

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: P1033881

Luminaire Tested: S124RDIW-B1020D1560UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033881
REPORT IS A COMBINATION OF REPORTS P999949 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1560UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

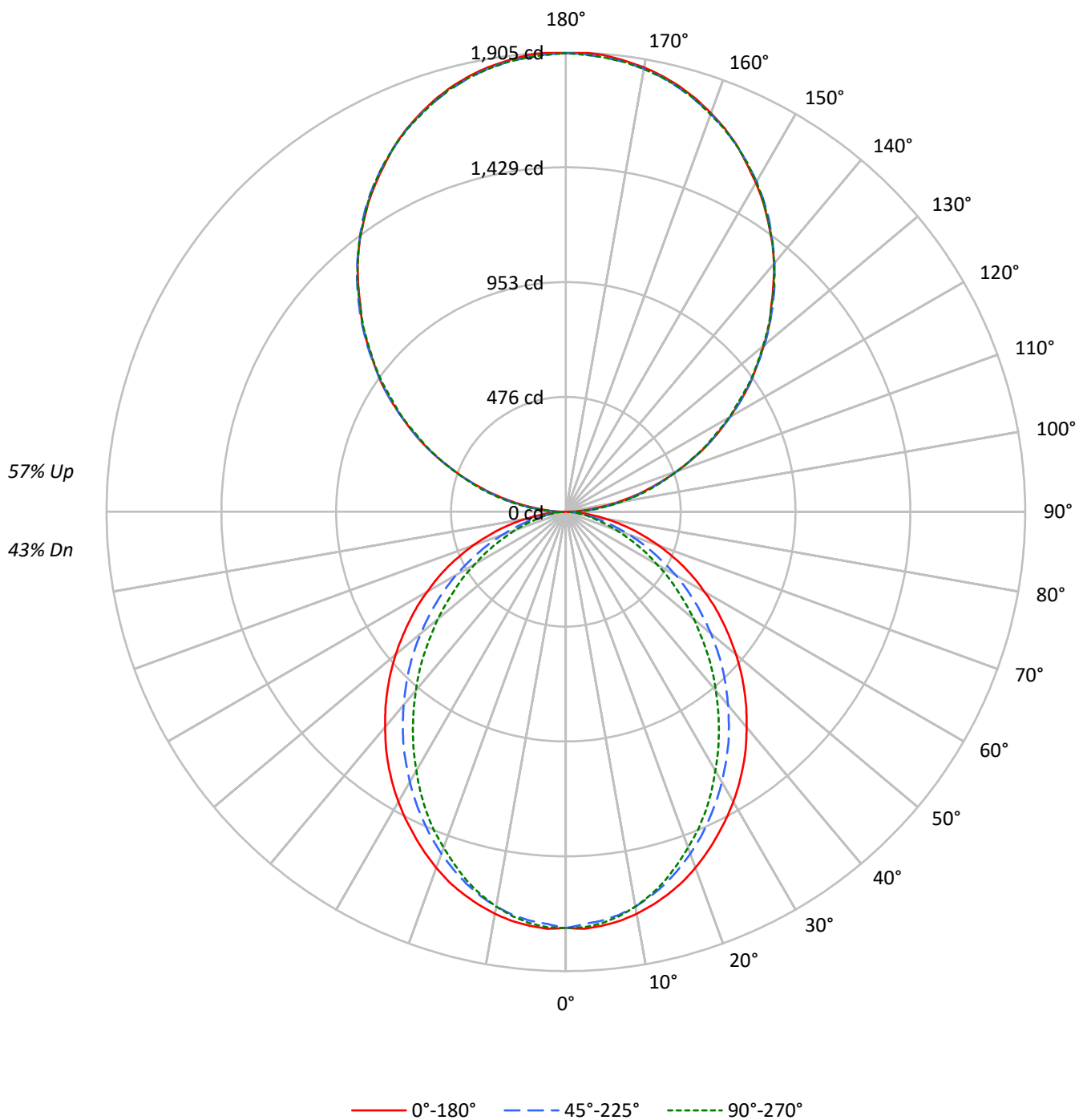
Lumens per Lamp: N/A
Luminaire Lumens: 9270.0 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	14075	14075	14075
5°	14076	13656	13657
10°	13956	13225	13068
15°	13765	12688	12372
20°	13513	12077	11579
25°	13199	11417	10804
30°	12893	10744	9934
35°	12554	10062	9084
40°	12153	9327	8210
45°	11776	8598	7345
50°	11347	7802	6466
55°	10884	6986	5560
60°	10370	6120	4664
65°	9875	5126	3802
70°	9169	4080	2905
75°	8265	2969	2032
80°	6901	1823	1461
85°	5196	1051	803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	1.8
10°-20°	452.5	4.9
20°-30°	653.3	7.0
30°-40°	740.4	8.0
40°-50°	714.9	7.7
50°-60°	594.3	6.4
60°-70°	410.2	4.4
70°-80°	207.3	2.2
80°-90°	56.7	0.6
90°-100°	124.0	1.3
100°-110°	371.4	4.0
110°-120°	630.9	6.8
120°-130°	832.1	9.0
130°-140°	934.5	10.1
140°-150°	918.5	9.9
150°-160°	772.5	8.3
160°-170°	514.0	5.5
170°-180°	180.0	1.9
0°-30°	1268.1	13.7
0°-40°	2008.6	21.7
0°-60°	3317.8	35.8
0°-90°	3992.1	43.1
90°-120°	1126.3	12.1
90°-150°	3811.4	41.1
90°-180°	5278.0	56.9
0°-180°	9270.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1723	1718	1702	1715	1713	164
15°	1641	1630	1596	1594	1584	463
25°	1484	1460	1406	1384	1370	684
35°	1283	1241	1175	1130	1106	802
45°	1047	998	918	854	830	807
55°	793	740	654	585	560	709
65°	539	482	398	341	325	532
75°	287	238	176	145	137	302
85°	71	45	41	38	38	78
90°	4	21	32	41	44	11
95°	88	102	112	116	116	96
105°	343	344	350	354	359	363
115°	641	641	638	637	636	633
125°	934	934	933	930	927	833
135°	1205	1214	1214	1211	1206	932
145°	1464	1470	1471	1470	1465	916
155°	1677	1677	1676	1682	1676	772
165°	1826	1821	1818	1827	1821	515
175°	1899	1892	1890	1901	1890	180
180°	1902	1902	1902	1902	1902	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1726.0	1726.0	1726.0	1726.0	1726.0
2.5°	1731.2	1726.0	1711.4	1726.0	1724.6
5°	1723.3	1718.0	1702.2	1715.4	1712.7
7.5°	1711.4	1706.1	1686.3	1695.6	1691.6
10°	1692.9	1686.3	1662.5	1667.8	1662.5
12.5°	1669.1	1661.2	1632.1	1634.8	1626.8
15°	1641.4	1629.5	1596.4	1593.8	1584.5
17.5°	1609.7	1592.5	1554.2	1547.5	1534.3
20°	1571.3	1554.2	1509.2	1498.6	1481.5
22.5°	1529.0	1509.2	1460.3	1443.1	1429.9
25°	1484.1	1460.3	1406.1	1383.7	1370.5
27.5°	1437.9	1408.8	1352.0	1325.5	1307.0
30°	1389.0	1355.9	1293.8	1260.8	1239.6
32.5°	1337.4	1299.1	1234.3	1194.7	1174.9
35°	1283.2	1240.9	1174.9	1129.9	1106.1
37.5°	1226.4	1182.8	1110.1	1061.2	1037.4
40°	1165.6	1122.0	1046.7	991.2	967.4
42.5°	1107.5	1061.2	981.9	925.1	900.0
45°	1046.7	997.8	918.5	853.7	829.9
47.5°	984.6	934.3	852.4	785.0	758.6
50°	921.1	869.6	785.0	718.9	693.8
52.5°	856.4	806.2	718.9	651.5	625.1
55°	792.9	740.1	654.2	585.4	560.3
57.5°	730.8	675.3	590.7	520.7	502.2
60°	663.4	610.6	526.0	457.3	436.1
62.5°	602.6	547.1	459.9	397.8	381.9
65°	539.2	482.4	397.8	341.0	325.1
67.5°	473.1	418.9	339.6	289.4	270.9
70°	411.0	355.5	280.2	236.6	223.3
72.5°	344.9	296.0	226.0	190.3	178.4
75°	286.8	237.9	175.8	145.4	137.4
77.5°	226.0	183.7	130.8	109.7	107.0
80°	167.8	129.5	89.9	85.9	84.6
82.5°	117.6	83.3	64.8	62.1	60.8
85°	71.4	44.9	41.0	38.3	38.3
87.5°	30.4	19.8	18.5	17.2	18.5
90°	4.4	20.6	32.4	41.2	44.1
92.5°	38.3	57.4	64.7	69.1	70.6
95°	88.3	101.5	111.8	116.2	116.2
97.5°	141.2	153.0	164.8	170.7	170.7
100°	206.0	211.8	225.1	228.0	228.0
102.5°	273.6	275.1	286.9	291.3	292.8
105°	342.8	344.3	350.1	354.5	359.0
107.5°	414.9	416.3	417.8	423.7	422.2
110°	488.4	491.4	489.9	487.0	491.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	564.9	564.9	562.0	562.0	562.0
115°	641.4	641.4	638.5	637.0	635.5
117.5°	713.5	713.5	712.0	707.6	703.2
120°	785.6	791.5	787.1	779.7	782.7
122.5°	860.6	862.1	860.6	856.2	848.9
125°	934.2	934.2	932.7	929.8	926.8
127.5°	1000.4	1004.8	1001.9	998.9	997.4
130°	1071.0	1075.4	1075.4	1072.5	1066.6
132.5°	1143.1	1146.0	1144.6	1141.6	1140.1
135°	1204.9	1213.7	1213.7	1210.8	1206.4
137.5°	1274.0	1278.4	1281.4	1277.0	1278.4
140°	1343.2	1346.1	1346.1	1344.6	1343.2
142.5°	1406.4	1409.4	1407.9	1407.9	1407.9
145°	1463.8	1469.7	1471.2	1469.7	1465.3
147.5°	1522.7	1530.0	1528.5	1527.1	1525.6
150°	1575.6	1581.5	1581.5	1581.5	1580.0
152.5°	1625.6	1628.6	1630.0	1634.5	1630.0
155°	1677.1	1677.1	1675.7	1681.5	1675.7
157.5°	1721.3	1718.3	1718.3	1722.7	1718.3
160°	1759.5	1758.0	1756.6	1761.0	1753.6
162.5°	1794.8	1790.4	1788.9	1797.8	1790.4
165°	1825.7	1821.3	1818.4	1827.2	1821.3
167.5°	1850.7	1844.8	1844.8	1853.7	1844.8
170°	1871.3	1864.0	1865.4	1874.3	1864.0
172.5°	1886.0	1880.1	1880.1	1890.4	1880.1
175°	1899.3	1891.9	1890.4	1900.7	1890.4
177.5°	1905.2	1897.8	1897.8	1908.1	1896.3
180°	1902.2	1902.2	1902.2	1902.2	1902.2

(END OF REPORT)