

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: P1029348

Luminaire Tested: S122DIW-B290D1440UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029348
REPORT IS A COMBINATION OF REPORTS P985594 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B290D1440UB2750-4F0-XX-W2A-D_3500K
Description: Define 2 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

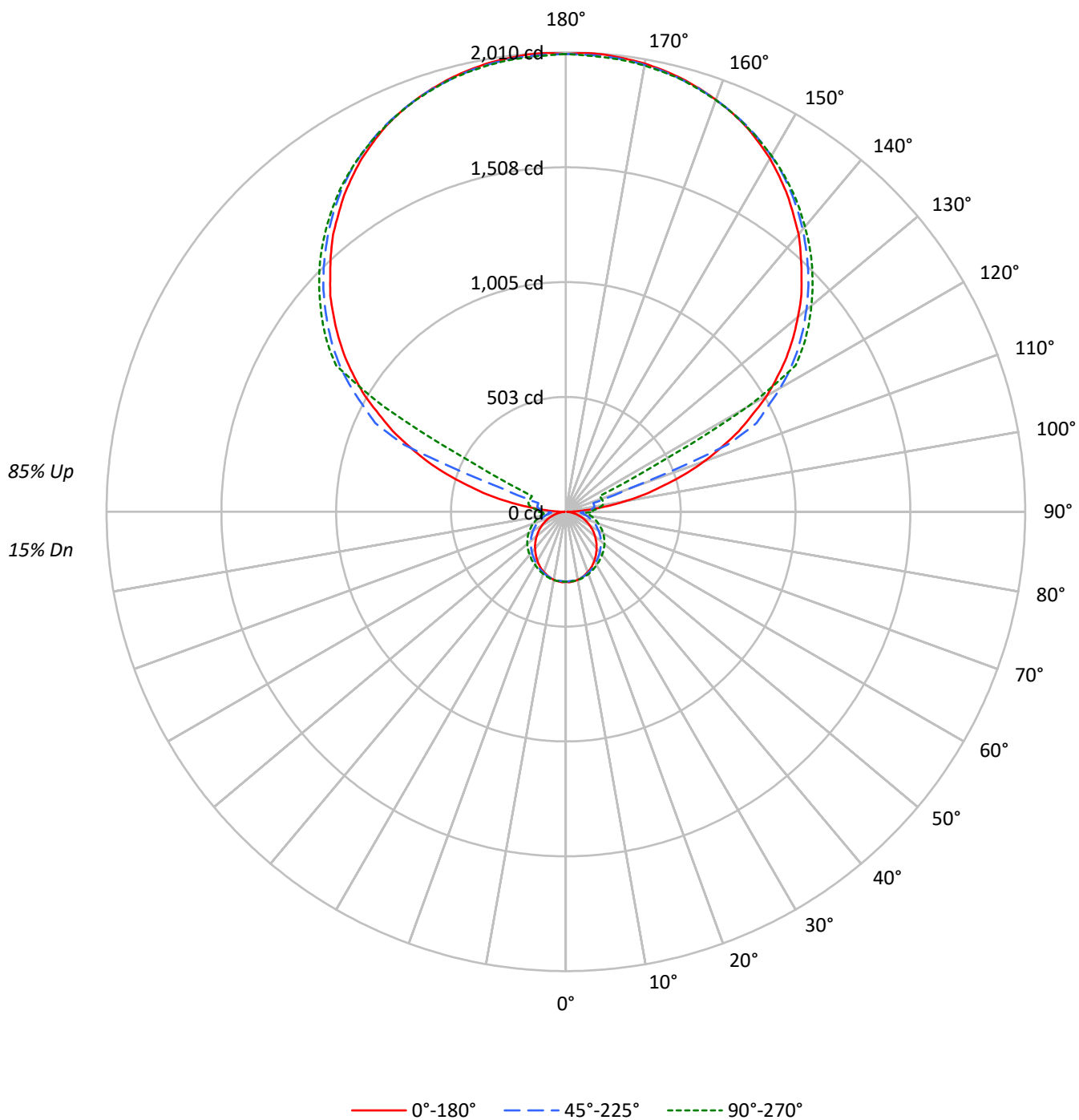
Lumens per Lamp: N/A
Luminaire Lumens: 7044.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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

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Luminous Intensity Polar Plot



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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	99	99	99	99	87	87	87	87	64	64	64	43	43	43	24	24	24
1	89	85	81	78	78	75	71	69	55	53	51	37	36	35	20	20	19
2	81	74	68	63	71	65	60	56	48	45	42	32	30	28	18	17	16
3	74	65	58	52	64	57	51	46	42	38	35	28	26	24	15	14	13
4	67	57	50	44	59	50	44	39	37	33	29	25	22	20	14	12	11
5	62	51	43	37	54	44	38	33	33	28	25	22	19	17	12	11	10
6	57	45	37	32	49	40	33	28	29	25	22	20	17	15	11	9	8
7	52	40	33	28	45	36	29	25	26	22	19	18	15	13	10	8	7
8	48	36	29	24	42	32	26	21	24	20	16	16	13	11	9	8	6
9	45	33	26	21	39	29	23	19	22	17	14	15	12	10	8	7	6
10	42	30	23	19	36	27	21	17	20	16	13	14	11	9	8	6	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4850	4850	4850
5°	4872	4643	4617
10°	4839	4483	4417
15°	4770	4315	4212
20°	4684	4141	4017
25°	4599	3973	3840
30°	4479	3804	3665
35°	4360	3639	3537
40°	4232	3498	3409
45°	4112	3370	3298
50°	3982	3252	3188
55°	3845	3126	3076
60°	3678	2994	2959
65°	3505	2843	2824
70°	3309	2682	2678
75°	3054	2520	2542
80°	2659	2351	2399
85°	2260	2192	2276

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4112 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	0.4
10°-20°	83.3	1.2
20°-30°	126.2	1.8
30°-40°	153.7	2.2
40°-50°	165.4	2.3
50°-60°	160.6	2.3
60°-70°	140.2	2.0
70°-80°	108.0	1.5
80°-90°	75.8	1.1
90°-100°	115.9	1.6
100°-110°	282.6	4.0
110°-120°	677.0	9.6
120°-130°	1096.3	15.6
130°-140°	1155.9	16.4
140°-150°	1070.0	15.2
150°-160°	859.5	12.2
160°-170°	553.8	7.9
170°-180°	190.6	2.7
0°-30°	238.5	3.4
0°-40°	392.2	5.6
0°-60°	718.2	10.2
0°-90°	1042.2	14.8
90°-120°	1075.5	15.3
90°-150°	4397.8	62.4
90°-180°	6002.0	85.2
0°-180°	7044.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	306	306	306	306	306	
5°	307	306	303	306	306	29
15°	293	294	294	298	298	83
25°	266	270	274	279	280	123
35°	230	237	246	255	258	143
45°	188	200	216	230	234	145
55°	144	160	183	199	205	129
65°	99	120	146	165	170	98
75°	55	80	108	127	133	58
85°	16	44	72	91	97	17
90°	6	48	88	113	121	8
95°	98	71	108	132	136	114
105°	443	499	127	158	169	473
115°	835	865	921	263	164	822
125°	1179	1198	1240	1262	1270	1052
135°	1458	1482	1499	1523	1524	1127
145°	1691	1690	1714	1727	1722	1058
155°	1862	1849	1867	1875	1864	858
165°	1962	1954	1958	1968	1958	554
175°	2007	1997	2000	2010	1996	191
180°	2003	2003	2003	2003	2003	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	306.4	306.4	306.4	306.4	306.4
2.5°	308.6	307.3	304.1	306.4	305.5
5°	307.3	305.9	303.3	305.9	305.5
7.5°	305.0	304.1	301.9	305.0	304.6
10°	302.4	301.5	300.2	303.7	303.3
12.5°	297.9	298.4	297.5	301.0	300.6
15°	293.0	293.9	293.9	297.9	297.5
17.5°	286.8	288.6	289.9	293.9	293.9
20°	280.6	282.8	284.6	289.5	289.5
22.5°	274.0	276.6	279.3	284.2	285.1
25°	266.4	269.5	273.5	278.8	280.2
27.5°	257.5	262.4	266.9	273.5	274.4
30°	248.6	254.4	260.2	267.3	268.6
32.5°	238.9	245.5	252.6	261.1	263.7
35°	229.6	237.1	245.5	255.3	258.4
37.5°	219.3	227.8	238.4	249.1	252.2
40°	209.1	218.9	230.9	242.4	246.4
42.5°	199.4	209.1	223.3	236.2	240.2
45°	188.3	200.3	215.8	229.6	234.0
47.5°	177.6	190.5	208.2	222.5	227.3
50°	166.5	180.3	200.3	215.3	220.2
52.5°	155.8	170.5	191.8	207.4	212.7
55°	144.3	160.3	183.4	199.4	205.1
57.5°	133.2	151.0	174.1	191.4	197.1
60°	121.2	140.3	165.6	182.5	188.7
62.5°	110.6	130.5	155.8	174.1	179.8
65°	98.6	120.3	146.5	164.7	170.5
67.5°	87.9	110.6	137.2	155.4	161.6
70°	76.4	99.5	127.0	146.1	151.4
72.5°	65.7	89.7	117.7	136.3	143.0
75°	54.6	79.5	107.9	127.0	132.8
77.5°	44.0	69.7	98.6	117.7	123.9
80°	33.3	60.4	89.2	107.9	114.1
82.5°	24.4	51.1	80.4	99.0	104.8
85°	16.0	43.5	71.9	90.6	96.8
87.5°	9.8	36.4	64.8	83.0	88.8
90°	5.8	47.6	87.6	112.6	120.8
92.5°	40.2	57.9	89.4	109.6	116.4
95°	97.8	70.8	107.6	131.7	135.6
97.5°	172.7	72.9	121.9	142.7	149.4
100°	259.6	77.5	127.0	155.0	162.8
102.5°	354.9	366.6	126.8	158.7	168.0
105°	442.8	499.1	126.6	158.0	168.7
107.5°	545.6	592.6	126.4	157.4	168.1
110°	643.8	683.1	286.0	155.3	166.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	736.5	769.7	765.5	155.1	164.3
115°	835.1	864.6	920.8	263.2	163.6
117.5°	920.1	952.7	995.9	802.1	426.8
120°	1015.7	1039.3	1083.2	1113.0	922.2
122.5°	1096.9	1120.6	1166.0	1186.7	1192.1
125°	1179.1	1197.9	1239.7	1261.8	1270.2
127.5°	1254.5	1274.2	1308.0	1333.6	1339.0
130°	1325.5	1348.2	1373.5	1400.0	1402.2
132.5°	1397.9	1416.3	1438.9	1462.1	1464.3
135°	1458.3	1481.5	1499.0	1522.8	1523.5
137.5°	1522.1	1539.4	1556.2	1579.1	1577.9
140°	1584.4	1595.6	1612.4	1632.5	1628.0
142.5°	1636.5	1646.3	1665.1	1682.0	1677.0
145°	1691.2	1689.8	1714.4	1727.2	1722.2
147.5°	1739.0	1734.7	1759.3	1767.0	1762.6
150°	1785.4	1775.3	1798.5	1807.1	1799.9
152.5°	1824.5	1812.9	1834.7	1843.4	1833.2
155°	1862.2	1849.2	1866.6	1875.3	1863.7
157.5°	1892.7	1881.1	1894.1	1904.2	1892.7
160°	1918.7	1910.0	1918.7	1927.4	1917.3
162.5°	1941.9	1933.2	1940.5	1950.6	1937.6
165°	1962.2	1953.5	1957.9	1968.0	1957.9
167.5°	1978.2	1969.5	1973.8	1983.9	1970.9
170°	1991.2	1982.5	1985.4	1995.5	1982.5
172.5°	1999.9	1991.2	1994.1	2004.2	1991.2
175°	2007.1	1997.0	1999.9	2010.0	1995.5
177.5°	2010.0	1999.9	2001.3	2011.5	1998.4
180°	2002.8	2002.8	2002.8	2002.8	2002.8

(END OF REPORT)