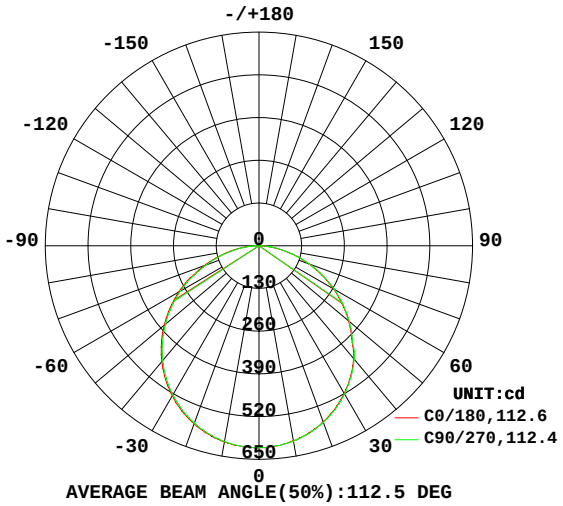
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

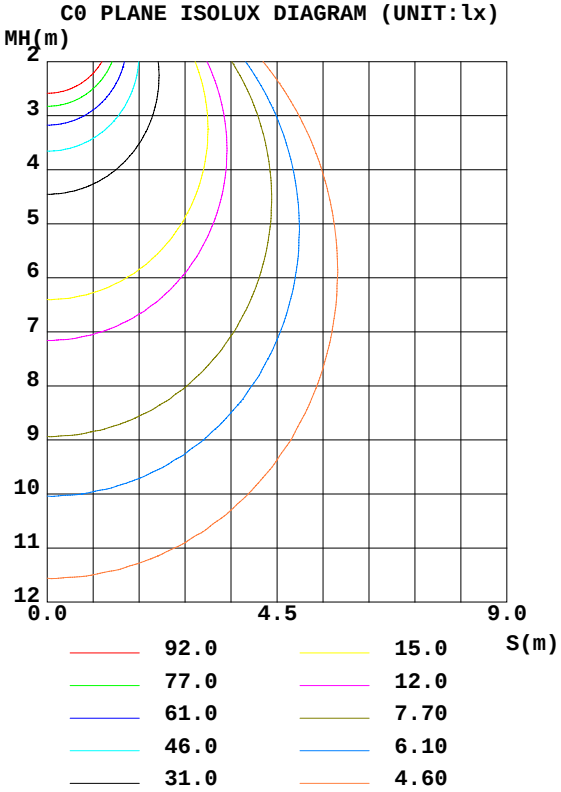
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 82.57 lm/W	
MODEL	ASL-511201	Imax(cd)	615.5	S/MH(C0/180)	1.25
NOMINAL POWER(W)	22	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1766.9	η UP,DN(C0-180)	0.0,50.5
NOMINAL FLUX(lm)	1766.94	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.5
LAMPS INSIDE	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	606.1	606.4	604.4	604.4	602.1	603.6	603.2	606.2	0- 10	58.19	58.19	3.29,3.29
20	576.4	576.9	574.1	571.8	569.6	570.9	572.2	575.8	10- 20	167.0	225.2	12.7,12.7
30	527.2	528.4	524.3	519.2	519.6	518.2	520.8	526.7	20- 30	253.8	479.0	27.1,27.1
40	459.8	460.7	455.8	450.2	449.1	448.2	451.0	457.2	30- 40	306.7	785.7	44.5,44.5
50	376.7	377.4	370.5	364.0	356.2	355.2	359.1	366.4	40- 50	316.6	1102	62.4,62.4
60	281.4	282.2	276.1	267.6	261.4	259.8	264.4	272.3	50- 60	285.3	1388	78.5,78.5
70	176.7	177.3	171.4	163.1	161.2	160.3	164.2	172.4	60- 70	217.2	1605	90.8,90.8
80	80.22	81.03	76.03	68.83	66.23	64.96	68.99	76.85	70- 80	126.2	1731	98,98
90	2.632	3.182	1.475	0.7939	0.7799	0.7868	0.7586	1.253	80- 90	35.90	1767	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

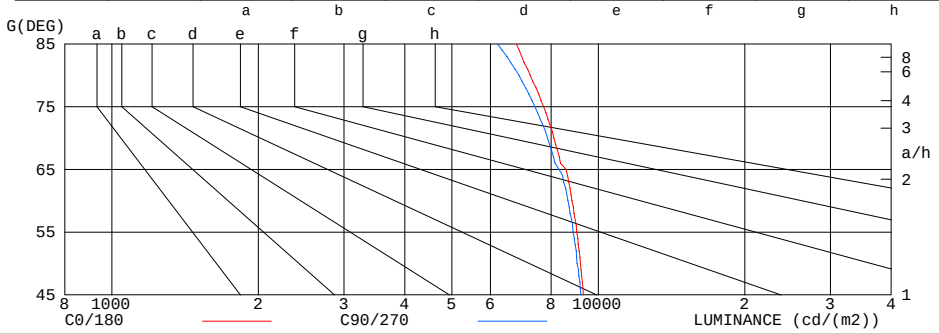
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	**TYPE:**	**WEIGHT:**
SPEC.:	**DIM.:**	**SERIAL No.:3000K**
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	6782	6203
80	7244	6869
75	7720	7405
70	8099	7861
65	8572	8300
60	8826	8662
55	9027	8872
50	9190	9044
45	9311	9207

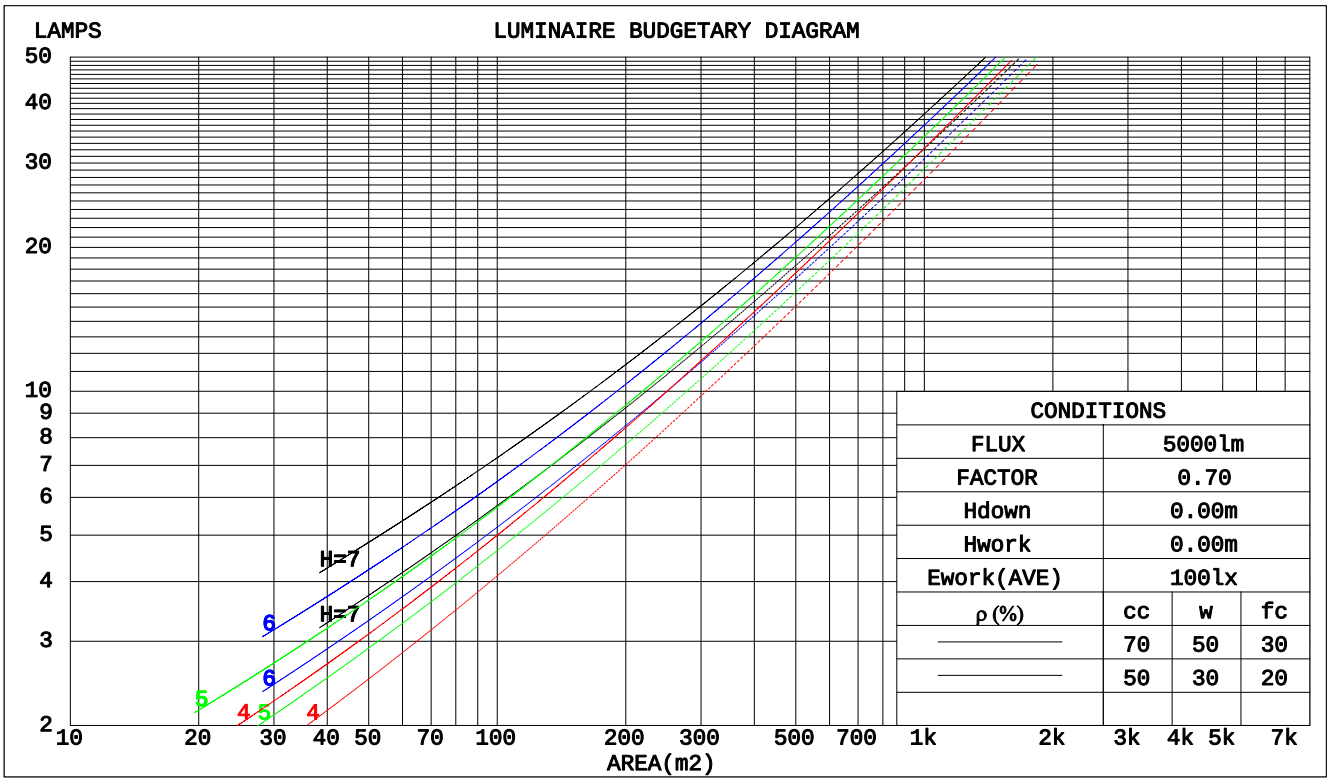
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
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	1.00
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:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
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	.134	.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:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
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	21.8	22.1	20.1	21.5	20.4	21.7	22.0
	4H	20.9	22.2	21.2	22.4	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	22.7	21.9	23.0	23.3	21.4	22.6	21.7	22.9	23.1
	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	23.9	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	23.6
	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	22.8	22.5	23.2	23.6
	6H	23.0	23.6	23.5	24.1	24.5	22.9	23.5	23.3	23.9	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		+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 1767 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:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

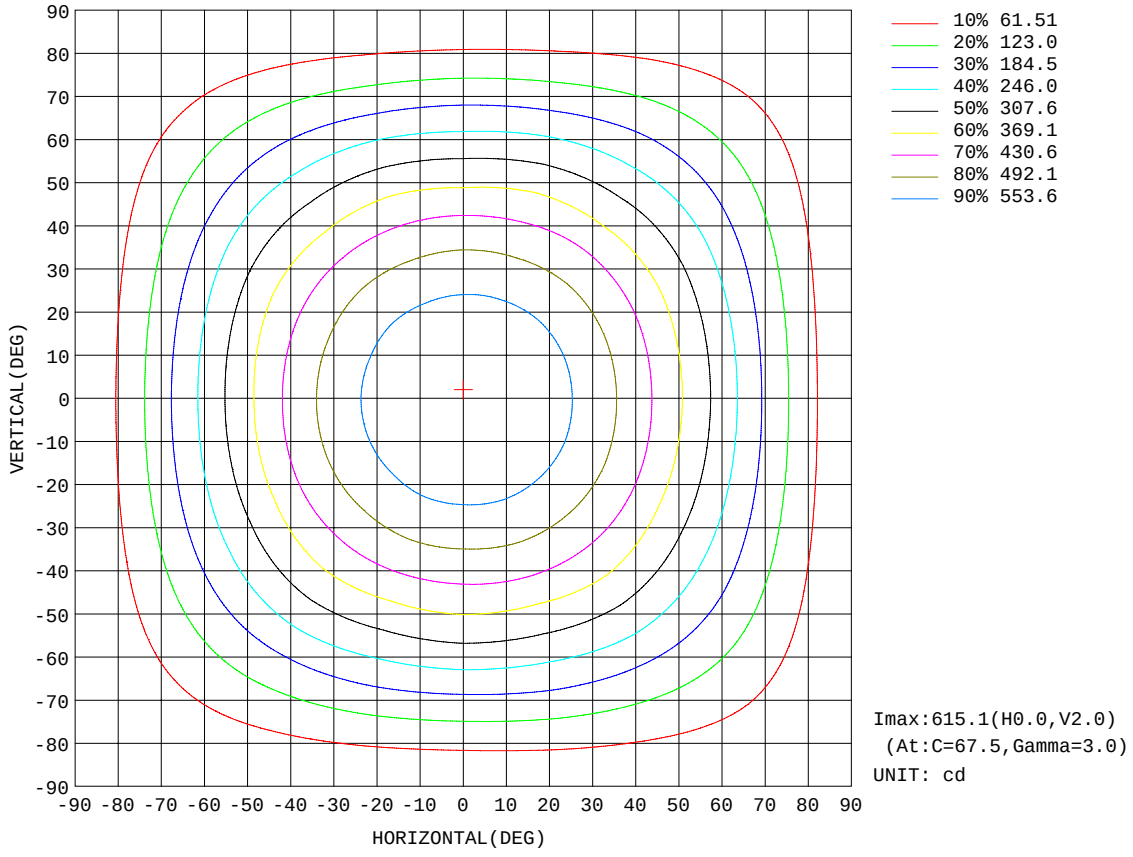
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	46	39	57	46	39	56	45	39	32
0.80	67	56	48	66	55	48	65	55	48	41
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:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



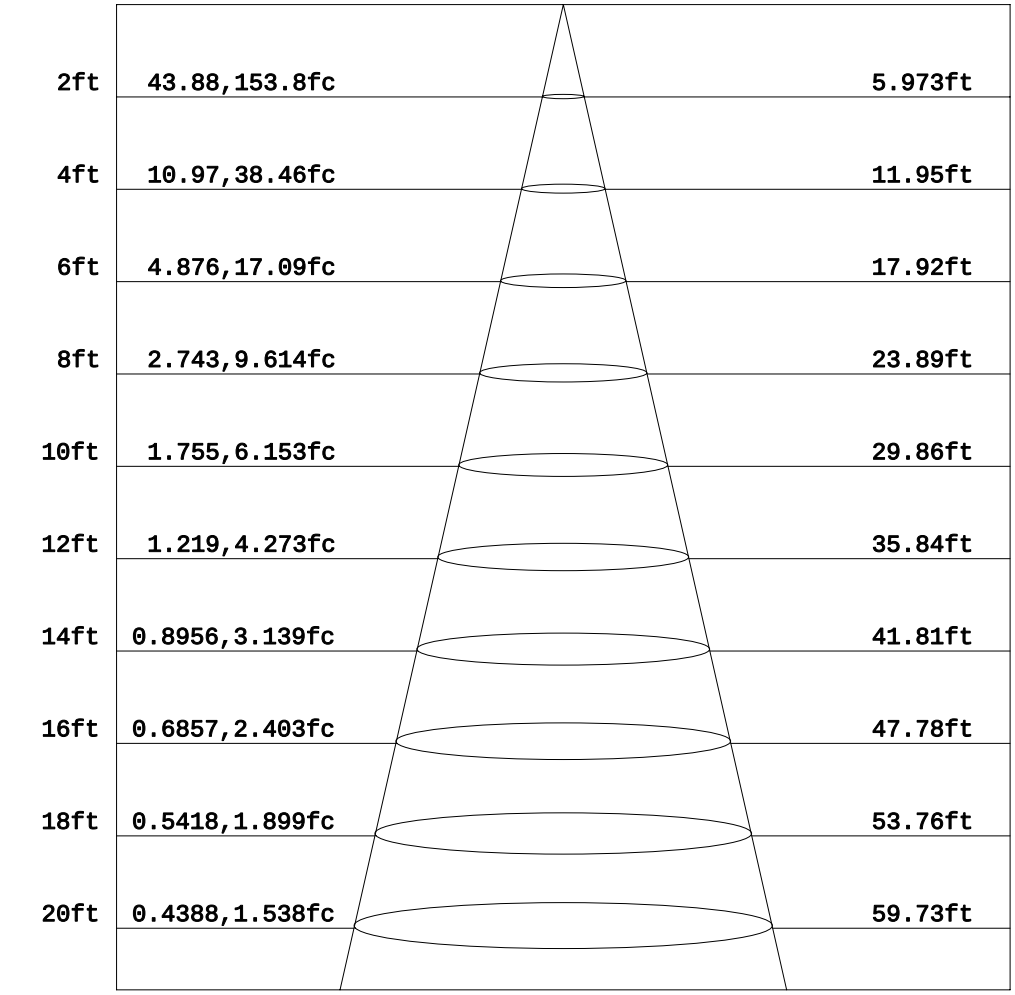
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

Flux out:1308 lm



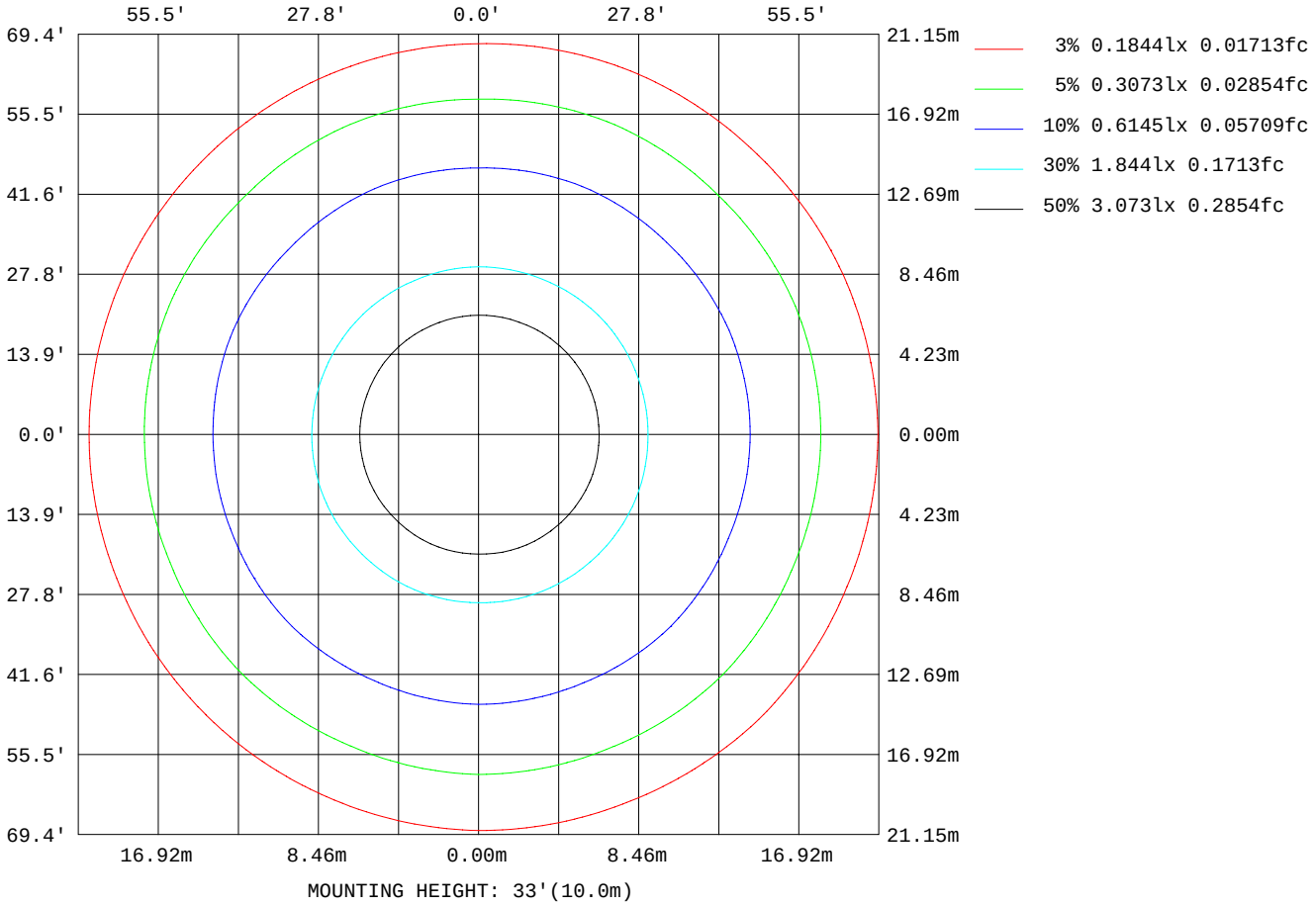
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
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:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

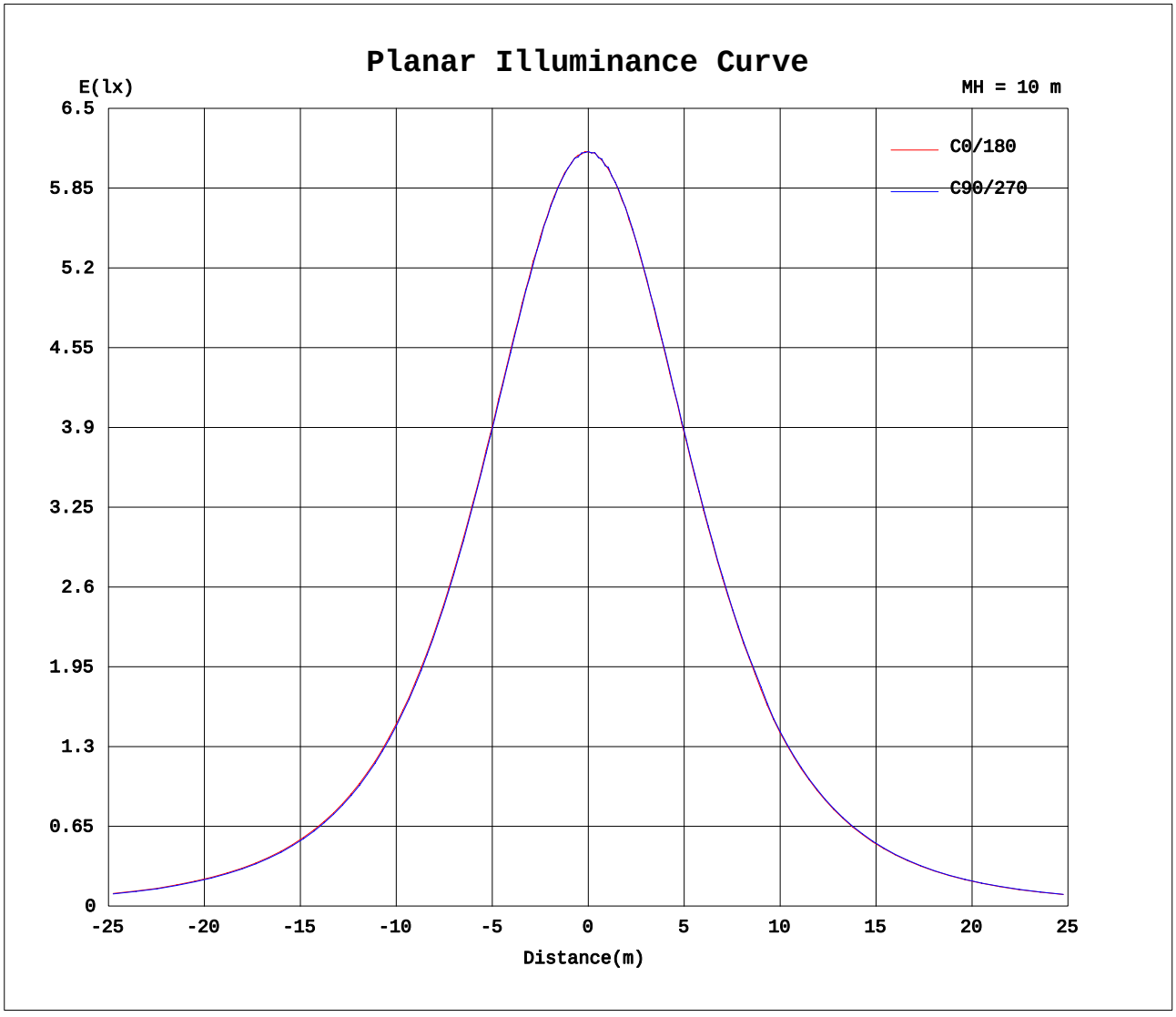
AvgL	cd/m2
L_0~180(65)av	8214
L_0~180(75)av	7252
L_0~180(85)av	5698
L_90~270(65)av	8120
L_90~270(75)av	7191
L_90~270(85)av	5629
L_45(65)av	8147
L_45(75)av	7221
L_45(85)av	5665

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:0.1920A P:21.40W PF:0.9310 Freq:60.00Hz Lamp Flux:1766.94x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
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	615	615	615	615	615	615	615	615	615	615	615	615	615	615	615	615			
5	613	612	613	614	612	613	612	611	611	611	612	611	610	611	613	613			
10	606	606	606	607	604	605	604	603	602	602	604	603	603	604	606	605			
15	593	595	594	594	592	591	591	589	589	589	589	589	591	592	593	594			
20	576	578	577	578	574	574	572	571	570	569	571	570	572	573	576	576			
25	555	557	556	555	552	551	548	547	548	546	546	548	550	550	553	554			
30	527	530	528	528	524	523	519	518	520	517	518	518	521	521	527	526			
35	496	498	495	497	492	491	487	485	486	483	485	485	488	489	494	495			
40	460	463	461	460	456	454	450	448	449	447	448	448	451	452	457	459			
45	420	418	421	415	415	405	408	399	400	405	399	407	402	412	409	418			
50	377	373	377	369	371	362	364	356	356	361	355	362	359	368	366	375			
55	330	327	331	324	324	317	317	309	310	313	309	315	313	320	321	328			
60	281	279	282	276	276	268	268	261	261	264	260	265	264	272	272	280			
65	231	230	232	226	224	219	213	211	212	209	210	210	214	219	223	227			
70	177	180	177	177	171	169	163	161	161	159	160	160	164	167	172	175			
75	127	130	128	127	122	119	114	112	112	110	111	111	115	118	123	126			
80	80.2	82.8	81.0	80.1	76.0	73.5	68.8	66.7	66.2	63.8	65.0	65.4	69.0	71.6	76.8	79.1			
85	37.7	39.7	38.5	37.9	34.5	32.3	28.2	26.2	25.6	23.5	24.4	24.8	28.1	30.4	34.7	37.0			
90	2.63	3.20	3.18	2.34	1.48	0.86	0.79	0.79	0.78	0.77	0.79	0.79	0.76	0.80	1.25	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: