

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: P1033628

Luminaire Tested: S124DIW-B575D470UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033628
REPORT IS A COMBINATION OF REPORTS P997844 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D470UB30-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

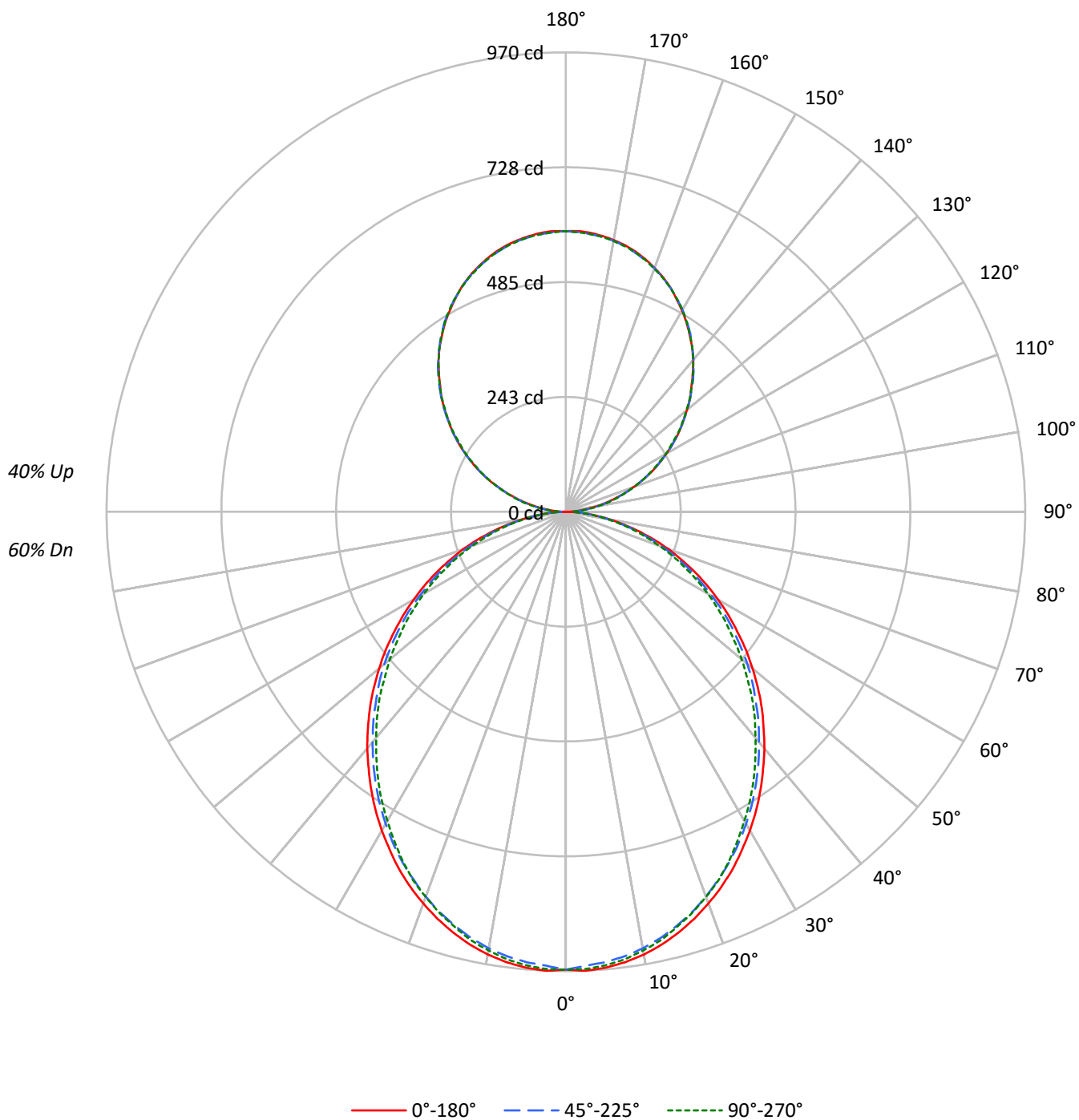
Lumens per Lamp: N/A
Luminaire Lumens: 4127.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	7885	7885	7885
5°	7892	7659	7668
10°	7825	7446	7394
15°	7713	7193	7084
20°	7569	6920	6765
25°	7409	6631	6420
30°	7214	6318	6042
35°	7012	5999	5676
40°	6802	5655	5287
45°	6582	5309	4923
50°	6338	4974	4521
55°	6073	4585	4121
60°	5801	4156	3705
65°	5492	3714	3235
70°	5133	3182	2732
75°	4599	2565	2188
80°	3920	1854	1539
85°	3042	1033	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6582 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	2.2
10°-20°	256.8	6.2
20°-30°	377.9	9.2
30°-40°	439.3	10.6
40°-50°	439.3	10.6
50°-60°	384.2	9.3
60°-70°	285.2	6.9
70°-80°	161.8	3.9
80°-90°	47.6	1.2
90°-100°	38.6	0.9
100°-110°	115.7	2.8
110°-120°	196.5	4.8
120°-130°	259.1	6.3
130°-140°	291.1	7.1
140°-150°	286.1	6.9
150°-160°	240.6	5.8
160°-170°	160.1	3.9
170°-180°	56.1	1.4
0°-30°	725.8	17.6
0°-40°	1165.1	28.2
0°-60°	1988.6	48.2
0°-90°	2483.3	60.2
90°-120°	350.7	8.5
90°-150°	1187.0	28.8
90°-180°	1644.0	39.8
0°-180°	4127.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	967	967	967	967	967	
5°	966	963	955	963	962	92
15°	920	917	905	910	907	259
25°	833	828	817	818	814	383
35°	717	711	700	695	691	448
45°	585	580	567	559	556	451
55°	442	440	429	420	415	396
65°	300	296	288	280	277	297
75°	160	156	152	149	148	169
85°	42	42	40	40	40	45
90°	1	6	10	13	14	5
95°	28	32	35	36	36	30
105°	107	107	109	110	112	113
115°	200	200	199	198	198	197
125°	291	291	290	290	289	259
135°	375	378	378	377	376	290
145°	456	458	458	458	456	285
155°	522	522	522	524	522	240
165°	569	567	566	569	567	160
175°	592	589	589	592	589	56
180°	592	592	592	592	592	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	967.0	967.0	967.0	967.0	967.0
2.5°	970.1	967.8	959.3	967.0	966.2
5°	966.2	963.1	954.6	963.1	961.6
7.5°	959.3	956.2	946.9	953.8	953.1
10°	949.2	946.1	936.0	942.2	940.7
12.5°	936.0	932.9	922.1	929.0	926.7
15°	919.7	916.6	905.0	909.7	907.3
17.5°	901.1	897.3	886.4	889.5	888.0
20°	880.2	876.3	864.7	867.0	865.5
22.5°	857.7	852.3	840.7	845.4	842.3
25°	833.0	827.5	816.7	817.5	814.4
27.5°	805.1	799.6	789.6	788.0	784.1
30°	777.2	771.0	760.9	757.8	753.9
32.5°	747.7	742.3	731.5	727.6	723.7
35°	716.7	711.3	700.5	695.0	691.2
37.5°	684.2	679.5	667.9	662.5	657.1
40°	652.4	646.2	634.6	626.8	623.0
42.5°	618.3	615.2	602.1	592.8	590.4
45°	585.0	579.6	567.2	558.7	556.3
47.5°	550.1	546.3	534.6	525.3	519.1
50°	514.5	511.4	500.5	489.7	485.1
52.5°	479.6	475.8	464.1	454.8	448.6
55°	442.4	440.1	429.3	420.0	415.3
57.5°	407.6	405.2	394.4	385.1	380.4
60°	371.1	367.3	357.2	350.2	346.4
62.5°	335.5	332.4	321.6	315.4	311.5
65°	299.9	296.0	288.2	280.5	276.6
67.5°	263.4	260.3	252.6	244.8	244.1
70°	230.1	224.7	218.5	212.3	210.0
72.5°	194.5	189.1	184.4	179.8	177.4
75°	159.6	155.7	151.9	148.8	148.0
77.5°	125.5	124.0	120.1	119.3	117.0
80°	95.3	93.0	91.4	89.9	89.1
82.5°	65.9	65.1	65.1	64.3	63.5
85°	41.8	41.8	40.3	40.3	39.5
87.5°	20.1	19.4	18.6	18.6	18.6
90°	1.4	6.4	10.1	12.8	13.7
92.5°	11.9	17.9	20.2	21.5	22.0
95°	27.5	31.6	34.8	36.2	36.2
97.5°	44.0	47.6	51.3	53.1	53.1
100°	64.1	66.0	70.1	71.0	71.0
102.5°	85.2	85.7	89.3	90.7	91.2
105°	106.8	107.2	109.0	110.4	111.8
107.5°	129.2	129.7	130.1	132.0	131.5
110°	152.1	153.0	152.6	151.7	153.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.9	175.9	175.0	175.0	175.0
115°	199.8	199.8	198.8	198.4	197.9
117.5°	222.2	222.2	221.8	220.4	219.0
120°	244.7	246.5	245.1	242.8	243.7
122.5°	268.0	268.5	268.0	266.7	264.4
125°	290.9	290.9	290.5	289.6	288.6
127.5°	311.6	312.9	312.0	311.1	310.6
130°	333.5	334.9	334.9	334.0	332.2
132.5°	356.0	356.9	356.5	355.5	355.1
135°	375.2	378.0	378.0	377.1	375.7
137.5°	396.8	398.2	399.1	397.7	398.2
140°	418.3	419.2	419.2	418.8	418.3
142.5°	438.0	438.9	438.5	438.5	438.5
145°	455.9	457.7	458.2	457.7	456.3
147.5°	474.2	476.5	476.0	475.6	475.1
150°	490.7	492.5	492.5	492.5	492.1
152.5°	506.3	507.2	507.7	509.0	507.7
155°	522.3	522.3	521.9	523.7	521.9
157.5°	536.1	535.1	535.1	536.5	535.1
160°	548.0	547.5	547.1	548.4	546.1
162.5°	559.0	557.6	557.1	559.9	557.6
165°	568.6	567.2	566.3	569.0	567.2
167.5°	576.4	574.5	574.5	577.3	574.5
170°	582.8	580.5	581.0	583.7	580.5
172.5°	587.4	585.5	585.5	588.7	585.5
175°	591.5	589.2	588.7	592.0	588.7
177.5°	593.3	591.0	591.0	594.2	590.6
180°	592.4	592.4	592.4	592.4	592.4

(END OF REPORT)