

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: P1033866

Luminaire Tested: S124RDIW-B1020D1560UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033866
REPORT IS A COMBINATION OF REPORTS P999910 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1560UB27-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

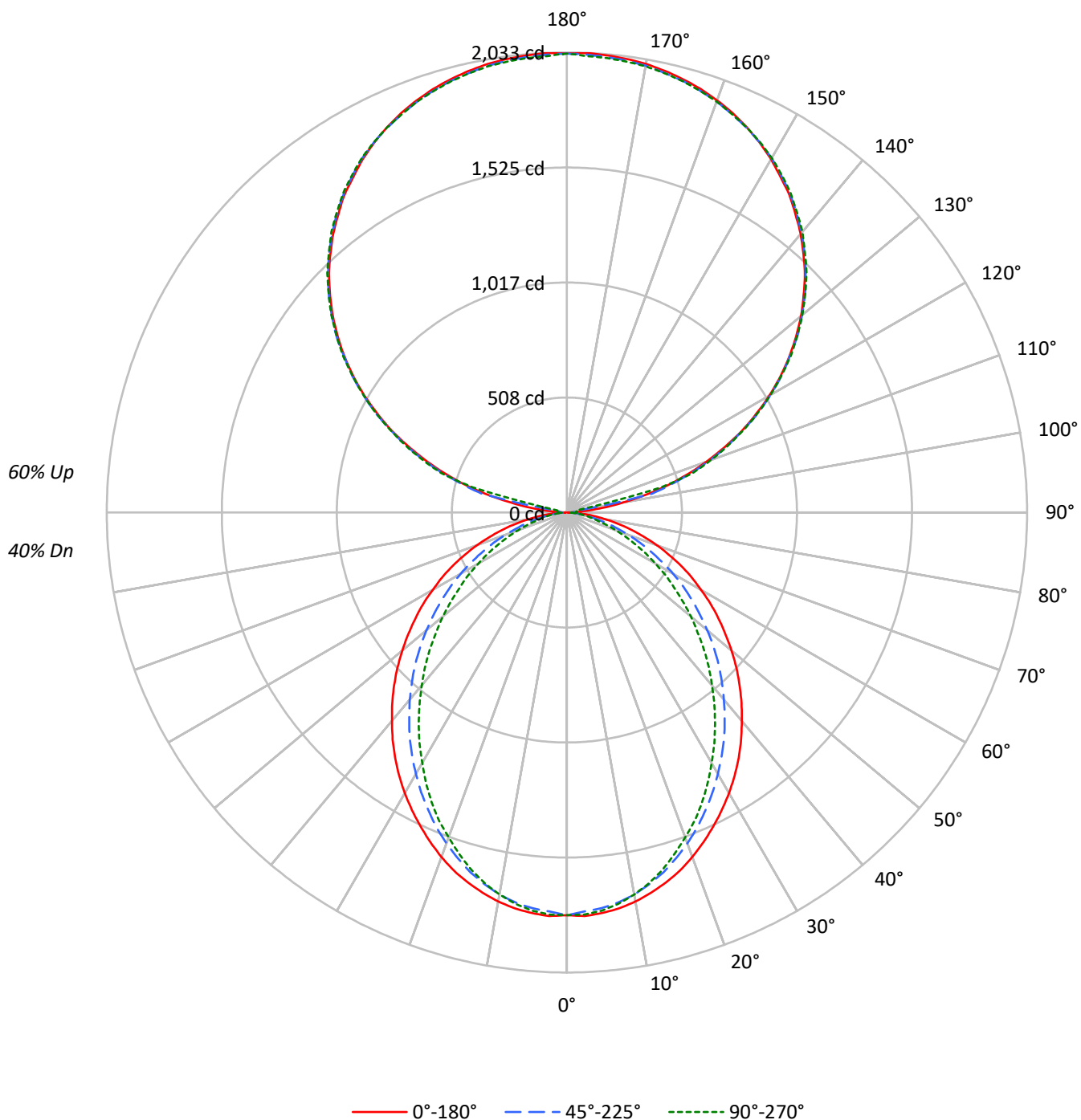
Lumens per Lamp: N/A
Luminaire Lumens: 10392.0 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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					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	65	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	35	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°	14512	14512	14512
5°	14513	14081	14082
10°	14391	13636	13474
15°	14192	13083	12757
20°	13933	12452	11939
25°	13610	11772	11140
30°	13293	11077	10243
35°	12945	10374	9366
40°	12531	9616	8466
45°	12142	8865	7573
50°	11701	8044	6668
55°	11223	7203	5733
60°	10692	6309	4810
65°	10182	5286	3920
70°	9455	4207	2996
75°	8521	3060	2095
80°	7119	1880	1506
85°	5356	1081	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12142 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	1.6
10°-20°	466.6	4.5
20°-30°	673.6	6.5
30°-40°	763.5	7.3
40°-50°	737.1	7.1
50°-60°	612.8	5.9
60°-70°	423.0	4.1
70°-80°	213.7	2.1
80°-90°	58.5	0.6
90°-100°	67.3	0.6
100°-110°	443.4	4.3
110°-120°	846.6	8.1
120°-130°	1074.8	10.3
130°-140°	1149.8	11.1
140°-150°	1075.1	10.3
150°-160°	867.0	8.3
160°-170°	559.1	5.4
170°-180°	192.7	1.9
0°-30°	1307.6	12.6
0°-40°	2071.0	19.9
0°-60°	3421.0	32.9
0°-90°	4116.2	39.6
90°-120°	1357.3	13.1
90°-150°	4657.0	44.8
90°-180°	6276.0	60.4
0°-180°	10392.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1777	1771	1755	1769	1766	169
15°	1692	1680	1646	1643	1634	477
25°	1530	1506	1450	1427	1413	705
35°	1323	1280	1211	1165	1140	827
45°	1079	1029	947	880	856	832
55°	818	763	674	604	578	731
65°	556	497	410	352	335	549
75°	296	245	181	150	142	312
85°	74	46	42	40	40	81
90°	5	21	33	42	46	9
95°	83	32	33	42	44	103
105°	457	466	473	487	432	478
115°	852	857	856	859	859	839
125°	1198	1204	1201	1206	1208	1070
135°	1487	1485	1491	1494	1497	1145
145°	1714	1719	1719	1720	1723	1071
155°	1880	1881	1876	1882	1878	867
165°	1983	1975	1975	1987	1974	560
175°	2028	2019	2021	2034	2016	193
180°	2028	2028	2028	2028	2028	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.6	1779.6	1779.6	1779.6	1779.6
2.5°	1785.1	1779.6	1764.6	1779.6	1778.3
5°	1776.9	1771.4	1755.1	1768.7	1766.0
7.5°	1764.6	1759.2	1738.7	1748.3	1744.2
10°	1745.6	1738.7	1714.2	1719.7	1714.2
12.5°	1721.0	1712.8	1682.9	1685.6	1677.4
15°	1692.4	1680.1	1646.1	1643.4	1633.8
17.5°	1659.7	1642.0	1602.5	1595.7	1582.0
20°	1620.2	1602.5	1556.1	1545.2	1527.5
22.5°	1576.6	1556.1	1505.7	1488.0	1474.4
25°	1530.3	1505.7	1449.9	1426.7	1413.1
27.5°	1482.6	1452.6	1394.0	1366.7	1347.7
30°	1432.1	1398.1	1334.0	1300.0	1278.2
32.5°	1379.0	1339.5	1272.7	1231.8	1211.4
35°	1323.1	1279.5	1211.4	1165.1	1140.5
37.5°	1264.5	1219.6	1144.6	1094.2	1069.7
40°	1201.9	1156.9	1079.2	1022.0	997.5
42.5°	1141.9	1094.2	1012.4	953.9	928.0
45°	1079.2	1028.8	947.0	880.3	855.7
47.5°	1015.2	963.4	878.9	809.4	782.2
50°	949.8	896.6	809.4	741.3	715.4
52.5°	883.0	831.2	741.3	671.8	644.5
55°	817.6	763.1	674.5	603.7	577.8
57.5°	753.5	696.3	609.1	536.9	517.8
60°	684.0	629.5	542.3	471.5	449.7
62.5°	621.4	564.1	474.2	410.2	393.8
65°	556.0	497.4	410.2	351.6	335.2
67.5°	487.8	432.0	350.2	298.4	279.3
70°	423.8	366.6	288.9	243.9	230.3
72.5°	355.7	305.2	233.0	196.2	184.0
75°	295.7	245.3	181.2	149.9	141.7
77.5°	233.0	189.4	134.9	113.1	110.4
80°	173.1	133.5	92.7	88.6	87.2
82.5°	121.3	85.8	66.8	64.0	62.7
85°	73.6	46.3	42.2	39.5	39.5
87.5°	31.3	20.4	19.1	17.7	19.1
90°	4.6	21.2	33.4	42.5	45.5
92.5°	22.8	19.7	31.9	41.0	41.0
95°	83.4	31.9	33.4	42.5	44.0
97.5°	159.3	192.7	33.4	41.0	42.5
100°	248.8	276.1	66.7	41.0	42.5
102.5°	348.9	367.1	385.3	44.0	44.0
105°	456.6	465.7	473.3	486.9	432.3
107.5°	555.2	559.8	570.4	578.0	584.0
110°	655.3	659.9	669.0	672.0	676.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	752.4	761.5	764.5	763.0	769.1
115°	852.5	857.1	855.6	858.6	858.6
117.5°	942.0	948.1	952.6	951.1	951.1
120°	1033.0	1039.1	1037.6	1040.6	1037.6
122.5°	1118.0	1121.0	1124.1	1125.6	1122.5
125°	1198.4	1204.5	1201.4	1206.0	1207.5
127.5°	1275.7	1277.3	1284.8	1283.3	1281.8
130°	1350.1	1351.6	1356.1	1357.7	1357.7
132.5°	1418.3	1421.4	1427.4	1429.0	1427.4
135°	1486.6	1485.1	1491.2	1494.2	1497.2
137.5°	1547.3	1547.3	1554.9	1557.9	1556.4
140°	1606.4	1609.5	1612.5	1617.1	1618.6
142.5°	1659.5	1665.6	1667.1	1670.2	1670.2
145°	1714.1	1718.7	1718.7	1720.2	1723.2
147.5°	1756.6	1765.7	1764.2	1765.7	1767.2
150°	1803.6	1809.7	1808.2	1808.2	1809.7
152.5°	1843.1	1847.6	1844.6	1847.6	1846.1
155°	1879.5	1881.0	1876.5	1882.5	1878.0
157.5°	1911.3	1911.3	1905.3	1912.9	1905.3
160°	1938.7	1934.1	1932.6	1941.7	1932.6
162.5°	1962.9	1956.9	1955.3	1964.4	1953.8
165°	1982.6	1975.1	1975.1	1987.2	1973.5
167.5°	1999.3	1991.7	1990.2	2003.9	1988.7
170°	2013.0	2003.9	2005.4	2017.5	2002.4
172.5°	2022.1	2013.0	2014.5	2026.6	2009.9
175°	2028.2	2019.0	2020.6	2034.2	2016.0
177.5°	2032.7	2022.1	2025.1	2037.3	2019.0
180°	2028.2	2028.2	2028.2	2028.2	2028.2

(END OF REPORT)