

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: P1031664

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031664
REPORT IS A COMBINATION OF REPORTS P991440 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-F
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

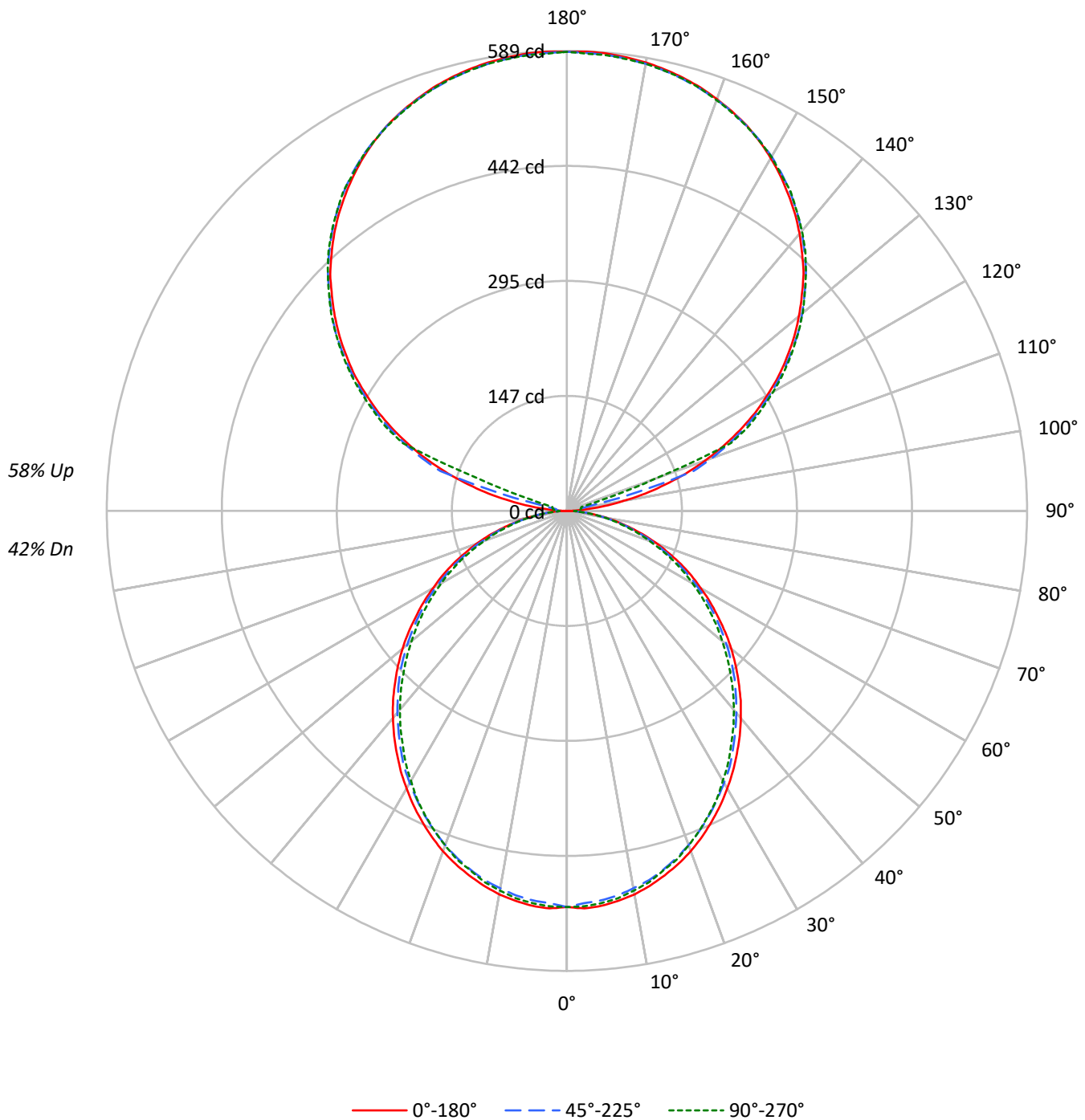
Lumens per Lamp: N/A
Luminaire Lumens: 3112.9 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	41
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	32	30
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25
5	67	55	47	41	61	51	44	39	42	37	33	35	31	28	27	24	22
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	22	20	17
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13

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	1.5
10°-20°	135.0	4.3
20°-30°	199.4	6.4
30°-40°	232.9	7.5
40°-50°	234.1	7.5
50°-60°	205.7	6.6
60°-70°	153.2	4.9
70°-80°	87.2	2.8
80°-90°	26.0	0.8
90°-100°	20.7	0.7
100°-110°	100.2	3.2
110°-120°	245.6	7.9
120°-130°	311.7	10.0
130°-140°	333.0	10.7
140°-150°	311.4	10.0
150°-160°	251.2	8.1
160°-170°	162.1	5.2
170°-180°	55.9	1.8
0°-30°	382.2	12.3
0°-40°	615.1	19.8
0°-60°	1054.9	33.9
0°-90°	1321.2	42.4
90°-120°	366.5	11.8
90°-150°	1322.6	42.5
90°-180°	1792.0	57.6
0°-180°	3112.9	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	10	12	13	3
95°	27	9	14	17	17	32
105°	130	135	96	18	19	138
115°	244	247	251	255	257	241
125°	344	348	349	350	351	307
135°	428	431	433	434	433	330
145°	494	497	498	499	499	309
155°	544	544	544	546	544	251
165°	574	573	572	576	573	162
175°	588	586	586	589	586	56
180°	588	588	588	588	588	

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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	10.5	12.2	13.1
92.5°	10.0	7.4	11.4	14.4	14.8
95°	26.6	8.7	13.5	16.6	16.6
97.5°	48.5	36.2	14.0	17.5	17.9
100°	73.8	82.5	14.4	17.9	18.3
102.5°	102.6	108.3	32.3	17.9	18.8
105°	130.1	134.9	95.6	18.3	19.2
107.5°	159.4	163.3	169.9	102.6	45.4
110°	188.6	192.1	196.9	182.5	120.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	216.6	219.6	224.4	228.4	227.5
115°	244.1	246.7	250.6	255.0	256.8
117.5°	271.2	274.2	276.4	279.9	280.3
120°	296.1	300.0	301.3	304.8	304.8
122.5°	321.4	324.4	326.2	328.4	328.8
125°	344.1	347.6	349.3	350.2	351.1
127.5°	366.8	370.3	372.5	373.8	372.9
130°	387.8	391.3	393.0	394.7	393.9
132.5°	407.8	411.3	412.7	414.4	413.1
135°	428.4	431.0	432.7	434.0	432.7
137.5°	445.8	449.3	450.2	452.4	451.5
140°	463.3	465.9	467.2	469.0	468.1
142.5°	479.5	482.1	483.4	484.7	483.4
145°	494.3	497.4	498.2	499.1	499.1
147.5°	508.7	510.9	511.8	512.6	510.5
150°	521.8	523.1	524.0	524.9	523.6
152.5°	533.6	534.0	534.5	536.2	534.0
155°	544.5	543.7	544.1	546.3	543.7
157.5°	553.3	553.3	552.8	555.4	551.9
160°	561.1	560.7	560.2	562.9	559.8
162.5°	568.5	567.2	566.8	569.9	567.2
165°	574.2	572.9	572.5	576.0	572.9
167.5°	579.0	577.3	577.3	580.8	577.3
170°	583.0	581.2	581.2	584.7	581.2
172.5°	585.6	583.4	583.8	587.3	583.4
175°	587.8	585.6	586.0	589.1	585.6
177.5°	588.6	586.4	586.9	590.4	586.0
180°	587.8	587.8	587.8	587.8	587.8

(END OF REPORT)