

Certification Exhibit

FCC ID: 2ADCB-RMODIT

FCC Rule Part: 47 CFR Part 2.1091

Project Number: 72131950

Manufacturer: Acuity Brands Lighting, Inc. Model: RMODIT

RF Exposure

Model: RMODIT **FCC ID: 2ADCB-RMODIT**

General Information:
Applicant:
Device Category: Acuity Brands Lighting, Inc.

Mobile

Environment: General Population/Uncontrolled Exposure

The 904 - 926MHz transmitter is collocated and transmits simultaneously with the 2.4GHz transmitter

radio.

Technical Information:

Table 1: Technical Information

	Device 1 Details	Device 2 Details	
Frequency Band(s) (MHz)	904-926	2402-2480	
Antenna Type(s)	Pulse W3911B0300 Dual Band Antenna	Molex 0479480001 Chip Antenna	
Antenna Gain (dBi)	1.3	3	
Conducted Power (dBm)	19.06	9.48	
Conducted Power (mW)	80.54	8.87	

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MPE Calculation:

The Power Density (mW/cm²) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm2)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Table 2: MPE Calculation (Including Collocated Devices)

Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)	Radio
904	19.06	0.60	80.54	1.3	1.349	20	0.022	Α
2480	9.48	1.00	8.87	3	1.995	20	0.004	В

<u>Summation of MPE ratios – Simultaneous Transmissions</u>

This device contains multiple transmitters which can operate simultaneously; therefore the maximum RF exposure is determined by the summation of MPE ratios. The limit is such that the summation of MPE ratios is ≤ 1.0 .

Table 3: Summation of MPE Ratios

	Scenario 1		
Radio A	Х		
Radio B	Х		
Radio A MPE Ratio	0.035863525		
Radio B MPE Ratio	0.00352152		
MPE Ratio Summation:	0.039385045		

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