

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: P1031653

Luminaire Tested: S123DIW-B340D460UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031653
REPORT IS A COMBINATION OF REPORTS P991423 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D460UB35-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

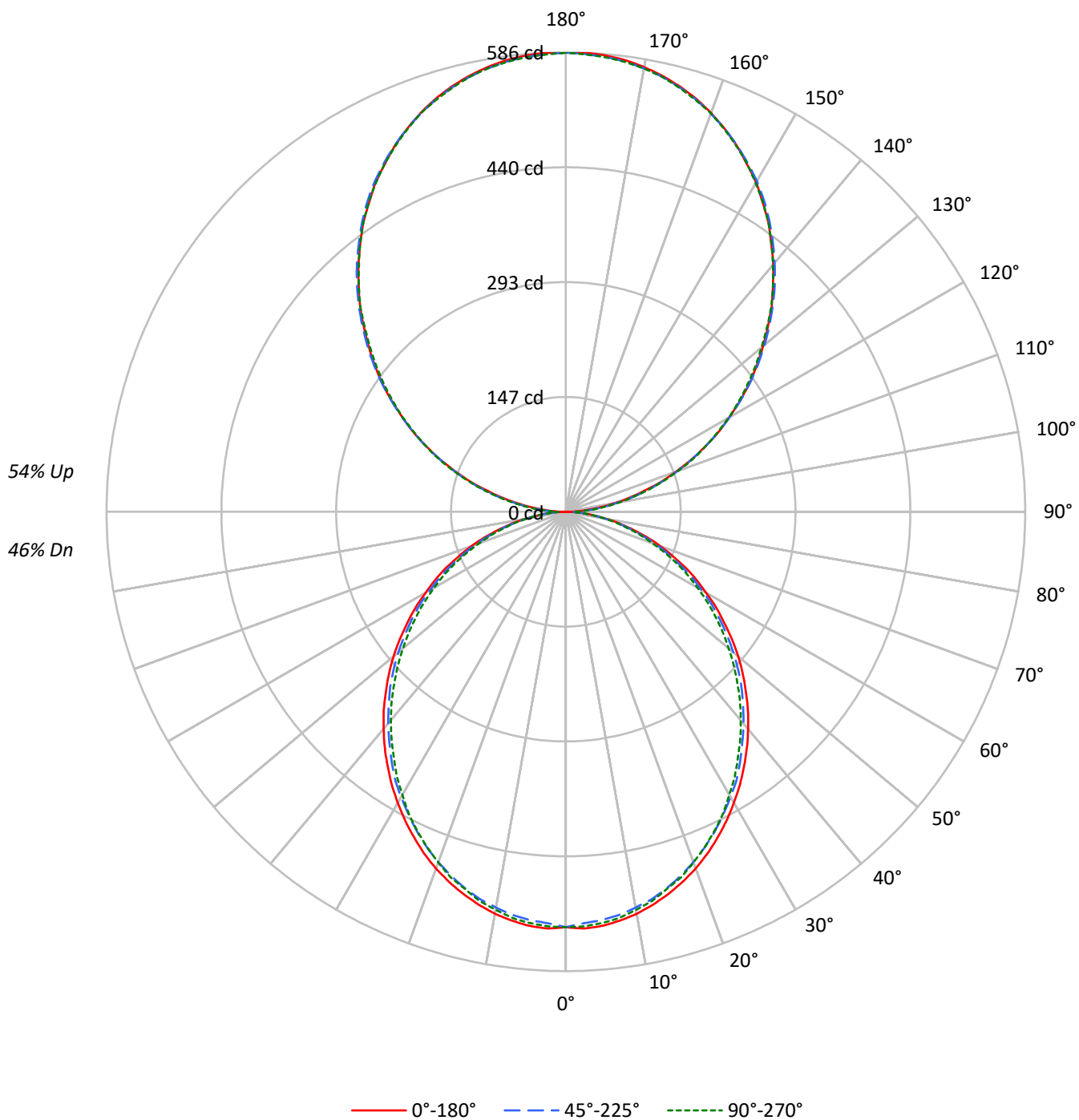
Lumens per Lamp: N/A
Luminaire Lumens: 3003.0 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	53	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°	5704	5704	5704
5°	5717	5506	5499
10°	5667	5321	5265
15°	5588	5127	5012
20°	5497	4911	4761
25°	5380	4684	4492
30°	5253	4449	4210
35°	5119	4209	3928
40°	4978	3957	3653
45°	4824	3712	3364
50°	4667	3438	3074
55°	4466	3153	2780
60°	4259	2839	2468
65°	4064	2498	2143
70°	3784	2120	1762
75°	3378	1680	1368
80°	2921	1180	967
85°	2276	635	485

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4824 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	1.7
10°-20°	141.0	4.7
20°-30°	208.3	6.9
30°-40°	243.3	8.1
40°-50°	244.6	8.1
50°-60°	214.8	7.2
60°-70°	160.0	5.3
70°-80°	91.1	3.0
80°-90°	27.1	0.9
90°-100°	37.7	1.3
100°-110°	114.1	3.8
110°-120°	194.3	6.5
120°-130°	255.6	8.5
130°-140°	287.3	9.6
140°-150°	282.4	9.4
150°-160°	237.8	7.9
160°-170°	158.3	5.3
170°-180°	55.4	1.8
0°-30°	399.3	13.3
0°-40°	642.6	21.4
0°-60°	1102.0	36.7
0°-90°	1380.2	46.0
90°-120°	346.1	11.5
90°-150°	1171.3	39.0
90°-180°	1623.0	54.0
0°-180°	3003.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	530	528	523	528	527	50
15°	505	503	497	501	498	142
25°	458	456	450	450	449	211
35°	396	394	388	385	383	248
45°	325	323	317	312	309	251
55°	246	246	240	235	233	221
65°	168	166	161	158	156	166
75°	89	87	86	83	82	95
85°	24	23	23	22	22	25
90°	0	5	11	13	14	4
95°	27	30	34	36	36	30
105°	104	104	109	109	110	111
115°	196	197	196	196	196	193
125°	286	288	287	285	283	255
135°	371	374	374	372	371	286
145°	450	451	453	452	450	281
155°	516	516	516	518	515	237
165°	562	560	560	563	560	158
175°	584	582	582	585	582	56
180°	586	586	586	586	586	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	529.9	529.9	529.9	529.9	529.9
2.5°	532.1	530.3	525.3	529.9	529.4
5°	530.3	528.0	523.0	527.6	526.7
7.5°	526.2	523.9	518.9	523.0	522.6
10°	520.8	518.5	512.6	516.7	515.7
12.5°	513.5	511.6	506.2	508.9	508.5
15°	504.8	503.0	497.1	500.7	498.0
17.5°	495.2	493.0	487.0	489.8	488.9
20°	484.3	481.6	475.6	477.5	476.1
22.5°	472.0	469.3	463.3	464.7	462.9
25°	458.3	455.6	449.7	450.1	448.8
27.5°	444.2	441.5	435.1	435.6	434.2
30°	428.7	426.4	420.1	420.1	416.9
32.5°	413.2	410.0	405.5	402.3	400.9
35°	396.4	393.6	387.7	385.0	382.7
37.5°	379.5	375.9	369.9	366.8	365.4
40°	361.7	359.0	352.6	349.0	347.2
42.5°	344.0	340.8	334.4	330.8	328.9
45°	324.8	323.0	317.1	311.6	309.4
47.5°	306.2	303.4	298.0	292.5	290.7
50°	287.0	284.8	278.8	273.8	271.1
52.5°	267.0	265.6	259.2	255.1	252.4
55°	246.5	246.0	240.1	235.1	232.8
57.5°	227.3	225.5	221.0	216.4	213.7
60°	206.4	205.9	200.5	196.4	194.1
62.5°	187.7	186.3	180.9	176.8	175.4
65°	168.1	165.8	161.3	157.6	156.3
67.5°	147.2	145.3	141.7	138.5	136.7
70°	128.5	125.7	123.0	119.8	117.5
72.5°	108.9	107.1	103.9	101.1	100.2
75°	88.8	87.0	85.7	83.4	82.0
77.5°	71.1	70.2	68.3	66.5	66.5
80°	53.8	52.4	51.5	51.0	51.0
82.5°	36.9	36.9	36.9	36.0	35.5
85°	23.7	22.8	22.8	21.9	21.9
87.5°	11.8	10.5	10.0	9.6	9.6
90°	0.5	5.1	11.0	12.9	13.8
92.5°	13.8	16.6	19.3	20.7	19.8
95°	27.1	30.4	34.0	35.9	35.9
97.5°	44.6	46.9	49.7	52.0	51.5
100°	62.6	65.3	67.6	69.0	69.9
102.5°	83.3	84.7	87.9	89.3	88.8
105°	103.5	104.4	108.6	108.6	109.5
107.5°	127.4	127.9	129.7	131.1	130.7
110°	149.5	150.4	151.4	153.2	152.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	172.5	173.0	173.0	175.3	175.3
115°	195.5	196.9	196.0	196.4	196.0
117.5°	219.0	219.5	218.5	218.5	217.2
120°	240.6	243.4	241.1	240.6	239.7
122.5°	263.2	265.0	264.1	262.7	261.3
125°	286.2	287.5	286.6	284.8	282.9
127.5°	307.3	310.1	309.2	306.4	304.6
130°	328.5	332.2	330.8	328.9	325.7
132.5°	349.6	353.3	352.4	350.1	347.8
135°	371.3	374.0	373.6	371.7	370.8
137.5°	391.1	393.4	394.7	392.4	391.1
140°	411.8	414.1	414.5	414.1	410.8
142.5°	430.6	432.9	433.8	433.4	431.1
145°	450.4	451.3	452.7	452.2	450.4
147.5°	467.4	469.3	470.6	470.6	467.9
150°	485.4	486.3	487.2	487.2	484.4
152.5°	500.1	501.5	501.9	502.9	500.5
155°	515.7	515.7	516.2	518.0	514.8
157.5°	529.1	528.6	529.1	530.9	528.2
160°	541.5	540.6	540.6	542.9	541.0
162.5°	552.5	551.2	551.6	553.9	550.7
165°	561.7	560.4	560.4	563.1	559.9
167.5°	569.6	567.7	568.2	570.9	568.2
170°	576.0	574.2	574.2	577.4	574.2
172.5°	581.1	579.2	579.2	582.0	578.8
175°	584.3	582.4	582.4	585.2	582.0
177.5°	586.1	584.3	584.3	587.0	583.8
180°	585.7	585.7	585.7	585.7	585.7

(END OF REPORT)