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 Calculation:
The General Population / Uncontrolled Exposure limit for mobile devices is **1 mW/cm^2 at 20 cm** separation distance for the US. For Canada, the Exposure Evaluation EIRP Limit is computed from the formula EIRP = 1.31*10^(-2))*(f_MHz)^0.6834. Cumulative power density at the 20 cm separation distance and total EIRP rating are computed below and compared to the respective limits.

USA REF: 2.1091/1093, 447498 D01 General RF Exposure Guidance v06
IC REF: RSS-102 Issue 5
Sep. Distance: >20cm

Test Date: 17-Feb-16
Test Engineer: Joseph Brunett
EUT: Nutek IVU – Small
EUT Mode: Hopping
Meas. Distance: 3 meters

					Canada	**USA**
Freq. MHz	Pout* (Pk) dBm	EIRP* (Pk) dBm	Worst Case Source Based Time Averaged Po/EIRP(Pk)** mW	Power Density S @ 20cm mW/cm^2	mW	Power Density Limit S @ 20cm mW/cm^2
904.0	16.3	18.6	72.0	0.0143	1372.5	1.0
914.0	16.2	18.9	77.5	0.0154	1382.9	1.0
923.6	16.2	18.8	75.9	0.0151	1392.8	1.0

*As Measured / Computed from highest fundamental emission, see fundamental emission section of this report.

**Only RMS level is required, RMS/6min << Pk, Peak emission employed to demonstrate compliance.

Summary:
The EUT with both transmitters is compliant with both the FCC power density limit and the IC Exposure Evaluation EIRP limit.