

Report No.:

Test Time: 29.01.2020 21:45

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FP 150 138W 5000K 40x90gr. NN

Number of Lamps: 1

Luminous Width (mm): 153

Voltage: 221.3 V

Power: 138.19 W

Luminous Length (mm): 404

Luminous Height (mm): 80

Current: 0.629 A

Power Factor: 0.993

Photometric Results

CIE Class: Direct

Measurement Flux: 18556.9 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 38.3, 142.0, 50.9, 50.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 21.7, 84.1, 29.5, 29.5

Luminaire Efficacy Rating (LER): 134.34

Max. Intensity: 26219.03 cd

S/MH(C0/C180): 0.37

Total Rated Lamp Lumens: 18556.9 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 25898.56 cd

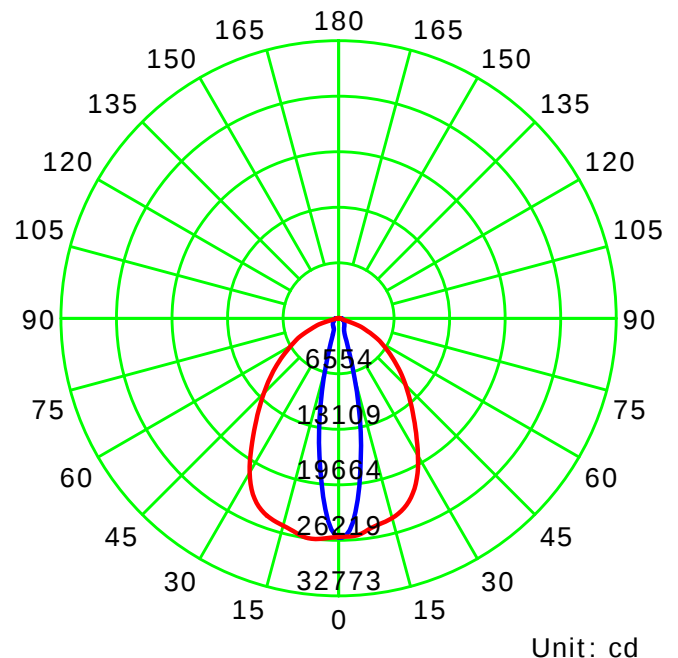
Pos of Max. Intensity: H270 V7

S/MH(C90/C270): 1.15

Picture Of Luminaire



Luminous Intensity Distribution Curve



— 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

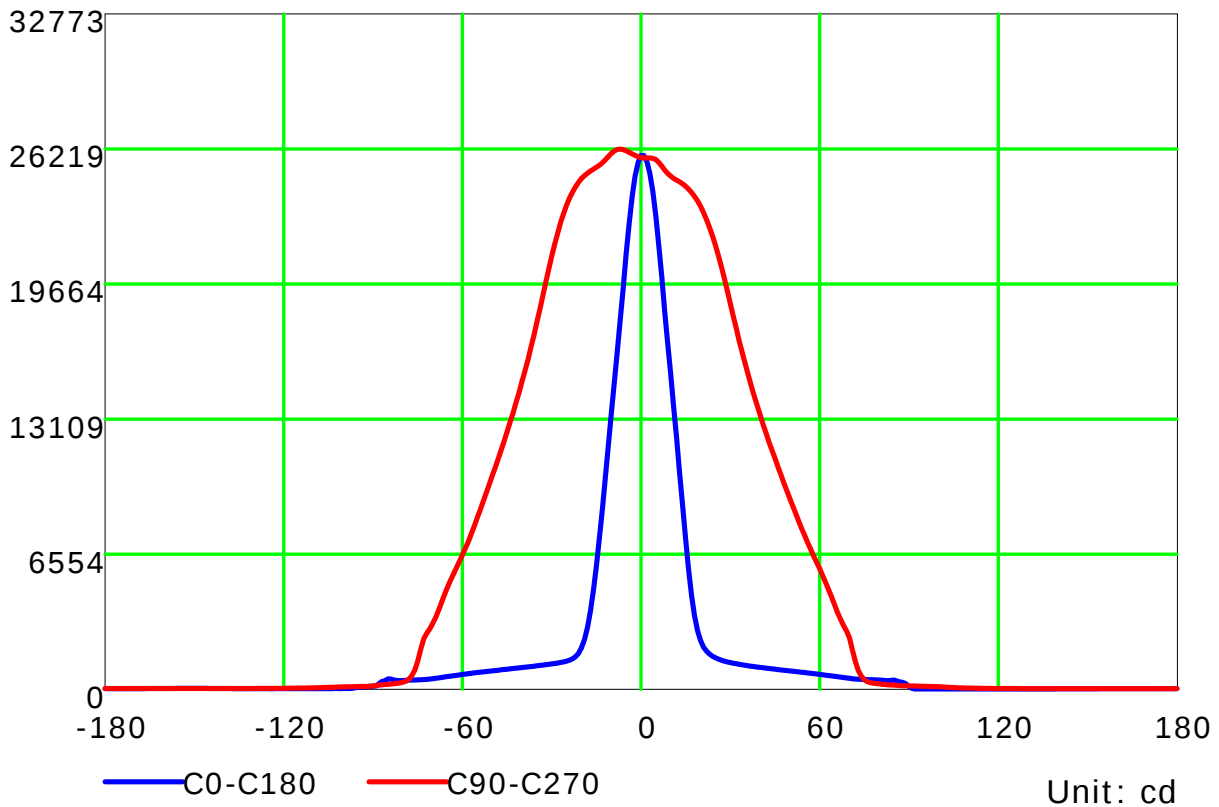
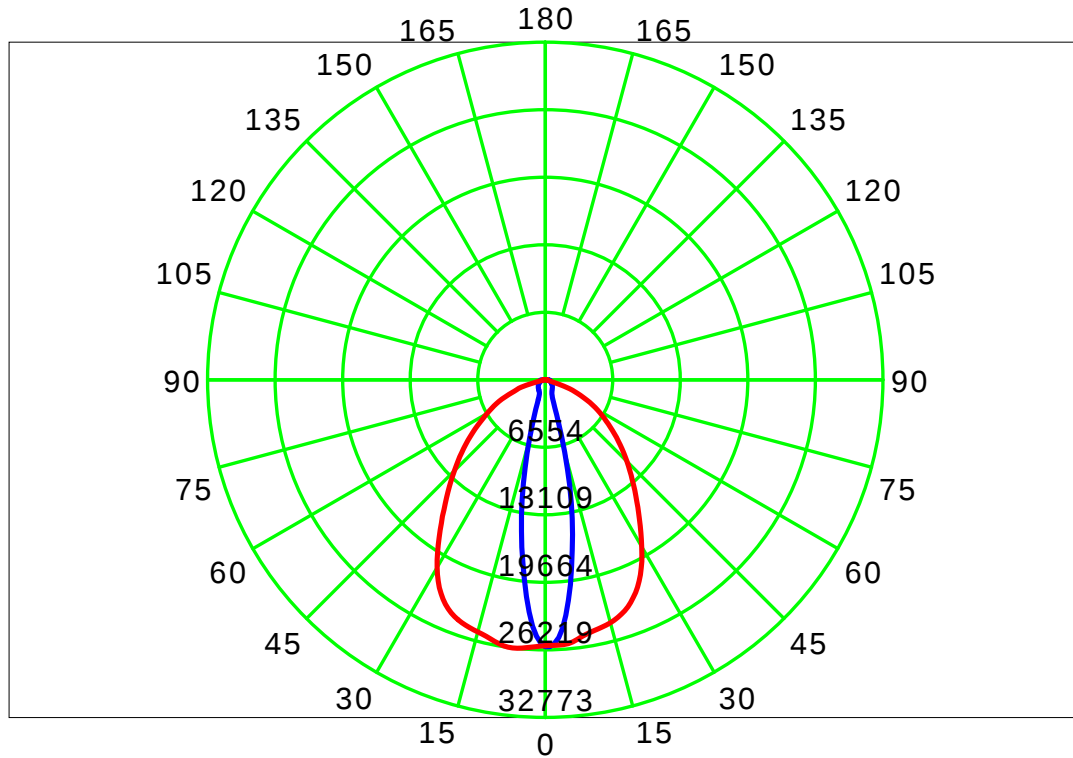
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

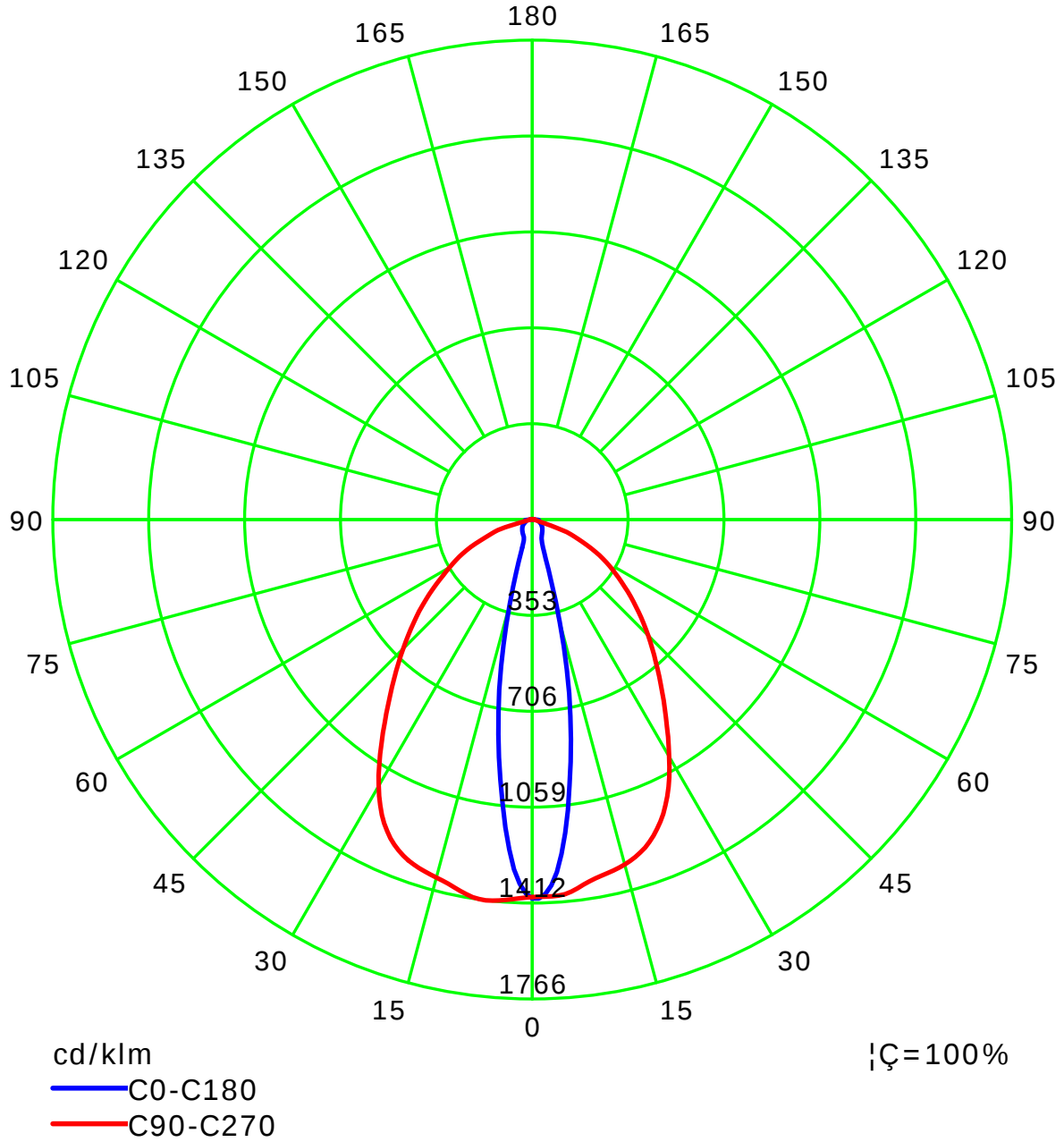
Luminous Intensity Distribution Curve



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

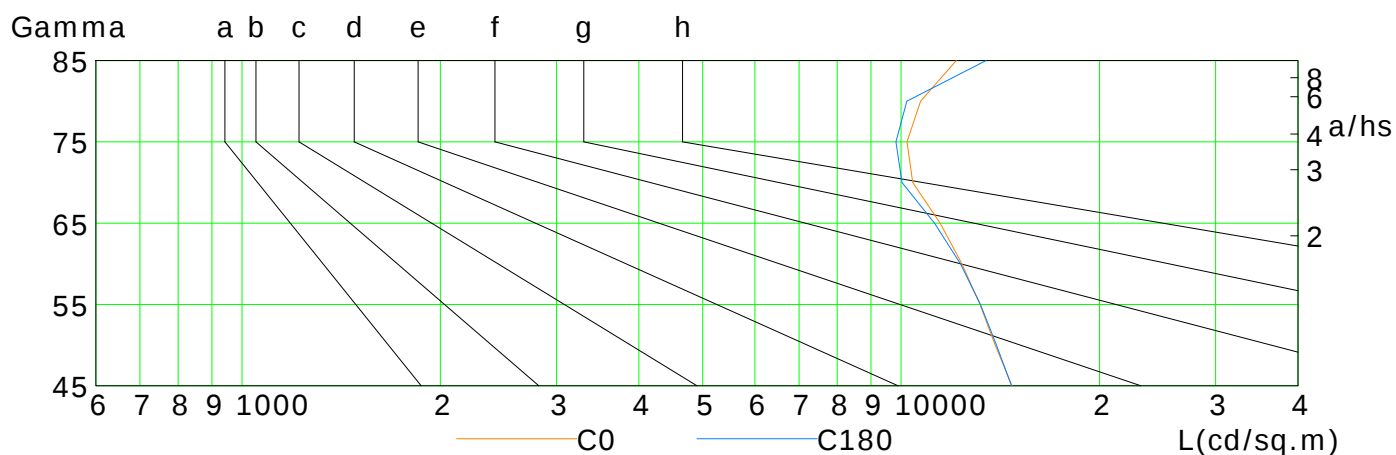
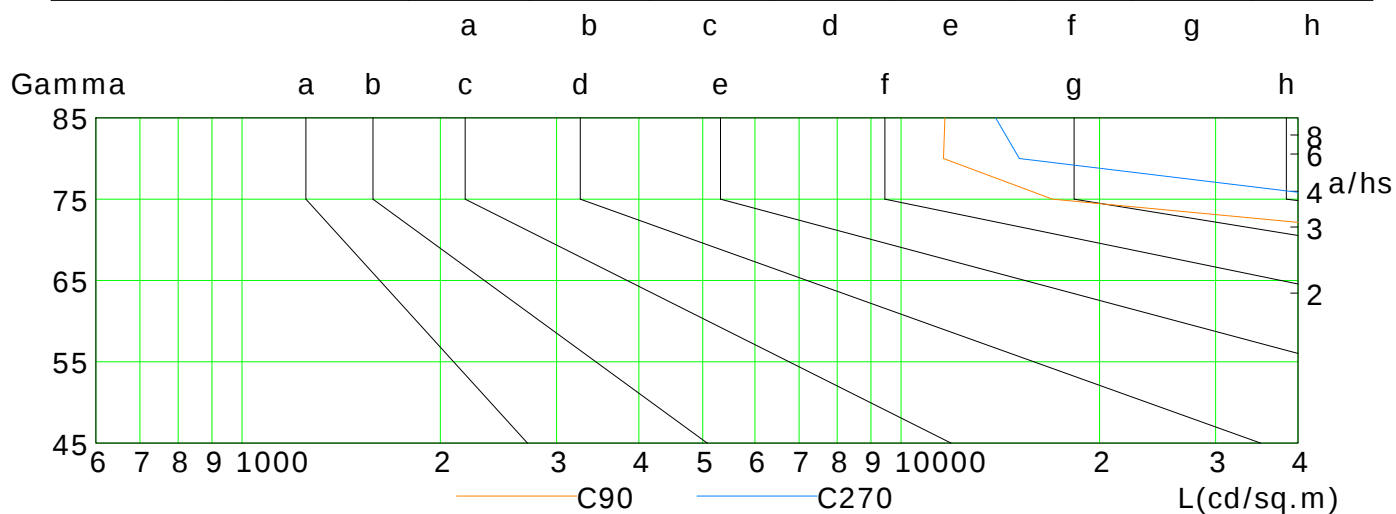
Gamma Plane (°): 0.0-180.0: 1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

Luminous Intensity Distribution Curve(cd / klm)



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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	14729	13893	13174	12367	11456	10412	10207	10705	12123
C90	214205	188499	163934	141173	110464	76947	16971	11594	11654
C180	14701	13950	13194	12305	11235	10032	9818	10202	13457
C270	238511	210853	183163	157145	133224	97668	48933	15110	13915

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

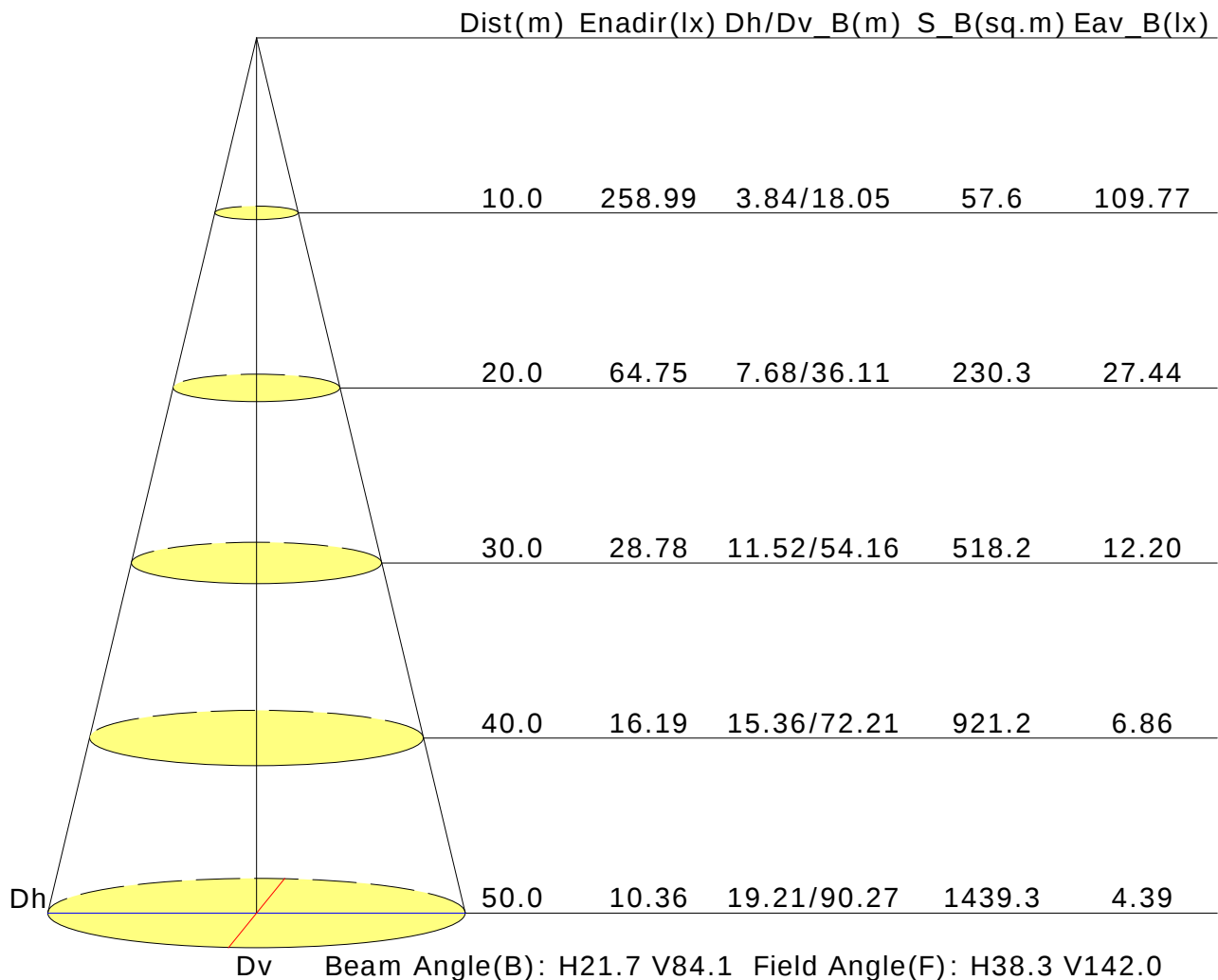
Test Device: LSG-1800B

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	16.8	17.9	17.1	18.2	18.4	29.0	30.1	29.3	30.3	30.5
3H	18.4	19.3	18.7	19.6	19.9	30.1	31.1	30.5	31.4	31.7
4H	19.1	20.0	19.5	20.3	20.6	30.3	31.2	30.7	31.5	31.8
6H	19.9	20.8	20.3	21.1	21.4	30.3	31.1	30.7	31.5	31.8
8H	20.3	21.2	20.7	21.5	21.9	30.3	31.1	30.6	31.4	31.8
12H	20.8	21.6	21.2	22.0	22.3	30.2	31.0	30.6	31.4	31.7
X=4H Y=2H	17.9	18.8	18.3	19.1	19.4	28.8	29.7	29.1	30.0	30.3
3H	19.5	20.2	19.8	20.6	20.9	29.9	30.7	30.3	31.1	31.4
4H	20.2	20.9	20.6	21.3	21.7	30.2	30.9	30.6	31.2	31.6
6H	21.1	21.7	21.5	22.1	22.5	30.2	30.8	30.6	31.2	31.6
8H	21.5	22.1	22.0	22.5	22.9	30.1	30.7	30.6	31.1	31.6
12H	22.0	22.5	22.5	23.0	23.4	30.1	30.7	30.6	31.1	31.6
X=8H Y=4H	20.5	21.1	21.0	21.5	22.0	30.1	30.6	30.5	31.0	31.5
6H	21.4	21.9	21.9	22.3	22.8	30.1	30.5	30.6	31.0	31.5
8H	21.9	22.3	22.4	22.8	23.3	30.1	30.5	30.6	31.0	31.5
12H	22.5	22.9	23.0	23.4	23.9	30.1	30.4	30.6	30.9	31.5
X=12H Y=4H	20.6	21.1	21.0	21.5	22.0	30.0	30.5	30.5	31.0	31.4
6H	21.5	21.9	22.0	22.4	22.9	30.0	30.4	30.5	30.9	31.4
8H	22.0	22.3	22.5	22.8	23.4	30.0	30.4	30.6	30.9	31.4
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+1.2/-1.7				
S=1.5H	+0.4/-0.6					+2.6/-4.1				
S=2.0H	+0.6/-1.0					+4.1/-7.2				

Calculate in accordance with CIE Pub.117. The table is revised with 18557lm ($8\log(F/F_0) = 10.1$).

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 = 0.75									
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	0.71	0.79	0.85	0.89	0.95	0.99	1.01	1.05	1.07	
	0.30		0.64	0.73	0.79	0.83	0.90	0.94	0.97	1.02	1.04	
	0.20		0.60	0.68	0.74	0.79	0.86	0.91	0.94	0.99	1.02	
0.50	0.50	0.20	0.69	0.77	0.82	0.86	0.92	0.95	0.98	1.01	1.03	
	0.30		0.63	0.71	0.77	0.82	0.88	0.91	0.94	0.98	1.00	
	0.20		0.59	0.67	0.73	0.78	0.84	0.88	0.91	0.96	0.98	
0.30	0.50	0.20	0.68	0.75	0.80	0.84	0.89	0.92	0.94	0.97	0.99	
	0.30		0.63	0.70	0.76	0.80	0.85	0.89	0.91	0.95	0.97	
	0.20		0.59	0.67	0.72	0.76	0.82	0.86	0.89	0.93	0.95	
0.00	0.00	0.00	0.57	0.64	0.69	0.73	0.79	0.82	0.85	0.88	0.90	
Rating:138W 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 = 0.75									
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	0.80	0.65	0.56	0.48	0.38	0.32	0.27	0.21	0.17	
	0.30		0.66	0.56	0.48	0.43	0.35	0.29	0.25	0.20	0.16	
	0.20		0.57	0.49	0.43	0.38	0.31	0.27	0.23	0.19	0.16	
0.50	0.50	0.20	0.76	0.62	0.53	0.46	0.36	0.33	0.25	0.20	0.16	
	0.30		0.64	0.54	0.47	0.41	0.33	0.28	0.24	0.19	0.15	
	0.20		0.56	0.48	0.42	0.37	0.30	0.26	0.22	0.18	0.15	
0.30	0.50	0.20	0.73	0.59	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.52	0.45	0.39	0.31	0.26	0.22	0.18	0.14	
	0.20		0.55	0.47	0.41	0.36	0.29	0.25	0.21	0.17	0.14	
0.00	0.00	0.00	0.43	0.35	0.30	0.26	0.21	0.17	0.15	0.12	0.10	
Rating:138W 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 = 0.75									
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	0.16	0.18	0.19	0.19	0.20	0.21	0.22	0.22	0.23	
	0.30		0.11	0.12	0.14	0.15	0.17	0.18	0.19	0.20	0.21	
	0.20		0.07	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.19	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	
	0.30		0.10	0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.20	
	0.20		0.07	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.18	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.19	
	0.20		0.07	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:138W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												