Product Information Sheet

COMMISSION DELEGATED REGULATION (EU) 2019/2015 with regard to energy labelling of light sources

Supplier's name or trade mark: Source			
Supplier's address: SGD, Unit 7/8 Ashbourne Business Centre Ballybin Road Ashbourne Co. Meath Ireland A84YP58			
Model identifier: SHBMW			
Type of light source:			
Lighting technology used:	LED	Non-directional or directional:	NDLS
Light source cap-type (or other electric interface)	NDLS		
Mains or non-mains:	MLS	Connected light source (CLS):	No
Colour-tuneable light source:	No	Envelope:	-
High luminance light source:	No		
Anti-glare shield:	No	Dimmable:	Yes
Product parameters			
Parameter	Value	Parameter	Value
General product parameters:			
Energy consumption in on-mode (kWh/1000 h), rounded up to the nearest integer	200	Energy efficiency class	D
Useful luminous flux (ϕuse), indicating if it refers to the flux in a sphere (360º), in a wide cone (120º) or in a narrow cone (90º)	31 572 in Wide cone (120°)	Correlated colour temperature, rounded to the nearest 100 K, or the range of correlated colour temperatures, rounded to the nearest 100 K, that can be set	4 000 or 5 000 or 6 000
On-mode power (P_{on}), expressed in W	200,0	Standby power (P_{sb}), expressed in W and rounded to the second decimal	0,50
Networked standby power (P_{net}) for CLS, expressed in W and rounded to the second decimal	-	Colour rendering index, rounded to the nearest integer, or the range of CRI-values that can be set	80
Outer dimensions without separate control gear, light-	Height	184	Spectral power distribution in the range 250 nm to 800 nm, at full-load	See image in last page
	Width	334		
	Depth	334		

ing control parts and non-lighting control parts, if any (millimetre)			
Claim of equivalent power[a]	-	If yes, equivalent power (W)	-
		Chromaticity coordinates (x and y)	0,313 0,337
Parameters for LED and OLED light sources:			
R9 colour rendering index value	5	Survival factor	0,50
the lumen maintenance factor	0,80		
Parameters for LED and OLED mains light sources:			
displacement factor (cos φ1)	1,00	Colour consistency in McAdam ellipses	6
Claims that an LED light source replaces a fluorescent light source without integrated ballast of a particular wattage.	-[b]	If yes then replacement claim (W)	-
Flicker metric (Pst LM)	1,0	Stroboscopic effect metric (SVM)	0,4

[a]'-' : not applicable;

[b]'-' : not applicable;

Programming and Function Applying

Remote Control

Product end of life instruction.

This Lighting product is in the scope of EU 2019/2020 directive on Waste Electrical and Electronic Equipment (WEEE). This product must be disposed according to the legislation. This document is intended for use by end of life recyclers or treatment facilities. It provides the basic information to assure an appropriate end of life treatment for the components and materials of the product. It is the responsibility of the end user to dispose of this product correctly. www.weeeireland.ie or contact your local council for further information.
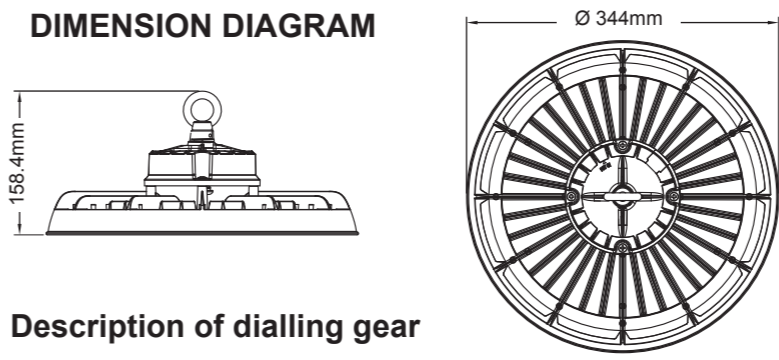
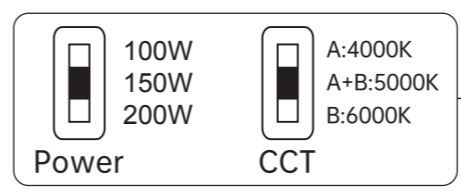### Disassembly Diagram for High Bay & Battery

- Gland
- Cover for input cable
- Cover for Battery
- Battery
- Emergency Driver
- Screw for Lens

7. Lens
6. PCB
5. Housing
8. Screws for Lens
1. Bracket
3. Screws for Driver
2. Hook
4. Driver
8. Screws for Bracket

	Buttons	LCD Screen	The Light
Programming at the 1st Sensor	Press ⏻ button to turn ON the light	The LCD screen starts to have numbers showing.	Light ON
	Press Scene button to start programming	The LCD screen starts to show all the sensor numbers at the right column	Light blinks then keeps ON for 5S then OFF if no motion or other commands
	Press Start button	The S icon at the left bottom corner blinks	Following the last step, light keeps ON or OFF
	Press the Detection Area button	The S icon and Detection Area icon blinks	Following the last step, light keeps ON or OFF
	Press the ▲ ▼ buttons to adjust the as 25%, 50%, 75% or 100%.	The S icon and Detection Area icon keep blinking, numbers changing	Light blinks at each press
	Press the Holdtime button	The S icon and Holdtime icon blinks	Light ON
	Press the ▲ ▼ buttons to adjust the as 5S, 30S, 1min, 3min, 5min, 10min, 20min or 30min	The S icon and Holdtime icon keep blinking, numbers changing	Light blinks at each press
	Press the Standby Dimming button	The S icon and Standby Dimming icon blinks	Light ON
	Press the ▲ ▼ buttons to adjust the as 10% 20% 30% or 50%.	The S icon and Standby Dimming icon keep blinking, numbers changing	Light blinks at each press
	Press the Standby Period button	The S icon and Standby Period icon blinks	Light ON
	Press the ▲ ▼ buttons to adjust the as 0S, 10S, 30S, 1min, 5min, 10min, 30min, 60min, --(infinite+∞)	The S icon and Standby Period icon keep blinking, numbers changing	Light blinks at each press
	Press the Daylight Threshold button	The S icon and Daylight Threshold icon blinks	Light ON
	Press the ▲ ▼ buttons to adjust the as --(Disable), 2lux, 10lux, 30lux, 50lux, 80lux, 120lux, 200lux, 250lux, 300lux, 350lux or 400lux.	The S icon and Daylight Threshold icon keep blinking, numbers changing	Light blinks at each press
	Press the Memory button	The M icon (right next to S icon) blinks	Light ON
	Press the Apply Daylight Threshold button	All icons settle	Light performs the saved program
Applying to all the other Sensors	Press ⏻ button to turn ON the light	The LCD screen starts to have numbers showing.	Light ON
	Press Scene button to start programming	The LCD screen starts to show all the sensor numbers at the right column	Light blinks then keeps ON for 5S then OFF if no motion or other commands
	Press the Apply button	All icons settle	Light performs the saved program
Manually Dimming in ON/OFF Mode	Press ⏻ button to turn ON the light	The LCD screen starts to have numbers showing.	Light ON
	Press ▲ ▼ buttons to adjust output accordingly	Percent number on the left column changes along	Light performs output change
Manually Dimming in Sensor Mode	Press ⏻ button to turn ON the light	The LCD screen starts to have numbers showing.	Light ON
	Press POWER% button	The PW icon blinks	Light blinks
	Press ▲ ▼ buttons to adjust output accordingly	Percent number on the left column changes along	Light performs output change

For more information contact:

SGD Solas Geal Distribution

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Unit 32 Junction One Business Park, Valley Road, Birkenhead, Wirral, Merseyside, UK, CH41 7ED
SGD IRE: +353 1 835 7447, **SGD UK:** 0330 551 7000 **Website:** www.sgd.ie

160 Lm/W luminous Efficacy | IP65 | ErP COMPLIANT | UKCA | CE | RoHS COMPLIANT

Installation Manual
LED Multi Watt CCT Highbay Light
PRODUCT CODE: SHBMW / SHBMW-EM / SHBSENS

source

DIMENSION DIAGRAM

Ø 344mm
158.4mm

5 years Quality Assurance

SHBMW with Sensor attached

Description of dialling gear

100W	A:4000K
150W	A+B:5000K
200W	B:6000K
Power	**CCT**

Please read instructions carefully.
This product should only be installed by a qualified electrician
Please retain these instructions for future reference.
Important:
- This Highbay Light must be earthed
- Before installation or maintenance, ensure that the mains supply to this highbay is switched off and the circuit supply fuses are removed or circuit breaker turned off.
- Check that the total load on the circuit, including when this high bay is fitted, does not exceed the rating of the circuit cable fuse of the circuit breaker.

SPECIFICATION

Model no.	Multi Watt	Lumen Efficiency	CCT	CRI	Operating Temp	Material	IP Rating	Dimmable	IK Rating	Input Voltage
SHBMW	100w 150w 200w	160LM/W	4000k 5000k 6000k	>Ra80	-30~+50°C	Aluminium die-casting, Stainless steel screws	IP65	with sensor only	IK08	100-240V 50/60Hz

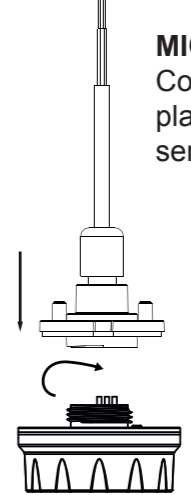### ACCESSORIES

- Remote Control (sold separately)
- Microwave sensor attachment (sold separately)
- Bracket (supplied in box)

Model no.	Description
SHBMW	LED Multi-Watt High Bay Light
SHBSENS	Microwave Sensor Accessory
RL-HB	Remote Control Accessory
SHB-BR	Bracket

18.8
26.3
3.8
54

Microwave Sensor
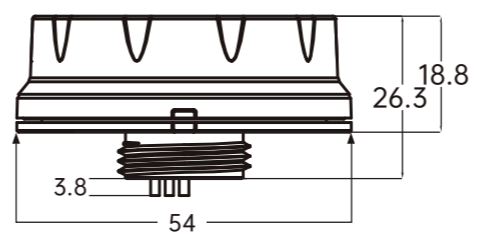
MICRO SENSOR INSTALLATION

MICRO SENSOR
Connect pins in place. Rotate the sensor head tightly

Remote Control

MICROWAVE SENSOR PERFORMANCE
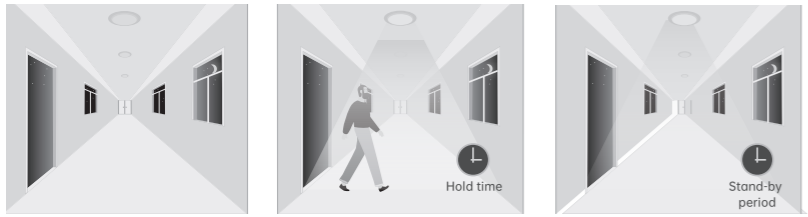
1. Daylight Sensor
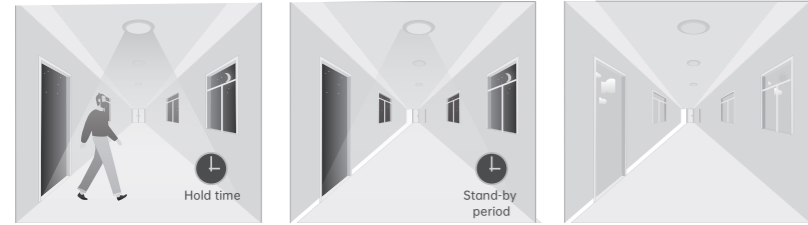
Turns ON the Light when it is dark enough

Dims the light along with daylight changing as daylight harvesting function

Turns OFF the highbay light when it is bright enough

2. Microwave Sensor
A. Without Daylight Priority

With insufficient ambient brightness, sensor turns ON light automatically even when there is no motion
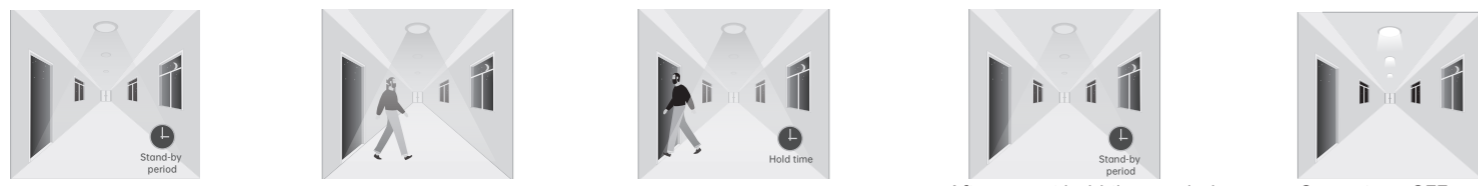
Sensor turns ON light at 100% when it detects motion, and keeps for a hold time period after motion stops

Sensor dims light to standby dimming level after hold time if there's still no motion detected
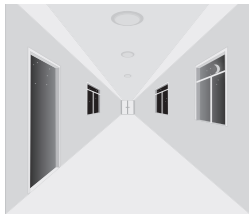
Sensor turns OFF light after standby period

B. With Daylight Priority

With insufficient ambient brightness, sensor turns ON light and keeps it at standby dimming level even there's no motion or presence

When sensor detects motion or presence, it will dim light to 100%

After motion stops, it will go to hold time period and still keep light at 100%

After preset hold time period, it will dim light to standby dimming level again and keep it there

With sufficient ambient brightness, sensor turns ON light automatically

EMERGENCY FITTING - SHBMW-EM

204.2

204.2

37

1. Suitable for indoor application, half/completely outdoor environment conditions might be captured as moving signals to trigger the sensor.
2. Suitable for ceiling mount installation, adjust sensitivity properly if it's installed on side-wall because it gets more sensitive.
3. Adjust sensitivity properly when the sensor is applied in small/narrow/metal-built/with metal spaces.
4. Microwave sensor can't be placed under/inside metal shell; Microwave module must directly face the detection area with edge lower than light fixture.
5. Keep the sensor away from vibration equipments, air-conditioning outlets, smoke extractors alike conditions to avoid unwanted trigger.
6. Keep the sensor module away from AC input and DC output to avoid high/low frequency signal interference.
7. At least 2m/6.5ft distance between microwave sensors; 1.5m/4.9ft between the sensor and other wireless devices such as routers to avoid possible radio interference.
8. Daylight testing delivered in bright day without shadow or specially designed lampshade or lens.
9. Dimming performance differs when connected to different drivers; If the driver can't completely turn OFF, sensor can't either.
10. Input power voltage must be stable with float less than 10%.
11. The first time powered ON sensor, light will be ON 100% for about 10S then dims to standby level or OFF.
12. Distance detection is delivered by testing person about 165cm in open area as reference, the result differs by size and speed of moving objects, mountng height and real-life situation.
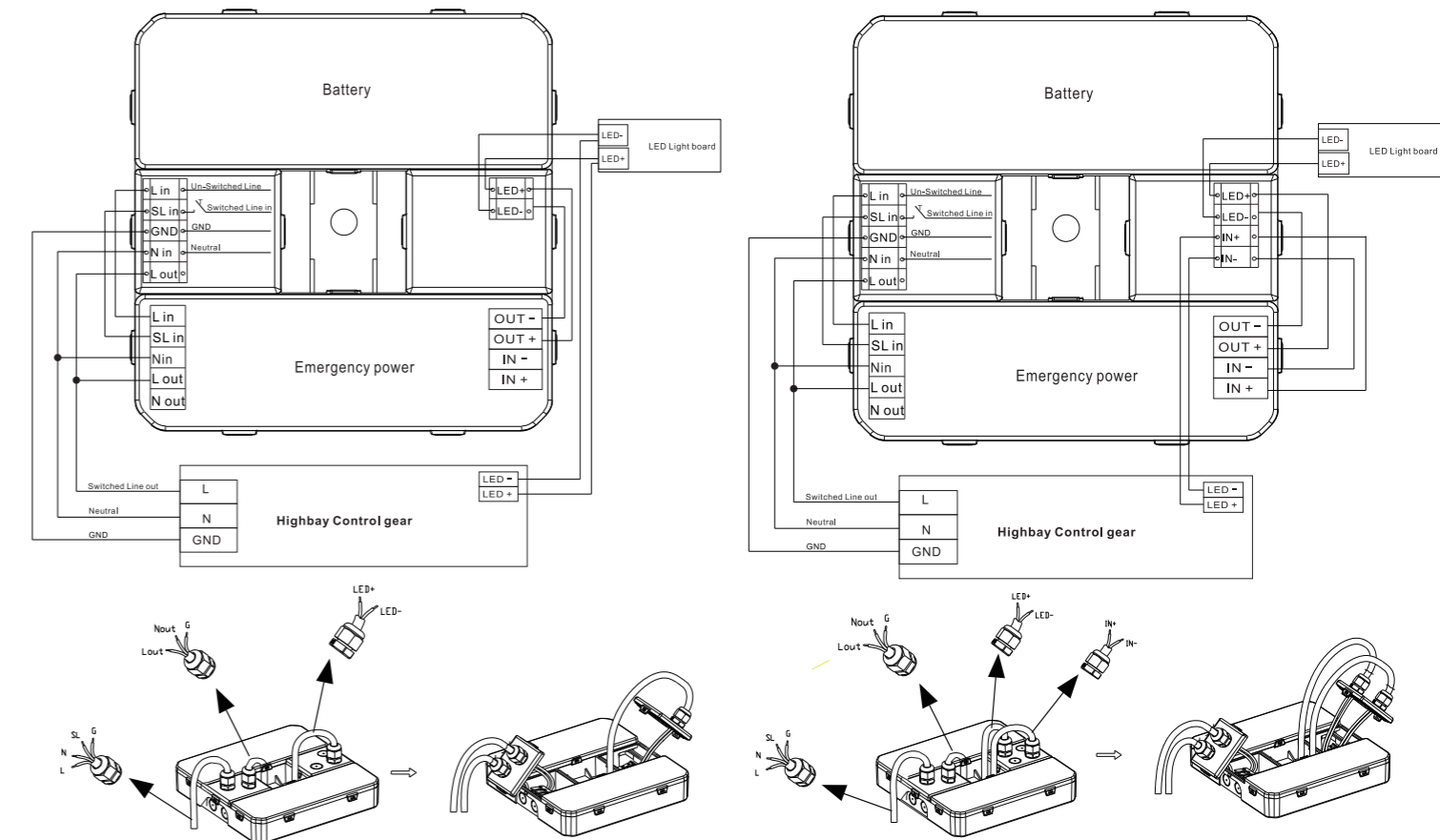
EMERGENCY BATTERY SPECIFICATION

Emergency Battery Type	Emergency Power	Emergency Duration	Charge Current	Charge Time	IP Rating	Life Time	Lumen in Emergency mode
6.4V/6000mAhLiFeP04	10W	3Hrs	230-300mA	24H	IP65	50000 Hrs	1500Lm

- High Temperature grade battery cells
- Male/female socket for simple connection
- The minimum charging environment temperature of the battery is 5C, to ensure that the battery can be charged to the rated capacity
- Battery voltage: 3.2V per cell
- Minimum Charging temperature: 5°C
- Constant power output emergency power supply
- Normal Function/Self Test
- For LED Models with forward voltage of 60-250Vdc
- The product can be installed internally or externally
- Integral LifeP04 battery pack
- Maintained/Non-Maintained operation

- Compatible with all dimmable and non dimmable constant current LED Drivers
- Automatic shutdown of output if LED load is out of range
- Constant power output, output current self-adjustable
- Electronic charge system
- Deep discharge protection
- Short circuit proof battery connection
- Open circuit proof
- Polarity reversal protection for battery
- 5 years guarantee for Hightbay fitting
- 3 years guarantee for battery

The maximum no-load voltage of the driver is 340V

Battery

LED Light board

Un-Switched Line

Switched Line in

GND

Neutral

Emergency power

Highbay Control gear

Battery

LED Light board

Un-Switched Line

Switched Line in

GND

Neutral

Emergency power

Highbay Control gear

The Maximum allowable voltage of the LED driver output terminal must be higher than 340V (When the LED load is not connected or fails, the battery will generate a peak voltage of about 1S before protecting)

The indicator light will turn off under the following conditions:
1. When the power is off, the light enters into the emergency mode.
2. Normal function: When the power is on, the battery is disconnected
After the power is connected, disconnect the power and reconnect the batteryu (note, in this case, please reset the AC power supply)
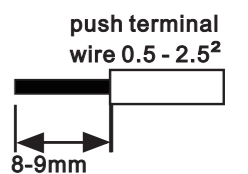
Requirements for LED Control gear:
1. LED Driver, the maximum output current shall not exceed 1A
2. When the SLin is connected, the LED is in the maintenance state
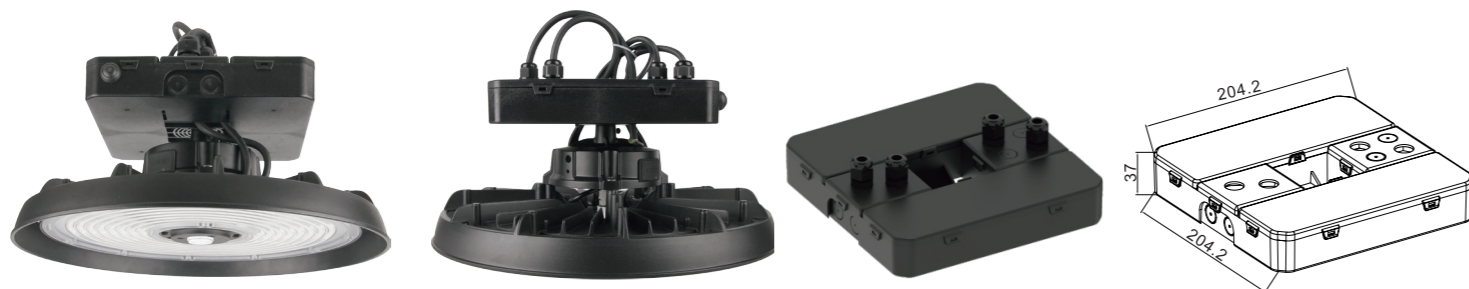3. When the SLin is disconnected, the LED is in the non-maintenance state
Requirements for the wiring:
Wire dimension range: 0.5 - 2.5 square meters
Crimping buckle can be fastened, wire diameter range, maximum 5.5mm, minimum 3mm

push terminal
wire 0.5 - 2.5²
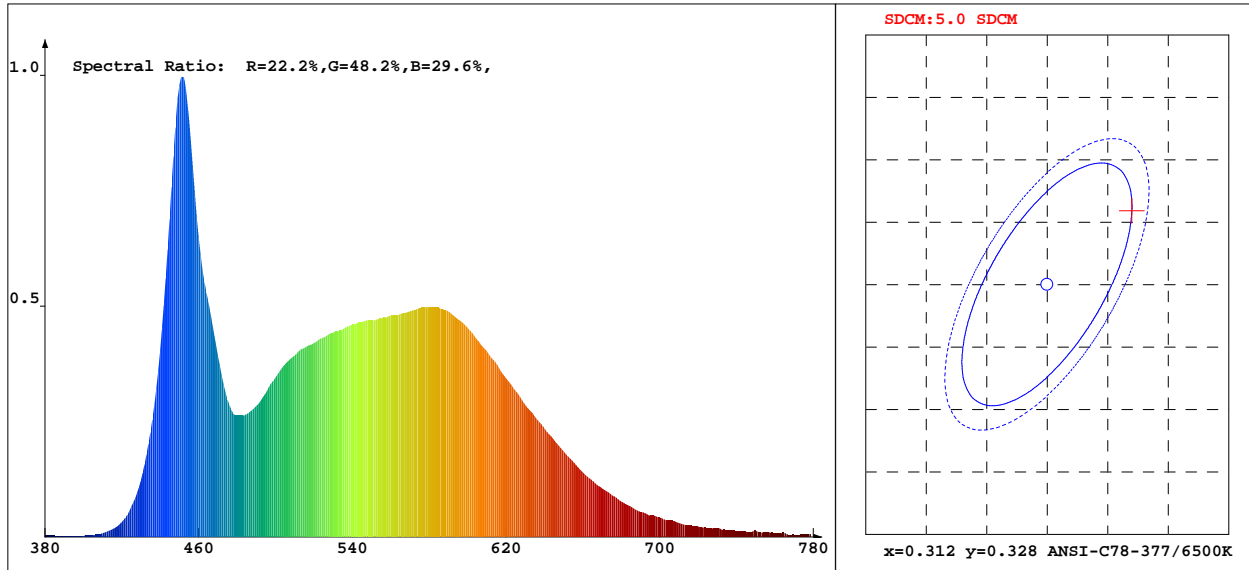
8-9mm

LED Test Report

Product Mark

Product Type :   Manufacturer :

Temperature :25'C   Humidity :65%

Operator :admin   Test Date :2023-07-21

Remark:

Spectral Ratio: R=22.2%,G=48.2%,B=29.6%,

SDCM:5.0 SDCM

x=0.312 y=0.328 ANSI-C78-377/6500K

Chroma Parameters

Chro.Coor.:x=0.3193   y=0.3341   u=0.2005   v=0.3147   duv=0.0025

CCT: 6130K   Dominant Wave.:492.4nm   Purity:4.7%

Flux RGB Ratio:R=13.7%,G=82.3%,B=4.0%   Peak Wave:451.6nm   Half Width:23.6nm

Rendering Index:Ra= 83.0

R1 =81   R2 =89   R3 =93   R4 =82   R5 =82   R6 =84   R7 =87   R8 =66

R9 =0   R10=74   R11=81   R12=60   R13=84   R14=97   R15=76

Photo Parameters

Flux:23678.90lm   Effi.:114.3lm/W   Radiant:112984.0mW   Iv:0.0mcd

Ele. Parameters

Voltage:U=229.600V   Current:I=0.9260A

Power:P=207.20W   Power Factor:PF=0.974

Lamp Parameters

Voltage:U=0.000V   Current:I=0.0000A   Power:P=0.00W

Power Factor:PF=1.000   Efficacy:0.0lm/W

Instrument state
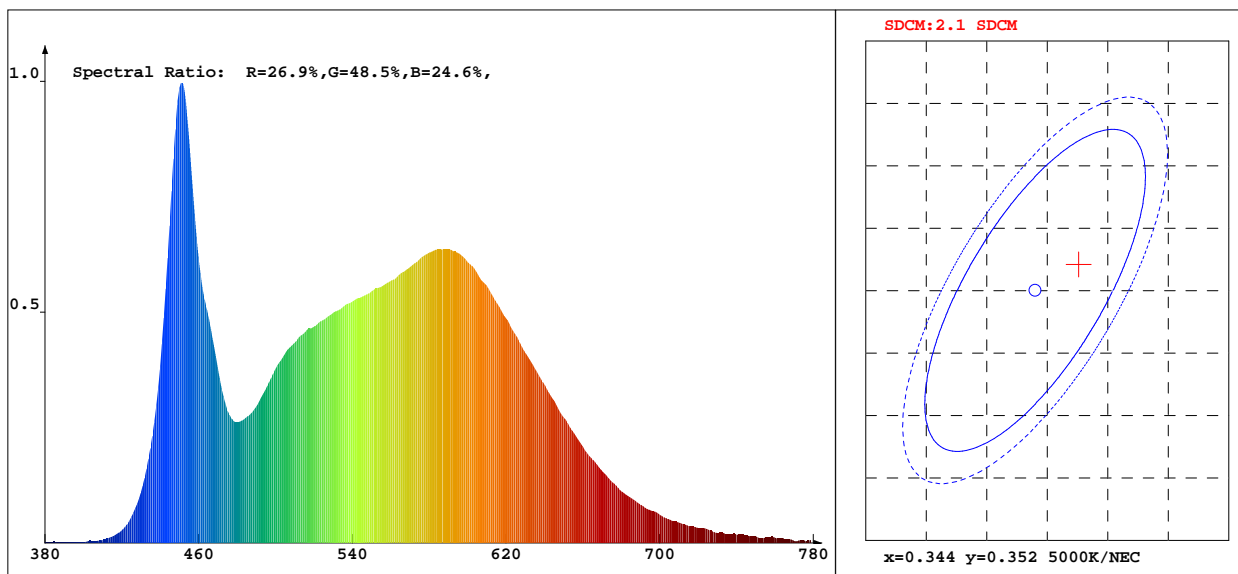
Instrument:Hopoo HP8000S   Integral Time: 2.380ms   VPeak: 15094

VDark: 1267   Product ID: 201307390

LED Test Report

Product Mark

Product Type :   Manufacturer :

Temperature :25'C   Humidity :65%

Operator :admin   Test Date :2023-07-21

Remark:

Spectral Ratio: R=26.9%,G=48.5%,B=24.6%,

SDCM:2.1 SDCM

x=0.344 y=0.352 5000K/NEC

Chroma Parameters

Chro.Coor.:x=0.3476   y=0.3541   u=0.2121   v=0.3242   duv=0.0002

CCT: 4916K   Dominant Wave.:573.5nm   Purity:10.6%

Flux RGB Ratio:R=15.9%,G=80.9%,B=3.2%   Peak Wave:451.2nm   Half Width:22.4nm

Rendering Index:Ra= 83.0

R1 =81   R2 =90   R3 =95   R4 =81   R5 =82   R6 =85   R7 =86   R8 =65

R9 =3   R10=76   R11=80   R12=59   R13=84   R14=98   R15=75

Photo Parameters

Flux:25255.70lm   Effi.:126.5lm/W   Radiant:117403.0mW   Iv:0.0mcd

Ele. Parameters

Voltage:U=229.700V   Current:I=0.8930A

Power:P=199.60W   Power Factor:PF=0.973

Lamp Parameters

Voltage:U=0.000V   Current:I=0.0000A   Power:P=0.00W

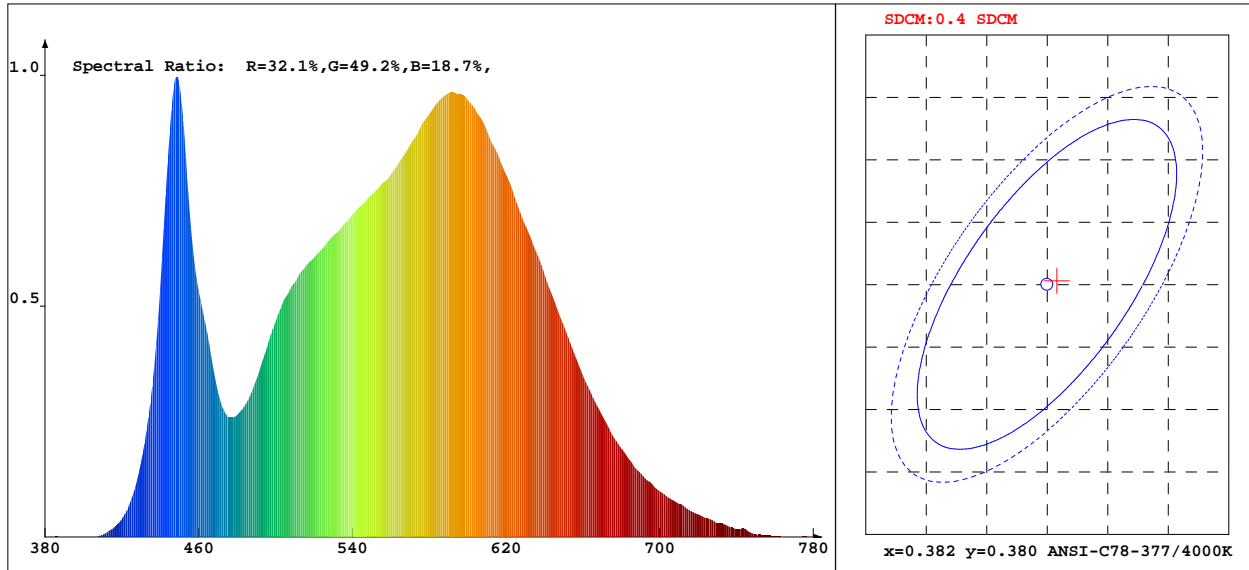Power Factor:PF=1.000   Efficacy:0.0lm/W

Instrument state

Instrument:Hopoo HP8000S   Integral Time: 2.380ms   VPeak: 13494

VDark: 1262   Product ID: 201307390

LED Test Report

Product Mark

Product Type :	Manufacturer :
Temperature :25'C	Humidity :65%
Operator :admin	Test Date :2023-07-21
Remark:	

Spectral Ratio: R=32.1%,G=49.2%,B=18.7%,

SDCM:0.4 SDCM

x=0.382 y=0.380 ANSI-C78-377/4000K

Chroma Parameters

Chro.Coor.:x=0.3826   y=0.3800   u=0.2252   v=0.3355   duv=0.0009

CCT: 3966K   Dominant Wave.:578.7nm   Purity:28.9%

Flux RGB Ratio:R=18.1%,G=79.7%,B=2.2%   Peak Wave:448.5nm   Half Width:21.9nm

Rendering Index:Ra= 81.7

R1 =79	R2 =88	R3 =95	R4 =81	R5 =81	R6 =85	R7 =84	R8 =61
R9 =0	R10=73	R11=81	R12=64	R13=81	R14=97	R15=72	

Photo Parameters

Flux:24246.50lm   Effi.:115.9lm/W   Radiant:108563.0mW   Iv:0.0mcd

Ele. Parameters

Voltage:U=229.700V   Current:I=0.9340A

Power:P=209.20W   Power Factor:PF=0.974

Lamp Parameters

Voltage:U=0.000V   Current:I=0.0000A   Power:P=0.00W

Power Factor:PF=1.000   Efficacy:0.0lm/W

Instrument state

Instrument:Hopoo HP8000S   Integral Time: 3.893ms   VPeak: 14934

VDark: 1426   Product ID: 201307390

EU DECLARATION OF CONFORMITY

Manufacturers Name: Solas Geal Distribution

Unit 7/8 Ashbourne Business Centre, Ballybin Road, Ashbourne, Co. Meath, A84 YP58.

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Product:

LED CCT Multi Watt High Bay Light

Model Numbers:

SHBMW, SHBMW-EM

The product/model of the declaration described above is in conformity with the relevant community harmonisation legislation:

Low Voltage Directive (2014/35/EU)

EMC (2014/30/EU)

RoHS (2011/65/EU) & Amendment Directive (EU) 2015/863

Directive 2009/125/EC

(EU) 2019/2015 Regulation on Energy Labelling for Light Sources
(EU) 2019/2020 Ecodesign Requirements for Light Sources & Separate Control Gears

The product/model of the declaration described above is in conformity with the standards and technical specifications listed below:

EN IEC 60598-2-1:2021, EN IEC 60598-1:2021+A11:2022,

EN IEC 60598-2-2022, EN IEC 62031:2020+A11:2021, EN 62493:2015

EN IEC 55015:2019+A11:2020, EN IEC 61547:2023,

EN IEC 61000-3-2:2019+A1:2021,

EN 61000-3-3:2013+A1:2019+A2:2021, EN 61547:2009

Signed:

Date: 15/02/24

Place of Issue: Republic of Ireland

CE