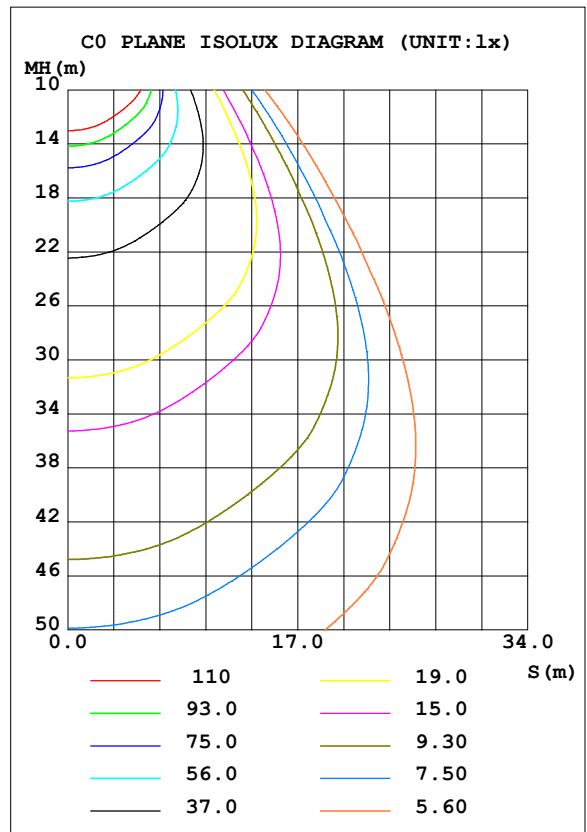
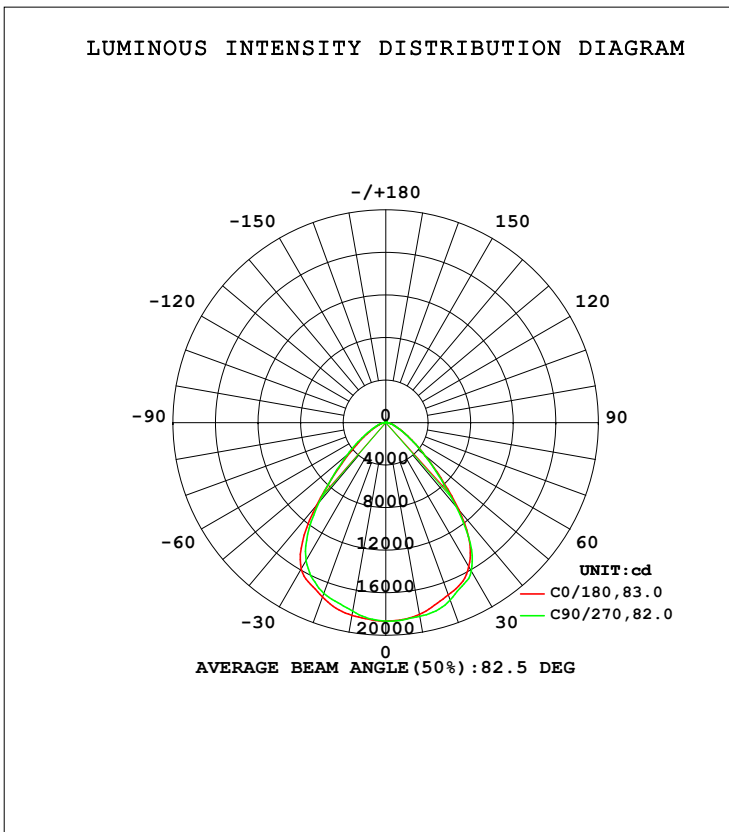


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.5V I:1.577A P:189.1W PF:0.9953 Freq:59.98Hz Lamp Flux:33575.5x1 lm
NAME: ASD-UHB5-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

DATA OF LAMP		PHOTOMETRIC DATA Eff: 177.57 lm/W			
MODEL	ASD-UHB5-PRO-200BK	I <sub>max</sub> (cd)	18664	S/MH (C0/180)	1.18
NOMINAL POWER (W)	200	LOR (%)	100.0	S/MH (C90/270)	1.17
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	33575	<input type="checkbox"/> UP, DN (C0-180)	0.5, 50.1
NOMINAL FLUX (lm)	33575	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 48.9
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	1.25



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 27DEG  
 Operators: lianghaizhu  
 Test Date: 2023-11-15

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	1831	1844	1848	1841	1839	1823	1800	1806	0- 10	1763	1763	5.25,5.25
20	1723	1734	1775	1790	1744	1722	1707	1711	10- 20	5057	6819	20.3,20.3
30	1561	1574	1610	1629	1593	1526	1499	1520	20- 30	7674	14493	43.2,43.2
40	1067	1019	1030	1071	1013	1010	975.7	1035	30- 40	8306	22799	67.9,67.9
50	486.8	460.5	482.2	465.1	444.6	474.3	477.5	482.9	40- 50	5514	28312	84.3,84.3
60	210.4	190.4	208.1	190.5	189.4	190.7	208.7	204.6	50- 60	2819	31131	92.7,92.7
70	91.20	84.47	90.50	82.99	81.58	85.54	90.01	89.01	60- 70	1332	32463	96.7,96.7
80	35.58	31.75	32.27	30.00	29.78	34.79	35.43	34.83	70- 80	609.3	33073	98.5,98.5
90	1.828	1.940	1.571	1.985	1.829	2.000	1.062	1.748	80- 90	161.0	33234	99,99
100	1.576	1.634	1.630	1.645	1.561	1.494	1.521	1.500	90-100	15.12	33249	99,99
110	2.804	2.870	2.837	2.886	2.766	2.661	2.718	2.700	100-110	22.50	33271	99.1,99.1
120	4.484	4.554	4.479	4.557	4.466	4.334	4.431	4.408	110-120	35.52	33307	99.2,99.2
130	6.381	6.492	6.360	6.478	6.506	6.365	6.502	6.463	120-130	48.60	33356	99.3,99.3
140	8.319	8.467	8.242	8.431	8.687	8.526	8.747	8.626	130-140	57.64	33413	99.5,99.5
150	10.20	10.34	10.08	10.31	10.70	10.61	10.82	10.74	140-150	59.49	33473	99.7,99.7
160	11.69	11.67	11.72	11.64	12.70	12.56	12.80	12.70	150-160	52.13	33525	99.8,99.8
170	13.49	13.37	13.49	13.40	14.40	14.24	14.48	14.34	160-170	36.85	33562	100,100
180	15.24	15.09	15.30	15.17	15.23	15.09	15.29	15.18	170-180	13.79	33575	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 25970 lm

%lum = 77.3%

%lamp = 77.3%

Conical surface Flux(120deg): 31131 lm

%lum = 92.7%

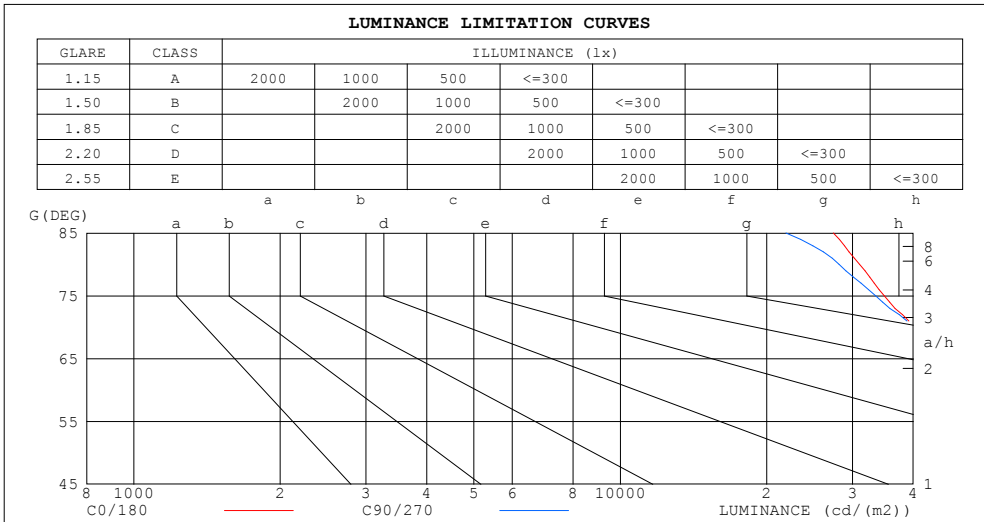
%lamp = 92.7%

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-15

□ 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:120.5V I:1.577A P:189.1W PF:0.9953 Freq:59.98Hz Lamp Flux:33575.5x1 lm
NAME: ASD-UHB5-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	27405	21887
80	31045	28159
75	34882	33478
70	40401	40092
65	49683	49199
60	63745	63065
55	85074	84204
50	114749	113652
45	157137	151219

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 27DEG  
 Operators: lianghaizhu  
 Test Date: 2023-11-15

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:120.5V I:1.577A P:189.1W PF:0.9953 Freq:59.98Hz Lamp Flux:33575.5x1 lm
NAME: ASD-UHB5-PRO-200BK
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	.232	.132	.042	.225	.128	.041	.211	.121	.039	.199	.115	.037	.187	.109	.035	
2.0	.224	.123	.038	.217	.120	.037	.206	.114	.036	.195	.109	.034	.185	.105	.033	
3.0	.212	.113	.034	.207	.111	.033	.197	.107	.032	.187	.103	.031	.179	.099	.031	
4.0	.201	.104	.031	.196	.103	.030	.187	.099	.030	.179	.096	.029	.171	.093	.028	
5.0	.190	.097	.028	.185	.095	.028	.177	.092	.027	.170	.090	.027	.163	.087	.026	
6.0	.179	.090	.026	.175	.089	.025	.168	.086	.025	.162	.084	.025	.156	.082	.024	
7.0	.169	.084	.024	.166	.083	.024	.160	.081	.023	.154	.079	.023	.148	.077	.023	
8.0	.161	.078	.022	.158	.078	.022	.152	.076	.022	.146	.074	.021	.141	.073	.021	
9.0	.152	.074	.021	.150	.073	.020	.144	.071	.020	.140	.070	.020	.135	.069	.020	
10.0	.145	.069	.019	.142	.069	.019	.138	.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	.198	.198	.198	.169	.169	.169	.116	.116	.116	.066	.066	.066	.021	.021	.021	
1.0	.183	.165	.148	.156	.141	.128	.107	.097	.088	.062	.056	.051	.020	.018	.017	
2.0	.171	.140	.114	.146	.121	.099	.100	.083	.069	.058	.049	.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	.064	.090	.065	.045	.052	.038	.027	.017	.012	.009	
5.0	.145	.097	.061	.125	.084	.053	.086	.059	.038	.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	.132	.081	.045	.114	.070	.039	.079	.049	.028	.046	.029	.017	.015	.010	.005	
8.0	.127	.075	.040	.109	.065	.035	.075	.046	.025	.044	.027	.015	.014	.009	.005	
9.0	.121	.070	.036	.104	.061	.031	.072	.043	.022	.042	.025	.013	.014	.008	.004	
10.0	.116	.066	.033	.100	.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:2023-11-15

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:120.5V I:1.577A P:189.1W PF:0.9953 Freq:59.98Hz Lamp Flux:33575.5x1 lm
NAME: ASD-UHB5-PRO-200BK
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	27.4	28.6	27.7	28.8	29.0	27.3	28.6	27.6	28.8	29.0
3H	27.7	28.8	27.9	29.0	29.3	27.6	28.7	27.9	29.0	29.2
4H	27.7	28.8	28.1	29.1	29.3	27.7	28.8	28.0	29.0	29.3
6H	27.8	28.8	28.1	29.1	29.4	27.7	28.7	28.1	29.0	29.3
8H	27.8	28.8	28.2	29.1	29.4	27.7	28.7	28.1	29.0	29.3
12H	27.8	28.7	28.2	29.0	29.3	27.7	28.6	28.1	28.9	29.2
4H 2H	27.4	28.5	27.7	28.7	29.0	27.4	28.4	27.7	28.7	28.9
3H	27.8	28.7	28.1	29.0	29.3	27.7	28.7	28.1	29.0	29.3
4H	27.9	28.8	28.3	29.1	29.4	27.9	28.7	28.3	29.1	29.4
6H	28.1	28.8	28.5	29.2	29.6	28.0	28.7	28.4	29.1	29.5
8H	28.1	28.8	28.5	29.2	29.6	28.0	28.7	28.5	29.1	29.5
12H	28.2	28.8	28.6	29.2	29.6	28.0	28.7	28.5	29.1	29.5
8H 4H	27.9	28.6	28.4	29.0	29.4	27.9	28.6	28.3	28.9	29.3
6H	28.1	28.7	28.6	29.1	29.6	28.1	28.6	28.5	29.0	29.5
8H	28.2	28.7	28.7	29.2	29.6	28.1	28.6	28.6	29.1	29.5
12H	28.3	28.7	28.8	29.2	29.7	28.2	28.6	28.7	29.1	29.5
12H 4H	27.9	28.5	28.3	28.9	29.3	27.9	28.5	28.3	28.9	29.3
6H	28.1	28.6	28.6	29.1	29.5	28.1	28.5	28.5	29.0	29.5
8H	28.2	28.7	28.7	29.1	29.6	28.1	28.6	28.6	29.0	29.5
Variations with the observer position at spacings:										
S = 1.0H	+ 1.1 / - 1.5					+ 1.1 / - 1.6				
1.5H	+ 1.4 / - 1.3					+ 1.4 / - 1.3				
2.0H	+ 2.4 / - 1.8					+ 2.3 / - 1.8				

CIE Pub.117, 33575 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 12.2)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-15

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:120.5V I:1.577A P:189.1W PF:0.9953 Freq:59.98Hz Lamp Flux:33575.5x1 lm
NAME: ASD-UHB5-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

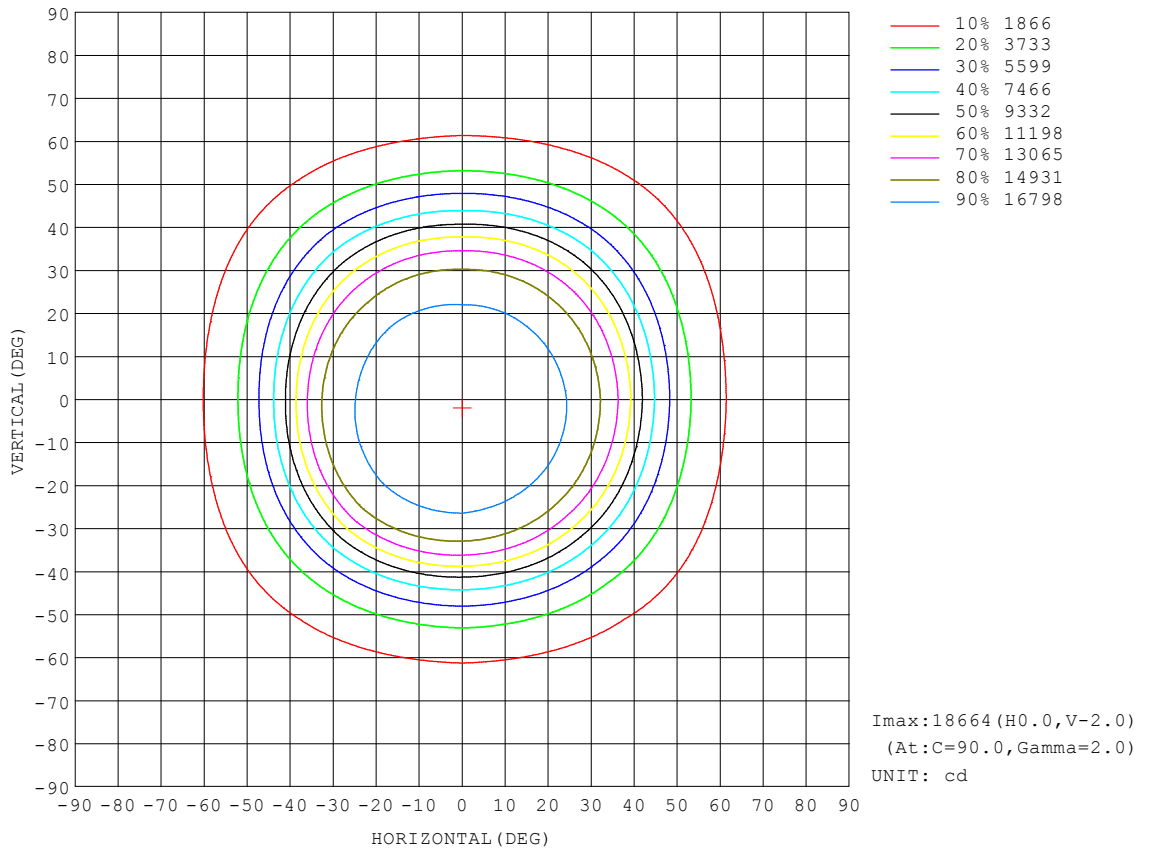
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	71	62	57	71	62	57	70	61	56	51
0.80	81	72	66	80	72	66	78	71	66	60
1.00	88	80	74	87	79	74	85	80	73	68
1.25	94	86	81	92	85	81	90	84	80	74
1.50	98	91	86	96	90	85	93	88	84	78
2.00	102	96	92	101	95	91	98	93	89	83
2.50	105	100	95	103	98	94	100	96	92	85
3.00	107	103	99	105	101	97	102	98	95	88
4.00	110	106	103	108	104	101	104	101	99	90
5.00	112	108	106	110	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: 2023-11-15

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:120.5V I:1.577A P:189.1W PF:0.9953 Freq:59.98Hz Lamp Flux:33575.5x1 lm
NAME: ASD-UHB5-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

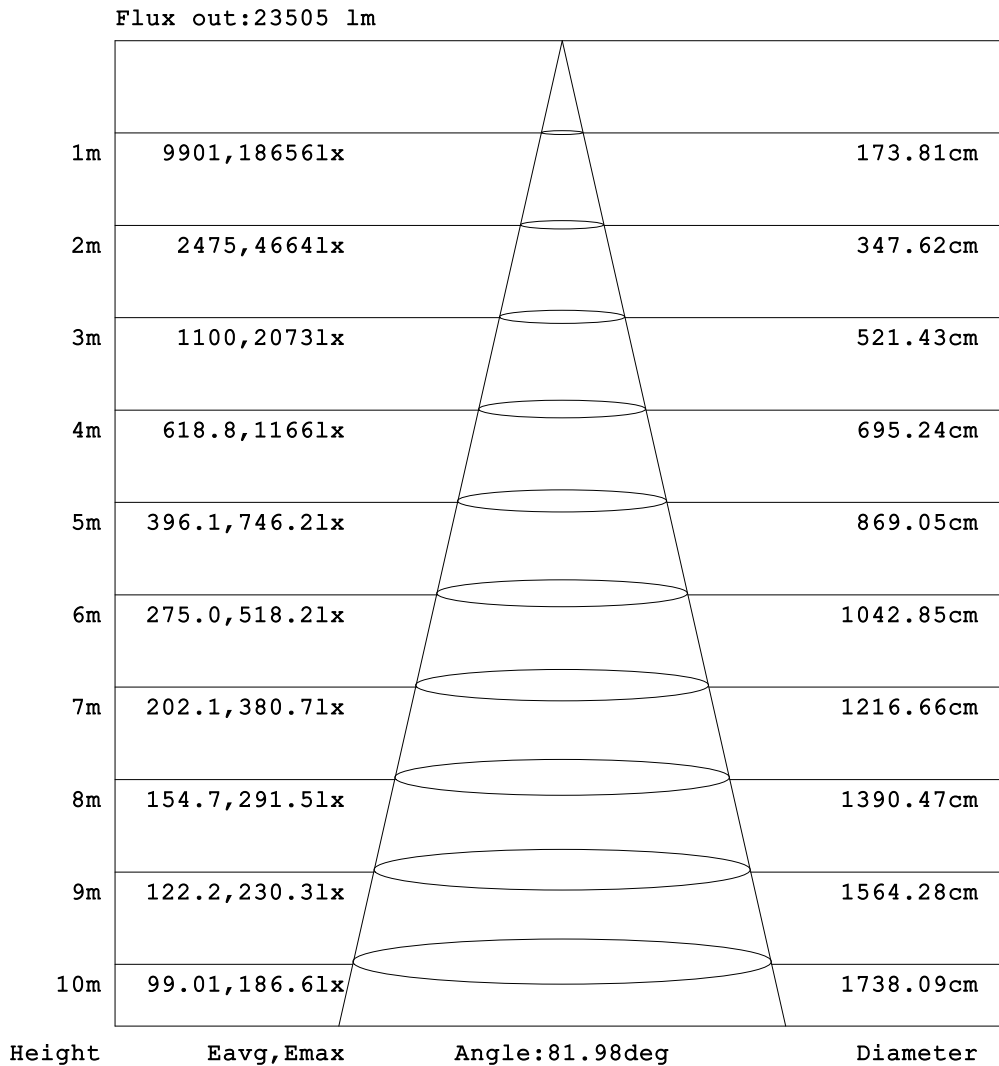


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-15

□ 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:120.5V I:1.577A P:189.1W PF:0.9953 Freq:59.98Hz Lamp Flux:33575.5x1 lm
NAME: ASD-UHB5-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp



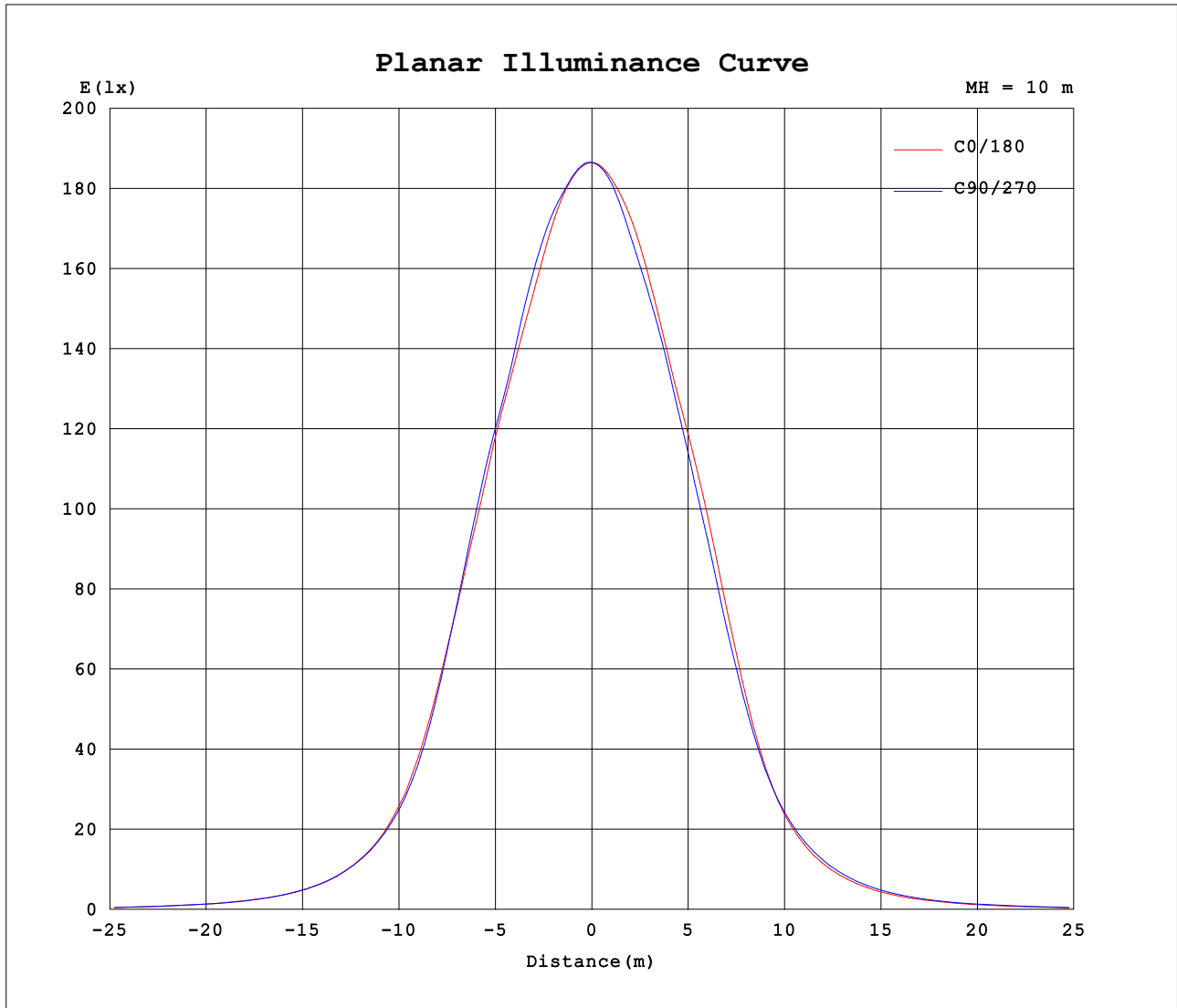
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-15

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: 2023-11-15

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:120.5V I:1.577A P:189.1W PF:0.9953 Freq:59.98Hz Lamp Flux:33575.5x1 lm
NAME: ASD-UHB5-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315											
0	1865	1866	1865	1865	1865	1866	1865	1865											
5	1857	1860	1861	1859	1856	1855	1848	1849											
10	1831	1844	1848	1841	1839	1823	1800	1806											
15	1777	1805	1831	1833	1806	1769	1753	1758											
20	1723	1734	1775	1790	1744	1722	1707	1711											
25	1672	1682	1696	1703	1677	1652	1623	1639											
30	1561	1574	1610	1629	1593	1526	1499	1520											
35	1374	1355	1385	1431	1367	1313	1280	1325											
40	1067	1019	1030	1071	1013	1010	976	1035											
45	733	693	706	711	673	706	687	719											
50	487	461	482	465	445	474	477	483											
55	322	295	319	296	291	301	320	316											
60	210	190	208	190	189	191	209	205											
65	139	126	137	125	124	127	136	135											
70	91.2	84.5	90.5	83.0	81.6	85.5	90.0	89.0											
75	59.6	54.9	57.2	53.0	53.0	57.5	59.5	58.0											
80	35.6	31.7	32.3	30.0	29.8	34.8	35.4	34.8											
85	15.8	12.8	12.6	11.7	11.2	15.3	14.3	14.9											
90	1.83	1.94	1.57	1.99	1.83	2.00	1.06	1.75											
95	1.18	1.36	1.21	1.37	1.22	1.30	1.13	1.29											
100	1.58	1.63	1.63	1.65	1.56	1.49	1.52	1.50											
105	2.12	2.19	2.17	2.20	2.10	2.01	2.05	2.03											
110	2.80	2.87	2.84	2.89	2.77	2.66	2.72	2.70											
115	3.60	3.67	3.61	3.68	3.56	3.43	3.52	3.49											
120	4.48	4.55	4.48	4.56	4.47	4.33	4.43	4.41											
125	5.42	5.51	5.41	5.50	5.45	5.32	5.43	5.40											
130	6.38	6.49	6.36	6.48	6.51	6.37	6.50	6.46											
135	7.35	7.48	7.30	7.45	7.60	7.44	7.62	7.54											
140	8.32	8.47	8.24	8.43	8.69	8.53	8.75	8.63											
145	9.30	9.46	9.16	9.43	9.71	9.60	9.81	9.70											
150	10.2	10.3	10.1	10.3	10.7	10.6	10.8	10.7											
155	10.9	11.0	10.8	10.9	11.7	11.6	11.8	11.7											
160	11.7	11.7	11.7	11.6	12.7	12.6	12.8	12.7											
165	12.6	12.6	12.7	12.6	13.7	13.5	13.8	13.6											
170	13.5	13.4	13.5	13.4	14.4	14.2	14.5	14.3											
175	14.7	14.5	14.7	14.6	14.9	14.8	15.0	14.9											
180	15.2	15.1	15.3	15.2	15.2	15.1	15.3	15.2											

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-11-15

□ 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: