

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: P1032492

Luminaire Tested: S124DIW-B1020D1340UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032492
REPORT IS A COMBINATION OF REPORTS P996712 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_3500K
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

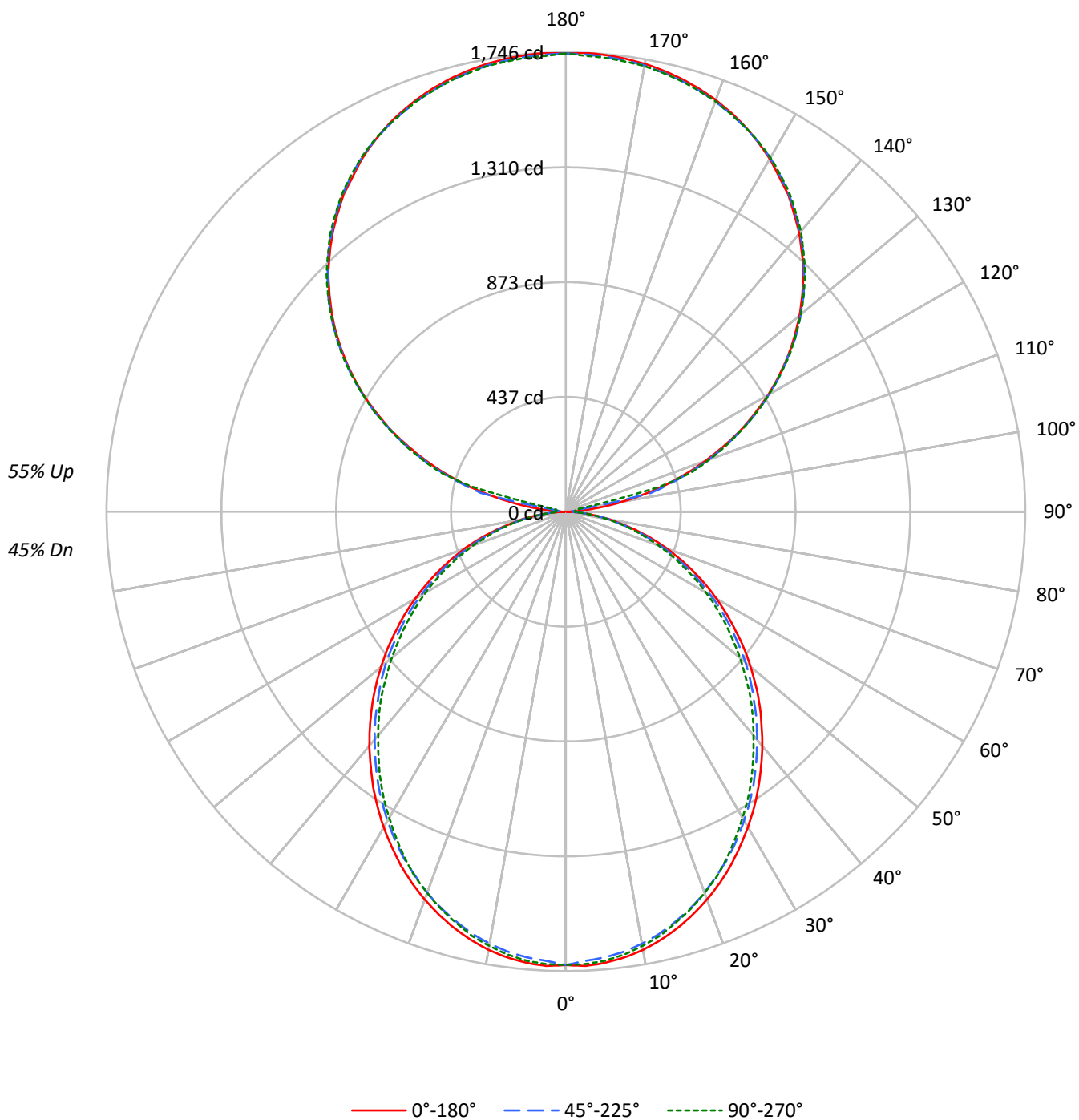
Lumens per Lamp: N/A
Luminaire Lumens: 9816.0 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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	50	30	10
RCR																				
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52			45
1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	46	44	43			38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	45	40	38	37			32
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31			27
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	32	29	27			23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23			20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	21			18
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18			16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16			14
9	49	37	30	25	45	35	28	23	29	24	21	25	21	18	20	17	15			13
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13			11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14045	14045	14045
5°	14058	13642	13658
10°	13938	13262	13170
15°	13739	12812	12620
20°	13483	12326	12049
25°	13196	11811	11436
30°	12849	11254	10762
35°	12491	10685	10110
40°	12116	10073	9418
45°	11723	9457	8771
50°	11289	8861	8053
55°	10818	8165	7341
60°	10334	7403	6598
65°	9781	6615	5762
70°	9145	5668	4866
75°	8193	4568	3897
80°	6984	3304	2741
85°	5421	1840	1476

