

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: P1031662

Luminaire Tested: S123DIW-B340D460UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031662
REPORT IS A COMBINATION OF REPORTS P991437 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D460UB50-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

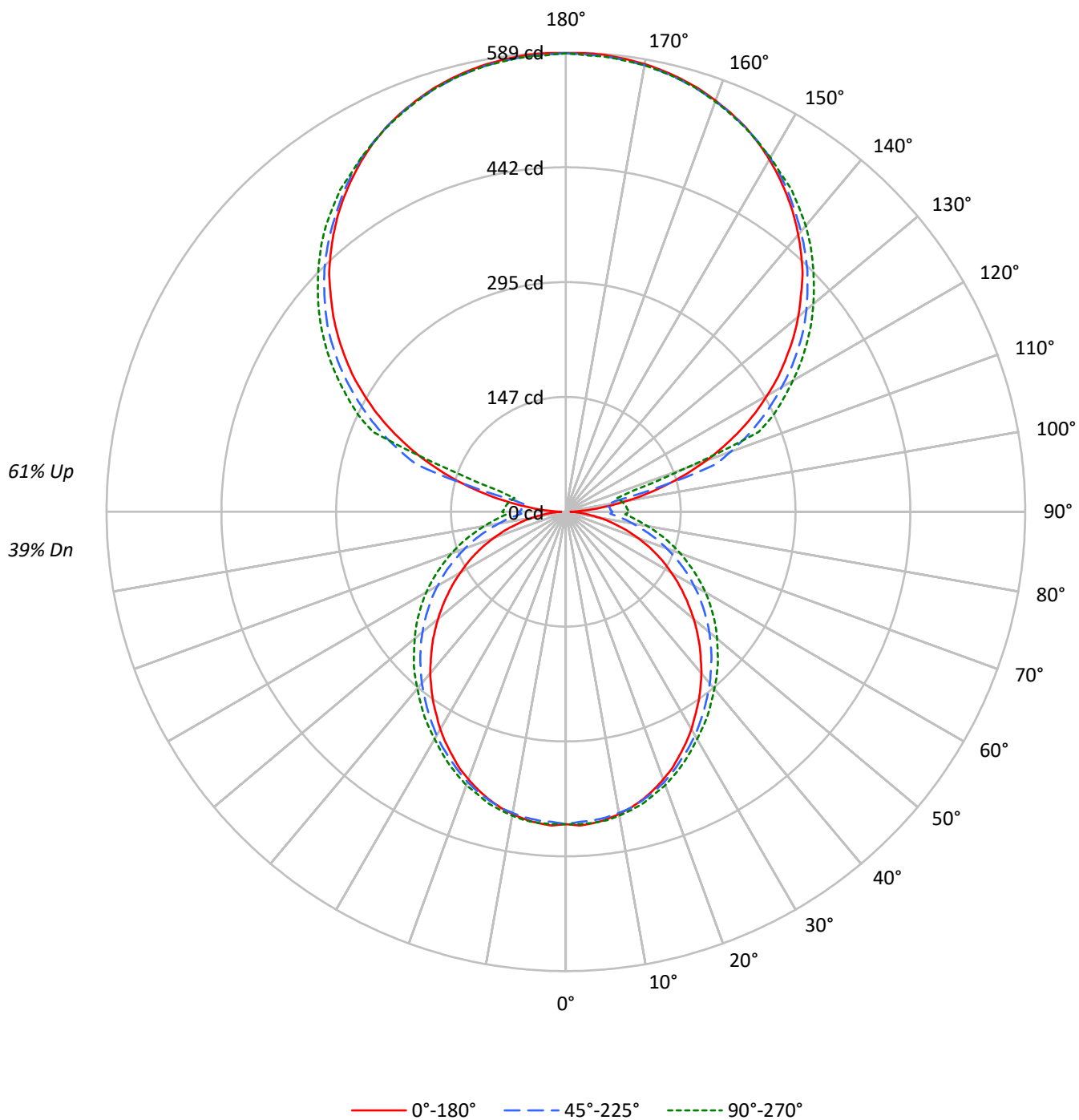
Lumens per Lamp: N/A
Luminaire Lumens: 3139.0 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	36	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	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4311	4311	4311
5°	4322	4184	4181
10°	4282	4071	4040
15°	4225	3946	3890
20°	4146	3807	3730
25°	4047	3649	3563
30°	3945	3507	3397
35°	3832	3358	3260
40°	3723	3222	3116
45°	3603	3089	2998
50°	3483	2959	2869
55°	3352	2824	2752
60°	3223	2687	2630
65°	3089	2540	2488
70°	2892	2377	2342
75°	2640	2190	2191
80°	2345	2001	2020
85°	2056	1846	1895

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3603 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	1.2
10°-20°	108.3	3.5
20°-30°	162.0	5.2
30°-40°	193.4	6.2
40°-50°	202.3	6.4
50°-60°	189.9	6.0
60°-70°	158.6	5.1
70°-80°	113.4	3.6
80°-90°	68.6	2.2
90°-100°	63.1	2.0
100°-110°	131.4	4.2
110°-120°	266.4	8.5
120°-130°	323.6	10.3
130°-140°	338.3	10.8
140°-150°	312.5	10.0
150°-160°	251.2	8.0
160°-170°	162.1	5.2
170°-180°	55.9	1.8
0°-30°	308.3	9.8
0°-40°	501.6	16.0
0°-60°	893.8	28.5
0°-90°	1234.5	39.3
90°-120°	460.9	14.7
90°-150°	1435.3	45.7
90°-180°	1904.0	60.7
0°-180°	3139.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	400	400	400	400	400	
5°	401	400	397	401	400	38
15°	382	383	383	387	386	108
25°	345	349	350	356	356	159
35°	297	304	309	316	318	186
45°	243	253	264	272	276	187
55°	185	199	215	227	230	166
65°	128	145	164	177	182	126
75°	69	90	112	126	131	74
85°	21	43	66	81	86	22
90°	6	32	60	76	82	6
95°	31	30	57	73	78	36
105°	134	149	128	63	68	141
115°	246	254	274	289	294	243
125°	345	349	363	373	377	309
135°	429	431	438	447	448	330
145°	495	497	498	503	504	310
155°	544	544	544	546	544	251
165°	574	573	572	576	573	162
175°	588	586	586	589	586	56
180°	588	588	588	588	588	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	400.5	400.5	400.5	400.5	400.5
2.5°	402.7	401.4	397.9	401.4	400.9
5°	400.9	400.1	397.4	400.9	400.5
7.5°	397.9	397.9	395.3	399.6	399.2
10°	393.5	394.4	392.2	396.6	395.7
12.5°	388.3	389.6	388.3	392.2	391.3
15°	381.7	383.1	382.6	387.0	386.5
17.5°	373.9	376.5	376.1	380.0	379.1
20°	365.2	367.8	368.7	372.6	373.0
22.5°	356.0	358.6	359.9	365.2	364.7
25°	344.7	349.0	350.3	356.0	356.0
27.5°	333.8	338.6	341.2	346.0	346.4
30°	322.0	327.6	331.1	336.4	336.4
32.5°	308.9	315.4	320.2	325.9	327.2
35°	296.7	303.6	309.3	315.9	317.6
37.5°	283.6	291.4	298.0	305.4	306.7
40°	270.5	278.3	287.1	294.5	296.2
42.5°	256.1	266.1	275.3	283.6	286.2
45°	242.6	253.0	263.9	272.2	275.7
47.5°	228.2	240.0	252.2	261.3	263.9
50°	214.2	226.4	240.0	250.0	253.0
52.5°	199.4	212.5	227.7	238.2	242.1
55°	185.0	199.4	215.1	226.9	230.4
57.5°	171.0	185.9	202.9	214.6	218.6
60°	156.2	171.9	189.8	202.0	206.8
62.5°	142.2	158.4	177.6	189.8	194.1
65°	127.8	144.8	164.0	177.1	181.5
67.5°	113.4	131.3	150.5	164.9	168.4
70°	98.2	116.9	137.9	151.8	156.2
72.5°	84.2	103.0	124.8	139.2	143.5
75°	69.4	89.9	111.7	126.1	131.3
77.5°	56.7	77.2	99.0	114.3	118.2
80°	43.2	64.6	87.3	102.1	106.5
82.5°	31.4	53.2	76.3	91.2	95.5
85°	21.4	43.2	66.3	81.1	85.5
87.5°	13.1	34.9	57.2	72.0	76.3
90°	6.1	31.8	59.8	76.3	81.6
92.5°	15.2	31.4	57.2	74.6	78.9
95°	31.4	30.5	56.7	73.3	77.7
97.5°	52.9	56.3	54.6	71.2	75.9
100°	77.7	100.4	52.4	68.5	73.3
102.5°	106.1	124.0	67.6	65.5	70.7
105°	133.6	148.9	128.3	63.2	68.1
107.5°	162.5	175.5	200.0	144.5	91.2
110°	191.2	202.6	224.8	221.8	162.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	219.2	228.3	249.7	264.6	267.6
115°	246.3	254.1	273.7	288.6	293.9
117.5°	273.4	279.9	296.9	310.9	314.8
120°	297.8	303.9	319.6	333.2	336.2
122.5°	323.1	327.0	342.3	354.1	357.6
125°	345.4	348.9	363.3	373.3	377.3
127.5°	368.1	371.2	384.3	394.3	396.5
130°	389.1	392.2	402.6	412.6	414.4
132.5°	408.7	412.2	420.1	429.7	431.4
135°	429.3	431.4	437.9	447.1	448.0
137.5°	446.7	449.7	453.7	462.9	464.2
140°	463.7	466.3	468.9	477.3	478.6
142.5°	479.9	482.1	483.4	490.4	491.3
145°	494.7	497.4	498.2	502.6	504.3
147.5°	508.7	510.9	511.8	513.9	513.6
150°	521.8	523.1	524.0	524.9	524.5
152.5°	533.6	534.0	534.5	536.2	534.0
155°	544.5	543.7	544.1	546.3	543.7
157.5°	553.3	553.3	552.8	555.4	551.9
160°	561.1	560.7	560.2	562.9	559.8
162.5°	568.5	567.2	566.8	569.9	567.2
165°	574.2	572.9	572.5	576.0	572.9
167.5°	579.0	577.3	577.3	580.8	577.3
170°	583.0	581.2	581.2	584.7	581.2
172.5°	585.6	583.4	583.8	587.3	583.4
175°	587.8	585.6	586.0	589.1	585.6
177.5°	588.6	586.4	586.9	590.4	586.0
180°	587.8	587.8	587.8	587.8	587.8

(END OF REPORT)