

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: P1033497

Luminaire Tested: S124DIW-B350D470UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033497
REPORT IS A COMBINATION OF REPORTS P997538 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D470UB50-4F0-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

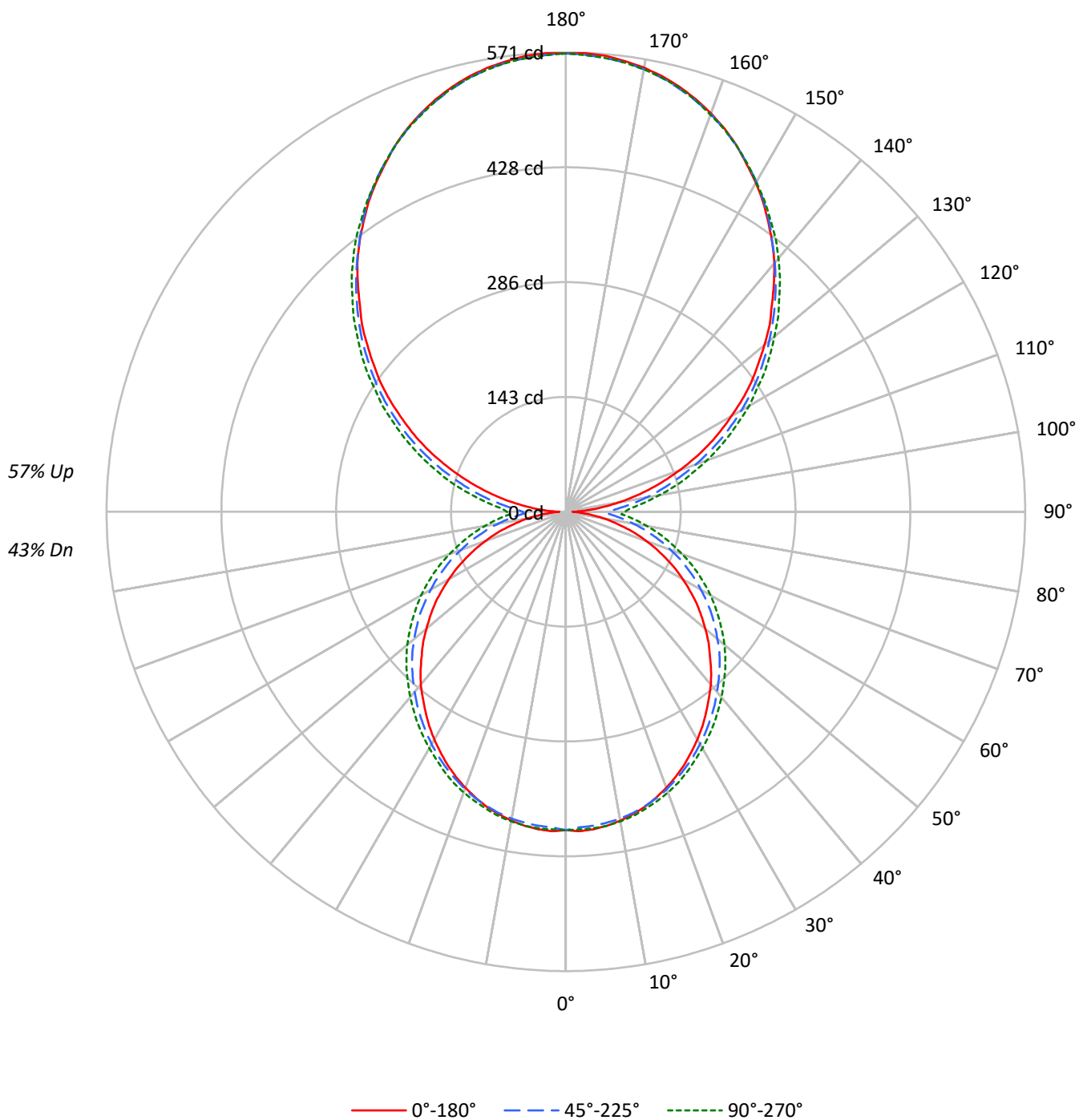
Lumens per Lamp: N/A
Luminaire Lumens: 2931.0 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 26.2
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	79	79	79	64	64	64	49	49	49
1	95	91	86	83	87	83	79	76	68	66	63	55	53	51	42	41	40
2	86	79	72	67	78	72	66	62	59	55	52	47	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	32	30	28
4	72	61	52	46	65	55	48	43	46	40	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	20
6	60	48	40	34	55	44	37	32	37	31	27	30	25	22	23	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	19	16	14
9	48	36	28	23	44	33	26	22	28	22	19	23	18	16	18	15	13
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	16	13	11

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: 45°

Luminance: 2851 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	1.3
10°-20°	107.4	3.7
20°-30°	162.4	5.5
30°-40°	196.5	6.7
40°-50°	207.7	7.1
50°-60°	195.5	6.7
60°-70°	162.2	5.5
70°-80°	113.8	3.9
80°-90°	65.4	2.2
90°-100°	75.3	2.6
100°-110°	139.5	4.8
110°-120°	207.9	7.1
120°-130°	259.9	8.9
130°-140°	284.5	9.7
140°-150°	276.0	9.4
150°-160°	231.4	7.9
160°-170°	153.9	5.3
170°-180°	53.9	1.8
0°-30°	307.3	10.5
0°-40°	503.8	17.2
0°-60°	907.0	30.9
0°-90°	1248.5	42.6
90°-120°	422.8	14.4
90°-150°	1243.2	42.4
90°-180°	1682.0	57.4
0°-180°	2931.0	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°	8	31	54	69	74	7
95°	32	51	72	85	89	33
105°	107	116	134	146	151	113
115°	195	199	212	221	224	192
125°	282	281	292	299	301	251
135°	362	364	368	374	375	280
145°	439	440	441	443	443	275
155°	502	502	502	504	502	231
165°	547	546	545	547	546	154
175°	569	567	566	569	566	54
180°	570	570	570	570	570	

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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°	8.4	31.0	53.6	69.0	73.5
92.5°	18.1	39.4	60.6	74.3	78.3
95°	32.2	50.8	72.0	85.3	89.3
97.5°	47.6	64.0	85.6	99.0	102.9
100°	66.6	79.8	101.1	113.9	117.0
102.5°	86.9	97.0	117.4	130.2	134.2
105°	106.7	115.9	134.1	146.5	151.4
107.5°	128.3	136.2	152.1	165.0	167.7
110°	149.8	156.9	172.0	181.2	186.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	172.3	177.6	191.3	201.1	204.6
115°	194.8	198.7	212.0	221.4	224.0
117.5°	216.4	219.0	231.9	239.8	242.1
120°	237.5	240.6	252.1	258.8	263.2
122.5°	260.0	260.4	272.0	279.4	280.3
125°	281.6	281.1	291.8	299.3	301.1
127.5°	301.4	302.2	310.3	317.4	320.0
130°	322.1	323.0	330.1	337.2	338.1
132.5°	343.7	344.1	349.0	355.6	357.9
135°	361.8	364.4	367.5	373.7	375.0
137.5°	382.5	383.3	386.0	391.4	394.0
140°	403.2	403.6	404.1	409.3	411.2
142.5°	421.6	422.5	421.7	426.6	428.3
145°	438.8	440.2	440.6	442.9	443.3
147.5°	456.4	458.2	457.8	457.8	459.1
150°	472.3	473.7	473.7	473.7	473.2
152.5°	486.9	487.8	488.2	489.5	488.2
155°	502.3	502.3	501.9	503.6	501.9
157.5°	515.5	514.6	514.6	516.0	514.6
160°	527.0	526.5	526.1	527.4	525.2
162.5°	537.6	536.2	535.8	538.4	536.2
165°	546.8	545.5	544.6	547.3	545.5
167.5°	554.3	552.5	552.5	555.2	552.5
170°	560.5	558.3	558.7	561.4	558.3
172.5°	564.9	563.1	563.1	566.2	563.1
175°	568.8	566.6	566.2	569.3	566.2
177.5°	570.6	568.4	568.4	571.5	568.0
180°	569.7	569.7	569.7	569.7	569.7

(END OF REPORT)