

Report No.: 1

Test Time: 30.01.2020 09:23

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 HE 4x28LED 125W 5000K 150x55gr.

Luminous Length (mm): 404

Luminous Width (mm): 153

Luminous Height (mm): 80

Voltage: 221.1 V

Current: 0.564 A

Power: 123.93 W

Power Factor: 0.992

Photometric Results

CIE Class: Direct

Measurement Flux: 18610.3 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 18610.3 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 110.8, 150.8, 131.8, 135.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 58.4, 143.8, 70.7, 70.3

Luminaire Efficacy Rating (LER): 150.22

Central Intensity: 3051.05 cd

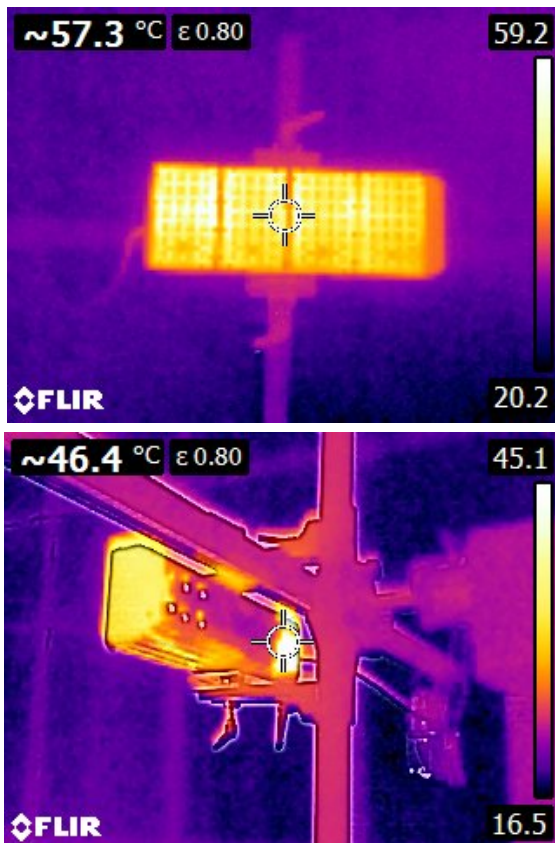
Max. Intensity: 15265.46 cd

Pos of Max. Intensity: H247.5 V64

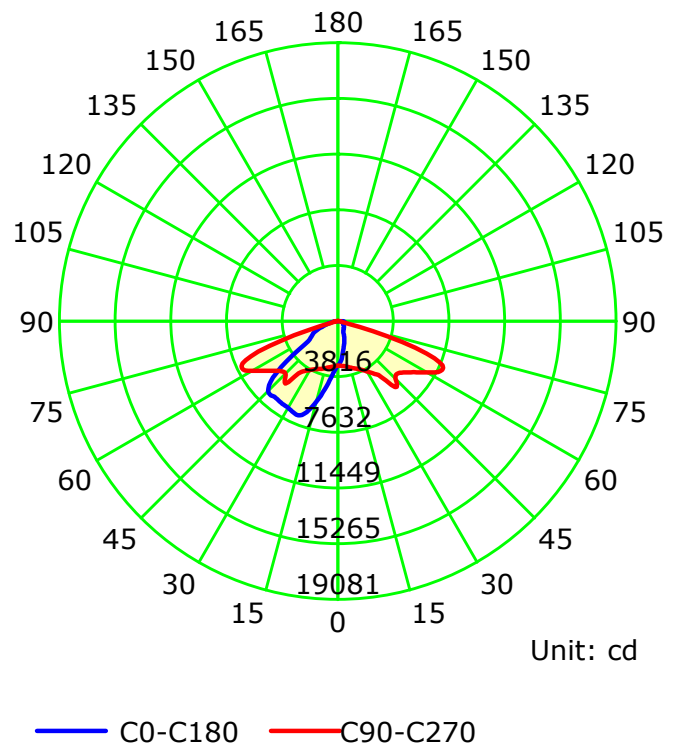
S/MH(C0/C180): 1.81

S/MH(C90/C270): 2.28

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

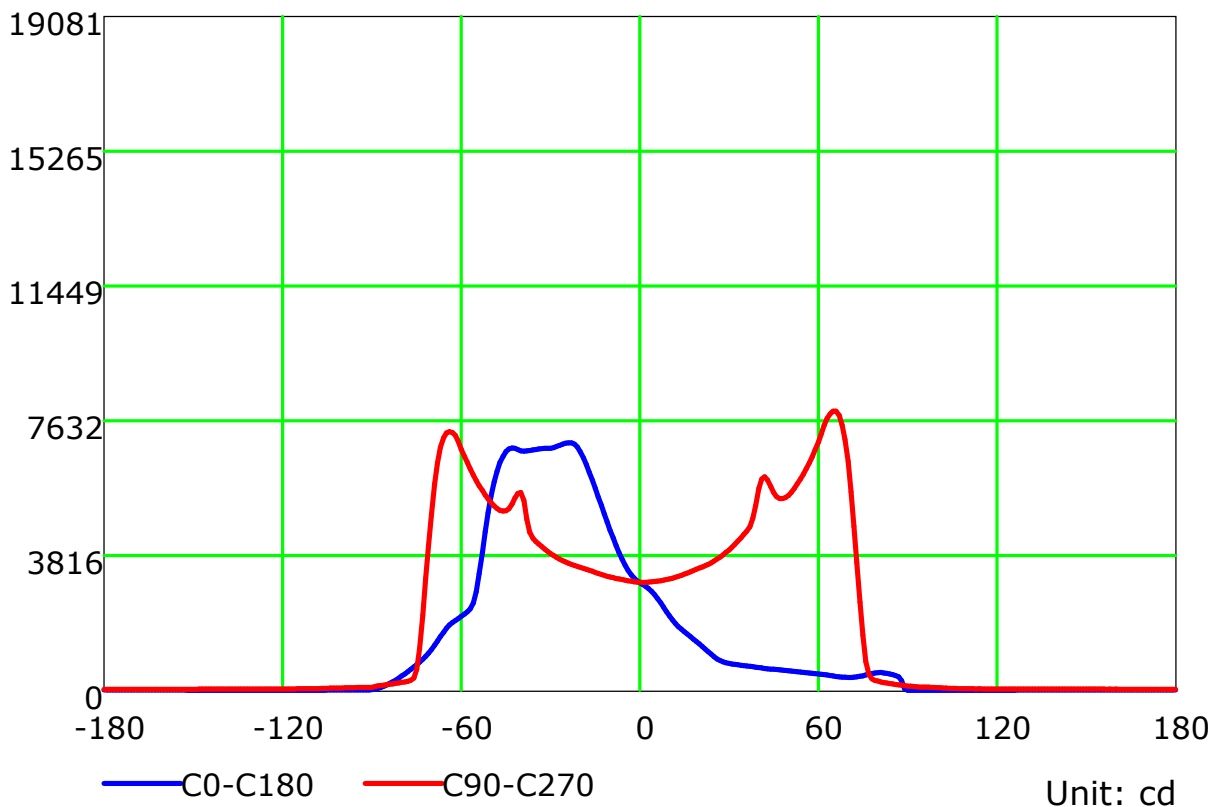
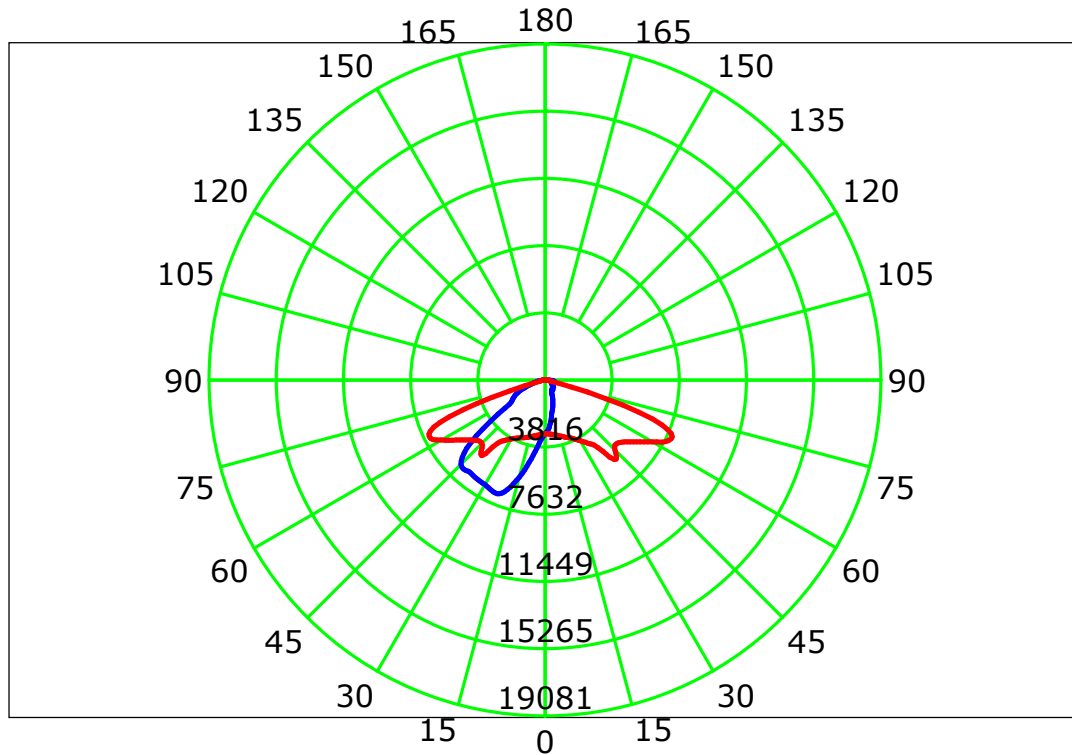
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

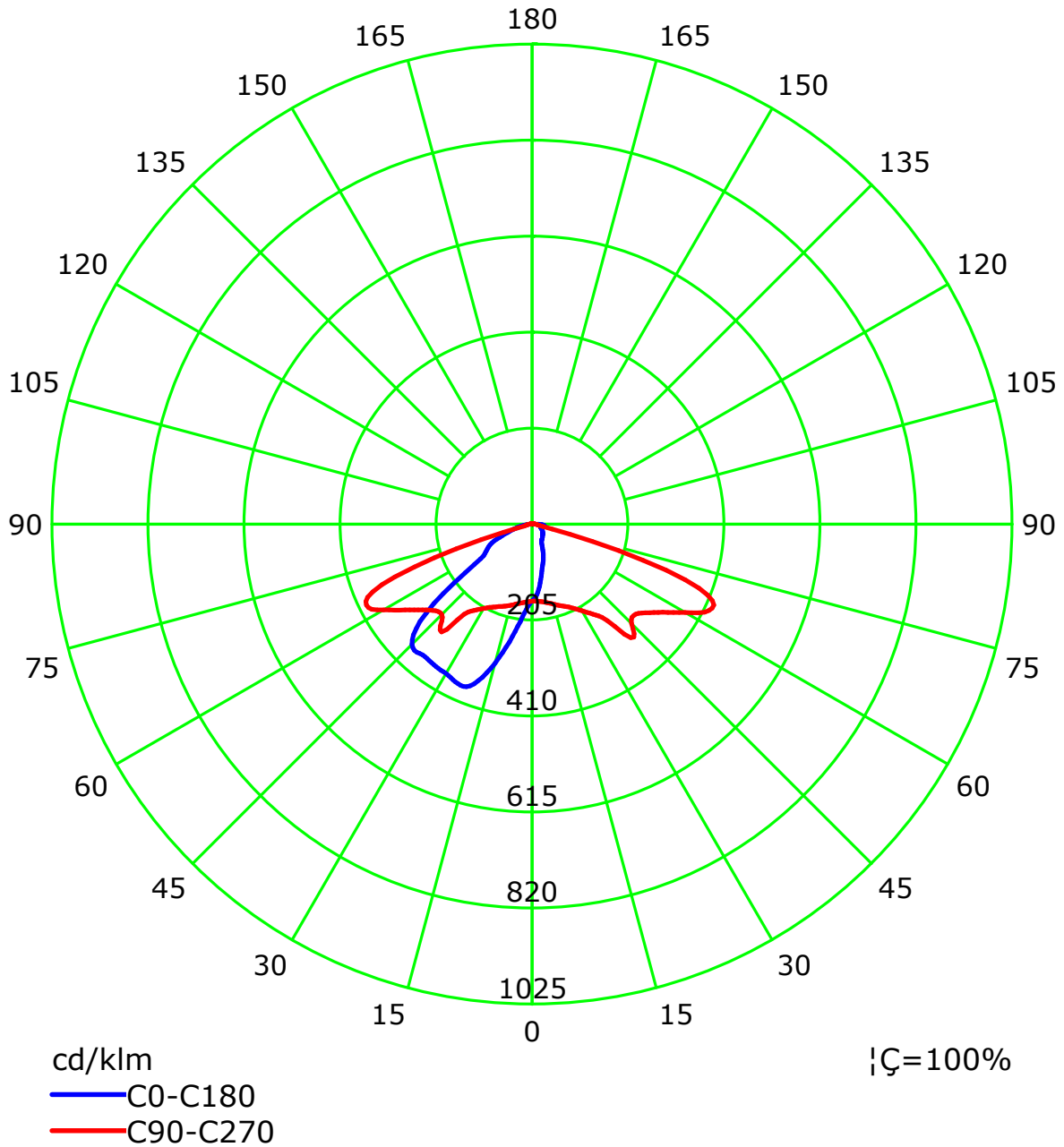
Luminous Intensity Distribution Curve



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)



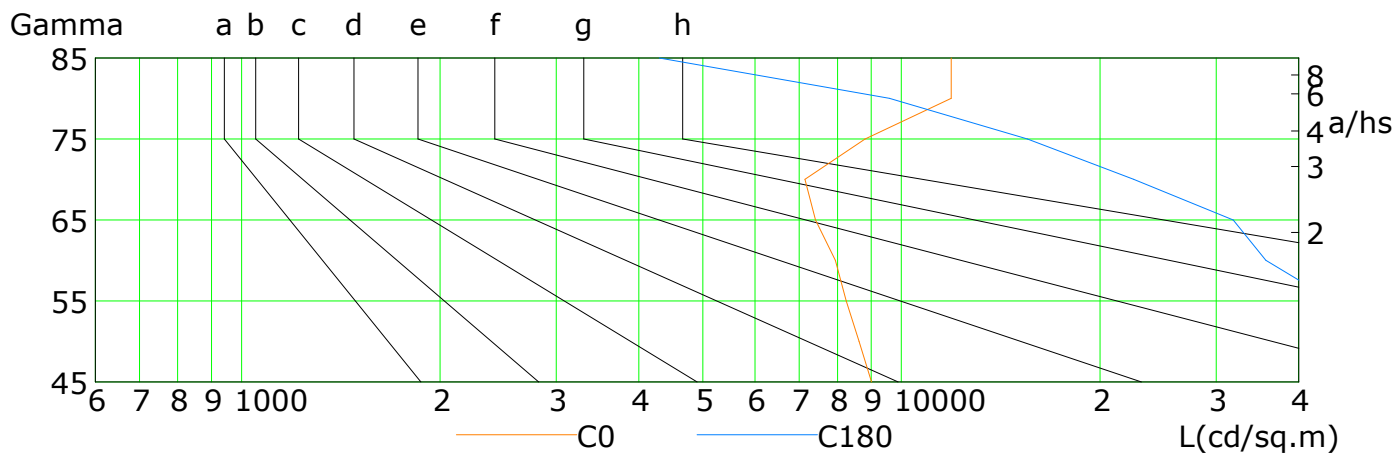
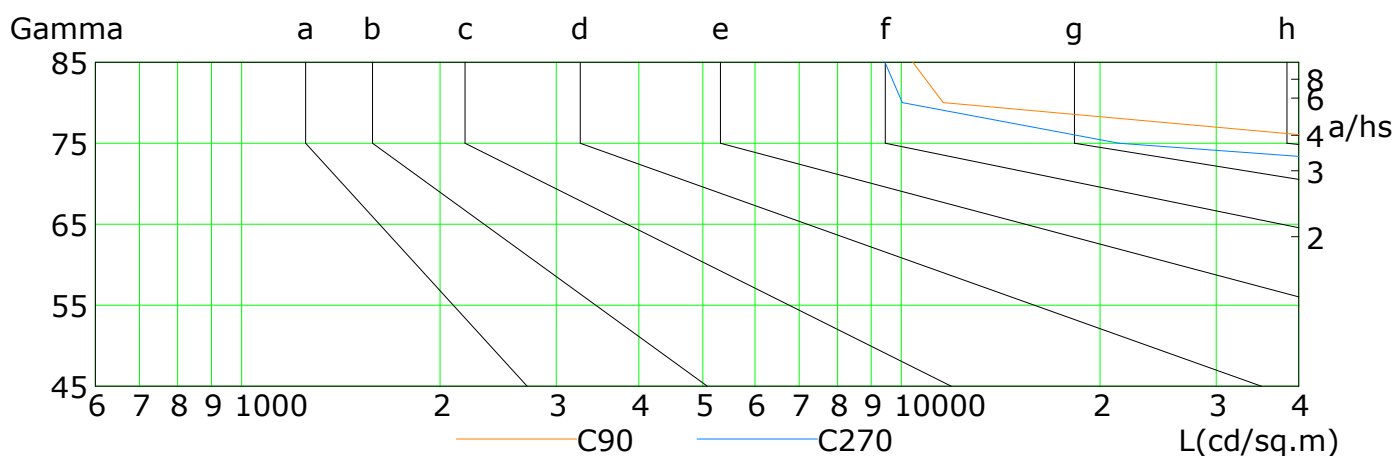
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

a b c d e f g h

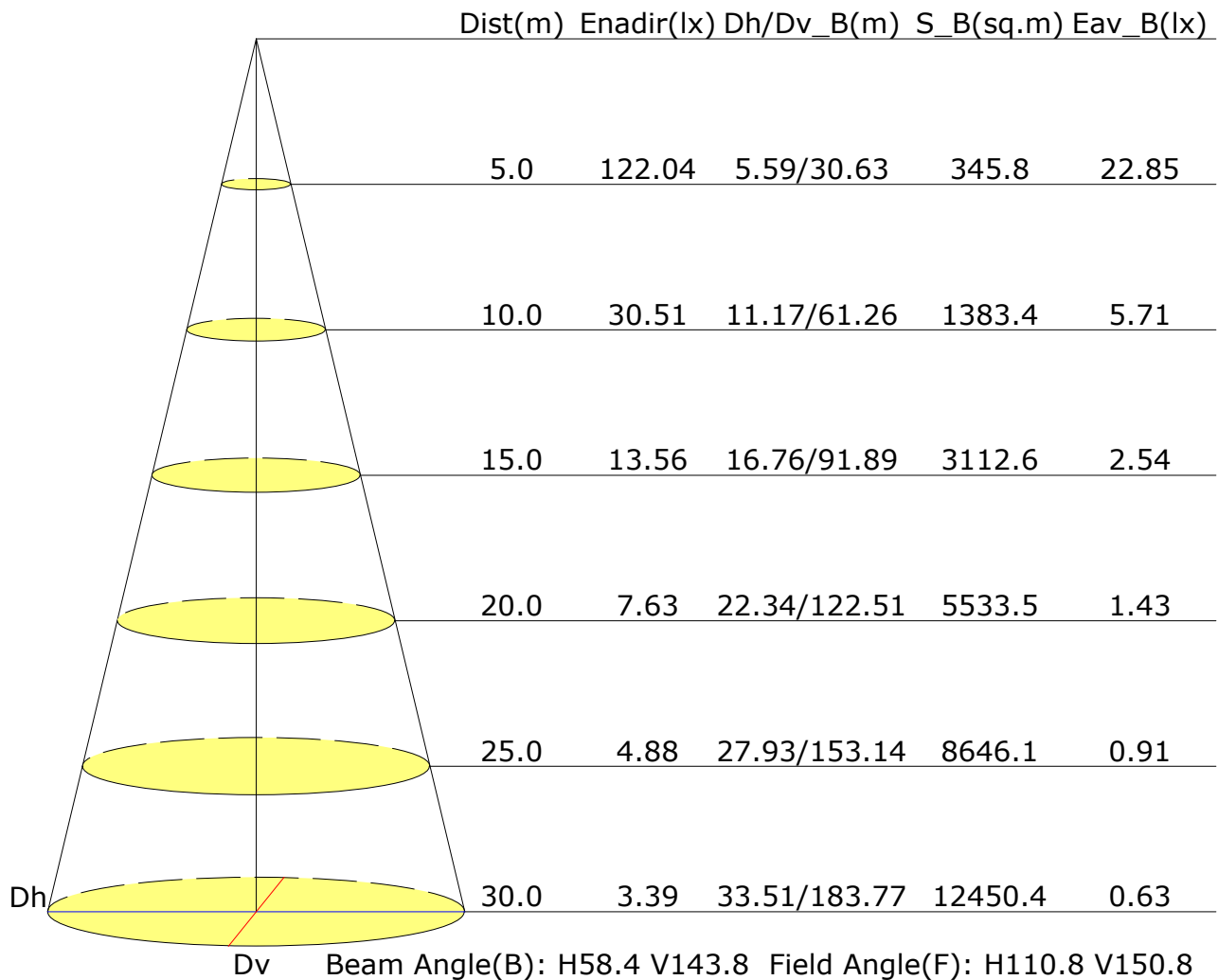


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	9008	8629	8245	7940	7406	7142	8806	11903	11895
C90	107050	112547	134721	169381	212407	198567	56251	11577	10412
C180	101655	85223	45154	35687	31828	22498	15520	9596	4298
C270	97193	108370	130716	164467	196019	152377	21360	10025	9440

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

Gamma Plane (°):0.0-180.0:1.0
 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	14.0	15.5	14.3	15.7	16.0	27.7	29.2	28.0	29.5	29.7
3H	15.6	17.0	16.0	17.3	17.6	31.9	33.3	32.2	33.6	33.9
4H	16.7	18.0	17.1	18.3	18.6	32.3	33.6	32.7	33.9	34.2
6H	18.2	19.4	18.6	19.8	20.1	32.2	33.4	32.6	33.8	34.1
8H	19.1	20.2	19.5	20.6	20.9	32.2	33.3	32.6	33.7	34.1
12H	19.8	20.9	20.2	21.3	21.7	32.1	33.3	32.5	33.6	34.0
X=4H Y=2H	15.8	17.1	16.2	17.5	17.8	27.5	28.8	27.9	29.1	29.4
3H	17.3	18.4	17.7	18.8	19.2	31.8	32.9	32.2	33.3	33.7
4H	18.3	19.3	18.7	19.7	20.1	32.3	33.3	32.7	33.7	34.1
6H	19.7	20.6	20.1	21.0	21.4	32.2	33.1	32.7	33.5	34.0
8H	20.5	21.3	21.0	21.8	22.2	32.2	33.0	32.7	33.4	33.9
12H	21.4	22.1	21.8	22.5	23.0	32.2	32.9	32.7	33.4	33.8
X=8H Y=4H	19.9	20.7	20.4	21.2	21.6	32.2	33.0	32.6	33.4	33.9
6H	21.1	21.8	21.6	22.2	22.7	32.2	32.8	32.7	33.3	33.8
8H	21.8	22.4	22.3	22.9	23.4	32.2	32.7	32.7	33.2	33.7
12H	22.7	23.2	23.2	23.7	24.2	32.1	32.6	32.7	33.1	33.7
X=12H Y=4H	20.0	20.7	20.5	21.2	21.6	32.2	32.9	32.6	33.3	33.8
6H	21.2	21.8	21.7	22.3	22.8	32.1	32.7	32.6	33.2	33.7
8H	22.0	22.5	22.5	23.0	23.5	32.1	32.6	32.7	33.1	33.7
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.2					+0.4/-0.5				
S=1.5H	+0.7/-0.8					+1.9/-2.6				
S=2.0H	+1.0/-1.8					+3.5/-5.4				

Calculate in accordance with CIE Pub.117. The table is revised with 18610lm ($8\log(F/F_0) = 10.2$).

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:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 2.00									
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	NA	0.65	0.71	0.77	0.85	0.90	0.94	0.98	1.01	
	0.30		NA	0.57	0.64	0.70	0.79	0.85	0.89	0.94	0.98	
	0.20		NA	0.51	0.58	0.64	0.74	0.80	0.85	0.91	0.95	
0.50	0.50	0.20	NA	0.63	0.69	0.74	0.82	0.87	0.90	0.94	0.97	
	0.30		NA	0.56	0.62	0.68	0.77	0.82	0.86	0.91	0.94	
	0.20		NA	0.51	0.57	0.63	0.72	0.78	0.82	0.88	0.91	
0.30	0.50	0.20	NA	0.61	0.66	0.71	0.79	0.83	0.86	0.90	0.93	
	0.30		NA	0.55	0.61	0.66	0.75	0.80	0.83	0.88	0.91	
	0.20		NA	0.50	0.56	0.62	0.71	0.76	0.80	0.85	0.88	
0.00	0.00	0.00	NA	0.47	0.53	0.59	0.67	0.72	0.76	0.81	0.84	
Rating:124W 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 = 2.00									
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	NA	0.82	0.71	0.62	0.48	0.40	0.34	0.26	0.21	
	0.30		NA	0.70	0.62	0.54	0.43	0.36	0.31	0.25	0.20	
	0.20		NA	0.61	0.55	0.49	0.40	0.33	0.29	0.23	0.19	
0.50	0.50	0.20	NA	0.79	0.68	0.59	0.46	0.41	0.32	0.25	0.20	
	0.30		NA	0.68	0.60	0.53	0.42	0.35	0.30	0.24	0.19	
	0.20		NA	0.60	0.54	0.48	0.39	0.32	0.28	0.22	0.19	
0.30	0.50	0.20	NA	0.76	0.66	0.56	0.44	0.36	0.31	0.24	0.19	
	0.30		NA	0.67	0.59	0.51	0.40	0.34	0.29	0.23	0.19	
	0.20		NA	0.59	0.53	0.47	0.37	0.31	0.27	0.22	0.18	
0.00	0.00	0.00	0.97	0.50	0.44	0.38	0.30	0.25	0.21	0.17	0.14	
Rating:124W 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 = 2.00									
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	NA	0.19	0.19	0.20	0.21	0.21	0.22	0.22	0.23	
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		NA	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18	
0.50	0.50	0.20	NA	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.22	
	0.30		NA	0.12	0.13	0.14	0.15	0.17	0.17	0.18	0.19	
	0.20		NA	0.07	0.08	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	NA	0.17	0.18	0.19	0.19	0.20	0.20	0.20	0.21	
	0.30		NA	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		NA	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Rating:124W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												