

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: P1033634

Luminaire Tested: S124DIW-B575D470UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033634
REPORT IS A COMBINATION OF REPORTS P997853 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D470UB35-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

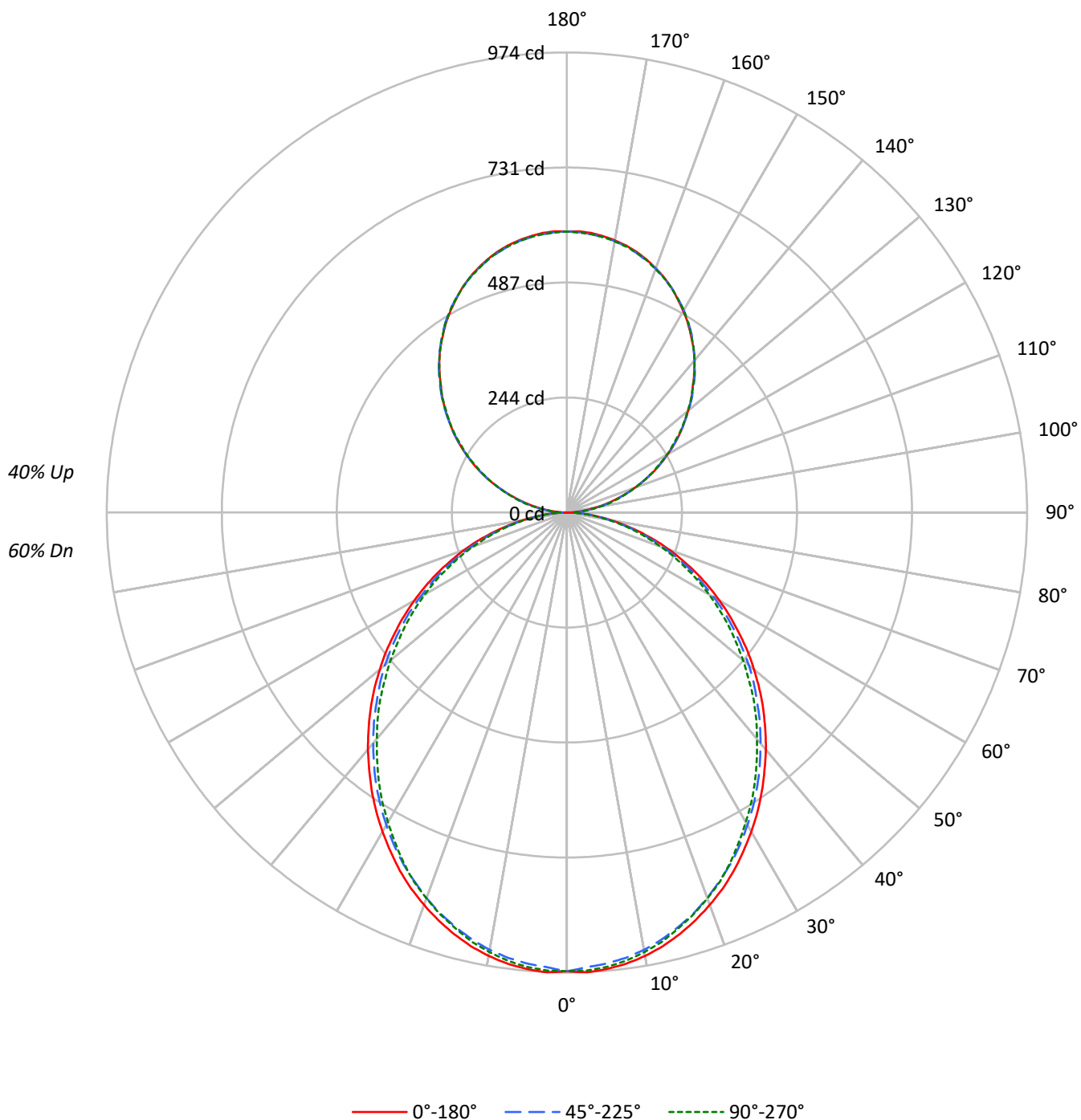
Lumens per Lamp: N/A
Luminaire Lumens: 4145.0 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 37.2
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65
1	100	96	92	88	93	89	86	83	78	75	73	68	66	64	58	56	55
2	91	83	77	72	85	78	73	68	68	64	61	59	56	53	51	49	46
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	40
4	76	65	57	51	71	61	54	48	54	48	43	47	42	39	40	37	34
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	33	30
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26
7	60	47	39	33	56	44	37	32	39	33	29	35	30	26	30	26	23
8	55	43	35	30	52	40	33	28	36	30	26	32	27	23	28	24	21
9	52	39	32	26	48	37	30	25	33	27	23	29	24	21	26	22	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7920	7920	7920
5°	7927	7692	7702
10°	7860	7479	7426
15°	7747	7225	7116
20°	7603	6951	6794
25°	7441	6660	6449
30°	7246	6347	6069
35°	7043	6026	5701
40°	6832	5680	5310
45°	6611	5333	4946
50°	6367	4997	4541
55°	6100	4605	4140
60°	5828	4175	3721
65°	5516	3730	3249
70°	5156	3196	2744
75°	4619	2575	2199
80°	3936	1862	1546
85°	3056	1038	832

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6611 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	2.2
10°-20°	257.9	6.2
20°-30°	379.6	9.2
30°-40°	441.2	10.6
40°-50°	441.2	10.6
50°-60°	385.9	9.3
60°-70°	286.5	6.9
70°-80°	162.5	3.9
80°-90°	47.8	1.2
90°-100°	38.8	0.9
100°-110°	116.2	2.8
110°-120°	197.3	4.8
120°-130°	260.2	6.3
130°-140°	292.3	7.1
140°-150°	287.3	6.9
150°-160°	241.6	5.8
160°-170°	160.8	3.9
170°-180°	56.3	1.4
0°-30°	729.1	17.6
0°-40°	1170.3	28.2
0°-60°	1997.4	48.2
0°-90°	2494.3	60.2
90°-120°	352.3	8.5
90°-150°	1192.1	28.8
90°-180°	1651.0	39.8
0°-180°	4145.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	970	967	959	967	966	92
15°	924	921	909	914	911	260
25°	837	831	820	821	818	385
35°	720	714	704	698	694	450
45°	588	582	570	561	559	453
55°	444	442	431	422	417	398
65°	301	297	290	282	278	298
75°	160	156	152	149	149	170
85°	42	42	40	40	40	45
90°	1	6	10	13	14	5
95°	28	32	35	36	36	30
105°	107	108	110	111	112	114
115°	201	201	200	199	199	198
125°	292	292	292	291	290	260
135°	377	380	380	379	377	292
145°	458	460	460	460	458	287
155°	524	524	524	526	524	241
165°	571	570	569	572	570	161
175°	594	592	591	594	591	56
180°	595	595	595	595	595	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	971.3	971.3	971.3	971.3	971.3
2.5°	974.4	972.1	963.5	971.3	970.5
5°	970.5	967.4	958.8	967.4	965.8
7.5°	963.5	960.4	951.1	958.1	957.3
10°	953.4	950.3	940.2	946.4	944.8
12.5°	940.2	937.0	926.1	933.2	930.8
15°	923.8	920.7	909.0	913.7	911.4
17.5°	905.1	901.2	890.3	893.5	891.9
20°	884.1	880.2	868.6	870.9	869.3
22.5°	861.6	856.1	844.4	849.1	846.0
25°	836.6	831.2	820.3	821.1	818.0
27.5°	808.6	803.2	793.1	791.5	787.6
30°	780.6	774.4	764.3	761.2	757.3
32.5°	751.0	745.6	734.7	730.8	726.9
35°	719.9	714.5	703.6	698.1	694.2
37.5°	687.2	682.5	670.9	665.4	660.0
40°	655.3	649.1	637.4	629.6	625.7
42.5°	621.1	618.0	604.7	595.4	593.0
45°	587.6	582.2	569.7	561.1	558.8
47.5°	552.6	548.7	537.0	527.7	521.4
50°	516.8	513.7	502.8	491.9	487.2
52.5°	481.8	477.9	466.2	456.8	450.6
55°	444.4	442.1	431.2	421.8	417.2
57.5°	409.4	407.0	396.1	386.8	382.1
60°	372.8	368.9	358.8	351.8	347.9
62.5°	337.0	333.9	323.0	316.8	312.9
65°	301.2	297.3	289.5	281.7	277.8
67.5°	264.6	261.5	253.7	245.9	245.2
70°	231.1	225.7	219.5	213.2	210.9
72.5°	195.3	189.9	185.2	180.6	178.2
75°	160.3	156.4	152.5	149.4	148.7
77.5°	126.1	124.5	120.6	119.9	117.5
80°	95.7	93.4	91.8	90.3	89.5
82.5°	66.2	65.4	65.4	64.6	63.8
85°	42.0	42.0	40.5	40.5	39.7
87.5°	20.2	19.5	18.7	18.7	18.7
90°	1.4	6.4	10.1	12.9	13.8
92.5°	12.0	17.9	20.2	21.6	22.1
95°	27.6	31.7	35.0	36.3	36.3
97.5°	44.2	47.9	51.5	53.4	53.4
100°	64.4	66.3	70.4	71.3	71.3
102.5°	85.6	86.0	89.7	91.1	91.6
105°	107.2	107.7	109.5	110.9	112.3
107.5°	129.8	130.2	130.7	132.5	132.1
110°	152.8	153.7	153.2	152.3	153.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.7	176.7	175.8	175.8	175.8
115°	200.6	200.6	199.7	199.2	198.8
117.5°	223.2	223.2	222.7	221.3	219.9
120°	245.7	247.5	246.2	243.9	244.8
122.5°	269.2	269.6	269.2	267.8	265.5
125°	292.2	292.2	291.7	290.8	289.9
127.5°	312.9	314.3	313.3	312.4	312.0
130°	335.0	336.3	336.3	335.4	333.6
132.5°	357.5	358.4	358.0	357.1	356.6
135°	376.8	379.6	379.6	378.7	377.3
137.5°	398.5	399.8	400.8	399.4	399.8
140°	420.1	421.0	421.0	420.6	420.1
142.5°	439.9	440.8	440.3	440.3	440.3
145°	457.8	459.7	460.1	459.7	458.3
147.5°	476.2	478.5	478.1	477.6	477.1
150°	492.8	494.6	494.6	494.6	494.2
152.5°	508.4	509.4	509.8	511.2	509.8
155°	524.5	524.5	524.1	525.9	524.1
157.5°	538.3	537.4	537.4	538.8	537.4
160°	550.3	549.8	549.4	550.8	548.5
162.5°	561.3	560.0	559.5	562.3	560.0
165°	571.0	569.6	568.7	571.5	569.6
167.5°	578.8	577.0	577.0	579.8	577.0
170°	585.3	583.0	583.4	586.2	583.0
172.5°	589.9	588.0	588.0	591.3	588.0
175°	594.0	591.7	591.3	594.5	591.3
177.5°	595.9	593.6	593.6	596.8	593.1
180°	594.9	594.9	594.9	594.9	594.9

(END OF REPORT)