

Report No.: 1

Test Time: 29.01.2020 19:44

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 HE 4x28LED 125W 5000K 40x90gr.

Luminous Length (mm): 404

Luminous Width (mm): 153

Luminous Height (mm): 80

Voltage: 221.2 V

Current: 0.565 A

Power: 124.12 W

Power Factor: 0.992

Photometric Results

CIE Class: Direct

Measurement Flux: 17888.4 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 17888.4 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 38.3, 142.0, 50.9, 50.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 21.7, 84.1, 29.5, 29.5

Luminaire Efficacy Rating (LER): 144.17

Central Intensity: 24965.6 cd

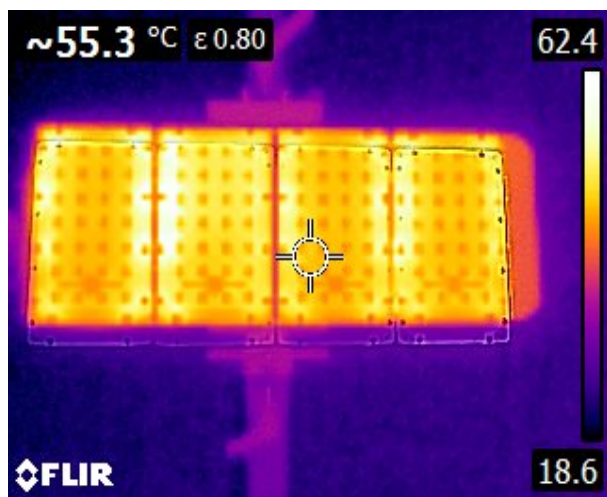
Max. Intensity: 25274.52 cd

Pos of Max. Intensity: H270 V7

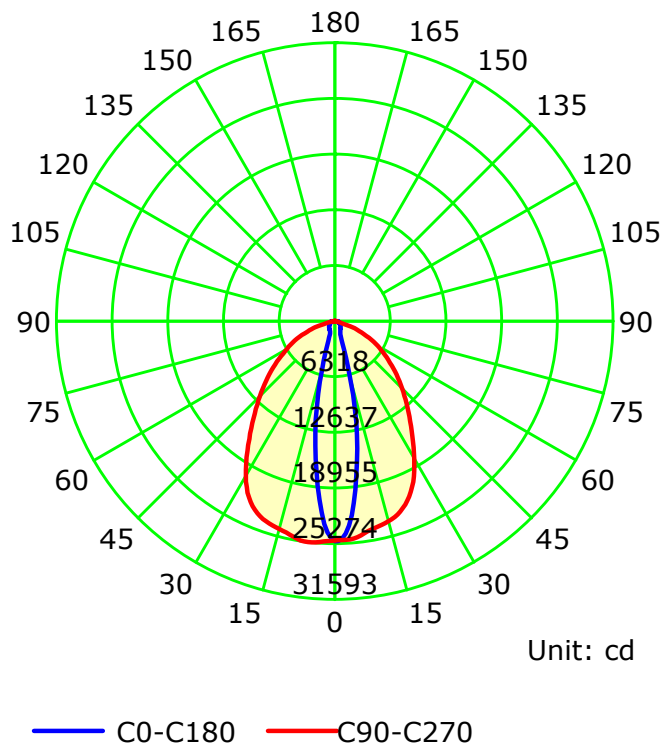
S/MH(C0/C180): 0.37

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

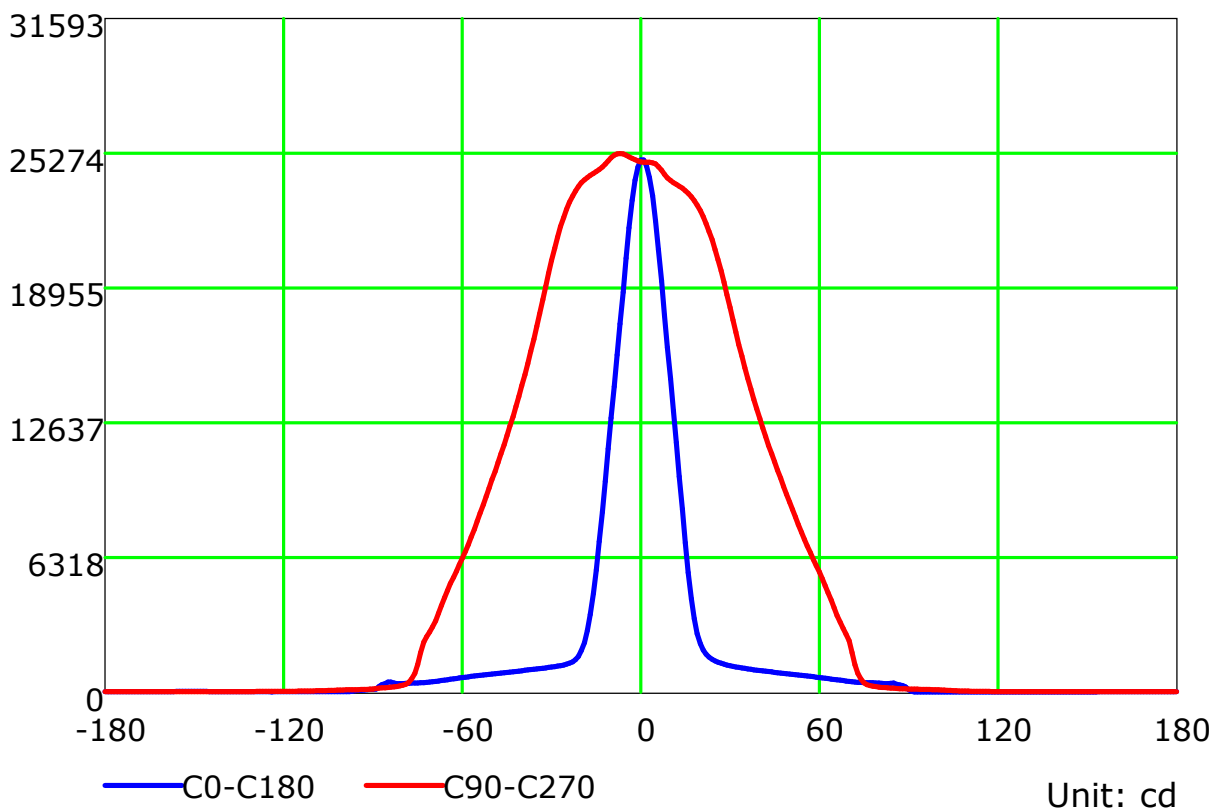
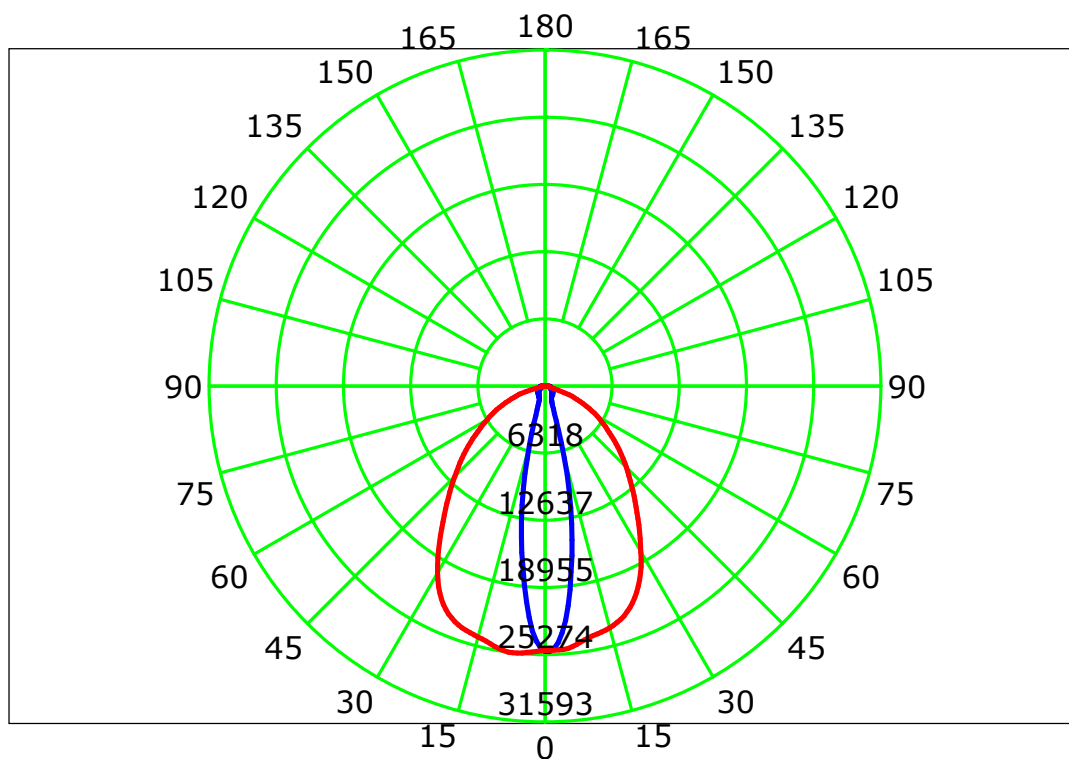
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

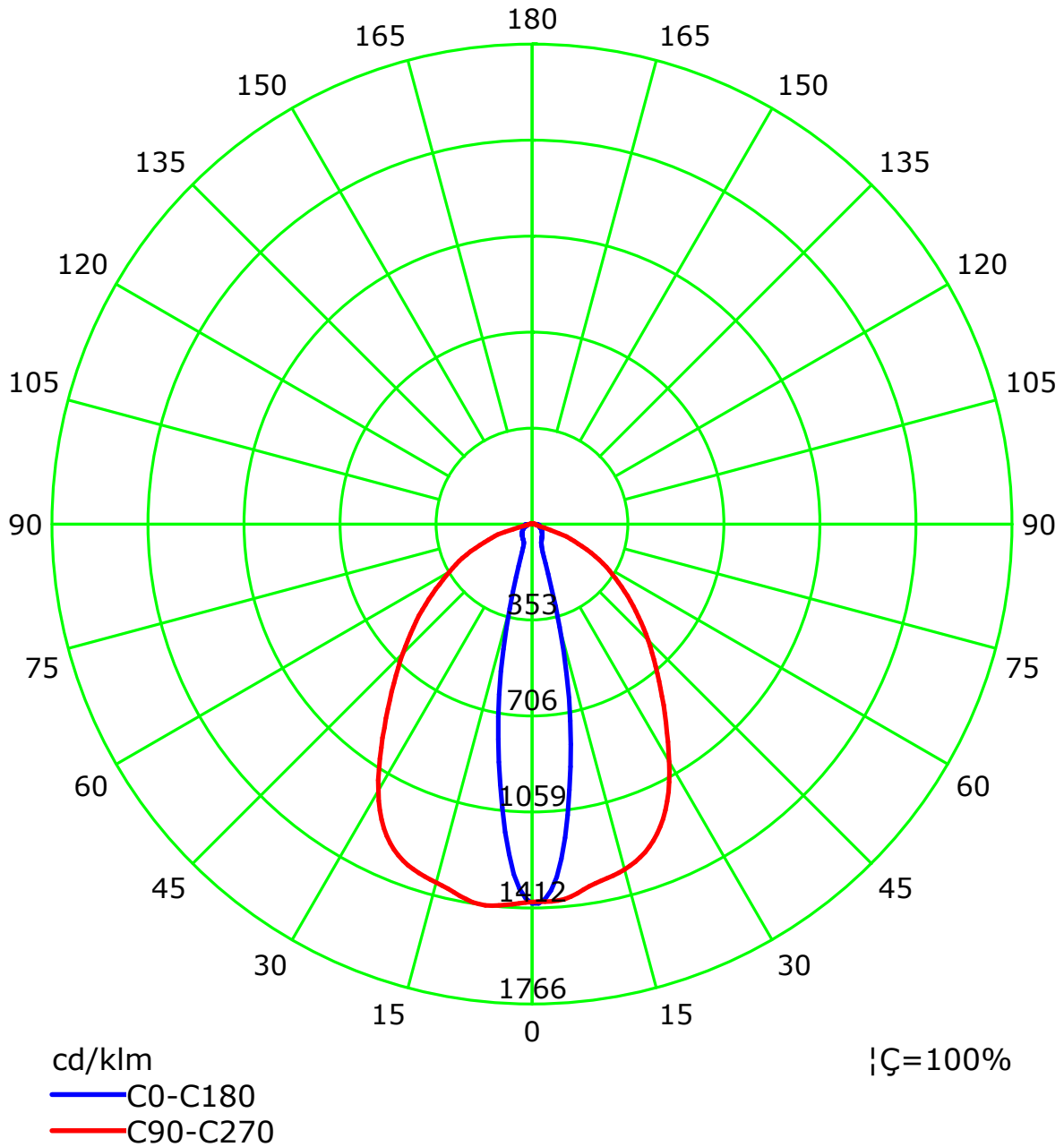
Luminous Intensity Distribution Curve



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)



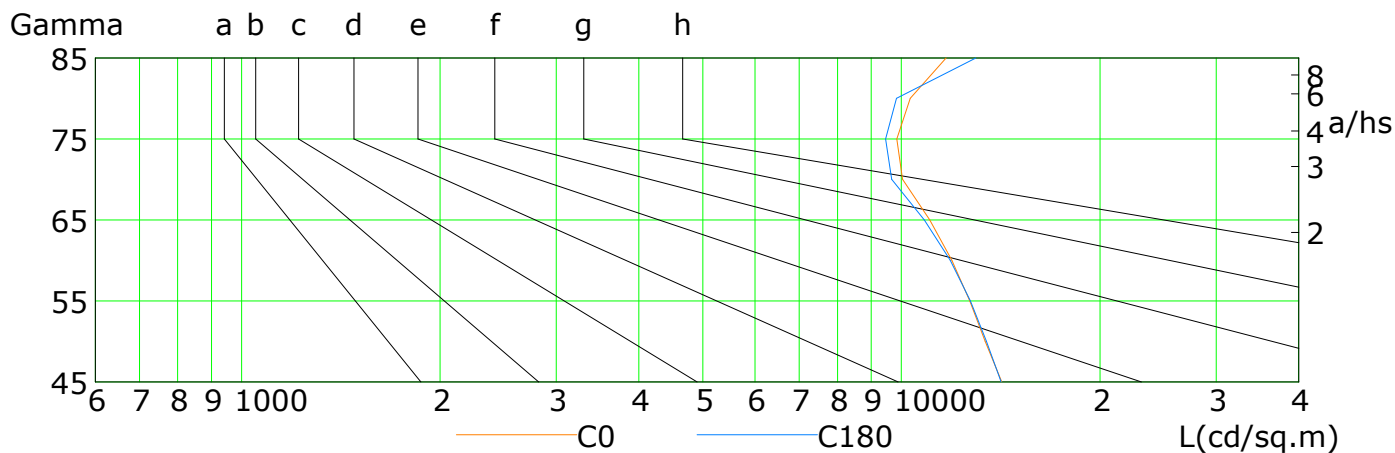
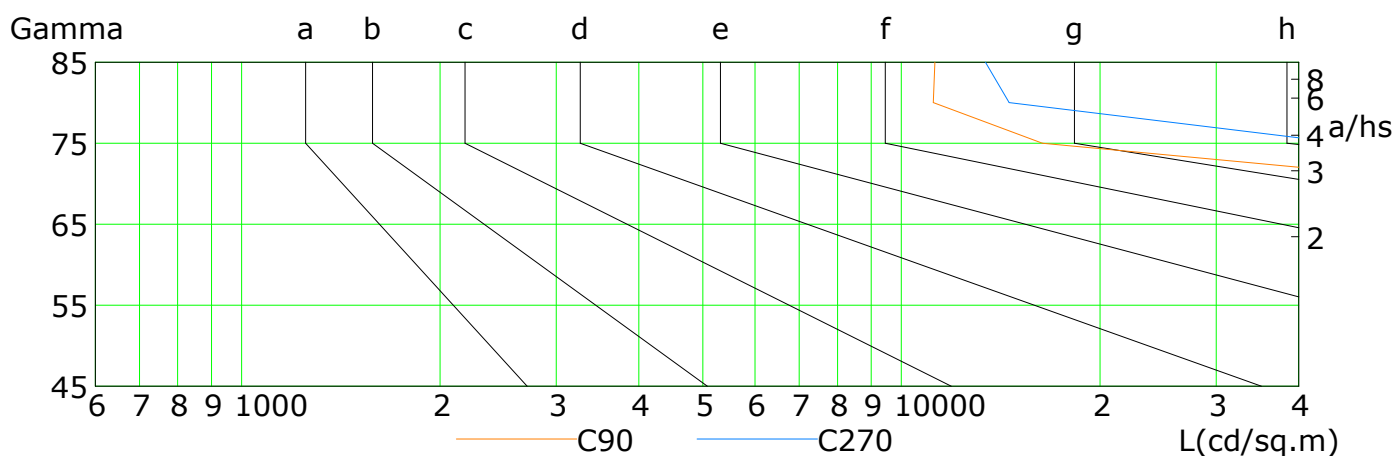
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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)							
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

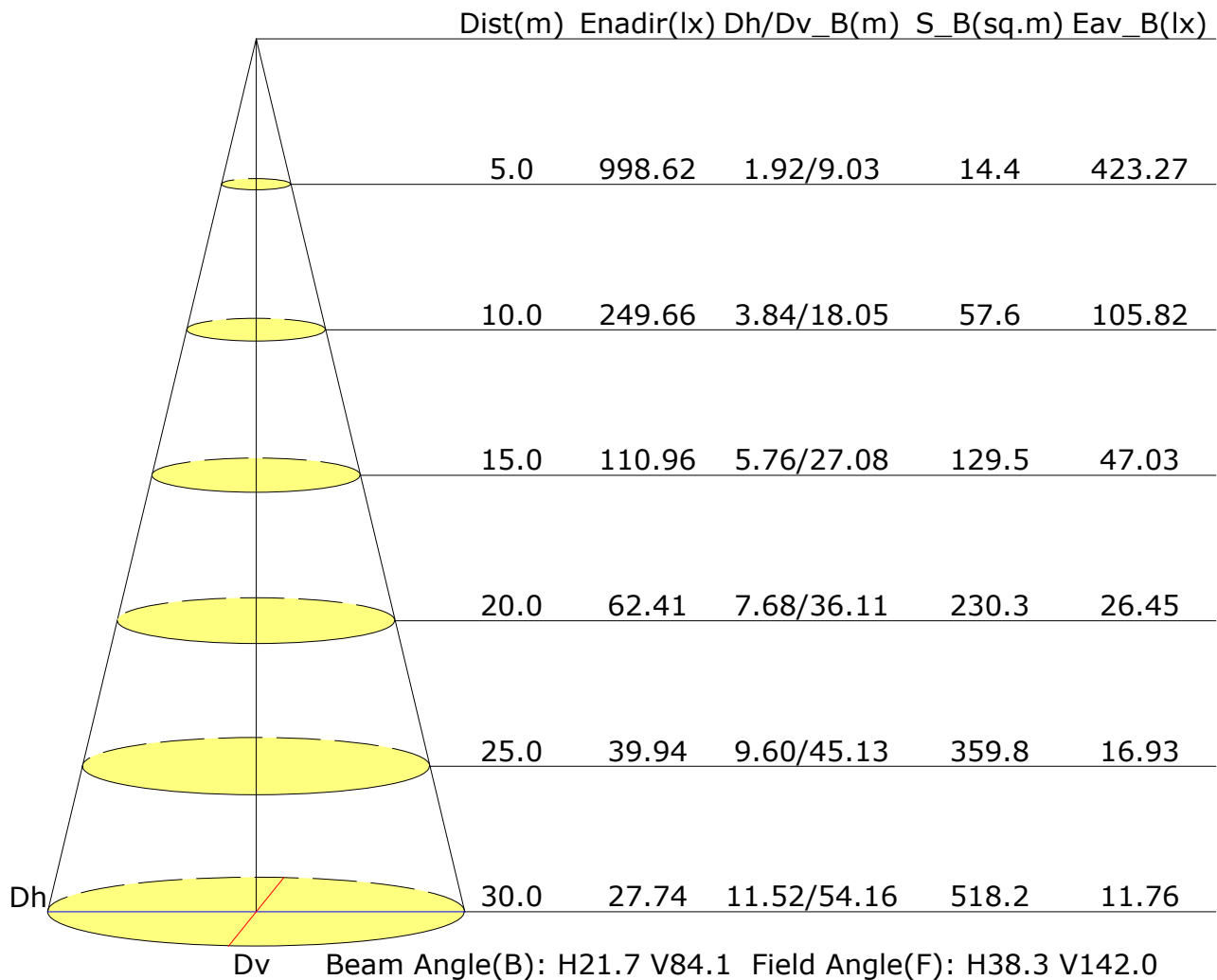


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	14198	13393	12699	11922	11043	10037	9839	10319	11686
C90	206489	181708	158028	136087	106485	74175	16359	11176	11234
C180	14172	13447	12718	11862	10830	9671	9464	9834	12972
C270	229919	203257	176565	151484	128425	94150	47170	14566	13414

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	16.7	17.8	17.0	18.0	18.3	28.9	29.9	29.2	30.2	30.4
3H	18.2	19.2	18.6	19.5	19.8	30.0	31.0	30.3	31.2	31.5
4H	19.0	19.9	19.3	20.2	20.5	30.2	31.1	30.5	31.4	31.7
6H	19.8	20.7	20.2	21.0	21.3	30.2	31.0	30.5	31.3	31.7
8H	20.2	21.0	20.6	21.4	21.7	30.1	31.0	30.5	31.3	31.6
12H	20.7	21.5	21.1	21.8	22.2	30.1	30.9	30.5	31.2	31.6
X=4H Y=2H	17.8	18.7	18.1	19.0	19.3	28.7	29.6	29.0	29.9	30.2
3H	19.3	20.1	19.7	20.5	20.8	29.8	30.6	30.2	30.9	31.3
4H	20.1	20.8	20.5	21.2	21.6	30.0	30.7	30.4	31.1	31.5
6H	20.9	21.6	21.4	22.0	22.4	30.0	30.6	30.5	31.0	31.5
8H	21.4	22.0	21.8	22.4	22.8	30.0	30.6	30.5	31.0	31.5
12H	21.9	22.4	22.4	22.9	23.3	30.0	30.5	30.5	31.0	31.4
X=8H Y=4H	20.4	21.0	20.9	21.4	21.8	29.9	30.5	30.4	30.9	31.4
6H	21.3	21.8	21.8	22.2	22.7	29.9	30.4	30.4	30.9	31.4
8H	21.8	22.2	22.3	22.7	23.2	30.0	30.4	30.5	30.8	31.3
12H	22.4	22.7	22.9	23.2	23.8	30.0	30.3	30.5	30.8	31.3
X=12H Y=4H	20.4	20.9	20.9	21.4	21.8	29.9	30.4	30.4	30.8	31.3
6H	21.3	21.8	21.9	22.2	22.7	29.9	30.3	30.4	30.8	31.3
8H	21.9	22.2	22.4	22.7	23.2	29.9	30.3	30.4	30.8	31.3
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+1.2/-1.7				
S=1.5H	+0.4/-0.6					+2.6/-4.1				
S=2.0H	+0.6/-1.0					+4.1/-7.2				

Calculate in accordance with CIE Pub.117. The table is revised with 17888lm ($8\log(F/F_0) = 10.0$).

C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
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 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	0.71	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	1.02	1.04	
	0.20		0.60	0.68	0.74	0.79	0.86	0.91	0.94	0.99	1.02	
0.50	0.50	0.20	0.69	0.77	0.82	0.86	0.92	0.95	0.98	1.01	1.03	
	0.30		0.63	0.71	0.77	0.82	0.88	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	0.68	0.75	0.80	0.84	0.89	0.92	0.94	0.97	0.99	
	0.30		0.63	0.70	0.76	0.80	0.85	0.89	0.91	0.95	0.97	
	0.20		0.59	0.67	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:124W 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	0.65	0.56	0.48	0.38	0.32	0.27	0.21	0.17	
	0.30		0.66	0.56	0.48	0.43	0.35	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	0.16	
0.50	0.50	0.20	0.76	0.62	0.53	0.46	0.36	0.33	0.25	0.20	0.16	
	0.30		0.64	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	0.30	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		0.63	0.52	0.45	0.39	0.31	0.26	0.22	0.18	0.14	
	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	0.35	0.30	0.26	0.21	0.17	0.15	0.12	0.10	
Rating:124W 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	0.20	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	0.08	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	0.21	0.22	
	0.30		0.10	0.12	0.13	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Rating:124W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												