

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: P1032638

Luminaire Tested: S124DIW-B350D1340UB2750-4F0-XX-W2A-D_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032638
REPORT IS A COMBINATION OF REPORTS P997367 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1340UB2750-4F0-XX-W2A-D_5000K
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

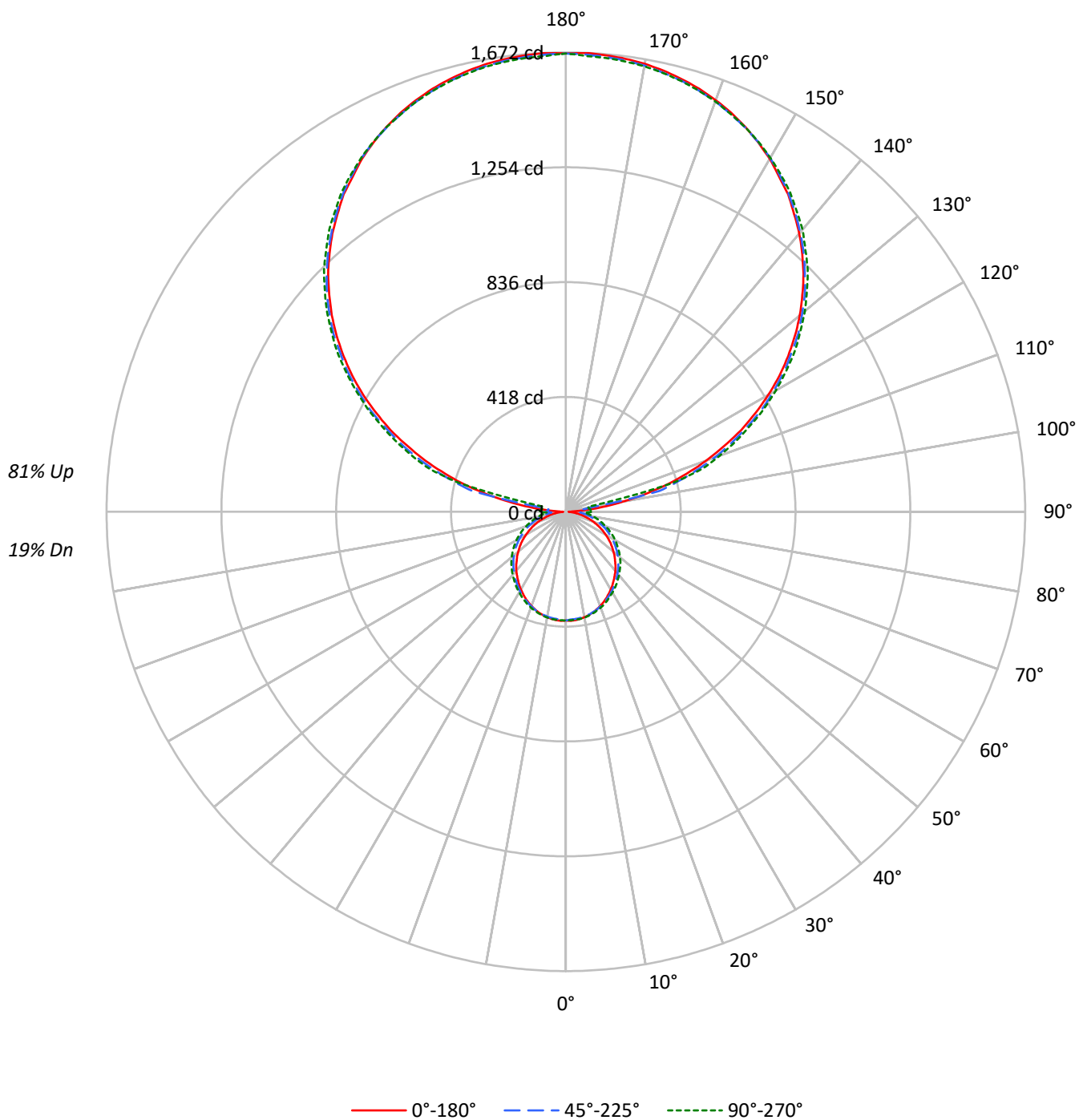
Lumens per Lamp: N/A
Luminaire Lumens: 6514.0 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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	50	30	10
RCR																				
0	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28	19		
1	90	86	82	79	80	76	73	70	57	55	53	40	39	37	24	23	23	15		
2	82	75	69	64	72	66	61	57	50	47	44	35	33	31	21	20	19	13		
3	75	66	59	53	66	58	52	47	44	40	36	31	28	26	18	17	16	10		
4	68	58	50	44	60	51	45	40	39	34	31	27	24	22	16	15	13	9		
5	62	51	43	38	55	45	39	34	34	30	26	24	21	19	15	13	12	8		
6	57	46	38	32	50	41	34	29	31	26	23	22	19	16	13	11	10	7		
7	53	41	33	28	46	36	30	25	28	23	20	20	17	14	12	10	9	6		
8	49	37	30	25	43	33	27	22	25	21	17	18	15	13	11	9	8	5		
9	45	34	26	22	40	30	24	19	23	18	15	16	13	11	10	8	7	5		
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	9	8	6	4		

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: 3523 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	2.5
30°-40°	196.5	3.0
40°-50°	207.7	3.2
50°-60°	195.5	3.0
60°-70°	162.2	2.5
70°-80°	113.8	1.7
80°-90°	67.6	1.0
90°-100°	93.6	1.4
100°-110°	392.9	6.0
110°-120°	715.3	11.0
120°-130°	894.6	13.7
130°-140°	950.3	14.6
140°-150°	885.1	13.6
150°-160°	713.1	10.9
160°-170°	459.9	7.1
170°-180°	158.5	2.4
0°-30°	307.3	4.7
0°-40°	503.8	7.7
0°-60°	907.0	13.9
0°-90°	1250.7	19.2
90°-120°	1201.8	18.4
90°-150°	3931.8	60.4
90°-180°	5263.0	80.8
0°-180°	6514.0	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°	11	42	71	92	98	8
95°	74	47	66	85	91	89
105°	380	396	418	441	400	398
115°	704	712	724	737	740	693
125°	987	992	1000	1013	1017	882
135°	1224	1222	1230	1240	1245	943
145°	1410	1414	1414	1418	1422	881
155°	1546	1547	1543	1548	1544	713
165°	1631	1624	1624	1634	1623	461
175°	1668	1661	1662	1673	1658	159
180°	1668	1668	1668	1668	1668	

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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°	10.8	42.3	71.3	91.6	97.7
92.5°	25.3	38.4	67.4	87.3	90.9
95°	74.4	46.6	65.9	85.4	90.7
97.5°	136.3	176.6	63.7	81.6	86.7
100°	209.5	243.5	88.6	79.3	83.6
102.5°	291.9	316.5	348.4	79.2	82.7
105°	379.5	395.8	418.5	440.8	399.5
107.5°	460.6	471.9	496.1	513.4	521.5
110°	542.5	552.4	575.5	588.1	595.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	621.9	634.7	651.8	660.3	668.8
115°	703.9	711.5	724.5	736.7	739.8
117.5°	777.5	785.1	802.1	810.2	813.8
120°	851.8	858.1	869.8	881.2	882.2
122.5°	921.7	924.2	938.7	948.7	949.3
125°	987.4	991.9	1000.5	1012.7	1016.6
127.5°	1051.0	1051.8	1066.9	1073.7	1075.5
130°	1111.7	1112.5	1123.4	1132.6	1135.2
132.5°	1167.8	1169.9	1180.2	1189.0	1190.4
135°	1223.6	1222.3	1230.4	1240.0	1245.1
137.5°	1273.5	1273.0	1281.0	1290.2	1291.1
140°	1322.1	1324.1	1327.1	1336.6	1340.1
142.5°	1365.3	1370.3	1371.1	1378.5	1380.2
145°	1410.2	1413.5	1413.5	1417.5	1421.7
147.5°	1445.1	1452.2	1451.0	1452.6	1455.7
150°	1483.8	1488.4	1487.2	1487.2	1488.4
152.5°	1515.8	1519.6	1517.1	1519.6	1518.3
155°	1545.8	1547.0	1543.3	1548.3	1544.5
157.5°	1572.0	1572.0	1567.0	1573.2	1567.0
160°	1594.4	1590.7	1589.5	1596.9	1589.5
162.5°	1614.4	1609.4	1608.2	1615.7	1606.9
165°	1630.6	1624.4	1624.4	1634.4	1623.1
167.5°	1644.4	1638.1	1636.9	1648.1	1635.6
170°	1655.6	1648.1	1649.3	1659.3	1646.8
172.5°	1663.1	1655.6	1656.8	1666.8	1653.1
175°	1668.1	1660.6	1661.8	1673.0	1658.1
177.5°	1671.8	1663.1	1665.6	1675.5	1660.6
180°	1668.1	1668.1	1668.1	1668.1	1668.1

(END OF REPORT)