

Report No.:

Test Time: 29.01.2020 23:35

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FP 150 138W 5000K 2x40-100gr. NN

Number of Lamps: 1

Luminous Width (mm): 153

Voltage: 221.2 V

Power: 138.19 W

Luminous Length (mm): 404

Luminous Height (mm): 80

Current: 0.628 A

Power Factor: 0.994

Photometric Results

CIE Class: Direct

Measurement Flux: 19097.5 lm

Downward Ratio: 99%

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): 138.25

Max. Intensity: 9036.74 cd

S/MH(C0/C180): 2.33

Total Rated Lamp Lumens: 19097.5 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 3154.89 cd

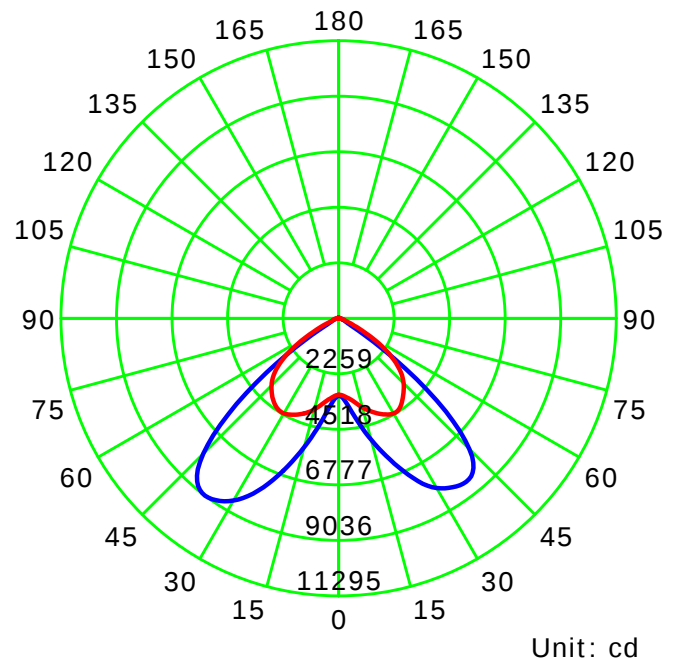
Pos of Max. Intensity: H180 V37

S/MH(C90/C270): 1.86

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

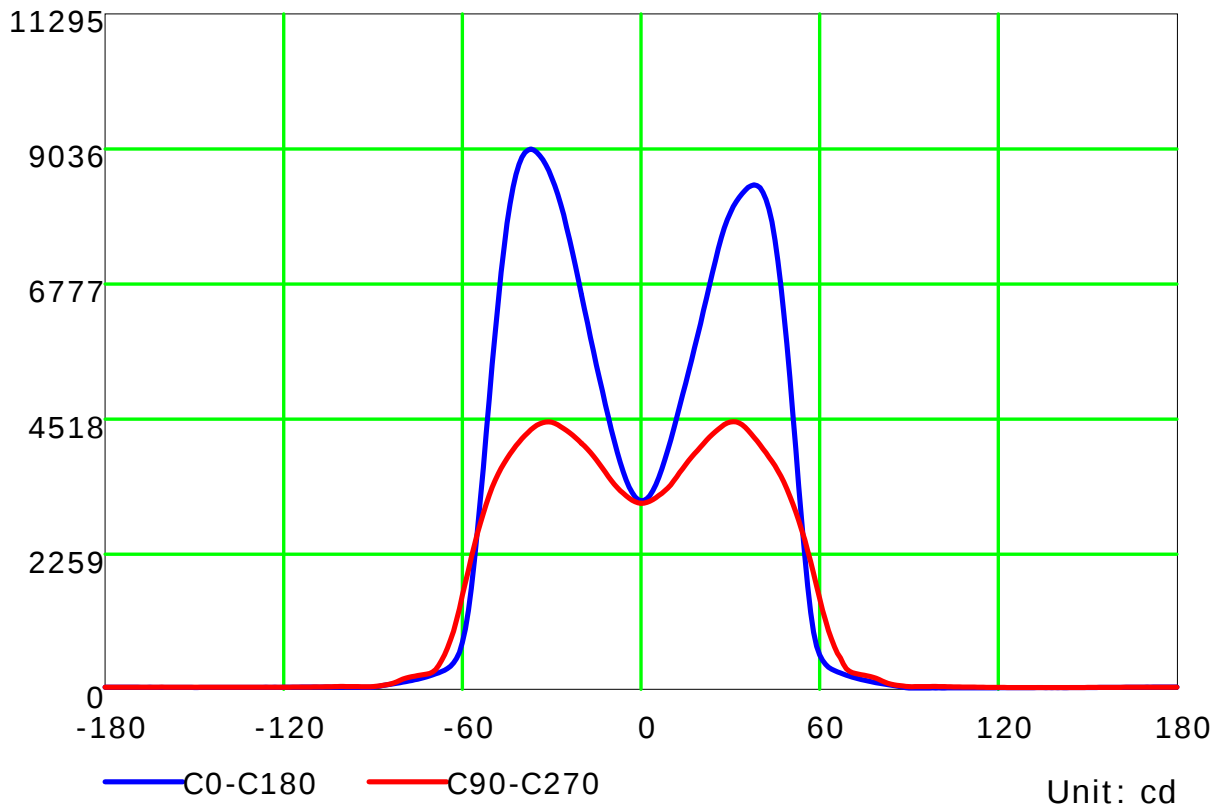
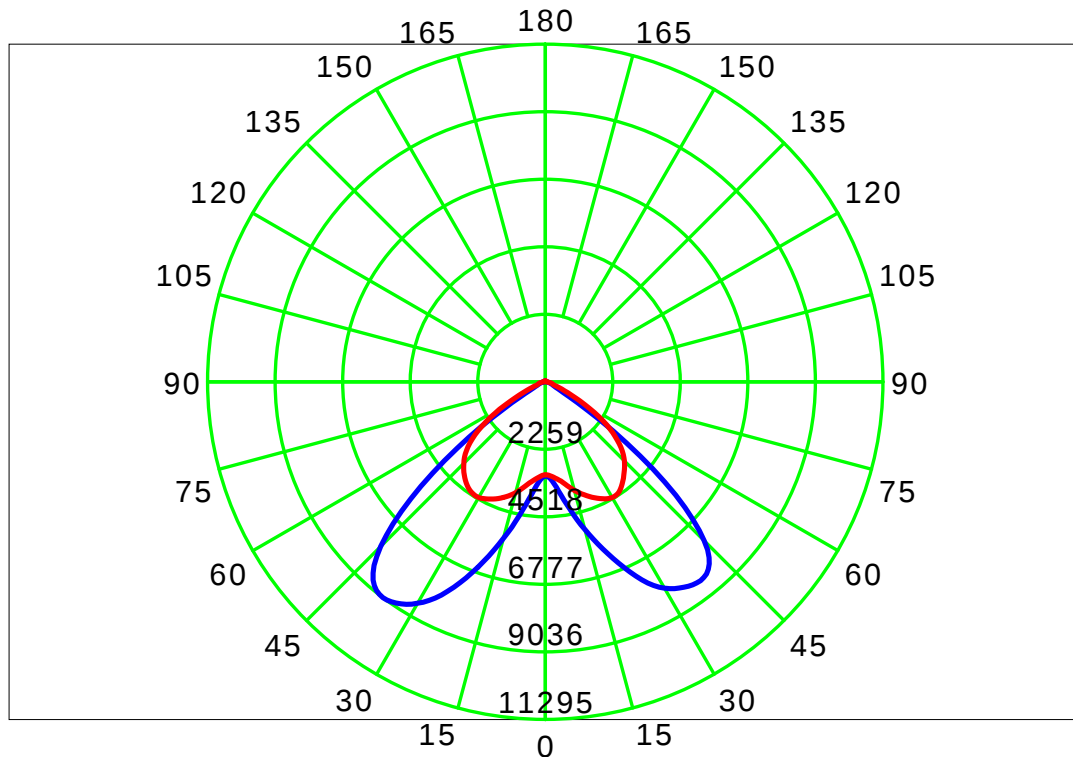
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

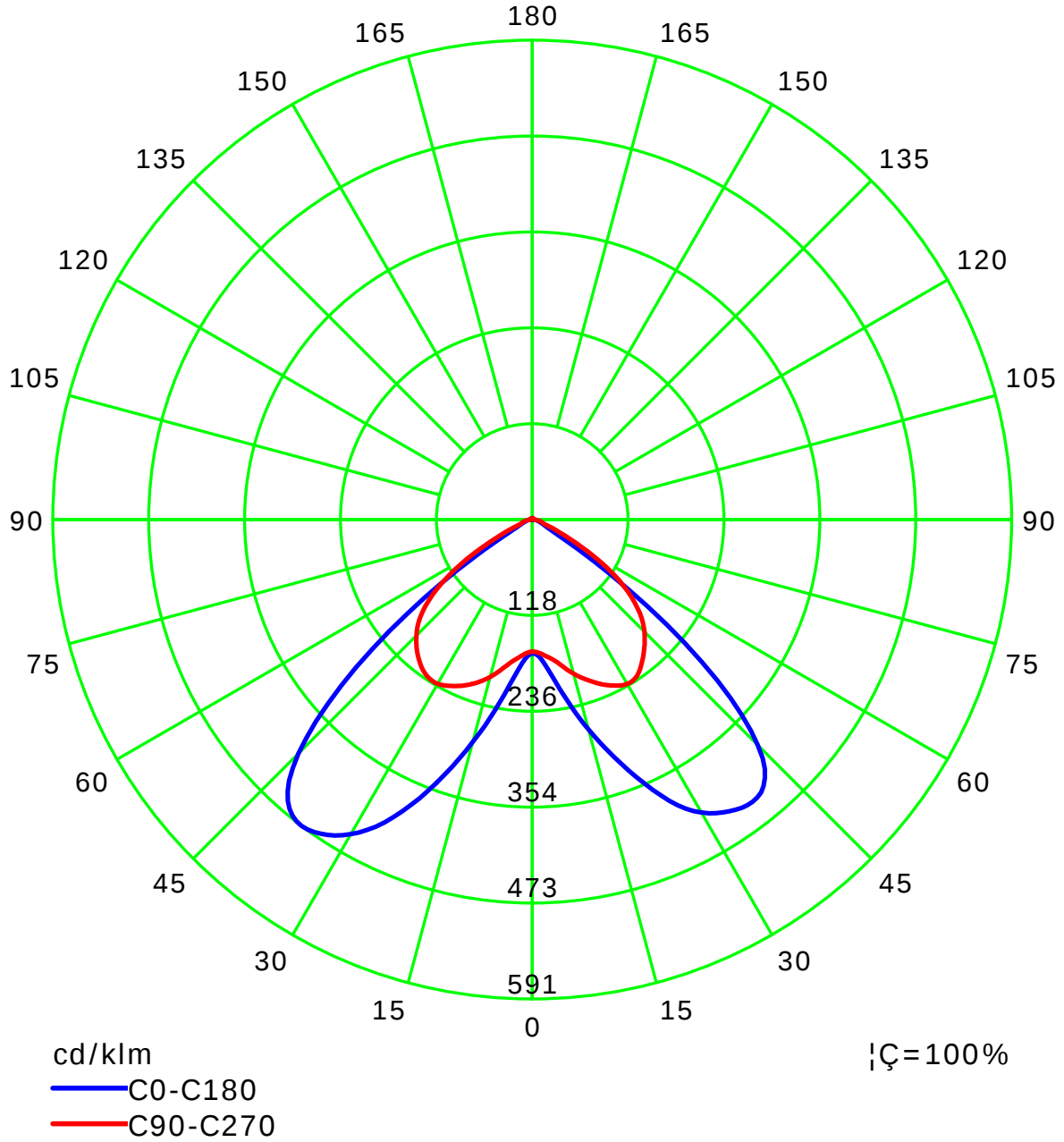
Luminous Intensity Distribution Curve



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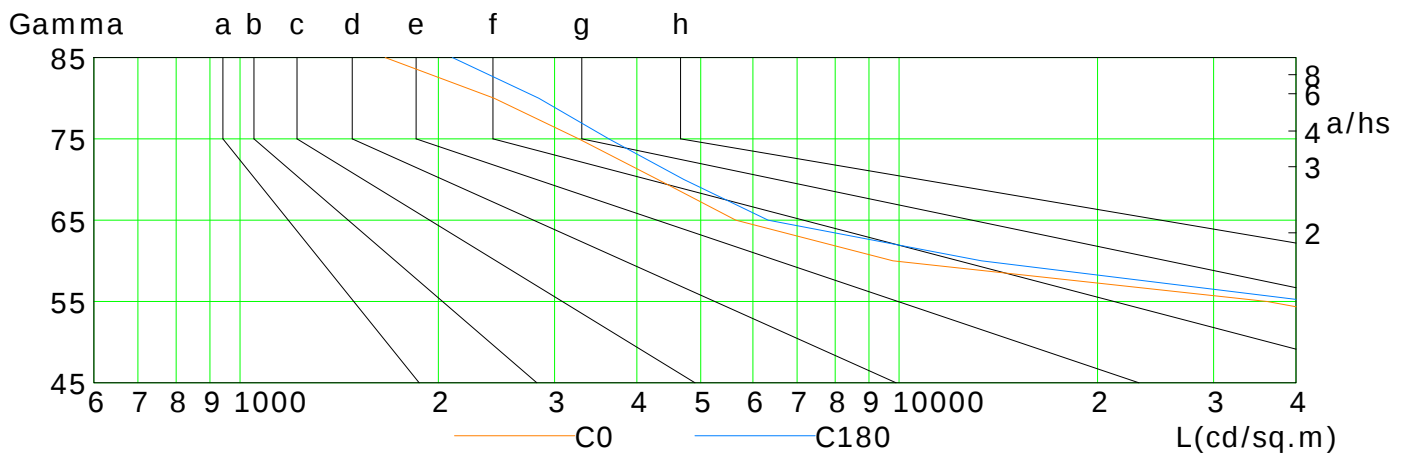
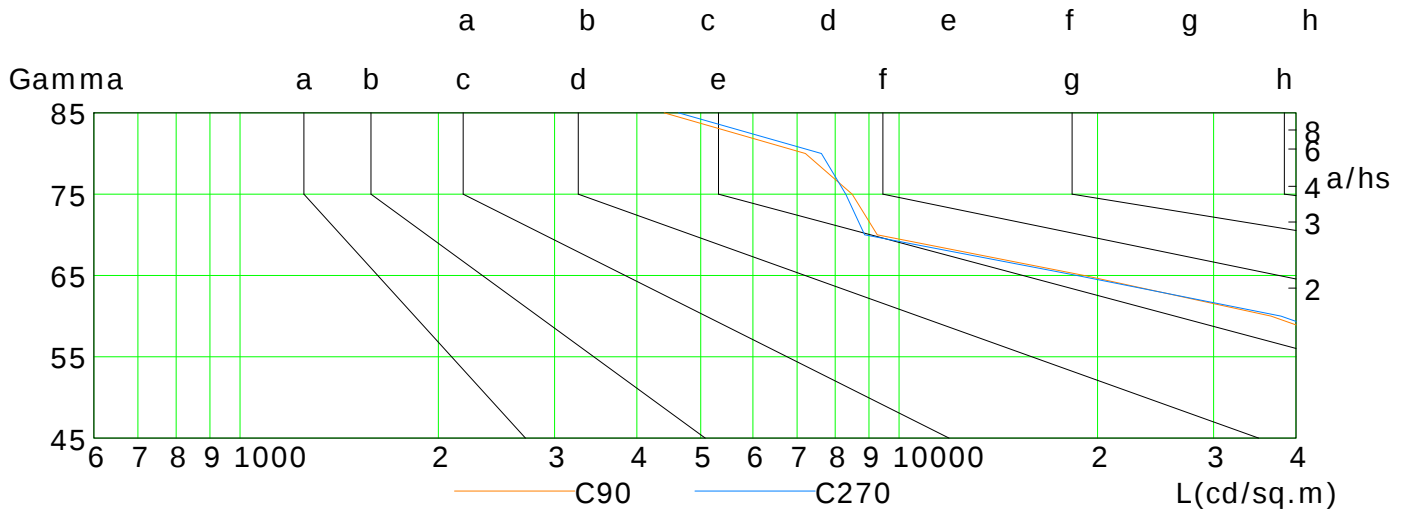
Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

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	112894	80879	36141	9785	5652	4305	3265	2429	1660
C90	71437	65776	55050	36678	19085	9268	8488	7208	4402
C180	117108	84228	42478	13337	6326	4715	3628	2839	2100
C270	73722	68828	57181	37968	18608	8865	8301	7624	4628

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

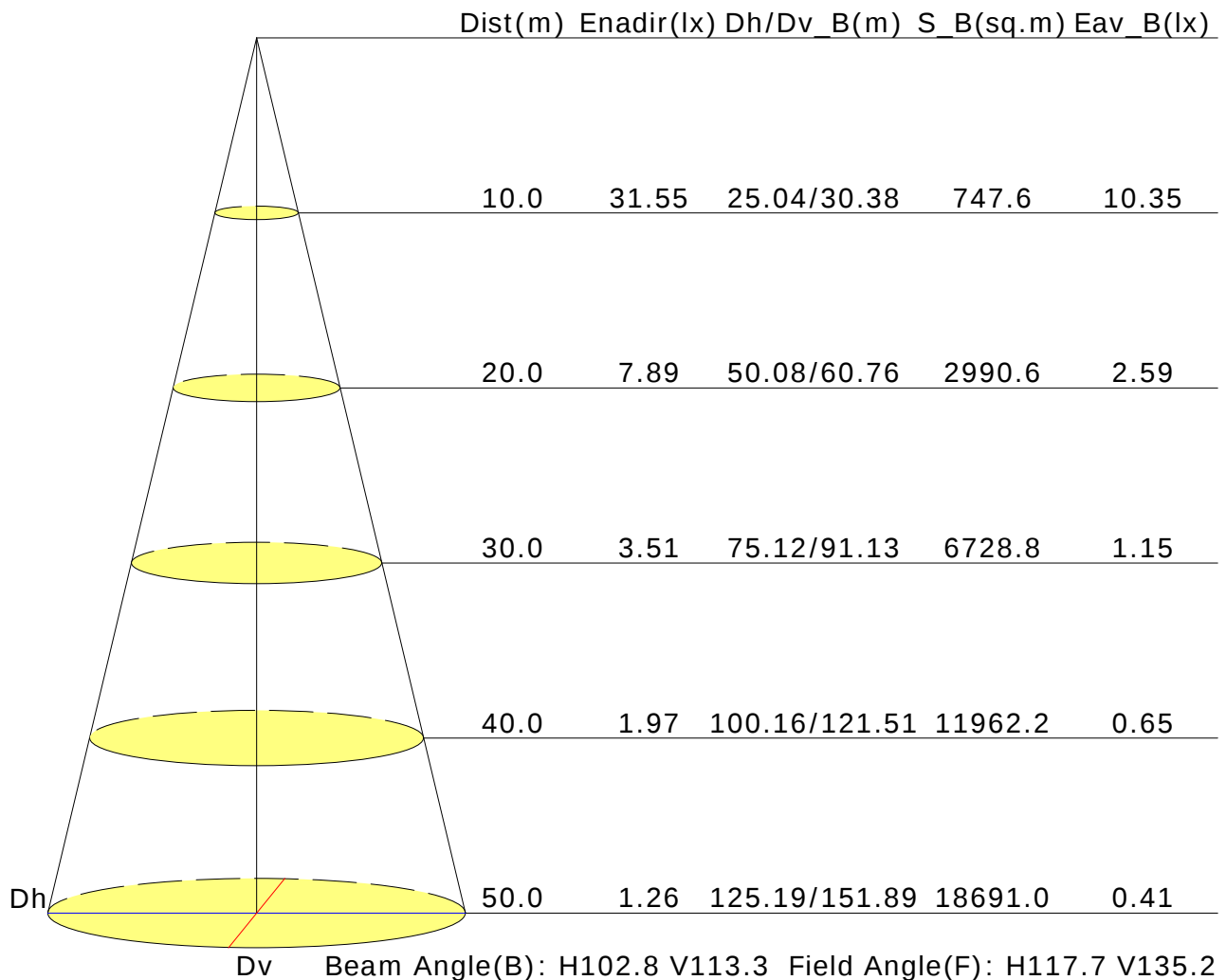
Test Device: LSG-1800B

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	27.1	28.4	27.4	28.7	28.9	27.4	28.7	27.7	29.0	29.3
3H	27.0	28.1	27.3	28.4	28.7	27.4	28.6	27.7	28.9	29.2
4H	26.9	28.0	27.2	28.3	28.6	27.3	28.4	27.7	28.7	29.1
6H	26.8	27.8	27.2	28.2	28.5	27.3	28.3	27.7	28.6	29.0
8H	26.8	27.7	27.2	28.1	28.4	27.3	28.2	27.7	28.6	28.9
12H	26.7	27.7	27.1	28.0	28.4	27.2	28.2	27.6	28.5	28.9
X=4H Y=2H	27.4	28.5	27.8	28.8	29.1	27.7	28.7	28.0	29.1	29.4
3H	27.3	28.2	27.7	28.5	28.9	27.7	28.6	28.0	28.9	29.3
4H	27.2	28.0	27.6	28.4	28.8	27.6	28.4	28.0	28.8	29.2
6H	27.2	27.9	27.6	28.3	28.7	27.6	28.3	28.0	28.7	29.1
8H	27.1	27.8	27.6	28.2	28.6	27.6	28.2	28.0	28.6	29.1
12H	27.1	27.7	27.6	28.1	28.6	27.5	28.1	28.0	28.6	29.0
X=8H Y=4H	27.1	27.8	27.6	28.2	28.6	27.5	28.2	28.0	28.6	29.0
6H	27.1	27.6	27.6	28.1	28.5	27.5	28.0	28.0	28.5	29.0
8H	27.1	27.5	27.6	28.0	28.5	27.5	27.9	28.0	28.4	28.9
12H	27.0	27.4	27.5	27.9	28.4	27.5	27.9	28.0	28.3	28.9
X=12H Y=4H	27.1	27.7	27.6	28.1	28.6	27.5	28.1	28.0	28.5	29.0
6H	27.0	27.5	27.5	28.0	28.5	27.5	27.9	28.0	28.4	28.9
8H	27.0	27.4	27.5	27.9	28.4	27.5	27.8	28.0	28.3	28.9
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 19098lm ($8\log(F/F_0) = 10.2$).

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: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 = 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: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 = 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:138W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												