

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: P1033118

Luminaire Tested: S124DIW-B1020D1050UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033118
REPORT IS A COMBINATION OF REPORTS P996683 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1050UB50-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

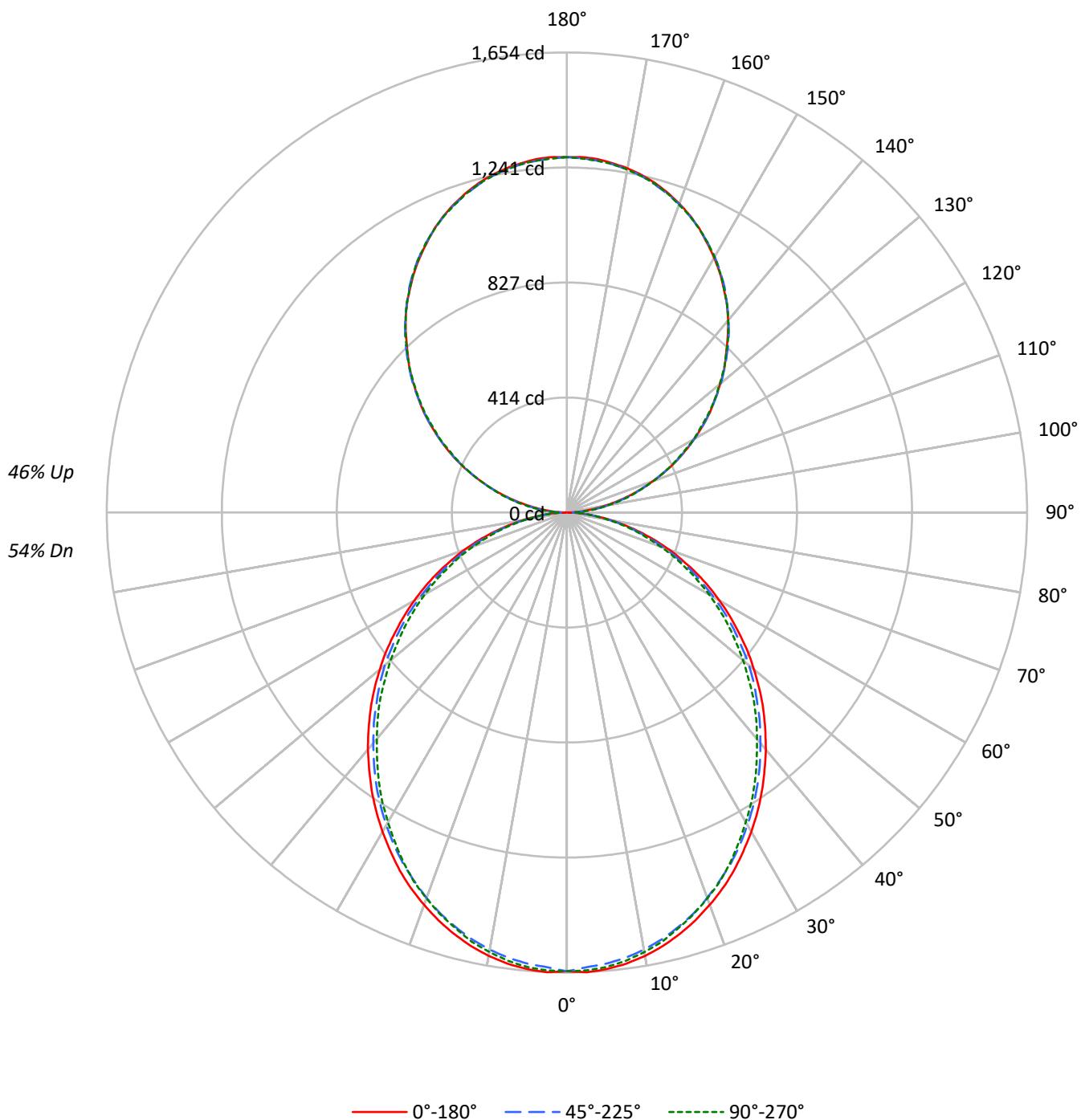
Lumens per Lamp: N/A
Luminaire Lumens: 7780.0 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 78.3
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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60
1	99	94	90	87	91	88	84	81	75	73	70	64	62	60	53	52	51
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	47	45	43
3	82	72	65	59	76	67	61	56	58	53	49	49	46	43	41	39	36
4	75	64	56	50	69	60	53	47	52	46	42	44	40	36	37	34	31
5	69	57	49	43	64	53	46	41	46	40	36	40	35	32	33	30	27
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21
8	55	42	34	29	51	39	32	28	35	29	25	30	25	22	25	22	19
9	51	38	31	26	47	36	29	25	32	26	22	27	23	20	23	20	17
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16

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	2.0
10°-20°	437.9	5.6
20°-30°	644.5	8.3
30°-40°	749.2	9.6
40°-50°	749.1	9.6
50°-60°	655.2	8.4
60°-70°	486.5	6.3
70°-80°	276.0	3.5
80°-90°	81.8	1.1
90°-100°	83.3	1.1
100°-110°	249.4	3.2
110°-120°	423.7	5.4
120°-130°	558.7	7.2
130°-140°	627.6	8.1
140°-150°	616.8	7.9
150°-160°	518.8	6.7
160°-170°	345.2	4.4
170°-180°	120.9	1.6
0°-30°	1237.9	15.9
0°-40°	1987.1	25.5
0°-60°	3391.5	43.6
0°-90°	4235.7	54.4
90°-120°	756.3	9.7
90°-150°	2559.4	32.9
90°-180°	3544.0	45.6
0°-180°	7780.0	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°	3	14	22	28	30	9
95°	59	68	75	78	78	64
105°	230	231	235	238	241	244
115°	431	431	429	428	427	425
125°	627	627	626	624	622	559
135°	809	815	815	813	810	626
145°	983	987	988	987	984	615
155°	1126	1126	1125	1129	1125	518
165°	1226	1223	1221	1227	1223	346
175°	1275	1270	1270	1276	1270	121
180°	1277	1277	1277	1277	1277	

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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°	3.0	13.8	21.7	27.7	29.6
92.5°	25.7	38.5	43.5	46.4	47.4
95°	59.3	68.2	75.1	78.0	78.0
97.5°	94.8	102.7	110.6	114.6	114.6
100°	138.3	142.3	151.2	153.1	153.1
102.5°	183.8	184.7	192.6	195.6	196.6
105°	230.2	231.2	235.1	238.1	241.1
107.5°	278.6	279.6	280.6	284.5	283.5
110°	328.0	330.0	329.0	327.0	330.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	379.4	379.4	377.4	377.4	377.4
115°	430.7	430.7	428.8	427.8	426.8
117.5°	479.1	479.1	478.2	475.2	472.2
120°	527.6	531.5	528.5	523.6	525.6
122.5°	577.9	578.9	577.9	575.0	570.0
125°	627.3	627.3	626.3	624.4	622.4
127.5°	671.8	674.8	672.8	670.8	669.8
130°	719.2	722.2	722.2	720.2	716.2
132.5°	767.6	769.6	768.6	766.6	765.6
135°	809.1	815.0	815.0	813.1	810.1
137.5°	855.5	858.5	860.5	857.5	858.5
140°	902.0	903.9	903.9	903.0	902.0
142.5°	944.5	946.4	945.4	945.4	945.4
145°	983.0	986.9	987.9	986.9	984.0
147.5°	1022.5	1027.4	1026.5	1025.5	1024.5
150°	1058.1	1062.0	1062.0	1062.0	1061.0
152.5°	1091.7	1093.6	1094.6	1097.6	1094.6
155°	1126.2	1126.2	1125.2	1129.2	1125.2
157.5°	1155.9	1153.9	1153.9	1156.9	1153.9
160°	1181.6	1180.6	1179.6	1182.5	1177.6
162.5°	1205.3	1202.3	1201.3	1207.2	1202.3
165°	1226.0	1223.0	1221.1	1227.0	1223.0
167.5°	1242.8	1238.9	1238.9	1244.8	1238.9
170°	1256.6	1251.7	1252.7	1258.6	1251.7
172.5°	1266.5	1262.6	1262.6	1269.5	1262.6
175°	1275.4	1270.5	1269.5	1276.4	1269.5
177.5°	1279.4	1274.4	1274.4	1281.3	1273.4
180°	1277.4	1277.4	1277.4	1277.4	1277.4

(END OF REPORT)