



42 Partners Limited

Unit 88 Bizspace Park
Upper Villiers Street
Wolverhampton
WV2 4XB
UK

www.42partners.com

42@42partners.com

T +44 (0) 1902 453650

F +44 (0) 8701 696729

Registered in England: Company Number 3021552
VAT Registration Number: GB 661 1596 34

Photometric Report

Job / Report / Date

42 / 9102 / 9102-11b / 2010.03.26

Customer	Encapsulite International Ltd.
Luminaire Range	Stick-Lite
Luminaire catalog No.	HFI 18W Stick-Lite
Luminaire description	Sealed tubular luminaire with integral T8 fluorescent lamp Single distribution test used for series
Lamp description	18W T8 linear fluorescent
Lamp lumen output	1140lm
No. of lamps in luminaire	1

Photometric Report

- Pictures
- Luminaire information
- Report basis
- Polar Curves
- HV Distribution Curves
- Principal Axes Intensities
- Light Output Ratios & CIBSE TM5 Results
- Aspect Factors
- Luminous intensities
- Zonal Flux Calculations
- Luminance calculations
- VDI Luminance table
- CIBSE TM10 Glare Index Results
- CIE Glare Limiting (Soellnor) Diagram
- Comments
- Quick Design Table

Job / Report / Date

42 / 9102 / 9102-11b / 2010.03.26

Customer

Encapsulite International Ltd.

Luminaire Range

Stick-Lite

Luminaire catalog No.

HFI 18W Stick-Lite

Luminaire description

Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series

Lamp description

18W T8 linear fluorescent

Lamp lumen output

1140lm

No. of lamps in luminaire

1



Job / Report / Date 42 / 9102 / 9102-11b / 2010.03.26

Customer	Encapsulite International Ltd.
Luminaire Range	Stick-Lite
Luminaire catalog No.	HFI 18W Stick-Lite
Luminaire description	Sealed tubular luminaire with integral T8 fluorescent lamp Single distribution test used for series
Lamp description	18W T8 linear fluorescent
Lamp lumen output	1140lm
No. of lamps in luminaire	1

Luminaire physical characteristics

Overall Dimensions

Length	755mm
Width	38mm
Height	38mm

Visible Dimensions when installed

Length	755mm
Width	38mm
Height	38mm

Luminous Dimensions

Length	559mm
Width	35mm
Height 0°	35mm
Height 90°	35mm
Height 180°	35mm
Height 270°	35mm

Luminous Areas

Base	0.019565m ²
Sides	0.019565m ² (0°/180° azimuth)
Ends	0.001225m ² (90°/270° azimuth)

Job / Report / Date 42 / 9102 / 9102-11b / 2010.03.26

Customer Encapsulite International Ltd.

Luminaire Range Stick-Lite

Luminaire catalog No. HFI 18W Stick-Lite

Luminaire description Sealed tubular luminaire
 with integral T8 fluorescent lamp
 Single distribution test used for series

Lamp description 18W T8 linear fluorescent

Lamp lumen output 1140lm

No. of lamps in luminaire 1

Report Basis

All measurements taken in accordance with BS5225 / EN13032 / CIE24 / CIE27 / CIE121.

Control gear

1 * integral ballast
 Ballast Voltage Range 220-240V

Electrical characteristics at 25°C

Luminaire	230V	144.7mA	0.56PF	18.6W	33.6VA
-----------	------	---------	--------	-------	--------

Lumen Output figures used in this report (lumens)

Measured Luminaire Output	1,137
---------------------------	-------

Measured luminous efficacy at 25°C

Luminaire	61.0 lm/W
-----------	-----------

Luminaire tests were performed with 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 luminaire.

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 was determined at 25°C.

The lamp was treated as an integral part of the luminaire.

No measurement of the absolute lumen output of components of the lamp assembly were made. For calculation purposes, the Lumen Output figure mentioned in this report should be used in conjunction with a Light Output Ratio of 1.

No measurement of the ballast factor of the control gear was made.

Job / Report / Date

42 / 9102 / 9102-11b / 2010.03.26

Customer

Encapsulite International Ltd.

Luminaire Range

Stick-Lite

Luminaire catalog No.

HFI 18W Stick-Lite

Luminaire description

Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series

Lamp description

18W T8 linear fluorescent

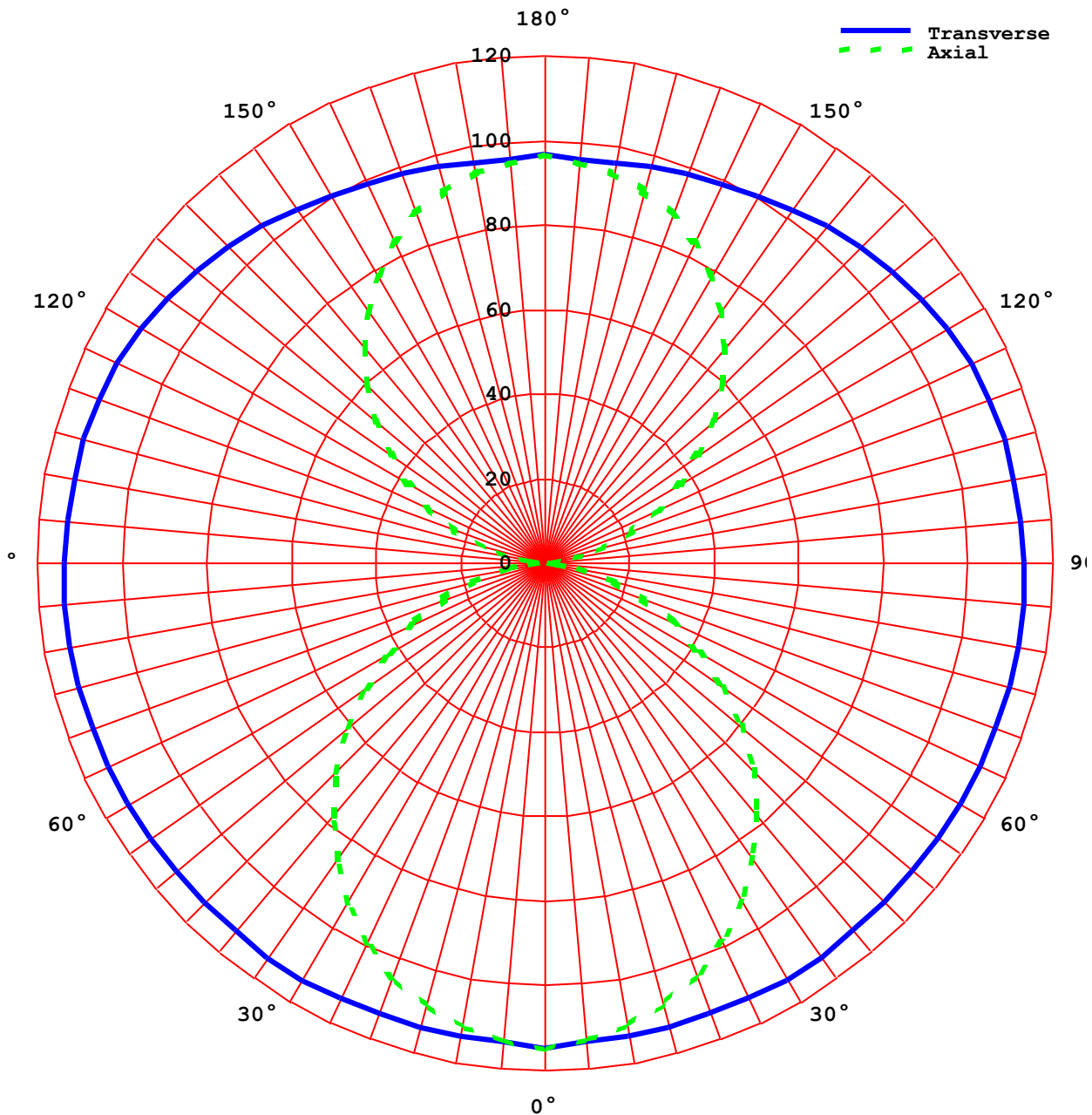
Lamp lumen output

1140lm

No. of lamps in luminaire

1

Average Principal Axes Luminous Intensities (cd/klm)



Job / Report / Date

42 / 9102 / 9102-11b / 2010.03.26

Customer

Encapsulite International Ltd.

Luminaire Range

Stick-Lite

Luminaire catalog No.

HFI 18W Stick-Lite

Luminaire description

Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series

Lamp description

18W T8 linear fluorescent

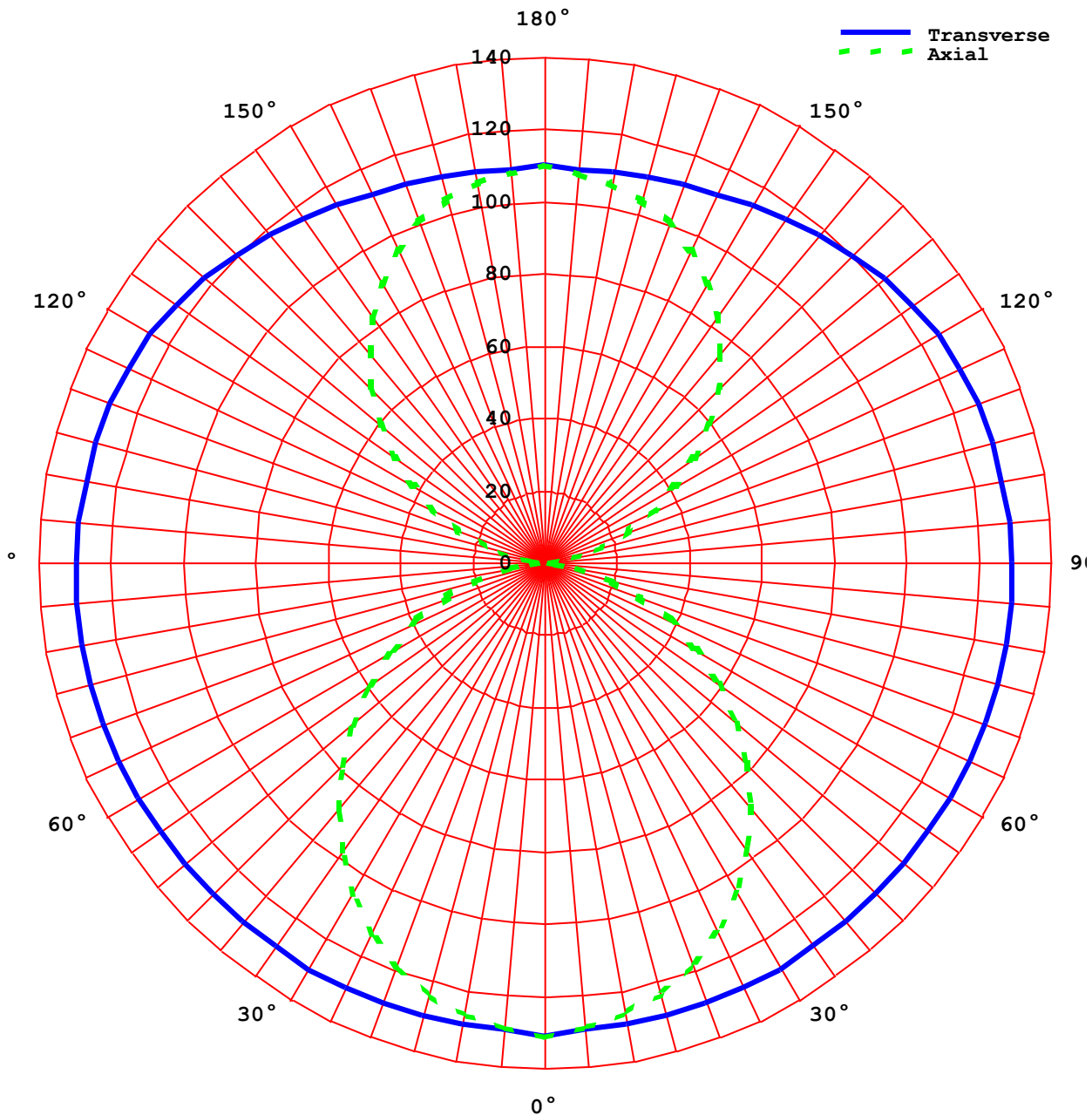
Lamp lumen output

1140lm

No. of lamps in luminaire

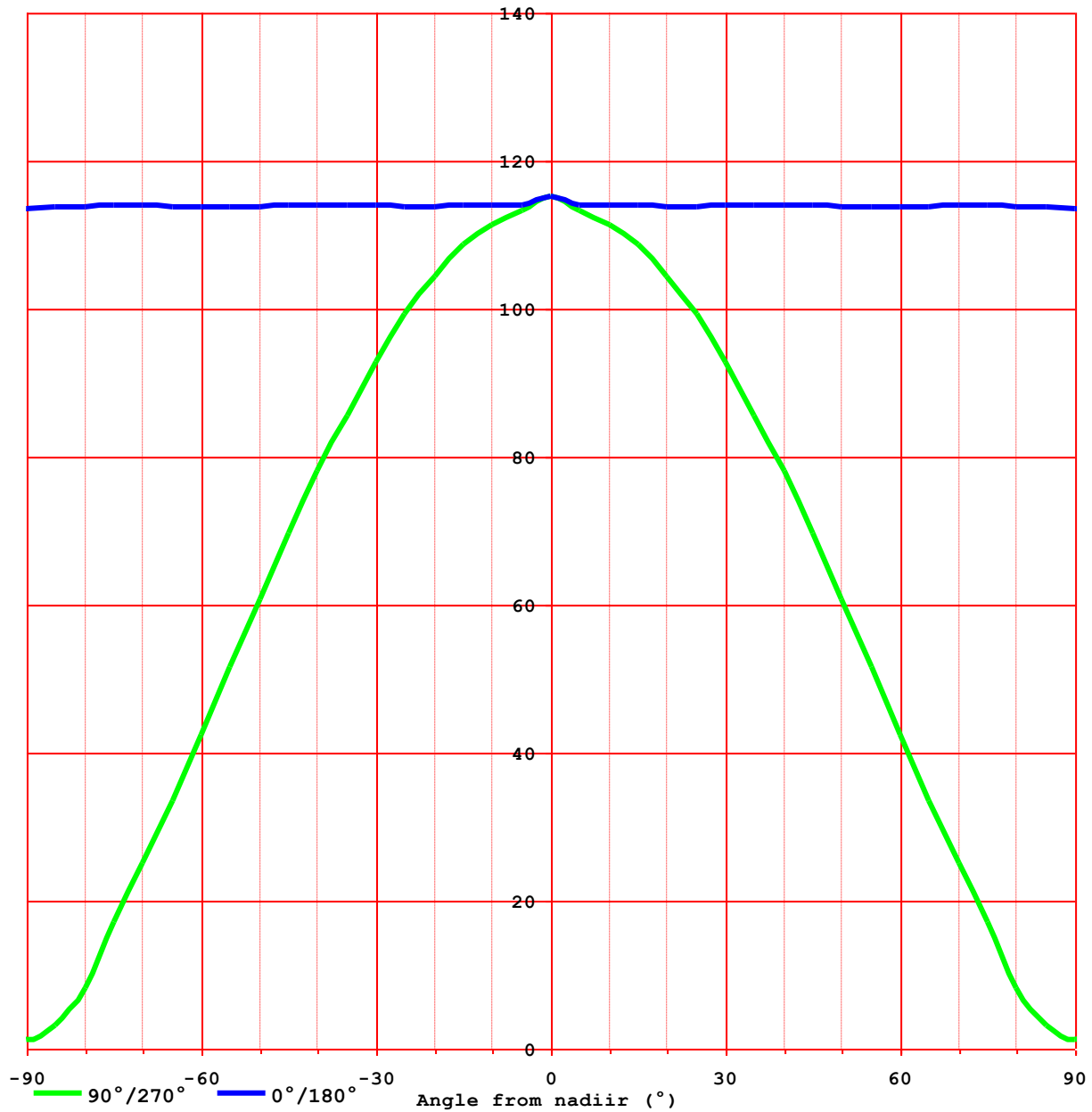
1

Average Principal Axes Luminous Intensities (cd)



Customer	Encapsulite International Ltd.
Luminaire Range	Stick-Lite
Luminaire catalog No.	HFI 18W Stick-Lite
Luminaire description	Sealed tubular luminaire with integral T8 fluorescent lamp
Lamp description	Single distribution test used for series 18W T8 linear fluorescent
Lamp lumen output	1140lm
No. of lamps in luminaire	1

Average Principal Axes Luminous Intensities (cd/klm)



Job / Report / Date

42 / 9102 / 9102-11b / 2010.03.26

Customer

Encapsulite International Ltd.

Luminaire Range

Stick-Lite

Luminaire catalog No.

HFI 18W Stick-Lite

Luminaire description

Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series

Lamp description

18W T8 linear fluorescent

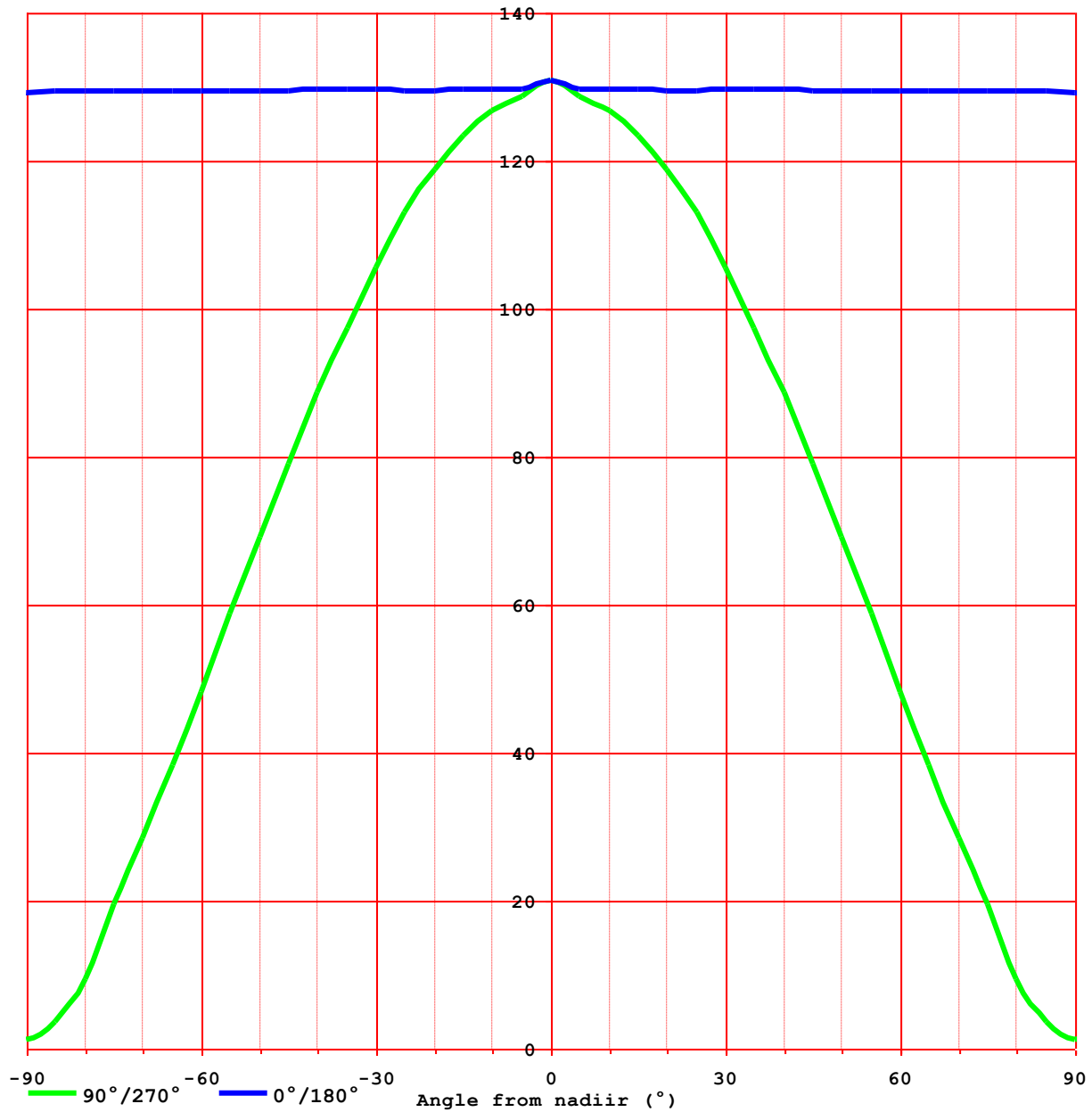
Lamp lumen output

1140lm

No. of lamps in luminaire

1

Average Principal Axes Luminous Intensities (cd)



Job / Report / Date

42 / 9102 / 9102-11b / 2010.03.26

Customer Encapsulite International Ltd.
Luminaire Range Stick-Lite
Luminaire catalog No. HFI 18W Stick-Lite
Luminaire description Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series
Lamp description 18W T8 linear fluorescent
Lamp lumen output 1140lm
No. of lamps in luminaire 1

Average Luminous Intensities (cd/Klm)

Angle	Transverse plane	Axial plane
0°	115.09	115.09
5°	113.93	113.24
10°	113.96	111.44
15°	113.94	108.57
20°	113.85	104.40
25°	113.78	99.34
30°	114.07	92.87
35°	114.03	85.61
40°	113.96	77.97
45°	113.89	69.58
50°	113.85	60.79
55°	113.78	51.61
60°	113.75	42.37
65°	113.81	33.61
70°	113.87	25.06
75°	113.88	17.22
80°	113.80	8.20
85°	113.71	3.16
90°	113.59	1.09
95°	113.19	3.55
100°	112.76	9.05
105°	112.40	14.98
110°	111.93	22.13
115°	111.23	29.64
120°	110.24	36.93
125°	108.91	44.52
130°	107.38	51.94
135°	105.57	59.55
140°	103.85	66.13
145°	102.03	72.61
150°	100.38	78.24
155°	98.60	83.62
160°	97.56	87.74
165°	96.75	91.12
170°	95.99	93.42
175°	95.54	94.93
180°	96.61	96.61

Job / Report / Date

42 / 9102 / 9102-11b / 2010.03.26

Customer Encapsulite International Ltd.
Luminaire Range Stick-Lite
Luminaire catalog No. HFI 18W Stick-Lite
Luminaire description Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series
Lamp description 18W T8 linear fluorescent
Lamp lumen output 1140lm
No. of lamps in luminaire 1

Average Luminous Intensities (cd)

Angle	Transverse plane	Axial plane
0°	130.86	130.86
5°	129.54	128.75
10°	129.57	126.70
15°	129.55	123.44
20°	129.45	118.71
25°	129.37	112.95
30°	129.69	105.60
35°	129.66	97.33
40°	129.57	88.65
45°	129.49	79.12
50°	129.45	69.12
55°	129.37	58.69
60°	129.33	48.17
65°	129.41	38.21
70°	129.47	28.49
75°	129.49	19.58
80°	129.39	9.32
85°	129.28	3.59
90°	129.16	1.24
95°	128.70	4.04
100°	128.21	10.30
105°	127.80	17.04
110°	127.26	25.16
115°	126.47	33.70
120°	125.35	41.99
125°	123.83	50.62
130°	122.09	59.06
135°	120.03	67.71
140°	118.08	75.18
145°	116.01	82.56
150°	114.13	88.96
155°	112.10	95.08
160°	110.92	99.77
165°	110.00	103.61
170°	109.14	106.22
175°	108.63	107.94
180°	109.85	109.85

Job / Report / Date 42 / 9102 / 9102-11b / 2010.03.26

Customer Encapsulite International Ltd.
Luminaire Range Stick-Lite
Luminaire catalog No. HFI 18W Stick-Lite
Luminaire description Sealed tubular luminaire
with integral T8 fluorescent lamp
Lamp description Single distribution test used for series
18W T8 linear fluorescent
Lamp lumen output 1140lm
No. of lamps in luminaire 1

Light Output Ratios Up 0.48
Down 0.52
Total 1.00

Spacing to Height Ratios SHR NOM 1.75
SHR MAX 1.84
SHR MAX TRANS 2.46

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	.50	.56	.61	.68	.72	.75	.80	.83	
	.30		N/A	.43	.49	.54	.61	.66	.70	.75	.79	
	.10		N/A	.37	.43	.48	.55	.61	.65	.71	.75	
.50	.50	.20	N/A	.43	.48	.52	.57	.61	.64	.68	.70	
	.30		N/A	.37	.42	.46	.52	.56	.59	.64	.67	
	.10		N/A	.32	.37	.41	.48	.52	.56	.61	.64	
.30	.50	.20	N/A	.36	.40	.43	.47	.50	.53	.56	.58	
	.30		N/A	.31	.35	.39	.44	.47	.50	.53	.56	
	.10		N/A	.27	.32	.35	.40	.44	.47	.51	.53	
.00	.00	.00	N/A	.20	.23	.25	.29	.31	.33	.36	.38	
BZ Class			N/A	6	6	6	6	6	6	7	7	

CIE Flux code 32 / 58 / 80 / 52 / 100

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 0.22 0.28 0.33 0.40 0.45 0.53 0.58 0.62 0.66 0.68 0.69 0.66
CIE class 7 / 8 / 8 / 8 / 8 / 8 / 8 / 8 / 8 / 8 / 9 / - / -

Flux Fraction Ratio 0.92
DIN Class 1.00 C

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.

Job / Report / Date

42 / 9102 / 9102-11b / 2010.03.26

Customer

Encapsulite International Ltd.

Luminaire Range

Stick-Lite

Luminaire catalog No.

HFI 18W Stick-Lite

Luminaire description

Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series

Lamp description

18W T8 linear fluorescent

Lamp lumen output

1140lm

No. of lamps in luminaire

1

Angle

Aspect Factors

	Parallel plane	Perpendicular plane
0°	0.000	0.000
5°	0.086	0.004
10°	0.171	0.015
15°	0.252	0.033
20°	0.329	0.057
25°	0.401	0.087
30°	0.465	0.120
35°	0.522	0.157
40°	0.571	0.194
45°	0.613	0.232
50°	0.646	0.269
55°	0.672	0.302
60°	0.691	0.333
65°	0.704	0.358
70°	0.713	0.379
75°	0.718	0.394
80°	0.720	0.403
85°	0.720	0.408
90°	0.720	0.409

Customer	Encapsulite International Ltd.
Luminaire Range	Stick-Lite
Luminaire catalog No.	HFI 18W Stick-Lite
Luminaire description	Sealed tubular luminaire with integral T8 fluorescent lamp Single distribution test used for series
Lamp description	18W T8 linear fluorescent
Lamp lumen output	1140lm
No. of lamps in luminaire	1

Zonal Flux Calculations

Angles	Individual	Cumulative
0° - 5°	0.3%	0.3%
5° - 10°	0.8%	1.1%
10° - 15°	1.3%	2.4%
15° - 20°	1.8%	4.2%
20° - 25°	2.3%	6.5%
25° - 30°	2.7%	9.2%
30° - 35°	3.0%	12.2%
35° - 40°	3.3%	15.4%
40° - 45°	3.5%	18.9%
45° - 50°	3.6%	22.6%
50° - 55°	3.7%	26.3%
55° - 60°	3.8%	30.1%
60° - 65°	3.8%	33.9%
65° - 70°	3.7%	37.6%
70° - 75°	3.7%	41.3%
75° - 80°	3.6%	44.9%
80° - 85°	3.5%	48.5%
85° - 90°	3.5%	52.0%
90° - 95°	3.5%	55.5%
95° - 100°	3.5%	59.0%
100° - 105°	3.5%	62.5%
105° - 110°	3.6%	66.1%
110° - 115°	3.6%	69.7%
115° - 120°	3.6%	73.3%
120° - 125°	3.5%	76.8%
125° - 130°	3.4%	80.3%
130° - 135°	3.3%	83.6%
135° - 140°	3.1%	86.7%
140° - 145°	2.9%	89.6%
145° - 150°	2.6%	92.2%
150° - 155°	2.3%	94.5%
155° - 160°	1.9%	96.4%
160° - 165°	1.5%	98.0%
165° - 170°	1.1%	99.1%
170° - 175°	0.7%	99.8%
175° - 180°	0.2%	100.0%

Customer Encapsulite International Ltd.
 Luminaire Range Stick-Lite
 Luminaire catalog No. HFI 18W Stick-Lite
 Luminaire description Sealed tubular luminaire
 with integral T8 fluorescent lamp
 Single distribution test used for series
 Lamp description 18W T8 linear fluorescent
 Lamp lumen output 1140lm
 No. of lamps in luminaire 1

Averaged Luminance Values (Cd/m²)

Elevation(°)

Azimuth(°)

	0°	15°	30°	45°	60°	75°	90°
45°	4680	4589	4493	4364	4339	4556	5382
50°	4696	4585	4449	4245	4127	4263	5114
55°	4748	4616	4440	4157	3931	3942	4800
60°	4839	4686	4469	4097	3759	3645	4443
65°	4977	4801	4541	4089	3619	3339	4074
70°	5163	4965	4668	4126	3522	3037	3633
75°	5404	5185	4859	4234	3494	2778	3135
80°	5709	5470	5117	4420	3578	2533	2025
85°	6100	5842	5478	4735	3802	2491	1227
	90°	105°	120°	135°	150°	165°	180°
45°	5382	4556	4339	4364	4493	4589	4680
50°	5114	4263	4127	4245	4449	4585	4696
55°	4800	3942	3931	4157	4440	4616	4748
60°	4443	3645	3759	4097	4469	4686	4839
65°	4074	3339	3619	4089	4541	4801	4977
70°	3633	3037	3522	4126	4668	4965	5163
75°	3135	2778	3494	4234	4859	5185	5404
80°	2025	2533	3578	4420	5117	5470	5709
85°	1227	2491	3802	4735	5478	5842	6100
	180°	195°	210°	225°	240°	255°	270°
45°	4680	4589	4493	4364	4339	4556	5382
50°	4696	4585	4449	4245	4127	4263	5114
55°	4748	4616	4440	4157	3931	3942	4800
60°	4839	4686	4469	4097	3759	3645	4443
65°	4977	4801	4541	4089	3619	3339	4074
70°	5163	4965	4668	4126	3522	3037	3633
75°	5404	5185	4859	4234	3494	2778	3135
80°	5709	5470	5117	4420	3578	2533	2025
85°	6100	5842	5478	4735	3802	2491	1227
	270°	285°	300°	315°	330°	345°	0°
45°	5382	4556	4339	4364	4493	4589	4680
50°	5114	4263	4127	4245	4449	4585	4696
55°	4800	3942	3931	4157	4440	4616	4748
60°	4443	3645	3759	4097	4469	4686	4839
65°	4074	3339	3619	4089	4541	4801	4977
70°	3633	3037	3522	4126	4668	4965	5163
75°	3135	2778	3494	4234	4859	5185	5404
80°	2025	2533	3578	4420	5117	5470	5709
85°	1227	2491	3802	4735	5478	5842	6100

Customer Encapsulite International Ltd.
 Luminaire Range Stick-Lite
 Luminaire catalog No. HFI 18W Stick-Lite
 Luminaire description Sealed tubular luminaire
 with integral T8 fluorescent lamp
 Single distribution test used for series
 Lamp description 18W T8 linear fluorescent
 Lamp lumen output 1140lm
 No. of lamps in luminaire 1

Non averaged Luminance Values (Cd/m²)

Elevation(°)

Azimuth(°)

	0°	15°	30°	45°	60°	75°	90°
45°	4672	4589	4511	4403	4374	4604	5469
50°	4687	4585	4466	4280	4155	4310	5182
55°	4740	4616	4456	4187	3953	3971	4873
60°	4833	4687	4487	4133	3783	3688	4514
65°	4970	4802	4560	4128	3670	3385	4115
70°	5156	4967	4691	4154	3543	3082	3680
75°	5398	5190	4886	4255	3501	2812	3160
80°	5706	5477	5143	4443	3584	2557	2033
85°	6100	5853	5506	4750	3806	2515	1245
	90°	105°	120°	135°	150°	165°	180°
45°	5469	4586	4411	4400	4541	4615	4688
50°	5182	4313	4199	4291	4498	4612	4705
55°	4873	3993	3978	4200	4493	4643	4756
60°	4514	3687	3838	4148	4526	4712	4845
65°	4115	3380	3680	4151	4596	4828	4984
70°	3680	3061	3599	4195	4723	4992	5170
75°	3160	2758	3558	4303	4919	5213	5409
80°	2033	2533	3663	4491	5174	5494	5712
85°	1245	2477	3883	4814	5535	5862	6099
	180°	195°	210°	225°	240°	255°	270°
45°	4688	4584	4452	4327	4279	4534	5294
50°	4705	4581	4410	4208	4066	4231	5047
55°	4756	4609	4394	4119	3879	3935	4728
60°	4845	4675	4418	4052	3691	3615	4371
65°	4984	4791	4488	4035	3551	3311	4033
70°	5170	4953	4609	4065	3450	3024	3586
75°	5409	5170	4789	4165	3430	2798	3110
80°	5712	5452	5048	4347	3491	2547	2016
85°	6099	5821	5405	4653	3716	2499	1209
	270°	285°	300°	315°	330°	345°	0°
45°	5294	4503	4293	4328	4469	4570	4672
50°	5047	4198	4087	4202	4421	4564	4687
55°	4728	3870	3913	4121	4416	4597	4740
60°	4371	3591	3723	4054	4446	4668	4833
65°	4033	3281	3576	4043	4519	4782	4970
70°	3586	2981	3496	4091	4648	4947	5156
75°	3110	2743	3487	4213	4842	5169	5398
80°	2016	2495	3573	4400	5103	5456	5706
85°	1209	2472	3804	4724	5465	5832	6100

Customer Encapsulite International Ltd.
 Luminaire Range Stick-Lite
 Luminaire catalog No. HFI 18W Stick-Lite
 Luminaire description Sealed tubular luminaire
 with integral T8 fluorescent lamp
 Single distribution test used for series
 Lamp description 18W T8 linear fluorescent
 Lamp lumen output 1140lm
 No. of lamps in luminaire 1

Averaged Luminance Values (Cd/m²/klm)

Elevation(°)

Azimuth(°)

	0°	15°	30°	45°	60°	75°	90°
45°	4116	4036	3952	3838	3817	4007	4733
50°	4130	4033	3913	3734	3629	3749	4498
55°	4176	4060	3905	3656	3457	3467	4222
60°	4256	4121	3931	3603	3306	3206	3907
65°	4377	4222	3994	3596	3183	2937	3583
70°	4541	4367	4105	3629	3098	2671	3195
75°	4753	4561	4274	3724	3073	2443	2757
80°	5021	4811	4501	3888	3147	2228	1781
85°	5365	5138	4818	4165	3344	2191	1079
	90°	105°	120°	135°	150°	165°	180°
45°	4733	4007	3817	3838	3952	4036	4116
50°	4498	3749	3629	3734	3913	4033	4130
55°	4222	3467	3457	3656	3905	4060	4176
60°	3907	3206	3306	3603	3931	4121	4256
65°	3583	2937	3183	3596	3994	4222	4377
70°	3195	2671	3098	3629	4105	4367	4541
75°	2757	2443	3073	3724	4274	4561	4753
80°	1781	2228	3147	3888	4501	4811	5021
85°	1079	2191	3344	4165	4818	5138	5365
	180°	195°	210°	225°	240°	255°	270°
45°	4116	4036	3952	3838	3817	4007	4733
50°	4130	4033	3913	3734	3629	3749	4498
55°	4176	4060	3905	3656	3457	3467	4222
60°	4256	4121	3931	3603	3306	3206	3907
65°	4377	4222	3994	3596	3183	2937	3583
70°	4541	4367	4105	3629	3098	2671	3195
75°	4753	4561	4274	3724	3073	2443	2757
80°	5021	4811	4501	3888	3147	2228	1781
85°	5365	5138	4818	4165	3344	2191	1079
	270°	285°	300°	315°	330°	345°	0°
45°	4733	4007	3817	3838	3952	4036	4116
50°	4498	3749	3629	3734	3913	4033	4130
55°	4222	3467	3457	3656	3905	4060	4176
60°	3907	3206	3306	3603	3931	4121	4256
65°	3583	2937	3183	3596	3994	4222	4377
70°	3195	2671	3098	3629	4105	4367	4541
75°	2757	2443	3073	3724	4274	4561	4753
80°	1781	2228	3147	3888	4501	4811	5021
85°	1079	2191	3344	4165	4818	5138	5365

Customer Encapsulite International Ltd.
 Luminaire Range Stick-Lite
 Luminaire catalog No. HFI 18W Stick-Lite
 Luminaire description Sealed tubular luminaire
 with integral T8 fluorescent lamp
 Single distribution test used for series
 Lamp description 18W T8 linear fluorescent
 Lamp lumen output 1140lm
 No. of lamps in luminaire 1

Non averaged Luminance Values (Cd/m²/klm)

Elevation(°)

Azimuth(°)

	0°	15°	30°	45°	60°	75°	90°
45°	4109	4036	3967	3872	3847	4049	4810
50°	4123	4032	3928	3764	3654	3791	4557
55°	4169	4060	3919	3683	3477	3492	4286
60°	4251	4123	3947	3635	3327	3244	3970
65°	4371	4223	4010	3630	3228	2977	3619
70°	4535	4369	4126	3654	3116	2710	3237
75°	4748	4565	4297	3742	3079	2473	2780
80°	5019	4817	4523	3907	3152	2249	1788
85°	5365	5148	4843	4178	3348	2212	1095
	90°	105°	120°	135°	150°	165°	180°
45°	4810	4033	3879	3870	3994	4059	4123
50°	4557	3793	3693	3774	3956	4056	4138
55°	4286	3512	3499	3694	3951	4083	4183
60°	3970	3243	3376	3648	3981	4145	4261
65°	3619	2973	3237	3651	4043	4246	4383
70°	3237	2692	3165	3689	4154	4391	4547
75°	2780	2426	3130	3784	4326	4585	4757
80°	1788	2228	3222	3950	4551	4832	5024
85°	1095	2178	3415	4234	4868	5156	5364
	180°	195°	210°	225°	240°	255°	270°
45°	4123	4031	3915	3805	3764	3987	4656
50°	4138	4029	3878	3701	3576	3721	4439
55°	4183	4054	3865	3622	3412	3461	4158
60°	4261	4112	3885	3564	3246	3179	3844
65°	4383	4213	3947	3549	3123	2912	3547
70°	4547	4357	4054	3575	3034	2660	3154
75°	4757	4547	4212	3663	3017	2461	2735
80°	5024	4795	4440	3823	3071	2240	1774
85°	5364	5120	4754	4093	3268	2198	1063
	270°	285°	300°	315°	330°	345°	0°
45°	4656	3960	3776	3807	3931	4019	4109
50°	4439	3692	3595	3696	3888	4014	4123
55°	4158	3404	3442	3624	3884	4043	4169
60°	3844	3158	3275	3566	3910	4105	4251
65°	3547	2886	3145	3556	3974	4206	4371
70°	3154	2622	3075	3598	4088	4351	4535
75°	2735	2412	3067	3705	4259	4546	4748
80°	1774	2195	3143	3870	4488	4799	5019
85°	1063	2174	3346	4155	4806	5129	5365

Job / Report / Date 42 / 9102 / 9102-11b / 2010.03.26

Customer Encapsulite International Ltd.
Luminaire Range Stick-Lite
Luminaire catalog No. HFI 18W Stick-Lite
Luminaire description Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series
Lamp description 18W T8 linear fluorescent
Lamp lumen output 1140lm
No. of lamps in luminaire 1

Maximum Non averaged Luminance Values (Cd/m²)

Elevation(°)

Maximum Azimuth Angle

45°	5469	90°
50°	5182	90°
55°	4873	90°
60°	4845	180°
65°	4984	180°
70°	5170	180°
75°	5409	180°
80°	5712	180°
85°	6100	0°

Job / Report / Date 42 / 9102 / 9102-11b / 2010.03.26

Customer Encapsulite International Ltd.
Luminaire Range Stick-Lite
Luminaire catalog No. HFI 18W Stick-Lite
Luminaire description Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series
Lamp description 18W T8 linear fluorescent
Lamp lumen output 1140lm
No. of lamps in luminaire 1

VDT Luminance Information
BS EN 12464 / CIBSE LG7 / 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

Job / Report / Date

42 / 9102 / 9102-11b / 2010.03.26

Customer Encapsulite International Ltd.
 Luminaire Range Stick-Lite
 Luminaire catalog No. HFI 18W Stick-Lite
 Luminaire description Sealed tubular luminaire
 with integral T8 fluorescent lamp
 Single distribution test used for series
 Lamp description 18W T8 linear fluorescent
 Lamp lumen output 1140lm
 No. of lamps in luminaire 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°

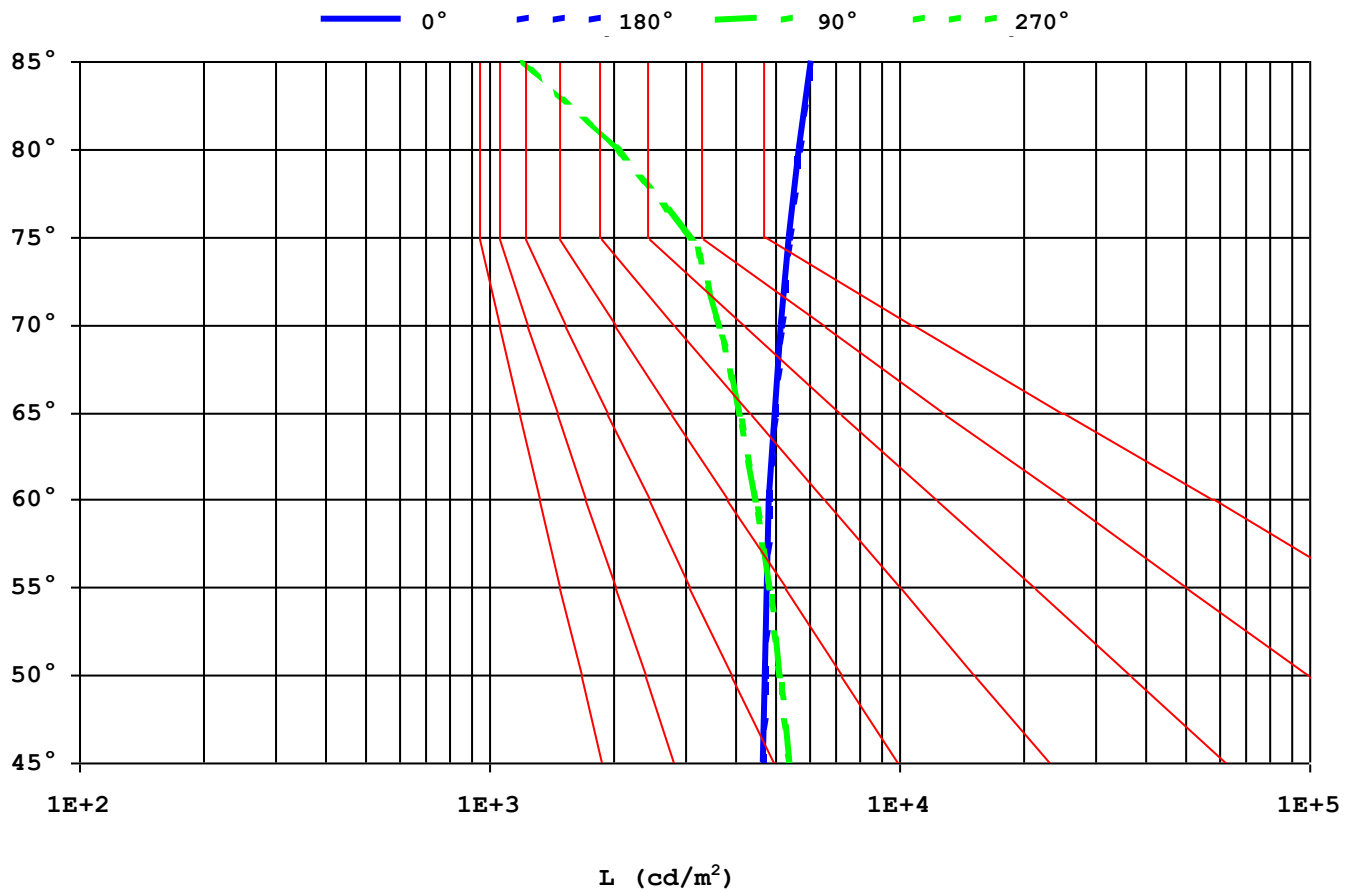
2H 2H	13.3	14.5	14.4	15.7	17.2	9.2	10.4	10.4	11.6	13.2
3H	16.7	17.9	17.9	19.1	20.6	11.1	12.2	12.3	13.5	15.0
4H	18.5	19.6	19.7	20.8	22.3	11.8	12.9	13.0	14.1	15.7
6H	20.4	21.4	21.6	22.6	24.2	12.3	13.3	13.5	14.5	16.1
8H	21.3	22.3	22.5	23.5	25.1	12.4	13.4	13.6	14.6	16.2
12H	22.3	23.3	23.5	24.5	26.1	12.5	13.4	13.7	14.6	16.2
4H 2H	14.1	15.2	15.3	16.4	18.0	11.5	12.5	12.6	13.7	15.3
3H	17.9	18.9	19.1	20.1	21.7	13.6	14.6	14.8	15.8	17.4
4H	20.0	20.8	21.2	22.1	23.7	14.6	15.4	15.8	16.7	18.3
6H	22.0	22.8	23.3	24.1	25.7	15.3	16.0	16.5	17.3	18.9
8H	23.2	23.9	24.4	25.1	26.8	15.5	16.2	16.7	17.5	19.1
12H	24.4	25.0	25.6	26.3	27.9	15.7	16.4	16.9	17.6	19.3
8H 4H	20.6	21.3	21.8	22.6	24.2	16.9	17.6	18.1	18.9	20.5
6H	23.0	23.6	24.2	24.9	26.5	17.9	18.5	19.2	19.8	21.5
8H	24.4	24.9	25.6	26.2	27.9	18.4	19.0	19.7	20.3	21.9
12H	25.8	26.3	27.1	27.6	29.2	18.8	19.2	20.0	20.6	22.2
12H 4H	20.7	21.4	21.9	22.6	24.3	18.0	18.6	19.2	19.9	21.6
6H	23.3	23.8	24.5	25.1	26.8	19.3	19.8	20.5	21.1	22.8
8H	24.7	25.2	26.0	26.5	28.2	19.9	20.3	21.1	21.6	23.3

Calculated in accordance with CIBSE Technical Memorandum No. 10 1985

Customer Encapsulite International Ltd.
Luminaire Range Stick-Lite
Luminaire catalog No. HFI 18W Stick-Lite
Luminaire description Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series
Lamp description 18W T8 linear fluorescent
Lamp lumen output 1140lm
No. of lamps in luminaire 1

CIE Glare Limiting (Soellnor) Diagram

Glare Rating	Quality 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



Job / Report / Date	42 / 9102 / 9102-11b / 2010.03.26
Customer	Encapsulite International Ltd.
Luminaire Range	Stick-Lite
Luminaire catalog No.	HFI 18W Stick-Lite
Luminaire description	Sealed tubular luminaire with integral T8 fluorescent lamp Single distribution test used for series
Lamp description	18W T8 linear fluorescent
Lamp lumen output	1140lm
No. of lamps in luminaire	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.

Job / Report / Date 42 / 9102 / 9102-11b / 2010.03.26

Customer Encapsulite International Ltd.
Luminaire Range Stick-Lite
Luminaire catalog No. HFI 18W Stick-Lite
Luminaire description Sealed tubular luminaire
with integral T8 fluorescent lamp
Single distribution test used for series
Lamp description 18W T8 linear fluorescent
Lamp lumen output 1140lm
No. of lamps in luminaire 1

Quick Design Table

Based on: reflectances of Ceiling = 0.5
Wall = 0.5
Floor = 0.2
Room Index = 2.00
lamp output = 1137 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	3.1	4.6	6.2	7.7	12.3	15.4	30.8	46.2	77.1