



RF Exposure Evaluation

FCC ID: 2BAFB-R-S60RGB

1. Client Information

| | | |
|---------------------|---|---|
| Applicant | : | Dongguan City Tulifang Photographic Equipment Co., Ltd |
| Address | : | GD Modern International Exhibition Center Side, Houjie, Dongguan, Guangdong Province, China |
| Manufacturer | : | Dongguan City Tulifang Photographic Equipment Co., Ltd |
| Address | : | GD Modern International Exhibition Center Side, Houjie, Dongguan, Guangdong Province, China |

2. General Description of EUT

| | | |
|---|---|--|
| EUT Name | : | LED photo/video light |
| Model(s) No. | : | R-S60B, R-S36B, R-S36RGB, RSF-11-RGB |
| Model Difference | : | All these models are identical, in the same PCB, layout and circuit, the only difference is that the model name is different |
| Product Description | : | Operation Frequency: Bluetooth 5.0: 2402MHz~2480MHz |
| | | Number of Channel: Bluetooth 5.0: 79 channels |
| | | Antenna Gain: 2.5dBi PCB Antenna |
| | | Modulation Type: GFSK |
| | | Bit Rate of Transmitter: 1/2Mbps |
| Power Supply | : | Adapter:FJ-SW20171504000D Input:AC 100-240V~50/60Hz, 1.5A Max Output:15V,4A |
| Software Version | : | 1.0 |
| Hardware Version | : | 1.0 |
| Remark: The antenna gain provided by the applicant, the adapter and verified for the RF conduction test and adapter provided by TOBY test lab. | | |

Note: More test information about the EUT please refer the RF Test Report.

SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.

(1) Clause 4.3: General SAR test reduction and exclusion guidance

Sub clause 4.31: Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance ≤ 5 mm are determined by:

$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f(\text{GHz})}]}{\leq 3.0 \text{ for 1-g SAR}}$$

$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f(\text{GHz})}]}{\leq 7.5.0 \text{ for 10-g SAR}}$$



2. Calculation:

| Test separation: 5mm | | | | | | |
|-------------------------|-----------------------|------------------------------|--------------------------------------|-------------------------------------|-------------------|-----------------|
| Bluetooth LE Mode 1Mbps | | | | | | |
| Frequency (GHz) | Conducted Power (dBm) | Turn-up Power Tolerance (dB) | Max power of tune up tolerance (dBm) | Max power of tune up tolerance (mw) | Calculation Value | Threshold Value |
| 2.402 | 2.362 | 2±1 | 3 | 1.995 | 0.618 | 3.0 |
| 2.440 | 2.383 | 2±1 | 3 | 1.995 | 0.623 | 3.0 |
| 2.480 | 2.487 | 2±1 | 3 | 1.995 | 0.628 | 3.0 |
| Bluetooth Mode 2Mbps | | | | | | |
| Frequency (GHz) | Conducted Power (dBm) | Turn-up Power Tolerance (dB) | Max power of tune up tolerance (dBm) | Max power of tune up tolerance (mw) | Calculation Value | Threshold Value |
| 2.402 | 2.405 | 2±1 | 3 | 0.618 | 0.618 | 3.0 |
| 2.440 | 2.417 | 2±1 | 3 | 0.623 | 0.623 | 3.0 |
| 2.480 | 2.542 | 2±1 | 3 | 0.628 | 0.628 | 3.0 |

Conclusion:

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v06.

-----END OF REPORT-----

