

Report No.: 1

Test Time: 14.11.2019 18:09

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 595_300 18LED 18W 5000K microprisma (50)

Luminous Length (mm): 595

Luminous Width (mm): 300

Luminous Height (mm): 50

Voltage: 221.4 V

Current: 0.087 A

Power: 18.71 W

Power Factor: 0.963

Photometric Results

CIE Class: Direct

Measurement Flux: 2104.4 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 2104.4 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.2, 161.8, 152.9, 152.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 77.6, 80.3, 75.7, 75.7

Luminaire Efficacy Rating (LER): 112.52

Central Intensity: 1064.89 cd

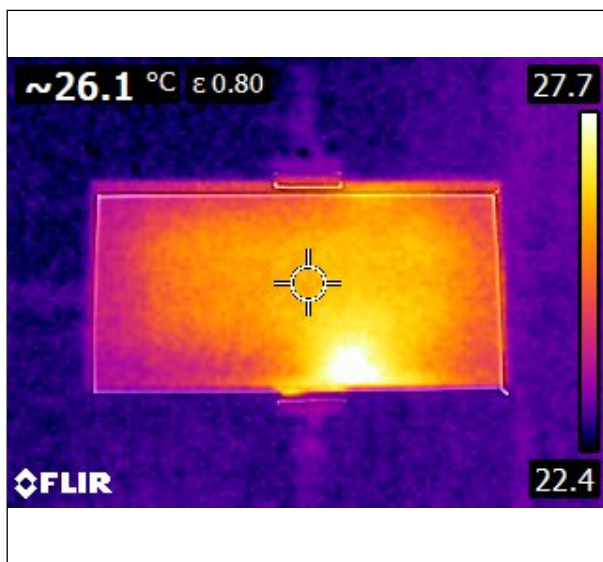
Max. Intensity: 1066.24 cd

Pos of Max. Intensity: H45 V0

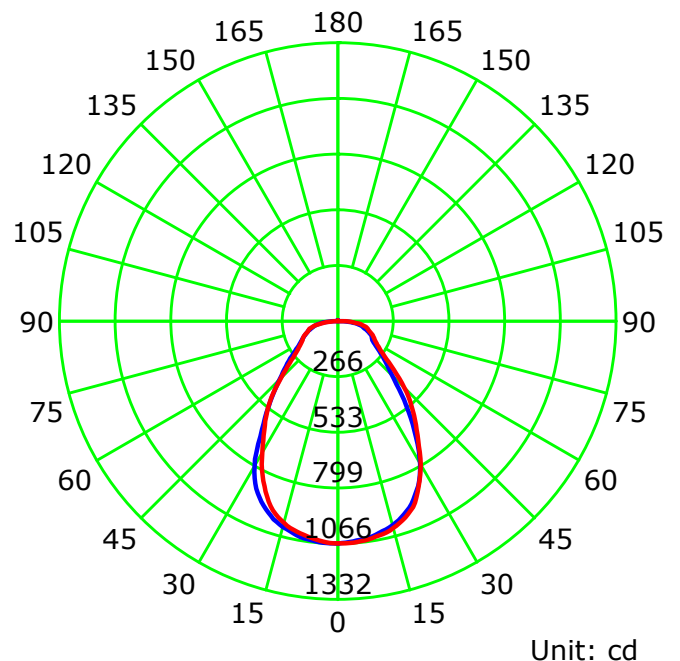
S/MH(C0/C180): 1.13

S/MH(C90/C270): 1.10

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

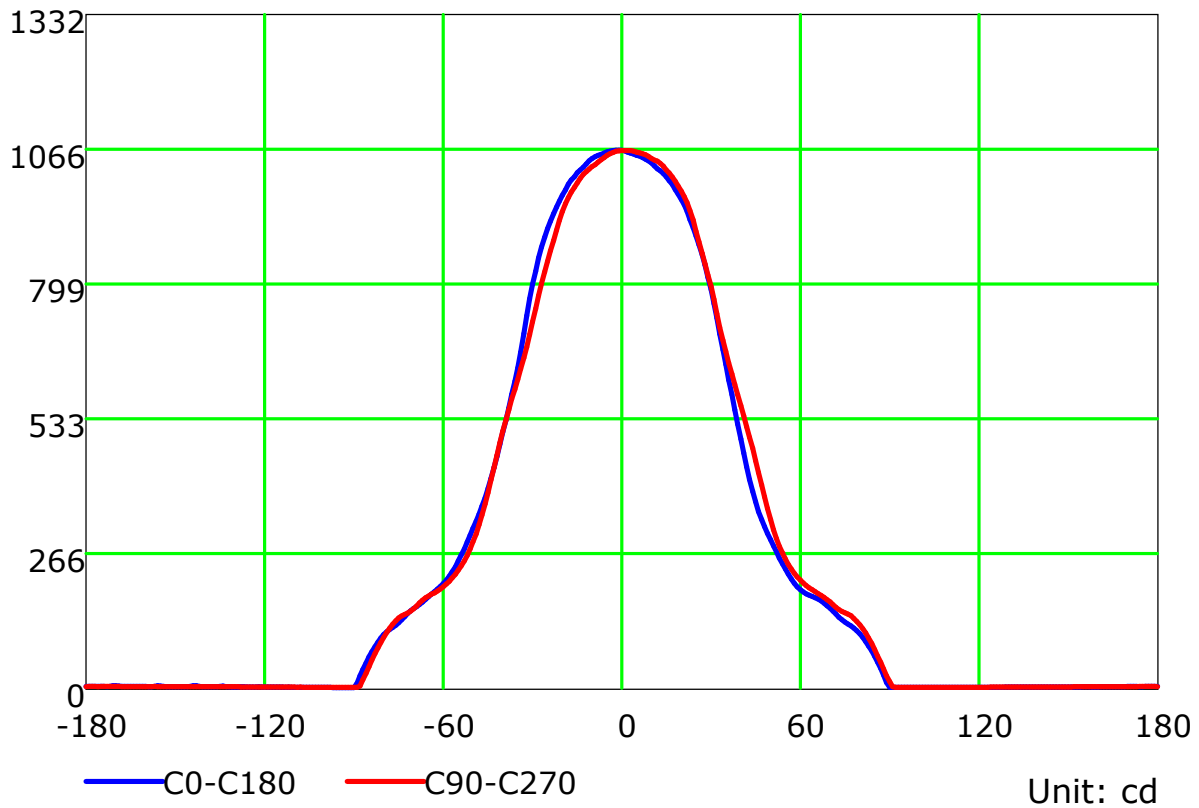
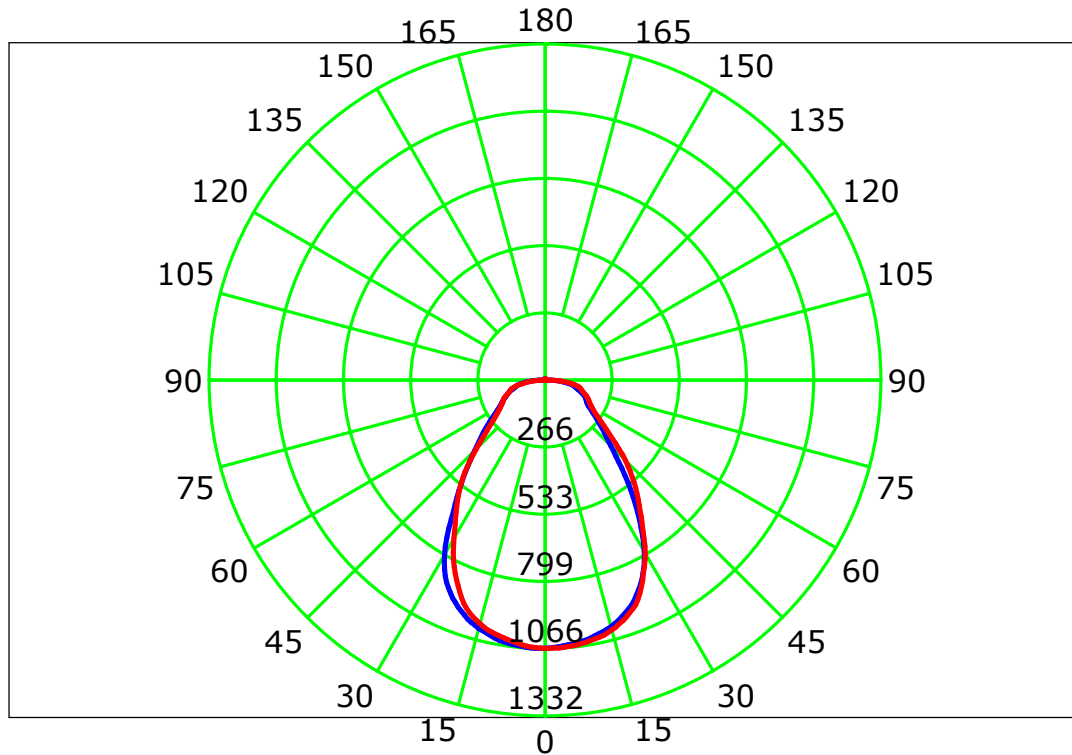
Test Device: LSG-1800B

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

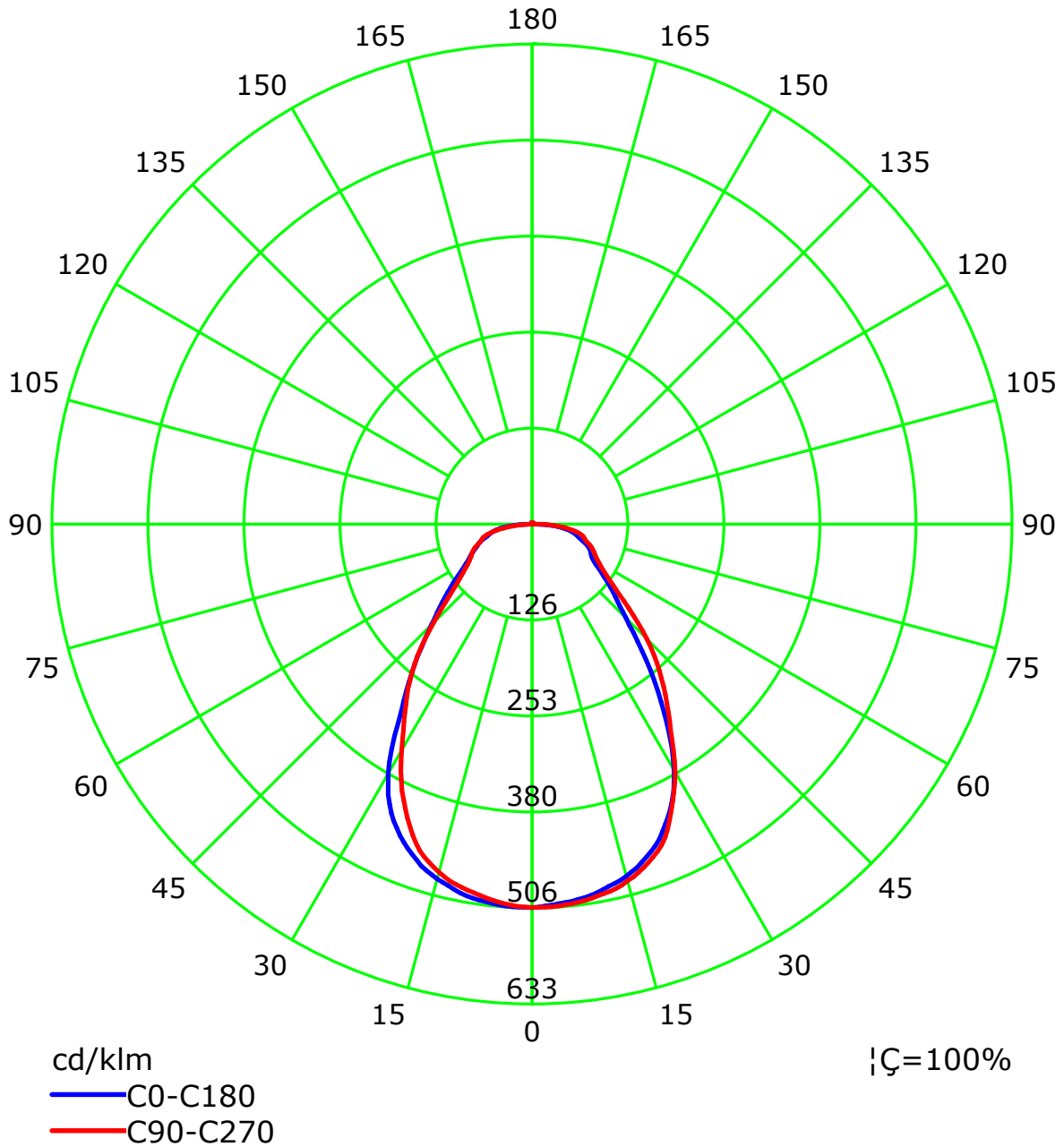
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd/klm)

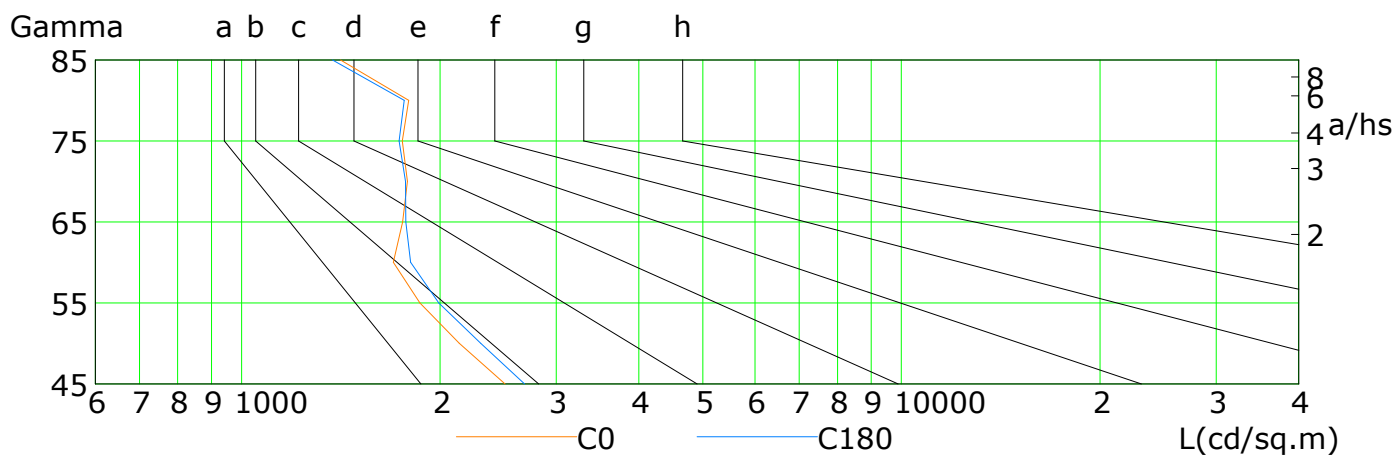
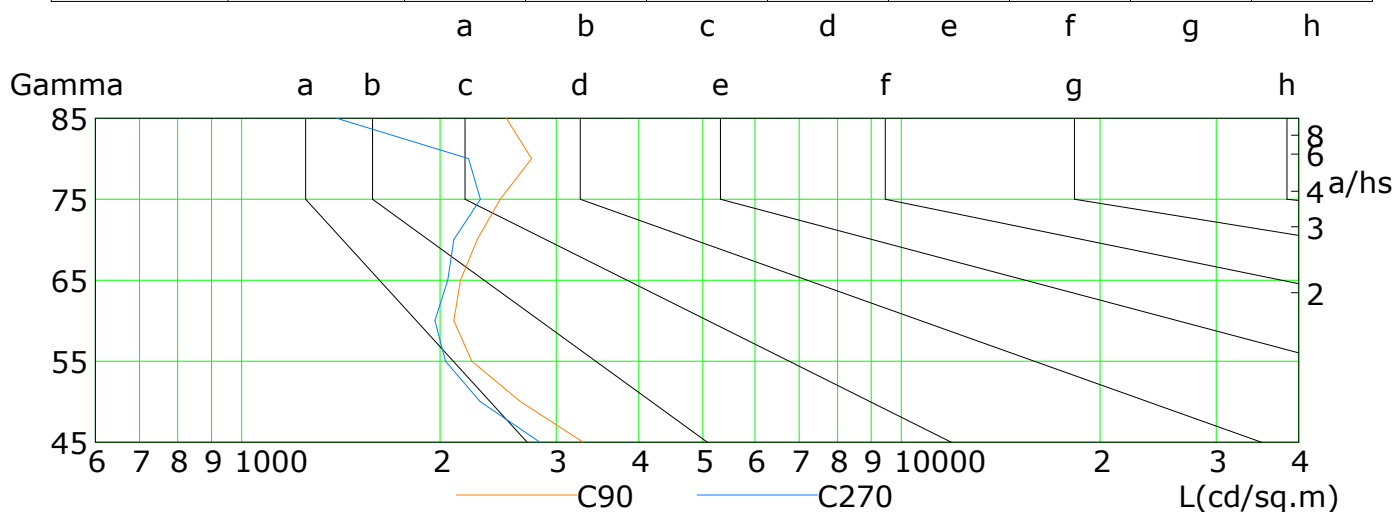


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

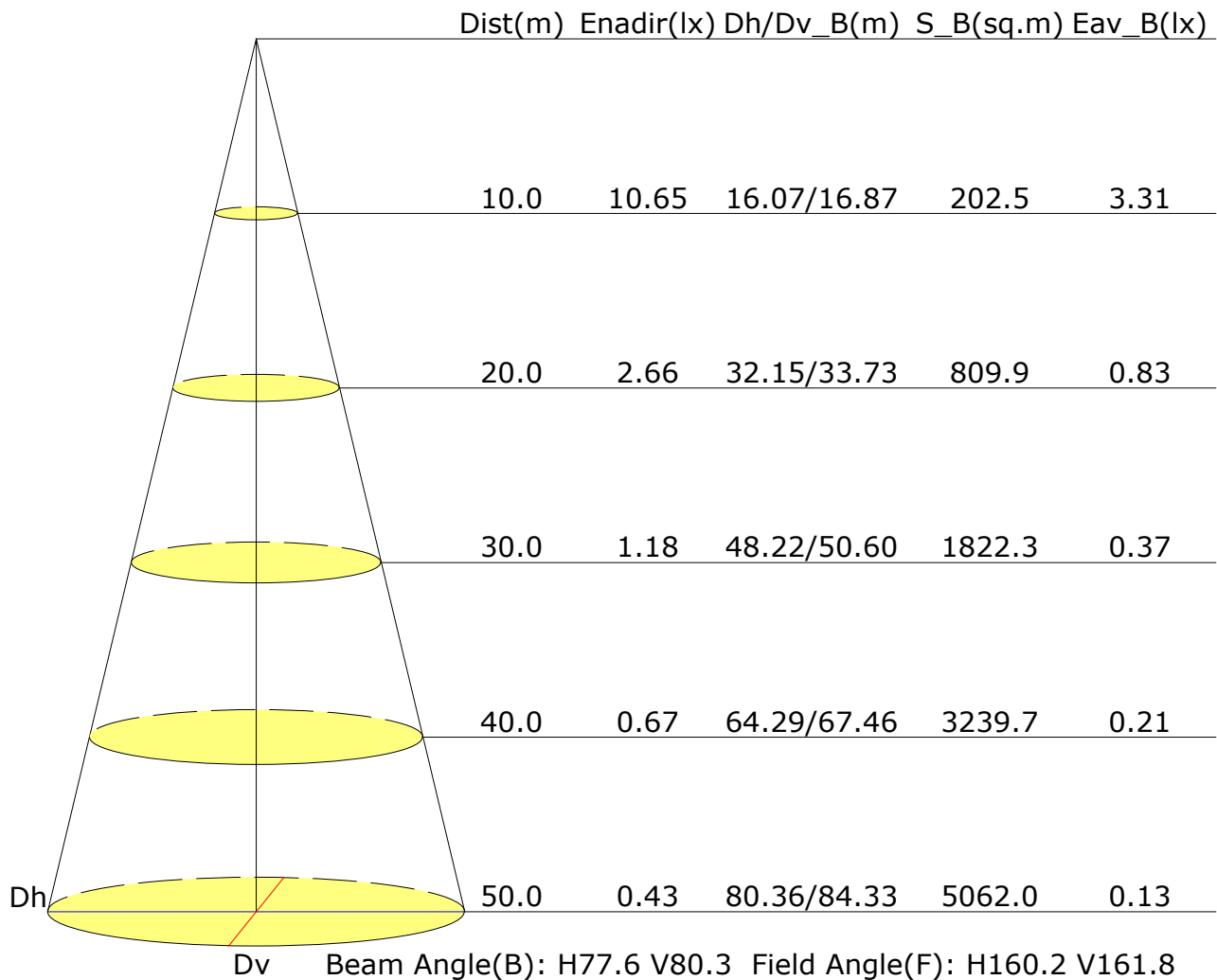


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2509	2138	1863	1698	1754	1784	1753	1793	1412
C90	3293	2647	2233	2097	2148	2276	2467	2751	2520
C180	2686	2303	1990	1804	1774	1772	1733	1765	1374
C270	2832	2300	2038	1965	2053	2097	2301	2209	1393

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	13.8	15.1	14.1	15.3	15.6	14.3	15.6	14.6	15.8	16.0
3H	15.4	16.5	15.7	16.8	17.1	15.9	17.1	16.3	17.4	17.6
4H	16.2	17.3	16.5	17.6	17.9	16.8	17.9	17.2	18.2	18.5
6H	17.0	18.0	17.3	18.3	18.6	17.8	18.8	18.1	19.1	19.4
8H	17.3	18.3	17.7	18.6	18.9	18.1	19.1	18.5	19.5	19.8
12H	17.5	18.5	17.9	18.8	19.2	18.4	19.3	18.8	19.7	20.0
X=4H Y=2H	14.4	15.4	14.7	15.7	16.0	14.7	15.8	15.1	16.1	16.4
3H	16.1	17.1	16.5	17.4	17.8	16.6	17.5	17.0	17.9	18.2
4H	17.1	17.9	17.5	18.3	18.7	17.7	18.5	18.1	18.9	19.3
6H	18.0	18.8	18.5	19.2	19.6	18.8	19.5	19.2	19.9	20.3
8H	18.4	19.1	18.9	19.5	20.0	19.2	19.9	19.7	20.3	20.8
12H	18.7	19.4	19.2	19.8	20.3	19.6	20.2	20.0	20.6	21.1
X=8H Y=4H	17.4	18.1	17.9	18.5	19.0	17.9	18.6	18.4	19.0	19.5
6H	18.5	19.1	19.0	19.5	20.0	19.2	19.8	19.7	20.2	20.7
8H	19.0	19.5	19.5	20.0	20.5	19.8	20.3	20.3	20.7	21.2
12H	19.4	19.8	19.9	20.3	20.9	20.2	20.6	20.7	21.1	21.6
X=12H Y=4H	17.5	18.1	17.9	18.5	19.0	18.0	18.6	18.4	19.0	19.5
6H	18.6	19.1	19.1	19.6	20.1	19.3	19.8	19.8	20.2	20.7
8H	19.1	19.6	19.7	20.1	20.6	19.8	20.3	20.4	20.8	21.3
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.3/-0.3				
S=1.5H	+0.3/-0.7					+0.3/-0.6				
S=2.0H	+0.6/-0.8					+0.5/-0.8				

Calculate in accordance with CIE Pub.117. The table is revised with 2104lm ($8\log(F/F_0) = 2.6$).

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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 = 1.00									
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	0.62	0.72	0.78	0.83	0.89	0.94	0.97	1.01	1.04	
	0.30		0.55	0.65	0.71	0.76	0.84	0.89	0.92	0.97	1.00	
	0.20		0.50	0.59	0.66	0.71	0.79	0.84	0.88	0.94	0.97	
0.50	0.50	0.20	0.61	0.70	0.76	0.80	0.86	0.90	0.93	0.97	1.00	
	0.30		0.54	0.63	0.70	0.74	0.81	0.86	0.89	0.94	0.97	
	0.20		0.50	0.59	0.65	0.70	0.77	0.82	0.86	0.91	0.94	
0.30	0.50	0.20	0.59	0.68	0.73	0.77	0.83	0.87	0.90	0.93	0.95	
	0.30		0.54	0.62	0.68	0.73	0.79	0.83	0.86	0.91	0.93	
	0.20		0.49	0.58	0.64	0.69	0.75	0.80	0.84	0.88	0.91	
0.00	0.00	0.00	0.47	0.55	0.61	0.66	0.72	0.76	0.79	0.84	0.86	
Rating:19W 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	0.65	0.57	0.45	0.38	0.33	0.26	0.21	
	0.30		0.76	0.64	0.56	0.50	0.41	0.35	0.30	0.24	0.20	
	0.20		0.65	0.56	0.50	0.45	0.37	0.32	0.28	0.23	0.19	
0.50	0.50	0.20	0.87	0.72	0.62	0.54	0.43	0.40	0.31	0.24	0.20	
	0.30		0.74	0.63	0.54	0.48	0.40	0.33	0.29	0.23	0.19	
	0.20		0.64	0.55	0.49	0.44	0.36	0.31	0.27	0.22	0.18	
0.30	0.50	0.20	0.85	0.69	0.59	0.52	0.41	0.34	0.29	0.23	0.19	
	0.30		0.72	0.61	0.53	0.47	0.38	0.32	0.28	0.22	0.18	
	0.20		0.63	0.54	0.48	0.43	0.35	0.30	0.26	0.21	0.18	
0.00	0.00	0.00	0.52	0.44	0.38	0.34	0.28	0.23	0.20	0.16	0.13	
Rating:19W 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	0.18	0.19	0.19	0.21	0.21	0.22	0.22	0.23	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
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	0.14	0.15	0.17	0.17	0.19	0.19	
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17	
0.30	0.50	0.20	0.15	0.17	0.17	0.18	0.19	0.20	0.20	0.20	0.21	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.07	0.09	0.10	0.12	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:19W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												