

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: P1033467

Luminaire Tested: S124DIW-B350D1560UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033467
REPORT IS A COMBINATION OF REPORTS P997472 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1560UB50-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

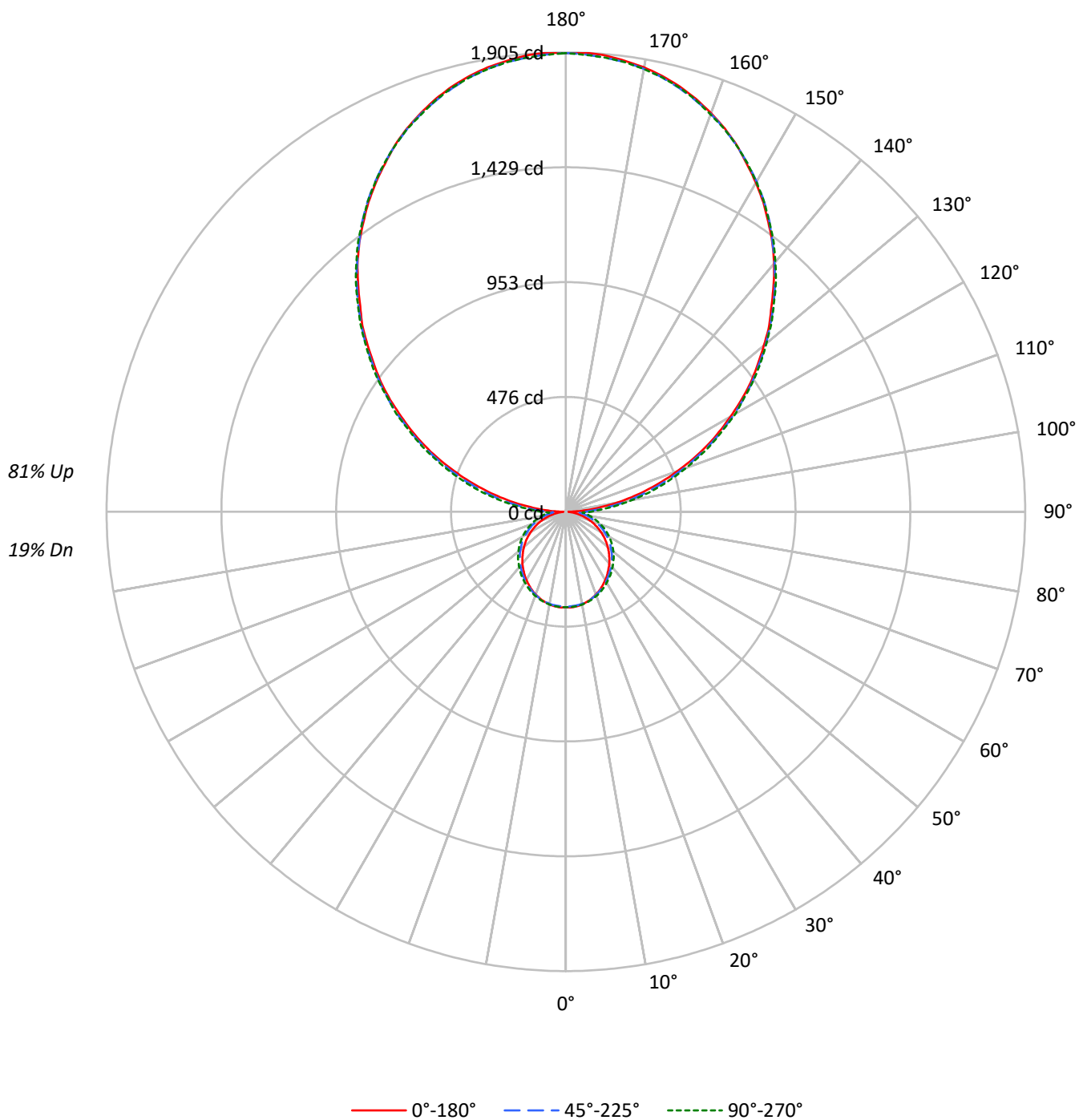
Lumens per Lamp: N/A
Luminaire Lumens: 6631.0 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	90	86	82	79	80	76	73	70	57	55	53	40	38	37	24	23	22
2	82	75	69	64	72	66	61	57	50	46	44	35	33	31	21	19	19
3	75	66	59	53	66	58	52	47	44	40	36	30	28	26	18	17	16
4	68	58	50	44	60	51	45	40	39	34	31	27	24	22	16	15	13
5	62	51	43	38	55	45	39	34	34	30	26	24	21	19	14	13	11
6	57	46	38	32	50	41	34	29	31	26	23	22	19	16	13	11	10
7	53	41	33	28	46	36	30	25	28	23	20	19	16	14	12	10	9
8	49	37	30	25	43	33	27	22	25	20	17	18	15	12	11	9	8
9	45	34	26	22	40	30	24	19	23	18	15	16	13	11	10	8	7
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	9	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3227	3227	3227
5°	3235	3143	3148
10°	3214	3081	3072
15°	3184	3011	2986
20°	3140	2936	2902
25°	3090	2853	2812
30°	3035	2770	2720
35°	2974	2686	2638
40°	2925	2605	2554
45°	2851	2530	2478
50°	2789	2444	2399
55°	2725	2361	2308
60°	2625	2258	2222
65°	2516	2147	2119
70°	2383	2020	2000
75°	2196	1878	1887
80°	1987	1734	1769
85°	1710	1589	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3751 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	0.6
10°-20°	107.4	1.6
20°-30°	162.4	2.4
30°-40°	196.5	3.0
40°-50°	207.7	3.1
50°-60°	195.5	2.9
60°-70°	162.2	2.4
70°-80°	113.8	1.7
80°-90°	68.2	1.0
90°-100°	162.2	2.4
100°-110°	399.7	6.0
110°-120°	649.9	9.8
120°-130°	842.7	12.7
130°-140°	939.2	14.2
140°-150°	919.4	13.9
150°-160°	772.5	11.7
160°-170°	514.0	7.8
170°-180°	180.0	2.7
0°-30°	307.3	4.6
0°-40°	503.8	7.6
0°-60°	907.0	13.7
0°-90°	1251.3	18.9
90°-120°	1211.8	18.3
90°-150°	3913.1	59.0
90°-180°	5380.0	81.1
0°-180°	6631.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	396	395	392	395	395	38
15°	380	380	379	383	382	107
25°	347	350	351	356	357	160
35°	304	309	314	320	321	190
45°	253	262	270	278	280	196
55°	198	208	221	230	233	177
65°	137	152	167	178	181	136
75°	76	93	111	124	128	81
85°	24	42	62	75	80	24
90°	12	45	76	98	104	11
95°	94	122	150	167	171	100
105°	347	357	379	395	403	368
115°	644	648	659	668	669	635
125°	936	936	945	951	950	834
135°	1206	1215	1218	1222	1220	933
145°	1464	1470	1471	1472	1470	917
155°	1677	1677	1676	1682	1676	772
165°	1826	1821	1818	1827	1821	515
175°	1899	1892	1890	1901	1890	180
180°	1902	1902	1902	1902	1902	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	395.7	395.7	395.7	395.7	395.7
2.5°	397.4	396.1	392.6	395.7	395.2
5°	396.1	394.8	391.7	395.2	394.8
7.5°	393.5	392.6	389.9	393.9	393.5
10°	389.9	389.5	387.3	391.2	390.8
12.5°	385.0	385.0	383.7	387.3	387.3
15°	379.7	380.2	378.8	382.8	382.4
17.5°	372.6	374.0	373.5	377.5	377.1
20°	365.1	366.4	366.9	371.3	371.3
22.5°	356.7	358.5	359.3	363.8	364.7
25°	347.4	350.0	351.4	356.2	356.7
27.5°	337.2	341.2	342.9	347.4	347.8
30°	327.0	330.5	333.6	338.5	339.4
32.5°	315.9	320.3	323.9	329.7	330.5
35°	304.0	309.3	313.7	319.9	321.2
37.5°	292.0	298.2	303.5	309.7	311.0
40°	280.5	286.2	292.4	299.1	300.9
42.5°	267.2	273.8	281.4	288.9	290.2
45°	253.4	261.9	270.3	277.8	280.0
47.5°	240.6	249.0	258.8	266.3	268.9
50°	226.4	236.2	245.9	254.8	257.4
52.5°	212.2	222.0	233.5	242.4	245.0
55°	198.5	207.8	221.1	230.0	232.6
57.5°	183.0	194.5	207.4	218.0	220.2
60°	167.9	179.4	194.1	204.3	207.8
62.5°	153.3	166.2	180.8	191.0	194.5
65°	137.4	151.5	166.6	177.7	181.2
67.5°	122.3	137.4	153.3	164.4	167.9
70°	106.8	121.8	138.7	150.6	153.7
72.5°	91.7	107.2	125.4	136.9	140.5
75°	76.2	92.6	111.2	123.6	127.6
77.5°	61.6	78.9	98.4	110.8	115.2
80°	48.3	66.0	85.5	98.8	102.4
82.5°	35.0	53.6	73.1	86.8	90.8
85°	23.5	42.1	62.0	75.3	79.8
87.5°	14.6	32.8	52.3	65.1	69.1
90°	11.5	45.4	76.3	97.9	104.4
92.5°	44.9	79.6	105.9	122.7	127.8
95°	94.1	121.9	150.3	166.7	170.7
97.5°	146.5	171.2	201.1	218.6	222.5
100°	210.9	228.2	258.8	273.6	276.7
102.5°	278.5	289.7	318.4	334.3	339.3
105°	346.8	357.1	379.3	394.8	402.9
107.5°	418.9	427.8	444.8	461.8	463.4
110°	491.9	501.1	515.2	522.4	530.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	568.0	573.3	585.0	594.8	598.3
115°	644.1	648.0	659.3	667.6	669.2
117.5°	716.2	718.8	730.6	735.5	734.7
120°	787.8	795.0	803.5	805.0	811.5
122.5°	862.8	864.3	874.8	879.2	875.0
125°	936.0	935.5	945.1	950.6	950.3
127.5°	1002.2	1006.1	1012.1	1017.1	1018.7
130°	1072.3	1076.3	1083.4	1088.5	1085.2
132.5°	1144.4	1146.9	1150.8	1155.3	1156.5
135°	1205.8	1214.6	1217.7	1221.9	1220.1
137.5°	1274.9	1278.8	1283.6	1285.9	1289.5
140°	1344.1	1346.5	1347.0	1351.2	1352.1
142.5°	1406.8	1409.8	1407.9	1412.8	1414.5
145°	1464.2	1469.7	1471.2	1472.4	1469.7
147.5°	1523.1	1530.0	1528.5	1527.5	1527.8
150°	1576.0	1581.5	1581.5	1581.5	1580.0
152.5°	1625.6	1628.6	1630.0	1634.5	1630.0
155°	1677.1	1677.1	1675.7	1681.5	1675.7
157.5°	1721.3	1718.3	1718.3	1722.7	1718.3
160°	1759.5	1758.0	1756.6	1761.0	1753.6
162.5°	1794.8	1790.4	1788.9	1797.8	1790.4
165°	1825.7	1821.3	1818.4	1827.2	1821.3
167.5°	1850.7	1844.8	1844.8	1853.7	1844.8
170°	1871.3	1864.0	1865.4	1874.3	1864.0
172.5°	1886.0	1880.1	1880.1	1890.4	1880.1
175°	1899.3	1891.9	1890.4	1900.7	1890.4
177.5°	1905.2	1897.8	1897.8	1908.1	1896.3
180°	1902.2	1902.2	1902.2	1902.2	1902.2

(END OF REPORT)