Report No.: 1

Test Time: 13.08.2019 15:59

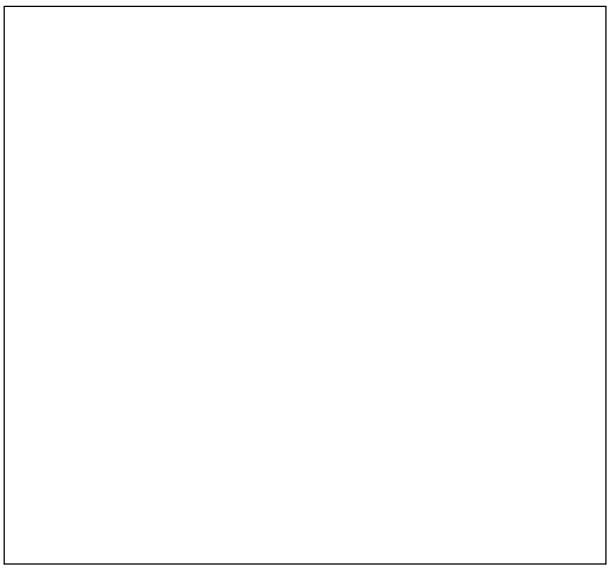
Luminaire Property

Luminaire Manufacturer: FAROS
Luminaire Description: FL 58_750 152LED 0,39A 23W 4000K opal
Luminous Length (mm): 750
Lamp Description: LED
Luminous Height (mm): 60
Luminous Width (mm): 75
Current: 0.106 A
Voltage: 221.5 V
Power Factor: 0.971
Power: 22.98 W

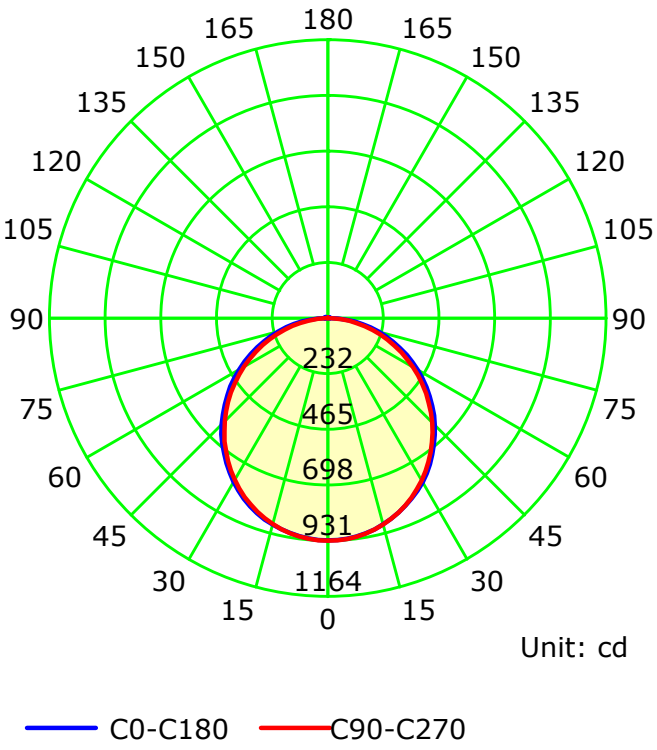
Photometric Results

CIE Class: Direct
Total Rated Lamp Lumens: 2771.0 lm
Measurement Flux: 2771 lm
Efficiency: 100%
Downward Ratio: 99%
Upward Ratio: 1%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 167.7, 164.1, 165.7, 165.2
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 115.3, 112.0, 113.9, 114.0
Luminaire Efficacy Rating (LER): 120.63
Central Intensity: 930.3 cd
Max. Intensity: 931.8 cd
Pos of Max. Intensity: H90 V0
S/MH(C0/C180): 1.26
S/MH(C90/C270): 1.25

Picture Of Luminaire

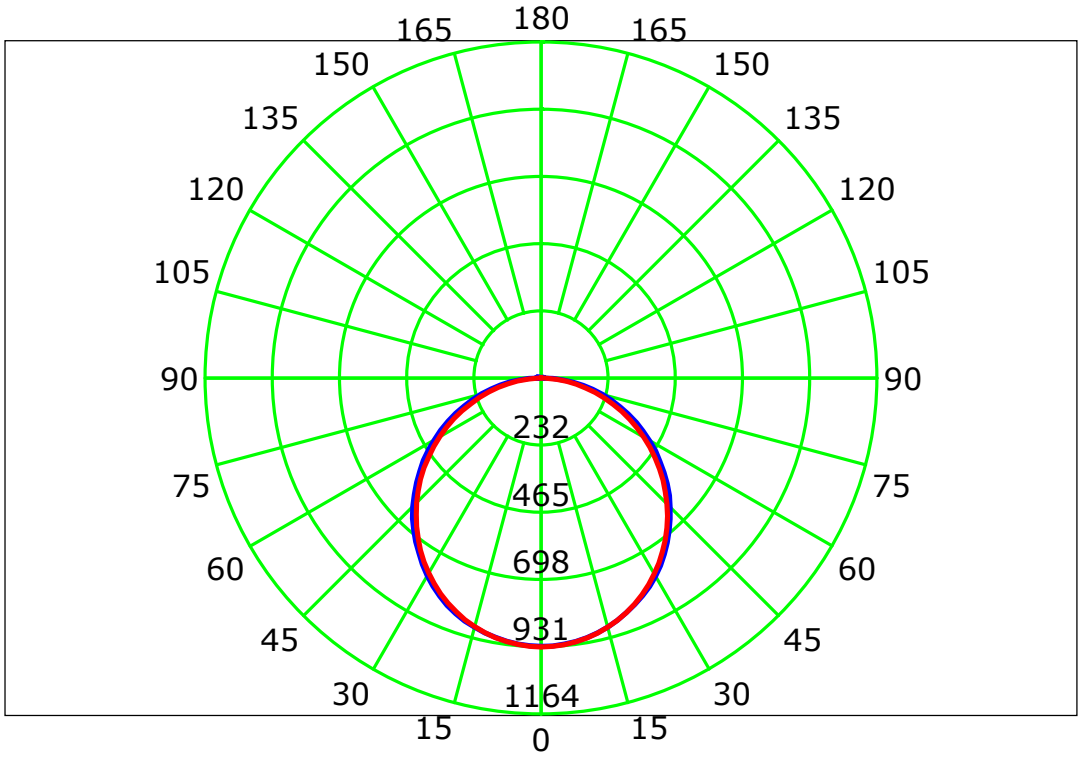


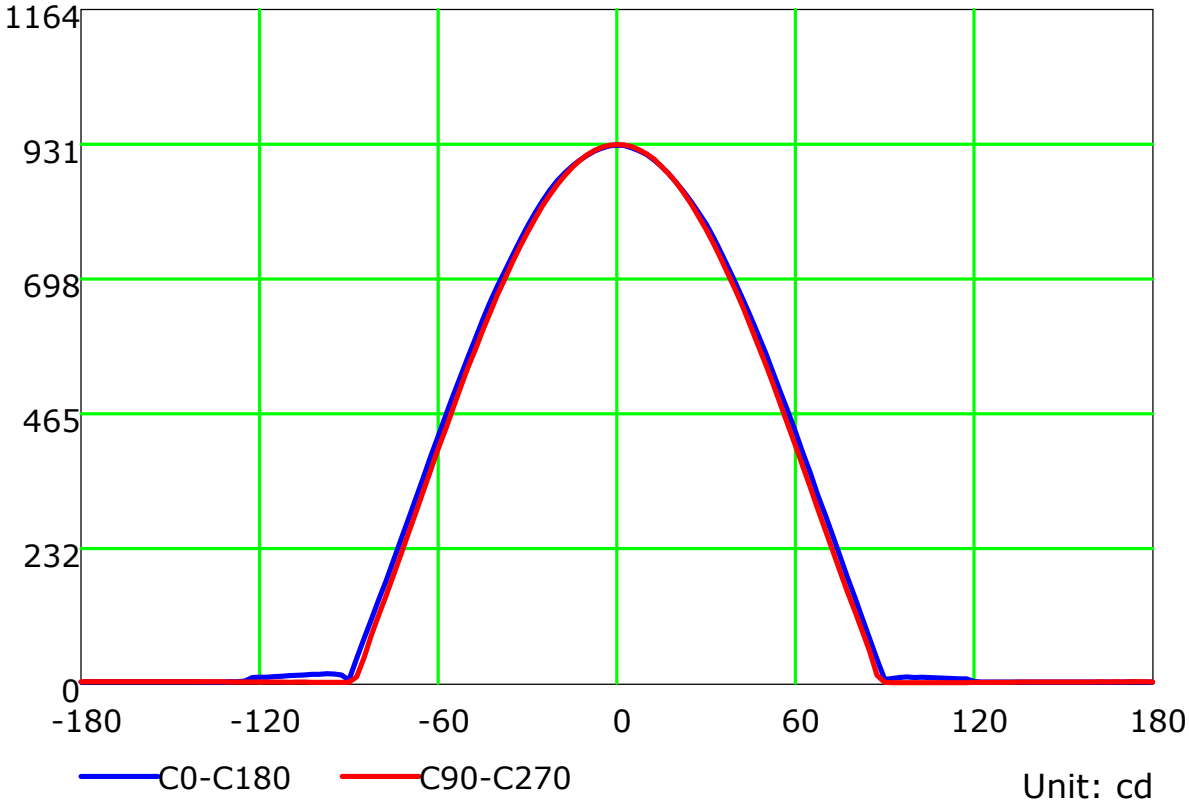
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5
Gamma Plane (°):0.0-180.0:2.5
Test Lab:
Test Device: LSG-1800B
Test Type: TYPE C
Distance: 12.677 m
Temperature:
Humidity:
Operator:
Inspector:

Luminous Intensity Distribution Curve

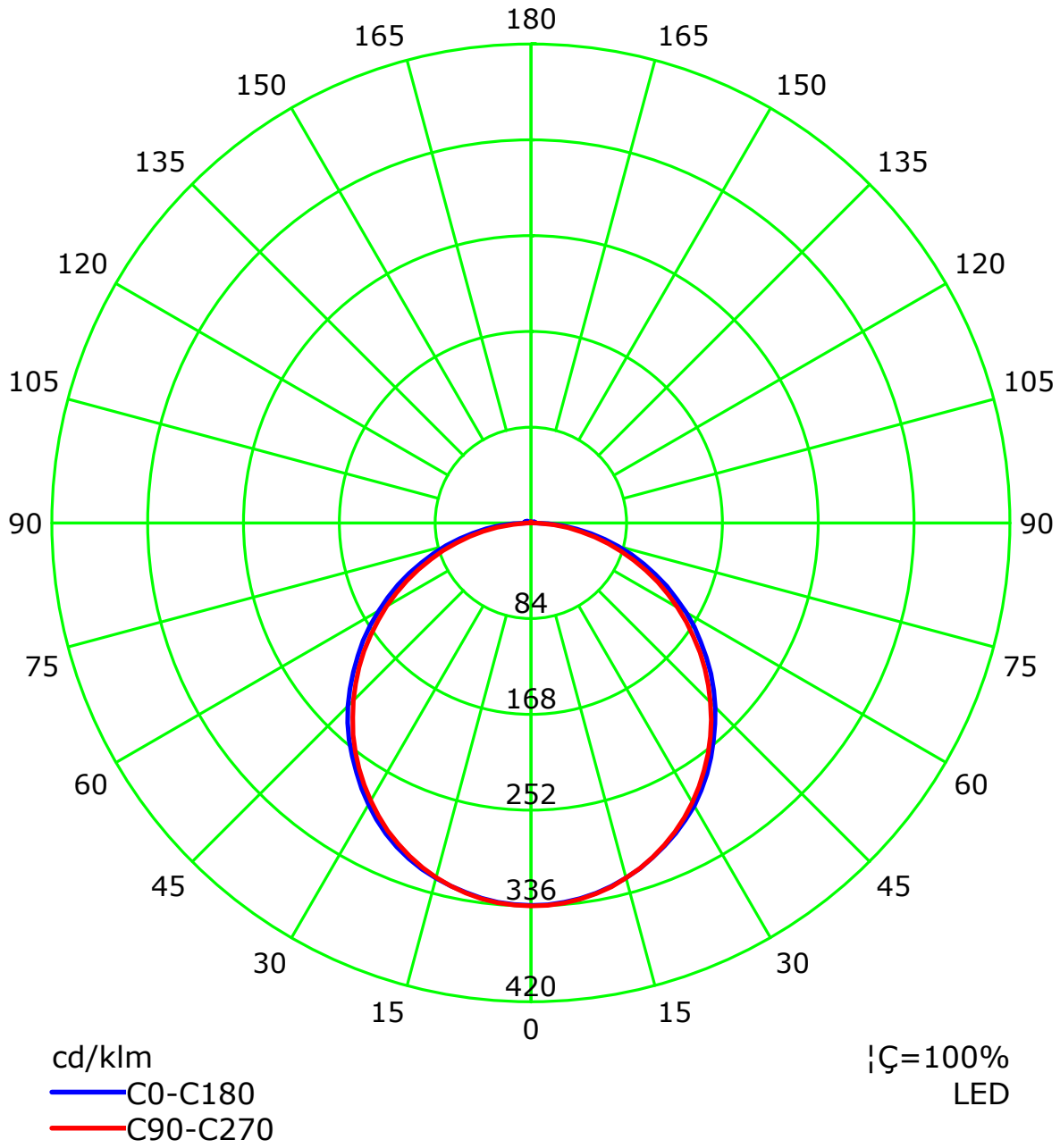




C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:2.5
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

Luminous Intensity Distribution Curve(cd/klm)

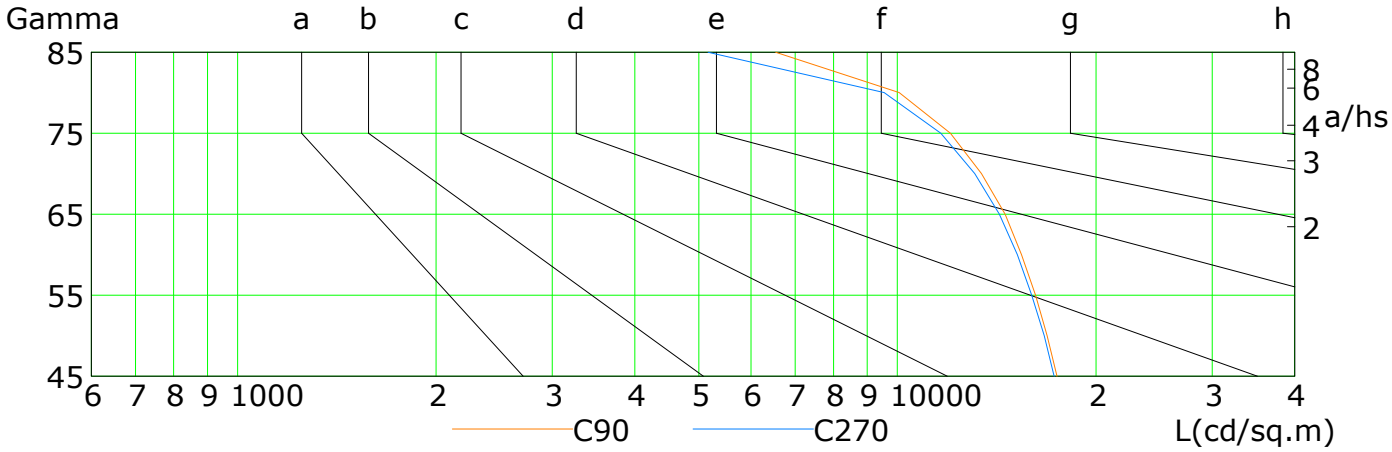


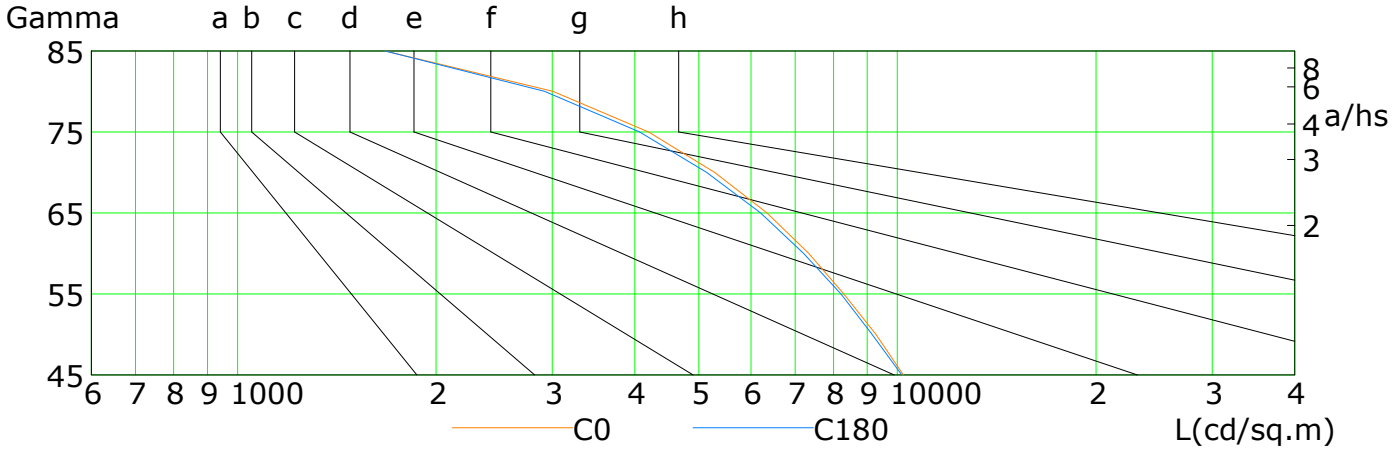
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:2.5
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



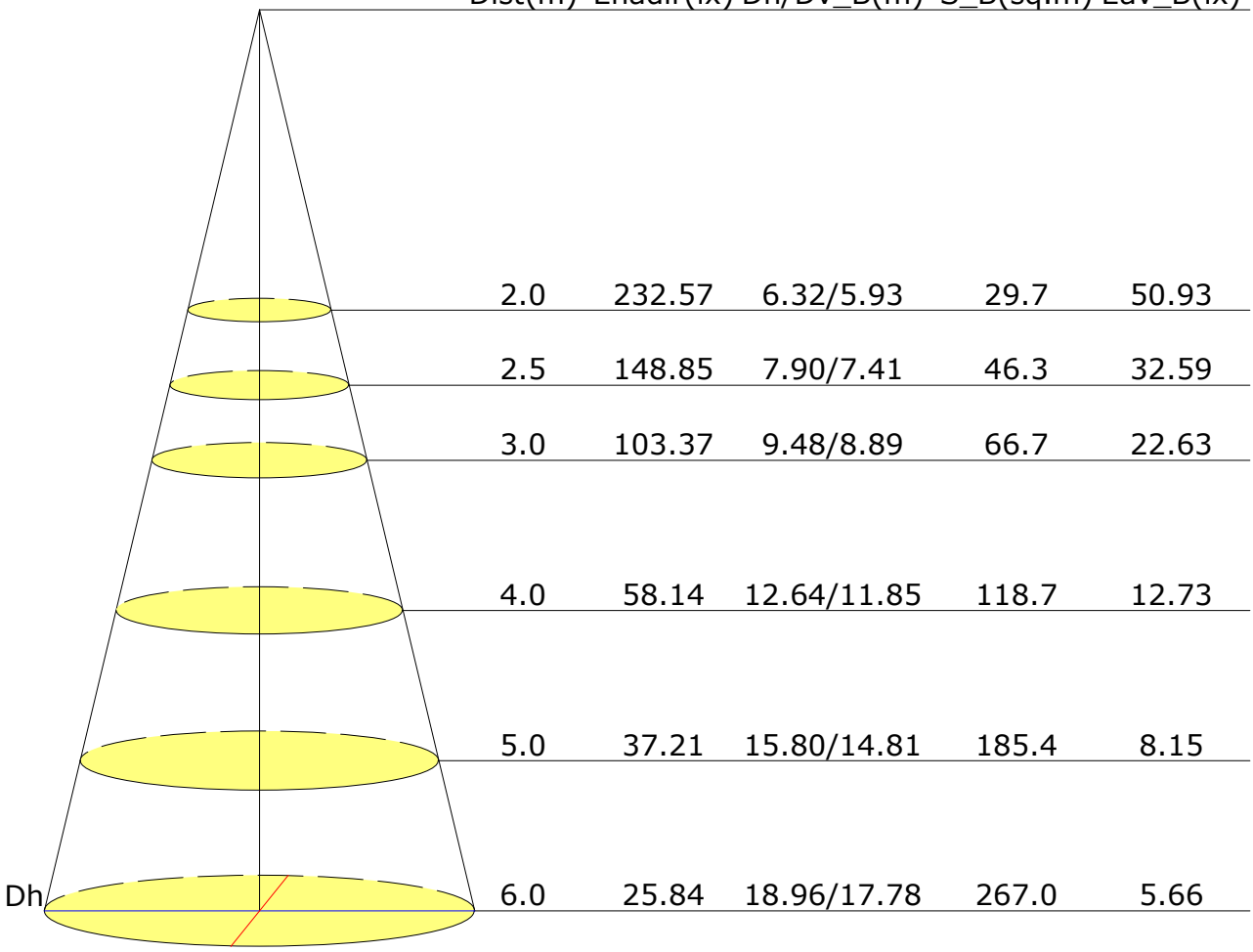


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	10213	9270	8296	7334	6347	5283	4197	3004	1673
C90	17446	16863	16191	15416	14562	13410	12038	10061	6539
C180	10155	9152	8212	7206	6204	5139	4068	2919	1673
C270	17277	16689	15977	15201	14272	13091	11634	9551	5166

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

Gamma Plane (°):0.0-180.0:2.5
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 (°):0.0-180.0:2.5
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	21.4	20.3	21.7	21.9	21.2	22.6	21.5	22.8	23.1
3H	21.3	22.5	21.6	22.8	23.1	22.7	24.0	23.0	24.3	24.6
4H	21.7	22.9	22.1	23.3	23.6	23.3	24.5	23.7	24.8	25.2
6H	22.1	23.2	22.4	23.5	23.9	23.8	24.9	24.1	25.2	25.6
8H	22.2	23.2	22.5	23.6	23.9	23.9	25.0	24.3	25.3	25.7
12H	22.2	23.2	22.6	23.6	24.0	24.0	25.0	24.4	25.4	25.7
X=4H Y=2H	20.6	21.8	21.0	22.2	22.5	21.6	22.8	21.9	23.1	23.4
3H	22.1	23.1	22.5	23.5	23.8	23.2	24.3	23.6	24.6	25.0
4H	22.7	23.6	23.1	24.0	24.4	24.0	24.9	24.4	25.3	25.7
6H	23.1	23.9	23.5	24.3	24.7	24.5	25.3	25.0	25.8	26.2
8H	23.2	24.0	23.7	24.4	24.8	24.7	25.5	25.2	25.9	26.3
12H	23.3	24.0	23.8	24.4	24.9	24.8	25.5	25.3	25.9	26.4
X=8H Y=4H	22.9	23.7	23.4	24.1	24.5	24.1	24.9	24.6	25.3	25.7
6H	23.4	24.1	23.9	24.5	25.0	24.7	25.4	25.2	25.8	26.3
8H	23.6	24.2	24.1	24.7	25.2	25.0	25.5	25.5	26.0	26.5
12H	23.8	24.2	24.3	24.7	25.3	25.1	25.6	25.6	26.1	26.6
X=12H Y=4H	22.9	23.6	23.4	24.0	24.5	24.1	24.8	24.6	25.2	25.7
6H	23.5	24.0	24.0	24.5	25.0	24.8	25.3	25.3	25.8	26.3
8H	23.7	24.2	24.2	24.7	25.2	25.0	25.5	25.5	26.0	26.5
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.1/-0.1				
S=1.5H	+0.3/-0.6					+0.3/-0.4				
S=2.0H	+0.6/-1.1					+0.8/-1.0				

Calculate in accordance with CIE Pub.117. The table is revised with 2771lm (8log(F/F0) = 3.5).

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

Gamma Plane (°):0.0-180.0:2.5
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	0.51	0.62	0.69	0.75	0.83	0.89	0.93	0.98	1.01
	0.30		0.43	0.53	0.61	0.67	0.77	0.83	0.87	0.93	0.97
	0.20		0.36	0.47	0.55	0.61	0.71	0.77	0.82	0.89	0.94
0.50	0.50	0.20	0.49	0.59	0.67	0.72	0.80	0.85	0.89	0.94	0.97
	0.30		0.42	0.52	0.60	0.66	0.74	0.80	0.84	0.90	0.94
	0.20		0.36	0.46	0.54	0.60	0.69	0.76	0.80	0.87	0.91
0.30	0.50	0.20	0.48	0.57	0.64	0.70	0.77	0.82	0.86	0.90	0.93
	0.30		0.41	0.51	0.58	0.64	0.72	0.78	0.82	0.87	0.90
	0.20		0.36	0.46	0.53	0.59	0.68	0.74	0.78	0.84	0.88
0.00	0.00	0.00	0.34	0.43	0.50	0.56	0.64	0.70	0.74	0.80	0.83

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 (°):0.0-180.0:2.5
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	1.08	0.90	0.78	0.68	0.54	0.45	0.39	0.30	0.25
	0.30		0.90	0.77	0.68	0.60	0.49	0.41	0.36	0.28	0.23
	0.20		0.77	0.68	0.60	0.54	0.45	0.38	0.33	0.27	0.22
0.50	0.50	0.20	1.04	0.87	0.75	0.65	0.52	0.46	0.37	0.29	0.23
	0.30		0.88	0.76	0.66	0.58	0.47	0.40	0.35	0.27	0.23
	0.20		0.77	0.67	0.59	0.53	0.44	0.37	0.32	0.26	0.22
0.30	0.50	0.20	1.02	0.84	0.72	0.63	0.50	0.41	0.35	0.27	0.23
	0.30		0.87	0.74	0.64	0.57	0.46	0.39	0.33	0.26	0.22
	0.20		0.76	0.66	0.58	0.52	0.43	0.36	0.32	0.25	0.21
0.00	0.00	0.00	0.66	0.57	0.50	0.44	0.36	0.30	0.26	0.20	0.17

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 (°):0.0-180.0:2.5
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	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.04	0.06	0.07	0.09	0.11	0.12	0.13	0.15	0.16
0.50	0.50	0.20	0.16	0.18	0.18	0.19	0.20	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		0.04	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