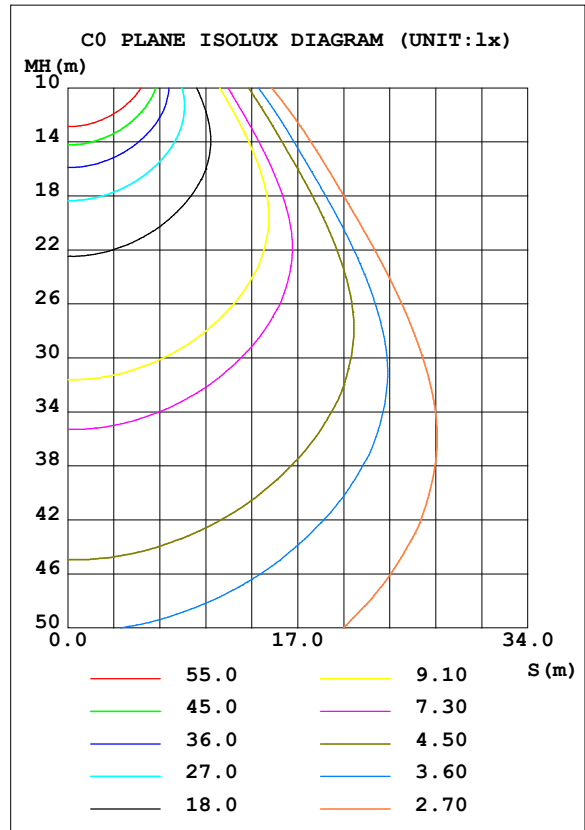
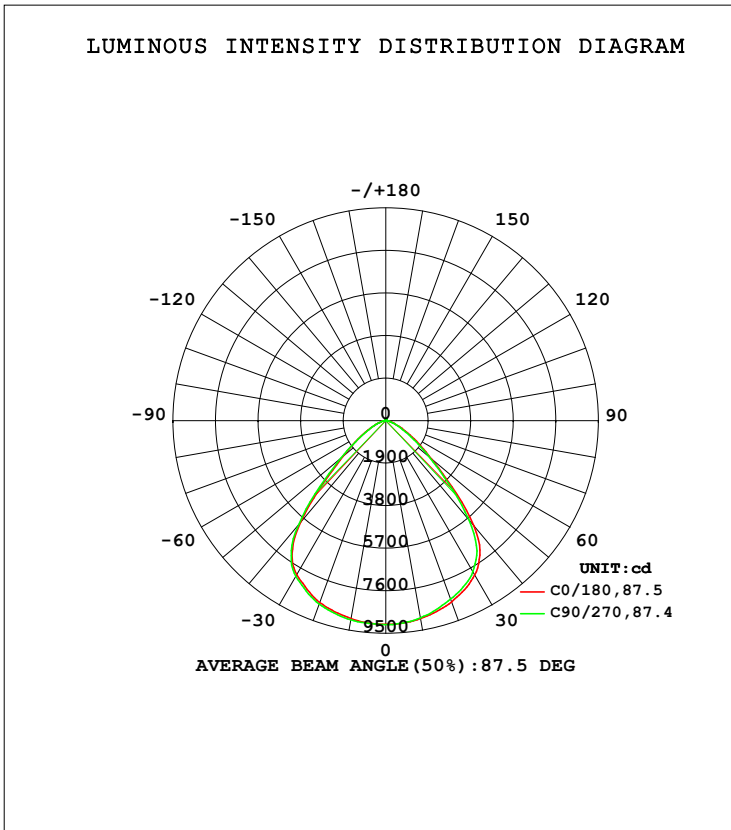


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.7V I:0.8113A P:97.30W PF:0.9939 Freq:59.98Hz Lamp Flux:17580.1x1 lm
NAME: ASD-UHB5-PRO-100BK
SPEC.:4000K
MFR.: ASD Lighting Corp

DATA OF LAMP		PHOTOMETRIC DATA Eff: 180.67 lm/W			
MODEL	ASD-UHB5-PRO-100BK	I <sub>max</sub> (cd)	9108	S/MH (C0/180)	1.25
NOMINAL POWER (W)	100	LOR (%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	17580	<input type="checkbox"/> UP, DN (C0-180)	0.5, 49.1
NOMINAL FLUX (lm)	17580	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 49.9
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: 2023-11-14

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	8969	8939	8939	8953	8974	9016	9032	9008	0- 10	863.2	863.2	4.91,4.91
20	8605	8504	8473	8530	8646	8723	8712	8680	10- 20	2493	3356	19.1,19.1
30	7947	7804	7785	7875	7945	8045	8029	7981	20- 30	3833	7188	40.9,40.9
40	6119	5805	5757	5857	5915	6151	6064	6043	30- 40	4478	11666	66.4,66.4
50	2681	2482	2565	2556	2507	2652	2632	2606	40- 50	3173	14839	84.4,84.4
60	1167	1042	1032	1124	1077	1075	1031	1122	50- 60	1546	16384	93.2,93.2
70	438.1	393.8	395.7	427.1	402.9	402.6	400.3	424.3	60- 70	691.6	17076	97.1,97.1
80	139.3	129.4	135.5	138.4	125.0	131.0	129.4	131.6	70- 80	265.9	17342	98.6,98.6
90	8.011	8.176	8.545	9.820	9.410	8.522	7.139	6.974	80- 90	63.19	17405	99,99
100	8.280	8.958	8.652	8.851	8.203	7.913	7.817	7.945	90-100	8.122	17413	99.1,99.1
110	14.92	15.54	15.45	15.35	14.64	14.02	14.16	14.19	100-110	11.92	17425	99.1,99.1
120	23.47	24.20	24.13	23.95	23.56	22.70	22.91	22.90	110-120	18.80	17444	99.2,99.2
130	32.93	33.73	33.74	33.48	33.92	32.80	33.16	32.98	120-130	25.34	17469	99.4,99.4
140	42.10	42.77	42.95	42.65	44.33	42.89	43.59	43.21	130-140	29.53	17499	99.5,99.5
150	50.27	51.17	51.22	51.13	53.47	52.07	52.68	52.61	140-150	29.72	17529	99.7,99.7
160	59.89	60.35	60.83	60.33	63.24	61.78	62.45	62.21	150-160	26.03	17555	99.9,99.9
170	69.53	69.30	69.98	69.31	71.64	70.33	71.09	70.61	160-170	18.57	17573	100,100
180	75.07	74.09	75.00	74.43	75.03	74.10	74.99	74.43	170-180	6.897	17580	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 13523 lm

%lum = 76.9%

%lamp = 76.9%

Conical surface Flux(120deg): 16384 lm

%lum = 93.2%

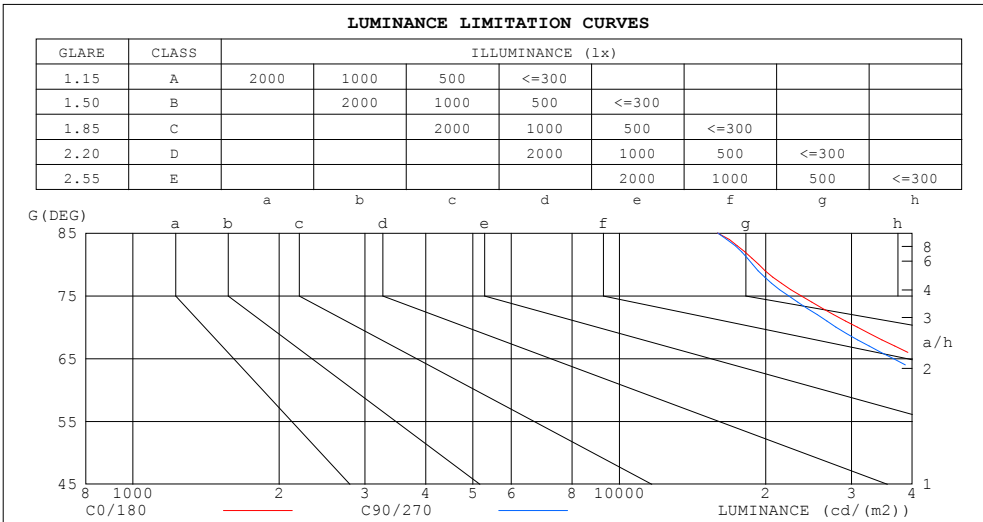
%lamp = 93.2%

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-14

□ 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:120.7V I:0.8113A P:97.30W PF:0.9939 Freq:59.98Hz Lamp Flux:17580.1x1 lm
NAME: ASD-UHB5-PRO-100BK
SPEC.:4000K
MFR.: ASD Lighting Corp



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	15902	15924
80	19332	18807
75	23610	22275
70	30864	27880
65	41993	36548
60	56244	49733
55	75618	69802
50	100515	96152
45	143147	135111

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-14

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:120.7V I:0.8113A P:97.30W PF:0.9939 Freq:59.98Hz Lamp Flux:17580.1x1 lm
NAME: ASD-UHB5-PRO-100BK
SPEC.:4000K
MFR.: ASD Lighting Corp

<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	.231	.132	.042	.224	.128	.041	.211	.121	.039	.198	.114	.037	.187	.108	.035	
2.0	.224	.123	.038	.218	.120	.037	.207	.115	.036	.196	.110	.034	.186	.105	.033	
3.0	.214	.114	.034	.208	.112	.034	.198	.107	.033	.189	.103	.032	.180	.100	.031	
4.0	.202	.105	.031	.198	.103	.031	.189	.100	.030	.180	.097	.029	.173	.094	.029	
5.0	.191	.098	.028	.187	.096	.028	.179	.093	.027	.172	.091	.027	.165	.088	.026	
6.0	.181	.091	.026	.177	.090	.026	.170	.087	.025	.164	.085	.025	.157	.083	.025	
7.0	.171	.085	.024	.168	.084	.024	.162	.082	.024	.156	.080	.023	.150	.078	.023	
8.0	.162	.079	.022	.159	.078	.022	.154	.077	.022	.148	.075	.022	.143	.074	.021	
9.0	.154	.075	.021	.151	.074	.021	.146	.072	.020	.141	.071	.020	.137	.069	.020	
10.0	.146	.070	.019	.144	.070	.019	.139	.068	.019	.135	.067	.019	.131	.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	.164	.148	.156	.141	.128	.107	.097	.088	.061	.056	.051	.020	.018	.017	
2.0	.171	.140	.114	.146	.120	.098	.100	.083	.069	.058	.048	.040	.019	.016	.013	
3.0	.161	.122	.090	.138	.105	.078	.095	.073	.055	.055	.043	.032	.018	.014	.011	
4.0	.153	.108	.073	.131	.093	.063	.090	.065	.045	.052	.038	.026	.017	.012	.009	
5.0	.146	.097	.061	.125	.084	.053	.086	.059	.037	.050	.034	.022	.016	.011	.007	
6.0	.139	.088	.052	.119	.076	.045	.082	.053	.032	.048	.031	.019	.015	.010	.006	
7.0	.133	.081	.045	.114	.070	.039	.079	.049	.028	.046	.029	.016	.015	.010	.005	
8.0	.127	.075	.040	.109	.065	.034	.076	.046	.024	.044	.027	.015	.014	.009	.005	
9.0	.122	.070	.035	.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:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-14

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:120.7V I:0.8113A P:97.30W PF:0.9939 Freq:59.98Hz Lamp Flux:17580.1x1 lm
NAME: ASD-UHB5-PRO-100BK
SPEC.:4000K
MFR.: ASD Lighting Corp

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	27.1	28.4	27.4	28.6	28.8	26.9	28.1	27.1	28.3	28.5
3H	27.3	28.5	27.6	28.7	28.9	27.0	28.2	27.3	28.4	28.6
4H	27.3	28.4	27.6	28.7	28.9	27.0	28.1	27.4	28.4	28.6
6H	27.3	28.3	27.7	28.6	28.9	27.0	28.0	27.4	28.3	28.6
8H	27.3	28.3	27.6	28.6	28.9	27.0	28.0	27.4	28.3	28.6
12H	27.3	28.2	27.6	28.5	28.8	27.0	27.9	27.3	28.2	28.5
4H 2H	27.1	28.2	27.4	28.4	28.7	26.9	28.0	27.2	28.2	28.5
3H	27.4	28.3	27.7	28.6	28.9	27.1	28.0	27.5	28.3	28.6
4H	27.5	28.3	27.8	28.6	29.0	27.2	28.0	27.6	28.3	28.7
6H	27.5	28.2	27.9	28.6	29.0	27.2	28.0	27.6	28.3	28.7
8H	27.5	28.2	27.9	28.6	28.9	27.2	27.9	27.6	28.3	28.7
12H	27.5	28.1	27.9	28.5	28.9	27.2	27.8	27.7	28.2	28.7
8H 4H	27.4	28.1	27.8	28.5	28.8	27.1	27.8	27.6	28.2	28.6
6H	27.5	28.0	27.9	28.5	28.9	27.2	27.8	27.7	28.2	28.6
8H	27.5	28.0	28.0	28.4	28.9	27.3	27.7	27.7	28.2	28.6
12H	27.5	27.9	28.0	28.4	28.9	27.3	27.7	27.8	28.2	28.6
12H 4H	27.4	28.0	27.8	28.4	28.8	27.1	27.7	27.5	28.1	28.5
6H	27.5	27.9	27.9	28.4	28.8	27.2	27.7	27.7	28.1	28.6
8H	27.5	27.9	28.0	28.4	28.9	27.2	27.7	27.7	28.1	28.6
Variations with the observer position at spacings:										
S = 1.0H	+ 1.2 / - 1.9					+ 1.3 / - 2.0				
1.5H	+ 1.5 / - 1.5					+ 1.5 / - 1.5				
2.0H	+ 2.8 / - 2.2					+ 2.7 / - 2.3				

CIE Pub.117, 17580 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 10.0)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-14

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:120.7V I:0.8113A P:97.30W PF:0.9939 Freq:59.98Hz Lamp Flux:17580.1x1 lm
NAME: ASD-UHB5-PRO-100BK
SPEC.:4000K
MFR.: ASD Lighting Corp

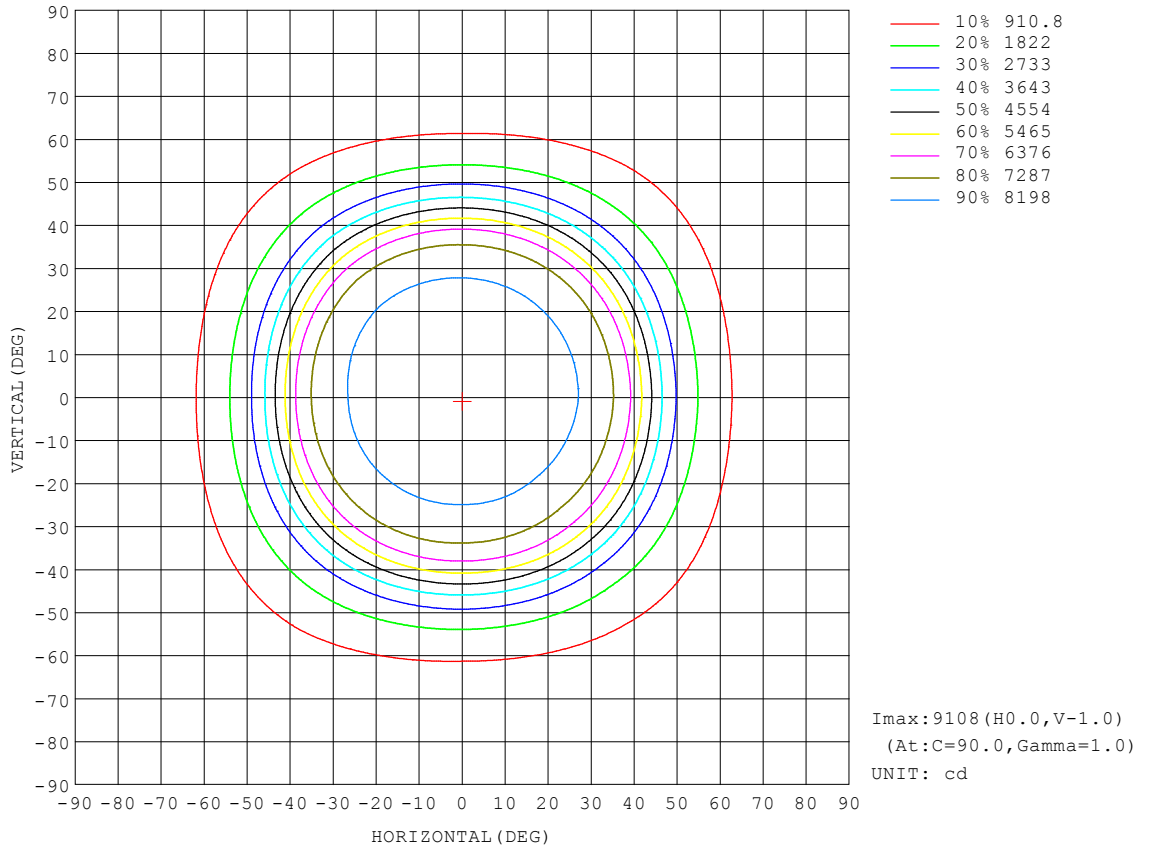
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	70	61	55	70	61	55	68	60	55	50
0.80	80	71	65	79	71	65	77	70	65	59
1.00	87	79	74	86	78	73	84	79	73	67
1.25	93	86	80	92	85	80	90	84	79	73
1.50	97	90	85	96	89	85	93	88	83	77
2.00	102	96	92	101	95	91	97	93	89	83
2.50	105	99	95	103	98	94	100	95	92	85
3.00	107	102	99	105	101	97	102	98	95	88
4.00	110	106	103	108	104	101	104	101	98	90
5.00	112	108	105	109	106	104	105	103	101	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:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-14

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:120.7V I:0.8113A P:97.30W PF:0.9939 Freq:59.98Hz Lamp Flux:17580.1x1 lm
NAME: ASD-UHB5-PRO-100BK
SPEC.:4000K
MFR.: ASD Lighting Corp

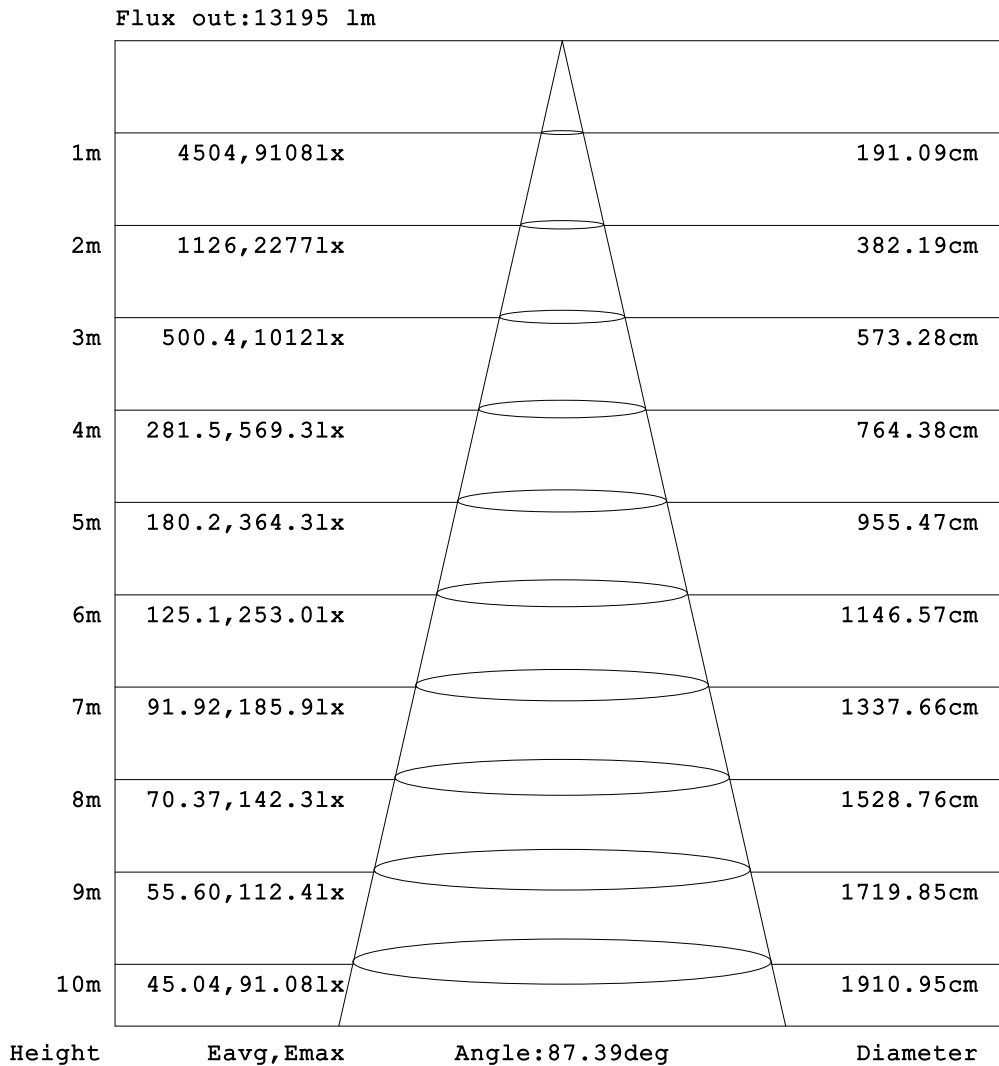


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 27DEG  
 Operators: lianghaizhu  
 Test Date: 2023-11-14

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:120.7V I:0.8113A P:97.30W PF:0.9939 Freq:59.98Hz Lamp Flux:17580.1x1 lm
NAME: ASD-UHB5-PRO-100BK
SPEC.:4000K
MFR.: ASD Lighting Corp



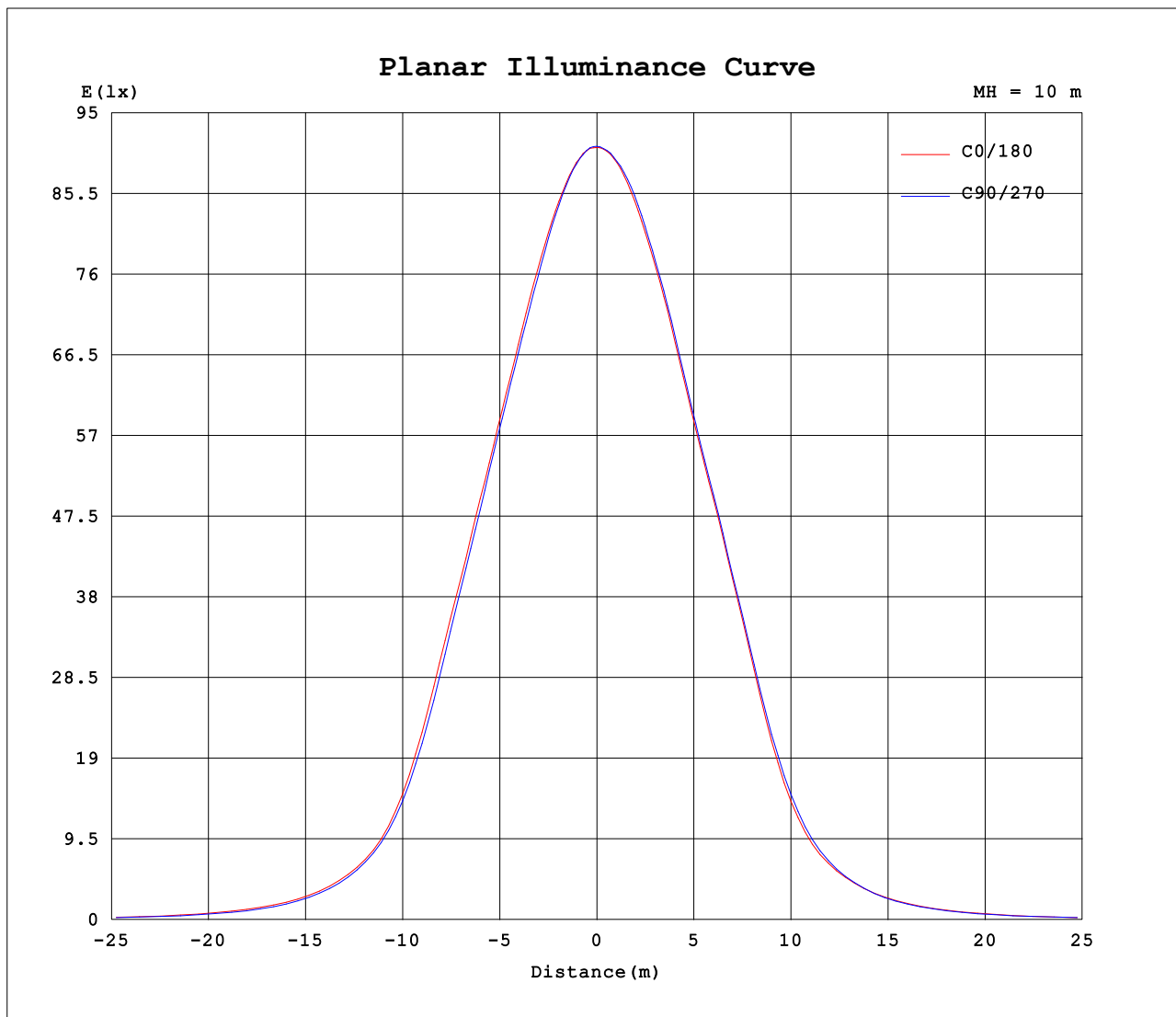
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-14

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: 2023-11-14

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:120.7V I:0.8113A P:97.30W PF:0.9939 Freq:59.98Hz Lamp Flux:17580.1x1 lm
NAME: ASD-UHB5-PRO-100BK
SPEC.:4000K
MFR.: ASD Lighting Corp

Table--1

UNIT: cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	9092	9106	9108	9108	9092	9106	9108	9108										
5	9072	9048	9066	9068	9066	9078	9081	9094										
10	8969	8939	8939	8953	8974	9016	9032	9008										
15	8820	8740	8733	8786	8832	8887	8898	8876										
20	8605	8504	8473	8530	8646	8723	8712	8680										
25	8337	8213	8192	8230	8321	8464	8408	8369										
30	7947	7804	7785	7875	7945	8045	8029	7981										
35	7325	7108	7100	7195	7301	7472	7372	7348										
40	6119	5805	5757	5857	5915	6151	6064	6043										
45	4201	3958	3965	4014	3945	4238	4182	4103										
50	2681	2482	2565	2556	2507	2652	2632	2606										
55	1800	1604	1662	1703	1666	1693	1651	1706										
60	1167	1042	1032	1124	1077	1075	1031	1122										
65	736	656	641	708	672	663	642	702										
70	438	394	396	427	403	403	400	424										
75	254	233	239	251	235	240	240	246										
80	139	129	136	138	125	131	129	132										
85	57.5	52.5	57.6	57.1	45.7	51.0	47.3	49.1										
90	8.01	8.18	8.55	9.82	9.41	8.52	7.14	6.97										
95	6.36	7.29	6.98	8.00	7.85	6.71	6.34	6.49										
100	8.28	8.96	8.65	8.85	8.20	7.91	7.82	7.94										
105	11.3	11.8	11.7	11.7	11.0	10.5	10.7	10.6										
110	14.9	15.5	15.4	15.4	14.6	14.0	14.2	14.2										
115	19.0	19.7	19.6	19.5	18.9	18.1	18.3	18.3										
120	23.5	24.2	24.1	24.0	23.6	22.7	22.9	22.9										
125	28.2	28.9	28.9	28.7	28.6	27.6	27.9	27.8										
130	32.9	33.7	33.7	33.5	33.9	32.8	33.2	33.0										
135	37.6	38.3	38.5	38.1	39.3	38.0	38.5	38.2										
140	42.1	42.8	43.0	42.6	44.3	42.9	43.6	43.2										
145	46.2	47.1	47.1	47.0	49.0	47.5	48.3	48.0										
150	50.3	51.2	51.2	51.1	53.5	52.1	52.7	52.6										
155	54.9	55.5	55.8	55.6	58.3	56.9	57.5	57.4										
160	59.9	60.3	60.8	60.3	63.2	61.8	62.4	62.2										
165	64.9	65.1	65.7	65.0	67.9	66.4	67.2	66.7										
170	69.5	69.3	70.0	69.3	71.6	70.3	71.1	70.6										
175	73.2	72.6	73.3	72.8	74.2	73.0	73.9	73.4										
180	75.1	74.1	75.0	74.4	75.0	74.1	75.0	74.4										

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-14

□ 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: