

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: P1033435

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033435
REPORT IS A COMBINATION OF REPORTS P997399 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-F
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

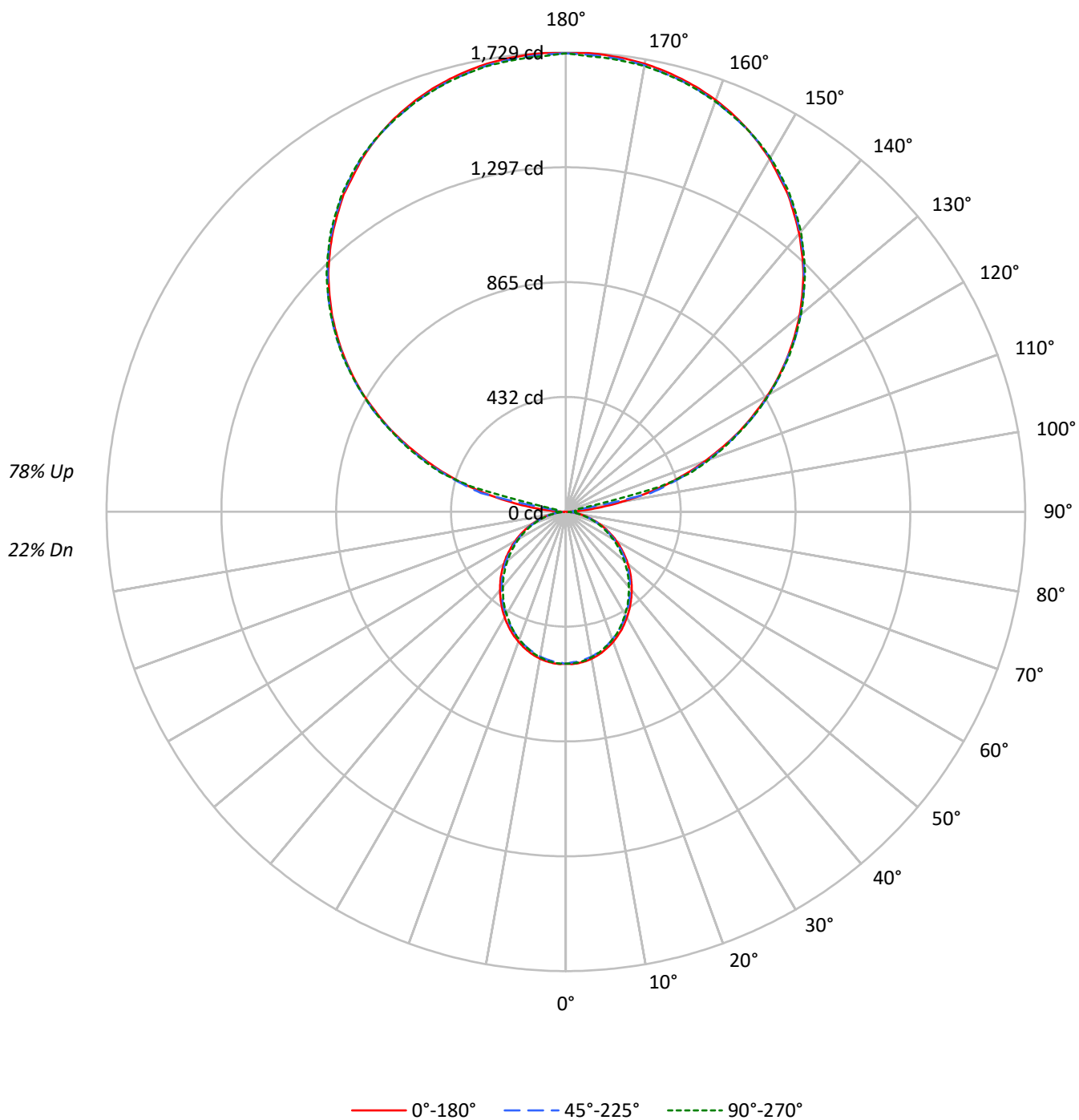
Lumens per Lamp: N/A
Luminaire Lumens: 6810.0 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4664	4664	4664
5°	4668	4530	4535
10°	4628	4404	4373
15°	4562	4255	4191
20°	4477	4092	4001
25°	4382	3922	3797
30°	4267	3737	3573
35°	4147	3548	3357
40°	4023	3344	3127
45°	3893	3141	2912
50°	3749	2943	2674
55°	3592	2711	2437
60°	3431	2458	2191
65°	3249	2197	1913
70°	3036	1881	1616
75°	2720	1517	1294
80°	2320	1097	910
85°	1797	610	490

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3893 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	0.8
10°-20°	151.9	2.2
20°-30°	223.5	3.3
30°-40°	259.8	3.8
40°-50°	259.8	3.8
50°-60°	227.2	3.3
60°-70°	168.7	2.5
70°-80°	95.7	1.4
80°-90°	31.0	0.5
90°-100°	57.3	0.8
100°-110°	377.1	5.5
110°-120°	720.2	10.6
120°-130°	914.2	13.4
130°-140°	978.0	14.4
140°-150°	914.5	13.4
150°-160°	737.5	10.8
160°-170°	475.6	7.0
170°-180°	163.9	2.4
0°-30°	429.3	6.3
0°-40°	689.1	10.1
0°-60°	1176.2	17.3
0°-90°	1471.6	21.6
90°-120°	1154.6	17.0
90°-150°	3961.4	58.2
90°-180°	5338.0	78.4
0°-180°	6810.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	572	572	572	572	572	
5°	572	570	565	570	569	54
15°	544	542	535	538	537	153
25°	493	490	483	484	482	227
35°	424	421	414	411	409	265
45°	346	343	336	330	329	267
55°	262	260	254	248	246	234
65°	177	175	170	166	164	176
75°	94	92	90	88	88	100
85°	25	25	24	24	23	27
90°	4	18	28	36	39	5
95°	71	27	28	36	37	88
105°	388	396	403	414	368	406
115°	725	729	728	730	730	714
125°	1019	1025	1022	1026	1027	910
135°	1265	1263	1268	1271	1274	974
145°	1458	1462	1462	1463	1466	911
155°	1599	1600	1596	1601	1598	737
165°	1686	1680	1680	1690	1679	477
175°	1725	1718	1719	1730	1715	164
180°	1725	1725	1725	1725	1725	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	571.9	571.9	571.9	571.9	571.9
2.5°	573.8	572.4	567.4	571.9	571.5
5°	571.5	569.7	564.6	569.7	568.7
7.5°	567.4	565.5	560.0	564.2	563.7
10°	561.4	559.6	553.6	557.3	556.4
12.5°	553.6	551.8	545.4	549.5	548.1
15°	544.0	542.2	535.3	538.0	536.7
17.5°	533.0	530.7	524.3	526.1	525.2
20°	520.6	518.3	511.4	512.8	511.9
22.5°	507.3	504.1	497.2	500.0	498.2
25°	492.7	489.5	483.0	483.5	481.7
27.5°	476.2	473.0	467.0	466.1	463.8
30°	459.7	456.0	450.0	448.2	445.9
32.5°	442.2	439.0	432.6	430.3	428.0
35°	423.9	420.7	414.3	411.1	408.8
37.5°	404.7	401.9	395.0	391.8	388.6
40°	385.9	382.2	375.3	370.8	368.5
42.5°	365.7	363.9	356.1	350.6	349.2
45°	346.0	342.8	335.5	330.4	329.0
47.5°	325.4	323.1	316.2	310.7	307.1
50°	304.3	302.5	296.1	289.6	286.9
52.5°	283.7	281.4	274.5	269.0	265.3
55°	261.7	260.3	253.9	248.4	245.6
57.5°	241.1	239.7	233.3	227.8	225.0
60°	219.5	217.2	211.3	207.1	204.9
62.5°	198.4	196.6	190.2	186.5	184.2
65°	177.4	175.1	170.5	165.9	163.6
67.5°	155.8	154.0	149.4	144.8	144.4
70°	136.1	132.9	129.2	125.6	124.2
72.5°	115.0	111.8	109.1	106.3	104.9
75°	94.4	92.1	89.8	88.0	87.5
77.5°	74.2	73.3	71.0	70.6	69.2
80°	56.4	55.0	54.1	53.2	52.7
82.5°	39.0	38.5	38.5	38.0	37.6
85°	24.7	24.7	23.8	23.8	23.4
87.5°	11.9	11.5	11.0	11.0	11.0
90°	3.9	18.1	28.4	36.1	38.7
92.5°	19.4	16.8	27.1	34.8	34.8
95°	71.0	27.1	28.4	36.1	37.4
97.5°	135.5	163.9	28.4	34.8	36.1
100°	211.6	234.8	56.8	34.8	36.1
102.5°	296.8	312.3	327.8	37.4	37.4
105°	388.4	396.1	402.6	414.2	367.8
107.5°	472.3	476.1	485.2	491.6	496.8
110°	557.4	561.3	569.1	571.6	575.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.0	647.8	650.3	649.1	654.2
115°	725.2	729.1	727.8	730.3	730.3
117.5°	801.3	806.5	810.3	809.1	809.1
120°	878.7	883.9	882.6	885.2	882.6
122.5°	951.0	953.6	956.2	957.5	954.9
125°	1019.4	1024.6	1022.0	1025.8	1027.1
127.5°	1085.2	1086.5	1092.9	1091.6	1090.4
130°	1148.4	1149.7	1153.6	1154.9	1154.9
132.5°	1206.5	1209.1	1214.2	1215.5	1214.2
135°	1264.6	1263.3	1268.4	1271.0	1273.6
137.5°	1316.2	1316.2	1322.6	1325.2	1323.9
140°	1366.5	1369.1	1371.7	1375.5	1376.8
142.5°	1411.7	1416.8	1418.1	1420.7	1420.7
145°	1458.1	1462.0	1462.0	1463.3	1465.9
147.5°	1494.2	1502.0	1500.7	1502.0	1503.3
150°	1534.2	1539.4	1538.1	1538.1	1539.4
152.5°	1567.8	1571.7	1569.1	1571.7	1570.4
155°	1598.8	1600.1	1596.2	1601.3	1597.5
157.5°	1625.9	1625.9	1620.7	1627.2	1620.7
160°	1649.1	1645.2	1643.9	1651.7	1643.9
162.5°	1669.7	1664.6	1663.3	1671.0	1662.0
165°	1686.5	1680.1	1680.1	1690.4	1678.8
167.5°	1700.7	1694.3	1693.0	1704.6	1691.7
170°	1712.3	1704.6	1705.9	1716.2	1703.3
172.5°	1720.1	1712.3	1713.6	1723.9	1709.7
175°	1725.2	1717.5	1718.8	1730.4	1714.9
177.5°	1729.1	1720.1	1722.6	1733.0	1717.5
180°	1725.2	1725.2	1725.2	1725.2	1725.2

(END OF REPORT)