

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: P1033474

Luminaire Tested: S124DIW-B350D470UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033474
REPORT IS A COMBINATION OF REPORTS P997483 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D470UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

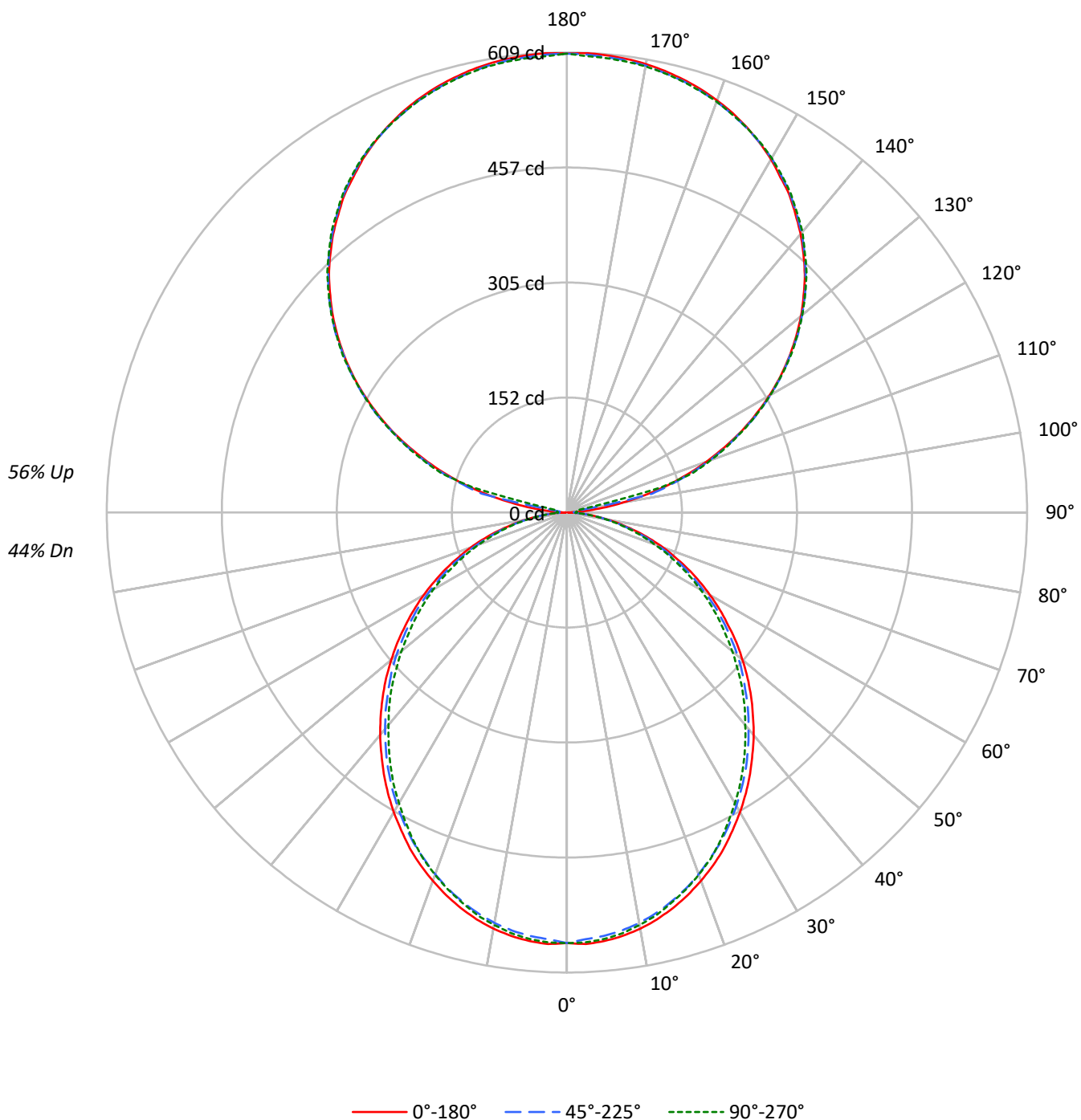
Lumens per Lamp: N/A
Luminaire Lumens: 3344.0 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	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°	4648	4648	4648
5°	4652	4514	4520
10°	4612	4389	4359
15°	4546	4240	4176
20°	4461	4079	3988
25°	4367	3909	3784
30°	4252	3724	3561
35°	4134	3536	3346
40°	4010	3333	3116
45°	3879	3129	2902
50°	3736	2932	2665
55°	3580	2702	2429
60°	3420	2450	2184
65°	3238	2189	1907
70°	3025	1876	1611
75°	2712	1511	1289
80°	2311	1093	907
85°	1797	607	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3879 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	1.6
10°-20°	151.4	4.5
20°-30°	222.8	6.7
30°-40°	258.9	7.7
40°-50°	258.9	7.7
50°-60°	226.5	6.8
60°-70°	168.1	5.0
70°-80°	95.4	2.9
80°-90°	28.6	0.9
90°-100°	20.2	0.6
100°-110°	132.8	4.0
110°-120°	253.6	7.6
120°-130°	321.9	9.6
130°-140°	344.4	10.3
140°-150°	322.0	9.6
150°-160°	259.7	7.8
160°-170°	167.5	5.0
170°-180°	57.7	1.7
0°-30°	427.8	12.8
0°-40°	686.8	20.5
0°-60°	1172.2	35.1
0°-90°	1464.3	43.8
90°-120°	406.6	12.2
90°-150°	1394.9	41.7
90°-180°	1880.0	56.2
0°-180°	3344.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	570	568	563	568	567	54
15°	542	540	534	536	535	153
25°	491	488	481	482	480	226
35°	422	419	413	410	407	264
45°	345	342	334	329	328	266
55°	261	259	253	248	245	234
65°	177	174	170	165	163	175
75°	94	92	90	88	87	100
85°	25	25	24	24	23	27
90°	1	6	10	13	14	3
95°	25	10	10	13	13	31
105°	137	140	142	146	130	143
115°	255	257	256	257	257	251
125°	359	361	360	361	362	321
135°	445	445	447	448	448	343
145°	513	515	515	515	516	321
155°	563	563	562	564	562	260
165°	594	592	592	595	591	168
175°	608	605	605	609	604	58
180°	608	608	608	608	608	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.0	570.0	570.0	570.0	570.0
2.5°	571.8	570.5	565.4	570.0	569.5
5°	569.5	567.7	562.7	567.7	566.8
7.5°	565.4	563.6	558.1	562.2	561.8
10°	559.5	557.7	551.7	555.4	554.5
12.5°	551.7	549.9	543.5	547.6	546.2
15°	542.1	540.3	533.5	536.2	534.8
17.5°	531.2	528.9	522.5	524.3	523.4
20°	518.8	516.6	509.7	511.1	510.2
22.5°	505.6	502.4	495.5	498.3	496.5
25°	491.0	487.8	481.4	481.8	480.0
27.5°	474.5	471.3	465.4	464.5	462.2
30°	458.1	454.4	448.5	446.7	444.4
32.5°	440.7	437.5	431.1	428.9	426.6
35°	422.5	419.3	412.9	409.7	407.4
37.5°	403.3	400.5	393.7	390.5	387.3
40°	384.6	380.9	374.1	369.5	367.2
42.5°	364.5	362.6	354.9	349.4	348.0
45°	344.8	341.6	334.3	329.3	327.9
47.5°	324.3	322.0	315.1	309.7	306.0
50°	303.3	301.4	295.0	288.7	285.9
52.5°	282.7	280.4	273.6	268.1	264.4
55°	260.8	259.4	253.0	247.5	244.8
57.5°	240.2	238.9	232.5	227.0	224.3
60°	218.8	216.5	210.6	206.4	204.2
62.5°	197.8	195.9	189.5	185.9	183.6
65°	176.8	174.5	169.9	165.3	163.1
67.5°	155.3	153.5	148.9	144.3	143.9
70°	135.6	132.5	128.8	125.1	123.8
72.5°	114.6	111.4	108.7	106.0	104.6
75°	94.1	91.8	89.5	87.7	87.2
77.5°	74.0	73.1	70.8	70.3	69.0
80°	56.2	54.8	53.9	53.0	52.5
82.5°	38.8	38.4	38.4	37.9	37.5
85°	24.7	24.7	23.7	23.7	23.3
87.5°	11.9	11.4	11.0	11.0	11.0
90°	1.4	6.4	10.0	12.7	13.6
92.5°	6.8	5.9	9.5	12.3	12.3
95°	25.0	9.5	10.0	12.7	13.2
97.5°	47.7	57.7	10.0	12.3	12.7
100°	74.5	82.7	20.0	12.3	12.7
102.5°	104.5	110.0	115.4	13.2	13.2
105°	136.8	139.5	141.8	145.8	129.5
107.5°	166.3	167.7	170.8	173.1	174.9
110°	196.3	197.6	200.4	201.3	202.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.4	228.1	229.0	228.5	230.4
115°	255.3	256.7	256.3	257.2	257.2
117.5°	282.2	284.0	285.3	284.9	284.9
120°	309.4	311.2	310.8	311.7	310.8
122.5°	334.9	335.8	336.7	337.1	336.2
125°	358.9	360.8	359.9	361.2	361.7
127.5°	382.1	382.6	384.8	384.4	383.9
130°	404.4	404.8	406.2	406.7	406.7
132.5°	424.8	425.7	427.6	428.0	427.6
135°	445.3	444.8	446.6	447.5	448.5
137.5°	463.4	463.4	465.7	466.6	466.2
140°	481.2	482.1	483.0	484.3	484.8
142.5°	497.1	498.9	499.3	500.2	500.2
145°	513.4	514.8	514.8	515.2	516.2
147.5°	526.1	528.9	528.4	528.9	529.3
150°	540.2	542.0	541.6	541.6	542.0
152.5°	552.0	553.4	552.5	553.4	553.0
155°	562.9	563.4	562.0	563.9	562.5
157.5°	572.5	572.5	570.7	572.9	570.7
160°	580.7	579.3	578.9	581.6	578.9
162.5°	587.9	586.1	585.7	588.4	585.2
165°	593.8	591.6	591.6	595.2	591.1
167.5°	598.8	596.6	596.1	600.2	595.7
170°	602.9	600.2	600.7	604.3	599.8
172.5°	605.7	602.9	603.4	607.0	602.0
175°	607.5	604.8	605.2	609.3	603.8
177.5°	608.8	605.7	606.6	610.2	604.8
180°	607.5	607.5	607.5	607.5	607.5

(END OF REPORT)