

Report No.: 1

Test Time: 29.01.2020 21:33

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FP 150 HE 4x28LED 125W 5000K 2x40-100gr.

Luminous Length (mm): 404

Luminous Width (mm): 153

Luminous Height (mm): 80

Voltage: 221.1 V

Current: 0.571 A

Power: 125.47 W

Power Factor: 0.993

Photometric Results

CIE Class: Direct

Measurement Flux: 18403.9 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 18403.9 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 117.7, 135.2, 135.1, 134.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 102.8, 113.3, 118.6, 118.3

Luminaire Efficacy Rating (LER): 146.73

Central Intensity: 3040.3 cd

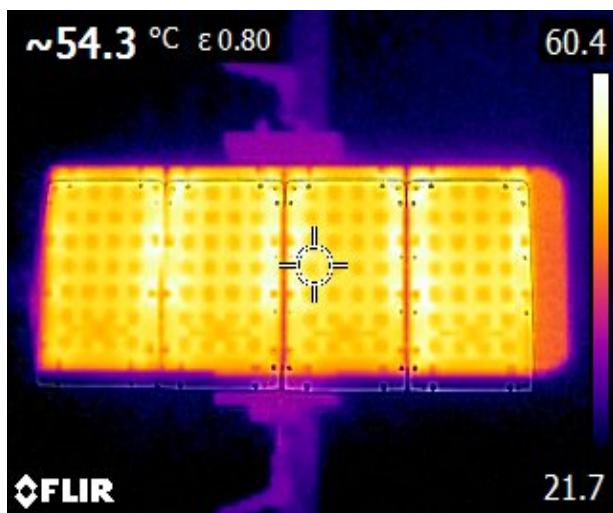
Max. Intensity: 8708.51 cd

Pos of Max. Intensity: H180 V37

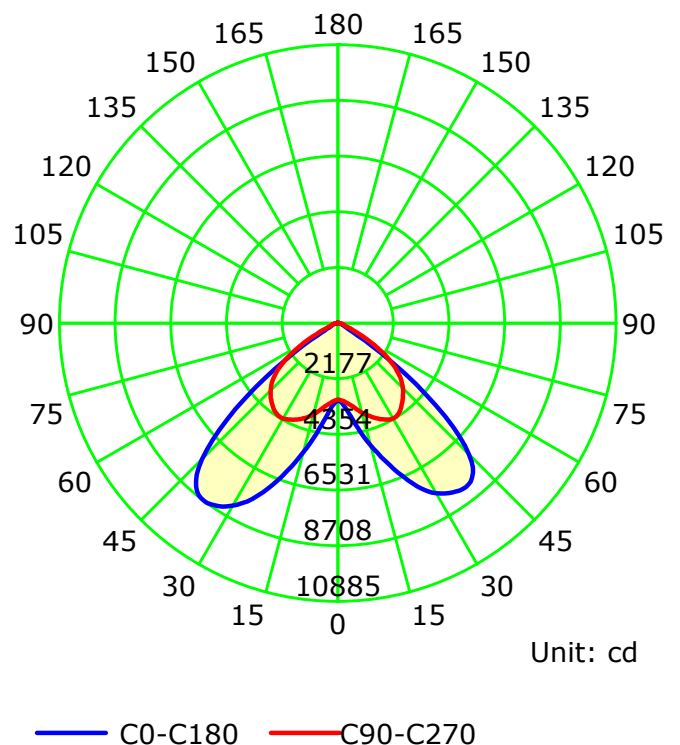
S/MH(C0/C180): 2.33

S/MH(C90/C270): 1.86

Termogramma



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

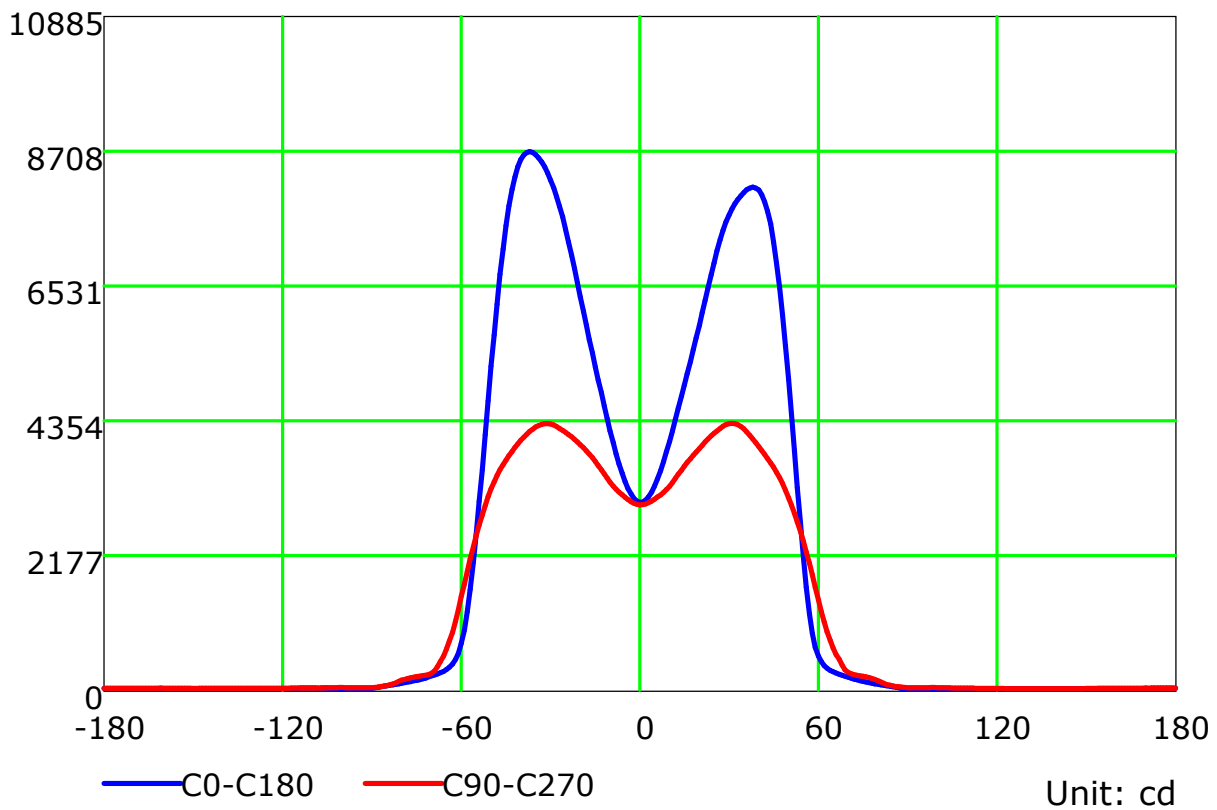
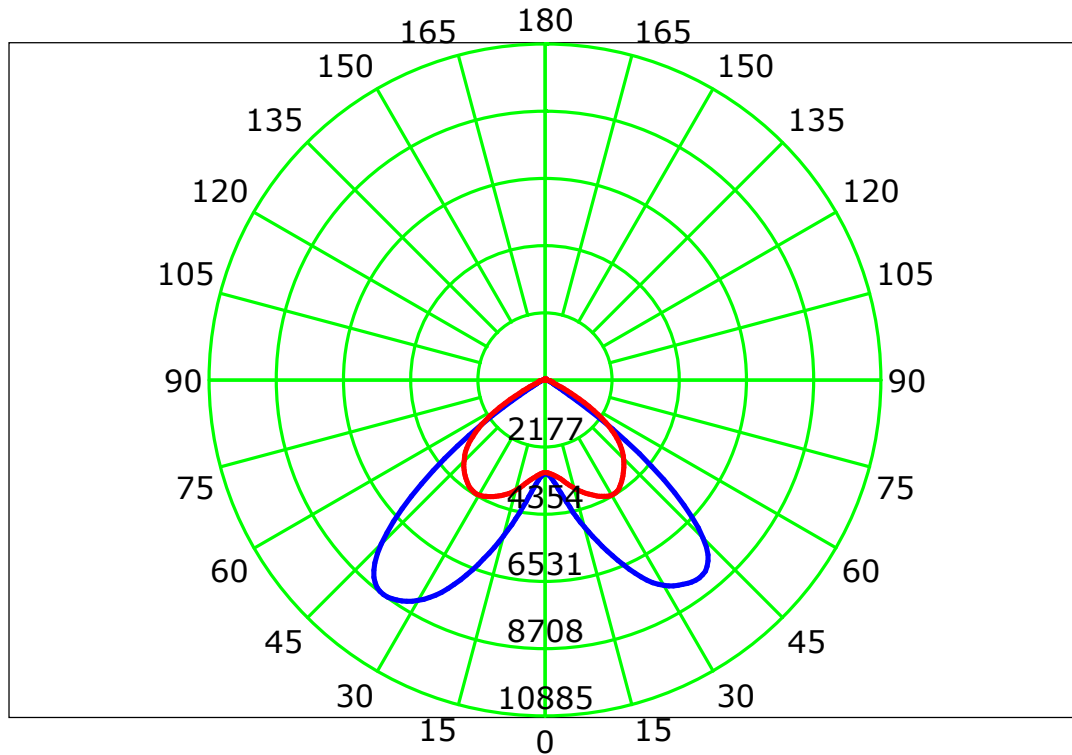
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

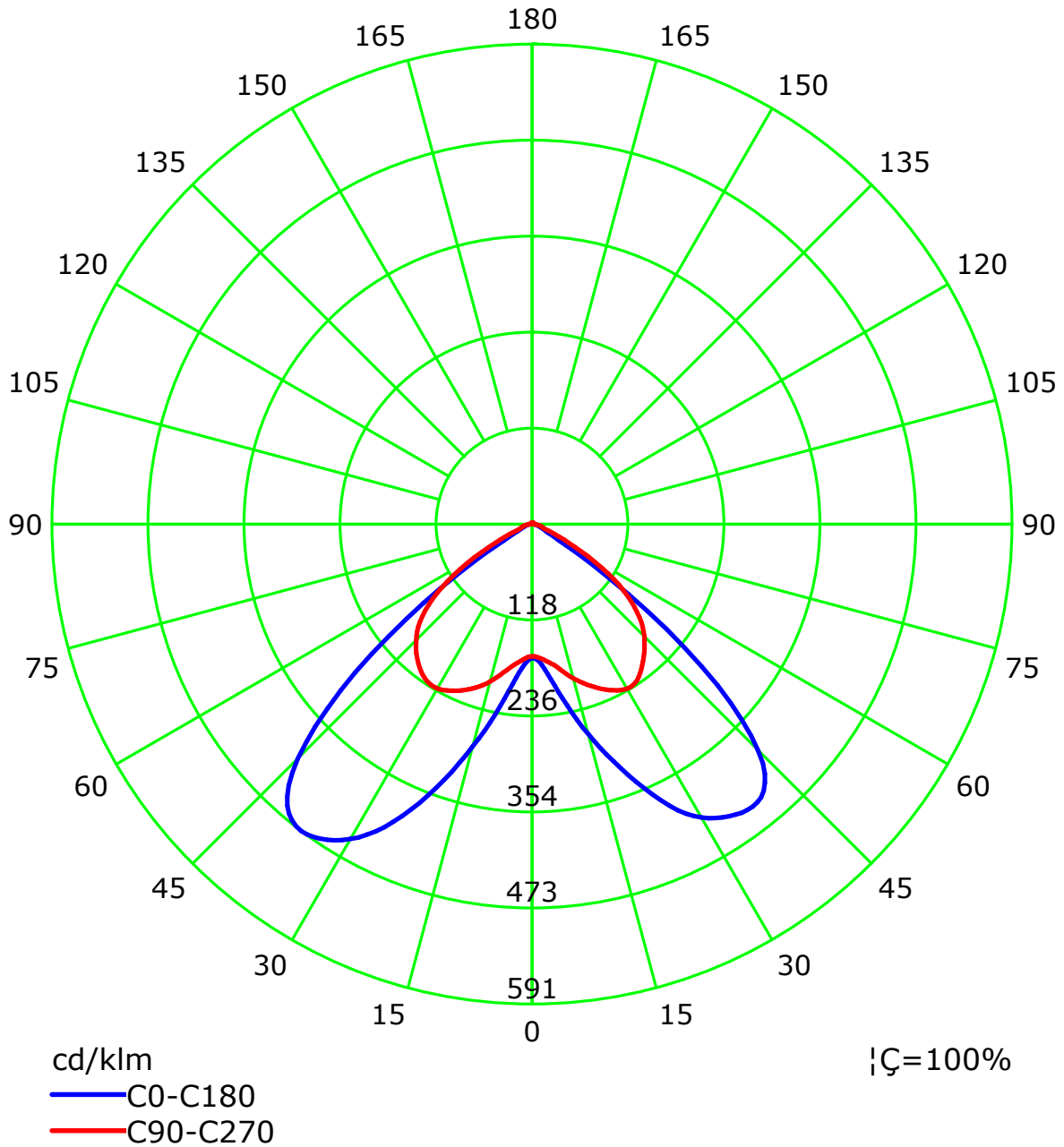
Luminous Intensity Distribution Curve



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:

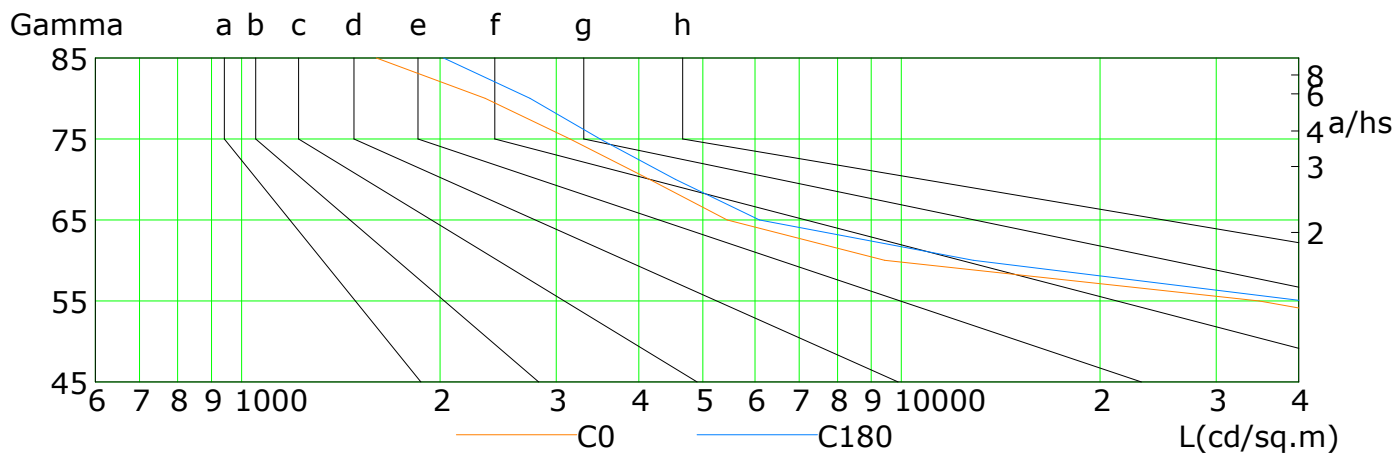
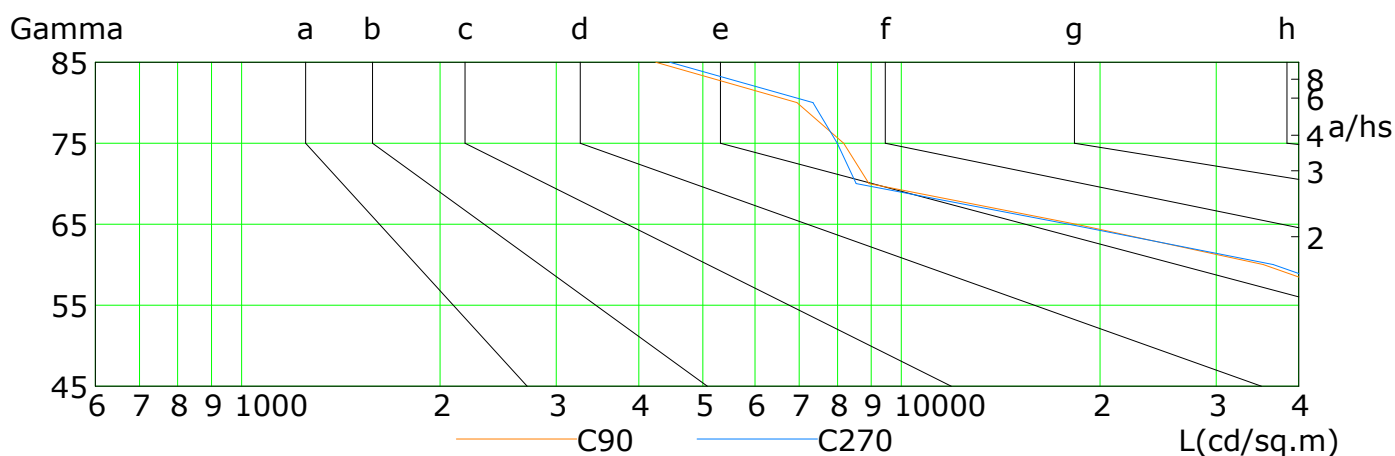
Luminous Intensity Distribution Curve(cd/klm)



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

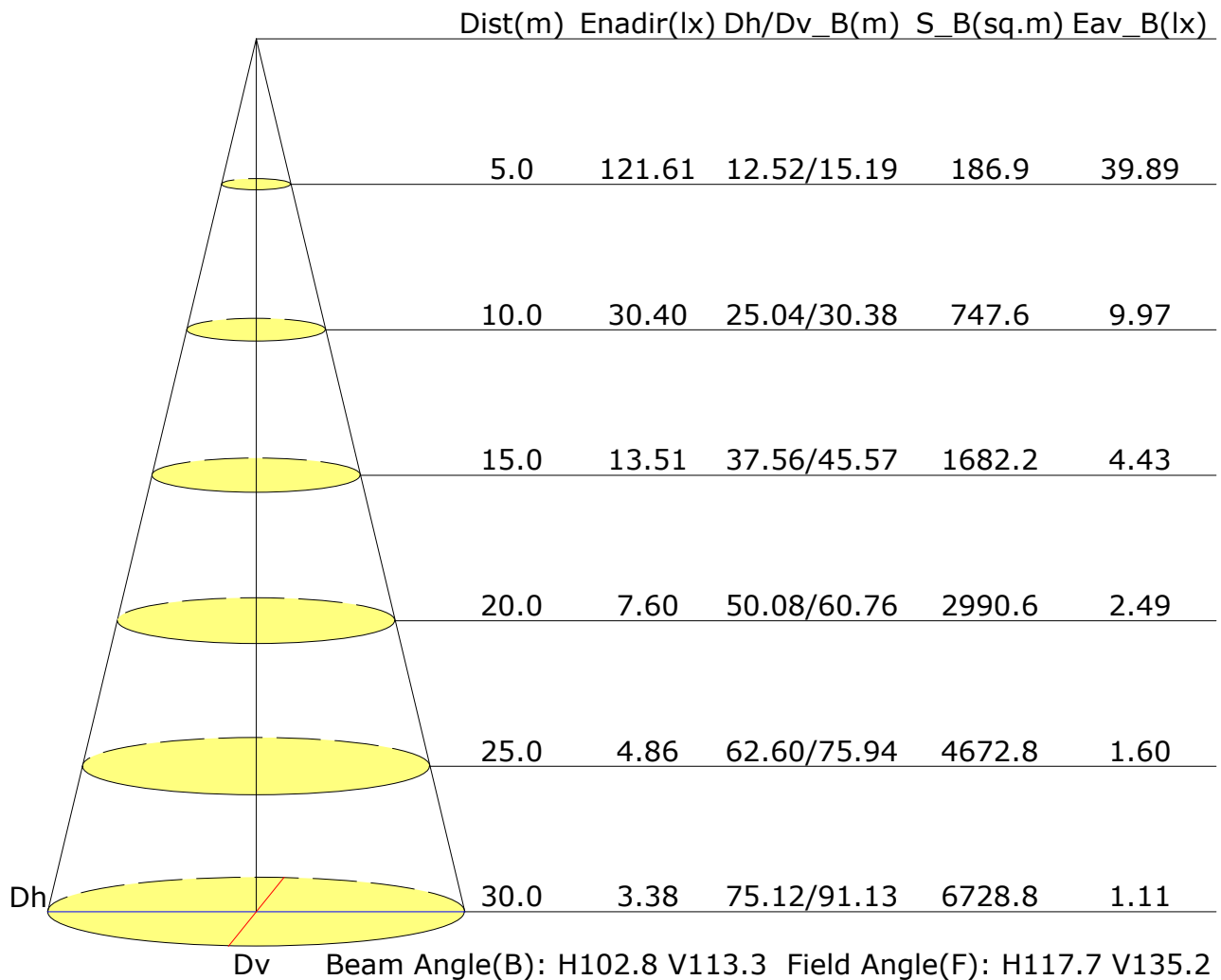


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	108793	77942	34828	9429	5447	4149	3147	2341	1600
C90	68843	63387	53050	35346	18392	8931	8180	6946	4242
C180	112854	81168	40935	12853	6096	4544	3496	2736	2023
C270	71044	66328	55104	36589	17932	8543	7999	7347	4460

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:

Illuminance at a Distance



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	27.0	28.3	27.3	28.5	28.8	27.3	28.6	27.6	28.9	29.1
3H	26.8	28.0	27.2	28.3	28.6	27.3	28.4	27.6	28.7	29.0
4H	26.8	27.9	27.1	28.2	28.5	27.2	28.3	27.6	28.6	28.9
6H	26.7	27.7	27.1	28.0	28.4	27.2	28.2	27.5	28.5	28.8
8H	26.7	27.6	27.0	28.0	28.3	27.1	28.1	27.5	28.4	28.8
12H	26.6	27.5	27.0	27.9	28.2	27.1	28.0	27.5	28.4	28.7
X=4H Y=2H	27.3	28.4	27.6	28.7	29.0	27.5	28.6	27.9	28.9	29.2
3H	27.1	28.1	27.5	28.4	28.8	27.5	28.4	27.9	28.8	29.2
4H	27.1	27.9	27.5	28.3	28.7	27.5	28.3	27.9	28.7	29.1
6H	27.0	27.7	27.5	28.1	28.6	27.4	28.2	27.9	28.6	29.0
8H	27.0	27.7	27.5	28.1	28.5	27.4	28.1	27.9	28.5	28.9
12H	27.0	27.6	27.4	28.0	28.5	27.4	28.0	27.9	28.4	28.9
X=8H Y=4H	27.0	27.7	27.5	28.1	28.5	27.4	28.0	27.8	28.5	28.9
6H	27.0	27.5	27.4	27.9	28.4	27.4	27.9	27.9	28.3	28.8
8H	26.9	27.4	27.4	27.8	28.4	27.4	27.8	27.9	28.3	28.8
12H	26.9	27.3	27.4	27.8	28.3	27.3	27.7	27.8	28.2	28.7
X=12H Y=4H	27.0	27.6	27.4	28.0	28.5	27.4	27.9	27.8	28.4	28.8
6H	26.9	27.4	27.4	27.8	28.4	27.3	27.8	27.8	28.3	28.8
8H	26.9	27.3	27.4	27.8	28.3	27.3	27.7	27.8	28.2	28.7
Variations with the observer position at spacings:										
S=1.0H	+1.2/-2.4					+0.5/-0.7				
S=1.5H	+2.9/-10.0					+2.6/-4.7				
S=2.0H	+3.7/-12.0					+3.4/-8.6				

Calculate in accordance with CIE Pub.117. The table is revised with $18404 \ln (8 \log(F/F_0) = 10.1)$.

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 = 2.00									
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	NA	0.81	0.86	0.91	0.97	1.00	1.02	1.06	1.07	
	0.30		NA	0.75	0.81	0.86	0.92	0.96	0.99	1.03	1.05	
	0.20		NA	0.71	0.77	0.82	0.89	0.93	0.96	1.00	1.03	
0.50	0.50	0.20	NA	0.79	0.84	0.88	0.93	0.97	0.99	1.02	1.03	
	0.30		NA	0.74	0.79	0.84	0.90	0.94	0.96	0.99	1.01	
	0.20		NA	0.70	0.76	0.80	0.87	0.91	0.93	0.97	1.00	
0.30	0.50	0.20	NA	0.77	0.82	0.86	0.91	0.93	0.95	0.98	0.99	
	0.30		NA	0.73	0.78	0.82	0.88	0.91	0.93	0.96	0.98	
	0.20		NA	0.70	0.75	0.79	0.85	0.89	0.91	0.94	0.96	
0.00	0.00	0.00	NA	0.67	0.72	0.76	0.82	0.85	0.87	0.90	0.91	
Rating:125W 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 = 2.00									
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	NA	0.60	0.51	0.44	0.34	0.28	0.24	0.18	0.15	
	0.30		NA	0.52	0.45	0.39	0.31	0.25	0.22	0.17	0.14	
	0.20		NA	0.45	0.40	0.35	0.28	0.23	0.20	0.16	0.13	
0.50	0.50	0.20	NA	0.57	0.48	0.41	0.32	0.30	0.22	0.17	0.14	
	0.30		NA	0.50	0.43	0.37	0.29	0.24	0.21	0.16	0.13	
	0.20		NA	0.44	0.38	0.34	0.27	0.22	0.19	0.15	0.13	
0.30	0.50	0.20	NA	0.54	0.46	0.39	0.30	0.24	0.21	0.16	0.13	
	0.30		NA	0.48	0.41	0.35	0.27	0.23	0.19	0.15	0.12	
	0.20		NA	0.43	0.37	0.32	0.26	0.21	0.18	0.14	0.12	
0.00	0.00	0.00	0.99	0.31	0.27	0.23	0.17	0.14	0.12	0.09	0.07	
Rating:125W 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 = 2.00									
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	NA	0.17	0.18	0.18	0.20	0.20	0.21	0.22	0.22	
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.18	0.20	0.20	
	0.20		NA	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.19	
0.50	0.50	0.20	NA	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21	
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		NA	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.18	
0.30	0.50	0.20	NA	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	
	0.30		NA	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		NA	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18	
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:125W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												