

# MPE Calculation

**For Dice Electronics.LLC; Model: BT1DB**

**FCC ID: V9UBT1DB**

RF Exposure Requirements:	47CFR§1.1307(b)
RF Radiation Exposure Limits:	47CFR§1.1310
RF Radiation Exposure Guidelines:	47CFR§2.1091
EUT Frequency Band:	2402 – 2480MHz
Limits for General Population/Uncontrolled Exposure in the band of:	1500 – 100000MHz
Power Density Limit:	1.0mW/cm <sup>2</sup> ;

Equation:  $S = PG/4\pi R^2$   
Where, S=Power Density  
P=Power Input to Antenna  
G=Antenna Gain  
R=distance to the center of radiated antenna

Low Channel (2402MHz):  
Power=6.67dBm, Antenna Gain=0.54dBi, Prediction distance 20cm  
 $S = (4.65 \times 1.13) / (4 \times 3.14 \times 20^2) = 0.001 \text{ mW/cm}^2$

## Result

The above result had shown that device complied with 1.0mW/cm<sup>2</sup> Power density requirement for distance of 20 cm.

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