MPE CALCULATION

FCC ID: RAYWIFIBT1 / **IC ID:** 4697A-WIFIBT1

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: **WLAN (**2412-2462 MHz), **BT** (2402-2480MHz)

Limits for General Population/Uncontrolled Exposure in the band of: 1500 - 100,000 MHz

Power Density Limit: 1 mW/ cm^2

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

MPE test Result

Highest power setting:

Module	Test Mode	Channel	Frequency (MHz)	Measured power (dBm)	Target power (dBm)	Tolerance (dB)	Max tune up power (dBm)
WLAN	802.11g	Mid	2437	17.4	16.5	+2/-2.5	18.5
BT	EDR	Mid	2441	2.6	2	+2/-2.5	4

Prediction distance 20cm

(BT 2.4GHz): Max tune up Power =4 dBm, Antenna Gain = 3.14 dBi, Power density = 0.00102 mW/ cm^2

(WLAN 2.4GHz): Max tune up Power = 18.5 dBm, Antenna Gain = 3.14 dBi, Power density = 0.0291 mW/ cm^2

Total Ratio = $(P_{WLAN}/1) + (P_{BT}/1)$ = 0.0291 mW/ cm^2 + 0.00102 mW/ cm^2 = 0.03012 mW/ cm^2

The Above Result had shown that the Device complied with MPE requirement.

Completed By: Nima Molaei

Date: Dec 12st, 2014

SIEMIC, Inc

775 Montague Expressway, Milpitas, CA 95035

Phone: (408) 526-1188