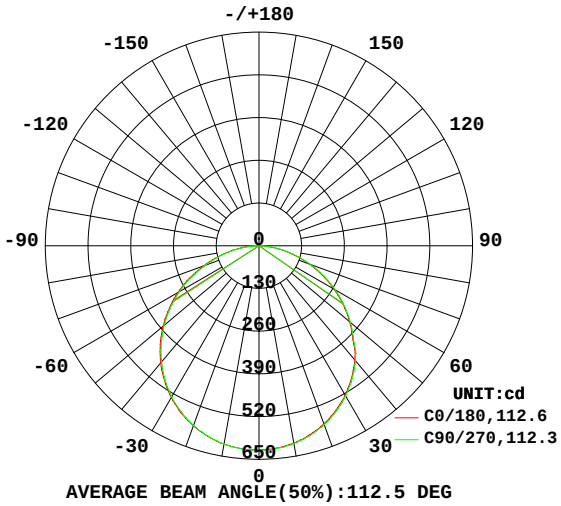
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

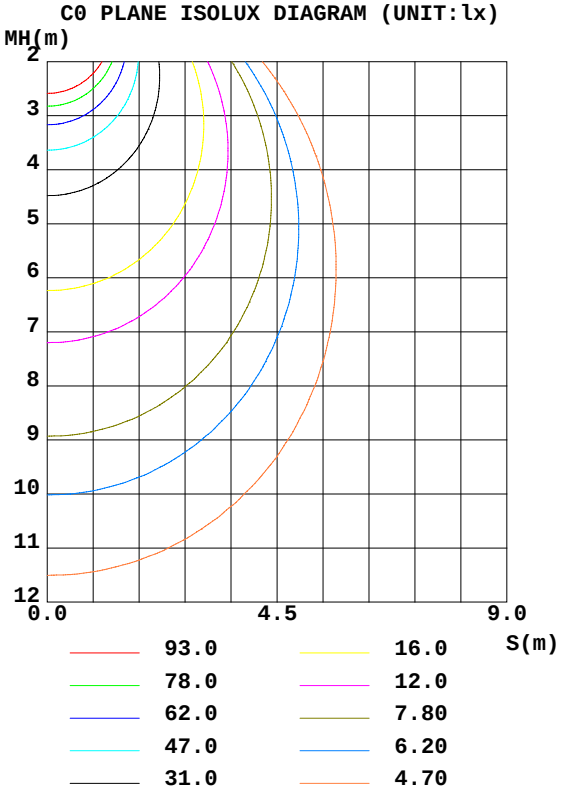
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 84.36 lm/W	
MODEL	ASL-511201	Imax(cd)	623.6	S/MH(C0/180)	1.25
NOMINAL POWER(W)	22	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1788.4	η UP,DN(C0-180)	0.0,50.5
NOMINAL FLUX(lm)	1788.38	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.5
LAMPS INSIDE	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	612.4	614.6	612.3	610.9	609.9	610.5	611.2	613.2	0- 10	58.89	58.89	3.29,3.29
20	583.9	584.8	582.0	578.7	577.2	577.3	579.4	583.1	10- 20	169.0	227.9	12.7,12.7
30	532.9	534.9	530.6	525.5	524.4	524.7	527.0	531.9	20- 30	256.8	484.7	27.1,27.1
40	464.8	466.5	460.7	454.4	453.9	453.1	457.2	462.9	30- 40	310.4	795.1	44.5,44.5
50	381.1	381.8	376.4	368.5	360.2	359.5	363.3	370.6	40- 50	320.6	1116	62.4,62.4
60	284.4	286.1	279.5	271.0	264.1	263.4	267.7	275.7	50- 60	288.7	1404	78.5,78.5
70	178.7	179.7	173.4	165.4	163.1	161.8	166.4	174.8	60- 70	219.9	1624	90.8,90.8
80	81.18	81.95	76.86	69.61	67.07	65.96	70.02	77.60	70- 80	127.7	1752	98,98
90	2.658	3.227	1.484	0.8141	0.8001	0.8015	0.7664	1.252	80- 90	36.34	1788	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

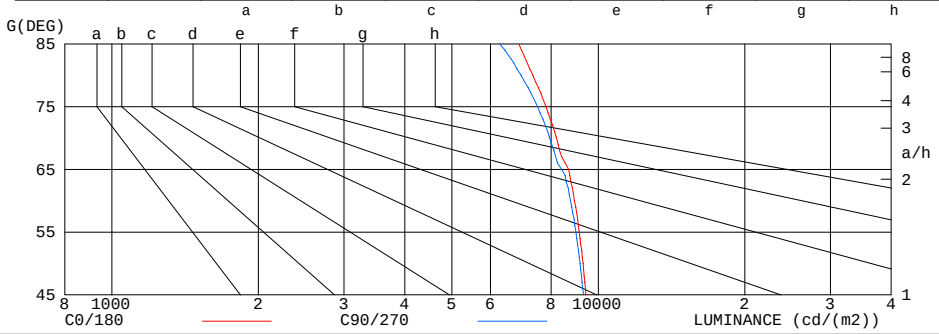
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	**TYPE:**	**WEIGHT:**
SPEC.:	**DIM.:**	**SERIAL No.:3500K**
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	6864	6264
80	7337	6937
75	7804	7498
70	8200	7943
65	8685	8400
60	8926	8762
55	9134	8993
50	9304	9177
45	9430	9326

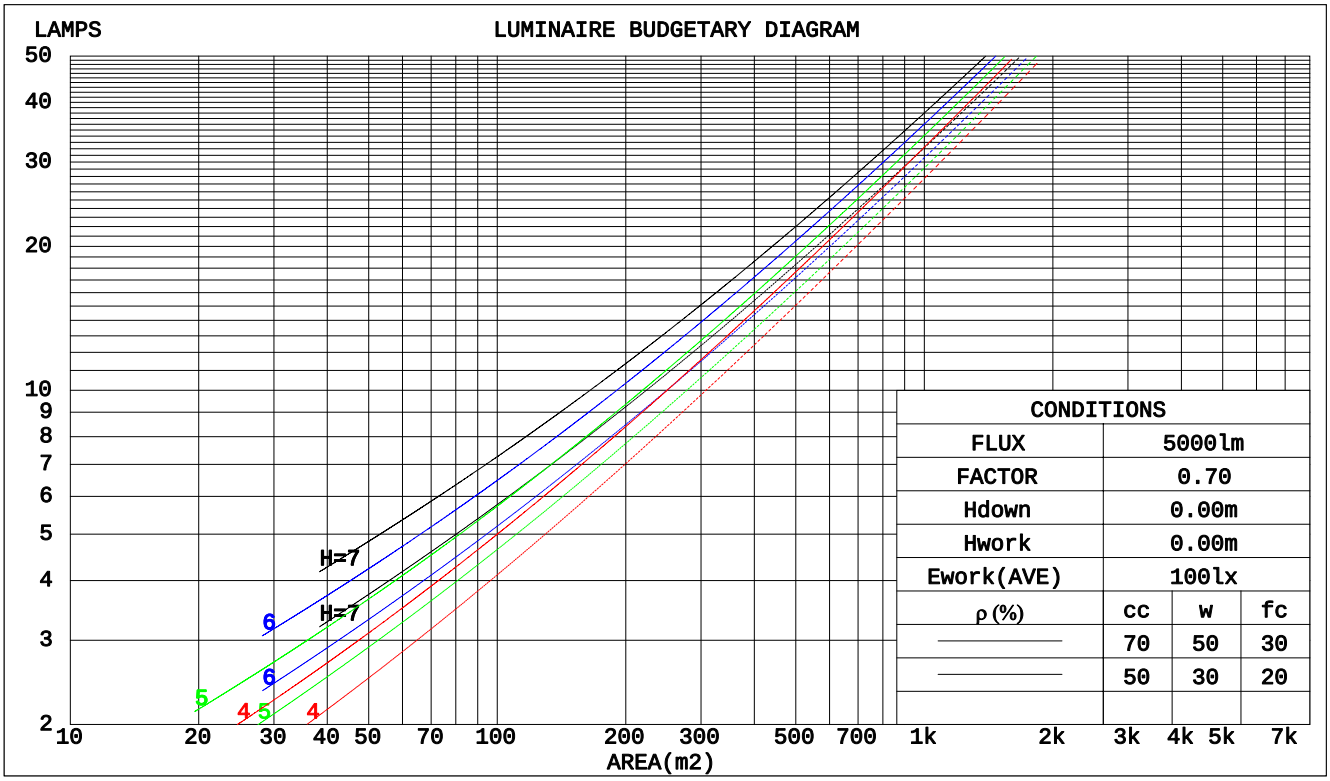
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
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:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
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:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
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	22.4	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	23.4	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, 1788 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:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

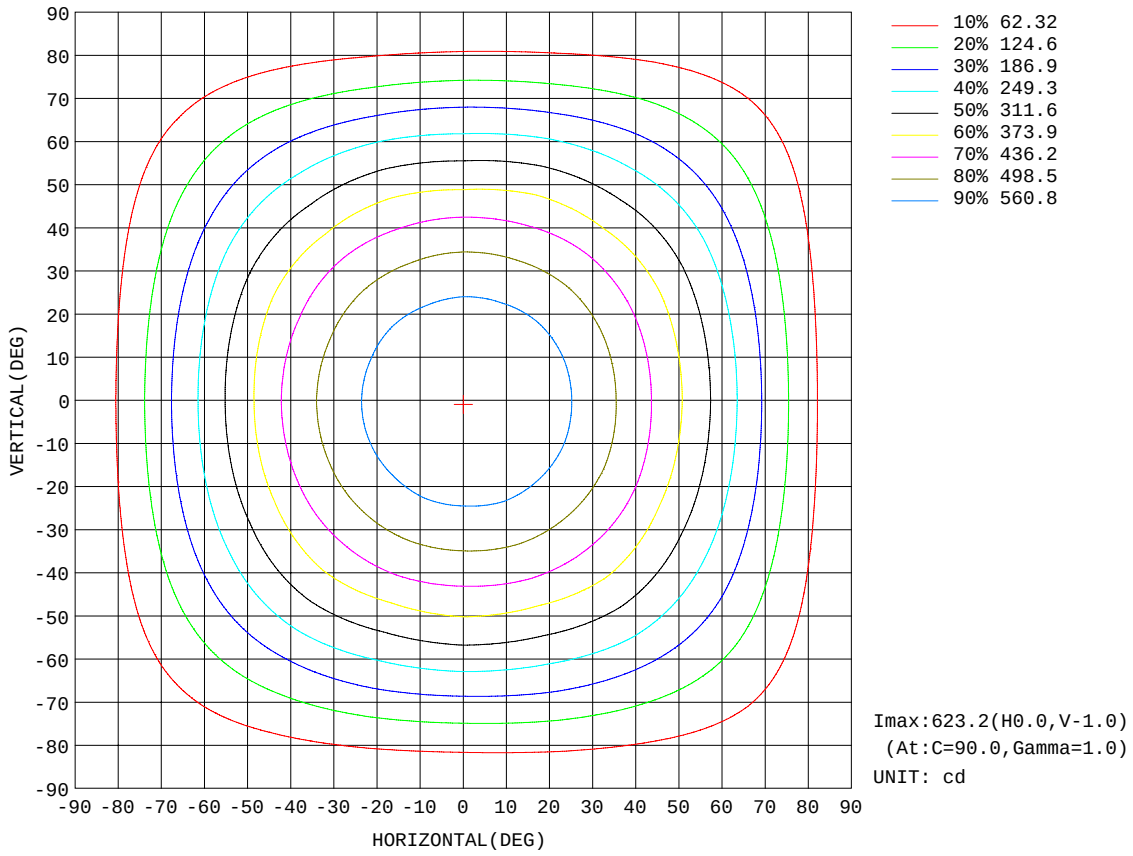
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	46	39	57	46	39	56	45	39	32
0.80	67	56	48	66	55	48	65	55	48	41
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:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



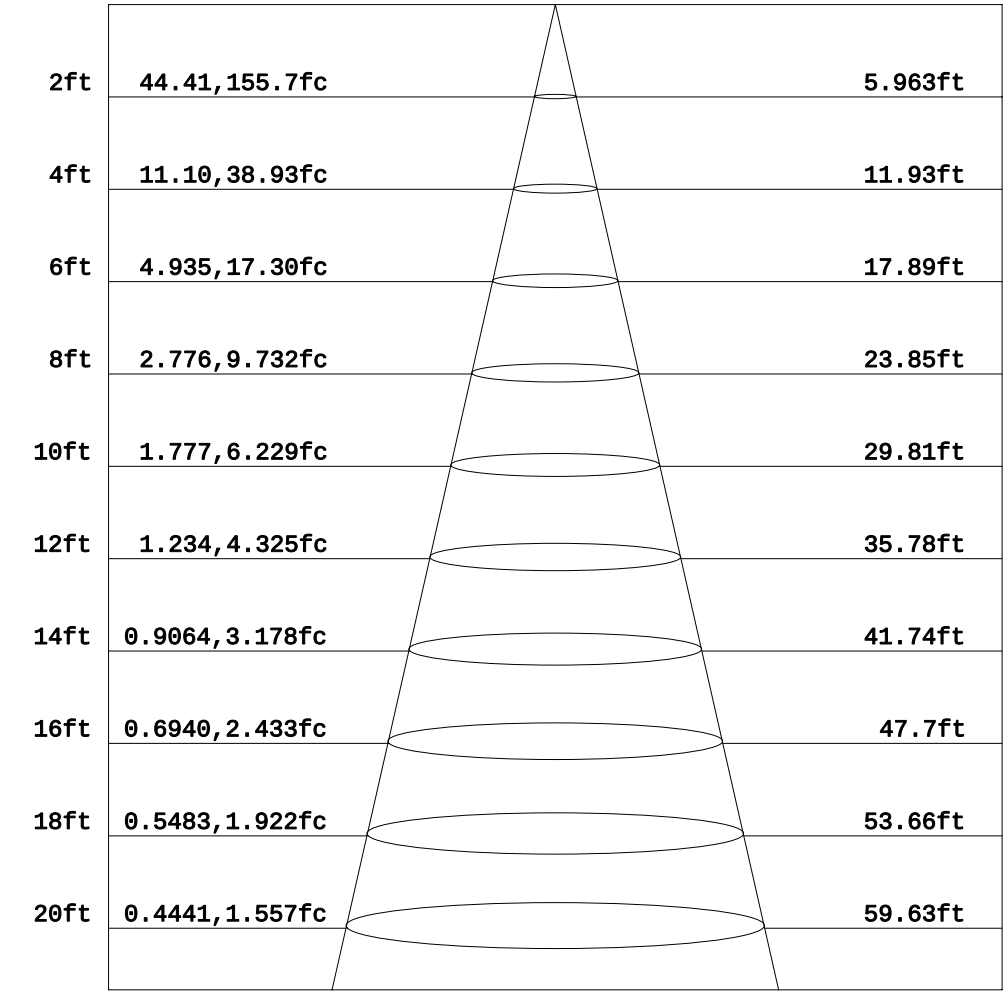
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

Flux out:1323 lm



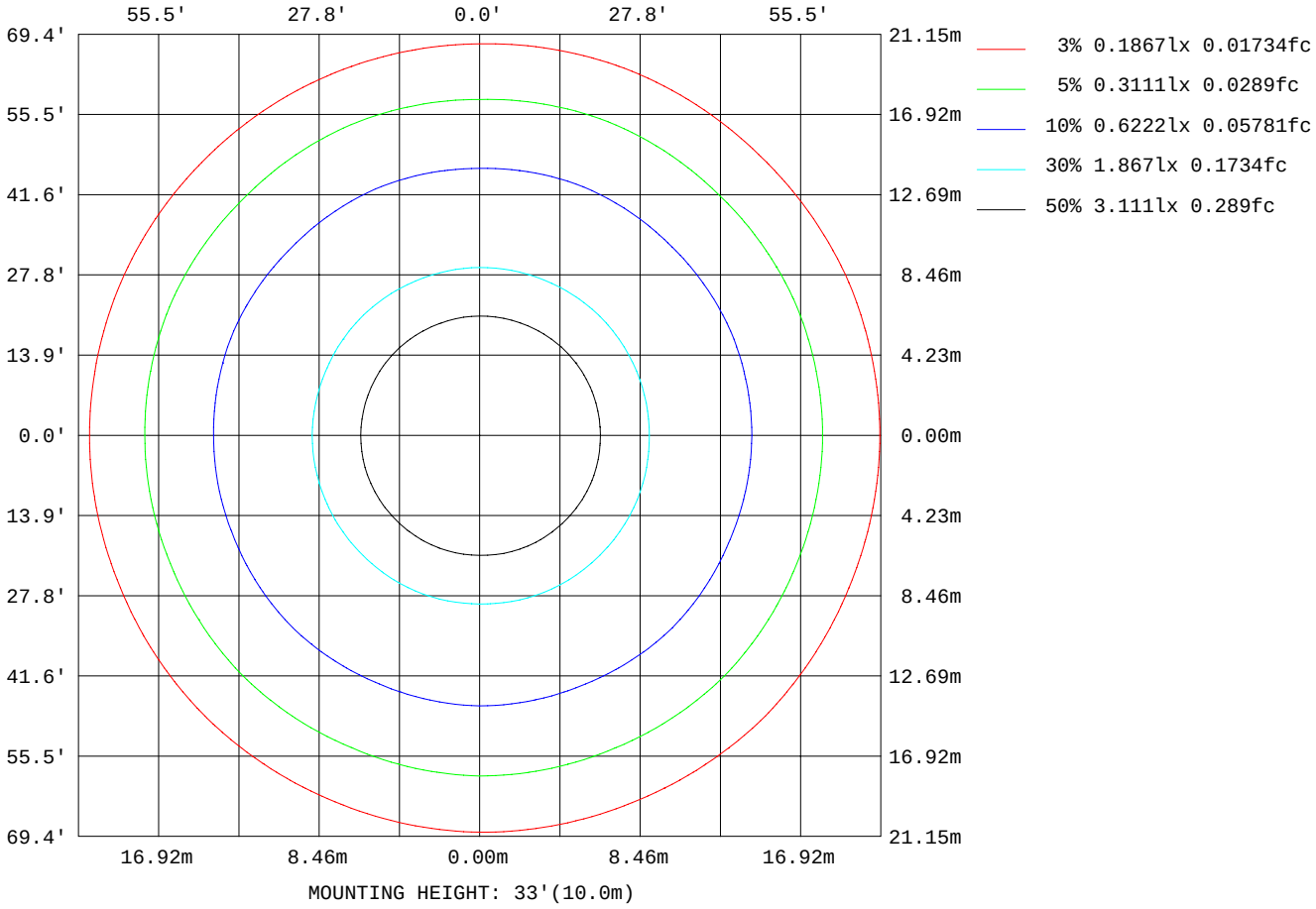
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
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:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

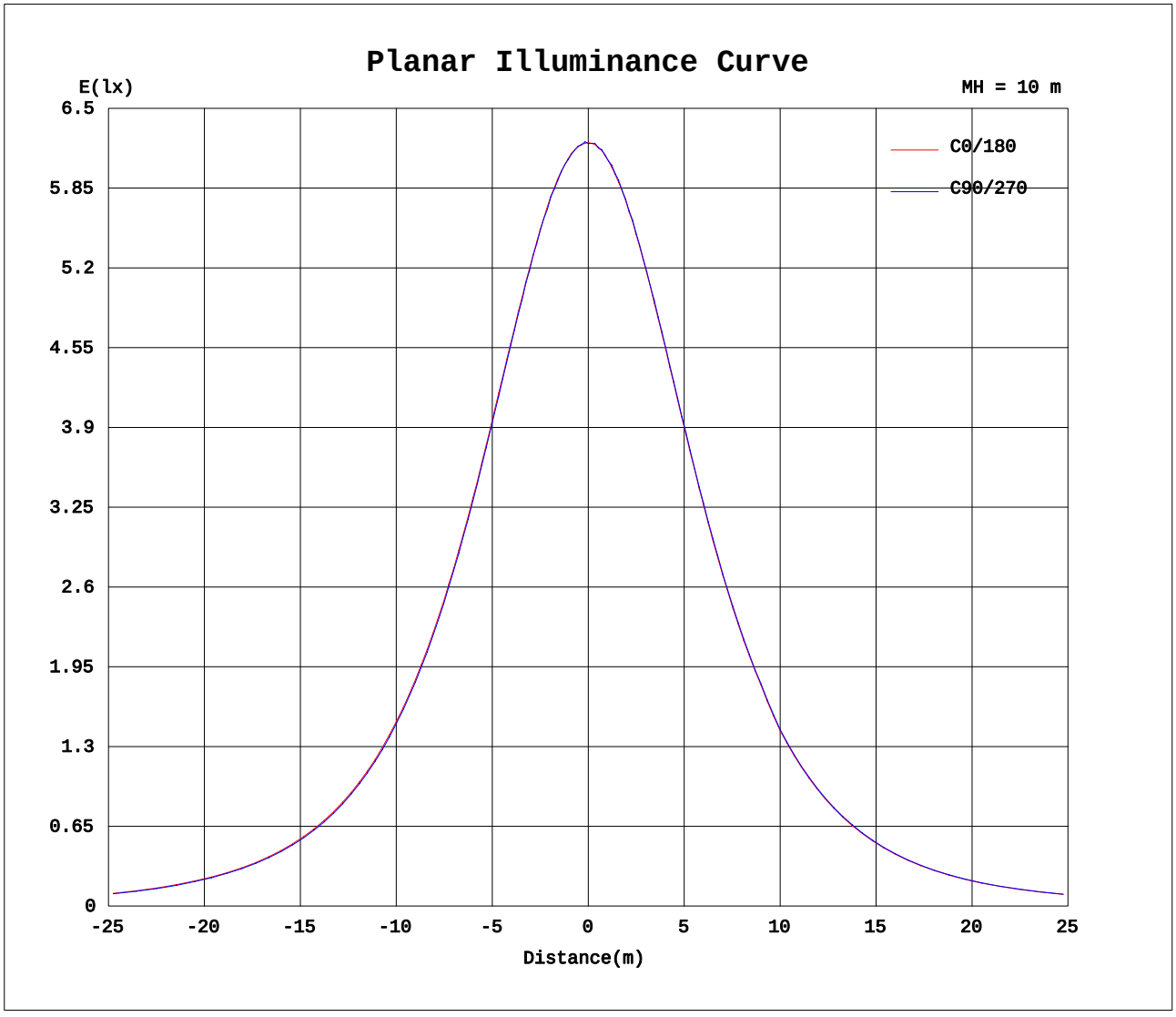
AvgL	cd/m2
L_0~180(65)av	8306
L_0~180(75)av	7328
L_0~180(85)av	5763
L_90~270(65)av	8232
L_90~270(75)av	7290
L_90~270(85)av	5697
L_45(65)av	8247
L_45(75)av	7307
L_45(85)av	5732

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:0.1890A P:21.20W PF:0.9350 Freq:60.00Hz Lamp Flux:1788.38x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
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	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622	622			
5	620	621	621	620	620	619	618	619	618	618	619	619	620	619	619	620			
10	612	614	615	614	612	612	611	611	610	610	610	610	611	611	613	613			
15	601	602	602	602	600	597	597	596	596	595	596	595	598	598	600	601			
20	584	585	585	583	582	580	579	578	577	576	577	577	579	580	583	584			
25	561	563	562	562	559	557	554	554	553	552	553	553	556	556	559	561			
30	533	536	535	534	531	529	526	525	524	523	525	523	527	528	532	534			
35	501	505	503	501	498	496	491	492	491	490	492	490	494	494	499	501			
40	465	469	466	465	461	459	454	454	454	452	453	452	457	458	463	465			
45	425	425	426	421	421	411	413	404	404	410	404	411	407	416	417	424			
50	381	377	382	374	376	367	368	360	360	365	360	366	363	372	371	380			
55	334	331	335	328	329	320	320	313	314	317	313	318	316	324	324	333			
60	284	283	286	279	280	271	271	264	264	266	263	269	268	275	276	284			
65	234	233	235	229	227	221	215	214	214	212	213	213	217	222	225	233			
70	179	182	180	179	173	171	165	163	163	161	162	162	166	169	175	178			
75	129	132	130	129	124	121	116	114	113	111	112	112	117	119	125	128			
80	81.2	83.8	82.0	81.2	76.9	74.2	69.6	67.5	67.1	64.8	66.0	65.9	70.0	72.5	77.6	80.2			
85	38.1	40.2	39.0	38.4	34.8	32.7	28.6	26.6	25.9	23.8	24.7	25.0	28.5	30.7	35.1	37.4			
90	2.66	3.25	3.23	2.38	1.48	0.89	0.81	0.82	0.80	0.79	0.80	0.78	0.77	0.81	1.25	2.38			

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: