

T e s t R e p o r t

Report No : LS1421E

Client: : TLC Southern Ltd
The TLC Building,
5 Newton Road,
Crawley,
West Sussex,
RH10 9TS

Description : LED Lite 24W UFO Downlight Warm White 3500K

Manufacturer : LEDLITE

Type/Model : LTUF24WH

Test Specification : Determination of Light Output Distribution Light Distribution measurements were made with reference to CIE 127 – 2007, clause 6.2.1; Goniophotometry Method


Date Testing Started : 17/05/2016

Conclusion : Refer to body of report

Date of Issue : 23/05/2016

Date of Expiry : 22/05/2021

Tested by: **S. RICHARDS**
Position: Photometrics Team
Leader



Approved by: **T. MALIK**
Position: Quality and Operations
Manager



INTRODUCTION

TLC Southern Ltd have supplied the product identified in page one for determination of light output distribution.

PRODUCT DETAILS

Table 1. Test Sample Details

Product Description	LED Lite 24W UFO Downlight Warm White 3500K
Model No.	LTUF24WH
Number of Samples	1
Condition on Receipt	Good
Nominal Dimensions	Ø 220mm x H 60mm
Product Supply Requirement	230-240V AC 50Hz
Lamp Type and Power	LED 24W
Sampling Method: Test samples selected and supplied by client, no sampling method specified by client.	

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PROCEDURE

Table 2. Test Procedure and Equipment Used for Photometric Measurements

Test Standard	CIE 127 – 2007, clause 6.2.1; Goniophotometry Method
Equipment Used	LMT GO-DS 2000 goniophotometer
Standard Lamp Used	LMT Photometer Unit 01B6081
Standard Lamp Traceability	Traceable to luminous intensity standard lamp type OSRAM Wi41/G lamp No. 934
Scan Setup	Elevation: 0°-180°, step size: 5° Azimuth: 0°-360°, step size: 5°
Power Supply	LMT GO-DS 2000 goniophotometer
Power Measurement	LMT GO-DS 2000 goniophotometer
Temperature Measurement	Testo 925 Thermocouple reader (143)

Table 3. Lamp Conditioning and Setup

Lamp ageing Time (Hours)	0
Stabilisation Time (Hours)	1.0
Total Operating Time (Hours)	1.66
Support Structure	Goniophotometer luminaire mounting fixture

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TEST RESULTS

Table 4. Test Environmental and Operating Conditions

Ambient Temperature (°C)	25.0
Voltage (V)	240.2
Current (mA)	105.71
Power (W)	24.13
Power Factor	0.94

Table 5. Beam Angle and Luminous Flux Results

Centre Beam Intensity (cd)	Beam Angle (Lamp orientation)	Beam Angle Result (°)
597.1	0-180	134.2
	90-270	134.4

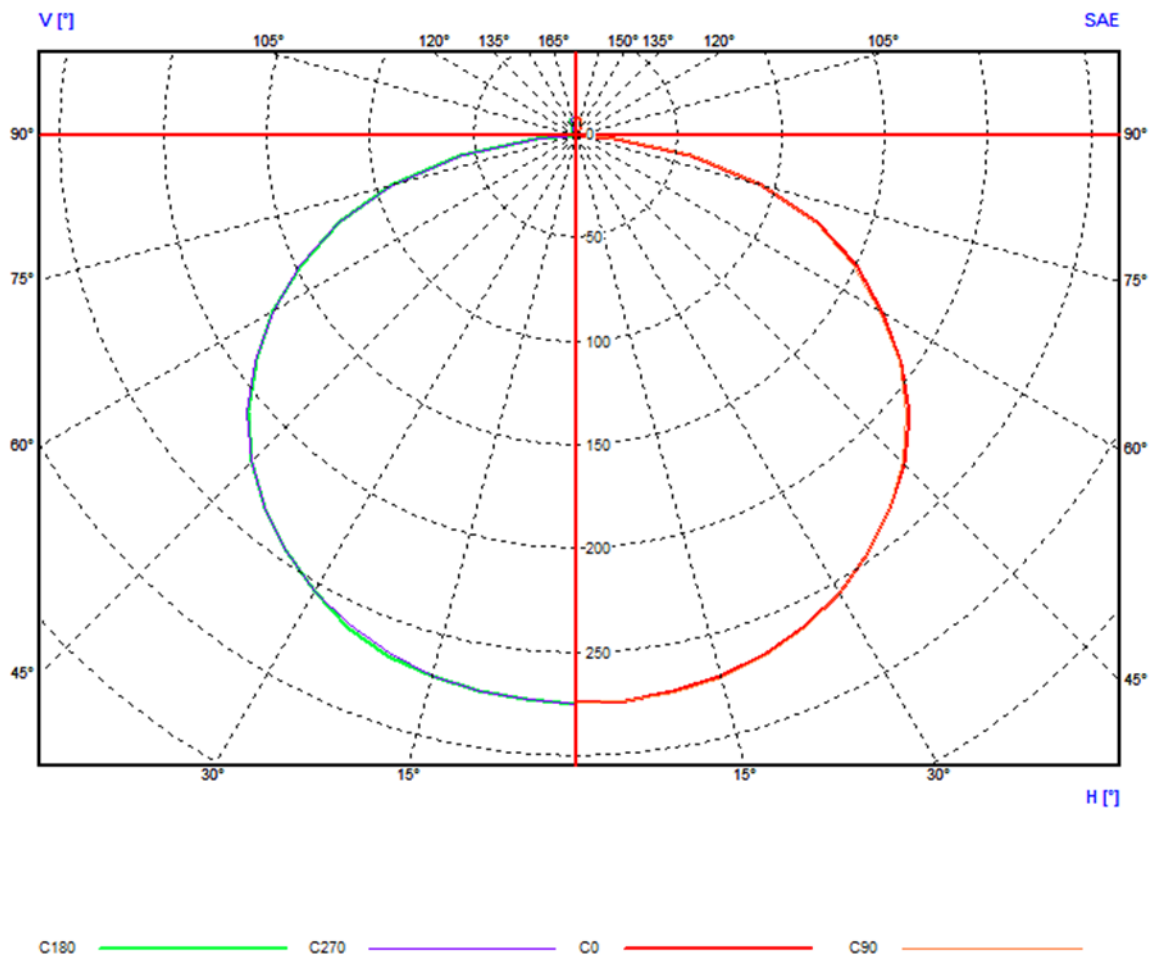


Figure 1. Polar Diagram

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Table 6. Luminous Intensities (cd)

Gamma	0	5	10	15	20	25	30	35	40	45	50	55
0	596.6	596.8	596.8	596.8	597.1	597.1	596.8	596.8	596.8	596.8	596.6	596.8
5	596.0	596.0	596.0	595.8	595.8	596.0	596.3	596.0	596.3	596.0	596.0	596.0
10	592.6	592.6	593.1	592.9	593.4	593.7	593.4	593.7	593.9	593.4	593.9	594.2
15	588.4	588.9	588.9	588.9	589.2	589.2	589.4	589.4	589.4	589.4	589.7	589.7
20	580.4	580.9	580.9	581.2	581.5	581.2	581.7	581.7	581.7	581.7	582.0	582.0
25	569.6	570.1	570.3	570.6	570.6	570.9	570.6	570.9	571.1	570.9	570.9	571.1
30	554.5	554.7	555.0	555.2	555.5	555.8	555.8	555.8	555.8	555.5	555.0	555.0
35	535.9	535.9	535.9	536.4	536.7	536.7	536.7	537.0	536.7	536.2	536.2	536.2
40	513.9	513.9	514.2	514.2	514.5	515.0	514.5	514.7	514.2	513.9	513.7	513.9
45	488.0	488.2	488.2	488.0	488.2	488.5	488.8	488.8	488.2	488.0	487.7	487.4
50	457.0	457.2	456.7	456.7	457.0	457.2	457.8	457.5	457.0	456.2	456.4	456.4
55	417.2	416.7	418.3	420.4	419.6	420.7	417.8	417.5	418.3	420.1	418.6	419.9
60	373.0	372.7	373.5	374.8	375.1	374.3	373.8	373.5	373.8	374.3	373.8	372.7
65	324.5	324.8	324.8	325.0	325.3	325.6	325.6	325.3	324.8	324.8	324.5	324.5
70	268.6	268.6	268.9	269.1	269.4	269.7	269.7	269.7	269.4	269.4	269.4	269.7
75	202.1	202.1	202.3	202.7	203.1	203.3	203.5	203.4	203.3	203.5	203.8	204.0
80	122.6	122.7	123.0	123.3	123.6	123.7	124.0	124.1	124.3	124.5	124.7	124.9
85	40.4	40.5	40.6	40.8	40.9	41.1	41.4	41.6	41.9	42.1	42.3	42.5
90	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
95	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
100	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
105	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
110	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
115	3.8	3.8	3.8	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
120	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
125	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1	4.1	4.1
130	4.3	4.3	4.3	4.3	4.2	4.2	4.1	4.1	4.0	4.0	3.9	3.9
135	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
140	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
145	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
150	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
155	10.5	10.5	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
160	15.5	15.5	15.5	15.5	15.6	15.6	15.7	15.7	15.7	15.8	15.8	15.8
165	17.7	17.7	17.7	17.8	17.9	17.9	18.0	18.1	18.2	18.3	18.4	18.4
170	17.9	17.9	17.9	18.0	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.6
175	16.9	16.9	16.9	16.9	17.0	17.0	17.1	17.2	17.2	17.3	17.4	17.4
180	17.0	17.0	17.0	17.0	17.1	17.1	17.2	17.2	17.3	17.4	17.4	17.5

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Table 6 Continued...

Gamma	60	65	70	75	80	85	90	95	100	105	110	115
0	596.8	596.8	596.8	596.6	596.8	596.6	596.3	596.6	596.6	596.3	596.8	596.8
5	596.3	596.3	596.0	596.0	596.3	596.0	596.0	596.0	596.3	596.0	596.0	596.0
10	593.9	594.2	594.2	594.5	594.2	593.9	594.2	594.2	594.5	593.9	594.2	594.2
15	590.0	589.7	589.7	590.0	590.0	590.2	590.2	590.0	590.0	590.0	590.2	590.2
20	582.3	582.3	582.8	582.5	582.8	582.5	582.8	582.8	582.3	582.8	582.8	582.3
25	571.1	570.6	570.3	570.6	570.6	570.3	570.3	570.1	570.1	570.3	570.6	570.3
30	555.0	554.7	555.0	554.7	554.7	554.5	554.2	554.5	554.2	553.7	554.2	553.9
35	535.9	536.2	535.6	535.6	535.6	535.1	534.8	534.8	534.6	534.8	534.8	534.6
40	513.7	513.4	513.4	512.9	512.6	512.6	512.1	512.1	512.1	511.5	511.5	511.5
45	487.2	486.9	486.6	486.4	486.1	486.1	485.6	485.3	485.3	485.0	484.8	484.8
50	455.9	455.4	454.3	454.3	454.3	454.1	453.0	453.8	453.3	452.5	452.5	452.5
55	416.2	414.8	415.9	417.8	416.4	417.2	415.6	413.0	413.8	416.4	414.8	415.6
60	371.4	370.9	370.9	371.4	371.4	370.6	369.3	368.5	368.2	369.3	370.1	369.8
65	324.0	323.5	322.9	322.1	321.9	321.3	321.3	321.1	320.8	320.5	320.5	320.5
70	269.1	268.6	268.1	267.8	267.3	267.0	266.8	266.8	266.8	266.8	266.5	266.5
75	204.0	203.7	203.3	203.0	202.8	202.5	202.4	202.4	202.3	202.2	202.2	202.5
80	124.9	124.9	124.8	124.7	124.7	124.6	124.7	125.0	125.0	124.8	124.7	124.7
85	42.6	42.9	43.0	43.3	43.4	43.5	43.6	43.6	43.6	43.5	43.4	43.3
90	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
95	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
100	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
105	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
110	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
115	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
120	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
125	4.0	3.9	3.9	3.8	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
130	3.9	3.9	3.9	4.0	4.0	4.0	4.0	4.1	4.2	4.3	4.3	4.3
135	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
140	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
145	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
150	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
155	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
160	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
165	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.7	18.6
170	18.7	18.8	18.9	19.0	19.0	19.1	19.1	19.1	19.2	19.2	19.1	19.0
175	17.5	17.6	17.6	17.6	17.7	17.7	17.8	17.8	17.7	17.7	17.8	17.8
180	17.5	17.6	17.6	17.5	17.5	17.5	17.4	17.4	17.4	17.4	17.4	17.4

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Table 6 Continued...

Gamma	120	125	130	135	140	145	150	155	160	165	170	175
0	596.8	596.8	596.6	596.6	596.6	596.8	596.6	596.6	596.6	596.8	596.6	596.6
5	596.0	595.8	595.8	595.8	595.8	595.5	595.5	595.8	595.5	595.5	595.5	595.5
10	594.2	593.9	593.9	593.9	593.9	593.7	593.9	593.7	593.4	593.1	593.1	592.9
15	590.2	590.0	590.0	590.2	590.0	590.0	589.7	589.2	589.2	588.9	588.9	588.9
20	582.3	582.3	582.5	582.5	582.5	582.5	582.0	582.0	582.0	581.7	581.7	581.5
25	570.3	570.6	570.6	570.6	570.9	570.6	570.3	570.3	570.1	570.3	570.1	570.1
30	553.9	554.2	553.9	553.9	553.9	554.2	554.2	553.9	553.7	553.4	553.7	553.4
35	534.6	534.3	534.6	534.3	534.3	534.3	534.6	534.6	534.1	534.3	534.1	534.3
40	511.5	511.8	511.5	511.3	511.3	511.5	511.8	511.8	511.3	511.3	511.0	511.3
45	485.0	485.3	485.0	484.8	484.5	485.0	485.0	484.8	485.0	484.8	484.8	484.5
50	453.0	454.1	452.2	452.5	452.7	452.7	453.0	453.0	452.7	452.2	452.2	452.7
55	414.6	411.9	412.5	416.4	417.0	413.8	411.9	412.2	415.1	415.9	415.6	413.8
60	368.5	368.0	369.0	369.5	370.1	369.0	368.5	368.2	369.0	369.8	369.8	368.8
65	320.8	321.1	321.1	321.3	321.1	321.6	321.3	321.3	321.1	320.8	320.8	321.1
70	267.0	267.6	267.8	267.8	267.8	267.8	267.6	267.3	267.0	266.8	266.8	266.8
75	202.8	202.9	203.0	202.9	203.0	202.9	202.7	202.4	202.2	202.0	201.9	201.9
80	124.9	124.8	124.8	124.7	124.6	124.6	124.6	124.4	124.2	124.1	123.9	124.0
85	43.3	43.2	43.2	43.1	43.1	43.2	43.2	43.0	42.8	42.7	42.5	42.5
90	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
95	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
100	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
105	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
110	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
115	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.8	3.8
120	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.3
125	3.7	3.7	3.8	3.8	3.9	3.9	4.0	4.0	4.1	4.1	4.2	4.2
130	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
135	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.5	4.5	4.5
140	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
145	4.0	4.1	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
150	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
155	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.5	10.5	10.5
160	15.8	15.8	15.8	15.8	15.8	15.7	15.7	15.7	15.7	15.6	15.6	15.6
165	18.6	18.5	18.5	18.5	18.4	18.3	18.2	18.1	18.1	18.0	18.0	17.9
170	19.0	18.9	18.9	18.8	18.7	18.6	18.5	18.5	18.4	18.3	18.3	18.2
175	17.8	17.8	17.7	17.7	17.6	17.6	17.5	17.5	17.4	17.3	17.2	17.2
180	17.4	17.3	17.2	17.2	17.1	17.1	17.1	17.0	17.0	17.0	17.0	17.0

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Table 6 Continued...

Gamma	180	185	190	195	200	205	210	215	220	225	230	235
0	596.8	596.6	596.3	596.6	596.8	596.6	596.8	596.8	596.8	596.8	596.6	596.8
5	595.5	595.2	595.2	595.2	595.5	595.2	595.5	595.2	595.0	595.0	595.0	595.0
10	592.6	592.9	592.6	592.3	592.3	592.3	592.1	592.3	592.1	591.8	591.8	592.1
15	588.6	588.6	588.4	588.4	588.1	587.8	587.8	587.8	587.8	587.8	587.6	587.6
20	581.2	581.2	581.2	580.7	580.7	580.4	580.4	580.1	579.9	579.9	579.6	579.4
25	569.8	569.6	569.0	569.0	568.5	568.8	568.8	568.5	568.8	568.5	568.2	568.5
30	553.4	553.4	553.1	552.9	552.6	552.3	552.9	552.9	552.3	552.3	552.3	551.8
35	534.3	534.3	534.1	533.8	533.8	533.3	533.5	533.5	533.0	533.0	532.7	533.0
40	511.3	511.0	511.3	510.7	510.7	511.0	511.0	511.0	510.7	510.2	509.9	510.5
45	484.8	484.8	484.8	485.3	484.8	484.8	484.8	484.8	484.3	484.3	484.3	484.5
50	452.7	452.5	452.7	453.0	452.7	452.7	453.3	452.7	452.2	452.2	453.3	452.5
55	411.9	411.9	413.8	417.5	416.2	415.9	413.3	412.5	414.1	416.2	415.6	415.9
60	368.5	368.2	368.8	369.5	370.6	370.1	369.5	369.0	369.5	370.6	370.9	370.3
65	321.1	321.3	321.3	321.3	321.6	321.9	322.1	322.1	322.1	322.4	322.4	322.4
70	266.8	266.8	266.5	266.5	266.8	267.0	267.3	267.3	267.3	267.6	267.6	267.3
75	202.0	201.8	201.6	201.6	201.7	201.9	201.9	202.0	202.0	202.1	202.2	202.0
80	124.0	123.8	123.6	123.5	123.7	123.7	123.6	123.4	123.2	123.2	123.1	123.0
85	42.4	42.2	42.0	41.9	42.0	41.8	41.7	41.5	41.3	41.2	41.1	41.2
90	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
95	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
100	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
105	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
110	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
115	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	3.7	3.7	3.7	3.7
120	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
125	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.1	4.1	4.1	4.0
130	4.3	4.3	4.3	4.3	4.2	4.1	4.1	4.0	3.9	3.9	3.9	3.8
135	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.5	4.4	4.4	4.4	4.4
140	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
145	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.0	4.0	4.1	4.0	4.0
150	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.0	6.0	6.0
155	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
160	15.5	15.5	15.5	15.5	15.6	15.6	15.6	15.6	15.7	15.7	15.7	15.7
165	17.9	17.9	17.9	18.0	18.0	18.0	18.1	18.1	18.2	18.3	18.4	18.4
170	18.1	18.1	18.1	18.2	18.2	18.3	18.3	18.4	18.5	18.6	18.6	18.7
175	17.2	17.1	17.1	17.1	17.1	17.2	17.3	17.3	17.3	17.4	17.4	17.4
180	17.0	17.0	17.0	17.0	17.0	17.1	17.1	17.2	17.2	17.2	17.3	17.4

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Table 6 Continued...

Gamma	240	245	250	255	260	265	270	275	280	285	290	295
0	597.1	596.6	597.1	596.6	596.8	596.8	596.8	596.8	596.6	596.6	596.8	596.8
5	595.0	595.0	595.0	595.0	595.2	595.0	595.0	595.0	595.2	595.0	595.0	595.0
10	591.8	591.8	592.1	591.8	591.8	591.8	592.1	592.1	592.1	592.1	592.1	592.1
15	587.3	587.3	587.3	587.0	587.0	587.0	587.3	586.8	587.3	587.0	587.0	587.0
20	579.1	579.1	579.1	579.1	578.8	579.1	578.8	578.6	578.8	578.8	578.8	578.6
25	568.0	568.0	568.0	568.0	568.2	567.7	567.4	567.7	567.4	567.4	567.4	567.4
30	552.1	551.8	551.8	552.3	551.8	552.1	552.1	551.8	551.8	551.8	551.8	552.1
35	533.0	532.7	533.0	532.7	533.0	533.0	533.0	533.0	533.0	533.3	533.0	533.0
40	510.7	510.5	510.5	510.7	510.5	510.5	510.5	510.5	510.7	511.0	511.3	511.3
45	484.8	484.5	484.5	484.3	484.3	484.3	484.3	484.3	484.5	484.5	485.3	485.3
50	453.3	453.5	452.7	452.7	453.0	453.0	453.3	452.7	453.0	453.8	453.8	454.3
55	413.8	413.8	415.9	415.1	415.1	417.0	413.8	413.5	416.2	417.0	415.9	418.6
60	369.3	369.0	370.1	370.9	370.9	370.1	369.5	369.5	370.3	371.7	372.5	371.4
65	321.9	321.9	322.1	322.1	322.1	321.9	322.1	322.4	322.7	322.7	322.9	323.5
70	267.0	266.8	266.8	266.8	266.8	266.8	266.5	266.8	267.0	267.3	267.6	267.8
75	201.8	201.5	201.4	201.3	201.1	200.9	200.9	201.0	201.1	201.3	201.5	201.6
80	122.8	122.6	122.5	122.4	122.4	122.3	122.2	122.1	122.0	122.1	122.2	122.1
85	41.1	41.1	41.1	41.1	41.0	40.9	40.8	40.7	40.6	40.5	40.3	40.1
90	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
95	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
100	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
105	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
110	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
115	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
120	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
125	3.9	3.9	3.8	3.7	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.6
130	3.8	3.8	3.9	3.9	4.0	4.0	4.0	4.1	4.2	4.2	4.3	4.3
135	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
140	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
145	4.0	4.0	4.1	4.1	4.1	4.1	4.0	4.1	4.1	4.1	4.1	4.0
150	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
155	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
160	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7
165	18.4	18.5	18.5	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5	18.5
170	18.8	18.8	18.8	18.9	18.9	18.9	18.9	19.0	19.0	19.0	18.9	18.8
175	17.5	17.5	17.5	17.5	17.5	17.5	17.6	17.6	17.6	17.5	17.5	17.6
180	17.4	17.5	17.5	17.5	17.5	17.5	17.4	17.4	17.4	17.4	17.4	17.4

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Table 6 Continued...

Gamma	300	305	310	315	320	325	330	335	340	345	350	355
0	596.6	596.8	597.1	596.8	597.1	596.8	596.8	596.8	596.8	596.8	596.8	596.8
5	595.2	595.2	595.2	595.0	595.2	595.2	595.5	595.5	595.5	595.8	596.0	596.0
10	592.1	591.8	592.1	591.8	592.1	592.1	592.1	592.3	592.3	592.3	592.6	592.3
15	586.8	587.0	587.0	586.8	587.0	587.3	587.3	587.3	587.6	587.8	587.8	588.4
20	578.8	578.3	578.6	578.6	578.6	579.1	579.1	579.1	579.4	579.9	580.1	580.4
25	567.4	567.4	567.7	567.7	567.7	568.0	568.0	568.2	568.8	568.8	569.3	569.3
30	551.8	552.1	552.1	552.1	552.3	552.3	552.6	553.1	553.4	553.7	554.2	554.2
35	533.0	533.3	533.3	533.5	533.8	534.1	534.1	534.6	534.6	534.6	535.4	535.4
40	511.0	511.3	511.3	511.5	511.8	512.1	512.3	512.6	512.6	512.9	513.4	513.9
45	485.3	485.3	485.3	485.3	485.8	486.1	486.6	486.1	486.9	487.2	487.7	488.0
50	454.3	453.8	454.1	454.8	455.4	455.1	455.1	455.4	455.9	455.6	457.0	456.4
55	414.6	414.1	415.6	418.8	418.0	419.6	416.4	415.4	417.0	419.3	419.6	420.4
60	370.9	370.9	371.4	372.5	373.3	372.7	371.9	371.7	372.2	374.1	374.3	374.1
65	323.2	323.5	323.7	323.7	323.7	324.0	324.0	324.2	324.2	324.5	324.5	324.5
70	267.8	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.4	268.6	268.6	268.9
75	201.7	201.8	201.8	201.6	201.6	201.6	201.7	201.8	201.9	202.1	202.1	202.2
80	122.0	122.0	122.1	122.0	121.9	121.8	121.7	121.9	122.1	122.2	122.3	122.4
85	39.9	39.7	39.6	39.6	39.5	39.5	39.4	39.4	39.6	39.8	40.0	40.2
90	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
95	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
100	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
105	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
110	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
115	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
120	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.3
125	3.6	3.7	3.7	3.7	3.8	3.8	3.9	4.0	4.0	4.1	4.2	4.2
130	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
135	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
140	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
145	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
150	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
155	10.5	10.5	10.5	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.5	10.5
160	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.6	15.6	15.5	15.5	15.5
165	18.5	18.4	18.4	18.3	18.3	18.2	18.1	18.0	17.9	17.8	17.8	17.7
170	18.8	18.7	18.6	18.5	18.4	18.4	18.3	18.2	18.1	18.0	17.9	17.9
175	17.6	17.6	17.5	17.5	17.4	17.3	17.3	17.2	17.1	17.0	17.0	16.9
180	17.4	17.3	17.2	17.2	17.1	17.1	17.1	17.0	17.0	17.0	17.0	17.0

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PRODUCT DIAGRAM & IDENTIFICATION OF PHOTOMETRIC CENTRE

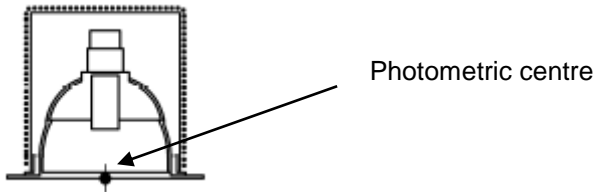


Figure 2. Product photometric centre

ILLUSTRATION



Figure 3. Product image

End