

Report No.: 1

Test Time: 30.09.2019 15:54

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 73W 5000K

Luminous Width (mm): 153

Voltage: 221.1 V

Power: 72.19 W

Luminous Length (mm): 604

Luminous Height (mm): 80

Current: 0.335 A

Power Factor: 0.974

Photometric Results

CIE Class: Direct

Measurement Flux: 11176.1 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 117.5, 149.6, 137.2, 136.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 56.9, 141.6, 69.5, 71.3

Luminaire Efficacy Rating (LER): 154.87

Max. Intensity: 9055.17 cd

S/MH(C0/C180): 1.73

Total Rated Lamp Lumens: 11176.1 lm

Efficiency: 100%

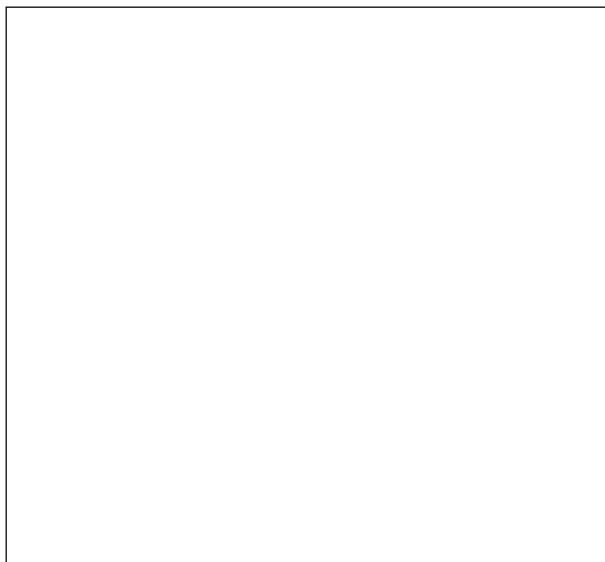
Upward Ratio: 1%

Central Intensity: 1958.76 cd

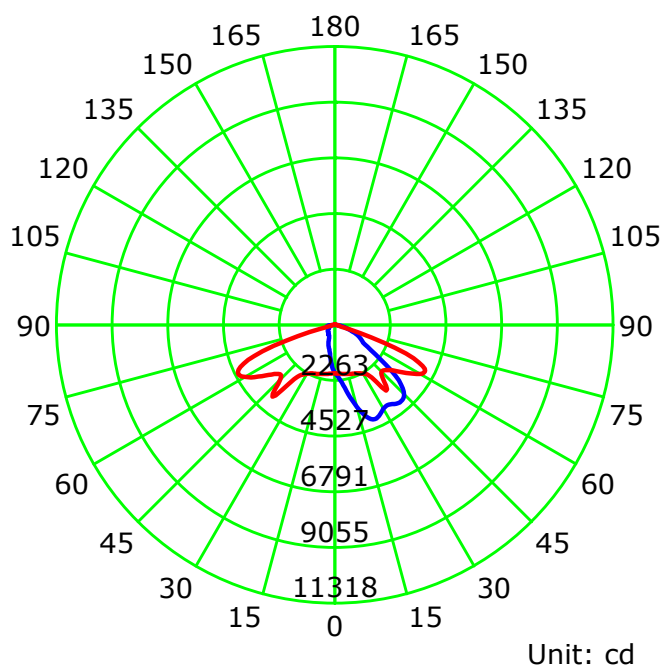
Pos of Max. Intensity: H292.5 V63

S/MH(C90/C270): 2.05

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

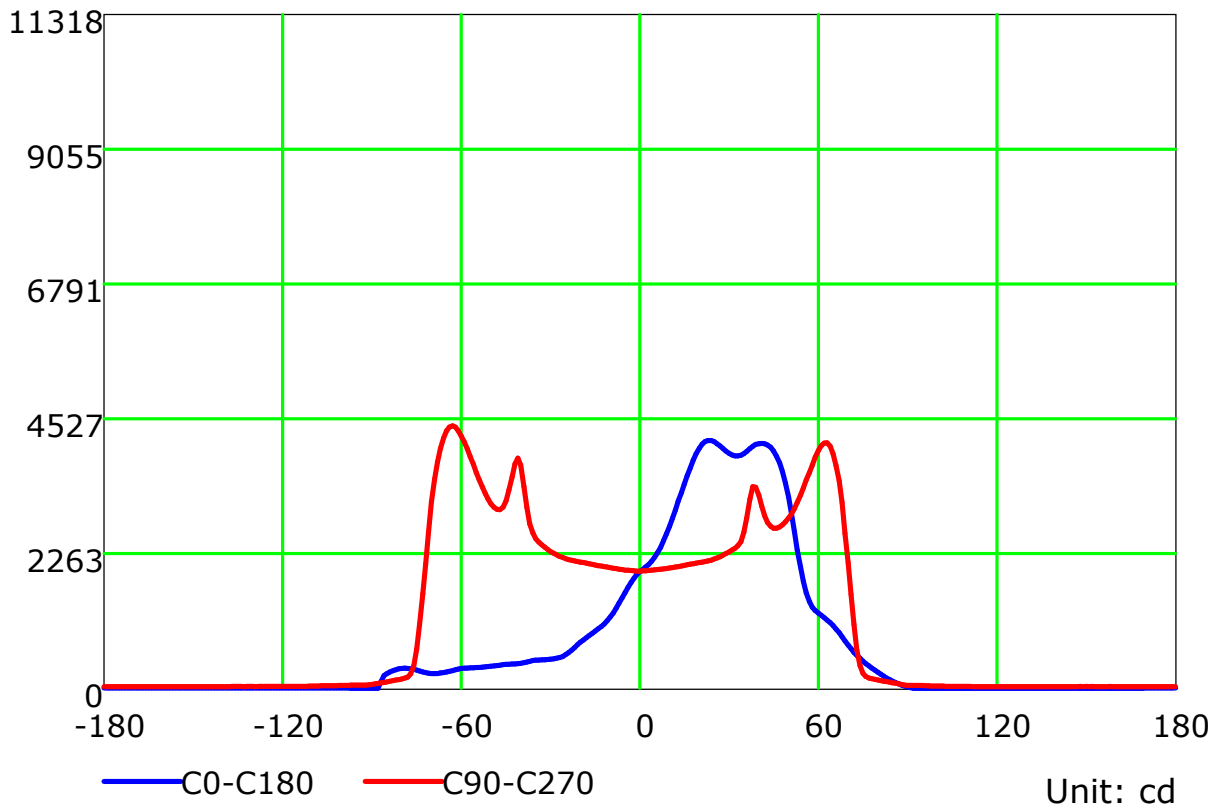
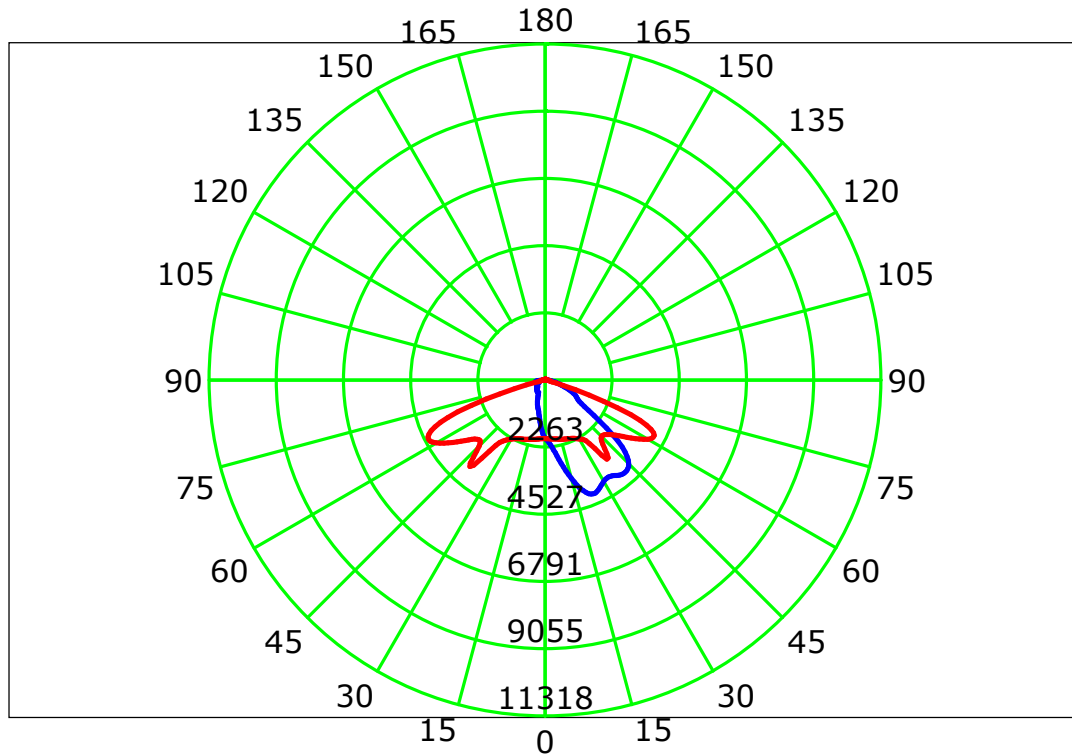
Test Device: LSG-1800B

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

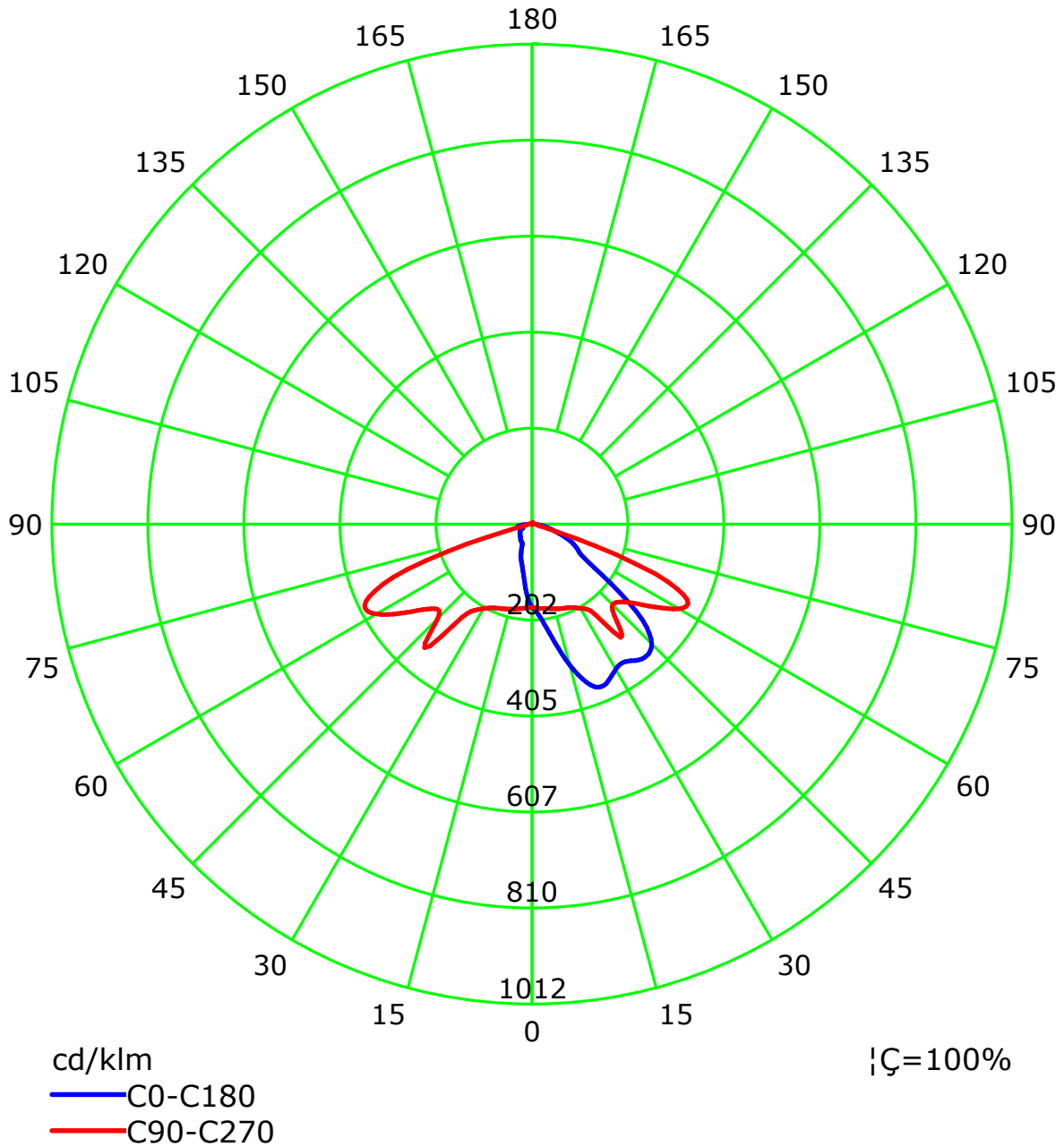
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd/klm)



