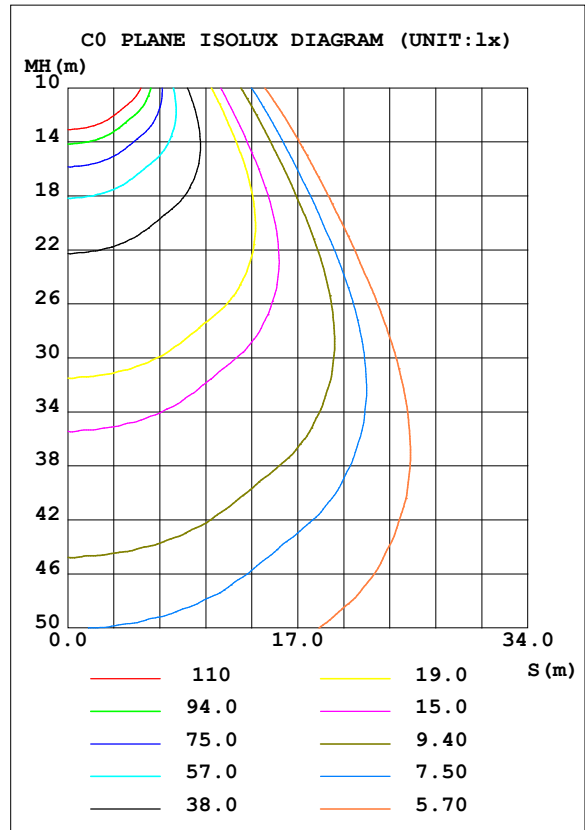
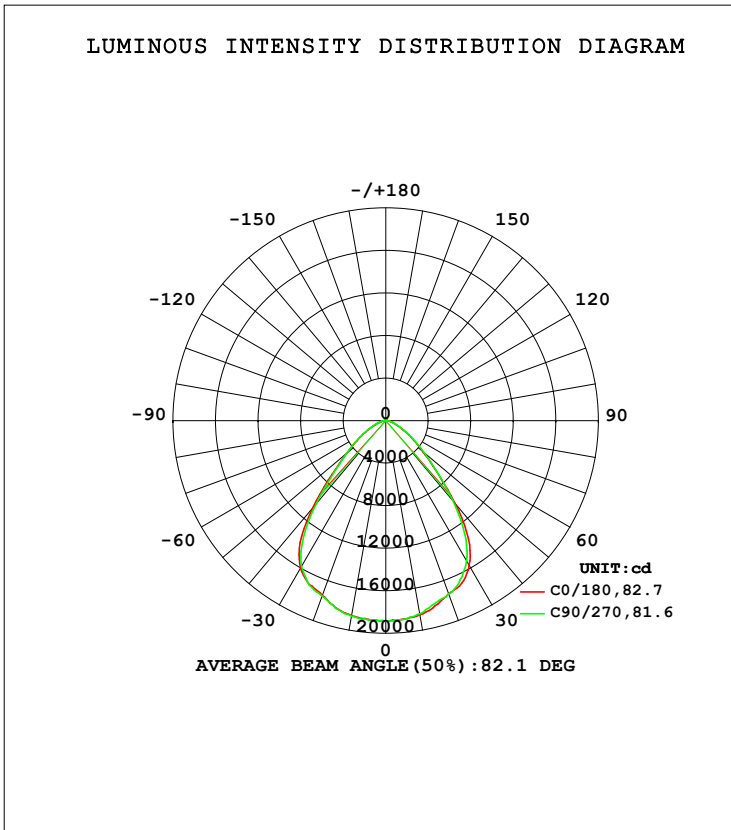


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:280.7V I:0.6834A P:191.1W PF:0.9961 Freq:59.98Hz Lamp Flux:34126.2x1 lm
NAME: ASD-UHB5-HV-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

DATA OF LAMP		PHOTOMETRIC DATA Eff: 178.55 lm/W			
MODEL	ASD-UHB5-HV-PRO-200BK	I _{max} (cd)	18870	S/MH (C0/180)	1.20
NOMINAL POWER (W)	200	LOR (%)	100.0	S/MH (C90/270)	1.18
RATED VOLTAGE (V)	277	TOTAL FLUX (lm)	34126	<input type="checkbox"/> UP, DN (C0-180)	0.5, 48.8
NOMINAL FLUX (lm)	34126	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.6, 50.1
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	1.1	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	277	<input type="checkbox"/> down (%)	98.9	CIBSE SHR MAX	1.15



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-22

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	1853	1842	1843	1853	1862	1866	1867	1865	0- 10	1785	1785	5.23,5.23
20	1732	1729	1734	1740	1748	1762	1757	1750	10- 20	5096	6881	20.2,20.2
30	1569	1534	1519	1569	1605	1614	1585	1571	20- 30	7736	14617	42.8,42.8
40	1015	954.1	980.8	1044	1070	1081	1014	987.7	30- 40	8290	22907	67.1,67.1
50	463.2	454.1	476.0	494.1	481.1	504.5	480.1	469.1	40- 50	5457	28364	83.1,83.1
60	220.5	215.6	230.9	233.5	229.5	240.0	234.2	224.2	50- 60	3042	31406	92,92
70	91.96	89.64	98.40	98.48	95.13	101.5	98.31	95.22	60- 70	1517	32923	96.5,96.5
80	32.83	32.01	36.65	37.69	35.60	38.62	35.10	33.35	70- 80	661.7	33585	98.4,98.4
90	1.788	1.857	1.175	1.981	1.346	1.986	1.137	1.725	80- 90	167.5	33752	98.9,98.9
100	1.670	1.723	1.660	1.622	1.637	1.565	1.632	1.691	90-100	15.37	33768	99,99
110	2.937	3.019	2.906	2.850	2.948	2.812	2.910	3.013	100-110	23.63	33791	99,99
120	4.676	4.782	4.645	4.569	4.882	4.674	4.797	4.928	110-120	37.56	33829	99.1,99.1
130	6.657	6.754	6.648	6.532	7.447	7.173	7.263	7.366	120-130	52.13	33881	99.3,99.3
140	8.728	8.810	8.737	8.564	10.12	9.767	9.918	9.881	130-140	62.89	33944	99.5,99.5
150	10.86	10.87	10.88	10.65	12.34	11.98	12.17	12.13	140-150	65.14	34009	99.7,99.7
160	13.57	13.39	13.39	13.14	14.90	14.43	14.65	14.55	150-160	58.35	34068	99.8,99.8
170	16.39	15.90	15.99	15.74	16.88	16.09	16.61	16.10	160-170	42.67	34110	100,100
180	17.66	17.02	17.39	16.97	17.67	17.03	17.33	16.94	170-180	15.95	34126	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 26040 lm

%lum = 76.3%

%lamp = 76.3%

Conical surface Flux(120deg): 31406 lm

%lum = 92.0%

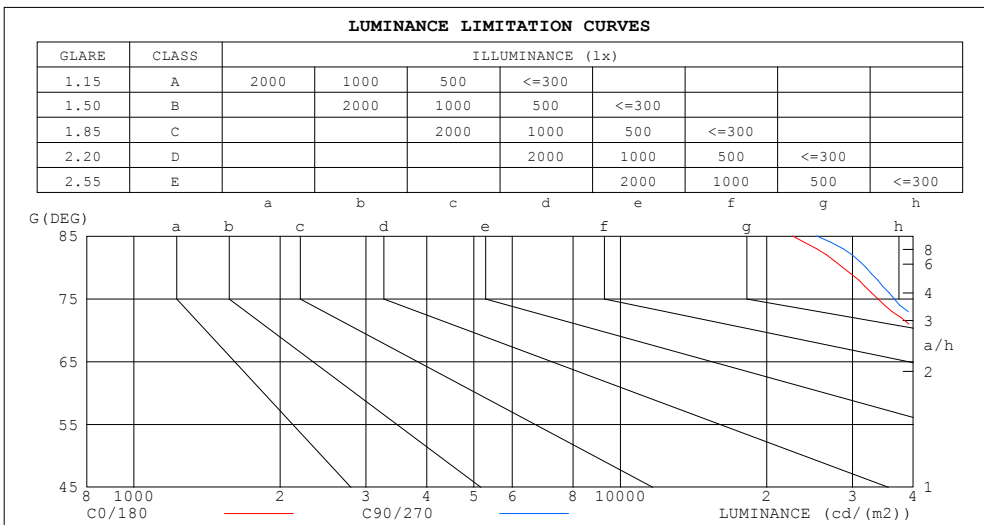
%lamp = 92.0%

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:27DEG
Operators:lianghaizhu
Test Date:2023-11-22

□ 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:280.7V I:0.6834A P:191.1W PF:0.9961 Freq:59.98Hz Lamp Flux:34126.2x1 lm
NAME: ASD-UHB5-HV-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	22603	25347
80	28647	31980
75	33821	36562
70	40740	43591
65	51343	54470
60	66807	69957
55	86181	88770
50	109189	112210
45	145257	146245

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-22

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:280.7V I:0.6834A P:191.1W PF:0.9961 Freq:59.98Hz Lamp Flux:34126.2x1 lm
NAME: ASD-UHB5-HV-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

<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	.234	.133	.042	.227	.129	.041	.213	.122	.039	.201	.116	.037	.190	.110	.035	
2.0	.226	.124	.038	.220	.121	.037	.208	.116	.036	.197	.111	.035	.187	.106	.033	
3.0	.214	.114	.034	.209	.112	.034	.199	.108	.033	.189	.104	.032	.180	.100	.031	
4.0	.202	.105	.031	.198	.103	.031	.189	.100	.030	.180	.097	.029	.172	.094	.029	
5.0	.191	.097	.028	.187	.096	.028	.179	.093	.027	.171	.090	.027	.164	.088	.026	
6.0	.180	.090	.026	.176	.089	.026	.169	.087	.025	.163	.085	.025	.156	.082	.024	
7.0	.170	.084	.024	.167	.083	.024	.161	.081	.023	.155	.079	.023	.149	.077	.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	.199	.199	.199	.170	.170	.170	.116	.116	.116	.067	.067	.067	.021	.021	.021	
1.0	.183	.165	.149	.157	.142	.128	.107	.098	.089	.062	.056	.051	.020	.018	.017	
2.0	.172	.141	.114	.147	.121	.099	.101	.084	.069	.058	.049	.040	.019	.016	.013	
3.0	.162	.122	.091	.139	.106	.079	.096	.073	.055	.055	.043	.033	.018	.014	.011	
4.0	.154	.108	.074	.132	.094	.064	.091	.065	.045	.053	.038	.027	.017	.012	.009	
5.0	.146	.098	.062	.126	.084	.054	.087	.059	.038	.050	.035	.022	.016	.011	.007	
6.0	.140	.089	.053	.120	.077	.046	.083	.054	.032	.048	.032	.019	.015	.010	.006	
7.0	.133	.082	.046	.115	.071	.040	.079	.050	.028	.046	.029	.017	.015	.010	.006	
8.0	.128	.076	.040	.110	.066	.035	.076	.046	.025	.044	.027	.015	.014	.009	.005	
9.0	.122	.071	.036	.105	.062	.032	.073	.043	.023	.042	.026	.013	.014	.008	.004	
10.0	.117	.067	.033	.101	.058	.029	.070	.041	.021	.041	.024	.012	.013	.008	.004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-22

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:280.7V I:0.6834A P:191.1W PF:0.9961 Freq:59.98Hz Lamp Flux:34126.2x1 lm
NAME: ASD-UHB5-HV-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

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	27.3	28.5	27.5	28.7	28.9	27.3	28.5	27.6	28.7	28.9
3H	27.5	28.7	27.8	28.9	29.2	27.6	28.8	27.9	29.0	29.2
4H	27.6	28.7	27.9	29.0	29.2	27.7	28.8	28.0	29.1	29.3
6H	27.7	28.7	28.0	29.0	29.2	27.8	28.8	28.1	29.1	29.4
8H	27.7	28.6	28.0	28.9	29.2	27.8	28.8	28.2	29.1	29.4
12H	27.7	28.6	28.0	28.9	29.2	27.8	28.7	28.2	29.0	29.3
4H 2H	27.3	28.4	27.6	28.7	28.9	27.4	28.4	27.7	28.7	28.9
3H	27.7	28.7	28.1	29.0	29.3	27.8	28.7	28.2	29.0	29.4
4H	27.9	28.7	28.3	29.1	29.4	28.0	28.8	28.4	29.2	29.5
6H	28.0	28.8	28.4	29.1	29.5	28.1	28.9	28.5	29.2	29.6
8H	28.0	28.7	28.5	29.1	29.5	28.2	28.9	28.6	29.2	29.6
12H	28.1	28.7	28.5	29.1	29.5	28.2	28.8	28.6	29.2	29.6
8H 4H	27.9	28.6	28.3	29.0	29.4	28.0	28.7	28.4	29.1	29.5
6H	28.1	28.6	28.5	29.1	29.5	28.2	28.8	28.7	29.2	29.6
8H	28.1	28.6	28.6	29.1	29.6	28.3	28.8	28.8	29.2	29.7
12H	28.2	28.6	28.7	29.1	29.6	28.3	28.8	28.8	29.2	29.7
12H 4H	27.9	28.5	28.3	28.9	29.3	28.0	28.6	28.4	29.0	29.4
6H	28.1	28.6	28.5	29.0	29.5	28.2	28.7	28.7	29.1	29.6
8H	28.2	28.6	28.6	29.0	29.5	28.3	28.7	28.8	29.2	29.7
Variations with the observer position at spacings:										
S = 1.0H	+ 1.0 / - 1.4					+ 0.9 / - 1.2				
1.5H	+ 1.4 / - 0.9					+ 1.1 / - 0.8				
2.0H	+ 1.9 / - 1.6					+ 1.8 / - 1.5				

CIE Pub.117, 34126 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 12.3)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-22

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:280.7V I:0.6834A P:191.1W PF:0.9961 Freq:59.98Hz Lamp Flux:34126.2x1 lm
NAME: ASD-UHB5-HV-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

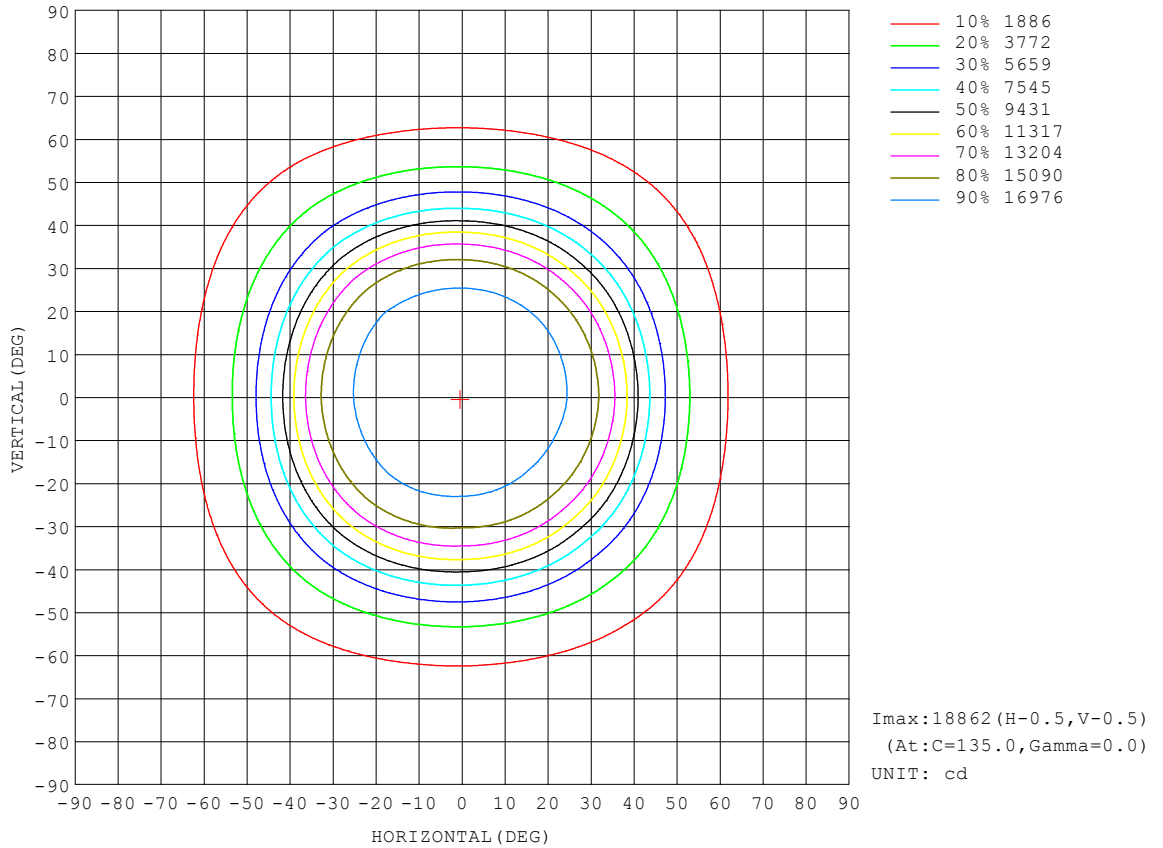
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	71	62	56	70	61	56	69	61	56	51
0.80	80	71	66	79	71	66	78	70	65	60
1.00	87	79	74	86	79	73	84	79	73	67
1.25	93	86	80	92	85	80	90	84	79	73
1.50	97	90	85	96	89	85	93	88	83	77
2.00	102	96	91	100	95	91	97	93	89	82
2.50	105	99	95	103	98	94	99	95	92	85
3.00	107	102	98	105	101	97	101	98	95	87
4.00	110	106	103	108	104	101	104	101	98	90
5.00	112	108	105	109	106	104	105	103	100	92
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: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-22

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:280.7V I:0.6834A P:191.1W PF:0.9961 Freq:59.98Hz Lamp Flux:34126.2x1 lm
NAME: ASD-UHB5-HV-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

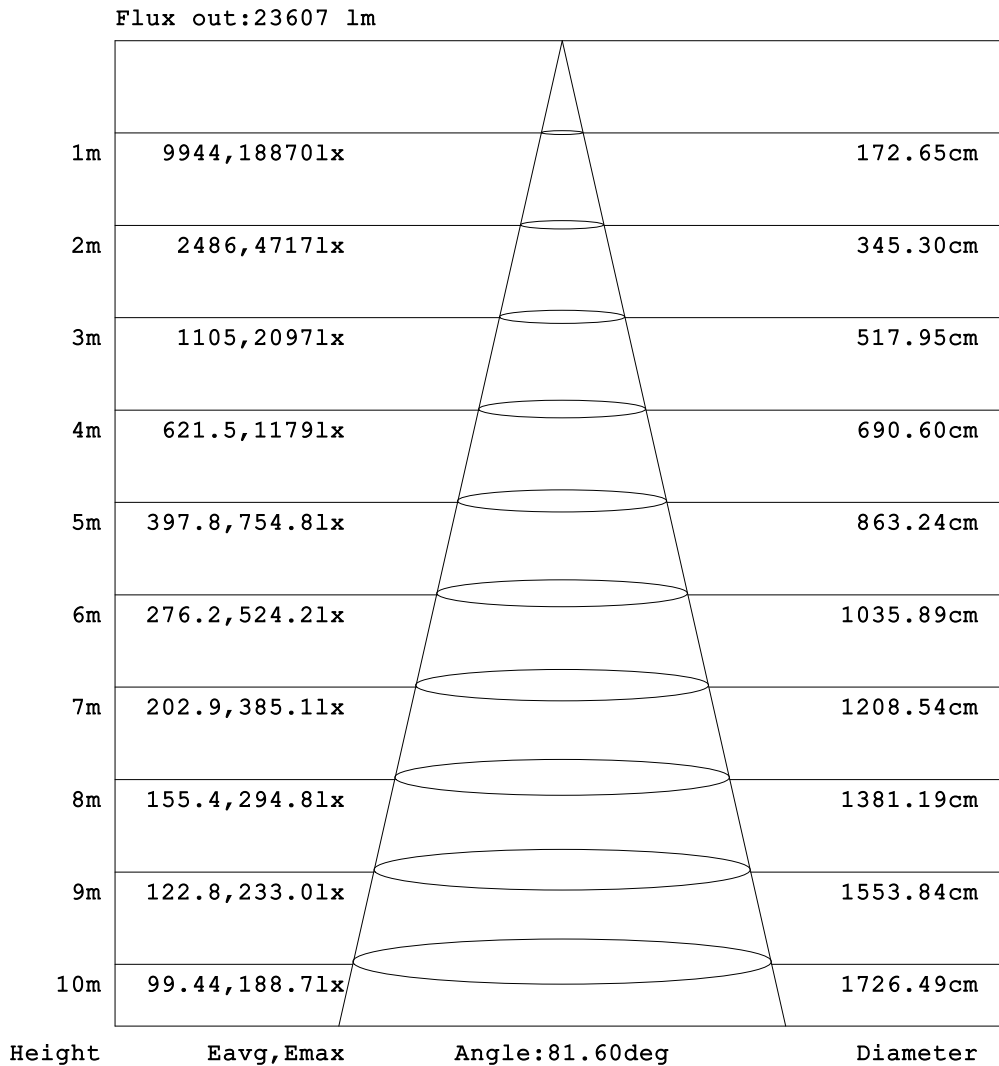


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-22

□ 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:280.7V I:0.6834A P:191.1W PF:0.9961 Freq:59.98Hz Lamp Flux:34126.2x1 lm
NAME: ASD-UHB5-HV-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

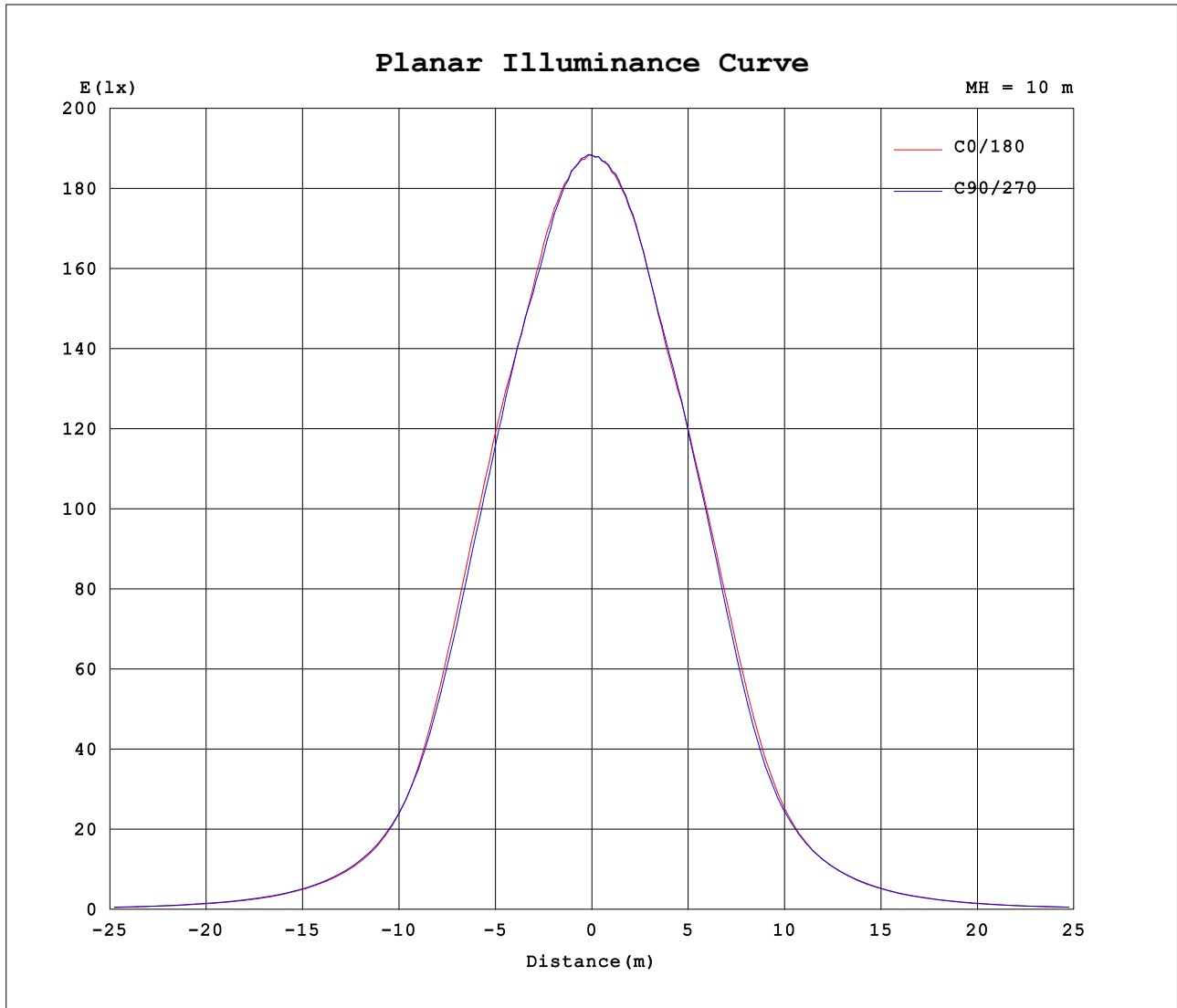


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-22

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: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-22

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:280.7V I:0.6834A P:191.1W PF:0.9961 Freq:59.98Hz Lamp Flux:34126.2x1 lm
NAME: ASD-UHB5-HV-PRO-200BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315											
0	1883	1880	1883	1887	1883	1880	1883	1887											
5	1874	1872	1875	1879	1877	1873	1881	1881											
10	1853	1842	1843	1853	1862	1866	1867	1865											
15	1800	1776	1778	1796	1822	1833	1825	1818											
20	1732	1729	1734	1740	1748	1762	1757	1750											
25	1688	1657	1652	1686	1701	1712	1706	1702											
30	1569	1534	1519	1569	1605	1614	1585	1571											
35	1354	1294	1294	1361	1406	1417	1357	1335											
40	1015	954	981	1044	1070	1081	1014	988											
45	678	643	683	721	715	735	692	673											
50	463	454	476	494	481	505	480	469											
55	326	320	336	343	336	353	342	330											
60	220	216	231	234	229	240	234	224											
65	143	139	152	153	149	158	153	147											
70	92.0	89.6	98.4	98.5	95.1	101	98.3	95.2											
75	57.8	56.7	62.5	63.8	61.3	65.4	62.7	60.0											
80	32.8	32.0	36.7	37.7	35.6	38.6	35.1	33.4											
85	13.0	11.9	14.6	16.5	14.9	16.8	12.7	12.0											
90	1.79	1.86	1.17	1.98	1.35	1.99	1.14	1.73											
95	1.25	1.41	1.24	1.36	1.22	1.37	1.21	1.36											
100	1.67	1.72	1.66	1.62	1.64	1.56	1.63	1.69											
105	2.23	2.30	2.21	2.17	2.21	2.11	2.20	2.27											
110	2.94	3.02	2.91	2.85	2.95	2.81	2.91	3.01											
115	3.76	3.86	3.73	3.66	3.84	3.67	3.78	3.91											
120	4.68	4.78	4.65	4.57	4.88	4.67	4.80	4.93											
125	5.65	5.75	5.63	5.53	6.09	5.85	5.96	6.09											
130	6.66	6.75	6.65	6.53	7.45	7.17	7.26	7.37											
135	7.68	7.76	7.68	7.55	8.83	8.51	8.63	8.65											
140	8.73	8.81	8.74	8.56	10.1	9.77	9.92	9.88											
145	9.78	9.83	9.80	9.62	11.3	10.9	11.1	11.0											
150	10.9	10.9	10.9	10.7	12.3	12.0	12.2	12.1											
155	12.1	12.0	12.1	11.8	13.5	13.1	13.3	13.3											
160	13.6	13.4	13.4	13.1	14.9	14.4	14.7	14.5											
165	15.1	14.7	14.8	14.5	16.0	15.4	15.8	15.4											
170	16.4	15.9	16.0	15.7	16.9	16.1	16.6	16.1											
175	17.3	16.7	17.0	16.6	17.4	16.7	17.2	16.7											
180	17.7	17.0	17.4	17.0	17.7	17.0	17.3	16.9											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-22

□ 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: