

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: P1033631

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033631
REPORT IS A COMBINATION OF REPORTS P997849 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D470UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

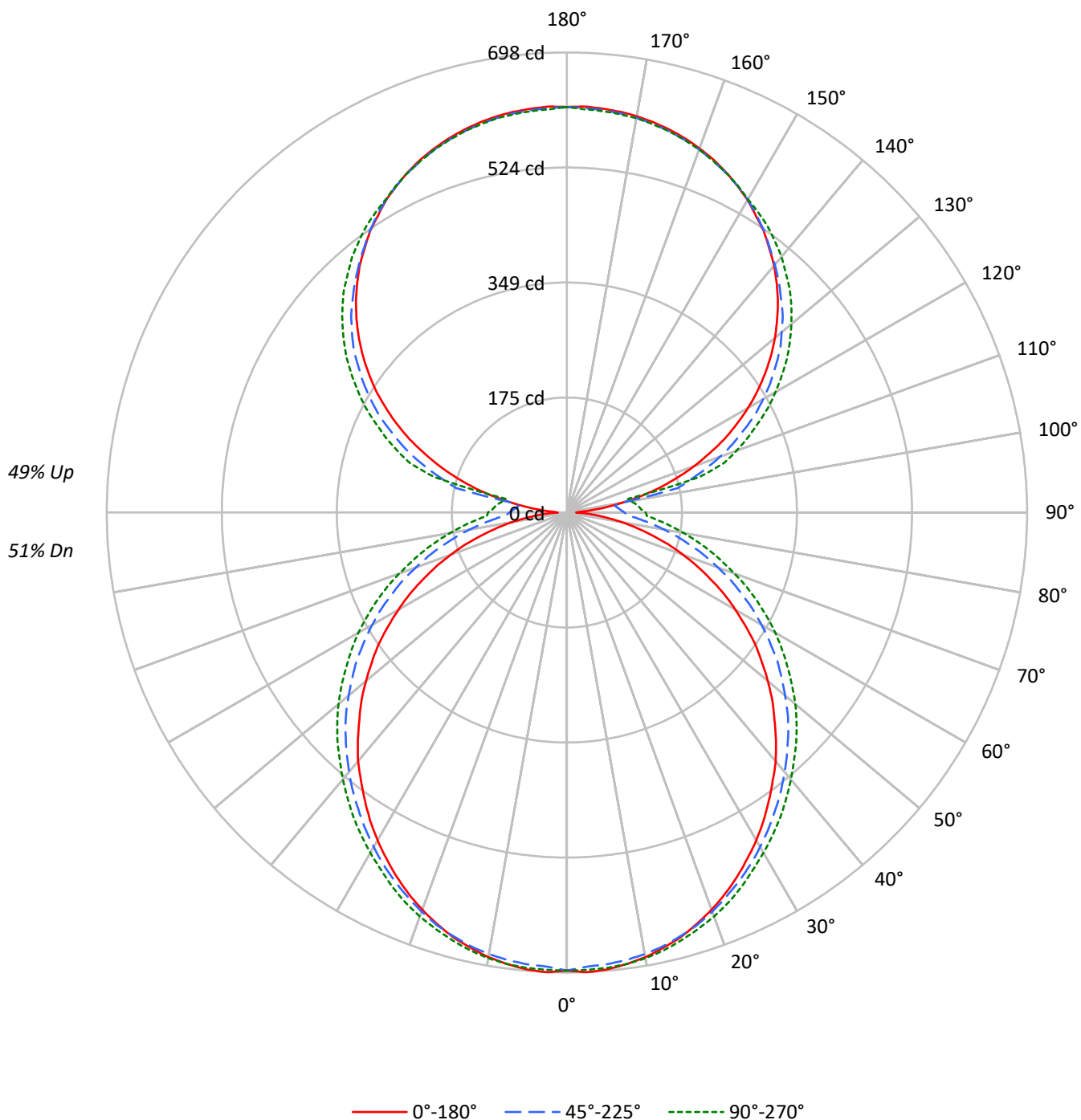
Lumens per Lamp: N/A
Luminaire Lumens: 4275.0 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	49	48	46
2	88	80	73	68	81	74	68	63	63	58	55	52	49	46	42	40	38
3	80	70	62	56	73	65	58	52	55	50	45	46	42	39	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	41	36	33	33	30	27
5	67	55	46	40	61	51	43	38	43	37	33	36	32	28	30	26	24
6	61	49	41	35	56	45	38	33	39	33	28	33	28	24	27	23	21
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	24	21	18
8	53	40	32	27	48	37	30	25	32	26	22	27	22	19	22	19	16
9	49	36	29	24	45	34	27	22	29	24	20	25	20	17	21	17	15
10	46	33	26	21	42	31	24	20	27	21	18	23	19	15	19	16	13

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	1.5
10°-20°	188.7	4.4
20°-30°	285.3	6.7
30°-40°	345.2	8.1
40°-50°	364.9	8.5
50°-60°	343.5	8.0
60°-70°	285.0	6.7
70°-80°	200.0	4.7
80°-90°	114.0	2.7
90°-100°	87.5	2.0
100°-110°	184.2	4.3
110°-120°	290.2	6.8
120°-130°	344.8	8.1
130°-140°	356.9	8.3
140°-150°	327.7	7.7
150°-160°	263.0	6.2
160°-170°	169.6	4.0
170°-180°	58.5	1.4
0°-30°	539.9	12.6
0°-40°	885.1	20.7
0°-60°	1593.5	37.3
0°-90°	2192.6	51.3
90°-120°	561.9	13.1
90°-150°	1591.4	37.2
90°-180°	2082.0	48.7
0°-180°	4275.0	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°	14	50	87	112	120	10
95°	35	46	78	102	109	39
105°	146	164	195	218	208	153
115°	263	272	296	314	320	259
125°	367	368	386	402	408	328
135°	453	452	459	473	478	349
145°	521	521	521	526	530	325
155°	570	571	569	571	570	263
165°	601	599	599	603	599	170
175°	615	612	613	617	612	59
180°	615	615	615	615	615	

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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°	13.9	50.0	87.2	112.5	119.7
92.5°	18.6	44.9	82.1	106.6	112.8
95°	35.4	45.5	77.8	101.6	109.0
97.5°	57.6	90.3	73.9	96.5	104.0
100°	84.1	112.5	79.4	92.6	98.5
102.5°	114.4	137.1	172.2	88.8	95.0
105°	145.5	163.9	195.0	218.5	208.2
107.5°	175.4	190.0	220.5	242.2	249.6
110°	205.0	217.3	247.3	266.1	273.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	233.6	245.8	272.4	289.1	297.1
115°	263.3	271.7	296.1	314.1	319.6
117.5°	290.5	296.9	321.7	337.5	343.8
120°	317.3	321.4	343.5	360.1	365.3
122.5°	343.0	344.0	365.9	381.9	386.4
125°	366.6	367.7	386.2	402.4	407.6
127.5°	390.1	389.8	407.7	421.2	426.2
130°	411.8	411.6	425.4	439.8	444.5
132.5°	432.5	432.8	443.9	457.6	461.8
135°	452.6	452.1	459.3	472.8	478.3
137.5°	471.0	470.2	475.6	488.2	491.6
140°	488.9	489.0	490.7	502.2	506.6
142.5°	504.2	506.1	505.7	515.2	518.3
145°	520.8	521.4	521.4	526.5	530.5
147.5°	533.7	535.6	535.2	536.4	540.0
150°	547.9	549.0	548.5	548.5	549.0
152.5°	559.1	560.5	559.5	560.5	560.0
155°	570.1	570.6	569.2	571.1	569.7
157.5°	579.8	579.8	578.0	580.3	578.0
160°	588.1	586.7	586.2	589.0	586.2
162.5°	595.4	593.6	593.1	595.9	592.7
165°	601.4	599.1	599.1	602.8	598.7
167.5°	606.5	604.2	603.7	607.9	603.3
170°	610.6	607.9	608.3	612.0	607.4
172.5°	613.4	610.6	611.1	614.8	609.7
175°	615.2	612.5	612.9	617.1	611.5
177.5°	616.6	613.4	614.3	618.0	612.5
180°	615.2	615.2	615.2	615.2	615.2

(END OF REPORT)