

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: P1034077

Luminaire Tested: S124RDIW-B350D1560UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034077
REPORT IS A COMBINATION OF REPORTS P1000389 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D1560UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

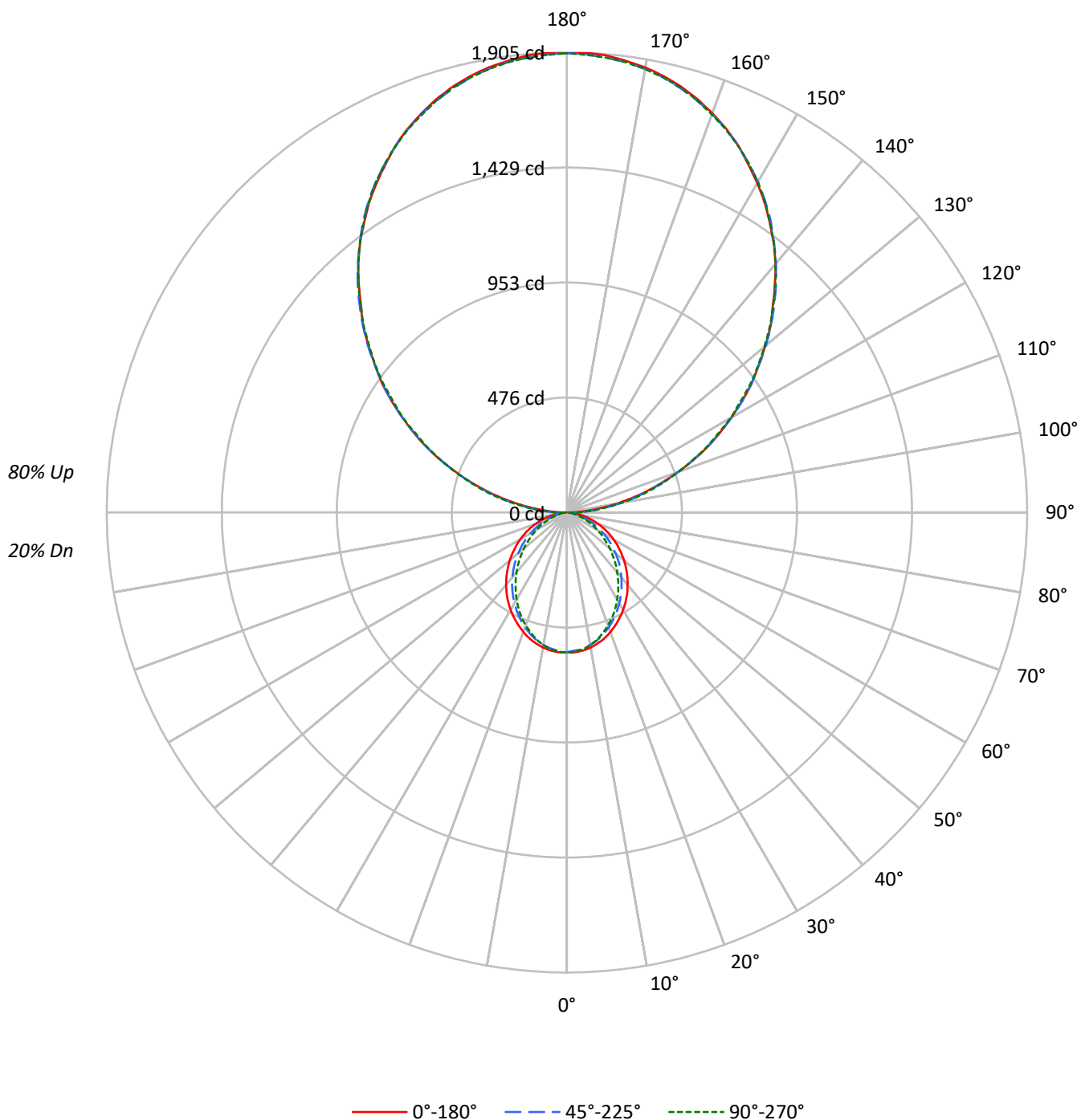
Lumens per Lamp: N/A
Luminaire Lumens: 6619.0 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1034077

CATALOG NUMBER: S124RDIW-B350D1560UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1034077

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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	67	67	67	47	47	47	29	29	29	29	29	29
1	91	87	83	80	81	77	74	71	59	57	55	41	40	39	26	25	24	24	24	17
2	83	76	70	66	73	68	63	59	51	48	45	36	34	33	23	22	21	21	21	15
3	76	67	60	55	67	59	54	49	45	41	38	32	30	28	20	19	18	18	18	13
4	69	59	52	46	61	53	46	41	40	36	32	29	26	24	18	17	15	15	15	11
5	63	53	45	39	56	47	40	35	36	31	28	26	23	21	16	15	13	13	13	9
6	58	47	39	34	51	42	35	31	32	28	24	23	20	18	15	13	12	12	12	8
7	54	42	35	29	47	38	31	27	29	24	21	21	18	16	13	12	10	10	10	7
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	12	11	9	9	9	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	12	11	10	8	8	8	6
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	10	9	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4719	4579	4579
10°	4679	4434	4381
15°	4615	4254	4148
20°	4530	4049	3882
25°	4426	3827	3622
30°	4323	3602	3331
35°	4209	3373	3045
40°	4075	3127	2752
45°	3948	2882	2462
50°	3804	2616	2168
55°	3649	2342	1864
60°	3477	2051	1564
65°	3311	1719	1275
70°	3074	1367	974
75°	2769	995	682
80°	2316	610	491
85°	1739	351	268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3948 cd/sqm

TEST NUMBER: P1034077

CATALOG NUMBER: S124RDIW-B350D1560UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	0.8
10°-20°	151.7	2.3
20°-30°	219.0	3.3
30°-40°	248.2	3.8
40°-50°	239.7	3.6
50°-60°	199.3	3.0
60°-70°	137.5	2.1
70°-80°	69.5	1.0
80°-90°	21.7	0.3
90°-100°	124.0	1.9
100°-110°	371.4	5.6
110°-120°	630.9	9.5
120°-130°	832.1	12.6
130°-140°	934.5	14.1
140°-150°	918.5	13.9
150°-160°	772.5	11.7
160°-170°	514.0	7.8
170°-180°	180.0	2.7
0°-30°	425.2	6.4
0°-40°	673.4	10.2
0°-60°	1112.3	16.8
0°-90°	1341.0	20.3
90°-120°	1126.3	17.0
90°-150°	3811.4	57.6
90°-180°	5278.0	79.7
0°-180°	6619.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	579	579	579	579	579	
5°	578	576	571	575	574	55
15°	550	546	535	534	531	155
25°	498	490	471	464	460	229
35°	430	416	394	379	371	269
45°	351	334	308	286	278	271
55°	266	248	219	196	188	238
65°	181	162	133	114	109	179
75°	96	80	59	49	46	101
85°	24	15	14	13	13	26
90°	4	21	32	41	44	8
95°	88	102	112	116	116	96
105°	343	344	350	354	359	363
115°	641	641	638	637	636	633
125°	934	934	933	930	927	833
135°	1205	1214	1214	1211	1206	932
145°	1464	1470	1471	1470	1465	916
155°	1677	1677	1676	1682	1676	772
165°	1826	1821	1818	1827	1821	515
175°	1899	1892	1890	1901	1890	180
180°	1902	1902	1902	1902	1902	

TEST NUMBER: P1034077

CATALOG NUMBER: S124RDIW-B350D1560UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	578.6	578.6	578.6	578.6	578.6
2.5°	580.4	578.6	573.8	578.6	578.2
5°	577.7	576.0	570.7	575.1	574.2
7.5°	573.8	572.0	565.3	568.4	567.1
10°	567.6	565.3	557.4	559.1	557.4
12.5°	559.6	556.9	547.2	548.1	545.4
15°	550.3	546.3	535.2	534.3	531.2
17.5°	539.6	533.9	521.0	518.8	514.4
20°	526.8	521.0	506.0	502.4	496.7
22.5°	512.6	506.0	489.6	483.8	479.4
25°	497.6	489.6	471.4	463.9	459.5
27.5°	482.0	472.3	453.3	444.4	438.2
30°	465.7	454.6	433.8	422.7	415.6
32.5°	448.4	435.5	413.8	400.5	393.9
35°	430.2	416.0	393.9	378.8	370.8
37.5°	411.2	396.5	372.2	355.8	347.8
40°	390.8	376.2	350.9	332.3	324.3
42.5°	371.3	355.8	329.2	310.1	301.7
45°	350.9	334.5	307.9	286.2	278.2
47.5°	330.1	313.2	285.8	263.2	254.3
50°	308.8	291.5	263.2	241.0	232.6
52.5°	287.1	270.3	241.0	218.4	209.6
55°	265.8	248.1	219.3	196.3	187.9
57.5°	245.0	226.4	198.0	174.6	168.4
60°	222.4	204.7	176.3	153.3	146.2
62.5°	202.0	183.4	154.2	133.4	128.0
65°	180.8	161.7	133.4	114.3	109.0
67.5°	158.6	140.4	113.9	97.0	90.8
70°	137.8	119.2	93.9	79.3	74.9
72.5°	115.6	99.2	75.8	63.8	59.8
75°	96.1	79.8	58.9	48.7	46.1
77.5°	75.8	61.6	43.9	36.8	35.9
80°	56.3	43.4	30.1	28.8	28.4
82.5°	39.4	27.9	21.7	20.8	20.4
85°	23.9	15.1	13.7	12.8	12.8
87.5°	10.2	6.6	6.2	5.8	6.2
90°	4.4	20.6	32.4	41.2	44.1
92.5°	38.3	57.4	64.7	69.1	70.6
95°	88.3	101.5	111.8	116.2	116.2
97.5°	141.2	153.0	164.8	170.7	170.7
100°	206.0	211.8	225.1	228.0	228.0
102.5°	273.6	275.1	286.9	291.3	292.8
105°	342.8	344.3	350.1	354.5	359.0
107.5°	414.9	416.3	417.8	423.7	422.2
110°	488.4	491.4	489.9	487.0	491.4

TEST NUMBER: P1034077

CATALOG NUMBER: S124RDIW-B350D1560UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	564.9	564.9	562.0	562.0	562.0
115°	641.4	641.4	638.5	637.0	635.5
117.5°	713.5	713.5	712.0	707.6	703.2
120°	785.6	791.5	787.1	779.7	782.7
122.5°	860.6	862.1	860.6	856.2	848.9
125°	934.2	934.2	932.7	929.8	926.8
127.5°	1000.4	1004.8	1001.9	998.9	997.4
130°	1071.0	1075.4	1075.4	1072.5	1066.6
132.5°	1143.1	1146.0	1144.6	1141.6	1140.1
135°	1204.9	1213.7	1213.7	1210.8	1206.4
137.5°	1274.0	1278.4	1281.4	1277.0	1278.4
140°	1343.2	1346.1	1346.1	1344.6	1343.2
142.5°	1406.4	1409.4	1407.9	1407.9	1407.9
145°	1463.8	1469.7	1471.2	1469.7	1465.3
147.5°	1522.7	1530.0	1528.5	1527.1	1525.6
150°	1575.6	1581.5	1581.5	1581.5	1580.0
152.5°	1625.6	1628.6	1630.0	1634.5	1630.0
155°	1677.1	1677.1	1675.7	1681.5	1675.7
157.5°	1721.3	1718.3	1718.3	1722.7	1718.3
160°	1759.5	1758.0	1756.6	1761.0	1753.6
162.5°	1794.8	1790.4	1788.9	1797.8	1790.4
165°	1825.7	1821.3	1818.4	1827.2	1821.3
167.5°	1850.7	1844.8	1844.8	1853.7	1844.8
170°	1871.3	1864.0	1865.4	1874.3	1864.0
172.5°	1886.0	1880.1	1880.1	1890.4	1880.1
175°	1899.3	1891.9	1890.4	1900.7	1890.4
177.5°	1905.2	1897.8	1897.8	1908.1	1896.3
180°	1902.2	1902.2	1902.2	1902.2	1902.2

(END OF REPORT)