

Report No.: 1

Test Time: 19.02.2020 14:30

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 100 36 LED 300W 5000K 20 gr.

Number of Lamps: 1

Luminous Width (mm): 210

Voltage: 220.7 V

Power: 301.45 W

Luminous Length (mm): 355

Luminous Height (mm): 338

Current: 1.402 A

Power Factor: 0.974

Photometric Results

CIE Class: Direct

Measurement Flux: 50146.8 lm

Downward Ratio: 94%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 43.8, 40.3, 42.4, 41.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 19.7, 20.1, 20.4, 19.3

Luminaire Efficacy Rating (LER): 166.40

Max. Intensity: 204822 cd

S/MH(C0/C180): 0.34

Total Rated Lamp Lumens: 50146.8 lm

Efficiency: 100%

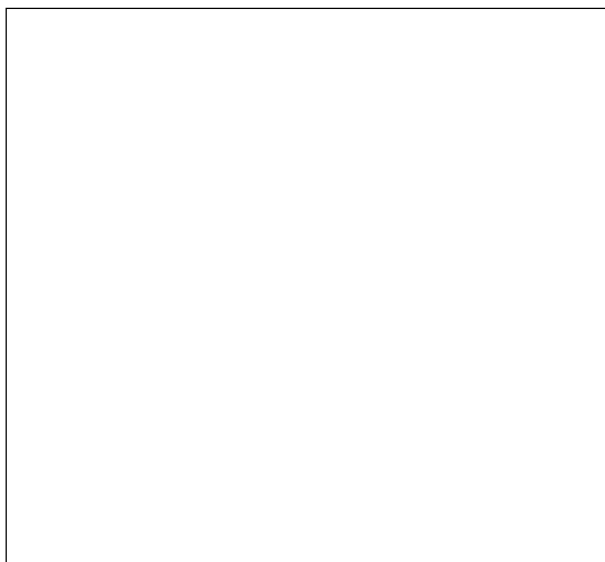
Upward Ratio: 6%

Central Intensity: 199964.88 cd

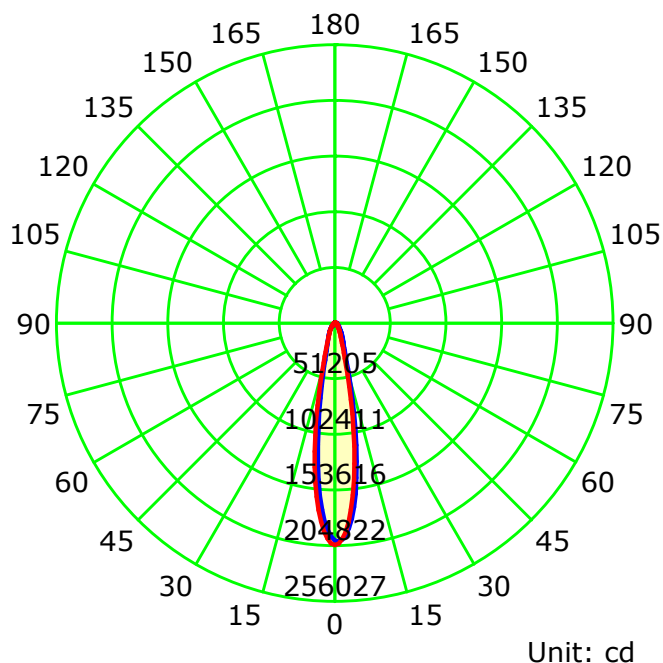
Pos of Max. Intensity: H135 V0

S/MH(C90/C270): 0.34

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

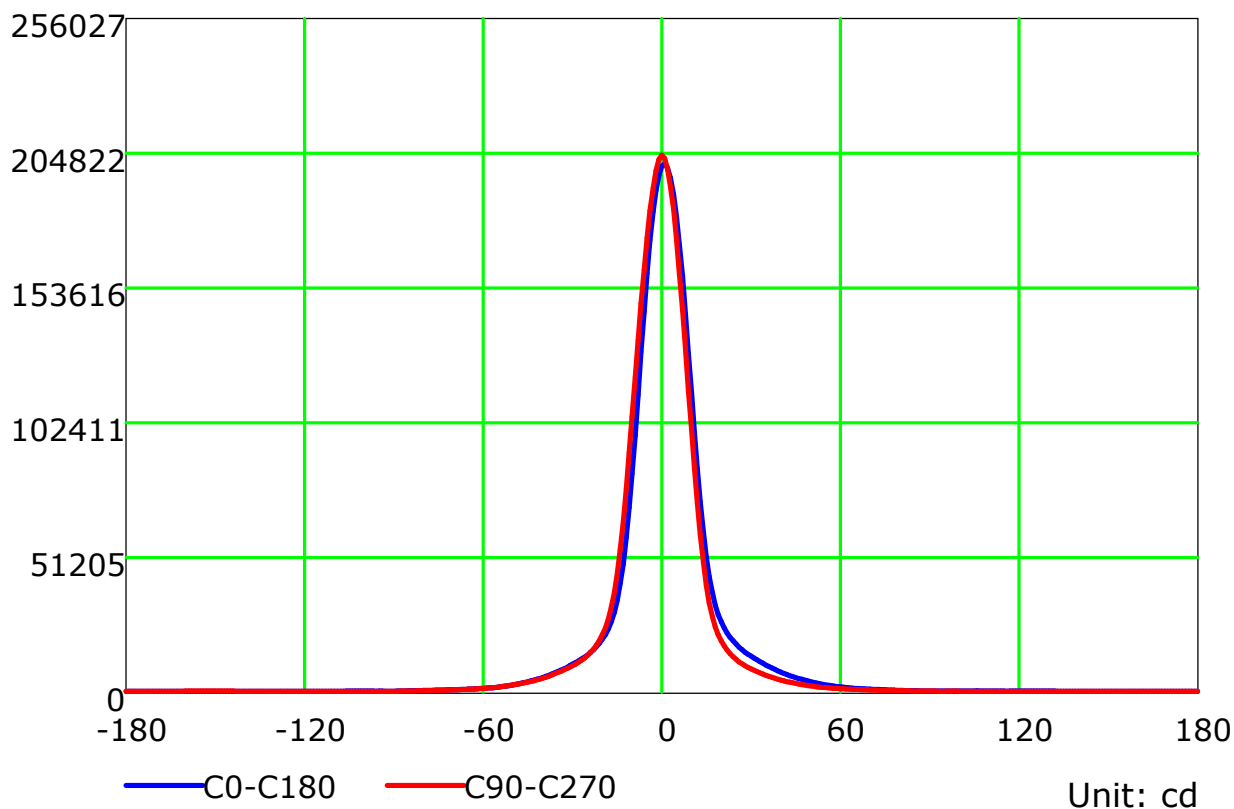
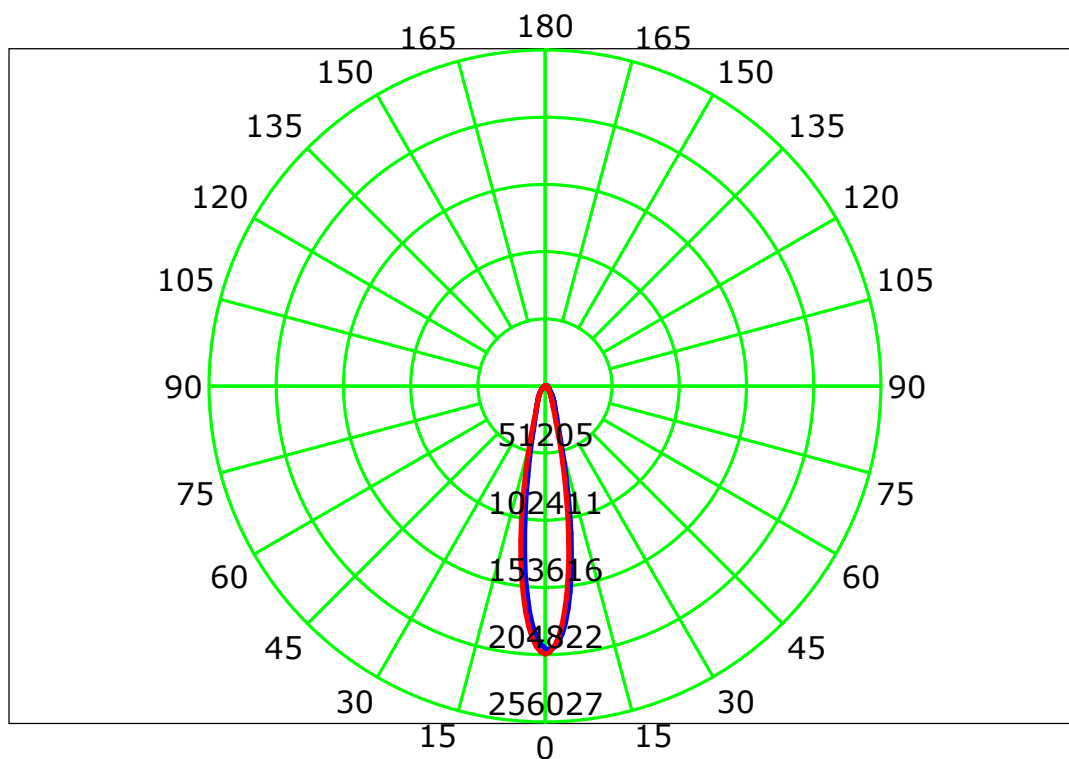
Test Device: LSG-1800B

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

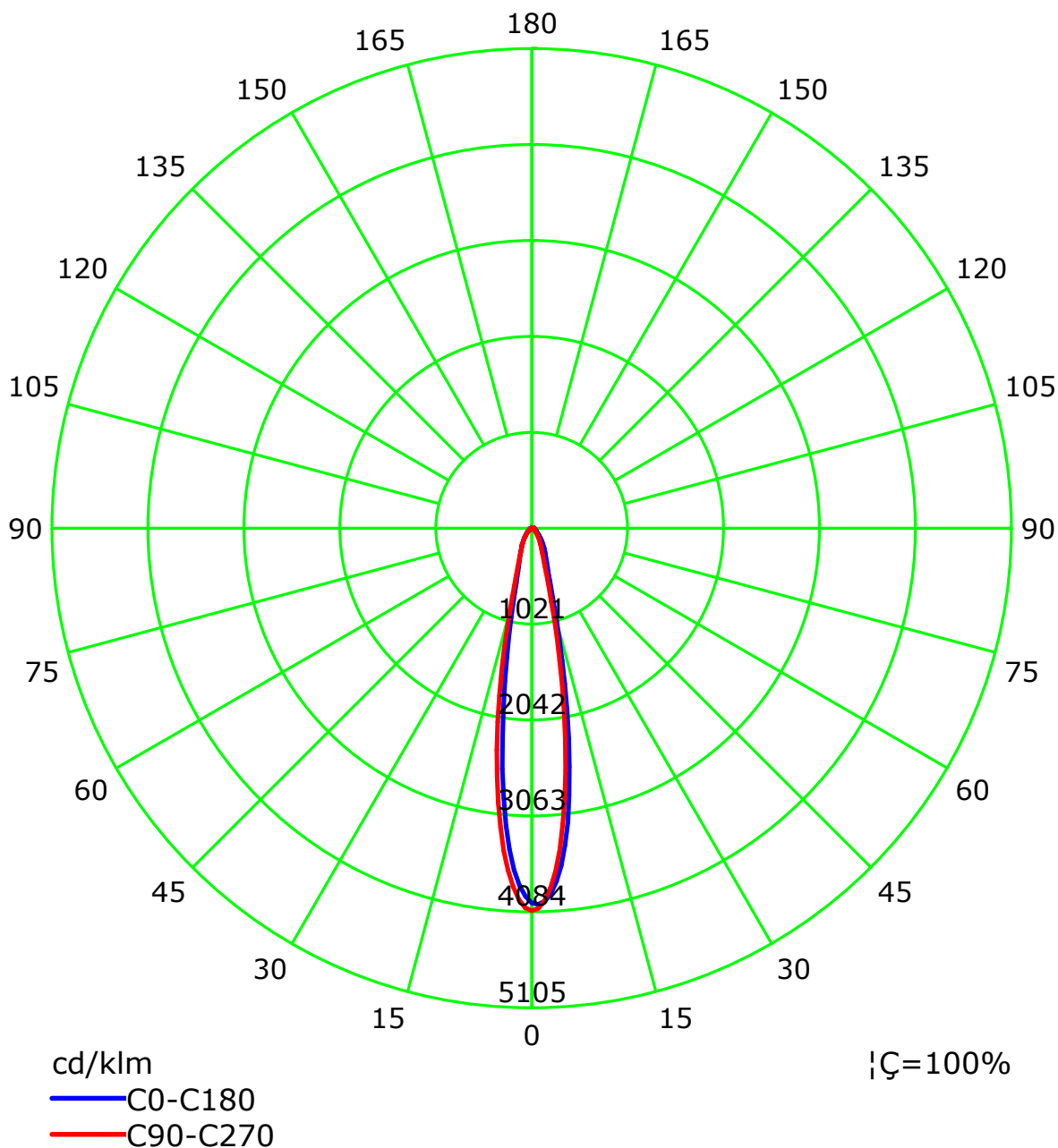
Test Device: LSG-1800B

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

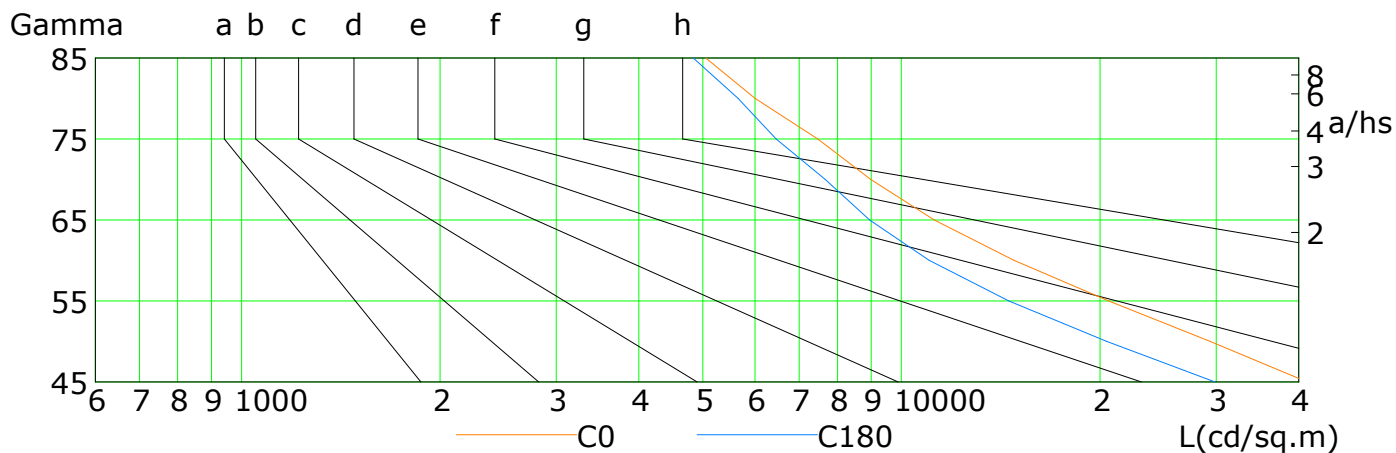
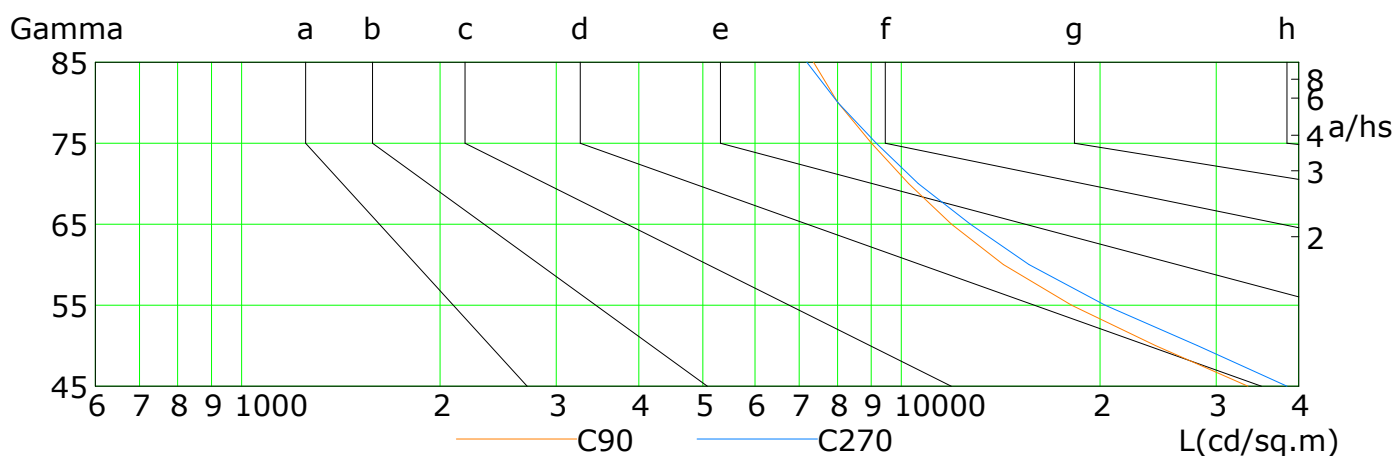
Humidity:

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	41359	29335	20603	14817	11219	8981	7468	6001	5052
C90	33499	24275	18119	14278	11911	10260	9007	8015	7363
C180	29854	20457	14542	11016	8950	7665	6459	5654	4835
C270	38405	28098	20372	15613	12718	10605	9162	8015	7186

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

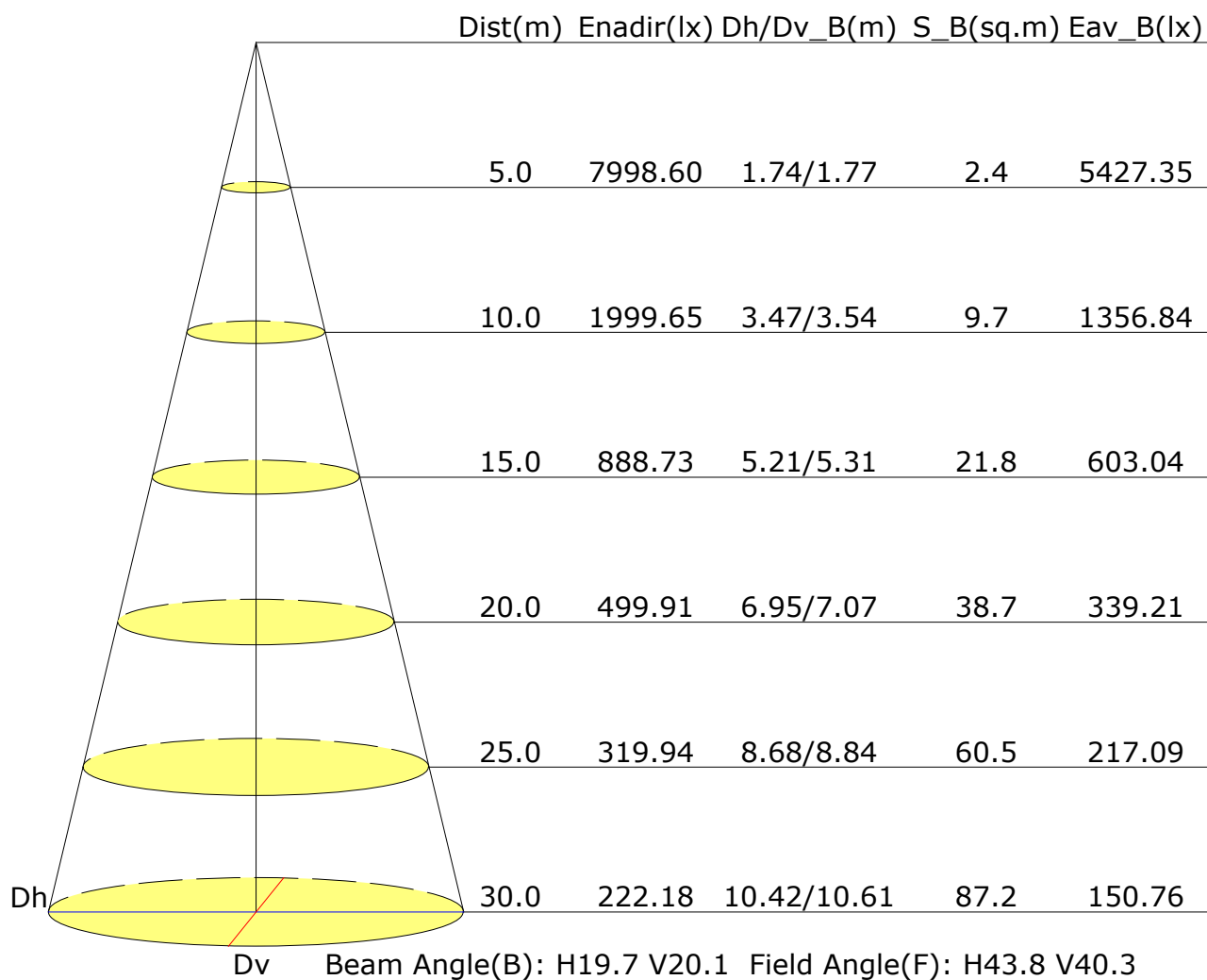
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

Illuminance at a Distance



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:

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	20.0	20.8	20.4	21.1	21.4	18.9	19.7	19.2	20.0	20.3
3H	20.5	21.2	20.8	21.5	21.9	19.4	20.1	19.8	20.5	20.8
4H	20.7	21.4	21.1	21.7	22.1	19.7	20.4	20.1	20.7	21.1
6H	20.9	21.5	21.3	21.9	22.3	20.0	20.6	20.4	21.0	21.4
8H	21.0	21.6	21.4	22.0	22.4	20.2	20.8	20.6	21.2	21.6
12H	21.0	21.6	21.5	22.1	22.5	20.3	20.9	20.8	21.3	21.8
X=4H Y=2H	20.1	20.8	20.5	21.1	21.5	19.0	19.7	19.4	20.1	20.5
3H	20.6	21.2	21.1	21.6	22.1	19.7	20.3	20.2	20.7	21.2
4H	21.0	21.5	21.4	21.9	22.4	20.1	20.7	20.6	21.1	21.6
6H	21.3	21.7	21.8	22.2	22.7	20.6	21.0	21.1	21.5	22.0
8H	21.4	21.9	21.9	22.3	22.9	20.8	21.2	21.3	21.7	22.2
12H	21.6	22.0	22.1	22.5	23.0	21.0	21.4	21.6	21.9	22.5
X=8H Y=4H	21.0	21.4	21.5	21.9	22.5	20.2	20.7	20.7	21.2	21.7
6H	21.4	21.8	22.0	22.3	22.9	20.8	21.1	21.3	21.7	22.2
8H	21.7	22.0	22.2	22.5	23.1	21.1	21.4	21.7	22.0	22.6
12H	21.9	22.2	22.5	22.7	23.4	21.5	21.7	22.0	22.3	22.9
X=12H Y=4H	21.0	21.4	21.5	21.9	22.4	20.2	20.6	20.8	21.1	21.7
6H	21.4	21.8	22.0	22.3	22.9	20.8	21.1	21.4	21.7	22.3
8H	21.7	22.0	22.3	22.6	23.2	21.2	21.5	21.8	22.0	22.6
Variations with the observer position at spacings:										
S=1.0H	+1.0/-1.0					+0.9/-0.9				
S=1.5H	+2.3/-1.7					+2.0/-1.6				
S=2.0H	+3.8/-2.4					+3.2/-2.3				

Calculate in accordance with CIE Pub.117. The table is revised with 50147lm ($8\log(F/F_0) = 13.6$).

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 Test Lab:
 Test Type: TYPE C
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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 = 0.50									
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	0.81	0.88	0.92	0.95	1.00	1.03	1.05	1.08	1.10	
	0.30		0.76	0.83	0.87	0.91	0.96	0.99	1.02	1.05	1.07	
	0.20		0.72	0.79	0.84	0.87	0.93	0.96	0.99	1.03	1.05	
0.50	0.50	0.20	0.79	0.85	0.89	0.92	0.96	0.99	1.00	1.03	1.04	
	0.30		0.75	0.81	0.85	0.88	0.93	0.96	0.98	1.01	1.02	
	0.20		0.72	0.78	0.82	0.85	0.90	0.93	0.95	0.99	1.01	
0.30	0.50	0.20	0.78	0.83	0.87	0.89	0.93	0.95	0.96	0.98	1.00	
	0.30		0.74	0.79	0.83	0.86	0.90	0.92	0.94	0.97	0.98	
	0.20		0.71	0.77	0.81	0.84	0.88	0.90	0.92	0.95	0.97	
0.00	0.00	0.00	0.69	0.74	0.77	0.80	0.83	0.86	0.87	0.89	0.91	
Rating:301W 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 = 0.50									
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	0.65	0.53	0.45	0.40	0.32	0.26	0.23	0.18	0.14	
	0.30		0.54	0.46	0.40	0.35	0.29	0.24	0.21	0.17	0.14	
	0.20		0.46	0.40	0.35	0.31	0.26	0.22	0.20	0.16	0.13	
0.50	0.50	0.20	0.61	0.50	0.42	0.36	0.29	0.28	0.21	0.16	0.13	
	0.30		0.51	0.43	0.37	0.33	0.26	0.22	0.19	0.15	0.13	
	0.20		0.44	0.38	0.33	0.30	0.24	0.21	0.18	0.15	0.12	
0.30	0.50	0.20	0.57	0.46	0.39	0.34	0.27	0.22	0.19	0.15	0.12	
	0.30		0.49	0.41	0.35	0.30	0.25	0.21	0.18	0.14	0.12	
	0.20		0.43	0.36	0.32	0.28	0.23	0.19	0.17	0.13	0.11	
0.00	0.00	0.00	0.29	0.23	0.20	0.17	0.14	0.12	0.10	0.08	0.06	
Rating:301W 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 = 0.50									
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	0.19	0.21	0.22	0.23	0.24	0.25	0.26	0.26	0.27	
	0.30		0.15	0.17	0.18	0.19	0.21	0.22	0.23	0.24	0.25	
	0.20		0.11	0.13	0.15	0.16	0.18	0.20	0.21	0.23	0.24	
0.50	0.50	0.20	0.18	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.26	
	0.30		0.14	0.16	0.18	0.19	0.20	0.21	0.22	0.24	0.24	
	0.20		0.11	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.23	
0.30	0.50	0.20	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	
	0.30		0.14	0.16	0.17	0.18	0.20	0.21	0.22	0.23	0.23	
	0.20		0.11	0.13	0.15	0.16	0.18	0.19	0.20	0.21	0.22	
0.00	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Rating:301W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												