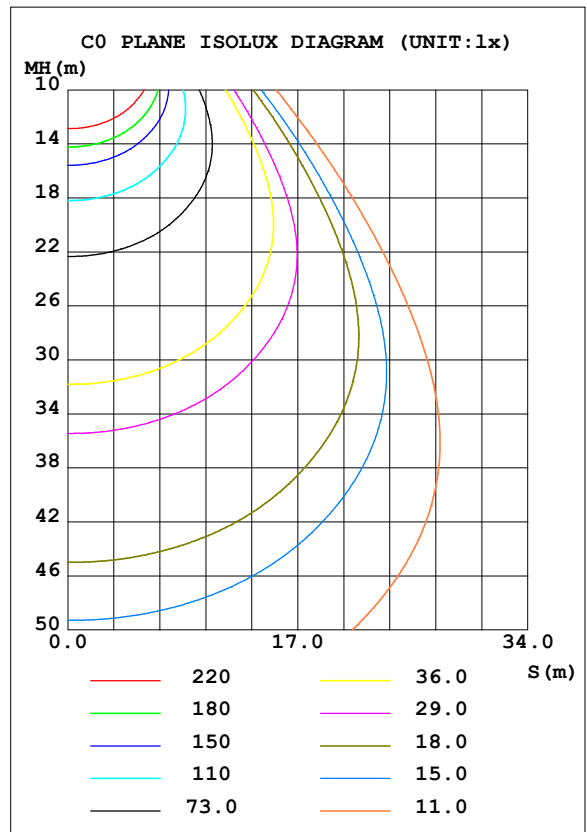
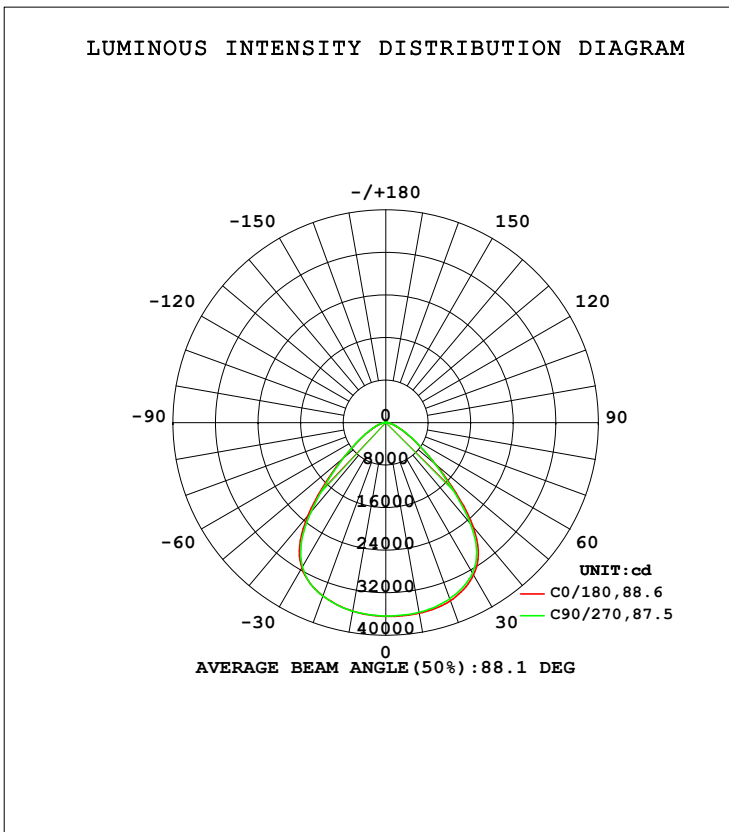


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.9V I:3.719A P:448.3W PF:0.9968 Freq:59.96Hz Lamp Flux:72910.9x1 lm		
NAME: ASD-UHB3-500ADAC-BK-500W4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.42*0.42m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 162.65 lm/W			
MODEL		I _{max} (cd)	36459	S/MH (C0/180)	1.24
NOMINAL POWER (W)	500	LOR (%)	100.0	S/MH (C90/270)	1.22
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	72911	<input type="checkbox"/> UP, DN (C0-180)	0.5, 51.5
NOMINAL FLUX (lm)	72910.9	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 47.5
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	1.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	<input type="checkbox"/> down (%)	99.0	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-04-28

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity: 56%
 Test Distance: 6.500m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	3638	3632	3621	3607	3598	3595	3600	3609	0- 10	3460	3460	4.75,4.75
20	3561	3542	3521	3504	3464	3458	3467	3491	10- 20	10094	13555	18.6,18.6
30	3304	3271	3264	3259	3159	3136	3136	3176	20- 30	15604	29158	40,40
40	2559	2462	2474	2536	2279	2221	2187	2219	30- 40	17872	47030	64.5,64.5
50	1236	1217	1211	1271	1061	1077	1045	1032	40- 50	13166	60196	82.6,82.6
60	523.9	548.4	544.4	571.5	444.8	491.5	463.1	461.2	50- 60	6975	67171	92.1,92.1
70	216.6	227.4	230.6	240.8	183.3	203.1	194.1	189.0	60- 70	3349	70520	96.7,96.7
80	69.28	71.11	76.21	82.00	58.43	63.88	58.51	53.54	70- 80	1377	71897	98.6,98.6
90	4.164	4.456	4.675	4.794	3.959	4.029	4.049	3.955	80- 90	304.2	72201	99,99
100	4.582	4.785	4.841	4.654	4.588	4.609	4.656	4.576	90-100	47.29	72249	99.1,99.1
110	5.971	5.993	5.965	5.925	6.296	6.165	6.232	6.306	100-110	55.47	72304	99.2,99.2
120	9.279	9.232	9.214	9.169	9.714	9.550	9.619	9.680	110-120	76.37	72381	99.3,99.3
130	12.96	12.90	12.90	12.85	13.51	13.30	13.41	13.39	120-130	100.9	72481	99.4,99.4
140	16.50	16.45	16.45	16.38	17.19	16.94	17.13	16.99	130-140	115.6	72597	99.6,99.6
150	19.78	19.73	19.69	19.57	20.64	20.32	20.54	20.38	140-150	115.3	72712	99.7,99.7
160	23.35	23.20	23.27	23.01	24.33	23.91	24.17	23.98	150-160	100.6	72813	99.9,99.9
170	26.91	26.62	26.77	26.52	27.52	27.12	27.39	27.13	160-170	71.50	72884	100,100
180	28.76	28.41	28.66	28.36	28.79	28.40	28.68	28.35	170-180	26.46	72911	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 54526 lm

%lum = 74.8%

%lamp = 74.8%

Conical surface Flux(120deg): 67171 lm

%lum = 92.1%

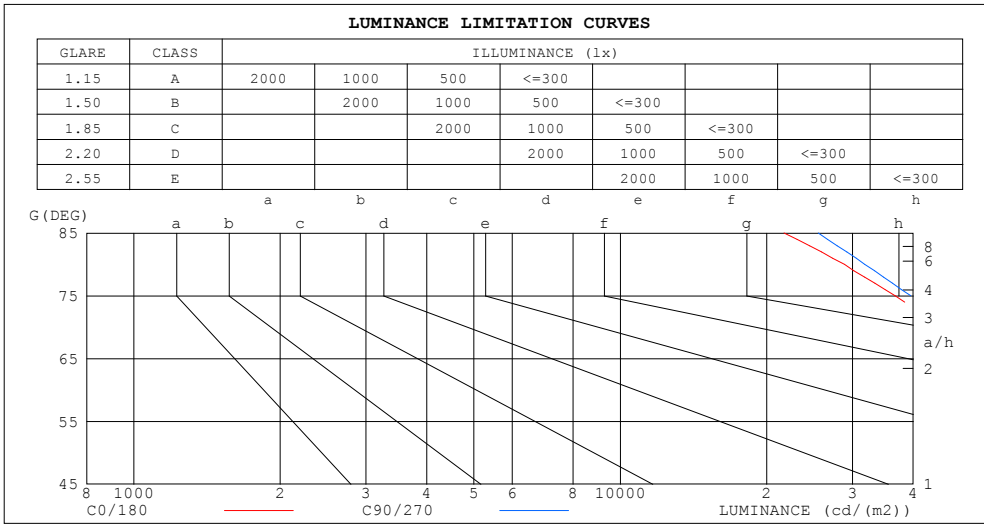
%lamp = 92.1%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-04-28

□ Range: 0 - 180DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.9V I:3.719A P:448.3W PF:0.9968 Freq:59.96Hz Lamp Flux:72910.9x1 lm		
NAME: ASD-UHB3-500ADAC-BK-500W4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.42*0.42m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	21707	25515
80	28912	31804
75	36728	39530
70	45901	48847
65	58166	61205
60	75934	78895
55	100745	102319
50	139388	136473
45	191264	183305

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-04-28

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.9V I:3.719A P:448.3W PF:0.9968 Freq:59.96Hz Lamp Flux:72910.9x1 lm		
NAME: ASD-UHB3-500ADAC-BK-500W4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.42*0.42m	Shielding Angle:

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio		Wall Exitance Coefficients (WEC)			
0.0						
1.0	.237 .135 .043	.230 .131 .042	.216 .124 .040	.204 .118 .038	.192 .112 .036	
2.0	.229 .126 .039	.223 .123 .038	.212 .118 .037	.201 .113 .035	.191 .108 .034	
3.0	.218 .116 .035	.213 .114 .034	.202 .110 .033	.193 .106 .032	.184 .102 .032	
4.0	.206 .107 .031	.201 .105 .031	.192 .102 .030	.184 .099 .030	.176 .096 .029	
5.0	.194 .099 .029	.190 .098 .028	.182 .095 .028	.175 .092 .027	.168 .090 .027	
6.0	.184 .092 .026	.180 .091 .026	.173 .088 .026	.166 .086 .025	.160 .084 .025	
7.0	.173 .086 .024	.170 .085 .024	.164 .083 .024	.158 .081 .024	.152 .079 .023	
8.0	.164 .080 .023	.161 .079 .022	.155 .078 .022	.150 .076 .022	.145 .074 .022	
9.0	.156 .075 .021	.153 .075 .021	.148 .073 .021	.143 .072 .020	.138 .070 .020	
10.0	.148 .071 .020	.145 .070 .020	.141 .069 .019	.136 .068 .019	.132 .066 .019	

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio		Ceiling Cavity Exitance Coefficients (CCEC)			
0.0	.198 .198 .198	.169 .169 .169	.115 .115 .115	.066 .066 .066	.021 .021 .021	
1.0	.183 .164 .148	.156 .141 .127	.107 .097 .088	.062 .056 .051	.020 .018 .017	
2.0	.171 .140 .113	.147 .120 .098	.101 .083 .068	.058 .048 .040	.019 .016 .013	
3.0	.162 .122 .089	.139 .105 .077	.095 .073 .054	.055 .043 .032	.018 .014 .010	
4.0	.154 .108 .072	.132 .093 .063	.091 .065 .044	.053 .038 .026	.017 .012 .009	
5.0	.146 .097 .060	.126 .084 .052	.087 .058 .037	.050 .034 .022	.016 .011 .007	
6.0	.140 .088 .051	.120 .076 .045	.083 .053 .031	.048 .031 .019	.016 .010 .006	
7.0	.134 .081 .044	.115 .070 .039	.079 .049 .027	.046 .029 .016	.015 .010 .005	
8.0	.128 .075 .039	.110 .065 .034	.076 .046 .024	.044 .027 .014	.014 .009 .005	
9.0	.122 .070 .035	.105 .061 .031	.073 .043 .022	.043 .025 .013	.014 .008 .004	
10.0	.117 .066 .032	.101 .057 .028	.070 .040 .020	.041 .024 .012	.013 .008 .004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-04-28

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.9V I:3.719A P:448.3W PF:0.9968 Freq:59.96Hz Lamp Flux:72910.9x1 lm		
NAME: ASD-UHB3-500ADAC-BK-500W4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.42*0.42m	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	28.5	29.8	28.7	30.0	30.2	28.5	29.7	28.7	29.9	30.1
3H	28.7	29.9	29.0	30.1	30.4	28.7	29.9	29.0	30.1	30.4
4H	28.8	29.9	29.1	30.1	30.4	28.8	29.9	29.1	30.2	30.4
6H	28.8	29.8	29.1	30.1	30.4	28.9	29.9	29.2	30.2	30.4
8H	28.8	29.8	29.1	30.1	30.4	28.8	29.8	29.2	30.1	30.4
12H	28.8	29.7	29.1	30.0	30.3	28.8	29.8	29.2	30.1	30.4
4H 2H	28.6	29.7	28.9	29.9	30.2	28.5	29.6	28.8	29.9	30.1
3H	28.9	29.9	29.3	30.2	30.5	28.9	29.9	29.3	30.2	30.5
4H	29.0	29.9	29.4	30.2	30.6	29.1	29.9	29.5	30.3	30.6
6H	29.1	29.9	29.5	30.2	30.6	29.2	29.9	29.6	30.3	30.7
8H	29.1	29.8	29.5	30.2	30.6	29.2	29.9	29.6	30.3	30.7
12H	29.1	29.7	29.5	30.1	30.6	29.2	29.8	29.6	30.2	30.6
8H 4H	29.0	29.7	29.5	30.1	30.5	29.1	29.8	29.5	30.1	30.5
6H	29.2	29.7	29.6	30.1	30.6	29.2	29.8	29.7	30.2	30.6
8H	29.2	29.7	29.7	30.1	30.6	29.3	29.8	29.7	30.2	30.7
12H	29.2	29.6	29.7	30.1	30.6	29.3	29.7	29.8	30.2	30.7
12H 4H	29.0	29.6	29.4	30.0	30.5	29.0	29.7	29.5	30.1	30.5
6H	29.1	29.6	29.6	30.1	30.5	29.2	29.7	29.7	30.1	30.6
8H	29.2	29.6	29.7	30.1	30.6	29.3	29.7	29.7	30.2	30.6
Variations with the observer position at spacings:										
S = 1.0H	+ 1.0 / - 1.5					+ 1.0 / - 1.4				
1.5H	+ 1.0 / - 1.1					+ 1.0 / - 0.9				
2.0H	+ 2.4 / - 1.8					+ 2.2 / - 1.7				

CIE Pub.117, 72911 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 14.9)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-04-28

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.9V I:3.719A P:448.3W PF:0.9968 Freq:59.96Hz Lamp Flux:72910.9x1 lm		
NAME: ASD-UHB3-500ADAC-BK-500W4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.42*0.42m	Shielding Angle:

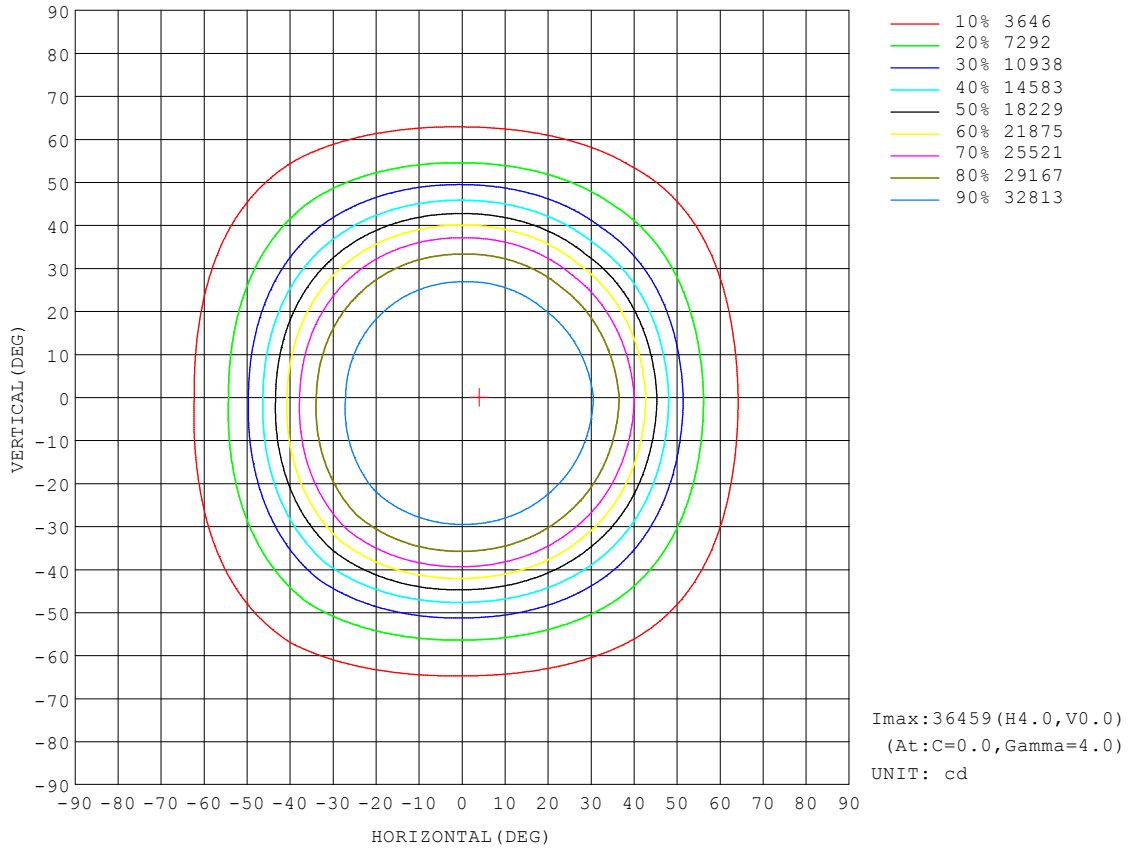
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	69	60	54	68	59	54	67	59	54	48
0.80	79	70	64	78	69	64	76	68	63	58
1.00	86	78	72	85	77	72	83	78	71	66
1.25	93	85	79	91	84	79	89	82	78	72
1.50	97	89	84	95	88	84	92	87	82	76
2.00	102	95	91	100	94	90	97	92	88	82
2.50	104	99	94	103	97	93	99	95	91	84
3.00	107	102	98	105	100	97	101	97	94	87
4.00	110	106	102	108	104	101	103	100	98	90
5.00	112	108	105	109	106	103	105	102	100	91
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-04-28

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.9V I:3.719A P:448.3W PF:0.9968 Freq:59.96Hz Lamp Flux:72910.9x1 lm		
NAME: ASD-UHB3-500ADAC-BK-500W4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.42*0.42m	Shielding Angle:

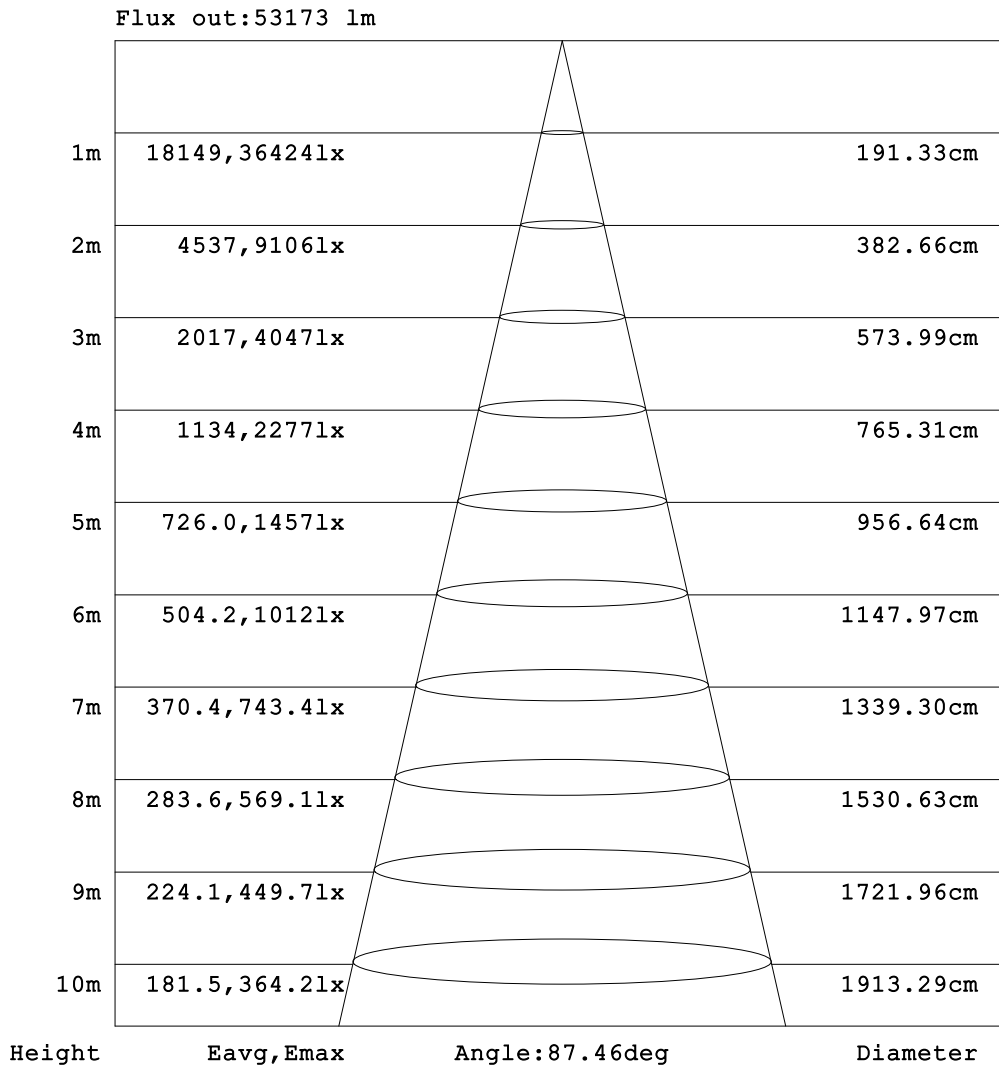


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-04-28

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

AAI Figure

Test:U:120.9V I:3.719A P:448.3W PF:0.9968 Freq:59.96Hz Lamp Flux:72910.9x1 lm		
NAME: ASD-UHB3-500ADAC-BK-500W4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.42*0.42m	Shielding Angle:

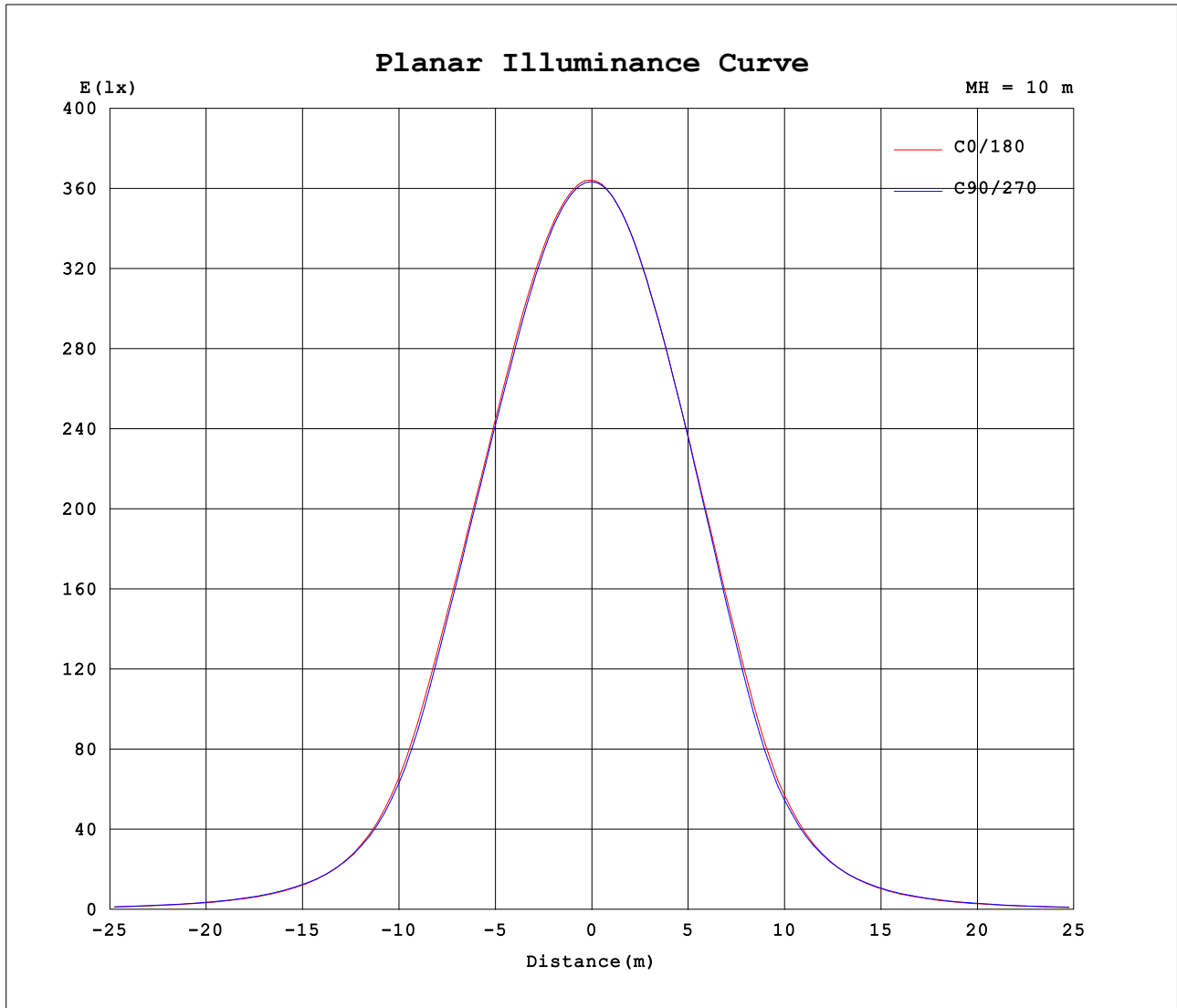


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-04-28

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-04-28

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity: 56%
 Test Distance: 6.500m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.9V I:3.719A P:448.3W PF:0.9968 Freq:59.96Hz Lamp Flux:72910.9x1 lm		
NAME: ASD-UHB3-500ADAC-BK-500W4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.42*0.42m	Shielding Angle:

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	3642	3638	3635	3631	3642	3638	3635	3631										
5	3646	3640	3634	3625	3628	3625	3626	3627										
10	3638	3632	3621	3607	3598	3595	3600	3609										
15	3615	3604	3588	3570	3545	3540	3548	3569										
20	3561	3542	3521	3504	3464	3458	3467	3491										
25	3460	3435	3421	3409	3348	3338	3347	3372										
30	3304	3271	3264	3259	3159	3136	3136	3176										
35	3036	2981	2981	2996	2828	2787	2770	2823										
40	2559	2462	2474	2536	2279	2221	2187	2219										
45	1866	1771	1789	1859	1616	1577	1547	1542										
50	1236	1217	1211	1271	1061	1077	1045	1032										
55	797	822	810	853	686	736	699	698										
60	524	548	544	572	445	492	463	461										
65	339	357	357	375	287	319	303	299										
70	217	227	231	241	183	203	194	189										
75	131	135	141	148	111	122	115	110										
80	69.3	71.1	76.2	82.0	58.4	63.9	58.5	53.5										
85	26.1	26.4	30.7	34.9	20.8	23.2	19.4	15.2										
90	4.16	4.46	4.68	4.79	3.96	4.03	4.05	3.95										
95	4.24	4.49	4.55	4.32	4.14	4.18	4.20	4.13										
100	4.58	4.79	4.84	4.65	4.59	4.61	4.66	4.58										
105	5.10	5.23	5.27	5.15	5.17	5.19	5.17	5.14										
110	5.97	5.99	5.96	5.92	6.30	6.17	6.23	6.31										
115	7.54	7.53	7.48	7.46	7.95	7.79	7.87	7.93										
120	9.28	9.23	9.21	9.17	9.71	9.55	9.62	9.68										
125	11.1	11.1	11.0	11.0	11.6	11.4	11.5	11.5										
130	13.0	12.9	12.9	12.9	13.5	13.3	13.4	13.4										
135	14.8	14.7	14.7	14.7	15.4	15.1	15.3	15.2										
140	16.5	16.4	16.4	16.4	17.2	16.9	17.1	17.0										
145	18.1	18.1	18.1	18.0	18.9	18.7	18.8	18.7										
150	19.8	19.7	19.7	19.6	20.6	20.3	20.5	20.4										
155	21.5	21.5	21.4	21.2	22.4	22.1	22.3	22.2										
160	23.3	23.2	23.3	23.0	24.3	23.9	24.2	24.0										
165	25.2	25.0	25.1	24.9	26.1	25.7	25.9	25.7										
170	26.9	26.6	26.8	26.5	27.5	27.1	27.4	27.1										
175	28.2	27.8	28.0	27.7	28.5	28.1	28.4	28.0										
180	28.8	28.4	28.7	28.4	28.8	28.4	28.7	28.4										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-04-28

□ Range: 0 - 180DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks: