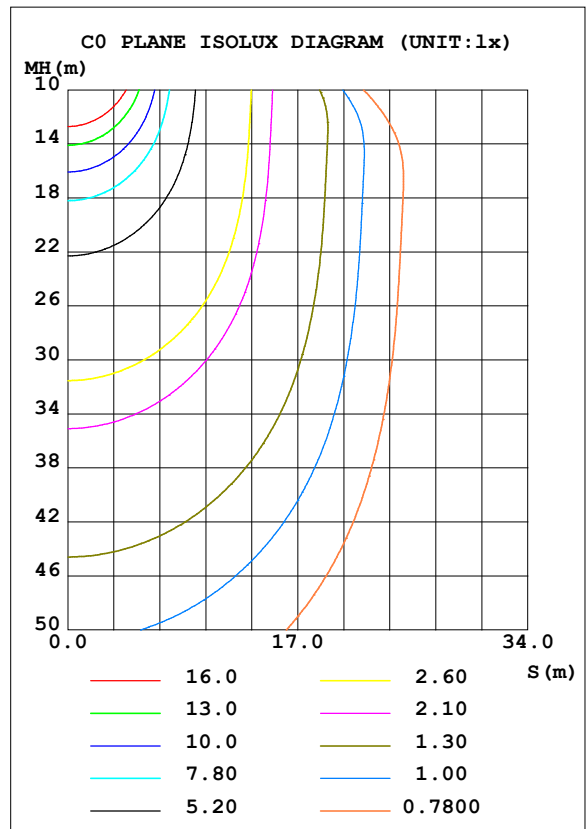
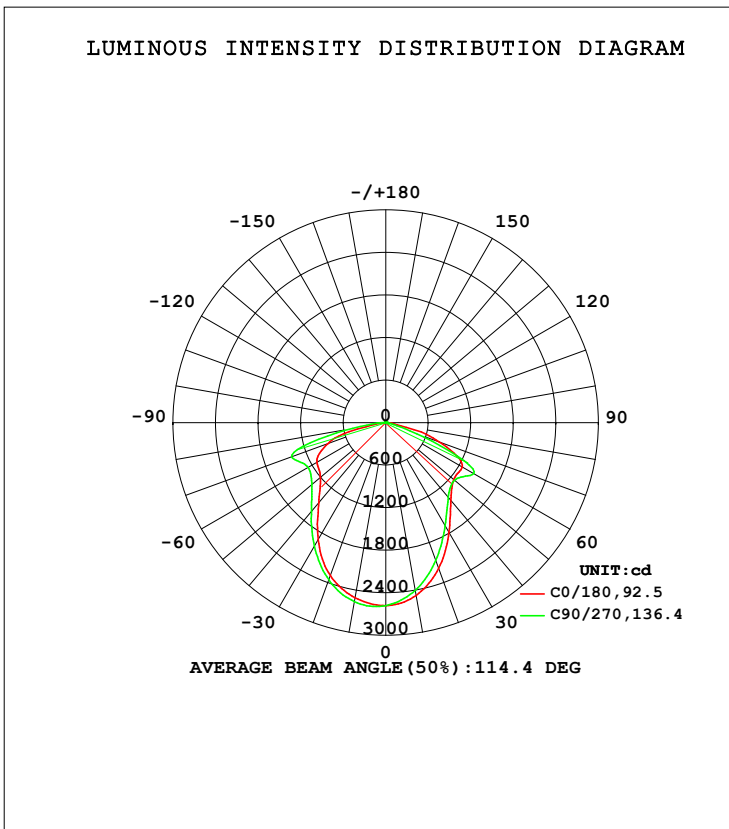


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:121.5V I:0.3740A P:45.26W PF:0.9958 Freq:59.98Hz Lamp Flux:6900.76x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-CAN07A-45DAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.22*0.22m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 152.46 lm/W			
MODEL	ASD-CAN07A-45DAC-BK-5000K	$I_{max}$ (cd)	2599	S/MH (C0/180)	1.12
NOMINAL POWER (W)	45	LOR (%)	100.0	S/MH (C90/270)	1.17
RATED VOLTAGE (V)	120-277	TOTAL FLUX (lm)	6900.8	$\eta$ UP, DN (C0-180)	0.5, 45.3
NOMINAL FLUX (lm)	6900.76	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.4, 53.8
LAMPS INSIDE	1	$\eta$ up (%)	0.9	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	$\eta$ down (%)	99.1	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 28.8DEG  
 Operators: wudashuai  
 Test Date: 2021-11-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity: 66%  
 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	2474	2427	2400	2441	2507	2558	2564	2527	0- 10	241.8	241.8	3.5,3.5
20	2187	2107	2067	2162	2295	2391	2357	2303	10- 20	668.6	910.4	13.2,13.2
30	1784	1705	1678	1780	1907	2063	2015	1969	20- 30	945.7	1856	26.9,26.9
40	1430	1419	1375	1429	1472	1646	1631	1616	30- 40	1047	2903	42.1,42.1
50	1254	1334	1266	1278	1207	1352	1363	1388	40- 50	1072	3975	57.6,57.6
60	1247	1323	1435	1306	1123	1266	1268	1383	50- 60	1159	5134	74.4,74.4
70	807.1	353.0	465.8	497.3	872.6	1170	1412	1172	60- 70	1122	6256	90.7,90.7
80	136.2	49.27	44.73	60.72	174.0	205.1	478.8	185.9	70- 80	513.1	6769	98.1,98.1
90	6.022	4.243	4.611	4.192	6.709	25.37	41.70	21.02	80- 90	70.50	6839	99.1,99.1
100	5.088	5.745	6.278	5.842	4.920	4.375	4.344	4.444	90-100	6.799	6846	99.2,99.2
110	6.785	7.494	8.070	7.655	6.663	6.167	6.145	6.280	100-110	6.344	6853	99.3,99.3
120	8.634	9.304	9.884	9.486	8.364	7.838	7.865	7.995	110-120	7.720	6860	99.4,99.4
130	10.88	11.59	12.22	11.58	10.49	9.715	9.679	9.857	120-130	8.652	6869	99.5,99.5
140	13.27	13.90	14.45	13.89	12.98	12.20	12.23	12.40	130-140	9.240	6878	99.7,99.7
150	15.06	15.41	15.83	15.53	14.92	14.47	14.54	14.62	140-150	8.876	6887	99.8,99.8
160	16.31	16.45	16.84	16.56	16.28	15.95	16.05	16.06	150-160	7.255	6894	99.9,99.9
170	17.31	17.31	17.62	17.37	17.35	17.07	17.22	17.17	160-170	4.758	6899	100,100
180	17.86	17.68	17.89	17.75	17.88	17.67	17.91	17.74	170-180	1.672	6901	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 3434.5 lm

%lum = 49.8%

%lamp = 49.8%

Conical surface Flux(120deg): 5134.2 lm

%lum = 74.4%

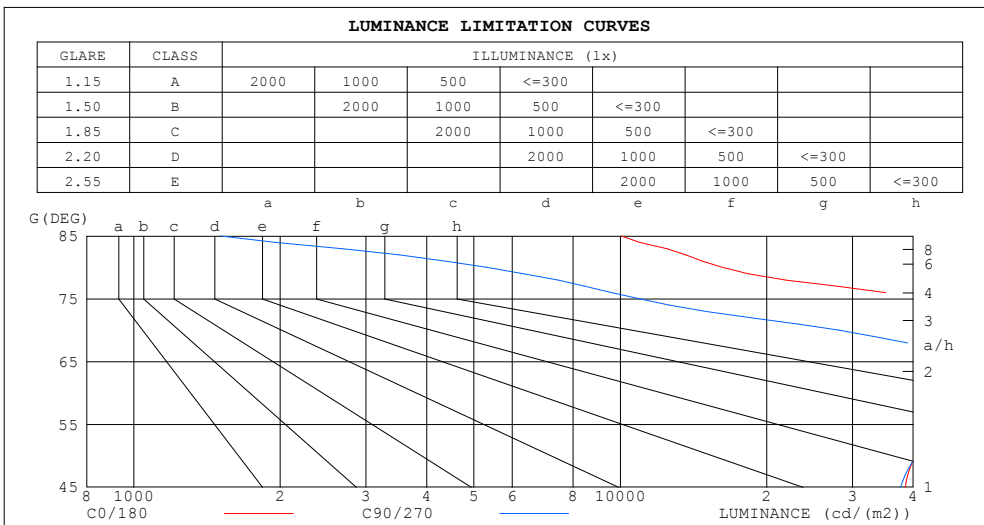
%lamp = 74.4%

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28.8DEG  
 Operators:wudashuai  
 Test Date:2021-11-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:66%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:121.5V I:0.3740A P:45.26W PF:0.9958 Freq:59.98Hz Lamp Flux:6900.76x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-CAN07A-45DAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.22*0.22m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	10056	1508
80	16238	5321
75	41821	10949
70	48846	28131
65	54008	54484
60	51639	59270
55	44900	47940
50	40371	40697
45	38536	37691

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28.8DEG  
 Operators:wudashuai  
 Test Date:2021-11-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:66%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:121.5V I:0.3740A P:45.26W PF:0.9958 Freq:59.98Hz Lamp Flux:6900.76x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-CAN07A-45DAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.22*0.22m	Shielding Angle:

ρ <sub>cc</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.312	.177	.056	.305	.174	.055	.291	.167	.053	.278	.160	.051	.266	.154	.050	
2.0	.298	.163	.050	.291	.160	.049	.279	.155	.048	.268	.150	.047	.257	.145	.046	
3.0	.276	.147	.044	.270	.145	.044	.259	.141	.043	.249	.137	.042	.240	.133	.041	
4.0	.254	.132	.039	.249	.130	.039	.239	.127	.038	.231	.124	.037	.222	.121	.037	
5.0	.234	.119	.035	.230	.118	.034	.221	.115	.034	.213	.113	.033	.206	.110	.033	
6.0	.217	.109	.031	.213	.107	.031	.205	.105	.031	.198	.103	.030	.191	.101	.030	
7.0	.201	.100	.028	.198	.098	.028	.191	.096	.028	.184	.095	.028	.178	.093	.027	
8.0	.188	.092	.026	.184	.091	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.085	.024	.172	.084	.024	.167	.083	.023	.162	.081	.023	.157	.080	.023	
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021	

ρ <sub>cc</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.197	.197	.197	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.187	.163	.141	.160	.140	.121	.110	.096	.084	.063	.056	.049	.020	.018	.016	
2.0	.180	.139	.104	.154	.119	.090	.106	.083	.063	.061	.048	.037	.020	.016	.012	
3.0	.173	.121	.080	.148	.105	.070	.102	.073	.049	.059	.042	.029	.019	.014	.009	
4.0	.165	.108	.064	.142	.093	.056	.097	.065	.039	.056	.038	.023	.018	.012	.008	
5.0	.158	.098	.054	.135	.085	.047	.093	.059	.033	.054	.035	.020	.017	.011	.006	
6.0	.150	.089	.046	.129	.077	.040	.089	.054	.028	.052	.032	.017	.017	.010	.006	
7.0	.143	.083	.040	.123	.072	.035	.085	.050	.025	.049	.030	.015	.016	.010	.005	
8.0	.137	.077	.035	.118	.067	.031	.081	.047	.022	.047	.028	.013	.015	.009	.004	
9.0	.130	.072	.032	.112	.062	.028	.078	.044	.020	.045	.026	.012	.015	.008	.004	
10.0	.125	.067	.029	.107	.059	.026	.075	.041	.018	.043	.024	.011	.014	.008	.004	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28.8DEG  
 Operators:wudashuai  
 Test Date:2021-11-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:66%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:121.5V I:0.3740A P:45.26W PF:0.9958 Freq:59.98Hz Lamp Flux:6900.76x1 lm										
NAME: ASD Lighting Corp					TYPE:			WEIGHT:		
SPEC.:ASD-CAN07A-45DAC-BK-5000K					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp					SUR.:0.22*0.22m			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	26.6	28.1	26.9	28.4	28.6	27.0	28.5	27.3	28.8	29.0
3H	28.3	29.7	28.6	29.9	30.2	28.0	29.4	28.3	29.7	29.9
4H	28.8	30.1	29.1	30.4	30.7	28.0	29.3	28.3	29.6	29.9
6H	28.8	30.1	29.2	30.4	30.7	27.9	29.1	28.2	29.4	29.7
8H	28.8	30.0	29.1	30.3	30.6	27.8	29.1	28.2	29.4	29.7
12H	28.7	29.9	29.1	30.2	30.6	27.8	29.0	28.1	29.3	29.6
4H 2H	27.3	28.6	27.6	28.9	29.2	27.6	28.9	27.9	29.2	29.5
3H	28.8	30.0	29.2	30.3	30.6	28.5	29.7	28.8	30.0	30.3
4H	29.3	30.4	29.7	30.7	31.1	28.5	29.6	28.9	29.9	30.2
6H	29.4	30.4	29.8	30.7	31.1	28.4	29.4	28.8	29.7	30.1
8H	29.4	30.3	29.8	30.7	31.1	28.4	29.3	28.8	29.6	30.0
12H	29.4	30.2	29.8	30.6	31.0	28.3	29.1	28.8	29.5	30.0
8H 4H	29.2	30.1	29.7	30.5	30.9	28.4	29.3	28.8	29.7	30.1
6H	29.3	30.1	29.8	30.5	31.0	28.4	29.1	28.8	29.5	30.0
8H	29.4	30.0	29.8	30.5	30.9	28.3	29.0	28.8	29.4	29.9
12H	29.4	29.9	29.8	30.4	30.9	28.3	28.9	28.8	29.3	29.8
12H 4H	29.2	30.0	29.6	30.4	30.8	28.4	29.2	28.8	29.6	30.0
6H	29.3	30.0	29.8	30.4	30.9	28.3	29.0	28.8	29.4	29.9
8H	29.3	29.9	29.8	30.4	30.8	28.3	28.9	28.8	29.3	29.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.4 / - 0.4				
1.5H	+ 0.2 / - 0.2					+ 0.4 / - 0.6				
2.0H	+ 0.6 / - 0.8					+ 1.2 / - 2.3				

CIE Pub.117, 6901 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 6.7)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28.8DEG  
 Operators:wudashuai  
 Test Date:2021-11-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:66%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:121.5V I:0.3740A P:45.26W PF:0.9958 Freq:59.98Hz Lamp Flux:6900.76x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-CAN07A-45DAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.22*0.22m	Shielding Angle:

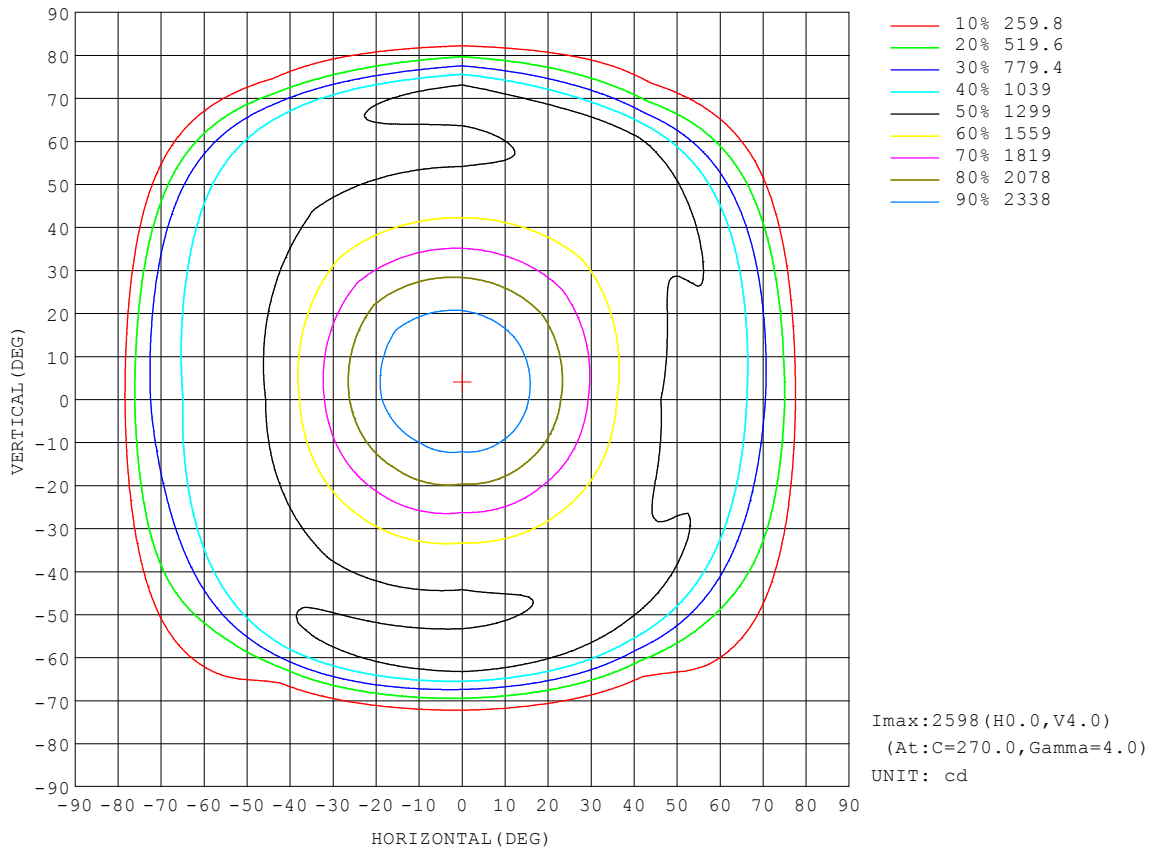
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	45	38	56	44	37	54	44	37	31
0.80	66	54	47	65	54	47	63	53	46	39
1.00	74	63	55	73	62	55	71	64	54	47
1.25	81	70	63	80	70	63	77	68	62	54
1.50	87	76	69	85	75	68	82	73	67	59
2.00	94	85	78	92	84	77	88	81	76	67
2.50	98	90	84	96	88	83	92	86	81	72
3.00	102	94	89	99	93	88	95	90	85	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	109	104	100	106	102	98	101	98	95	85
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:28.8DEG  
 Operators:wudashuai  
 Test Date:2021-11-04

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:66%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:121.5V I:0.3740A P:45.26W PF:0.9958 Freq:59.98Hz Lamp Flux:6900.76x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-CAN07A-45DAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.22*0.22m	Shielding Angle:

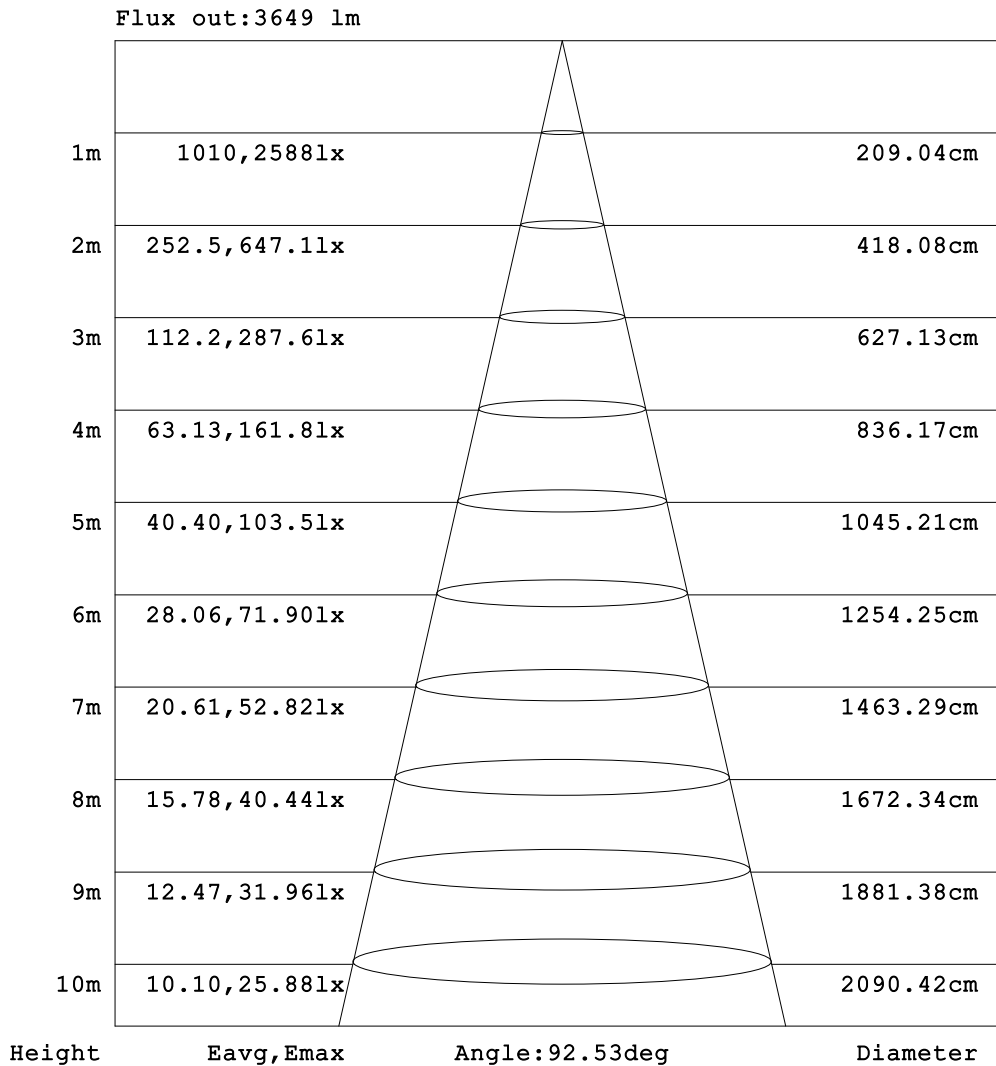


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28.8DEG  
 Operators:wudashuai  
 Test Date:2021-11-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:66%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:121.5V I:0.3740A P:45.26W PF:0.9958 Freq:59.98Hz Lamp Flux:6900.76x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-CAN07A-45DAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.22*0.22m	Shielding Angle:



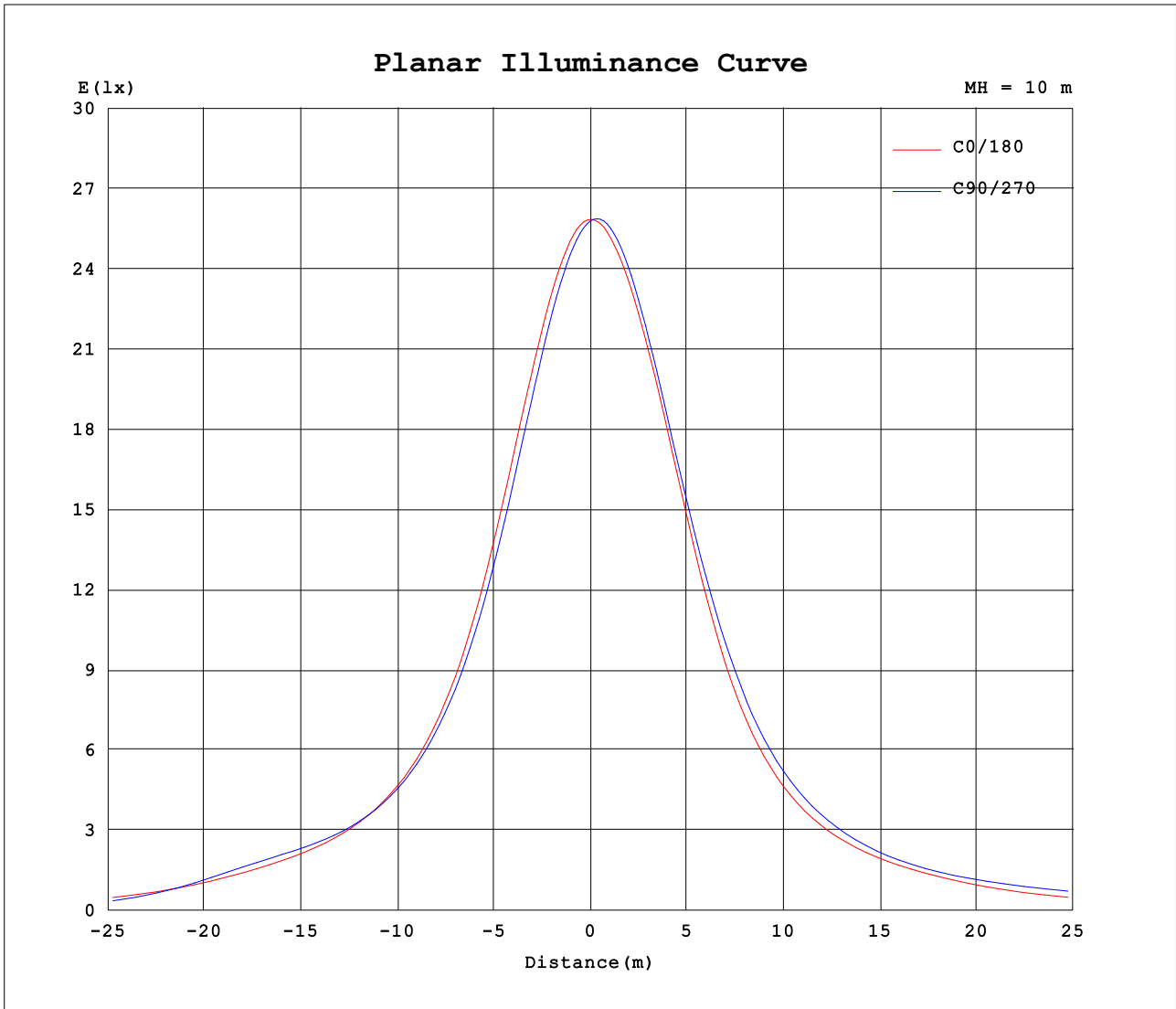
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28.8DEG  
 Operators:wudashuai  
 Test Date:2021-11-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:66%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:



Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 28.8DEG  
 Operators: wudashuai  
 Test Date: 2021-11-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity: 66%  
 Test Distance: 6.500m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:121.5V I:0.3740A P:45.26W PF:0.9958 Freq:59.98Hz Lamp Flux:6900.76x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-CAN07A-45DAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.22*0.22m	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	45	90	135	180	225	270	315										
0	2581	2581	2581	2581	2581	2581	2581	2581										
5	2552	2525	2513	2531	2562	2591	2598	2579										
10	2474	2427	2400	2441	2507	2558	2564	2527										
15	2349	2287	2248	2318	2420	2491	2483	2431										
20	2187	2107	2067	2162	2295	2391	2357	2303										
25	1993	1905	1870	1977	2122	2250	2197	2146										
30	1784	1705	1678	1780	1907	2063	2015	1969										
35	1589	1537	1508	1582	1678	1851	1823	1785										
40	1430	1419	1375	1429	1472	1646	1631	1616										
45	1316	1350	1290	1326	1314	1475	1477	1479										
50	1254	1334	1266	1278	1207	1352	1363	1388										
55	1244	1358	1331	1286	1152	1286	1290	1355										
60	1247	1323	1435	1306	1123	1266	1268	1383										
65	1103	949	1115	1140	1035	1257	1325	1407										
70	807	353	466	497	873	1170	1412	1172										
75	523	129	137	157	621	738	1106	523										
80	136	49.3	44.7	60.7	174	205	479	186										
85	42.3	10.4	6.36	15.7	53.9	81.2	135	73.0										
90	6.02	4.24	4.61	4.19	6.71	25.4	41.7	21.0										
95	4.53	4.88	5.37	4.92	4.23	4.04	4.47	3.93										
100	5.09	5.74	6.28	5.84	4.92	4.37	4.34	4.44										
105	5.90	6.61	7.18	6.78	5.79	5.22	5.17	5.31										
110	6.79	7.49	8.07	7.66	6.66	6.17	6.14	6.28										
115	7.68	8.39	8.96	8.56	7.51	7.03	7.06	7.14										
120	8.63	9.30	9.88	9.49	8.36	7.84	7.87	8.00										
125	9.70	10.4	11.0	10.5	9.34	8.71	8.69	8.86										
130	10.9	11.6	12.2	11.6	10.5	9.72	9.68	9.86										
135	12.1	12.8	13.4	12.8	11.7	10.9	10.9	11.1										
140	13.3	13.9	14.5	13.9	13.0	12.2	12.2	12.4										
145	14.3	14.8	15.2	14.8	14.1	13.4	13.5	13.6										
150	15.1	15.4	15.8	15.5	14.9	14.5	14.5	14.6										
155	15.7	16.0	16.4	16.1	15.6	15.3	15.4	15.4										
160	16.3	16.5	16.8	16.6	16.3	16.0	16.0	16.1										
165	16.9	16.9	17.3	17.0	16.9	16.6	16.7	16.7										
170	17.3	17.3	17.6	17.4	17.4	17.1	17.2	17.2										
175	17.7	17.6	17.8	17.6	17.7	17.4	17.6	17.5										
180	17.9	17.7	17.9	17.8	17.9	17.7	17.9	17.7										

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:28.8DEG  
 Operators:wudashuai  
 Test Date:2021-11-04

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:66%  
 Test Distance:6.500m [K=1.0000]  
 Remarks: