



Certification Exhibit

FCC ID: 2ADCB-RMODIT

FCC Rule Part: 47 CFR Part 2.1091

TÜV SÜD Project Number: 72151775

**Manufacturer: Acuity Brands Lighting, Inc.
Model: RMODIT**

RF Exposure

General Information:

Applicant: Acuity Brands Lighting, Inc.
Device Category: Mobile
Environment: General Population/Uncontrolled Exposure

The 900MHz ISM radio is collocated and transmits simultaneously with the 2.4GHz BTLE radio.

Technical Information:**Table 1: Technical Information**

	<i>Device 1 Details</i>	<i>Device 2 Details</i>
Frequency Band(s) (MHz)	904-926	2402-2480
Antenna Type(s)	Inverted F PCB Trace Antenna	Molex 0479480001 Chip Antenna
Antenna Gain (dBi)	2.1	3
Conducted Power (dBm)	19.06	9.48
Conducted Power (mW)	80.54	8.87

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/Cm ²)	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	2.1	1.622	20	0.026	A
2402	9.48	1.00	8.87	3	1.995	20	0.004	B

Summation of MPE ratios – Simultaneous Transmissions

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 (900 MHz ISM)	x
Radio B (2.4GHz BTLE)	x
Radio A MPE Ratio	0.043117441
Radio B MPE Ratio	0.00352152
MPE Ratio Summation:	0.04663896