

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: P1033481

Luminaire Tested: S124DIW-B350D470UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033481
REPORT IS A COMBINATION OF REPORTS P997514 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D470UB30-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

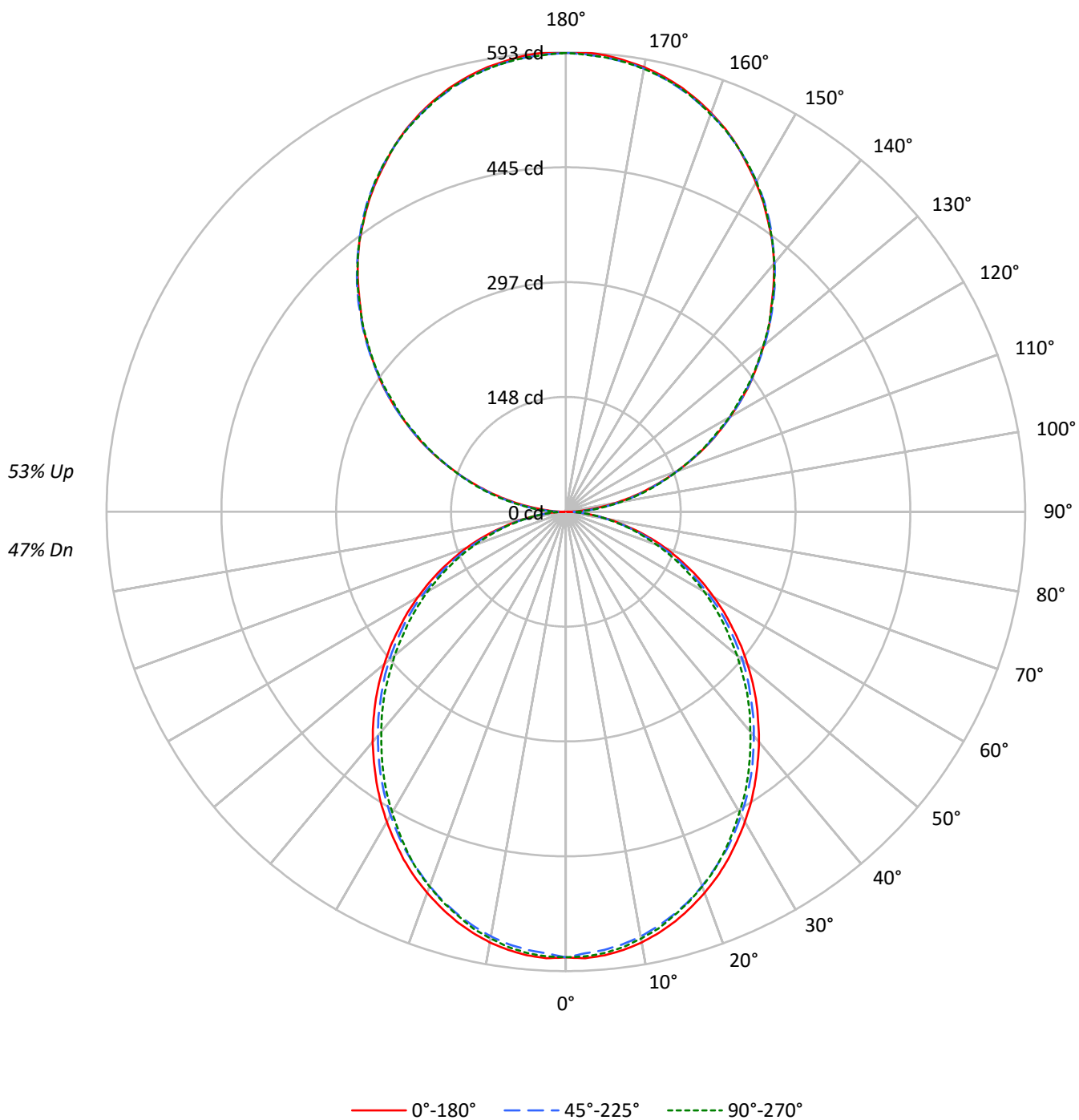
Lumens per Lamp: N/A
Luminaire Lumens: 3121.0 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	4690	4690	4690
5°	4693	4555	4560
10°	4654	4428	4397
15°	4587	4278	4213
20°	4502	4115	4023
25°	4405	3944	3818
30°	4290	3758	3593
35°	4170	3567	3375
40°	4045	3363	3144
45°	3914	3157	2928
50°	3770	2959	2689
55°	3612	2726	2451
60°	3450	2471	2203
65°	3265	2209	1924
70°	3054	1892	1625
75°	2735	1525	1301
80°	2332	1103	916
85°	1812	615	493

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3914 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.7
10°-20°	152.7	4.9
20°-30°	224.7	7.2
30°-40°	261.2	8.4
40°-50°	261.2	8.4
50°-60°	228.5	7.3
60°-70°	169.6	5.4
70°-80°	96.2	3.1
80°-90°	28.8	0.9
90°-100°	38.6	1.2
100°-110°	115.7	3.7
110°-120°	196.5	6.3
120°-130°	259.1	8.3
130°-140°	291.1	9.3
140°-150°	286.1	9.2
150°-160°	240.6	7.7
160°-170°	160.1	5.1
170°-180°	56.1	1.8
0°-30°	431.6	13.8
0°-40°	692.9	22.2
0°-60°	1182.6	37.9
0°-90°	1477.3	47.3
90°-120°	350.7	11.2
90°-150°	1187.0	38.0
90°-180°	1644.0	52.7
0°-180°	3121.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	575	573	568	573	572	55
15°	547	545	538	541	540	154
25°	495	492	486	486	484	228
35°	426	423	416	413	411	267
45°	348	345	337	332	331	268
55°	263	262	255	250	247	236
65°	178	176	171	167	164	176
75°	95	93	90	88	88	101
85°	25	25	24	24	24	27
90°	1	6	10	13	14	4
95°	28	32	35	36	36	30
105°	107	107	109	110	112	113
115°	200	200	199	198	198	197
125°	291	291	290	290	289	259
135°	375	378	378	377	376	290
145°	456	458	458	458	456	285
155°	522	522	522	524	522	240
165°	569	567	566	569	567	160
175°	592	589	589	592	589	56
180°	592	592	592	592	592	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	575.1	575.1	575.1	575.1	575.1
2.5°	576.9	575.5	570.5	575.1	574.6
5°	574.6	572.8	567.7	572.8	571.8
7.5°	570.5	568.6	563.1	567.2	566.8
10°	564.5	562.6	556.6	560.3	559.4
12.5°	556.6	554.8	548.3	552.5	551.1
15°	547.0	545.1	538.2	541.0	539.6
17.5°	535.9	533.6	527.1	529.0	528.1
20°	523.5	521.1	514.2	515.6	514.7
22.5°	510.1	506.9	500.0	502.7	500.9
25°	495.3	492.1	485.7	486.1	484.3
27.5°	478.8	475.5	469.5	468.6	466.3
30°	462.2	458.5	452.5	450.6	448.3
32.5°	444.7	441.4	435.0	432.7	430.4
35°	426.2	423.0	416.5	413.3	411.0
37.5°	406.9	404.1	397.2	394.0	390.7
40°	388.0	384.3	377.4	372.8	370.5
42.5°	367.7	365.9	358.0	352.5	351.1
45°	347.9	344.7	337.3	332.2	330.8
47.5°	327.2	324.9	317.9	312.4	308.7
50°	306.0	304.1	297.7	291.2	288.5
52.5°	285.2	282.9	276.0	270.5	266.8
55°	263.1	261.7	255.3	249.7	247.0
57.5°	242.4	241.0	234.5	229.0	226.2
60°	220.7	218.4	212.4	208.3	206.0
62.5°	199.5	197.7	191.2	187.5	185.2
65°	178.3	176.0	171.4	166.8	164.5
67.5°	156.7	154.8	150.2	145.6	145.1
70°	136.9	133.6	129.9	126.3	124.9
72.5°	115.7	112.4	109.7	106.9	105.5
75°	94.9	92.6	90.3	88.5	88.0
77.5°	74.6	73.7	71.4	71.0	69.6
80°	56.7	55.3	54.4	53.5	53.0
82.5°	39.2	38.7	38.7	38.2	37.8
85°	24.9	24.9	24.0	24.0	23.5
87.5°	12.0	11.5	11.1	11.1	11.1
90°	1.4	6.4	10.1	12.8	13.7
92.5°	11.9	17.9	20.2	21.5	22.0
95°	27.5	31.6	34.8	36.2	36.2
97.5°	44.0	47.6	51.3	53.1	53.1
100°	64.1	66.0	70.1	71.0	71.0
102.5°	85.2	85.7	89.3	90.7	91.2
105°	106.8	107.2	109.0	110.4	111.8
107.5°	129.2	129.7	130.1	132.0	131.5
110°	152.1	153.0	152.6	151.7	153.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.9	175.9	175.0	175.0	175.0
115°	199.8	199.8	198.8	198.4	197.9
117.5°	222.2	222.2	221.8	220.4	219.0
120°	244.7	246.5	245.1	242.8	243.7
122.5°	268.0	268.5	268.0	266.7	264.4
125°	290.9	290.9	290.5	289.6	288.6
127.5°	311.6	312.9	312.0	311.1	310.6
130°	333.5	334.9	334.9	334.0	332.2
132.5°	356.0	356.9	356.5	355.5	355.1
135°	375.2	378.0	378.0	377.1	375.7
137.5°	396.8	398.2	399.1	397.7	398.2
140°	418.3	419.2	419.2	418.8	418.3
142.5°	438.0	438.9	438.5	438.5	438.5
145°	455.9	457.7	458.2	457.7	456.3
147.5°	474.2	476.5	476.0	475.6	475.1
150°	490.7	492.5	492.5	492.5	492.1
152.5°	506.3	507.2	507.7	509.0	507.7
155°	522.3	522.3	521.9	523.7	521.9
157.5°	536.1	535.1	535.1	536.5	535.1
160°	548.0	547.5	547.1	548.4	546.1
162.5°	559.0	557.6	557.1	559.9	557.6
165°	568.6	567.2	566.3	569.0	567.2
167.5°	576.4	574.5	574.5	577.3	574.5
170°	582.8	580.5	581.0	583.7	580.5
172.5°	587.4	585.5	585.5	588.7	585.5
175°	591.5	589.2	588.7	592.0	588.7
177.5°	593.3	591.0	591.0	594.2	590.6
180°	592.4	592.4	592.4	592.4	592.4

(END OF REPORT)