

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: P1031647

Luminaire Tested: S123DIW-B340D460UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031647
REPORT IS A COMBINATION OF REPORTS P991414 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D460UB30-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

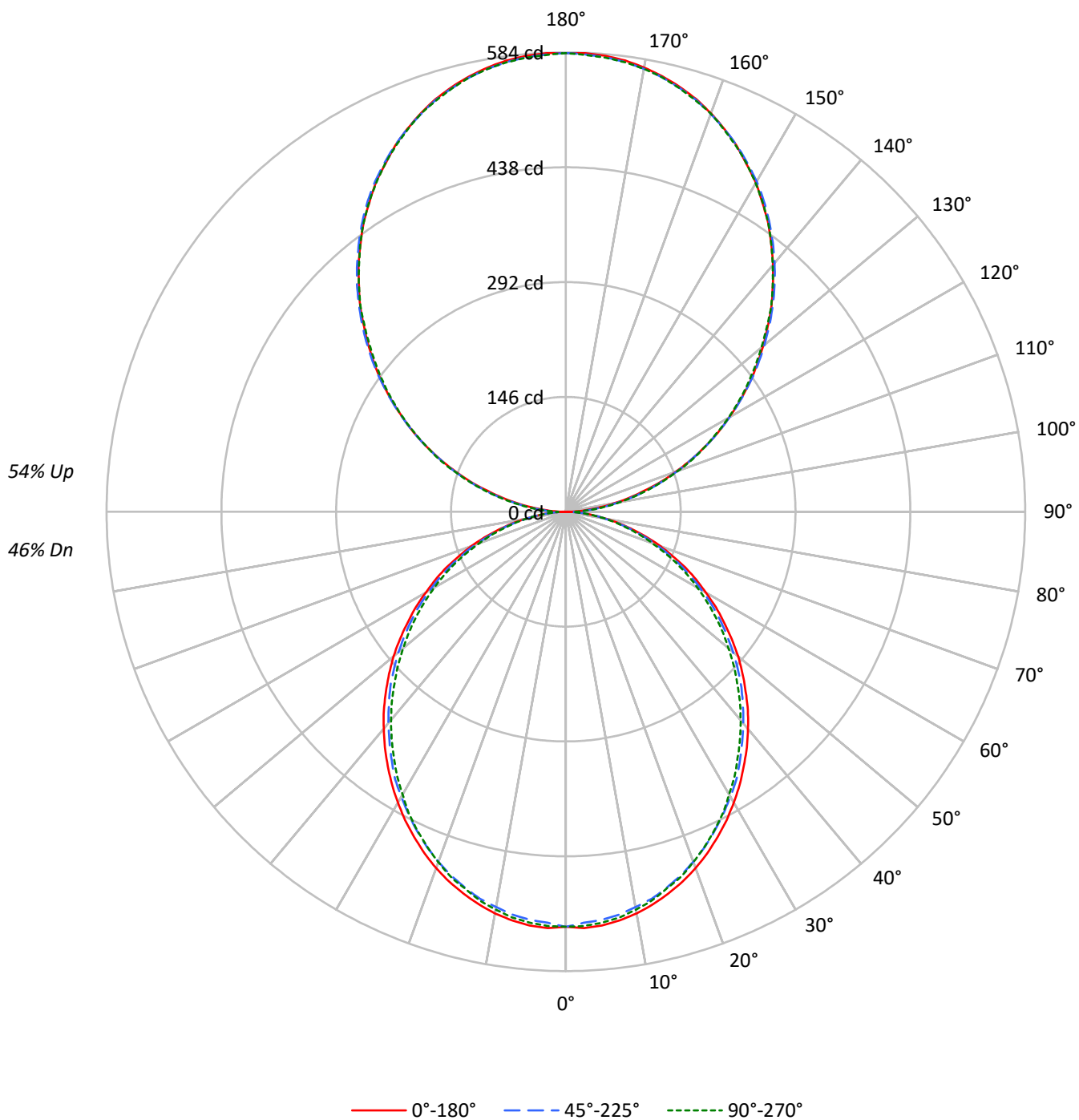
Lumens per Lamp: N/A
Luminaire Lumens: 2990.0 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	5679	5679	5679
5°	5693	5483	5475
10°	5642	5297	5243
15°	5564	5104	4990
20°	5474	4890	4740
25°	5357	4664	4472
30°	5230	4429	4191
35°	5096	4190	3911
40°	4957	3940	3637
45°	4803	3695	3349
50°	4647	3423	3061
55°	4446	3140	2769
60°	4240	2826	2457
65°	4047	2487	2133
70°	3767	2112	1754
75°	3366	1672	1363
80°	2904	1176	963
85°	2267	632	483

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4803 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.7	1.7
10°-20°	140.4	4.7
20°-30°	207.4	6.9
30°-40°	242.2	8.1
40°-50°	243.5	8.1
50°-60°	213.9	7.2
60°-70°	159.3	5.3
70°-80°	90.7	3.0
80°-90°	27.0	0.9
90°-100°	37.5	1.3
100°-110°	113.6	3.8
110°-120°	193.4	6.5
120°-130°	254.5	8.5
130°-140°	286.0	9.6
140°-150°	281.2	9.4
150°-160°	236.7	7.9
160°-170°	157.6	5.3
170°-180°	55.2	1.8
0°-30°	397.6	13.3
0°-40°	639.8	21.4
0°-60°	1097.2	36.7
0°-90°	1374.2	46.0
90°-120°	344.6	11.5
90°-150°	1166.2	39.0
90°-180°	1616.0	54.0
0°-180°	2990.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	528	528	528	528	528	
5°	528	526	521	525	524	50
15°	503	501	495	498	496	142
25°	456	454	448	448	447	210
35°	395	392	386	383	381	247
45°	323	322	316	310	308	250
55°	245	245	239	234	232	220
65°	167	165	161	157	156	165
75°	88	87	85	83	82	94
85°	24	23	23	22	22	25
90°	0	5	11	13	14	4
95°	27	30	34	36	36	30
105°	103	104	108	108	109	110
115°	195	196	195	196	195	193
125°	285	286	285	284	282	254
135°	370	372	372	370	369	285
145°	448	449	451	450	448	280
155°	514	514	514	516	513	236
165°	559	558	558	561	558	158
175°	582	580	580	583	580	55
180°	583	583	583	583	583	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	527.6	527.6	527.6	527.6	527.6
2.5°	529.8	528.0	523.0	527.6	527.1
5°	528.0	525.7	520.8	525.3	524.4
7.5°	523.9	521.7	516.7	520.8	520.3
10°	518.5	516.2	510.3	514.4	513.5
12.5°	511.2	509.4	504.0	506.7	506.2
15°	502.6	500.8	494.9	498.5	495.8
17.5°	493.1	490.8	484.9	487.6	486.7
20°	482.2	479.5	473.6	475.4	474.0
22.5°	469.9	467.2	461.3	462.7	460.9
25°	456.3	453.6	447.7	448.2	446.8
27.5°	442.3	439.6	433.2	433.7	432.3
30°	426.9	424.6	418.2	418.2	415.1
32.5°	411.4	408.3	403.7	400.5	399.2
35°	394.6	391.9	386.0	383.3	381.0
37.5°	377.9	374.2	368.3	365.2	363.8
40°	360.2	357.5	351.1	347.5	345.7
42.5°	342.5	339.3	333.0	329.3	327.5
45°	323.4	321.6	315.7	310.3	308.0
47.5°	304.8	302.1	296.7	291.2	289.4
50°	285.8	283.5	277.6	272.6	269.9
52.5°	265.8	264.5	258.1	254.0	251.3
55°	245.4	245.0	239.1	234.1	231.8
57.5°	226.4	224.5	220.0	215.5	212.7
60°	205.5	205.0	199.6	195.5	193.2
62.5°	186.9	185.5	180.1	176.0	174.6
65°	167.4	165.1	160.6	157.0	155.6
67.5°	146.5	144.7	141.1	137.9	136.1
70°	127.9	125.2	122.5	119.3	117.0
72.5°	108.4	106.6	103.4	100.7	99.8
75°	88.5	86.6	85.3	83.0	81.7
77.5°	70.8	69.9	68.0	66.2	66.2
80°	53.5	52.2	51.3	50.8	50.8
82.5°	36.7	36.7	36.7	35.8	35.4
85°	23.6	22.7	22.7	21.8	21.8
87.5°	11.8	10.4	10.0	9.5	9.5
90°	0.5	5.0	11.0	12.8	13.7
92.5°	13.7	16.5	19.2	20.6	19.7
95°	27.0	30.2	33.9	35.7	35.7
97.5°	44.4	46.7	49.5	51.8	51.3
100°	62.3	65.0	67.3	68.7	69.6
102.5°	82.9	84.3	87.5	88.9	88.4
105°	103.1	104.0	108.1	108.1	109.0
107.5°	126.9	127.3	129.2	130.6	130.1
110°	148.9	149.8	150.7	152.5	151.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	171.8	172.2	172.2	174.5	174.5
115°	194.7	196.1	195.1	195.6	195.1
117.5°	218.0	218.5	217.6	217.6	216.2
120°	239.6	242.3	240.0	239.6	238.7
122.5°	262.0	263.9	262.9	261.6	260.2
125°	284.9	286.3	285.4	283.6	281.7
127.5°	306.0	308.7	307.8	305.1	303.2
130°	327.1	330.7	329.4	327.5	324.3
132.5°	348.1	351.8	350.9	348.6	346.3
135°	369.7	372.4	372.0	370.1	369.2
137.5°	389.4	391.7	393.0	390.7	389.4
140°	410.0	412.3	412.7	412.3	409.1
142.5°	428.8	431.1	432.0	431.5	429.2
145°	448.5	449.4	450.8	450.3	448.5
147.5°	465.4	467.2	468.6	468.6	465.9
150°	483.3	484.2	485.1	485.1	482.4
152.5°	497.9	499.3	499.8	500.7	498.4
155°	513.5	513.5	514.0	515.8	512.6
157.5°	526.8	526.3	526.8	528.6	525.9
160°	539.2	538.2	538.2	540.5	538.7
162.5°	550.2	548.8	549.2	551.5	548.3
165°	559.3	557.9	557.9	560.7	557.5
167.5°	567.1	565.3	565.7	568.5	565.7
170°	573.5	571.7	571.7	574.9	571.7
172.5°	578.6	576.7	576.7	579.5	576.3
175°	581.8	579.9	579.9	582.7	579.5
177.5°	583.6	581.8	581.8	584.5	581.3
180°	583.1	583.1	583.1	583.1	583.1

(END OF REPORT)