

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: P1033415

Luminaire Tested: S124DIW-B350D1340UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033415
REPORT IS A COMBINATION OF REPORTS P997348 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1340UB27-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

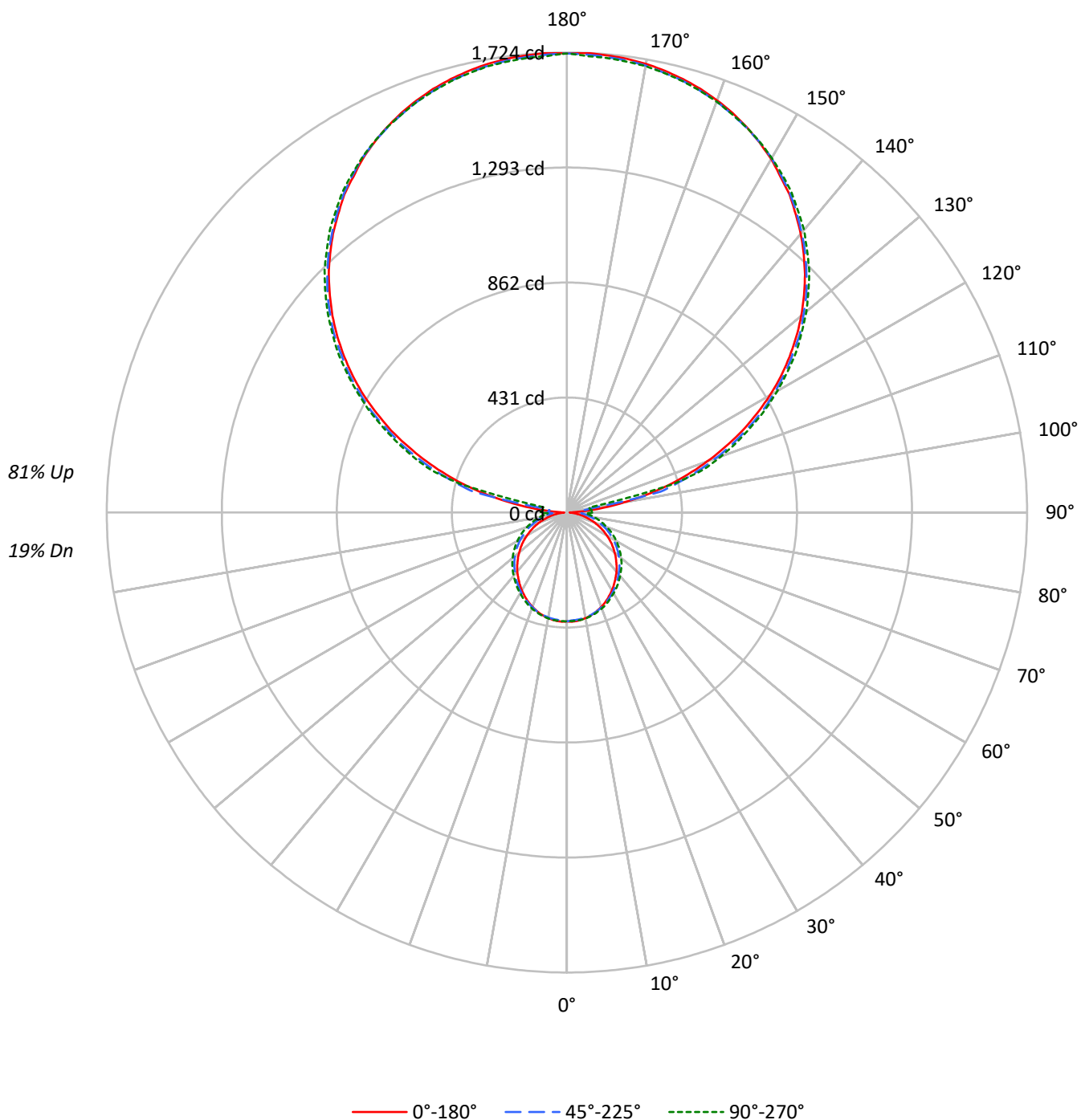
Lumens per Lamp: N/A
Luminaire Lumens: 6717.0 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	3327	3327	3327
5°	3336	3240	3246
10°	3314	3176	3168
15°	3283	3105	3079
20°	3238	3027	2993
25°	3186	2942	2900
30°	3130	2857	2805
35°	3066	2770	2720
40°	3015	2687	2633
45°	2940	2609	2555
50°	2877	2520	2474
55°	2810	2435	2380
60°	2707	2328	2292
65°	2593	2214	2186
70°	2456	2082	2062
75°	2265	1937	1946
80°	2048	1789	1822
85°	1761	1640	1723

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°	38.7	0.6
10°-20°	110.8	1.6
20°-30°	167.5	2.5
30°-40°	202.6	3.0
40°-50°	214.2	3.2
50°-60°	201.6	3.0
60°-70°	167.3	2.5
70°-80°	117.4	1.7
80°-90°	69.7	1.0
90°-100°	96.5	1.4
100°-110°	405.2	6.0
110°-120°	737.6	11.0
120°-130°	922.5	13.7
130°-140°	979.9	14.6
140°-150°	912.7	13.6
150°-160°	735.3	10.9
160°-170°	474.2	7.1
170°-180°	163.4	2.4
0°-30°	316.9	4.7
0°-40°	519.5	7.7
0°-60°	935.3	13.9
0°-90°	1289.7	19.2
90°-120°	1239.3	18.4
90°-150°	4054.4	60.4
90°-180°	5427.0	80.8
0°-180°	6717.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	408	407	404	408	407	39
15°	392	392	391	395	394	110
25°	358	361	362	367	368	165
35°	313	319	324	330	331	196
45°	261	270	279	286	289	202
55°	205	214	228	237	240	182
65°	142	156	172	183	187	140
75°	79	96	115	128	132	84
85°	24	43	64	78	82	25
90°	11	44	74	94	101	9
95°	77	48	68	88	94	92
105°	391	408	432	455	412	410
115°	726	734	747	760	763	715
125°	1018	1023	1032	1044	1048	909
135°	1262	1260	1269	1279	1284	972
145°	1454	1458	1458	1462	1466	909
155°	1594	1595	1591	1596	1593	735
165°	1682	1675	1675	1685	1674	475
175°	1720	1712	1714	1725	1710	164
180°	1720	1720	1720	1720	1720	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	408.0	408.0	408.0	408.0	408.0
2.5°	409.8	408.4	404.8	408.0	407.5
5°	408.4	407.1	403.9	407.5	407.1
7.5°	405.7	404.8	402.0	406.2	405.7
10°	402.0	401.6	399.3	403.4	403.0
12.5°	397.0	397.0	395.7	399.3	399.3
15°	391.5	392.0	390.6	394.7	394.3
17.5°	384.2	385.6	385.1	389.3	388.8
20°	376.5	377.8	378.3	382.9	382.9
22.5°	367.8	369.6	370.5	375.1	376.0
25°	358.2	360.9	362.3	367.3	367.8
27.5°	347.7	351.8	353.6	358.2	358.6
30°	337.2	340.8	344.0	349.1	350.0
32.5°	325.8	330.3	334.0	339.9	340.8
35°	313.4	318.9	323.5	329.9	331.2
37.5°	301.1	307.5	313.0	319.4	320.7
40°	289.2	295.1	301.5	308.4	310.2
42.5°	275.5	282.3	290.1	297.9	299.3
45°	261.3	270.0	278.7	286.5	288.7
47.5°	248.1	256.8	266.8	274.6	277.3
50°	233.5	243.5	253.6	262.7	265.4
52.5°	218.8	228.9	240.8	249.9	252.7
55°	204.7	214.3	228.0	237.1	239.9
57.5°	188.7	200.6	213.8	224.8	227.1
60°	173.2	185.0	200.1	210.6	214.3
62.5°	158.1	171.3	186.4	196.9	200.6
65°	141.6	156.3	171.8	183.2	186.9
67.5°	126.1	141.6	158.1	169.5	173.2
70°	110.1	125.6	143.0	155.3	158.5
72.5°	94.6	110.6	129.3	141.2	144.8
75°	78.6	95.5	114.7	127.5	131.6
77.5°	63.5	81.3	101.4	114.2	118.8
80°	49.8	68.1	88.2	101.9	105.5
82.5°	36.1	55.3	75.4	89.5	93.7
85°	24.2	43.4	64.0	77.7	82.2
87.5°	15.1	33.8	53.9	67.2	71.3
90°	11.2	43.6	73.5	94.5	100.7
92.5°	26.2	39.5	69.5	90.0	93.6
95°	76.7	48.0	68.0	88.1	93.5
97.5°	140.6	182.1	65.8	84.0	89.5
100°	216.0	251.0	91.3	81.8	86.3
102.5°	300.9	326.4	359.2	81.6	85.3
105°	391.3	408.2	431.6	454.6	411.9
107.5°	475.0	486.6	511.6	529.5	537.8
110°	559.5	569.7	593.3	606.4	614.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	641.3	654.5	672.2	680.9	689.8
115°	725.7	733.8	747.1	759.7	762.9
117.5°	801.6	809.6	827.1	835.4	839.0
120°	878.4	885.0	896.9	908.5	909.7
122.5°	950.5	953.0	967.9	978.4	979.0
125°	1018.1	1022.9	1031.7	1044.3	1048.3
127.5°	1083.7	1084.6	1100.2	1107.1	1109.0
130°	1146.4	1147.2	1158.3	1167.8	1170.6
132.5°	1204.3	1206.4	1217.0	1226.1	1227.5
135°	1261.7	1260.4	1268.7	1278.6	1284.0
137.5°	1313.1	1312.7	1321.0	1330.3	1331.4
140°	1363.3	1365.5	1368.5	1378.3	1381.8
142.5°	1407.9	1413.1	1413.9	1421.4	1423.3
145°	1454.2	1457.6	1457.6	1461.6	1466.1
147.5°	1490.3	1497.5	1496.2	1498.0	1501.1
150°	1530.1	1534.8	1533.5	1533.5	1534.8
152.5°	1563.1	1567.0	1564.4	1567.0	1565.7
155°	1594.0	1595.3	1591.4	1596.5	1592.7
157.5°	1621.0	1621.0	1615.8	1622.3	1615.8
160°	1644.1	1640.3	1639.0	1646.7	1639.0
162.5°	1664.7	1659.6	1658.3	1666.0	1657.0
165°	1681.5	1675.0	1675.0	1685.3	1673.7
167.5°	1695.6	1689.2	1687.9	1699.5	1686.6
170°	1707.2	1699.5	1700.8	1711.0	1698.2
172.5°	1714.9	1707.2	1708.5	1718.8	1704.6
175°	1720.1	1712.3	1713.6	1725.2	1709.8
177.5°	1723.9	1714.9	1717.5	1727.8	1712.3
180°	1720.1	1720.1	1720.1	1720.1	1720.1

(END OF REPORT)