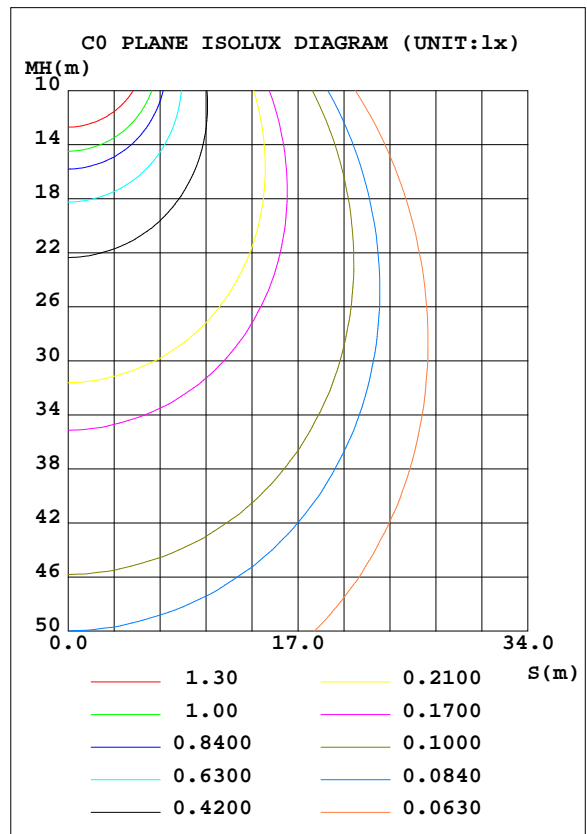
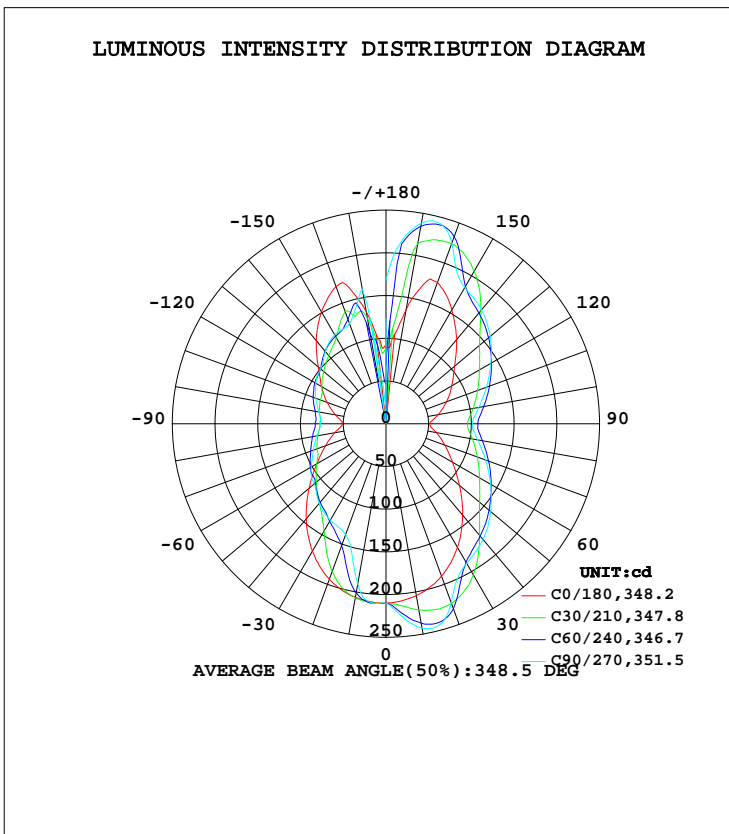


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18BK
SPEC.:5000K
MFR.: ASD Lighting Corp

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	LWS27A-18D18BK	Imax(cd)	245.4	S/MH(C0/180)	1.22
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	0.85
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	1507.4	η UP, DN(C0-180)	29.1,29.5
NOMINAL FLUX(lm)	1507	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	19.5,22.0
LAMPS INSIDE	1	η up(%)	48.6	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	51.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:27.8DEG  
 Operators:Alan Wang  
 Test Date:14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity:47.5%  
 Test Distance:2.500m [K=1.0393]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	204.3	230.6	243.0	233.1	206.3	204.7	190.6	203.5	0- 10	20.49	20.49	1.36,1.36
20	189.8	231.5	222.9	234.6	193.8	164.3	138.2	160.6	10- 20	58.06	78.56	5.21,5.21
30	167.1	195.2	188.6	197.5	172.1	135.5	130.2	121.2	20- 30	82.51	161.1	10.7,10.7
40	139.5	166.0	176.7	168.4	145.3	119.0	121.6	113.0	30- 40	97.77	258.8	17.2,17.2
50	112.2	150.9	159.9	153.7	117.7	105.8	109.9	103.9	40- 50	105.9	364.7	24.2,24.2
60	89.86	137.5	141.5	139.7	93.49	97.81	101.2	94.73	50- 60	108.0	472.7	31.4,31.4
70	73.31	125.1	124.0	126.6	75.32	92.81	90.45	88.34	60- 70	106.2	578.9	38.4,38.4
80	59.88	113.7	108.9	114.5	60.95	87.66	82.15	83.12	70- 80	101.4	680.3	45.1,45.1
90	51.54	107.0	101.2	107.1	51.30	83.35	76.96	80.05	80- 90	94.73	775.0	51.4,51.4
100	62.08	115.1	110.1	114.7	60.05	84.52	79.72	81.38	90-100	94.37	869.4	57.7,57.7
110	75.50	126.0	125.1	125.9	73.29	89.09	87.63	83.45	100-110	99.97	969.4	64.3,64.3
120	88.76	137.9	141.9	138.1	87.08	91.74	95.00	84.51	110-120	103.4	1073	71.2,71.2
130	104.9	149.9	159.3	150.6	103.5	99.86	100.0	93.01	120-130	103.4	1176	78,78
140	128.7	164.6	174.0	164.4	127.0	109.6	110.4	104.1	130-140	99.82	1276	84.6,84.6
150	154.2	198.7	184.5	196.0	151.0	116.8	120.1	113.1	140-150	91.28	1367	90.7,90.7
160	176.2	233.8	225.2	232.0	170.9	134.6	125.2	127.6	150-160	76.40	1444	95.8,95.8
170	135.5	226.7	238.5	218.8	133.0	111.9	160.3	121.5	160-170	51.00	1495	99.2,99.2
180	89.43	105.2	168.1	51.31	89.13	72.71	24.11	34.25	170-180	12.71	1507	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 311.21 lm

%lum = 20.6%

%lamp = 20.6%

Conical surface Flux(120deg): 472.72 lm

%lum = 31.4%

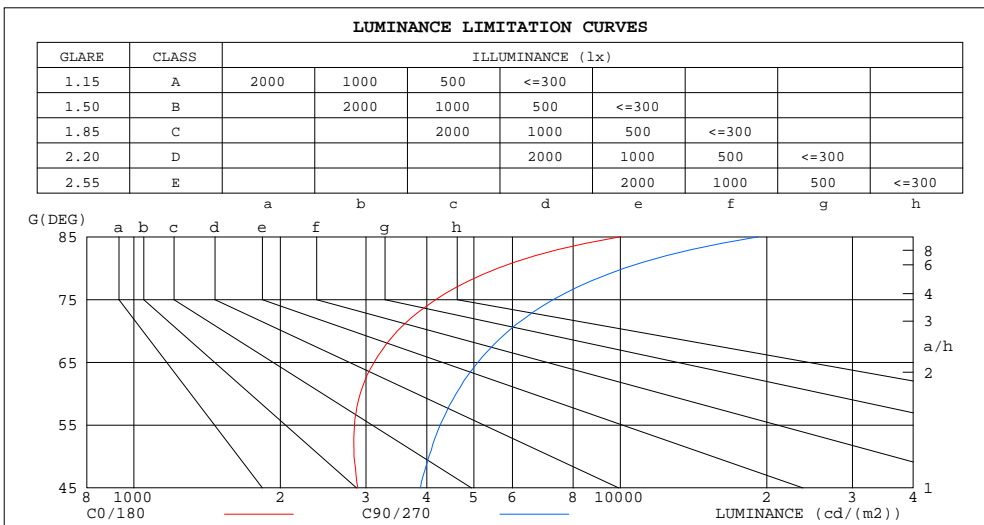
%lamp = 31.4%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:27.8DEG  
 Operators:Alan Wang  
 Test Date:14 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity:47.5%  
 Test Distance:2.500m [K=1.0393]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	9983	19199
80	5601	10186
75	4174	7282
70	3481	5889
65	3119	5093
60	2919	4597
55	2842	4262
50	2834	4041
45	2886	3881

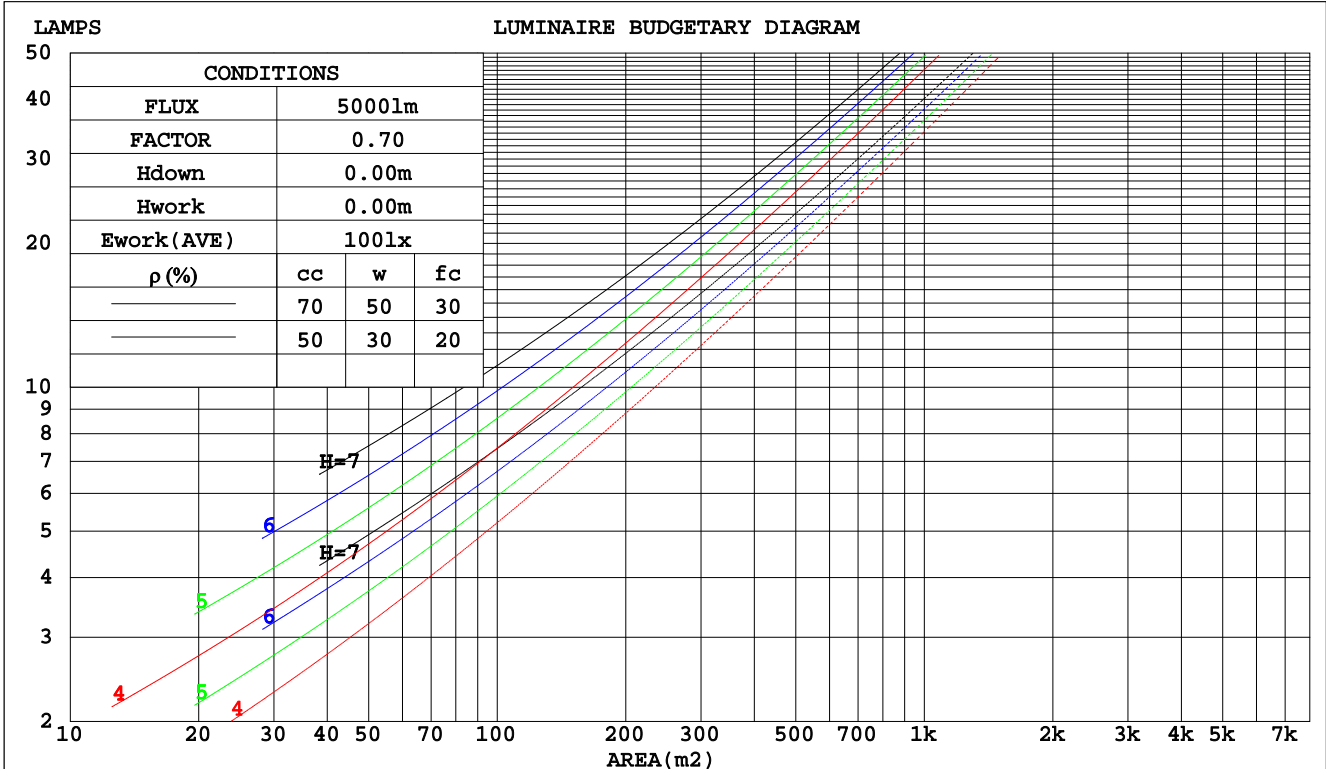
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 27.8DEG  
 Operators: Alan Wang  
 Test Date: 14 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 47.5%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
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	.84	.84	.84	.70	.70	.70	.57	.57	.57	.51
1.0	.90	.85	.80	.83	.78	.74	.70	.66	.63	.57	.55	.53	.46	.45	.43	.38
2.0	.77	.70	.64	.71	.65	.59	.60	.55	.51	.49	.45	.42	.39	.37	.34	.30
3.0	.67	.59	.52	.62	.54	.48	.52	.46	.42	.43	.38	.35	.34	.31	.28	.24
4.0	.59	.50	.43	.54	.47	.41	.46	.40	.35	.38	.33	.29	.30	.27	.24	.20
5.0	.52	.43	.37	.48	.40	.35	.41	.35	.30	.34	.29	.25	.27	.23	.21	.17
6.0	.47	.38	.32	.43	.35	.30	.37	.30	.26	.30	.25	.22	.25	.21	.18	.15
7.0	.42	.34	.28	.39	.31	.26	.33	.27	.23	.28	.23	.19	.22	.19	.16	.13
8.0	.38	.30	.24	.35	.28	.23	.30	.24	.20	.25	.20	.17	.21	.17	.14	.12
9.0	.35	.27	.22	.32	.25	.20	.28	.22	.18	.23	.19	.15	.19	.15	.13	.10
10.0	.32	.24	.19	.30	.23	.18	.25	.20	.16	.21	.17	.14	.18	.14	.11	.09



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:27.8DEG  
 Operators:Alan Wang  
 Test Date:14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity:47.5%  
 Test Distance:2.500m [K=1.0393]  
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp

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	.294	.169	.054	.256	.148	.047	.221	.128	.041	
2.0	.308	.169	.052	.288	.158	.049	.250	.139	.043	.216	.121	.038	.184	.104	.033	
3.0	.273	.146	.044	.255	.137	.041	.221	.120	.036	.190	.104	.032	.160	.089	.027	
4.0	.247	.128	.038	.230	.120	.036	.199	.105	.031	.170	.091	.027	.143	.077	.024	
5.0	.225	.115	.033	.210	.108	.031	.181	.094	.028	.154	.081	.024	.129	.069	.021	
6.0	.206	.104	.030	.192	.097	.028	.166	.085	.025	.141	.073	.022	.118	.062	.018	
7.0	.191	.094	.027	.178	.089	.025	.153	.077	.022	.130	.067	.019	.108	.056	.017	
8.0	.177	.087	.024	.165	.081	.023	.142	.071	.020	.121	.061	.018	.101	.052	.015	
9.0	.165	.080	.022	.154	.075	.021	.133	.066	.019	.113	.057	.016	.094	.048	.014	
10.0	.155	.074	.021	.145	.070	.019	.125	.061	.017	.106	.053	.015	.088	.044	.013	

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	.561	.561	.561	.479	.479	.479	.327	.327	.327	.188	.188	.188	.060	.060	.060	
1.0	.557	.529	.504	.476	.454	.434	.326	.312	.300	.188	.181	.174	.060	.058	.056	
2.0	.550	.508	.472	.471	.437	.408	.323	.302	.284	.186	.176	.167	.060	.057	.054	
3.0	.543	.492	.452	.465	.424	.391	.320	.295	.275	.185	.172	.162	.059	.056	.053	
4.0	.536	.480	.438	.460	.415	.381	.316	.289	.268	.183	.169	.159	.059	.055	.052	
5.0	.529	.471	.429	.454	.408	.373	.313	.285	.263	.181	.167	.156	.058	.055	.051	
6.0	.522	.464	.422	.448	.402	.368	.309	.281	.260	.179	.165	.155	.058	.054	.051	
7.0	.515	.458	.417	.443	.397	.363	.306	.278	.258	.178	.164	.153	.057	.054	.051	
8.0	.509	.452	.413	.438	.392	.360	.303	.275	.256	.176	.162	.152	.057	.053	.050	
9.0	.503	.448	.410	.434	.389	.358	.300	.273	.254	.175	.161	.152	.057	.053	.050	
10.0	.498	.444	.408	.429	.386	.356	.298	.271	.253	.174	.160	.151	.056	.053	.050	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:27.8DEG  
 Operators:Alan Wang  
 Test Date:14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity:47.5%  
 Test Distance:2.500m [K=1.0393]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp

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	14.1	15.1	14.9	16.0	17.1	15.2	16.3	16.1	17.1	18.2
3H	16.3	17.2	17.2	18.1	19.2	17.8	18.8	18.7	19.6	20.8
4H	17.5	18.4	18.4	19.3	20.4	19.3	20.1	20.2	21.0	22.2
6H	18.7	19.6	19.6	20.5	21.6	20.9	21.7	21.8	22.6	23.8
8H	19.4	20.2	20.3	21.1	22.3	21.8	22.6	22.7	23.5	24.7
12H	20.1	20.9	21.1	21.8	23.0	22.9	23.6	23.8	24.5	25.7
4H 2H	15.2	16.0	16.1	16.9	18.1	16.0	16.8	16.9	17.7	18.9
3H	17.7	18.4	18.6	19.3	20.5	18.8	19.6	19.7	20.5	21.7
4H	19.1	19.8	20.0	20.7	21.9	20.4	21.1	21.4	22.1	23.3
6H	20.6	21.2	21.6	22.2	23.4	22.2	22.8	23.2	23.8	25.0
8H	21.4	22.0	22.4	23.0	24.2	23.2	23.8	24.2	24.8	26.0
12H	22.3	22.8	23.2	23.8	25.1	24.4	24.9	25.4	25.9	27.2
8H 4H	20.0	20.6	21.0	21.5	22.8	21.0	21.6	22.0	22.5	23.8
6H	21.9	22.4	22.9	23.4	24.7	23.1	23.6	24.1	24.6	25.9
8H	22.9	23.4	23.9	24.4	25.7	24.3	24.7	25.3	25.7	27.1
12H	24.1	24.5	25.1	25.5	26.8	25.7	26.1	26.7	27.1	28.4
12H 4H	20.2	20.7	21.2	21.7	23.0	21.1	21.6	22.1	22.6	23.9
6H	22.3	22.7	23.3	23.7	25.0	23.4	23.8	24.4	24.8	26.1
8H	23.5	23.9	24.5	24.9	26.2	24.7	25.1	25.7	26.1	27.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.3 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.4 / - 0.6					+ 0.3 / - 0.4				

CIE Pub.117, 1507 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.4)  
 Area: 0.06157 m2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:27.8DEG  
 Operators:Alan Wang  
 Test Date:14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity:47.5%  
 Test Distance:2.500m [K=1.0393]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp

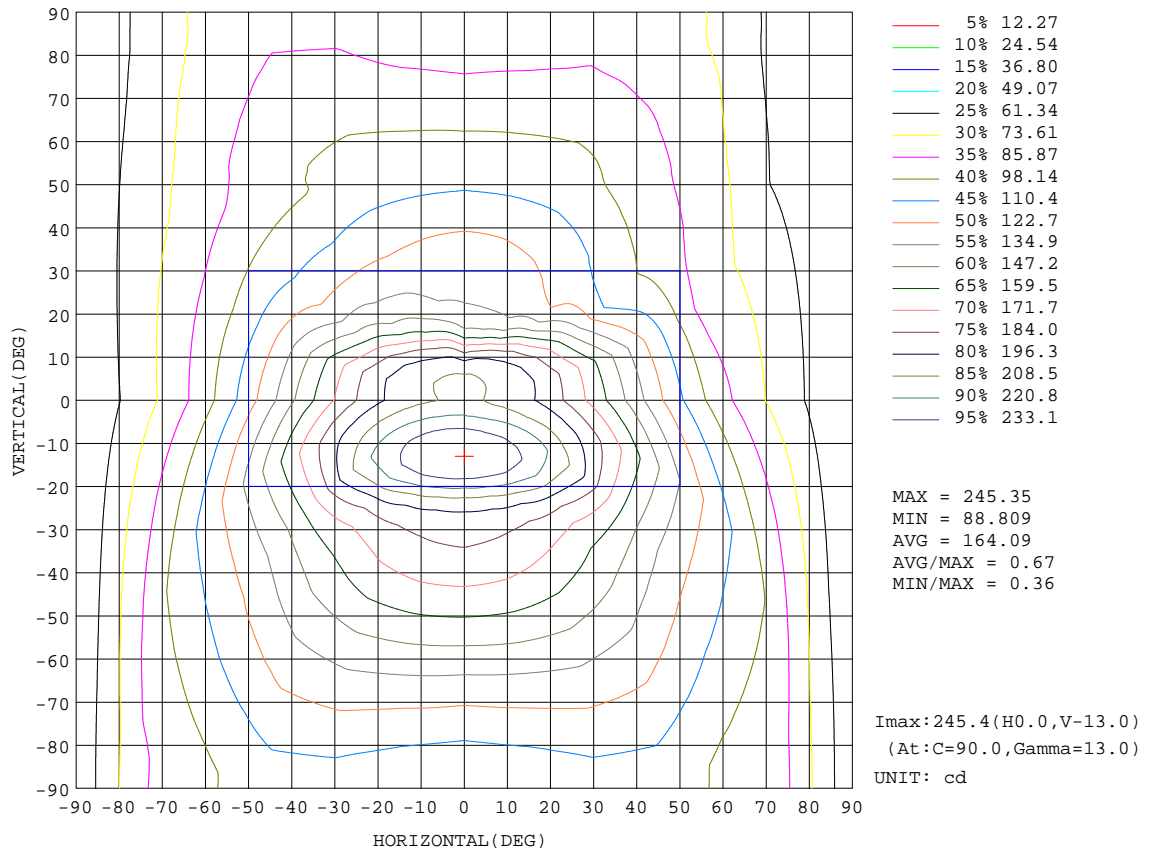
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	41	29	22	38	28	21	35	25	20	13
0.80	49	37	29	46	35	28	41	32	26	16
1.00	57	44	36	53	42	34	47	39	31	19
1.25	63	51	42	59	48	40	52	43	36	23
1.50	69	56	48	64	53	45	55	47	40	25
2.00	76	65	56	70	61	53	60	53	47	29
2.50	81	70	62	75	66	58	64	57	51	31
3.00	84	75	67	78	70	63	67	60	55	34
4.00	89	81	74	82	75	69	70	65	60	37
5.00	92	85	79	85	79	74	72	68	64	39
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:27.8DEG  
 Operators:Alan Wang  
 Test Date:14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity:47.5%  
 Test Distance:2.500m [K=1.0393]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp



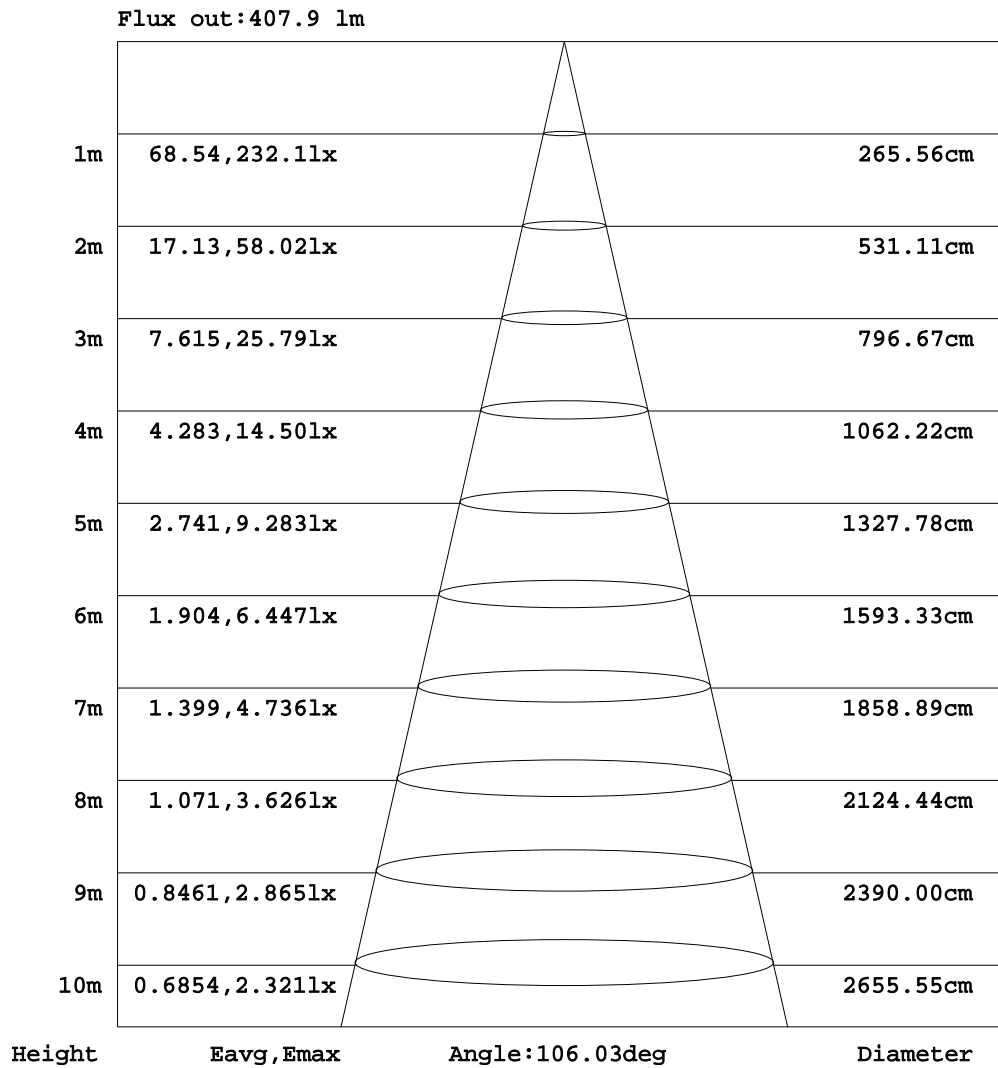
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 27.8DEG  
 Operators: Alan Wang  
 Test Date: 14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 47.5%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:



AAI Figure

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp



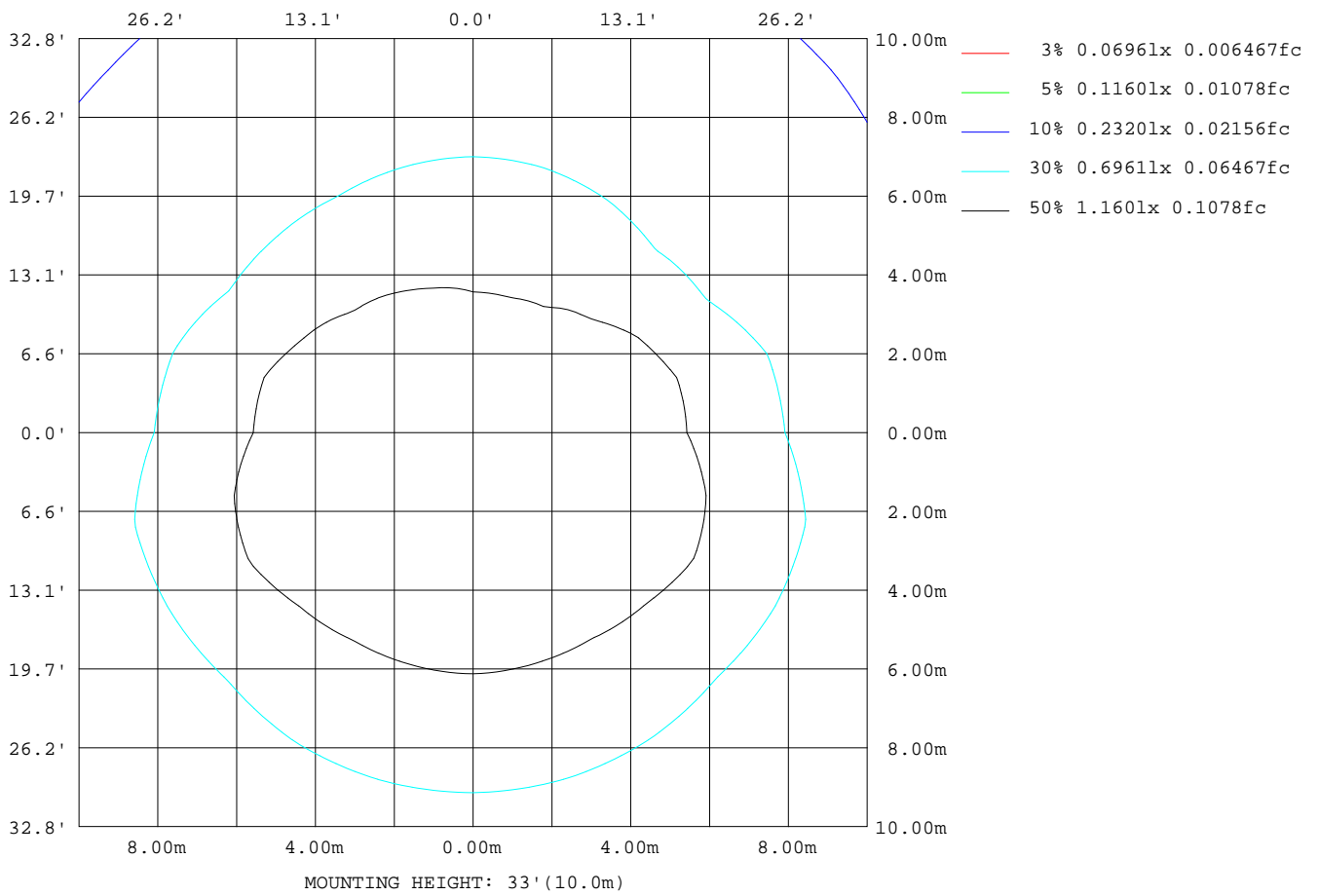
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:27.8DEG  
 Operators:Alan Wang  
 Test Date:14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity:47.5%  
 Test Distance:2.500m [K=1.0393]  
 Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:27.8DEG  
 Operators:Alan Wang  
 Test Date:14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity:47.5%  
 Test Distance:2.500m [K=1.0393]  
 Remarks:

## LED Avg.L Report

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp

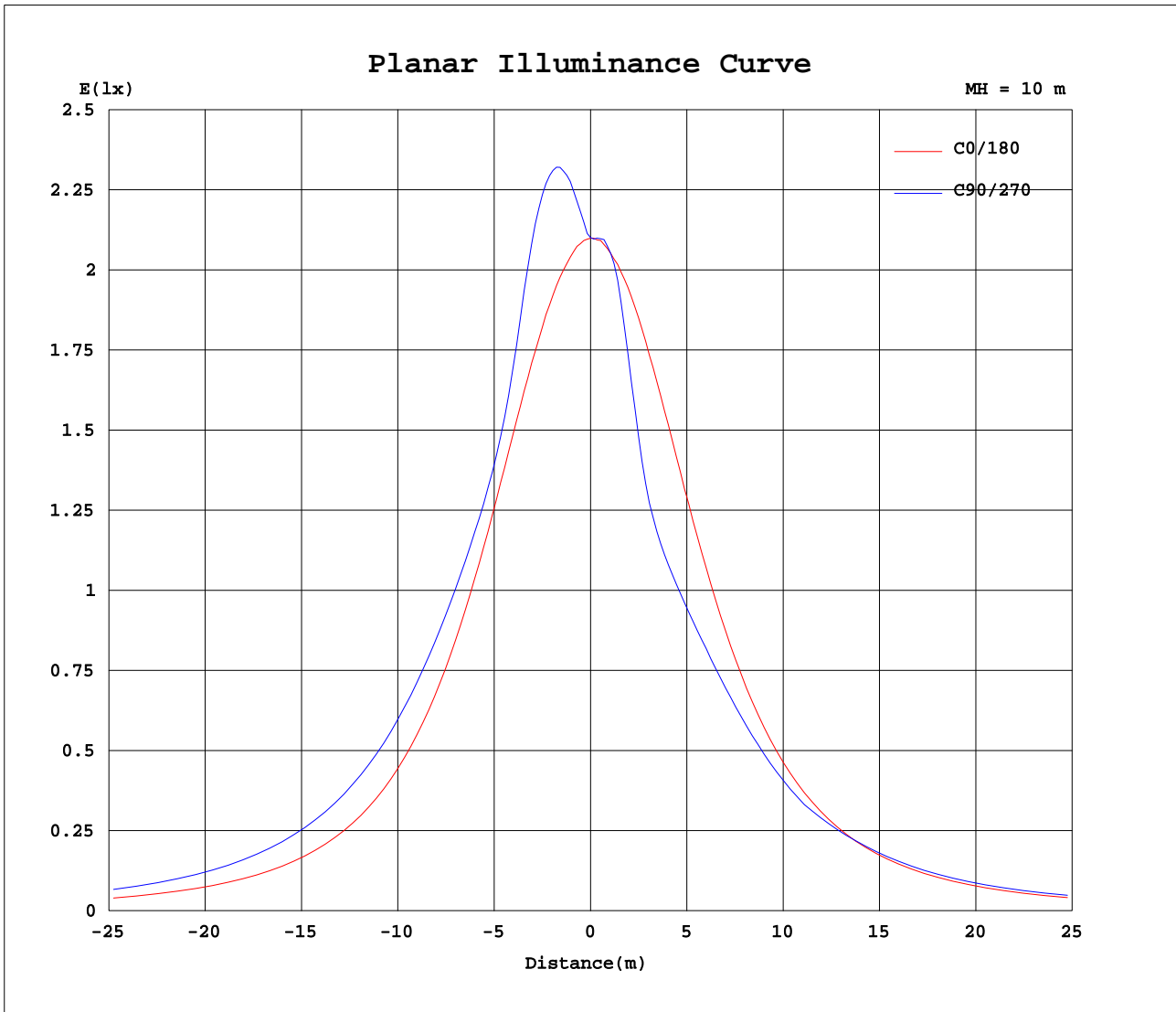
AvgL	cd/m2
L_0~180(65)av	3169
L_0~180(75)av	4216
L_0~180(85)av	10056
L_90~270(65)av	4374
L_90~270(75)av	6351
L_90~270(85)av	16911
L_45(65)av	4349
L_45(75)av	6513
L_45(85)av	17843

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:27.8DEG  
Operators:Alan Wang  
Test Date:14 October 2023

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
Humidity:47.5%  
Test Distance:2.500m [K=1.0393]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 27.8DEG  
 Operators: Alan Wang  
 Test Date: 14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity: 47.5%  
 Test Distance: 2.500m [K=1.0393]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp

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	210	210	210	210	210	210	210	210	211	210	210	210	210	210	210	210	210	210	210
5	208	210	214	219	223	226	227	227	225	221	216	212	209	210	210	210	211	210	210
10	204	210	221	231	237	241	243	242	239	233	225	213	206	207	207	205	201	198	191
15	198	209	225	235	241	243	243	244	243	239	229	213	201	202	199	189	177	168	156
20	190	206	224	231	231	225	223	226	232	235	228	210	194	194	184	164	152	144	138
25	180	199	216	217	206	199	199	200	207	220	221	204	184	182	165	145	140	133	133
30	167	190	204	195	187	188	189	188	189	197	209	195	172	169	145	136	132	130	130
35	154	179	188	177	178	181	183	182	180	180	192	184	159	153	131	128	125	126	127
40	140	166	170	166	171	175	177	176	174	168	173	171	145	138	121	119	120	121	122
45	126	153	155	158	165	168	169	169	167	161	157	158	131	124	114	112	114	115	115
50	112	141	143	151	158	160	160	160	159	154	145	144	118	111	107	106	108	109	110
55	100	130	134	144	150	151	151	151	152	146	136	132	105	101	100	100	105	107	107
60	89.9	120	126	138	142	142	142	143	144	140	128	121	93.5	92.2	93.7	97.8	102	102	101
65	81.1	112	120	131	135	134	133	134	136	133	122	113	83.8	84.9	87.9	95.9	98.0	96.3	95.1
70	73.3	106	114	125	128	126	124	126	128	127	115	105	75.3	78.5	86.0	92.8	93.8	91.8	90.5
75	66.5	99.6	108	119	121	118	116	118	122	120	109	98.3	67.8	72.8	83.7	90.0	90.5	87.9	86.4
80	59.9	93.9	103	114	115	111	109	111	115	115	104	92.3	61.0	68.5	81.0	87.7	87.5	84.0	82.1
85	53.6	88.5	97.6	108	109	105	103	105	109	109	98.5	86.9	54.4	64.8	78.6	84.8	84.4	80.5	78.5
90	51.5	86.9	95.7	107	108	104	101	103	107	107	96.0	84.5	51.3	63.3	77.7	83.3	83.0	79.1	77.0
95	55.4	89.9	98.4	110	111	107	104	106	110	109	97.9	86.4	53.6	62.8	77.1	82.3	82.3	78.8	76.8
100	62.1	95.5	104	115	116	113	110	112	116	115	103	91.7	60.1	64.4	79.4	84.5	84.1	81.1	79.7
105	68.6	101	109	121	122	120	117	119	122	120	108	97.7	66.3	66.7	80.6	86.7	87.5	85.0	83.4
110	75.5	107	114	126	129	127	125	127	129	126	114	104	73.3	71.5	81.8	89.1	90.7	88.8	87.6
115	82.5	114	120	132	136	134	133	134	136	132	120	110	80.1	76.4	82.7	90.8	93.3	92.3	91.4
120	88.8	122	126	138	143	143	142	143	143	138	126	118	87.1	81.5	86.7	91.7	96.2	95.3	95.0
125	96.2	132	134	144	150	151	151	151	150	144	134	128	94.3	87.3	91.2	94.3	97.6	97.7	98.3
130	105	143	143	150	157	159	159	159	158	151	142	139	104	92.8	95.3	99.9	99.7	99.6	100
135	116	155	156	156	163	166	167	167	164	157	154	152	115	99.1	99.5	105	105	104	104
140	129	168	173	165	169	173	174	173	170	164	169	164	127	108	104	110	111	110	110
145	141	179	191	178	175	178	179	178	175	176	187	176	139	118	110	113	115	115	116
150	154	189	206	199	186	184	184	184	185	196	204	187	151	131	117	117	118	119	120
155	167	197	218	221	208	199	197	198	207	218	216	194	162	148	128	123	121	122	122
160	176	201	224	234	233	228	225	227	231	232	222	195	171	166	140	135	130	128	125
165	168	201	223	236	241	244	243	242	240	235	221	194	164	163	133	143	145	141	139
170	136	160	214	227	235	238	238	237	233	219	187	158	133	132	125	112	107	124	160
175	103	109	120	158	212	215	215	214	165	139	120	107	99.4	99.5	98.3	89.7	79.3	62.4	48.0
180	89.4	83.8	79.9	105	68.9	2.90	168	20.9	52.6	51.3	69.3	88.8	89.1	89.2	85.2	72.7	46.6	36.5	24.1

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:27.8DEG  
 Operators:Alan Wang  
 Test Date:14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity:47.5%  
 Test Distance:2.500m [K=1.0393]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1532A P:18.06W PF:0.9823 Freq:60.00Hz Lamp Flux:1507.36x1 lm
NAME:ASD-LWS27A-18D18CCBK
SPEC.:5000K
MFR.: ASD Lighting Corp

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	210	211	210	210	210														
5	210	210	209	209	209														
10	196	200	203	205	204														
15	158	171	188	196	199														
20	138	141	161	182	190														
25	132	130	134	162	178														
30	129	126	121	140	164														
35	126	123	118	120	149														
40	121	119	113	106	134														
45	115	114	109	101	119														
50	109	107	104	96.3	104														
55	106	104	98.3	92.1	89.7														
60	101	101	94.7	88.2	78.4														
65	95.5	96.3	92.4	83.2	75.9														
70	91.2	92.2	88.3	81.1	70.0														
75	87.5	88.5	85.4	77.9	64.1														
80	83.6	85.5	83.1	74.8	59.6														
85	80.1	82.7	80.7	72.3	55.6														
90	78.8	82.1	80.1	71.4	54.3														
95	78.8	81.9	80.1	71.0	54.7														
100	81.2	83.3	81.4	72.2	56.8														
105	84.6	86.0	82.7	72.3	59.4														
110	88.5	88.5	83.4	72.1	63.7														
115	91.8	90.8	84.3	73.0	69.3														
120	95.0	92.8	84.5	77.3	75.1														
125	97.2	93.4	87.1	81.8	81.2														
130	98.7	96.3	93.0	87.0	86.5														
135	104	103	98.7	91.8	93.2														
140	110	109	104	96.9	101														
145	116	114	109	103	110														
150	120	118	113	109	119														
155	122	121	119	119	125														
160	126	126	128	131	131														
165	137	139	142	141	122														
170	161	156	121	98.7	116														
175	36.0	56.1	56.5	74.2	85.6														
180	6.05	10.6	34.3	60.3	74.4														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:27.8DEG  
 Operators:Alan Wang  
 Test Date:14 October 2023

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.416  
 Humidity:47.5%  
 Test Distance:2.500m [K=1.0393]  
 Remarks: