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

Report No.: 1 Test Time: 30.01.2020 20:08

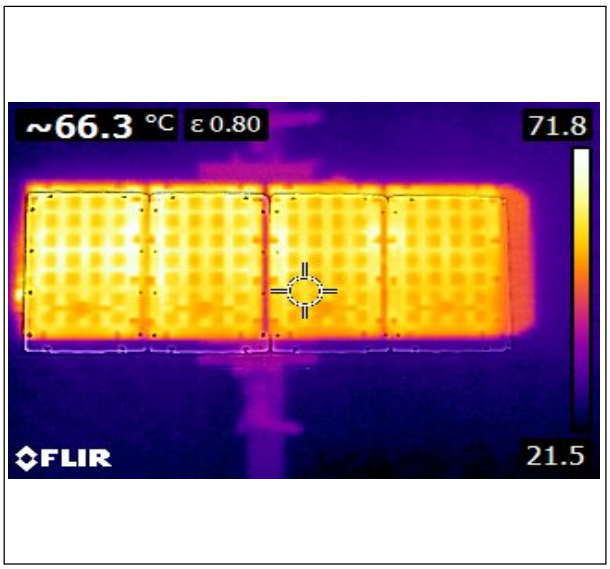
Luminaire Property

Luminaire Manufacturer:
Luminaire Description: FP 150 150W 5000K 150x55gr. NEMA
Luminous Length (mm): 404 Luminous Width (mm): 153
Luminous Height (mm): 80 Voltage: 221.3 V
Current: 0.702 A Power: 151.92 W
Power Factor: 0.977

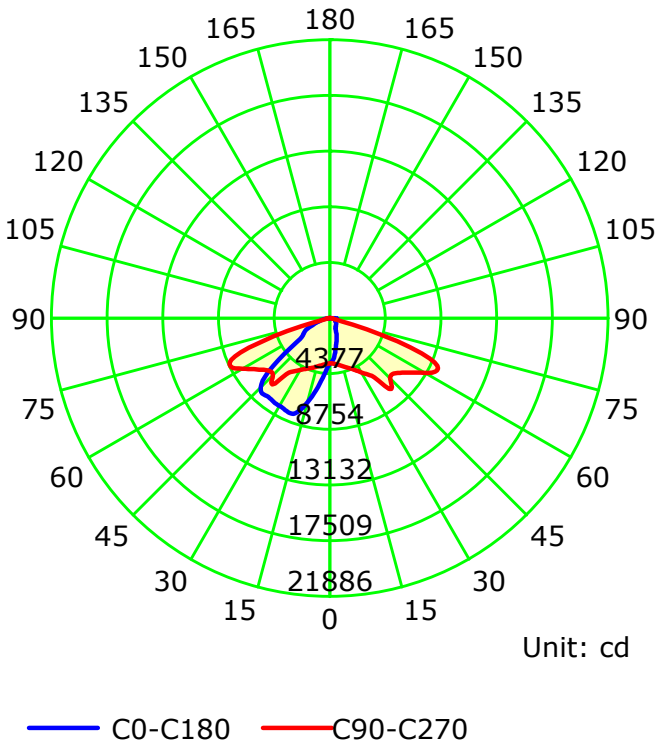
Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 21552.9 lm
Measurement Flux: 21552.9 lm Efficiency: 100%
Downward Ratio: 99% Upward Ratio: 1%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 110.9, 150.7, 131.6, 135.1
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 56.5, 143.7, 69.3, 67.8
Luminaire Efficacy Rating (LER): 141.92 Central Intensity: 3592.41 cd
Max. Intensity: 17509.59 cd Pos of Max. Intensity: H247.5 V64
S/MH(C0/C180): 1.79 S/MH(C90/C270): 2.35

Termogramma



Luminous Intensity Distribution Curve

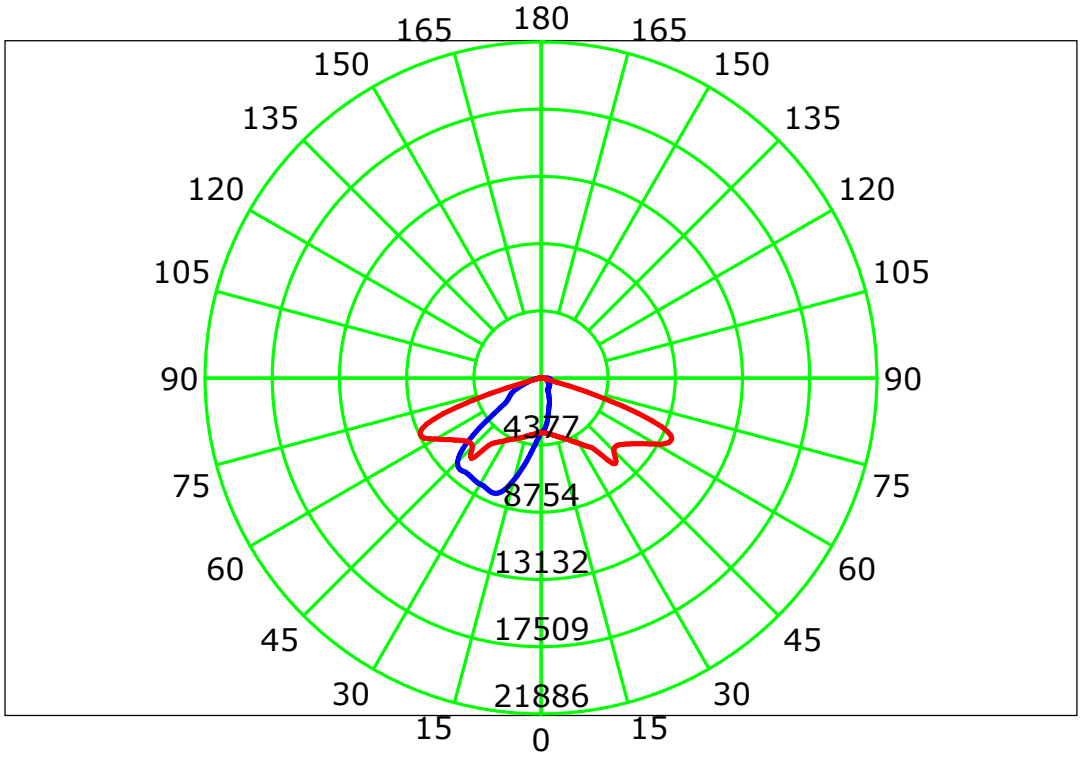


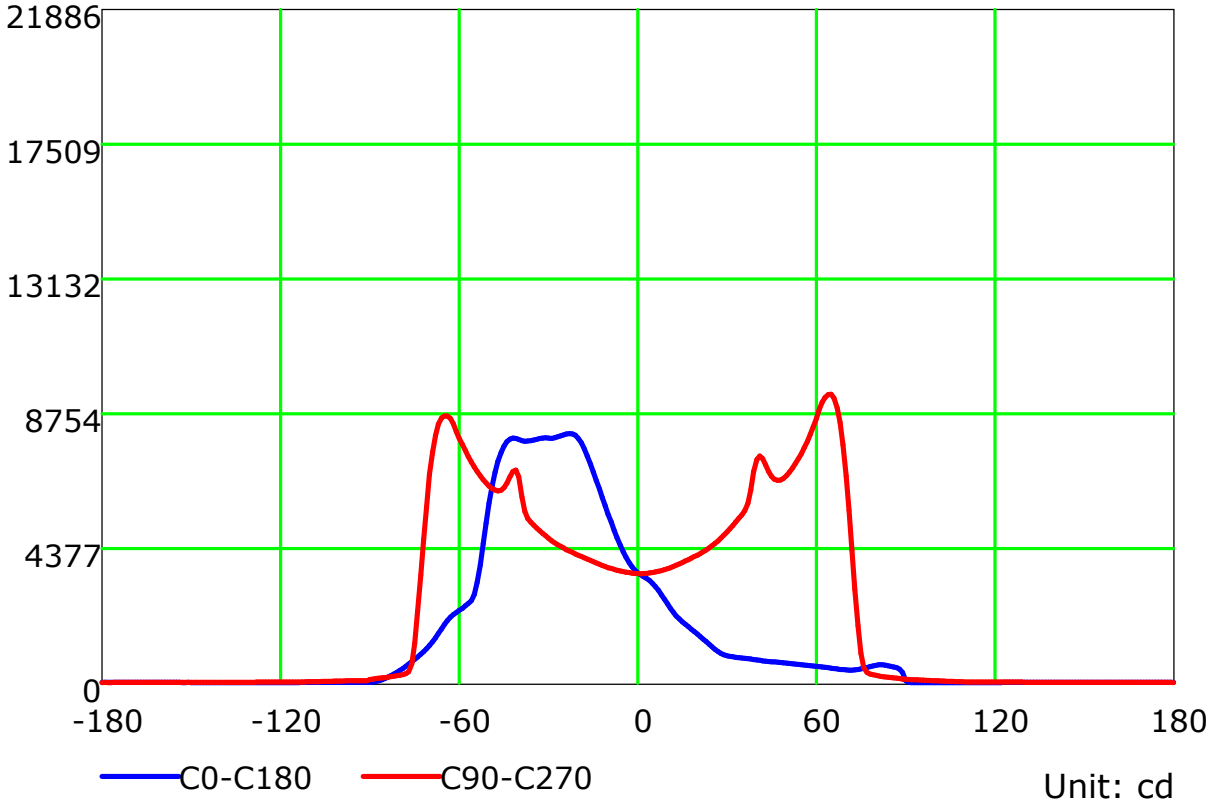
Unit: cd

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

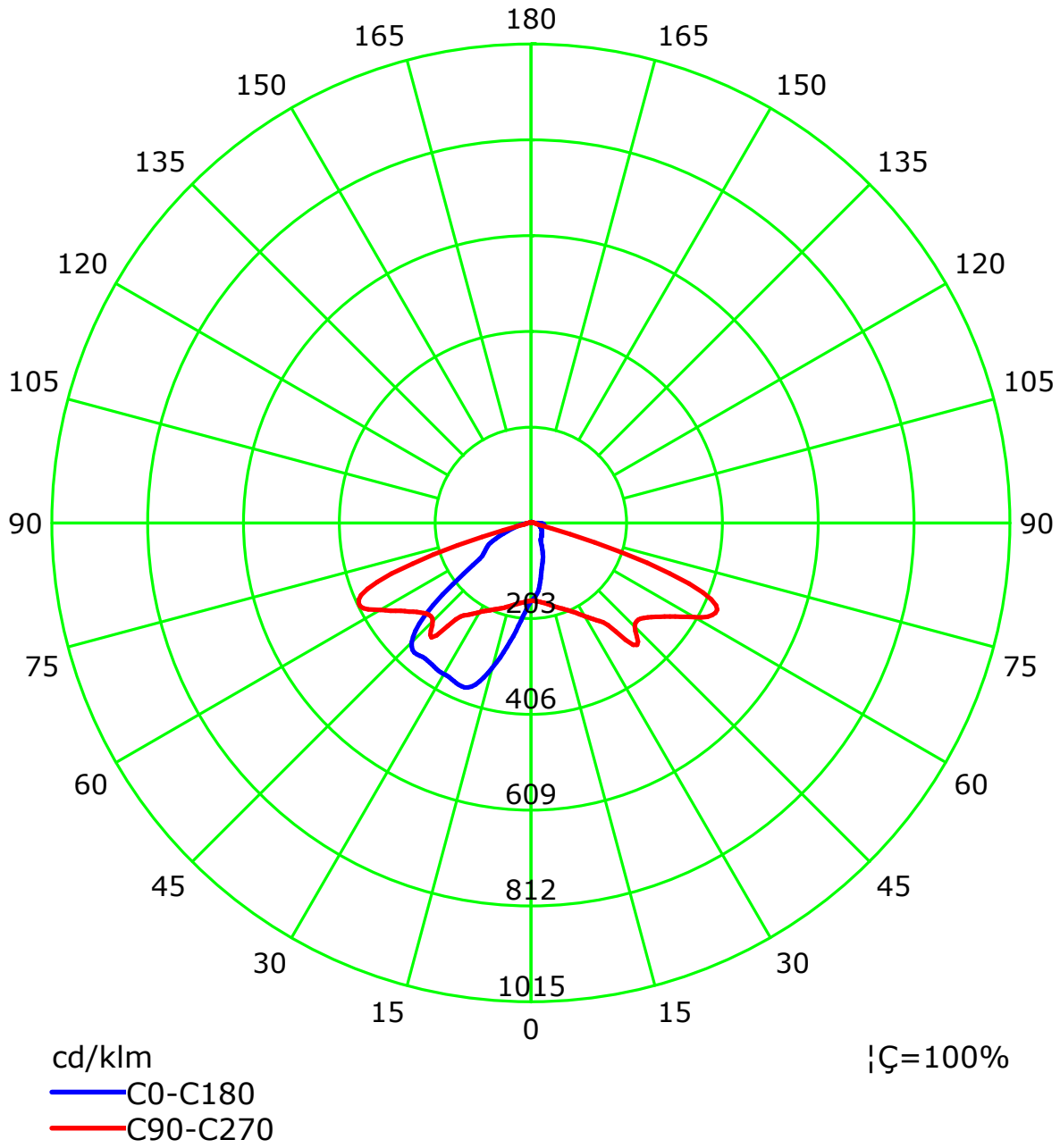




C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

Luminous Intensity Distribution Curve(cd/klm)



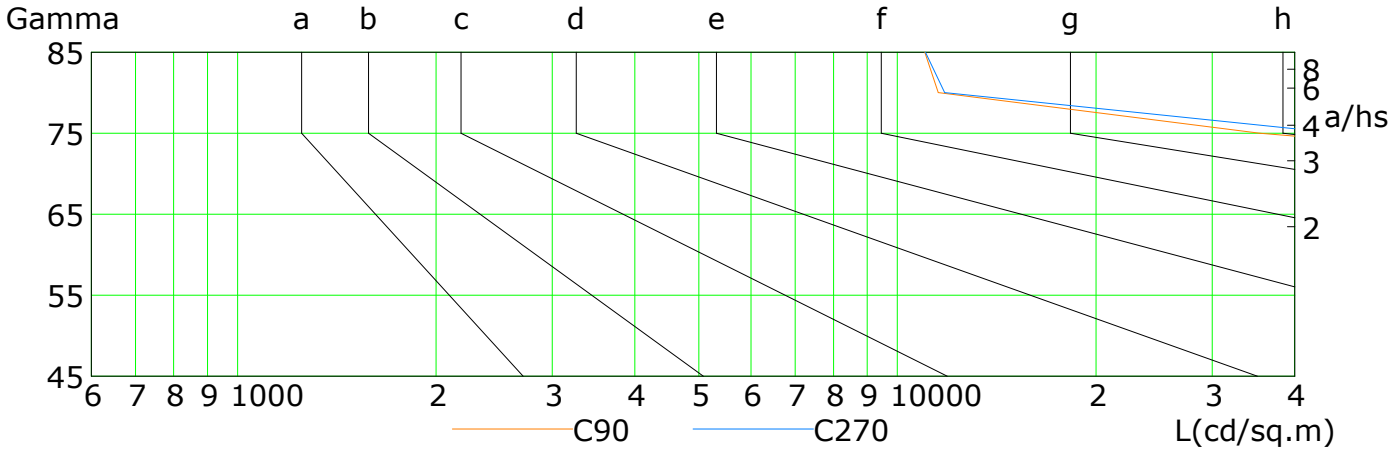
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

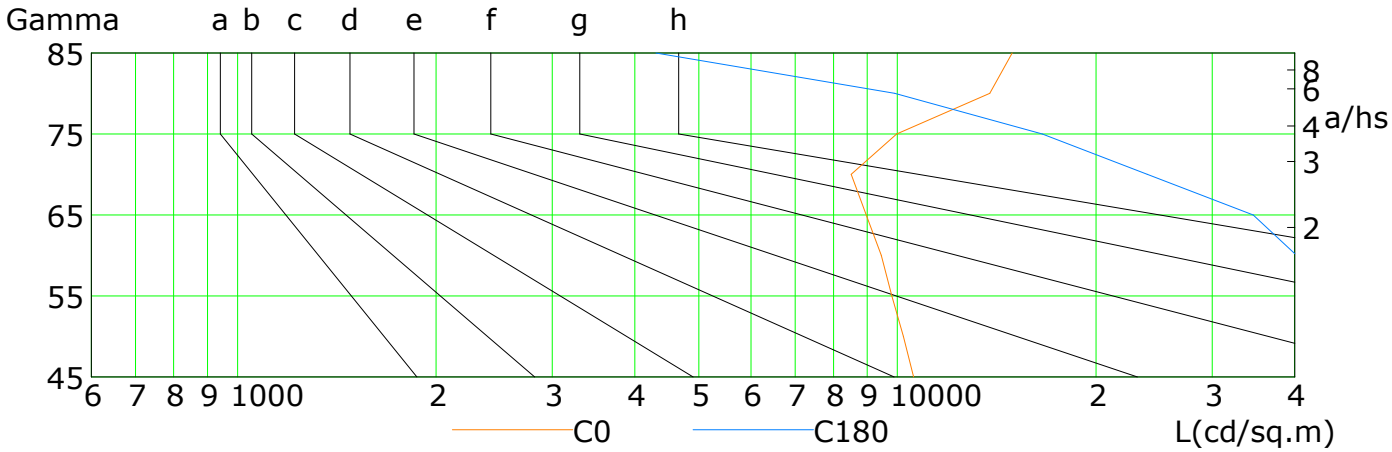
Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

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





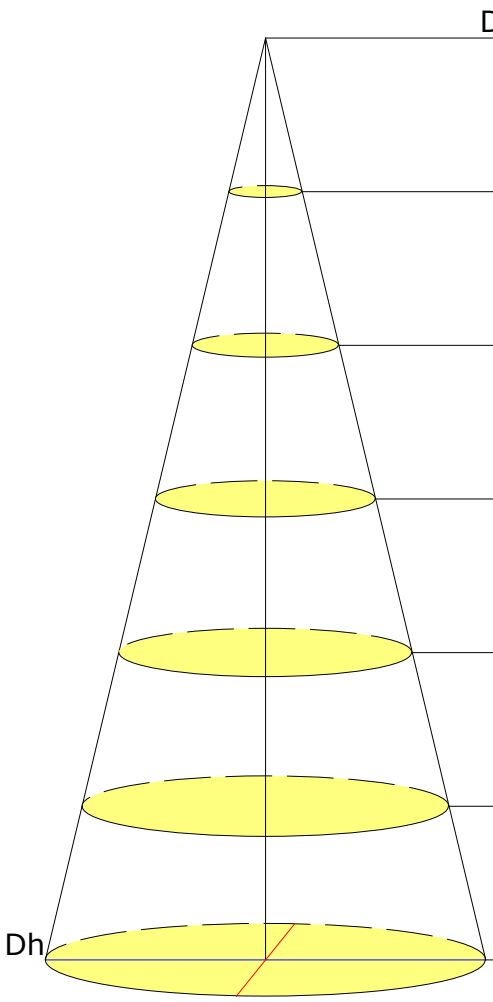
L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	10580	10207	9805	9454	8974	8509	9970	13810	14933
C90	128352	137452	164076	207398	252335	206496	35452	11539	10999
C180	115773	90621	46556	40285	34624	23920	16581	9904	4306
C270	121411	130561	154729	191752	233492	208166	47054	11797	11033

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	143.70	5.37/30.51	342.3	26.60
10.0	35.92	10.74/61.03	1369.3	6.65
15.0	15.97	16.11/91.54	3081.0	2.96
20.0	8.98	21.48/122.06	5477.3	1.66
25.0	5.75	26.85/152.57	8558.3	1.06
30.0	3.99	32.21/183.08	12324.0	0.74

Beam Angle(B): H56.5 V143.7 Field Angle(F): H110.9 V150.7

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

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	14.5	16.0	14.9	16.3	16.6	28.4	29.9	28.8	30.2	30.5
3H	16.2	17.6	16.6	17.9	18.2	32.6	33.9	32.9	34.2	34.5
4H	17.3	18.5	17.6	18.9	19.2	32.9	34.2	33.3	34.5	34.9
6H	18.8	19.9	19.1	20.3	20.6	32.8	34.0	33.2	34.4	34.7
8H	19.7	20.8	20.0	21.2	21.5	32.8	34.0	33.2	34.3	34.7
12H	20.5	21.6	20.9	22.0	22.3	32.8	33.9	33.2	34.2	34.6
X=4H Y=2H	16.4	17.7	16.8	18.0	18.4	28.2	29.5	28.6	29.8	30.2
3H	17.9	19.0	18.3	19.4	19.7	32.5	33.6	32.9	33.9	34.3
4H	18.9	19.9	19.3	20.2	20.6	32.9	33.9	33.4	34.3	34.7
6H	20.2	21.1	20.7	21.5	22.0	32.9	33.8	33.3	34.2	34.6
8H	21.1	21.9	21.6	22.4	22.8	32.9	33.7	33.3	34.1	34.5
12H	22.0	22.8	22.5	23.2	23.7	32.8	33.6	33.3	34.0	34.5
X=8H Y=4H	20.6	21.4	21.1	21.8	22.3	32.8	33.6	33.3	34.1	34.5
6H	21.7	22.4	22.2	22.8	23.3	32.8	33.5	33.3	33.9	34.4
8H	22.5	23.1	23.0	23.5	24.0	32.8	33.4	33.3	33.9	34.4
12H	23.4	23.9	23.9	24.4	24.9	32.8	33.3	33.3	33.8	34.3
X=12H Y=4H	20.7	21.4	21.1	21.8	22.3	32.8	33.5	33.3	34.0	34.5
6H	21.9	22.4	22.4	22.9	23.4	32.8	33.4	33.3	33.8	34.4
8H	22.7	23.2	23.2	23.7	24.2	32.8	33.3	33.3	33.8	34.3
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.2					+0.5/-0.5				
S=1.5H	+0.6/-0.8					+1.8/-2.8				
S=2.0H	+1.0/-1.8					+3.3/-5.5				

Calculate in accordance with CIE Pub.117. The table is revised with 21553lm (8log(F/F0) = 10.7).

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:

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	0.65	0.72	0.77	0.86	0.91	0.94	0.98	1.01
	0.30		NA	0.58	0.64	0.70	0.80	0.85	0.89	0.94	0.98
	0.20		NA	0.52	0.58	0.65	0.75	0.81	0.85	0.91	0.95
0.50	0.50	0.20	NA	0.63	0.69	0.75	0.82	0.87	0.90	0.94	0.97
	0.30		NA	0.56	0.63	0.69	0.77	0.83	0.86	0.91	0.94
	0.20		NA	0.51	0.58	0.64	0.73	0.79	0.83	0.88	0.92
0.30	0.50	0.20	NA	0.61	0.67	0.72	0.79	0.84	0.87	0.91	0.93
	0.30		NA	0.55	0.61	0.67	0.75	0.80	0.83	0.88	0.91
	0.20		NA	0.51	0.57	0.63	0.71	0.77	0.80	0.85	0.89
0.00	0.00	0.00	NA	0.48	0.54	0.59	0.68	0.73	0.76	0.81	0.84

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

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	0.81	0.70	0.61	0.47	0.39	0.33	0.26	0.21
	0.30		NA	0.69	0.61	0.54	0.43	0.36	0.31	0.24	0.20
	0.20		NA	0.61	0.54	0.48	0.39	0.33	0.29	0.23	0.19
0.50	0.50	0.20	NA	0.78	0.67	0.58	0.45	0.40	0.32	0.24	0.20
	0.30		NA	0.67	0.60	0.52	0.41	0.34	0.30	0.23	0.19
	0.20		NA	0.60	0.53	0.47	0.38	0.32	0.28	0.22	0.18
0.30	0.50	0.20	NA	0.75	0.65	0.56	0.43	0.35	0.30	0.23	0.19
	0.30		NA	0.66	0.58	0.50	0.40	0.33	0.28	0.22	0.18
	0.20		NA	0.59	0.52	0.46	0.37	0.31	0.27	0.21	0.18
0.00	0.00	0.00	0.97	0.49	0.43	0.38	0.29	0.24	0.21	0.16	0.13

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(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	0.19	0.19	0.20	0.21	0.21	0.22	0.22	0.23
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		NA	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.50	0.50	0.20	NA	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.22
	0.30		NA	0.12	0.13	0.14	0.15	0.17	0.17	0.19	0.19
	0.20		NA	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
0.30	0.50	0.20	NA	0.17	0.18	0.19	0.19	0.20	0.20	0.20	0.21
	0.30		NA	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		NA	0.07	0.08	0.10	0.12	0.13	0.14	0.16	0.17
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

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: