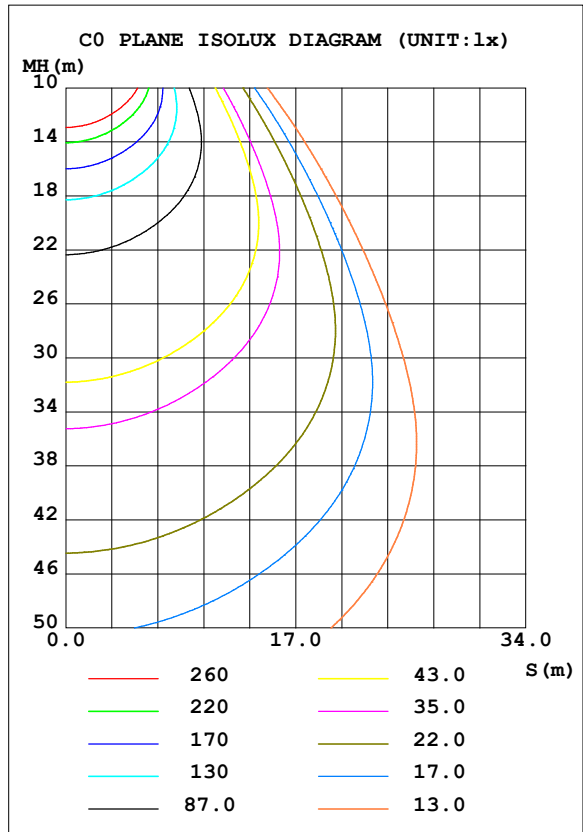
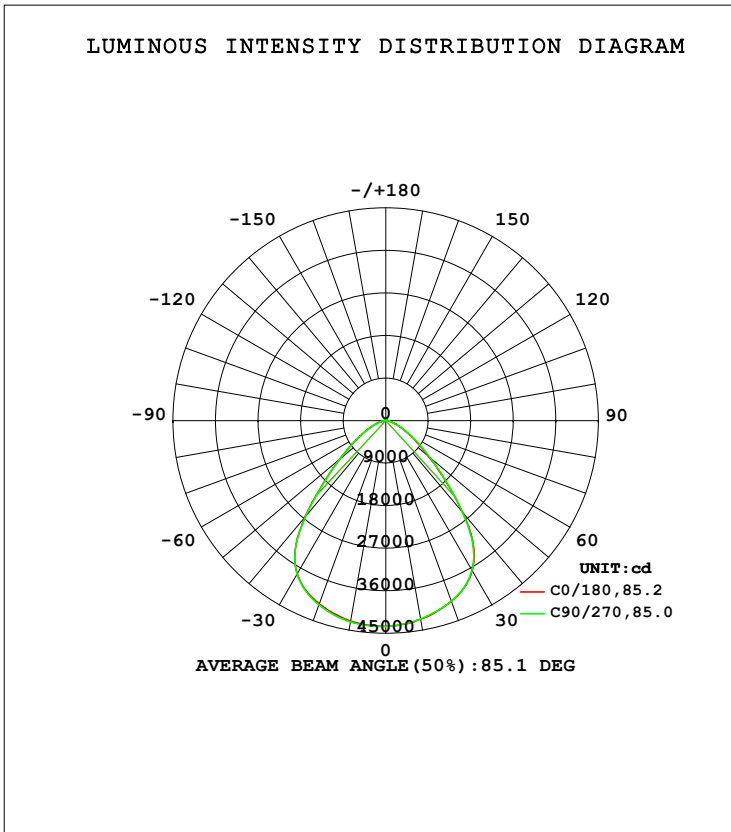


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.2V I:3.808A P:456.3W PF:0.9969 Freq:59.98Hz Lamp Flux:82551.2x1 lm
NAME: ASD-UHB5-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

DATA OF LAMP		PHOTOMETRIC DATA Eff: 180.91 lm/W			
MODEL	ASD-UHB5-PRO-500BK	I _{max} (cd)	43568	S/MH (C0/180)	1.23
NOMINAL POWER (W)	500	LOR (%)	100.0	S/MH (C90/270)	1.22
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	82551	<input type="checkbox"/> UP, DN (C0-180)	0.5, 49.0
NOMINAL FLUX (lm)	82551	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 50.0
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: 27DEG
 Operators: lianghaizhu
 Test Date: 2024-01-06

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	4266	4248	4257	4283	4302	4324	4321	4298	0- 10	4123	4123	4.99,4.99
20	4066	4046	4062	4097	4122	4152	4146	4108	10- 20	11887	16011	19.4,19.4
30	3662	3626	3651	3710	3744	3778	3753	3701	20- 30	18143	34154	41.4,41.4
40	2535	2513	2520	2609	2657	2737	2633	2534	30- 40	20190	54343	65.8,65.8
50	1201	1175	1240	1267	1284	1288	1272	1179	40- 50	14222	68566	83.1,83.1
60	551.2	512.2	576.6	578.6	590.7	560.6	572.8	527.6	50- 60	7628	76194	92.3,92.3
70	232.7	216.0	243.2	249.4	250.5	234.1	236.5	221.2	60- 70	3729	79923	96.8,96.8
80	69.34	64.52	72.45	74.77	72.54	68.66	67.52	63.78	70- 80	1509	81432	98.6,98.6
90	4.700	4.566	4.611	4.648	4.460	4.381	4.482	4.602	80- 90	284.5	81716	99,99
100	5.295	5.283	5.267	5.216	4.933	4.896	4.999	5.145	90-100	51.73	81768	99.1,99.1
110	7.243	7.325	7.224	7.000	6.670	6.579	6.690	6.841	100-110	61.55	81830	99.1,99.1
120	11.34	11.48	11.35	11.09	10.60	10.42	10.59	10.74	110-120	87.99	81918	99.2,99.2
130	15.85	15.99	15.89	15.60	15.11	14.83	15.08	15.18	120-130	117.8	82035	99.4,99.4
140	20.23	20.35	20.32	19.99	19.79	19.47	19.75	19.83	130-140	136.7	82172	99.5,99.5
150	24.28	24.41	24.41	24.06	24.17	23.94	24.12	24.29	140-150	138.4	82310	99.7,99.7
160	28.71	28.70	28.86	28.40	28.80	28.48	28.74	28.78	150-160	121.6	82432	99.9,99.9
170	32.95	32.77	33.02	32.60	33.07	32.71	33.01	32.88	160-170	86.86	82519	100,100
180	35.02	34.75	35.01	34.74	35.01	34.76	35.01	34.75	170-180	32.27	82551	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 62458 lm

%lum = 75.7%

%lamp = 75.7%

Conical surface Flux(120deg): 76194 lm

%lum = 92.3%

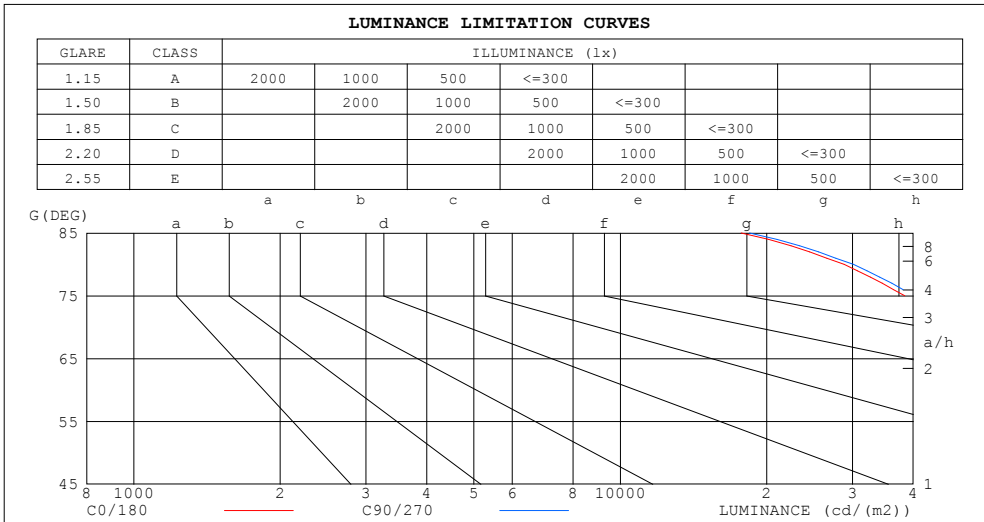
%lamp = 92.3%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2024-01-06

□ 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:120.2V I:3.808A P:456.3W PF:0.9969 Freq:59.98Hz Lamp Flux:82551.2x1 lm
NAME: ASD-UHB5-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17729	18425
80	28851	30148
75	38417	40157
70	49152	51378
65	62088	65028
60	79658	83330
55	102754	107320
50	135006	139399
45	180896	182892

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2024-01-06

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:120.2V I:3.808A P:456.3W PF:0.9969 Freq:59.98Hz Lamp Flux:82551.2x1 lm
NAME: ASD-UHB5-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	.234	.133	.042	.227	.129	.041	.213	.122	.039	.201	.116	.037	.190	.110	.035	
2.0	.227	.124	.038	.221	.122	.037	.209	.116	.036	.198	.111	.035	.188	.106	.034	
3.0	.216	.115	.034	.210	.113	.034	.200	.108	.033	.191	.104	.032	.182	.101	.031	
4.0	.204	.106	.031	.199	.104	.031	.190	.101	.030	.182	.098	.029	.174	.095	.029	
5.0	.192	.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	.163	.079	.022	.160	.079	.022	.154	.077	.022	.149	.075	.022	.143	.074	.021	
9.0	.154	.075	.021	.152	.074	.021	.146	.072	.021	.141	.071	.020	.137	.070	.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	.165	.148	.156	.141	.127	.107	.097	.088	.062	.056	.051	.020	.018	.017	
2.0	.171	.140	.114	.147	.121	.098	.101	.083	.069	.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	.086	.059	.037	.050	.034	.022	.016	.011	.007	
6.0	.139	.088	.052	.120	.076	.045	.083	.054	.032	.048	.031	.019	.015	.010	.006	
7.0	.133	.081	.045	.115	.070	.039	.079	.049	.028	.046	.029	.016	.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:27DEG
 Operators:lianghaizhu
 Test Date:2024-01-06

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:120.2V I:3.808A P:456.3W PF:0.9969 Freq:59.98Hz Lamp Flux:82551.2x1 lm
NAME: ASD-UHB5-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	28.0	29.3	28.3	29.5	29.7	28.1	29.4	28.4	29.6	29.8
3H	28.3	29.5	28.6	29.7	30.0	28.4	29.6	28.7	29.8	30.1
4H	28.4	29.5	28.7	29.7	30.0	28.5	29.6	28.8	29.9	30.1
6H	28.4	29.4	28.7	29.7	30.0	28.5	29.5	28.9	29.8	30.1
8H	28.4	29.4	28.7	29.7	30.0	28.5	29.5	28.9	29.8	30.1
12H	28.4	29.3	28.7	29.6	29.9	28.5	29.4	28.8	29.7	30.0
4H 2H	28.1	29.2	28.4	29.4	29.7	28.2	29.3	28.5	29.5	29.8
3H	28.5	29.4	28.8	29.7	30.0	28.6	29.5	28.9	29.8	30.1
4H	28.6	29.5	29.0	29.8	30.1	28.7	29.6	29.1	29.9	30.2
6H	28.7	29.4	29.1	29.8	30.2	28.8	29.5	29.2	29.9	30.3
8H	28.7	29.4	29.1	29.8	30.2	28.8	29.5	29.2	29.9	30.3
12H	28.7	29.3	29.1	29.7	30.1	28.8	29.4	29.2	29.8	30.2
8H 4H	28.6	29.3	29.0	29.7	30.1	28.7	29.4	29.1	29.8	30.2
6H	28.7	29.3	29.2	29.7	30.1	28.8	29.4	29.3	29.8	30.2
8H	28.7	29.2	29.2	29.7	30.1	28.8	29.3	29.3	29.8	30.2
12H	28.7	29.2	29.2	29.6	30.1	28.8	29.3	29.3	29.7	30.2
12H 4H	28.6	29.2	29.0	29.6	30.0	28.7	29.3	29.1	29.7	30.1
6H	28.7	29.2	29.2	29.6	30.1	28.8	29.3	29.3	29.7	30.2
8H	28.7	29.1	29.2	29.6	30.1	28.8	29.3	29.3	29.7	30.2
Variations with the observer position at spacings:										
S = 1.0H	+ 1.1 / - 1.5					+ 1.0 / - 1.4				
1.5H	+ 1.3 / - 1.1					+ 1.2 / - 1.1				
2.0H	+ 2.2 / - 1.9					+ 2.2 / - 1.9				

CIE Pub.117, 82551 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:2024-01-06

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:120.2V I:3.808A P:456.3W PF:0.9969 Freq:59.98Hz Lamp Flux:82551.2x1 lm
NAME: ASD-UHB5-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

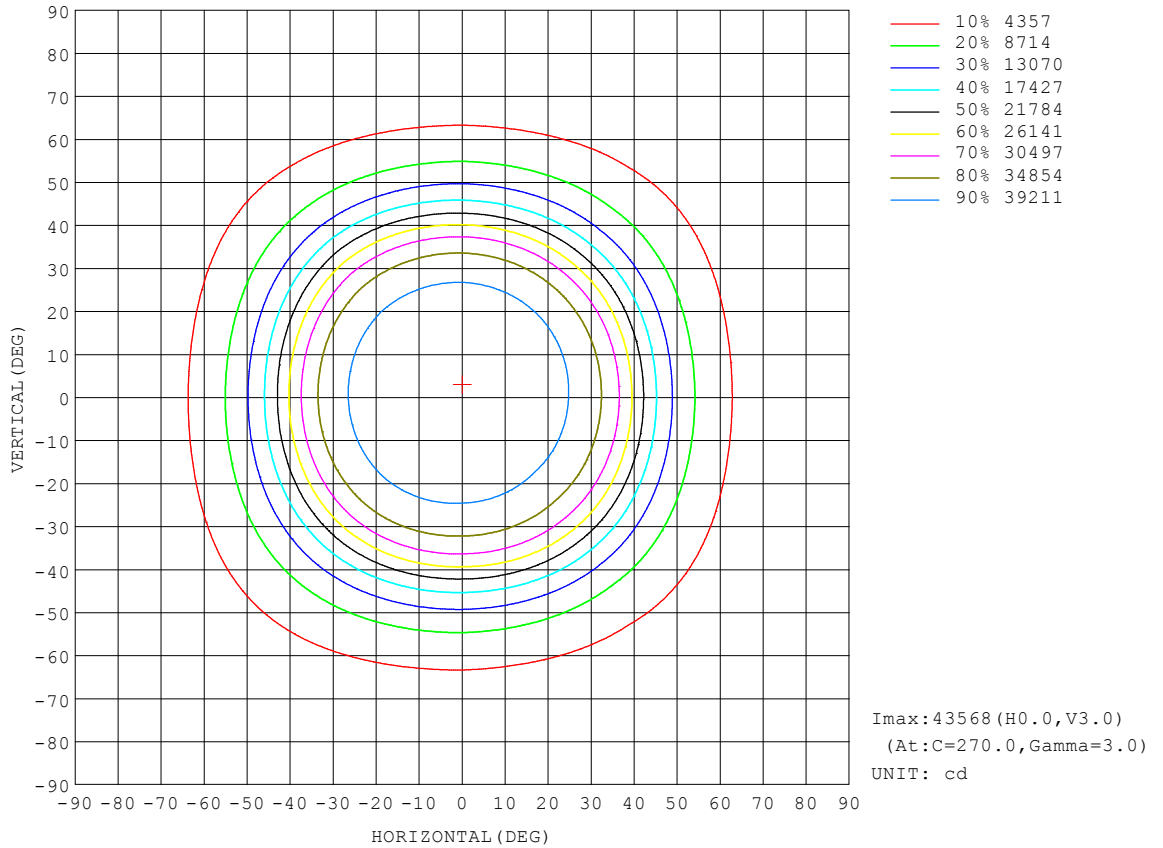
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	70	61	55	69	60	55	68	60	55	49
0.80	80	71	65	79	70	65	77	69	64	59
1.00	87	79	73	86	78	73	84	79	72	66
1.25	93	85	80	92	84	79	89	83	79	73
1.50	97	90	85	96	89	84	93	87	83	77
2.00	102	96	91	100	95	90	97	92	89	82
2.50	105	99	95	103	98	94	99	95	92	84
3.00	107	102	98	105	101	97	101	98	95	87
4.00	110	106	103	108	104	101	104	101	98	90
5.00	112	108	105	109	106	104	105	103	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:27DEG
 Operators:lianghaizhu
 Test Date:2024-01-06

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:120.2V I:3.808A P:456.3W PF:0.9969 Freq:59.98Hz Lamp Flux:82551.2x1 lm
NAME: ASD-UHB5-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

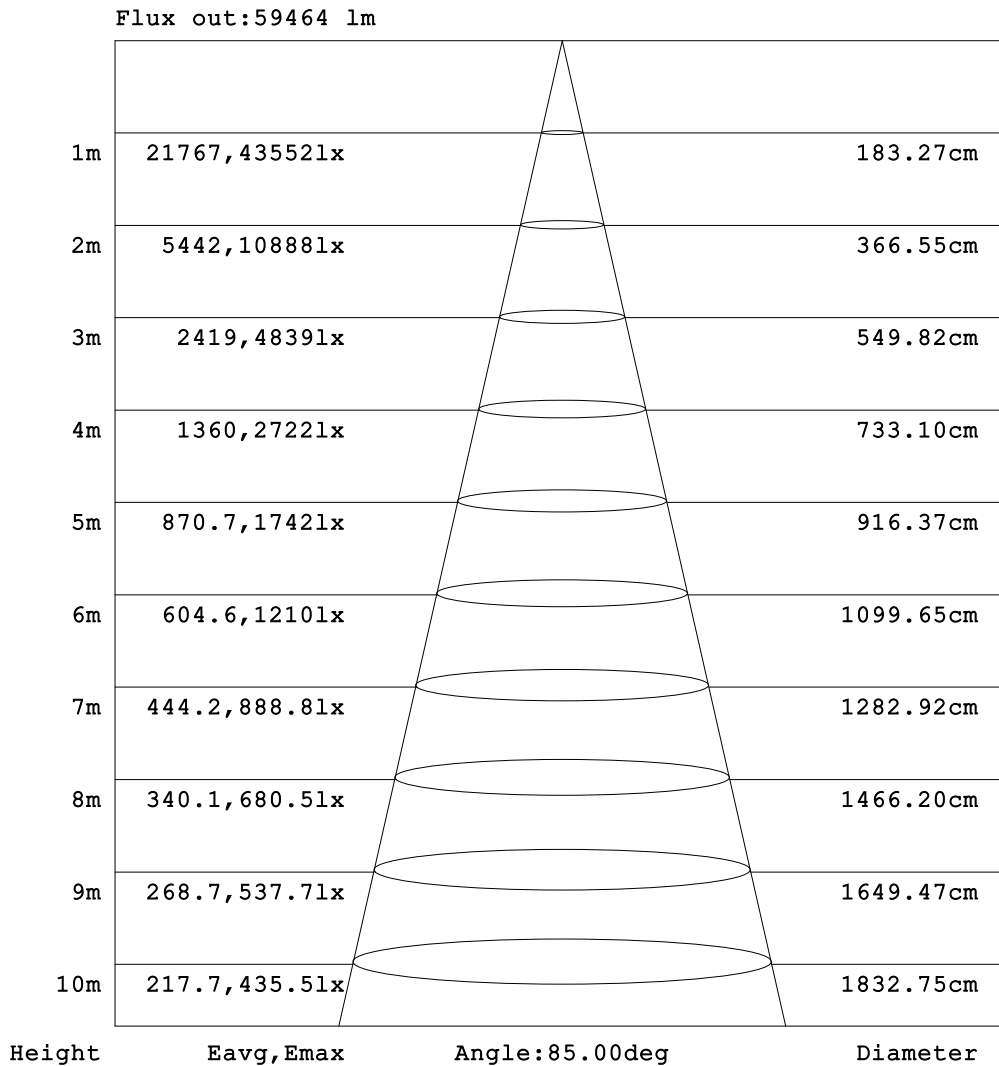


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2024-01-06

□ 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:120.2V I:3.808A P:456.3W PF:0.9969 Freq:59.98Hz Lamp Flux:82551.2x1 lm
NAME: ASD-UHB5-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

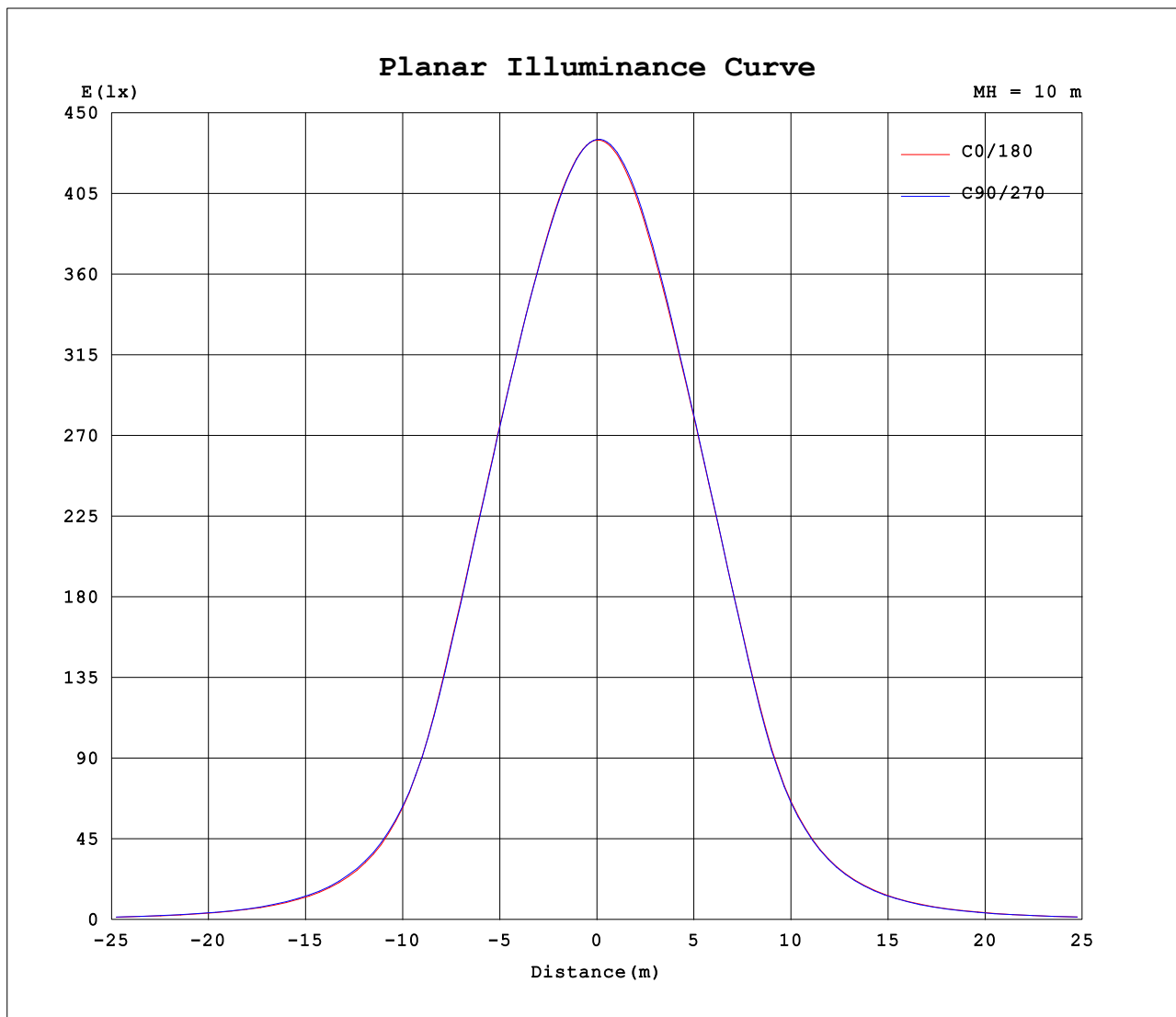


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2024-01-06

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: 2024-01-06

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:120.2V I:3.808A P:456.3W PF:0.9969 Freq:59.98Hz Lamp Flux:82551.2x1 lm
NAME: ASD-UHB5-PRO-500BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	4349	4350	4353	4355	4349	4350	4353	4355										
5	4323	4315	4320	4335	4342	4354	4354	4342										
10	4266	4248	4257	4283	4302	4324	4321	4298										
15	4179	4158	4171	4202	4228	4257	4253	4220										
20	4066	4046	4062	4097	4122	4152	4146	4108										
25	3912	3885	3905	3951	3977	4003	3990	3952										
30	3662	3626	3651	3710	3744	3778	3753	3701										
35	3240	3196	3219	3298	3341	3392	3340	3261										
40	2535	2513	2520	2609	2657	2737	2633	2534										
45	1770	1754	1790	1844	1869	1936	1852	1758										
50	1201	1175	1240	1267	1284	1288	1272	1179										
55	816	777	852	860	877	847	861	794										
60	551	512	577	579	591	561	573	528										
65	363	336	380	385	391	367	375	347										
70	233	216	243	249	251	234	237	221										
75	138	128	144	148	146	137	137	130										
80	69.3	64.5	72.5	74.8	72.5	68.7	67.5	63.8										
85	21.4	20.2	22.2	23.9	21.7	20.9	21.1	19.2										
90	4.70	4.57	4.61	4.65	4.46	4.38	4.48	4.60										
95	4.84	4.77	4.78	4.77	4.54	4.49	4.59	4.72										
100	5.30	5.28	5.27	5.22	4.93	4.90	5.00	5.15										
105	5.94	5.93	5.94	5.79	5.49	5.42	5.55	5.65										
110	7.24	7.33	7.22	7.00	6.67	6.58	6.69	6.84										
115	9.21	9.33	9.20	8.96	8.54	8.40	8.55	8.70										
120	11.3	11.5	11.3	11.1	10.6	10.4	10.6	10.7										
125	13.6	13.7	13.6	13.3	12.8	12.6	12.8	12.9										
130	15.8	16.0	15.9	15.6	15.1	14.8	15.1	15.2										
135	18.1	18.2	18.2	17.8	17.5	17.1	17.4	17.5										
140	20.2	20.4	20.3	20.0	19.8	19.5	19.7	19.8										
145	22.3	22.4	22.4	22.1	22.0	21.7	22.0	22.1										
150	24.3	24.4	24.4	24.1	24.2	23.9	24.1	24.3										
155	26.4	26.5	26.6	26.2	26.4	26.2	26.4	26.5										
160	28.7	28.7	28.9	28.4	28.8	28.5	28.7	28.8										
165	30.9	30.8	31.1	30.6	31.1	30.7	31.0	31.0										
170	32.9	32.8	33.0	32.6	33.1	32.7	33.0	32.9										
175	34.4	34.2	34.5	34.1	34.4	34.1	34.4	34.2										
180	35.0	34.8	35.0	34.7	35.0	34.8	35.0	34.7										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2024-01-06

□ 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: