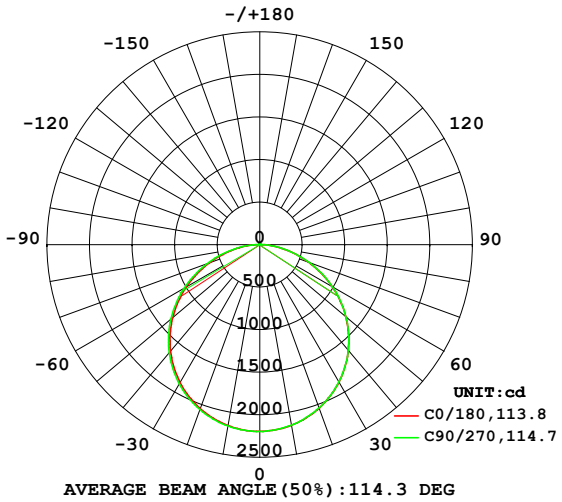
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.2V I:0.4065A P:48.68W PF:0.9961 Freq:64.98Hz Lamp Flux:6477.32x1 lm		
NAME: ASD-BFR-24A50	TYPE:	WEIGHT:
SPEC.:50W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:1.2*0.6	Shielding Angle:

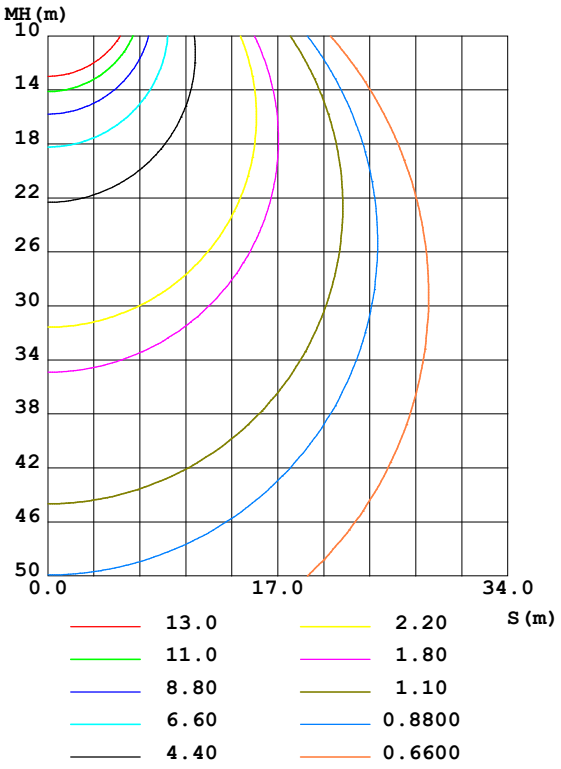
DATA OF LAMP		PHOTOMETRIC DATA Eff: 133.07 lm/W			
MODEL	ASD-BFR-24A50	Imax(cd)	2198	S/MH(C0/180)	1.27
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	6477.3	η UP,DN(C0-180)	0.3,49.2
NOMINAL FLUX(lm)	6477.32	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.4,50.2
LAMPS INSIDE	1	η up(%)	0.6	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	99.4	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):114.3 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu-2
Test Date:2026-08-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.200m [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	2154	2154	2155	2154	2159	2161	2164	2159	0- 10	207.7	207.7	3.21,3.21
20	2045	2042	2042	2045	2050	2056	2063	2052	10- 20	596.3	804.0	12.4,12.4
30	1865	1859	1861	1866	1874	1884	1893	1877	20- 30	907.5	1711	26.4,26.4
40	1621	1619	1620	1625	1633	1646	1657	1640	30- 40	1101	2812	43.4,43.4
50	1322	1322	1325	1329	1337	1352	1366	1342	40- 50	1150	3962	61.2,61.2
60	979.9	979.3	985.2	991.0	997.2	1013	1027	1002	50- 60	1047	5008	77.3,77.3
70	615.1	616.7	622.5	629.4	631.6	647.0	661.0	636.4	60- 70	807.0	5815	89.8,89.8
80	265.9	268.2	271.6	277.9	279.9	292.7	304.6	285.3	70- 80	478.3	6294	97.2,97.2
90	8.778	5.959	3.403	10.14	14.14	13.17	13.45	13.12	80- 90	142.3	6436	99.4,99.4
100	2.184	2.271	2.400	2.377	4.632	4.818	4.938	4.813	90-100	3.757	6440	99.4,99.4
110	3.303	3.306	3.596	3.513	6.508	6.530	6.590	6.503	100-110	4.518	6444	99.5,99.5
120	4.495	4.625	5.009	4.821	7.984	7.930	8.025	7.935	110-120	5.606	6450	99.6,99.6
130	5.924	6.174	6.620	6.340	9.276	9.129	9.232	9.204	120-130	6.326	6456	99.7,99.7
140	7.371	7.689	8.033	7.687	10.28	9.921	10.16	10.21	130-140	6.449	6463	99.8,99.8
150	8.709	9.016	9.218	8.900	10.96	10.50	10.83	10.93	140-150	5.907	6468	99.9,99.9
160	10.04	9.968	10.24	10.00	11.36	10.83	11.27	11.35	150-160	4.745	6473	99.9,99.9
170	10.92	10.65	11.09	10.91	11.47	11.00	11.52	11.51	160-170	3.084	6476	100,100
180	11.25	10.94	11.55	11.45	11.28	10.94	11.55	11.45	170-180	1.072	6477	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 3390.4 lm

%lum = 52.3%
%lamp = 52.3%

Conical surface Flux(120deg): 5008.3 lm

%lum = 77.3%
%lamp = 77.3%

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu-2
Test Date:2026-08-11

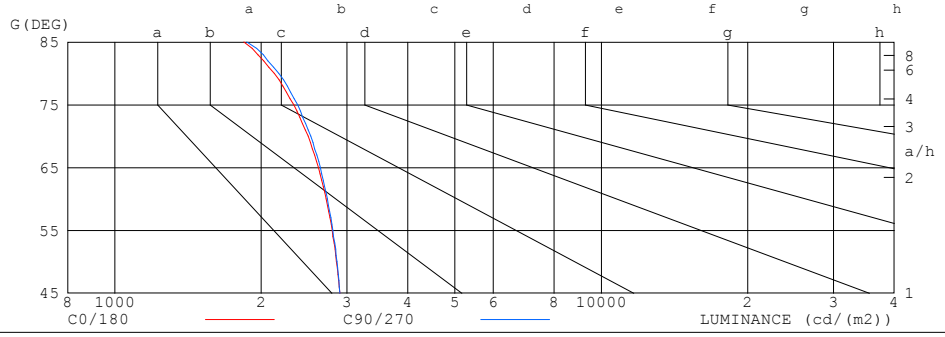
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.200m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.2V I:0.4065A P:48.68W PF:0.9961 Freq:64.98Hz Lamp Flux:6477.32x1 lm		
NAME: ASD-BFR-24A50	**TYPE:**	**WEIGHT:**
SPEC.:50W-5000K	**DIM.:**	**SERIAL No.:**
MFR.: ASD Lighting Corp.	**SUR.:1.2*0.6**	**Shielding Angle:**

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1841	1866
80	2126	2172
75	2333	2377
70	2497	2527
65	2622	2644
60	2721	2736
55	2797	2805
50	2856	2862
45	2901	2902

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu-2
Test Date:2026-08-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.200m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.2V I:0.4065A P:48.68W PF:0.9961 Freq:64.98Hz Lamp Flux:6477.32x1 lm		
NAME: ASD-BFR-24A50	TYPE:	WEIGHT:
SPEC.:50W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:1.2*0.6	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)									
0.0																
1.0	.316	.180	.057	.309	.176	.056	.295	.169	.054	.282	.163	.052	.271	.157	.051	
2.0	.296	.162	.050	.289	.159	.049	.277	.154	.048	.266	.149	.047	.256	.145	.046	
3.0	.273	.145	.044	.267	.143	.043	.257	.139	.042	.247	.135	.041	.238	.132	.041	
4.0	.251	.131	.038	.246	.129	.038	.237	.126	.038	.228	.122	.037	.220	.119	.036	
5.0	.232	.118	.034	.228	.117	.034	.219	.114	.034	.211	.112	.033	.204	.109	.033	
6.0	.215	.108	.031	.211	.107	.031	.204	.104	.030	.196	.102	.030	.190	.100	.030	
7.0	.200	.099	.028	.196	.098	.028	.190	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.187	.091	.026	.183	.090	.026	.177	.089	.025	.172	.087	.025	.166	.085	.025	
9.0	.175	.085	.024	.172	.084	.024	.167	.082	.023	.161	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.195	.195	.195	.167	.167	.167	.114	.114	.114	.065	.065	.065	.021	.021	.021	
1.0	.186	.161	.139	.159	.138	.119	.109	.095	.083	.063	.055	.048	.020	.018	.016	
2.0	.178	.137	.102	.152	.118	.089	.104	.081	.062	.060	.047	.036	.019	.015	.012	
3.0	.170	.119	.079	.146	.103	.068	.100	.071	.048	.058	.042	.028	.019	.014	.009	
4.0	.162	.106	.063	.139	.092	.055	.096	.064	.039	.055	.037	.023	.018	.012	.007	
5.0	.155	.096	.052	.133	.083	.045	.092	.058	.032	.053	.034	.019	.017	.011	.006	
6.0	.148	.087	.044	.127	.076	.038	.088	.053	.027	.051	.031	.016	.016	.010	.005	
7.0	.141	.080	.038	.121	.070	.033	.084	.049	.024	.049	.029	.014	.016	.009	.005	
8.0	.134	.075	.034	.116	.065	.029	.080	.045	.021	.047	.027	.012	.015	.009	.004	
9.0	.128	.070	.030	.111	.061	.026	.077	.043	.019	.045	.025	.011	.014	.008	.004	
10.0	.123	.065	.027	.106	.057	.024	.073	.040	.017	.043	.024	.010	.014	.008	.003	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu-2
Test Date:2026-08-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.200m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.2V I:0.4065A P:48.68W PF:0.9961 Freq:64.98Hz Lamp Flux:6477.32x1 lm		
NAME: ASD-BFR-24A50	TYPE:	WEIGHT:
SPEC.:50W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:1.2*0.6	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	16.4	17.9	16.7	18.1	18.3	16.4	17.9	16.7	18.1	18.3
	3H	17.9	19.3	18.2	19.6	19.8	17.9	19.4	18.2	19.6	19.9
	4H	18.5	19.9	18.8	20.1	20.4	18.6	19.9	18.9	20.2	20.4
	6H	19.0	20.2	19.3	20.5	20.8	19.0	20.3	19.4	20.6	20.9
	8H	19.1	20.3	19.5	20.6	20.9	19.2	20.4	19.5	20.7	21.0
	12H	19.2	20.4	19.6	20.7	21.0	19.3	20.5	19.6	20.8	21.1
4H	2H	17.0	18.3	17.3	18.6	18.9	17.0	18.3	17.3	18.6	18.9
	3H	18.7	19.9	19.1	20.2	20.5	18.7	19.9	19.1	20.2	20.5
	4H	19.5	20.5	19.8	20.9	21.2	19.5	20.6	19.9	20.9	21.3
	6H	20.0	21.0	20.4	21.4	21.7	20.1	21.0	20.5	21.4	21.8
	8H	20.2	21.1	20.7	21.5	21.9	20.3	21.2	20.7	21.6	22.0
	12H	20.4	21.2	20.8	21.6	22.0	20.4	21.3	20.9	21.7	22.1
8H	4H	19.7	20.6	20.2	21.0	21.4	19.8	20.7	20.2	21.0	21.4
	6H	20.5	21.2	20.9	21.6	22.1	20.5	21.3	21.0	21.7	22.1
	8H	20.8	21.4	21.2	21.9	22.3	20.8	21.5	21.3	21.9	22.4
	12H	21.0	21.5	21.5	22.0	22.5	21.0	21.6	21.5	22.1	22.5
12H	4H	19.7	20.6	20.2	21.0	21.4	19.8	20.6	20.2	21.0	21.4
	6H	20.5	21.2	21.0	21.6	22.1	20.6	21.2	21.0	21.7	22.1
	8H	20.9	21.4	21.3	21.9	22.4	20.9	21.5	21.4	21.9	22.4
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 6477 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 6.5)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu-2
Test Date:2026-08-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.200m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.2V I:0.4065A P:48.68W PF:0.9961 Freq:64.98Hz Lamp Flux:6477.32x1 lm		
NAME: ASD-BFR-24A50	TYPE:	WEIGHT:
SPEC.:50W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:1.2*0.6	Shielding Angle:

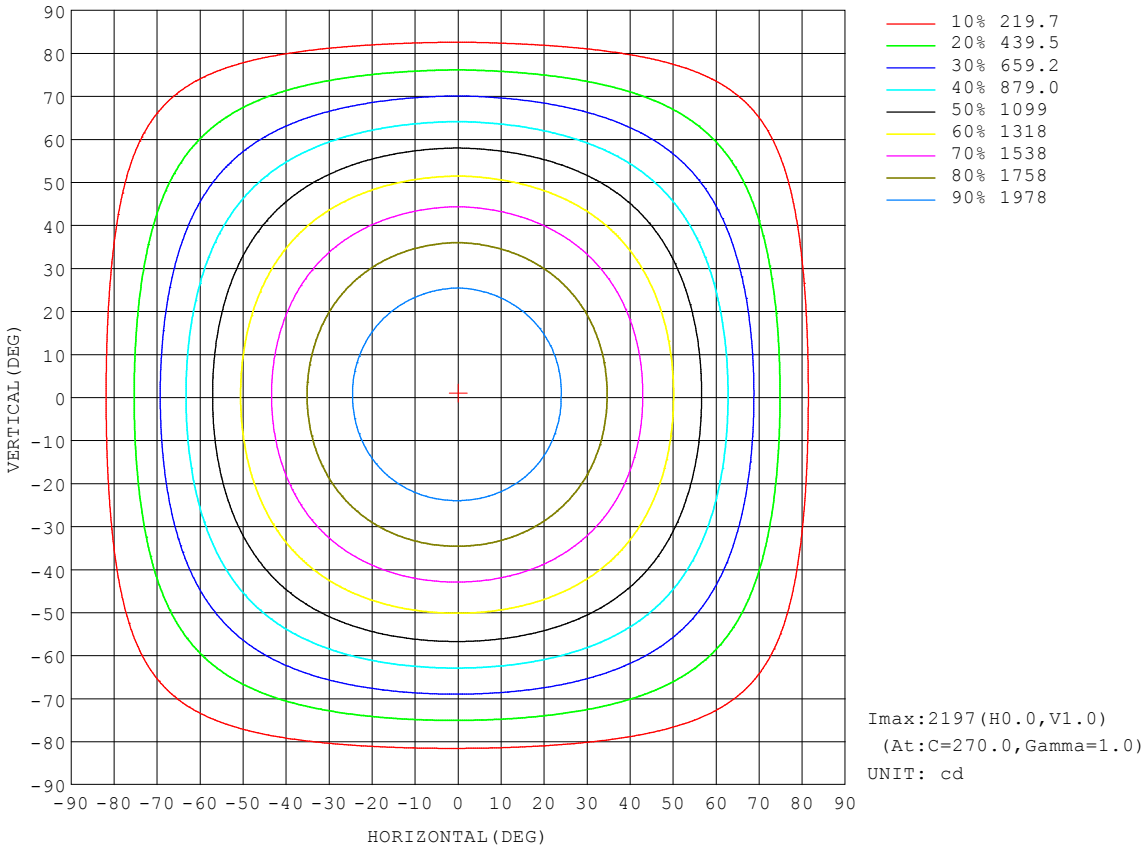
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	66	55	47	64	54	47	40
1.00	75	64	57	74	63	56	72	65	56	48
1.25	82	72	64	81	71	64	78	69	63	56
1.50	87	77	70	86	76	70	83	75	69	61
2.00	94	86	79	92	84	78	89	82	77	69
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	99	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	97	101	98	94	85
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-2
Test Date:2026-08-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.200m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.2V I:0.4065A P:48.68W PF:0.9961 Freq:64.98Hz Lamp Flux:6477.32x1 lm		
NAME: ASD-BFR-24A50	TYPE:	WEIGHT:
SPEC.:50W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:1.2*0.6	Shielding Angle:



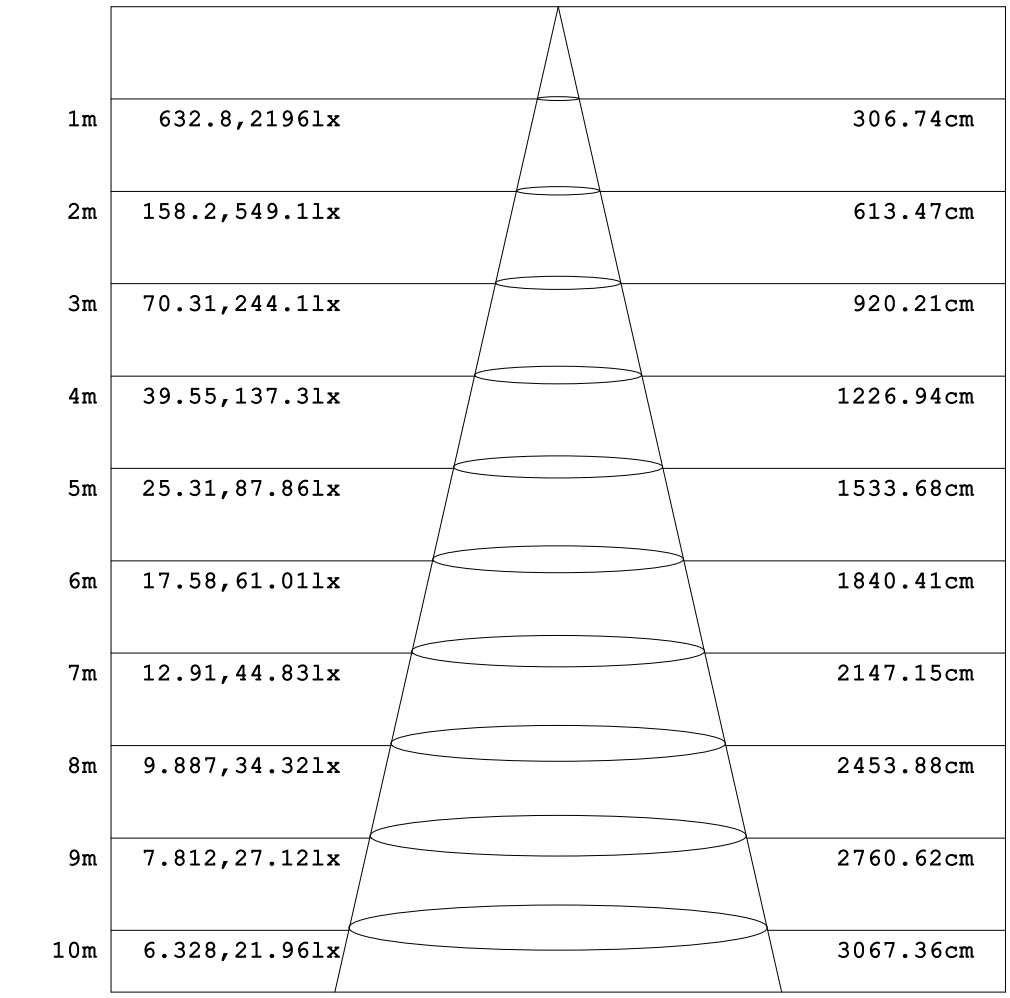
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu-2
Test Date:2026-08-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.200m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.2V I:0.4065A P:48.68W PF:0.9961 Freq:64.98Hz Lamp Flux:6477.32x1 lm		
NAME: ASD-BFR-24A50	TYPE:	WEIGHT:
SPEC.:50W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:1.2*0.6	Shielding Angle:

Flux out:4714 lm

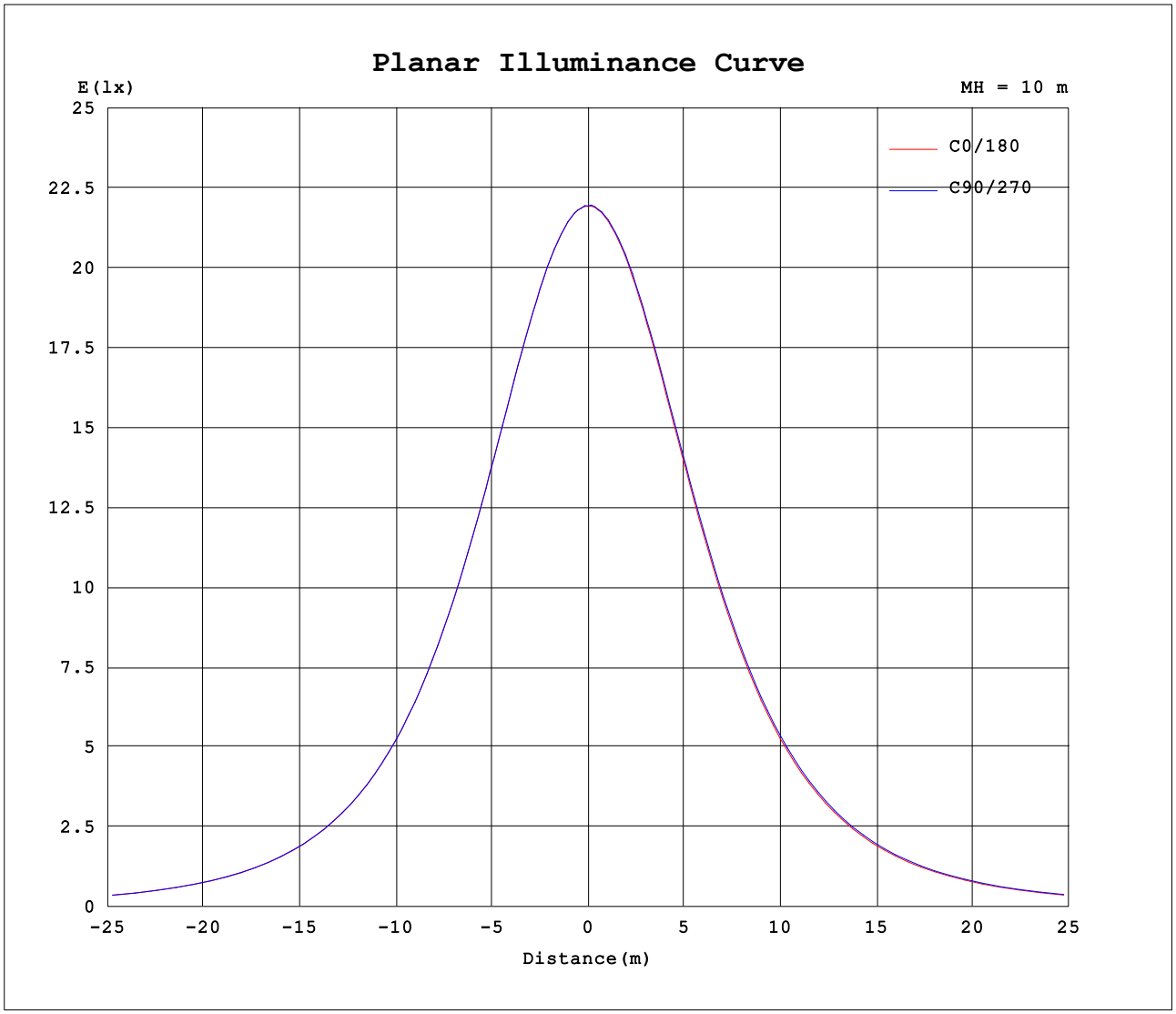


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu-2
Test Date:2026-08-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.200m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu-2
Test Date:2026-08-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.200m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.2V I:0.4065A P:48.68W PF:0.9961 Freq:64.98Hz Lamp Flux:6477.32x1 lm		
NAME: ASD-BFR-24A50	TYPE:	WEIGHT:
SPEC.:50W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.:1.2*0.6	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	45	90	135	180	225	270	315
0	2194	2194	2194	2194	2194	2194	2194	2194
5	2184	2183	2184	2183	2186	2187	2188	2185
10	2154	2154	2155	2154	2159	2161	2164	2159
15	2108	2106	2105	2108	2113	2120	2123	2115
20	2045	2042	2042	2045	2050	2056	2063	2052
25	1963	1959	1959	1963	1972	1978	1985	1971
30	1865	1859	1861	1866	1874	1884	1893	1877
35	1750	1747	1748	1752	1761	1771	1782	1765
40	1621	1619	1620	1625	1633	1646	1657	1640
45	1478	1476	1478	1485	1490	1504	1518	1498
50	1322	1322	1325	1329	1337	1352	1366	1342
55	1156	1154	1159	1165	1173	1188	1201	1178
60	980	979	985	991	997	1013	1027	1002
65	798	799	805	811	815	831	846	821
70	615	617	622	629	632	647	661	636
75	435	437	443	449	451	465	479	456
80	266	268	272	278	280	293	305	285
85	116	115	117	122	126	134	144	129
90	8.78	5.96	3.40	10.1	14.1	13.2	13.5	13.1
95	1.70	1.80	1.91	1.88	3.69	3.86	4.01	3.91
100	2.18	2.27	2.40	2.38	4.63	4.82	4.94	4.81
105	2.71	2.80	2.98	2.95	5.57	5.74	5.79	5.71
110	3.30	3.31	3.60	3.51	6.51	6.53	6.59	6.50
115	3.85	3.93	4.26	4.12	7.28	7.23	7.33	7.23
120	4.49	4.62	5.01	4.82	7.98	7.93	8.02	7.94
125	5.22	5.40	5.82	5.60	8.68	8.59	8.67	8.63
130	5.92	6.17	6.62	6.34	9.28	9.13	9.23	9.20
135	6.63	6.93	7.35	7.03	9.81	9.57	9.72	9.77
140	7.37	7.69	8.03	7.69	10.3	9.92	10.2	10.2
145	8.06	8.41	8.67	8.31	10.7	10.2	10.5	10.6
150	8.71	9.02	9.22	8.90	11.0	10.5	10.8	10.9
155	9.37	9.53	9.75	9.48	11.2	10.7	11.1	11.2
160	10.0	9.97	10.2	10.0	11.4	10.8	11.3	11.3
165	10.6	10.3	10.7	10.5	11.5	10.9	11.4	11.5
170	10.9	10.6	11.1	10.9	11.5	11.0	11.5	11.5
175	11.2	10.9	11.4	11.3	11.4	11.0	11.5	11.5
180	11.2	10.9	11.6	11.5	11.3	10.9	11.6	11.5

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu-2
Test Date:2026-08-11

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.200m [K=1.0000]
Remarks: