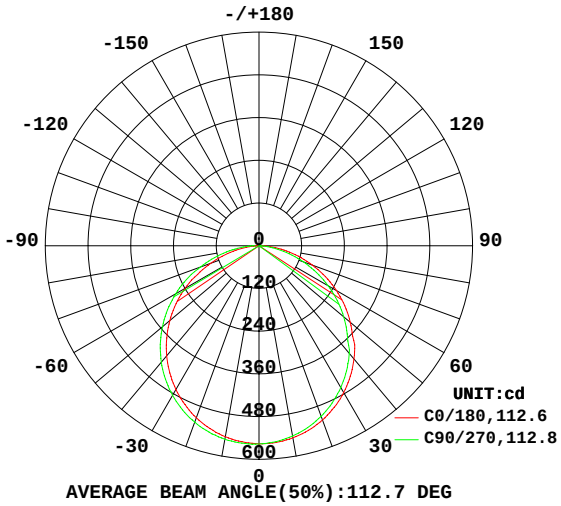
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.1V I:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

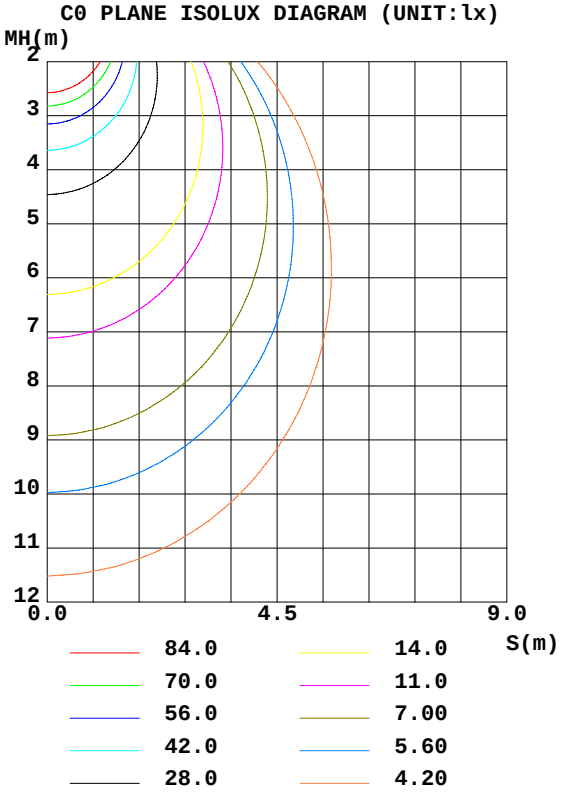
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 72.79 lm/W	
MODEL	ASL-511202	Imax(cd)	558.3	S/MH(C0/180)	1.27
NOMINAL POWER(W)	22	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1601.3	η UP,DN(C0-180)	0.0,52.0
NOMINAL FLUX(lm)	1601.32	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.0
LAMPS INSIDE	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:

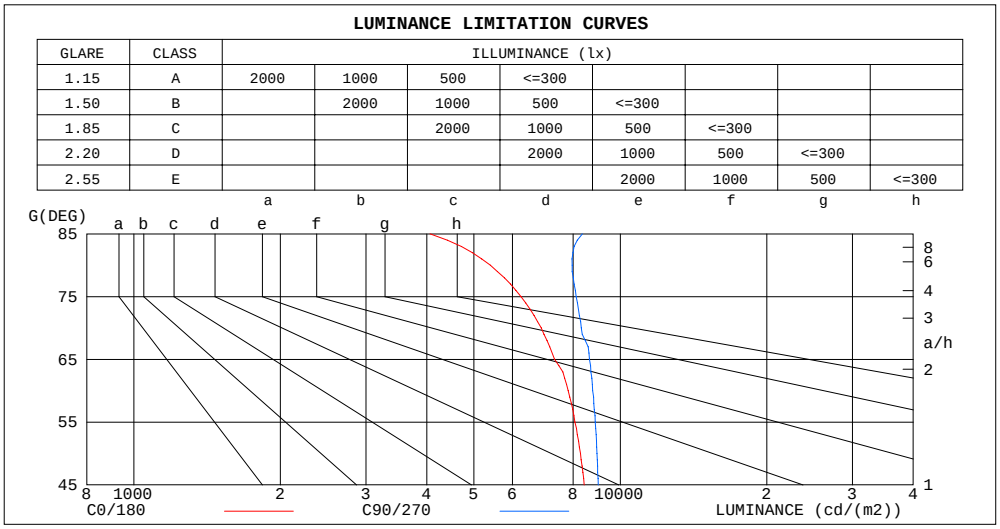
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	544.7	549.0	551.9	551.4	548.1	545.0	543.0	543.4	0- 10	52.68	52.68	3.29,3.29
20	514.4	522.1	527.4	526.2	520.9	513.6	509.9	510.7	10- 20	151.0	203.7	12.7,12.7
30	466.7	477.3	485.4	484.4	476.1	465.7	459.8	461.5	20- 30	229.2	432.9	27,27
40	403.6	417.7	426.6	425.3	415.3	401.4	394.8	396.6	30- 40	277.1	710.0	44.3,44.3
50	327.3	343.3	354.3	352.8	335.0	319.4	310.5	312.5	40- 50	287.1	997.1	62.3,62.3
60	240.1	257.9	270.1	268.4	251.2	233.7	224.1	225.9	50- 60	259.3	1256	78.5,78.5
70	144.6	162.1	175.1	173.5	160.0	141.7	132.5	135.0	60- 70	197.8	1454	90.8,90.8
80	57.69	72.97	85.11	83.91	71.25	55.01	47.59	49.66	70- 80	114.3	1569	98,98
90	0.7337	4.227	11.08	9.954	2.768	0.6974	0.7470	0.7282	80- 90	32.81	1601	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:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	4061	8357
80	5403	7963
75	6249	8116
70	6878	8315
65	7327	8643
60	7810	8775
55	8065	8876
50	8282	8954
45	8430	9010

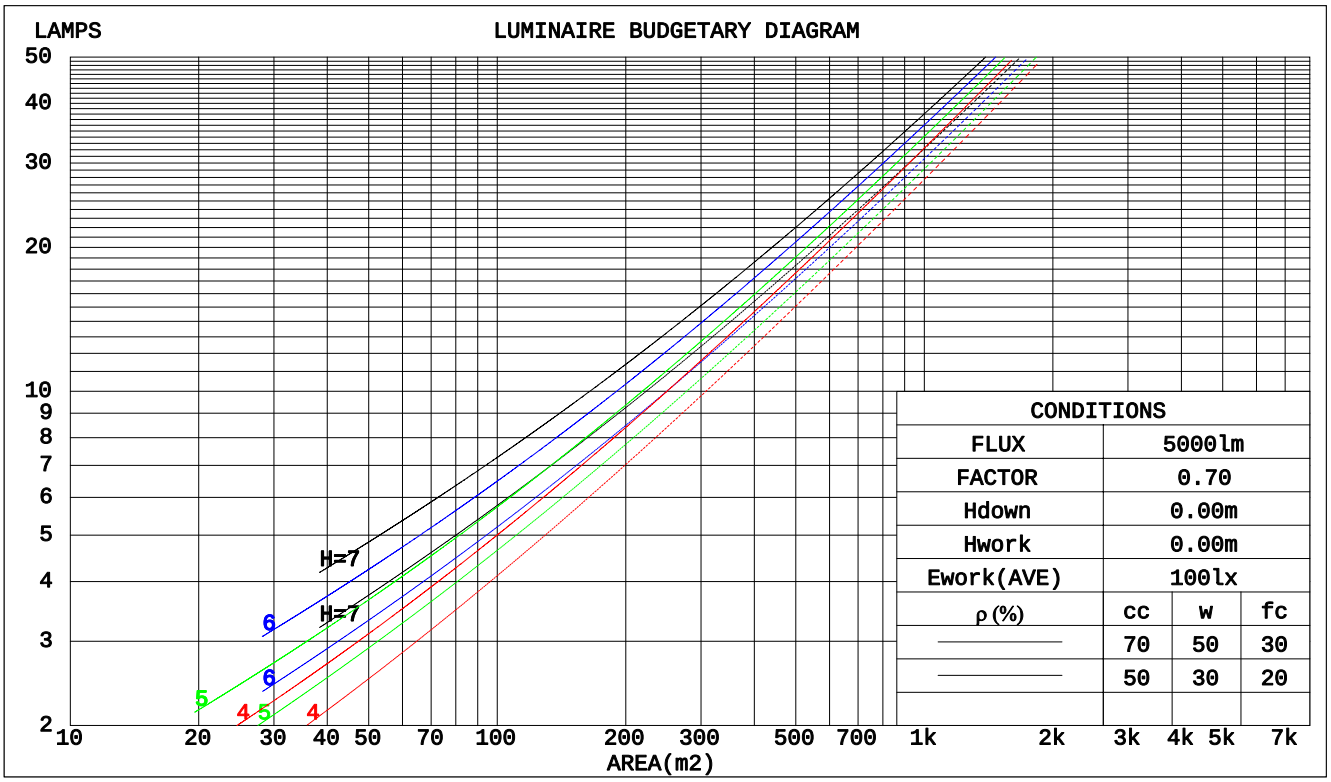
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 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	.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	.64	.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:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 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	.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:120.1V I:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 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	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	21.0	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	24.6	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	23.0	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	22.9	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	23.8	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, 1601 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:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

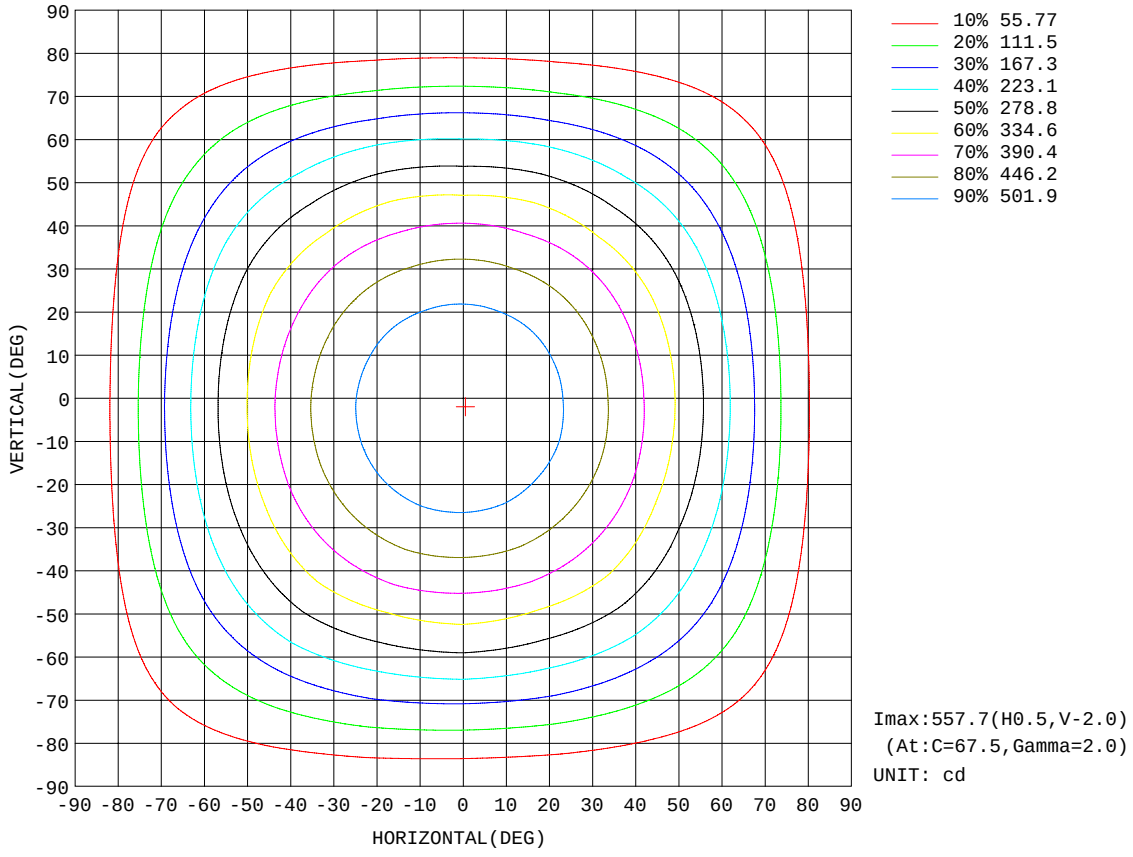
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	46	39	57	45	39	55	45	38	32
0.80	67	56	48	66	55	48	65	54	48	41
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:120.1V I:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



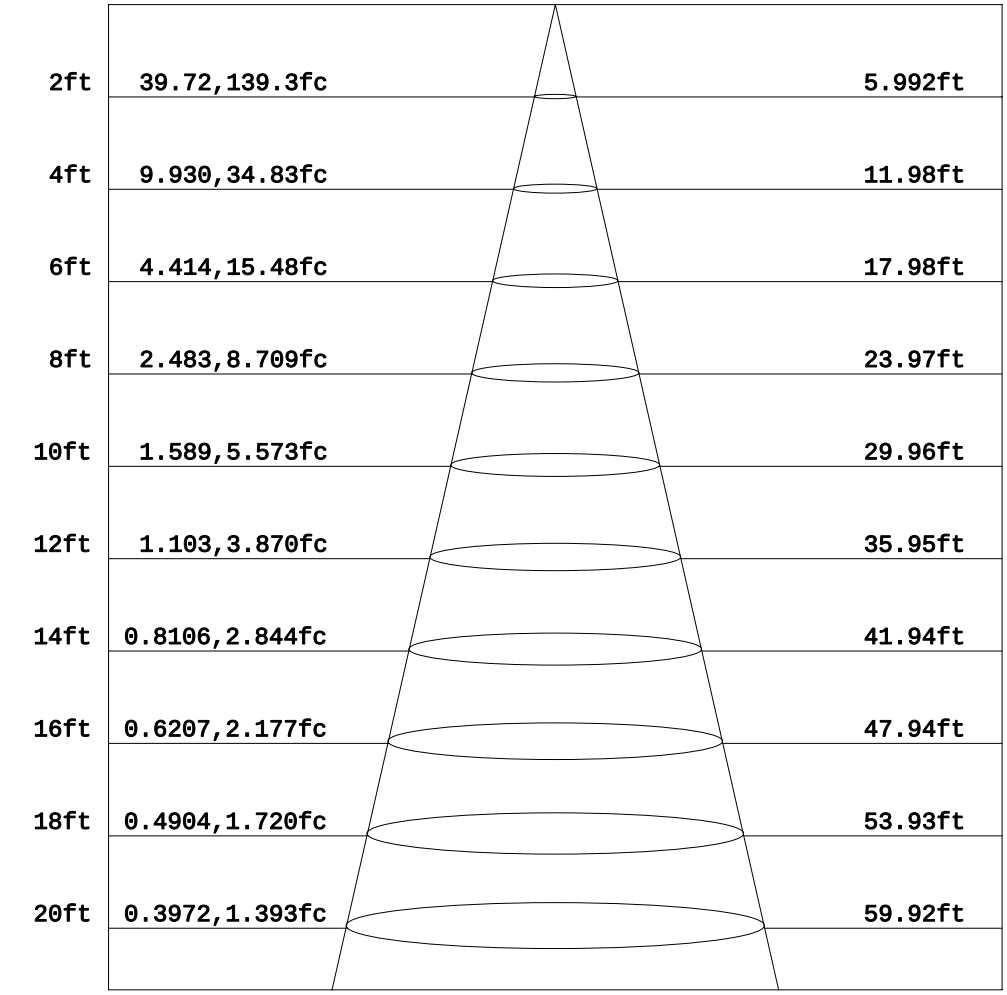
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-27

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:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

Flux out:1184 lm



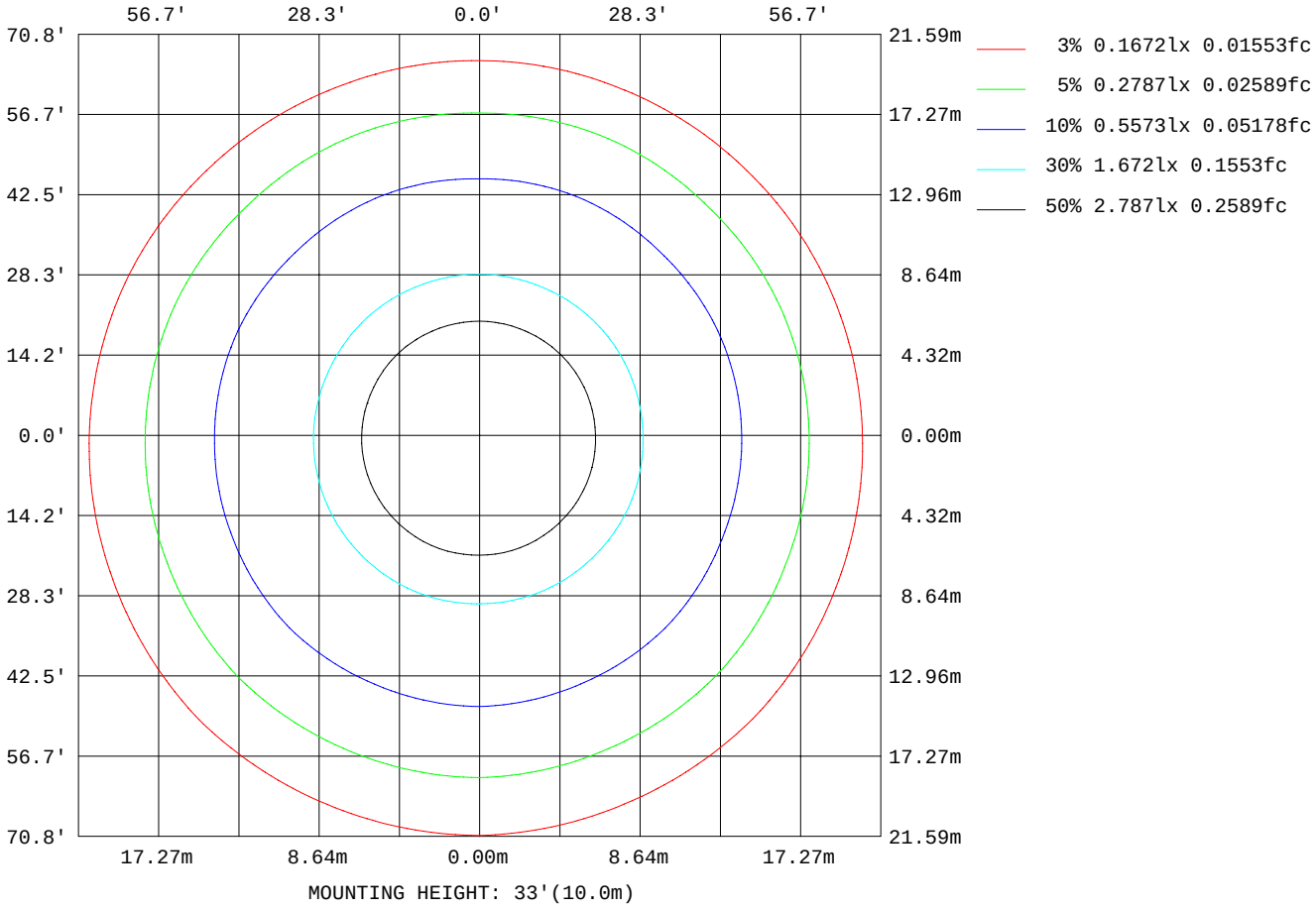
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 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:2026-10-27

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:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:4000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

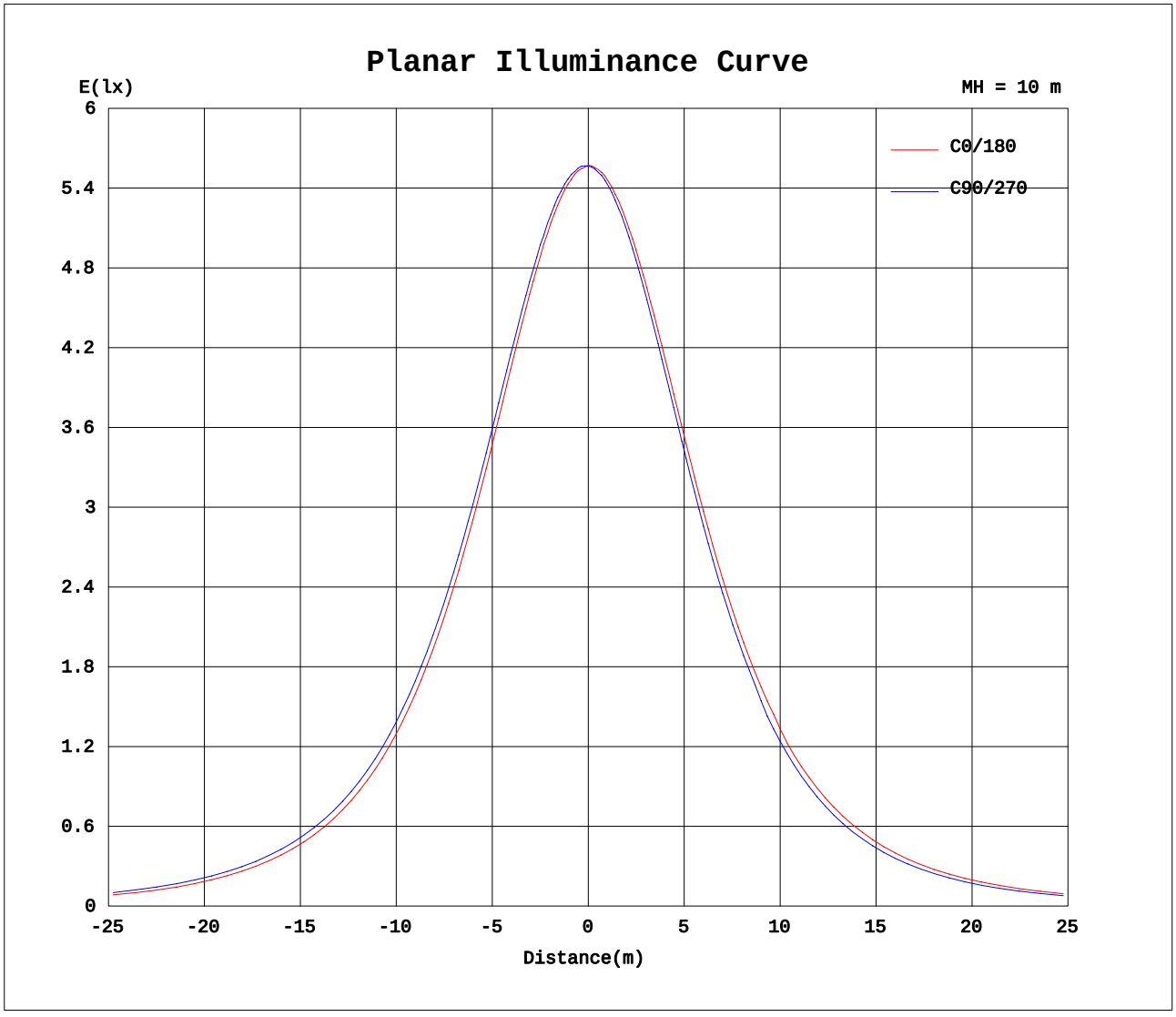
AvgL	cd/m2
L_0~180(65)av	7620
L_0~180(75)av	6715
L_0~180(85)av	5089
L_90~270(65)av	7752
L_90~270(75)av	6832
L_90~270(85)av	5389
L_45(65)av	7728
L_45(75)av	6777
L_45(85)av	5224

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:0.1990A P:22.00W PF:0.9190 Freq:60.00Hz Lamp Flux:1601.32x1 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	557	557	557	557	557	557	557	557	557	557	557	557	557	557	557	557			
5	552	554	556	556	557	557	556	556	555	554	554	553	552	552	552	553			
10	545	548	549	551	552	552	551	550	548	547	545	543	543	542	543	544			
15	532	536	538	541	542	542	541	540	537	534	531	530	529	528	529	530			
20	514	519	522	527	527	529	526	525	521	517	514	511	510	509	511	513			
25	492	499	502	507	509	510	508	505	501	496	491	489	487	486	488	490			
30	467	473	477	483	485	487	484	481	476	470	466	462	460	459	462	464			
35	437	444	449	455	458	459	457	453	447	440	435	430	429	428	430	433			
40	404	412	418	425	427	429	425	422	415	407	401	396	395	393	397	399			
45	366	372	382	389	392	394	390	386	377	371	358	359	351	355	352	362			
50	327	331	343	345	354	351	353	342	335	332	319	318	310	315	312	322			
55	284	290	302	305	313	310	312	301	294	290	277	276	268	272	270	279			
60	240	246	258	262	270	268	268	259	251	245	234	230	224	227	226	235			
65	190	201	212	217	225	223	223	214	206	197	188	180	178	177	181	185			
70	145	155	162	171	175	178	174	168	160	149	142	135	133	131	135	139			
75	99.4	109	116	125	129	132	128	122	114	104	96.8	90.0	88.3	87.1	90.5	94.1			
80	57.7	66.0	73.0	81.1	85.1	87.5	83.9	78.6	71.3	61.4	55.0	49.1	47.6	46.5	49.7	52.9			
85	21.8	28.8	34.5	41.5	44.8	46.8	43.7	39.0	32.8	24.7	19.4	14.6	13.0	12.1	14.5	17.5			
90	0.73	1.29	4.23	8.10	11.1	11.6	9.95	6.08	2.77	0.75	0.70	0.72	0.75	0.74	0.73	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: