

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

Model identifier: SADCO CCT

Type of light source:

Lighting technology used:	LED	Non-directional or directional:	DLS
Light source cap-type (or other electric interface)	N/A		
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:	No

Product parameters

Parameter	Value	Parameter	Value
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General product parameters:

Energy consumption in on-mode (kWh/1000 h), rounded up to the nearest integer	16	Energy efficiency class	E
Useful luminous flux (ϕ_{use}), indicating if it refers to the flux in a sphere (360°), in a wide cone (120°) or in a narrow cone (90°)	1 800 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	3 000 or 4 000 or 5 700
On-mode power (P_{on}), expressed in W	16,0	Standby power (P_{sb}), expressed in W and rounded to the second decimal	-
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	83
Outer dimensions	Height	Spectral power distribution in the	See image in last page
	Width		

without separate control gear, lighting control parts and non-lighting control parts, if any (millimetre)	Depth	20	range 250 nm to 800 nm, at full-load	
Claim of equivalent power ^(a)		-	If yes, equivalent power (W)	-
			Chromaticity coordinates (x and y)	0,440 0,403
Parameters for directional light sources:				
Peak luminous intensity (cd)		314	Beam angle in degrees, or the range of beam angles that can be set	178
Parameters for LED and OLED light sources:				
R9 colour rendering index value		7	Survival factor	0,90
the lumen maintenance factor		0,96		
Parameters for LED and OLED mains light sources:				
displacement factor (cos ϕ_1)		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)		0,0	Stroboscopic effect metric (SVM)	0,0

(a)-: not applicable;

(b)-: not applicable;



Disassembly precautions

When disassembling the LED light source, please always follow the basic safety precautions, it is including:

1. Read all instructions.
2. Professional people maintenance.
3. Always make sure that the power is turned off and the LED lamps have cooled down before disassembling, cleaning and adjusting the LED lamps.
4. Do not disassemble LED lamps near the heat source.
5. Turn on the LED lamp, confirm the voltage and current do not exceed the rated nominal value.

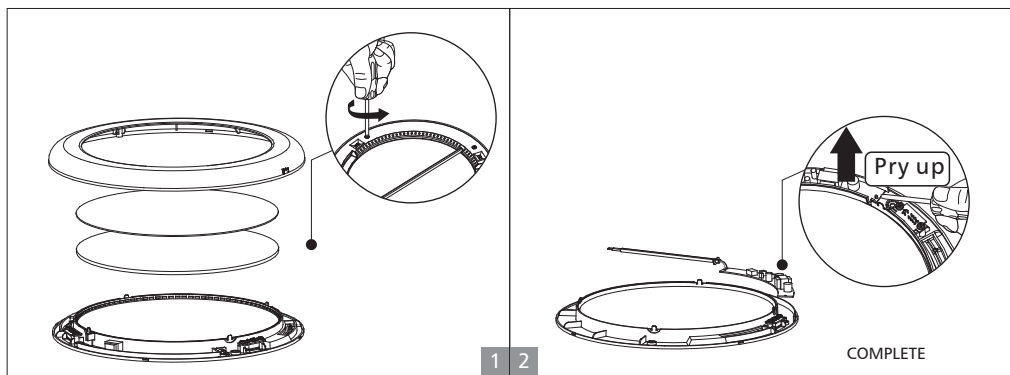
Safety instructions

WARNING!!!

1. Before disassembling, please make sure that the LED lamp is disconnected from the power supply.
2. To ensure that the LED is not damaged, please wear an effective static ring.
3. There is high temperature work during the disassembly process, please wear goggles, masks and protective gloves.



The disassembly steps are as follows



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. Please follow the pictured diagram on the back of this manual showing how to dismantle the product into different components which should be disposed correctly. These components would consist of plastic, metal and electronic materials. It is the responsibility of the end user to dispose of this product correctly. www.weeireland.ie or contact your local council for further information.

For more information contact:

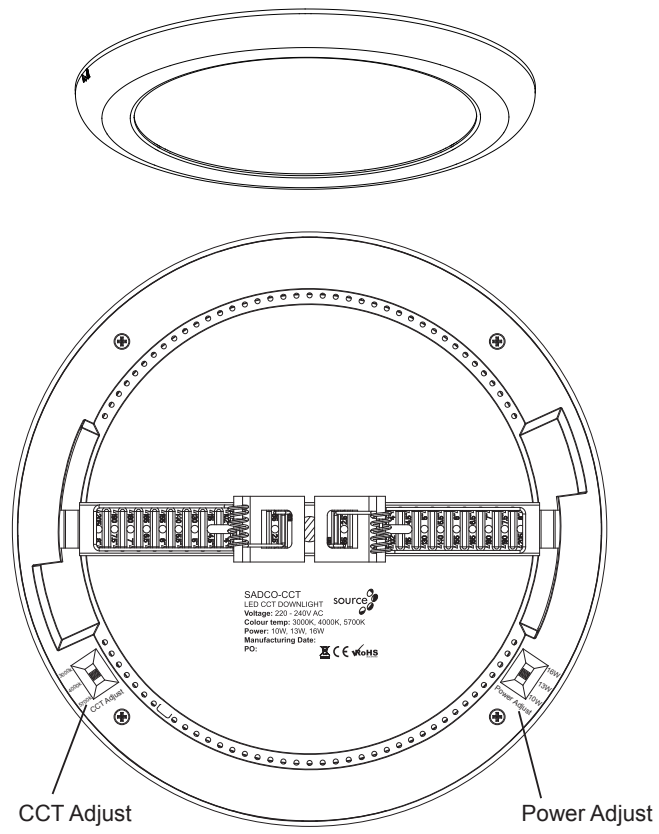
Unit 7/8 Ashbourne Business Centre, Ballybin Road, Ashbourne, Co. Meath, Ireland, A84 YP58, **Phone:** 00353 1 835 7447



Unit 32 Junction One Business Park, Valley Road, Birkenhead, Merseyside, UK, CH41 7ED, **UK Ph:** 0330 551 7000

Website: www.sgd.ie

LED CCT/WATTAGE ADJUSTABLE DOWNLIGHT



Installation Guide

PRODUCT CODE:
SADCO-CCT

Surface or Recessed Mounting



SAFETY INSTRUCTIONS

To ensure correct function and safety, please read and follow all instructions carefully before using the product:

1. Turn off power supply before installation or before doing any maintenance work.
2. Do not install any luminaire near the heat source.
3. This product has an IP rating of IP20.
4. Do not exceed the nominal supply voltage or amperage ratings.
5. Dimmable version is compatible with a wide range of recommended TRIAC dimmers.
6. All wiring and installation of the light fitting must adhere to local and national wiring rules.
7. Take care not to pull any electrical wires during unpacking as this may damage the connection.
8. Lay out all the components on a smooth surface and make sure there are no components missing before assembling.
9. To avoid injury, or damage to the fitting, please ensure that power leads and screws are secure before connecting the power.
10. Please keep instructions for future reference.

The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire must be replaced.

Installation Procedure

WARNING

1. Switch off before installation.
2. Switch on only after complete installation and examination of the circuit.
3. Installation and maintenance should only done by a qualified electrician

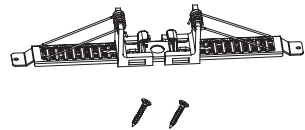


Turn Off
Power Supply

Turn off power supply before starting any installation. Read instructions & check you have all the tools & accessories to complete the installation correctly.

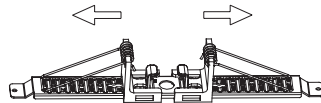
Surface Mounted Installation

Step 1



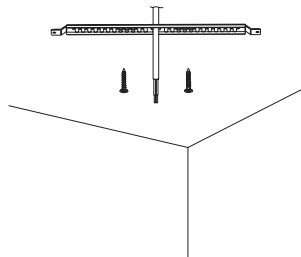
Take out the lamp and accessory pack from box.

Step 2



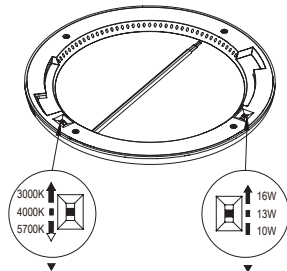
Slide the spring to the edge and remove them.

Step 3



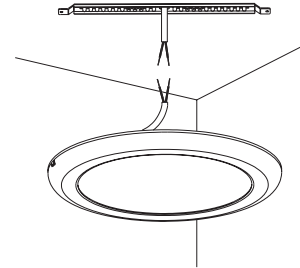
Knock-in the plastic anchor into ceiling, fix bracket with screw.

Step 4



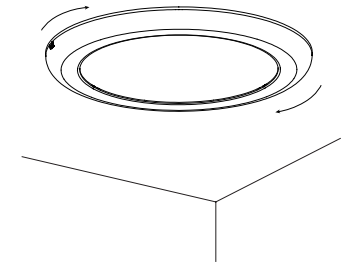
Choose preferred CCT or power by slide switch.

Step 5



Connect wires with L,N, and do insulation treatment.

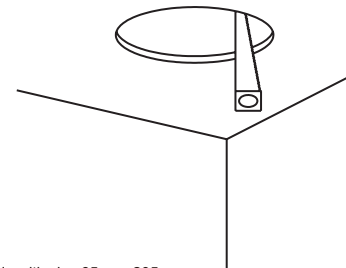
Step 6



Aim the groove at the installation bracket, rotate the lamp clockwise until it is firmly fixed, turn on.

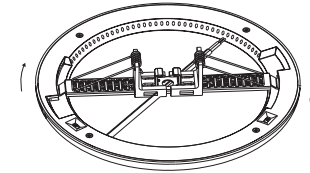
Recessed into ceiling

Step 1



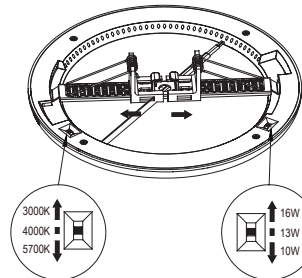
Open a hole with size 65mm~205mm

Step 2



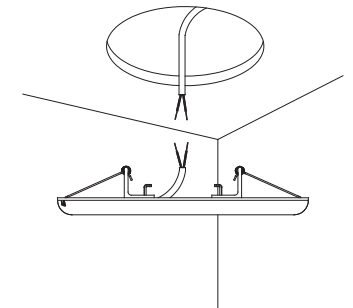
Rotate the bracket clockwise until it fix tightly with lamp groove.

Step 3



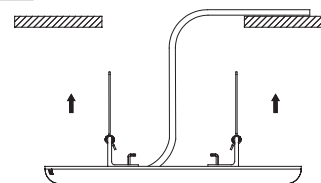
Adjust snap to a proper cutout size;
Choose preferred CCT or power by slide switch.

Step 4



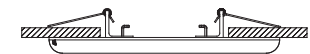
Connect wires with L,N, and do insulation treatment.

Step 5



Hold back the spring clip then push the downlight into the hole.

Step 6



Make sure the lamp fixed tightly, turn on.

Spectrum Test Report

Sample
Specification : SADCO CCT 16W @ (3000K)
Sample No. : 1
Manufacturer : SGD LIMITED

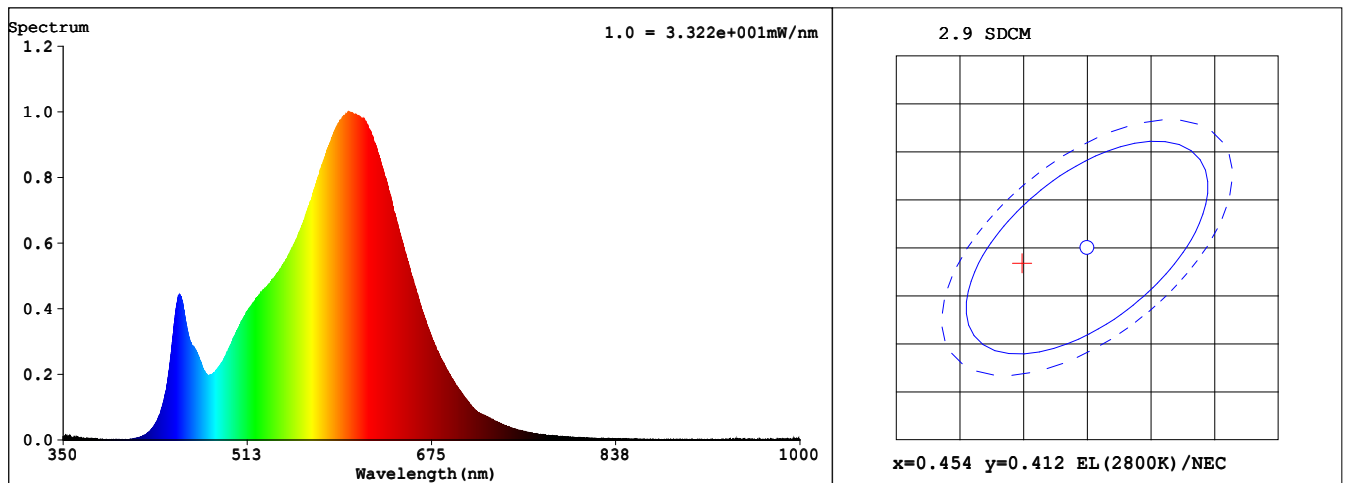
Date : 2019-06-05 08:56:08
Sam. Status :
Instrument : HAAS - 2000
Test by : SGD LIMITED

Test Condition

Temperature : 25.3Deg
WL Range : 350nm-1000nm
Test Mode : Accuracy Test

RH : 65.0%
IP : 48792 (74%)
T : 124 ms
Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4489$ $y = 0.4104$ / $u' = 0.2555$ $v' = 0.5256$ ($duv=9.76e-04$)

CCT= 2859K Prcp WL: Ld=583.1nm Purity=57.9%

Peak WL: Lp=602nm FWHM: =120.1nm Ratio:R=23.9% G=73.6% B=2.5%

Render Index: Ra = 82.6

R1 =81 R2 =92 R3 =95 R4 =80 R5 =82 R6 =91 R7 =82
R8 =58 R9 =7 R10=82 R11=80 R12=74 R13=84 R14=98 R15=73

Photometric & Radiometric Parameters

Flux = 1575.6 lm Eff. : 95.07 lm/W Fe = 4.7972 W

Electrical parameters

V = 230.3 V I = 0.07475 A P = 16.57 W PF = 0.9628 F=49.99 Hz

Spectrum Test Report

Sample
Specification : SADCO CCT 16W @ (4000K)
Sample No. : 2
Manufacturer : SGD LIMITED

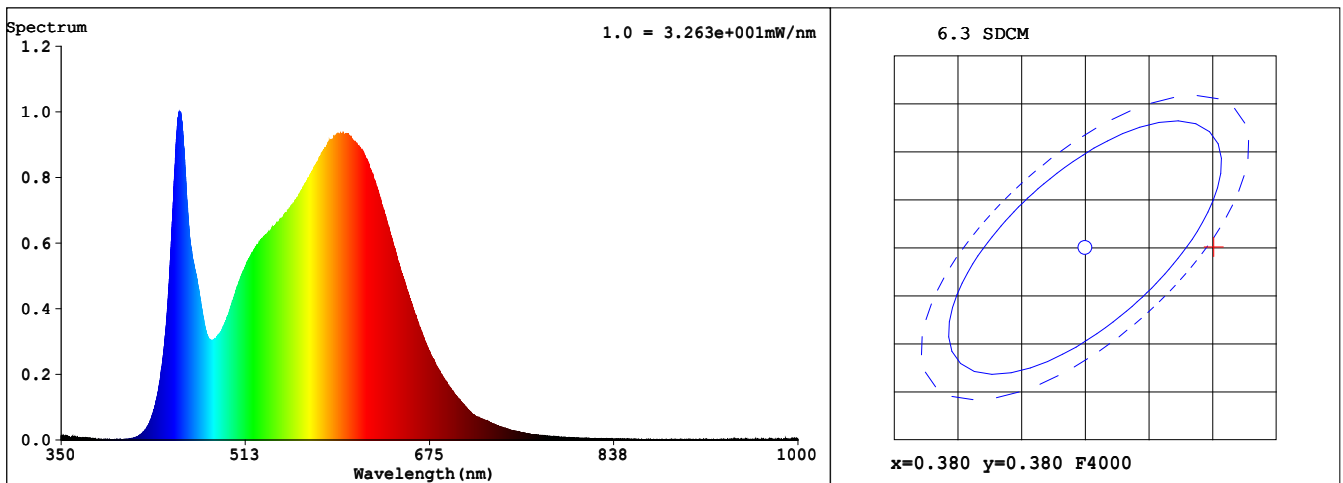
Date : 2019-06-05 08:58:48
Sam. Status
Instrument : HAAS - 2000
Test by : SGD LIMITED

Test Condition

Temperature : 25.3Deg
WL Range : 350nm-1000nm
Test Mode : Accuracy Test

RH : 65.0%
IP : 45918 (70%)
T : 124 ms
Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3901$ $y = 0.3801$ / $u' = 0.2301$ $v' = 0.5045$ ($duv = -1.12e-03$)

CCT= 3773K Prcp WL: Ld=580.5nm Purity=31.1%

Peak WL: Lp=454nm FWHM: =23.6nm Ratio:R=19.6% G=76.6% B=3.8%

Render Index: Ra = 85.6

R1 =85 R2 =93 R3 =96 R4 =83 R5 =85 R6 =90 R7 =86
R8 =67 R9 =20 R10=83 R11=82 R12=65 R13=88 R14=99 R15=79

Photometric & Radiometric Parameters

Flux = 1701.9 lm Eff. : 107.24 lm/W Fe = 5.2526 W

Electrical parameters

V = 230.3 V I = 0.07180 A P = 15.87 W PF = 0.9597 F=49.99 Hz

Spectrum Test Report

Sample
Specification : SADCO CCT 16W @ (5700K)
Sample No. : 3
Manufacturer : SGD LIMITED

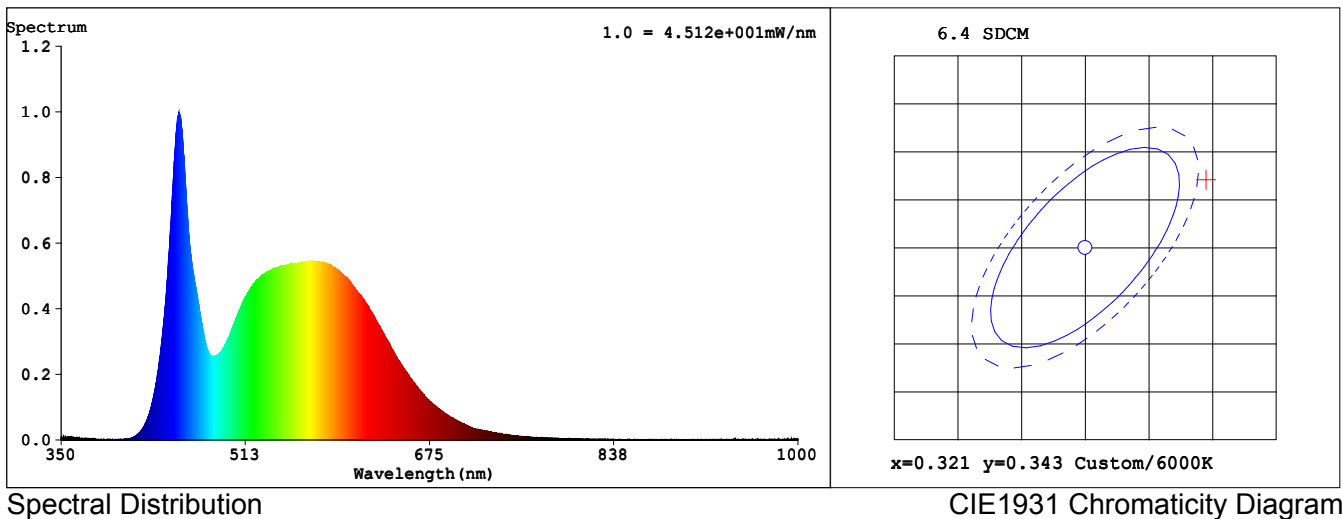
Date : 2019-06-05 09:00:14
Sam. Status
Instrument : HAAS - 2000
Test by : SGD LIMITED

Test Condition

Temperature : 25.3Deg
WL Range : 350nm-1000nm
Test Mode : Accuracy Test

RH : 65.0%
IP : 53117 (81%)
T : 124 ms
Sensitivity : High

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3305$ $y = 0.3496$ / $u' = 0.2023$ $v' = 0.4815$ ($duv=5.18e-03$)

CCT= 5585K Prcp WL: Ld=544.8nm Purity=4.1%

Peak WL: Lp=454nm FWHM: =23.3nm Ratio:R=14.4% G=80.5% B=5.1%

Render Index: Ra = 82.5

R1 =80 R2 =88 R3 =93 R4 =81 R5 =81 R6 =83 R7 =87
R8 =67 R9 =4 R10=71 R11=79 R12=57 R13=83 R14=96 R15=75

Photometric & Radiometric Parameters

Flux = 1588.0 lm Eff. : 94.41 lm/W Fe = 4.9631 W

Electrical parameters

V = 230.3 V I = 0.07582 A P = 16.82 W PF = 0.9634 F=49.99 Hz

Spectrum Test Report

Sample
Specification : SADCO CCT 13W @ (5700K)
Sample No. : 4
Manufacturer : SGD LIMITED

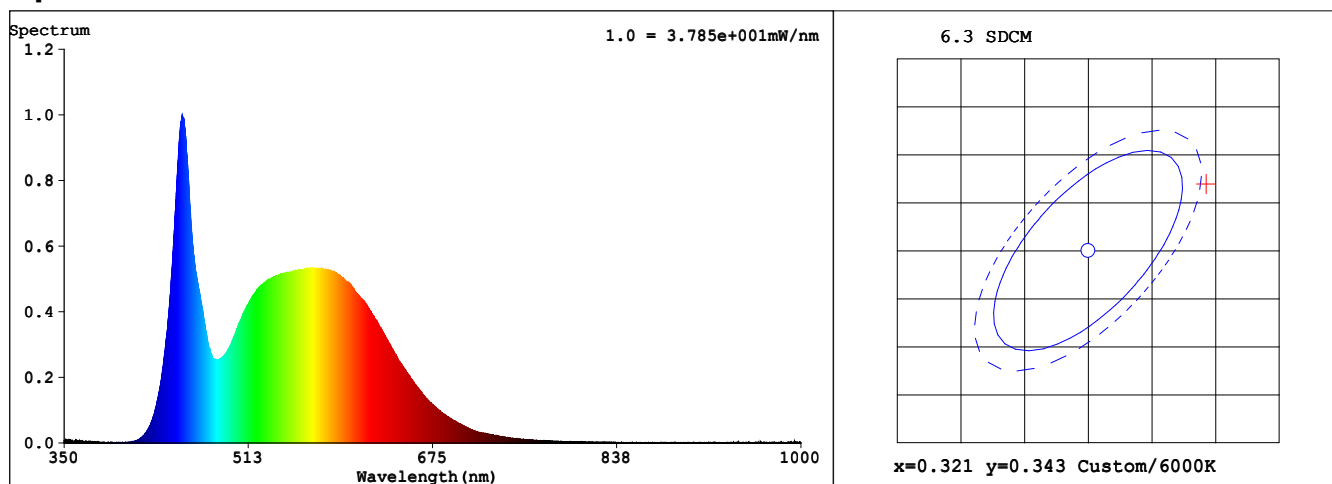
Date : 2019-06-05 09:08:25
Sam. Status :
Instrument : HAAS - 2000
Test by : SGD LIMITED

Test Condition

Temperature : 25.3Deg
WL Range : 350nm-1000nm
Test Mode : Accuracy Test

RH : 65.0%
IP : 44877 (68%)
T : 124 ms
Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3302$ $y = 0.3494$ / $u' = 0.2022$ $v' = 0.4814$ ($duv=5.21e-03$)
CCT= 5595K Prcp WL: $L_d=543.8nm$ Purity=4.0%
Peak WL: $L_p=454nm$ FWHM: =22.7nm Ratio:R=14.4% G=80.5% B=5.2%

Render Index: $R_a = 82.7$

R1 =80 R2 =89 R3 =93 R4 =80 R5 =81 R6 =84 R7 =87
R8 =67 R9 =5 R10=72 R11=79 R12=57 R13=83 R14=96 R15=75

Photometric & Radiometric Parameters

Flux = 1304.0 lm Eff. : 99.21 lm/W $F_e = 4.0783 W$

Electrical parameters

$V = 230.3 V$ $I = 0.06015 A$ $P = 13.14 W$ PF = 0.9487 F=49.99 Hz

Spectrum Test Report

Sample : SADCO CCT 13W @ (4000K)
Specification : SADCO CCT 13W @ (4000K)
Sample No. : 5
Manufacturer : SGD LIMITED

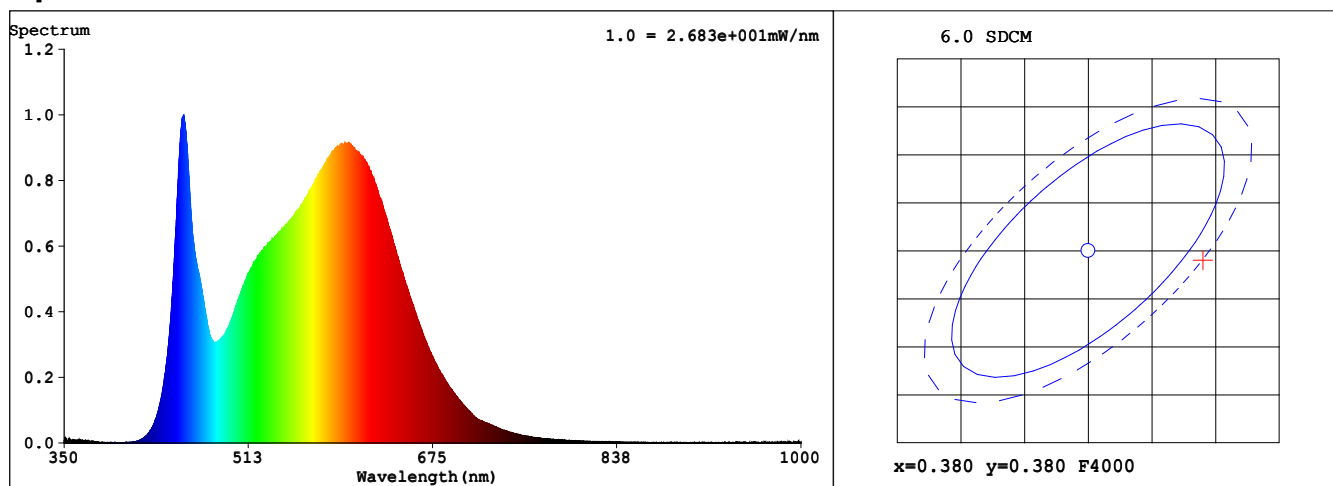
Date : 2019-06-05 09:09:25
Sam. Status :
Instrument : HAAS - 2000
Test by : SGD LIMITED

Test Condition

Temperature : 25.3Deg
WL Range : 350nm-1000nm
Test Mode : Accuracy Test

RH : 65.0%
IP : 49521 (76%)
T : 167 ms
Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3890$ $y = 0.3790$ / $u' = 0.2298$ $v' = 0.5038$ ($duv = -1.34e-03$)
CCT= 3791K Prcp WL: Ld=580.5nm Purity=30.5%
Peak WL: Lp=456nm FWHM: =23.8nm Ratio:R=19.6% G=76.5% B=3.9%

Render Index: Ra = 85.8

R1 =85 R2 =94 R3 =96 R4 =83 R5 =85 R6 =90 R7 =85
R8 =67 R9 =21 R10=84 R11=82 R12=65 R13=88 R14=99 R15=80

Photometric & Radiometric Parameters

Flux = 1367.4 lm Eff. : 109.36 lm/W Fe = 4.2317 W

Electrical parameters

V = 230.3 V I = 0.05748 A P = 12.50 W PF = 0.9446 F=49.99 Hz

Spectrum Test Report

Sample :
Specification : SADCO CCT 13W @ (3000K)
Sample No. : 6
Manufacturer : SGD LIMITED

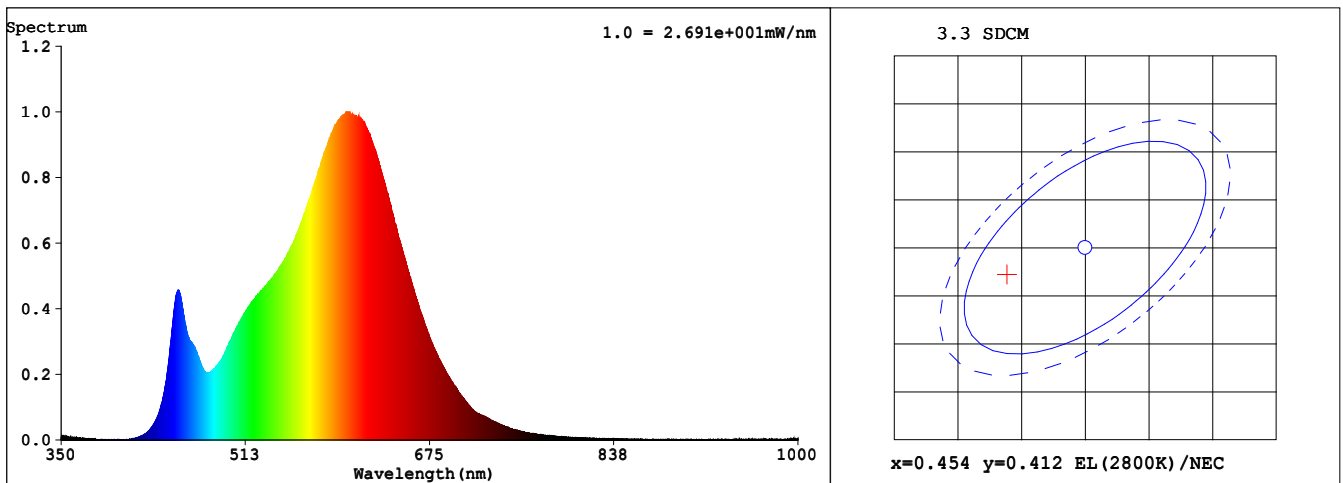
Date : 2019-06-05 09:11:30
Sam. Status :
Instrument : HAAS-2000
Test by : SGD LIMITED

Test Condition

Temperature : 25.3Deg
WL Range : 350nm-1000nm
Test Mode : Accuracy Test

RH : 65.0%
IP : 53151 (81%)
T : 167 ms
Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4479$ $y = 0.4092$ / $u' = 0.2554$ $v' = 0.5250$ ($duv=6.44e-04$)

CCT= 2865K Prcp WL: Ld=583.2nm Purity=57.3%

Peak WL: Lp=601nm FWHM: =120.3nm Ratio:R=23.9% G=73.5% B=2.6%

Render Index: Ra = 82.7

R1 =82 R2 =93 R3 =95 R4 =80 R5 =82 R6 =92 R7 =82
R8 =58 R9 =8 R10=83 R11=80 R12=74 R13=84 R14=98 R15=73

Photometric & Radiometric Parameters

Flux = 1275.4 lm Eff. : 98.45 lm/W Fe = 3.8921 W

Electrical parameters

V = 230.3 V I = 0.05937 A P = 12.95 W PF = 0.9475 F=49.99 Hz

Spectrum Test Report

Sample
Specification : SADCO CCT 10W @ (3000K)
Sample No. : 4
Manufacturer : SGD LIMITED

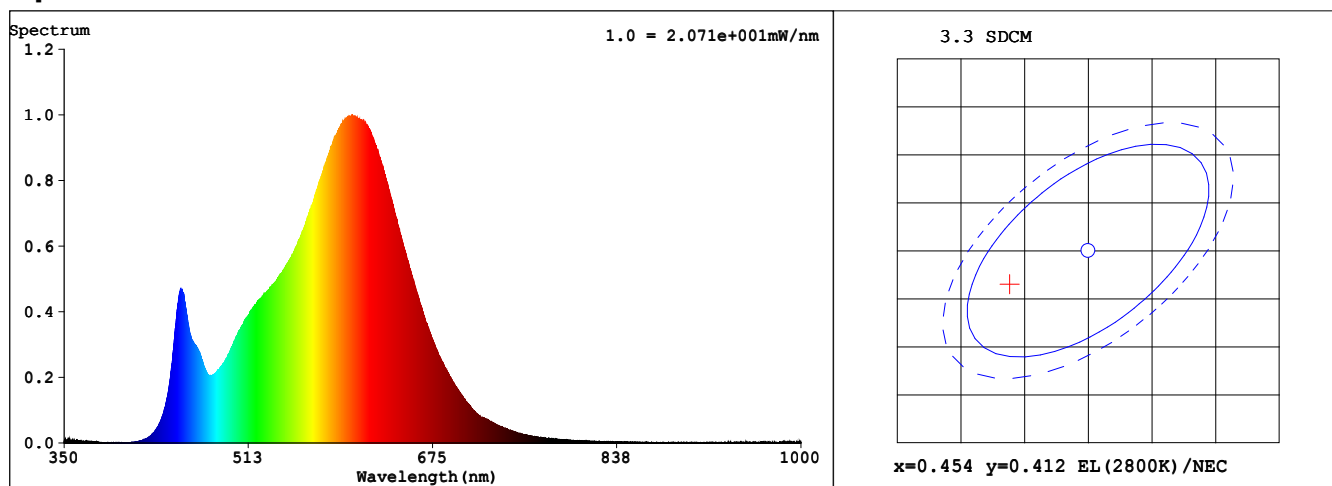
Date : 2019-05-27 08:55:16
Sam. Status :
Instrument : HAAS - 2000
Test by : SGD LIMITED

Test Condition

Temperature : 25.3Deg
WL Range : 350nm-1000nm
Test Mode : Accuracy Test

RH : 65.0%
IP : 49989 (76%)
T : 204 ms
Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4478$ $y = 0.4085$ / $u' = 0.2557$ $v' = 0.5247$ ($duv=3.78e-04$)
CCT= 2860K Prcp WL: Ld=583.3nm Purity=57.0%
Peak WL: Lp=604nm FWHM: =119.3nm Ratio:R=24.0% G=73.4% B=2.6%

Render Index: Ra = 83.0

R1 =82 R2 =93 R3 =94 R4 =80 R5 =82 R6 =92 R7 =82
R8 =58 R9 =9 R10=84 R11=80 R12=74 R13=85 R14=98 R15=74

Photometric & Radiometric Parameters

Flux = 978.29 lm Eff. : 102.74 lm/W Fe = 2.9908 W

Electrical parameters

V = 230.3 V I = 0.04498 A P = 9.522 W PF = 0.9194 F=49.99 Hz

Spectrum Test Report

Sample :
Specification : SADCO CCT 10W @(4000K)
Sample No. : 5
Manufacturer : SGD LIMITED

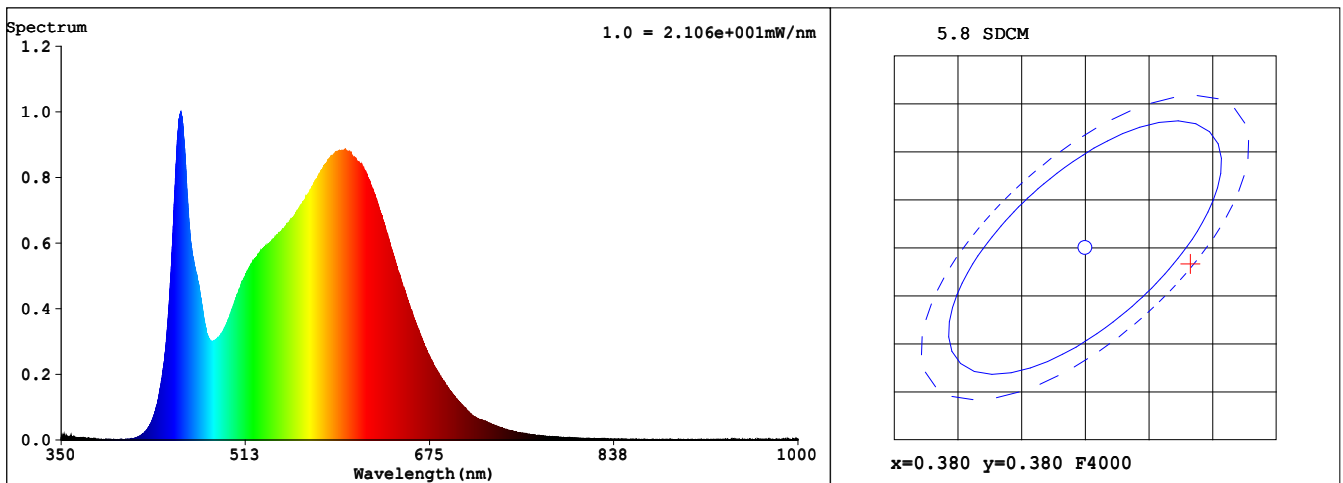
Date : 2019-05-27 09:00:03
Sam. Status :
Instrument : HAAS - 2000
Test by : SGD LIMITED

Test Condition

Temperature : 25.3Deg
WL Range : 350nm-1000nm
Test Mode : Accuracy Test

RH : 65.0%
IP : 45923 (70%)
T : 204 ms
Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3883$ $y = 0.3783$ / $u' = 0.2296$ $v' = 0.5034$ ($duv = -1.46e-03$)

CCT= 3805K Prcp WL: $L_d = 580.5\text{nm}$ Purity=30.0%

Peak WL: $L_p = 456\text{nm}$ FWHM: =23.3nm Ratio:R=19.6% G=76.4% B=4.0%

Render Index: $R_a = 85.9$

R1 =86 R2 =94 R3 =96 R4 =83 R5 =85 R6 =91 R7 =85
R8 =67 R9 =22 R10=85 R11=82 R12=65 R13=89 R14=99 R15=80

Photometric & Radiometric Parameters

Flux = 1039.8 lm Eff. : 112.26 lm/W $F_e = 3.2207$ W

Electrical parameters

V = 230.3 V I = 0.04392 A P = 9.262 W PF = 0.9159 F=49.99 Hz

Spectrum Test Report

Sample :
Specification : SADCO CCT 10W @ (5700K)
Sample No. : 6
Manufacturer : SGD LIMITED

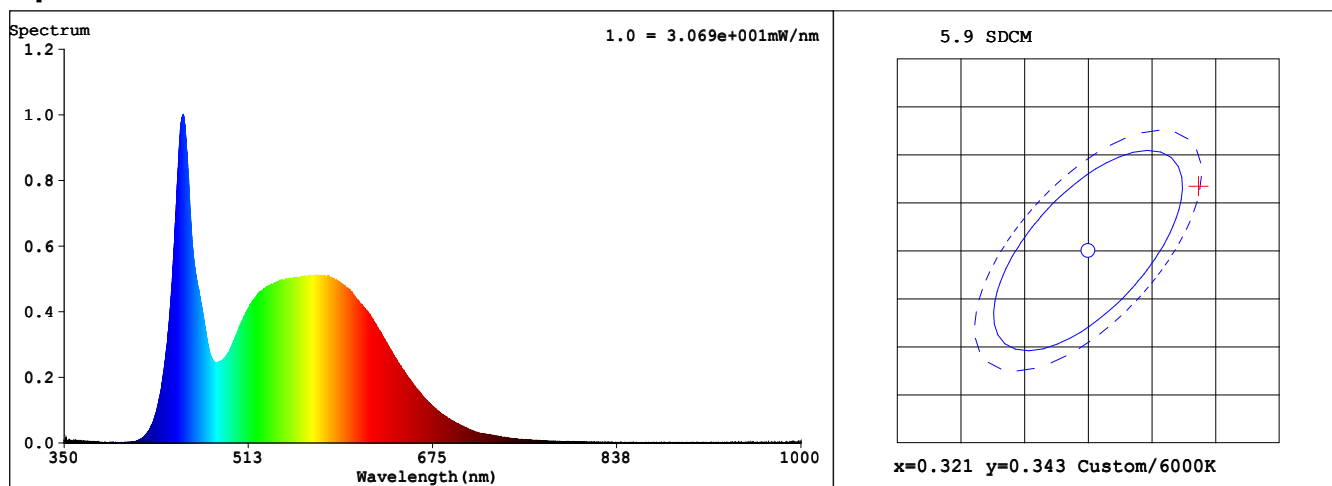
Date : 2019-05-27 09:02:00
Sam. Status :
Instrument : HAAS - 2000
Test by : SGD LIMITED

Test Condition

Temperature : 25.3Deg
WL Range : 350nm-1000nm
Test Mode : Accuracy Test

RH : 65.0%
IP : 47880 (73%)
T : 162 ms
Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3296$ $y = 0.3492$ / $u' = 0.2019$ $v' = 0.4812$ ($duv=5.37e-03$)
CCT= 5619K Prcp WL: $L_d=541.0nm$ Purity=3.8%
Peak WL: $L_p=455nm$ FWHM: =21.4nm Ratio:R=14.4% G=80.4% B=5.2%

Render Index: $R_a = 82.8$

R1 =81 R2 =89 R3 =93 R4 =80 R5 =81 R6 =84 R7 =87
R8 =67 R9 =6 R10=73 R11=79 R12=56 R13=83 R14=97 R15=75

Photometric & Radiometric Parameters

Flux = 1016.5 lm Eff. : 105.52 lm/W Fe = 3.1791 W

Electrical parameters

V = 230.3 V I = 0.04544 A P = 9.633 W PF = 0.9206 F=49.99 Hz



EU DECLARATION OF CONFORMITY

Manufacturers Name: Solas Geal Distribution
Unit 7/8 Ashbourne Business Centre, Ballybin Road, Ashbourne, Co. Meath, A84 YP58.

Declaration Number:
056-SADCO-CCT

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

Products:
LED CCT/Wattage Adjustable Downlighter

Model Code:
SADCO-CCT

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

RoHS Directive 2011/65/EU amended to 2015/863/EU
Low Voltage Directive (2014/35/EU)
EMC (2014/30/EU)

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

EN55015:2013+A1:2015, EN61547:2009, EN61000-3-2:2014, EN61000-3-3:2013, EN60598-1:2015+A1:2018, EN60598-2-1:1989, EN60598-2-2:2012, EN62493:2015



Signed:

Date:

Place of Issue: Republic of Ireland

