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Photometric Report

Job / Report / Date 42 / 10692 / 10692-10a / 2013.06.17

Customer	Encapsulite International Ltd.
Luminaire Range	MT50 IP68
Luminaire catalog No.	MT50 SC 35W
Luminaire description	linear cylindrical luminaire with opal cover data derived from range test series
Lamp description	35W/840 HE Osram Lumilux
Lamp lumen output	3,300 lm
Lamp quantity	1

Photometric Report

- Pictures
- Luminaire information
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- Principal Axes Intensities
- Light Output Ratios & CIBSE TM5 Results
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Job / Report / Date

42 / 10692 / 10692-10a / 2013.06.17

Customer

Encapsulite International Ltd.

Luminaire Range

MT50 IP68

Luminaire catalog No.

MT50 SC 35W

Luminaire description

linear cylindrical luminaire
with opal cover

data derived from range test series

Lamp description

35W/840 HE Osram Lumilux

Lamp lumen output

3,300 lm

Lamp quantity

1



Helvar
www.helvar.com

ELECTRONIC BALLAST EL1x14-35s
220-240V 0/50-60Hz



T5:14W 0.08-0.06A λ 0.96

T5:21,28,35W 0.18-0.09A λ 0.98

ta = -20...+50°C

75



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Luminaire physical characteristics

Overall Dimensions

Length	1560mm
Width	50mm
Height	50mm

Visible Dimensions when installed

Length	1560mm
Width	50mm
Height	50mm

Luminous Dimensions

Length	1475mm
Width	50mm
Height 0°	25mm
Height 90°	0mm
Height 180°	25mm
Height 270°	0mm

Luminous Areas

Base	0.07375m ²
Sides	0.036875m ² (0°/180° azimuth)
Ends	0m ² (90°/270° azimuth)

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Report Basis

All measurements taken in accordance with EN13032.

Lamp tests were performed with the lamps in a horizontal orientation.

Luminaire tests were performed with the lamps in a horizontal orientation.

The photometric centre of the luminaire was taken as the geometric centre of the lamp.

The photometric nadir was taken to be perpendicular to the front face of the reflector.

The luminaire has been treated as though it has 2 planes of symmetry through the 0°/180° plane and the 90°/270° plane.

The lumen output, light output ratio (LORL) and power consumption of the luminaire were determined at 25°C after 100 hours pre-conditioning.

Lamps used for test were provided by the customer.

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Customer Encapsulite International Ltd.
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with opal cover
data derived from range test series
Lamp description 35W/840 HE Osram Lumilux
Lamp lumen output 3,300 lm
Lamp quantity 1

Electrical input & Photometric output characteristics

Control gear

1 * Helvar EL1x14-35S

Ballast Voltage Range 220-240V
Ballast Current Range .09-.18A
Ballast Power Factor 0.98

Sample	Voltage (V)	Current (mA)	Power Factor	Power (W)	VA	Output (lm)	% of Nominal	Efficacy (lm/W)
Luminaire	230.1	161.0	0.988	36.6	37.1	2,615	79%	71.5
Lamp	230.0	168.8	0.989	38.4	38.8	2,952	89%	76.9
Lamp Total	230.0	168.8	0.989	38.4	38.8	2,952	89%	76.9

Electrical characteristics at 25°C

Ballast Nominal	230V	172.2mA	0.98PF	38.8W	39.6VA
Lamp Nominal	230V	152.2mA	1.00PF	35.0W	35.0VA
Luminaire	230V	161.0mA	0.99PF	36.6W	37.1VA
Lamp	230V	168.8mA	0.99PF	38.4W	38.8VA

Measured Electrical characteristics relative to Ballast Nominal

Luminaire	Current	94%	Power	94%	VA	94%
Lamp	Current	98%	Power	99%	VA	98%

Measured Electrical characteristics relative to Lamp Nominal

Luminaire	Current	106%	Power	105%	VA	106%
Lamp	Current	111%	Power	110%	VA	111%

Lumen Output figures used in this report (lumens)

Nominal Lamp Output	3,300
Measured Luminaire Output	2,615
Measured Lamp Output	2,952

Measured Lumen Output characteristics relative to Lamp Nominal Total

Luminaire	79%
Lamp	89%

Measured luminous efficacy at 25°C

Luminaire	71.5 lm/W
Lamp	76.9 lm/W

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The light output ratio of the luminaire was measured as 0.886 at 25°C.
This is the ratio of the output of the luminaire to the output of the lamp.

The measured lumen output of the luminaire was 2,615 lumens at 25°C.
This figure can be related to the nominal lumen output of the lamp quoted by the manufacturer of 3,300 lumens, to give a nominal light output ratio of 0.792.

The measured lumen output of the lamp was 2,952 lumens at 25°C.
This figure can be related to the nominal lumen output of the lamp quoted by the manufacturer of 3,300 lumens, to give a nominal BLF of 0.894.

For lighting design calculations:

A light output ratio of 1 should be used in conjunction with the measured lumen output of the luminaire of 2,615 lumens.

or

The nominal light output ratio of 0.792 should be used in conjunction with the nominal lumen output of the lamp of 3,300 lumens.

or

The measured light output ratio of 0.886 should be used in conjunction with the measured lumen output of the lamp of 2,952 lumens.

or

The measured light output ratio of 0.886 should be used in conjunction with the nominal lumen output of the lamp of 3,300 lumens and the nominal BLF of 0.894.

This report is based on the following parameters:

The Light Output Ratio is the nominal value of 0.792.

The lamp output is the nominal value of 3,300 lumens.

There is 1 lamp in the luminaire.

No measurements relating to the ballast factor of the control gear were made.

The nominal ballast factor represented by the ratio of the measured lumen output of the lamp to the declared lumen output has been incorporated into the nominal Light Output Ratio figure. The resultant nominal LOR allows lighting calculations to be performed using the declared lamp output without having to incorporate a separate BLF calculation to allow for deviation from the nominal output due to thermal and gear effects.

If the measured LOR figure is used, the measured lumen output of the lamp should be used to perform lighting calculations. If the nominal lamp output is used with the measured LOR figure, an allowance should be made for any deviation of the lamp and gear combination from the published lumen output, represented by the nominal BLF.

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linear cylindrical luminaire
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data derived from range test series

Lamp description

35W/840 HE Osram Lumilux

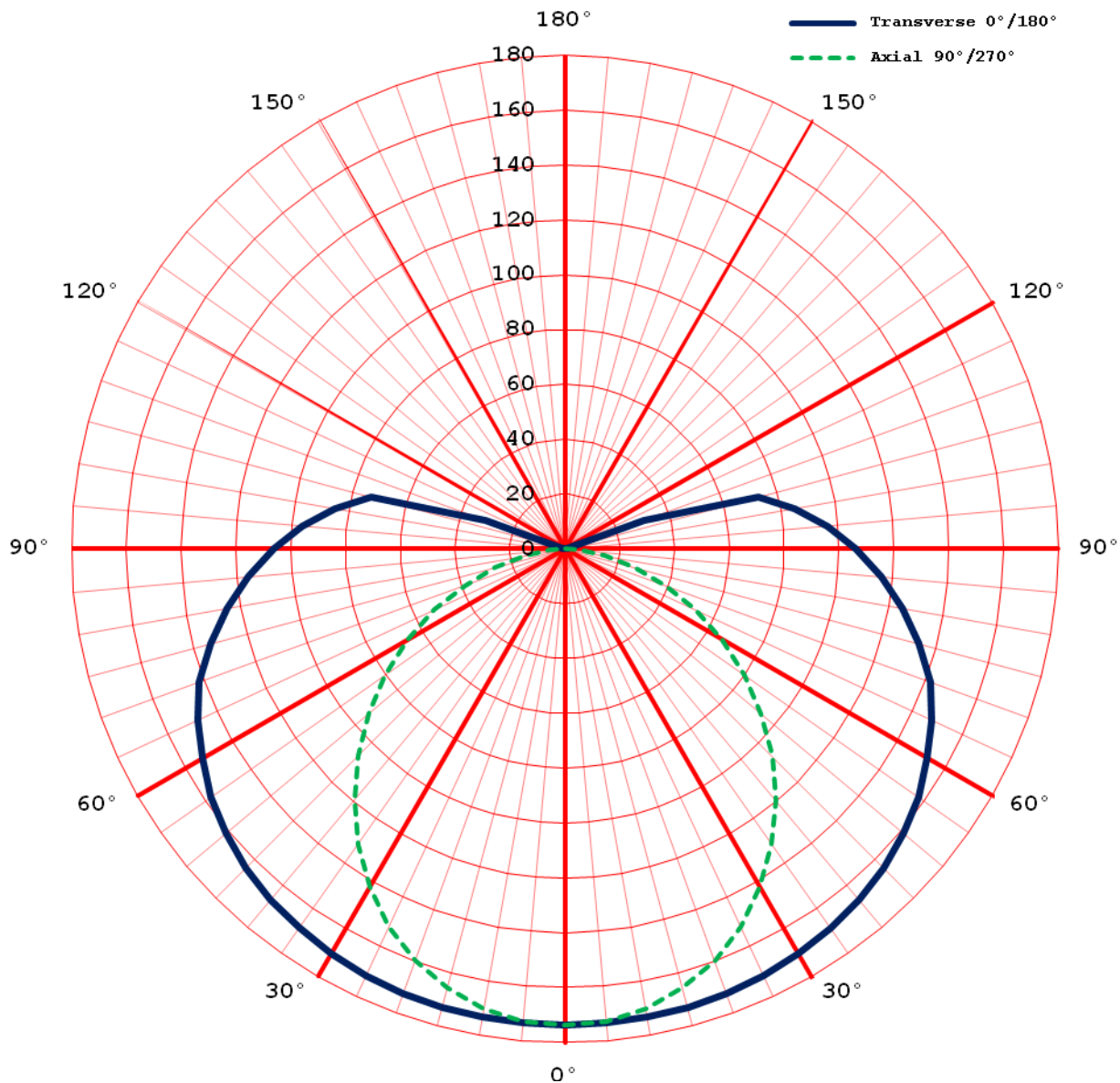
Lamp lumen output

3,300 lm

Lamp quantity

1

Average Principal Axes Luminous Intensities (cd/klm)



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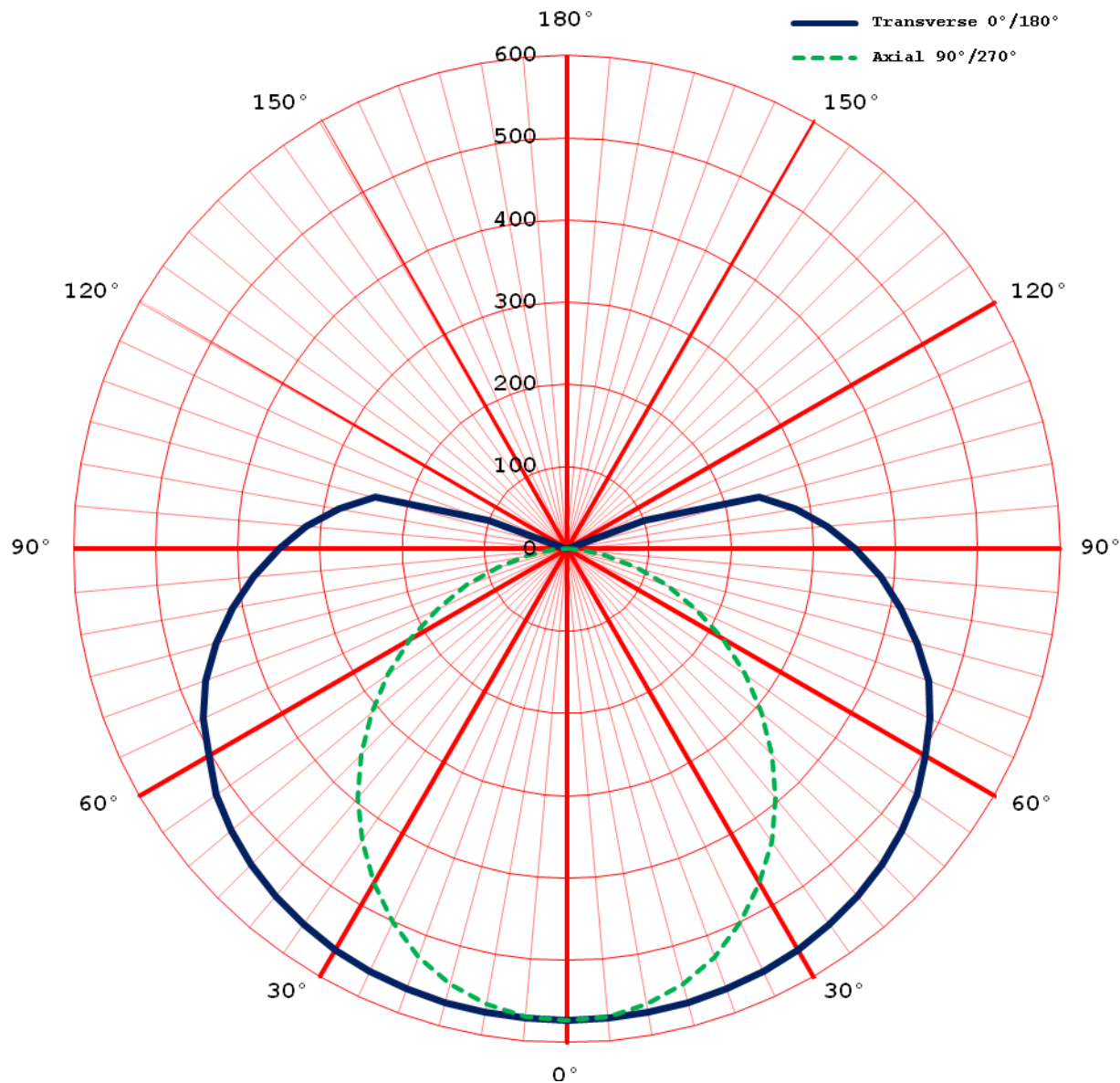
Lamp lumen output

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Lamp quantity

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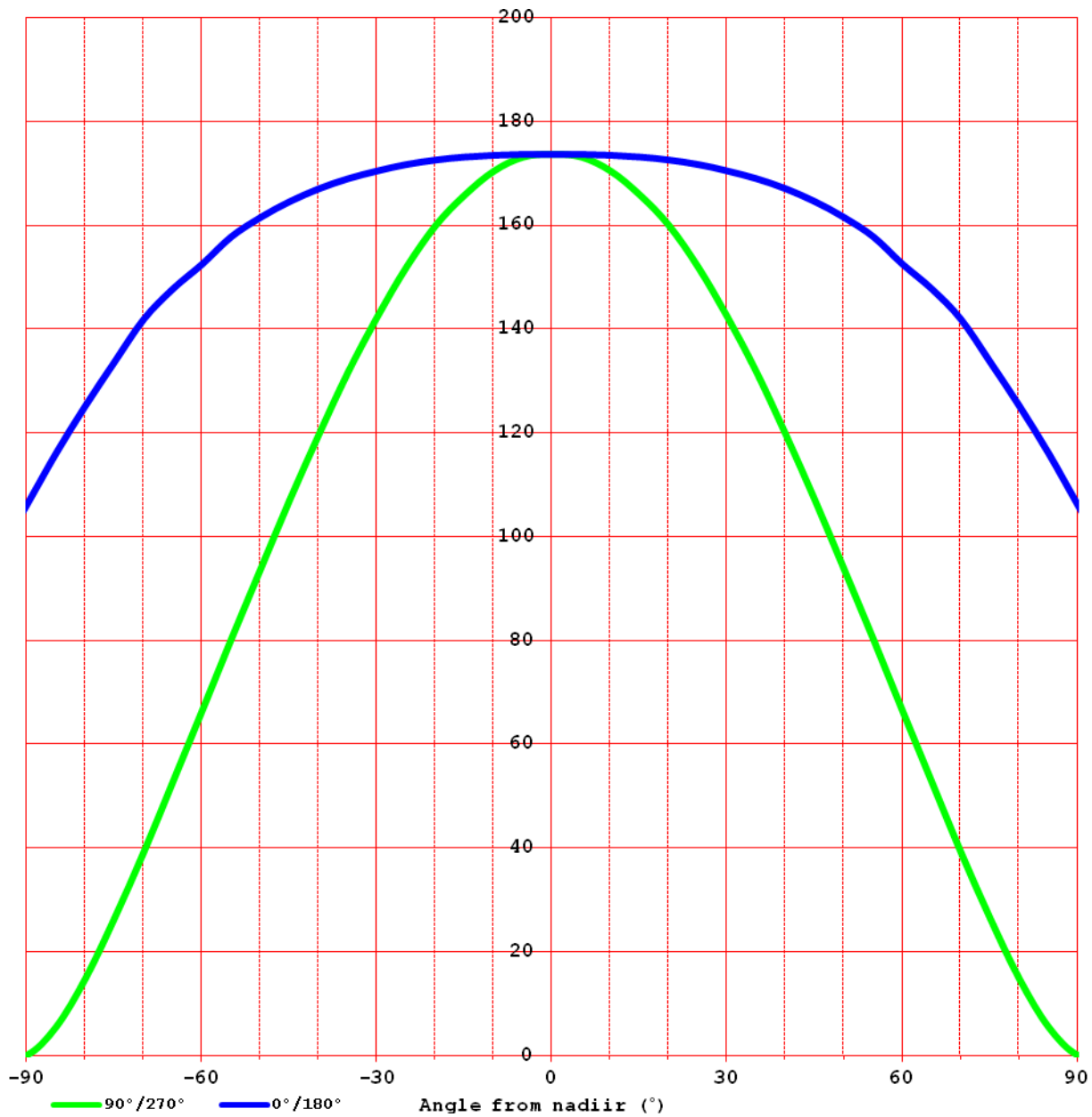
Lamp lumen output

