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Photometric Report

Job / Report / Date 42 / 10692 / 10692-14a / 2013.06.17

Customer	Encapsulite International Ltd.
Luminaire Range	MT70 IP68
Luminaire catalog No.	MT70 70W
Luminaire description	linear cylindrical luminaire with clear cover data derived from range test series
Lamp description	70W/840 F T8 Sylvania Luxline Plus
Lamp lumen output	6,200 lm
Lamp quantity	1

Photometric Report

- Pictures
- Luminaire information
- Report basis
- Polar Curves
- HV Distribution Curves
- Principal Axes Intensities
- Light Output Ratios & CIBSE TM5 Results
- Aspect Factors
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- VDI Luminance table
- CIBSE TM10 Glare Index Results
- CIE Glare Limiting (Soellnor) Diagram
- Comments
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Job / Report / Date

42 / 10692 / 10692-14a / 2013.06.17

Customer

Encapsulite International Ltd.

Luminaire Range

MT70 IP68

Luminaire catalog No.

MT70 70W

Luminaire description

linear cylindrical luminaire
with clear cover

Lamp description

data derived from range test series

Lamp lumen output

70W/840 F T8 Sylvania Luxline Plus
6,200 lm

Lamp quantity

1



Helvar
www.helvar.com

ELECTRONIC BALLAST EL1x70s
220-240V 0/50-60Hz



T8: 70W 0.30-0.28A λ 0.98
ta = -20...+50°C

SYLVANIA
LUXLINE PLUS

F70W / 840 -T8

COOL WHITE DE LUXE

www.havells-sylvania.com

MADE IN GERMANY



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Luminaire physical characteristics

Overall Dimensions

Length	1875mm
Width	70mm
Height	70mm

Visible Dimensions when installed

Length	1875mm
Width	70mm
Height	70mm

Luminous Dimensions

Length	1810mm
Width	70mm
Height 0°	35mm
Height 90°	0mm
Height 180°	35mm
Height 270°	0mm

Luminous Areas

Base	0.1267m ²
Sides	0.06335m 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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Lamp lumen output 6,200 lm
Lamp quantity 1

Electrical input & Photometric output characteristics

Control gear

1 * Helvar EL1x70s

Ballast Voltage Range 220-240V
Ballast Current Range 0.28-0.30A
Ballast Power Factor 0.98

Sample	Voltage (V)	Current (mA)	Power Factor	Power (W)	VA	Output (lm)	% of Nominal	Efficacy (lm/W)
Luminaire	230.0	264.6	0.991	60.3	60.9	4,344	70%	72.0
Lamp	230.0	273.7	0.992	62.4	62.9	5,092	82%	81.6

Electrical characteristics at 25°C

Ballast Nominal	230V	289.6mA	0.98PF	65.3W	66.6VA
Lamp Nominal	230V	304.3mA	1.00PF	70.0W	70.0VA
Luminaire	230V	264.6mA	0.99PF	60.3W	60.9VA
Lamp	230V	273.7mA	0.99PF	62.4W	62.9VA

Measured Electrical characteristics relative to Ballast Nominal

Luminaire	Current	91%	Power	92%	VA	91%
Lamp	Current	95%	Power	96%	VA	95%

Measured Electrical characteristics relative to Lamp Nominal

Luminaire	Current	87%	Power	86%	VA	87%
Lamp	Current	90%	Power	89%	VA	90%

Lumen Output figures used in this report (lumens)

Nominal Lamp Output	6,200
Measured Luminaire Output	4,344
Measured Lamp Output	5,092

Measured Lumen Output characteristics relative to Lamp Nominal Total

Luminaire	70%
Lamp	82%

Measured luminous efficacy at 25°C

Luminaire	72.0 lm/W
Lamp	81.6 lm/W

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The light output ratio of the luminaire was measured as 0.853 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 4,344 lumens at 25°C.
This figure can be related to the nominal lumen output of the lamp quoted by the manufacturer of 6,200 lumens, to give a nominal light output ratio of 0.701.

The measured lumen output of the lamp was 5,092 lumens at 25°C.
This figure can be related to the nominal lumen output of the lamp quoted by the manufacturer of 6,200 lumens, to give a nominal BLF of 0.821.

For lighting design calculations:

A light output ratio of 1 should be used in conjunction with the measured lumen output of the luminaire of 4,344 lumens.

or

The nominal light output ratio of 0.701 should be used in conjunction with the nominal lumen output of the lamp of 6,200 lumens.

or

The measured light output ratio of 0.853 should be used in conjunction with the measured lumen output of the lamp of 5,092 lumens.

or

The measured light output ratio of 0.853 should be used in conjunction with the nominal lumen output of the lamp of 6,200 lumens and the nominal BLF of 0.821.

This report is based on the following parameters:

The Light Output Ratio is the nominal value of 0.701.

The lamp output is the nominal value of 6,200 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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Lamp description

70W/840 F T8 Sylvania Luxline Plus

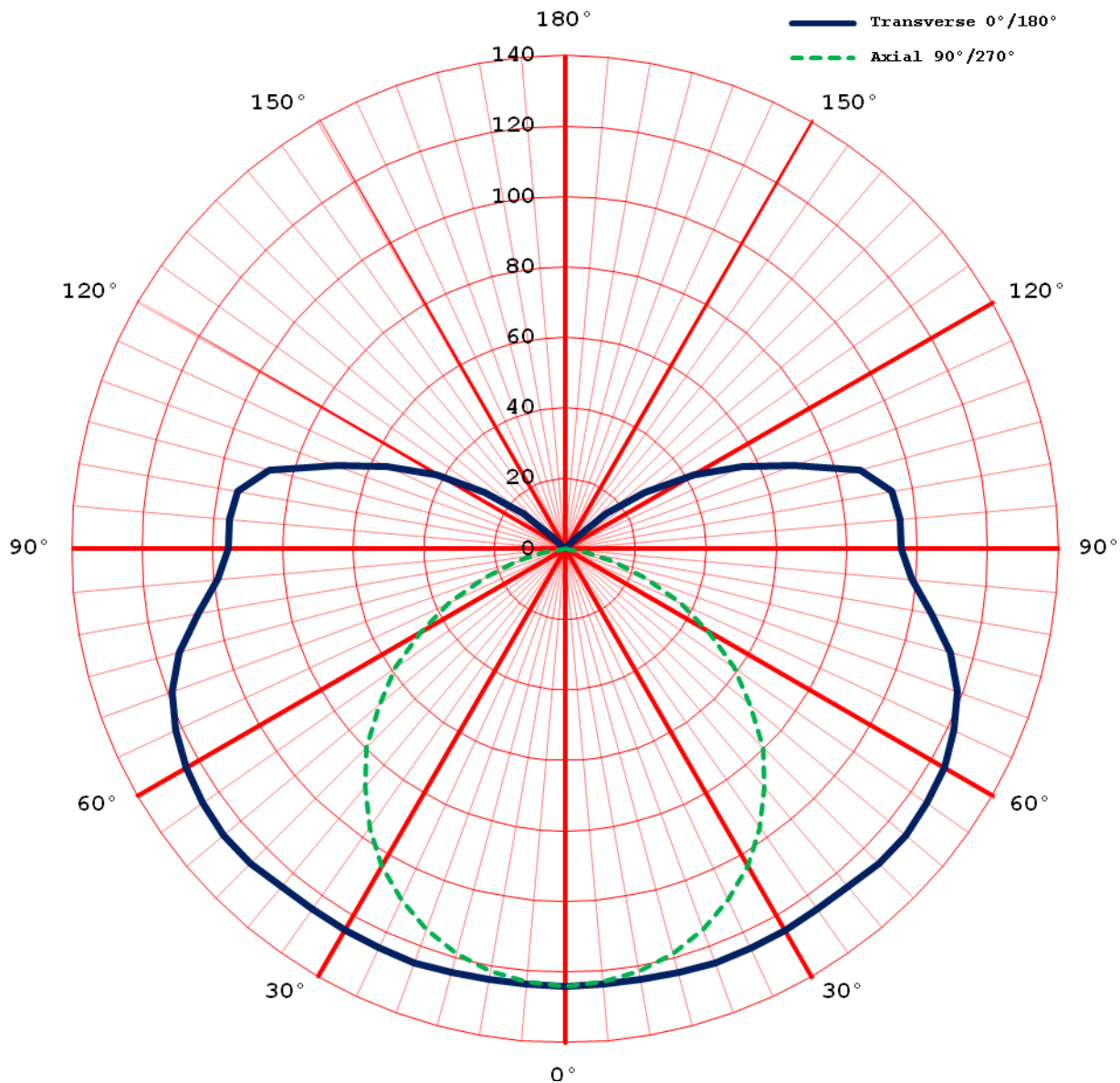
Lamp lumen output

6,200 lm

Lamp quantity

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Average Principal Axes Luminous Intensities (cd/klm)



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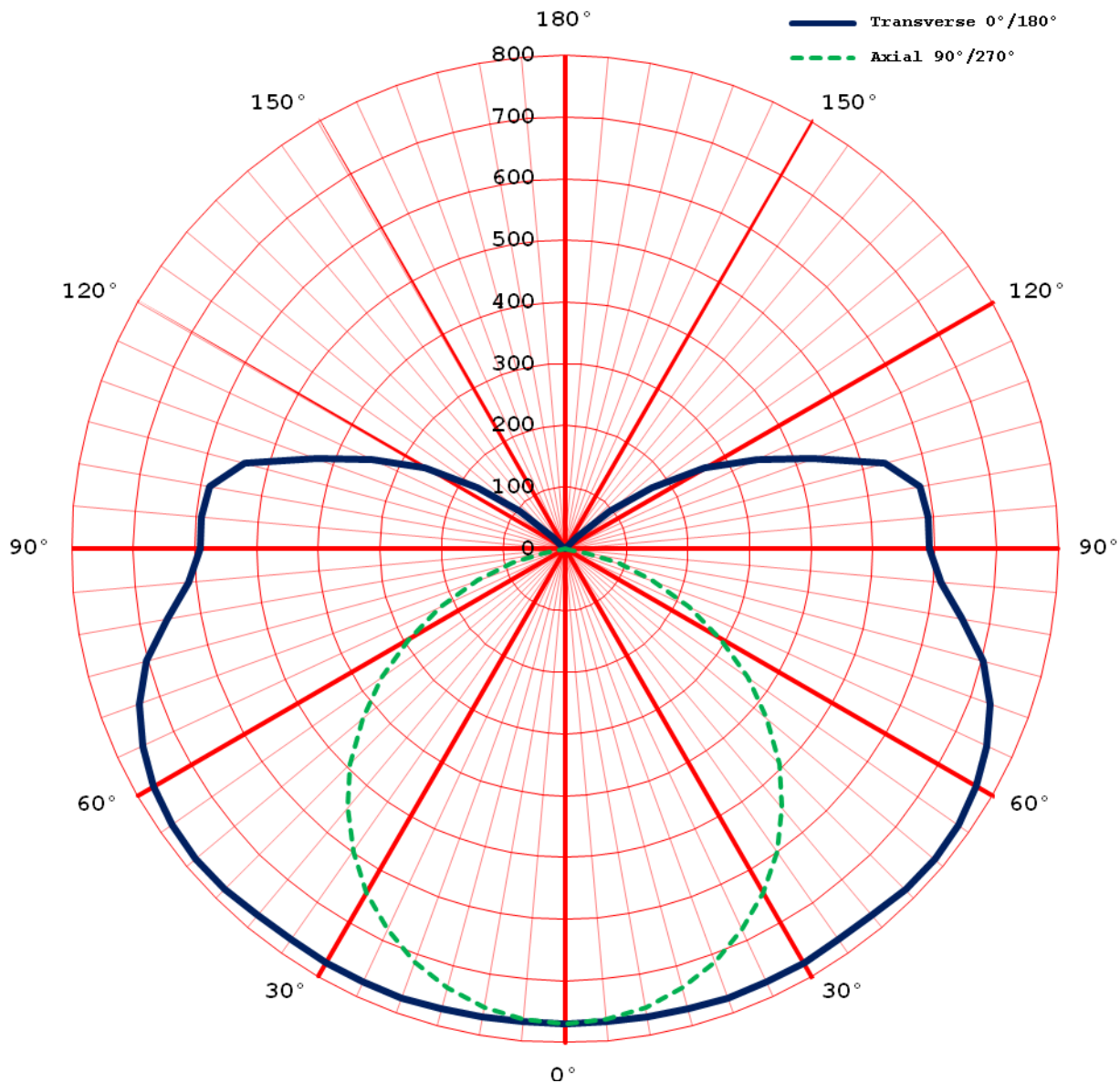
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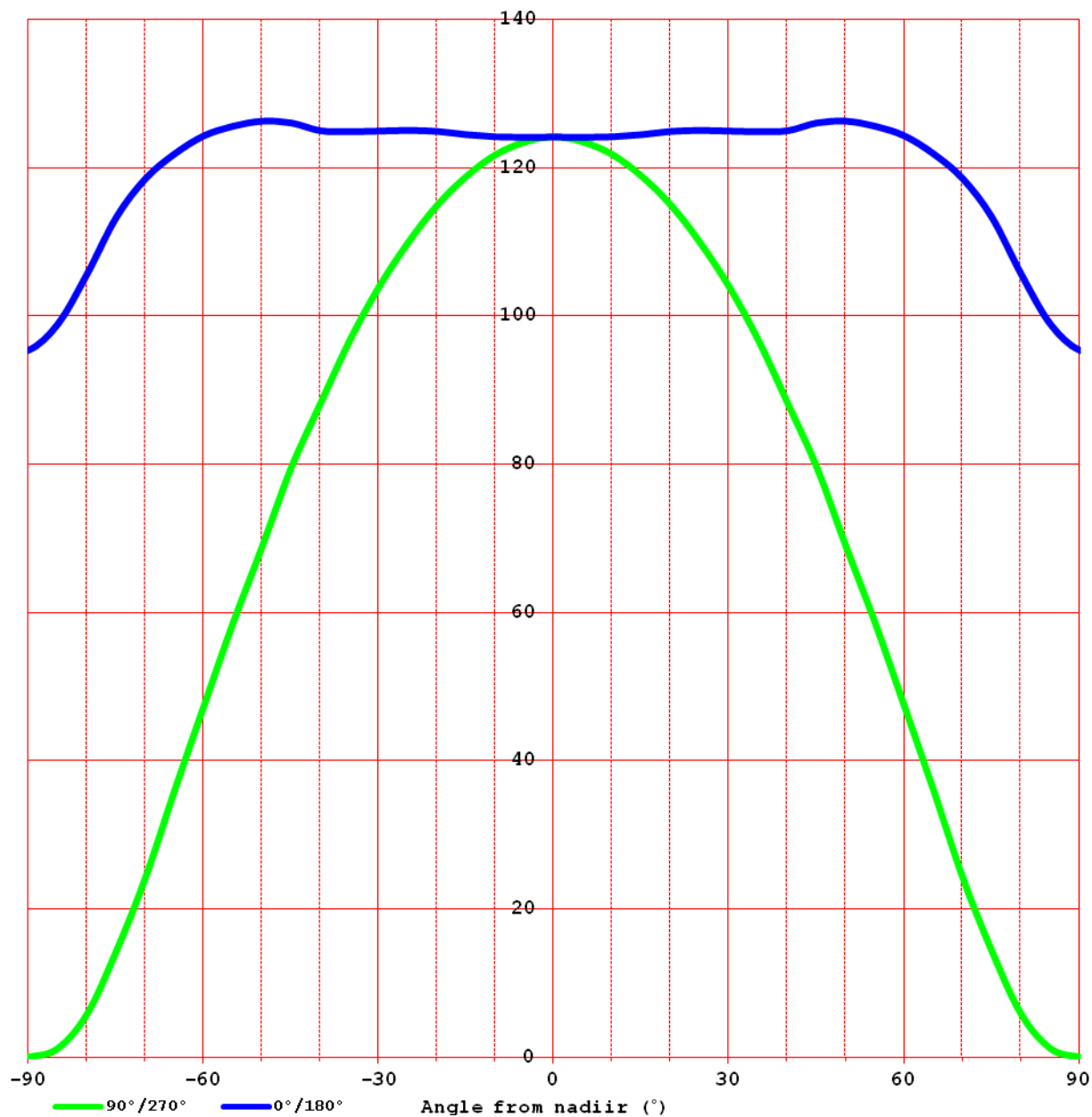
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Lamp quantity

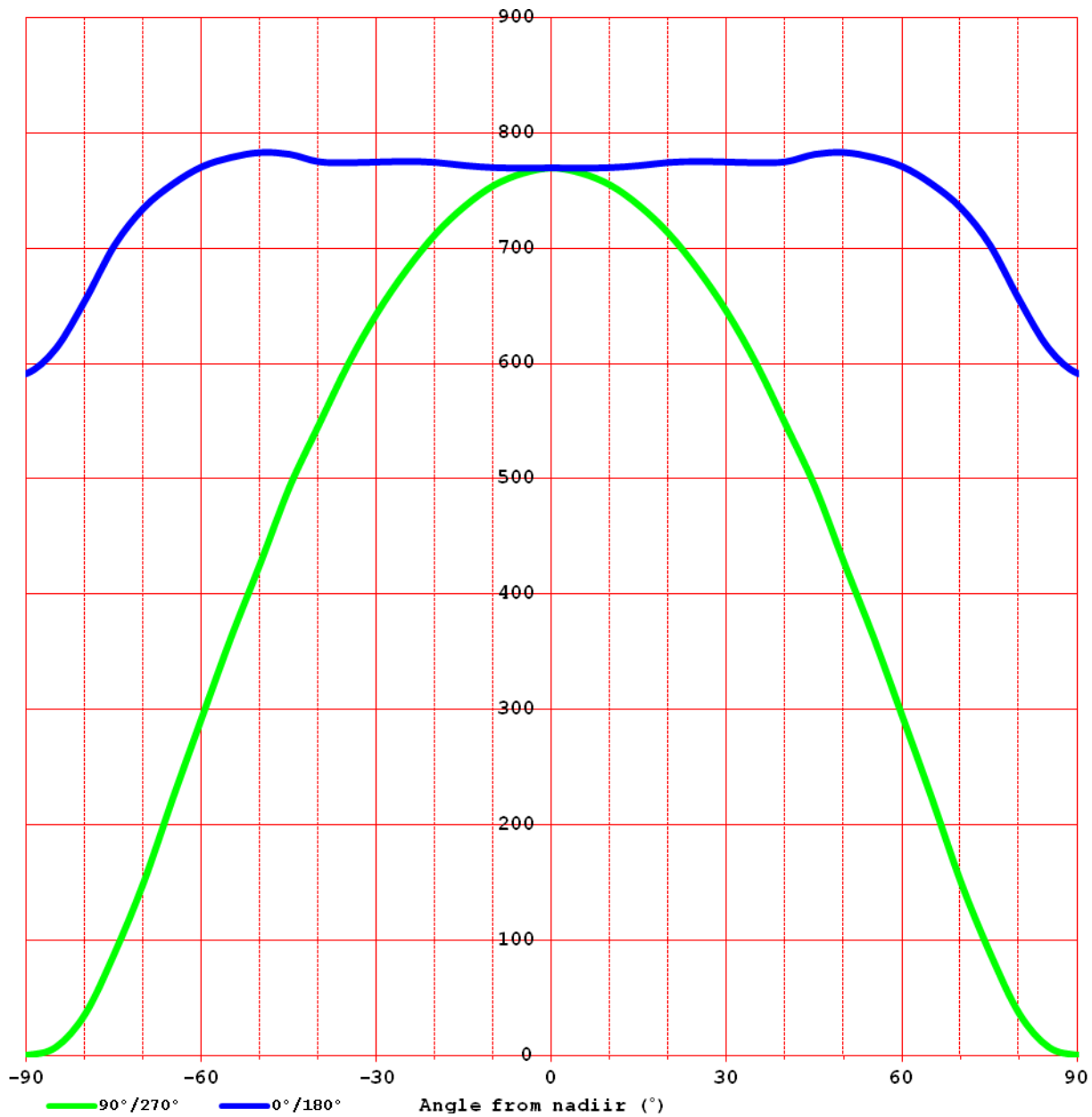
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Average Luminous Intensities (cd/Klm)

Angle	Transverse plane	Axial plane
0°	124.11	124.11
5°	124.07	123.39
10°	124.16	121.69
15°	124.44	118.77
20°	124.89	114.89
25°	125.01	109.83
30°	124.93	103.84
35°	124.85	96.64
40°	124.97	88.18
45°	126.02	79.52
50°	126.26	68.84
55°	125.58	58.52
60°	124.29	47.31
65°	121.87	35.98
70°	118.51	24.16
75°	113.30	14.24
80°	105.67	5.79
85°	98.92	1.13
90°	95.40	0.00
95°	95.48	0.00
100°	94.40	0.00
105°	86.70	0.00
110°	68.95	0.00
115°	55.62	0.00
120°	42.20	0.00
125°	27.93	0.00
130°	15.53	0.00
135°	4.41	0.00
140°	0.61	0.00
145°	0.48	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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Average Luminous Intensities (cd)

Angle	Transverse plane	Axial plane
0°	769.51	769.51
5°	769.26	764.99
10°	769.78	754.45
15°	771.54	736.39
20°	774.30	712.30
25°	775.06	680.94
30°	774.57	643.80
35°	774.07	599.14
40°	774.82	546.71
45°	781.33	493.02
50°	782.84	426.78
55°	778.59	362.80
60°	770.58	293.30
65°	755.56	223.05
70°	734.78	149.79
75°	702.46	88.32
80°	655.13	35.88
85°	613.27	7.03
90°	591.46	0.00
95°	591.96	0.00
100°	585.25	0.00
105°	537.55	0.00
110°	427.47	0.00
115°	344.82	0.00
120°	261.66	0.00
125°	173.20	0.00
130°	96.27	0.00
135°	27.33	0.00
140°	3.76	0.00
145°	3.00	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 0.14
Down 0.56
Total 0.70

Spacing to Height Ratios SHR NOM 1.75
SHR MAX 1.86
SHR MAX TRANS 2.51

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	.39	.43	.47	.52	.55	.58	.61	.64	
	.30		N/A	.33	.37	.41	.47	.51	.53	.58	.60	
	.10		N/A	.28	.33	.37	.42	.46	.50	.54	.57	
.50	.50	.20	N/A	.36	.40	.43	.47	.51	.53	.56	.58	
	.30		N/A	.31	.35	.38	.43	.47	.49	.53	.55	
	.10		N/A	.27	.31	.34	.40	.43	.46	.50	.53	
.30	.50	.20	N/A	.33	.36	.39	.43	.46	.48	.51	.53	
	.30		N/A	.29	.32	.35	.40	.43	.45	.49	.51	
	.10		N/A	.25	.29	.32	.37	.40	.43	.46	.49	
.00	.00	.00	N/A	.22	.25	.28	.32	.35	.37	.40	.43	
BZ Class			N/A	6	6	6	6	6	6	6	6	

CIE Flux code 32 / 60 / 83 / 80 / 70

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 0.21 0.28 0.34 0.40 0.46 0.54 0.60 0.64 0.69 0.72 0.79 0.81
CIE class 8 / 8 / 8 / 8 / 8 / 8 / 8 / 8 / 8 / 8 / 9 / -

Flux Fraction Ratio 0.25
DIN Class 0.70 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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Lamp quantity 1

Angle Aspect Factors

	Parallel plane	Perpendicular plane
0°	0.000	0.000
5°	0.087	0.004
10°	0.172	0.015
15°	0.255	0.033
20°	0.333	0.058
25°	0.406	0.088
30°	0.473	0.123
35°	0.532	0.161
40°	0.584	0.200
45°	0.627	0.240
50°	0.662	0.279
55°	0.690	0.314
60°	0.710	0.345
65°	0.723	0.371
70°	0.731	0.391
75°	0.735	0.404
80°	0.737	0.411
85°	0.737	0.413
90°	0.737	0.413

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Lamp description

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Lamp lumen output

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Lamp quantity

6,200 lm

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Zonal Flux Calculations

Angles	Individual	Cumulative
0° - 5°	0.4%	0.4%
5° - 10°	1.3%	1.7%
10° - 15°	2.1%	3.8%
15° - 20°	2.9%	6.6%
20° - 25°	3.6%	10.2%
25° - 30°	4.2%	14.4%
30° - 35°	4.8%	19.2%
35° - 40°	5.2%	24.4%
40° - 45°	5.6%	30.0%
45° - 50°	5.9%	35.9%
50° - 55°	6.1%	42.0%
55° - 60°	6.2%	48.2%
60° - 65°	6.1%	54.3%
65° - 70°	6.0%	60.3%
70° - 75°	5.7%	66.0%
75° - 80°	5.3%	71.2%
80° - 85°	4.7%	75.9%
85° - 90°	4.3%	80.3%
90° - 95°	4.2%	84.5%
95° - 100°	4.0%	88.5%
100° - 105°	3.6%	92.1%
105° - 110°	2.8%	94.9%
110° - 115°	2.1%	97.0%
115° - 120°	1.4%	98.4%
120° - 125°	0.9%	99.3%
125° - 130°	0.5%	99.8%
130° - 135°	0.2%	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°	5814	5626	5203	5503	5203	5626	5814
50°	6023	5815	5141	5240	5141	5815	6023
55°	6250	6011	5110	4992	5110	6011	6250
60°	6519	6225	5162	4630	5162	6225	6519
65°	6809	6484	5292	4166	5292	6484	6809
70°	7143	6806	5358	3457	5358	6806	7143
75°	7474	7144	5479	2693	5479	7144	7474
80°	7763	7434	5513	1631	5513	7434	7763
85°	8271	7861	5584	636	5584	7861	8271
	180.0°	210.0°	240.0°	270.0°	300.0°	330.0°	0.0°
45°	5814	5626	5203	5503	5203	5626	5814
50°	6023	5815	5141	5240	5141	5815	6023
55°	6250	6011	5110	4992	5110	6011	6250
60°	6519	6225	5162	4630	5162	6225	6519
65°	6809	6484	5292	4166	5292	6484	6809
70°	7143	6806	5358	3457	5358	6806	7143
75°	7474	7144	5479	2693	5479	7144	7474
80°	7763	7434	5513	1631	5513	7434	7763
85°	8271	7861	5584	636	5584	7861	8271

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Non averaged Luminance Values (cd/m²)

Elevation(°)

Azimuth(°)

	0.0°	30.0°	60.0°	90.0°	120.0°	150.0°	180.0°
45°	5737	5534	5133	5524	5284	5695	5891
50°	5936	5709	5078	5276	5212	5893	6110
55°	6146	5896	5010	4980	5188	6096	6355
60°	6396	6069	5100	4635	5181	6340	6642
65°	6661	6361	5196	4200	5406	6601	6958
70°	6977	6643	5284	3510	5470	6912	7309
75°	7302	6957	5373	2755	5585	7287	7646
80°	7548	7230	5422	1666	5557	7564	7979
85°	8079	7674	5452	727	5698	8009	8462
	180.0°	210.0°	240.0°	270.0°	300.0°	330.0°	0.0°
45°	5891	5673	5213	5482	5181	5602	5737
50°	6110	5862	5140	5205	5134	5797	5936
55°	6355	6056	5124	5004	5117	5995	6146
60°	6642	6276	5187	4624	5179	6215	6396
65°	6958	6509	5270	4131	5295	6468	6661
70°	7309	6861	5274	3403	5404	6806	6977
75°	7646	7168	5420	2631	5537	7164	7302
80°	7979	7434	5454	1596	5619	7508	7548
85°	8462	7862	5463	545	5724	7901	8079

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Averaged Luminance Values (cd/m²/klm)

Elevation(°)

Azimuth(°)

	0.0°	30.0°	60.0°	90.0°	120.0°	150.0°	180.0°
45°	938	907	839	888	839	907	938
50°	971	938	829	845	829	938	971
55°	1008	969	824	805	824	969	1008
60°	1051	1004	833	747	833	1004	1051
65°	1098	1046	854	672	854	1046	1098
70°	1152	1098	864	558	864	1098	1152
75°	1206	1152	884	434	884	1152	1206
80°	1252	1199	889	263	889	1199	1252
85°	1334	1268	901	103	901	1268	1334
	180.0°	210.0°	240.0°	270.0°	300.0°	330.0°	0.0°
45°	938	907	839	888	839	907	938
50°	971	938	829	845	829	938	971
55°	1008	969	824	805	824	969	1008
60°	1051	1004	833	747	833	1004	1051
65°	1098	1046	854	672	854	1046	1098
70°	1152	1098	864	558	864	1098	1152
75°	1206	1152	884	434	884	1152	1206
80°	1252	1199	889	263	889	1199	1252
85°	1334	1268	901	103	901	1268	1334

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Customer

Encapsulite International Ltd.

Luminaire Range

MT70 IP68

Luminaire catalog No.

MT70 70W

Luminaire description

linear cylindrical luminaire
with clear cover

data derived from range test series

Lamp description

70W/840 F T8 Sylvania Luxline Plus

Lamp lumen output

6,200 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°	925	893	828	891	852	919	950
50°	957	921	819	851	841	950	986
55°	991	951	808	803	837	983	1025
60°	1032	979	823	748	836	1023	1071
65°	1074	1026	838	677	872	1065	1122
70°	1125	1071	852	566	882	1115	1179
75°	1178	1122	867	444	901	1175	1233
80°	1217	1166	875	269	896	1220	1287
85°	1303	1238	879	117	919	1292	1365
	180.0°	210.0°	240.0°	270.0°	300.0°	330.0°	0.0°
45°	950	915	841	884	836	904	925
50°	986	946	829	839	828	935	957
55°	1025	977	826	807	825	967	991
60°	1071	1012	837	746	835	1002	1032
65°	1122	1050	850	666	854	1043	1074
70°	1179	1107	851	549	872	1098	1125
75°	1233	1156	874	424	893	1156	1178
80°	1287	1199	880	257	906	1211	1217
85°	1365	1268	881	88	923	1274	1303

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Customer Encapsulite International Ltd.
Luminaire Range MT70 IP68
Luminaire catalog No. MT70 70W
Luminaire description linear cylindrical luminaire
with clear cover
data derived from range test series
Lamp description 70W/840 F T8 Sylvania Luxline Plus
Lamp lumen output 6,200 lm
Lamp quantity 1

Maximum Non averaged Luminance Values (cd/m²)

Elevation(°)

Maximum Azimuth Angle

45°	5891	180°
50°	6110	180°
55°	6355	180°
60°	6642	180°
65°	6958	180°
70°	7309	180°
75°	7646	180°
80°	7979	180°
85°	8462	180°

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Customer Encapsulite International Ltd.
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Luminaire catalog No. MT70 70W
Luminaire description linear cylindrical luminaire
with clear cover
data derived from range test series
Lamp description 70W/840 F T8 Sylvania Luxline Plus
Lamp lumen output 6,200 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

MT70 IP68

Luminaire catalog No.

MT70 70W

Luminaire description

linear cylindrical luminaire
with clear cover

data derived from range test series

Lamp description

70W/840 F T8 Sylvania Luxline Plus

Lamp lumen output

6,200 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	11.2	12.9	12.0	13.7	14.7	7.4	9.2	8.2	10.0	10.9
3H	14.7	16.3	15.5	17.1	18.1	9.3	10.9	10.1	11.8	12.8
4H	16.4	17.9	17.2	18.7	19.7	10.0	11.5	10.8	12.3	13.3
6H	18.1	19.6	19.0	20.4	21.4	10.4	11.8	11.2	12.7	13.7
8H	19.0	20.4	19.8	21.3	22.3	10.4	11.8	11.3	12.7	13.7
12H	19.9	21.3	20.7	22.1	23.2	10.4	11.8	11.3	12.7	13.7
4H 2H	12.2	13.7	13.0	14.5	15.5	9.7	11.2	10.5	12.1	13.1
3H	16.0	17.3	16.8	18.2	19.2	12.0	13.4	12.9	14.2	15.3
4H	18.0	19.2	18.8	20.1	21.1	13.0	14.2	13.9	15.1	16.2
6H	19.9	21.0	20.8	21.9	23.0	13.6	14.7	14.5	15.6	16.7
8H	20.9	22.0	21.8	22.9	24.0	13.8	14.9	14.7	15.8	16.9
12H	22.0	23.0	22.9	23.9	25.0	13.9	14.9	14.8	15.8	16.9
8H 4H	18.6	19.7	19.5	20.6	21.7	15.2	16.3	16.1	17.2	18.3
6H	20.9	21.8	21.8	22.7	23.8	16.2	17.1	17.1	18.0	19.2
8H	22.2	23.0	23.1	24.0	25.1	16.7	17.5	17.6	18.5	19.6
12H	23.5	24.2	24.5	25.2	26.3	17.0	17.7	17.9	18.7	19.8
12H 4H	18.8	19.7	19.7	20.7	21.8	16.1	17.1	17.1	18.0	19.2
6H	21.2	22.0	22.1	23.0	24.1	17.4	18.2	18.4	19.2	20.3
8H	22.6	23.3	23.5	24.2	25.4	18.0	18.7	19.0	19.7	20.8

Calculated in accordance with CIBSE Technical Memorandum No. 10 1985

Customer

Encapsulite International Ltd.

Luminaire Range

MT70 IP68

Luminaire catalog No.

MT70 70W

Luminaire description

linear cylindrical luminaire
with clear cover

data derived from range test series

Lamp description

70W/840 F T8 Sylvania Luxline Plus

Lamp lumen output

6,200 lm

Lamp quantity

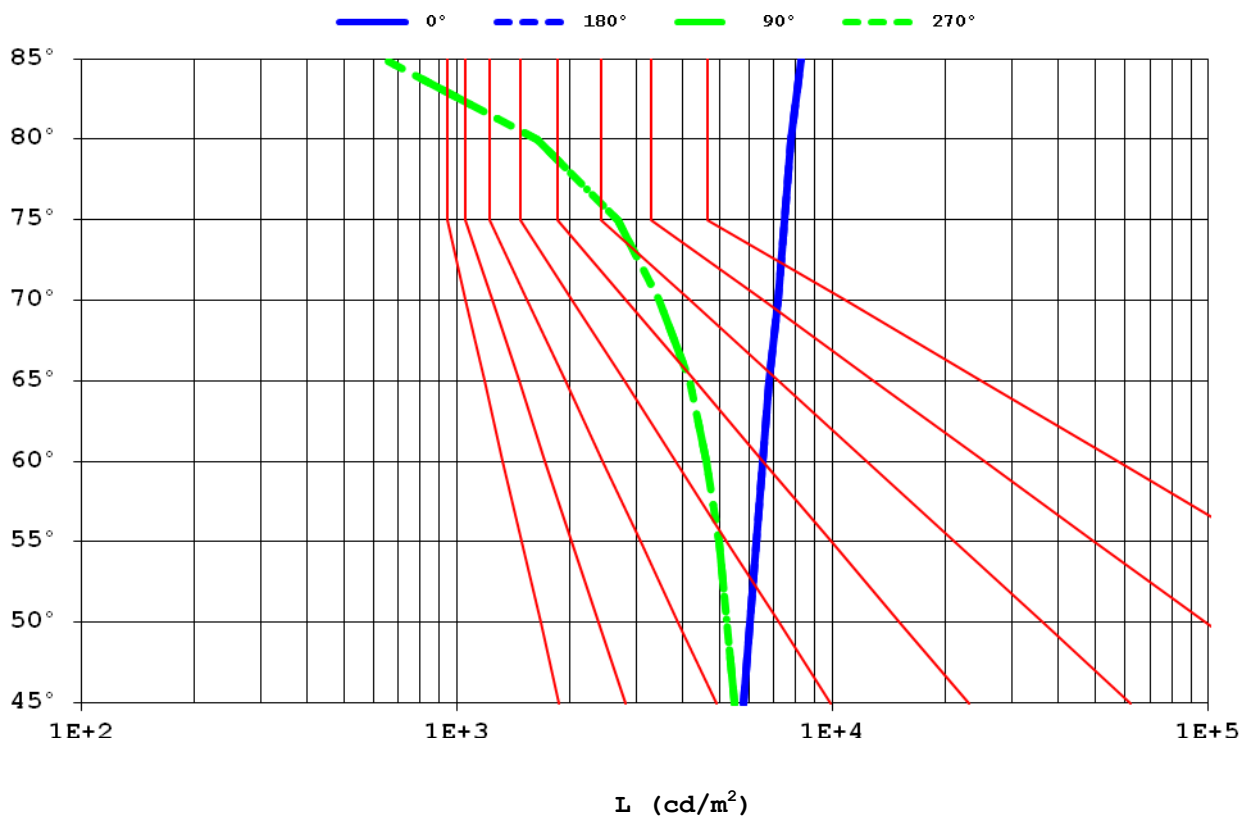
1

CIE Glare Limiting (Soellnor) Diagram

Glare Quality
Rating Class

Service values of illuminance

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
		a	b	c	d	e	f	g	h



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Customer	Encapsulite International Ltd.
Luminaire Range	MT70 IP68
Luminaire catalog No.	MT70 70W
Luminaire description	linear cylindrical luminaire with clear cover data derived from range test series
Lamp description	70W/840 F T8 Sylvania Luxline Plus
Lamp lumen output	6,200 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.
Luminaire Range MT70 IP68
Luminaire catalog No. MT70 70W
Luminaire description linear cylindrical luminaire
with clear cover
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Lamp description 70W/840 F T8 Sylvania Luxline Plus
Lamp lumen output 6,200 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 = 6200 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	0.7	1.0	1.4	1.7	2.7	3.4	6.8	10.2	17.0