

Report No.: 1

Test Time: 27.08.2019 09:53

Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FL 1500 2x220LED 0,39A 40W 4000K opal ID

Lamp Description: LED

Luminous Width (mm): 115

Voltage: 221.2 V

Power: 41.84 W

Luminous Length (mm): 1500

Luminous Height (mm): 94

Current: 0.193 A

Power Factor: 0.976

Photometric Results

CIE Class: Direct

Measurement Flux: 4301.4 lm

Downward Ratio: 97%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 173.1, 164.9, 167.7, 167.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 121.3, 113.6, 118.2, 117.9

Luminaire Efficacy Rating (LER): 102.86

Max. Intensity: 1356.94 cd

S/MH(C0/C180): 1.30

Total Rated Lamp Lumens: 4301.4 lm

Efficiency: 100%

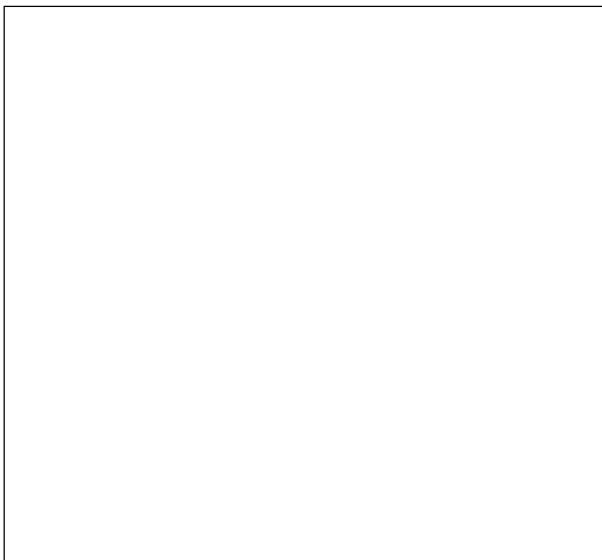
Upward Ratio: 3%

Central Intensity: 1352.98 cd

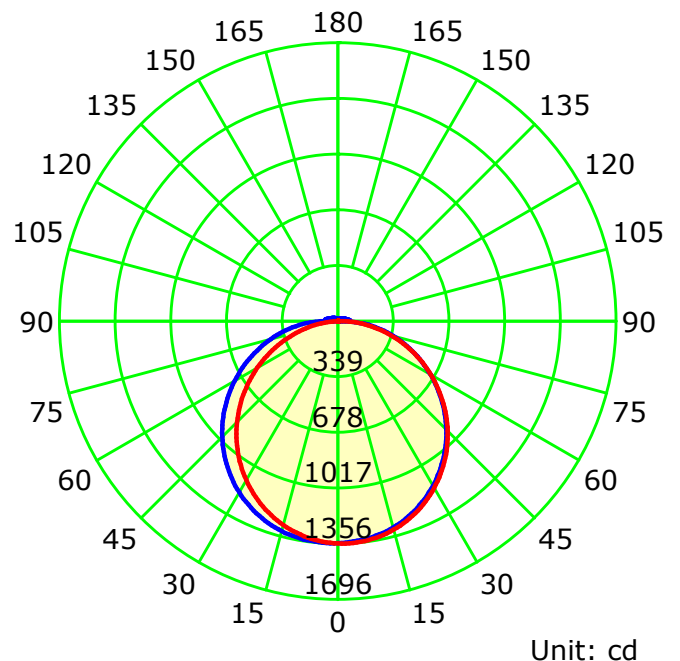
Pos of Max. Intensity: H135 V4

S/MH(C90/C270): 1.26

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

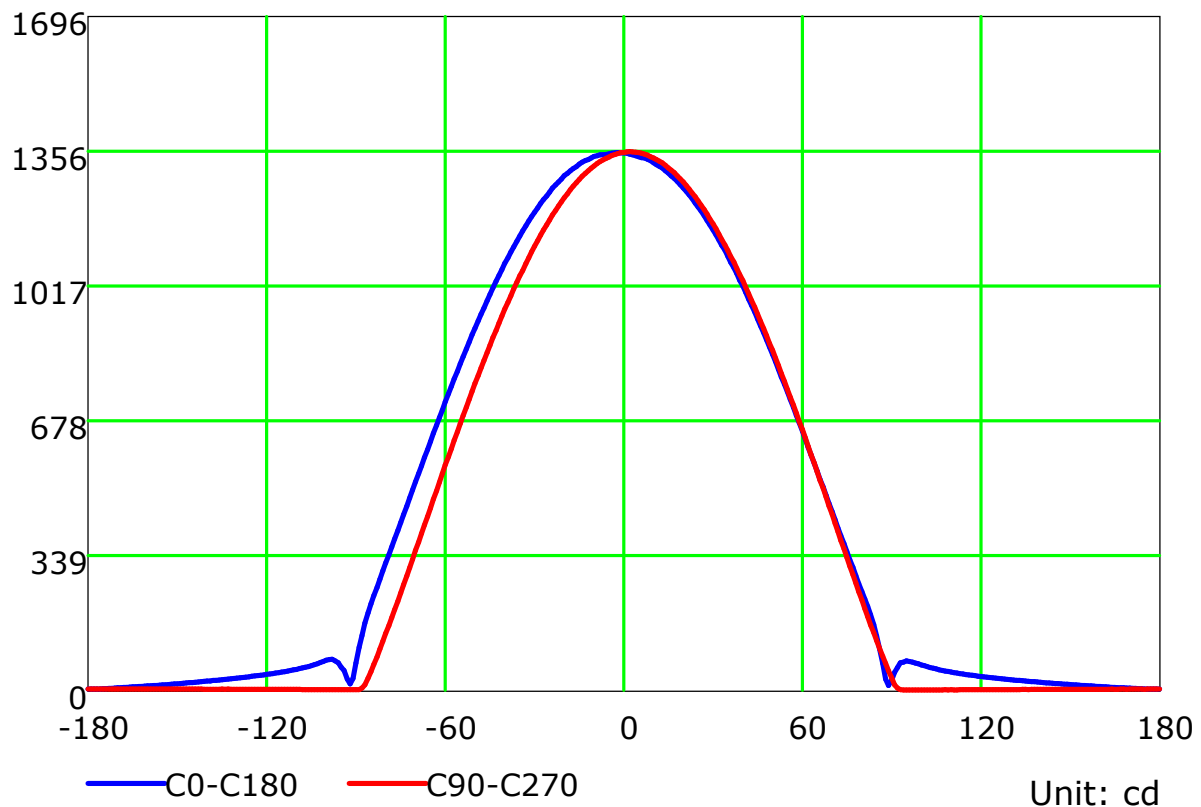
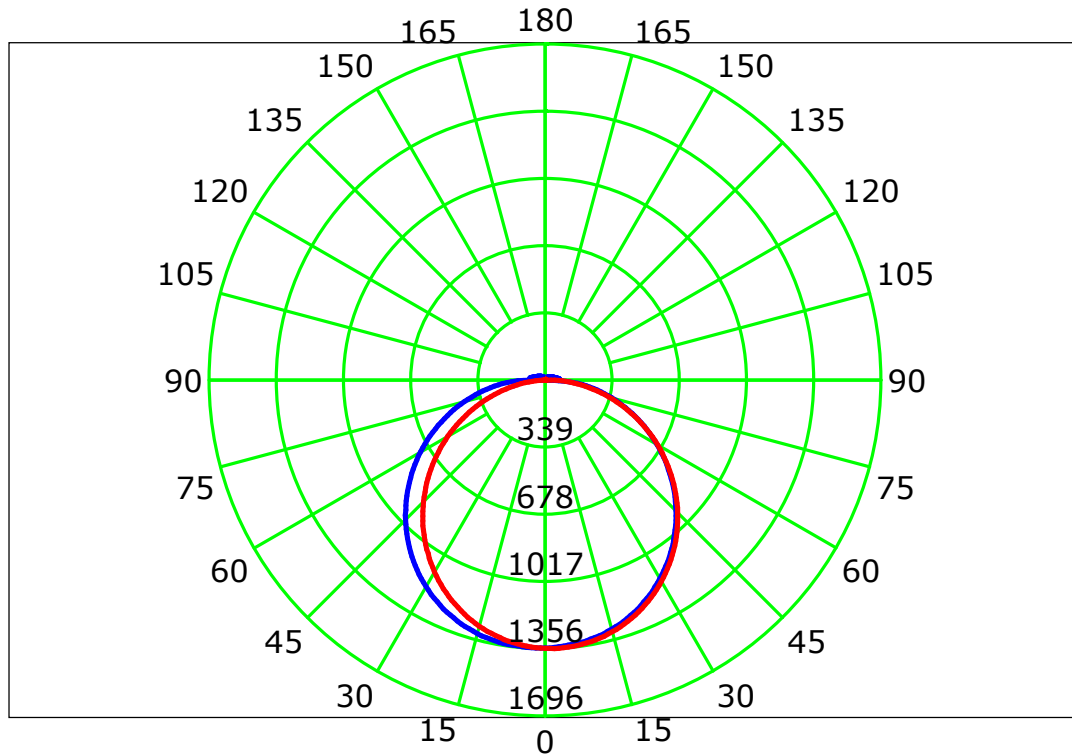
Test Device: LSG-1800B

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

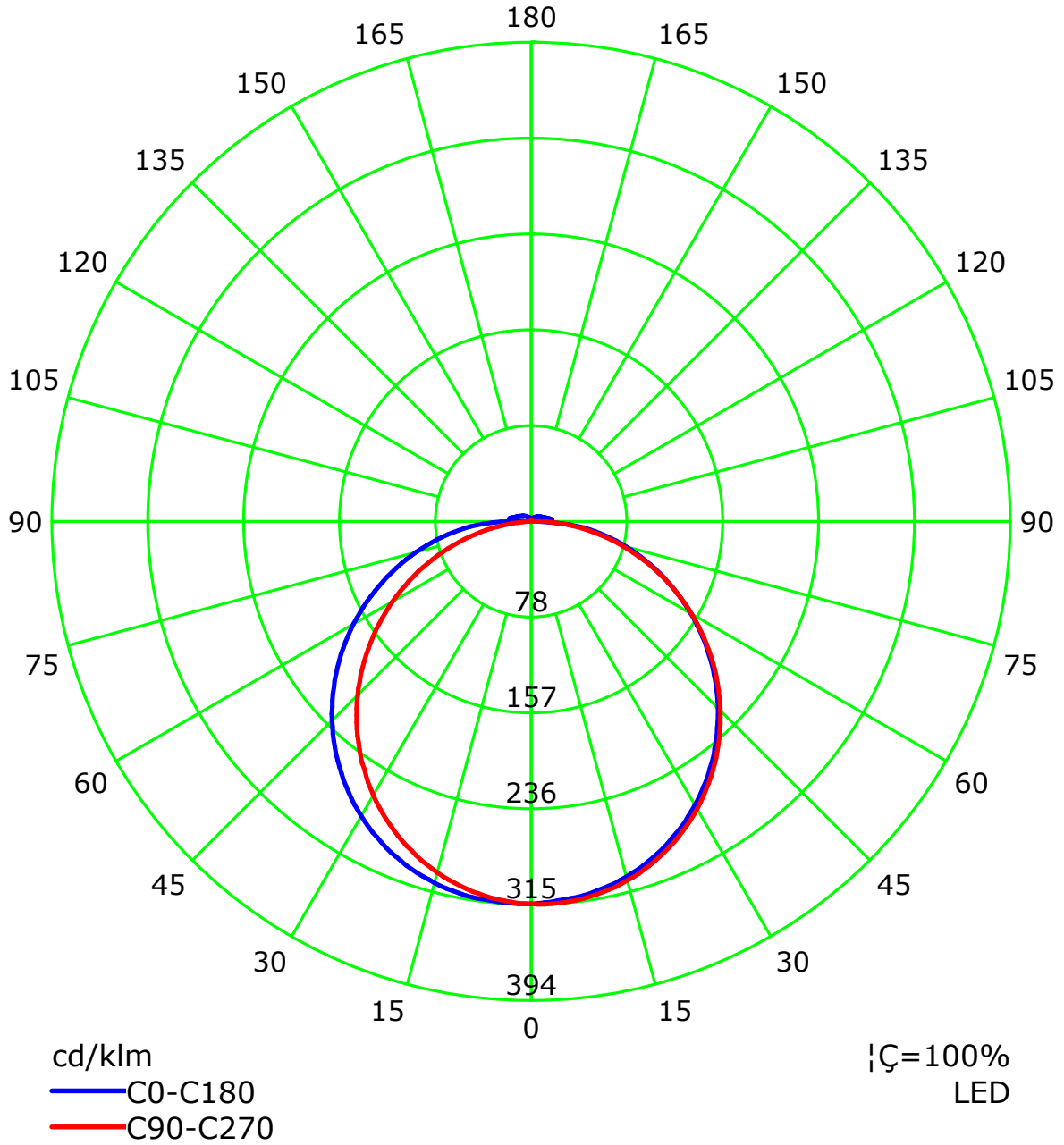
Test Device: LSG-1800B

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

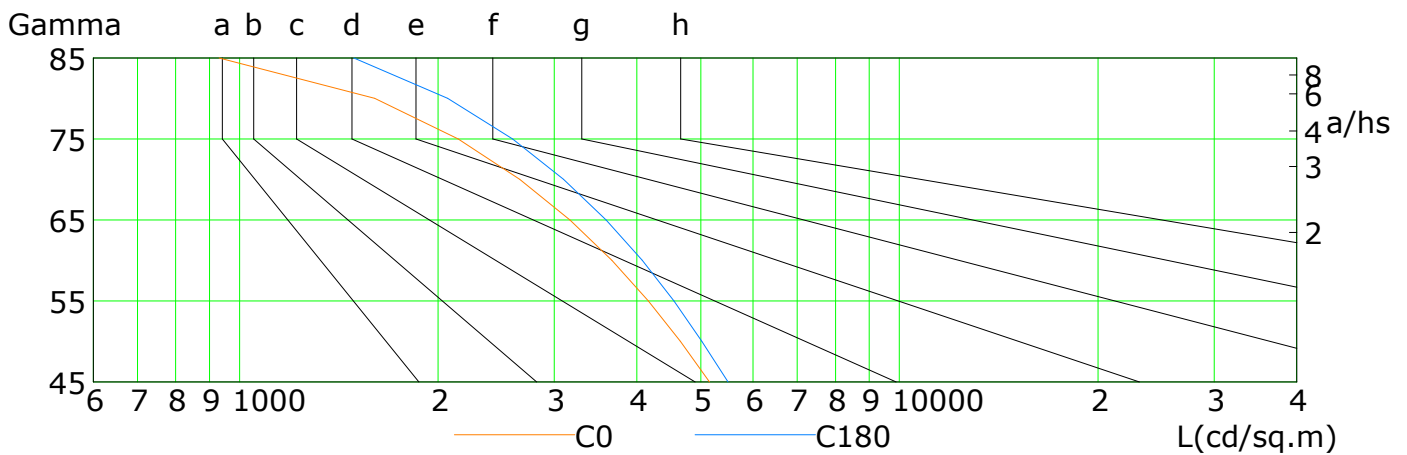
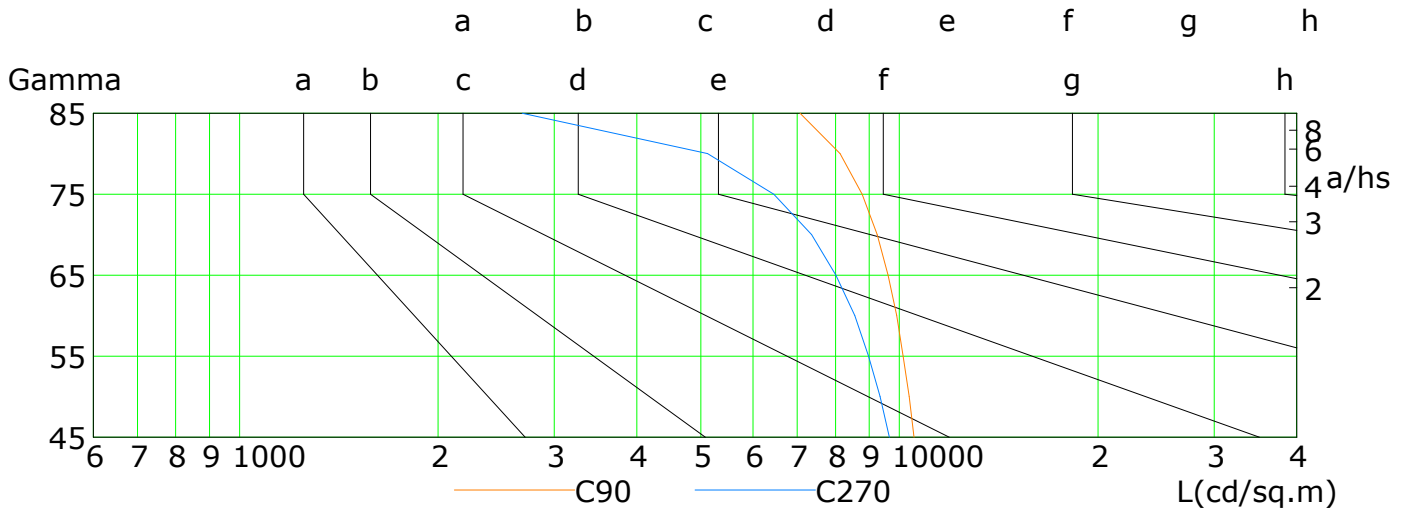
Distance: 12.677 m

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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	5156	4654	4162	3665	3168	2657	2145	1602	931
C90	10522	10350	10136	9909	9612	9259	8779	8128	7072
C180	5497	5019	4553	4078	3593	3099	2592	2067	1491
C270	9653	9343	8975	8557	8010	7357	6448	5122	2680

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

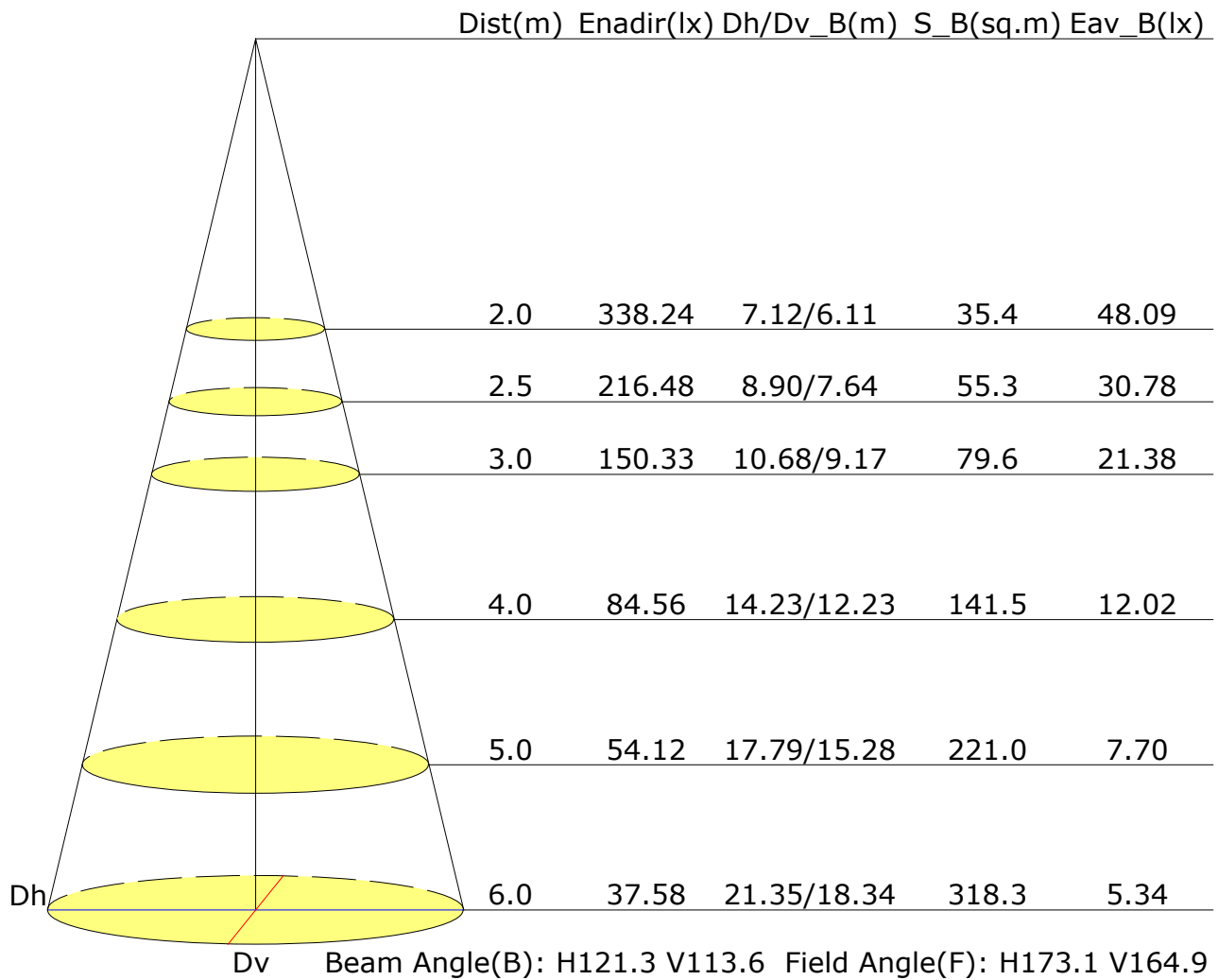
Test Device: LSG-1800B

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	17.5	18.9	17.8	19.2	19.5	18.9	20.3	19.3	20.6	20.9
3H	18.7	20.0	19.1	20.3	20.7	20.5	21.8	20.9	22.1	22.4
4H	19.2	20.4	19.6	20.8	21.1	21.2	22.4	21.6	22.7	23.1
6H	19.6	20.7	20.0	21.1	21.5	21.7	22.8	22.1	23.2	23.5
8H	19.7	20.8	20.1	21.2	21.6	21.8	22.9	22.3	23.3	23.7
12H	19.8	20.8	20.2	21.2	21.6	22.0	23.0	22.4	23.4	23.8
X=4H Y=2H	18.1	19.3	18.5	19.7	20.0	19.3	20.5	19.7	20.8	21.2
3H	19.6	20.6	20.0	21.0	21.4	21.0	22.0	21.4	22.4	22.8
4H	20.2	21.1	20.6	21.5	21.9	21.7	22.7	22.2	23.1	23.5
6H	20.6	21.4	21.1	21.9	22.3	22.3	23.2	22.8	23.6	24.1
8H	20.7	21.5	21.2	22.0	22.4	22.6	23.3	23.0	23.8	24.3
12H	20.8	21.5	21.3	22.0	22.5	22.7	23.4	23.2	23.9	24.4
X=8H Y=4H	20.4	21.2	20.9	21.6	22.1	21.8	22.6	22.3	23.1	23.5
6H	20.9	21.6	21.5	22.0	22.6	22.5	23.1	23.0	23.6	24.2
8H	21.1	21.7	21.7	22.2	22.7	22.8	23.3	23.3	23.8	24.4
12H	21.3	21.8	21.8	22.3	22.9	23.0	23.5	23.5	24.0	24.6
X=12H Y=4H	20.4	21.1	20.9	21.6	22.1	21.8	22.5	22.3	23.0	23.5
6H	21.0	21.5	21.5	22.0	22.6	22.5	23.1	23.1	23.6	24.1
8H	21.2	21.7	21.7	22.2	22.8	22.8	23.3	23.4	23.8	24.4
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.3/-0.6					+0.3/-0.3				
S=2.0H	+0.6/-1.1					+0.8/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 4301lm ($8\log(F/F_0) = 5.1$).

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)

Utilance U(F)												
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	0.50	0.61	0.68	0.74	0.83	0.88	0.92	0.97	1.01	
	0.30		0.42	0.52	0.60	0.66	0.76	0.82	0.86	0.93	0.97	
	0.20		0.35	0.46	0.54	0.60	0.70	0.76	0.81	0.88	0.93	
0.50	0.50	0.20	0.49	0.59	0.66	0.72	0.79	0.85	0.88	0.93	0.97	
	0.30		0.41	0.51	0.59	0.65	0.73	0.79	0.84	0.89	0.93	
	0.20		0.35	0.45	0.53	0.59	0.68	0.75	0.79	0.86	0.90	
0.30	0.50	0.20	0.47	0.57	0.64	0.69	0.76	0.81	0.85	0.90	0.93	
	0.30		0.40	0.50	0.57	0.63	0.71	0.77	0.81	0.86	0.90	
	0.20		0.35	0.45	0.52	0.58	0.67	0.73	0.77	0.83	0.87	
0.00	0.00	0.00	0.33	0.42	0.49	0.55	0.63	0.69	0.73	0.79	0.82	
Luminous ceiling reflectance(into room):0.30 Luminous ceiling reflectance(into void):0.20 Luminous ceiling transmittance:0.40 Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

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(Wall)

Utilance U(W)												
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	1.09	0.92	0.79	0.69	0.55	0.46	0.40	0.31	0.25	
	0.30		0.91	0.79	0.69	0.61	0.50	0.42	0.37	0.29	0.24	
	0.20		0.78	0.69	0.61	0.55	0.46	0.39	0.34	0.27	0.23	
0.50	0.50	0.20	1.06	0.88	0.76	0.66	0.53	0.47	0.38	0.30	0.24	
	0.30		0.89	0.77	0.67	0.60	0.49	0.41	0.36	0.28	0.23	
	0.20		0.78	0.68	0.60	0.54	0.45	0.38	0.33	0.27	0.22	
0.30	0.50	0.20	1.03	0.85	0.73	0.64	0.51	0.43	0.37	0.28	0.23	
	0.30		0.88	0.75	0.66	0.58	0.47	0.40	0.34	0.27	0.23	
	0.20		0.77	0.67	0.59	0.53	0.44	0.37	0.33	0.26	0.22	
0.00	0.00	0.00	0.67	0.58	0.51	0.45	0.37	0.31	0.27	0.21	0.18	
Luminous ceiling reflectance(into room):0.30 Luminous ceiling reflectance(into void):0.20 Luminous ceiling transmittance:0.40 Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

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(Ceiling cavity)

Utilance U(C)											
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	0.11	0.13	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.04	0.06	0.07	0.08	0.10	0.12	0.13	0.15	0.16
0.50	0.50	0.20	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.21
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18
	0.20		0.04	0.06	0.07	0.08	0.10	0.12	0.13	0.15	0.16
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		0.09	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18
	0.20		0.04	0.06	0.07	0.08	0.10	0.12	0.13	0.14	0.15
0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA
Luminous ceiling reflectance(into room):0.30 Luminous ceiling reflectance(into void):0.20 Luminous ceiling transmittance:0.40 Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

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: