

Report No.: 1

Test Time: 22.01.2020 12:47

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 HE 3x28LED 1.7A 75W 5000K 90x90gr.

Luminous Length (mm): 504

Luminous Width (mm): 153

Luminous Height (mm): 80

Voltage: 221.5 V

Current: 0.349 A

Power: 75.65 W

Power Factor: 0.977

Photometric Results

CIE Class: Direct

Measurement Flux: 11156.5 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 11156.5 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.9, 113.3, 121.9, 122.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 81.3, 80.9, 89.2, 89.2

Luminaire Efficacy Rating (LER): 147.52

Central Intensity: 4363.75 cd

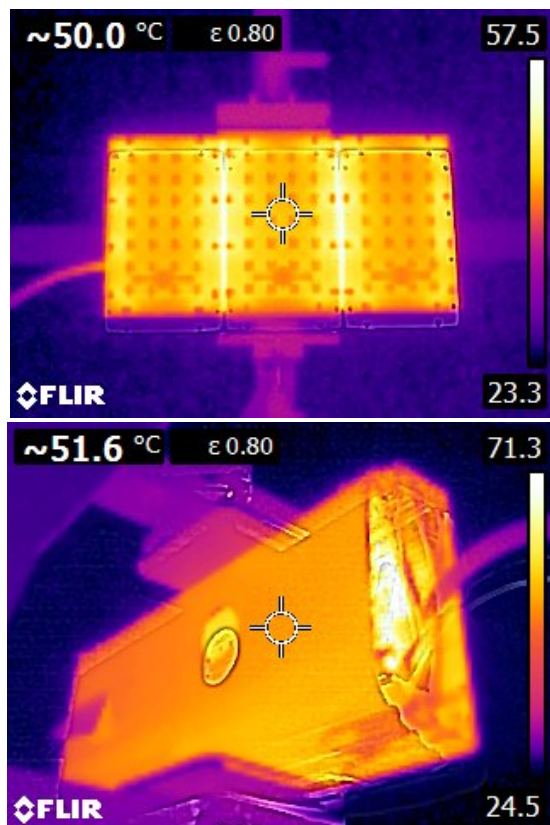
Max. Intensity: 6913.78 cd

Pos of Max. Intensity: H45 V33

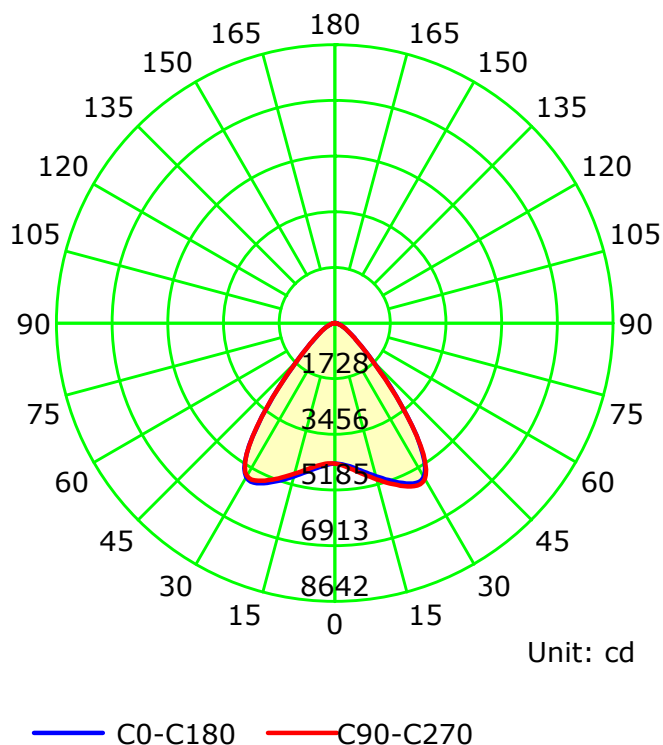
S/MH(C0/C180): 1.48

S/MH(C90/C270): 1.48

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

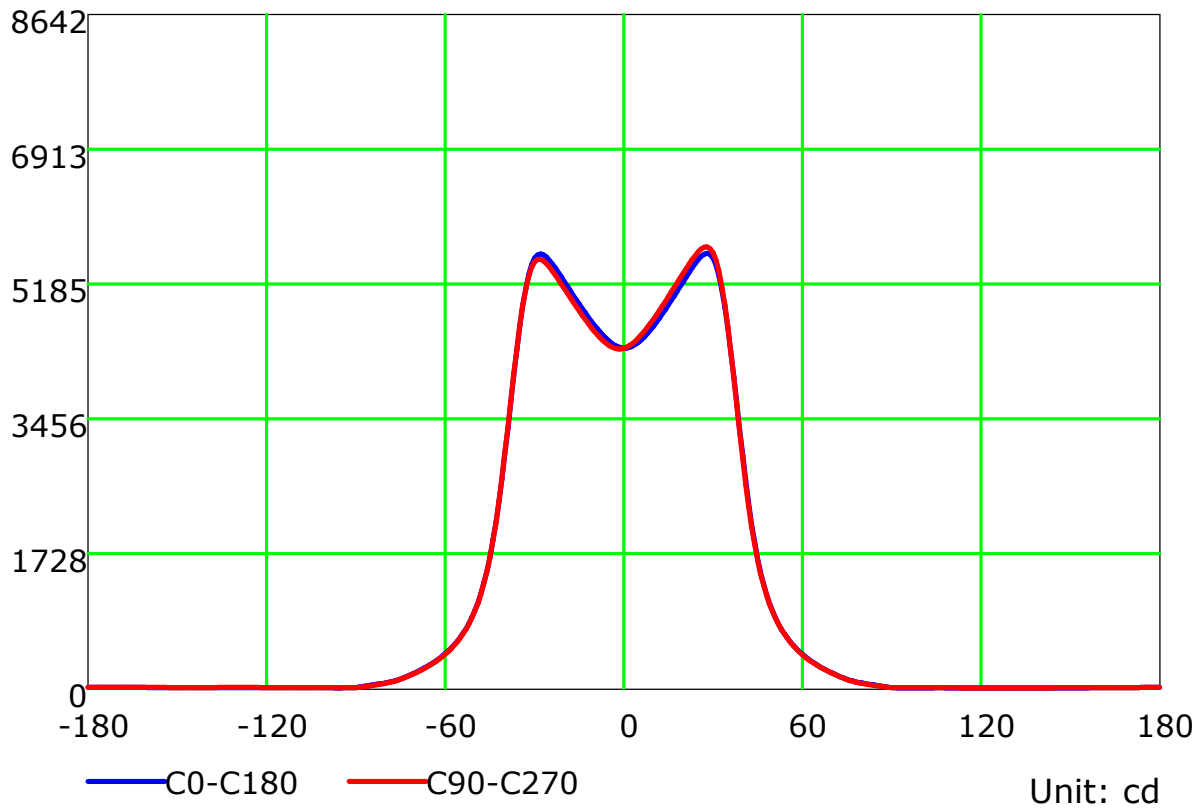
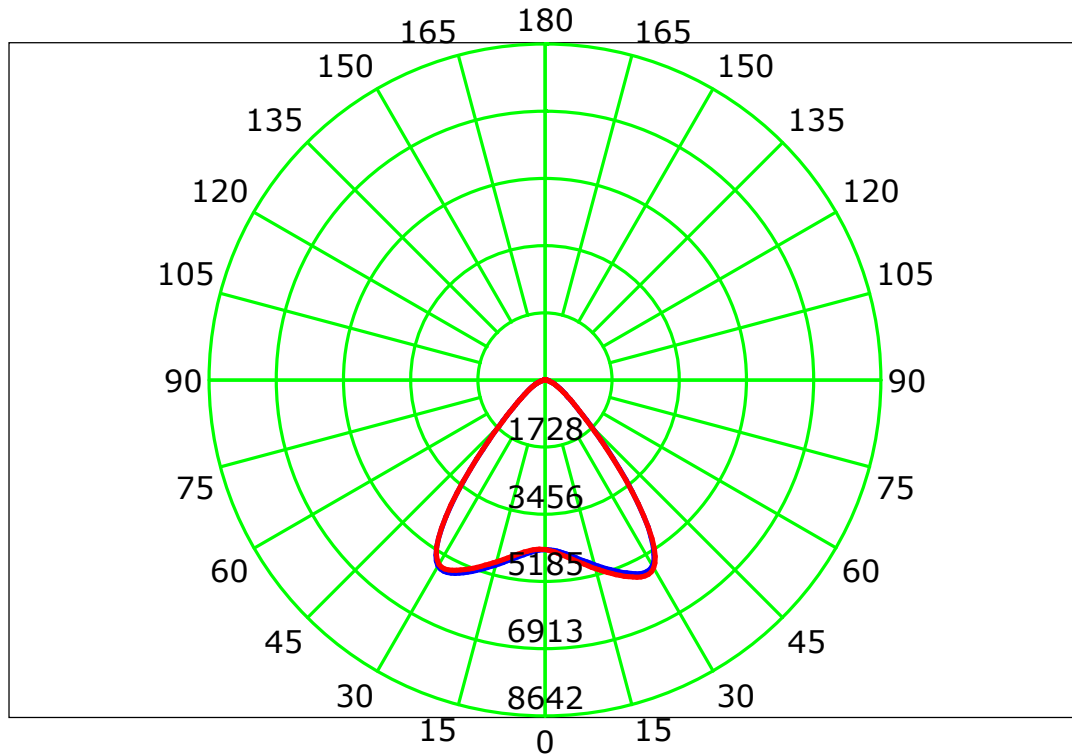
Test Device: LSG-1800B

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

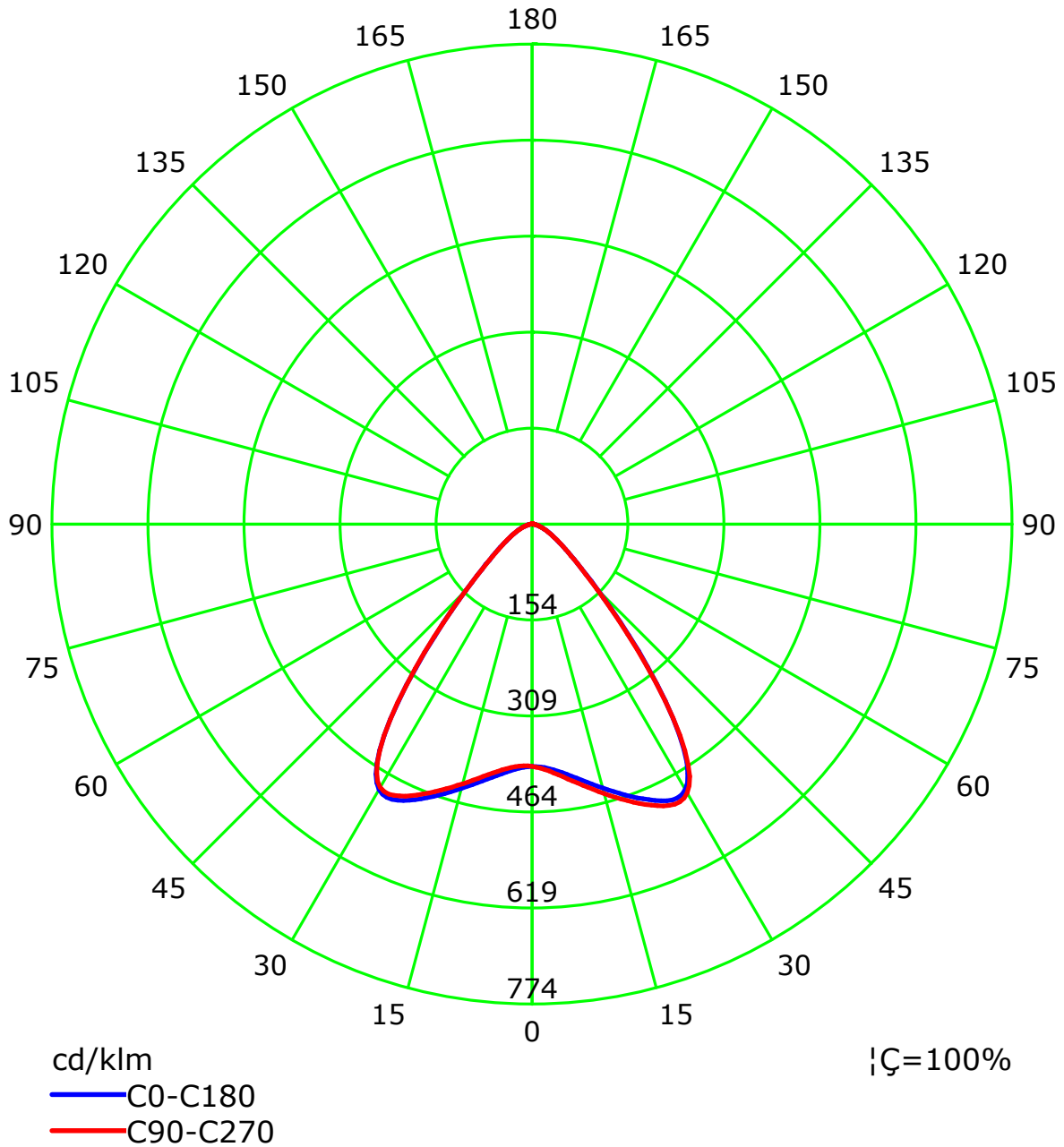
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

