

Report No.: 1

Test Time: 21.01.2020 17:15

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 HE 2x28LED 1.25A 50W 5000K 90x90gr

Luminous Length (mm): 200

Luminous Width (mm): 150

Luminous Height (mm): 80

Voltage: 221.3 V

Current: 0.240 A

Power: 52.53 W

Power Factor: 0.988

Photometric Results

CIE Class: Direct

Measurement Flux: 7839.6 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 7839.6 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 114.7, 114.7, 124.5, 124.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 85.4, 85.8, 93.7, 93.8

Luminaire Efficacy Rating (LER): 149.29

Central Intensity: 2967 cd

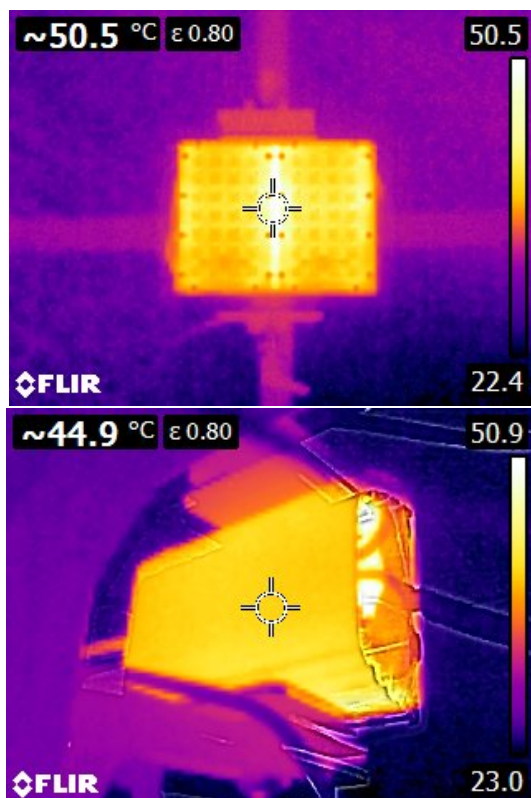
Max. Intensity: 4462.67 cd

Pos of Max. Intensity: H45 V36

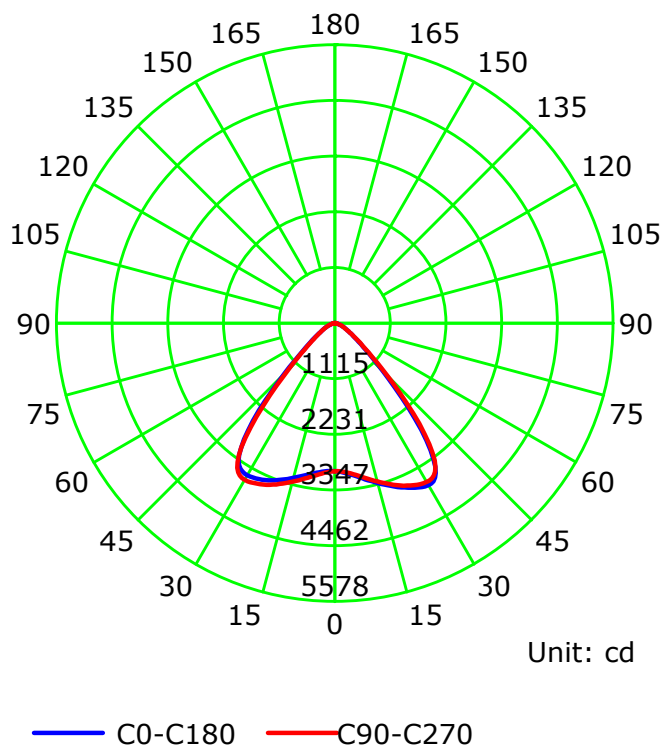
S/MH(C0/C180): 1.55

S/MH(C90/C270): 1.56

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

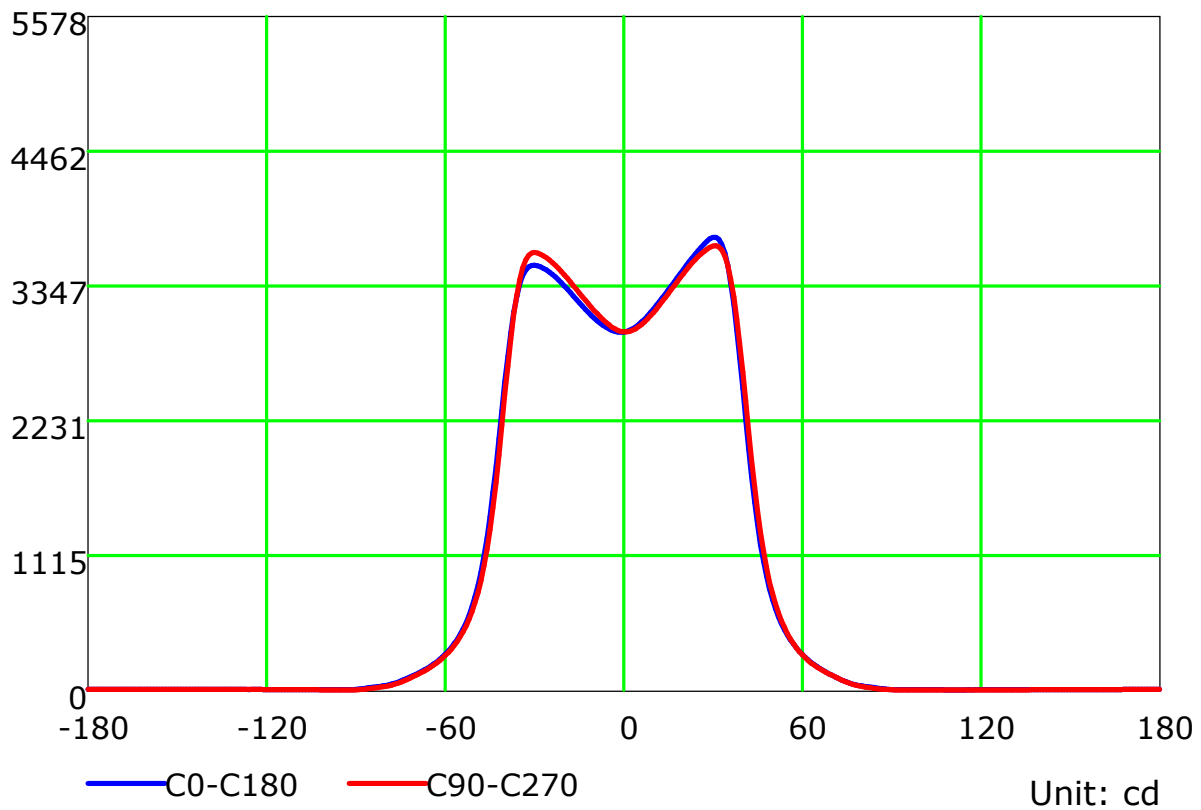
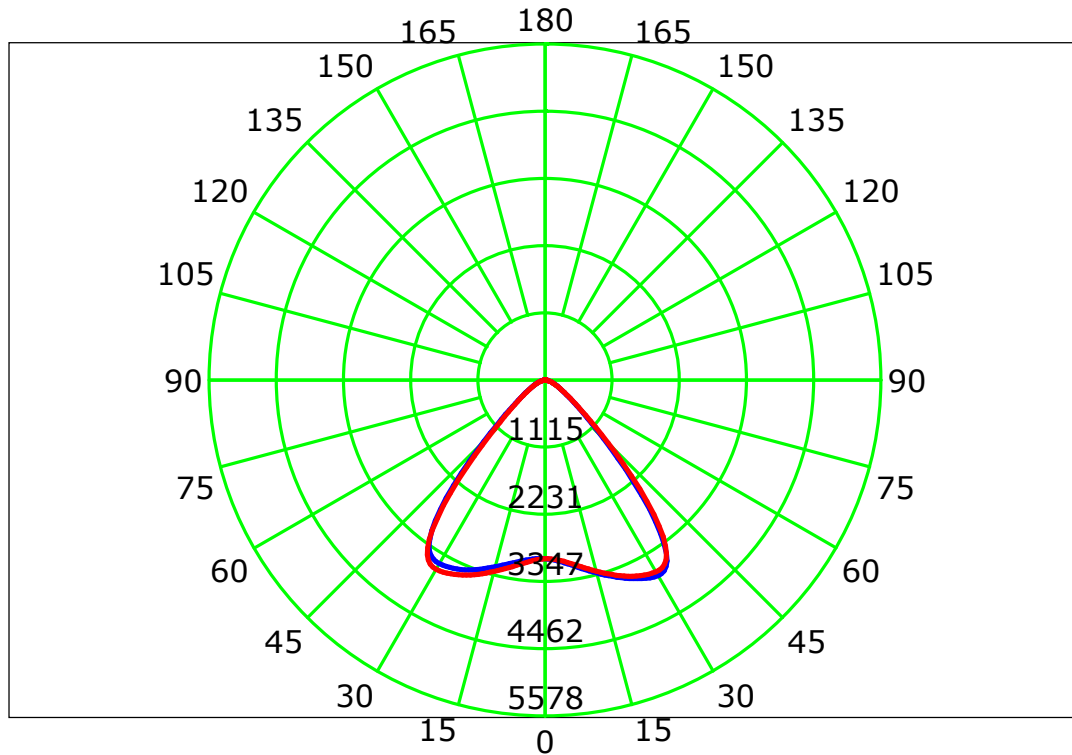
Test Device: LSG-1800B

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

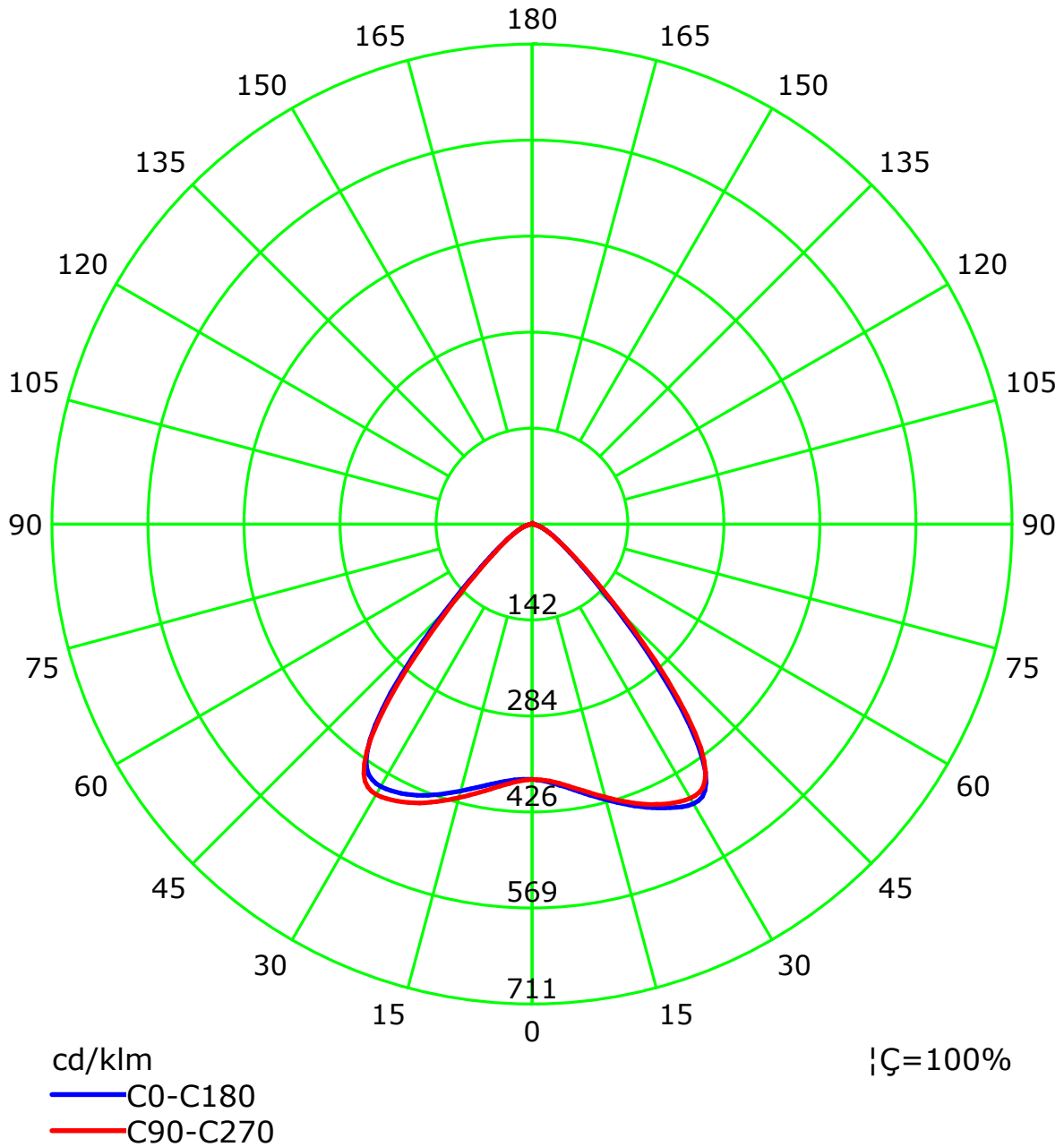
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

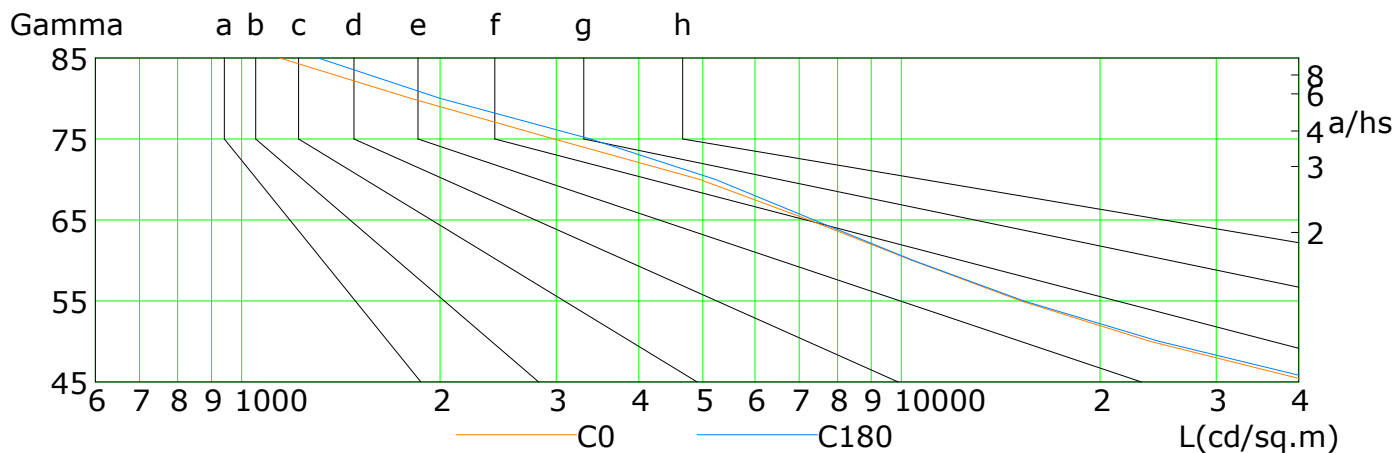
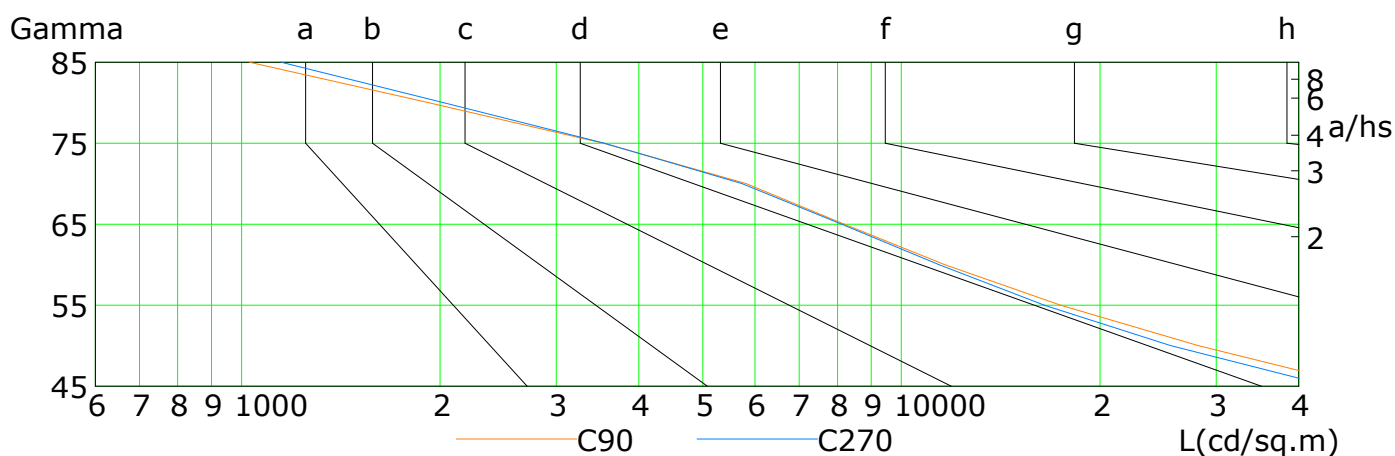
Luminous Intensity Distribution Curve(cd/klm)



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

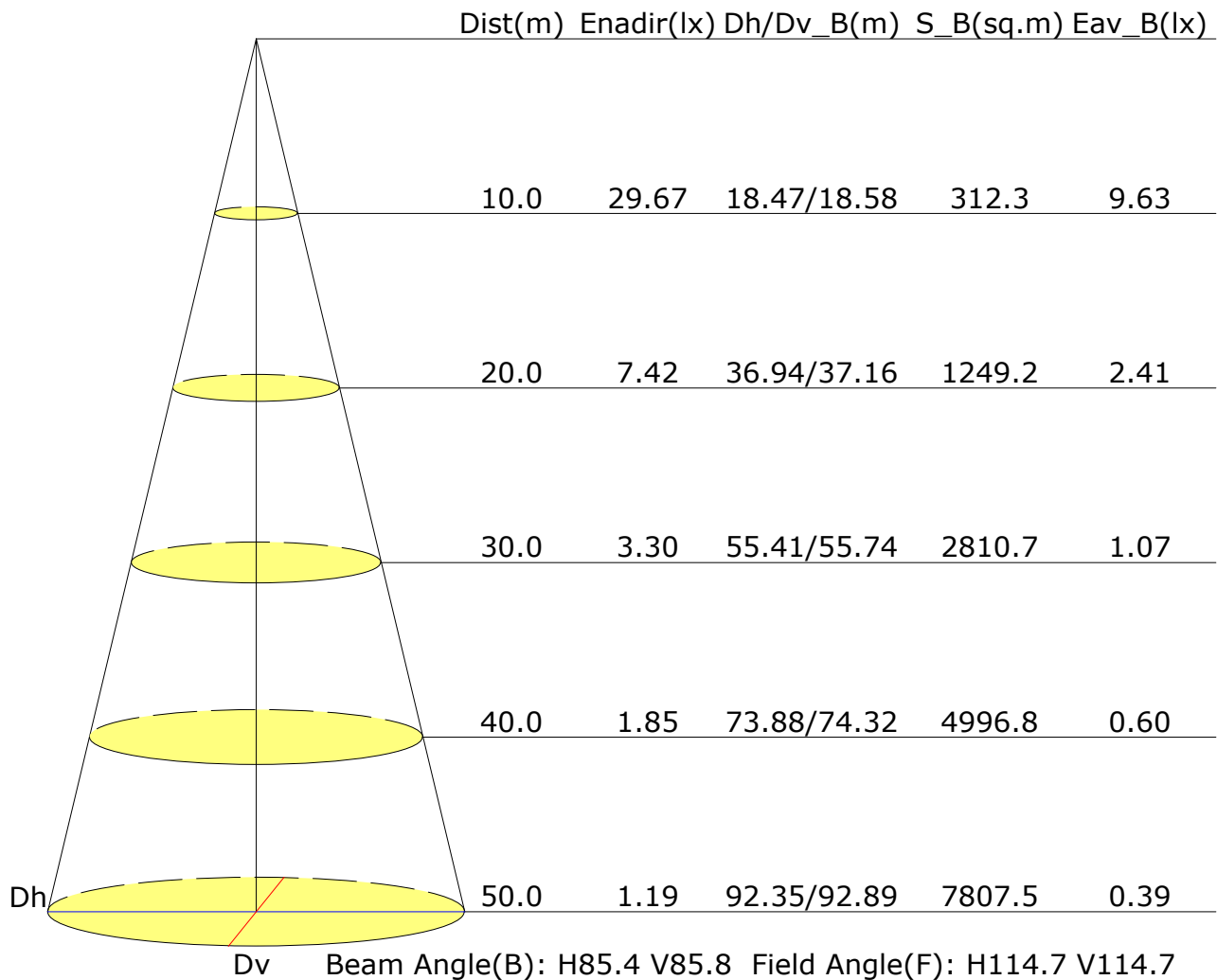


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	42236	23805	15184	10369	7244	4942	2975	1803	1142
C90	50011	28163	17435	11622	8195	5816	3532	1918	1028
C180	44234	24566	15331	10401	7369	5216	3378	1999	1306
C270	44729	25573	16470	11387	8121	5734	3550	2021	1149

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	23.7	24.8	24.0	25.1	25.3	23.9	25.0	24.2	25.3	25.5
3H	23.6	24.7	24.0	24.9	25.2	23.9	24.9	24.2	25.1	25.4
4H	23.6	24.6	23.9	24.9	25.1	23.8	24.8	24.2	25.1	25.4
6H	23.5	24.4	23.9	24.7	25.1	23.8	24.6	24.1	24.9	25.3
8H	23.5	24.4	23.9	24.7	25.0	23.7	24.6	24.1	24.9	25.2
12H	23.5	24.3	23.9	24.6	25.0	23.7	24.5	24.1	24.8	25.2
X=4H Y=2H	23.7	24.6	24.0	24.9	25.2	23.9	24.8	24.2	25.1	25.4
3H	23.7	24.5	24.1	24.9	25.2	23.9	24.7	24.3	25.0	25.4
4H	23.7	24.4	24.1	24.8	25.1	23.9	24.6	24.3	25.0	25.3
6H	23.6	24.3	24.1	24.7	25.1	23.8	24.5	24.3	24.9	25.3
8H	23.6	24.2	24.1	24.6	25.0	23.8	24.4	24.3	24.8	25.2
12H	23.6	24.1	24.0	24.5	25.0	23.8	24.3	24.2	24.7	25.2
X=8H Y=4H	23.6	24.2	24.1	24.6	25.1	23.8	24.4	24.3	24.8	25.2
6H	23.6	24.1	24.1	24.5	25.0	23.8	24.3	24.3	24.7	25.2
8H	23.6	24.0	24.1	24.5	25.0	23.8	24.2	24.3	24.6	25.1
12H	23.6	23.9	24.1	24.4	24.9	23.8	24.1	24.3	24.6	25.1
X=12H Y=4H	23.6	24.1	24.1	24.6	25.0	23.8	24.3	24.3	24.7	25.2
6H	23.6	24.0	24.1	24.5	24.9	23.8	24.2	24.3	24.6	25.1
8H	23.6	23.9	24.1	24.4	24.9	23.8	24.1	24.3	24.6	25.1
Variations with the observer position at spacings:										
S=1.0H	+2.7/-3.8					+2.6/-3.8				
S=1.5H	+3.4/-5.5					+3.4/-5.5				
S=2.0H	+5.2/-6.8					+5.1/-6.7				

Calculate in accordance with CIE Pub.117. The table is revised with 7840lm ($8\log(F/F_0) = 7.2$).

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 = 1.25									
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	0.80	0.86	0.91	0.96	1.00	1.02	1.06	1.08	
	0.30		0.64	0.74	0.81	0.85	0.92	0.96	0.99	1.03	1.05	
	0.20		0.60	0.70	0.77	0.81	0.88	0.93	0.96	1.00	1.03	
0.50	0.50	0.20	0.69	0.78	0.84	0.88	0.93	0.96	0.99	1.02	1.03	
	0.30		0.64	0.73	0.79	0.84	0.89	0.93	0.96	0.99	1.01	
	0.20		0.59	0.69	0.76	0.80	0.86	0.90	0.93	0.97	1.00	
0.30	0.50	0.20	0.68	0.76	0.82	0.86	0.90	0.93	0.95	0.98	1.00	
	0.30		0.63	0.72	0.78	0.82	0.87	0.91	0.93	0.96	0.98	
	0.20		0.59	0.69	0.75	0.79	0.85	0.88	0.91	0.94	0.96	
0.00	0.00	0.00	0.57	0.66	0.72	0.76	0.81	0.85	0.87	0.90	0.92	
Rating:53W 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 = 1.25									
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	0.78	0.62	0.52	0.44	0.35	0.28	0.24	0.19	0.15	
	0.30		0.65	0.53	0.45	0.39	0.31	0.26	0.22	0.17	0.14	
	0.20		0.56	0.46	0.40	0.35	0.29	0.24	0.21	0.16	0.14	
0.50	0.50	0.20	0.75	0.59	0.49	0.42	0.33	0.30	0.23	0.17	0.14	
	0.30		0.63	0.51	0.43	0.38	0.30	0.25	0.21	0.16	0.13	
	0.20		0.55	0.45	0.39	0.34	0.27	0.23	0.20	0.16	0.13	
0.30	0.50	0.20	0.72	0.56	0.47	0.40	0.31	0.25	0.21	0.16	0.13	
	0.30		0.62	0.50	0.42	0.36	0.28	0.23	0.20	0.15	0.13	
	0.20		0.54	0.44	0.38	0.33	0.26	0.22	0.19	0.15	0.12	
0.00	0.00	0.00	0.42	0.33	0.27	0.23	0.18	0.15	0.12	0.09	0.08	
Rating:53W 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 = 1.25									
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	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.22	
	0.30		0.10	0.11	0.13	0.14	0.16	0.17	0.18	0.19	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	0.14	0.16	0.17	0.17	0.18	0.19	0.20	0.20	0.21	
	0.30		0.09	0.11	0.12	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	0.17	0.18	
0.30	0.50	0.20	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.20	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	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:53W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												