

Report No.: 1

Test Time: 19.12.2019 17:24

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FI 135 4x24LED 0.4A 20.5W 4000K matoviy

Luminous Length (mm): 1280

Luminous Width (mm): 350

Luminous Height (mm): 100

Voltage: 221.4 V

Current: 0.097 A

Power: 20.76 W

Power Factor: 0.964

Photometric Results

CIE Class: Direct

Measurement Flux: 2761.7 lm

Downward Ratio: 92%

Total Rated Lamp Lumens: 2761.7 lm

Efficiency: 100%

Upward Ratio: 8%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.7, 218.5, 194.6, 194.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 107.0, 124.3, 115.1, 115.2

Luminaire Efficacy Rating (LER): 133.08

Central Intensity: 814.65 cd

Max. Intensity: 816.55 cd

Pos of Max. Intensity: H157.5 V1

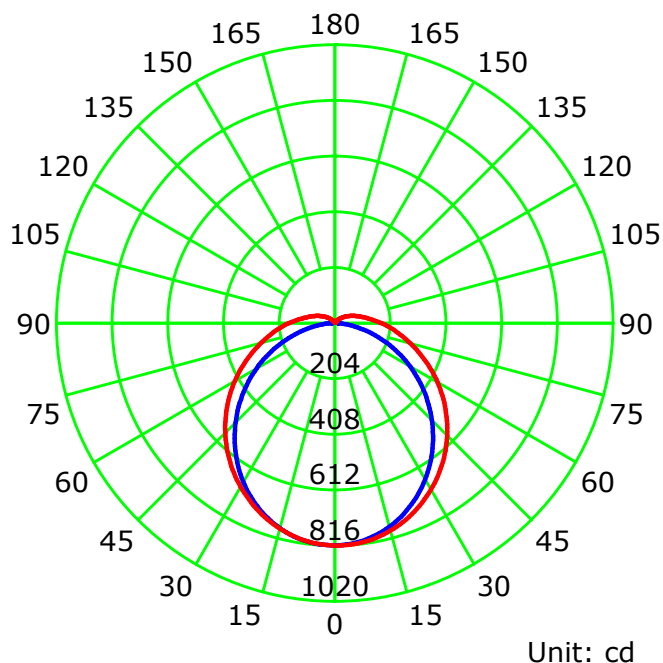
S/MH(C0/C180): 1.22

S/MH(C90/C270): 1.28

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— 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

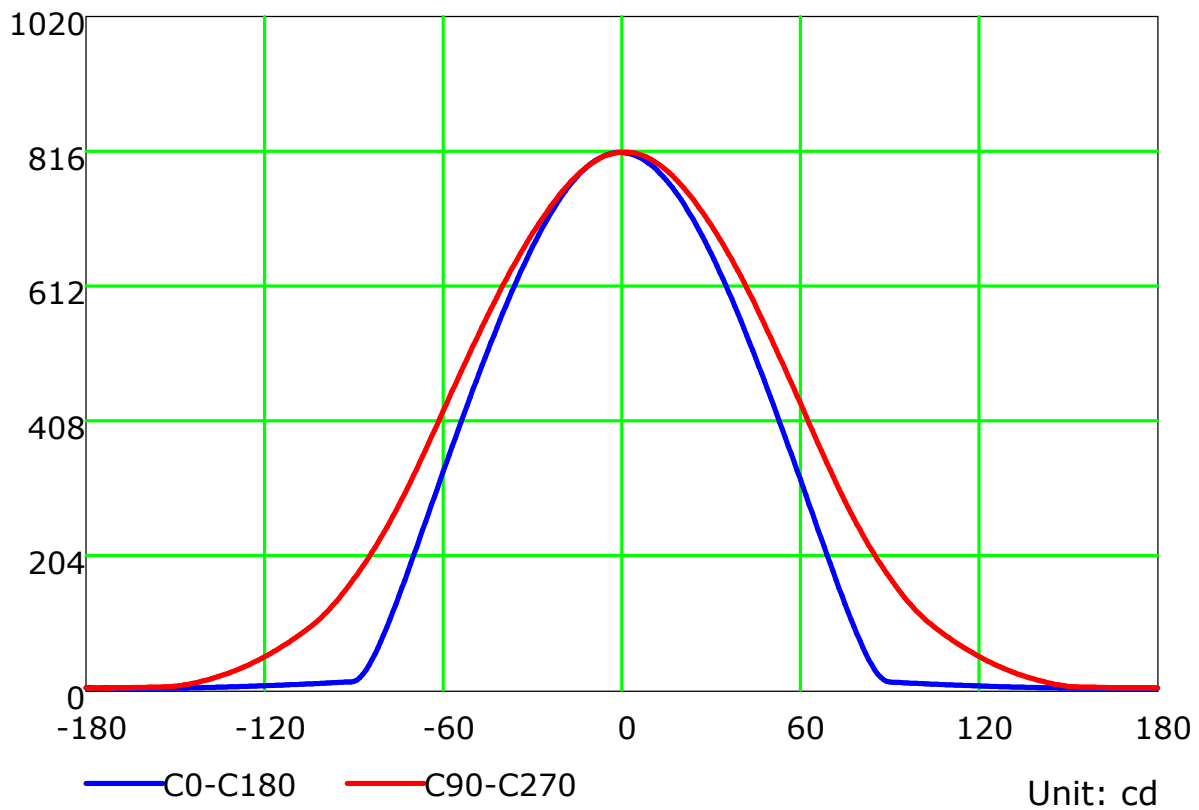
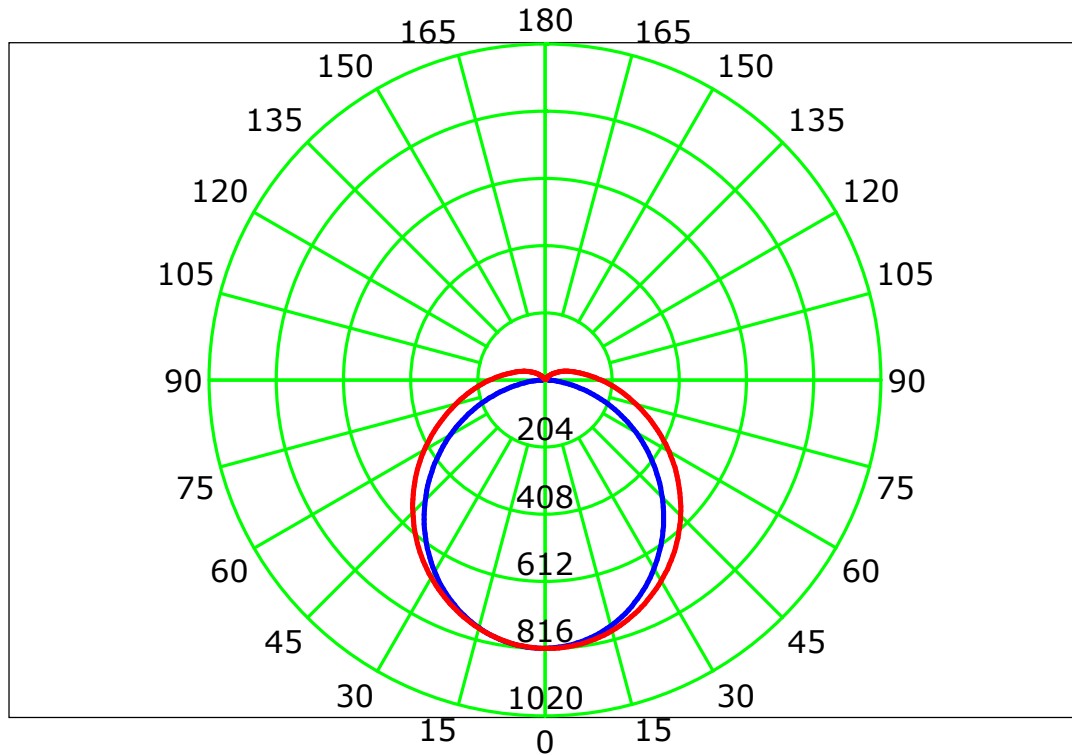
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

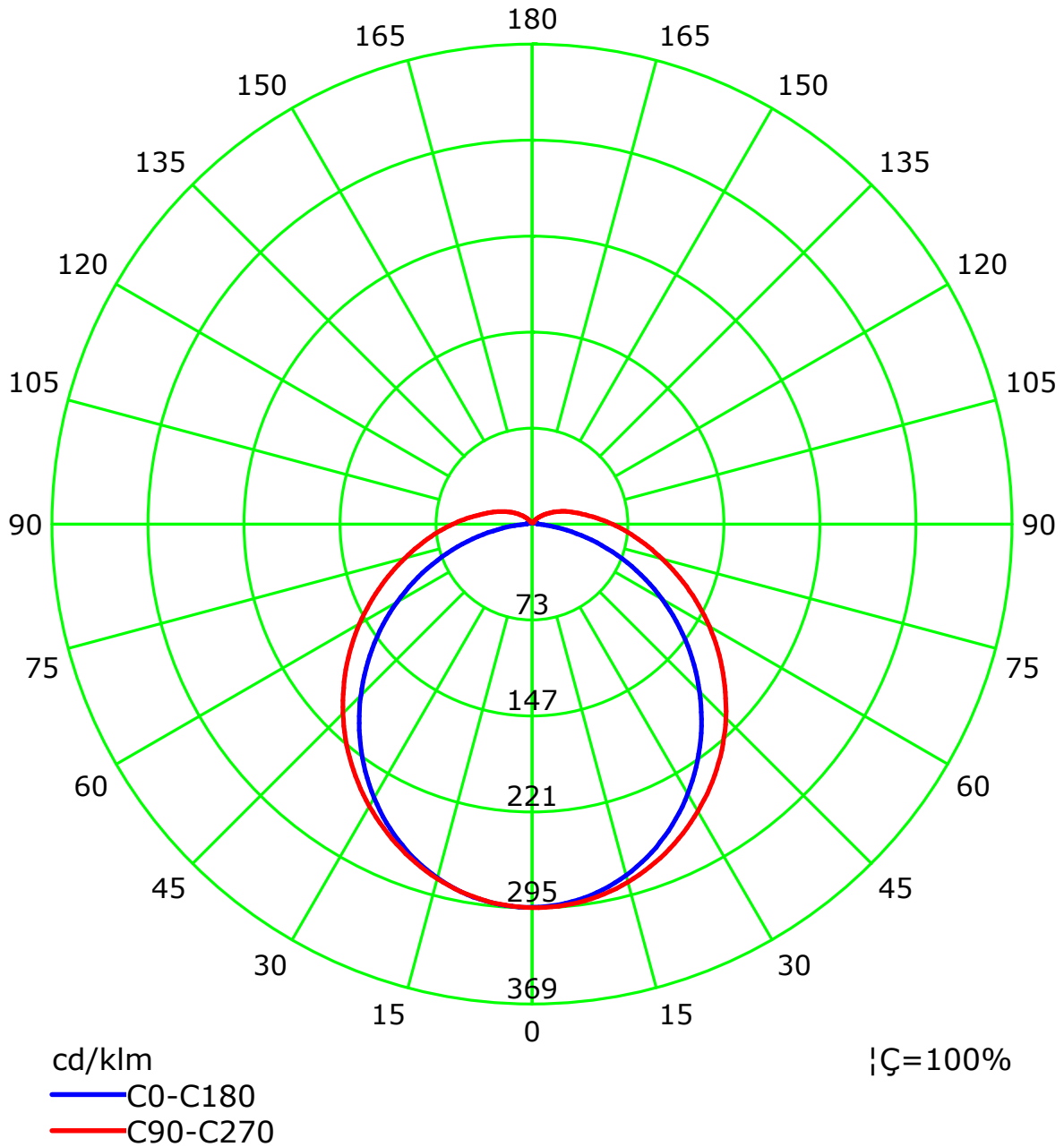
Luminous Intensity Distribution Curve



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)

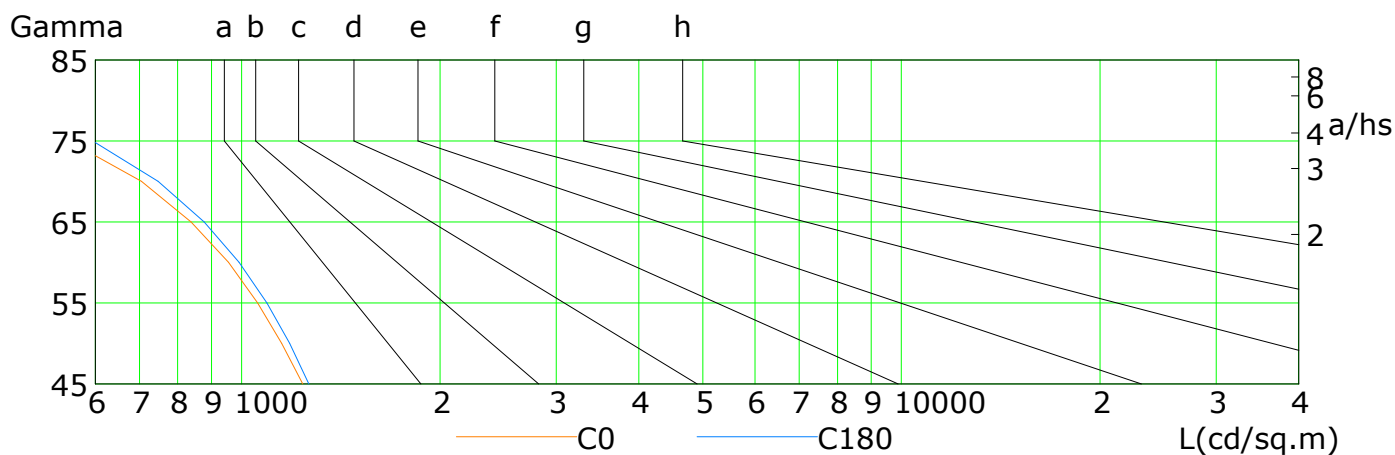
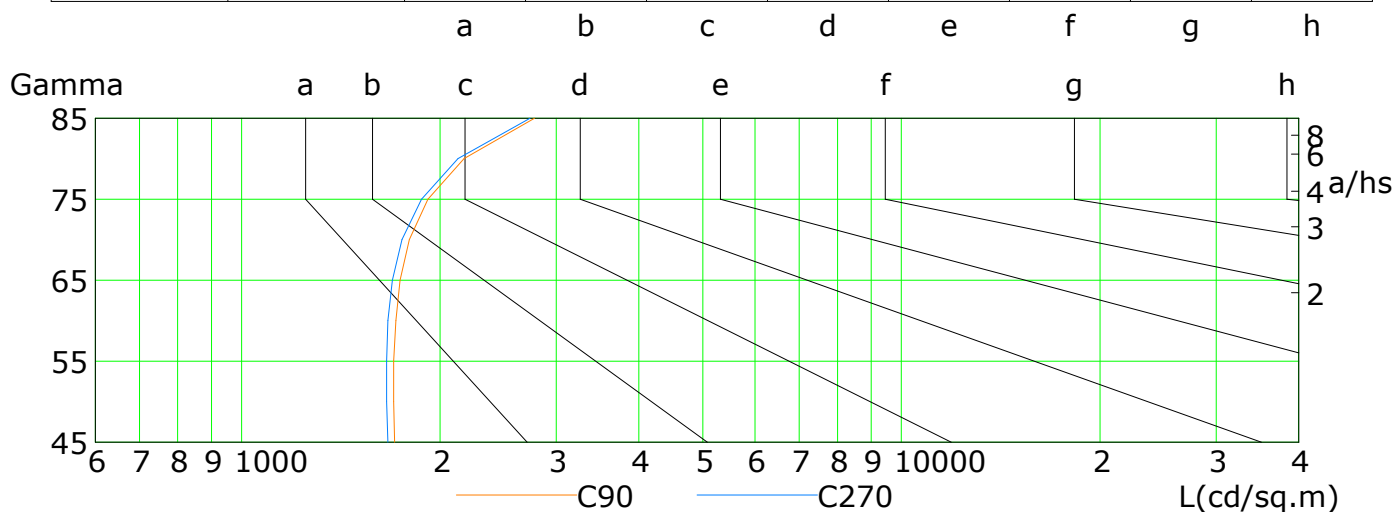


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

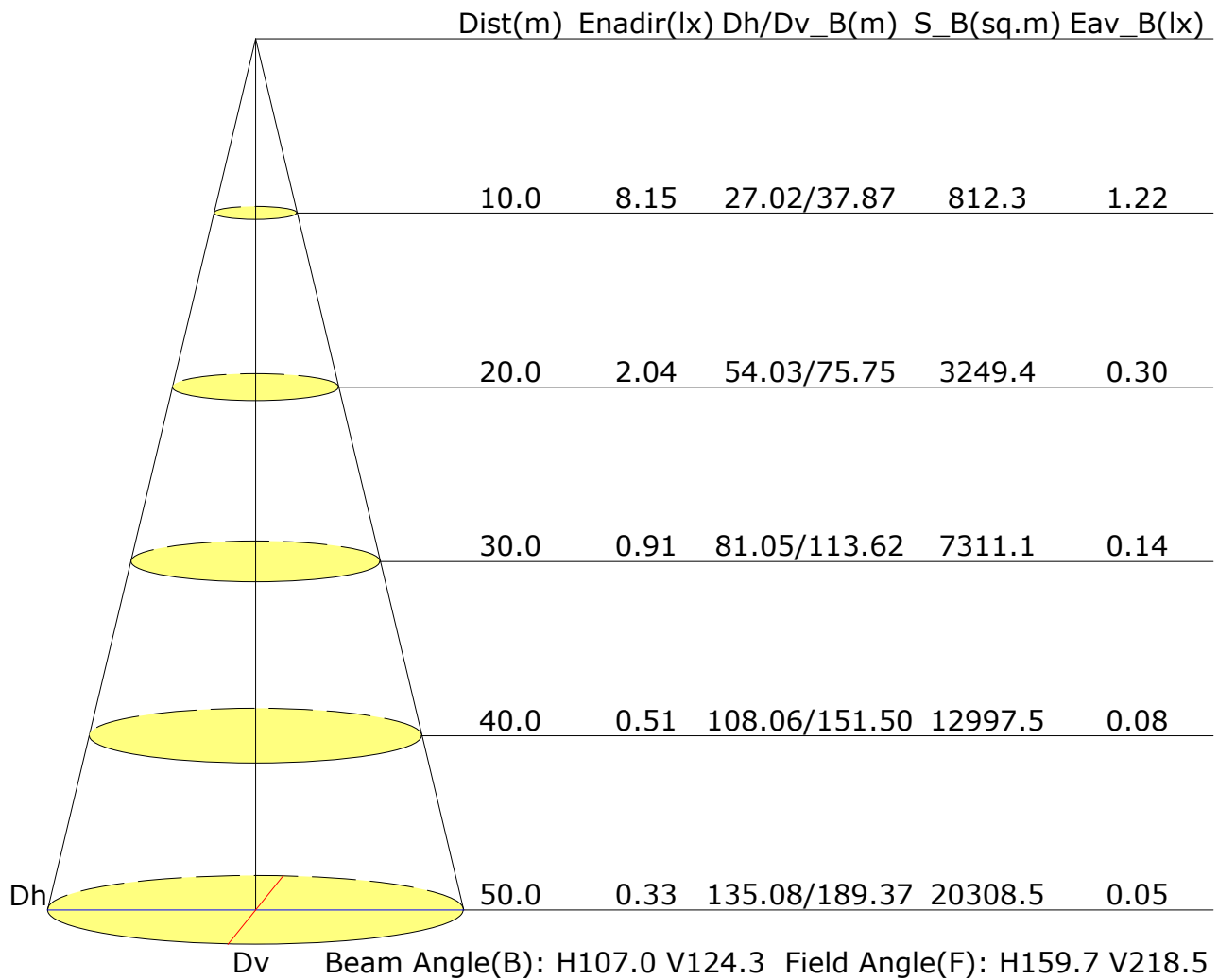


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	1237	1150	1058	956	839	705	548	372	189
C90	1707	1700	1701	1713	1738	1796	1915	2174	2780
C180	1265	1182	1092	991	877	748	594	415	227
C270	1665	1658	1658	1666	1692	1749	1873	2128	2735

C Plane (°):0.0-360.0: 22.5
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 Temperature:
 Operator:

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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	11.9	13.3	12.4	13.7	14.1	13.6	15.0	14.1	15.4	15.8
3H	13.2	14.4	13.6	14.8	15.3	15.7	16.9	16.2	17.3	17.8
4H	13.6	14.8	14.1	15.2	15.7	16.8	17.9	17.2	18.3	18.8
6H	13.9	14.9	14.3	15.4	15.9	17.8	18.9	18.3	19.4	19.9
8H	13.9	15.0	14.4	15.4	15.9	18.4	19.4	18.9	19.9	20.4
12H	13.9	14.9	14.4	15.4	15.9	19.0	20.0	19.5	20.5	21.0
X=4H Y=2H	12.8	13.9	13.3	14.4	14.8	14.1	15.3	14.6	15.7	16.2
3H	14.2	15.2	14.7	15.7	16.2	16.4	17.4	16.9	17.9	18.4
4H	14.8	15.7	15.3	16.2	16.7	17.6	18.5	18.1	19.0	19.6
6H	15.2	16.0	15.7	16.5	17.1	18.9	19.7	19.4	20.2	20.8
8H	15.3	16.0	15.9	16.6	17.2	19.5	20.3	20.1	20.8	21.4
12H	15.3	16.0	15.9	16.6	17.2	20.2	20.9	20.8	21.5	22.1
X=8H Y=4H	15.4	16.1	16.0	16.7	17.3	17.8	18.6	18.4	19.1	19.7
6H	16.0	16.6	16.6	17.2	17.8	19.3	19.9	19.9	20.5	21.1
8H	16.2	16.8	16.8	17.3	18.0	20.1	20.6	20.7	21.2	21.9
12H	16.4	16.8	17.0	17.4	18.1	21.0	21.5	21.6	22.1	22.7
X=12H Y=4H	15.5	16.2	16.1	16.8	17.4	17.8	18.5	18.4	19.0	19.7
6H	16.3	16.8	16.9	17.4	18.0	19.3	19.9	19.9	20.5	21.1
8H	16.6	17.0	17.2	17.6	18.3	20.2	20.7	20.8	21.3	22.0
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.3/-0.2				
S=1.5H	+0.3/-0.5					+0.4/-0.4				
S=2.0H	+0.5/-1.0					+0.6/-0.7				

Calculate in accordance with CIE Pub.117. The table is revised with 2762lm ($8\log(F/F_0) = 3.5$).

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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	0.52	0.62	0.69	0.74	0.81	0.86	0.90	0.95	0.98	
	0.30		0.44	0.54	0.61	0.66	0.74	0.80	0.84	0.90	0.94	
	0.20		0.38	0.48	0.55	0.60	0.69	0.75	0.79	0.86	0.90	
0.50	0.50	0.20	0.50	0.59	0.65	0.70	0.77	0.81	0.85	0.89	0.92	
	0.30		0.42	0.52	0.58	0.64	0.71	0.76	0.80	0.85	0.89	
	0.20		0.37	0.46	0.53	0.58	0.66	0.72	0.76	0.82	0.86	
0.30	0.50	0.20	0.47	0.56	0.62	0.66	0.73	0.77	0.80	0.84	0.87	
	0.30		0.41	0.50	0.56	0.61	0.68	0.73	0.76	0.81	0.84	
	0.20		0.36	0.45	0.52	0.57	0.64	0.69	0.73	0.78	0.82	
0.00	0.00	0.00	0.33	0.42	0.48	0.52	0.59	0.64	0.67	0.72	0.75	
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	1.03	0.86	0.74	0.66	0.53	0.45	0.39	0.31	0.26	
	0.30		0.86	0.74	0.65	0.58	0.48	0.41	0.36	0.29	0.25	
	0.20		0.73	0.64	0.58	0.52	0.44	0.38	0.34	0.28	0.23	
0.50	0.50	0.20	0.97	0.82	0.70	0.62	0.51	0.45	0.37	0.29	0.24	
	0.30		0.82	0.71	0.62	0.56	0.46	0.39	0.35	0.28	0.23	
	0.20		0.72	0.63	0.56	0.50	0.43	0.37	0.32	0.26	0.22	
0.30	0.50	0.20	0.93	0.77	0.67	0.59	0.48	0.40	0.35	0.28	0.23	
	0.30		0.79	0.68	0.60	0.53	0.44	0.38	0.33	0.26	0.22	
	0.20		0.70	0.61	0.54	0.49	0.41	0.35	0.31	0.25	0.21	
0.00	0.00	0.00	0.59	0.51	0.44	0.40	0.33	0.29	0.25	0.20	0.17	
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	0.24	0.26	0.26	0.27	0.28	0.28	0.29	0.29	0.30	
	0.30		0.17	0.19	0.20	0.21	0.23	0.24	0.25	0.26	0.27	
	0.20		0.12	0.14	0.15	0.16	0.18	0.20	0.21	0.23	0.24	
0.50	0.50	0.20	0.23	0.25	0.25	0.26	0.27	0.27	0.28	0.28	0.28	
	0.30		0.17	0.18	0.19	0.20	0.22	0.23	0.24	0.25	0.26	
	0.20		0.12	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.23	
0.30	0.50	0.20	0.23	0.24	0.25	0.25	0.26	0.26	0.27	0.27	0.27	
	0.30		0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	
	0.20		0.12	0.13	0.15	0.16	0.17	0.19	0.20	0.21	0.22	
0.00	0.00	0.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	
Rating:21W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												