FCC Part 1 Subpart I
FCC Part 2 Subpart J
RSS 102 ISSUE 6

RF EXPOSURE REPORT

FOR

VR19H VR CONTROLLER

MODEL NUMBER: VR1001

FCC ID: X4GS01826
IC: 8803A-S01826

REPORT NUMBER: R15186804-E1

ISSUE DATE: 2024-05-22

Prepared for
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ACCREDITED
CERT #0751.06

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2024-05-10	Initial Issue	Charles Moody
V2	2024-05-22	Added ISED RSS-102 Issue 6 to cover page, § 2 and § 7.2. Updated relevant exemption limits	Richard Jankovics

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Axon Enterprise Inc.
17800 North 85th Street
Scottsdale, AZ 85255, USA

EUT DESCRIPTION: VR19H VR Controller

MODEL: VR1001

SERIAL NUMBER: T40SP1059

SAMPLE RECEIPT DATE: 2024-03-12

DATE TESTED: 2024-04-01

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 1 SUBPART I & PART 2 SUBPART J	Complies
RSS 102 ISSUE 6	Complies

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document.

Approved & Released For
UL LLC By:

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2. TEST METHODOLOGY

All calculations were made in accordance with FCC Parts 1.1310, 2.1091, 2.1093, KDB 447498 D01 v06, KDB 447498 D03 V01, IEEE Std C95.1-2005, and IEEE Std C95.3-2002, IC Safety Code 6 and RSS 102 Issue 6.

This report contains data provided by the customer which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer. Data provided by the customer includes:

1.) Maximum Declared Output Power (See section 7)
2.) Separation Distance (See section 7)
3.) Antenna Gain (See section 7.2)

3. REFERENCES

Output power, duty cycle and antenna gain is excerpted from the applicable test reports or client declarations.

4. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification # 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☐	Building: 12 Laboratory Dr RTP, NC 27709, U.S.A	US0067	2180C	825374
☒	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A		27265	

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

5.2. DECISION RULES

For all tests where the applicable U_{LAB} <= U_{MAX} the Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2, where U_{MAX} = 30% (0.3) for RF Exposure evaluations. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

For all tests where the applicable U_{LAB} > U_{MAX} the Decision Rule is based on Guarded Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.3.2, with a guard band equal to (U_{LAB} – U_{MAX}), where U_{MAX} = 30% (0.3) for RF Exposure evaluations. (Test results are adjusted by the value of the guard band to determine conformity with a specified requirement.)

6. DEVICE UNDER TEST

The EUT is a VR19H VR Controller which contains a BLE radio used to interact with a virtual reality platform.

Separation distances, maximum average output power, and antenna gain have been declared by the manufacturer and can be found in documentation provided.

7. FCC PORTABLE DEVICE TEST EXCLUSION CONSIDERATIONS

7.1. FCC Stand-alone test exclusion KDB 447498 D01 v6.

a) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)]·[√f(GHz)] ≤ 3.0, for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

SAR Exclusion Calculations Table for Portable Devices (separation distance ≤ 50 mm)

Tx	Frequency (MHz)	Avg Output power		Separation Distances (mm)	Calculated Threshold
		dBm	mW		
BLE 2.4 GHz	2480	9.50	9	20	0.7

Conclusion:
The computed value is ≤ 3; therefore, EUT qualifies for Standalone SAR test exclusion.

7.2. ISED CANADA – RSS-102 Issue 6

SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 11 for operating frequencies below 6GHz and Table 12 for operating frequencies between 6GHz and 30 GHz.

Table 11: Power limits for exemption from routine SAR evaluation based on the separation distance

Frequency (MHz)	≤ 5 mm (mW)	10 mm (mW)	15 mm (mW)	20 mm (mW)	25 mm (mW)	30 mm (mW)	35 mm (mW)	40 mm (mW)	45 mm (mW)	> 50 mm (mW)
≤ 300	45	116	139	163	189	216	246	280	319	362
450	32	71	87	104	124	147	175	208	248	296
835	21	32	41	54	72	96	129	172	228	298
1900	6	10	18	33	57	92	138	194	257	323
2450	3	7	16	32	56	89	128	170	209	245
3500	2	6	15	29	50	72	94	114	134	158
5800	1	5	13	23	32	41	54	74	102	128

Notes:

1) Output power level shall be the higher of the maximum conducted or equivalent isotropically radiated power (e.i.r.p) source-based, time-averaged output power.

2) For limb-worn devices where the 10 gram value applies, the exemption limits for routine evaluation in Table 11 are multiplied by a factor of 2.5.

3) If the operating frequency of the device is between two frequencies located in Table 1, linear interpolation shall be applied for the applicable separation distance. Alternatively, the limit corresponding to the smaller distance may be employed. For test separation distance less than 5 mm, the exemption limits for a separation distance of 5 mm can be applied to determine if a routine evaluation is required.

4) For implanted medical devices, the exemption limit for routine SAR evaluation is set at an output power of 1 mW, regardless of frequency.

The minimum antenna to user distance that will be encountered in normal use is 20mm while in use (trigger finger – limb worn) and 37.58mm while not in use (holster - body). This results in an exemption limit of 80 mW while in use (limb worn) and 128 mW while not in use (body) at 2450 MHz. For limb-worn devices where the 10 gram value applies, the exemption limits for routine evaluation in Table 1 are multiplied by a factor of 2.5.

Tx	Frequency (MHz)	Maximum Pk Power	Antenna Gain	1.77 dBi
			(dBm)	(mW)
BLE	2480	Conducted	9.50	8.91
		E.I.R.P	11.27	13.40

As the maximum average output power is 8.91 mW conducted and 13.40 mW EIRP, the DUT qualifies for SAR test exclusion.

END OF TEST REPORT

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