

Report No.: 7

Test Time: 07.12.2017 10:48

## Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FP 150 50W 5000K 90x90gr. NEMA

Number of Lamps: 1

Luminous Width (mm): 153

Voltage: 231.5 V

Power: 48.34 W

Luminous Length (mm): 396

Luminous Height (mm): 80

Current: 0.213 A

Power Factor: 0.976

## Photometric Results

CIE Class: Direct

Measurement Flux: 5561.8 lm

Downward Ratio: 100%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 120.1, 120.1, 131.9, 132.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 86.2, 86.5, 95.0, 95.0

Luminaire Efficacy Rating (LER): 115.11

Max. Intensity: 2932.23 cd

S/MH(C0/C180): 1.52

Total Rated Lamp Lumens: 5561.8 lm

Efficiency: 100%

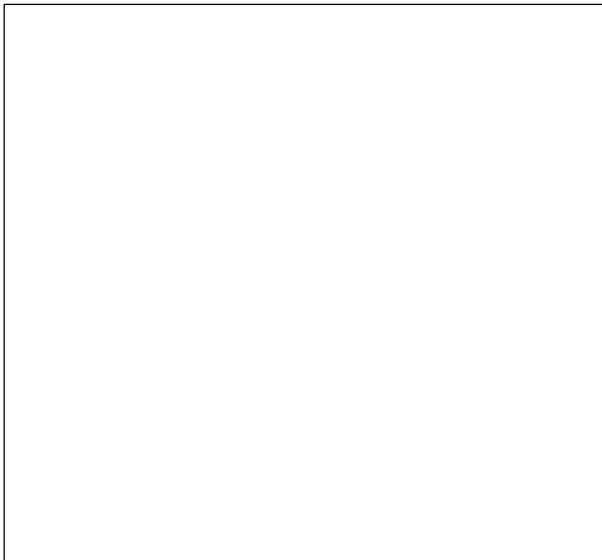
Upward Ratio: 0%

Central Intensity: 2156 cd

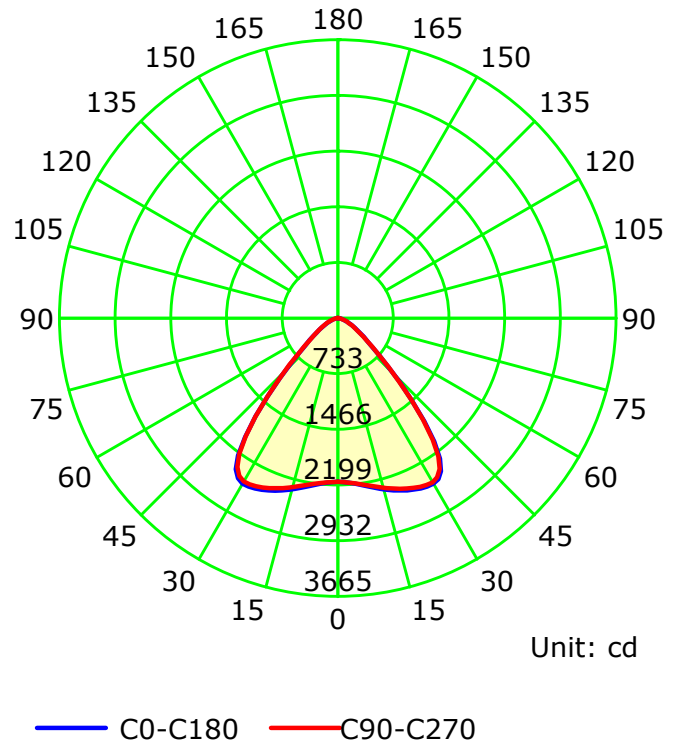
Pos of Max. Intensity: H135 V36

S/MH(C90/C270): 1.51

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

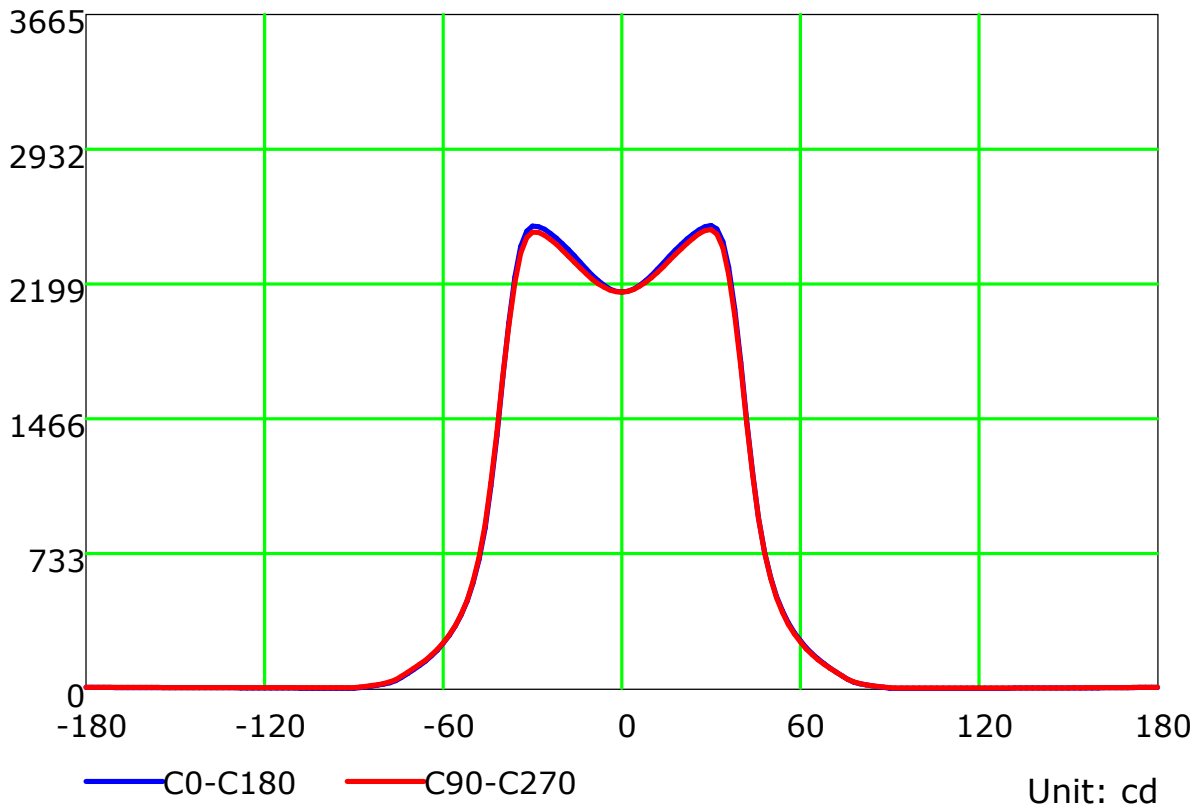
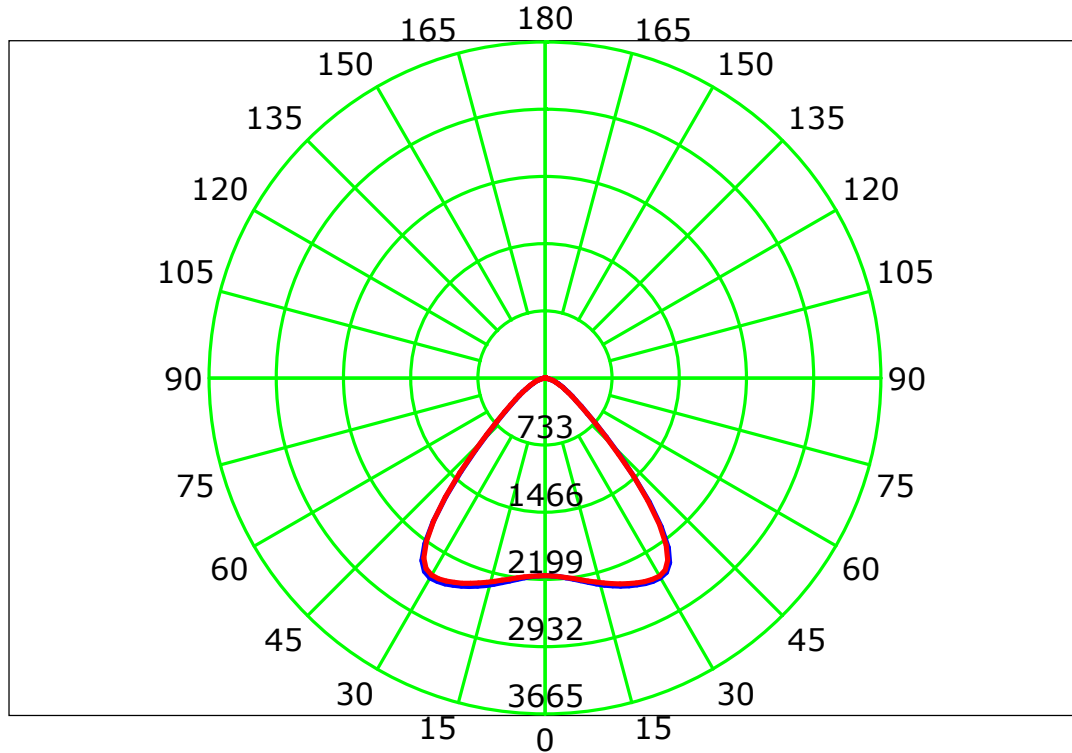
Test Device: LSG-1800B

Distance: 12.606 m

Humidity:

Inspector:

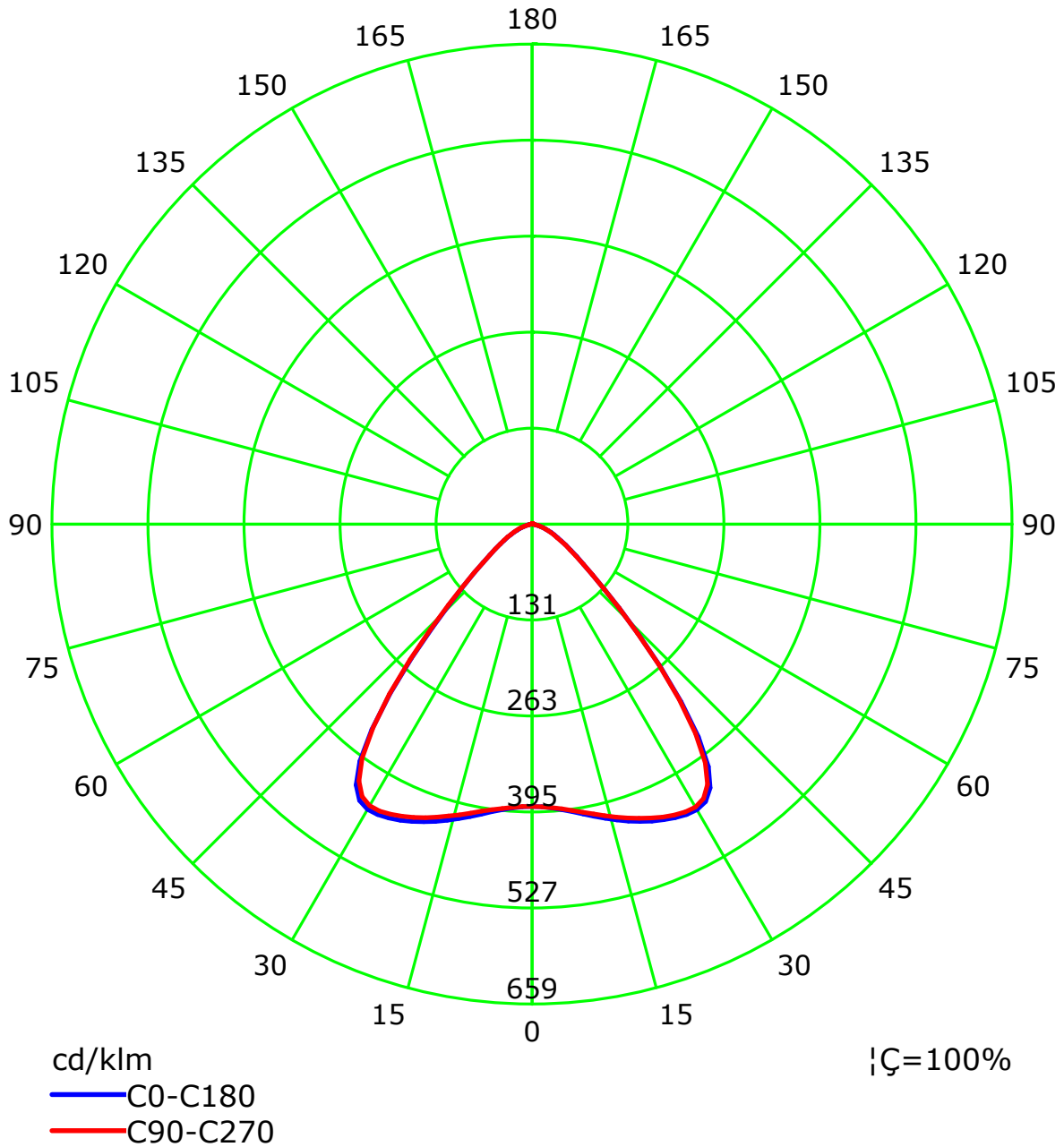
## Luminous Intensity Distribution Curve



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

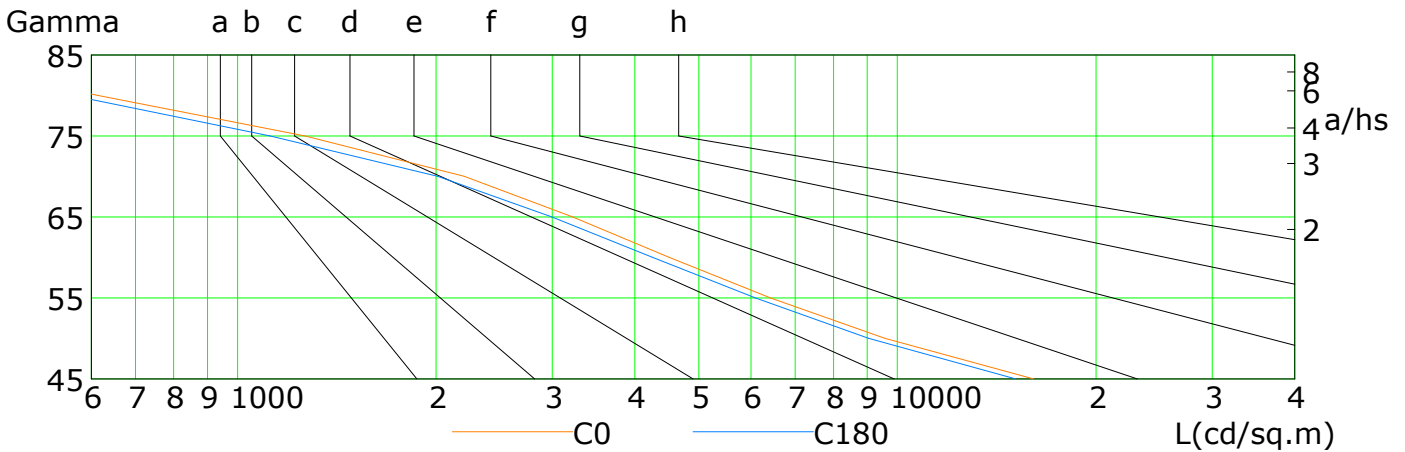
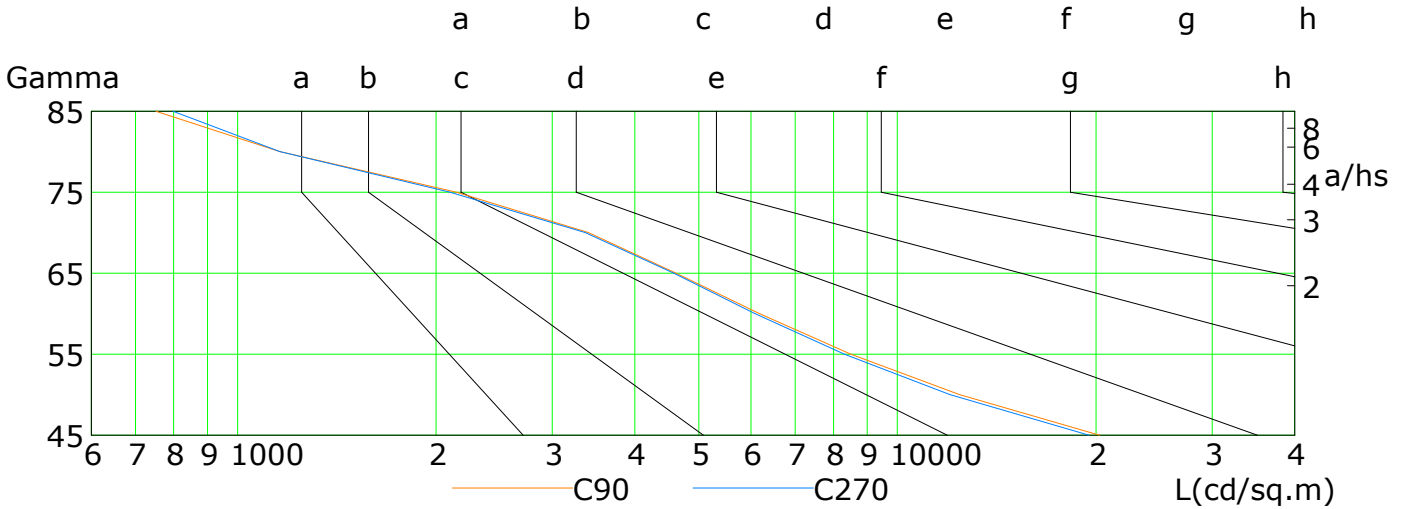
Gamma Plane (°):0.0-180.0:2.0  
 Test Device: LSG-1800B  
 Distance: 12.606 m  
 Humidity:  
 Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		a	b	c	d	e	f	g	h
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	16091	9566	6426	4506	3220	2206	1266	613	341
C90	20255	12415	8505	6176	4618	3402	2146	1159	752
C180	15106	9044	6093	4254	2996	2010	1121	559	304
C270	19527	12007	8315	6081	4585	3366	2099	1159	798

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Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

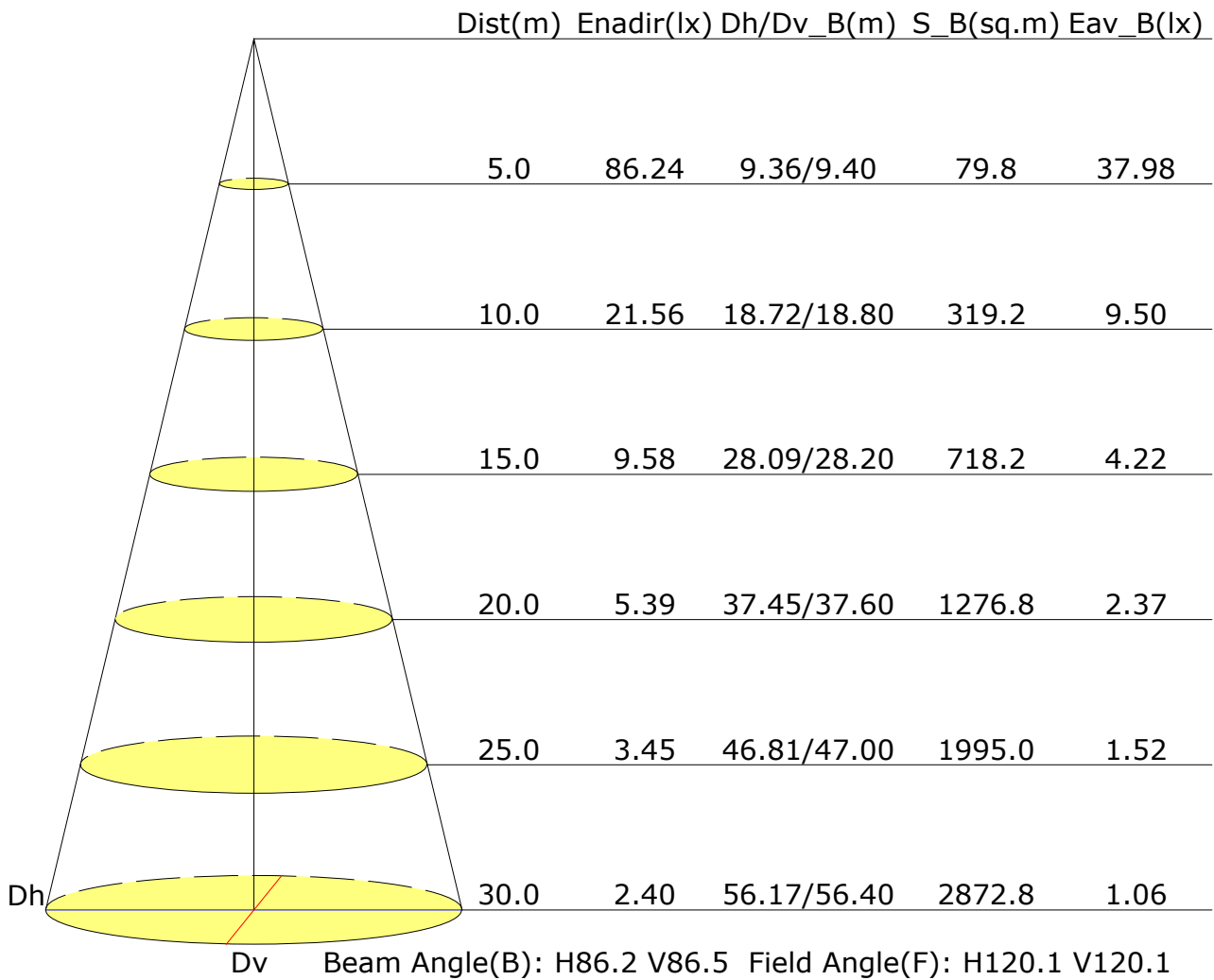
Test Device: LSG-1800B

Distance: 12.606 m

Humidity:

Inspector:

## Illuminance at a Distance



## 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	20.3	21.5	20.6	21.7	21.9	20.6	21.8	20.9	22.0	22.3
3H	20.3	21.4	20.7	21.7	21.9	20.7	21.8	21.0	22.0	22.3
4H	20.3	21.3	20.7	21.6	21.9	20.7	21.7	21.0	22.0	22.3
6H	20.3	21.2	20.6	21.5	21.8	20.7	21.6	21.0	21.9	22.2
8H	20.2	21.1	20.6	21.4	21.7	20.6	21.5	21.0	21.8	22.1
12H	20.2	21.0	20.6	21.4	21.7	20.6	21.4	21.0	21.7	22.1
X=4H Y=2H	20.4	21.4	20.8	21.7	22.0	20.7	21.7	21.1	22.0	22.3
3H	20.6	21.4	20.9	21.7	22.1	20.9	21.7	21.3	22.0	22.4
4H	20.6	21.3	21.0	21.7	22.0	20.9	21.7	21.3	22.0	22.4
6H	20.5	21.2	21.0	21.6	22.0	20.9	21.5	21.3	21.9	22.3
8H	20.5	21.1	20.9	21.5	21.9	20.9	21.5	21.3	21.9	22.3
12H	20.5	21.0	20.9	21.4	21.9	20.9	21.4	21.3	21.8	22.2
X=8H Y=4H	20.6	21.2	21.0	21.6	22.0	20.9	21.5	21.3	21.9	22.3
6H	20.6	21.0	21.0	21.5	21.9	20.9	21.4	21.4	21.8	22.3
8H	20.6	21.0	21.0	21.4	21.9	20.9	21.3	21.4	21.8	22.3
12H	20.5	20.9	21.0	21.4	21.9	20.9	21.3	21.4	21.7	22.2
X=12H Y=4H	20.5	21.1	21.0	21.5	21.9	20.9	21.4	21.3	21.8	22.3
6H	20.6	21.0	21.0	21.4	21.9	20.9	21.3	21.4	21.8	22.3
8H	20.5	20.9	21.0	21.4	21.9	20.9	21.3	21.4	21.7	22.2
Variations with the observer position at spacings:										
S=1.0H	+2.1/-2.8					+2.0/-2.6				
S=1.5H	+2.8/-4.2					+2.6/-3.9				
S=2.0H	+4.4/-5.5					+4.2/-5.0				

Calculate in accordance with CIE Pub.117. The table is revised with 5562lm ( $8\log(F/F_0) = 6.0$ ).

## Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.25									
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	0.70	0.79	0.85	0.90	0.96	0.99	1.02	1.05	1.07	
	0.30		0.63	0.73	0.80	0.85	0.91	0.95	0.98	1.02	1.05	
	0.20		0.59	0.69	0.75	0.80	0.87	0.92	0.95	1.00	1.03	
0.50	0.50	0.20	0.68	0.77	0.83	0.87	0.93	0.96	0.98	1.01	1.03	
	0.30		0.62	0.72	0.78	0.83	0.89	0.93	0.95	0.99	1.01	
	0.20		0.58	0.68	0.75	0.79	0.86	0.90	0.93	0.97	0.99	
0.30	0.50	0.20	0.67	0.76	0.81	0.85	0.90	0.93	0.95	0.98	0.99	
	0.30		0.62	0.71	0.77	0.81	0.87	0.90	0.93	0.96	0.98	
	0.20		0.58	0.67	0.74	0.78	0.84	0.88	0.91	0.94	0.96	
0.00	0.00	0.00	0.56	0.65	0.71	0.75	0.81	0.84	0.87	0.90	0.92	
<p>Rating:48W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

## Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.25									
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	0.80	0.64	0.53	0.46	0.36	0.29	0.25	0.19	0.16	
	0.30		0.67	0.55	0.46	0.40	0.32	0.27	0.23	0.18	0.15	
	0.20		0.57	0.48	0.41	0.36	0.29	0.25	0.22	0.17	0.14	
0.50	0.50	0.20	0.77	0.61	0.50	0.43	0.34	0.31	0.23	0.18	0.14	
	0.30		0.65	0.53	0.45	0.39	0.31	0.26	0.22	0.17	0.14	
	0.20		0.56	0.47	0.40	0.35	0.28	0.24	0.21	0.16	0.13	
0.30	0.50	0.20	0.74	0.58	0.48	0.41	0.32	0.26	0.22	0.17	0.14	
	0.30		0.63	0.51	0.43	0.37	0.29	0.24	0.21	0.16	0.13	
	0.20		0.55	0.46	0.39	0.34	0.27	0.23	0.20	0.15	0.13	
0.00	0.00	0.00	0.44	0.35	0.29	0.25	0.19	0.16	0.13	0.10	0.08	
<p>Rating:48W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												



## Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.25								
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	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21
	0.30		0.09	0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.50	0.50	0.20	0.14	0.16	0.17	0.17	0.18	0.19	0.19	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	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17
0.30	0.50	0.20	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.20
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.16	0.18	0.18
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<p>Rating:48W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											