

Report No.:

Test Time: 28.10.2020 13:44

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 180 40LED 50W 5000K opal

Luminous Length (mm): 1200

Luminous Width (mm): 180

Luminous Height (mm): 35

Voltage: 221.3 V

Current: 0.226 A

Power: 48.93 W

Power Factor: 0.975

## Photometric Results

CIE Class: Direct

Measurement Flux: 5415.8 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 5415.8 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.7, 163.4, 164.1, 163.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.4, 110.6, 111.0, 111.0

Luminaire Efficacy Rating (LER): 110.73

Central Intensity: 1893 cd

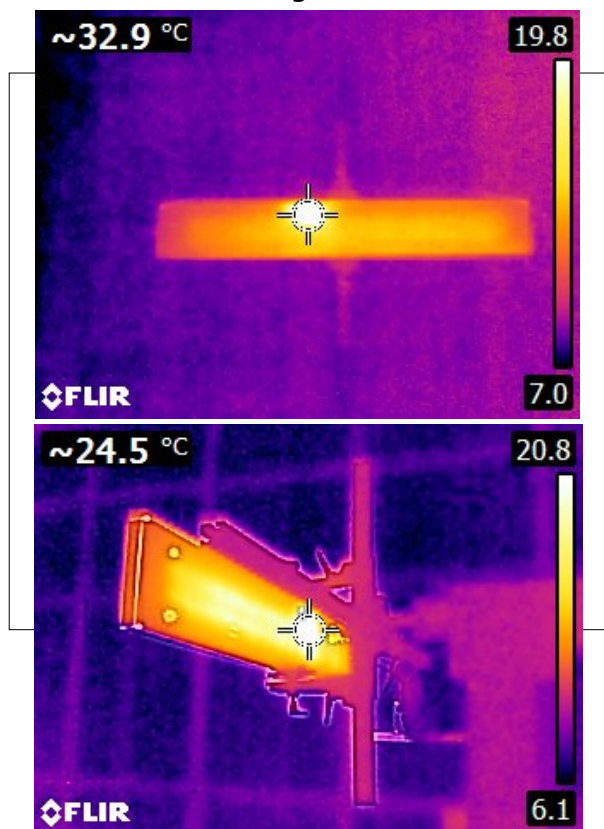
Max. Intensity: 1898.17 cd

Pos of Max. Intensity: H135 V0

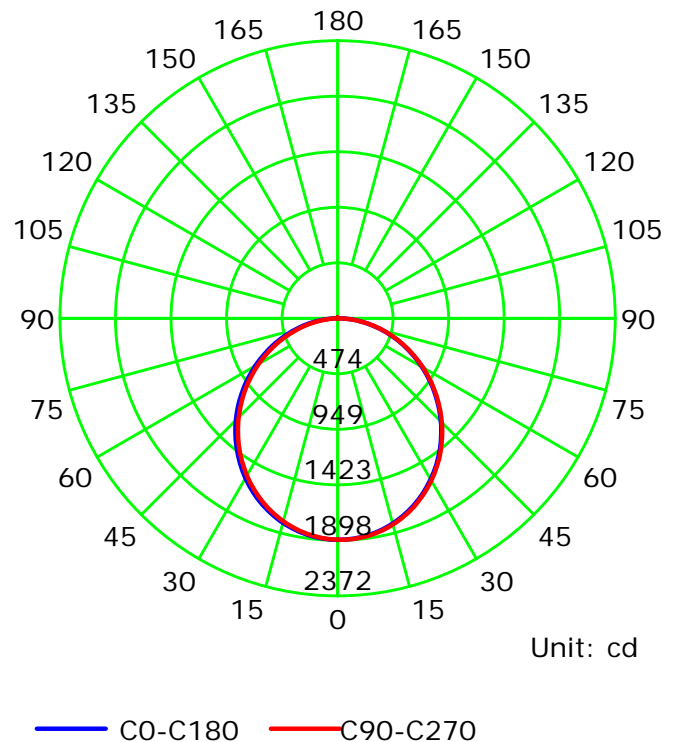
S/MH(C0/C180): 1.24

S/MH(C90/C270): 1.24

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

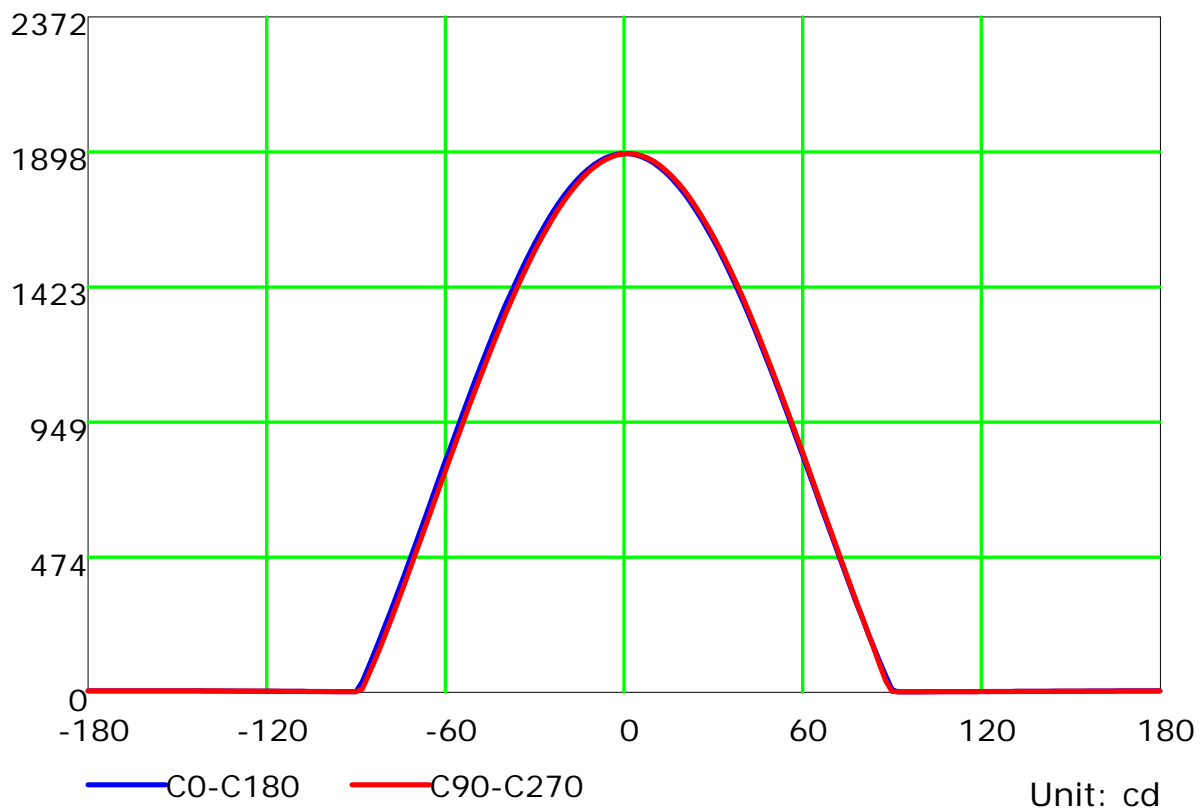
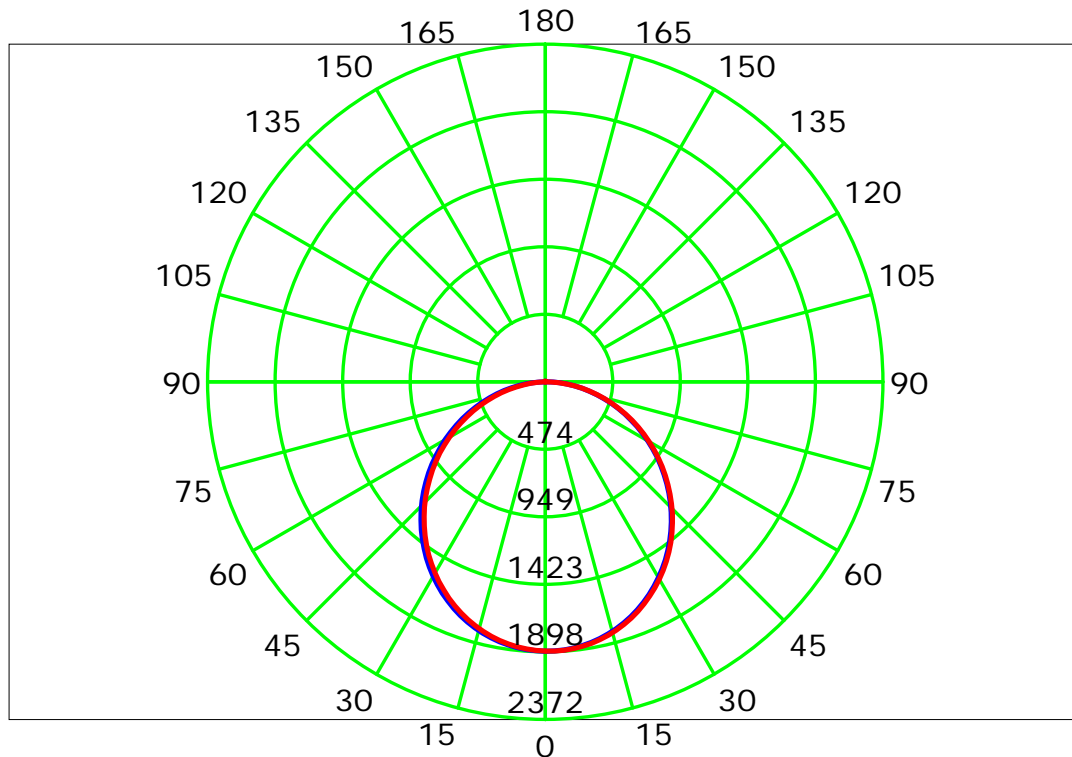
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

