

Report No.: 1

Test Time: 22.01.2020 19:03

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 HE 4x28LED 2.4A 100W 5000K 40x90gr.

Luminous Length (mm): 604

Luminous Width (mm): 153

Luminous Height (mm): 80

Voltage: 221.3 V

Current: 0.465 A

Power: 100.79 W

Power Factor: 0.978

Photometric Results

CIE Class: Direct

Measurement Flux: 15109 lm

Downward Ratio: 98%

Total Rated Lamp Lumens: 15109.0 lm

Efficiency: 100%

Upward Ratio: 2%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 38.6, 139.3, 51.3, 51.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 20.7, 83.9, 28.2, 28.3

Luminaire Efficacy Rating (LER): 149.96

Central Intensity: 21071.04 cd

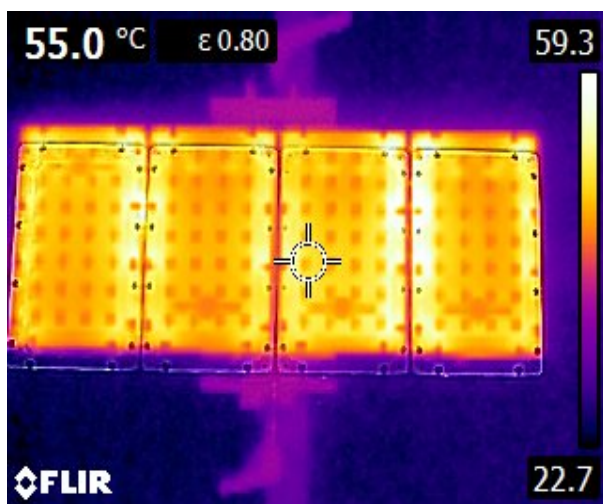
Max. Intensity: 21240.84 cd

Pos of Max. Intensity: H0 V1

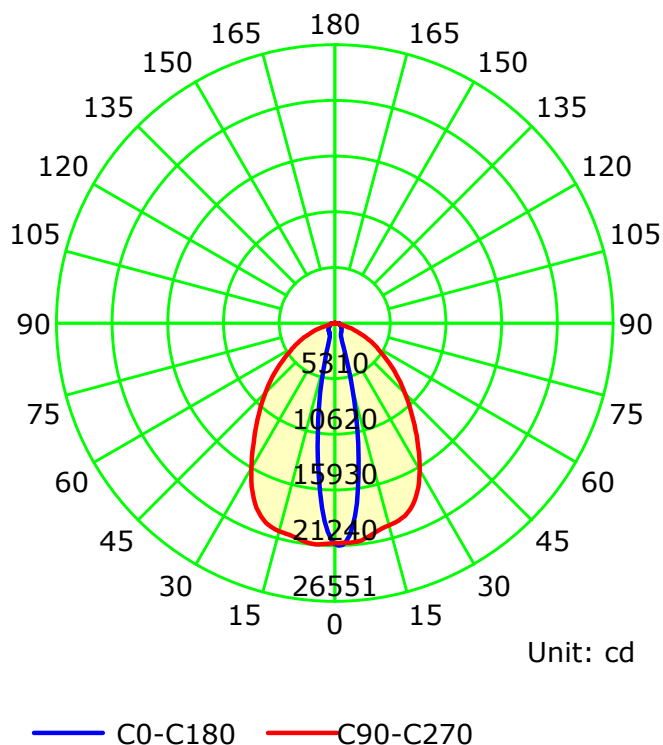
S/MH(C0/C180): 0.35

S/MH(C90/C270): 1.15

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

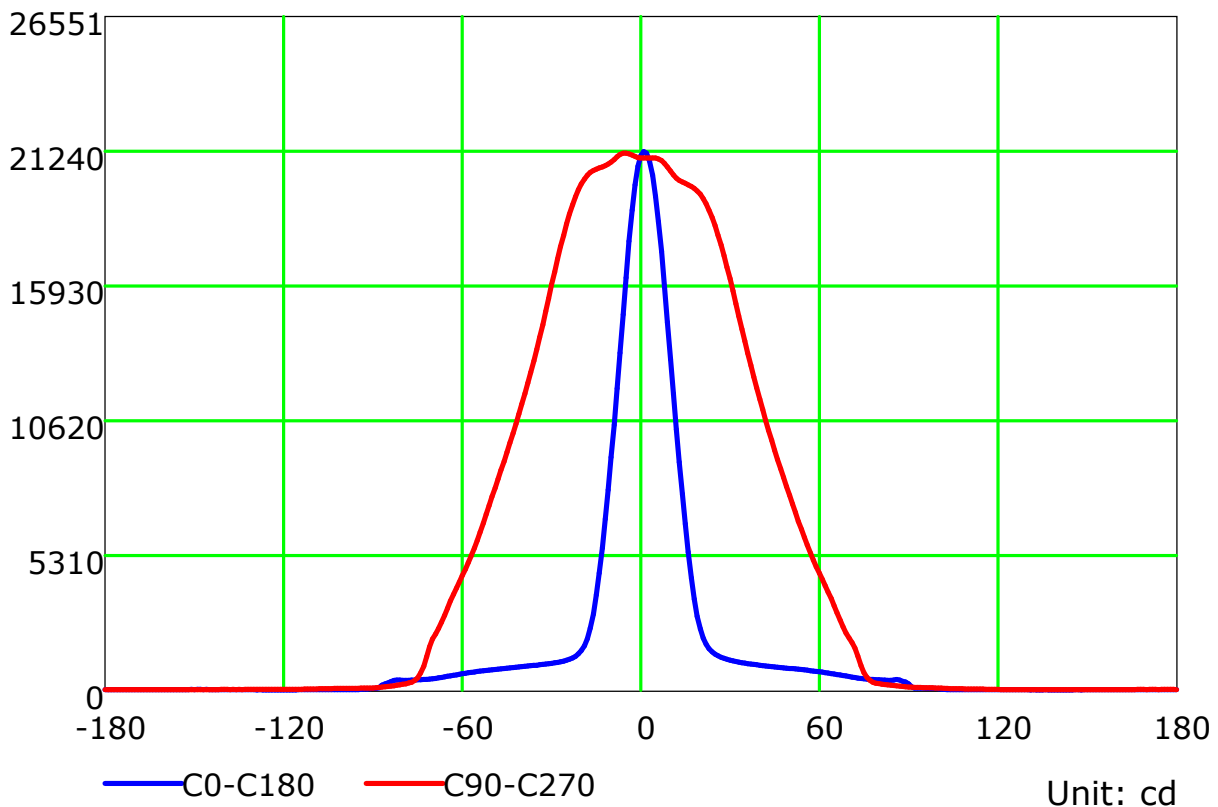
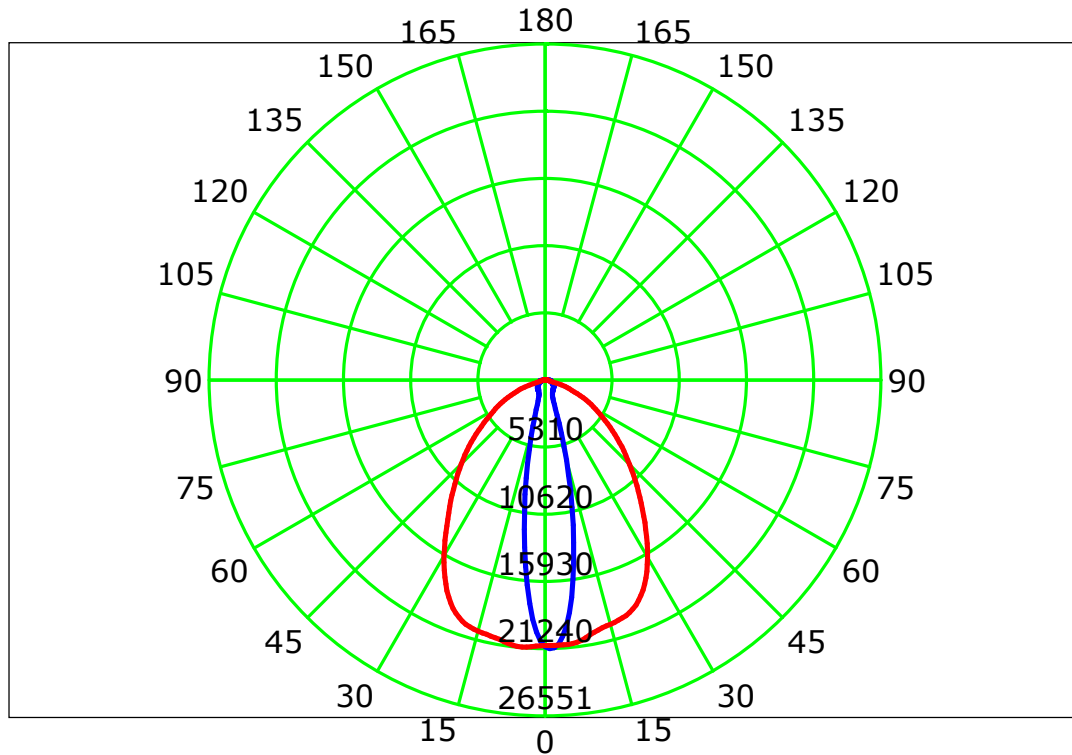
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

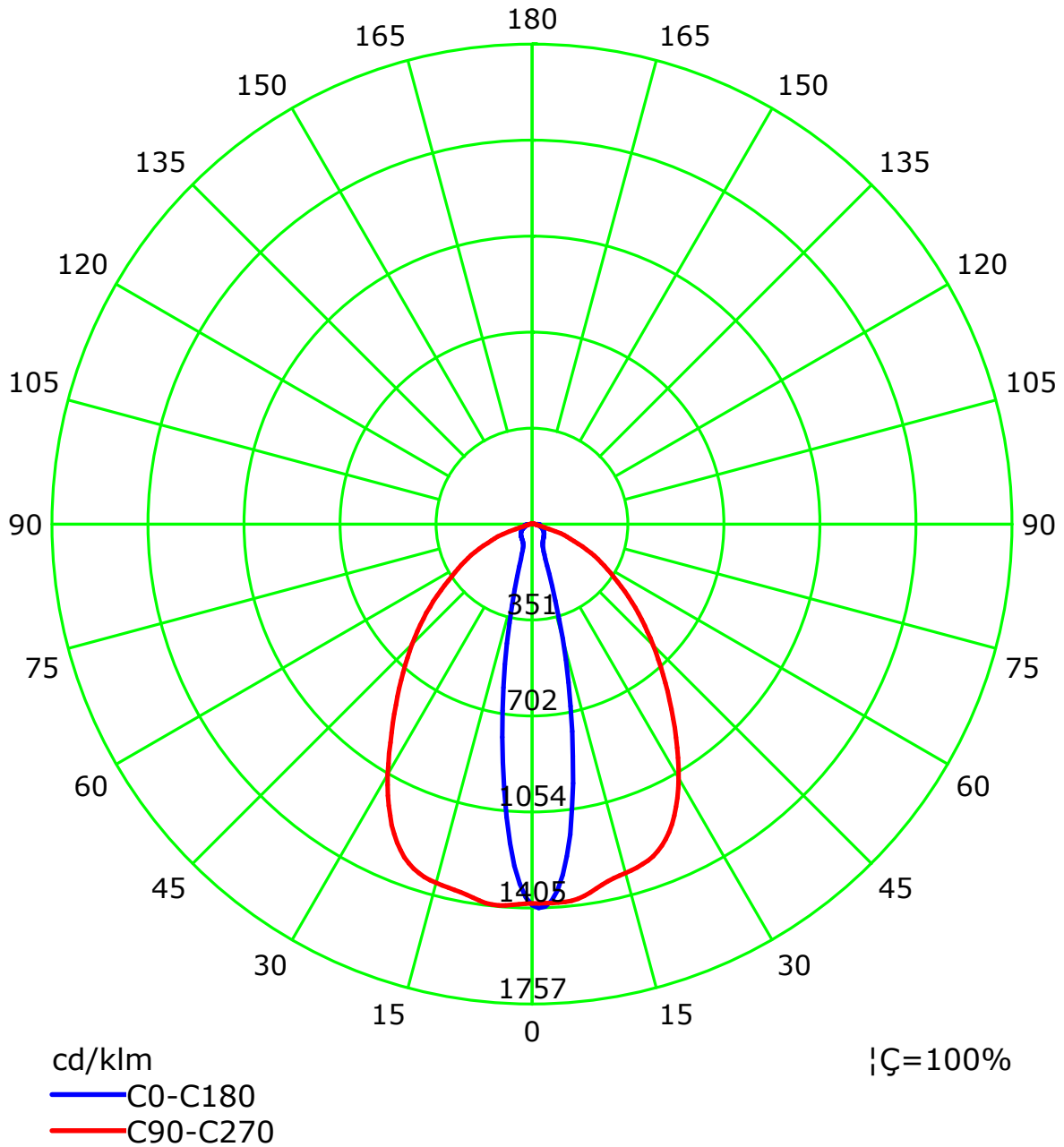
Luminous Intensity Distribution Curve



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:

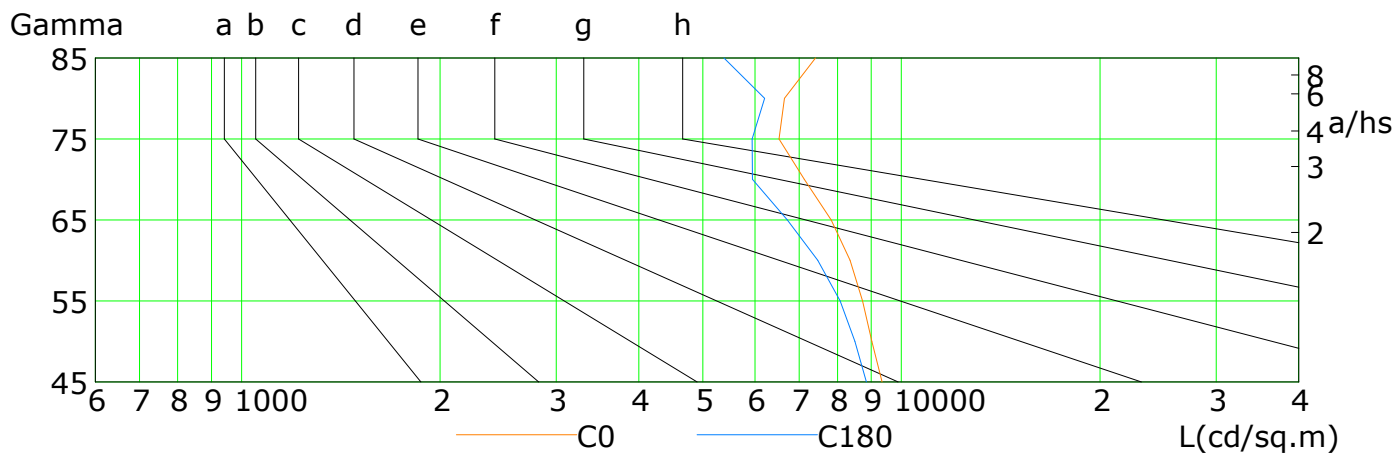
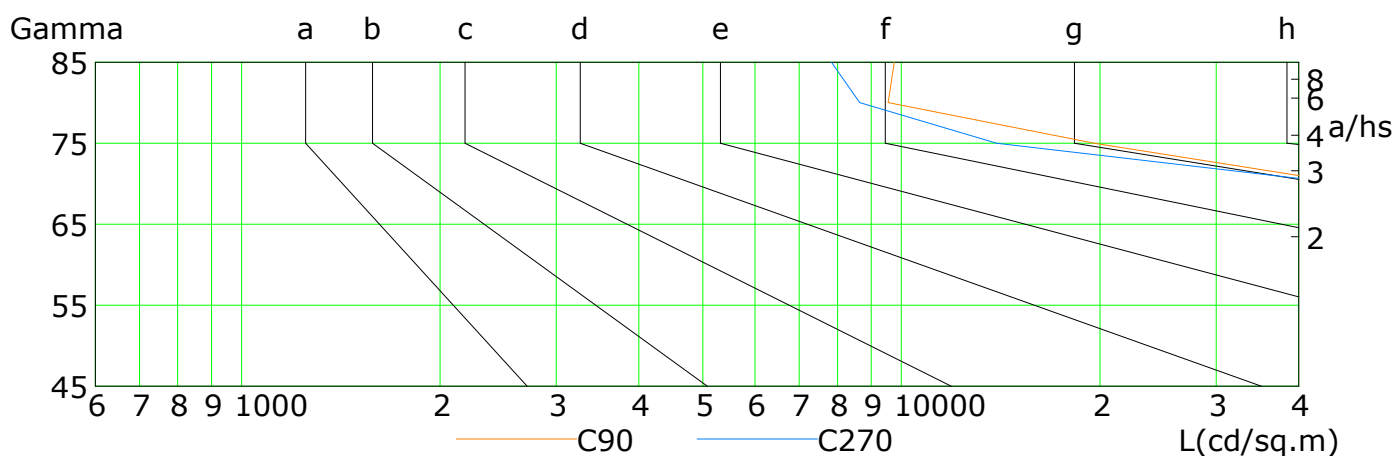
Luminous Intensity Distribution Curve(cd/klm)



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

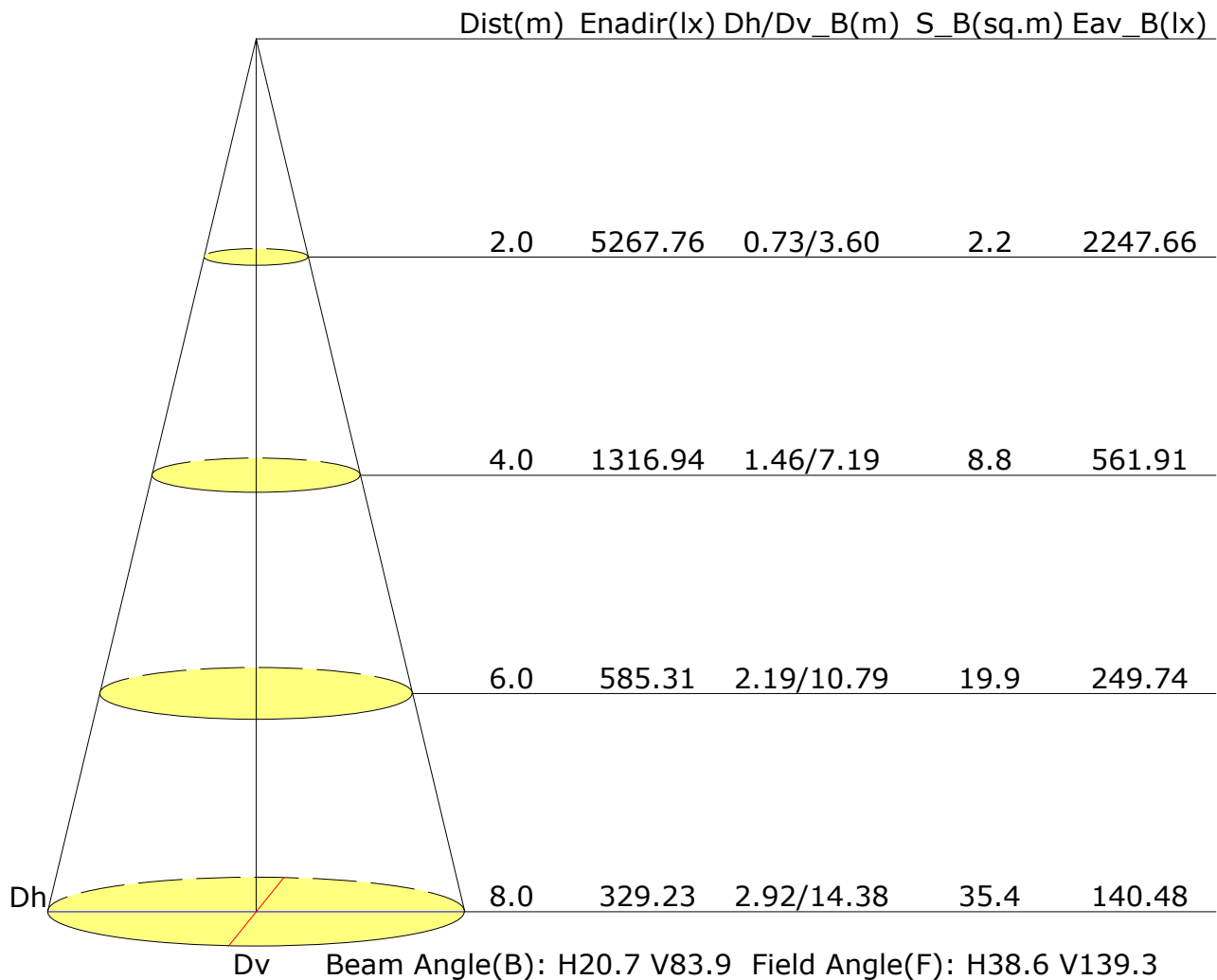


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	9349	9019	8730	8356	7828	7127	6523	6652	7407
C90	127932	111776	95730	81417	66610	47920	19596	9545	9754
C180	8851	8499	8074	7472	6718	5948	5938	6207	5382
C270	126968	111065	93663	79674	64612	47031	13938	8643	7833

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	16.1	17.2	16.4	17.4	17.7	26.8	27.9	27.1	28.1	28.4
3H	17.8	18.8	18.1	19.0	19.3	27.9	28.8	28.2	29.1	29.4
4H	18.5	19.5	18.9	19.8	20.1	28.0	28.9	28.4	29.2	29.5
6H	19.3	20.1	19.6	20.5	20.8	28.0	28.8	28.4	29.2	29.5
8H	19.7	20.5	20.0	20.8	21.2	28.0	28.8	28.4	29.1	29.5
12H	20.1	20.9	20.5	21.2	21.6	28.0	28.8	28.4	29.1	29.5
X=4H Y=2H	17.1	18.1	17.5	18.4	18.7	26.6	27.6	27.0	27.9	28.2
3H	18.9	19.7	19.3	20.0	20.4	27.7	28.5	28.1	28.8	29.2
4H	19.7	20.4	20.1	20.8	21.2	27.9	28.6	28.3	29.0	29.4
6H	20.5	21.1	20.9	21.5	22.0	27.9	28.5	28.4	28.9	29.4
8H	20.9	21.5	21.4	21.9	22.4	27.9	28.5	28.4	28.9	29.4
12H	21.4	21.9	21.9	22.3	22.8	27.9	28.4	28.4	28.9	29.4
X=8H Y=4H	20.0	20.6	20.5	21.0	21.5	27.8	28.4	28.3	28.8	29.3
6H	20.9	21.4	21.4	21.9	22.4	27.9	28.3	28.4	28.8	29.3
8H	21.4	21.8	21.9	22.3	22.8	27.9	28.3	28.4	28.8	29.3
12H	22.0	22.3	22.5	22.8	23.4	27.9	28.3	28.4	28.8	29.3
X=12H Y=4H	20.1	20.6	20.5	21.0	21.5	27.8	28.3	28.2	28.7	29.2
6H	21.0	21.4	21.5	21.9	22.4	27.8	28.2	28.3	28.7	29.2
8H	21.5	21.9	22.0	22.4	22.9	27.9	28.2	28.4	28.7	29.3
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+1.2/-1.5				
S=1.5H	+0.3/-0.5					+2.8/-3.7				
S=2.0H	+0.4/-0.9					+4.2/-5.8				

Calculate in accordance with CIE Pub.117. The table is revised with 15109Im ($8\log(F/F_0) = 9.4$).

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 = 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	0.70	0.78	0.84	0.89	0.94	0.98	1.01	1.04	1.07	
	0.30		0.64	0.72	0.78	0.83	0.89	0.94	0.97	1.01	1.04	
	0.20		0.59	0.68	0.74	0.79	0.85	0.90	0.94	0.98	1.01	
0.50	0.50	0.20	0.69	0.76	0.82	0.86	0.91	0.95	0.97	1.00	1.02	
	0.30		0.63	0.71	0.77	0.81	0.87	0.91	0.94	0.98	1.00	
	0.20		0.59	0.67	0.73	0.77	0.84	0.88	0.91	0.95	0.98	
0.30	0.50	0.20	0.67	0.74	0.79	0.83	0.88	0.91	0.94	0.96	0.98	
	0.30		0.62	0.70	0.75	0.79	0.85	0.88	0.91	0.94	0.96	
	0.20		0.58	0.66	0.72	0.76	0.82	0.86	0.89	0.92	0.95	
0.00	0.00	0.00	0.56	0.64	0.69	0.73	0.78	0.82	0.84	0.88	0.90	
Rating:101W 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	0.66	0.56	0.48	0.38	0.32	0.27	0.21	0.17	
	0.30		0.67	0.56	0.49	0.43	0.35	0.29	0.25	0.20	0.16	
	0.20		0.57	0.49	0.43	0.38	0.32	0.27	0.24	0.19	0.16	
0.50	0.50	0.20	0.76	0.63	0.53	0.46	0.36	0.34	0.26	0.20	0.16	
	0.30		0.65	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	0.31	0.26	0.22	0.18	0.15	
0.30	0.50	0.20	0.74	0.60	0.50	0.44	0.34	0.28	0.24	0.19	0.15	
	0.30		0.63	0.53	0.45	0.39	0.32	0.26	0.23	0.18	0.15	
	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	0.36	0.30	0.27	0.21	0.18	0.15	0.12	0.10	
Rating:101W 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	0.21	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	0.09	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	0.22	0.22	
	0.30		0.11	0.12	0.14	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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Rating:101W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												