

Report No.: 1

Test Time: 05.02.2020 18:00

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 120 220W 5000K 106-106gr.

Luminous Length (mm): 348 mm

Luminous Width (mm): 380 mm

Luminous Height (mm): 141 mm

Voltage: 221.1 V

Current: 0.983 A

Power: 220.84 W

Power Factor: 0.994

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 31733.1 lm

Measurement Flux: 31733.1 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 154.5, 154.6, 154.0, 154.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 112.8, 111.7, 114.4, 114.3

Luminaire Efficacy Rating (LER): 143.25

Central Intensity: 11061.69 cd

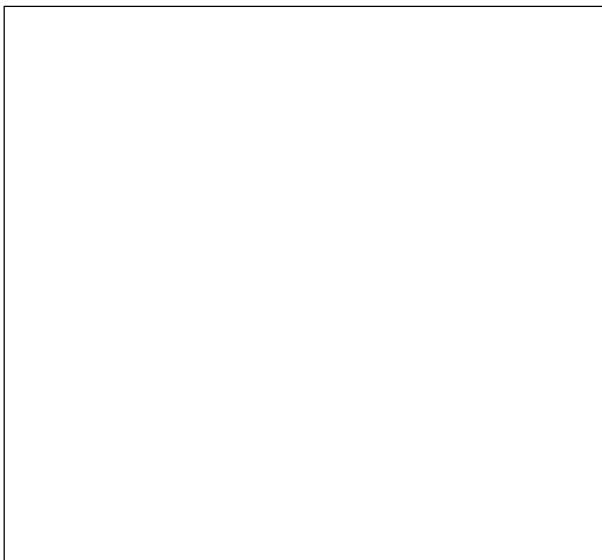
Max. Intensity: 11063.84 cd

Pos of Max. Intensity: H0 V1

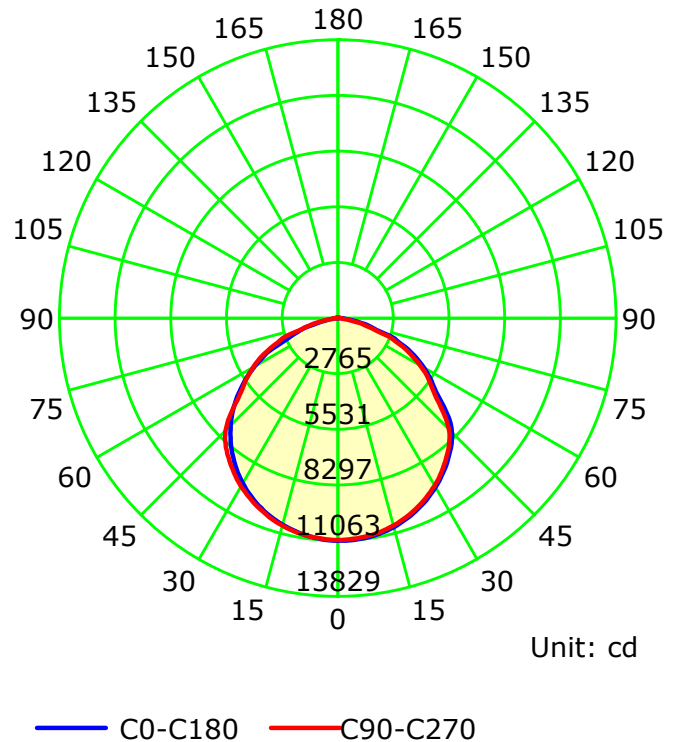
S/MH(C0/C180): 1.29

S/MH(C90/C270): 1.30

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:1.0

Test Lab:

Test Device: LSG-1800B

Test Type: TYPE C

Distance: 12.677 m

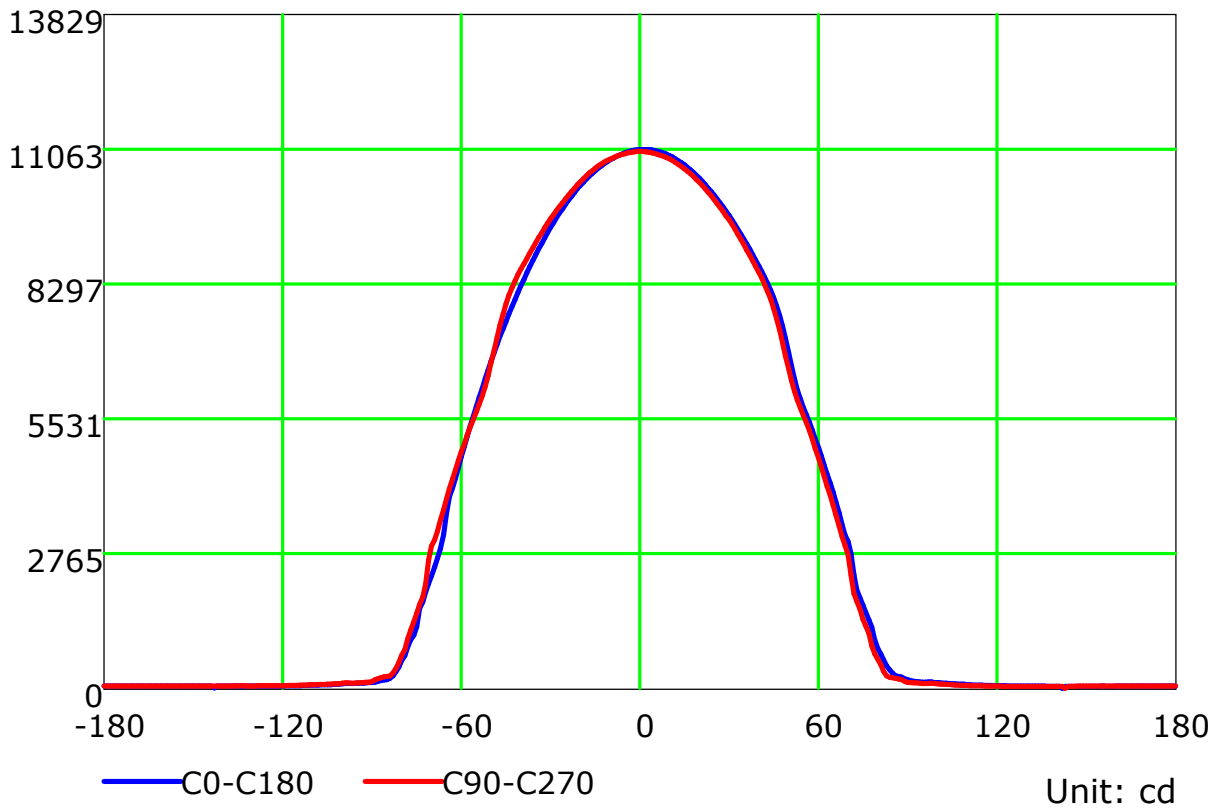
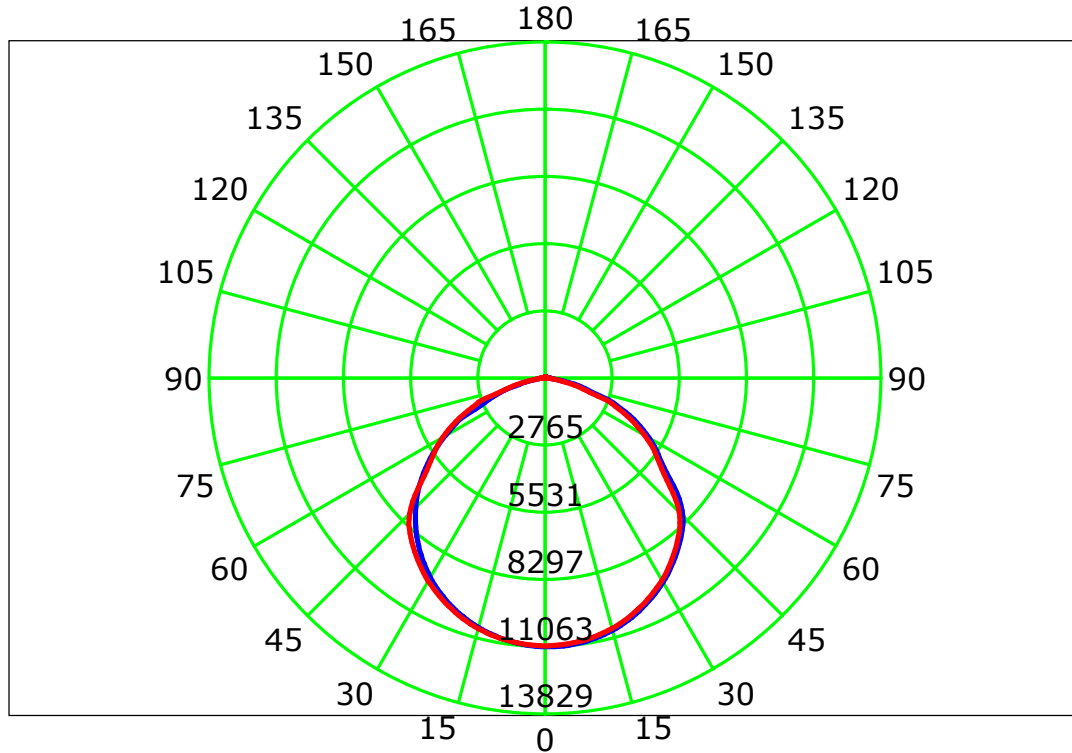
Temperature:

Humidity:

Operator:

Inspector:

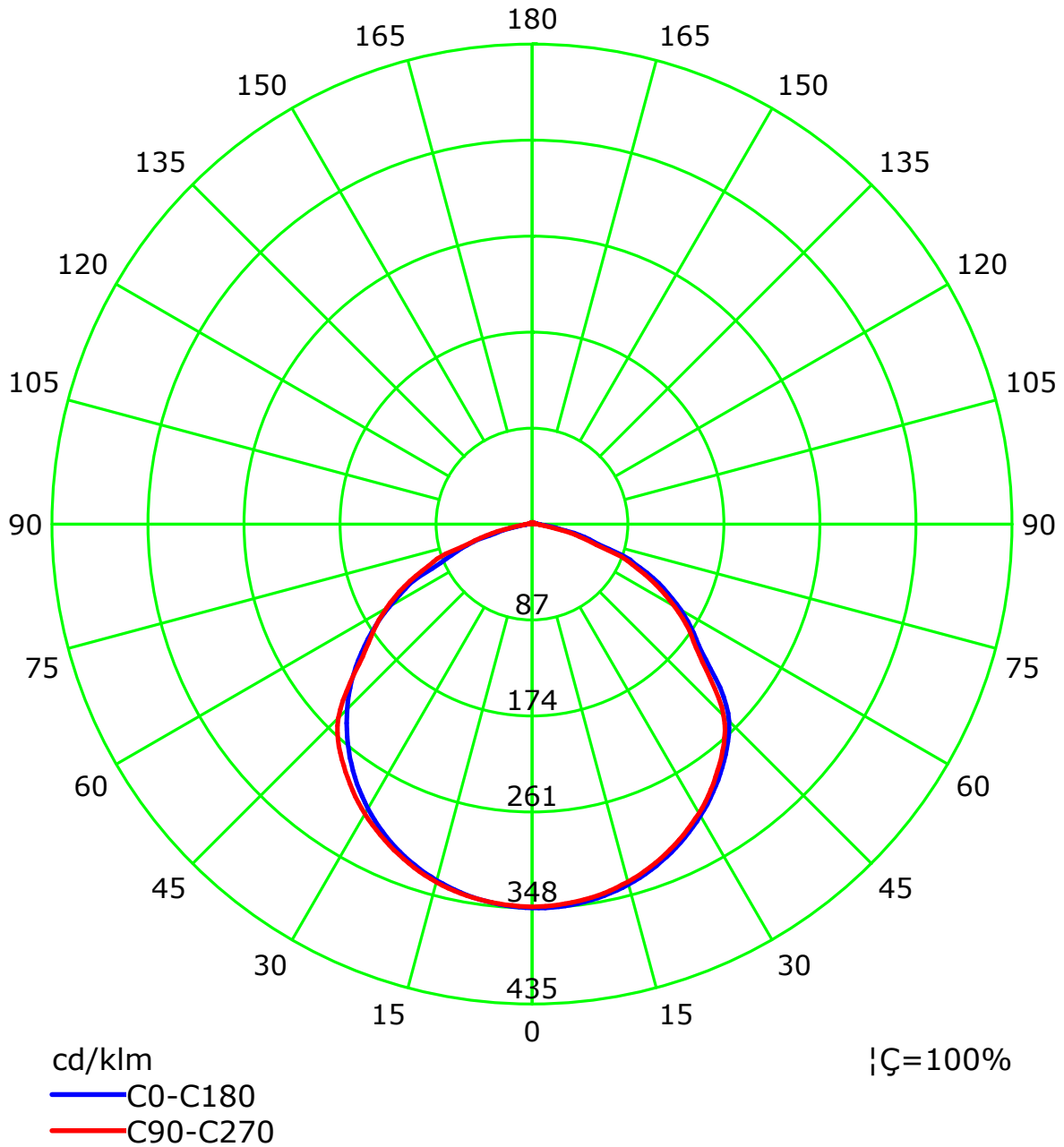
Luminous Intensity Distribution Curve



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)



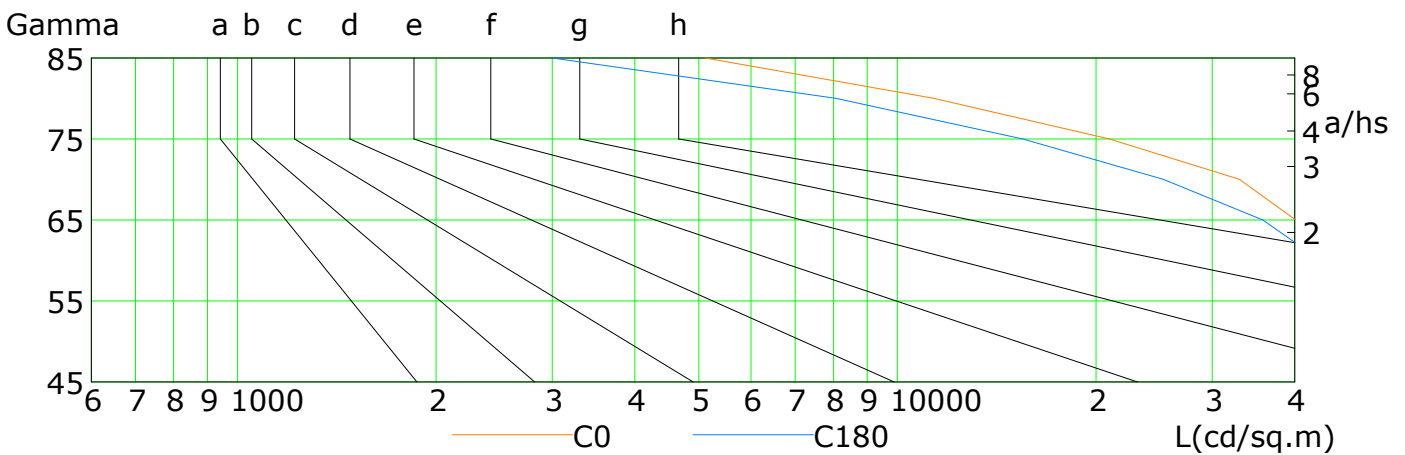
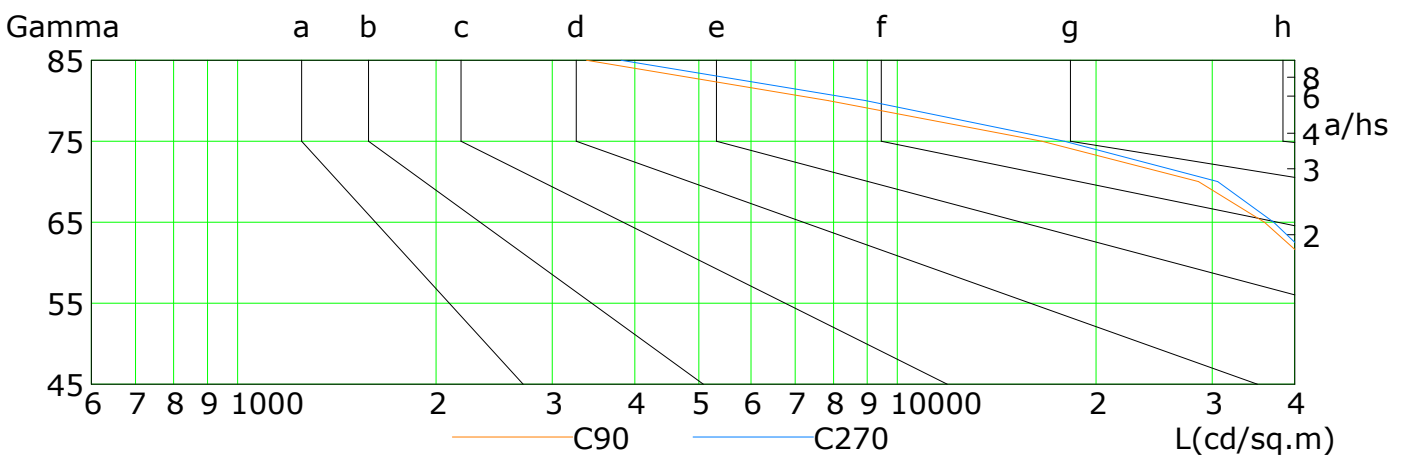
C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)								
		2000	1000	500	<=300					
1.15	A									
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	62574	56263	49684	45582	40141	32991	20962	11350	5116
C90	59399	52089	46837	42122	36012	28598	16564	7857	3378
C180	58764	54753	49772	43787	35775	25288	15490	8064	3000
C270	60086	53018	47365	43122	37186	30580	17901	8951	3813

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

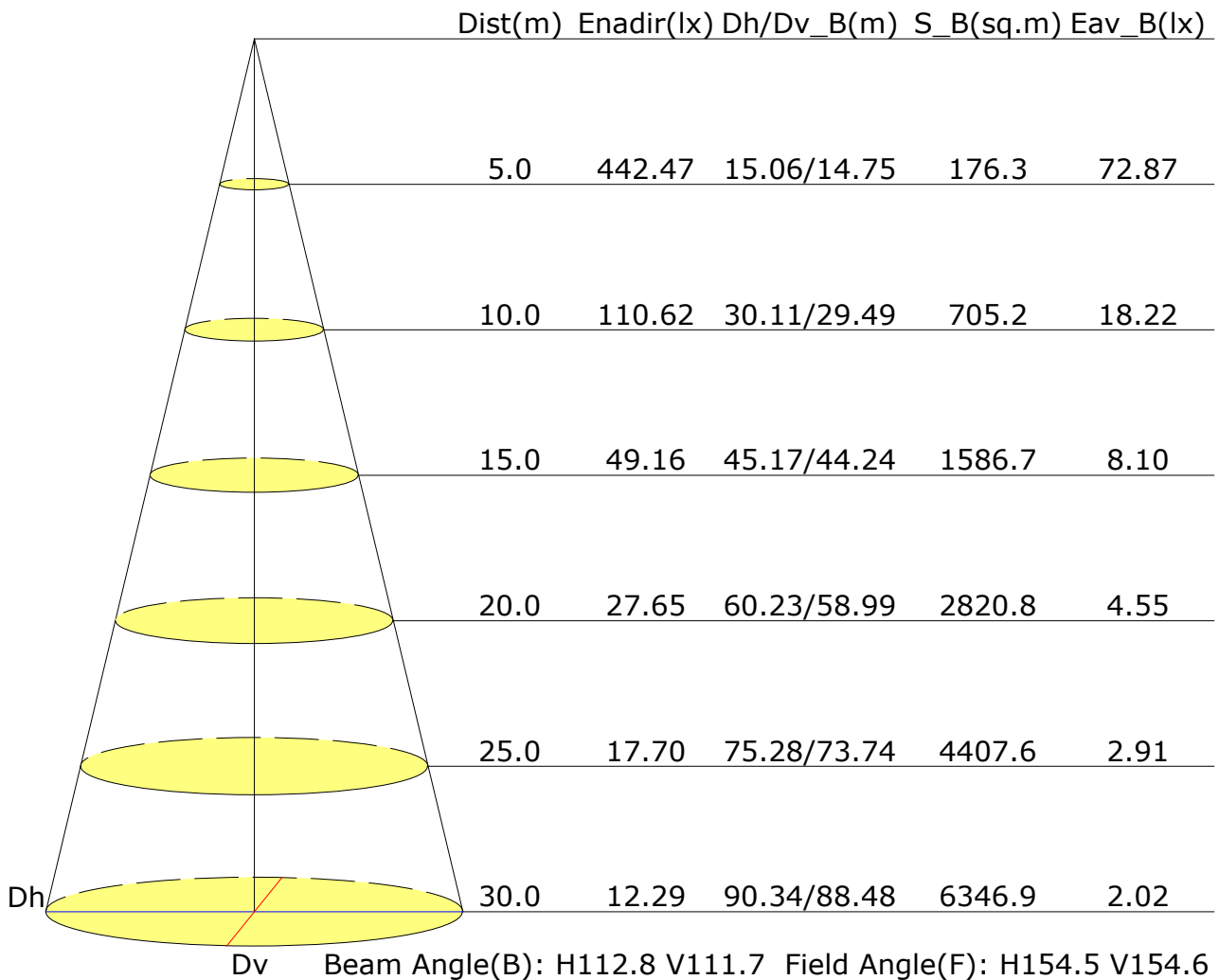
Test Device: LSG-1800B

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	26.1	27.4	26.4	27.7	27.9	25.9	27.2	26.2	27.5	27.7
3H	27.2	28.4	27.6	28.7	29.0	27.0	28.2	27.3	28.5	28.8
4H	27.5	28.6	27.9	28.9	29.3	27.2	28.3	27.5	28.6	29.0
6H	27.6	28.7	28.0	29.0	29.3	27.2	28.3	27.6	28.6	29.0
8H	27.6	28.6	28.0	29.0	29.3	27.2	28.2	27.6	28.6	28.9
12H	27.6	28.6	28.0	28.9	29.3	27.2	28.2	27.6	28.5	28.9
X=4H Y=2H	26.4	27.6	26.8	27.9	28.2	26.3	27.4	26.7	27.8	28.1
3H	27.8	28.7	28.2	29.1	29.5	27.5	28.5	27.9	28.9	29.2
4H	28.1	29.0	28.5	29.3	29.7	27.8	28.7	28.2	29.1	29.5
6H	28.2	29.0	28.7	29.4	29.9	27.9	28.7	28.3	29.1	29.5
8H	28.3	29.0	28.7	29.4	29.8	27.9	28.6	28.4	29.0	29.5
12H	28.3	28.9	28.7	29.3	29.8	27.9	28.5	28.3	29.0	29.4
X=8H Y=4H	28.2	28.9	28.6	29.3	29.7	27.9	28.6	28.3	29.0	29.5
6H	28.4	28.9	28.9	29.4	29.9	28.0	28.6	28.5	29.1	29.5
8H	28.4	28.9	28.9	29.4	29.9	28.0	28.5	28.5	29.0	29.5
12H	28.4	28.8	28.9	29.3	29.9	28.0	28.5	28.5	29.0	29.5
X=12H Y=4H	28.1	28.8	28.6	29.2	29.7	27.9	28.5	28.3	28.9	29.4
6H	28.4	28.8	28.9	29.3	29.8	28.0	28.5	28.5	29.0	29.5
8H	28.4	28.8	28.9	29.3	29.9	28.0	28.5	28.6	29.0	29.5
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.2/-0.3				
S=1.5H	+0.5/-0.8					+0.6/-0.8				
S=2.0H	+0.9/-1.1					+0.8/-1.2				

Calculate in accordance with CIE Pub.117. The table is revised with 31625lm ($8\log(F/F_0) = 12.0$).

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.50									
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	0.61	0.70	0.77	0.82	0.89	0.94	0.97	1.02	1.04	
		0.30	0.54	0.62	0.70	0.76	0.84	0.89	0.93	0.98	1.01	
		0.20	0.48	0.57	0.65	0.71	0.79	0.85	0.89	0.94	0.98	
0.50	0.50	0.20	0.59	0.67	0.75	0.79	0.86	0.90	0.93	0.97	1.00	
		0.30	0.53	0.61	0.69	0.74	0.81	0.86	0.90	0.94	0.97	
		0.20	0.48	0.56	0.64	0.69	0.77	0.83	0.86	0.92	0.95	
0.30	0.50	0.20	0.58	0.65	0.72	0.77	0.83	0.87	0.90	0.93	0.96	
		0.30	0.52	0.60	0.67	0.72	0.79	0.84	0.87	0.91	0.94	
		0.20	0.48	0.55	0.63	0.68	0.76	0.80	0.84	0.89	0.92	
0.00	0.00	0.00	0.45	0.53	0.60	0.65	0.72	0.77	0.80	0.84	0.87	
<p>Rating:221W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.50									
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	0.92	0.78	0.65	0.56	0.45	0.37	0.31	0.24	0.20	
	0.30		0.77	0.67	0.57	0.50	0.40	0.34	0.29	0.23	0.19	
	0.20		0.66	0.58	0.50	0.45	0.37	0.31	0.27	0.21	0.18	
0.50	0.50	0.20	0.89	0.74	0.62	0.54	0.42	0.38	0.30	0.23	0.18	
	0.30		0.75	0.65	0.55	0.48	0.39	0.32	0.28	0.22	0.18	
	0.20		0.65	0.57	0.49	0.44	0.36	0.30	0.26	0.21	0.17	
0.30	0.50	0.20	0.86	0.71	0.60	0.51	0.40	0.33	0.28	0.22	0.17	
	0.30		0.73	0.63	0.53	0.46	0.37	0.31	0.26	0.21	0.17	
	0.20		0.64	0.56	0.48	0.43	0.35	0.29	0.25	0.20	0.16	
0.00	0.00	0.00	0.53	0.46	0.39	0.34	0.27	0.22	0.19	0.15	0.12	
<p>Rating:221W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.50									
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	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23	
	0.30		0.11	0.12	0.14	0.15	0.16	0.18	0.18	0.20	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	0.16	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	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	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.10	0.12	0.13	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	0.16	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	
<p>Rating:221W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												