

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: P1033871

Luminaire Tested: S124RDIW-B1020D1560UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033871
REPORT IS A COMBINATION OF REPORTS P999931 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1560UB30-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

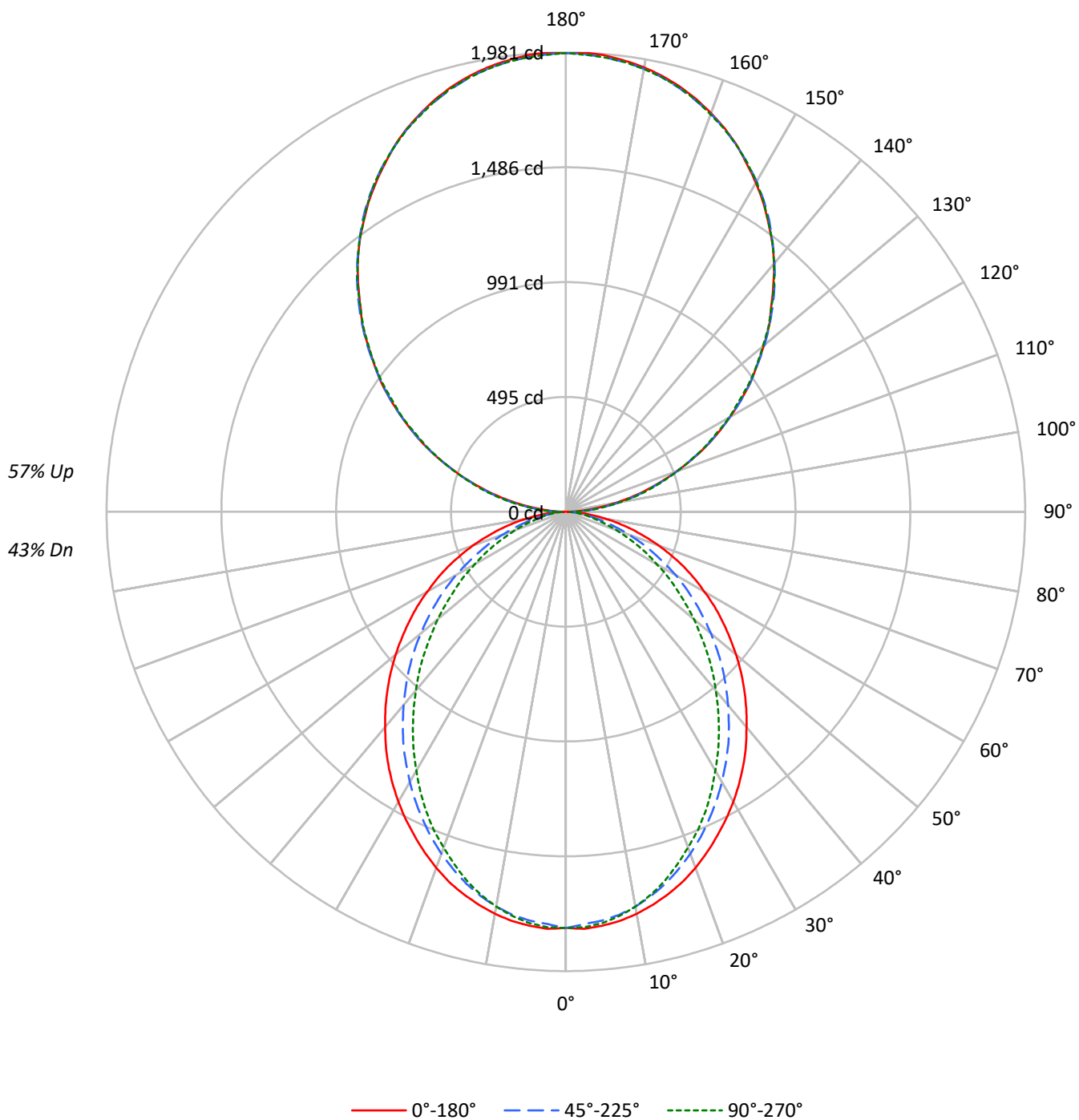
Lumens per Lamp: N/A
Luminaire Lumens: 9640.0 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	14636	14636	14636
5°	14637	14200	14202
10°	14513	13752	13589
15°	14313	13195	12865
20°	14052	12559	12040
25°	13726	11872	11235
30°	13406	11172	10330
35°	13055	10462	9446
40°	12638	9698	8537
45°	12245	8941	7638
50°	11800	8113	6725
55°	11318	7265	5782
60°	10785	6364	4850
65°	10268	5329	3954
70°	9535	4242	3021
75°	8593	3087	2113
80°	7177	1894	1520
85°	5399	1092	836

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12245 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	1.8
10°-20°	470.6	4.9
20°-30°	679.4	7.0
30°-40°	769.9	8.0
40°-50°	743.4	7.7
50°-60°	618.1	6.4
60°-70°	426.6	4.4
70°-80°	215.6	2.2
80°-90°	59.0	0.6
90°-100°	129.0	1.3
100°-110°	386.2	4.0
110°-120°	656.1	6.8
120°-130°	865.3	9.0
130°-140°	971.9	10.1
140°-150°	955.2	9.9
150°-160°	803.4	8.3
160°-170°	534.5	5.5
170°-180°	187.2	1.9
0°-30°	1318.7	13.7
0°-40°	2088.6	21.7
0°-60°	3450.1	35.8
0°-90°	4151.2	43.1
90°-120°	1171.3	12.2
90°-150°	3963.7	41.1
90°-180°	5489.0	56.9
0°-180°	9640.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1795	1795	1795	1795	1795	
5°	1792	1786	1770	1784	1781	170
15°	1707	1694	1660	1657	1648	481
25°	1543	1518	1462	1439	1425	711
35°	1334	1290	1222	1175	1150	834
45°	1088	1038	955	888	863	839
55°	824	770	680	609	583	738
65°	561	502	414	355	338	554
75°	298	247	183	151	143	315
85°	74	47	43	40	40	81
90°	5	21	34	43	46	11
95°	92	106	116	121	121	99
105°	356	358	364	369	373	378
115°	667	667	664	662	661	658
125°	972	972	970	967	964	866
135°	1253	1262	1262	1259	1254	969
145°	1522	1528	1530	1528	1524	953
155°	1744	1744	1743	1749	1743	803
165°	1899	1894	1891	1900	1894	535
175°	1975	1968	1966	1977	1966	188
180°	1978	1978	1978	1978	1978	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1794.8	1794.8	1794.8	1794.8	1794.8
2.5°	1800.3	1794.8	1779.7	1794.8	1793.4
5°	1792.0	1786.5	1770.0	1783.8	1781.0
7.5°	1779.7	1774.2	1753.5	1763.2	1759.0
10°	1760.4	1753.5	1728.8	1734.3	1728.8
12.5°	1735.7	1727.4	1697.2	1699.9	1691.7
15°	1706.8	1694.4	1660.1	1657.3	1647.7
17.5°	1673.8	1656.0	1616.1	1609.2	1595.5
20°	1634.0	1616.1	1569.4	1558.4	1540.5
22.5°	1590.0	1569.4	1518.5	1500.7	1486.9
25°	1543.3	1518.5	1462.2	1438.8	1425.1
27.5°	1495.2	1464.9	1405.9	1378.4	1359.1
30°	1444.3	1410.0	1345.4	1311.0	1289.0
32.5°	1390.7	1350.9	1283.5	1242.3	1221.7
35°	1334.4	1290.4	1221.7	1175.0	1150.2
37.5°	1275.3	1230.0	1154.4	1103.5	1078.8
40°	1212.1	1166.7	1088.4	1030.7	1005.9
42.5°	1151.6	1103.5	1021.1	962.0	935.9
45°	1088.4	1037.6	955.1	887.8	863.0
47.5°	1023.8	971.6	886.4	816.3	788.8
50°	957.9	904.3	816.3	747.6	721.5
52.5°	890.5	838.3	747.6	677.5	650.0
55°	824.5	769.6	680.3	608.8	582.7
57.5°	760.0	702.2	614.3	541.5	522.2
60°	689.9	634.9	547.0	475.5	453.5
62.5°	626.7	568.9	478.2	413.6	397.2
65°	560.7	501.6	413.6	354.6	338.1
67.5°	492.0	435.6	353.2	301.0	281.7
70°	427.4	369.7	291.3	246.0	232.2
72.5°	358.7	307.8	235.0	197.9	185.5
75°	298.2	247.4	182.8	151.2	142.9
77.5°	235.0	191.0	136.1	114.1	111.3
80°	174.5	134.7	93.4	89.3	88.0
82.5°	122.3	86.6	67.3	64.6	63.2
85°	74.2	46.7	42.6	39.9	39.9
87.5°	31.6	20.6	19.2	17.9	19.2
90°	4.6	21.4	33.7	42.8	45.9
92.5°	39.8	59.7	67.3	71.9	73.4
95°	91.8	105.6	116.3	120.9	120.9
97.5°	146.9	159.1	171.4	177.5	177.5
100°	214.2	220.3	234.1	237.1	237.1
102.5°	284.6	286.1	298.3	302.9	304.5
105°	356.5	358.0	364.1	368.7	373.3
107.5°	431.4	433.0	434.5	440.6	439.1
110°	507.9	511.0	509.5	506.4	511.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	587.5	587.5	584.4	584.4	584.4
115°	667.0	667.0	664.0	662.5	660.9
117.5°	742.0	742.0	740.5	735.9	731.3
120°	817.0	823.1	818.5	810.9	813.9
122.5°	895.0	896.5	895.0	890.4	882.8
125°	971.5	971.5	970.0	966.9	963.9
127.5°	1040.4	1044.9	1041.9	1038.8	1037.3
130°	1113.8	1118.4	1118.4	1115.3	1109.2
132.5°	1188.8	1191.8	1190.3	1187.2	1185.7
135°	1253.0	1262.2	1262.2	1259.1	1254.5
137.5°	1324.9	1329.5	1332.6	1328.0	1329.5
140°	1396.8	1399.9	1399.9	1398.4	1396.8
142.5°	1462.6	1465.7	1464.1	1464.1	1464.1
145°	1522.3	1528.4	1529.9	1528.4	1523.8
147.5°	1583.5	1591.1	1589.6	1588.1	1586.5
150°	1638.6	1644.7	1644.7	1644.7	1643.1
152.5°	1690.6	1693.6	1695.2	1699.8	1695.2
155°	1744.1	1744.1	1742.6	1748.7	1742.6
157.5°	1790.0	1787.0	1787.0	1791.5	1787.0
160°	1829.8	1828.3	1826.7	1831.3	1823.7
162.5°	1866.5	1861.9	1860.4	1869.6	1861.9
165°	1898.6	1894.1	1891.0	1900.2	1894.1
167.5°	1924.7	1918.5	1918.5	1927.7	1918.5
170°	1946.1	1938.4	1939.9	1949.1	1938.4
172.5°	1961.4	1955.2	1955.2	1966.0	1955.2
175°	1975.1	1967.5	1966.0	1976.7	1966.0
177.5°	1981.3	1973.6	1973.6	1984.3	1972.1
180°	1978.2	1978.2	1978.2	1978.2	1978.2

(END OF REPORT)