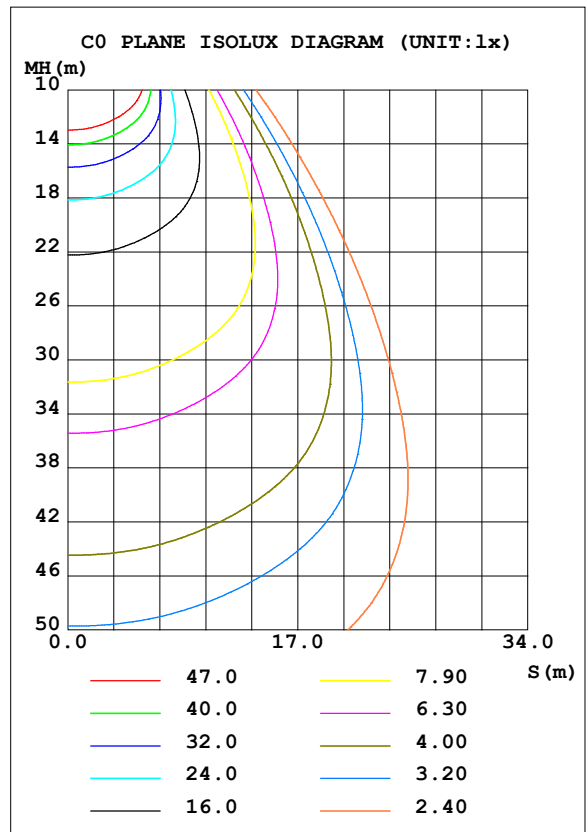
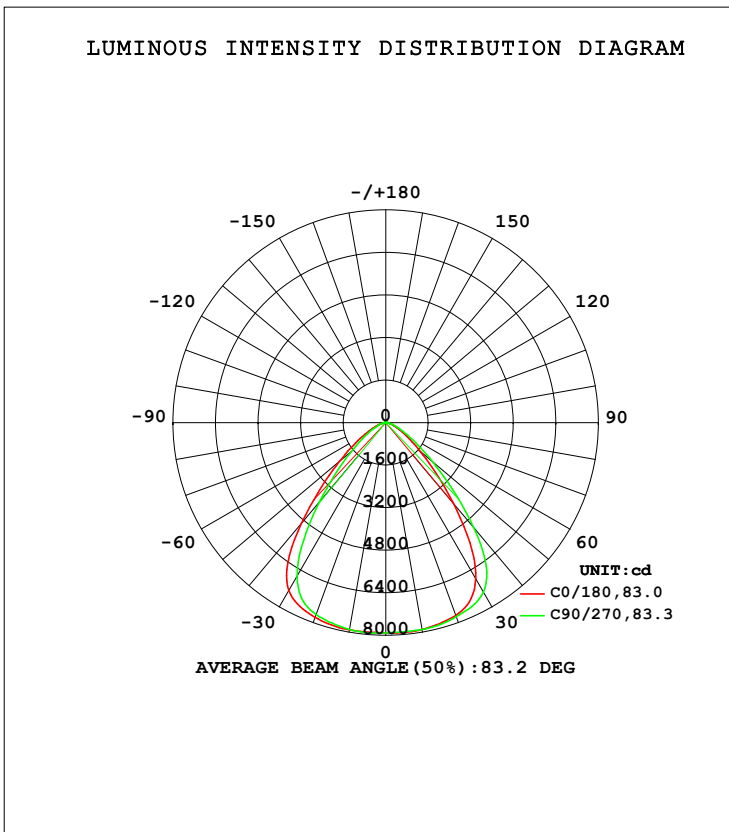


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:121.5V I:0.8027A P:97.09W PF:0.9955 Freq:59.99Hz Lamp Flux:14603.8x1 lm		
NAME: ASD-UHB3-100DAC-BK-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.235*0.235m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 150.41 lm/W			
MODEL		I _{max} (cd)	7925	S/MH (C0/180)	1.23
NOMINAL POWER (W)	100	LOR (%)	100.0	S/MH (C90/270)	1.14
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	14604	<input type="checkbox"/> UP, DN (C0-180)	0.5, 51.3
NOMINAL FLUX (lm)	14603.8	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 47.8
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: 25.1DEG
 Operators: lianghaizhu
 Test Date: 2022-07-11

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	7896	7899	7896	7891	7916	7915	7894	7874	0- 10	754.6	754.6	5.17,5.17
20	7707	7730	7766	7823	7789	7744	7678	7634	10- 20	2218	2973	20.4,20.4
30	6771	7082	7355	7473	7291	7048	6669	6436	20- 30	3448	6421	44,44
40	3953	4429	5145	5538	4924	4363	3862	3497	30- 40	3667	10088	69.1,69.1
50	1722	1933	2316	2553	2282	1955	1711	1527	40- 50	2384	12471	85.4,85.4
60	735.5	819.1	962.0	1072	964.1	833.4	718.1	645.0	50- 60	1194	13665	93.6,93.6
70	285.3	325.5	380.7	439.0	375.8	329.3	282.3	248.5	60- 70	546.6	14212	97.3,97.3
80	75.75	94.59	116.8	145.3	111.6	93.06	70.64	55.89	70- 80	211.8	14424	98.8,98.8
90	8.275	6.861	4.800	5.922	4.022	6.035	6.897	7.355	80- 90	39.74	14463	99,99
100	6.803	6.143	5.538	5.329	5.348	5.863	6.612	7.165	90-100	5.934	14469	99.1,99.1
110	12.23	11.23	10.18	9.506	10.06	10.89	12.17	12.96	100-110	8.891	14478	99.1,99.1
120	19.63	18.32	16.98	16.03	16.99	18.10	19.76	20.69	110-120	14.44	14493	99.2,99.2
130	27.94	26.50	25.08	23.94	25.49	26.67	28.56	29.51	120-130	20.07	14513	99.4,99.4
140	36.07	34.66	33.33	32.11	34.36	35.36	37.32	38.03	130-140	23.89	14537	99.5,99.5
150	43.49	42.30	40.96	39.78	42.60	43.48	45.15	45.81	140-150	24.47	14561	99.7,99.7
160	51.40	49.93	48.95	47.44	50.88	51.52	53.25	53.73	150-160	21.57	14583	99.9,99.9
170	59.13	57.65	57.19	55.82	58.70	58.73	60.19	60.12	160-170	15.43	14598	100,100
180	62.70	61.97	62.44	61.68	62.72	61.98	62.47	61.69	170-180	5.743	14604	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 11466 lm

%lum = 78.5%

%lamp = 78.5%

Conical surface Flux(120deg): 13665 lm

%lum = 93.6%

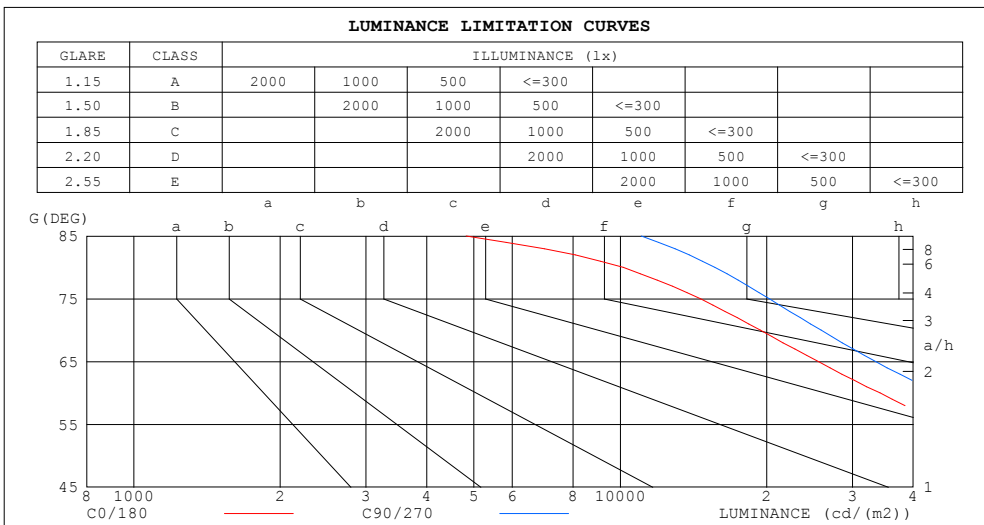
%lamp = 93.6%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2022-07-11

□ 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:121.5V I:0.8027A P:97.09W PF:0.9955 Freq:59.99Hz Lamp Flux:14603.8x1 lm		
NAME: ASD-UHB3-100DAC-BK-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.235*0.235m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4820	11038
80	10144	15641
75	14616	20252
70	19400	25888
65	25523	33460
60	34210	44745
55	45939	60431
50	62314	83806
45	86988	117401

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2022-07-11

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:121.5V I:0.8027A P:97.09W PF:0.9955 Freq:59.99Hz Lamp Flux:14603.8x1 lm		
NAME: ASD-UHB3-100DAC-BK-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.235*0.235m	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	.227	.129	.041	.219	.125	.040	.206	.118	.038	.194	.112	.036	.182	.106	.034	
2.0	.220	.120	.037	.214	.118	.036	.202	.112	.035	.191	.107	.034	.182	.103	.032	
3.0	.209	.111	.033	.204	.109	.033	.194	.105	.032	.185	.101	.031	.176	.097	.030	
4.0	.198	.103	.030	.194	.101	.030	.185	.098	.029	.177	.095	.029	.169	.092	.028	
5.0	.188	.096	.028	.184	.094	.027	.176	.091	.027	.168	.089	.026	.162	.086	.026	
6.0	.178	.089	.025	.174	.088	.025	.167	.086	.025	.160	.083	.024	.154	.081	.024	
7.0	.168	.083	.024	.165	.082	.023	.159	.080	.023	.153	.078	.023	.147	.076	.022	
8.0	.160	.078	.022	.157	.077	.022	.151	.075	.022	.146	.074	.021	.141	.072	.021	
9.0	.152	.073	.020	.149	.073	.020	.144	.071	.020	.139	.070	.020	.134	.068	.020	
10.0	.144	.069	.019	.142	.068	.019	.137	.067	.019	.133	.066	.019	.129	.065	.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																
1.0	.198	.198	.198	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
2.0	.170	.140	.114	.146	.120	.099	.100	.083	.069	.058	.048	.040	.018	.016	.013	
3.0	.160	.121	.090	.137	.105	.078	.094	.073	.055	.054	.042	.032	.018	.014	.011	
4.0	.152	.107	.073	.130	.093	.064	.090	.065	.045	.052	.038	.027	.017	.012	.009	
5.0	.144	.096	.061	.124	.083	.053	.085	.058	.037	.049	.034	.022	.016	.011	.007	
6.0	.138	.088	.052	.118	.076	.045	.082	.053	.032	.047	.031	.019	.015	.010	.006	
7.0	.131	.081	.045	.113	.070	.039	.078	.049	.028	.045	.029	.017	.015	.009	.005	
8.0	.126	.075	.040	.108	.065	.035	.075	.045	.025	.044	.027	.015	.014	.009	.005	
9.0	.120	.070	.035	.104	.061	.031	.072	.043	.022	.042	.025	.013	.014	.008	.004	
10.0	.116	.065	.032	.100	.057	.028	.069	.040	.020	.040	.024	.012	.013	.008	.004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2022-07-11

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:121.5V I:0.8027A P:97.09W PF:0.9955 Freq:59.99Hz Lamp Flux:14603.8x1 lm										
NAME: ASD-UHB3-100DAC-BK-5000K					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp					SUR.:0.235*0.235m			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	25.3	26.6	25.6	26.8	27.0	26.3	27.5	26.6	27.7	27.9
3H	25.5	26.6	25.8	26.8	27.1	26.5	27.6	26.8	27.9	28.1
4H	25.5	26.5	25.8	26.8	27.1	26.5	27.6	26.8	27.8	28.1
6H	25.5	26.4	25.8	26.7	27.0	26.5	27.5	26.9	27.8	28.1
8H	25.4	26.4	25.8	26.7	26.9	26.5	27.5	26.9	27.7	28.0
12H	25.4	26.3	25.7	26.6	26.9	26.5	27.4	26.8	27.7	28.0
4H 2H	25.4	26.4	25.7	26.7	26.9	26.3	27.3	26.6	27.6	27.8
3H	25.6	26.5	26.0	26.8	27.1	26.6	27.5	26.9	27.8	28.1
4H	25.7	26.5	26.1	26.8	27.2	26.6	27.5	27.0	27.8	28.1
6H	25.7	26.4	26.1	26.8	27.1	26.7	27.4	27.1	27.8	28.1
8H	25.7	26.3	26.1	26.7	27.1	26.7	27.4	27.1	27.7	28.1
12H	25.6	26.2	26.1	26.6	27.0	26.7	27.3	27.1	27.7	28.1
8H 4H	25.6	26.3	26.1	26.7	27.1	26.6	27.3	27.0	27.6	28.0
6H	25.7	26.2	26.1	26.7	27.1	26.7	27.2	27.1	27.6	28.1
8H	25.7	26.2	26.2	26.6	27.1	26.7	27.2	27.2	27.6	28.1
12H	25.7	26.1	26.1	26.5	27.0	26.7	27.1	27.2	27.5	28.0
12H 4H	25.6	26.2	26.0	26.6	27.0	26.5	27.2	27.0	27.5	28.0
6H	25.7	26.1	26.1	26.6	27.0	26.6	27.1	27.1	27.6	28.0
8H	25.7	26.1	26.2	26.5	27.0	26.7	27.1	27.1	27.5	28.0
Variations with the observer position at spacings:										
S = 1.0H	+ 1.3 / - 2.1					+ 1.2 / - 1.8				
1.5H	+ 1.6 / - 1.4					+ 1.8 / - 1.7				
2.0H	+ 2.5 / - 2.0					+ 3.1 / - 2.4				

CIE Pub.117, 14604 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 9.3)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2022-07-11

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:121.5V I:0.8027A P:97.09W PF:0.9955 Freq:59.99Hz Lamp Flux:14603.8x1 lm		
NAME: ASD-UHB3-100DAC-BK-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.235*0.235m	Shielding Angle:

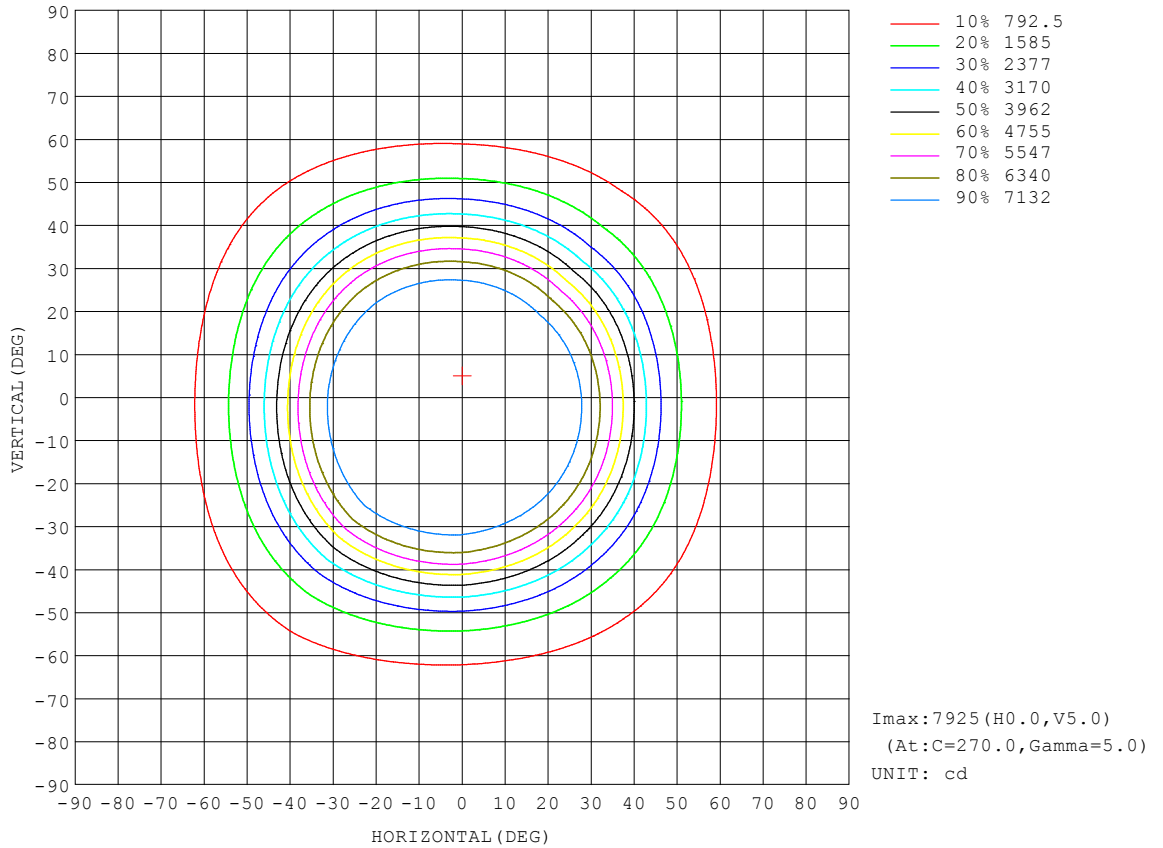
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	72	63	58	71	63	57	70	62	57	52
0.80	81	73	67	81	72	67	79	72	67	61
1.00	89	80	75	87	80	75	85	80	74	69
1.25	94	87	82	93	86	81	91	85	80	75
1.50	98	91	86	97	90	86	94	89	85	79
2.00	103	97	93	101	96	92	98	94	90	84
2.50	105	100	96	104	99	95	100	96	93	86
3.00	108	103	99	106	101	98	102	99	96	88
4.00	111	107	103	108	105	102	104	101	99	91
5.00	112	109	106	110	107	104	105	103	101	93
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:25.1DEG
 Operators:lianghaizhu
 Test Date:2022-07-11

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:121.5V I:0.8027A P:97.09W PF:0.9955 Freq:59.99Hz Lamp Flux:14603.8x1 lm		
NAME: ASD-UHB3-100DAC-BK-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.235*0.235m	Shielding Angle:

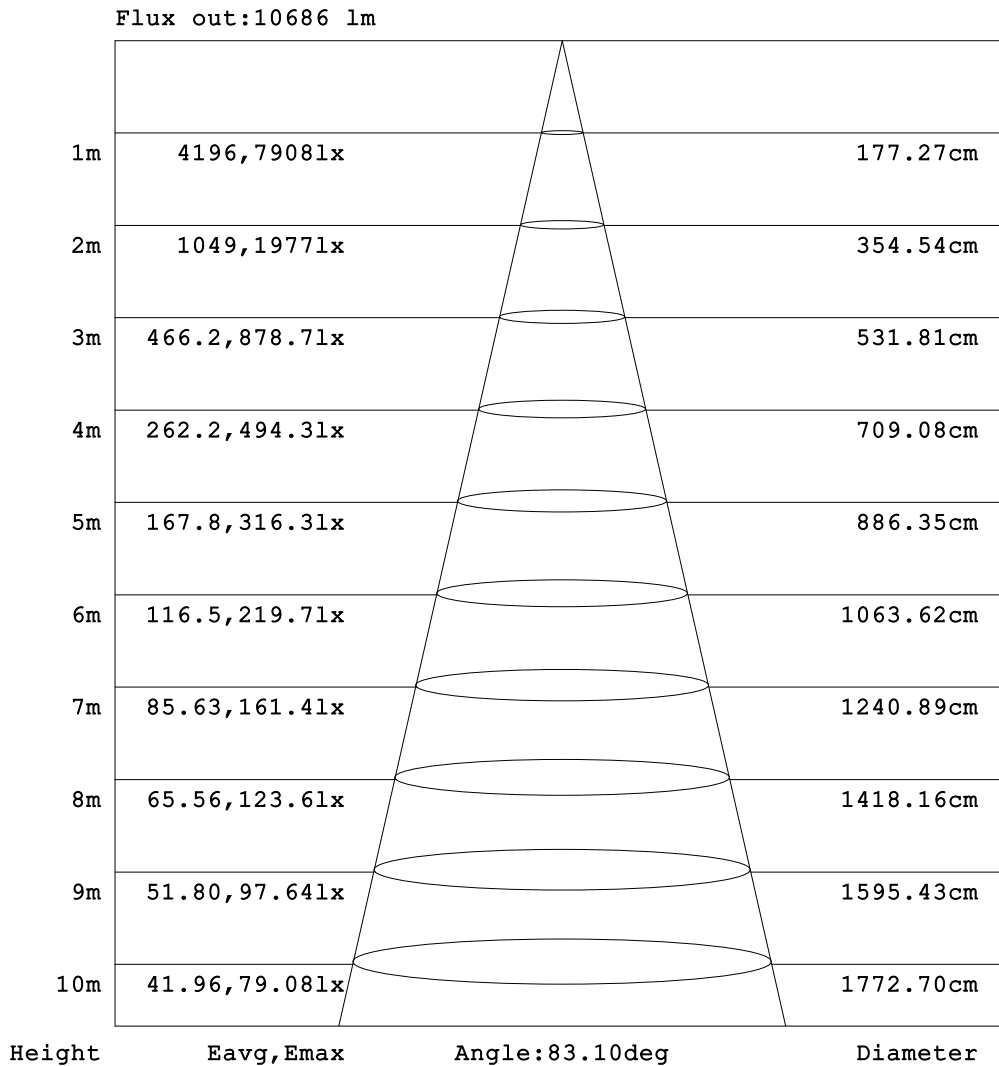


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: lianghaizhu
 Test Date: 2022-07-11

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:121.5V I:0.8027A P:97.09W PF:0.9955 Freq:59.99Hz Lamp Flux:14603.8x1 lm		
NAME: ASD-UHB3-100DAC-BK-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.235*0.235m	Shielding Angle:

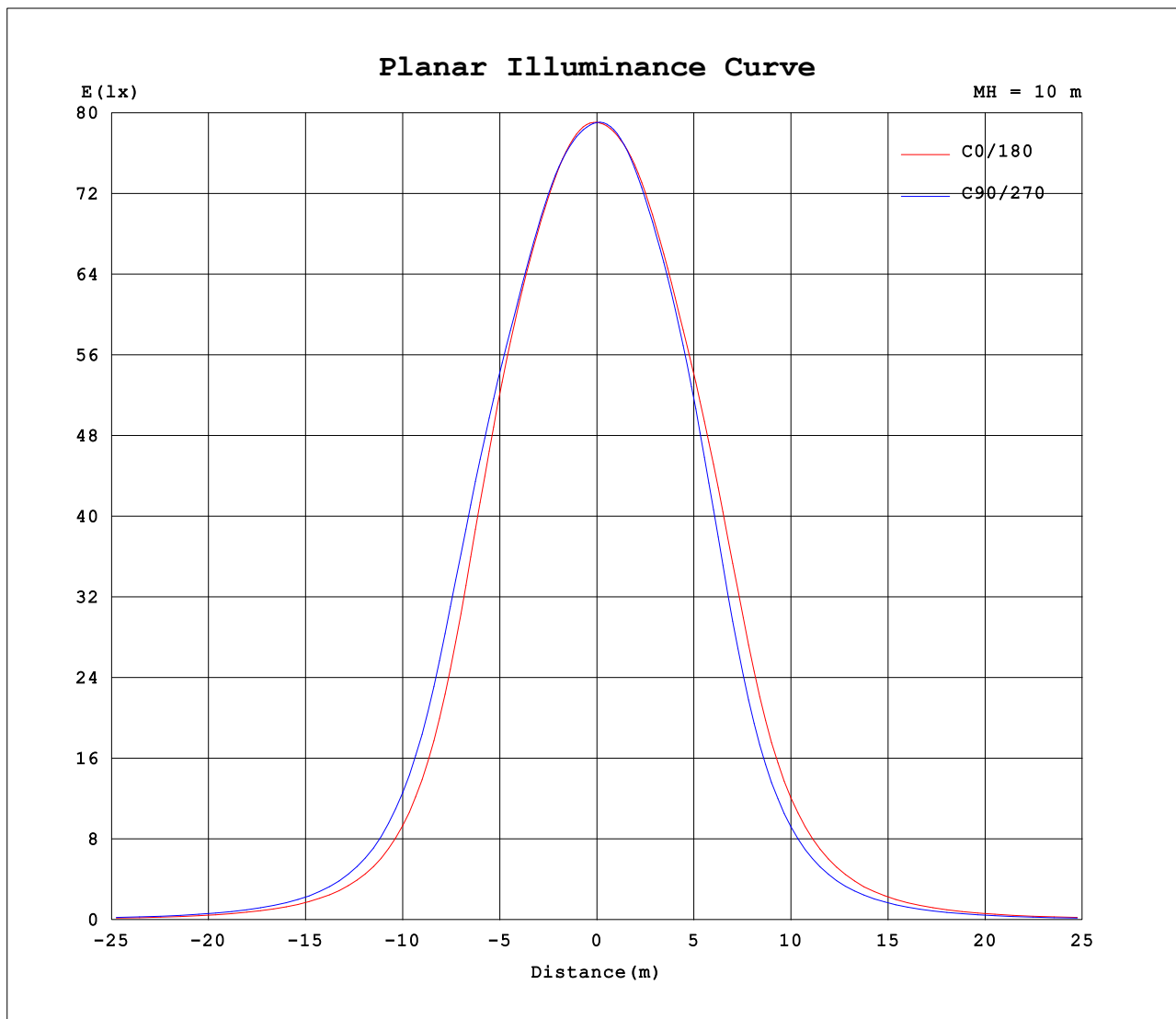


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2022-07-11

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:25.1DEG
Operators:lianghaizhu
Test Date:2022-07-11

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:121.5V I:0.8027A P:97.09W PF:0.9955 Freq:59.99Hz Lamp Flux:14603.8x1 lm		
NAME: ASD-UHB3-100DAC-BK-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.235*0.235m	Shielding Angle:

Table--1

UNIT: cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315											
0	7907	7905	7906	7908	7907	7905	7906	7908											
5	7919	7906	7889	7884	7904	7921	7925	7918											
10	7896	7899	7896	7891	7916	7915	7894	7874											
15	7825	7835	7863	7895	7884	7851	7809	7783											
20	7707	7730	7766	7823	7789	7744	7678	7634											
25	7441	7552	7638	7693	7632	7546	7384	7270											
30	6771	7082	7355	7473	7291	7048	6669	6436											
35	5522	6029	6595	6877	6433	5966	5386	5001											
40	3953	4429	5145	5538	4924	4363	3862	3497											
45	2645	2990	3570	3870	3424	2988	2611	2321											
50	1722	1933	2316	2553	2282	1955	1711	1527											
55	1133	1257	1490	1644	1491	1276	1111	1003											
60	736	819	962	1072	964	833	718	645											
65	464	523	608	692	610	530	457	409											
70	285	325	381	439	376	329	282	249											
75	163	192	225	267	220	192	161	136											
80	75.7	94.6	117	145	112	93.1	70.6	55.9											
85	18.1	27.4	41.4	56.5	35.5	25.7	15.4	10.8											
90	8.27	6.86	4.80	5.92	4.02	6.04	6.90	7.35											
95	5.66	5.56	4.25	5.04	4.13	5.02	5.11	5.40											
100	6.80	6.14	5.54	5.33	5.35	5.86	6.61	7.17											
105	9.23	8.40	7.59	7.02	7.39	8.09	9.11	9.75											
110	12.2	11.2	10.2	9.51	10.1	10.9	12.2	13.0											
115	15.7	14.6	13.3	12.5	13.3	14.3	15.8	16.6											
120	19.6	18.3	17.0	16.0	17.0	18.1	19.8	20.7											
125	23.7	22.4	20.9	19.9	21.1	22.3	24.1	25.0											
130	27.9	26.5	25.1	23.9	25.5	26.7	28.6	29.5											
135	32.1	30.6	29.3	28.1	29.9	31.1	33.0	33.8											
140	36.1	34.7	33.3	32.1	34.4	35.4	37.3	38.0											
145	39.8	38.6	37.2	36.0	38.6	39.5	41.3	42.0											
150	43.5	42.3	41.0	39.8	42.6	43.5	45.2	45.8											
155	47.3	46.0	44.8	43.5	46.6	47.4	49.1	49.7											
160	51.4	49.9	48.9	47.4	50.9	51.5	53.3	53.7											
165	55.5	53.9	53.2	51.7	55.1	55.4	57.1	57.3											
170	59.1	57.6	57.2	55.8	58.7	58.7	60.2	60.1											
175	61.7	60.5	60.4	59.4	61.4	61.1	62.1	61.7											
180	62.7	62.0	62.4	61.7	62.7	62.0	62.5	61.7											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2022-07-11

□ 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: