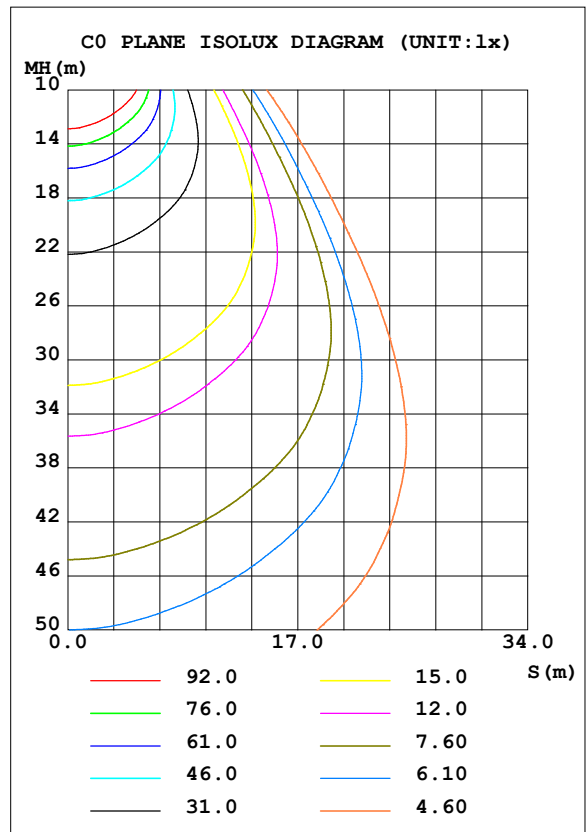
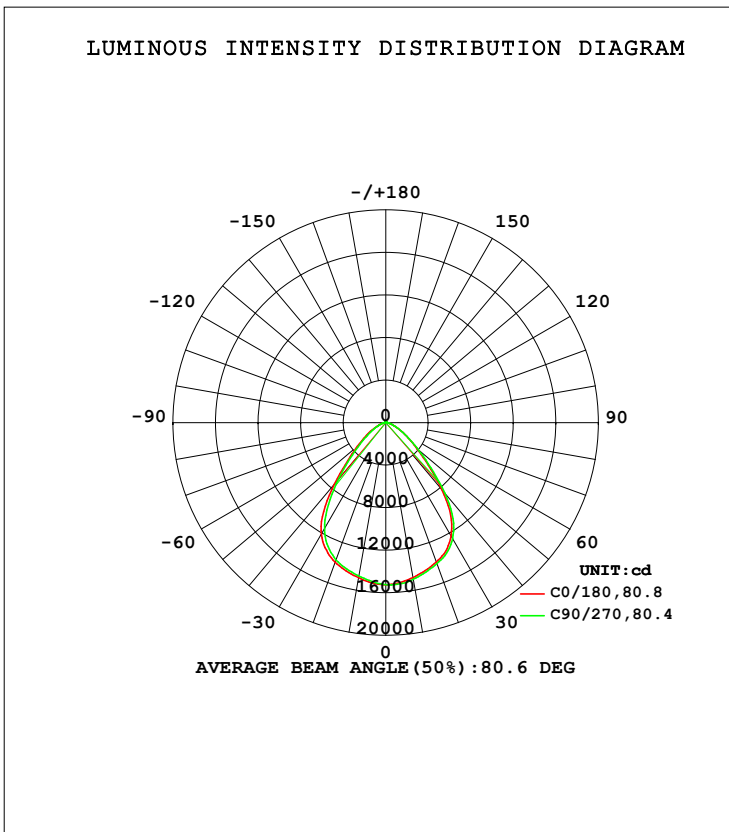


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.6V I:1.205A P:144.7W PF:0.9960 Freq:59.98Hz Lamp Flux:26330.9x1 lm
NAME: ASD-UHB5-PRO-150BK
SPEC.:4000K
MFR.: ASD Lighting Corp

DATA OF LAMP		PHOTOMETRIC DATA Eff: 181.95 lm/W			
MODEL	ASD-UHB5-PRO-150BK	I _{max} (cd)	15265	S/MH (C0/180)	1.15
NOMINAL POWER (W)	150	LOR (%)	100.0	S/MH (C90/270)	1.11
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	26331	<input type="checkbox"/> UP, DN (C0-180)	0.5, 51.4
NOMINAL FLUX (lm)	26331	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.6, 47.5
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	1.1	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	120	<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: 2023-11-14

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	1479	1482	1495	1492	1481	1475	1463	1468	0- 10	1432	1432	5.44,5.44
20	1394	1398	1410	1409	1396	1388	1374	1383	10- 20	4067	5499	20.9,20.9
30	1228	1234	1258	1250	1214	1186	1155	1189	20- 30	6075	11574	44,44
40	821.4	821.5	862.6	822.8	750.7	713.0	690.2	734.4	30- 40	6350	17924	68.1,68.1
50	388.6	399.4	407.2	368.0	350.0	356.7	319.8	318.6	40- 50	4182	22106	84,84
60	184.3	189.1	188.5	144.6	168.0	163.8	144.3	125.5	50- 60	2246	24352	92.5,92.5
70	74.97	76.76	79.19	65.54	67.47	66.41	60.65	57.51	60- 70	1080	25432	96.6,96.6
80	28.08	29.92	31.66	28.01	24.07	23.84	21.77	23.58	70- 80	477.9	25910	98.4,98.4
90	2.005	2.424	2.334	2.279	2.003	1.959	1.346	1.817	80- 90	132.4	26042	98.9,98.9
100	1.199	1.324	1.145	1.301	1.674	1.698	1.738	1.719	90-100	15.34	26058	99,99
110	2.117	2.079	2.018	2.102	2.904	2.928	3.045	2.941	100-110	20.54	26078	99,99
120	3.405	3.342	3.267	3.372	4.388	4.398	4.536	4.426	110-120	31.55	26110	99.2,99.2
130	4.897	4.815	4.738	4.847	6.002	5.993	6.154	6.031	120-130	41.61	26151	99.3,99.3
140	6.417	6.339	6.252	6.339	7.656	7.598	7.802	7.638	130-140	48.04	26199	99.5,99.5
150	7.831	7.796	7.690	7.738	9.134	9.078	9.258	9.130	140-150	48.45	26248	99.7,99.7
160	9.319	9.252	9.187	9.184	10.55	10.45	10.65	10.49	150-160	42.20	26290	99.8,99.8
170	10.87	10.74	10.75	10.71	11.71	11.57	11.75	11.60	160-170	29.78	26320	100,100
180	12.01	11.81	11.94	11.88	12.01	11.81	11.94	11.87	170-180	11.00	26331	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 20322 lm

%lum = 77.2%

%lamp = 77.2%

Conical surface Flux(120deg): 24352 lm

%lum = 92.5%

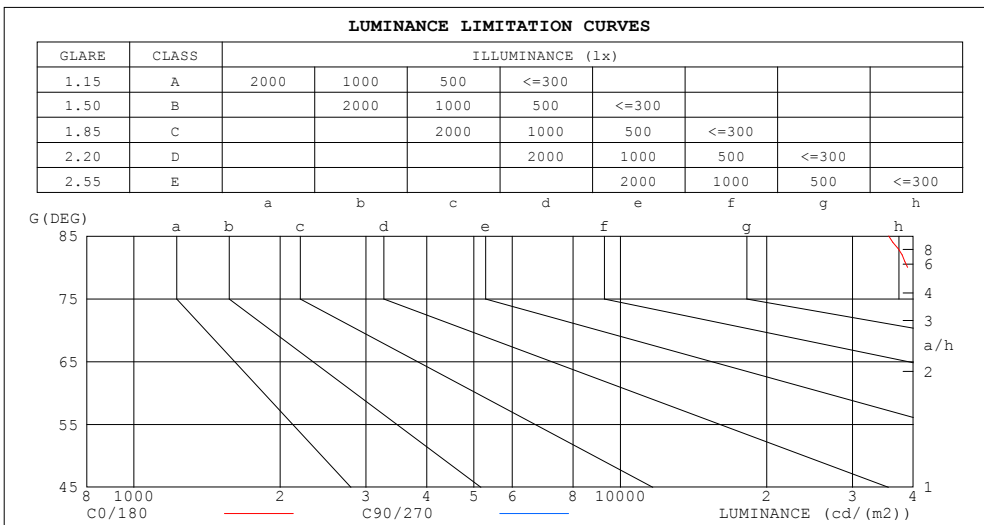
%lamp = 92.5%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-14

□ 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:120.6V I:1.205A P:144.7W PF:0.9960 Freq:59.98Hz Lamp Flux:26330.9x1 lm
NAME: ASD-UHB5-PRO-150BK
SPEC.: 4000K
MFR.: ASD Lighting Corp



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	35636	42352
80	38965	43938
75	44073	47974
70	52820	55789
65	67599	70469
60	88806	90847
55	114686	115443
50	145678	152650
45	192986	204534

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-14

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:120.6V I:1.205A P:144.7W PF:0.9960 Freq:59.98Hz Lamp Flux:26330.9x1 lm
NAME: ASD-UHB5-PRO-150BK
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	.232	.132	.042	.224	.128	.041	.211	.121	.039	.199	.114	.037	.187	.108	.035	
2.0	.223	.122	.038	.217	.120	.037	.205	.114	.035	.195	.109	.034	.185	.104	.033	
3.0	.212	.113	.034	.206	.111	.033	.196	.106	.032	.187	.102	.031	.178	.099	.031	
4.0	.200	.104	.031	.195	.102	.030	.186	.099	.030	.178	.096	.029	.170	.093	.028	
5.0	.189	.096	.028	.185	.095	.028	.177	.092	.027	.169	.089	.027	.163	.087	.026	
6.0	.179	.089	.026	.175	.088	.025	.168	.086	.025	.161	.084	.025	.155	.082	.024	
7.0	.169	.083	.024	.165	.082	.023	.159	.080	.023	.153	.079	.023	.148	.077	.023	
8.0	.160	.078	.022	.157	.077	.022	.151	.076	.022	.146	.074	.021	.141	.072	.021	
9.0	.152	.073	.020	.149	.073	.020	.144	.071	.020	.139	.070	.020	.134	.068	.020	
10.0	.144	.069	.019	.142	.068	.019	.137	.067	.019	.133	.066	.019	.129	.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	.052	.020	.018	.017	
2.0	.172	.141	.115	.147	.121	.099	.101	.084	.069	.058	.049	.041	.019	.016	.013	
3.0	.162	.122	.091	.139	.106	.079	.095	.073	.055	.055	.043	.033	.018	.014	.011	
4.0	.153	.108	.074	.132	.094	.064	.090	.065	.045	.052	.038	.027	.017	.012	.009	
5.0	.146	.098	.062	.125	.084	.054	.086	.059	.038	.050	.035	.023	.016	.011	.007	
6.0	.139	.089	.053	.119	.077	.046	.082	.054	.033	.048	.032	.019	.015	.010	.006	
7.0	.133	.082	.046	.114	.071	.040	.079	.050	.028	.046	.029	.017	.015	.010	.006	
8.0	.127	.076	.041	.109	.066	.035	.076	.046	.025	.044	.027	.015	.014	.009	.005	
9.0	.122	.071	.036	.105	.061	.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:2023-11-14

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:120.6V I:1.205A P:144.7W PF:0.9960 Freq:59.98Hz Lamp Flux:26330.9x1 lm
NAME: ASD-UHB5-PRO-150BK
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	28.6	29.8	28.8	30.0	30.2	28.7	29.9	29.0	30.1	30.4
3H	28.9	30.0	29.2	30.2	30.5	29.0	30.1	29.3	30.4	30.6
4H	28.9	30.0	29.3	30.3	30.5	29.1	30.2	29.4	30.4	30.7
6H	29.0	30.0	29.3	30.3	30.5	29.2	30.2	29.5	30.4	30.7
8H	29.0	30.0	29.3	30.2	30.5	29.2	30.2	29.5	30.4	30.7
12H	29.0	29.9	29.3	30.2	30.5	29.2	30.1	29.6	30.4	30.7
4H 2H	28.7	29.7	29.0	30.0	30.3	28.8	29.9	29.1	30.1	30.4
3H	29.1	30.0	29.4	30.3	30.6	29.2	30.1	29.6	30.4	30.7
4H	29.2	30.1	29.6	30.4	30.7	29.4	30.2	29.8	30.5	30.9
6H	29.4	30.1	29.8	30.4	30.8	29.5	30.3	29.9	30.6	31.0
8H	29.4	30.1	29.8	30.4	30.8	29.6	30.3	30.0	30.6	31.0
12H	29.4	30.0	29.9	30.4	30.9	29.6	30.3	30.1	30.6	31.1
8H 4H	29.2	29.9	29.7	30.3	30.7	29.4	30.1	29.8	30.4	30.8
6H	29.4	30.0	29.9	30.4	30.9	29.6	30.2	30.1	30.6	31.0
8H	29.5	30.0	30.0	30.5	30.9	29.7	30.2	30.2	30.7	31.1
12H	29.6	30.0	30.1	30.5	31.0	29.8	30.2	30.3	30.7	31.2
12H 4H	29.2	29.8	29.6	30.2	30.6	29.4	30.0	29.8	30.4	30.8
6H	29.4	29.9	29.9	30.4	30.8	29.6	30.1	30.1	30.5	31.0
8H	29.5	30.0	30.0	30.4	30.9	29.7	30.2	30.2	30.6	31.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.9 / - 1.3					+ 0.9 / - 1.3				
1.5H	+ 1.1 / - 0.8					+ 1.1 / - 0.8				
2.0H	+ 1.8 / - 1.5					+ 1.9 / - 1.5				

CIE Pub.117, 26331 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 11.4)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-14

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:120.6V I:1.205A P:144.7W PF:0.9960 Freq:59.98Hz Lamp Flux:26330.9x1 lm
NAME: ASD-UHB5-PRO-150BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

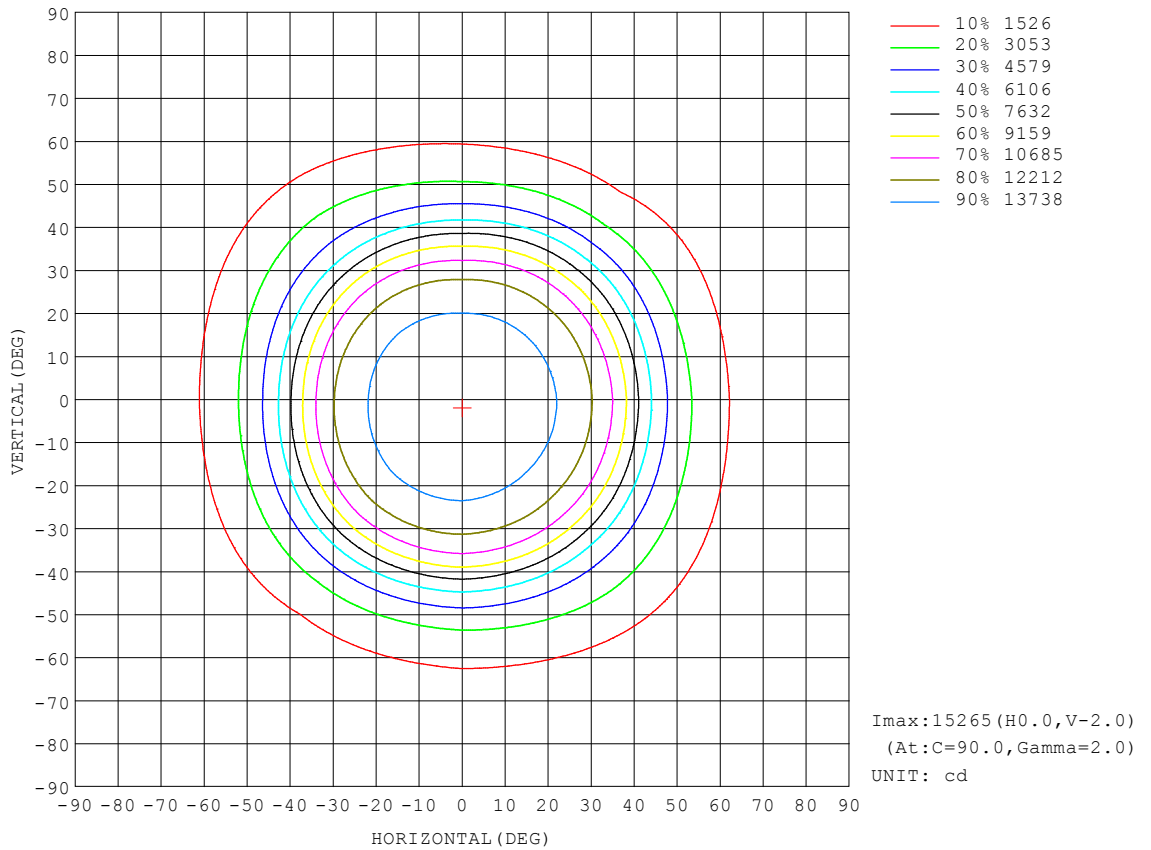
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	71	62	57	71	62	57	70	62	57	51
0.80	81	72	66	80	72	66	78	71	66	60
1.00	88	80	74	87	79	74	85	80	73	68
1.25	94	86	81	92	85	81	90	84	80	74
1.50	98	91	86	96	90	85	93	88	84	78
2.00	102	96	92	101	95	91	98	93	89	83
2.50	105	100	95	103	98	94	100	96	92	85
3.00	107	103	99	105	101	97	102	98	95	88
4.00	110	106	103	108	104	101	104	101	99	90
5.00	112	108	106	109	106	104	105	103	101	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: 2023-11-14

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:120.6V I:1.205A P:144.7W PF:0.9960 Freq:59.98Hz Lamp Flux:26330.9x1 lm
NAME: ASD-UHB5-PRO-150BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

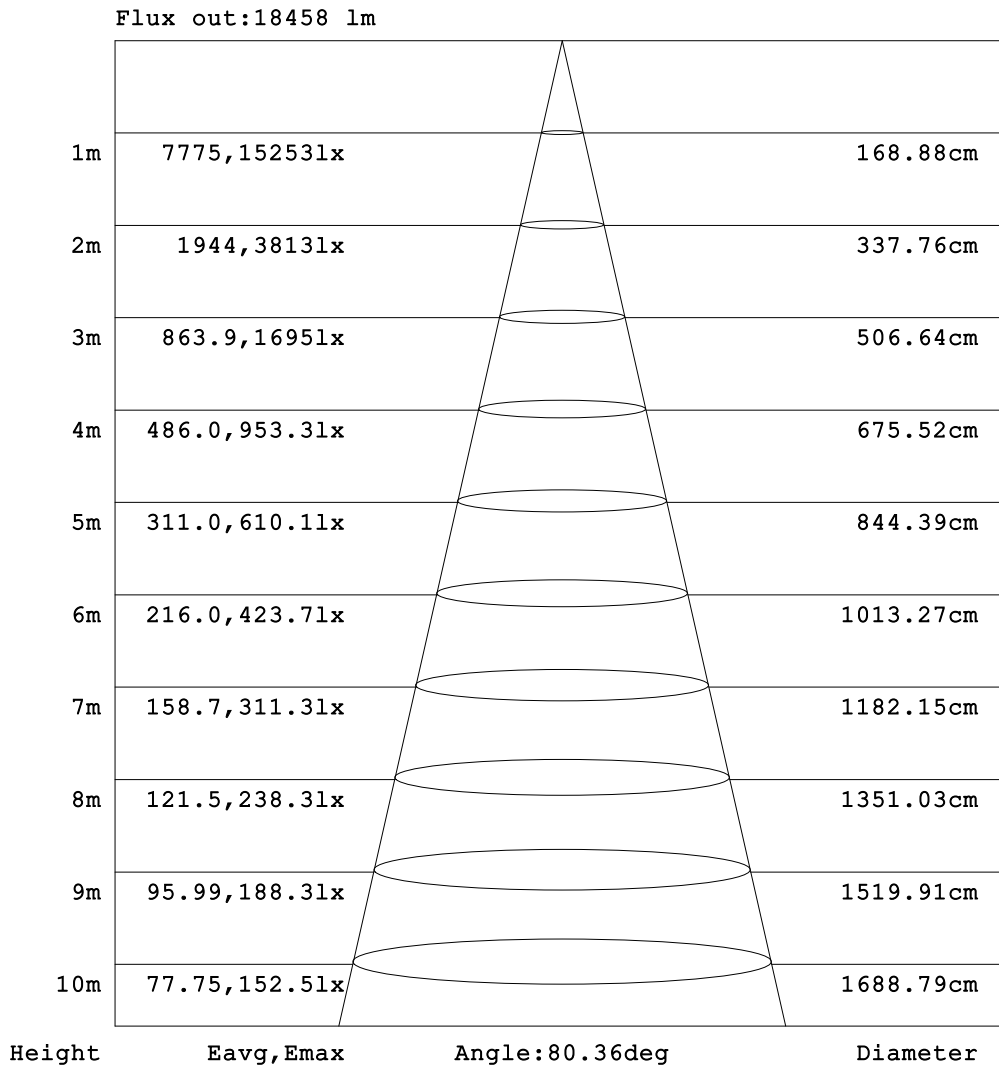


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-14

□ 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:120.6V I:1.205A P:144.7W PF:0.9960 Freq:59.98Hz Lamp Flux:26330.9x1 lm
NAME: ASD-UHB5-PRO-150BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

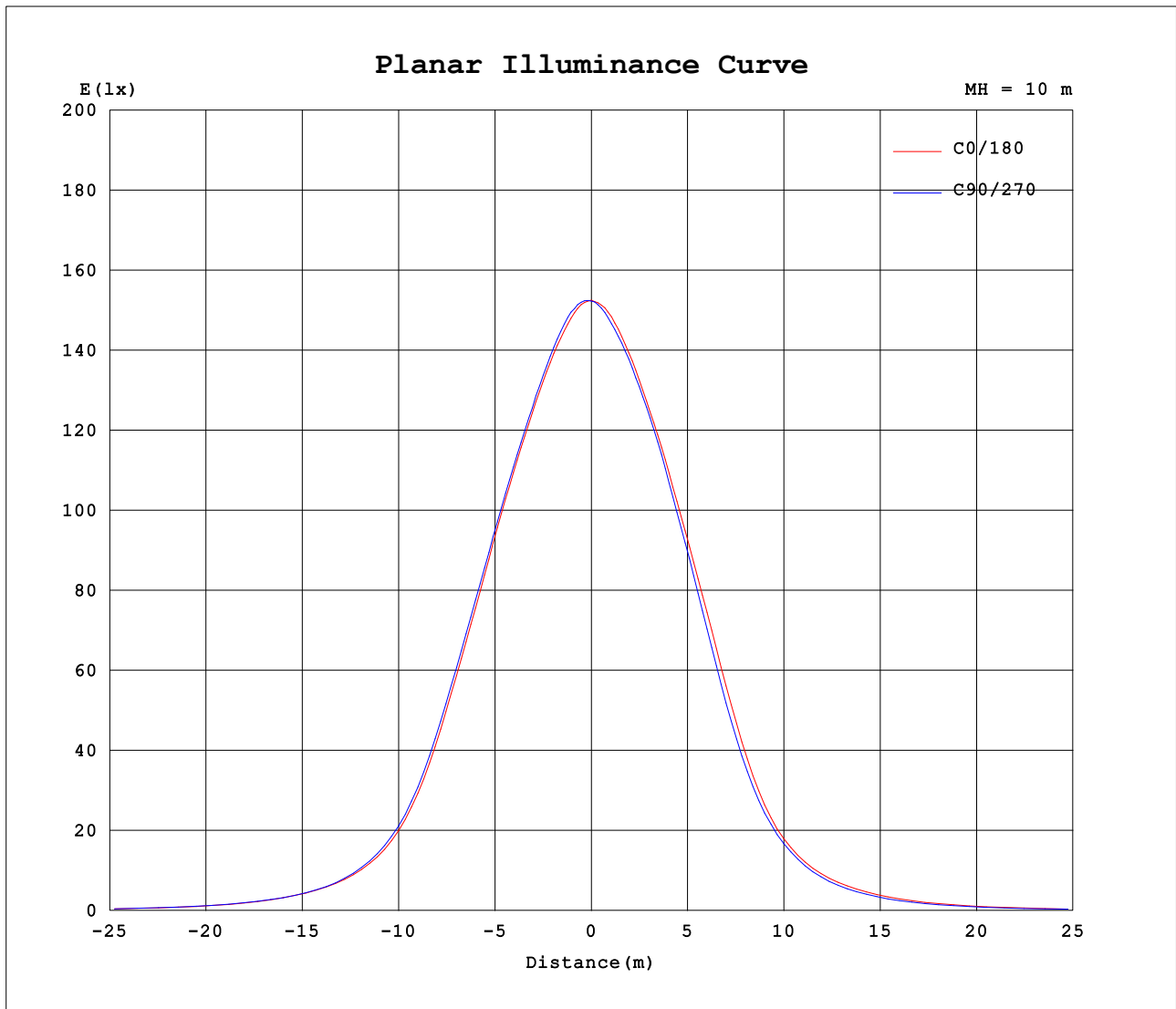


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-14

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: 2023-11-14

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:120.6V I:1.205A P:144.7W PF:0.9960 Freq:59.98Hz Lamp Flux:26330.9x1 lm		
NAME: ASD-UHB5-PRO-150BK		
SPEC.: 4000K		
MFR.: ASD Lighting Corp		

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	1525	1524	1523	1523	1525	1524	1523	1523										
5	1511	1518	1521	1521	1512	1508	1499	1500										
10	1479	1482	1495	1492	1481	1475	1463	1468										
15	1440	1443	1456	1455	1442	1434	1425	1428										
20	1394	1398	1410	1409	1396	1388	1374	1383										
25	1335	1335	1353	1348	1324	1310	1286	1306										
30	1228	1234	1258	1250	1214	1186	1155	1189										
35	1069	1072	1104	1083	1021	984	943	997										
40	821	822	863	823	751	713	690	734										
45	566	565	600	559	508	494	474	494										
50	389	399	407	368	350	357	320	319										
55	273	284	275	231	249	247	217	197										
60	184	189	189	145	168	164	144	125										
65	119	120	124	96.5	108	105	93.2	84.6										
70	75.0	76.8	79.2	65.5	67.5	66.4	60.6	57.5										
75	47.3	49.8	51.5	44.4	42.1	41.5	38.5	38.5										
80	28.1	29.9	31.7	28.0	24.1	23.8	21.8	23.6										
85	12.9	13.8	15.3	13.0	8.93	8.79	6.92	9.40										
90	2.01	2.42	2.33	2.28	2.00	1.96	1.35	1.82										
95	0.98	1.32	0.89	1.33	1.54	1.53	1.26	1.53										
100	1.20	1.32	1.14	1.30	1.67	1.70	1.74	1.72										
105	1.61	1.58	1.53	1.60	2.21	2.23	2.35	2.25										
110	2.12	2.08	2.02	2.10	2.90	2.93	3.04	2.94										
115	2.72	2.67	2.60	2.70	3.63	3.65	3.77	3.67										
120	3.41	3.34	3.27	3.37	4.39	4.40	4.54	4.43										
125	4.13	4.06	3.99	4.09	5.18	5.18	5.33	5.21										
130	4.90	4.81	4.74	4.85	6.00	5.99	6.15	6.03										
135	5.67	5.58	5.50	5.60	6.83	6.81	6.99	6.84										
140	6.42	6.34	6.25	6.34	7.66	7.60	7.80	7.64										
145	7.13	7.08	6.98	7.05	8.43	8.36	8.55	8.41										
150	7.83	7.80	7.69	7.74	9.13	9.08	9.26	9.13										
155	8.54	8.50	8.41	8.43	9.83	9.77	9.95	9.82										
160	9.32	9.25	9.19	9.18	10.5	10.5	10.6	10.5										
165	10.1	10.0	9.99	9.96	11.2	11.1	11.3	11.1										
170	10.9	10.7	10.7	10.7	11.7	11.6	11.7	11.6										
175	11.6	11.4	11.4	11.4	12.0	11.8	12.0	11.9										
180	12.0	11.8	11.9	11.9	12.0	11.8	11.9	11.9										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-14

□ 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: