

Report No.:

Test Time: 29.10.2020 15:01

Luminaire Property

Luminaire Manufacturer: FAROS LED

Luminaire Description: FI 172 120LED 28W 5000K opal

Luminous Length (mm): 1000

Luminous Width (mm): 130

Luminous Height (mm): 88

Voltage: 221.5 V

Current: 0.134 A

Power: 28.54 W

Power Factor: 0.962

Photometric Results

CIE Class: Direct

Measurement Flux: 2948.8 lm

Downward Ratio: 97%

Total Rated Lamp Lumens: 2948.8 lm

Efficiency: 100%

Upward Ratio: 3%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 165.1, 163.4, 163.3, 163.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.7, 106.5, 108.5, 108.5

Luminaire Efficacy Rating (LER): 103.37

Central Intensity: 971.51 cd

Max. Intensity: 1054.98 cd

Pos of Max. Intensity: H270 V20

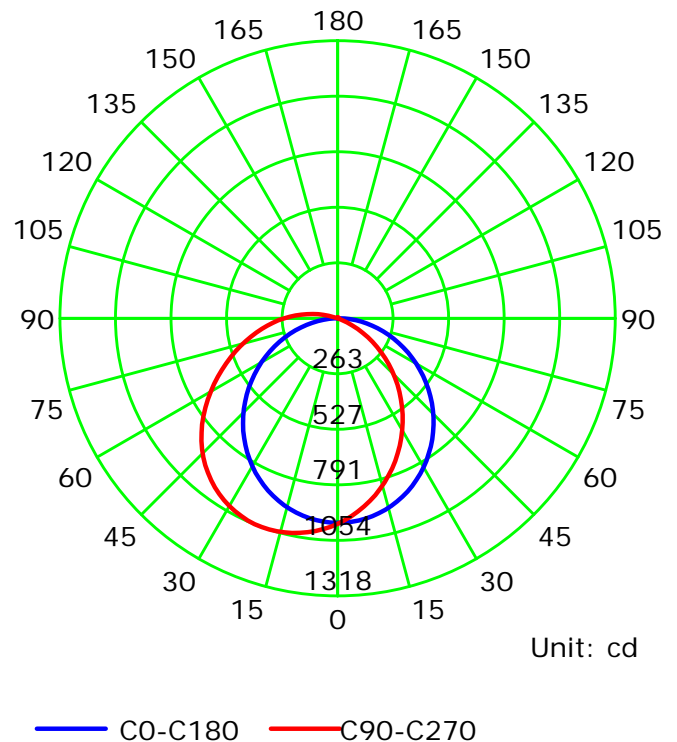
S/MH(C0/C180): 1.25

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

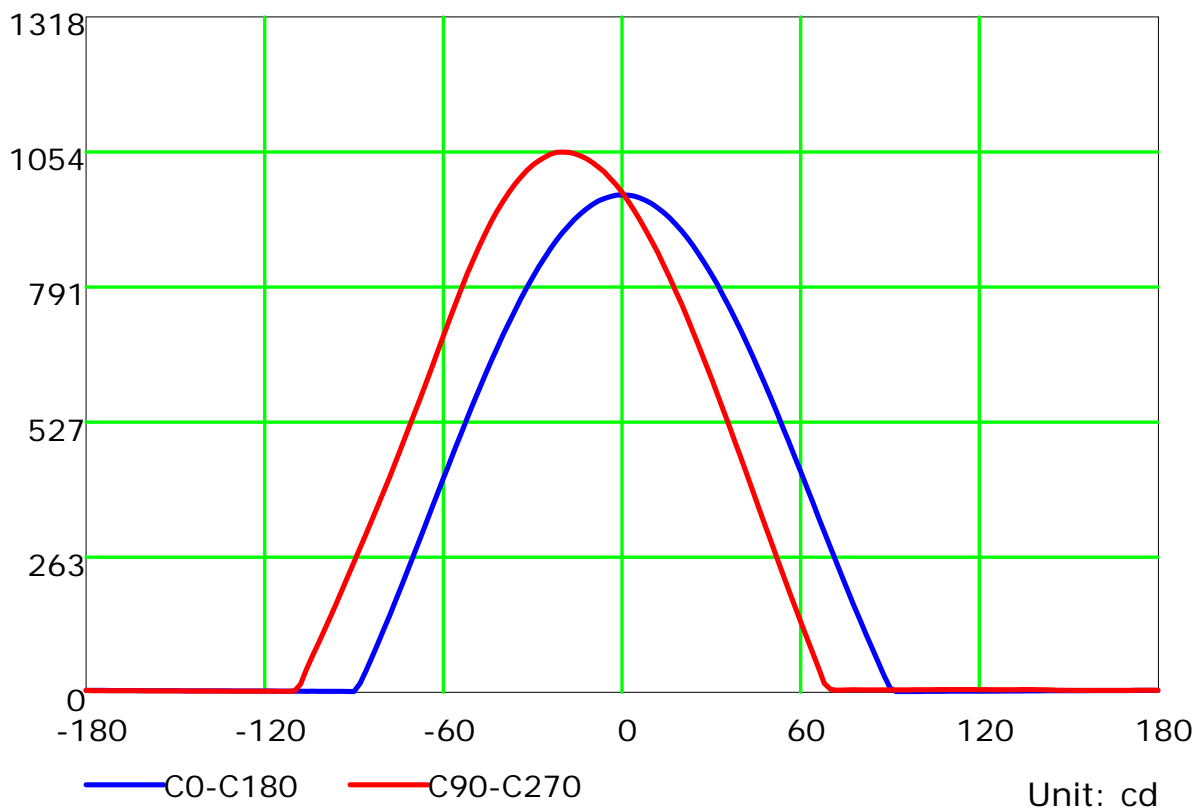
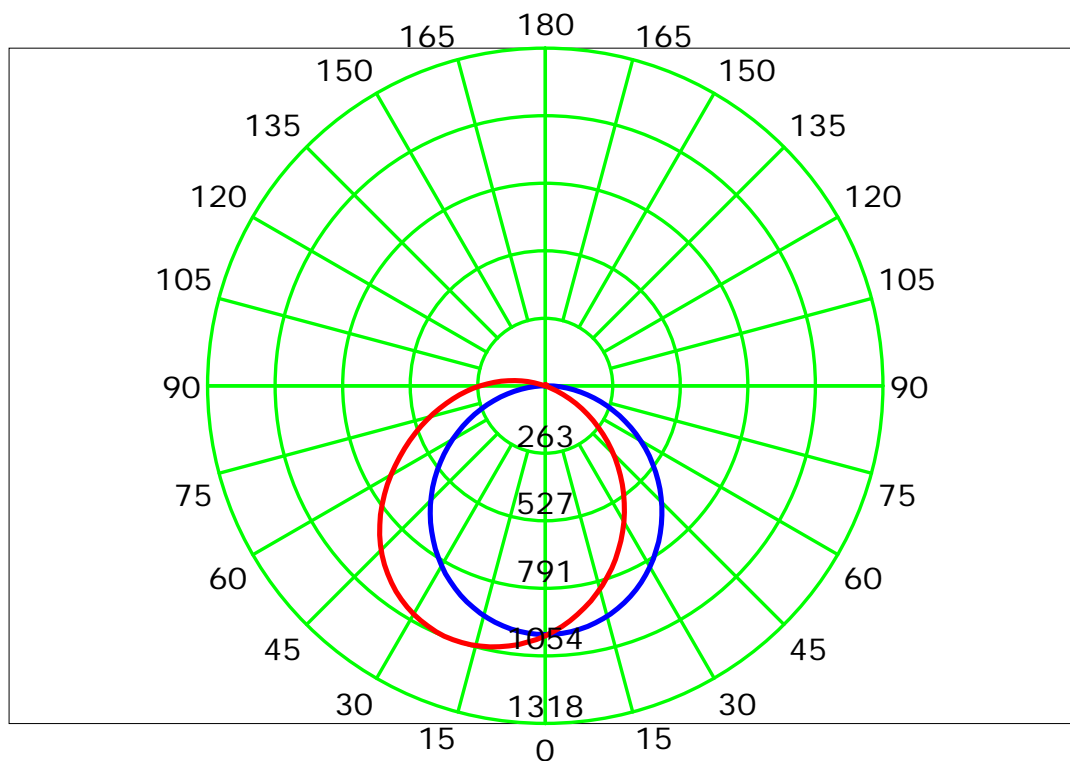
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

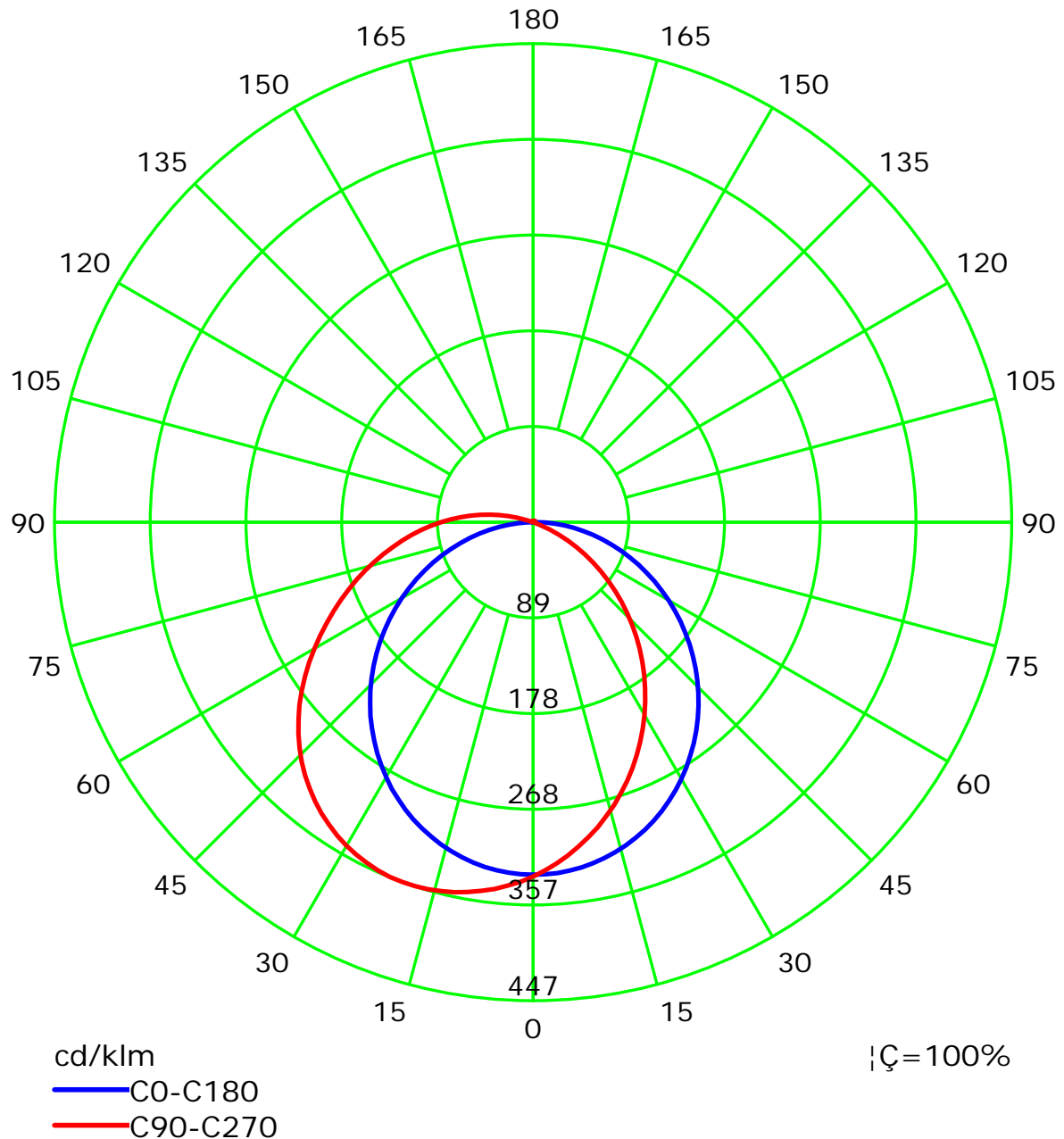
Luminous Intensity Distribution Curve



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 Test Lab:
 Test Type: TYPE C
 Temperature:
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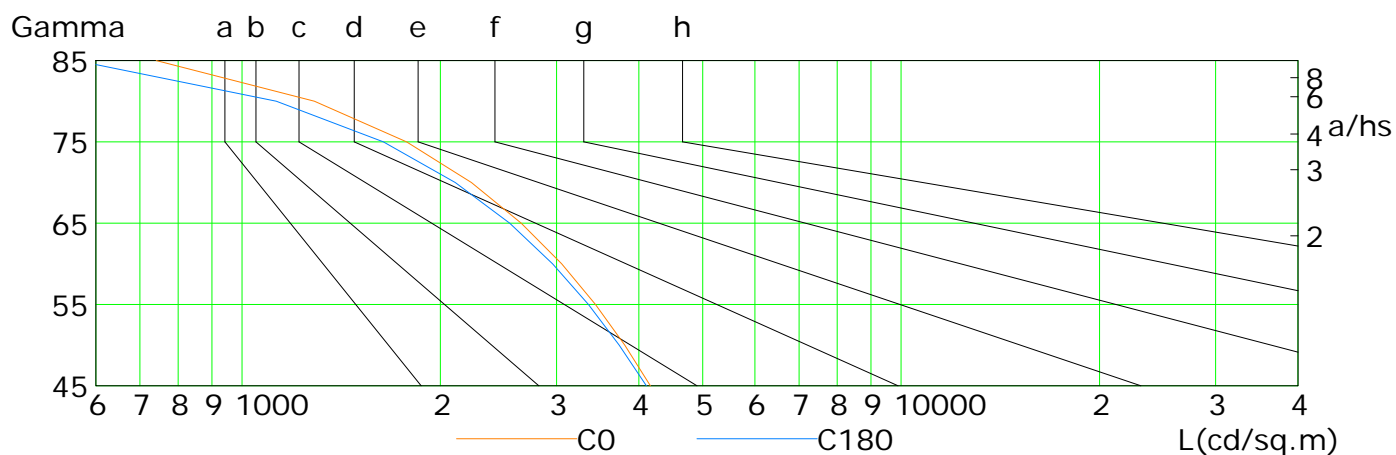
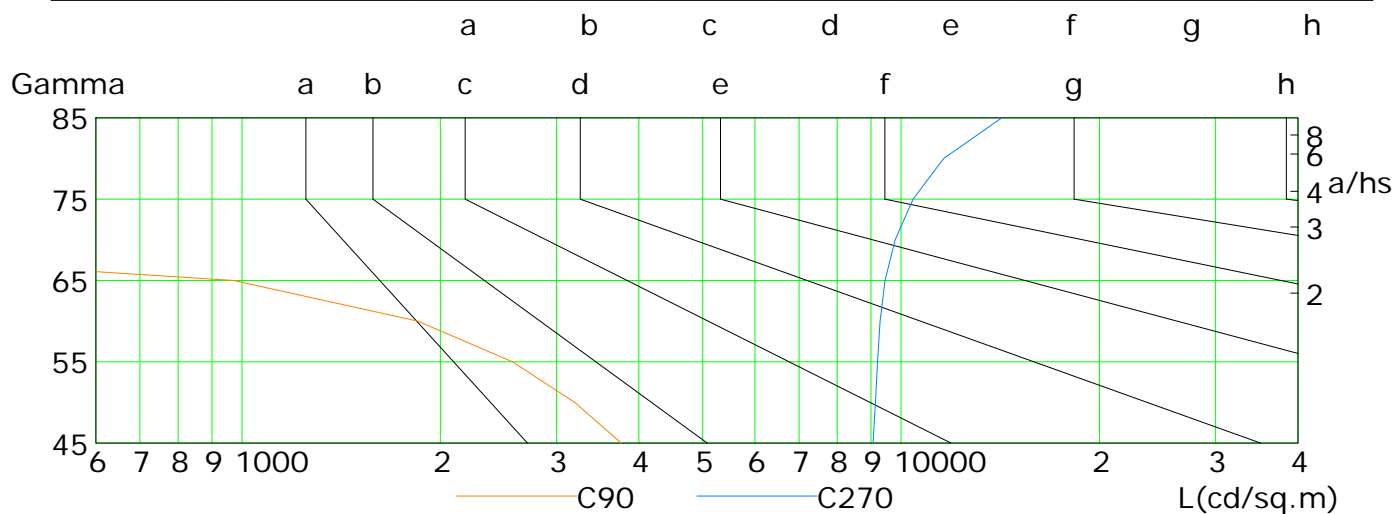
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 Test Device: LSG-1800B
 Distance: 12.682 m
 Humidity:
 Inspector:

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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4166	3807	3437	3055	2652	2228	1777	1288	741
C90	3762	3199	2572	1848	971	108	104	146	214
C180	4106	3735	3354	2959	2547	2107	1638	1127	560
C270	9067	9141	9209	9289	9451	9793	10424	11599	14212

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Test Type: TYPE C

Temperature:

Operator:

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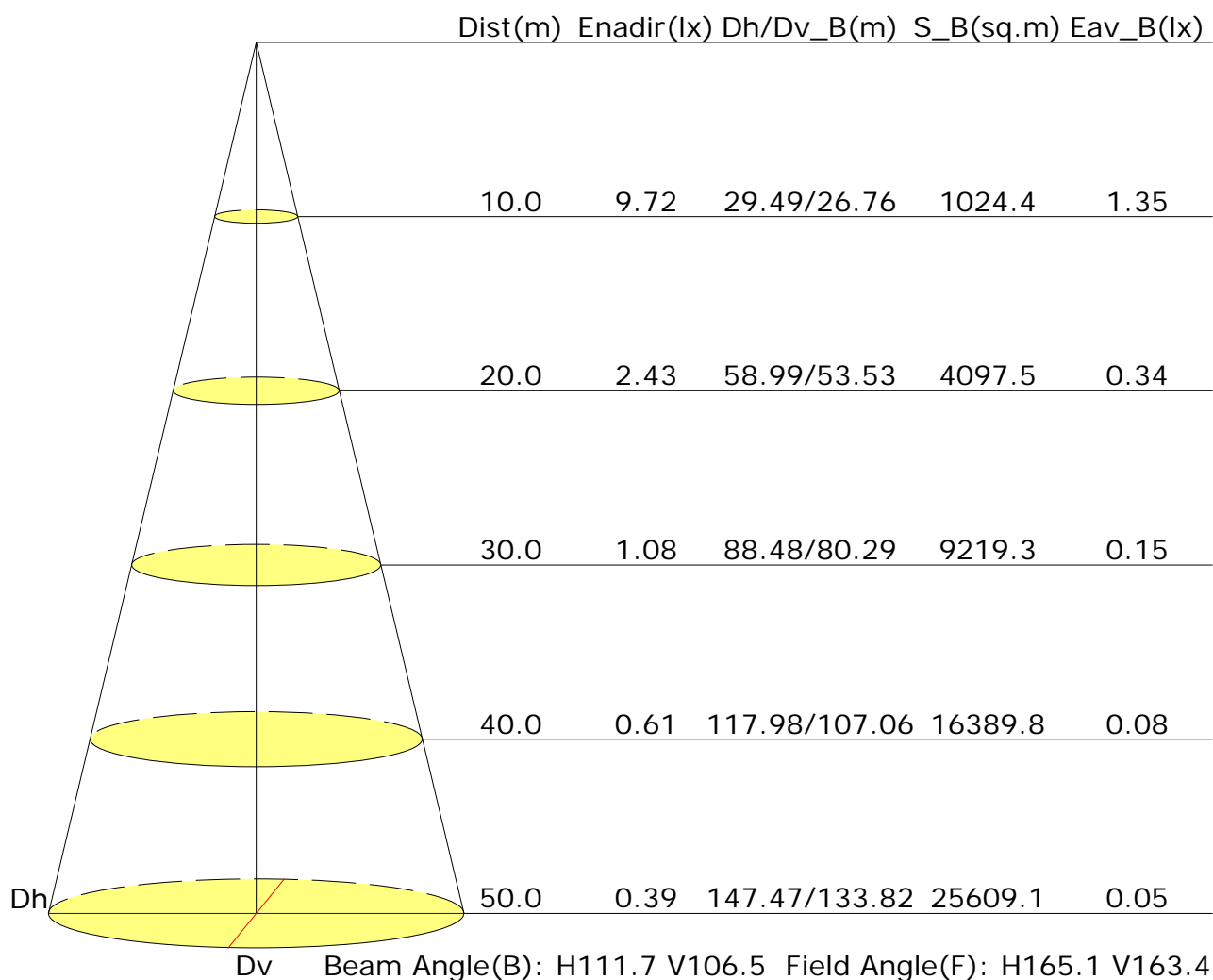
Test Device: LSG-1800B

Distance: 12.682 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	16.9	18.2	17.2	18.5	18.8	18.6	20.0	19.0	20.3	20.6
3H	18.1	19.4	18.5	19.7	20.0	20.6	21.9	21.0	22.2	22.5
4H	18.6	19.8	19.0	20.1	20.5	21.6	22.8	22.0	23.2	23.5
6H	18.9	20.0	19.3	20.3	20.7	22.7	23.8	23.1	24.1	24.5
8H	19.0	20.0	19.4	20.4	20.8	23.2	24.3	23.6	24.7	25.1
12H	19.0	20.0	19.4	20.4	20.8	23.8	24.8	24.2	25.2	25.6
X=4H Y=2H	17.7	18.8	18.0	19.2	19.5	19.0	20.2	19.4	20.6	20.9
3H	19.1	20.1	19.5	20.5	20.9	21.2	22.2	21.6	22.6	23.0
4H	19.7	20.6	20.1	21.0	21.4	22.3	23.3	22.8	23.7	24.1
6H	20.1	20.9	20.5	21.3	21.8	23.6	24.4	24.0	24.8	25.3
8H	20.2	21.0	20.7	21.4	21.9	24.2	25.0	24.7	25.4	25.9
12H	20.3	21.0	20.8	21.4	21.9	24.9	25.6	25.4	26.0	26.5
X=8H Y=4H	20.1	20.9	20.6	21.3	21.8	22.5	23.3	23.0	23.7	24.2
6H	20.7	21.3	21.2	21.8	22.3	23.9	24.5	24.4	25.0	25.5
8H	20.9	21.5	21.4	22.0	22.5	24.6	25.2	25.2	25.7	26.3
12H	21.0	21.5	21.6	22.1	22.6	25.5	26.0	26.0	26.5	27.0
X=12H Y=4H	20.2	20.9	20.7	21.4	21.9	22.5	23.2	23.0	23.7	24.2
6H	20.9	21.4	21.4	22.0	22.5	23.9	24.5	24.5	25.0	25.5
8H	21.2	21.6	21.7	22.2	22.7	24.7	25.2	25.3	25.7	26.3
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.4/-0.5				
S=1.5H	+0.3/-0.5					+0.8/-0.9				
S=2.0H	+0.5/-0.9					+1.2/-1.7				

Calculate in accordance with CIE Pub.117. The table is revised with 2949lm ($8\log(F/F_0) = 3.8$).

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	0.55	0.65	0.72	0.77	0.84	0.89	0.93	0.98	1.01	
	0.30		0.47	0.57	0.64	0.70	0.78	0.83	0.88	0.93	0.97	
	0.20		0.41	0.51	0.58	0.64	0.72	0.78	0.83	0.89	0.93	
0.50	0.50	0.20	0.53	0.62	0.69	0.74	0.81	0.86	0.89	0.93	0.96	
	0.30		0.46	0.55	0.62	0.68	0.75	0.80	0.84	0.89	0.93	
	0.20		0.40	0.50	0.57	0.63	0.71	0.76	0.80	0.86	0.90	
0.30	0.50	0.20	0.51	0.60	0.67	0.71	0.78	0.82	0.85	0.89	0.92	
	0.30		0.45	0.54	0.61	0.66	0.73	0.78	0.81	0.86	0.89	
	0.20		0.40	0.49	0.56	0.61	0.69	0.74	0.78	0.83	0.86	
0.00	0.00	0.00	0.37	0.47	0.53	0.58	0.65	0.70	0.73	0.78	0.81	
<p>Rating: 29W 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>												

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	0.84	0.72	0.64	0.51	0.43	0.37	0.29	0.24	
	0.30		0.84	0.72	0.63	0.56	0.46	0.40	0.34	0.28	0.23	
	0.20		0.72	0.63	0.56	0.50	0.42	0.37	0.32	0.26	0.22	
0.50	0.50	0.20	0.97	0.81	0.69	0.61	0.49	0.44	0.35	0.28	0.23	
	0.30		0.82	0.70	0.61	0.54	0.45	0.38	0.33	0.26	0.22	
	0.20		0.71	0.62	0.55	0.49	0.41	0.35	0.31	0.25	0.21	
0.30	0.50	0.20	0.94	0.77	0.66	0.58	0.47	0.39	0.34	0.26	0.22	
	0.30		0.80	0.68	0.59	0.52	0.43	0.37	0.32	0.25	0.21	
	0.20		0.70	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.32	0.28	0.24	0.19	0.16	
<p>Rating: 29W 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>												

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	0.19	0.20	0.21	0.22	0.23	0.23	0.24	0.24	0.25
	0.30		0.12	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.22
	0.20		0.07	0.09	0.10	0.11	0.13	0.15	0.16	0.18	0.19
0.50	0.50	0.20	0.19	0.20	0.21	0.21	0.22	0.22	0.23	0.23	0.24
	0.30		0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21
	0.20		0.07	0.09	0.10	0.11	0.13	0.15	0.16	0.17	0.18
0.30	0.50	0.20	0.18	0.19	0.20	0.20	0.21	0.22	0.22	0.22	0.23
	0.30		0.12	0.13	0.14	0.15	0.17	0.18	0.18	0.20	0.20
	0.20		0.07	0.09	0.10	0.11	0.13	0.14	0.15	0.17	0.18
0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Rating: 29W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											