

RF Exposure Evaluation Report

1 RF EXPOSURE

Product Name: Smart Christmas light string
 Model No.: LS-S420-2A
 FCC ID: 2A82TLS-S420

2. RF Exposure Evaluation

FCC KDB447498 D01 General RF Exposure Guidance v06: Mobile and Portable Device, RF Exposure, Equipment Authorization Procedures.

FCC CFR 47 part1 1.1310: Radiofrequency radiation exposure limits.

FCC CFR 47 part2 2.1091: Radiofrequency radiation exposure evaluation: mobile devices.

2.1 LIMITS

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

2.2 EUT RF EXPOSURE EVALUATION

| Worst Mode: 2402MHz | | | | | | |
|---------------------|-----------------------|-------------------------|-----------------------|-------|------------------|-------|
| Channel (MHz) | Conducted Power (dBm) | Tune up Tolerance (dBm) | Maximum tune-up Power | | Calculated value | Limit |
| | | | (dBm) | (mW) | | |
| BLE-2402MHz | 6.88 | 7±1 | 8.0 | 6.310 | 0.196 | 3.0 |

Calculated value 0.196 < 3.0, So there is no require SAR test.