

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: P1033410

Luminaire Tested: S124DIW-B350D1050UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033410
REPORT IS A COMBINATION OF REPORTS P997340 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1050UB50-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

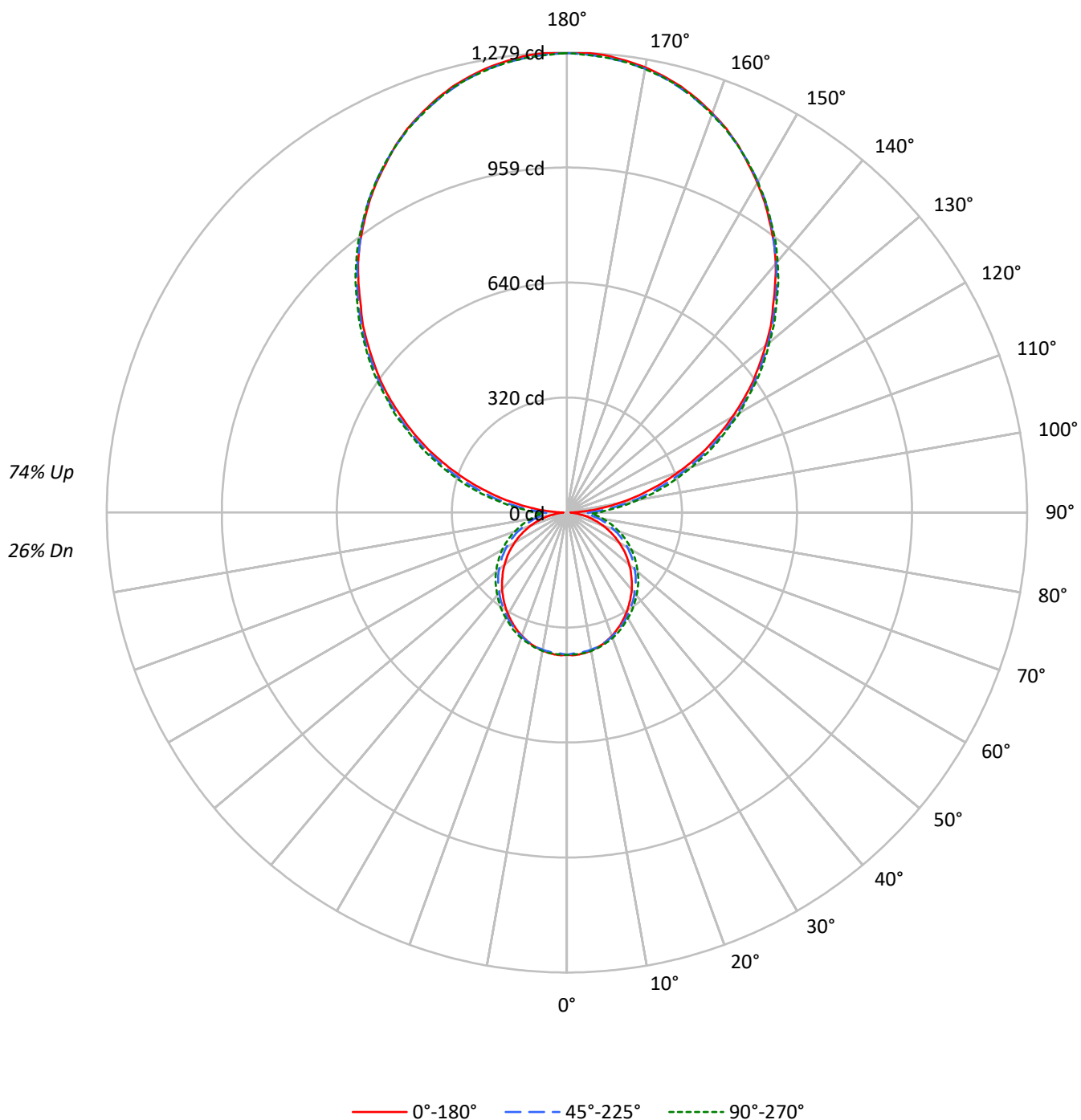
Lumens per Lamp: N/A
Luminaire Lumens: 4896.0 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34
1	92	87	83	80	82	78	75	72	60	58	56	44	42	41	29	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	24	23
3	76	66	59	54	67	59	53	48	46	42	38	34	31	28	22	20	19
4	69	59	51	45	61	52	46	41	41	36	32	30	27	24	20	18	16
5	63	52	44	38	56	46	40	35	36	31	28	26	23	21	17	16	14
6	58	46	38	33	51	42	35	30	32	27	24	24	20	18	16	14	12
7	54	42	34	28	48	37	31	26	29	24	21	22	18	16	14	12	11
8	50	38	30	25	44	34	27	23	26	22	18	20	16	14	13	11	10
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	9
10	43	31	24	20	38	28	22	18	22	18	14	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3227	3227	3227
5°	3235	3143	3148
10°	3214	3081	3072
15°	3184	3011	2986
20°	3140	2936	2902
25°	3090	2853	2812
30°	3035	2770	2720
35°	2974	2686	2638
40°	2925	2605	2554
45°	2851	2530	2478
50°	2789	2444	2399
55°	2725	2361	2308
60°	2625	2258	2222
65°	2516	2147	2119
70°	2383	2020	2000
75°	2196	1878	1887
80°	1987	1734	1769
85°	1710	1589	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3294 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	0.8
10°-20°	107.4	2.2
20°-30°	162.4	3.3
30°-40°	196.5	4.0
40°-50°	207.7	4.2
50°-60°	195.5	4.0
60°-70°	162.2	3.3
70°-80°	113.8	2.3
80°-90°	66.9	1.4
90°-100°	121.5	2.5
100°-110°	277.7	5.7
110°-120°	442.7	9.0
120°-130°	569.4	11.6
130°-140°	632.2	12.9
140°-150°	617.7	12.6
150°-160°	518.8	10.6
160°-170°	345.2	7.1
170°-180°	120.9	2.5
0°-30°	307.3	6.3
0°-40°	503.8	10.3
0°-60°	907.0	18.5
0°-90°	1250.0	25.5
90°-120°	841.8	17.2
90°-150°	2661.1	54.4
90°-180°	3646.0	74.5
0°-180°	4896.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	396	395	392	395	395	38
15°	380	380	379	383	382	107
25°	347	350	351	356	357	160
35°	304	309	314	320	321	190
45°	253	262	270	278	280	196
55°	198	208	221	230	233	177
65°	137	152	167	178	181	136
75°	76	93	111	124	128	81
85°	24	42	62	75	80	24
90°	10	39	66	84	90	9
95°	65	89	114	128	132	69
105°	234	244	264	278	285	249
115°	433	437	450	458	460	428
125°	629	629	639	645	646	561
135°	810	816	819	824	824	627
145°	983	987	988	990	988	616
155°	1126	1126	1125	1129	1125	518
165°	1226	1223	1221	1227	1223	346
175°	1275	1270	1270	1276	1270	121
180°	1277	1277	1277	1277	1277	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	395.7	395.7	395.7	395.7	395.7
2.5°	397.4	396.1	392.6	395.7	395.2
5°	396.1	394.8	391.7	395.2	394.8
7.5°	393.5	392.6	389.9	393.9	393.5
10°	389.9	389.5	387.3	391.2	390.8
12.5°	385.0	385.0	383.7	387.3	387.3
15°	379.7	380.2	378.8	382.8	382.4
17.5°	372.6	374.0	373.5	377.5	377.1
20°	365.1	366.4	366.9	371.3	371.3
22.5°	356.7	358.5	359.3	363.8	364.7
25°	347.4	350.0	351.4	356.2	356.7
27.5°	337.2	341.2	342.9	347.4	347.8
30°	327.0	330.5	333.6	338.5	339.4
32.5°	315.9	320.3	323.9	329.7	330.5
35°	304.0	309.3	313.7	319.9	321.2
37.5°	292.0	298.2	303.5	309.7	311.0
40°	280.5	286.2	292.4	299.1	300.9
42.5°	267.2	273.8	281.4	288.9	290.2
45°	253.4	261.9	270.3	277.8	280.0
47.5°	240.6	249.0	258.8	266.3	268.9
50°	226.4	236.2	245.9	254.8	257.4
52.5°	212.2	222.0	233.5	242.4	245.0
55°	198.5	207.8	221.1	230.0	232.6
57.5°	183.0	194.5	207.4	218.0	220.2
60°	167.9	179.4	194.1	204.3	207.8
62.5°	153.3	166.2	180.8	191.0	194.5
65°	137.4	151.5	166.6	177.7	181.2
67.5°	122.3	137.4	153.3	164.4	167.9
70°	106.8	121.8	138.7	150.6	153.7
72.5°	91.7	107.2	125.4	136.9	140.5
75°	76.2	92.6	111.2	123.6	127.6
77.5°	61.6	78.9	98.4	110.8	115.2
80°	48.3	66.0	85.5	98.8	102.4
82.5°	35.0	53.6	73.1	86.8	90.8
85°	23.5	42.1	62.0	75.3	79.8
87.5°	14.6	32.8	52.3	65.1	69.1
90°	10.1	38.6	65.6	84.4	89.9
92.5°	32.3	60.7	84.7	100.0	104.6
95°	65.1	88.6	113.6	128.5	132.5
97.5°	100.1	120.9	146.9	162.5	166.4
100°	143.2	158.7	184.9	198.7	201.8
102.5°	188.7	199.3	224.1	238.6	243.1
105°	234.2	244.0	264.3	278.4	285.0
107.5°	282.6	291.1	307.6	322.6	324.7
110°	331.5	339.7	354.3	362.4	369.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.5	387.8	400.4	410.2	413.7
115°	433.4	437.3	449.6	458.4	460.5
117.5°	481.8	484.4	496.8	503.1	503.7
120°	529.8	535.0	544.9	548.9	554.4
122.5°	580.1	581.1	592.1	598.0	596.1
125°	629.1	628.6	638.7	645.2	645.9
127.5°	673.6	676.1	683.0	689.0	691.1
130°	720.5	723.1	730.2	736.2	734.8
132.5°	768.9	770.5	774.8	780.3	782.0
135°	810.0	815.9	819.0	824.2	823.8
137.5°	856.4	858.9	862.7	866.4	869.6
140°	902.9	904.3	904.8	909.6	910.9
142.5°	944.9	946.8	945.4	950.3	952.0
145°	983.4	986.9	987.9	989.6	988.4
147.5°	1022.9	1027.4	1026.5	1025.9	1026.7
150°	1058.5	1062.0	1062.0	1062.0	1061.0
152.5°	1091.7	1093.6	1094.6	1097.6	1094.6
155°	1126.2	1126.2	1125.2	1129.2	1125.2
157.5°	1155.9	1153.9	1153.9	1156.9	1153.9
160°	1181.6	1180.6	1179.6	1182.5	1177.6
162.5°	1205.3	1202.3	1201.3	1207.2	1202.3
165°	1226.0	1223.0	1221.1	1227.0	1223.0
167.5°	1242.8	1238.9	1238.9	1244.8	1238.9
170°	1256.6	1251.7	1252.7	1258.6	1251.7
172.5°	1266.5	1262.6	1262.6	1269.5	1262.6
175°	1275.4	1270.5	1269.5	1276.4	1269.5
177.5°	1279.4	1274.4	1274.4	1281.3	1273.4
180°	1277.4	1277.4	1277.4	1277.4	1277.4

(END OF REPORT)