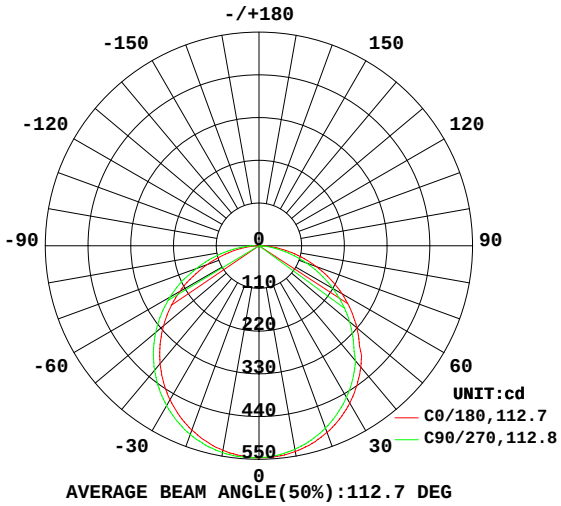
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

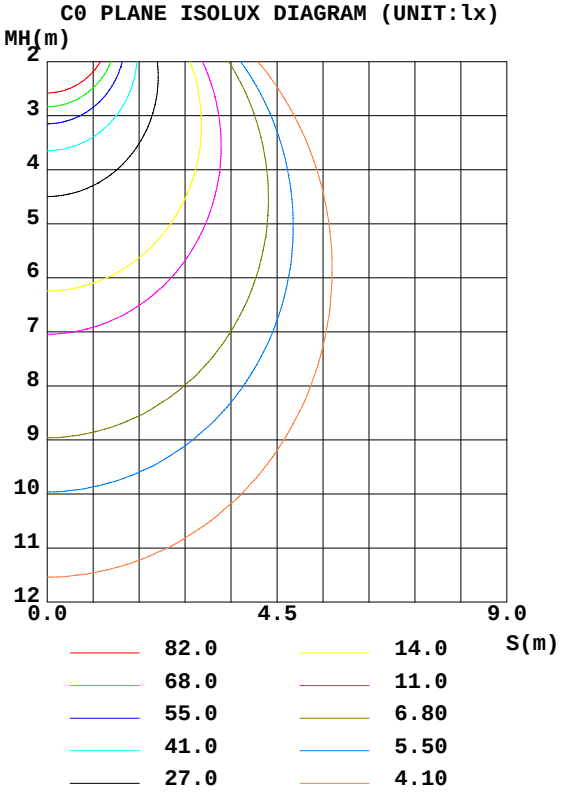
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 71.37 lm/W	
MODEL	ASL-511202	Imax(cd)	547.5	S/MH(C0/180)	1.27
NOMINAL POWER(W)	22	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1570.2	η UP,DN(C0-180)	0.0,52.0
NOMINAL FLUX(lm)	1570.16	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.0
LAMPS INSIDE	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%):112.7 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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=1.0288]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	535.0	538.2	540.9	540.6	538.4	534.4	532.1	532.5	0- 10	51.67	51.67	3.29,3.29
20	505.5	512.8	517.2	516.3	511.6	504.1	499.8	500.6	10- 20	148.1	199.8	12.7,12.7
30	457.8	468.5	475.5	474.5	467.9	457.0	450.6	452.7	20- 30	224.9	424.6	27,27
40	396.7	409.4	418.4	417.5	408.3	394.5	386.9	388.7	30- 40	271.8	696.4	44.4,44.4
50	321.0	336.7	347.3	345.8	328.8	313.1	304.3	306.8	40- 50	281.4	977.8	62.3,62.3
60	235.8	252.9	264.6	263.2	246.5	229.1	219.5	221.7	50- 60	254.3	1232	78.5,78.5
70	141.8	158.9	171.5	170.1	157.1	139.0	130.0	132.4	60- 70	193.9	1426	90.8,90.8
80	56.44	71.32	83.34	82.24	69.89	53.91	46.68	48.69	70- 80	112.0	1538	98,98
90	0.7222	4.124	10.77	9.707	2.654	0.6915	0.7280	0.7220	80- 90	32.16	1570	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:2026-10-27

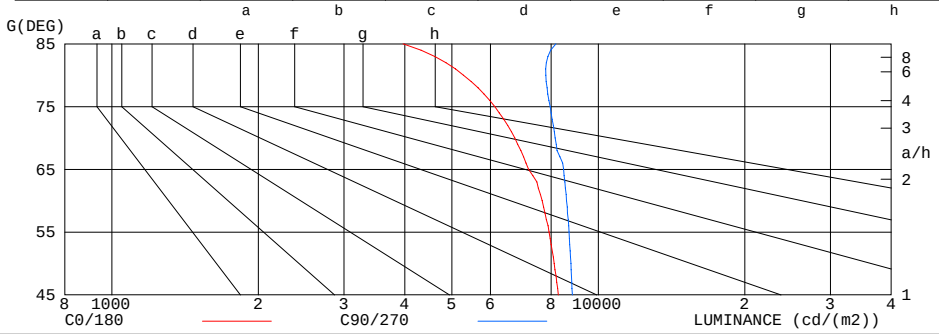
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0288]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 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	3968	8180
80	5281	7802
75	6124	7960
70	6734	8150
65	7186	8485
60	7664	8604
55	7920	8705
50	8114	8782
45	8277	8845

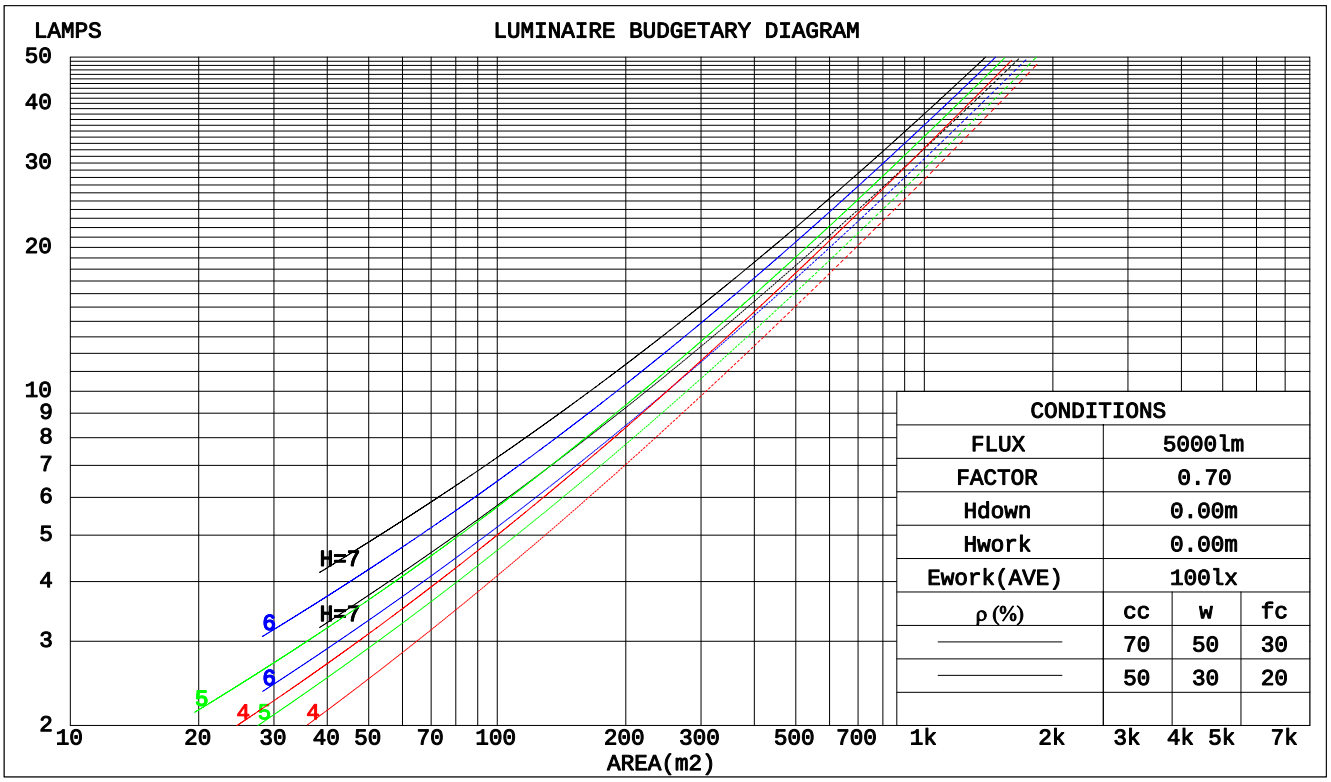
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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=1.0288]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 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	.95	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	.78	.75	.71	.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	.53	.47	.61	.53	.47	.59	.52	.46	.57	.51	.45	.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	.44	.37	.32	.43	.36	.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:2026-10-27

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=1.0288]
Remarks:

WEC AND CCEC

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 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	.178	.056	.305	.174	.055	.292	.167	.053	.280	.161	.052	.268	.156	.050	
2.0	.293	.161	.049	.287	.158	.049	.275	.153	.048	.265	.148	.046	.255	.144	.045	
3.0	.271	.144	.043	.266	.142	.043	.255	.138	.042	.246	.135	.041	.237	.131	.041	
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.227	.122	.037	.220	.119	.036	
5.0	.231	.118	.034	.227	.116	.034	.219	.114	.034	.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	.099	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.178	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.089	.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	.022	.148	.075	.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	.089	.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:2026-10-27

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=1.0288]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 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	20.1	18.8	20.3	20.5	19.0	20.5	19.2	20.7	20.9
	3H	20.0	21.4	20.3	21.7	21.9	20.6	22.1	20.9	22.3	22.5
	4H	20.6	21.9	20.9	22.2	22.4	21.4	22.7	21.7	23.0	23.2
	6H	21.0	22.2	21.3	22.5	22.8	21.9	23.2	22.3	23.5	23.8
	8H	21.1	22.3	21.4	22.6	22.9	22.2	23.4	22.5	23.7	24.0
	12H	21.1	22.3	21.5	22.6	22.9	22.3	23.5	22.7	23.8	24.1
4H	2H	19.2	20.6	19.6	20.8	21.1	19.6	20.9	19.9	21.2	21.4
	3H	20.9	22.1	21.2	22.4	22.7	21.4	22.6	21.8	22.9	23.2
	4H	21.6	22.7	22.0	23.0	23.3	22.3	23.4	22.7	23.7	24.0
	6H	22.1	23.1	22.5	23.4	23.8	23.0	24.0	23.4	24.3	24.7
	8H	22.3	23.1	22.7	23.5	23.9	23.3	24.2	23.7	24.5	24.9
	12H	22.3	23.2	22.8	23.6	24.0	23.5	24.4	24.0	24.7	25.1
8H	4H	21.9	22.8	22.3	23.2	23.6	22.5	23.4	22.9	23.8	24.2
	6H	22.6	23.3	23.0	23.7	24.2	23.4	24.2	23.9	24.6	25.0
	8H	22.8	23.5	23.3	23.9	24.4	23.8	24.5	24.3	24.9	25.4
	12H	23.0	23.6	23.5	24.0	24.5	24.2	24.7	24.7	25.2	25.7
12H	4H	22.0	22.8	22.4	23.2	23.6	22.5	23.4	23.0	23.7	24.2
	6H	22.7	23.4	23.2	23.8	24.2	23.5	24.1	23.9	24.6	25.0
	8H	23.0	23.6	23.5	24.0	24.5	23.9	24.5	24.4	24.9	25.4
Variations with the observer position at spacings:											
S = 1.0H		+ 0.2 / - 0.2					+ 0.1 / - 0.2				
1.5H		+ 0.2 / - 0.4					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.4					+ 0.1 / - 0.3				

CIE Pub.117, 1570 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.6)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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=1.0288]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

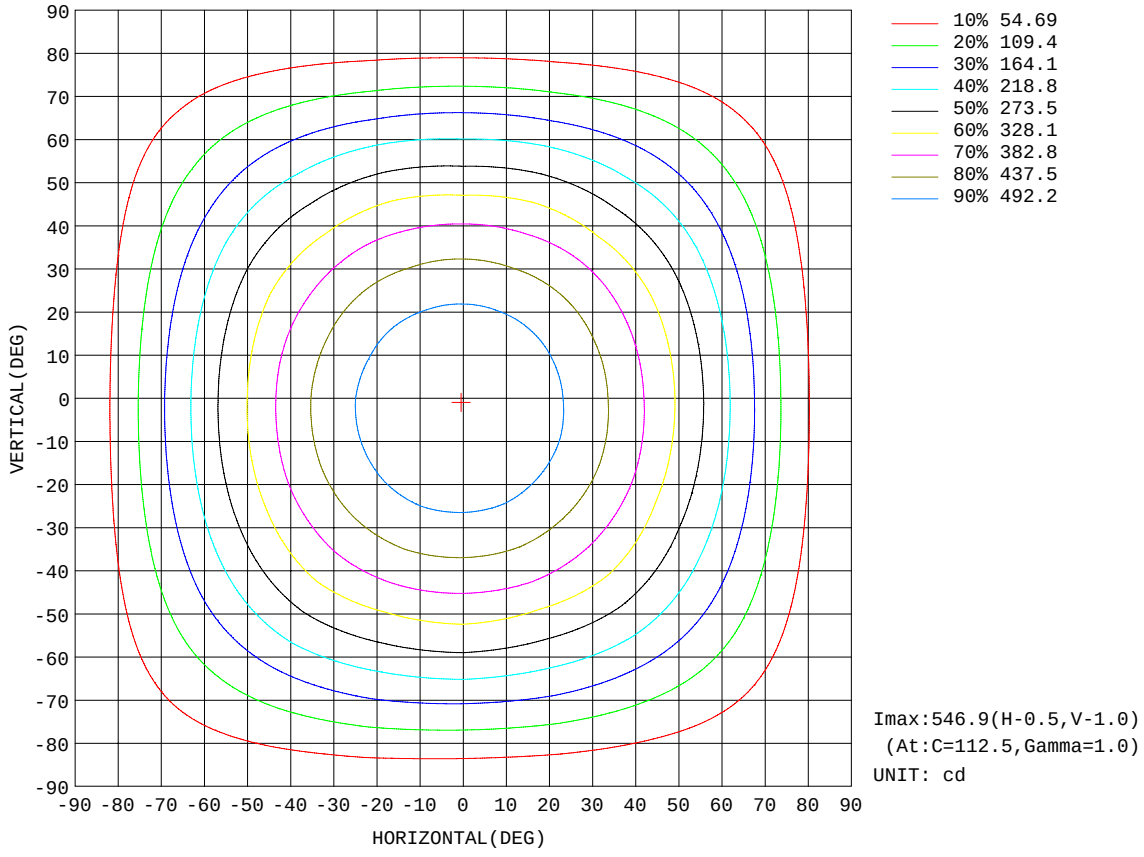
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	46	39	57	45	39	55	45	38	32
0.80	67	56	48	66	55	48	65	55	48	41
1.00	76	65	57	75	64	57	72	65	56	49
1.25	83	72	65	81	72	65	79	70	64	57
1.50	88	78	71	86	77	70	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	99	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:2026-10-27

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=1.0288]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



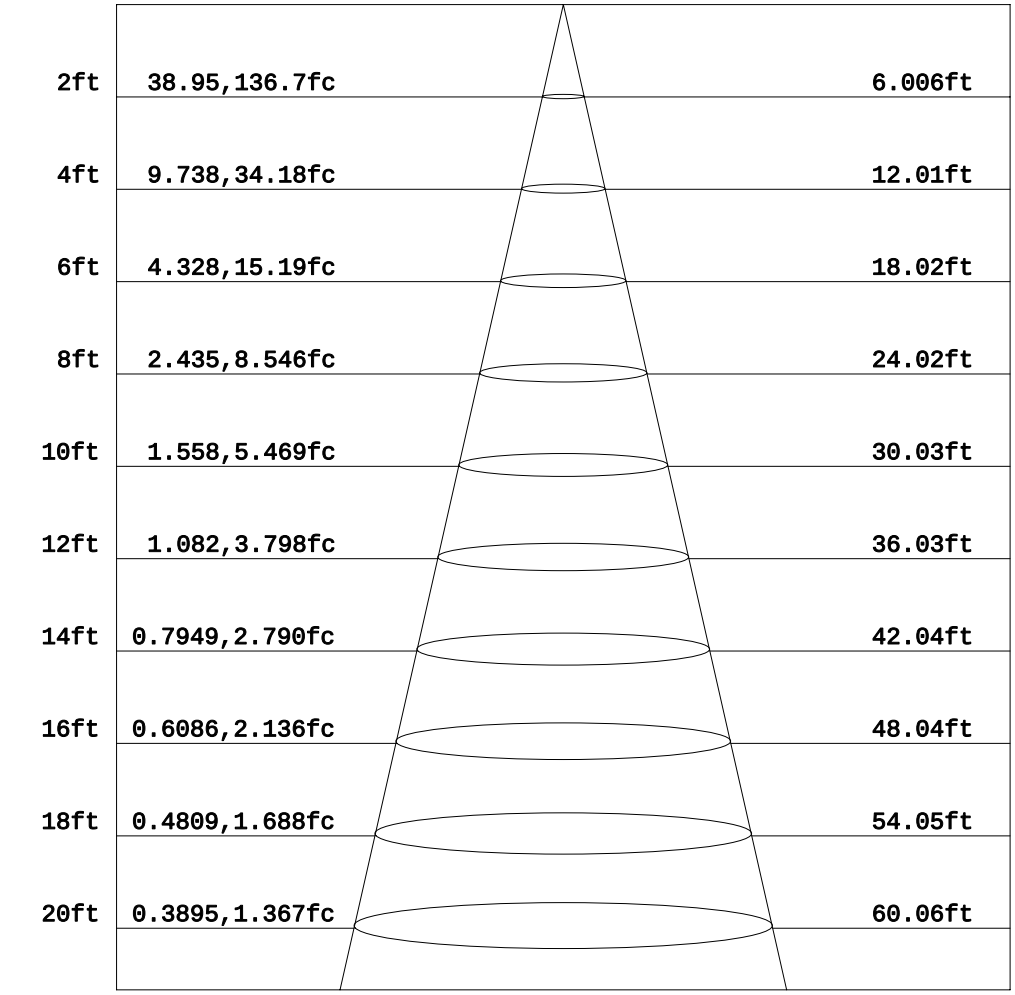
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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=1.0288]
Remarks:

AAI Figure

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

Flux out:1161 lm



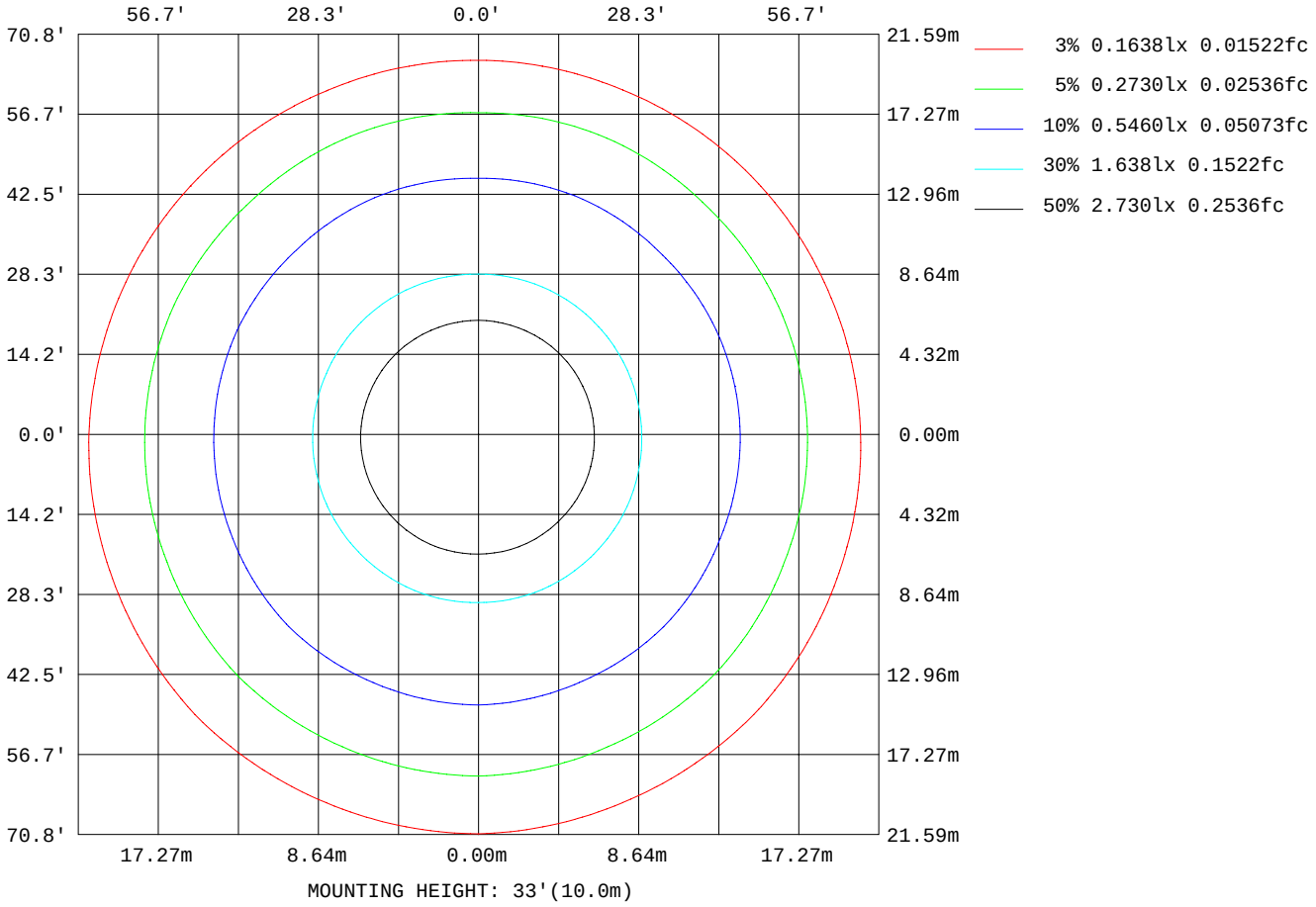
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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=1.0288]
Remarks:

ISOLUX DIAGRAM

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 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:2026-10-27

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=1.0288]
Remarks:

LED Avg.L Report

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

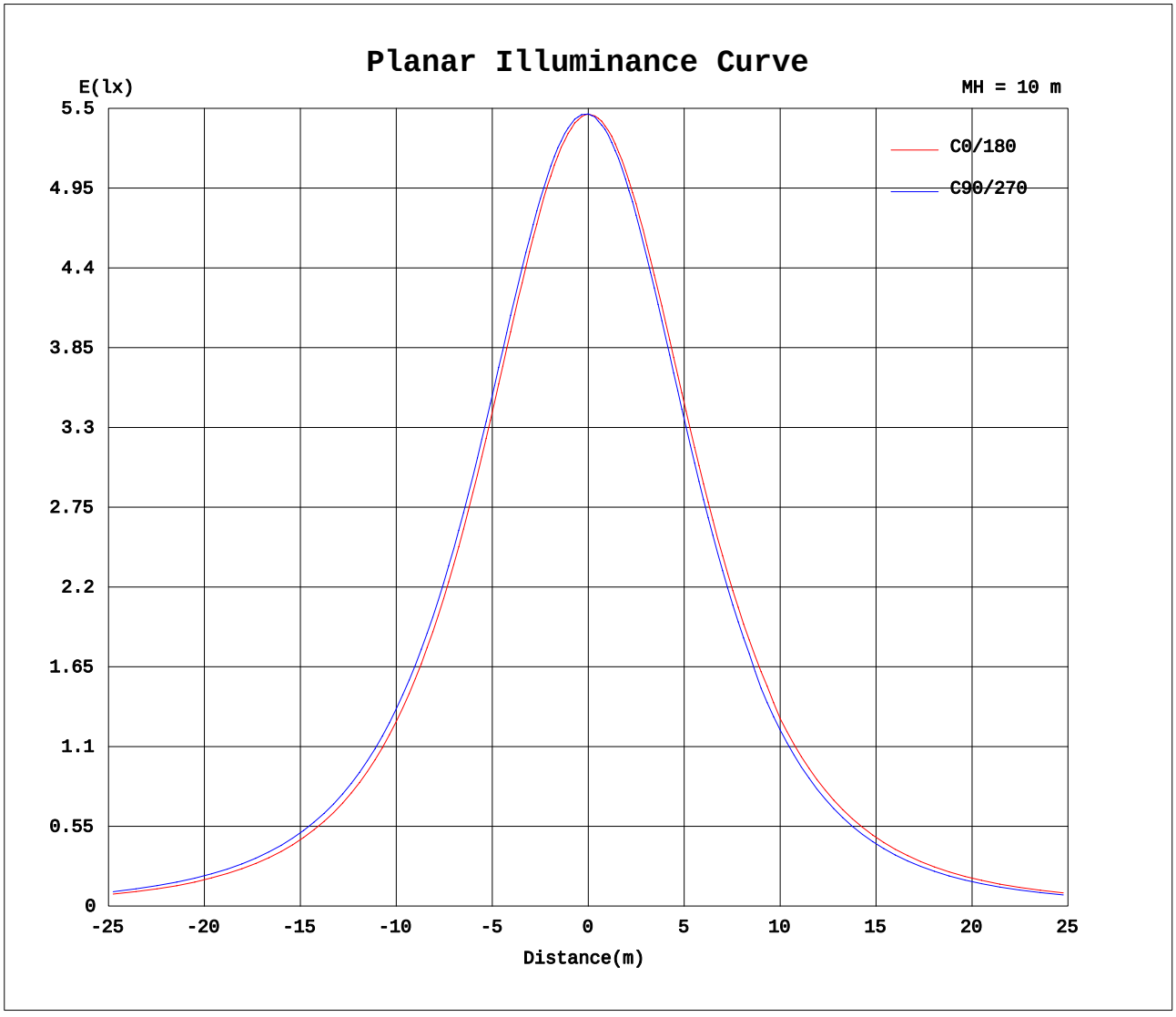
AvgL	cd/m2
L_0~180(65)av	7481
L_0~180(75)av	6592
L_0~180(85)av	4989
L_90~270(65)av	7599
L_90~270(75)av	6693
L_90~270(85)av	5277
L_45(65)av	7585
L_45(75)av	6641
L_45(85)av	5128

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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=1.0288]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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=1.0288]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.1V I:0.1980A P:22.00W PF:0.9240 Freq:60.00Hz Lamp Flux:1570.16x1 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	546	546	546	546	546	546	546	546	546	546	546	546	546	546	546	546			
5	542	544	545	546	545	546	546	545	544	543	543	541	542	541	542	542			
10	535	537	538	540	541	542	541	540	538	536	534	532	532	532	533	534			
15	522	526	528	531	532	532	531	530	527	524	522	519	518	518	518	520			
20	505	509	513	516	517	519	516	515	512	507	504	501	500	500	501	503			
25	484	489	493	496	499	500	498	495	492	486	483	478	477	477	479	481			
30	458	464	469	474	475	477	475	471	468	462	457	452	451	450	453	455			
35	429	436	441	446	448	452	448	444	440	432	427	422	421	419	422	425			
40	397	404	409	415	418	421	418	413	408	400	394	388	387	385	389	392			
45	360	362	375	382	385	387	384	376	366	364	352	351	344	349	346	355			
50	321	324	337	338	347	343	346	336	329	325	313	312	304	309	307	316			
55	280	284	296	299	307	304	306	296	289	284	272	270	263	267	265	274			
60	236	241	253	257	265	263	263	254	247	240	229	226	219	222	222	230			
65	187	197	208	213	221	219	219	210	202	191	184	177	175	174	177	181			
70	142	151	159	168	171	174	170	165	157	146	139	132	130	129	132	136			
75	97.6	107	114	123	127	129	125	120	112	102	94.8	88.1	86.5	85.6	89.0	92.3			
80	56.4	64.7	71.3	79.5	83.3	85.8	82.2	77.0	69.9	60.1	53.9	48.2	46.7	45.7	48.7	51.8			
85	21.3	28.2	33.9	40.6	43.9	45.9	42.8	38.3	32.2	24.2	19.0	14.3	12.8	11.9	14.3	17.1			
90	0.72	1.23	4.12	7.93	10.8	11.3	9.71	5.91	2.65	0.74	0.69	0.70	0.73	0.72	0.72	0.70			

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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=1.0288]
Remarks: