

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: P1033440

Luminaire Tested: S124DIW-B350D1340UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033440
REPORT IS A COMBINATION OF REPORTS P997406 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-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

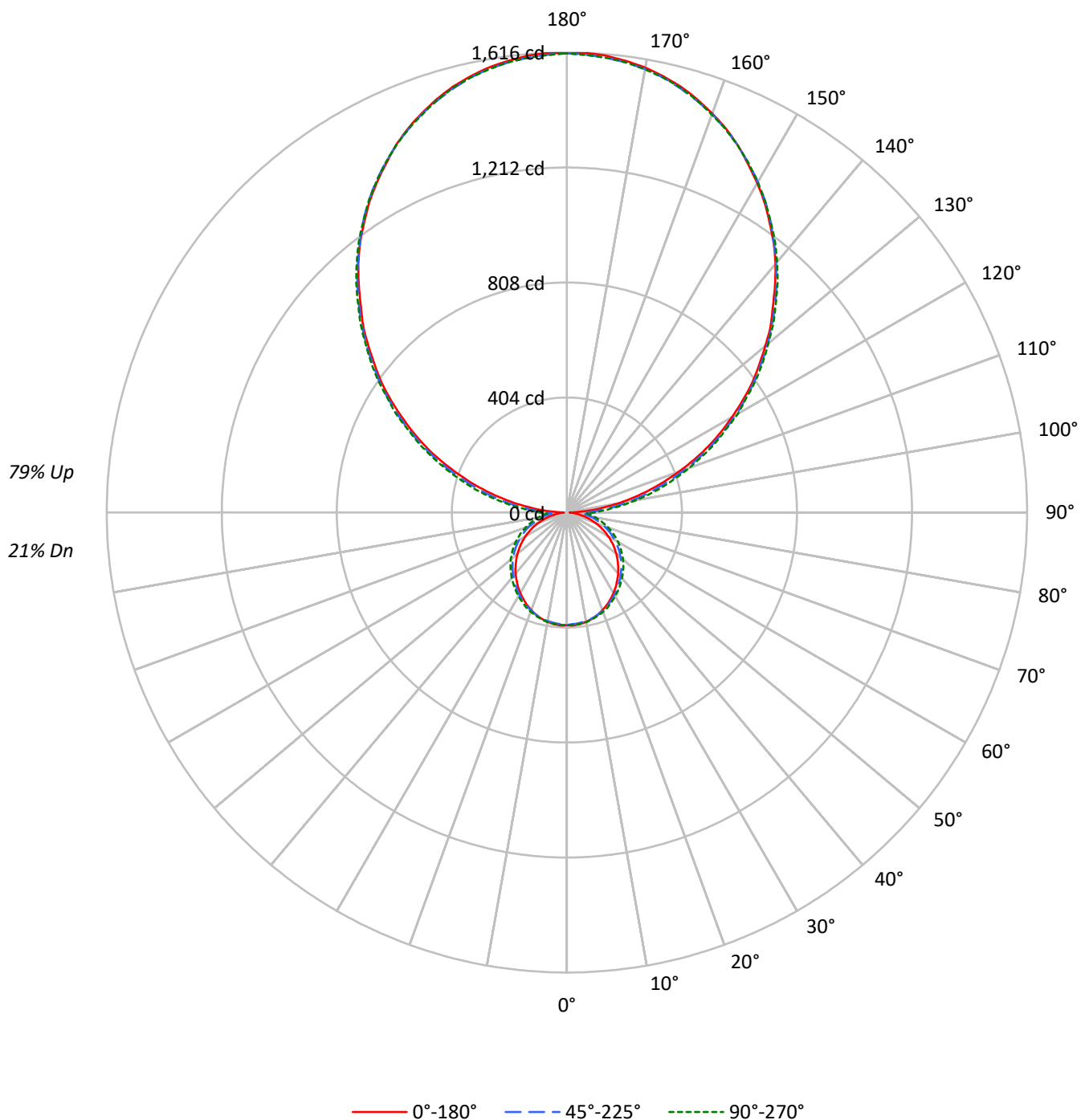
Lumens per Lamp: N/A
Luminaire Lumens: 5828.0 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1033440

CATALOG NUMBER: S124DIW-B350D1340UB50-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1033440

CATALOG NUMBER: S124DIW-B350D1340UB50-4F0-XX-W2A-D1

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	67	67	67	48	48	48	30	30	30
1	91	87	83	79	80	77	74	71	58	56	54	41	40	39	26	25	24
2	83	75	69	64	73	67	62	57	51	47	44	36	34	32	22	21	20
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14
5	63	52	44	38	55	46	39	34	35	30	27	25	22	19	16	14	12
6	58	46	38	33	51	41	34	29	31	27	23	22	19	17	14	12	11
7	53	41	34	28	47	37	30	25	28	24	20	20	17	15	13	11	10
8	49	37	30	25	43	33	27	22	26	21	18	18	15	13	12	10	8
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	11	9	8
10	42	31	24	19	37	28	22	17	21	17	14	15	12	10	10	8	7

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

TEST NUMBER: P1033440

CATALOG NUMBER: S124DIW-B350D1340UB50-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	0.6
10°-20°	107.4	1.8
20°-30°	162.4	2.8
30°-40°	196.5	3.4
40°-50°	207.7	3.6
50°-60°	195.5	3.4
60°-70°	162.2	2.8
70°-80°	113.8	2.0
80°-90°	67.6	1.2
90°-100°	143.4	2.5
100°-110°	343.2	5.9
110°-120°	554.0	9.5
120°-130°	716.2	12.3
130°-140°	797.1	13.7
140°-150°	779.8	13.4
150°-160°	655.1	11.2
160°-170°	435.9	7.5
170°-180°	152.6	2.6
0°-30°	307.3	5.3
0°-40°	503.8	8.6
0°-60°	907.0	15.6
0°-90°	1250.7	21.5
90°-120°	1040.5	17.9
90°-150°	3333.7	57.2
90°-180°	4577.0	78.5
0°-180°	5828.0	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	10
95°	81	106	133	149	153	86
105°	295	305	326	341	348	313
115°	547	550	562	571	573	539
125°	794	794	803	809	809	708
135°	1023	1030	1033	1038	1037	791
145°	1242	1246	1248	1249	1247	777
155°	1422	1422	1421	1426	1421	654
165°	1548	1544	1542	1549	1544	437
175°	1610	1604	1603	1612	1603	153
180°	1613	1613	1613	1613	1613	

TEST NUMBER: P1033440

CATALOG NUMBER: S124DIW-B350D1340UB50-4F0-XX-W2A-D1

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°	39.0	70.9	96.1	112.2	117.1
95°	80.7	106.5	133.3	149.1	153.1
97.5°	125.1	147.9	176.0	192.6	196.5
100°	179.6	196.0	224.6	239.0	242.1
102.5°	236.9	247.9	274.8	290.0	294.8
105°	294.7	304.7	326.1	340.9	348.3
107.5°	355.8	364.5	381.3	397.4	399.2
110°	417.7	426.4	440.7	448.3	455.7

TEST NUMBER: P1033440

CATALOG NUMBER: S124DIW-B350D1340UB50-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	482.1	487.4	499.5	509.3	512.8
115°	546.6	550.5	562.2	570.8	572.6
117.5°	607.7	610.3	622.4	628.0	627.8
120°	668.4	674.7	683.8	686.5	692.5
122.5°	732.0	733.2	744.0	749.0	745.9
125°	794.0	793.5	803.3	809.2	809.4
127.5°	850.1	853.3	859.8	865.3	867.1
130°	909.5	912.8	919.9	925.4	923.0
132.5°	970.6	972.7	976.8	981.8	983.2
135°	1022.6	1030.1	1033.2	1037.8	1036.7
137.5°	1081.2	1084.5	1088.8	1091.7	1095.2
140°	1139.9	1141.9	1142.4	1146.8	1147.9
142.5°	1193.0	1195.5	1193.9	1198.8	1200.5
145°	1241.7	1246.3	1247.5	1249.0	1246.9
147.5°	1291.6	1297.4	1296.2	1295.3	1295.9
150°	1336.5	1341.1	1341.1	1341.1	1339.8
152.5°	1378.5	1381.0	1382.2	1386.0	1382.2
155°	1422.2	1422.2	1420.9	1425.9	1420.9
157.5°	1459.6	1457.1	1457.1	1460.8	1457.1
160°	1492.0	1490.8	1489.5	1493.3	1487.0
162.5°	1522.0	1518.2	1517.0	1524.5	1518.2
165°	1548.2	1544.4	1541.9	1549.4	1544.4
167.5°	1569.4	1564.4	1564.4	1571.9	1564.4
170°	1586.8	1580.6	1581.8	1589.3	1580.6
172.5°	1599.3	1594.3	1594.3	1603.0	1594.3
175°	1610.5	1604.3	1603.0	1611.8	1603.0
177.5°	1615.5	1609.3	1609.3	1618.0	1608.0
180°	1613.0	1613.0	1613.0	1613.0	1613.0

(END OF REPORT)