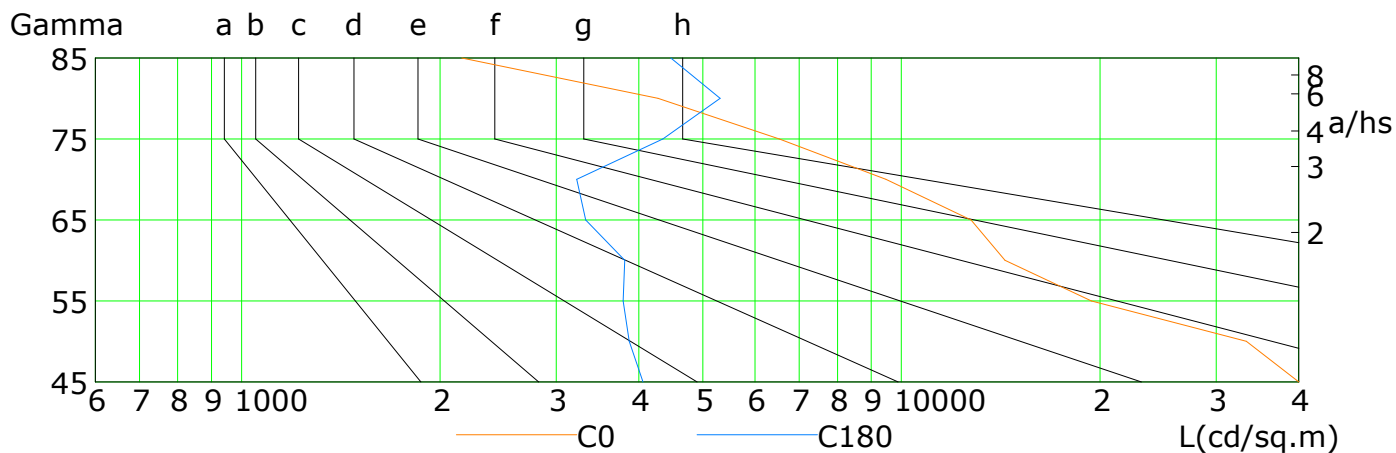
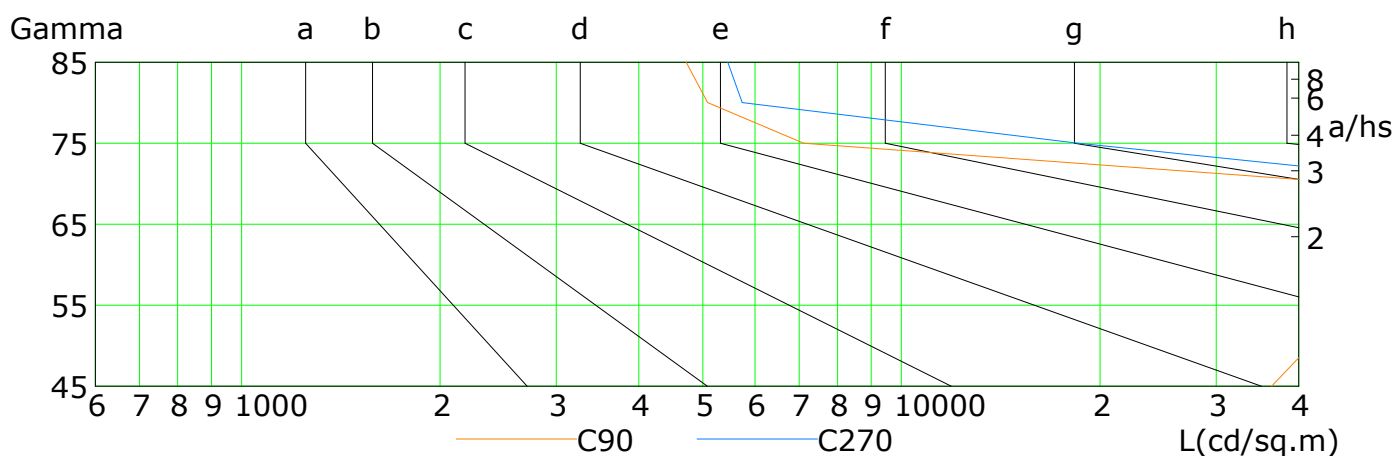
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

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

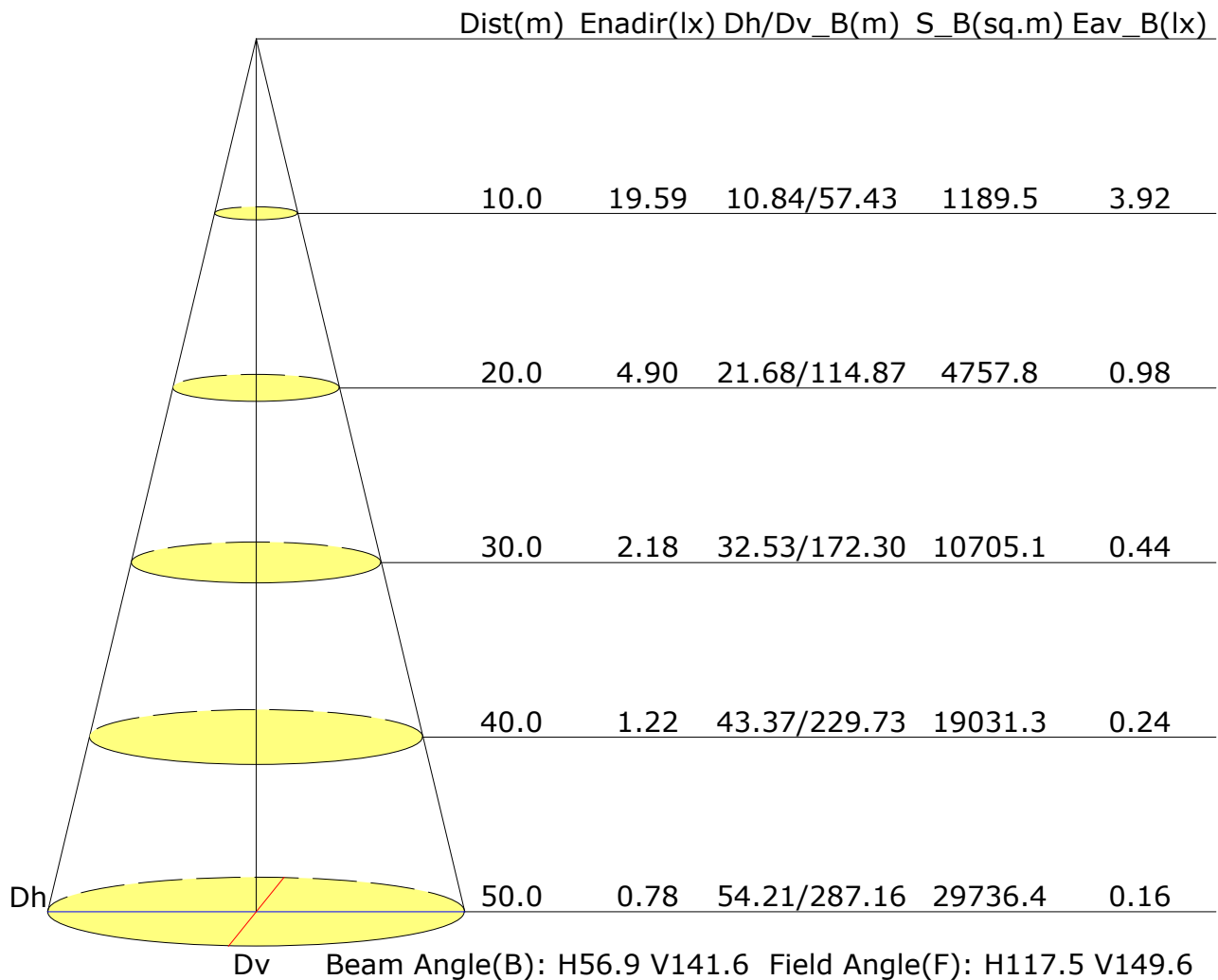


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	40056	33324	19417	14361	12748	9479	6532	4277	2156
C90	36393	41608	53477	70411	78578	49014	7109	5088	4717
C180	4061	3868	3788	3808	3325	3221	4348	5313	4475
C270	42543	45109	57583	74661	86255	72838	18540	5738	5459

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	24.8	26.3	25.1	26.5	26.8	32.4	33.9	32.7	34.2	34.4
3H	25.1	26.5	25.5	26.8	27.1	34.6	35.9	34.9	36.2	36.5
4H	25.2	26.5	25.6	26.8	27.1	34.6	35.9	35.0	36.2	36.6
6H	25.2	26.4	25.6	26.7	27.1	34.5	35.7	34.9	36.1	36.4
8H	25.2	26.4	25.6	26.7	27.1	34.5	35.6	34.9	36.0	36.4
12H	25.2	26.3	25.6	26.6	27.0	34.5	35.6	34.9	35.9	36.3
X=4H Y=2H	26.6	27.9	27.0	28.2	28.5	32.4	33.7	32.8	34.0	34.4
3H	26.8	27.9	27.2	28.3	28.7	34.9	36.0	35.3	36.4	36.8
4H	26.9	27.9	27.3	28.3	28.7	35.0	36.0	35.5	36.4	36.8
6H	26.9	27.8	27.4	28.2	28.7	35.0	35.8	35.4	36.2	36.7
8H	26.9	27.7	27.4	28.2	28.6	34.9	35.7	35.4	36.2	36.6
12H	26.9	27.6	27.4	28.1	28.6	34.9	35.6	35.4	36.1	36.5
X=8H Y=4H	27.6	28.4	28.1	28.8	29.3	34.9	35.7	35.4	36.2	36.6
6H	27.7	28.3	28.2	28.8	29.3	34.9	35.5	35.4	36.0	36.5
8H	27.7	28.3	28.2	28.8	29.3	34.9	35.4	35.4	35.9	36.4
12H	27.7	28.2	28.2	28.7	29.2	34.9	35.3	35.4	35.8	36.4
X=12H Y=4H	27.6	28.3	28.1	28.8	29.2	34.9	35.6	35.4	36.1	36.5
6H	27.7	28.3	28.2	28.8	29.3	34.9	35.4	35.4	35.9	36.4
8H	27.8	28.3	28.3	28.8	29.3	34.9	35.4	35.4	35.8	36.4
Variations with the observer position at spacings:										
S=1.0H	+0.8/-1.4					+0.4/-0.4				
S=1.5H	+1.9/-3.9					+1.9/-2.3				
S=2.0H	+3.2/-4.6					+2.6/-3.4				

Calculate in accordance with CIE Pub.117. The table is revised with $11176 \ln (8 \log(F/F_0) = 8.4)$.

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	0.65	0.72	0.78	0.86	0.91	0.94	0.99	1.02	
	0.30		NA	0.58	0.64	0.71	0.80	0.85	0.89	0.95	0.98	
	0.20		NA	0.52	0.58	0.65	0.75	0.81	0.85	0.91	0.95	
0.50	0.50	0.20	NA	0.63	0.69	0.75	0.83	0.87	0.90	0.95	0.97	
	0.30		NA	0.56	0.63	0.69	0.77	0.83	0.86	0.91	0.94	
	0.20		NA	0.51	0.58	0.64	0.73	0.79	0.83	0.88	0.92	
0.30	0.50	0.20	NA	0.61	0.67	0.72	0.79	0.84	0.87	0.91	0.93	
	0.30		NA	0.55	0.61	0.67	0.75	0.80	0.84	0.88	0.91	
	0.20		NA	0.51	0.57	0.63	0.71	0.77	0.81	0.86	0.89	
0.00	0.00	0.00	NA	0.48	0.54	0.60	0.68	0.73	0.76	0.81	0.84	
Rating:72W 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	0.82	0.71	0.61	0.47	0.39	0.34	0.26	0.21	
	0.30		NA	0.70	0.62	0.54	0.43	0.36	0.31	0.24	0.20	
	0.20		NA	0.61	0.55	0.48	0.39	0.33	0.29	0.23	0.19	
0.50	0.50	0.20	NA	0.78	0.68	0.58	0.45	0.40	0.32	0.25	0.20	
	0.30		NA	0.68	0.60	0.52	0.41	0.34	0.30	0.23	0.19	
	0.20		NA	0.60	0.54	0.47	0.38	0.32	0.28	0.22	0.18	
0.30	0.50	0.20	NA	0.75	0.65	0.56	0.43	0.35	0.30	0.23	0.19	
	0.30		NA	0.66	0.58	0.51	0.40	0.33	0.29	0.22	0.18	
	0.20		NA	0.59	0.53	0.46	0.37	0.31	0.27	0.21	0.18	
0.00	0.00	0.00	0.97	0.49	0.44	0.38	0.30	0.24	0.21	0.16	0.13	
Rating:72W 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	0.19	0.20	0.20	0.21	0.21	0.22	0.22	0.23	
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		NA	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	NA	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.22	
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.17	0.19	0.19	
	0.20		NA	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17	
0.30	0.50	0.20	NA	0.17	0.18	0.19	0.19	0.20	0.20	0.20	0.21	
	0.30		NA	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		NA	0.07	0.08	0.10	0.12	0.13	0.14	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:72W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												