

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: P1032597

Luminaire Tested: S124DIW-B1195D470UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032597
REPORT IS A COMBINATION OF REPORTS P997174 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D470UB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

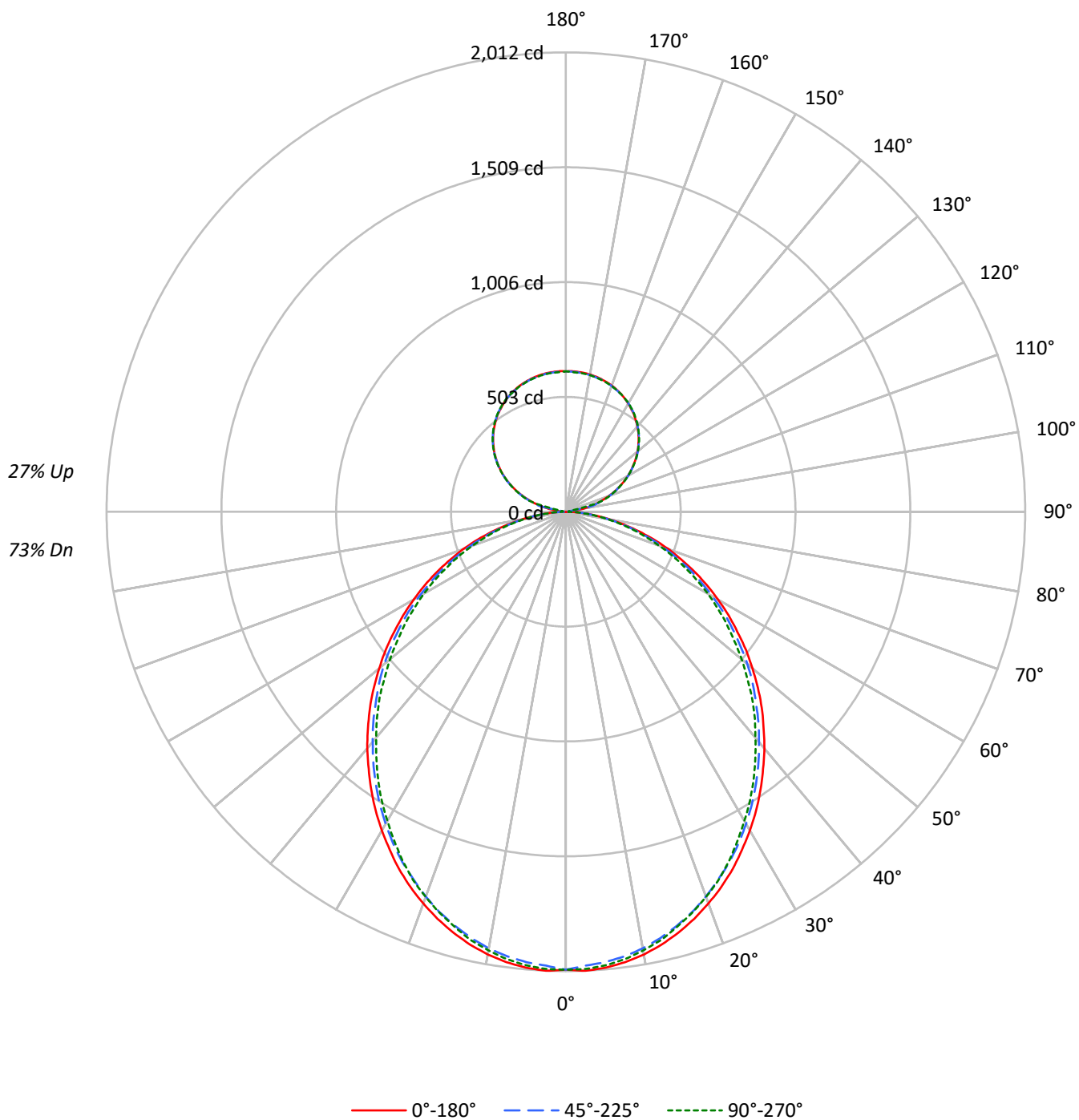
Lumens per Lamp: N/A
Luminaire Lumens: 7053.0 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	50	30	10
RCR																				
0	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	77	77	73
1	103	98	94	91	97	94	90	87	84	82	79	76	74	72	68	67	65	65	65	61
2	94	86	80	74	89	82	76	71	74	69	66	67	63	60	60	57	55	55	55	51
3	86	76	68	62	81	72	65	60	65	60	55	59	55	51	53	50	47	47	47	44
4	78	67	59	52	74	64	56	51	58	52	47	53	48	44	48	44	40	40	40	37
5	72	60	51	45	68	57	49	44	52	46	41	47	42	38	43	39	35	35	35	32
6	66	54	45	39	63	52	44	38	47	41	36	43	37	33	39	35	31	31	31	28
7	62	49	40	35	58	47	39	34	43	36	32	39	34	30	36	31	28	28	28	25
8	57	44	36	31	54	43	35	30	39	33	28	36	30	26	33	28	25	25	25	23
9	53	41	33	28	51	39	32	27	36	30	25	33	28	24	30	26	22	22	22	20
10	50	37	30	25	47	36	29	24	33	27	23	31	25	22	28	24	20	20	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16355	16355	16355
5°	16369	15885	15904
10°	16230	15444	15336
15°	15998	14919	14694
20°	15700	14353	14031
25°	15366	13753	13316
30°	14962	13105	12531
35°	14544	12442	11773
40°	14109	11728	10966
45°	13652	11012	10212
50°	13146	10318	9377
55°	12597	9508	8547
60°	12034	8620	7684
65°	11391	7704	6709
70°	10648	6599	5666
75°	9542	5320	4539
80°	8131	3845	3192
85°	6316	2142	1719

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13652 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	2.7
10°-20°	532.6	7.6
20°-30°	783.8	11.1
30°-40°	911.2	12.9
40°-50°	911.1	12.9
50°-60°	796.9	11.3
60°-70°	591.6	8.4
70°-80°	335.7	4.8
80°-90°	97.4	1.4
90°-100°	20.4	0.3
100°-110°	134.5	1.9
110°-120°	256.8	3.6
120°-130°	326.0	4.6
130°-140°	348.8	4.9
140°-150°	326.1	4.6
150°-160°	263.0	3.7
160°-170°	169.6	2.4
170°-180°	58.5	0.8
0°-30°	1505.5	21.3
0°-40°	2416.7	34.3
0°-60°	4124.6	58.5
0°-90°	5149.3	73.0
90°-120°	411.7	5.8
90°-150°	1412.7	20.0
90°-180°	1904.0	27.0
0°-180°	7053.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2006	2006	2006	2006	2006	
5°	2004	1998	1980	1998	1994	190
15°	1908	1901	1877	1887	1882	538
25°	1728	1716	1694	1696	1689	795
35°	1487	1475	1453	1442	1434	930
45°	1213	1202	1176	1159	1154	935
55°	918	913	890	871	861	822
65°	622	614	598	582	574	616
75°	331	323	315	309	307	351
85°	87	87	84	84	82	93
90°	1	6	10	13	14	7
95°	25	10	10	13	13	31
105°	138	141	144	148	131	145
115°	259	260	260	260	260	255
125°	364	365	364	366	366	325
135°	451	450	452	453	454	347
145°	520	521	521	522	523	325
155°	570	571	569	571	570	263
165°	601	599	599	603	599	170
175°	615	612	613	617	612	59
180°	615	615	615	615	615	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2005.7	2005.7	2005.7	2005.7	2005.7
2.5°	2012.1	2007.3	1989.6	2005.7	2004.1
5°	2004.1	1997.7	1980.0	1997.7	1994.4
7.5°	1989.6	1983.2	1963.9	1978.4	1976.8
10°	1968.7	1962.3	1941.4	1954.3	1951.1
12.5°	1941.4	1935.0	1912.5	1926.9	1922.1
15°	1907.7	1901.2	1877.1	1886.8	1881.9
17.5°	1869.1	1861.1	1838.6	1845.0	1841.8
20°	1825.7	1817.7	1793.6	1798.4	1795.2
22.5°	1779.1	1767.8	1743.7	1753.4	1746.9
25°	1727.7	1716.4	1693.9	1695.5	1689.1
27.5°	1669.8	1658.6	1637.7	1634.4	1626.4
30°	1611.9	1599.1	1578.2	1571.8	1563.7
32.5°	1550.9	1539.6	1517.1	1509.1	1501.1
35°	1486.6	1475.3	1452.8	1441.6	1433.6
37.5°	1419.1	1409.4	1385.3	1374.1	1362.8
40°	1353.2	1340.3	1316.2	1300.2	1292.1
42.5°	1282.5	1276.1	1248.7	1229.5	1224.6
45°	1213.4	1202.1	1176.4	1158.7	1153.9
47.5°	1141.1	1133.0	1108.9	1089.6	1076.8
50°	1067.1	1060.7	1038.2	1015.7	1006.1
52.5°	994.8	986.8	962.7	943.4	930.5
55°	917.7	912.8	890.3	871.1	861.4
57.5°	845.3	840.5	818.0	798.7	789.1
60°	769.8	761.8	740.9	726.4	718.4
62.5°	695.9	689.5	667.0	654.1	646.1
65°	622.0	613.9	597.9	581.8	573.7
67.5°	546.4	540.0	523.9	507.9	506.2
70°	477.3	466.1	453.2	440.4	435.5
72.5°	403.4	392.1	382.5	372.9	368.0
75°	331.1	323.0	315.0	308.6	307.0
77.5°	260.4	257.1	249.1	247.5	242.7
80°	197.7	192.9	189.6	186.4	184.8
82.5°	136.6	135.0	135.0	133.4	131.8
85°	86.8	86.8	83.6	83.6	82.0
87.5°	41.8	40.2	38.6	38.6	38.6
90°	1.4	6.4	10.1	12.9	13.8
92.5°	6.9	6.0	9.7	12.4	12.4
95°	25.3	9.7	10.1	12.9	13.3
97.5°	48.3	58.4	10.1	12.4	12.9
100°	75.5	83.7	20.2	12.4	12.9
102.5°	105.8	111.4	116.9	13.3	13.3
105°	138.5	141.3	143.6	147.7	131.1
107.5°	168.4	169.8	173.0	175.3	177.2
110°	198.8	200.2	202.9	203.8	205.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	228.2	231.0	231.9	231.5	233.3
115°	258.6	260.0	259.5	260.4	260.4
117.5°	285.8	287.6	289.0	288.5	288.5
120°	313.4	315.2	314.7	315.7	314.7
122.5°	339.1	340.1	341.0	341.4	340.5
125°	363.5	365.4	364.4	365.8	366.3
127.5°	387.0	387.5	389.8	389.3	388.8
130°	409.5	410.0	411.4	411.8	411.8
132.5°	430.2	431.2	433.0	433.5	433.0
135°	451.0	450.5	452.3	453.3	454.2
137.5°	469.4	469.4	471.7	472.6	472.1
140°	487.3	488.2	489.1	490.5	491.0
142.5°	503.4	505.3	505.7	506.6	506.6
145°	520.0	521.4	521.4	521.8	522.7
147.5°	532.9	535.6	535.2	535.6	536.1
150°	547.1	549.0	548.5	548.5	549.0
152.5°	559.1	560.5	559.5	560.5	560.0
155°	570.1	570.6	569.2	571.1	569.7
157.5°	579.8	579.8	578.0	580.3	578.0
160°	588.1	586.7	586.2	589.0	586.2
162.5°	595.4	593.6	593.1	595.9	592.7
165°	601.4	599.1	599.1	602.8	598.7
167.5°	606.5	604.2	603.7	607.9	603.3
170°	610.6	607.9	608.3	612.0	607.4
172.5°	613.4	610.6	611.1	614.8	609.7
175°	615.2	612.5	612.9	617.1	611.5
177.5°	616.6	613.4	614.3	618.0	612.5
180°	615.2	615.2	615.2	615.2	615.2

(END OF REPORT)