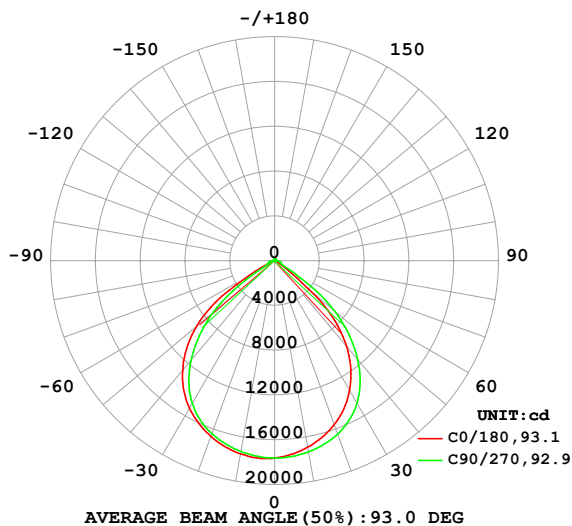


LUMINAIRE PHOTOMETRIC TEST REPORT

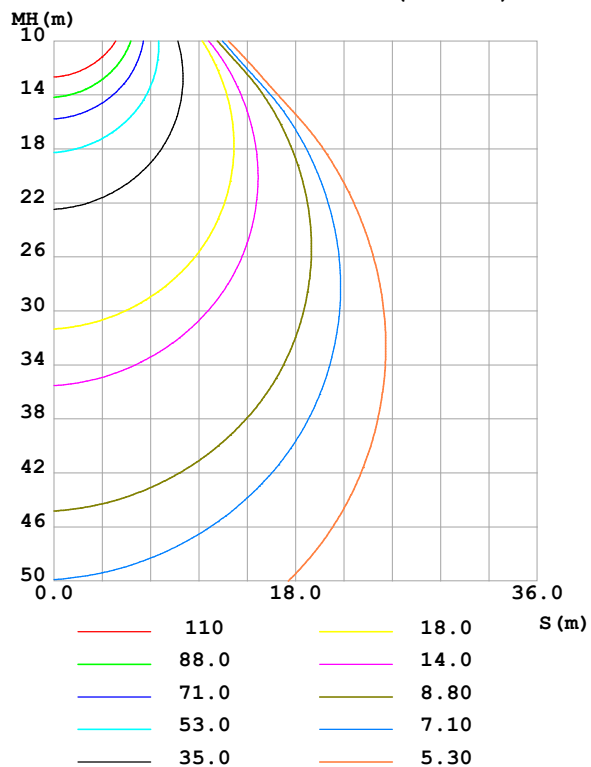
Test:U:120.05V I:1.8129A P:217.06W PF:0.9973 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:34331.2x1 lm		
NAME: ASD-NHB-ST-220	TYPE:	WEIGHT:
SPEC.: 220W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.76*0.2m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 158.16 lm/W
MODEL	ASD-NHB-ST-220	I _{max} (cd)	17701	S/MH(C0/180)	1.28	
NOMINAL POWER(W)	220	LOR(%)	100.0	S/MH(C90/270)	1.24	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	34331	η UP,DN(C0-180)	0.7,48.5	
NOMINAL FLUX(lm)	34331.2	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.7,50.2	
LAMPS INSIDE	1	η up (%)	1.3	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	120	η down (%)	98.7	CIBSE SHR MAX	1.35	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: lianghaizhu-2
Test Date: 2025-05-06

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.488
Humidity: 65.0%
Test Distance: 9.770m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1693	1707	1735	1753	1753	1749	1731	1704	0- 10	1666	1666	4.85,4.85
20	1558	1587	1648	1673	1670	1665	1644	1583	10- 20	4756	6422	18.7,18.7
30	1339	1371	1472	1518	1523	1511	1473	1372	20- 30	7131	13553	39.5,39.5
40	1000	1035	1155	1248	1280	1245	1163	1041	30- 40	8171	21725	63.3,63.3
50	390.2	550.0	698.7	841.9	909.1	851.1	715.3	557.0	40- 50	7174	28898	84.2,84.2
60	57.82	95.44	95.05	295.9	248.6	313.3	98.70	98.76	50- 60	3698	32596	94.9,94.9
70	31.82	32.68	57.90	66.06	48.96	62.44	57.04	32.97	60- 70	859.1	33455	97.4,97.4
80	3.459	10.05	32.27	19.65	27.72	18.33	31.42	9.606	70- 80	334.1	33789	98.4,98.4
90	0.6291	0.8865	0.6698	2.180	2.645	2.215	0.7250	0.9381	80- 90	81.05	33870	98.7,98.7
100	1.963	1.997	1.644	1.189	1.085	1.435	1.932	2.323	90-100	13.44	33883	98.7,98.7
110	4.186	4.143	3.635	2.830	2.837	3.281	4.092	4.663	100-110	27.78	33911	98.8,98.8
120	6.998	6.787	6.297	5.288	5.436	5.902	6.888	7.456	110-120	49.63	33961	98.9,98.9
130	9.583	9.447	9.076	7.916	8.337	8.640	9.734	10.18	120-130	69.37	34030	99.1,99.1
140	11.91	11.98	11.55	10.54	10.85	11.29	12.21	12.73	130-140	80.26	34110	99.4,99.4
150	14.61	14.78	14.02	13.07	13.32	13.82	14.62	15.37	140-150	80.64	34191	99.6,99.6
160	17.43	17.27	16.71	15.88	16.30	16.44	17.09	17.64	150-160	71.57	34263	99.8,99.8
170	19.24	18.83	18.67	18.12	18.72	18.44	18.86	19.00	160-170	50.32	34313	99.9,99.9
180	19.99	19.38	19.66	19.29	20.02	19.39	19.67	19.31	170-180	18.21	34331	100,100
DEG	LUMINOUS INTENSITY:X10cd									UNIT:lm		

Conical surface Flux(90deg): 25588 lm

%lum = 74.5%

%lamp = 74.5%

Conical surface Flux(130deg): 33153 lm

%lum = 96.6%

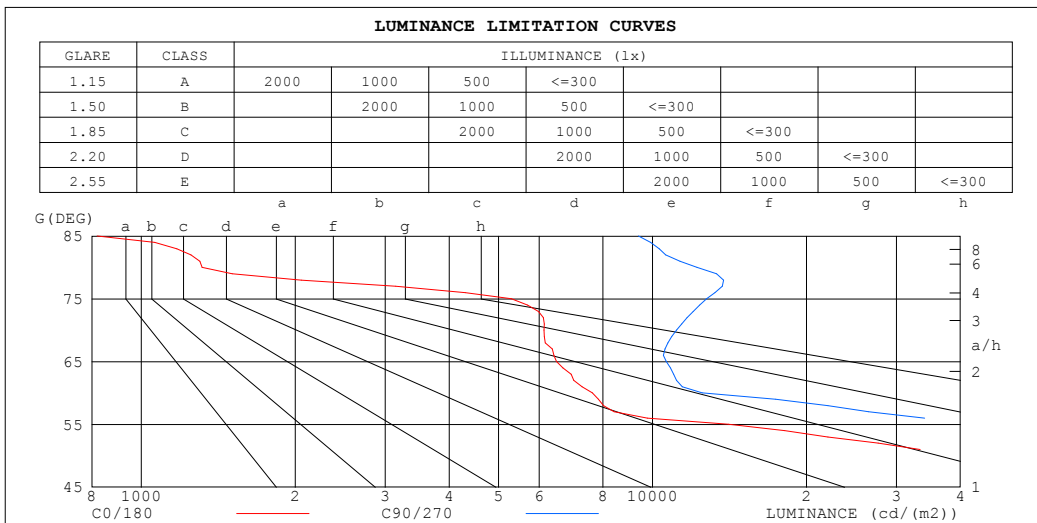
%lamp = 96.6%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:lianghaizhu-2
 Test Date:2025-05-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.488
 Humidity:65.0%
 Test Distance:9.770m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.05V I:1.8129A P:217.06W PF:0.9973 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:34331.2x1 lm		
NAME: ASD-NHB-ST-220	TYPE:	WEIGHT:
SPEC.: 220W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.76*0.2m	Shielding Angle:



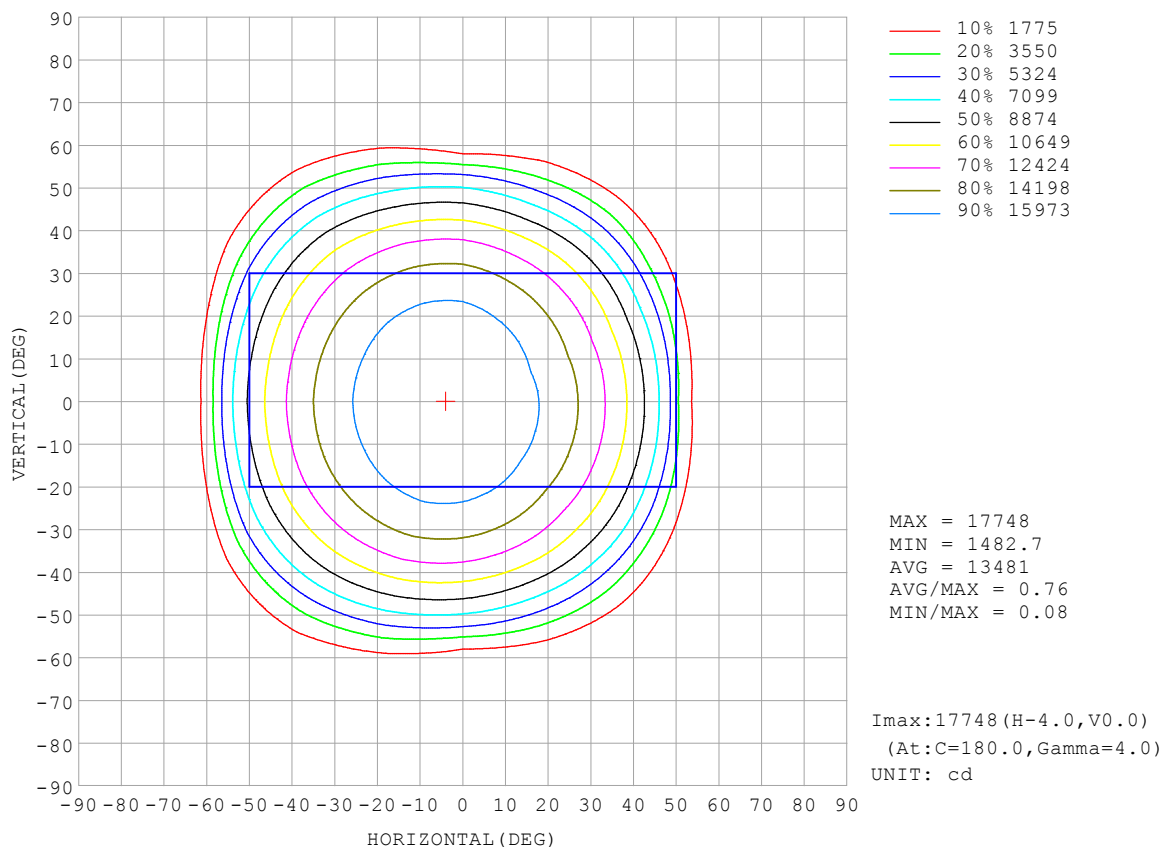
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	819	9384
80	1314	12220
75	5297	12766
70	6136	11133
65	6491	10641
60	7628	12502
55	14064	42070
50	40037	71481
45	71299	87848

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: lianghaizhu-2
Test Date: 2025-05-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.488
Humidity: 65.0%
Test Distance: 9.770m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.05V I:1.8129A P:217.06W PF:0.9973 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:34331.2x1 lm		
NAME: ASD-NHB-ST-220	TYPE:	WEIGHT:
SPEC.: 220W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.76*0.2m	Shielding Angle:

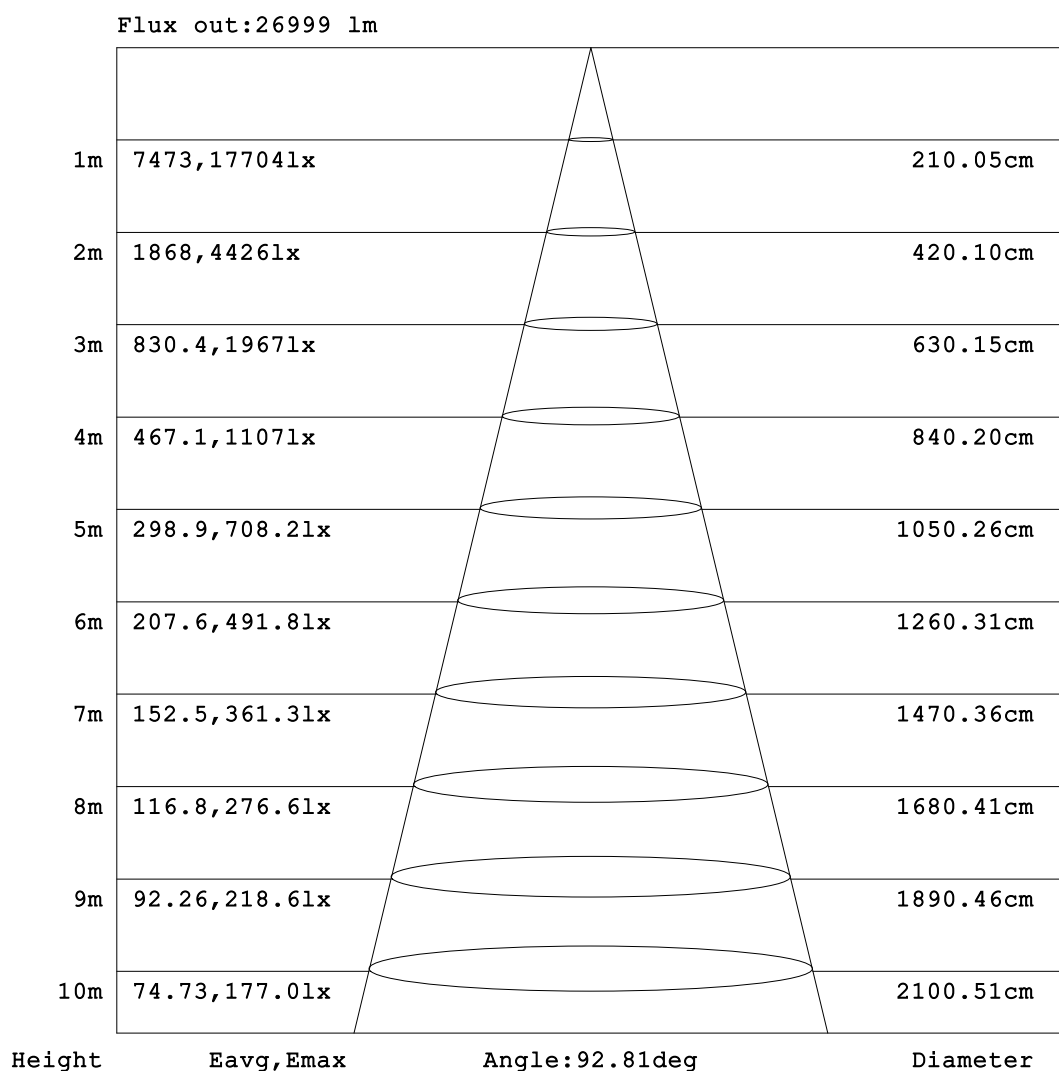


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:lianghaizhu-2
Test Date:2025-05-06

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:9.770m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.05V I:1.8129A P:217.06W PF:0.9973 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:34331.2x1 lm		
NAME: ASD-NHB-ST-220	TYPE:	WEIGHT:
SPEC.: 220W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.76*0.2m	Shielding Angle:



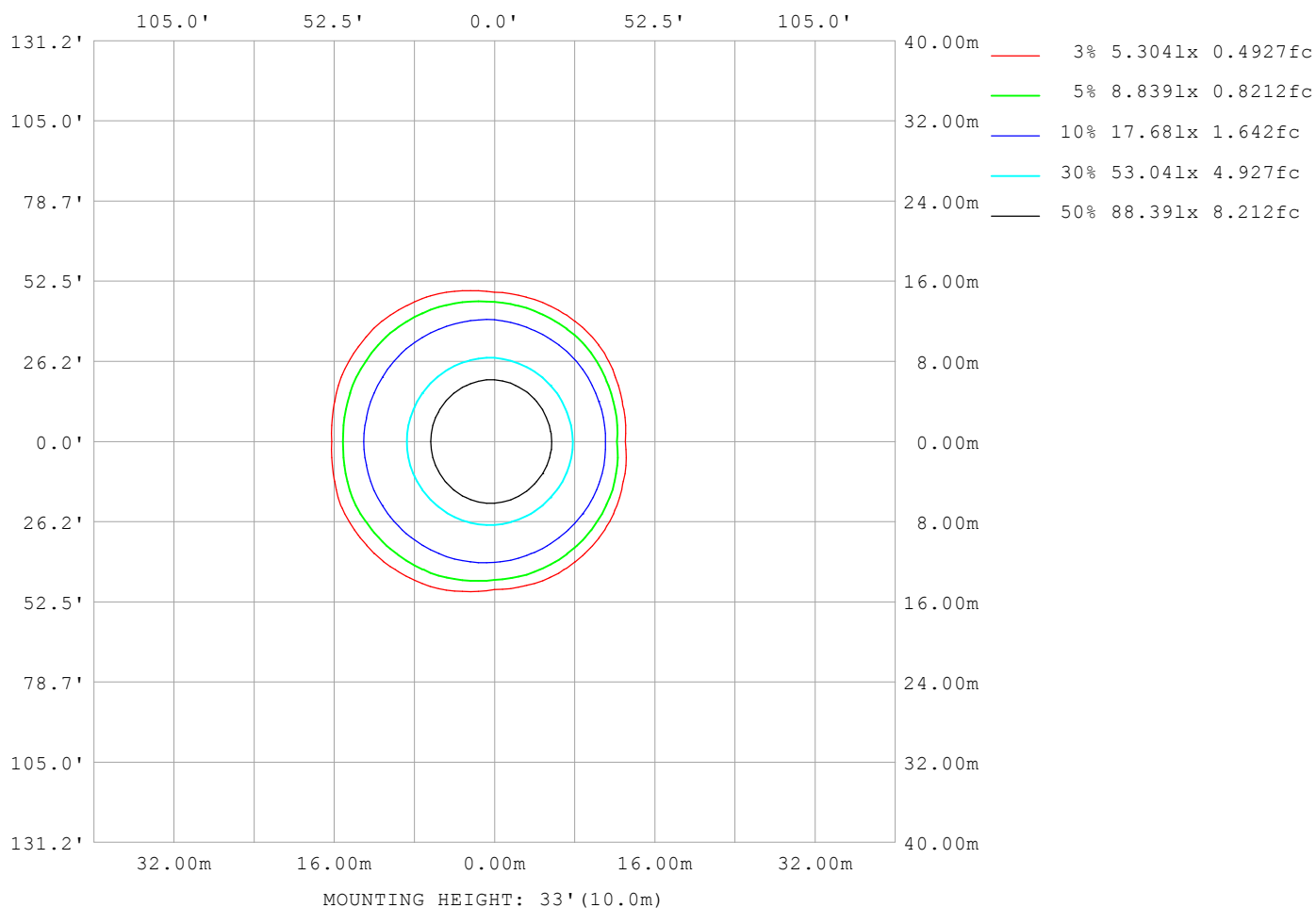
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: lianghaizhu-2
Test Date: 2025-05-06

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.488
Humidity: 65.0%
Test Distance: 9.770m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

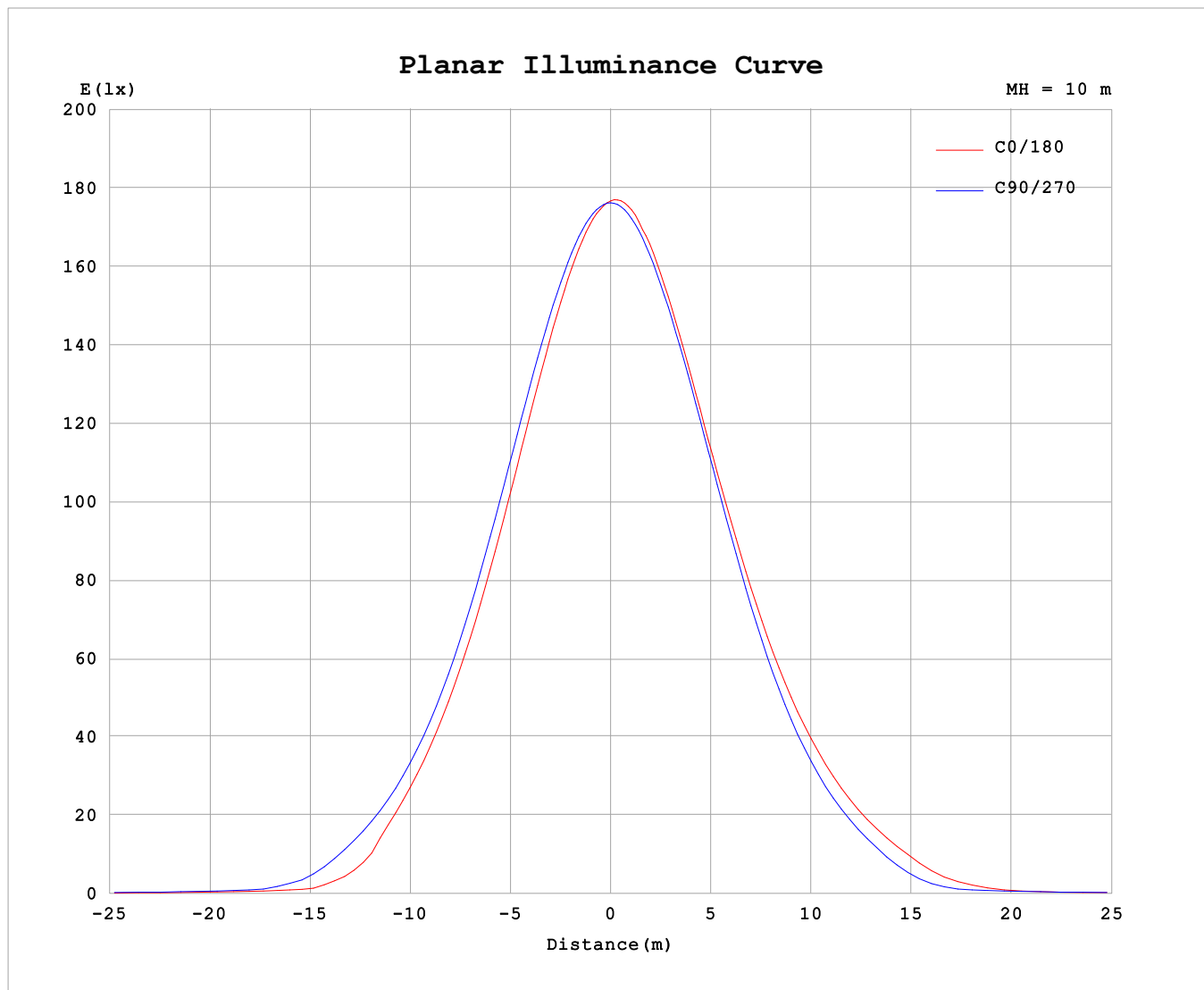
Test:U:120.05V I:1.8129A P:217.06W PF:0.9973 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:34331.2x1 lm		
NAME: ASD-NHB-ST-220	TYPE:	WEIGHT:
SPEC.: 220W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.76*0.2m	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:lianghaizhu-2
Test Date:2025-05-06

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:9.770m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: lianghaizhu-2
Test Date: 2025-05-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.488
Humidity: 65.0%
Test Distance: 9.770m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.05V I:1.8129A P:217.06W PF:0.9973 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:34331.2x1 lm		
NAME: ASD-NHB-ST-220	TYPE:	WEIGHT:
SPEC.: 220W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.76*0.2m	Shielding Angle:

Table--1

UNIT: X10cd

C (DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	1763	1763	1763	1763	1763	1763	1763	1763	1763	1763	1763	1763	1763	1763	1763	1763			
5	1737	1739	1742	1749	1757	1763	1767	1769	1769	1768	1766	1761	1755	1748	1742	1736			
10	1693	1698	1707	1720	1735	1746	1753	1756	1753	1750	1749	1740	1731	1716	1704	1694			
15	1635	1641	1652	1674	1699	1715	1721	1723	1719	1716	1714	1707	1694	1672	1652	1635			
20	1558	1566	1587	1619	1648	1669	1673	1675	1670	1666	1665	1658	1644	1612	1583	1559			
25	1462	1471	1493	1536	1575	1602	1609	1610	1605	1600	1600	1591	1572	1530	1492	1463			
30	1339	1349	1371	1422	1472	1508	1518	1526	1523	1514	1511	1498	1473	1419	1372	1340			
35	1187	1196	1218	1274	1332	1381	1399	1416	1415	1404	1394	1372	1337	1273	1223	1185			
40	1000	1008	1035	1089	1155	1215	1248	1276	1280	1265	1245	1208	1163	1088	1041	994			
45	764	780	813	870	945	1012	1064	1103	1114	1094	1066	1007	954	868	820	763			
50	390	498	550	618	699	779	842	891	909	885	851	778	715	619	557	485			
55	122	199	274	334	367	509	584	641	639	630	594	513	387	329	274	188			
60	57.8	74.7	95.4	120	95.1	214	296	312	249	296	313	222	98.7	119	98.8	71.5			
65	41.6	43.2	59.6	66.7	68.4	86.7	114	116	67.5	109	115	83.4	67.7	67.8	61.7	41.8			
70	31.8	26.4	32.7	47.2	57.9	59.5	66.1	58.3	49.0	54.0	62.4	56.1	57.0	46.7	33.0	25.7			
75	20.8	15.7	18.5	29.2	50.2	41.1	38.7	35.3	36.8	33.2	36.4	39.0	49.2	28.2	18.0	15.1			
80	3.46	4.21	10.1	13.3	32.3	23.5	19.7	21.2	27.7	19.6	18.3	21.9	31.4	12.2	9.61	3.61			
85	1.08	1.50	1.97	4.13	12.4	9.14	11.7	9.76	10.2	8.45	10.9	8.33	12.0	3.46	1.91	1.33			
90	0.63	0.75	0.89	0.89	0.67	1.53	2.18	2.62	2.65	2.51	2.21	1.51	0.73	0.89	0.94	0.89			
95	1.18	1.21	1.25	1.14	0.99	0.90	0.80	0.58	0.57	0.71	0.92	1.07	1.19	1.39	1.49	1.51			
100	1.96	1.97	2.00	1.85	1.64	1.39	1.19	0.93	1.08	1.21	1.43	1.69	1.93	2.20	2.32	2.39			
105	2.96	2.97	2.96	2.78	2.53	2.18	1.89	1.59	1.84	1.98	2.23	2.60	2.91	3.23	3.39	3.50			
110	4.19	4.17	4.14	3.92	3.64	3.20	2.83	2.48	2.84	2.98	3.28	3.71	4.09	4.47	4.66	4.80			
115	5.57	5.53	5.46	5.21	4.92	4.41	3.99	3.58	4.04	4.20	4.52	5.01	5.46	5.84	6.06	6.26			
120	7.00	6.90	6.79	6.59	6.30	5.75	5.29	4.88	5.44	5.58	5.90	6.40	6.89	7.25	7.46	7.69			
125	8.32	8.20	8.12	7.97	7.70	7.11	6.60	6.27	6.92	7.04	7.28	7.81	8.34	8.68	8.83	9.05			
130	9.58	9.49	9.45	9.35	9.08	8.46	7.92	7.60	8.34	8.41	8.64	9.20	9.73	10.1	10.2	10.4			
135	10.8	10.7	10.7	10.7	10.4	9.79	9.25	8.88	9.62	9.72	9.99	10.5	11.0	11.4	11.5	11.6			
140	11.9	12.0	12.0	11.9	11.6	11.0	10.5	10.2	10.8	11.0	11.3	11.8	12.2	12.6	12.7	12.8			
145	13.2	13.3	13.3	13.1	12.7	12.2	11.8	11.3	12.0	12.2	12.5	13.0	13.4	13.8	14.0	14.1			
150	14.6	14.8	14.8	14.4	14.0	13.5	13.1	12.6	13.3	13.4	13.8	14.2	14.6	15.0	15.4	15.5			
155	16.1	16.3	16.1	15.7	15.4	14.9	14.5	14.0	14.8	14.8	15.2	15.6	15.9	16.2	16.6	16.8			
160	17.4	17.6	17.3	16.9	16.7	16.3	15.9	15.5	16.3	16.2	16.4	16.8	17.1	17.3	17.6	18.0			
165	18.4	18.6	18.2	17.9	17.8	17.5	17.1	16.9	17.6	17.4	17.5	17.9	18.1	18.1	18.4	18.8			
170	19.2	19.3	18.8	18.6	18.7	18.4	18.1	17.9	18.7	18.3	18.4	18.7	18.9	18.8	19.0	19.4			
175	19.8	19.6	19.2	19.1	19.3	19.1	18.8	18.8	19.6	19.0	19.1	19.2	19.4	19.2	19.3	19.6			
180	20.0	19.5	19.4	19.4	19.7	19.4	19.3	19.4	20.0	19.5	19.4	19.4	19.7	19.4	19.3	19.4			

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:lianghaizhu-2

Test Date:2025-05-06

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.488

Humidity:65.0%

Test Distance:9.770m [K=1.0000]

Remarks: