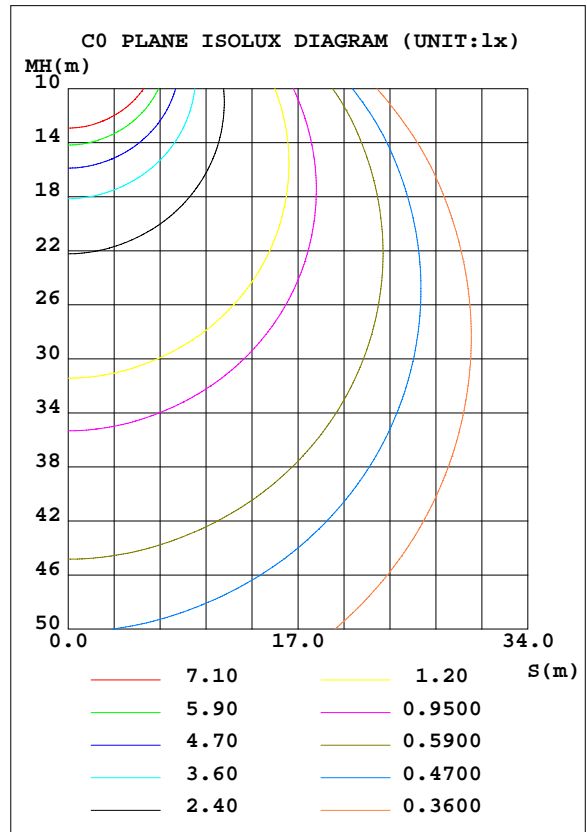
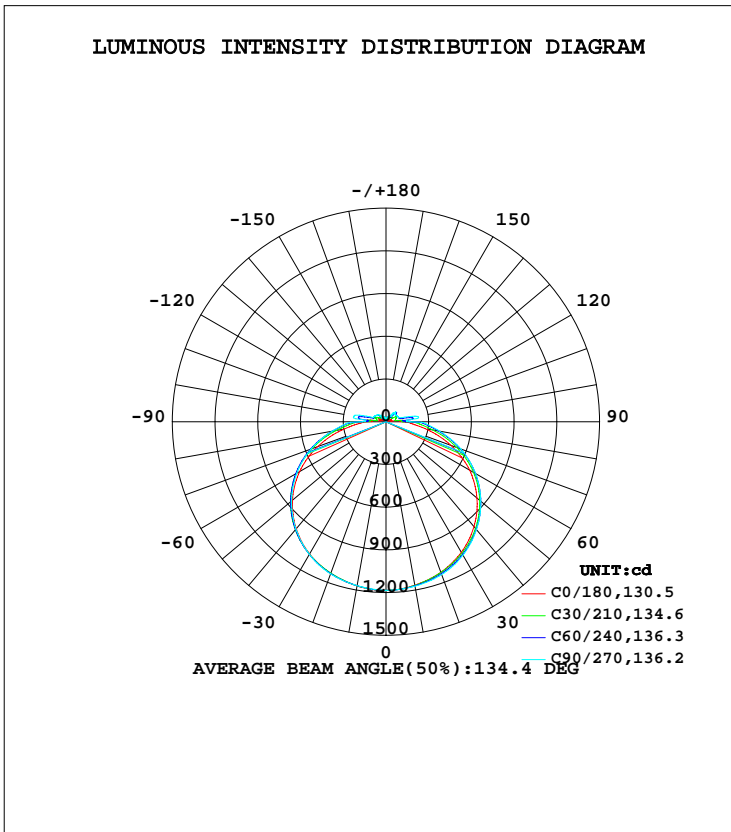


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 118.56 lm/W			
MODEL	ASD-LFL01-24D4040	Imax(cd)	1185	S/MH(C0/180)	1.35
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.35
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	4865.1	η UP, DN(C0-180)	4.7,45.3
NOMINAL FLUX(lm)	4865.13	CIE CLASS	DIRECT	η UP, DN(C180-360)	4.6,45.4
LAMPS INSIDE	1	η up(%)	9.3	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	90.7	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1166	1170	1172	1172	1170	1168	1169	1166	0- 10	112.3	112.3	2.31,2.31
20	1125	1132	1142	1136	1134	1132	1137	1127	10- 20	326.2	438.5	9.01,9.01
30	1059	1075	1082	1081	1073	1076	1076	1069	20- 30	510.7	949.2	19.5,19.5
40	961.6	988.1	989.2	996.2	980.5	991.9	984.1	981.7	30- 40	646.0	1595	32.8,32.8
50	834.0	870.9	869.3	880.4	857.0	877.4	865.5	865.1	40- 50	715.7	2311	47.5,47.5
60	679.0	724.4	727.7	735.5	700.2	733.7	723.3	719.9	50- 60	710.1	3021	62.1,62.1
70	484.7	550.7	559.9	563.1	510.9	562.4	560.5	548.8	60- 70	626.4	3647	75,75
80	277.6	362.7	382.5	374.8	300.7	373.5	385.2	362.7	70- 80	473.0	4120	84.7,84.7
90	124.1	127.5	167.7	164.1	141.0	155.4	166.8	130.5	80- 90	292.1	4412	90.7,90.7
100	37.37	87.81	222.2	94.65	41.55	129.6	228.4	109.1	90-100	143.0	4555	93.6,93.6
110	40.28	83.30	93.55	84.82	41.70	82.67	94.11	80.47	100-110	99.45	4655	95.7,95.7
120	24.86	80.49	87.46	81.50	12.39	76.39	84.94	76.65	110-120	73.66	4729	97.2,97.2
130	10.95	38.43	82.14	49.55	32.14	24.99	77.68	29.43	120-130	56.90	4785	98.4,98.4
140	25.27	48.52	51.55	54.18	13.18	51.59	30.72	51.70	130-140	37.01	4822	99.1,99.1
150	25.58	34.02	48.16	39.00	26.13	39.48	40.52	40.57	140-150	24.47	4847	99.6,99.6
160	11.86	27.93	34.77	25.21	12.94	24.24	36.85	30.14	150-160	12.01	4859	99.9,99.9
170	19.26	2.998	17.89	1.720	10.74	1.907	17.78	3.226	160-170	4.880	4864	100,100
180	21.48	21.28	20.67	21.22	21.48	21.29	20.66	21.22	170-180	1.310	4865	100,100
DEG	LUMINOUS INTENSITY:cd Less than 35% Percent = 18.9 %									UNIT:lm		

Conical surface Flux(90deg): 1948.9 lm

%lum = 40.1%
 %lamp = 40.1%

Conical surface Flux(120deg): 3021 lm

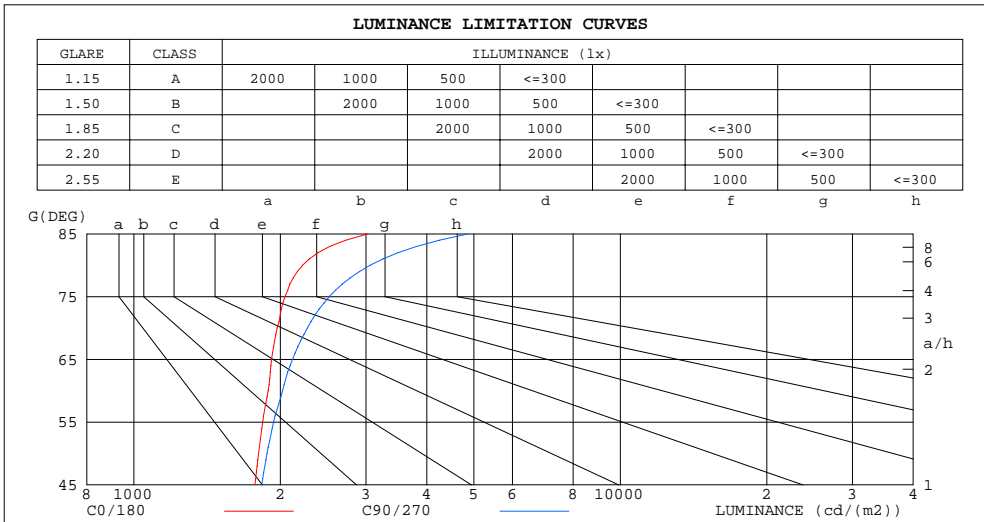
%lum = 62.1%
 %lamp = 62.1%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3030	4872
80	2223	3060
75	2044	2522
70	1971	2274
65	1919	2119
60	1889	2022
55	1840	1938
50	1804	1879
45	1773	1832

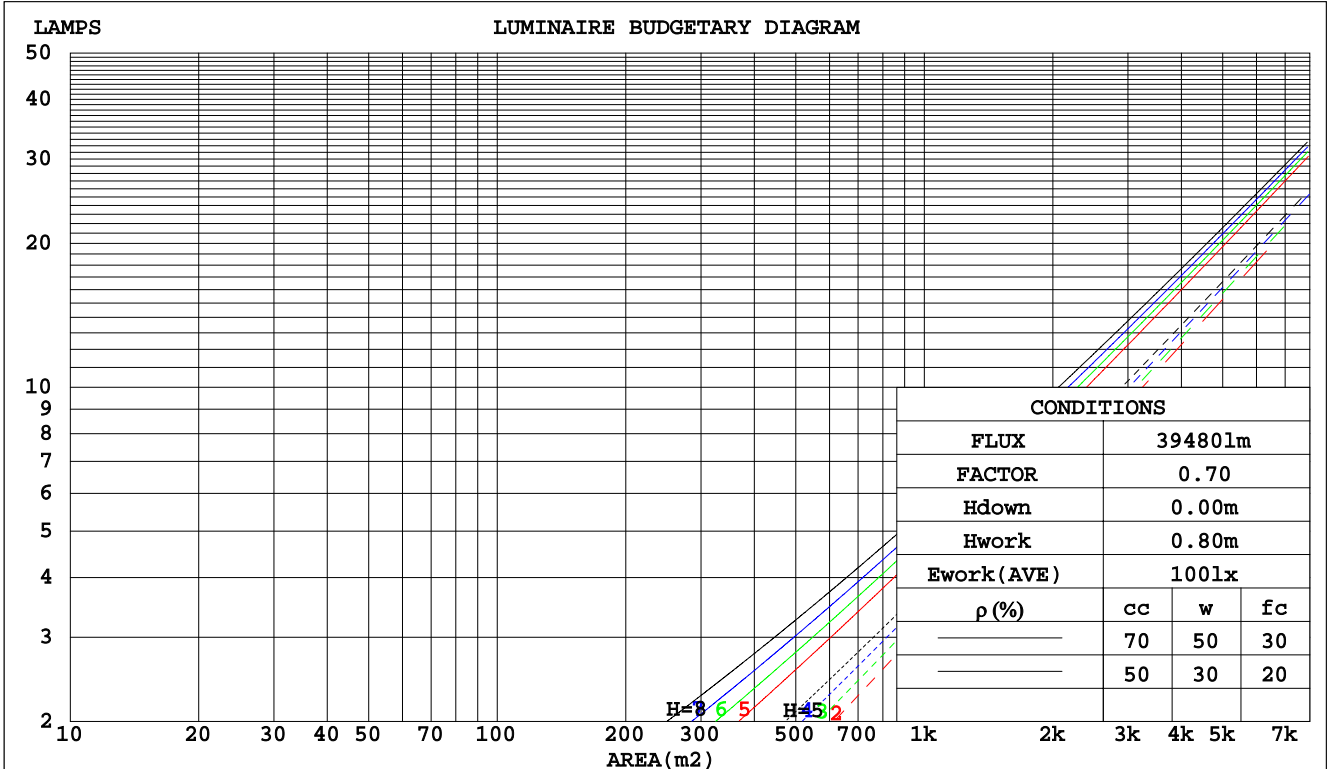
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Derek Lai
 Test Date: 06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance: 2.500m [K=1.0621]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	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	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	.99	.99	.99	.93	.93	.93	.91
1.0	.98	.93	.88	.95	.90	.86	.89	.85	.82	.83	.80	.78	.78	.76	.74	.71
2.0	.84	.76	.70	.81	.74	.68	.76	.70	.65	.72	.67	.62	.67	.63	.60	.57
3.0	.73	.64	.57	.71	.62	.56	.66	.59	.53	.62	.56	.51	.58	.54	.49	.47
4.0	.64	.55	.47	.62	.53	.46	.58	.51	.45	.55	.48	.43	.52	.46	.42	.39
5.0	.57	.47	.40	.55	.46	.40	.52	.44	.38	.49	.42	.37	.46	.40	.36	.33
6.0	.51	.41	.35	.49	.41	.34	.47	.39	.33	.44	.37	.32	.42	.36	.31	.29
7.0	.46	.37	.30	.45	.36	.30	.42	.35	.29	.40	.33	.28	.38	.32	.27	.25
8.0	.42	.33	.27	.41	.32	.26	.38	.31	.26	.36	.30	.25	.35	.29	.24	.22
9.0	.38	.30	.24	.37	.29	.24	.35	.28	.23	.34	.27	.22	.32	.26	.22	.20
10.0	.35	.27	.22	.34	.26	.21	.33	.26	.21	.31	.25	.20	.30	.24	.20	.18



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Derek Lai
 Test Date: 06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance: 2.500m [K=1.0621]
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	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	.373	.212	.067	.363	.207	.066	.344	.197	.063	.327	.188	.060	.311	.180	.058	
2.0	.330	.181	.055	.321	.177	.054	.304	.169	.053	.288	.162	.051	.274	.155	.049	
3.0	.296	.158	.047	.288	.154	.046	.273	.148	.045	.259	.142	.043	.246	.136	.042	
4.0	.268	.139	.041	.261	.136	.040	.247	.131	.039	.234	.126	.038	.222	.121	.037	
5.0	.244	.124	.036	.238	.122	.036	.225	.117	.035	.214	.113	.034	.203	.109	.033	
6.0	.224	.112	.032	.218	.110	.032	.207	.106	.031	.197	.102	.030	.187	.098	.029	
7.0	.207	.102	.029	.202	.101	.029	.192	.097	.028	.182	.093	.027	.173	.090	.026	
8.0	.192	.094	.026	.187	.092	.026	.178	.089	.025	.169	.086	.025	.161	.083	.024	
9.0	.179	.087	.024	.175	.085	.024	.166	.082	.023	.158	.079	.023	.151	.077	.022	
10.0	.168	.080	.022	.164	.079	.022	.156	.076	.022	.149	.074	.021	.142	.071	.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	.261	.261	.261	.223	.223	.223	.152	.152	.152	.088	.088	.088	.028	.028	.028	
1.0	.256	.227	.201	.219	.195	.173	.150	.134	.120	.086	.078	.070	.028	.025	.022	
2.0	.249	.204	.165	.214	.175	.143	.146	.121	.100	.084	.071	.058	.027	.023	.019	
3.0	.242	.187	.143	.207	.161	.124	.142	.112	.087	.082	.065	.051	.026	.021	.017	
4.0	.234	.174	.128	.201	.150	.111	.138	.105	.078	.080	.061	.046	.026	.020	.015	
5.0	.226	.164	.118	.194	.142	.103	.134	.099	.072	.078	.058	.043	.025	.019	.014	
6.0	.219	.156	.111	.188	.135	.096	.130	.095	.068	.075	.056	.041	.024	.018	.013	
7.0	.212	.149	.105	.182	.129	.092	.126	.091	.065	.073	.053	.039	.024	.017	.013	
8.0	.205	.144	.101	.177	.125	.088	.122	.087	.063	.071	.052	.037	.023	.017	.012	
9.0	.199	.139	.098	.171	.120	.086	.119	.085	.061	.069	.050	.036	.022	.016	.012	
10.0	.193	.134	.096	.166	.117	.083	.115	.082	.059	.067	.049	.035	.022	.016	.012	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm										
NAME: ASD-LFL01-24D4040					TYPE:LED			WEIGHT:		
SPEC.:					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	9.0	10.5	9.4	10.9	11.3	9.3	10.8	9.7	11.1	11.5
3H	11.0	12.3	11.4	12.8	13.2	11.4	12.8	11.9	13.2	13.6
4H	11.9	13.2	12.3	13.6	14.1	12.5	13.8	13.0	14.2	14.7
6H	12.7	13.9	13.1	14.3	14.8	13.6	14.8	14.1	15.3	15.8
8H	13.0	14.2	13.5	14.7	15.2	14.2	15.4	14.7	15.8	16.3
12H	13.4	14.6	13.9	15.0	15.5	14.8	16.0	15.3	16.4	16.9
4H 2H	9.8	11.1	10.3	11.6	12.0	10.0	11.3	10.5	11.8	12.2
3H	12.0	13.1	12.5	13.6	14.1	12.4	13.5	12.9	14.0	14.5
4H	13.0	14.1	13.6	14.6	15.1	13.6	14.7	14.1	15.2	15.7
6H	14.0	15.0	14.5	15.5	16.0	14.9	15.8	15.4	16.3	16.9
8H	14.5	15.3	15.0	15.9	16.5	15.5	16.4	16.1	17.0	17.6
12H	14.9	15.7	15.5	16.3	16.9	16.3	17.1	16.9	17.7	18.3
8H 4H	13.6	14.5	14.1	15.0	15.6	14.0	14.9	14.6	15.5	16.1
6H	14.8	15.6	15.4	16.1	16.8	15.6	16.3	16.2	16.9	17.5
8H	15.4	16.1	16.0	16.7	17.3	16.4	17.1	17.0	17.7	18.3
12H	16.1	16.7	16.7	17.3	17.9	17.4	18.0	18.0	18.6	19.2
12H 4H	13.7	14.5	14.3	15.1	15.7	14.1	14.9	14.7	15.5	16.1
6H	15.0	15.7	15.6	16.3	16.9	15.7	16.4	16.3	17.0	17.6
8H	15.8	16.4	16.4	17.0	17.6	16.7	17.3	17.3	17.9	18.5
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	+ 0.2 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117, 4865 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.5)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

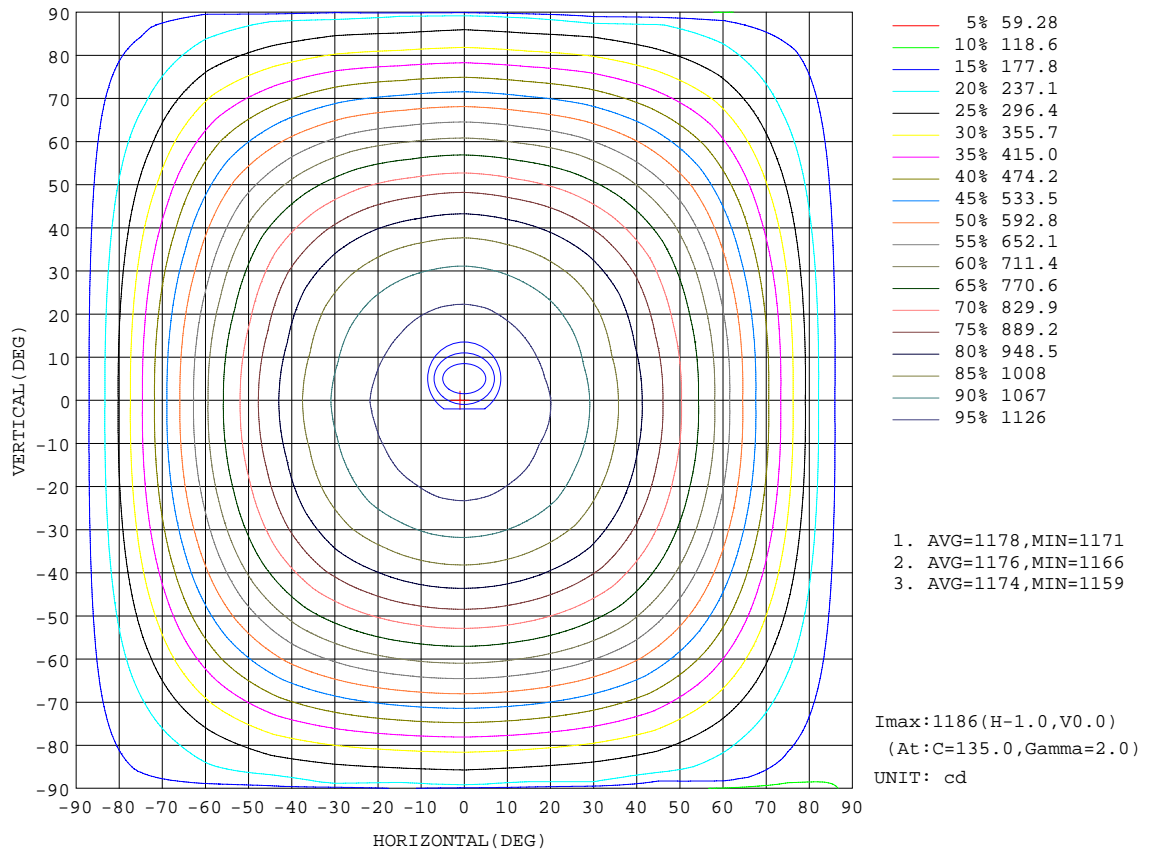
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	51	38	31	50	38	31	48	37	30	24
0.80	60	47	39	59	47	39	56	45	38	31
1.00	68	56	47	66	55	47	63	56	46	38
1.25	75	63	55	73	62	54	70	60	53	44
1.50	80	69	60	78	67	60	74	65	58	49
2.00	88	77	69	85	75	68	80	72	66	56
2.50	92	82	75	89	80	74	84	77	71	60
3.00	96	87	80	93	85	79	87	81	75	64
4.00	100	93	87	97	91	85	91	86	81	69
5.00	103	97	92	100	94	89	94	89	85	73
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: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

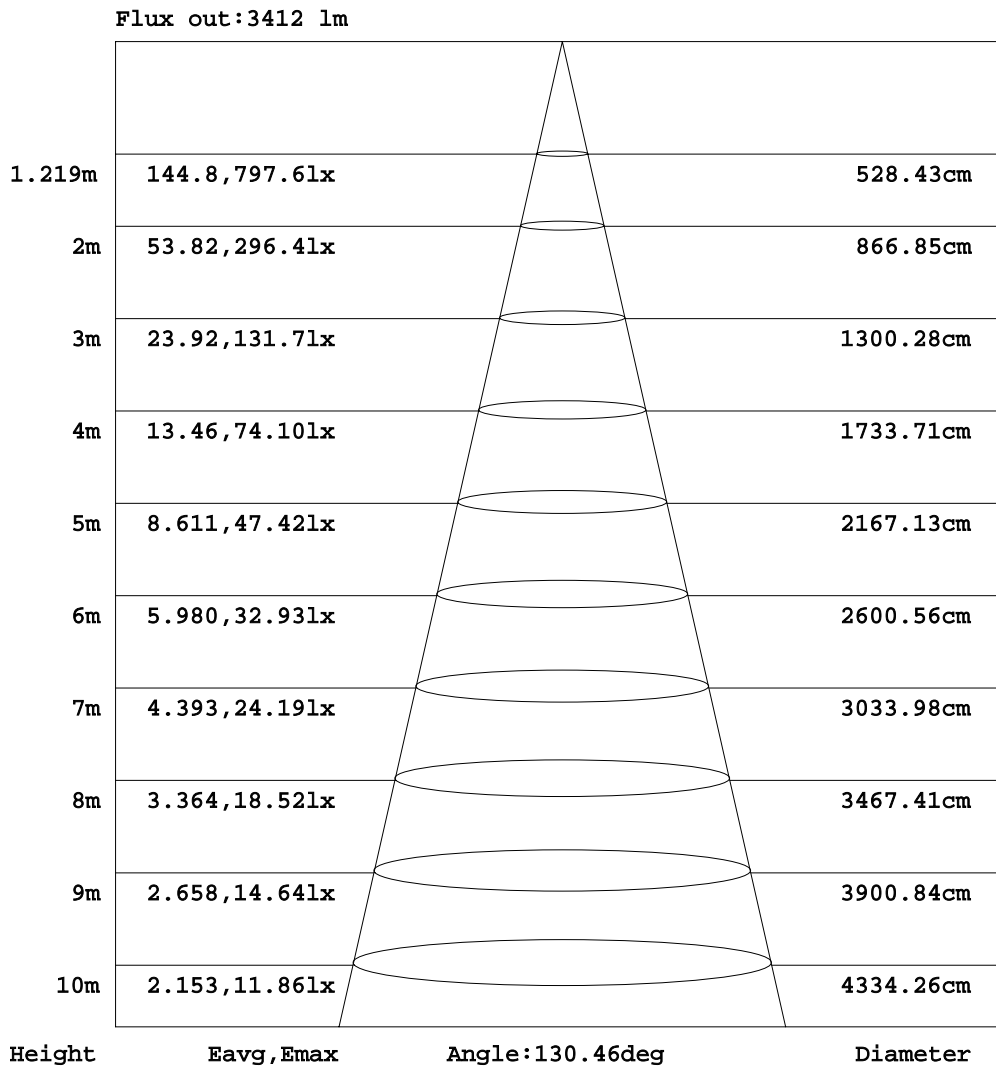


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Derek Lai
 Test Date: 06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance: 2.500m [K=1.0621]
 Remarks:

AAI Figure

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:



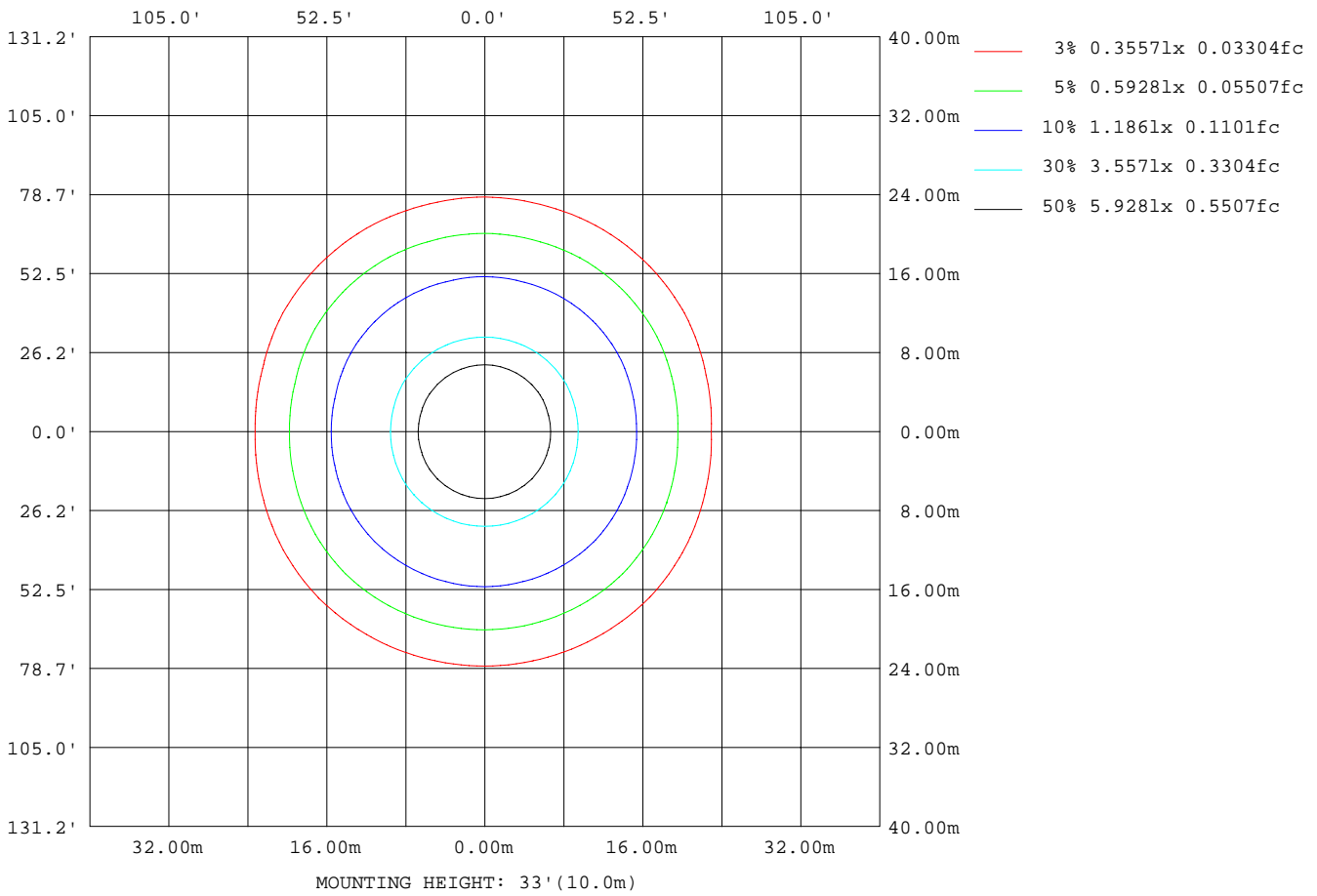
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks:

LED Avg.L Report

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

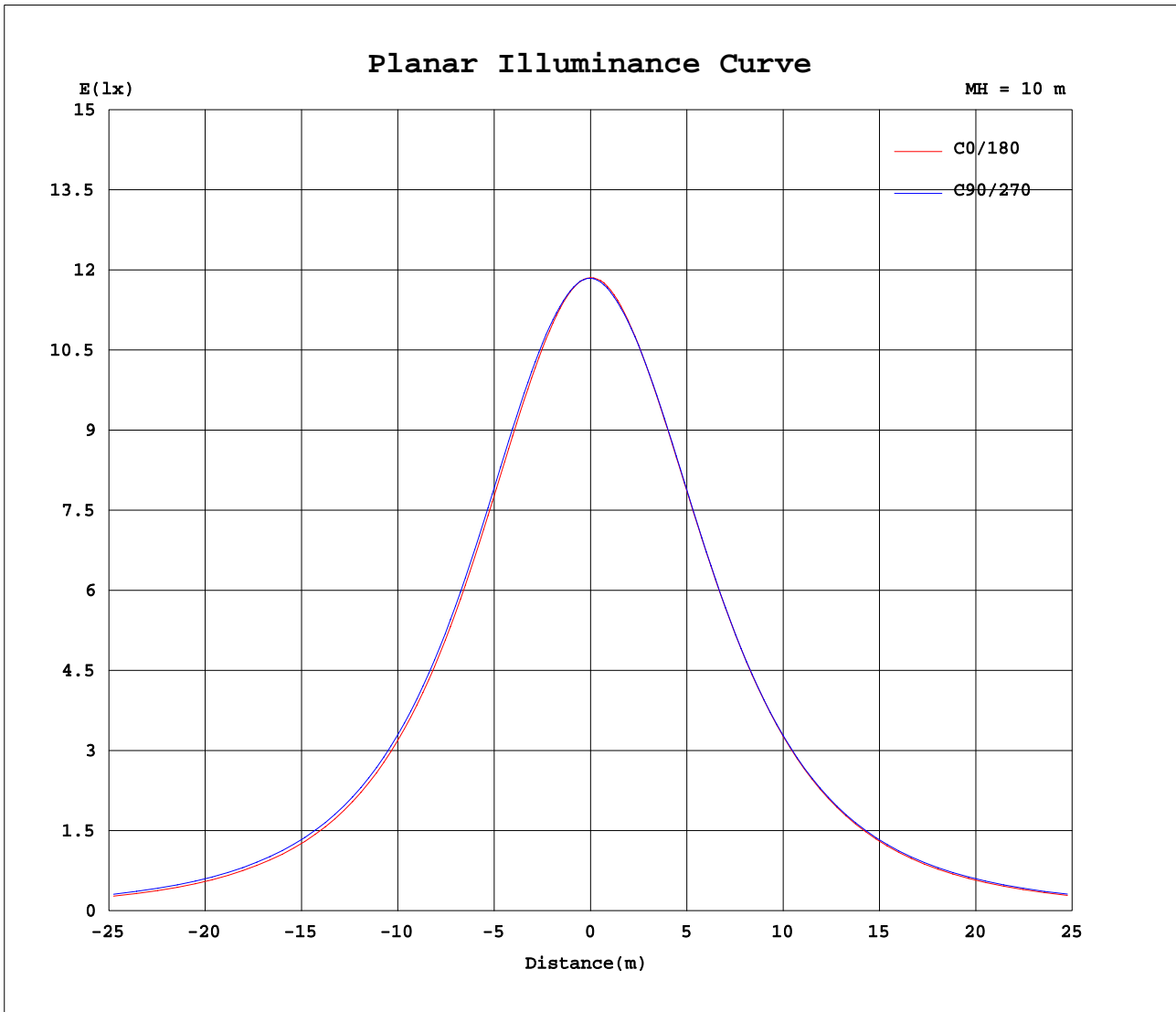
AvgL	cd/m2
L_0~180(65)av	1960
L_0~180(75)av	2111
L_0~180(85)av	3152
L_90~270(65)av	2118
L_90~270(75)av	2528
L_90~270(85)av	4890
L_45(65)av	2121
L_45(75)av	2482
L_45(85)av	4533

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.1DEG
Operators: Derek Lai
Test Date: 06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362
Humidity: 41.0%
Test Distance: 2.500m [K=1.0621]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	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	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184
5	1179	1179	1180	1180	1181	1181	1181	1181	1181	1182	1181	1181	1181	1180	1180	1180	1180	1179	1179
10	1166	1167	1167	1170	1170	1171	1172	1173	1171	1172	1171	1171	1170	1169	1170	1168	1169	1169	1169
15	1148	1149	1149	1153	1155	1159	1161	1161	1158	1156	1154	1154	1154	1153	1152	1152	1155	1156	1156
20	1125	1127	1127	1132	1135	1140	1142	1143	1138	1136	1133	1134	1134	1131	1131	1132	1135	1137	1137
25	1095	1098	1100	1107	1109	1114	1116	1116	1113	1112	1108	1107	1107	1104	1106	1108	1109	1111	1111
30	1059	1061	1066	1075	1076	1080	1082	1082	1079	1081	1077	1073	1073	1069	1074	1076	1076	1075	1076
35	1014	1017	1026	1035	1035	1037	1039	1039	1039	1042	1038	1031	1031	1027	1036	1038	1036	1033	1033
40	962	966	978	988	987	988	989	990	991	996	992	982	980	978	990	992	989	983	984
45	902	908	922	933	932	931	932	934	936	942	937	926	923	921	937	938	935	927	928
50	834	842	859	871	869	868	869	870	874	880	875	862	857	858	876	877	874	865	866
55	759	769	788	801	800	799	800	802	806	811	805	791	783	786	806	809	806	797	798
60	679	691	709	724	724	724	728	729	731	736	727	711	700	706	729	734	732	723	723
65	583	600	623	641	643	643	645	646	650	652	642	623	610	618	644	651	651	642	644
70	485	503	530	551	555	556	560	560	562	563	550	527	511	522	552	562	565	557	560
75	380	401	432	457	463	466	470	470	470	469	452	426	406	421	455	468	474	468	472
80	278	299	334	363	372	377	383	381	379	375	354	323	301	317	356	374	383	379	385
85	190	211	250	280	293	299	306	302	299	290	266	232	206	224	265	287	300	301	308
90	124	98.2	116	127	139	163	168	181	160	164	138	142	141	132	168	155	173	161	167
95	118	122	119	135	171	147	152	146	159	134	104	114	132	123	135	131	128	140	147
100	37.4	52.8	65.3	87.8	169	212	222	212	172	94.6	66.2	55.5	41.5	51.0	62.4	130	196	221	228
105	40.8	49.5	70.7	81.9	97.8	104	114	104	99.1	88.8	72.8	57.4	42.2	53.7	69.9	88.8	110	152	168
110	40.3	47.3	78.2	83.3	93.3	92.6	93.6	93.1	94.4	84.8	84.0	60.7	41.7	52.3	87.1	82.7	93.3	93.0	94.1
115	35.7	43.6	86.2	81.6	90.5	89.4	90.6	90.0	91.7	83.6	87.7	50.1	41.1	46.1	68.6	79.5	84.7	89.5	91.1
120	24.9	36.5	46.1	80.5	87.3	85.8	87.5	86.5	88.8	81.5	81.4	47.3	12.4	38.0	47.1	76.4	85.6	82.0	84.9
125	31.6	36.1	54.7	95.3	83.5	81.9	84.1	82.9	84.6	97.7	58.3	24.9	33.1	28.0	55.3	71.9	78.0	78.4	78.2
130	10.9	23.1	47.6	38.4	96.4	82.1	82.1	83.5	97.5	49.6	55.5	39.9	32.1	35.8	52.5	25.0	73.8	73.0	77.7
135	16.9	24.4	27.0	56.5	46.8	94.8	98.7	99.4	52.4	57.2	49.8	36.2	29.0	33.5	22.3	53.6	19.5	48.9	71.5
140	25.3	29.0	40.0	48.5	56.2	79.4	51.6	74.3	56.9	54.2	36.5	22.9	13.2	20.0	34.3	51.6	57.2	57.6	30.7
145	25.8	28.2	27.7	19.6	51.1	50.8	53.7	52.1	51.7	21.2	40.4	28.7	25.5	28.2	39.0	18.2	50.7	51.8	55.1
150	25.6	16.8	33.7	34.0	15.7	45.2	48.2	42.5	16.4	39.0	35.9	28.6	26.1	24.4	35.0	39.5	15.4	27.9	40.5
155	14.0	11.7	28.0	33.3	29.1	33.2	24.6	27.3	35.6	35.9	27.1	11.3	16.7	9.65	27.2	35.8	36.7	23.7	31.3
160	11.9	14.2	22.4	27.9	30.6	26.5	34.8	29.1	27.0	25.2	18.3	1.81	12.9	3.08	18.0	24.2	27.1	29.8	36.8
165	10.2	14.6	9.31	21.1	19.9	21.4	29.2	21.5	14.7	14.4	1.57	9.37	10.1	11.2	1.90	13.8	15.5	20.9	30.1
170	19.3	17.7	17.7	3.00	4.47	17.8	17.9	16.9	11.5	1.72	2.91	10.7	10.7	11.2	6.67	1.91	8.42	17.3	17.8
175	11.0	10.5	14.9	18.4	18.3	16.4	16.2	15.2	18.1	20.3	19.3	18.5	18.2	19.1	19.6	20.7	19.3	16.5	18.1
180	21.5	21.5	21.5	21.3	21.0	20.2	20.7	19.9	20.9	21.2	21.4	21.5	21.5	21.5	21.5	21.3	21.0	20.2	20.7

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.3467A P:41.04W PF:0.9864 Freq:60.01Hz Lamp Flux:4865.13x1 lm		
NAME: ASD-LFL01-24D4040	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD Lighting corp	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	1184	1184	1184	1184	1184														
5	1179	1178	1179	1179	1179														
10	1168	1167	1166	1166	1166														
15	1154	1151	1148	1147	1147														
20	1135	1131	1127	1125	1124														
25	1108	1104	1101	1098	1094														
30	1073	1070	1069	1064	1058														
35	1030	1029	1029	1025	1014														
40	980	981	982	977	964														
45	923	926	928	922	906														
50	861	864	865	859	841														
55	793	796	796	790	769														
60	719	723	720	712	692														
65	638	641	637	628	602														
70	553	555	549	535	505														
75	464	465	456	439	404														
80	376	375	363	342	303														
85	300	296	281	257	216														
90	148	138	130	117	129														
95	166	178	139	102	97.2														
100	222	194	109	61.3	49.1														
105	146	97.3	80.0	68.9	57.3														
110	93.9	91.4	80.5	82.0	54.1														
115	90.7	90.2	80.8	71.0	48.0														
120	83.8	86.3	76.6	48.6	40.7														
125	79.1	80.5	72.0	59.9	42.1														
130	74.1	74.5	29.4	52.2	28.5														
135	44.5	20.8	58.4	29.2	28.0														
140	58.8	58.8	51.7	44.9	31.8														
145	52.6	52.6	20.0	31.4	30.5														
150	13.4	16.1	40.6	35.6	26.8														
155	32.1	37.5	36.2	30.8	12.4														
160	29.0	32.7	30.1	25.3	12.1														
165	23.1	21.9	22.3	12.0	14.8														
170	17.5	4.70	3.23	18.8	18.2														
175	16.2	18.4	19.2	14.7	11.1														
180	19.9	20.9	21.2	21.4	21.5														

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 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	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184
3.0	1182	1182	1182	1183	1183	1183	1184	1184	1183	1184
6.0	1177	1177	1178	1179	1179	1180	1180	1180	1179	1180
9.0	1169	1170	1170	1172	1172	1174	1174	1175	1174	1174
12.0	1159	1160	1161	1163	1165	1167	1169	1168	1167	1166
15.0	1148	1149	1149	1153	1155	1159	1161	1161	1158	1156
18.0	1135	1136	1137	1141	1144	1148	1150	1151	1147	1145
21.0	1120	1121	1122	1127	1131	1136	1137	1138	1134	1132
24.0	1102	1104	1106	1112	1115	1120	1122	1122	1118	1118
27.0	1081	1084	1087	1095	1097	1101	1103	1104	1100	1100
30.0	1059	1061	1066	1075	1076	1080	1082	1082	1079	1081
33.0	1033	1036	1043	1052	1053	1055	1057	1058	1056	1059
36.0	1004	1008	1017	1027	1026	1028	1029	1030	1029	1034
39.0	972.7	977.1	987.8	998.2	997.2	997.9	999.8	1001	1001	1006
42.0	938.2	943.8	956.8	966.9	965.4	965.7	966.9	968.1	969.5	975.5
45.0	901.7	907.7	922.2	933.4	931.8	931.1	932.5	933.6	935.8	942.0
48.0	862.1	869.5	885.5	896.9	894.2	894.2	895.2	896.6	899.6	905.9
51.0	819.6	828.3	845.2	857.3	856.2	854.6	855.8	857.2	860.7	866.8
54.0	774.4	784.4	802.8	815.5	814.5	812.7	814.5	815.8	819.8	825.8
57.0	727.3	738.2	757.5	771.2	770.5	769.1	771.6	772.4	776.3	782.1
60.0	679.0	691.3	709.3	724.4	724.3	723.7	727.7	729.1	730.7	735.5
63.0	622.4	638.0	658.2	674.9	676.5	676.1	676.9	679.0	684.3	686.4
66.0	563.9	581.0	604.8	623.2	625.2	625.4	627.8	628.7	631.9	635.1
69.0	504.6	522.8	548.9	569.2	572.4	573.7	577.4	577.1	579.6	581.7
72.0	444.3	462.5	491.2	513.4	518.3	520.3	523.5	523.6	525.7	526.1
75.0	380.4	400.9	432.0	456.6	463.0	465.8	469.9	469.6	470.5	469.2
78.0	318.1	339.3	372.9	399.7	407.9	412.0	417.0	415.6	415.4	412.3
81.0	258.1	280.2	316.1	344.7	355.1	360.3	366.1	363.8	362.3	357.0
84.0	204.9	227.5	264.8	294.7	306.6	312.9	319.4	316.3	313.5	305.7
87.0	166.5	186.1	223.9	253.3	267.1	274.5	281.8	277.7	273.0	261.8
90.0	124.1	98.16	115.9	127.5	139.1	163.5	167.7	181.4	160.2	164.1
93.0	116.4	95.19	120.9	121.2	136.1	144.2	144.2	137.9	123.2	115.9
96.0	86.15	96.81	99.27	139.7	187.7	217.1	220.7	214.8	191.1	143.9
99.0	37.16	53.84	63.12	108.9	185.8	219.5	229.1	220.5	188.5	116.9
102.0	36.73	50.61	68.34	78.76	124.0	174.1	187.3	174.3	127.6	80.31
105.0	40.79	49.55	70.74	81.88	97.84	103.9	113.8	104.5	99.14	88.83
108.0	38.93	48.37	71.36	83.16	94.15	93.76	94.51	94.03	95.16	84.71
111.0	39.86	46.92	79.06	83.09	92.83	92.03	93.03	92.56	93.83	84.66
114.0	42.96	47.72	83.62	82.10	91.17	90.04	91.23	90.65	92.24	83.97
117.0	33.90	42.93	80.76	80.21	89.28	87.94	89.33	88.57	90.40	82.61
120.0	24.86	36.46	46.15	80.49	87.26	85.80	87.46	86.48	88.76	81.50
123.0	31.77	38.63	57.79	88.55	84.49	83.66	85.60	84.48	86.36	90.31
126.0	31.50	34.43	52.84	98.11	84.86	81.03	83.28	82.10	86.05	101.1
129.0	11.26	23.13	48.30	46.40	92.60	80.83	80.86	80.44	93.81	55.89
132.0	25.11	31.35	48.90	58.76	86.11	87.35	86.37	88.49	105.0	44.64
135.0	16.87	24.43	27.01	56.54	46.76	94.80	98.66	99.37	52.44	57.18
138.0	25.01	28.97	39.03	54.82	62.89	50.24	55.36	52.97	69.11	55.66
141.0	25.65	30.00	36.80	46.99	54.95	70.31	84.04	72.91	56.89	53.06
144.0	26.16	28.43	28.32	20.21	52.14	52.09	56.09	53.50	52.92	48.84
147.0	16.96	15.87	34.93	32.09	48.69	48.83	51.11	49.38	48.89	19.82
150.0	25.58	16.82	33.68	34.02	15.68	45.16	48.16	42.46	16.38	39.00
153.0	21.62	13.89	31.24	35.32	36.56	12.09	15.61	16.85	36.09	36.56
156.0	13.01	11.32	26.98	32.36	28.99	31.75	35.93	29.93	32.31	33.92
159.0	12.12	11.50	23.18	29.08	31.62	25.88	31.63	26.09	33.90	27.16
162.0	11.30	16.07	16.80	25.89	27.61	24.78	33.62	31.50	19.34	20.87
165.0	10.24	14.57	9.308	21.05	19.92	21.43	29.18	21.48	14.69	14.45
168.0	12.63	9.086	7.573	9.676	11.75	21.21	20.21	18.24	12.56	2.959
171.0	19.53	18.61	10.14	2.860	5.053	13.71	13.19	12.62	9.079	1.813
174.0	10.49	10.02	9.749	14.28	15.57	13.53	11.82	12.43	12.36	18.57
177.0	19.93	19.44	19.86	19.73	19.57	20.17	20.46	20.35	20.15	21.00
180.0	21.48	21.52	21.52	21.28	21.02	20.20	20.67	19.87	20.93	21.22
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184
3.0	1184	1184	1183	1183	1183	1183	1183	1182	1182	1182
6.0	1180	1180	1180	1179	1179	1178	1178	1177	1177	1177
9.0	1173	1174	1173	1172	1172	1171	1172	1171	1171	1170
12.0	1165	1165	1164	1163	1163	1162	1163	1164	1164	1163
15.0	1154	1154	1154	1153	1152	1152	1155	1156	1156	1154
18.0	1142	1142	1143	1141	1140	1140	1144	1145	1146	1144
21.0	1129	1129	1129	1126	1127	1127	1130	1132	1133	1130
24.0	1113	1113	1113	1110	1111	1112	1115	1116	1117	1114
27.0	1096	1094	1094	1091	1094	1096	1097	1097	1098	1095
30.0	1077	1073	1073	1069	1074	1076	1076	1075	1076	1073

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.1DEG

Operators: Derek Lai

Test Date: 06 September 2019

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.362

Humidity: 41.0%

Test Distance: 2.500m [K=1.0621]

Remarks:

Photometric Data Table [cd]

33.0	1054	1049	1048	1045	1053	1054	1053	1051	1052	1048
36.0	1029	1022	1021	1018	1028	1029	1027	1023	1024	1021
39.0	1001	992.7	991.6	988.4	1000	1002	999.0	994.0	994.3	990.3
42.0	970.6	960.5	958.9	956.3	970.0	970.9	967.6	961.7	962.0	958.4
45.0	937.2	925.8	922.7	921.3	936.6	938.3	934.7	927.3	927.7	923.5
48.0	901.1	888.7	884.6	884.0	900.3	902.8	898.9	891.1	891.3	887.1
51.0	861.8	847.9	843.0	844.2	862.1	864.0	860.9	851.8	852.4	847.9
54.0	820.0	805.4	798.2	800.6	820.5	823.1	819.8	810.9	811.5	806.7
57.0	775.0	759.5	751.1	754.6	776.4	779.7	777.2	767.5	768.7	763.7
60.0	727.5	711.0	700.2	706.1	729.2	733.7	732.1	722.6	723.3	718.6
63.0	677.0	658.7	646.8	654.2	679.2	685.1	684.4	675.3	676.6	670.8
66.0	624.1	604.2	590.6	599.5	626.6	633.9	634.2	625.8	627.7	621.4
69.0	568.7	546.8	531.3	542.0	571.4	580.3	582.4	574.5	577.4	570.3
72.0	510.9	486.8	469.7	482.2	514.0	525.2	528.9	521.8	525.0	517.6
75.0	451.9	425.6	406.2	420.6	455.1	468.3	473.9	468.1	472.2	464.3
78.0	392.9	363.4	342.5	358.0	395.2	411.2	418.8	414.4	419.3	410.9
81.0	335.0	303.2	280.6	297.1	336.6	355.3	365.4	362.6	368.6	359.9
84.0	281.9	248.6	224.1	241.0	282.1	303.3	315.5	314.9	322.2	313.6
87.0	237.7	202.6	177.2	195.4	235.5	258.2	272.6	274.7	283.5	275.2
90.0	137.6	142.2	141.0	131.8	167.9	155.4	172.7	161.1	166.8	148.0
93.0	114.5	89.01	98.33	92.05	112.6	122.5	125.1	137.9	145.1	138.5
96.0	89.11	83.98	108.6	99.30	110.3	139.4	186.1	213.2	213.9	220.8
99.0	63.22	53.06	41.26	49.86	59.44	144.7	196.8	222.4	229.4	223.0
102.0	69.94	61.13	41.92	52.86	66.80	99.44	174.2	212.8	223.8	209.2
105.0	72.83	57.43	42.22	53.71	69.89	88.81	109.9	151.6	167.7	145.5
108.0	93.09	57.18	42.07	52.79	72.27	82.29	94.05	101.0	98.40	96.85
111.0	76.73	76.46	43.84	62.83	78.84	80.42	92.86	92.29	93.57	93.36
114.0	84.23	53.21	27.42	50.54	69.28	79.73	90.33	90.29	91.84	91.44
117.0	92.54	46.88	29.46	36.62	67.39	78.32	87.65	84.72	89.77	89.32
120.0	81.42	47.30	12.39	37.95	47.12	76.39	85.59	81.97	84.94	83.84
123.0	44.78	38.76	33.46	35.42	48.51	71.69	80.81	80.55	83.51	81.60
126.0	57.62	32.17	32.93	27.10	54.95	70.90	78.76	78.53	80.02	79.14
129.0	56.01	40.55	32.53	36.32	53.08	26.90	75.99	74.92	78.72	76.46
132.0	54.50	38.97	30.25	35.38	50.94	56.82	67.53	72.37	74.63	72.78
135.0	49.77	36.22	28.99	33.45	22.27	53.60	19.46	48.88	71.47	44.49
138.0	17.65	28.26	21.94	23.31	15.24	52.13	58.96	14.49	17.21	15.38
141.0	37.71	22.26	11.14	20.08	37.79	49.59	55.90	57.18	59.72	58.41
144.0	40.57	28.95	20.66	29.04	39.26	18.75	51.99	53.21	56.51	54.24
147.0	39.28	28.98	25.34	28.81	37.81	28.04	25.00	49.00	52.67	50.32
150.0	35.89	28.60	26.13	24.35	35.02	39.48	15.42	27.89	40.52	13.40
153.0	32.65	17.35	21.67	12.19	31.67	39.03	35.09	8.665	15.63	12.29
156.0	25.89	7.680	14.21	7.868	24.39	33.42	36.51	31.19	35.82	31.47
159.0	20.81	5.119	13.21	4.859	19.84	25.82	32.99	30.91	37.37	30.29
162.0	14.49	2.008	12.35	10.41	14.20	19.88	19.42	31.89	34.55	26.76
165.0	1.574	9.374	10.11	11.24	1.903	13.82	15.52	20.93	30.12	23.08
168.0	1.900	14.15	12.49	13.89	2.185	1.804	13.41	17.99	19.81	22.03
171.0	9.725	10.51	10.71	11.31	11.17	1.945	8.934	11.50	14.16	12.81
174.0	18.72	13.48	14.49	14.34	18.89	18.85	13.82	12.31	11.59	13.33
177.0	20.70	20.17	20.04	20.64	21.05	21.61	21.26	20.93	21.25	20.97
180.0	21.37	21.49	21.48	21.55	21.54	21.29	21.02	20.20	20.66	19.87
G/C	300.0	315.0	330.0	345.0						
0.0	1184	1184	1184	1184						
3.0	1181	1183	1182	1182						
6.0	1176	1177	1177	1177						
9.0	1169	1169	1170	1169						
12.0	1161	1160	1159	1159						
15.0	1151	1148	1147	1147						
18.0	1139	1136	1134	1134						
21.0	1126	1122	1120	1119						
24.0	1110	1107	1104	1101						
27.0	1091	1089	1085	1081						
30.0	1070	1069	1064	1058						
33.0	1046	1046	1042	1033						
36.0	1020	1020	1016	1005						
39.0	991.0	991.4	987.4	974.2						
42.0	959.3	960.5	955.9	940.8						
45.0	925.7	927.6	922.2	905.6						
48.0	890.1	890.9	885.6	867.6						
51.0	851.1	851.7	846.0	827.8						
54.0	810.0	810.1	804.0	783.9						
57.0	767.4	766.1	759.0	737.7						
60.0	722.7	719.9	711.9	691.6						
63.0	675.6	671.0	662.4	641.0						
66.0	624.1	620.1	610.1	581.7						

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks:

Photometric Data Table [cd]

69.0	572.7	567.0	554.1	524.3
72.0	519.4	511.9	497.1	467.0
75.0	464.9	455.7	438.6	404.0
78.0	410.3	399.3	380.0	343.2
81.0	358.1	345.0	323.4	284.2
84.0	310.2	295.5	271.9	231.6
87.0	269.5	253.1	228.4	191.9
90.0	138.2	130.5	116.7	128.8
93.0	121.7	108.8	122.0	104.4
96.0	189.1	145.4	72.62	68.82
99.0	196.5	129.0	59.03	46.70
102.0	163.6	86.94	64.13	50.14
105.0	97.27	79.97	68.88	57.32
108.0	91.40	79.56	71.91	53.79
111.0	91.07	80.36	73.40	53.71
114.0	90.25	79.54	71.88	49.30
117.0	88.18	77.02	69.63	45.77
120.0	86.33	76.65	48.56	40.68
123.0	81.04	73.91	50.48	35.33
126.0	79.74	71.87	58.20	41.57
129.0	76.86	30.23	53.17	29.00
132.0	70.30	61.33	51.77	34.16
135.0	20.83	58.42	29.21	28.04
138.0	61.23	57.61	26.20	32.20
141.0	57.39	49.91	43.42	31.85
144.0	53.97	20.43	32.23	29.94
147.0	20.32	36.15	37.94	19.19
150.0	16.13	40.57	35.55	26.85
153.0	36.89	38.43	34.08	13.94
156.0	36.97	34.73	29.94	11.92
159.0	33.99	31.06	26.24	11.07
162.0	29.19	27.86	17.14	18.39
165.0	21.92	22.28	12.00	14.83
168.0	13.50	9.374	8.745	10.87
171.0	5.052	3.316	12.63	19.36
174.0	16.31	15.11	12.81	10.56
177.0	19.39	20.28	19.79	19.93
180.0	20.94	21.22	21.37	21.52

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Derek Lai
 Test Date:06 September 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.362
 Humidity: 41.0%
 Test Distance:2.500m [K=1.0621]
 Remarks: