

# RF Exposure Evaluation

Product : **AquaHue Bluetooth Smart LED Aquarium Light**

Model Number : AH-1015; AH-1020; AH-1030; AH-1040

Applicant : **Yalumi Corporation**

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# 1 RF Exposure Evaluation

## Portable Device

According to §15.247(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission’s guidelines.

According to KDB 447498\_D01\_V06 4.3.1(a) SAR exclusion thresholds by:  
 [max. power of channel, including tune-up tolerance, mW]/(min, test separation distances, mm)]\* $[\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR.

## Maximum measured transmitter power

### BLE mode

Frequency Range (MHz)	Maximum measured transmitter power (dBm)	Tune-up power tolerance (dB)	Total Maximum power (dBm)	Total Maximum power (mW)
2402	-16.10	(±)2	-14.10	0.00004
2440	-16.71	(±)2	-14.71	0.00003
2480	-17.28	(±)2	-15.28	0.00002

$$(0.00004/5)*(\sqrt{2.402}) = 0.00001 \leq 7.5$$

### Conclusion:

No SAR is required.

## SIMULTANEOUS TRANSMISSION EVALUATION

N/A