

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: P1033606

Luminaire Tested: S124DIW-B575D1560UB35-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033606
REPORT IS A COMBINATION OF REPORTS P997786 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1560UB35-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

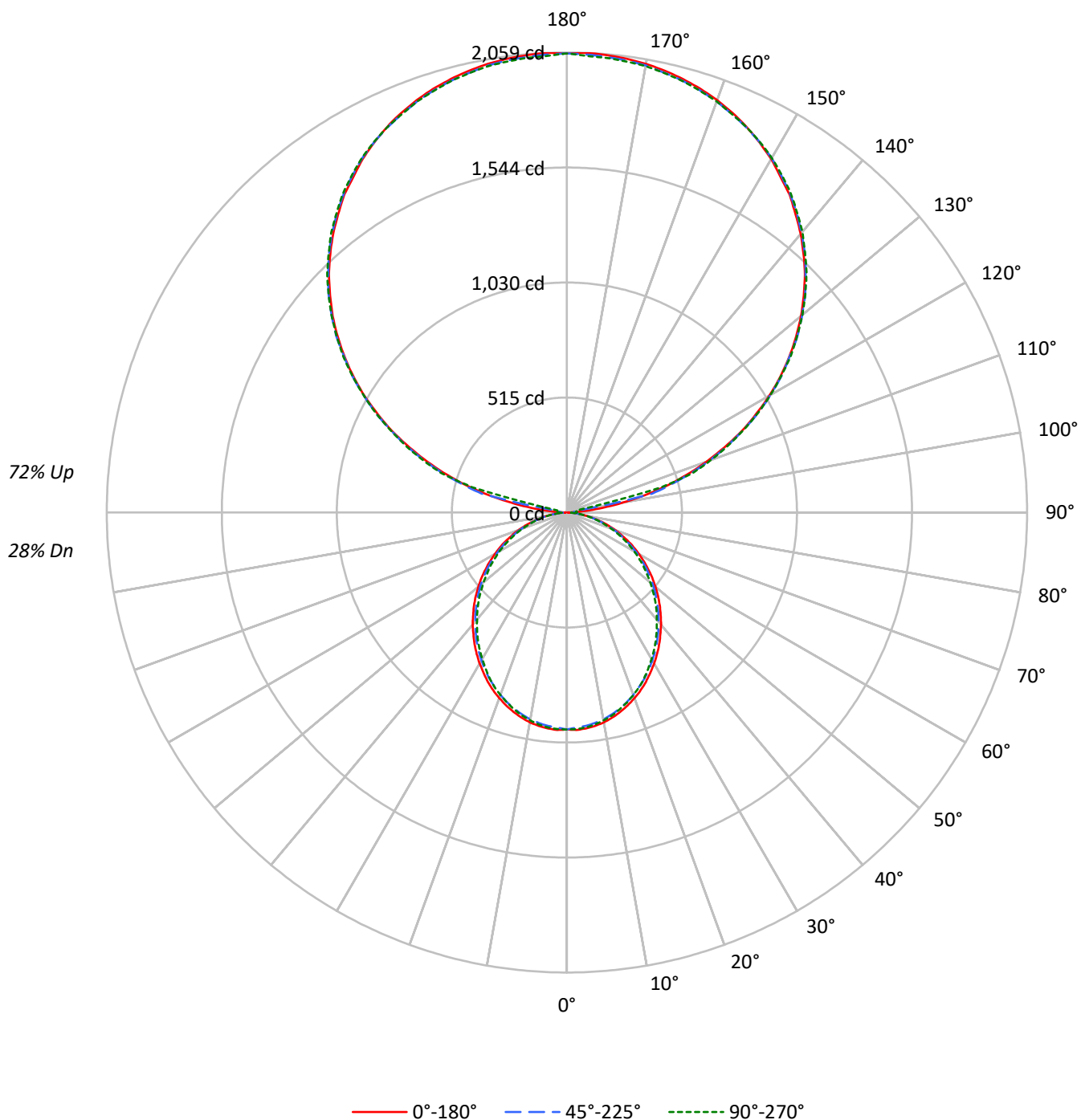
Lumens per Lamp: N/A
Luminaire Lumens: 8855.0 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 76.2
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	93	89	85	82	83	79	76	73	62	60	58	46	45	44	32	31	30
2	85	77	71	66	75	69	64	60	54	51	48	41	39	37	28	27	26
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22
4	70	60	52	47	63	54	47	42	43	38	34	32	29	26	22	20	19
5	65	53	46	40	57	48	41	36	38	33	29	29	25	23	20	18	16
6	59	48	40	34	53	43	36	31	34	29	26	26	22	20	18	16	14
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13
8	51	39	31	26	45	35	29	24	28	23	20	21	18	15	15	13	11
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7920	7920	7920
5°	7927	7692	7702
10°	7860	7479	7426
15°	7747	7225	7116
20°	7603	6951	6794
25°	7441	6660	6449
30°	7246	6347	6069
35°	7043	6026	5701
40°	6832	5680	5310
45°	6611	5333	4946
50°	6367	4997	4541
55°	6100	4605	4140
60°	5828	4175	3721
65°	5516	3730	3249
70°	5156	3196	2744
75°	4619	2575	2199
80°	3936	1862	1546
85°	3056	1038	832

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6611 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	1.0
10°-20°	257.9	2.9
20°-30°	379.6	4.3
30°-40°	441.2	5.0
40°-50°	441.2	5.0
50°-60°	385.9	4.4
60°-70°	286.5	3.2
70°-80°	162.5	1.8
80°-90°	50.8	0.6
90°-100°	68.2	0.8
100°-110°	449.2	5.1
110°-120°	857.7	9.7
120°-130°	1088.8	12.3
130°-140°	1164.8	13.2
140°-150°	1089.2	12.3
150°-160°	878.3	9.9
160°-170°	566.4	6.4
170°-180°	195.2	2.2
0°-30°	729.1	8.2
0°-40°	1170.3	13.2
0°-60°	1997.4	22.6
0°-90°	2497.2	28.2
90°-120°	1375.0	15.5
90°-150°	4717.8	53.3
90°-180°	6358.0	71.8
0°-180°	8855.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	970	967	959	967	966	92
15°	924	921	909	914	911	260
25°	837	831	820	821	818	385
35°	720	714	704	698	694	450
45°	588	582	570	561	559	453
55°	444	442	431	422	417	398
65°	301	297	290	282	278	298
75°	160	156	152	149	149	170
85°	42	42	40	40	40	45
90°	5	22	34	43	46	7
95°	84	32	34	43	45	104
105°	463	472	480	493	438	484
115°	864	868	867	870	870	850
125°	1214	1220	1217	1222	1223	1084
135°	1506	1504	1511	1514	1517	1160
145°	1736	1741	1741	1743	1746	1085
155°	1904	1906	1901	1907	1902	878
165°	2008	2001	2001	2013	1999	568
175°	2055	2045	2047	2061	2042	196
180°	2055	2055	2055	2055	2055	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	971.3	971.3	971.3	971.3	971.3
2.5°	974.4	972.1	963.5	971.3	970.5
5°	970.5	967.4	958.8	967.4	965.8
7.5°	963.5	960.4	951.1	958.1	957.3
10°	953.4	950.3	940.2	946.4	944.8
12.5°	940.2	937.0	926.1	933.2	930.8
15°	923.8	920.7	909.0	913.7	911.4
17.5°	905.1	901.2	890.3	893.5	891.9
20°	884.1	880.2	868.6	870.9	869.3
22.5°	861.6	856.1	844.4	849.1	846.0
25°	836.6	831.2	820.3	821.1	818.0
27.5°	808.6	803.2	793.1	791.5	787.6
30°	780.6	774.4	764.3	761.2	757.3
32.5°	751.0	745.6	734.7	730.8	726.9
35°	719.9	714.5	703.6	698.1	694.2
37.5°	687.2	682.5	670.9	665.4	660.0
40°	655.3	649.1	637.4	629.6	625.7
42.5°	621.1	618.0	604.7	595.4	593.0
45°	587.6	582.2	569.7	561.1	558.8
47.5°	552.6	548.7	537.0	527.7	521.4
50°	516.8	513.7	502.8	491.9	487.2
52.5°	481.8	477.9	466.2	456.8	450.6
55°	444.4	442.1	431.2	421.8	417.2
57.5°	409.4	407.0	396.1	386.8	382.1
60°	372.8	368.9	358.8	351.8	347.9
62.5°	337.0	333.9	323.0	316.8	312.9
65°	301.2	297.3	289.5	281.7	277.8
67.5°	264.6	261.5	253.7	245.9	245.2
70°	231.1	225.7	219.5	213.2	210.9
72.5°	195.3	189.9	185.2	180.6	178.2
75°	160.3	156.4	152.5	149.4	148.7
77.5°	126.1	124.5	120.6	119.9	117.5
80°	95.7	93.4	91.8	90.3	89.5
82.5°	66.2	65.4	65.4	64.6	63.8
85°	42.0	42.0	40.5	40.5	39.7
87.5°	20.2	19.5	18.7	18.7	18.7
90°	4.6	21.5	33.8	43.0	46.1
92.5°	23.1	20.0	32.3	41.5	41.5
95°	84.5	32.3	33.8	43.0	44.6
97.5°	161.4	195.2	33.8	41.5	43.0
100°	252.0	279.7	67.6	41.5	43.0
102.5°	353.5	371.9	390.3	44.6	44.6
105°	462.6	471.8	479.5	493.3	438.0
107.5°	562.4	567.1	577.8	585.5	591.6
110°	663.9	668.5	677.7	680.8	685.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	762.2	771.4	774.5	773.0	779.1
115°	863.7	868.3	866.7	869.8	869.8
117.5°	954.3	960.5	965.1	963.5	963.5
120°	1046.5	1052.7	1051.1	1054.2	1051.1
122.5°	1132.6	1135.7	1138.7	1140.3	1137.2
125°	1214.0	1220.2	1217.1	1221.7	1223.3
127.5°	1292.4	1293.9	1301.6	1300.1	1298.6
130°	1367.7	1369.2	1373.9	1375.4	1375.4
132.5°	1436.9	1439.9	1446.1	1447.6	1446.1
135°	1506.0	1504.5	1510.6	1513.7	1516.8
137.5°	1567.5	1567.5	1575.2	1578.2	1576.7
140°	1627.4	1630.5	1633.6	1638.2	1639.7
142.5°	1681.2	1687.3	1688.9	1692.0	1692.0
145°	1736.5	1741.1	1741.1	1742.7	1745.7
147.5°	1779.6	1788.8	1787.2	1788.8	1790.3
150°	1827.2	1833.3	1831.8	1831.8	1833.3
152.5°	1867.1	1871.8	1868.7	1871.8	1870.2
155°	1904.0	1905.6	1901.0	1907.1	1902.5
157.5°	1936.3	1936.3	1930.2	1937.8	1930.2
160°	1964.0	1959.4	1957.8	1967.0	1957.8
162.5°	1988.6	1982.4	1980.9	1990.1	1979.3
165°	2008.5	2000.8	2000.8	2013.1	1999.3
167.5°	2025.4	2017.8	2016.2	2030.0	2014.7
170°	2039.3	2030.0	2031.6	2043.9	2028.5
172.5°	2048.5	2039.3	2040.8	2053.1	2036.2
175°	2054.6	2045.4	2046.9	2060.8	2042.3
177.5°	2059.2	2048.5	2051.6	2063.9	2045.4
180°	2054.6	2054.6	2054.6	2054.6	2054.6

(END OF REPORT)