

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: P1033622

Luminaire Tested: S124DIW-B575D470UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033622
REPORT IS A COMBINATION OF REPORTS P997814 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D470UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

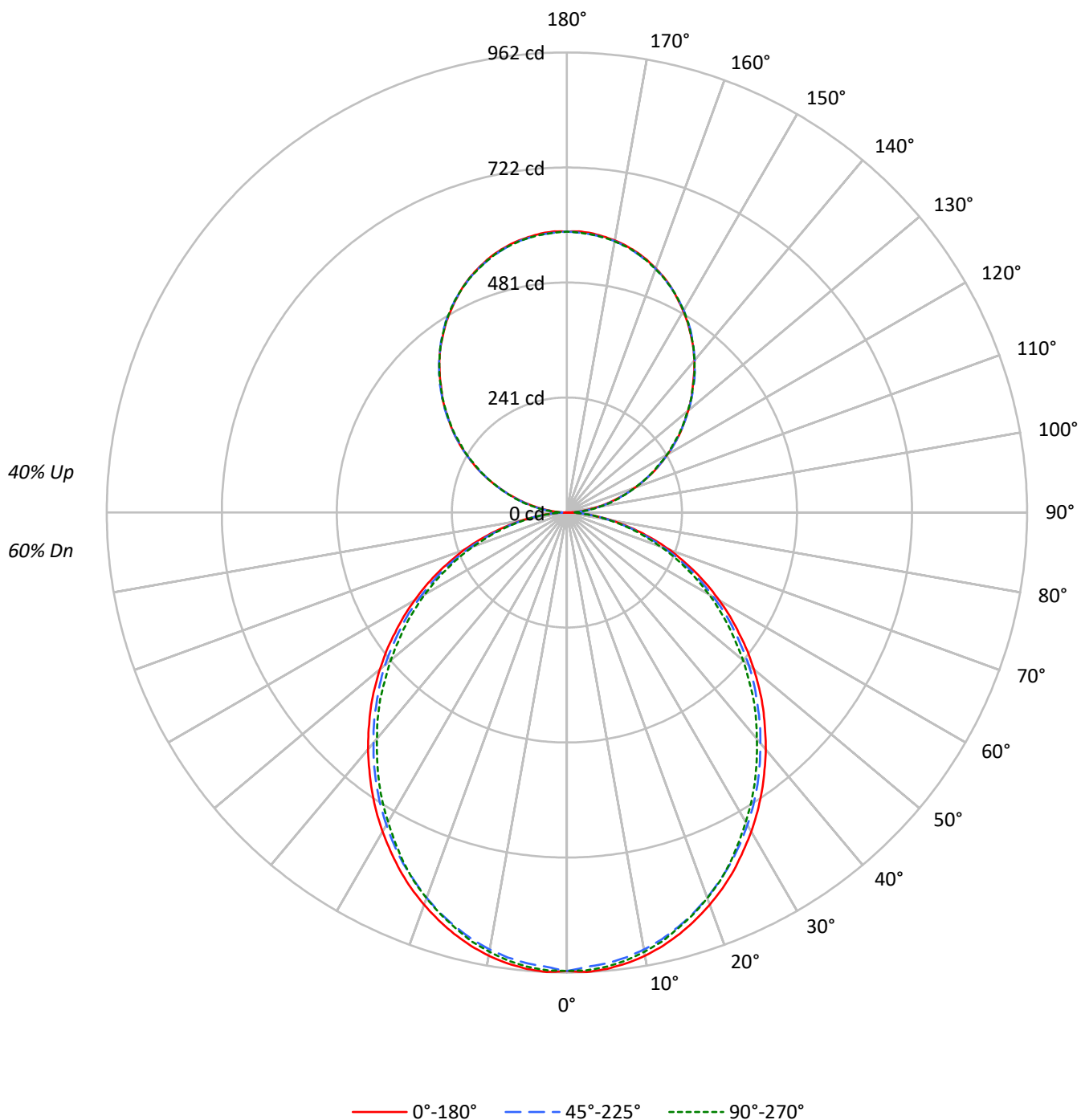
Lumens per Lamp: N/A
Luminaire Lumens: 4092.0 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 37.2
Input Voltage (V):
Input Current (A_{in}): 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°	7819	7819	7819
5°	7826	7594	7603
10°	7759	7383	7331
15°	7648	7133	7025
20°	7506	6861	6708
25°	7345	6575	6366
30°	7153	6265	5990
35°	6953	5948	5628
40°	6745	5607	5242
45°	6527	5265	4882
50°	6284	4933	4482
55°	6022	4545	4086
60°	5753	4121	3673
65°	5445	3683	3208
70°	5091	3156	2709
75°	4562	2543	2169
80°	3887	1839	1527
85°	3020	1025	822

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6527 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	2.2
10°-20°	254.6	6.2
20°-30°	374.7	9.2
30°-40°	435.6	10.6
40°-50°	435.5	10.6
50°-60°	380.9	9.3
60°-70°	282.8	6.9
70°-80°	160.5	3.9
80°-90°	47.2	1.2
90°-100°	38.3	0.9
100°-110°	114.7	2.8
110°-120°	194.8	4.8
120°-130°	256.9	6.3
130°-140°	288.6	7.1
140°-150°	283.6	6.9
150°-160°	238.5	5.8
160°-170°	158.7	3.9
170°-180°	55.6	1.4
0°-30°	719.7	17.6
0°-40°	1155.3	28.2
0°-60°	1971.8	48.2
0°-90°	2462.3	60.2
90°-120°	347.8	8.5
90°-150°	1176.9	28.8
90°-180°	1630.0	39.8
0°-180°	4092.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	958	955	946	955	953	91
15°	912	909	897	902	900	257
25°	826	820	810	810	808	380
35°	711	705	694	689	685	444
45°	580	575	562	554	552	447
55°	439	436	426	416	412	393
65°	297	294	286	278	274	294
75°	158	154	151	148	147	168
85°	42	42	40	40	39	45
90°	1	6	10	13	14	5
95°	27	31	34	36	36	30
105°	106	106	108	110	111	112
115°	198	198	197	197	196	195
125°	288	288	288	287	286	257
135°	372	375	375	374	372	288
145°	452	454	454	454	452	283
155°	518	518	517	519	517	238
165°	564	562	562	564	562	159
175°	586	584	584	587	584	56
180°	587	587	587	587	587	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	958.8	958.8	958.8	958.8	958.8
2.5°	961.9	959.6	951.1	958.8	958.1
5°	958.1	955.0	946.5	955.0	953.4
7.5°	951.1	948.1	938.8	945.8	945.0
10°	941.2	938.1	928.1	934.2	932.7
12.5°	928.1	925.0	914.3	921.2	918.9
15°	912.0	908.9	897.4	902.0	899.7
17.5°	893.5	889.7	878.9	882.0	880.5
20°	872.8	868.9	857.4	859.7	858.2
22.5°	850.5	845.1	833.6	838.2	835.1
25°	825.9	820.5	809.8	810.5	807.5
27.5°	798.2	792.9	782.9	781.3	777.5
30°	770.6	764.4	754.5	751.4	747.5
32.5°	741.4	736.0	725.3	721.4	717.6
35°	710.7	705.3	694.5	689.2	685.3
37.5°	678.4	673.8	662.3	656.9	651.5
40°	646.9	640.8	629.2	621.5	617.7
42.5°	613.1	610.0	597.0	587.7	585.4
45°	580.1	574.7	562.4	553.9	551.6
47.5°	545.5	541.6	530.1	520.9	514.8
50°	510.1	507.1	496.3	485.6	480.9
52.5°	475.6	471.7	460.2	451.0	444.8
55°	438.7	436.4	425.6	416.4	411.8
57.5°	404.1	401.8	391.1	381.8	377.2
60°	368.0	364.2	354.2	347.3	343.4
62.5°	332.7	329.6	318.8	312.7	308.9
65°	297.3	293.5	285.8	278.1	274.3
67.5°	261.2	258.1	250.5	242.8	242.0
70°	228.2	222.8	216.7	210.5	208.2
72.5°	192.8	187.5	182.9	178.2	175.9
75°	158.3	154.4	150.6	147.5	146.7
77.5°	124.5	122.9	119.1	118.3	116.0
80°	94.5	92.2	90.7	89.1	88.4
82.5°	65.3	64.5	64.5	63.8	63.0
85°	41.5	41.5	40.0	40.0	39.2
87.5°	20.0	19.2	18.4	18.4	18.4
90°	1.4	6.4	10.0	12.7	13.6
92.5°	11.8	17.7	20.0	21.4	21.8
95°	27.3	31.3	34.5	35.9	35.9
97.5°	43.6	47.2	50.9	52.7	52.7
100°	63.6	65.4	69.5	70.4	70.4
102.5°	84.5	84.9	88.6	89.9	90.4
105°	105.8	106.3	108.1	109.5	110.8
107.5°	128.1	128.6	129.0	130.8	130.4
110°	150.8	151.7	151.3	150.4	151.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.4	174.4	173.5	173.5	173.5
115°	198.1	198.1	197.2	196.7	196.2
117.5°	220.3	220.3	219.9	218.5	217.1
120°	242.6	244.4	243.0	240.8	241.7
122.5°	265.7	266.2	265.7	264.4	262.1
125°	288.5	288.5	288.0	287.1	286.2
127.5°	308.9	310.3	309.4	308.5	308.0
130°	330.7	332.1	332.1	331.2	329.3
132.5°	353.0	353.9	353.4	352.5	352.1
135°	372.0	374.8	374.8	373.9	372.5
137.5°	393.4	394.8	395.7	394.3	394.8
140°	414.7	415.7	415.7	415.2	414.7
142.5°	434.3	435.2	434.7	434.7	434.7
145°	452.0	453.8	454.3	453.8	452.5
147.5°	470.2	472.4	472.0	471.5	471.1
150°	486.5	488.3	488.3	488.3	487.9
152.5°	502.0	502.9	503.3	504.7	503.3
155°	517.9	517.9	517.4	519.2	517.4
157.5°	531.5	530.6	530.6	532.0	530.6
160°	543.3	542.9	542.4	543.8	541.5
162.5°	554.2	552.8	552.4	555.1	552.8
165°	563.8	562.4	561.5	564.2	562.4
167.5°	571.5	569.7	569.7	572.4	569.7
170°	577.8	575.6	576.0	578.7	575.6
172.5°	582.4	580.6	580.6	583.7	580.6
175°	586.5	584.2	583.7	586.9	583.7
177.5°	588.3	586.0	586.0	589.2	585.6
180°	587.4	587.4	587.4	587.4	587.4

(END OF REPORT)