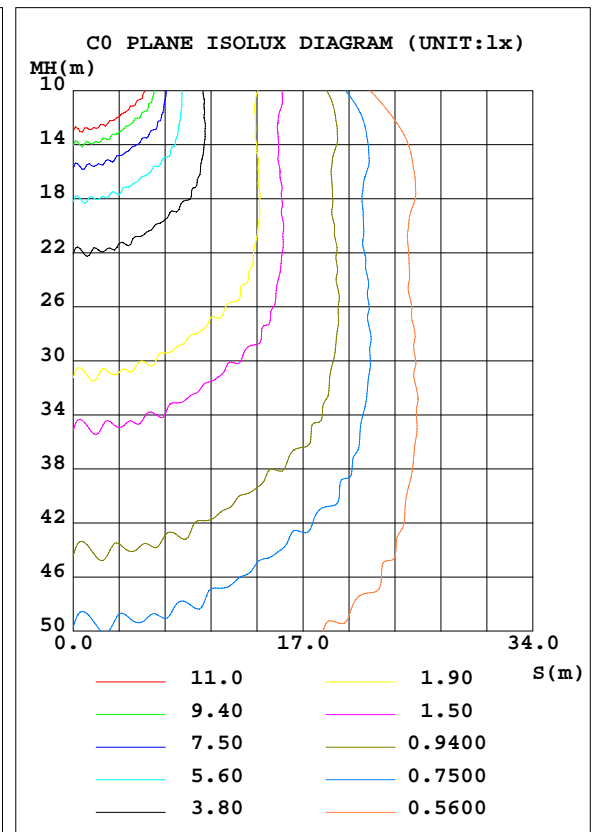
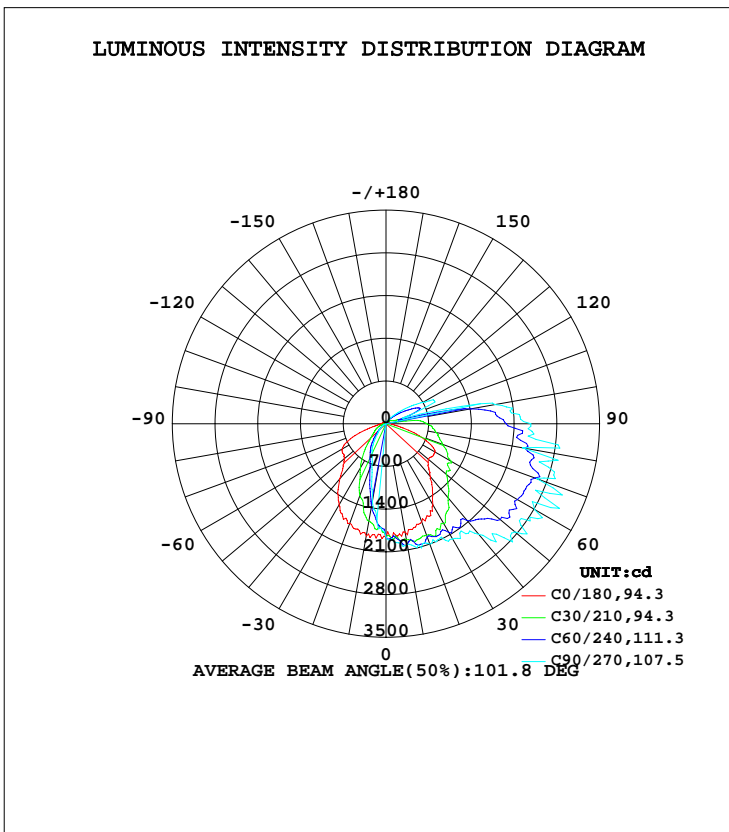


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 151.62 lm/W			
MODEL	ASD-WLP01-50D50-PC-PRM	I _{max} (cd)	3160	S/MH(C0/180)	1.22
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH(C90/270)	0.48
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	7878.4	η UP, DN(C0-180)	15.1,71.3
NOMINAL FLUX(lm)	7878.39	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	0.4,13.1
LAMPS INSIDE	1	η up(%)	15.6	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	120	η down(%)	84.4	CIBSE SHR MAX	1.15



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1801	1993	2013	1962	1867	1441	1297	1461	0- 10	168.7	168.7	2.14,2.14
20	1710	1980	2101	1985	1737	931.1	665.6	915.9	10- 20	454.5	623.2	7.91,7.91
30	1542	1964	2183	1952	1537	611.1	447.7	615.9	20- 30	658.0	1281	16.3,16.3
40	1137	1864	2368	1823	1180	376.1	223.4	363.6	30- 40	779.9	2061	26.2,26.2
50	906.4	1894	2759	1852	896.5	199.7	119.3	200.3	40- 50	861.0	2922	37.1,37.1
60	926.5	1924	2812	1871	829.4	90.44	40.48	96.30	50- 60	950.4	3872	49.2,49.2
70	578.2	1920	2628	1795	502.0	29.11	2.460	32.61	60- 70	999.9	4872	61.8,61.8
80	160.9	1854	2271	1751	152.7	12.63	3.090	14.75	70- 80	951.8	5824	73.9,73.9
90	85.04	1517	2375	1450	84.32	6.032	3.154	6.863	80- 90	828.5	6653	84.4,84.4
100	47.88	935.5	1815	802.2	46.65	4.675	6.614	5.210	90-100	639.3	7292	92.6,92.6
110	62.71	208.8	386.1	212.5	61.71	4.558	6.948	5.103	100-110	230.3	7522	95.5,95.5
120	38.23	247.8	704.4	220.7	40.59	4.273	6.473	4.258	110-120	175.9	7698	97.7,97.7
130	13.78	158.5	344.2	154.5	15.37	3.172	5.370	3.148	120-130	109.1	7807	99.1,99.1
140	5.472	86.21	148.2	86.17	6.215	2.753	4.064	2.739	130-140	46.31	7854	99.7,99.7
150	2.442	36.52	60.56	35.75	2.986	2.932	2.317	2.847	140-150	17.62	7871	99.9,99.9
160	1.897	7.245	23.86	8.006	3.127	2.176	2.238	2.790	150-160	5.636	7877	100,100
170	3.059	2.782	3.018	2.752	2.412	2.830	1.495	2.059	160-170	1.167	7878	100,100
180	3.787	3.787	3.787	3.787	3.282	3.282	3.282	3.282	170-180	0.2533	7878	100,100
DEG	LUMINOUS INTENSITY:cd Less than 35% Percent = 14.0 %									UNIT:lm		

Conical surface Flux(90deg): 2479.7 lm

%lum = 31.5%
 %lamp = 31.5%

Conical surface Flux(120deg): 3872.5 lm

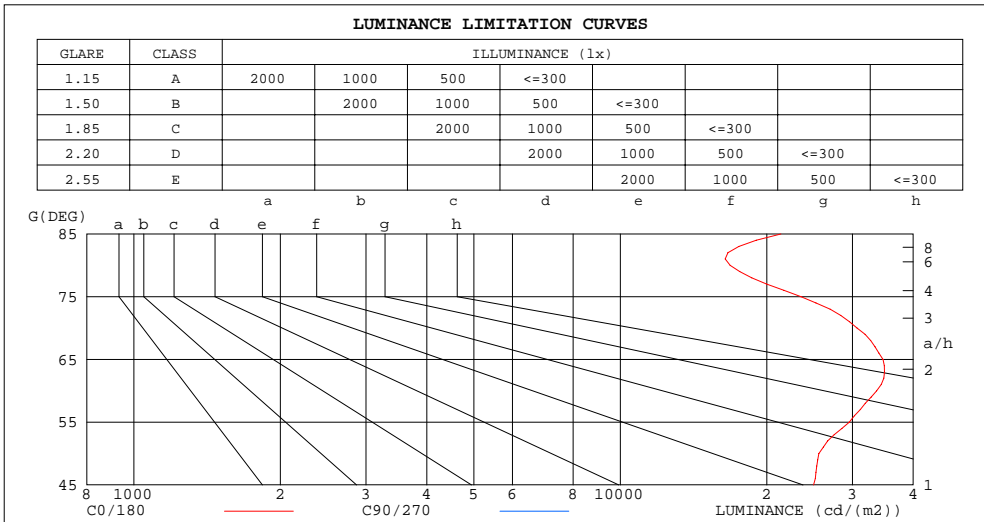
%lum = 49.2%
 %lamp = 49.2%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	21378	486886
80	16821	237323
75	23534	193183
70	30679	139451
65	34684	123228
60	33629	102080
55	29553	85657
50	25591	77912
45	24956	65699

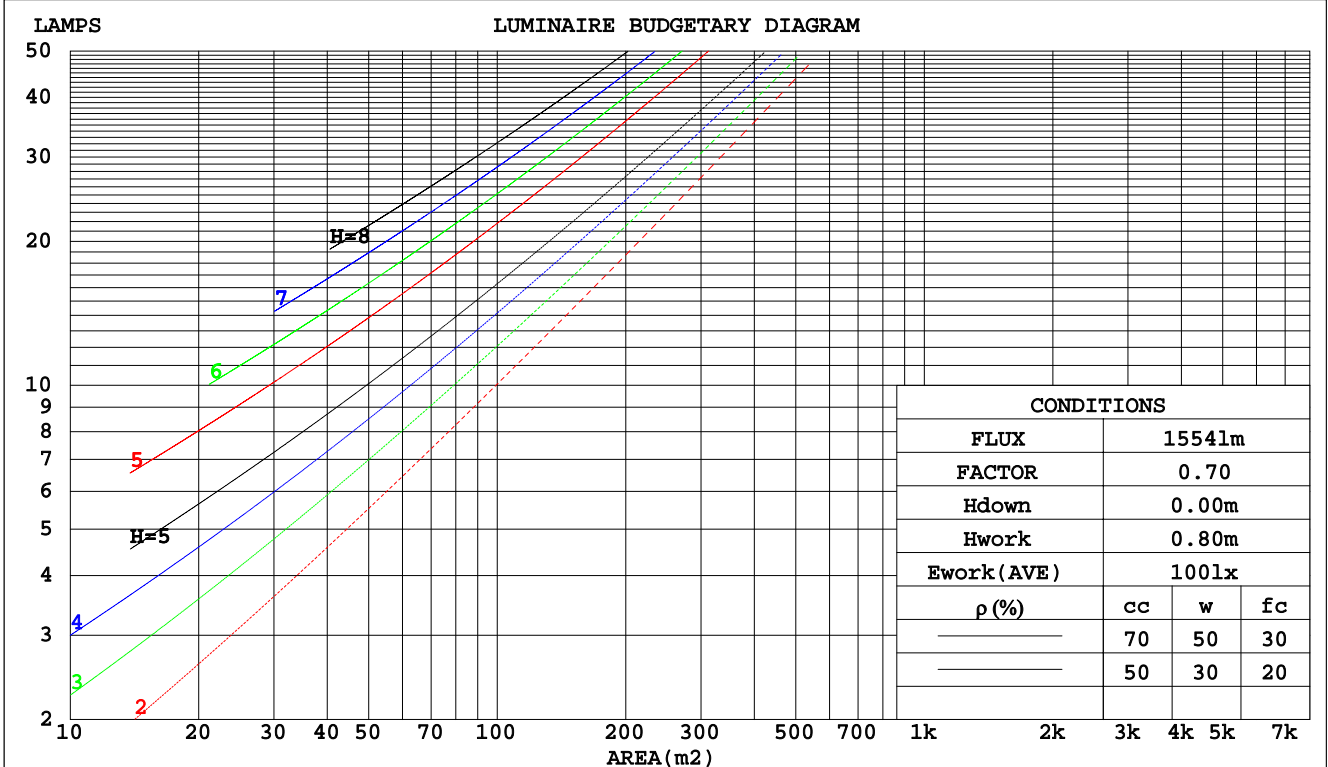
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.15	1.15	1.15	1.11	1.11	1.11	1.02	1.02	1.02	.95	.95	.95	.88	.88	.88	.84
1.0	.94	.88	.82	.90	.84	.80	.83	.78	.74	.76	.72	.69	.70	.67	.64	.61
2.0	.79	.71	.64	.76	.68	.62	.70	.63	.58	.64	.59	.54	.59	.54	.51	.47
3.0	.68	.59	.51	.66	.57	.50	.60	.53	.47	.55	.49	.44	.51	.46	.41	.38
4.0	.60	.50	.42	.57	.48	.41	.53	.45	.39	.49	.42	.37	.45	.39	.34	.32
5.0	.53	.43	.36	.51	.42	.35	.47	.39	.33	.43	.37	.31	.40	.34	.29	.27
6.0	.48	.38	.31	.46	.37	.30	.42	.34	.29	.39	.32	.27	.36	.30	.26	.23
7.0	.43	.34	.27	.41	.33	.26	.38	.31	.25	.35	.29	.24	.33	.27	.23	.20
8.0	.39	.30	.24	.38	.29	.23	.35	.28	.22	.32	.26	.21	.30	.24	.20	.18
9.0	.36	.27	.21	.34	.26	.21	.32	.25	.20	.30	.24	.19	.28	.22	.18	.16
10.0	.33	.25	.19	.32	.24	.19	.30	.23	.18	.28	.22	.17	.26	.20	.16	.14



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

WEC AND CCEC

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	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	.431	.245	.078	.419	.239	.076	.396	.227	.073	.376	.217	.070	.356	.207	.067	
2.0	.362	.198	.061	.351	.193	.060	.331	.184	.057	.312	.175	.055	.294	.166	.052	
3.0	.316	.168	.050	.306	.164	.049	.288	.156	.047	.270	.148	.045	.254	.141	.044	
4.0	.281	.146	.043	.272	.142	.042	.255	.135	.040	.240	.129	.039	.225	.122	.037	
5.0	.253	.129	.037	.245	.126	.037	.230	.120	.035	.216	.114	.034	.202	.108	.033	
6.0	.230	.115	.033	.223	.113	.032	.209	.107	.031	.196	.102	.030	.184	.097	.029	
7.0	.211	.104	.030	.205	.102	.029	.192	.097	.028	.180	.092	.027	.169	.088	.026	
8.0	.195	.095	.027	.189	.093	.026	.177	.089	.025	.167	.084	.024	.157	.080	.023	
9.0	.181	.088	.024	.176	.086	.024	.165	.082	.023	.155	.078	.022	.146	.074	.021	
10.0	.169	.081	.022	.164	.079	.022	.154	.076	.021	.145	.072	.020	.136	.069	.020	

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	.309	.309	.309	.264	.264	.264	.180	.180	.180	.104	.104	.104	.033	.033	.033	
1.0	.308	.275	.244	.264	.236	.210	.180	.162	.145	.104	.094	.085	.033	.030	.027	
2.0	.302	.252	.210	.259	.217	.181	.177	.150	.127	.102	.087	.074	.033	.028	.024	
3.0	.294	.236	.189	.252	.203	.164	.173	.141	.115	.100	.082	.068	.032	.027	.022	
4.0	.286	.223	.175	.246	.193	.152	.169	.134	.107	.098	.079	.063	.031	.026	.021	
5.0	.278	.213	.166	.239	.185	.144	.164	.129	.102	.095	.076	.060	.031	.025	.020	
6.0	.270	.205	.159	.232	.178	.138	.160	.125	.098	.093	.073	.058	.030	.024	.019	
7.0	.263	.199	.154	.226	.172	.134	.156	.121	.095	.091	.071	.057	.029	.023	.019	
8.0	.256	.193	.150	.220	.168	.131	.152	.118	.093	.089	.069	.055	.029	.023	.018	
9.0	.249	.188	.147	.215	.163	.129	.149	.115	.091	.087	.068	.054	.028	.022	.018	
10.0	.243	.184	.145	.209	.160	.127	.145	.113	.090	.085	.067	.054	.027	.022	.018	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm										
NAME: ASD Lighting Corp					TYPE: LED			WEIGHT:		
SPEC.: ASD-WLP01-50D50-PC-PRM					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	23.7	25.2	24.3	25.8	26.4	29.5	31.0	30.1	31.6	32.3
3H	27.0	28.3	27.6	28.9	29.6	33.6	35.0	34.2	35.6	36.3
4H	28.0	29.3	28.6	29.9	30.7	35.5	36.8	36.1	37.4	38.1
6H	28.7	29.9	29.3	30.6	31.3	37.3	38.5	37.9	39.1	39.9
8H	28.9	30.1	29.6	30.8	31.5	38.4	39.6	39.1	40.3	41.0
12H	29.1	30.2	29.7	30.9	31.6	39.6	40.7	40.3	41.4	42.2
4H 2H	26.4	27.7	27.0	28.3	29.0	30.0	31.3	30.6	31.9	32.7
3H	28.8	30.0	29.5	30.6	31.4	34.5	35.6	35.1	36.3	37.0
4H	30.0	31.0	30.6	31.7	32.4	36.6	37.7	37.3	38.3	39.1
6H	31.1	32.0	31.7	32.7	33.5	38.7	39.6	39.4	40.3	41.1
8H	31.5	32.4	32.2	33.1	33.9	39.9	40.8	40.6	41.5	42.3
12H	31.8	32.7	32.5	33.4	34.2	41.3	42.1	42.0	42.8	43.6
8H 4H	32.4	33.2	33.0	33.9	34.7	37.0	37.9	37.7	38.6	39.4
6H	33.5	34.2	34.2	35.0	35.8	39.5	40.2	40.2	41.0	41.8
8H	34.0	34.7	34.7	35.4	36.2	40.9	41.6	41.6	42.3	43.2
12H	34.5	35.2	35.2	35.9	36.7	42.6	43.2	43.3	43.9	44.8
12H 4H	33.2	34.0	33.9	34.7	35.5	37.0	37.8	37.7	38.6	39.4
6H	34.7	35.4	35.4	36.1	36.9	39.6	40.3	40.3	41.0	41.8
8H	35.3	36.0	36.0	36.7	37.5	41.2	41.8	41.9	42.5	43.4
CIE190: 2010										

CIE190: 2010
Area: 0.0551 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 21.3DEG
Operators: Alan Wang
Test Date: 07 December 2020

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
Humidity: 49.7%
Test Distance: 2.500m [K=1.0459]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

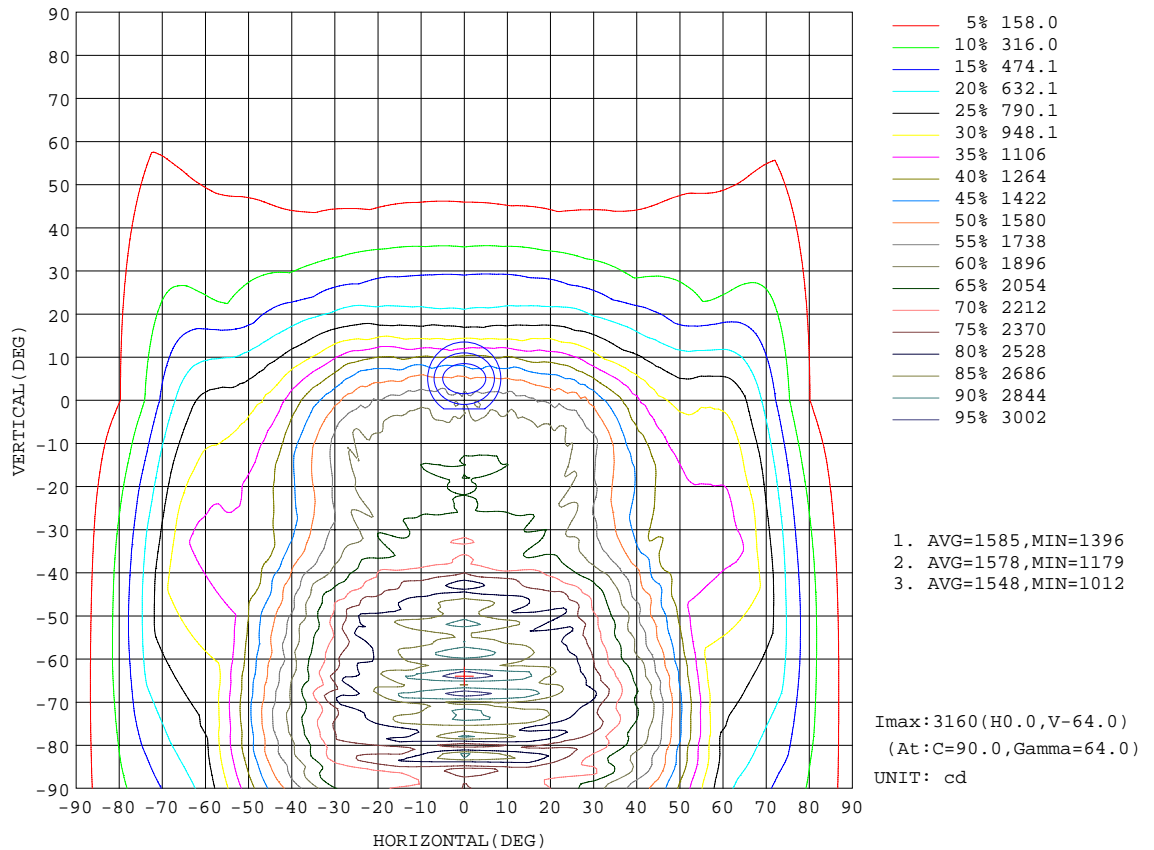
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	47	34	26	46	34	26	44	33	26	19
0.80	55	42	33	54	41	33	51	40	33	25
1.00	63	49	40	61	48	40	58	49	39	30
1.25	69	56	47	67	55	46	63	53	45	35
1.50	74	61	52	72	60	51	67	57	50	39
2.00	82	70	61	79	68	60	74	64	57	46
2.50	87	75	67	83	73	65	77	69	62	50
3.00	90	80	72	87	78	70	81	73	67	54
4.00	95	86	79	92	84	77	85	78	73	59
5.00	99	91	84	95	88	82	88	82	77	63
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: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

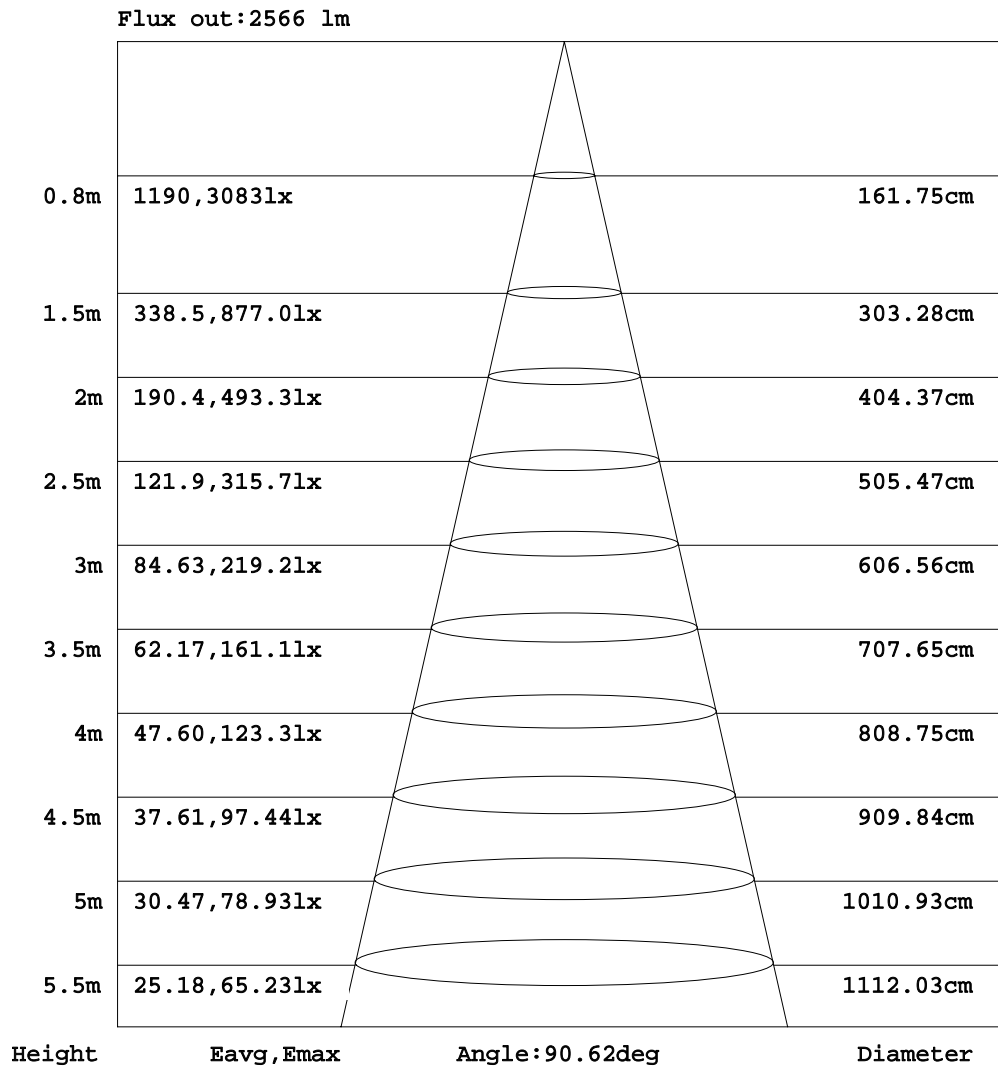


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

AAI Figure

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



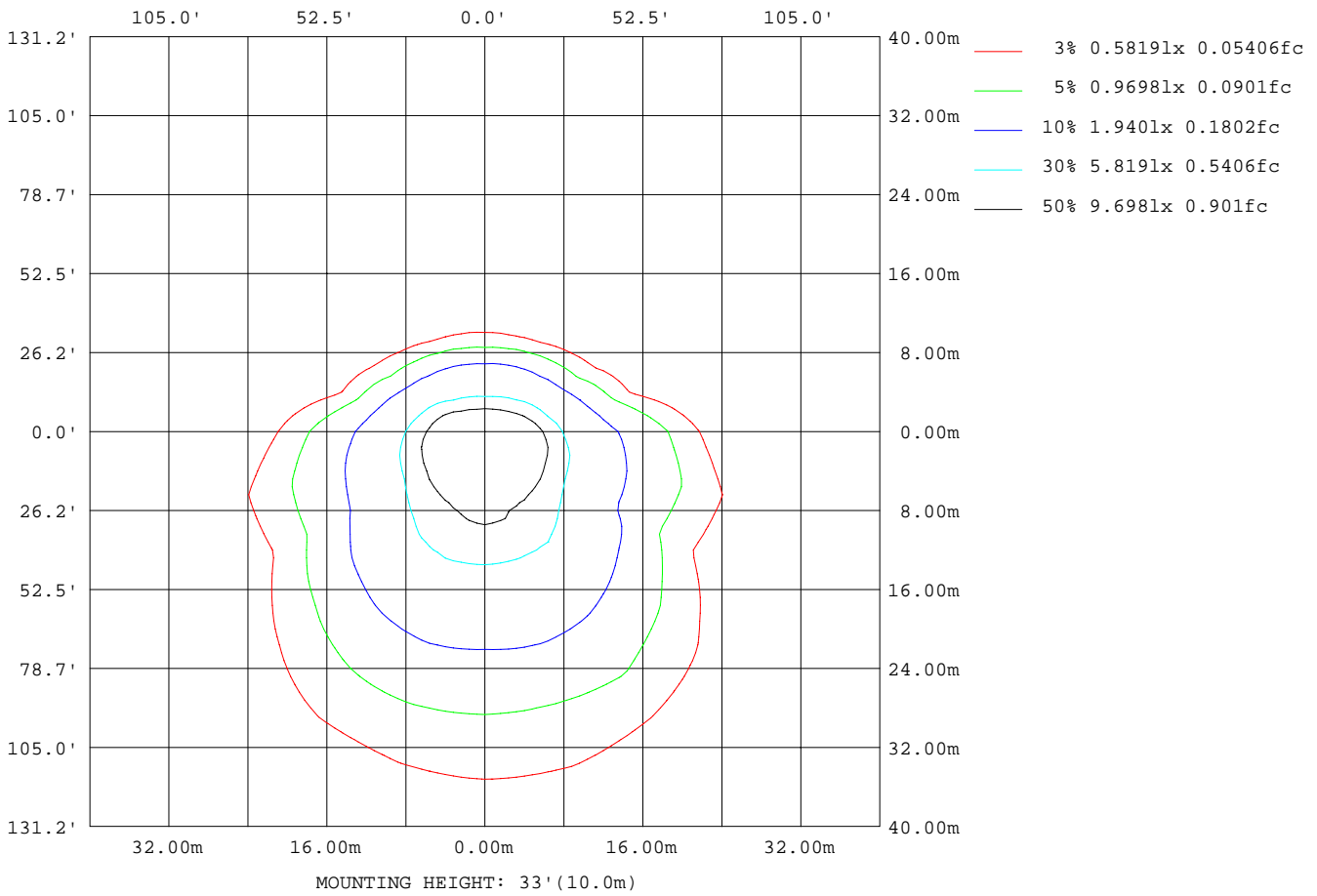
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators:Alan Wang
 Test Date:07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance:2.500m [K=1.0459]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

LED Avg.L Report

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

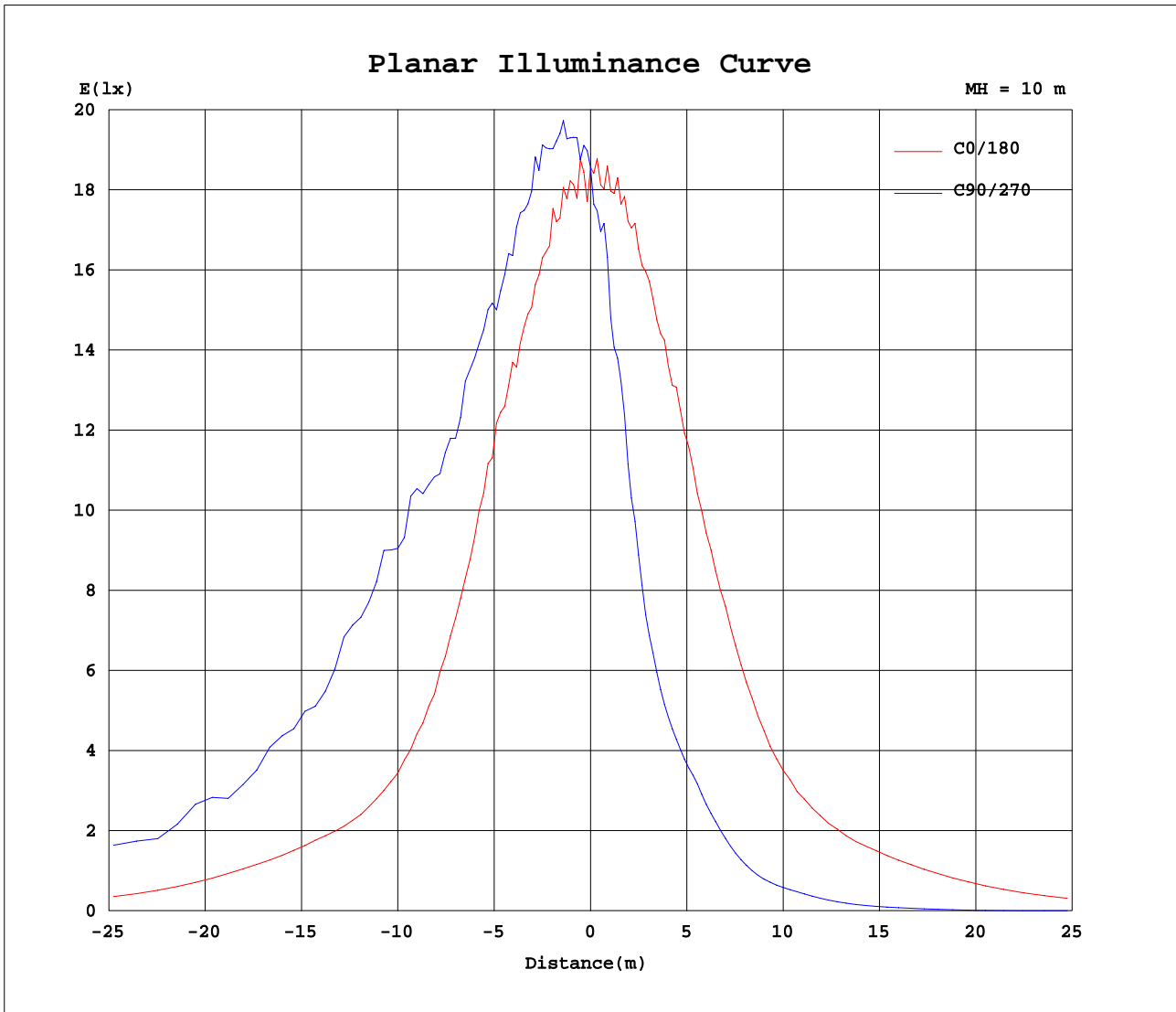
AvgL	cd/m2
L_0~180(65)av	32533
L_0~180(75)av	21636
L_0~180(85)av	21764
L_90~270(65)av	61772
L_90~270(75)av	96690
L_90~270(85)av	243769
L_45(65)av	41194
L_45(75)av	65546
L_45(85)av	174824

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 21.3DEG
Operators: Alan Wang
Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
Humidity: 49.7%
Test Distance: 2.500m [K=1.0459]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	
5	1834	1842	1845	1881	1878	1927	1953	1920	1911	1859	1828	1859	1881	1806	1744	1676	1635	1655	1650	
10	1801	1867	1926	1993	2012	1950	2013	2013	2017	1962	1966	1918	1867	1735	1619	1441	1374	1296	1297	
15	1762	1890	1968	1966	2059	2090	2051	1981	1968	1977	1984	1906	1788	1602	1433	1203	1034	917	901	
20	1710	1897	1946	1980	1973	2020	2101	2041	1992	1985	1927	1882	1737	1525	1253	931	769	702	666	
25	1673	1869	1934	1962	2021	2027	2080	2011	2017	1949	1976	1888	1679	1421	1013	734	621	561	542	
30	1542	1776	1894	1964	2055	2152	2183	2111	2040	1952	1908	1829	1537	1200	838	611	516	472	448	
35	1329	1623	1750	1989	2085	2081	2146	2142	2036	1919	1759	1626	1384	972	679	492	413	351	329	
40	1137	1426	1588	1864	2068	2168	2368	2225	2028	1823	1602	1466	1180	802	522	376	296	243	223	
45	972	1302	1441	1813	2207	2447	2560	2489	2203	1837	1459	1281	991	655	378	275	200	173	165	
50	906	1185	1293	1894	2445	2510	2759	2573	2404	1852	1328	1151	896	509	295	200	139	130	119	
55	934	1118	1261	1936	2466	2547	2707	2570	2536	1909	1238	1087	856	376	236	139	97.3	80.6	70.7	
60	926	1150	1237	1924	2486	2757	2812	2744	2410	1871	1175	1108	829	284	200	90.4	60.0	47.2	40.5	
65	808	1164	1107	1878	2526	2906	2870	2868	2460	1841	1160	1124	707	249	160	56.7	26.8	12.5	7.37	
70	578	1094	988	1920	2602	2760	2628	2817	2421	1795	1034	1067	502	231	115	29.1	3.37	2.57	2.46	
75	336	941	907	1927	2437	2754	2755	2737	2378	1776	942	947	281	206	77.0	16.5	3.29	2.89	2.82	
80	161	766	833	1854	2313	2416	2271	2499	2379	1751	843	767	153	165	52.0	12.6	3.46	3.18	3.09	
85	103	584	765	1697	2166	2389	2338	2391	2202	1641	778	567	106	121	38.0	9.11	3.43	3.18	3.14	
90	85.0	407	673	1517	1970	2333	2375	2242	2048	1450	679	378	84.3	87.5	27.4	6.03	3.08	3.14	3.15	
95	73.6	251	568	1316	1804	2046	2061	1974	1811	1256	579	228	70.9	65.7	20.4	4.97	3.25	3.71	3.93	
100	47.9	86.2	144	936	1418	1763	1815	1694	1432	802	156	265	84.1	46.7	37.7	11.4	4.68	4.59	6.12	6.61
105	26.3	89.0	278	141	381	682	796	615	374	156	265	84.1	24.2	22.0	10.6	4.01	4.99	6.41	6.94	
110	62.7	66.3	184	209	419	416	386	430	348	213	192	67.4	61.7	25.2	9.84	4.56	5.23	6.46	6.95	
115	52.7	48.3	119	251	612	854	880	829	513	222	120	50.7	53.2	17.0	7.57	4.50	5.38	6.37	6.80	
120	38.2	35.4	106	248	488	657	704	627	462	221	101	38.6	40.6	11.2	5.63	4.27	5.29	6.14	6.47	
125	25.3	27.6	97.3	203	352	473	512	460	339	189	85.3	28.4	27.4	7.33	4.44	3.34	4.95	5.73	6.00	
130	13.8	19.3	76.7	158	243	315	344	317	240	154	69.1	20.7	15.4	3.78	3.61	3.17	3.18	5.09	5.37	
135	8.89	7.39	62.7	113	166	208	224	208	164	106	58.7	7.31	8.00	5.51	2.83	3.51	3.80	3.02	2.90	
140	5.47	9.01	37.5	86.2	112	141	148	140	108	86.2	38.5	9.19	6.21	3.85	2.98	2.75	3.63	3.58	4.06	
145	3.75	4.85	20.1	64.2	75.9	91.0	94.5	89.9	76.8	60.3	20.3	6.23	4.61	2.74	2.78	3.01	2.67	2.96	3.33	
150	2.44	2.82	10.5	36.5	55.4	61.0	60.6	62.0	54.5	35.7	10.9	3.11	2.99	2.07	2.56	2.93	3.05	2.52	2.32	
155	2.54	2.49	4.48	17.9	33.1	41.9	44.0	42.0	33.4	17.6	4.86	2.77	2.99	2.85	2.39	2.63	2.72	2.59	2.57	
160	1.90	1.98	2.86	7.25	15.6	21.6	23.9	21.8	15.8	8.01	3.50	3.07	3.13	3.10	2.32	2.18	2.17	2.47	2.24	
165	2.89	2.89	2.67	2.94	4.27	8.10	9.08	8.39	4.78	3.36	3.02	3.28	3.25	3.27	3.19	2.22	1.82	1.97	1.67	
170	3.06	3.11	3.01	2.78	2.81	2.96	3.02	3.07	3.00	2.75	2.57	2.52	2.41	2.42	2.44	2.83	2.70	1.89	1.50	
175	3.22	3.24	3.24	3.21	3.14	3.06	3.00	3.08	3.21	3.27	3.10	2.80	2.54	2.55	2.55	2.40	2.21	2.19	2.36	
180	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.28	3.28	3.28	3.28	3.28	3.28	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.3V I:0.4335A P:51.96W PF:0.9950 Freq:60.01Hz Lamp Flux:7878.39x1 lm		
NAME: ASD Lighting Corp	TYPE: LED	WEIGHT:
SPEC.: ASD-WLP01-50D50-PC-PRM	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	1856	1856	1856	1856	1856														
5	1588	1668	1685	1690	1758														
10	1331	1379	1461	1575	1706														
15	918	1032	1214	1408	1597														
20	706	778	916	1177	1460														
25	564	627	747	986	1327														
30	476	520	616	792	1100														
35	353	406	488	640	895														
40	241	289	364	494	752														
45	168	197	267	360	629														
50	126	133	200	276	500														
55	80.3	91.4	142	228	384														
60	44.0	57.8	96.3	198	286														
65	12.1	25.9	61.5	164	236														
70	2.59	4.39	32.6	123	214														
75	2.97	3.78	19.5	83.8	192														
80	3.21	3.50	14.7	59.4	158														
85	3.20	3.37	10.7	43.2	120														
90	3.09	2.85	6.86	31.4	88.9														
95	4.01	3.32	5.82	22.9	66.2														
100	5.89	4.45	5.21	7.01	33.7														
105	6.23	4.98	4.45	13.9	37.8														
110	6.41	5.32	5.10	10.6	37.1														
115	6.34	5.41	4.72	8.07	25.3														
120	6.08	5.17	4.26	5.58	17.0														
125	5.61	4.78	2.78	4.76	11.6														
130	4.82	2.94	3.15	3.33	4.84														
135	3.15	3.73	3.24	2.97	5.72														
140	3.85	3.33	2.74	3.06	3.81														
145	3.15	2.63	3.03	3.05	2.81														
150	2.38	2.79	2.85	2.95	2.47														
155	2.88	3.01	2.95	2.54	2.58														
160	2.71	2.95	2.79	2.60	2.73														
165	1.74	1.97	2.09	2.56	3.33														
170	1.45	1.56	2.06	2.83	3.14														
175	2.23	2.17	2.01	2.06	2.93														
180	3.28	3.28	3.28	3.28	3.28														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

Photometric Data Table [cd]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
3.0	1884	1943	1890	1837	1871	1923	1883	1842	1833	1869
6.0	1853	1894	1880	1900	1908	1912	1962	1957	1901	1870
9.0	1795	1870	1914	1929	2024	1959	2015	2018	1972	1967
12.0	1775	1919	1951	1987	1936	1981	2033	1944	2021	2009
15.0	1762	1890	1968	1966	2059	2090	2051	1981	1968	1977
18.0	1733	1876	1936	2049	2061	2060	2052	2074	2075	2007
21.0	1668	1893	1947	1997	1967	2008	2099	2037	1975	1993
24.0	1653	1920	2011	1983	2025	2026	2084	2006	2013	1934
27.0	1599	1872	1948	1925	1982	2072	2145	2027	2028	1943
30.0	1542	1776	1894	1964	2055	2152	2183	2111	2040	1952
33.0	1408	1697	1790	1887	2013	2150	2242	2181	1957	1892
36.0	1297	1579	1742	1947	2077	2079	2228	2096	2117	1954
39.0	1154	1450	1619	1845	2003	2123	2309	2189	2004	1828
42.0	1078	1392	1535	1833	2136	2345	2568	2315	2145	1845
45.0	972.3	1302	1441	1813	2207	2447	2560	2489	2203	1837
48.0	934.3	1215	1356	1844	2333	2645	2744	2622	2282	1845
51.0	906.1	1163	1269	1916	2437	2572	2862	2600	2426	1881
54.0	924.0	1120	1302	1936	2491	2591	2701	2682	2565	1935
57.0	934.5	1130	1198	1905	2556	2653	2813	2604	2540	1919
60.0	926.5	1150	1237	1924	2486	2757	2812	2744	2410	1871
63.0	873.4	1189	1135	1884	2524	2729	3029	2622	2471	1852
66.0	762.0	1143	1085	1854	2523	2768	2681	2754	2464	1852
69.0	629.1	1122	1010	1925	2546	2952	2931	2905	2481	1772
72.0	483.4	1016	958.3	1934	2621	2657	2915	2562	2615	1774
75.0	335.6	941.0	906.6	1927	2437	2754	2755	2737	2378	1776
78.0	213.4	836.7	874.3	1907	2464	2660	2882	2459	2418	1781
81.0	141.5	732.9	825.1	1837	2355	2345	2491	2316	2332	1717
84.0	109.6	624.9	776.0	1720	2153	2570	2474	2550	2290	1674
87.0	94.40	509.8	743.1	1657	2243	2292	2397	2185	2212	1563
90.0	85.04	406.8	673.1	1517	1970	2333	2375	2242	2048	1450
93.0	79.96	313.0	613.5	1413	1865	2099	2203	2000	1940	1334
96.0	69.57	204.3	530.2	1267	1802	2033	2044	1969	1795	1223
99.0	47.89	98.37	210.6	1086	1539	1828	1925	1757	1757	976.1
102.0	46.95	102.8	220.7	505.6	1092	1460	1581	1368	1047	447.0
105.0	26.30	88.95	278.0	140.7	381.2	681.7	796.0	614.7	374.0	155.7
108.0	64.98	78.94	234.1	178.6	232.1	286.1	285.0	267.3	203.7	205.1
111.0	61.46	61.13	160.7	224.8	498.8	541.1	516.8	550.5	402.5	219.0
114.0	55.27	51.54	124.7	244.2	613.9	833.2	879.6	798.2	512.2	223.7
117.0	46.93	42.92	112.3	261.1	575.2	803.2	872.6	778.7	503.5	222.7
120.0	38.23	35.39	106.1	247.8	488.3	657.5	704.4	627.3	461.6	220.7
123.0	30.06	30.11	101.7	222.9	401.6	543.8	587.0	519.6	386.1	202.3
126.0	22.91	25.97	92.91	194.4	328.0	441.2	476.2	428.5	317.9	183.9
129.0	17.10	21.33	79.54	167.8	264.0	344.1	376.9	343.5	258.6	163.6
132.0	11.09	12.62	71.91	140.2	206.9	265.0	287.5	267.0	206.7	134.9
135.0	8.891	7.391	62.73	112.7	166.0	208.3	223.5	208.4	164.3	106.3
138.0	6.944	8.515	46.22	93.50	131.5	164.8	174.2	164.7	127.7	90.57
141.0	4.900	8.215	33.32	83.67	102.7	130.0	136.3	128.7	100.1	83.18
144.0	4.160	5.599	22.85	70.25	81.01	99.16	103.5	98.08	81.38	67.15
147.0	3.037	3.637	15.32	51.73	67.65	75.29	76.53	75.77	68.35	48.18
150.0	2.442	2.815	10.49	36.52	55.36	60.98	60.56	62.03	54.48	35.75
153.0	2.489	2.394	5.286	23.67	41.88	50.47	51.41	50.27	41.34	23.07
156.0	2.568	2.527	4.120	15.52	29.01	37.38	39.69	37.80	29.38	15.43
159.0	1.977	2.138	3.314	9.478	18.38	25.25	27.76	25.56	18.50	9.675
162.0	2.197	2.292	2.543	4.168	10.83	15.46	17.08	15.69	11.10	4.658
165.0	2.892	2.889	2.672	2.942	4.272	8.104	9.079	8.388	4.782	3.360
168.0	3.013	3.047	2.894	2.723	2.995	3.252	3.315	3.376	3.220	2.919
171.0	3.080	3.135	3.059	2.842	2.795	2.852	2.888	2.951	2.954	2.712
174.0	3.170	3.206	3.202	3.129	3.016	2.930	2.872	2.968	3.088	3.108
177.0	3.300	3.318	3.298	3.291	3.277	3.258	3.248	3.282	3.354	3.444
180.0	3.787	3.787	3.787	3.787	3.787	3.787	3.787	3.787	3.787	3.787
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
3.0	1887	1854	1820	1776	1696	1715	1702	1683	1703	1672
6.0	1874	1869	1827	1777	1731	1660	1577	1564	1504	1499
9.0	1946	1913	1831	1731	1631	1509	1440	1379	1372	1384
12.0	1951	1920	1822	1687	1569	1371	1214	1096	1101	1143
15.0	1984	1906	1788	1602	1433	1203	1034	917.2	901.3	918.3
18.0	1981	1918	1775	1564	1295	1018	861.5	781.6	747.9	771.2
21.0	1948	1867	1751	1514	1215	887.9	725.1	663.1	633.7	670.7
24.0	1940	1858	1715	1445	1074	776.6	648.4	577.4	562.4	579.3
27.0	1915	1890	1638	1332	934.4	680.4	575.8	522.5	505.0	529.1
30.0	1908	1829	1537	1200	838.0	611.1	516.1	472.2	447.7	475.6

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

Photometric Data Table [cd]

