



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](mailto: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.

USA REF: 1.1310, 2.1091/1093, 447498 D01 General RF Exposure Guidance v06

IC REF: RSS-102 Issue 6, Safety Code 6

Min. Sep. Distance: 20 cm

Test Date: 17-Mar-25

Test Engineer: J. Nantz

EUT: AIHS-MU

EUT Mode: Active

Meas. Distance: 3m

R0	Mode	Frequency Band		Conducted Power (Avg) dBm	Antenna Gain dBi	EIRP (Avg) mW	S20cm (Avg) mW/cm2	S (Avg) W/m2	SAR (Avg) W/kg	Canada ISED Safety Code 6			USA FCC 1.1310 MPE			
		Start MHz	Stop MHz							SAR Limit (Avg) W/kg	Srl Limit Table 5 W/m2	MPE Ratio	SAR Limit (Avg) W/kg	MPE Limit Table 1 (mW/cm2)	MPE Ratio	
R1	CM	2412	2472	23.5	1.3	302.0	0.060	0.601			5.45689	0.11010		1.000	0.060	
R2	CW	13.56	13.56						1.380	1.600		0.863	1.600		0.863	
R3																
R4																
R5												Total MPE	0.97260		Total MPE	0.923
R6												MPE Ratio < 1	YES		MPE Ratio < 1	YES
#	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16

(ROW)COLUMNNOTE:

- R1 C4 Max conducted power including tune up tolerance as reported in Bureau Veritas Rpt. No. SA150107E07H. Device is classified as a mobile device.
- R1 C5 Max antenna gain of INPAQ dipole model DAM-I6-H-DB-800-10-17 as reported in Bureau Veritas Rpt. No. SA150107E07H.
- R1 C6  $EIRP(mW) = 10^{((Cond\ Pow(dBm) + tune\ up(dB) + Ant.\ Gain(dBi))/10)}$
- R1 C7  $S(mW/cm^2) = EIRP(mW)/(4 \times \pi \times 20cm^2)$
- R1 C8  $S(W/m^2) = EIRP(W)/(4 \times \pi \times 0.2m^2)$
- R1 C10 Limit calculated as:  $0.02619 \times f(MHz)^{0.6834} W/m^2$  according to RSS-102 i6, table 7 for uncontrolled environment
- R2 C9 Maximum measured SAR according to Willow Run Test Labs Rpt. No's. AIHS-MU - Exh 11 - TR\_20778-25\_FCC\_SAR REPORT\_3 & TR\_20779-25\_ISED\_SAR REPORT\_2

### Summary:

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