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

Report No.: 1 Test Time: 31.01.2020 14:25

Luminaire Property

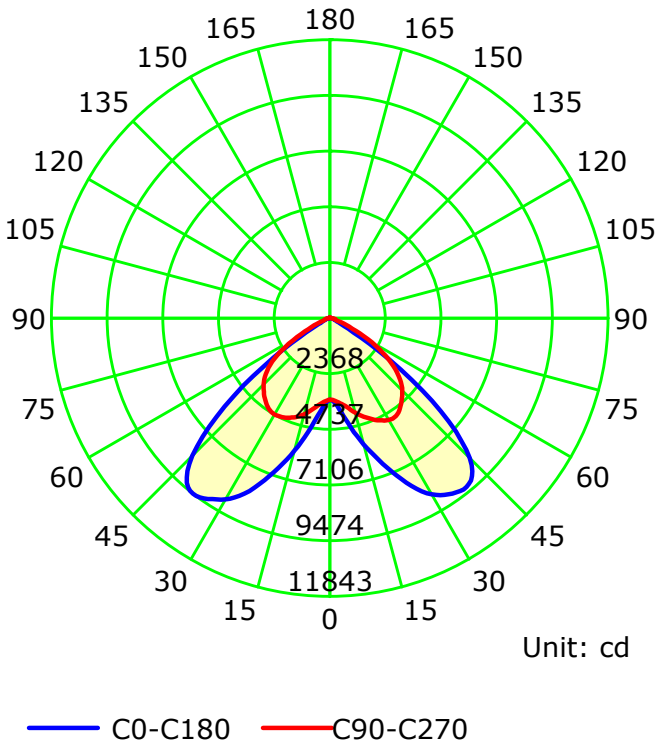
Luminaire Manufacturer:
Luminaire Description: FP 150 150W 5000K 2x40-100gr. NEMA
Luminous Length (mm): 404 Luminous Width (mm): 153
Luminous Height (mm): 80 Voltage: 221.4 V
Current: 0.700 A Power: 151.59 W
Power Factor: 0.977

Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 21055.8 lm
Measurement Flux: 21055.8 lm Efficiency: 100%
Downward Ratio: 99% Upward Ratio: 1%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 119.7, 136.0, 138.5, 134.4
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 104.4, 113.7, 121.9, 118.5
Luminaire Efficacy Rating (LER): 138.95 Central Intensity: 3484.23 cd
Max. Intensity: 9474.92 cd Pos of Max. Intensity: H180 V38
S/MH(C0/C180): 2.33 S/MH(C90/C270): 1.84