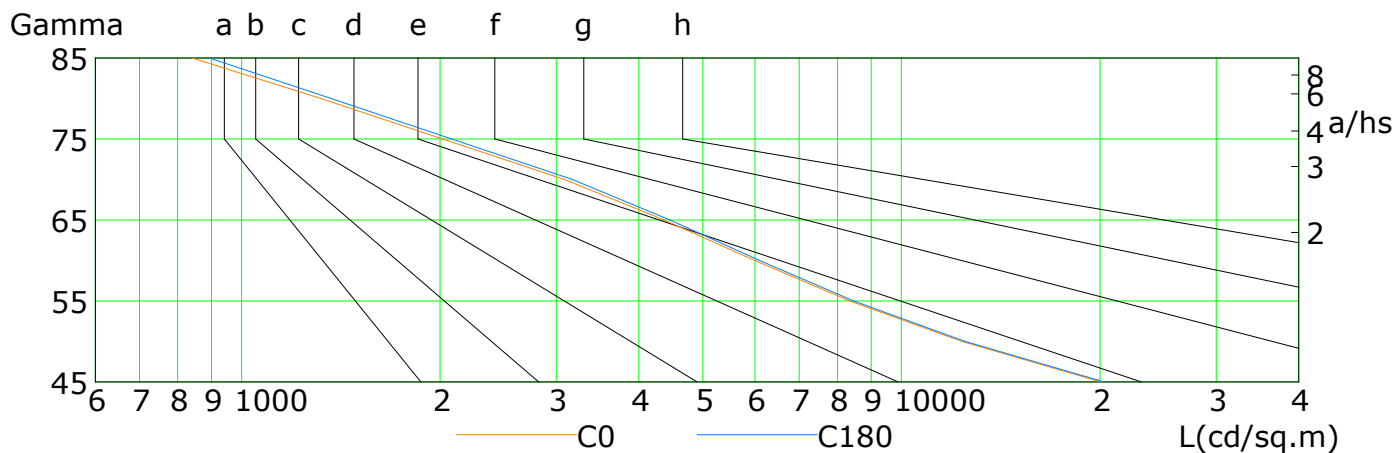
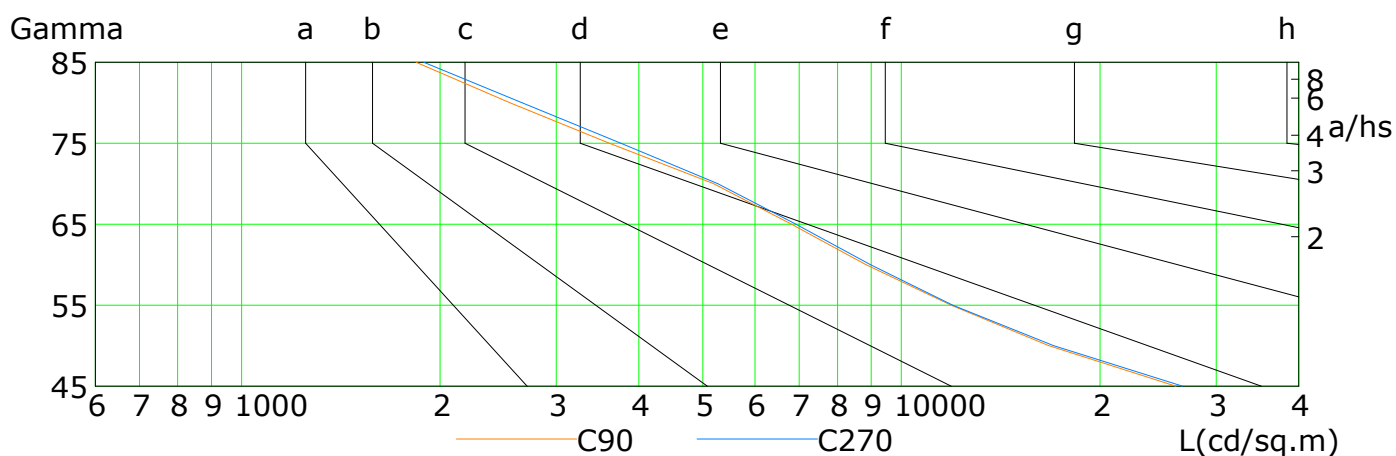
Luminous Intensity Distribution Curve(cd/klm)



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

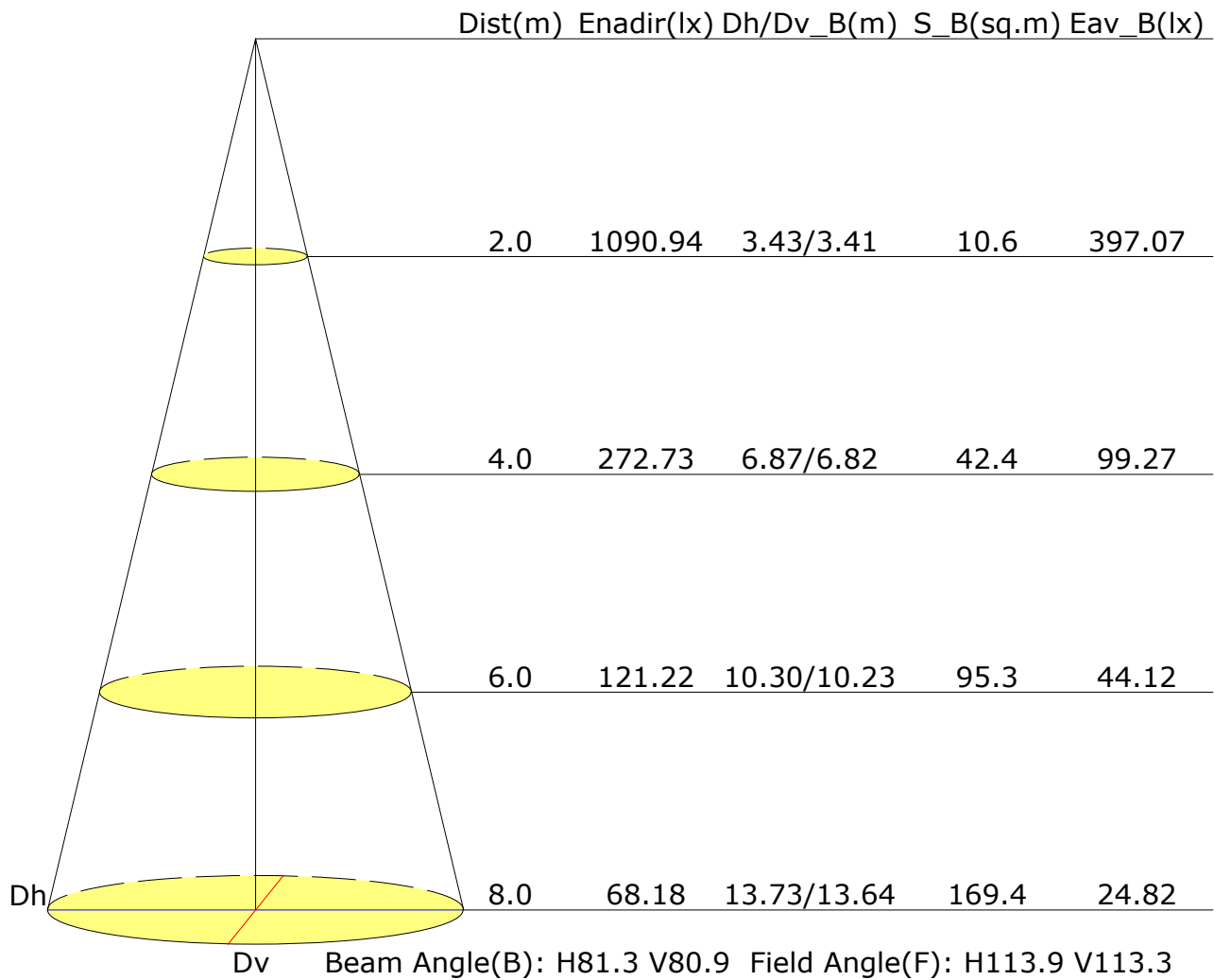


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	20069	12327	8347	5984	4367	3080	2017	1316	841
C90	26078	16708	11897	8828	6812	5186	3610	2549	1838
C180	20304	12474	8464	6091	4460	3166	2081	1365	894
C270	26689	16986	11970	8966	6925	5266	3757	2659	1887

C Plane (°):0.0-360.0: 22.5
 Test Lab:
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 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	21.3	22.5	21.6	22.7	22.9	21.9	23.0	22.2	23.2	23.5
3H	21.3	22.3	21.7	22.6	22.9	21.9	23.0	22.3	23.2	23.5
4H	21.3	22.3	21.6	22.5	22.8	21.9	22.9	22.3	23.2	23.5
6H	21.3	22.1	21.6	22.4	22.8	21.9	22.8	22.3	23.1	23.4
8H	21.2	22.1	21.6	22.4	22.7	21.9	22.7	22.2	23.0	23.4
12H	21.2	22.0	21.6	22.3	22.7	21.8	22.7	22.2	23.0	23.3
X=4H Y=2H	21.4	22.3	21.7	22.6	22.9	21.9	22.8	22.2	23.1	23.4
3H	21.5	22.3	21.8	22.6	22.9	22.0	22.8	22.4	23.2	23.5
4H	21.5	22.2	21.9	22.5	22.9	22.1	22.8	22.5	23.1	23.5
6H	21.5	22.1	21.9	22.5	22.9	22.1	22.7	22.5	23.1	23.5
8H	21.4	22.0	21.9	22.4	22.8	22.0	22.6	22.5	23.0	23.4
12H	21.4	21.9	21.9	22.3	22.8	22.0	22.5	22.5	23.0	23.4
X=8H Y=4H	21.5	22.0	21.9	22.4	22.9	22.0	22.6	22.5	23.0	23.4
6H	21.5	21.9	21.9	22.4	22.8	22.1	22.5	22.5	23.0	23.4
8H	21.4	21.8	21.9	22.3	22.8	22.1	22.5	22.5	22.9	23.4
12H	21.4	21.8	21.9	22.3	22.8	22.0	22.4	22.5	22.9	23.4
X=12H Y=4H	21.4	21.9	21.9	22.4	22.8	22.0	22.5	22.4	22.9	23.4
6H	21.4	21.8	21.9	22.3	22.8	22.0	22.4	22.5	22.9	23.4
8H	21.4	21.8	21.9	22.3	22.8	22.0	22.4	22.5	22.9	23.4
Variations with the observer position at spacings:										
S=1.0H	+2.9/-3.4					+2.5/-3.1				
S=1.5H	+3.8/-4.8					+3.5/-4.5				
S=2.0H	+5.5/-5.9					+5.2/-5.6				

Calculate in accordance with CIE Pub.117. The table is revised with 11156lm ($8\log(F/F_0) = 8.4$).

C Plane (°):0.0-360.0: 22.5
 Test Lab:
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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	0.73	0.82	0.88	0.92	0.97	1.01	1.03	1.06	1.08	
	0.30		0.67	0.76	0.82	0.87	0.93	0.97	0.99	1.03	1.06	
	0.20		0.63	0.72	0.78	0.83	0.89	0.93	0.96	1.01	1.03	
0.50	0.50	0.20	0.71	0.80	0.85	0.89	0.94	0.97	0.99	1.02	1.04	
	0.30		0.66	0.75	0.81	0.85	0.90	0.94	0.96	1.00	1.02	
	0.20		0.62	0.71	0.77	0.81	0.87	0.91	0.94	0.98	1.00	
0.30	0.50	0.20	0.70	0.78	0.83	0.87	0.91	0.94	0.96	0.98	1.00	
	0.30		0.65	0.74	0.79	0.83	0.88	0.92	0.94	0.97	0.98	
	0.20		0.62	0.70	0.76	0.80	0.86	0.89	0.92	0.95	0.97	
0.00	0.00	0.00	0.60	0.68	0.74	0.77	0.82	0.86	0.88	0.91	0.92	
Rating:76W 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	0.75	0.60	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.51	0.44	0.38	0.31	0.25	0.22	0.17	0.14	
	0.20		0.54	0.45	0.39	0.34	0.28	0.23	0.20	0.16	0.13	
0.50	0.50	0.20	0.72	0.57	0.47	0.41	0.32	0.30	0.22	0.17	0.14	
	0.30		0.61	0.50	0.42	0.36	0.29	0.24	0.21	0.16	0.13	
	0.20		0.53	0.44	0.37	0.33	0.27	0.22	0.19	0.15	0.13	
0.30	0.50	0.20	0.69	0.54	0.45	0.38	0.30	0.24	0.21	0.16	0.13	
	0.30		0.59	0.48	0.40	0.35	0.28	0.23	0.19	0.15	0.12	
	0.20		0.52	0.43	0.36	0.32	0.26	0.21	0.18	0.14	0.12	
0.00	0.00	0.00	0.40	0.31	0.26	0.22	0.17	0.14	0.12	0.09	0.07	
Rating:76W 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	0.16	0.17	0.18	
0.50	0.50	0.20	0.14	0.15	0.16	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	0.11	0.13	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:76W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												