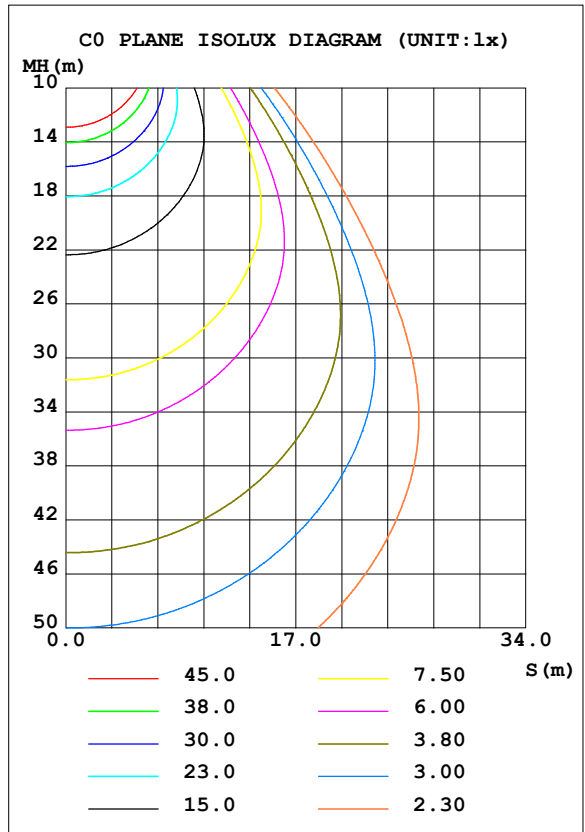
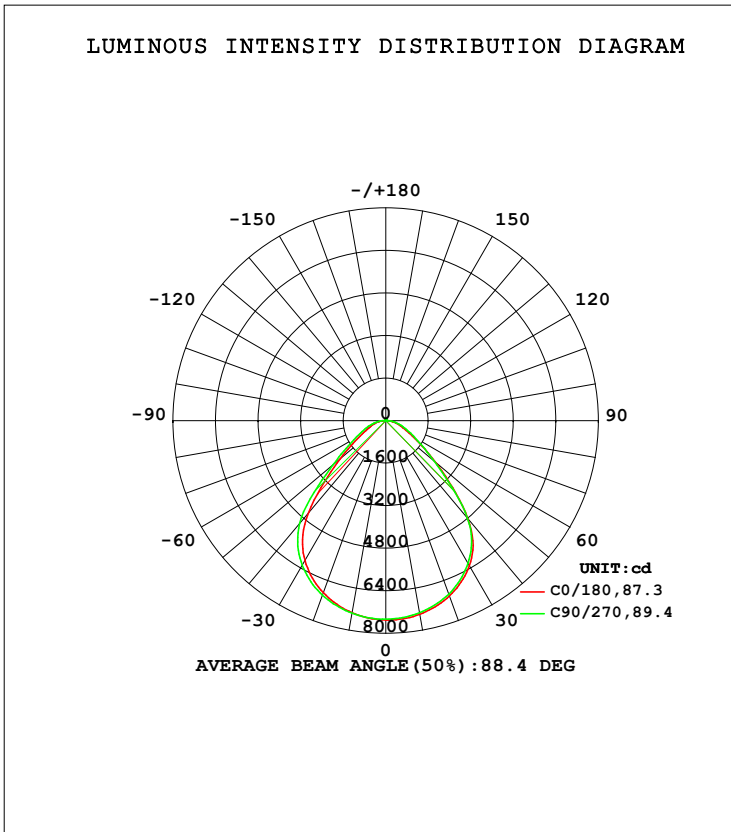


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.1V I:0.8347A P:99.66W PF:0.9945 Freq:59.98Hz Lamp Flux:15230x1 lm		
NAME: ASD-WHB5A-100D50	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.36*0.25	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 152.82 lm/W			
MODEL	ASD-WHB5A-100D50	I <sub>max</sub> (cd)	7500	S/MH (C0/180)	1.21
NOMINAL POWER (W)	100	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	120-277	TOTAL FLUX (lm)	15230	<input type="checkbox"/> UP, DN (C0-180)	0.5, 49.1
NOMINAL FLUX (lm)	15230	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: 2023-10-16

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:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	7395	7359	7335	7307	7337	7346	7352	7354	0- 10	707.7	707.7	4.65,4.65
20	7013	6967	6941	6878	6885	6936	6982	6982	10- 20	2027	2734	18,18
30	6297	6219	6191	6101	6081	6193	6281	6285	20- 30	3049	5784	38,38
40	4807	4720	4790	4608	4521	4835	5041	4952	30- 40	3496	9280	60.9,60.9
50	2452	2355	2392	2278	2245	2463	2596	2544	40- 50	2728	12008	78.8,78.8
60	1142	1156	1255	1111	1055	1216	1331	1237	50- 60	1527	13535	88.9,88.9
70	602.5	656.6	701.3	644.1	578.9	678.4	742.7	676.6	60- 70	882.2	14417	94.7,94.7
80	280.3	287.6	325.0	305.4	283.0	317.2	363.3	296.4	70- 80	508.7	14926	98,98
90	6.952	5.630	5.572	5.682	6.188	8.248	11.18	7.129	80- 90	151.6	15078	99,99
100	8.275	8.664	8.999	8.866	9.755	9.477	9.434	9.182	90-100	7.853	15085	99.1,99.1
110	13.39	13.99	14.47	14.36	15.48	15.00	15.05	14.55	100-110	12.35	15098	99.1,99.1
120	19.94	20.60	21.20	21.10	22.48	21.81	21.79	21.25	110-120	17.62	15115	99.2,99.2
130	27.36	27.93	28.60	28.43	30.42	29.48	29.63	28.89	120-130	22.40	15138	99.4,99.4
140	34.50	35.11	35.63	35.57	37.93	36.97	37.21	36.37	130-140	25.14	15163	99.6,99.6
150	40.98	41.84	42.16	42.18	44.74	43.85	44.07	43.29	140-150	24.76	15188	99.7,99.7
160	48.65	49.27	49.69	49.28	52.12	51.06	51.46	50.70	150-160	21.42	15209	99.9,99.9
170	56.27	56.29	56.75	56.24	59.05	57.99	58.55	57.62	160-170	15.20	15224	100,100
180	60.98	60.43	60.84	60.25	61.11	60.26	60.87	60.19	170-180	5.619	15230	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 10822 lm

%lum = 71.1%

%lamp = 71.1%

Conical surface Flux(120deg): 13535 lm

%lum = 88.9%

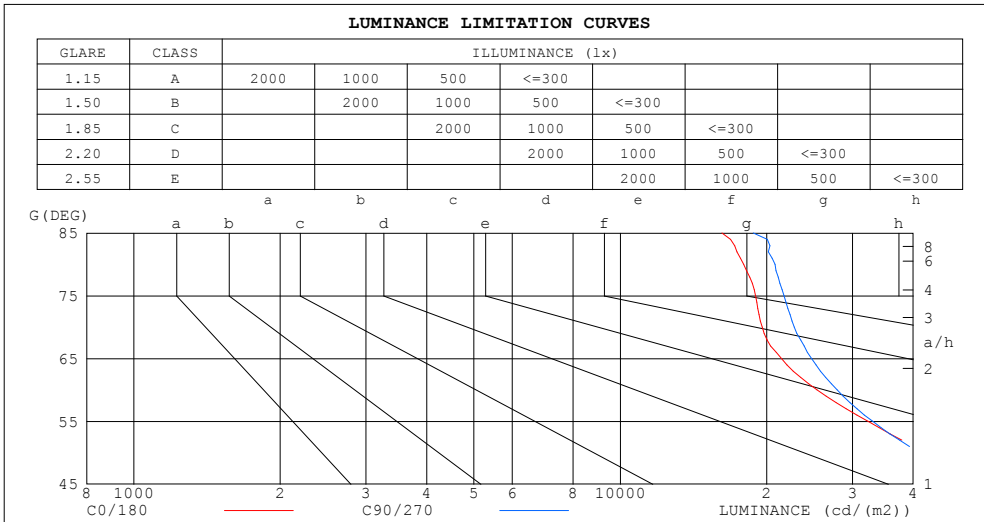
%lamp = 88.9%

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-10-16

□ 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:120.1V I:0.8347A P:99.66W PF:0.9945 Freq:59.98Hz Lamp Flux:15230x1 lm		
NAME: ASD-WHB5A-100D50	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.36*0.25	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	16166	18779
80	17938	20796
75	18979	21719
70	19572	22783
65	21432	24742
60	25380	27892
55	32263	33006
50	42381	41346
45	55882	55050

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-10-16

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:120.1V I:0.8347A P:99.66W PF:0.9945 Freq:59.98Hz Lamp Flux:15230x1 lm		
NAME: ASD-WHB5A-100D50	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.36*0.25	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	.254	.145	.046	.247	.141	.045	.234	.134	.043	.221	.128	.041	.210	.122	.039	
2.0	.243	.133	.041	.237	.130	.040	.225	.125	.039	.214	.120	.038	.204	.115	.036	
3.0	.228	.122	.036	.223	.119	.036	.213	.115	.035	.203	.111	.034	.194	.107	.033	
4.0	.214	.111	.033	.209	.110	.032	.200	.106	.032	.192	.103	.031	.184	.100	.030	
5.0	.201	.102	.030	.197	.101	.029	.189	.098	.029	.181	.096	.028	.174	.093	.028	
6.0	.189	.095	.027	.185	.093	.027	.178	.091	.027	.171	.089	.026	.165	.087	.026	
7.0	.178	.088	.025	.174	.087	.025	.168	.085	.024	.162	.083	.024	.156	.081	.024	
8.0	.168	.082	.023	.165	.081	.023	.159	.079	.023	.153	.078	.022	.148	.076	.022	
9.0	.159	.077	.021	.156	.076	.021	.151	.074	.021	.146	.073	.021	.141	.072	.021	
10.0	.150	.072	.020	.148	.071	.020	.143	.070	.020	.138	.069	.020	.134	.068	.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	.184	.164	.146	.158	.141	.126	.108	.097	.087	.062	.056	.051	.020	.018	.016	
2.0	.173	.140	.112	.149	.120	.097	.102	.083	.067	.059	.048	.039	.019	.016	.013	
3.0	.164	.122	.088	.141	.105	.076	.097	.073	.053	.056	.043	.032	.018	.014	.010	
4.0	.156	.108	.071	.134	.093	.062	.092	.065	.044	.053	.038	.026	.017	.012	.008	
5.0	.149	.097	.059	.128	.084	.052	.088	.059	.036	.051	.035	.022	.016	.011	.007	
6.0	.142	.089	.051	.122	.077	.044	.084	.054	.031	.049	.032	.019	.016	.010	.006	
7.0	.135	.082	.044	.116	.071	.038	.080	.050	.027	.047	.029	.016	.015	.010	.005	
8.0	.129	.076	.039	.111	.066	.034	.077	.046	.024	.045	.027	.014	.015	.009	.005	
9.0	.124	.071	.035	.107	.061	.030	.074	.043	.022	.043	.026	.013	.014	.008	.004	
10.0	.119	.067	.032	.102	.058	.028	.071	.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:2023-10-16

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:120.1V I:0.8347A P:99.66W PF:0.9945 Freq:59.98Hz Lamp Flux:15230x1 lm										
NAME: ASD-WHB5A-100D50					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp.					SUR.:0.36*0.25			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	24.2	25.5	24.5	25.7	25.9	24.3	25.6	24.5	25.8	26.0
3H	24.7	25.9	25.0	26.2	26.4	25.0	26.2	25.3	26.4	26.7
4H	25.0	26.2	25.3	26.4	26.7	25.3	26.5	25.6	26.7	27.0
6H	25.3	26.3	25.6	26.6	26.9	25.6	26.7	25.9	27.0	27.2
8H	25.3	26.4	25.7	26.7	27.0	25.7	26.7	26.1	27.0	27.3
12H	25.4	26.4	25.7	26.7	27.0	25.8	26.8	26.1	27.1	27.4
4H 2H	24.4	25.5	24.7	25.8	26.0	24.4	25.6	24.8	25.8	26.1
3H	25.1	26.1	25.5	26.4	26.7	25.4	26.3	25.7	26.6	27.0
4H	25.5	26.4	25.9	26.8	27.1	25.8	26.7	26.2	27.1	27.4
6H	25.9	26.7	26.3	27.1	27.5	26.3	27.1	26.7	27.4	27.8
8H	26.1	26.8	26.5	27.2	27.6	26.4	27.2	26.9	27.5	27.9
12H	26.1	26.8	26.6	27.2	27.6	26.6	27.2	27.0	27.6	28.0
8H 4H	25.7	26.4	26.1	26.8	27.2	26.0	26.7	26.4	27.1	27.5
6H	26.2	26.8	26.7	27.2	27.7	26.5	27.1	27.0	27.6	28.0
8H	26.4	26.9	26.9	27.4	27.9	26.8	27.3	27.2	27.7	28.2
12H	26.6	27.0	27.1	27.5	28.0	27.0	27.4	27.5	27.9	28.4
12H 4H	25.7	26.4	26.1	26.8	27.2	26.0	26.6	26.4	27.0	27.5
6H	26.2	26.8	26.7	27.2	27.7	26.6	27.1	27.0	27.5	28.0
8H	26.5	26.9	27.0	27.4	27.9	26.8	27.3	27.3	27.7	28.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.8					+ 0.6 / - 0.7				
1.5H	+ 0.6 / - 0.6					+ 0.6 / - 0.5				
2.0H	+ 1.5 / - 0.9					+ 1.3 / - 0.8				

CIE Pub.117, 15230 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 9.5)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-10-16

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:120.1V I:0.8347A P:99.66W PF:0.9945 Freq:59.98Hz Lamp Flux:15230x1 lm		
NAME: ASD-WHB5A-100D50	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.36*0.25	Shielding Angle:

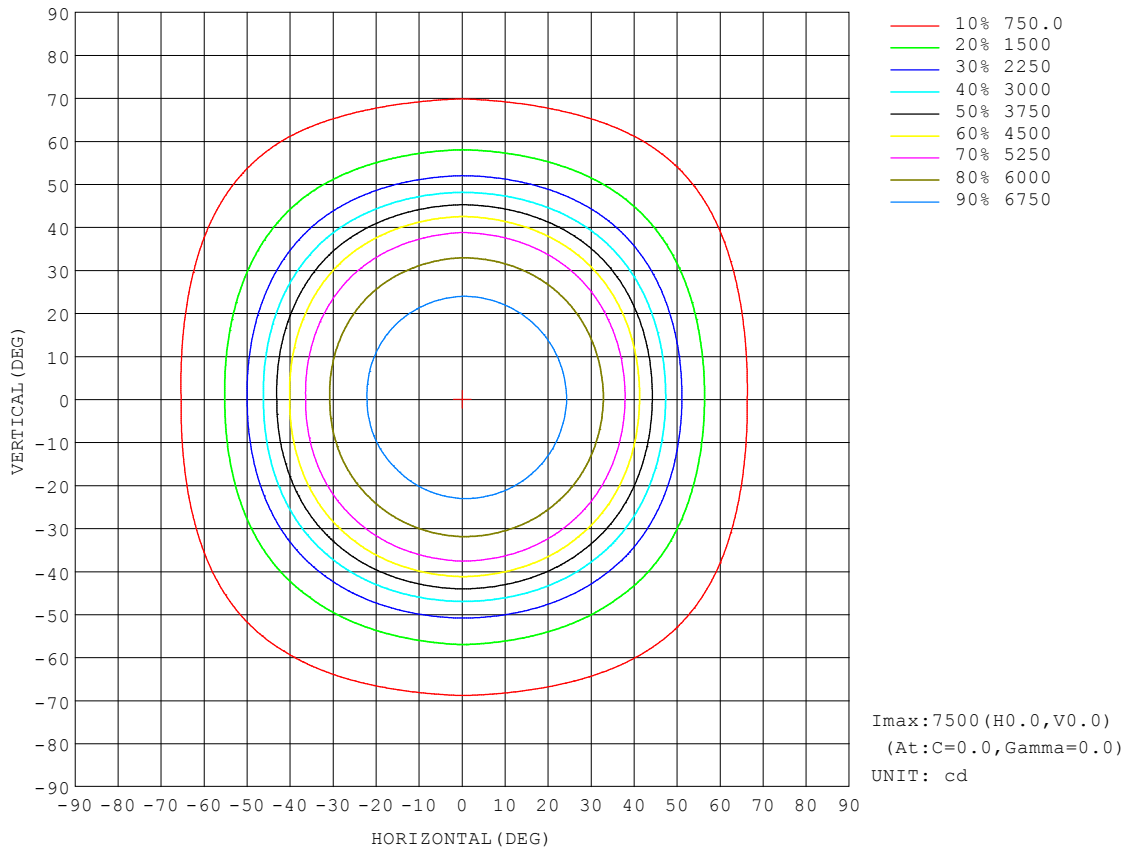
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	67	57	51	66	57	51	65	57	51	46
0.80	77	67	61	76	67	61	74	66	61	55
1.00	84	75	69	83	75	69	81	76	69	63
1.25	91	82	76	89	81	76	87	80	75	69
1.50	95	87	81	93	86	81	90	84	80	73
2.00	100	94	88	99	92	88	95	90	86	79
2.50	103	97	92	101	96	91	98	93	89	82
3.00	106	100	96	104	99	95	100	96	93	85
4.00	109	104	101	107	103	99	102	99	96	88
5.00	111	107	104	108	105	102	104	101	99	90
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:2023-10-16

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:120.1V I:0.8347A P:99.66W PF:0.9945 Freq:59.98Hz Lamp Flux:15230x1 lm		
NAME: ASD-WHB5A-100D50	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.36*0.25	Shielding Angle:

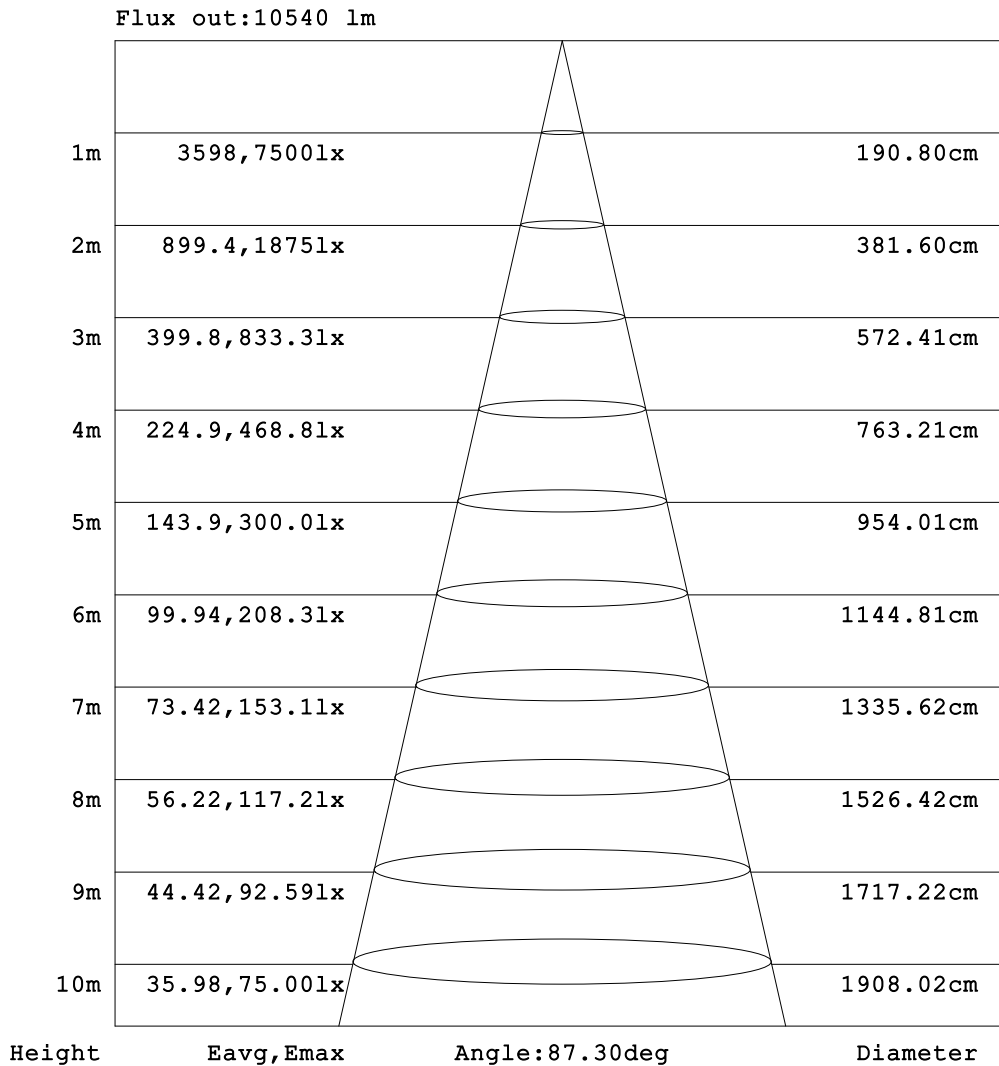


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 27DEG  
 Operators: lianghaizhu  
 Test Date: 2023-10-16

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:120.1V I:0.8347A P:99.66W PF:0.9945 Freq:59.98Hz Lamp Flux:15230x1 lm		
NAME: ASD-WHB5A-100D50	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.36*0.25	Shielding Angle:



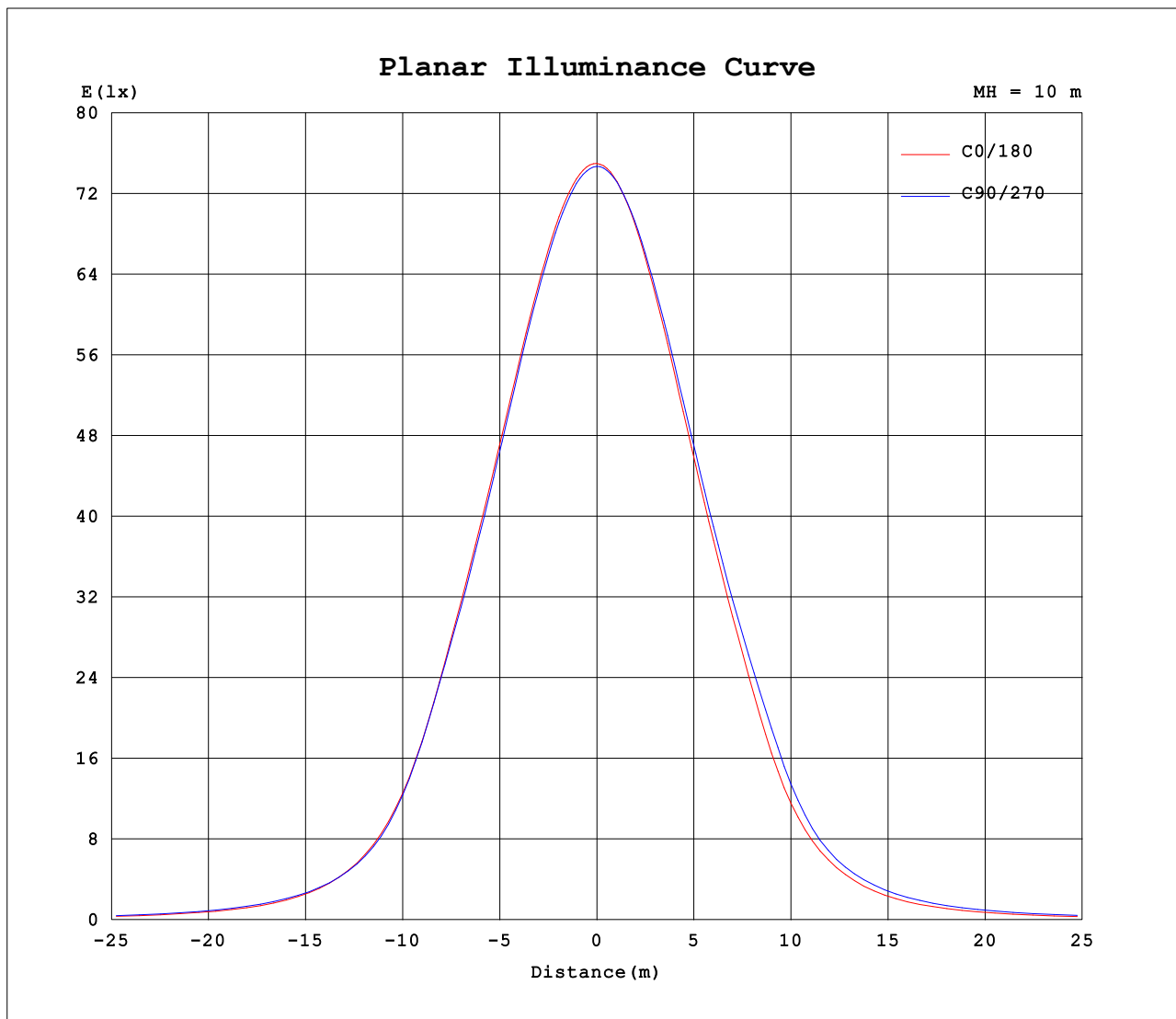
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-10-16

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: 2023-10-16

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:120.1V I:0.8347A P:99.66W PF:0.9945 Freq:59.98Hz Lamp Flux:15230x1 lm		
NAME: ASD-WHB5A-100D50	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.36*0.25	Shielding Angle:

Table--1

UNIT: cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	7500	7482	7470	7459	7500	7482	7470	7459										
5	7479	7455	7435	7417	7453	7449	7443	7442										
10	7395	7359	7335	7307	7337	7346	7352	7354										
15	7238	7198	7173	7128	7147	7178	7197	7204										
20	7013	6967	6941	6878	6885	6936	6982	6982										
25	6703	6647	6612	6547	6533	6615	6679	6683										
30	6297	6219	6191	6101	6081	6193	6281	6285										
35	5730	5644	5636	5514	5467	5637	5768	5752										
40	4807	4720	4790	4608	4521	4835	5041	4952										
45	3556	3447	3503	3340	3276	3598	3812	3713										
50	2452	2355	2392	2278	2245	2463	2596	2544										
55	1665	1618	1704	1560	1519	1705	1831	1752										
60	1142	1156	1255	1111	1055	1216	1331	1237										
65	815	862	941	832	764	898	991	906										
70	602	657	701	644	579	678	743	677										
75	442	472	506	477	431	496	544	487										
80	280	288	325	305	283	317	363	296										
85	127	108	147	124	111	159	202	128										
90	6.95	5.63	5.57	5.68	6.19	8.25	11.2	7.13										
95	6.48	6.78	6.95	6.88	7.50	7.32	7.23	7.06										
100	8.27	8.66	9.00	8.87	9.76	9.48	9.43	9.18										
105	10.6	11.1	11.6	11.4	12.5	12.1	12.1	11.7										
110	13.4	14.0	14.5	14.4	15.5	15.0	15.1	14.5										
115	16.5	17.1	17.7	17.6	18.8	18.2	18.3	17.7										
120	19.9	20.6	21.2	21.1	22.5	21.8	21.8	21.2										
125	23.6	24.3	24.9	24.8	26.4	25.6	25.6	25.1										
130	27.4	27.9	28.6	28.4	30.4	29.5	29.6	28.9										
135	31.2	31.6	32.2	32.1	34.3	33.3	33.5	32.7										
140	34.5	35.1	35.6	35.6	37.9	37.0	37.2	36.4										
145	37.8	38.4	38.8	39.0	41.3	40.5	40.6	39.9										
150	41.0	41.8	42.2	42.2	44.7	43.9	44.1	43.3										
155	44.8	45.4	45.8	45.6	48.3	47.3	47.6	46.9										
160	48.7	49.3	49.7	49.3	52.1	51.1	51.5	50.7										
165	52.6	53.0	53.6	53.0	56.0	54.9	55.4	54.7										
170	56.3	56.3	56.8	56.2	59.0	58.0	58.5	57.6										
175	59.2	59.0	59.5	58.9	60.9	59.9	60.4	59.6										
180	61.0	60.4	60.8	60.2	61.1	60.3	60.9	60.2										

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:27DEG  
 Operators:lianghaizhu  
 Test Date:2023-10-16

□ 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: