

1.0 Maximum Permissible Exposure Evaluation (Supplements the test report.)

The results of power measurement and intended use/proximity are compared against the requirements for safety of RF exposure.

1.2 Criteria

Section Reference	Date
2.1091, FCC OET Bulletin 65, KDB 447498 Section 4.3.1	2014-05-07

1.3 Procedure

Using measurement of peak power and intended application, determine the permissible exposure level or whether additional exposure tests (SAR) are indicated. Justify conclusion for selected exposure area and separation distance.

1.4 Exemption Calculation

This device is affixed to typically a lamp or other such device for controlled color illumination in typically commercial applications. The operating band is 2400-2483.5 MHz. Power is determined from the measured field strength at 3 meters applied to determine EIRP. Source duty cycle factor for exposure is assumed as zero and not evaluated as the total peak power is below 2 mW.

POWER CALCULATION

Measured Field Strength dBμV/m*	At Distance	Source Duty Cycle Factor dB	Calculated Average Field Strength dBμV/m	Calculated EIRP mW
97.7	3 m	0	97.7	1.8

*This is the peak measurement.

The required separation for the frequency and power is determined from KDB 447498 Section 4.3.1.2 and referencing KDC 447498 Appendix A as excerpted below:

SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm

MHz	5	10	15	20	25	mm
900	16	32	47	63	79	SAR Test Exclusion Threshold (mW)
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	

Under the 5 mm distance column and selecting the worse-case row for 2450 MHz, without the exercise of interpolation, the EUT power is at or below 18% of the 10 mW limit.

The EUT therefore meets the criteria for exemption from SAR testing.
