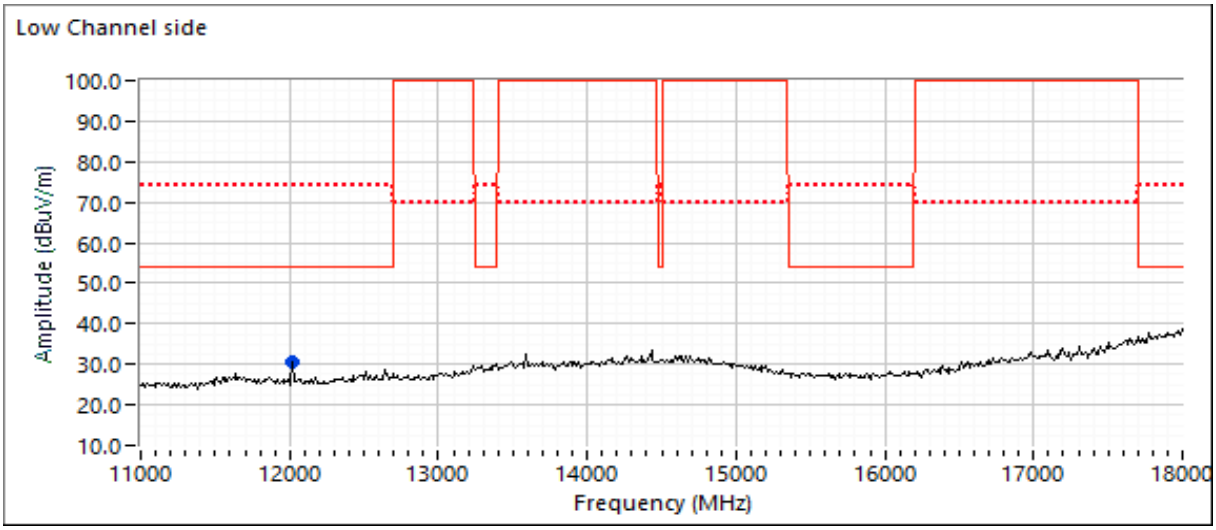
| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |



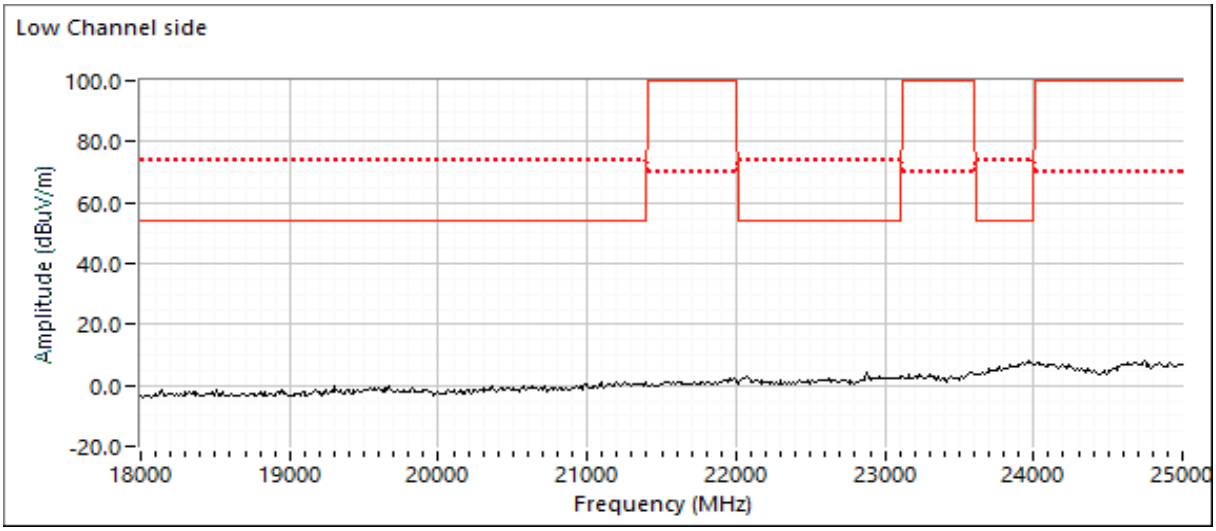



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |



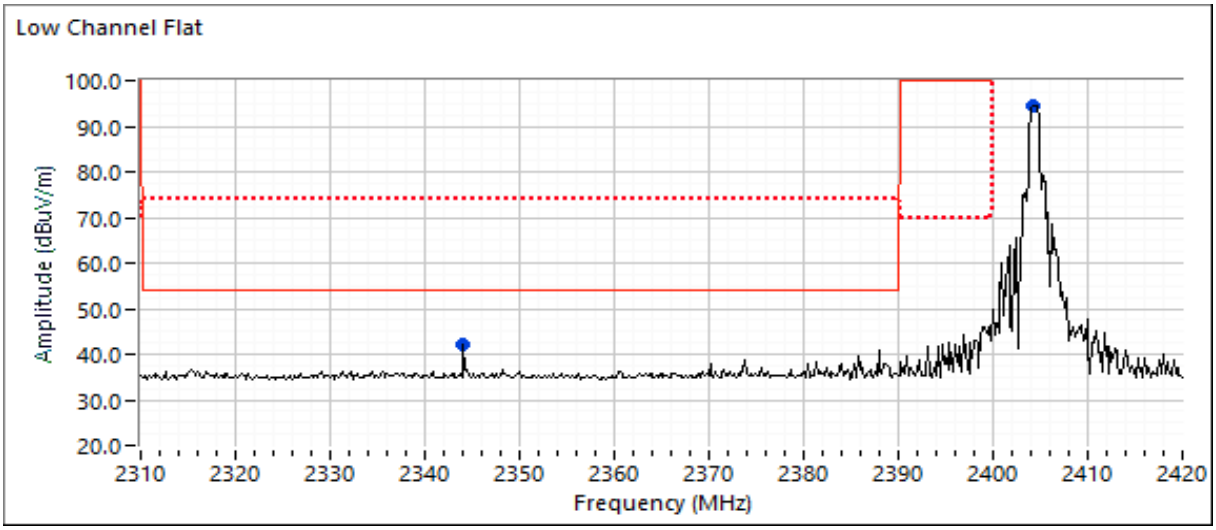



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

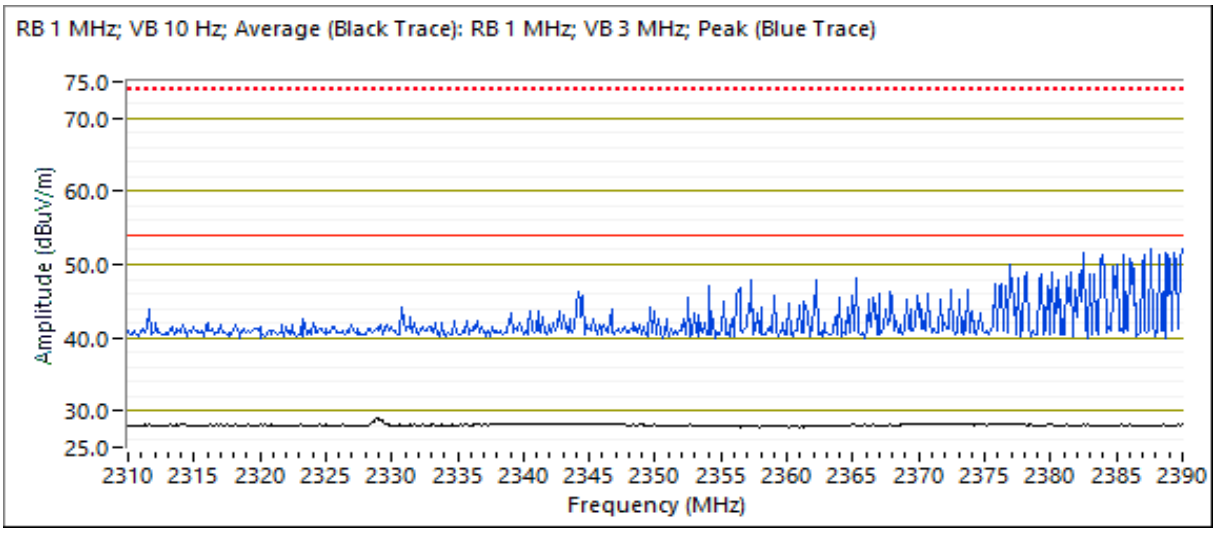



**Band Edge Signal Field Strength - Direct measurement of field strength**

| Frequency | Level | Pol | 15.209 / 15.247 | | Detector | Azimuth | Height | Comments |
|---|---|---|---|---|---|---|---|---|
| MHz | dBµV/m | V/H | Limit | Margin | Pk/QP/Avg | degrees | meters | |
| **2386.350** | **52.0** | H | 74.0 | **-22.0** | PK | 286 | 2.2 | RB 1 MHz;VB 3 MHz;Flat |
| 2343.790 | 30.0 | H | 54.0 | -24.0 | AVG | 286 | 2.3 | RB 1 MHz;VB 10 Hz;Flat |
| 2389.500 | 29.7 | H | 54.0 | -24.3 | AVG | 286 | 2.2 | RB 1 MHz;VB 10 Hz;Flat |
| 2342.830 | 45.1 | H | 74.0 | -28.9 | PK | 286 | 2.3 | RB 1 MHz;VB 3 MHz;Flat |



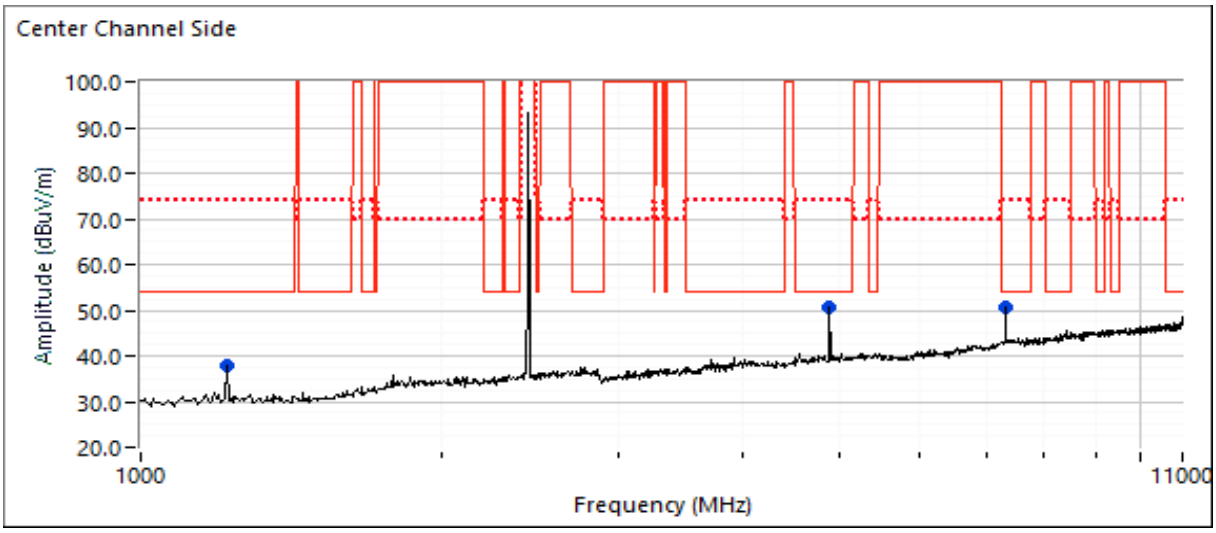
| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

**Run #1b: Center Channel**

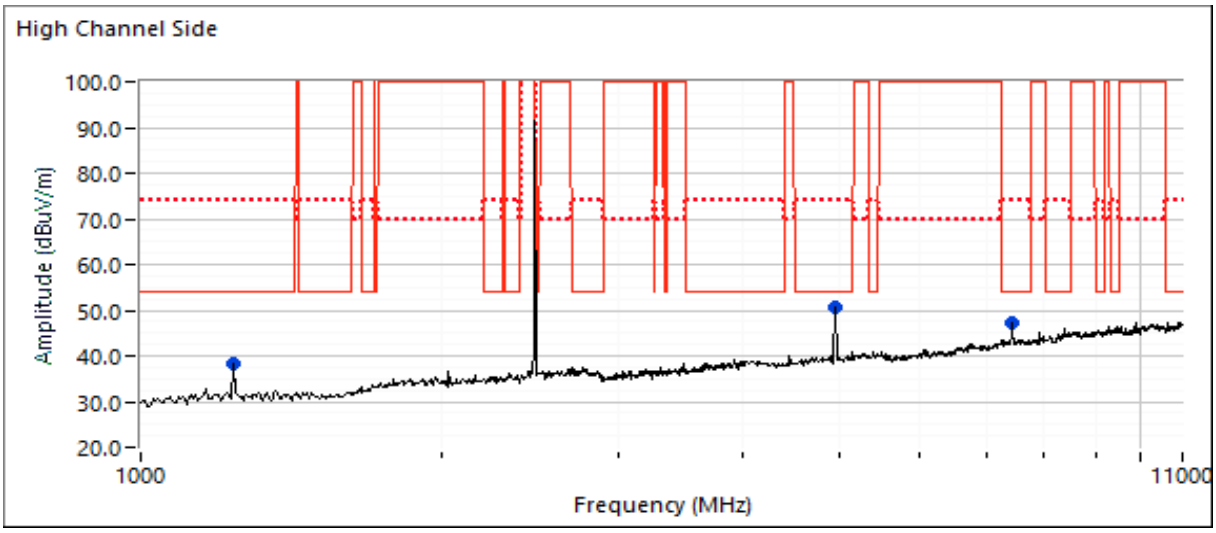
| Frequency | Level | Pol | 15.209 / 15.247 | | Detector | Azimuth | Height | Comments |
|---|---|---|---|---|---|---|---|---|
| MHz | dBµV/m | V/H | Limit | Margin | Pk/QP/Avg | degrees | meters | |
| 1220.050 | 36.4 | V | 54.0 | -17.6 | AVG | 343 | 1.0 | RB 1 MHz;VB 10 Hz;Side |
| 1219.970 | 41.6 | V | 74.0 | -32.4 | PK | 343 | 1.0 | RB 1 MHz;VB 3 MHz;Side |
| 4880.080 | 48.4 | H | 54.0 | -5.6 | AVG | 134 | 1.2 | RB 1 MHz;VB 10 Hz;Side |
| 4880.210 | 52.8 | H | 74.0 | -21.2 | PK | 134 | 1.2 | RB 1 MHz;VB 3 MHz;Side |
| 7320.170 | 46.8 | V | 54.0 | -7.2 | AVG | 183 | 2.0 | RB 1 MHz;VB 10 Hz;Side |
| 7320.250 | 54.5 | V | 74.0 | -19.5 | PK | 183 | 2.0 | RB 1 MHz;VB 3 MHz;Side |



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

**Run #1c: High Channel**

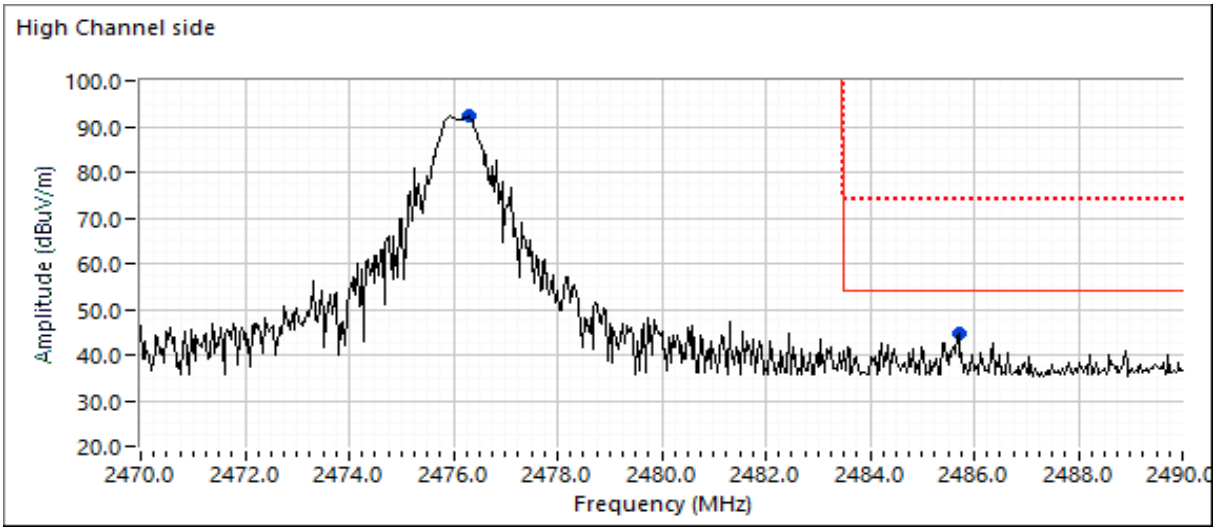
| Frequency | Level | Pol | 15.209 / 15.247 | | Detector | Azimuth | Height | Comments |
|---|---|---|---|---|---|---|---|---|
| MHz | dBµV/m | V/H | Limit | Margin | Pk/QP/Avg | degrees | meters | |
| 1238.020 | 36.4 | V | 54.0 | -17.6 | AVG | 147 | 1.0 | RB 1 MHz;VB 10 Hz;Side |
| 1238.060 | 41.5 | V | 74.0 | -32.5 | PK | 147 | 1.0 | RB 1 MHz;VB 3 MHz;Side |
| 4952.020 | 50.3 | V | 54.0 | -3.7 | AVG | 23 | 2.3 | RB 1 MHz;VB 10 Hz;Side |
| 4952.370 | 53.8 | V | 74.0 | -20.2 | PK | 23 | 2.3 | RB 1 MHz;VB 3 MHz;Side |
| 7427.970 | 44.4 | V | 54.0 | -9.6 | AVG | 134 | 2.3 | RB 1 MHz;VB 10 Hz;Side |
| 7428.230 | 52.3 | V | 74.0 | -21.7 | PK | 134 | 2.3 | RB 1 MHz;VB 3 MHz;Side |



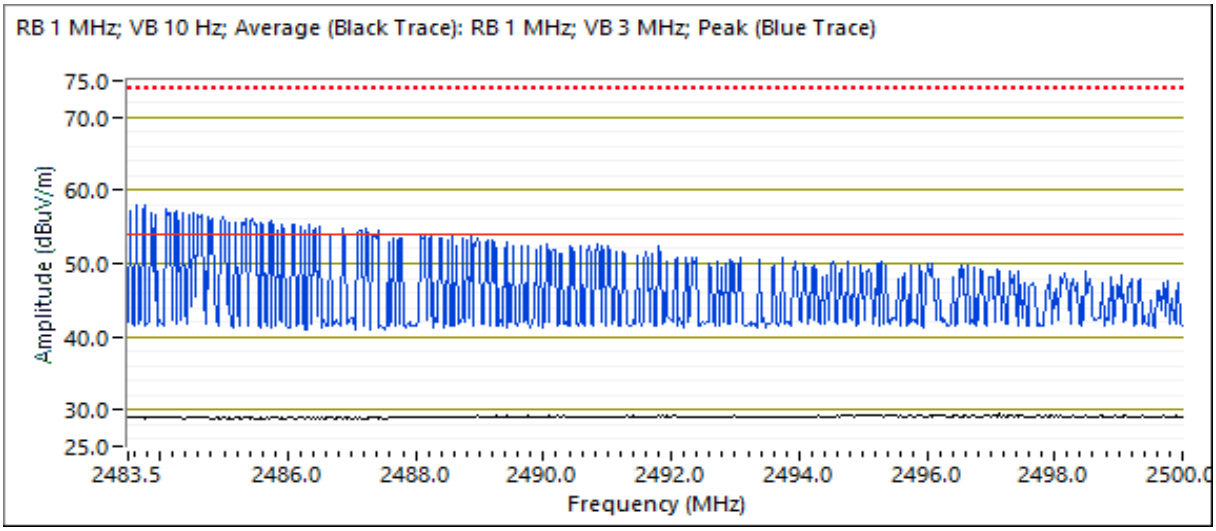

**Band Edge Signal Field Strength - Direct measurement of field strength**

| Frequency | Level | Pol | 15.209 / 15.247 | | Detector | Azimuth | Height | Comments |
|---|---|---|---|---|---|---|---|---|
| MHz | dBµV/m | V/H | Limit | Margin | Pk/QP/Avg | degrees | meters | |
| **2483.610** | **56.1** | H | 74.0 | **-17.9** | PK | 287 | 2.2 | RB 1 MHz;VB 3 MHz;Flat |
| 2483.870 | 55.4 | H | 74.0 | -18.6 | PK | 313 | 2.5 | RB 1 MHz;VB 3 MHz;Side |
| 2490.700 | 55.4 | H | 74.0 | -18.6 | PK | 231 | 1.6 | RB 1 MHz;VB 3 MHz;Upright |
| 2484.360 | 30.8 | H | 54.0 | -23.2 | AVG | 287 | 2.2 | RB 1 MHz;VB 10 Hz;Flat |
| 2494.720 | 30.7 | H | 54.0 | -23.3 | AVG | 231 | 1.6 | RB 1 MHz;VB 10 Hz;Upright |
| 2488.370 | 30.5 | H | 54.0 | -23.5 | AVG | 313 | 2.5 | RB 1 MHz;VB 10 Hz;Side |

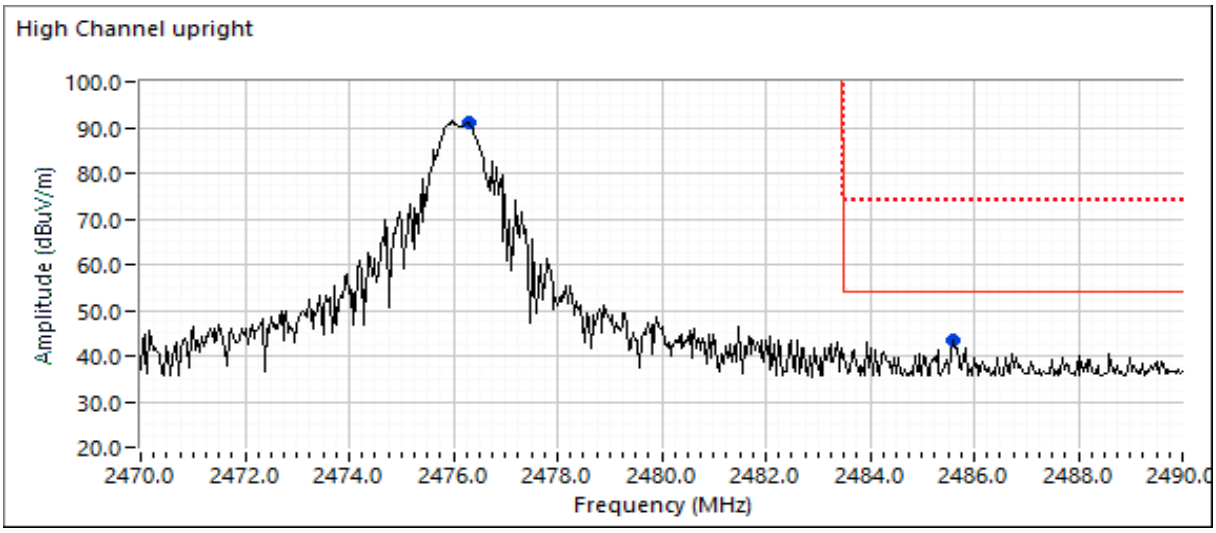
| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

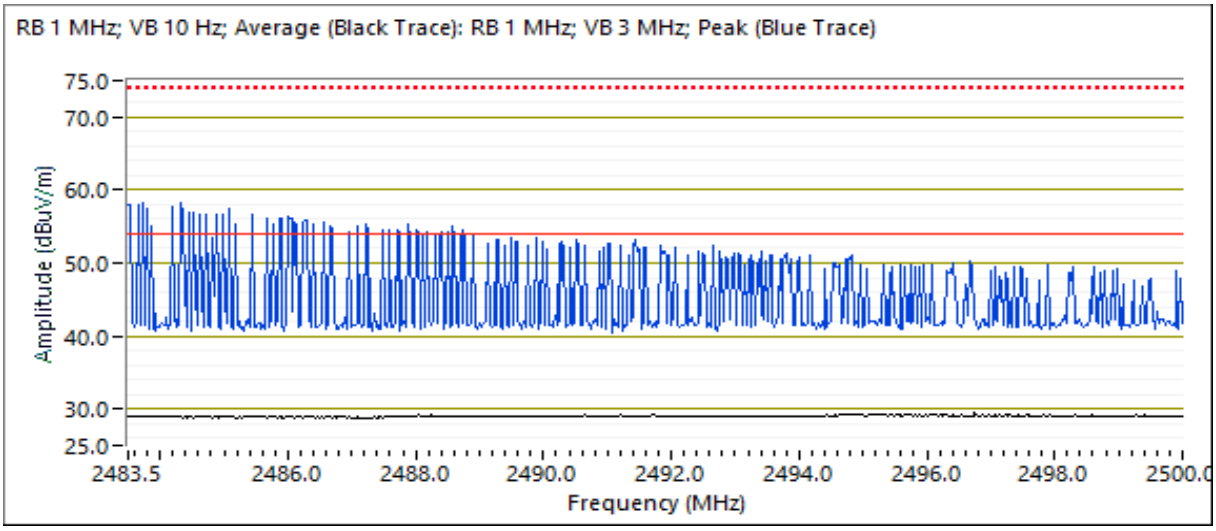



| | |
|---|---|
| Note: | Basd on the preliminary measurements, the maximum amplitude was observed with a horizontally polarized antenna with the EUT on its side and upright. |

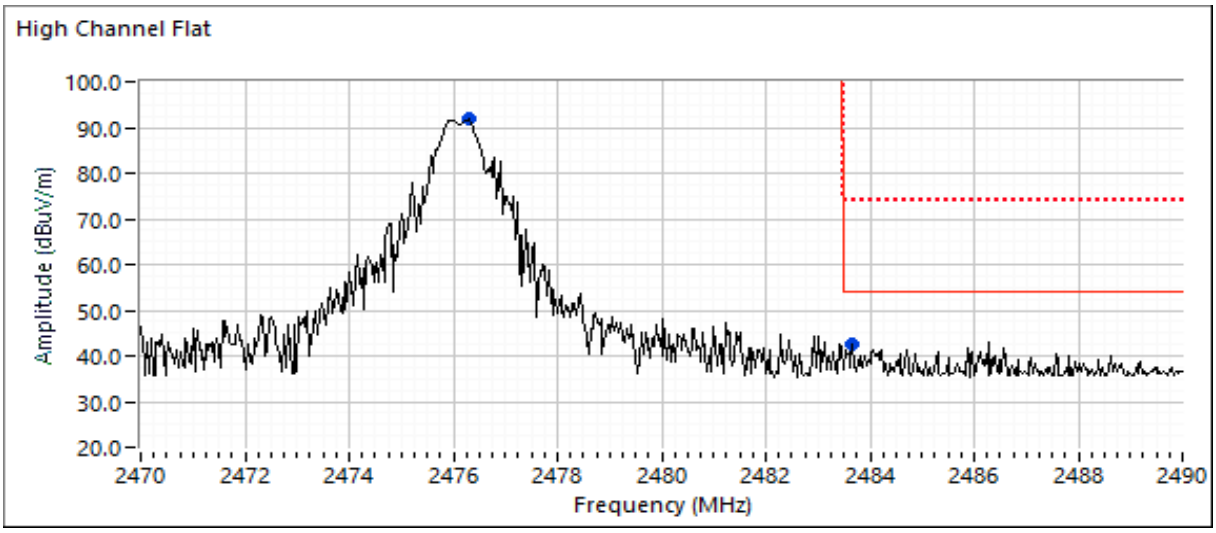


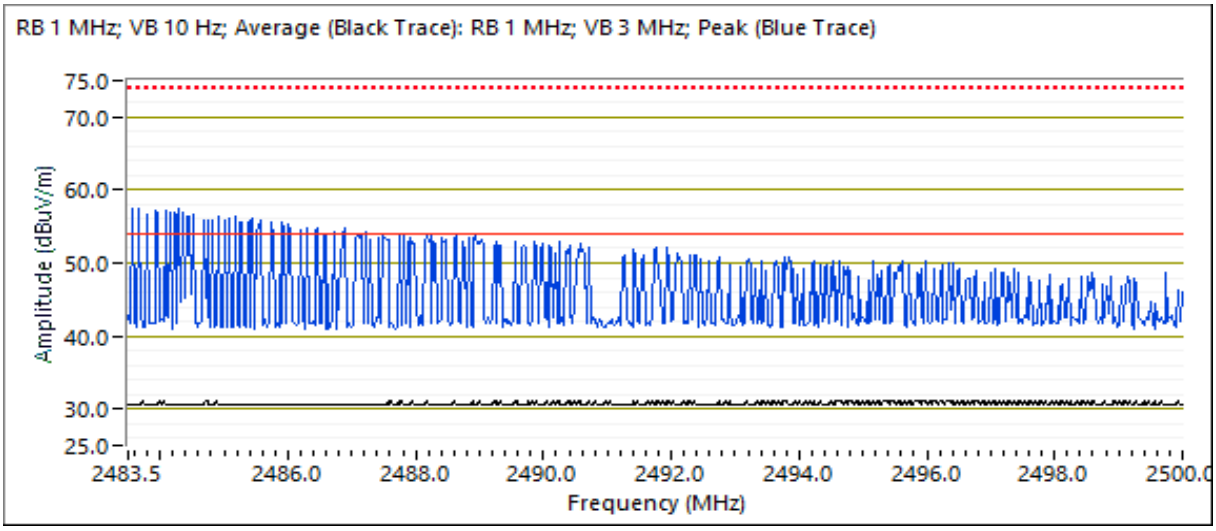
| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

# RSS-247 and FCC 15.247 (DTS) Antenna Port Measurements

## Power, PSD, Bandwidth and Spurious Emissions

### Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 11/19 & 12/12/2024
Test Engineer: David Bare
Test Location: Fremont EMC Lab #4

Config. Used: 1
Config Change: -
EUT Voltage: Battery

### General Test Configuration

The EUT was connected to the spectrum analyzer or power meter via a suitable attenuator. All measurements were made on a single chain.

All measurements have been corrected to allow for the external attenuators used.

### Ambient Conditions:

Temperature: 20-22 °C
Rel. Humidity: 36-43 %

### Summary of Results

| Run # | Pwr setting | Test Performed | Limit | Pass / Fail | Result / Margin |
|---|---|---|---|---|---|
| 1 | 0 | Output Power | 15.247(b) | Pass | -0.5 dBm |
| 2 | 0 | Power spectral Density (PSD) | 15.247(d) | Pass | Total power less than PSD limit |
| 3 | 0 | Minimum 6dB Bandwidth | 15.247(a) | Pass | 510 kHz |
| 3 | 0 | 99% Bandwidth | RSS GEN | - | 561 kHz |
| 4 | 0 | Spurious emissions | 15.247(b) | Pass | |

### Modifications Made During Testing

No modifications were made to the EUT during testing

### Deviations From The Standard

No deviations were made from the requirements of the standard.

| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

## Procedure Comments:

Measurements performed in accordance with ANSI C63.10

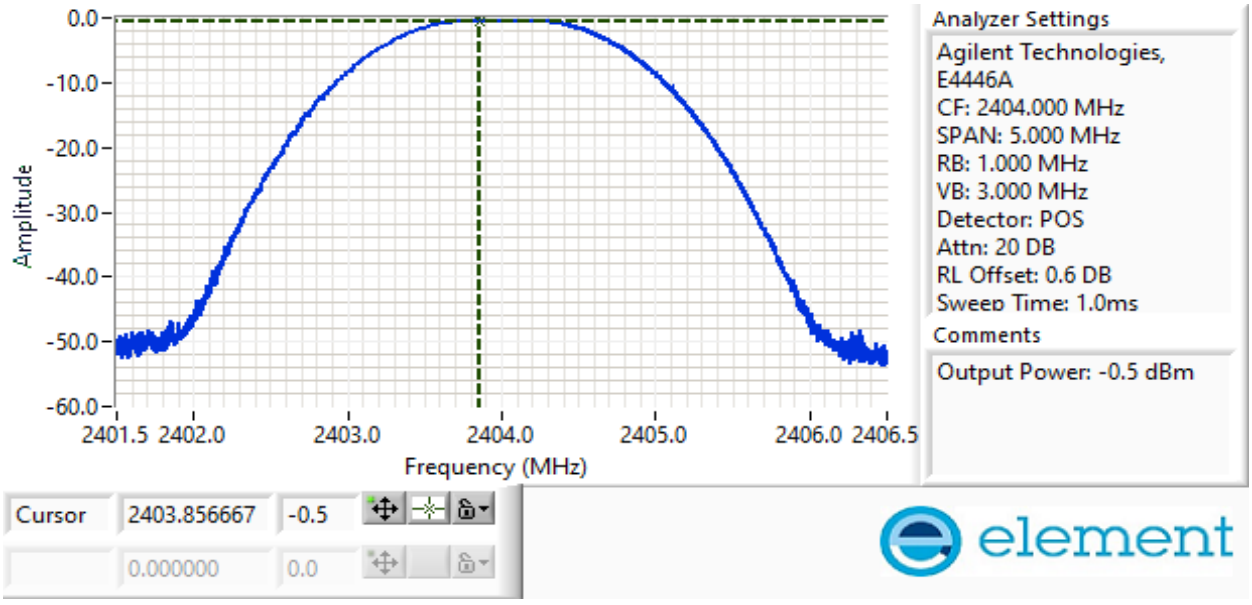
## Sample Notes

Sample S/N: 1

**Run #1: Output Power**

| Power Setting[2] | Frequency (MHz) | Output Power (dBm) [1] | Output Power mW | Antenna Gain (dBi) | Result | EIRP dBm | EIRP W | Output Power (dBm) [3] | Output Power mW |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 2404 | -0.5 | 0.9 | 0.2 | Pass | -0.3 | 0.0009 | | |
| 0 | 2440 | -1.3 | 0.7 | -0.8 | Pass | -2.1 | 0.0006 | | |
| 0 | 2476 | -2.3 | 0.6 | -1.7 | Pass | -4.0 | 0.0004 | | |

| | |
|---|---|
| Note 1: | Output power measured using a spectrun analyzer (see plot below) with RBW≥ OBW and VBW≥3* RBW, Span ≥ 2 times OBW, auto sweep time, Peak detector, Max hold, spurious limit is **-20dBc**. |
| Note 2: | Power setting - the software power setting used during testing, included for reference only. |



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

**Run #2: Power spectral Density**

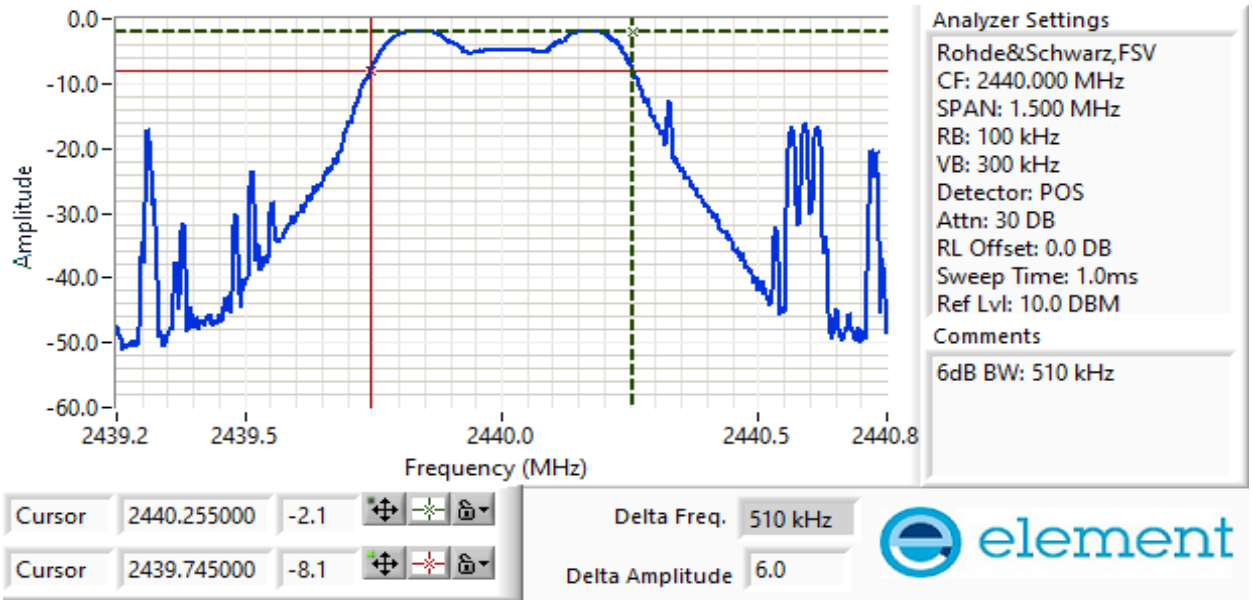
As the output power was less than the PSD limit, no PSD test is required.

**Run #3: Signal Bandwidth**

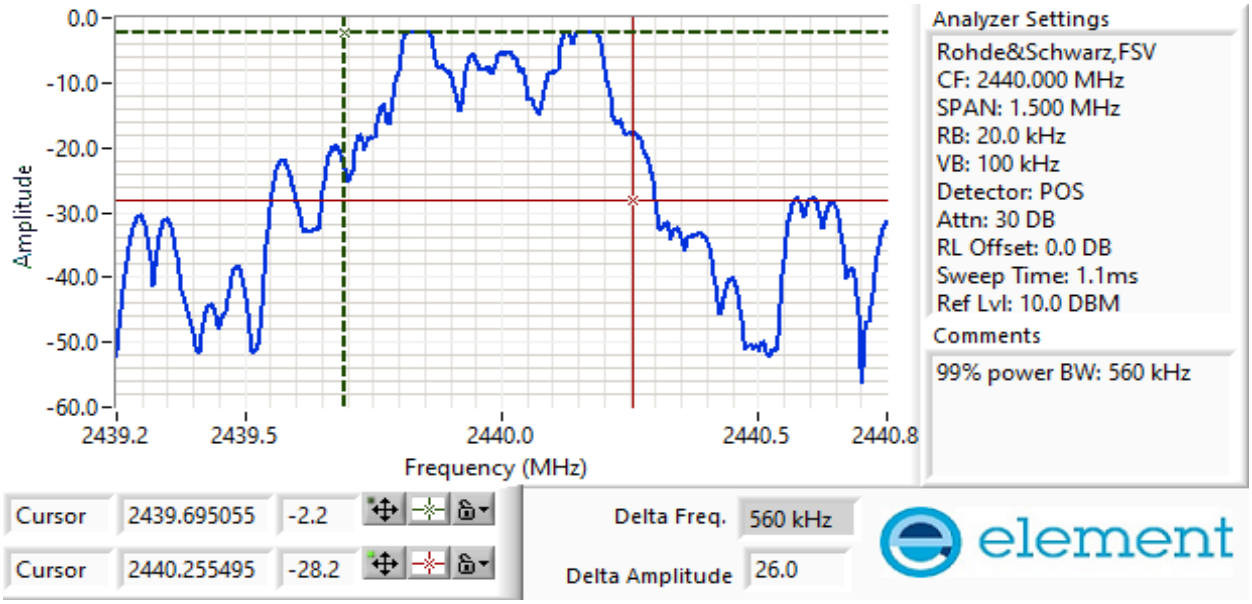
Sample S/N: CE001C

| Power Setting | Frequency (MHz) | Bandwidth (kHz) | | RBW Setting (kHz) | |
|---|---|---|---|---|---|
| | | 6dB | 99% | 6dB | 99% |
| 0 | 2404 | 513 | 518 | 100 | 20 |
| 0 | 2440 | 510 | 560 | 100 | 20 |
| 0 | 2476 | 512 | 498 | 100 | 20 |

| | |
|---|---|
| Note 1: | DTS BW: RBW=100kHz, VBW ≥ 3*RBW, peak detector, max hold, auto sweep time, Span 2-5 times measured BW.<br>99% BW: RBW=1-5% of 99%BW, VBW ≥ 3*RBW, peak detector, max hold, auto sweep time. Span 1.5-5 times OBW. |



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |



| | | | |
|---|---|---|---|
| Client: | XPLORER | PR Number: | PR185733 |
| Model: | ICON Remote Control | T-Log Number: | PR185733-RA-RC |
| | | Project Manager: | Christine Krebill |
| Contact: | Huong Monnier | Project Engineer: | David Bare |
| Standard: | FCC Part 15, RSS-247 | Class: | N/A |

**Run #4: Out of Band Spurious Emissions**

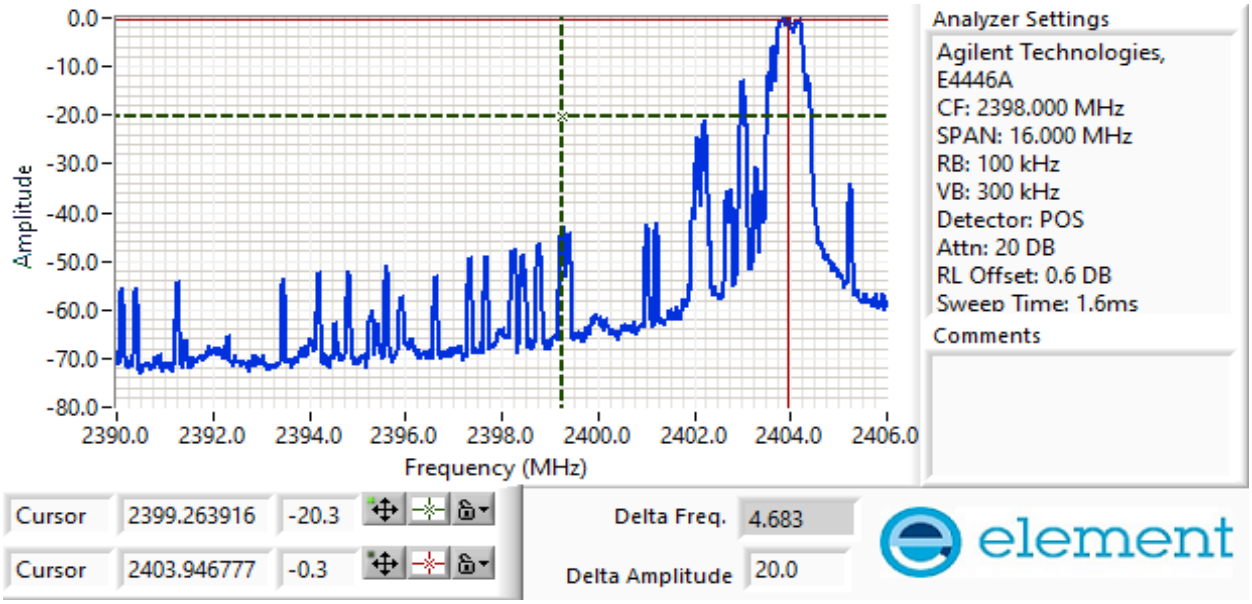
Sample S/N: 1

| Frequency (MHz) | Power Setting | | Limit | Result |
|---|---|---|---|---|
| 2404 | 0 | | -20dBc | Pass |

RBW = 100 kHz and VBW = 300 kHz for all plots.

Plot for low channel

Plot showing compliance with -20dBc limit from 2390 MHz to 2400 MHz. Radiated measurements used to show compliance with the limits for all other emissions..



***End of Report***

This page is intentionally blank and
marks the last page of this test report.