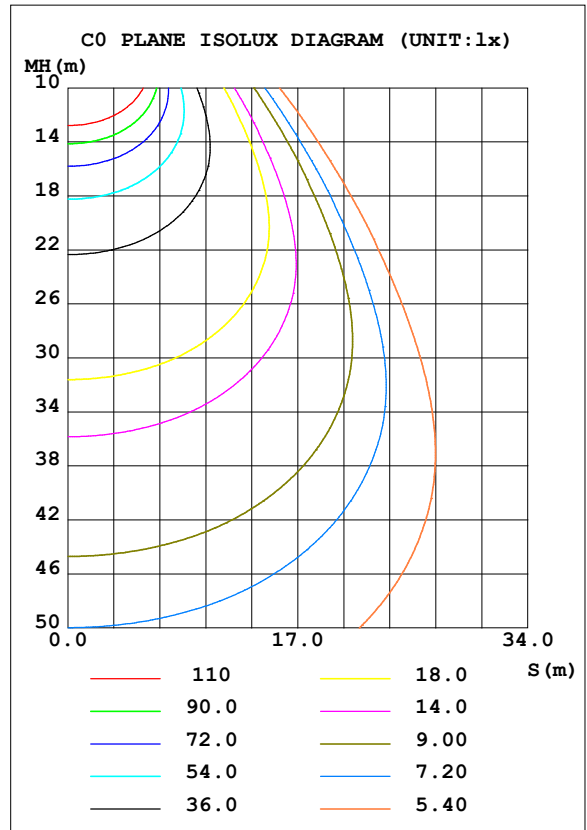
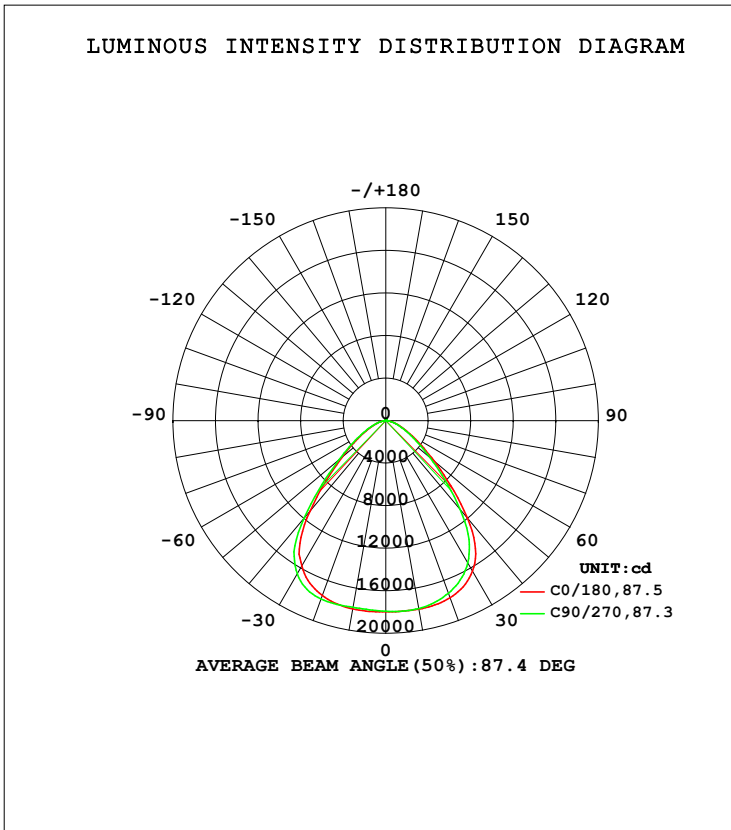


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:122.1V I:1.875A P:228.2W PF:0.9965 Freq:59.98Hz Lamp Flux:37189.7x1 lm		
NAME: ASD-UHB3-240ADAC-BK-240W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.29*0.29m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 159.73 lm/W			
MODEL		I _{max} (cd)	18002	S/MH (C0/180)	1.23
NOMINAL POWER (W)	240	LOR (%)	98.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	36446	<input type="checkbox"/> UP, DN (C0-180)	0.5, 48.3
NOMINAL FLUX (lm)	37189.7	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 48.8
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	0.9	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	<input type="checkbox"/> down (%)	97.1	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: lianghaizhu
 Test Date: 2023-04-07

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity: 56%
 Test Distance: 6.500m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum,lamp
10	1799	1797	1793	1791	1797	1790	1782	1785	0- 10	1712	1712	4.7,4.6
20	1771	1742	1726	1730	1749	1774	1785	1776	10- 20	5040	6752	18.5,18.2
30	1632	1575	1543	1556	1580	1636	1666	1649	20- 30	7827	14579	40,39.2
40	1195	1137	1089	1118	1108	1158	1194	1169	30- 40	8828	23407	64.2,62.9
50	598.3	560.9	546.8	553.0	537.8	559.7	578.9	574.3	40- 50	6381	29788	81.7,80.1
60	285.3	265.8	260.7	266.6	250.7	264.9	271.5	271.1	50- 60	3538	33326	91.4,89.6
70	129.4	119.7	118.9	122.5	110.0	117.6	118.3	118.0	60- 70	1829	35155	96.5,94.5
80	42.21	41.30	41.43	42.31	33.31	34.09	33.50	33.03	70- 80	786.2	35941	98.6,96.6
90	1.936	1.925	1.707	1.965	1.638	1.813	1.800	1.729	80- 90	161.2	36102	99.1,97.1
100	1.734	1.808	1.841	1.819	1.797	1.703	1.674	1.693	90-100	16.94	36119	99.1,97.1
110	2.974	3.095	3.161	3.112	3.083	2.924	2.877	2.905	100-110	24.79	36144	99.2,97.2
120	4.610	4.769	4.868	4.792	4.756	4.529	4.479	4.503	110-120	37.75	36182	99.3,97.3
130	6.468	6.629	6.749	6.657	6.662	6.374	6.352	6.351	120-130	49.94	36232	99.4,97.4
140	8.270	8.445	8.552	8.480	8.543	8.249	8.250	8.254	130-140	57.63	36289	99.6,97.6
150	9.888	10.06	10.14	10.09	10.24	9.977	9.972	9.990	140-150	57.71	36347	99.7,97.7
160	11.63	11.72	11.88	11.75	12.04	11.73	11.78	11.76	150-160	50.20	36397	99.9,97.9
170	13.34	13.31	13.48	13.35	13.63	13.35	13.46	13.37	160-170	35.58	36433	100,98
180	14.28	14.14	14.29	14.18	14.31	14.13	14.30	14.16	170-180	13.16	36446	100,98
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 27025 lm

%lum = 74.2%

%lamp = 72.7%

Conical surface Flux(120deg): 33326 lm

%lum = 91.4%

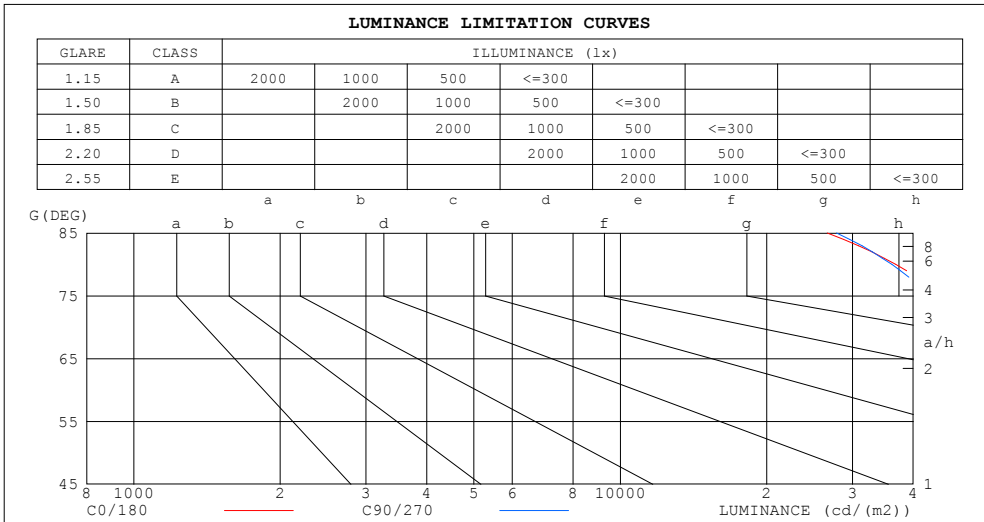
%lamp = 89.6%

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:lianghaizhu
Test Date:2023-04-07

□ Range: 0 - 180DEG
□ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:6.500m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:122.1V I:1.875A P:228.2W PF:0.9965 Freq:59.98Hz Lamp Flux:37189.7x1 lm		
NAME: ASD-UHB3-240ADAC-BK-240W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.29*0.29m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	26636	27830
80	36829	36151
75	46510	44532
70	57337	52691
65	69793	63660
60	86455	78993
55	108775	99639
50	141028	128891
45	185027	168256

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2023-04-07

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:122.1V I:1.875A P:228.2W PF:0.9965 Freq:59.98Hz Lamp Flux:37189.7x1 lm		
NAME: ASD-UHB3-240ADAC-BK-240W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.29*0.29m	Shielding Angle:

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio		Wall Exitance Coefficients (WEC)			
0.0						
1.0	.235 .133 .042	.228 .130 .041	.214 .123 .039	.202 .117 .037	.191 .111 .036	
2.0	.227 .124 .038	.221 .122 .037	.209 .116 .036	.199 .112 .035	.189 .107 .034	
3.0	.215 .115 .034	.210 .112 .034	.200 .108 .033	.191 .105 .032	.182 .101 .031	
4.0	.203 .106 .031	.199 .104 .031	.190 .101 .030	.182 .097 .029	.174 .094 .029	
5.0	.192 .098 .028	.187 .096 .028	.180 .094 .028	.172 .091 .027	.165 .088 .027	
6.0	.181 .091 .026	.177 .089 .026	.170 .087 .025	.163 .085 .025	.157 .083 .025	
7.0	.171 .084 .024	.167 .083 .024	.161 .081 .023	.155 .080 .023	.150 .078 .023	
8.0	.161 .079 .022	.158 .078 .022	.153 .076 .022	.147 .075 .022	.142 .073 .021	
9.0	.153 .074 .021	.150 .073 .021	.145 .072 .020	.140 .070 .020	.136 .069 .020	
10.0	.145 .070 .019	.143 .069 .019	.138 .068 .019	.134 .066 .019	.130 .065 .019	

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio		Ceiling Cavity Exitance Coefficients (CCEC)			
0.0	.194 .194 .194	.166 .166 .166	.113 .113 .113	.065 .065 .065	.021 .021 .021	
1.0	.179 .161 .144	.153 .138 .124	.105 .095 .086	.060 .055 .050	.019 .018 .016	
2.0	.168 .137 .110	.144 .118 .095	.099 .081 .067	.057 .047 .039	.018 .015 .013	
3.0	.159 .119 .087	.136 .103 .075	.094 .071 .053	.054 .042 .031	.017 .014 .010	
4.0	.151 .105 .070	.129 .091 .061	.089 .063 .043	.051 .037 .026	.017 .012 .008	
5.0	.144 .095 .059	.123 .082 .051	.085 .057 .036	.049 .034 .021	.016 .011 .007	
6.0	.137 .086 .050	.118 .075 .043	.081 .052 .031	.047 .031 .018	.015 .010 .006	
7.0	.131 .079 .043	.113 .069 .038	.078 .048 .027	.045 .028 .016	.015 .009 .005	
8.0	.125 .074 .038	.108 .064 .033	.075 .045 .024	.043 .026 .014	.014 .009 .005	
9.0	.120 .069 .034	.103 .060 .030	.072 .042 .021	.042 .025 .013	.014 .008 .004	
10.0	.115 .065 .031	.099 .056 .027	.069 .039 .019	.040 .023 .011	.013 .008 .004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2023-04-07

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:122.1V I:1.875A P:228.2W PF:0.9965 Freq:59.98Hz Lamp Flux:37189.7x1 lm		
NAME: ASD-UHB3-240ADAC-BK-240W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.29*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	28.4	29.7	28.7	29.9	30.1	28.1	29.4	28.3	29.6	29.8
3H	28.8	30.0	29.1	30.2	30.5	28.5	29.6	28.8	29.9	30.1
4H	29.0	30.1	29.3	30.3	30.6	28.6	29.7	28.9	30.0	30.2
6H	29.0	30.1	29.3	30.3	30.6	28.7	29.7	29.0	30.0	30.3
8H	29.0	30.0	29.4	30.3	30.6	28.7	29.7	29.0	30.0	30.2
12H	29.0	30.0	29.4	30.3	30.6	28.7	29.6	29.0	29.9	30.2
4H 2H	28.5	29.6	28.8	29.9	30.1	28.2	29.3	28.5	29.6	29.8
3H	29.1	30.0	29.4	30.3	30.6	28.7	29.7	29.1	30.0	30.3
4H	29.3	30.1	29.6	30.5	30.8	29.0	29.8	29.3	30.1	30.5
6H	29.4	30.2	29.8	30.5	30.9	29.1	29.9	29.5	30.2	30.6
8H	29.4	30.1	29.8	30.5	30.9	29.1	29.8	29.6	30.2	30.6
12H	29.4	30.1	29.9	30.5	30.9	29.1	29.8	29.6	30.2	30.6
8H 4H	29.3	30.0	29.7	30.4	30.8	29.0	29.7	29.4	30.1	30.5
6H	29.5	30.1	29.9	30.5	30.9	29.2	29.8	29.6	30.2	30.6
8H	29.5	30.1	30.0	30.5	31.0	29.3	29.8	29.7	30.2	30.7
12H	29.6	30.0	30.1	30.5	31.0	29.3	29.7	29.8	30.2	30.7
12H 4H	29.3	29.9	29.7	30.3	30.7	29.0	29.6	29.4	30.0	30.4
6H	29.5	30.0	29.9	30.4	30.9	29.2	29.7	29.7	30.1	30.6
8H	29.6	30.0	30.0	30.4	30.9	29.3	29.7	29.8	30.2	30.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.8 / - 1.1					+ 0.9 / - 1.2				
1.5H	+ 0.9 / - 0.8					+ 0.9 / - 0.8				
2.0H	+ 1.9 / - 1.4					+ 1.8 / - 1.3				

CIE Pub.117, 37190 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 12.6)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2023-04-07

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:122.1V I:1.875A P:228.2W PF:0.9965 Freq:59.98Hz Lamp Flux:37189.7x1 lm		
NAME: ASD-UHB3-240ADAC-BK-240W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.29*0.29m	Shielding Angle:

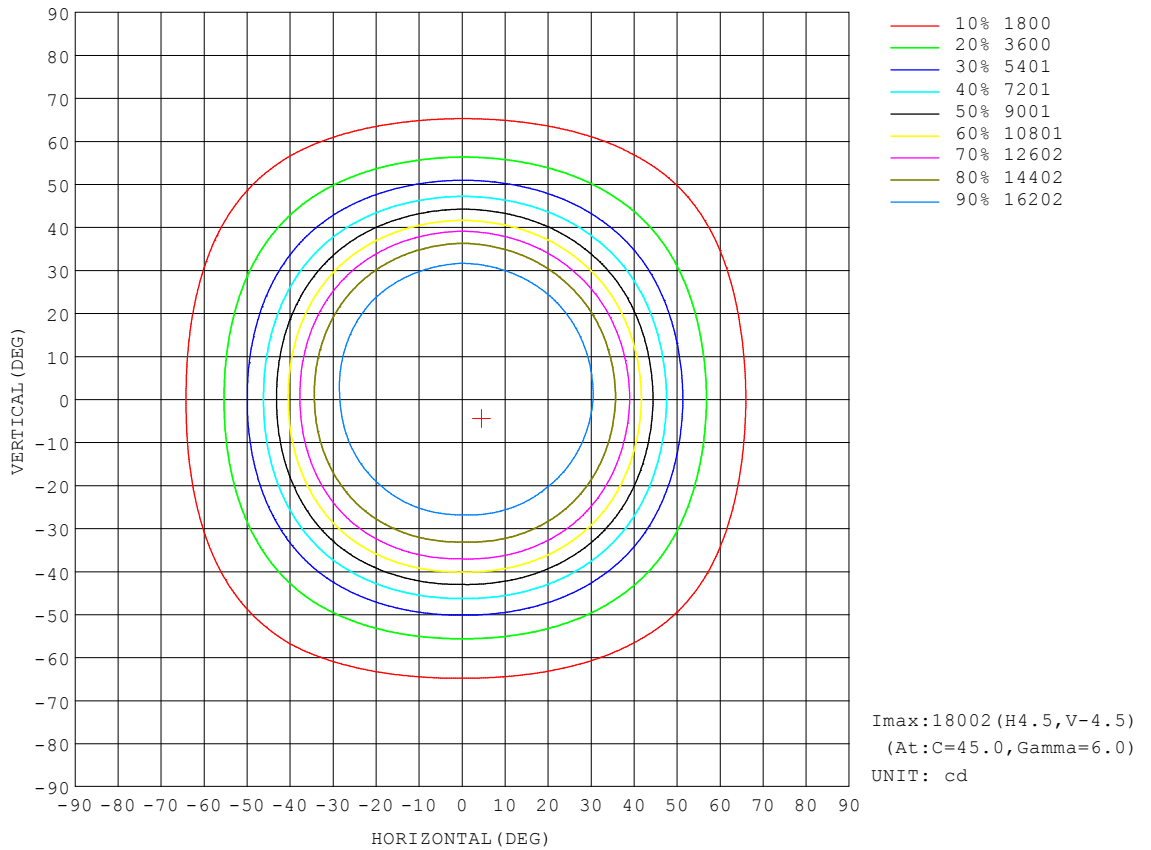
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	68	58	53	67	58	53	66	58	52	47
0.80	77	68	62	76	68	62	75	67	62	56
1.00	84	76	70	83	75	70	81	76	70	64
1.25	90	83	77	89	82	77	87	81	76	70
1.50	94	87	82	93	86	82	90	85	80	74
2.00	100	93	89	98	92	88	95	90	86	80
2.50	102	97	92	100	95	91	97	93	89	82
3.00	105	100	96	103	98	95	99	95	92	85
4.00	108	103	100	105	102	99	101	98	96	88
5.00	109	106	103	107	104	101	103	100	98	89
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:25.1DEG
 Operators:lianghaizhu
 Test Date:2023-04-07

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:122.1V I:1.875A P:228.2W PF:0.9965 Freq:59.98Hz Lamp Flux:37189.7x1 lm		
NAME: ASD-UHB3-240ADAC-BK-240W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.29*0.29m	Shielding Angle:

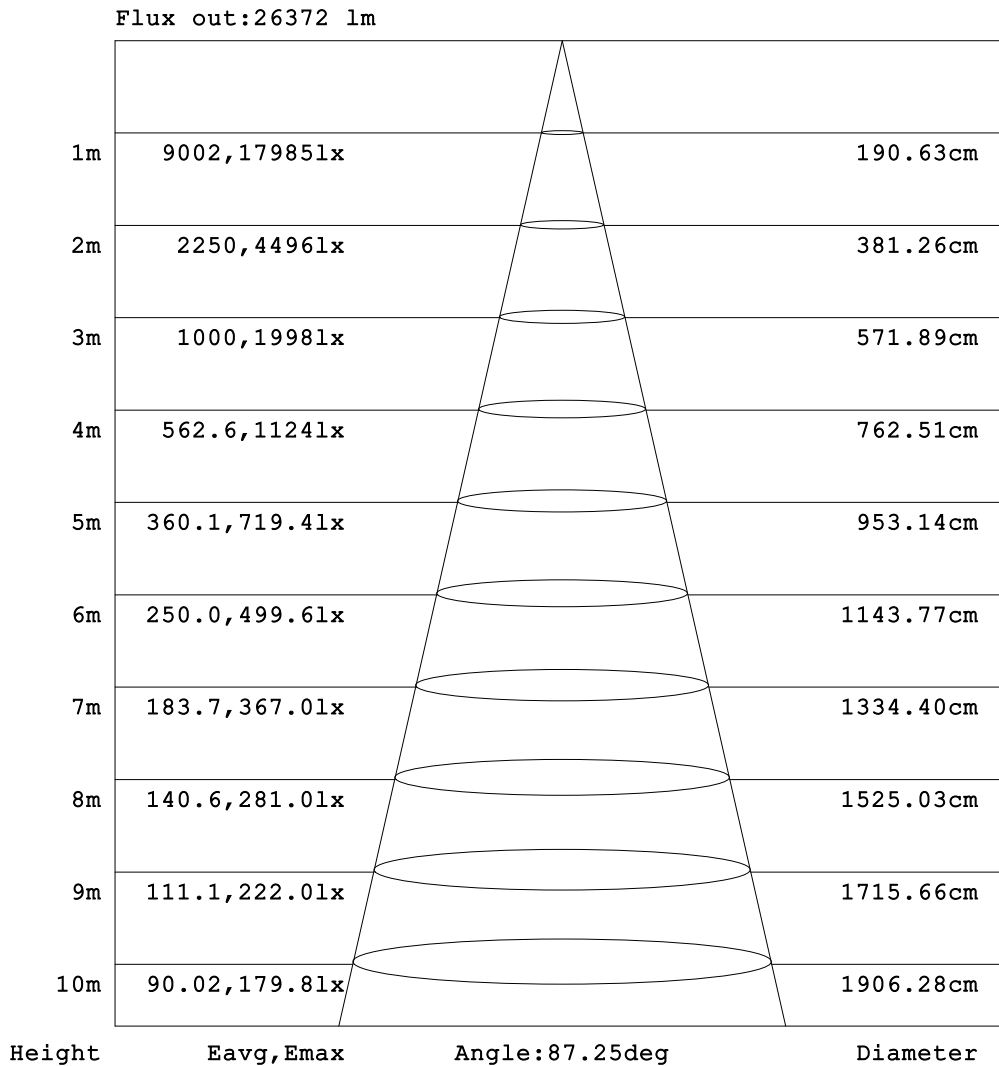


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2023-04-07

□ Range: 0 - 180DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

AAI Figure

Test:U:122.1V I:1.875A P:228.2W PF:0.9965 Freq:59.98Hz Lamp Flux:37189.7x1 lm		
NAME: ASD-UHB3-240ADAC-BK-240W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.29*0.29m	Shielding Angle:

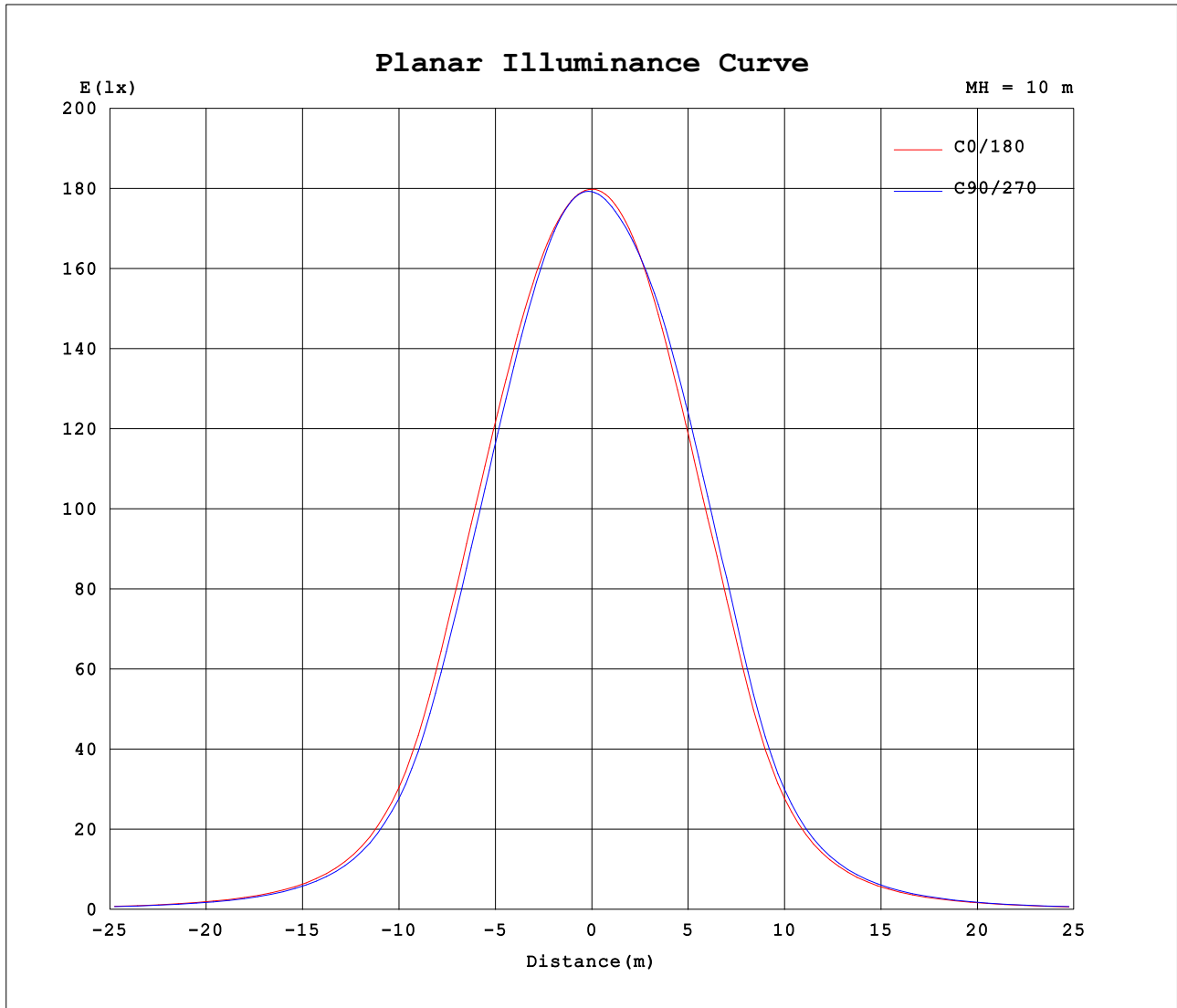


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2023-04-07

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:lianghaizhu
Test Date:2023-04-07

Range: 0 - 180DEG
 Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:6.500m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:122.1V I:1.875A P:228.2W PF:0.9965 Freq:59.98Hz Lamp Flux:37189.7x1 lm		
NAME: ASD-UHB3-240ADAC-BK-240W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ASD LIGHTING CORP	SUR.:0.29*0.29m	Shielding Angle:

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315											
0	1798	1795	1792	1789	1798	1795	1792	1789											
5	1799	1800	1798	1794	1799	1791	1784	1784											
10	1799	1797	1793	1791	1797	1790	1782	1785											
15	1793	1781	1770	1772	1784	1789	1787	1786											
20	1771	1742	1726	1730	1749	1774	1785	1776											
25	1723	1679	1656	1664	1687	1729	1751	1738											
30	1632	1575	1543	1556	1580	1636	1666	1649											
35	1471	1416	1363	1394	1410	1459	1507	1474											
40	1195	1137	1089	1118	1108	1158	1194	1169											
45	864	817	785	805	786	818	849	832											
50	598	561	547	553	538	560	579	574											
55	412	387	377	383	369	384	397	395											
60	285	266	261	267	251	265	271	271											
65	195	180	178	183	168	180	184	183											
70	129	120	119	123	110	118	118	118											
