

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: P1031657

Luminaire Tested: S123DIW-B340D460UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031657
REPORT IS A COMBINATION OF REPORTS P991429 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-D1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

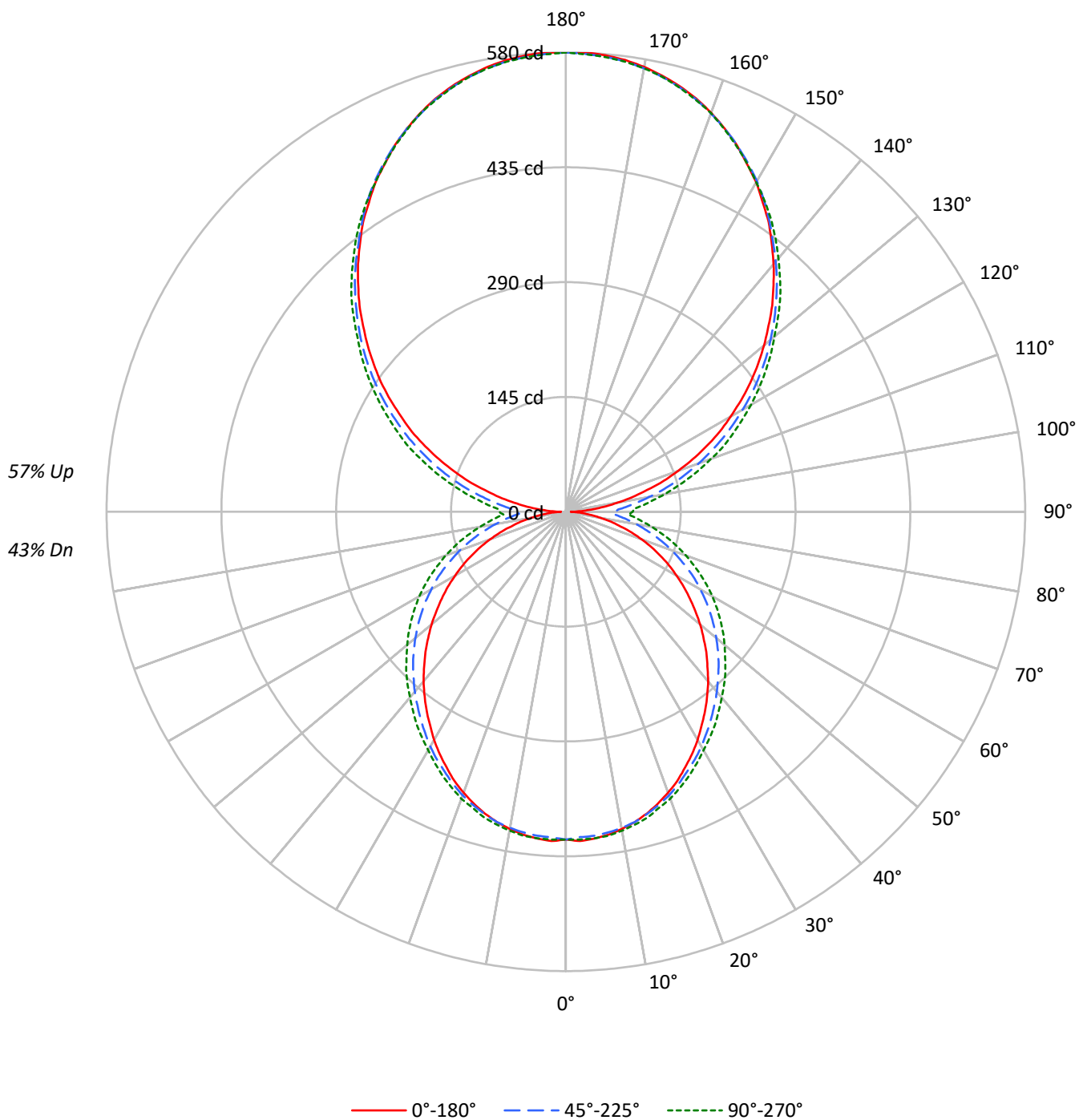
Lumens per Lamp: N/A
Luminaire Lumens: 2999.0 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	95	91	86	83	87	83	79	76	68	65	63	55	53	51	42	41	40
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	32	30	28
4	72	61	52	46	65	55	48	43	46	40	36	37	33	30	29	26	23
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	20
6	60	48	40	34	55	44	37	32	37	31	27	30	25	22	23	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	19	16	14
9	48	36	28	23	44	33	26	22	28	22	19	23	18	16	18	15	13
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	17	14	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	1.3
10°-20°	111.9	3.7
20°-30°	167.4	5.6
30°-40°	199.8	6.7
40°-50°	209.1	7.0
50°-60°	196.2	6.5
60°-70°	163.9	5.5
70°-80°	117.2	3.9
80°-90°	71.0	2.4
90°-100°	81.1	2.7
100°-110°	145.2	4.8
110°-120°	213.9	7.1
120°-130°	265.3	8.8
130°-140°	289.9	9.7
140°-150°	280.8	9.4
150°-160°	235.4	7.9
160°-170°	156.7	5.2
170°-180°	54.9	1.8
0°-30°	318.6	10.6
0°-40°	518.4	17.3
0°-60°	923.7	30.8
0°-90°	1275.7	42.5
90°-120°	440.2	14.7
90°-150°	1276.2	42.6
90°-180°	1723.0	57.5
0°-180°	2999.0	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°	32	53	78	94	99	34
105°	106	118	141	154	159	113
115°	196	203	218	229	232	194
125°	285	286	298	306	307	254
135°	368	371	375	382	383	284
145°	446	447	448	451	451	279
155°	511	511	511	513	510	235
165°	556	555	555	558	554	157
175°	578	577	577	579	576	55
180°	580	580	580	580	580	

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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	61.8	79.1	84.5
92.5°	19.1	41.2	66.4	82.7	85.9
95°	31.9	52.6	78.3	94.1	98.6
97.5°	48.7	67.2	91.1	107.0	111.0
100°	66.1	83.2	106.2	120.6	126.0
102.5°	86.1	100.0	123.5	137.5	141.6
105°	106.1	117.8	141.3	153.9	158.9
107.5°	129.4	139.2	159.6	173.1	176.7
110°	150.7	159.8	178.8	192.3	195.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	173.5	180.3	197.5	211.0	215.1
115°	195.9	202.7	218.0	229.2	232.4
117.5°	219.1	223.2	237.6	248.4	250.6
120°	240.0	245.1	257.6	267.5	269.8
122.5°	262.4	265.1	278.2	286.7	288.5
125°	284.7	286.1	298.2	305.9	307.3
127.5°	305.7	307.9	318.3	324.6	325.9
130°	326.6	329.8	337.4	344.2	343.7
132.5°	347.1	350.7	356.6	362.5	363.3
135°	368.5	370.8	375.3	381.6	383.0
137.5°	388.1	390.0	394.4	399.4	400.3
140°	408.2	410.5	412.2	418.6	417.6
142.5°	426.9	428.7	429.6	435.0	434.9
145°	446.5	446.9	448.2	451.4	451.4
147.5°	462.8	464.6	466.0	467.4	466.5
150°	480.6	481.5	482.4	482.4	480.6
152.5°	495.2	496.5	497.0	497.9	495.6
155°	510.7	510.7	511.1	512.9	509.7
157.5°	523.9	523.4	523.9	525.7	523.0
160°	536.2	535.2	535.2	537.5	535.7
162.5°	547.1	545.7	546.2	548.5	545.3
165°	556.2	554.8	554.8	557.6	554.4
167.5°	563.9	562.1	562.6	565.3	562.6
170°	570.3	568.5	568.5	571.7	568.5
172.5°	575.3	573.5	573.5	576.2	573.1
175°	578.5	576.7	576.7	579.4	576.2
177.5°	580.3	578.5	578.5	581.3	578.1
180°	579.9	579.9	579.9	579.9	579.9

(END OF REPORT)