

Report No.: 1

Test Time: 27.06.2019 09:34

Luminaire Property

Luminaire Manufacturer: FAROS
Luminaire Description: FH 45 100W BR
Number of Lamps: 1
Luminous Width (mm): 53
Voltage: 221.1 V
Power: 104.58 W

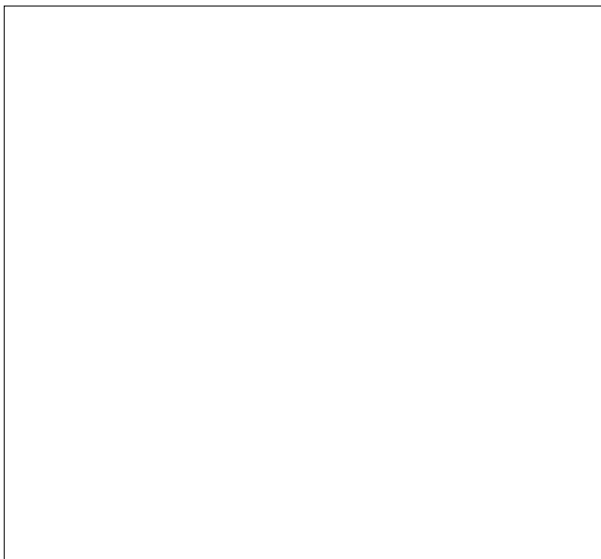
Lamp Description: LED
Luminous Length (mm): 2500
Luminous Height (mm): 53
Current: 0.646 A
Power Factor: 0.93

Photometric Results

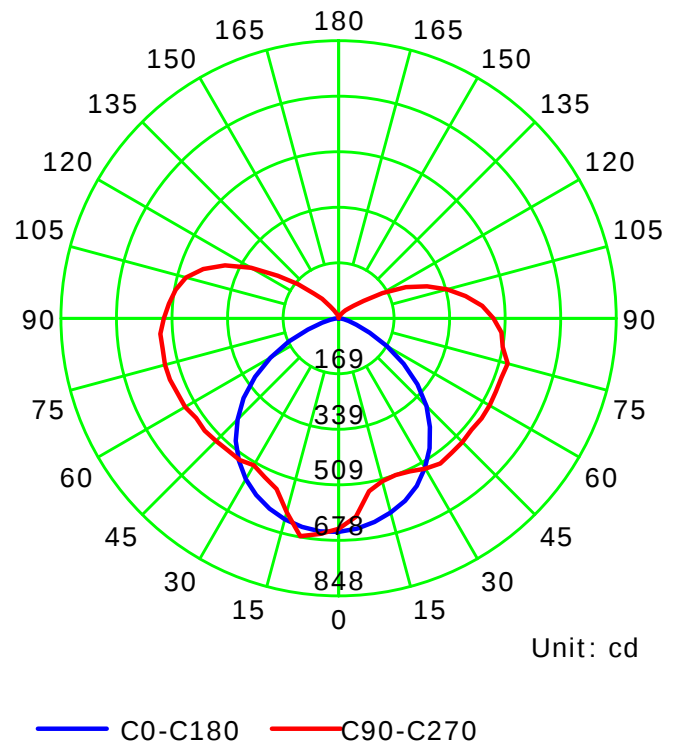
CIE Class: Semi-Direct
Measurement Flux: 3461.2 lm
Downward Ratio: 79%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 142.9, 270.5, 237.2, 239.9
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 102.9, 223.5, 186.7, 186.6
Luminaire Efficacy Rating (LER): 33.15
Max. Intensity: 678.87 cd
S/MH(C0/C180): 1.24

Total Rated Lamp Lumens: 3461.2 lm
Efficiency: 100%
Upward Ratio: 21%
Central Intensity: 652.56 cd
Pos of Max. Intensity: H225 V15
S/MH(C90/C270): 1.25

Picture Of Luminaire



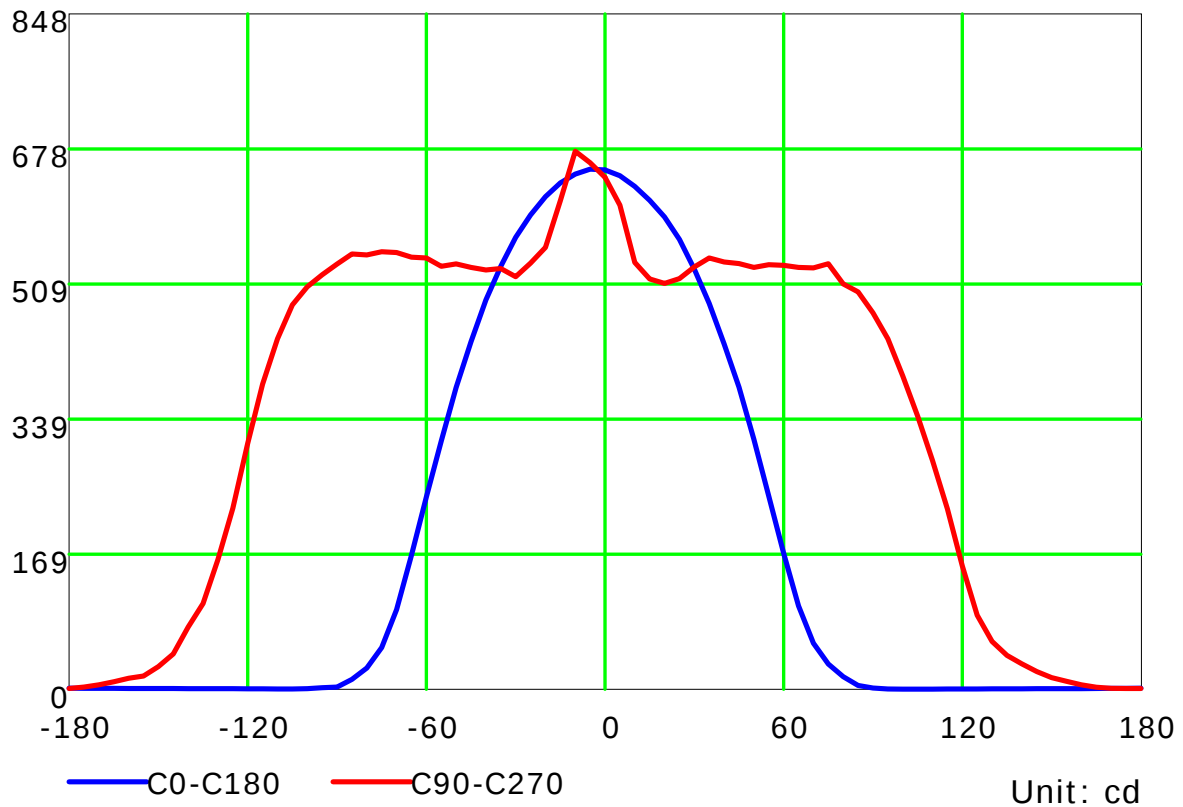
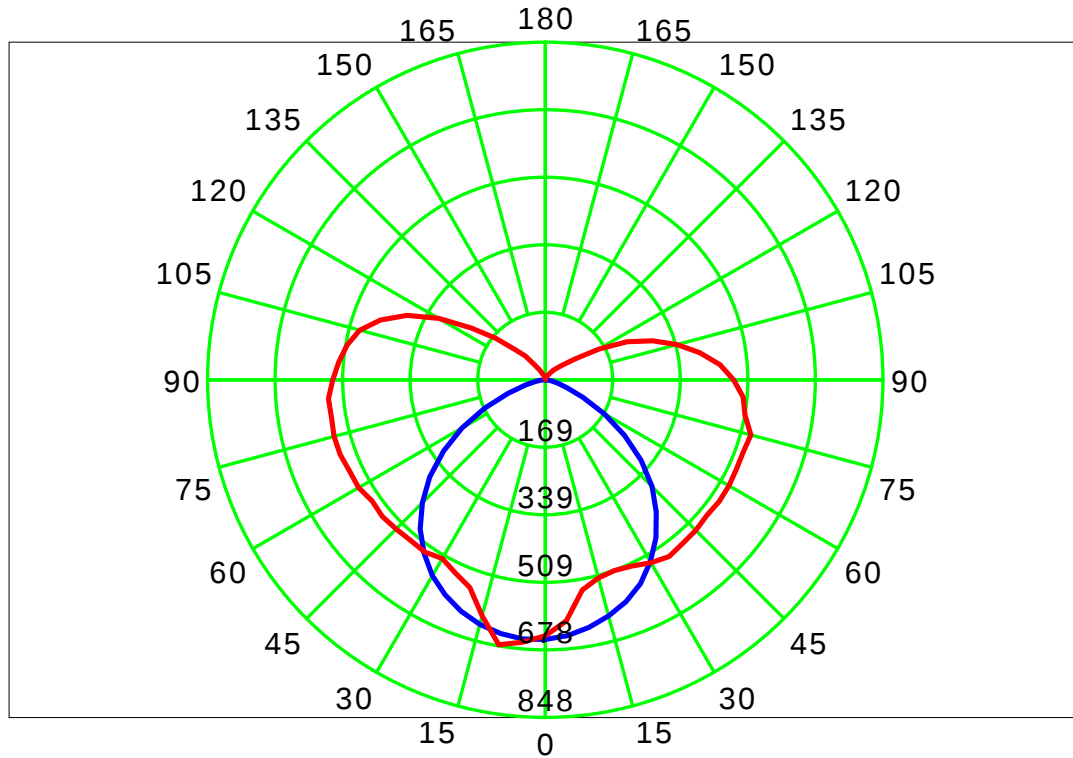
Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:5.0
Test Device: LSG-1800B
Distance: 12.654 m
Humidity:
Inspector:

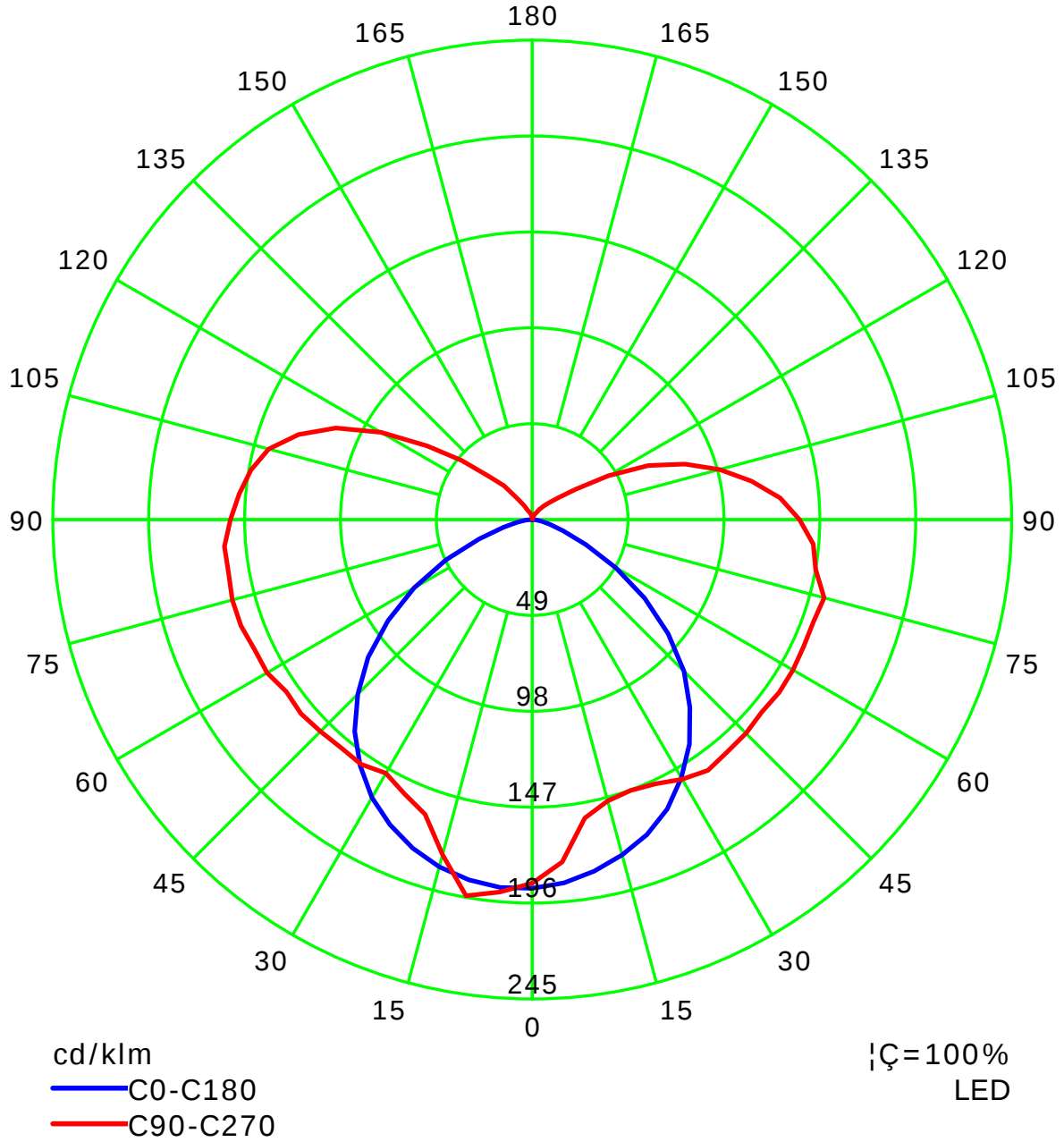
Luminous Intensity Distribution Curve



C Plane (°): 0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
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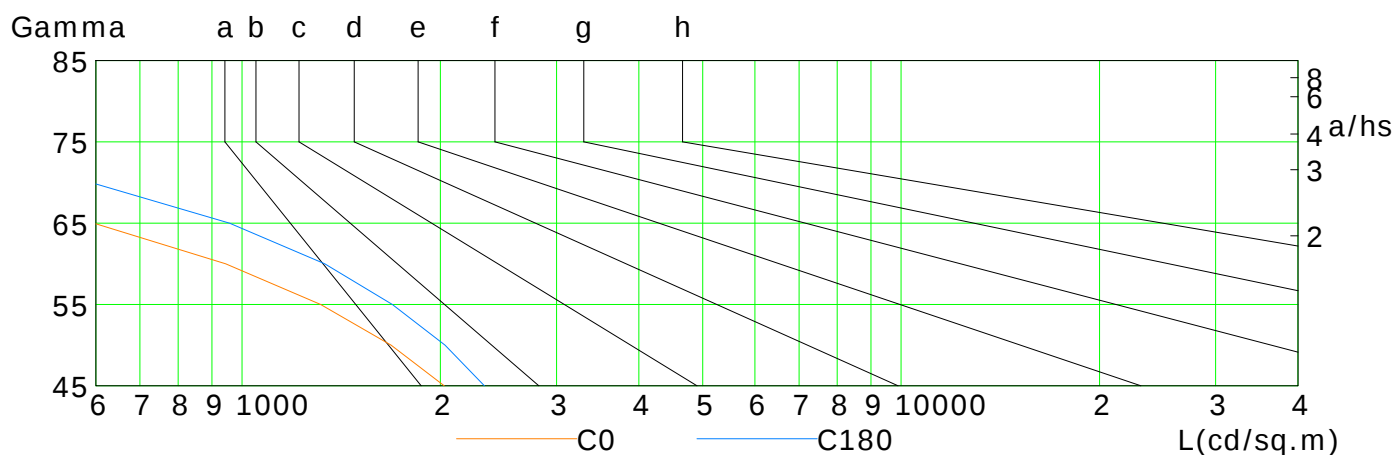
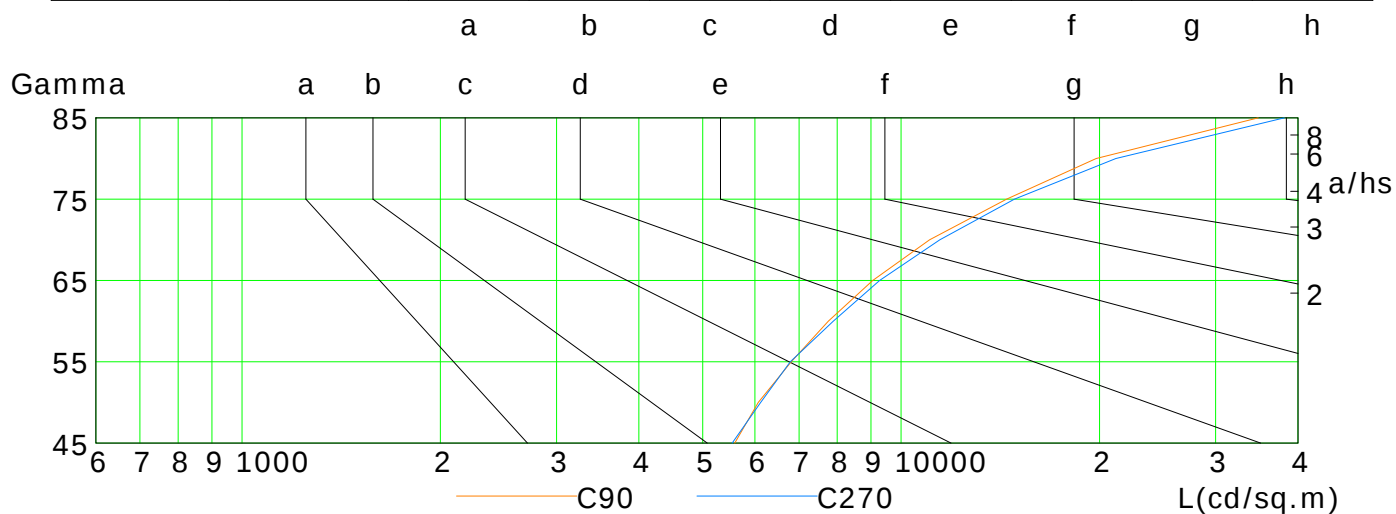
Gamma Plane (°): 0.0-180.0: 5.0
Test Device: LSG-1800B
Distance: 12.654 m
Humidity:
Inspector:

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	2027	1683	1316	944	596	342	197	104	34
C90	5591	6071	6813	7756	9057	11044	14452	19762	34804
C180	2332	2033	1691	1335	957	590	324	174	87
C270	5541	6123	6788	7893	9274	11446	14856	21177	38138

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

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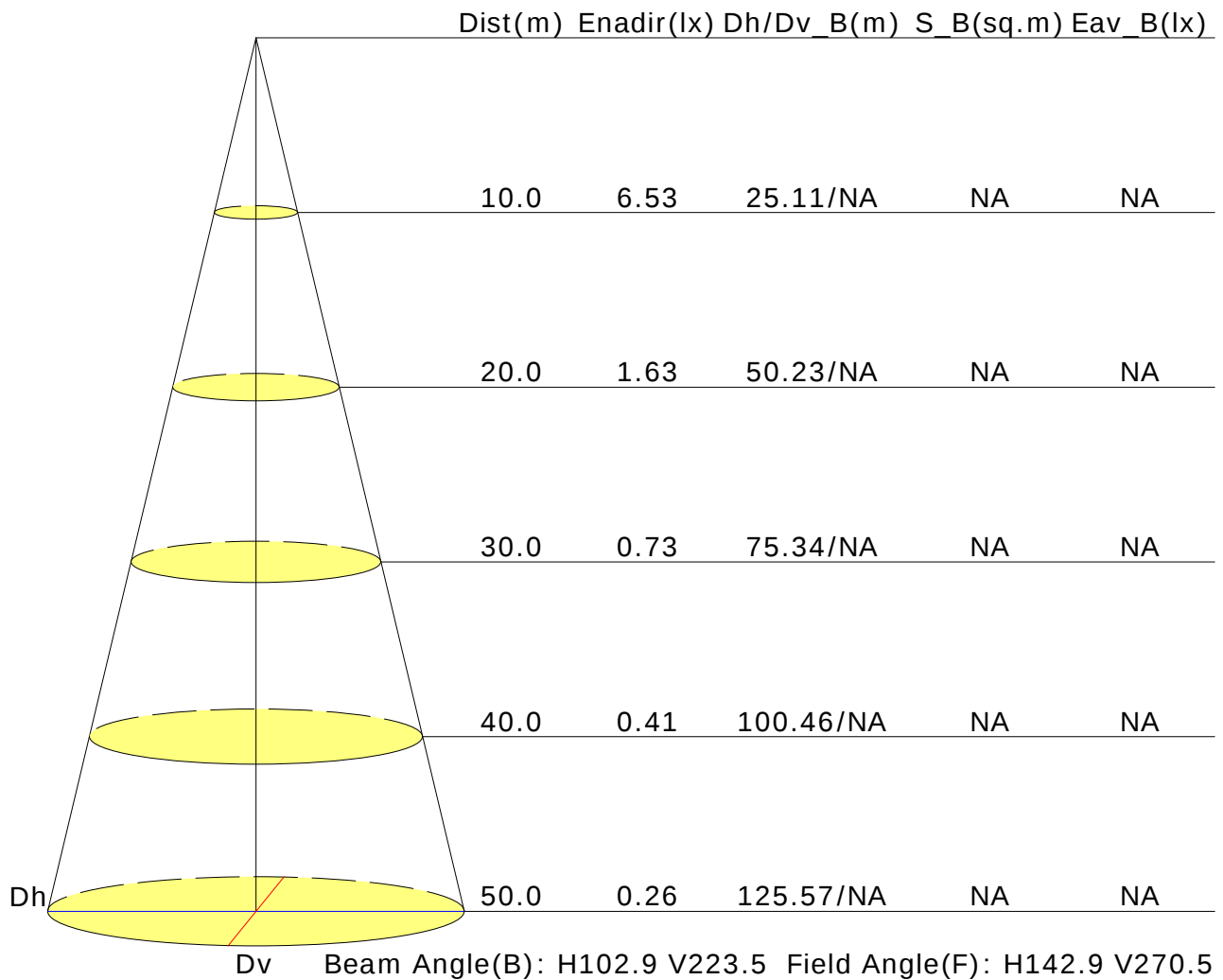
Test Device: LSG-1800B

Distance: 12.654 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	12.4	13.7	13.0	14.3	15.0	17.3	18.6	17.9	19.1	19.8
3H	13.4	14.6	14.0	15.2	15.9	20.6	21.7	21.2	22.4	23.1
4H	13.6	14.8	14.3	15.4	16.1	22.4	23.5	23.1	24.2	24.9
6H	13.8	14.8	14.4	15.5	16.2	24.4	25.5	25.1	26.1	26.9
8H	13.8	14.8	14.4	15.4	16.2	25.5	26.5	26.2	27.2	28.0
12H	13.7	14.7	14.4	15.4	16.2	26.7	27.7	27.4	28.4	29.2
X=4H Y=2H	14.3	15.4	15.0	16.1	16.8	17.7	18.8	18.3	19.4	20.1
3H	15.8	16.8	16.4	17.4	18.2	21.1	22.1	21.8	22.8	23.6
4H	16.4	17.2	17.0	17.9	18.7	23.1	24.0	23.8	24.7	25.5
6H	16.7	17.5	17.4	18.2	19.1	25.3	26.1	26.0	26.8	27.6
8H	16.8	17.5	17.5	18.3	19.1	26.5	27.2	27.2	27.9	28.8
12H	16.8	17.5	17.5	18.2	19.1	27.8	28.5	28.5	29.2	30.1
X=8H Y=4H	18.1	18.8	18.8	19.5	20.4	23.3	24.0	24.0	24.8	25.6
6H	18.9	19.5	19.6	20.2	21.1	25.6	26.3	26.4	27.0	27.9
8H	19.1	19.7	19.9	20.4	21.3	27.0	27.5	27.7	28.3	29.2
12H	19.3	19.8	20.0	20.5	21.5	28.4	28.9	29.2	29.7	30.6
X=12H Y=4H	18.6	19.3	19.3	20.0	20.9	23.3	24.0	24.0	24.7	25.6
6H	19.6	20.2	20.4	21.0	21.9	25.7	26.2	26.4	27.0	27.9
8H	20.1	20.6	20.8	21.3	22.3	27.0	27.5	27.8	28.3	29.2
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.1					+0.4/-0.4				
S=1.5H	+0.4/-0.4					+0.7/-0.8				
S=2.0H	+0.6/-0.8					+1.1/-1.3				

Calculate in accordance with CIE Pub.117. The table is revised with 3461lm ($8\log(F/F_0) = 4.3$).

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.50									
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	0.45	0.52	0.59	0.64	0.71	0.77	0.80	0.86	0.89	
	0.30		0.36	0.43	0.51	0.56	0.63	0.69	0.73	0.80	0.84	
	0.20		0.30	0.37	0.44	0.49	0.57	0.63	0.68	0.74	0.79	
0.50	0.50	0.20	0.41	0.48	0.54	0.58	0.65	0.70	0.73	0.78	0.81	
	0.30		0.34	0.40	0.47	0.51	0.58	0.64	0.67	0.73	0.77	
	0.20		0.29	0.35	0.41	0.46	0.53	0.58	0.63	0.69	0.73	
0.30	0.50	0.20	0.38	0.44	0.49	0.53	0.59	0.63	0.66	0.70	0.74	
	0.30		0.32	0.37	0.43	0.47	0.54	0.58	0.62	0.67	0.70	
	0.20		0.27	0.32	0.38	0.43	0.49	0.54	0.58	0.63	0.67	
0.00	0.00	0.00	0.23	0.27	0.33	0.36	0.42	0.46	0.50	0.54	0.58	
Rating:105W 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 = 1.50									
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	1.06	0.93	0.82	0.74	0.61	0.53	0.47	0.38	0.32	
	0.30		0.89	0.80	0.71	0.65	0.56	0.49	0.43	0.36	0.31	
	0.20		0.76	0.70	0.63	0.58	0.51	0.45	0.40	0.34	0.29	
0.50	0.50	0.20	0.99	0.87	0.76	0.68	0.57	0.51	0.44	0.36	0.30	
	0.30		0.83	0.75	0.67	0.61	0.52	0.46	0.41	0.34	0.29	
	0.20		0.72	0.66	0.60	0.55	0.48	0.42	0.38	0.32	0.28	
0.30	0.50	0.20	0.92	0.80	0.70	0.63	0.53	0.46	0.41	0.33	0.28	
	0.30		0.78	0.71	0.63	0.57	0.49	0.43	0.38	0.32	0.27	
	0.20		0.69	0.63	0.57	0.52	0.45	0.40	0.36	0.30	0.26	
0.00	0.00	0.00	0.57	0.52	0.47	0.43	0.38	0.33	0.30	0.25	0.22	
Rating:105W 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 = 1.50									
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	0.37	0.39	0.39	0.40	0.41	0.41	0.42	0.42	0.42	
	0.30		0.30	0.31	0.32	0.33	0.35	0.36	0.37	0.38	0.38	
	0.20		0.24	0.26	0.27	0.28	0.30	0.31	0.32	0.34	0.35	
0.50	0.50	0.20	0.36	0.37	0.38	0.39	0.39	0.40	0.40	0.40	0.40	
	0.30		0.29	0.31	0.32	0.32	0.34	0.35	0.35	0.36	0.37	
	0.20		0.24	0.25	0.26	0.27	0.29	0.30	0.31	0.33	0.34	
0.30	0.50	0.20	0.35	0.36	0.37	0.37	0.38	0.38	0.38	0.39	0.39	
	0.30		0.29	0.30	0.31	0.32	0.33	0.34	0.34	0.35	0.36	
	0.20		0.24	0.25	0.26	0.27	0.28	0.30	0.30	0.32	0.33	
0.00	0.00	0.00	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	
Rating:105W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												