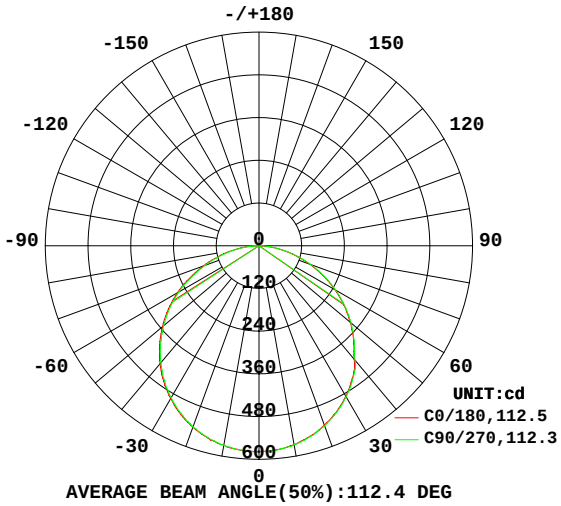
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:5000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

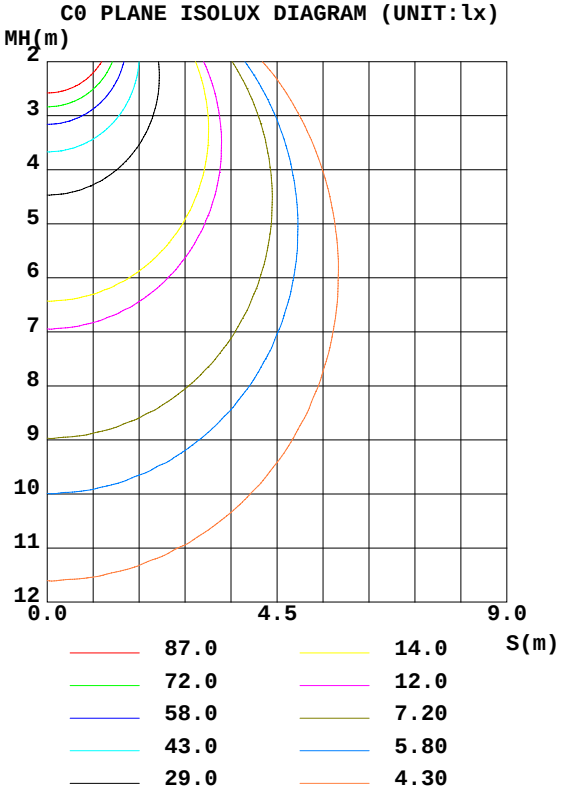
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 75.84 lm/W	
MODEL	ASL-511201	Imax(cd)	579.2	S/MH(C0/180)	1.26
NOMINAL POWER(W)	22	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1660.9	η UP,DN(C0-180)	0.0,50.5
NOMINAL FLUX(lm)	1660.92	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.5
LAMPS INSIDE	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%):112.4 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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=1.0827]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	569.1	571.2	568.7	568.2	567.8	566.7	568.0	569.8	0- 10	54.74	54.74	3.3,3.3
20	542.6	542.9	541.8	538.3	536.5	536.9	539.2	541.8	10- 20	157.1	211.8	12.8,12.8
30	496.0	496.5	493.1	488.1	487.5	486.8	490.2	494.6	20- 30	238.7	450.5	27.1,27.1
40	432.7	434.1	428.3	422.3	416.4	415.9	419.9	427.5	30- 40	288.4	738.9	44.5,44.5
50	353.7	355.5	349.8	342.2	334.6	334.6	337.6	343.8	40- 50	297.0	1036	62.4,62.4
60	265.1	265.8	260.1	252.2	245.6	244.7	248.5	256.0	50- 60	268.4	1304	78.5,78.5
70	166.4	167.3	161.4	153.6	151.8	150.8	154.7	162.4	60- 70	204.1	1508	90.8,90.8
80	75.63	76.37	71.46	64.60	62.47	61.13	65.14	72.29	70- 80	118.8	1627	98,98
90	2.471	2.989	1.309	0.7448	0.7447	0.7386	0.7103	1.114	80- 90	33.80	1661	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:2026-10-29

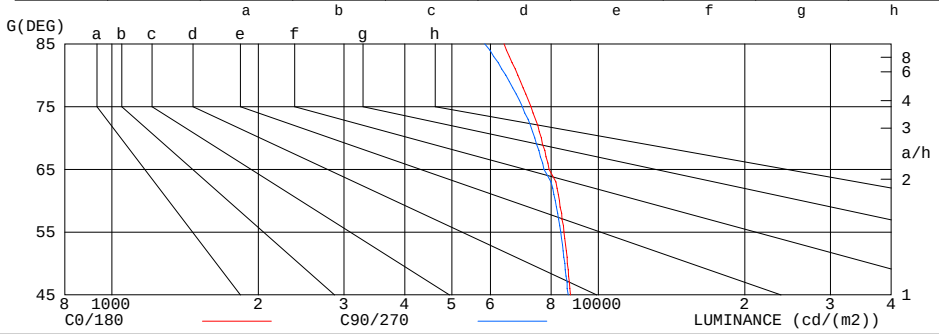
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:10.400m [K=1.0827]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	**TYPE:**	**WEIGHT:**
SPEC.:	**DIM.:**	**SERIAL No.:5000K**
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	6398	5838
80	6832	6452
75	7270	6976
70	7634	7401
65	7920	7729
60	8316	8157
55	8496	8368
50	8632	8533
45	8767	8670

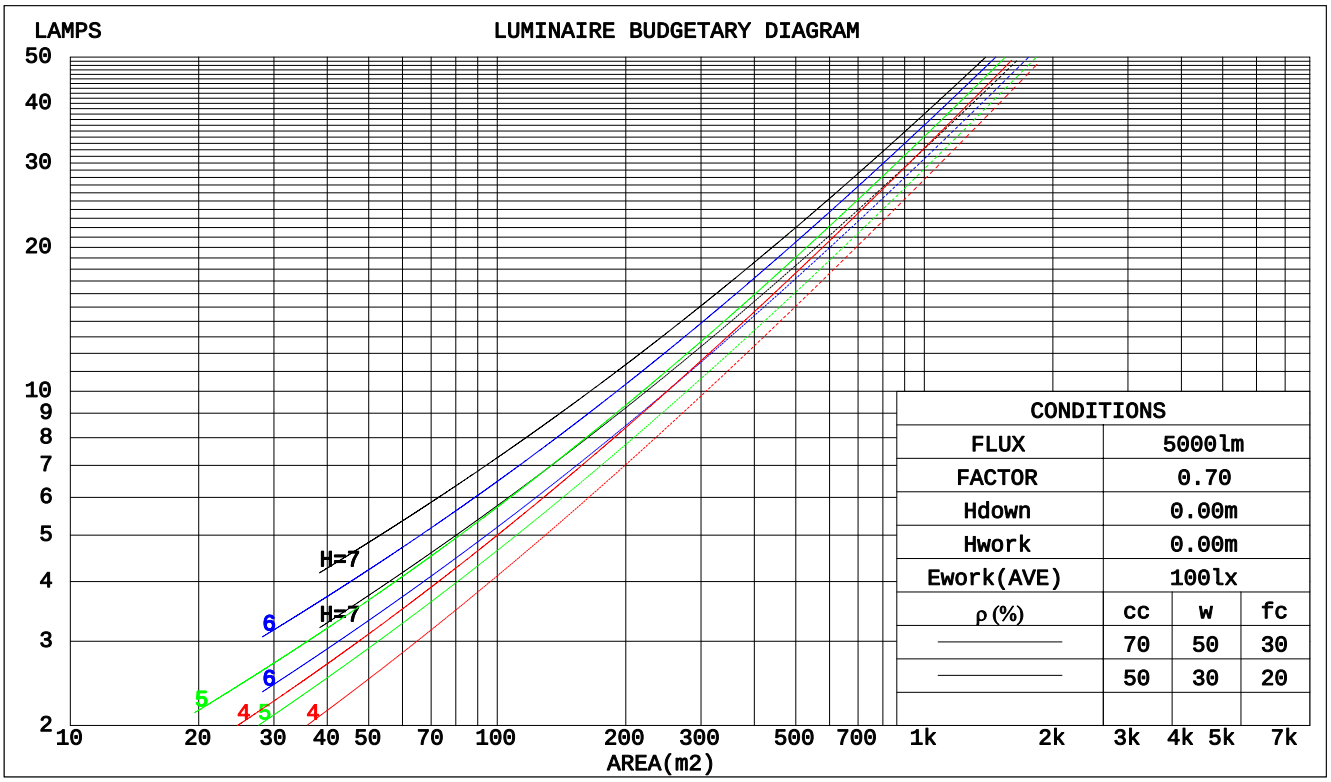
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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=1.0827]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:5000K
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	.96	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	.79	.75	.72	.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	.54	.47	.61	.53	.47	.59	.52	.46	.57	.51	.46	.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	.45	.37	.32	.43	.37	.32	.42	.36	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.27
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:2026-10-29

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=1.0827]
Remarks:

WEC AND CCEC

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:5000K
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	.177	.056	.305	.174	.055	.292	.167	.053	.279	.161	.052	.268	.155	.050	
2.0	.293	.161	.049	.287	.158	.049	.275	.153	.048	.264	.148	.046	.254	.144	.045	
3.0	.271	.144	.043	.265	.142	.043	.255	.138	.042	.245	.134	.041	.237	.131	.041	
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.231	.118	.034	.227	.116	.034	.218	.114	.033	.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	.098	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.172	.087	.025	.167	.085	.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	.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	.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	.088	.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:2026-10-29

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=1.0827]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:5000K
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	20.2	18.9	20.4	20.6	18.6	20.1	18.8	20.3	20.5
	3H	20.2	21.6	20.5	21.9	22.1	20.1	21.5	20.4	21.7	22.0
	4H	20.9	22.2	21.2	22.5	22.7	20.7	22.1	21.0	22.3	22.6
	6H	21.4	22.6	21.7	22.9	23.2	21.2	22.5	21.5	22.7	23.0
	8H	21.5	22.8	21.9	23.0	23.3	21.4	22.6	21.7	22.9	23.2
	12H	21.7	22.8	22.0	23.1	23.4	21.5	22.6	21.8	22.9	23.2
4H	2H	19.3	20.6	19.6	20.9	21.1	19.2	20.5	19.5	20.8	21.1
	3H	21.0	22.2	21.4	22.5	22.8	20.9	22.1	21.3	22.4	22.7
	4H	21.8	22.9	22.2	23.2	23.6	21.7	22.8	22.1	23.1	23.4
	6H	22.5	23.4	22.9	23.8	24.1	22.3	23.3	22.7	23.6	24.0
	8H	22.7	23.6	23.1	24.0	24.3	22.5	23.4	22.9	23.8	24.2
	12H	22.9	23.7	23.3	24.1	24.5	22.7	23.5	23.1	23.9	24.3
8H	4H	22.1	23.0	22.5	23.4	23.8	22.0	22.9	22.4	23.3	23.7
	6H	22.9	23.7	23.4	24.1	24.5	22.8	23.5	23.2	23.9	24.4
	8H	23.3	23.9	23.7	24.3	24.8	23.1	23.8	23.6	24.2	24.6
	12H	23.5	24.1	24.0	24.6	25.0	23.4	23.9	23.8	24.4	24.9
12H	4H	22.1	23.0	22.6	23.3	23.7	22.0	22.9	22.5	23.2	23.6
	6H	23.0	23.7	23.5	24.1	24.5	22.9	23.5	23.3	24.0	24.4
	8H	23.4	24.0	23.9	24.4	24.9	23.2	23.8	23.7	24.3	24.7
Variations with the observer position at spacings:											
S = 1.0H		+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 1661 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.8)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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=1.0827]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:5000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

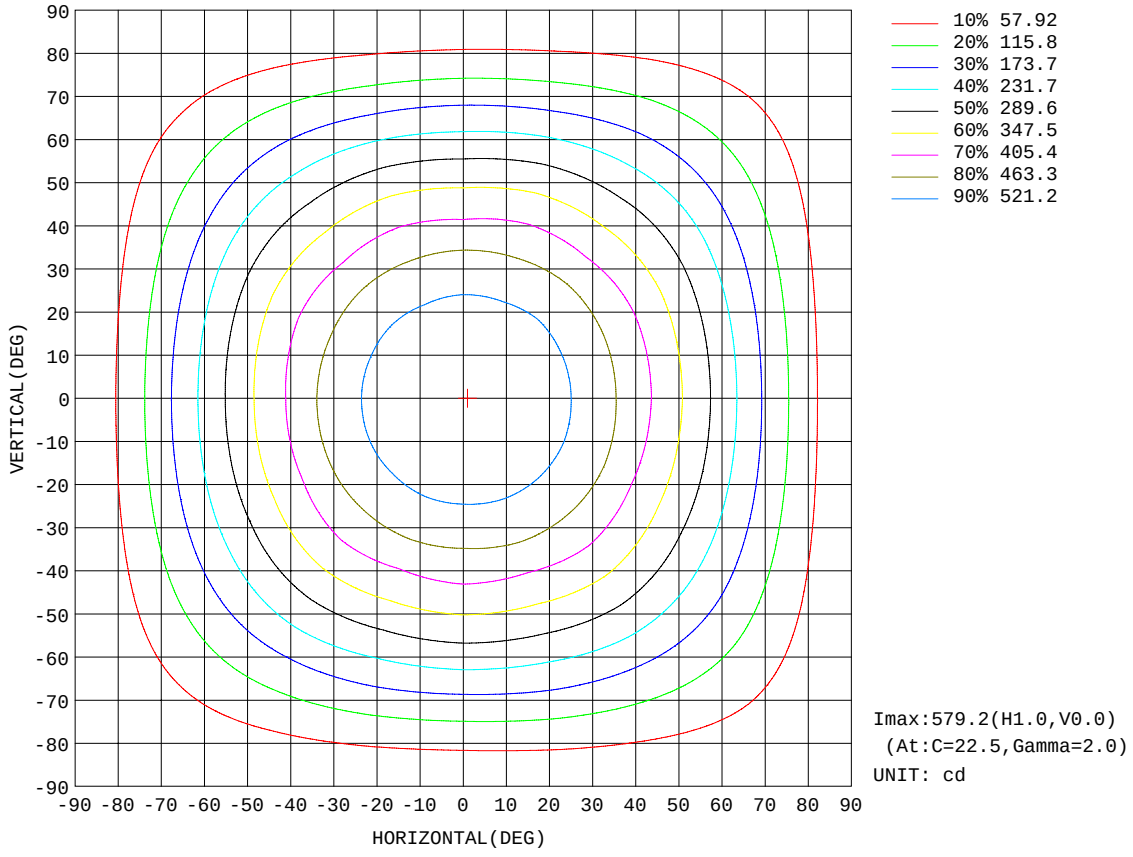
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	57	46	39	57	46	39	56	45	39	32
0.80	67	56	48	66	55	48	65	55	48	41
1.00	76	65	57	75	64	57	72	66	57	49
1.25	83	72	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	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	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:2026-10-29

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=1.0827]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:5000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



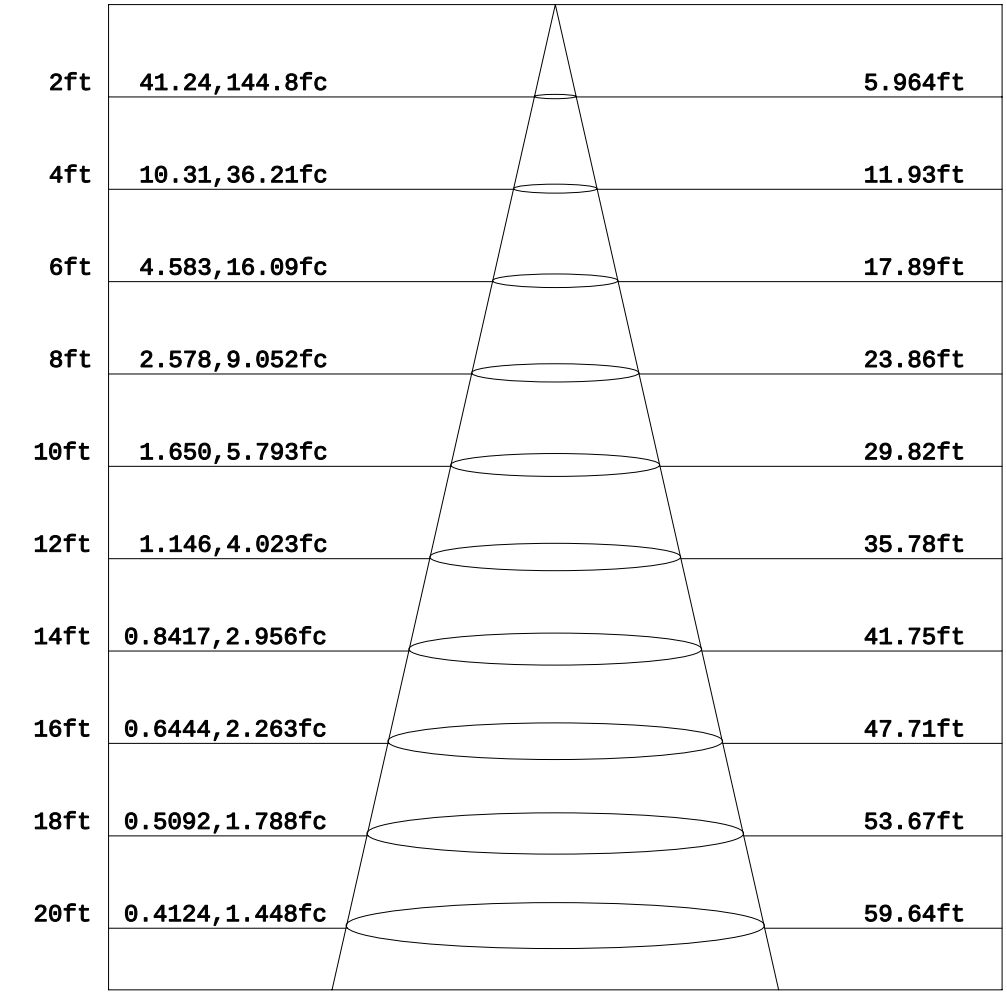
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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=1.0827]
Remarks:

AAI Figure

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:5000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

Flux out:1229 lm



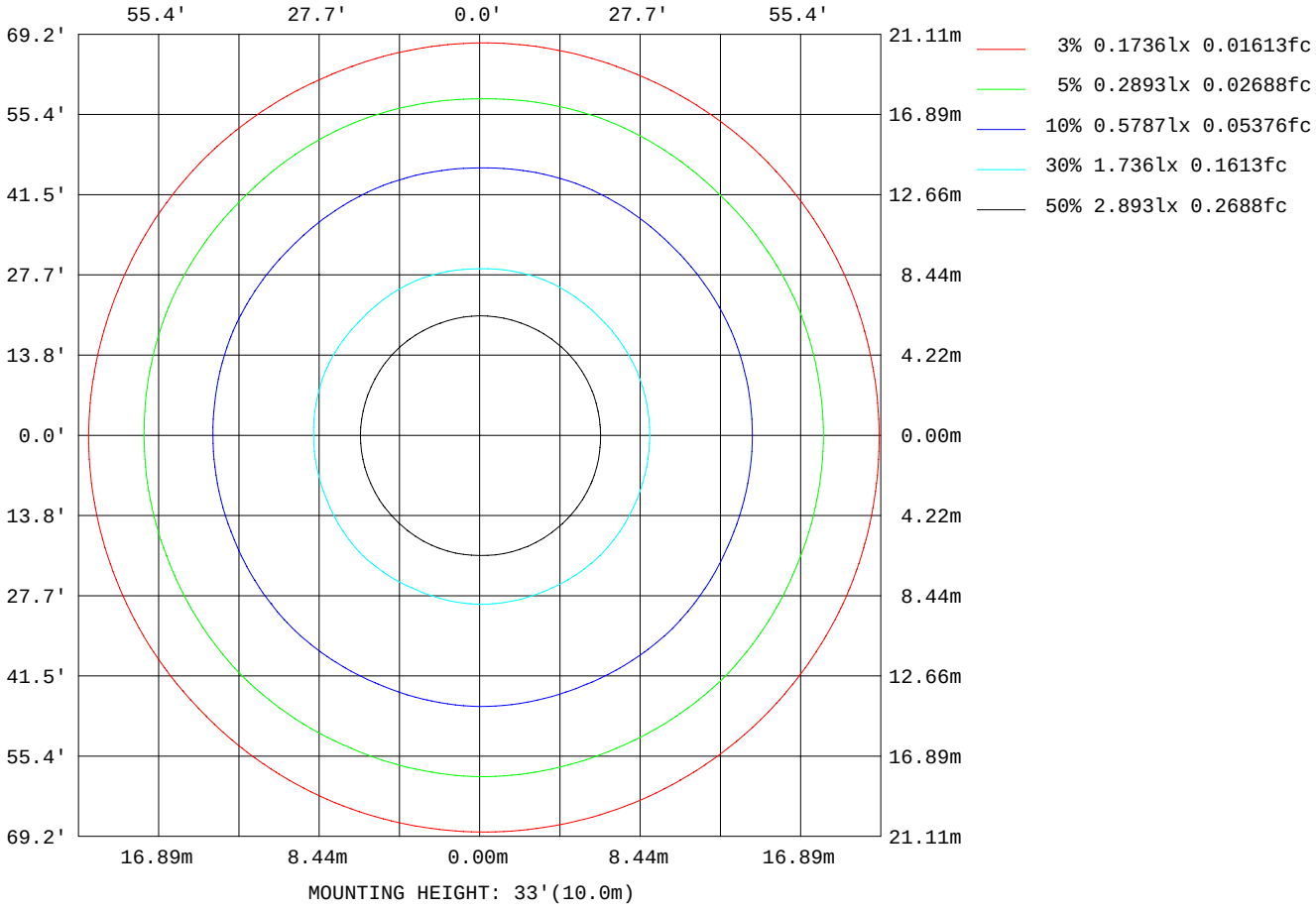
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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=1.0827]
Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:5000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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=1.0827]
Remarks:

LED Avg.L Report

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:5000K
MFR.: ASL Lighting	SUR.:	Shielding Angle:

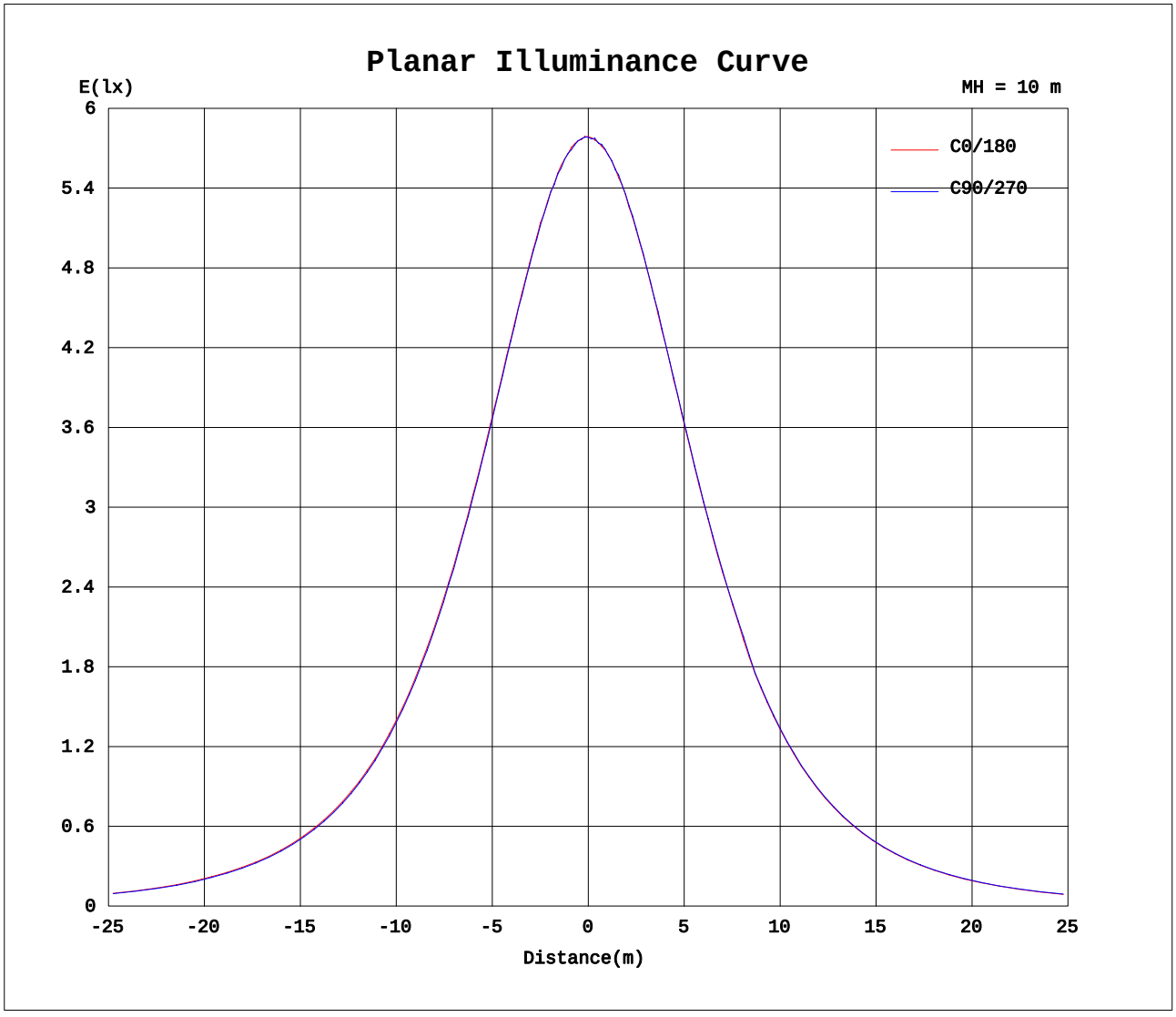
AvgL	cd/m2
L_0~180(65)av	7649
L_0~180(75)av	6824
L_0~180(85)av	5366
L_90~270(65)av	7605
L_90~270(75)av	6773
L_90~270(85)av	5299
L_45(65)av	7630
L_45(75)av	6799
L_45(85)av	5328

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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=1.0827]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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=1.0827]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1980A P:21.90W PF:0.9200 Freq:60.00Hz Lamp Flux:1660.92x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:5000K
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	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579			
5	577	578	577	578	576	575	574	575	575	575	576	575	576	576	576	576			
10	569	571	571	571	569	569	568	566	568	567	567	567	568	568	570	568			
15	559	559	559	559	557	556	555	553	554	554	555	555	555	557	558	557			
20	543	543	543	544	542	540	538	537	537	535	537	536	539	539	542	542			
25	521	522	523	522	520	518	515	513	515	512	514	515	517	517	521	520			
30	496	498	496	498	493	492	488	487	487	486	487	488	490	491	495	496			
35	466	469	467	467	462	461	458	457	456	455	457	456	459	460	464	464			
40	433	436	434	434	428	423	422	416	416	420	416	421	420	426	427	431			
45	395	391	396	388	391	382	384	376	376	381	376	383	379	387	384	393			
50	354	351	355	348	350	341	342	334	335	338	335	340	338	346	344	352			
55	311	308	312	305	306	298	298	291	291	295	291	295	294	301	301	309			
60	265	262	266	260	260	253	252	245	246	248	245	249	249	255	256	263			
65	213	217	215	213	208	206	201	198	199	197	198	198	201	204	210	212			
70	166	169	167	166	161	159	154	152	152	149	151	151	155	157	162	165			
75	120	123	121	120	115	112	108	106	105	103	104	105	108	111	116	119			
80	75.6	78.0	76.4	75.5	71.5	69.1	64.6	62.8	62.5	59.9	61.1	61.3	65.1	67.3	72.3	74.5			
85	35.5	37.5	36.2	35.7	32.5	30.4	26.5	24.7	24.1	22.1	23.0	23.3	26.4	28.5	32.7	34.7			
90	2.47	3.02	2.99	2.15	1.31	0.78	0.74	0.77	0.74	0.76	0.74	0.73	0.71	0.74	1.11	2.16			

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-10-29

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=1.0827]
Remarks: