

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: P1033097

Luminaire Tested: S124DIW-B1020D1050UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033097
REPORT IS A COMBINATION OF REPORTS P996652 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1050UB30-4F0-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

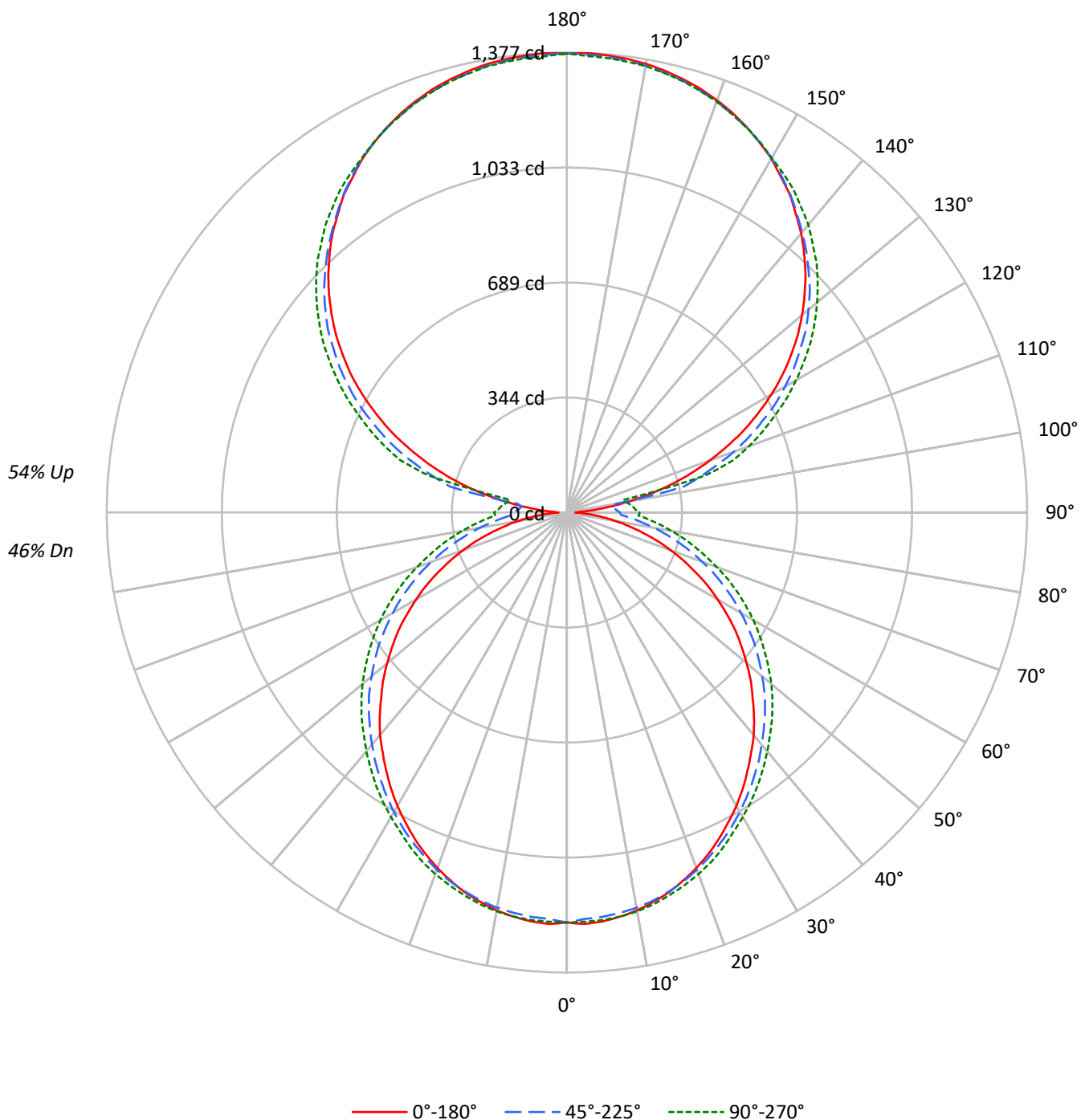
Lumens per Lamp: N/A
Luminaire Lumens: 8438.0 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	96	91	87	83	88	84	80	77	70	67	65	57	55	53	45	44	42
2	87	79	73	67	79	73	67	62	60	56	53	49	46	44	39	37	35
3	79	69	62	55	72	64	57	52	53	48	44	43	40	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25
5	66	54	46	40	60	50	42	37	42	36	32	34	30	27	27	24	22
6	61	48	40	34	55	45	37	32	37	32	27	31	26	23	25	21	19
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17
8	52	40	32	26	48	37	29	25	31	25	21	25	21	18	20	17	15
9	48	36	28	23	44	33	26	22	28	23	19	23	19	16	19	16	13
10	45	33	26	21	41	31	24	20	26	21	17	22	17	15	17	14	12

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	1.4
10°-20°	333.2	3.9
20°-30°	503.7	6.0
30°-40°	609.4	7.2
40°-50°	644.3	7.6
50°-60°	606.3	7.2
60°-70°	503.1	6.0
70°-80°	353.1	4.2
80°-90°	201.9	2.4
90°-100°	164.1	1.9
100°-110°	388.1	4.6
110°-120°	632.4	7.5
120°-130°	761.2	9.0
130°-140°	793.2	9.4
140°-150°	731.1	8.7
150°-160°	587.3	7.0
160°-170°	378.8	4.5
170°-180°	130.5	1.5
0°-30°	953.2	11.3
0°-40°	1562.6	18.5
0°-60°	2813.2	33.3
0°-90°	3871.3	45.9
90°-120°	1184.6	14.0
90°-150°	3470.1	41.1
90°-180°	4567.0	54.1
0°-180°	8438.0	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°	25	91	159	205	218	18
95°	74	85	142	186	199	84
105°	322	355	411	455	429	338
115°	586	601	644	676	686	577
125°	817	820	852	882	891	730
135°	1010	1009	1022	1046	1057	778
145°	1162	1164	1164	1174	1181	727
155°	1273	1274	1271	1275	1272	587
165°	1343	1338	1338	1346	1337	380
175°	1374	1368	1369	1378	1366	131
180°	1374	1374	1374	1374	1374	

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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°	25.1	91.4	158.6	204.7	217.7
92.5°	36.0	82.1	149.4	194.0	205.0
95°	74.4	84.8	142.2	185.5	198.8
97.5°	124.4	186.8	135.3	176.1	189.6
100°	183.6	237.8	149.6	169.2	180.0
102.5°	251.4	294.0	358.6	163.1	174.1
105°	321.7	355.4	411.3	454.9	428.9
107.5°	388.5	414.9	470.2	509.7	523.4
110°	454.9	477.2	531.5	565.1	579.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	519.3	541.9	589.4	618.6	633.7
115°	585.7	601.2	644.1	676.4	686.0
117.5°	646.3	658.7	703.0	730.9	741.9
120°	706.7	714.9	753.6	783.2	792.1
122.5°	764.2	766.3	805.4	833.9	841.5
125°	817.3	820.0	852.3	881.5	890.7
127.5°	869.7	869.3	901.9	925.6	934.3
130°	918.6	918.3	943.3	969.2	977.4
132.5°	964.9	965.5	986.1	1010.6	1017.7
135°	1009.7	1008.7	1022.5	1046.5	1056.8
137.5°	1050.8	1049.5	1060.1	1082.8	1088.7
140°	1090.9	1091.6	1095.0	1116.0	1123.9
142.5°	1125.5	1129.7	1129.3	1146.4	1151.9
145°	1162.5	1164.2	1164.2	1173.5	1181.0
147.5°	1191.3	1196.1	1195.1	1197.5	1204.0
150°	1223.2	1225.9	1224.8	1224.8	1225.9
152.5°	1248.5	1251.6	1249.5	1251.6	1250.5
155°	1273.1	1274.2	1271.1	1275.2	1272.1
157.5°	1294.7	1294.7	1290.6	1295.8	1290.6
160°	1313.2	1310.1	1309.1	1315.3	1309.1
162.5°	1329.7	1325.6	1324.5	1330.7	1323.5
165°	1343.0	1337.9	1337.9	1346.1	1336.9
167.5°	1354.3	1349.2	1348.2	1357.4	1347.1
170°	1363.6	1357.4	1358.4	1366.7	1356.4
172.5°	1369.7	1363.6	1364.6	1372.8	1361.5
175°	1373.8	1367.7	1368.7	1378.0	1365.6
177.5°	1376.9	1369.7	1371.8	1380.0	1367.7
180°	1373.8	1373.8	1373.8	1373.8	1373.8

(END OF REPORT)