

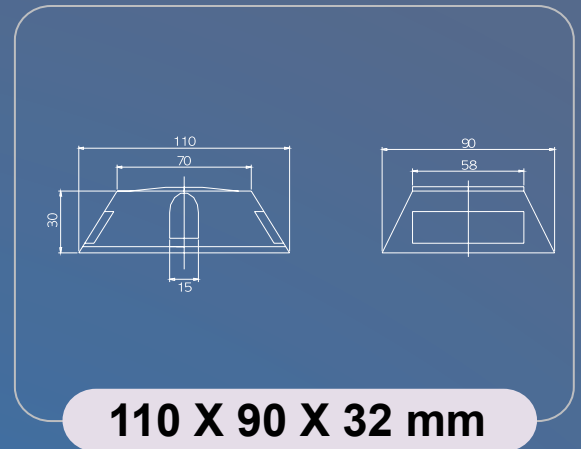
Specifications on YH-YS

* Dimensions and Weight

- Size 110 x 90 x 32 mm
- Weight 380g

* Physical Properties

- Modulus of Rupture 58 kgf/cm²
- Compressive Strength 5.8 kgf/cm²
- Breaking Load 878 kgf
- Water Proof IP67
- Operating Temperature -40°C to +70°C
- Operating Time more than 12 hours
- Onset Point 150 - 350 LUX
- Charging Time 3 (sunny) to 8 (cloudy and rainy)



* Lighting Properties

Model	Type	Color	Luminance (Lux)		
			average	min	max
YH-YS1	Steady	Red	20.7	13.5	27.8
		Green	73.3	50.4	96.1
		Blue	54.8	51.3	58.3
		Amber	36.1	10.8	61.4
		White	52.9	48.3	57.5
	Flashing	Red	41.7	36.2	47.2
		Green	28.2	24.8	31.6
		Blue	22.1	20.8	23.3
		Amber	49.2	45.6	52.7
		White	26.8	25.1	28.5
YH-YS2	Steady	Red	7.8	6.7	8.8
		Green	29.3	25.6	33.0
		Blue	42.5	32.6	52.3
		Amber	7.6	4.3	10.9
		White	46.4	28.9	63.9
	Flashing	Red	32.4	22.9	41.9
		Green	40.8	33.6	47.9
		Blue	32.2	31.4	32.9
		Amber	46.2	40.3	52.0
		White	34.1	32.2	35.9

* Basic Components

Single Crystalline Solar Cell	Solar Module Size	0.298W 100mA 2.98V
	Solar Maximum Output Power	
	Solar Charging Current at 20,000 Lux & 100,000 Lux	
	Solar Operating Current	
LED	Solar Voltage	ø 10 (3.2V/20mA) 20mA per each 1.1mA per each 3.0V 0.019W 3 pcs / 6 pcs
	LED Size	
	LED Current	
	LED Operating Current	
	LED Voltage	
	LED Wattage	
Pseudocapacitor	LED Quantities	2.3V 120F 1 pcs
	Pseudocapacitor	
Poly Carbonate Housing	Number of Pseudocapacitor	
Electronic Controller		

※ Luminance (cd/m²) measurement: The luminance of 9 points on the lighting area are measured and averaged.

Colors



RED



GREEN



BLUE



AMBER



WHITE

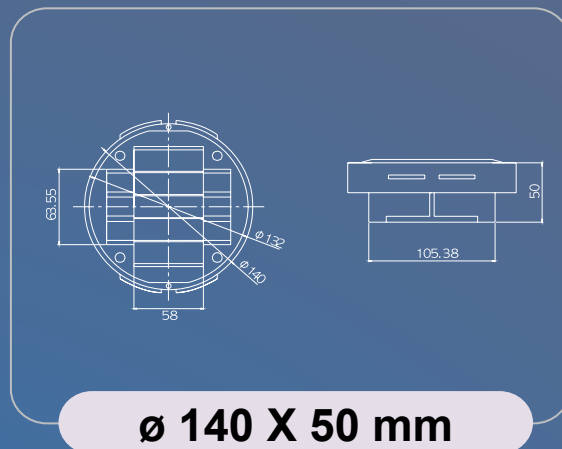
Specifications on YH-DD1

* Dimensions and Weight

- Size ø 140 x 50mm
- Weight 1000g

* Physical Properties

- Modulus of Rupture 278 kgf/cm²
- Compressive Strength 31.3 kgf/cm²
- Breaking Load 3,981 kgf
- Water Proof IP67
- Operating Temperature -40°C to +70°C
- Operating Time more than 12 hours
- Onset Point 150 - 350 LUX
- Charging Time 3 (sunny) to 8 (cloudy and rainy)



ø 140 X 50 mm

* Lighting Properties

Model	Type	Color	Luminance (Lux)			Type	Color	Luminance (Lux)		
			average	min	max			average	min	max
YH-DD1	Steady	Red	19.0	14.5	23.4	Flashing	Red	23.8	18.8	28.7
		Green	19.0	13.4	24.5		Green	31.0	23.0	39.0
		Blue	27.6	22.7	32.5		Blue	28.9	23.2	34.5
		Orange	10.9	7.6	14.2		Orange	13.2	9.8	16.5
		White	37.4	22.7	52.1		White	38.9	23.7	54.0

Luminance (cd/m²) measurement: The luminance of 9 points on the lighting area are measured and averaged.

* Basic Components

Single Crystalline Solar Cell	Solar Module Size Solar Maximum Output Power Solar Charging Current at 20,000 Lux & 100,000 Lux Solar Operating Current Solar Voltage	0.447W 150mA 2.98V
LED	LED Size LED Current LED Operating Current LED Voltage LED Wattage LED Quantities	ø 10 (3.2V/20mA) 20mA per each 1.1mA per each 3.0V 0.019W 3 pcs / 6 pcs
Pseudocapacitor	Pseudocapacitor Number of Pseudocapacitor	2.3V 120F 2 pcs
Poly Carbonate Housing		
Electronic Controller		

Colors



RED



GREEN



BLUE



ORANGE



WHITE

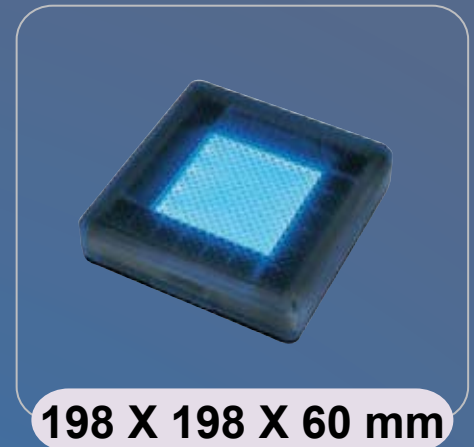
Specifications on ST-0808

* Dimensions and Weight

- Size 198 x 198 x 60 mm
- Weight 2.8 kg

* Physical Properties

- Modulus of Rupture 222 kgf/cm²
- Compressive Strength 28 kgf/cm²
- Breaking Load 3560 kgf
- Water Proof IP68
- Operating Temperature -40°C to +70°C
- Operating Time more than 12 hours
- Onset Point 150 - 350 LUX
- Charging Time 3 (sunny) to 8 (cloudy and rainy)



* Lighting Properties

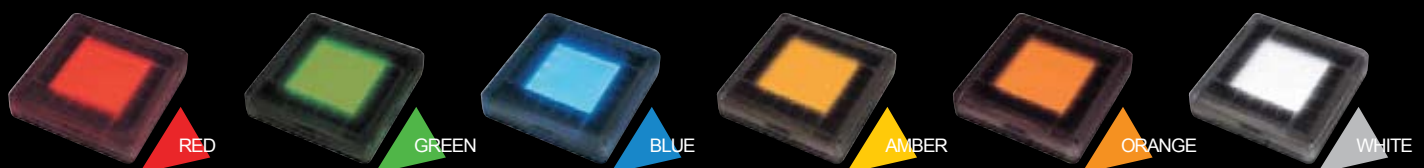
Model NO	Color	Luminance (Nit) ¹⁾			Illuminance (Lux) ²⁾			Uniformity ³⁾	
		average	min	max	average	min	max		
ST-0808	Red	5.85	5.7	6.0	18.35	17.9	18.8	80%	75%
ST-0808	Green	14.65	14.3	15.0	45.9	44.7	47.1	75%	70%
ST-0808	Blue	4.0	3.9	4.1	12.55	12.2	12.9	80%	75%
ST-0808	Amber	5.35	5.2	5.5	16.8	16.3	17.3	80%	75%
ST-0808	Orange	2.9	2.8	3.0	9.1	8.8	9.4	80%	75%
ST-0808	White	11.2	10.9	11.5	35.15	34.2	36.1	80%	75%

- 1) Luminance (cd/m) measurement: The luminance of 9 points on the lighting area are measured and averaged.
- 2) Illuminance (lm/m) is obtained by multiplying 3.14 to luminance.
- 3) Uniformity is obtained by dividing minimum luminance by maximum luminance from 9 point measurements.

* Basic Components

Single Crystalline Solar Cell	Solar Module Size Solar Maximum Output Power Solar Charging Current at 20,000 Lux & 100,000 Lux Solar Operating Current Solar Voltage	1.788W 600mA 2.98V
LED	LED Size LED Current LED Operating Current LED Voltage LED Wattage LED Quantities	ø 5 (3.2V/20mA) 20mA per each 1.8mA per each R, A, O (2.5V) B, W, G (4.0V) R, A, O (0.018W) B, W, G (0.028W) 4 pcs
Pseudocapacitor	Pseudocapacitor Number of Pseudocapacitor	2.3V 120F R, G, B, A, O (4 pcs) W (5 pcs)
Poly Carbonate Housing		
Electronic Controller		

Colors



Specifications on ST-0408

* Dimensions and Weight

- Size 99 x 198 x 60 mm
- Weight 1.0 kg

* Physical Properties

- Modulus of Rupture 95 kgf/cm²
- Compressive Strength 9.1 kgf/cm²
- Breaking Load 1518 kgf
- Water Proof IP68
- Operating Temperature -40°C to +70°C
- Operating Time more than 12 hours
- Onset Point 150 - 350 LUX
- Charging Time 3 (sunny) to 8 (cloudy and rainy)



* Lighting Properties

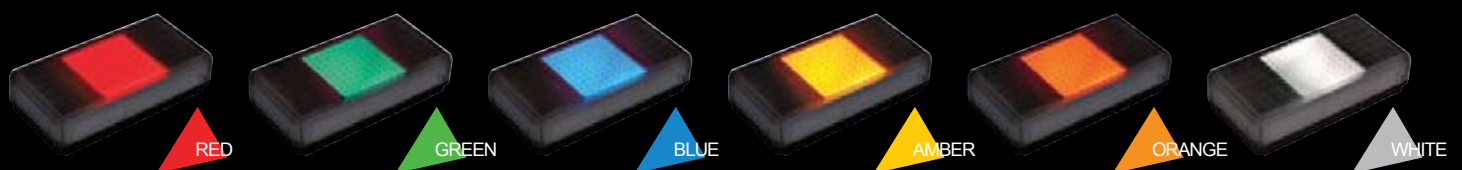
Model NO	Color	Luminance (Nit) ¹⁾			Illuminance (Lux) ²⁾			Uniformity ³⁾	
		average	min	max	average	min	max		
ST-0408	Red	5.2	4.9	5.5	16.35	15.4	17.3	75%	80%
ST-0408	Green	10.3	10.0	10.6	32.35	31.4	33.3	75%	80%
ST-0408	Blue	2.5	2.4	2.6	7.85	7.5	8.2	75%	80%
ST-0408	Amber	4.45	4.2	4.7	14.0	13.2	14.8	75%	80%
ST-0408	Orange	2.7	2.5	2.9	8.5	7.9	9.1	75%	80%
ST-0408	White	5.55	5.1	6.0	17.4	15.9	18.9	75%	80%

- 1) Luminance (cd/m) measurement: The luminance of 9 points on the lighting area are measured and averaged.
- 2) Illuminance (lm/m) is obtained by multiplying 3.14 to luminance.
- 3) Uniformity is obtained by dividing minimum luminance by maximum luminance from 9 point measurements.

* Basic Components

Single Crystalline Solar Cell	Solar Module Size Solar Maximum Output Power Solar Charging Current at 20,000 Lux & 100,000 Lux Solar Operating Current Solar Voltage	0.894W 300mA 2.98V
LED	LED Size LED Current LED Operating Current LED Voltage LED Wattage LED Quantities	ø 5 (3.2V/20mA) 20mA per each 1.6mA per each R, A, O (2.5V) B, W, G (4.0V) R, A, O (0.012W) B, W, G (0.192W) 3 pcs
Pseudocapacitor	Pseudocapacitor Number of Pseudocapacitor	2.3V 120F R, G, B, A, O (2 pcs) W (3 pcs)
Poly Carbonate Housing		
Electronic Controller		

Colors



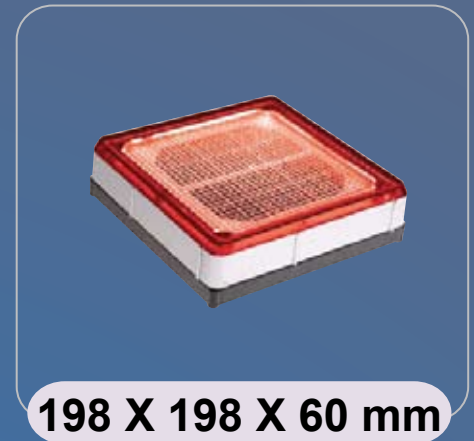
Specifications on NST-0808

* Dimensions and Weight

- Size 198 x 198 x 60 mm
- Weight 2.8 kg

* Physical Properties

- Modulus of Rupture 222 kgf/cm²
- Compressive Strength 28 kgf/cm²
- Breaking Load 2555 kgf
- Water Proof IP68
- Operating Temperature -40°C to +70°C
- Operating Time more than 12 hours
- Onset Point 150 - 350 LUX
- Charging Time 3 (sunny) to 8 (cloudy and rainy)



* Lighting Properties

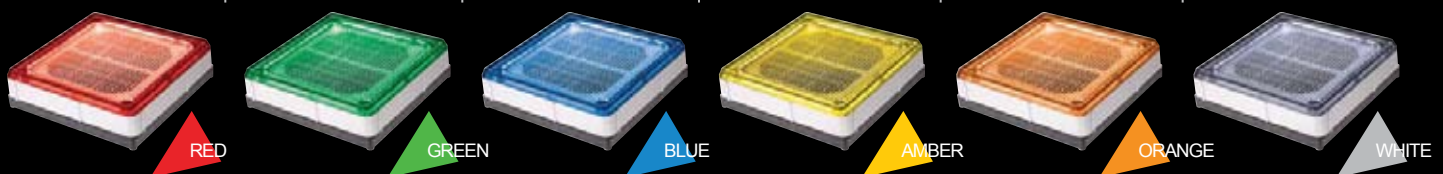
Model NO	Color	Luminance (Nit) ¹⁾			Illuminance (Lux) ²⁾			Uniformity ³⁾
		average	min	max	average	min	max	
NST-0808	Red	5.2	4.7	5.7	16.33	14.8	17.9	82%
NST-0808	Green	8.3	7.8	8.8	26.06	24.5	27.6	89%
NST-0808	Blue	15.05	13.3	16.8	47.26	41.8	52.8	79%
NST-0808	Amber	2.85	2.6	3.1	8.95	8.2	9.7	84%
NST-0808	Orange	2.85	2.6	3.1	8.95	8.2	9.7	84%
NST-0808	White	14.9	13.2	16.6	46.79	41.4	52.1	80%

- 1) Luminance (cd/m) measurement: The luminance of 9 points on the lighting area are measured and averaged.
- 2) Illuminance (lm/m) is obtained by multiplying 3.14 to luminance.
- 3) Uniformity is obtained by dividing minimum luminance by maximum luminance from 9 point measurements.

* Basic Components

Single Crystalline Solar Cell	Solar Module Size Solar Maximum Output Power Solar Charging Current at 20,000 Lux & 100,000 Lux Solar Operating Current Solar Voltage	2.34W 7.85mA 2.98V
LED	LED Size LED Current LED Operating Current LED Voltage LED Wattage LED Quantities	3.5x2.8mm chip type (3.2V/20mA) 20mA per each 2.0mA per each R, A, O (2.5V) B, W, G (4.0V) R, A, O (0.02W) B, W, G (0.032W) 4 pcs
Pseudocapacitor	Pseudocapacitor Number of Pseudocapacitor	2.3V 120F R, G, B, A, O (5 pcs) W (6 pcs)
Poly Carbonate Housing		
Electronic Controller		

Colors



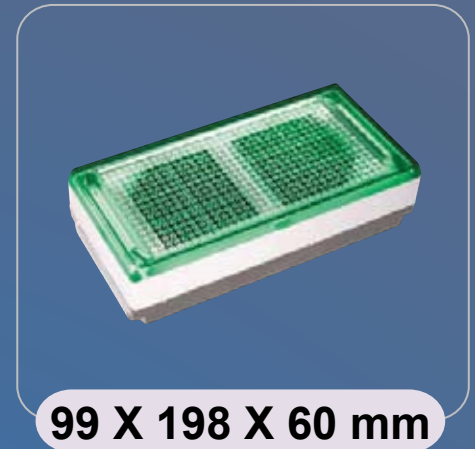
Specifications on NST-0408

* Dimensions and Weight

- Size 99 x 198 x 60 mm
- Weight 1.0 kg

* Physical Properties

- Modulus of Rupture 95 kgf/cm²
- Compressive Strength 9.1 kgf/cm²
- Breaking Load 1518 kgf
- Water Proof IP68
- Operating Temperature -40°C to +70°C
- Operating Time more than 12 hours
- Onset Point 150 - 350 LUX
- Charging Time 3 (sunny) to 8 (cloudy and rainy)



* Lighting Properties

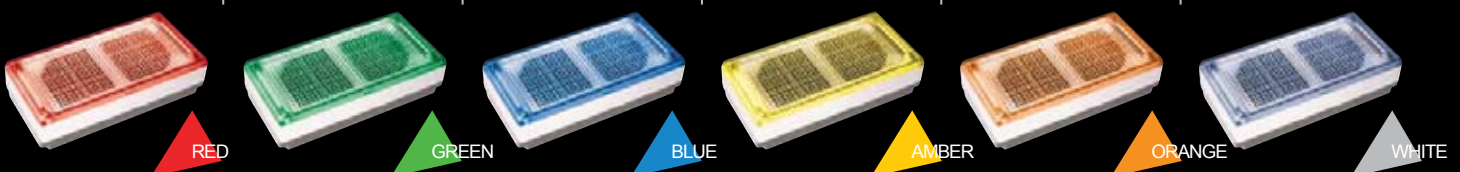
Model NO	Color	Luminance (Nit) ¹⁾			Illuminance (Lux) ²⁾			Uniformity ³⁾
		average	min	max	average	min	max	
NST-0408	Red	4.65	3.8	5.5	14.60	11.9	17.3	69%
NST-0408	Green	11.45	9.1	13.8	35.95	28.6	43.3	66%
NST-0408	Blue	14.1	11.6	16.6	44.27	36.4	52.1	70%
NST-0408	Amber	4.2	3.1	5.3	13.19	9.7	16.6	58%
NST-0408	Orange	2.8	2.2	3.4	8.79	6.9	10.7	65%
NST-0408	White	14.8	12.2	17.4	46.47	38.3	54.6	70%

- 1) Luminance (cd/m) measurement: The luminance of 9 points on the lighting area are measured and averaged.
- 2) Illuminance (lm/m) is obtained by multiplying 3.14 to luminance.
- 3) Uniformity is obtained by dividing minimum luminance by maximum luminance from 9 point measurements.

* Basic Components

Single Crystalline Solar Cell	Solar Module Size Solar Maximum Output Power Solar Charging Current at 20,000 Lux & 100,000 Lux Solar Operating Current Solar Voltage	1.17W 393mA 2.98V
LED	LED Size LED Current LED Operating Current LED Voltage LED Wattage LED Quantities	3.5x2.8mm chip type 20mA per each 1.8mA per each R, A, O (2.5V) B, W, G (4.0V) R, A, O (0.018W) B, W, G (0.028W) 4 pcs
Pseudocapacitor	Pseudocapacitor Number of Pseudocapacitor	2.3V 120F R, A, O (3 pcs) B, W, G (4 pcs)
Poly Carbonate Housing		
Electronic Controller		

Colors



Specifications on NST-0404

* Dimensions and Weight

- Size 99 x 99 x 60 mm
- Weight 650 g

* Physical Properties

- Modulus of Rupture —
- Compressive Strength 69,872 N
- Breaking Load —
- Water Proof IP68
- Operating Temperature -40°C to +70°C
- Operating Time more than 20 hours
- Onset Point 150 - 350 LUX
- Charging Time 5 (sunny) to 15 (cloudy and rainy)



* Lighting Properties

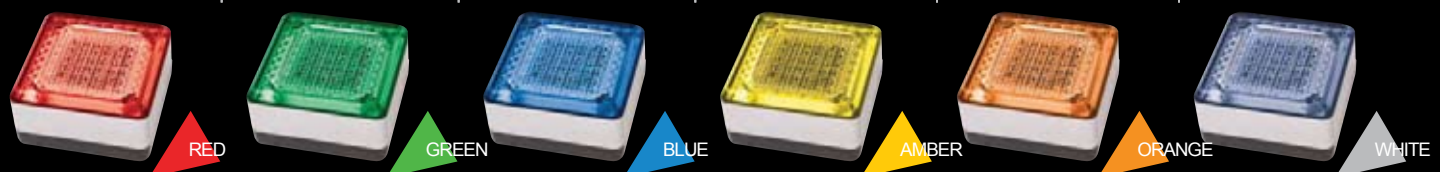
Model NO	Color	Luminance (Nit) ¹⁾			Illuminance (Lux) ²⁾			Uniformity ³⁾
		average	min	max	average	min	max	
NST-0404	Red	4.2	3.8	4.6	13.19	11.9	14.4	83%
NST-0404	Green	5.1	4.6	5.6	16.01	14.4	17.6	82%
NST-0404	Blue	8.9	8.1	9.7	27.95	25.4	30.5	84%
NST-0404	Amber	3.1	2.8	3.4	9.73	8.8	10.7	82%
NST-0404	Orange	2.2	2.0	2.4	6.91	6.3	7.5	83%
NST-0404	White	9.1	8.4	9.8	28.57	26.4	30.8	86%

- 1) Luminance (cd/m) measurement: The luminance of 9 points on the lighting area are measured and averaged.
- 2) Illuminance (lm/m) is obtained by multiplying 3.14 to luminance.
- 3) Uniformity is obtained by dividing minimum luminance by maximum luminance from 9 point measurements.

* Basic Components

Single Crystalline Solar Cell	Solar Module Size Solar Maximum Output Power Solar Charging Current at 20,000 Lux & 100,000 Lux Solar Operating Current	0.268W 90mA 2.98V
LED	LED Size LED Current LED Operating Current LED Voltage LED Wattage LED Quantities	3.5x2.8mm chip type 20mA per each R, A, O (1.8mA per each) B, W, G (1.1mA per each) R, A, O (2.5V) B, W, G (4.0V) 0.004W 4 pcs
Pseudocapacitor	Pseudocapacitor Number of Pseudocapacitor	2.3V 120F 2 pcs
Poly Carbonate Housing		
Electronic Controller		

Colors



Specifications on NST-100

* Dimensions and Weight

- Size ø 100 x 60
- Weight 650 g

* Physical Properties

- Modulus of Rupture —
- Compressive Strength 62,135 N
- Breaking Load —
- Water Proof IP68
- Operating Temperature -40°C to +70°C
- Operating Time more than 20 hours
- Onset Point 150 - 350 LUX
- Charging Time 5 (sunny) to 15 (cloudy and rainy)



* Lighting Properties

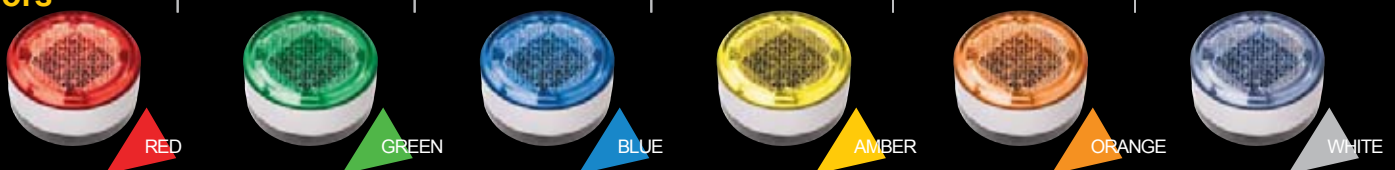
Model NO	Color	Luminance (Nit) ¹⁾			Illuminance (Lux) ²⁾			Uniformity ³⁾
		average	min	max	average	min	max	
NST-100	Red	4.4	3.2	5.6	13.82	10.0	17.6	57%
NST-100	Green	6.0	4.7	7.3	18.84	14.8	22.9	64%
NST-100	Blue	11.25	8.8	13.7	35.33	27.6	43.0	64%
NST-100	Amber	3.85	3.0	4.7	12.09	9.4	14.8	64%
NST-100	Orange	3.1	2.3	3.9	9.73	7.2	12.2	59%
NST-100	White	7.55	6.3	8.8	23.71	19.8	27.6	72%

- 1) Luminance (cd/m) measurement: The luminance of 9 points on the lighting area are measured and averaged.
- 2) Illuminance (lm/m) is obtained by multiplying 3.14 to luminance.
- 3) Uniformity is obtained by dividing minimum luminance by maximum luminance from 9 point measurements.

* Basic Components

Single Crystalline Solar Cell	Solar Module Size Solar Maximum Output Power Solar Charging Current at 20,000 Lux & 100,000 Lux Solar Operating Current Solar Voltage	0.268W 90mA 2.98V
LED	LED Size LED Current LED Operating Current LED Voltage LED Wattage LED Quantities	3.5x2.8mm chip type 20mA per each R, A, O (1.8mA per each) B, W, G (1.1mA per each) R, A, O (2.5V) B, W, G (4.0V) 0.004W 4 pcs
Pseudocapacitor	Pseudocapacitor Number of Pseudocapacitor	2.3V 120F 2 pcs
Poly Carbonate Housing		
Electronic Controller		

Colors



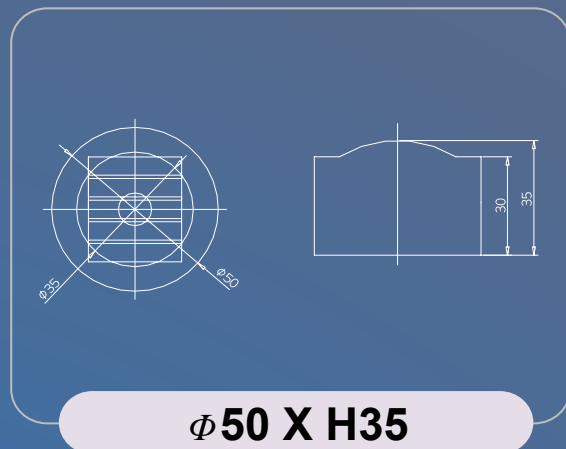
Specifications on Ground Flasher

* Dimensions and Weight

- Size ϕ 50 x 35
- Weight 70g

* Physical Properties

- Modulus of Rupture —
- Compressive Strength 24,517 N
- Breaking Load —
- Water Proof IP68
- Operating Temperature -40°C to +70°C
- Operating Time more than 12 hours
- Onset Point 150 - 350 LUX
- Charging Time 3 (sunny) to 8 (cloudy and rainy)



* Lighting Properties

Model	Type	Color	Luminance (Lux)		
			average	min	max
GF	Normal	Red	19.75	17	22.5
		Green	36.65	34.8	38.5
		Blue	20.45	18.6	22.3
		Orange	19.9	18.6	21.2
		White	16.7	15.9	17.5
	Special	Red	88.85	38.7	139
		Green	34.85	28.7	41
		Blue	82.45	44.9	120
		Orange	88.45	38.9	138
		White	63.8	23.6	104
	Steady	Red	48.6	39.2	58
		Green	48.05	38.6	57.5
		Blue	83.15	39.3	127
		Orange	82.9	35.8	130
		White	51.6	41.2	62

※ Luminance (cd/m²) measurement: The luminance of 9 points on the lighting area are measured and averaged.

* Basic Components

Single Crystalline Solar Cell	Solar Module Size	0.0894W
	Solar Maximum Output Power	
LED	Solar Charging Current at 20,000 Lux & 100,000 Lux	30mA
	Solar Operating Current	2.98V
	Solar Voltage	
	LED Size	ϕ 3 (3.2V/20mA)
	LED Current	20mA per each
Pseudocapacitor	LED Operating Current	0.26mA
	LED Voltage	3.0V
	LED Wattage	0.0024W
	LED Quantities	1 pcs
Poly Carbonate Housing	Pseudocapacitor	2.3V 10F
	Number of Pseudocapacitor	3 pcs
Electronic Controller		

Colors



RED



GREEN



BLUE



ORANGE



WHITE