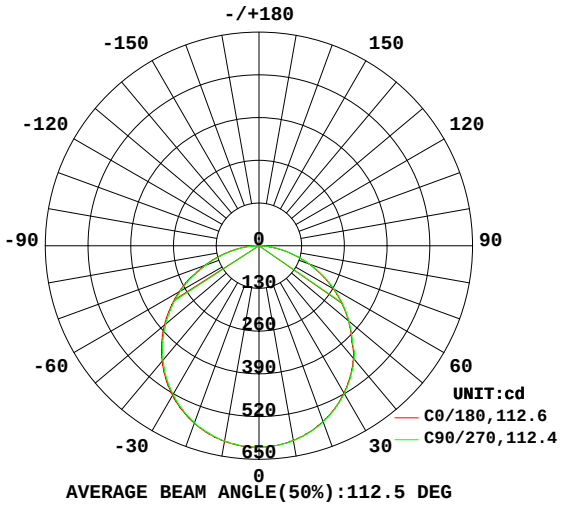
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

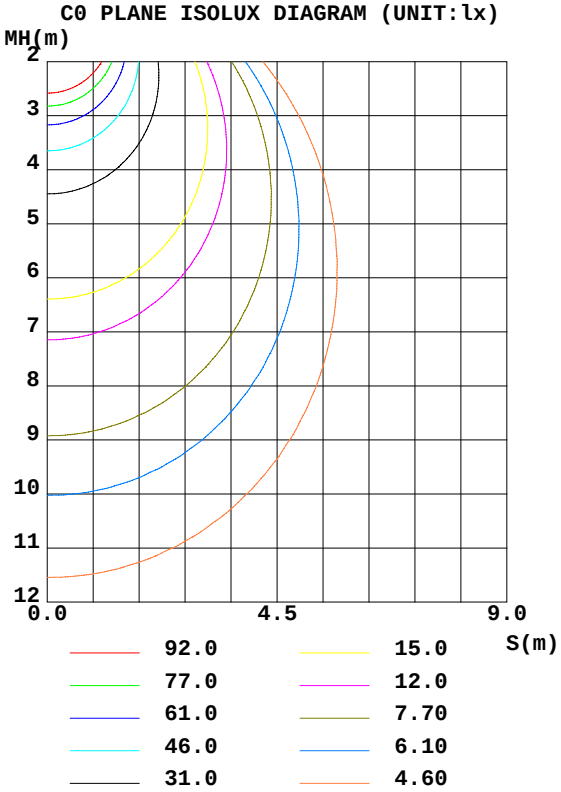
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 81.59 lm/W	
MODEL	ASL-511201	Imax(cd)	614.1	S/MH(C0/180)	1.25
NOMINAL POWER(W)	22	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1762.4	η UP,DN(C0-180)	0.0,50.5
NOMINAL FLUX(lm)	1762.4	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):112.5 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	604.6	603.9	603.9	603.0	601.7	601.4	602.3	604.7	0- 10	58.04	58.04	3.29,3.29
20	575.1	575.4	572.7	570.8	569.6	569.1	570.6	574.8	10- 20	166.6	224.6	12.7,12.7
30	525.6	526.7	522.6	517.9	517.9	515.6	519.3	524.5	20- 30	253.1	477.7	27.1,27.1
40	458.7	459.1	454.6	448.3	447.1	446.5	450.0	456.9	30- 40	305.9	783.6	44.5,44.5
50	375.6	376.1	370.9	363.5	355.3	354.3	357.8	365.2	40- 50	315.8	1099	62.4,62.4
60	281.0	281.9	275.5	267.4	260.4	259.4	263.5	271.8	50- 60	284.6	1384	78.5,78.5
70	176.4	177.4	171.1	163.1	160.8	159.5	163.9	172.6	60- 70	216.7	1601	90.8,90.8
80	80.16	80.84	75.76	68.78	66.04	64.85	68.78	76.68	70- 80	125.9	1727	98,98
90	2.619	3.181	1.455	0.7942	0.7800	0.7866	0.7656	1.226	80- 90	35.84	1762	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

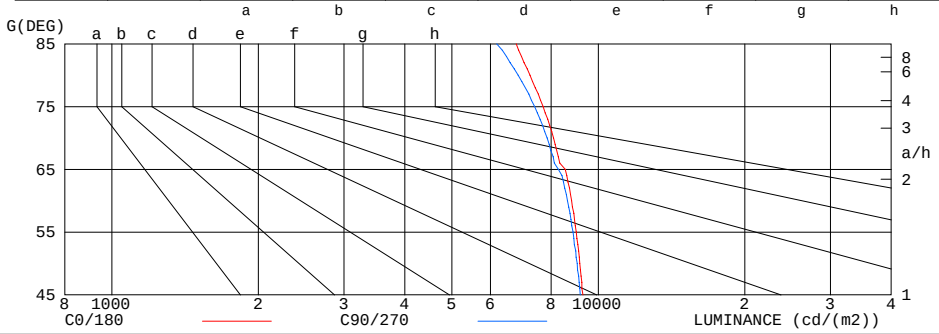
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	**TYPE:**	**WEIGHT:**
SPEC.:	**DIM.:**	**SERIAL No.:4000K**
MFR.: ASL Lighting	**SUR.:**	**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	6778	6181
80	7237	6844
75	7697	7395
70	8087	7846
65	8552	8276
60	8811	8642
55	9010	8869
50	9161	9051
45	9300	9183

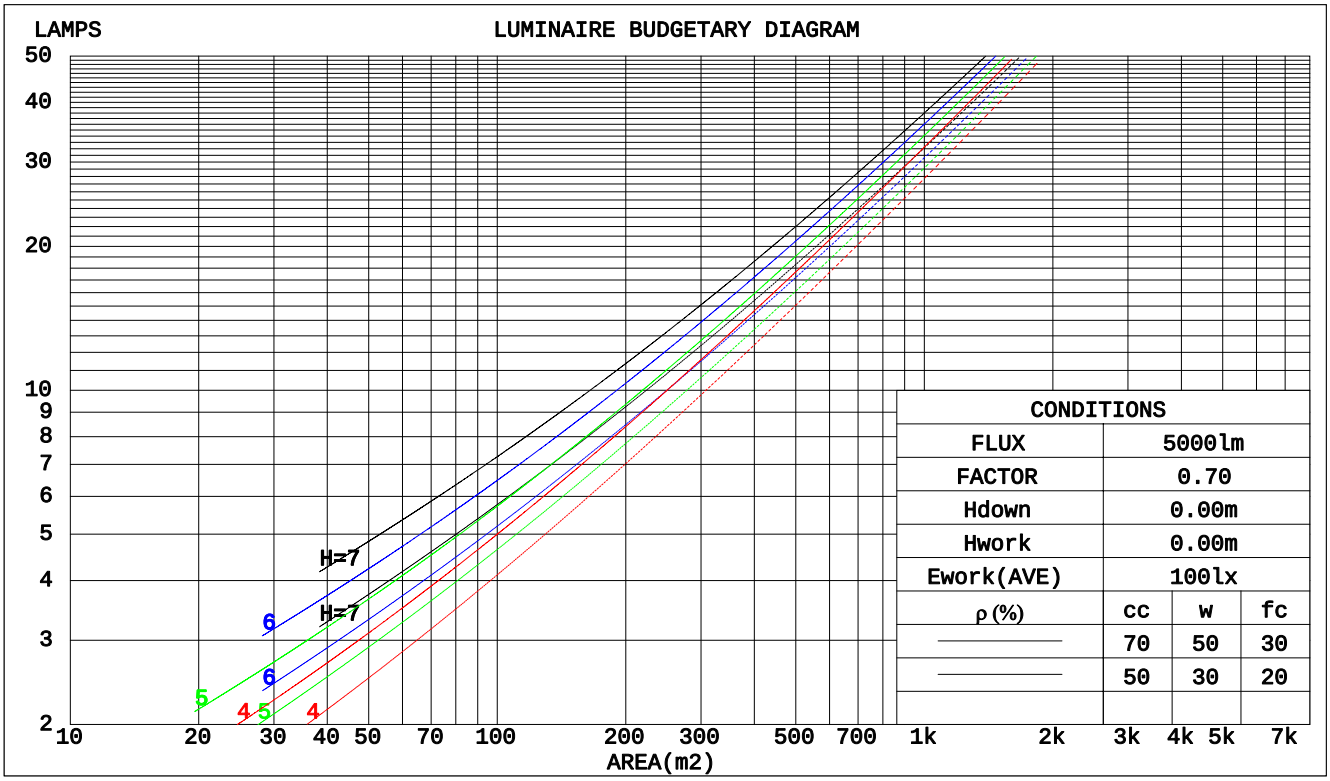
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	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			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.04	.99	.96	1.01	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.83
2.0	.90	.83	.78	.88	.82	.77	.85	.79	.75	.82	.77	.73	.79	.75	.72	.69
3.0	.79	.71	.64	.78	.70	.64	.75	.68	.63	.72	.66	.62	.69	.65	.60	.58
4.0	.70	.61	.54	.69	.60	.54	.66	.59	.53	.64	.58	.53	.62	.56	.52	.50
5.0	.63	.54	.47	.61	.53	.47	.59	.52	.46	.57	.51	.46	.55	.50	.45	.43
6.0	.56	.47	.41	.55	.47	.41	.54	.46	.40	.52	.45	.40	.50	.44	.40	.37
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.40	.35	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

WEC AND CCEC

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	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	.312	.177	.056	.305	.174	.055	.292	.167	.053	.279	.161	.052	.268	.155	.050	
2.0	.293	.161	.049	.287	.158	.049	.275	.153	.048	.264	.148	.046	.254	.144	.045	
3.0	.271	.144	.043	.265	.142	.043	.255	.138	.042	.245	.135	.041	.237	.131	.041	
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.231	.118	.034	.227	.116	.034	.218	.114	.033	.211	.111	.033	.204	.109	.033	
6.0	.214	.107	.031	.210	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030	
7.0	.199	.098	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.172	.087	.025	.167	.086	.025	
9.0	.174	.084	.024	.172	.084	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.161	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.180	.156	.134	.154	.134	.115	.106	.092	.080	.061	.053	.046	.019	.017	.015	
2.0	.172	.132	.098	.148	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	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	18.6	20.2	18.9	20.4	20.6	18.6	20.1	18.8	20.3	20.5
	3H	20.2	21.6	20.5	21.9	22.1	20.1	21.5	20.4	21.7	22.0
	4H	20.9	22.2	21.2	22.5	22.7	20.7	22.1	21.0	22.3	22.6
	6H	21.4	22.6	21.7	22.9	23.2	21.2	22.5	21.5	22.7	23.0
	8H	21.5	22.8	21.9	23.0	23.3	21.4	22.6	21.7	22.9	23.2
	12H	21.6	22.8	22.0	23.1	23.4	21.5	22.6	21.8	22.9	23.2
4H	2H	19.3	20.6	19.6	20.9	21.1	19.2	20.5	19.5	20.8	21.1
	3H	21.0	22.2	21.4	22.5	22.8	20.9	22.1	21.3	22.4	22.7
	4H	21.8	22.9	22.2	23.2	23.5	21.7	22.8	22.1	23.1	23.4
	6H	22.5	23.4	22.9	23.8	24.1	22.3	23.3	22.7	23.6	24.0
	8H	22.7	23.6	23.1	24.0	24.3	22.5	23.4	22.9	23.8	24.2
	12H	22.9	23.7	23.3	24.1	24.5	22.7	23.5	23.1	23.9	24.3
8H	4H	22.1	23.0	22.5	23.4	23.8	22.0	22.9	22.4	23.3	23.7
	6H	22.9	23.7	23.4	24.1	24.5	22.8	23.5	23.2	23.9	24.4
	8H	23.3	23.9	23.7	24.3	24.8	23.1	23.8	23.6	24.2	24.6
	12H	23.5	24.1	24.0	24.5	25.0	23.4	23.9	23.8	24.4	24.8
12H	4H	22.1	22.9	22.6	23.3	23.7	22.0	22.9	22.5	23.2	23.6
	6H	23.0	23.7	23.5	24.1	24.5	22.9	23.5	23.3	24.0	24.4
	8H	23.4	23.9	23.9	24.4	24.9	23.2	23.8	23.7	24.2	24.7

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, 1762 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.0)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

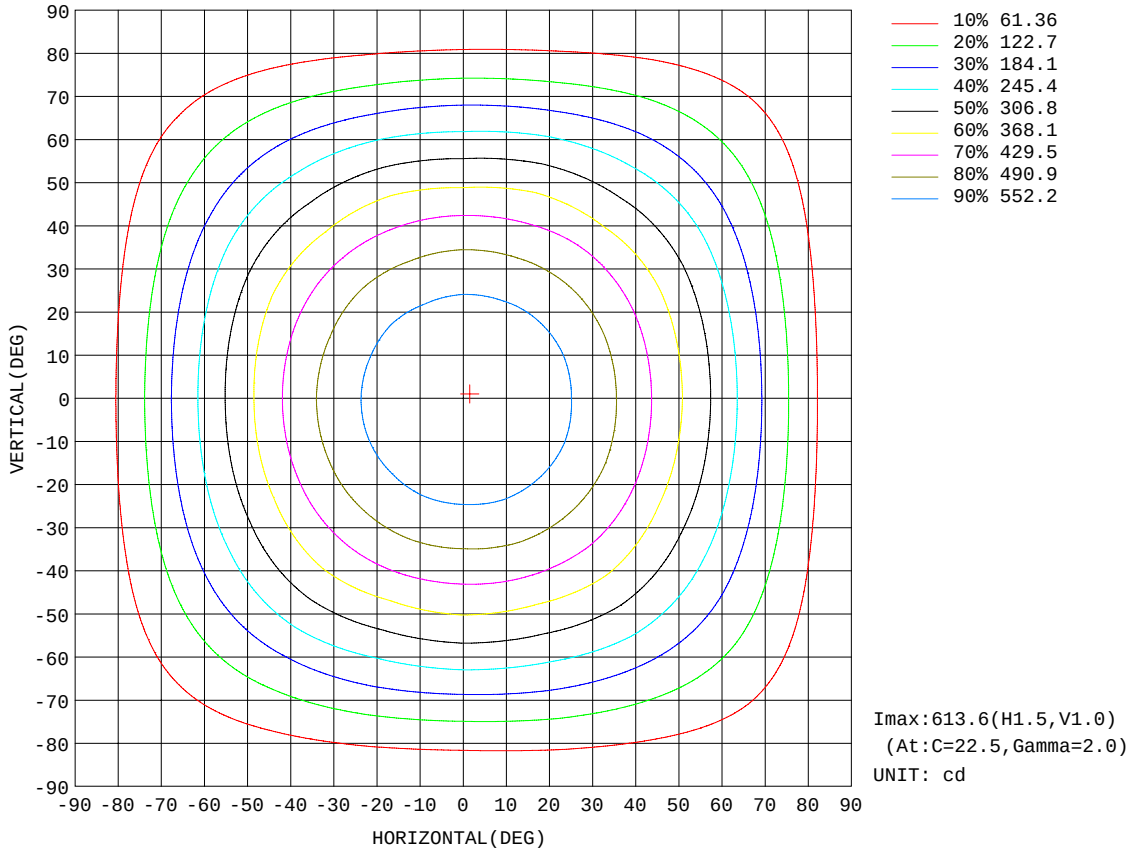
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	46	39	57	46	39	56	45	39	32
0.80	67	56	48	66	55	48	65	55	48	41
1.00	76	65	57	75	64	57	72	66	57	49
1.25	83	72	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	75	69	62
2.00	95	86	80	93	85	79	89	83	77	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	86	78
4.00	106	100	96	104	99	94	100	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
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:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



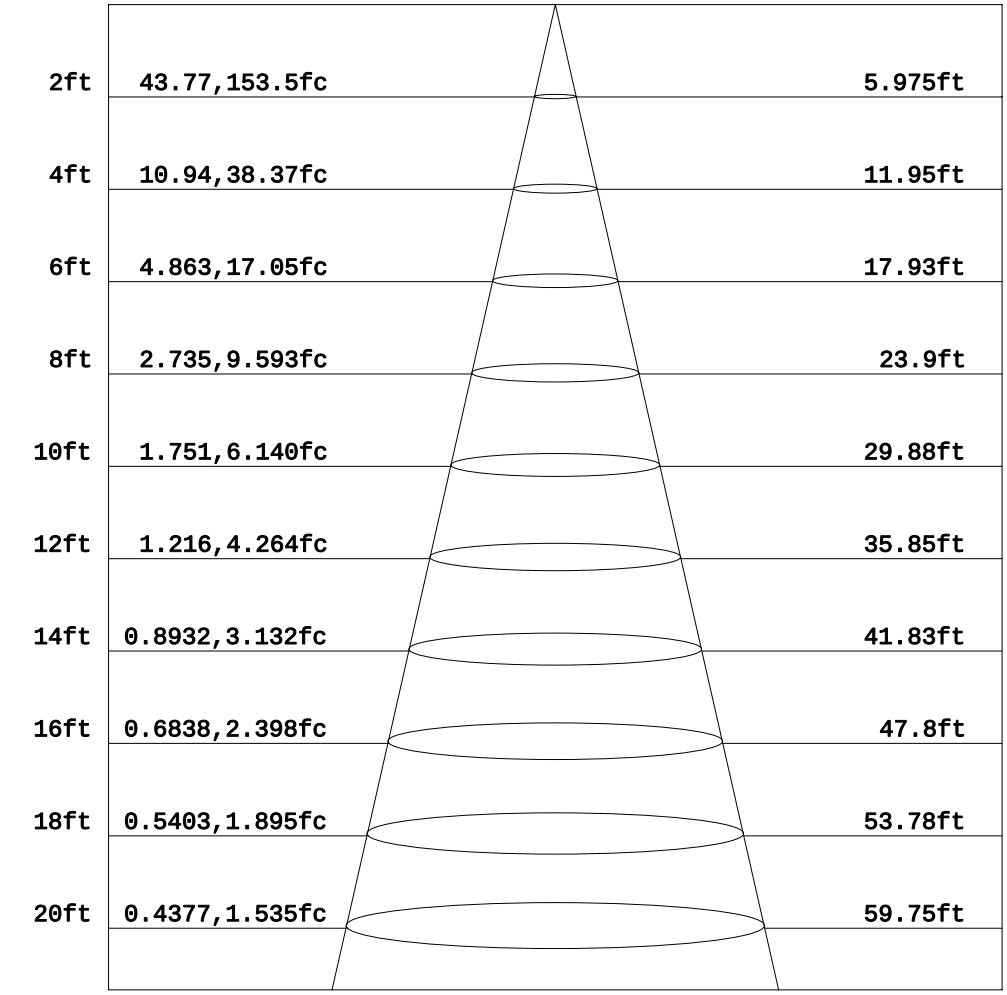
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

AAI Figure

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

Flux out:1304 lm



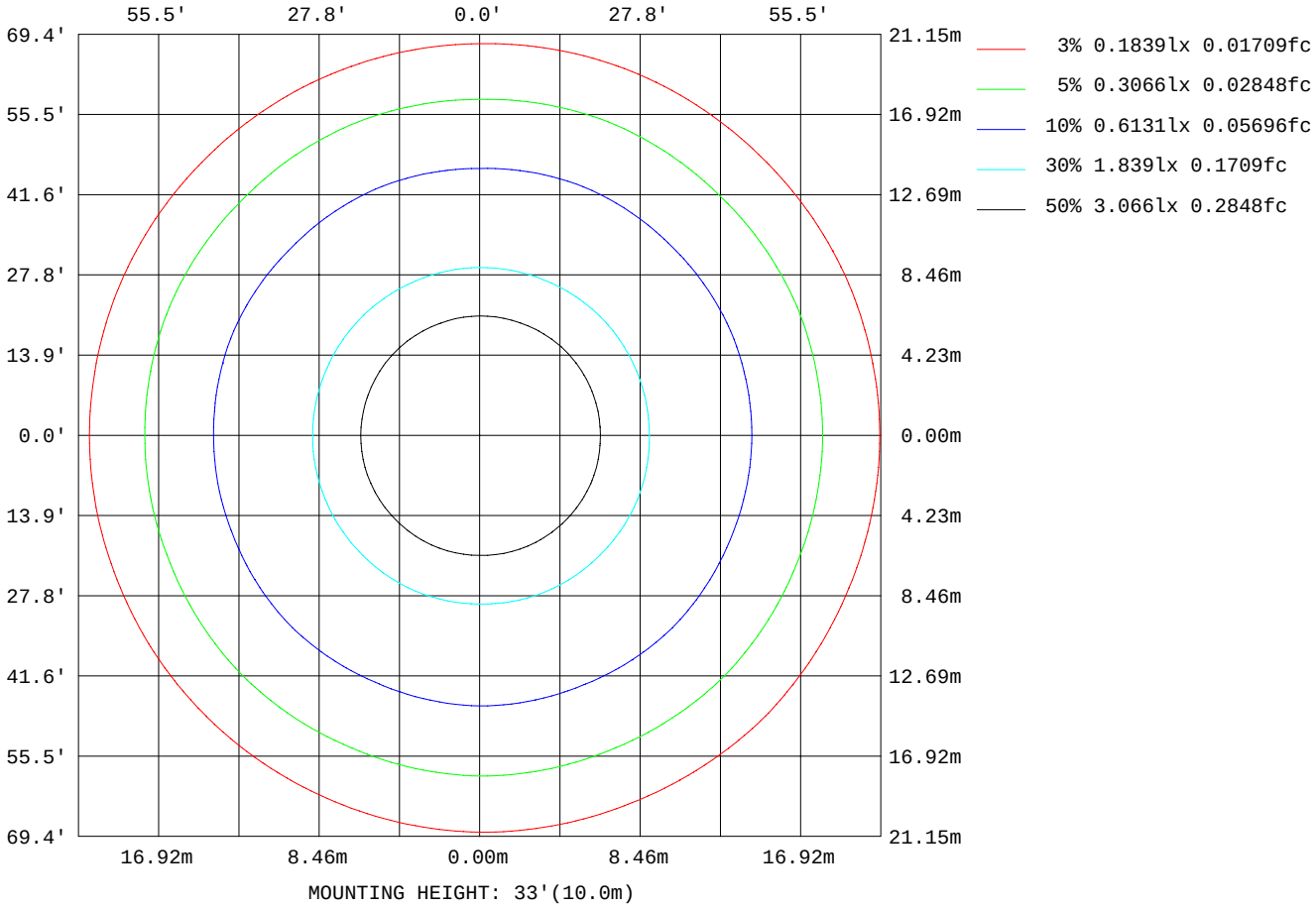
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

LED Avg.L Report

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

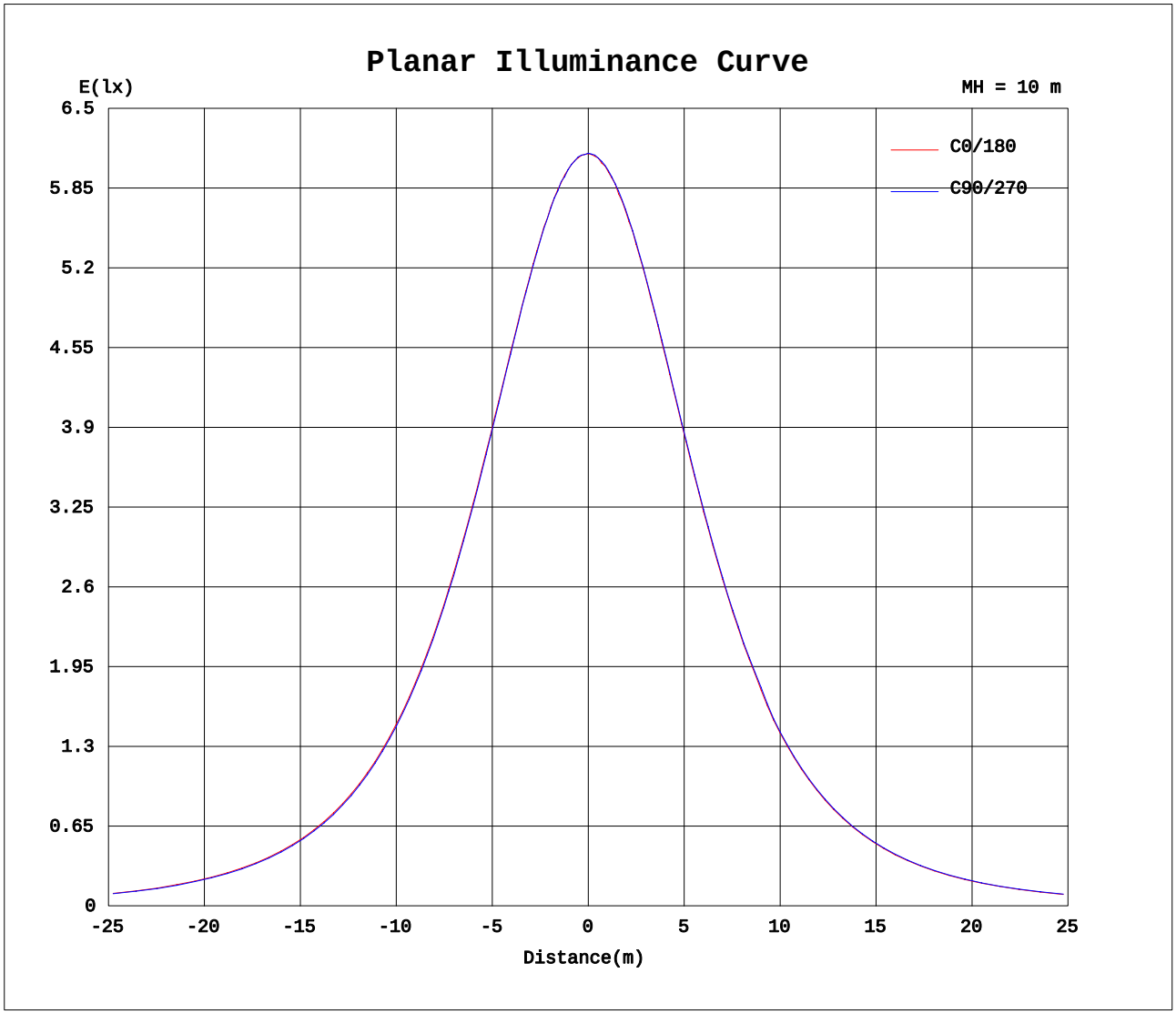
AvgL	cd/m2
L_0~180(65)av	8190
L_0~180(75)av	7237
L_0~180(85)av	5695
L_90~270(65)av	8105
L_90~270(75)av	7177
L_90~270(85)av	5608
L_45(65)av	8131
L_45(75)av	7208
L_45(85)av	5652

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1940A P:21.60W PF:0.9270 Freq:60.00Hz Lamp Flux:1762.4x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(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	613	613	613	613	613	613	613	613	613	613	613	613	613	613	613	613			
5	611	612	611	611	611	610	612	609	610	610	610	609	610	611	611	612			
10	605	606	604	604	604	602	603	601	602	602	601	601	602	603	605	604			
15	593	594	593	593	591	591	589	588	588	588	588	588	589	590	592	592			
20	575	577	575	576	573	572	571	569	570	569	569	569	571	572	575	575			
25	553	555	554	554	550	548	547	545	546	545	545	546	547	548	551	553			
30	526	529	527	526	523	522	518	517	518	516	516	516	519	520	525	525			
35	495	497	495	495	490	488	484	485	484	483	483	484	487	488	492	493			
40	459	461	459	458	455	453	448	447	447	446	447	446	450	451	457	458			
45	419	417	419	411	414	404	407	398	399	404	398	405	401	410	408	418			
50	376	372	376	369	371	361	363	355	355	360	354	361	358	366	365	374			
55	330	327	330	323	324	315	317	309	309	313	308	313	312	320	320	328			
60	281	279	282	276	275	267	267	261	260	263	259	264	263	271	272	279			
65	231	230	232	226	223	218	213	211	211	208	210	210	214	216	222	227			
70	176	180	177	176	171	168	163	161	161	158	159	159	164	166	173	175			
75	127	130	128	127	122	119	114	112	112	109	110	111	115	117	123	126			
80	80.2	82.7	80.8	80.1	75.8	73.4	68.8	66.6	66.0	63.8	64.9	65.2	68.8	71.4	76.7	79.1			
85	37.7	39.8	38.5	37.9	34.3	32.3	28.2	26.2	25.6	23.5	24.4	24.7	28.0	30.3	34.7	36.9			
90	2.62	3.21	3.18	2.31	1.45	0.86	0.79	0.79	0.78	0.78	0.79	0.78	0.77	0.80	1.23	2.32			

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks: