

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: P1033421

Luminaire Tested: S124DIW-B350D1340UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033421
REPORT IS A COMBINATION OF REPORTS P997378 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1340UB30-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

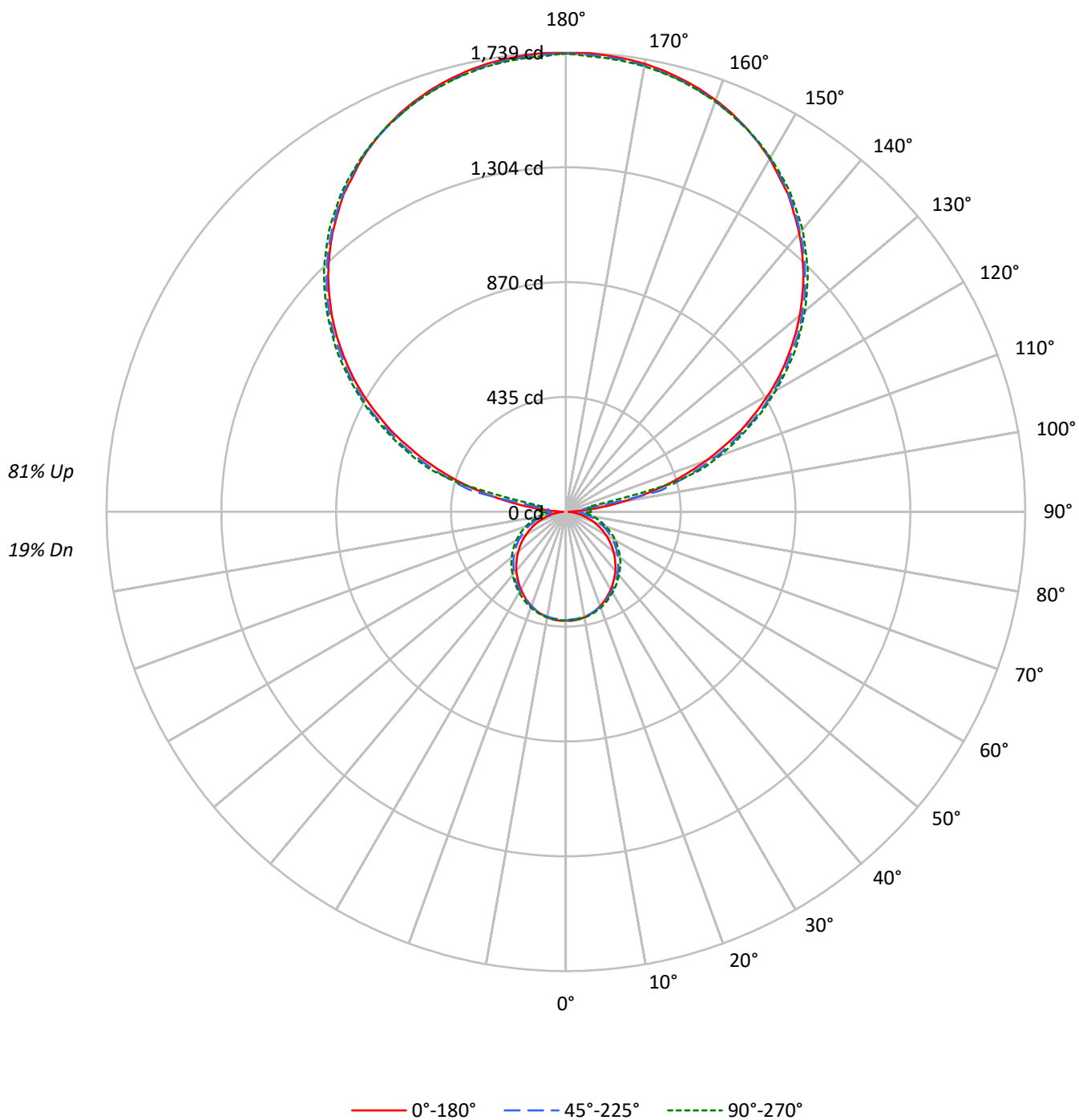
Lumens per Lamp: N/A
Luminaire Lumens: 6775.0 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
Input Voltage (V):
Input Current (A_{in}): 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°	3356	3356	3356
5°	3365	3268	3274
10°	3343	3204	3194
15°	3312	3132	3105
20°	3265	3054	3018
25°	3213	2967	2925
30°	3157	2881	2829
35°	3093	2794	2744
40°	3041	2710	2656
45°	2966	2631	2577
50°	2901	2542	2495
55°	2833	2455	2400
60°	2729	2348	2311
65°	2617	2233	2205
70°	2479	2100	2080
75°	2285	1954	1962
80°	2065	1803	1838
85°	1776	1653	1738

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°	39.0	0.6
10°-20°	111.7	1.6
20°-30°	168.9	2.5
30°-40°	204.4	3.0
40°-50°	216.0	3.2
50°-60°	203.3	3.0
60°-70°	168.7	2.5
70°-80°	118.4	1.7
80°-90°	70.3	1.0
90°-100°	97.3	1.4
100°-110°	408.7	6.0
110°-120°	744.0	11.0
120°-130°	930.5	13.7
130°-140°	988.4	14.6
140°-150°	920.6	13.6
150°-160°	741.6	10.9
160°-170°	478.3	7.1
170°-180°	164.8	2.4
0°-30°	319.6	4.7
0°-40°	524.0	7.7
0°-60°	943.3	13.9
0°-90°	1300.8	19.2
90°-120°	1250.0	18.4
90°-150°	4089.5	60.4
90°-180°	5474.0	80.8
0°-180°	6775.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	412	412	412	412	412	
5°	412	411	407	411	411	39
15°	395	395	394	398	398	111
25°	361	364	365	370	371	166
35°	316	322	326	333	334	198
45°	264	272	281	289	291	204
55°	206	216	230	239	242	184
65°	143	158	173	185	188	142
75°	79	96	116	129	133	84
85°	24	44	64	78	83	25
90°	11	44	74	95	102	9
95°	77	48	69	89	94	93
105°	395	412	435	458	415	413
115°	732	740	754	766	769	721
125°	1027	1032	1041	1053	1057	917
135°	1273	1271	1280	1290	1295	981
145°	1467	1470	1470	1474	1479	917
155°	1608	1609	1605	1610	1606	741
165°	1696	1690	1690	1700	1688	479
175°	1735	1727	1728	1740	1724	165
180°	1735	1735	1735	1735	1735	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	411.5	411.5	411.5	411.5	411.5
2.5°	413.4	412.0	408.3	411.5	411.0
5°	412.0	410.6	407.4	411.0	410.6
7.5°	409.2	408.3	405.5	409.7	409.2
10°	405.5	405.1	402.8	406.9	406.4
12.5°	400.4	400.4	399.1	402.8	402.8
15°	394.9	395.4	394.0	398.1	397.7
17.5°	387.5	388.9	388.5	392.6	392.2
20°	379.7	381.1	381.6	386.2	386.2
22.5°	371.0	372.8	373.7	378.3	379.3
25°	361.3	364.0	365.4	370.5	371.0
27.5°	350.7	354.8	356.7	361.3	361.7
30°	340.1	343.8	347.0	352.1	353.0
32.5°	328.6	333.2	336.9	342.8	343.8
35°	316.1	321.6	326.3	332.7	334.1
37.5°	303.7	310.1	315.7	322.1	323.5
40°	291.7	297.7	304.1	311.1	312.9
42.5°	277.9	284.8	292.6	300.5	301.8
45°	263.6	272.3	281.1	288.9	291.2
47.5°	250.2	259.0	269.1	277.0	279.7
50°	235.5	245.6	255.8	265.0	267.7
52.5°	220.7	230.9	242.8	252.1	254.8
55°	206.4	216.1	229.9	239.2	241.9
57.5°	190.3	202.3	215.7	226.7	229.0
60°	174.6	186.6	201.8	212.4	216.1
62.5°	159.4	172.8	188.0	198.6	202.3
65°	142.9	157.6	173.3	184.8	188.5
67.5°	127.2	142.9	159.4	171.0	174.6
70°	111.1	126.7	144.2	156.7	159.9
72.5°	95.4	111.5	130.4	142.4	146.1
75°	79.3	96.3	115.7	128.6	132.7
77.5°	64.1	82.0	102.3	115.2	119.8
80°	50.2	68.7	88.9	102.8	106.4
82.5°	36.4	55.8	76.0	90.3	94.5
85°	24.4	43.8	64.5	78.3	82.9
87.5°	15.2	34.1	54.4	67.7	71.9
90°	11.3	44.0	74.1	95.3	101.6
92.5°	26.4	39.9	70.1	90.8	94.4
95°	77.4	48.4	68.6	88.8	94.3
97.5°	141.7	183.7	66.3	84.8	90.2
100°	217.9	253.3	92.1	82.5	87.0
102.5°	303.6	329.2	362.3	82.3	86.0
105°	394.7	411.8	435.3	458.4	415.4
107.5°	479.0	490.8	516.0	534.0	542.5
110°	564.3	574.6	598.5	611.7	619.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	646.8	660.2	678.0	686.8	695.7
115°	732.1	740.1	753.6	766.2	769.4
117.5°	808.6	816.5	834.3	842.6	846.3
120°	886.0	892.6	904.7	916.5	917.6
122.5°	958.6	961.2	976.2	986.8	987.4
125°	1026.9	1031.7	1040.6	1053.3	1057.3
127.5°	1093.1	1094.0	1109.7	1116.7	1118.6
130°	1156.3	1157.1	1168.4	1178.0	1180.8
132.5°	1214.7	1216.8	1227.6	1236.7	1238.2
135°	1272.6	1271.3	1279.7	1289.6	1295.0
137.5°	1324.5	1324.1	1332.4	1341.8	1342.9
140°	1375.1	1377.3	1380.3	1390.2	1393.8
142.5°	1420.1	1425.3	1426.1	1433.8	1435.6
145°	1466.8	1470.2	1470.2	1474.3	1478.7
147.5°	1503.1	1510.4	1509.1	1510.9	1514.0
150°	1543.4	1548.1	1546.8	1546.8	1548.1
152.5°	1576.6	1580.5	1577.9	1580.5	1579.2
155°	1607.7	1609.0	1605.1	1610.3	1606.4
157.5°	1635.0	1635.0	1629.8	1636.3	1629.8
160°	1658.3	1654.5	1653.2	1660.9	1653.2
162.5°	1679.1	1673.9	1672.6	1680.4	1671.3
165°	1696.0	1689.5	1689.5	1699.9	1688.2
167.5°	1710.3	1703.8	1702.5	1714.1	1701.2
170°	1721.9	1714.1	1715.4	1725.8	1712.8
172.5°	1729.7	1721.9	1723.2	1733.6	1719.3
175°	1734.9	1727.1	1728.4	1740.1	1724.5
177.5°	1738.8	1729.7	1732.3	1742.7	1727.1
180°	1734.9	1734.9	1734.9	1734.9	1734.9

(END OF REPORT)