

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: P1033831

Luminaire Tested: S124RDIW-B1020D1050UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033831
REPORT IS A COMBINATION OF REPORTS P999843 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1050UB30-4F0-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

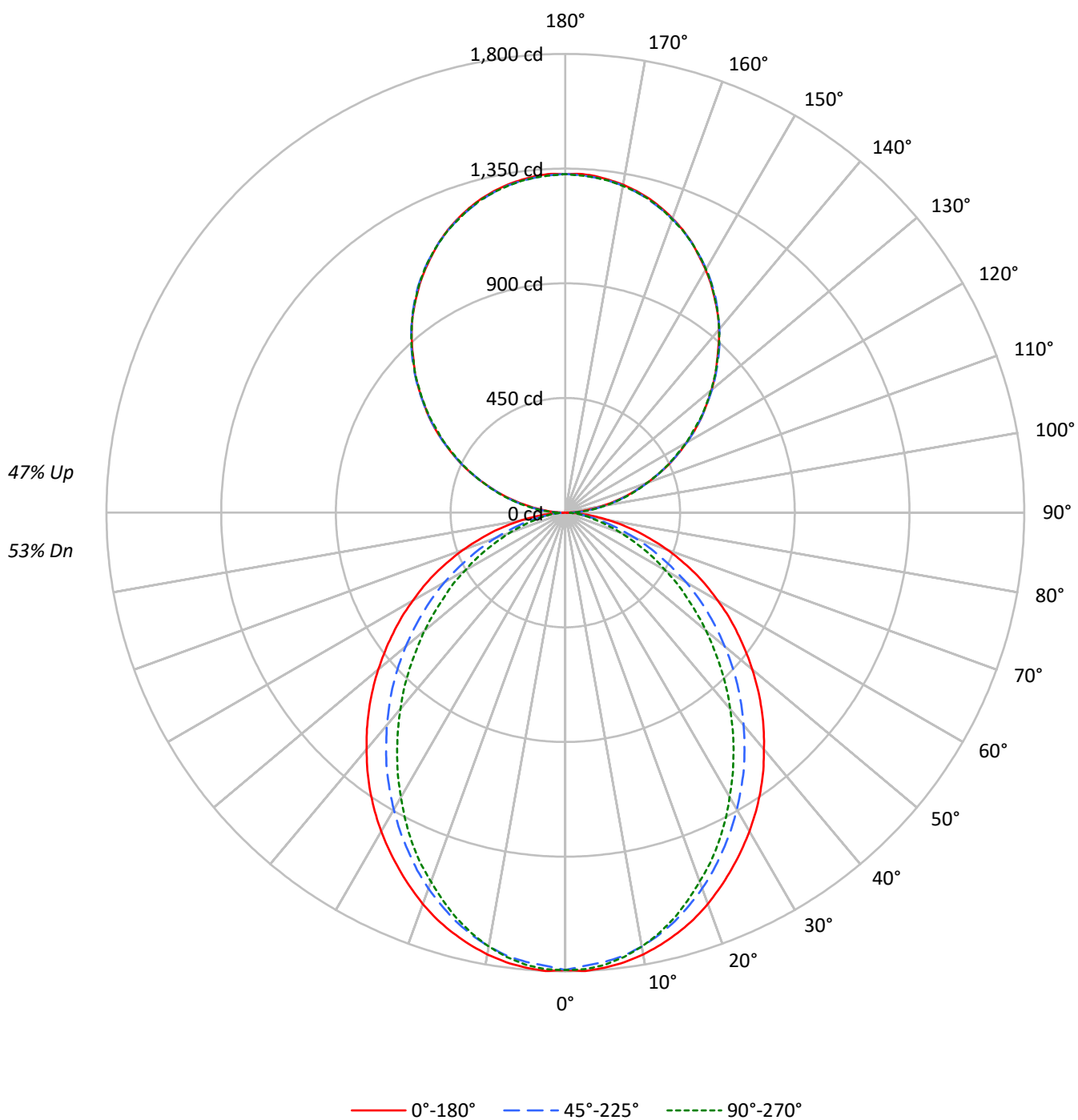
Lumens per Lamp: N/A
Luminaire Lumens: 7836.0 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 78.3
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59
1	99	95	91	87	91	88	84	81	75	73	70	63	62	60	52	51	50
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43
3	82	73	66	60	76	68	62	57	58	54	50	50	46	43	41	39	37
4	76	65	57	51	70	60	54	48	52	47	43	44	40	37	37	34	32
5	69	58	50	44	64	54	47	42	47	41	37	40	36	32	34	30	28
6	64	52	44	38	59	49	41	36	42	37	32	36	32	28	31	27	25
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22
8	55	43	35	30	51	40	33	28	35	29	25	30	26	23	26	22	20
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	20	18
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16

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	2.2
10°-20°	470.6	6.0
20°-30°	679.4	8.7
30°-40°	769.9	9.8
40°-50°	743.4	9.5
50°-60°	618.1	7.9
60°-70°	426.6	5.4
70°-80°	215.6	2.8
80°-90°	57.6	0.7
90°-100°	86.6	1.1
100°-110°	259.4	3.3
110°-120°	440.6	5.6
120°-130°	581.1	7.4
130°-140°	652.7	8.3
140°-150°	641.5	8.2
150°-160°	539.5	6.9
160°-170°	359.0	4.6
170°-180°	125.7	1.6
0°-30°	1318.7	16.8
0°-40°	2088.6	26.7
0°-60°	3450.1	44.0
0°-90°	4149.8	53.0
90°-120°	786.6	10.0
90°-150°	2661.9	34.0
90°-180°	3686.0	47.0
0°-180°	7836.0	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°	3	14	23	29	31	9
95°	62	71	78	81	81	67
105°	239	240	244	248	251	254
115°	448	448	446	445	444	442
125°	652	652	651	649	647	582
135°	842	848	848	846	842	651
145°	1022	1026	1028	1026	1023	640
155°	1171	1171	1170	1174	1170	539
165°	1275	1272	1270	1276	1272	360
175°	1326	1321	1320	1328	1320	126
180°	1328	1328	1328	1328	1328	

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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°	3.1	14.4	22.6	28.8	30.8
92.5°	26.7	40.1	45.2	48.3	49.3
95°	61.6	70.9	78.1	81.2	81.2
97.5°	98.6	106.9	115.1	119.2	119.2
100°	143.8	148.0	157.2	159.3	159.3
102.5°	191.1	192.1	200.4	203.4	204.5
105°	239.4	240.4	244.5	247.6	250.7
107.5°	289.7	290.8	291.8	295.9	294.9
110°	341.1	343.2	342.1	340.1	343.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	394.5	394.5	392.5	392.5	392.5
115°	448.0	448.0	445.9	444.9	443.9
117.5°	498.3	498.3	497.3	494.2	491.1
120°	548.7	552.8	549.7	544.6	546.6
122.5°	601.1	602.1	601.1	598.0	592.9
125°	652.4	652.4	651.4	649.4	647.3
127.5°	698.7	701.8	699.7	697.7	696.6
130°	748.0	751.1	751.1	749.0	744.9
132.5°	798.3	800.4	799.4	797.3	796.3
135°	841.5	847.7	847.7	845.6	842.5
137.5°	889.8	892.9	894.9	891.8	892.9
140°	938.1	940.1	940.1	939.1	938.1
142.5°	982.3	984.3	983.3	983.3	983.3
145°	1022.3	1026.4	1027.5	1026.4	1023.4
147.5°	1063.4	1068.6	1067.5	1066.5	1065.5
150°	1100.4	1104.5	1104.5	1104.5	1103.5
152.5°	1135.4	1137.4	1138.4	1141.5	1138.4
155°	1171.3	1171.3	1170.3	1174.4	1170.3
157.5°	1202.1	1200.1	1200.1	1203.2	1200.1
160°	1228.9	1227.8	1226.8	1229.9	1224.7
162.5°	1253.5	1250.4	1249.4	1255.6	1250.4
165°	1275.1	1272.0	1270.0	1276.1	1272.0
167.5°	1292.6	1288.5	1288.5	1294.6	1288.5
170°	1306.9	1301.8	1302.8	1309.0	1301.8
172.5°	1317.2	1313.1	1313.1	1320.3	1313.1
175°	1326.5	1321.3	1320.3	1327.5	1320.3
177.5°	1330.6	1325.4	1325.4	1332.6	1324.4
180°	1328.5	1328.5	1328.5	1328.5	1328.5

(END OF REPORT)