

Report No.: 1

Test Time: 22.01.2020 13:47

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FP 150 HE 50W 5000K 40x90gr.

Luminous Length (mm): 504

Luminous Width (mm): 153

Luminous Height (mm): 80

Voltage: 221.5 V

Current: 0.349 A

Power: 75.55 W

Power Factor: 0.977

## Photometric Results

CIE Class: Direct

Measurement Flux: 11280.7 lm

Downward Ratio: 98%

Total Rated Lamp Lumens: 11280.7 lm

Efficiency: 100%

Upward Ratio: 2%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 37.4, 141.5, 50.3, 49.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 21.6, 84.8, 29.6, 29.2

Luminaire Efficacy Rating (LER): 149.36

Central Intensity: 15763.93 cd

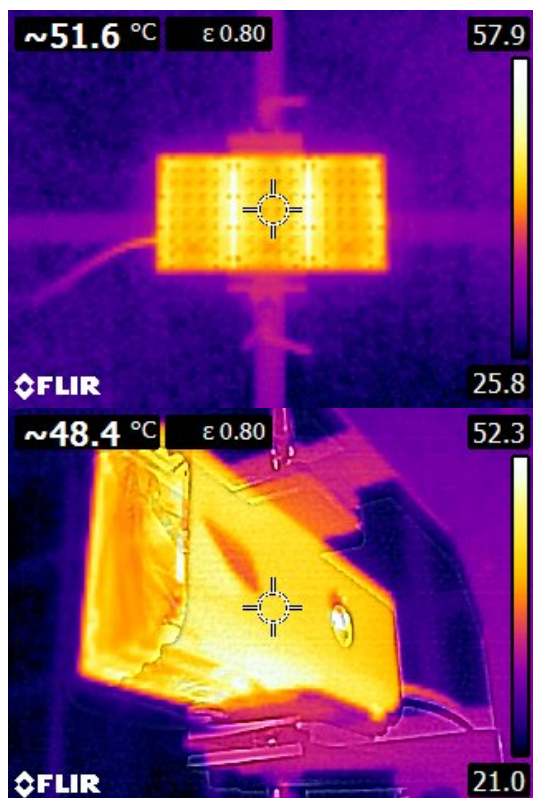
Max. Intensity: 15868.88 cd

Pos of Max. Intensity: H270 V6

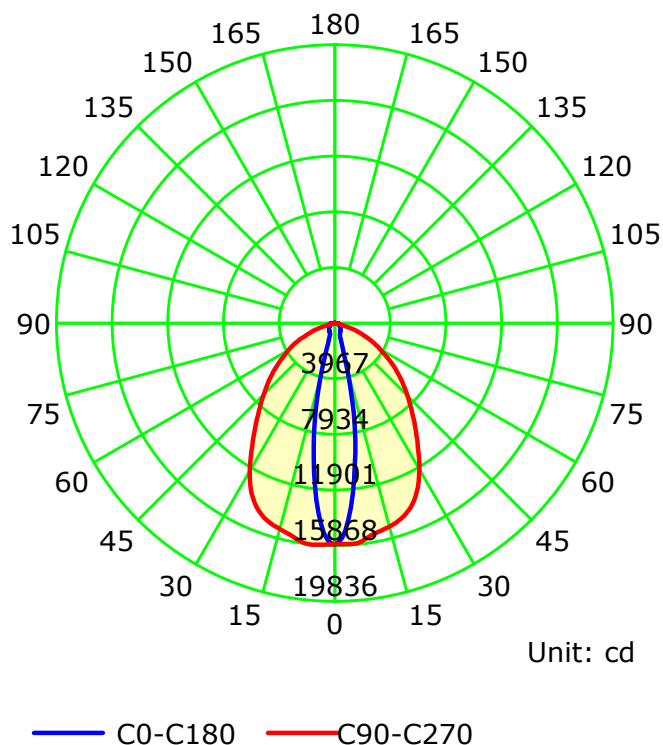
S/MH(C0/C180): 0.37

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

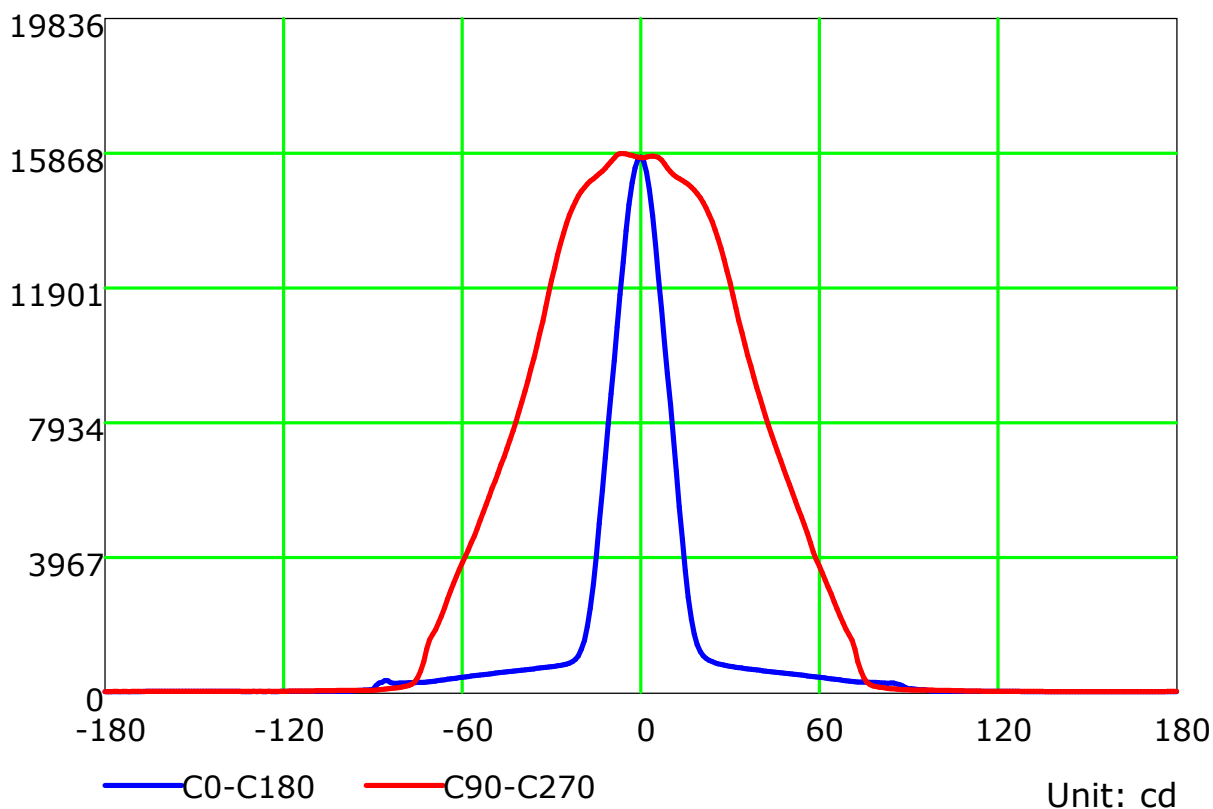
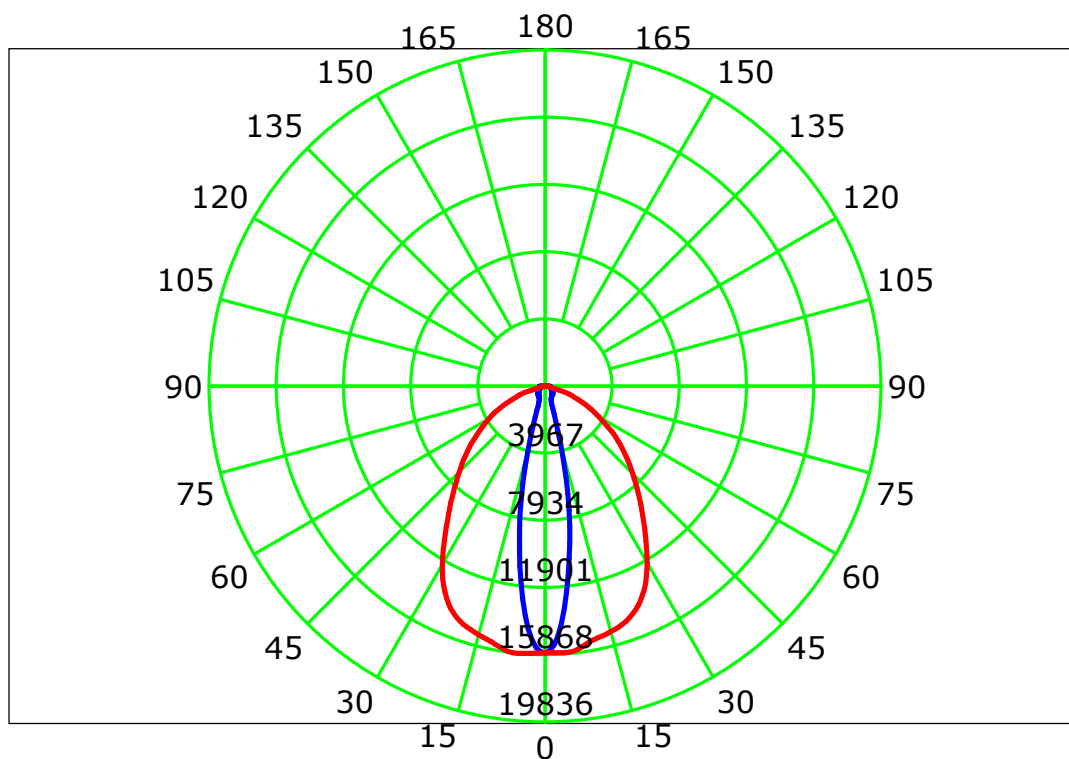
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

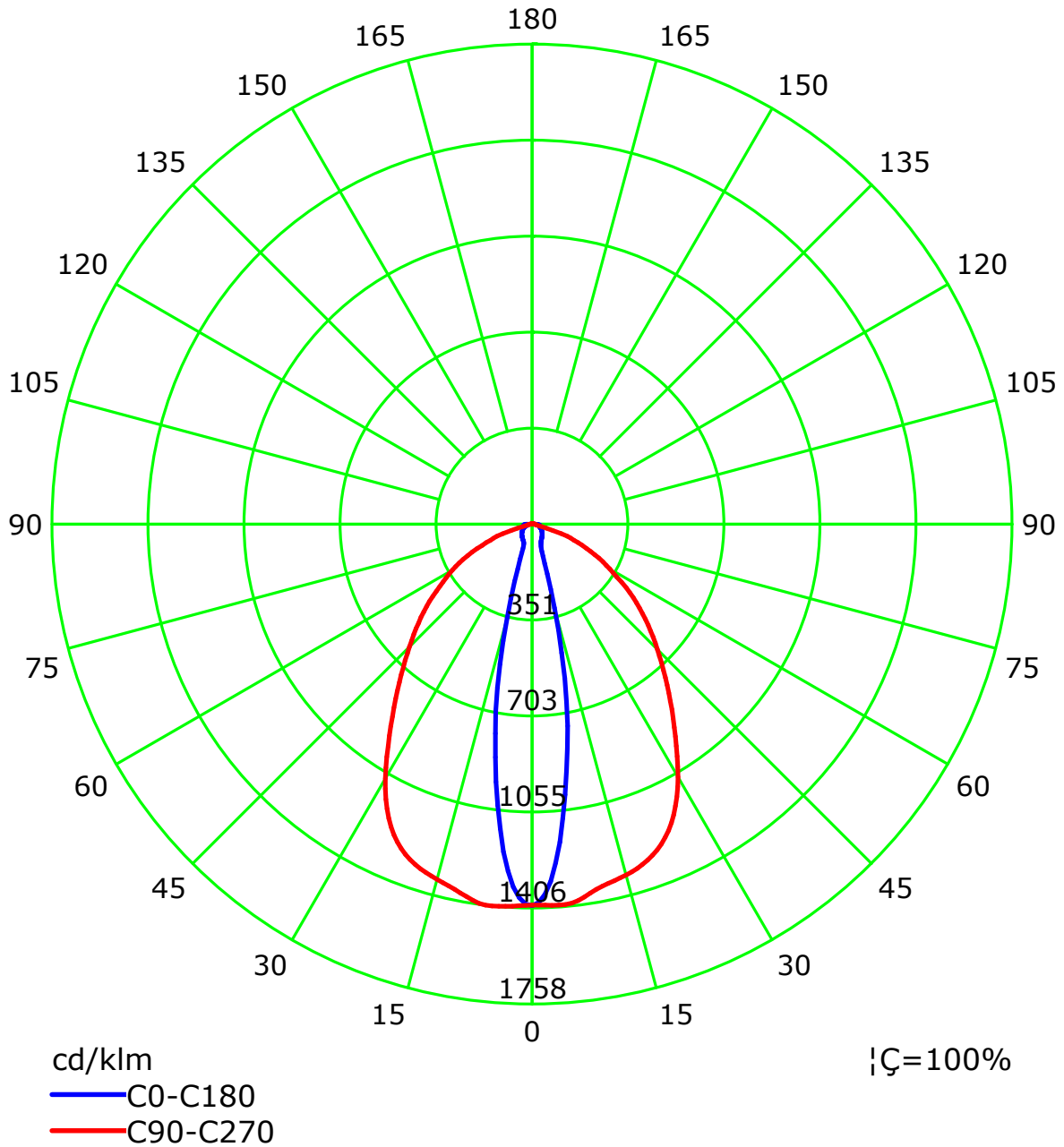
## Luminous Intensity Distribution Curve



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:

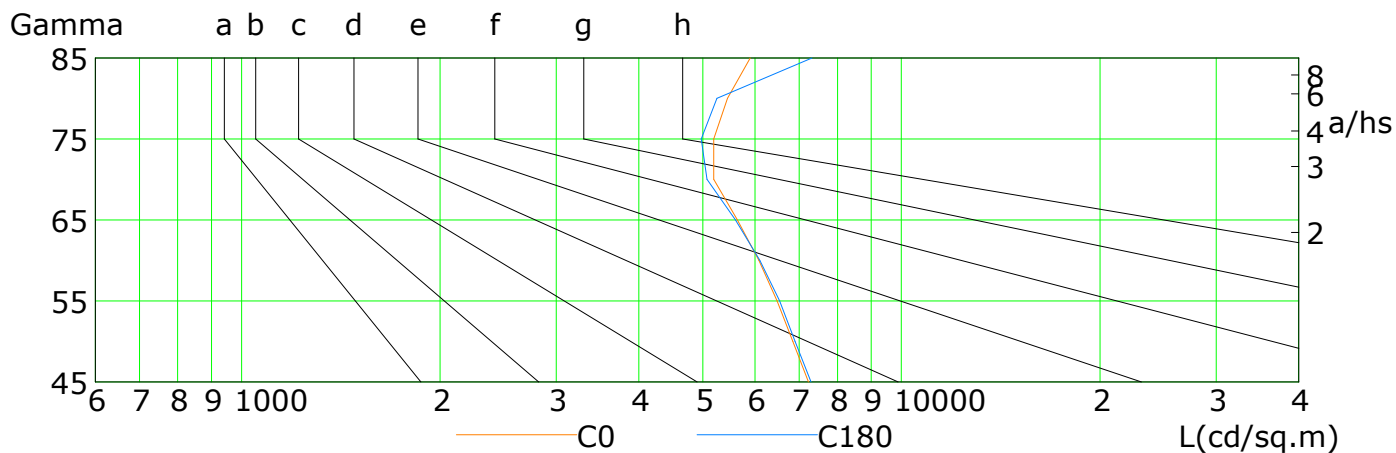
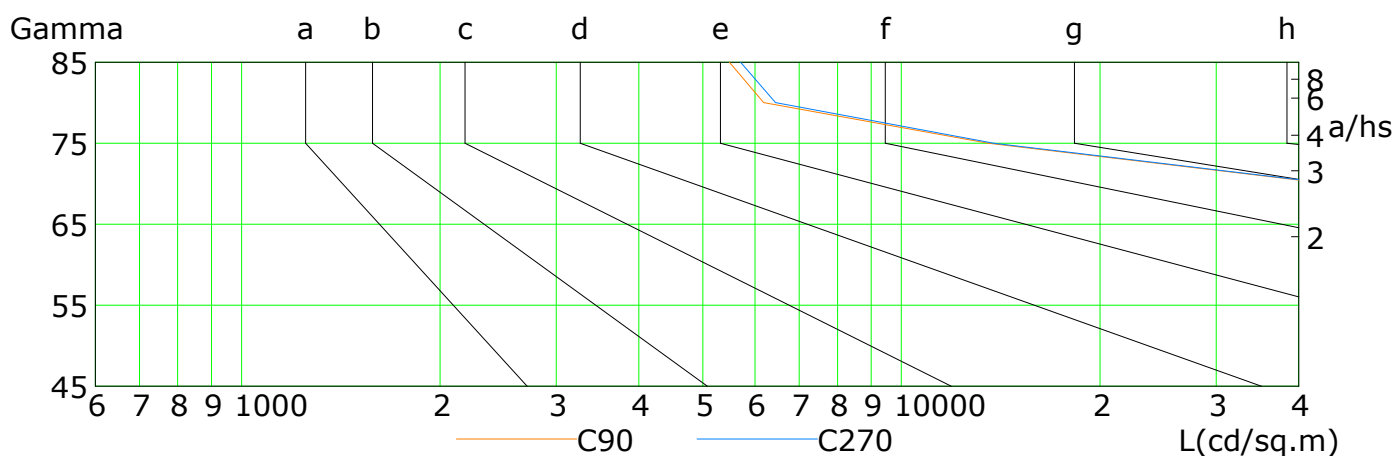
## Luminous Intensity Distribution Curve(cd/klm)



## 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

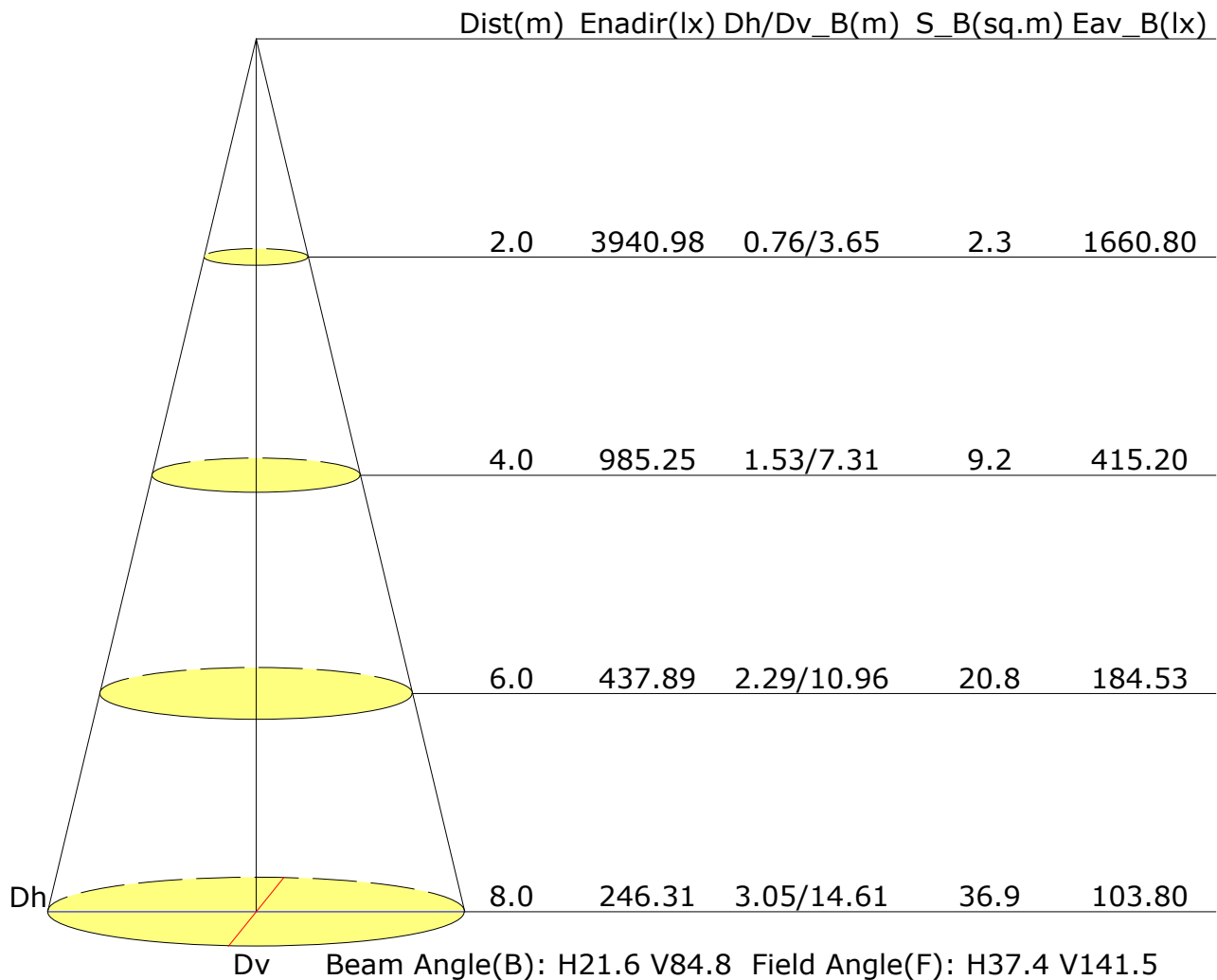


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	7228	6844	6479	6082	5645	5192	5195	5452	5897
C90	116059	103711	91003	75594	61219	44781	13542	6186	5486
C180	7299	6903	6540	6098	5603	5073	4974	5252	7318
C270	113708	101850	89080	77489	62785	44922	13801	6441	5704

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	14.4	15.5	14.7	15.7	16.0	26.5	27.6	26.8	27.9	28.1
3H	16.0	17.0	16.3	17.2	17.5	27.7	28.6	28.0	28.9	29.2
4H	16.8	17.7	17.1	18.0	18.3	27.8	28.7	28.1	29.0	29.3
6H	17.6	18.5	18.0	18.8	19.1	27.7	28.6	28.1	28.9	29.3
8H	18.0	18.9	18.4	19.2	19.5	27.7	28.5	28.1	28.9	29.2
12H	18.5	19.3	18.9	19.7	20.0	27.7	28.5	28.1	28.8	29.2
X=4H Y=2H	15.5	16.4	15.8	16.7	17.0	26.3	27.2	26.7	27.5	27.9
3H	17.0	17.8	17.4	18.2	18.6	27.5	28.3	27.9	28.6	29.0
4H	17.9	18.6	18.3	18.9	19.3	27.6	28.3	28.0	28.7	29.1
6H	18.7	19.4	19.2	19.8	20.2	27.6	28.2	28.1	28.6	29.1
8H	19.2	19.8	19.6	20.2	20.6	27.6	28.2	28.1	28.6	29.0
12H	19.7	20.2	20.2	20.7	21.1	27.6	28.1	28.1	28.5	29.0
X=8H Y=4H	18.2	18.7	18.6	19.1	19.6	27.5	28.1	28.0	28.5	29.0
6H	19.1	19.5	19.6	20.0	20.5	27.5	28.0	28.0	28.4	28.9
8H	19.6	20.0	20.1	20.5	21.0	27.5	27.9	28.0	28.4	28.9
12H	20.2	20.5	20.7	21.0	21.6	27.5	27.9	28.0	28.4	28.9
X=12H Y=4H	18.2	18.7	18.6	19.1	19.6	27.5	28.0	28.0	28.4	28.9
6H	19.1	19.5	19.6	20.0	20.5	27.5	27.9	28.0	28.4	28.9
8H	19.6	20.0	20.2	20.5	21.0	27.5	27.8	28.0	28.3	28.9
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.3					+1.3/-1.7				
S=1.5H	+0.3/-0.5					+2.8/-4.3				
S=2.0H	+0.5/-0.9					+4.2/-7.2				

Calculate in accordance with CIE Pub.117. The table is revised with 11281lm ( $8\log(F/F_0) = 8.4$ ).

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	0.79	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	1.01	1.04	
	0.20		0.60	0.68	0.74	0.79	0.86	0.90	0.94	0.99	1.02	
0.50	0.50	0.20	0.69	0.77	0.82	0.86	0.91	0.95	0.97	1.01	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	0.78	0.84	0.88	0.91	0.96	0.98	
0.30	0.50	0.20	0.67	0.75	0.80	0.83	0.88	0.92	0.94	0.97	0.98	
	0.30		0.62	0.70	0.75	0.80	0.85	0.89	0.91	0.94	0.97	
	0.20		0.59	0.66	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: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 = 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	0.79	0.65	0.55	0.48	0.38	0.32	0.27	0.21	0.17	
	0.30		0.66	0.56	0.48	0.43	0.34	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	0.15	
0.50	0.50	0.20	0.76	0.62	0.53	0.45	0.36	0.33	0.25	0.19	0.16	
	0.30		0.64	0.54	0.46	0.41	0.33	0.27	0.24	0.18	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		0.62	0.52	0.45	0.39	0.31	0.26	0.22	0.17	0.14	
	0.20		0.55	0.47	0.40	0.36	0.29	0.24	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	0.11	0.09	
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 = 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	0.20	0.21	0.21	0.22	0.23	0.23	
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21	
	0.20		0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	0.19	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.11	0.12	0.14	0.15	0.16	0.18	0.18	0.20	0.20	
	0.20		0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18	0.19	
0.30	0.50	0.20	0.15	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.20	
	0.20		0.07	0.09	0.10	0.11	0.13	0.15	0.16	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:76W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												