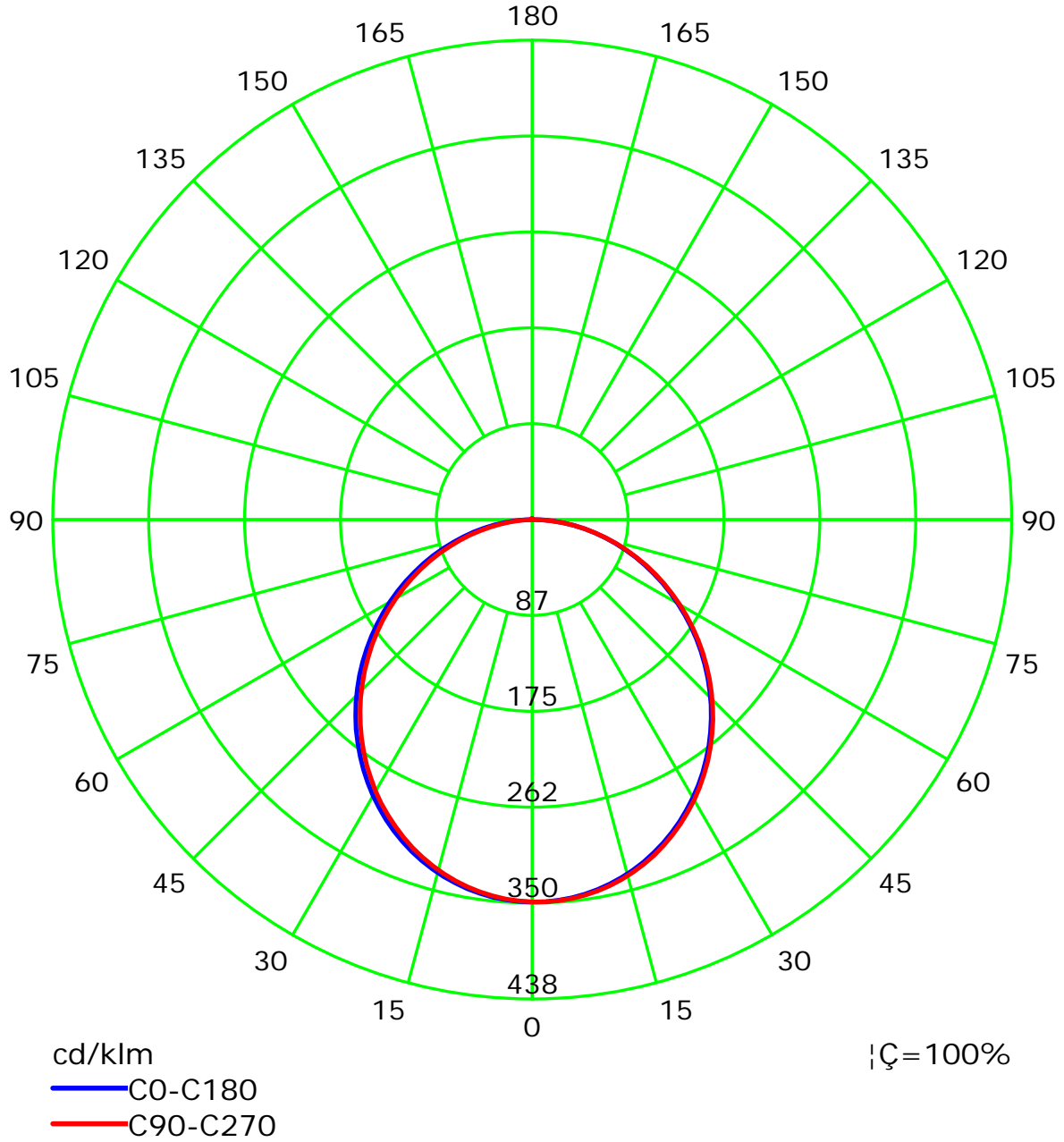
## Luminous Intensity Distribution Curve



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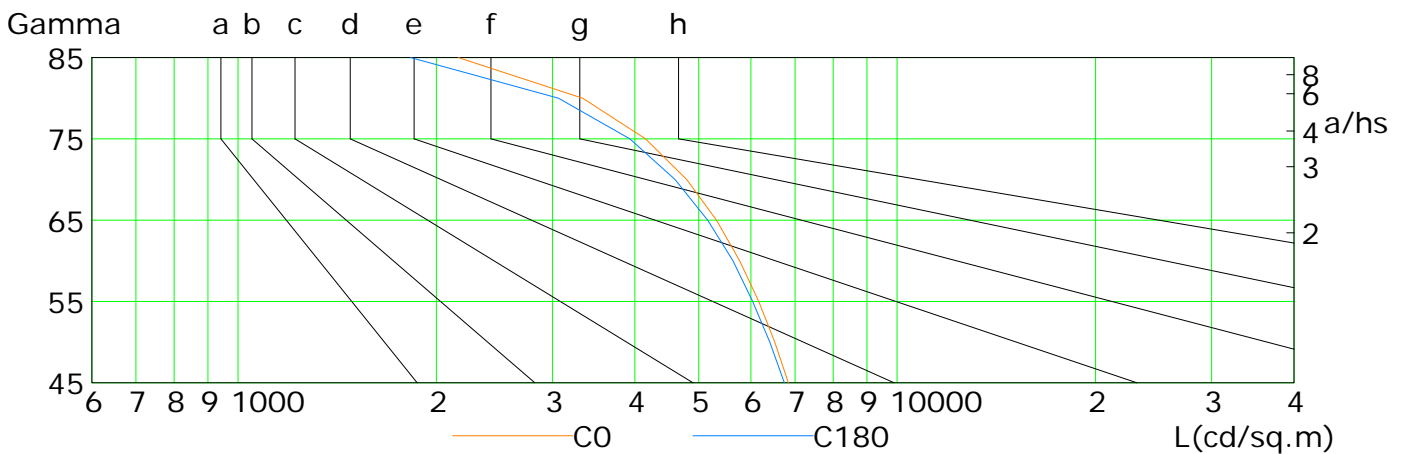
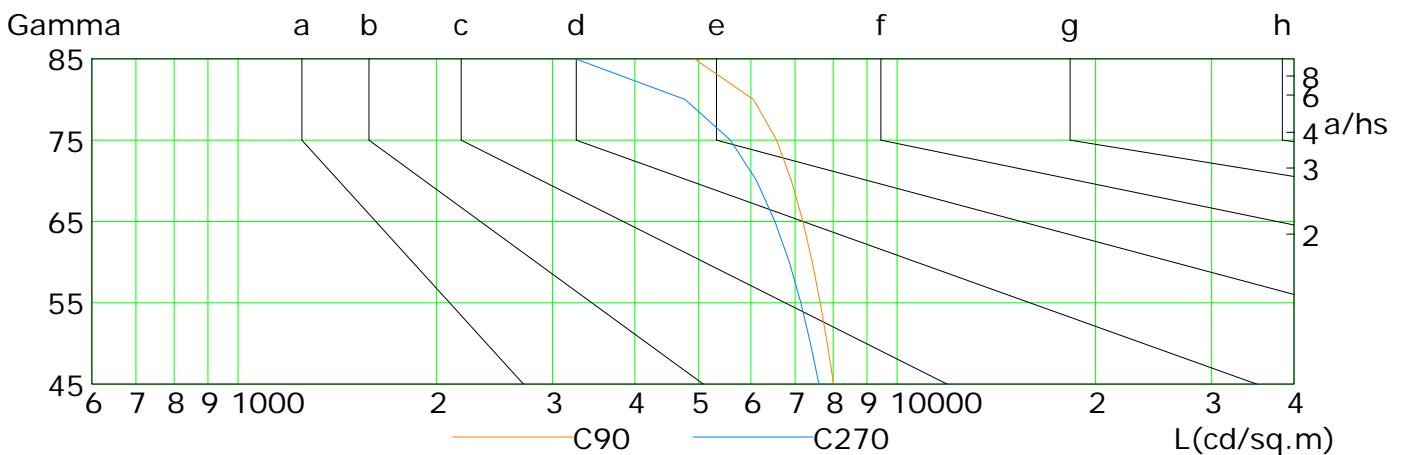
## Luminous Intensity Distribution Curve(cd/klm)



## 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

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	6839	6520	6168	5771	5321	4795	4154	3333	2159
C90	8012	7834	7645	7434	7194	6912	6566	6054	4926
C180	6744	6410	6038	5636	5158	4602	3931	3064	1827
C270	7609	7386	7145	6863	6526	6121	5586	4767	3251

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Test Type: TYPE C

Temperature:

Operator:

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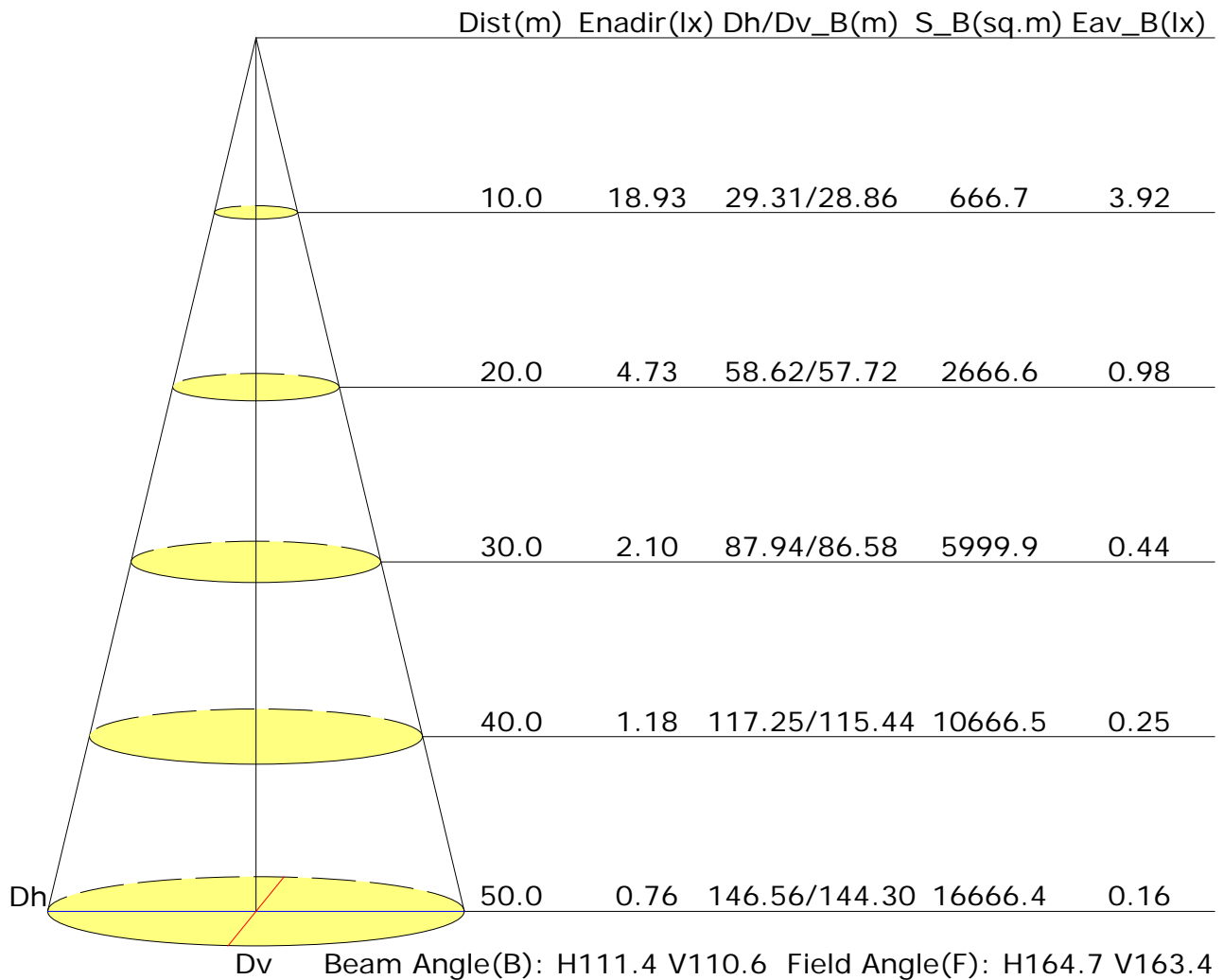
Test Device: LSG-1800B

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	18.9	20.3	19.2	20.6	20.8	19.3	20.7	19.6	20.9	21.1
3H	20.4	21.7	20.7	21.9	22.2	20.8	22.1	21.2	22.4	22.7
4H	21.0	22.2	21.3	22.5	22.8	21.5	22.7	21.8	23.0	23.3
6H	21.4	22.5	21.7	22.8	23.1	22.0	23.1	22.4	23.4	23.8
8H	21.5	22.6	21.9	22.9	23.3	22.2	23.2	22.5	23.6	23.9
12H	21.6	22.6	22.0	23.0	23.3	22.2	23.3	22.6	23.6	24.0
X=4H Y=2H	19.6	20.8	19.9	21.1	21.4	19.8	21.0	20.2	21.3	21.7
3H	21.2	22.3	21.6	22.6	23.0	21.6	22.6	22.0	23.0	23.3
4H	21.9	22.9	22.3	23.2	23.6	22.4	23.3	22.8	23.7	24.1
6H	22.5	23.3	22.9	23.7	24.1	23.0	23.8	23.4	24.2	24.6
8H	22.6	23.4	23.1	23.8	24.2	23.2	24.0	23.7	24.4	24.8
12H	22.8	23.4	23.2	23.9	24.3	23.4	24.0	23.8	24.5	24.9
X=8H Y=4H	22.2	23.0	22.7	23.4	23.8	22.6	23.4	23.1	23.8	24.2
6H	22.9	23.5	23.4	24.0	24.4	23.4	24.0	23.9	24.4	24.9
8H	23.1	23.7	23.6	24.2	24.6	23.7	24.2	24.2	24.7	25.2
12H	23.3	23.8	23.8	24.3	24.8	23.9	24.3	24.4	24.8	25.3
X=12H Y=4H	22.2	22.9	22.7	23.4	23.8	22.6	23.3	23.1	23.8	24.2
6H	23.0	23.5	23.5	24.0	24.5	23.4	24.0	23.9	24.4	24.9
8H	23.2	23.7	23.7	24.2	24.7	23.7	24.2	24.2	24.7	25.2
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.3/-0.5					+0.4/-0.5				
S=2.0H	+0.5/-0.9					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 5416lm ( $8\log(F/F_0) = 5.9$ ).

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Test Lab:

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Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.682 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	0.56	0.66	0.74	0.79	0.86	0.92	0.95	1.00	1.03	
	0.30		0.48	0.59	0.66	0.72	0.80	0.86	0.90	0.96	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	0.99	
	0.30		0.47	0.57	0.65	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	0.74	0.80	0.85	0.88	0.92	0.95	
	0.30		0.47	0.56	0.63	0.68	0.76	0.81	0.84	0.89	0.92	
	0.20		0.42	0.52	0.59	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	
<p>Rating: 49W 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	0.83	0.71	0.62	0.50	0.41	0.36	0.28	0.23	
	0.30		0.84	0.71	0.62	0.55	0.45	0.38	0.33	0.26	0.22	
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.31	0.25	0.21	
0.50	0.50	0.20	0.97	0.80	0.68	0.60	0.48	0.43	0.34	0.26	0.22	
	0.30		0.82	0.70	0.60	0.53	0.44	0.37	0.32	0.25	0.21	
	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	0.46	0.38	0.32	0.25	0.21	
	0.30		0.81	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.20	
	0.20		0.71	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	0.32	0.27	0.23	0.18	0.15	
<p>Rating: 49W 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	0.17	0.18	0.19	0.20	0.21	0.21	0.21	0.22	0.22
	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	0.09	0.11	0.13	0.14	0.16	0.17
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.21
	0.30		0.10	0.11	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	0.15	0.17
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.16	0.18	0.18
	0.20		0.05	0.06	0.08	0.09	0.11	0.12	0.13	0.15	0.16
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<p>Rating: 49W 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>											