

# Light Emitting Tiles

# 4 × 8 × 2 3/8

## Specifications

### ► Dimensions and Weight

Size ..... 4x8x2 3/8 inches (99x196x60mm)  
 Weight ..... 2.2lbs (1,000g)

### ► Physical Properties

Modulus of Rupture ..... 8.23 N/mm<sup>2</sup> (=85 kgf/cm<sup>2</sup>) (ASTM C 67)  
 Compressive Strength ..... 0.79 N/mm<sup>2</sup> (=8.1 kgf/cm<sup>2</sup>) (ASTM C 67)  
 Breaking Load ..... 13,181 N (=1,345 kgf) (ASTM C 67)  
 Operating Temperature ..... -13°F ~ 140°F (-25°C ~ 60°C)  
 Operating Time ..... 8 hours minimum  
 Onset Point ..... 120 Lux  
 Charging Time ..... 1(sunny) to 8 (cloudy and rainy) hours

### ► Lighting Properties

Model NO.	Color	Luminance(Nit) <sup>1</sup>		Illuminance(Lux) <sup>2</sup>		Uniformity <sup>3</sup>	
		average	min	average	min	average	min
ST-0408GL	Green	10.6	10.0	33.3	31.4	75%	80%
ST-0408BL	Blue	2.6	2.4	8.2	7.5	75%	80%
ST-0408WL	White	7.2	6.8	22.6	21.4	75%	80%
ST-0408RL	Red	5.5	4.9	17.3	15.4	75%	80%
ST-0408OL	Orange	4.7	4.2	14.8	13.2	75%	80%
ST-0408AL	Amber	2.9	2.5	9.1	7.9	75%	80%

<sup>1</sup>Luminance (cd/m) measurement: The luminances of 9 points on the lighting area are measured and averaged.

<sup>2</sup>Illuminance (lm/m) is obtained by multiplying 3.14 to luminance.

<sup>3</sup>Uniformity is obtained by dividing minimum luminance by maximum luminance from 9 point measurements.

### ► Basic Components

- Single Crystalline Solar Cell
- EnergyCache
- LED
- Electronic Controller
- Poly Carbonate Housing

### ► Installation

Simple set-up; similar to standard paving bricks in both mortarless and mortared installation.

Expansion lugs on each side surface protect the tiles from abrasion and pressure caused by temperature shifts or other environmental factors.

### ► Referenced Standards

**ASTM C902 :** Standard Specification for Pedestrian and Light Traffic Paving Brick  
**ESNA DG - 5 - 1994 :** Recommended Lighting for Walkways and Class 1 Bikeways

Walkway Class	Avg. Maintained Illuminance Levels in Lux (Horizontal Levels)
Commercial	10
Intermediate	5
Residential	2

### ► Illumination Example

Place	Lux	Place	Lux
direct sunlight	100,000	cloudy day	30,000 - 70,000
very cloudy day	10,000 - 30,000	rainy day	7,000 - 10,000
full moon	0.2	good illumination for reading	200 - 500

