

Report No.: 1

Test Time: 01.11.2019 19:16

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 4x24LED 0,4A 20,5W 3000K bez stekla

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.4 V

Current: 0.096 A

Power: 20.65 W

Power Factor: 0.964

Photometric Results

CIE Class: Direct

Measurement Flux: 2792 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 2792.0 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.3, 143.8, 150.7, 150.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 117.2, 114.0, 118.4, 118.2

Luminaire Efficacy Rating (LER): 135.26

Central Intensity: 989.77 cd

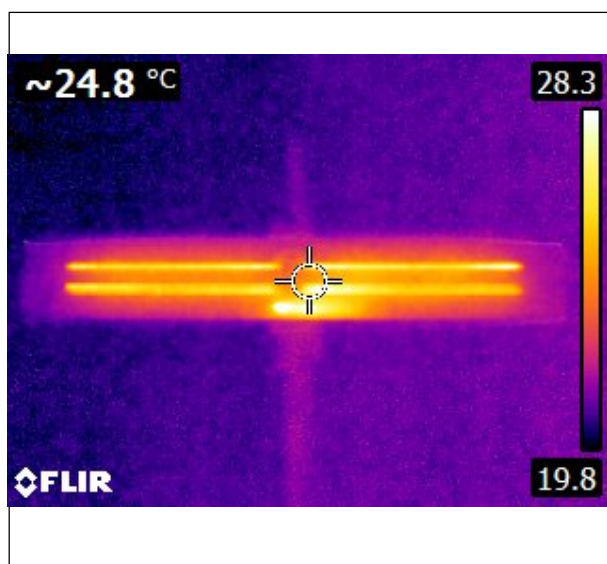
Max. Intensity: 995.1 cd

Pos of Max. Intensity: H90 V4

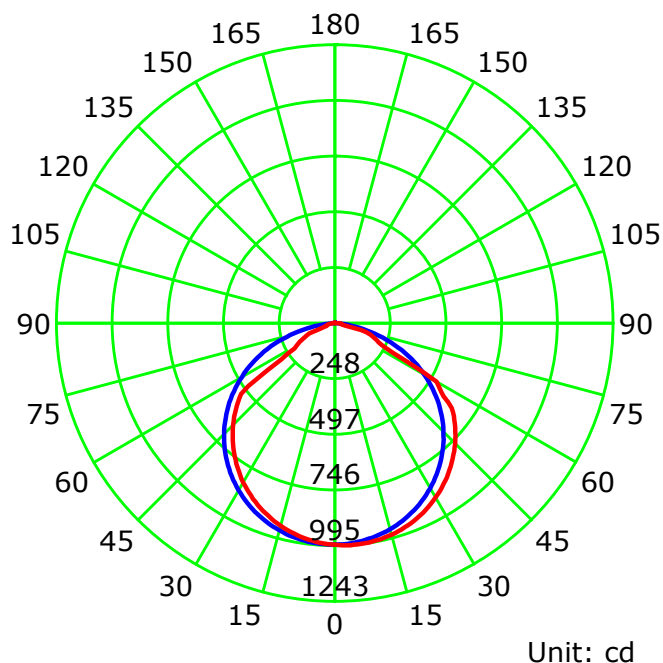
S/MH(C0/C180): 1.29

S/MH(C90/C270): 1.29

Termogramma



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

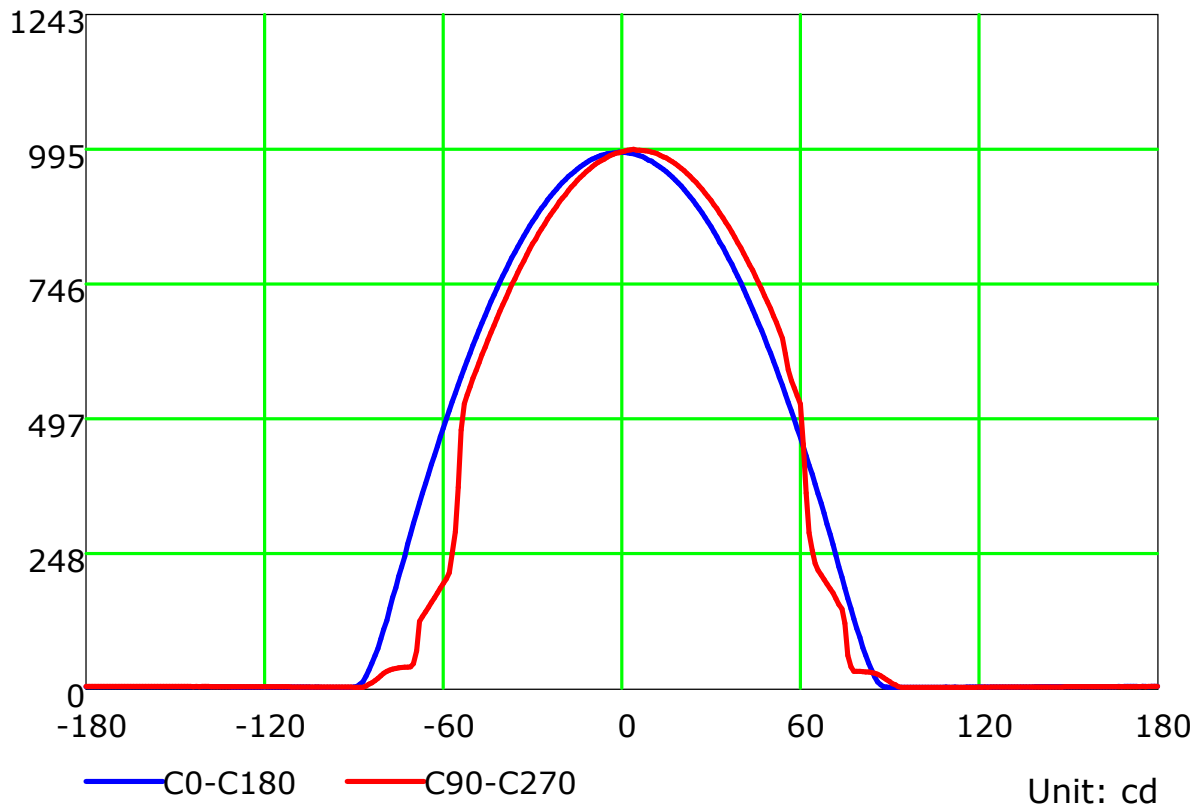
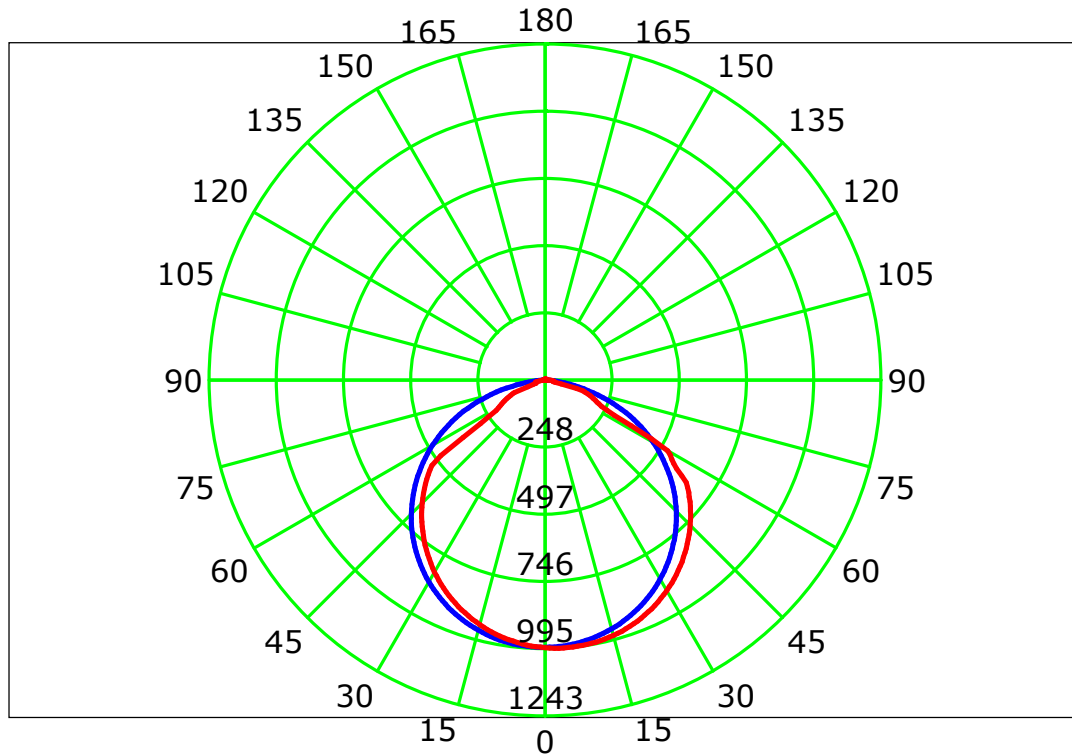
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

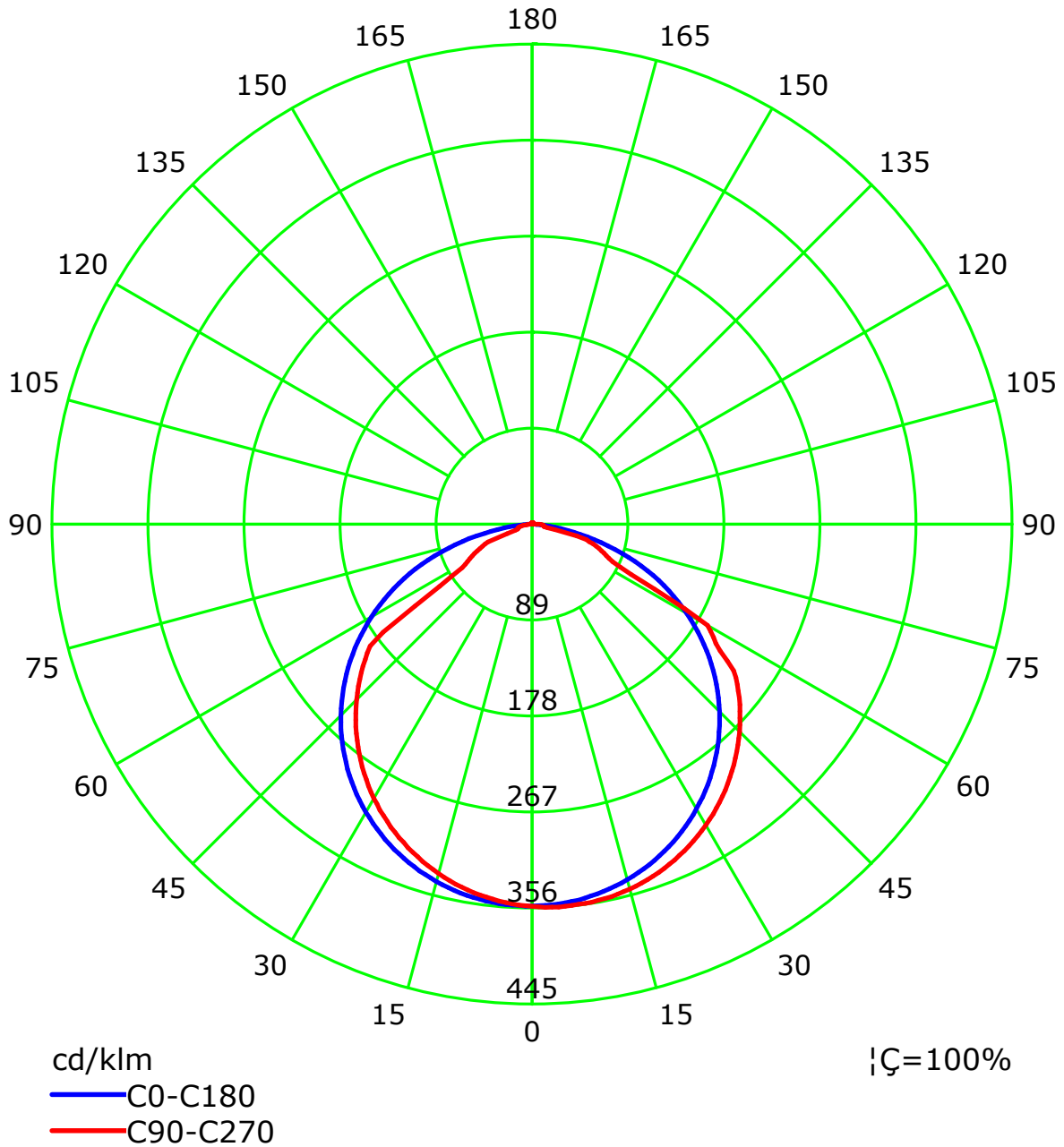
Luminous Intensity Distribution Curve



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)



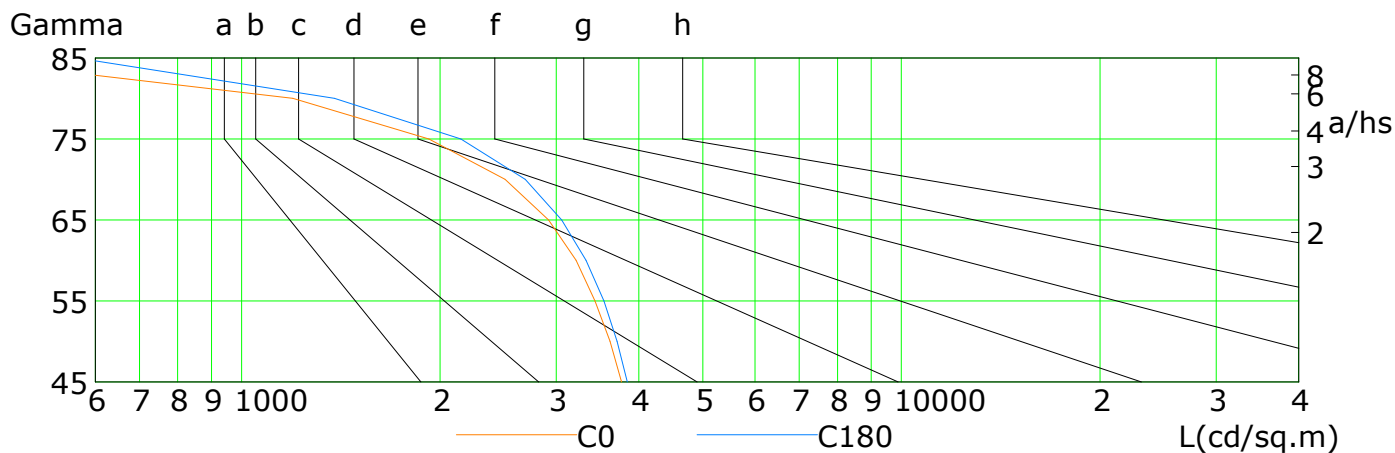
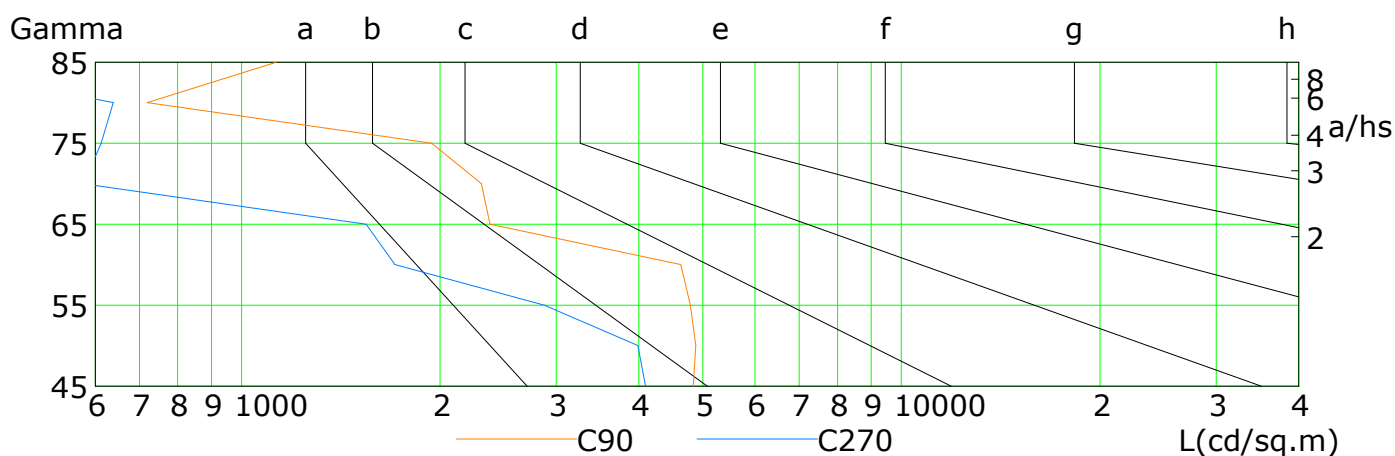
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

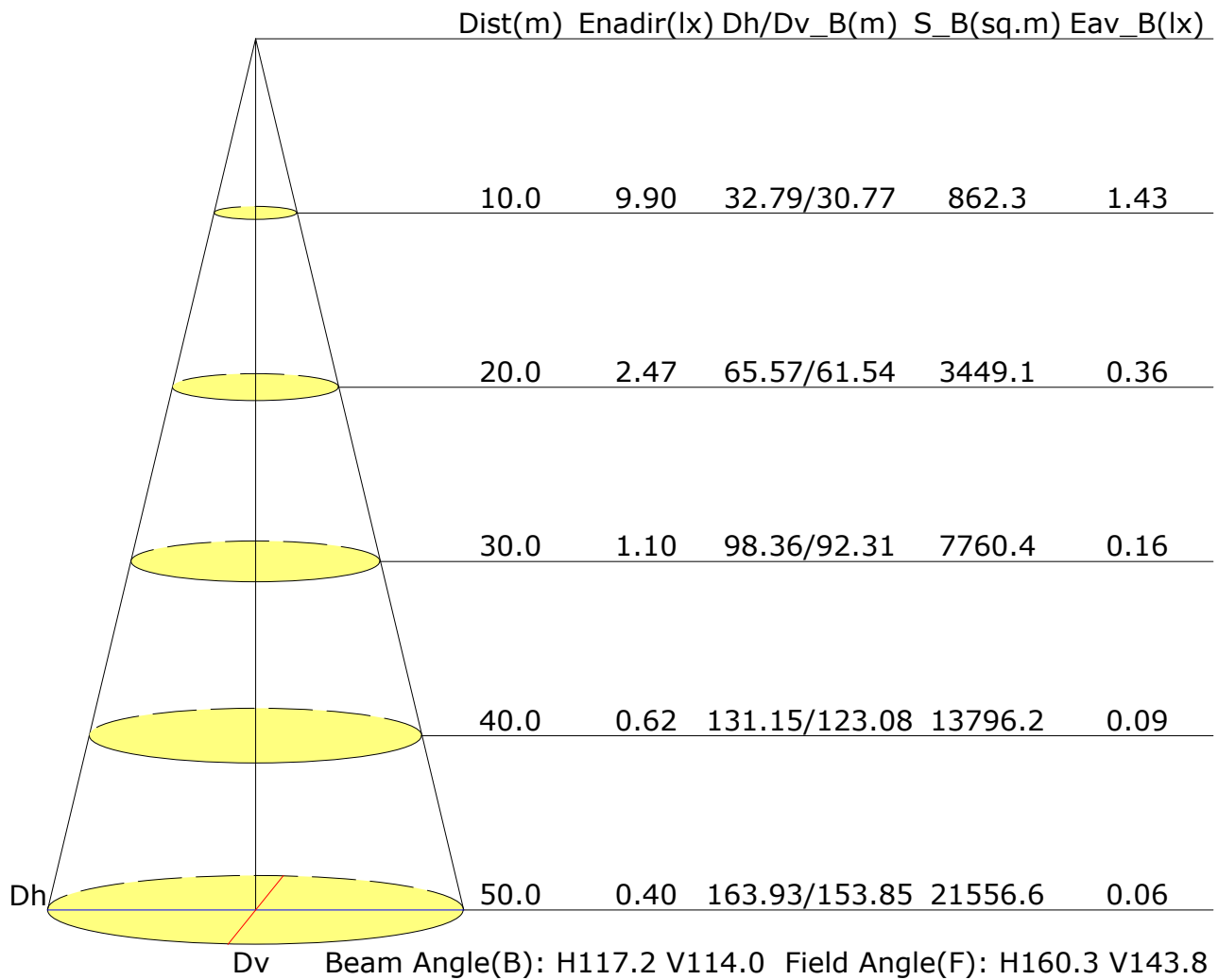


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	3765	3618	3433	3212	2918	2509	1922	1196	360
C90	4838	4879	4788	4628	2381	2309	1941	719	1129
C180	3843	3706	3540	3328	3056	2690	2149	1383	563
C270	4094	3986	2876	1708	1545	575	612	639	322

C Plane (°):0.0-360.0: 22.5
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 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	17.2	18.5	17.5	18.8	19.0	17.0	18.3	17.3	18.6	18.8
3H	18.6	19.8	18.9	20.1	20.4	17.4	18.6	17.7	18.9	19.2
4H	19.0	20.2	19.4	20.5	20.8	17.6	18.7	17.9	19.0	19.3
6H	19.2	20.2	19.5	20.6	20.9	17.5	18.6	17.9	18.9	19.3
8H	19.2	20.2	19.6	20.5	20.9	17.5	18.6	17.9	18.9	19.2
12H	19.2	20.1	19.5	20.5	20.8	17.5	18.5	17.9	18.8	19.2
X=4H Y=2H	17.7	18.9	18.1	19.2	19.5	17.5	18.7	17.9	19.0	19.3
3H	19.2	20.2	19.6	20.5	20.9	18.0	19.0	18.4	19.4	19.7
4H	19.8	20.6	20.2	21.0	21.4	18.2	19.1	18.7	19.5	19.9
6H	19.9	20.7	20.4	21.1	21.5	18.2	19.0	18.7	19.4	19.8
8H	20.0	20.7	20.4	21.1	21.5	18.2	18.9	18.7	19.4	19.8
12H	20.0	20.6	20.4	21.0	21.5	18.2	18.9	18.7	19.3	19.8
X=8H Y=4H	19.8	20.5	20.2	20.9	21.3	18.3	19.0	18.8	19.5	19.9
6H	20.0	20.5	20.5	21.0	21.5	18.4	18.9	18.8	19.4	19.9
8H	20.0	20.5	20.5	21.0	21.5	18.4	18.9	18.9	19.3	19.8
12H	20.0	20.5	20.5	20.9	21.5	18.4	18.8	18.9	19.3	19.8
X=12H Y=4H	19.7	20.4	20.2	20.8	21.3	18.3	19.0	18.8	19.4	19.8
6H	20.0	20.5	20.5	20.9	21.4	18.4	18.8	18.8	19.3	19.8
8H	20.0	20.4	20.5	20.9	21.4	18.4	18.8	18.9	19.3	19.8
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.4/-0.5				
S=1.5H	+0.4/-0.7					+1.3/-1.9				
S=2.0H	+0.8/-1.3					+1.9/-3.5				

Calculate in accordance with CIE Pub.117. The table is revised with 2792lm ($8\log(F/F_0) = 3.6$).

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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 = 1.25									
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	0.58	0.68	0.76	0.81	0.89	0.94	0.97	1.02	1.04	
	0.30		0.50	0.61	0.69	0.75	0.83	0.88	0.92	0.98	1.01	
	0.20		0.44	0.55	0.63	0.69	0.78	0.84	0.88	0.94	0.98	
0.50	0.50	0.20	0.56	0.66	0.74	0.79	0.86	0.90	0.93	0.97	1.00	
	0.30		0.49	0.60	0.67	0.73	0.81	0.86	0.89	0.94	0.97	
	0.20		0.44	0.55	0.63	0.68	0.76	0.82	0.86	0.91	0.95	
0.30	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.87	0.90	0.94	0.96	
	0.30		0.48	0.59	0.66	0.71	0.78	0.83	0.87	0.91	0.94	
	0.20		0.43	0.54	0.62	0.67	0.75	0.80	0.84	0.89	0.92	
0.00	0.00	0.00	0.41	0.52	0.59	0.64	0.71	0.76	0.80	0.84	0.87	
Rating:21W 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	0.98	0.80	0.67	0.58	0.46	0.38	0.32	0.25	0.20	
	0.30		0.82	0.68	0.59	0.52	0.42	0.35	0.30	0.23	0.19	
	0.20		0.70	0.60	0.52	0.46	0.38	0.32	0.28	0.22	0.18	
0.50	0.50	0.20	0.95	0.77	0.65	0.56	0.44	0.40	0.31	0.24	0.19	
	0.30		0.80	0.67	0.57	0.50	0.40	0.33	0.29	0.22	0.18	
	0.20		0.69	0.59	0.51	0.45	0.37	0.31	0.27	0.21	0.18	
0.30	0.50	0.20	0.92	0.74	0.62	0.53	0.42	0.34	0.29	0.22	0.18	
	0.30		0.78	0.65	0.55	0.48	0.39	0.32	0.27	0.21	0.17	
	0.20		0.69	0.58	0.50	0.44	0.36	0.30	0.26	0.20	0.17	
0.00	0.00	0.00	0.58	0.48	0.41	0.35	0.28	0.23	0.20	0.15	0.13	
Rating:21W 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	0.17	0.18	0.19	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	0.13	0.15	0.16	0.18	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	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	0.08	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	0.20	
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		0.05	0.07	0.08	0.09	0.11	0.13	0.14	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:21W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												