Picture Of Luminaire

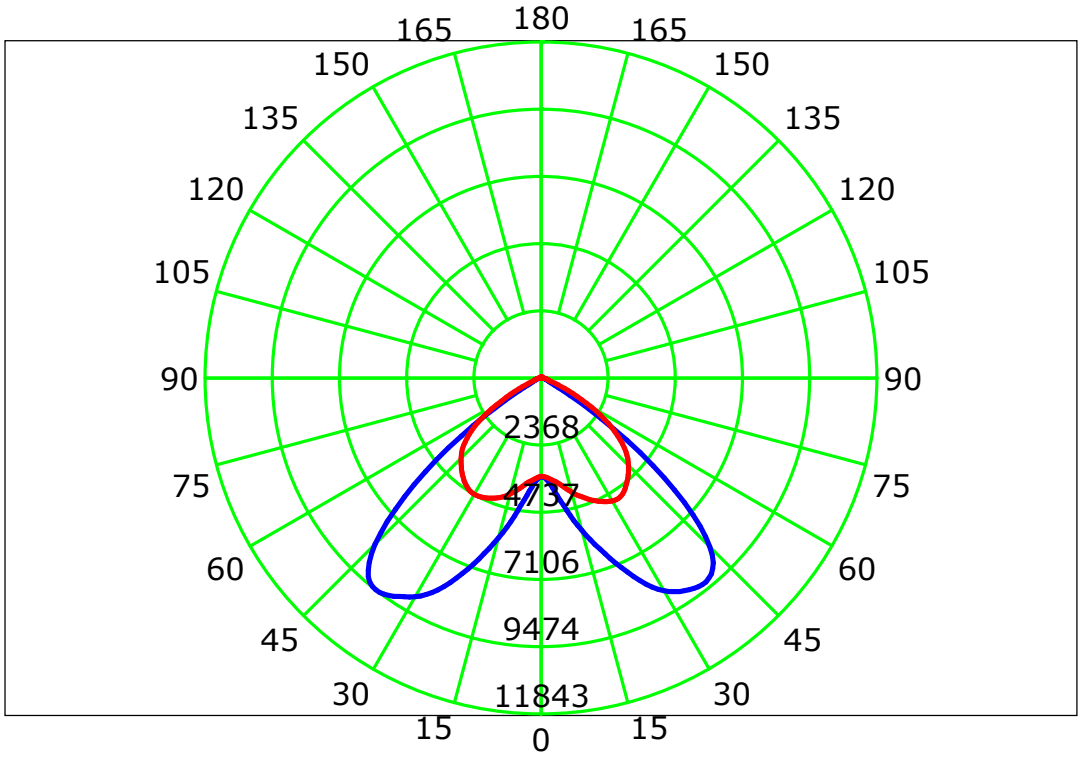
Luminous Intensity Distribution Curve

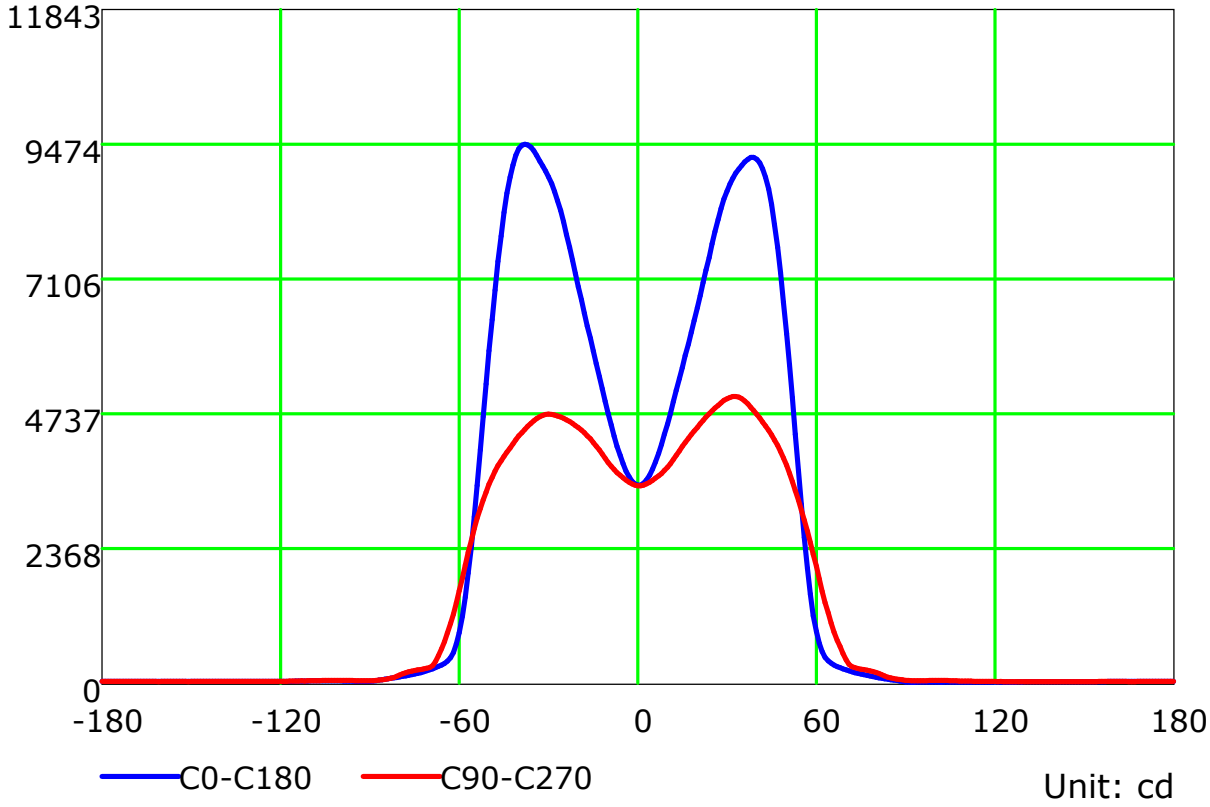


C Plane (°):0.0-360.0: 22.5 Gamma Plane (°):0.0-180.0:1.0
Test Lab: Test Device: LSG-1800B
Test Type: TYPE C Distance: 12.677 m
Temperature: Humidity:
Operator: Inspector:

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

Luminous Intensity Distribution Curve

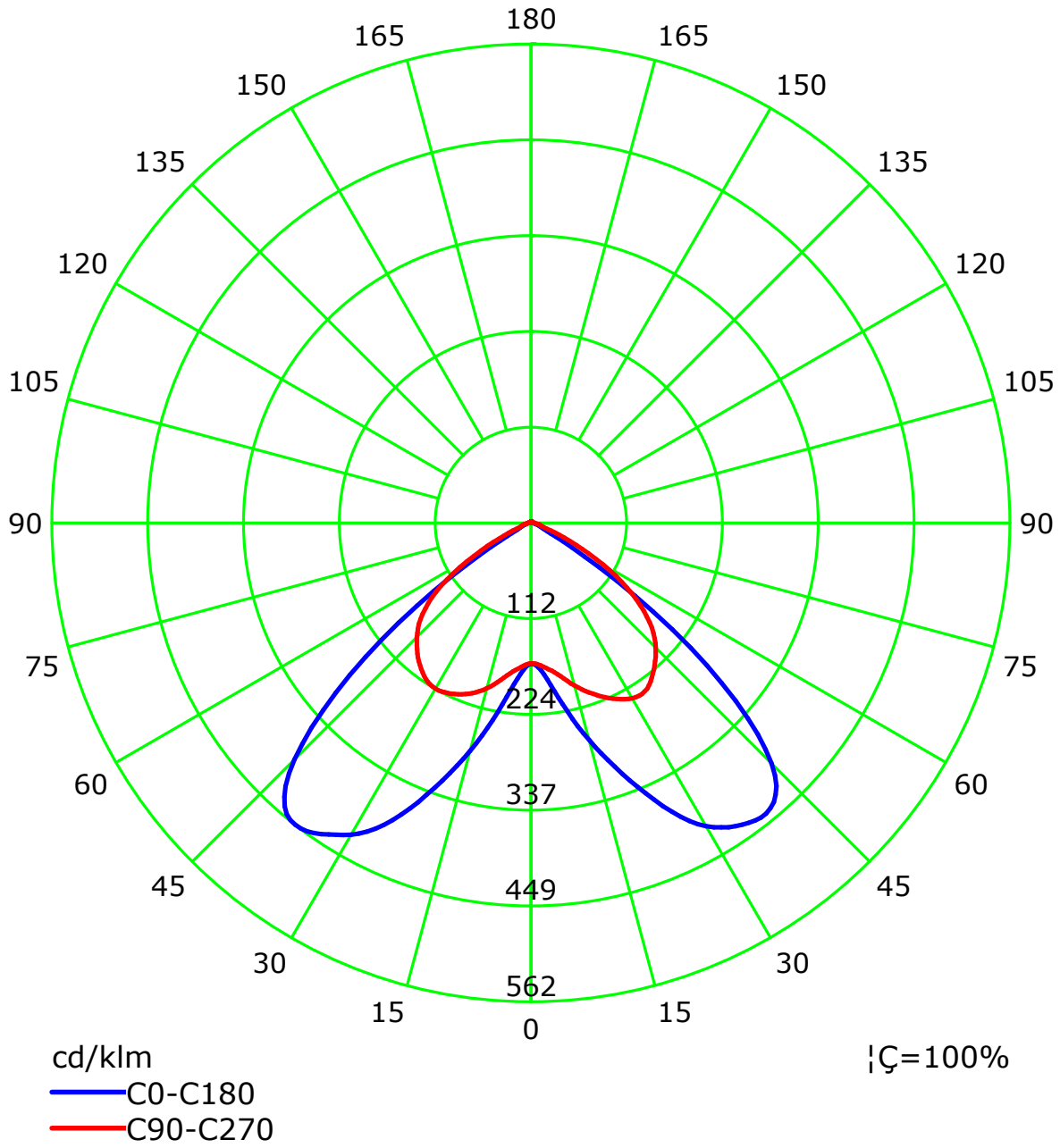




C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

Luminous Intensity Distribution Curve(cd/klm)



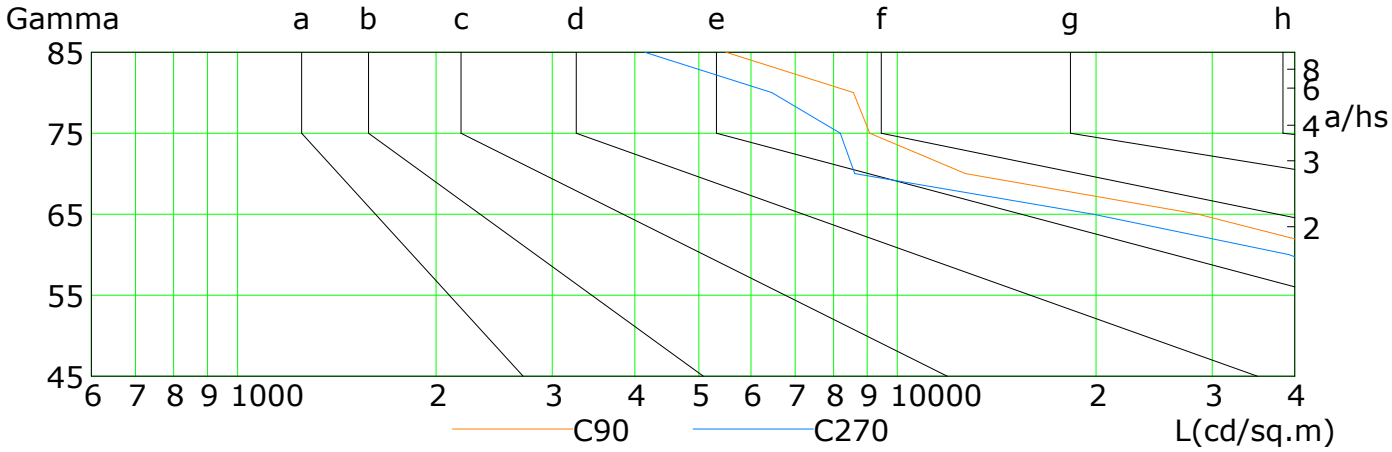
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

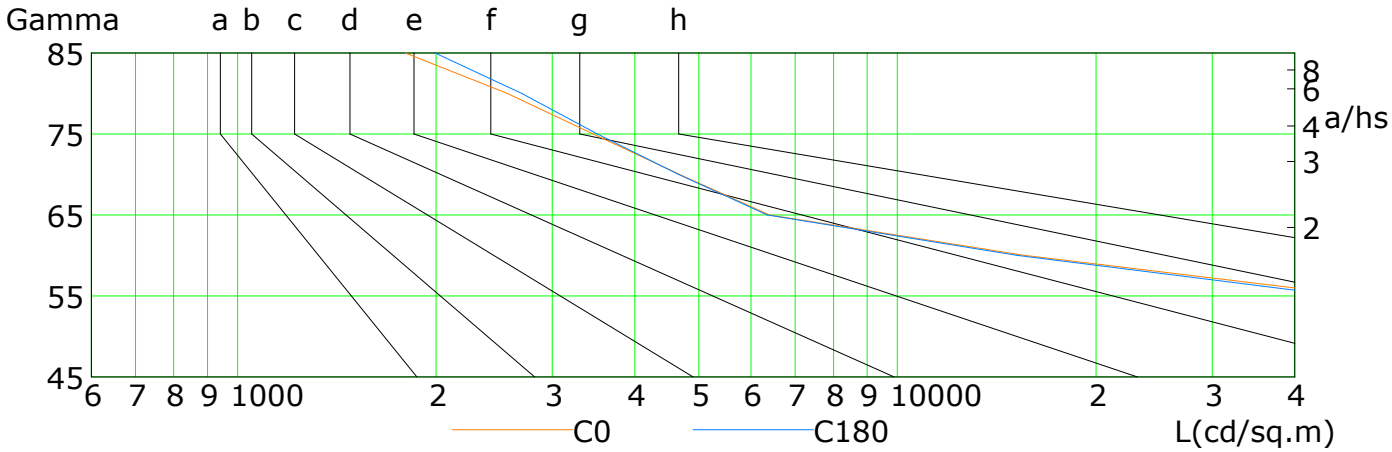
Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

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





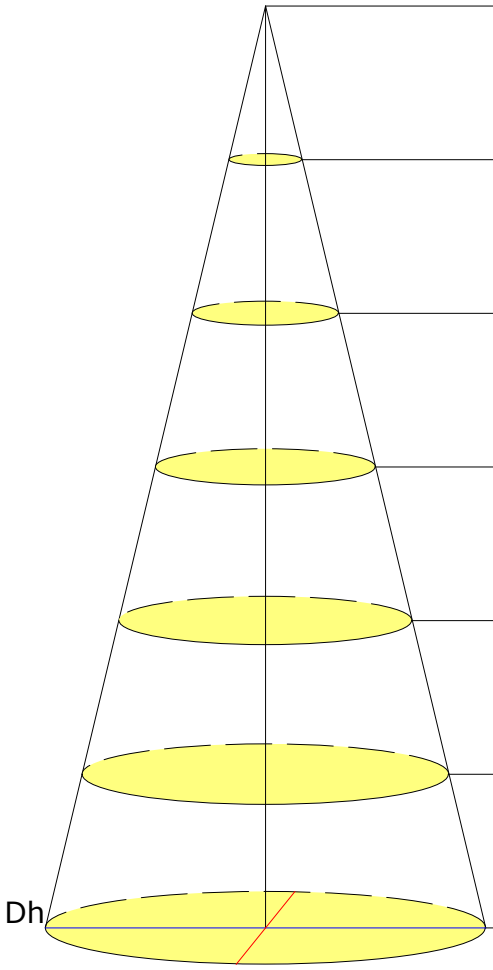
L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	126485	95356	50821	15556	6405	4670	3459	2563	1796
C90	83389	78099	67050	49685	28570	12688	9080	8577	5500
C180	124386	90722	47251	15155	6351	4658	3508	2694	1992
C270	76246	71268	59816	39188	19802	8615	8190	6455	4141

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



Dist(m)	Enadir(lx)	Dh/Dv_B(m)	S_B(sq.m)	Eav_B(lx)
5.0	139.37	12.88/15.32	197.9	43.23
10.0	34.84	25.76/30.64	791.7	10.81
15.0	15.49	38.65/45.96	1781.4	4.80
20.0	8.71	51.53/61.28	3167.0	2.70
25.0	5.57	64.41/76.60	4948.4	1.73
30.0	3.87	77.29/91.92	7125.6	1.20

Beam Angle(B): H104.4 V113.7 Field Angle(F): H119.7 V136.0

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:

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	27.9	29.2	28.2	29.4	29.7	28.0	29.4	28.4	29.6	29.9
3H	27.7	28.9	28.0	29.2	29.5	28.1	29.3	28.4	29.5	29.8
4H	27.6	28.7	28.0	29.0	29.4	28.0	29.1	28.4	29.4	29.7
6H	27.6	28.6	27.9	28.9	29.2	28.0	29.0	28.3	29.3	29.6
8H	27.5	28.5	27.9	28.8	29.2	27.9	28.9	28.3	29.2	29.6
12H	27.5	28.4	27.9	28.8	29.1	27.9	28.8	28.3	29.2	29.5
X=4H Y=2H	28.2	29.3	28.6	29.6	30.0	28.4	29.5	28.8	29.8	30.1
3H	28.1	29.0	28.5	29.4	29.8	28.5	29.4	28.8	29.7	30.1
4H	28.1	28.9	28.5	29.3	29.6	28.4	29.2	28.8	29.6	30.0
6H	28.0	28.7	28.4	29.1	29.5	28.4	29.1	28.8	29.5	29.9
8H	28.0	28.6	28.4	29.0	29.5	28.3	29.0	28.8	29.4	29.9
12H	27.9	28.5	28.4	29.0	29.4	28.3	28.9	28.8	29.3	29.8
X=8H Y=4H	28.0	28.6	28.4	29.0	29.5	28.3	29.0	28.8	29.4	29.8
6H	27.9	28.4	28.4	28.9	29.4	28.3	28.8	28.8	29.3	29.8
8H	27.9	28.3	28.4	28.8	29.3	28.3	28.7	28.8	29.2	29.7
12H	27.9	28.3	28.4	28.7	29.3	28.3	28.6	28.8	29.1	29.7
X=12H Y=4H	27.9	28.5	28.4	29.0	29.4	28.3	28.9	28.8	29.3	29.8
6H	27.9	28.3	28.4	28.8	29.3	28.3	28.7	28.8	29.2	29.7
8H	27.9	28.3	28.4	28.7	29.3	28.2	28.6	28.8	29.1	29.7
Variations with the observer position at spacings:										
S=1.0H	+1.1/-1.4					+0.5/-0.6				
S=1.5H	+2.5/-8.9					+2.4/-4.5				
S=2.0H	+3.6/-12.2					+3.3/-8.9				

Calculate in accordance with CIE Pub.117. The table is revised with 21056lm (8log(F/F0) = 10.6).

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 = 2.00								
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	NA	0.80	0.86	0.90	0.96	1.00	1.02	1.05	1.07
	0.30		NA	0.74	0.80	0.85	0.92	0.96	0.99	1.02	1.05
	0.20		NA	0.70	0.76	0.81	0.88	0.93	0.96	1.00	1.03
0.50	0.50	0.20	NA	0.78	0.83	0.87	0.93	0.96	0.98	1.01	1.03
	0.30		NA	0.73	0.78	0.83	0.89	0.93	0.96	0.99	1.01
	0.20		NA	0.69	0.75	0.79	0.86	0.90	0.93	0.97	0.99
0.30	0.50	0.20	NA	0.76	0.81	0.85	0.90	0.93	0.95	0.98	0.99
	0.30		NA	0.72	0.77	0.81	0.87	0.91	0.93	0.96	0.98
	0.20		NA	0.69	0.74	0.78	0.84	0.88	0.91	0.94	0.96
0.00	0.00	0.00	NA	0.66	0.71	0.75	0.81	0.84	0.87	0.90	0.91

Rating:152W 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 = 2.00								
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	NA	0.62	0.52	0.45	0.35	0.28	0.24	0.19	0.15
	0.30		NA	0.53	0.46	0.40	0.31	0.26	0.22	0.17	0.14
	0.20		NA	0.46	0.41	0.36	0.28	0.24	0.21	0.16	0.14
0.50	0.50	0.20	NA	0.59	0.50	0.42	0.32	0.30	0.23	0.17	0.14
	0.30		NA	0.51	0.44	0.38	0.30	0.24	0.21	0.16	0.13
	0.20		NA	0.45	0.39	0.34	0.27	0.23	0.20	0.16	0.13
0.30	0.50	0.20	NA	0.56	0.47	0.40	0.30	0.25	0.21	0.16	0.13
	0.30		NA	0.49	0.42	0.36	0.28	0.23	0.20	0.15	0.13
	0.20		NA	0.44	0.38	0.33	0.26	0.22	0.19	0.15	0.12
0.00	0.00	0.00	0.99	0.33	0.28	0.24	0.18	0.14	0.12	0.09	0.08

Rating:152W 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:

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 2.00								
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	NA	0.17	0.18	0.19	0.20	0.20	0.21	0.22	0.22
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.18	0.20	0.20
	0.20		NA	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.19
0.50	0.50	0.20	NA	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		NA	0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.18
0.30	0.50	0.20	NA	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20
	0.30		NA	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		NA	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Rating:152W Photometrically tested without ceiling board.
Multiply UF values by service correction factors
Calculate in accordance with CIBSE Technical Memorandum NO.5 1980