

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: P1032856

Luminaire Tested: S124RDIW-B1020D1340UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032856
REPORT IS A COMBINATION OF REPORTS P999879 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1340UB2750-4F0-XX-W2A-F_3000K
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

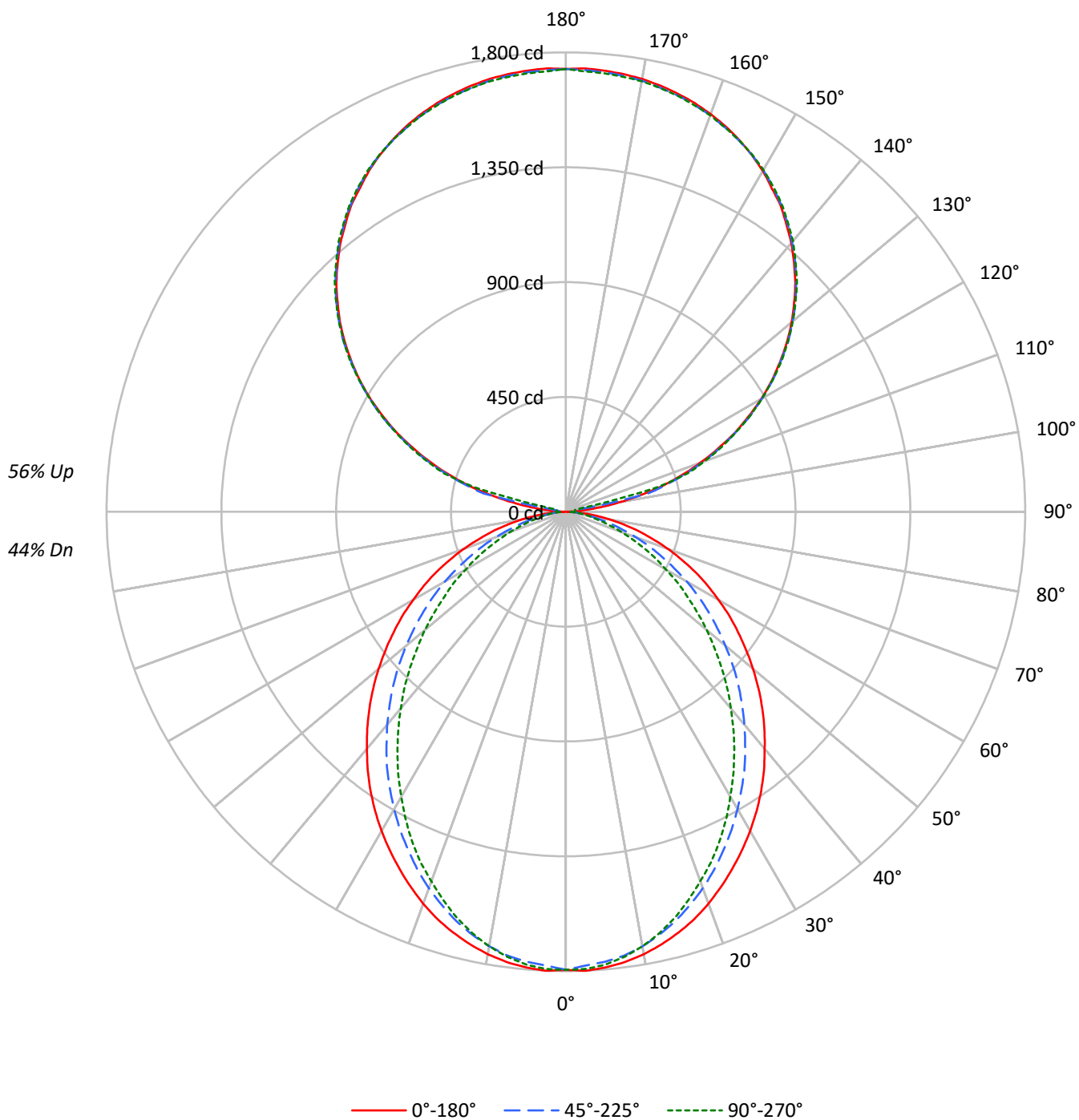
Lumens per Lamp: N/A
Luminaire Lumens: 9519.0 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	50	30	10
RCR																				
0	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50			44
1	97	92	89	85	88	85	82	79	70	68	66	57	55	54	45	44	43			37
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	36			32
3	81	71	64	59	73	66	59	54	55	50	46	45	41	39	35	33	31			27
4	74	63	56	50	67	58	51	46	49	44	40	40	36	33	32	29	27			23
5	68	56	48	43	62	52	45	40	44	38	34	36	32	29	29	26	24			20
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	26	23	21			18
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19			16
8	54	41	34	29	49	38	32	27	33	27	24	27	23	20	22	19	17			14
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	20	17	15			13
10	47	35	28	23	43	32	26	22	28	22	19	23	19	16	19	16	14			12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14636	14636	14636
5°	14637	14200	14202
10°	14513	13752	13589
15°	14313	13195	12865
20°	14052	12559	12040
25°	13726	11872	11235
30°	13406	11172	10330
35°	13055	10462	9446
40°	12638	9698	8537
45°	12245	8941	7638
50°	11800	8113	6725
55°	11318	7265	5782
60°	10785	6364	4850
65°	10268	5329	3954
70°	9535	4242	3021
75°	8593	3087	2113
80°	7177	1894	1520
85°	5399	1092	836

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12245 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	1.8
10°-20°	470.6	4.9
20°-30°	679.4	7.1
30°-40°	769.9	8.1
40°-50°	743.4	7.8
50°-60°	618.1	6.5
60°-70°	426.6	4.5
70°-80°	215.6	2.3
80°-90°	58.3	0.6
90°-100°	57.6	0.6
100°-110°	379.3	4.0
110°-120°	724.2	7.6
120°-130°	919.4	9.7
130°-140°	983.6	10.3
140°-150°	919.7	9.7
150°-160°	741.6	7.8
160°-170°	478.3	5.0
170°-180°	164.8	1.7
0°-30°	1318.7	13.9
0°-40°	2088.6	21.9
0°-60°	3450.1	36.2
0°-90°	4150.6	43.6
90°-120°	1161.0	12.2
90°-150°	3983.6	41.8
90°-180°	5368.0	56.4
0°-180°	9519.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1795	1795	1795	1795	1795	
5°	1792	1786	1770	1784	1781	170
15°	1707	1694	1660	1657	1648	481
25°	1543	1518	1462	1439	1425	711
35°	1334	1290	1222	1175	1150	834
45°	1088	1038	955	888	863	839
55°	824	770	680	609	583	738
65°	561	502	414	355	338	554
75°	298	247	183	151	143	315
85°	74	47	43	40	40	81
90°	4	18	28	36	39	8
95°	71	27	28	36	38	88
105°	391	398	405	416	370	409
115°	729	733	732	734	734	718
125°	1025	1030	1028	1032	1033	915
135°	1272	1270	1276	1278	1281	980
145°	1466	1470	1470	1472	1474	916
155°	1608	1609	1605	1610	1606	741
165°	1696	1690	1690	1700	1688	479
175°	1735	1727	1728	1740	1724	165
180°	1735	1735	1735	1735	1735	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1794.8	1794.8	1794.8	1794.8	1794.8
2.5°	1800.3	1794.8	1779.7	1794.8	1793.4
5°	1792.0	1786.5	1770.0	1783.8	1781.0
7.5°	1779.7	1774.2	1753.5	1763.2	1759.0
10°	1760.4	1753.5	1728.8	1734.3	1728.8
12.5°	1735.7	1727.4	1697.2	1699.9	1691.7
15°	1706.8	1694.4	1660.1	1657.3	1647.7
17.5°	1673.8	1656.0	1616.1	1609.2	1595.5
20°	1634.0	1616.1	1569.4	1558.4	1540.5
22.5°	1590.0	1569.4	1518.5	1500.7	1486.9
25°	1543.3	1518.5	1462.2	1438.8	1425.1
27.5°	1495.2	1464.9	1405.9	1378.4	1359.1
30°	1444.3	1410.0	1345.4	1311.0	1289.0
32.5°	1390.7	1350.9	1283.5	1242.3	1221.7
35°	1334.4	1290.4	1221.7	1175.0	1150.2
37.5°	1275.3	1230.0	1154.4	1103.5	1078.8
40°	1212.1	1166.7	1088.4	1030.7	1005.9
42.5°	1151.6	1103.5	1021.1	962.0	935.9
45°	1088.4	1037.6	955.1	887.8	863.0
47.5°	1023.8	971.6	886.4	816.3	788.8
50°	957.9	904.3	816.3	747.6	721.5
52.5°	890.5	838.3	747.6	677.5	650.0
55°	824.5	769.6	680.3	608.8	582.7
57.5°	760.0	702.2	614.3	541.5	522.2
60°	689.9	634.9	547.0	475.5	453.5
62.5°	626.7	568.9	478.2	413.6	397.2
65°	560.7	501.6	413.6	354.6	338.1
67.5°	492.0	435.6	353.2	301.0	281.7
70°	427.4	369.7	291.3	246.0	232.2
72.5°	358.7	307.8	235.0	197.9	185.5
75°	298.2	247.4	182.8	151.2	142.9
77.5°	235.0	191.0	136.1	114.1	111.3
80°	174.5	134.7	93.4	89.3	88.0
82.5°	122.3	86.6	67.3	64.6	63.2
85°	74.2	46.7	42.6	39.9	39.9
87.5°	31.6	20.6	19.2	17.9	19.2
90°	3.9	18.2	28.5	36.3	38.9
92.5°	19.5	16.9	27.2	35.0	35.0
95°	71.4	27.2	28.5	36.3	37.6
97.5°	136.2	164.8	28.5	35.0	36.3
100°	212.8	236.2	57.1	35.0	36.3
102.5°	298.5	314.0	329.6	37.6	37.6
105°	390.6	398.4	404.9	416.5	369.8
107.5°	474.9	478.8	487.9	494.4	499.6
110°	560.6	564.5	572.2	574.8	578.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	643.6	651.4	654.0	652.7	657.9
115°	729.3	733.2	731.9	734.4	734.4
117.5°	805.8	811.0	814.9	813.6	813.6
120°	883.7	888.9	887.6	890.2	887.6
122.5°	956.3	958.9	961.5	962.8	960.2
125°	1025.1	1030.3	1027.7	1031.6	1032.9
127.5°	1091.3	1092.6	1099.1	1097.8	1096.5
130°	1154.9	1156.2	1160.1	1161.4	1161.4
132.5°	1213.3	1215.9	1221.1	1222.4	1221.1
135°	1271.7	1270.4	1275.6	1278.1	1280.7
137.5°	1323.6	1323.6	1330.1	1332.6	1331.4
140°	1374.2	1376.8	1379.4	1383.3	1384.6
142.5°	1419.6	1424.8	1426.1	1428.7	1428.7
145°	1466.3	1470.2	1470.2	1471.5	1474.1
147.5°	1502.6	1510.4	1509.1	1510.4	1511.7
150°	1542.9	1548.1	1546.8	1546.8	1548.1
152.5°	1576.6	1580.5	1577.9	1580.5	1579.2
155°	1607.7	1609.0	1605.1	1610.3	1606.4
157.5°	1635.0	1635.0	1629.8	1636.3	1629.8
160°	1658.3	1654.5	1653.2	1660.9	1653.2
162.5°	1679.1	1673.9	1672.6	1680.4	1671.3
165°	1696.0	1689.5	1689.5	1699.9	1688.2
167.5°	1710.3	1703.8	1702.5	1714.1	1701.2
170°	1721.9	1714.1	1715.4	1725.8	1712.8
172.5°	1729.7	1721.9	1723.2	1733.6	1719.3
175°	1734.9	1727.1	1728.4	1740.1	1724.5
177.5°	1738.8	1729.7	1732.3	1742.7	1727.1
180°	1734.9	1734.9	1734.9	1734.9	1734.9

(END OF REPORT)