

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: P1031665

Luminaire Tested: S123DIW-B340D460UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031665
REPORT IS A COMBINATION OF REPORTS P991441 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D460UB50-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

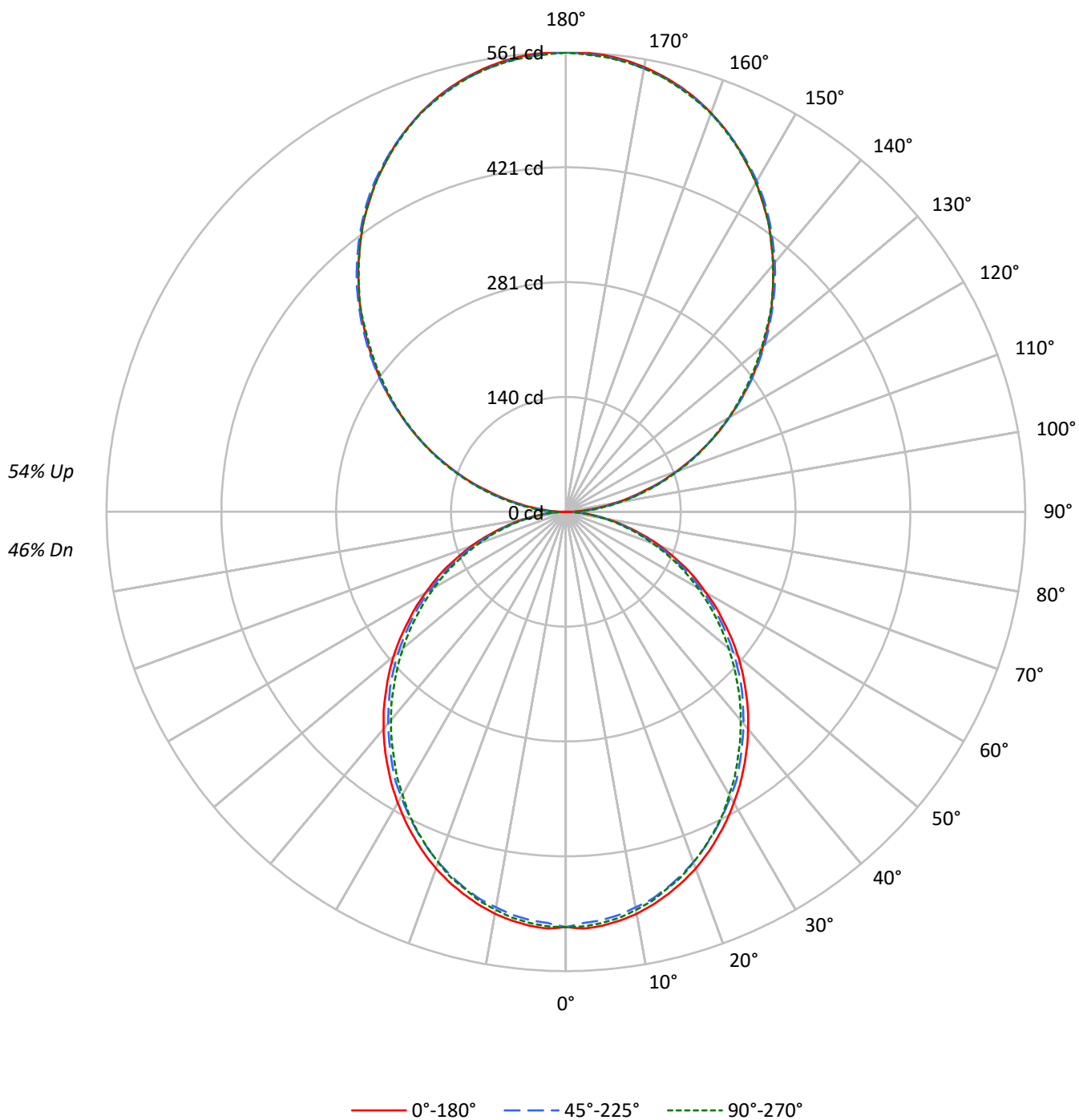
Lumens per Lamp: N/A
Luminaire Lumens: 2875.0 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	97	92	89	85	89	85	82	79	71	69	66	58	56	55	46	45	44
2	88	81	75	69	81	74	69	64	62	58	55	51	48	46	41	39	37
3	80	71	64	58	73	65	59	54	55	50	46	45	42	39	36	34	32
4	73	63	55	49	67	58	51	46	49	43	39	40	36	33	32	29	27
5	67	56	48	42	62	52	44	39	43	38	34	36	32	29	29	26	24
6	62	50	42	36	57	46	39	34	39	34	29	32	28	25	26	23	21
7	57	45	37	32	52	42	35	30	35	30	26	30	25	22	24	21	18
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17
9	50	37	30	25	45	35	28	23	30	24	21	25	21	18	20	17	15
10	46	34	27	22	42	32	25	21	27	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5459	5459	5459
5°	5473	5271	5263
10°	5425	5092	5041
15°	5349	4907	4798
20°	5263	4701	4557
25°	5150	4483	4300
30°	5028	4259	4029
35°	4900	4029	3760
40°	4766	3787	3496
45°	4617	3552	3220
50°	4467	3291	2943
55°	4274	3017	2662
60°	4077	2717	2363
65°	3890	2391	2051
70°	3622	2029	1687
75°	3233	1607	1310
80°	2796	1130	925
85°	2180	607	463

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4617 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	1.7
10°-20°	135.0	4.7
20°-30°	199.4	6.9
30°-40°	232.9	8.1
40°-50°	234.1	8.1
50°-60°	205.7	7.2
60°-70°	153.2	5.3
70°-80°	87.2	3.0
80°-90°	26.0	0.9
90°-100°	36.1	1.3
100°-110°	109.3	3.8
110°-120°	186.0	6.5
120°-130°	244.7	8.5
130°-140°	275.0	9.6
140°-150°	270.4	9.4
150°-160°	227.7	7.9
160°-170°	151.6	5.3
170°-180°	53.1	1.8
0°-30°	382.2	13.3
0°-40°	615.1	21.4
0°-60°	1054.9	36.7
0°-90°	1321.2	46.0
90°-120°	331.4	11.5
90°-150°	1121.5	39.0
90°-180°	1554.0	54.1
0°-180°	2875.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	508	505	501	505	504	48
15°	483	482	476	479	477	136
25°	439	436	430	431	430	202
35°	379	377	371	368	366	237
45°	311	309	304	298	296	240
55°	236	236	230	225	223	211
65°	161	159	154	151	150	159
75°	85	83	82	80	78	91
85°	23	22	22	21	21	24
90°	0	5	11	12	13	3
95°	26	29	33	34	34	29
105°	99	100	104	104	105	106
115°	187	188	188	188	188	185
125°	274	275	274	273	271	244
135°	356	358	358	356	355	274
145°	431	432	434	433	431	269
155°	494	494	494	496	493	227
165°	538	536	536	539	536	152
175°	560	558	558	560	557	53
180°	561	561	561	561	561	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	507.2	507.2	507.2	507.2	507.2
2.5°	509.4	507.6	502.8	507.2	506.8
5°	507.6	505.4	500.7	505.0	504.1
7.5°	503.7	501.5	496.7	500.7	500.2
10°	498.5	496.3	490.6	494.5	493.7
12.5°	491.5	489.7	484.5	487.1	486.7
15°	483.2	481.5	475.8	479.3	476.7
17.5°	474.0	471.9	466.2	468.8	467.9
20°	463.6	461.0	455.3	457.0	455.7
22.5°	451.8	449.2	443.5	444.8	443.1
25°	438.7	436.1	430.4	430.9	429.6
27.5°	425.2	422.6	416.5	416.9	415.6
30°	410.4	408.2	402.1	402.1	399.0
32.5°	395.5	392.5	388.1	385.1	383.8
35°	379.4	376.8	371.1	368.5	366.3
37.5°	363.3	359.8	354.1	351.1	349.8
40°	346.3	343.7	337.5	334.1	332.3
42.5°	329.3	326.2	320.1	316.6	314.9
45°	310.9	309.2	303.5	298.3	296.1
47.5°	293.1	290.4	285.2	280.0	278.2
50°	274.7	272.6	266.9	262.1	259.5
52.5°	255.6	254.3	248.1	244.2	241.6
55°	235.9	235.5	229.8	225.0	222.9
57.5°	217.6	215.9	211.5	207.2	204.5
60°	197.6	197.1	191.9	188.0	185.8
62.5°	179.7	178.4	173.1	169.2	167.9
65°	160.9	158.7	154.4	150.9	149.6
67.5°	140.9	139.1	135.6	132.6	130.8
70°	123.0	120.4	117.7	114.7	112.5
72.5°	104.2	102.5	99.4	96.8	95.9
75°	85.0	83.3	82.0	79.8	78.5
77.5°	68.0	67.2	65.4	63.7	63.7
80°	51.5	50.2	49.3	48.8	48.8
82.5°	35.3	35.3	35.3	34.5	34.0
85°	22.7	21.8	21.8	20.9	20.9
87.5°	11.3	10.0	9.6	9.2	9.2
90°	0.4	4.8	10.6	12.3	13.2
92.5°	13.2	15.9	18.5	19.8	18.9
95°	26.0	29.1	32.6	34.4	34.4
97.5°	42.7	44.9	47.6	49.8	49.3
100°	59.9	62.6	64.8	66.1	67.0
102.5°	79.7	81.1	84.1	85.5	85.0
105°	99.1	100.0	104.0	104.0	104.8
107.5°	122.0	122.5	124.2	125.5	125.1
110°	143.2	144.0	144.9	146.7	145.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.2	165.6	165.6	167.8	167.8
115°	187.2	188.5	187.7	188.1	187.7
117.5°	209.7	210.1	209.2	209.2	207.9
120°	230.4	233.0	230.8	230.4	229.5
122.5°	252.0	253.7	252.9	251.5	250.2
125°	274.0	275.3	274.4	272.7	270.9
127.5°	294.3	296.9	296.0	293.4	291.6
130°	314.5	318.1	316.7	315.0	311.9
132.5°	334.8	338.3	337.4	335.2	333.0
135°	355.5	358.1	357.7	355.9	355.1
137.5°	374.4	376.6	378.0	375.8	374.4
140°	394.3	396.5	396.9	396.5	393.4
142.5°	412.3	414.5	415.4	415.0	412.8
145°	431.3	432.1	433.5	433.0	431.3
147.5°	447.6	449.3	450.6	450.6	448.0
150°	464.7	465.6	466.5	466.5	463.9
152.5°	478.8	480.2	480.6	481.5	479.3
155°	493.8	493.8	494.3	496.0	492.9
157.5°	506.6	506.2	506.6	508.4	505.7
160°	518.5	517.6	517.6	519.8	518.0
162.5°	529.1	527.7	528.2	530.4	527.3
165°	537.9	536.5	536.5	539.2	536.1
167.5°	545.4	543.6	544.0	546.7	544.0
170°	551.5	549.8	549.8	552.8	549.8
172.5°	556.4	554.6	554.6	557.3	554.2
175°	559.5	557.7	557.7	560.3	557.3
177.5°	561.2	559.5	559.5	562.1	559.0
180°	560.8	560.8	560.8	560.8	560.8

(END OF REPORT)