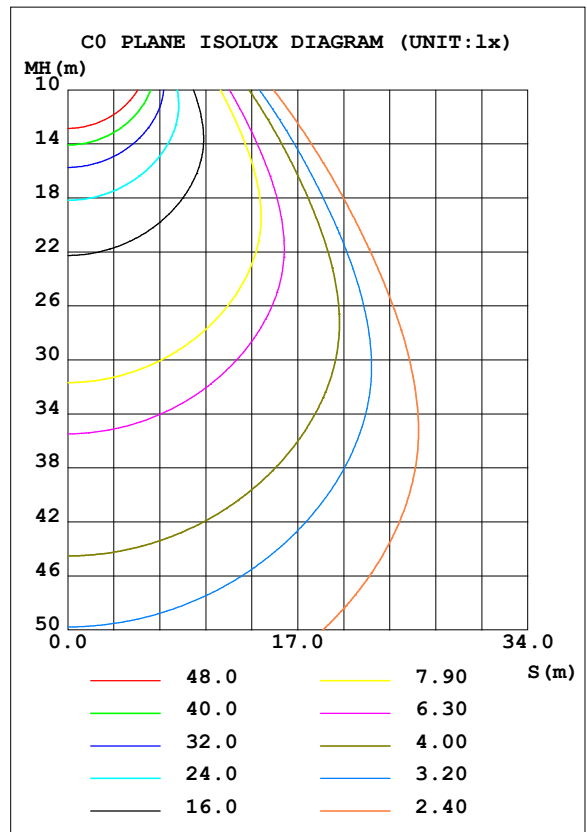
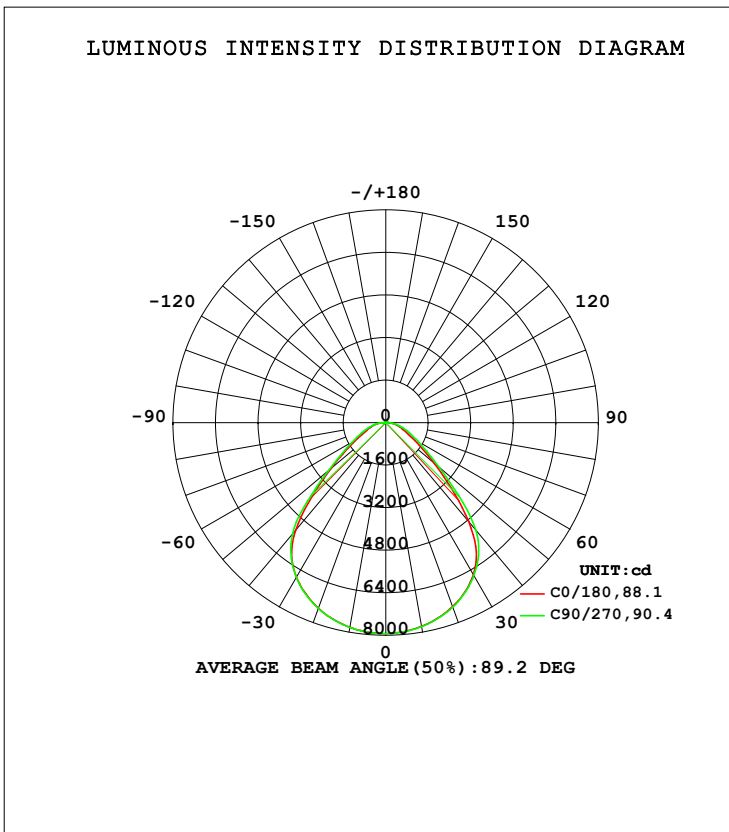


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.6V I:0.8409A P:100.8W PF:0.9941 Freq:59.98Hz Lamp Flux:16551.6x1 lm		
NAME: ASD-WHB5A-PRO-100-100W-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP.	SUR.:0.36*0.25	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 164.13 lm/W			
MODEL	ASD-WHB5A-PRO-100	I _{max} (cd)	7936	S/MH (C0/180)	1.25
NOMINAL POWER (W)	100	LOR (%)	100.0	S/MH (C90/270)	1.25
RATED VOLTAGE (V)	120-277	TOTAL FLUX (lm)	16552	<input type="checkbox"/> UP, DN (C0-180)	0.5, 48.8
NOMINAL FLUX (lm)	16551.6	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 50.2
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	1.30



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-08-25

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	7779	7782	7792	7818	7816	7826	7819	7788	0- 10	751.0	751.0	4.54,4.54
20	7360	7352	7377	7427	7425	7450	7431	7372	10- 20	2155	2906	17.6,17.6
30	6598	6595	6636	6721	6719	6749	6724	6626	20- 30	3261	6167	37.3,37.3
40	4848	5011	5269	5396	5265	5445	5453	5081	30- 40	3785	9952	60.1,60.1
50	2396	2449	2642	2783	2716	2840	2829	2508	40- 50	2986	12938	78.2,78.2
60	1142	1218	1390	1350	1272	1388	1450	1251	50- 60	1678	14615	88.3,88.3
70	642.4	713.7	789.7	777.4	698.5	790.9	821.3	721.7	60- 70	978.9	15594	94.2,94.2
80	325.9	343.4	380.7	414.4	382.6	420.3	409.0	351.1	70- 80	591.2	16186	97.8,97.8
90	5.953	6.086	6.022	10.89	9.511	15.20	12.10	6.102	80- 90	197.6	16383	99,99
100	9.774	9.883	9.861	9.081	8.992	8.955	9.286	9.749	90-100	8.340	16392	99,99
110	15.62	15.78	15.86	14.71	14.39	14.35	15.03	15.46	100-110	12.83	16404	99.1,99.1
120	23.03	23.15	23.29	21.86	21.72	21.64	22.52	23.00	110-120	18.50	16423	99.2,99.2
130	31.35	31.37	31.68	30.05	31.44	31.25	32.41	32.69	120-130	24.06	16447	99.4,99.4
140	39.09	39.32	39.35	38.08	42.02	42.00	42.99	43.24	130-140	27.94	16475	99.5,99.5
150	46.54	47.01	46.79	45.65	51.13	51.25	52.18	52.40	140-150	28.19	16503	99.7,99.7
160	55.34	55.76	55.65	53.76	60.25	60.04	61.20	61.39	150-160	24.57	16528	99.9,99.9
170	64.77	64.50	64.41	62.68	67.61	67.03	67.86	67.61	160-170	17.49	16545	100,100
180	70.24	69.36	69.67	68.82	70.25	69.36	69.67	68.83	170-180	6.447	16552	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 11639 lm

%lum = 70.3%

%lamp = 70.3%

Conical surface Flux(120deg): 14615 lm

%lum = 88.3%

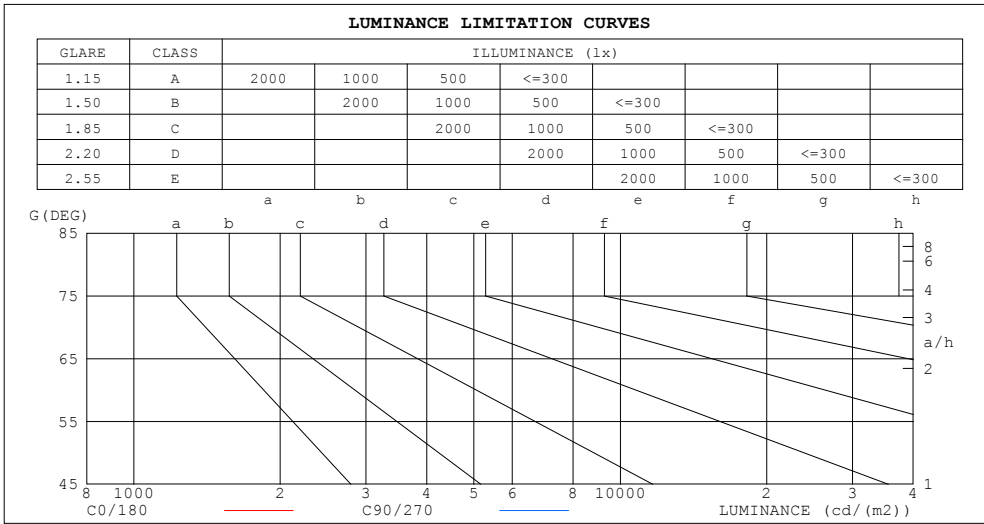
%lamp = 88.3%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-08-25

□ 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:120.6V I:0.8409A P:100.8W PF:0.9941 Freq:59.98Hz Lamp Flux:16551.6x1 lm		
NAME: ASD-WHB5A-PRO-100-100W-5000K	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	160431	239679
80	208536	243617
75	209696	247381
70	208679	256537
65	220511	274954
60	253717	308876
55	317176	364533
50	414200	456741
45	548682	610654

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-08-25

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:120.6V I:0.8409A P:100.8W PF:0.9941 Freq:59.98Hz Lamp Flux:16551.6x1 lm		
NAME: ASD-WHB5A-PRO-100-100W-5000K	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	.259 .147 .047	.251 .143 .046	.238 .136 .044	.225 .130 .042	.214 .124 .040	
2.0	.246 .135 .041	.239 .132 .041	.228 .127 .039	.217 .122 .038	.207 .117 .037	
3.0	.231 .123 .037	.225 .121 .036	.215 .116 .035	.205 .112 .034	.196 .109 .034	
4.0	.216 .112 .033	.211 .111 .033	.202 .107 .032	.194 .104 .031	.186 .101 .031	
5.0	.202 .103 .030	.198 .102 .030	.190 .099 .029	.182 .096 .029	.175 .094 .028	
6.0	.190 .095 .027	.186 .094 .027	.179 .092 .027	.172 .089 .026	.166 .087 .026	
7.0	.179 .088 .025	.175 .087 .025	.169 .085 .025	.163 .083 .024	.157 .082 .024	
8.0	.169 .082 .023	.166 .082 .023	.160 .080 .023	.154 .078 .023	.149 .077 .022	
9.0	.159 .077 .022	.157 .076 .021	.151 .075 .021	.146 .073 .021	.142 .072 .021	
10.0	.151 .072 .020	.148 .072 .020	.144 .070 .020	.139 .069 .020	.135 .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	.185 .164 .146	.158 .141 .126	.108 .097 .087	.062 .056 .051	.020 .018 .016	
2.0	.174 .140 .111	.149 .121 .096	.102 .083 .067	.059 .049 .039	.019 .016 .013	
3.0	.165 .122 .088	.141 .105 .076	.097 .073 .053	.056 .043 .031	.018 .014 .010	
4.0	.157 .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	.136 .082 .044	.117 .071 .038	.081 .050 .027	.047 .029 .016	.015 .010 .005	
8.0	.130 .076 .039	.112 .066 .034	.077 .046 .024	.045 .027 .014	.015 .009 .005	
9.0	.124 .071 .035	.107 .062 .031	.074 .043 .022	.043 .026 .013	.014 .008 .004	
10.0	.119 .067 .032	.103 .058 .028	.071 .041 .020	.042 .024 .012	.013 .008 .004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-08-25

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:120.6V I:0.8409A P:100.8W PF:0.9941 Freq:59.98Hz Lamp Flux:16551.6x1 lm										
NAME: ASD-WHB5A-PRO-100-100W-5000K					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	32.0	33.4	32.3	33.6	33.8	32.5	33.8	32.8	34.1	34.3
3H	32.6	33.9	32.9	34.1	34.3	33.3	34.5	33.6	34.7	35.0
4H	33.0	34.1	33.3	34.4	34.7	33.6	34.8	34.0	35.1	35.3
6H	33.3	34.4	33.6	34.6	34.9	34.0	35.1	34.3	35.3	35.6
8H	33.4	34.4	33.7	34.7	35.0	34.1	35.2	34.5	35.4	35.7
12H	33.5	34.5	33.8	34.8	35.1	34.2	35.2	34.6	35.5	35.8
4H 2H	32.3	33.4	32.6	33.7	33.9	32.7	33.8	33.0	34.1	34.3
3H	33.1	34.1	33.4	34.4	34.7	33.6	34.6	34.0	34.9	35.3
4H	33.6	34.5	34.0	34.8	35.2	34.2	35.1	34.5	35.4	35.7
6H	34.0	34.8	34.4	35.2	35.6	34.7	35.5	35.1	35.8	36.2
8H	34.2	35.0	34.6	35.3	35.7	34.9	35.6	35.3	36.0	36.4
12H	34.3	35.0	34.7	35.4	35.8	35.0	35.7	35.5	36.1	36.5
8H 4H	33.8	34.5	34.2	34.9	35.3	34.3	35.1	34.7	35.4	35.8
6H	34.4	35.0	34.8	35.4	35.9	35.0	35.6	35.4	36.0	36.4
8H	34.7	35.2	35.1	35.6	36.1	35.3	35.8	35.7	36.2	36.7
12H	34.8	35.3	35.3	35.7	36.2	35.5	36.0	36.0	36.4	36.9
12H 4H	33.8	34.5	34.2	34.9	35.3	34.3	35.0	34.8	35.4	35.8
6H	34.5	35.0	34.9	35.4	35.9	35.0	35.5	35.5	36.0	36.4
8H	34.8	35.2	35.2	35.7	36.2	35.3	35.8	35.8	36.3	36.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.7					+ 0.5 / - 0.6				
1.5H	+ 0.6 / - 0.5					+ 0.6 / - 0.5				
2.0H	+ 1.3 / - 0.8					+ 1.3 / - 0.7				

CIE Pub.117, 16552 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 9.8)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-08-25

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:120.6V I:0.8409A P:100.8W PF:0.9941 Freq:59.98Hz Lamp Flux:16551.6x1 lm		
NAME: ASD-WHB5A-PRO-100-100W-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP.	SUR.:0.36*0.25	Shielding Angle:

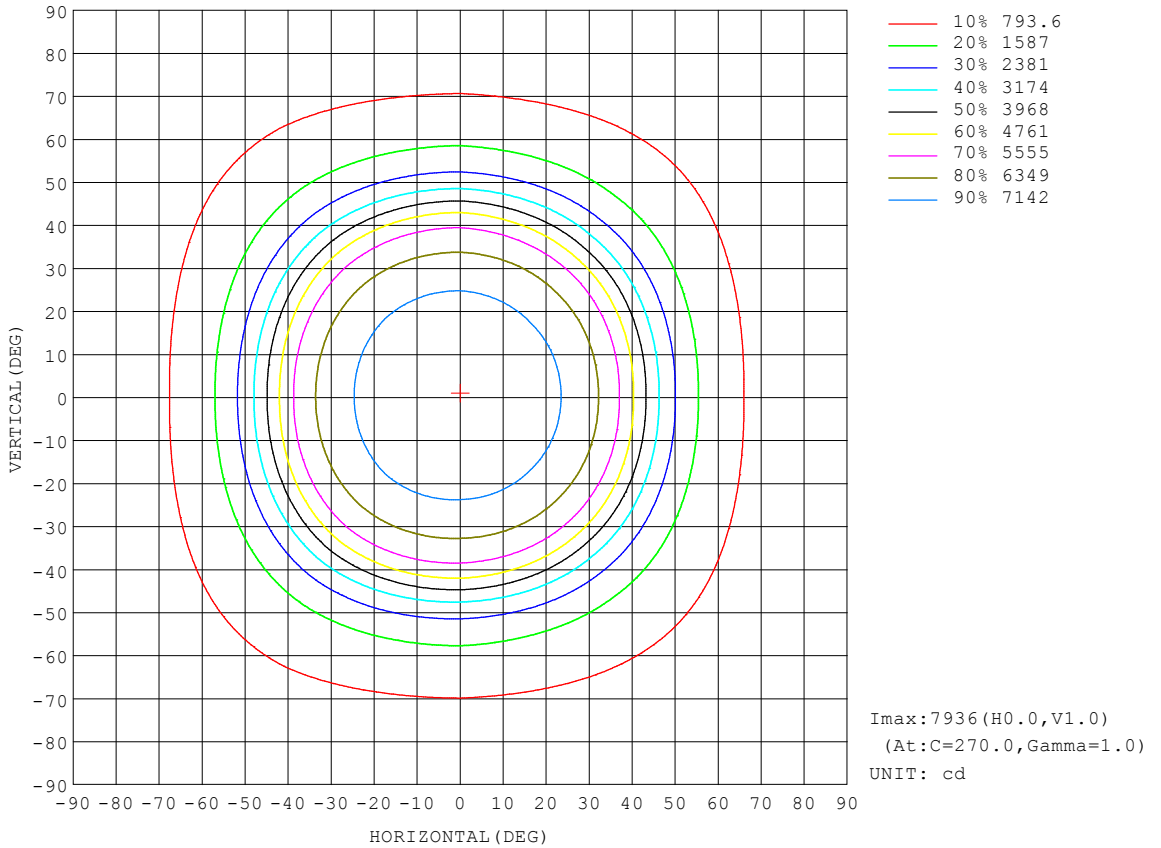
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	67	57	51	66	56	51	65	56	50	45
0.80	76	67	61	75	66	60	74	65	60	54
1.00	84	75	69	83	74	69	81	75	68	62
1.25	90	82	76	89	81	75	86	80	75	68
1.50	94	87	81	93	86	80	90	84	79	73
2.00	100	93	88	98	92	87	95	90	85	78
2.50	103	97	92	101	95	91	97	93	89	81
3.00	106	100	96	104	98	94	100	96	92	84
4.00	109	104	100	106	102	99	102	99	96	88
5.00	111	107	103	108	105	102	104	101	98	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:2023-08-25

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:120.6V I:0.8409A P:100.8W PF:0.9941 Freq:59.98Hz Lamp Flux:16551.6x1 lm		
NAME: ASD-WHB5A-PRO-100-100W-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP.	SUR.:0.36*0.25	Shielding Angle:

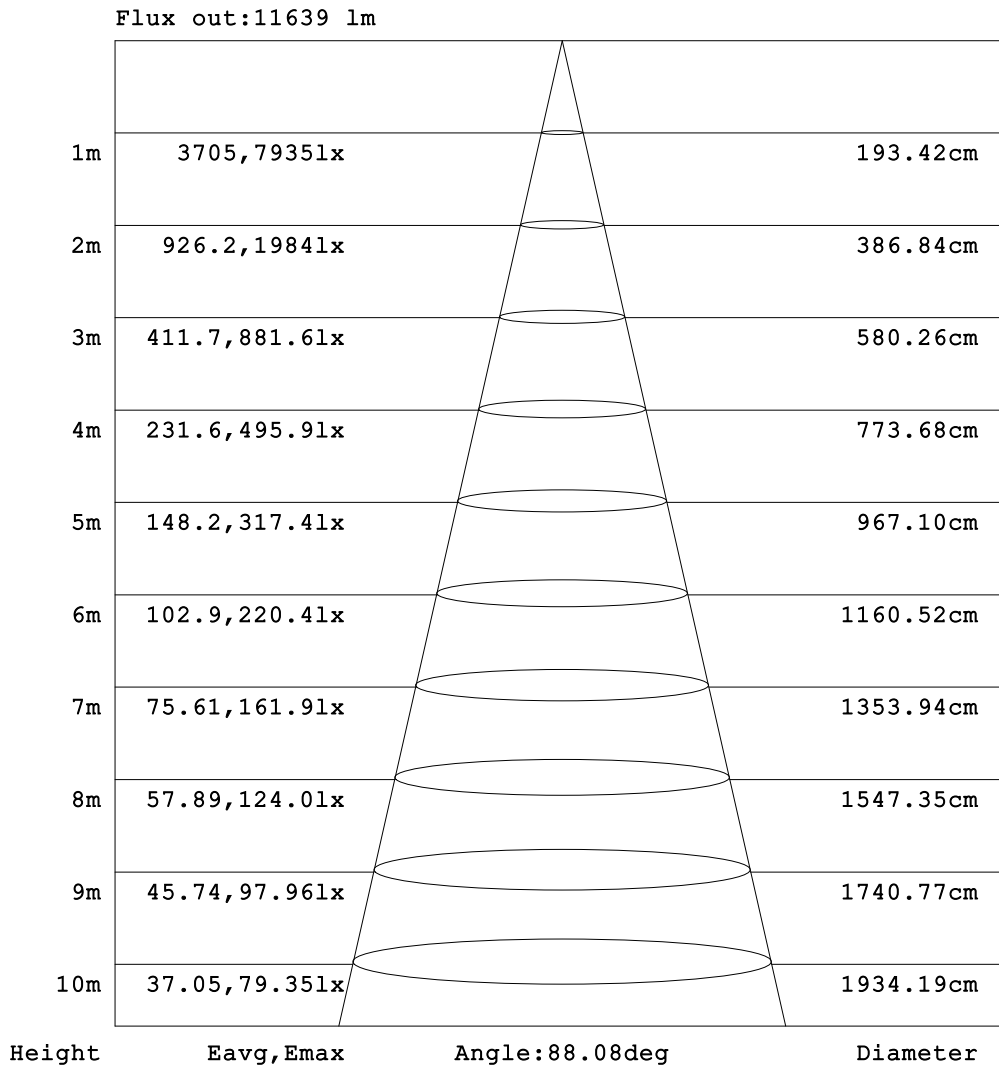


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-08-25

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:120.6V I:0.8409A P:100.8W PF:0.9941 Freq:59.98Hz Lamp Flux:16551.6x1 lm		
NAME: ASD-WHB5A-PRO-100-100W-5000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP.	SUR.:0.36*0.25	Shielding Angle:

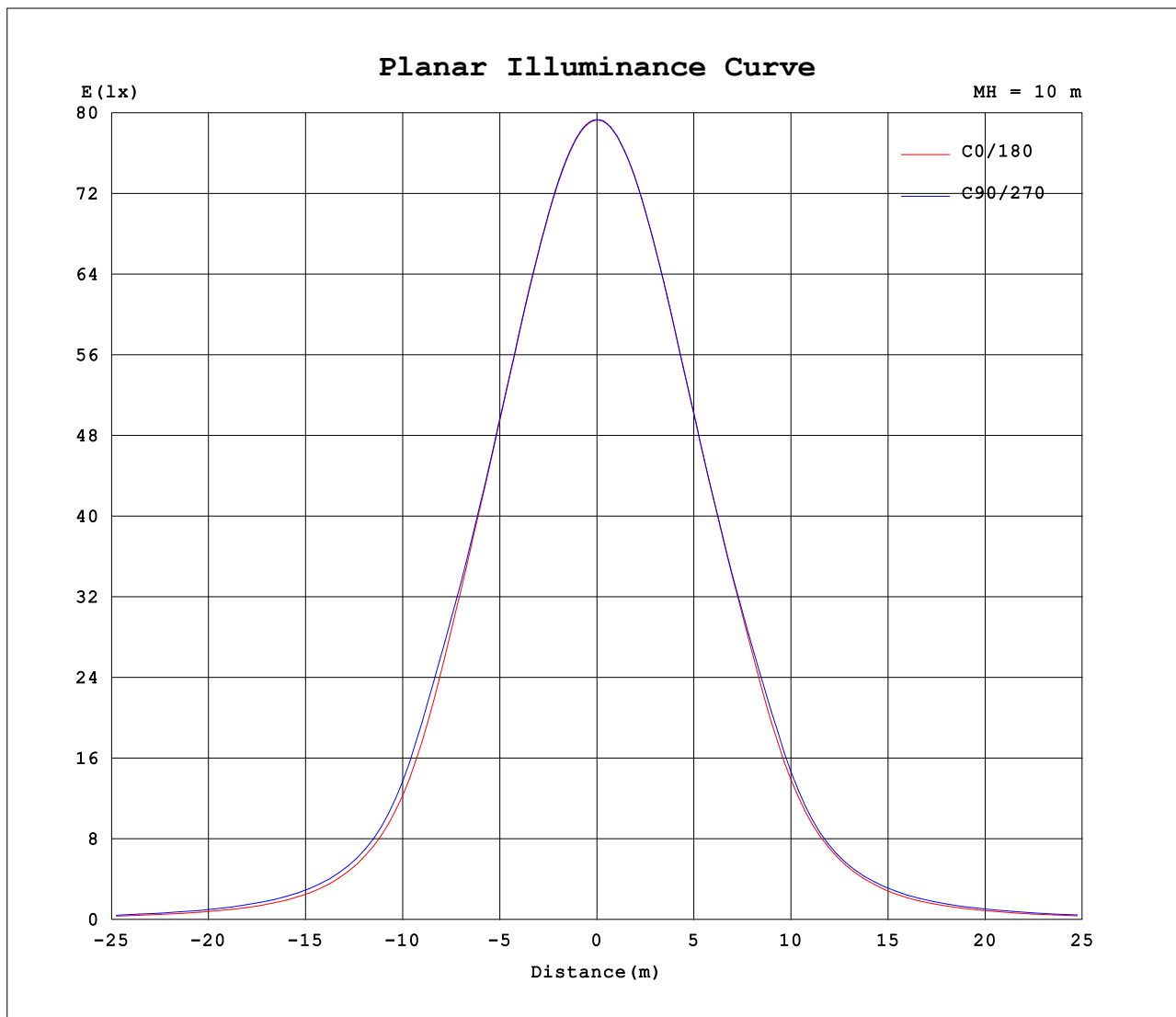


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-08-25

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: 2023-08-25

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:120.6V I:0.8409A P:100.8W PF:0.9941 Freq:59.98Hz Lamp Flux:16551.6x1 lm		
NAME: ASD-WHB5A-PRO-100-100W-5000K	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	7930	7933	7934	7935	7930	7933	7934	7935											
5	7889	7889	7897	7906	7906	7911	7908	7892											
10	7779	7782	7792	7818	7816	7826	7819	7788											
15	7606	7599	7616	7655	7658	7671	7661	7614											
20	7360	7352	7377	7427	7425	7450	7431	7372											
25	7035	7026	7055	7121	7115	7146	7126	7047											
30	6598	6595	6636	6721	6719	6749	6724	6626											
35	5945	6004	6084	6193	6174	6227	6199	6045											
40	4848	5011	5269	5396	5265	5445	5453	5081											
45	3492	3590	3886	4062	3930	4149	4159	3666											
50	2396	2449	2642	2783	2716	2840	2829	2508											
55	1637	1694	1882	1921	1862	1958	1995	1745											
60	1142	1218	1390	1350	1272	1388	1450	1251											
65	839	918	1046	1001	917	1025	1087	939											
70	642	714	790	777	698	791	821	722											
75	488	531	576	598	539	604	607	538											
80	326	343	381	414	383	420	409	351											
85	126	137	188	227	201	234	223	150											
90	5.95	6.09	6.02	10.9	9.51	15.2	12.1	6.10											
95	7.72	7.70	7.61	7.07	7.12	7.03	7.24	7.66											
100	9.77	9.88	9.86	9.08	8.99	8.95	9.29	9.75											
105	12.5	12.6	12.7	11.7	11.4	11.4	11.9	12.4											
110	15.6	15.8	15.9	14.7	14.4	14.3	15.0	15.5											
115	19.1	19.3	19.4	18.1	17.8	17.8	18.5	19.0											
120	23.0	23.1	23.3	21.9	21.7	21.6	22.5	23.0											
125	27.2	27.3	27.5	26.0	26.3	26.1	27.1	27.6											
130	31.3	31.4	31.7	30.1	31.4	31.3	32.4	32.7											
135	35.4	35.4	35.6	34.1	36.9	36.6	37.7	37.9											
140	39.1	39.3	39.4	38.1	42.0	42.0	43.0	43.2											
145	42.8	43.3	43.0	42.0	46.9	47.1	47.9	48.2											
150	46.5	47.0	46.8	45.6	51.1	51.3	52.2	52.4											
155	50.7	51.2	51.0	49.5	55.4	55.2	56.4	56.6											
160	55.3	55.8	55.7	53.8	60.3	60.0	61.2	61.4											
165	60.2	60.5	60.3	58.4	64.4	64.0	65.2	65.1											
170	64.8	64.5	64.4	62.7	67.6	67.0	67.9	67.6											
175	68.5	67.8	67.8	66.4	69.6	68.9	69.5	69.0											
180	70.2	69.4	69.7	68.8	70.2	69.4	69.7	68.8											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-08-25

□ 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: