



RF EXPOSURE TEST REPORT



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Laboratory Accreditations (per ISO/IEC 17025:2017)



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Manufacturer: Orca Water Solutions
Address: Suite 107 - 4288 Lozells Ave
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Equipment Tested: Orca Pod
Model Number(s): RCA-POD-ULTBLV1
FCC ID: 2BUOSPOD-ULTBLV1
ISED ID: 34745-POD-ULTBLV1
FVIN: RCA-POD-ULTBLV1

orca
Water is life.

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REVISION HISTORY

Date	Report Number	Details	Author's Initials
August 26, 2026	QA-8292-2	Final	JS
All previous versions of this report have been superseded by the latest dated revision as listed in the above table. Please dispose of all previous electronic and paper printed revisions accordingly.			

REPORT AUTHORIZATION

The data documented in this report is for the test equipment provided by the manufacturer and the results relate only to the item tested. The tests were conducted on the sample equipment as requested by the manufacturer for the purpose of demonstrating compliance with the standards outlined in Section I of this report as agreed upon by the Manufacturer under the quote QAI-1716.

The Manufacturer is responsible for the tested product configurations, continued product compliance, and for the appropriate auditing of subsequent products as required.

This report may comprise a partial list of tests that are required for FCC and ISED. A Declaration of Conformity can only be produced by the manufacturer. This is to certify that the following report is true and correct to the best of our knowledge.

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QAI EMC ACCREDITATION

QAI EMC is your one-stop regulatory compliance partner for electromagnetic compatibility (EMC) and electromagnetic interference (EMI). Products are tested to the latest and applicable EMC/EMI requirements for domestic and international markets. QAI EMC goes above and beyond being a testing facility—we are your regulatory compliance partner. QAI EMC has the capability to perform RF Emissions and Immunity for all types of electronics manufacturing including Industrial, Scientific, Medical, Information Technology, Telecom, Wireless, Automotive, Marine and Avionics.

EMC Laboratory Location	FCC Designation (3m SAC)	IC Registration (3m SAC)	A2LA Certificate
Burnaby, BC, Canada	CA9543 Lab Reg# 669742	9543A	3657.02

EMC Facility Burnaby BC, Canada



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EXECUTIVE SUMMARY

1.1 Purpose

The purpose of this report is to demonstrate and document the compliance of Orca Pod as per Sections 1.2 and 1.3.

1.2 Scope

The information documented in this report is based on the test methods and levels as per Quote QAI-1716:

CFR Title 47 FCC Part 1.1310 Radiofrequency radiation exposure limits.

RSS-102 Issue 6 – Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus

1.3 Summary of Results

The following testing was performed pursuant to FCC Title 47 Part 15 and Industry Canada ICES-003 to demonstrate the testimony to “FCC, IC, & CE” mark Electromagnetic Compatibility testing for the product.

No.	Test	Applicable Standard	Requirement	Result
1	RF Exposure	FCC 47 CFR 1.1310 RSS-102	RF exposure measurements	Complies

Table 1: Applicable test standards and descriptions



Test Equipment List

The tables below contain all the equipment used by 'QAI Laboratories' in conducting all tests on the Equipment Under Test (EUT) as per Section I.

Emissions Test Equipment

	Manufacturer	Model	Description	Serial No.	S/W Version	Calibration Due Date
1	Com-Power Corporation	LI-220C	Line Impedance Stabilization Network (9kHz-30MHz)	20070020	N/A	2028-Dec-5
2	Sunol Sciences	SC 104V	Turntable Controller	042506-1	N/A	Indication Only
3	Sunol Sciences	SM46C	Turntable	071705-2	N/A	Indication Only
4	Maturo GmbH	BAM 4.0-P	Boresight Antenna Mast	365	3382.01	Indication Only
5	ETS Lindgren	S201	7-meter Semi-Anechoic Chamber	1030	N/A	Indication Only
6	Hewlett Packard	8447F	Amplifier (0.1-1300MHz)	1726A00566	N/A	Indication Only
7	Hewlett Packard	8449B	Preamplifier (1-26.5 GHz)	3008A00982	N/A	Indication Only
8	Microwave Lab	USMC10180	Low Noise Amplifier (0.1-18GHz)	001303JR0802A2729	N/A	Indication Only
9	Keysight Technologies	N9038B	MXE EMI Receiver, Multi-touch	MY60180014	N/A	2026-Aug-22
10	ETS-Lindgren	3117	Horn, Double-Ridge Guide Ant, 1.0 - 18 GHz	75944	N/A	2029-Mar-11
11	Sunol Sciences	JB3	Biconilog Antenna (30MHz – 3GHz)	A042004	N/A	2028-Mar-18
12	California Instruments	PACS-1	Test System - H&F	72569	N/A	2028-Apr-2
13	California Instruments	OMNI 1-18i	CDN - H&F	7127	N/A	2028-Apr-2
14	California Instruments	3001i	Power Supply - H&F	52117	CTS3.0 v3.2.0.35	2028-Apr-2
15	TESEQ	ISN T800	Impedance Stabilization Network (150kHz – 30MHz)	27133	N/A	2029-Mar-10
16	Rohde & Schwarz	FSU 67	EMI Receiver	101388	N/A	Indication only

Measurement Software List

	Manufacturer	Model	Version	Description
1	Rohde & Schwarz	EMC 32	10.35.10	Emissions Test Software

GENERAL INFORMATION

2.1 Product Description

The information provided in this section is for the Equipment Under Test (EUT) and the corresponding Auxiliary Equipment needed to perform the tests as a complete system.



Figure 1: Orca Pod

Equipment Under Test (EUT)

Equipment	Orca Pod
Description	Wireless Ultrasonic Water Submeter
Manufacturer	Altimus Design Inc. dba Orca Water Solutions
Model No.	RCA-POD-ULTBLV1
Serial No.	POD26072700001
Clock frequencies tuned upon within the EUT:	2.4 GHz (Thread)
Highest frequency generated within the EUT:	2.48 GHz

Equipment Under Test (EUT) – RF Information

RF device type	2.4 GHz IEEE 802.15.4 / Thread DTS
Model No. (HVIN)	RCA-POD-ULTBLV1
Operating frequency	2405 MHz – 2480 MHz
Number of available channels/Transmitter	15 Channels
Channel separation	5MHz
Channel bandwidth	1.2 MHz
Output Power/Transmitter (conducted)	7.6 dBm
Modulation type	O-QPSK DSSS, IEEE 802.15.4 / Thread
Test Channels (L, M, H)	2405 MHz, 2445 MHz, 2480 MHz
Data Rate	250 kbps
Adaptive	No
Geo-location-capable	No
Number of antennas	1
Antenna type	PCB antenna with U.FL connector
Antenna gain	3.2dBi (estimated Reference design)

Equipment Under Test (EUT) – General Information

Tested as	Tabletop
Dimensions	50mm (W) x 920mm (L) x 60mm (H), excluding external antenna
Declared operating temperature range:	0 – 40C
Input power	5 VDC USB power
Grounded	No
Device use	Fixed Location – Physically secured & not easily moved.

Test Modes

Test	Transmitter State	Power
1	2.4 GHz Thread Radio ON – Continuous Transmit Test Mode	5 VDC via USB-C

Auxiliary Manufacturer Supplied Equipment

Equipment	Manufacturer	Product Description	Model No.
Cell Signal Booster	Wilson Electronics	Cell Booster	460020
LoRaWAN Gateway	RAK	LoRaWAN Gateway	RAK7268CV2
Orca Ocean	Orca Ocean	HUB	RCA-OCN-BLSV001
Laptop	Microsoft	Laptop with Tera Term Software	Model: 1769

2.2 Environmental Conditions

The equipment under test was operated and tested under the following environmental conditions:

Parameter	Conditions
Location	QAI – Burnaby
Temperature	26.0 C
Relative Humidity	55.7 %

2.3 Measurement Uncertainty

Parameter	Uncertainty
Radiated Emissions, 30MHz-1GHz	± 2.40 dB
Radiated Emissions, 1GHz-40GHz	± 2.48 dB
Radio Frequency	±1.5 x 10 ⁻⁵ MHz
Total RF Power Conducted	±1.36 dB
Spurious Emissions, Conducted	±1.36 dB
RF Power Density, Conducted	±1.36 dB
Temperature	±1°C
Humidity	±5 %
DC and low frequency voltages	±3 %

2.4 Worst Test Case

Worst-case orientation was determined during the preliminary testing. The final radiated emissions were performed in the worst-case orientation.

2.5 Sample Calculations of Emissions Data

Radiated and conducted emissions were performed using EMC32 software developed by Rohde & Schwarz. Transducer factors such as antenna factors, cable losses and amplifier gains were stored in the test templates which are used to perform the emissions measurements. After the test is finished, data is generated from the EMC32 consisting of product details, emission plots and final data tables as shown below.

Frequency (MHz)	Q-Peak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Ant. Ht. (cm)	Pol	Turntable Position (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
42.663900	33.0	1000.000	120.000	100.0	H	70.0	13.2	7.5	40.5

Table 2: Sample Quasi-Peak Correction Data – Radiated

Quasi-Peak reading shown in the table above is already corrected by the software using the correction factor shown in column “Corr.” The correction factor listed under “Corr.” table calculated as:

$$\text{Corr. (dB)} = \text{Antenna factor} + \text{Cable loss}$$



Or

$$\text{Corr. (dB)} = \text{Antenna factor} + \text{Cable Loss} - \text{Amp gain (if pre-amplifier was used)}$$

The final Quasi peak reading shown in the data is calculated by the software using following equation:

$$\text{Corrected Quasi-Peak (dB}\mu\text{V/m)} = \text{Raw Quasi-Peak Reading} + \text{Antenna factor} + \text{Cable loss}$$

To obtain the final Quasi-Peak or Average reading during power line conducted emissions, transducer factors are included in the final measurement as shown below.

Frequency (MHz)	Q-Peak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	PE	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.150	44.3	1000.000	9.000	GND	0.6	21.7	66.0

Table 3: Sample Quasi-Peak Correction Data - Conducted Emissions

Frequency (MHz)	Average (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	PE	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.150	27.2	1000.000	9.000	GND	0.6	28.8	56.0

Table 4: Sample Average Correction Data- Conducted Emissions

Quasi Peak or Average reading shown in the preceding table is already corrected by the software using the correction factor shown in column "Corr." The correction factor listed under "Corr." table calculated as:

$$\text{Corr. (dB)} = \text{Antenna factor} + \text{Cable loss}$$

The final Quasi-peak or Average reading shown in the data is calculated by the software using following equation:

$$\text{Corr. Quasi-Peak/Average Reading (dB}\mu\text{V)} = \text{Raw Quasi-Peak/Average Reading} + \text{Antenna factor} + \text{Cable loss}$$

The allowable margin from the limits, as per the standards, were calculated for both radiated and conducted emissions:

$$\text{Margin (dB)} = \text{Limit} - \text{Quasi-Peak or Average reading}$$

3.1 RF Exposure Evaluation – Federal Communications Commission (FCC) & ISED

Date Performed:	26-Jul-20
Test Standard:	FCC 47 CFR 1.1307 FCC 47 CFR 1.1310 FCC 47 CFR 2.1091
Test Method:	FCC OET Bulletin 65 Ed 97-01 FCC KDB 477498 D01: v06
Modifications:	None
Final Result:	Complies

Applicable Regulations

FCC – KDB 447498: General RF Exposure Guidance

7. RF EXPOSURE EVALUATION GUIDANCE FOR MOBILE CONDITIONS

7.1 Transmitters used in mobile device exposure conditions for standalone operations.

A minimum test separation distance ≥ 20 cm is required between the antenna and radiating structures of the device and nearby persons to apply mobile device exposure limits. The minimum test separation distance required for a device to comply with mobile device exposure conditions must be clearly identified in the installation and operating instructions, for all installation and exposure conditions, to enable users and installers to comply with RF exposure requirements.

When a device qualifies for the categorical exclusion provision of 2.1091 (c), the minimum test separation distance may be estimated, when applicable, by simple calculations according to plane-wave equivalent conditions, to ensure the transmitter and its antenna(s) can operate in manners that meet or exceed the estimated distance.

When a device does not qualify for the categorical exclusion provision of 2.1091 (c), routine evaluation using MPE measurement or computational modeling is required to determine compliance. For mobile devices operating in mostly stationary configurations MPE estimated instead of measurements or numerical simulation may be acceptable.

7.2 Transmitters used in mobile device exposure conditions for simultaneous transmission operations.

For mobile exposure host platform devices to qualify for simultaneous transmission MPE test exclusion, all transmitters and antennas in the host must either be evaluated for MPE compliance, by measurement or computational modeling, or qualify for the standalone MPE test exclusion in 7.1. When modular transmitters are used, the minimum test separation distance required for each simultaneously transmitting antenna installed in the host device must satisfy MPE compliance for both standalone and simultaneous transmission operations. When simultaneous transmission MPE test exclusion applies, transmitter modules may be incorporated in host devices according to Class I permissive change requirements to document the test exclusion conditions.

Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is ≤ 1.0 , according to calculated/estimated, numerically modeled, or measured field strengths or power density. The MPE ratio of each antenna is determined at the minimum test separation distance required by the operating configurations and exposure conditions of the host device, according to the ratio of field strengths or power density to the MPE limit at the test frequency. Either the maximum peak or spatially averaged results from measurements or numerical simulations may be used to determine the MPE ratios. Spatial averaging should not be applied when MPE is estimated using simple calculations based on far-field plane-wave equivalent conditions. The antenna installation and operating requirements for the host device must meet the

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minimum test separation distances required for all antennas, in both standalone and simultaneous transmission operations, to satisfy compliance.

FCC 47 CFR 1.1307: Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

(b)(3)(i)(B) A single RF source is exempt if the available maximum time-averaged power or effective radiated power (ERP), whichever is greater is less than or equal to the threshold P_{th} (mW) described in the following formula:

$$P_{th}(mW) = \begin{cases} ERP_{20cm}(d/20cm)^x & d \leq 20cm \\ ERP_{20cm} & 20cm \leq d \leq 40cm \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20cm}\sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

And

$$ERP_{20cm} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f \leq 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

(b)(3)(i)(C) Table 1 – Single RF Sources Subject to Routine Environmental Evaluation:

RF Source Frequency (MHz)	Threshold ERP (W)
0.3 – 1.34	1,920 R ²
1.34 – 30	3,450 R ² /f ²
30 – 300	3.83 R ²
300 – 1,500	0.0128 R ² f
1,500 – 100,000	19.2 R ²

R is the separation distance in meters

Table 5: Single RF Sources Subject to Routine Evaluation

(b)(3)(ii)(B) in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation:

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Where:

a = number of fixed, mobile, or portable RF sources claiming exemption using (b)(3)(i)(B) for P_{th}

b = number of fixed, mobile, or portable RF sources claiming exemption using (b)(3)(i)(C) for ERP_{th}

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance.

P_i = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm

$P_{th,i}$ = the exemption threshold power (P_{th}) according to (b)(3)(i)(B) for fixed, mobile, or portable RF source i

ERP_j = the ERP of fixed, mobile, or portable RF source j .

$ERP_{th,j}$ = exemption threshold ERP for fixed, mobile, or portable RF source j , at a distance of at least $\lambda/2\pi$ according to the applicable formula of (b)(3)(i)(C)

$Evaluated_k$ = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

$Exposure Limit_k$ = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k , as applicable from 1.1310

FCC 47 CFR 1.1310: Radiofrequency radiation exposure limits

(e)(1) Table 1 – Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
(i) Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	*(100)	≤ 6
3.0 – 30	1842/f	4.89/f	*(900/f ²)	< 6
30 – 300	61.4	0.163	1.0	< 6
300 – 1,500			f/300	< 6
1,500 – 100,000			5	< 6
(ii) Limits for General Population/Uncontrolled Exposure				
0.3 – 3.0	614	1.63	*(100)	< 30
3.0 – 30	824/f	2.19/f	*(180/f ²)	< 30
30 – 300	27.5	0.073	0.2	< 30
300 – 1,500			f/1500	< 30
1,500 – 100,000			1.0	< 30

f = frequency in MHz

* = Plane-wave equivalent power density

Table 6: Limits for Maximum Permissible Exposure (MPE)

(e)(2) Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

FCC 47 CFR 2.1091: Radiofrequency radiation exposure evaluation: mobile devices

(c) (1): Evaluation of compliance with the exposure limits in 1.1310 of this chapter, and preparation of an EA if the limits are exceeded, is necessary for mobile devices with single RF sources having either more than an available maximum time averaged power of 1 mW or more than the ERP listed in table 1 of 1.1307(b)(3)(i)(C), whichever is greater.



Transmitter	Thread transmitter
Peak Output Power:	Tx1-Thread = 7.6 dBm, 5.75 mW
Antenna Gain:	0 dBi for Thread
Antenna Type:	Microstrip Antenna
Frequency Range:	2405 MHz
Exposure Distance:	4.5 cm

Using the Maximum Permissible Exposure (MPE) threshold table above in section 3.1.1.3, taken from FCC 47 CFR 1.1310(e)(1), the limit for occupational/uncontrolled exposure at 2400 MHz is:

$$MPE_{2405\text{ MHz}} = 1\text{ mW/cm}^2$$

The plane-wave power density calculation for the transmitter is:

$$S = \frac{P_{mW} * G_{ant}}{4\pi * R_{cm}^2} \text{ mW/cm}^2$$

Where,

S = power density
 P_{mW} = conducted output power in mW
 G_{ant} = linear antenna gain
 R_{cm} = the separation distance in cm

$$S_{Tx2_Thread} = \frac{5.75\text{ mW} * \left(10^{0\text{ dBi}/10}\right)}{4\pi * 4.5^2} = 0.02259\text{ mW/cm}^2$$

Transmitter	Detail	Power Density (mW/cm ²)	Power Density Limit (mW/cm ²)	Result
Tx1	2.4 GHz Thread	0.02259	1	Complies

Table 7: FCC RF Exposure Evaluation Results



ISED – RSS-102

Section 2.5.2 Exemption Limits for Routine Evaluation – RF Exposure Evaluation:

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

- Below 20 MHz and the source-based, time-averaged maximum E.I.R.P. of the device is equal to or less than 1 W.
- At or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum E.I.R.P. of the device is equal to or less than $4.49/f^{0.5}$ W, where f is in MHz.
- At or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum E.I.R.P. of the device is equal to or less than 0.6 W.
- At or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum E.I.R.P. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ W, where f is in MHz.

In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the E.I.R.P. was derived.

Section 3.2 RF Exposure Evaluation of Devices:

A device requiring an RF exposure evaluation shall be made in accordance with the latest version of IEEE C95.3.

If the device is designed such that more than one antenna can functionally transmit at the same time, the RF exposure evaluation shall be conducted while all antennas are transmitting. The individual exposure level ratios shall be totalled and used for compliance purposes.

If the device has more than one antenna but is not designed to have more than one antenna functionally transmit at the same time, the RF exposure evaluation of the device shall be performed for each of the individually transmitting antennas. The maximum RF field strength value shall be recorded and used for compliance purposes.

If the device combines groups of simultaneous and non-simultaneous transmitting antennas, the worst-case of the above scenarios applies.

Section 4 Exposure Limits:

RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)				
Frequency Range (MHz)	Electric Field (V/m rms)	Magnetic Field (A/m rms)	Power Density (W/m ²)	Reference Period (Minutes)
0.003 – 10	83	90	-	Instantaneous*
0.1 – 10	-	$0.73 / f$	-	6**
1.1 – 10	$87 / f^{0.5}$	-	-	6**
10 – 20	27.46	0.0728	2	6
20 – 48	$58.07 / f^{0.25}$	$0.1540 / f^{0.25}$	$8.944 / f^{0.5}$	6
48 – 300	22.06	0.05852	1.291	6
300 – 6000	$3.142 f^{0.25}$	$0.008335 f^{0.25}$	$0.02619 f^{0.5}$	6
6000 – 15000	61.4	0.163	10	6
15000 – 150000	61.4	0.163	10	$616000 / f^{1.2}$
150000 – 300000	$0.158 f^{0.5}$	$4.21 \times 10^{-4} f^{0.5}$	$6.67 \times 10^{-5} f$	$616000 / f^{1.2}$

Note: f is frequency in MHz.

* Based on nerve stimulation (NS).

** Based on specific absorption rate (SAR).

Table 8: ISED Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)

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RF Field Strength Limits for Controlled Use Devices (Controlled Environment)				
Frequency Range (MHz)	Electric Field (V/m rms)	Magnetic Field (A/m rms)	Power Density (W/m ²)	Reference Period (Minutes)
0.003 – 10	170	180	-	Instantaneous*
0.1 – 10	-	1.6 / f	-	6**
1.1 – 10	193 / f ^{0.5}	-	-	6**
10 – 20	61.4	0.163	10	6
20 – 48	129.8 / f ^{0.25}	0.3444 / f ^{0.25}	44.72 / f ^{0.5}	6
48 – 300	49.33	0.1309	6.455	6
300 – 6000	15.60 f ^{0.25}	0.04138 f ^{0.25}	0.6455 f ^{0.5}	6
6000 – 15000	137	0.364	50	6
15000 – 150000	137	0.364	50	616000 / f ^{1.2}
150000 – 300000	0.354 f ^{0.5}	9.4 x 10 ⁻⁴ f ^{0.5}	3.33 x 10 ⁻⁴ f	616000 / f ^{1.2}

Note: f is frequency in MHz.

* Based on nerve stimulation (NS).

** Based on specific absorption rate (SAR).

Table 9: ISED Field Strength Limits for Controlled Use Devices (Controlled Environments)

ISED Measurement Data and Results:

From the RSS-102 limits for RF field strength limits in uncontrolled environments, the maximum power density at 2400 MHz is **0.02619 f^{0.5}** (1.284 W/m²) and which is 12.84 mW/cm².

Transmitter	Detail	Power Density (mW/cm ²) ^{Note 1}	Power Density Limit (mW/cm ²) ^{Note 2}	Result
Tx1	2.4 GHz Thread	0.02259	12.84	Complies

Note 1: See section 3.1.1 for calculation of transmitter power density

Note 2: Power density limit converted from W/m² to mW/cm²

Table 10: RSS-102 Exposure Evaluation



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Appendix B: ABBREVIATIONS

Abbreviation	Definition
AC	Alternating Current
AM	Amplitude Modulation
ASW	Anti-Submarine Warfare
BIT	Built-in-Test
CE	European Conformity
CISPR	Comité International Spécial des Perturbations Radioélectriques (International Special Committee on Radio Interference)
DC	Direct Current
EFT	Electrical Fast Transient
EMC	Electro Magnetic Compatibility
EMI	Electro Magnetic Interference
ERP	Effective Radiated Power
ESD	Electrostatic Discharge
EUT	Equipment Under Test
FCC	Federal Communications Commission
FVIN	Firmware Version Identification Number FVIN
GFE	Government Furnished Equipment
IC	Industry Canada
ICES	Interference Causing Equipment Standard
IEC	International Electrotechnical Commission
LISN	Line Impedance Stabilizing Network
OATS	Open Area Test Site
RF	Radio Frequency
RMS	Root-Mean-Square
SAC	Semi-Anechoic Chamber
TEM	Transverse Electromagnetic
TPD	Terminal Protection Device

END OF REPORT

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