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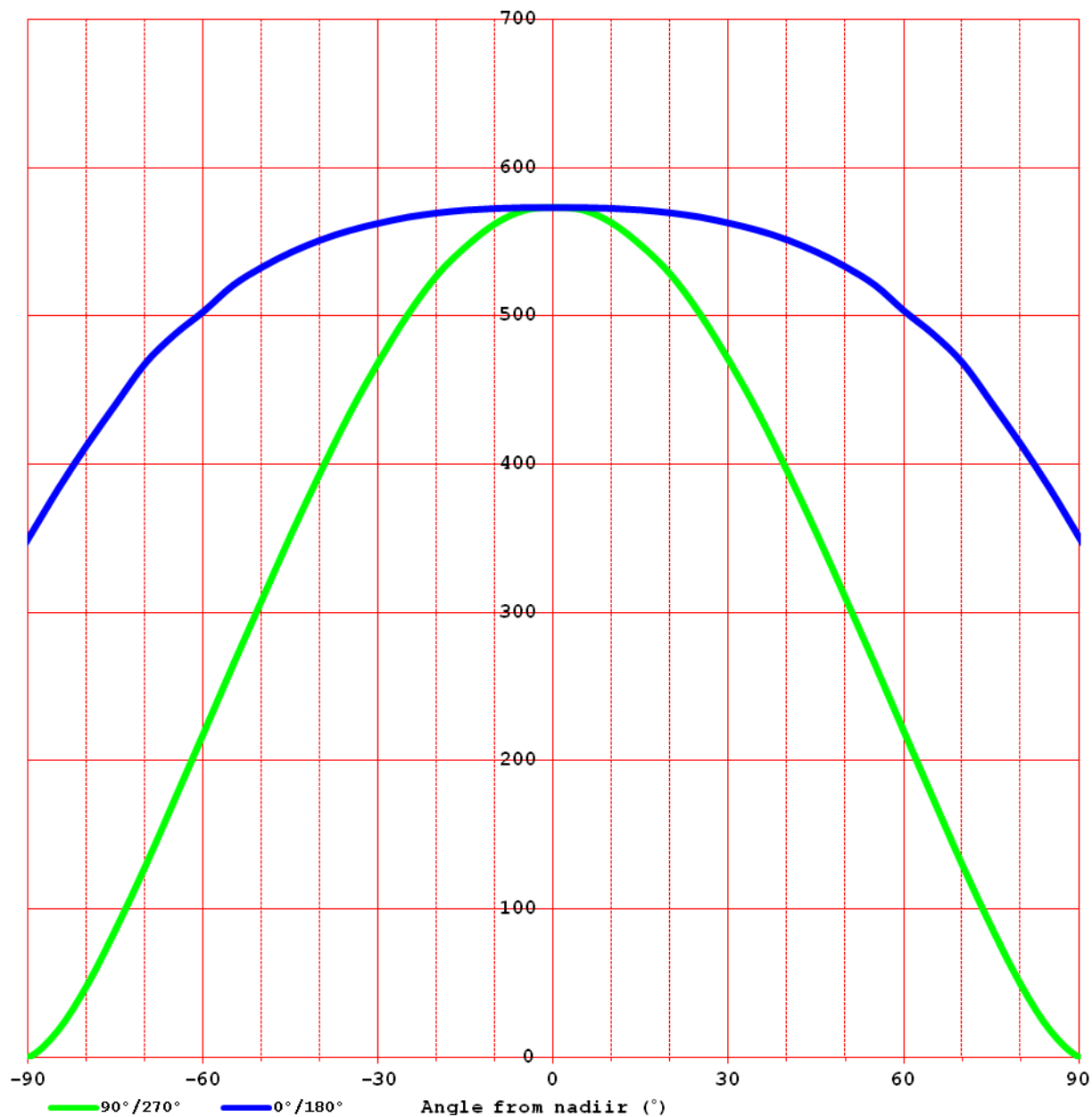
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Average Principal Axes Luminous Intensities (cd)



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Average Luminous Intensities (cd/Klm)

Angle	Transverse plane	Axial plane
0°	173.64	173.64
5°	173.64	173.10
10°	173.48	170.41
15°	173.15	165.80
20°	172.57	159.91
25°	171.70	151.86
30°	170.46	142.27
35°	168.97	131.61
40°	167.03	119.62
45°	164.55	106.96
50°	161.49	93.60
55°	157.77	80.16
60°	152.48	66.34
65°	147.73	52.69
70°	141.86	39.08
75°	133.63	26.39
80°	125.16	14.73
85°	116.06	5.43
90°	106.10	0.00
95°	96.22	0.00
100°	85.39	0.00
105°	73.28	0.00
110°	30.67	0.00
115°	0.62	0.00
120°	0.50	0.04
125°	0.00	0.00
130°	0.00	0.00
135°	0.00	0.00
140°	0.00	0.00
145°	0.00	0.00
150°	0.00	0.00
155°	0.00	0.00
160°	0.00	0.00
165°	0.00	0.00
170°	0.00	0.00
175°	0.00	0.00
180°	0.00	0.00

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Lamp quantity

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Average Luminous Intensities (cd)

Angle	Transverse plane	Axial plane
0°	573.03	573.03
5°	573.02	571.24
10°	572.48	562.34
15°	571.39	547.14
20°	569.48	527.69
25°	566.61	501.13
30°	562.52	469.50
35°	557.61	434.31
40°	551.19	394.74
45°	543.01	352.97
50°	532.92	308.89
55°	520.64	264.52
60°	503.17	218.93
65°	487.49	173.88
70°	468.13	128.97
75°	440.98	87.07
80°	413.02	48.60
85°	383.01	17.93
90°	350.13	0.00
95°	317.53	0.00
100°	281.80	0.00
105°	241.83	0.00
110°	101.23	0.00
115°	2.05	0.00
120°	1.64	0.14
125°	0.00	0.00
130°	0.00	0.00
135°	0.00	0.00
140°	0.00	0.00
145°	0.00	0.00
150°	0.00	0.00
155°	0.00	0.00
160°	0.00	0.00
165°	0.00	0.00
170°	0.00	0.00
175°	0.00	0.00
180°	0.00	0.00

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Light Output Ratios Up 0.09
Down 0.71
Total 0.79

Spacing to Height Ratios SHR NOM 1.75
SHR MAX 1.81
SHR MAX TRANS 2.34

Utilisation Factors UF(F) Standard Presentation SHR NOM = 1.75

Room Reflectances			Room Index									
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
.70	.50	.20	N/A	.46	.52	.56	.61	.65	.68	.72	.75	
	.30		N/A	.40	.45	.49	.56	.60	.63	.68	.71	
	.10		N/A	.35	.40	.44	.51	.55	.59	.64	.68	
.50	.50	.20	N/A	.44	.49	.52	.58	.61	.64	.67	.70	
	.30		N/A	.38	.43	.47	.53	.57	.60	.64	.67	
	.10		N/A	.34	.39	.43	.49	.53	.56	.61	.64	
.30	.50	.20	N/A	.41	.46	.49	.54	.57	.60	.63	.65	
	.30		N/A	.36	.41	.45	.50	.54	.56	.60	.63	
	.10		N/A	.33	.37	.41	.46	.50	.53	.58	.60	
.00	.00	.00	N/A	.30	.34	.37	.42	.46	.48	.52	.55	
BZ Class			N/A	6	6	6	6	6	6	6	6	

CIE Flux code 35 / 63 / 84 / 89 / 79

CIE Room Index 0.60 0.80 1.00 1.25 1.50 2.00 2.50 3.00 4.00 5.00 10.0 20.0
CIE DRR 0.23 0.30 0.36 0.42 0.48 0.56 0.62 0.66 0.72 0.75 0.82 0.86
CIE class 7 / 7 / 7 / 7 / 7 / 7 / 7 / 7 / 7 / 8 / 8 / 10

Flux Fraction Ratio 0.12
DIN Class 0.79 B

Calculated in accordance with CIBSE Technical Memorandum No. 5 1980

In accordance with TM5, this UF table is valid for values of SHR from 0.5 below SHR NOM to 0.5 above SHR NOM. SHR MAX is a separate limitation.

Reflectances given in the UF table are the effective reflectances of the ceiling cavity, walls and floor cavity, and must be determined for the actual room in which the luminaire will be used.

UF(F), UF(W), and UF(C) for 0% reflectance of the room surfaces are equivalent to DF(F), DF(W) and DF(C) respectively.

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with opal cover
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Lamp description 35W/840 HE Osram Lumilux
Lamp lumen output 3,300 lm
Lamp quantity 1

Angle Aspect Factors

	Parallel plane	Perpendicular plane
0°	0.000	0.000
5°	0.087	0.004
10°	0.173	0.015
15°	0.255	0.033
20°	0.333	0.058
25°	0.405	0.088
30°	0.471	0.122
35°	0.529	0.159
40°	0.579	0.197
45°	0.621	0.236
50°	0.655	0.273
55°	0.682	0.308
60°	0.701	0.339
65°	0.715	0.365
70°	0.724	0.386
75°	0.729	0.402
80°	0.731	0.412
85°	0.732	0.417
90°	0.732	0.419

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Lamp lumen output	3,300 lm
Lamp quantity	1

Zonal Flux Calculations

Angles	Individual	Cumulative
0° - 5°	0.5%	0.5%
5° - 10°	1.6%	2.1%
10° - 15°	2.6%	4.6%
15° - 20°	3.5%	8.1%
20° - 25°	4.3%	12.5%
25° - 30°	5.1%	17.6%
30° - 35°	5.7%	23.3%
35° - 40°	6.2%	29.5%
40° - 45°	6.5%	36.0%
45° - 50°	6.8%	42.8%
50° - 55°	6.8%	49.6%
55° - 60°	6.8%	56.4%
60° - 65°	6.6%	62.9%
65° - 70°	6.2%	69.2%
70° - 75°	5.8%	75.0%
75° - 80°	5.3%	80.3%
80° - 85°	4.8%	85.1%
85° - 90°	4.2%	89.3%
90° - 95°	3.7%	93.0%
95° - 100°	3.1%	96.2%
100° - 105°	2.4%	98.5%
105° - 110°	1.2%	99.7%
110° - 115°	0.2%	100.0%
115° - 120°	0.0%	100.0%
120° - 125°	0.0%	100.0%
125° - 130°	0.0%	100.0%
130° - 135°	0.0%	100.0%
135° - 140°	0.0%	100.0%
140° - 145°	0.0%	100.0%
145° - 150°	0.0%	100.0%
150° - 155°	0.0%	100.0%
155° - 160°	0.0%	100.0%
160° - 165°	0.0%	100.0%
165° - 170°	0.0%	100.0%
170° - 175°	0.0%	100.0%
175° - 180°	0.0%	100.0%

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Averaged Luminance Values (cd/m²)

Elevation(°)	Azimuth(°)						
	0.0°	30.0°	60.0°	90.0°	120.0°	150.0°	180.0°
45°	6942	6679	6188	6769	6188	6679	6942
50°	7044	6705	6005	6516	6005	6705	7044
55°	7180	6759	5837	6253	5837	6759	7180
60°	7313	6824	5678	5937	5678	6824	7313
65°	7548	6949	5519	5579	5519	6949	7548
70°	7818	7123	5417	5113	5417	7123	7818
75°	8061	7332	5390	4562	5389	7332	8061
80°	8408	7607	5405	3795	5405	7607	8408
85°	8874	8001	5599	2790	5599	8001	8874
	180.0°	210.0°	240.0°	270.0°	300.0°	330.0°	0.0°
45°	6942	6679	6188	6769	6188	6679	6942
50°	7044	6705	6005	6516	6005	6705	7044
55°	7180	6759	5837	6253	5837	6759	7180
60°	7313	6824	5678	5937	5678	6824	7313
65°	7548	6949	5519	5579	5519	6949	7548
70°	7818	7123	5417	5113	5417	7123	7818
75°	8061	7332	5390	4562	5389	7332	8061
80°	8408	7607	5405	3795	5405	7607	8408
85°	8874	8001	5599	2790	5599	8001	8874

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Luminaire Range

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Luminaire catalog No.

MT50 SC 35W

Luminaire description

linear cylindrical luminaire
with opal cover

data derived from range test series

Lamp description

35W/840 HE Osram Lumilux

Lamp lumen output

3,300 lm

Lamp quantity

1

Non averaged Luminance Values (cd/m²)

Elevation(°)

Azimuth(°)

	0.0°	30.0°	60.0°	90.0°	120.0°	150.0°	180.0°
45°	6889	6672	6239	6849	6234	6739	6995
50°	6982	6698	6068	6591	6069	6795	7106
55°	7115	6748	5909	6360	5897	6847	7246
60°	7204	6833	5758	6046	5731	6927	7421
65°	7467	6912	5602	5699	5592	7051	7628
70°	7754	7131	5514	5225	5479	7225	7883
75°	7957	7356	5478	4703	5492	7436	8165
80°	8289	7633	5531	4006	5462	7732	8527
85°	8730	8039	5761	3014	5646	8144	9017
	180.0°	210.0°	240.0°	270.0°	300.0°	330.0°	0.0°
45°	6995	6700	6184	6688	6095	6606	6889
50°	7106	6728	5995	6441	5887	6599	6982
55°	7246	6788	5830	6146	5713	6652	7115
60°	7421	6837	5676	5828	5548	6700	7204
65°	7628	7013	5533	5458	5349	6818	7467
70°	7883	7178	5434	5001	5240	6958	7754
75°	8165	7404	5407	4420	5182	7130	7957
80°	8527	7701	5435	3584	5193	7361	8289
85°	9017	8070	5662	2565	5326	7750	8730

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data derived from range test series
Lamp description 35W/840 HE Osram Lumilux
Lamp lumen output 3,300 lm
Lamp quantity 1

Averaged Luminance Values (cd/m²/klm)

Elevation(°)	Azimuth(°)						
	0.0°	30.0°	60.0°	90.0°	120.0°	150.0°	180.0°
45°	2104	2024	1875	2051	1875	2024	2104
50°	2135	2032	1820	1974	1820	2032	2135
55°	2176	2048	1769	1895	1769	2048	2176
60°	2216	2068	1721	1799	1721	2068	2216
65°	2287	2106	1672	1691	1672	2106	2287
70°	2369	2159	1641	1549	1641	2159	2369
75°	2443	2222	1633	1382	1633	2222	2443
80°	2548	2305	1638	1150	1638	2305	2548
85°	2689	2424	1697	845	1697	2424	2689
	180.0°	210.0°	240.0°	270.0°	300.0°	330.0°	0.0°
45°	2104	2024	1875	2051	1875	2024	2104
50°	2135	2032	1820	1974	1820	2032	2135
55°	2176	2048	1769	1895	1769	2048	2176
60°	2216	2068	1721	1799	1721	2068	2216
65°	2287	2106	1672	1691	1672	2106	2287
70°	2369	2159	1641	1549	1641	2159	2369
75°	2443	2222	1633	1382	1633	2222	2443
80°	2548	2305	1638	1150	1638	2305	2548
85°	2689	2424	1697	845	1697	2424	2689

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Customer

Encapsulite International Ltd.

Luminaire Range

MT50 IP68

Luminaire catalog No.

MT50 SC 35W

Luminaire description

linear cylindrical luminaire
with opal cover

data derived from range test series

Lamp description

35W/840 HE Osram Lumilux

Lamp lumen output

3,300 lm

Lamp quantity

1

Non averaged Luminance Values (cd/m²/klm)

Elevation(°)

Azimuth(°)

	0.0°	30.0°	60.0°	90.0°	120.0°	150.0°	180.0°
45°	2088	2022	1891	2076	1889	2042	2120
50°	2116	2030	1839	1997	1839	2059	2153
55°	2156	2045	1791	1927	1787	2075	2196
60°	2183	2070	1745	1832	1737	2099	2249
65°	2263	2095	1698	1727	1694	2137	2312
70°	2350	2161	1671	1583	1660	2190	2389
75°	2411	2229	1660	1425	1664	2253	2474
80°	2512	2313	1676	1214	1655	2343	2584
85°	2646	2436	1746	913	1711	2468	2732
	180.0°	210.0°	240.0°	270.0°	300.0°	330.0°	0.0°
45°	2120	2030	1874	2027	1847	2002	2088
50°	2153	2039	1817	1952	1784	2000	2116
55°	2196	2057	1767	1862	1731	2016	2156
60°	2249	2072	1720	1766	1681	2030	2183
65°	2312	2125	1677	1654	1621	2066	2263
70°	2389	2175	1647	1515	1588	2109	2350
75°	2474	2244	1638	1339	1570	2161	2411
80°	2584	2334	1647	1086	1574	2231	2512
85°	2732	2446	1716	777	1614	2348	2646

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Customer Encapsulite International Ltd.
Luminaire Range MT50 IP68
Luminaire catalog No. MT50 SC 35W
Luminaire description linear cylindrical luminaire
with opal cover
data derived from range test series
Lamp description 35W/840 HE Osram Lumilux
Lamp lumen output 3,300 lm
Lamp quantity 1

Maximum Non averaged Luminance Values (cd/m²)

Elevation(°)

Maximum Azimuth Angle

45°	6995	180°
50°	7106	180°
55°	7246	180°
60°	7421	180°
65°	7628	180°
70°	7883	180°
75°	8165	180°
80°	8527	180°
85°	9017	180°

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Lamp description 35W/840 HE Osram Lumilux
Lamp lumen output 3,300 lm
Lamp quantity 1

VDT Luminance Information

BS EN 12464 (2002) / CIBSE LG7 (2005) / CIBSE LG3 (2001)

Permitted Usage according to Screen Type and Luminance Limit Angle	Limiting luminance (cd/m ²)	Use permitted at Luminance Limit Angle(°)	
		55°	65°
Screen Type III (No screen treatment) used with some negative polarity software	200	NO	NO
Screen Type I and II (Good or moderate screen treatment) used with some negative polarity software	500	NO	NO
Screen Type III (No screen treatment) used with only positive polarity software	1000	NO	NO
Screen Type I and II (Good or moderate screen treatment) used with only positive polarity software	1500	NO	NO

VDT Luminance Information

BS EN 12464 (2011) / CIBSE LG7 (2012)

Permitted Usage according to Screen Type and Luminance Limit Angle	Limiting luminance (cd/m ²)	Use permitted at Luminance Limit Angle(°)	
		55°	65°
Medium luminance screen (L <= 200 cdm ²) Case B negative polarity and/or higher requirements	1000	-	NO
Medium luminance screen (L <= 200 cdm ²) Case A positive polarity and normal requirements	1500	-	NO
High luminance screen (L > 200 cd/m ²) Case B negative polarity and/or higher requirements	1500	-	NO
High luminance screen (L > 200 cd/m ²) Case A positive polarity and normal requirements	3000	-	NO

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Customer

Encapsulite International Ltd.

Luminaire Range

MT50 IP68

Luminaire catalog No.

MT50 SC 35W

Luminaire description

linear cylindrical luminaire
with opal cover

data derived from range test series

Lamp description

35W/840 HE Osram Lumilux

Lamp lumen output

3,300 lm

Lamp quantity

1

Uncorrected Glare Indices

Reflectance of

Ceiling	.70	.70	.50	.50	.30	.70	.70	.50	.50	.30
Wall	.50	.30	.50	.30	.30	.50	.30	.50	.30	.30
Floor Cavity	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20

Room dimension

Viewed crosswise

Viewed endwise

X Y

0°

90°

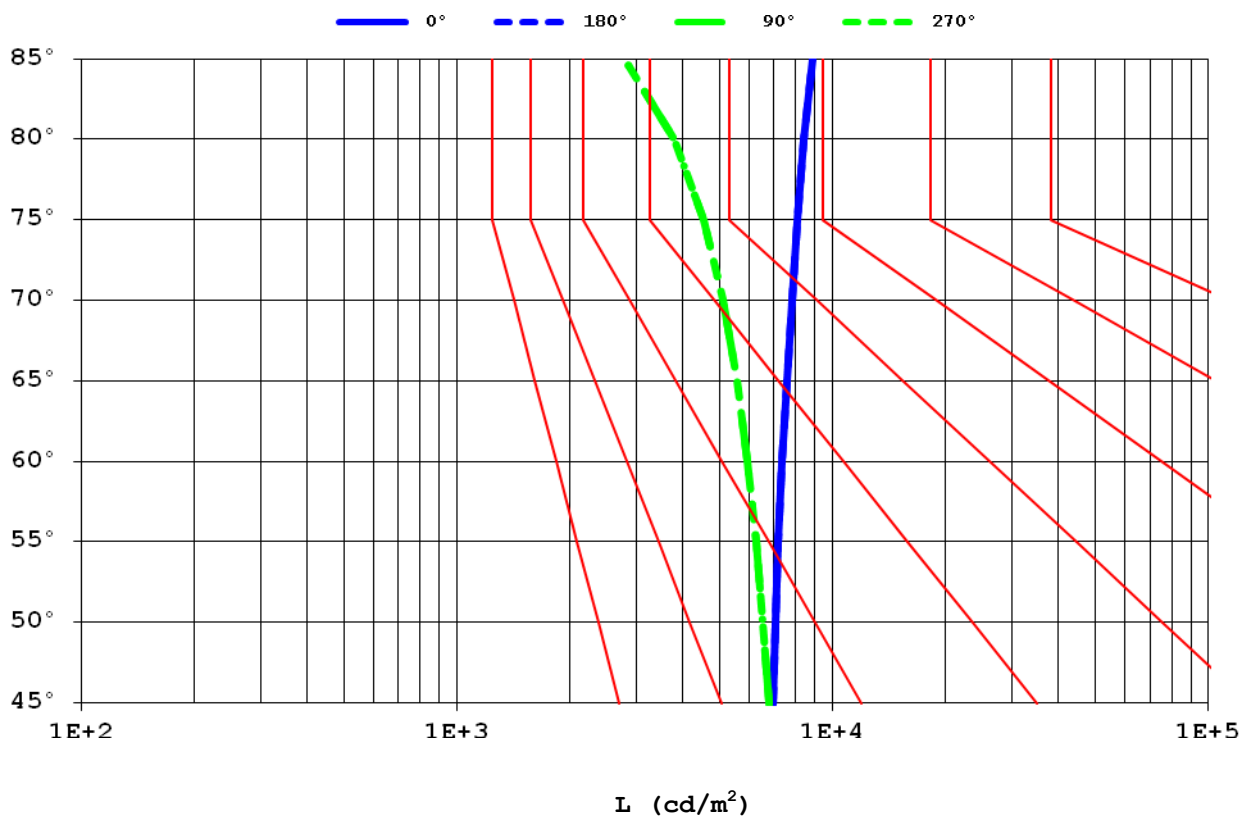
2H 2H	14.3	16.2	14.9	16.9	17.6	10.8	12.7	11.4	13.4	14.1
3H	17.6	19.4	18.3	20.1	20.8	12.8	14.5	13.4	15.2	16.0
4H	19.3	21.0	19.9	21.6	22.4	13.5	15.2	14.2	15.9	16.6
6H	21.0	22.6	21.7	23.3	24.1	14.0	15.6	14.7	16.3	17.1
8H	21.9	23.4	22.6	24.1	24.9	14.2	15.7	14.9	16.4	17.2
12H	22.8	24.3	23.5	25.0	25.8	14.2	15.7	14.9	16.5	17.3
4H 2H	15.2	16.9	15.8	17.5	18.3	12.8	14.5	13.5	15.2	16.0
3H	18.9	20.4	19.6	21.1	21.9	15.1	16.6	15.8	17.3	18.1
4H	20.8	22.1	21.5	22.9	23.7	16.0	17.4	16.8	18.1	19.0
6H	22.7	23.9	23.5	24.7	25.6	16.7	18.0	17.5	18.7	19.6
8H	23.7	24.9	24.5	25.7	26.5	17.0	18.2	17.8	18.9	19.8
12H	24.8	25.9	25.6	26.7	27.6	17.2	18.3	18.0	19.0	19.9
8H 4H	21.4	22.6	22.2	23.3	24.2	18.0	19.2	18.8	20.0	20.8
6H	23.6	24.6	24.4	25.4	26.3	19.0	20.0	19.8	20.8	21.7
8H	25.0	25.8	25.8	26.7	27.6	19.6	20.4	20.4	21.3	22.2
12H	26.3	27.1	27.1	27.9	28.8	19.9	20.7	20.7	21.5	22.4
12H 4H	21.5	22.6	22.3	23.4	24.3	18.9	20.0	19.7	20.8	21.7
6H	23.9	24.8	24.8	25.7	26.6	20.2	21.1	21.0	21.9	22.8
8H	25.3	26.1	26.1	26.9	27.8	20.8	21.6	21.6	22.4	23.3

Calculated in accordance with CIBSE Technical Memorandum No. 10 1985

Customer Encapsulite International Ltd.
Luminaire Range MT50 IP68
Luminaire catalog No. MT50 SC 35W
Luminaire description linear cylindrical luminaire
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Lamp description 35W/840 HE Osram Lumilux
Lamp lumen output 3,300 lm
Lamp quantity 1

CIE Glare Limiting (Soellnor) Diagram

Glare Quality Rating Class		Service values of illuminance							
		a	b	c	d	e	f	g	h
1.15	A	2000	1000	500	<300				
1.50	B		2000	1000	500	<300			
1.85	C			2000	1000	500	<300		
2.20	D				2000	1000	500	<300	
2.55	E					2000	1000	500	<300



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Customer	Encapsulite International Ltd.
Luminaire Range	MT50 IP68
Luminaire catalog No.	MT50 SC 35W
Luminaire description	linear cylindrical luminaire with opal cover data derived from range test series
Lamp description	35W/840 HE Osram Lumilux
Lamp lumen output	3,300 lm
Lamp quantity	1

Comments

It is recommended that point to point calculations are used when designing lighting schemes in order to accurately predict uniformity. Data files in various formats are available to allow easy transfer of this data to a computer. Please enquire for details.

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Customer Encapsulite International Ltd.
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Luminaire catalog No. MT50 SC 35W
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Lamp description 35W/840 HE Osram Lumilux
Lamp lumen output 3,300 lm
Lamp quantity 1

Quick Design Table

Based on: reflectances of Ceiling = 0.5
Wall = 0.5
Floor = 0.2
Room Index = 2.00
lamp output = 3300 lumens
ballast lumen factor = 1.00

To achieve an Illuminance of 100 lux

Surface Area (m ²)	20	30	40	50	80	100	200	300	500
No. of luminaires	1.1	1.6	2.1	2.6	4.2	5.3	10.5	15.8	26.3