

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: P1033147

Luminaire Tested: S124DIW-B1020D1340UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033147
REPORT IS A COMBINATION OF REPORTS P996748 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1340UB50-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

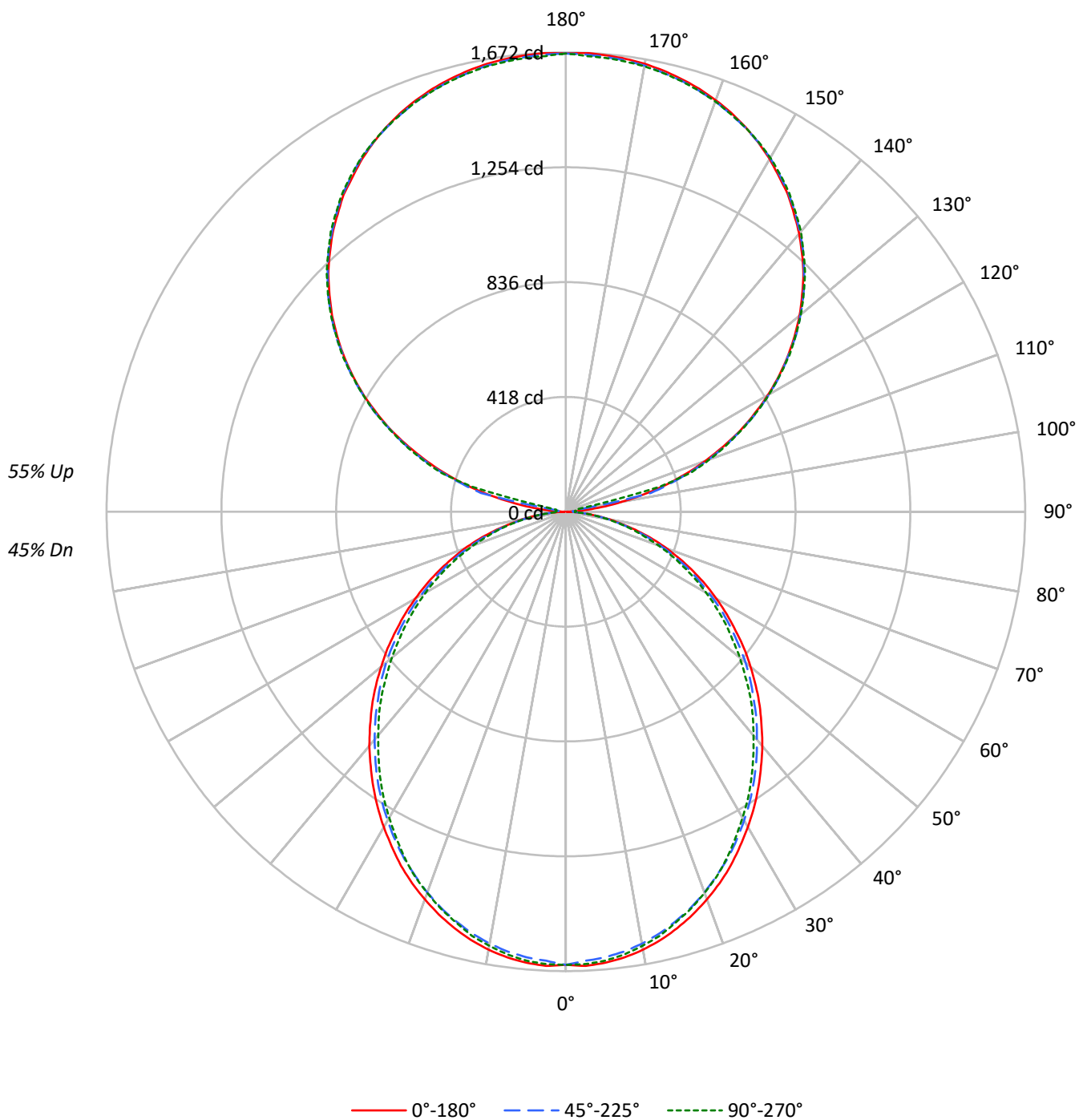
Lumens per Lamp: N/A
Luminaire Lumens: 9398.0 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52
1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	46	44	43
2	88	81	75	69	80	74	69	64	62	58	55	51	48	45	40	38	37
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	32	29	27
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	21
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16
9	49	37	30	25	45	35	28	23	29	24	21	25	21	18	20	17	15
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13448	13448	13448
5°	13460	13062	13078
10°	13345	12698	12610
15°	13154	12268	12082
20°	12910	11802	11537
25°	12635	11309	10949
30°	12302	10776	10304
35°	11959	10230	9681
40°	11601	9644	9017
45°	11225	9055	8397
50°	10810	8485	7710
55°	10358	7818	7028
60°	9895	7088	6318
65°	9365	6335	5518
70°	8757	5427	4659
75°	7844	4374	3732
80°	6683	3162	2626
85°	5196	1760	1413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11225 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	1.7
10°-20°	437.9	4.7
20°-30°	644.5	6.9
30°-40°	749.2	8.0
40°-50°	749.1	8.0
50°-60°	655.2	7.0
60°-70°	486.5	5.2
70°-80°	276.0	2.9
80°-90°	82.5	0.9
90°-100°	55.4	0.6
100°-110°	364.6	3.9
110°-120°	696.3	7.4
120°-130°	883.9	9.4
130°-140°	945.6	10.1
140°-150°	884.2	9.4
150°-160°	713.1	7.6
160°-170°	459.9	4.9
170°-180°	158.5	1.7
0°-30°	1237.9	13.2
0°-40°	1987.1	21.1
0°-60°	3391.5	36.1
0°-90°	4236.4	45.1
90°-120°	1116.3	11.9
90°-150°	3830.1	40.8
90°-180°	5162.0	54.9
0°-180°	9398.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1649	1649	1649	1649	1649	
5°	1648	1643	1628	1643	1640	156
15°	1569	1563	1544	1551	1547	442
25°	1421	1411	1393	1394	1389	654
35°	1222	1213	1195	1185	1179	764
45°	998	988	967	953	949	769
55°	755	751	732	716	708	676
65°	511	505	492	478	472	506
75°	272	266	259	254	252	289
85°	71	71	69	69	67	77
90°	4	18	27	35	37	8
95°	69	26	27	35	36	85
105°	376	383	389	400	356	393
115°	701	705	704	706	706	690
125°	986	991	988	992	993	880
135°	1223	1221	1226	1229	1231	942
145°	1410	1414	1414	1415	1417	881
155°	1546	1547	1543	1548	1544	713
165°	1631	1624	1624	1634	1623	461
175°	1668	1661	1662	1673	1658	159
180°	1668	1668	1668	1668	1668	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1649.2	1649.2	1649.2	1649.2	1649.2
2.5°	1654.5	1650.5	1636.0	1649.2	1647.9
5°	1647.9	1642.6	1628.1	1642.6	1640.0
7.5°	1636.0	1630.7	1614.8	1626.7	1625.4
10°	1618.8	1613.5	1596.3	1606.9	1604.3
12.5°	1596.3	1591.1	1572.6	1584.5	1580.5
15°	1568.6	1563.3	1543.5	1551.4	1547.4
17.5°	1536.9	1530.3	1511.8	1517.1	1514.4
20°	1501.2	1494.6	1474.8	1478.7	1476.1
22.5°	1462.9	1453.6	1433.8	1441.7	1436.4
25°	1420.6	1411.3	1392.8	1394.2	1388.9
27.5°	1373.0	1363.8	1346.6	1343.9	1337.3
30°	1325.4	1314.9	1297.7	1292.4	1285.8
32.5°	1275.2	1266.0	1247.5	1240.9	1234.3
35°	1222.4	1213.1	1194.6	1185.4	1178.8
37.5°	1166.9	1158.9	1139.1	1129.9	1120.6
40°	1112.7	1102.1	1082.3	1069.1	1062.5
42.5°	1054.5	1049.3	1026.8	1010.9	1007.0
45°	997.7	988.5	967.3	952.8	948.8
47.5°	938.2	931.6	911.8	896.0	885.4
50°	877.5	872.2	853.7	835.2	827.2
52.5°	818.0	811.4	791.6	775.7	765.1
55°	754.6	750.6	732.1	716.2	708.3
57.5°	695.1	691.1	672.6	656.8	648.8
60°	633.0	626.4	609.2	597.3	590.7
62.5°	572.2	566.9	548.4	537.8	531.2
65°	511.4	504.8	491.6	478.4	471.8
67.5°	449.3	444.0	430.8	417.6	416.3
70°	392.5	383.2	372.7	362.1	358.1
72.5°	331.7	322.4	314.5	306.6	302.6
75°	272.2	265.6	259.0	253.7	252.4
77.5°	214.1	211.4	204.8	203.5	199.5
80°	162.5	158.6	155.9	153.3	152.0
82.5°	112.3	111.0	111.0	109.7	108.4
85°	71.4	71.4	68.7	68.7	67.4
87.5°	34.4	33.0	31.7	31.7	31.7
90°	3.7	17.5	27.4	34.9	37.4
92.5°	18.7	16.2	26.2	33.7	33.7
95°	68.6	26.2	27.4	34.9	36.2
97.5°	131.0	158.4	27.4	33.7	34.9
100°	204.6	227.1	54.9	33.7	34.9
102.5°	287.0	301.9	316.9	36.2	36.2
105°	375.5	383.0	389.3	400.5	355.6
107.5°	456.6	460.4	469.1	475.3	480.3
110°	539.0	542.7	550.2	552.7	556.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	618.8	626.3	628.8	627.5	632.5
115°	701.2	704.9	703.7	706.1	706.1
117.5°	774.8	779.8	783.5	782.3	782.3
120°	849.6	854.6	853.4	855.9	853.4
122.5°	919.5	922.0	924.5	925.7	923.2
125°	985.6	990.6	988.1	991.9	993.1
127.5°	1049.2	1050.5	1056.7	1055.5	1054.2
130°	1110.4	1111.6	1115.4	1116.6	1116.6
132.5°	1166.5	1169.0	1174.0	1175.3	1174.0
135°	1222.7	1221.4	1226.4	1228.9	1231.4
137.5°	1272.6	1272.6	1278.8	1281.3	1280.0
140°	1321.2	1323.7	1326.2	1330.0	1331.2
142.5°	1364.9	1369.9	1371.1	1373.6	1373.6
145°	1409.8	1413.5	1413.5	1414.8	1417.3
147.5°	1444.7	1452.2	1451.0	1452.2	1453.5
150°	1483.4	1488.4	1487.2	1487.2	1488.4
152.5°	1515.8	1519.6	1517.1	1519.6	1518.3
155°	1545.8	1547.0	1543.3	1548.3	1544.5
157.5°	1572.0	1572.0	1567.0	1573.2	1567.0
160°	1594.4	1590.7	1589.5	1596.9	1589.5
162.5°	1614.4	1609.4	1608.2	1615.7	1606.9
165°	1630.6	1624.4	1624.4	1634.4	1623.1
167.5°	1644.4	1638.1	1636.9	1648.1	1635.6
170°	1655.6	1648.1	1649.3	1659.3	1646.8
172.5°	1663.1	1655.6	1656.8	1666.8	1653.1
175°	1668.1	1660.6	1661.8	1673.0	1658.1
177.5°	1671.8	1663.1	1665.6	1675.5	1660.6
180°	1668.1	1668.1	1668.1	1668.1	1668.1

(END OF REPORT)