

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: P1033880

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033880
REPORT IS A COMBINATION OF REPORTS P999948 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-F
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

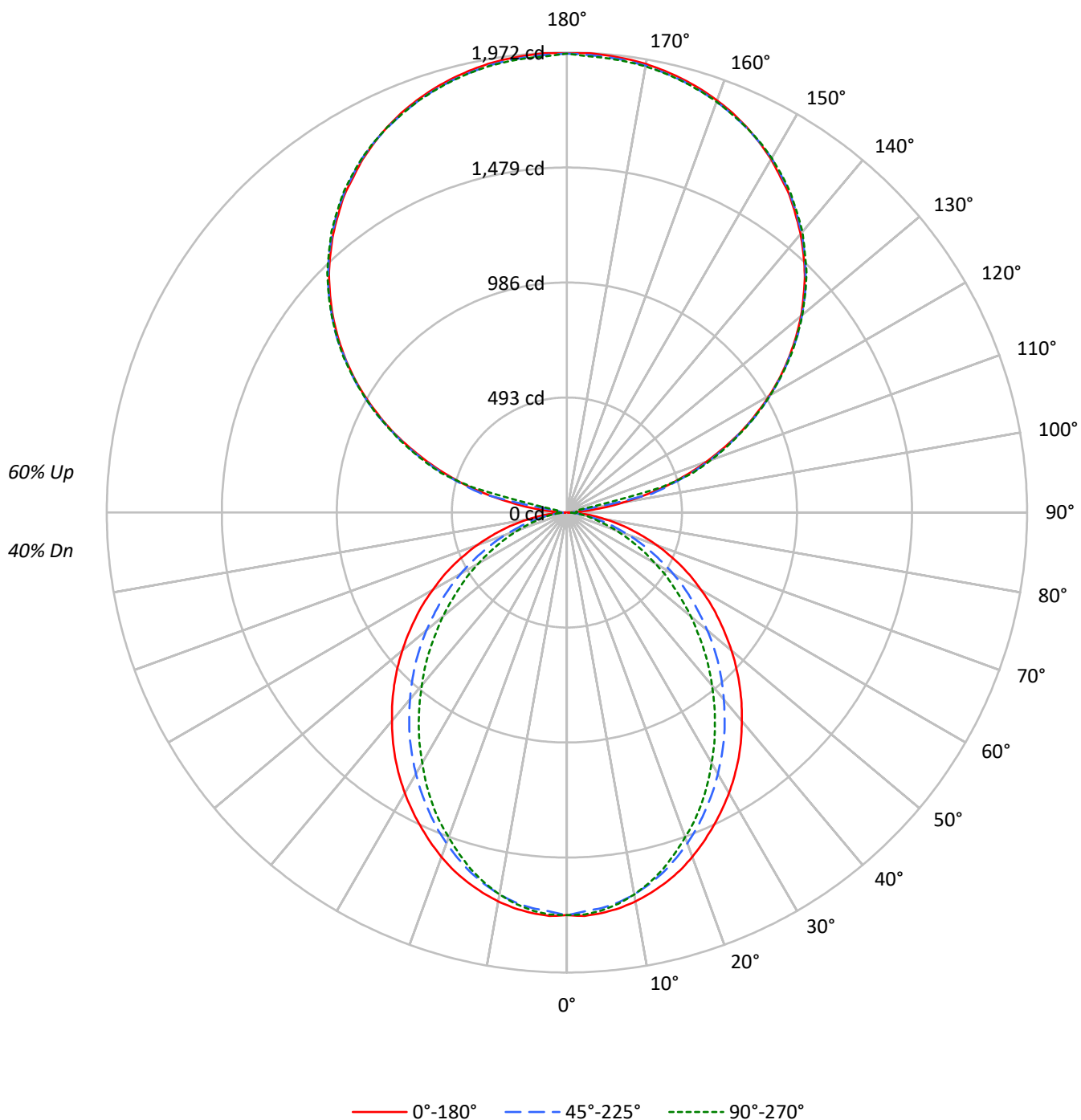
Lumens per Lamp: N/A
Luminaire Lumens: 10079.0 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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				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	95	95	95	95	78	78	78	61	61	61	47	47	47
1	96	92	88	84	87	83	80	77	68	66	64	54	53	52	41	41	40
2	87	80	74	69	79	73	68	64	60	56	53	48	45	43	37	35	34
3	80	71	63	58	72	65	58	53	53	49	45	43	39	37	33	31	29
4	73	63	55	49	66	57	51	45	47	42	38	38	35	32	29	27	25
5	67	56	48	42	61	51	44	39	42	37	33	34	30	28	27	24	22
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19
7	57	45	37	32	52	41	35	30	35	29	26	28	24	21	22	19	17
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	17	15	13

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	1.6
10°-20°	452.5	4.5
20°-30°	653.3	6.5
30°-40°	740.4	7.3
40°-50°	714.9	7.1
50°-60°	594.3	5.9
60°-70°	410.2	4.1
70°-80°	207.3	2.1
80°-90°	56.7	0.6
90°-100°	65.3	0.6
100°-110°	430.0	4.3
110°-120°	821.2	8.1
120°-130°	1042.4	10.3
130°-140°	1115.2	11.1
140°-150°	1042.8	10.3
150°-160°	840.9	8.3
160°-170°	542.3	5.4
170°-180°	186.9	1.9
0°-30°	1268.1	12.6
0°-40°	2008.6	19.9
0°-60°	3317.8	32.9
0°-90°	3992.1	39.6
90°-120°	1316.5	13.1
90°-150°	4516.8	44.8
90°-180°	6087.0	60.4
0°-180°	10079.0	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	8
95°	81	31	32	41	43	100
105°	443	452	459	472	419	463
115°	827	831	830	833	833	814
125°	1162	1168	1165	1170	1171	1038
135°	1442	1440	1446	1449	1452	1111
145°	1663	1667	1667	1668	1671	1039
155°	1823	1824	1820	1826	1822	841
165°	1923	1916	1916	1927	1914	543
175°	1967	1958	1960	1973	1955	187
180°	1967	1967	1967	1967	1967	

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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°	22.1	19.1	30.9	39.7	39.7
95°	80.9	30.9	32.4	41.2	42.7
97.5°	154.5	186.9	32.4	39.7	41.2
100°	241.3	267.8	64.7	39.7	41.2
102.5°	338.4	356.1	373.7	42.7	42.7
105°	442.9	451.7	459.0	472.3	419.3
107.5°	538.5	542.9	553.2	560.6	566.4
110°	635.6	640.0	648.8	651.8	656.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	729.8	738.6	741.5	740.1	745.9
115°	826.9	831.3	829.8	832.7	832.7
117.5°	913.7	919.6	924.0	922.5	922.5
120°	1001.9	1007.8	1006.4	1009.3	1006.4
122.5°	1084.3	1087.3	1090.2	1091.7	1088.8
125°	1162.3	1168.2	1165.3	1169.7	1171.1
127.5°	1237.4	1238.8	1246.2	1244.7	1243.2
130°	1309.4	1310.9	1315.3	1316.8	1316.8
132.5°	1375.7	1378.6	1384.5	1386.0	1384.5
135°	1441.9	1440.4	1446.3	1449.2	1452.2
137.5°	1500.7	1500.7	1508.1	1511.0	1509.5
140°	1558.1	1561.0	1564.0	1568.4	1569.9
142.5°	1609.6	1615.5	1616.9	1619.9	1619.9
145°	1662.6	1667.0	1667.0	1668.4	1671.4
147.5°	1703.8	1712.6	1711.1	1712.6	1714.1
150°	1749.4	1755.2	1753.8	1753.8	1755.2
152.5°	1787.6	1792.0	1789.1	1792.0	1790.6
155°	1822.9	1824.4	1820.0	1825.9	1821.5
157.5°	1853.8	1853.8	1847.9	1855.3	1847.9
160°	1880.3	1875.9	1874.4	1883.2	1874.4
162.5°	1903.8	1898.0	1896.5	1905.3	1895.0
165°	1923.0	1915.6	1915.6	1927.4	1914.1
167.5°	1939.2	1931.8	1930.3	1943.6	1928.9
170°	1952.4	1943.6	1945.0	1956.8	1942.1
172.5°	1961.2	1952.4	1953.9	1965.6	1949.5
175°	1967.1	1958.3	1959.8	1973.0	1955.3
177.5°	1971.5	1961.2	1964.2	1975.9	1958.3
180°	1967.1	1967.1	1967.1	1967.1	1967.1

(END OF REPORT)