

# MPE CALCULATION

FCC ID: APV-SC1204

RF Exposure Requirements:  
RF Radiation Exposure Limits:  
RF Radiation Exposure Guidelines:

47 CFR §1.1307(b)  
47 CFR §1.1310  
FCC OST/OET Bulletin Number 65

EUT Frequency Band:  
Limits for General Population/Uncontrolled Exposure in the band of:

2402-2480 MHz  
300-1500MHz, 1500-100,000 MHz

Power Density Limit:

f/1500; 1 mW / cm<sup>2</sup>

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

---

EUT: BLE Module, Model No.: SCI\_BLE

PCB Trace Antenna

Prediction distance 20cm

BLE: Power= -1.61 dBm, Antenna Gain = 2 dBi, Power density = 0.000274 mW/cm<sup>2</sup>

Type	CH Freq (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Tune-Up Tolerance	Tolerance Max Power (dBm)	Measurement Distance (cm)	Calculated MPE (mW/cm <sup>2</sup> )	MPE Limit (mW/cm <sup>2</sup> )	Pass/Fail
BLE	2402	-1.61	2.0	±1dB	-0.61	20	0.000274	1	Pass

The Above Result had shown that the device complied with MPE requirement at a prediction distance of 20cm.

Completed By: Deon Dai



SIEMIC, Inc

775 Montague Expressway, Milpitas, CA 95035

Phone: (408) 526-1188

Date: 04/08/2019