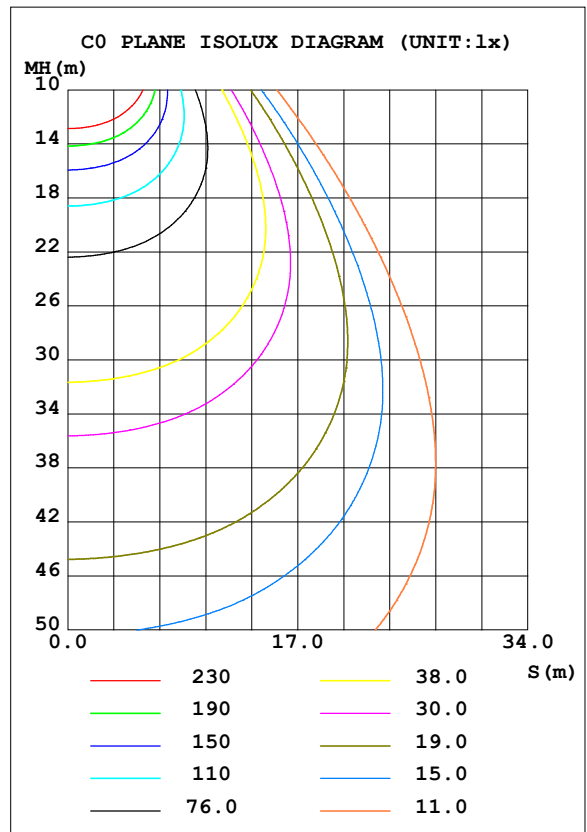
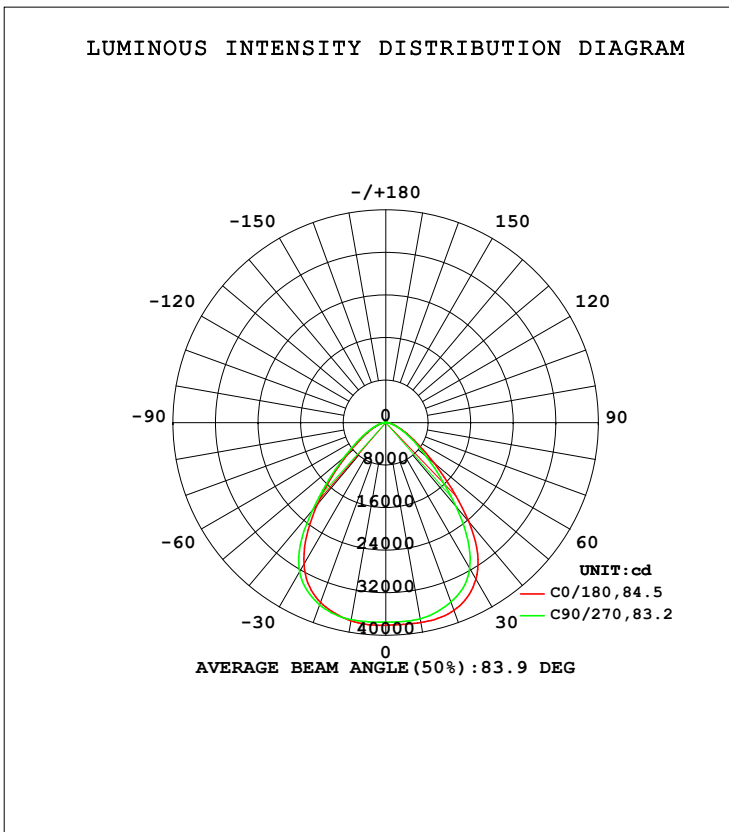


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.8V I:4.049A P:487.2W PF:0.9970 Freq:0Hz Lamp Flux:72413 lm		
NAME: ASD-UHB3-500D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 148.63 lm/W			
MODEL		I _{max} (cd)	38177	S/MH (C0/180)	1.17
NOMINAL POWER (W)	500	LOR (%)	100.0	S/MH (C90/270)	1.20
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	72413	<input type="checkbox"/> UP, DN (C0-180)	0.5, 50.0
NOMINAL FLUX (lm)	72413	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 49.0
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	1.25



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators: lianghaizhu
 Test Date: 2023-02-20

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	3816	3782	3744	3713	3783	3769	3762	3749	0- 10	3598	3598	5.04,5.04
20	3753	3674	3587	3533	3594	3609	3643	3662	10- 20	10510	14108	19.8,19.8
30	3393	3293	3159	3068	3079	3182	3241	3282	20- 30	15951	30059	42.1,42.1
40	2424	2210	2055	1946	2000	2061	2142	2211	30- 40	17021	47081	65.9,65.9
50	1194	1105	1004	997.9	962.6	1019	1038	1078	40- 50	11810	58890	82.4,82.4
60	539.8	521.4	485.1	489.4	430.8	485.4	487.9	528.6	50- 60	6603	65494	91.7,91.7
70	235.3	228.0	221.5	219.6	189.8	212.1	221.7	234.8	60- 70	3376	68870	96.4,96.4
80	82.76	76.39	75.78	74.10	63.41	71.38	76.75	78.41	70- 80	1480	70350	98.5,98.5
90	6.022	5.450	5.105	4.938	4.785	4.880	5.449	5.438	80- 90	351.9	70701	99,99
100	5.026	4.704	4.724	4.906	5.278	4.855	4.615	4.900	90-100	54.95	70756	99.1,99.1
110	5.562	5.828	6.043	6.194	7.099	6.676	6.319	6.107	100-110	56.07	70813	99.1,99.1
120	8.738	9.062	9.387	9.552	10.64	10.11	9.647	9.408	110-120	77.72	70890	99.2,99.2
130	12.43	12.79	13.17	13.35	14.52	13.84	13.37	13.06	120-130	102.2	70992	99.4,99.4
140	16.12	16.48	16.84	16.99	18.26	17.45	17.13	16.75	130-140	117.2	71110	99.6,99.6
150	19.54	19.89	20.10	20.28	21.71	20.88	20.61	20.33	140-150	117.2	71227	99.7,99.7
160	23.16	23.27	23.56	23.60	25.24	24.34	24.20	23.82	150-160	101.9	71329	99.9,99.9
170	26.81	26.70	26.97	26.85	28.27	27.46	27.50	27.06	160-170	72.12	71401	100,100
180	29.09	28.72	28.84	28.59	29.21	28.62	28.93	28.53	170-180	26.68	71428	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 53771 lm

%lum = 75.3%

%lamp = 75.3%

Conical surface Flux(120deg): 65494 lm

%lum = 91.7%

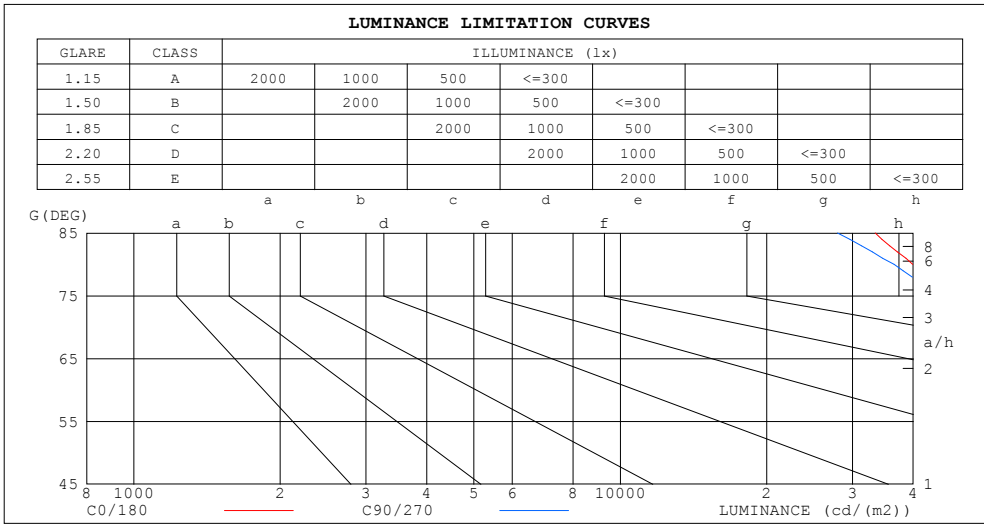
%lamp = 91.7%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-02-20

□ 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:119.8V I:4.049A P:487.2W PF:0.9970 Freq:0Hz Lamp Flux:72413 lm		
NAME: ASD-UHB3-500D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	33442	27962
80	39918	36554
75	47598	44921
70	57621	54239
65	70893	65737
60	90420	81265
55	116593	102579
50	155650	130856
45	207782	171546

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-02-20

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:119.8V I:4.049A P:487.2W PF:0.9970 Freq:0Hz Lamp Flux:72413 lm		
NAME: ASD-UHB3-500D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	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	.229 .131 .042	.216 .124 .040	.203 .117 .038	.192 .111 .036	
2.0	.228 .125 .038	.222 .122 .038	.210 .117 .036	.200 .112 .035	.190 .107 .034	
3.0	.217 .115 .035	.211 .113 .034	.201 .109 .033	.191 .105 .032	.183 .101 .031	
4.0	.204 .106 .031	.200 .104 .031	.191 .101 .030	.182 .098 .030	.174 .095 .029	
5.0	.193 .098 .028	.188 .097 .028	.180 .094 .028	.173 .091 .027	.166 .089 .027	
6.0	.182 .091 .026	.178 .090 .026	.171 .088 .025	.164 .085 .025	.158 .083 .025	
7.0	.172 .085 .024	.168 .084 .024	.162 .082 .024	.156 .080 .023	.150 .078 .023	
8.0	.162 .079 .022	.159 .079 .022	.154 .077 .022	.148 .075 .022	.143 .074 .021	
9.0	.154 .074 .021	.151 .074 .021	.146 .072 .020	.141 .071 .020	.137 .069 .020	
10.0	.146 .070 .019	.144 .069 .019	.139 .068 .019	.135 .067 .019	.130 .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	.116 .116 .116	.066 .066 .066	.021 .021 .021	
1.0	.183 .165 .148	.157 .141 .127	.107 .097 .088	.062 .056 .051	.020 .018 .017	
2.0	.172 .140 .114	.147 .121 .098	.101 .083 .068	.058 .049 .040	.019 .016 .013	
3.0	.162 .122 .090	.139 .105 .078	.095 .073 .055	.055 .043 .032	.018 .014 .011	
4.0	.154 .108 .073	.132 .093 .063	.091 .065 .045	.052 .038 .026	.017 .012 .009	
5.0	.146 .097 .061	.126 .084 .053	.087 .059 .037	.050 .034 .022	.016 .011 .007	
6.0	.139 .088 .052	.120 .077 .045	.083 .054 .032	.048 .032 .019	.015 .010 .006	
7.0	.133 .081 .045	.115 .070 .039	.079 .049 .028	.046 .029 .017	.015 .010 .005	
8.0	.127 .075 .040	.110 .065 .035	.076 .046 .025	.044 .027 .015	.014 .009 .005	
9.0	.122 .070 .036	.105 .061 .031	.073 .043 .022	.042 .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:25DEG
 Operators:lianghaizhu
 Test Date:2023-02-20

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:119.8V I:4.049A P:487.2W PF:0.9970 Freq:0Hz Lamp Flux:72413 lm										
NAME: ASD-UHB3-500D50-BK					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: ASD LIGHTING CORP					SUR.:0.39*0.39m			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	28.7	30.0	29.0	30.2	30.4	28.2	29.5	28.5	29.7	29.9
3H	29.1	30.2	29.4	30.5	30.7	28.6	29.7	28.9	30.0	30.2
4H	29.2	30.3	29.5	30.5	30.8	28.7	29.8	29.0	30.0	30.3
6H	29.2	30.3	29.6	30.5	30.8	28.7	29.8	29.1	30.0	30.3
8H	29.2	30.2	29.6	30.5	30.8	28.7	29.7	29.1	30.0	30.3
12H	29.2	30.2	29.6	30.5	30.8	28.7	29.7	29.1	30.0	30.3
4H 2H	28.8	29.9	29.1	30.2	30.4	28.3	29.4	28.7	29.7	29.9
3H	29.3	30.2	29.6	30.5	30.8	28.8	29.8	29.2	30.1	30.4
4H	29.5	30.3	29.8	30.6	31.0	29.0	29.9	29.4	30.2	30.6
6H	29.6	30.3	30.0	30.7	31.1	29.2	29.9	29.6	30.3	30.7
8H	29.6	30.3	30.0	30.7	31.1	29.2	29.9	29.6	30.3	30.7
12H	29.6	30.3	30.1	30.7	31.1	29.2	29.8	29.6	30.2	30.7
8H 4H	29.5	30.2	29.9	30.5	30.9	29.1	29.8	29.5	30.1	30.5
6H	29.7	30.2	30.1	30.6	31.1	29.3	29.8	29.7	30.2	30.7
8H	29.7	30.2	30.2	30.7	31.1	29.3	29.8	29.8	30.3	30.7
12H	29.8	30.2	30.3	30.7	31.2	29.4	29.8	29.9	30.3	30.7
12H 4H	29.4	30.1	29.9	30.5	30.9	29.0	29.7	29.5	30.1	30.5
6H	29.6	30.1	30.1	30.6	31.1	29.3	29.8	29.7	30.2	30.7
8H	29.7	30.2	30.2	30.6	31.1	29.3	29.8	29.8	30.2	30.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.9 / - 1.2					+ 0.9 / - 1.2				
1.5H	+ 1.0 / - 0.9					+ 1.0 / - 0.9				
2.0H	+ 2.1 / - 1.6					+ 1.7 / - 1.3				

CIE Pub.117, 71428 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 14.8)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-02-20

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:119.8V I:4.049A P:487.2W PF:0.9970 Freq:0Hz Lamp Flux:72413 lm		
NAME: ASD-UHB3-500D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:

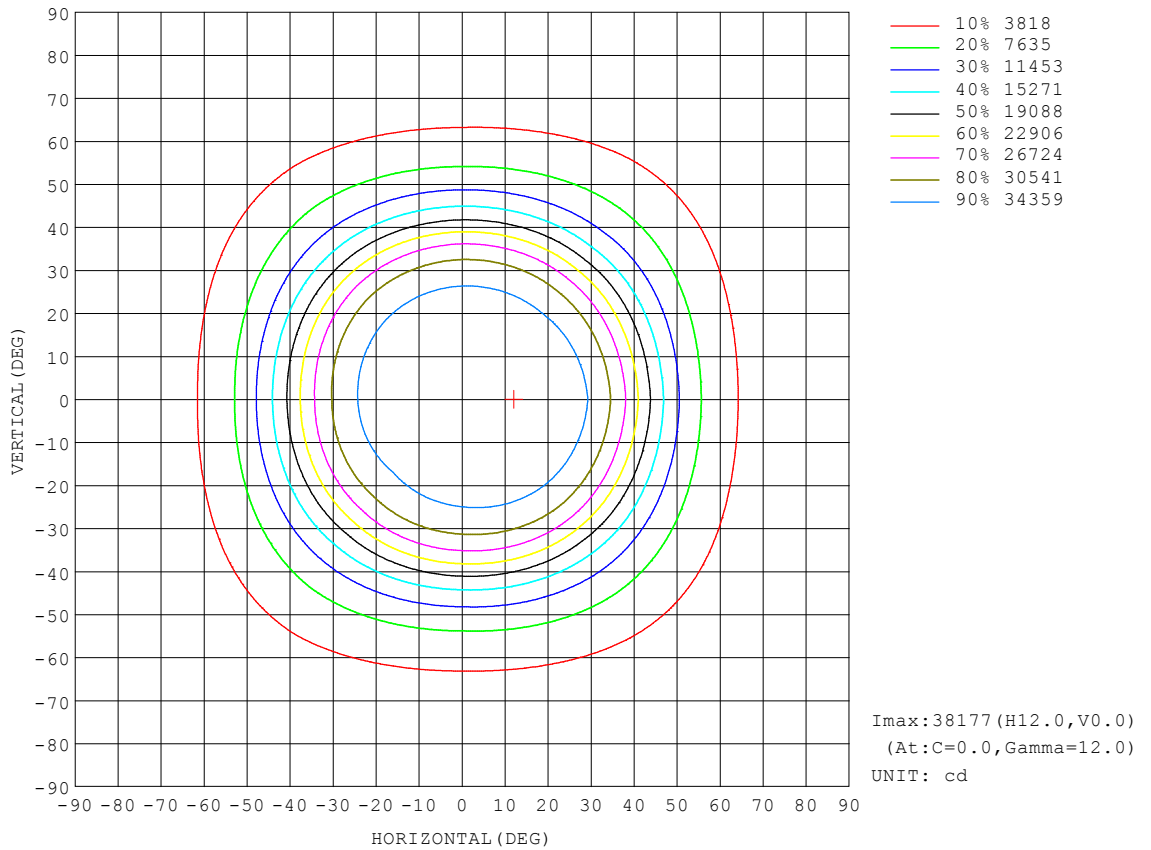
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	70	61	55	69	60	55	68	60	55	50
0.80	80	71	65	79	70	65	77	69	64	59
1.00	87	78	73	86	78	73	84	78	72	66
1.25	93	85	80	92	84	79	89	83	78	73
1.50	97	90	84	95	89	84	93	87	83	77
2.00	102	96	91	100	94	90	97	92	88	82
2.50	105	99	94	103	98	94	99	95	92	84
3.00	107	102	98	105	100	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	102	100	92
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:25DEG
 Operators:lianghaizhu
 Test Date:2023-02-20

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:119.8V I:4.049A P:487.2W PF:0.9970 Freq:0Hz Lamp Flux:72413 lm		
NAME: ASD-UHB3-500D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:

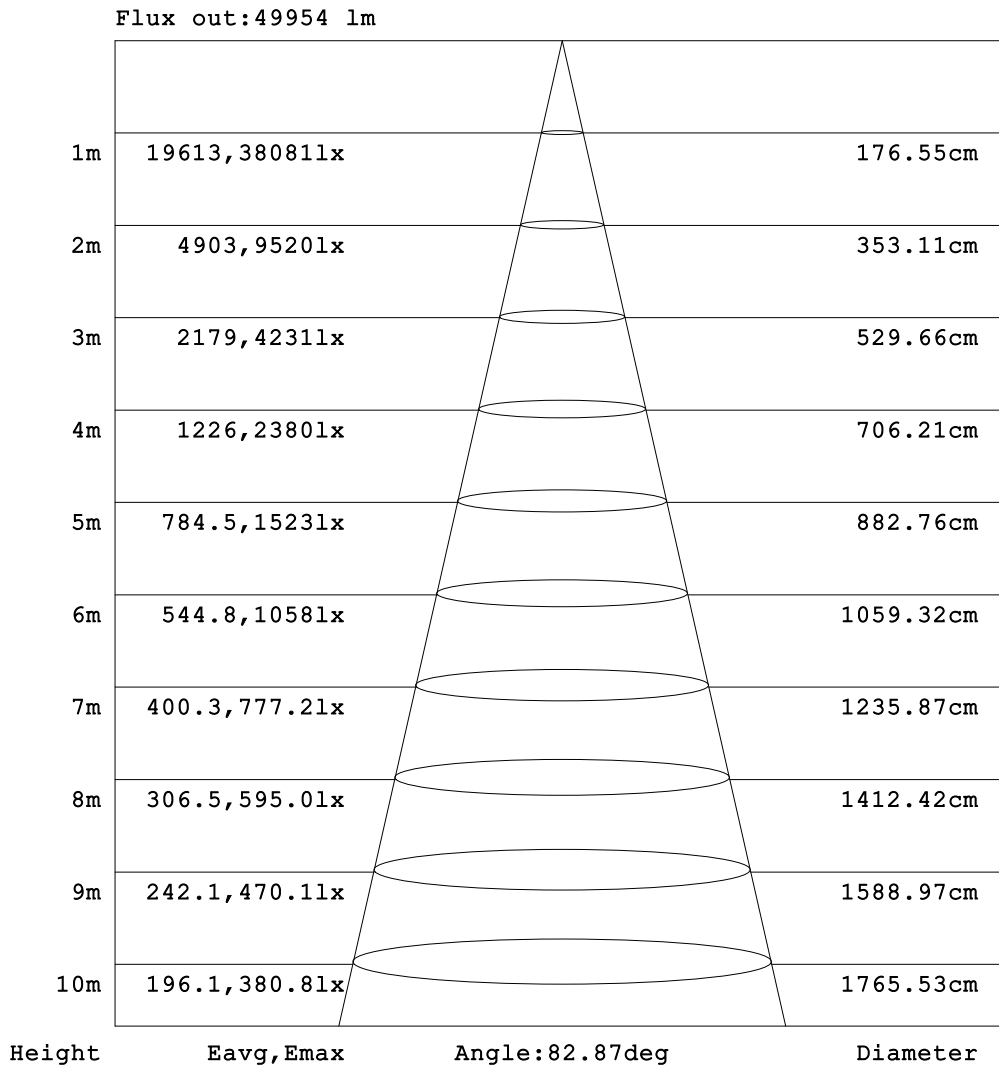


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-02-20

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:119.8V I:4.049A P:487.2W PF:0.9970 Freq:0Hz Lamp Flux:72413 lm		
NAME: ASD-UHB3-500D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:

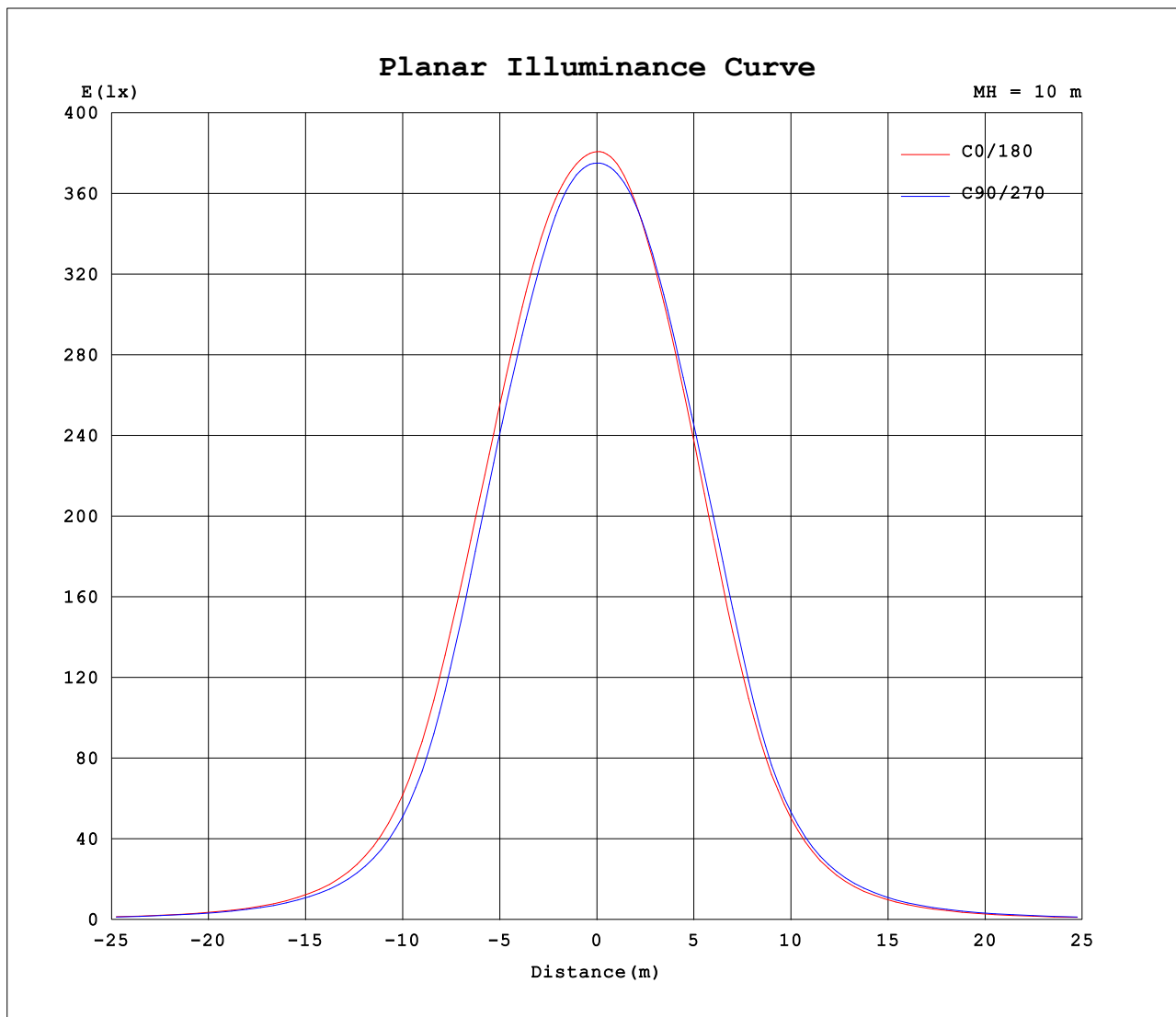


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-02-20

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:25DEG
Operators:lianghaizhu
Test Date:2023-02-20

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:119.8V I:4.049A P:487.2W PF:0.9970 Freq:0Hz Lamp Flux:72413 lm		
NAME: ASD-UHB3-500D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315											
0	3808	3776	3752	3733	3808	3776	3752	3733											
5	3808	3778	3754	3734	3811	3781	3758	3738											
10	3816	3782	3744	3713	3783	3769	3762	3749											
15	3811	3756	3688	3644	3710	3712	3730	3735											
20	3753	3674	3587	3533	3594	3609	3643	3662											
25	3626	3533	3435	3366	3401	3451	3490	3519											
30	3393	3293	3159	3068	3079	3182	3241	3282											
35	3011	2863	2692	2579	2597	2716	2807	2862											
40	2424	2210	2055	1946	2000	2061	2142	2211											
45	1754	1576	1448	1401	1428	1459	1514	1546											
50	1194	1105	1004	998	963	1019	1038	1078											
55	798	767	702	706	643	714	713	763											
60	540	521	485	489	431	485	488	529											
65	358	349	332	331	287	324	332	357											
70	235	228	221	220	190	212	222	235											
75	147	140	139	136	117	131	139	145											
80	82.8	76.4	75.8	74.1	63.4	71.4	76.8	78.4											
85	34.8	30.2	29.1	28.7	22.7	27.1	30.2	29.8											
90	6.02	5.45	5.11	4.94	4.79	4.88	5.45	5.44											
95	5.35	5.06	4.93	4.82	4.90	4.84	5.19	5.11											
100	5.03	4.70	4.72	4.91	5.28	4.85	4.62	4.90											
105	4.62	5.03	4.76	5.34	5.76	5.53	4.97	5.34											
110	5.56	5.83	6.04	6.19	7.10	6.68	6.32	6.11											
115	7.05	7.37	7.63	7.81	8.80	8.34	7.93	7.70											
120	8.74	9.06	9.39	9.55	10.6	10.1	9.65	9.41											
125	10.6	10.9	11.3	11.4	12.6	12.0	11.5	11.2											
130	12.4	12.8	13.2	13.3	14.5	13.8	13.4	13.1											
135	14.3	14.7	15.1	15.2	16.4	15.7	15.3	14.9											
140	16.1	16.5	16.8	17.0	18.3	17.5	17.1	16.7											
145	17.9	18.2	18.5	18.7	20.0	19.2	18.9	18.6											
150	19.5	19.9	20.1	20.3	21.7	20.9	20.6	20.3											
155	21.3	21.5	21.8	21.9	23.4	22.6	22.3	22.0											
160	23.2	23.3	23.6	23.6	25.2	24.3	24.2	23.8											
165	25.0	25.0	25.3	25.3	26.9	26.0	26.0	25.6											
170	26.8	26.7	27.0	26.8	28.3	27.5	27.5	27.1											
175	28.3	28.0	28.2	28.0	29.1	28.4	28.6	28.1											
180	29.1	28.7	28.8	28.6	29.2	28.6	28.9	28.5											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-02-20

□ 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: