

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: P1031641

Luminaire Tested: S123DIW-B340D460UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031641
REPORT IS A COMBINATION OF REPORTS P991384 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D460UB27-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

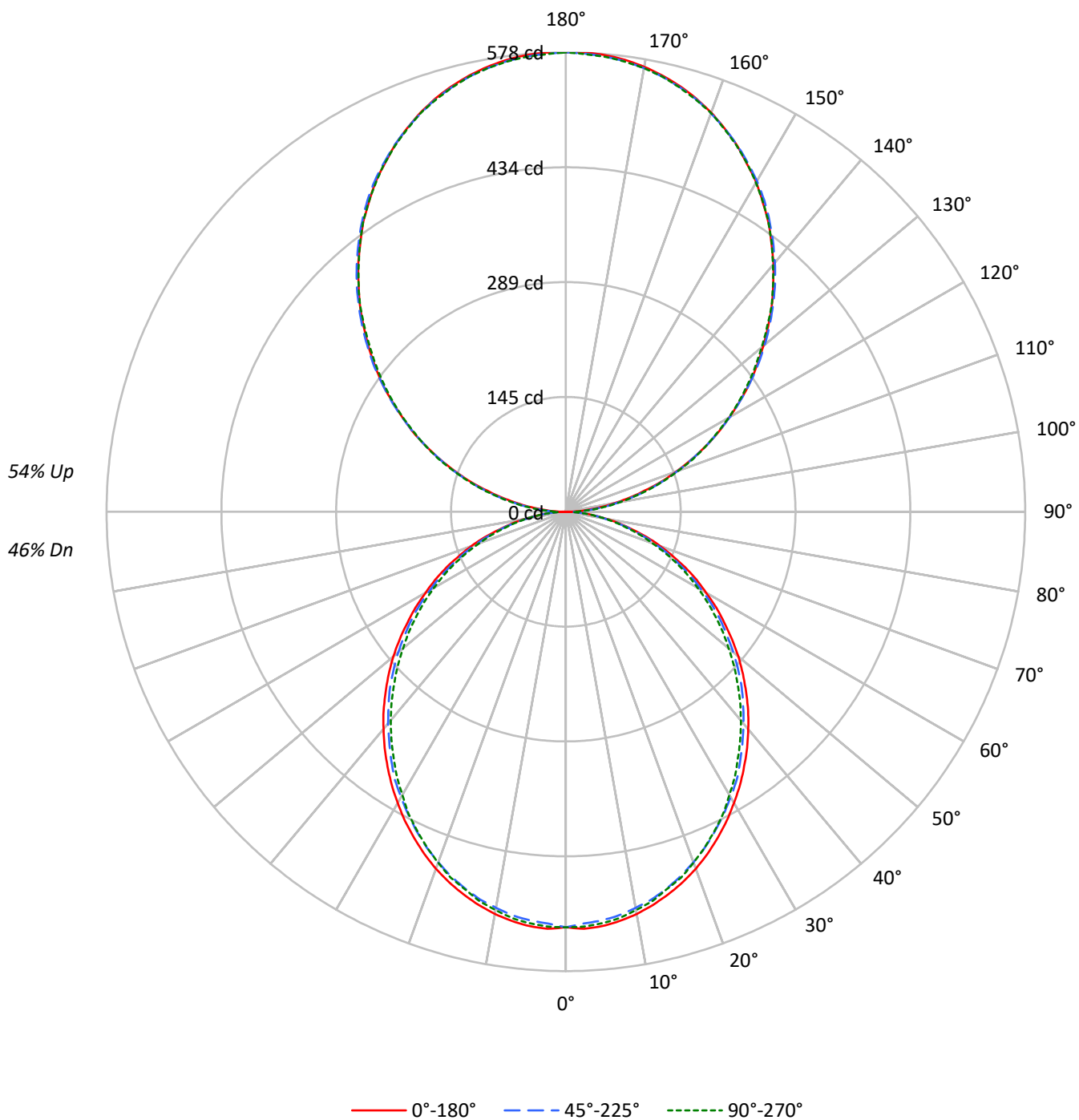
Lumens per Lamp: N/A
Luminaire Lumens: 2964.0 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1031641

CATALOG NUMBER: S123DIW-B340D460UB27-4F0-XX-W2A-F1

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	97	92	89	85	89	85	82	79	71	69	66	58	56	55	46	45	44
2	88	81	75	69	81	74	69	64	62	58	55	51	48	46	41	39	37
3	80	71	64	58	73	65	59	54	55	50	46	45	42	39	36	34	32
4	73	63	55	49	67	58	51	46	49	43	39	40	36	33	32	29	27
5	67	56	48	42	62	52	44	39	43	38	34	36	32	29	29	26	24
6	62	50	42	36	57	46	39	34	39	34	29	32	28	25	26	23	21
7	57	45	37	32	52	42	35	30	35	30	26	30	25	22	24	21	18
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17
9	50	37	30	25	45	35	28	23	30	24	21	25	21	18	20	17	15
10	46	34	27	22	42	32	25	21	27	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5628	5628	5628
5°	5643	5435	5427
10°	5593	5251	5197
15°	5515	5060	4947
20°	5426	4847	4699
25°	5311	4623	4433
30°	5184	4391	4154
35°	5052	4155	3877
40°	4913	3905	3604
45°	4761	3664	3320
50°	4607	3393	3033
55°	4408	3112	2745
60°	4203	2800	2437
65°	4010	2466	2114
70°	3734	2093	1739
75°	3336	1656	1350
80°	2883	1164	956
85°	2248	627	479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4761 cd/sqm

TEST NUMBER: P1031641

CATALOG NUMBER: S123DIW-B340D460UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.3	1.7
10°-20°	139.2	4.7
20°-30°	205.6	6.9
30°-40°	240.1	8.1
40°-50°	241.4	8.1
50°-60°	212.1	7.2
60°-70°	157.9	5.3
70°-80°	89.9	3.0
80°-90°	26.8	0.9
90°-100°	37.2	1.3
100°-110°	112.6	3.8
110°-120°	191.7	6.5
120°-130°	252.3	8.5
130°-140°	283.5	9.6
140°-150°	278.8	9.4
150°-160°	234.7	7.9
160°-170°	156.2	5.3
170°-180°	54.7	1.8
0°-30°	394.1	13.3
0°-40°	634.2	21.4
0°-60°	1087.7	36.7
0°-90°	1362.2	46.0
90°-120°	341.6	11.5
90°-150°	1156.2	39.0
90°-180°	1602.0	54.0
0°-180°	2964.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	523	523	523	523	523	
5°	523	521	516	521	520	50
15°	498	496	491	494	492	140
25°	452	450	444	444	443	208
35°	391	388	383	380	378	245
45°	321	319	313	308	305	248
55°	243	243	237	232	230	218
65°	166	164	159	156	154	164
75°	88	86	84	82	81	94
85°	23	22	22	22	22	25
90°	0	5	11	13	14	4
95°	27	30	34	35	35	30
105°	102	103	107	107	108	109
115°	193	194	194	194	194	191
125°	282	284	283	281	279	252
135°	366	369	369	367	366	282
145°	445	446	447	446	445	278
155°	509	509	510	511	508	234
165°	554	553	553	556	553	156
175°	577	575	575	578	574	55
180°	578	578	578	578	578	

TEST NUMBER: P1031641

CATALOG NUMBER: S123DIW-B340D460UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	522.9	522.9	522.9	522.9	522.9
2.5°	525.2	523.4	518.5	522.9	522.5
5°	523.4	521.1	516.2	520.7	519.8
7.5°	519.4	517.1	512.2	516.2	515.8
10°	514.0	511.7	505.9	509.9	509.0
12.5°	506.8	505.0	499.6	502.3	501.8
15°	498.2	496.4	490.6	494.2	491.5
17.5°	488.8	486.5	480.7	483.4	482.5
20°	478.0	475.3	469.4	471.2	469.9
22.5°	465.8	463.1	457.3	458.6	456.8
25°	452.4	449.7	443.8	444.3	442.9
27.5°	438.4	435.7	429.4	429.9	428.5
30°	423.1	420.9	414.6	414.6	411.4
32.5°	407.8	404.7	400.2	397.0	395.7
35°	391.2	388.5	382.7	380.0	377.7
37.5°	374.6	371.0	365.1	362.0	360.6
40°	357.0	354.3	348.0	344.4	342.6
42.5°	339.5	336.3	330.0	326.4	324.6
45°	320.6	318.8	313.0	307.6	305.3
47.5°	302.2	299.5	294.1	288.7	286.9
50°	283.3	281.0	275.2	270.2	267.5
52.5°	263.5	262.1	255.9	251.8	249.1
55°	243.3	242.8	237.0	232.0	229.8
57.5°	224.4	222.6	218.1	213.6	210.9
60°	203.7	203.2	197.8	193.8	191.6
62.5°	185.3	183.9	178.5	174.5	173.1
65°	165.9	163.7	159.2	155.6	154.2
67.5°	145.2	143.4	139.8	136.7	134.9
70°	126.8	124.1	121.4	118.3	116.0
72.5°	107.5	105.7	102.5	99.8	98.9
75°	87.7	85.9	84.5	82.3	80.9
77.5°	70.1	69.2	67.4	65.6	65.6
80°	53.1	51.7	50.8	50.4	50.4
82.5°	36.4	36.4	36.4	35.5	35.1
85°	23.4	22.5	22.5	21.6	21.6
87.5°	11.7	10.3	9.9	9.4	9.4
90°	0.5	5.0	10.9	12.7	13.6
92.5°	13.6	16.3	19.1	20.4	19.5
95°	26.8	30.0	33.6	35.4	35.4
97.5°	44.0	46.3	49.0	51.3	50.9
100°	61.8	64.5	66.8	68.1	69.0
102.5°	82.2	83.6	86.7	88.1	87.6
105°	102.2	103.1	107.2	107.2	108.1
107.5°	125.8	126.2	128.1	129.4	129.0
110°	147.6	148.5	149.4	151.2	150.3

TEST NUMBER: P1031641

CATALOG NUMBER: S123DIW-B340D460UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	170.7	170.7	173.0	173.0
115°	193.0	194.4	193.5	193.9	193.5
117.5°	216.2	216.6	215.7	215.7	214.3
120°	237.5	240.2	238.0	237.5	236.6
122.5°	259.8	261.6	260.7	259.3	257.9
125°	282.5	283.8	282.9	281.1	279.3
127.5°	303.3	306.1	305.2	302.4	300.6
130°	324.2	327.9	326.5	324.7	321.5
132.5°	345.1	348.8	347.9	345.6	343.3
135°	366.5	369.2	368.7	366.9	366.0
137.5°	386.0	388.3	389.6	387.4	386.0
140°	406.4	408.7	409.2	408.7	405.5
142.5°	425.1	427.3	428.2	427.8	425.5
145°	444.6	445.5	446.8	446.4	444.6
147.5°	461.4	463.2	464.6	464.6	461.8
150°	479.1	480.0	480.9	480.9	478.2
152.5°	493.6	495.0	495.4	496.3	494.1
155°	509.1	509.1	509.5	511.3	508.2
157.5°	522.2	521.8	522.2	524.0	521.3
160°	534.5	533.6	533.6	535.9	534.0
162.5°	545.4	544.0	544.5	546.8	543.6
165°	554.5	553.1	553.1	555.8	552.7
167.5°	562.2	560.4	560.8	563.6	560.8
170°	568.6	566.7	566.7	569.9	566.7
172.5°	573.5	571.7	571.7	574.5	571.3
175°	576.7	574.9	574.9	577.6	574.5
177.5°	578.5	576.7	576.7	579.5	576.3
180°	578.1	578.1	578.1	578.1	578.1

(END OF REPORT)