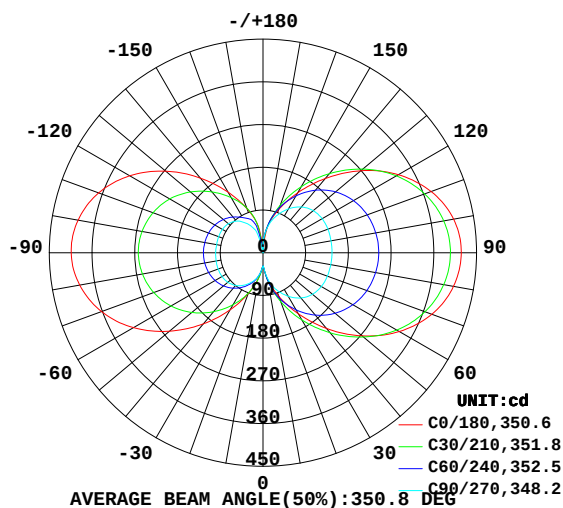


LUMINAIRE PHOTOMETRIC TEST REPORT

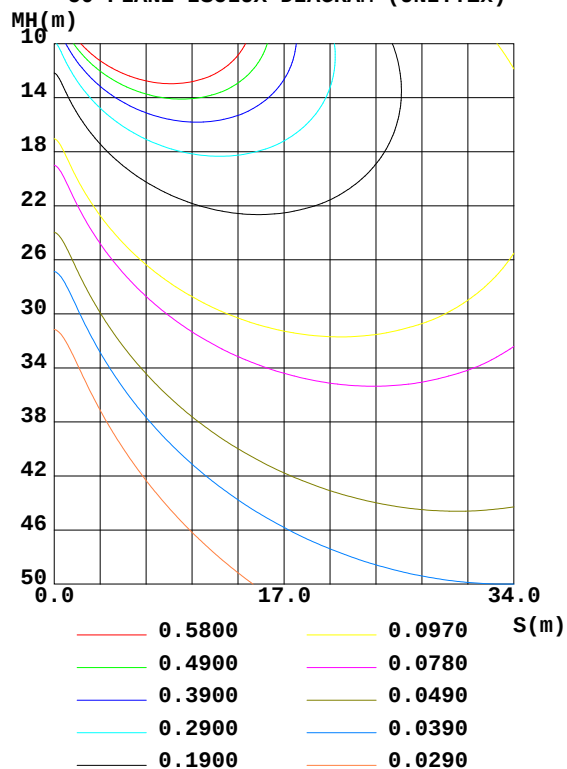
Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm		
NAME:ASD-LWS27N-36D30BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.40 lm/W			
MODEL	ASD-LWS27N-36D30BK	I _{max} (cd)	455.8	S/MH(C0/180)	5.17
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	3.15
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	2480.0	η UP, DN(C0-180)	29.0, 28.9
NOMINAL FLUX(lm)	2480.05	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	21.1, 21.0
LAMPS INSIDE	1	η up(%)	50.1	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	49.9	CIBSE SHR MAX	1.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 24.8DEG
Operators: Alan Wang
Test Date: 19 December 2023

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
Humidity: 41.9%
Test Distance: 2.50m [K=1.0423]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	57.16	61.47	54.47	59.02	53.71	52.45	47.63	55.52	0- 10	4.162	4.162	0.17,0.17
20	97.64	109.3	83.14	103.3	92.03	80.15	64.60	83.14	10- 20	20.97	25.13	1.01,1.01
30	148.0	153.8	105.6	141.3	139.0	104.1	78.88	104.6	20- 30	49.47	74.60	3.01,3.01
40	208.1	195.4	124.3	175.3	195.7	125.5	90.07	123.8	30- 40	88.17	162.8	6.56,6.56
50	272.6	232.1	136.1	204.3	257.2	143.7	96.88	140.3	40- 50	134.3	297.1	12,12
60	331.9	261.0	142.2	227.8	315.4	157.9	99.96	153.8	50- 60	182.2	479.2	19.3,19.3
70	378.7	281.6	144.4	244.1	362.2	168.2	100.7	163.6	60- 70	225.3	704.6	28.4,28.4
80	407.6	294.1	145.0	254.3	392.1	174.5	100.3	169.8	70- 80	257.6	962.2	38.8,38.8
90	417.7	298.6	145.5	258.4	404.1	176.8	99.90	172.2	80- 90	275.2	1237	49.9,49.9
100	407.8	294.5	145.5	255.4	395.6	175.2	99.23	171.3	90-100	275.6	1513	61,61
110	377.1	282.2	145.7	246.5	368.7	169.7	99.54	166.4	100-110	258.7	1772	71.4,71.4
120	329.2	261.8	143.9	231.0	324.4	160.3	98.78	157.7	110-120	226.8	1999	80.6,80.6
130	269.0	232.7	138.1	208.7	267.7	146.8	95.41	145.0	120-130	184.0	2183	88,88
140	204.5	195.5	126.1	179.5	205.3	129.5	87.21	128.1	130-140	135.8	2318	93.5,93.5
150	145.5	152.4	106.7	144.6	147.6	110.5	72.34	105.3	140-150	89.11	2407	97.1,97.1
160	96.94	106.9	82.64	105.5	99.01	90.94	53.26	77.32	150-160	49.72	2457	99.1,99.1
170	54.33	59.30	54.31	60.89	55.11	38.43	12.73	23.65	160-170	20.16	2477	99.9,99.9
180	0	0	0	0	0.1318	0.1379	0.1539	0.1572	170-180	2.671	2480	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 223.9 lm

%lum = 9.0%

%lamp = 9.0%

Conical surface Flux(120deg): 479.24 lm

%lum = 19.3%

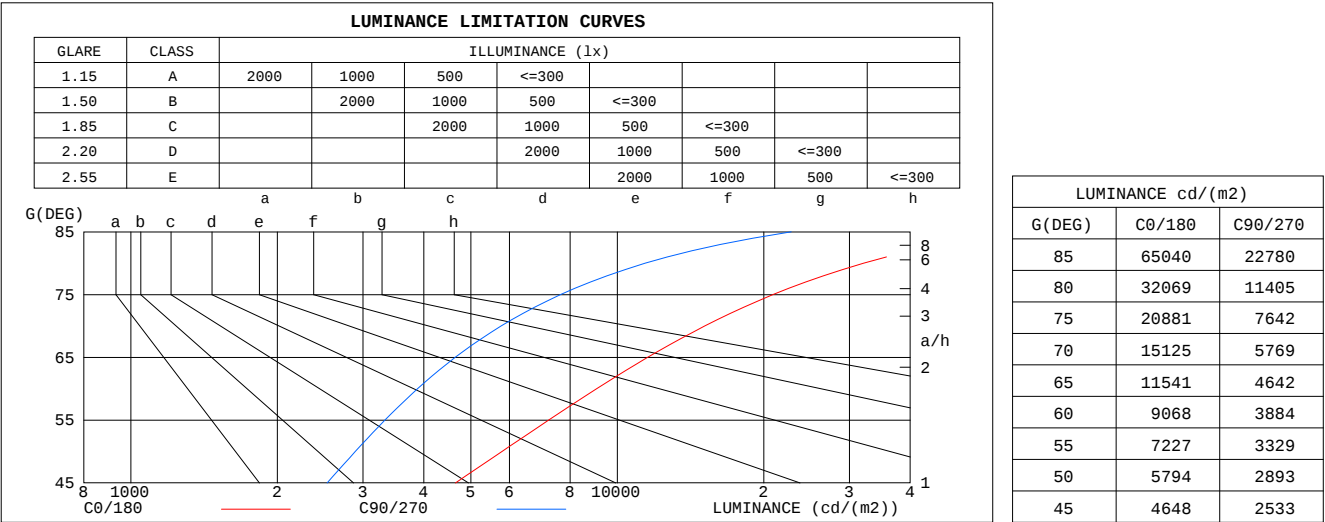
%lamp = 19.3%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 41.9%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm		
NAME:	TYPE: LED	WEIGHT:
SPEC.: ASD-LWS27N-36D30BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



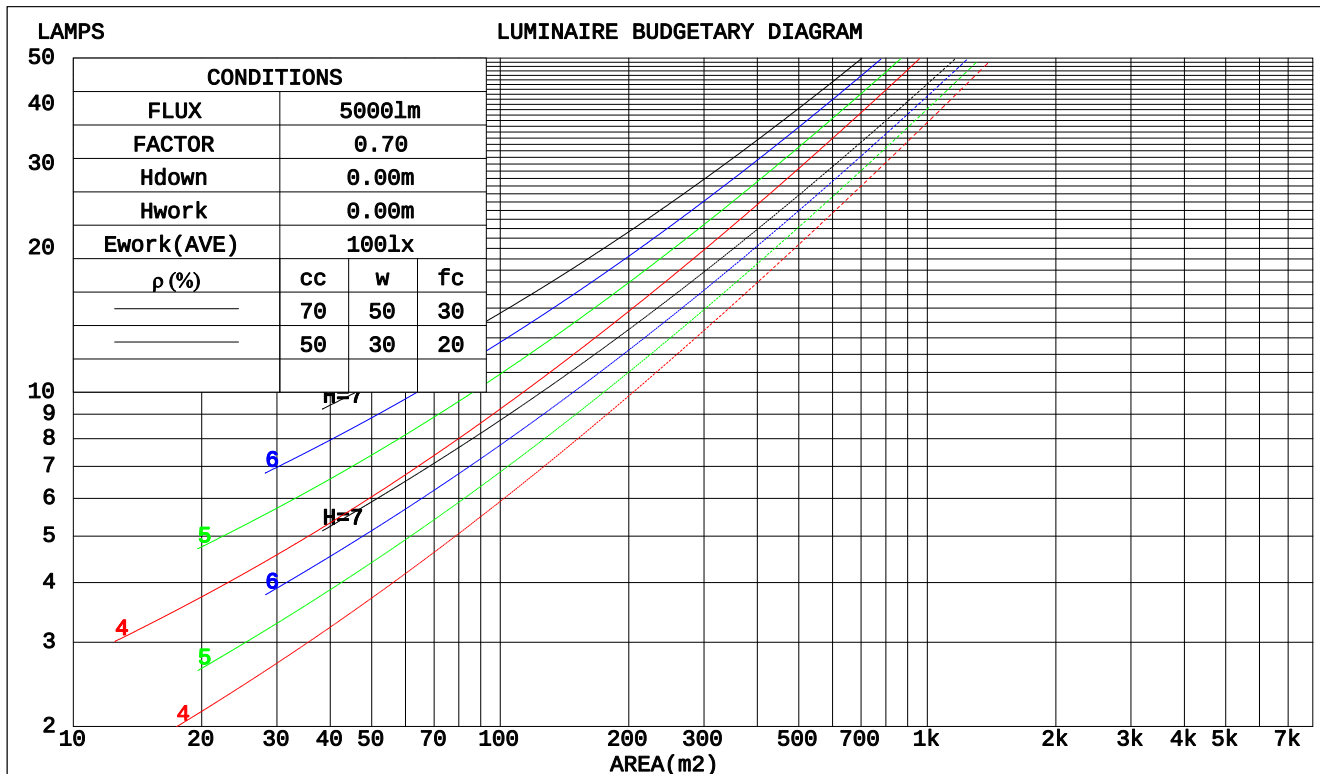
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 24.8DEG
Operators: Alan Wang
Test Date: 19 December 2023

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
Humidity: 41.9%
Test Distance: 2.500m [K=1.0423]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-36D30BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.07	1.07	1.07	.99	.99	.99	.83	.83	.83	.69	.69	.69	.56	.56	.56	.50
1.0	.85	.79	.74	.78	.73	.68	.65	.60	.57	.52	.49	.46	.41	.38	.36	.30
2.0	.71	.63	.56	.65	.58	.51	.53	.48	.43	.43	.38	.34	.32	.29	.26	.21
3.0	.61	.51	.44	.56	.47	.40	.45	.39	.33	.36	.31	.26	.27	.23	.20	.15
4.0	.53	.43	.36	.48	.39	.33	.39	.32	.27	.31	.26	.21	.23	.19	.16	.12
5.0	.46	.37	.29	.42	.33	.27	.34	.27	.22	.27	.22	.17	.20	.16	.13	.09
6.0	.41	.32	.25	.37	.29	.23	.30	.24	.19	.24	.19	.15	.18	.14	.11	.07
7.0	.37	.27	.21	.33	.25	.19	.27	.21	.16	.22	.16	.12	.16	.12	.09	.06
8.0	.33	.24	.18	.30	.22	.17	.25	.18	.14	.19	.14	.11	.15	.11	.08	.05
9.0	.30	.21	.16	.27	.20	.14	.22	.16	.12	.18	.13	.09	.13	.09	.07	.04
10.0	.27	.19	.14	.25	.18	.13	.20	.14	.10	.16	.11	.08	.12	.09	.06	.04



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 41.9%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm					
NAME:			TYPE:LED		WEIGHT:
SPEC.:ASD-LWS27N-36D30BK_5000K			DIM.:		SERIAL No.:
MFR.: ASD Lighting Corp			SUR.:		Shielding Angle:

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.435	.247	.078	.412	.235	.075	.370	.212	.068	.331	.191	.061	.296	.171	.055	
2.0	.358	.196	.060	.338	.186	.057	.299	.166	.052	.264	.148	.046	.231	.130	.041	
3.0	.310	.165	.049	.291	.156	.047	.256	.139	.042	.223	.122	.038	.193	.107	.033	
4.0	.274	.143	.042	.257	.135	.040	.225	.119	.036	.195	.105	.032	.167	.091	.028	
5.0	.247	.126	.036	.231	.118	.035	.201	.105	.031	.173	.091	.027	.147	.079	.024	
6.0	.224	.112	.032	.209	.106	.030	.182	.093	.027	.156	.081	.024	.132	.070	.021	
7.0	.205	.101	.029	.192	.096	.027	.166	.084	.024	.142	.073	.021	.120	.062	.018	
8.0	.189	.092	.026	.177	.087	.025	.153	.077	.022	.131	.066	.019	.110	.056	.016	
9.0	.176	.085	.024	.164	.080	.022	.142	.070	.020	.121	.061	.017	.102	.052	.015	
10.0	.164	.078	.022	.153	.074	.021	.132	.065	.018	.113	.056	.016	.094	.048	.014	

ρ _{CC}	80%			70%			50%			30%			10%			0	
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ _{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)										
0.0	.572	.572	.572	.489	.489	.489	.334	.334	.334	.192	.192	.192	.061	.061	.061		
1.0	.574	.540	.509	.491	.463	.438	.336	.319	.303	.193	.184	.176	.062	.059	.057		
2.0	.569	.519	.477	.487	.447	.413	.334	.309	.288	.192	.180	.169	.062	.058	.055		
3.0	.562	.504	.458	.482	.435	.397	.331	.302	.279	.191	.176	.164	.061	.057	.054		
4.0	.554	.493	.446	.476	.426	.387	.327	.297	.273	.189	.174	.161	.061	.057	.053		
5.0	.547	.484	.437	.470	.419	.381	.324	.292	.269	.187	.172	.159	.060	.056	.053		
6.0	.540	.477	.431	.464	.413	.376	.320	.289	.266	.186	.170	.158	.060	.056	.052		
7.0	.533	.471	.427	.458	.408	.372	.317	.286	.264	.184	.168	.157	.059	.055	.052		
8.0	.526	.465	.424	.453	.404	.370	.313	.283	.262	.182	.167	.156	.059	.055	.052		
9.0	.520	.461	.421	.448	.400	.367	.310	.281	.261	.181	.166	.156	.059	.055	.052		
10.0	.514	.457	.419	.443	.397	.366	.307	.279	.260	.179	.165	.155	.058	.054	.051		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 41.9%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm										
NAME:			TYPE:LED			WEIGHT:				
SPEC.:ASD-LWS27N-36D30BK_5000K			DIM.:			SERIAL No.:				
MFR.: ASD Lighting Corp			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	18.5	19.6	19.3	20.5	21.6	14.5	15.6	15.3	16.5	17.6
3H	22.4	23.5	23.3	24.4	25.6	17.4	18.4	18.2	19.3	20.5
4H	24.6	25.6	25.5	26.5	27.7	19.0	19.9	19.9	20.9	22.1
6H	26.9	27.8	27.8	28.7	30.0	20.8	21.7	21.7	22.6	23.8
8H	28.1	29.0	29.0	29.9	31.2	21.8	22.6	22.7	23.6	24.8
12H	29.5	30.3	30.4	31.3	32.5	22.9	23.7	23.8	24.7	26.0
4H 2H	19.1	20.1	20.0	21.0	22.2	16.6	17.6	17.5	18.5	19.7
3H	23.3	24.2	24.3	25.1	26.4	19.5	20.3	20.4	21.3	22.5
4H	25.7	26.5	26.7	27.5	28.7	21.1	21.9	22.1	22.9	24.2
6H	28.3	28.9	29.2	29.9	31.2	22.9	23.6	23.9	24.6	25.9
8H	29.6	30.3	30.6	31.3	32.6	23.9	24.6	24.9	25.5	26.9
12H	31.1	31.7	32.1	32.7	34.0	25.0	25.6	26.0	26.6	28.0
8H 4H	26.1	26.7	27.1	27.7	29.0	22.8	23.4	23.7	24.4	25.7
6H	29.0	29.5	30.0	30.6	31.9	24.8	25.3	25.8	26.4	27.7
8H	30.6	31.1	31.6	32.1	33.5	25.9	26.4	26.9	27.4	28.8
12H	32.4	32.9	33.5	33.9	35.3	27.1	27.6	28.2	28.6	30.0
12H 4H	26.1	26.7	27.1	27.7	29.1	23.4	24.0	24.4	25.0	26.3
6H	29.1	29.6	30.1	30.7	32.0	25.6	26.1	26.6	27.1	28.4
8H	30.9	31.3	31.9	32.4	33.7	26.8	27.2	27.8	28.3	29.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.3 / - 0.3					+ 0.2 / - 0.2				
2.0H	+ 0.4 / - 0.5					+ 0.3 / - 0.4				

CIE Pub.117, 2480 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 3.2$)
Area: 0.0732 m²

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 24.8DEG
Operators: Alan Wang
Test Date: 19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
Humidity: 41.9%
Test Distance: 2.500m [K=1.0423]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-36D30BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

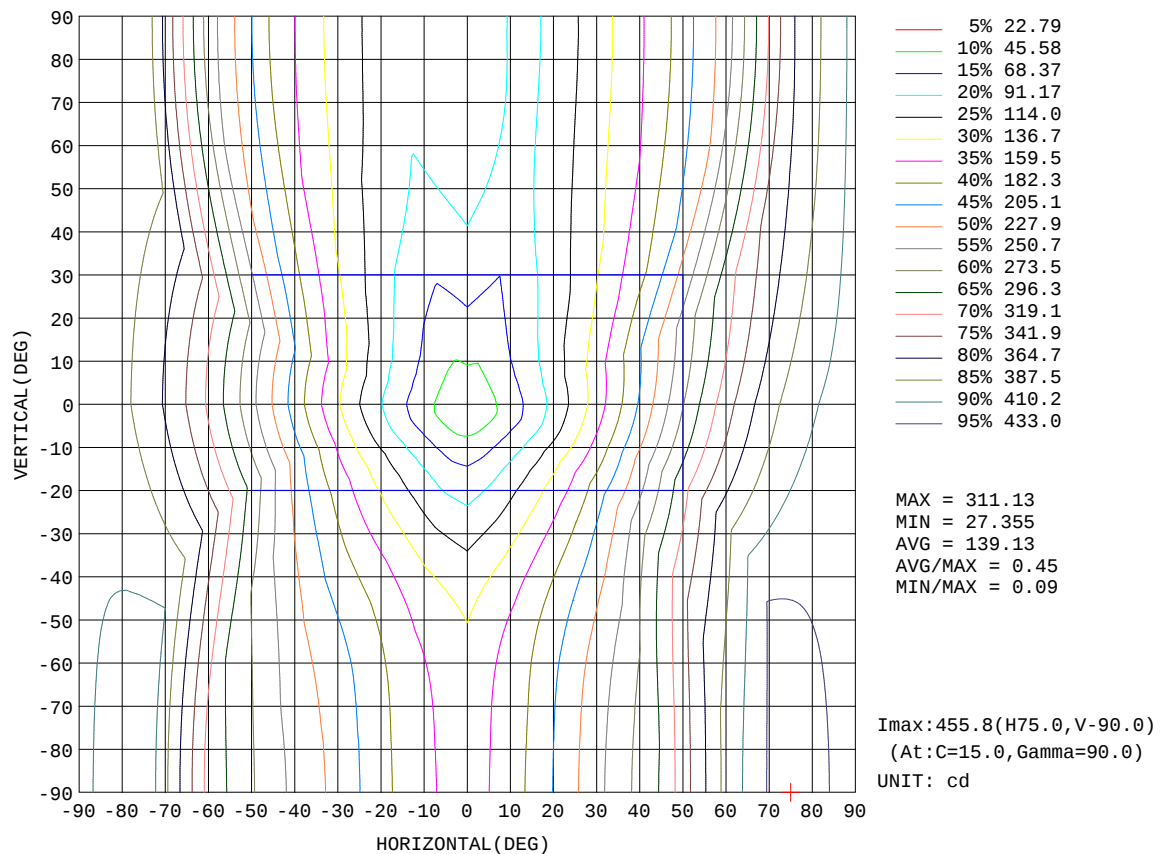
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	34	21	14	32	20	13	29	18	12	5
0.80	42	28	19	40	26	18	35	24	16	7
1.00	49	35	25	46	33	24	40	31	21	10
1.25	56	41	32	52	39	30	45	34	26	12
1.50	62	47	37	57	44	35	49	38	30	15
2.00	70	56	46	64	52	43	54	45	37	19
2.50	75	62	52	69	58	49	58	49	42	22
3.00	79	67	58	73	62	54	61	53	46	25
4.00	84	74	66	78	69	61	65	58	52	28
5.00	88	79	72	81	73	66	68	62	57	31
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 41.9%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-36D30BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

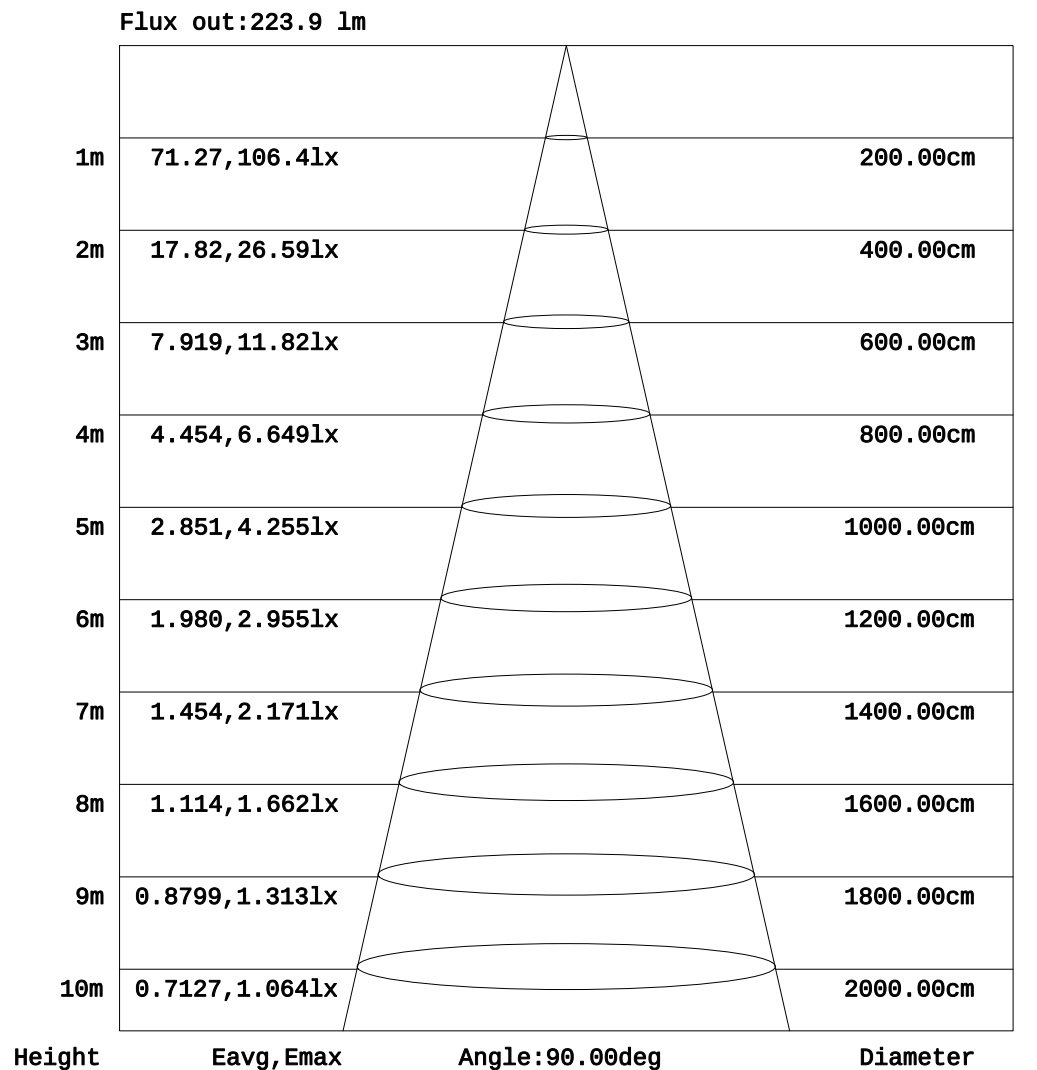


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 41.9%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

AAI Figure

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-36D30BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



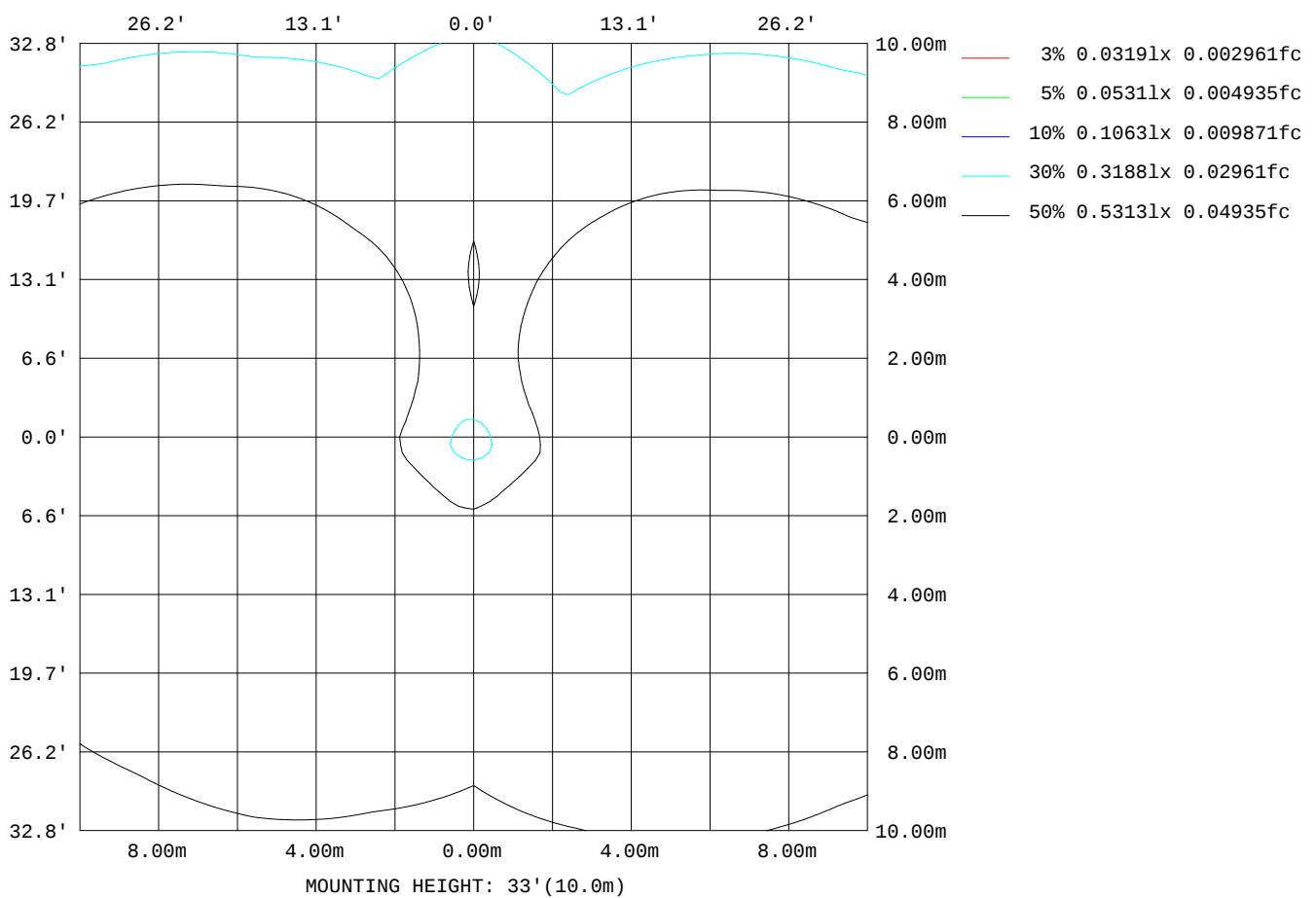
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators:Alan Wang
 Test Date:19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 41.9%
 Test Distance:2.500m [K=1.0423]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-36D30BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 41.9%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

LED Avg.L Report

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-36D30BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

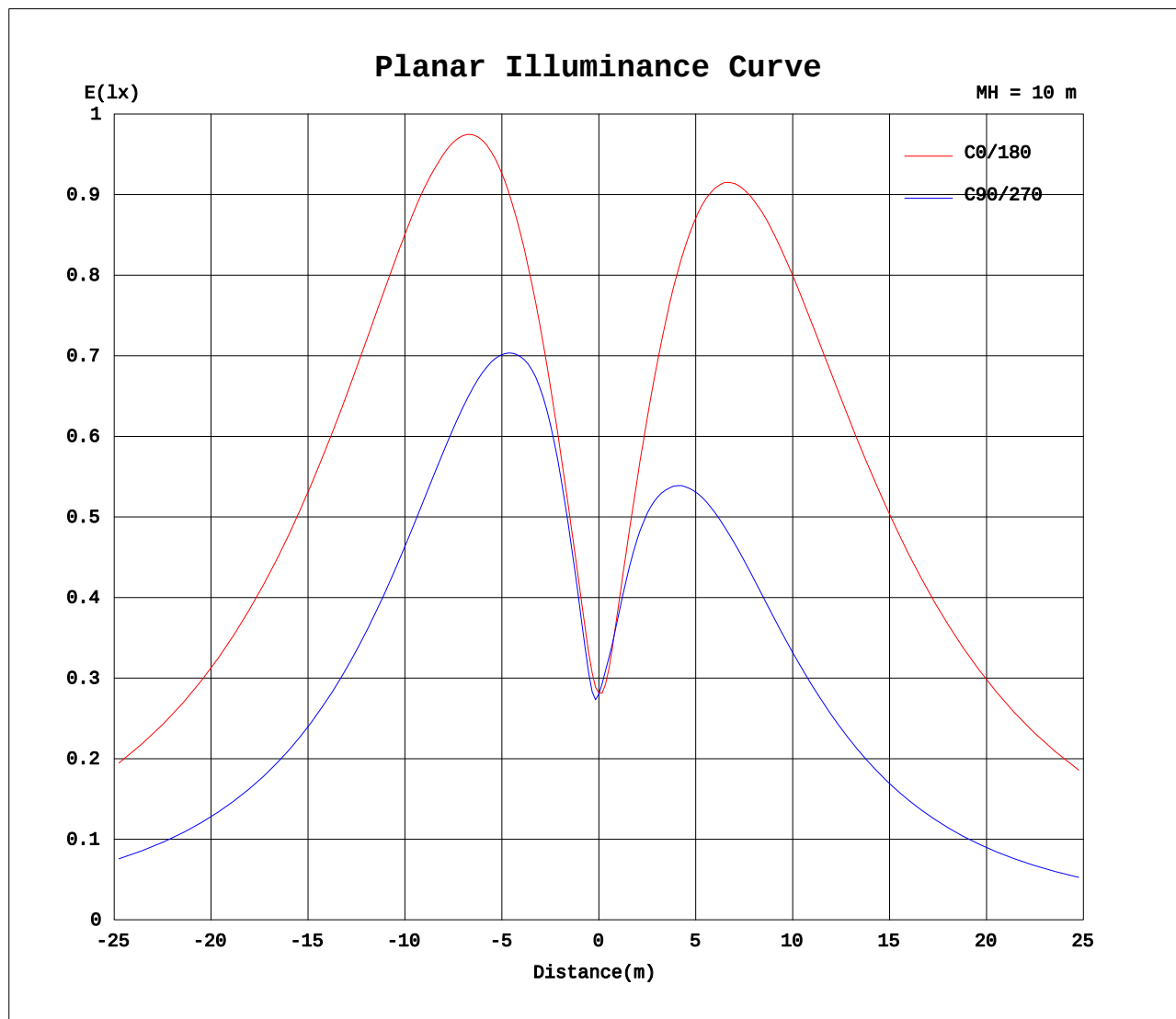
AvgL	cd/m2
L_0~180(65)av	11277
L_0~180(75)av	20451
L_0~180(85)av	63920
L_90~270(65)av	3946
L_90~270(75)av	6474
L_90~270(85)av	19223
L_45(65)av	6723
L_45(75)av	11585
L_45(85)av	35357

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 24.8DEG
Operators: Alan Wang
Test Date: 19 December 2023

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
Humidity: 41.9%
Test Distance: 2.500m [K=1.0423]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 24.8DEG
Operators: Alan Wang
Test Date: 19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
Humidity: 41.9%
Test Distance: 2.500m [K=1.0423]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-36D30BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	28.1	28.1	28.1	28.1	28.1	28.0	28.0	28.0	28.0	27.9	27.9	27.9	28.1	28.1	28.1	28.1	28.1	28.0	28.0
5	39.7	38.2	38.1	38.6	38.5	37.6	37.3	37.0	37.0	37.1	36.5	36.1	37.1	38.0	38.2	37.4	36.2	36.1	36.7
10	57.2	56.0	59.6	61.5	60.5	57.2	54.5	55.1	57.9	59.0	57.6	53.9	53.7	55.7	55.3	52.4	47.9	44.3	47.6
15	76.4	77.3	83.8	85.5	82.6	76.0	70.2	72.9	78.7	81.7	80.5	74.7	71.9	74.8	72.9	66.9	58.4	51.6	56.9
20	97.6	101	109	109	103	92.3	83.1	88.2	97.4	103	104	97.3	92.0	95.4	90.7	80.2	67.2	57.7	64.6
25	121	128	136	132	121	107	94.5	102	114	123	127	122	114	117	109	92.4	75.4	63.7	71.9
30	148	158	163	154	139	121	106	115	130	141	150	149	139	142	126	104	83.3	69.5	78.9
35	177	189	191	175	156	134	116	128	145	159	173	178	166	168	144	115	90.8	74.9	85.0
40	208	223	220	195	171	146	124	139	159	175	194	209	196	196	162	126	97.6	79.6	90.1
45	241	258	249	214	186	156	131	148	172	191	215	241	226	226	180	135	104	83.6	93.8
50	273	293	276	232	198	164	136	155	183	204	234	273	257	256	196	144	109	86.9	96.9
55	303	327	302	248	209	170	140	161	192	217	252	305	287	286	211	151	113	89.4	98.8
60	332	359	326	261	219	175	142	165	200	228	267	336	315	315	224	158	117	91.3	100.0
65	357	387	346	272	227	179	144	169	206	237	280	363	341	341	236	164	120	92.7	101
70	379	411	363	282	233	182	144	171	211	244	290	387	362	363	245	168	122	93.6	101
75	396	430	377	289	237	184	145	173	215	250	299	405	379	381	252	172	124	94.1	101
80	408	444	387	294	241	185	145	174	218	254	305	420	392	394	258	174	125	94.4	100
85	415	453	393	297	243	186	145	175	220	257	309	429	401	403	261	176	125	94.4	99.9
90	418	456	395	299	244	187	145	175	221	258	311	433	404	406	263	177	126	94.5	99.9
95	415	453	393	298	243	187	146	175	220	258	311	431	402	404	262	176	125	94.2	99.7
100	408	444	387	294	241	186	146	175	219	255	307	422	396	397	259	175	125	93.6	99.2
105	395	430	377	289	238	185	146	174	217	252	302	409	384	384	254	173	124	93.3	99.4
110	377	410	363	282	234	183	146	173	213	246	295	392	369	368	247	170	122	92.9	99.5
115	355	385	345	273	228	180	145	171	209	240	285	369	348	346	238	165	120	92.0	99.4
120	329	356	324	262	220	177	144	168	203	231	273	342	324	321	227	160	117	90.5	98.8
125	300	325	301	248	211	172	142	164	195	221	258	312	297	294	214	154	114	88.5	97.5
130	269	290	274	233	200	165	138	158	186	209	241	281	268	264	199	147	109	85.6	95.4
135	236	254	246	215	187	157	133	151	175	195	222	248	237	234	184	139	104	82.3	91.8
140	204	219	218	196	172	146	126	141	162	180	201	215	205	204	167	130	98.3	78.2	87.2
145	174	185	189	174	156	134	117	130	148	163	178	184	175	176	151	120	92.1	72.7	80.5
150	146	154	161	152	138	121	107	117	132	145	155	154	148	150	134	110	85.7	64.4	72.3
155	120	125	133	130	120	106	94.9	103	116	126	131	127	122	125	118	101	80.3	60.5	63.4
160	96.9	98.7	107	107	101	90.4	82.6	89.1	98.8	106	107	101	99.0	102	100	90.9	74.6	57.8	53.3
165	76.3	75.1	81.3	83.2	80.3	74.1	69.7	73.7	80.1	83.8	83.2	78.2	78.3	79.7	80.8	74.3	62.3	38.8	31.7
170	54.3	54.7	57.4	59.3	58.5	55.7	54.3	55.9	59.2	60.9	59.8	56.1	55.1	55.2	49.2	38.4	29.2	20.9	12.7
175	15.6	23.0	30.8	35.5	37.0	36.9	37.2	37.4	38.0	35.8	28.4	19.4	15.9	17.4	13.4	9.19	5.60	3.00	1.21
180	0.00	0.00	0.00	0.00	10.5	0.00	0.00	20.5	0.00	0.00	0.00	0.00	0.13	0.13	0.13	0.14	0.14	0.14	0.15

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 41.9%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.2447A P:29.04W PF:0.9889 Freq:60.00Hz Lamp Flux:2480.05x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-36D30BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345													
0	28.0	28.0	27.9	27.9	27.9													
5	36.8	38.3	39.7	40.4	40.1													
10	45.8	51.0	55.5	58.3	58.5													
15	52.8	61.8	70.2	76.2	78.2													
20	58.3	70.7	83.1	93.8	99.2													
25	63.2	78.6	94.6	110	121													
30	67.8	85.7	105	126	144													
35	72.1	92.4	114	140	168													
40	75.8	98.9	124	155	195													
45	78.7	104	132	170	221													
50	81.2	109	140	182	246													
55	83.0	113	148	195	271													
60	84.2	117	154	206	294													
65	85.0	120	159	215	314													
70	85.5	122	164	223	331													
75	85.7	123	167	229	345													
80	85.8	124	170	234	353													
85	85.6	125	171	237	359													
90	85.7	125	172	238	361													
95	85.5	125	172	238	360													
100	85.1	125	171	235	353													
105	85.1	124	169	231	342													
110	85.0	123	166	225	328													
115	84.7	121	163	218	309													
120	84.0	119	158	208	289													
125	82.9	115	152	198	267													
130	81.2	111	145	186	243													
135	78.1	107	137	172	217													
140	73.8	100	128	158	191													
145	69.8	92.8	117	142	166													
150	65.0	83.7	105	125	141													
155	60.2	73.1	91.4	107	118													
160	54.9	61.7	77.3	90.0	96.4													
165	34.7	37.5	59.6	71.2	77.1													
170	13.9	15.8	23.7	31.7	43.7													
175	1.00	1.65	3.06	5.80	9.51													
180	0.15	0.14	0.16	0.16	0.15													

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 19 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 41.9%
 Test Distance: 2.500m [K=1.0423]
 Remarks: