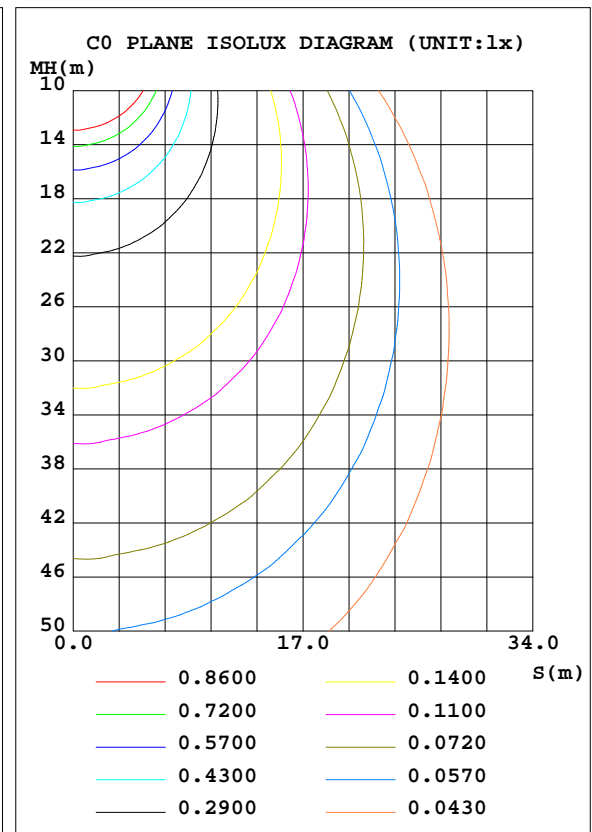
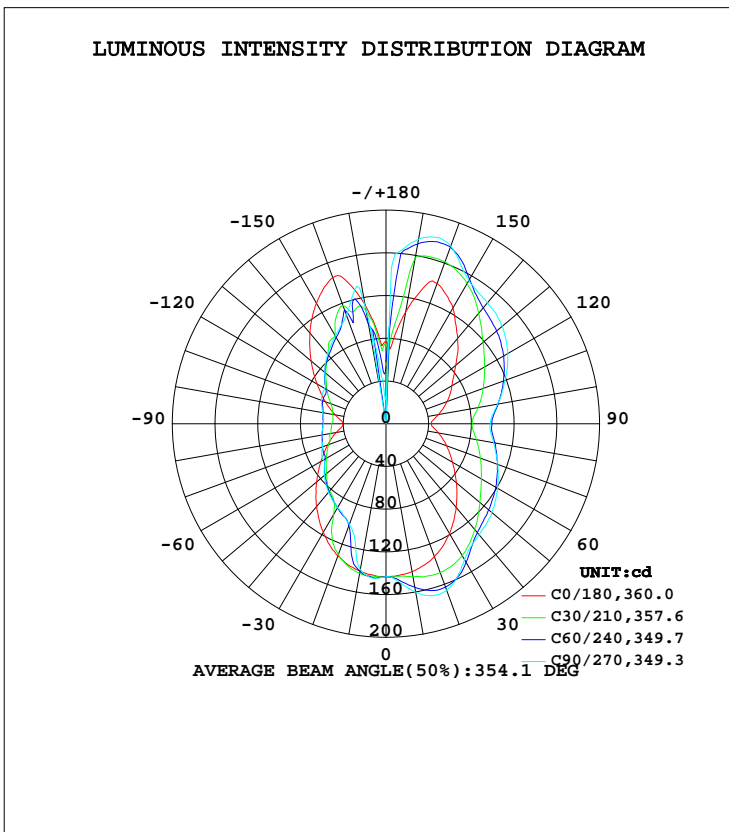


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 66.74 lm/W			
MODEL	ASD-LWS27C-18D18BK	Imax(cd)	181.2	S/MH(C0/180)	1.22
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	0.91
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	1185.9	η UP, DN(C0-180)	31.2,29.7
NOMINAL FLUX(lm)	1185.88	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	19.3,19.9
LAMPS INSIDE	1	η up(%)	50.5	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	49.5	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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	140.6	151.0	160.1	153.4	140.3	141.4	138.9	141.8	0- 10	13.87	13.87	1.17,1.17
20	132.4	157.8	165.9	160.5	131.6	115.8	100.3	111.1	10- 20	39.92	53.79	4.54,4.54
30	119.0	149.7	146.9	151.7	117.4	91.42	90.76	93.09	20- 30	59.19	113.0	9.53,9.53
40	102.2	132.9	135.9	134.0	101.1	82.33	83.74	82.27	30- 40	71.48	184.5	15.6,15.6
50	86.16	119.6	129.3	122.4	84.85	73.92	75.22	74.42	40- 50	79.08	263.5	22.2,22.2
60	71.89	111.5	120.7	114.7	70.48	66.29	67.48	67.15	50- 60	82.34	345.9	29.2,29.2
70	60.34	104.3	111.5	106.7	58.18	61.20	63.38	62.87	60- 70	82.90	428.8	36.2,36.2
80	49.93	97.42	102.3	99.43	47.45	58.99	60.99	59.01	70- 80	80.95	509.7	43,43
90	42.58	92.67	97.54	95.24	40.34	58.00	58.96	57.48	80- 90	77.35	587.1	49.5,49.5
100	49.91	99.63	106.1	103.5	48.48	57.34	60.16	57.14	90-100	77.57	664.7	56,56
110	60.90	109.2	118.6	113.9	60.41	59.09	64.21	59.47	100-110	82.40	747.1	63,63
120	71.15	117.9	131.7	123.7	74.55	64.67	66.33	64.62	110-120	85.24	832.3	70.2,70.2
130	85.18	126.4	142.1	131.9	91.41	74.28	74.97	74.25	120-130	85.43	917.7	77.4,77.4
140	104.2	138.4	147.9	141.2	110.9	84.11	84.99	85.34	130-140	82.18	999.9	84.3,84.3
150	125.4	158.1	155.0	160.7	130.3	95.63	94.90	97.09	140-150	74.44	1074	90.6,90.6
160	139.9	171.0	177.0	175.4	145.6	114.8	108.7	110.7	150-160	61.62	1136	95.8,95.8
170	106.3	166.3	175.4	162.8	112.9	99.18	110.2	108.4	160-170	39.96	1176	99.2,99.2
180	76.41	54.72	0	42.76	76.58	65.15	25.97	26.99	170-180	9.969	1186	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 223.35 lm

%lum = 18.8%

%lamp = 18.8%

Conical surface Flux(120deg): 345.89 lm

%lum = 29.2%

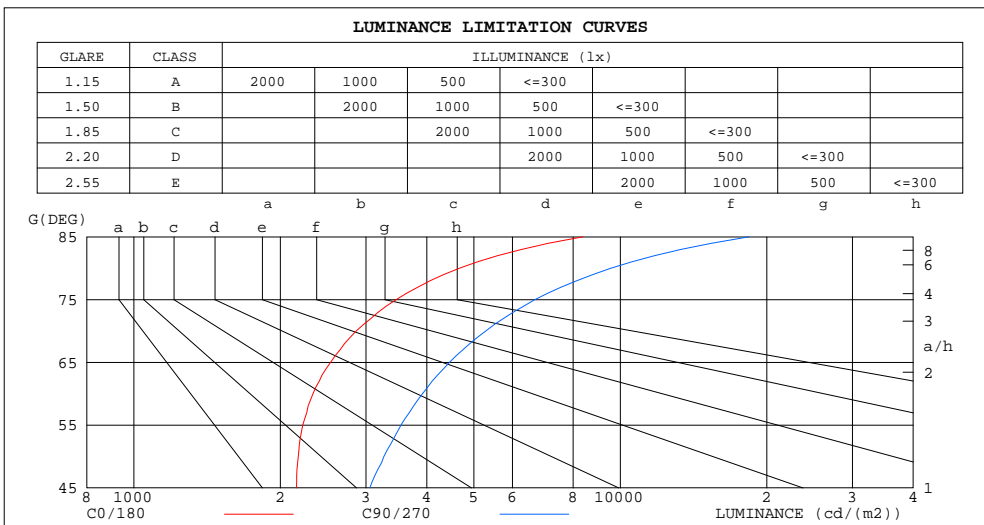
%lamp = 29.2%

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:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	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	8370	18382
80	4670	9566
75	3463	6680
70	2865	5294
65	2538	4456
60	2335	3920
55	2224	3543
50	2177	3266
45	2159	3056

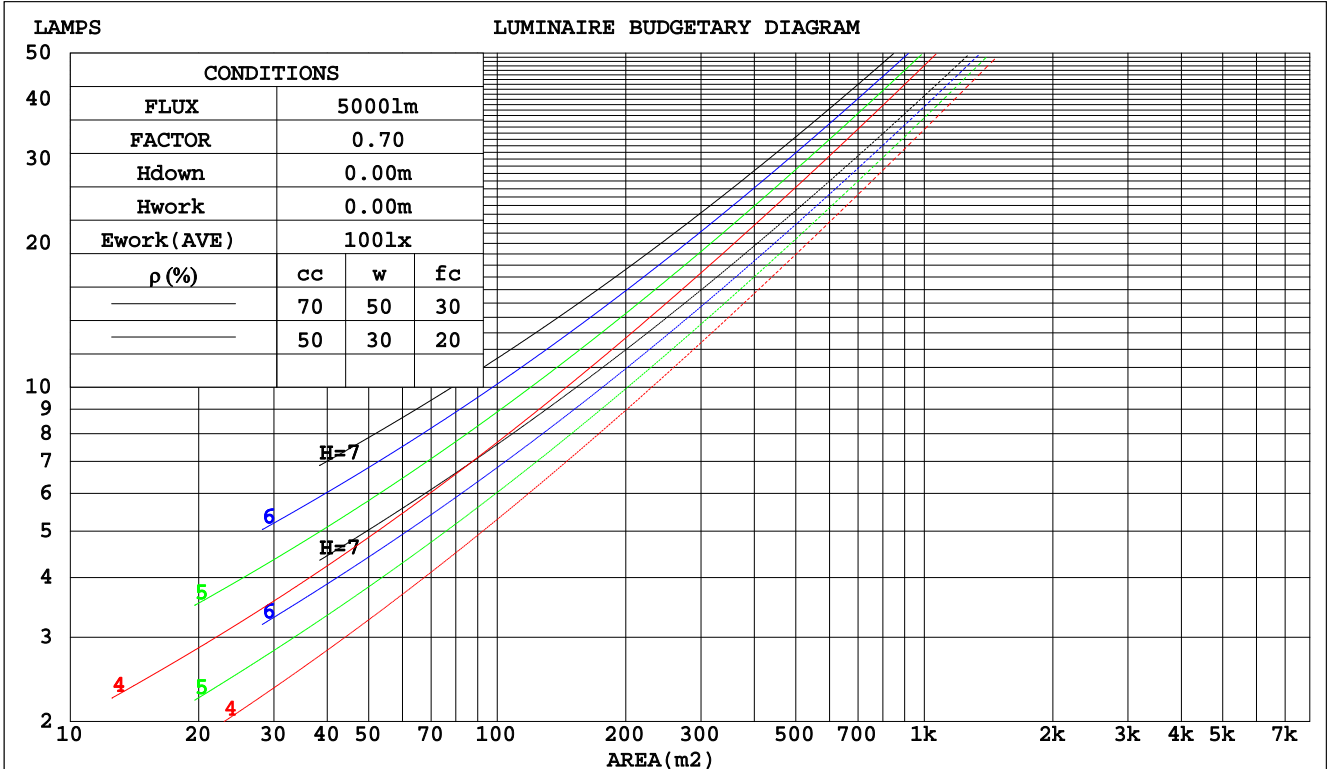
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 27.8DEG
 Operators: Alan Wang
 Test Date: 14 October 2023

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρpw																0
ρfc	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	.77	.74	.68	.65	.62	.56	.54	.51	.45	.43	.41	.36
2.0	.76	.69	.63	.70	.64	.58	.58	.54	.49	.48	.44	.41	.38	.35	.33	.28
3.0	.66	.58	.51	.61	.54	.48	.51	.45	.40	.41	.37	.33	.33	.29	.27	.22
4.0	.58	.49	.43	.54	.46	.40	.45	.39	.34	.36	.32	.28	.29	.25	.22	.19
5.0	.52	.43	.36	.47	.40	.34	.40	.33	.29	.32	.28	.24	.26	.22	.19	.16
6.0	.46	.37	.31	.42	.35	.29	.36	.29	.25	.29	.24	.21	.23	.20	.17	.14
7.0	.41	.33	.27	.38	.31	.25	.32	.26	.22	.26	.22	.18	.21	.17	.15	.12
8.0	.38	.29	.24	.35	.27	.22	.29	.23	.19	.24	.19	.16	.19	.16	.13	.11
9.0	.34	.26	.21	.32	.25	.20	.27	.21	.17	.22	.18	.14	.18	.14	.12	.09
10.0	.31	.24	.19	.29	.22	.18	.25	.19	.15	.20	.16	.13	.17	.13	.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:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	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	.361	.205	.065	.338	.193	.061	.296	.170	.054	.257	.149	.048	.222	.129	.041	
2.0	.310	.170	.052	.290	.159	.049	.251	.140	.043	.216	.121	.038	.183	.104	.033	
3.0	.275	.146	.044	.256	.137	.041	.221	.120	.036	.189	.103	.032	.159	.088	.027	
4.0	.248	.129	.038	.231	.121	.036	.199	.105	.031	.169	.091	.027	.141	.077	.023	
5.0	.226	.115	.033	.210	.108	.031	.180	.094	.028	.153	.081	.024	.127	.068	.020	
6.0	.207	.104	.030	.193	.097	.028	.165	.085	.025	.140	.073	.021	.116	.061	.018	
7.0	.191	.095	.027	.178	.089	.025	.153	.077	.022	.129	.066	.019	.107	.055	.016	
8.0	.178	.087	.024	.165	.081	.023	.142	.071	.020	.120	.061	.017	.099	.051	.015	
9.0	.166	.080	.022	.154	.075	.021	.132	.065	.019	.112	.056	.016	.092	.047	.014	
10.0	.155	.074	.021	.145	.070	.019	.124	.061	.017	.105	.052	.015	.086	.043	.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	.575	.575	.575	.492	.492	.492	.336	.336	.336	.193	.193	.193	.062	.062	.062	
1.0	.572	.544	.518	.489	.467	.446	.335	.321	.308	.193	.186	.179	.062	.060	.058	
2.0	.565	.522	.486	.484	.450	.420	.332	.311	.293	.191	.181	.172	.061	.059	.056	
3.0	.558	.507	.466	.478	.437	.404	.328	.304	.284	.190	.177	.167	.061	.058	.055	
4.0	.551	.495	.453	.473	.428	.393	.325	.298	.277	.188	.175	.164	.061	.057	.054	
5.0	.544	.486	.444	.467	.421	.386	.322	.294	.272	.186	.173	.162	.060	.056	.053	
6.0	.537	.479	.437	.462	.415	.381	.318	.290	.269	.185	.171	.160	.060	.056	.053	
7.0	.530	.473	.432	.456	.410	.377	.315	.287	.267	.183	.169	.159	.059	.055	.053	
8.0	.524	.467	.428	.451	.405	.374	.312	.285	.265	.182	.168	.158	.059	.055	.052	
9.0	.519	.463	.426	.447	.402	.371	.310	.282	.264	.180	.167	.157	.058	.055	.052	
10.0	.513	.459	.423	.442	.399	.369	.307	.281	.262	.179	.166	.157	.058	.054	.052	

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:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	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	13.0	14.0	13.9	14.9	16.1	14.8	15.8	15.6	16.7	17.8
3H	15.2	16.2	16.1	17.1	18.2	17.6	18.5	18.5	19.4	20.6
4H	16.4	17.3	17.4	18.2	19.4	19.2	20.1	20.1	21.0	22.2
6H	17.7	18.6	18.7	19.5	20.7	21.0	21.8	21.9	22.7	23.9
8H	18.5	19.2	19.4	20.2	21.4	22.0	22.7	22.9	23.7	24.9
12H	19.3	20.0	20.2	20.9	22.2	23.1	23.8	24.0	24.8	26.0
4H 2H	14.3	15.2	15.2	16.1	17.3	15.5	16.3	16.4	17.3	18.5
3H	16.8	17.6	17.8	18.5	19.7	18.6	19.3	19.5	20.3	21.5
4H	18.2	18.9	19.2	19.9	21.1	20.3	21.0	21.3	22.0	23.2
6H	19.7	20.3	20.7	21.3	22.5	22.3	22.9	23.3	23.9	25.1
8H	20.5	21.0	21.4	22.0	23.3	23.4	23.9	24.4	24.9	26.2
12H	21.3	21.8	22.3	22.8	24.1	24.6	25.1	25.6	26.2	27.5
8H 4H	19.3	19.8	20.3	20.8	22.1	20.9	21.4	21.8	22.4	23.7
6H	21.1	21.6	22.1	22.6	23.9	23.1	23.6	24.1	24.6	25.9
8H	22.1	22.6	23.1	23.6	24.9	24.4	24.9	25.4	25.9	27.2
12H	23.2	23.6	24.2	24.6	26.0	25.9	26.3	27.0	27.3	28.7
12H 4H	19.6	20.1	20.6	21.1	22.4	21.0	21.5	21.9	22.5	23.8
6H	21.6	22.0	22.6	23.1	24.4	23.4	23.8	24.4	24.8	26.1
8H	22.8	23.2	23.8	24.2	25.6	24.8	25.2	25.8	26.2	27.5
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, 1186 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 0.6)
 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:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

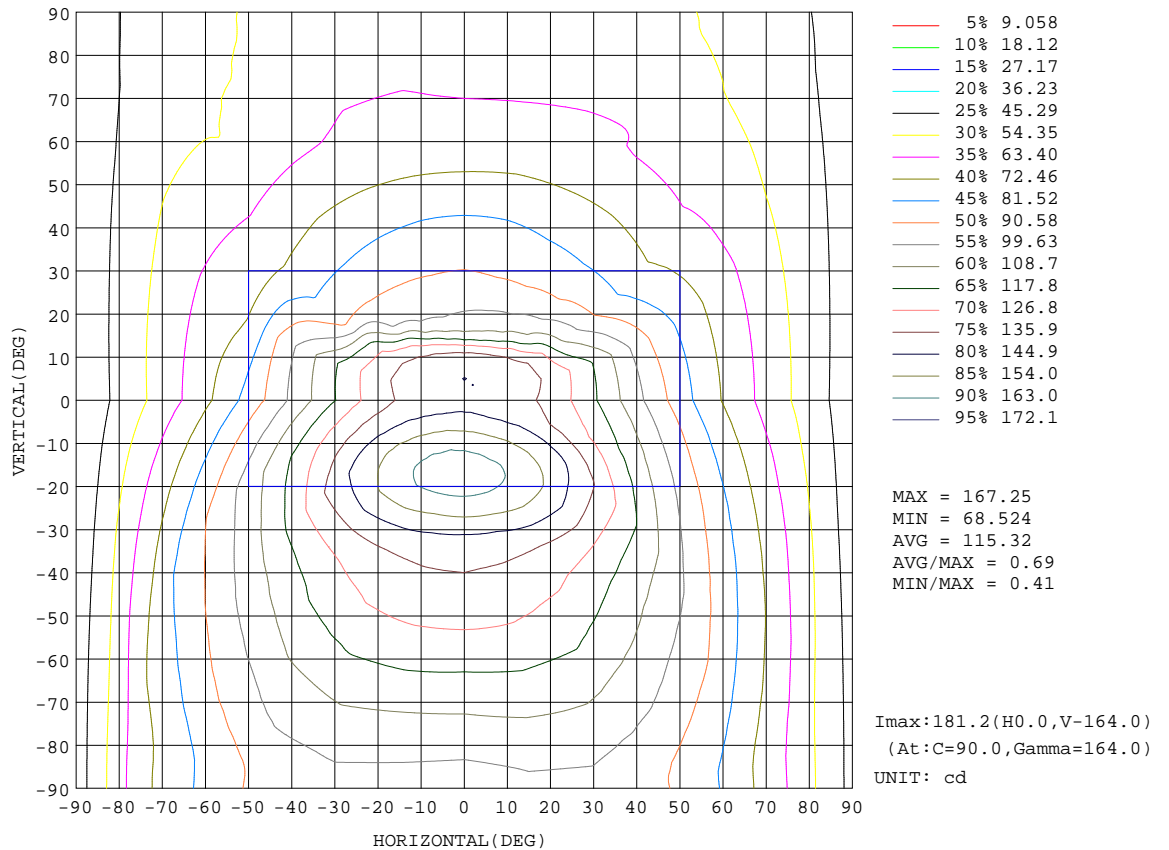
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	40	28	21	37	27	20	33	24	19	11
0.80	48	36	28	45	34	27	40	30	24	15
1.00	56	43	34	52	40	33	45	37	30	18
1.25	62	50	41	58	47	39	50	41	35	21
1.50	68	55	46	63	52	44	54	45	39	23
2.00	75	64	55	69	59	52	59	51	45	27
2.50	80	69	61	74	64	57	63	55	50	29
3.00	83	74	66	77	69	62	65	59	54	32
4.00	88	80	73	81	74	68	69	63	59	34
5.00	92	84	78	84	78	73	71	66	62	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: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:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

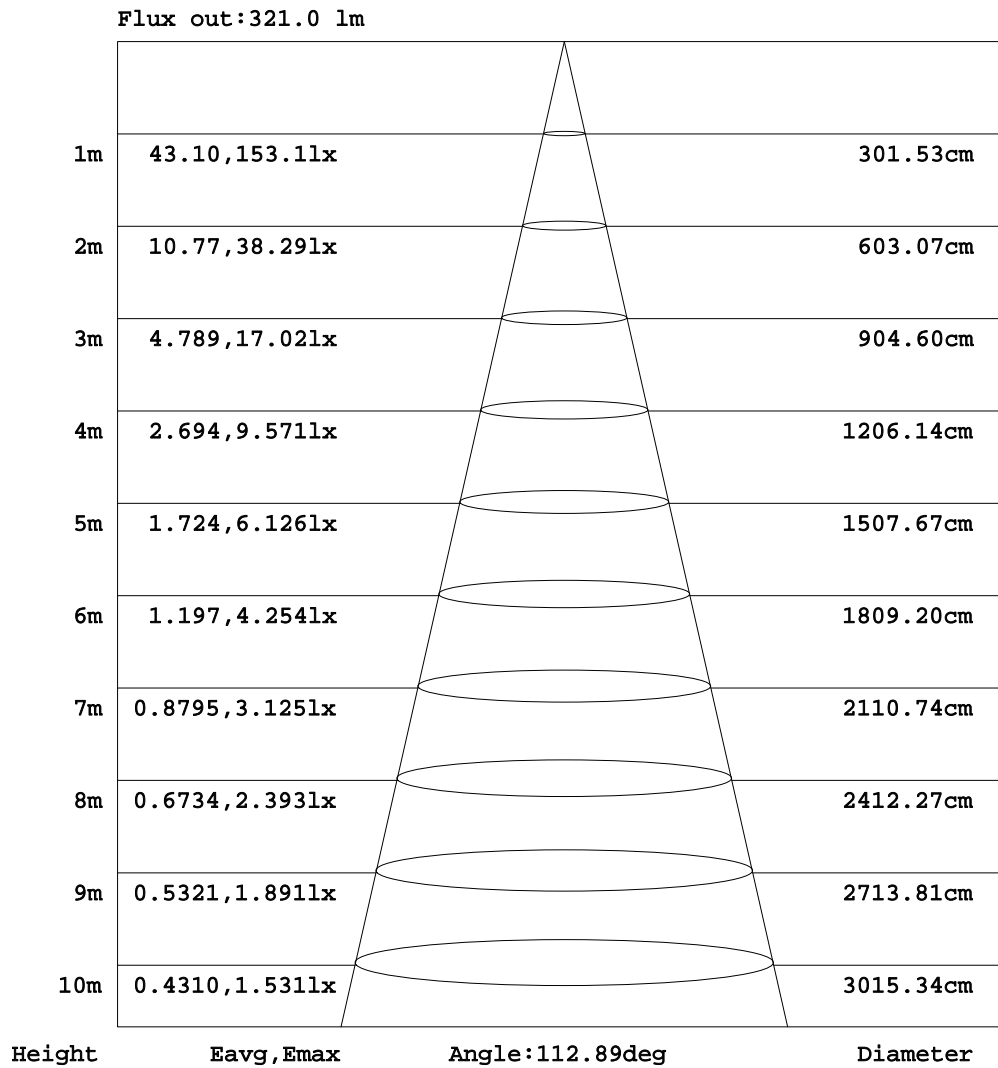


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:27.8DEG
 Operators:Alan Wang
 Test Date:14 October 2023

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:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



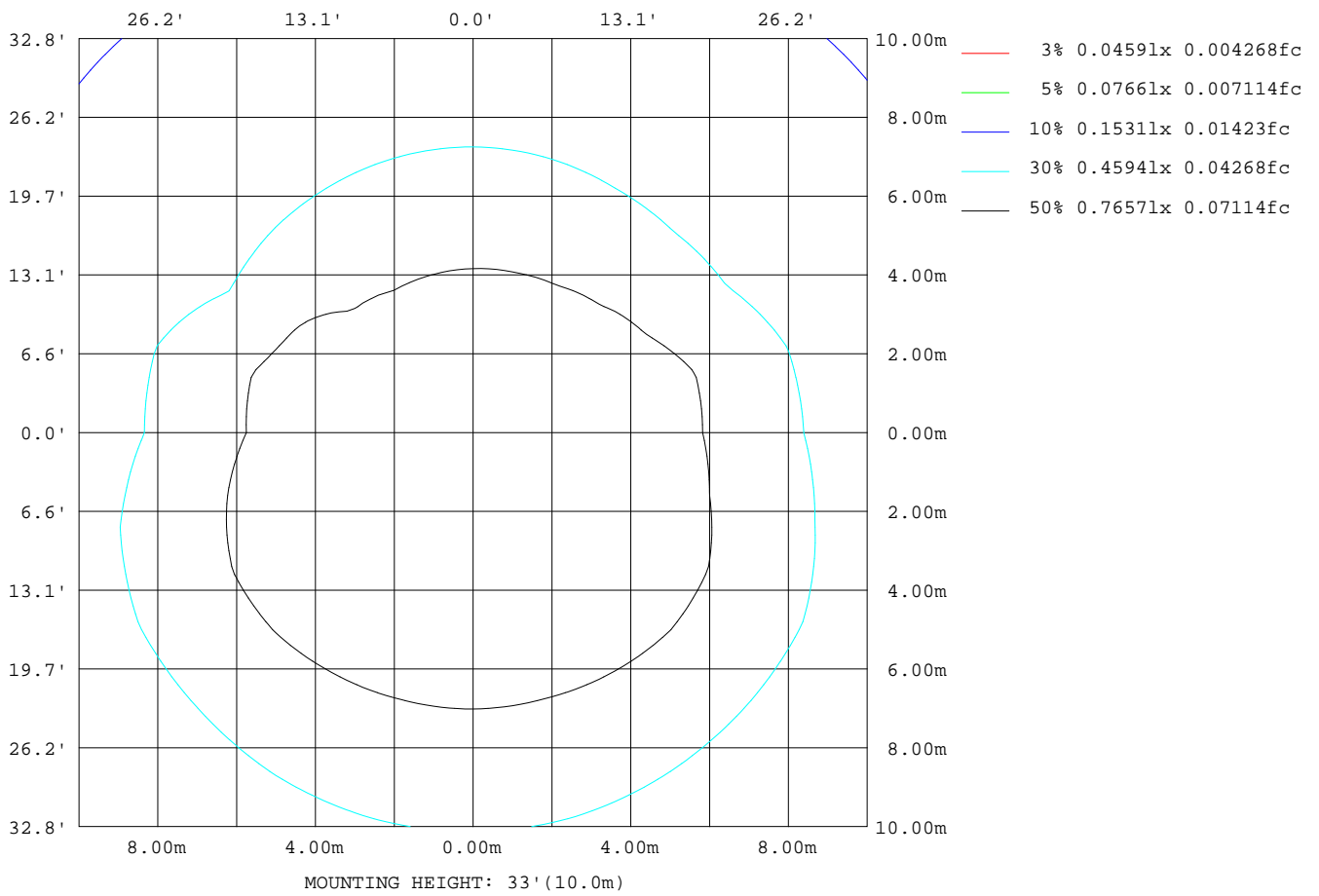
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: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:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	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: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:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

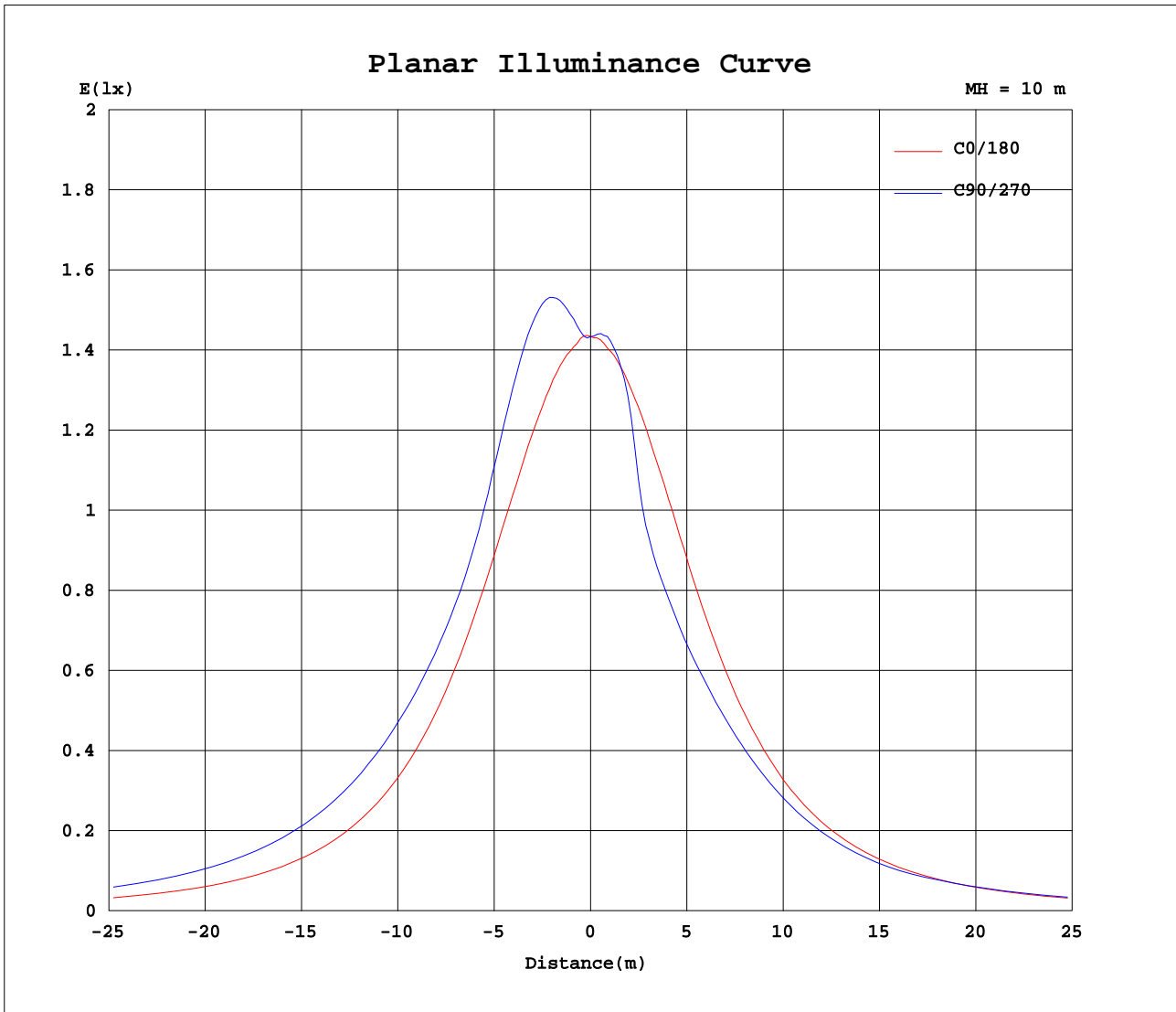
AvgL	cd/m2
L_0~180(65)av	2496
L_0~180(75)av	3387
L_0~180(85)av	8121
L_90~270(65)av	3501
L_90~270(75)av	5293
L_90~270(85)av	14758
L_45(65)av	3307
L_45(75)av	5087
L_45(85)av	14253

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

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:

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:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	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	143	144	144	144	143	143	143	143	144	143	143	143	143	144	144	144	143	143	143
5	142	142	143	145	147	148	150	149	148	146	144	142	142	143	143	144	145	145	145
10	141	141	146	151	155	159	160	160	157	153	148	143	140	141	142	141	141	139	139
15	137	140	148	156	162	165	167	166	164	159	151	142	137	138	138	135	126	115	112
20	132	136	148	158	163	165	166	166	165	160	152	139	132	133	130	116	102	99.4	100
25	126	132	147	156	159	158	158	159	160	158	151	137	125	127	119	96.5	95.2	94.4	94.5
30	119	127	143	150	150	147	147	148	150	152	146	132	117	119	98.0	91.4	90.9	90.5	90.8
35	111	121	137	142	140	139	140	140	141	143	140	127	109	110	86.1	87.1	87.0	87.2	87.2
40	102	114	130	133	133	135	136	136	135	134	133	120	101	101	82.3	82.3	83.0	83.6	83.7
45	94.0	107	122	125	129	132	133	132	131	127	125	114	92.6	91.0	77.6	78.0	78.9	79.7	79.7
50	86.2	100	115	120	125	128	129	129	127	122	117	107	84.9	77.7	72.8	73.9	74.7	75.1	75.2
55	78.5	93.8	108	116	122	125	125	125	124	118	111	100	77.3	70.3	68.5	70.0	70.4	70.4	70.5
60	71.9	88.0	103	111	119	121	121	121	120	115	106	94.2	70.5	67.6	64.6	66.3	66.0	66.6	67.5
65	66.0	82.6	98.5	108	115	116	116	116	116	111	101	88.9	63.9	63.5	60.9	62.4	64.3	66.2	66.3
70	60.3	78.0	94.0	104	111	112	111	111	111	107	96.7	84.2	58.2	59.4	57.3	61.2	63.4	64.3	63.4
75	55.2	73.5	90.0	101	107	108	106	107	107	103	92.5	79.6	52.8	55.2	54.3	60.1	61.7	62.9	62.2
80	49.9	69.1	85.9	97.4	104	104	102	103	103	99.4	88.6	75.2	47.5	51.2	53.0	59.0	60.9	61.5	61.0
85	44.9	65.0	82.2	93.8	99.9	100	98.6	99.0	99.5	95.9	85.1	71.0	42.2	48.3	51.6	58.1	59.8	60.0	59.7
90	42.6	63.2	80.9	92.7	99.2	99.1	97.5	98.3	99.2	95.2	84.1	70.0	40.3	47.5	50.9	58.0	59.5	59.6	59.0
95	44.8	65.2	82.8	95.1	101	102	100	101	102	98.2	86.9	72.6	42.9	48.0	49.7	57.4	59.4	59.5	58.8
100	49.9	70.1	87.6	99.6	107	108	106	107	107	103	92.0	77.7	48.5	50.8	50.8	57.3	59.9	61.1	60.2
105	55.4	74.6	92.3	105	112	113	112	113	113	109	96.8	82.6	54.1	54.7	51.7	59.1	61.3	63.2	62.3
110	60.9	79.4	96.9	109	117	119	119	119	119	114	102	87.8	60.4	58.6	55.0	59.1	63.0	64.9	64.2
115	66.3	84.9	102	114	122	125	125	126	125	119	107	93.5	67.1	62.8	59.6	60.2	63.2	66.2	66.1
120	71.1	90.5	107	118	127	131	132	132	130	124	112	99.6	74.6	67.6	63.8	64.7	65.0	66.0	66.3
125	77.5	96.6	112	122	132	136	137	137	135	128	117	107	83.0	72.8	68.3	69.5	70.2	69.7	69.7
130	85.2	103	119	126	135	140	142	142	139	132	124	115	91.4	78.6	73.6	74.3	74.9	74.7	75.0
135	95.2	111	127	131	138	143	146	145	142	136	132	123	101	85.3	78.9	78.9	79.5	79.9	80.2
140	104	120	135	138	142	146	148	147	145	141	141	131	111	93.7	84.7	84.1	83.6	84.2	85.0
145	114	128	144	147	147	149	150	150	149	149	150	139	121	105	93.1	89.0	88.1	88.8	89.7
150	125	135	152	158	157	155	155	155	157	161	159	146	130	116	95.5	95.6	93.6	94.1	94.9
155	133	142	158	166	168	166	165	167	169	170	166	145	139	127	110	103	99.7	99.8	101
160	140	148	161	171	176	177	177	177	177	175	168	146	146	137	118	115	114	109	109
165	130	149	162	171	177	180	181	181	179	175	164	143	137	133	111	123	120	122	123
170	106	120	158	166	171	174	175	175	174	163	127	114	113	113	108	99.2	94.3	96.4	110
175	78.8	85.5	93.3	114	160	163	163	163	125	106	95.3	89.0	84.1	84.3	79.5	73.9	66.4	54.5	42.7
180	76.4	74.3	60.2	54.7	58.3	18.9	0.00	0.00	27.8	42.8	66.2	73.3	76.6	76.4	74.3	65.2	53.6	51.1	26.0

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:0.1509A P:17.77W PF:0.9812 Freq:60.00Hz Lamp Flux:1185.88x1 lm		
NAME:ASD-LWS27C-18D18BK	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	143	144	143	143	143														
5	145	145	144	144	143														
10	140	141	142	143	142														
15	114	121	133	139	139														
20	101	104	111	129	134														
25	94.7	96.3	101	113	127														
30	90.2	90.4	93.1	101	119														
35	86.8	86.1	86.6	91.4	110														
40	83.5	82.4	82.3	84.1	99.5														
45	79.8	78.8	78.3	78.4	90.0														
50	75.6	75.1	74.4	73.7	82.9														
55	71.0	70.9	70.8	69.5	76.4														
60	67.6	66.3	67.1	65.7	70.6														
65	66.8	65.4	63.3	62.3	65.3														
70	63.2	63.4	62.9	59.2	60.3														
75	62.5	60.7	60.4	57.6	55.9														
80	61.2	60.3	59.0	55.2	51.3														
85	59.8	59.1	58.1	53.7	48.6														
90	59.3	58.4	57.5	52.2	46.9														
95	58.8	57.5	56.3	51.3	46.1														
100	59.6	58.2	57.1	52.1	47.6														
105	61.4	60.0	58.7	52.9	51.8														
110	63.8	62.2	59.5	54.6	55.8														
115	65.7	62.9	60.2	58.8	60.3														
120	66.0	64.8	64.6	63.6	64.7														
125	70.4	69.6	69.1	68.4	68.9														
130	75.4	74.3	74.2	74.0	72.8														
135	80.3	79.2	79.5	79.7	78.0														
140	85.2	84.6	85.3	85.2	85.1														
145	89.8	90.1	91.5	91.0	92.1														
150	95.1	95.8	97.1	97.8	98.7														
155	100	101	103	104	104														
160	109	109	111	112	112														
165	121	119	122	123	98.9														
170	137	136	108	83.5	95.7														
175	33.5	45.3	52.2	66.2	70.0														
180	20.3	13.5	27.0	50.1	62.5														

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: