

Report No.: 1

Test Time: 11.12.2019 19:01

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x18LED 0.3A 36W 5000K microprisma

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.4 V

Current: 0.168 A

Power: 36.14 W

Power Factor: 0.969

Photometric Results

CIE Class: Direct

Measurement Flux: 4055.2 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 4055.2 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 157.2, 158.8, 149.1, 149.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 80.8, 81.7, 77.2, 77.1

Luminaire Efficacy Rating (LER): 112.26

Central Intensity: 2036.31 cd

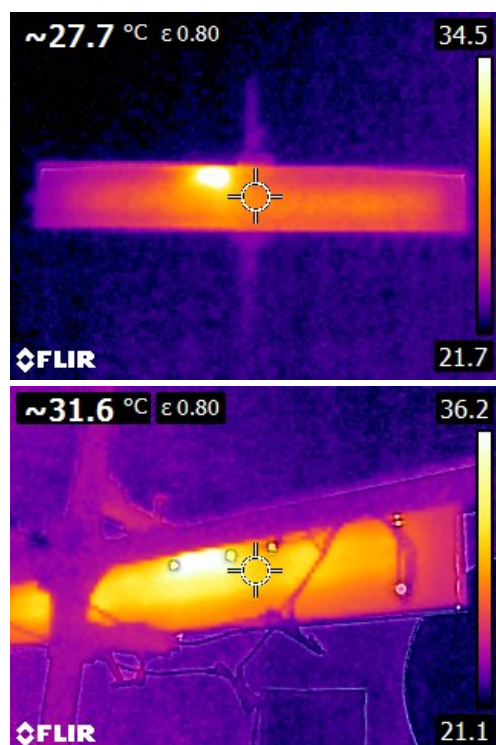
Max. Intensity: 2047.39 cd

Pos of Max. Intensity: H135 V3

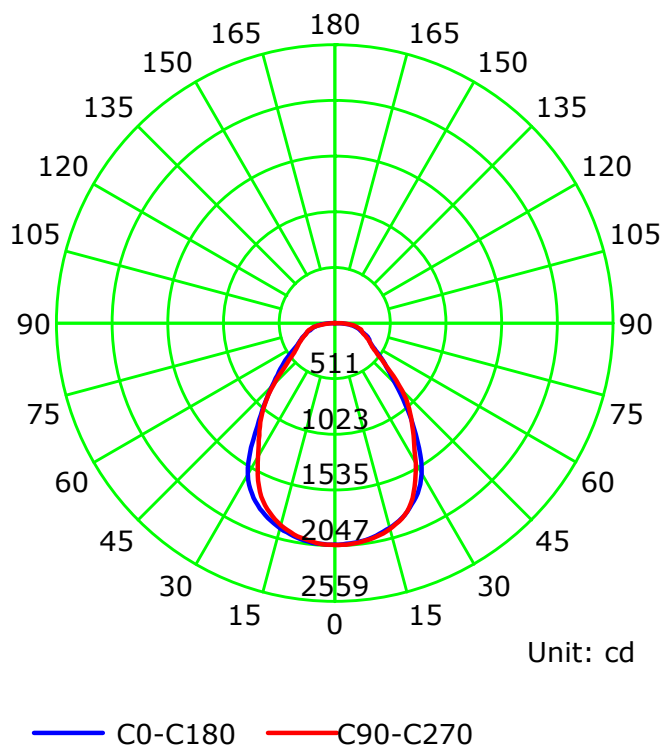
S/MH(C0/C180): 1.17

S/MH(C90/C270): 1.10

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

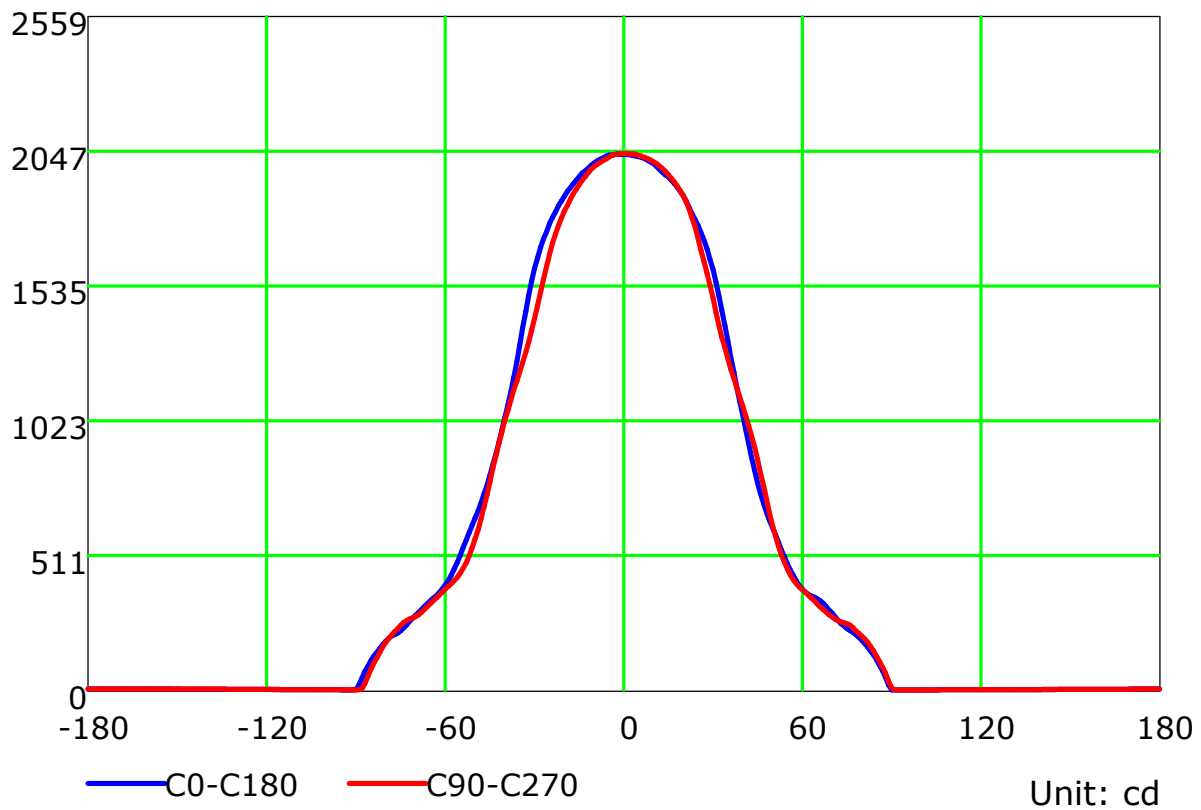
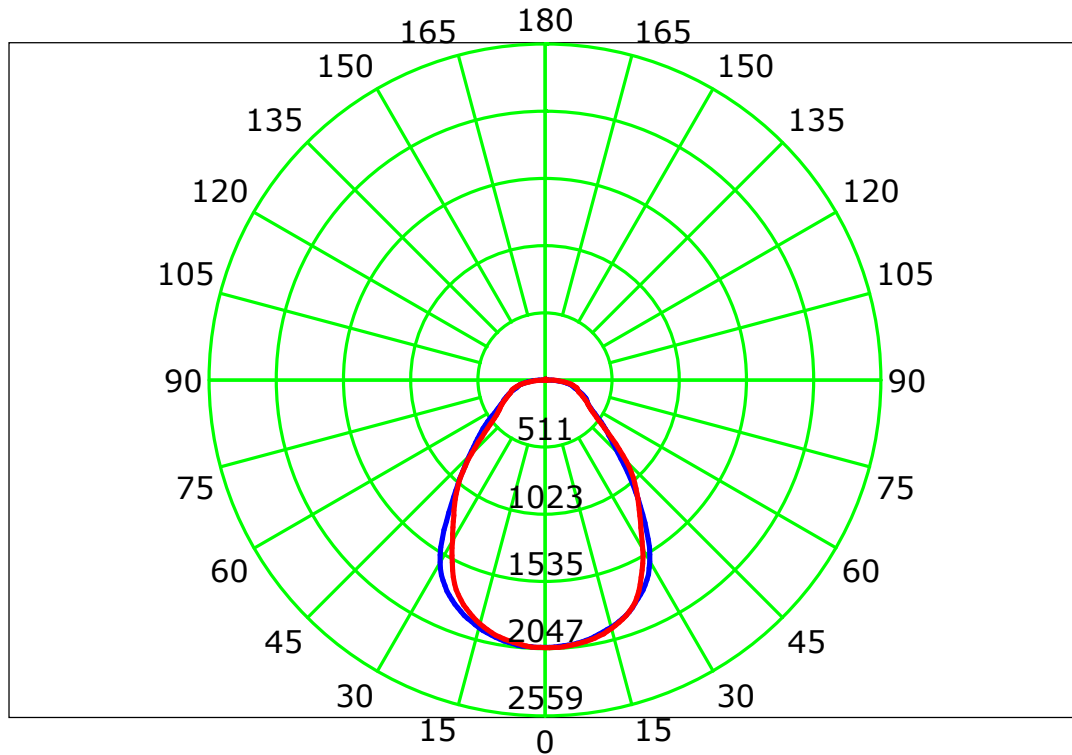
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

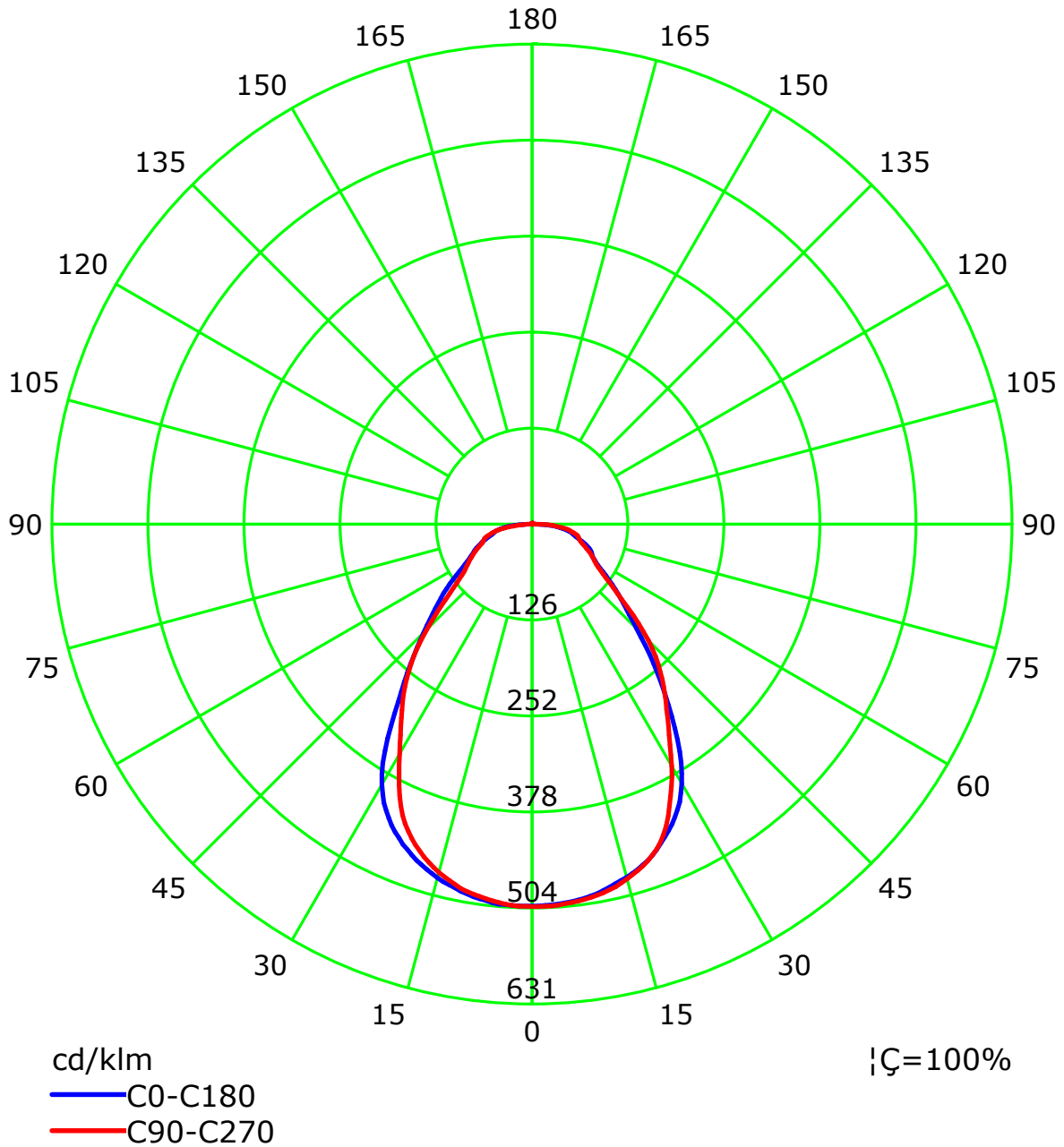
Luminous Intensity Distribution Curve



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)



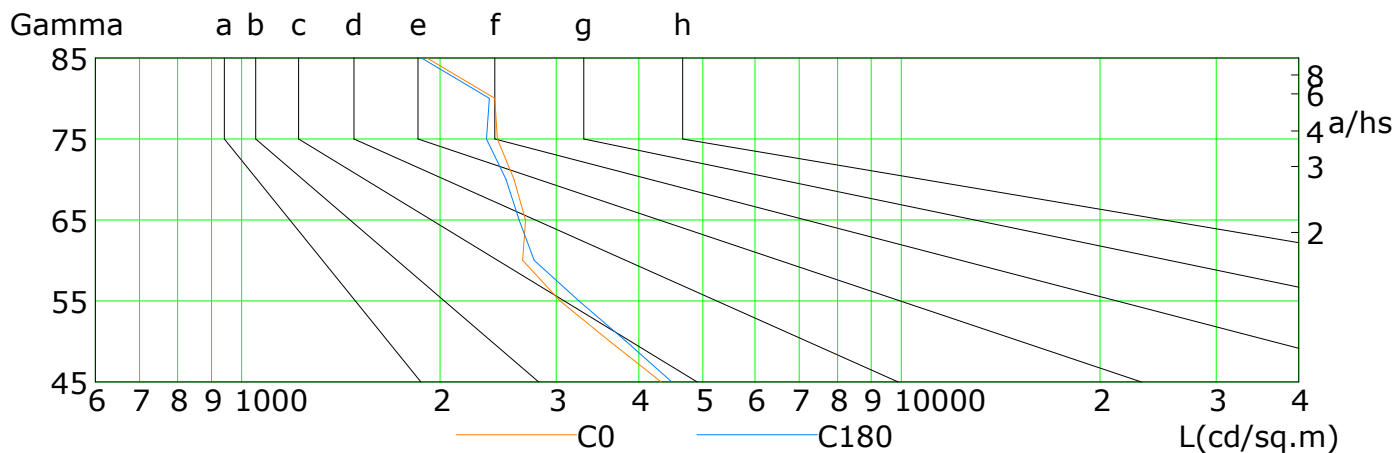
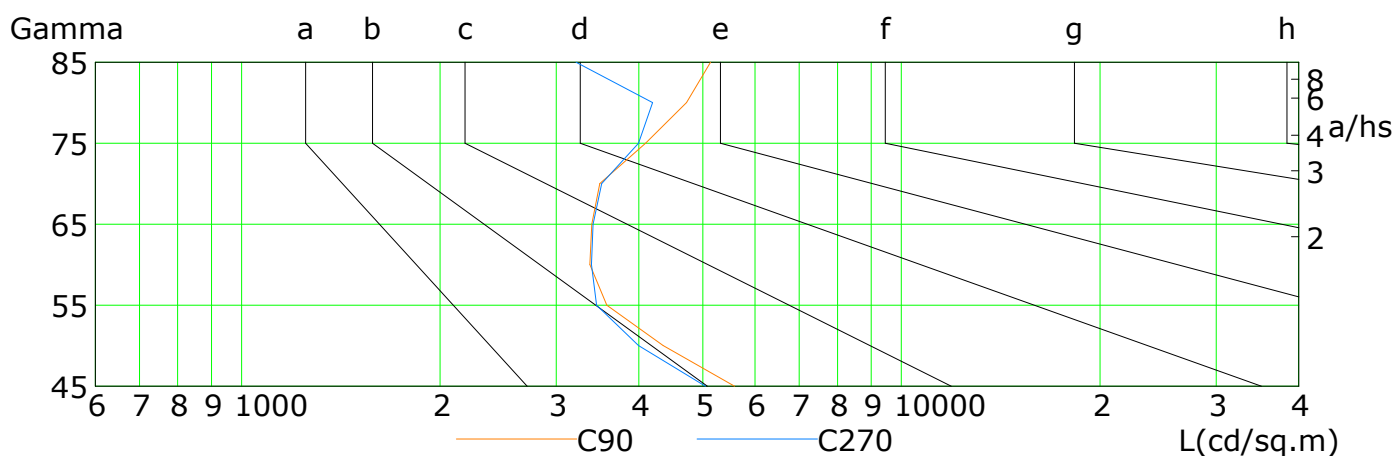
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

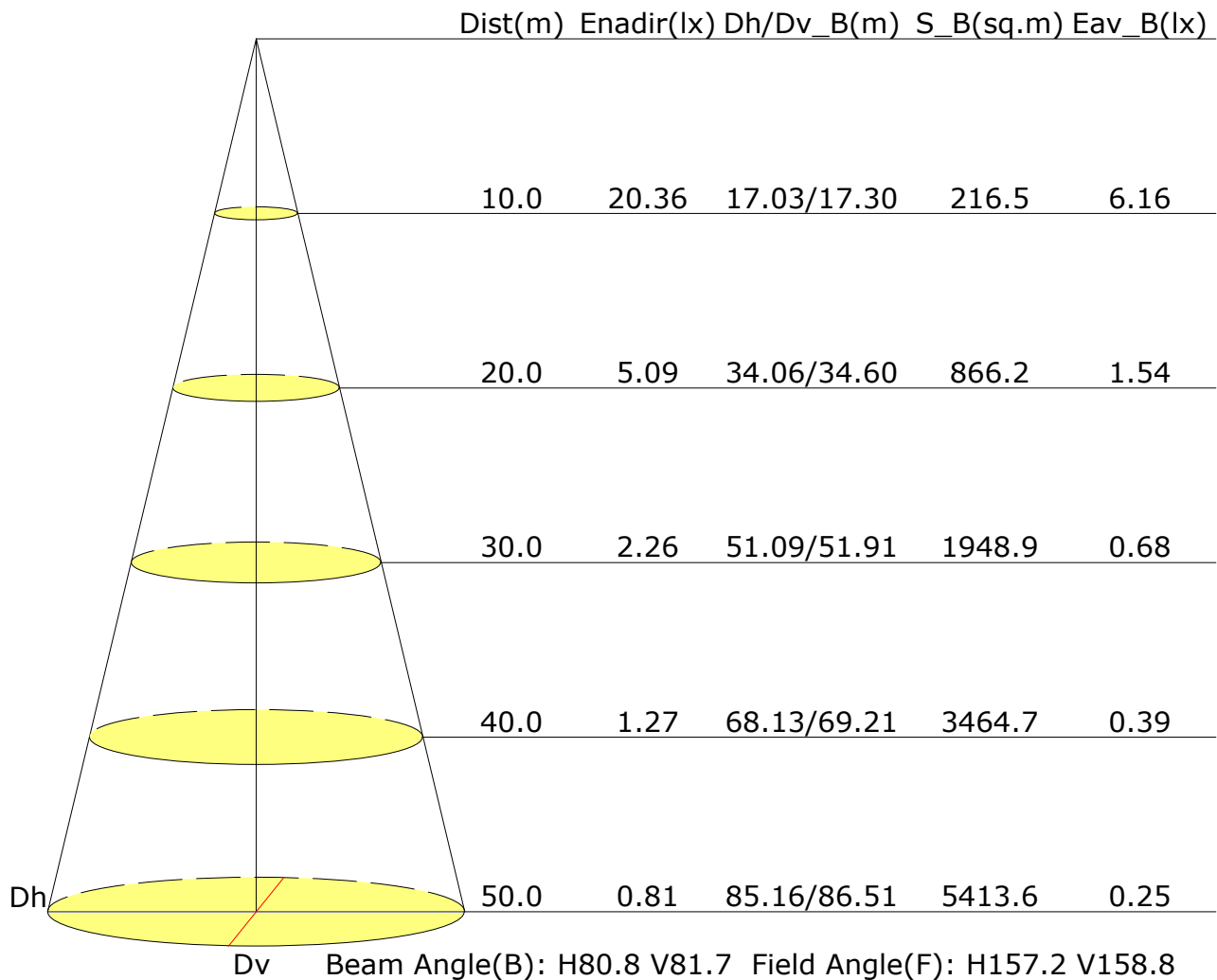


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4325	3613	3040	2667	2695	2588	2441	2419	1909
C90	5584	4353	3577	3373	3394	3491	4097	4727	5137
C180	4488	3825	3246	2775	2633	2516	2352	2373	1875
C270	5049	3995	3451	3391	3409	3516	3995	4196	3213

C Plane (°):0.0-360.0: 22.5
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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	15.8	17.0	16.1	17.3	17.5	16.0	17.3	16.3	17.5	17.8
3H	17.1	18.2	17.4	18.5	18.8	17.5	18.6	17.8	18.9	19.2
4H	17.7	18.8	18.1	19.1	19.4	18.4	19.4	18.7	19.7	20.0
6H	18.4	19.4	18.7	19.7	20.0	19.3	20.3	19.6	20.6	20.9
8H	18.6	19.6	19.0	19.9	20.3	19.7	20.6	20.0	21.0	21.3
12H	18.8	19.8	19.2	20.1	20.5	20.0	20.9	20.3	21.2	21.6
X=4H Y=2H	16.2	17.3	16.6	17.6	17.9	16.5	17.5	16.8	17.8	18.1
3H	17.8	18.7	18.2	19.0	19.4	18.1	19.0	18.5	19.4	19.7
4H	18.6	19.4	19.0	19.8	20.1	19.2	20.0	19.6	20.4	20.7
6H	19.4	20.1	19.8	20.5	20.9	20.2	21.0	20.7	21.4	21.8
8H	19.7	20.4	20.2	20.8	21.2	20.7	21.4	21.2	21.8	22.2
12H	20.0	20.6	20.4	21.0	21.5	21.1	21.7	21.5	22.1	22.6
X=8H Y=4H	18.9	19.5	19.3	20.0	20.4	19.4	20.1	19.8	20.5	20.9
6H	19.8	20.4	20.3	20.8	21.3	20.6	21.2	21.1	21.6	22.1
8H	20.3	20.7	20.7	21.2	21.7	21.2	21.7	21.7	22.2	22.7
12H	20.6	21.0	21.1	21.5	22.0	21.7	22.1	22.2	22.6	23.1
X=12H Y=4H	18.9	19.5	19.4	20.0	20.4	19.4	20.0	19.9	20.5	20.9
6H	19.9	20.4	20.4	20.9	21.3	20.7	21.2	21.2	21.6	22.1
8H	20.4	20.8	20.9	21.3	21.8	21.3	21.7	21.8	22.2	22.7
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.3/-0.3				
S=1.5H	+0.4/-0.8					+0.4/-0.6				
S=2.0H	+0.8/-1.0					+0.7/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 4055lm ($8\log(F/F_0) = 4.9$).

C Plane (°):0.0-360.0: 22.5
 Test Lab:
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 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.00									
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	0.63	0.72	0.79	0.83	0.90	0.95	0.98	1.02	1.04	
	0.30		0.56	0.65	0.72	0.77	0.84	0.89	0.93	0.98	1.01	
	0.20		0.51	0.60	0.67	0.72	0.80	0.85	0.89	0.94	0.98	
0.50	0.50	0.20	0.61	0.70	0.76	0.81	0.87	0.91	0.94	0.98	1.00	
	0.30		0.55	0.64	0.70	0.75	0.82	0.87	0.90	0.94	0.97	
	0.20		0.50	0.59	0.66	0.71	0.78	0.83	0.87	0.92	0.95	
0.30	0.50	0.20	0.60	0.68	0.74	0.78	0.84	0.88	0.90	0.94	0.96	
	0.30		0.54	0.63	0.69	0.74	0.80	0.84	0.87	0.91	0.94	
	0.20		0.50	0.59	0.65	0.70	0.76	0.81	0.84	0.89	0.92	
0.00	0.00	0.00	0.48	0.56	0.62	0.67	0.73	0.77	0.80	0.84	0.87	
Rating:36W 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 = 1.00									
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	0.91	0.75	0.64	0.56	0.45	0.37	0.32	0.25	0.21	
	0.30		0.76	0.64	0.56	0.49	0.40	0.34	0.30	0.24	0.20	
	0.20		0.65	0.56	0.49	0.44	0.37	0.32	0.28	0.22	0.19	
0.50	0.50	0.20	0.87	0.72	0.61	0.53	0.43	0.39	0.30	0.24	0.19	
	0.30		0.74	0.62	0.54	0.48	0.39	0.33	0.28	0.22	0.19	
	0.20		0.64	0.55	0.48	0.43	0.36	0.31	0.27	0.21	0.18	
0.30	0.50	0.20	0.85	0.69	0.58	0.51	0.41	0.34	0.29	0.22	0.19	
	0.30		0.72	0.61	0.52	0.46	0.37	0.32	0.27	0.22	0.18	
	0.20		0.63	0.54	0.47	0.42	0.35	0.30	0.26	0.21	0.17	
0.00	0.00	0.00	0.52	0.44	0.38	0.33	0.27	0.23	0.20	0.15	0.13	
Rating:36W 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 = 1.00									
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	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18	
0.50	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	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.15	0.16	
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:36W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												