

Prediction of MPE at a given distance

Product Name: Red Light Therapy Lamp Remote Control
Model No: STR-LT-002
FCC ID: 2BGFSSTR-LT-002

NOTE:according to KDB 447498 D01 General RF Exposure Guidance v06, Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied.

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

The EUT is a portable device

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ 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 product is used at a distance of 5 mm from the human body.

Here,

1.1 EUT RF EXPOSURE EVALUATION

Operational Mode: SRD						
Channel (MHz)	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dB)	Maximum tune-up Power (dBm)	Maximum tune-up Power (mW)	Calculated value	Exclusion threshold
433.925	-18.49	± 1	-17.49	0.018	0.006	3
Conclusion: the calculated value ≤ 3.0 , SAR is exempted.						

Calculated value $0.10 < 3.0$, So there is no require SAR test

dbm=dbuv/m-95.2, so the 433.925MHz power is $76.71-95.2 = -18.49\text{dBm}$