75	79.4	75.3	76.1	77.4	66.0	69.7	69.3	68.9											
80	42.2	41.3	41.4	42.3	33.3	34.1	33.5	33.0											
85	15.3	15.9	16.0	16.3	9.79	9.44	8.06	8.87											
90	1.94	1.92	1.71	1.96	1.64	1.81	1.80	1.73											
95	1.40	1.62	1.50	1.60	1.36	1.41	1.28	1.34											
100	1.73	1.81	1.84	1.82	1.80	1.70	1.67	1.69											
105	2.29	2.39	2.44	2.40	2.38	2.26	2.22	2.24											
110	2.97	3.09	3.16	3.11	3.08	2.92	2.88	2.91											
115	3.75	3.89	3.98	3.91	3.88	3.69	3.64	3.66											
120	4.61	4.77	4.87	4.79	4.76	4.53	4.48	4.50											
125	5.52	5.69	5.80	5.72	5.69	5.43	5.39	5.40											
130	6.47	6.63	6.75	6.66	6.66	6.37	6.35	6.35											
135	7.40	7.55	7.68	7.57	7.63	7.32	7.33	7.31											
140	8.27	8.45	8.55	8.48	8.54	8.25	8.25	8.25											
145	9.09	9.28	9.36	9.31	9.39	9.12	9.11	9.13											
150	9.89	10.1	10.1	10.1	10.2	9.98	9.97	9.99											
155	10.7	10.9	11.0	10.9	11.1	10.8	10.8	10.9											
160	11.6	11.7	11.9	11.7	12.0	11.7	11.8	11.8											
165	12.5	12.6	12.7	12.6	12.9	12.6	12.7	12.6											
170	13.3	13.3	13.5	13.3	13.6	13.3	13.5	13.4											
175	14.0	13.9	14.0	13.9	14.1	13.9	14.0	13.9											
180	14.3	14.1	14.3	14.2	14.3	14.1	14.3	14.2											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lianghaizhu
 Test Date:2023-04-07

□ Range: 0 - 180DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:6.500m [K=1.0000]
 Remarks: