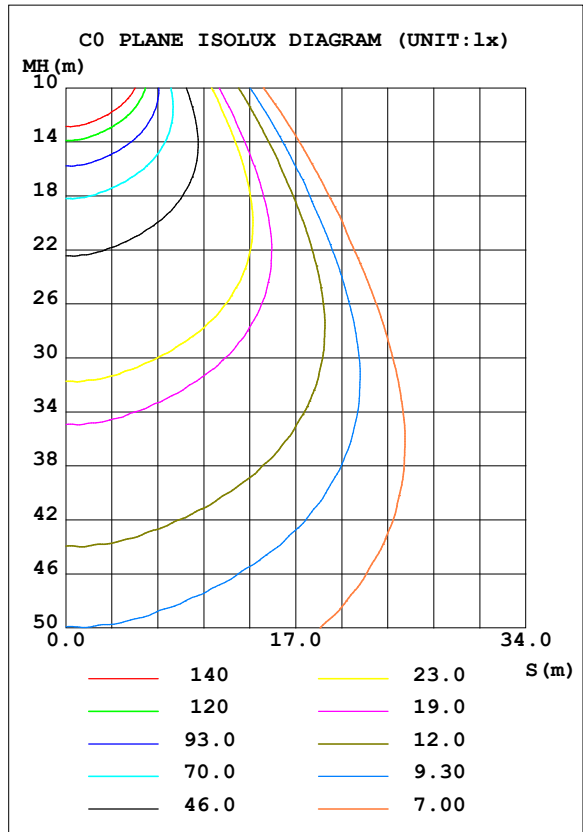
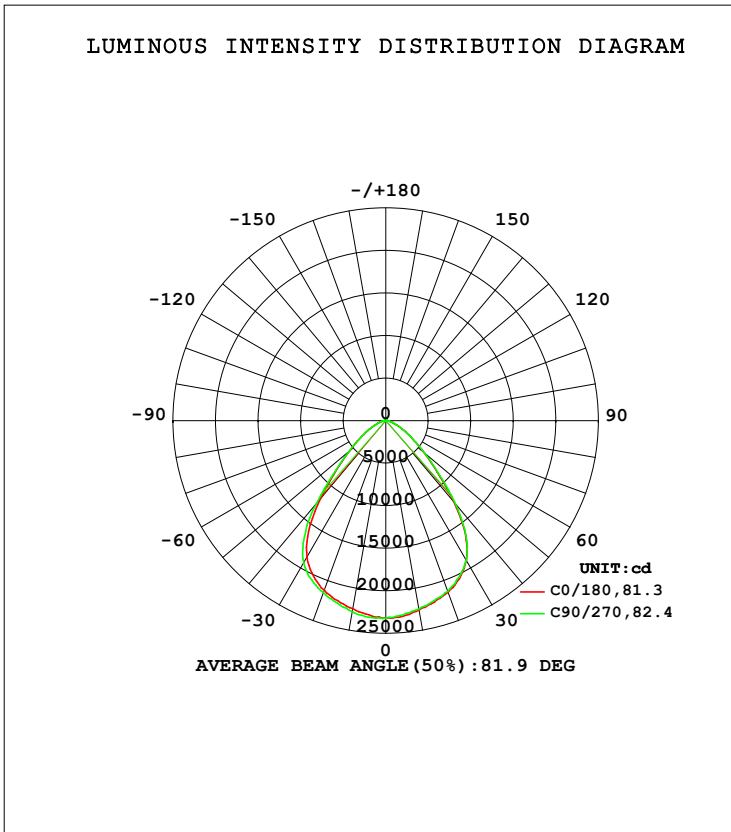


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:278.7V I:0.8111A P:225.0W PF:0.9952 Freq:59.98Hz Lamp Flux:41331x1 lm
NAME: ASD-UHB5-HV-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

DATA OF LAMP		PHOTOMETRIC DATA Eff: 183.69 lm/W			
MODEL	ASD-UHB5-HV-PRO-240BK	I _{max} (cd)	23249	S/MH (C0/180)	1.16
NOMINAL POWER (W)	240	LOR (%)	100.0	S/MH (C90/270)	1.18
RATED VOLTAGE (V)	277	TOTAL FLUX (lm)	41331	<input type="checkbox"/> UP, DN (C0-180)	0.5, 49.7
NOMINAL FLUX (lm)	41331	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 49.3
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	1.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	277	<input type="checkbox"/> down (%)	99.0	CIBSE SHR MAX	1.15



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-23

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	2261	2243	2249	2244	2241	2264	2278	2280	0- 10	2183	2183	5.28,5.28
20	2148	2126	2133	2126	2119	2136	2148	2159	10- 20	6220	8403	20.3,20.3
30	1897	1856	1893	1894	1852	1890	1927	1938	20- 30	9372	17775	43,43
40	1241	1196	1270	1284	1190	1229	1267	1249	30- 40	10033	27808	67.3,67.3
50	589.4	582.9	595.8	600.5	562.6	592.0	567.5	564.5	40- 50	6675	34483	83.4,83.4
60	276.4	269.0	278.4	279.8	261.7	274.8	261.1	260.1	50- 60	3635	38118	92.2,92.2
70	115.7	113.6	116.0	115.7	110.2	116.9	106.7	106.9	60- 70	1791	39910	96.6,96.6
80	43.80	43.38	44.47	45.07	42.63	44.26	38.31	38.09	70- 80	781.4	40691	98.5,98.5
90	2.746	2.534	1.595	2.343	2.229	2.542	1.575	2.166	80- 90	210.2	40901	99,99
100	1.952	2.022	1.971	1.942	1.967	1.936	1.984	1.989	90-100	18.87	40920	99,99
110	3.417	3.521	3.490	3.450	3.501	3.423	3.521	3.529	100-110	28.19	40948	99.1,99.1
120	5.436	5.561	5.558	5.517	5.706	5.573	5.707	5.715	110-120	44.51	40993	99.2,99.2
130	7.755	7.882	7.900	7.861	8.477	8.242	8.403	8.412	120-130	61.08	41054	99.3,99.3
140	10.12	10.24	10.24	10.23	11.36	11.02	11.21	11.09	130-140	72.65	41127	99.5,99.5
150	12.38	12.49	12.46	12.45	13.71	13.43	13.57	13.43	140-150	74.19	41201	99.7,99.7
160	14.92	14.96	15.06	14.97	16.31	16.04	16.24	15.98	150-160	65.47	41266	99.8,99.8
170	17.56	17.50	17.73	17.49	18.33	18.06	18.39	18.04	160-170	47.24	41313	100,100
180	19.12	18.86	19.15	18.91	19.08	18.83	19.11	18.94	170-180	17.57	41331	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 31635 lm

%lum = 76.5%

%lamp = 76.5%

Conical surface Flux(120deg): 38118 lm

%lum = 92.2%

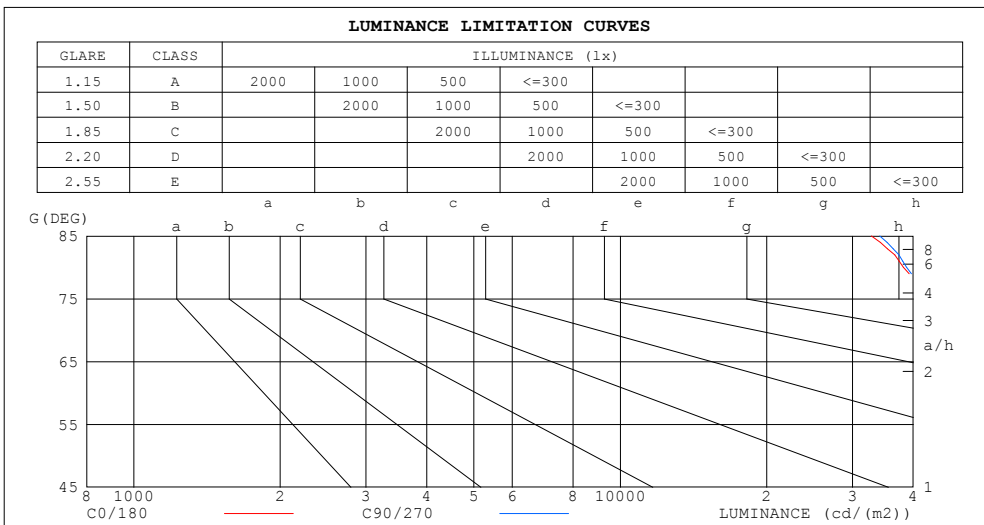
%lamp = 92.2%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-23

□ 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:278.7V I:0.8111A P:225.0W PF:0.9952 Freq:59.98Hz Lamp Flux:41331x1 lm
NAME: ASD-UHB5-HV-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	32819	34168
80	38218	38798
75	43894	43734
70	51237	51404
65	64697	65474
60	83743	84356
55	107371	107630
50	138921	140448
45	183138	187713

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-23

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:278.7V I:0.8111A P:225.0W PF:0.9952 Freq:59.98Hz Lamp Flux:41331x1 lm
NAME: ASD-UHB5-HV-PRO-240BK
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	.226	.129	.041	.213	.122	.039	.201	.116	.037	.189	.110	.035	
2.0	.225	.123	.038	.219	.121	.037	.207	.115	.036	.197	.110	.035	.187	.106	.033	
3.0	.214	.114	.034	.208	.112	.034	.198	.107	.033	.189	.103	.032	.180	.100	.031	
4.0	.202	.105	.031	.197	.103	.030	.188	.100	.030	.180	.097	.029	.172	.094	.028	
5.0	.190	.097	.028	.186	.096	.028	.178	.093	.027	.171	.090	.027	.164	.088	.026	
6.0	.180	.090	.026	.176	.089	.026	.169	.087	.025	.162	.084	.025	.156	.082	.024	
7.0	.170	.084	.024	.167	.083	.024	.160	.081	.023	.154	.079	.023	.149	.077	.023	
8.0	.161	.079	.022	.158	.078	.022	.152	.076	.022	.147	.074	.021	.142	.073	.021	
9.0	.153	.074	.021	.150	.073	.021	.145	.072	.020	.140	.070	.020	.135	.069	.020	
10.0	.145	.070	.019	.143	.069	.019	.138	.068	.019	.134	.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	.198	.198	.198	.170	.170	.170	.116	.116	.116	.066	.066	.066	.021	.021	.021	
1.0	.183	.165	.148	.157	.141	.128	.107	.097	.088	.062	.056	.051	.020	.018	.017	
2.0	.171	.140	.114	.147	.121	.099	.101	.084	.069	.058	.049	.040	.019	.016	.013	
3.0	.162	.122	.090	.139	.105	.078	.095	.073	.055	.055	.043	.032	.018	.014	.011	
4.0	.153	.108	.073	.132	.093	.064	.090	.065	.045	.052	.038	.027	.017	.012	.009	
5.0	.146	.097	.061	.125	.084	.053	.086	.059	.038	.050	.034	.022	.016	.011	.007	
6.0	.139	.088	.052	.119	.077	.045	.082	.054	.032	.048	.032	.019	.015	.010	.006	
7.0	.133	.081	.045	.114	.071	.039	.079	.049	.028	.046	.029	.017	.015	.010	.006	
8.0	.127	.075	.040	.109	.065	.035	.076	.046	.025	.044	.027	.015	.014	.009	.005	
9.0	.122	.070	.036	.105	.061	.031	.073	.043	.022	.042	.025	.013	.014	.008	.004	
10.0	.117	.066	.033	.101	.058	.029	.070	.040	.020	.041	.024	.012	.013	.008	.004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-23

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:278.7V I:0.8111A P:225.0W PF:0.9952 Freq:59.98Hz Lamp Flux:41331x1 lm										
NAME: ASD-UHB5-HV-PRO-240BK										
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	28.2	29.4	28.4	29.6	29.8	28.2	29.4	28.5	29.6	29.8
3H	28.5	29.6	28.7	29.8	30.1	28.5	29.6	28.8	29.9	30.1
4H	28.6	29.6	28.9	29.9	30.1	28.6	29.7	28.9	29.9	30.2
6H	28.6	29.6	28.9	29.9	30.2	28.7	29.7	29.0	29.9	30.2
8H	28.6	29.6	29.0	29.9	30.2	28.7	29.6	29.0	29.9	30.2
12H	28.6	29.5	29.0	29.8	30.2	28.7	29.6	29.0	29.9	30.2
4H 2H	28.2	29.3	28.5	29.6	29.8	28.3	29.3	28.6	29.6	29.9
3H	28.6	29.6	29.0	29.9	30.2	28.7	29.6	29.0	29.9	30.2
4H	28.8	29.7	29.2	30.0	30.3	28.9	29.7	29.2	30.0	30.4
6H	29.0	29.7	29.4	30.1	30.4	29.0	29.7	29.4	30.1	30.5
8H	29.0	29.7	29.4	30.1	30.5	29.0	29.7	29.5	30.1	30.5
12H	29.0	29.7	29.5	30.1	30.5	29.1	29.7	29.5	30.1	30.5
8H 4H	28.8	29.5	29.3	29.9	30.3	28.9	29.5	29.3	29.9	30.3
6H	29.0	29.6	29.5	30.0	30.5	29.1	29.6	29.5	30.1	30.5
8H	29.1	29.6	29.6	30.1	30.5	29.2	29.7	29.6	30.1	30.6
12H	29.2	29.6	29.7	30.1	30.6	29.2	29.7	29.7	30.1	30.6
12H 4H	28.8	29.4	29.2	29.8	30.2	28.8	29.5	29.3	29.9	30.3
6H	29.0	29.5	29.5	30.0	30.4	29.1	29.6	29.5	30.0	30.5
8H	29.1	29.6	29.6	30.0	30.5	29.2	29.6	29.7	30.1	30.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.9 / - 1.3					+ 0.9 / - 1.3				
1.5H	+ 1.1 / - 0.9					+ 1.2 / - 0.9				
2.0H	+ 1.9 / - 1.5					+ 2.0 / - 1.5				

CIE Pub.117, 41331 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 12.9)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-23

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:278.7V I:0.8111A P:225.0W PF:0.9952 Freq:59.98Hz Lamp Flux:41331x1 lm
NAME: ASD-UHB5-HV-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

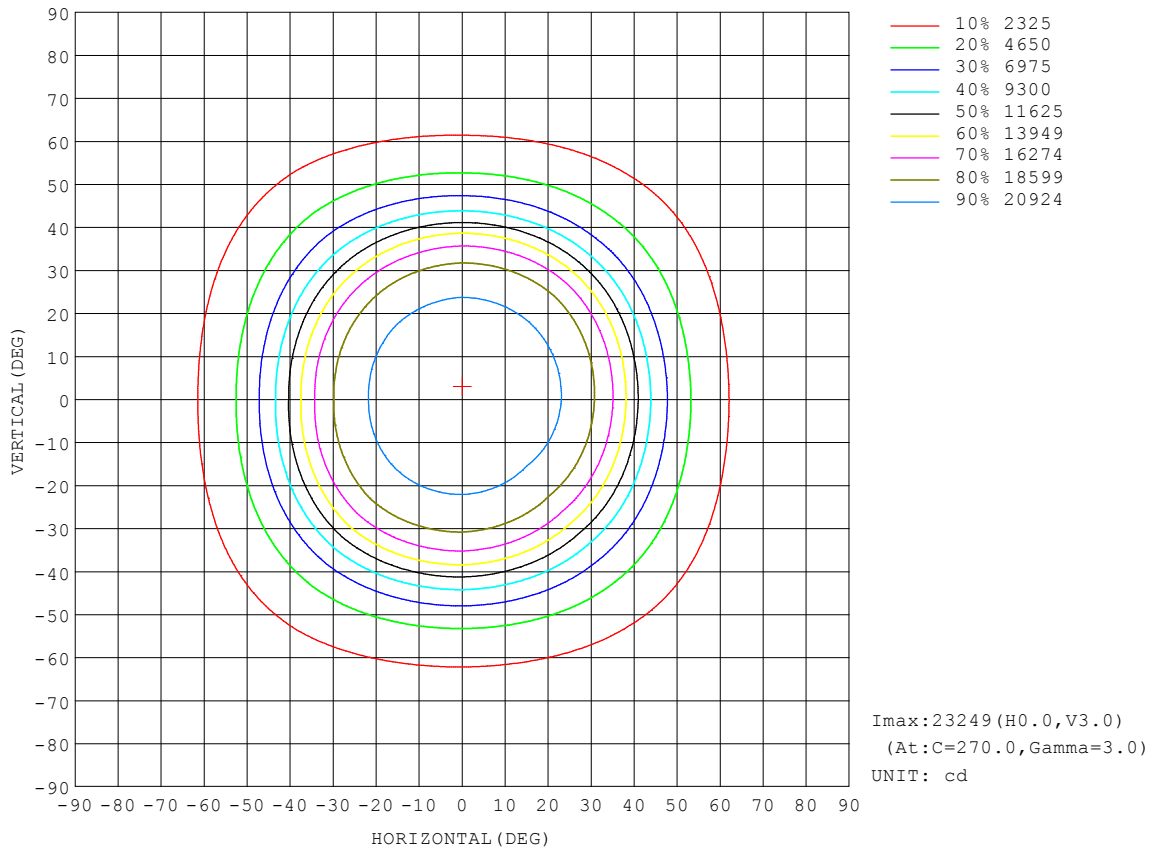
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	71	62	56	70	61	56	69	61	56	51
0.80	80	71	66	79	71	66	78	70	65	60
1.00	88	79	74	86	79	73	84	79	73	67
1.25	93	86	81	92	85	80	90	84	79	73
1.50	97	90	85	96	89	85	93	88	83	77
2.00	102	96	92	101	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	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: 2023-11-23

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:278.7V I:0.8111A P:225.0W PF:0.9952 Freq:59.98Hz Lamp Flux:41331x1 lm
NAME: ASD-UHB5-HV-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

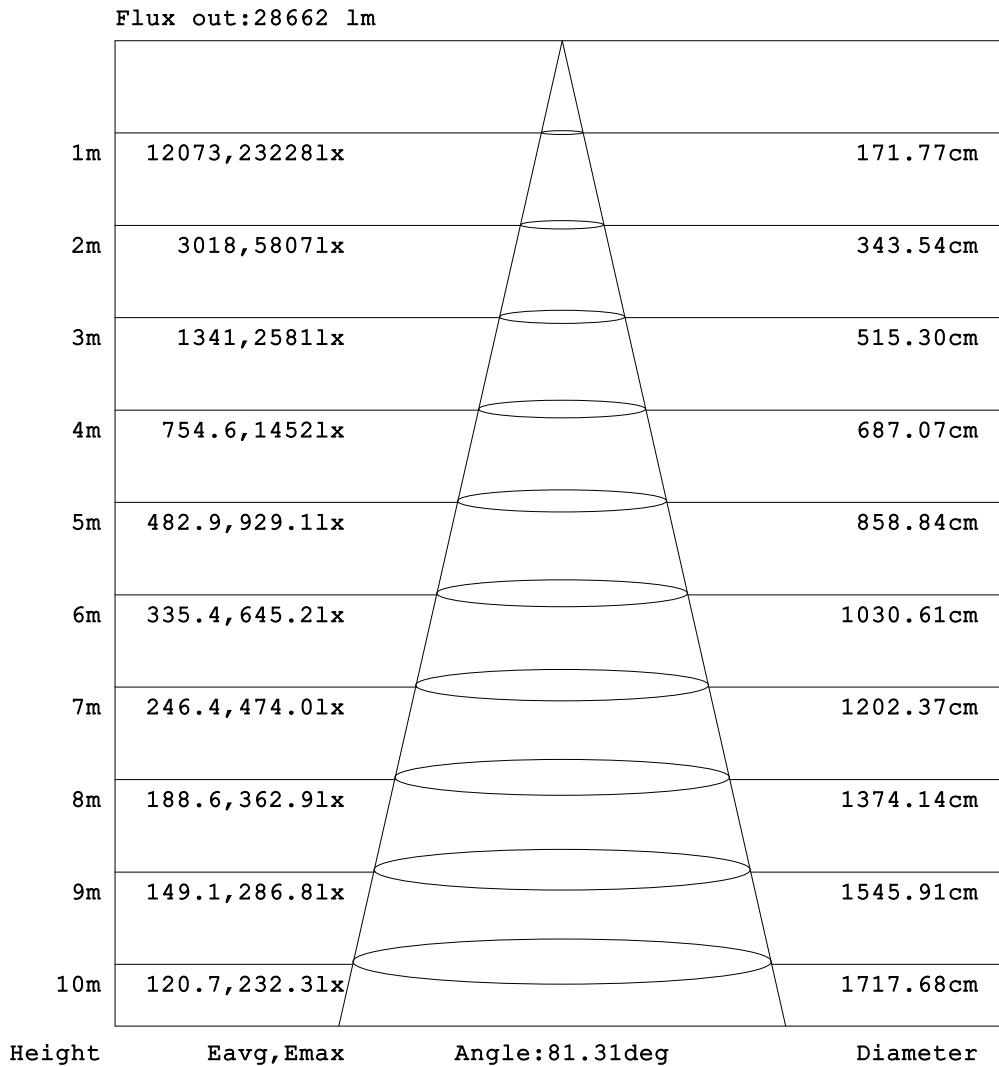


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-23

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:278.7V I:0.8111A P:225.0W PF:0.9952 Freq:59.98Hz Lamp Flux:41331x1 lm
NAME: ASD-UHB5-HV-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

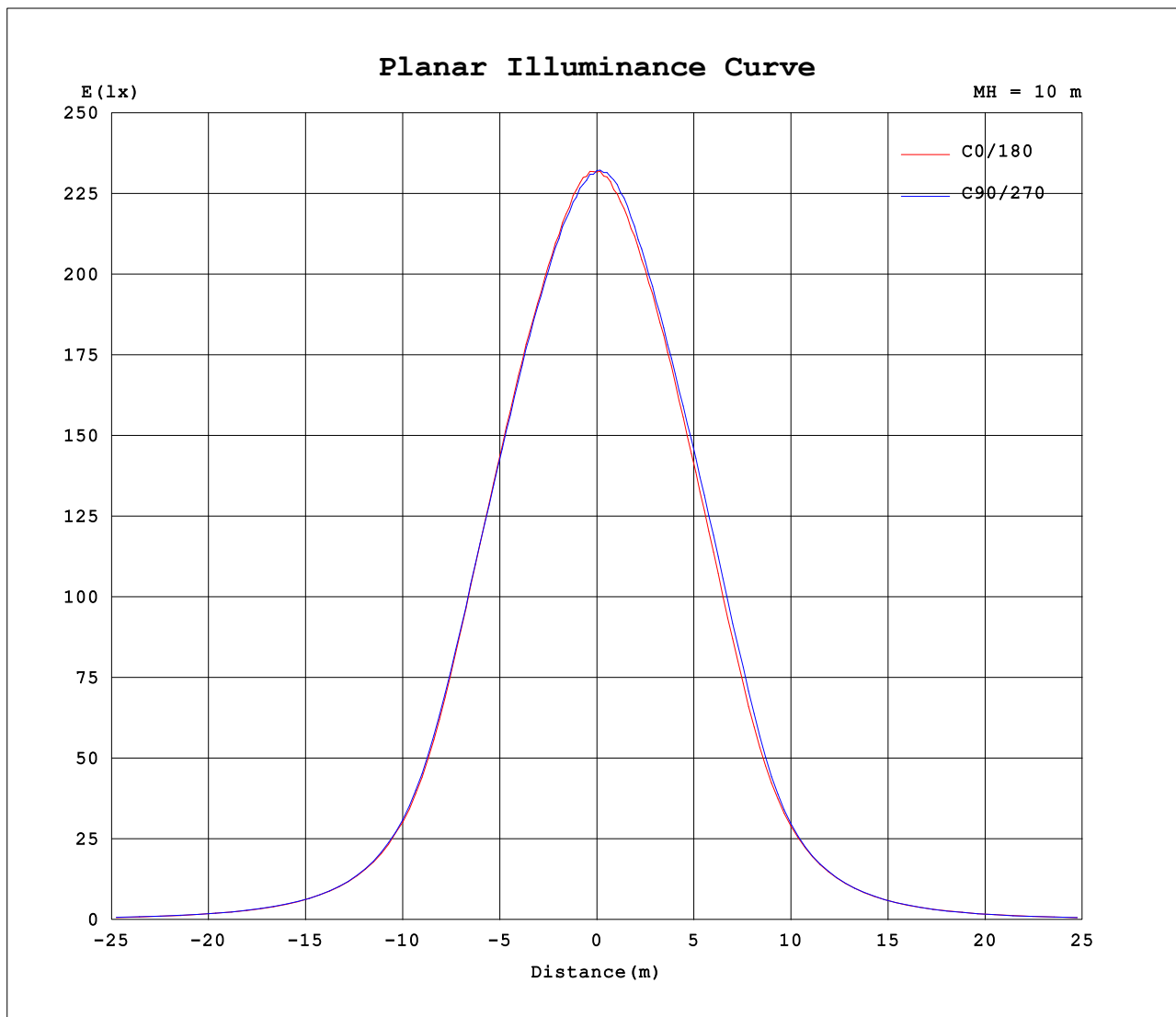


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-23

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: 2023-11-23

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:278.7V I:0.8111A P:225.0W PF:0.9952 Freq:59.98Hz Lamp Flux:41331x1 lm
NAME: ASD-UHB5-HV-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	2317	2320	2322	2320	2317	2320	2322	2320										
5	2308	2291	2293	2289	2289	2311	2319	2320										
10	2261	2243	2249	2244	2241	2264	2278	2280										
15	2208	2189	2192	2191	2189	2206	2218	2221										
20	2148	2126	2133	2126	2119	2136	2148	2159										
25	2052	2016	2035	2032	2012	2042	2064	2070										
30	1897	1856	1893	1894	1852	1890	1927	1938										
35	1634	1593	1644	1655	1585	1625	1670	1674										
40	1241	1196	1270	1284	1190	1229	1267	1249										
45	855	831	876	882	823	849	841	824										
50	589	583	596	600	563	592	568	565										
55	406	401	407	412	385	405	387	387										
60	276	269	278	280	262	275	261	260										
65	180	177	183	183	171	181	167	168										
70	116	114	116	116	110	117	107	107										
75	75.0	73.4	74.7	74.6	71.7	75.1	67.2	67.1										
80	43.8	43.4	44.5	45.1	42.6	44.3	38.3	38.1										
85	18.9	18.5	19.7	20.1	18.1	18.9	14.8	14.7										
90	2.75	2.53	1.60	2.34	2.23	2.54	1.58	2.17										
95	1.52	1.65	1.47	1.62	1.47	1.66	1.47	1.57										
100	1.95	2.02	1.97	1.94	1.97	1.94	1.98	1.99										
105	2.61	2.69	2.65	2.61	2.65	2.59	2.67	2.67										
110	3.42	3.52	3.49	3.45	3.50	3.42	3.52	3.53										
115	4.37	4.49	4.48	4.44	4.52	4.42	4.54	4.55										
120	5.44	5.56	5.56	5.52	5.71	5.57	5.71	5.72										
125	6.57	6.70	6.71	6.67	7.03	6.85	7.01	7.02										
130	7.76	7.88	7.90	7.86	8.48	8.24	8.40	8.41										
135	8.94	9.07	9.08	9.07	9.97	9.65	9.84	9.78										
140	10.1	10.2	10.2	10.2	11.4	11.0	11.2	11.1										
145	11.3	11.4	11.4	11.4	12.6	12.3	12.4	12.3										
150	12.4	12.5	12.5	12.5	13.7	13.4	13.6	13.4										
155	13.6	13.6	13.7	13.6	14.9	14.6	14.8	14.6										
160	14.9	15.0	15.1	15.0	16.3	16.0	16.2	16.0										
165	16.4	16.3	16.5	16.3	17.5	17.2	17.4	17.1										
170	17.6	17.5	17.7	17.5	18.3	18.1	18.4	18.0										
175	18.6	18.4	18.7	18.5	19.0	18.6	19.0	18.7										
180	19.1	18.9	19.2	18.9	19.1	18.8	19.1	18.9										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-23

□ 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: