

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: P1032637

Luminaire Tested: S124DIW-B350D1340UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032637
REPORT IS A COMBINATION OF REPORTS P997365 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_3500K
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

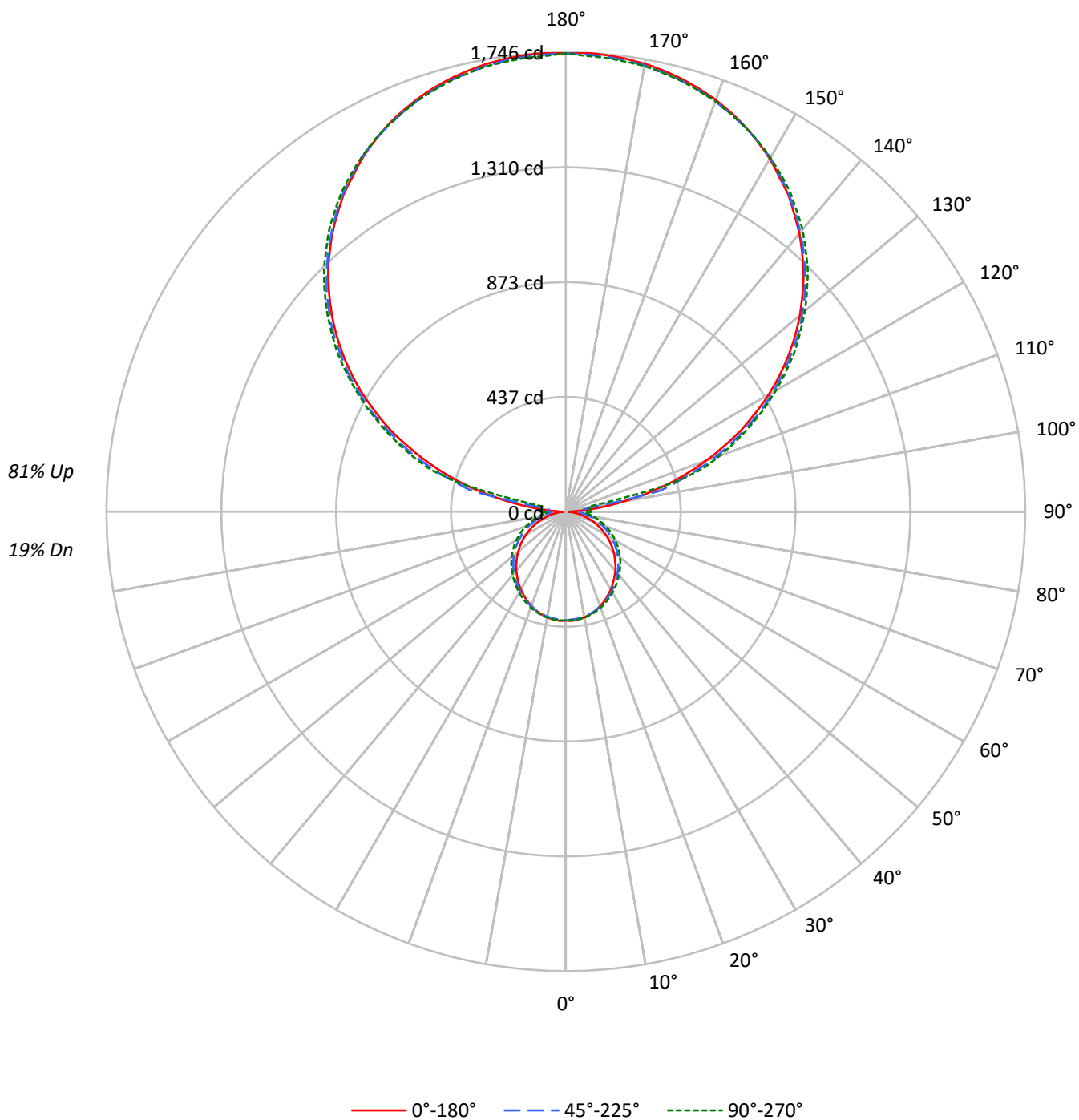
Lumens per Lamp: N/A
Luminaire Lumens: 6804.1 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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
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	39	37	24	23	23
2	82	75	69	64	72	66	61	57	50	47	44	35	33	31	21	20	19
3	75	66	59	53	66	58	52	47	44	40	36	31	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	15	13	12
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	20	17	14	12	10	9
8	49	37	30	25	43	33	27	22	25	21	17	18	15	13	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	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3370	3370	3370
5°	3379	3282	3288
10°	3358	3218	3209
15°	3326	3145	3119
20°	3279	3066	3031
25°	3227	2980	2937
30°	3170	2894	2841
35°	3106	2806	2755
40°	3054	2721	2667
45°	2978	2643	2589
50°	2913	2552	2506
55°	2846	2466	2411
60°	2742	2358	2321
65°	2628	2242	2214
70°	2488	2110	2089
75°	2294	1962	1971
80°	2073	1811	1847
85°	1783	1660	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 90°
Luminance: 3686 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.6
10°-20°	112.2	1.6
20°-30°	169.6	2.5
30°-40°	205.2	3.0
40°-50°	217.0	3.2
50°-60°	204.2	3.0
60°-70°	169.4	2.5
70°-80°	118.9	1.7
80°-90°	70.6	1.0
90°-100°	97.7	1.4
100°-110°	410.4	6.0
110°-120°	747.2	11.0
120°-130°	934.5	13.7
130°-140°	992.6	14.6
140°-150°	924.6	13.6
150°-160°	744.8	10.9
160°-170°	480.4	7.1
170°-180°	165.5	2.4
0°-30°	321.0	4.7
0°-40°	526.2	7.7
0°-60°	947.4	13.9
0°-90°	1306.3	19.2
90°-120°	1255.4	18.5
90°-150°	4107.0	60.4
90°-180°	5498.0	80.8
0°-180°	6804.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	409	413	412	39
15°	397	397	396	400	399	112
25°	363	366	367	372	372	167
35°	318	323	328	334	336	199
45°	265	274	282	290	292	205
55°	207	217	231	240	243	185
65°	144	158	174	186	189	142
75°	80	97	116	129	133	85
85°	24	44	65	79	83	26
90°	11	44	74	96	102	9
95°	78	49	69	89	95	93
105°	396	414	437	460	417	415
115°	735	743	757	770	773	724
125°	1031	1036	1045	1058	1062	921
135°	1278	1277	1285	1295	1300	985
145°	1473	1476	1476	1481	1485	921
155°	1615	1616	1612	1617	1613	745
165°	1703	1697	1697	1707	1695	481
175°	1742	1734	1736	1748	1732	166
180°	1742	1742	1742	1742	1742	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.3	413.3	413.3	413.3	413.3
2.5°	415.1	413.7	410.0	413.3	412.8
5°	413.7	412.3	409.1	412.8	412.3
7.5°	411.0	410.0	407.3	411.4	411.0
10°	407.3	406.8	404.5	408.6	408.2
12.5°	402.2	402.2	400.8	404.5	404.5
15°	396.6	397.1	395.7	399.8	399.4
17.5°	389.2	390.6	390.1	394.3	393.8
20°	381.3	382.7	383.2	387.8	387.8
22.5°	372.5	374.4	375.3	379.9	380.9
25°	362.8	365.6	367.0	372.1	372.5
27.5°	352.2	356.3	358.2	362.8	363.3
30°	341.5	345.2	348.5	353.6	354.5
32.5°	330.0	334.6	338.3	344.3	345.2
35°	317.5	323.0	327.7	334.1	335.5
37.5°	305.0	311.5	317.0	323.5	324.9
40°	292.9	299.0	305.4	312.4	314.2
42.5°	279.1	286.0	293.9	301.7	303.1
45°	264.7	273.5	282.3	290.2	292.5
47.5°	251.3	260.1	270.3	278.1	280.9
50°	236.5	246.7	256.8	266.1	268.9
52.5°	221.7	231.9	243.9	253.1	255.9
55°	207.3	217.0	230.9	240.2	243.0
57.5°	191.1	203.2	216.6	227.7	230.0
60°	175.4	187.4	202.7	213.3	217.0
62.5°	160.1	173.5	188.8	199.5	203.2
65°	143.5	158.3	174.0	185.6	189.3
67.5°	127.7	143.5	160.1	171.7	175.4
70°	111.5	127.3	144.9	157.3	160.6
72.5°	95.8	112.0	131.0	143.0	146.7
75°	79.6	96.7	116.2	129.1	133.3
77.5°	64.3	82.4	102.7	115.7	120.3
80°	50.4	69.0	89.3	103.2	106.9
82.5°	36.6	56.0	76.4	90.7	94.9
85°	24.5	44.0	64.8	78.7	83.3
87.5°	15.3	34.2	54.6	68.0	72.2
90°	11.3	44.1	74.5	95.7	102.0
92.5°	26.4	40.0	70.4	91.2	94.9
95°	77.7	48.7	69.0	89.3	94.7
97.5°	142.4	184.5	66.6	85.2	90.6
100°	218.8	254.3	92.5	82.9	87.4
102.5°	304.8	330.7	363.9	82.7	86.4
105°	396.5	413.5	437.1	460.4	417.2
107.5°	481.2	492.9	518.2	536.3	544.7
110°	566.7	577.1	601.1	614.3	621.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	649.6	663.0	680.9	689.7	698.6
115°	735.2	743.2	756.8	769.5	772.8
117.5°	812.1	820.1	837.8	846.3	850.0
120°	889.8	896.4	908.5	920.4	921.5
122.5°	962.7	965.3	980.4	991.1	991.6
125°	1031.4	1036.1	1045.1	1057.8	1061.8
127.5°	1097.9	1098.7	1114.4	1121.5	1123.4
130°	1161.2	1162.0	1173.3	1183.0	1185.7
132.5°	1219.9	1222.0	1232.8	1241.9	1243.4
135°	1278.0	1276.7	1285.2	1295.2	1300.5
137.5°	1330.1	1329.7	1338.0	1347.7	1348.7
140°	1381.0	1383.2	1386.2	1396.1	1399.8
142.5°	1426.2	1431.4	1432.2	1439.9	1441.7
145°	1473.1	1476.5	1476.5	1480.6	1485.0
147.5°	1509.6	1516.9	1515.6	1517.4	1520.5
150°	1550.0	1554.7	1553.4	1553.4	1554.7
152.5°	1583.3	1587.3	1584.7	1587.3	1586.0
155°	1614.6	1615.9	1612.0	1617.2	1613.3
157.5°	1642.0	1642.0	1636.8	1643.3	1636.8
160°	1665.4	1661.5	1660.2	1668.1	1660.2
162.5°	1686.3	1681.1	1679.8	1687.6	1678.5
165°	1703.2	1696.7	1696.7	1707.2	1695.4
167.5°	1717.6	1711.1	1709.8	1721.5	1708.5
170°	1729.3	1721.5	1722.8	1733.2	1720.2
172.5°	1737.1	1729.3	1730.6	1741.0	1726.7
175°	1742.3	1734.5	1735.8	1747.5	1731.9
177.5°	1746.2	1737.1	1739.7	1750.2	1734.5
180°	1742.3	1742.3	1742.3	1742.3	1742.3

(END OF REPORT)