

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: P1033340

Luminaire Tested: S124DIW-B1195D470UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033340
REPORT IS A COMBINATION OF REPORTS P997193 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D470UB35-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

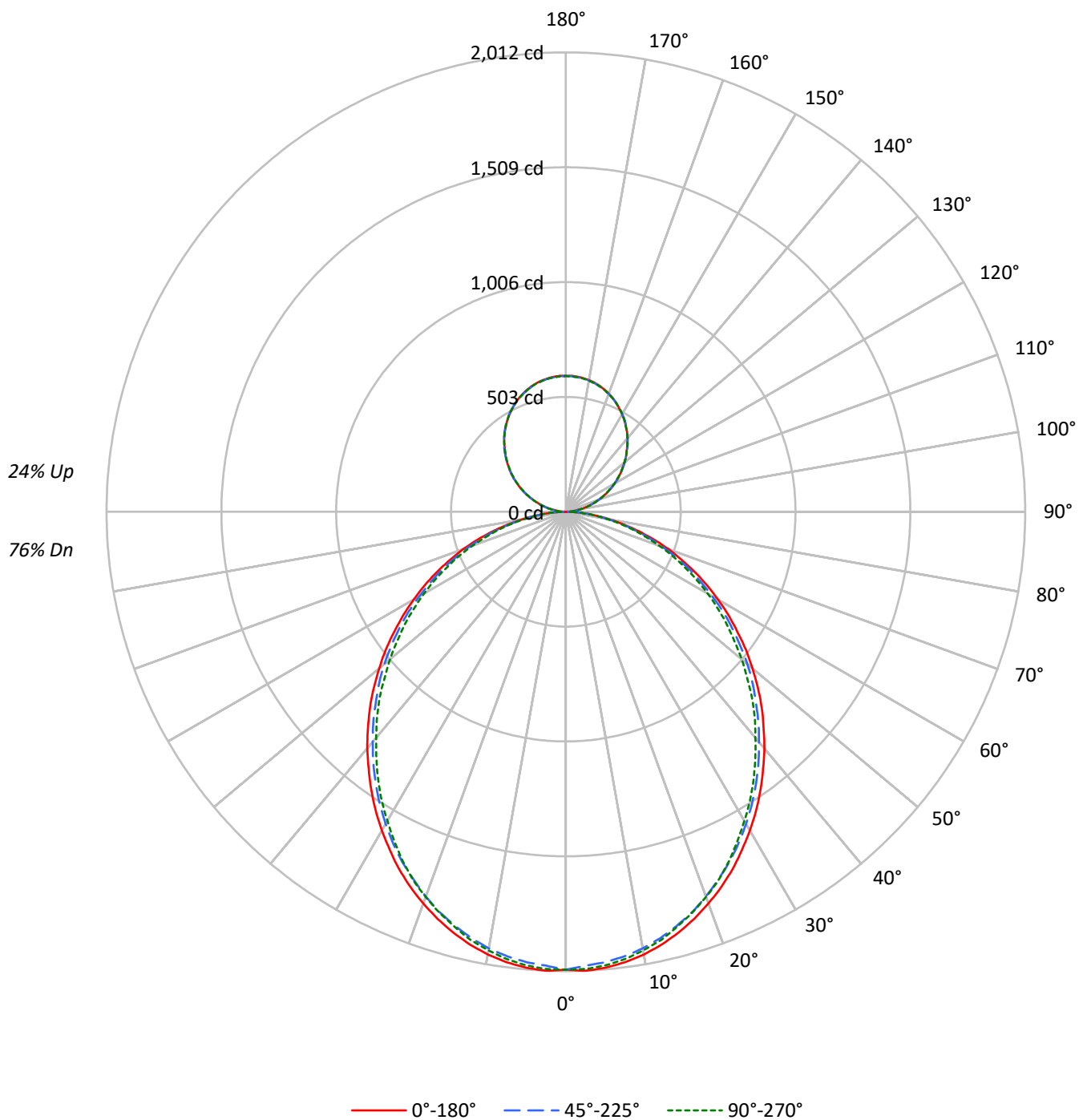
Lumens per Lamp: N/A
Luminaire Lumens: 6800.0 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1033340

CATALOG NUMBER: S124DIW-B1195D470UB35-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1033340

CATALOG NUMBER: S124DIW-B1195D470UB35-4F0-XX-W2A-F1

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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80
1	104	99	95	91	98	94	91	87	86	83	80	78	76	74	70	69	67
2	94	86	80	75	89	83	77	72	75	71	67	68	65	62	62	59	57
3	86	76	68	62	82	73	66	60	66	61	56	60	56	52	55	51	48
4	79	67	59	53	75	65	57	51	59	53	48	54	49	45	49	45	42
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36
6	67	54	46	40	63	52	44	39	48	41	36	44	38	34	40	36	32
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	37	32	29
8	58	45	37	31	55	43	36	30	40	33	29	37	31	27	34	29	26
9	54	41	33	28	51	40	32	27	37	30	26	34	28	24	31	27	23
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21

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

TEST NUMBER: P1033340

CATALOG NUMBER: S124DIW-B1195D470UB35-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	2.8
10°-20°	532.6	7.8
20°-30°	783.8	11.5
30°-40°	911.2	13.4
40°-50°	911.1	13.4
50°-60°	796.9	11.7
60°-70°	591.6	8.7
70°-80°	335.7	4.9
80°-90°	97.4	1.4
90°-100°	38.8	0.6
100°-110°	116.2	1.7
110°-120°	197.3	2.9
120°-130°	260.2	3.8
130°-140°	292.3	4.3
140°-150°	287.3	4.2
150°-160°	241.6	3.6
160°-170°	160.8	2.4
170°-180°	56.3	0.8
0°-30°	1505.5	22.1
0°-40°	2416.7	35.5
0°-60°	4124.6	60.7
0°-90°	5149.3	75.7
90°-120°	352.3	5.2
90°-150°	1192.1	17.5
90°-180°	1651.0	24.3
0°-180°	6800.0	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	8
95°	28	32	35	36	36	30
105°	107	108	110	111	112	114
115°	201	201	200	199	199	198
125°	292	292	292	291	290	260
135°	377	380	380	379	377	292
145°	458	460	460	460	458	287
155°	524	524	524	526	524	241
165°	571	570	569	572	570	161
175°	594	592	591	594	591	56
180°	595	595	595	595	595	

TEST NUMBER: P1033340

CATALOG NUMBER: S124DIW-B1195D470UB35-4F0-XX-W2A-F1

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°	12.0	17.9	20.2	21.6	22.1
95°	27.6	31.7	35.0	36.3	36.3
97.5°	44.2	47.9	51.5	53.4	53.4
100°	64.4	66.3	70.4	71.3	71.3
102.5°	85.6	86.0	89.7	91.1	91.6
105°	107.2	107.7	109.5	110.9	112.3
107.5°	129.8	130.2	130.7	132.5	132.1
110°	152.8	153.7	153.2	152.3	153.7



TEST NUMBER: P1033340

CATALOG NUMBER: S124DIW-B1195D470UB35-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.7	176.7	175.8	175.8	175.8
115°	200.6	200.6	199.7	199.2	198.8
117.5°	223.2	223.2	222.7	221.3	219.9
120°	245.7	247.5	246.2	243.9	244.8
122.5°	269.2	269.6	269.2	267.8	265.5
125°	292.2	292.2	291.7	290.8	289.9
127.5°	312.9	314.3	313.3	312.4	312.0
130°	335.0	336.3	336.3	335.4	333.6
132.5°	357.5	358.4	358.0	357.1	356.6
135°	376.8	379.6	379.6	378.7	377.3
137.5°	398.5	399.8	400.8	399.4	399.8
140°	420.1	421.0	421.0	420.6	420.1
142.5°	439.9	440.8	440.3	440.3	440.3
145°	457.8	459.7	460.1	459.7	458.3
147.5°	476.2	478.5	478.1	477.6	477.1
150°	492.8	494.6	494.6	494.6	494.2
152.5°	508.4	509.4	509.8	511.2	509.8
155°	524.5	524.5	524.1	525.9	524.1
157.5°	538.3	537.4	537.4	538.8	537.4
160°	550.3	549.8	549.4	550.8	548.5
162.5°	561.3	560.0	559.5	562.3	560.0
165°	571.0	569.6	568.7	571.5	569.6
167.5°	578.8	577.0	577.0	579.8	577.0
170°	585.3	583.0	583.4	586.2	583.0
172.5°	589.9	588.0	588.0	591.3	588.0
175°	594.0	591.7	591.3	594.5	591.3
177.5°	595.9	593.6	593.6	596.8	593.1
180°	594.9	594.9	594.9	594.9	594.9

(END OF REPORT)