

Report No.: 1

Test Time: 09.12.2019 09:31

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 191 2x210LED 0.7A 80W 4000K zakalennoe steklo

Luminous Width (mm): 189

Voltage: 221.0 V

Power: 79.30 W

Luminous Length (mm): 1210

Luminous Height (mm): 87

Current: 0.366 A

Power Factor: 0.977

Photometric Results

CIE Class: Direct

Measurement Flux: 11133.3 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 151.8, 72.1, 92.2, 89.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 108.3, 51.2, 64.4, 63.1

Luminaire Efficacy Rating (LER): 140.44

Max. Intensity: 8744.47 cd

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 11133.3 lm

Efficiency: 100%

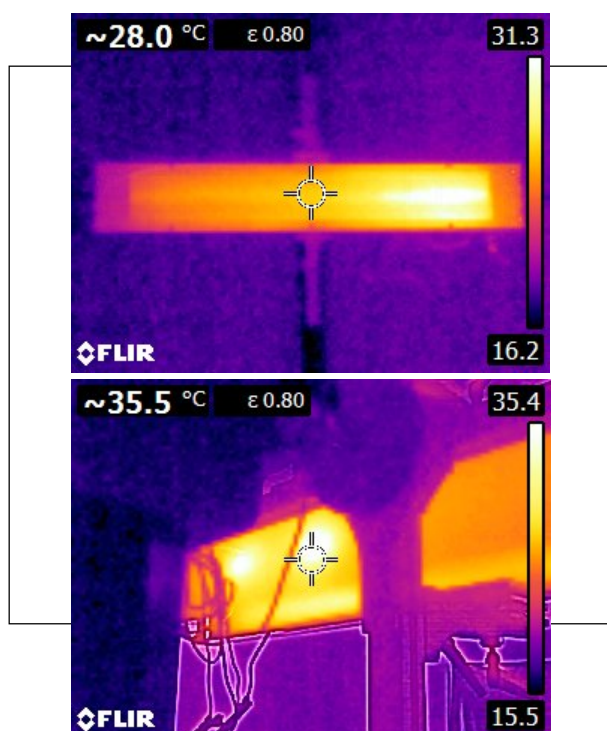
Upward Ratio: 1%

Central Intensity: 8430.83 cd

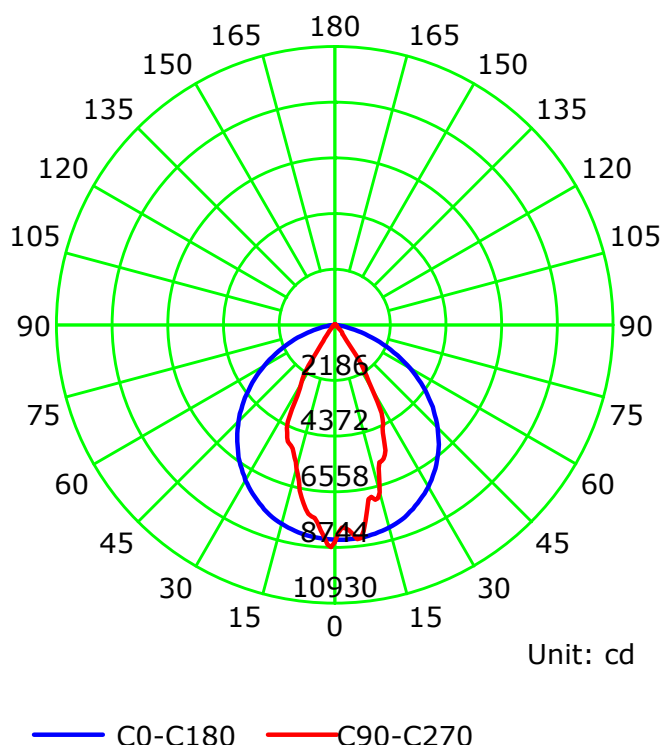
Pos of Max. Intensity: H337.5 V3

S/MH(C90/C270): 0.77

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

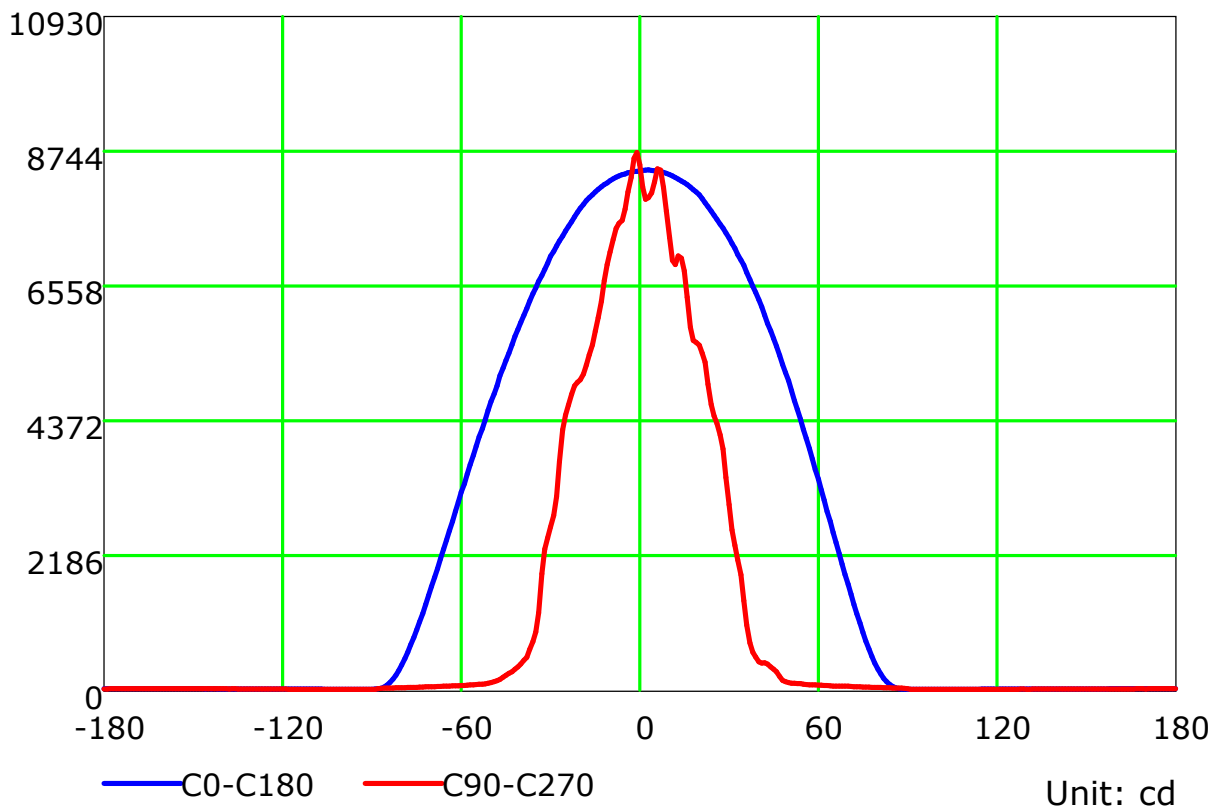
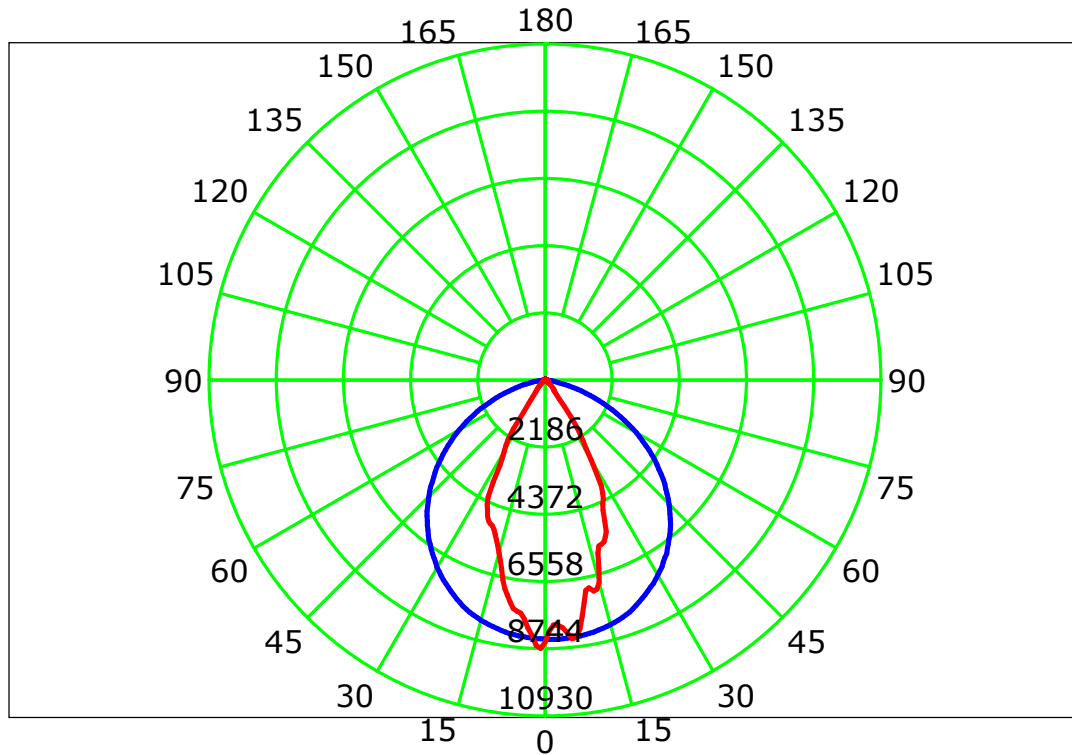
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

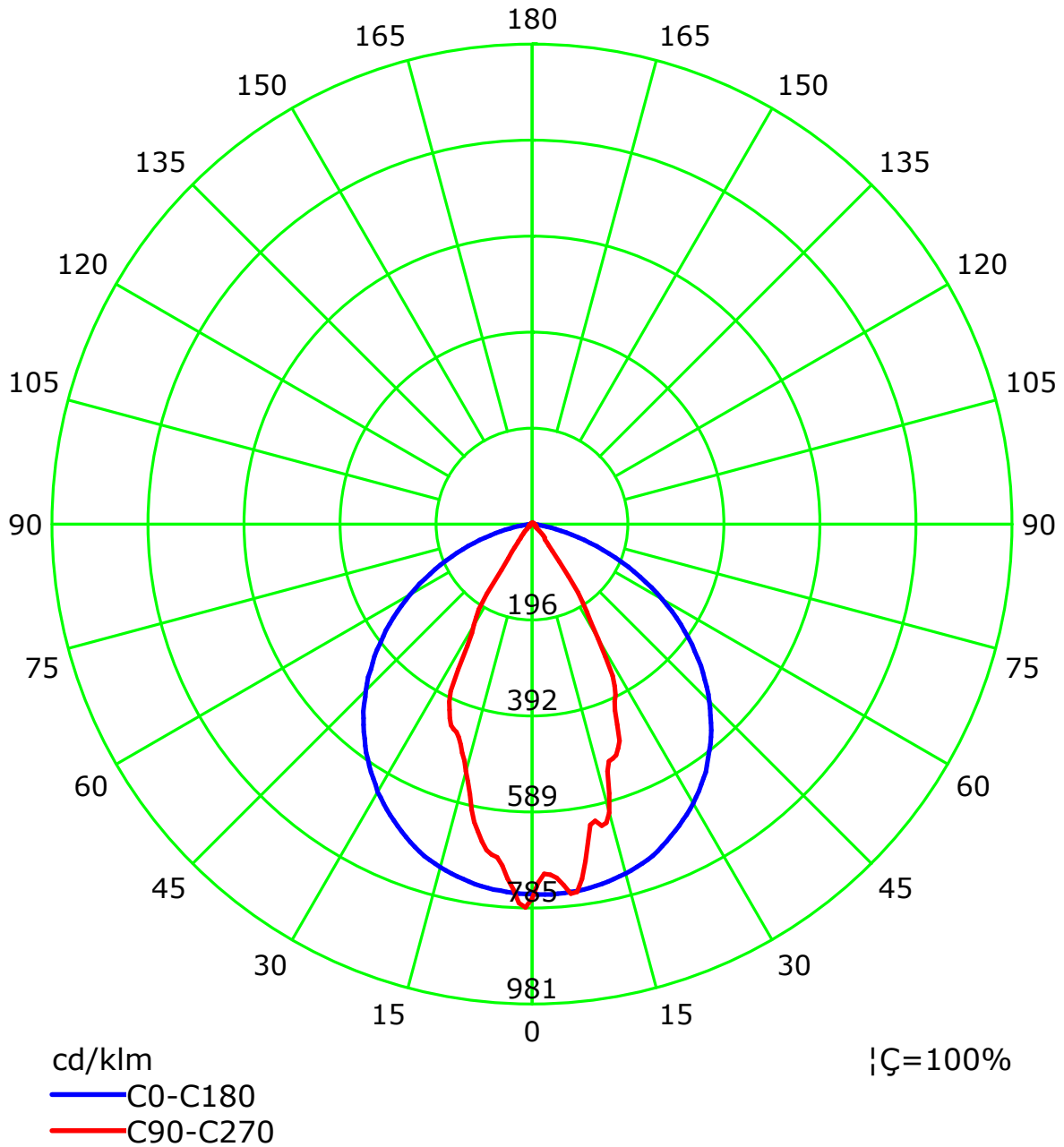
Luminous Intensity Distribution Curve



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)



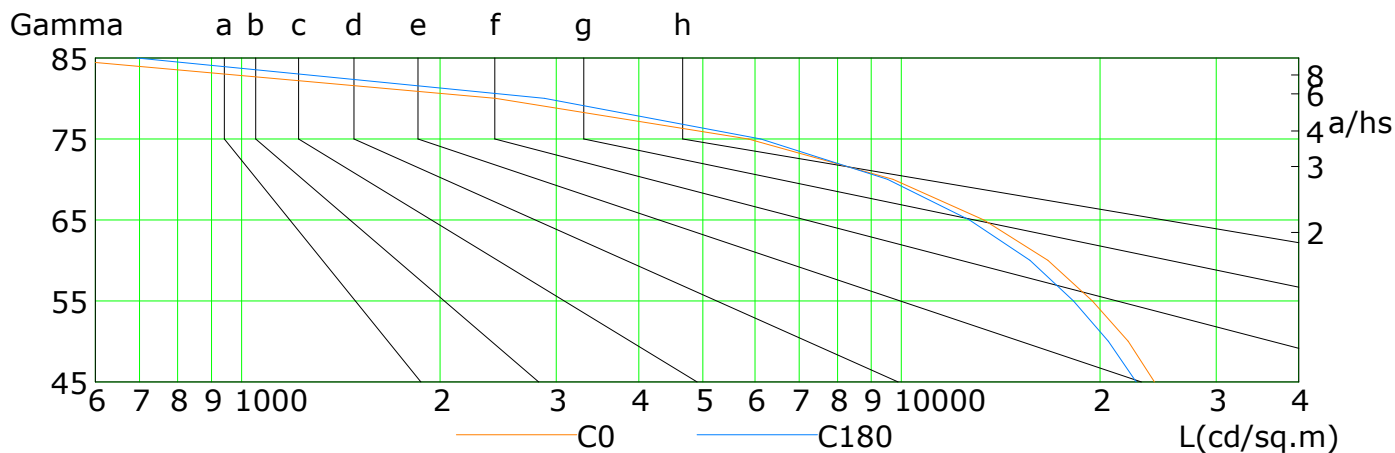
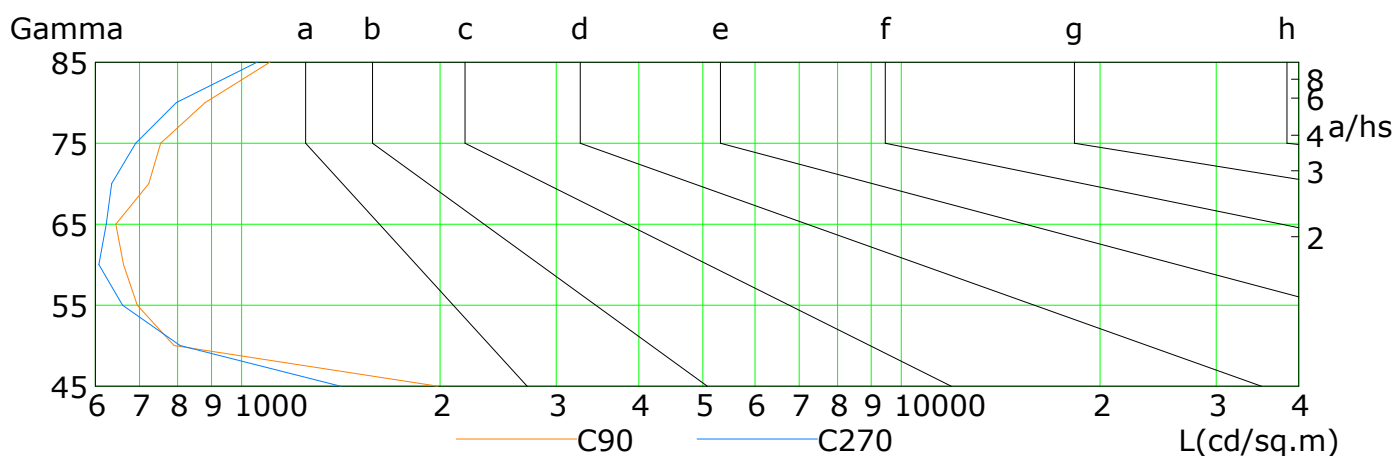
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

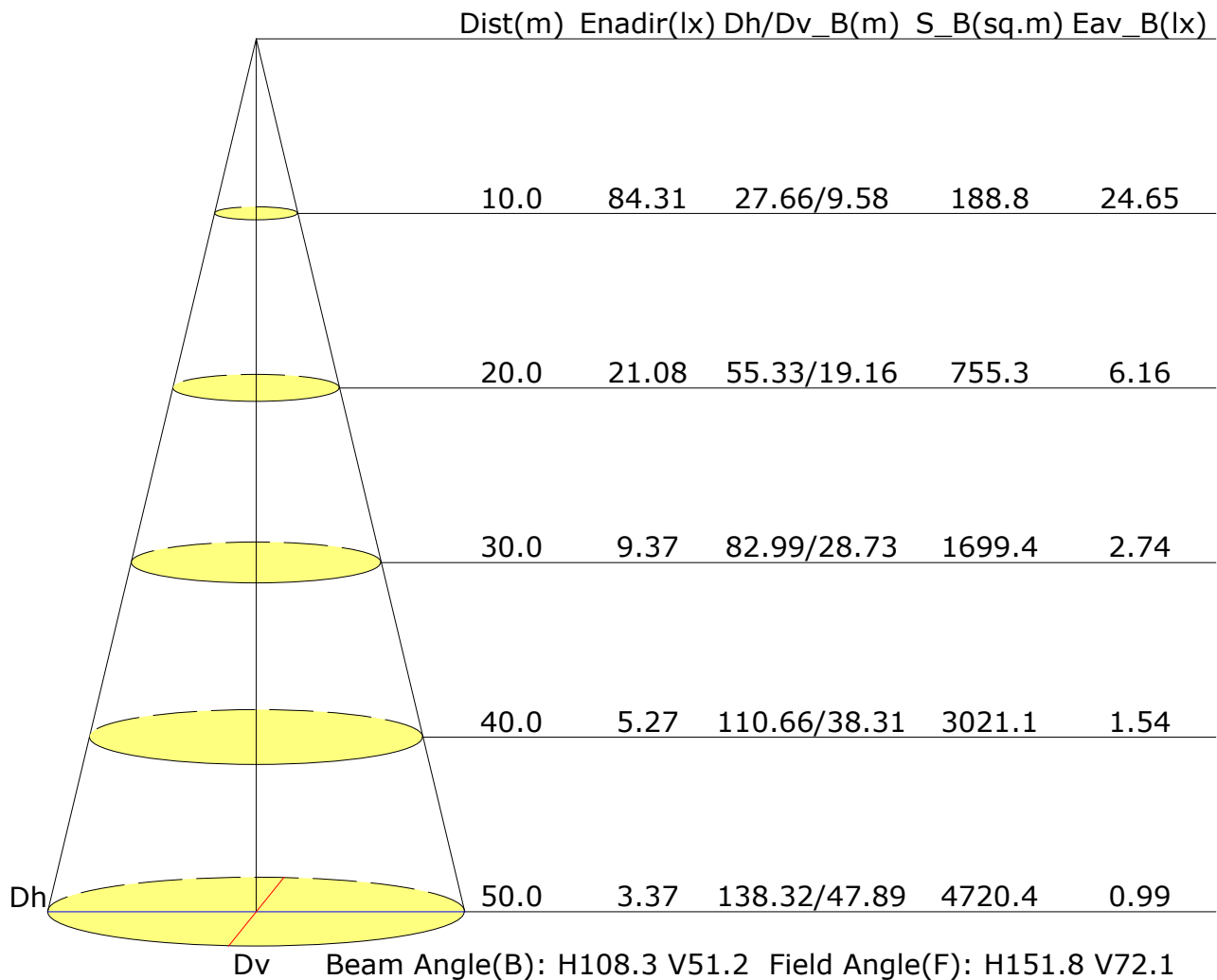


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	24175	22059	19479	16677	13332	9712	5860	2424	510
C90	1985	791	695	663	645	724	754	881	1104
C180	22687	20584	18229	15656	12687	9525	6120	2876	694
C270	1413	807	660	608	624	636	691	796	1055

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	22.3	23.4	22.6	23.6	23.8	10.5	11.6	10.8	11.8	12.1
3H	23.1	24.1	23.4	24.4	24.6	10.5	11.5	10.8	11.8	12.0
4H	23.3	24.3	23.7	24.5	24.9	10.6	11.5	10.9	11.8	12.1
6H	23.4	24.2	23.8	24.6	24.9	10.6	11.5	11.0	11.8	12.1
8H	23.4	24.2	23.7	24.5	24.9	10.7	11.5	11.1	11.8	12.2
12H	23.3	24.1	23.7	24.5	24.8	10.8	11.6	11.2	11.9	12.3
X=4H Y=2H	22.0	23.0	22.4	23.2	23.6	11.3	12.2	11.6	12.5	12.8
3H	22.9	23.7	23.3	24.0	24.3	11.3	12.1	11.7	12.4	12.8
4H	23.1	23.8	23.5	24.2	24.6	11.4	12.1	11.8	12.4	12.8
6H	23.2	23.8	23.6	24.2	24.6	11.5	12.1	11.9	12.5	12.9
8H	23.2	23.7	23.6	24.2	24.6	11.6	12.1	12.0	12.5	13.0
12H	23.2	23.7	23.6	24.1	24.6	11.7	12.2	12.2	12.6	13.1
X=8H Y=4H	23.0	23.6	23.5	24.0	24.4	11.4	12.0	11.8	12.4	12.8
6H	23.1	23.5	23.6	24.0	24.5	11.6	12.0	12.1	12.5	13.0
8H	23.1	23.5	23.6	23.9	24.4	11.7	12.1	12.2	12.6	13.1
12H	23.0	23.4	23.6	23.9	24.4	11.9	12.2	12.4	12.7	13.2
X=12H Y=4H	23.0	23.5	23.4	23.9	24.4	11.4	11.9	11.8	12.3	12.8
6H	23.0	23.4	23.5	23.9	24.4	11.6	12.0	12.1	12.4	12.9
8H	23.0	23.4	23.5	23.9	24.4	11.7	12.1	12.2	12.6	13.1
Variations with the observer position at spacings:										
S=1.0H	+0.6/-0.8					+3.5/-4.4				
S=1.5H	+2.3/-4.4					+5.0/-5.1				
S=2.0H	+3.8/-8.7					+6.0/-5.5				

Calculate in accordance with CIE Pub.117. The table is revised with 11133lm ($8\log(F/F_0) = 8.4$).

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 = 1.00									
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	0.71	0.80	0.86	0.90	0.96	1.00	1.02	1.06	1.08	
	0.30		0.65	0.74	0.81	0.85	0.92	0.96	0.99	1.03	1.05	
	0.20		0.61	0.70	0.76	0.81	0.88	0.92	0.96	1.00	1.03	
0.50	0.50	0.20	0.70	0.78	0.84	0.88	0.93	0.96	0.99	1.02	1.03	
	0.30		0.64	0.73	0.79	0.83	0.89	0.93	0.96	0.99	1.01	
	0.20		0.60	0.69	0.75	0.80	0.86	0.90	0.93	0.97	0.99	
0.30	0.50	0.20	0.68	0.76	0.82	0.85	0.90	0.93	0.95	0.98	0.99	
	0.30		0.63	0.72	0.78	0.82	0.87	0.90	0.93	0.96	0.98	
	0.20		0.60	0.69	0.74	0.79	0.84	0.88	0.91	0.94	0.96	
0.00	0.00	0.00	0.58	0.66	0.72	0.76	0.81	0.84	0.86	0.89	0.91	
Rating:79W 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	0.78	0.63	0.53	0.45	0.36	0.29	0.25	0.19	0.16	
	0.30		0.65	0.54	0.46	0.40	0.32	0.27	0.23	0.18	0.15	
	0.20		0.56	0.47	0.41	0.36	0.29	0.25	0.21	0.17	0.14	
0.50	0.50	0.20	0.75	0.60	0.50	0.43	0.33	0.31	0.23	0.18	0.14	
	0.30		0.63	0.52	0.44	0.38	0.31	0.25	0.22	0.17	0.14	
	0.20		0.55	0.46	0.39	0.35	0.28	0.24	0.20	0.16	0.13	
0.30	0.50	0.20	0.72	0.57	0.47	0.40	0.31	0.26	0.22	0.17	0.14	
	0.30		0.61	0.50	0.42	0.37	0.29	0.24	0.21	0.16	0.13	
	0.20		0.54	0.45	0.38	0.34	0.27	0.23	0.19	0.15	0.13	
0.00	0.00	0.00	0.42	0.33	0.28	0.24	0.19	0.15	0.13	0.10	0.08	
Rating:79W 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	0.14	0.15	0.16	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	0.15	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	0.20	
	0.20		0.06	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	0.17	0.18	0.19	0.20	0.20	0.21	
	0.30		0.10	0.12	0.13	0.14	0.15	0.17	0.17	0.18	0.19	
	0.20		0.06	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:79W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												