

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: P1033480

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033480
REPORT IS A COMBINATION OF REPORTS P997513 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-F
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

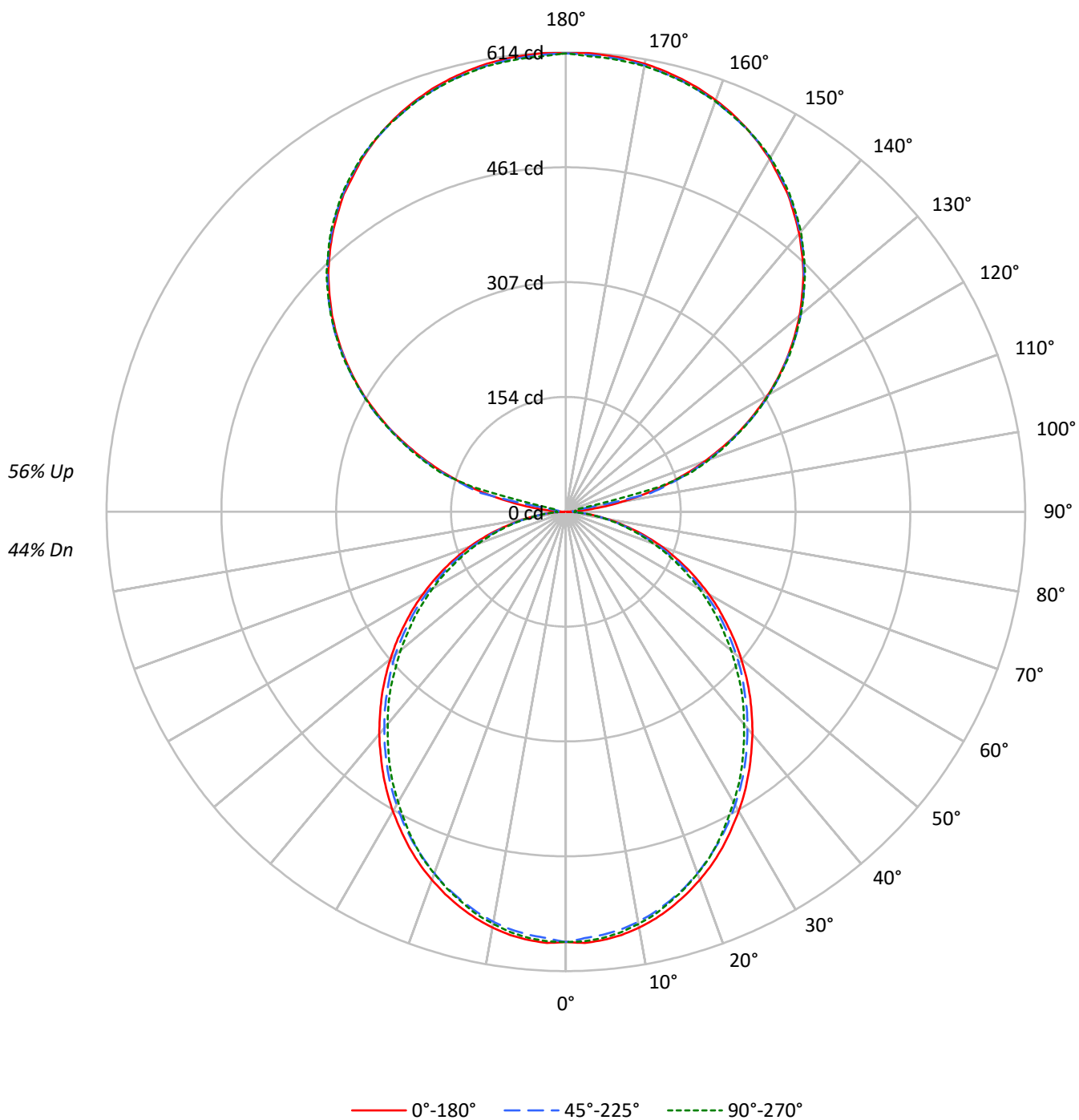
Lumens per Lamp: N/A
Luminaire Lumens: 3373.0 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 26.2
Input Voltage (V):
Input Current (A_{in}): 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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	50	50	50
1	96	92	88	85	88	84	81	78	70	68	65	57	55	54	44	43	42
2	88	80	74	69	80	74	68	64	61	57	54	50	47	45	39	37	36
3	80	71	63	58	73	65	59	53	54	49	46	44	41	38	35	32	30
4	73	62	55	49	67	57	51	45	48	43	39	39	35	32	31	28	26
5	67	56	48	42	61	51	44	39	43	38	33	35	31	28	28	25	23
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	25	22	20
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	14
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13

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	1.6
10°-20°	152.7	4.5
20°-30°	224.7	6.7
30°-40°	261.2	7.7
40°-50°	261.2	7.7
50°-60°	228.5	6.8
60°-70°	169.6	5.0
70°-80°	96.2	2.9
80°-90°	28.8	0.9
90°-100°	20.3	0.6
100°-110°	133.9	4.0
110°-120°	255.7	7.6
120°-130°	324.6	9.6
130°-140°	347.3	10.3
140°-150°	324.8	9.6
150°-160°	261.9	7.8
160°-170°	168.9	5.0
170°-180°	58.2	1.7
0°-30°	431.6	12.8
0°-40°	692.9	20.5
0°-60°	1182.6	35.1
0°-90°	1477.3	43.8
90°-120°	410.0	12.2
90°-150°	1406.7	41.7
90°-180°	1896.0	56.2
0°-180°	3373.0	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	3
95°	25	10	10	13	13	31
105°	138	141	143	147	131	144
115°	258	259	258	259	259	253
125°	362	364	363	364	365	323
135°	449	449	450	451	452	346
145°	518	519	519	520	520	324
155°	568	568	567	569	567	262
165°	599	597	597	600	596	169
175°	613	610	610	614	609	58
180°	613	613	613	613	613	

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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°	6.9	6.0	9.6	12.4	12.4
95°	25.2	9.6	10.1	12.8	13.3
97.5°	48.1	58.2	10.1	12.4	12.8
100°	75.1	83.4	20.2	12.4	12.8
102.5°	105.4	110.9	116.4	13.3	13.3
105°	137.9	140.7	143.0	147.1	130.6
107.5°	167.7	169.1	172.3	174.6	176.4
110°	198.0	199.3	202.1	203.0	204.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	227.3	230.0	230.9	230.5	232.3
115°	257.5	258.9	258.4	259.4	259.4
117.5°	284.6	286.4	287.8	287.3	287.3
120°	312.0	313.9	313.4	314.3	313.4
122.5°	337.7	338.6	339.5	340.0	339.1
125°	362.0	363.8	362.9	364.3	364.7
127.5°	385.4	385.8	388.1	387.7	387.2
130°	407.8	408.3	409.7	410.1	410.1
132.5°	428.4	429.4	431.2	431.6	431.2
135°	449.1	448.6	450.4	451.3	452.3
137.5°	467.4	467.4	469.7	470.6	470.1
140°	485.3	486.2	487.1	488.5	488.9
142.5°	501.3	503.1	503.6	504.5	504.5
145°	517.8	519.2	519.2	519.6	520.5
147.5°	530.6	533.4	532.9	533.4	533.8
150°	544.8	546.7	546.2	546.2	546.7
152.5°	556.7	558.1	557.2	558.1	557.7
155°	567.7	568.2	566.8	568.7	567.3
157.5°	577.4	577.4	575.5	577.8	575.5
160°	585.6	584.2	583.8	586.5	583.8
162.5°	592.9	591.1	590.6	593.4	590.2
165°	598.9	596.6	596.6	600.3	596.1
167.5°	603.9	601.6	601.2	605.3	600.7
170°	608.1	605.3	605.8	609.4	604.9
172.5°	610.8	608.1	608.5	612.2	607.1
175°	612.6	609.9	610.4	614.5	609.0
177.5°	614.0	610.8	611.7	615.4	609.9
180°	612.6	612.6	612.6	612.6	612.6

(END OF REPORT)