

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: P1033851

Luminaire Tested: S124RDIW-B1020D1340UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033851
REPORT IS A COMBINATION OF REPORTS P999887 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1340UB30-4F0-XX-W2A-F1
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

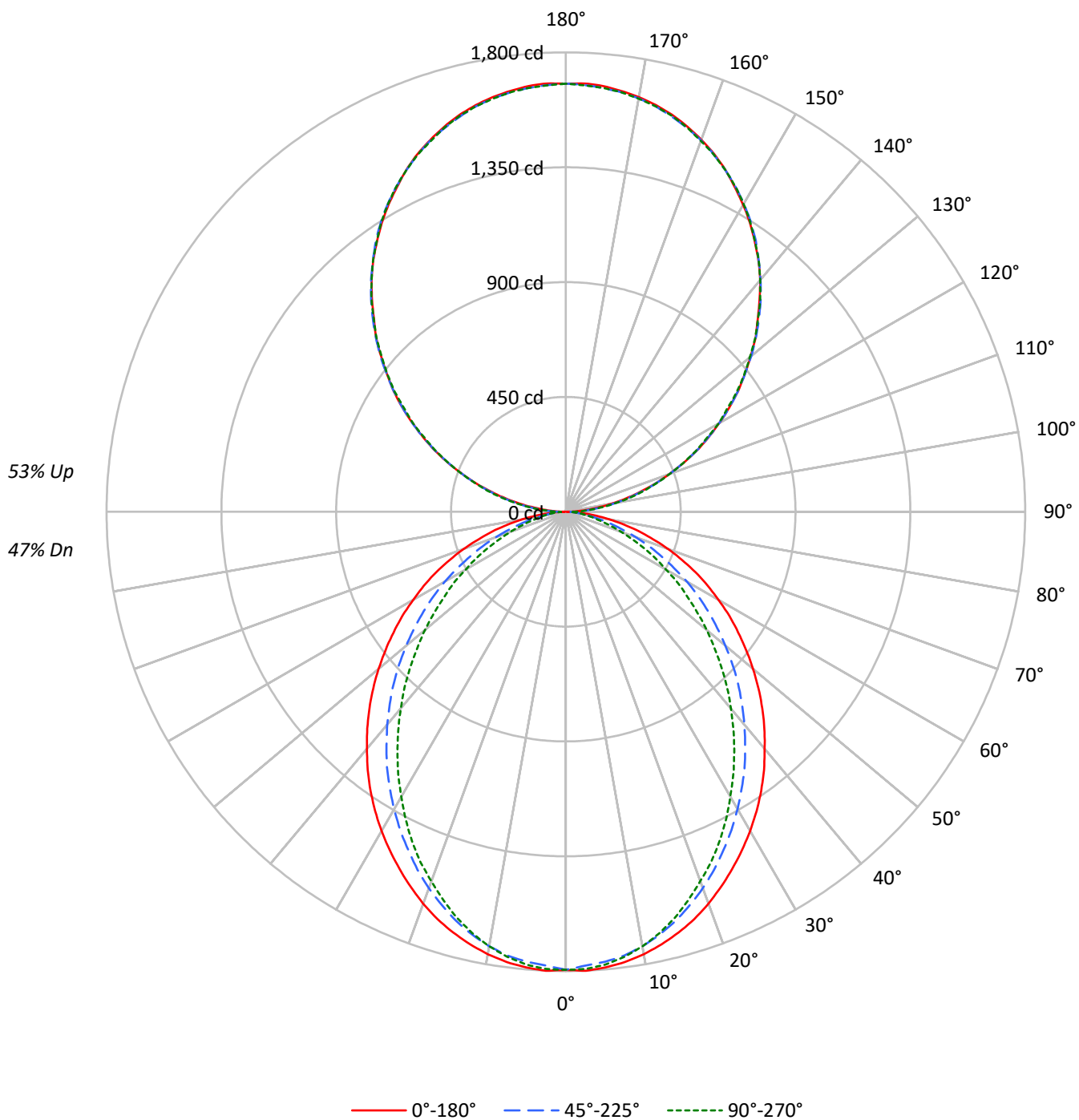
Lumens per Lamp: N/A
Luminaire Lumens: 8805.0 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	98	98	98	98	82	82	82	67	67	67	53	53	53
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46
2	89	82	76	71	81	75	70	66	63	60	56	52	50	47	42	40	39
3	81	72	65	59	74	66	60	55	56	51	48	47	43	40	38	35	33
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	31	28	25
6	63	51	43	37	58	47	40	35	40	35	31	34	30	27	28	25	22
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20
8	54	42	34	29	50	39	32	27	34	28	24	28	24	21	23	20	18
9	50	38	31	26	46	36	29	25	31	25	22	26	22	19	22	19	16
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15

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	1.9
10°-20°	470.6	5.3
20°-30°	679.4	7.7
30°-40°	769.9	8.7
40°-50°	743.4	8.4
50°-60°	618.1	7.0
60°-70°	426.6	4.8
70°-80°	215.6	2.4
80°-90°	58.3	0.7
90°-100°	109.3	1.2
100°-110°	327.5	3.7
110°-120°	556.4	6.3
120°-130°	733.8	8.3
130°-140°	824.1	9.4
140°-150°	810.0	9.2
150°-160°	681.3	7.7
160°-170°	453.3	5.1
170°-180°	158.7	1.8
0°-30°	1318.7	15.0
0°-40°	2088.6	23.7
0°-60°	3450.1	39.2
0°-90°	4150.6	47.1
90°-120°	993.2	11.3
90°-150°	3361.1	38.2
90°-180°	4654.0	52.9
0°-180°	8805.0	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	10
95°	78	90	99	102	102	84
105°	302	304	309	313	317	321
115°	566	566	563	562	560	558
125°	824	824	822	820	817	734
135°	1062	1070	1070	1068	1064	822
145°	1291	1296	1297	1296	1292	808
155°	1479	1479	1478	1483	1478	681
165°	1610	1606	1604	1611	1606	454
175°	1675	1668	1667	1676	1667	159
180°	1678	1678	1678	1678	1678	

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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°	33.7	50.6	57.1	61.0	62.3
95°	77.8	89.5	98.6	102.5	102.5
97.5°	124.5	134.9	145.3	150.5	150.5
100°	181.6	186.8	198.5	201.1	201.1
102.5°	241.3	242.6	253.0	256.9	258.2
105°	302.3	303.6	308.8	312.7	316.6
107.5°	365.9	367.2	368.5	373.6	372.3
110°	430.7	433.3	432.0	429.4	433.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	498.2	498.2	495.6	495.6	495.6
115°	565.6	565.6	563.1	561.8	560.5
117.5°	629.2	629.2	627.9	624.0	620.1
120°	692.8	698.0	694.1	687.6	690.2
122.5°	759.0	760.3	759.0	755.1	748.6
125°	823.8	823.8	822.5	819.9	817.3
127.5°	882.2	886.1	883.5	880.9	879.6
130°	944.5	948.4	948.4	945.8	940.6
132.5°	1008.0	1010.6	1009.3	1006.8	1005.5
135°	1062.5	1070.3	1070.3	1067.7	1063.8
137.5°	1123.5	1127.4	1130.0	1126.1	1127.4
140°	1184.5	1187.1	1187.1	1185.8	1184.5
142.5°	1240.3	1242.9	1241.6	1241.6	1241.6
145°	1290.9	1296.1	1297.4	1296.1	1292.2
147.5°	1342.8	1349.3	1348.0	1346.7	1345.4
150°	1389.5	1394.7	1394.7	1394.7	1393.4
152.5°	1433.6	1436.2	1437.5	1441.4	1437.5
155°	1479.0	1479.0	1477.7	1482.9	1477.7
157.5°	1517.9	1515.3	1515.3	1519.2	1515.3
160°	1551.6	1550.3	1549.0	1552.9	1546.5
162.5°	1582.8	1578.9	1577.6	1585.4	1578.9
165°	1610.0	1606.1	1603.5	1611.3	1606.1
167.5°	1632.1	1626.9	1626.9	1634.7	1626.9
170°	1650.2	1643.8	1645.1	1652.8	1643.8
172.5°	1663.2	1658.0	1658.0	1667.1	1658.0
175°	1674.9	1668.4	1667.1	1676.2	1667.1
177.5°	1680.1	1673.6	1673.6	1682.7	1672.3
180°	1677.5	1677.5	1677.5	1677.5	1677.5

(END OF REPORT)