

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: P1033877

Luminaire Tested: S124RDIW-B1020D1560UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033877
REPORT IS A COMBINATION OF REPORTS P999943 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1560UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

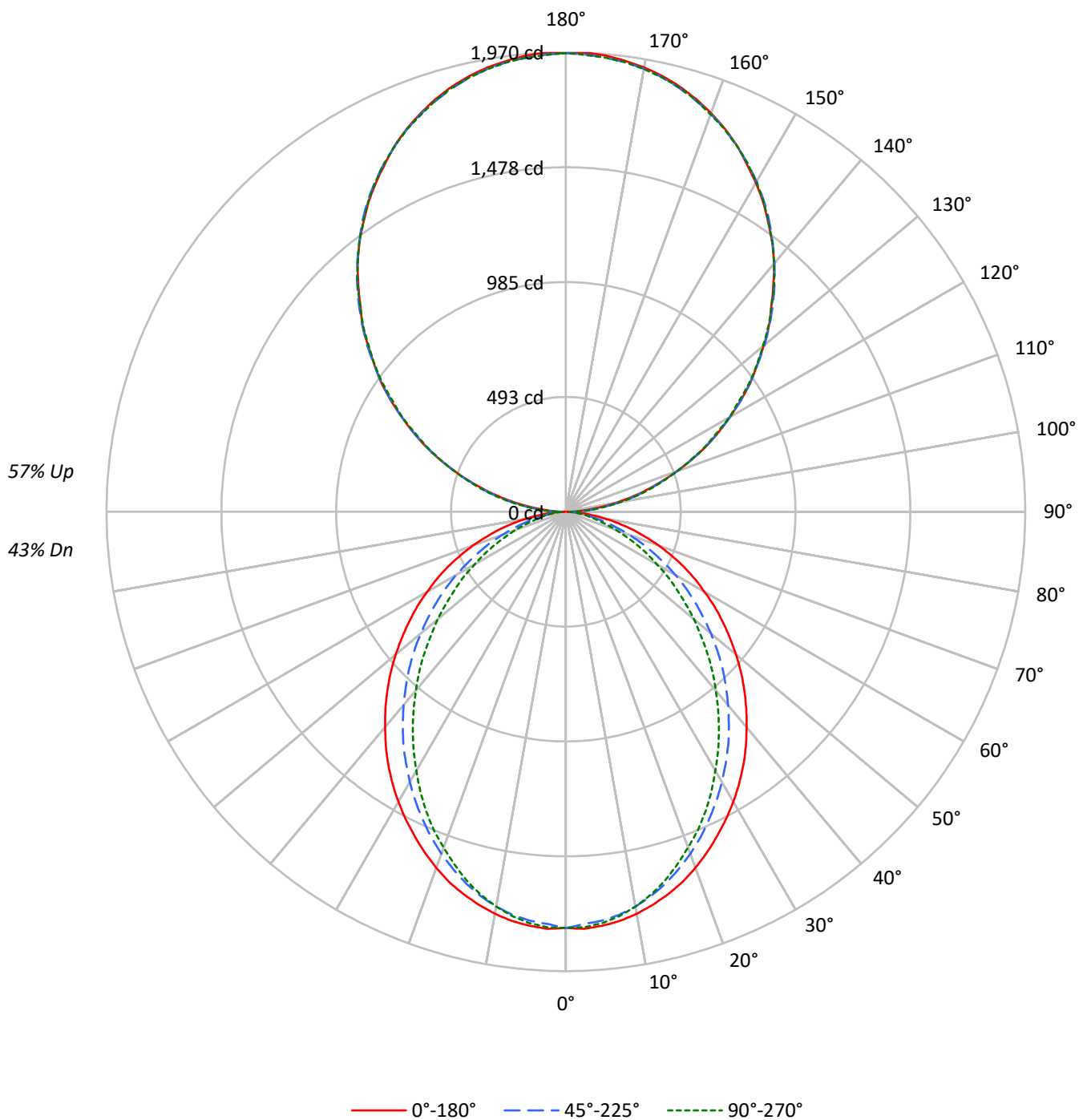
Lumens per Lamp: N/A
Luminaire Lumens: 9586.0 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 99
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50
1	96	92	89	85	88	85	81	78	70	68	66	57	55	54	44	43	42
2	88	81	75	70	80	74	69	65	62	58	55	50	47	45	39	38	36
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31
4	74	63	55	50	67	58	51	46	49	43	40	40	36	33	31	29	27
5	68	56	48	43	62	52	45	40	43	38	34	36	32	29	28	26	23
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	26	23	21
7	58	46	38	32	53	42	35	30	36	30	26	29	25	22	24	21	19
8	53	41	34	29	49	38	32	27	32	27	23	27	23	20	22	19	17
9	50	38	30	26	46	35	28	24	30	25	21	25	21	18	20	17	15
10	46	35	28	23	43	32	26	22	27	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14554	14554	14554
5°	14556	14122	14123
10°	14432	13676	13513
15°	14233	13122	12794
20°	13973	12489	11974
25°	13649	11806	11172
30°	13332	11110	10273
35°	12983	10404	9394
40°	12568	9645	8490
45°	12178	8891	7595
50°	11734	8068	6687
55°	11256	7225	5749
60°	10724	6328	4824
65°	10212	5301	3932
70°	9482	4219	3005
75°	8547	3070	2101
80°	7140	1884	1511
85°	5370	1086	830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	1.8
10°-20°	467.9	4.9
20°-30°	675.6	7.0
30°-40°	765.7	8.0
40°-50°	739.3	7.7
50°-60°	614.6	6.4
60°-70°	424.2	4.4
70°-80°	214.4	2.2
80°-90°	58.6	0.6
90°-100°	128.2	1.3
100°-110°	384.0	4.0
110°-120°	652.4	6.8
120°-130°	860.4	9.0
130°-140°	966.4	10.1
140°-150°	949.8	9.9
150°-160°	798.9	8.3
160°-170°	531.5	5.5
170°-180°	186.1	1.9
0°-30°	1311.4	13.7
0°-40°	2077.1	21.7
0°-60°	3431.0	35.8
0°-90°	4128.2	43.1
90°-120°	1164.7	12.1
90°-150°	3941.3	41.1
90°-180°	5458.0	56.9
0°-180°	9586.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1782	1777	1760	1774	1771	169
15°	1697	1685	1651	1648	1639	478
25°	1535	1510	1454	1431	1417	707
35°	1327	1283	1215	1168	1144	829
45°	1082	1032	950	883	858	835
55°	820	765	676	605	579	734
65°	558	499	411	353	336	551
75°	297	246	182	150	142	313
85°	74	46	42	40	40	81
90°	5	21	34	43	46	11
95°	91	105	116	120	120	99
105°	354	356	362	367	371	376
115°	663	663	660	659	657	654
125°	966	966	964	962	958	861
135°	1246	1255	1255	1252	1248	964
145°	1514	1520	1521	1520	1515	947
155°	1734	1734	1733	1739	1733	798
165°	1888	1883	1880	1889	1883	532
175°	1964	1956	1955	1966	1955	186
180°	1967	1967	1967	1967	1967	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.8	1784.8	1784.8	1784.8	1784.8
2.5°	1790.3	1784.8	1769.8	1784.8	1783.4
5°	1782.1	1776.6	1760.2	1773.9	1771.1
7.5°	1769.8	1764.3	1743.8	1753.4	1749.3
10°	1750.6	1743.8	1719.2	1724.7	1719.2
12.5°	1726.0	1717.8	1687.8	1690.5	1682.3
15°	1697.3	1685.0	1650.9	1648.2	1638.6
17.5°	1664.5	1646.8	1607.2	1600.3	1586.7
20°	1624.9	1607.2	1560.7	1549.8	1532.0
22.5°	1581.2	1560.7	1510.1	1492.4	1478.7
25°	1534.7	1510.1	1454.1	1430.9	1417.2
27.5°	1486.9	1456.8	1398.1	1370.7	1351.6
30°	1436.3	1402.2	1337.9	1303.8	1281.9
32.5°	1383.0	1343.4	1276.4	1235.4	1214.9
35°	1327.0	1283.3	1214.9	1168.5	1143.9
37.5°	1268.2	1223.1	1148.0	1097.4	1072.8
40°	1205.4	1160.3	1082.4	1025.0	1000.4
42.5°	1145.2	1097.4	1015.4	956.6	930.7
45°	1082.4	1031.8	949.8	882.8	858.2
47.5°	1018.1	966.2	881.5	811.8	784.4
50°	952.5	899.2	811.8	743.4	717.5
52.5°	885.6	833.6	743.4	673.7	646.4
55°	820.0	765.3	676.5	605.4	579.4
57.5°	755.7	698.3	610.9	538.5	519.3
60°	686.0	631.4	543.9	472.9	451.0
62.5°	623.2	565.8	475.6	411.4	395.0
65°	557.6	498.8	411.4	352.6	336.2
67.5°	489.3	433.2	351.2	299.3	280.2
70°	425.0	367.6	289.7	244.6	231.0
72.5°	356.7	306.1	233.7	196.8	184.5
75°	296.6	246.0	181.8	150.3	142.1
77.5°	233.7	190.0	135.3	113.4	110.7
80°	173.6	133.9	92.9	88.8	87.5
82.5°	121.6	86.1	67.0	64.2	62.9
85°	73.8	46.5	42.4	39.6	39.6
87.5°	31.4	20.5	19.1	17.8	19.1
90°	4.6	21.3	33.5	42.6	45.6
92.5°	39.6	59.3	66.9	71.5	73.0
95°	91.3	105.0	115.6	120.2	120.2
97.5°	146.0	158.2	170.4	176.5	176.5
100°	213.0	219.1	232.8	235.8	235.8
102.5°	283.0	284.5	296.7	301.2	302.7
105°	354.5	356.0	362.1	366.6	371.2
107.5°	429.0	430.5	432.0	438.1	436.6
110°	505.1	508.1	506.6	503.5	508.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	584.2	584.2	581.1	581.1	581.1
115°	663.3	663.3	660.2	658.7	657.2
117.5°	737.8	737.8	736.3	731.7	727.2
120°	812.4	818.5	813.9	806.3	809.3
122.5°	890.0	891.5	890.0	885.4	877.8
125°	966.0	966.0	964.5	961.5	958.4
127.5°	1034.5	1039.0	1036.0	1033.0	1031.4
130°	1107.5	1112.1	1112.1	1109.0	1102.9
132.5°	1182.0	1185.1	1183.6	1180.5	1179.0
135°	1245.9	1255.1	1255.1	1252.0	1247.5
137.5°	1317.4	1322.0	1325.0	1320.5	1322.0
140°	1388.9	1392.0	1392.0	1390.5	1388.9
142.5°	1454.4	1457.4	1455.9	1455.9	1455.9
145°	1513.7	1519.8	1521.3	1519.8	1515.2
147.5°	1574.5	1582.1	1580.6	1579.1	1577.6
150°	1629.3	1635.4	1635.4	1635.4	1633.9
152.5°	1681.0	1684.1	1685.6	1690.2	1685.6
155°	1734.3	1734.3	1732.8	1738.8	1732.8
157.5°	1779.9	1776.9	1776.9	1781.4	1776.9
160°	1819.5	1817.9	1816.4	1821.0	1813.4
162.5°	1856.0	1851.4	1849.9	1859.0	1851.4
165°	1887.9	1883.4	1880.3	1889.4	1883.4
167.5°	1913.8	1907.7	1907.7	1916.8	1907.7
170°	1935.1	1927.5	1929.0	1938.1	1927.5
172.5°	1950.3	1944.2	1944.2	1954.9	1944.2
175°	1964.0	1956.4	1954.9	1965.5	1954.9
177.5°	1970.1	1962.5	1962.5	1973.1	1960.9
180°	1967.0	1967.0	1967.0	1967.0	1967.0

(END OF REPORT)