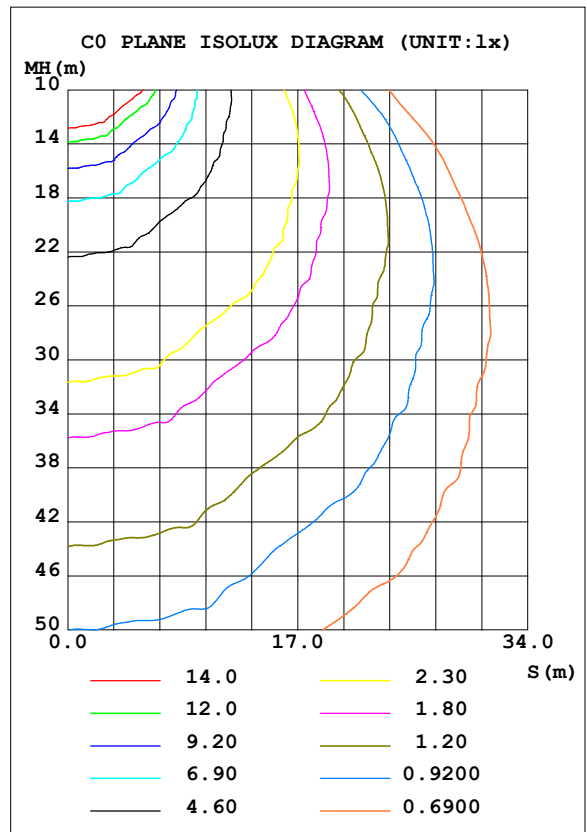
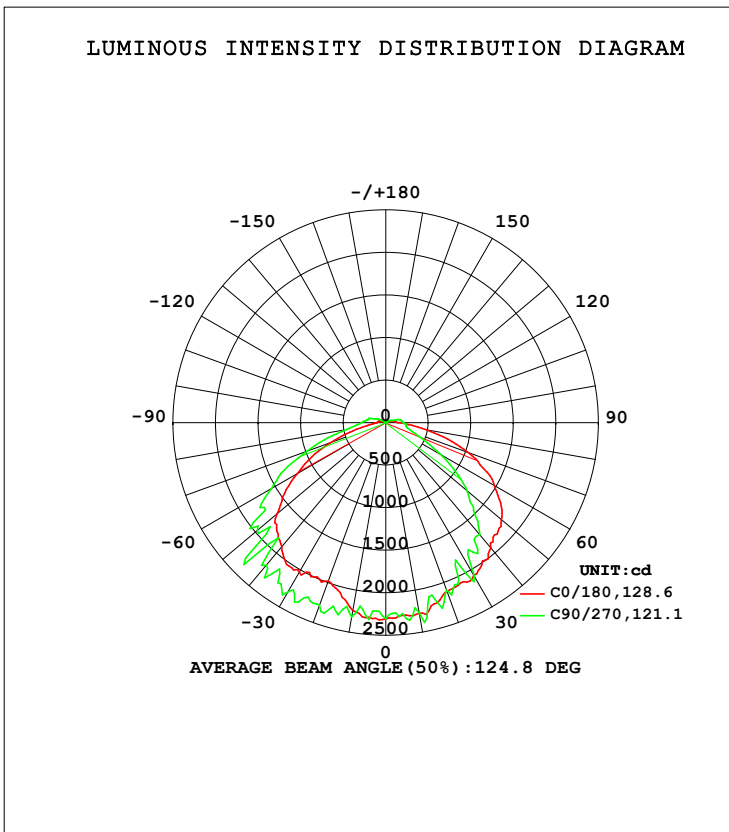


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:121.5V I:0.4225A P:51.10W PF:0.9954 Freq:59.98Hz Lamp Flux:7100x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-WLP01S-50D50	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.18x0.25m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 138.95 lm/W			
MODEL	ASD-WLP01S-50D50	I <sub>max</sub> (cd)	2398	S/MH (C0/180)	1.36
NOMINAL POWER (W)	50	LOR (%)	100.0	S/MH (C90/270)	1.43
RATED VOLTAGE (V)	120-277	TOTAL FLUX (lm)	7100	η UP, DN (C0-180)	2.5, 42.6
NOMINAL FLUX (lm)	7100	CIE CLASS	DIRECT	η UP, DN (C180-360)	3.1, 51.8
LAMPS INSIDE	1	η up (%)	5.6	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	η down (%)	94.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 24.5DEG  
 Operators: wudashuai  
 Test Date: 2021-12-14

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity: 50%  
 Test Distance: 6.500m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	2273	2344	2275	2307	2243	2203	2319	2245	0- 10	217.1	217.1	2.72,2.72
20	2111	2116	2093	2190	1983	2152	2281	2264	10- 20	628.3	845.3	10.6,10.6
30	2070	1969	2084	1817	2031	2243	2292	2203	20- 30	983.2	1829	22.9,22.9
40	1919	1619	1722	1498	1902	1831	2185	2017	30- 40	1239	3068	38.4,38.4
50	1776	1359	1250	1254	1667	1755	1968	1625	40- 50	1317	4385	54.9,54.9
60	1474	980.6	735.4	868.9	1206	1383	1558	1315	50- 60	1241	5625	70.4,70.4
70	1028	604.9	356.7	503.8	693.2	1015	986.5	1042	60- 70	977.5	6603	82.7,82.7
80	482.0	308.6	244.0	243.3	239.2	569.7	467.7	691.0	70- 80	616.1	7219	90.4,90.4
90	155.3	187.2	208.7	167.6	110.8	264.5	282.7	324.9	80- 90	319.8	7539	94.4,94.4
100	102.3	146.2	179.7	125.3	87.92	171.7	216.2	176.1	90-100	193.7	7732	96.8,96.8
110	49.24	93.56	86.23	68.36	41.18	115.5	132.8	118.4	100-110	131.9	7864	98.5,98.5
120	31.28	34.80	42.75	29.05	18.08	43.39	64.65	51.95	110-120	62.07	7926	99.2,99.2
130	20.83	17.38	14.13	15.55	15.34	17.81	10.57	25.62	120-130	23.76	7950	99.5,99.5
140	15.51	15.58	15.95	15.73	15.08	13.45	12.58	18.11	130-140	12.17	7962	99.7,99.7
150	15.96	17.03	17.48	17.17	16.89	15.32	14.67	16.39	140-150	9.851	7972	99.8,99.8
160	17.59	18.19	18.72	18.36	18.42	17.13	16.83	18.02	150-160	7.917	7980	99.9,99.9
170	18.99	19.20	19.73	19.25	19.49	18.66	18.72	19.21	160-170	5.245	7985	100,100
180	19.79	19.51	19.82	19.71	19.80	19.52	19.82	19.74	170-180	1.852	7987	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 3722.9 lm

%lum = 46.6%

%lamp = 46.6%

Conical surface Flux(120deg): 5625.3 lm

%lum = 70.4%

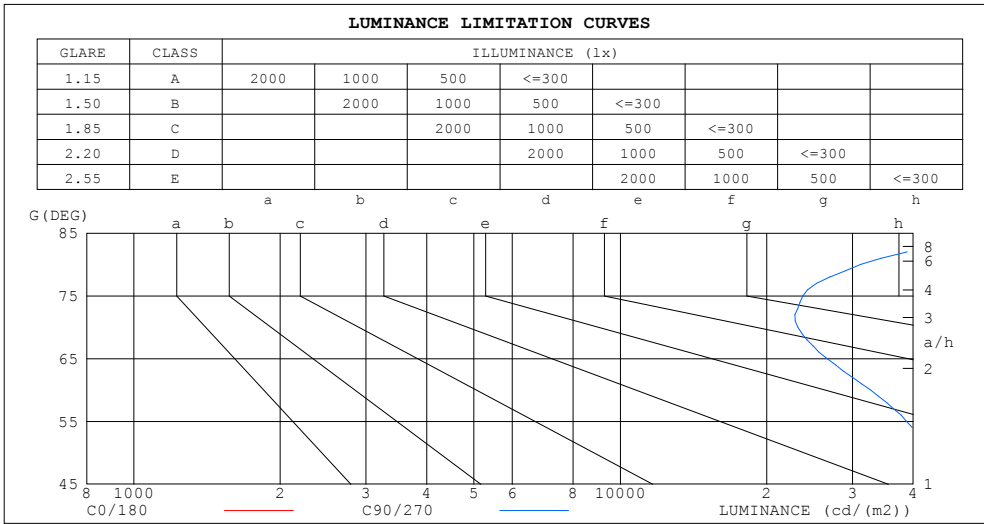
%lamp = 70.4%

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:24.5DEG  
 Operators:wudashuai  
 Test Date:2021-12-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:50%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:121.5V I:0.4225A P:51.10W PF:0.9954 Freq:59.98Hz Lamp Flux:7100x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-WLP01S-50D50	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.18x0.25m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	68979	61372
80	61693	31226
75	64776	23729
70	66824	23175
65	66275	26587
60	65549	32677
55	63986	38704
50	61418	43210
45	58193	45933

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:24.5DEG  
 Operators:wudashuai  
 Test Date:2021-12-14

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:50%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:121.5V I:0.4225A P:51.10W PF:0.9954 Freq:59.98Hz Lamp Flux:7100x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-WLP01S-50D50	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.18x0.25m	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.339	.193	.061	.330	.188	.060	.313	.180	.057	.298	.172	.055	.284	.165	.053	
2.0	.309	.169	.052	.301	.166	.051	.286	.159	.049	.272	.153	.048	.260	.147	.046	
3.0	.281	.150	.045	.274	.147	.044	.261	.141	.043	.249	.136	.042	.237	.131	.041	
4.0	.257	.134	.039	.251	.131	.039	.239	.127	.038	.228	.122	.037	.218	.118	.036	
5.0	.236	.120	.035	.231	.118	.035	.220	.115	.034	.210	.111	.033	.201	.107	.032	
6.0	.218	.109	.031	.213	.108	.031	.204	.104	.030	.195	.101	.030	.186	.098	.029	
7.0	.202	.100	.028	.198	.099	.028	.189	.096	.028	.181	.093	.027	.174	.090	.026	
8.0	.189	.092	.026	.184	.091	.026	.177	.088	.025	.169	.086	.025	.162	.083	.024	
9.0	.176	.085	.024	.173	.084	.024	.165	.082	.023	.159	.080	.023	.152	.077	.022	
10.0	.165	.079	.022	.162	.078	.022	.156	.076	.021	.149	.074	.021	.144	.072	.021	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.233	.233	.233	.199	.199	.199	.136	.136	.136	.078	.078	.078	.025	.025	.025	
1.0	.225	.199	.175	.193	.171	.151	.132	.118	.104	.076	.068	.061	.024	.022	.020	
2.0	.218	.175	.139	.187	.151	.120	.128	.104	.084	.074	.061	.049	.024	.020	.016	
3.0	.210	.158	.116	.180	.136	.101	.124	.095	.071	.071	.055	.042	.023	.018	.014	
4.0	.203	.145	.101	.174	.125	.088	.120	.087	.062	.069	.051	.037	.022	.017	.012	
5.0	.195	.135	.090	.168	.117	.079	.115	.081	.055	.067	.048	.033	.022	.016	.011	
6.0	.188	.127	.083	.162	.110	.072	.111	.077	.051	.065	.045	.030	.021	.015	.010	
7.0	.181	.120	.077	.156	.104	.067	.108	.073	.048	.063	.043	.028	.020	.014	.009	
8.0	.174	.114	.073	.150	.099	.063	.104	.069	.045	.060	.041	.027	.020	.013	.009	
9.0	.168	.109	.069	.145	.095	.060	.100	.067	.043	.059	.039	.026	.019	.013	.008	
10.0	.163	.105	.067	.140	.091	.058	.097	.064	.041	.057	.038	.025	.018	.012	.008	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:24.5DEG  
 Operators:wudashuai  
 Test Date:2021-12-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:50%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

## UGR(Unified Glare Rating) Table

Test:U:121.5V I:0.4225A P:51.10W PF:0.9954 Freq:59.98Hz Lamp Flux:7100x1 lm										
NAME: ASD Lighting Corp					TYPE:			WEIGHT:		
SPEC.:ASD-WLP01S-50D50					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp					SUR.:0.18x0.25m			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	26.8	28.3	27.2	28.6	28.9	24.5	26.0	24.9	26.3	26.6
3H	28.8	30.2	29.2	30.5	30.9	25.4	26.8	25.8	27.1	27.5
4H	29.7	31.0	30.1	31.3	31.7	25.8	27.1	26.2	27.5	27.8
6H	30.3	31.6	30.8	31.9	32.3	26.3	27.5	26.7	27.9	28.3
8H	30.6	31.8	31.0	32.2	32.6	26.6	27.8	27.1	28.2	28.6
12H	30.8	32.0	31.3	32.4	32.8	27.2	28.3	27.6	28.7	29.1
4H 2H	27.1	28.4	27.5	28.8	29.2	25.3	26.6	25.7	27.0	27.3
3H	29.3	30.4	29.7	30.8	31.3	26.4	27.6	26.9	28.0	28.4
4H	30.3	31.3	30.7	31.8	32.2	27.0	28.0	27.4	28.4	28.9
6H	31.1	32.0	31.6	32.5	33.0	27.6	28.5	28.1	29.0	29.5
8H	31.5	32.3	32.0	32.8	33.3	28.0	28.9	28.5	29.4	29.9
12H	31.8	32.6	32.3	33.1	33.6	28.6	29.5	29.2	29.9	30.5
8H 4H	30.4	31.3	30.9	31.7	32.2	27.5	28.3	28.0	28.8	29.3
6H	31.4	32.1	31.9	32.6	33.2	28.3	29.0	28.8	29.5	30.1
8H	31.8	32.5	32.4	33.0	33.6	28.9	29.5	29.4	30.1	30.6
12H	32.3	32.9	32.9	33.4	34.0	29.7	30.3	30.3	30.8	31.4
12H 4H	30.4	31.2	30.9	31.7	32.2	27.6	28.4	28.1	28.8	29.4
6H	31.4	32.1	32.0	32.6	33.2	28.5	29.1	29.0	29.7	30.2
8H	31.9	32.5	32.5	33.0	33.6	29.2	29.7	29.7	30.3	30.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.1					+ 0.3 / - 0.4				
2.0H	+ 0.3 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117, 7987 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 7.2$ )

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:24.5DEG  
Operators:wudashuai  
Test Date:2021-12-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
Humidity:50%  
Test Distance:6.500m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:121.5V I:0.4225A P:51.10W PF:0.9954 Freq:59.98Hz Lamp Flux:7100x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-WLP01S-50D50	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.18x0.25m	Shielding Angle:

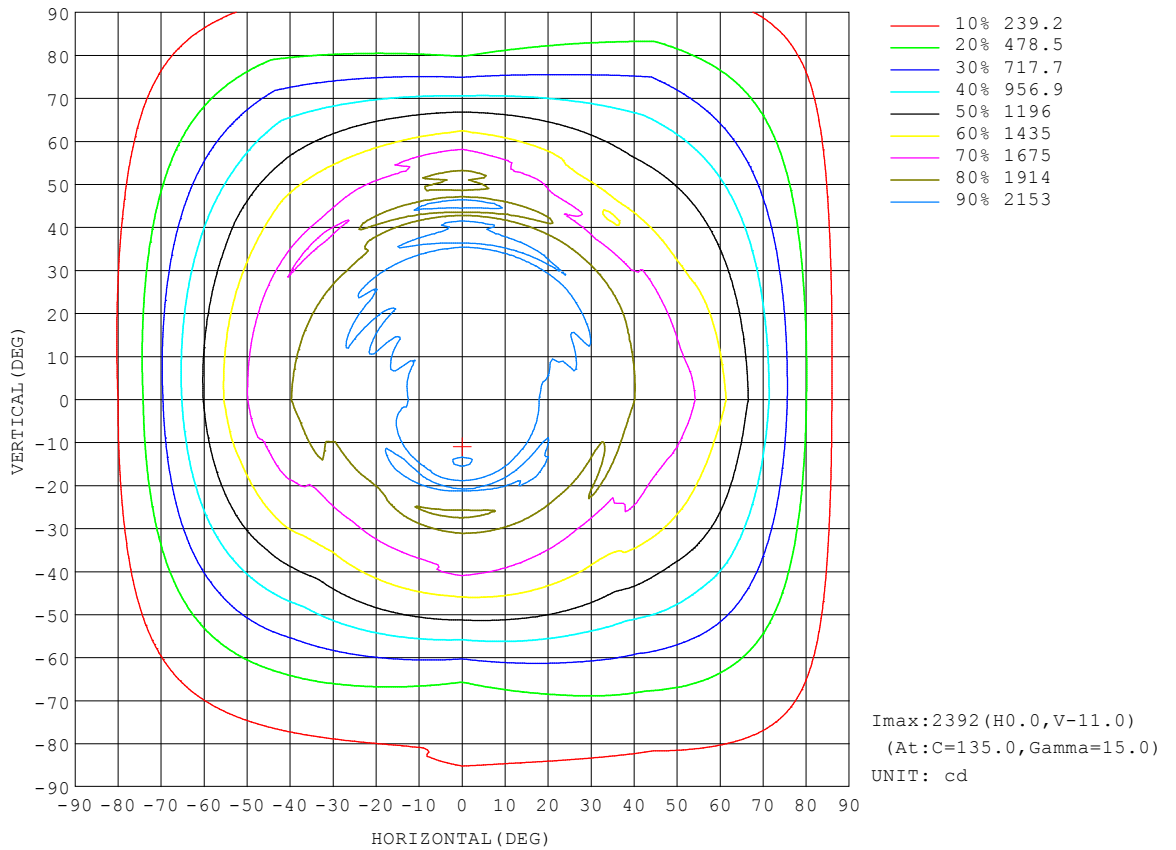
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	54	42	34	53	41	34	51	41	34	28
0.80	63	51	43	62	51	43	60	50	43	36
1.00	72	60	52	70	59	52	68	60	51	43
1.25	79	67	60	77	67	59	74	65	58	50
1.50	84	73	65	82	72	65	78	70	64	55
2.00	91	81	74	89	80	73	85	77	72	63
2.50	95	86	80	93	85	79	88	82	76	67
3.00	99	91	85	96	89	83	91	85	81	71
4.00	103	96	91	100	94	89	95	90	86	75
5.00	106	100	95	103	98	93	97	93	90	79
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:24.5DEG  
 Operators:wudashuai  
 Test Date:2021-12-14

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:50%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:121.5V I:0.4225A P:51.10W PF:0.9954 Freq:59.98Hz Lamp Flux:7100x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-WLP01S-50D50	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.18x0.25m	Shielding Angle:

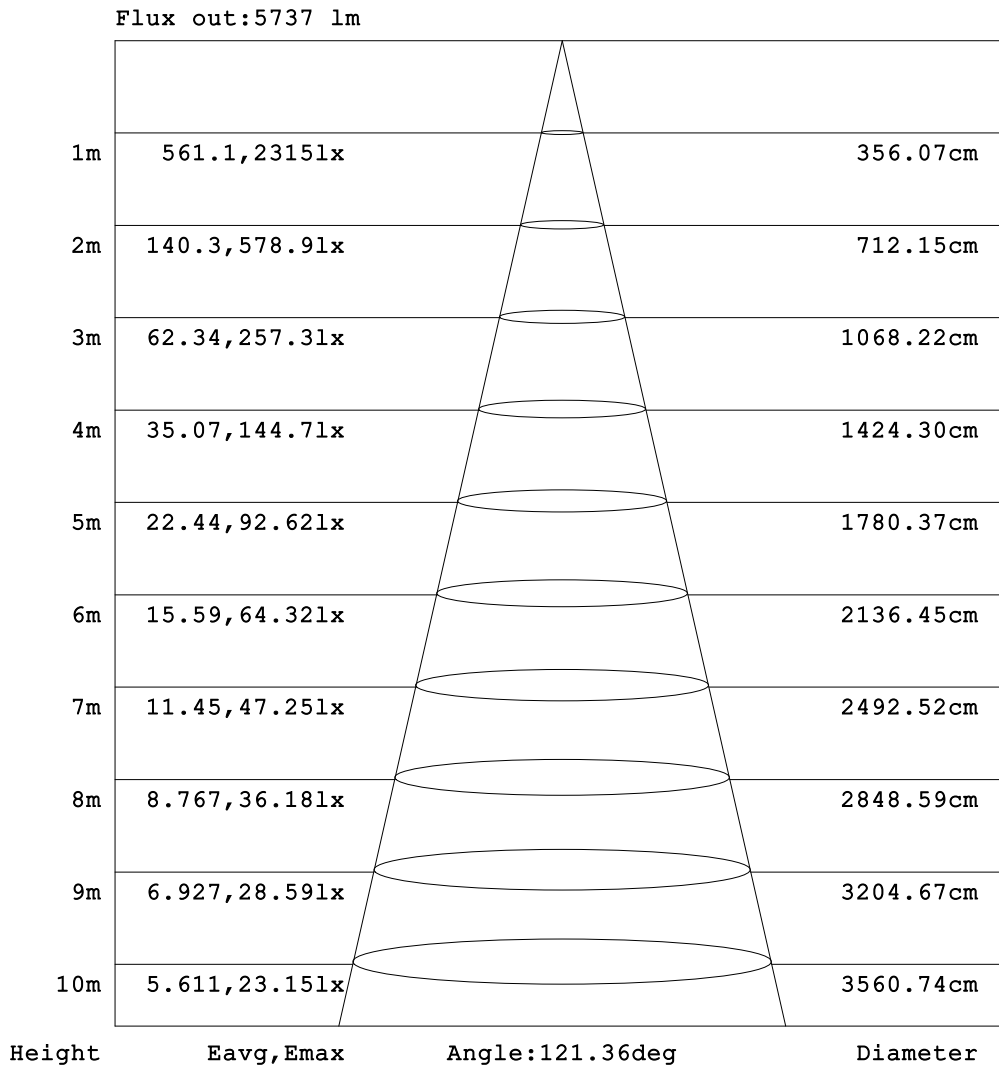


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:24.5DEG  
 Operators:wudashuai  
 Test Date:2021-12-14

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:50%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:121.5V I:0.4225A P:51.10W PF:0.9954 Freq:59.98Hz Lamp Flux:7100x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-WLP01S-50D50	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.18x0.25m	Shielding Angle:



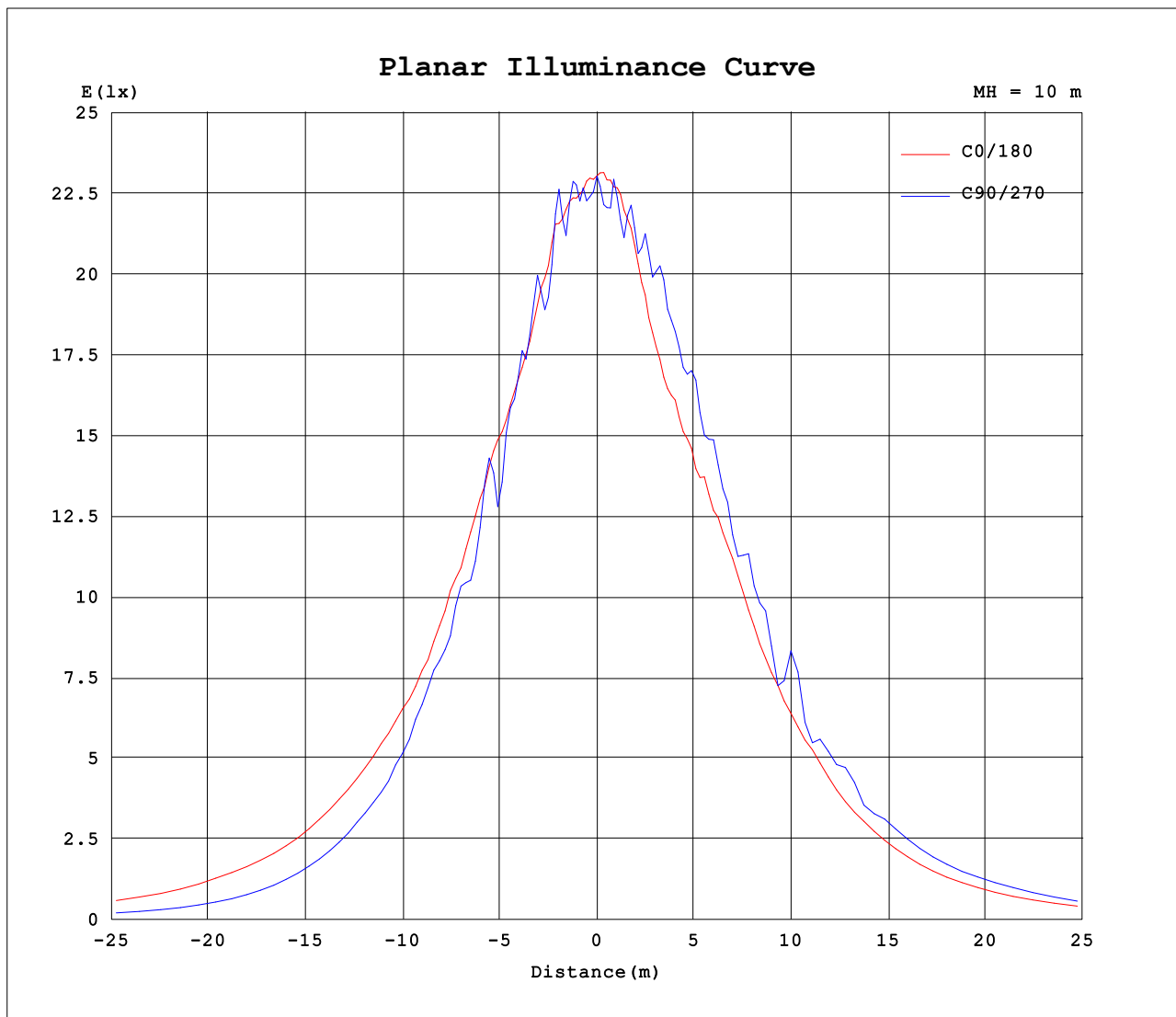
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:24.5DEG  
 Operators:wudashuai  
 Test Date:2021-12-14

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:50%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:



Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 24.5DEG  
 Operators: wudashuai  
 Test Date: 2021-12-14

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity: 50%  
 Test Distance: 6.500m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:121.5V I:0.4225A P:51.10W PF:0.9954 Freq:59.98Hz Lamp Flux:7100x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-WLP01S-50D50	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.18x0.25m	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	45	90	135	180	225	270	315										
0	2305	2305	2305	2305	2305	2305	2305	2305										
5	2274	2279	2253	2288	2297	2223	2321	2206										
10	2273	2344	2275	2307	2243	2203	2319	2245										
15	2207	2392	2098	2398	2069	2169	2292	2297										
20	2111	2116	2093	2190	1983	2152	2281	2264										
25	2080	2137	2029	2078	2001	2181	2271	2251										
30	2070	1969	2084	1817	2031	2243	2292	2203										
35	1983	1798	1881	1780	2036	2096	2170	2144										
40	1919	1619	1722	1498	1902	1831	2185	2017										
45	1851	1580	1462	1451	1810	1789	2356	1713										
50	1776	1359	1250	1254	1667	1755	1968	1625										
55	1651	1176	999	1056	1451	1536	1741	1529										
60	1474	981	735	869	1206	1383	1558	1315										
65	1260	790	506	687	966	1198	1318	1187										
70	1028	605	357	504	693	1015	987	1042										
75	754	442	276	343	438	804	709	870										
80	482	309	244	243	239	570	468	691										
85	270	228	241	194	145	376	344	486										
90	155	187	209	168	111	265	283	325										
95	118	164	194	148	96.9	201	250	227										
100	102	146	180	125	87.9	172	216	176										
105	90.3	122	148	101	78.3	147	205	149										
110	49.2	93.6	86.2	68.4	41.2	116	133	118										
115	40.2	57.9	68.1	42.4	25.4	73.8	99.4	83.0										
120	31.3	34.8	42.8	29.1	18.1	43.4	64.6	51.9										
125	25.6	24.7	21.8	21.1	16.2	24.7	32.9	35.1										
130	20.8	17.4	14.1	15.5	15.3	17.8	10.6	25.6										
135	17.3	14.9	15.0	15.1	14.1	14.9	11.5	20.1										
140	15.5	15.6	15.9	15.7	15.1	13.5	12.6	18.1										
145	15.2	16.4	16.7	16.5	16.0	14.3	13.6	16.5										
150	16.0	17.0	17.5	17.2	16.9	15.3	14.7	16.4										
155	16.8	17.6	18.1	17.8	17.7	16.2	15.8	17.3										
160	17.6	18.2	18.7	18.4	18.4	17.1	16.8	18.0										
165	18.3	18.7	19.2	18.9	19.1	18.0	17.8	18.7										
170	19.0	19.2	19.7	19.3	19.5	18.7	18.7	19.2										
175	19.5	19.5	20.0	19.5	19.8	19.2	19.4	19.4										
180	19.8	19.5	19.8	19.7	19.8	19.5	19.8	19.7										

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:24.5DEG  
 Operators:wudashuai  
 Test Date:2021-12-14

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:50%  
 Test Distance:6.500m [K=1.0000]  
 Remarks: