

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: P1033473

Luminaire Tested: S124DIW-B350D470UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033473
REPORT IS A COMBINATION OF REPORTS P997481 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D470UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

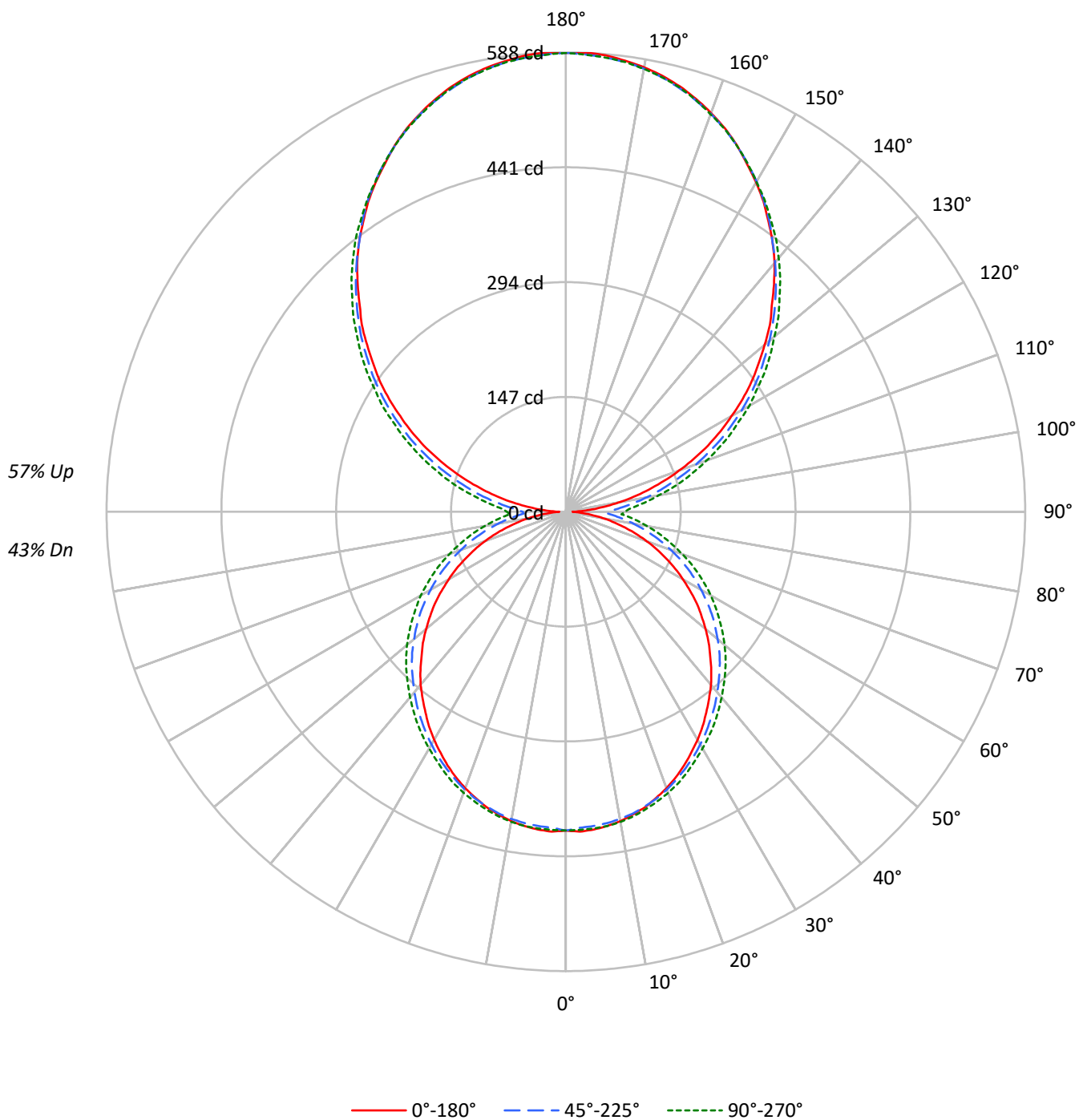
Lumens per Lamp: N/A
Luminaire Lumens: 3022.0 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 26.2
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	49	49	49
1	95	91	86	83	87	83	79	76	68	66	63	55	53	51	42	41	40
2	86	79	72	67	78	72	66	62	59	55	52	47	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	52	46	65	55	48	43	46	40	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	25	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	18	16	18	15	13
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3327	3327	3327
5°	3336	3240	3246
10°	3314	3176	3168
15°	3283	3105	3079
20°	3238	3027	2993
25°	3186	2942	2900
30°	3130	2857	2805
35°	3066	2770	2720
40°	3015	2687	2633
45°	2940	2609	2555
50°	2877	2520	2474
55°	2810	2435	2380
60°	2707	2328	2292
65°	2593	2214	2186
70°	2456	2082	2062
75°	2265	1937	1946
80°	2048	1789	1822
85°	1761	1640	1723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2940 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	1.3
10°-20°	110.8	3.7
20°-30°	167.5	5.5
30°-40°	202.6	6.7
40°-50°	214.2	7.1
50°-60°	201.6	6.7
60°-70°	167.3	5.5
70°-80°	117.4	3.9
80°-90°	67.4	2.2
90°-100°	77.7	2.6
100°-110°	143.8	4.8
110°-120°	214.4	7.1
120°-130°	268.0	8.9
130°-140°	293.3	9.7
140°-150°	284.6	9.4
150°-160°	238.6	7.9
160°-170°	158.7	5.3
170°-180°	55.6	1.8
0°-30°	316.9	10.5
0°-40°	519.5	17.2
0°-60°	935.3	30.9
0°-90°	1287.4	42.6
90°-120°	435.9	14.4
90°-150°	1281.8	42.4
90°-180°	1735.0	57.4
0°-180°	3022.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	408	407	404	408	407	39
15°	392	392	391	395	394	110
25°	358	361	362	367	368	165
35°	313	319	324	330	331	196
45°	261	270	279	286	289	202
55°	205	214	228	237	240	182
65°	142	156	172	183	187	140
75°	79	96	115	128	132	84
85°	24	43	64	78	82	25
90°	9	32	55	71	76	7
95°	33	52	74	88	92	34
105°	110	120	138	151	156	117
115°	201	205	219	228	231	198
125°	290	290	301	309	310	259
135°	373	376	379	385	387	289
145°	452	454	454	456	457	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°	408.0	408.0	408.0	408.0	408.0
2.5°	409.8	408.4	404.8	408.0	407.5
5°	408.4	407.1	403.9	407.5	407.1
7.5°	405.7	404.8	402.0	406.2	405.7
10°	402.0	401.6	399.3	403.4	403.0
12.5°	397.0	397.0	395.7	399.3	399.3
15°	391.5	392.0	390.6	394.7	394.3
17.5°	384.2	385.6	385.1	389.3	388.8
20°	376.5	377.8	378.3	382.9	382.9
22.5°	367.8	369.6	370.5	375.1	376.0
25°	358.2	360.9	362.3	367.3	367.8
27.5°	347.7	351.8	353.6	358.2	358.6
30°	337.2	340.8	344.0	349.1	350.0
32.5°	325.8	330.3	334.0	339.9	340.8
35°	313.4	318.9	323.5	329.9	331.2
37.5°	301.1	307.5	313.0	319.4	320.7
40°	289.2	295.1	301.5	308.4	310.2
42.5°	275.5	282.3	290.1	297.9	299.3
45°	261.3	270.0	278.7	286.5	288.7
47.5°	248.1	256.8	266.8	274.6	277.3
50°	233.5	243.5	253.6	262.7	265.4
52.5°	218.8	228.9	240.8	249.9	252.7
55°	204.7	214.3	228.0	237.1	239.9
57.5°	188.7	200.6	213.8	224.8	227.1
60°	173.2	185.0	200.1	210.6	214.3
62.5°	158.1	171.3	186.4	196.9	200.6
65°	141.6	156.3	171.8	183.2	186.9
67.5°	126.1	141.6	158.1	169.5	173.2
70°	110.1	125.6	143.0	155.3	158.5
72.5°	94.6	110.6	129.3	141.2	144.8
75°	78.6	95.5	114.7	127.5	131.6
77.5°	63.5	81.3	101.4	114.2	118.8
80°	49.8	68.1	88.2	101.9	105.5
82.5°	36.1	55.3	75.4	89.5	93.7
85°	24.2	43.4	64.0	77.7	82.2
87.5°	15.1	33.8	53.9	67.2	71.3
90°	8.7	32.0	55.2	71.2	75.7
92.5°	18.7	40.5	62.5	76.7	80.7
95°	33.2	52.3	74.2	88.0	92.1
97.5°	49.1	65.9	88.4	102.0	106.2
100°	68.6	82.3	104.2	117.5	120.7
102.5°	89.5	100.0	121.0	134.2	138.4
105°	109.9	119.5	138.3	151.1	156.0
107.5°	132.2	140.5	156.9	170.1	172.9
110°	154.5	161.8	177.3	186.9	191.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.6	183.1	197.3	207.3	211.0
115°	200.8	205.0	218.7	228.2	230.9
117.5°	223.0	225.8	239.1	247.3	249.5
120°	244.9	248.1	259.9	266.8	271.4
122.5°	268.0	268.5	280.3	288.2	289.1
125°	290.3	289.9	300.8	308.6	310.4
127.5°	310.7	311.7	319.9	327.2	329.9
130°	332.1	333.0	340.3	347.6	348.5
132.5°	354.4	354.8	359.8	366.7	369.0
135°	372.9	375.7	378.9	385.3	386.7
137.5°	394.3	395.3	398.0	403.4	406.2
140°	415.6	416.2	416.6	422.1	423.8
142.5°	434.8	435.7	434.7	439.7	441.6
145°	452.5	453.8	454.3	456.5	457.1
147.5°	470.7	472.4	472.0	472.0	473.4
150°	487.0	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)