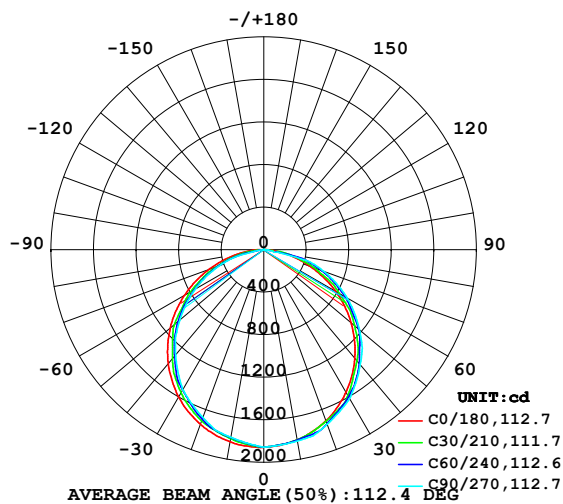


LUMINAIRE PHOTOMETRIC TEST REPORT

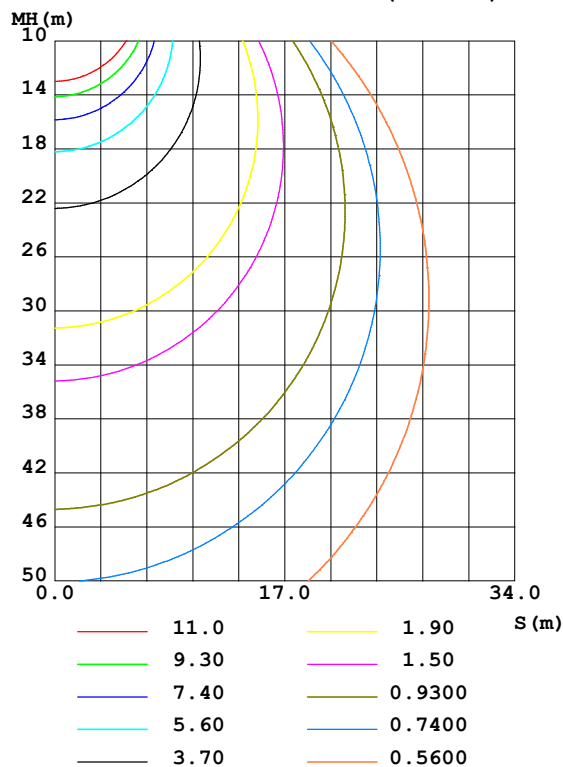
Test:U:121.5V I:0.3951A P:47.71W PF:0.9936 Freq:59.98Hz Lamp Flux:5217.33x1 lm		
NAME: ASD-ELP07-24A50CC-STD (3000)	TYPE:50W 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:1.16x0.56m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 109.36 lm/W			
MODEL		I _{max} (cd)	1860	S/MH(C0/180)	1.28
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)		TOTAL FLUX(lm)	5217.3	η UP,DN(C0-180)	0.0,51.9
NOMINAL FLUX(lm)	5217.33	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:31.3DEG
Operators:qinlizhi
Test Date:2019-10-09

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:54%
Test Distance:8.200m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1817	1815	1827	1824	1835	1800	1791	1791	0- 10	174.6	174.6	3.35,3.35
20	1712	1746	1747	1756	1747	1706	1680	1697	10- 20	500.5	675.1	12.9,12.9
30	1548	1578	1618	1603	1602	1534	1523	1511	20- 30	758.6	1434	27.5,27.5
40	1332	1385	1413	1423	1399	1335	1291	1300	30- 40	916.4	2350	45,45
50	1073	1129	1175	1173	1150	1070	1033	1031	40- 50	952.2	3302	63.3,63.3
60	779.5	850.6	905.0	884.5	861.5	775.8	746.4	743.9	50- 60	860.5	4163	79.8,79.8
70	467.8	552.7	602.0	565.8	551.9	465.4	444.4	451.2	60- 70	654.6	4817	92.3,92.3
80	184.7	223.0	0	226.0	253.7	153.3	0	153.7	70- 80	358.7	5176	99.2,99.2
90	13.39	0	0	0	32.95	0	0	0	80- 90	41.25	5217	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 2829.4 lm

%lum = 54.2%

%lamp = 54.2%

Conical surface Flux(120deg): 4162.8 lm

%lum = 79.8%

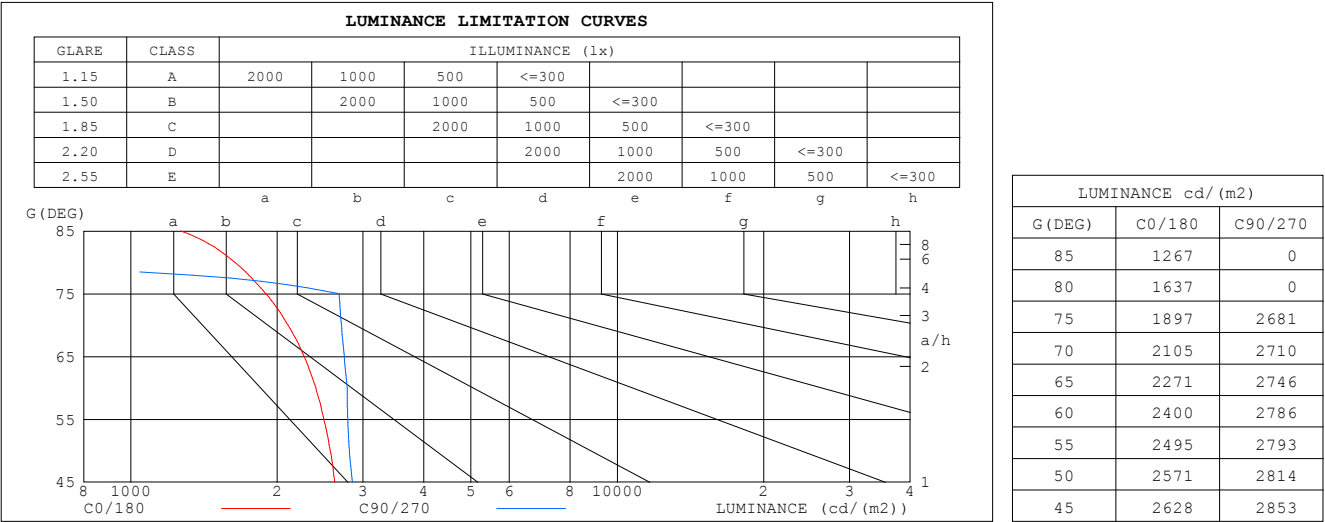
%lamp = 79.8%

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:31.3DEG
 Operators:qinlizhi
 Test Date:2019-10-09

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:54%
 Test Distance:8.200m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:121.5V I:0.3951A P:47.71W PF:0.9936 Freq:59.98Hz Lamp Flux:5217.33x1 lm		
NAME: ASD-ELP07-24A50CC-STD (3000)	TYPE:50W 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:1.16x0.56m	Shielding Angle:



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:31.3DEG
Operators:qinlizhi
Test Date:2019-10-09

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:54%
Test Distance:8.200m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:121.5V I:0.3951A P:47.71W PF:0.9936 Freq:59.98Hz Lamp Flux:5217.33x1 lm		
NAME: ASD-ELP07-24A50CC-STD (3000)	TYPE:50W 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:1.16x0.56m	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.299	.170	.054	.292	.166	.053	.278	.160	.051	.266	.154	.049	.255	.148	.048		
2.0	.286	.157	.048	.280	.154	.047	.268	.149	.046	.258	.144	.045	.248	.140	.044		
3.0	.267	.142	.043	.261	.140	.042	.251	.136	.041	.241	.132	.041	.233	.129	.040		
4.0	.247	.128	.038	.242	.127	.037	.233	.124	.037	.225	.121	.036	.217	.118	.036		
5.0	.229	.117	.034	.225	.115	.034	.216	.113	.033	.209	.110	.033	.202	.108	.032		
6.0	.213	.107	.031	.209	.105	.030	.202	.103	.030	.195	.101	.030	.188	.099	.029		
7.0	.198	.098	.028	.195	.097	.028	.188	.095	.027	.182	.093	.027	.176	.092	.027		
8.0	.185	.090	.025	.182	.090	.025	.176	.088	.025	.171	.087	.025	.166	.085	.025		
9.0	.174	.084	.023	.171	.083	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023		
10.0	.163	.078	.022	.161	.078	.022	.156	.076	.022	.152	.075	.021	.148	.074	.021		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.180	.156	.135	.154	.134	.116	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.147	.114	.085	.101	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.140	.099	.065	.096	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:31.3DEG
Operators:qinlizhi
Test Date:2019-10-09

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:54%
Test Distance:8.200m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:121.5V I:0.3951A P:47.71W PF:0.9936 Freq:59.98Hz Lamp Flux:5217.33x1 lm										
NAME: ASD-ELP07-24A50CC-STD (3000)					TYPE:50W 3000K			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: ASD Lighting corp					SUR.:1.16x0.56m			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working 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	16.2	17.7	16.5	17.9	18.1	16.7	18.3	17.0	18.5	18.7
3H	17.6	19.0	17.9	19.2	19.4	18.5	19.9	18.8	20.1	20.3
4H	18.1	19.4	18.4	19.6	19.9	19.2	20.5	19.5	20.8	21.1
6H	18.4	19.6	18.7	19.9	20.2	19.3	20.6	19.6	20.8	21.1
8H	18.5	19.7	18.8	19.9	20.2	19.3	20.5	19.6	20.8	21.0
12H	18.5	19.7	18.9	20.0	20.3	19.2	20.4	19.6	20.7	21.0
4H 2H	16.9	18.2	17.2	18.5	18.7	17.3	18.7	17.6	18.9	19.2
3H	18.5	19.6	18.8	19.9	20.2	19.3	20.4	19.6	20.7	21.0
4H	19.1	20.1	19.5	20.5	20.8	20.2	21.2	20.5	21.5	21.9
6H	19.5	20.4	19.9	20.8	21.2	20.3	21.2	20.7	21.6	22.0
8H	19.7	20.5	20.1	20.9	21.3	20.3	21.1	20.7	21.5	21.9
12H	19.8	20.6	20.2	20.9	21.3	20.2	21.0	20.6	21.4	21.8
8H 4H	19.5	20.3	19.9	20.7	21.1	20.4	21.3	20.8	21.7	22.0
6H	20.1	20.8	20.5	21.2	21.6	20.6	21.3	21.1	21.7	22.2
8H	20.3	21.0	20.8	21.4	21.8	20.6	21.2	21.0	21.6	22.1
12H	20.5	21.0	21.0	21.5	22.0	20.5	21.1	21.0	21.5	22.0
12H 4H	19.5	20.3	19.9	20.6	21.0	20.4	21.2	20.8	21.6	22.0
6H	20.1	20.7	20.5	21.1	21.6	20.6	21.3	21.1	21.7	22.2
8H	20.3	20.9	20.8	21.3	21.8	20.6	21.2	21.1	21.6	22.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.1 / - 0.3				
2.0H	+ 0.3 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 5217 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.7$)

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:31.3DEG
 Operators:qinlizhi
 Test Date:2019-10-09

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:54%
 Test Distance:8.200m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:121.5V I:0.3951A P:47.71W PF:0.9936 Freq:59.98Hz Lamp Flux:5217.33x1 lm		
NAME: ASD-ELP07-24A50CC-STD (3000)	TYPE:50W 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:1.16x0.56m	Shielding Angle:

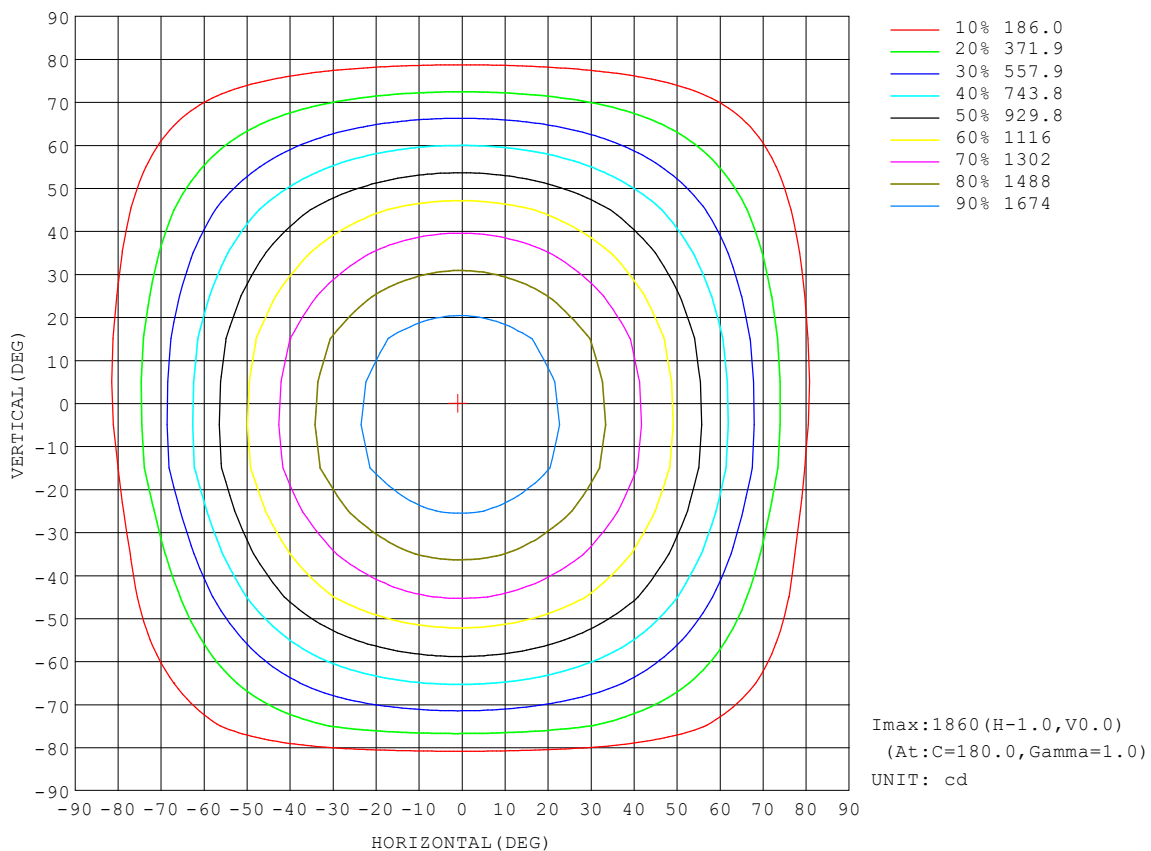
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	49	65	55	48	41
1.00	76	65	58	75	65	58	73	66	57	50
1.25	83	73	66	82	72	66	79	71	65	58
1.50	89	79	72	87	78	71	84	76	70	63
2.00	95	87	81	94	86	80	90	84	78	71
2.50	99	92	86	97	90	85	94	88	83	75
3.00	103	96	91	101	94	90	97	92	87	79
4.00	107	101	97	104	99	95	100	96	93	84
5.00	109	104	101	107	103	99	102	99	96	87
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:31.3DEG
 Operators:qinlizhi
 Test Date:2019-10-09

$V(B)$ Range:-75 - 75DEG
 $V(B)$ Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:54%
 Test Distance:8.200m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:121.5V I:0.3951A P:47.71W PF:0.9936 Freq:59.98Hz Lamp Flux:5217.33x1 lm		
NAME: ASD-ELP07-24A50CC-STD (3000)	TYPE:50W 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:1.16x0.56m	Shielding Angle:

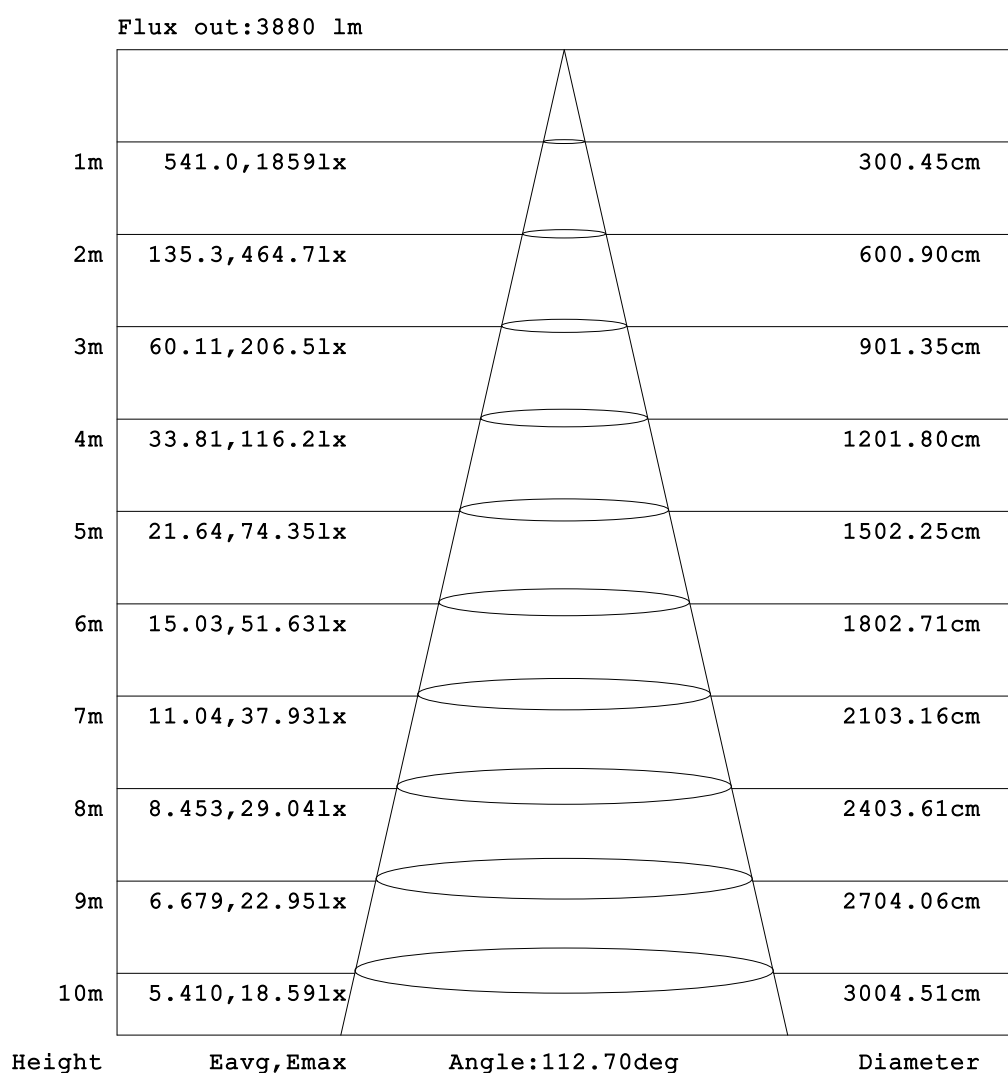


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:31.3DEG
Operators:qinlizhi
Test Date:2019-10-09

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:54%
Test Distance:8.200m [K=1.0000]
Remarks:

AAI Figure

Test:U:121.5V I:0.3951A P:47.71W PF:0.9936 Freq:59.98Hz Lamp Flux:5217.33x1 lm		
NAME: ASD-ELP07-24A50CC-STD (3000)	TYPE:50W 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:1.16x0.56m	Shielding Angle:

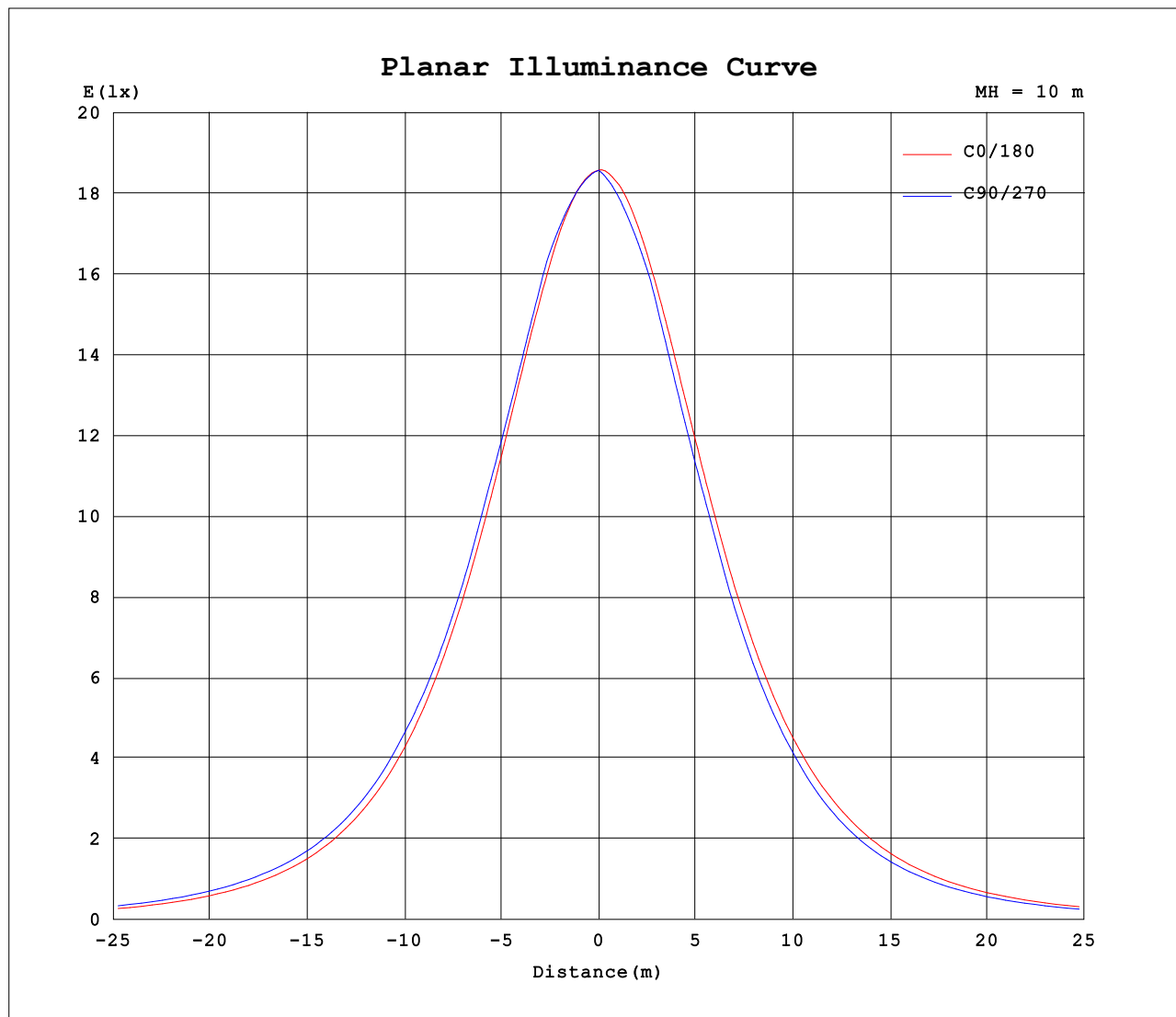


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:31.3DEG
Operators:qinlizhi
Test Date:2019-10-09

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:54%
Test Distance:8.200m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:31.3DEG
Operators:qinlizhi
Test Date:2019-10-09

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:54%
Test Distance:8.200m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:121.5V I:0.3951A P:47.71W PF:0.9936 Freq:59.98Hz Lamp Flux:5217.33x1 lm		
NAME: ASD-ELP07-24A50CC-STD (3000)	TYPE:50W 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:1.16x0.56m	Shielding Angle:

Table--1

UNIT: cd

[illegible]

```
H( $\beta$ ) Range:-90 - 90DEG
H( $\beta$ ) Interval: 1.0DEG
Test Speed: HIGH
Temperature:31.3DEG
Operators:qinlizhi
Test Date:2019-10-09
```

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:54%
Test Distance:8.200m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:121.5V I:0.3951A P:47.71W PF:0.9936 Freq:59.98Hz Lamp Flux:5217.33x1 lm		
NAME: ASD-ELP07-24A50CC-STD (3000)	TYPE:50W 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:1.16x0.56m	Shielding Angle:

Table--4

UNIT: cd

[illegible]

```
H( $\beta$ ) Range:-90 - 90DEG
H( $\beta$ ) Interval: 1.0DEG
Test Speed: HIGH
Temperature:31.3DEG
Operators:qinlizhi
Test Date:2019-10-09
```

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:54%
Test Distance:8.200m [K=1.0000]
Remarks: