

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: P1033644

Luminaire Tested: S124DIW-B575D470UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033644
REPORT IS A COMBINATION OF REPORTS P997868 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D470UB50-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

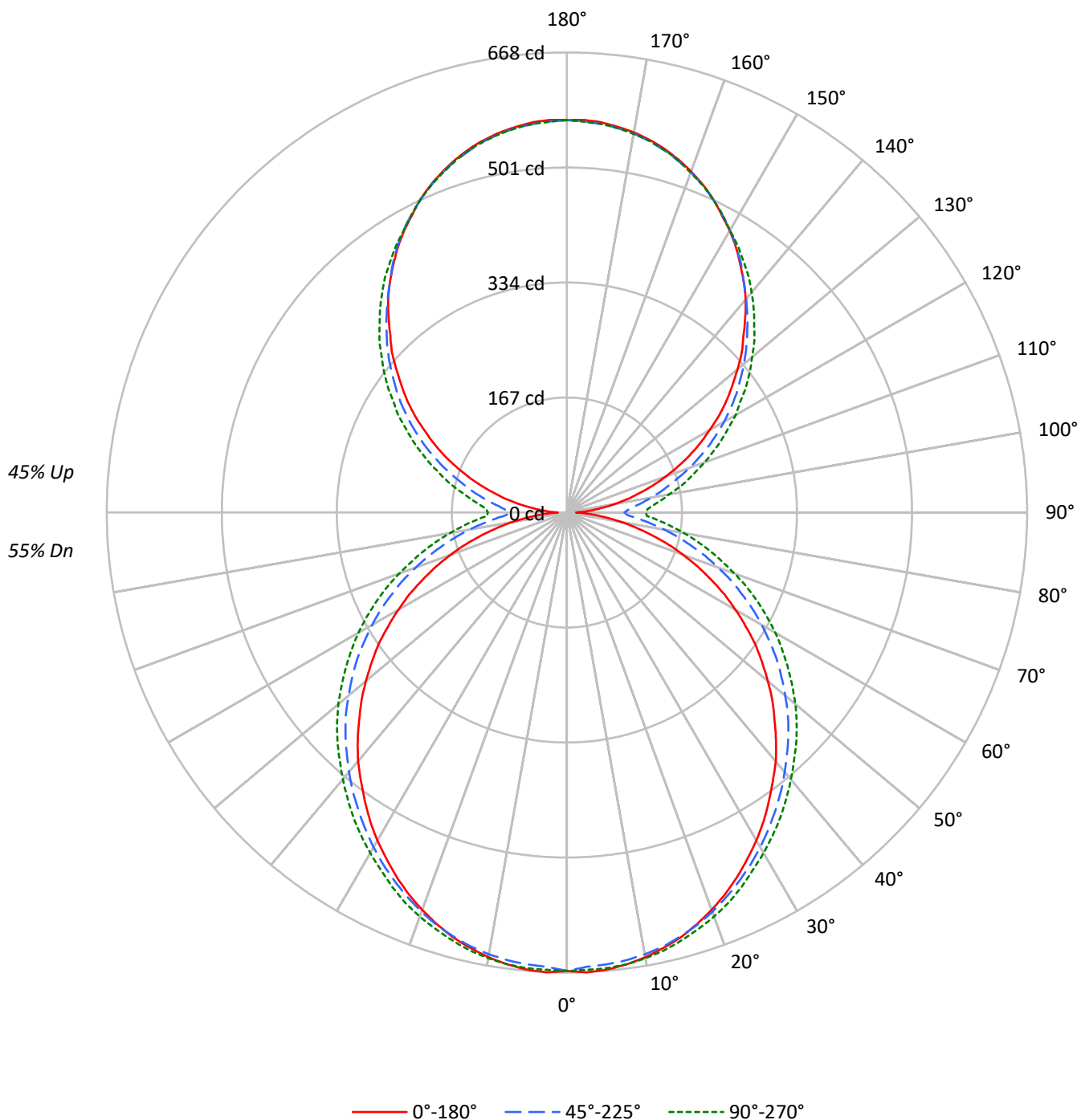
Lumens per Lamp: N/A
Luminaire Lumens: 3851.0 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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
RCR																	
0	108	108	108	108	100	100	100	100	86	86	86		73	73	73		60
1	98	93	89	85	90	86	82	79	74	71	68		62	60	58		52
2	88	80	74	68	82	75	69	64	64	59	56		54	51	48		45
3	80	70	62	56	74	65	58	53	56	51	46		47	43	40		39
4	73	62	54	47	68	58	50	44	49	44	39		42	37	34		35
5	67	55	47	40	62	51	44	38	44	38	33		37	33	29		31
6	62	49	41	35	57	46	38	33	40	34	29		34	29	25		28
7	57	44	36	30	53	41	34	29	36	30	25		31	26	22		26
8	53	40	32	27	49	38	30	25	33	27	23		28	23	20		24
9	49	37	29	24	46	34	27	23	30	24	20		26	21	18		22
10	46	34	26	21	43	32	25	20	28	22	18		24	19	16		20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5427	5427	5427
5°	5442	5285	5295
10°	5406	5182	5167
15°	5356	5065	5022
20°	5281	4938	4881
25°	5197	4798	4729
30°	5105	4660	4575
35°	5001	4518	4437
40°	4918	4383	4294
45°	4796	4255	4168
50°	4691	4111	4036
55°	4583	3972	3883
60°	4416	3798	3738
65°	4230	3611	3565
70°	4007	3397	3364
75°	3694	3160	3173
80°	3340	2916	2975
85°	2874	2673	2811

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4796 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.6
10°-20°	180.7	4.7
20°-30°	273.2	7.1
30°-40°	330.5	8.6
40°-50°	349.4	9.1
50°-60°	328.8	8.5
60°-70°	272.9	7.1
70°-80°	191.5	5.0
80°-90°	109.2	2.8
90°-100°	101.4	2.6
100°-110°	158.8	4.1
110°-120°	220.9	5.7
120°-130°	267.2	6.9
130°-140°	287.7	7.5
140°-150°	276.6	7.2
150°-160°	231.4	6.0
160°-170°	153.9	4.0
170°-180°	53.9	1.4
0°-30°	516.9	13.4
0°-40°	847.4	22.0
0°-60°	1525.6	39.6
0°-90°	2099.1	54.5
90°-120°	481.1	12.5
90°-150°	1312.6	34.1
90°-180°	1752.0	45.5
0°-180°	3851.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	666	664	659	665	664	63
15°	639	639	637	644	643	180
25°	584	589	591	599	600	269
35°	511	520	528	538	540	320
45°	426	440	455	467	471	329
55°	334	350	372	387	391	298
65°	231	255	280	299	305	229
75°	128	156	187	208	215	136
85°	40	71	104	127	134	41
90°	13	48	84	108	115	10
95°	36	65	98	120	126	36
105°	109	125	154	174	181	117
115°	197	203	226	242	247	194
125°	283	282	300	314	317	252
135°	362	365	370	381	384	281
145°	439	440	441	445	446	275
155°	502	502	502	504	502	231
165°	547	546	545	547	546	154
175°	569	567	566	569	566	54
180°	570	570	570	570	570	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	665.5	665.5	665.5	665.5	665.5
2.5°	668.5	666.3	660.3	665.5	664.8
5°	666.3	664.0	658.8	664.8	664.0
7.5°	661.8	660.3	655.8	662.5	661.8
10°	655.8	655.1	651.4	658.1	657.3
12.5°	647.6	647.6	645.4	651.4	651.4
15°	638.7	639.4	637.2	643.9	643.2
17.5°	626.8	629.0	628.2	635.0	634.2
20°	614.1	616.3	617.1	624.5	624.5
22.5°	599.9	602.9	604.4	611.9	613.3
25°	584.3	588.7	591.0	599.2	599.9
27.5°	567.1	573.8	576.8	584.3	585.0
30°	550.0	556.0	561.2	569.4	570.9
32.5°	531.4	538.8	544.8	554.5	556.0
35°	511.2	520.2	527.6	538.1	540.3
37.5°	491.1	501.6	510.5	520.9	523.2
40°	471.7	481.4	491.9	503.0	506.0
42.5°	449.4	460.6	473.2	485.9	488.1
45°	426.3	440.4	454.6	467.3	471.0
47.5°	404.7	418.8	435.2	447.9	452.4
50°	380.8	397.2	413.6	428.5	433.0
52.5°	357.0	373.4	392.7	407.7	412.1
55°	333.9	349.5	371.9	386.8	391.3
57.5°	307.8	327.2	348.8	366.7	370.4
60°	282.5	301.8	326.4	343.6	349.5
62.5°	257.9	279.5	304.1	321.2	327.2
65°	231.0	254.9	280.2	298.8	304.8
67.5°	205.7	231.0	257.9	276.5	282.5
70°	179.6	204.9	233.3	253.4	258.6
72.5°	154.3	180.4	210.9	230.3	236.2
75°	128.2	155.8	187.1	207.9	214.6
77.5°	103.6	132.7	165.4	186.3	193.8
80°	81.2	111.0	143.8	166.2	172.2
82.5°	58.9	90.2	123.0	146.1	152.8
85°	39.5	70.8	104.3	126.7	134.1
87.5°	24.6	55.1	87.9	109.6	116.3
90°	13.2	47.9	83.5	107.7	114.6
92.5°	22.7	54.5	88.7	110.9	117.2
95°	36.1	64.7	98.3	119.8	126.5
97.5°	51.2	76.4	110.4	131.6	138.3
100°	69.9	91.0	124.0	145.1	150.3
102.5°	90.2	107.0	138.8	159.5	166.0
105°	109.4	124.7	154.1	174.0	181.3
107.5°	131.0	144.1	170.6	191.0	195.8
110°	152.3	163.6	189.2	205.4	212.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.4	183.4	207.1	223.4	229.4
115°	196.6	203.3	226.2	242.2	246.9
117.5°	218.2	222.6	244.6	258.9	263.5
120°	239.0	243.1	263.3	276.0	282.8
122.5°	261.5	261.9	281.6	295.2	298.2
125°	282.8	282.0	300.3	313.5	317.1
127.5°	302.6	303.1	317.2	329.8	334.5
130°	323.0	323.6	335.5	348.0	350.8
132.5°	344.6	344.7	353.2	365.0	369.1
135°	362.4	365.0	370.2	381.2	384.4
137.5°	383.1	383.6	387.5	397.4	401.5
140°	403.8	403.9	404.7	413.9	417.2
142.5°	421.9	422.8	421.7	429.9	432.9
145°	439.1	440.2	440.6	444.7	446.4
147.5°	456.7	458.2	457.8	458.1	460.6
150°	472.6	473.7	473.7	473.7	473.2
152.5°	486.9	487.8	488.2	489.5	488.2
155°	502.3	502.3	501.9	503.6	501.9
157.5°	515.5	514.6	514.6	516.0	514.6
160°	527.0	526.5	526.1	527.4	525.2
162.5°	537.6	536.2	535.8	538.4	536.2
165°	546.8	545.5	544.6	547.3	545.5
167.5°	554.3	552.5	552.5	555.2	552.5
170°	560.5	558.3	558.7	561.4	558.3
172.5°	564.9	563.1	563.1	566.2	563.1
175°	568.8	566.6	566.2	569.3	566.2
177.5°	570.6	568.4	568.4	571.5	568.0
180°	569.7	569.7	569.7	569.7	569.7

(END OF REPORT)