

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: P1033434

Luminaire Tested: S124DIW-B350D1340UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033434
REPORT IS A COMBINATION OF REPORTS P997397 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1340UB40-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

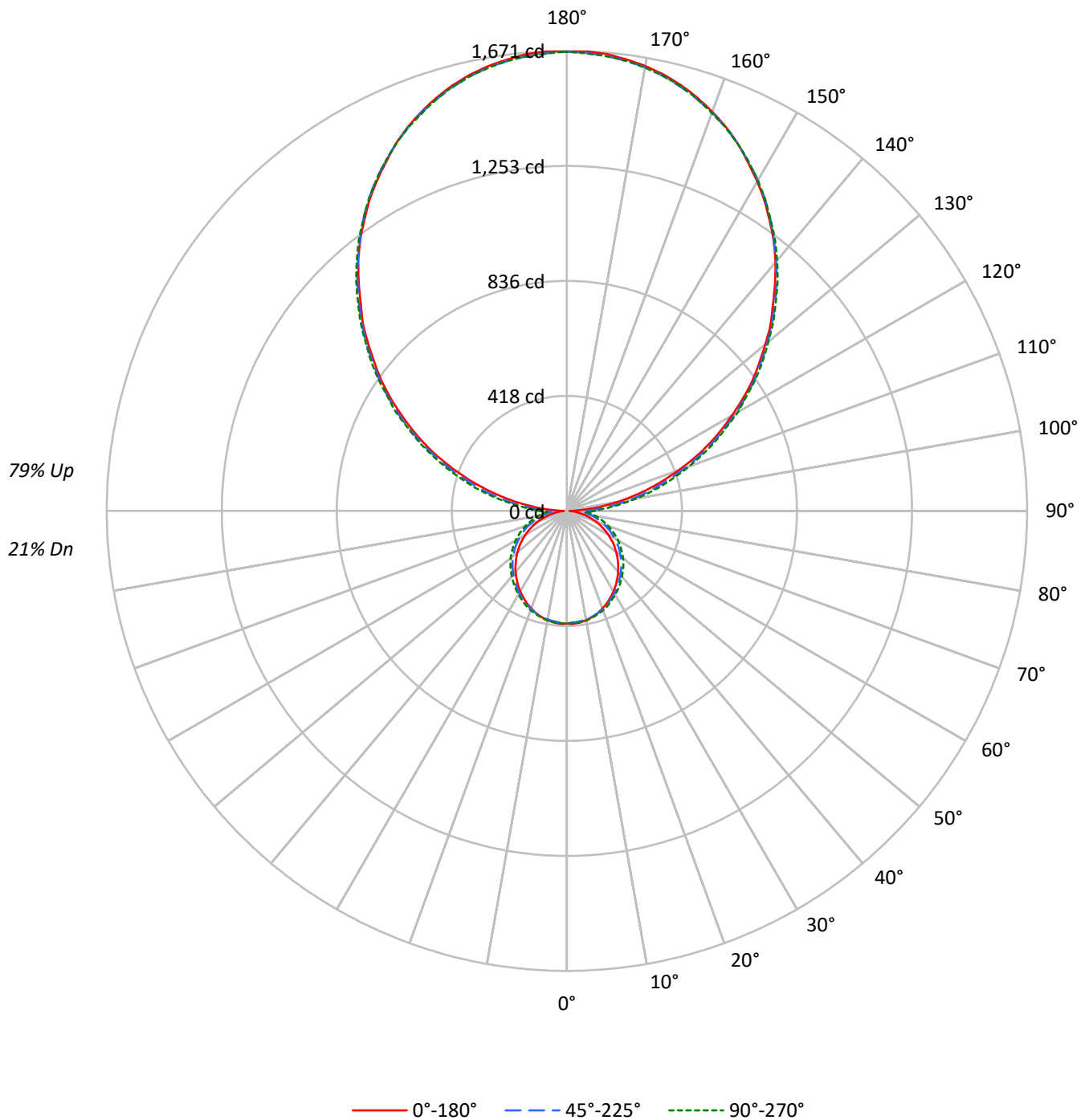
Lumens per Lamp: N/A
Luminaire Lumens: 6027.0 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	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°	3337	3337	3337
5°	3346	3249	3255
10°	3324	3186	3176
15°	3293	3114	3087
20°	3246	3036	3001
25°	3195	2950	2907
30°	3138	2865	2813
35°	3075	2778	2728
40°	3024	2695	2640
45°	2949	2616	2563
50°	2884	2527	2481
55°	2818	2441	2386
60°	2715	2335	2298
65°	2600	2220	2192
70°	2463	2088	2069
75°	2271	1942	1952
80°	2052	1793	1828
85°	1768	1643	1729

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3653 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	0.6
10°-20°	111.1	1.8
20°-30°	168.0	2.8
30°-40°	203.2	3.4
40°-50°	214.8	3.6
50°-60°	202.2	3.4
60°-70°	167.7	2.8
70°-80°	117.7	2.0
80°-90°	69.9	1.2
90°-100°	148.3	2.5
100°-110°	354.9	5.9
110°-120°	572.9	9.5
120°-130°	740.7	12.3
130°-140°	824.3	13.7
140°-150°	806.4	13.4
150°-160°	677.5	11.2
160°-170°	450.8	7.5
170°-180°	157.8	2.6
0°-30°	317.8	5.3
0°-40°	521.0	8.6
0°-60°	938.0	15.6
0°-90°	1293.4	21.5
90°-120°	1076.1	17.9
90°-150°	3447.5	57.2
90°-180°	4734.0	78.5
0°-180°	6027.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	409	409	409	409	409	
5°	410	408	405	409	408	39
15°	393	393	392	396	395	111
25°	359	362	363	368	369	165
35°	314	320	324	331	332	197
45°	262	271	280	287	290	203
55°	205	215	229	238	240	183
65°	142	157	172	184	187	141
75°	79	96	115	128	132	84
85°	24	44	64	78	82	25
90°	11	44	74	95	101	11
95°	83	110	138	154	158	89
105°	305	315	337	353	360	323
115°	565	569	581	590	592	558
125°	821	821	831	837	837	732
135°	1058	1065	1068	1073	1072	818
145°	1284	1289	1290	1292	1290	804
155°	1471	1471	1469	1475	1469	677
165°	1601	1597	1595	1602	1597	451
175°	1666	1659	1658	1667	1658	158
180°	1668	1668	1668	1668	1668	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	409.2	409.2	409.2	409.2	409.2
2.5°	411.0	409.6	406.0	409.2	408.7
5°	409.6	408.2	405.0	408.7	408.2
7.5°	406.9	406.0	403.2	407.3	406.9
10°	403.2	402.7	400.5	404.6	404.1
12.5°	398.2	398.2	396.8	400.5	400.5
15°	392.7	393.1	391.8	395.9	395.4
17.5°	385.3	386.7	386.3	390.4	389.9
20°	377.5	378.9	379.4	384.0	384.0
22.5°	368.8	370.7	371.6	376.2	377.1
25°	359.2	362.0	363.3	368.4	368.8
27.5°	348.7	352.8	354.6	359.2	359.7
30°	338.1	341.8	345.0	350.1	351.0
32.5°	326.7	331.3	334.9	340.9	341.8
35°	314.3	319.8	324.4	330.8	332.2
37.5°	301.9	308.4	313.9	320.3	321.6
40°	290.0	296.0	302.4	309.3	311.1
42.5°	276.3	283.2	290.9	298.7	300.1
45°	262.1	270.8	279.5	287.3	289.6
47.5°	248.8	257.5	267.6	275.4	278.1
50°	234.1	244.2	254.3	263.5	266.2
52.5°	219.5	229.6	241.5	250.6	253.4
55°	205.3	214.9	228.6	237.8	240.5
57.5°	189.2	201.1	214.4	225.4	227.7
60°	173.7	185.6	200.7	211.2	214.9
62.5°	158.5	171.8	186.9	197.5	201.1
65°	142.0	156.7	172.3	183.7	187.4
67.5°	126.5	142.0	158.5	170.0	173.7
70°	110.4	126.0	143.4	155.8	159.0
72.5°	94.8	110.9	129.7	141.6	145.2
75°	78.8	95.8	115.0	127.8	132.0
77.5°	63.7	81.6	101.7	114.5	119.1
80°	49.9	68.3	88.4	102.2	105.8
82.5°	36.2	55.4	75.6	89.8	93.9
85°	24.3	43.5	64.1	77.9	82.5
87.5°	15.1	33.9	54.1	67.4	71.5
90°	11.2	43.8	73.8	94.7	101.0
92.5°	40.4	73.2	99.4	116.0	121.0
95°	83.4	110.1	137.9	154.1	158.3
97.5°	129.4	153.0	182.1	199.2	203.3
100°	185.6	202.8	232.2	247.2	250.4
102.5°	245.0	256.4	284.1	299.8	304.8
105°	304.7	315.2	337.2	352.6	360.2
107.5°	367.9	377.0	394.3	411.0	412.9
110°	432.0	441.0	455.7	463.7	471.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	498.6	504.1	516.6	526.7	530.4
115°	565.2	569.4	581.4	590.2	592.1
117.5°	628.4	631.2	643.6	649.4	649.2
120°	691.2	697.8	707.2	709.9	716.1
122.5°	757.0	758.3	769.4	774.6	771.4
125°	821.0	820.6	830.7	836.9	837.1
127.5°	879.1	882.6	889.1	894.8	896.7
130°	940.6	944.0	951.3	957.0	954.5
132.5°	1003.8	1005.9	1010.1	1015.3	1016.8
135°	1057.5	1065.2	1068.4	1073.3	1072.1
137.5°	1118.1	1121.6	1126.0	1129.0	1132.6
140°	1178.8	1181.0	1181.4	1186.1	1187.1
142.5°	1233.9	1236.4	1234.6	1239.6	1241.5
145°	1284.2	1288.8	1290.1	1291.5	1289.6
147.5°	1335.8	1341.7	1340.4	1339.6	1340.2
150°	1382.2	1386.9	1386.9	1386.9	1385.6
152.5°	1425.6	1428.2	1429.5	1433.3	1429.5
155°	1470.7	1470.7	1469.4	1474.6	1469.4
157.5°	1509.4	1506.9	1506.9	1510.7	1506.9
160°	1543.0	1541.7	1540.4	1544.3	1537.8
162.5°	1573.9	1570.1	1568.8	1576.5	1570.1
165°	1601.0	1597.2	1594.6	1602.3	1597.2
167.5°	1623.0	1617.8	1617.8	1625.6	1617.8
170°	1641.0	1634.6	1635.9	1643.6	1634.6
172.5°	1653.9	1648.8	1648.8	1657.8	1648.8
175°	1665.5	1659.1	1657.8	1666.8	1657.8
177.5°	1670.7	1664.3	1664.3	1673.3	1663.0
180°	1668.1	1668.1	1668.1	1668.1	1668.1

(END OF REPORT)