

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.05V I:1.3302A P:159.31W PF:0.9976 Freq:64.98Hz

Lamp Flux:29327x1 lm

NAME: ASD-WHB5B-NEOX-160

TYPE:

WEIGHT:

SPEC.: 160W-5000K

DIM.:

SERIAL No.:

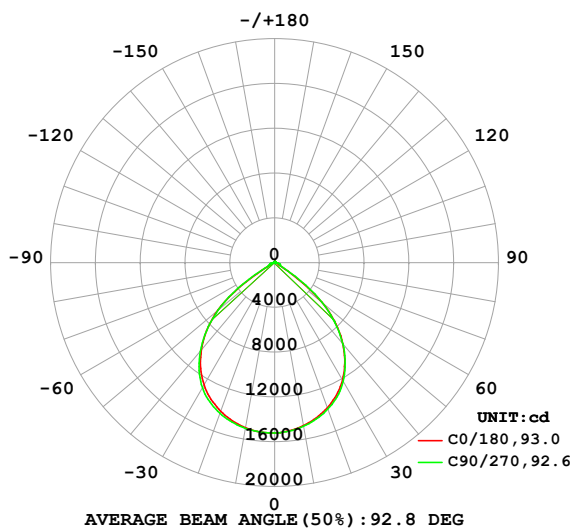
MFR.: ASD Lighting Corp.

SUR.: 0.38*0.25

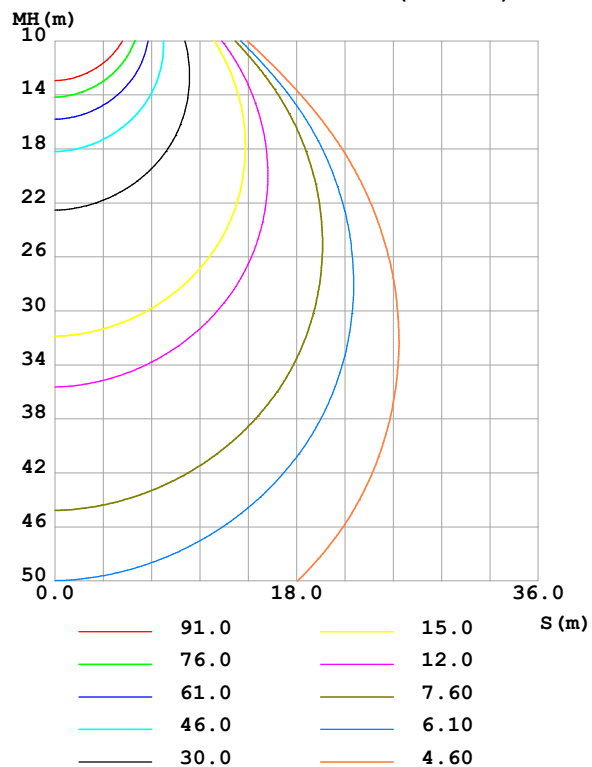
Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 184.09 lm/W
MODEL	ASD-WHB5B-NEOX-160	I _{max} (cd)	15231	S/MH(C0/180)	1.23	
NOMINAL POWER(W)	160	LOR(%)	100.0	S/MH(C90/270)	1.25	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	29327	η UP,DN(C0-180)	0.3,48.0	
NOMINAL FLUX(lm)	29327	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.4,51.3	
LAMPS INSIDE	1	η up (%)	0.7	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	120	η down (%)	99.3	CIBSE SHR MAX	1.30	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 27°C
Operators: lianghaizhu-1
Test Date: 2025-03-21

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity: 56%
Test Distance: 8.340m [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	1479	1478	1485	1489	1497	1503	1503	1492	0- 10	1438	1438	4.9,4.9
20	1379	1377	1392	1397	1412	1426	1432	1407	10- 20	4101	5539	18.9,18.9
30	1212	1200	1225	1230	1262	1279	1290	1250	20- 30	6136	11675	39.8,39.8
40	948.5	926.8	947.6	966.2	1020	1031	1034	991.0	30- 40	7016	18691	63.7,63.7
50	554.4	546.6	554.4	599.4	665.9	673.8	656.6	615.5	40- 50	6192	24883	84.8,84.8
60	59.74	127.0	70.02	149.7	94.51	207.8	106.2	162.6	50- 60	3217	28101	95.8,95.8
70	37.57	38.68	44.87	42.05	38.18	44.65	45.92	44.10	60- 70	657.9	28759	98.1,98.1
80	14.15	13.67	21.81	14.36	19.87	15.50	26.51	15.51	70- 80	294.1	29053	99.1,99.1
90	0.2183	0.2211	0.2128	0.2374	0.4447	0.5443	0.9512	0.3498	80- 90	68.22	29121	99.3,99.3
100	0.3994	0.4348	0.4273	0.4033	0.6901	0.7370	0.7496	0.8283	90-100	4.236	29125	99.3,99.3
110	0.9348	0.9795	0.9740	0.9135	1.797	1.811	1.852	1.981	100-110	10.11	29135	99.3,99.3
120	1.780	1.826	1.844	1.738	3.485	3.439	3.524	3.659	110-120	19.90	29155	99.4,99.4
130	2.816	2.893	2.912	2.774	5.198	5.116	5.227	5.337	120-130	29.98	29185	99.5,99.5
140	4.022	4.171	4.128	3.997	6.639	6.562	6.660	6.779	130-140	36.35	29221	99.6,99.6
150	5.736	5.815	5.787	5.565	7.916	7.797	7.904	8.002	140-150	38.06	29260	99.8,99.8
160	7.493	7.442	7.481	7.244	8.884	8.715	8.831	8.848	150-160	34.51	29294	99.9,99.9
170	8.789	8.694	8.774	8.586	9.442	9.239	9.381	9.303	160-170	24.24	29318	100,100
180	9.498	9.318	9.458	9.296	9.505	9.322	9.464	9.301	170-180	8.780	29327	100,100
DEG	LUMINOUS INTENSITY:X10cd									UNIT:lm		

Conical surface Flux(90deg): 22014 lm

%lum = 75.1%

%lamp = 75.1%

Conical surface Flux(120deg): 28101 lm

%lum = 95.8%

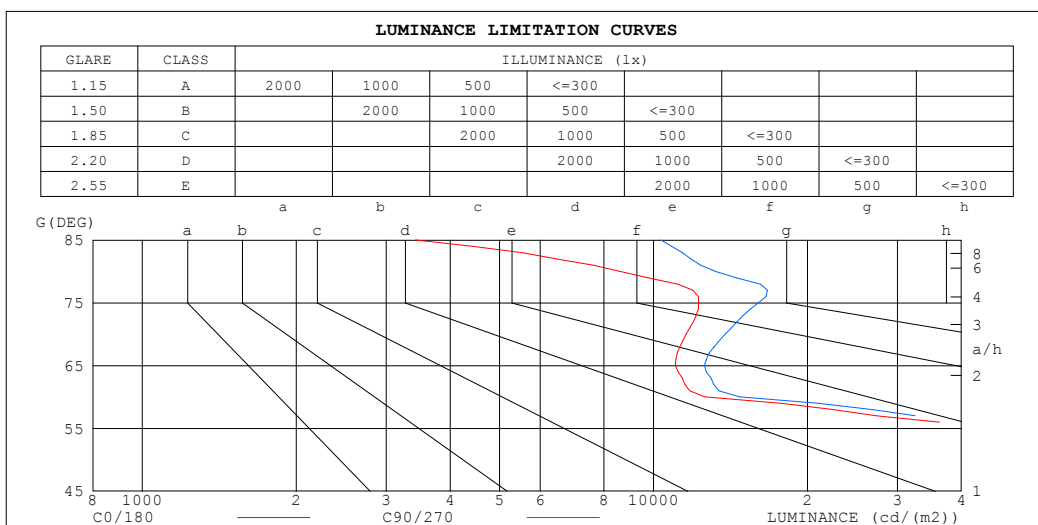
%lamp = 95.8%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:27°C
 Operators:lianghaizhu-1
 Test Date:2025-03-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
 Humidity:56%
 Test Distance:8.340m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.05V I:1.3302A P:159.31W PF:0.9976 Freq:64.98Hz Lamp Flux:29327x1 lm		
NAME: ASD-WHB5B-NEOX-160	TYPE:	WEIGHT:
SPEC.: 160W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.38*0.25	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3424	10328
80	8590	13215
75	12244	16036
70	11578	13807
65	11035	12569
60	12592	14737
55	46119	52237
50	90894	90767
45	115329	113808

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C Interval: 22.5DEG
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Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
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Remarks:

WEC AND CCEC

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SPEC.: 160W-5000K		DIM.:		SERIAL No.:	
MFR.: ASD Lighting Corp.		SUR.: 0.38*0.25		Shielding Angle:	

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.228	.129	.041	.220	.126	.040	.207	.119	.038	.195	.112	.036	.184	.107	.034		
2.0	.222	.122	.037	.216	.119	.037	.205	.114	.035	.194	.109	.034	.184	.104	.033		
3.0	.213	.113	.034	.208	.111	.033	.198	.107	.033	.188	.103	.032	.180	.099	.031		
4.0	.202	.105	.031	.198	.103	.031	.189	.100	.030	.181	.097	.029	.173	.094	.029		
5.0	.192	.098	.028	.188	.096	.028	.180	.094	.028	.173	.091	.027	.166	.089	.027		
6.0	.182	.091	.026	.178	.090	.026	.171	.088	.026	.165	.086	.025	.158	.083	.025		
7.0	.172	.085	.024	.169	.084	.024	.163	.082	.024	.157	.080	.023	.151	.079	.023		
8.0	.163	.080	.022	.160	.079	.022	.155	.077	.022	.149	.076	.022	.144	.074	.022		
9.0	.155	.075	.021	.152	.074	.021	.147	.073	.021	.142	.071	.020	.138	.070	.020		
10.0	.147	.071	.020	.145	.070	.020	.140	.069	.019	.136	.068	.019	.132	.066	.019		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.196	.196	.196	.167	.167	.167	.114	.114	.114	.066	.066	.066	.021	.021	.021		
1.0	.180	.162	.146	.154	.139	.126	.105	.096	.087	.061	.055	.051	.019	.018	.016		
2.0	.168	.138	.112	.144	.119	.097	.099	.082	.067	.057	.048	.040	.018	.015	.013		
3.0	.159	.119	.088	.136	.103	.076	.094	.072	.053	.054	.042	.031	.017	.014	.010		
4.0	.151	.105	.071	.129	.091	.061	.089	.063	.043	.051	.037	.026	.017	.012	.008		
5.0	.144	.095	.058	.123	.082	.051	.085	.057	.036	.049	.034	.021	.016	.011	.007		
6.0	.137	.086	.049	.118	.074	.043	.081	.052	.030	.047	.031	.018	.015	.010	.006		
7.0	.131	.079	.042	.113	.068	.037	.078	.048	.026	.045	.028	.016	.015	.009	.005		
8.0	.125	.073	.037	.108	.063	.032	.075	.044	.023	.043	.026	.014	.014	.009	.005		
9.0	.120	.068	.033	.103	.059	.029	.072	.042	.020	.042	.025	.012	.014	.008	.004		
10.0	.115	.064	.030	.099	.055	.026	.069	.039	.018	.040	.023	.011	.013	.008	.004		

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:27℃

Operators:lianghaizhu-1

Test Date:2025-03-21

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364

Humidity:56%

Test Distance:8.340m [K=1.0000]

Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.05V I:1.3302A P:159.31W PF:0.9976 Freq:64.98Hz Lamp Flux:29327x1 lm		
NAME: ASD-WHB5B-NEOX-160	TYPE:	WEIGHT:
SPEC.: 160W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.38*0.25	Shielding Angle:

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	26.0	27.3	26.3	27.5	27.7	26.1	27.4	26.4	27.6	27.8
3H	25.9	27.1	26.2	27.3	27.5	26.0	27.1	26.3	27.4	27.6
4H	25.9	27.0	26.2	27.2	27.5	26.0	27.1	26.3	27.3	27.6
6H	25.8	26.8	26.1	27.1	27.4	26.0	27.0	26.3	27.2	27.5
8H	25.8	26.7	26.1	27.0	27.3	25.9	26.9	26.3	27.2	27.5
12H	25.7	26.7	26.1	27.0	27.3	25.9	26.8	26.3	27.1	27.4
4H 2H	25.9	27.0	26.2	27.2	27.5	26.0	27.0	26.3	27.3	27.5
3H	25.8	26.7	26.2	27.0	27.3	25.9	26.8	26.2	27.1	27.4
4H	25.8	26.6	26.2	27.0	27.3	25.9	26.8	26.3	27.1	27.4
6H	25.8	26.5	26.2	26.8	27.2	25.9	26.7	26.3	27.0	27.4
8H	25.7	26.4	26.1	26.8	27.2	25.9	26.6	26.3	27.0	27.4
12H	25.7	26.3	26.1	26.7	27.1	25.9	26.5	26.3	26.9	27.3
8H 4H	25.7	26.4	26.1	26.7	27.1	25.8	26.5	26.2	26.9	27.2
6H	25.7	26.2	26.1	26.6	27.1	25.8	26.4	26.3	26.8	27.2
8H	25.6	26.1	26.1	26.6	27.0	25.9	26.3	26.3	26.8	27.2
12H	25.6	26.0	26.1	26.5	27.0	25.9	26.3	26.3	26.7	27.2
12H 4H	25.6	26.3	26.1	26.7	27.1	25.8	26.4	26.2	26.8	27.2
6H	25.6	26.1	26.1	26.6	27.0	25.8	26.3	26.3	26.7	27.2
8H	25.6	26.0	26.1	26.5	27.0	25.8	26.2	26.3	26.7	27.2
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.9 / - 4.1					+ 1.7 / - 3.3				
1.5H	+ 0.9 / - 1.9					+ 0.8 / - 1.7				
2.0H	+ 3.8 / - 7.4					+ 3.5 / - 6.3				

CIE Pub.117, 29327 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 11.7)
Area: 0.095 m2

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γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity:56%
Test Distance:8.340m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.05V I:1.3302A P:159.31W PF:0.9976 Freq:64.98Hz Lamp Flux:29327x1 lm		
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SPEC.: 160W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.38*0.25	Shielding Angle:

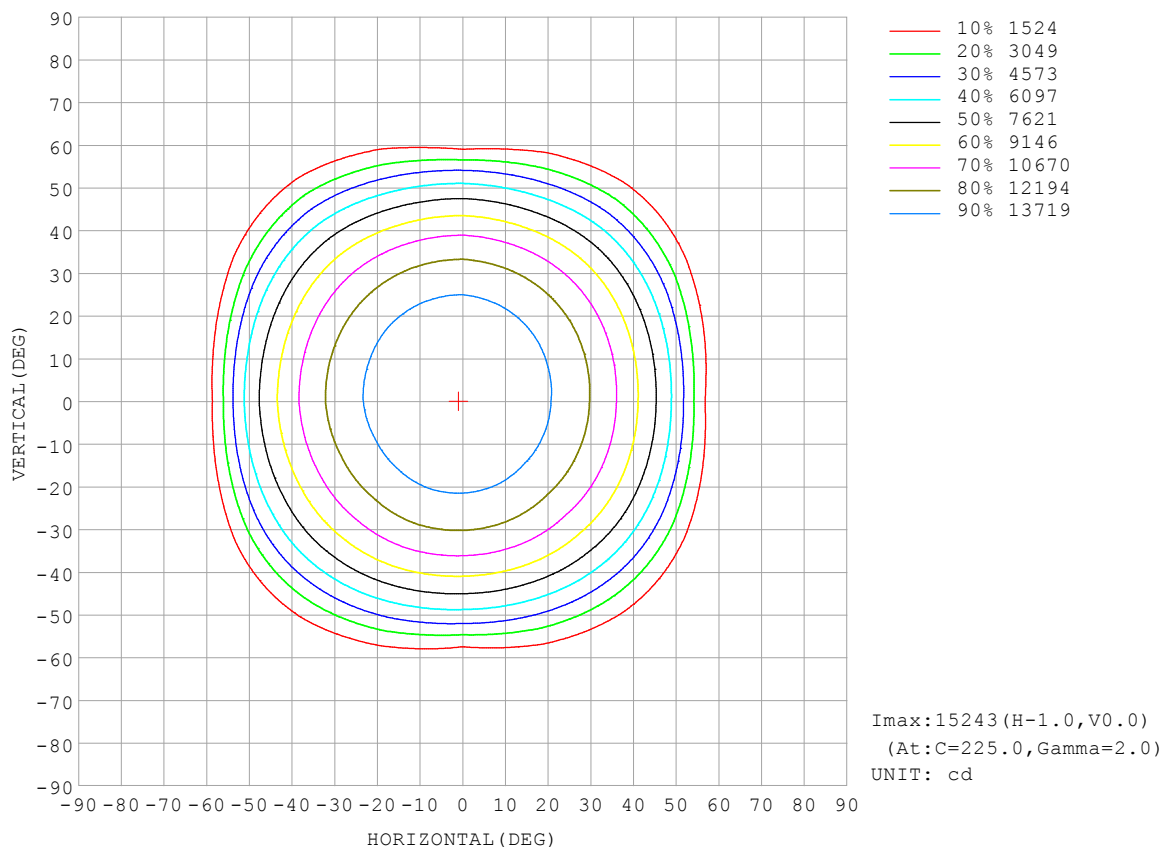
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	68	58	53	67	58	52	66	58	52	47
0.80	78	69	63	77	69	63	76	68	63	57
1.00	87	78	73	86	78	72	84	78	72	66
1.25	93	85	80	92	85	79	89	83	79	73
1.50	97	90	85	96	89	84	93	87	83	77
2.00	102	96	92	101	95	91	98	93	89	83
2.50	105	99	95	103	98	94	100	95	92	85
3.00	107	102	99	105	101	97	102	98	95	88
4.00	110	106	103	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	102	100	92
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.364
Humidity: 56%
Test Distance: 8.340m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

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SPEC.: 160W-5000K	DIM.:	SERIAL No.:
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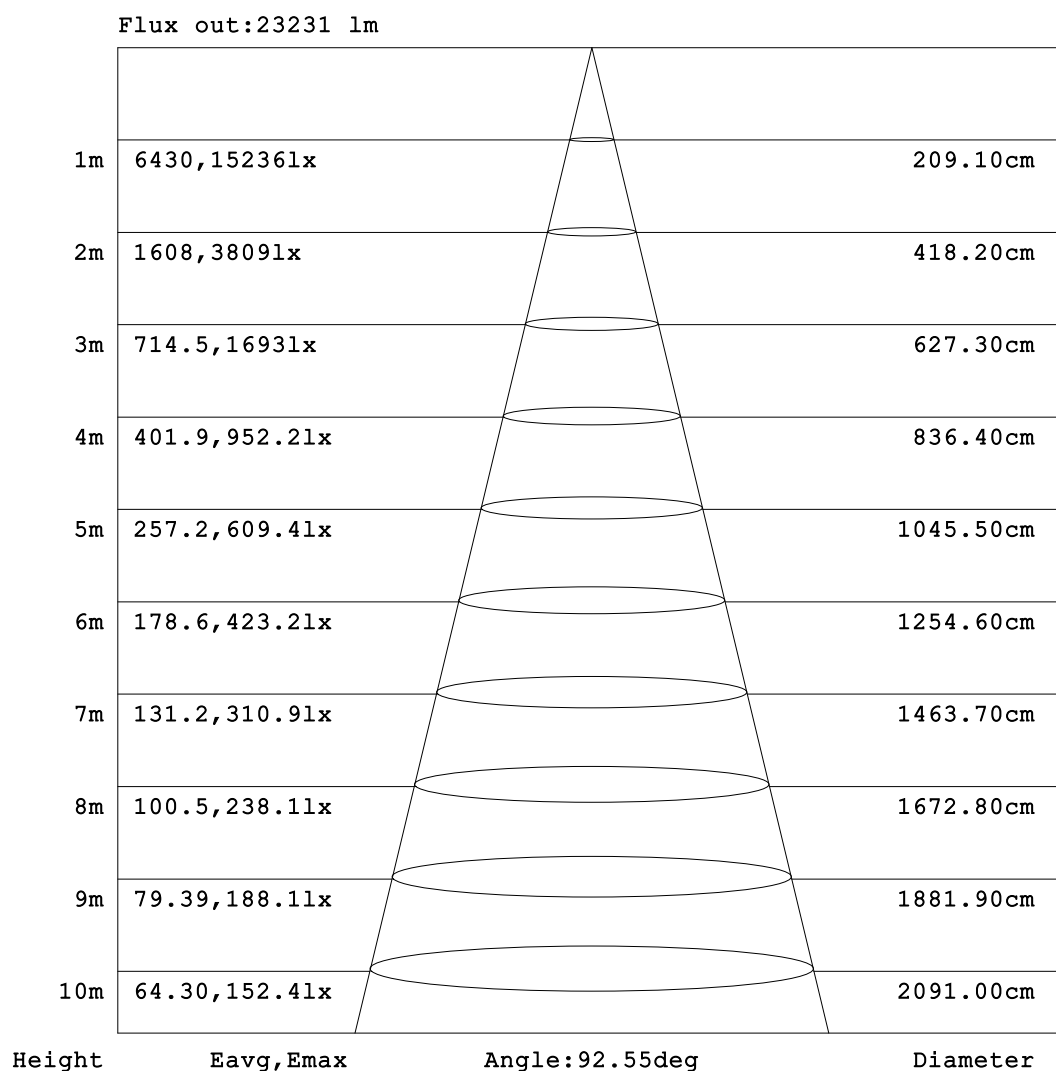


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AAI Figure

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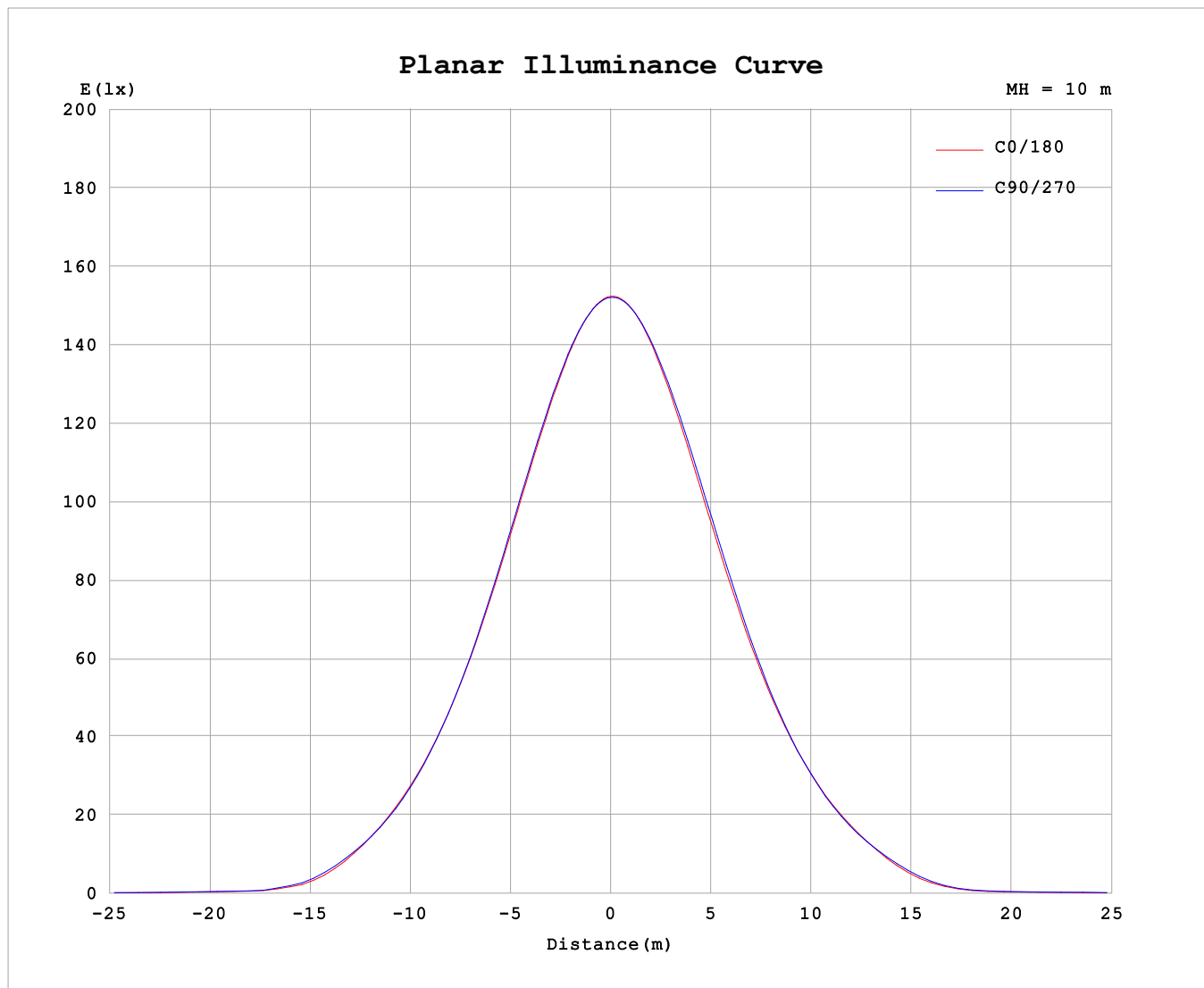


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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Planar Illuminance Curve



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LUMINOUS DISTRIBUTION INTENSITY DATA

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NAME: ASD-WHB5B-NEOX-160	TYPE:	WEIGHT:
SPEC.: 160W-5000K	DIM.:	SERIAL No.:
MFR.: ASD Lighting Corp.	SUR.: 0.38*0.25	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	1522	1522	1522	1522	1522	1522	1522	1522	1522	1522	1522	1522	1522	1522	1522	1522			
5	1508	1508	1507	1509	1510	1512	1513	1515	1518	1519	1520	1520	1519	1517	1515	1511			
10	1479	1478	1478	1482	1485	1488	1489	1492	1497	1499	1503	1504	1503	1498	1492	1485			
15	1436	1435	1435	1441	1446	1450	1451	1454	1462	1465	1472	1474	1474	1466	1456	1446			
20	1379	1377	1377	1386	1392	1397	1397	1402	1412	1418	1426	1431	1432	1421	1407	1393			
25	1307	1301	1300	1312	1322	1326	1325	1332	1346	1353	1364	1370	1372	1357	1341	1322			
30	1212	1205	1200	1214	1225	1232	1230	1241	1262	1269	1279	1286	1290	1271	1250	1231			
35	1093	1084	1076	1090	1100	1110	1110	1127	1153	1160	1169	1175	1177	1156	1135	1114			
40	948	937	927	937	948	960	966	987	1020	1025	1031	1031	1034	1010	991	969			
45	774	762	750	755	765	782	797	823	862	862	865	858	860	832	818	795			
50	554	554	547	549	554	580	599	627	666	669	674	659	657	628	616	588			
55	251	308	314	317	285	347	369	388	377	431	450	430	403	395	384	342			
60	59.7	107	127	116	70.0	128	150	146	94.5	171	208	190	106	161	163	134			
65	44.2	50.2	58.1	54.3	50.5	55.6	61.6	55.0	47.1	56.8	71.9	67.3	55.7	65.0	70.0	55.9			
70	37.6	34.1	38.7	39.2	44.9	40.2	42.0	36.8	38.2	36.5	44.7	42.8	45.9	42.4	44.1	36.1			
75	30.1	22.3	20.8	27.3	39.4	28.4	21.7	24.7	31.6	24.5	24.0	30.1	40.6	29.0	22.3	23.5			
80	14.2	10.9	13.7	14.9	21.8	16.2	14.4	13.0	19.9	13.5	15.5	17.1	26.5	17.0	15.5	11.5			
85	2.83	2.67	3.42	5.47	8.55	5.98	4.79	4.23	5.78	4.86	6.79	6.76	9.56	6.83	5.32	3.31			
90	0.22	0.22	0.22	0.22	0.21	0.23	0.24	0.28	0.44	0.45	0.54	0.60	0.95	0.36	0.35	0.35			
95	0.25	0.26	0.28	0.28	0.28	0.27	0.27	0.25	0.39	0.42	0.44	0.46	0.44	0.48	0.49	0.49			
100	0.40	0.40	0.43	0.43	0.43	0.41	0.40	0.37	0.69	0.71	0.74	0.76	0.75	0.80	0.83	0.85			
105	0.63	0.63	0.66	0.67	0.66	0.63	0.62	0.58	1.16	1.17	1.19	1.22	1.22	1.28	1.33	1.36			
110	0.93	0.93	0.98	0.99	0.97	0.93	0.91	0.87	1.80	1.80	1.81	1.85	1.85	1.92	1.98	2.04			
115	1.32	1.32	1.38	1.38	1.37	1.32	1.29	1.24	2.59	2.58	2.58	2.62	2.64	2.72	2.78	2.86			
120	1.78	1.78	1.83	1.85	1.84	1.78	1.74	1.68	3.49	3.46	3.44	3.48	3.52	3.61	3.66	3.76			
125	2.28	2.28	2.32	2.37	2.36	2.28	2.22	2.17	4.38	4.35	4.30	4.35	4.41	4.50	4.52	4.62			
130	2.82	2.83	2.89	2.94	2.91	2.83	2.77	2.72	5.20	5.18	5.12	5.15	5.23	5.32	5.34	5.42			
135	3.39	3.42	3.50	3.55	3.50	3.43	3.37	3.32	5.95	5.94	5.87	5.90	5.98	6.07	6.09	6.16			
140	4.02	4.08	4.17	4.19	4.13	4.07	4.00	3.93	6.64	6.63	6.56	6.60	6.66	6.76	6.78	6.86			
145	4.81	4.87	4.95	4.95	4.89	4.82	4.73	4.64	7.29	7.27	7.21	7.25	7.30	7.39	7.42	7.52			
150	5.74	5.78	5.82	5.81	5.79	5.67	5.56	5.48	7.92	7.85	7.80	7.86	7.90	7.96	8.00	8.13			
155	6.66	6.67	6.66	6.67	6.69	6.55	6.43	6.37	8.45	8.36	8.31	8.39	8.43	8.45	8.48	8.64			
160	7.49	7.48	7.44	7.45	7.48	7.37	7.24	7.21	8.88	8.75	8.71	8.80	8.83	8.82	8.85	9.01			
165	8.19	8.19	8.13	8.14	8.18	8.08	7.97	7.95	9.21	9.06	9.01	9.12	9.15	9.09	9.12	9.28			
170	8.79	8.78	8.69	8.72	8.77	8.68	8.59	8.58	9.44	9.27	9.24	9.34	9.38	9.27	9.30	9.45			
175	9.28	9.17	9.11	9.17	9.24	9.10	9.05	9.09	9.55	9.38	9.35	9.42	9.49	9.35	9.37	9.49			
180	9.50	9.37	9.32	9.39	9.46	9.32	9.30	9.38	9.50	9.37	9.32	9.39	9.46	9.31	9.30	9.38			

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:27℃

Operators:lianghaizhu-1

Test Date:2025-03-21

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.364

Humidity:56%

Test Distance:8.340m [K=1.0000]

Remarks: