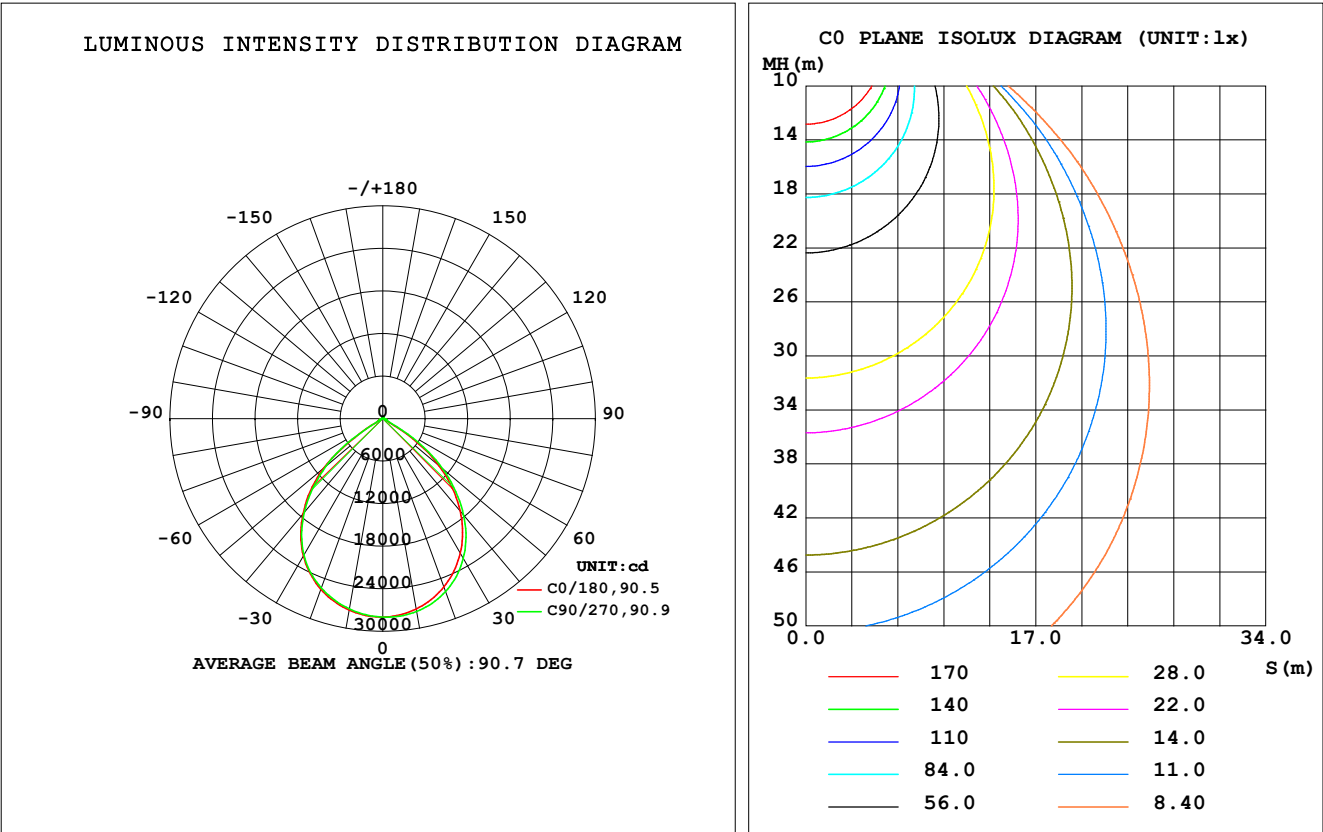


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.5V I:2.721A P:326.7W PF:0.9969 Freq:59.98Hz Lamp Flux:52194.1x1 lm		
NAME: ASD-WHB5B-ST-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.515*0.36	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 159.74 lm/W
MODEL	ASD-WHB5B-ST-320	I _{max} (cd)	28006	S/MH(C0/180)	1.19	
NOMINAL POWER(W)	320	LOR(%)	100.0	S/MH(C90/270)	1.19	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	52194	□ UP,DN(C0-180)	0.5,50.2	
NOMINAL FLUX(lm)	52194.1	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.5,48.8	
LAMPS INSIDE	1	□ up(%)	1.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	120	□ 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:2024-06-11

□ 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	2726	2743	2761	2763	2742	2728	2725	2719	0- 10	2643	2643	5.06,5.06
20	2524	2560	2595	2600	2559	2540	2540	2517	10- 20	7503	10146	19.4,19.4
30	2188	2218	2273	2271	2240	2212	2224	2175	20- 30	11074	21220	40.7,40.7
40	1699	1719	1774	1774	1750	1721	1720	1664	30- 40	12441	33662	64.5,64.5
50	1042	1068	1104	1120	1090	1064	1050	996.6	40- 50	10857	44519	85.3,85.3
60	118.0	297.7	230.9	297.0	108.4	242.8	110.4	215.7	50- 60	5692	50210	96.2,96.2
70	53.36	50.97	54.32	57.14	59.90	53.20	51.13	44.00	60- 70	862.7	51073	97.9,97.9
80	18.29	42.83	30.33	58.37	20.55	37.13	19.00	30.78	70- 80	458.3	51531	98.7,98.7
90	1.188	1.257	1.727	1.216	1.110	1.197	1.207	1.222	80- 90	146.3	51678	99,99
100	2.527	2.512	2.489	2.435	2.356	2.469	2.560	2.547	90-100	19.36	51697	99,99
110	4.565	4.511	4.498	4.399	4.513	4.657	4.762	4.766	100-110	36.69	51734	99.1,99.1
120	7.144	7.031	7.043	6.894	7.234	7.363	7.517	7.488	110-120	58.14	51792	99.2,99.2
130	9.818	9.677	9.732	9.525	10.02	10.10	10.36	10.24	120-130	76.71	51868	99.4,99.4
140	12.38	12.18	12.21	12.00	12.65	12.71	13.02	12.84	130-140	86.61	51955	99.5,99.5
150	15.10	14.91	14.97	14.68	15.58	15.60	15.97	15.73	140-150	86.75	52042	99.7,99.7
160	17.98	17.96	18.03	17.70	18.47	18.43	18.83	18.57	150-160	77.29	52119	99.9,99.9
170	20.48	20.36	20.53	20.11	20.73	20.54	20.97	20.62	160-170	54.90	52174	100,100
180	21.56	21.41	21.73	21.31	21.58	21.40	21.75	21.30	170-180	20.04	52194	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 39493 lm

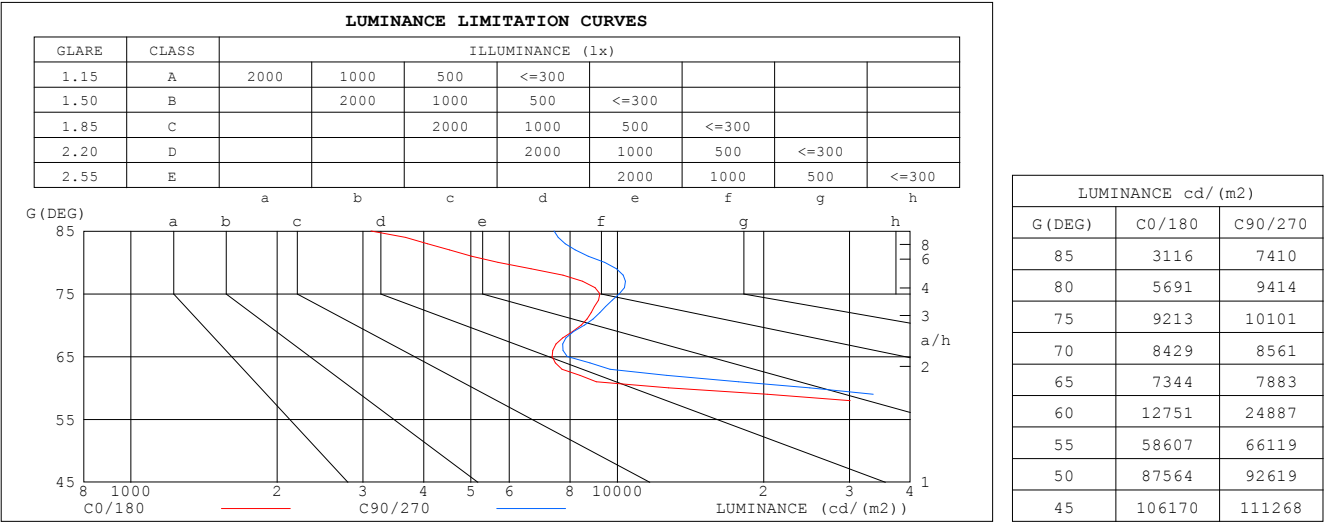
%lum = 75.7%
%lamp = 75.7%

Conical surface Flux(120deg): 50210 lm

%lum = 96.2%
%lamp = 96.2%

LUMINANCE LIMITATION CURVES

Test:U:120.5V I:2.721A P:326.7W PF:0.9969 Freq:59.98Hz Lamp Flux:52194.1x1 lm		
NAME: ASD-WHB5B-ST-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.515*0.36	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu
Test Date:2024-06-11

☐ 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:2.721A P:326.7W PF:0.9969 Freq:59.98Hz Lamp Flux:52194.1x1 lm					
NAME: ASD-WHB5B-ST-320			TYPE:		WEIGHT:
SPEC.: 320W-5000K			DIM.:		SERIAL No.:
MFR.: ASD Lighting Corp.			SUR.:0.515*0.36		Shielding Angle:

☐ cc	80%			70%			50%			30%			10%			0
☐ w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
☐ fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.225	.128	.041	.218	.124	.040	.205	.117	.038	.192	.111	.036	.181	.105	.034	
2.0	.220	.120	.037	.214	.118	.036	.202	.112	.035	.191	.107	.034	.182	.103	.032	
3.0	.211	.112	.034	.205	.110	.033	.195	.106	.032	.186	.102	.031	.177	.098	.030	
4.0	.200	.104	.031	.196	.102	.030	.187	.099	.030	.178	.096	.029	.171	.093	.028	
5.0	.190	.097	.028	.186	.095	.028	.178	.093	.027	.171	.090	.027	.164	.087	.026	
6.0	.180	.090	.026	.176	.089	.026	.169	.087	.025	.163	.085	.025	.157	.082	.024	
7.0	.171	.084	.024	.167	.083	.024	.161	.081	.023	.155	.080	.023	.150	.078	.023	
8.0	.162	.079	.022	.159	.078	.022	.153	.077	.022	.148	.075	.022	.143	.073	.021	
9.0	.154	.074	.021	.151	.074	.021	.146	.072	.020	.141	.071	.020	.137	.069	.020	
10.0	.146	.070	.019	.144	.070	.019	.139	.068	.019	.135	.067	.019	.131	.066	.019	

☐ cc	80%			70%			50%			30%			10%			0
☐ w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
☐ 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	.182	.164	.149	.156	.141	.128	.107	.097	.088	.061	.056	.051	.020	.018	.017	
2.0	.170	.140	.114	.146	.120	.099	.100	.083	.069	.058	.048	.040	.018	.016	.013	
3.0	.161	.122	.090	.138	.105	.078	.095	.073	.055	.055	.043	.032	.018	.014	.011	
4.0	.153	.108	.073	.131	.093	.064	.090	.065	.045	.052	.038	.027	.017	.012	.009	
5.0	.145	.097	.061	.125	.084	.053	.086	.058	.037	.050	.034	.022	.016	.011	.007	
6.0	.139	.088	.052	.119	.076	.045	.082	.053	.032	.048	.031	.019	.015	.010	.006	
7.0	.133	.081	.045	.114	.070	.039	.079	.049	.028	.046	.029	.016	.015	.009	.005	
8.0	.127	.075	.040	.109	.065	.034	.076	.046	.024	.044	.027	.015	.014	.009	.005	
9.0	.122	.070	.035	.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:2024-06-11

☐ 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:2.721A P:326.7W PF:0.9969 Freq:59.98Hz Lamp Flux:52194.1x1 lm										
NAME: ASD-WHB5B-ST-320					TYPE:			WEIGHT:		
SPEC.: 320W-5000K					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp.					SUR.:0.515*0.36			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	26.2	27.5	26.5	27.7	27.9	26.6	27.8	26.8	28.0	28.2
3H	26.1	27.2	26.4	27.5	27.7	26.4	27.5	26.7	27.8	28.0
4H	26.0	27.1	26.3	27.3	27.6	26.3	27.4	26.6	27.7	27.9
6H	26.0	26.9	26.3	27.2	27.5	26.3	27.3	26.6	27.6	27.8
8H	25.9	26.9	26.2	27.2	27.4	26.2	27.2	26.6	27.5	27.8
12H	25.9	26.8	26.2	27.1	27.4	26.2	27.1	26.6	27.4	27.7
4H 2H	26.1	27.2	26.4	27.5	27.7	26.4	27.5	26.7	27.7	28.0
3H	26.0	26.9	26.3	27.2	27.5	26.3	27.2	26.6	27.5	27.8
4H	26.0	26.8	26.3	27.1	27.4	26.2	27.1	26.6	27.4	27.7
6H	25.9	26.6	26.3	27.0	27.4	26.2	27.0	26.6	27.3	27.7
8H	25.9	26.6	26.3	26.9	27.3	26.2	26.9	26.6	27.3	27.7
12H	25.8	26.5	26.3	26.8	27.3	26.2	26.8	26.6	27.2	27.6
8H 4H	25.9	26.5	26.3	26.9	27.3	26.1	26.8	26.6	27.2	27.6
6H	25.8	26.4	26.3	26.8	27.3	26.2	26.7	26.6	27.1	27.6
8H	25.8	26.3	26.3	26.8	27.2	26.2	26.7	26.6	27.1	27.6
12H	25.8	26.2	26.3	26.7	27.2	26.2	26.6	26.7	27.0	27.5
12H 4H	25.8	26.4	26.2	26.8	27.2	26.1	26.7	26.5	27.1	27.5
6H	25.8	26.3	26.3	26.7	27.2	26.1	26.6	26.6	27.1	27.5
8H	25.8	26.2	26.3	26.7	27.2	26.2	26.6	26.7	27.0	27.5
Variations with the observer position at spacings:										
S = 1.0H	+ 1.6 / - 2.6					+ 1.3 / - 2.0				
1.5H	+ 0.7 / - 1.1					+ 0.7 / - 1.0				
2.0H	+ 3.2 / - 8.1					+ 3.0 / - 7.1				

CIE Pub.117, 52194 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 13.7$)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2024-06-11

☐ 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:2.721A P:326.7W PF:0.9969 Freq:59.98Hz Lamp Flux:52194.1x1 lm		
NAME: ASD-WHB5B-ST-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.515*0.36	Shielding Angle:

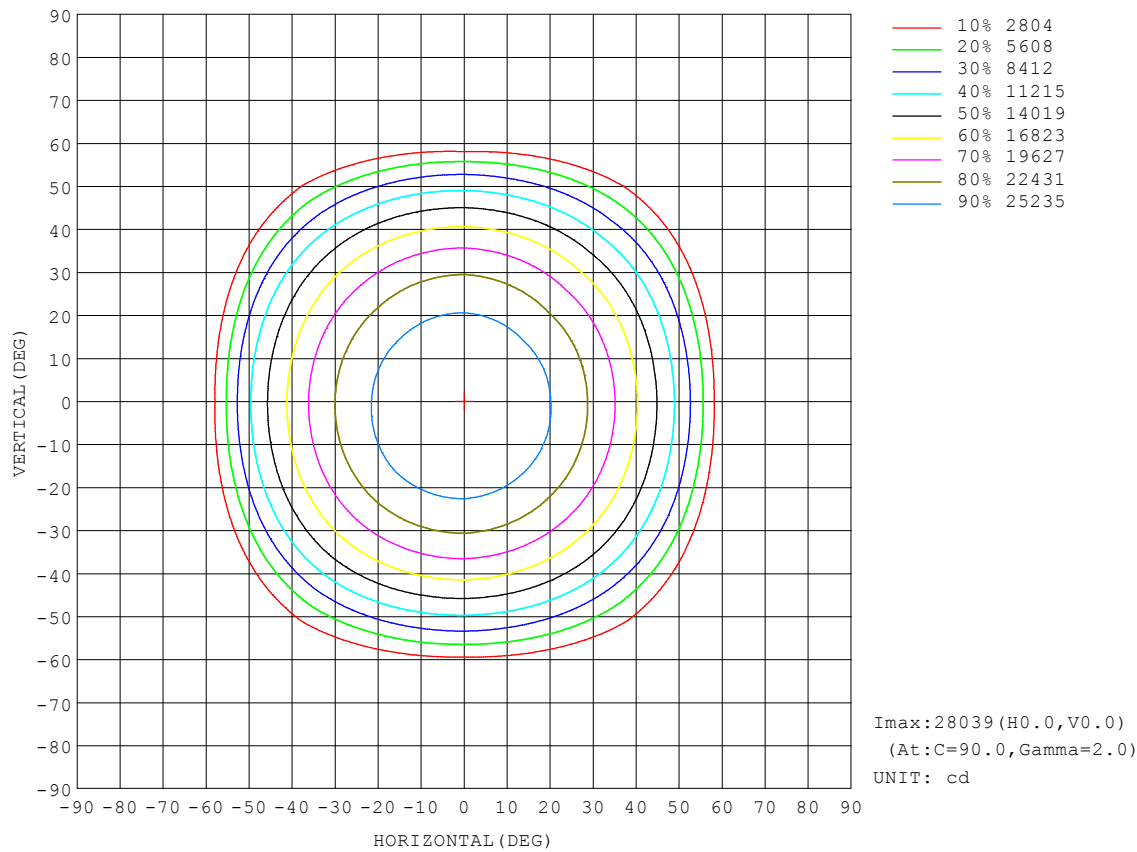
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	68	59	53	68	59	53	67	58	53	47
0.80	79	70	64	78	69	64	76	68	63	58
1.00	87	79	73	86	78	73	84	79	72	66
1.25	93	86	80	92	85	80	90	84	79	73
1.50	97	90	85	96	89	85	93	88	84	78
2.00	103	97	92	101	95	91	98	93	90	83
2.50	105	100	95	103	98	94	100	96	92	85
3.00	107	103	99	105	101	98	102	98	95	88
4.00	110	106	103	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	102	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: 2024-06-11

☐ 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:2.721A P:326.7W PF:0.9969 Freq:59.98Hz Lamp Flux:52194.1x1 lm		
NAME: ASD-WHB5B-ST-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.515*0.36	Shielding Angle:

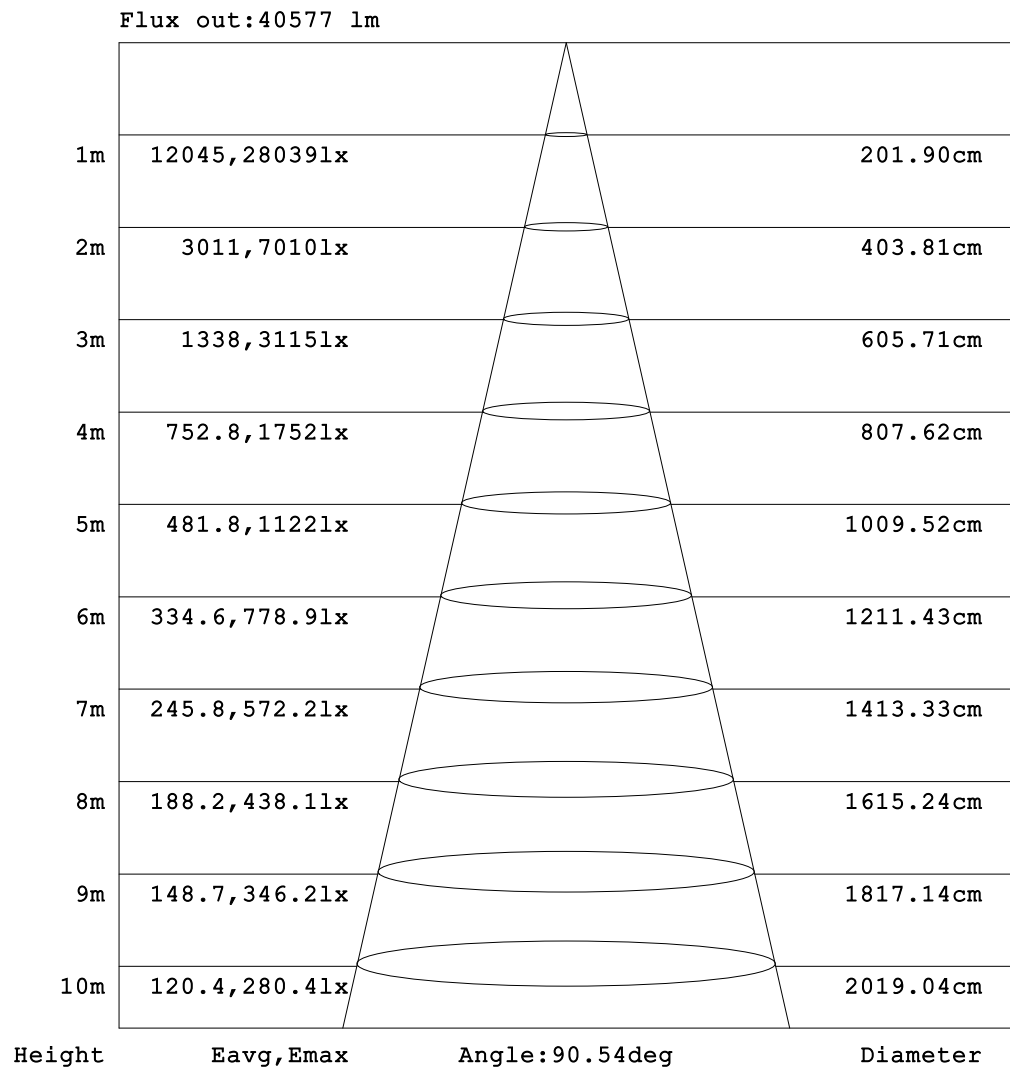


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu
Test Date:2024-06-11

☐ 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:2.721A P:326.7W PF:0.9969 Freq:59.98Hz Lamp Flux:52194.1x1 lm		
NAME: ASD-WHB5B-ST-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:0.515*0.36	Shielding Angle:

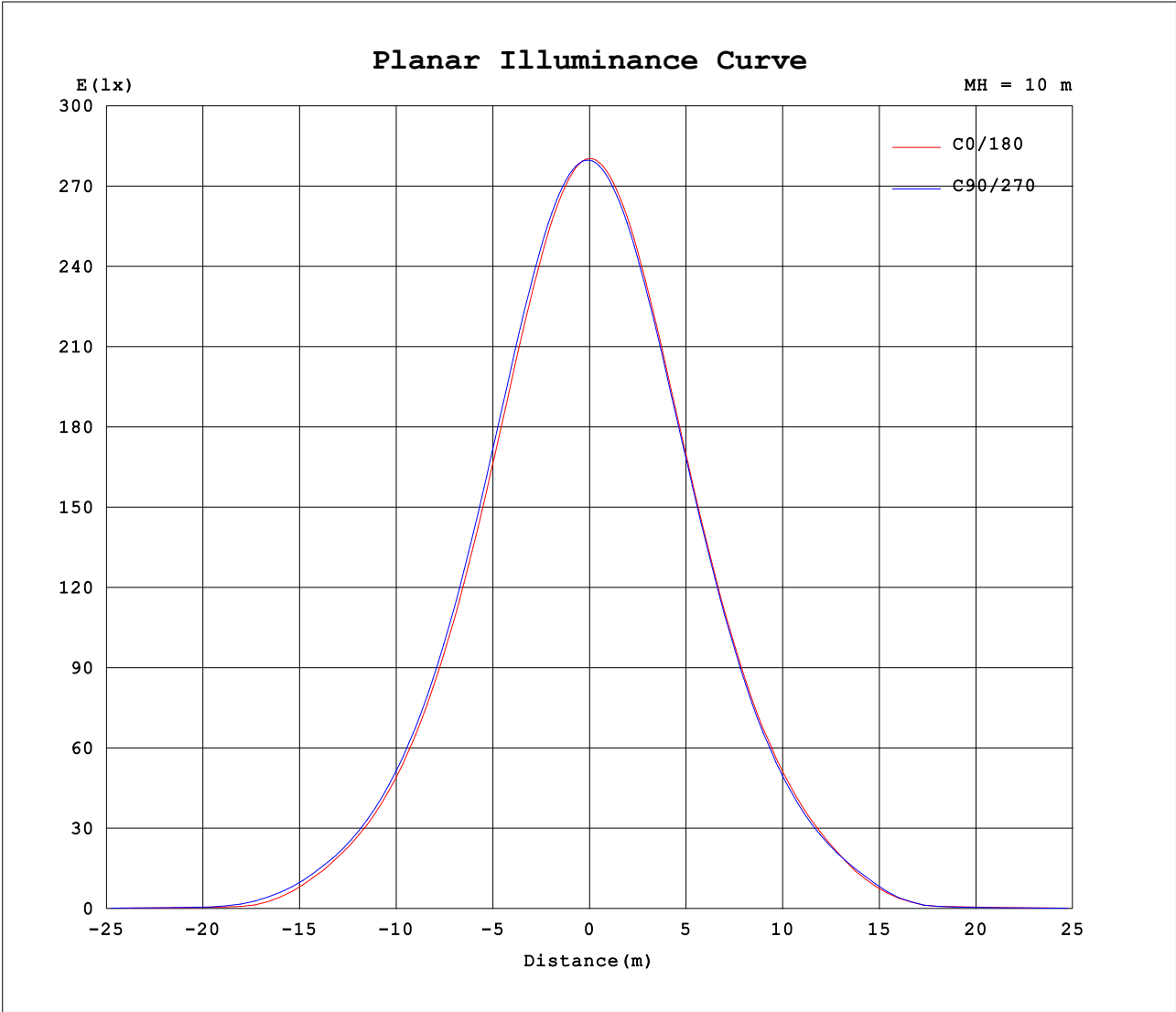


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2024-06-11

☐ 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:2024-06-11

☐ 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:2.721A P:326.7W PF:0.9969 Freq:59.98Hz Lamp Flux:52194.1x1 lm								
NAME: ASD-WHB5B-ST-320					TYPE:			WEIGHT:
SPEC.: 320W-5000K					DIM.:			SERIAL No.:
MFR.: ASD Lighting Corp.					SUR.:0.515*0.36			Shielding Angle:

Table--1

UNIT: ×10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	2799	2799	2799	2799	2799	2799	2799	2799										
5	2778	2787	2795	2795	2785	2778	2775	2774										
10	2726	2743	2761	2763	2742	2728	2725	2719										
15	2640	2668	2695	2699	2667	2648	2646	2634										
20	2524	2560	2595	2600	2559	2540	2540	2517										
25	2374	2410	2456	2456	2418	2396	2402	2364										
30	2188	2218	2273	2271	2240	2212	2224	2175										
35	1965	1989	2047	2042	2017	1987	1998	1941										
40	1699	1719	1774	1774	1750	1721	1720	1664										
45	1389	1418	1460	1476	1447	1414	1404	1345										
50	1042	1068	1104	1120	1090	1064	1050	997										
55	622	681	704	710	589	661	639	622										
60	118	298	231	297	108	243	110	216										
65	57.4	87.0	61.8	89.9	62.4	79.4	57.2	66.4										
70	53.4	51.0	54.3	57.1	59.9	53.2	51.1	44.0										
75	44.1	37.5	48.5	42.0	49.6	42.7	40.7	37.4										
80	18.3	42.8	30.3	58.4	20.5	37.1	19.0	30.8										
85	5.03	20.0	12.0	27.7	5.43	9.85	6.28	8.18										
90	1.19	1.26	1.73	1.22	1.11	1.20	1.21	1.22										
95	1.76	1.78	1.75	1.72	1.62	1.73	1.77	1.77										
100	2.53	2.51	2.49	2.43	2.36	2.47	2.56	2.55										
105	3.46	3.43	3.41	3.33	3.35	3.46	3.57	3.56										
110	4.56	4.51	4.50	4.40	4.51	4.66	4.76	4.77										
115	5.81	5.73	5.73	5.61	5.83	5.98	6.10	6.10										
120	7.14	7.03	7.04	6.89	7.23	7.36	7.52	7.49										
125	8.47	8.34	8.37	8.19	8.64	8.75	8.98	8.88										
130	9.82	9.68	9.73	9.52	10.0	10.1	10.4	10.2										
135	11.1	10.9	11.0	10.8	11.3	11.4	11.7	11.5										
140	12.4	12.2	12.2	12.0	12.6	12.7	13.0	12.8										
145	13.7	13.5	13.5	13.3	14.0	14.1	14.4	14.2										
150	15.1	14.9	15.0	14.7	15.6	15.6	16.0	15.7										
155	16.5	16.4	16.5	16.2	17.0	17.1	17.4	17.2										
160	18.0	18.0	18.0	17.7	18.5	18.4	18.8	18.6										
165	19.3	19.3	19.4	19.0	19.7	19.6	20.1	19.8										
170	20.5	20.4	20.5	20.1	20.7	20.5	21.0	20.6										
175	21.2	21.1	21.3	20.9	21.3	21.1	21.6	21.2										
180	21.6	21.4	21.7	21.3	21.6	21.4	21.8	21.3										

C Range: 0 - 360DEG	□ Range: 0 - 180DEG
C Interval: 45.0DEG	□ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Temperature:27DEG	Humidity:56%
Operators:lianghaizhu	Test Distance:6.500m [K=1.0000]
Test Date:2024-06-11	Remarks: