

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: P1033858

Luminaire Tested: S124RDIW-B1020D1340UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033858
REPORT IS A COMBINATION OF REPORTS P999898 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1340UB40-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

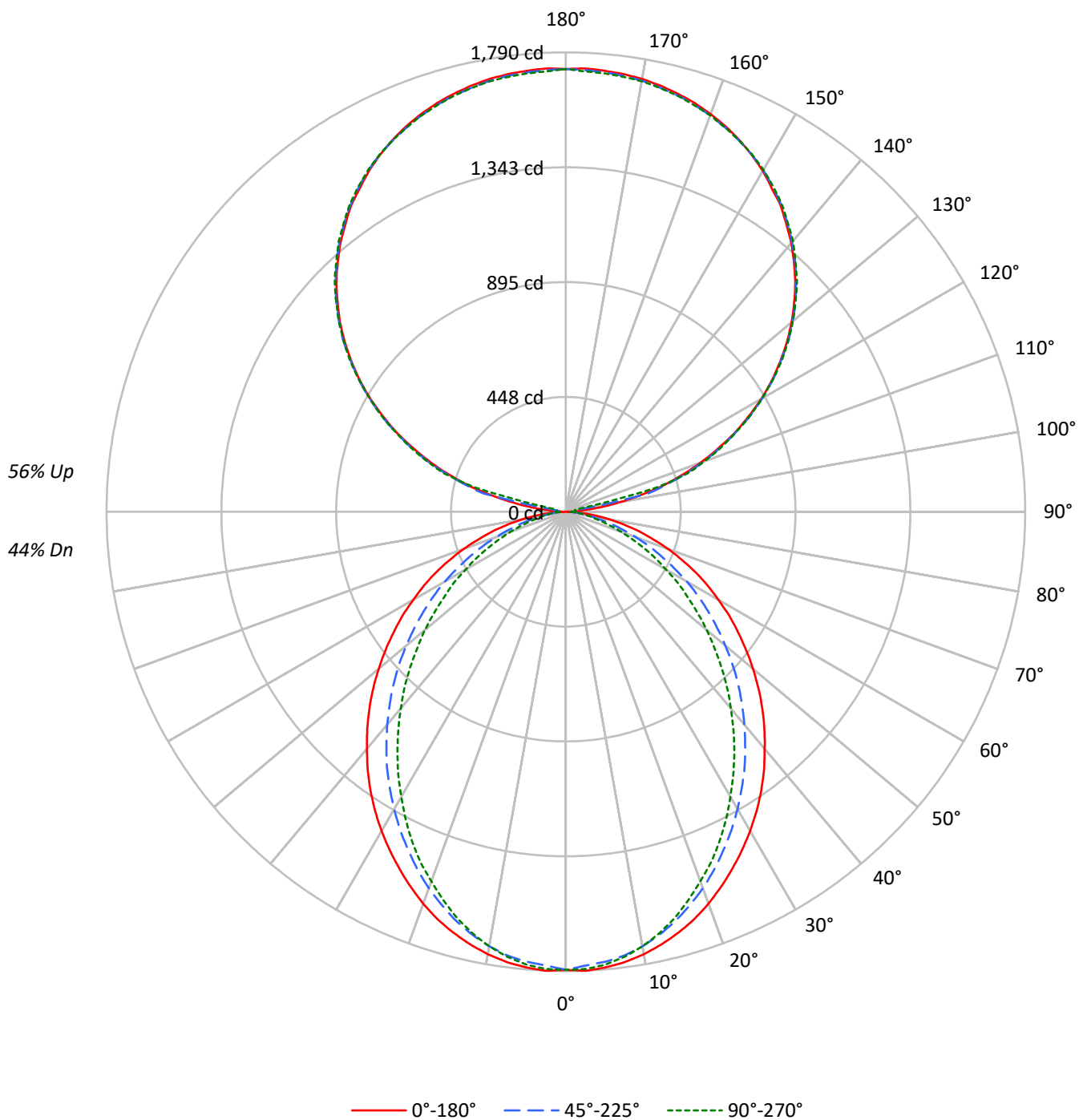
Lumens per Lamp: N/A
Luminaire Lumens: 9466.0 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50
1	97	92	89	85	88	85	82	79	70	68	66	57	55	54	45	44	43
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	36
3	81	71	64	59	73	66	59	54	55	50	46	45	41	39	35	33	31
4	74	63	56	50	67	58	51	46	49	44	40	40	36	33	32	29	27
5	68	56	48	43	62	52	45	40	44	38	34	36	32	29	29	26	24
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	30	26	23	24	21	19
8	54	41	34	29	49	38	32	27	33	27	24	27	23	20	22	19	17
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	20	17	15
10	47	35	28	23	43	32	26	22	28	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14554	14554	14554
5°	14556	14122	14123
10°	14432	13676	13513
15°	14233	13122	12794
20°	13973	12489	11974
25°	13649	11806	11172
30°	13332	11110	10273
35°	12983	10404	9394
40°	12568	9645	8490
45°	12178	8891	7595
50°	11734	8068	6687
55°	11256	7225	5749
60°	10724	6328	4824
65°	10212	5301	3932
70°	9482	4219	3005
75°	8547	3070	2101
80°	7140	1884	1511
85°	5370	1086	830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	1.8
10°-20°	467.9	4.9
20°-30°	675.6	7.1
30°-40°	765.7	8.1
40°-50°	739.3	7.8
50°-60°	614.6	6.5
60°-70°	424.2	4.5
70°-80°	214.4	2.3
80°-90°	58.0	0.6
90°-100°	57.3	0.6
100°-110°	377.1	4.0
110°-120°	720.2	7.6
120°-130°	914.2	9.7
130°-140°	978.0	10.3
140°-150°	914.5	9.7
150°-160°	737.5	7.8
160°-170°	475.6	5.0
170°-180°	163.9	1.7
0°-30°	1311.4	13.9
0°-40°	2077.1	21.9
0°-60°	3431.0	36.2
0°-90°	4127.6	43.6
90°-120°	1154.6	12.2
90°-150°	3961.4	41.8
90°-180°	5338.0	56.4
0°-180°	9466.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1782	1777	1760	1774	1771	169
15°	1697	1685	1651	1648	1639	478
25°	1535	1510	1454	1431	1417	707
35°	1327	1283	1215	1168	1144	829
45°	1082	1032	950	883	858	835
55°	820	765	676	605	579	734
65°	558	499	411	353	336	551
75°	297	246	182	150	142	313
85°	74	46	42	40	40	81
90°	4	18	28	36	39	8
95°	71	27	28	36	37	88
105°	388	396	403	414	368	406
115°	725	729	728	730	730	714
125°	1019	1025	1022	1026	1027	910
135°	1265	1263	1268	1271	1274	974
145°	1458	1462	1462	1463	1466	911
155°	1599	1600	1596	1601	1598	737
165°	1686	1680	1680	1690	1679	477
175°	1725	1718	1719	1730	1715	164
180°	1725	1725	1725	1725	1725	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.8	1784.8	1784.8	1784.8	1784.8
2.5°	1790.3	1784.8	1769.8	1784.8	1783.4
5°	1782.1	1776.6	1760.2	1773.9	1771.1
7.5°	1769.8	1764.3	1743.8	1753.4	1749.3
10°	1750.6	1743.8	1719.2	1724.7	1719.2
12.5°	1726.0	1717.8	1687.8	1690.5	1682.3
15°	1697.3	1685.0	1650.9	1648.2	1638.6
17.5°	1664.5	1646.8	1607.2	1600.3	1586.7
20°	1624.9	1607.2	1560.7	1549.8	1532.0
22.5°	1581.2	1560.7	1510.1	1492.4	1478.7
25°	1534.7	1510.1	1454.1	1430.9	1417.2
27.5°	1486.9	1456.8	1398.1	1370.7	1351.6
30°	1436.3	1402.2	1337.9	1303.8	1281.9
32.5°	1383.0	1343.4	1276.4	1235.4	1214.9
35°	1327.0	1283.3	1214.9	1168.5	1143.9
37.5°	1268.2	1223.1	1148.0	1097.4	1072.8
40°	1205.4	1160.3	1082.4	1025.0	1000.4
42.5°	1145.2	1097.4	1015.4	956.6	930.7
45°	1082.4	1031.8	949.8	882.8	858.2
47.5°	1018.1	966.2	881.5	811.8	784.4
50°	952.5	899.2	811.8	743.4	717.5
52.5°	885.6	833.6	743.4	673.7	646.4
55°	820.0	765.3	676.5	605.4	579.4
57.5°	755.7	698.3	610.9	538.5	519.3
60°	686.0	631.4	543.9	472.9	451.0
62.5°	623.2	565.8	475.6	411.4	395.0
65°	557.6	498.8	411.4	352.6	336.2
67.5°	489.3	433.2	351.2	299.3	280.2
70°	425.0	367.6	289.7	244.6	231.0
72.5°	356.7	306.1	233.7	196.8	184.5
75°	296.6	246.0	181.8	150.3	142.1
77.5°	233.7	190.0	135.3	113.4	110.7
80°	173.6	133.9	92.9	88.8	87.5
82.5°	121.6	86.1	67.0	64.2	62.9
85°	73.8	46.5	42.4	39.6	39.6
87.5°	31.4	20.5	19.1	17.8	19.1
90°	3.9	18.1	28.4	36.1	38.7
92.5°	19.4	16.8	27.1	34.8	34.8
95°	71.0	27.1	28.4	36.1	37.4
97.5°	135.5	163.9	28.4	34.8	36.1
100°	211.6	234.8	56.8	34.8	36.1
102.5°	296.8	312.3	327.8	37.4	37.4
105°	388.4	396.1	402.6	414.2	367.8
107.5°	472.3	476.1	485.2	491.6	496.8
110°	557.4	561.3	569.1	571.6	575.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.0	647.8	650.3	649.1	654.2
115°	725.2	729.1	727.8	730.3	730.3
117.5°	801.3	806.5	810.3	809.1	809.1
120°	878.7	883.9	882.6	885.2	882.6
122.5°	951.0	953.6	956.2	957.5	954.9
125°	1019.4	1024.6	1022.0	1025.8	1027.1
127.5°	1085.2	1086.5	1092.9	1091.6	1090.4
130°	1148.4	1149.7	1153.6	1154.9	1154.9
132.5°	1206.5	1209.1	1214.2	1215.5	1214.2
135°	1264.6	1263.3	1268.4	1271.0	1273.6
137.5°	1316.2	1316.2	1322.6	1325.2	1323.9
140°	1366.5	1369.1	1371.7	1375.5	1376.8
142.5°	1411.7	1416.8	1418.1	1420.7	1420.7
145°	1458.1	1462.0	1462.0	1463.3	1465.9
147.5°	1494.2	1502.0	1500.7	1502.0	1503.3
150°	1534.2	1539.4	1538.1	1538.1	1539.4
152.5°	1567.8	1571.7	1569.1	1571.7	1570.4
155°	1598.8	1600.1	1596.2	1601.3	1597.5
157.5°	1625.9	1625.9	1620.7	1627.2	1620.7
160°	1649.1	1645.2	1643.9	1651.7	1643.9
162.5°	1669.7	1664.6	1663.3	1671.0	1662.0
165°	1686.5	1680.1	1680.1	1690.4	1678.8
167.5°	1700.7	1694.3	1693.0	1704.6	1691.7
170°	1712.3	1704.6	1705.9	1716.2	1703.3
172.5°	1720.1	1712.3	1713.6	1723.9	1709.7
175°	1725.2	1717.5	1718.8	1730.4	1714.9
177.5°	1729.1	1720.1	1722.6	1733.0	1717.5
180°	1725.2	1725.2	1725.2	1725.2	1725.2

(END OF REPORT)