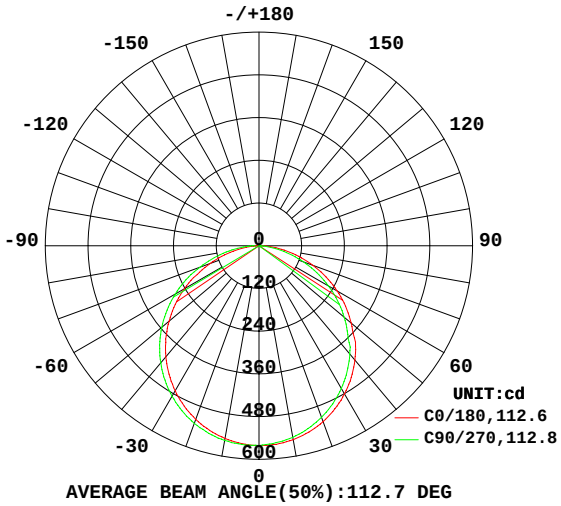
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

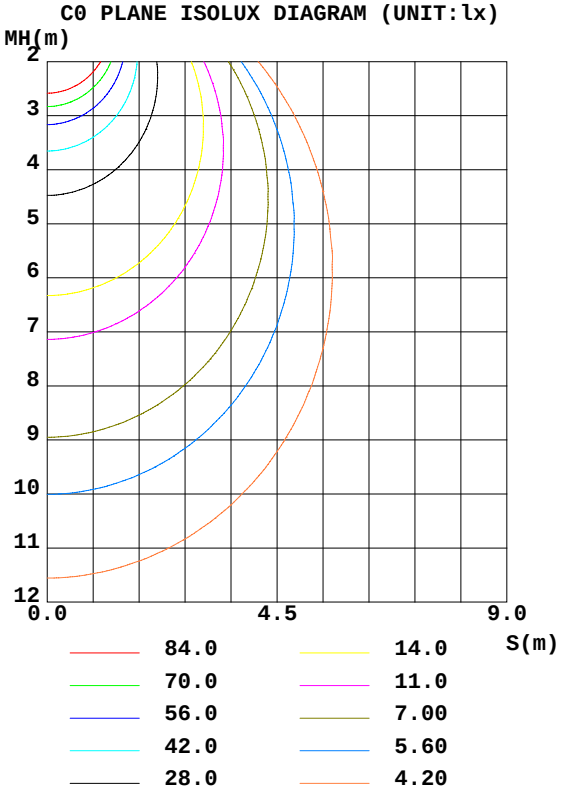
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 74.02 lm/W	
MODEL	ASL-511202	Imax(cd)	562.0	S/MH(C0/180)	1.27
NOMINAL POWER(W)	22	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1613.6	η UP,DN(C0-180)	0.0,52.0
NOMINAL FLUX(lm)	1613.57	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.0
LAMPS INSIDE	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	549.8	553.0	555.4	555.4	553.4	549.3	546.4	546.9	0- 10	53.08	53.08	3.29,3.29
20	519.1	526.0	531.0	530.5	525.9	517.7	513.2	514.0	10- 20	152.2	205.2	12.7,12.7
30	470.5	481.7	488.8	488.1	480.3	468.7	462.5	464.6	20- 30	231.0	436.2	27,27
40	407.3	420.0	429.1	428.8	419.0	404.8	397.0	399.1	30- 40	279.2	715.4	44.3,44.3
50	329.7	345.6	356.6	355.3	338.0	321.1	312.7	315.0	40- 50	289.5	1005	62.3,62.3
60	241.9	259.8	271.8	270.7	253.2	235.1	225.2	227.7	50- 60	261.2	1266	78.5,78.5
70	145.6	163.1	176.1	175.1	161.7	142.8	133.3	135.8	60- 70	199.3	1465	90.8,90.8
80	58.18	73.40	85.54	84.61	71.92	55.42	47.78	49.91	70- 80	115.1	1581	98,98
90	0.7349	4.263	11.13	10.11	2.810	0.7096	0.7521	0.7404	80- 90	33.06	1614	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

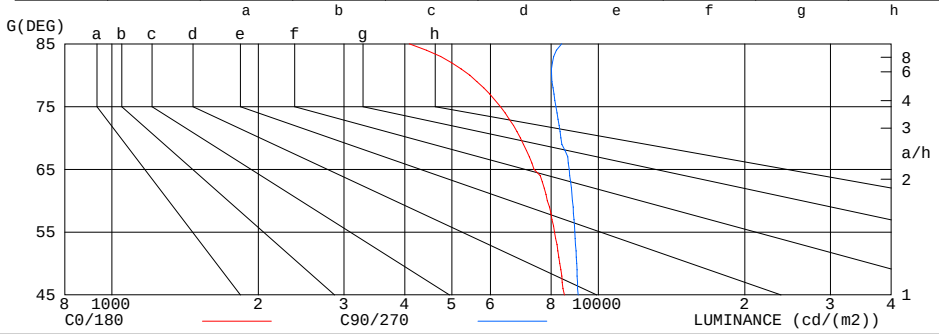
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0288]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 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	4086	8411
80	5441	8014
75	6290	8183
70	6915	8379
65	7373	8712
60	7856	8844
55	8127	8945
50	8330	9026
45	8514	9088

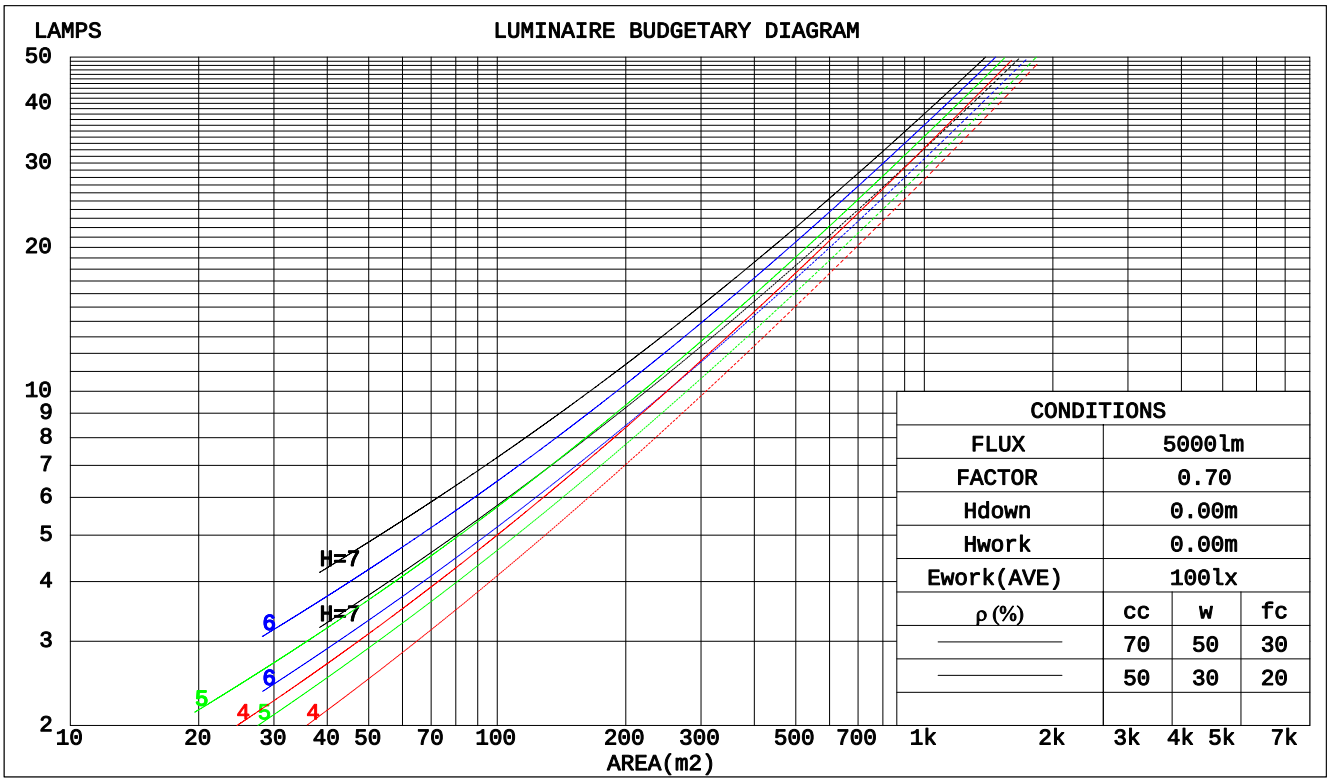
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 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	.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:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 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	.178	.056	.305	.174	.055	.292	.168	.053	.280	.161	.052	.269	.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	.162	.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:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 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	20.1	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	20.7	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	20.9	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	24.6	24.9
	12H	22.3	23.2	22.8	23.5	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	23.3	23.1	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, 1614 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.7)

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:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

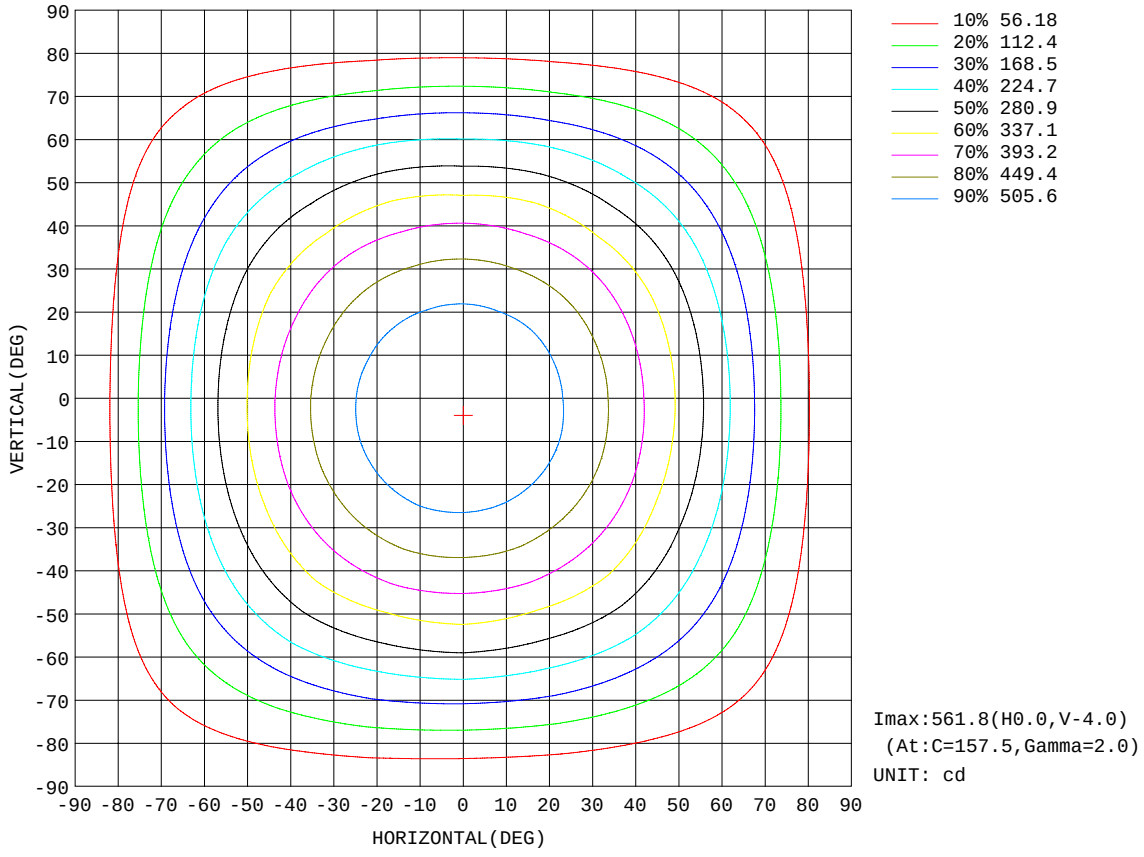
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	46	39	57	45	39	55	45	38	32
0.80	67	56	48	66	55	48	65	54	48	41
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:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



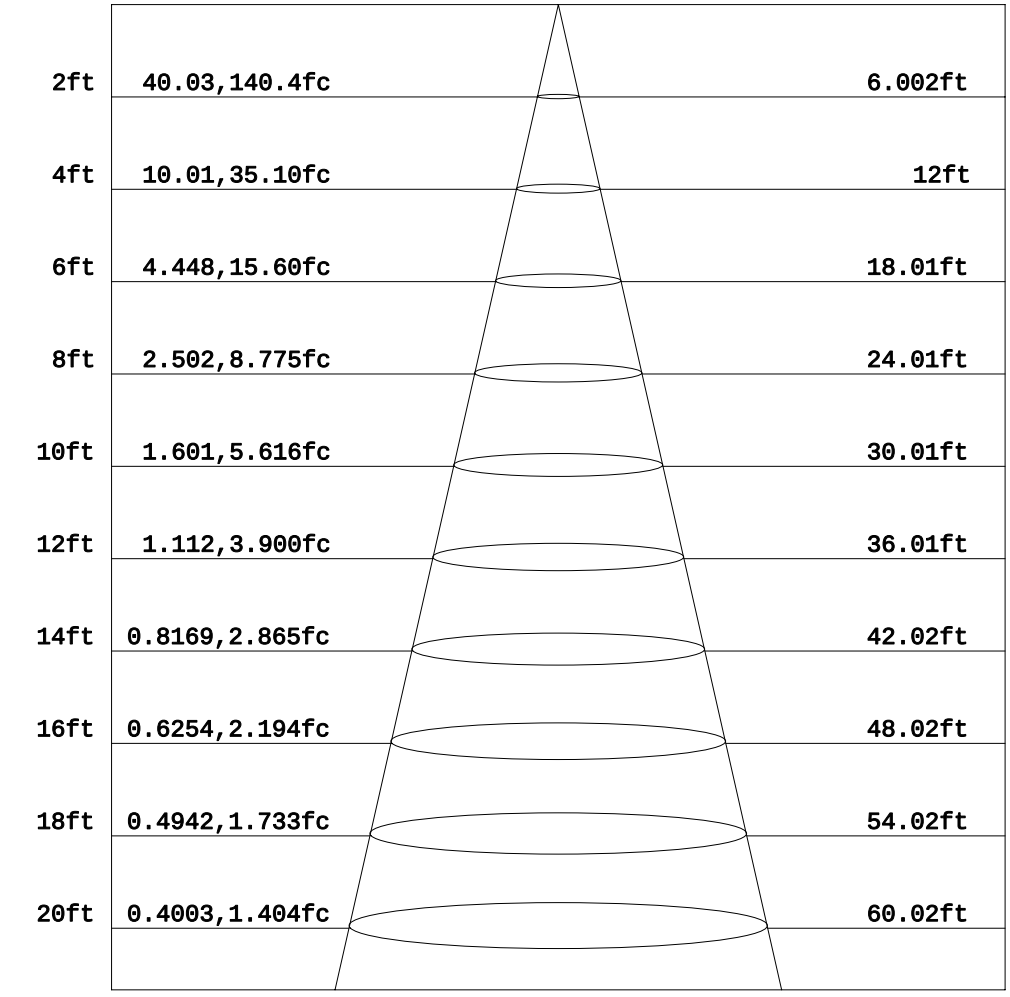
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

Flux out:1193 lm



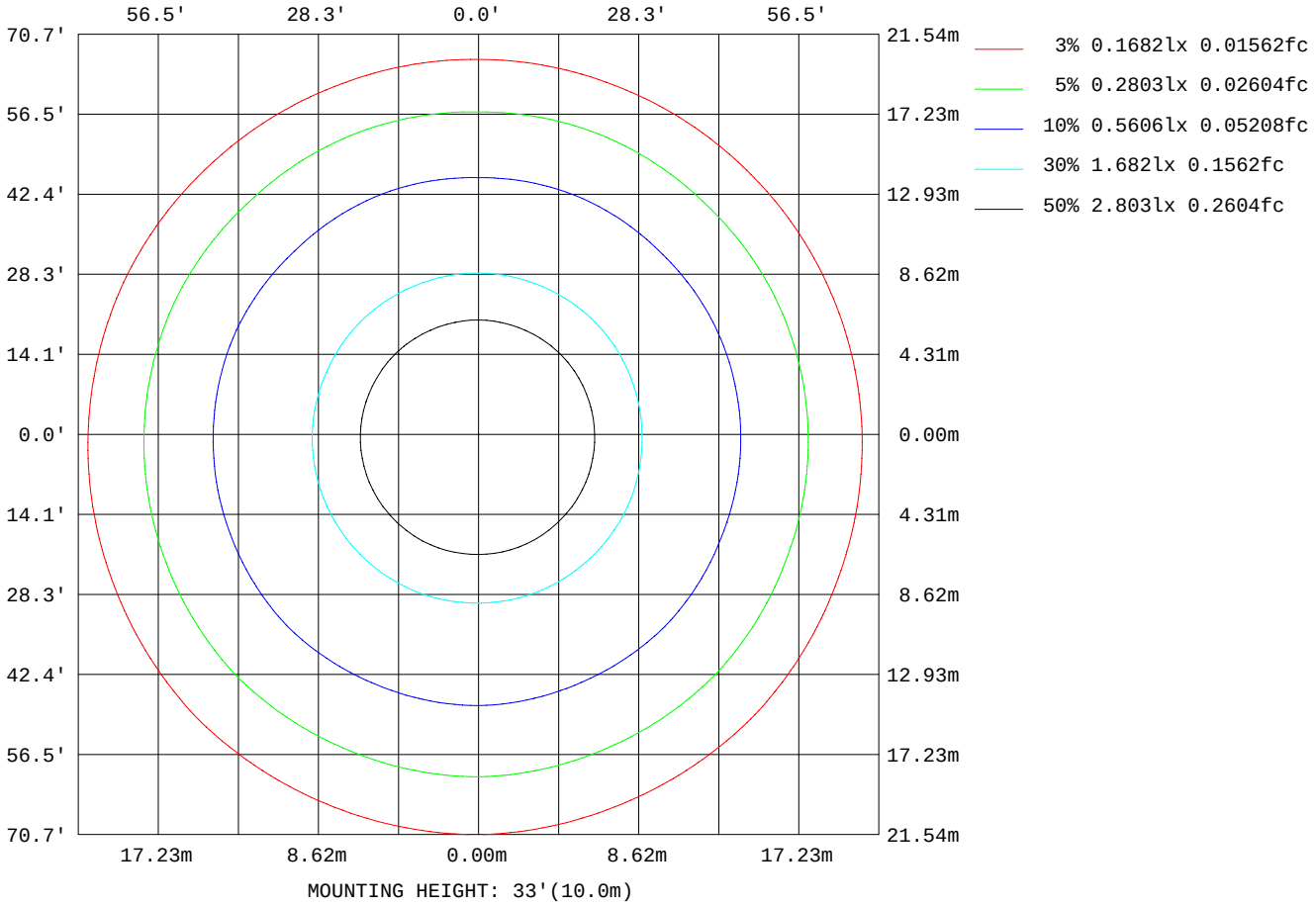
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 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:2026-10-27

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:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

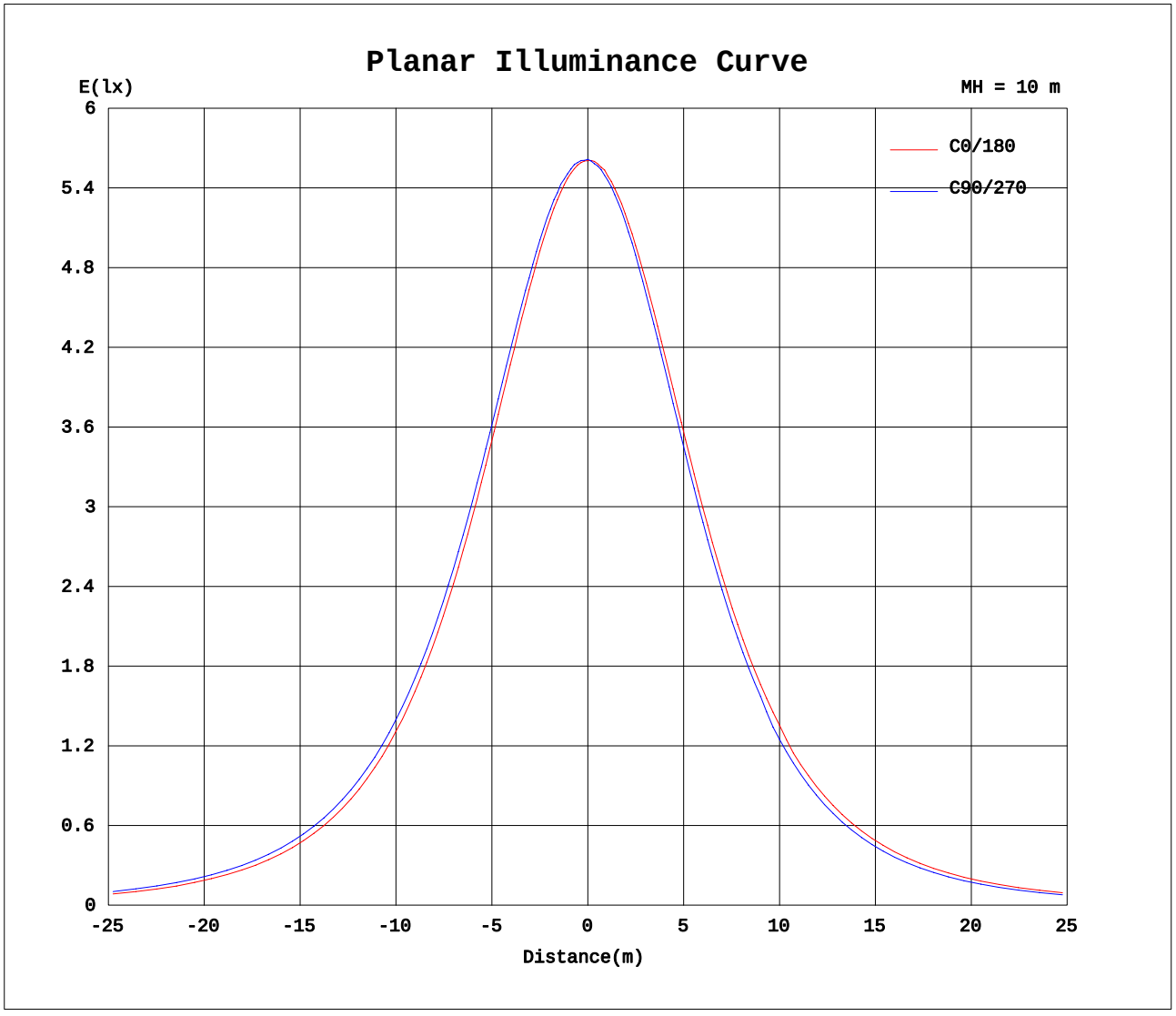
AvgL	cd/m2
L_0~180(65)av	7683
L_0~180(75)av	6779
L_0~180(85)av	5142
L_90~270(65)av	7797
L_90~270(75)av	6871
L_90~270(85)av	5416
L_45(65)av	7782
L_45(75)av	6818
L_45(85)av	5268

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:120.0V I:0.1960A P:21.80W PF:0.9290 Freq:60.00Hz Lamp Flux:1613.57x1 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	561	561	561	561	561	561	561	561	561	561	561	561	561	561	561	561			
5	558	559	560	561	560	561	560	560	560	559	557	557	555	556	556	557			
10	550	552	553	555	555	557	555	555	553	551	549	547	546	547	547	548			
15	537	540	542	545	545	547	546	544	542	539	535	533	532	532	533	535			
20	519	524	526	530	531	533	531	529	526	522	518	515	513	513	514	516			
25	497	503	506	511	512	513	511	509	505	500	496	492	490	490	491	494			
30	471	477	482	487	489	490	488	485	480	474	469	465	463	462	465	467			
35	440	448	453	459	460	463	460	457	452	444	438	434	432	431	433	436			
40	407	415	420	427	429	432	429	425	419	411	405	399	397	396	399	402			
45	371	376	384	393	395	397	394	390	383	375	361	361	353	358	355	365			
50	330	333	346	347	357	353	355	345	338	334	321	321	313	317	315	324			
55	287	292	304	307	315	313	315	304	297	292	279	277	270	273	272	281			
60	242	248	260	264	272	270	271	261	253	247	235	232	225	228	228	236			
65	192	202	214	219	226	225	225	215	208	199	189	182	179	178	182	186			
70	146	156	163	173	176	179	175	169	162	150	143	136	133	132	136	140			
75	100	110	117	126	130	133	129	124	116	105	97.4	90.6	88.7	87.6	91.0	94.7			
80	58.2	66.5	73.4	81.7	85.5	88.3	84.6	79.4	71.9	62.0	55.4	49.4	47.8	46.8	49.9	53.2			
85	21.9	29.0	34.8	41.8	45.1	47.2	44.1	39.5	33.2	24.9	19.5	14.7	13.0	12.1	14.6	17.5			
90	0.73	1.28	4.26	8.16	11.1	11.7	10.1	6.22	2.81	0.77	0.71	0.73	0.75	0.75	0.74	0.71			

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: