

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: P1033499

Luminaire Tested: S124DIW-B350D470UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033499
REPORT IS A COMBINATION OF REPORTS P997541 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-F1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

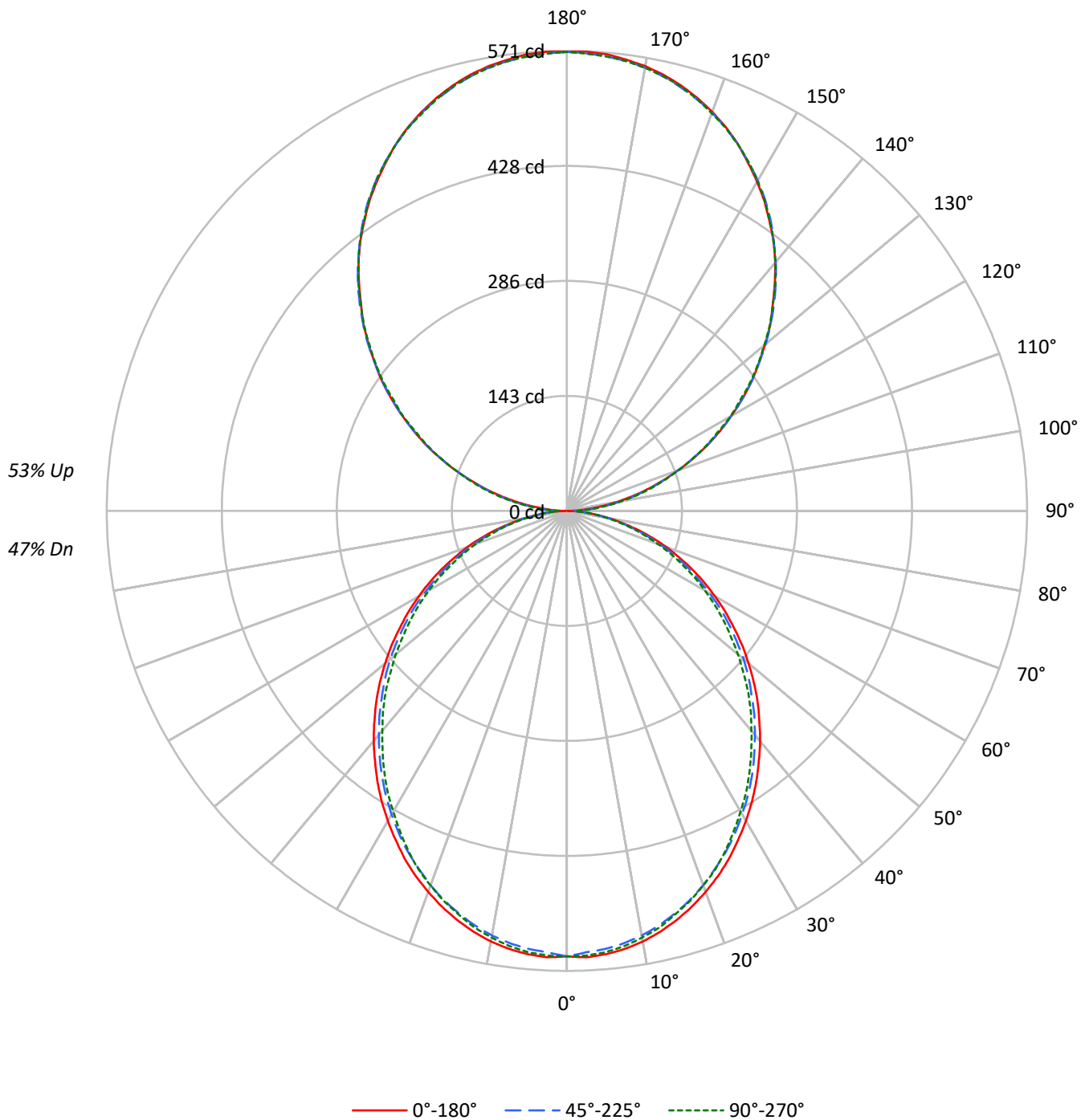
Lumens per Lamp: N/A
Luminaire Lumens: 3001.0 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54
1	97	93	89	85	89	85	82	79	72	69	67	59	57	56	47	46	45
2	88	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	38
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	34	32
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	27	24	21
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	21	19
8	53	41	33	28	49	38	31	27	33	27	23	28	23	20	23	19	17
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15
10	46	34	27	22	43	32	26	21	28	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4509	4509	4509
5°	4512	4379	4384
10°	4474	4257	4227
15°	4409	4112	4050
20°	4327	3956	3867
25°	4235	3791	3671
30°	4124	3612	3454
35°	4009	3430	3245
40°	3889	3233	3023
45°	3763	3036	2815
50°	3623	2844	2585
55°	3472	2621	2356
60°	3317	2376	2118
65°	3139	2124	1849
70°	2936	1819	1563
75°	2631	1466	1251
80°	2242	1061	879
85°	1739	589	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3763 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.7
10°-20°	146.8	4.9
20°-30°	216.1	7.2
30°-40°	251.2	8.4
40°-50°	251.1	8.4
50°-60°	219.6	7.3
60°-70°	163.1	5.4
70°-80°	92.5	3.1
80°-90°	27.7	0.9
90°-100°	37.1	1.2
100°-110°	111.2	3.7
110°-120°	189.0	6.3
120°-130°	249.2	8.3
130°-140°	279.9	9.3
140°-150°	275.1	9.2
150°-160°	231.4	7.7
160°-170°	153.9	5.1
170°-180°	53.9	1.8
0°-30°	415.0	13.8
0°-40°	666.1	22.2
0°-60°	1136.9	37.9
0°-90°	1420.2	47.3
90°-120°	337.3	11.2
90°-150°	1141.5	38.0
90°-180°	1581.0	52.7
0°-180°	3001.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	552	551	546	551	550	52
15°	526	524	517	520	519	148
25°	476	473	467	467	466	219
35°	410	407	400	397	395	256
45°	334	331	324	319	318	258
55°	253	252	245	240	237	227
65°	171	169	165	160	158	170
75°	91	89	87	85	85	97
85°	24	24	23	23	23	26
90°	1	6	10	12	13	4
95°	26	30	34	35	35	29
105°	103	103	105	106	108	109
115°	192	192	191	191	190	189
125°	280	280	279	278	278	249
135°	361	364	364	363	361	279
145°	438	440	441	440	439	274
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°	552.9	552.9	552.9	552.9	552.9
2.5°	554.6	553.3	548.4	552.9	552.4
5°	552.4	550.6	545.8	550.6	549.8
7.5°	548.4	546.6	541.3	545.3	544.9
10°	542.7	540.9	535.1	538.7	537.8
12.5°	535.1	533.4	527.2	531.1	529.8
15°	525.8	524.1	517.4	520.1	518.7
17.5°	515.2	513.0	506.8	508.6	507.7
20°	503.2	501.0	494.4	495.7	494.8
22.5°	490.4	487.3	480.6	483.3	481.5
25°	476.2	473.1	466.9	467.4	465.6
27.5°	460.3	457.2	451.4	450.5	448.3
30°	444.3	440.8	435.0	433.2	431.0
32.5°	427.5	424.4	418.2	416.0	413.8
35°	409.8	406.7	400.5	397.4	395.1
37.5°	391.2	388.5	381.9	378.8	375.7
40°	373.0	369.5	362.8	358.4	356.2
42.5°	353.5	351.7	344.2	338.9	337.6
45°	334.5	331.4	324.3	319.4	318.1
47.5°	314.5	312.3	305.7	300.3	296.8
50°	294.1	292.4	286.2	280.0	277.3
52.5°	274.2	272.0	265.4	260.0	256.5
55°	252.9	251.6	245.4	240.1	237.4
57.5°	233.0	231.7	225.5	220.2	217.5
60°	212.2	210.0	204.2	200.2	198.0
62.5°	191.8	190.0	183.8	180.3	178.1
65°	171.4	169.2	164.8	160.4	158.1
67.5°	150.6	148.8	144.4	140.0	139.5
70°	131.6	128.5	124.9	121.4	120.1
72.5°	111.2	108.1	105.4	102.8	101.4
75°	91.3	89.0	86.8	85.1	84.6
77.5°	71.8	70.9	68.7	68.2	66.9
80°	54.5	53.2	52.3	51.4	50.9
82.5°	37.7	37.2	37.2	36.8	36.3
85°	23.9	23.9	23.0	23.0	22.6
87.5°	11.5	11.1	10.6	10.6	10.6
90°	1.3	6.2	9.7	12.3	13.2
92.5°	11.5	17.2	19.4	20.7	21.1
95°	26.4	30.4	33.5	34.8	34.8
97.5°	42.3	45.8	49.3	51.1	51.1
100°	61.7	63.4	67.4	68.3	68.3
102.5°	82.0	82.4	85.9	87.2	87.7
105°	102.7	103.1	104.9	106.2	107.5
107.5°	124.3	124.7	125.1	126.9	126.5
110°	146.3	147.2	146.7	145.8	147.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.2	169.2	168.3	168.3	168.3
115°	192.1	192.1	191.2	190.8	190.3
117.5°	213.7	213.7	213.3	211.9	210.6
120°	235.3	237.1	235.7	233.5	234.4
122.5°	257.8	258.2	257.8	256.4	254.2
125°	279.8	279.8	279.4	278.5	277.6
127.5°	299.6	300.9	300.1	299.2	298.7
130°	320.8	322.1	322.1	321.2	319.5
132.5°	342.4	343.2	342.8	341.9	341.5
135°	360.9	363.5	363.5	362.6	361.3
137.5°	381.6	382.9	383.8	382.5	382.9
140°	402.3	403.2	403.2	402.7	402.3
142.5°	421.2	422.1	421.7	421.7	421.7
145°	438.4	440.2	440.6	440.2	438.9
147.5°	456.0	458.2	457.8	457.4	456.9
150°	471.9	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)