OOO "FAROS"
www.farosled.ru
Tel: +7 (8422) 583-386, 583-387
E-mail: info@farosled.ru

Report No.: 1 Test Time: 05.02.2020 18:00

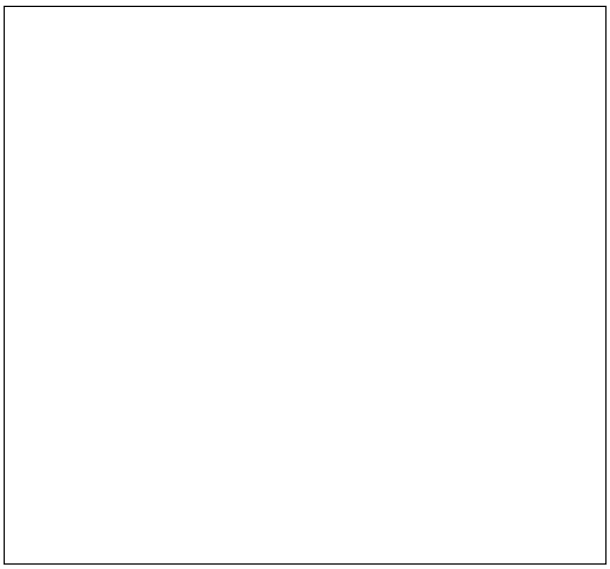
Luminaire Property

Luminaire Manufacturer:
Luminaire Description: FG 120 100W 5000K 106-106gr.
Luminous Length (mm): 348 mm Luminous Width (mm): 120 mm
Luminous Height (mm): 109 mm Voltage: 221.0 V
Current: 0.464 A Power: 101.71 W
Power Factor: 0.989

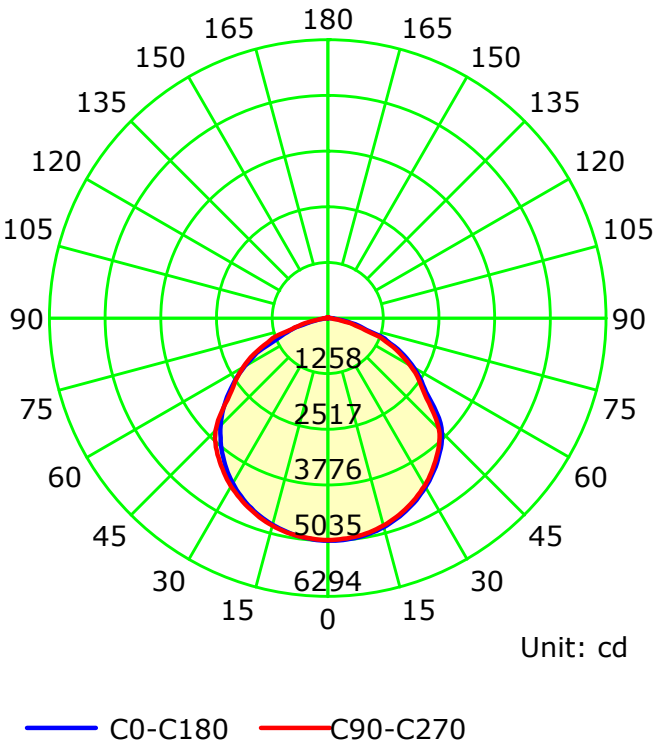
Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 14428.2 lm
Measurement Flux: 14428.2 lm Efficiency: 100%
Downward Ratio: 99% Upward Ratio: 1%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 154.5, 154.6, 154.0, 154.1
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 112.8, 111.7, 114.4, 114.3
Luminaire Efficacy Rating (LER): 141.58 Central Intensity: 5034.98 cd
Max. Intensity: 5035.96 cd Pos of Max. Intensity: H0 V1
S/MH(C0/C180): 1.29 S/MH(C90/C270): 1.30

Picture Of Luminaire

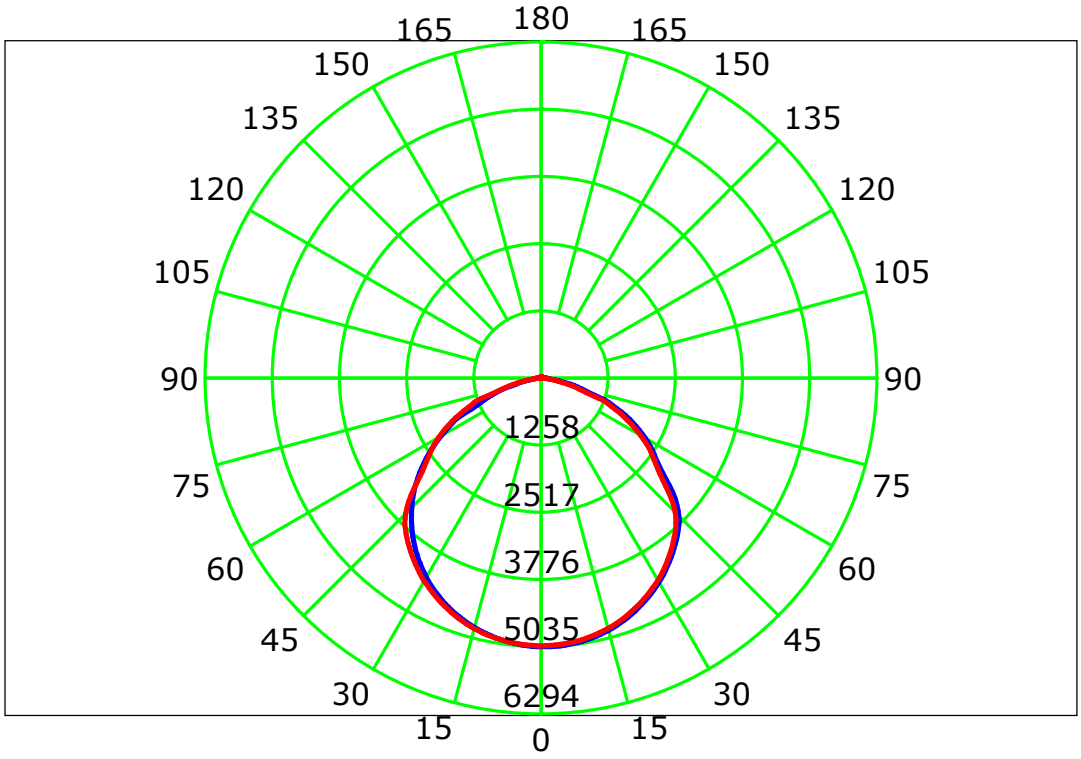


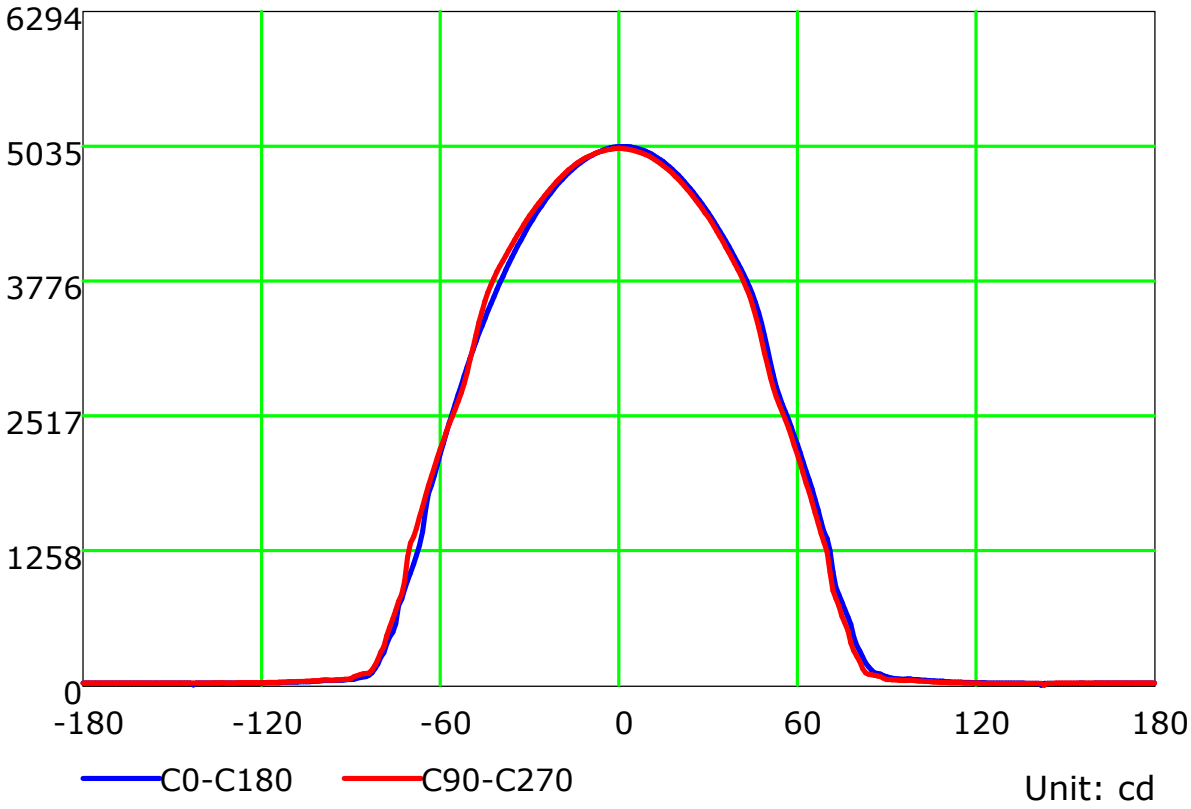
Luminous Intensity Distribution Curve



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:

Luminous Intensity Distribution Curve

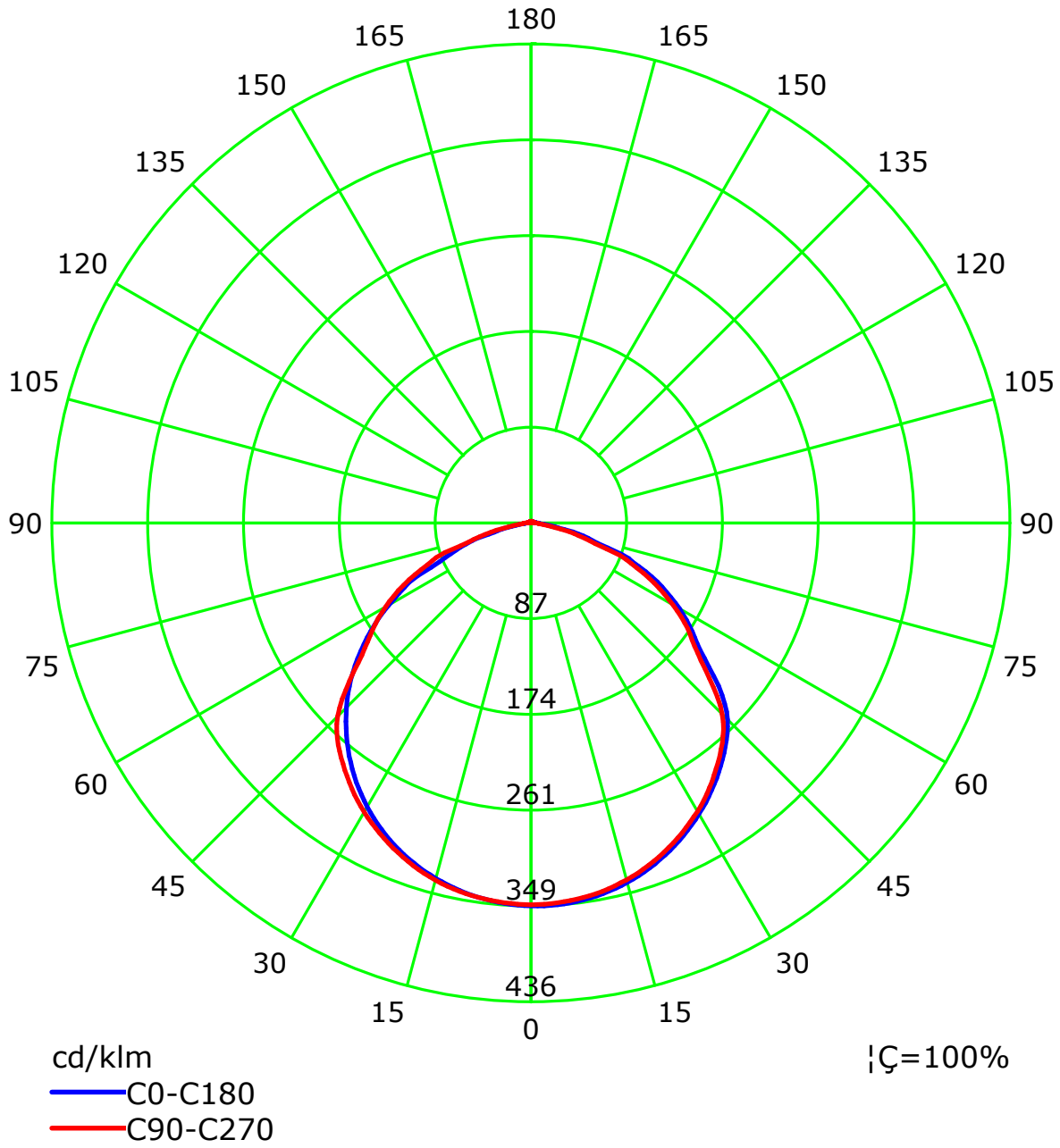




C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

Luminous Intensity Distribution Curve(cd/klm)



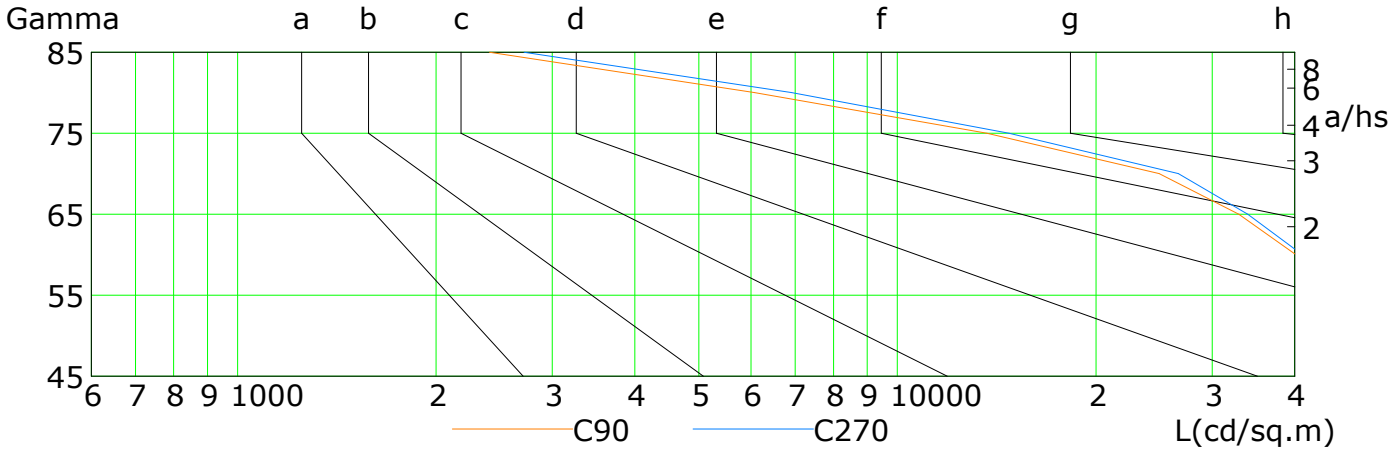
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

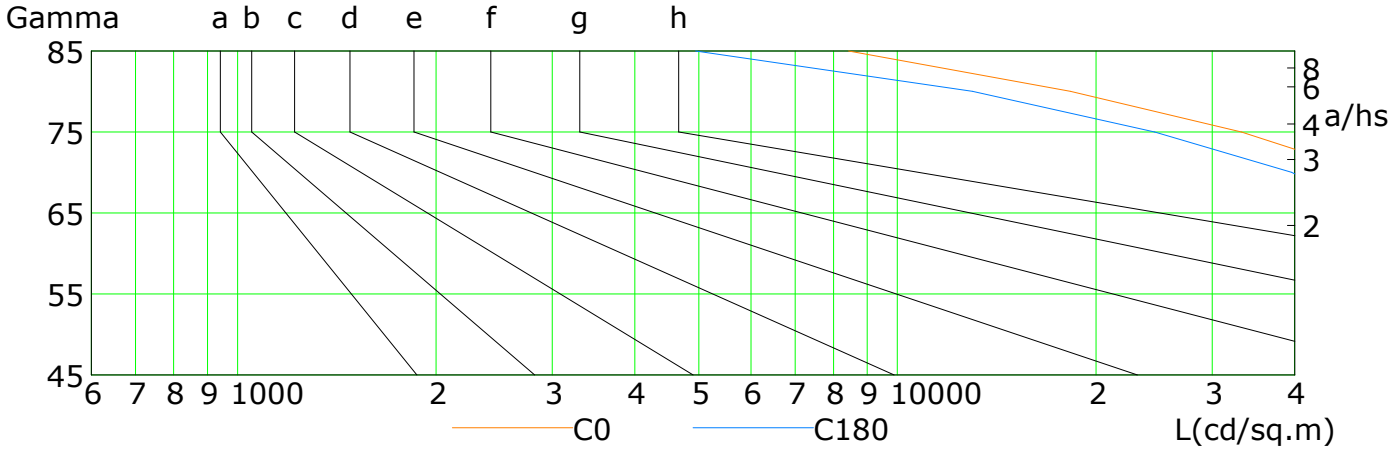
Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

OOO "FAROS"
www.farosled.ru
Tel: +7 (8422) 583-386, 583-387
E-mail: info@farosled.ru

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





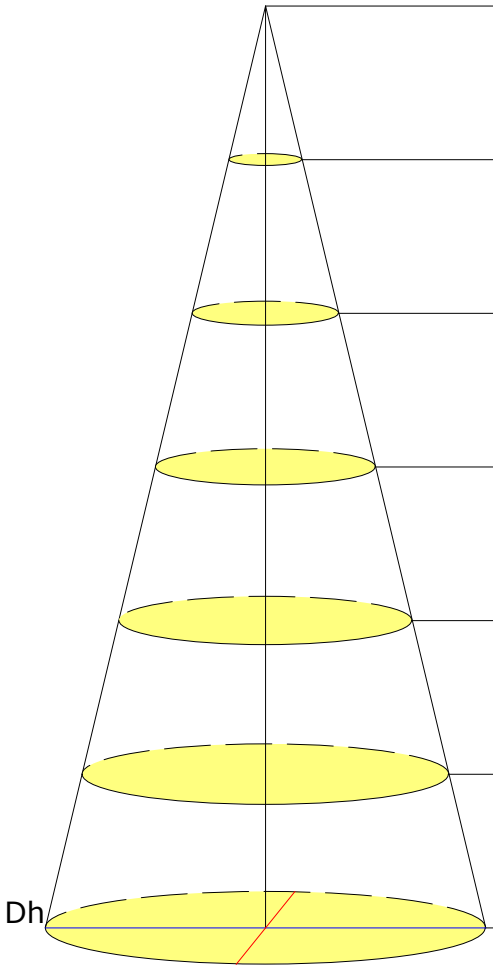
L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	94165	85167	75700	69967	62151	51614	33221	18293	8438
C90	63043	53461	46392	40152	32907	24919	13662	6071	2409
C180	88431	82881	75835	67213	55392	39563	24548	12997	4948
C270	63771	54415	46915	41104	33980	26646	14765	6917	2719

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:

OOO "FAROS"
www.farosled.ru
Tel: +7 (8422) 583-386, 583-387
E-mail: info@farosled.ru

Illuminance at a Distance



Dist(m)	Enadir(lx)	Dh/Dv_B(m)	S_B(sq.m)	Eav_B(lx)
5.0	201.40	15.06/14.75	176.3	33.17
10.0	50.35	30.11/29.49	705.2	8.29
15.0	22.38	45.17/44.24	1586.7	3.69
20.0	12.59	60.23/58.99	2820.8	2.07
25.0	8.06	75.28/73.74	4407.6	1.33
30.0	5.59	90.34/88.48	6346.9	0.92

Beam Angle(B): H112.8 V111.7 Field Angle(F): H154.5 V154.6

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:

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	27.1	28.4	27.4	28.7	28.9	26.1	27.4	26.4	27.7	27.9
3H	28.3	29.5	28.6	29.8	30.1	27.0	28.2	27.4	28.5	28.8
4H	28.6	29.7	28.9	30.0	30.3	27.2	28.3	27.6	28.7	29.0
6H	28.7	29.8	29.1	30.1	30.4	27.2	28.3	27.6	28.6	29.0
8H	28.7	29.7	29.1	30.1	30.4	27.2	28.2	27.6	28.6	28.9
12H	28.7	29.7	29.1	30.0	30.4	27.2	28.1	27.6	28.5	28.9
X=4H Y=2H	27.4	28.5	27.7	28.8	29.1	26.5	27.7	26.9	28.0	28.3
3H	28.7	29.7	29.1	30.0	30.4	27.6	28.6	28.0	29.0	29.3
4H	29.0	29.9	29.5	30.3	30.7	27.8	28.7	28.3	29.1	29.5
6H	29.2	30.0	29.7	30.4	30.8	27.9	28.7	28.4	29.1	29.5
8H	29.2	30.0	29.7	30.4	30.8	27.9	28.6	28.4	29.0	29.5
12H	29.2	29.9	29.7	30.3	30.8	27.9	28.5	28.4	29.0	29.4
X=8H Y=4H	29.1	29.8	29.5	30.2	30.7	27.9	28.7	28.4	29.1	29.5
6H	29.3	29.9	29.8	30.3	30.8	28.1	28.6	28.5	29.1	29.6
8H	29.3	29.8	29.8	30.3	30.8	28.1	28.6	28.6	29.0	29.5
12H	29.3	29.8	29.9	30.3	30.8	28.0	28.5	28.6	29.0	29.5
X=12H Y=4H	29.0	29.7	29.5	30.1	30.6	27.9	28.6	28.4	29.0	29.5
6H	29.3	29.8	29.8	30.3	30.8	28.0	28.5	28.5	29.0	29.5
8H	29.3	29.8	29.8	30.2	30.8	28.1	28.5	28.6	29.0	29.5
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.3					+0.3/-0.4				
S=1.5H	+0.5/-0.7					+0.6/-1.0				
S=2.0H	+1.2/-1.3					+0.9/-1.5				

Calculate in accordance with CIE Pub.117. The table is revised with 14395lm (8log(F/F0) = 9.3).

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(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.50								
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	0.61	0.70	0.77	0.82	0.89	0.94	0.97	1.02	1.04
	0.30		0.54	0.62	0.70	0.76	0.84	0.89	0.93	0.98	1.01
	0.20		0.48	0.57	0.65	0.71	0.79	0.85	0.89	0.94	0.98
0.50	0.50	0.20	0.59	0.67	0.75	0.79	0.86	0.90	0.93	0.97	1.00
	0.30		0.53	0.61	0.69	0.74	0.81	0.86	0.90	0.94	0.97
	0.20		0.48	0.56	0.64	0.69	0.77	0.83	0.86	0.92	0.95
0.30	0.50	0.20	0.58	0.65	0.72	0.77	0.83	0.87	0.90	0.93	0.96
	0.30		0.52	0.60	0.67	0.72	0.79	0.84	0.87	0.91	0.94
	0.20		0.48	0.55	0.63	0.68	0.76	0.80	0.84	0.89	0.92
0.00	0.00	0.00	0.45	0.53	0.60	0.65	0.72	0.77	0.80	0.84	0.87

Rating:102W Photometrically tested without ceiling board.

Multiply UF values by service correction factors

Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.50								
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	0.92	0.78	0.65	0.56	0.45	0.37	0.31	0.24	0.20
	0.30		0.77	0.67	0.57	0.50	0.40	0.34	0.29	0.23	0.19
	0.20		0.66	0.58	0.50	0.45	0.37	0.31	0.27	0.21	0.18
0.50	0.50	0.20	0.89	0.74	0.62	0.54	0.42	0.38	0.30	0.23	0.18
	0.30		0.75	0.65	0.55	0.48	0.39	0.32	0.28	0.22	0.18
	0.20		0.65	0.57	0.49	0.44	0.36	0.30	0.26	0.21	0.17
0.30	0.50	0.20	0.86	0.71	0.60	0.51	0.40	0.33	0.28	0.22	0.17
	0.30		0.73	0.63	0.53	0.46	0.37	0.31	0.26	0.21	0.17
	0.20		0.64	0.56	0.48	0.43	0.35	0.29	0.25	0.20	0.16
0.00	0.00	0.00	0.53	0.46	0.39	0.34	0.27	0.22	0.19	0.15	0.12

Rating:102W Photometrically tested without ceiling board.
Multiply UF values by service correction factors
Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.50								
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	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23
	0.30		0.11	0.12	0.14	0.15	0.16	0.18	0.18	0.20	0.20
	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	0.16	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Rating:102W 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: