

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1009470

Luminaire Tested: S122DIP-B865D1080UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1009470
REPORT IS A COMBINATION OF REPORTS P984774 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIP-B865D1080UB50-4F0-XX-W2A-D4
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

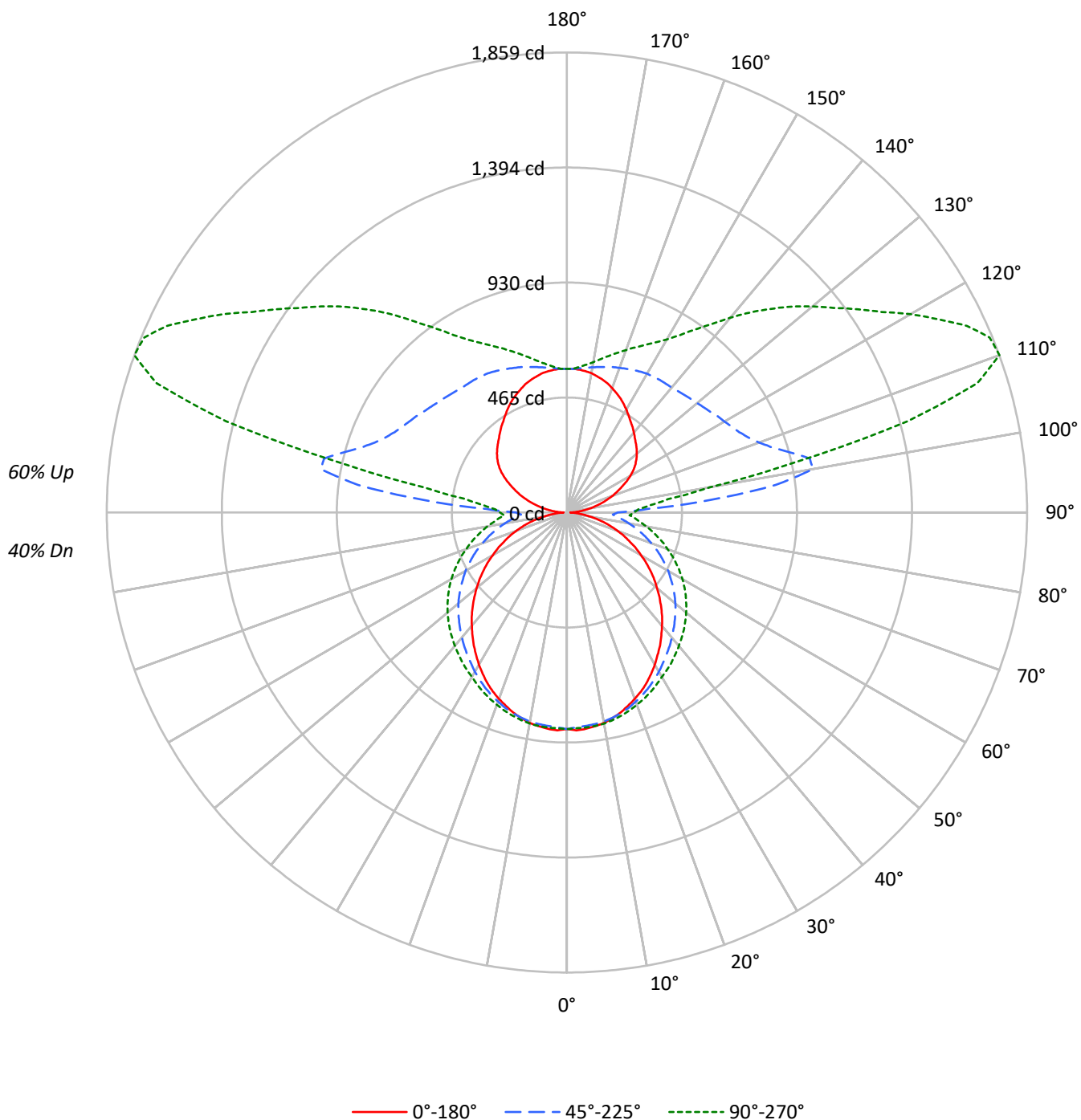
Lumens per Lamp: N/A
Luminaire Lumens: 7389.6 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1009470

CATALOG NUMBER: S122DIP-B865D1080UB50-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



TEST NUMBER: P1009470

CATALOG NUMBER: S122DIP-B865D1080UB50-4F0-XX-W2A-D4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47
1	94	90	85	81	86	82	78	75	66	64	61	53	51	49	40	38	37
2	85	78	71	65	77	71	65	60	57	53	50	45	42	40	34	32	31
3	78	68	60	54	70	62	55	50	50	45	41	40	36	33	30	28	25
4	71	60	51	45	64	54	47	42	44	39	35	35	31	28	27	24	22
5	65	53	45	38	59	48	41	35	39	34	30	31	27	24	24	21	19
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	42	34	29	50	39	32	27	32	26	22	26	21	18	19	17	14
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13
9	47	35	27	22	43	32	25	21	27	21	18	21	17	14	16	14	11
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13852	13852	13852
5°	13914	13261	13185
10°	13822	12801	12614
15°	13625	12327	12029
20°	13380	11827	11473
25°	13136	11349	10969
30°	12796	10864	10469
35°	12453	10396	10102
40°	12089	9992	9738
45°	11743	9625	9421
50°	11373	9287	9106
55°	10984	8927	8787
60°	10505	8554	8452
65°	10007	8122	8066
70°	9445	7660	7651
75°	8727	7199	7258
80°	7593	6717	6851
85°	6455	6266	6502

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11743 cd/sqm

TEST NUMBER: P1009470

CATALOG NUMBER: S122DIP-B865D1080UB50-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	1.1
10°-20°	237.9	3.2
20°-30°	360.5	4.9
30°-40°	439.0	5.9
40°-50°	472.3	6.4
50°-60°	458.7	6.2
60°-70°	400.6	5.4
70°-80°	308.3	4.2
80°-90°	210.2	2.8
90°-100°	377.8	5.1
100°-110°	899.5	12.2
110°-120°	904.8	12.2
120°-130°	725.9	9.8
130°-140°	568.6	7.7
140°-150°	420.1	5.7
150°-160°	293.4	4.0
160°-170°	172.8	2.3
170°-180°	56.2	0.8
0°-30°	681.4	9.2
0°-40°	1120.4	15.2
0°-60°	2051.4	27.8
0°-90°	2970.5	40.2
90°-120°	2182.1	29.5
90°-150°	3896.7	52.7
90°-180°	4419.0	59.8
0°-180°	7389.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	875	875	875	875	875	
5°	878	874	866	874	872	83
15°	837	840	840	851	850	236
25°	761	770	781	796	800	350
35°	656	677	701	729	738	410
45°	538	572	616	656	668	415
55°	412	458	524	569	586	369
65°	282	344	418	470	487	280
75°	156	227	308	363	379	165
85°	46	124	206	259	276	48
90°	14	101	205	254	270	11
95°	49	166	583	359	337	48
105°	142	248	936	1632	1425	152
115°	245	322	768	1542	1784	243
125°	337	399	708	1234	1432	300
135°	394	470	672	1013	1164	305
145°	449	516	654	820	902	282
155°	510	551	635	718	747	235
165°	556	573	608	645	655	157
175°	579	580	585	592	590	55
180°	580	580	580	580	580	

TEST NUMBER: P1009470

CATALOG NUMBER: S122DIP-B865D1080UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	875.1	875.1	875.1	875.1	875.1
2.5°	881.4	877.6	868.7	875.1	872.5
5°	877.6	873.8	866.2	873.8	872.5
7.5°	871.3	868.7	862.4	871.3	870.0
10°	863.7	861.1	857.3	867.5	866.2
12.5°	851.0	852.3	849.7	859.9	858.6
15°	837.0	839.6	839.6	851.0	849.7
17.5°	819.3	824.4	828.2	839.6	839.6
20°	801.5	807.9	812.9	826.9	826.9
22.5°	782.5	790.1	797.7	811.7	814.2
25°	760.9	769.8	781.2	796.5	800.3
27.5°	735.6	749.5	762.2	781.2	783.8
30°	710.2	726.7	743.2	763.5	767.3
32.5°	682.3	701.3	721.6	745.7	753.3
35°	655.7	677.2	701.3	729.2	738.1
37.5°	626.5	650.6	681.0	711.5	720.4
40°	597.3	625.2	659.5	692.5	703.9
42.5°	569.4	597.3	637.9	674.7	686.1
45°	537.7	572.0	616.4	655.7	668.4
47.5°	507.3	544.1	594.8	635.4	649.3
50°	475.6	514.9	572.0	615.1	629.0
52.5°	445.1	487.0	547.9	592.3	607.5
55°	412.2	457.8	523.8	569.4	585.9
57.5°	380.5	431.2	497.1	546.6	563.1
60°	346.2	400.8	473.1	521.2	539.0
62.5°	315.8	372.9	445.1	497.1	513.6
65°	281.5	343.7	418.5	470.5	487.0
67.5°	251.1	315.8	391.9	443.9	461.6
70°	218.1	284.1	362.7	417.2	432.5
72.5°	187.7	256.2	336.1	389.3	408.4
75°	156.0	227.0	308.2	362.7	379.2
77.5°	125.6	199.1	281.5	336.1	353.8
80°	95.1	172.5	254.9	308.2	325.9
82.5°	69.8	145.8	229.6	282.8	299.3
85°	45.7	124.3	205.5	258.7	276.5
87.5°	27.9	104.0	185.2	237.2	253.6
90°	13.8	101.2	205.4	254.4	270.2
92.5°	28.1	131.6	327.9	284.8	288.8
95°	49.2	165.8	583.4	359.2	336.6
97.5°	66.9	190.1	850.3	515.4	412.3
100°	94.9	211.0	1008.6	834.0	587.3
102.5°	119.2	230.4	1005.3	1279.8	956.7
105°	142.5	248.5	936.2	1632.0	1425.4
107.5°	169.3	266.8	871.5	1753.0	1737.9
110°	194.9	285.4	826.0	1721.6	1859.4

TEST NUMBER: P1009470

CATALOG NUMBER: S122DIP-B865D1080UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	219.4	304.4	792.5	1640.7	1848.3
115°	245.1	322.0	768.2	1542.4	1783.5
117.5°	270.6	341.0	750.3	1449.3	1690.7
120°	295.1	359.4	734.9	1363.7	1602.6
122.5°	318.6	379.6	722.9	1296.3	1508.6
125°	337.4	398.8	708.4	1234.4	1431.6
127.5°	354.1	418.2	697.4	1179.0	1357.8
130°	368.6	436.6	687.6	1124.4	1295.3
132.5°	382.0	454.5	678.9	1068.0	1231.7
135°	394.2	470.2	671.5	1012.8	1163.6
137.5°	406.5	483.5	665.1	957.1	1096.6
140°	421.0	494.5	658.9	906.8	1027.2
142.5°	435.5	504.6	656.4	859.6	959.3
145°	448.7	515.7	654.1	819.7	902.5
147.5°	464.4	524.6	650.8	784.9	850.1
150°	480.0	533.6	647.4	759.0	807.0
152.5°	495.6	542.5	641.8	738.4	774.7
155°	510.1	550.8	635.1	718.3	746.8
157.5°	522.4	557.6	628.4	699.3	722.2
160°	534.7	564.2	621.8	680.3	698.8
162.5°	547.0	569.3	616.2	662.5	676.4
165°	555.9	572.6	608.4	645.2	655.2
167.5°	563.7	576.0	601.7	629.6	635.1
170°	571.5	577.6	596.1	615.0	617.3
172.5°	576.0	579.4	589.4	602.2	602.8
175°	579.3	579.9	584.9	592.2	590.5
177.5°	581.6	580.5	580.5	584.9	581.6
180°	580.5	580.5	580.5	580.5	580.5

(END OF REPORT)