

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: P1033490

Luminaire Tested: S124DIW-B350D470UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033490
REPORT IS A COMBINATION OF REPORTS P997528 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D470UB40-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

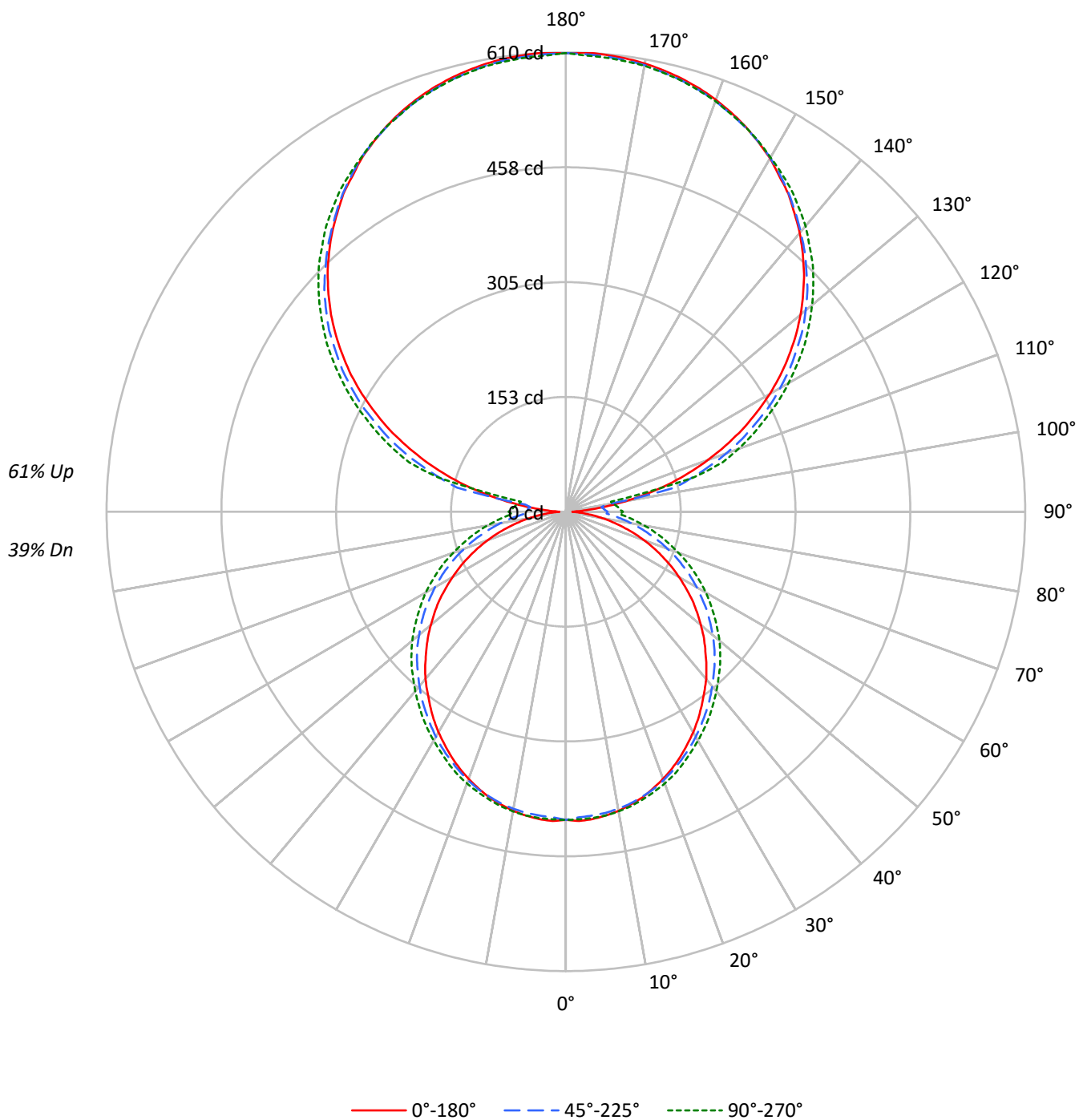
Lumens per Lamp: N/A
Luminaire Lumens: 3281.0 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	90	86	82	86	82	78	75	67	64	62	53	51	49	40	39	38
2	86	78	72	66	78	71	66	61	58	54	50	46	43	40	34	33	31
3	78	68	61	55	70	62	56	50	51	46	42	40	37	34	30	28	26
4	71	60	52	46	64	55	48	42	45	40	35	36	32	29	27	24	22
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	21	19
6	60	48	40	34	54	44	36	31	36	30	26	29	25	21	22	19	17
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15
8	51	39	31	26	46	36	29	24	29	24	20	24	20	17	18	15	13
9	48	35	28	23	43	32	26	21	27	22	18	22	18	15	17	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3337	3337	3337
5°	3346	3249	3255
10°	3324	3186	3176
15°	3293	3114	3087
20°	3246	3036	3001
25°	3195	2950	2907
30°	3138	2865	2813
35°	3075	2778	2728
40°	3024	2695	2640
45°	2949	2616	2563
50°	2884	2527	2481
55°	2818	2441	2386
60°	2715	2335	2298
65°	2600	2220	2192
70°	2463	2088	2069
75°	2271	1942	1952
80°	2052	1793	1828
85°	1768	1643	1729

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2949 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	1.2
10°-20°	111.1	3.4
20°-30°	168.0	5.1
30°-40°	203.2	6.2
40°-50°	214.8	6.5
50°-60°	202.2	6.2
60°-70°	167.7	5.1
70°-80°	117.7	3.6
80°-90°	67.6	2.1
90°-100°	59.7	1.8
100°-110°	162.4	4.9
110°-120°	273.9	8.3
120°-130°	333.8	10.2
130°-140°	350.1	10.7
140°-150°	323.8	9.9
150°-160°	260.4	7.9
160°-170°	167.9	5.1
170°-180°	57.9	1.8
0°-30°	317.8	9.7
0°-40°	521.0	15.9
0°-60°	938.0	28.6
0°-90°	1291.1	39.3
90°-120°	496.0	15.1
90°-150°	1503.8	45.8
90°-180°	1990.0	60.7
0°-180°	3281.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	409	409	409	409	409	
5°	410	408	405	409	408	39
15°	393	393	392	396	395	111
25°	359	362	363	368	369	165
35°	314	320	324	331	332	197
45°	262	271	280	287	290	203
55°	205	215	229	238	240	183
65°	142	157	172	184	187	141
75°	79	96	115	128	132	84
85°	24	44	64	78	82	25
90°	9	32	55	71	76	6
95°	31	31	50	65	70	36
105°	141	153	172	188	175	148
115°	259	264	278	290	293	255
125°	362	363	374	384	387	323
135°	447	447	452	460	464	345
145°	515	516	516	519	522	322
155°	564	565	564	565	564	260
165°	595	593	593	597	593	168
175°	609	606	607	611	605	58
180°	609	609	609	609	609	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	409.2	409.2	409.2	409.2	409.2
2.5°	411.0	409.6	406.0	409.2	408.7
5°	409.6	408.2	405.0	408.7	408.2
7.5°	406.9	406.0	403.2	407.3	406.9
10°	403.2	402.7	400.5	404.6	404.1
12.5°	398.2	398.2	396.8	400.5	400.5
15°	392.7	393.1	391.8	395.9	395.4
17.5°	385.3	386.7	386.3	390.4	389.9
20°	377.5	378.9	379.4	384.0	384.0
22.5°	368.8	370.7	371.6	376.2	377.1
25°	359.2	362.0	363.3	368.4	368.8
27.5°	348.7	352.8	354.6	359.2	359.7
30°	338.1	341.8	345.0	350.1	351.0
32.5°	326.7	331.3	334.9	340.9	341.8
35°	314.3	319.8	324.4	330.8	332.2
37.5°	301.9	308.4	313.9	320.3	321.6
40°	290.0	296.0	302.4	309.3	311.1
42.5°	276.3	283.2	290.9	298.7	300.1
45°	262.1	270.8	279.5	287.3	289.6
47.5°	248.8	257.5	267.6	275.4	278.1
50°	234.1	244.2	254.3	263.5	266.2
52.5°	219.5	229.6	241.5	250.6	253.4
55°	205.3	214.9	228.6	237.8	240.5
57.5°	189.2	201.1	214.4	225.4	227.7
60°	173.7	185.6	200.7	211.2	214.9
62.5°	158.5	171.8	186.9	197.5	201.1
65°	142.0	156.7	172.3	183.7	187.4
67.5°	126.5	142.0	158.5	170.0	173.7
70°	110.4	126.0	143.4	155.8	159.0
72.5°	94.8	110.9	129.7	141.6	145.2
75°	78.8	95.8	115.0	127.8	132.0
77.5°	63.7	81.6	101.7	114.5	119.1
80°	49.9	68.3	88.4	102.2	105.8
82.5°	36.2	55.4	75.6	89.8	93.9
85°	24.3	43.5	64.1	77.9	82.5
87.5°	15.1	33.9	54.1	67.4	71.5
90°	8.7	32.1	55.4	71.4	76.0
92.5°	13.7	28.8	52.2	67.7	71.4
95°	31.1	30.7	49.9	65.0	69.6
97.5°	53.3	76.7	47.6	61.8	66.4
100°	79.7	99.9	54.8	59.5	63.2
102.5°	109.8	125.3	148.2	57.6	61.3
105°	141.2	153.2	172.3	187.9	175.2
107.5°	170.8	180.0	199.2	213.0	218.0
110°	200.5	208.3	227.0	238.5	243.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.2	237.4	253.4	263.0	268.6
115°	258.7	264.3	278.4	289.5	292.7
117.5°	285.6	290.2	305.3	314.5	318.1
120°	312.5	315.8	328.6	338.6	341.4
122.5°	338.1	339.0	352.3	361.8	364.1
125°	361.7	363.1	373.6	383.7	386.9
127.5°	384.9	385.0	396.4	404.2	407.0
130°	406.9	406.8	415.5	424.2	426.9
132.5°	427.4	427.8	435.1	443.3	445.7
135°	447.4	446.9	451.9	460.2	463.8
137.5°	465.6	465.2	469.3	477.1	478.9
140°	483.3	483.9	485.2	492.5	495.3
142.5°	498.9	500.7	500.7	506.6	508.5
145°	515.3	516.2	516.2	519.3	522.1
147.5°	528.0	530.3	529.8	530.8	533.0
150°	542.2	543.5	543.0	543.0	543.5
152.5°	553.5	554.9	554.0	554.9	554.4
155°	564.4	564.9	563.5	565.4	564.0
157.5°	574.0	574.0	572.2	574.5	572.2
160°	582.2	580.8	580.4	583.1	580.4
162.5°	589.5	587.7	587.2	590.0	586.8
165°	595.4	593.1	593.1	596.8	592.7
167.5°	600.4	598.2	597.7	601.8	597.2
170°	604.5	601.8	602.3	605.9	601.3
172.5°	607.3	604.5	605.0	608.6	603.6
175°	609.1	606.4	606.8	610.9	605.4
177.5°	610.5	607.3	608.2	611.8	606.4
180°	609.1	609.1	609.1	609.1	609.1

(END OF REPORT)