33.0	1845	1707	1438	1059	743.0	542.5	458.9	396.8	377.1	400.1
36.0	1738	1598	1337	937.0	646.2	467.6	388.3	329.2	304.4	330.2
39.0	1647	1498	1214	828.2	549.8	397.6	316.9	261.5	241.8	260.4
42.0	1548	1391	1096	742.0	461.4	334.6	253.5	206.5	192.9	205.1
45.0	1459	1281	991.1	654.9	378.0	275.0	199.9	173.0	165.0	167.7
48.0	1376	1209	930.4	569.8	324.1	229.4	160.9	148.9	140.9	141.4
51.0	1312	1138	877.9	480.8	281.7	187.0	129.3	119.9	108.4	116.8
54.0	1253	1108	853.8	400.2	245.8	149.7	105.3	89.56	78.91	89.20
57.0	1250	1073	853.7	332.2	219.8	116.8	81.66	64.64	58.03	63.29
60.0	1175	1108	829.4	283.6	199.7	90.44	60.05	47.15	40.48	44.03
63.0	1194	1117	771.9	261.4	177.6	68.51	39.22	27.04	19.33	25.65
66.0	1120	1123	671.4	245.9	150.3	50.94	20.73	6.040	2.341	5.743
69.0	1068	1095	545.2	233.3	123.2	33.91	4.130	2.488	2.373	2.501
72.0	989.8	1017	408.9	223.4	98.40	22.22	3.369	2.708	2.620	2.756
75.0	941.8	946.6	281.5	206.2	76.97	16.52	3.295	2.891	2.823	2.966
78.0	881.7	847.0	190.2	183.5	58.87	14.29	3.508	3.107	3.018	3.155
81.0	827.5	728.3	138.9	154.9	50.13	11.82	3.513	3.199	3.116	3.229
84.0	792.8	605.8	112.9	129.6	40.35	9.809	3.470	3.191	3.116	3.202
87.0	743.4	488.8	96.26	105.3	33.41	7.715	3.255	3.185	3.163	3.168
90.0	679.4	378.2	84.32	87.49	27.37	6.032	3.085	3.137	3.154	3.094
93.0	617.7	284.2	74.94	73.04	23.00	4.708	2.734	3.125	3.298	3.207
96.0	543.6	199.0	67.91	62.38	19.35	4.941	3.621	4.418	4.815	4.636
99.0	256.7	90.76	48.13	44.43	14.49	4.784	4.428	5.927	6.414	5.746
102.0	190.7	87.09	46.98	23.02	5.339	4.388	4.821	6.291	6.794	6.047
105.0	264.9	84.05	24.25	22.05	10.59	4.013	4.987	6.414	6.937	6.229
108.0	245.3	80.49	63.54	28.61	10.86	4.401	5.152	6.454	6.959	6.377
111.0	166.7	61.83	60.34	23.56	9.337	4.566	5.277	6.452	6.929	6.415
114.0	126.8	52.87	54.93	18.61	7.912	4.527	5.369	6.396	6.852	6.370
117.0	110.9	47.35	48.48	14.54	6.896	4.395	5.380	6.286	6.686	6.243
120.0	100.6	38.61	40.59	11.21	5.627	4.273	5.288	6.140	6.473	6.081
123.0	90.65	31.90	32.39	8.496	4.690	4.119	5.119	5.904	6.220	5.825
126.0	82.10	26.53	24.90	6.747	4.250	2.796	4.853	5.640	5.884	5.512
129.0	72.17	22.08	18.76	4.656	3.773	2.882	3.865	5.311	5.550	5.122
132.0	63.59	14.74	5.159	5.503	3.235	3.477	2.698	3.839	4.339	3.565
135.0	58.72	7.306	8.002	5.509	2.833	3.514	3.802	3.022	2.900	3.146
138.0	47.13	7.634	6.985	4.532	2.889	3.133	3.835	3.785	3.956	3.927
141.0	34.35	9.208	5.737	3.466	2.674	2.674	3.526	3.467	3.926	3.775
144.0	23.23	7.130	4.571	2.985	2.834	2.816	2.900	3.188	3.515	3.423
147.0	15.41	4.755	4.010	2.309	2.664	3.046	2.590	2.604	2.792	2.708
150.0	10.89	3.106	2.986	2.074	2.561	2.932	3.048	2.515	2.317	2.381
153.0	6.729	2.775	2.949	2.613	2.431	2.727	2.886	2.679	2.624	2.741
156.0	4.551	2.831	3.005	2.899	2.242	2.542	2.641	2.549	2.545	2.926
159.0	3.794	3.022	3.090	3.047	2.175	2.353	2.301	2.491	2.343	2.794
162.0	2.940	3.135	3.159	3.169	2.912	2.131	2.032	2.333	1.885	2.351
165.0	3.020	3.283	3.246	3.270	3.186	2.223	1.821	1.974	1.673	1.736
168.0	2.818	3.192	3.118	2.896	2.545	2.484	2.449	1.846	1.498	1.526
171.0	2.560	2.508	2.409	2.527	2.668	2.855	2.560	1.862	1.510	1.453
174.0	2.877	2.613	2.444	2.515	2.536	2.408	2.078	1.896	1.792	1.806
177.0	3.488	3.355	2.880	2.739	2.626	2.433	2.400	2.432	2.440	2.437
180.0	3.787	3.787	3.282	3.282	3.282	3.282	3.282	3.282	3.282	3.282
G/C	300.0	315.0	330.0	345.0						
0.0	1856	1856	1856	1856						
3.0	1672	1711	1775	1824						
6.0	1591	1657	1684	1755						
9.0	1409	1505	1607	1704						
12.0	1236	1317	1515	1662						
15.0	1032	1214	1408	1597						
18.0	853.3	1006	1235	1511						
21.0	738.3	888.5	1149	1436						
24.0	655.2	782.0	1030	1348						
27.0	572.5	684.7	899.2	1231						
30.0	519.9	615.9	791.6	1100						
33.0	448.7	544.0	704.3	964.3						
36.0	383.3	461.0	612.0	861.0						
39.0	309.3	386.2	523.3	776.9						
42.0	251.4	321.4	438.2	701.4						
45.0	196.7	267.1	359.9	628.9						
48.0	155.8	224.1	301.4	550.8						
51.0	122.4	187.7	264.9	477.7						
54.0	98.35	153.4	235.8	405.3						
57.0	77.69	121.6	215.3	341.8						
60.0	57.82	96.30	197.9	285.6						
63.0	37.93	74.21	179.3	250.0						
66.0	20.13	55.20	156.2	232.4						

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks:

Photometric Data Table [cd]

69.0	5.216	37.63	131.2	216.9
72.0	4.103	23.98	106.4	206.7
75.0	3.776	19.46	83.78	192.3
78.0	3.756	16.53	67.86	173.7
81.0	3.504	13.78	55.96	149.9
84.0	3.423	11.43	45.93	127.5
87.0	3.144	8.884	38.21	105.9
90.0	2.846	6.863	31.43	88.92
93.0	2.795	5.790	26.13	73.06
96.0	3.664	5.668	20.69	61.76
99.0	4.309	5.426	11.04	39.58
102.0	4.715	4.699	8.328	19.79
105.0	4.980	4.451	13.91	37.76
108.0	5.206	5.220	11.97	41.63
111.0	5.366	5.049	10.09	34.66
114.0	5.416	4.821	8.517	27.43
117.0	5.337	4.526	7.052	21.67
120.0	5.168	4.258	5.584	16.97
123.0	4.966	3.850	5.252	13.53
126.0	4.688	2.491	4.540	10.83
129.0	3.486	2.998	3.696	6.807
132.0	2.933	3.168	3.147	6.795
135.0	3.734	3.237	2.970	5.723
138.0	3.508	2.847	3.132	4.376
141.0	3.220	2.645	3.072	3.607
144.0	2.806	2.943	3.081	2.960
147.0	2.505	3.077	2.993	2.485
150.0	2.794	2.847	2.947	2.467
153.0	3.001	2.903	2.714	2.552
156.0	3.064	2.936	2.562	2.511
159.0	2.991	2.884	2.669	2.533
162.0	2.702	2.533	2.544	3.127
165.0	1.968	2.087	2.565	3.325
168.0	1.680	2.032	2.757	3.207
171.0	1.528	1.970	2.672	3.070
174.0	1.777	1.744	2.018	2.807
177.0	2.386	2.349	2.392	2.934
180.0	3.282	3.282	3.282	3.282

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 21.3DEG
 Operators: Alan Wang
 Test Date: 07 December 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.442T2
 Humidity: 49.7%
 Test Distance: 2.500m [K=1.0459]
 Remarks: