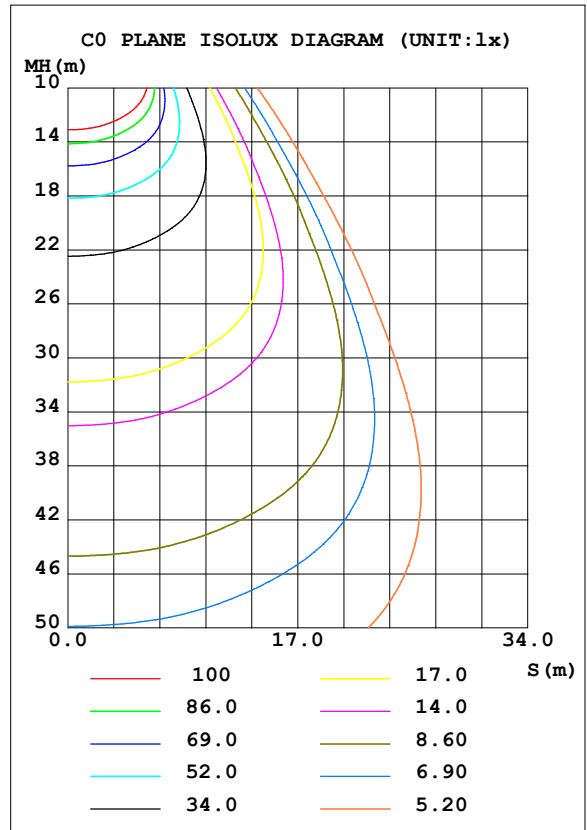
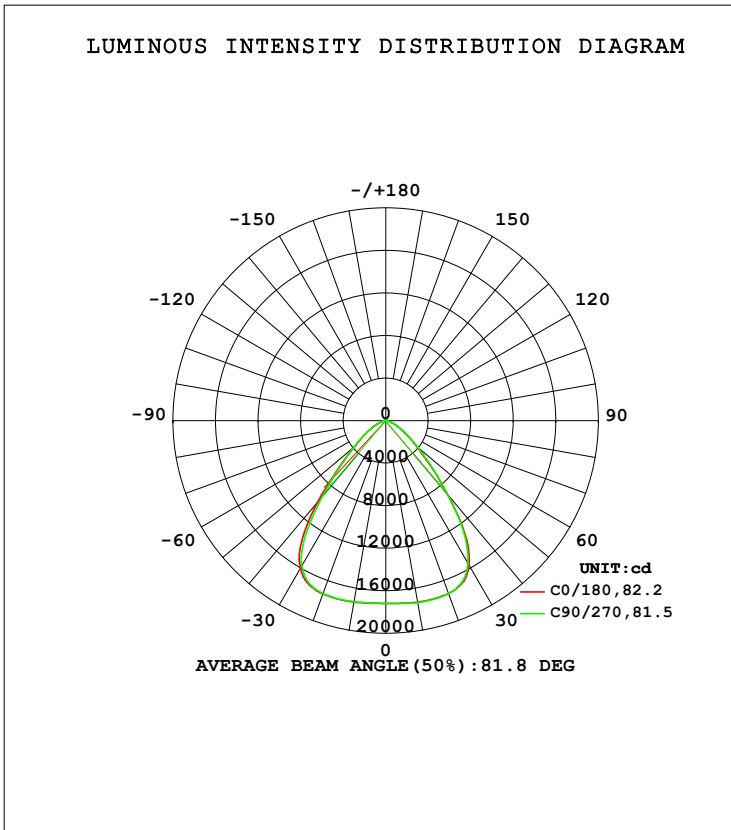


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:121.5V I:1.663A P:201.7W PF:0.9980 Freq:59.97Hz Lamp Flux:31494.6x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 156.15 lm/W			
MODEL		I _{max} (cd)	17399	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)	31495	η UP, DN (C0-180)	0.5, 49.4
NOMINAL FLUX (lm)	31494.6	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.5, 49.7
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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1733	1736	1738	1735	1732	1729	1729	1731	0- 10	1648	1648	5.23,5.23
20	1728	1729	1730	1732	1733	1731	1729	1727	10- 20	4917	6565	20.8,20.8
30	1568	1555	1546	1585	1602	1591	1579	1561	20- 30	7753	14318	45.5,45.5
40	901.3	899.8	905.0	977.0	989.3	945.8	924.0	885.5	30- 40	8028	22346	71,71
50	378.7	387.7	400.9	418.4	394.8	415.0	395.5	376.6	40- 50	4789	27134	86.2,86.2
60	170.1	173.2	177.8	188.2	178.8	184.7	176.6	168.4	50- 60	2428	29562	93.9,93.9
70	65.48	67.96	70.81	74.08	70.48	71.67	68.11	64.29	60- 70	1157	30719	97.5,97.5
80	15.36	16.23	17.27	18.51	17.44	17.15	16.25	14.72	70- 80	405.3	31124	98.8,98.8
90	0.8863	0.9734	0.9171	1.051	1.002	1.020	0.9996	0.9632	80- 90	72.81	31197	99.1,99.1
100	1.316	1.312	1.284	1.238	1.150	1.155	1.179	1.227	90-100	10.78	31208	99.1,99.1
110	2.445	2.425	2.384	2.303	2.189	2.181	2.222	2.305	100-110	18.21	31226	99.1,99.1
120	4.035	4.002	3.960	3.851	3.711	3.687	3.745	3.847	110-120	30.17	31256	99.2,99.2
130	5.881	5.824	5.801	5.659	5.525	5.489	5.577	5.675	120-130	42.48	31299	99.4,99.4
140	7.700	7.665	7.633	7.488	7.461	7.411	7.514	7.608	130-140	51.09	31350	99.5,99.5
150	9.296	9.296	9.235	9.107	9.199	9.136	9.260	9.337	140-150	52.65	31402	99.7,99.7
160	10.98	10.90	10.90	10.72	10.98	10.89	11.03	11.09	150-160	46.33	31449	99.9,99.9
170	12.77	12.61	12.69	12.49	12.75	12.63	12.78	12.75	160-170	33.30	31482	100,100
180	13.65	13.51	13.64	13.51	13.64	13.51	13.64	13.52	170-180	12.50	31495	100,100
DEG	LUMINOUS INTENSITY: $\times 10\text{cd}$									UNIT:lm		

Conical surface Flux(90deg): 25149 lm

%lum = 79.9%

%lamp = 79.9%

Conical surface Flux(120deg): 29562 lm

%lum = 93.9%

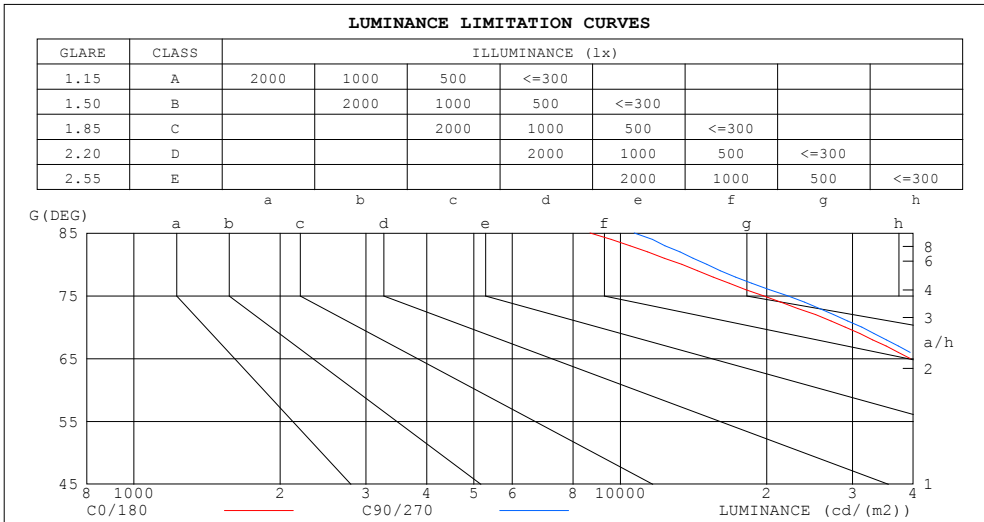
%lamp = 93.9%

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:

LUMINANCE LIMITATION CURVES

Test:U:121.5V I:1.663A P:201.7W PF:0.9980 Freq:59.97Hz Lamp Flux:31494.6x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	8669	10683
80	13389	15074
75	19668	22071
70	28979	31378
65	39429	41602
60	51493	53887
55	67111	70303
50	89163	94528
45	125480	129679

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:1.663A P:201.7W PF:0.9980 Freq:59.97Hz Lamp Flux:31494.6x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.223	.127	.040	.216	.123	.039	.203	.116	.037	.191	.110	.035	.179	.104	.034	
2.0	.217	.119	.036	.211	.116	.036	.199	.111	.034	.189	.106	.033	.179	.101	.032	
3.0	.207	.110	.033	.201	.108	.032	.191	.104	.032	.182	.100	.031	.173	.096	.030	
4.0	.196	.102	.030	.191	.100	.030	.182	.097	.029	.174	.094	.028	.167	.091	.028	
5.0	.186	.095	.027	.181	.093	.027	.174	.090	.027	.166	.088	.026	.159	.085	.026	
6.0	.176	.088	.025	.172	.087	.025	.165	.085	.025	.159	.082	.024	.152	.080	.024	
7.0	.167	.082	.023	.163	.081	.023	.157	.079	.023	.151	.077	.023	.146	.076	.022	
8.0	.158	.077	.022	.155	.076	.022	.149	.075	.021	.144	.073	.021	.139	.071	.021	
9.0	.150	.073	.020	.147	.072	.020	.142	.070	.020	.138	.069	.020	.133	.068	.020	
10.0	.143	.069	.019	.140	.068	.019	.136	.067	.019	.132	.065	.019	.127	.064	.018	

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.198	.198	.198	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.182	.164	.148	.155	.141	.128	.106	.097	.088	.061	.056	.051	.020	.018	.017	
2.0	.170	.140	.114	.145	.120	.099	.100	.083	.069	.057	.048	.040	.018	.016	.013	
3.0	.160	.121	.091	.137	.105	.079	.094	.073	.055	.054	.042	.032	.017	.014	.011	
4.0	.151	.107	.074	.130	.093	.064	.089	.065	.045	.052	.038	.027	.017	.012	.009	
5.0	.144	.096	.061	.123	.083	.053	.085	.058	.038	.049	.034	.022	.016	.011	.007	
6.0	.137	.087	.052	.118	.076	.045	.081	.053	.032	.047	.031	.019	.015	.010	.006	
7.0	.131	.080	.045	.112	.070	.039	.078	.049	.028	.045	.029	.017	.015	.009	.005	
8.0	.125	.074	.040	.108	.065	.035	.074	.045	.025	.043	.027	.015	.014	.009	.005	
9.0	.120	.069	.035	.103	.060	.031	.071	.042	.022	.042	.025	.013	.013	.008	.004	
10.0	.115	.065	.032	.099	.057	.028	.069	.040	.020	.040	.024	.012	.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:1.663A P:201.7W PF:0.9980 Freq:59.97Hz Lamp Flux:31494.6x1 lm										
NAME: ASD Lighting Corp					TYPE:			WEIGHT:		
SPEC.:ASD-UHB3-200ADAC-BK-4000K					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	27.8	26.8	28.0	28.2	26.6	27.9	26.9	28.1	28.3
3H	26.7	27.8	27.0	28.1	28.3	26.8	28.0	27.1	28.2	28.4
4H	26.7	27.8	27.0	28.0	28.3	26.9	27.9	27.2	28.2	28.4
6H	26.7	27.7	27.0	27.9	28.2	26.8	27.8	27.2	28.1	28.4
8H	26.6	27.6	27.0	27.9	28.2	26.8	27.7	27.1	28.0	28.3
12H	26.6	27.5	27.0	27.8	28.1	26.8	27.7	27.1	28.0	28.3
4H 2H	26.6	27.6	26.9	27.9	28.1	26.7	27.7	27.0	28.0	28.2
3H	26.8	27.7	27.2	28.0	28.3	27.0	27.9	27.3	28.2	28.5
4H	26.9	27.7	27.3	28.0	28.4	27.0	27.8	27.4	28.2	28.5
6H	26.9	27.6	27.3	27.9	28.3	27.0	27.7	27.4	28.1	28.5
8H	26.8	27.5	27.3	27.9	28.3	27.0	27.7	27.4	28.0	28.4
12H	26.8	27.4	27.2	27.8	28.2	27.0	27.6	27.4	28.0	28.4
8H 4H	26.8	27.5	27.2	27.9	28.3	27.0	27.6	27.4	28.0	28.4
6H	26.8	27.4	27.3	27.8	28.2	27.0	27.5	27.4	27.9	28.4
8H	26.8	27.3	27.3	27.7	28.2	27.0	27.4	27.4	27.9	28.3
12H	26.8	27.2	27.3	27.7	28.2	27.0	27.4	27.4	27.8	28.3
12H 4H	26.8	27.4	27.2	27.8	28.2	26.9	27.5	27.3	27.9	28.3
6H	26.8	27.3	27.3	27.7	28.2	26.9	27.4	27.4	27.9	28.3
8H	26.8	27.2	27.3	27.7	28.2	26.9	27.3	27.4	27.8	28.3
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, 31495 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 12.0)

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:

UTILIZATION FACTORS TABLE

Test:U:121.5V I:1.663A P:201.7W PF:0.9980 Freq:59.97Hz Lamp Flux:31494.6x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:

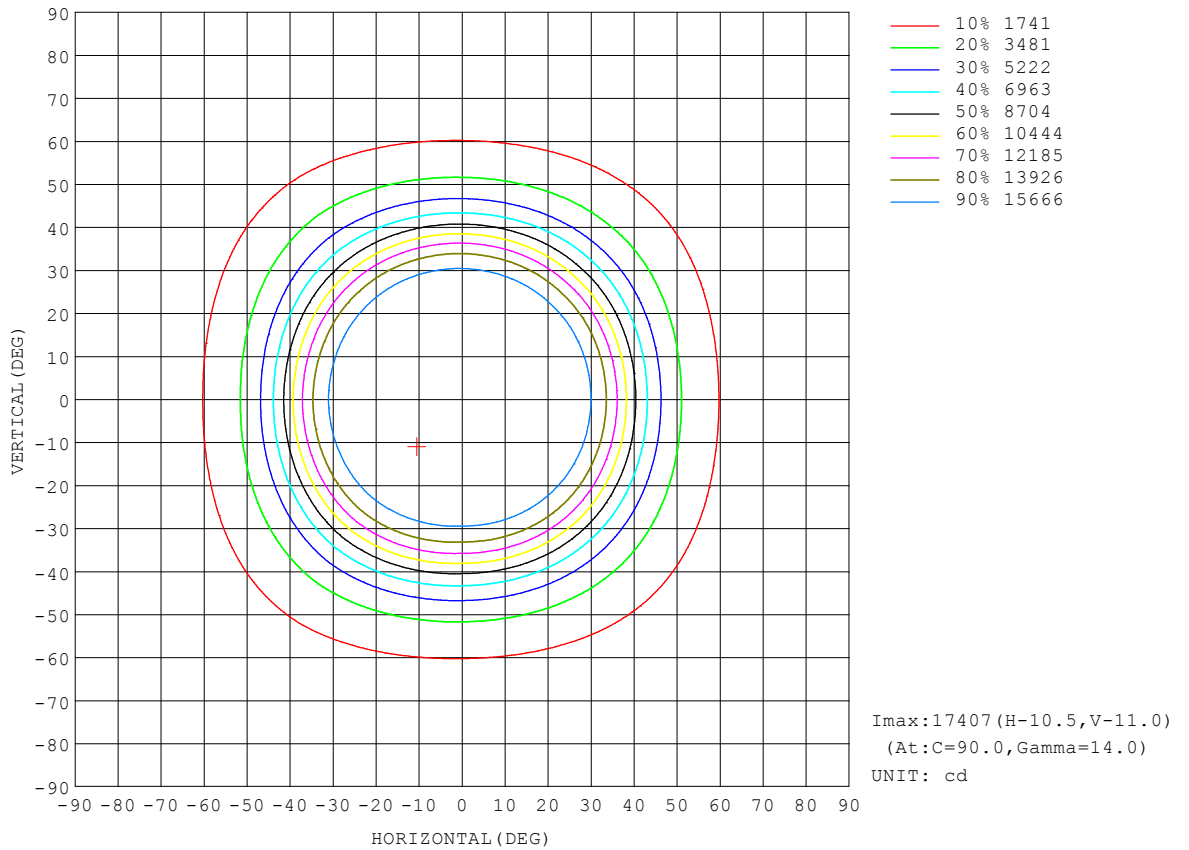
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	73	64	59	73	64	59	71	64	59	54
0.80	82	74	69	82	74	69	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	96	100	97	94	87
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

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:

ISOCANDELA DIAGRAM

Test:U:121.5V I:1.663A P:201.7W PF:0.9980 Freq:59.97Hz Lamp Flux:31494.6x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:

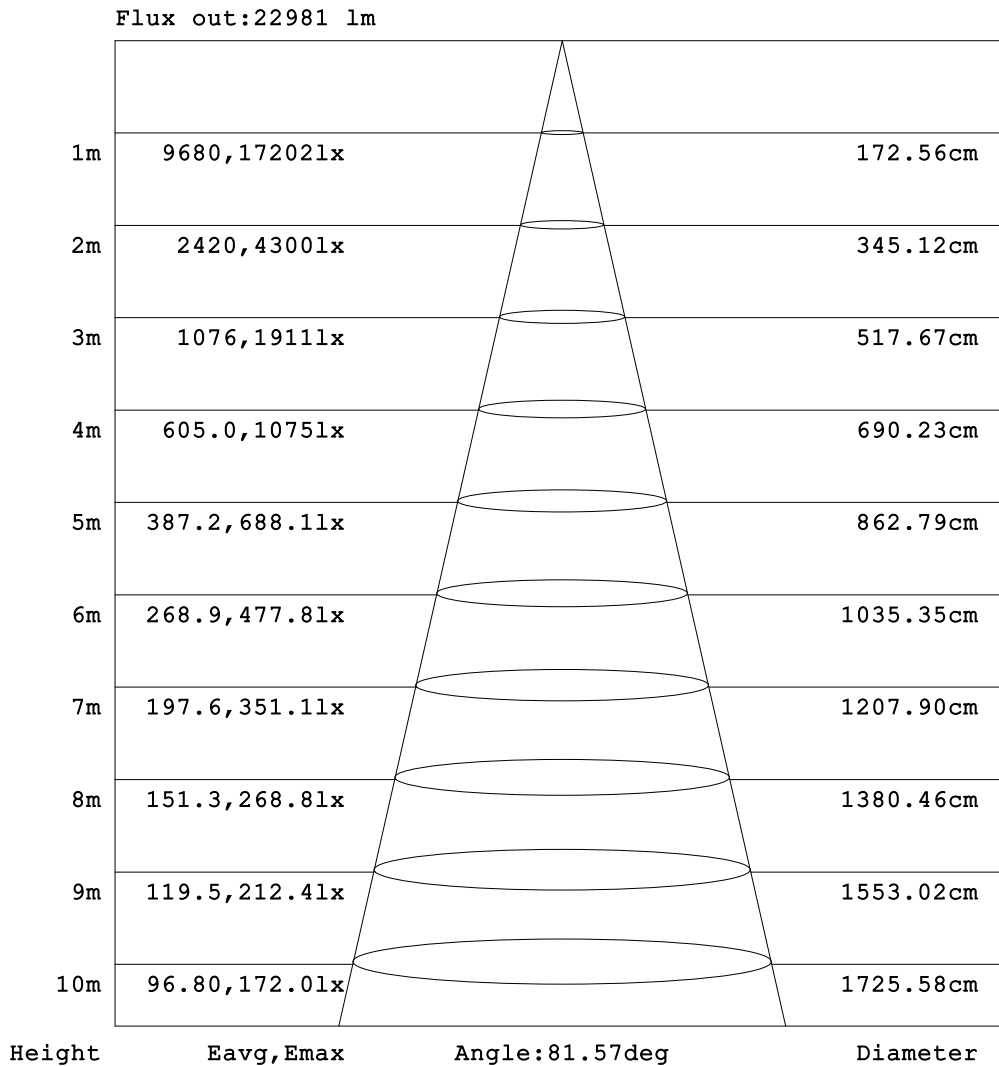


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:17.0DEG
 Operators:wudashuai
 Test Date:2022-02-25

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:1.663A P:201.7W PF:0.9980 Freq:59.97Hz Lamp Flux:31494.6x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-4000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp	SUR.:0.29m	Shielding Angle:

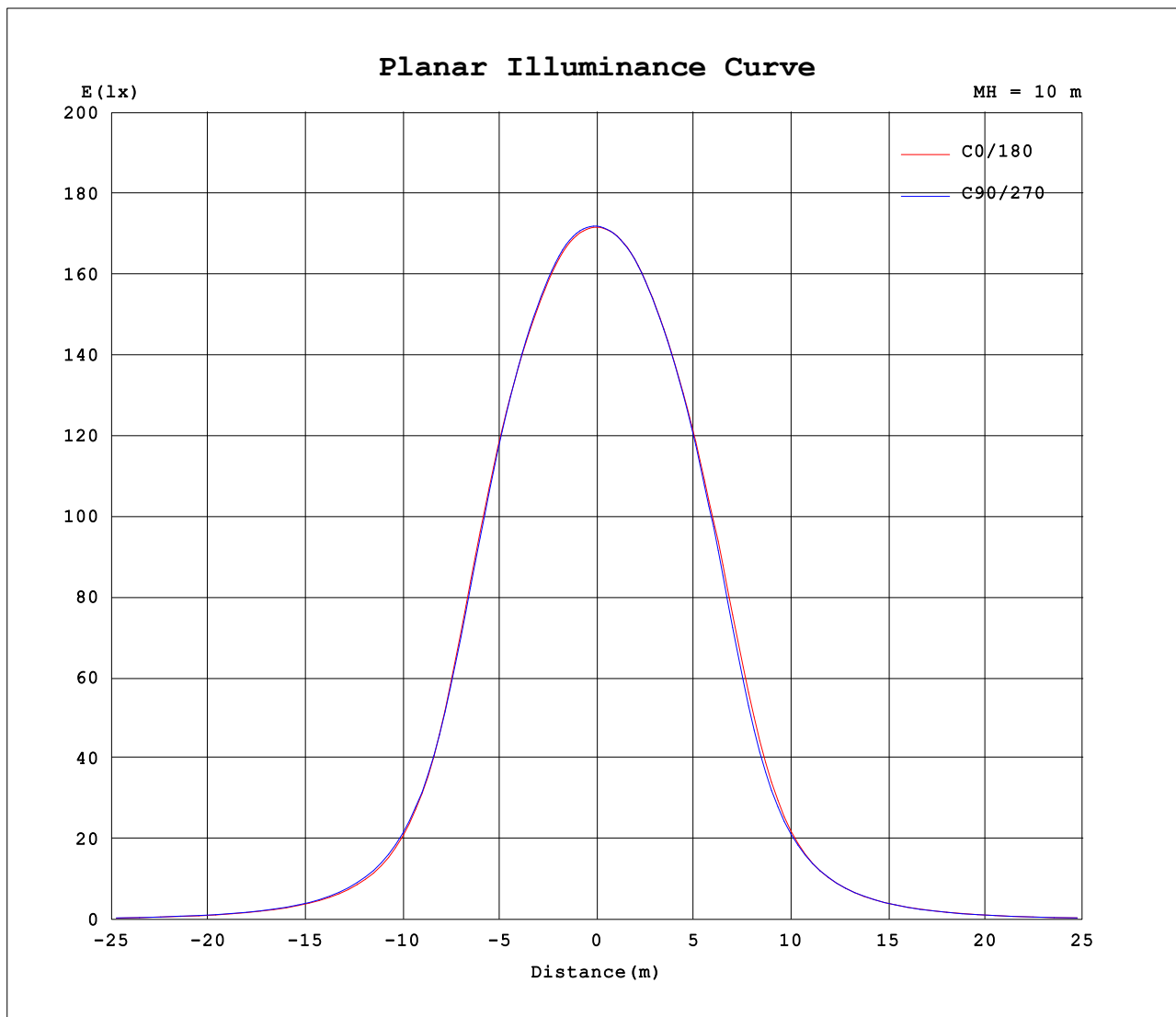


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:121.5V I:1.663A P:201.7W PF:0.9980 Freq:59.97Hz Lamp Flux:31494.6x1 lm		
NAME: ASD Lighting Corp	TYPE:	WEIGHT:
SPEC.:ASD-UHB3-200ADAC-BK-4000K	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	1719	1719	1719	1719	1719	1719	1719	1719										
5	1724	1726	1727	1724	1723	1720	1720	1721										
10	1733	1736	1738	1735	1732	1729	1729	1731										
15	1735	1738	1740	1739	1737	1735	1734	1733										
20	1728	1729	1730	1732	1733	1731	1729	1727										
25	1692	1686	1685	1699	1705	1702	1696	1690										
30	1568	1555	1546	1585	1602	1591	1579	1561										
35	1299	1286	1275	1352	1376	1335	1317	1278										
40	901	900	905	977	989	946	924	886										
45	586	591	605	646	623	626	602	579										
50	379	388	401	418	395	415	396	377										
55	254	259	266	282	265	279	265	255										
60	170	173	178	188	179	185	177	168										
65	110	113	116	121	115	119	113	109										
70	65.5	68.0	70.8	74.1	70.5	71.7	68.1	64.3										
75	33.6	35.1	37.7	39.7	37.0	37.6	35.4	32.7										
80	15.4	16.2	17.3	18.5	17.4	17.2	16.3	14.7										
85	4.99	5.56	6.14	6.92	6.30	5.99	5.47	4.53										
90	0.89	0.97	0.92	1.05	1.00	1.02	1.00	0.96										
95	0.96	1.02	0.94	0.96	0.84	0.89	0.88	0.93										
100	1.32	1.31	1.28	1.24	1.15	1.16	1.18	1.23										
105	1.81	1.80	1.76	1.70	1.60	1.60	1.64	1.70										
110	2.44	2.43	2.38	2.30	2.19	2.18	2.22	2.31										
115	3.20	3.17	3.13	3.03	2.90	2.89	2.93	3.03										
120	4.04	4.00	3.96	3.85	3.71	3.69	3.75	3.85										
125	4.94	4.90	4.86	4.74	4.59	4.56	4.63	4.74										
130	5.88	5.82	5.80	5.66	5.53	5.49	5.58	5.68										
135	6.81	6.75	6.74	6.58	6.49	6.44	6.55	6.64										
140	7.70	7.66	7.63	7.49	7.46	7.41	7.51	7.61										
145	8.53	8.51	8.46	8.33	8.36	8.30	8.42	8.49										
150	9.30	9.30	9.24	9.11	9.20	9.14	9.26	9.34										
155	10.1	10.1	10.0	9.88	10.0	9.99	10.1	10.2										
160	11.0	10.9	10.9	10.7	11.0	10.9	11.0	11.1										
165	11.9	11.8	11.9	11.6	11.9	11.8	12.0	12.0										
170	12.8	12.6	12.7	12.5	12.8	12.6	12.8	12.8										
175	13.4	13.2	13.3	13.2	13.4	13.2	13.4	13.3										
180	13.7	13.5	13.6	13.5	13.6	13.5	13.6	13.5										

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: