

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: P1011591

Luminaire Tested: S123DIP-B340D365UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011591
REPORT IS A COMBINATION OF REPORTS P989798 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B340D365UB50-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

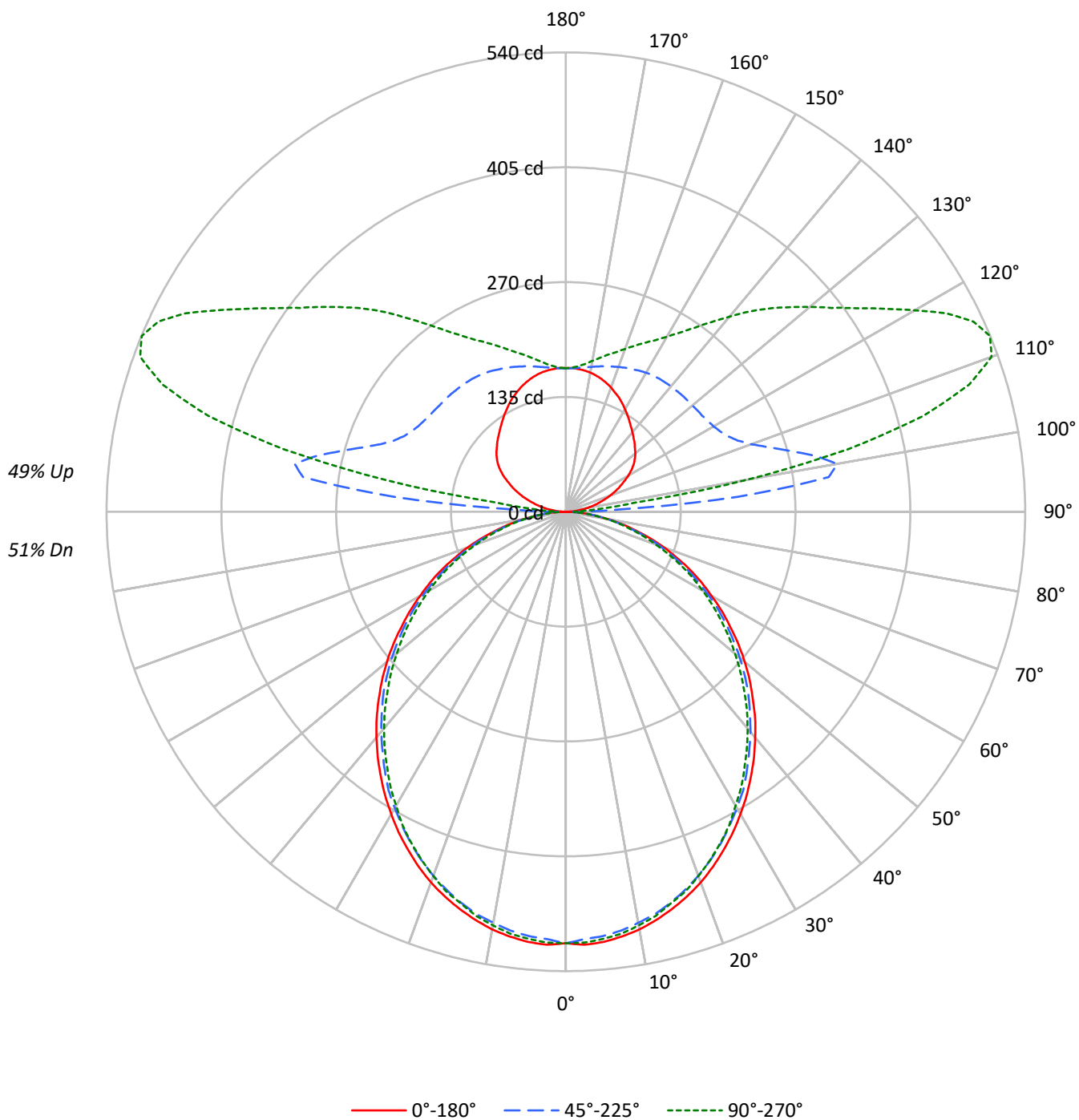
Lumens per Lamp: N/A
Luminaire Lumens: 2593.9 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 22.3
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: P1011591

CATALOG NUMBER: S123DIP-B340D365UB50-4F0-XX-W2A-F4

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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	98	94	90	86	90	87	83	80	73	71	69	61	60	58	50	49	48
2	89	82	75	70	82	76	70	66	64	60	57	54	51	48	44	42	40
3	81	72	64	59	75	67	60	55	57	52	48	48	44	41	39	37	34
4	74	63	56	49	68	59	52	46	50	45	41	42	38	35	35	32	30
5	68	57	48	42	63	53	45	40	45	39	35	38	34	30	31	28	26
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	29	25	23
7	58	46	38	32	54	43	36	30	37	31	27	31	27	24	26	23	20
8	54	42	34	28	50	39	32	27	34	28	24	29	24	21	24	21	18
9	50	38	30	25	46	35	29	24	31	25	21	26	22	19	22	19	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	21	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5459	5459	5459
5°	5473	5271	5263
10°	5425	5092	5041
15°	5349	4907	4798
20°	5263	4701	4557
25°	5150	4483	4300
30°	5028	4259	4029
35°	4900	4029	3760
40°	4766	3787	3496
45°	4617	3552	3220
50°	4467	3291	2943
55°	4274	3017	2662
60°	4077	2717	2363
65°	3890	2391	2051
70°	3622	2029	1687
75°	3233	1607	1310
80°	2796	1130	925
85°	2180	607	463

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4617 cd/sqm

TEST NUMBER: P1011591

CATALOG NUMBER: S123DIP-B340D365UB50-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	1.8
10°-20°	135.0	5.2
20°-30°	199.4	7.7
30°-40°	232.9	9.0
40°-50°	234.1	9.0
50°-60°	205.7	7.9
60°-70°	153.2	5.9
70°-80°	87.2	3.4
80°-90°	25.7	1.0
90°-100°	95.9	3.7
100°-110°	268.2	10.3
110°-120°	261.5	10.1
120°-130°	208.2	8.0
130°-140°	164.4	6.3
140°-150°	122.6	4.7
150°-160°	85.5	3.3
160°-170°	50.3	1.9
170°-180°	16.3	0.6
0°-30°	382.2	14.7
0°-40°	615.1	23.7
0°-60°	1054.9	40.7
0°-90°	1320.9	50.9
90°-120°	625.6	24.1
90°-150°	1120.9	43.2
90°-180°	1273.0	49.1
0°-180°	2593.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	508	505	501	505	504	48
15°	483	482	476	479	477	136
25°	439	436	430	431	430	202
35°	379	377	371	368	366	237
45°	311	309	304	298	296	240
55°	236	236	230	225	223	211
65°	161	159	154	151	150	159
75°	85	83	82	80	78	91
85°	23	22	22	21	21	24
90°	1	4	8	10	10	2
95°	12	38	203	59	40	12
105°	40	59	275	481	435	42
115°	70	87	210	461	529	69
125°	97	115	196	356	417	87
135°	114	136	194	293	338	88
145°	130	149	191	240	264	82
155°	148	160	185	210	219	68
165°	162	166	177	188	191	46
175°	168	169	170	172	172	16
180°	169	169	169	169	169	

TEST NUMBER: P1011591

CATALOG NUMBER: S123DIP-B340D365UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	507.2	507.2	507.2	507.2	507.2
2.5°	509.4	507.6	502.8	507.2	506.8
5°	507.6	505.4	500.7	505.0	504.1
7.5°	503.7	501.5	496.7	500.7	500.2
10°	498.5	496.3	490.6	494.5	493.7
12.5°	491.5	489.7	484.5	487.1	486.7
15°	483.2	481.5	475.8	479.3	476.7
17.5°	474.0	471.9	466.2	468.8	467.9
20°	463.6	461.0	455.3	457.0	455.7
22.5°	451.8	449.2	443.5	444.8	443.1
25°	438.7	436.1	430.4	430.9	429.6
27.5°	425.2	422.6	416.5	416.9	415.6
30°	410.4	408.2	402.1	402.1	399.0
32.5°	395.5	392.5	388.1	385.1	383.8
35°	379.4	376.8	371.1	368.5	366.3
37.5°	363.3	359.8	354.1	351.1	349.8
40°	346.3	343.7	337.5	334.1	332.3
42.5°	329.3	326.2	320.1	316.6	314.9
45°	310.9	309.2	303.5	298.3	296.1
47.5°	293.1	290.4	285.2	280.0	278.2
50°	274.7	272.6	266.9	262.1	259.5
52.5°	255.6	254.3	248.1	244.2	241.6
55°	235.9	235.5	229.8	225.0	222.9
57.5°	217.6	215.9	211.5	207.2	204.5
60°	197.6	197.1	191.9	188.0	185.8
62.5°	179.7	178.4	173.1	169.2	167.9
65°	160.9	158.7	154.4	150.9	149.6
67.5°	140.9	139.1	135.6	132.6	130.8
70°	123.0	120.4	117.7	114.7	112.5
72.5°	104.2	102.5	99.4	96.8	95.9
75°	85.0	83.3	82.0	79.8	78.5
77.5°	68.0	67.2	65.4	63.7	63.7
80°	51.5	50.2	49.3	48.8	48.8
82.5°	35.3	35.3	35.3	34.5	34.0
85°	22.7	21.8	21.8	20.9	20.9
87.5°	11.3	10.0	9.6	9.2	9.2
90°	0.7	4.1	8.5	9.6	9.9
92.5°	5.1	20.5	63.6	21.7	18.1
95°	11.6	37.8	202.7	59.2	39.6
97.5°	18.5	43.2	311.7	148.7	81.3
100°	25.3	47.6	323.7	311.0	214.3
102.5°	32.5	52.8	301.5	416.4	339.4
105°	39.6	58.6	274.8	480.6	434.8
107.5°	47.2	65.4	251.2	508.8	497.0
110°	55.4	72.4	231.7	509.6	532.5

TEST NUMBER: P1011591

CATALOG NUMBER: S123DIP-B340D365UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	62.9	79.8	218.7	490.3	539.7
115°	70.1	87.3	210.2	460.9	528.7
117.5°	77.2	94.5	204.4	429.4	504.8
120°	84.8	101.7	200.6	399.8	473.4
122.5°	91.3	108.5	198.2	376.3	444.0
125°	97.4	115.0	196.2	355.5	417.0
127.5°	102.2	121.2	195.2	338.4	393.7
130°	106.6	126.6	194.1	322.6	374.6
132.5°	110.1	131.6	193.8	308.0	355.8
135°	114.2	136.2	193.5	292.8	338.0
137.5°	117.9	140.0	192.8	278.4	319.2
140°	121.7	143.4	192.4	264.4	299.4
142.5°	125.8	146.4	191.7	251.6	281.0
145°	130.2	149.2	191.1	240.2	264.2
147.5°	134.7	152.1	190.0	231.2	249.8
150°	139.1	154.5	188.7	223.4	237.5
152.5°	143.6	157.0	187.0	216.6	227.3
155°	148.0	159.6	184.9	210.2	219.1
157.5°	151.4	161.8	183.2	204.0	211.2
160°	155.5	163.7	181.1	198.4	203.7
162.5°	158.6	165.1	179.1	193.1	196.9
165°	161.7	166.3	177.0	187.8	191.1
167.5°	164.1	167.4	175.0	183.2	185.3
170°	166.1	167.8	172.9	179.1	180.1
172.5°	167.5	168.4	171.2	175.5	175.3
175°	168.5	168.6	169.9	172.3	171.9
177.5°	169.2	168.8	168.8	170.2	169.5
180°	168.8	168.8	168.8	168.8	168.8

(END OF REPORT)