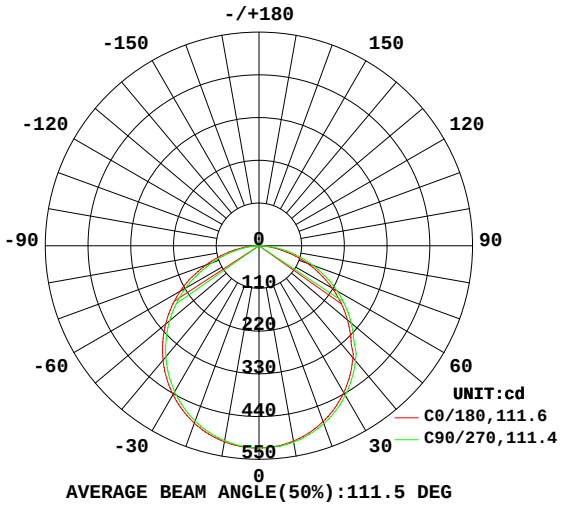
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

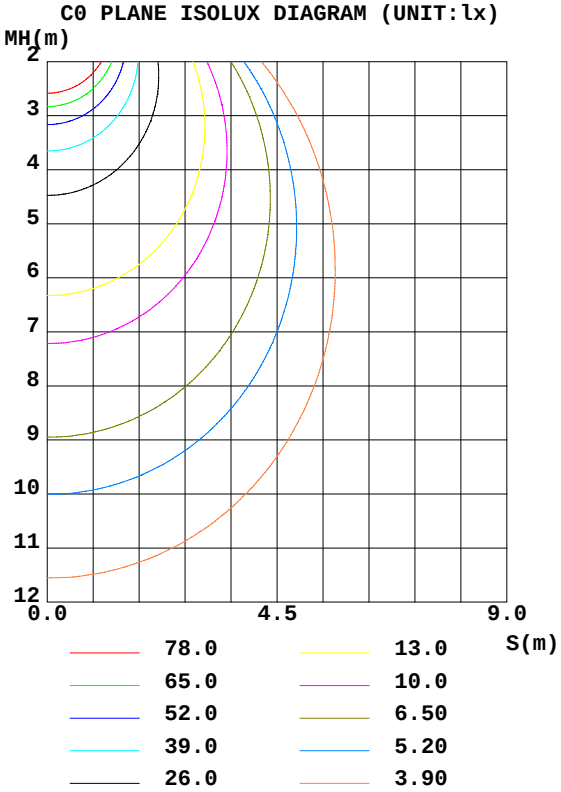
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 85.69 lm/W	
MODEL	ASL-510902	Imax(cd)	521.2	S/MH(C0/180)	1.25
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1473.8	η UP,DN(C0-180)	0.0,49.2
NOMINAL FLUX(lm)	1473.82	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.8
LAMPS INSIDE	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%):111.5 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



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

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	512.6	511.1	509.7	509.1	510.7	512.1	513.4	513.6	0- 10	49.27	49.27	3.34,3.34
20	486.4	483.7	480.5	478.8	482.2	485.1	487.5	488.3	10- 20	141.1	190.4	12.9,12.9
30	442.7	439.0	434.3	432.0	436.6	441.1	444.6	445.7	20- 30	213.7	404.1	27.4,27.4
40	384.5	379.6	372.8	370.0	376.3	382.4	386.9	388.2	30- 40	257.4	661.5	44.9,44.9
50	313.8	307.8	300.2	296.8	297.5	304.7	310.1	312.0	40- 50	264.6	926.1	62.8,62.8
60	234.1	227.3	218.5	214.9	217.4	225.3	231.7	234.2	50- 60	238.0	1164	79,79
70	145.5	138.2	129.7	126.1	132.3	140.6	147.6	150.5	60- 70	180.2	1344	91.2,91.2
80	63.19	56.54	49.38	46.25	51.09	58.35	65.26	68.13	70- 80	102.5	1447	98.2,98.2
90	1.402	0.6533	0.6772	0.6825	0.6358	0.6117	1.776	3.270	80- 90	27.11	1474	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

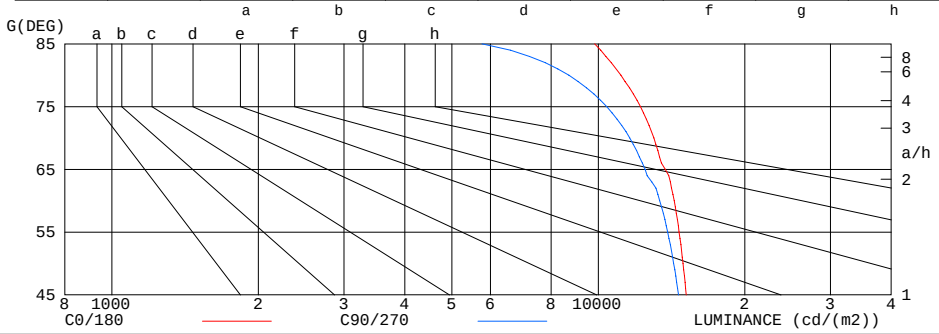
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	**TYPE:**	**WEIGHT:**
SPEC.:	**DIM.:**	**SERIAL No.:4000K**
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	9825	5766
80	11128	8699
75	12203	10400
70	13005	11600
65	13728	12473
60	14317	13368
55	14654	13880
50	14926	14283
45	15154	14613

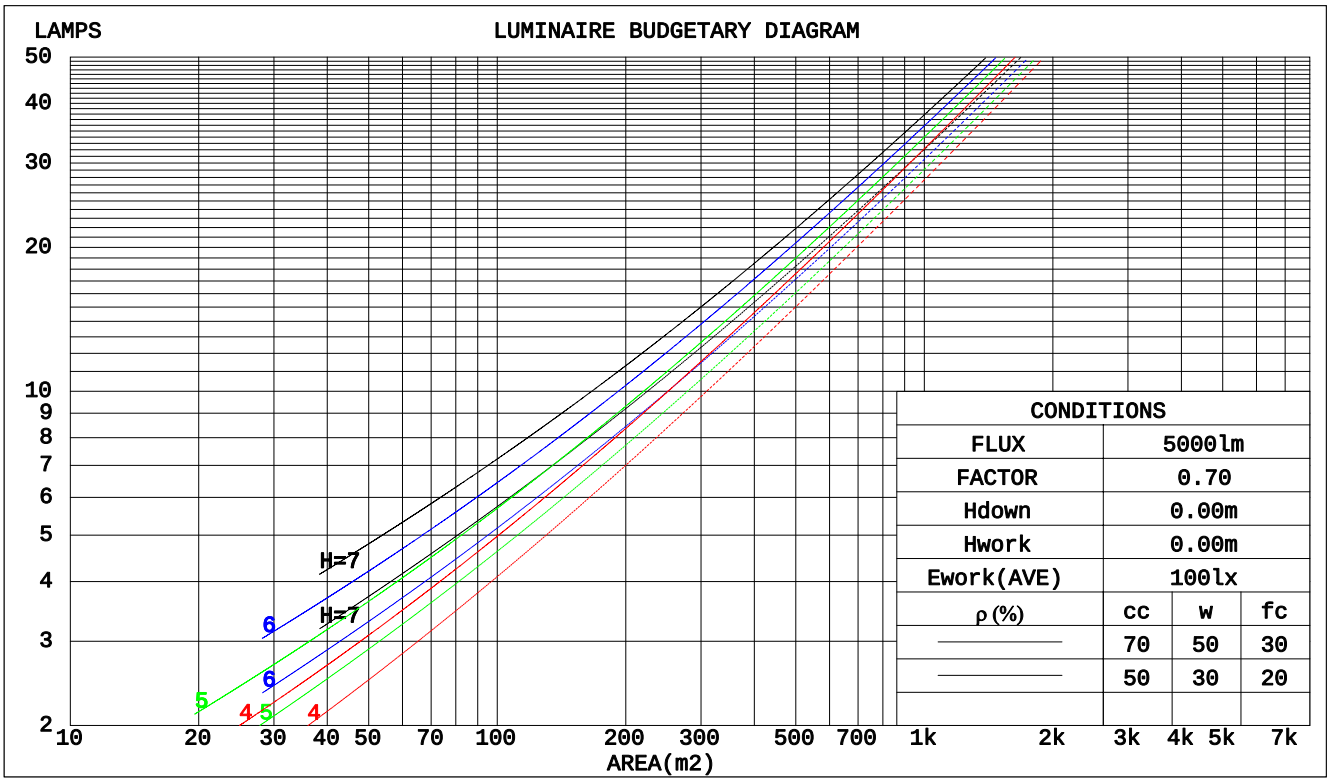
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-28

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:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
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	.67	.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	.51	.45	.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	.44	.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:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
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	.253	.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	.217	.113	.033	.210	.111	.033	.203	.108	.033	
6.0	.213	.107	.031	.209	.106	.030	.202	.104	.030	.195	.102	.030	.189	.100	.030	
7.0	.199	.098	.028	.195	.097	.028	.189	.095	.027	.183	.094	.027	.177	.092	.027	
8.0	.185	.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	.163	.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	.134	.087	.051	.092	.061	.036	.053	.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	.069	.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:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
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	20.9	22.4	21.1	22.6	22.8	20.6	22.1	20.9	22.3	22.5
	3H	22.4	23.8	22.7	24.0	24.3	22.0	23.4	22.3	23.7	23.9
	4H	23.0	24.4	23.3	24.6	24.9	22.6	23.9	22.9	24.1	24.4
	6H	23.5	24.7	23.8	25.0	25.3	22.9	24.2	23.2	24.4	24.7
	8H	23.6	24.8	24.0	25.1	25.4	23.0	24.2	23.3	24.5	24.8
	12H	23.7	24.9	24.1	25.2	25.5	23.0	24.2	23.4	24.5	24.8
4H	2H	21.4	22.8	21.7	23.0	23.3	21.2	22.6	21.6	22.8	23.1
	3H	23.2	24.3	23.5	24.6	24.9	22.8	24.0	23.2	24.3	24.6
	4H	23.9	25.0	24.3	25.3	25.6	23.5	24.6	23.9	24.9	25.2
	6H	24.5	25.4	24.9	25.8	26.2	24.0	24.9	24.4	25.3	25.6
	8H	24.7	25.6	25.1	26.0	26.3	24.1	25.0	24.5	25.4	25.7
	12H	24.8	25.7	25.3	26.0	26.4	24.2	25.0	24.6	25.4	25.8
8H	4H	24.1	25.0	24.6	25.4	25.8	23.8	24.7	24.2	25.0	25.4
	6H	24.9	25.6	25.3	26.0	26.4	24.4	25.1	24.8	25.5	26.0
	8H	25.2	25.8	25.6	26.2	26.7	24.6	25.2	25.1	25.7	26.1
	12H	25.4	25.9	25.9	26.4	26.9	24.7	25.3	25.2	25.7	26.2
12H	4H	24.1	25.0	24.6	25.3	25.8	23.8	24.6	24.2	25.0	25.4
	6H	24.9	25.6	25.4	26.0	26.4	24.5	25.1	24.9	25.5	26.0
	8H	25.2	25.8	25.7	26.3	26.7	24.7	25.3	25.2	25.7	26.2
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.2					+ 0.2 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 1474 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.3)

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:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

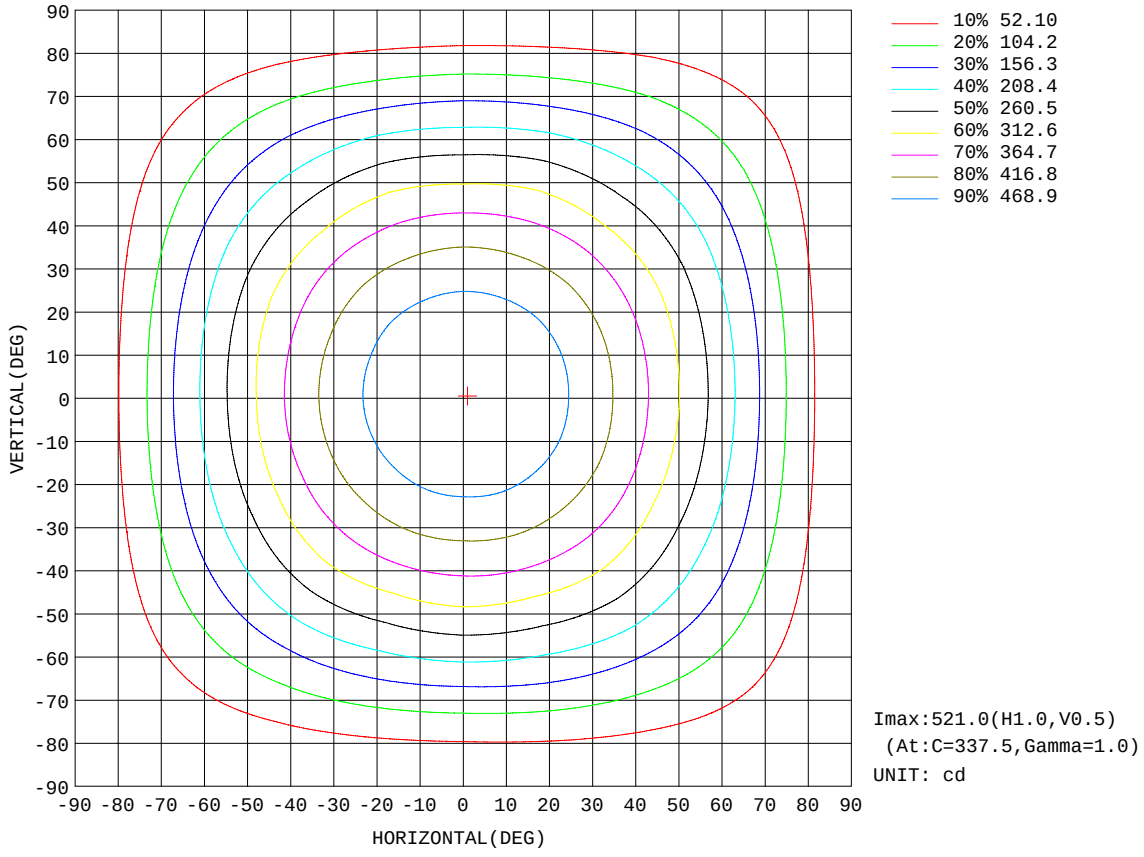
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	49	65	55	48	41
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	84	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:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



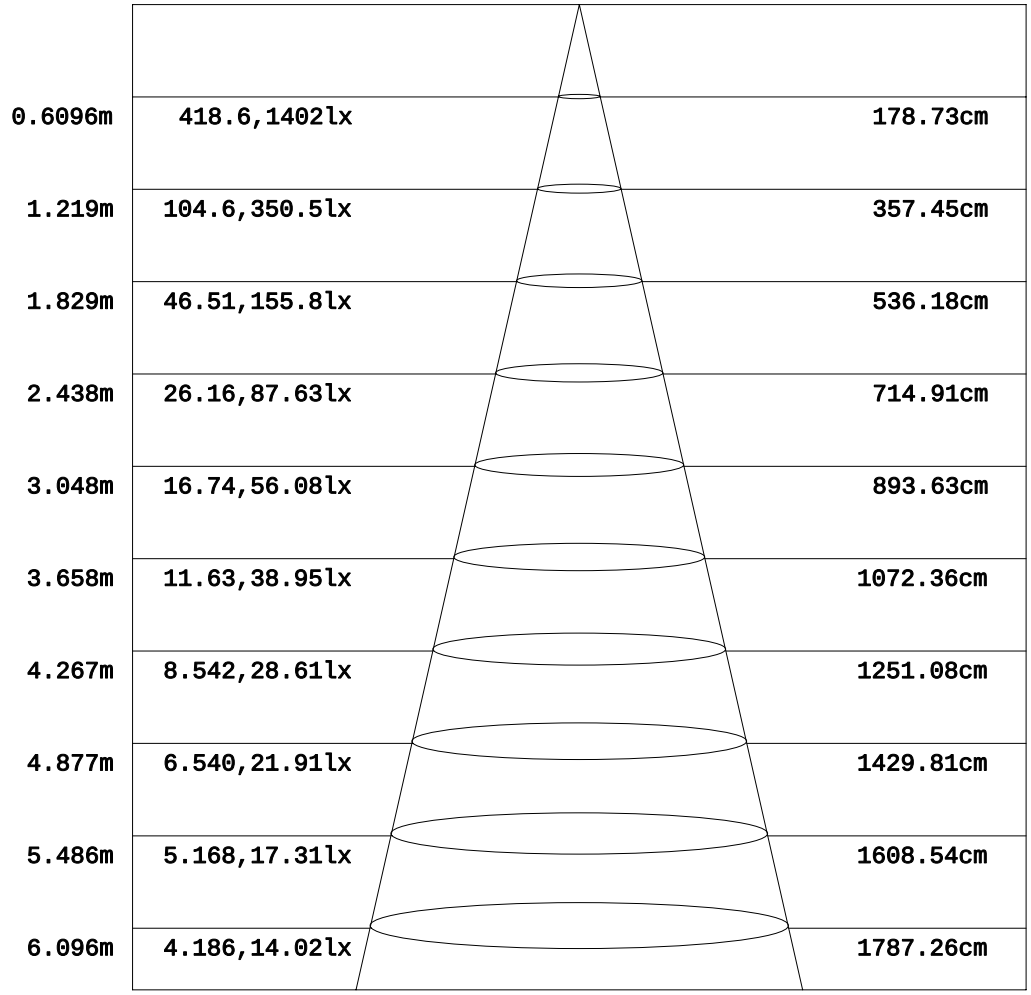
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-28

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:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

Flux out:1074 lm



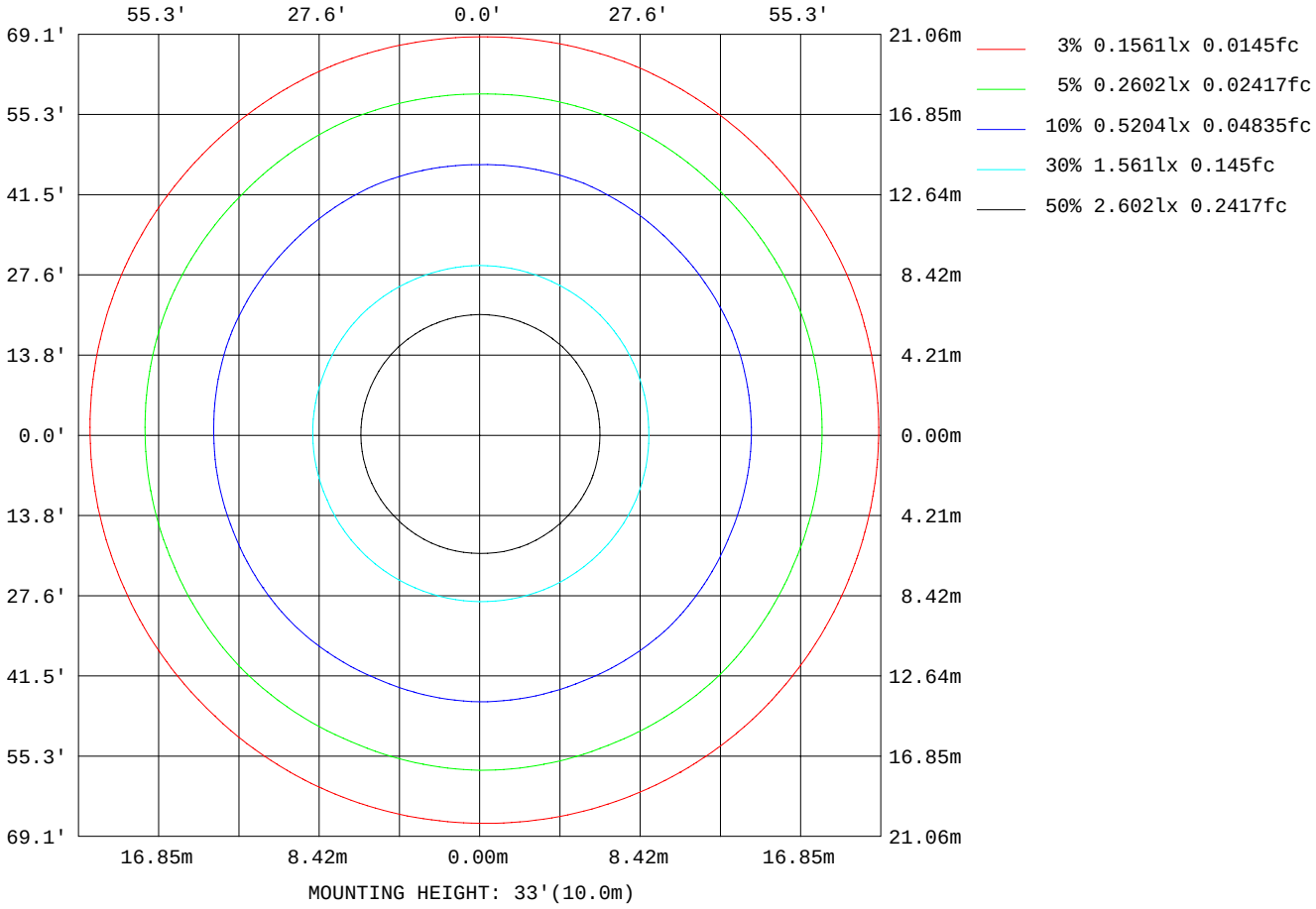
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
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:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

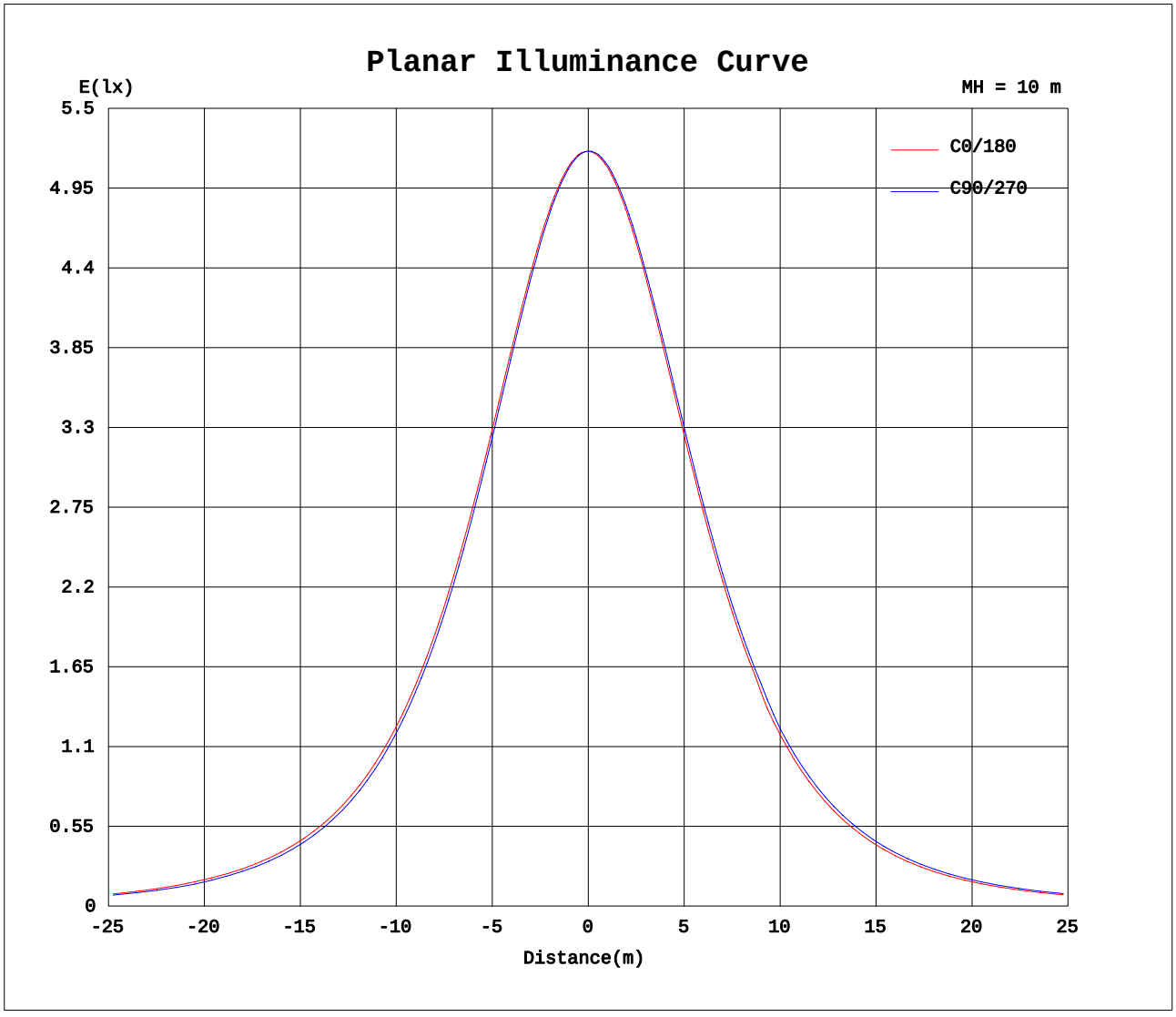
AvgL	cd/m2
L_0~180(65)av	13199
L_0~180(75)av	11437
L_0~180(85)av	8061
L_90~270(65)av	13115
L_90~270(75)av	11440
L_90~270(85)av	8147
L_45(65)av	13129
L_45(75)av	11446
L_45(85)av	8139

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:119.9V I:0.1550A P:17.20W PF:0.9220 Freq:60.00Hz Lamp Flux:1473.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
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	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521			
5	519	518	518	518	518	517	517	518	518	518	519	519	519	520	519	520			
10	513	512	511	511	510	509	509	510	511	511	512	512	513	513	514	513			
15	502	501	499	499	497	497	496	497	499	499	501	501	503	503	503	503			
20	486	486	484	483	480	480	479	481	482	483	485	486	488	488	488	488			
25	467	466	464	462	459	459	458	459	461	462	465	466	468	468	469	468			
30	443	442	439	437	434	433	432	434	437	438	441	442	445	445	446	445			
35	415	414	411	409	405	405	403	405	408	409	413	415	417	417	419	418			
40	385	384	380	378	373	373	370	373	376	378	382	383	387	387	388	387			
45	350	343	345	336	338	330	335	331	334	343	341	349	346	353	348	353			
50	314	307	308	299	300	293	297	294	298	305	305	313	310	316	312	317			
55	275	268	269	260	260	254	257	254	258	266	266	273	272	278	274	278			
60	234	228	227	220	219	213	215	213	217	224	225	232	232	237	234	237			
65	190	186	181	177	172	171	169	171	175	178	183	188	190	193	193	193			
70	145	143	138	135	130	128	126	128	132	135	141	143	148	149	150	149			
75	103	101	96.2	92.9	88.0	86.5	84.5	86.3	90.2	92.9	98.2	101	106	107	108	107			
80	63.2	61.1	56.5	53.6	49.4	48.0	46.3	47.8	51.1	53.6	58.3	61.3	65.3	66.6	68.1	66.5			
85	28.0	26.1	22.3	19.8	16.4	15.4	14.1	15.3	17.9	19.9	23.9	26.5	30.0	31.2	32.5	31.2			
90	1.40	0.65	0.65	0.66	0.68	0.69	0.68	0.67	0.64	0.62	0.61	0.72	1.78	2.89	3.27	2.92			

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: