

Report No.:

Test Time: 21.08.2020 20:48

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FI 171 2x40LED 24W 5000K opal

Luminous Length (mm): 605

Luminous Width (mm): 172

Luminous Height (mm): 203

Voltage: 221.5 V

Current: 0.112 A

Power: 23.98 W

Power Factor: 0.964

Photometric Results

CIE Class: Direct

Measurement Flux: 2363.9 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 2363.9 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.7, 162.2, 163.1, 163.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 112.3, 112.1, 112.3, 112.3

Luminaire Efficacy Rating (LER): 98.63

Central Intensity: 815.73 cd

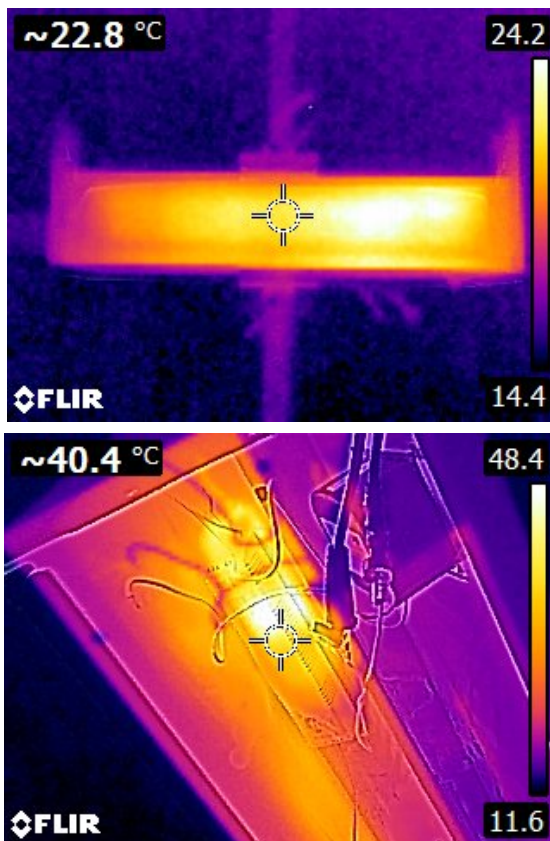
Max. Intensity: 819.77 cd

Pos of Max. Intensity: H337.5 V2

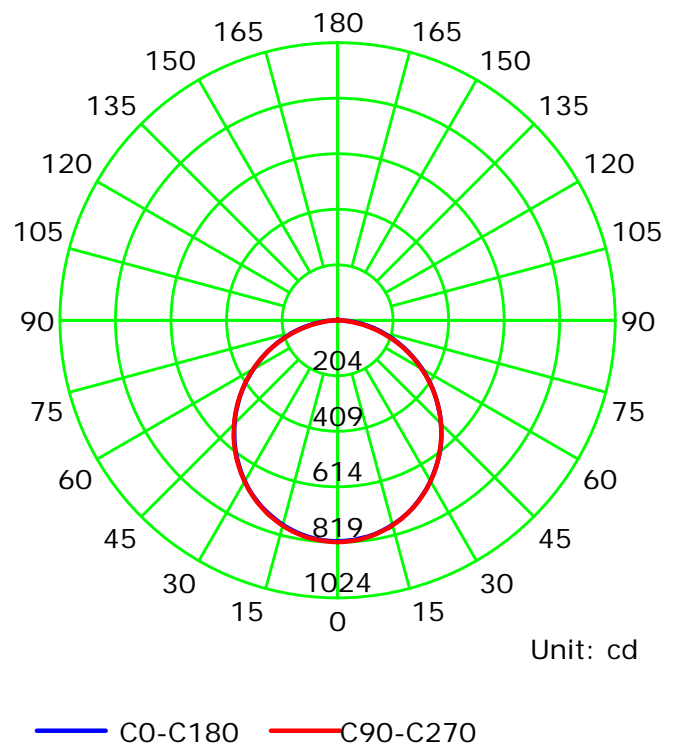
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.25

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

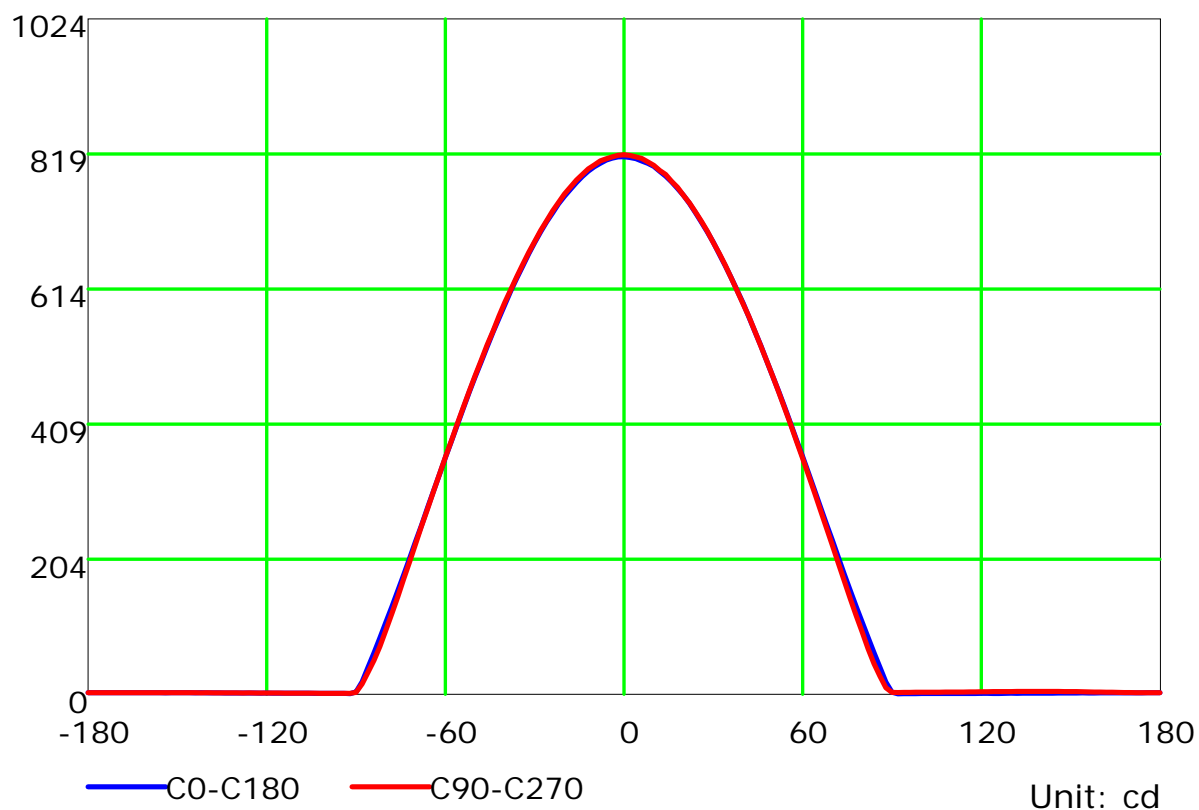
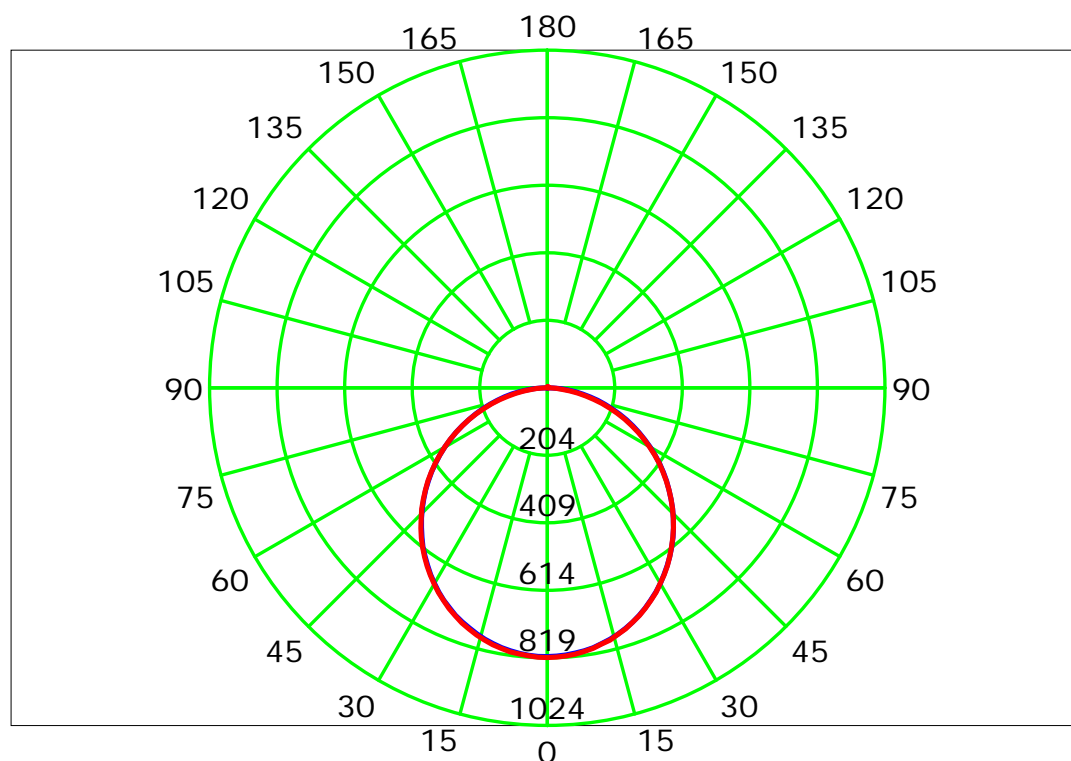
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



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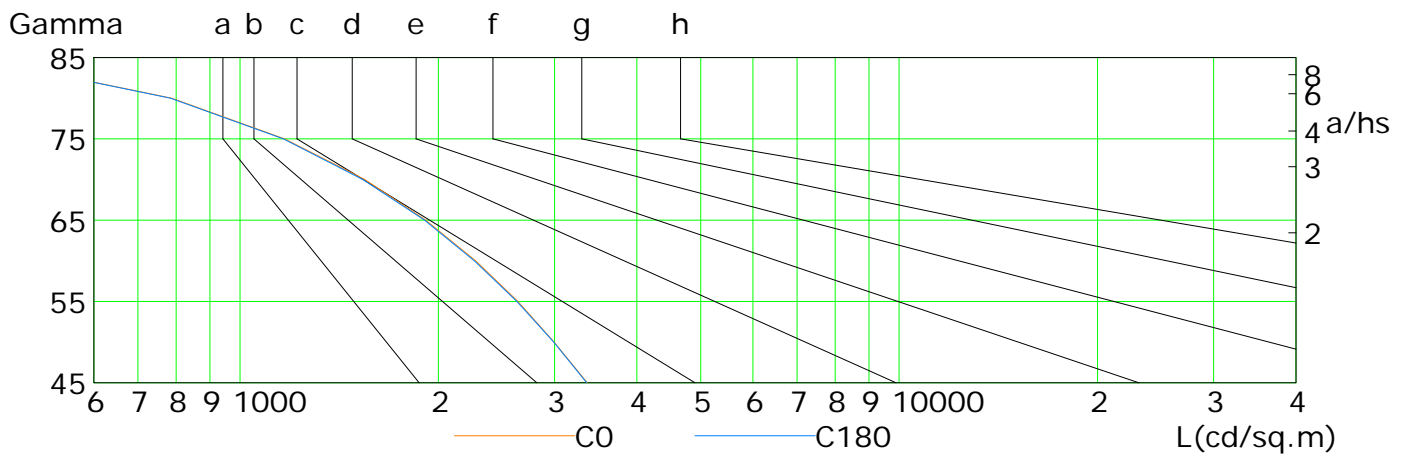
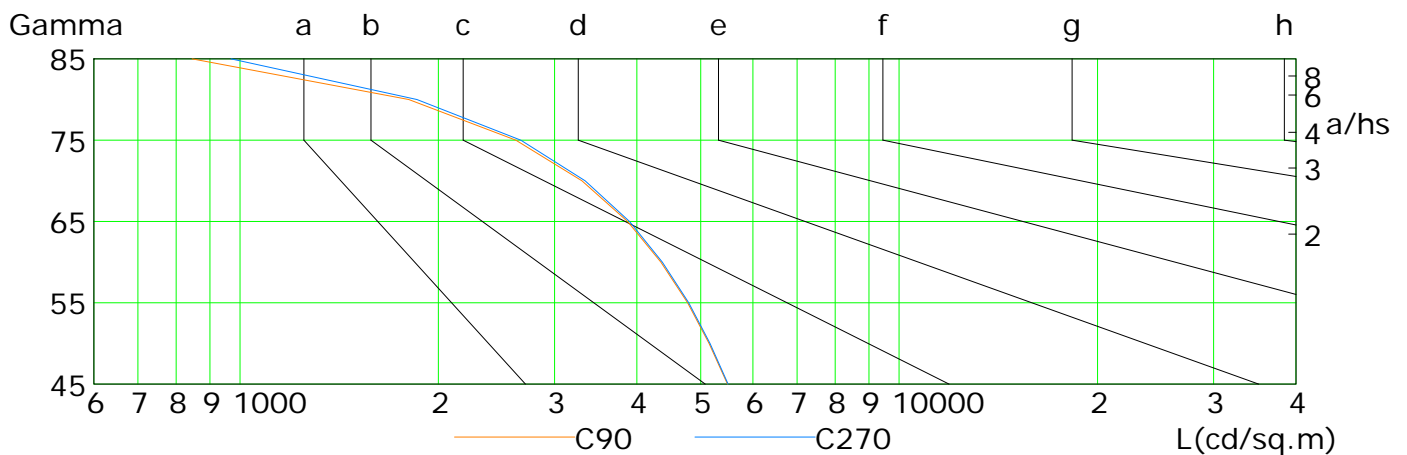
Humidity:

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	3364	2995	2639	2278	1913	1546	1168	787	395
C90	5488	5149	4776	4351	3873	3302	2621	1803	846
C180	3357	2993	2631	2267	1905	1536	1163	784	396
C270	5501	5165	4793	4372	3899	3339	2667	1855	969

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Temperature:

Operator:

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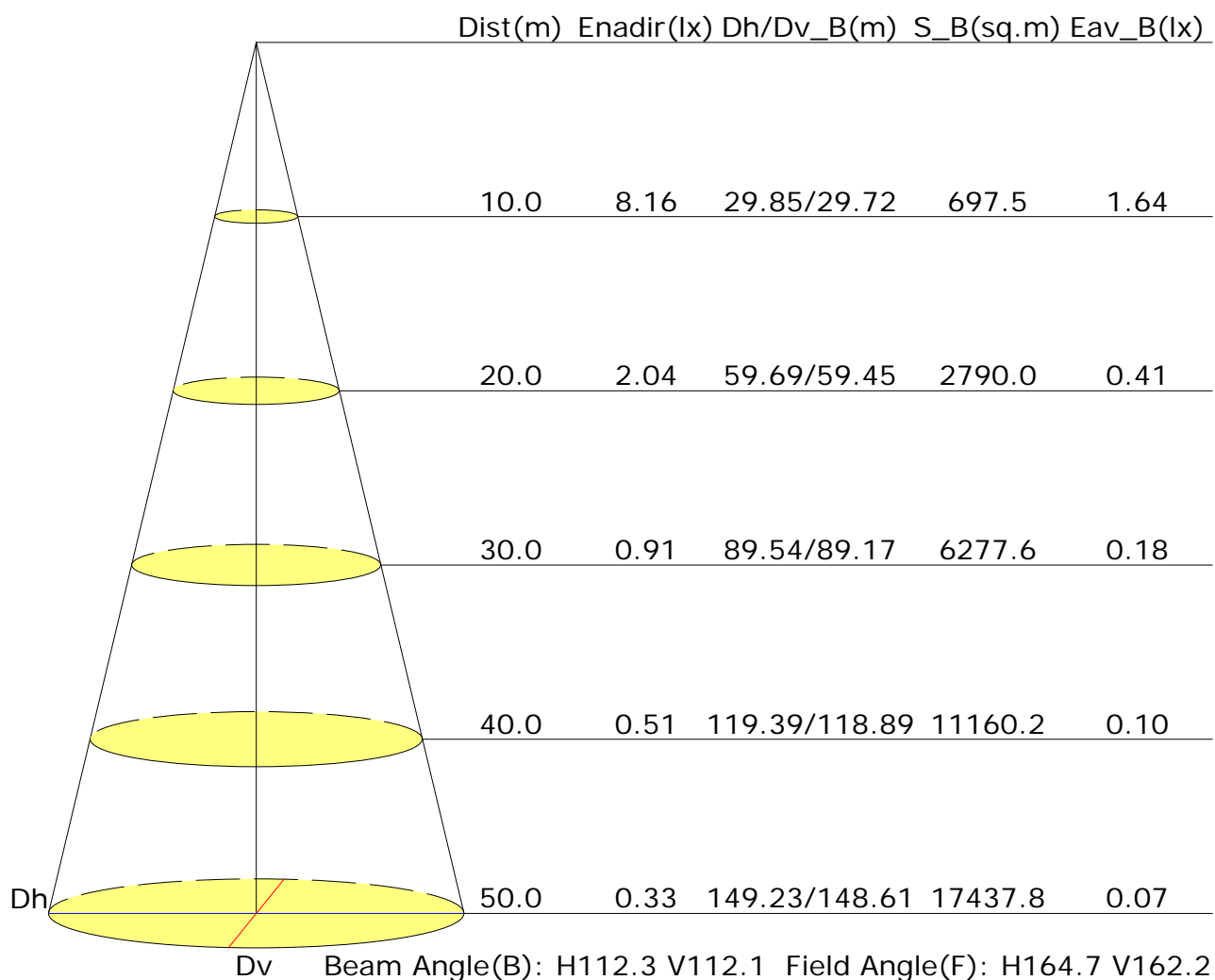
Test Device: LSG-1800B

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	15.9	17.3	16.2	17.6	17.8	17.1	18.5	17.4	18.7	19.0
3H	17.1	18.4	17.4	18.6	18.9	18.4	19.7	18.8	20.0	20.3
4H	17.5	18.7	17.8	19.0	19.3	18.9	20.1	19.3	20.4	20.7
6H	17.7	18.9	18.1	19.2	19.5	19.2	20.3	19.6	20.7	21.0
8H	17.8	18.9	18.2	19.2	19.6	19.3	20.4	19.7	20.7	21.1
12H	17.8	18.9	18.2	19.2	19.6	19.3	20.4	19.7	20.7	21.1
X=4H Y=2H	16.5	17.7	16.9	18.0	18.3	17.4	18.6	17.8	18.9	19.2
3H	17.8	18.9	18.2	19.2	19.6	18.9	20.0	19.3	20.3	20.7
4H	18.3	19.3	18.8	19.6	20.0	19.5	20.5	20.0	20.8	21.2
6H	18.7	19.5	19.1	19.9	20.3	19.9	20.8	20.4	21.2	21.6
8H	18.8	19.5	19.2	20.0	20.4	20.0	20.8	20.5	21.2	21.6
12H	18.8	19.5	19.3	19.9	20.4	20.1	20.8	20.6	21.2	21.7
X=8H Y=4H	18.6	19.3	19.0	19.7	20.2	19.7	20.4	20.1	20.8	21.3
6H	19.0	19.6	19.5	20.1	20.5	20.1	20.7	20.6	21.2	21.7
8H	19.1	19.7	19.6	20.2	20.7	20.3	20.8	20.8	21.3	21.8
12H	19.2	19.7	19.7	20.2	20.7	20.4	20.8	20.9	21.3	21.8
X=12H Y=4H	18.6	19.2	19.0	19.7	20.1	19.6	20.3	20.1	20.8	21.2
6H	19.0	19.6	19.5	20.0	20.5	20.1	20.7	20.6	21.2	21.7
8H	19.2	19.7	19.7	20.1	20.7	20.3	20.8	20.8	21.3	21.8
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.1/-0.1				
S=1.5H	+0.4/-0.7					+0.4/-0.5				
S=2.0H	+0.7/-1.2					+0.9/-1.2				

Calculate in accordance with CIE Pub.117. The table is revised with 2364lm ($8\log(F/F_0) = 3.0$).

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	0.86	0.92	0.95	1.00	1.03	
	0.30		0.48	0.58	0.66	0.72	0.80	0.86	0.90	0.95	0.99	
	0.20		0.42	0.53	0.60	0.66	0.75	0.81	0.85	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.98	
	0.30		0.47	0.57	0.64	0.70	0.78	0.83	0.87	0.92	0.95	
	0.20		0.42	0.52	0.59	0.65	0.73	0.79	0.83	0.89	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.73	0.80	0.85	0.88	0.92	0.94	
	0.30		0.46	0.56	0.63	0.68	0.76	0.81	0.84	0.89	0.92	
	0.20		0.41	0.51	0.58	0.64	0.72	0.77	0.81	0.86	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.68	0.73	0.77	0.82	0.85	
Rating: 24W 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	0.71	0.62	0.50	0.41	0.35	0.27	0.22	
	0.30		0.84	0.71	0.62	0.55	0.45	0.38	0.33	0.26	0.21	
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.31	0.24	0.20	
0.50	0.50	0.20	0.97	0.80	0.68	0.59	0.48	0.43	0.34	0.26	0.21	
	0.30		0.82	0.70	0.60	0.53	0.43	0.36	0.32	0.25	0.20	
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.94	0.77	0.66	0.57	0.45	0.38	0.32	0.25	0.20	
	0.30		0.80	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.20	
	0.20		0.70	0.61	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.31	0.26	0.23	0.18	0.15	
Rating: 24W 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	0.22	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		0.05	0.07	0.08	0.10	0.12	0.13	0.14	0.16	0.17
0.50	0.50	0.20	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.22
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	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	0.20	0.20	0.20	0.21
	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
<p>Rating: 24W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											