Certification Exhibit

FCC ID: 2ADCB-RMODIT3

FCC Rule Part: 47 CFR Part 2.1091

TÜV SÜD Project Number: 72161058

Manufacturer: Acuity Lighting Brands Inc.
Model: RMODIT3

RF Exposure

General Information:

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

The 915MHz radio is collocated and transmits simultaneously with the BLE radio.

Technical Information:

Table 1: Technical Information

Detail	915MHz Radio	BLE Radio
Frequency Range	904 – 926MHz	2402 – 2480MHz
Number of Channels	12	40
Modulation Format	OQPSK DSSS	GFSK
Data Rates	100kbps	1Mbps
Operating Voltage	3.3Vdc	3.3Vdc
Antenna Type / Gain	Intermediate-fed Inverted L / -0.9dBi (Host trace antenna design) Inverted F PCB Trace / 2.1dBi (Host trace antenna design) Chip / 1dBi (Combination Chip / Trace antenna) Intermediate-fed Inverted L / -0.6dBi (Host trace antenna design) Monopole / 0dBi (On-board U.FL) Dual band Monopole / 1.5dBi (Host circuit design to U.FL) Dipole / 0.8dBi (On-board U.FL)	Intermediate-fed Inverted L / 2.4dBi (Host antenna trace design) Dual band Monopole / 3dBi (Host trace design to U.FL) Surface Mount / 3dBi (On-board module)

Note: Only the highest gain antenna of each radio was used for the RF Exposure calculations.

MPE Calculation:

The Power Density (mW/cm^2) 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	19.38	0.60	86.70	2.1	1.622	20	0.028	A
2402	9.98	1.00	9.95	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 (915MHz)	x
Radio B (BLE)	x
Radio A MPE Ratio	0.046414425
Radio B MPE Ratio	0.00395121
MPE Ratio Summation:	0.050365635