

Report No.: 1

Test Time: 21.01.2020 18:43

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 HE 2x28LED 1.25A 50W 5000K 40x90gr

Luminous Length (mm): 200

Luminous Width (mm): 150

Luminous Height (mm): 80

Voltage: 221.4 V

Current: 0.240 A

Power: 52.59 W

Power Factor: 0.988

Photometric Results

CIE Class: Direct

Measurement Flux: 8014 lm

Downward Ratio: 98%

Total Rated Lamp Lumens: 8014.0 lm

Efficiency: 100%

Upward Ratio: 2%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 40.6, 145.5, 52.6, 53.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 26.0, 84.2, 33.8, 34.4

Luminaire Efficacy Rating (LER): 152.44

Central Intensity: 10114.29 cd

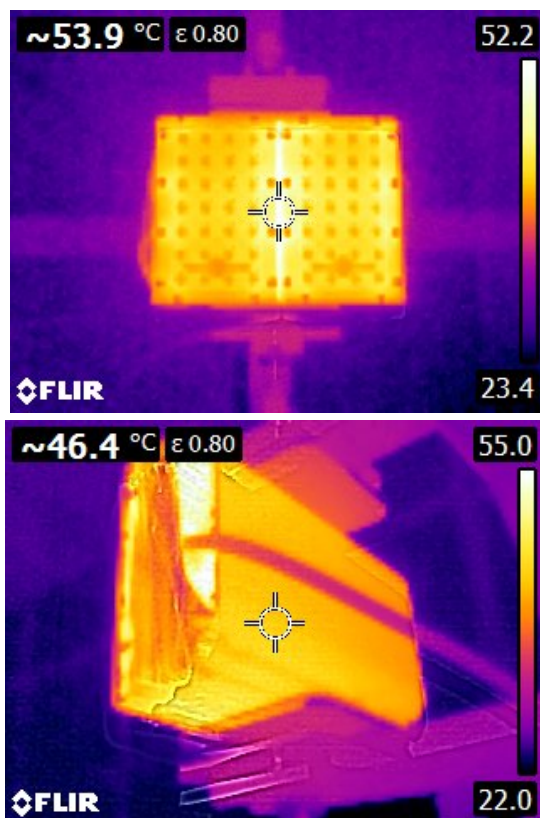
Max. Intensity: 10644.3 cd

Pos of Max. Intensity: H247.5 V6

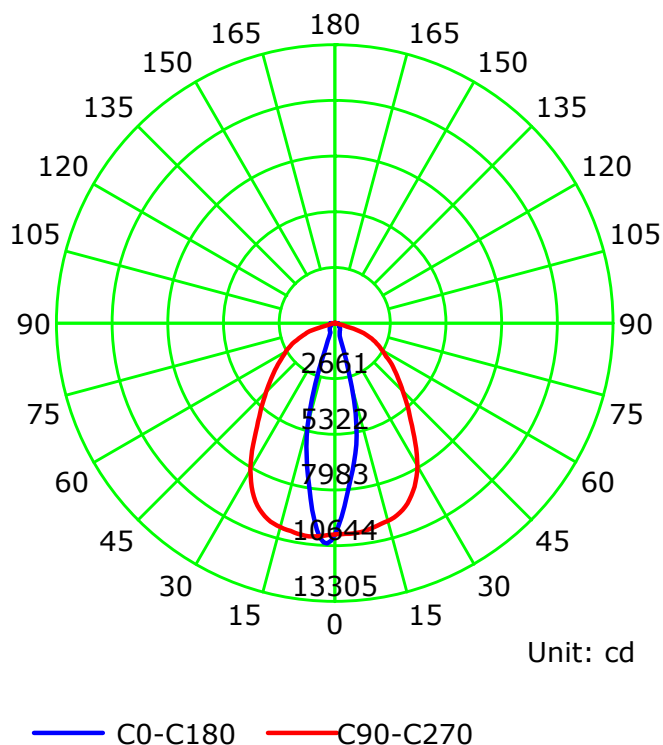
S/MH(C0/C180): 0.45

S/MH(C90/C270): 1.18

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

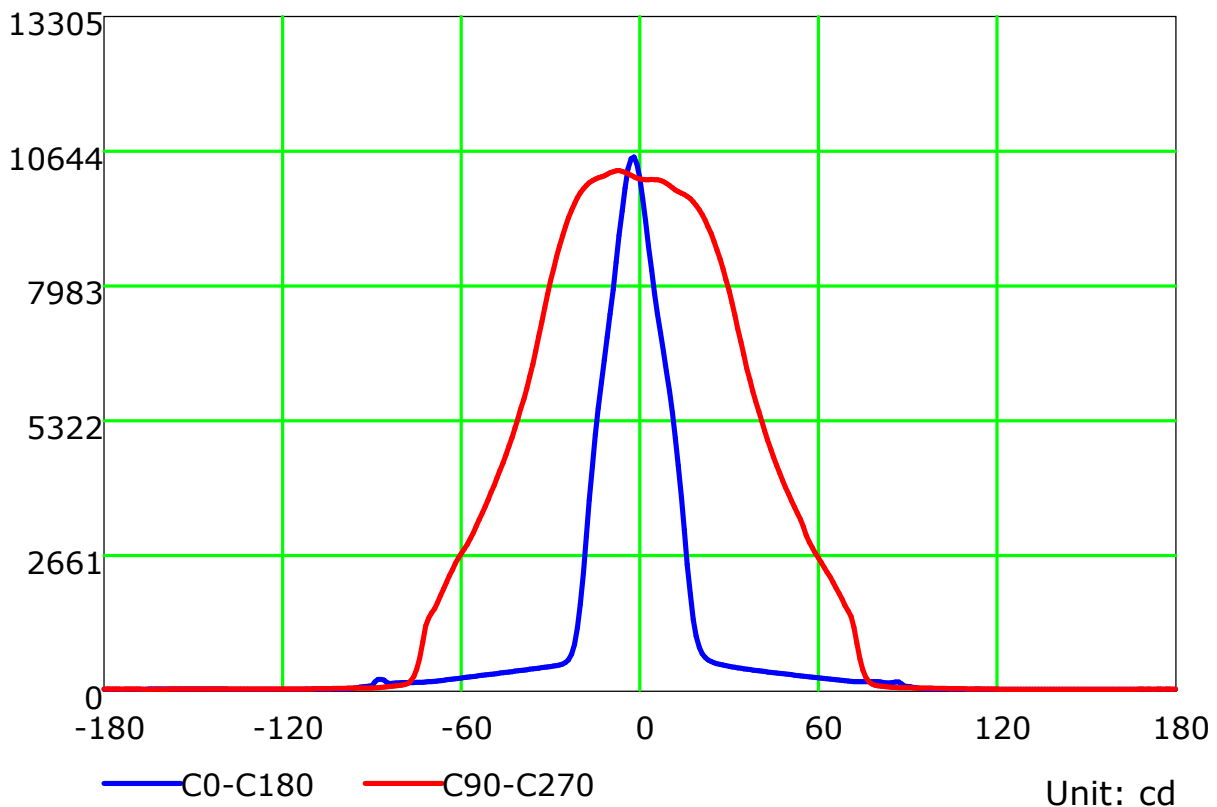
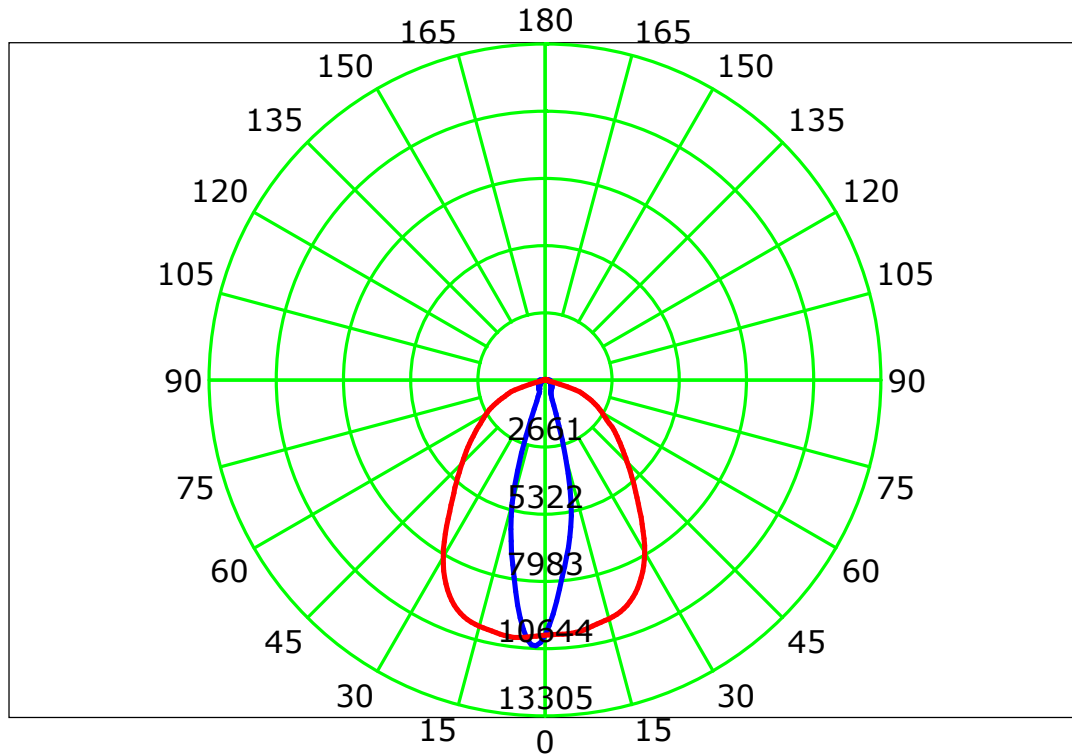
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

