

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: P1033870

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033870
REPORT IS A COMBINATION OF REPORTS P999930 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-F
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

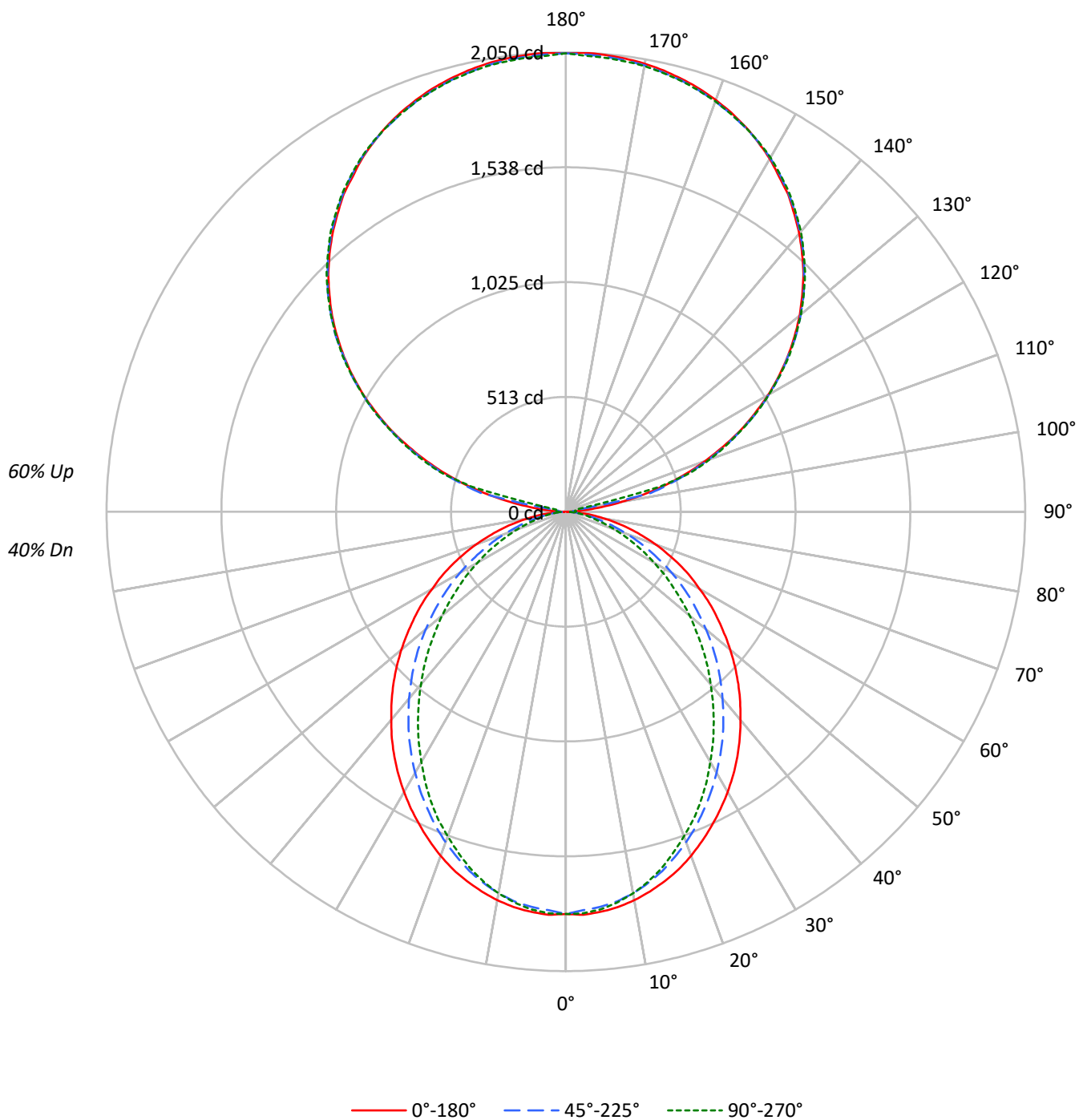
Lumens per Lamp: N/A
Luminaire Lumens: 10482.0 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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

TEST NUMBER: P1033870

CATALOG NUMBER: S124RDIW-B1020D1560UB30-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1033870

CATALOG NUMBER: S124RDIW-B1020D1560UB30-4F0-XX-W2A-F

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	47	47	40
1	96	92	88	84	87	83	80	77	68	66	64	54	53	52	41	41	40	40	40	34
2	87	80	74	69	79	73	68	64	60	56	53	48	45	43	37	35	34	34	34	29
3	80	71	63	58	72	64	58	53	53	49	45	43	39	37	33	31	29	29	29	24
4	73	63	55	49	66	57	51	45	47	42	38	38	34	32	29	27	25	25	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	28	27	24	22	22	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	19	19	16
7	57	45	37	32	52	41	35	30	35	29	26	28	24	21	22	19	17	17	17	15
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	18	16	16	16	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	14	14	12
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	17	15	13	13	13	11

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

TEST NUMBER: P1033870

CATALOG NUMBER: S124RDIW-B1020D1560UB30-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	1.6
10°-20°	470.6	4.5
20°-30°	679.4	6.5
30°-40°	769.9	7.3
40°-50°	743.4	7.1
50°-60°	618.1	5.9
60°-70°	426.6	4.1
70°-80°	215.6	2.1
80°-90°	59.0	0.6
90°-100°	67.9	0.6
100°-110°	447.3	4.3
110°-120°	854.0	8.1
120°-130°	1084.2	10.3
130°-140°	1159.8	11.1
140°-150°	1084.5	10.3
150°-160°	874.6	8.3
160°-170°	564.0	5.4
170°-180°	194.4	1.9
0°-30°	1318.7	12.6
0°-40°	2088.6	19.9
0°-60°	3450.1	32.9
0°-90°	4151.2	39.6
90°-120°	1369.2	13.1
90°-150°	4697.7	44.8
90°-180°	6331.0	60.4
0°-180°	10482.0	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	9
95°	84	32	34	43	44	104
105°	461	470	477	491	436	482
115°	860	865	863	866	866	847
125°	1209	1215	1212	1216	1218	1080
135°	1500	1498	1504	1507	1510	1156
145°	1729	1734	1734	1735	1738	1080
155°	1896	1898	1893	1899	1894	874
165°	2000	1992	1992	2005	1991	565
175°	2046	2037	2038	2052	2034	195
180°	2046	2046	2046	2046	2046	

TEST NUMBER: P1033870

CATALOG NUMBER: S124RDIW-B1020D1560UB30-4F0-XX-W2A-F

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°	23.0	19.9	32.1	41.3	41.3
95°	84.2	32.1	33.7	42.8	44.4
97.5°	160.7	194.3	33.7	41.3	42.8
100°	251.0	278.5	67.3	41.3	42.8
102.5°	352.0	370.3	388.7	44.4	44.4
105°	460.6	469.8	477.4	491.2	436.1
107.5°	560.1	564.7	575.4	583.0	589.1
110°	661.1	665.6	674.8	677.9	682.5

TEST NUMBER: P1033870

CATALOG NUMBER: S124RDIW-B1020D1560UB30-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	759.0	768.2	771.2	769.7	775.8
115°	860.0	864.6	863.0	866.1	866.1
117.5°	950.3	956.4	961.0	959.5	959.5
120°	1042.1	1048.2	1046.7	1049.7	1046.7
122.5°	1127.8	1130.8	1133.9	1135.4	1132.4
125°	1208.9	1215.0	1211.9	1216.5	1218.1
127.5°	1286.9	1288.5	1296.1	1294.6	1293.0
130°	1361.9	1363.4	1368.0	1369.6	1369.6
132.5°	1430.8	1433.8	1439.9	1441.5	1439.9
135°	1499.6	1498.1	1504.2	1507.3	1510.3
137.5°	1560.8	1560.8	1568.5	1571.5	1570.0
140°	1620.5	1623.6	1626.6	1631.2	1632.8
142.5°	1674.1	1680.2	1681.7	1684.8	1684.8
145°	1729.2	1733.7	1733.7	1735.3	1738.3
147.5°	1772.0	1781.2	1779.7	1781.2	1782.7
150°	1819.4	1825.6	1824.0	1824.0	1825.6
152.5°	1859.2	1863.8	1860.8	1863.8	1862.3
155°	1896.0	1897.5	1892.9	1899.0	1894.4
157.5°	1928.1	1928.1	1922.0	1929.6	1922.0
160°	1955.6	1951.0	1949.5	1958.7	1949.5
162.5°	1980.1	1974.0	1972.5	1981.6	1970.9
165°	2000.0	1992.4	1992.4	2004.6	1990.8
167.5°	2016.8	2009.2	2007.7	2021.4	2006.1
170°	2030.6	2021.4	2023.0	2035.2	2019.9
172.5°	2039.8	2030.6	2032.1	2044.4	2027.5
175°	2045.9	2036.7	2038.3	2052.0	2033.7
177.5°	2050.5	2039.8	2042.9	2055.1	2036.7
180°	2045.9	2045.9	2045.9	2045.9	2045.9

(END OF REPORT)