

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: P1033441

Luminaire Tested: S124DIW-B350D1340UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033441
REPORT IS A COMBINATION OF REPORTS P997408 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1340UB50-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

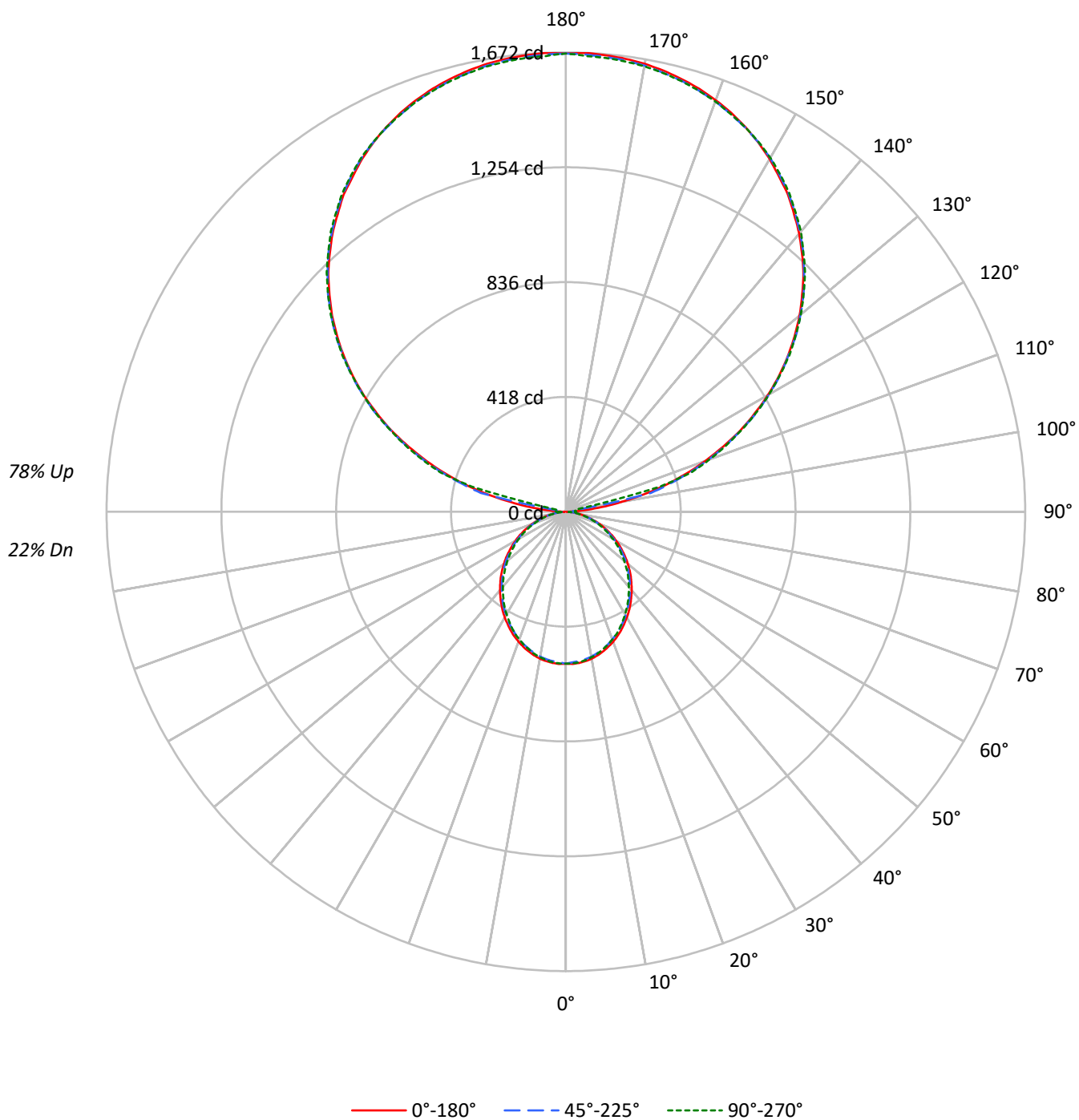
Lumens per Lamp: N/A
Luminaire Lumens: 6584.0 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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
RCR																	
0	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25
2	83	76	70	65	73	68	63	59	52	48	46	37	35	33	23	22	21
3	76	67	60	54	67	59	54	49	45	41	38	33	30	28	21	19	18
4	69	59	51	46	61	53	46	41	40	36	32	29	26	24	18	17	16
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	17	15	13
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	10
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	11	9
9	46	34	27	23	41	31	25	20	24	20	16	18	15	12	11	10	8
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4509	4509	4509
5°	4512	4379	4384
10°	4474	4257	4227
15°	4409	4112	4050
20°	4327	3956	3867
25°	4235	3791	3671
30°	4124	3612	3454
35°	4009	3430	3245
40°	3889	3233	3023
45°	3763	3036	2815
50°	3623	2844	2585
55°	3472	2621	2356
60°	3317	2376	2118
65°	3139	2124	1849
70°	2936	1819	1563
75°	2631	1466	1251
80°	2242	1061	879
85°	1739	589	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3763 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	0.8
10°-20°	146.8	2.2
20°-30°	216.1	3.3
30°-40°	251.2	3.8
40°-50°	251.1	3.8
50°-60°	219.6	3.3
60°-70°	163.1	2.5
70°-80°	92.5	1.4
80°-90°	29.9	0.5
90°-100°	55.4	0.8
100°-110°	364.6	5.5
110°-120°	696.3	10.6
120°-130°	883.9	13.4
130°-140°	945.6	14.4
140°-150°	884.2	13.4
150°-160°	713.1	10.8
160°-170°	459.9	7.0
170°-180°	158.5	2.4
0°-30°	415.0	6.3
0°-40°	666.1	10.1
0°-60°	1136.9	17.3
0°-90°	1422.5	21.6
90°-120°	1116.3	17.0
90°-150°	3830.1	58.2
90°-180°	5162.0	78.4
0°-180°	6584.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	552	551	546	551	550	52
15°	526	524	517	520	519	148
25°	476	473	467	467	466	219
35°	410	407	400	397	395	256
45°	334	331	324	319	318	258
55°	253	252	245	240	237	227
65°	171	169	165	160	158	170
75°	91	89	87	85	85	97
85°	24	24	23	23	23	26
90°	4	18	27	35	37	5
95°	69	26	27	35	36	85
105°	376	383	389	400	356	393
115°	701	705	704	706	706	690
125°	986	991	988	992	993	880
135°	1223	1221	1226	1229	1231	942
145°	1410	1414	1414	1415	1417	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°	552.9	552.9	552.9	552.9	552.9
2.5°	554.6	553.3	548.4	552.9	552.4
5°	552.4	550.6	545.8	550.6	549.8
7.5°	548.4	546.6	541.3	545.3	544.9
10°	542.7	540.9	535.1	538.7	537.8
12.5°	535.1	533.4	527.2	531.1	529.8
15°	525.8	524.1	517.4	520.1	518.7
17.5°	515.2	513.0	506.8	508.6	507.7
20°	503.2	501.0	494.4	495.7	494.8
22.5°	490.4	487.3	480.6	483.3	481.5
25°	476.2	473.1	466.9	467.4	465.6
27.5°	460.3	457.2	451.4	450.5	448.3
30°	444.3	440.8	435.0	433.2	431.0
32.5°	427.5	424.4	418.2	416.0	413.8
35°	409.8	406.7	400.5	397.4	395.1
37.5°	391.2	388.5	381.9	378.8	375.7
40°	373.0	369.5	362.8	358.4	356.2
42.5°	353.5	351.7	344.2	338.9	337.6
45°	334.5	331.4	324.3	319.4	318.1
47.5°	314.5	312.3	305.7	300.3	296.8
50°	294.1	292.4	286.2	280.0	277.3
52.5°	274.2	272.0	265.4	260.0	256.5
55°	252.9	251.6	245.4	240.1	237.4
57.5°	233.0	231.7	225.5	220.2	217.5
60°	212.2	210.0	204.2	200.2	198.0
62.5°	191.8	190.0	183.8	180.3	178.1
65°	171.4	169.2	164.8	160.4	158.1
67.5°	150.6	148.8	144.4	140.0	139.5
70°	131.6	128.5	124.9	121.4	120.1
72.5°	111.2	108.1	105.4	102.8	101.4
75°	91.3	89.0	86.8	85.1	84.6
77.5°	71.8	70.9	68.7	68.2	66.9
80°	54.5	53.2	52.3	51.4	50.9
82.5°	37.7	37.2	37.2	36.8	36.3
85°	23.9	23.9	23.0	23.0	22.6
87.5°	11.5	11.1	10.6	10.6	10.6
90°	3.7	17.5	27.4	34.9	37.4
92.5°	18.7	16.2	26.2	33.7	33.7
95°	68.6	26.2	27.4	34.9	36.2
97.5°	131.0	158.4	27.4	33.7	34.9
100°	204.6	227.1	54.9	33.7	34.9
102.5°	287.0	301.9	316.9	36.2	36.2
105°	375.5	383.0	389.3	400.5	355.6
107.5°	456.6	460.4	469.1	475.3	480.3
110°	539.0	542.7	550.2	552.7	556.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	618.8	626.3	628.8	627.5	632.5
115°	701.2	704.9	703.7	706.1	706.1
117.5°	774.8	779.8	783.5	782.3	782.3
120°	849.6	854.6	853.4	855.9	853.4
122.5°	919.5	922.0	924.5	925.7	923.2
125°	985.6	990.6	988.1	991.9	993.1
127.5°	1049.2	1050.5	1056.7	1055.5	1054.2
130°	1110.4	1111.6	1115.4	1116.6	1116.6
132.5°	1166.5	1169.0	1174.0	1175.3	1174.0
135°	1222.7	1221.4	1226.4	1228.9	1231.4
137.5°	1272.6	1272.6	1278.8	1281.3	1280.0
140°	1321.2	1323.7	1326.2	1330.0	1331.2
142.5°	1364.9	1369.9	1371.1	1373.6	1373.6
145°	1409.8	1413.5	1413.5	1414.8	1417.3
147.5°	1444.7	1452.2	1451.0	1452.2	1453.5
150°	1483.4	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)