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Report No.: 1 Test Time: 18.11.2019 14:14

Luminaire Property

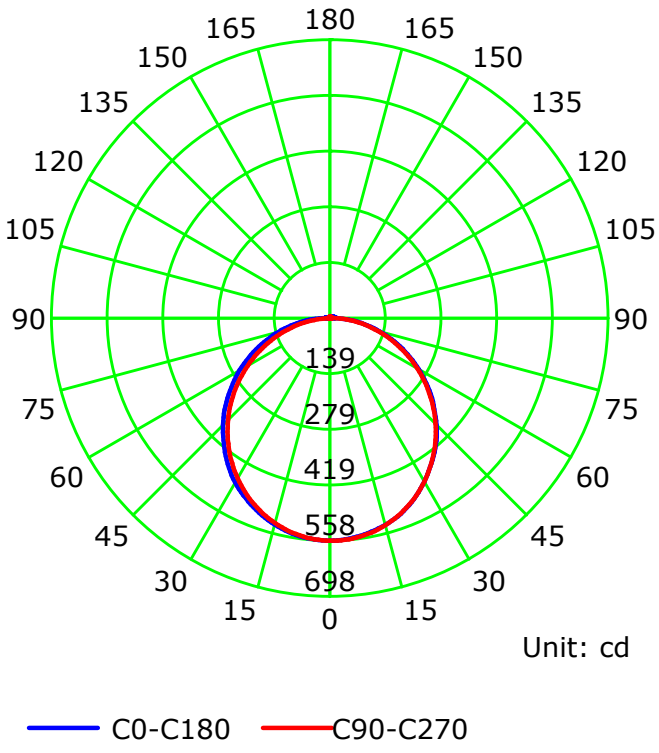
Luminaire Manufacturer:
Luminaire Description: FL 58_750 1x76LED 0,21A 12W 4000K opal
Luminous Length (mm): 750 Luminous Width (mm): 70
Luminous Height (mm): 65 Voltage: 221.4 V
Current: 0.067 A Power: 13.61 W
Power Factor: 0.904

Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 1679.6 lm
Measurement Flux: 1679.6 lm Efficiency: 100%
Downward Ratio: 98% Upward Ratio: 2%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 168.7, 164.6, 165.9, 166.2
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 115.3, 112.2, 113.9, 114.2
Luminaire Efficacy Rating (LER): 123.46 Central Intensity: 558.29 cd
Max. Intensity: 558.79 cd Pos of Max. Intensity: H90 V1
S/MH(C0/C180): 1.26 S/MH(C90/C270): 1.25

Picture Of Luminaire

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5 Gamma Plane (°):0.0-180.0:1.0
Test Lab: Test Device: LSG-1800B
Test Type: TYPE C Distance: 12.677 m
Temperature: Humidity:
Operator: Inspector:

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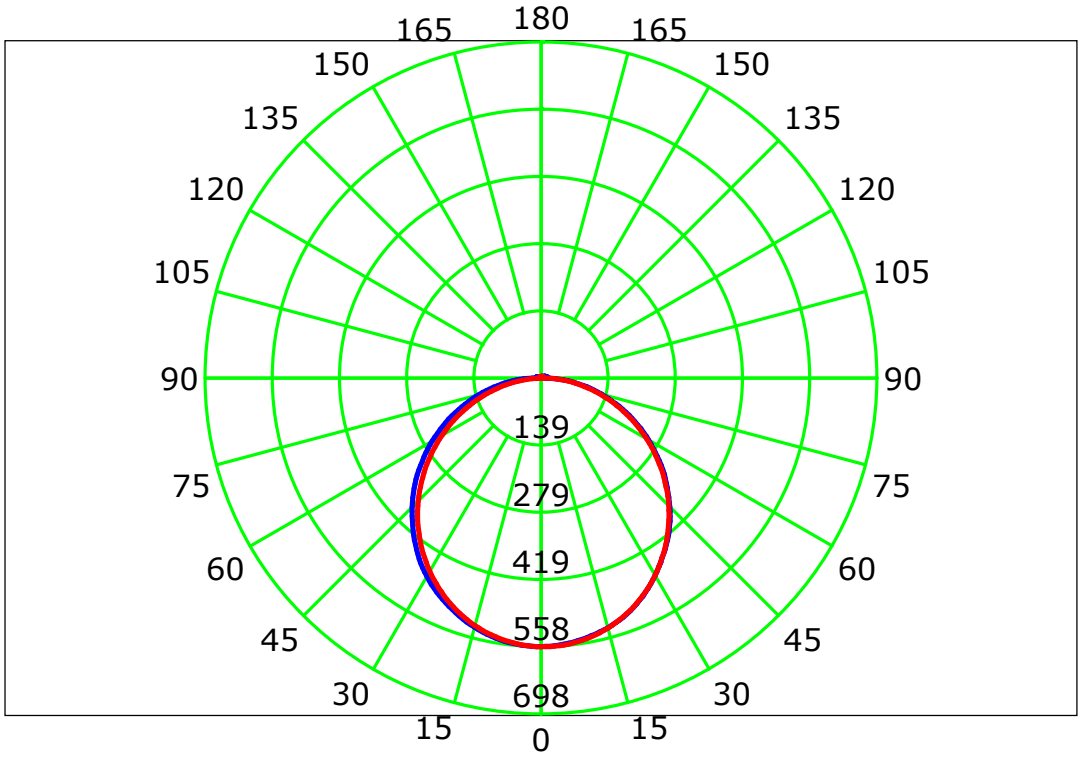
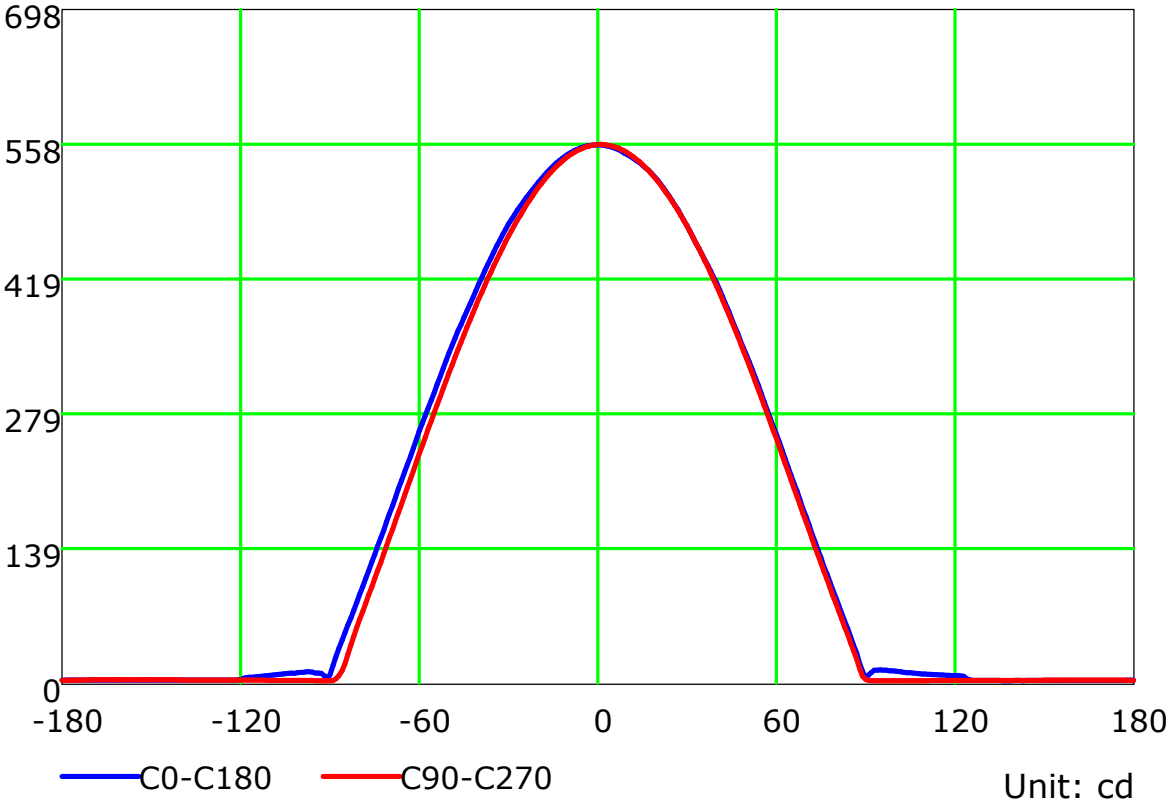
Luminous Intensity Distribution Curve





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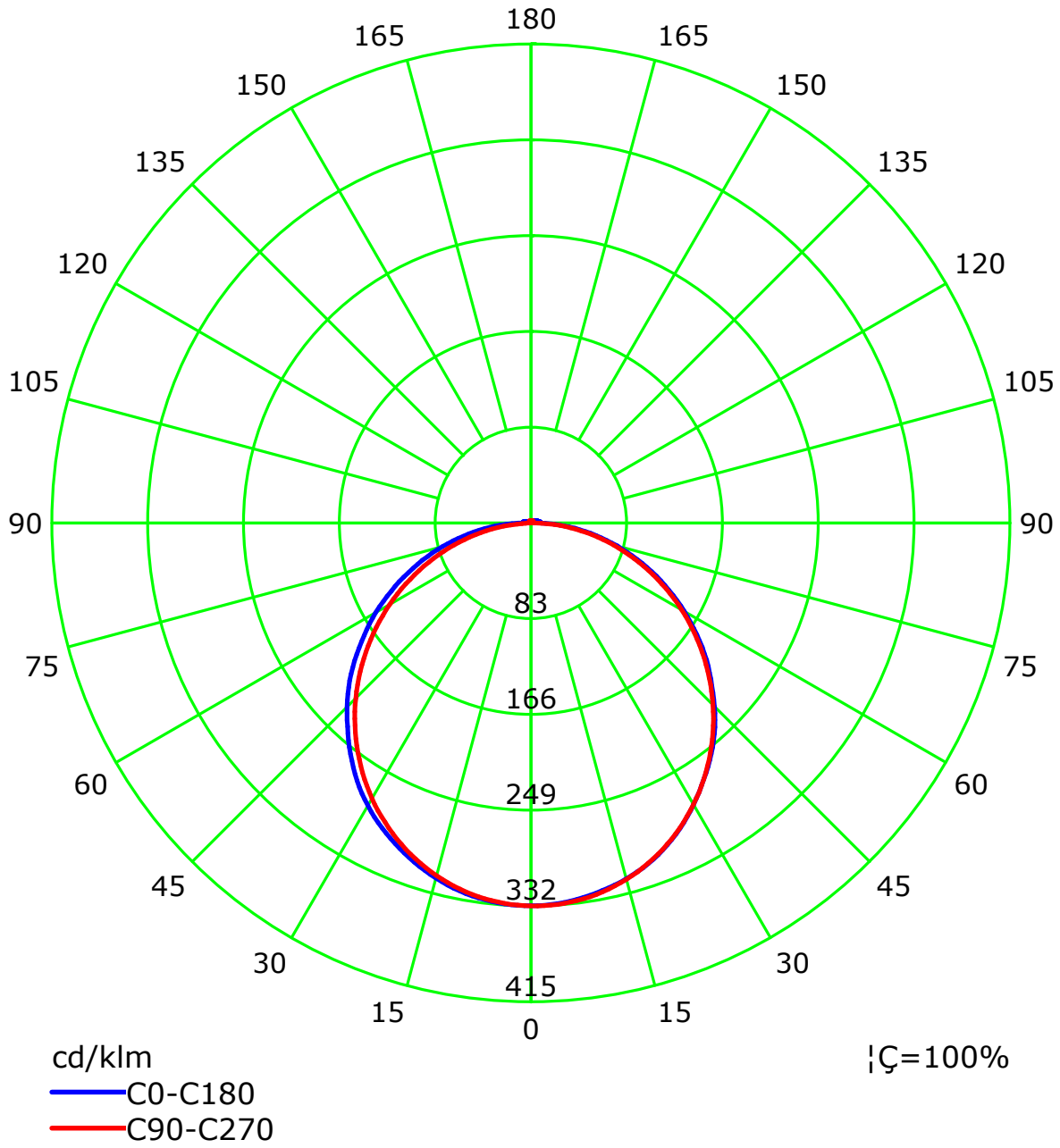
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



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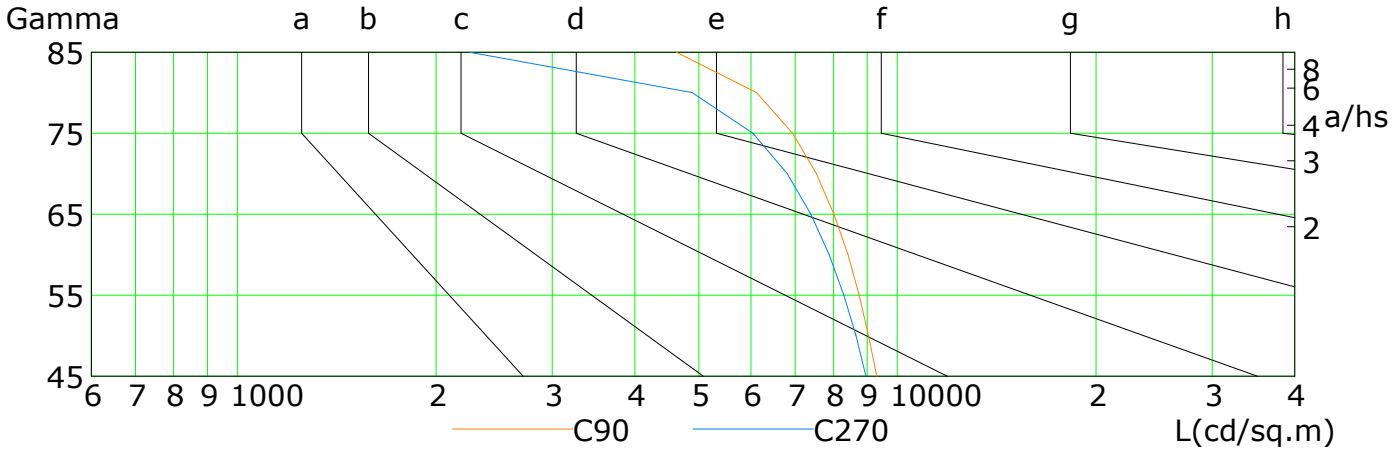
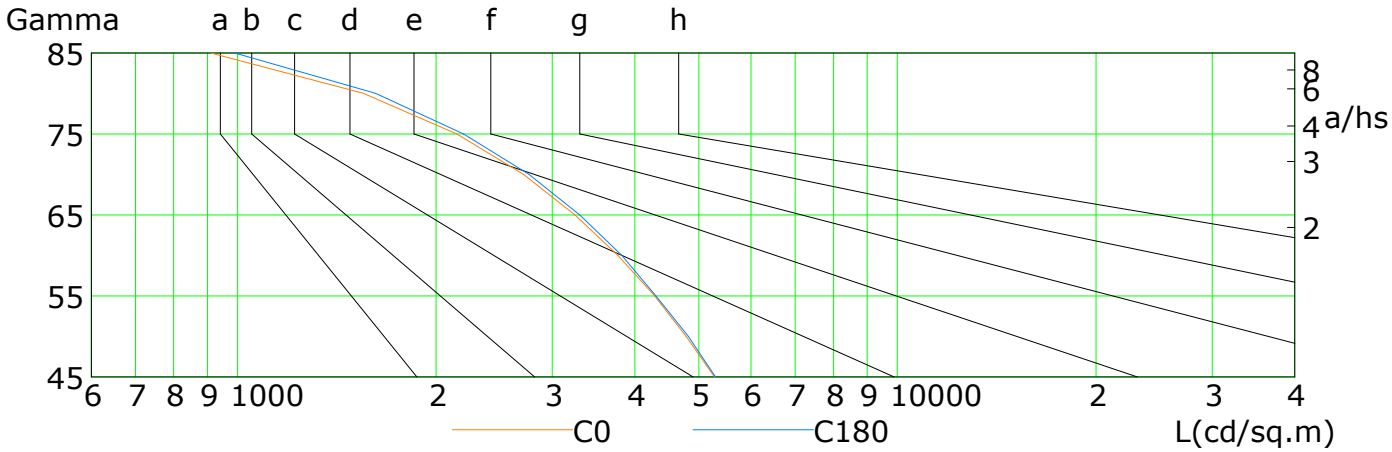
Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
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





L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	5283	4783	4286	3771	3246	2711	2150	1552	911
C90	9309	9040	8751	8415	8008	7536	6938	6118	4624
C180	5299	4820	4306	3821	3300	2763	2201	1619	990
C270	8960	8651	8300	7882	7395	6810	6038	4885	2248

C Plane (°):0.0-360.0: 22.5
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Test Device: LSG-1800B
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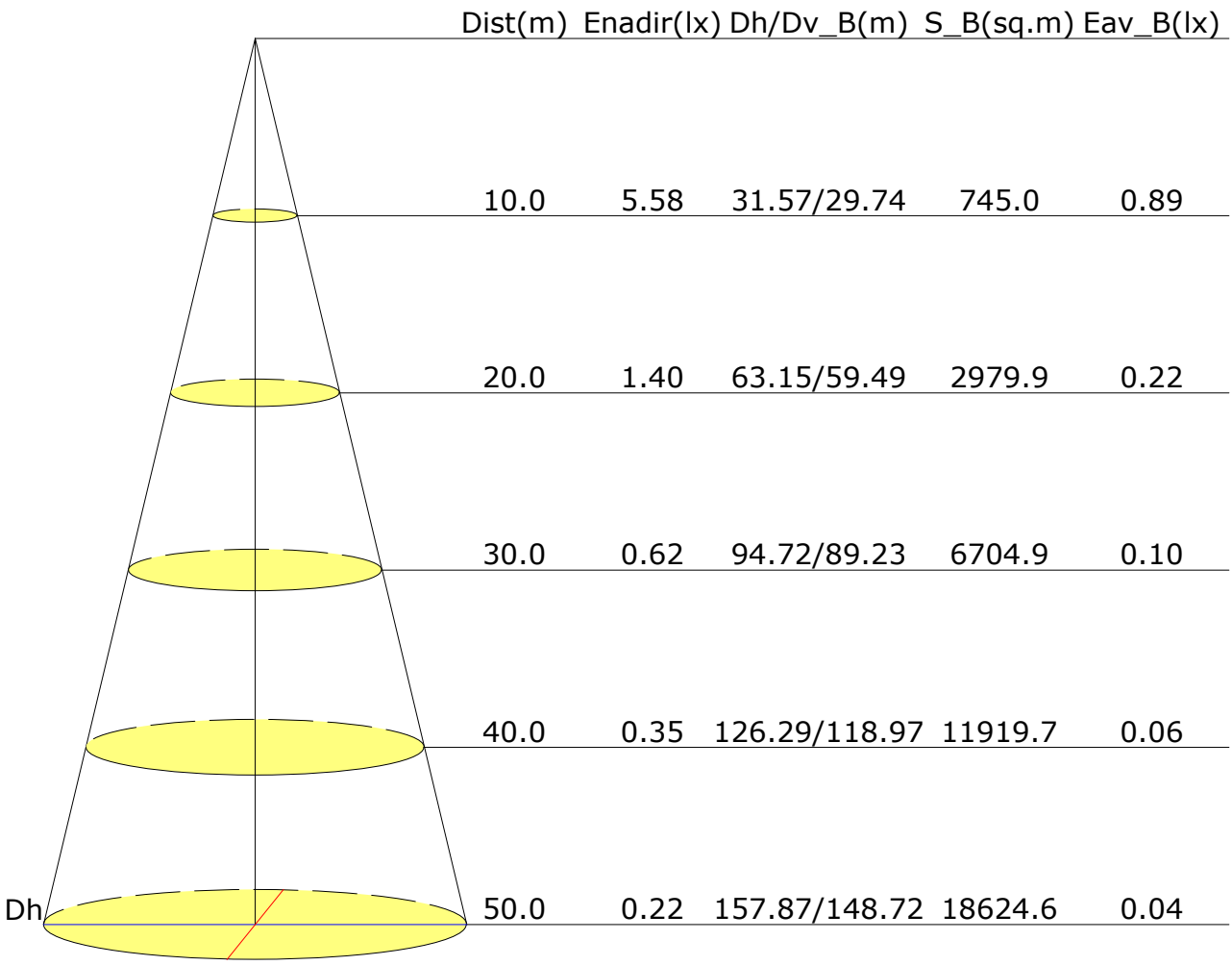
Illuminance at a Distance



C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
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UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	17.7	19.0	18.0	19.3	19.6	18.9	20.3	19.2	20.6	20.8
3H	18.9	20.2	19.3	20.5	20.8	20.5	21.7	20.8	22.0	22.3
4H	19.4	20.6	19.7	20.9	21.2	21.1	22.3	21.5	22.6	22.9
6H	19.7	20.8	20.1	21.1	21.5	21.6	22.7	22.0	23.0	23.4
8H	19.8	20.9	20.2	21.2	21.6	21.7	22.8	22.1	23.1	23.5
12H	19.8	20.9	20.2	21.2	21.6	21.8	22.8	22.2	23.2	23.6
X=4H Y=2H	18.3	19.5	18.7	19.8	20.2	19.3	20.5	19.7	20.8	21.2
3H	19.7	20.7	20.1	21.1	21.5	21.0	22.0	21.4	22.4	22.8
4H	20.3	21.2	20.7	21.6	22.0	21.7	22.7	22.2	23.0	23.5
6H	20.7	21.5	21.2	21.9	22.4	22.3	23.1	22.8	23.5	24.0
8H	20.8	21.6	21.3	22.0	22.5	22.5	23.3	23.0	23.7	24.2
12H	20.9	21.6	21.4	22.1	22.5	22.6	23.3	23.1	23.8	24.2
X=8H Y=4H	20.5	21.3	21.0	21.7	22.2	21.9	22.6	22.3	23.1	23.5
6H	21.1	21.7	21.6	22.2	22.7	22.5	23.1	23.0	23.6	24.1
8H	21.3	21.8	21.8	22.3	22.8	22.8	23.3	23.3	23.8	24.3
12H	21.4	21.9	21.9	22.4	22.9	22.9	23.4	23.5	23.9	24.5
X=12H Y=4H	20.6	21.2	21.0	21.7	22.2	21.9	22.5	22.3	23.0	23.5
6H	21.1	21.7	21.6	22.2	22.7	22.5	23.1	23.1	23.6	24.1
8H	21.3	21.8	21.9	22.3	22.9	22.8	23.3	23.3	23.8	24.3
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.1				
S=1.5H	+0.3/-0.6					+0.3/-0.4				
S=2.0H	+0.6/-1.1					+0.8/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 1680lm (8log(F/F0) = 1.8).

C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
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Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.25								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.55	0.65	0.73	0.78	0.85	0.90	0.94	0.99	1.02
	0.30		0.47	0.57	0.65	0.71	0.79	0.85	0.89	0.94	0.98
	0.20		0.41	0.51	0.59	0.65	0.73	0.80	0.84	0.91	0.95
0.50	0.50	0.20	0.53	0.63	0.70	0.75	0.82	0.87	0.90	0.95	0.97
	0.30		0.46	0.56	0.63	0.69	0.76	0.82	0.86	0.91	0.94
	0.20		0.41	0.51	0.58	0.64	0.72	0.78	0.82	0.88	0.91
0.30	0.50	0.20	0.52	0.61	0.67	0.72	0.79	0.83	0.86	0.90	0.93
	0.30		0.45	0.55	0.62	0.67	0.74	0.79	0.83	0.87	0.91
	0.20		0.40	0.50	0.57	0.62	0.70	0.75	0.79	0.85	0.88
0.00	0.00	0.00	0.38	0.47	0.54	0.59	0.66	0.71	0.75	0.80	0.83

Rating:14W Photometrically tested without ceiling board.
Multiply UF values by service correction factors
Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
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Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.25								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	1.02	0.84	0.72	0.63	0.51	0.42	0.36	0.28	0.23
	0.30		0.85	0.72	0.63	0.56	0.46	0.39	0.34	0.27	0.22
	0.20		0.73	0.63	0.56	0.50	0.42	0.36	0.31	0.25	0.21
0.50	0.50	0.20	0.98	0.81	0.69	0.60	0.48	0.43	0.35	0.27	0.22
	0.30		0.83	0.70	0.61	0.54	0.44	0.37	0.32	0.25	0.21
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.30	0.24	0.20
0.30	0.50	0.20	0.95	0.78	0.66	0.58	0.46	0.38	0.33	0.26	0.21
	0.30		0.81	0.68	0.59	0.52	0.43	0.36	0.31	0.24	0.20
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.29	0.23	0.19
0.00	0.00	0.00	0.61	0.51	0.44	0.39	0.32	0.27	0.23	0.18	0.15

Rating:14W Photometrically tested without ceiling board.

Multiply UF values by service correction factors

Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.25								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.18	0.20	0.20	0.21	0.22	0.23	0.23	0.23	0.24
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21
	0.20		0.06	0.08	0.09	0.11	0.13	0.14	0.15	0.17	0.18
0.50	0.50	0.20	0.18	0.19	0.20	0.20	0.21	0.22	0.22	0.22	0.23
	0.30		0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
	0.20		0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.17	0.18
0.30	0.50	0.20	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22
	0.30		0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.19
	0.20		0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.16	0.17
0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Rating:14W Photometrically tested without ceiling board.

Multiply UF values by service correction factors

Calculate in accordance with CIBSE Technical Memorandum NO.5 1980