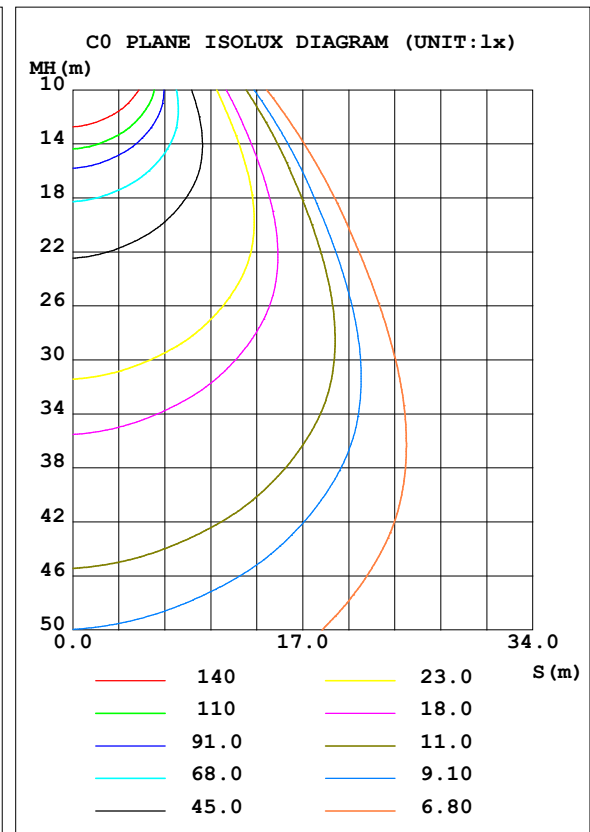
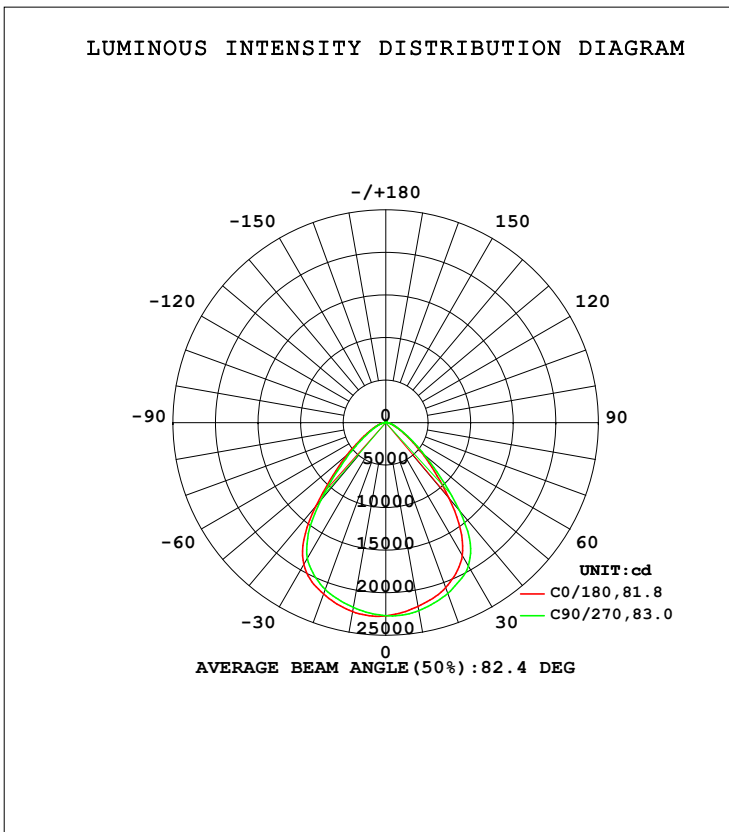


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.2V I:1.883A P:225.4W PF:0.9960 Freq:59.88Hz Lamp Flux:40556.6x1 lm
NAME: ASD-UHB5-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

DATA OF LAMP		PHOTOMETRIC DATA Eff: 179.94 lm/W			
MODEL	ASD-UHB5-PRO-240BK	I _{max} (cd)	22808	S/MH (C0/180)	1.20
NOMINAL POWER (W)	240	LOR (%)	100.0	S/MH (C90/270)	1.17
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	40557	<input type="checkbox"/> UP, DN (C0-180)	0.5, 50.0
NOMINAL FLUX (lm)	40557	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.5, 48.9
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	1.1	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	<input type="checkbox"/> down (%)	98.9	CIBSE SHR MAX	1.25



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-24

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	2191	2208	2243	2266	2255	2233	2205	2186	0- 10	2144	2144	5.29,5.29
20	2062	2091	2136	2155	2142	2127	2087	2053	10- 20	6136	8280	20.4,20.4
30	1800	1857	1941	1957	1927	1917	1844	1781	20- 30	9257	17537	43.2,43.2
40	1158	1234	1345	1355	1281	1290	1193	1117	30- 40	10023	27560	68,68
50	555.4	559.6	602.4	614.0	602.2	579.2	536.9	513.0	40- 50	6675	34235	84.4,84.4
60	235.5	230.0	252.1	244.0	254.9	242.6	223.3	208.3	50- 60	3386	37621	92.8,92.8
70	102.5	99.77	109.2	108.9	110.5	106.5	97.11	94.40	60- 70	1583	39205	96.7,96.7
80	40.12	38.94	42.52	43.35	41.16	40.04	35.55	36.32	70- 80	731.3	39936	98.5,98.5
90	1.990	2.014	1.453	2.267	1.355	1.975	1.320	2.120	80- 90	191.7	40128	98.9,98.9
100	2.041	2.015	1.897	1.847	1.883	1.891	2.006	2.047	90-100	17.93	40146	99,99
110	3.563	3.543	3.343	3.243	3.324	3.370	3.577	3.637	100-110	27.93	40174	99.1,99.1
120	5.635	5.602	5.344	5.196	5.422	5.496	5.804	5.881	110-120	44.11	40218	99.2,99.2
130	7.980	7.928	7.639	7.465	8.081	8.129	8.585	8.680	120-130	60.58	40278	99.3,99.3
140	10.34	10.27	9.980	9.811	11.02	10.93	11.48	11.53	130-140	72.32	40351	99.5,99.5
150	12.60	12.55	12.27	12.13	13.61	13.48	13.91	14.01	140-150	74.29	40425	99.7,99.7
160	15.22	15.12	14.90	14.70	16.46	16.17	16.66	16.64	150-160	66.12	40491	99.8,99.8
170	17.93	17.69	17.62	17.40	18.63	18.31	18.68	18.65	160-170	47.82	40539	100,100
180	19.40	19.11	19.30	19.12	19.39	19.13	19.29	19.14	170-180	17.79	40557	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 31402 lm

%lum = 77.4%

%lamp = 77.4%

Conical surface Flux(120deg): 37621 lm

%lum = 92.8%

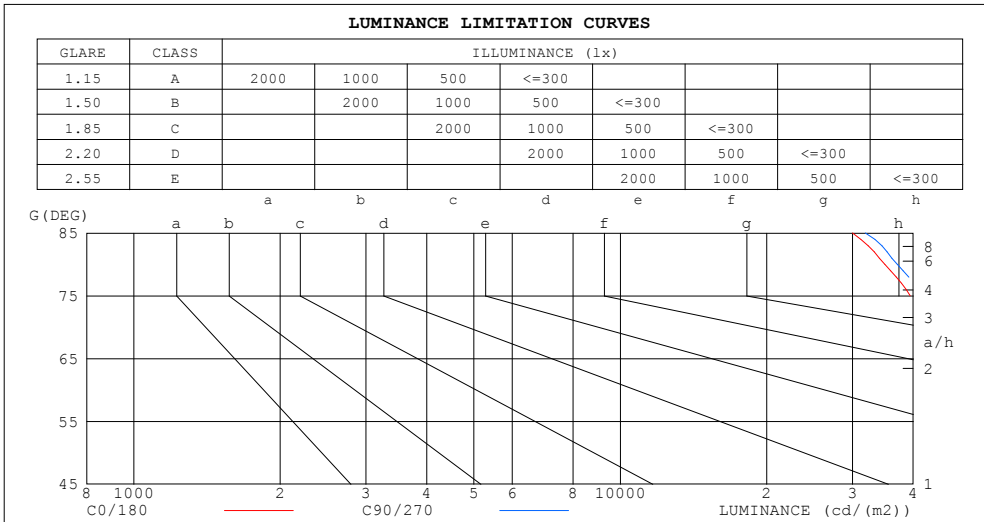
%lamp = 92.8%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-24

□ 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:120.2V I:1.883A P:225.4W PF:0.9960 Freq:59.88Hz Lamp Flux:40556.6x1 lm
NAME: ASD-UHB5-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	30022	31894
80	35004	37101
75	39424	41991
70	45421	48389
65	55560	59259
60	71367	76403
55	96724	103805
50	130914	142002
45	173375	195475

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 27DEG
 Operators: lianghaizhu
 Test Date: 2023-11-24

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:120.2V I:1.883A P:225.4W PF:0.9960 Freq:59.88Hz Lamp Flux:40556.6x1 lm
NAME: ASD-UHB5-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	.231	.132	.042	.224	.128	.041	.211	.121	.039	.198	.114	.037	.187	.108	.035	
2.0	.223	.122	.038	.217	.120	.037	.205	.114	.035	.195	.109	.034	.185	.105	.033	
3.0	.212	.113	.034	.207	.111	.033	.196	.106	.032	.187	.102	.031	.178	.099	.031	
4.0	.200	.104	.031	.196	.102	.030	.187	.099	.030	.178	.096	.029	.171	.093	.028	
5.0	.189	.096	.028	.185	.095	.028	.177	.092	.027	.170	.090	.027	.163	.087	.026	
6.0	.179	.090	.026	.175	.088	.025	.168	.086	.025	.161	.084	.025	.155	.082	.024	
7.0	.169	.084	.024	.166	.083	.024	.160	.081	.023	.154	.079	.023	.148	.077	.023	
8.0	.160	.078	.022	.157	.077	.022	.152	.076	.022	.146	.074	.021	.141	.073	.021	
9.0	.152	.074	.021	.149	.073	.020	.144	.071	.020	.139	.070	.020	.135	.069	.020	
10.0	.145	.069	.019	.142	.069	.019	.138	.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	.097	.089	.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	.091	.138	.105	.079	.095	.073	.055	.055	.043	.033	.018	.014	.011	
4.0	.153	.108	.074	.131	.093	.064	.090	.065	.045	.052	.038	.027	.017	.012	.009	
5.0	.146	.097	.062	.125	.084	.054	.086	.059	.038	.050	.035	.022	.016	.011	.007	
6.0	.139	.089	.052	.119	.077	.046	.082	.054	.032	.048	.032	.019	.015	.010	.006	
7.0	.133	.081	.046	.114	.071	.040	.079	.049	.028	.046	.029	.017	.015	.010	.006	
8.0	.127	.076	.040	.109	.066	.035	.076	.046	.025	.044	.027	.015	.014	.009	.005	
9.0	.122	.071	.036	.105	.061	.032	.073	.043	.022	.042	.025	.013	.014	.008	.004	
10.0	.117	.066	.033	.101	.058	.029	.070	.041	.020	.041	.024	.012	.013	.008	.004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-24

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:120.2V I:1.883A P:225.4W PF:0.9960 Freq:59.88Hz Lamp Flux:40556.6x1 lm										
NAME: ASD-UHB5-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	27.8	29.0	28.0	29.2	29.4	28.1	29.4	28.4	29.6	29.8
3H	28.0	29.1	28.3	29.4	29.6	28.4	29.5	28.7	29.7	30.0
4H	28.1	29.2	28.4	29.4	29.7	28.5	29.5	28.8	29.8	30.0
6H	28.2	29.1	28.5	29.4	29.7	28.5	29.5	28.9	29.8	30.1
8H	28.2	29.1	28.5	29.4	29.7	28.5	29.5	28.9	29.8	30.1
12H	28.2	29.1	28.5	29.4	29.7	28.5	29.4	28.9	29.7	30.1
4H 2H	27.8	28.9	28.1	29.1	29.4	28.1	29.2	28.5	29.5	29.7
3H	28.2	29.1	28.5	29.4	29.7	28.5	29.4	28.8	29.7	30.0
4H	28.3	29.1	28.7	29.5	29.8	28.7	29.5	29.0	29.8	30.2
6H	28.5	29.2	28.9	29.5	29.9	28.8	29.5	29.2	29.9	30.3
8H	28.5	29.2	28.9	29.6	29.9	28.8	29.5	29.2	29.9	30.3
12H	28.5	29.1	29.0	29.5	30.0	28.9	29.5	29.3	29.9	30.3
8H 4H	28.3	29.0	28.7	29.4	29.8	28.6	29.3	29.1	29.7	30.1
6H	28.5	29.1	29.0	29.5	29.9	28.8	29.4	29.3	29.8	30.3
8H	28.6	29.1	29.1	29.5	30.0	28.9	29.4	29.4	29.9	30.3
12H	28.7	29.1	29.2	29.6	30.0	29.0	29.4	29.5	29.9	30.4
12H 4H	28.3	28.9	28.7	29.3	29.7	28.6	29.2	29.0	29.6	30.0
6H	28.5	29.0	29.0	29.4	29.9	28.8	29.3	29.3	29.8	30.2
8H	28.6	29.0	29.1	29.5	30.0	28.9	29.4	29.4	29.8	30.3
Variations with the observer position at spacings:										
S = 1.0H	+ 1.1 / - 1.5					+ 1.1 / - 1.6				
1.5H	+ 1.3 / - 1.1					+ 1.5 / - 1.3				
2.0H	+ 2.2 / - 1.8					+ 2.5 / - 1.9				

CIE Pub.117, 40557 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 12.9$)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-24

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:120.2V I:1.883A P:225.4W PF:0.9960 Freq:59.88Hz Lamp Flux:40556.6x1 lm
NAME: ASD-UHB5-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

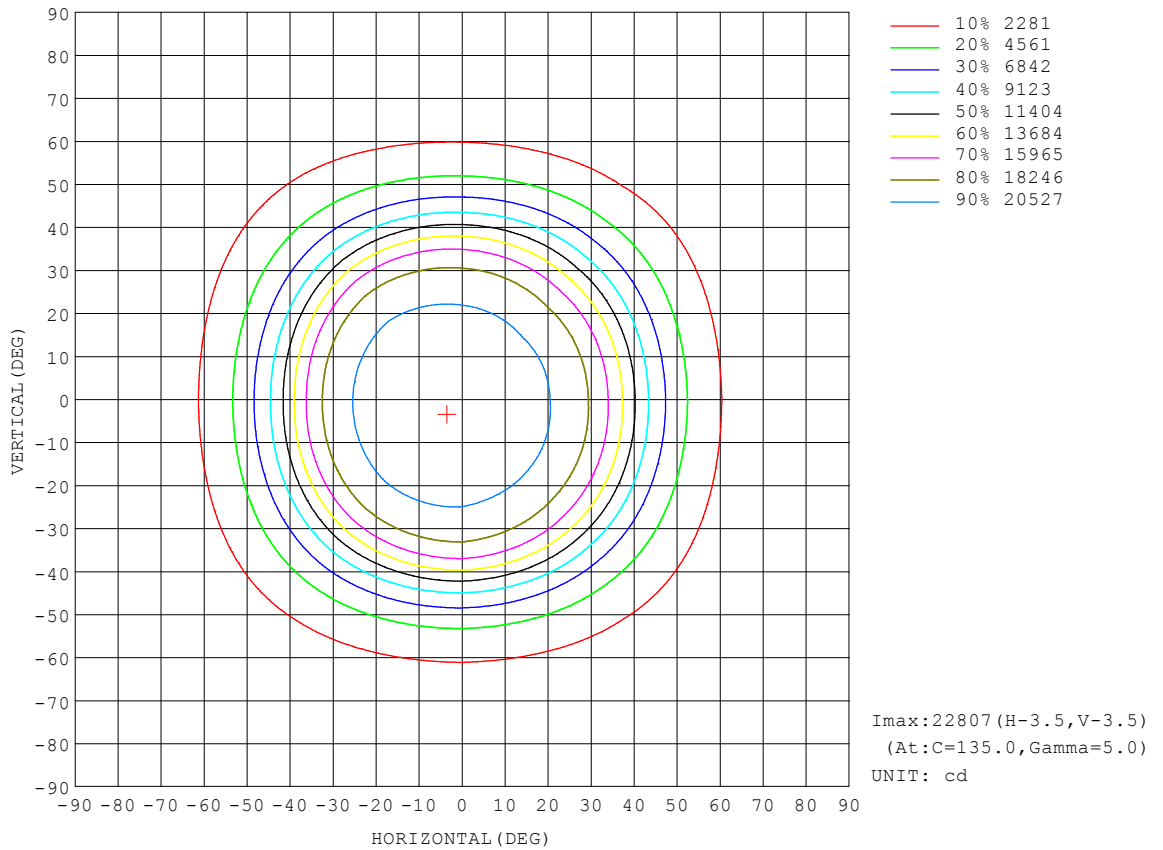
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	71	62	57	71	62	57	70	61	56	51
0.80	81	72	66	80	72	66	78	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	103	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	98	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:2023-11-24

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:120.2V I:1.883A P:225.4W PF:0.9960 Freq:59.88Hz Lamp Flux:40556.6x1 lm
NAME: ASD-UHB5-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

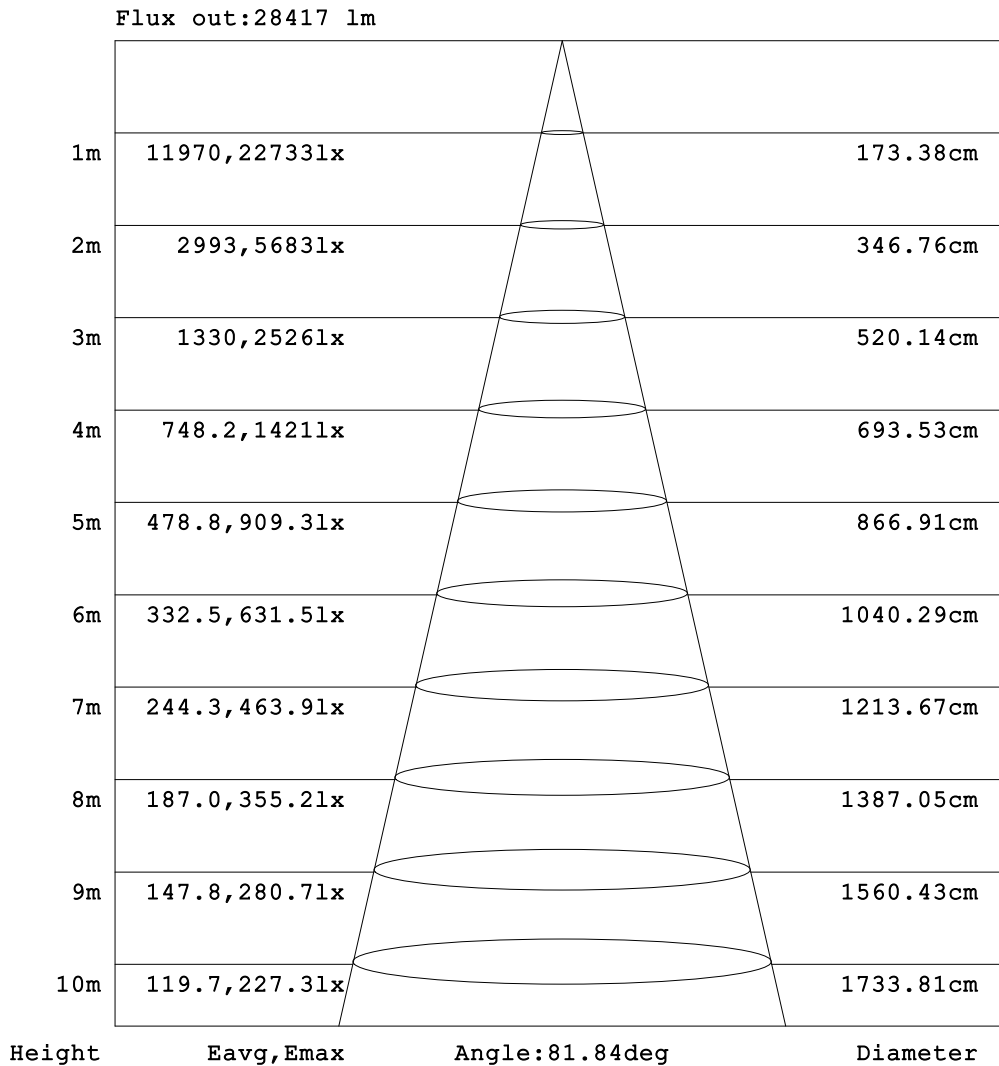


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-24

□ 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:120.2V I:1.883A P:225.4W PF:0.9960 Freq:59.88Hz Lamp Flux:40556.6x1 lm
NAME: ASD-UHB5-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

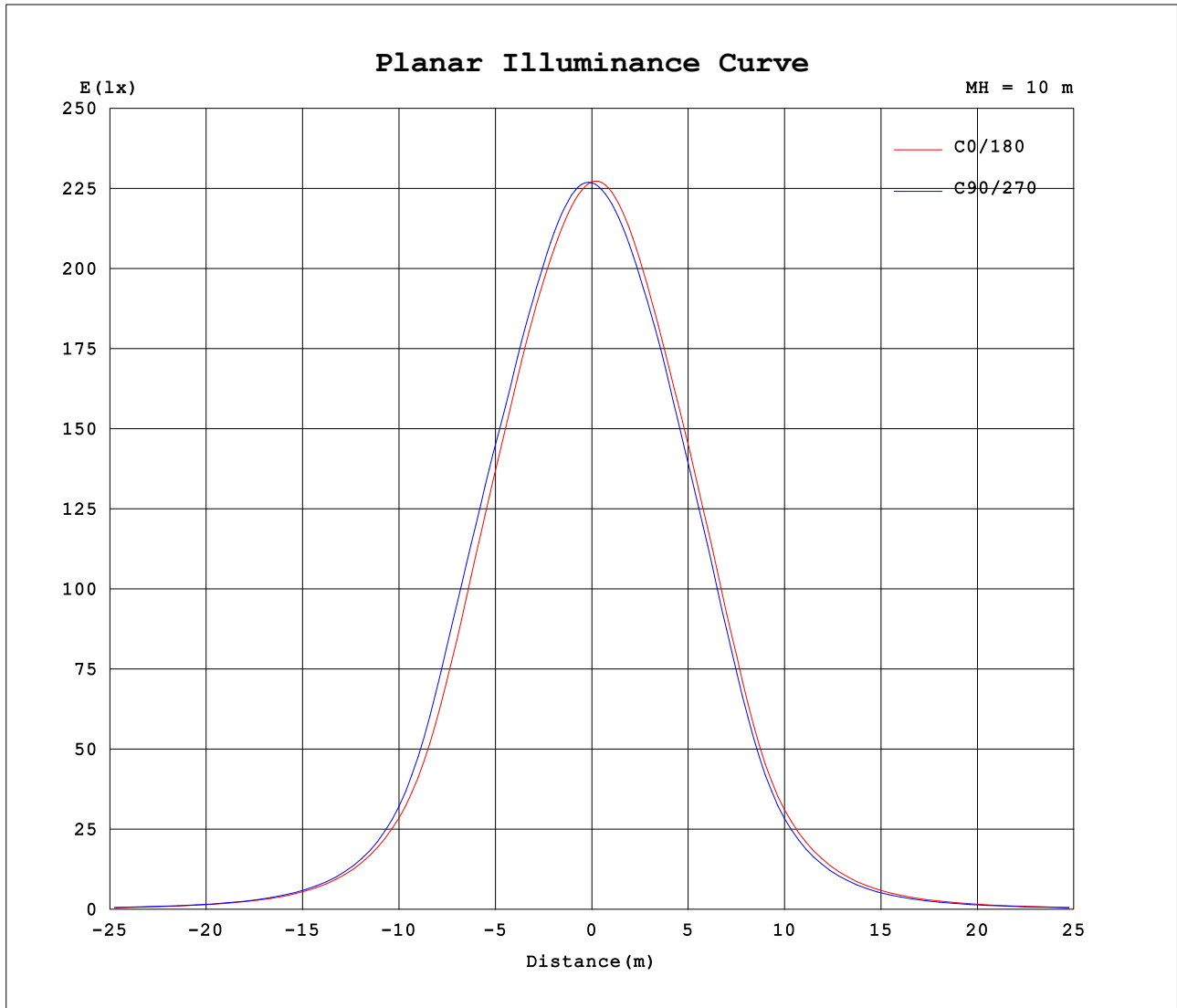


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-24

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: 2023-11-24

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:120.2V I:1.883A P:225.4W PF:0.9960 Freq:59.88Hz Lamp Flux:40556.6x1 lm
NAME: ASD-UHB5-PRO-240BK
SPEC.: 4000K
MFR.: ASD Lighting Corp

Table--1

UNIT: x10cd

C (DEG) □ (DEG)	0	45	90	135	180	225	270	315										
0	2271	2270	2268	2267	2271	2270	2268	2267										
5	2240	2248	2269	2281	2277	2262	2244	2234										
10	2191	2208	2243	2266	2255	2233	2205	2186										
15	2137	2154	2195	2222	2209	2190	2151	2133										
20	2062	2091	2136	2155	2142	2127	2087	2053										
25	1954	1994	2052	2070	2062	2048	1984	1942										
30	1800	1857	1941	1957	1927	1917	1844	1781										
35	1531	1614	1733	1740	1680	1689	1588	1498										
40	1158	1234	1345	1355	1281	1290	1193	1117										
45	809	839	912	924	881	864	804	771										
50	555	560	602	614	602	579	537	513										
55	366	362	393	391	394	374	348	324										
60	236	230	252	244	255	243	223	208										
65	155	150	165	160	166	161	146	140										
70	103	99.8	109	109	111	107	97.1	94.4										
75	67.3	66.0	71.7	73.1	72.2	68.9	63.0	62.0										
80	40.1	38.9	42.5	43.4	41.2	40.0	35.6	36.3										
85	17.3	16.5	18.3	19.3	16.1	16.2	12.4	13.8										
90	1.99	2.01	1.45	2.27	1.36	1.98	1.32	2.12										
95	1.53	1.63	1.43	1.60	1.40	1.59	1.48	1.58										
100	2.04	2.01	1.90	1.85	1.88	1.89	2.01	2.05										
105	2.72	2.69	2.54	2.46	2.52	2.55	2.70	2.75										
110	3.56	3.54	3.34	3.24	3.32	3.37	3.58	3.64										
115	4.55	4.52	4.29	4.16	4.29	4.36	4.62	4.68										
120	5.64	5.60	5.34	5.20	5.42	5.50	5.80	5.88										
125	6.79	6.75	6.47	6.31	6.69	6.76	7.13	7.22										
130	7.98	7.93	7.64	7.46	8.08	8.13	8.59	8.68										
135	9.18	9.12	8.82	8.64	9.56	9.54	10.1	10.1										
140	10.3	10.3	9.98	9.81	11.0	10.9	11.5	11.5										
145	11.5	11.4	11.1	11.0	12.3	12.2	12.7	12.8										
150	12.6	12.6	12.3	12.1	13.6	13.5	13.9	14.0										
155	13.8	13.8	13.5	13.3	15.0	14.8	15.3	15.3										
160	15.2	15.1	14.9	14.7	16.5	16.2	16.7	16.6										
165	16.7	16.5	16.3	16.1	17.7	17.4	17.8	17.8										
170	17.9	17.7	17.6	17.4	18.6	18.3	18.7	18.6										
175	18.9	18.6	18.7	18.5	19.2	18.9	19.2	19.1										
180	19.4	19.1	19.3	19.1	19.4	19.1	19.3	19.1										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:27DEG
 Operators:lianghaizhu
 Test Date:2023-11-24

□ 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: