

**MPE CALCULATION**  
**FCC ID: DD4MXCW640**

**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: 2.4GHz** 2412-2462 MHz  
**EUT Frequency Band: 5 GHz** 5180- 5320MHz, 5500-5700MHz, 5745-5825MHz

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

**Power Density Limit:** 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: MXCW Wireless Discussion System, Model No.: MXCW640**

(2.4GHz Band): Power = 10.35 dBm, Antenna Gain = 4.35 dBi, Power density = 0.007mW/ cm<sup>2</sup>

(5 GHz Band): Power = 13.09 dBm, Antenna Gain = 6 dBi, Power density = 0.038 mW/ cm<sup>2</sup>

| Type         | CH Freq (MHz) | Conducted Power (dBm) | Antenna Gain (dBi) | Directional 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 |
|--------------|---------------|-----------------------|--------------------|------------------------|-------------------|---------------------------|---------------------------|--------------------------------------|---------------------------------|-----------|
| 2.4 GHz WLAN | 2412          | 10.35                 | 4.35               | 4.35                   | ±1dB              | 11.35                     | 20                        | 0.007                                | 1                               | Pass      |
| 5 GHz WLAN   | 5240          | 15.80                 | 6                  | 6                      | ±1dB              | 16.80                     | 20                        | 0.038                                | 1                               | Pass      |

Note: 2.4GHz and 5GHz do not transmit simultaneously.

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

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Date: 09/29/2017