

Report No.: 1

Test Time: 31.10.2019 22:12

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 595 4x24LED 0,4A 20,5W 3000K bez stekla

Luminous Length (mm): 595

Luminous Width (mm): 595

Luminous Height (mm): 35

Voltage: 221.3 V

Current: 0.096 A

Power: 20.61 W

Power Factor: 0.963

Photometric Results

CIE Class: Direct

Measurement Flux: 2899.4 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 2899.4 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 158.4, 157.8, 158.5, 158.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 116.9, 117.0, 117.1, 117.0

Luminaire Efficacy Rating (LER): 140.73

Central Intensity: 977.13 cd

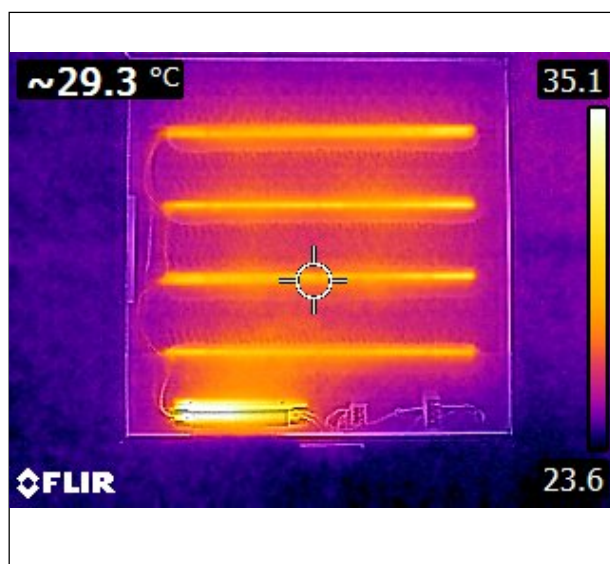
Max. Intensity: 979 cd

Pos of Max. Intensity: H157.5 V0

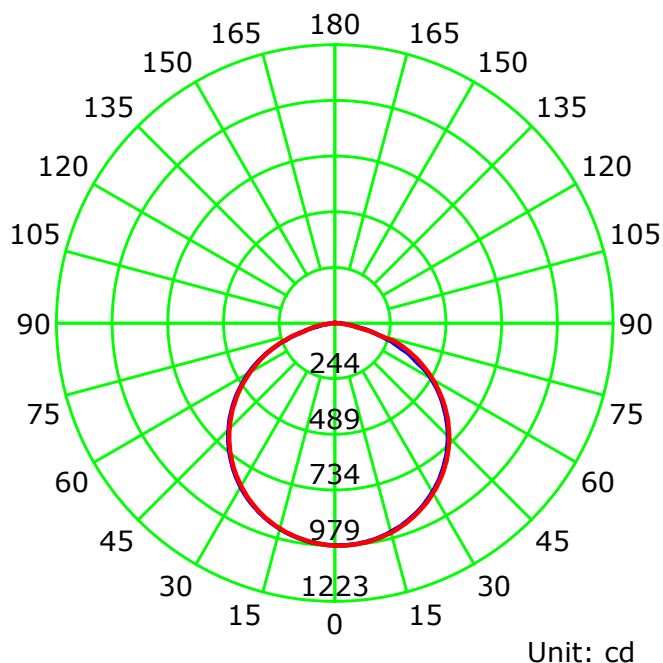
S/MH(C0/C180): 1.28

S/MH(C90/C270): 1.28

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

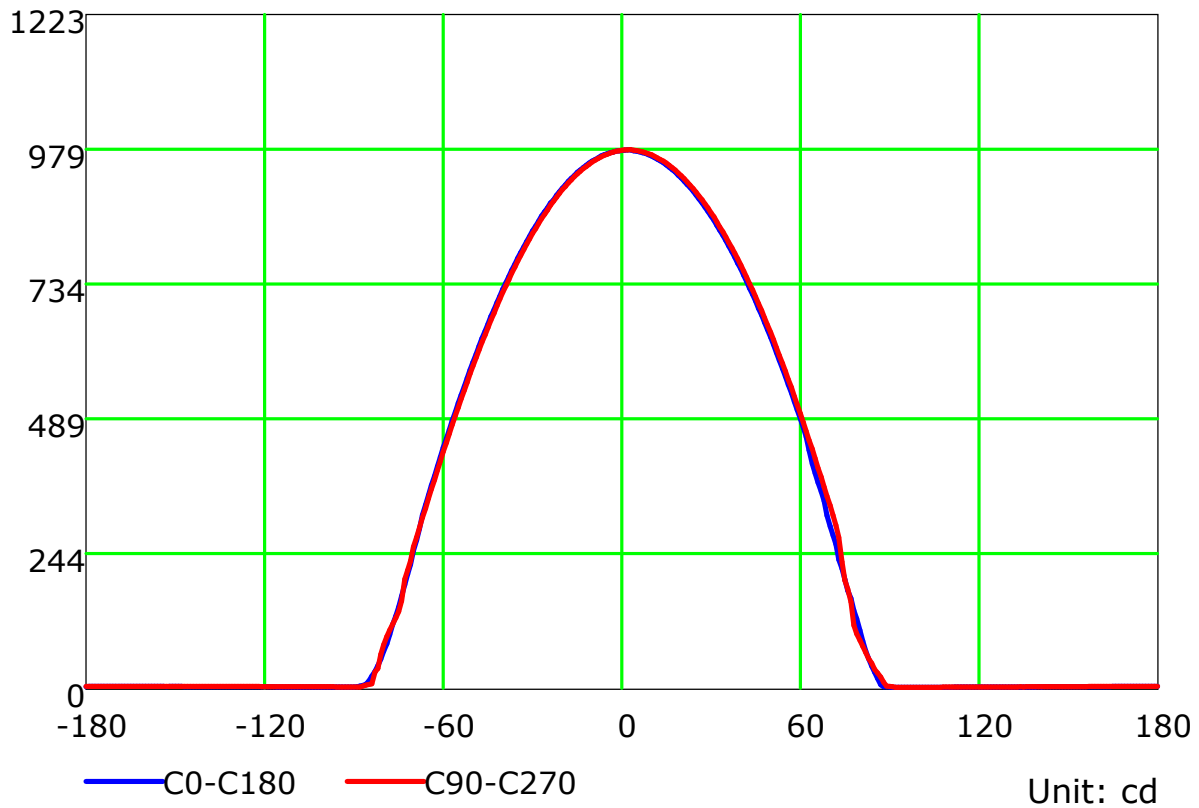
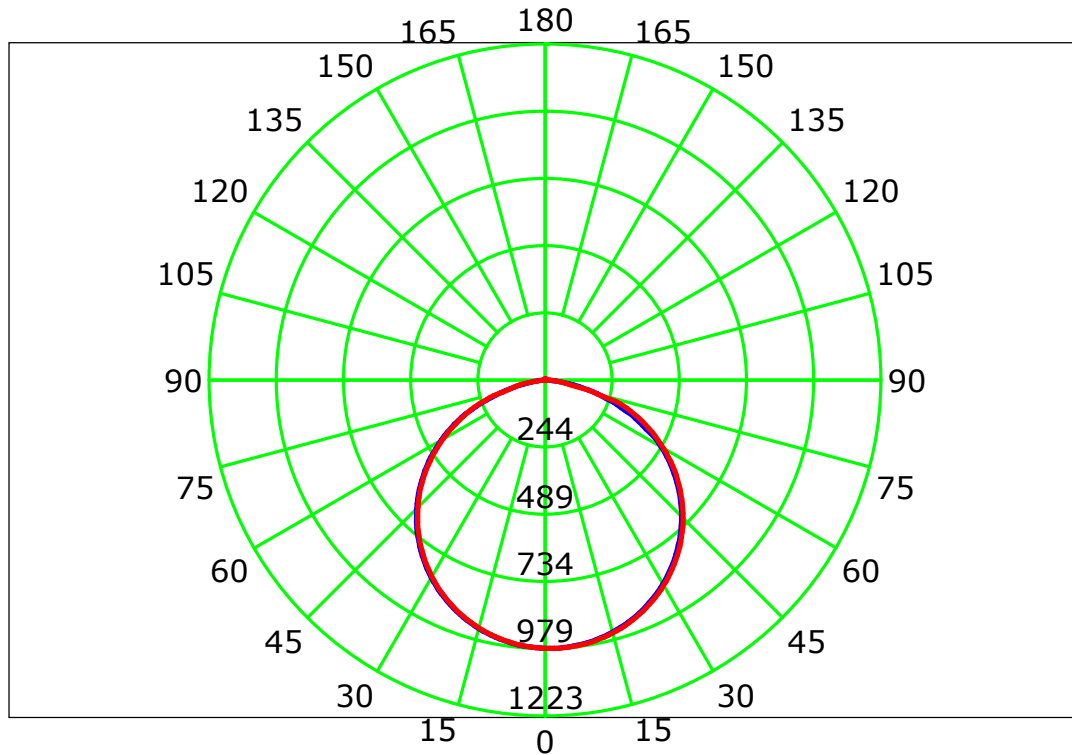
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

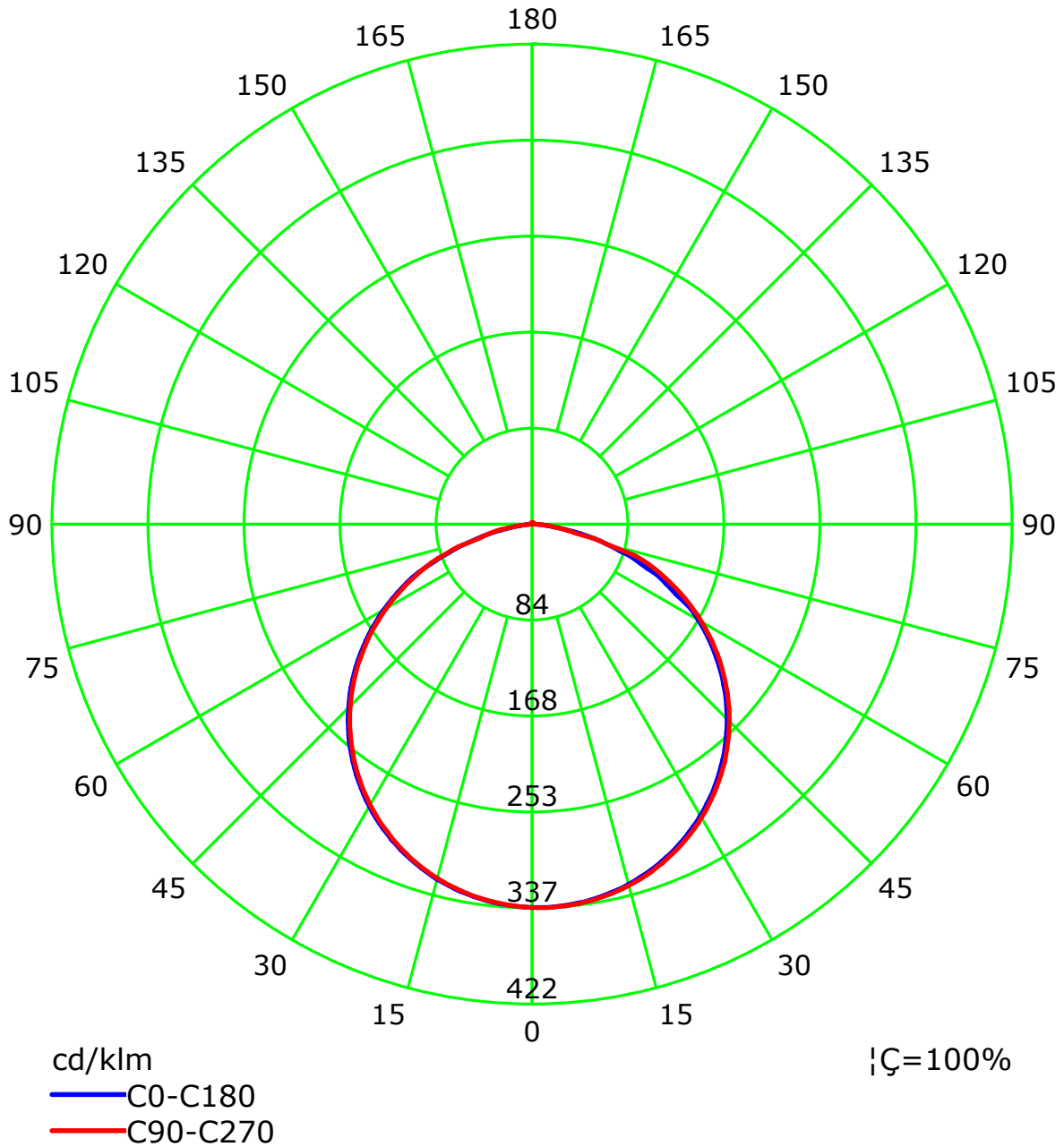
Luminous Intensity Distribution Curve



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:

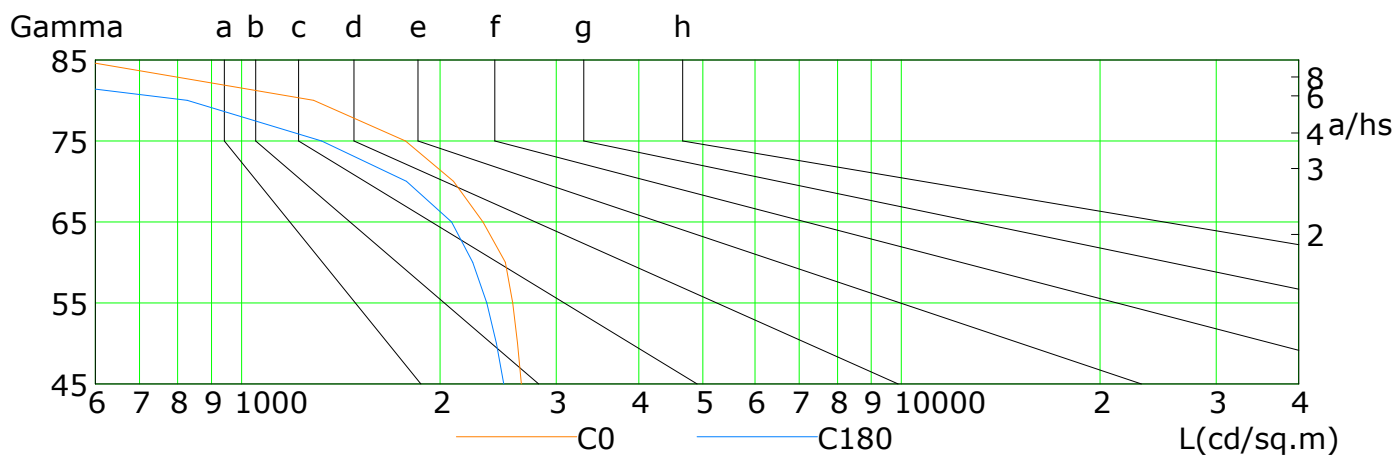
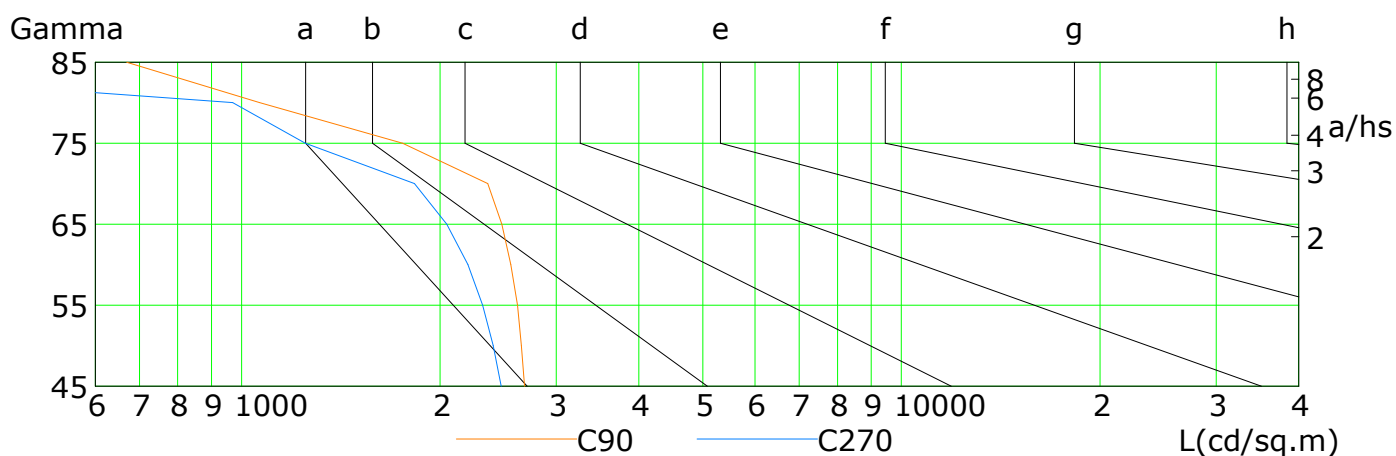
Luminous Intensity Distribution Curve(cd/klm)



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

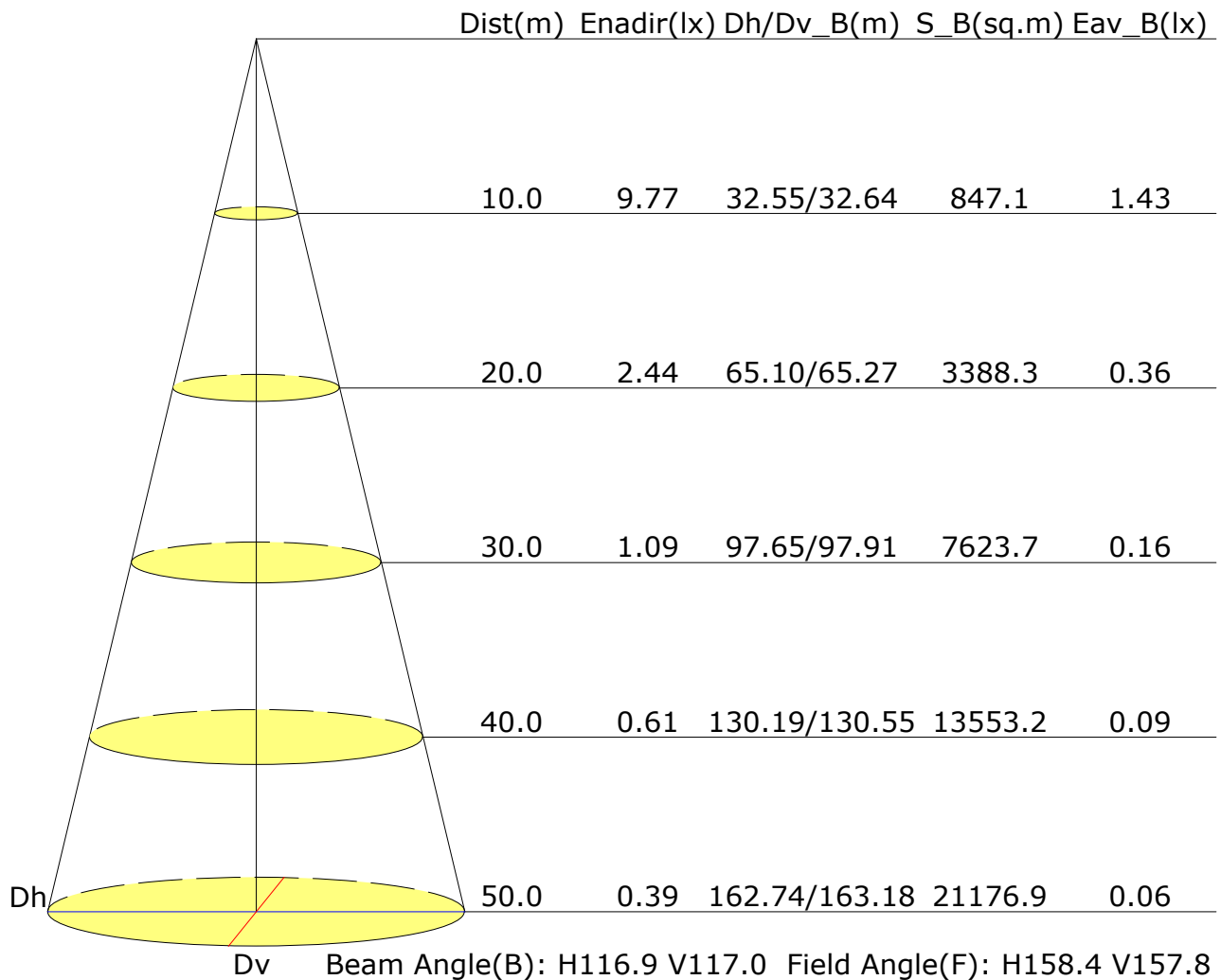


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2654	2619	2576	2510	2321	2094	1772	1286	565
C90	2684	2655	2619	2559	2479	2361	1754	1065	670
C180	2497	2434	2353	2241	2081	1777	1322	827	265
C270	2473	2406	2319	2204	2047	1828	1249	969	146

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	16.0	17.4	16.4	17.7	17.9	15.9	17.3	16.2	17.5	17.8
3H	17.5	18.8	17.9	19.1	19.4	17.4	18.7	17.8	19.0	19.3
4H	18.1	19.3	18.4	19.6	19.9	17.9	19.1	18.3	19.4	19.7
6H	18.4	19.5	18.8	19.8	20.1	18.1	19.3	18.5	19.6	19.9
8H	18.4	19.5	18.8	19.8	20.2	18.2	19.2	18.5	19.6	19.9
12H	18.4	19.5	18.8	19.8	20.2	18.2	19.2	18.5	19.5	19.9
X=4H Y=2H	16.7	17.9	17.1	18.2	18.5	16.6	17.8	16.9	18.1	18.4
3H	18.4	19.4	18.8	19.7	20.1	18.3	19.3	18.7	19.7	20.0
4H	19.0	19.9	19.4	20.3	20.7	18.9	19.8	19.3	20.2	20.6
6H	19.4	20.2	19.8	20.6	21.0	19.2	20.0	19.6	20.4	20.8
8H	19.5	20.2	19.9	20.6	21.1	19.2	20.0	19.7	20.4	20.8
12H	19.5	20.2	20.0	20.6	21.1	19.2	19.9	19.7	20.3	20.8
X=8H Y=4H	19.3	20.0	19.7	20.4	20.8	19.2	19.9	19.6	20.3	20.8
6H	19.8	20.3	20.2	20.8	21.3	19.5	20.1	20.0	20.6	21.0
8H	19.9	20.4	20.4	20.9	21.4	19.6	20.1	20.1	20.6	21.1
12H	19.9	20.4	20.4	20.9	21.4	19.6	20.1	20.1	20.6	21.1
X=12H Y=4H	19.2	19.9	19.7	20.3	20.8	19.2	19.8	19.6	20.3	20.7
6H	19.8	20.3	20.3	20.8	21.3	19.5	20.1	20.0	20.5	21.0
8H	19.9	20.4	20.4	20.8	21.4	19.6	20.1	20.1	20.6	21.1
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.1					+0.2/-0.2				
S=1.5H	+0.3/-0.4					+0.4/-0.6				
S=2.0H	+0.6/-0.8					+0.6/-1.1				

Calculate in accordance with CIE Pub.117. The table is revised with 2899Im ($8\log(F/F_0) = 3.7$).

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:

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	0.56	0.66	0.74	0.79	0.87	0.92	0.96	1.00	1.03	
	0.30		0.48	0.59	0.66	0.72	0.81	0.86	0.91	0.96	1.00	
	0.20		0.42	0.53	0.61	0.67	0.76	0.82	0.86	0.93	0.97	
0.50	0.50	0.20	0.54	0.64	0.71	0.77	0.84	0.88	0.92	0.96	0.99	
	0.30		0.47	0.57	0.65	0.71	0.78	0.84	0.88	0.93	0.96	
	0.20		0.42	0.52	0.60	0.66	0.74	0.80	0.84	0.90	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.74	0.81	0.85	0.88	0.92	0.95	
	0.30		0.46	0.56	0.63	0.69	0.76	0.81	0.85	0.90	0.93	
	0.20		0.41	0.52	0.59	0.65	0.72	0.78	0.82	0.87	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.69	0.74	0.78	0.83	0.86	
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	1.01	0.83	0.70	0.61	0.49	0.40	0.34	0.26	0.21	
	0.30		0.84	0.71	0.61	0.54	0.44	0.37	0.32	0.25	0.20	
	0.20		0.72	0.62	0.54	0.49	0.40	0.34	0.29	0.23	0.19	
0.50	0.50	0.20	0.97	0.80	0.67	0.59	0.46	0.42	0.32	0.25	0.20	
	0.30		0.82	0.69	0.60	0.52	0.42	0.35	0.30	0.24	0.19	
	0.20		0.71	0.61	0.53	0.47	0.39	0.33	0.29	0.22	0.19	
0.30	0.50	0.20	0.94	0.76	0.65	0.56	0.44	0.36	0.31	0.24	0.19	
	0.30		0.80	0.67	0.58	0.51	0.41	0.34	0.29	0.23	0.19	
	0.20		0.70	0.60	0.52	0.47	0.38	0.32	0.28	0.22	0.18	
0.00	0.00	0.00	0.60	0.50	0.43	0.38	0.30	0.25	0.22	0.17	0.14	
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	0.20	0.21	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	0.08	0.10	0.12	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.18	0.18	0.19	0.20	0.20	0.21	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	0.09	0.11	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.16	0.17	0.18	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	0.15	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:21W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												