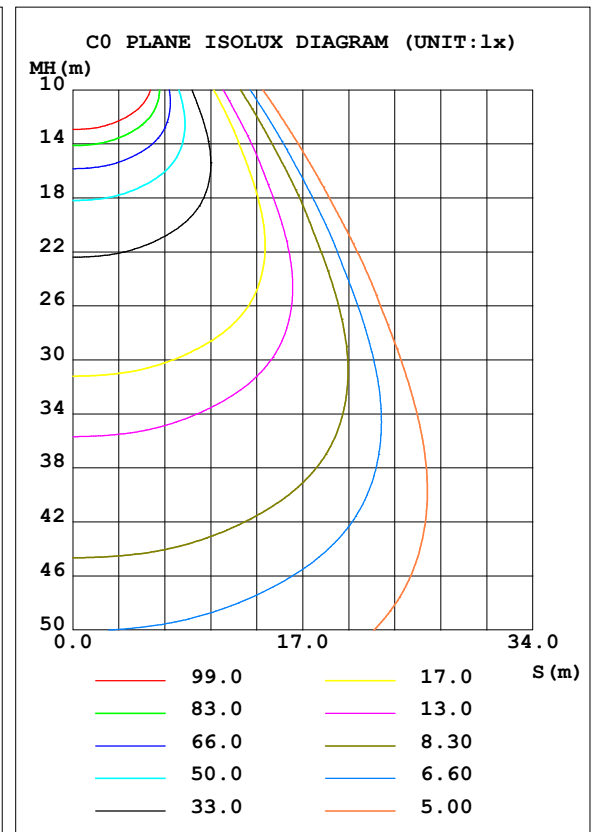
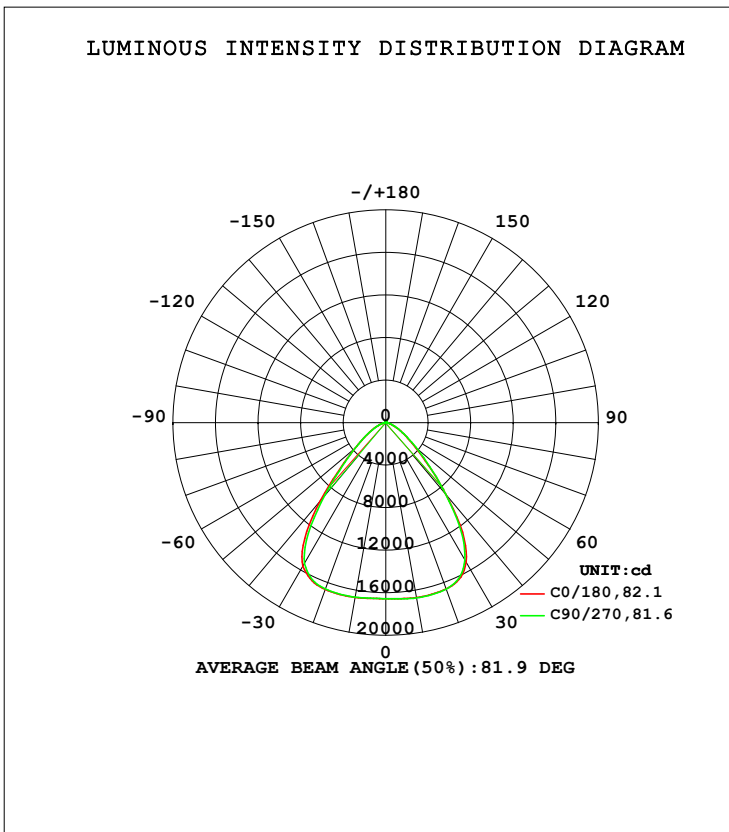


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:121.5V I:1.684A P:204.6W PF:0.9978 Freq:59.98Hz Lamp Flux:30407.1x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 148.31 lm/W			
MODEL		I <sub>max</sub> (cd)	16751	S/MH (C0/180)	1.20
NOMINAL POWER (W)	200	LOR (%)	100.0	S/MH (C90/270)	1.18
RATED VOLTAGE (V)	120-277	TOTAL FLUX (lm)	30407	η UP, DN (C0-180)	0.5, 49.4
NOMINAL FLUX (lm)	30407.1	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.5, 49.6
LAMPS INSIDE	1	η up (%)	0.9	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	120	η down (%)	99.1	CIBSE SHR MAX	1.15



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 17.0DEG  
 Operators: wudashuai  
 Test Date: 2022-02-25

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity: 59%  
 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	1670	1672	1673	1671	1668	1666	1666	1667	0- 10	1588	1588	5.22,5.22
20	1664	1665	1665	1668	1668	1667	1664	1662	10- 20	4734	6322	20.8,20.8
30	1511	1509	1487	1540	1561	1533	1531	1504	20- 30	7466	13789	45.3,45.3
40	876.2	872.8	876.3	943.1	956.3	914.4	890.6	857.2	30- 40	7760	21549	70.9,70.9
50	367.0	373.3	390.1	406.6	382.3	401.7	381.4	361.4	40- 50	4634	26183	86.1,86.1
60	166.9	166.0	172.2	183.5	172.3	181.8	169.9	161.2	50- 60	2351	28534	93.8,93.8
70	64.41	65.94	67.94	71.92	67.97	69.69	65.86	62.57	60- 70	1122	29656	97.5,97.5
80	14.85	15.77	16.92	18.10	16.90	16.73	15.86	14.27	70- 80	393.8	30050	98.8,98.8
90	0.8547	0.9414	0.8852	1.014	0.9713	0.9887	0.9700	0.9315	80- 90	70.86	30120	99.1,99.1
100	1.266	1.266	1.238	1.194	1.112	1.115	1.140	1.183	90-100	10.40	30131	99.1,99.1
110	2.356	2.338	2.298	2.223	2.116	2.108	2.146	2.222	100-110	17.57	30148	99.1,99.1
120	3.887	3.859	3.817	3.714	3.584	3.557	3.614	3.707	110-120	29.10	30178	99.2,99.2
130	5.662	5.613	5.588	5.454	5.333	5.292	5.376	5.463	120-130	40.94	30218	99.4,99.4
140	7.412	7.384	7.349	7.214	7.194	7.139	7.240	7.324	130-140	49.22	30268	99.5,99.5
150	8.946	8.952	8.890	8.770	8.860	8.802	8.920	8.987	140-150	50.70	30318	99.7,99.7
160	10.56	10.50	10.49	10.32	10.57	10.49	10.62	10.67	150-160	44.60	30363	99.9,99.9
170	12.29	12.14	12.21	12.02	12.28	12.15	12.31	12.26	160-170	32.06	30395	100,100
180	13.14	13.00	13.13	13.00	13.14	13.00	13.13	13.00	170-180	12.04	30407	100,100
DEG	LUMINOUS INTENSITY: $\times 10\text{cd}$									UNIT:lm		

Conical surface Flux(90deg): 24262 lm

%lum = 79.8%

%lamp = 79.8%

Conical surface Flux(120deg): 28534 lm

%lum = 93.8%

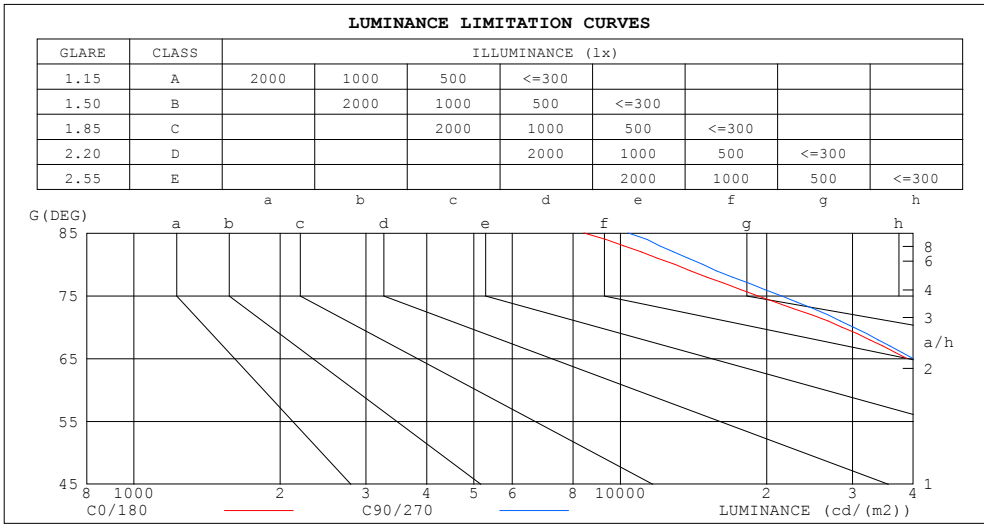
%lamp = 93.8%

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:17.0DEG  
 Operators:wudashuai  
 Test Date:2022-02-25

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:59%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:121.5V I:1.684A P:204.6W PF:0.9978 Freq:59.98Hz Lamp Flux:30407.1x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	8426	10383
80	12956	14767
75	19145	21421
70	28529	30099
65	38820	39986
60	50579	52187
55	65414	68857
50	86496	91955
45	121848	125632

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:17.0DEG  
 Operators:wudashuai  
 Test Date:2022-02-25

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:59%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:121.5V I:1.684A P:204.6W PF:0.9978 Freq:59.98Hz Lamp Flux:30407.1x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	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	.224	.127	.040	.217	.124	.039	.203	.117	.037	.191	.110	.035	.180	.104	.034	
2.0	.217	.119	.037	.211	.116	.036	.199	.111	.034	.189	.106	.033	.179	.101	.032	
3.0	.207	.110	.033	.202	.108	.032	.192	.104	.032	.182	.100	.031	.174	.096	.030	
4.0	.196	.102	.030	.192	.100	.030	.183	.097	.029	.174	.094	.028	.167	.091	.028	
5.0	.186	.095	.027	.182	.093	.027	.174	.090	.027	.166	.088	.026	.160	.085	.026	
6.0	.176	.088	.025	.172	.087	.025	.165	.085	.025	.159	.082	.024	.153	.080	.024	
7.0	.167	.082	.023	.163	.081	.023	.157	.079	.023	.151	.078	.023	.146	.076	.022	
8.0	.158	.077	.022	.155	.076	.022	.150	.075	.021	.144	.073	.021	.139	.072	.021	
9.0	.150	.073	.020	.148	.072	.020	.143	.070	.020	.138	.069	.020	.133	.068	.020	
10.0	.143	.069	.019	.141	.068	.019	.136	.067	.019	.132	.065	.019	.128	.064	.018	

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																
1.0	.198	.198	.198	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
2.0	.182	.164	.148	.155	.141	.128	.106	.097	.088	.061	.056	.051	.020	.018	.017	
3.0	.170	.140	.114	.145	.120	.099	.100	.083	.069	.057	.048	.040	.018	.016	.013	
4.0	.160	.121	.091	.137	.105	.078	.094	.073	.055	.054	.042	.032	.017	.014	.011	
5.0	.151	.107	.074	.130	.093	.064	.089	.065	.045	.052	.038	.027	.017	.012	.009	
6.0	.144	.096	.061	.123	.083	.053	.085	.058	.038	.049	.034	.022	.016	.011	.007	
7.0	.137	.087	.052	.118	.076	.045	.081	.053	.032	.047	.031	.019	.015	.010	.006	
8.0	.131	.080	.045	.112	.070	.039	.078	.049	.028	.045	.029	.017	.015	.009	.005	
9.0	.125	.074	.040	.108	.065	.035	.074	.045	.025	.043	.027	.015	.014	.009	.005	
10.0	.120	.069	.035	.103	.060	.031	.071	.042	.022	.042	.025	.013	.013	.008	.004	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:17.0DEG  
 Operators:wudashuai  
 Test Date:2022-02-25

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:59%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:121.5V I:1.684A P:204.6W PF:0.9978 Freq:59.98Hz Lamp Flux:30407.1x1 lm										
NAME: ASD Lighting Corp					TYPE:			WEIGHT:		
SPEC.:ASD-UHB3-200ADAC-BK-5000K					DIM.:			SERIAL No.:		
MFR.: ASD Lighting Corp					SUR.:0.29m			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	26.5	27.7	26.7	27.9	28.1	26.5	27.8	26.8	28.0	28.2
3H	26.6	27.8	26.9	28.0	28.2	26.7	27.8	27.0	28.1	28.3
4H	26.6	27.7	27.0	27.9	28.2	26.8	27.8	27.1	28.1	28.3
6H	26.6	27.6	26.9	27.9	28.1	26.7	27.7	27.1	28.0	28.3
8H	26.6	27.5	26.9	27.8	28.1	26.7	27.6	27.0	27.9	28.2
12H	26.5	27.4	26.9	27.7	28.0	26.7	27.6	27.0	27.9	28.2
4H 2H	26.5	27.5	26.8	27.8	28.0	26.6	27.6	26.9	27.8	28.1
3H	26.8	27.7	27.1	28.0	28.3	26.8	27.7	27.2	28.0	28.4
4H	26.8	27.6	27.2	27.9	28.3	26.9	27.7	27.3	28.0	28.4
6H	26.8	27.5	27.2	27.9	28.2	26.9	27.6	27.3	28.0	28.4
8H	26.8	27.4	27.2	27.8	28.2	26.9	27.5	27.3	27.9	28.3
12H	26.7	27.3	27.2	27.7	28.1	26.9	27.5	27.3	27.9	28.3
8H 4H	26.7	27.4	27.2	27.8	28.2	26.8	27.5	27.3	27.9	28.3
6H	26.8	27.3	27.2	27.7	28.1	26.9	27.4	27.3	27.8	28.3
8H	26.7	27.2	27.2	27.7	28.1	26.9	27.3	27.3	27.8	28.2
12H	26.7	27.1	27.2	27.6	28.1	26.8	27.3	27.3	27.7	28.2
12H 4H	26.7	27.3	27.1	27.7	28.1	26.8	27.4	27.2	27.8	28.2
6H	26.7	27.2	27.2	27.6	28.1	26.8	27.3	27.3	27.7	28.2
8H	26.7	27.1	27.2	27.6	28.1	26.8	27.2	27.3	27.7	28.2
Variations with the observer position at spacings:										
S = 1.0H	+ 1.3 / - 2.1					+ 1.3 / - 2.0				
1.5H	+ 2.0 / - 1.5					+ 1.8 / - 1.5				
2.0H	+ 2.5 / - 2.0					+ 2.5 / - 2.0				

CIE Pub.117, 30407 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 11.9)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:17.0DEG  
 Operators:wudashuai  
 Test Date:2022-02-25

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:59%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

## UTILIZATION FACTORS TABLE

Test:U:121.5V I:1.684A P:204.6W PF:0.9978 Freq:59.98Hz Lamp Flux:30407.1x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:

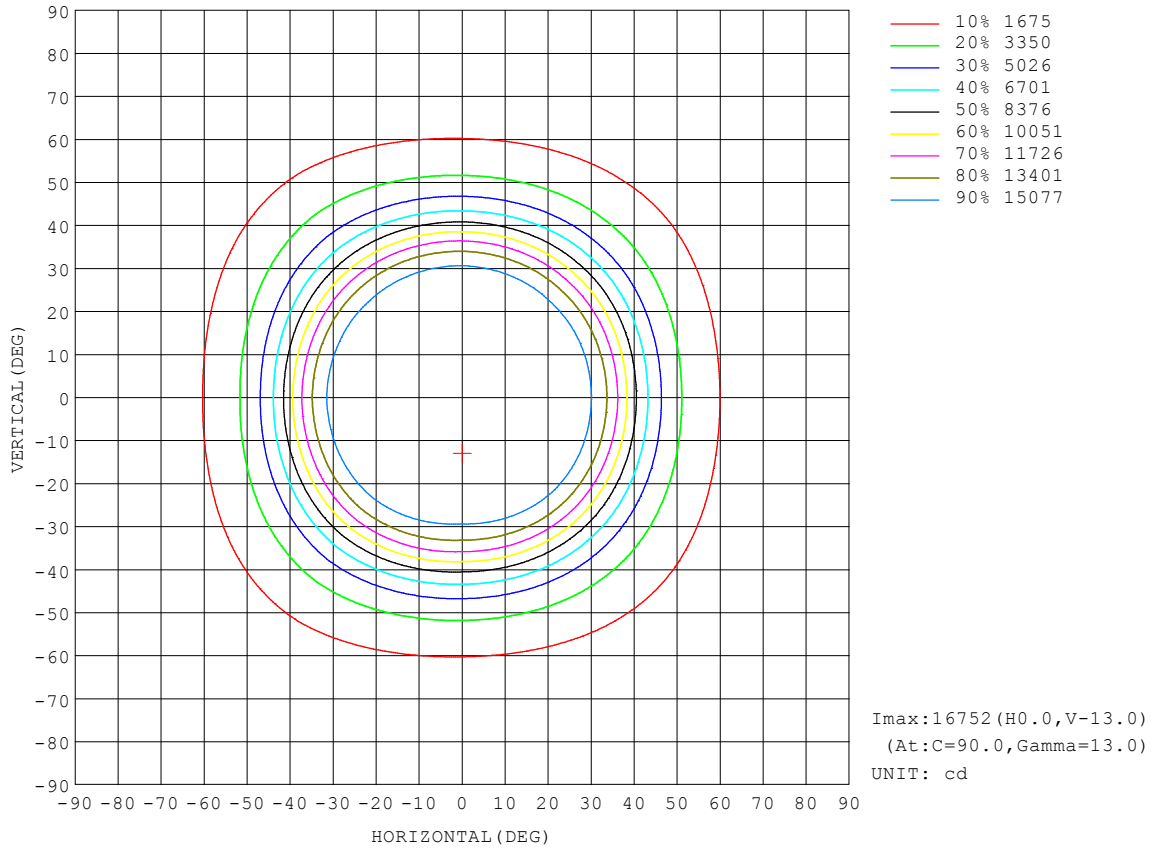
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	73	64	59	72	64	59	71	64	59	54
0.80	82	74	69	82	74	68	80	73	68	63
1.00	89	81	76	88	81	76	86	81	75	70
1.25	95	88	83	94	87	82	91	86	81	76
1.50	99	92	87	97	91	87	95	89	86	80
2.00	103	98	93	102	96	92	99	94	91	84
2.50	106	101	96	104	99	95	100	97	93	86
3.00	108	103	100	106	102	99	102	99	96	89
4.00	111	107	104	109	105	102	105	102	100	91
5.00	112	109	106	110	107	105	106	103	102	93
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:17.0DEG  
 Operators:wudashuai  
 Test Date:2022-02-25

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:59%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:121.5V I:1.684A P:204.6W PF:0.9978 Freq:59.98Hz Lamp Flux:30407.1x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:

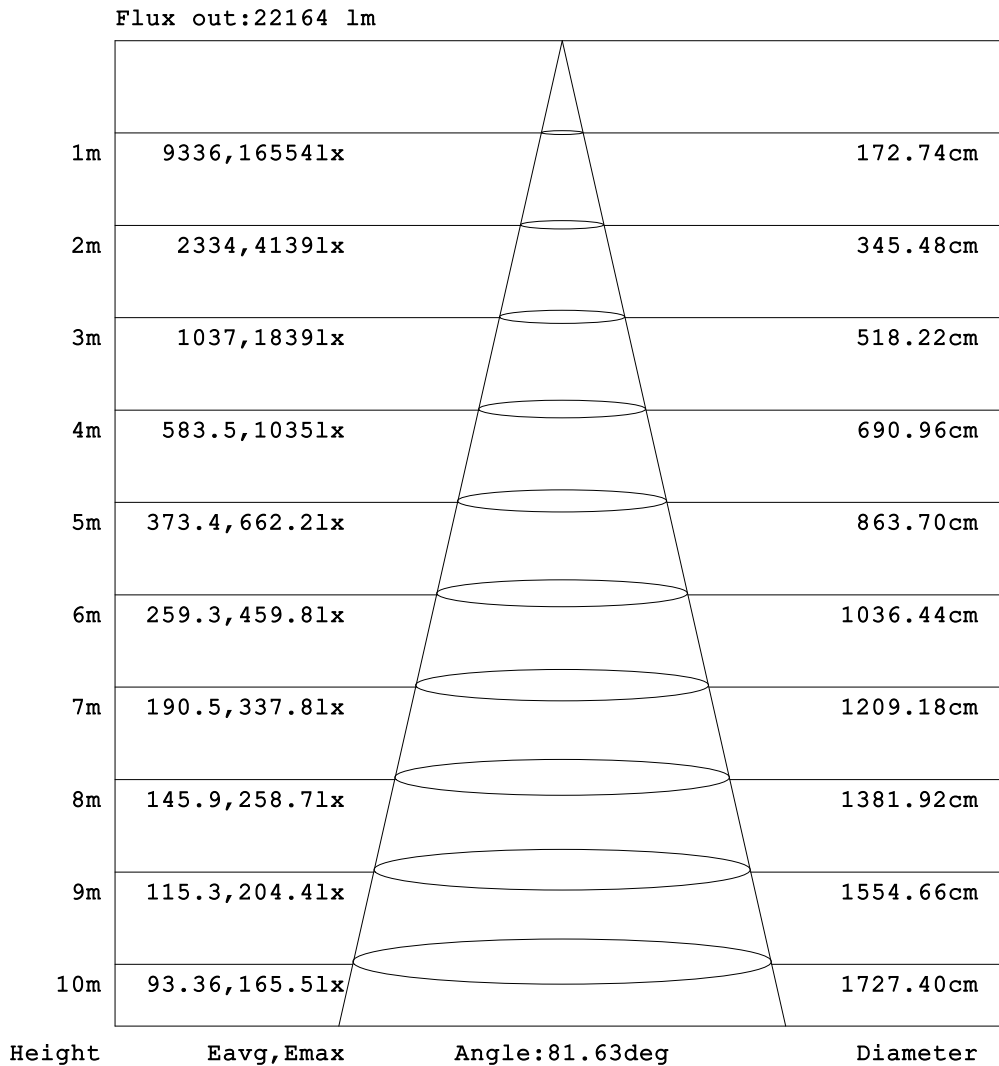


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:17.0DEG  
 Operators:wudashuai  
 Test Date:2022-02-25

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:59%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:121.5V I:1.684A P:204.6W PF:0.9978 Freq:59.98Hz Lamp Flux:30407.1x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:



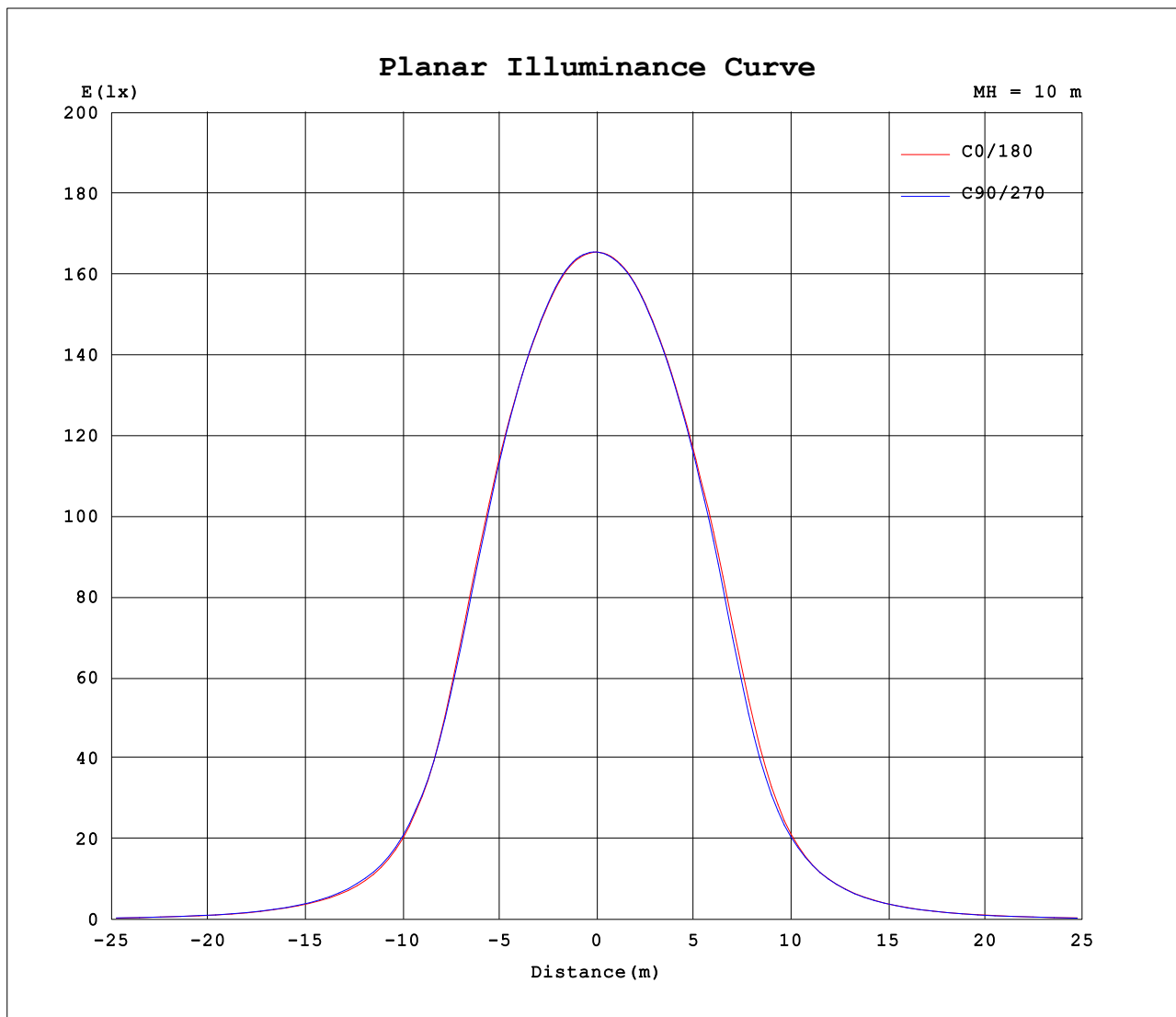
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:17.0DEG  
 Operators:wudashuai  
 Test Date:2022-02-25

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:59%  
 Test Distance:6.500m [K=1.0000]  
 Remarks:



### Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 17.0DEG  
Operators: wudashuai  
Test Date: 2022-02-25

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
Humidity: 59%  
Test Distance: 6.500m [K=1.0000]  
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:121.5V I:1.684A P:204.6W PF:0.9978 Freq:59.98Hz Lamp Flux:30407.1x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:

Table--1

UNIT: x10cd

C (DEG) \ γ (DEG)	0	45	90	135	180	225	270	315											
0	1655	1655	1655	1655	1655	1655	1655	1655											
5	1661	1663	1663	1661	1659	1657	1657	1659											
10	1670	1672	1673	1671	1668	1666	1666	1667											
15	1671	1674	1674	1675	1673	1670	1669	1669											
20	1664	1665	1665	1668	1668	1667	1664	1662											
25	1628	1622	1620	1634	1641	1638	1631	1626											
30	1511	1509	1487	1540	1561	1533	1531	1504											
35	1259	1245	1231	1306	1332	1290	1271	1236											
40	876	873	876	943	956	914	891	857											
45	569	572	586	624	602	605	582	559											
50	367	373	390	407	382	402	381	361											
55	248	249	261	276	257	272	254	242											
60	167	166	172	183	172	182	170	161											
65	108	109	112	117	111	116	109	106											
70	64.4	65.9	67.9	71.9	68.0	69.7	65.9	62.6											
75	32.7	34.1	36.6	39.2	35.8	36.4	34.1	31.8											
80	14.9	15.8	16.9	18.1	16.9	16.7	15.9	14.3											
85	4.85	5.39	5.97	6.76	6.10	5.85	5.35	4.41											
90	0.85	0.94	0.89	1.01	0.97	0.99	0.97	0.93											
95	0.93	0.98	0.91	0.93	0.81	0.87	0.86	0.90											
100	1.27	1.27	1.24	1.19	1.11	1.12	1.14	1.18											
105	1.74	1.74	1.70	1.64	1.55	1.55	1.58	1.64											
110	2.36	2.34	2.30	2.22	2.12	2.11	2.15	2.22											
115	3.08	3.05	3.01	2.92	2.80	2.79	2.83	2.92											
120	3.89	3.86	3.82	3.71	3.58	3.56	3.61	3.71											
125	4.76	4.72	4.69	4.57	4.43	4.40	4.47	4.56											
130	5.66	5.61	5.59	5.45	5.33	5.29	5.38	5.46											
135	6.56	6.50	6.49	6.34	6.26	6.21	6.31	6.39											
140	7.41	7.38	7.35	7.21	7.19	7.14	7.24	7.32											
145	8.20	8.19	8.15	8.02	8.06	7.99	8.11	8.18											
150	8.95	8.95	8.89	8.77	8.86	8.80	8.92	8.99											
155	9.71	9.70	9.65	9.51	9.68	9.62	9.74	9.80											
160	10.6	10.5	10.5	10.3	10.6	10.5	10.6	10.7											
165	11.5	11.4	11.4	11.2	11.5	11.4	11.5	11.5											
170	12.3	12.1	12.2	12.0	12.3	12.2	12.3	12.3											
175	12.9	12.8	12.8	12.7	12.9	12.7	12.9	12.8											
180	13.1	13.0	13.1	13.0	13.1	13.0	13.1	13.0											

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:17.0DEG  
 Operators:wudashuai  
 Test Date:2022-02-25

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.364  
 Humidity:59%  
 Test Distance:6.500m [K=1.0000]  
 Remarks: