

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: P1033662

Luminaire Tested: S124DIW-B575D770UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033662
REPORT IS A COMBINATION OF REPORTS P997916 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D770UB35-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

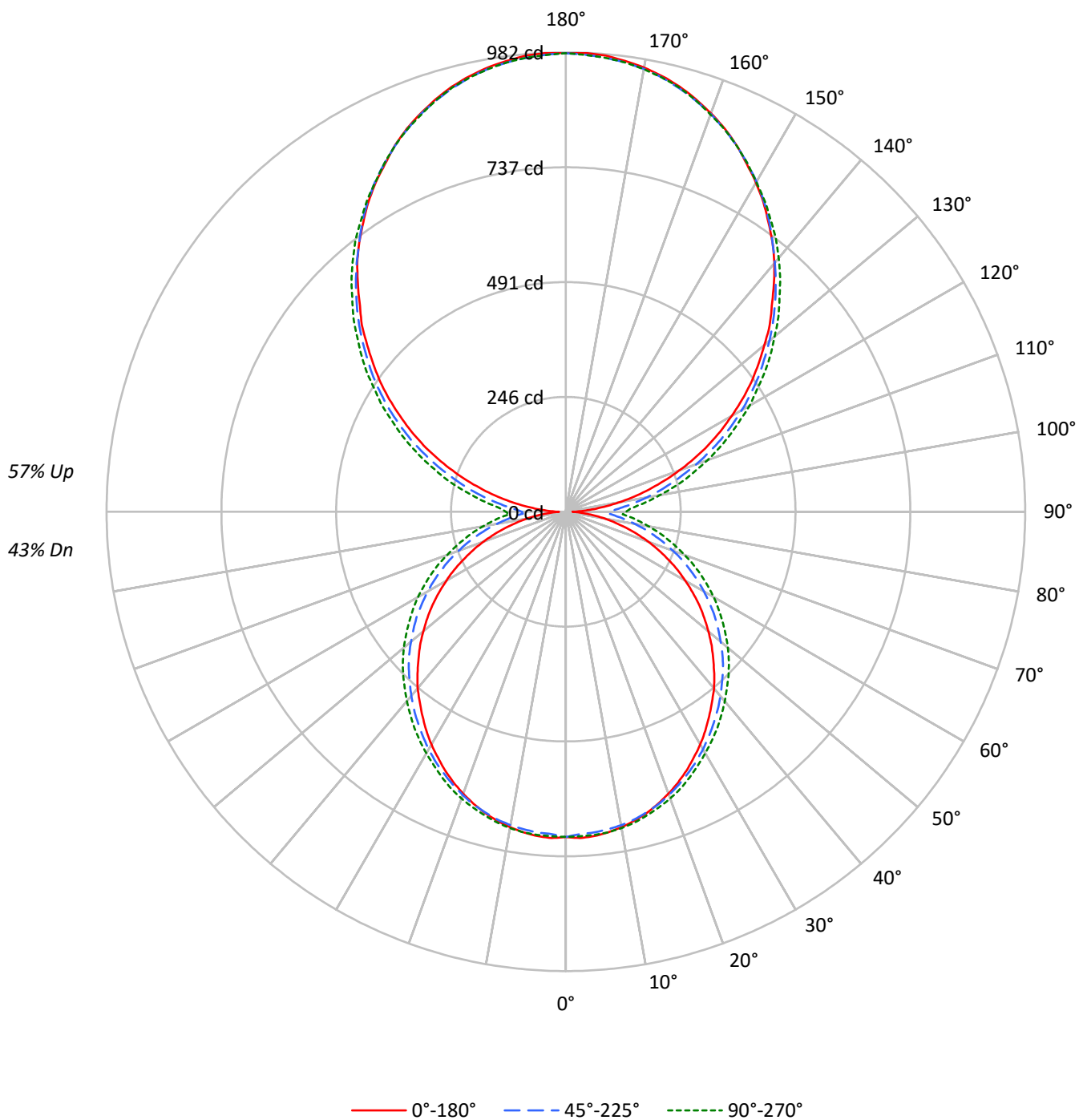
Lumens per Lamp: N/A
Luminaire Lumens: 5092.0 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 47.2
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	96	96	96	96	79	79	79	64	64	64	50	50	50
1	95	91	87	83	87	83	79	76	68	66	63	55	53	51	43	41	40
2	86	79	72	67	79	72	66	62	59	55	52	48	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	32	30	28
4	72	61	53	46	65	56	48	43	46	41	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	20
6	60	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	19	16	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	17	14	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5668	5668	5668
5°	5684	5521	5531
10°	5647	5412	5397
15°	5594	5290	5246
20°	5516	5157	5098
25°	5428	5012	4940
30°	5333	4868	4779
35°	5224	4720	4635
40°	5137	4578	4486
45°	5010	4445	4354
50°	4901	4294	4216
55°	4787	4148	4055
60°	4611	3967	3905
65°	4419	3772	3724
70°	4185	3547	3514
75°	3859	3300	3315
80°	3488	3046	3106
85°	3005	2793	2937

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5010 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	1.3
10°-20°	188.7	3.7
20°-30°	285.3	5.6
30°-40°	345.2	6.8
40°-50°	364.9	7.2
50°-60°	343.5	6.7
60°-70°	285.0	5.6
70°-80°	200.0	3.9
80°-90°	114.8	2.3
90°-100°	131.0	2.6
100°-110°	241.1	4.7
110°-120°	358.5	7.0
120°-130°	447.6	8.8
130°-140°	489.7	9.6
140°-150°	475.0	9.3
150°-160°	398.1	7.8
160°-170°	264.9	5.2
170°-180°	92.8	1.8
0°-30°	539.9	10.6
0°-40°	885.1	17.4
0°-60°	1593.5	31.3
0°-90°	2193.4	43.1
90°-120°	730.6	14.3
90°-150°	2142.8	42.1
90°-180°	2899.0	56.9
0°-180°	5092.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	696	694	688	694	694	66
15°	667	668	666	673	672	188
25°	610	615	617	626	627	281
35°	534	543	551	562	564	334
45°	445	460	475	488	492	344
55°	349	365	388	404	409	311
65°	241	266	293	312	318	239
75°	134	163	195	217	224	142
85°	41	74	109	132	140	43
90°	15	54	94	121	129	12
95°	56	88	125	149	156	57
105°	184	200	232	254	262	195
115°	335	342	366	382	387	331
125°	484	484	502	516	519	432
135°	622	627	632	643	646	482
145°	755	757	758	762	763	473
155°	864	864	864	867	864	398
165°	941	939	937	942	939	265
175°	979	975	974	980	974	93
180°	980	980	980	980	980	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.1	695.1	695.1	695.1	695.1
2.5°	698.2	695.9	689.7	695.1	694.4
5°	695.9	693.6	688.1	694.4	693.6
7.5°	691.2	689.7	685.0	692.0	691.2
10°	685.0	684.2	680.3	687.4	686.6
12.5°	676.5	676.5	674.1	680.3	680.3
15°	667.1	667.9	665.6	672.6	671.8
17.5°	654.7	657.0	656.2	663.2	662.4
20°	641.4	643.8	644.5	652.3	652.3
22.5°	626.6	629.7	631.3	639.1	640.6
25°	610.3	615.0	617.3	625.9	626.6
27.5°	592.4	599.4	602.5	610.3	611.1
30°	574.5	580.7	586.2	594.7	596.3
32.5°	555.0	562.8	569.0	579.1	580.7
35°	534.0	543.3	551.1	562.0	564.4
37.5°	513.0	523.9	533.2	544.1	546.5
40°	492.7	502.9	513.8	525.4	528.6
42.5°	469.4	481.1	494.3	507.5	509.9
45°	445.3	460.1	474.8	488.1	492.0
47.5°	422.7	437.5	454.6	467.8	472.5
50°	397.8	414.9	432.0	447.6	452.3
52.5°	372.9	390.0	410.2	425.8	430.5
55°	348.7	365.1	388.4	404.0	408.7
57.5°	321.5	341.7	364.3	383.0	386.9
60°	295.0	315.3	341.0	358.9	365.1
62.5°	269.3	291.9	317.6	335.5	341.7
65°	241.3	266.2	292.7	312.1	318.4
67.5°	214.8	241.3	269.3	288.8	295.0
70°	187.6	214.1	243.6	264.7	270.1
72.5°	161.1	188.4	220.3	240.5	246.8
75°	133.9	162.7	195.4	217.2	224.2
77.5°	108.2	138.6	172.8	194.6	202.4
80°	84.8	116.0	150.2	173.6	179.8
82.5°	61.5	94.2	128.4	152.6	159.6
85°	41.3	74.0	109.0	132.3	140.1
87.5°	25.7	57.6	91.9	114.4	121.4
90°	14.8	54.2	93.8	120.8	128.6
92.5°	31.4	68.5	105.8	129.8	136.8
95°	55.6	88.1	125.3	148.6	155.6
97.5°	82.1	110.7	148.7	172.0	179.0
100°	114.7	138.0	175.2	197.7	203.1
102.5°	149.6	167.5	203.1	225.6	232.6
105°	183.6	200.0	231.8	253.5	262.1
107.5°	220.8	234.8	262.8	285.2	290.0
110°	257.9	270.3	296.9	313.2	321.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	296.5	305.9	330.1	347.2	353.4
115°	335.2	342.2	365.6	382.0	386.7
117.5°	372.4	377.0	399.6	413.7	417.7
120°	408.7	414.1	434.4	446.2	453.9
122.5°	447.4	448.2	468.4	481.7	483.3
125°	484.5	483.7	502.5	515.7	518.9
127.5°	518.6	520.1	534.2	546.7	551.4
130°	554.2	555.8	568.2	580.7	582.4
132.5°	591.4	592.2	600.7	612.4	616.4
135°	622.5	627.1	632.5	643.4	645.8
137.5°	658.1	659.6	664.2	673.7	678.3
140°	693.8	694.5	695.3	704.6	707.8
142.5°	725.6	727.1	725.5	734.1	737.2
145°	755.1	757.4	758.1	762.1	762.9
147.5°	785.5	788.5	787.7	787.7	790.1
150°	812.8	815.0	815.0	815.0	814.2
152.5°	837.7	839.3	840.0	842.3	840.0
155°	864.3	864.3	863.5	866.6	863.5
157.5°	887.0	885.5	885.5	887.8	885.5
160°	906.7	906.0	905.2	907.5	903.7
162.5°	924.9	922.7	921.9	926.4	922.7
165°	940.9	938.6	937.1	941.6	938.6
167.5°	953.7	950.7	950.7	955.3	950.7
170°	964.4	960.6	961.3	965.9	960.6
172.5°	971.9	968.9	968.9	974.2	968.9
175°	978.8	975.0	974.2	979.5	974.2
177.5°	981.8	978.0	978.0	983.3	977.2
180°	980.3	980.3	980.3	980.3	980.3

(END OF REPORT)