

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: P1033843

Luminaire Tested: S124RDIW-B1020D1050UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033843
REPORT IS A COMBINATION OF REPORTS P999861 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-F1
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

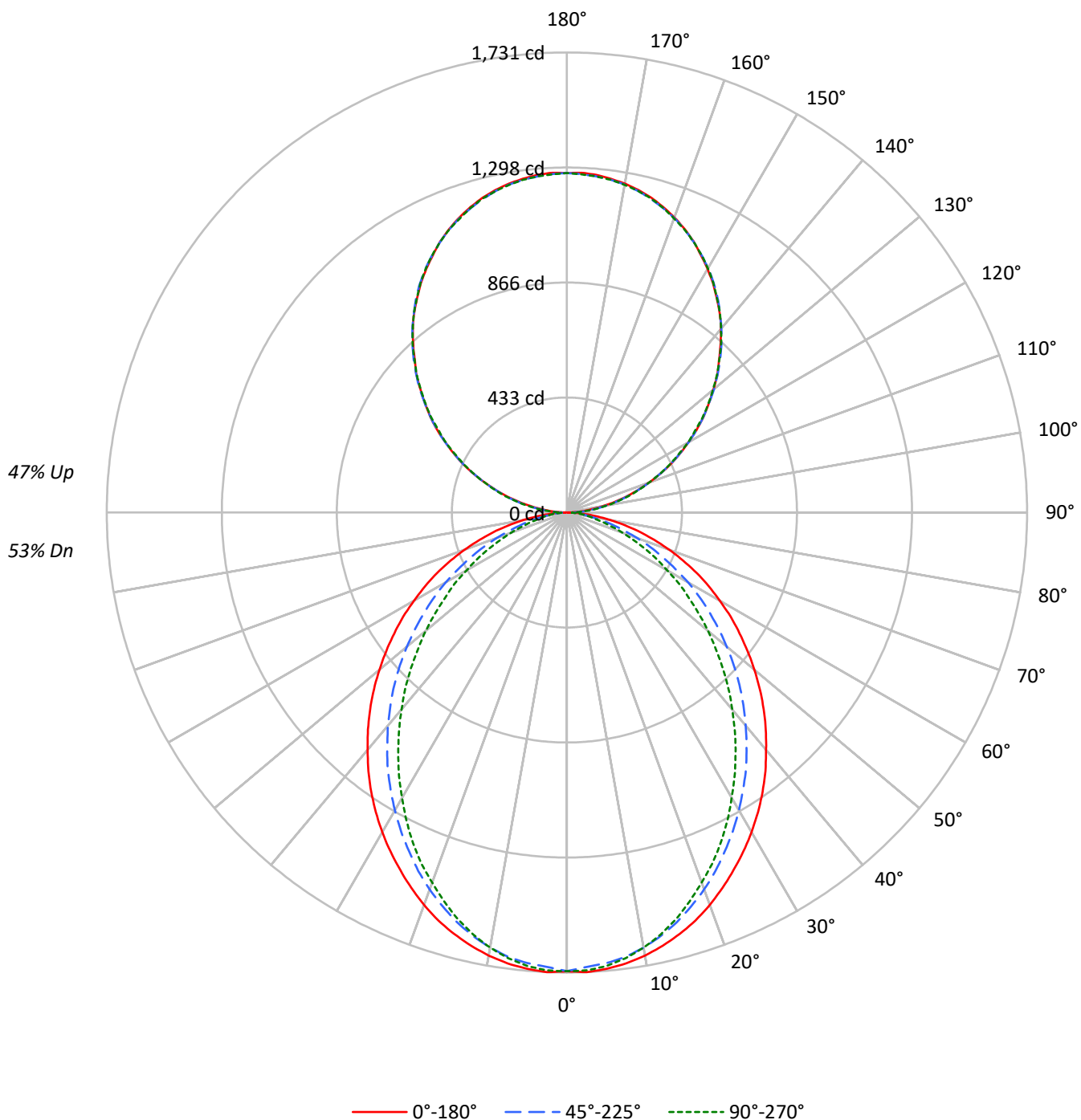
Lumens per Lamp: N/A
Luminaire Lumens: 7535.0 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	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°	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	2.2
10°-20°	452.5	6.0
20°-30°	653.3	8.7
30°-40°	740.4	9.8
40°-50°	714.9	9.5
50°-60°	594.3	7.9
60°-70°	410.2	5.4
70°-80°	207.3	2.8
80°-90°	55.4	0.7
90°-100°	83.3	1.1
100°-110°	249.4	3.3
110°-120°	423.7	5.6
120°-130°	558.7	7.4
130°-140°	627.6	8.3
140°-150°	616.8	8.2
150°-160°	518.8	6.9
160°-170°	345.2	4.6
170°-180°	120.9	1.6
0°-30°	1268.1	16.8
0°-40°	2008.6	26.7
0°-60°	3317.8	44.0
0°-90°	3990.7	53.0
90°-120°	756.3	10.0
90°-150°	2559.4	34.0
90°-180°	3544.0	47.0
0°-180°	7535.0	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	9
95°	59	68	75	78	78	64
105°	230	231	235	238	241	244
115°	431	431	429	428	427	425
125°	627	627	626	624	622	559
135°	809	815	815	813	810	626
145°	983	987	988	987	984	615
155°	1126	1126	1125	1129	1125	518
165°	1226	1223	1221	1227	1223	346
175°	1275	1270	1270	1276	1270	121
180°	1277	1277	1277	1277	1277	

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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°	25.7	38.5	43.5	46.4	47.4
95°	59.3	68.2	75.1	78.0	78.0
97.5°	94.8	102.7	110.6	114.6	114.6
100°	138.3	142.3	151.2	153.1	153.1
102.5°	183.8	184.7	192.6	195.6	196.6
105°	230.2	231.2	235.1	238.1	241.1
107.5°	278.6	279.6	280.6	284.5	283.5
110°	328.0	330.0	329.0	327.0	330.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	379.4	379.4	377.4	377.4	377.4
115°	430.7	430.7	428.8	427.8	426.8
117.5°	479.1	479.1	478.2	475.2	472.2
120°	527.6	531.5	528.5	523.6	525.6
122.5°	577.9	578.9	577.9	575.0	570.0
125°	627.3	627.3	626.3	624.4	622.4
127.5°	671.8	674.8	672.8	670.8	669.8
130°	719.2	722.2	722.2	720.2	716.2
132.5°	767.6	769.6	768.6	766.6	765.6
135°	809.1	815.0	815.0	813.1	810.1
137.5°	855.5	858.5	860.5	857.5	858.5
140°	902.0	903.9	903.9	903.0	902.0
142.5°	944.5	946.4	945.4	945.4	945.4
145°	983.0	986.9	987.9	986.9	984.0
147.5°	1022.5	1027.4	1026.5	1025.5	1024.5
150°	1058.1	1062.0	1062.0	1062.0	1061.0
152.5°	1091.7	1093.6	1094.6	1097.6	1094.6
155°	1126.2	1126.2	1125.2	1129.2	1125.2
157.5°	1155.9	1153.9	1153.9	1156.9	1153.9
160°	1181.6	1180.6	1179.6	1182.5	1177.6
162.5°	1205.3	1202.3	1201.3	1207.2	1202.3
165°	1226.0	1223.0	1221.1	1227.0	1223.0
167.5°	1242.8	1238.9	1238.9	1244.8	1238.9
170°	1256.6	1251.7	1252.7	1258.6	1251.7
172.5°	1266.5	1262.6	1262.6	1269.5	1262.6
175°	1275.4	1270.5	1269.5	1276.4	1269.5
177.5°	1279.4	1274.4	1274.4	1281.3	1273.4
180°	1277.4	1277.4	1277.4	1277.4	1277.4

(END OF REPORT)