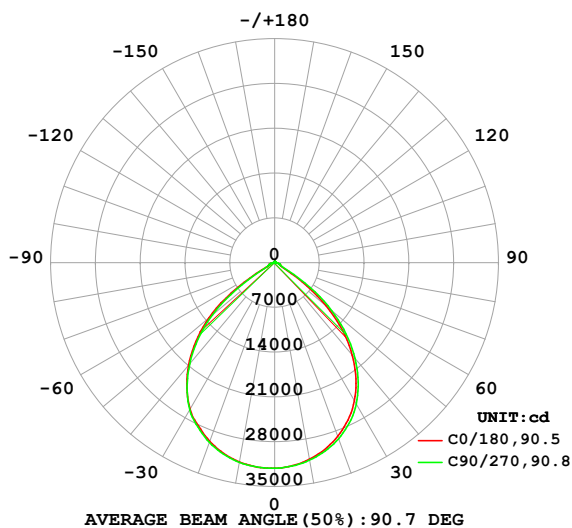


LUMINAIRE PHOTOMETRIC TEST REPORT

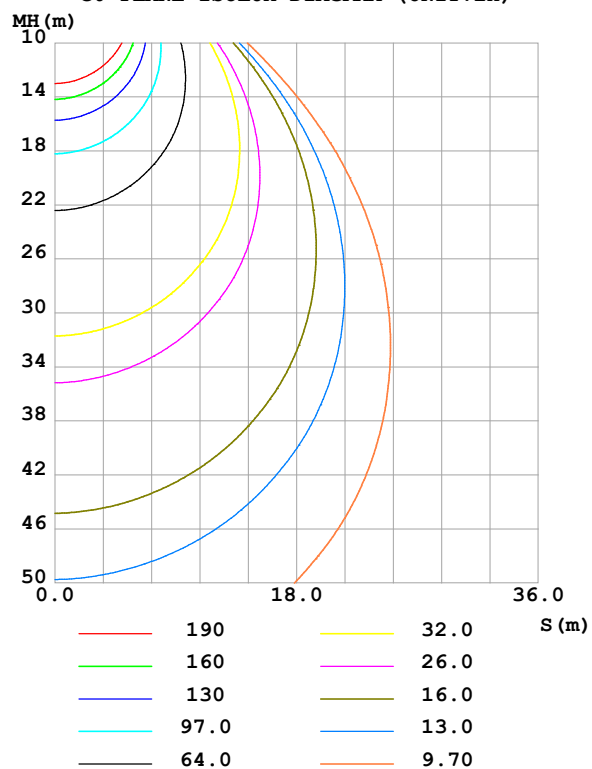
Test:U:119.98V I:2.6693A P:319.63W PF:0.9980 Freq:64.98Hz Lamp Flux:59803.5x1 lm		
NAME: ASD-WHB5B-NEOX-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.52*0.37	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 187.10 lm/W
MODEL	ASD-WHB5B-NEOX-320	I _{max} (cd)	32162	S/MH(C0/180)	1.22	
NOMINAL POWER(W)	320	LOR(%)	100.0	S/MH(C90/270)	1.23	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	59804	η UP,DN(C0-180)	0.3,48.7	
NOMINAL FLUX(lm)	59803.5	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.4,50.6	
LAMPS INSIDE	1	η up (%)	0.7	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	120	η down (%)	99.3	CIBSE SHR MAX	1.30	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 27°C
Operators: lianghaizhu-1
Test Date: 2025-03-20

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity: 56%
Test Distance: 8.340m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	3121	3122	3137	3149	3164	3174	3171	3147	0- 10	3036	3036	5.08,5.08
20	2888	2893	2928	2945	2971	2993	2989	2939	10- 20	8638	11674	19.5,19.5
30	2494	2490	2553	2577	2645	2658	2658	2575	20- 30	12804	24478	40.9,40.9
40	1889	1888	1956	1996	2096	2091	2068	1975	30- 40	14399	38877	65,65
50	1051	1077	1168	1219	1344	1321	1270	1145	40- 50	12402	51279	85.7,85.7
60	134.2	203.2	191.8	264.4	225.4	310.2	193.7	210.4	50- 60	6151	57430	96,96
70	79.38	77.76	82.17	88.71	93.64	94.97	90.43	85.01	60- 70	1171	58601	98,98
80	29.29	30.00	40.37	34.74	45.30	36.82	47.01	32.59	70- 80	624.4	59225	99,99
90	0.4537	0.4641	0.5560	0.5377	1.456	1.445	1.292	0.7216	80- 90	162.6	59388	99.3,99.3
100	0.8226	0.8257	0.7834	0.7214	1.360	1.476	1.610	1.693	90-100	8.515	59396	99.3,99.3
110	1.910	1.909	1.832	1.696	3.504	3.660	3.917	4.085	100-110	20.23	59417	99.4,99.4
120	3.623	3.615	3.528	3.322	6.876	6.992	7.308	7.567	110-120	40.05	59457	99.4,99.4
130	5.691	5.720	5.630	5.367	10.38	10.44	10.72	10.96	120-130	60.34	59517	99.5,99.5
140	8.156	8.209	8.026	7.779	13.38	13.40	13.66	13.86	130-140	73.17	59590	99.6,99.6
150	11.59	11.53	11.38	10.92	15.98	15.91	16.21	16.34	140-150	76.59	59667	99.8,99.8
160	15.13	15.03	14.93	14.52	17.98	17.78	18.06	18.09	150-160	69.69	59737	99.9,99.9
170	17.86	17.59	17.68	17.34	19.14	18.84	19.12	19.00	160-170	49.17	59786	100,100
180	19.21	18.96	19.18	18.91	19.22	18.97	19.18	18.92	170-180	17.81	59804	100,100
DEG	LUMINOUS INTENSITY:X10cd									UNIT:lm		

Conical surface Flux(90deg): 45577 lm

%lum = 76.2%

%lamp = 76.2%

Conical surface Flux(120deg): 57430 lm

%lum = 96.0%

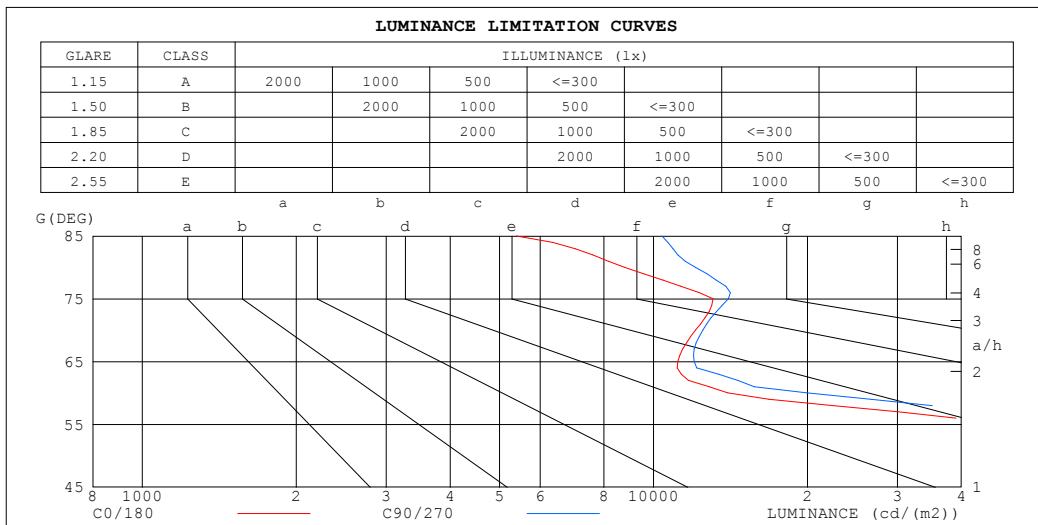
%lamp = 96.0%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:27°C
 Operators:lianghaizhu-1
 Test Date:2025-03-20

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:8.340m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.98V I:2.6693A P:319.63W PF:0.9980 Freq:64.98Hz Lamp Flux:59803.5x1 lm		
NAME: ASD-WHB5B-NEOX-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.52*0.37	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 27°C
Operators: lianghaizhu-1
Test Date: 2025-03-20

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity: 56%
Test Distance: 8.340m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:119.98V I:2.6693A P:319.63W PF:0.9980 Freq:64.98Hz Lamp Flux:59803.5x1 lm		
NAME: ASD-WHB5B-NEOX-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.52*0.37	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.226	.128	.041	.219	.125	.040	.206	.118	.038	.193	.112	.036	.182	.106	.034		
2.0	.220	.121	.037	.214	.118	.036	.203	.113	.035	.192	.108	.034	.182	.103	.033		
3.0	.211	.112	.034	.205	.110	.033	.195	.106	.032	.186	.102	.031	.178	.098	.030		
4.0	.200	.104	.031	.196	.102	.030	.187	.099	.030	.179	.096	.029	.171	.093	.028		
5.0	.190	.097	.028	.186	.095	.028	.178	.093	.027	.171	.090	.027	.164	.088	.026		
6.0	.180	.090	.026	.176	.089	.026	.169	.087	.025	.163	.085	.025	.157	.083	.025		
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	.074	.021		
9.0	.154	.074	.021	.151	.074	.021	.146	.072	.020	.141	.071	.020	.137	.069	.020		
10.0	.146	.070	.019	.144	.069	.019	.139	.068	.019	.135	.067	.019	.131	.066	.019		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.196	.196	.196	.167	.167	.167	.114	.114	.114	.066	.066	.066	.021	.021	.021		
1.0	.180	.162	.146	.154	.139	.126	.105	.096	.087	.061	.055	.051	.019	.018	.016		
2.0	.168	.138	.112	.144	.118	.097	.099	.082	.068	.057	.048	.040	.018	.015	.013		
3.0	.158	.119	.088	.136	.103	.076	.093	.071	.054	.054	.042	.032	.017	.014	.010		
4.0	.150	.105	.071	.129	.091	.062	.089	.063	.043	.051	.037	.026	.017	.012	.008		
5.0	.143	.094	.059	.123	.082	.051	.085	.057	.036	.049	.034	.021	.016	.011	.007		
6.0	.136	.086	.049	.117	.074	.043	.081	.052	.030	.047	.031	.018	.015	.010	.006		
7.0	.130	.079	.043	.112	.068	.037	.077	.048	.026	.045	.028	.016	.015	.009	.005		
8.0	.125	.073	.037	.107	.063	.032	.074	.044	.023	.043	.026	.014	.014	.009	.005		
9.0	.119	.068	.033	.103	.059	.029	.071	.041	.020	.042	.024	.012	.013	.008	.004		
10.0	.115	.064	.030	.099	.055	.026	.068	.039	.018	.040	.023	.011	.013	.008	.004		

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:27℃

Operators:lianghaizhu-1

Test Date:2025-03-20

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364

Humidity:56%

Test Distance:8.340m [K=1.0000]

Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.98V I:2.6693A P:319.63W PF:0.9980 Freq:64.98Hz Lamp Flux:59803.5x1 lm										
NAME: ASD-WHB5B-NEOX-320					TYPE:			WEIGHT:		
SPEC.: 320W-5000K					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp.					SUR.: 0.52*0.37			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	25.8	27.1	26.1	27.2	27.4	26.2	27.4	26.4	27.6	27.8
3H	25.7	26.8	26.0	27.1	27.3	26.1	27.2	26.4	27.4	27.7
4H	25.7	26.7	26.0	27.0	27.2	26.0	27.1	26.4	27.4	27.6
6H	25.6	26.6	25.9	26.9	27.1	26.0	27.0	26.3	27.3	27.6
8H	25.6	26.5	25.9	26.8	27.1	26.0	26.9	26.3	27.2	27.5
12H	25.5	26.4	25.9	26.7	27.0	26.0	26.9	26.3	27.2	27.5
4H 2H	25.7	26.7	26.0	27.0	27.2	26.0	27.1	26.3	27.3	27.6
3H	25.6	26.5	25.9	26.8	27.1	25.9	26.9	26.3	27.2	27.5
4H	25.6	26.4	25.9	26.7	27.0	25.9	26.8	26.3	27.1	27.4
6H	25.5	26.3	25.9	26.6	27.0	25.9	26.7	26.3	27.0	27.4
8H	25.5	26.2	25.9	26.6	26.9	25.9	26.6	26.4	27.0	27.4
12H	25.5	26.1	25.9	26.5	26.9	25.9	26.5	26.3	26.9	27.3
8H 4H	25.5	26.1	25.9	26.5	26.9	25.8	26.5	26.3	26.9	27.3
6H	25.5	26.0	25.9	26.4	26.9	25.9	26.4	26.3	26.8	27.3
8H	25.4	25.9	25.9	26.4	26.8	25.9	26.4	26.3	26.8	27.2
12H	25.4	25.8	25.9	26.3	26.8	25.9	26.3	26.4	26.7	27.2
12H 4H	25.4	26.0	25.9	26.4	26.8	25.8	26.4	26.2	26.8	27.2
6H	25.4	25.9	25.9	26.3	26.8	25.8	26.3	26.3	26.7	27.2
8H	25.4	25.8	25.9	26.3	26.8	25.8	26.3	26.3	26.7	27.2
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.8 / - 3.8					+ 1.6 / - 2.5				
1.5H	+ 0.9 / - 2.2					+ 0.8 / - 2.0				
2.0H	+ 3.9 / - 6.7					+ 3.6 / - 6.5				

CIE Pub.117, 59804 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 14.2$)
Area: 0.1924 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:27°C
Operators:lianghaizhu-1
Test Date:2025-03-20

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.340m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:119.98V I:2.6693A P:319.63W PF:0.9980 Freq:64.98Hz Lamp Flux:59803.5x1 lm		
NAME: ASD-WHB5B-NEOX-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.52*0.37	Shielding Angle:

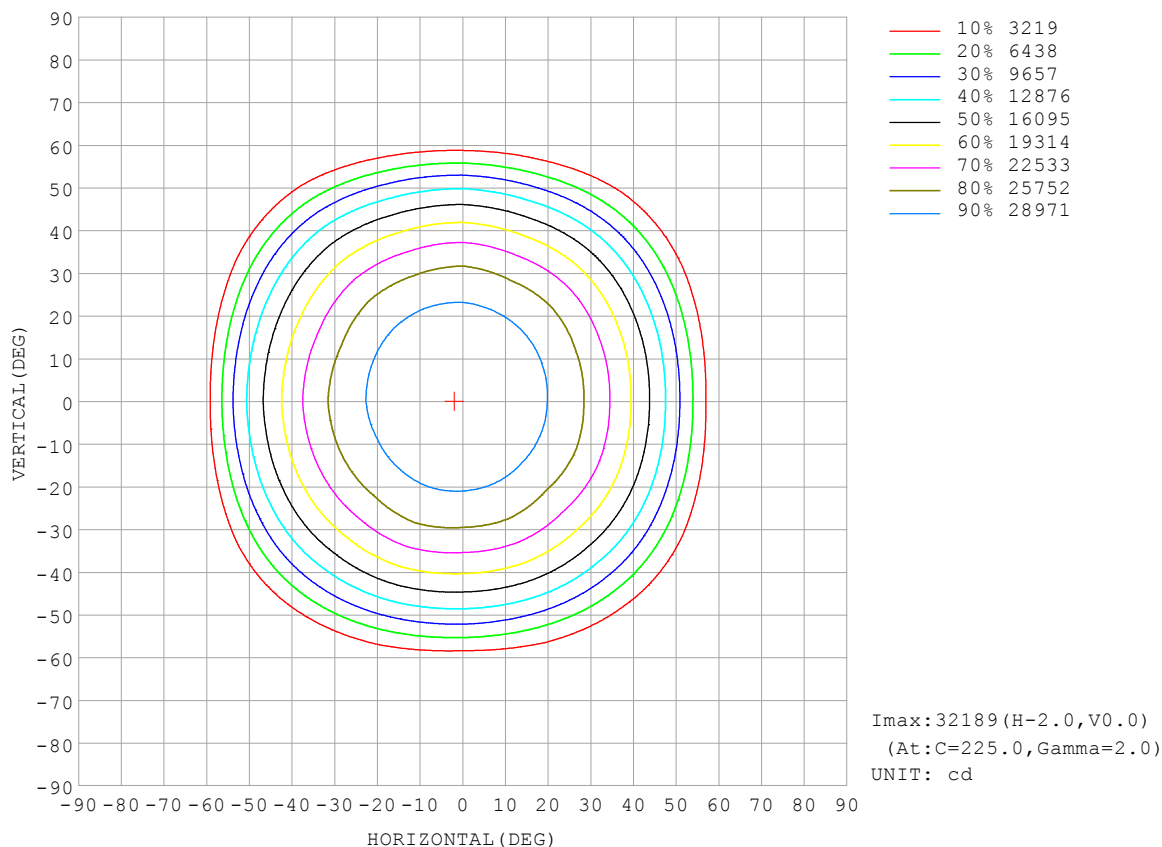
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	69	59	54	68	59	53	67	59	53	48
0.80	79	70	64	78	70	64	77	69	64	58
1.00	87	79	73	86	78	73	84	79	72	67
1.25	93	86	81	92	85	80	90	84	79	74
1.50	98	91	86	96	90	85	93	88	84	78
2.00	103	97	92	101	96	91	98	93	90	83
2.50	105	100	95	103	98	94	100	96	93	85
3.00	108	103	99	106	101	98	102	98	95	88
4.00	110	106	103	108	104	101	104	101	99	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: 22.5DEG
Test Speed: HIGH
Temperature: 27°C
Operators: lianghaizhu-1
Test Date: 2025-03-20

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity: 56%
Test Distance: 8.340m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:119.98V I:2.6693A P:319.63W PF:0.9980 Freq:64.98Hz Lamp Flux:59803.5x1 lm		
NAME: ASD-WHB5B-NEOX-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.52*0.37	Shielding Angle:

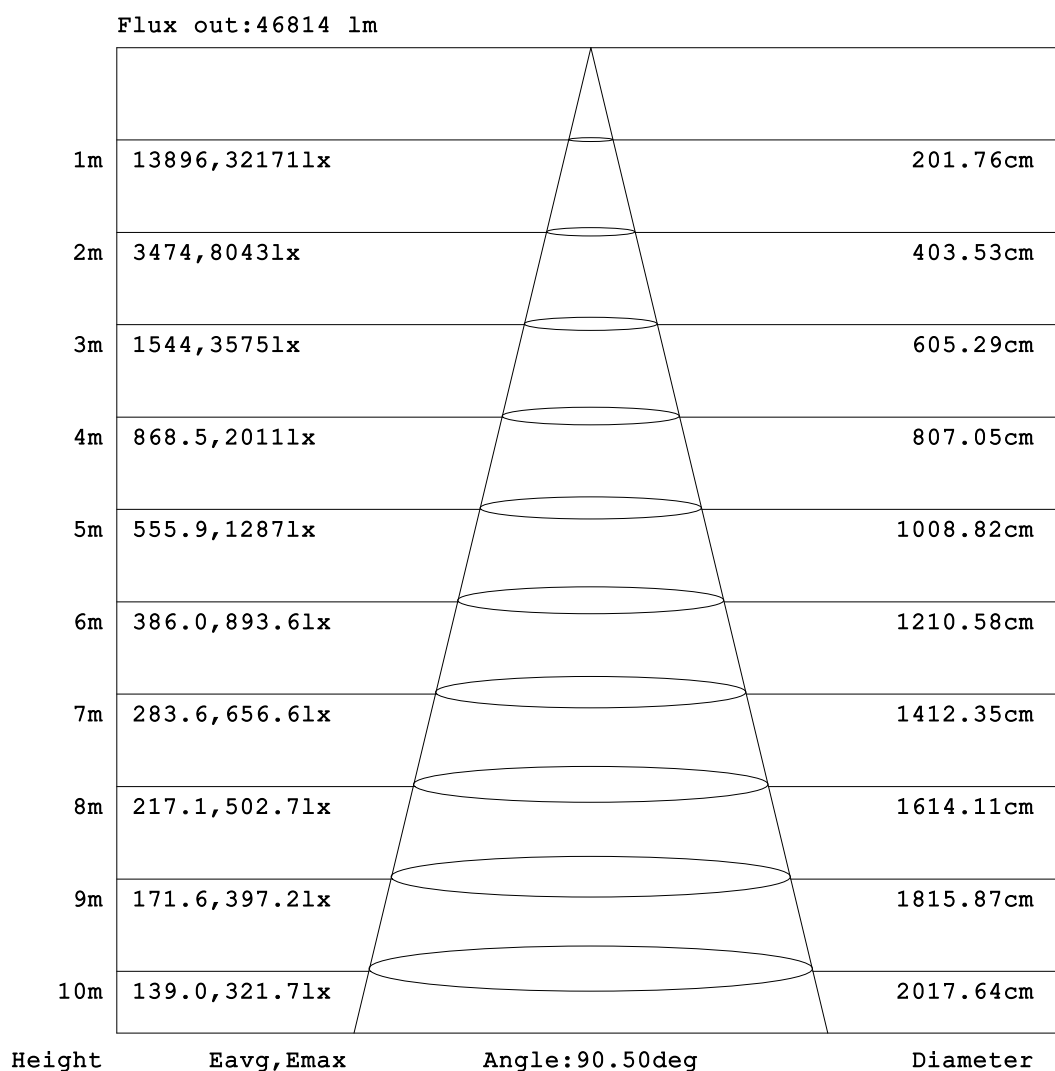


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:27°C
Operators:lianghaizhu-1
Test Date:2025-03-20

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.340m [K=1.0000]
Remarks:

AAI Figure

Test:U:119.98V I:2.6693A P:319.63W PF:0.9980 Freq:64.98Hz Lamp Flux:59803.5x1 lm		
NAME: ASD-WHB5B-NEOX-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.52*0.37	Shielding Angle:

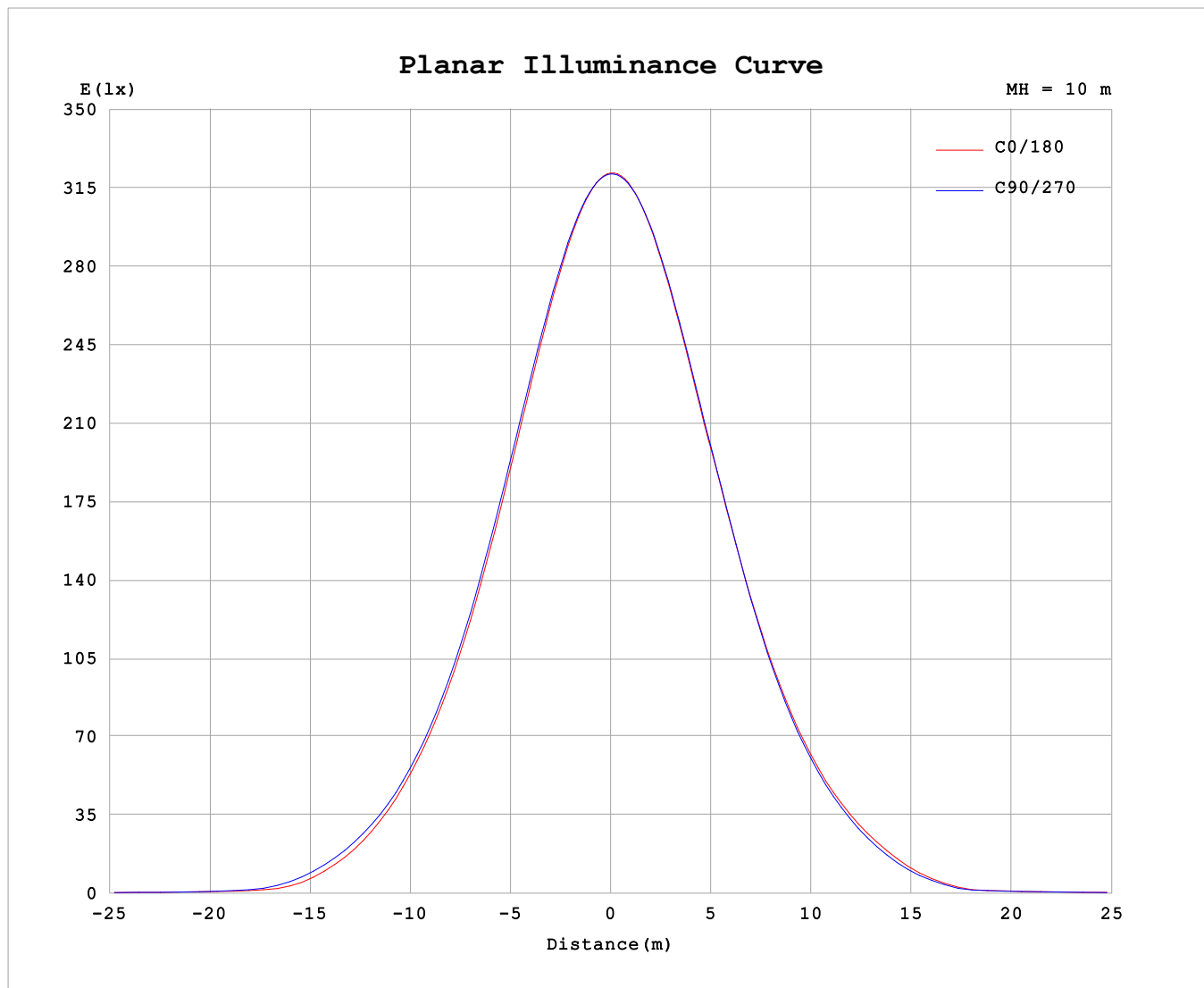


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 27°C
Operators: lianghaizhu-1
Test Date: 2025-03-20

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity: 56%
Test Distance: 8.340m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 27°C
Operators: lianghaizhu-1
Test Date: 2025-03-20

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity: 56%
Test Distance: 8.340m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.98V I:2.6693A P:319.63W PF:0.9980 Freq:64.98Hz Lamp Flux:59803.5x1 lm		
NAME: ASD-WHB5B-NEOX-320	TYPE:	WEIGHT:
SPEC.: 320W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.52*0.37	Shielding Angle:

Table--1

UNIT: X10cd

C (DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213	3213			
5	3186	3184	3184	3188	3191	3195	3198	3201	3207	3209	3211	3210	3207	3202	3197	3192			
10	3121	3120	3122	3130	3137	3145	3149	3154	3164	3168	3174	3175	3171	3160	3147	3134			
15	3024	3022	3026	3039	3050	3061	3064	3072	3086	3092	3102	3104	3100	3082	3062	3043			
20	2888	2887	2893	2912	2928	2942	2945	2953	2971	2980	2993	2996	2989	2964	2939	2912			
25	2715	2734	2717	2756	2767	2789	2786	2801	2818	2824	2840	2844	2839	2804	2779	2741			
30	2494	2509	2490	2543	2553	2596	2577	2613	2645	2622	2658	2642	2658	2591	2575	2523			
35	2217	2231	2214	2266	2279	2325	2312	2355	2395	2371	2400	2379	2391	2322	2302	2250			
40	1889	1900	1888	1937	1956	2000	1996	2046	2096	2072	2091	2060	2068	1998	1975	1924			
45	1507	1515	1509	1558	1583	1625	1631	1686	1744	1721	1733	1692	1698	1622	1594	1541			
50	1051	1063	1077	1128	1168	1198	1219	1276	1344	1314	1321	1269	1270	1183	1145	1091			
55	528	569	587	639	677	722	741	776	826	816	815	757	736	659	627	582			
60	134	183	203	214	192	248	264	293	225	303	310	251	194	213	210	189			
65	90.6	89.3	104	102	97.6	104	116	107	110	115	122	111	107	108	112	93.2			
70	79.4	66.6	77.8	79.4	82.2	79.3	88.7	80.7	93.6	83.6	95.0	84.9	90.4	82.7	85.0	70.6			
75	65.0	46.9	44.0	57.2	69.8	58.0	52.3	57.5	80.9	59.4	57.3	62.6	78.0	60.0	47.5	50.1			
80	29.3	25.9	30.0	32.5	40.4	36.1	34.7	34.4	45.3	36.0	36.8	38.3	47.0	35.2	32.6	28.4			
85	9.03	8.10	11.0	13.4	17.4	15.3	14.7	12.7	17.1	13.6	17.3	16.2	19.7	14.0	13.0	9.21			
90	0.45	0.46	0.46	0.48	0.56	0.69	0.54	0.79	1.46	1.28	1.45	1.24	1.29	0.75	0.72	0.71			
95	0.54	0.53	0.54	0.53	0.52	0.50	0.49	0.47	0.79	0.84	0.88	0.94	0.95	0.99	1.00	1.01			
100	0.82	0.81	0.83	0.80	0.78	0.75	0.72	0.69	1.36	1.42	1.48	1.58	1.61	1.68	1.69	1.73			
105	1.28	1.27	1.28	1.25	1.22	1.17	1.12	1.07	2.26	2.33	2.40	2.54	2.59	2.70	2.72	2.79			
110	1.91	1.89	1.91	1.87	1.83	1.75	1.70	1.63	3.50	3.59	3.66	3.83	3.92	4.05	4.08	4.18			
115	2.70	2.68	2.70	2.66	2.61	2.51	2.44	2.35	5.08	5.16	5.23	5.43	5.54	5.71	5.76	5.88			
120	3.62	3.60	3.61	3.58	3.53	3.41	3.32	3.22	6.88	6.94	6.99	7.19	7.31	7.50	7.57	7.72			
125	4.62	4.58	4.60	4.60	4.54	4.40	4.29	4.19	8.69	8.74	8.76	8.93	9.06	9.26	9.31	9.46			
130	5.69	5.68	5.72	5.73	5.63	5.49	5.37	5.28	10.4	10.4	10.4	10.6	10.7	10.9	11.0	11.1			
135	6.87	6.88	6.92	6.93	6.78	6.65	6.54	6.46	11.9	12.0	12.0	12.1	12.2	12.4	12.5	12.6			
140	8.16	8.17	8.21	8.17	8.03	7.88	7.78	7.69	13.4	13.4	13.4	13.5	13.7	13.8	13.9	14.0			
145	9.72	9.73	9.74	9.69	9.55	9.34	9.22	9.12	14.7	14.7	14.7	14.9	15.0	15.1	15.2	15.3			
150	11.6	11.6	11.5	11.5	11.4	11.1	10.9	10.8	16.0	16.0	15.9	16.1	16.2	16.3	16.3	16.6			
155	13.5	13.4	13.4	13.3	13.2	12.9	12.7	12.6	17.1	17.0	17.0	17.2	17.2	17.3	17.3	17.6			
160	15.1	15.1	15.0	14.9	14.9	14.7	14.5	14.4	18.0	17.8	17.8	18.0	18.1	18.0	18.1	18.4			
165	16.6	16.6	16.4	16.4	16.4	16.2	16.1	16.0	18.7	18.4	18.4	18.6	18.7	18.6	18.6	18.9			
170	17.9	17.7	17.6	17.6	17.7	17.5	17.3	17.4	19.1	18.8	18.8	19.0	19.1	18.9	19.0	19.3			
175	18.8	18.5	18.5	18.5	18.7	18.4	18.3	18.5	19.3	19.1	19.0	19.2	19.3	19.0	19.1	19.3			
180	19.2	19.0	19.0	19.0	19.2	18.9	18.9	19.1	19.2	19.0	19.0	19.0	19.2	18.9	18.9	19.1			

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:27℃

Operators:lianghaizhu-1

Test Date:2025-03-20

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364

Humidity:56%

Test Distance:8.340m [K=1.0000]

Remarks: