Report No.: 1 Test Time: 08.08.2019 12:34

Luminaire Property

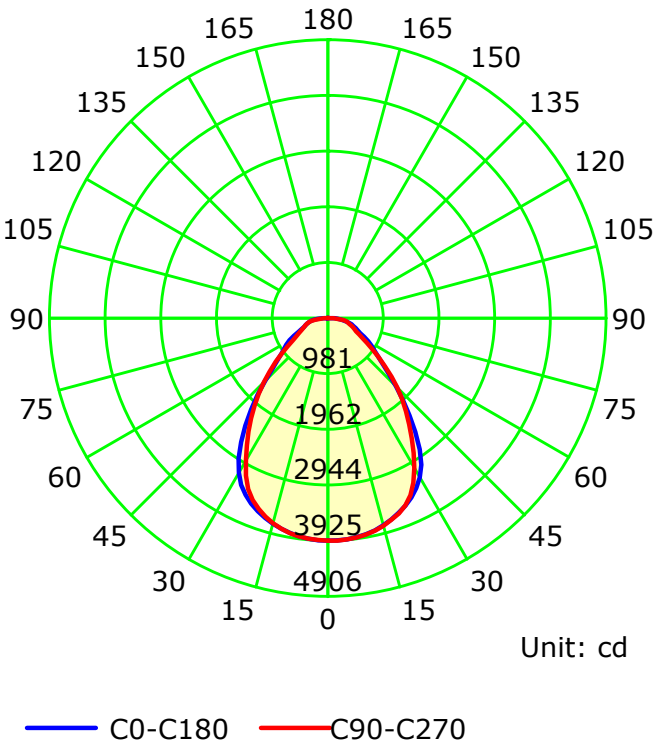
Luminaire Manufacturer:
Luminaire Description: FL 58 2x152 LED 62W 4000K microprisma
Lamp Description: LED Luminous Length (mm): 1500
Luminous Width (mm): 75 Luminous Height (mm): -60
Voltage: 221.4 V Current: 0.280 A
Power: 61.27 W Power Factor: 0.984

Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 7914.8 lm
Measurement Flux: 7914.8 lm Efficiency: 100%
Downward Ratio: 99% Upward Ratio: 1%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 151.4, 149.6, 143.5, 144.7
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 83.9, 82.9, 81.2, 81.7
Luminaire Efficacy Rating (LER): 129.23 Central Intensity: 3924.43 cd
Max. Intensity: 3925.48 cd Pos of Max. Intensity: H112.5 V0
S/MH(C0/C180): 1.20 S/MH(C90/C270): 1.14

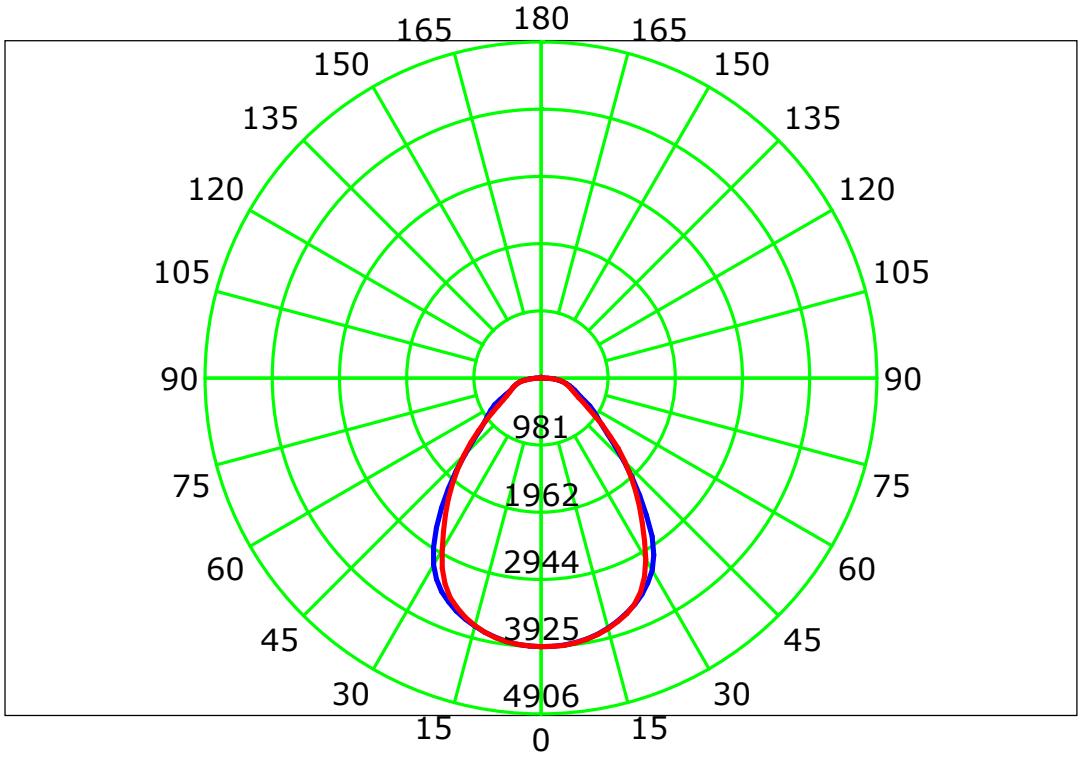
Picture Of Luminaire

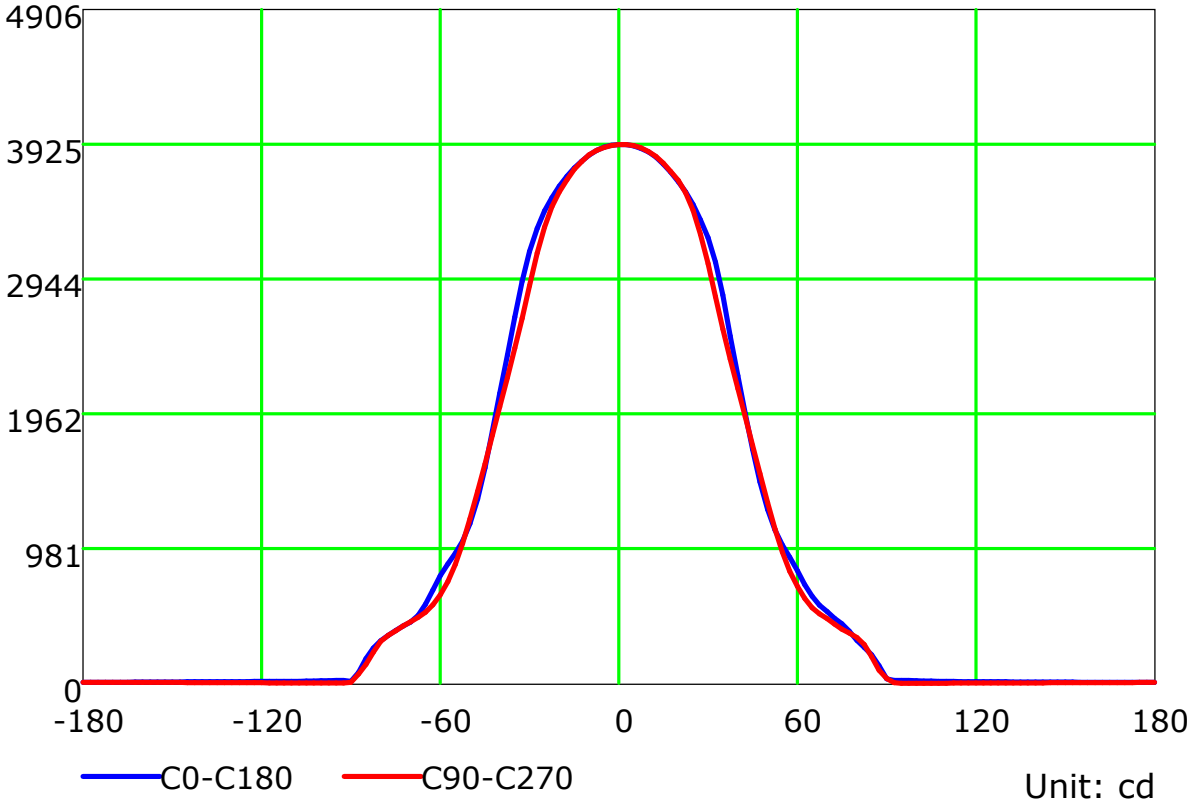
Luminous Intensity Distribution Curve



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

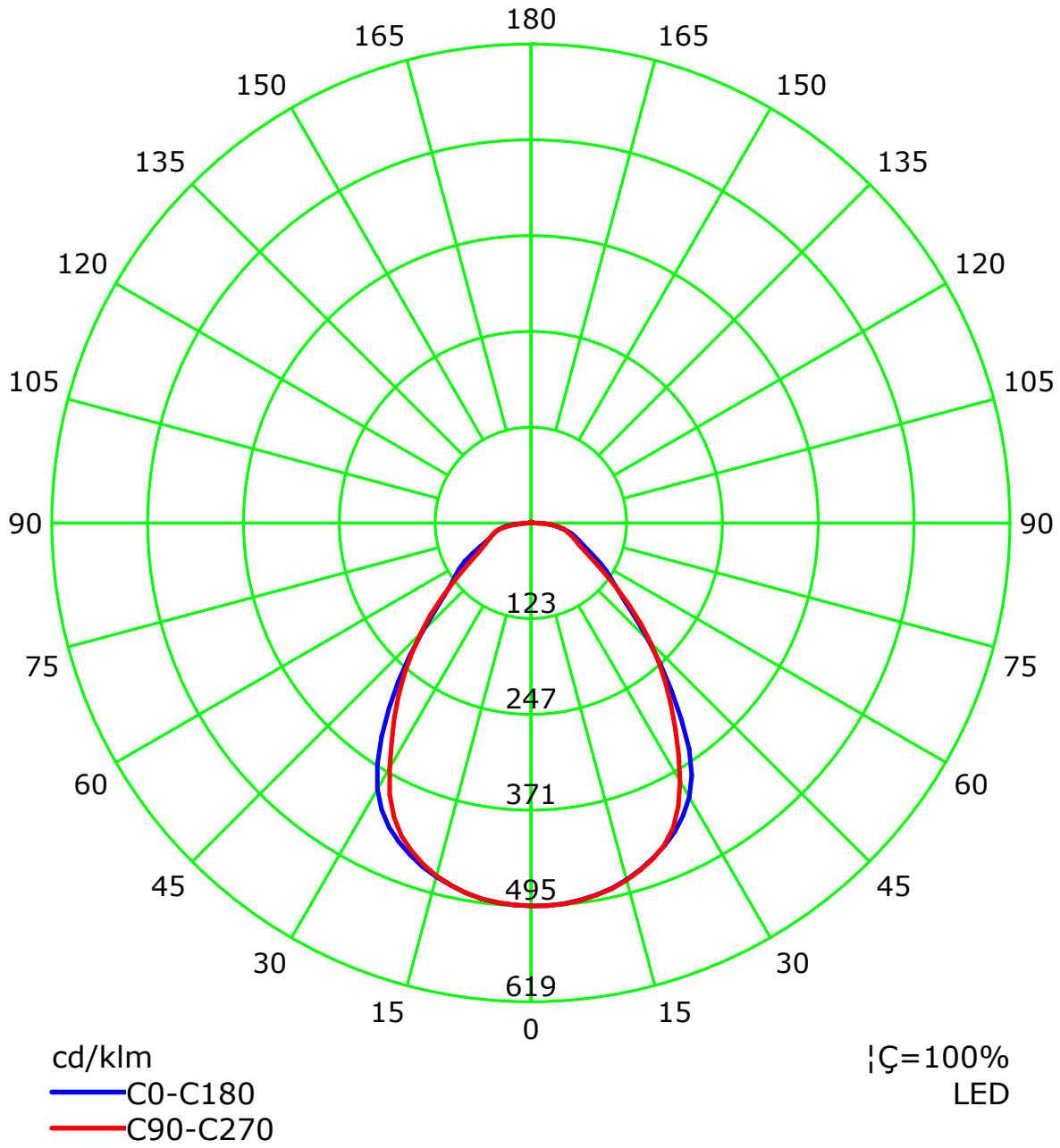




C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

Luminous Intensity Distribution Curve(cd/klm)

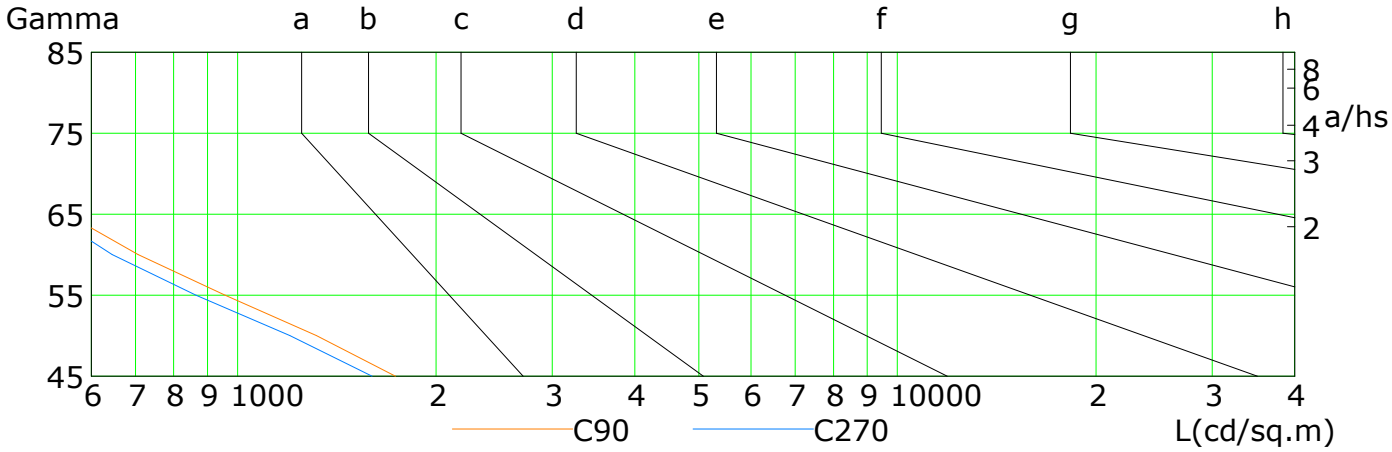


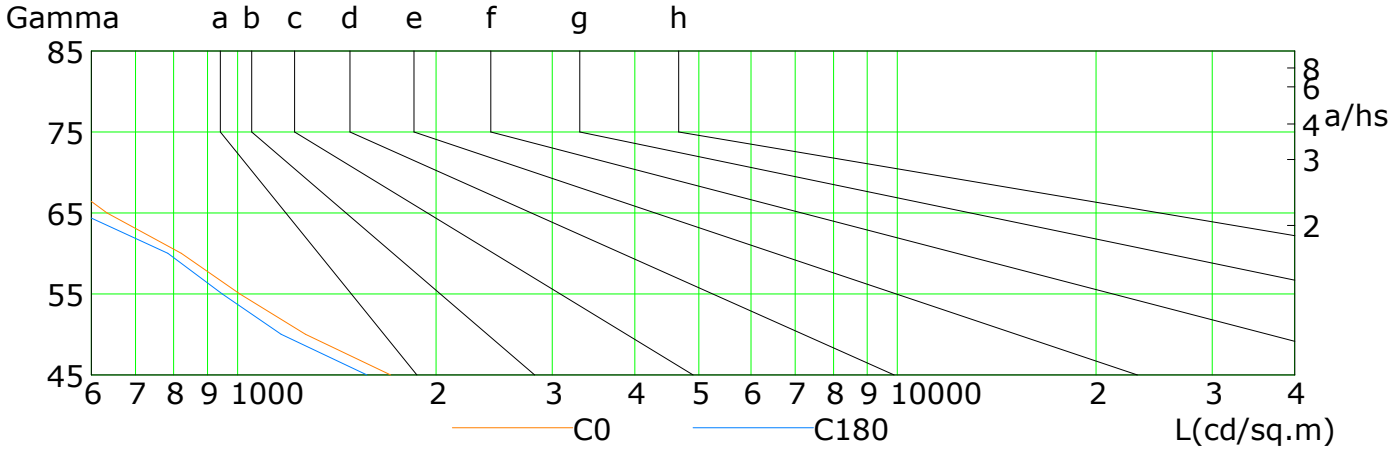
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



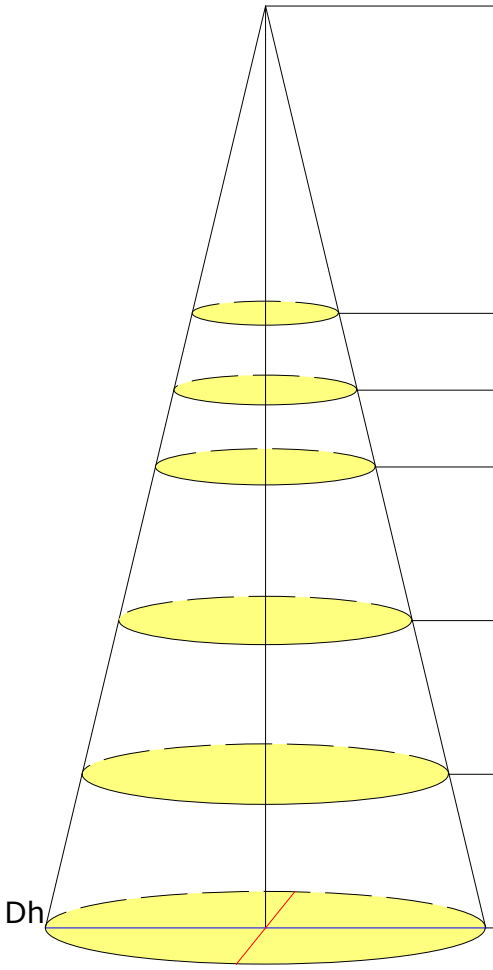


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	1706	1268	1008	822	634	522	435	314	209
C90	1734	1317	958	707	552	471	396	335	195
C180	1570	1164	948	784	577	447	385	311	182
C270	1599	1200	865	645	519	450	383	306	138

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



Dist(m)	Enadir(lx)	Dh/Dv_B(m)	S_B(sq.m)	Eav_B(lx)
2.0	981.11	3.60/3.53	9.7	462.76
2.5	627.91	4.50/4.41	15.1	296.16
3.0	436.05	5.39/5.30	21.8	205.67
4.0	245.28	7.19/7.06	38.7	115.69
5.0	156.98	8.99/8.83	60.5	74.04
6.0	109.01	10.79/10.59	87.2	51.42

Beam Angle(B): H83.9 V82.9 Field Angle(F): H151.4 V149.6

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	20.6	21.8	20.9	22.1	22.3	23.3	24.5	23.6	24.8	25.0
3H	16.4	17.6	16.8	17.8	18.1	24.7	25.8	25.0	26.1	26.4
4H	9.1	10.1	9.4	10.4	10.7	25.7	26.7	26.0	27.0	27.3
6H	-1.$	-1.$	-1.$	-1.$	-1.$	27.1	28.0	27.4	28.4	28.7
8H	-1.$	-1.$	-1.$	-1.$	-1.$	28.0	28.9	28.4	29.3	29.6
12H	-1.$	-1.$	-1.$	-1.$	-1.$	28.0	28.9	28.3	29.2	29.6
X=4H Y=2H	21.5	22.5	21.8	22.8	23.1	25.2	26.2	25.5	26.5	26.8
3H	17.0	17.9	17.4	18.2	18.6	25.6	26.5	26.0	26.8	27.2
4H	-1.$	-1.$	-1.$	-1.$	-1.$	24.1	24.9	24.5	25.2	25.6
6H	-1.$	-1.$	-1.$	-1.$	-1.$	24.3	25.1	24.8	25.5	25.9
8H	-1.$	-1.$	-1.$	-1.$	-1.$	25.5	26.2	25.9	26.6	27.0
12H	-1.$	-1.$	-1.$	-1.$	-1.$	25.1	25.7	25.5	26.1	26.5
X=8H Y=4H	-1.$	-1.$	-1.$	-1.$	-1.$	23.5	24.2	24.0	24.6	25.1
6H	-1.$	-1.$	-1.$	-1.$	-1.$	23.5	24.1	24.0	24.5	25.0
8H	-1.$	-1.$	-1.$	-1.$	-1.$	24.7	25.2	25.2	25.6	26.1
12H	-1.$	-1.$	-1.$	-1.$	-1.$	23.9	24.4	24.4	24.8	25.4
X=12H Y=4H	-1.$	-1.$	-1.$	-1.$	-1.$	23.5	24.1	23.9	24.5	25.0
6H	-1.$	-1.$	-1.$	-1.$	-1.$	23.4	23.9	23.9	24.4	24.9
8H	-1.$	-1.$	-1.$	-1.$	-1.$	24.6	25.0	25.1	25.5	26.0
Variations with the observer position at spacings:										
S=1.0H	-1.$/9.1					+8.7/-1.$				
S=1.5H	-1.$/10.1					+11.9/-1.$				
S=2.0H	-1.$/11.6					+14.8/-1.$				

Calculate in accordance with CIE Pub.117. The table is revised with 7915lm (8log(F/F0) = 7.2).

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	0.59	0.69	0.76	0.82	0.89	0.93	0.97	1.01	1.04
	0.30		0.51	0.62	0.69	0.75	0.83	0.88	0.92	0.97	1.00
	0.20		0.46	0.56	0.64	0.70	0.78	0.84	0.88	0.94	0.97
0.50	0.50	0.20	0.57	0.67	0.74	0.79	0.86	0.90	0.93	0.97	1.00
	0.30		0.51	0.61	0.68	0.73	0.81	0.85	0.89	0.94	0.97
	0.20		0.46	0.56	0.63	0.68	0.76	0.82	0.86	0.91	0.94
0.30	0.50	0.20	0.56	0.65	0.72	0.76	0.83	0.87	0.90	0.93	0.96
	0.30		0.50	0.60	0.66	0.71	0.78	0.83	0.86	0.91	0.94
	0.20		0.45	0.55	0.62	0.67	0.75	0.80	0.83	0.88	0.91
0.00	0.00	0.00	0.43	0.53	0.59	0.64	0.71	0.76	0.79	0.84	0.87

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

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	0.96	0.79	0.67	0.58	0.46	0.38	0.33	0.26	0.21
	0.30		0.80	0.68	0.58	0.52	0.42	0.35	0.30	0.24	0.20
	0.20		0.69	0.59	0.52	0.46	0.38	0.33	0.28	0.23	0.19
0.50	0.50	0.20	0.93	0.76	0.64	0.56	0.44	0.40	0.31	0.24	0.20
	0.30		0.78	0.66	0.57	0.50	0.40	0.34	0.29	0.23	0.19
	0.20		0.68	0.58	0.51	0.45	0.37	0.32	0.27	0.22	0.18
0.30	0.50	0.20	0.90	0.73	0.62	0.53	0.42	0.35	0.30	0.23	0.19
	0.30		0.77	0.64	0.55	0.48	0.39	0.33	0.28	0.22	0.18
	0.20		0.67	0.57	0.50	0.44	0.36	0.31	0.27	0.21	0.18
0.00	0.00	0.00	0.57	0.47	0.41	0.36	0.29	0.24	0.21	0.16	0.13

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	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	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	0.15	0.17	0.17	0.18	0.19	0.19	0.20	0.20	0.21
	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	0.12	0.14	0.15	0.16
0.30	0.50	0.20	0.15	0.16	0.17	0.17	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 (°):0.0-180.0:2.5
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector: