

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: P1012487

Luminaire Tested: S123RDIP-B340D365UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012487
REPORT IS A COMBINATION OF REPORTS P993230 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B340D365UB40-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

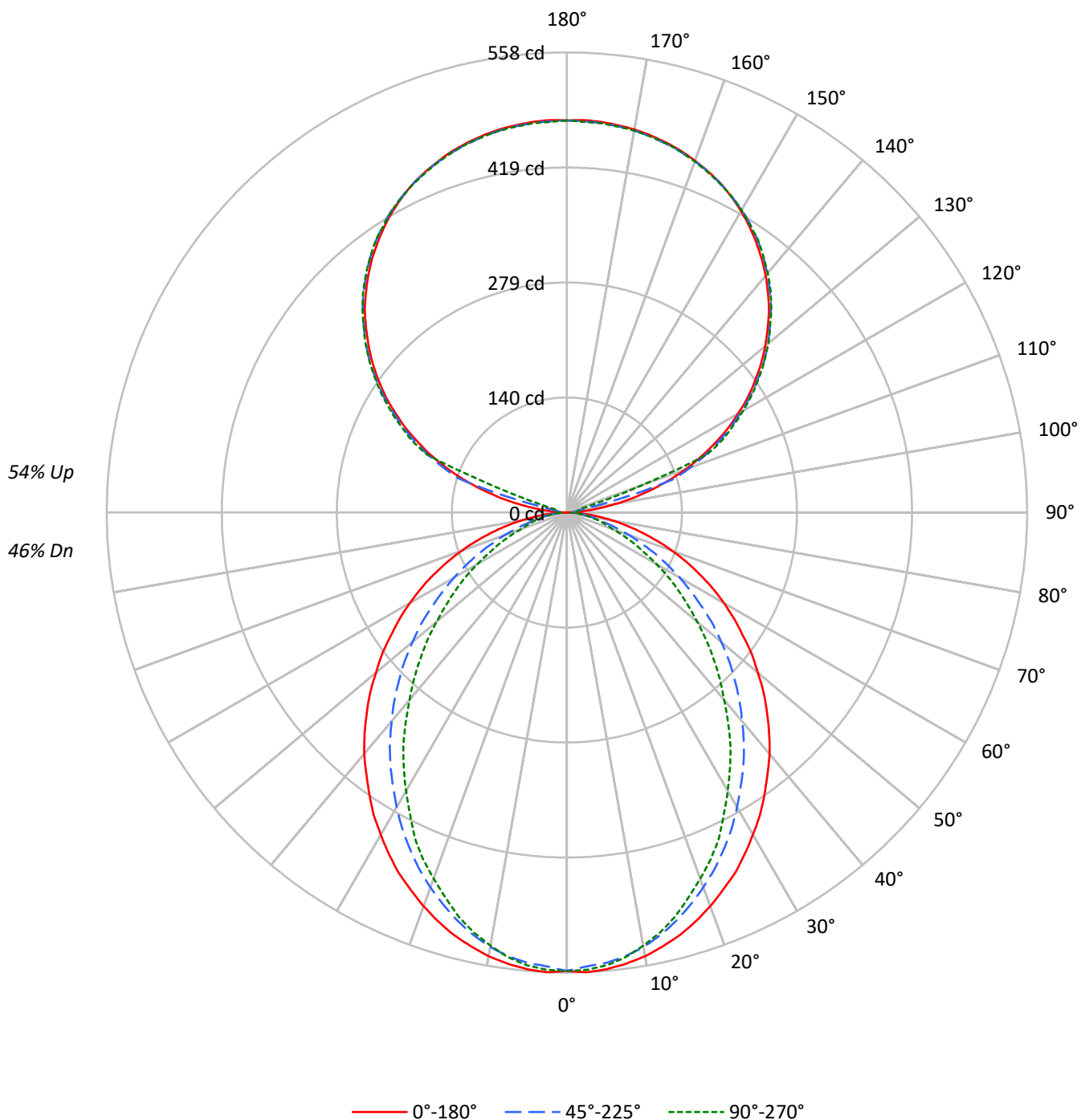
Lumens per Lamp: N/A
Luminaire Lumens: 2707.0 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1012487

CATALOG NUMBER: S123RDIP-B340D365UB40-4F0-XX-W2A-F

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	50	30	10
RCR																				
0	106	106	106	106	98	98	98	98	81	81	81	66	66	66	53	53	53			46
1	97	93	89	86	89	86	82	80	72	69	67	59	57	56	47	46	45			40
2	89	82	76	71	81	75	70	66	63	59	56	52	50	47	42	40	39			34
3	81	72	65	59	74	66	60	55	56	51	48	46	43	40	37	35	33			29
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29			25
5	68	57	49	43	63	53	46	41	45	39	35	37	33	30	30	28	25			22
6	63	51	43	38	58	47	40	35	40	35	31	34	30	27	28	25	22			19
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20			17
8	54	42	34	29	50	39	32	28	34	28	24	28	24	21	23	20	18			16
9	50	38	31	26	46	36	29	25	31	26	22	26	22	19	22	18	16			14
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15			13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5985	5985	5985
5°	5994	5773	5756
10°	5947	5555	5446
15°	5870	5288	5106
20°	5769	4995	4725
25°	5664	4692	4364
30°	5529	4370	3938
35°	5392	4053	3550
40°	5263	3709	3121
45°	5095	3372	2736
50°	4913	3013	2337
55°	4722	2629	1971
60°	4540	2234	1600
65°	4305	1829	1249
70°	4011	1384	892
75°	3583	937	707
80°	3062	651	497
85°	2296	351	259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5095 cd/sqm

TEST NUMBER: P1012487

CATALOG NUMBER: S123RDIP-B340D365UB40-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	1.9
10°-20°	145.4	5.4
20°-30°	209.3	7.7
30°-40°	235.7	8.7
40°-50°	225.5	8.3
50°-60°	184.6	6.8
60°-70°	124.4	4.6
70°-80°	62.4	2.3
80°-90°	17.3	0.6
90°-100°	16.8	0.6
100°-110°	81.1	3.0
110°-120°	198.7	7.3
120°-130°	252.3	9.3
130°-140°	269.5	10.0
140°-150°	252.0	9.3
150°-160°	203.3	7.5
160°-170°	131.2	4.8
170°-180°	45.2	1.7
0°-30°	407.0	15.0
0°-40°	642.7	23.7
0°-60°	1052.8	38.9
0°-90°	1256.9	46.4
90°-120°	296.6	11.0
90°-150°	1070.4	39.5
90°-180°	1450.0	53.6
0°-180°	2707.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	556	556	556	556	556	
5°	556	554	548	552	551	53
15°	530	525	513	510	507	149
25°	482	471	450	441	436	222
35°	418	401	373	354	346	261
45°	343	323	288	262	252	265
55°	261	238	200	174	165	234
65°	178	153	118	96	91	176
75°	94	73	48	43	42	100
85°	24	14	13	12	12	26
90°	0	4	8	10	11	3
95°	22	7	11	13	13	26
105°	105	109	77	15	16	112
115°	198	200	203	206	208	195
125°	278	281	283	283	284	249
135°	347	349	350	351	350	267
145°	400	402	403	404	404	250
155°	441	440	440	442	440	203
165°	465	464	463	466	464	131
175°	476	474	474	477	474	45
180°	476	476	476	476	476	

TEST NUMBER: P1012487

CATALOG NUMBER: S123RDIP-B340D365UB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	556.0	556.0	556.0	556.0	556.0
2.5°	558.2	556.4	551.0	556.0	555.1
5°	556.0	553.7	548.3	552.3	551.4
7.5°	551.9	549.6	542.9	545.6	544.2
10°	546.5	543.3	535.2	535.7	533.4
12.5°	538.8	535.2	524.8	524.4	521.7
15°	530.3	525.3	512.7	510.4	507.3
17.5°	519.9	514.5	498.7	494.2	489.7
20°	508.2	500.9	483.8	477.9	472.5
22.5°	495.1	486.5	468.0	460.4	455.4
25°	482.5	471.2	450.4	441.0	436.0
27.5°	467.1	455.0	432.4	419.8	412.1
30°	451.3	437.8	412.6	397.2	390.0
32.5°	435.6	419.8	392.7	375.6	367.9
35°	417.5	401.3	373.3	354.0	345.8
37.5°	399.5	381.9	352.6	331.0	321.0
40°	382.4	362.5	330.5	307.1	296.7
42.5°	363.0	343.1	309.8	283.6	274.6
45°	343.1	322.8	288.1	262.4	251.6
47.5°	323.7	301.2	266.9	239.0	229.5
50°	302.1	280.9	244.4	216.4	206.1
52.5°	282.7	259.3	223.2	193.9	184.9
55°	260.6	238.5	200.2	174.0	165.0
57.5°	240.8	216.9	178.1	153.3	145.6
60°	220.0	195.2	157.8	133.5	125.8
62.5°	199.3	174.5	137.1	114.5	106.4
65°	178.1	153.3	118.1	96.0	91.1
67.5°	156.9	131.7	97.4	80.7	75.3
70°	136.2	111.8	80.3	64.5	59.5
72.5°	115.4	91.5	63.6	51.4	50.0
75°	94.2	72.6	47.8	43.3	42.4
77.5°	74.8	55.0	37.4	34.7	33.8
80°	56.4	37.9	28.4	27.1	26.2
82.5°	38.8	23.4	20.3	18.9	18.9
85°	23.9	14.0	12.6	11.7	11.7
87.5°	10.8	5.9	5.9	5.4	5.0
90°	0.4	3.9	8.5	9.9	10.6
92.5°	8.1	6.0	9.2	11.7	12.0
95°	21.6	7.1	11.0	13.4	13.4
97.5°	39.2	29.3	11.3	14.1	14.5
100°	59.7	66.8	11.7	14.5	14.8
102.5°	83.0	87.6	26.1	14.5	15.2
105°	105.3	109.2	77.4	14.8	15.5
107.5°	129.0	132.2	137.5	83.0	36.8
110°	152.7	155.5	159.4	147.7	97.2



TEST NUMBER: P1012487

CATALOG NUMBER: S123RDIP-B340D365UB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.3	177.7	181.6	184.8	184.1
115°	197.5	199.7	202.8	206.4	207.8
117.5°	219.4	221.9	223.7	226.5	226.9
120°	239.6	242.8	243.8	246.7	246.7
122.5°	260.1	262.6	264.0	265.7	266.1
125°	278.5	281.3	282.7	283.4	284.1
127.5°	296.8	299.7	301.4	302.5	301.8
130°	313.8	316.6	318.0	319.5	318.7
132.5°	330.1	332.9	333.9	335.4	334.3
135°	346.7	348.8	350.2	351.3	350.2
137.5°	360.8	363.6	364.3	366.1	365.4
140°	374.9	377.1	378.1	379.5	378.8
142.5°	388.0	390.1	391.2	392.2	391.2
145°	400.0	402.5	403.2	403.9	403.9
147.5°	411.7	413.5	414.2	414.9	413.1
150°	422.3	423.3	424.1	424.8	423.7
152.5°	431.8	432.2	432.5	433.9	432.2
155°	440.7	440.0	440.3	442.1	440.0
157.5°	447.7	447.7	447.4	449.5	446.7
160°	454.1	453.7	453.4	455.5	453.0
162.5°	460.1	459.0	458.7	461.2	459.0
165°	464.7	463.6	463.3	466.1	463.6
167.5°	468.6	467.2	467.2	470.0	467.2
170°	471.8	470.3	470.3	473.2	470.3
172.5°	473.9	472.1	472.5	475.3	472.1
175°	475.6	473.9	474.2	476.7	473.9
177.5°	476.4	474.6	474.9	477.8	474.2
180°	475.6	475.6	475.6	475.6	475.6

(END OF REPORT)