

Willow Run (WR) Test Labs, Inc. 7117 Fieldcrest Drive Brighton, MI 48116

Phone: (734) 252-9785, Fax (734) 926-9785

e-mail: info@wrtest.com

## RF EXPOSURE CALCULATIONS

## **Requirement:**

According to USA CFR 15 §1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. For Canada, RSS-102 sets out the requirements and measurement techniques used to evaluate radio frequency (RF) exposure compliance of radiocommunication apparatus designed to be used within the vicinity of the human body.

## **Maximum Permissible Exposure Calculations:**

USA REF:1.1310, 2.1091/1093, 447498 D01 General RF Exposure Guidance v06
IC REF:RSS-102 Issue 5, Safety Code 6
Min. Sep. Distance: 20 cm (Mobile)

Test Date: 11-Oct-22
Test Engineer: John Nantz
EUT: SCHR1 BREX
EUT Mode: Worst Case
Meas. Distance: Conducted

RO	Mode	Freq. MHz	Worst Case EIRP(Pk/Avg)** dBm	Declared Tolerance (dB)	Worst Case EIRP w/ Tolerance dBm	E20cm(Avg) dBuV/m	S20cm(Avg)**** mW/cm2	Canada ISED RSS-10 SC6 Limit (S20cm) W/m2	2 MPE		USA FCC 1.131 S Limit mW/cm2	0 MPE MPE Ratio
R1	BLE/BT	2402	10.9	0.2	11.1	129.8	0.00245	5.5			1.00000	0.0024475
R2	BLE/BT	2440	10.9	0.2	11.1	129.8	0.00245	5.5			1.00000	0.0024475
R3	BLE/BT	2480	10.9	0.2	11.1	129.8	0.00245	5.5			1.00000	0.0024475
R4											MPE Total (<1):	0.0024475
R5								Complies?	Yes		Complies?	Yes
#	C1	C2	C3		C4	C5	C6	C7	C8	C9	C10	C11
	(ROW) (COLUMN) NOTE											

R0 C3 As Measured / Computed from highest fundamental emission, see fundamental emission section of this report. Maximum of either EIRP or Pout as measured.

R0 C5 EIRP (mW) = S (mW/cm^2) x 4 x Pl x 20cm^2

## **Summary:**

The EUT with all transmitters is compliant with both the FCC power density limit and the ISED Exposure Evaluation limits.