

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: P1033127

Luminaire Tested: S124DIW-B1020D1340UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033127
REPORT IS A COMBINATION OF REPORTS P996718 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1340UB30-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

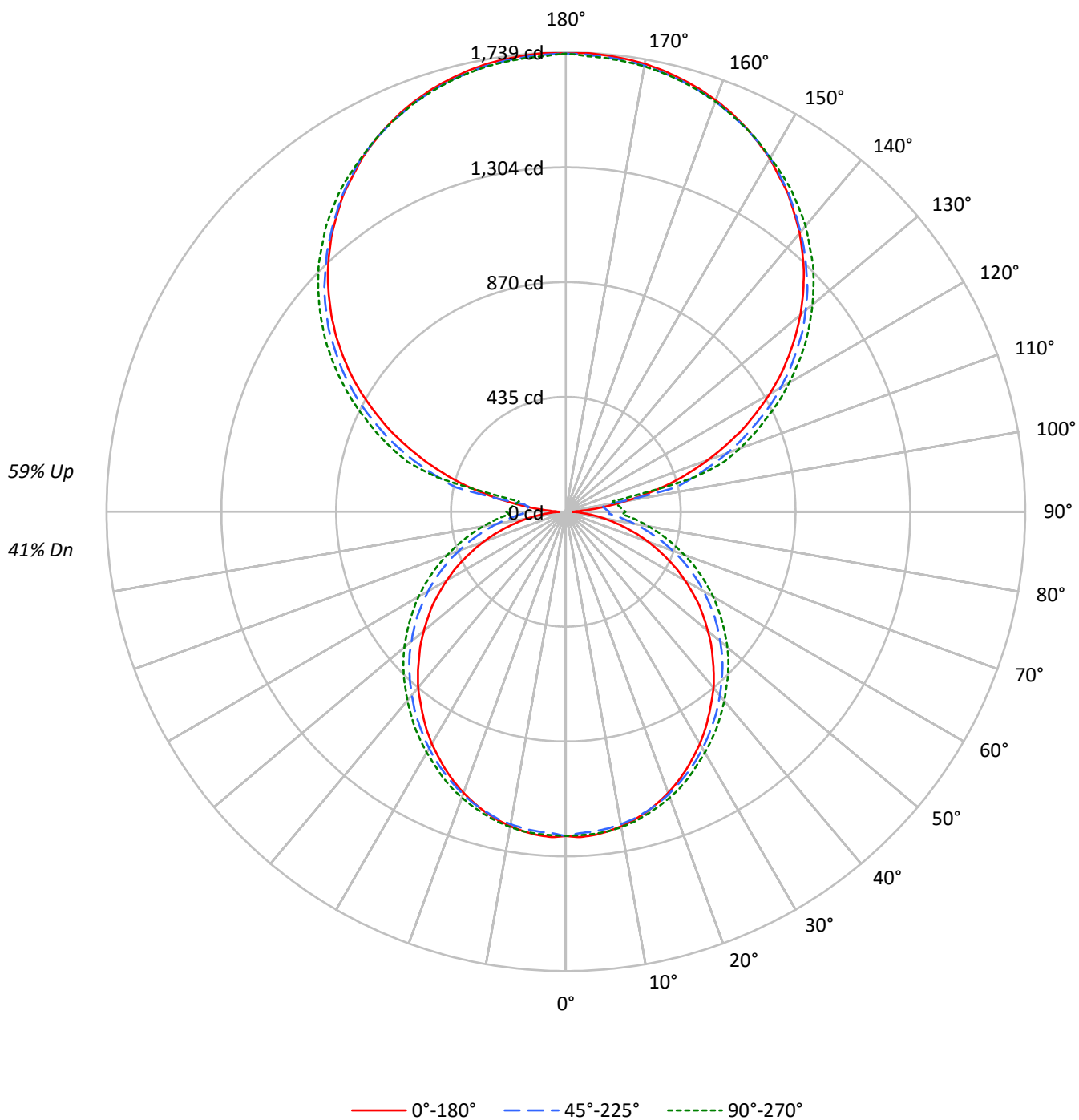
Lumens per Lamp: N/A
Luminaire Lumens: 9556.0 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47
1	95	90	86	82	86	82	79	75	67	65	62	53	52	50	41	39	38
2	86	78	72	67	78	71	66	61	58	54	51	46	44	41	35	33	32
3	78	68	61	55	71	62	56	51	51	46	42	41	37	34	31	29	27
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	25	22	20
6	60	48	40	34	54	44	37	31	36	31	27	29	25	22	22	19	17
7	55	43	35	29	50	40	32	27	33	27	23	26	22	19	20	17	15
8	51	39	31	26	47	36	29	24	30	24	20	24	20	17	19	16	13
9	48	36	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12
10	45	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10007	10007	10007
5°	10035	9746	9764
10°	9969	9555	9527
15°	9876	9339	9260
20°	9738	9106	9001
25°	9582	8848	8722
30°	9414	8593	8436
35°	9223	8333	8182
40°	9070	8082	7919
45°	8844	7847	7686
50°	8650	7580	7441
55°	8452	7323	7159
60°	8141	7003	6893
65°	7801	6658	6574
70°	7389	6263	6205
75°	6813	5825	5852
80°	6161	5378	5483
85°	5298	4930	5186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8844 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	1.2
10°-20°	333.2	3.5
20°-30°	503.7	5.3
30°-40°	609.4	6.4
40°-50°	644.3	6.7
50°-60°	606.3	6.3
60°-70°	503.1	5.3
70°-80°	353.1	3.7
80°-90°	202.6	2.1
90°-100°	176.1	1.8
100°-110°	467.0	4.9
110°-120°	783.1	8.2
120°-130°	952.5	10.0
130°-140°	997.9	10.4
140°-150°	922.5	9.7
150°-160°	741.7	7.8
160°-170°	478.3	5.0
170°-180°	164.8	1.7
0°-30°	953.2	10.0
0°-40°	1562.6	16.4
0°-60°	2813.2	29.4
0°-90°	3872.1	40.5
90°-120°	1426.2	14.9
90°-150°	4299.1	45.0
90°-180°	5684.0	59.5
0°-180°	9556.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1229	1224	1215	1226	1224	117
15°	1178	1179	1175	1187	1186	332
25°	1077	1086	1090	1105	1106	496
35°	943	959	973	992	996	590
45°	786	812	838	862	868	608
55°	616	644	686	713	722	549
65°	426	470	517	551	562	422
75°	236	287	345	383	396	251
85°	73	131	192	234	247	76
90°	26	95	164	212	226	19
95°	89	90	148	193	207	102
105°	403	438	496	542	506	423
115°	738	754	796	829	839	727
125°	1031	1034	1066	1096	1106	921
135°	1274	1273	1288	1312	1323	982
145°	1468	1470	1470	1480	1488	917
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°	1227.2	1227.2	1227.2	1227.2	1227.2
2.5°	1232.7	1228.6	1217.6	1227.2	1225.8
5°	1228.6	1224.4	1214.8	1225.8	1224.4
7.5°	1220.3	1217.6	1209.3	1221.7	1220.3
10°	1209.3	1208.0	1201.1	1213.4	1212.1
12.5°	1194.2	1194.2	1190.1	1201.1	1201.1
15°	1177.7	1179.1	1175.0	1187.3	1186.0
17.5°	1155.7	1159.9	1158.5	1170.8	1169.5
20°	1132.4	1136.5	1137.9	1151.6	1151.6
22.5°	1106.3	1111.8	1114.5	1128.2	1131.0
25°	1077.4	1085.6	1089.8	1104.9	1106.3
27.5°	1045.8	1058.2	1063.7	1077.4	1078.8
30°	1014.2	1025.2	1034.8	1049.9	1052.7
32.5°	979.8	993.6	1004.6	1022.4	1025.2
35°	942.7	959.2	973.0	992.2	996.3
37.5°	905.6	924.9	941.4	960.6	964.7
40°	869.9	887.8	907.0	927.6	933.1
42.5°	828.7	849.3	872.6	896.0	900.1
45°	786.1	812.2	838.3	861.6	868.5
47.5°	746.2	772.3	802.6	825.9	834.2
50°	702.2	732.5	762.7	790.2	798.4
52.5°	658.3	688.5	724.2	751.7	760.0
55°	615.7	644.5	685.7	713.2	721.5
57.5°	567.6	603.3	643.1	676.1	683.0
60°	520.8	556.6	601.9	633.5	644.5
62.5°	475.5	515.3	560.7	592.3	603.3
65°	426.0	470.0	516.7	551.1	562.1
67.5°	379.3	426.0	475.5	509.8	520.8
70°	331.2	377.9	430.1	467.2	476.9
72.5°	284.5	332.6	388.9	424.6	435.6
75°	236.4	287.2	344.9	383.4	395.8
77.5°	191.0	244.6	305.1	343.6	357.3
80°	149.8	204.8	265.2	306.5	317.4
82.5°	108.6	166.3	226.7	269.4	281.7
85°	72.8	130.6	192.4	233.6	247.4
87.5°	45.3	101.7	162.2	202.0	214.4
90°	25.9	95.2	164.5	212.2	225.8
92.5°	40.1	85.6	155.0	201.3	212.3
95°	89.3	90.4	148.1	193.0	206.6
97.5°	152.7	221.1	141.2	183.4	197.1
100°	227.9	287.0	161.5	176.5	187.5
102.5°	313.6	359.3	427.2	170.9	181.9
105°	403.0	438.3	495.6	541.6	505.8
107.5°	487.3	514.5	571.7	612.6	627.4
110°	571.6	594.7	650.5	684.7	699.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	653.2	677.5	725.5	754.4	770.6
115°	737.5	753.8	796.5	829.2	838.8
117.5°	814.0	827.5	872.6	900.2	911.2
120°	890.6	899.9	938.4	968.5	976.9
122.5°	963.2	965.8	1005.5	1034.3	1041.3
125°	1030.6	1034.4	1066.2	1096.2	1105.7
127.5°	1096.8	1096.7	1130.7	1154.1	1162.5
130°	1159.0	1158.9	1184.8	1210.9	1219.1
132.5°	1217.4	1218.6	1240.3	1265.0	1271.9
135°	1274.4	1273.1	1288.0	1312.5	1323.3
137.5°	1326.3	1325.0	1337.0	1360.1	1365.8
140°	1376.9	1378.2	1382.1	1403.9	1412.1
142.5°	1421.0	1426.2	1426.1	1443.8	1449.3
145°	1467.7	1470.2	1470.2	1479.7	1487.8
147.5°	1504.0	1510.4	1509.1	1511.8	1518.6
150°	1544.3	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)