

Report No.: 1

Test Time: 27.08.2019 10:29

Luminaire Property

Luminaire Manufacturer: FAROS

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

Lamp Description: LED

Luminous Width (mm): 115

Voltage: 220.9 V

Power: 42.05 W

Luminous Length (mm): 1500

Luminous Height (mm): 94

Current: 0.194 A

Power Factor: 0.977

Photometric Results

CIE Class: Direct

Measurement Flux: 5547.5 lm

Downward Ratio: 98%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 166.4, 159.9, 151.5, 150.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 75.1, 71.8, 73.1, 72.9

Luminaire Efficacy Rating (LER): 131.98

Max. Intensity: 2968.64 cd

S/MH(C0/C180): 1.13

Total Rated Lamp Lumens: 5547.5 lm

Efficiency: 100%

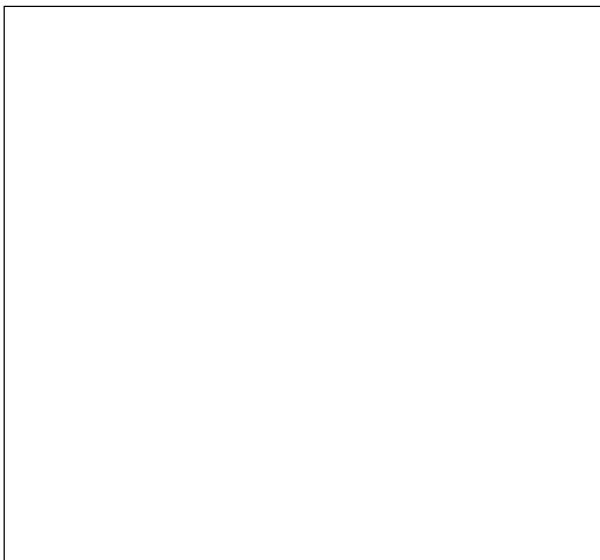
Upward Ratio: 2%

Central Intensity: 2964.19 cd

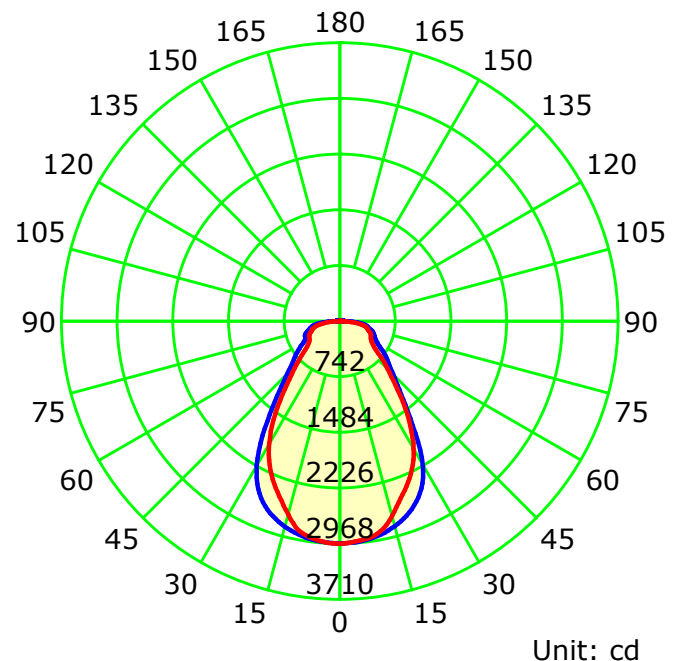
Pos of Max. Intensity: H112.5 V0

S/MH(C90/C270): 1.03

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

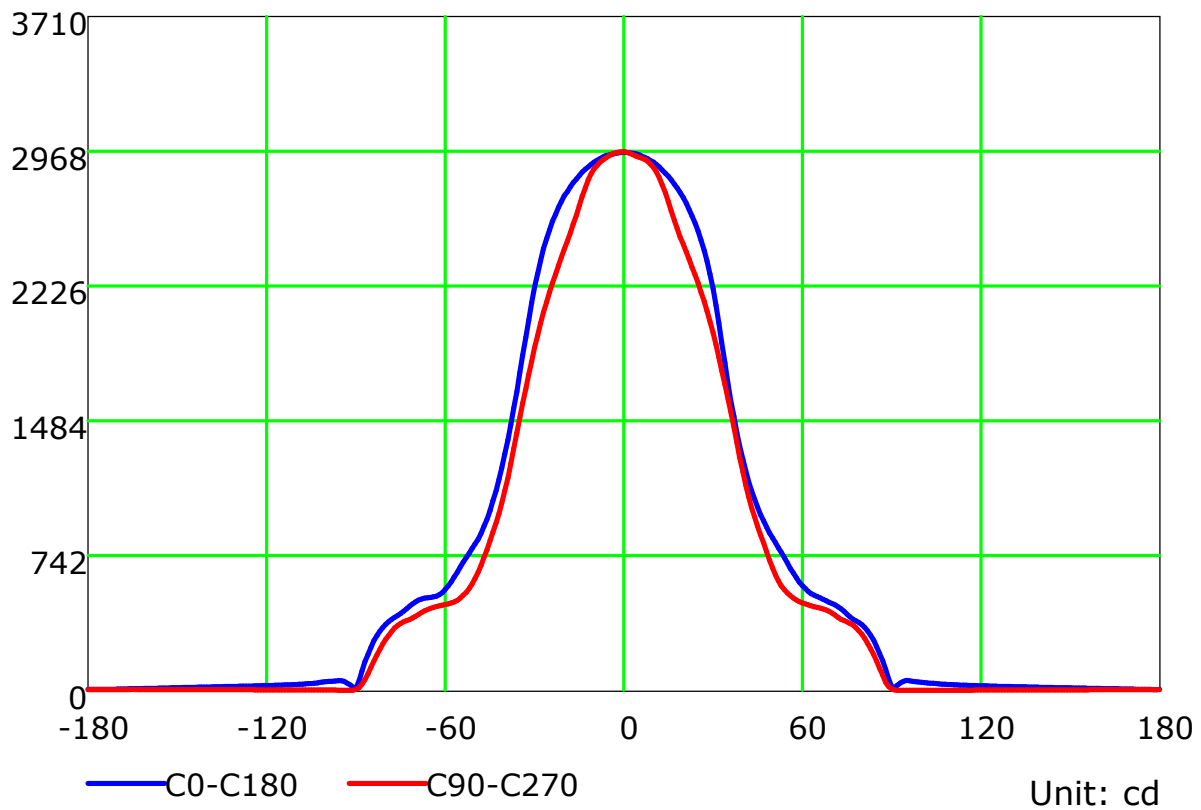
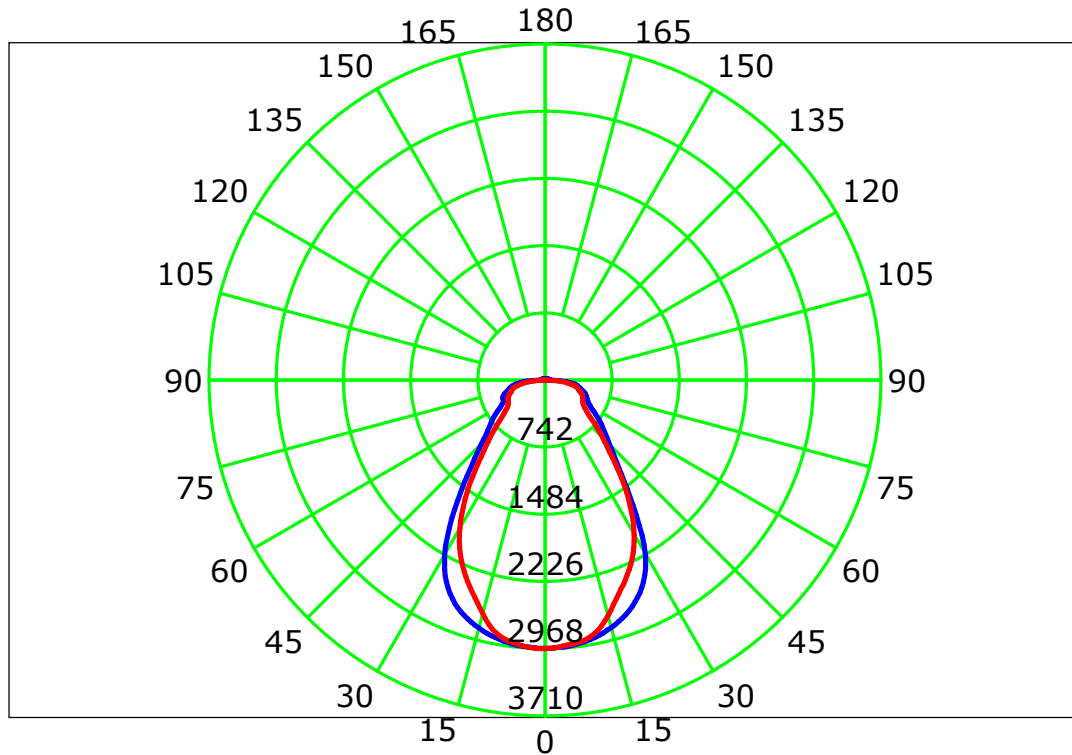
Test Device: LSG-1800B

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

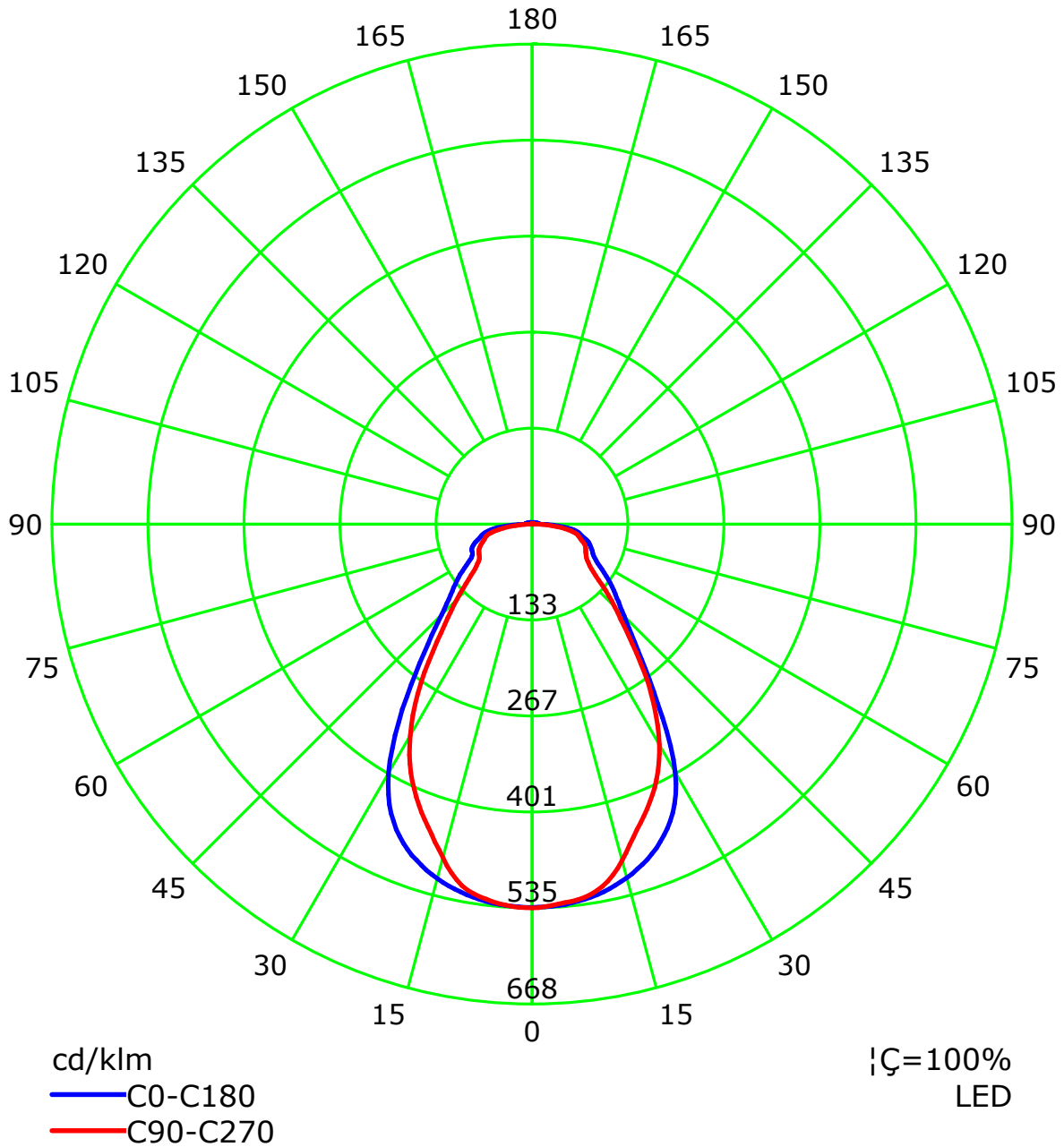
Test Device: LSG-1800B

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

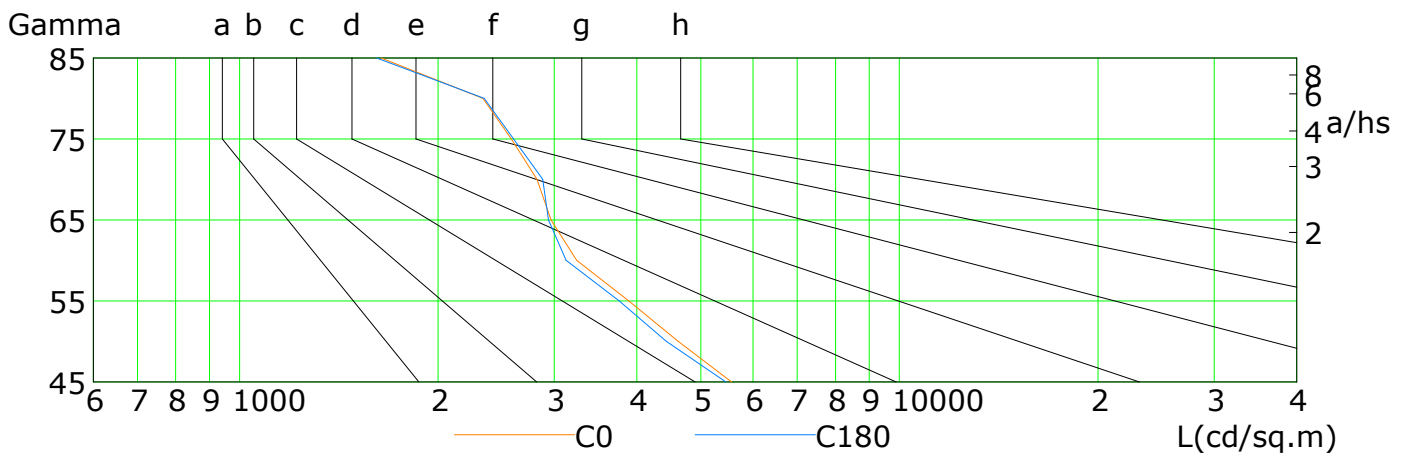
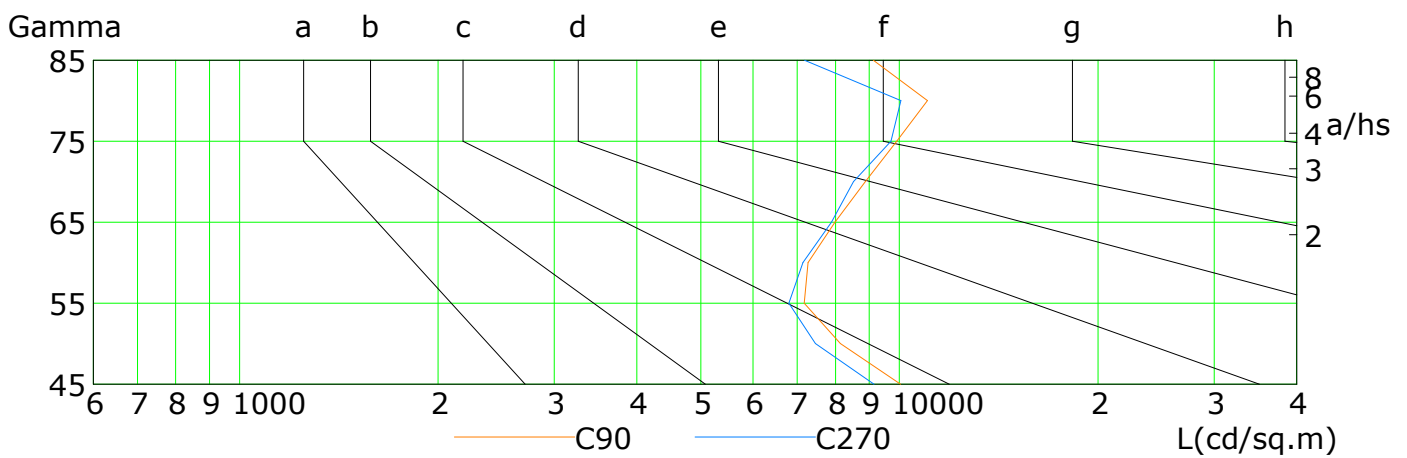
Humidity:

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	5566	4619	3892	3244	2964	2822	2580	2338	1640
C90	10041	8142	7173	7269	7990	8877	9908	11030	9128
C180	5458	4435	3762	3125	2938	2879	2602	2349	1614
C270	9151	7458	6796	7140	7892	8525	9715	10052	7184

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

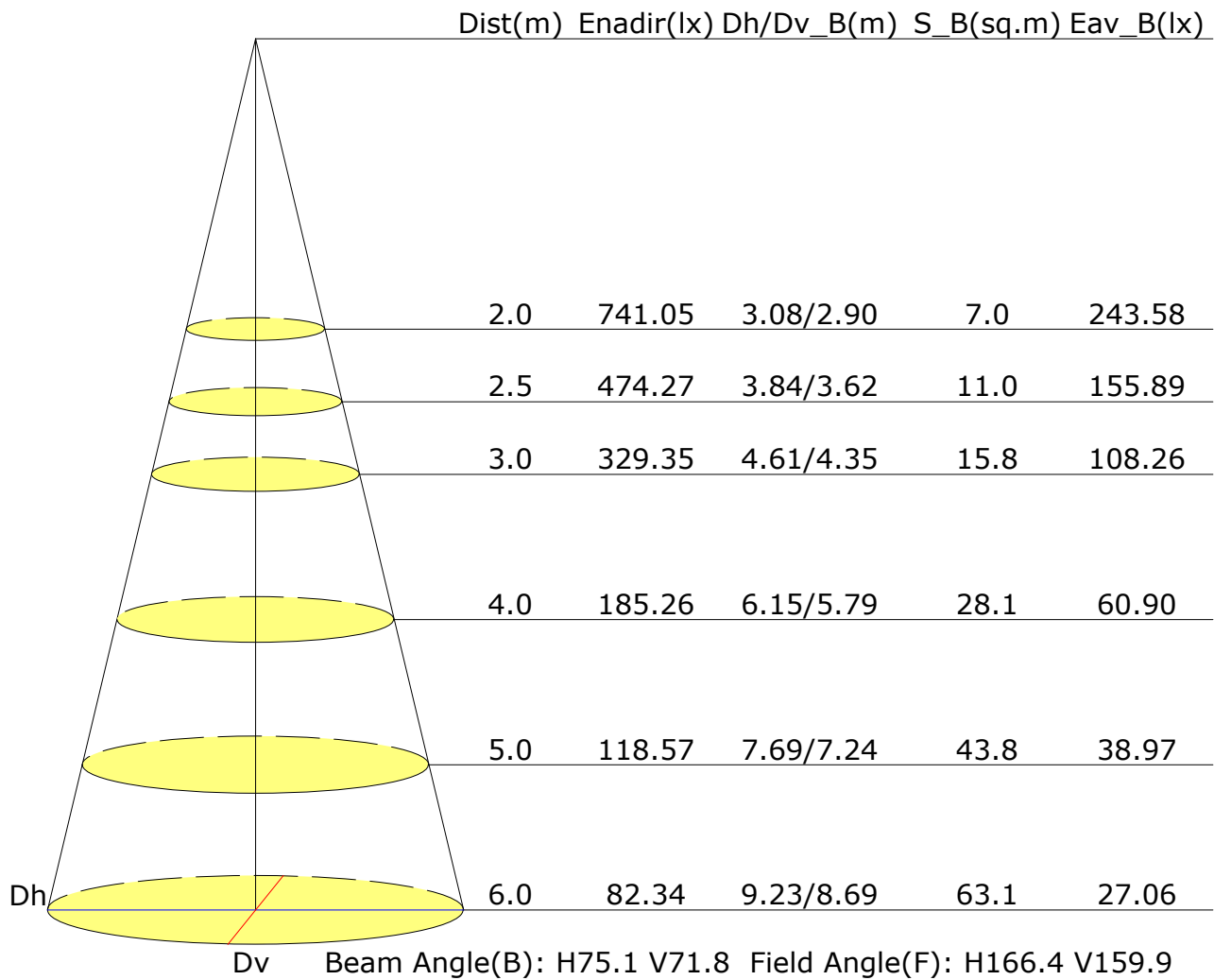
Test Device: LSG-1800B

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	16.6	17.9	16.9	18.1	18.4	17.2	18.5	17.6	18.7	19.0
3H	17.9	19.1	18.3	19.4	19.7	19.1	20.3	19.5	20.6	20.9
4H	18.6	19.7	19.0	20.0	20.3	20.2	21.3	20.6	21.6	21.9
6H	19.3	20.3	19.6	20.6	20.9	21.3	22.3	21.7	22.7	23.0
8H	19.5	20.5	19.9	20.8	21.2	21.8	22.7	22.1	23.1	23.4
12H	19.7	20.7	20.1	21.0	21.4	22.0	23.0	22.4	23.3	23.7
X=4H Y=2H	17.0	18.1	17.4	18.4	18.8	17.6	18.7	17.9	19.0	19.3
3H	18.6	19.5	19.0	19.9	20.3	19.6	20.6	20.0	20.9	21.3
4H	19.5	20.3	19.9	20.7	21.1	20.9	21.7	21.3	22.1	22.5
6H	20.3	21.0	20.7	21.4	21.8	22.1	22.8	22.5	23.2	23.7
8H	20.6	21.3	21.1	21.7	22.2	22.6	23.3	23.0	23.7	24.1
12H	20.8	21.5	21.3	21.9	22.4	22.9	23.5	23.4	24.0	24.5
X=8H Y=4H	19.8	20.4	20.2	20.9	21.3	21.0	21.7	21.5	22.1	22.6
6H	20.7	21.2	21.2	21.7	22.2	22.4	22.9	22.8	23.4	23.9
8H	21.1	21.6	21.6	22.1	22.6	22.9	23.4	23.4	23.9	24.4
12H	21.4	21.9	21.9	22.4	22.9	23.3	23.7	23.8	24.2	24.8
X=12H Y=4H	19.8	20.4	20.3	20.9	21.3	21.0	21.6	21.5	22.1	22.6
6H	20.7	21.2	21.3	21.7	22.2	22.4	22.9	22.9	23.4	23.9
8H	21.2	21.6	21.7	22.1	22.7	23.0	23.4	23.5	23.9	24.4
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.2/-0.3				
S=1.5H	+0.5/-0.7					+0.6/-0.6				
S=2.0H	+0.9/-1.1					+1.0/-1.0				

Calculate in accordance with CIE Pub.117. The table is revised with 5547lm ($8\log(F/F_0) = 6.0$).

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	0.58	0.68	0.75	0.80	0.87	0.92	0.95	1.00	1.03
	0.30		0.50	0.60	0.67	0.73	0.81	0.86	0.90	0.96	0.99
	0.20		0.45	0.55	0.62	0.67	0.76	0.81	0.86	0.92	0.96
0.50	0.50	0.20	0.57	0.66	0.72	0.77	0.84	0.88	0.92	0.96	0.98
	0.30		0.50	0.59	0.66	0.71	0.79	0.84	0.87	0.92	0.95
	0.20		0.45	0.54	0.61	0.66	0.74	0.80	0.84	0.89	0.93
0.30	0.50	0.20	0.55	0.64	0.70	0.75	0.81	0.85	0.88	0.92	0.95
	0.30		0.49	0.58	0.65	0.70	0.76	0.81	0.85	0.89	0.92
	0.20		0.44	0.53	0.60	0.65	0.73	0.78	0.82	0.87	0.90
0.00	0.00	0.00	0.42	0.51	0.57	0.62	0.69	0.74	0.78	0.82	0.85
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	0.97	0.81	0.69	0.61	0.49	0.41	0.35	0.27	0.23	
	0.30		0.81	0.69	0.61	0.54	0.44	0.37	0.32	0.26	0.21	
	0.20		0.70	0.61	0.54	0.48	0.40	0.35	0.30	0.24	0.20	
0.50	0.50	0.20	0.94	0.78	0.67	0.58	0.47	0.42	0.33	0.26	0.21	
	0.30		0.79	0.68	0.59	0.52	0.43	0.36	0.31	0.25	0.21	
	0.20		0.69	0.60	0.53	0.47	0.39	0.34	0.29	0.24	0.20	
0.30	0.50	0.20	0.91	0.75	0.64	0.56	0.45	0.37	0.32	0.25	0.21	
	0.30		0.78	0.66	0.57	0.51	0.41	0.35	0.30	0.24	0.20	
	0.20		0.68	0.59	0.52	0.46	0.38	0.33	0.28	0.23	0.19	
0.00	0.00	0.00	0.58	0.49	0.43	0.38	0.31	0.26	0.22	0.18	0.15	
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	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.06	0.08	0.09	0.11	0.13	0.14	0.16	0.17
0.50	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.20	0.20	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		0.05	0.06	0.08	0.09	0.11	0.12	0.13	0.15	0.16
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.18	0.19	0.19	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		0.05	0.06	0.08	0.09	0.11	0.12	0.13	0.15	0.16
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: