

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: P1033098

Luminaire Tested: S124DIW-B1020D1050UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033098
REPORT IS A COMBINATION OF REPORTS P996653 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-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

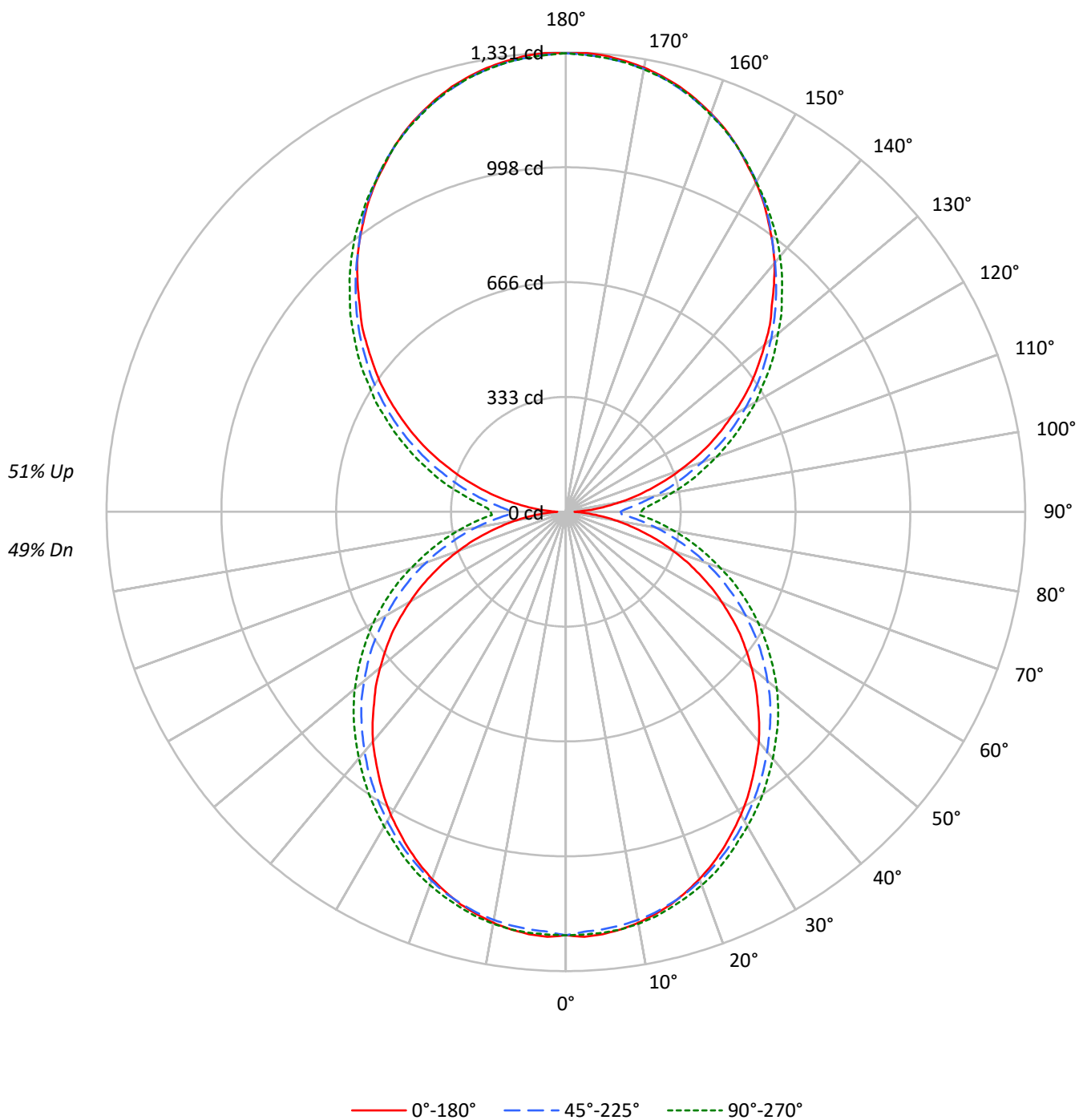
Lumens per Lamp: N/A
Luminaire Lumens: 7873.0 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55
1	97	92	88	84	89	85	81	78	71	68	66	59	57	55	47	46	45
2	88	80	73	68	80	73	68	63	62	57	54	51	48	45	41	39	37
3	80	70	62	56	73	64	57	52	54	49	45	45	41	38	36	33	31
4	73	61	53	47	66	57	49	44	48	42	38	40	35	32	32	29	26
5	67	55	46	40	61	50	43	37	43	37	32	35	31	28	29	25	23
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	23	20
7	57	44	36	30	52	41	33	28	35	29	25	29	24	21	24	20	18
8	52	40	32	26	48	37	30	25	32	26	22	26	22	19	22	18	16
9	49	36	29	23	45	34	27	22	29	23	19	24	20	17	20	17	14
10	46	33	26	21	42	31	24	20	27	21	17	22	18	15	18	15	13

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	1.5
10°-20°	333.2	4.2
20°-30°	503.7	6.4
30°-40°	609.4	7.7
40°-50°	644.3	8.2
50°-60°	606.3	7.7
60°-70°	503.1	6.4
70°-80°	353.1	4.5
80°-90°	201.9	2.6
90°-100°	205.1	2.6
100°-110°	347.1	4.4
110°-120°	499.5	6.3
120°-130°	614.3	7.8
130°-140°	667.0	8.5
140°-150°	644.3	8.2
150°-160°	539.6	6.9
160°-170°	359.0	4.6
170°-180°	125.7	1.6
0°-30°	953.2	12.1
0°-40°	1562.6	19.8
0°-60°	2813.2	35.7
0°-90°	3871.3	49.2
90°-120°	1051.7	13.4
90°-150°	2977.4	37.8
90°-180°	4002.0	50.8
0°-180°	7873.0	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	20
95°	80	134	198	238	250	81
105°	252	280	335	373	387	268
115°	456	469	510	540	548	451
125°	658	656	690	714	720	587
135°	844	850	860	880	885	654
145°	1024	1026	1028	1035	1037	641
155°	1171	1171	1170	1174	1170	539
165°	1275	1272	1270	1276	1272	360
175°	1326	1321	1320	1328	1320	126
180°	1328	1328	1328	1328	1328	

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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°	47.3	108.8	173.0	214.6	226.6
95°	79.5	134.1	197.7	237.9	250.2
97.5°	115.1	163.2	227.8	267.6	280.0
100°	158.9	198.8	261.6	300.8	310.5
102.5°	206.2	237.4	298.0	336.7	348.8
105°	251.8	280.3	335.2	372.7	386.7
107.5°	302.1	326.5	375.6	414.1	422.7
110°	352.1	373.4	420.4	450.0	464.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	404.1	420.6	464.0	494.2	505.2
115°	456.2	468.6	510.5	539.7	548.3
117.5°	506.5	514.8	555.0	580.8	588.7
120°	555.6	563.8	600.5	622.9	635.9
122.5°	608.0	609.0	645.1	669.5	674.0
125°	657.9	656.5	689.9	714.0	720.1
127.5°	704.2	705.9	731.3	754.0	762.6
130°	752.1	753.8	775.8	798.5	802.6
132.5°	802.4	803.1	818.6	839.9	847.1
135°	844.2	850.4	860.1	880.0	885.1
137.5°	892.5	894.3	901.8	919.3	927.3
140°	940.8	941.5	942.8	959.7	965.6
142.5°	983.7	985.7	983.3	998.4	1003.9
145°	1023.7	1026.4	1027.5	1034.6	1037.1
147.5°	1064.8	1068.6	1067.5	1067.9	1072.4
150°	1101.8	1104.5	1104.5	1104.5	1103.5
152.5°	1135.4	1137.4	1138.4	1141.5	1138.4
155°	1171.3	1171.3	1170.3	1174.4	1170.3
157.5°	1202.1	1200.1	1200.1	1203.2	1200.1
160°	1228.9	1227.8	1226.8	1229.9	1224.7
162.5°	1253.5	1250.4	1249.4	1255.6	1250.4
165°	1275.1	1272.0	1270.0	1276.1	1272.0
167.5°	1292.6	1288.5	1288.5	1294.6	1288.5
170°	1306.9	1301.8	1302.8	1309.0	1301.8
172.5°	1317.2	1313.1	1313.1	1320.3	1313.1
175°	1326.5	1321.3	1320.3	1327.5	1320.3
177.5°	1330.6	1325.4	1325.4	1332.6	1324.4
180°	1328.5	1328.5	1328.5	1328.5	1328.5

(END OF REPORT)