

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: P1031658

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031658
REPORT IS A COMBINATION OF REPORTS P991431 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-F
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

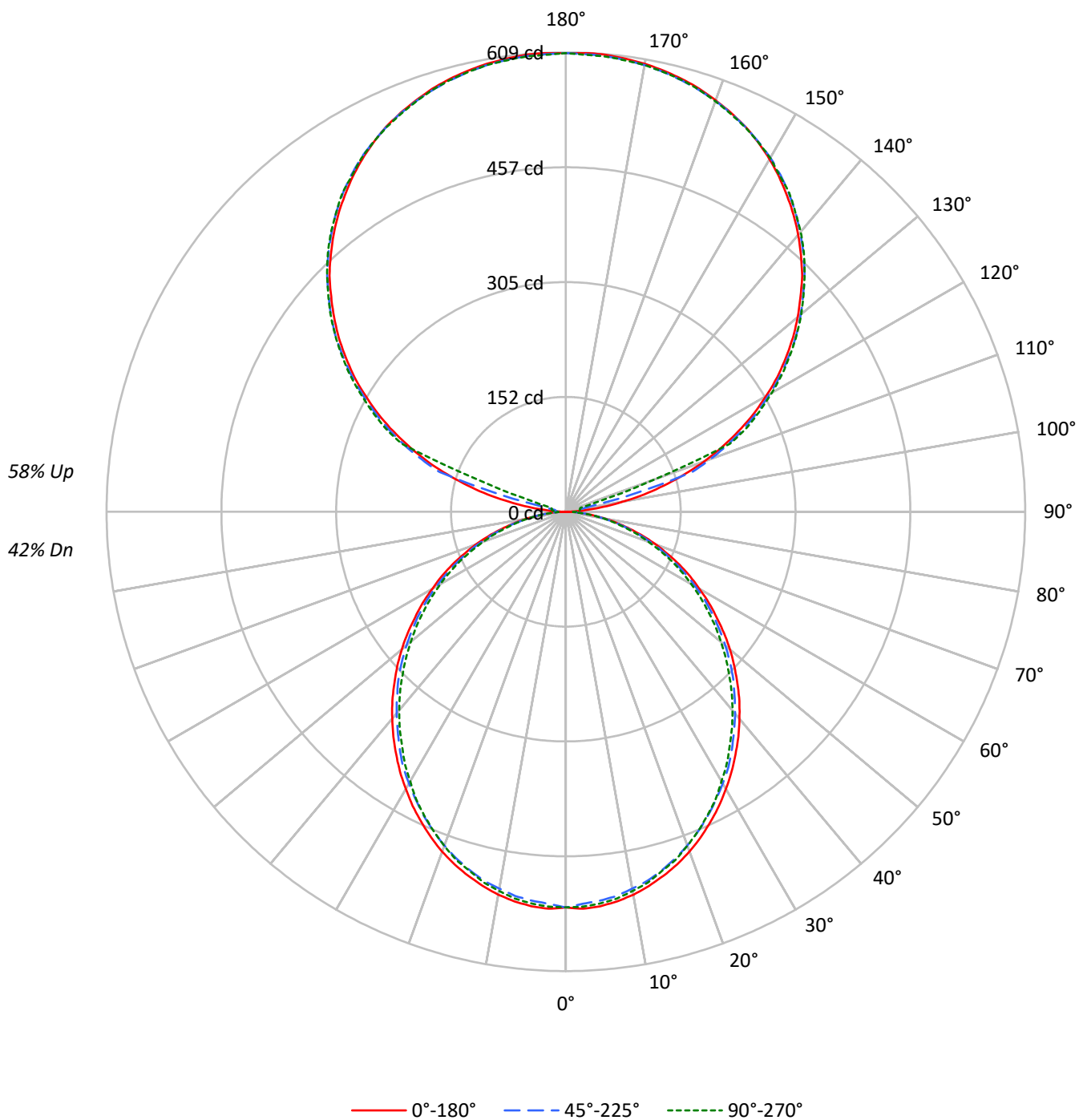
Lumens per Lamp: N/A
Luminaire Lumens: 3220.0 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	34	31	27	27	24	22
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	19
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	15
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°	5646	5646	5646
5°	5659	5450	5442
10°	5610	5266	5212
15°	5531	5074	4961
20°	5442	4861	4713
25°	5326	4637	4446
30°	5200	4404	4166
35°	5066	4167	3888
40°	4928	3917	3615
45°	4775	3674	3329
50°	4620	3403	3043
55°	4421	3121	2752
60°	4216	2809	2443
65°	4022	2472	2121
70°	3746	2100	1745
75°	3344	1662	1355
80°	2888	1169	958
85°	2257	627	479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4775 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	1.5
10°-20°	139.6	4.3
20°-30°	206.2	6.4
30°-40°	240.8	7.5
40°-50°	242.1	7.5
50°-60°	212.7	6.6
60°-70°	158.4	4.9
70°-80°	90.1	2.8
80°-90°	26.8	0.8
90°-100°	21.4	0.7
100°-110°	103.7	3.2
110°-120°	254.0	7.9
120°-130°	322.5	10.0
130°-140°	344.5	10.7
140°-150°	322.2	10.0
150°-160°	259.9	8.1
160°-170°	167.7	5.2
170°-180°	57.8	1.8
0°-30°	395.3	12.3
0°-40°	636.1	19.8
0°-60°	1090.8	33.9
0°-90°	1366.2	42.4
90°-120°	379.2	11.8
90°-150°	1368.4	42.5
90°-180°	1854.0	57.6
0°-180°	3220.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	525	523	518	522	521	50
15°	500	498	492	496	493	141
25°	454	451	445	446	444	209
35°	392	390	384	381	379	245
45°	322	320	314	308	306	248
55°	244	244	238	233	230	219
65°	166	164	160	156	155	164
75°	88	86	85	82	81	94
85°	24	22	22	22	22	25
90°	0	5	11	13	14	3
95°	28	9	14	17	17	33
105°	135	140	99	19	20	143
115°	252	255	259	264	266	249
125°	356	360	361	362	363	318
135°	443	446	448	449	448	341
145°	511	515	516	516	516	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°	524.5	524.5	524.5	524.5	524.5
2.5°	526.7	524.9	520.0	524.5	524.0
5°	524.9	522.7	517.7	522.2	521.3
7.5°	520.9	518.6	513.7	517.7	517.3
10°	515.5	513.2	507.3	511.4	510.5
12.5°	508.2	506.4	501.0	503.7	503.3
15°	499.7	497.9	492.0	495.6	492.9
17.5°	490.2	488.0	482.1	484.8	483.9
20°	479.4	476.7	470.8	472.6	471.3
22.5°	467.2	464.5	458.6	460.0	458.2
25°	453.7	451.0	445.1	445.6	444.2
27.5°	439.7	437.0	430.7	431.1	429.8
30°	424.4	422.1	415.8	415.8	412.6
32.5°	409.0	405.9	401.4	398.2	396.9
35°	392.3	389.6	383.8	381.1	378.8
37.5°	375.7	372.1	366.2	363.0	361.7
40°	358.1	355.4	349.1	345.4	343.6
42.5°	340.5	337.3	331.0	327.4	325.6
45°	321.5	319.7	313.9	308.5	306.2
47.5°	303.1	300.3	294.9	289.5	287.7
50°	284.1	281.9	276.0	271.0	268.3
52.5°	264.3	262.9	256.6	252.5	249.8
55°	244.0	243.5	237.7	232.7	230.4
57.5°	225.0	223.2	218.7	214.2	211.5
60°	204.3	203.8	198.4	194.4	192.1
62.5°	185.8	184.4	179.0	175.0	173.6
65°	166.4	164.2	159.6	156.0	154.7
67.5°	145.7	143.9	140.3	137.1	135.3
70°	127.2	124.5	121.8	118.6	116.4
72.5°	107.8	106.0	102.8	100.1	99.2
75°	87.9	86.1	84.8	82.5	81.2
77.5°	70.4	69.5	67.6	65.8	65.8
80°	53.2	51.9	51.0	50.5	50.5
82.5°	36.5	36.5	36.5	35.6	35.2
85°	23.5	22.5	22.5	21.6	21.6
87.5°	11.7	10.4	9.9	9.5	9.5
90°	0.5	5.0	10.8	12.6	13.6
92.5°	10.4	7.7	11.7	14.9	15.4
95°	27.6	9.0	14.0	17.2	17.2
97.5°	50.1	37.5	14.5	18.1	18.5
100°	76.3	85.4	14.9	18.5	19.0
102.5°	106.2	112.0	33.4	18.5	19.4
105°	134.6	139.6	98.9	19.0	19.9
107.5°	164.9	169.0	175.7	106.2	47.0
110°	195.2	198.8	203.7	188.8	124.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	224.1	227.2	232.2	236.3	235.4
115°	252.5	255.2	259.3	263.8	265.6
117.5°	280.5	283.7	286.0	289.6	290.0
120°	306.3	310.4	311.7	315.3	315.3
122.5°	332.5	335.7	337.5	339.7	340.2
125°	356.0	359.6	361.4	362.3	363.2
127.5°	379.5	383.1	385.4	386.7	385.8
130°	401.2	404.8	406.6	408.4	407.5
132.5°	422.0	425.6	426.9	428.7	427.4
135°	443.2	445.9	447.7	449.1	447.7
137.5°	461.3	464.9	465.8	468.0	467.1
140°	479.3	482.0	483.4	485.2	484.3
142.5°	496.0	498.8	500.1	501.5	500.1
145°	511.4	514.6	515.5	516.4	516.4
147.5°	526.3	528.6	529.5	530.4	528.1
150°	539.9	541.2	542.1	543.0	541.7
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)