

INTERTEK TESTING SERVICES

RF Exposure

The Equipment Under Test (EUT) is a **conn. 8" Ring Light With Stand with Bluetooth** functions. The EUT is powered by DC 3V by battery. For more detailed features description, please refer to the user's manual.

Bluetooth Version: 5.2 BLE

Antenna Type: PCB Layout Antenna.

Antenna Gain: 2.79 dBi max.

Modulation Type: GFSK

The nominal conducted output power specified: -3.19dBm (+/-1dB)

The nominal radiated output power (e.i.r.p) specified: -0.4dBm (+/- 1dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 95.8dB μ V/m at 3m in the frequency 2402MHz (BLE mode)

The EIRP = $[(FS^*D)^2 / 30]$ mW = 0.57dBm

The minimum peak radiated emission for the EUT is 94.2dB μ V/m at 3m in the frequency 2480MHz (BLE mode)

The EIRP = $[(FS^*D)^2 / 30]$ mW = -1.03dBm

which is within the production variation.

The maximum radiated output power specified is 0.6dBm = 1.15 mW

The source- based time-averaging conducted output power

= 1.15 * Duty factor mW (where Duty Factor ≤ 1)

= 1.15mW

The SAR Exclusion Threshold Level:

= $3.0 * (\text{min. test separation distance, mm}) / \text{sqrt(freq. in GHz)}$

= $3.0 * 5 / \text{sqrt (2.480)}$ mW

= 9.53 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing