

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: P1032867

Luminaire Tested: S124RDIW-B1020D1560UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032867
REPORT IS A COMBINATION OF REPORTS P999924 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1560UB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

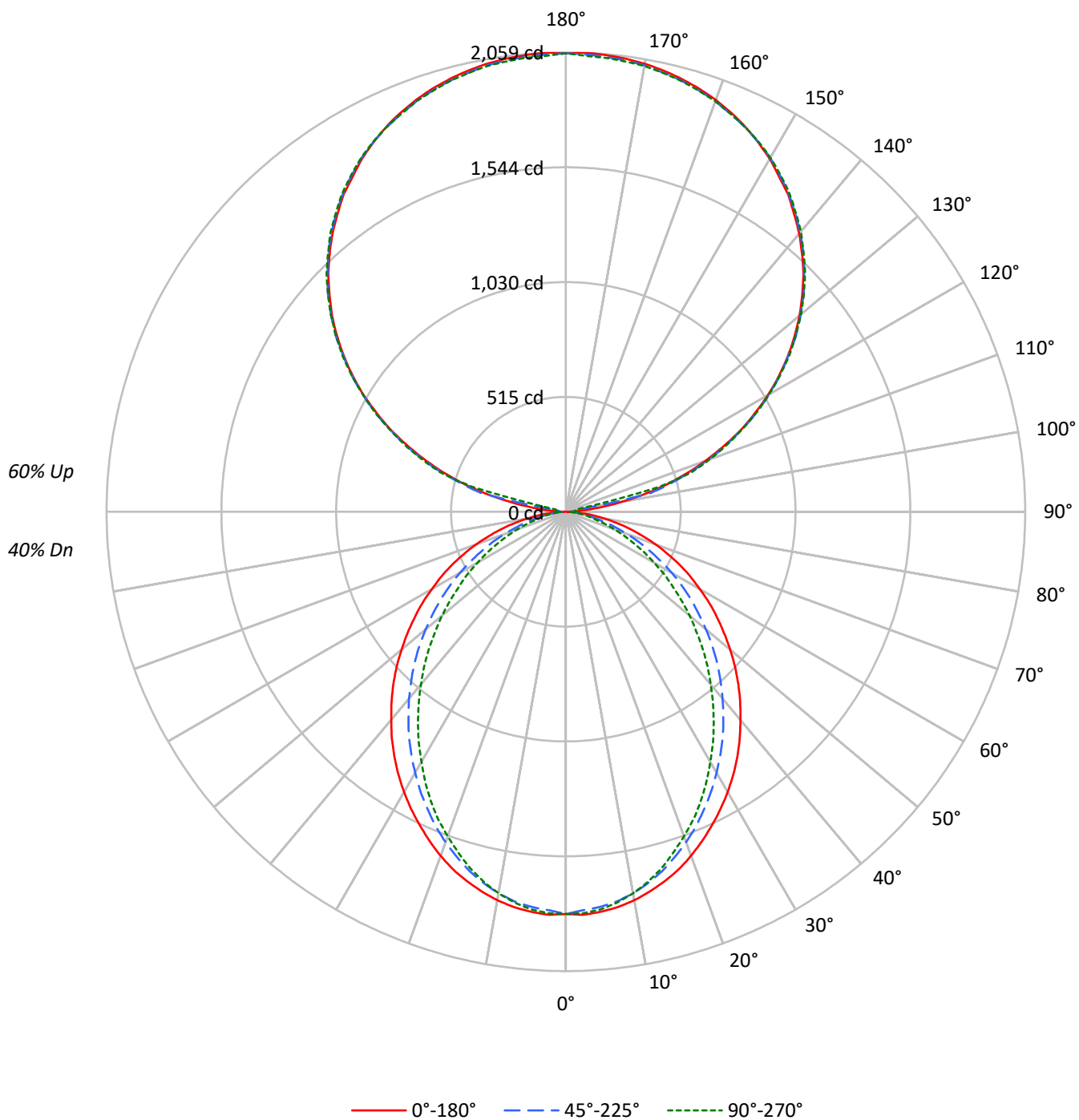
Lumens per Lamp: N/A
Luminaire Lumens: 10527.0 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1032867

CATALOG NUMBER: S124RDIW-B1020D1560UB2750-4F0-XX-W2A-F_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1032867

CATALOG NUMBER: S124RDIW-B1020D1560UB2750-4F0-XX-W2A-F_3500K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14699	14699	14699
5°	14700	14262	14264
10°	14576	13812	13648
15°	14375	13252	12922
20°	14113	12613	12093
25°	13785	11923	11284
30°	13464	11220	10375
35°	13112	10508	9487
40°	12692	9740	8574
45°	12298	8979	7671
50°	11851	8148	6753
55°	11367	7296	5807
60°	10831	6391	4872
65°	10312	5353	3970
70°	9575	4261	3035
75°	8631	3101	2122
80°	7210	1904	1525
85°	5421	1097	838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12298 cd/sqm

TEST NUMBER: P1032867

CATALOG NUMBER: S124RDIW-B1020D1560UB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	1.6
10°-20°	472.6	4.5
20°-30°	682.3	6.5
30°-40°	773.3	7.3
40°-50°	746.6	7.1
50°-60°	620.7	5.9
60°-70°	428.4	4.1
70°-80°	216.5	2.1
80°-90°	59.2	0.6
90°-100°	68.2	0.6
100°-110°	449.2	4.3
110°-120°	857.7	8.1
120°-130°	1088.8	10.3
130°-140°	1164.8	11.1
140°-150°	1089.2	10.3
150°-160°	878.3	8.3
160°-170°	566.4	5.4
170°-180°	195.2	1.9
0°-30°	1324.4	12.6
0°-40°	2097.7	19.9
0°-60°	3465.1	32.9
0°-90°	4169.2	39.6
90°-120°	1375.0	13.1
90°-150°	4717.8	44.8
90°-180°	6358.0	60.4
0°-180°	10527.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1803	1803	1803	1803	1803	
5°	1800	1794	1778	1792	1789	171
15°	1714	1702	1667	1664	1655	483
25°	1550	1525	1468	1445	1431	714
35°	1340	1296	1227	1180	1155	838
45°	1093	1042	959	892	867	843
55°	828	773	683	611	585	741
65°	563	504	415	356	340	556
75°	300	248	184	152	144	316
85°	74	47	43	40	40	82
90°	5	22	34	43	46	9
95°	84	32	34	43	45	104
105°	463	472	480	493	438	484
115°	864	868	867	870	870	850
125°	1214	1220	1217	1222	1223	1084
135°	1506	1504	1511	1514	1517	1160
145°	1736	1741	1741	1743	1746	1085
155°	1904	1906	1901	1907	1902	878
165°	2008	2001	2001	2013	1999	568
175°	2055	2045	2047	2061	2042	196
180°	2055	2055	2055	2055	2055	

TEST NUMBER: P1032867

CATALOG NUMBER: S124RDIW-B1020D1560UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1802.6	1802.6	1802.6	1802.6	1802.6
2.5°	1808.1	1802.6	1787.4	1802.6	1801.2
5°	1799.8	1794.3	1777.7	1791.5	1788.8
7.5°	1787.4	1781.9	1761.2	1770.8	1766.7
10°	1768.1	1761.2	1736.3	1741.8	1736.3
12.5°	1743.2	1734.9	1704.6	1707.3	1699.0
15°	1714.2	1701.8	1667.3	1664.5	1654.9
17.5°	1681.1	1663.2	1623.1	1616.2	1602.4
20°	1641.1	1623.1	1576.2	1565.2	1547.2
22.5°	1596.9	1576.2	1525.1	1507.2	1493.4
25°	1550.0	1525.1	1468.5	1445.1	1431.3
27.5°	1501.7	1471.3	1412.0	1384.4	1365.0
30°	1450.6	1416.1	1351.2	1316.7	1294.6
32.5°	1396.8	1356.7	1289.1	1247.7	1227.0
35°	1340.2	1296.0	1227.0	1180.1	1155.2
37.5°	1280.8	1235.3	1159.4	1108.3	1083.5
40°	1217.3	1171.8	1093.1	1035.2	1010.3
42.5°	1156.6	1108.3	1025.5	966.1	939.9
45°	1093.1	1042.1	959.2	891.6	866.8
47.5°	1028.3	975.8	890.2	819.8	792.2
50°	962.0	908.2	819.8	750.8	724.6
52.5°	894.4	841.9	750.8	680.4	652.8
55°	828.1	772.9	683.2	611.4	585.2
57.5°	763.3	705.3	617.0	543.8	524.5
60°	692.9	637.7	549.3	477.6	455.5
62.5°	629.4	571.4	480.3	415.4	398.9
65°	563.1	503.8	415.4	356.1	339.5
67.5°	494.1	437.5	354.7	302.3	282.9
70°	429.2	371.3	292.6	247.1	233.3
72.5°	360.2	309.2	236.0	198.8	186.3
75°	299.5	248.4	183.6	151.8	143.5
77.5°	236.0	191.8	136.6	114.6	111.8
80°	175.3	135.3	93.9	89.7	88.3
82.5°	122.8	87.0	67.6	64.9	63.5
85°	74.5	46.9	42.8	40.0	40.0
87.5°	31.7	20.7	19.3	17.9	19.3
90°	4.6	21.5	33.8	43.0	46.1
92.5°	23.1	20.0	32.3	41.5	41.5
95°	84.5	32.3	33.8	43.0	44.6
97.5°	161.4	195.2	33.8	41.5	43.0
100°	252.0	279.7	67.6	41.5	43.0
102.5°	353.5	371.9	390.3	44.6	44.6
105°	462.6	471.8	479.5	493.3	438.0
107.5°	562.4	567.1	577.8	585.5	591.6
110°	663.9	668.5	677.7	680.8	685.4

TEST NUMBER: P1032867

CATALOG NUMBER: S124RDIW-B1020D1560UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	762.2	771.4	774.5	773.0	779.1
115°	863.7	868.3	866.7	869.8	869.8
117.5°	954.3	960.5	965.1	963.5	963.5
120°	1046.5	1052.7	1051.1	1054.2	1051.1
122.5°	1132.6	1135.7	1138.7	1140.3	1137.2
125°	1214.0	1220.2	1217.1	1221.7	1223.3
127.5°	1292.4	1293.9	1301.6	1300.1	1298.6
130°	1367.7	1369.2	1373.9	1375.4	1375.4
132.5°	1436.9	1439.9	1446.1	1447.6	1446.1
135°	1506.0	1504.5	1510.6	1513.7	1516.8
137.5°	1567.5	1567.5	1575.2	1578.2	1576.7
140°	1627.4	1630.5	1633.6	1638.2	1639.7
142.5°	1681.2	1687.3	1688.9	1692.0	1692.0
145°	1736.5	1741.1	1741.1	1742.7	1745.7
147.5°	1779.6	1788.8	1787.2	1788.8	1790.3
150°	1827.2	1833.3	1831.8	1831.8	1833.3
152.5°	1867.1	1871.8	1868.7	1871.8	1870.2
155°	1904.0	1905.6	1901.0	1907.1	1902.5
157.5°	1936.3	1936.3	1930.2	1937.8	1930.2
160°	1964.0	1959.4	1957.8	1967.0	1957.8
162.5°	1988.6	1982.4	1980.9	1990.1	1979.3
165°	2008.5	2000.8	2000.8	2013.1	1999.3
167.5°	2025.4	2017.8	2016.2	2030.0	2014.7
170°	2039.3	2030.0	2031.6	2043.9	2028.5
172.5°	2048.5	2039.3	2040.8	2053.1	2036.2
175°	2054.6	2045.4	2046.9	2060.8	2042.3
177.5°	2059.2	2048.5	2051.6	2063.9	2045.4
180°	2054.6	2054.6	2054.6	2054.6	2054.6

(END OF REPORT)