

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: P1033106

Luminaire Tested: S124DIW-B1020D1050UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033106
REPORT IS A COMBINATION OF REPORTS P996665 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1050UB35-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

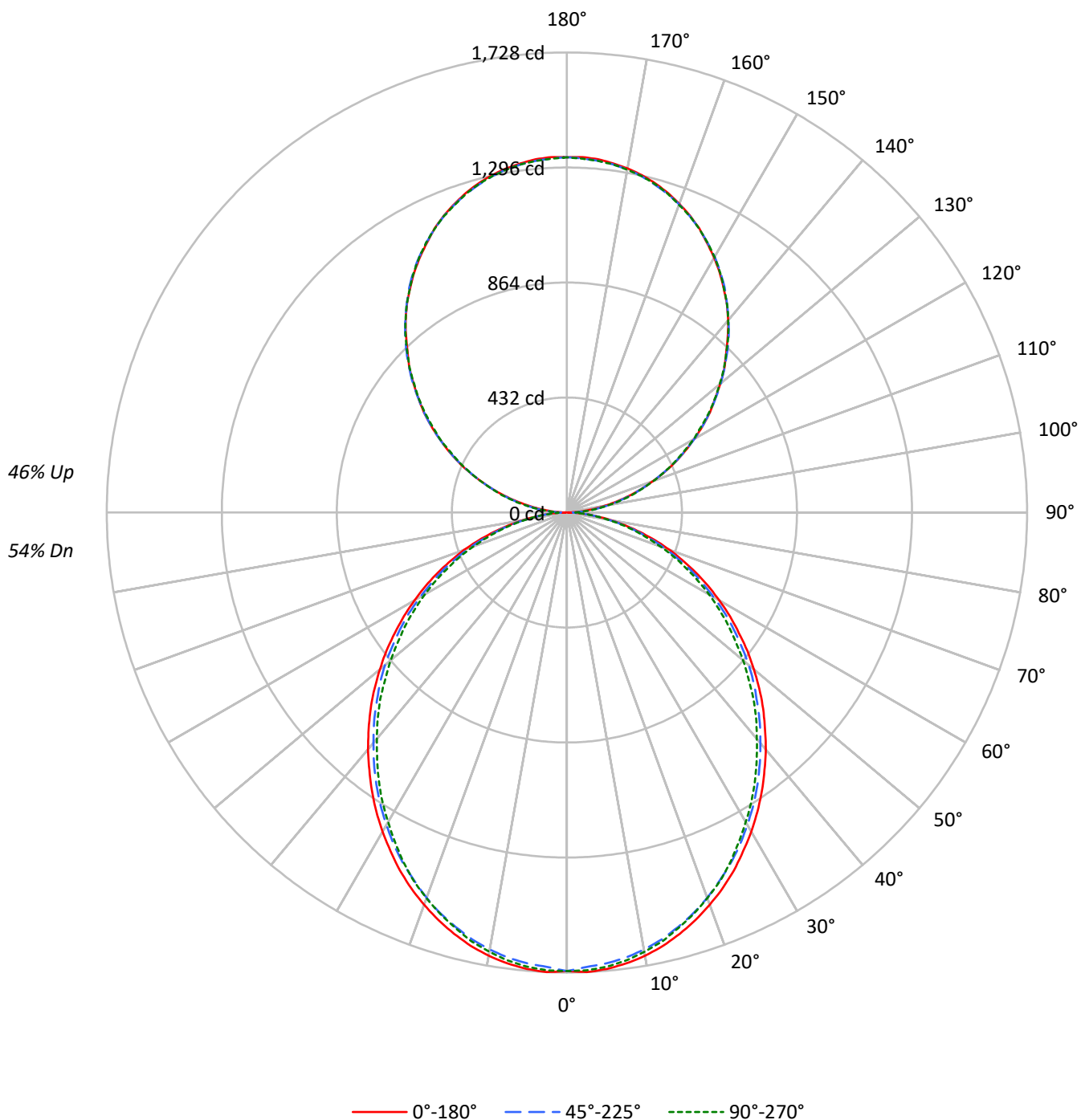
Lumens per Lamp: N/A
Luminaire Lumens: 8126.0 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	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	2.0
10°-20°	457.4	5.6
20°-30°	673.1	8.3
30°-40°	782.5	9.6
40°-50°	782.4	9.6
50°-60°	684.3	8.4
60°-70°	508.0	6.3
70°-80°	288.3	3.5
80°-90°	85.4	1.1
90°-100°	87.0	1.1
100°-110°	260.5	3.2
110°-120°	442.6	5.4
120°-130°	583.6	7.2
130°-140°	655.5	8.1
140°-150°	644.3	7.9
150°-160°	541.9	6.7
160°-170°	360.6	4.4
170°-180°	126.3	1.6
0°-30°	1292.9	15.9
0°-40°	2075.4	25.5
0°-60°	3542.1	43.6
0°-90°	4423.8	54.4
90°-120°	790.0	9.7
90°-150°	2673.5	32.9
90°-180°	3702.0	45.6
0°-180°	8126.0	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°	3	14	23	29	31	9
95°	62	71	78	82	82	67
105°	240	242	246	249	252	255
115°	450	450	448	447	446	444
125°	655	655	654	652	650	584
135°	845	851	851	849	846	654
145°	1027	1031	1032	1031	1028	643
155°	1176	1176	1175	1180	1175	541
165°	1281	1278	1276	1282	1278	361
175°	1332	1327	1326	1333	1326	126
180°	1334	1334	1334	1334	1334	

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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°	3.1	14.4	22.7	28.9	31.0
92.5°	26.8	40.2	45.4	48.5	49.5
95°	61.9	71.2	78.4	81.5	81.5
97.5°	99.1	107.3	115.6	119.7	119.7
100°	144.5	148.6	157.9	159.9	159.9
102.5°	191.9	193.0	201.2	204.3	205.4
105°	240.4	241.5	245.6	248.7	251.8
107.5°	291.0	292.0	293.1	297.2	296.2
110°	342.6	344.7	343.6	341.6	344.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	396.3	396.3	394.2	394.2	394.2
115°	449.9	449.9	447.9	446.8	445.8
117.5°	500.5	500.5	499.5	496.4	493.3
120°	551.1	555.2	552.1	546.9	549.0
122.5°	603.7	604.7	603.7	600.6	595.4
125°	655.3	655.3	654.2	652.2	650.1
127.5°	701.7	704.8	702.7	700.7	699.6
130°	751.2	754.3	754.3	752.3	748.1
132.5°	801.8	803.9	802.8	800.8	799.7
135°	845.1	851.3	851.3	849.3	846.2
137.5°	893.7	896.7	898.8	895.7	896.7
140°	942.2	944.2	944.2	943.2	942.2
142.5°	986.5	988.6	987.6	987.6	987.6
145°	1026.8	1030.9	1031.9	1030.9	1027.8
147.5°	1068.0	1073.2	1072.2	1071.1	1070.1
150°	1105.2	1109.3	1109.3	1109.3	1108.3
152.5°	1140.3	1142.3	1143.4	1146.5	1143.4
155°	1176.4	1176.4	1175.4	1179.5	1175.4
157.5°	1207.4	1205.3	1205.3	1208.4	1205.3
160°	1234.2	1233.2	1232.1	1235.2	1230.1
162.5°	1259.0	1255.9	1254.8	1261.0	1255.9
165°	1280.6	1277.5	1275.5	1281.7	1277.5
167.5°	1298.2	1294.0	1294.0	1300.2	1294.0
170°	1312.6	1307.5	1308.5	1314.7	1307.5
172.5°	1322.9	1318.8	1318.8	1326.0	1318.8
175°	1332.2	1327.1	1326.0	1333.3	1326.0
177.5°	1336.3	1331.2	1331.2	1338.4	1330.2
180°	1334.3	1334.3	1334.3	1334.3	1334.3

(END OF REPORT)