

Report No.: 1

Test Time: 22.01.2020 15:40

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FW 150 HE 4x28LED 2.4A 100W 5000K 2x40-100gr.

Luminous Length (mm): 604

Luminous Width (mm): 153

Luminous Height (mm): 80

Voltage: 221.3 V

Current: 0.466 A

Power: 100.90 W

Power Factor: 0.978

Photometric Results

CIE Class: Direct

Measurement Flux: 15129.4 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 15129.4 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 118.2, 135.0, 135.9, 134.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 102.6, 112.0, 118.4, 117.5

Luminaire Efficacy Rating (LER): 149.99

Central Intensity: 2516.32 cd

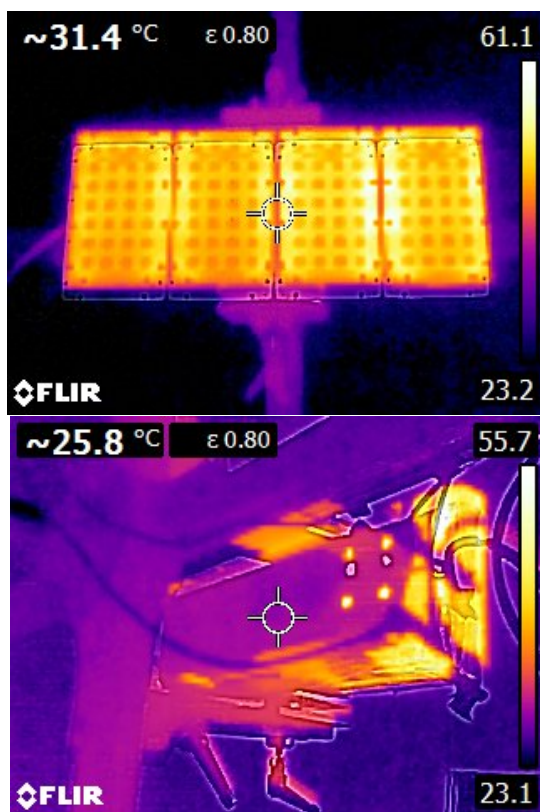
Max. Intensity: 7092.19 cd

Pos of Max. Intensity: H0 V37

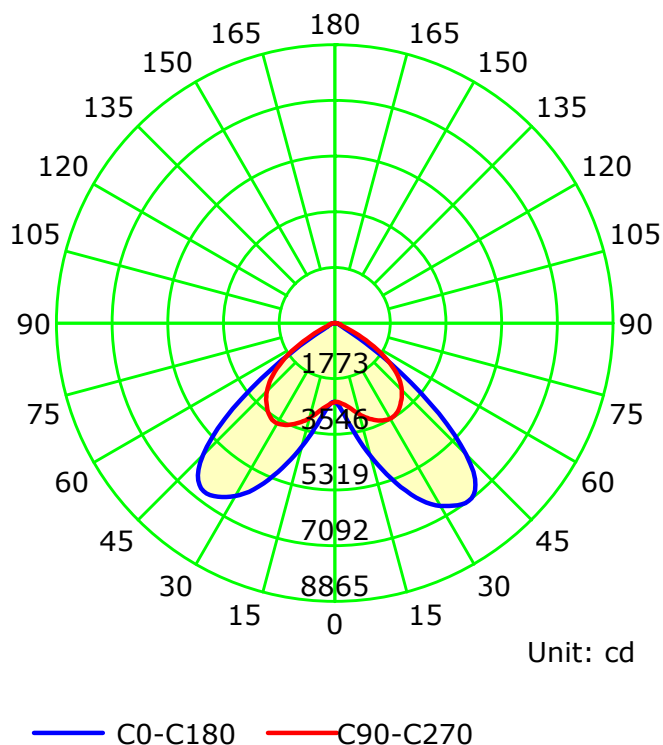
S/MH(C0/C180): 2.31

S/MH(C90/C270): 1.85

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

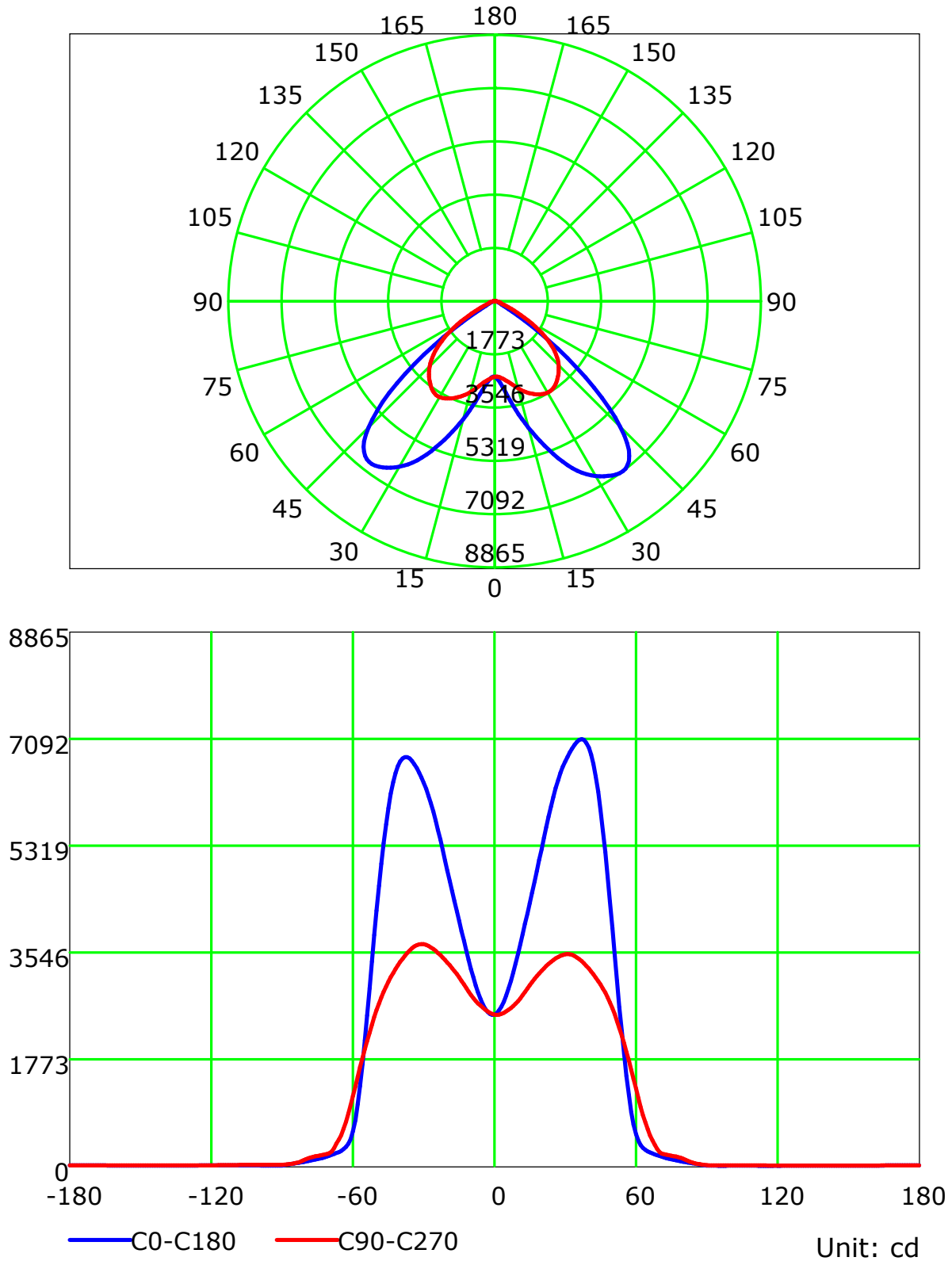
Test Device: LSG-1800B

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

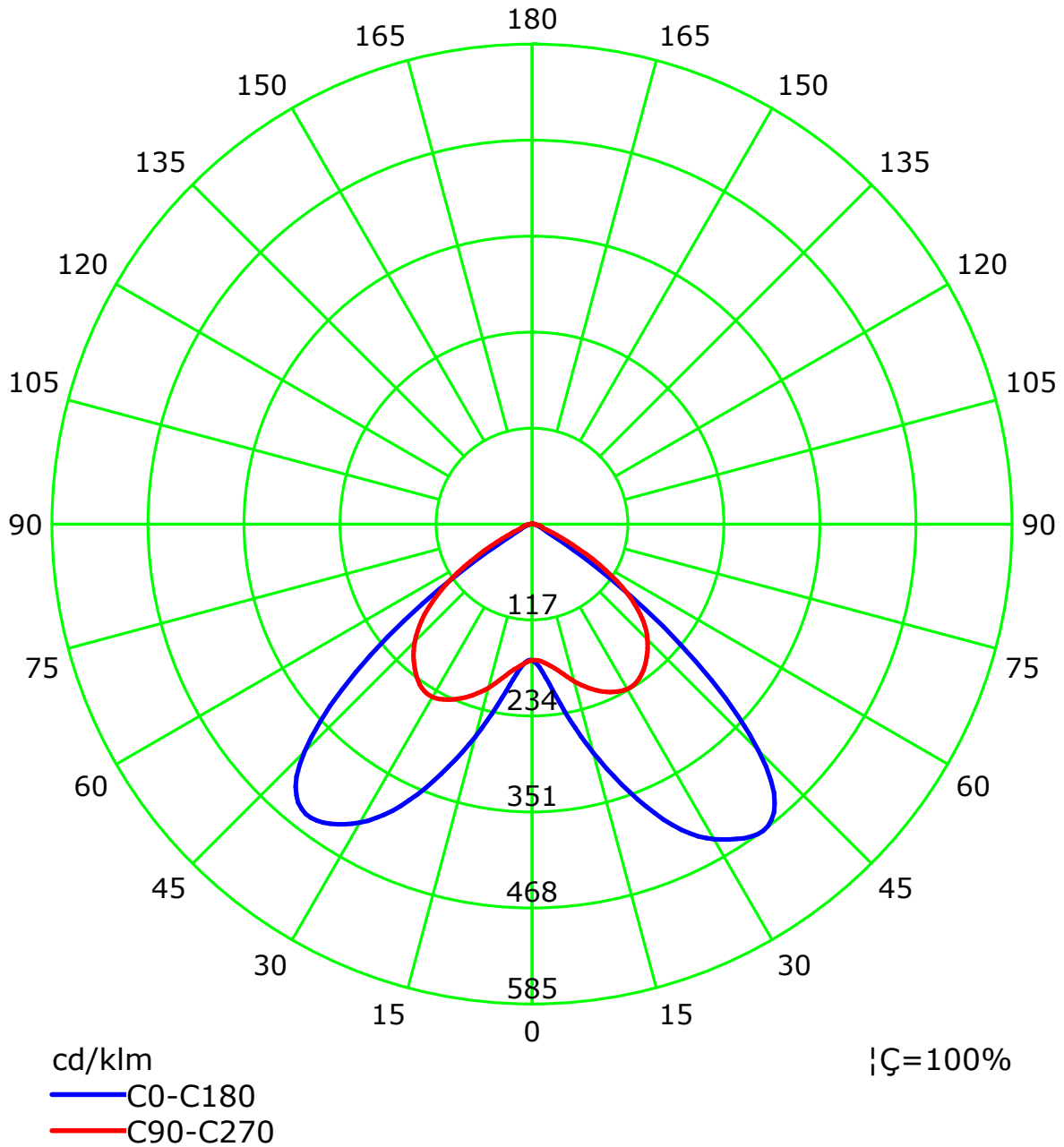
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd/klm)



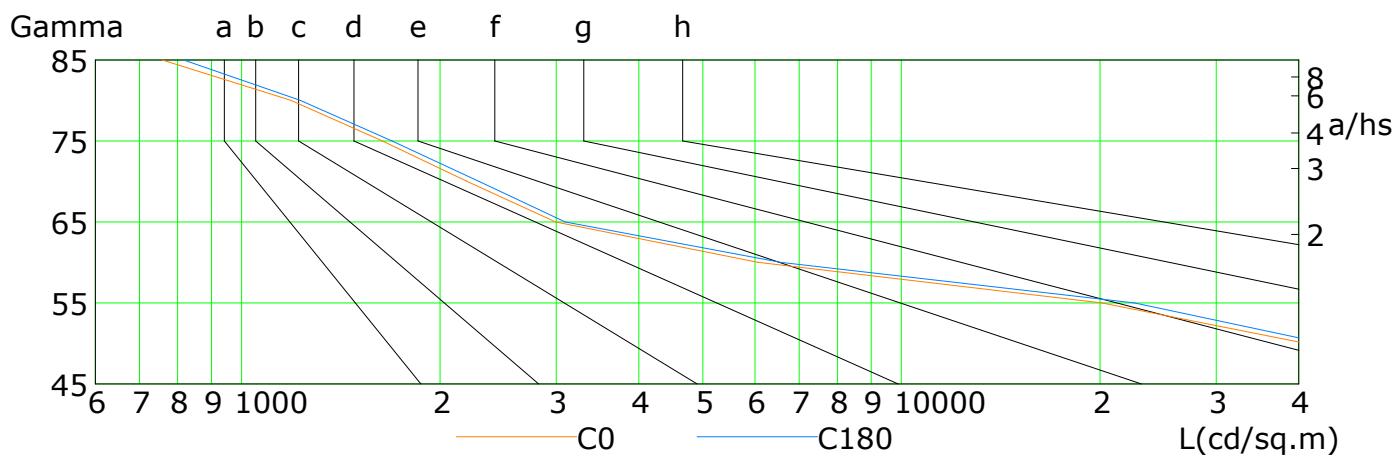
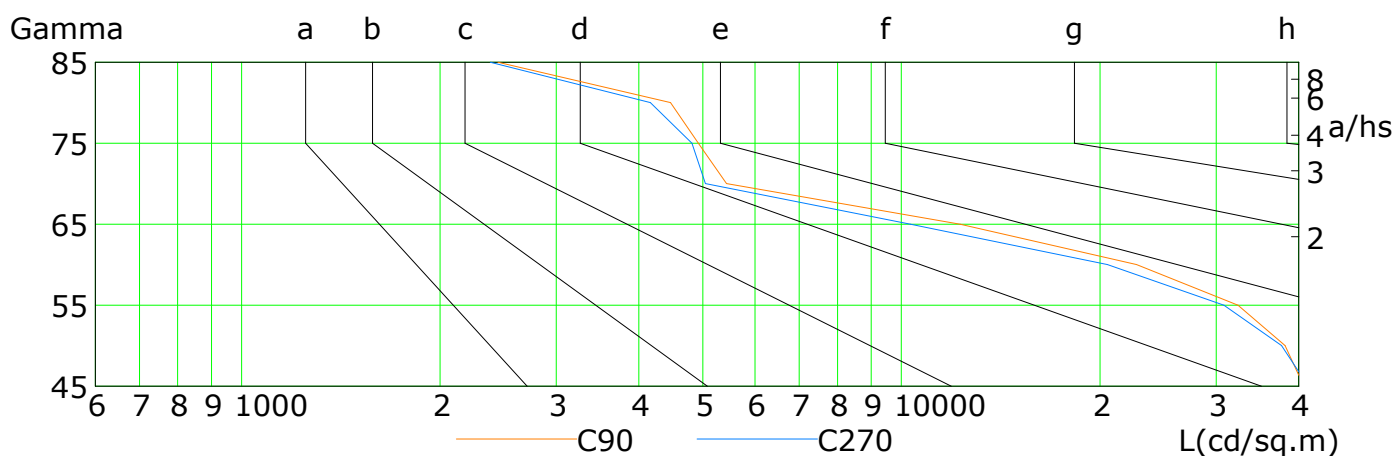
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

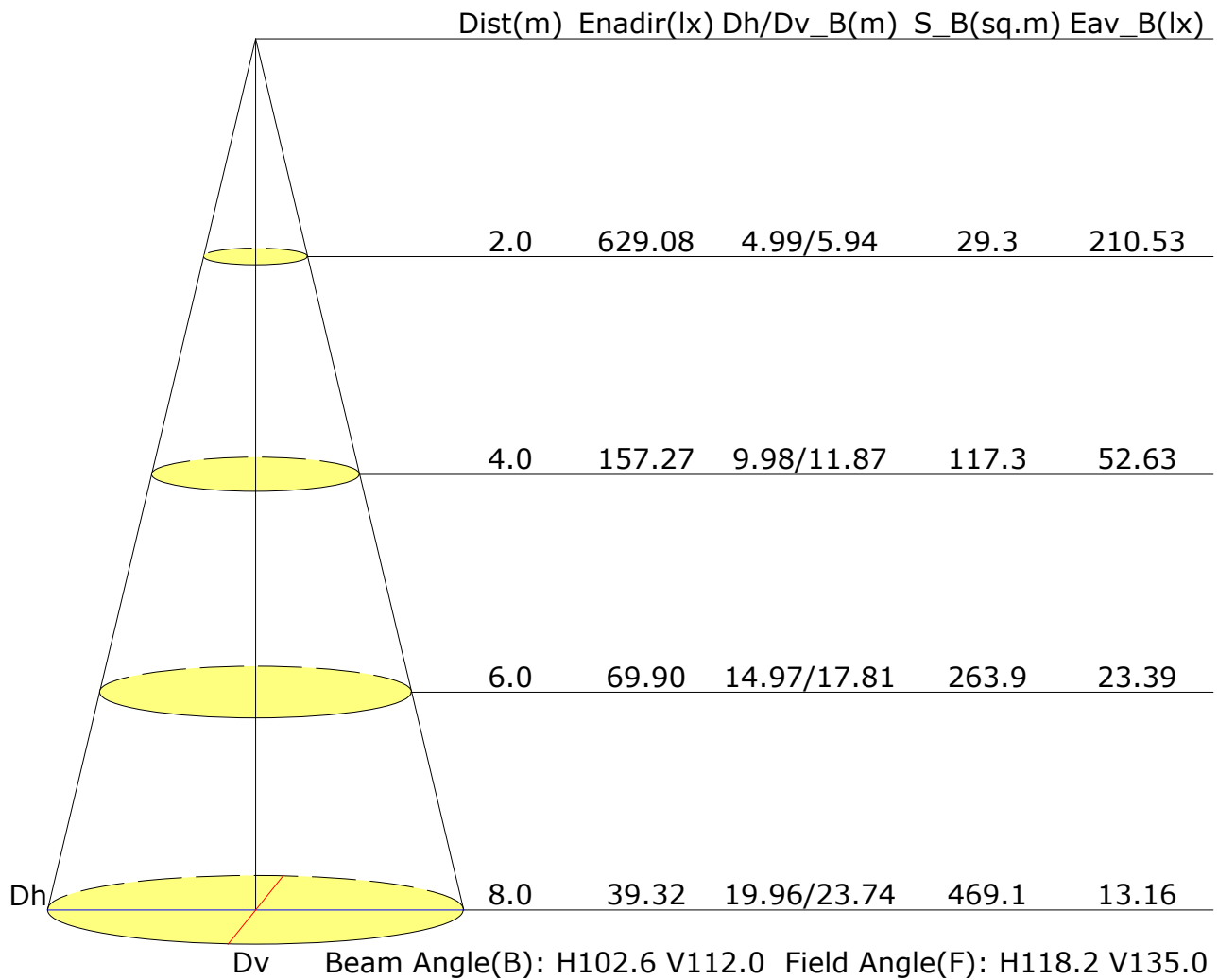


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	59386	40974	20147	6062	2991	2196	1635	1188	758
C90	40751	38139	32352	22727	12278	5434	4923	4470	2446
C180	59722	44028	22576	6555	3094	2288	1691	1227	817
C270	41400	37684	30805	20512	10327	5048	4815	4166	2382

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	25.1	26.4	25.4	26.7	26.9	25.7	27.0	26.0	27.3	27.5
3H	25.0	26.1	25.3	26.4	26.7	25.7	26.9	26.0	27.2	27.4
4H	24.9	26.0	25.2	26.3	26.6	25.7	26.8	26.0	27.1	27.4
6H	24.8	25.8	25.2	26.1	26.5	25.6	26.6	26.0	26.9	27.3
8H	24.8	25.8	25.2	26.1	26.4	25.6	26.6	26.0	26.9	27.2
12H	24.7	25.7	25.1	26.0	26.4	25.5	26.5	25.9	26.8	27.2
X=4H Y=2H	25.4	26.5	25.8	26.8	27.1	25.9	27.0	26.3	27.3	27.6
3H	25.3	26.2	25.7	26.6	26.9	26.0	26.9	26.3	27.2	27.6
4H	25.2	26.1	25.7	26.4	26.8	25.9	26.7	26.3	27.1	27.5
6H	25.2	25.9	25.6	26.3	26.7	25.9	26.6	26.3	27.0	27.4
8H	25.2	25.8	25.6	26.2	26.6	25.9	26.5	26.3	26.9	27.4
12H	25.1	25.7	25.6	26.1	26.6	25.8	26.4	26.3	26.8	27.3
X=8H Y=4H	25.2	25.8	25.6	26.2	26.7	25.8	26.5	26.3	26.9	27.3
6H	25.1	25.6	25.6	26.1	26.5	25.8	26.3	26.3	26.8	27.2
8H	25.1	25.5	25.6	26.0	26.5	25.8	26.2	26.3	26.7	27.2
12H	25.1	25.4	25.6	25.9	26.4	25.8	26.2	26.3	26.6	27.1
X=12H Y=4H	25.1	25.7	25.6	26.1	26.6	25.8	26.4	26.3	26.8	27.3
6H	25.1	25.5	25.6	26.0	26.5	25.8	26.2	26.3	26.7	27.2
8H	25.1	25.4	25.6	25.9	26.4	25.8	26.1	26.3	26.6	27.1
Variations with the observer position at spacings:										
S=1.0H	+1.3/-2.4					+0.6/-0.9				
S=1.5H	+2.9/-9.6					+2.5/-4.7				
S=2.0H	+3.8/-12.2					+3.0/-8.5				

Calculate in accordance with CIE Pub.117. The table is revised with 15129Im ($8\log(F/F_0) = 9.4$).

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 Test Type: TYPE C
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 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	0.82	0.87	0.91	0.97	1.01	1.03	1.06	1.08	
	0.30		NA	0.76	0.82	0.86	0.93	0.97	0.99	1.03	1.06	
	0.20		NA	0.72	0.77	0.82	0.89	0.94	0.97	1.01	1.03	
0.50	0.50	0.20	NA	0.80	0.85	0.89	0.94	0.97	0.99	1.02	1.04	
	0.30		NA	0.75	0.80	0.84	0.90	0.94	0.96	1.00	1.02	
	0.20		NA	0.71	0.76	0.81	0.87	0.91	0.94	0.98	1.00	
0.30	0.50	0.20	NA	0.78	0.83	0.86	0.91	0.94	0.96	0.98	1.00	
	0.30		NA	0.74	0.79	0.83	0.88	0.92	0.94	0.97	0.98	
	0.20		NA	0.70	0.75	0.80	0.86	0.89	0.92	0.95	0.97	
0.00	0.00	0.00	NA	0.68	0.73	0.77	0.82	0.86	0.88	0.91	0.92	
Rating:101W 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	0.60	0.51	0.43	0.33	0.27	0.23	0.18	0.15	
	0.30		NA	0.51	0.44	0.38	0.30	0.25	0.22	0.17	0.14	
	0.20		NA	0.45	0.39	0.34	0.28	0.23	0.20	0.16	0.13	
0.50	0.50	0.20	NA	0.57	0.48	0.41	0.31	0.29	0.22	0.17	0.13	
	0.30		NA	0.49	0.42	0.37	0.29	0.24	0.20	0.16	0.13	
	0.20		NA	0.44	0.38	0.33	0.26	0.22	0.19	0.15	0.12	
0.30	0.50	0.20	NA	0.54	0.46	0.39	0.30	0.24	0.20	0.15	0.13	
	0.30		NA	0.48	0.41	0.35	0.27	0.22	0.19	0.15	0.12	
	0.20		NA	0.43	0.37	0.32	0.25	0.21	0.18	0.14	0.12	
0.00	0.00	0.00	0.99	0.31	0.27	0.23	0.17	0.14	0.12	0.09	0.07	
Rating:101W 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	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.22	
	0.30		NA	0.11	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		NA	0.08	0.09	0.11	0.13	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	NA	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.21	
	0.30		NA	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		NA	0.08	0.09	0.11	0.13	0.14	0.15	0.17	0.18	
0.30	0.50	0.20	NA	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.20	
	0.30		NA	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		NA	0.08	0.09	0.10	0.12	0.14	0.15	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:101W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												