

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: P1031656

Luminaire Tested: S123DIW-B340D460UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031656
REPORT IS A COMBINATION OF REPORTS P991428 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D460UB40-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

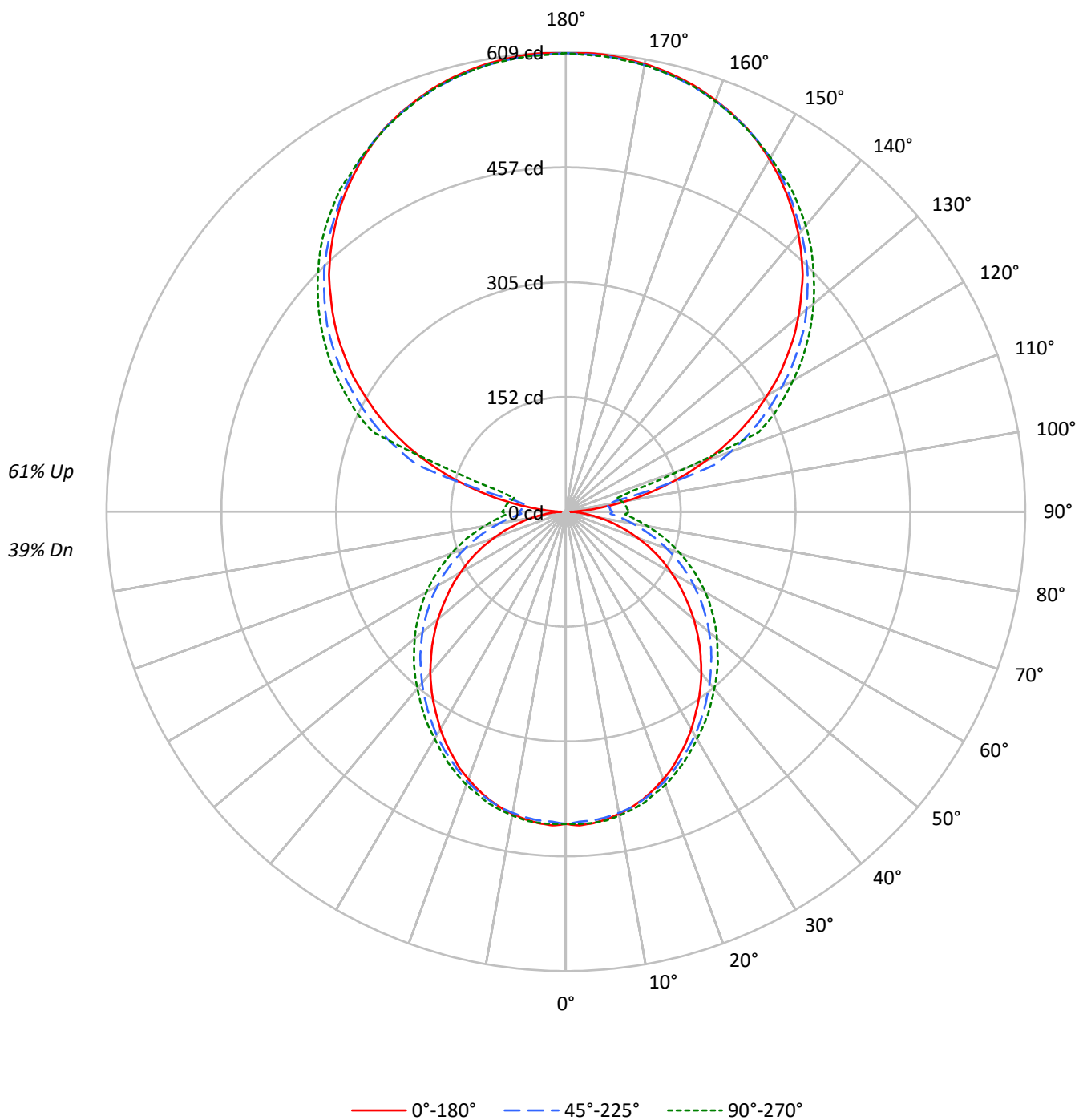
Lumens per Lamp: N/A
Luminaire Lumens: 3246.0 lumens
Efficiency: N/A
Efficacy: 123.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	90	86	82	86	82	78	75	67	64	62	52	51	49	40	38	37
2	86	78	72	66	78	71	66	61	58	54	50	46	43	40	34	33	31
3	78	68	61	55	70	62	56	50	51	46	42	40	37	34	30	28	26
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	21	19
6	60	48	40	34	54	44	37	31	36	30	26	29	25	21	22	19	17
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15
8	51	39	31	26	46	36	29	24	29	24	20	24	20	17	18	15	13
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4455	4455	4455
5°	4467	4324	4321
10°	4426	4207	4175
15°	4367	4078	4021
20°	4284	3934	3855
25°	4182	3771	3683
30°	4076	3624	3510
35°	3960	3471	3369
40°	3847	3329	3220
45°	3723	3193	3098
50°	3600	3058	2965
55°	3464	2919	2844
60°	3330	2776	2718
65°	3193	2625	2572
70°	2986	2456	2420
75°	2727	2262	2264
80°	2421	2068	2086
85°	2123	1908	1959

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3723 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	1.2
10°-20°	111.9	3.4
20°-30°	167.4	5.2
30°-40°	199.8	6.2
40°-50°	209.1	6.4
50°-60°	196.2	6.0
60°-70°	163.9	5.0
70°-80°	117.2	3.6
80°-90°	70.9	2.2
90°-100°	65.3	2.0
100°-110°	135.9	4.2
110°-120°	275.6	8.5
120°-130°	334.8	10.3
130°-140°	350.1	10.8
140°-150°	323.3	10.0
150°-160°	259.9	8.0
160°-170°	167.7	5.2
170°-180°	57.8	1.8
0°-30°	318.6	9.8
0°-40°	518.4	16.0
0°-60°	923.7	28.5
0°-90°	1275.7	39.3
90°-120°	476.7	14.7
90°-150°	1484.9	45.7
90°-180°	1970.0	60.7
0°-180°	3246.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	414	414	414	414	414	
5°	414	413	411	414	414	39
15°	394	396	395	400	400	111
25°	356	361	362	368	368	164
35°	307	314	320	326	328	192
45°	251	262	273	281	285	193
55°	191	206	222	234	238	171
65°	132	150	170	183	188	131
75°	72	93	115	130	136	77
85°	22	45	68	84	88	23
90°	6	33	62	79	84	6
95°	33	32	59	76	80	37
105°	138	154	133	65	70	146
115°	255	263	283	298	304	252
125°	357	361	376	386	390	319
135°	444	446	453	463	464	342
145°	512	515	516	520	522	320
155°	563	562	563	565	562	260
165°	594	593	592	596	593	168
175°	608	606	606	609	606	58
180°	608	608	608	608	608	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.9	413.9	413.9	413.9	413.9
2.5°	416.1	414.8	411.2	414.8	414.3
5°	414.3	413.4	410.7	414.3	413.9
7.5°	411.2	411.2	408.5	413.0	412.5
10°	406.7	407.6	405.3	409.8	408.9
12.5°	401.3	402.6	401.3	405.3	404.4
15°	394.5	395.9	395.4	399.9	399.5
17.5°	386.4	389.1	388.6	392.7	391.8
20°	377.4	380.1	381.0	385.0	385.5
22.5°	367.9	370.6	372.0	377.4	376.9
25°	356.2	360.7	362.0	367.9	367.9
27.5°	344.9	349.9	352.6	357.5	358.0
30°	332.7	338.6	342.2	347.6	347.6
32.5°	319.2	326.0	330.9	336.8	338.1
35°	306.6	313.8	319.7	326.4	328.2
37.5°	293.1	301.2	307.9	315.6	317.0
40°	279.5	287.7	296.7	304.3	306.1
42.5°	264.7	275.0	284.5	293.1	295.8
45°	250.7	261.5	272.8	281.3	284.9
47.5°	235.8	248.0	260.6	270.1	272.8
50°	221.4	234.0	248.0	258.3	261.5
52.5°	206.0	219.6	235.4	246.2	250.2
55°	191.2	206.0	222.3	234.4	238.1
57.5°	176.7	192.1	209.7	221.8	225.9
60°	161.4	177.6	196.1	208.7	213.7
62.5°	147.0	163.7	183.5	196.1	200.6
65°	132.1	149.7	169.5	183.1	187.6
67.5°	117.2	135.7	155.5	170.4	174.0
70°	101.4	120.8	142.5	156.9	161.4
72.5°	87.0	106.4	128.9	143.8	148.3
75°	71.7	92.9	115.4	130.3	135.7
77.5°	58.6	79.8	102.3	118.1	122.2
80°	44.6	66.7	90.2	105.5	110.0
82.5°	32.5	55.0	78.9	94.2	98.7
85°	22.1	44.6	68.5	83.9	88.4
87.5°	13.5	36.1	59.1	74.4	78.9
90°	6.4	33.0	61.7	78.9	84.4
92.5°	15.8	32.5	59.0	77.1	81.7
95°	32.6	31.5	58.6	75.8	80.3
97.5°	54.6	58.2	56.4	73.6	78.5
100°	80.4	103.9	54.1	70.8	75.8
102.5°	109.8	128.2	69.9	67.6	73.1
105°	138.2	154.0	132.7	65.4	70.4
107.5°	168.1	181.6	206.8	149.5	94.3
110°	197.9	209.6	232.6	229.4	168.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	226.8	236.2	258.4	273.7	276.9
115°	254.8	262.9	283.2	298.5	303.9
117.5°	282.8	289.6	307.2	321.6	325.6
120°	308.1	314.5	330.6	344.6	347.8
122.5°	334.3	338.4	354.2	366.3	370.0
125°	357.4	361.0	375.8	386.2	390.3
127.5°	380.9	384.0	397.6	407.9	410.1
130°	402.6	405.7	416.5	426.9	428.7
132.5°	422.9	426.5	434.6	444.5	446.3
135°	444.1	446.4	453.1	462.6	463.5
137.5°	462.2	465.4	469.4	478.8	480.2
140°	479.8	482.5	485.2	493.8	495.1
142.5°	496.5	498.8	500.1	507.4	508.2
145°	511.9	514.6	515.5	520.0	521.8
147.5°	526.3	528.6	529.5	531.8	531.3
150°	539.9	541.2	542.1	543.0	542.6
152.5°	552.1	552.5	553.0	554.8	552.5
155°	563.4	562.5	562.9	565.2	562.5
157.5°	572.4	572.4	571.9	574.6	571.0
160°	580.5	580.1	579.6	582.3	579.2
162.5°	588.2	586.8	586.4	589.6	586.8
165°	594.1	592.7	592.3	595.9	592.7
167.5°	599.0	597.2	597.2	600.9	597.2
170°	603.1	601.3	601.3	604.9	601.3
172.5°	605.8	603.6	604.0	607.6	603.6
175°	608.1	605.8	606.3	609.4	605.8
177.5°	609.0	606.7	607.2	610.8	606.3
180°	608.1	608.1	608.1	608.1	608.1

(END OF REPORT)