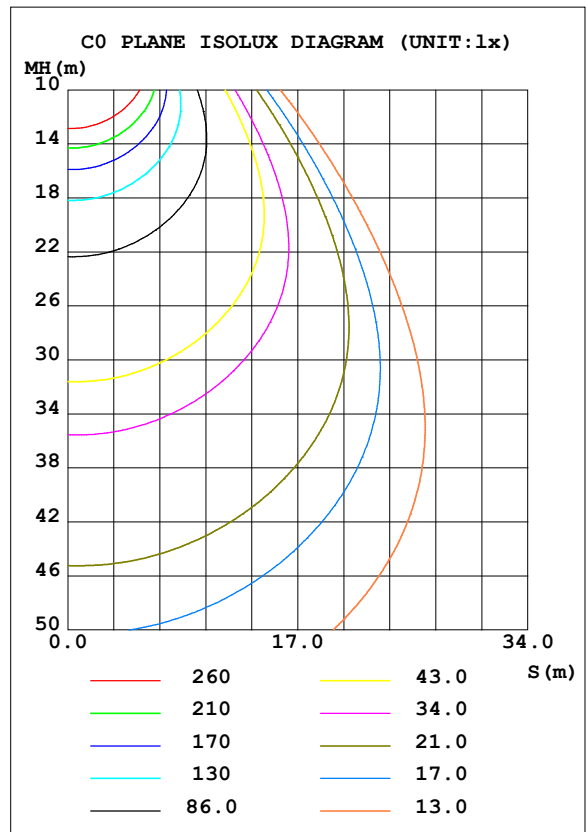
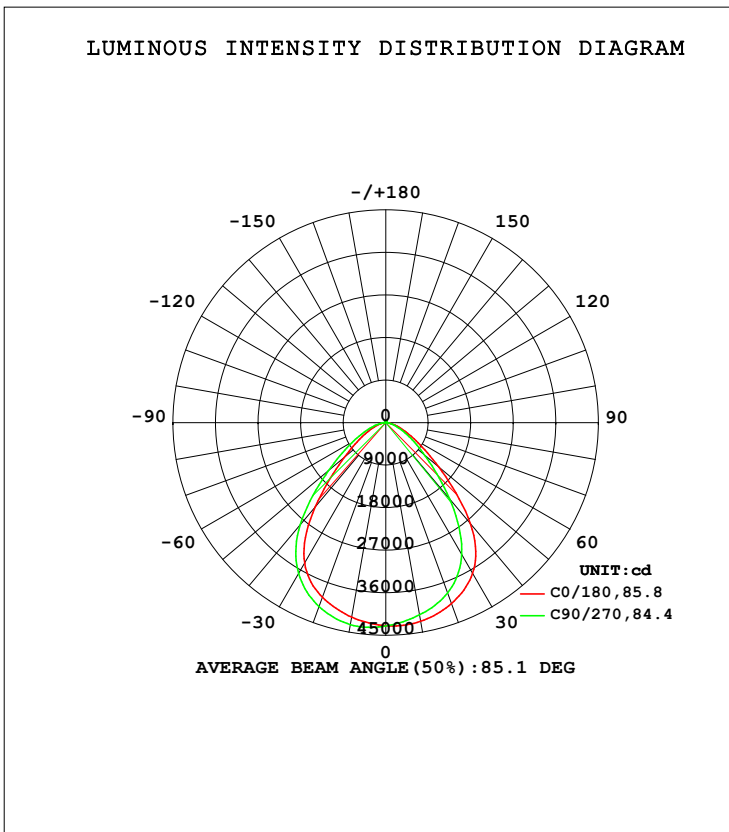


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:278.5V I:1.666A P:462.1W PF:0.9958 Freq:59.98Hz Lamp Flux:82904.6x1 lm
NAME: ASD-UHB5-HV-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

DATA OF LAMP		PHOTOMETRIC DATA Eff: 179.43 lm/W			
MODEL	ASD-UHB5-HV-PRO-500BK	I _{max} (cd)	43699	S/MH (C0/180)	1.18
NOMINAL POWER (W)	500	LOR (%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	82905	<input type="checkbox"/> UP, DN (C0-180)	0.5, 47.1
NOMINAL FLUX (lm)	82905	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 51.9
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	1.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	277	<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: 2023-11-26

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	4267	4167	4128	4150	4177	4255	4336	4360	0- 10	4073	4073	4.91,4.91
20	4072	3909	3832	3875	3927	4020	4138	4180	10- 20	11661	15734	19,19
30	3676	3389	3214	3289	3434	3582	3691	3747	20- 30	17422	33156	40,40
40	2785	2319	2096	2136	2318	2618	2812	2867	30- 40	19010	52167	62.9,62.9
50	1472	1258	1086	1120	1153	1442	1591	1575	40- 50	14463	66630	80.4,80.4
60	698.0	616.2	536.9	560.0	550.0	720.8	790.9	788.5	50- 60	8556	75186	90.7,90.7
70	312.6	270.4	243.5	254.7	245.0	322.7	369.5	367.3	60- 70	4541	79727	96.2,96.2
80	100.7	78.73	69.82	73.32	70.86	103.8	125.6	122.2	70- 80	1961	81688	98.5,98.5
90	5.194	5.635	5.677	5.288	4.671	4.647	4.810	4.659	80- 90	391.4	82079	99,99
100	5.296	5.829	6.020	5.877	5.120	4.914	4.765	4.665	90-100	55.54	82135	99.1,99.1
110	6.697	7.554	8.196	8.166	7.309	6.403	5.900	5.908	100-110	62.89	82198	99.1,99.1
120	10.46	11.49	12.25	12.28	11.28	10.04	9.393	9.406	110-120	87.70	82285	99.3,99.3
130	14.72	15.78	16.70	16.67	15.76	14.35	13.65	13.63	120-130	115.9	82401	99.4,99.4
140	18.97	19.98	20.91	20.94	20.22	18.92	18.23	18.19	130-140	134.0	82535	99.6,99.6
150	22.93	23.93	24.82	24.84	24.40	23.21	22.66	22.65	140-150	135.3	82671	99.7,99.7
160	27.24	27.94	28.80	28.73	28.69	27.57	27.15	27.07	150-160	118.8	82789	99.9,99.9
170	31.40	31.65	32.44	32.26	32.37	31.50	31.35	31.20	160-170	84.27	82874	100,100
180	33.68	33.36	33.65	33.54	33.67	33.36	33.62	33.56	170-180	31.11	82905	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 60212 lm

%lum = 72.6%

%lamp = 72.6%

Conical surface Flux(120deg): 75186 lm

%lum = 90.7%

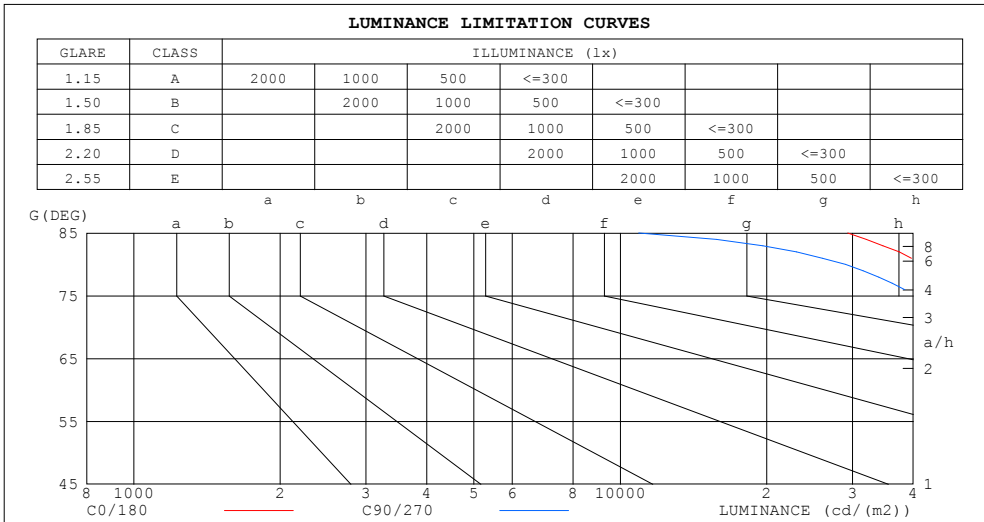
%lamp = 90.7%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-26

□ 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:278.5V I:1.666A P:462.1W PF:0.9958 Freq:59.98Hz Lamp Flux:82904.6x1 lm
NAME: ASD-UHB5-HV-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	29330	10902
80	41907	29051
75	53397	40534
70	66041	51447
65	81002	63063
60	100862	77587
55	127265	97170
50	165466	122081
45	214652	155923

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-26

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:278.5V I:1.666A P:462.1W PF:0.9958 Freq:59.98Hz Lamp Flux:82904.6x1 lm
NAME: ASD-UHB5-HV-PRO-500BK
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	.242	.138	.044	.235	.134	.043	.221	.127	.041	.209	.121	.039	.198	.115	.037	
2.0	.234	.128	.039	.228	.125	.039	.216	.120	.037	.205	.115	.036	.195	.110	.035	
3.0	.222	.118	.035	.216	.116	.035	.206	.112	.034	.197	.108	.033	.188	.104	.032	
4.0	.209	.109	.032	.204	.107	.032	.195	.103	.031	.187	.100	.030	.179	.097	.030	
5.0	.197	.100	.029	.192	.099	.029	.184	.096	.028	.177	.093	.028	.170	.091	.027	
6.0	.185	.093	.027	.182	.092	.026	.174	.089	.026	.168	.087	.026	.161	.085	.025	
7.0	.175	.086	.024	.171	.085	.024	.165	.083	.024	.159	.082	.024	.153	.080	.023	
8.0	.165	.081	.023	.162	.080	.023	.156	.078	.022	.151	.076	.022	.146	.075	.022	
9.0	.156	.076	.021	.154	.075	.021	.148	.073	.021	.144	.072	.021	.139	.071	.020	
10.0	.148	.071	.020	.146	.070	.020	.141	.069	.019	.137	.068	.019	.132	.067	.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	.147	.157	.141	.127	.107	.097	.088	.062	.056	.051	.020	.018	.016	
2.0	.172	.140	.113	.148	.120	.097	.101	.083	.068	.058	.048	.040	.019	.016	.013	
3.0	.163	.122	.089	.140	.105	.077	.096	.073	.054	.055	.043	.032	.018	.014	.010	
4.0	.155	.108	.072	.133	.093	.063	.091	.065	.044	.053	.038	.026	.017	.012	.009	
5.0	.147	.097	.060	.126	.084	.052	.087	.059	.037	.050	.034	.022	.016	.011	.007	
6.0	.140	.088	.051	.121	.077	.044	.083	.054	.031	.048	.032	.019	.016	.010	.006	
7.0	.134	.081	.044	.115	.071	.039	.080	.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	.123	.071	.035	.106	.061	.031	.073	.043	.022	.043	.025	.013	.014	.008	.004	
10.0	.118	.066	.032	.102	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-26

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:278.5V I:1.666A P:462.1W PF:0.9958 Freq:59.98Hz Lamp Flux:82904.6x1 lm
NAME: ASD-UHB5-HV-PRO-500BK
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	28.8	30.1	29.1	30.3	30.5	27.8	29.1	28.0	29.3	29.5
3H	29.3	30.4	29.6	30.7	30.9	28.2	29.4	28.5	29.6	29.8
4H	29.4	30.5	29.7	30.8	31.0	28.3	29.4	28.6	29.7	29.9
6H	29.5	30.5	29.8	30.8	31.1	28.3	29.4	28.6	29.6	29.9
8H	29.5	30.5	29.8	30.8	31.1	28.3	29.3	28.6	29.6	29.9
12H	29.4	30.4	29.8	30.7	31.0	28.3	29.2	28.6	29.5	29.8
4H 2H	28.9	30.0	29.2	30.3	30.5	28.0	29.1	28.3	29.4	29.6
3H	29.5	30.4	29.8	30.7	31.1	28.5	29.5	28.9	29.8	30.1
4H	29.7	30.6	30.1	30.9	31.2	28.7	29.6	29.1	29.9	30.3
6H	29.8	30.6	30.2	30.9	31.3	28.8	29.6	29.2	29.9	30.3
8H	29.8	30.6	30.3	30.9	31.3	28.8	29.5	29.2	29.9	30.3
12H	29.8	30.5	30.3	30.9	31.3	28.8	29.4	29.2	29.8	30.2
8H 4H	29.7	30.4	30.1	30.8	31.2	28.7	29.5	29.2	29.8	30.2
6H	29.9	30.4	30.3	30.9	31.3	28.9	29.5	29.3	29.9	30.3
8H	29.9	30.4	30.4	30.9	31.3	28.9	29.4	29.4	29.9	30.3
12H	29.9	30.4	30.4	30.8	31.3	28.9	29.3	29.4	29.8	30.3
12H 4H	29.6	30.3	30.1	30.7	31.1	28.7	29.4	29.1	29.8	30.2
6H	29.8	30.4	30.3	30.8	31.3	28.9	29.4	29.3	29.8	30.3
8H	29.9	30.3	30.4	30.8	31.3	28.9	29.3	29.4	29.8	30.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.7 / - 1.0					+ 0.8 / - 1.2				
1.5H	+ 0.8 / - 0.8					+ 0.7 / - 0.9				
2.0H	+ 2.1 / - 1.6					+ 1.6 / - 1.4				

CIE Pub.117, 82905 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 15.3)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-26

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:278.5V I:1.666A P:462.1W PF:0.9958 Freq:59.98Hz Lamp Flux:82904.6x1 lm
NAME: ASD-UHB5-HV-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

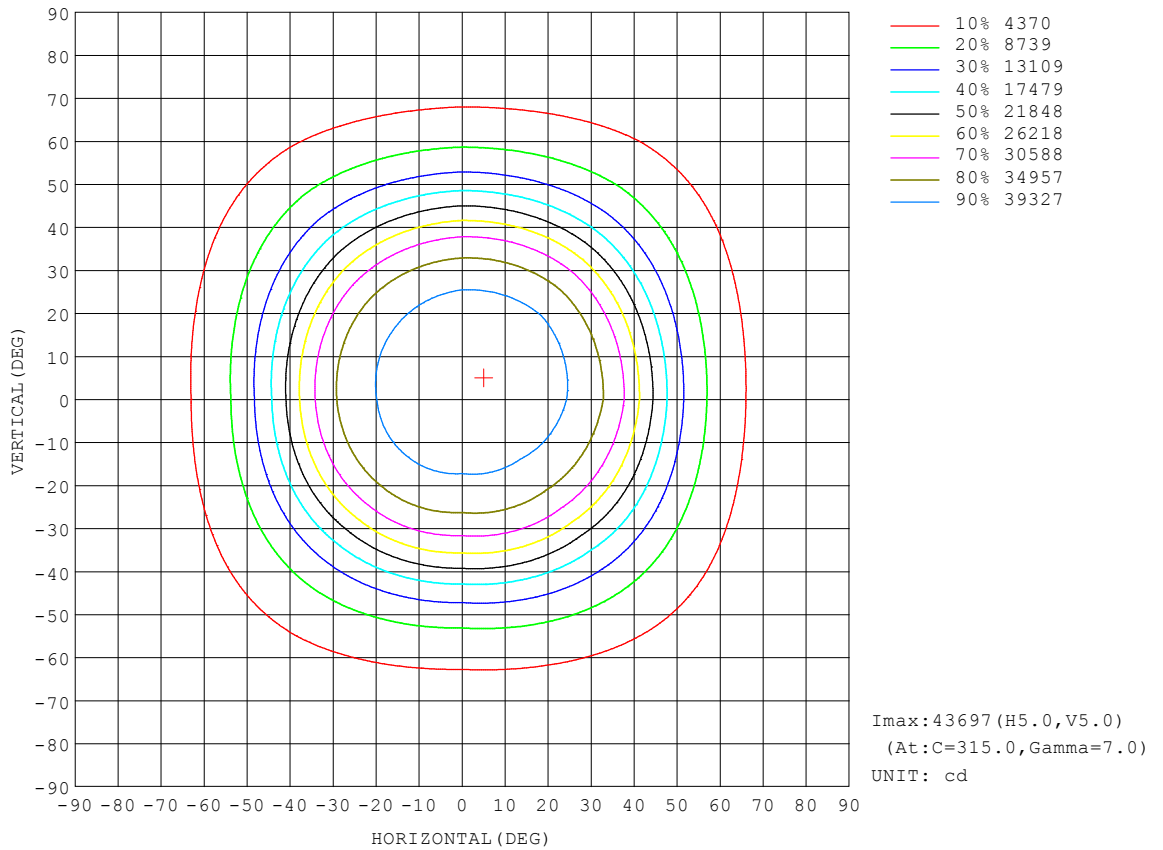
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	68	59	53	68	58	53	66	58	52	47
0.80	78	69	63	77	68	62	75	67	62	56
1.00	85	77	71	84	76	71	82	77	70	64
1.25	92	84	78	90	83	78	88	81	77	71
1.50	96	88	83	94	87	82	92	86	81	75
2.00	101	95	90	99	93	89	96	91	87	81
2.50	104	98	93	102	97	93	98	94	91	83
3.00	107	101	97	104	100	96	101	97	94	86
4.00	110	105	102	107	103	100	103	100	97	89
5.00	111	108	105	109	106	103	104	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: 2023-11-26

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:278.5V I:1.666A P:462.1W PF:0.9958 Freq:59.98Hz Lamp Flux:82904.6x1 lm
NAME: ASD-UHB5-HV-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

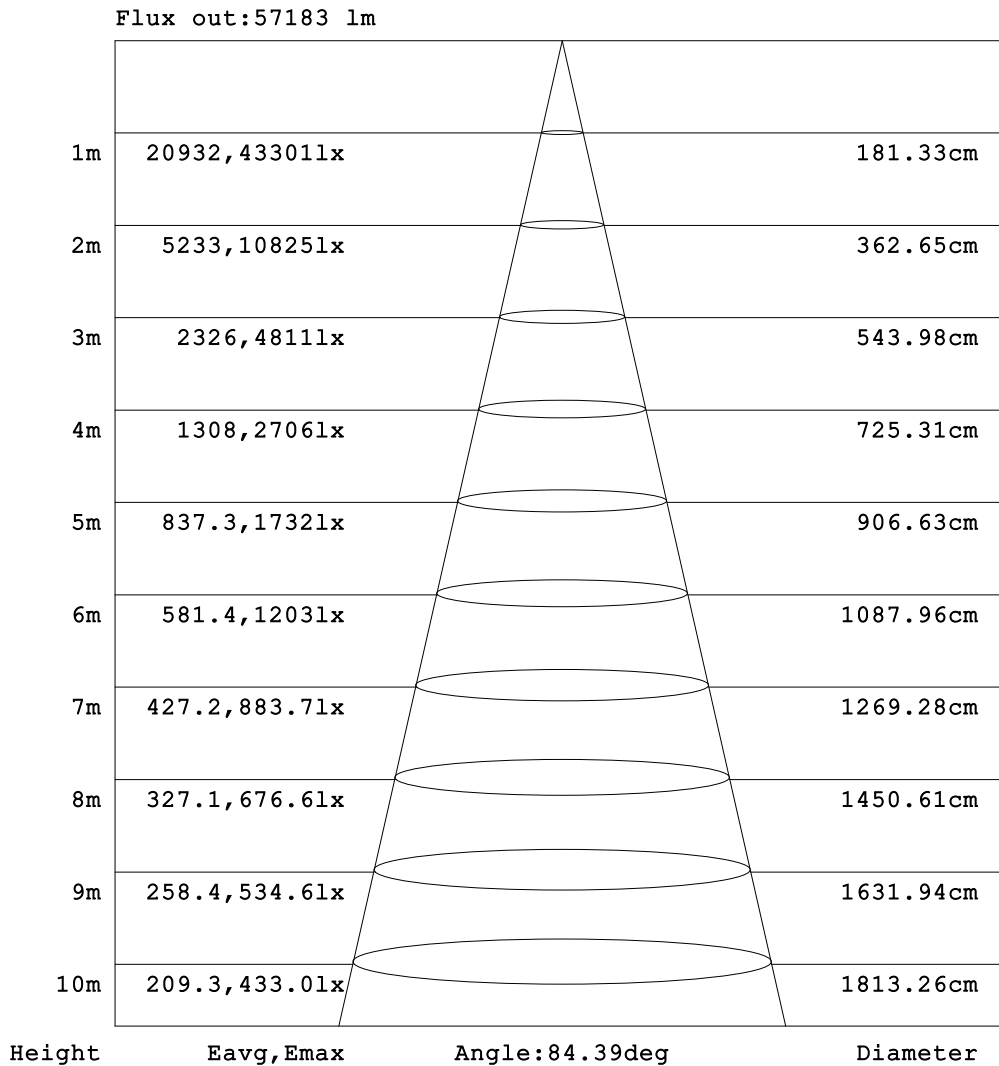


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-26

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:278.5V I:1.666A P:462.1W PF:0.9958 Freq:59.98Hz Lamp Flux:82904.6x1 lm
NAME: ASD-UHB5-HV-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

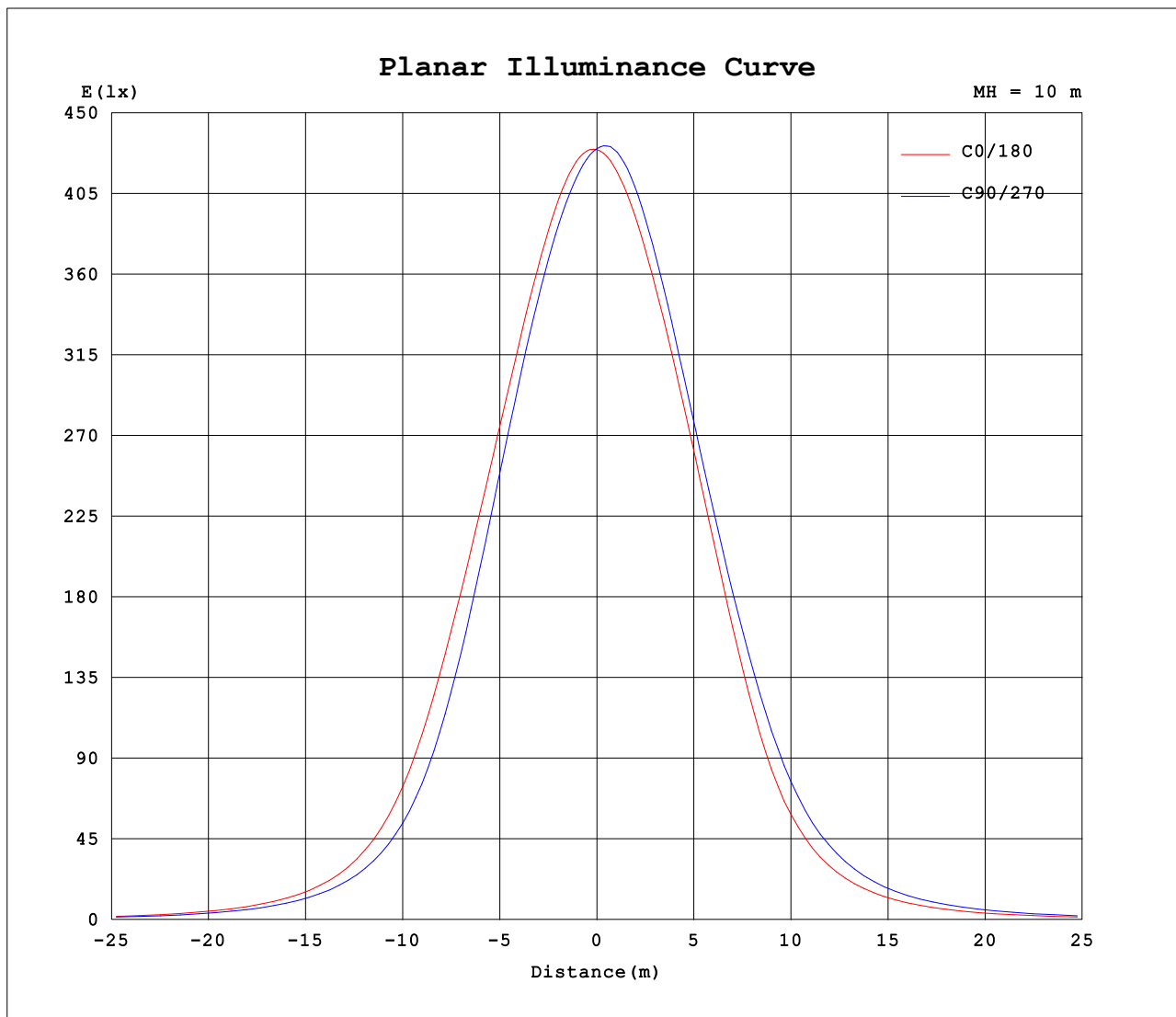


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-26

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: 2023-11-26

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:278.5V I:1.666A P:462.1W PF:0.9958 Freq:59.98Hz Lamp Flux:82904.6x1 lm
NAME: ASD-UHB5-HV-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315											
0	4296	4297	4300	4315	4296	4297	4300	4315											
5	4304	4249	4225	4242	4251	4301	4346	4363											
10	4267	4167	4128	4150	4177	4255	4336	4360											
15	4189	4056	4003	4033	4069	4159	4264	4299											
20	4072	3909	3832	3875	3927	4020	4138	4180											
25	3908	3702	3581	3641	3732	3839	3952	4003											
30	3676	3389	3214	3289	3434	3582	3691	3747											
35	3325	2922	2703	2777	2966	3182	3323	3389											
40	2785	2319	2096	2136	2318	2618	2812	2867											
45	2101	1729	1526	1565	1664	1987	2182	2193											
50	1472	1258	1086	1120	1153	1442	1591	1575											
55	1010	890	771	798	797	1025	1127	1114											
60	698	616	537	560	550	721	791	789											
65	474	416	369	385	373	491	549	547											
70	313	270	244	255	245	323	369	367											
75	191	159	145	152	145	197	232	228											
80	101	78.7	69.8	73.3	70.9	104	126	122											
85	35.4	20.7	13.2	16.3	17.9	36.3	49.0	45.0											
90	5.19	5.63	5.68	5.29	4.67	4.65	4.81	4.66											
95	5.08	5.56	5.68	5.42	4.77	4.65	4.63	4.52											
100	5.30	5.83	6.02	5.88	5.12	4.91	4.76	4.67											
105	5.75	6.36	6.62	6.51	5.81	5.42	5.15	5.07											
110	6.70	7.55	8.20	8.17	7.31	6.40	5.90	5.91											
115	8.49	9.45	10.1	10.2	9.22	8.11	7.50	7.54											
120	10.5	11.5	12.3	12.3	11.3	10.0	9.39	9.41											
125	12.6	13.6	14.5	14.5	13.5	12.1	11.4	11.5											
130	14.7	15.8	16.7	16.7	15.8	14.3	13.6	13.6											
135	16.9	17.9	18.8	18.8	18.0	16.7	15.9	15.9											
140	19.0	20.0	20.9	20.9	20.2	18.9	18.2	18.2											
145	20.9	22.0	22.8	22.9	22.3	21.1	20.5	20.5											
150	22.9	23.9	24.8	24.8	24.4	23.2	22.7	22.7											
155	25.1	25.9	26.8	26.8	26.5	25.4	24.9	24.9											
160	27.2	27.9	28.8	28.7	28.7	27.6	27.2	27.1											
165	29.5	29.9	30.8	30.7	30.8	29.7	29.4	29.3											
170	31.4	31.6	32.4	32.3	32.4	31.5	31.3	31.2											
175	32.9	32.9	33.4	33.3	33.4	32.7	32.8	32.7											
180	33.7	33.4	33.6	33.5	33.7	33.4	33.6	33.6											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-26

□ 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: