

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: P1033842

Luminaire Tested: S124RDIW-B1020D1050UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033842
REPORT IS A COMBINATION OF REPORTS P999860 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B1020D1050UB50-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

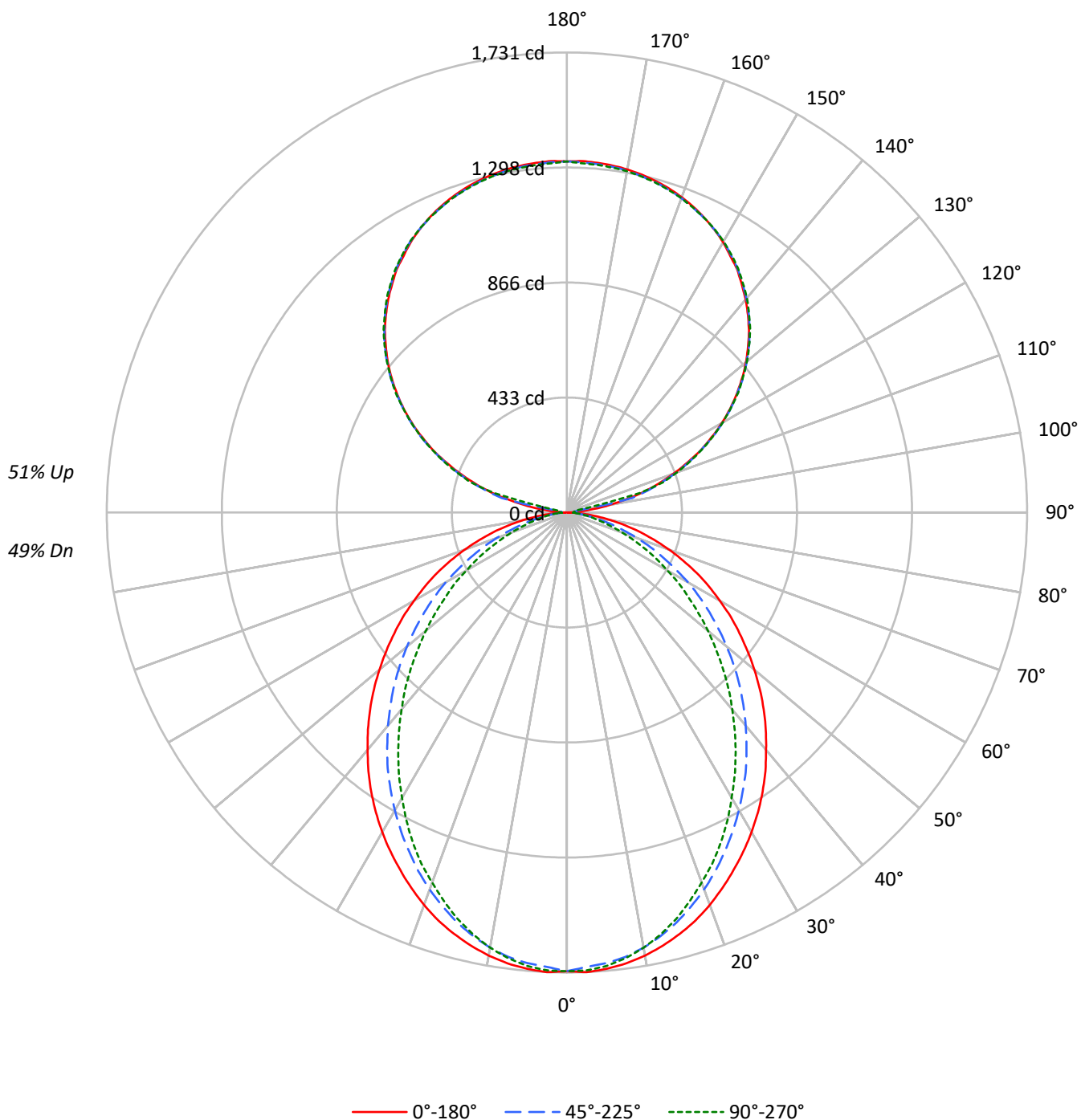
Lumens per Lamp: N/A
Luminaire Lumens: 8078.0 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	14075	14075	14075
5°	14076	13656	13657
10°	13956	13225	13068
15°	13765	12688	12372
20°	13513	12077	11579
25°	13199	11417	10804
30°	12893	10744	9934
35°	12554	10062	9084
40°	12153	9327	8210
45°	11776	8598	7345
50°	11347	7802	6466
55°	10884	6986	5560
60°	10370	6120	4664
65°	9875	5126	3802
70°	9169	4080	2905
75°	8265	2969	2032
80°	6901	1823	1461
85°	5196	1051	803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	2.0
10°-20°	452.5	5.6
20°-30°	653.3	8.1
30°-40°	740.4	9.2
40°-50°	714.9	8.9
50°-60°	594.3	7.4
60°-70°	410.2	5.1
70°-80°	207.3	2.6
80°-90°	55.4	0.7
90°-100°	43.8	0.5
100°-110°	288.8	3.6
110°-120°	551.4	6.8
120°-130°	700.0	8.7
130°-140°	748.8	9.3
140°-150°	700.2	8.7
150°-160°	564.7	7.0
160°-170°	364.2	4.5
170°-180°	125.5	1.6
0°-30°	1268.1	15.7
0°-40°	2008.6	24.9
0°-60°	3317.8	41.1
0°-90°	3990.7	49.4
90°-120°	884.0	10.9
90°-150°	3033.0	37.5
90°-180°	4087.0	50.6
0°-180°	8078.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1723	1718	1702	1715	1713	164
15°	1641	1630	1596	1594	1584	463
25°	1484	1460	1406	1384	1370	684
35°	1283	1241	1175	1130	1106	802
45°	1047	998	918	854	830	807
55°	793	740	654	585	560	709
65°	539	482	398	341	325	532
75°	287	238	176	145	137	302
85°	71	45	41	38	38	78
90°	3	14	22	28	30	7
95°	54	21	22	28	29	67
105°	297	303	308	317	282	311
115°	555	558	557	559	559	546
125°	780	784	782	785	786	697
135°	968	967	971	973	975	746
145°	1116	1119	1119	1120	1122	698
155°	1224	1225	1222	1226	1223	564
165°	1291	1286	1286	1294	1285	365
175°	1321	1315	1316	1325	1313	126
180°	1321	1321	1321	1321	1321	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1726.0	1726.0	1726.0	1726.0	1726.0
2.5°	1731.2	1726.0	1711.4	1726.0	1724.6
5°	1723.3	1718.0	1702.2	1715.4	1712.7
7.5°	1711.4	1706.1	1686.3	1695.6	1691.6
10°	1692.9	1686.3	1662.5	1667.8	1662.5
12.5°	1669.1	1661.2	1632.1	1634.8	1626.8
15°	1641.4	1629.5	1596.4	1593.8	1584.5
17.5°	1609.7	1592.5	1554.2	1547.5	1534.3
20°	1571.3	1554.2	1509.2	1498.6	1481.5
22.5°	1529.0	1509.2	1460.3	1443.1	1429.9
25°	1484.1	1460.3	1406.1	1383.7	1370.5
27.5°	1437.9	1408.8	1352.0	1325.5	1307.0
30°	1389.0	1355.9	1293.8	1260.8	1239.6
32.5°	1337.4	1299.1	1234.3	1194.7	1174.9
35°	1283.2	1240.9	1174.9	1129.9	1106.1
37.5°	1226.4	1182.8	1110.1	1061.2	1037.4
40°	1165.6	1122.0	1046.7	991.2	967.4
42.5°	1107.5	1061.2	981.9	925.1	900.0
45°	1046.7	997.8	918.5	853.7	829.9
47.5°	984.6	934.3	852.4	785.0	758.6
50°	921.1	869.6	785.0	718.9	693.8
52.5°	856.4	806.2	718.9	651.5	625.1
55°	792.9	740.1	654.2	585.4	560.3
57.5°	730.8	675.3	590.7	520.7	502.2
60°	663.4	610.6	526.0	457.3	436.1
62.5°	602.6	547.1	459.9	397.8	381.9
65°	539.2	482.4	397.8	341.0	325.1
67.5°	473.1	418.9	339.6	289.4	270.9
70°	411.0	355.5	280.2	236.6	223.3
72.5°	344.9	296.0	226.0	190.3	178.4
75°	286.8	237.9	175.8	145.4	137.4
77.5°	226.0	183.7	130.8	109.7	107.0
80°	167.8	129.5	89.9	85.9	84.6
82.5°	117.6	83.3	64.8	62.1	60.8
85°	71.4	44.9	41.0	38.3	38.3
87.5°	30.4	19.8	18.5	17.2	18.5
90°	3.0	13.8	21.7	27.7	29.6
92.5°	14.8	12.8	20.7	26.7	26.7
95°	54.3	20.7	21.7	27.7	28.7
97.5°	103.7	125.5	21.7	26.7	27.7
100°	162.0	179.8	43.5	26.7	27.7
102.5°	227.2	239.1	250.9	28.7	28.7
105°	297.4	303.3	308.2	317.1	281.6
107.5°	361.6	364.6	371.5	376.4	380.4
110°	426.8	429.8	435.7	437.7	440.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	490.0	495.9	497.9	496.9	500.9
115°	555.2	558.2	557.2	559.2	559.2
117.5°	613.5	617.5	620.4	619.4	619.4
120°	672.8	676.7	675.8	677.7	675.8
122.5°	728.1	730.1	732.1	733.1	731.1
125°	780.5	784.4	782.5	785.4	786.4
127.5°	830.9	831.8	836.8	835.8	834.8
130°	879.3	880.3	883.2	884.2	884.2
132.5°	923.7	925.7	929.7	930.6	929.7
135°	968.2	967.2	971.1	973.1	975.1
137.5°	1007.7	1007.7	1012.6	1014.6	1013.6
140°	1046.2	1048.2	1050.2	1053.1	1054.1
142.5°	1080.8	1084.8	1085.8	1087.7	1087.7
145°	1116.4	1119.3	1119.3	1120.3	1122.3
147.5°	1144.0	1150.0	1149.0	1150.0	1151.0
150°	1174.7	1178.6	1177.6	1177.6	1178.6
152.5°	1200.4	1203.3	1201.3	1203.3	1202.3
155°	1224.1	1225.1	1222.1	1226.0	1223.1
157.5°	1244.8	1244.8	1240.9	1245.8	1240.9
160°	1262.6	1259.6	1258.6	1264.6	1258.6
162.5°	1278.4	1274.4	1273.5	1279.4	1272.5
165°	1291.2	1286.3	1286.3	1294.2	1285.3
167.5°	1302.1	1297.2	1296.2	1305.1	1295.2
170°	1311.0	1305.1	1306.1	1314.0	1304.1
172.5°	1316.9	1311.0	1312.0	1319.9	1309.0
175°	1320.9	1315.0	1315.9	1324.8	1313.0
177.5°	1323.8	1316.9	1318.9	1326.8	1315.0
180°	1320.9	1320.9	1320.9	1320.9	1320.9

(END OF REPORT)