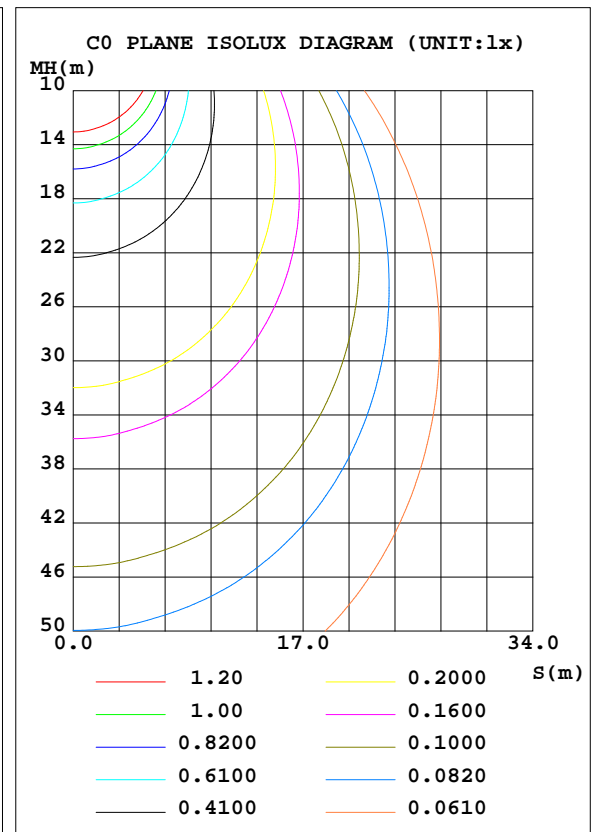
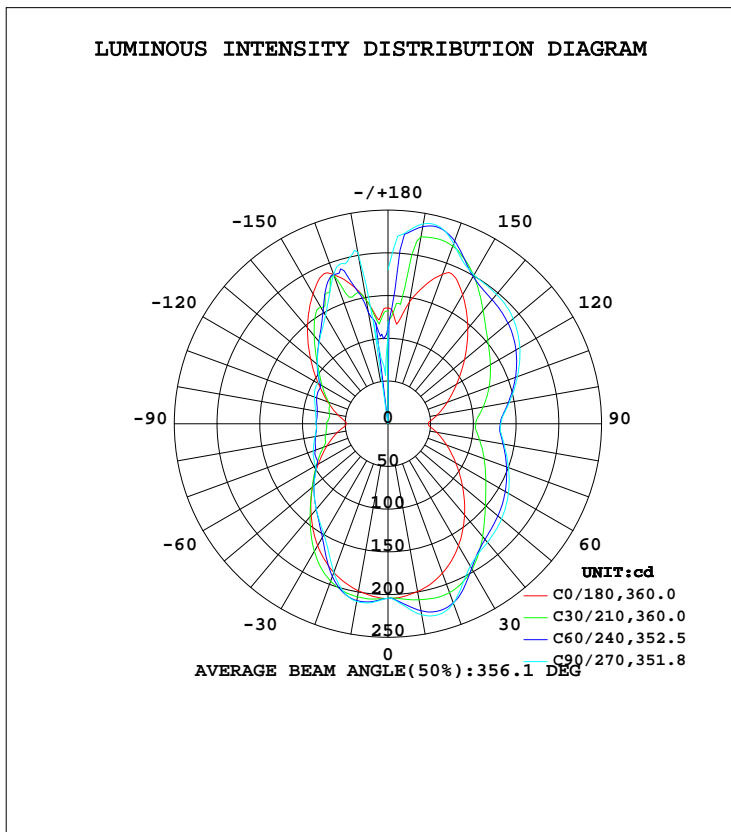


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 65.88 lm/W			
MODEL	ASD-LWS27C-24D24BK	I <sub>max</sub> (cd)	239.6	S/MH(C0/180)	1.21
NOMINAL POWER(W)	24	LOR(%)	100.0	S/MH(C90/270)	1.11
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	1636.5	η UP, DN(C0-180)	29.5,28.4
NOMINAL FLUX(lm)	1636.51	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	20.4,21.6
LAMPS INSIDE	1	η up(%)	49.9	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	50.1	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators: Alan Wang  
 Test Date: 22 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	199.4	215.9	226.9	215.7	198.6	208.3	211.1	208.6	0- 10	19.93	19.93	1.22,1.22
20	186.2	220.1	223.5	219.0	185.3	194.7	185.3	196.1	10- 20	58.93	78.86	4.82,4.82
30	165.0	200.1	192.7	198.8	164.7	162.3	149.9	164.3	20- 30	87.30	166.2	10.2,10.2
40	139.5	173.7	181.1	172.1	139.9	133.3	130.7	135.0	30- 40	103.0	269.1	16.4,16.4
50	113.9	159.0	173.5	157.5	115.6	113.9	113.0	114.9	40- 50	111.5	380.6	23.3,23.3
60	91.47	148.7	162.7	147.9	94.24	97.20	98.35	98.46	50- 60	113.9	494.5	30.2,30.2
70	73.22	138.7	150.0	138.8	76.15	87.32	93.13	88.53	60- 70	112.6	607.0	37.1,37.1
80	57.82	128.7	137.9	129.3	60.61	83.48	86.76	84.94	70- 80	108.9	715.9	43.7,43.7
90	47.38	123.4	132.1	123.9	49.08	82.51	84.61	83.35	80- 90	103.4	819.3	50.1,50.1
100	58.41	134.3	144.1	133.9	59.37	80.83	86.22	81.73	90-100	103.9	923.3	56.4,56.4
110	73.75	148.0	161.2	146.5	74.93	84.05	91.63	85.41	100-110	110.1	1033	63.1,63.1
120	92.63	160.3	178.2	157.9	94.06	91.64	94.97	93.83	110-120	114.3	1148	70.1,70.1
130	116.9	169.9	191.3	167.3	118.3	108.3	107.8	109.3	120-130	115.4	1263	77.2,77.2
140	145.5	179.9	197.7	177.9	146.6	128.8	125.3	129.8	130-140	112.3	1375	84,84
150	174.7	200.6	201.4	200.1	175.6	160.8	146.4	161.6	140-150	103.2	1479	90.4,90.4
160	186.2	228.1	224.6	228.2	185.6	184.9	186.1	194.3	150-160	87.24	1566	95.7,95.7
170	144.4	228.9	237.5	191.5	147.0	139.9	204.2	178.9	160-170	56.14	1622	99.1,99.1
180	135.9	115.6	180.1	112.3	135.3	122.3	101.1	45.68	170-180	14.48	1637	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 324.17 lm

%lum = 19.8%  
 %lamp = 19.8%

Conical surface Flux(120deg): 494.48 lm

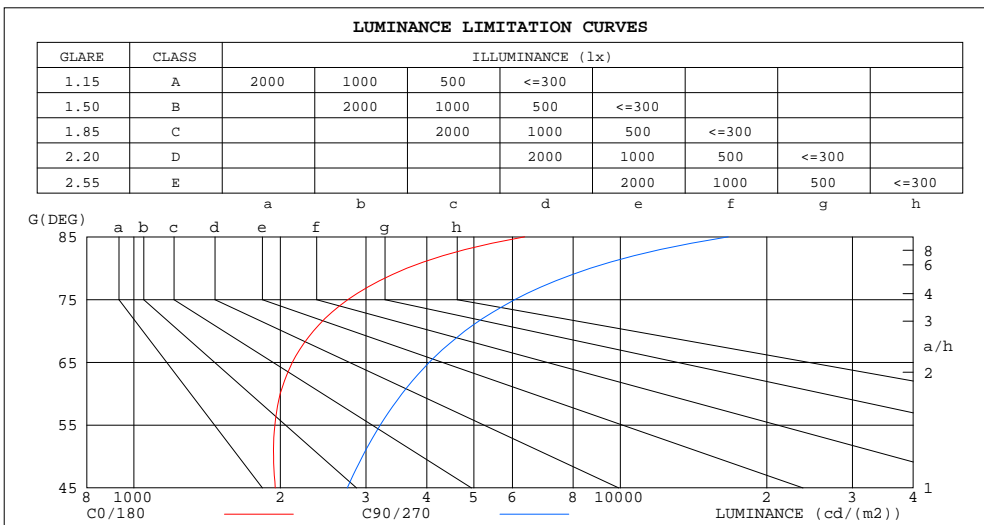
%lum = 30.2%  
 %lamp = 30.2%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators: Alan Wang  
 Test Date: 22 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	6359	16667
80	3639	8680
75	2755	6070
70	2340	4793
65	2117	4048
60	1999	3557
55	1949	3210
50	1937	2951
45	1953	2745

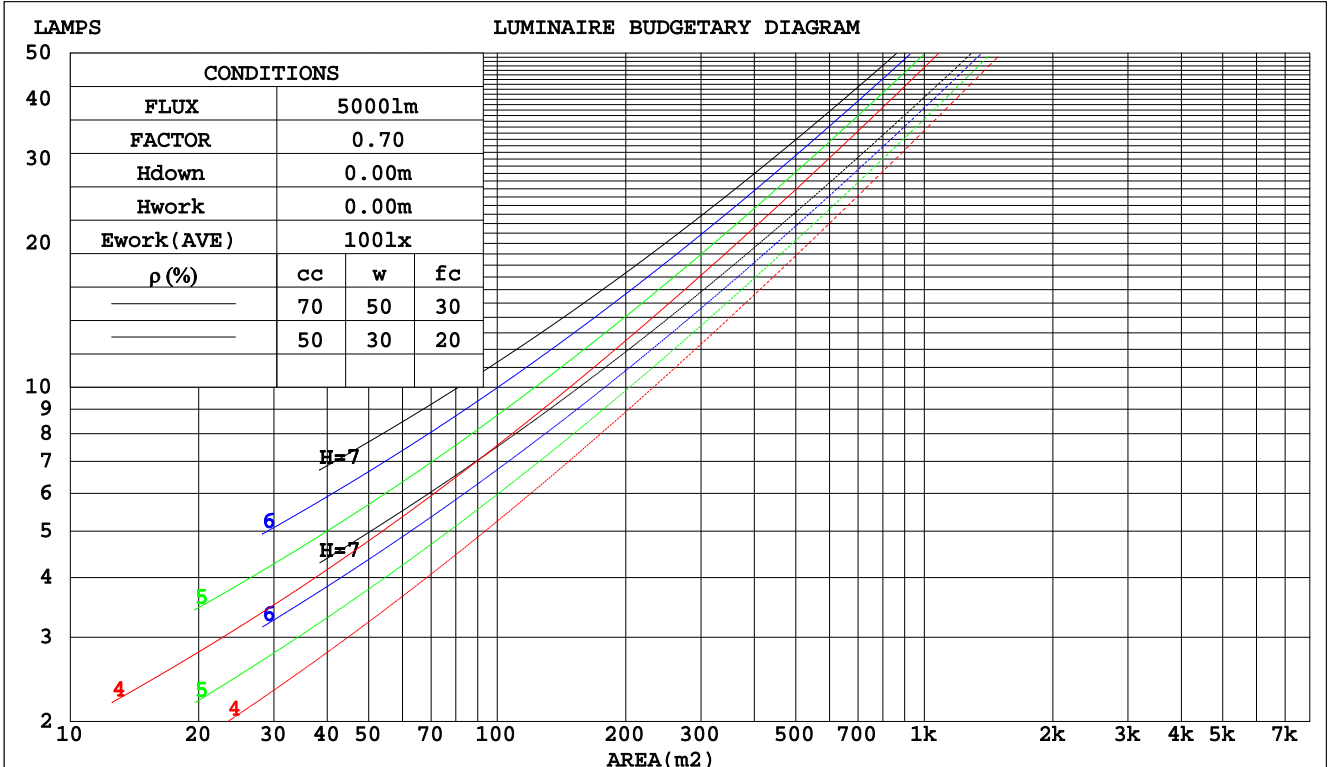
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators: Alan Wang  
 Test Date: 22 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc	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	.89	.84	.80	.82	.78	.74	.69	.66	.63	.57	.54	.52	.45	.43	.42	.36
2.0	.77	.69	.63	.71	.64	.59	.59	.54	.50	.48	.45	.41	.38	.36	.33	.29
3.0	.67	.58	.52	.61	.54	.48	.51	.46	.41	.42	.38	.34	.33	.30	.27	.23
4.0	.59	.50	.43	.54	.46	.40	.45	.39	.34	.37	.32	.29	.29	.26	.23	.19
5.0	.52	.43	.37	.48	.40	.34	.40	.34	.29	.33	.28	.25	.26	.23	.20	.16
6.0	.46	.38	.32	.43	.35	.29	.36	.30	.25	.30	.25	.21	.24	.20	.17	.14
7.0	.42	.33	.27	.39	.31	.26	.33	.27	.22	.27	.22	.19	.22	.18	.15	.13
8.0	.38	.30	.24	.35	.28	.23	.30	.24	.20	.25	.20	.17	.20	.16	.14	.11
9.0	.35	.27	.21	.32	.25	.20	.27	.21	.17	.23	.18	.15	.18	.15	.12	.10
10.0	.32	.24	.19	.29	.23	.18	.25	.19	.16	.21	.16	.13	.17	.14	.11	.09



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators: Alan Wang  
 Test Date: 22 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	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 Coefficients(WEC)									
0.0																
1.0	.357	.203	.064	.335	.191	.061	.293	.168	.054	.255	.147	.047	.219	.127	.041	
2.0	.307	.169	.052	.287	.158	.049	.249	.139	.043	.214	.120	.038	.182	.103	.032	
3.0	.273	.145	.044	.255	.136	.041	.220	.119	.036	.188	.103	.032	.158	.087	.027	
4.0	.246	.128	.038	.230	.120	.036	.198	.105	.031	.168	.090	.027	.140	.076	.023	
5.0	.225	.114	.033	.209	.107	.031	.180	.094	.028	.152	.080	.024	.127	.068	.020	
6.0	.206	.103	.030	.192	.097	.028	.165	.084	.025	.139	.072	.021	.116	.061	.018	
7.0	.191	.094	.027	.177	.088	.025	.152	.077	.022	.129	.066	.019	.107	.055	.016	
8.0	.177	.087	.024	.165	.081	.023	.141	.071	.020	.120	.061	.017	.099	.051	.015	
9.0	.165	.080	.022	.154	.075	.021	.132	.065	.019	.112	.056	.016	.092	.047	.014	
10.0	.155	.074	.021	.144	.070	.019	.124	.061	.017	.105	.052	.015	.086	.044	.012	

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	.571	.571	.571	.488	.488	.488	.333	.333	.333	.191	.191	.191	.061	.061	.061	
1.0	.567	.539	.514	.485	.463	.443	.332	.318	.306	.191	.184	.178	.061	.059	.058	
2.0	.560	.518	.482	.480	.446	.417	.329	.308	.291	.190	.179	.170	.061	.058	.056	
3.0	.553	.503	.462	.474	.434	.401	.326	.301	.281	.188	.176	.166	.060	.057	.054	
4.0	.546	.491	.449	.469	.424	.390	.322	.296	.274	.186	.173	.162	.060	.056	.053	
5.0	.539	.482	.439	.463	.417	.382	.319	.291	.270	.185	.171	.160	.060	.056	.053	
6.0	.532	.474	.433	.457	.411	.377	.316	.288	.267	.183	.169	.158	.059	.055	.052	
7.0	.526	.468	.428	.452	.406	.373	.312	.285	.264	.182	.168	.157	.059	.055	.052	
8.0	.520	.463	.424	.447	.402	.370	.310	.282	.262	.180	.166	.156	.058	.055	.052	
9.0	.514	.459	.421	.443	.398	.367	.307	.280	.261	.179	.165	.156	.058	.054	.052	
10.0	.509	.455	.419	.438	.395	.365	.304	.278	.260	.177	.164	.155	.058	.054	.051	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators: Alan Wang  
 Test Date: 22 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm										
NAME:ASD-LWS27C-24D24BK					TYPE:LED			WEIGHT:		
SPEC.: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	12.4	13.5	13.3	14.3	15.4	14.3	15.3	15.2	16.2	17.3
3H	14.6	15.5	15.4	16.4	17.5	17.2	18.1	18.0	19.0	20.1
4H	15.7	16.6	16.6	17.5	18.7	18.7	19.6	19.6	20.5	21.7
6H	16.9	17.7	17.8	18.6	19.8	20.5	21.3	21.4	22.2	23.4
8H	17.5	18.3	18.5	19.2	20.4	21.5	22.3	22.4	23.2	24.4
12H	18.2	19.0	19.2	19.9	21.1	22.7	23.4	23.6	24.3	25.6
4H 2H	13.7	14.6	14.6	15.5	16.7	15.0	15.9	15.9	16.8	18.0
3H	16.1	16.9	17.1	17.8	19.1	18.1	18.8	19.0	19.8	21.0
4H	17.5	18.2	18.4	19.1	20.4	19.8	20.5	20.8	21.5	22.7
6H	18.9	19.5	19.9	20.5	21.7	21.8	22.4	22.8	23.4	24.7
8H	19.6	20.2	20.6	21.2	22.5	22.9	23.5	23.9	24.5	25.7
12H	20.4	20.9	21.4	21.9	23.2	24.2	24.7	25.2	25.7	27.0
8H 4H	18.6	19.2	19.6	20.1	21.4	20.4	20.9	21.3	21.9	23.2
6H	20.4	20.9	21.4	21.9	23.2	22.6	23.1	23.6	24.1	25.4
8H	21.4	21.8	22.4	22.8	24.1	23.9	24.4	25.0	25.4	26.7
12H	22.4	22.8	23.4	23.8	25.1	25.4	25.8	26.5	26.8	28.2
12H 4H	18.9	19.4	19.9	20.4	21.7	20.4	21.0	21.4	22.0	23.3
6H	20.9	21.3	21.9	22.3	23.7	22.9	23.3	23.9	24.3	25.6
8H	22.0	22.4	23.1	23.4	24.8	24.3	24.7	25.3	25.7	27.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.5					+ 0.3 / - 0.4				

CIE Pub.117, 1637 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.7)  
 Area: 0.0915 m2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators: Alan Wang  
 Test Date: 22 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

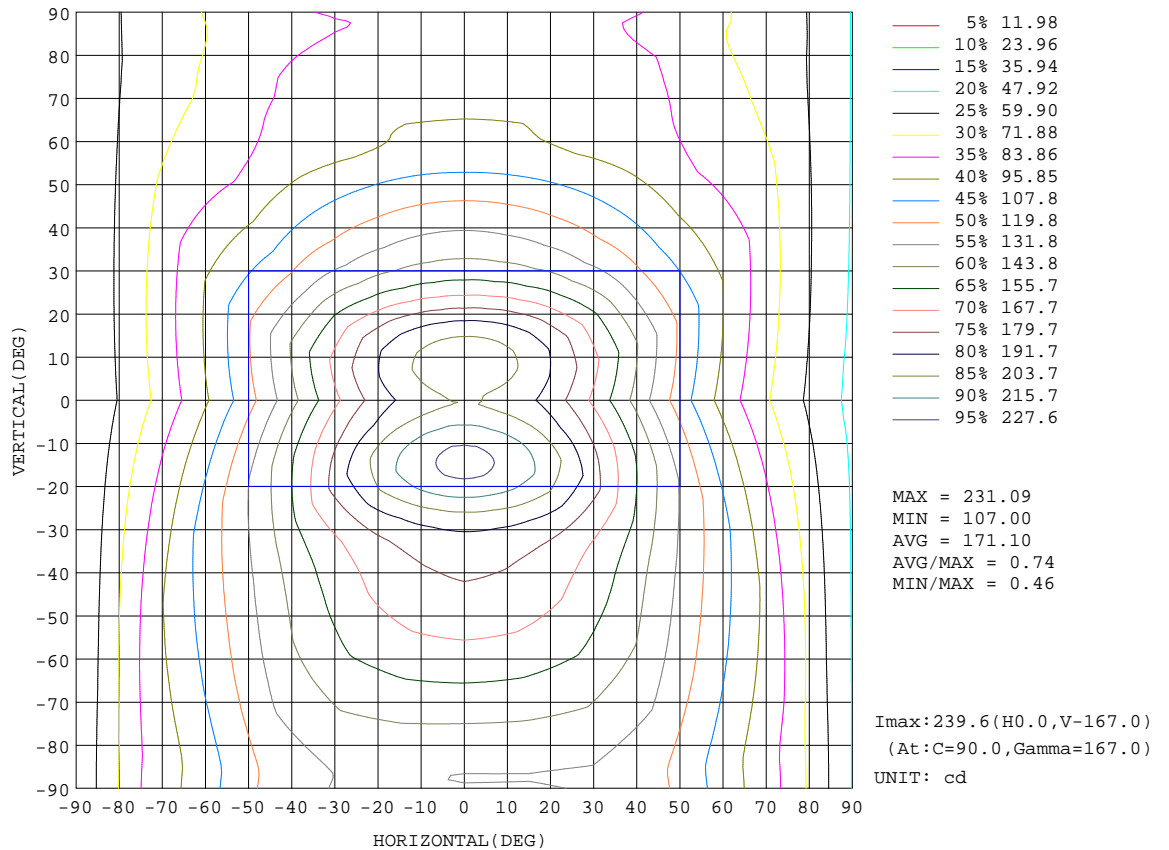
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	40	28	22	38	27	21	34	25	19	12
0.80	49	36	29	46	34	27	41	31	25	15
1.00	56	43	35	53	41	33	46	38	30	19
1.25	63	50	42	59	47	40	51	42	35	22
1.50	68	56	47	63	52	45	54	46	40	24
2.00	75	64	56	70	60	52	60	52	46	28
2.50	80	70	62	74	65	58	63	56	50	30
3.00	84	74	67	78	69	62	66	59	54	32
4.00	89	81	74	82	75	69	69	64	59	35
5.00	92	85	79	85	79	73	72	67	63	37
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: 22 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

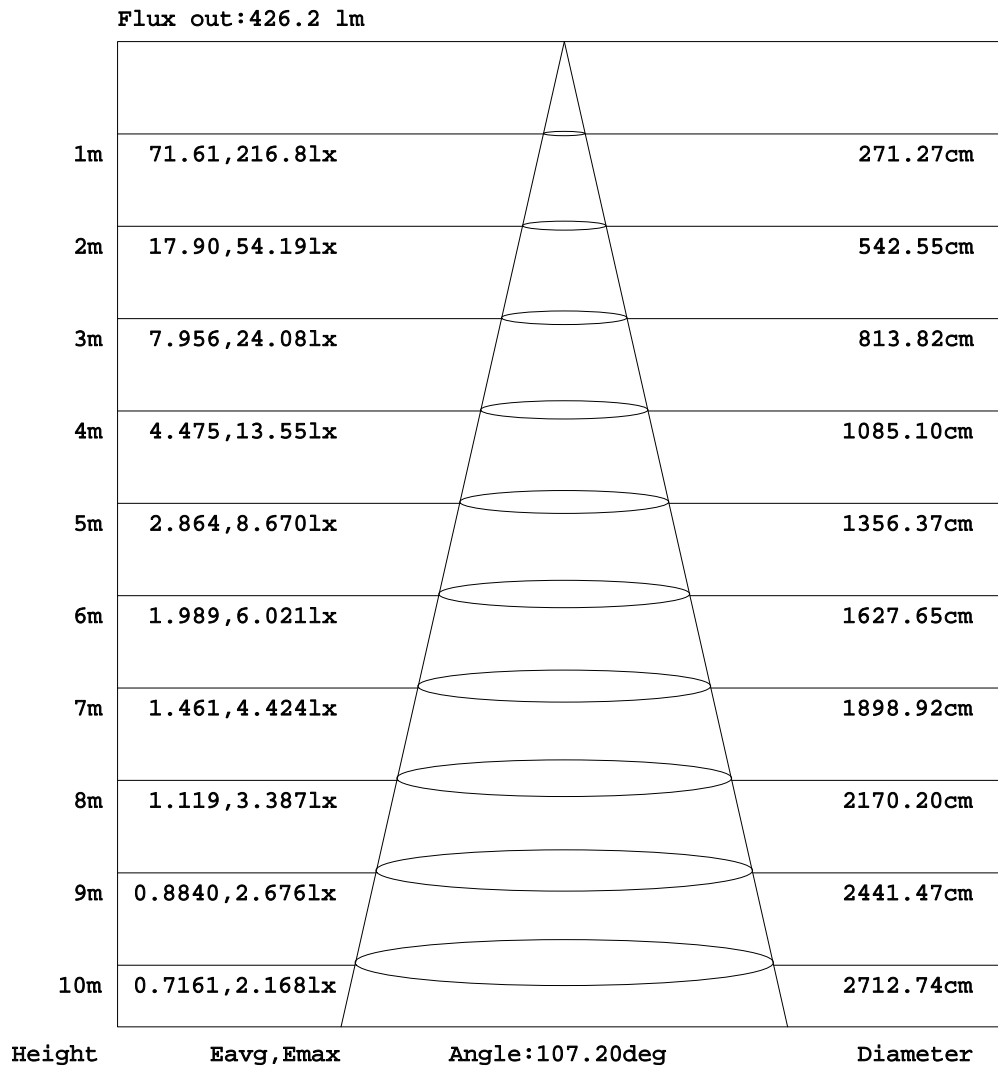


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators: Alan Wang  
 Test Date: 22 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

AAI Figure

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



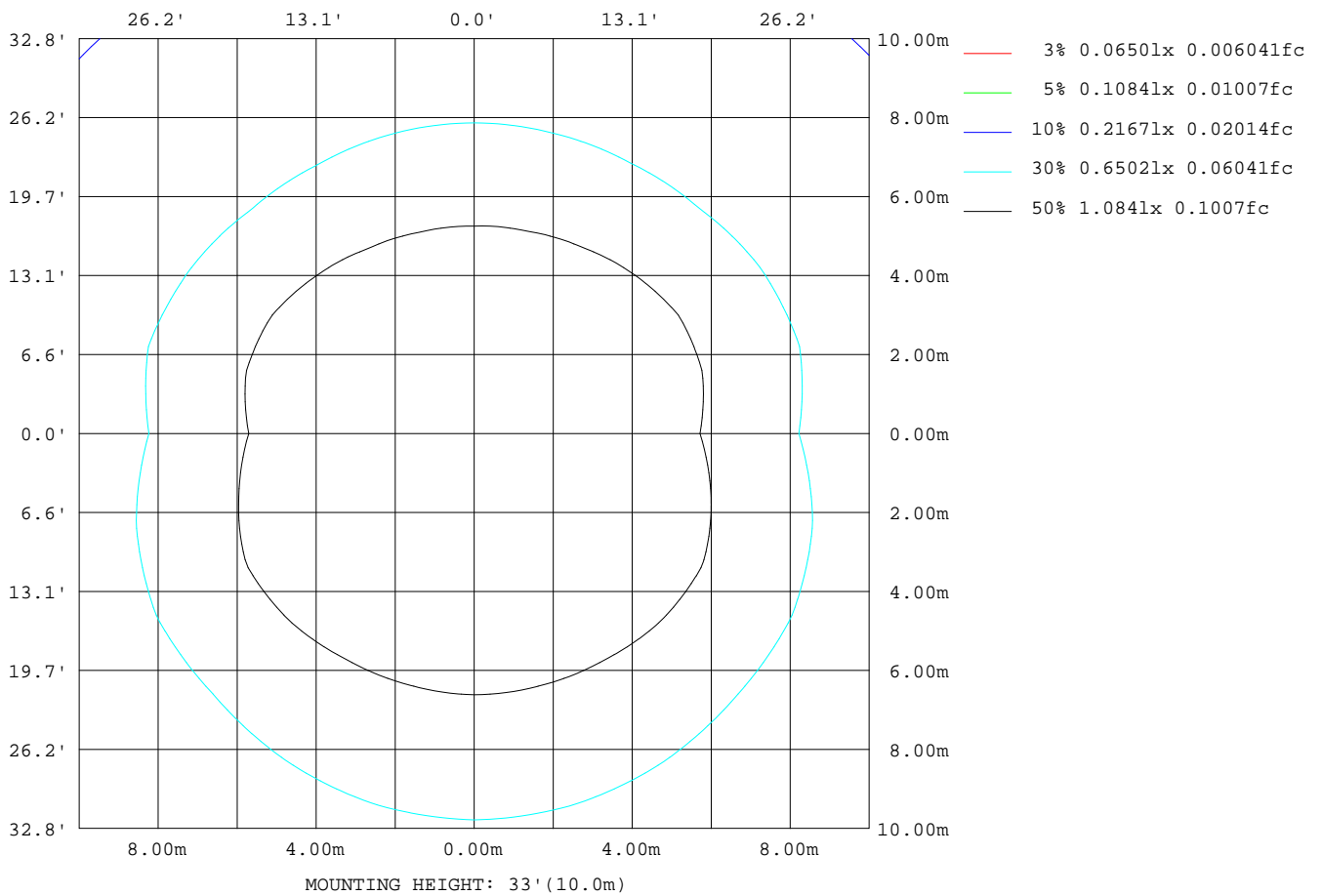
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators:Alan Wang  
 Test Date:22 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance:2.500m [K=1.0393]  
 Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.: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: 22 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

## LED Avg.L Report

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

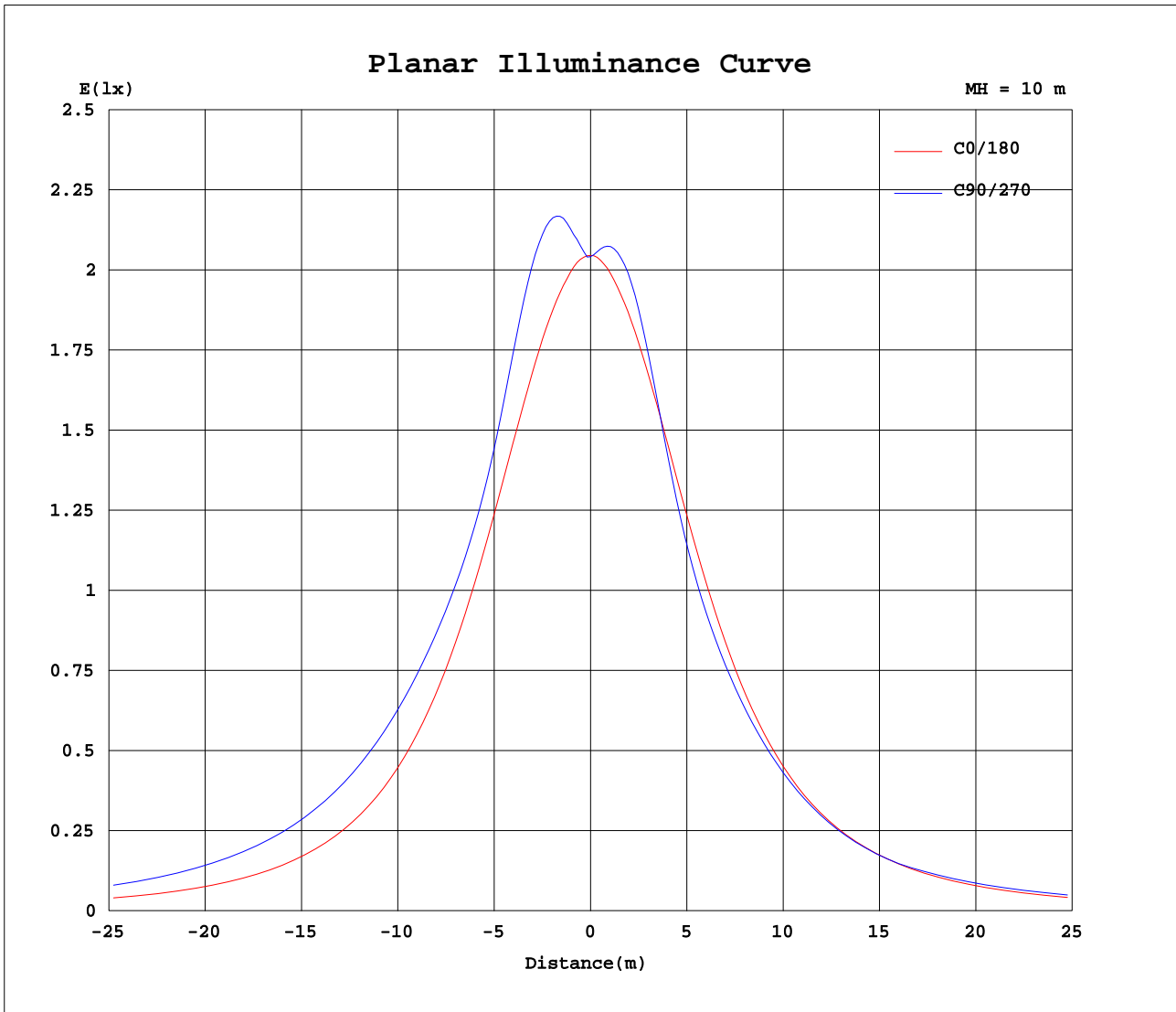
AvgL	cd/m2
L_0~180(65)av	2154
L_0~180(75)av	2816
L_0~180(85)av	6502
L_90~270(65)av	3264
L_90~270(75)av	4933
L_90~270(85)av	13626
L_45(65)av	3020
L_45(75)av	4645
L_45(85)av	12990

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 24.8DEG  
Operators: Alan Wang  
Test Date: 22 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
Humidity: 42.9%  
Test Distance: 2.500m [K=1.0393]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators: Alan Wang  
 Test Date: 22 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.: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	205	205	204	204	204	204	204	204	204	204	204	204	205	205	204	204	204	204	204
5	203	203	206	209	212	213	213	213	212	209	206	203	203	204	206	207	209	210	210
10	199	202	209	216	222	226	227	226	222	216	208	202	199	202	206	208	210	211	211
15	194	200	211	221	227	230	231	230	227	220	210	199	193	198	203	204	204	203	203
20	186	196	210	220	223	224	224	224	223	219	209	194	185	192	196	195	190	186	185
25	176	189	205	213	211	208	207	208	210	212	204	187	176	184	186	180	171	166	165
30	165	180	197	200	196	193	193	192	194	199	196	179	165	173	172	162	154	150	150
35	152	170	185	186	184	184	185	184	182	184	185	169	153	162	157	146	141	140	139
40	140	159	172	174	177	180	181	179	175	172	172	158	140	149	142	133	131	131	131
45	126	147	160	165	172	176	178	176	171	164	160	147	128	137	128	123	122	122	122
50	114	136	149	159	168	172	174	172	167	157	149	137	116	124	116	114	113	113	113
55	102	126	140	154	164	167	168	167	163	152	140	127	105	113	106	105	104	104	104
60	91.5	117	132	149	159	162	163	162	158	148	132	118	94.2	103	96.7	97.2	95.8	97.2	98.3
65	81.9	109	126	144	153	156	157	156	153	143	126	111	84.7	93.8	88.3	89.2	93.1	95.7	95.9
70	73.2	102	120	139	148	150	150	150	148	139	120	104	76.2	85.2	80.5	87.3	90.5	92.8	93.1
75	65.2	95.2	114	134	142	144	144	144	143	134	115	97.4	68.1	77.1	75.9	85.1	88.2	90.0	89.9
80	57.8	89.3	109	129	137	138	138	139	138	129	110	91.6	60.6	69.5	74.2	83.5	86.1	87.1	86.8
85	50.7	83.6	104	124	132	133	133	134	133	125	105	86.0	53.0	65.8	72.4	82.2	84.1	84.8	84.4
90	47.4	81.5	103	123	131	132	132	133	133	124	103	83.8	49.1	64.6	72.4	82.5	84.5	85.2	84.6
95	51.2	84.8	107	127	136	136	136	137	136	128	106	86.7	52.1	62.9	69.6	80.7	83.6	84.7	84.7
100	58.4	91.0	113	134	143	144	144	144	143	134	113	92.8	59.4	64.2	69.8	80.8	84.0	85.9	86.2
105	65.9	97.2	120	141	151	153	153	152	151	140	119	99.0	66.9	70.0	71.4	82.6	86.2	88.1	88.5
110	73.8	103	126	148	159	161	161	161	158	147	125	105	74.9	76.5	74.1	84.1	88.9	91.0	91.6
115	82.7	110	132	154	166	169	170	169	165	152	131	112	83.8	83.5	81.3	84.3	90.1	93.5	94.4
120	92.6	118	138	160	173	177	178	176	171	158	138	120	94.1	91.9	89.0	91.6	91.4	93.7	95.0
125	104	127	145	165	179	184	185	183	177	163	145	128	106	101	97.4	99.8	100	99.1	99.2
130	117	138	152	170	183	190	191	188	181	167	153	137	118	110	108	108	108	108	108
135	131	149	162	175	187	194	195	192	185	172	162	146	132	120	120	118	117	116	116
140	145	162	173	180	189	196	198	195	187	178	174	159	147	131	135	129	126	124	125
145	160	175	187	188	193	197	199	196	191	187	188	171	161	142	150	143	137	134	135
150	175	187	201	201	199	200	201	200	198	200	199	183	176	160	157	161	152	146	146
155	188	197	212	216	212	209	209	209	211	215	202	193	189	168	169	177	173	165	164
160	186	206	221	228	228	225	225	226	228	228	212	200	186	187	184	185	186	187	186
165	168	199	224	233	237	238	238	238	237	230	203	182	169	172	155	168	175	193	194
170	144	155	222	229	234	237	237	237	230	191	170	156	147	147	147	140	132	144	204
175	117	120	142	170	223	224	224	218	154	139	132	123	122	122	117	109	103	86.3	72.0
180	136	133	119	116	112	49.6	180	63.2	91.7	112	117	130	135	135	132	122	113	109	101

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators: Alan Wang  
 Test Date: 22 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.2097A P:24.84W PF:0.9872 Freq:60.00Hz Lamp Flux:1636.51x1 lm		
NAME:ASD-LWS27C-24D24BK	TYPE:LED	WEIGHT:
SPEC.: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	204	204	204	204	204														
5	210	209	207	205	204														
10	211	210	209	206	202														
15	204	205	205	203	198														
20	187	192	196	197	192														
25	167	173	182	187	184														
30	151	155	164	174	173														
35	140	142	148	159	162														
40	131	132	135	144	149														
45	122	123	124	130	136														
50	113	114	115	118	124														
55	104	105	106	108	113														
60	97.3	97.0	98.5	98.5	103														
65	95.8	94.0	90.9	90.4	93.6														
70	93.4	92.6	88.5	82.8	85.6														
75	90.3	89.8	87.1	77.9	78.3														
80	87.3	87.3	84.9	75.8	71.6														
85	85.1	85.3	83.0	73.1	67.0														
90	85.2	85.6	83.3	72.9	65.1														
95	85.0	84.7	81.5	70.4	63.4														
100	86.3	85.2	81.7	71.2	66.0														
105	88.5	87.5	83.9	72.4	71.5														
110	91.7	90.3	85.4	76.2	77.2														
115	94.0	91.6	86.7	83.0	83.2														
120	94.3	93.7	93.8	90.5	90.4														
125	100	102	101	98.9	99.3														
130	109	110	109	109	109														
135	118	119	119	121	119														
140	127	129	130	135	130														
145	136	140	144	151	142														
150	148	155	162	167	158														
155	166	173	180	179	171														
160	187	192	194	185	167														
165	197	199	199	184	152														
170	212	212	179	137	144														
175	64.6	92.1	88.1	99.8	106														
180	70.5	25.6	45.7	109	120														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.8DEG  
 Operators: Alan Wang  
 Test Date: 22 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 42.9%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks: