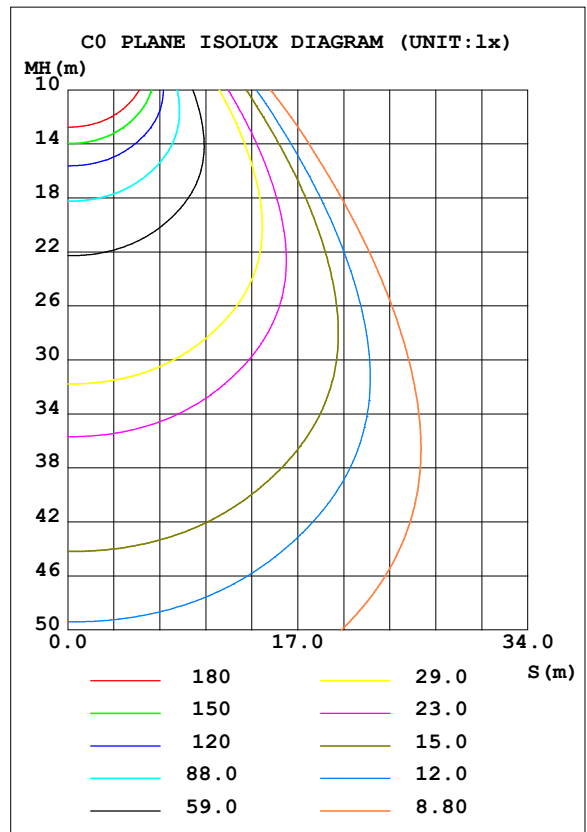
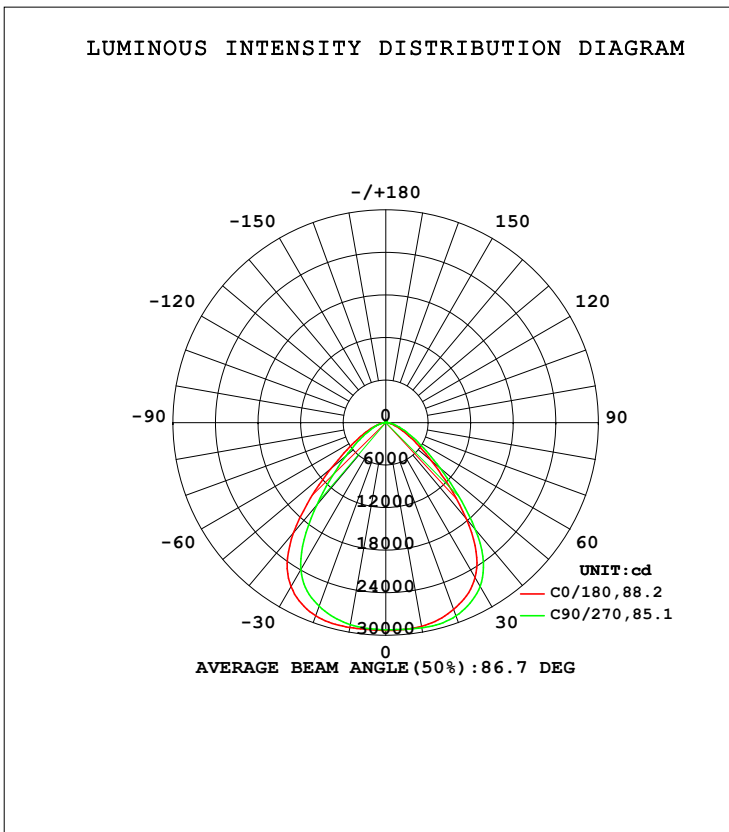


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.5V I:3.349A P:399.5 W PF:0.9964 Freq:59.99Hz Lamp Flux:58725x1 lm		
NAME: ASD-UHB3-400D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 146,99 lm/W			
MODEL		I _{max} (cd)	29409	S/MH (C0/180)	1.28
NOMINAL POWER (W)	400	LOR (%)	100.0	S/MH (C90/270)	1.16
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	58725	<input type="checkbox"/> UP, DN (C0-180)	0.5, 51.8
NOMINAL FLUX (lm)	58725	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 47.2
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: 25DEG
 Operators: lianghaizhu
 Test Date: 2023-03-17

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	2917	2931	2938	2927	2932	2914	2892	2883	0- 10	2788	2788	4.79,4.79
20	2802	2841	2898	2930	2896	2815	2753	2735	10- 20	8169	10957	18.8,18.8
30	2520	2570	2664	2745	2671	2527	2395	2375	20- 30	12552	23509	40.4,40.4
40	1767	1817	1965	2144	2021	1725	1514	1476	30- 40	13915	37424	64.3,64.3
50	847.2	932.7	1001	1123	1014	852.7	738.8	717.6	40- 50	10147	47571	81.8,81.8
60	379.4	447.5	486.1	535.4	443.8	409.5	350.2	337.9	50- 60	5663	53235	91.5,91.5
70	160.0	195.7	225.4	239.0	187.9	177.4	156.7	144.4	60- 70	2874	56108	96.4,96.4
80	51.29	64.40	80.54	83.92	59.97	56.07	48.60	41.39	70- 80	1232	57341	98.5,98.5
90	3.528	3.533	6.273	6.772	3.481	3.739	3.877	3.658	80- 90	282.7	57624	99,99
100	3.959	3.818	3.729	3.666	3.608	3.851	4.075	4.038	90-100	40.48	57664	99.1,99.1
110	5.298	4.843	4.440	4.323	4.513	4.757	5.132	5.416	100-110	44.55	57709	99.2,99.2
120	8.079	7.482	6.926	6.727	7.063	7.366	7.848	8.176	110-120	60.38	57769	99.3,99.3
130	11.10	10.45	9.871	9.595	9.982	10.31	10.87	11.16	120-130	79.80	57849	99.4,99.4
140	13.94	13.38	12.82	12.49	12.92	13.24	13.83	14.01	130-140	91.76	57941	99.6,99.6
150	16.52	16.04	15.53	15.12	15.74	16.01	16.61	16.72	140-150	91.95	58032	99.7,99.7
160	19.24	18.72	18.31	17.88	18.70	18.84	19.43	19.43	150-160	80.18	58113	99.9,99.9
170	21.73	21.28	21.08	20.68	21.43	21.40	21.87	21.74	160-170	56.78	58169	100,100
180	22.80	22.57	22.73	22.44	22.85	22.54	22.76	22.42	170-180	20.98	58190	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 43156 lm

%lum = 74.2%

%lamp = 74.2%

Conical surface Flux(120deg): 53235 lm

%lum = 91.5%

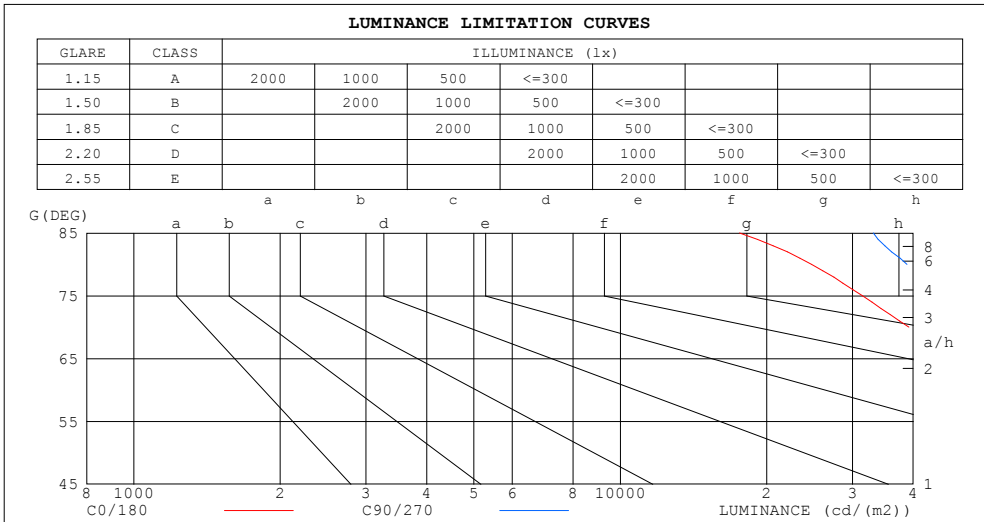
%lamp = 91.5%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-03-17

□ 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:3.349A P:399.5 W PF:0.9964 Freq:59.99Hz Lamp Flux:58725x1 lm		
NAME: ASD-UHB3-400D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17589	33110
80	24740	38848
75	31466	46330
70	39175	55190
65	49293	66294
60	63562	81435
55	83242	102363
50	110399	130463
45	149477	170372

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-03-17

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:3.349A P:399.5 W PF:0.9964 Freq:59.99Hz Lamp Flux:58725x1 lm		
NAME: ASD-UHB3-400D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	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	.239	.136	.043	.232	.132	.042	.219	.125	.040	.206	.119	.038	.195	.113	.036	
2.0	.231	.127	.039	.225	.124	.038	.213	.119	.037	.202	.114	.036	.193	.109	.034	
3.0	.219	.117	.035	.214	.115	.034	.204	.110	.034	.194	.106	.033	.185	.103	.032	
4.0	.207	.108	.032	.202	.106	.031	.193	.102	.031	.185	.099	.030	.177	.096	.029	
5.0	.195	.099	.029	.191	.098	.029	.183	.095	.028	.175	.093	.028	.168	.090	.027	
6.0	.184	.092	.026	.180	.091	.026	.173	.089	.026	.166	.086	.025	.160	.084	.025	
7.0	.174	.086	.024	.170	.085	.024	.164	.083	.024	.158	.081	.024	.152	.079	.023	
8.0	.164	.080	.023	.161	.079	.022	.155	.078	.022	.150	.076	.022	.145	.074	.022	
9.0	.156	.075	.021	.153	.075	.021	.148	.073	.021	.143	.072	.020	.138	.070	.020	
10.0	.148	.071	.020	.145	.070	.020	.141	.069	.019	.136	.068	.019	.132	.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	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.183	.164	.147	.156	.141	.127	.107	.097	.088	.062	.056	.051	.020	.018	.017	
2.0	.172	.140	.113	.147	.120	.098	.101	.083	.068	.058	.048	.040	.019	.016	.013	
3.0	.162	.122	.089	.139	.105	.077	.096	.073	.054	.055	.043	.032	.018	.014	.010	
4.0	.154	.108	.072	.132	.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	.120	.076	.044	.083	.053	.031	.048	.031	.019	.016	.010	.006	
7.0	.134	.081	.044	.115	.070	.039	.079	.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	.122	.070	.035	.105	.061	.031	.073	.043	.022	.043	.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:25DEG
 Operators:lianghaizhu
 Test Date:2023-03-17

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:3.349A P:399.5 W PF:0.9964 Freq:59.99Hz Lamp Flux:58725x1 lm										
NAME: ASD-UHB3-400D50-BK					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: ASD LIGHTING CORP					SUR.:0.39*0.39m			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	27.6	28.9	27.9	29.1	29.3	28.3	29.5	28.5	29.7	30.0
3H	27.9	29.1	28.2	29.3	29.6	28.7	29.9	29.0	30.1	30.4
4H	28.0	29.1	28.3	29.3	29.6	28.9	30.0	29.2	30.2	30.5
6H	28.0	29.0	28.3	29.3	29.6	29.0	30.0	29.3	30.3	30.5
8H	28.0	29.0	28.3	29.3	29.6	29.0	30.0	29.3	30.2	30.5
12H	28.0	28.9	28.3	29.2	29.5	29.0	29.9	29.3	30.2	30.5
4H 2H	27.8	28.9	28.1	29.1	29.4	28.4	29.5	28.7	29.7	30.0
3H	28.2	29.2	28.6	29.5	29.8	28.9	29.9	29.3	30.2	30.5
4H	28.4	29.2	28.7	29.5	29.9	29.2	30.0	29.5	30.4	30.7
6H	28.4	29.2	28.8	29.6	29.9	29.3	30.1	29.7	30.5	30.8
8H	28.4	29.1	28.9	29.5	29.9	29.4	30.1	29.8	30.5	30.9
12H	28.4	29.1	28.9	29.5	29.9	29.4	30.1	29.8	30.4	30.9
8H 4H	28.4	29.1	28.8	29.5	29.9	29.2	29.9	29.6	30.2	30.6
6H	28.5	29.1	29.0	29.5	30.0	29.4	30.0	29.9	30.4	30.8
8H	28.6	29.1	29.1	29.5	30.0	29.5	30.0	30.0	30.4	30.9
12H	28.6	29.0	29.1	29.5	30.0	29.6	30.0	30.0	30.4	30.9
12H 4H	28.4	29.0	28.8	29.4	29.8	29.1	29.8	29.6	30.2	30.6
6H	28.5	29.0	29.0	29.5	29.9	29.4	29.9	29.9	30.3	30.8
8H	28.6	29.0	29.1	29.5	30.0	29.5	29.9	30.0	30.4	30.9
Variations with the observer position at spacings:										
S = 1.0H	+ 1.0 / - 1.4					+ 0.8 / - 1.0				
1.5H	+ 1.0 / - 0.9					+ 0.8 / - 0.7				
2.0H	+ 1.9 / - 1.6					+ 1.9 / - 1.4				

CIE Pub.117, 58190 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 14.1)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-03-17

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:3.349A P:399.5 W PF:0.9964 Freq:59.99Hz Lamp Flux:58725x1 lm		
NAME: ASD-UHB3-400D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:

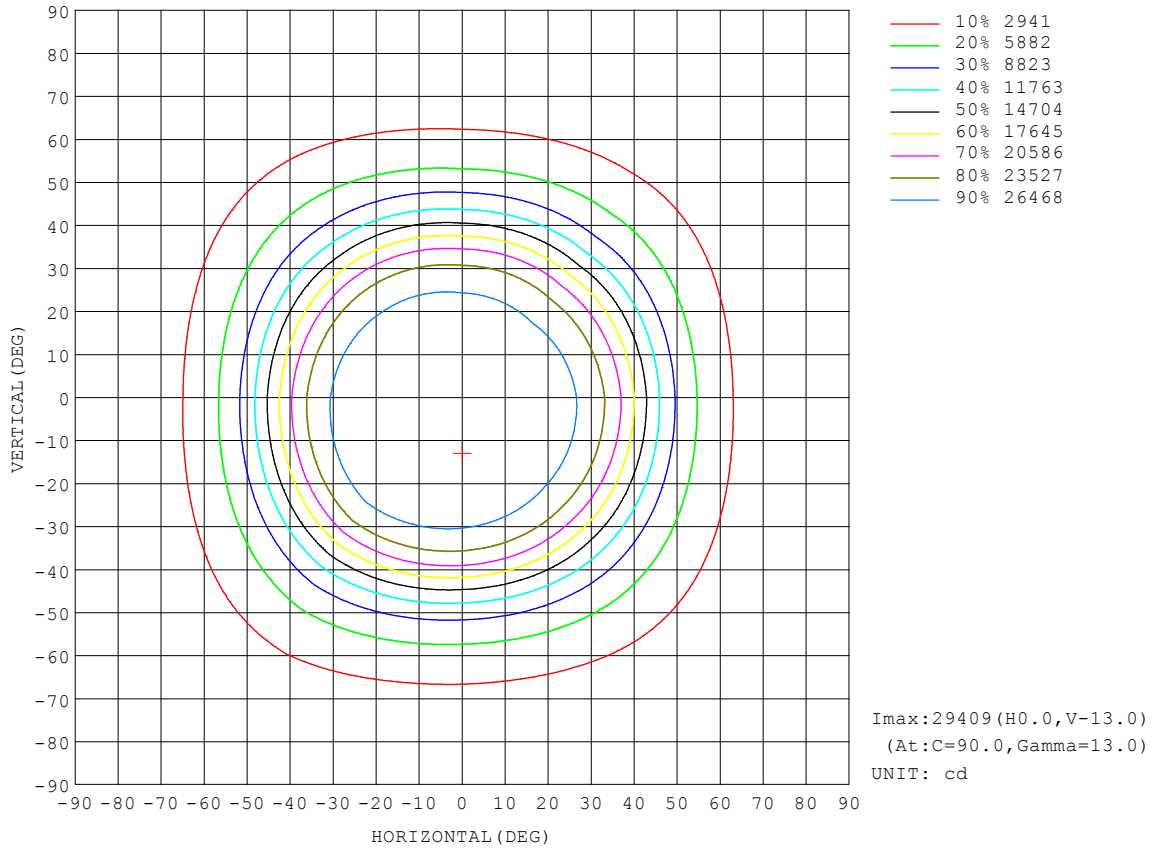
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	69	60	54	68	59	54	67	59	54	48
0.80	79	69	64	78	69	63	76	68	63	57
1.00	86	78	72	85	77	72	83	78	71	65
1.25	92	84	79	91	84	78	89	82	78	72
1.50	96	89	84	95	88	83	92	86	82	76
2.00	102	95	90	100	94	90	97	92	88	81
2.50	104	99	94	102	97	93	99	95	91	84
3.00	107	102	98	105	100	96	101	97	94	86
4.00	110	106	102	107	104	101	103	100	98	89
5.00	111	108	105	109	106	103	105	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:25DEG
 Operators:lianghaizhu
 Test Date:2023-03-17

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:3.349A P:399.5 W PF:0.9964 Freq:59.99Hz Lamp Flux:58725x1 lm		
NAME: ASD-UHB3-400D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:

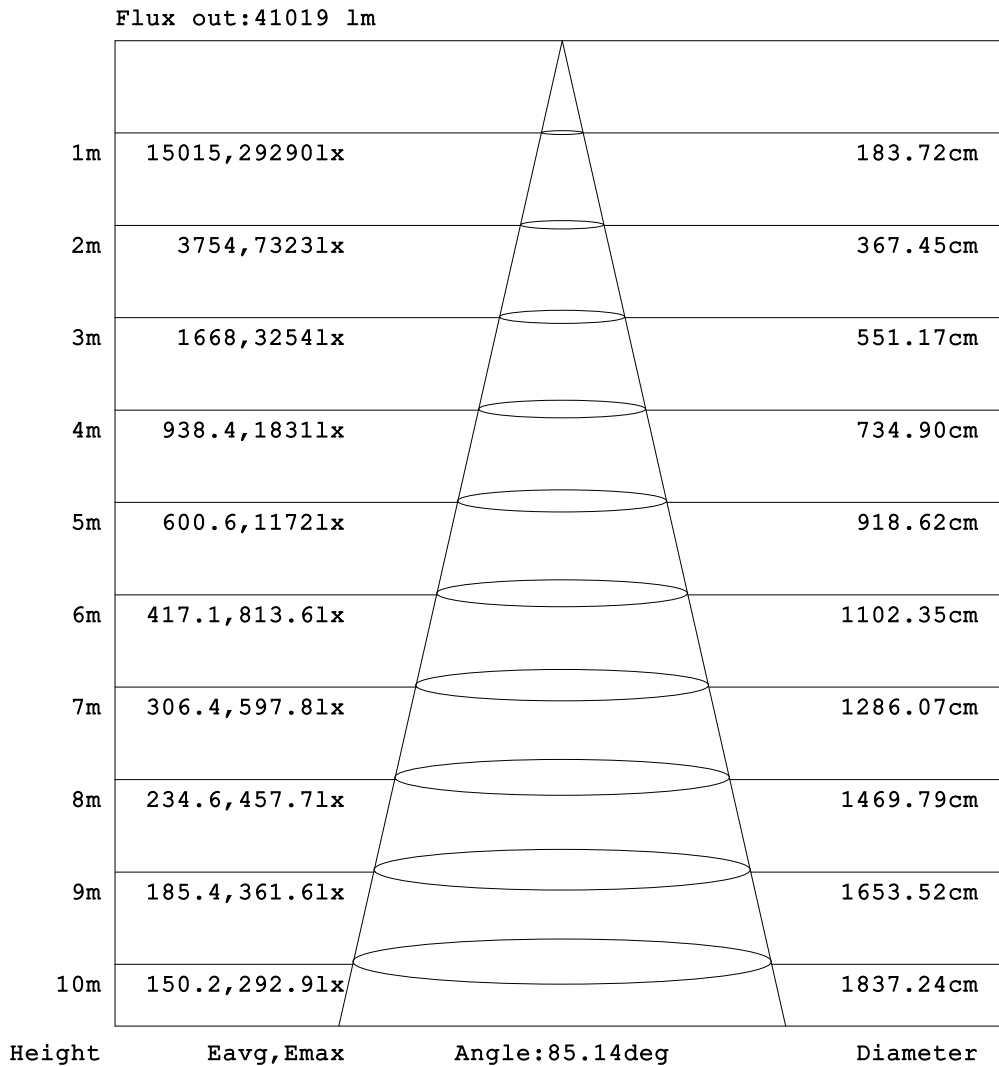


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-03-17

□ 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:3.349A P:399.5 W PF:0.9964 Freq:59.99Hz Lamp Flux:58725x1 lm		
NAME: ASD-UHB3-400D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:

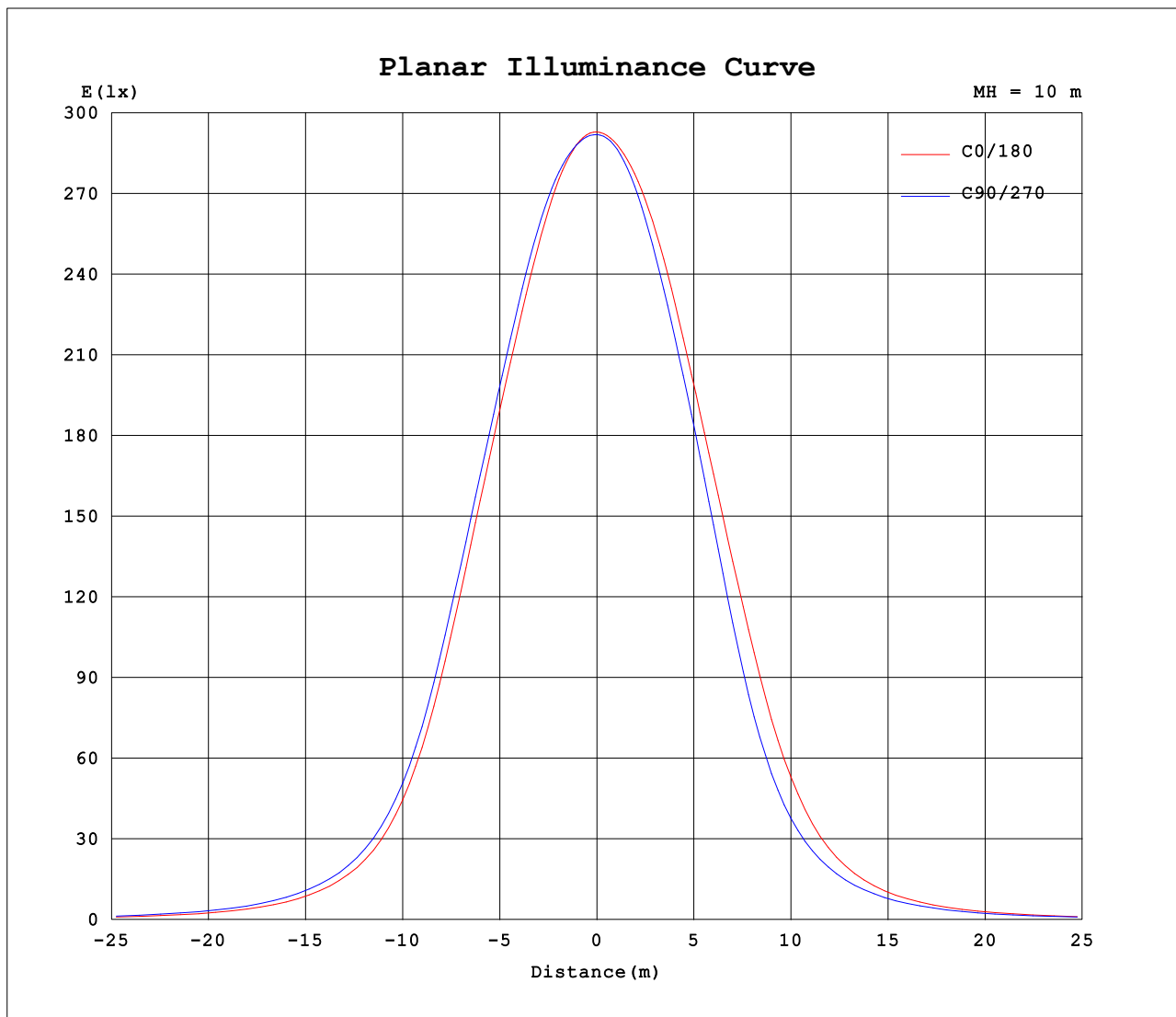


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-03-17

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:25DEG
Operators:lianghaizhu
Test Date:2023-03-17

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:3.349A P:399.5 W PF:0.9964 Freq:59.99Hz Lamp Flux:58725x1 lm		
NAME: ASD-UHB3-400D50-BK	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.39*0.39m	Shielding Angle:

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315											
0	2929	2924	2920	2915	2929	2924	2920	2915											
5	2930	2930	2926	2917	2929	2922	2915	2909											
10	2917	2931	2938	2927	2932	2914	2892	2883											
15	2877	2906	2938	2940	2929	2882	2841	2825											
20	2802	2841	2898	2930	2896	2815	2753	2735											
25	2693	2735	2811	2870	2815	2705	2624	2604											
30	2520	2570	2664	2745	2671	2527	2395	2375											
35	2223	2277	2403	2528	2427	2213	2010	1985											
40	1767	1817	1965	2144	2021	1725	1514	1476											
45	1262	1333	1438	1610	1502	1229	1066	1027											
50	847	933	1001	1123	1014	853	739	718											
55	570	651	701	777	670	599	511	499											
60	379	448	486	535	444	409	350	338											
65	249	300	334	362	292	273	238	224											
70	160	196	225	239	188	177	157	144											
75	97.2	119	143	149	113	107	95.8	85.3											
80	51.3	64.4	80.5	83.9	60.0	56.1	48.6	41.4											
85	18.3	25.2	34.5	37.4	22.7	19.4	14.8	10.6											
90	3.53	3.53	6.27	6.77	3.48	3.74	3.88	3.66											
95	3.64	3.57	3.58	3.54	3.45	3.69	3.86	3.75											
100	3.96	3.82	3.73	3.67	3.61	3.85	4.07	4.04											
105	4.38	4.19	4.01	3.92	3.89	4.10	4.31	4.39											
110	5.30	4.84	4.44	4.32	4.51	4.76	5.13	5.42											
115	6.63	6.09	5.59	5.41	5.72	6.00	6.43	6.74											
120	8.08	7.48	6.93	6.73	7.06	7.37	7.85	8.18											
125	9.59	8.94	8.37	8.13	8.48	8.81	9.33	9.66											
130	11.1	10.5	9.87	9.60	9.98	10.3	10.9	11.2											
135	12.6	11.9	11.4	11.1	11.5	11.8	12.4	12.6											
140	13.9	13.4	12.8	12.5	12.9	13.2	13.8	14.0											
145	15.2	14.7	14.2	13.8	14.3	14.6	15.2	15.4											
150	16.5	16.0	15.5	15.1	15.7	16.0	16.6	16.7											
155	17.9	17.4	16.9	16.5	17.2	17.4	18.0	18.1											
160	19.2	18.7	18.3	17.9	18.7	18.8	19.4	19.4											
165	20.6	20.1	19.8	19.3	20.2	20.2	20.8	20.7											
170	21.7	21.3	21.1	20.7	21.4	21.4	21.9	21.7											
175	22.5	22.2	22.1	21.8	22.4	22.2	22.6	22.3											
180	22.8	22.6	22.7	22.4	22.8	22.5	22.8	22.4											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:lianghaizhu
 Test Date:2023-03-17

□ 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: