

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: P1032491

Luminaire Tested: S124DIW-B1020D1340UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032491
REPORT IS A COMBINATION OF REPORTS P996711 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1340UB2750-4F0-XX-W2A-F_3000K
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

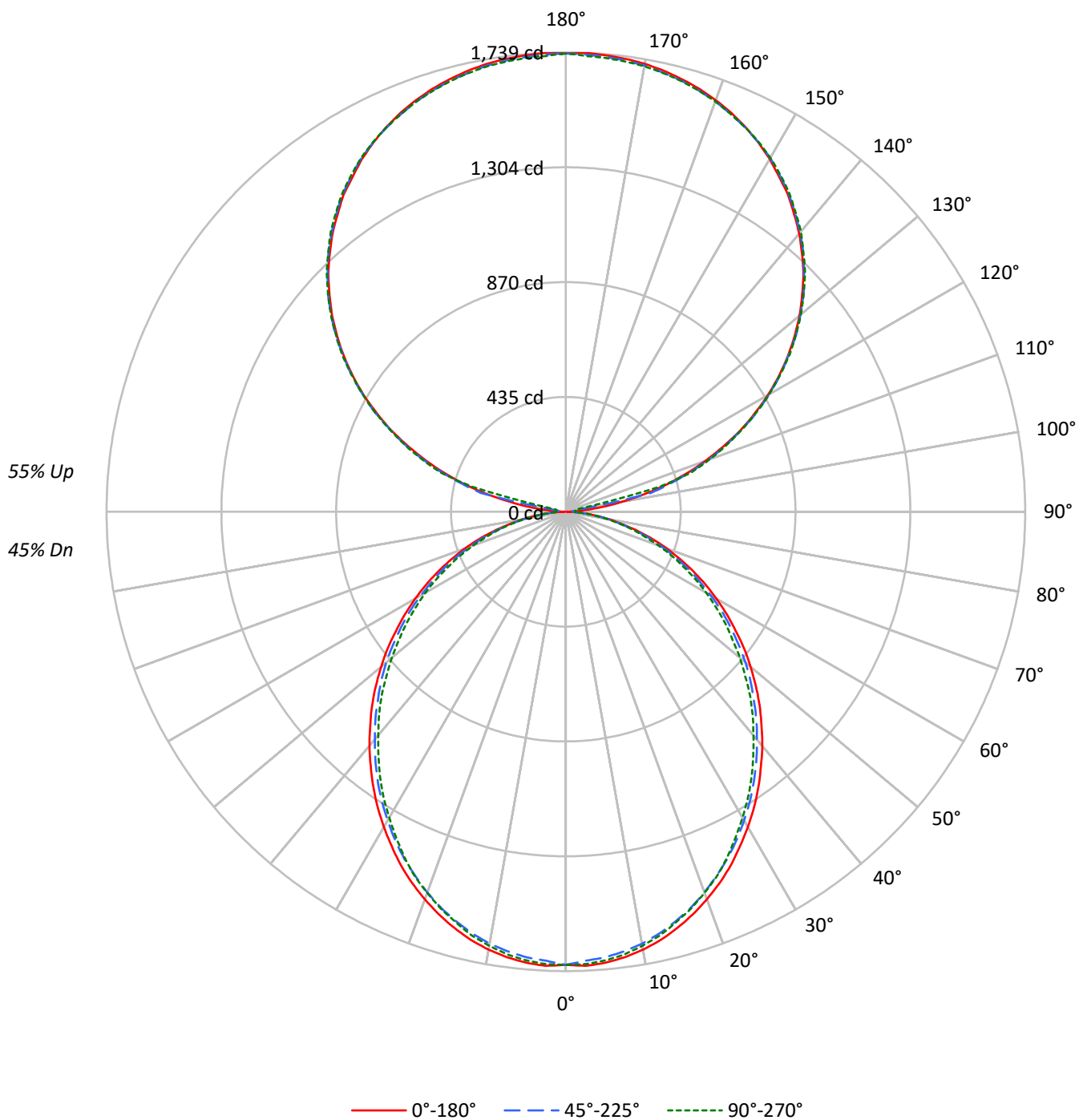
Lumens per Lamp: N/A
Luminaire Lumens: 9774.0 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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				0
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°	13985	13985	13985
5°	13997	13583	13599
10°	13878	13206	13113
15°	13679	12758	12565
20°	13425	12272	11997
25°	13139	11760	11386
30°	12794	11206	10715
35°	12437	10639	10067
40°	12064	10029	9377
45°	11673	9416	8733
50°	11241	8824	8018
55°	10771	8130	7309
60°	10291	7371	6570
65°	9739	6587	5738
70°	9105	5643	4845
75°	8158	4550	3881
80°	6951	3290	2729
85°	5399	1832	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11673 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	1.7
10°-20°	455.4	4.7
20°-30°	670.3	6.9
30°-40°	779.1	8.0
40°-50°	779.0	8.0
50°-60°	681.4	7.0
60°-70°	505.9	5.2
70°-80°	287.0	2.9
80°-90°	85.8	0.9
90°-100°	57.6	0.6
100°-110°	379.3	3.9
110°-120°	724.2	7.4
120°-130°	919.4	9.4
130°-140°	983.6	10.1
140°-150°	919.7	9.4
150°-160°	741.6	7.6
160°-170°	478.3	4.9
170°-180°	164.8	1.7
0°-30°	1287.3	13.2
0°-40°	2066.5	21.1
0°-60°	3526.9	36.1
0°-90°	4405.6	45.1
90°-120°	1161.0	11.9
90°-150°	3983.6	40.8
90°-180°	5368.0	54.9
0°-180°	9774.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1715	1715	1715	1715	1715	
5°	1714	1708	1693	1708	1705	163
15°	1631	1626	1605	1613	1609	460
25°	1477	1468	1448	1450	1444	680
35°	1271	1262	1242	1233	1226	795
45°	1038	1028	1006	991	987	800
55°	785	781	761	745	737	703
65°	532	525	511	498	491	526
75°	283	276	269	264	262	300
85°	74	74	72	72	70	80
90°	4	18	28	36	39	9
95°	71	27	28	36	38	88
105°	391	398	405	416	370	409
115°	729	733	732	734	734	718
125°	1025	1030	1028	1032	1033	915
135°	1272	1270	1276	1278	1281	980
145°	1466	1470	1470	1472	1474	916
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°	1715.0	1715.0	1715.0	1715.0	1715.0
2.5°	1720.5	1716.4	1701.3	1715.0	1713.7
5°	1713.7	1708.2	1693.1	1708.2	1705.4
7.5°	1701.3	1695.8	1679.3	1691.7	1690.3
10°	1683.4	1677.9	1660.1	1671.1	1668.3
12.5°	1660.1	1654.6	1635.3	1647.7	1643.6
15°	1631.2	1625.7	1605.1	1613.4	1609.2
17.5°	1598.2	1591.4	1572.1	1577.6	1574.9
20°	1561.1	1554.3	1533.6	1537.8	1535.0
22.5°	1521.3	1511.7	1491.0	1499.3	1493.8
25°	1477.3	1467.7	1448.4	1449.8	1444.3
27.5°	1427.8	1418.2	1400.3	1397.6	1390.7
30°	1378.4	1367.4	1349.5	1344.0	1337.1
32.5°	1326.1	1316.5	1297.3	1290.4	1283.5
35°	1271.2	1261.5	1242.3	1232.7	1225.8
37.5°	1213.5	1205.2	1184.6	1175.0	1165.4
40°	1157.1	1146.1	1125.5	1111.8	1104.9
42.5°	1096.6	1091.1	1067.8	1051.3	1047.2
45°	1037.5	1027.9	1005.9	990.8	986.7
47.5°	975.7	968.8	948.2	931.7	920.7
50°	912.5	907.0	887.8	868.5	860.3
52.5°	850.7	843.8	823.2	806.7	795.7
55°	784.7	780.6	761.3	744.8	736.6
57.5°	722.8	718.7	699.5	683.0	674.7
60°	658.3	651.4	633.5	621.2	614.3
62.5°	595.0	589.5	570.3	559.3	552.4
65°	531.8	525.0	511.2	497.5	490.6
67.5°	467.2	461.7	448.0	434.3	432.9
70°	408.1	398.5	387.5	376.5	372.4
72.5°	344.9	335.3	327.1	318.8	314.7
75°	283.1	276.2	269.4	263.9	262.5
77.5°	222.6	219.9	213.0	211.6	207.5
80°	169.0	164.9	162.2	159.4	158.0
82.5°	116.8	115.4	115.4	114.1	112.7
85°	74.2	74.2	71.5	71.5	70.1
87.5°	35.7	34.4	33.0	33.0	33.0
90°	3.9	18.2	28.5	36.3	38.9
92.5°	19.5	16.9	27.2	35.0	35.0
95°	71.4	27.2	28.5	36.3	37.6
97.5°	136.2	164.8	28.5	35.0	36.3
100°	212.8	236.2	57.1	35.0	36.3
102.5°	298.5	314.0	329.6	37.6	37.6
105°	390.6	398.4	404.9	416.5	369.8
107.5°	474.9	478.8	487.9	494.4	499.6
110°	560.6	564.5	572.2	574.8	578.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	643.6	651.4	654.0	652.7	657.9
115°	729.3	733.2	731.9	734.4	734.4
117.5°	805.8	811.0	814.9	813.6	813.6
120°	883.7	888.9	887.6	890.2	887.6
122.5°	956.3	958.9	961.5	962.8	960.2
125°	1025.1	1030.3	1027.7	1031.6	1032.9
127.5°	1091.3	1092.6	1099.1	1097.8	1096.5
130°	1154.9	1156.2	1160.1	1161.4	1161.4
132.5°	1213.3	1215.9	1221.1	1222.4	1221.1
135°	1271.7	1270.4	1275.6	1278.1	1280.7
137.5°	1323.6	1323.6	1330.1	1332.6	1331.4
140°	1374.2	1376.8	1379.4	1383.3	1384.6
142.5°	1419.6	1424.8	1426.1	1428.7	1428.7
145°	1466.3	1470.2	1470.2	1471.5	1474.1
147.5°	1502.6	1510.4	1509.1	1510.4	1511.7
150°	1542.9	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)