

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: P1032967

Luminaire Tested: S124RDIW-B350D1560UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032967
REPORT IS A COMBINATION OF REPORTS P1000364 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D1560UB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

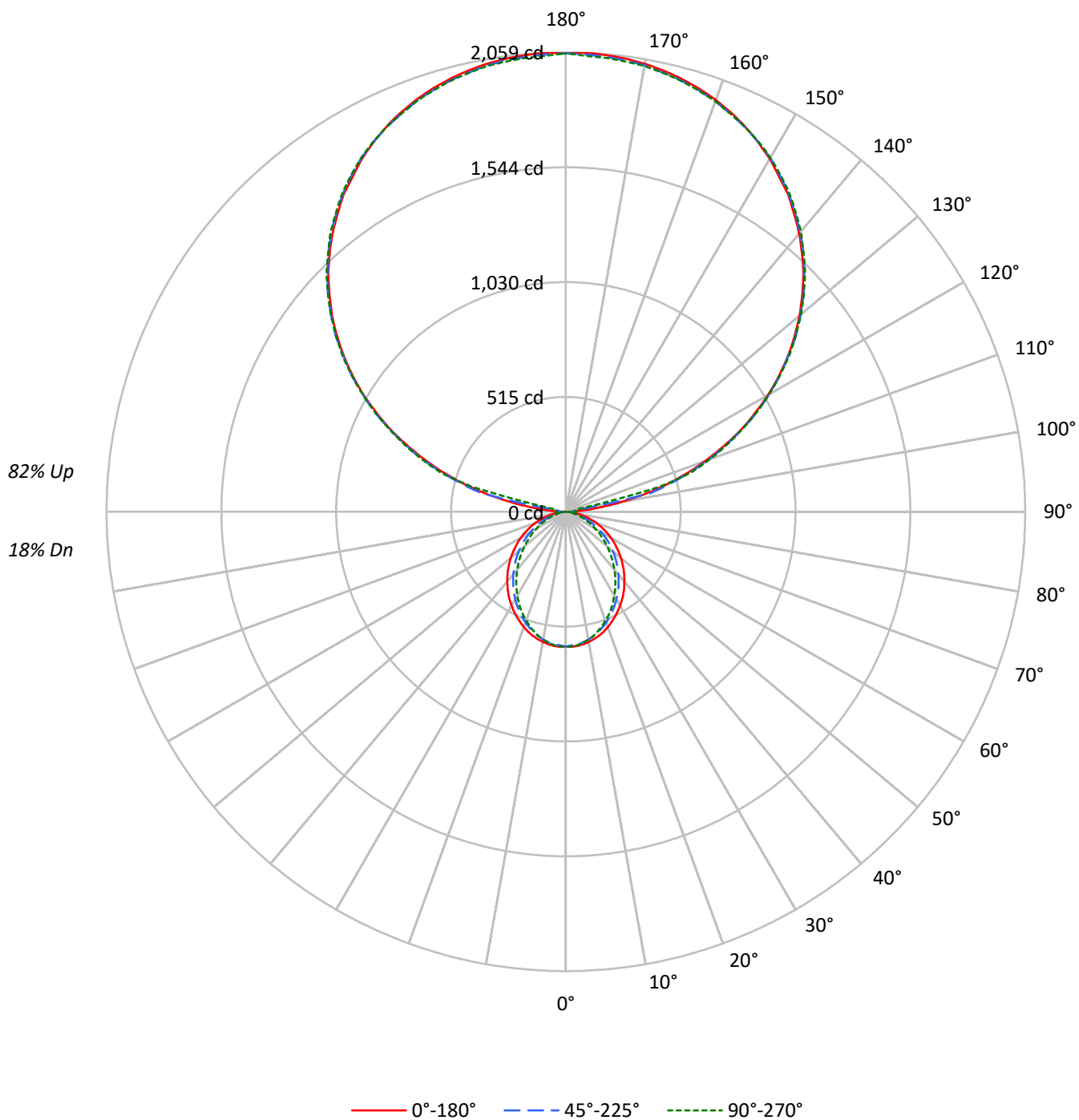
Lumens per Lamp: N/A
Luminaire Lumens: 7758.0 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	100	100	100	100	88	88	88	88	66	66	66	45	45	45	27	27	27	15	15	15
1	91	87	83	80	80	76	73	71	57	55	54	40	39	38	24	23	23	15	15	15
2	83	76	70	65	73	67	62	58	50	47	45	35	33	32	21	20	19	13	13	13
3	75	67	60	54	66	59	53	49	44	41	37	31	29	27	19	17	16	11	11	11
4	69	59	51	46	60	52	46	41	39	35	32	28	25	23	17	15	14	10	10	10
5	63	52	45	39	55	46	40	35	35	31	27	25	22	20	15	14	12	8	8	8
6	58	47	39	34	51	41	35	30	31	27	24	22	19	17	14	12	11	7	7	7
7	53	42	34	29	47	37	31	26	28	24	21	20	17	15	12	11	10	7	7	7
8	49	38	31	26	43	34	27	23	26	21	18	18	15	13	11	10	9	6	6	6
9	46	34	27	23	40	31	25	20	24	19	16	17	14	12	10	9	8	5	5	5
10	43	31	25	20	38	28	22	18	22	17	14	15	13	11	10	8	7	5	5	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4927	4927	4927
5°	4927	4780	4781
10°	4885	4630	4575
15°	4819	4441	4331
20°	4730	4228	4053
25°	4620	3996	3782
30°	4513	3761	3477
35°	4395	3522	3180
40°	4254	3265	2874
45°	4122	3010	2571
50°	3972	2731	2264
55°	3811	2446	1946
60°	3630	2142	1633
65°	3456	1794	1331
70°	3210	1429	1017
75°	2893	1039	711
80°	2418	639	511
85°	1819	366	281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	0.7
10°-20°	158.4	2.0
20°-30°	228.7	2.9
30°-40°	259.2	3.3
40°-50°	250.3	3.2
50°-60°	208.1	2.7
60°-70°	143.6	1.9
70°-80°	72.6	0.9
80°-90°	22.7	0.3
90°-100°	68.2	0.9
100°-110°	449.2	5.8
110°-120°	857.7	11.1
120°-130°	1088.8	14.0
130°-140°	1164.8	15.0
140°-150°	1089.2	14.0
150°-160°	878.3	11.3
160°-170°	566.4	7.3
170°-180°	195.2	2.5
0°-30°	443.9	5.7
0°-40°	703.1	9.1
0°-60°	1161.4	15.0
0°-90°	1400.2	18.0
90°-120°	1375.0	17.7
90°-150°	4717.8	60.8
90°-180°	6358.0	82.0
0°-180°	7758.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	604	604	604	604	604	
5°	603	601	596	600	600	57
15°	575	570	559	558	555	162
25°	520	511	492	484	480	239
35°	449	434	411	396	387	281
45°	366	349	322	299	290	283
55°	278	259	229	205	196	248
65°	189	169	139	119	114	186
75°	100	83	62	51	48	106
85°	25	16	14	13	13	27
90°	5	22	34	43	46	6
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°	604.2	604.2	604.2	604.2	604.2
2.5°	606.0	604.2	599.1	604.2	603.7
5°	603.2	601.4	595.8	600.5	599.5
7.5°	599.1	597.2	590.3	593.5	592.1
10°	592.6	590.3	582.0	583.8	582.0
12.5°	584.3	581.5	571.3	572.3	569.5
15°	574.6	570.4	558.8	557.9	554.7
17.5°	563.5	557.4	544.0	541.7	537.1
20°	550.0	544.0	528.3	524.6	518.6
22.5°	535.2	528.3	511.2	505.2	500.5
25°	519.5	511.2	492.2	484.4	479.7
27.5°	503.3	493.1	473.3	464.0	457.5
30°	486.2	474.6	452.9	441.3	433.9
32.5°	468.2	454.7	432.1	418.2	411.3
35°	449.2	434.4	411.3	395.5	387.2
37.5°	429.3	414.0	388.6	371.5	363.1
40°	408.0	392.8	366.4	347.0	338.6
42.5°	387.7	371.5	343.7	323.8	315.0
45°	366.4	349.3	321.5	298.8	290.5
47.5°	344.6	327.1	298.4	274.8	265.5
50°	322.4	304.4	274.8	251.7	242.9
52.5°	299.8	282.2	251.7	228.1	218.8
55°	277.6	259.1	229.0	204.9	196.1
57.5°	255.8	236.4	206.8	182.3	175.8
60°	232.2	213.7	184.1	160.1	152.7
62.5°	211.0	191.5	161.0	139.2	133.7
65°	188.7	168.9	139.2	119.4	113.8
67.5°	165.6	146.6	118.9	101.3	94.8
70°	143.9	124.4	98.1	82.8	78.2
72.5°	120.7	103.6	79.1	66.6	62.5
75°	100.4	83.3	61.5	50.9	48.1
77.5°	79.1	64.3	45.8	38.4	37.5
80°	58.8	45.3	31.5	30.1	29.6
82.5°	41.2	29.1	22.7	21.7	21.3
85°	25.0	15.7	14.3	13.4	13.4
87.5°	10.6	6.9	6.5	6.0	6.5
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)