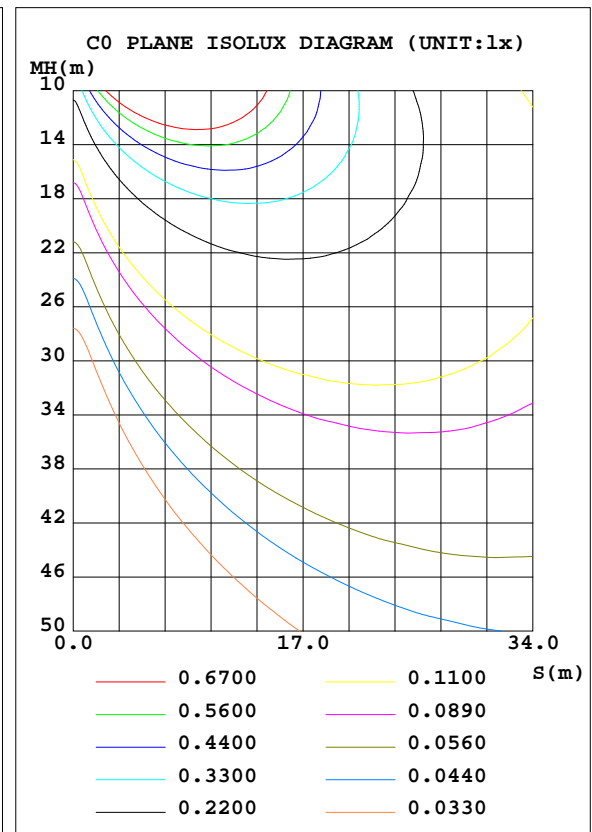
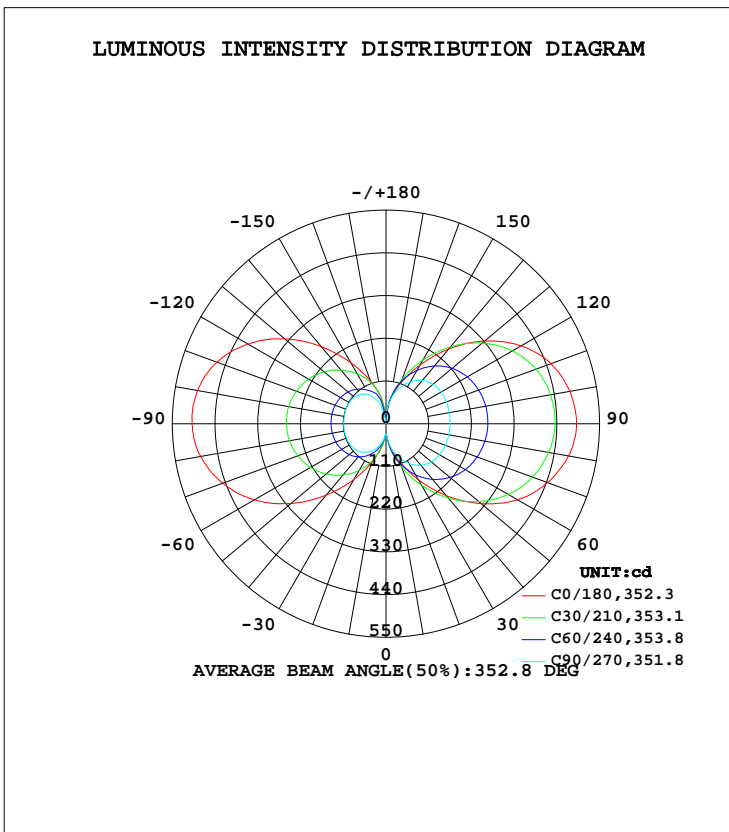


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:ASD-LWS27N-48D36BK	TYPE:LED	WEIGHT:
SPEC.:5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	ASD-LWS27N-48D36BK	Imax(cd)	558.6	S/MH(C0/180)	5.85
NOMINAL POWER(W)	36	LOR(%)	100.0	S/MH(C90/270)	3.38
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	2849.7	η UP, DN(C0-180)	30.2,29.6
NOMINAL FLUX(lm)	2849.7	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	20.3,20.0
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: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 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	57.51	64.63	57.15	64.67	56.86	54.76	45.37	54.90	0- 10	4.158	4.158	0.15,0.15
20	104.5	118.0	89.56	118.7	104.3	87.79	65.19	86.36	10- 20	22.41	26.56	0.93,0.93
30	165.4	167.6	118.2	170.0	165.5	114.7	82.64	110.1	20- 30	54.91	81.47	2.86,2.86
40	241.8	212.6	139.5	216.4	239.7	137.6	95.77	131.2	30- 40	100.2	181.7	6.38,6.38
50	320.3	249.9	152.6	254.6	319.4	155.5	103.1	147.7	40- 50	154.0	335.7	11.8,11.8
60	391.5	277.8	159.4	283.6	391.6	169.1	107.0	159.9	50- 60	209.1	544.8	19.1,19.1
70	442.7	298.0	162.7	305.1	447.5	178.6	108.3	168.4	60- 70	257.8	802.7	28.2,28.2
80	477.4	310.8	164.3	319.6	484.3	184.6	108.8	173.4	70- 80	294.1	1097	38.5,38.5
90	490.7	316.0	165.5	325.6	499.4	187.2	108.8	174.8	80- 90	314.3	1411	49.5,49.5
100	480.9	313.3	166.0	322.9	492.8	186.5	109.2	173.4	90-100	315.3	1726	60.6,60.6
110	452.0	302.7	165.6	312.0	463.2	182.0	109.7	168.4	100-110	297.6	2024	71,71
120	401.3	284.6	164.4	293.4	410.2	174.0	109.1	160.6	110-120	263.0	2287	80.2,80.2
130	331.9	257.7	158.3	264.9	339.8	161.3	106.5	148.6	120-130	214.8	2502	87.8,87.8
140	251.8	221.1	145.6	227.2	259.3	144.7	99.01	132.7	130-140	159.4	2661	93.4,93.4
150	174.0	175.7	124.2	180.6	181.4	124.6	85.68	110.0	140-150	104.5	2766	97,97
160	111.7	122.8	96.11	127.4	117.2	101.5	62.72	80.57	150-160	57.70	2823	99.1,99.1
170	62.37	65.37	60.11	68.22	64.92	53.97	19.68	29.29	160-170	23.26	2847	99.9,99.9
180	0	0	26.23	0	0.1431	0.1491	0.1846	0.2305	170-180	3.141	2850	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 251.74 lm

%lum = 8.8%

%lamp = 8.8%

Conical surface Flux(120deg): 544.82 lm

%lum = 19.1%

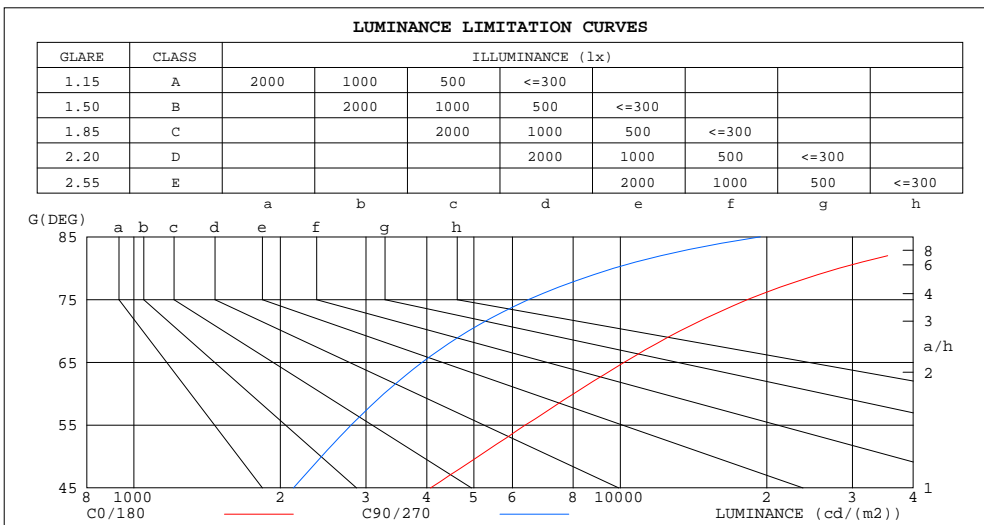
%lamp = 19.1%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-48D36BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	57191	19390
80	28168	9694
75	18258	6475
70	13261	4874
65	10181	3914
60	8023	3265
55	6375	2796
50	5105	2432
45	4071	2128

