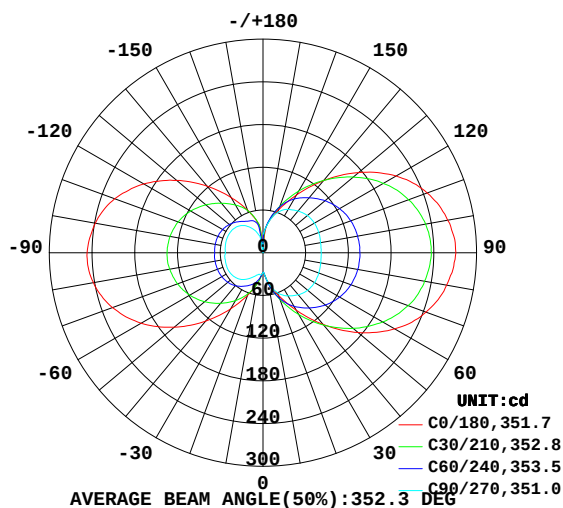


LUMINAIRE PHOTOMETRIC TEST REPORT

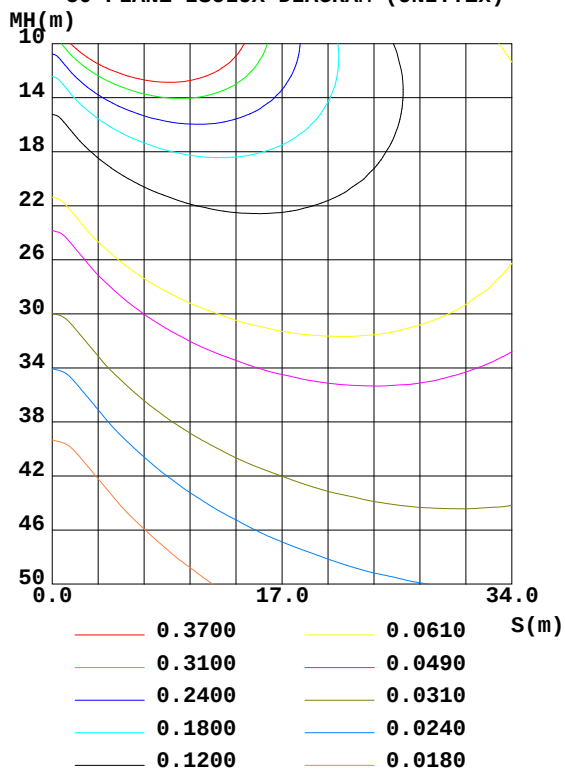
Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm		
NAME:ASD-LWS27N-18D18BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 82.74 lm/W			
MODEL	ASD-LWS27N-18D18BK	I _{max} (cd)	281.5	S/MH(C0/180)	4.33
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	2.39
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	1496.8	η UP, DN(C0-180)	29.7, 29.7
NOMINAL FLUX(lm)	1496.82	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	20.2, 20.5
LAMPS INSIDE	1	η up(%)	49.8	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	50.2	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 24.9DEG
Operators: Alan Wang
Test Date: 14 December 2023

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
Humidity: 42.0%
Test Distance: 2.500m [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	42.16	44.57	42.55	45.54	42.38	41.66	30.71	41.34	0- 10	3.416	3.416	0.23,0.23
20	63.65	70.56	59.79	71.96	63.51	55.00	35.41	53.78	10- 20	14.66	18.07	1.21,1.21
30	93.00	95.18	69.98	96.11	90.95	64.88	42.50	62.51	20- 30	32.11	50.18	3.35,3.35
40	131.4	116.1	77.01	116.1	125.3	73.46	48.83	70.04	30- 40	54.96	105.1	7.02,7.02
50	174.2	134.1	82.04	132.7	162.7	80.93	52.50	76.43	40- 50	81.95	187.1	12.5,12.5
60	213.8	148.6	83.61	146.7	197.8	86.74	54.39	81.41	50- 60	110.1	297.2	19.9,19.9
70	243.8	159.3	83.40	156.5	225.2	90.54	54.52	85.10	60- 70	135.5	432.6	28.9,28.9
80	261.9	166.1	82.32	162.4	241.7	92.68	54.08	87.11	70- 80	154.1	586.8	39.2,39.2
90	270.9	168.1	81.81	164.3	247.0	93.62	53.03	88.00	80- 90	164.2	750.9	50.2,50.2
100	263.4	166.0	82.24	162.4	239.3	93.13	53.78	87.94	90-100	164.0	914.9	61.1,61.1
110	245.5	159.6	83.38	156.4	221.9	90.83	54.55	85.74	100-110	154.0	1069	71.4,71.4
120	215.8	148.6	83.41	146.6	193.4	86.25	54.48	81.80	110-120	135.0	1204	80.4,80.4
130	175.4	133.8	81.47	132.8	158.2	79.83	53.17	76.24	120-130	109.3	1313	87.7,87.7
140	132.4	116.1	76.61	116.5	122.3	72.11	49.68	69.33	130-140	81.13	1394	93.2,93.2
150	93.65	95.34	70.42	96.44	89.64	64.47	42.81	59.51	140-150	54.36	1449	96.8,96.8
160	64.38	70.90	60.26	72.22	63.73	57.55	33.67	43.95	150-160	31.39	1480	98.9,98.9
170	43.08	44.98	42.85	45.64	43.11	43.60	19.12	31.92	160-170	14.17	1494	99.8,99.8
180	0	0	25.96	0	0.0955	0.0965	0.0992	0.1081	170-180	2.558	1497	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 142.58 lm

%lum = 9.5%

%lamp = 9.5%

Conical surface Flux(120deg): 297.18 lm

%lum = 19.9%

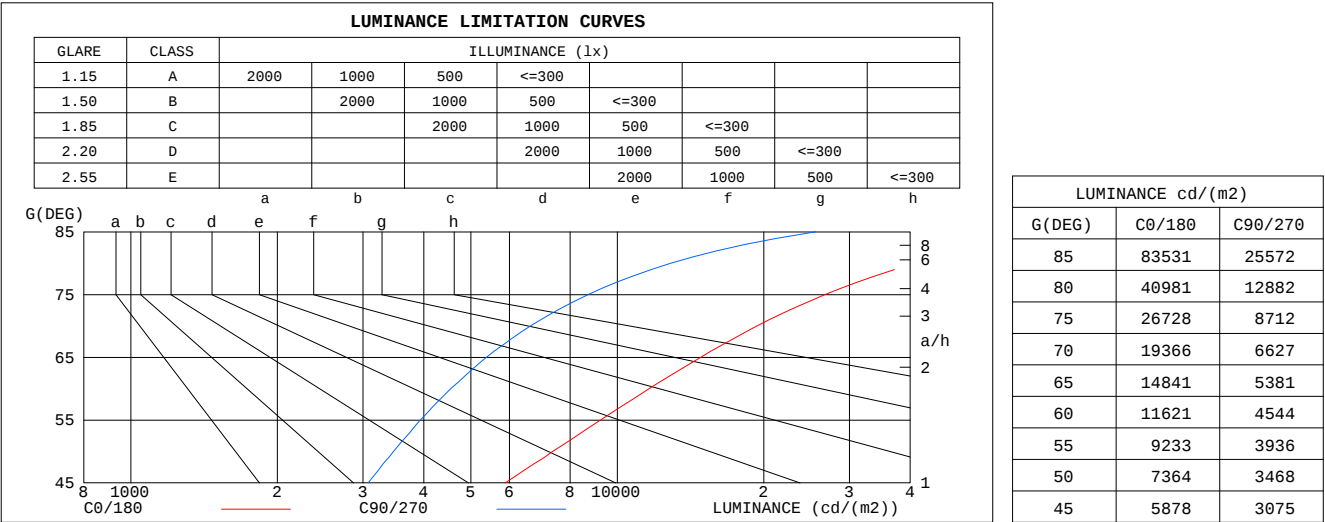
%lamp = 19.9%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.9DEG
 Operators: Alan Wang
 Test Date: 14 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.0%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-18D18BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



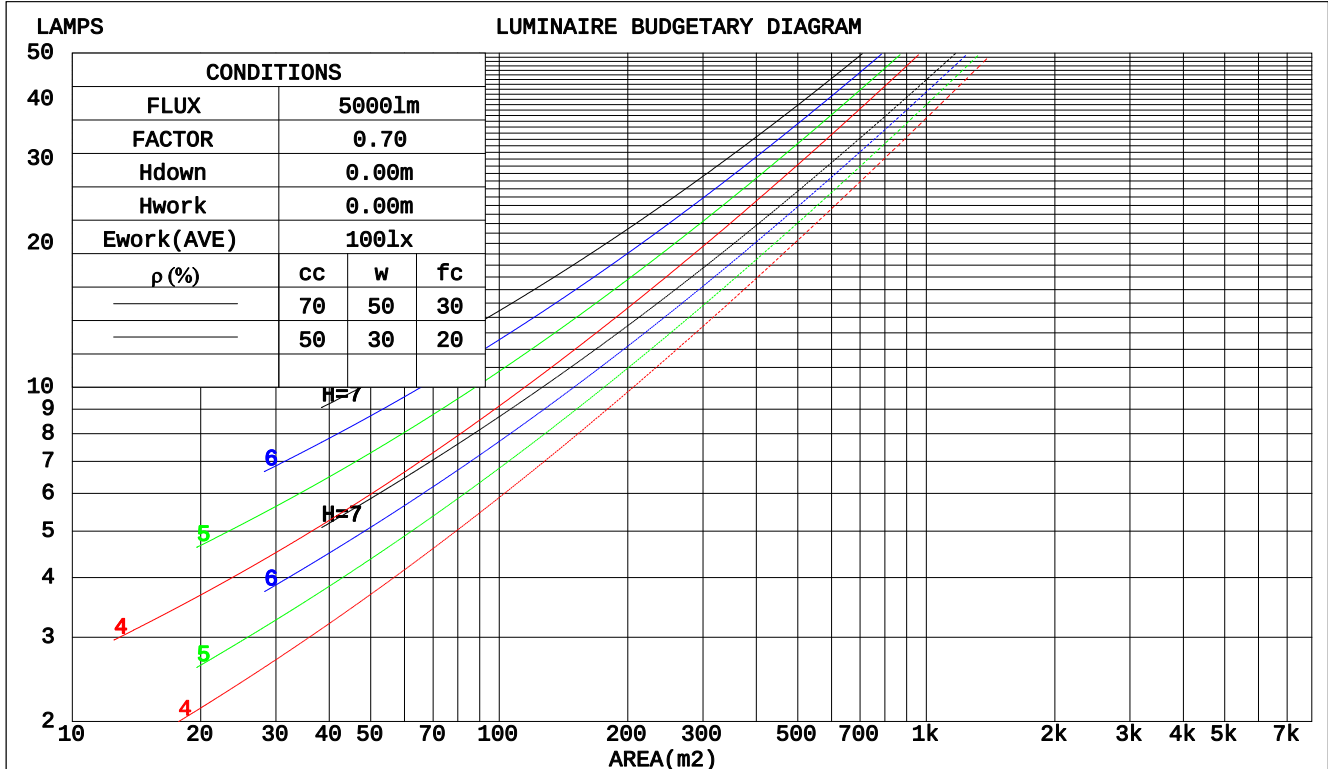
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 24.9DEG
Operators:Alan Wang
Test Date:14 December 2023

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-R5000_V2 SYSTEM V2.00.416
Humidity: 42.0%
Test Distance:2.500m [K=1.0423]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-18D18BK_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	.61	.57	.52	.49	.46	.41	.39	.36	.31
2.0	.72	.63	.56	.65	.58	.52	.54	.48	.43	.43	.38	.34	.33	.30	.27	.21
3.0	.61	.52	.44	.56	.47	.41	.46	.39	.34	.36	.31	.27	.27	.24	.20	.16
4.0	.53	.43	.36	.48	.40	.33	.39	.33	.27	.31	.26	.22	.24	.19	.16	.12
5.0	.47	.37	.30	.42	.34	.27	.35	.28	.22	.27	.22	.18	.21	.16	.13	.09
6.0	.41	.32	.25	.38	.29	.23	.31	.24	.19	.24	.19	.15	.18	.14	.11	.08
7.0	.37	.28	.21	.34	.25	.20	.28	.21	.16	.22	.17	.13	.16	.12	.09	.06
8.0	.33	.24	.18	.30	.22	.17	.25	.18	.14	.20	.15	.11	.15	.11	.08	.05
9.0	.30	.22	.16	.27	.20	.15	.23	.16	.12	.18	.13	.09	.14	.10	.07	.05
10.0	.27	.19	.14	.25	.18	.13	.21	.15	.11	.17	.12	.08	.13	.09	.06	.04



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.9DEG
 Operators: Alan Wang
 Test Date: 14 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.0%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm									
NAME:				TYPE:LED				WEIGHT:	
SPEC.:ASD-LWS27N-18D18BK_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	.433	.246	.078	.410	.234	.074	.368	.211	.067	.330	.190	.061	.294	.170	.055		
2.0	.357	.196	.060	.337	.185	.057	.298	.166	.051	.263	.147	.046	.230	.130	.041		
3.0	.309	.164	.049	.290	.156	.047	.255	.138	.042	.223	.122	.037	.192	.106	.033		
4.0	.274	.142	.042	.257	.134	.040	.224	.119	.036	.194	.104	.031	.166	.090	.028		
5.0	.246	.125	.036	.230	.118	.034	.201	.104	.031	.173	.091	.027	.147	.079	.024		
6.0	.223	.112	.032	.209	.106	.030	.182	.093	.027	.156	.081	.024	.132	.069	.021		
7.0	.205	.101	.029	.191	.095	.027	.166	.084	.024	.142	.073	.021	.120	.062	.018		
8.0	.189	.092	.026	.177	.087	.025	.153	.076	.022	.131	.066	.019	.110	.056	.016		
9.0	.175	.085	.024	.164	.080	.022	.142	.070	.020	.121	.061	.017	.102	.052	.015		
10.0	.163	.078	.022	.153	.074	.021	.132	.065	.018	.113	.056	.016	.095	.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	.570	.570	.570	.487	.487	.487	.333	.333	.333	.191	.191	.191	.061	.061	.061	
1.0	.572	.538	.507	.489	.462	.437	.335	.318	.302	.193	.184	.176	.062	.059	.057	
2.0	.566	.517	.475	.485	.445	.411	.332	.308	.287	.192	.179	.168	.061	.058	.055	
3.0	.559	.502	.456	.480	.433	.396	.329	.301	.277	.190	.176	.164	.061	.057	.054	
4.0	.552	.491	.444	.474	.424	.386	.326	.295	.271	.188	.173	.161	.061	.056	.053	
5.0	.545	.482	.435	.468	.417	.379	.322	.291	.267	.187	.171	.159	.060	.056	.052	
6.0	.537	.474	.429	.462	.411	.374	.319	.288	.265	.185	.169	.157	.060	.055	.052	
7.0	.530	.468	.425	.456	.406	.370	.315	.285	.262	.183	.168	.156	.059	.055	.052	
8.0	.524	.463	.422	.451	.402	.368	.312	.282	.261	.181	.166	.155	.059	.055	.051	
9.0	.518	.459	.419	.446	.398	.366	.309	.280	.260	.180	.165	.155	.058	.054	.051	
10.0	.512	.455	.417	.441	.395	.364	.306	.278	.259	.178	.164	.154	.058	.054	.051	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.9DEG
 Operators: Alan Wang
 Test Date: 14 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.0%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm										
NAME:			TYPE:LED			WEIGHT:				
SPEC.:ASD-LWS27N-18D18BK_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	19.2	20.3	20.1	21.2	22.4	14.8	15.9	15.6	16.8	18.0
3H	23.3	24.3	24.2	25.2	26.4	17.6	18.6	18.5	19.6	20.8
4H	25.5	26.4	26.4	27.4	28.6	19.2	20.2	20.1	21.1	22.3
6H	27.8	28.7	28.7	29.6	30.9	21.0	21.9	21.9	22.8	24.1
8H	29.0	29.9	29.9	30.8	32.1	22.0	22.8	22.9	23.8	25.0
12H	30.4	31.3	31.4	32.2	33.5	23.1	23.9	24.0	24.9	26.1
4H 2H	19.7	20.7	20.6	21.6	22.9	16.9	17.9	17.8	18.8	20.0
3H	24.1	24.9	25.0	25.9	27.1	19.7	20.6	20.7	21.5	22.8
4H	26.5	27.2	27.4	28.2	29.5	21.4	22.1	22.3	23.1	24.4
6H	29.1	29.8	30.0	30.8	32.0	23.1	23.8	24.1	24.8	26.1
8H	30.5	31.1	31.4	32.1	33.4	24.1	24.7	25.1	25.7	27.0
12H	32.0	32.6	33.0	33.6	34.9	25.2	25.8	26.2	26.8	28.1
8H 4H	26.8	27.4	27.8	28.4	29.7	23.0	23.7	24.0	24.7	26.0
6H	29.7	30.3	30.7	31.3	32.6	25.0	25.5	26.0	26.6	27.9
8H	31.4	31.9	32.4	32.9	34.2	26.1	26.6	27.1	27.6	29.0
12H	33.2	33.7	34.3	34.7	36.1	27.3	27.7	28.3	28.8	30.1
12H 4H	26.8	27.4	27.8	28.4	29.7	23.7	24.3	24.7	25.3	26.6
6H	29.8	30.3	30.8	31.4	32.7	25.8	26.3	26.8	27.3	28.7
8H	31.6	32.0	32.6	33.1	34.4	27.0	27.5	28.0	28.5	29.8
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, 1497 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 1.4$)
Area: 0.0368 m²

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 24.9DEG
Operators: Alan Wang
Test Date: 14 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
Humidity: 42.0%
Test Distance: 2.500m [K=1.0423]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-18D18BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

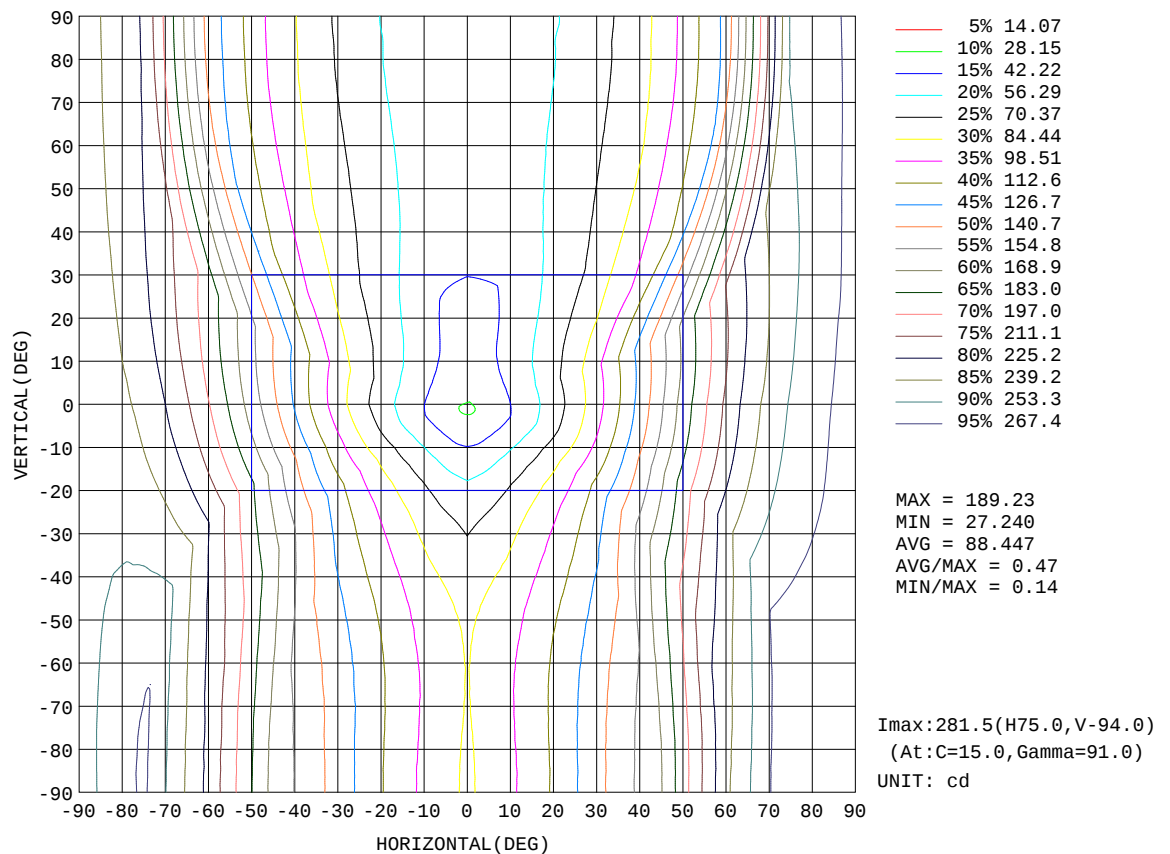
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	34	21	14	32	20	13	29	18	12	5
0.80	43	28	20	40	27	19	35	24	17	7
1.00	50	35	26	46	33	24	40	31	22	10
1.25	57	42	32	53	39	30	45	34	27	13
1.50	62	47	37	57	44	35	49	38	31	15
2.00	70	56	46	64	52	43	55	45	38	19
2.50	75	62	53	69	58	49	58	50	43	22
3.00	79	68	58	73	63	54	61	53	47	25
4.00	85	75	66	78	69	62	66	59	53	29
5.00	88	79	72	81	73	67	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: 24.9DEG
 Operators: Alan Wang
 Test Date: 14 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.0%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-18D18BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

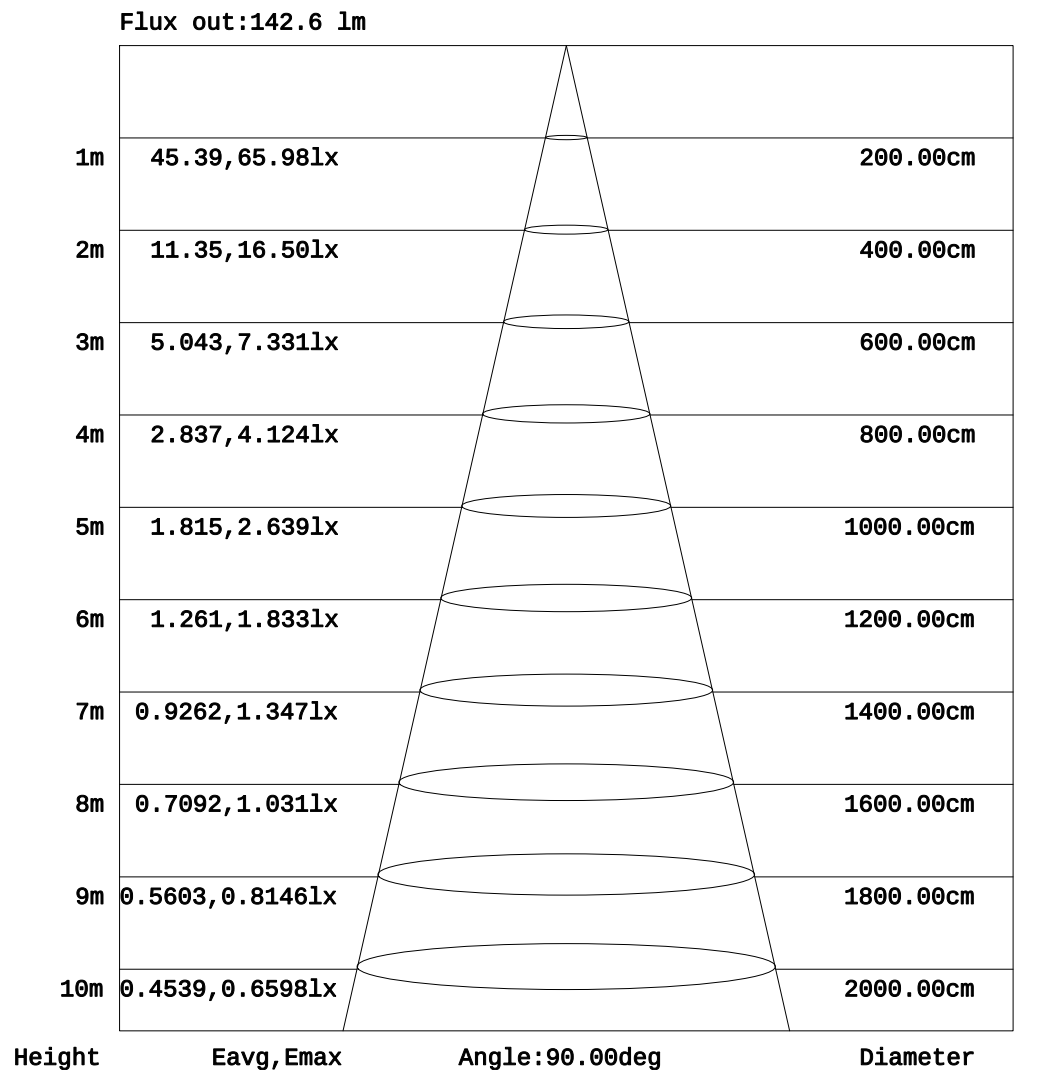


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 24.9DEG
Operators: Alan Wang
Test Date: 14 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
Humidity: 42.0%
Test Distance: 2.500m [K=1.0423]
Remarks:

AAI Figure

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-18D18BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



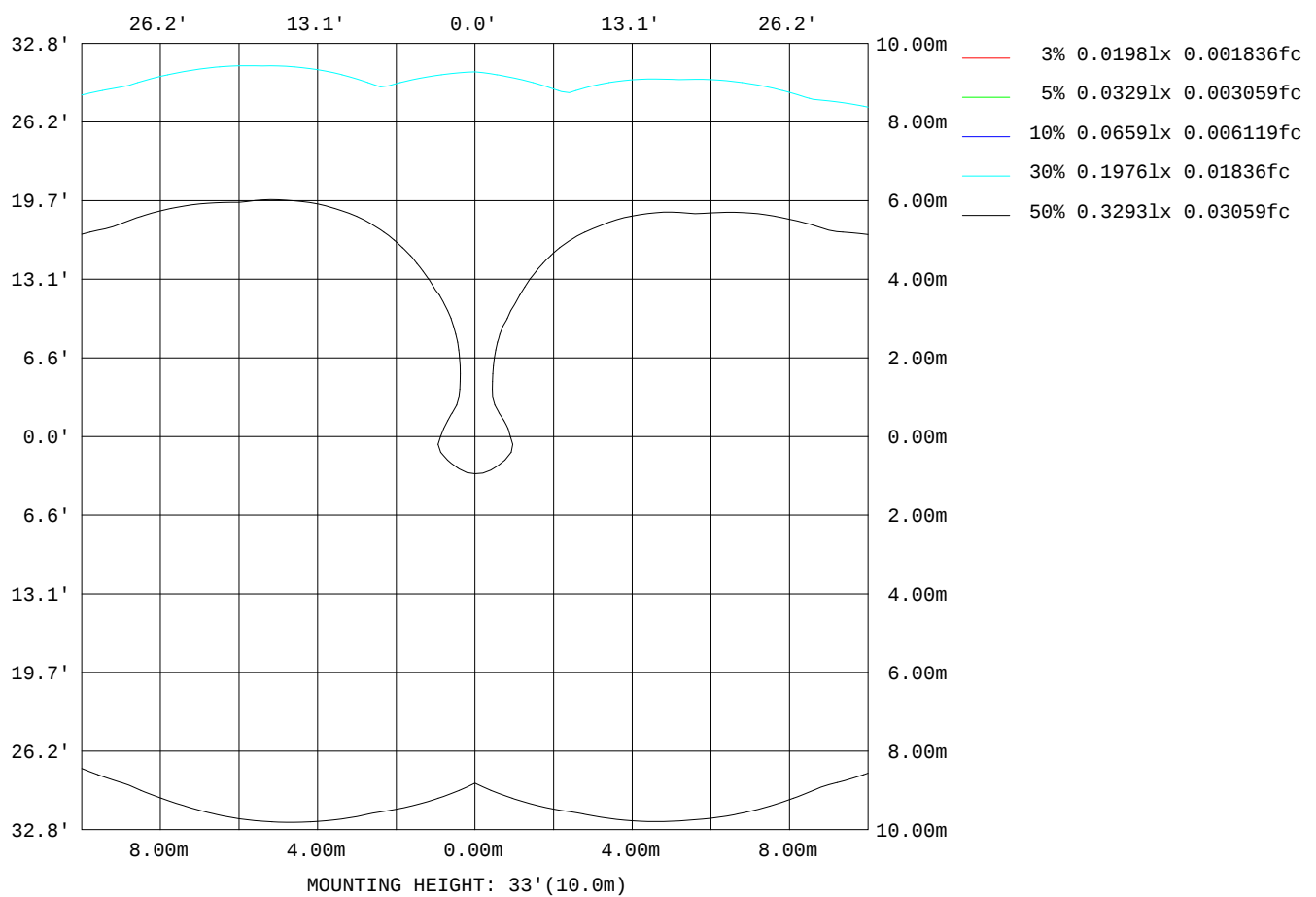
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.9DEG
 Operators:Alan Wang
 Test Date:14 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.0%
 Test Distance:2.500m [K=1.0423]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-18D18BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.9DEG
 Operators: Alan Wang
 Test Date: 14 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.0%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

LED Avg.L Report

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-18D18BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

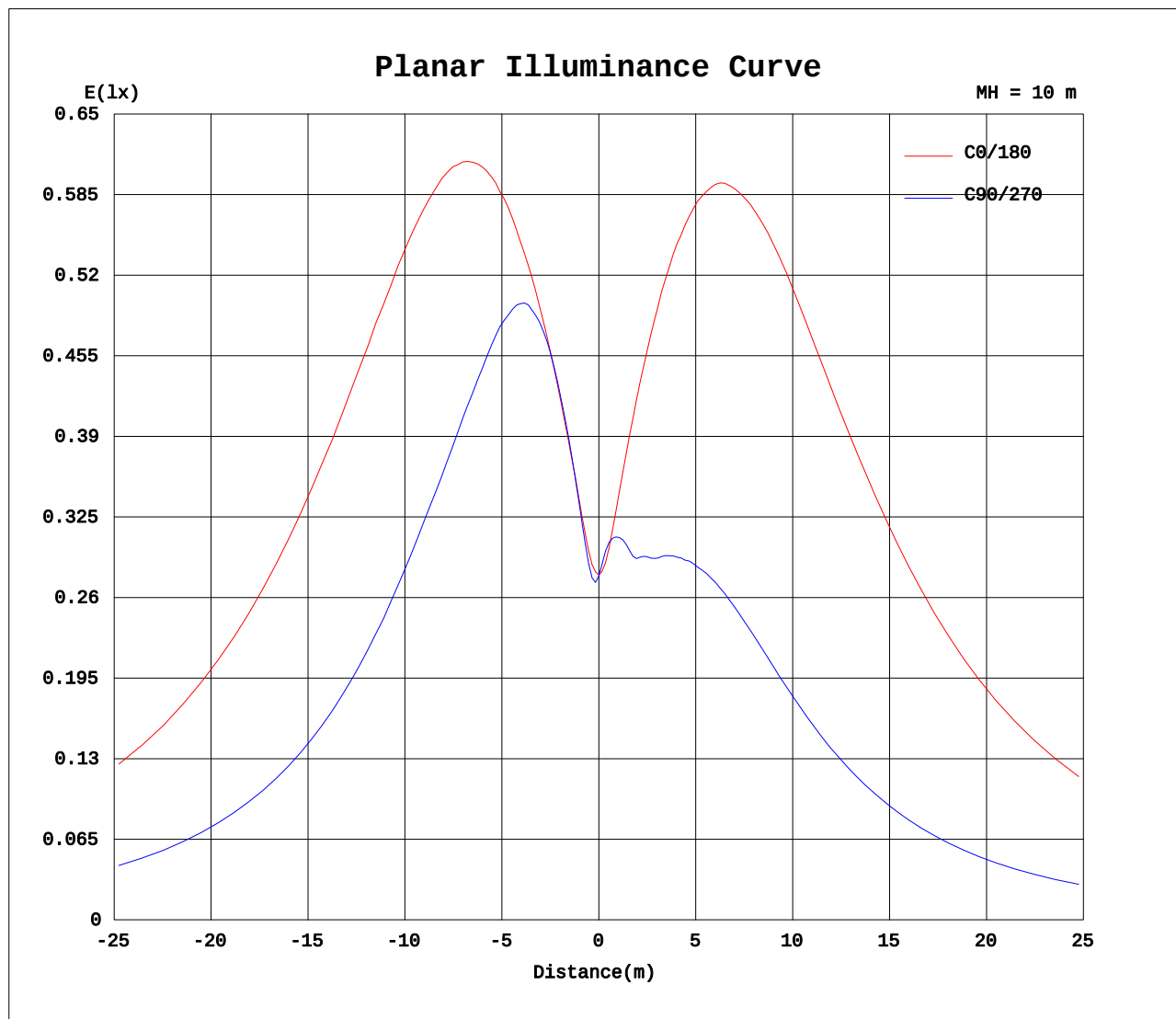
AvgL	cd/m2
L_0~180(65)av	14260
L_0~180(75)av	25684
L_0~180(85)av	80133
L_90~270(65)av	4449
L_90~270(75)av	7206
L_90~270(85)av	21218
L_45(65)av	7703
L_45(75)av	13161
L_45(85)av	39971

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.9DEG
 Operators: Alan Wang
 Test Date: 14 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.0%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

Planar Illuminance Curve



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C Interval: 15.0DEG
Test Speed: HIGH
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γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
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Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-18D18BK_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	27.8	27.8	27.9	27.8	27.8	27.8	27.8	27.7	27.6	27.6	27.5	27.5	27.8	27.8	27.9	27.8	27.8	27.8	27.8
5	33.0	32.2	32.0	32.4	32.5	32.4	32.5	32.6	32.9	32.8	32.5	32.3	33.3	33.8	34.0	33.6	33.0	31.9	31.3
10	42.2	41.3	43.2	44.6	44.6	43.2	42.6	43.4	45.1	45.5	44.4	42.1	42.4	43.5	43.2	41.7	39.2	35.3	30.7
15	52.3	52.2	56.0	57.5	56.7	53.9	51.8	54.1	57.4	58.9	57.7	53.8	52.3	53.5	52.3	49.0	44.1	38.2	32.4
20	63.7	64.9	69.6	70.6	68.2	63.5	59.8	63.8	69.0	72.0	71.7	66.9	63.5	64.7	61.2	55.0	47.8	40.0	35.4
25	77.1	79.4	84.2	83.3	78.3	71.3	65.6	71.3	78.9	84.5	86.4	81.8	76.2	76.7	69.6	60.0	51.1	42.0	38.9
30	93.0	96.1	100.0	95.2	86.9	77.2	70.0	77.5	87.5	96.1	102	98.3	91.0	89.4	77.6	64.9	54.3	44.4	42.5
35	111	115	116	106	94.2	82.4	73.8	82.7	94.7	107	117	116	107	104	85.3	69.2	57.6	46.7	45.9
40	131	135	133	116	101	87.6	77.0	87.7	102	116	132	135	125	119	92.7	73.5	60.3	48.6	48.8
45	153	157	149	125	108	91.9	80.0	92.1	108	125	147	155	144	134	100	77.4	62.9	50.0	51.1
50	174	178	165	134	114	95.8	82.0	95.8	115	133	161	176	163	150	107	80.9	64.6	50.9	52.5
55	195	199	180	142	120	98.7	83.1	98.5	120	140	175	195	181	166	113	84.0	66.0	51.4	53.7
60	214	219	194	149	124	101	83.6	101	124	147	187	213	198	180	119	86.7	67.0	51.7	54.4
65	231	237	207	155	128	102	83.7	102	128	152	197	230	213	193	124	88.9	67.7	51.6	54.7
70	244	252	217	159	131	103	83.4	103	131	156	205	244	225	204	128	90.5	68.0	51.5	54.5
75	255	264	225	163	134	104	83.0	103	133	160	213	256	235	213	131	91.9	68.2	51.0	54.3
80	262	273	230	166	135	104	82.3	103	134	162	217	264	242	219	133	92.7	68.3	50.6	54.1
85	268	278	234	167	136	103	82.0	103	135	164	220	269	246	223	135	93.5	68.5	50.8	54.1
90	271	281	236	168	136	104	81.8	103	135	164	221	270	247	224	135	93.6	68.0	50.0	53.0
95	269	280	235	167	136	104	81.8	103	134	164	220	267	244	221	134	93.6	68.3	50.3	53.4
100	263	274	232	166	135	104	82.2	103	134	162	217	261	239	216	133	93.1	68.1	50.5	53.8
105	256	265	226	163	133	104	82.9	103	132	160	212	253	232	209	130	92.1	68.0	50.7	54.3
110	246	253	218	160	131	103	83.4	103	130	156	205	241	222	200	127	90.8	67.5	50.9	54.5
115	232	238	208	154	128	102	83.5	102	128	152	196	226	208	188	123	88.6	66.7	50.8	54.6
120	216	220	195	149	124	101	83.4	100	124	147	185	210	193	175	117	86.2	65.5	50.5	54.5
125	197	200	181	141	119	98.4	82.8	98.0	119	140	173	191	176	160	111	83.2	64.0	49.8	54.1
130	175	179	165	134	114	95.3	81.5	95.0	114	133	160	172	158	145	105	79.8	61.9	48.8	53.2
135	154	157	149	125	108	91.5	79.3	91.4	108	125	146	152	140	130	97.9	76.0	59.5	47.4	51.9
140	132	135	133	116	101	87.0	76.6	87.0	102	117	131	133	122	115	90.7	72.1	56.8	45.5	49.7
145	112	115	116	106	94.3	82.5	73.4	82.2	94.8	107	116	114	105	102	84.1	68.2	53.8	43.1	46.8
150	93.6	96.1	99.9	95.3	87.3	77.8	70.4	77.7	87.8	96.4	101	97.1	89.6	88.9	77.5	64.5	51.1	40.8	42.8
155	77.7	79.4	84.2	83.4	78.7	72.0	66.3	71.8	79.4	84.9	86.1	81.0	75.9	76.7	70.9	61.5	49.2	39.2	38.3
160	64.4	65.1	69.7	70.9	68.6	64.2	60.3	63.9	69.2	72.2	71.5	66.7	63.7	64.9	63.1	57.5	48.0	38.6	33.7
165	53.0	52.5	56.2	57.9	57.2	54.5	52.2	54.3	57.5	58.9	57.8	54.1	53.0	53.6	54.0	51.7	45.8	37.5	27.6
170	43.1	41.9	43.6	45.0	44.9	43.7	42.9	43.6	45.1	45.6	44.6	42.5	43.1	43.3	44.2	43.6	39.6	33.4	19.1
175	25.1	30.2	32.3	32.6	32.7	32.3	32.7	32.8	32.8	32.8	32.5	30.1	22.4	23.6	16.6	8.82	5.00	2.12	0.37
180	0.00	0.00	0.00	0.00	13.7	25.9	26.0	25.7	15.3	0.00	0.00	0.00	0.10	0.10	0.10	0.10	0.09	0.09	0.10

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 24.9DEG

Operators: Alan Wang

Test Date: 14 December 2023

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416

Humidity: 42.0%

Test Distance: 2.500m [K=1.0423]

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1534A P:18.09W PF:0.9825 Freq:60.00Hz Lamp Flux:1496.82x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-18D18BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEC) γ (DEC)	285	300	315	330	345														
0	27.7	27.6	27.6	27.5	27.5														
5	31.6	32.7	33.4	33.6	33.4														
10	34.3	38.8	41.3	42.8	43.0														
15	36.9	43.4	48.2	52.0	53.3														
20	38.5	46.6	53.8	60.7	64.6														
25	40.7	49.4	58.5	68.7	77.2														
30	43.2	52.3	62.5	76.4	91.4														
35	45.4	55.0	66.4	84.0	107														
40	47.7	57.5	70.0	91.3	125														
45	49.0	59.6	73.3	97.9	144														
50	50.3	61.2	76.4	104	163														
55	51.0	62.4	79.1	110	182														
60	51.4	63.2	81.4	115	199														
65	51.7	63.9	83.4	119	215														
70	51.6	64.2	85.1	123	228														
75	51.3	64.4	86.3	126	239														
80	51.3	64.4	87.1	128	247														
85	51.4	64.7	87.8	129	252														
90	50.7	63.9	88.0	130	255														
95	51.0	64.3	88.0	130	254														
100	51.3	64.4	87.9	129	248														
105	51.4	64.3	87.1	127	241														
110	51.5	63.9	85.7	124	230														
115	51.4	63.1	84.0	120	217														
120	51.1	62.2	81.8	116	201														
125	50.3	60.7	79.2	111	183														
130	49.3	59.0	76.2	105	164														
135	47.8	56.8	73.0	98.4	145														
140	45.9	54.2	69.3	91.6	126														
145	43.6	51.0	65.2	83.8	107														
150	41.0	47.1	59.5	72.4	89.0														
155	37.1	39.0	44.2	57.8	70.0														
160	32.0	31.6	43.9	55.6	61.5														
165	24.0	25.8	39.0	46.9	50.3														
170	16.8	19.4	31.9	39.2	40.9														
175	0.29	0.68	2.41	5.30	9.06														
180	0.12	0.11	0.11	0.10	0.11														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.9DEG
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γ Range: 0 - 180DEG
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 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.416
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