

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: P1011590

Luminaire Tested: S123DIP-B340D365UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011590
REPORT IS A COMBINATION OF REPORTS P989797 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-F1
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

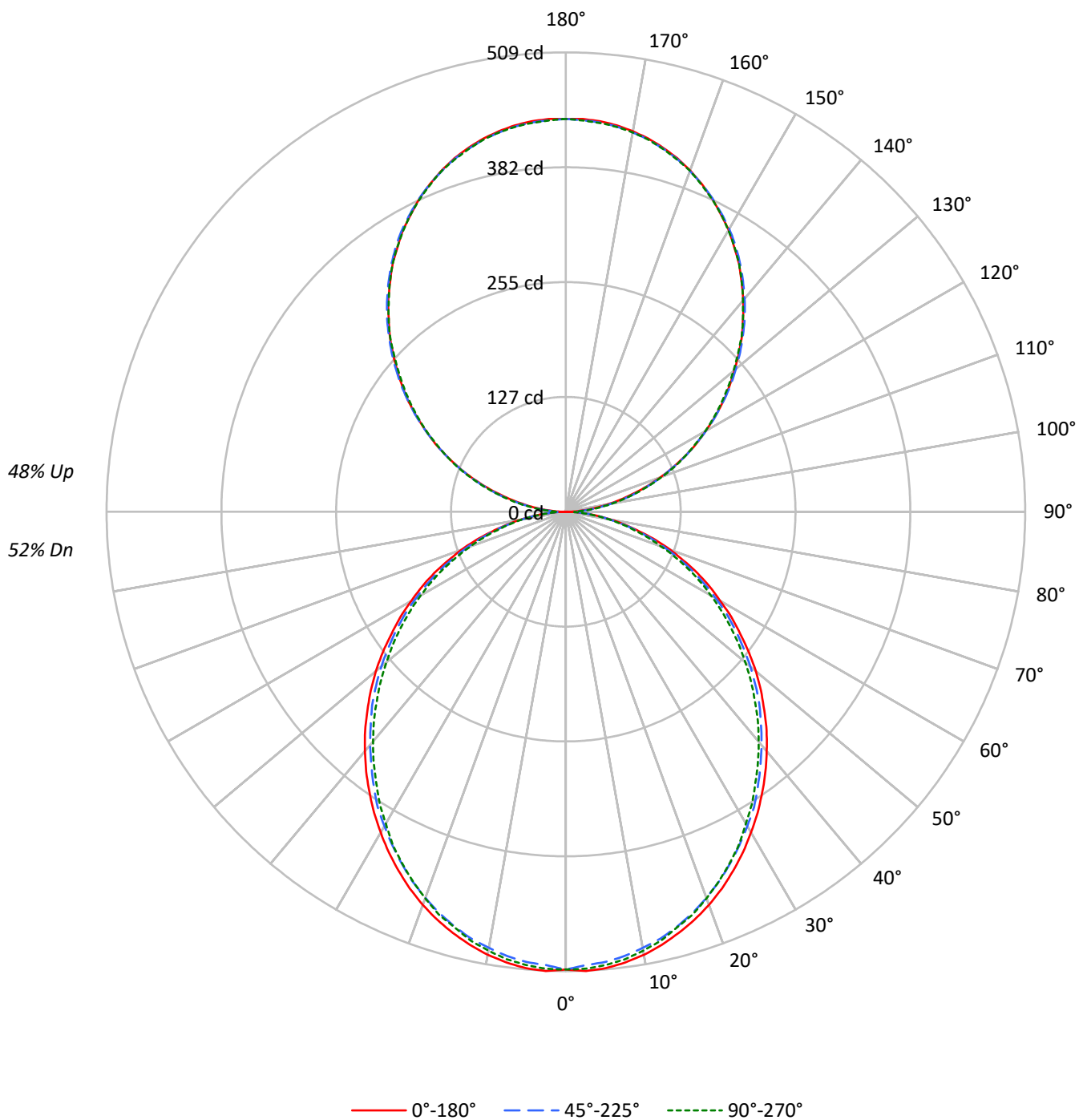
Lumens per Lamp: N/A
Luminaire Lumens: 2527.0 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58
1	98	94	90	86	91	87	84	81	74	72	69	62	61	59	51	50	49
2	89	82	76	71	82	76	71	66	65	61	57	55	52	49	45	43	41
3	82	72	65	59	75	67	60	55	57	52	48	48	45	42	40	37	35
4	75	64	56	50	69	59	52	47	51	45	41	43	39	36	36	33	30
5	68	57	49	43	63	53	46	40	45	40	35	39	34	31	32	29	26
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	27	23	21
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	24	21	18
9	50	38	31	25	47	36	29	24	31	26	22	27	22	19	23	19	17
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	18	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	1.9
10°-20°	135.0	5.3
20°-30°	199.4	7.9
30°-40°	232.9	9.2
40°-50°	234.1	9.3
50°-60°	205.7	8.1
60°-70°	153.2	6.1
70°-80°	87.2	3.4
80°-90°	25.7	1.0
90°-100°	28.0	1.1
100°-110°	84.8	3.4
110°-120°	144.4	5.7
120°-130°	189.9	7.5
130°-140°	213.5	8.4
140°-150°	209.9	8.3
150°-160°	176.7	7.0
160°-170°	117.6	4.7
170°-180°	41.2	1.6
0°-30°	382.2	15.1
0°-40°	615.1	24.3
0°-60°	1054.9	41.7
0°-90°	1320.9	52.3
90°-120°	257.2	10.2
90°-150°	870.6	34.5
90°-180°	1206.0	47.7
0°-180°	2527.0	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°	0	4	8	10	10	3
95°	20	23	25	27	27	22
105°	77	78	81	81	81	82
115°	145	146	146	146	146	144
125°	213	214	213	212	210	190
135°	276	278	278	276	276	213
145°	335	335	336	336	335	209
155°	383	383	384	385	383	176
165°	418	416	416	418	416	118
175°	434	433	433	435	432	41
180°	435	435	435	435	435	

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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°	0.3	3.8	8.2	9.6	10.3
92.5°	10.3	12.3	14.4	15.4	14.7
95°	20.2	22.6	25.3	26.7	26.7
97.5°	33.2	34.9	36.9	38.6	38.3
100°	46.5	48.6	50.3	51.3	52.0
102.5°	61.9	62.9	65.3	66.3	66.0
105°	76.9	77.6	80.7	80.7	81.4
107.5°	94.7	95.1	96.4	97.5	97.1
110°	111.1	111.8	112.5	113.9	113.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	128.2	128.6	128.6	130.3	130.3
115°	145.3	146.3	145.7	146.0	145.7
117.5°	162.8	163.1	162.4	162.4	161.4
120°	178.8	180.9	179.2	178.8	178.1
122.5°	195.6	197.0	196.3	195.2	194.2
125°	212.7	213.7	213.0	211.7	210.3
127.5°	228.4	230.5	229.8	227.7	226.4
130°	244.1	246.9	245.8	244.5	242.1
132.5°	259.9	262.6	261.9	260.2	258.5
135°	275.9	278.0	277.6	276.3	275.6
137.5°	290.6	292.4	293.4	291.7	290.6
140°	306.0	307.7	308.1	307.7	305.3
142.5°	320.0	321.8	322.4	322.1	320.4
145°	334.8	335.4	336.5	336.1	334.8
147.5°	347.4	348.8	349.8	349.8	347.7
150°	360.7	361.4	362.1	362.1	360.1
152.5°	371.7	372.7	373.0	373.7	372.0
155°	383.3	383.3	383.6	385.0	382.6
157.5°	393.2	392.9	393.2	394.6	392.5
160°	402.5	401.8	401.8	403.5	402.1
162.5°	410.7	409.6	410.0	411.7	409.3
165°	417.5	416.5	416.5	418.5	416.1
167.5°	423.3	421.9	422.3	424.3	422.3
170°	428.1	426.7	426.7	429.1	426.7
172.5°	431.9	430.5	430.5	432.5	430.2
175°	434.3	432.9	432.9	434.9	432.5
177.5°	435.6	434.3	434.3	436.3	433.9
180°	435.3	435.3	435.3	435.3	435.3

(END OF REPORT)