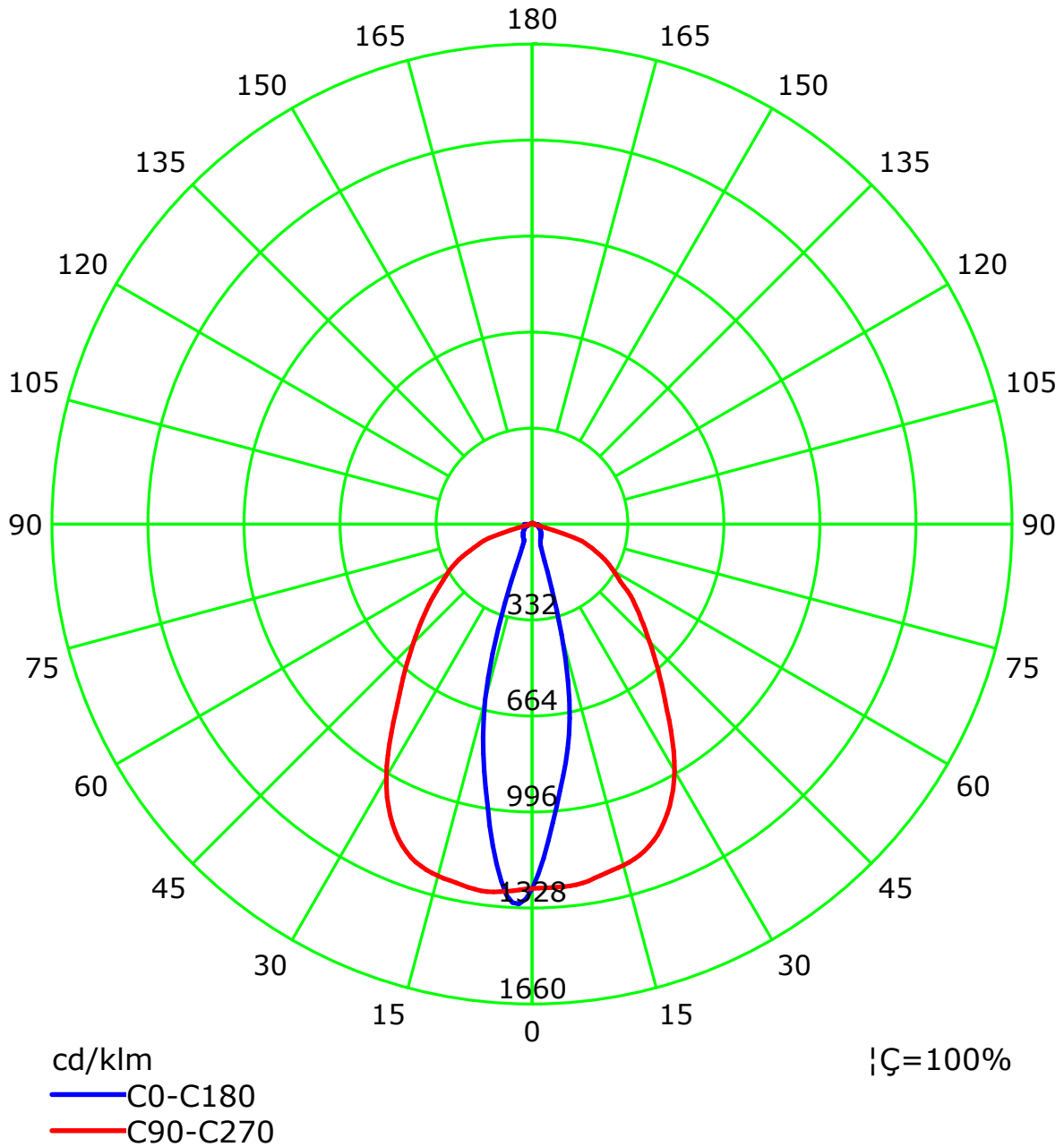
Luminous Intensity Distribution Curve



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)



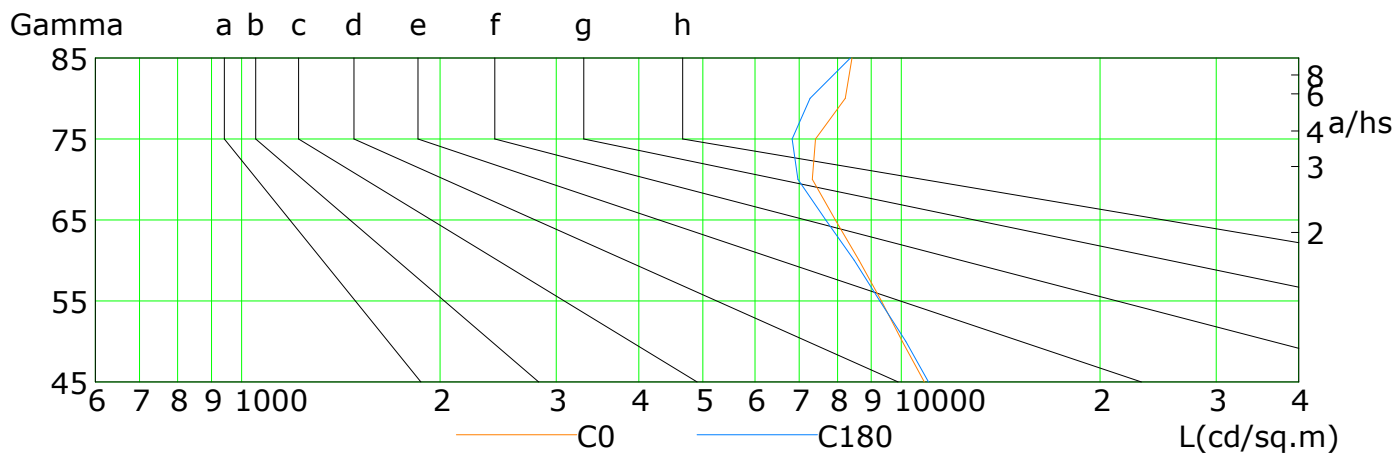
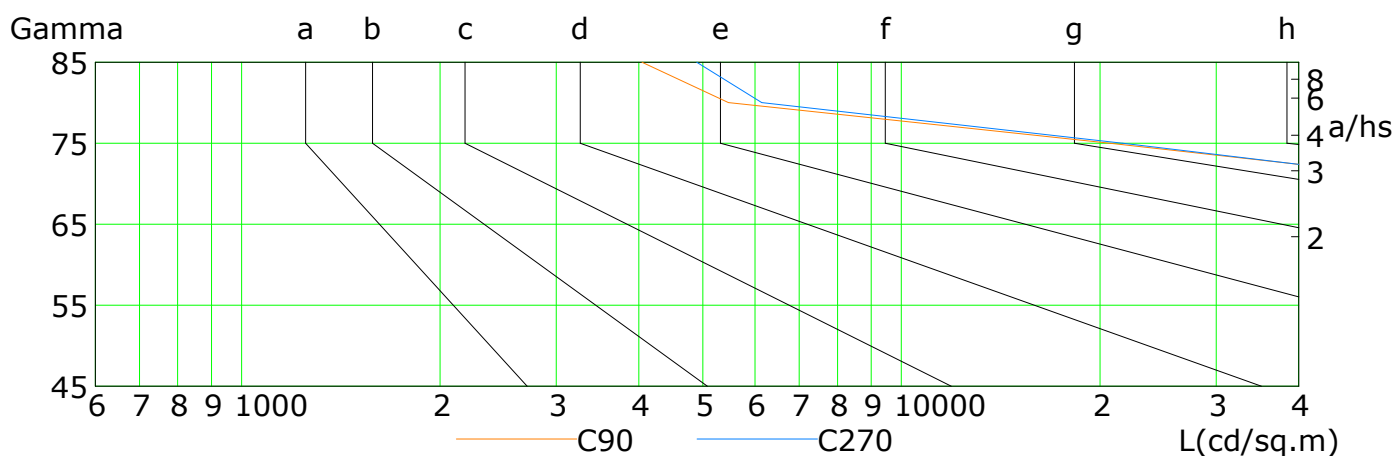
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

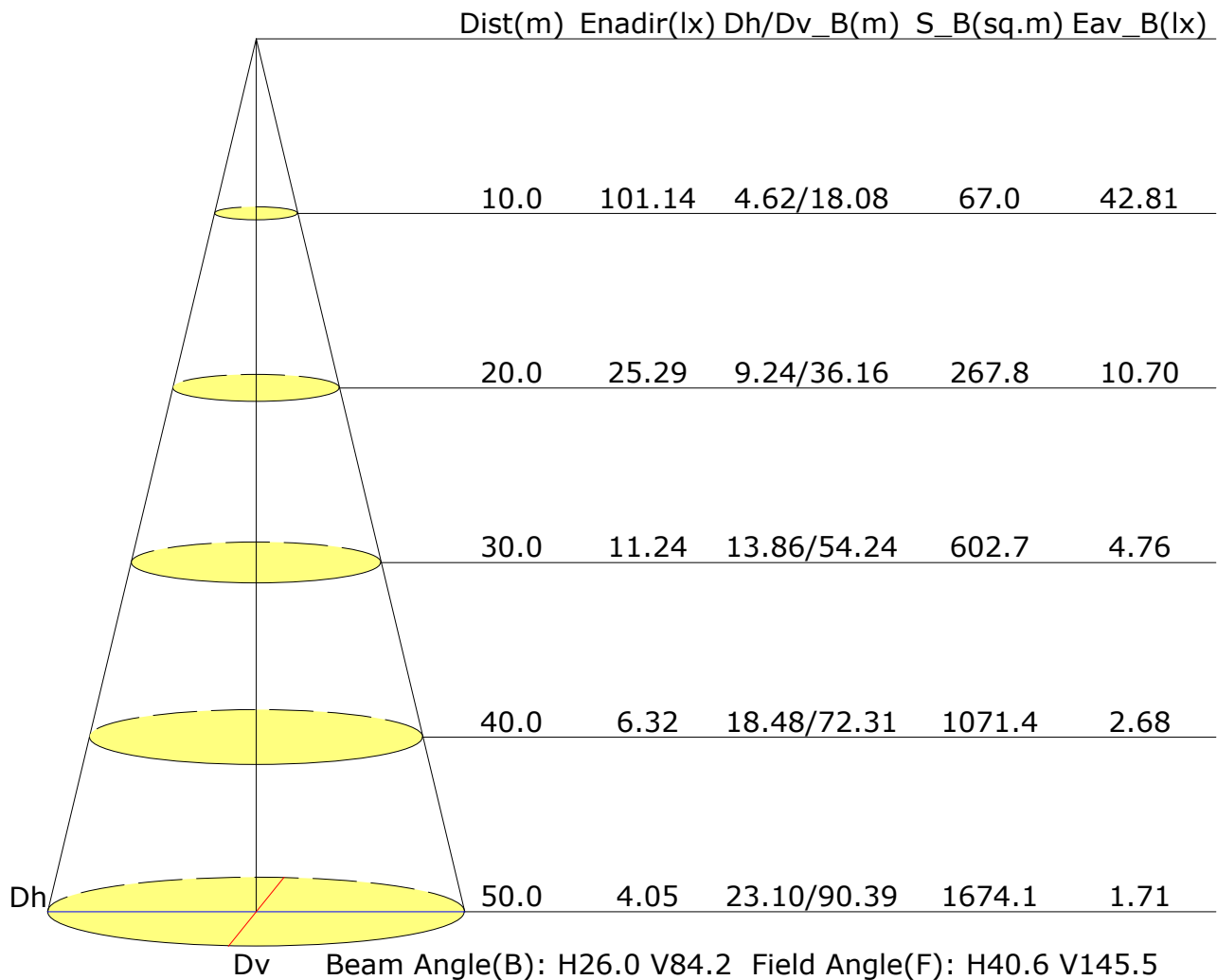


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	10839	10028	9325	8622	7939	7330	7414	8225	8420
C90	155077	136217	119656	103167	90619	73006	20712	5471	4046
C180	10993	10150	9277	8479	7679	6968	6830	7269	8373
C270	156744	137252	119994	106464	90519	70761	21656	6145	4897

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:

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	14.8	15.8	15.1	16.1	16.3	27.6	28.6	27.9	28.9	29.2
3H	16.3	17.2	16.6	17.5	17.8	29.1	30.0	29.4	30.3	30.6
4H	17.1	18.0	17.4	18.3	18.6	29.3	30.2	29.6	30.5	30.8
6H	18.0	18.8	18.4	19.2	19.5	29.2	30.1	29.6	30.4	30.8
8H	18.4	19.2	18.8	19.6	19.9	29.2	30.0	29.6	30.4	30.7
12H	18.9	19.6	19.3	20.0	20.4	29.2	29.9	29.6	30.3	30.7
X=4H Y=2H	15.9	16.8	16.3	17.1	17.4	27.4	28.3	27.7	28.6	28.9
3H	17.4	18.1	17.8	18.5	18.9	28.9	29.6	29.3	30.0	30.4
4H	18.2	18.8	18.6	19.2	19.6	29.1	29.8	29.5	30.2	30.6
6H	19.1	19.7	19.5	20.1	20.5	29.1	29.7	29.5	30.1	30.5
8H	19.5	20.1	20.0	20.5	21.0	29.0	29.6	29.5	30.0	30.5
12H	20.0	20.5	20.5	21.0	21.5	29.0	29.5	29.5	30.0	30.4
X=8H Y=4H	18.4	19.0	18.9	19.4	19.9	29.0	29.5	29.5	30.0	30.4
6H	19.4	19.8	19.9	20.3	20.8	29.0	29.4	29.5	29.9	30.4
8H	19.9	20.3	20.4	20.8	21.3	28.9	29.3	29.4	29.8	30.3
12H	20.5	20.8	21.0	21.3	21.9	28.9	29.3	29.4	29.8	30.3
X=12H Y=4H	18.4	18.9	18.9	19.4	19.9	28.9	29.5	29.4	29.9	30.4
6H	19.4	19.8	19.9	20.3	20.8	28.9	29.3	29.4	29.8	30.3
8H	19.9	20.3	20.5	20.8	21.3	28.9	29.2	29.4	29.8	30.3
Variations with the observer position at spacings:										
S=1.0H	+0.4/-0.3					+1.2/-1.5				
S=1.5H	+0.5/-0.7					+2.6/-4.3				
S=2.0H	+0.7/-1.1					+4.0/-7.7				

Calculate in accordance with CIE Pub.117. The table is revised with 8014lm ($8\log(F/F_0) = 7.2$).

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 = 0.75									
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	0.71	0.79	0.85	0.89	0.95	0.99	1.01	1.05	1.07	
	0.30		0.65	0.73	0.79	0.84	0.90	0.94	0.97	1.01	1.04	
	0.20		0.60	0.68	0.75	0.79	0.86	0.91	0.94	0.99	1.02	
0.50	0.50	0.20	0.69	0.77	0.82	0.86	0.91	0.95	0.97	1.00	1.02	
	0.30		0.64	0.72	0.77	0.82	0.87	0.91	0.94	0.98	1.00	
	0.20		0.60	0.68	0.73	0.78	0.84	0.88	0.91	0.96	0.98	
0.30	0.50	0.20	0.68	0.75	0.80	0.84	0.88	0.91	0.94	0.96	0.98	
	0.30		0.63	0.70	0.76	0.80	0.85	0.89	0.91	0.94	0.96	
	0.20		0.59	0.67	0.72	0.77	0.82	0.86	0.89	0.92	0.95	
0.00	0.00	0.00	0.57	0.64	0.70	0.73	0.79	0.82	0.85	0.88	0.90	
Rating:53W 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 = 0.75									
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	0.78	0.64	0.54	0.47	0.37	0.31	0.26	0.20	0.17	
	0.30		0.65	0.55	0.47	0.42	0.34	0.28	0.24	0.19	0.16	
	0.20		0.56	0.48	0.42	0.37	0.31	0.26	0.23	0.18	0.15	
0.50	0.50	0.20	0.75	0.61	0.51	0.44	0.35	0.33	0.25	0.19	0.15	
	0.30		0.63	0.53	0.45	0.40	0.32	0.27	0.23	0.18	0.15	
	0.20		0.55	0.47	0.41	0.36	0.30	0.25	0.22	0.17	0.14	
0.30	0.50	0.20	0.72	0.58	0.49	0.42	0.33	0.27	0.23	0.18	0.15	
	0.30		0.61	0.51	0.44	0.38	0.30	0.25	0.22	0.17	0.14	
	0.20		0.54	0.46	0.40	0.35	0.28	0.24	0.21	0.16	0.13	
0.00	0.00	0.00	0.41	0.34	0.29	0.25	0.20	0.17	0.14	0.11	0.09	
Rating:53W 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 = 0.75									
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	0.22	0.22	0.23	0.23	
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.21	0.21	
	0.20		0.07	0.09	0.11	0.12	0.14	0.16	0.17	0.18	0.19	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21	
	0.20		0.07	0.09	0.11	0.12	0.14	0.15	0.16	0.18	0.19	
0.30	0.50	0.20	0.15	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.20	
	0.20		0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17	0.18	
0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Rating:53W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												