Lisun Electronics Inc.
http://www.Lisungroup.com
Tel: +86(21)51083341
Fax: +86(21)51083342

Report No.: 1 Test Time: 22.10.2019 10:57

Luminaire Property

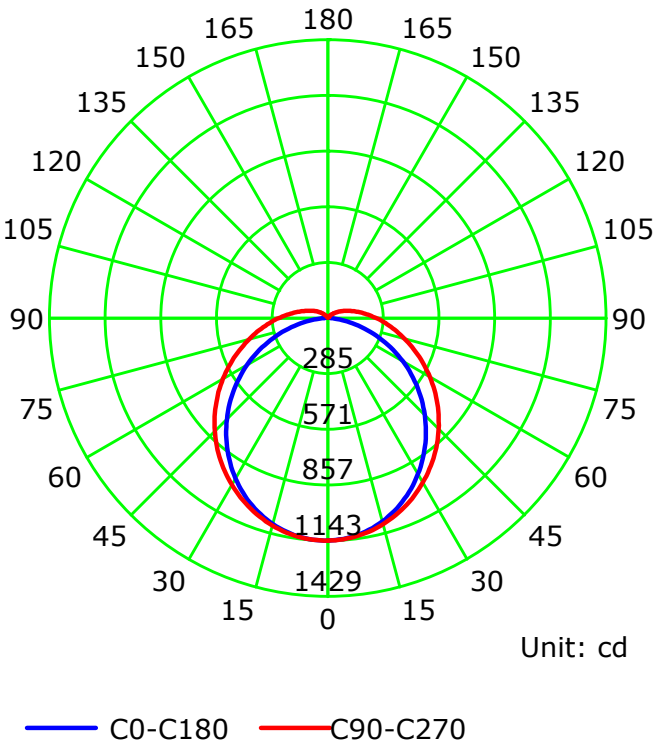
Luminaire Manufacturer:
Luminaire Description: FI 135 18LED 0,3A 36W 4000K matovyi
Luminous Length (mm): 1280 Luminous Width (mm): 135
Luminous Height (mm): 100 Voltage: 221.2 V
Current: 0.169 A Power: 36.27 W
Power Factor: 0.968

Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 3917.8 lm
Measurement Flux: 3917.8 lm Efficiency: 100%
Downward Ratio: 92% Upward Ratio: 8%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.0, 219.6, 197.4, 195.6
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 107.7, 126.1, 116.6, 116.0
Luminaire Efficacy Rating (LER): 108.07 Central Intensity: 1142.39 cd
Max. Intensity: 1143.89 cd Pos of Max. Intensity: H157.5 V1
S/MH(C0/C180): 1.22 S/MH(C90/C270): 1.28

Picture Of Luminaire

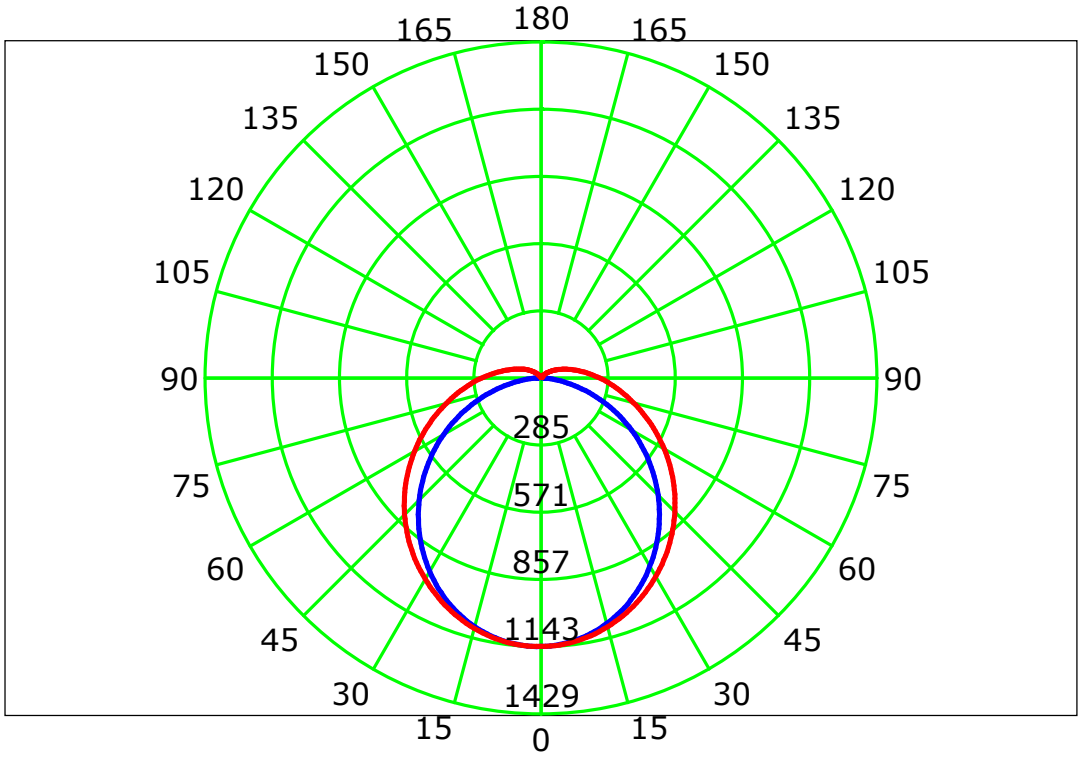
Luminous Intensity Distribution Curve

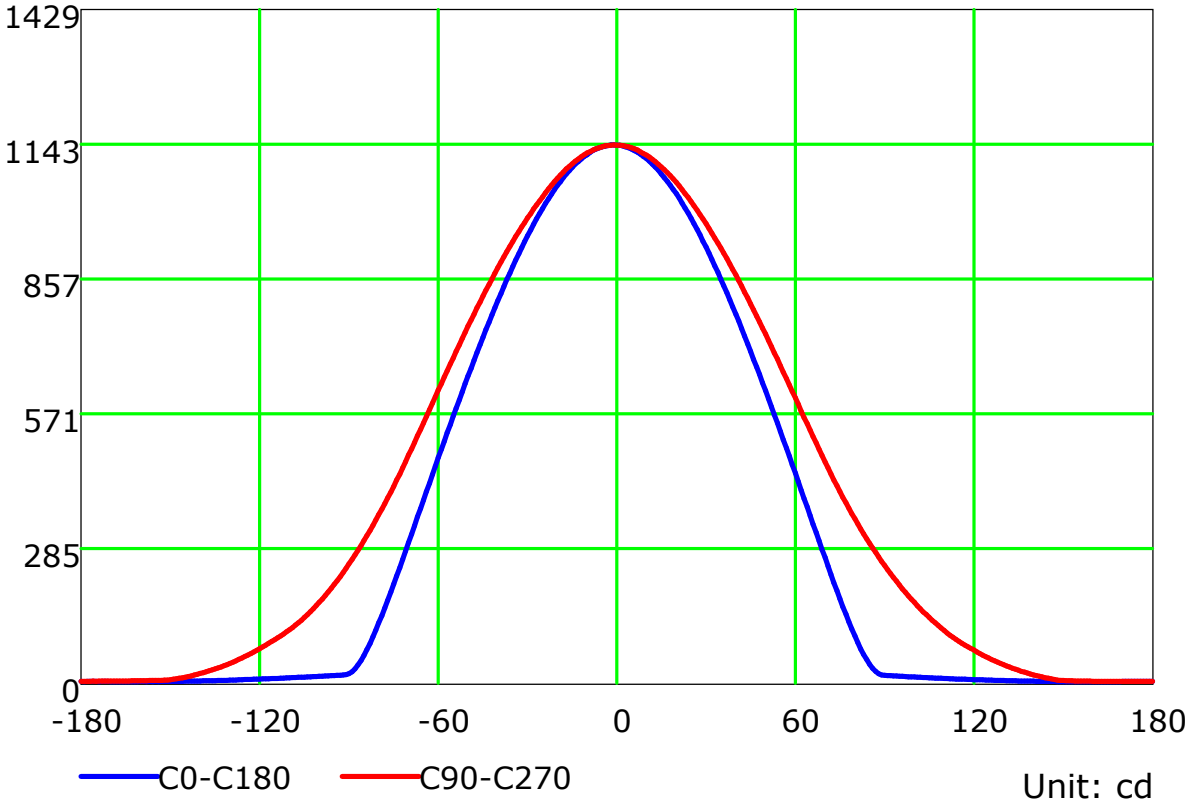


C Plane (°):0.0-360.0: 22.5 Gamma Plane (°):0.0-180.0:1.0
Test Lab: Test Device: LSG-1800B
Test Type: TYPE C Distance: 12.677 m
Temperature: Humidity:
Operator: Inspector:

Lisun Electronics Inc.
http://www.Lisungroup.com
Tel: +86(21)51083341
Fax: +86(21)51083342

Luminous Intensity Distribution Curve



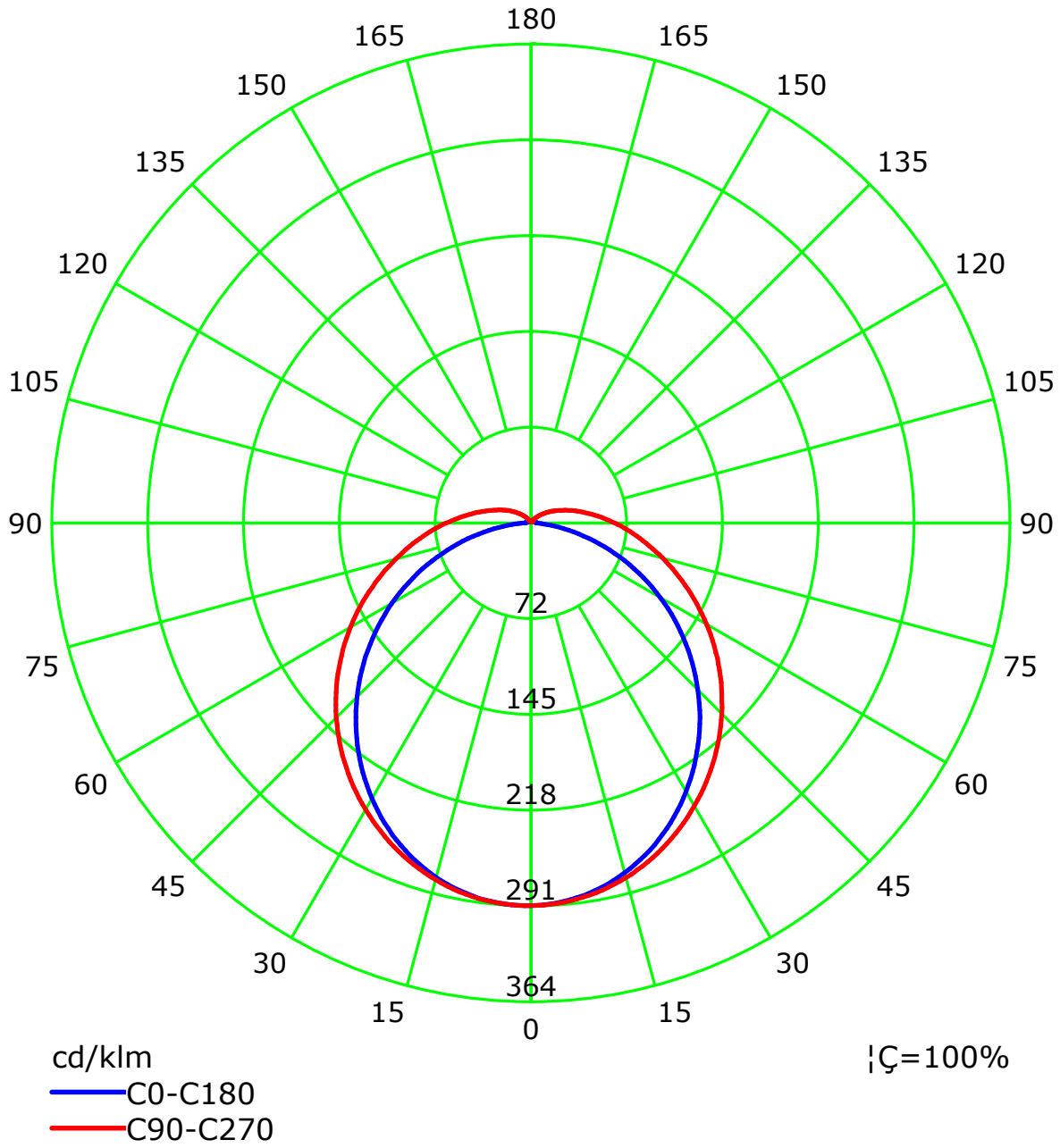


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

Lisun Electronics Inc.
http://www.Lisungroup.com
Tel: +86(21)51083341
Fax: +86(21)51083342

Luminous Intensity Distribution Curve(cd/klm)



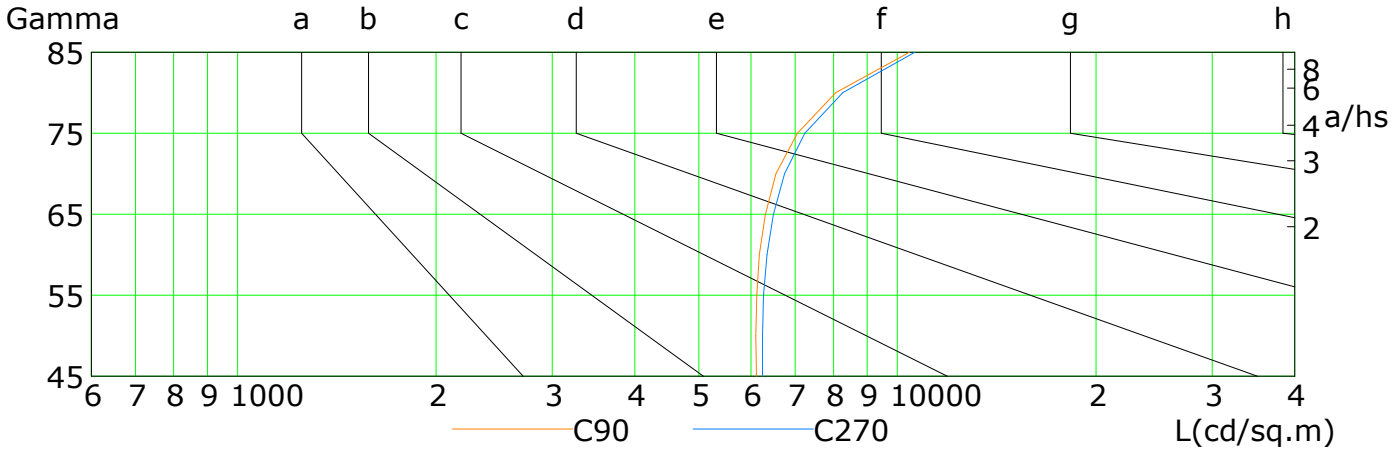
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

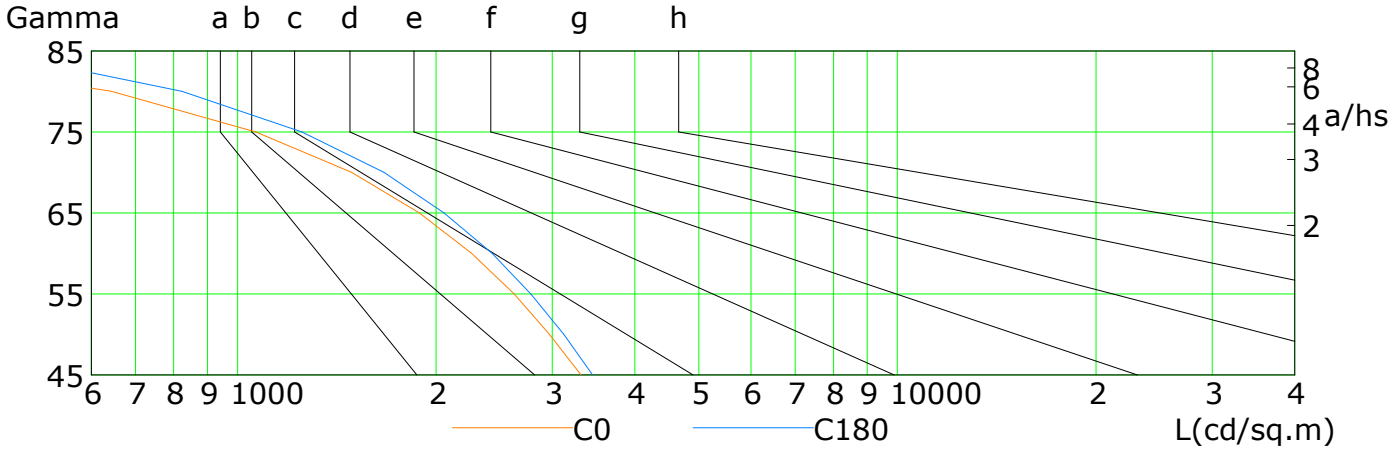
Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

Lisun Electronics Inc.
http://www.Lisungroup.com
Tel: +86(21)51083341
Fax: +86(21)51083342

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





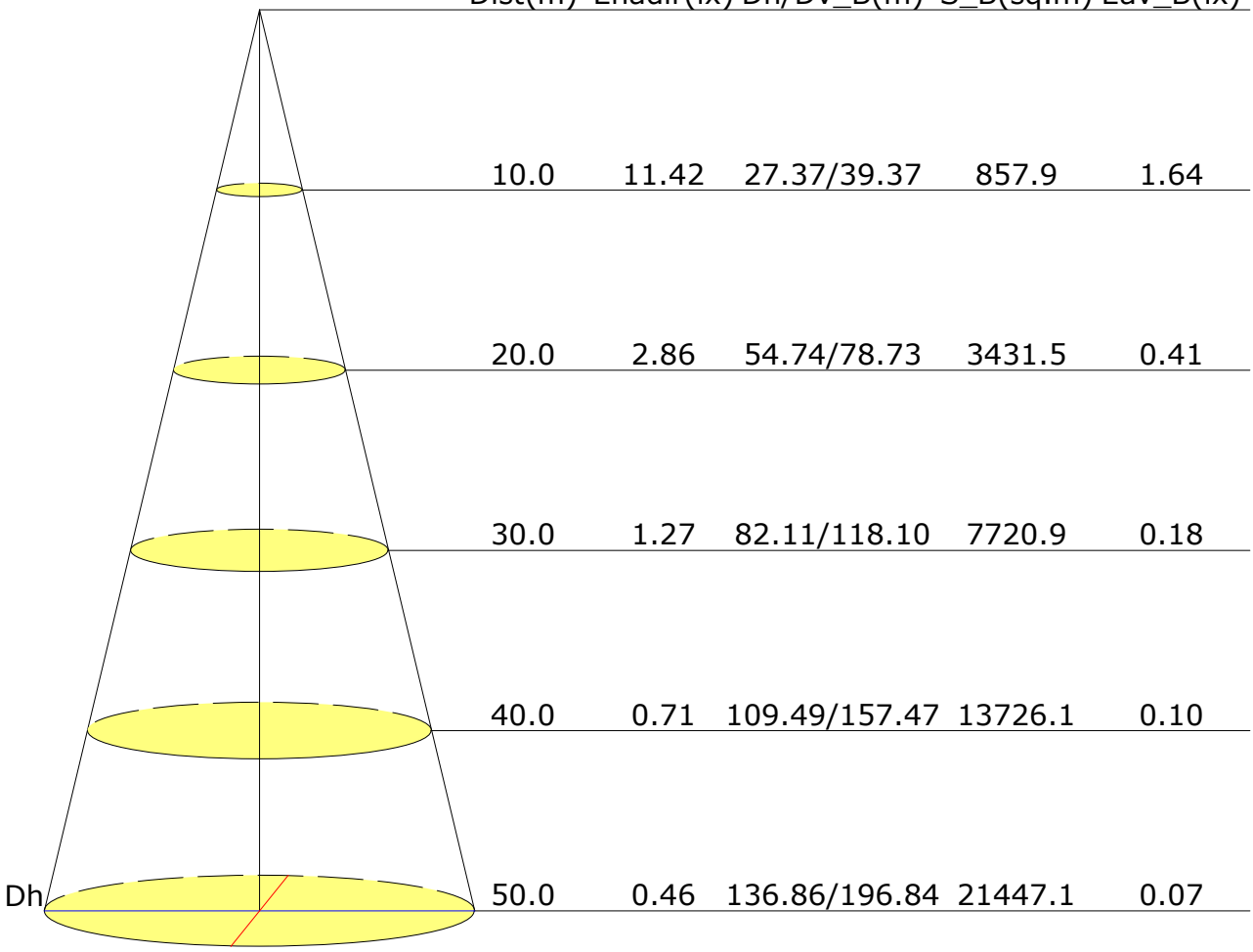
L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	3314	2969	2624	2264	1886	1489	1066	644	283
C90	6113	6104	6120	6179	6306	6548	7053	8068	10432
C180	3453	3120	2781	2430	2056	1666	1252	823	416
C270	6243	6245	6270	6346	6485	6747	7241	8271	10633

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:

Lisun Electronics Inc.
http://www.Lisungroup.com
Tel: +86(21)51083341
Fax: +86(21)51083342

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:

Lisun Electronics Inc.
http://www.Lisungroup.com
Tel: +86(21)51083341
Fax: +86(21)51083342

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	15.2	16.5	15.6	16.9	17.3	17.7	19.0	18.1	19.4	19.8
3H	16.2	17.4	16.7	17.9	18.3	19.8	21.0	20.2	21.4	21.9
4H	16.6	17.7	17.0	18.1	18.6	20.9	22.0	21.3	22.5	22.9
6H	16.7	17.8	17.2	18.3	18.8	22.0	23.1	22.5	23.5	24.0
8H	16.8	17.8	17.2	18.3	18.8	22.6	23.6	23.1	24.1	24.6
12H	16.7	17.7	17.2	18.2	18.7	23.2	24.2	23.7	24.7	25.2
X=4H Y=2H	16.0	17.2	16.5	17.6	18.1	18.0	19.2	18.5	19.6	20.1
3H	17.3	18.3	17.8	18.8	19.3	20.3	21.3	20.8	21.8	22.3
4H	17.7	18.6	18.3	19.1	19.7	21.5	22.4	22.1	22.9	23.5
6H	18.0	18.8	18.6	19.4	19.9	22.8	23.6	23.4	24.2	24.7
8H	18.1	18.8	18.7	19.4	20.0	23.5	24.3	24.1	24.8	25.4
12H	18.1	18.8	18.7	19.3	20.0	24.3	24.9	24.8	25.5	26.1
X=8H Y=4H	18.3	19.1	18.9	19.6	20.2	21.7	22.4	22.2	22.9	23.5
6H	18.8	19.4	19.4	20.0	20.6	23.1	23.7	23.7	24.3	24.9
8H	19.0	19.5	19.6	20.1	20.8	23.9	24.5	24.5	25.1	25.7
12H	19.1	19.5	19.7	20.1	20.8	24.8	25.3	25.4	25.9	26.6
X=12H Y=4H	18.5	19.2	19.1	19.7	20.3	21.6	22.3	22.2	22.9	23.5
6H	19.1	19.6	19.7	20.2	20.9	23.1	23.7	23.7	24.3	24.9
8H	19.3	19.8	19.9	20.4	21.1	24.0	24.5	24.6	25.1	25.8
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					+0.5/-0.5				
S=2.0H	+0.5/-1.1					+0.8/-1.0				

Calculate in accordance with CIE Pub.117. The table is revised with 3918lm (8log(F/F0) = 4.7).

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:

Lisun Electronics Inc.
http://www.Lisungroup.com
Tel: +86(21)51083341
Fax: +86(21)51083342

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	0.52	0.61	0.68	0.74	0.81	0.86	0.90	0.95	0.98
	0.30		0.44	0.53	0.61	0.66	0.74	0.80	0.84	0.90	0.93
	0.20		0.38	0.47	0.54	0.60	0.68	0.74	0.79	0.85	0.90
0.50	0.50	0.20	0.49	0.58	0.65	0.70	0.77	0.81	0.85	0.89	0.92
	0.30		0.42	0.51	0.58	0.63	0.71	0.76	0.80	0.85	0.88
	0.20		0.37	0.46	0.53	0.58	0.66	0.71	0.76	0.82	0.85
0.30	0.50	0.20	0.47	0.56	0.62	0.66	0.72	0.77	0.80	0.84	0.87
	0.30		0.41	0.50	0.56	0.61	0.68	0.72	0.76	0.81	0.84
	0.20		0.36	0.45	0.51	0.56	0.64	0.69	0.73	0.78	0.81
0.00	0.00	0.00	0.33	0.41	0.47	0.52	0.59	0.63	0.67	0.72	0.75

Rating:36W Photometrically tested without ceiling board.
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:

Lisun Electronics Inc.
http://www.Lisungroup.com
Tel: +86(21)51083341
Fax: +86(21)51083342

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	1.03	0.87	0.75	0.66	0.54	0.45	0.39	0.31	0.26
	0.30		0.86	0.74	0.65	0.58	0.49	0.42	0.37	0.29	0.25
	0.20		0.74	0.65	0.58	0.52	0.44	0.39	0.34	0.28	0.24
0.50	0.50	0.20	0.98	0.82	0.71	0.62	0.51	0.46	0.37	0.30	0.25
	0.30		0.83	0.71	0.63	0.56	0.46	0.40	0.35	0.28	0.24
	0.20		0.72	0.63	0.56	0.51	0.43	0.37	0.33	0.27	0.23
0.30	0.50	0.20	0.94	0.78	0.67	0.59	0.48	0.41	0.35	0.28	0.23
	0.30		0.80	0.68	0.60	0.54	0.44	0.38	0.33	0.27	0.22
	0.20		0.70	0.61	0.54	0.49	0.41	0.36	0.31	0.26	0.22
0.00	0.00	0.00	0.59	0.51	0.45	0.40	0.34	0.29	0.25	0.21	0.17

Rating:36W Photometrically tested without ceiling board.
Multiply UF values by service correction factors
Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

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	0.24	0.26	0.26	0.27	0.28	0.28	0.29	0.29	0.30
	0.30		0.17	0.19	0.20	0.21	0.23	0.24	0.25	0.26	0.27
	0.20		0.12	0.14	0.15	0.16	0.18	0.20	0.21	0.22	0.24
0.50	0.50	0.20	0.23	0.25	0.25	0.26	0.27	0.27	0.28	0.28	0.28
	0.30		0.17	0.18	0.19	0.20	0.22	0.23	0.24	0.25	0.26
	0.20		0.12	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.23
0.30	0.50	0.20	0.23	0.24	0.25	0.25	0.26	0.26	0.27	0.27	0.27
	0.30		0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25
	0.20		0.12	0.13	0.15	0.16	0.17	0.19	0.20	0.21	0.22
0.00	0.00	0.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08

Rating:36W Photometrically tested without ceiling board.

Multiply UF values by service correction factors

Calculate in accordance with CIBSE Technical Memorandum NO.5 1980