

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: P1031646

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031646
REPORT IS A COMBINATION OF REPORTS P991413 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-F
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

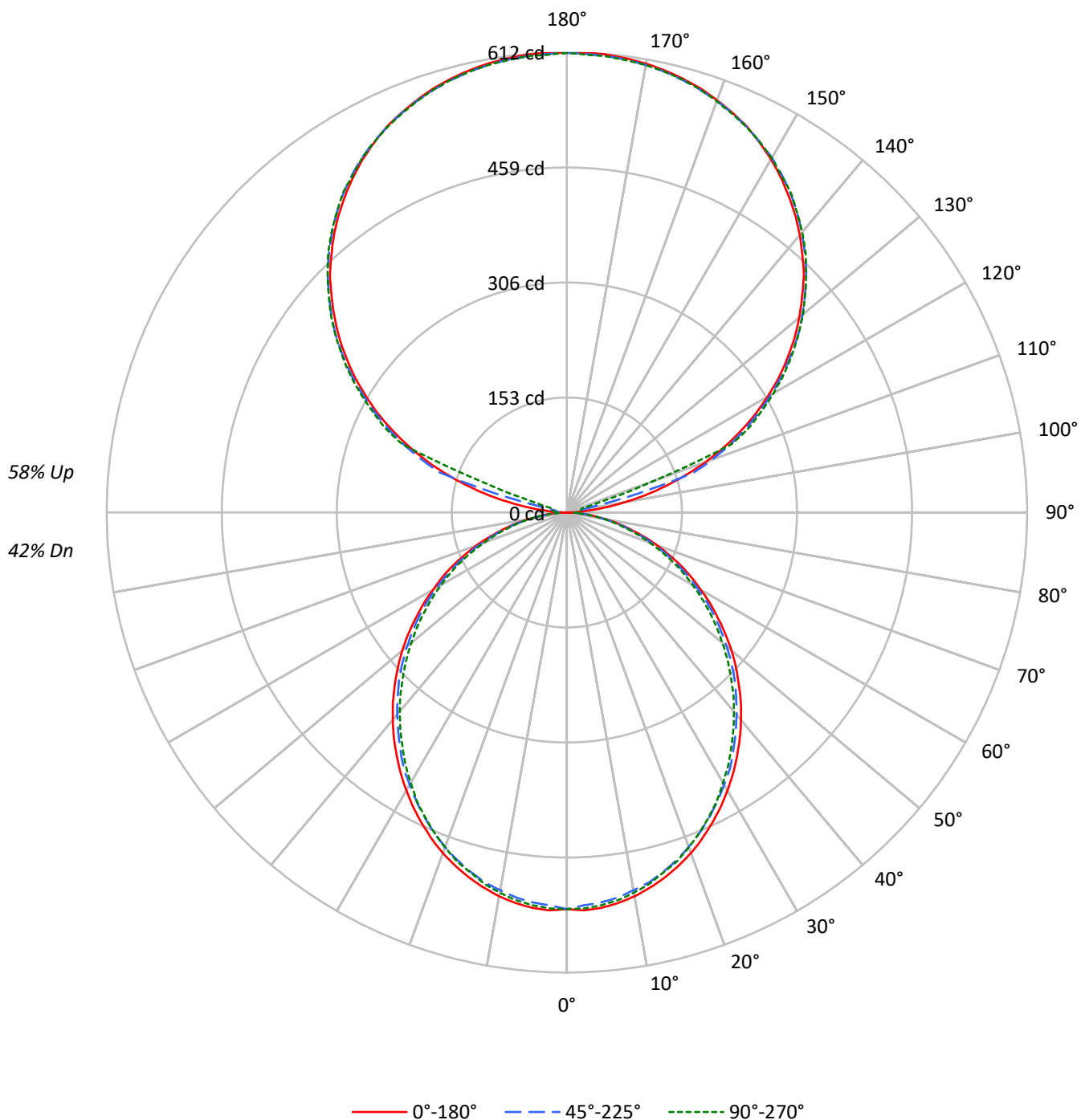
Lumens per Lamp: N/A
Luminaire Lumens: 3238.0 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	41
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	32	30
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25
5	67	55	47	41	61	51	44	39	42	37	33	35	31	28	27	24	22
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	22	20	17
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13

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	1.5
10°-20°	140.4	4.3
20°-30°	207.4	6.4
30°-40°	242.2	7.5
40°-50°	243.5	7.5
50°-60°	213.9	6.6
60°-70°	159.3	4.9
70°-80°	90.7	2.8
80°-90°	27.0	0.8
90°-100°	21.6	0.7
100°-110°	104.2	3.2
110°-120°	255.4	7.9
120°-130°	324.3	10.0
130°-140°	346.4	10.7
140°-150°	323.9	10.0
150°-160°	261.3	8.1
160°-170°	168.6	5.2
170°-180°	58.1	1.8
0°-30°	397.6	12.3
0°-40°	639.8	19.8
0°-60°	1097.2	33.9
0°-90°	1374.2	42.4
90°-120°	381.2	11.8
90°-150°	1375.8	42.5
90°-180°	1864.0	57.6
0°-180°	3238.0	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	3
95°	28	9	14	17	17	33
105°	135	140	100	19	20	144
115°	254	257	261	265	267	251
125°	358	362	363	364	365	320
135°	446	448	450	452	450	343
145°	514	517	518	519	519	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°	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	10.9	12.7	13.6
92.5°	10.4	7.7	11.8	15.0	15.4
95°	27.7	9.1	14.1	17.3	17.3
97.5°	50.4	37.7	14.5	18.2	18.6
100°	76.8	85.8	15.0	18.6	19.1
102.5°	106.7	112.6	33.6	18.6	19.5
105°	135.4	140.3	99.5	19.1	20.0
107.5°	165.8	169.9	176.7	106.7	47.2
110°	196.2	199.8	204.8	189.9	124.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.3	228.5	233.5	237.5	236.6
115°	253.9	256.6	260.7	265.3	267.1
117.5°	282.1	285.2	287.5	291.1	291.6
120°	308.0	312.0	313.4	317.0	317.0
122.5°	334.3	337.5	339.3	341.6	342.0
125°	357.9	361.5	363.4	364.3	365.2
127.5°	381.5	385.2	387.4	388.8	387.9
130°	403.3	407.0	408.8	410.6	409.7
132.5°	424.2	427.9	429.2	431.0	429.7
135°	445.6	448.3	450.1	451.5	450.1
137.5°	463.7	467.4	468.3	470.6	469.6
140°	481.9	484.6	486.0	487.8	486.9
142.5°	498.7	501.4	502.8	504.2	502.8
145°	514.2	517.3	518.2	519.2	519.2
147.5°	529.1	531.4	532.3	533.2	531.0
150°	542.8	544.1	545.0	546.0	544.6
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)