

# **Certification Exhibit**

# FCC ID: 2ADCB-DELC

# FCC Rule Part: 47 CFR Part 2.1091

# Project Number: 72184157

Manufacturer: Acuity Brands Model Name (s) / Number (s): DTL DELC/ D4i, LC

# **RF Exposure**

#### **General Information:**

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

#### Technical Information (BLE) – "Device 1" – D4i Variant:

Frequency Range (MHz): 2402 - 2480 Antenna Type: Inverted-F Antenna (IFA) Antenna Gains: 4.8 dBi \*Maximum Transmitter Conducted Power: 10dBm, 10mW Maximum System EIRP: 14.8dBm, 30.2mW Exposure Conditions: 20 centimeters

Note: \* - Power listed above is the maximum power including tune-up tolerances.

#### Technical Information (BLE) – "Device 2" – LC Variant:

Frequency Range (MHz): 2402 - 2480 Antenna Type: Inverted-F Antenna (IFA) Antenna Gains: 4.8 dBi \*Maximum Transmitter Conducted Power: 10dBm, 10mW Maximum System EIRP: 14.8dBm, 30.2mW Exposure Conditions: 20 centimeters

Note: \* - Power listed above is the maximum power including tune-up tolerances.

Technical Parameters	Device 1	Device 2
Frequency (GHz)	2.402	2.402
Frequency (MHz)	2402	2402
Separation Distance (cm)	20.00	20.00
Separation Distance (m)	0.2000	0.2000
Antenna Gain (dBi)	4.80	4.80
ERP Easily Determined	YES	YES
Conducted Power (dBm)	10	10
Conducted Power (mW)	10.0	10.0
Duty Factor (Source-Based) %	100.0	100.0
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	10.0	10.0
Maximum (Source-Based) Time-Averaged ERP (mW)	18.41	18.41
Maximum (Source-Based) Time-Averaged EIRP (mW)	30.20	30.20
Maximum Output (mW)	18.41	18.41

### Table 1: Device Characteristics (BLE)

## Test Exemption Criteria

Test exemption is determined by 47 CFR 1.1307(b)(3)(i)(C) where at the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency according to the following table.

For the exemption in Table 1 of 47 CFR 1.1307(b)(3)(i)(C) (table 2 below) to apply, R must be at least  $\lambda/2\pi$ , where  $\lambda$  is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of  $\lambda/4$  or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

### Table 2: 47 CFR 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R <sup>2</sup> .
1.34-30	3,450 R <sup>2</sup> /f <sup>2</sup> .
30-300	3.83 R <sup>2</sup> .
300-1,500	0.0128 R <sup>2</sup> f.
1,500-100,000	19.2R <sup>2</sup> .

## Test Exemption Determination

#### Table 3: 47 CFR 1.1307(b)(3)(i)(c) MPE-Based Exemption ERP (W) – (BLE)

Technical Parameters	Device 1	Device 2
λ / 2π (m)	0.020	0.020
R≥ λ / 2π	YES	YES
Maximum (Source-Based) Time-Averaged ERP (W)	0.0184	0.0184
ERP Threshold (W)	0.7680	0.7680
Exemption	YES	YES