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11723 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	1.7
10°-20°	457.4	4.7
20°-30°	673.1	6.9
30°-40°	782.5	8.0
40°-50°	782.4	8.0
50°-60°	684.3	7.0
60°-70°	508.0	5.2
70°-80°	288.3	2.9
80°-90°	86.2	0.9
90°-100°	57.8	0.6
100°-110°	380.9	3.9
110°-120°	727.3	7.4
120°-130°	923.3	9.4
130°-140°	987.7	10.1
140°-150°	923.6	9.4
150°-160°	744.8	7.6
160°-170°	480.4	4.9
170°-180°	165.5	1.7
0°-30°	1292.9	13.2
0°-40°	2075.4	21.1
0°-60°	3542.1	36.1
0°-90°	4424.6	45.1
90°-120°	1166.1	11.9
90°-150°	4000.7	40.8
90°-180°	5391.0	54.9
0°-180°	9816.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1722	1722	1722	1722	1722	
5°	1721	1716	1700	1716	1713	163
15°	1638	1633	1612	1620	1616	462
25°	1484	1474	1455	1456	1451	683
35°	1277	1267	1248	1238	1231	798
45°	1042	1032	1010	995	991	803
55°	788	784	765	748	740	706
65°	534	527	513	500	493	529
75°	284	277	270	265	264	302
85°	74	74	72	72	70	80
90°	4	18	29	36	39	9
95°	72	27	29	36	38	88
105°	392	400	407	418	371	411
115°	732	736	735	738	738	721
125°	1030	1035	1032	1036	1037	919
135°	1277	1276	1281	1284	1286	984
145°	1473	1476	1476	1478	1480	920
155°	1615	1616	1612	1617	1613	744
165°	1703	1697	1697	1707	1695	481
175°	1742	1734	1736	1748	1732	166
180°	1742	1742	1742	1742	1742	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1722.4	1722.4	1722.4	1722.4	1722.4
2.5°	1728.0	1723.8	1708.6	1722.4	1721.1
5°	1721.1	1715.5	1700.4	1715.5	1712.8
7.5°	1708.6	1703.1	1686.6	1699.0	1697.6
10°	1690.7	1685.2	1667.2	1678.3	1675.5
12.5°	1667.2	1661.7	1642.4	1654.8	1650.7
15°	1638.3	1632.7	1612.0	1620.3	1616.2
17.5°	1605.1	1598.2	1578.9	1584.4	1581.7
20°	1567.9	1561.0	1540.3	1544.4	1541.6
22.5°	1527.8	1518.2	1497.5	1505.8	1500.2
25°	1483.7	1474.0	1454.7	1456.1	1450.6
27.5°	1434.0	1424.3	1406.4	1403.6	1396.7
30°	1384.3	1373.3	1355.3	1349.8	1342.9
32.5°	1331.9	1322.2	1302.9	1296.0	1289.1
35°	1276.7	1267.0	1247.7	1238.0	1231.1
37.5°	1218.7	1210.4	1189.7	1180.0	1170.4
40°	1162.1	1151.1	1130.4	1116.6	1109.7
42.5°	1101.4	1095.9	1072.4	1055.8	1051.7
45°	1042.0	1032.4	1010.3	995.1	991.0
47.5°	979.9	973.0	952.3	935.8	924.7
50°	916.4	910.9	891.6	872.3	864.0
52.5°	854.3	847.4	826.7	810.2	799.1
55°	788.1	783.9	764.6	748.1	739.8
57.5°	726.0	721.8	702.5	685.9	677.7
60°	661.1	654.2	636.3	623.8	616.9
62.5°	597.6	592.1	572.8	561.7	554.8
65°	534.1	527.2	513.4	499.6	492.7
67.5°	469.3	463.7	449.9	436.1	434.8
70°	409.9	400.2	389.2	378.2	374.0
72.5°	346.4	336.8	328.5	320.2	316.1
75°	284.3	277.4	270.5	265.0	263.6
77.5°	223.6	220.8	213.9	212.5	208.4
80°	169.8	165.6	162.9	160.1	158.7
82.5°	117.3	115.9	115.9	114.6	113.2
85°	74.5	74.5	71.8	71.8	70.4
87.5°	35.9	34.5	33.1	33.1	33.1
90°	3.9	18.2	28.7	36.5	39.1
92.5°	19.5	16.9	27.4	35.2	35.2
95°	71.7	27.4	28.7	36.5	37.8
97.5°	136.8	165.5	28.7	35.2	36.5
100°	213.7	237.2	57.3	35.2	36.5
102.5°	299.7	315.4	331.0	37.8	37.8
105°	392.3	400.1	406.6	418.3	371.4
107.5°	477.0	480.9	490.0	496.5	501.7
110°	563.0	566.9	574.7	577.3	581.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	646.4	654.2	656.8	655.5	660.7
115°	732.4	736.3	735.0	737.6	737.6
117.5°	809.3	814.5	818.4	817.1	817.1
120°	887.5	892.7	891.4	894.0	891.4
122.5°	960.4	963.0	965.6	967.0	964.3
125°	1029.5	1034.7	1032.1	1036.0	1037.3
127.5°	1096.0	1097.3	1103.8	1102.5	1101.2
130°	1159.8	1161.1	1165.0	1166.3	1166.3
132.5°	1218.5	1221.1	1226.3	1227.6	1226.3
135°	1277.1	1275.8	1281.0	1283.6	1286.2
137.5°	1329.2	1329.2	1335.7	1338.4	1337.1
140°	1380.1	1382.7	1385.3	1389.2	1390.5
142.5°	1425.7	1430.9	1432.2	1434.8	1434.8
145°	1472.6	1476.5	1476.5	1477.8	1480.4
147.5°	1509.1	1516.9	1515.6	1516.9	1518.2
150°	1549.5	1554.7	1553.4	1553.4	1554.7
152.5°	1583.3	1587.3	1584.7	1587.3	1586.0
155°	1614.6	1615.9	1612.0	1617.2	1613.3
157.5°	1642.0	1642.0	1636.8	1643.3	1636.8
160°	1665.4	1661.5	1660.2	1668.1	1660.2
162.5°	1686.3	1681.1	1679.8	1687.6	1678.5
165°	1703.2	1696.7	1696.7	1707.2	1695.4
167.5°	1717.6	1711.1	1709.8	1721.5	1708.5
170°	1729.3	1721.5	1722.8	1733.2	1720.2
172.5°	1737.1	1729.3	1730.6	1741.0	1726.7
175°	1742.3	1734.5	1735.8	1747.5	1731.9
177.5°	1746.2	1737.1	1739.7	1750.2	1734.5
180°	1742.3	1742.3	1742.3	1742.3	1742.3

(END OF REPORT)