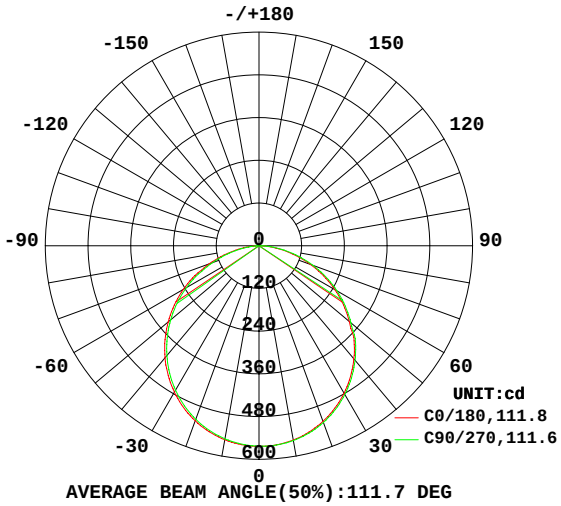
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

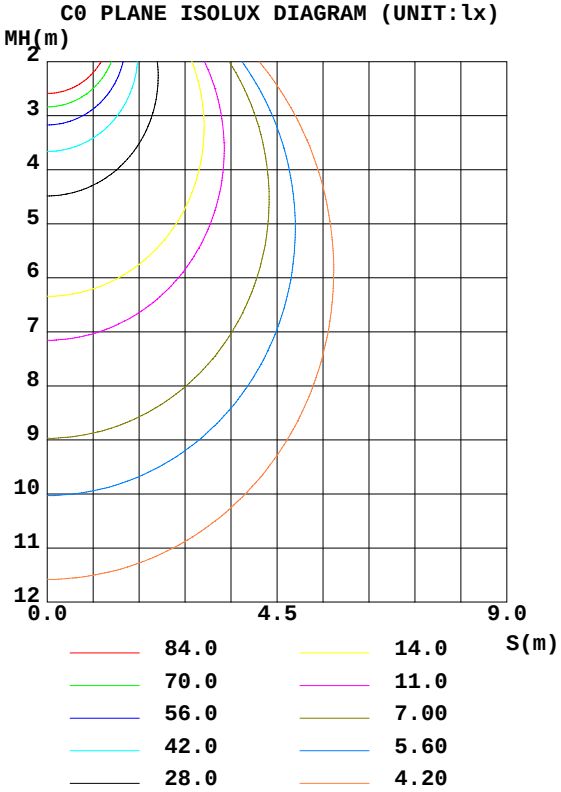
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 93.52 lm/W	
MODEL	ASL-510901	Imax(cd)	563.8	S/MH(C0/180)	1.26
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1599.1	η UP,DN(C0-180)	0.0,48.9
NOMINAL FLUX(lm)	1599.13	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,51.1
LAMPS INSIDE	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%):111.7 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-28

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=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	553.4	552.0	550.9	551.2	554.2	555.2	555.7	555.5	0- 10	53.30	53.30	3.33,3.33
20	523.1	521.0	519.0	520.2	525.1	526.9	528.4	528.1	10- 20	152.7	206.0	12.9,12.9
30	475.2	471.4	468.9	471.0	478.3	480.3	482.3	482.0	20- 30	231.4	437.4	27.4,27.4
40	410.5	405.7	402.6	405.4	414.6	417.3	419.6	419.4	30- 40	278.8	716.3	44.8,44.8
50	333.0	327.2	323.7	327.3	331.4	334.1	337.3	336.4	40- 50	288.0	1004	62.8,62.8
60	245.2	239.0	235.4	239.1	245.9	249.2	252.6	251.5	50- 60	258.3	1263	79,79
70	148.4	142.6	138.7	142.4	154.1	158.1	161.6	159.6	60- 70	196.0	1459	91.2,91.2
80	59.49	54.92	51.76	54.55	64.70	68.90	71.87	69.54	70- 80	111.1	1570	98.2,98.2
90	0.6955	0.6953	0.7419	0.7066	0.6836	1.676	2.950	1.823	80- 90	29.40	1599	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:2026-10-28

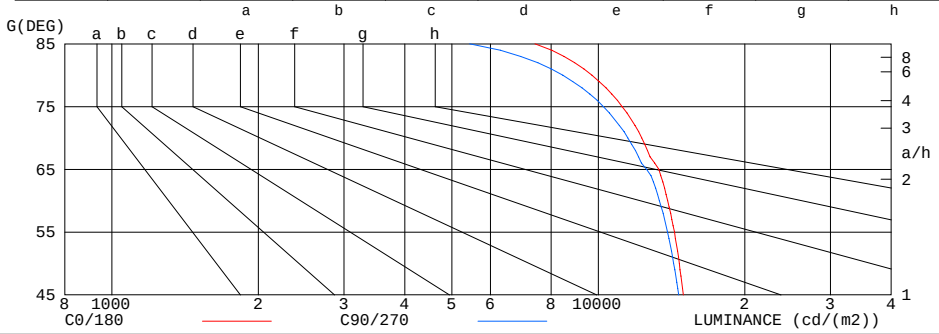
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 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	7407	5438
80	9702	8453
75	11188	10240
70	12283	11498
65	13314	12561
60	13887	13351
55	14339	13878
50	14671	14280
45	14958	14627

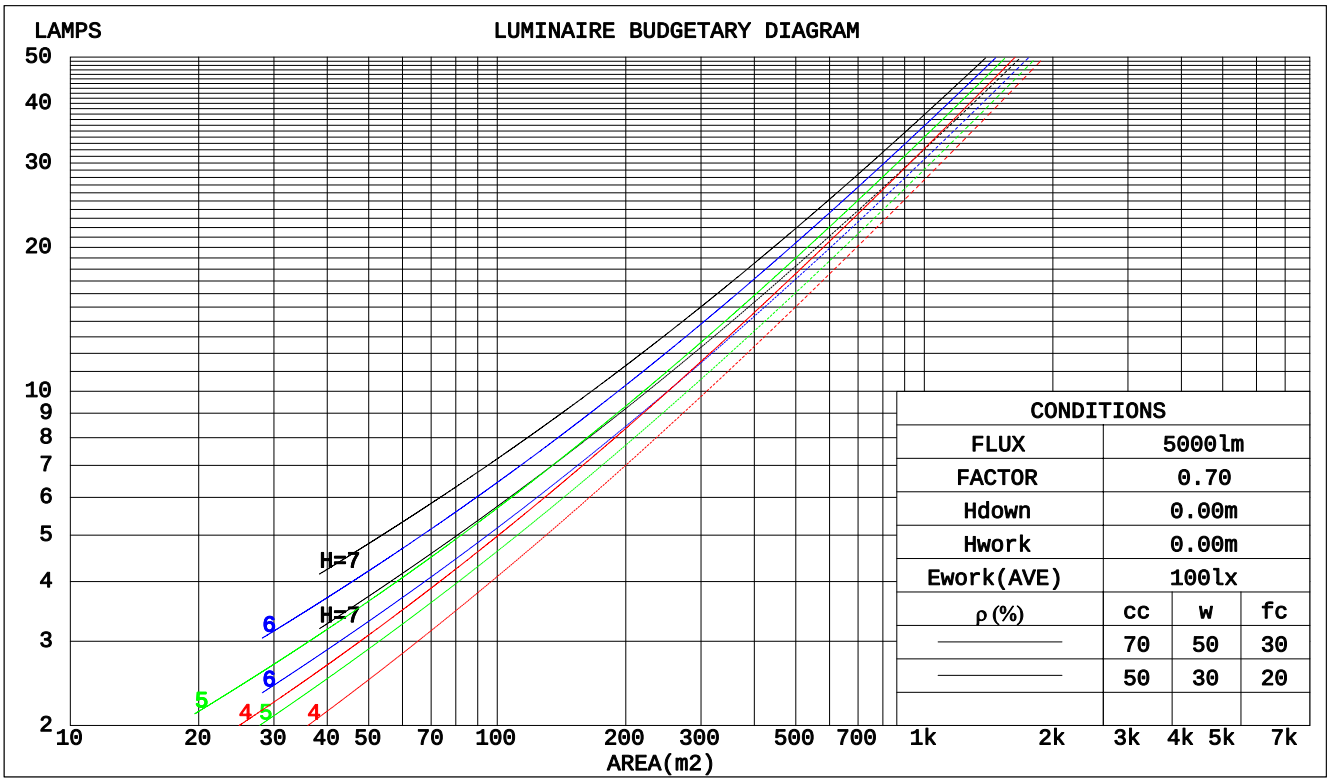
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-28

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=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 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	.00	.96	1.02	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.82	.77	.85	.80	.75	.82	.77	.73	.79	.75	.72	.70
3.0	.79	.71	.65	.78	.70	.64	.75	.68	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.70	.62	.55	.69	.61	.54	.66	.59	.54	.64	.58	.53	.62	.57	.52	.50
5.0	.63	.54	.47	.62	.53	.47	.60	.52	.46	.58	.51	.46	.56	.50	.45	.43
6.0	.57	.48	.41	.56	.47	.41	.54	.46	.41	.52	.45	.40	.50	.44	.40	.38
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.41	.36	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.27
10.0	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-28

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=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 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	.309	.176	.056	.302	.172	.055	.288	.165	.053	.276	.159	.051	.265	.154	.050	
2.0	.291	.159	.049	.285	.157	.048	.273	.152	.047	.262	.147	.046	.252	.143	.045	
3.0	.269	.143	.043	.264	.141	.043	.254	.137	.042	.244	.134	.041	.235	.130	.040	
4.0	.249	.129	.038	.244	.128	.038	.235	.124	.037	.226	.121	.037	.218	.119	.036	
5.0	.230	.117	.034	.226	.116	.034	.218	.113	.033	.210	.111	.033	.203	.108	.033	
6.0	.213	.107	.031	.210	.106	.030	.202	.104	.030	.196	.102	.030	.189	.100	.030	
7.0	.199	.098	.028	.195	.097	.028	.189	.095	.027	.183	.094	.027	.177	.092	.027	
8.0	.186	.091	.025	.182	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.174	.084	.023	.171	.083	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.164	.078	.022	.161	.078	.022	.156	.077	.022	.152	.075	.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	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.074	.141	.099	.064	.097	.068	.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	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
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:2026-10-28

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=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 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	20.4	21.9	20.6	22.1	22.3	20.2	21.8	20.5	22.0	22.2
3H	21.8	23.2	22.1	23.5	23.7	21.6	23.0	21.9	23.3	23.5
4H	22.4	23.7	22.7	24.0	24.3	22.2	23.5	22.5	23.8	24.0
6H	22.8	24.1	23.1	24.3	24.6	22.5	23.8	22.8	24.0	24.3
8H	22.9	24.1	23.2	24.4	24.7	22.6	23.8	22.9	24.1	24.4
12H	22.9	24.1	23.3	24.4	24.7	22.6	23.8	22.9	24.1	24.4
4H 2H	20.9	22.3	21.3	22.5	22.8	20.8	22.2	21.2	22.4	22.7
3H	22.6	23.8	22.9	24.0	24.4	22.4	23.6	22.8	23.9	24.2
4H	23.3	24.3	23.6	24.7	25.0	23.1	24.1	23.4	24.5	24.8
6H	23.8	24.7	24.2	25.1	25.4	23.5	24.5	23.9	24.8	25.2
8H	23.9	24.8	24.3	25.2	25.6	23.6	24.5	24.0	24.9	25.3
12H	24.0	24.8	24.4	25.2	25.6	23.7	24.5	24.1	24.9	25.3
8H 4H	23.5	24.4	23.9	24.7	25.1	23.3	24.2	23.7	24.6	24.9
6H	24.1	24.9	24.6	25.3	25.7	23.9	24.6	24.3	25.0	25.4
8H	24.3	25.0	24.8	25.4	25.9	24.1	24.7	24.5	25.1	25.6
12H	24.5	25.0	25.0	25.5	26.0	24.2	24.7	24.6	25.2	25.6
12H 4H	23.5	24.3	23.9	24.7	25.1	23.3	24.1	23.7	24.5	24.9
6H	24.2	24.8	24.6	25.2	25.7	23.9	24.6	24.4	25.0	25.4
8H	24.4	25.0	24.9	25.4	25.9	24.1	24.7	24.6	25.1	25.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				

CIE Pub.117, 1599 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:2026-10-28

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=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

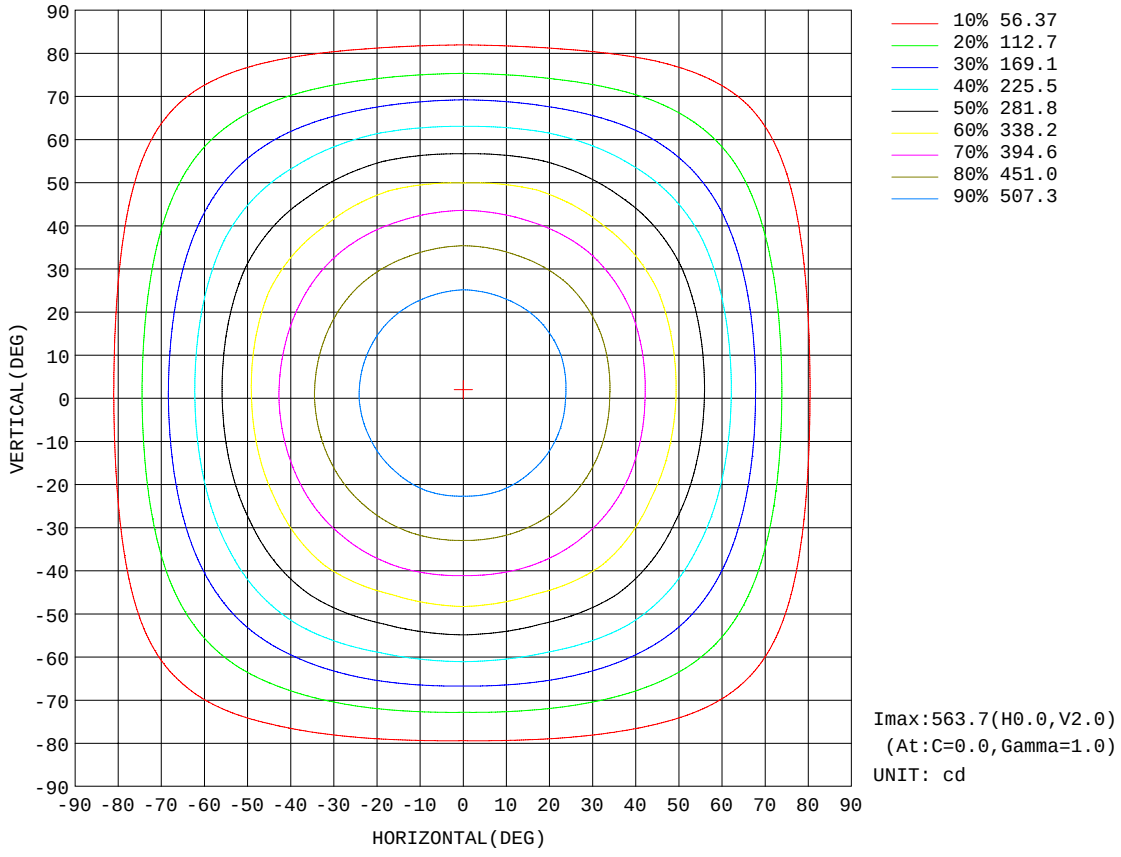
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	49	65	55	48	41
1.00	76	65	58	75	64	57	73	66	57	50
1.25	83	73	66	82	72	65	79	71	64	57
1.50	88	78	71	87	77	71	83	76	70	62
2.00	95	87	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	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:2026-10-28

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=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



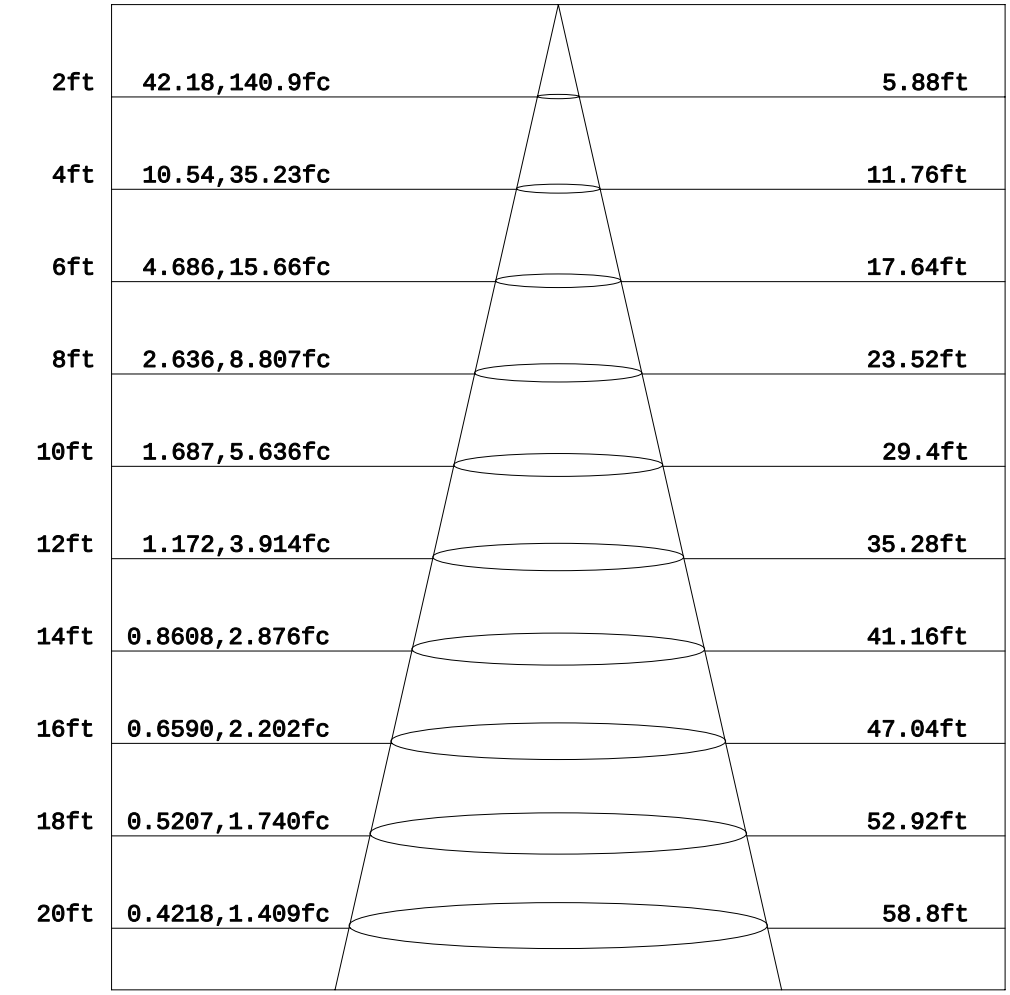
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-28

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=1.0000]
Remarks:

AAI Figure

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

Flux out:1165 lm



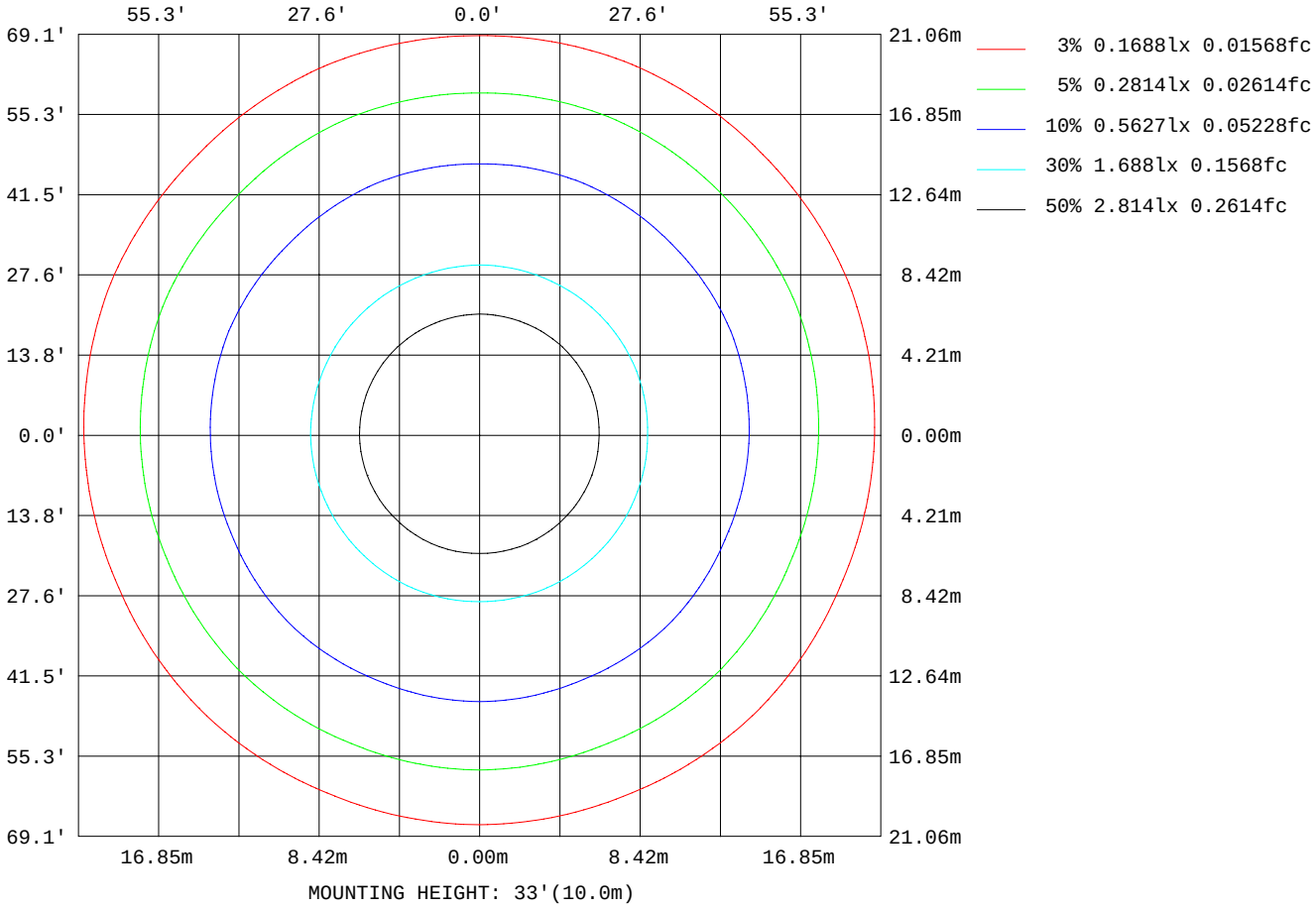
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-28

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=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 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:2026-10-28

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=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:3500K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

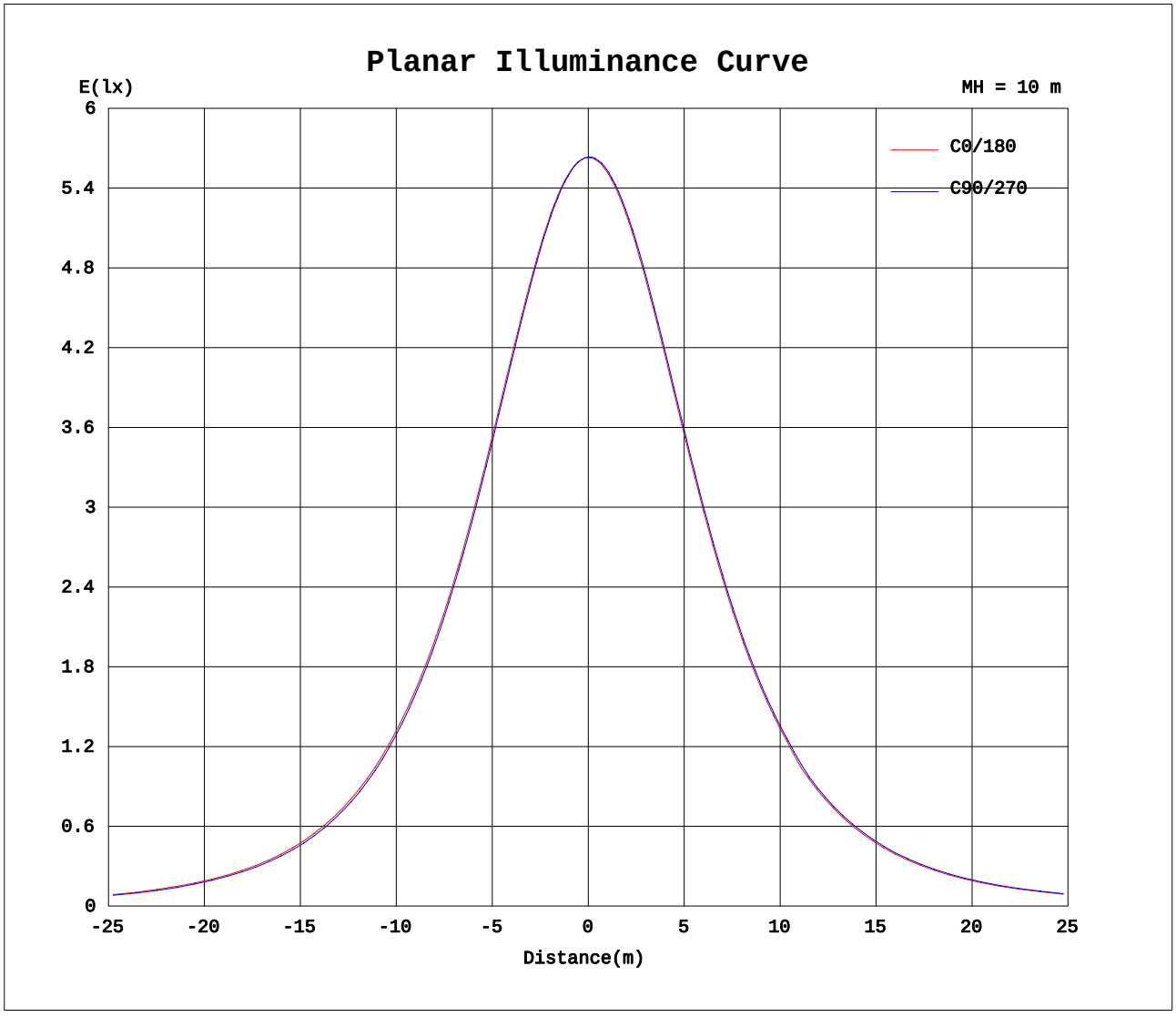
AvgL	cd/m2
L_0~180(65)av	13384
L_0~180(75)av	11513
L_0~180(85)av	8149
L_90~270(65)av	13234
L_90~270(75)av	11444
L_90~270(85)av	8196
L_45(65)av	13276
L_45(75)av	11488
L_45(85)av	8176

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-28

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=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-28

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=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1550A P:17.10W PF:0.9210 Freq:60.00Hz Lamp Flux:1599.13x1 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	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563			
5	561	560	560	560	559	560	560	560	561	561	562	562	562	562	562	561			
10	553	553	552	552	551	551	551	552	554	555	555	555	556	555	555	555			
15	541	540	539	539	537	539	538	539	542	542	544	543	545	544	544	543			
20	523	522	521	520	519	520	520	522	525	526	527	527	528	528	528	526			
25	501	500	498	497	496	498	498	499	504	504	506	506	508	507	507	505			
30	475	473	471	470	469	471	471	473	478	479	480	480	482	481	482	480			
35	445	443	440	440	438	440	440	443	448	449	451	451	453	452	453	450			
40	410	408	406	405	403	405	405	409	415	415	417	418	420	419	419	416			
45	373	371	368	365	365	366	368	372	378	378	381	381	383	382	383	380			
50	333	324	327	320	324	321	327	325	331	339	334	341	337	342	336	340			
55	290	281	284	278	281	278	284	283	290	297	293	299	296	300	295	297			
60	245	237	239	233	235	234	239	239	246	252	249	255	253	256	251	253			
65	199	192	191	187	187	188	191	193	200	206	204	209	207	210	206	206			
70	148	145	143	141	139	141	142	146	154	156	158	159	162	160	160	156			
75	102	99.5	97.1	95.7	93.4	95.9	96.8	101	108	110	112	113	116	114	113	110			
80	59.5	57.0	54.9	53.8	51.8	53.7	54.6	58.1	64.7	67.0	68.9	70.1	71.9	70.0	69.5	66.2			
85	22.8	20.7	19.2	18.3	16.7	18.3	18.9	21.8	27.3	29.5	31.2	32.2	33.7	31.9	31.3	28.4			
90	0.70	0.70	0.70	0.71	0.74	0.73	0.71	0.71	0.68	1.45	1.68	2.61	2.95	2.54	1.82	1.05			

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-28

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=1.0000]
Remarks: