MPE CALCULATION (FCC ID: 2ARO6INV-CC1312R1)

RF Exposure Requirements:	47 CFR §1.1307(b)
RF Radiation Exposure Limits:	47 CFR §1.1310
RF Radiation Exposure Guidelines:	FCC OST/OET Bulletin Number 65
EUT Frequency Band:	902-928MHz
Limits for General Population/Uncontrolled Exposure in the band of:	300 - 1500 MHz
Power Density Limit:	f/1500 mW/cm2 (0.601 mW/cm2 at 902MHz)

Equation: $S = PG / 4\pi R^2$ or $R = \sqrt{PG / 4\pi S}$

Where, S = Power Density

P = Power Input to Antenna

G = Antenna Gain

R = distance to the center of radiated antenna

Prediction distance 20 cm

EUT: Sub-GHz RF Module Radio product

External antenna version

Power = 13.907 dBm, Internal PIFA antenna gain = 2 dBi, Power density = 0.0078mW/cm^2

Maximum MPE is 0.0078 mW/cm^2, which is less than 0.601 mW/cm^2.

The above results show that the device complies with the MPE requirement.

Internal antenna version

Power = 13.907 dBm, antenna gain = 3.03 dBi, Power density = 0.0098 mW/cm^2

Maximum MPE is 0.0098 mW/cm^2, which is less than 0.601 mW/cm^2.

The above results show that the device complies with the MPE requirement.

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