

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: P1031644

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031644
REPORT IS A COMBINATION OF REPORTS P991410 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-D
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

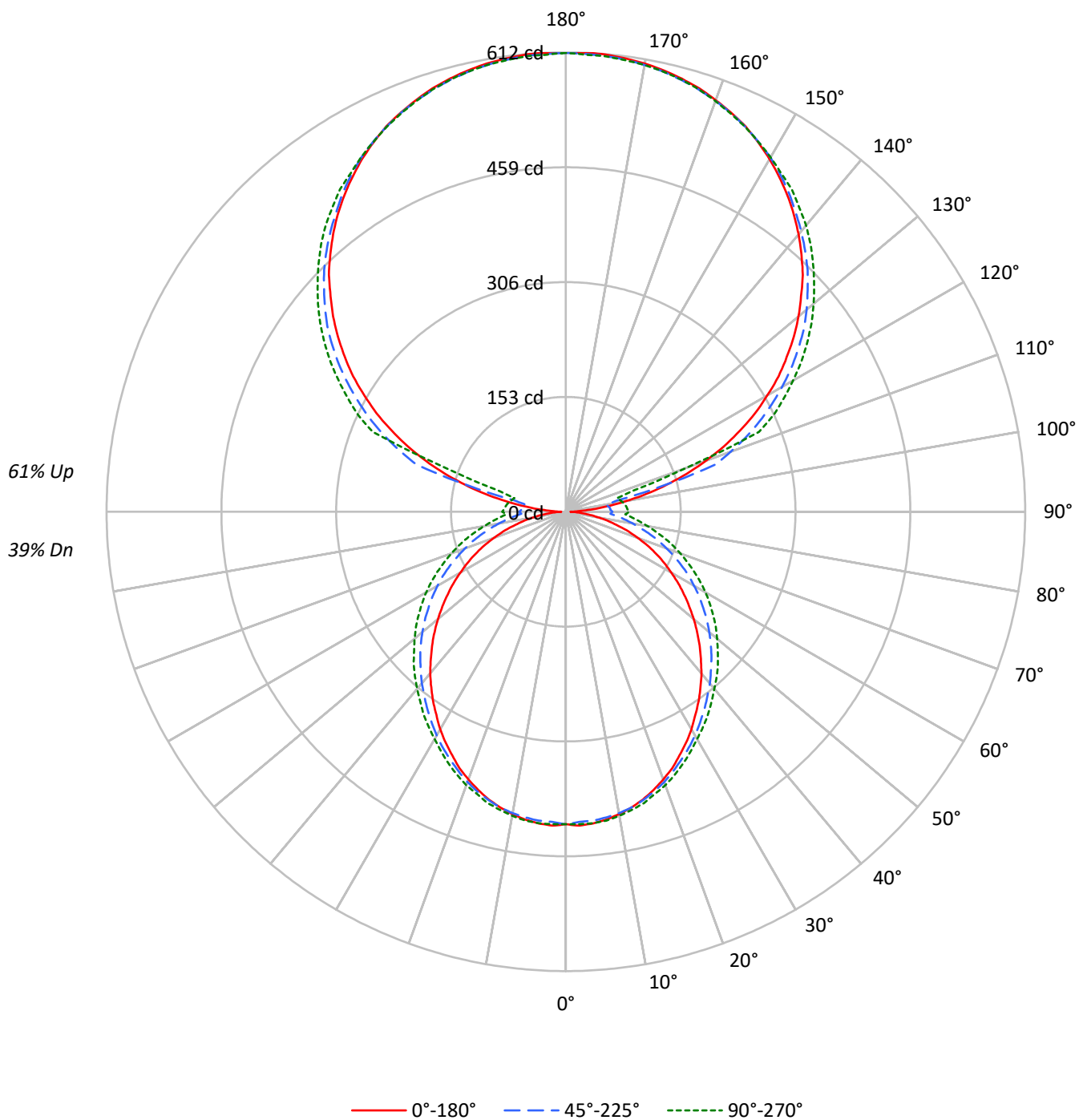
Lumens per Lamp: N/A
Luminaire Lumens: 3264.0 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	53	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°	4481	4481	4481
5°	4493	4349	4346
10°	4451	4232	4199
15°	4392	4102	4044
20°	4308	3957	3877
25°	4205	3793	3704
30°	4101	3646	3530
35°	3981	3490	3389
40°	3869	3349	3239
45°	3744	3211	3116
50°	3620	3075	2982
55°	3484	2936	2859
60°	3349	2793	2733
65°	3213	2641	2586
70°	3004	2470	2433
75°	2743	2276	2277
80°	2438	2079	2098
85°	2132	1919	1970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3744 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	1.2
10°-20°	112.6	3.4
20°-30°	168.3	5.2
30°-40°	201.0	6.2
40°-50°	210.3	6.4
50°-60°	197.3	6.0
60°-70°	164.8	5.1
70°-80°	117.9	3.6
80°-90°	71.4	2.2
90°-100°	65.6	2.0
100°-110°	136.6	4.2
110°-120°	277.0	8.5
120°-130°	336.6	10.3
130°-140°	351.9	10.8
140°-150°	325.1	10.0
150°-160°	261.3	8.0
160°-170°	168.6	5.2
170°-180°	58.1	1.8
0°-30°	320.4	9.8
0°-40°	521.4	16.0
0°-60°	929.0	28.5
0°-90°	1283.1	39.3
90°-120°	479.3	14.7
90°-150°	1492.9	45.7
90°-180°	1981.0	60.7
0°-180°	3264.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	417	416	413	417	416	40
15°	397	398	398	402	402	112
25°	358	363	364	370	370	165
35°	308	316	322	328	330	193
45°	252	263	274	283	287	194
55°	192	207	224	236	239	172
65°	133	150	170	184	189	131
75°	72	93	116	131	136	77
85°	22	45	69	84	89	23
90°	6	33	62	79	85	6
95°	33	32	59	76	81	37
105°	139	155	134	66	71	147
115°	256	264	285	300	306	253
125°	359	363	378	388	392	321
135°	446	449	456	465	466	344
145°	515	517	518	523	525	322
155°	566	566	566	568	566	261
165°	597	596	596	599	596	169
175°	611	609	610	613	609	58
180°	611	611	611	611	611	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	416.3	416.3	416.3	416.3	416.3
2.5°	418.5	417.2	413.6	417.2	416.7
5°	416.7	415.8	413.1	416.7	416.3
7.5°	413.6	413.6	410.8	415.4	414.9
10°	409.0	409.9	407.7	412.2	411.3
12.5°	403.6	404.9	403.6	407.7	406.7
15°	396.8	398.1	397.7	402.2	401.8
17.5°	388.6	391.3	390.9	395.0	394.1
20°	379.5	382.3	383.2	387.3	387.7
22.5°	370.0	372.7	374.1	379.5	379.1
25°	358.2	362.8	364.1	370.0	370.0
27.5°	346.9	351.9	354.6	359.6	360.0
30°	334.7	340.5	344.2	349.6	349.6
32.5°	321.0	327.8	332.8	338.7	340.1
35°	308.3	315.6	321.5	328.3	330.1
37.5°	294.7	302.9	309.7	317.4	318.8
40°	281.1	289.3	298.4	306.1	307.9
42.5°	266.2	276.6	286.1	294.7	297.5
45°	252.1	263.0	274.3	283.0	286.6
47.5°	237.2	249.4	262.1	271.6	274.3
50°	222.6	235.3	249.4	259.8	263.0
52.5°	207.2	220.8	236.7	247.6	251.7
55°	192.3	207.2	223.6	235.8	239.4
57.5°	177.8	193.2	210.9	223.1	227.2
60°	162.3	178.7	197.3	209.9	214.9
62.5°	147.8	164.6	184.6	197.3	201.8
65°	132.9	150.5	170.5	184.1	188.6
67.5°	117.9	136.5	156.4	171.4	175.0
70°	102.0	121.5	143.3	157.8	162.3
72.5°	87.5	107.0	129.7	144.7	149.2
75°	72.1	93.4	116.1	131.0	136.5
77.5°	58.9	80.3	102.9	118.8	122.9
80°	44.9	67.1	90.7	106.1	110.6
82.5°	32.6	55.3	79.4	94.8	99.3
85°	22.2	44.9	68.9	84.3	88.9
87.5°	13.6	36.3	59.4	74.8	79.4
90°	6.4	33.1	62.1	79.4	84.8
92.5°	15.8	32.6	59.4	77.6	82.1
95°	32.7	31.8	59.0	76.2	80.8
97.5°	54.9	58.6	56.7	74.0	78.9
100°	80.9	104.4	54.5	71.2	76.2
102.5°	110.3	128.9	70.3	68.0	73.5
105°	139.0	154.8	133.5	65.8	70.8
107.5°	169.0	182.6	208.0	150.2	94.8
110°	198.9	210.7	233.8	230.7	169.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	228.0	237.6	259.8	275.1	278.3
115°	256.2	264.3	284.7	300.2	305.6
117.5°	284.4	291.1	308.8	323.3	327.4
120°	309.8	316.1	332.4	346.5	349.6
122.5°	336.1	340.2	356.1	368.4	371.9
125°	359.3	362.9	377.9	388.3	392.4
127.5°	382.9	386.1	399.6	410.1	412.4
130°	404.7	407.9	418.8	429.2	431.0
132.5°	425.1	428.8	436.9	446.9	448.7
135°	446.5	448.8	455.5	465.1	466.0
137.5°	464.6	467.9	471.9	481.5	482.8
140°	482.4	485.1	487.8	496.4	497.8
142.5°	499.2	501.4	502.8	510.1	511.0
145°	514.7	517.3	518.2	522.8	524.6
147.5°	529.1	531.4	532.3	534.6	534.2
150°	542.8	544.1	545.0	546.0	545.5
152.5°	555.0	555.5	555.9	557.8	555.5
155°	566.4	565.5	565.9	568.2	565.5
157.5°	575.5	575.5	575.0	577.7	574.1
160°	583.7	583.2	582.7	585.5	582.3
162.5°	591.4	590.0	589.6	592.7	590.0
165°	597.3	595.9	595.5	599.1	595.9
167.5°	602.3	600.5	600.5	604.1	600.5
170°	606.4	604.5	604.5	608.2	604.5
172.5°	609.1	606.8	607.3	610.9	606.8
175°	611.4	609.1	609.5	612.7	609.1
177.5°	612.3	610.0	610.5	614.1	609.5
180°	611.4	611.4	611.4	611.4	611.4

(END OF REPORT)