

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: P1032846

Luminaire Tested: S124RDIW-B1020D1050UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032846
REPORT IS A COMBINATION OF REPORTS P999835 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1050UB2750-4F0-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

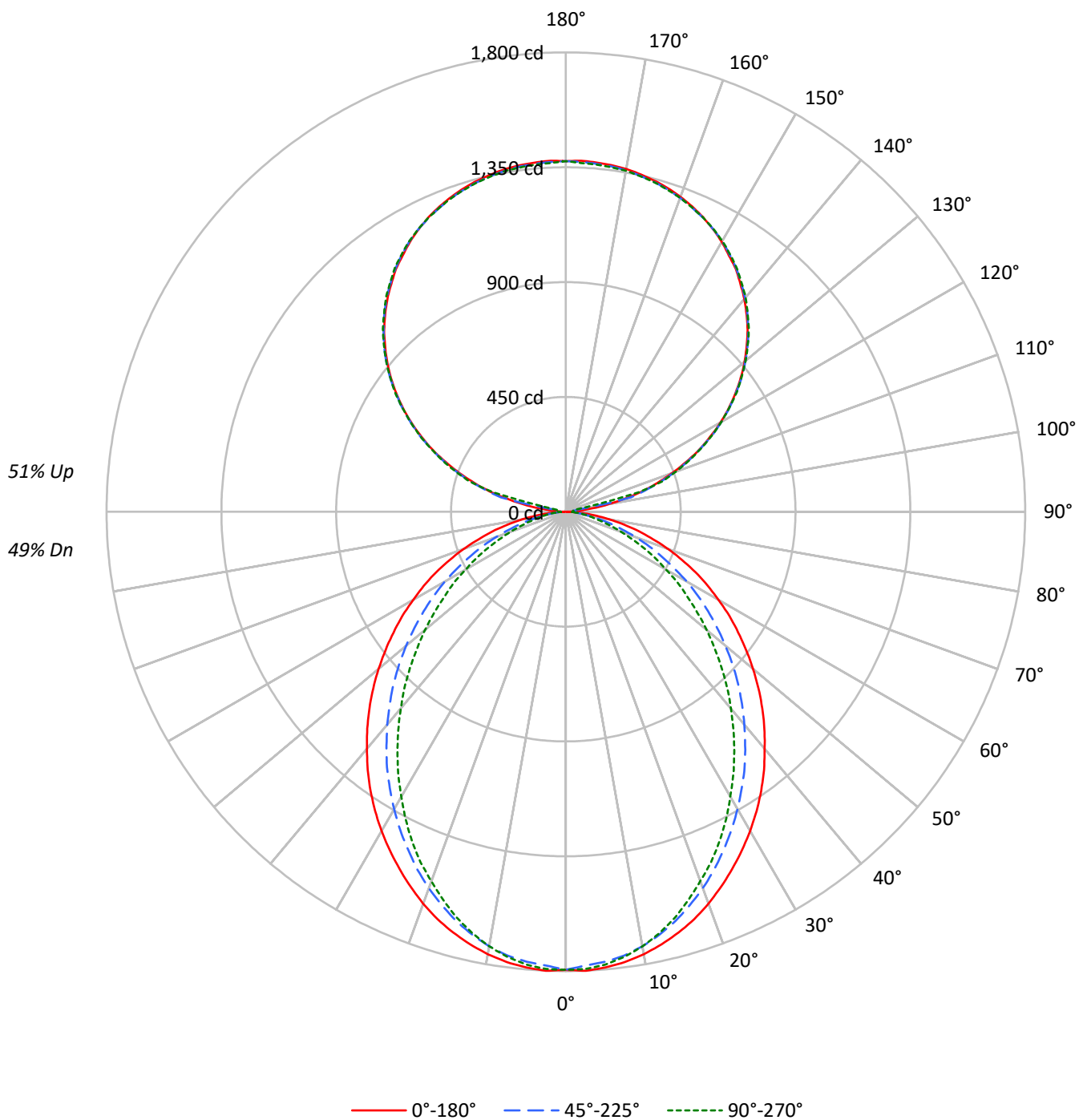
Lumens per Lamp: N/A
Luminaire Lumens: 8401.0 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	94	90	87	90	87	83	80	73	71	69	61	59	58	50	48	47
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	37	35
4	75	64	56	51	69	60	53	47	51	46	41	43	39	36	35	32	30
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26
6	63	51	44	38	58	48	41	36	41	36	31	35	31	27	29	26	23
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	22	19	17
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	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	2.0
10°-20°	470.6	5.6
20°-30°	679.4	8.1
30°-40°	769.9	9.2
40°-50°	743.4	8.8
50°-60°	618.1	7.4
60°-70°	426.6	5.1
70°-80°	215.6	2.6
80°-90°	57.6	0.7
90°-100°	45.6	0.5
100°-110°	300.3	3.6
110°-120°	573.5	6.8
120°-130°	728.0	8.7
130°-140°	778.8	9.3
140°-150°	728.3	8.7
150°-160°	587.3	7.0
160°-170°	378.8	4.5
170°-180°	130.5	1.6
0°-30°	1318.7	15.7
0°-40°	2088.6	24.9
0°-60°	3450.1	41.1
0°-90°	4149.8	49.4
90°-120°	919.4	10.9
90°-150°	3154.6	37.5
90°-180°	4251.0	50.6
0°-180°	8401.0	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	7
95°	56	22	23	29	30	70
105°	309	316	321	330	293	324
115°	578	581	580	582	582	568
125°	812	816	814	817	818	725
135°	1007	1006	1010	1012	1014	776
145°	1161	1164	1164	1165	1167	726
155°	1273	1274	1271	1275	1272	587
165°	1343	1338	1338	1346	1337	380
175°	1374	1368	1369	1378	1366	131
180°	1374	1374	1374	1374	1374	

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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°	15.4	13.4	21.6	27.7	27.7
95°	56.5	21.6	22.6	28.8	29.8
97.5°	107.9	130.5	22.6	27.7	28.8
100°	168.5	187.0	45.2	27.7	28.8
102.5°	236.3	248.7	261.0	29.8	29.8
105°	309.3	315.5	320.6	329.8	292.9
107.5°	376.1	379.2	386.4	391.5	395.6
110°	443.9	447.0	453.2	455.2	458.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	509.7	515.8	517.9	516.9	521.0
115°	577.5	580.6	579.5	581.6	581.6
117.5°	638.1	642.2	645.3	644.3	644.3
120°	699.8	703.9	702.8	704.9	702.8
122.5°	757.3	759.4	761.4	762.4	760.4
125°	811.8	815.9	813.8	816.9	817.9
127.5°	864.2	865.2	870.3	869.3	868.3
130°	914.5	915.6	918.6	919.7	919.7
132.5°	960.8	962.8	966.9	968.0	966.9
135°	1007.0	1006.0	1010.1	1012.1	1014.2
137.5°	1048.1	1048.1	1053.2	1055.3	1054.3
140°	1088.2	1090.2	1092.3	1095.4	1096.4
142.5°	1124.1	1128.3	1129.3	1131.3	1131.3
145°	1161.1	1164.2	1164.2	1165.3	1167.3
147.5°	1189.9	1196.1	1195.1	1196.1	1197.1
150°	1221.8	1225.9	1224.8	1224.8	1225.9
152.5°	1248.5	1251.6	1249.5	1251.6	1250.5
155°	1273.1	1274.2	1271.1	1275.2	1272.1
157.5°	1294.7	1294.7	1290.6	1295.8	1290.6
160°	1313.2	1310.1	1309.1	1315.3	1309.1
162.5°	1329.7	1325.6	1324.5	1330.7	1323.5
165°	1343.0	1337.9	1337.9	1346.1	1336.9
167.5°	1354.3	1349.2	1348.2	1357.4	1347.1
170°	1363.6	1357.4	1358.4	1366.7	1356.4
172.5°	1369.7	1363.6	1364.6	1372.8	1361.5
175°	1373.8	1367.7	1368.7	1378.0	1365.6
177.5°	1376.9	1369.7	1371.8	1380.0	1367.7
180°	1373.8	1373.8	1373.8	1373.8	1373.8

(END OF REPORT)