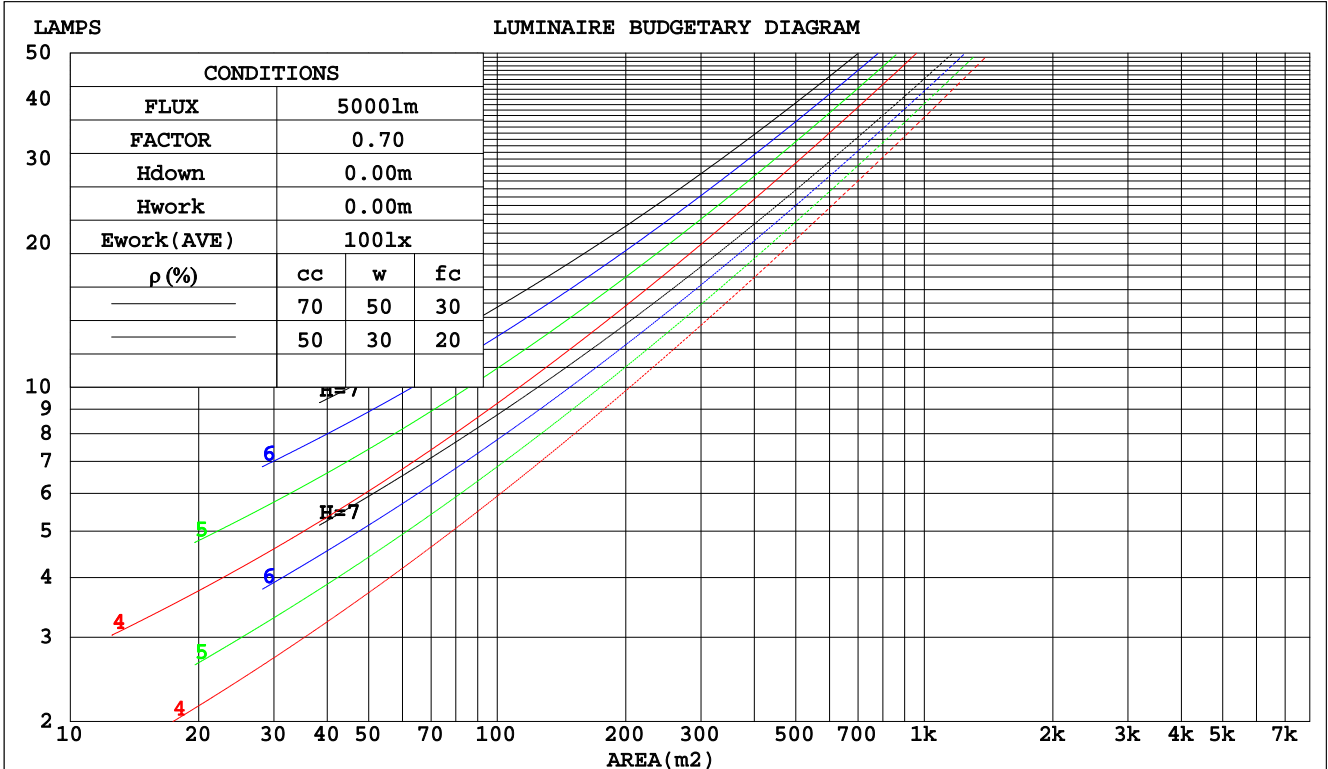
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-48D36BK_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	.85	.79	.74	.78	.73	.68	.64	.60	.56	.52	.49	.46	.40	.38	.36	.30
2.0	.71	.63	.56	.65	.58	.51	.53	.47	.42	.42	.38	.34	.32	.29	.26	.21
3.0	.61	.51	.44	.55	.47	.40	.45	.39	.33	.36	.31	.26	.27	.23	.20	.15
4.0	.53	.43	.36	.48	.39	.33	.39	.32	.27	.31	.25	.21	.23	.19	.16	.12
5.0	.46	.37	.29	.42	.33	.27	.34	.27	.22	.27	.21	.17	.20	.16	.13	.09
6.0	.41	.31	.25	.37	.29	.23	.30	.24	.18	.24	.19	.14	.18	.14	.10	.07
7.0	.37	.27	.21	.33	.25	.19	.27	.21	.16	.21	.16	.12	.16	.12	.09	.06
8.0	.33	.24	.18	.30	.22	.17	.24	.18	.14	.19	.14	.10	.15	.10	.07	.05
9.0	.30	.21	.16	.27	.20	.14	.22	.16	.12	.18	.13	.09	.13	.09	.06	.04
10.0	.27	.19	.14	.25	.18	.13	.20	.14	.10	.16	.11	.08	.12	.08	.06	.04



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-48D36BK_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	.434	.247	.078	.411	.235	.075	.369	.212	.068	.330	.190	.061	.294	.170	.055	
2.0	.358	.196	.060	.337	.186	.057	.298	.166	.052	.263	.147	.046	.229	.130	.041	
3.0	.310	.165	.049	.291	.156	.047	.255	.138	.042	.222	.122	.037	.192	.106	.033	
4.0	.274	.142	.042	.257	.134	.040	.224	.119	.036	.194	.104	.031	.166	.090	.027	
5.0	.246	.126	.036	.230	.118	.034	.200	.104	.031	.173	.091	.027	.146	.078	.024	
6.0	.224	.112	.032	.209	.106	.030	.181	.093	.027	.156	.081	.024	.131	.069	.021	
7.0	.205	.101	.029	.192	.095	.027	.166	.084	.024	.142	.073	.021	.119	.062	.018	
8.0	.189	.092	.026	.177	.087	.025	.153	.076	.022	.130	.066	.019	.109	.056	.016	
9.0	.175	.085	.024	.164	.080	.022	.142	.070	.020	.121	.061	.017	.101	.051	.015	
10.0	.164	.078	.022	.153	.074	.021	.132	.065	.018	.112	.056	.016	.094	.047	.014	

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	.335	.335	.335	.193	.193	.193	.062	.062	.062	
1.0	.577	.543	.512	.493	.466	.441	.338	.321	.305	.194	.185	.177	.062	.060	.057	
2.0	.571	.522	.480	.489	.449	.415	.335	.311	.290	.193	.181	.170	.062	.058	.055	
3.0	.565	.507	.461	.484	.437	.400	.332	.304	.280	.192	.177	.165	.062	.058	.054	
4.0	.557	.496	.449	.478	.428	.390	.329	.299	.275	.190	.175	.162	.061	.057	.053	
5.0	.550	.487	.440	.472	.421	.383	.325	.294	.271	.188	.173	.161	.061	.056	.053	
6.0	.542	.480	.435	.466	.415	.378	.322	.291	.268	.187	.171	.159	.060	.056	.053	
7.0	.536	.474	.430	.461	.410	.375	.318	.288	.266	.185	.170	.158	.060	.056	.052	
8.0	.529	.468	.427	.455	.406	.372	.315	.285	.264	.183	.168	.157	.059	.055	.052	
9.0	.523	.464	.424	.450	.403	.370	.312	.283	.263	.182	.167	.157	.059	.055	.052	
10.0	.517	.460	.422	.446	.400	.368	.309	.281	.262	.180	.166	.156	.058	.055	.052	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm										
NAME:					TYPE:LED			WEIGHT:		
SPEC.:ASD-LWS27N-48D36BK_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	18.1	19.2	18.9	20.1	21.3	13.6	14.7	14.5	15.6	16.8
3H	22.1	23.1	23.0	24.1	25.3	16.5	17.5	17.4	18.5	19.7
4H	24.3	25.2	25.2	26.2	27.4	18.2	19.1	19.1	20.1	21.3
6H	26.5	27.4	27.5	28.4	29.6	20.0	20.9	20.9	21.8	23.1
8H	27.8	28.6	28.7	29.6	30.8	21.0	21.9	21.9	22.8	24.1
12H	29.1	30.0	30.1	30.9	32.2	22.2	23.0	23.1	24.0	25.2
4H 2H	18.6	19.5	19.5	20.5	21.7	15.7	16.7	16.6	17.6	18.8
3H	22.9	23.7	23.8	24.7	25.9	18.6	19.4	19.5	20.4	21.6
4H	25.3	26.0	26.2	27.0	28.3	20.2	21.0	21.2	22.0	23.3
6H	27.9	28.6	28.8	29.6	30.9	22.1	22.8	23.0	23.8	25.1
8H	29.3	29.9	30.2	30.9	32.2	23.1	23.7	24.1	24.7	26.0
12H	30.8	31.4	31.8	32.4	33.7	24.3	24.9	25.2	25.9	27.2
8H 4H	25.6	26.2	26.5	27.2	28.5	21.8	22.5	22.8	23.5	24.8
6H	28.5	29.1	29.5	30.1	31.4	23.9	24.4	24.9	25.5	26.8
8H	30.2	30.7	31.2	31.7	33.0	25.0	25.5	26.0	26.5	27.9
12H	32.0	32.5	33.1	33.5	34.9	26.3	26.7	27.3	27.8	29.1
12H 4H	25.6	26.2	26.6	27.2	28.5	22.5	23.1	23.5	24.1	25.4
6H	28.6	29.1	29.6	30.1	31.5	24.6	25.1	25.7	26.2	27.5
8H	30.4	30.8	31.4	31.9	33.2	25.9	26.3	26.9	27.4	28.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.3 / - 0.4					+ 0.2 / - 0.2				
2.0H	+ 0.4 / - 0.5					+ 0.3 / - 0.4				

CIE Pub.117, 2850 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 3.6)
 Area: 0.0976 m2

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-48D36BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

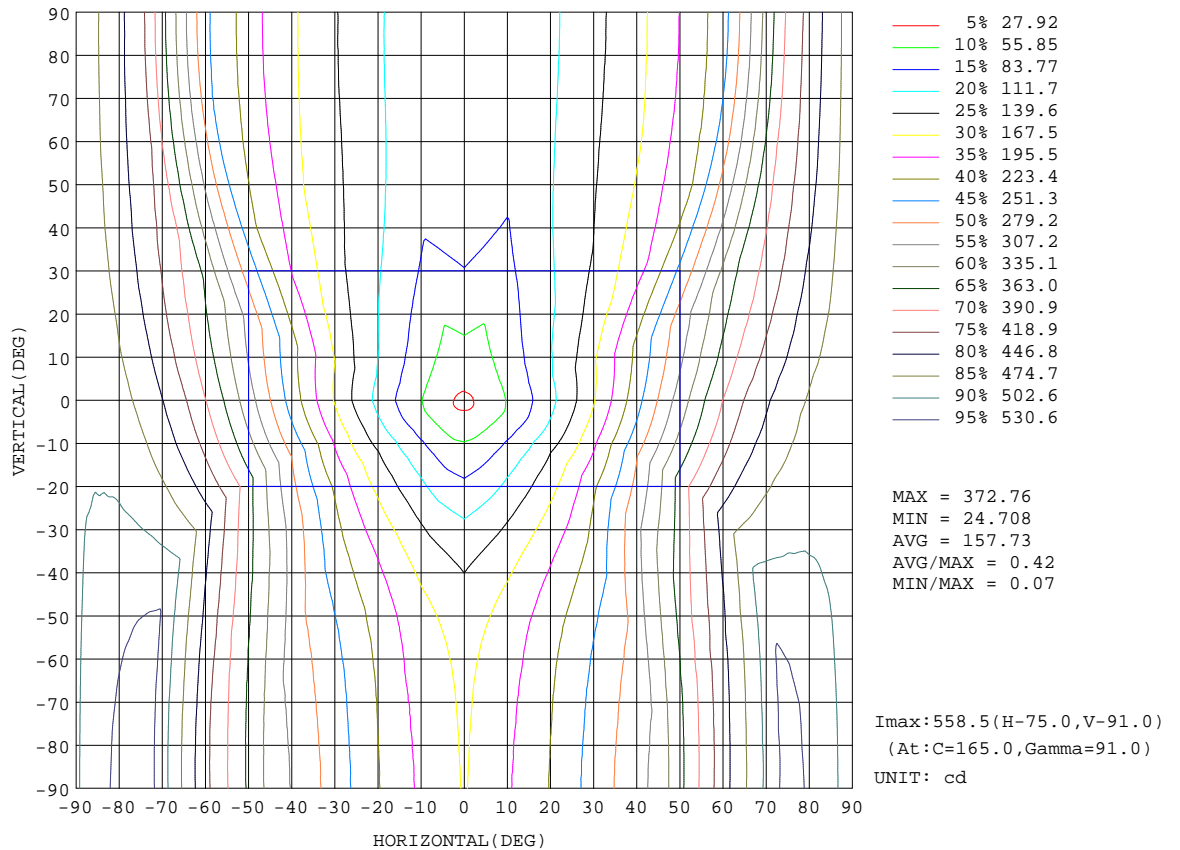
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	34	21	13	32	20	13	28	18	12	4
0.80	42	28	19	39	26	18	34	23	16	7
1.00	49	35	25	46	32	24	40	31	21	9
1.25	56	41	31	52	39	30	45	34	26	12
1.50	62	47	37	57	44	35	48	38	30	15
2.00	69	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	24
4.00	84	74	66	78	69	61	65	58	52	28
5.00	88	79	71	81	73	66	68	62	56	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: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-48D36BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

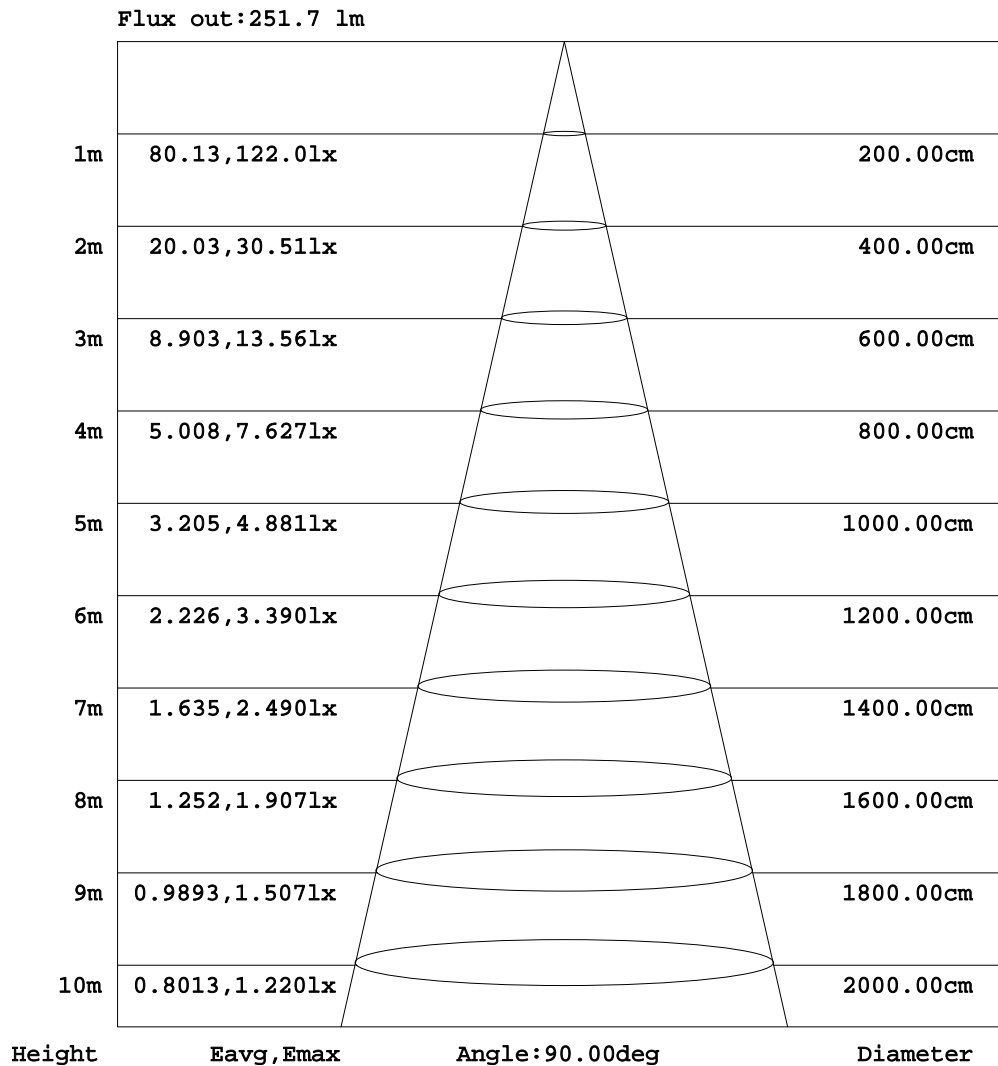


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators:Alan Wang
 Test Date:15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance:2.500m [K=1.0423]
 Remarks:

AAI Figure

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-48D36BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



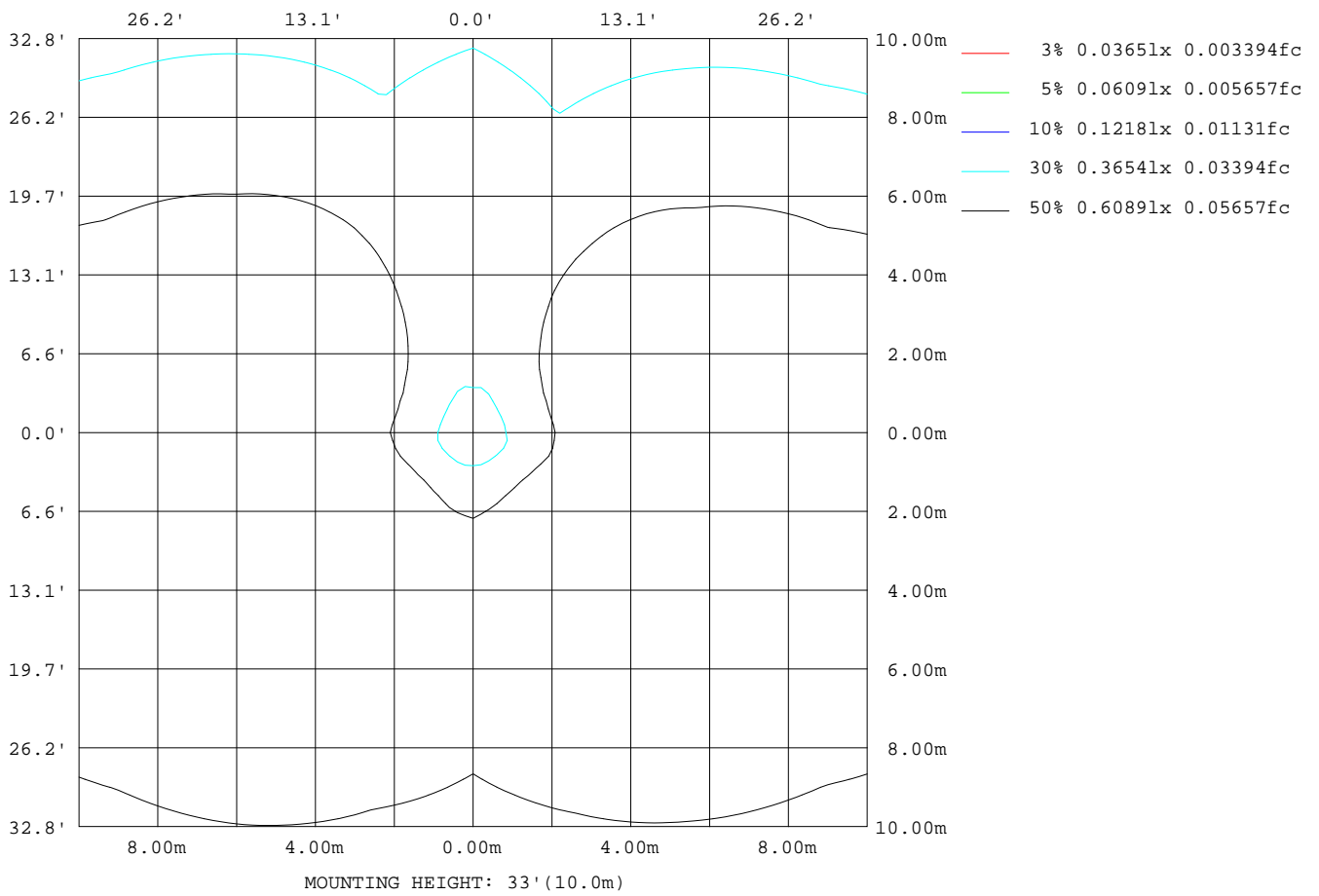
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators:Alan Wang
 Test Date:15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance:2.500m [K=1.0423]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-48D36BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

LED Avg.L Report

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-48D36BK_5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

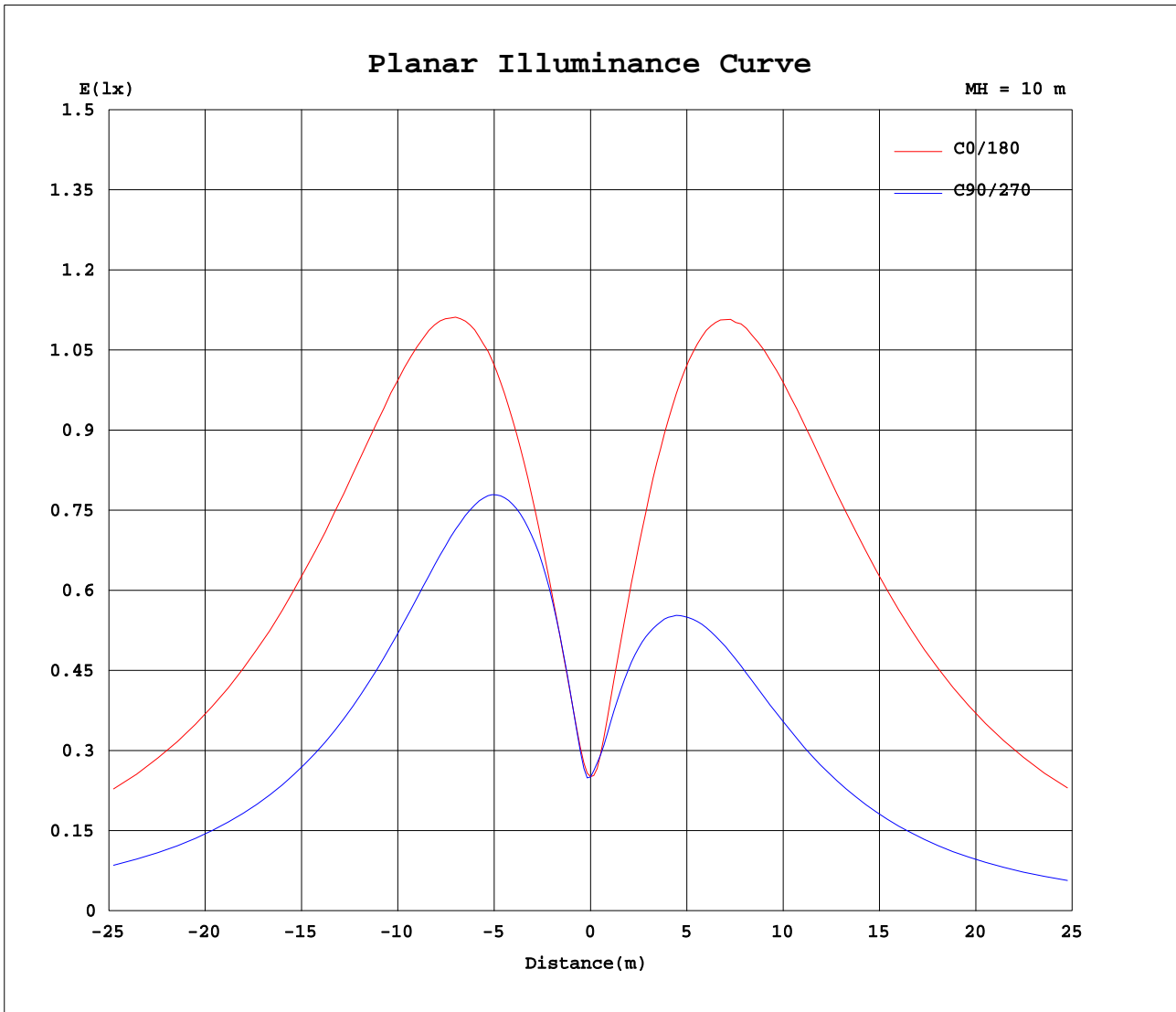
AvgL	cd/m2
L_0~180(65)av	10210
L_0~180(75)av	18405
L_0~180(85)av	57669
L_90~270(65)av	3265
L_90~270(75)av	5387
L_90~270(85)av	16097
L_45(65)av	5602
L_45(75)av	9614
L_45(85)av	29355

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Alan Wang
Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
Humidity: 42.7%
Test Distance: 2.500m [K=1.0423]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-48D36BK_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	25.1	25.1	25.1	25.1	25.0	25.1	25.1	25.1	25.0	24.9	24.9	24.9	25.1	25.1	25.1	25.1	25.0	25.1	25.1
5	37.7	36.4	37.1	38.2	38.4	37.7	37.7	37.3	37.6	37.8	37.0	35.8	36.5	37.5	37.5	36.5	34.8	33.7	33.6
10	57.5	57.2	62.1	64.6	63.5	60.0	57.2	58.5	62.5	64.7	63.1	58.5	56.9	59.0	58.3	54.8	49.1	43.0	45.4
15	79.4	82.1	89.8	91.5	87.7	80.5	74.3	78.6	87.1	91.9	91.4	84.3	79.1	81.9	79.2	72.3	62.3	51.3	55.8
20	104	111	119	118	110	99.1	89.6	97.2	110	119	121	113	104	106	99.9	87.8	73.7	58.8	65.2
25	133	143	150	143	131	117	104	115	131	145	152	146	133	132	120	102	84.4	66.1	74.3
30	165	179	183	168	152	134	118	132	152	170	184	182	165	161	138	115	94.5	73.4	82.6
35	202	220	216	191	170	149	130	147	172	194	216	222	201	191	156	127	104	79.7	90.0
40	242	263	250	213	187	161	139	160	189	216	249	264	240	222	172	138	111	85.3	95.8
45	281	308	282	232	202	172	147	170	204	237	280	308	280	254	187	147	118	89.6	100
50	320	352	312	250	215	180	153	179	218	255	309	352	319	285	201	156	123	93.1	103
55	357	394	339	265	227	187	156	186	230	270	336	394	357	315	214	163	128	95.9	106
60	392	432	364	278	236	193	159	191	240	284	360	433	392	342	225	169	132	98.0	107
65	420	465	385	289	244	197	161	195	247	296	379	467	422	367	234	174	135	99.5	108
70	443	492	401	298	250	200	163	198	254	305	394	498	448	387	241	179	137	101	108
75	461	515	414	305	255	202	164	201	259	313	407	522	469	404	248	182	139	101	109
80	477	531	425	311	258	204	164	203	263	320	417	541	484	417	252	185	140	102	109
85	486	541	432	314	261	206	165	204	266	324	423	553	495	426	255	186	141	102	109
90	491	544	435	316	262	206	165	205	267	326	426	558	499	429	256	187	141	103	109
95	487	539	435	315	262	207	166	205	267	325	425	556	499	429	256	187	141	103	109
100	481	529	430	313	261	206	166	205	266	323	421	548	493	423	255	186	141	103	109
105	468	514	422	309	258	205	166	204	263	318	414	533	481	413	251	185	141	103	109
110	452	493	411	303	254	203	166	202	259	312	402	511	463	400	245	182	139	103	110
115	430	466	395	295	248	201	165	201	254	304	387	483	440	380	239	179	138	102	110
120	401	433	376	285	242	198	164	197	247	293	369	449	410	357	230	174	135	101	109
125	369	395	351	272	233	193	162	193	238	280	347	410	378	330	220	168	132	99.7	108
130	332	355	323	258	222	186	158	186	227	265	322	367	340	300	208	161	128	97.5	106
135	293	311	292	241	209	178	153	178	214	247	294	323	301	270	195	154	122	94.2	103
140	252	266	258	221	194	168	146	167	199	227	263	278	259	237	180	145	116	89.6	99.0
145	212	223	223	199	177	155	136	155	181	205	230	234	219	205	165	135	109	84.0	93.3
150	174	182	189	176	158	140	124	139	161	181	196	194	181	175	149	125	101	77.9	85.7
155	141	145	155	150	138	123	111	122	140	155	162	155	147	147	132	114	93.1	72.1	74.4
160	112	112	122	123	116	105	96.1	105	118	127	129	121	117	119	113	101	84.7	65.4	62.7
165	86.3	83.4	91.9	94.2	91.9	85.4	79.9	84.6	93.4	98.4	98.7	90.2	90.7	92.0	91.8	85.9	72.0	52.2	46.5
170	62.4	60.0	62.3	65.4	65.1	62.1	60.1	61.6	66.3	68.2	66.9	63.3	64.9	65.1	63.5	54.0	40.3	29.1	19.7
175	20.1	27.9	34.5	38.0	38.7	38.4	38.7	38.7	39.2	38.6	33.4	24.4	21.9	23.0	18.2	13.6	9.24	5.99	3.17
180	0.00	0.00	0.00	0.00	8.77	23.8	26.2	23.0	0.73	0.00	0.00	0.00	0.14	0.14	0.14	0.15	0.12	0.15	0.18

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance: 2.500m [K=1.0423]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.2873A P:33.68W PF:0.9768 Freq:60.00Hz Lamp Flux:2849.7x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:ASD-LWS27N-48D36BK_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	25.1	25.0	24.9	24.9	24.9														
5	34.0	35.6	37.3	38.2	38.1														
10	43.4	49.4	54.9	58.4	58.9														
15	51.1	61.8	71.5	78.7	81.4														
20	57.9	72.3	86.4	98.6	106														
25	64.2	81.9	99.1	117	131														
30	70.2	90.4	110	134	158														
35	76.0	98.9	121	150	188														
40	80.8	106	131	166	218														
45	84.6	112	140	180	249														
50	87.3	117	148	193	279														
55	89.6	121	155	204	306														
60	91.3	124	160	213	331														
65	92.3	127	165	221	352														
70	93.2	128	168	227	368														
75	93.6	130	171	232	380														
80	93.9	131	173	235	390														
85	93.9	131	174	237	396														
90	94.1	131	175	238	396														
95	94.2	131	175	238	393														
100	94.5	130	173	235	386														
105	94.5	130	171	231	376														
110	94.2	129	168	226	362														
115	93.7	127	165	218	345														
120	93.0	124	161	210	324														
125	91.6	122	155	200	300														
130	89.5	118	149	189	274														
135	86.8	113	141	177	246														
140	83.2	107	133	164	217														
145	78.3	99.0	123	149	187														
150	72.9	89.1	110	132	158														
155	64.8	75.5	95.6	114	131														
160	58.9	62.7	80.6	95.6	107														
165	46.8	45.0	63.2	77.6	84.8														
170	20.3	20.7	29.3	44.0	57.0														
175	2.65	4.06	6.08	9.00	13.1														
180	0.21	0.22	0.23	0.17	0.17														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Alan Wang
 Test Date: 15 December 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.7%
 Test Distance: 2.500m [K=1.0423]
 Remarks: