

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059171

Luminaire Tested: S123RDRP-S340D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059171
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S340D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

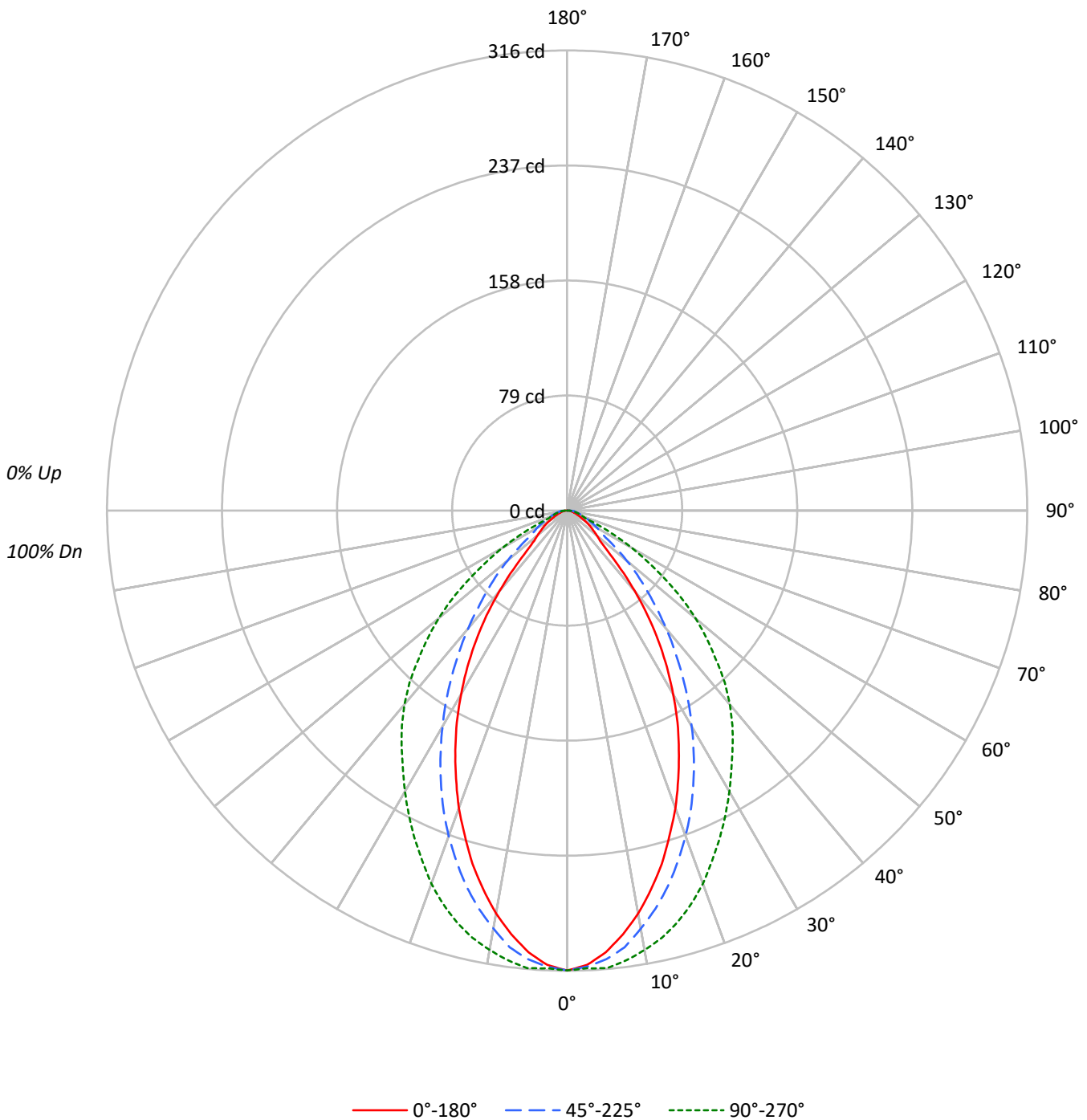
Lumens per Lamp: N/A
Luminaire Lumens: 424.0 lumens
Efficiency: N/A
Efficacy: 33.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (A_{in}): 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: P1059171

CATALOG NUMBER: S123RDRP-S340D830-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1059171

CATALOG NUMBER: S123RDRP-S340D830-X4F0-XX-UDD-SVL-W

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3708	3708	3708
5°	3588	3645	3718
10°	3349	3476	3653
15°	3053	3248	3558
20°	2717	2972	3408
25°	2353	2659	3213
30°	1974	2320	3021
35°	1564	1974	2840
40°	1107	1623	2664
45°	651	1284	2398
50°	488	976	2101
55°	409	659	1687
60°	331	561	1198
65°	261	481	633
70°	230	419	391
75°	213	390	372
80°	210	426	372
85°	269	633	472

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2398 cd/sqm



TEST NUMBER: P1059171

CATALOG NUMBER: S123RDRP-S340D830-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.1	6.9
10°-20°	75.5	17.8
20°-30°	96.2	22.7
30°-40°	90.5	21.3
40°-50°	65.2	15.4
50°-60°	37.6	8.9
60°-70°	17.2	4.1
70°-80°	8.6	2.0
80°-90°	4.1	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	200.8	47.4
0°-40°	291.3	68.7
0°-60°	394.1	93.0
0°-90°	424.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	424.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	304	310	309	312	315	28
15°	251	260	267	282	293	70
25°	182	191	205	228	248	83
35°	109	118	138	170	198	68
45°	39	49	77	116	144	33
55°	20	21	32	61	82	18
65°	9	13	17	19	23	10
75°	5	9	9	8	8	5
85°	2	4	5	4	4	2
90°	0	0	0	0	0	



TEST NUMBER: P1059171

CATALOG NUMBER: S123RDRP-S340D830-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	315.8	315.8	315.8	315.8	315.8
2.5°	312.3	316.2	313.5	313.9	314.6
5°	304.4	309.5	309.2	312.3	315.4
7.5°	293.5	299.3	302.5	307.2	311.5
10°	280.9	287.6	291.5	300.1	306.4
12.5°	266.4	275.0	280.1	291.5	300.5
15°	251.1	260.1	267.2	282.1	292.7
17.5°	233.8	243.6	252.7	270.3	283.3
20°	217.4	226.8	237.8	257.0	272.7
22.5°	199.3	209.5	222.1	242.5	260.1
25°	181.6	191.1	205.2	227.9	248.0
27.5°	164.0	173.4	188.3	213.4	235.4
30°	145.6	155.4	171.1	198.9	222.8
32.5°	127.5	136.9	154.6	184.8	209.9
35°	109.1	118.5	137.7	169.5	198.1
37.5°	91.0	100.8	121.2	156.9	186.4
40°	72.2	82.8	105.9	144.0	173.8
42.5°	54.5	65.9	90.6	130.6	160.1
45°	39.2	49.0	77.3	116.1	144.4
47.5°	30.6	35.7	65.1	101.2	129.9
50°	26.7	27.5	53.4	87.5	115.0
52.5°	23.1	23.9	42.0	74.5	99.3
55°	20.0	20.8	32.2	61.2	82.4
57.5°	16.9	18.0	26.7	48.6	66.3
60°	14.1	15.7	23.9	37.3	51.0
62.5°	11.4	14.1	20.4	27.5	36.5
65°	9.4	13.3	17.3	19.2	22.8
67.5°	7.8	12.2	14.5	13.7	13.3
70°	6.7	11.0	12.2	11.0	11.4
72.5°	5.5	10.2	10.2	9.4	9.4
75°	4.7	9.0	8.6	8.2	8.2
77.5°	3.9	7.8	7.5	7.1	6.7
80°	3.1	6.3	6.3	5.9	5.5
82.5°	2.7	5.1	5.1	5.1	4.3
85°	2.0	4.3	4.7	4.3	3.5
87.5°	1.6	3.9	3.9	3.5	2.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1059171

CATALOG NUMBER: S123RDRP-S340D830-X4F0-XX-UDD-SVL-W

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	4.51	5.83	4.88	6.14	6.46	11.88	13.20	12.25	13.51	13.83
	3H	5.91	7.08	6.29	7.41	7.77	12.11	13.28	12.49	13.61	13.98
	4H	6.46	7.55	6.86	7.90	8.28	12.23	13.32	12.63	13.67	14.05
	6H	6.89	7.89	7.30	8.26	8.66	12.34	13.34	12.76	13.71	14.11
	8H	7.06	8.01	7.49	8.40	8.81	12.39	13.34	12.82	13.73	14.14
	12H	7.22	8.13	7.65	8.51	8.94	12.45	13.36	12.88	13.74	14.17
4H	2H	5.62	6.71	6.02	7.06	7.44	11.84	12.93	12.24	13.28	13.67
	3H	7.29	8.18	7.70	8.58	8.99	12.20	13.10	12.61	13.50	13.90
	4H	8.09	8.89	8.53	9.31	9.76	12.40	13.20	12.83	13.62	14.06
	6H	8.72	9.42	9.19	9.86	10.33	12.63	13.32	13.09	13.76	14.23
	8H	8.96	9.60	9.43	10.05	10.52	12.73	13.38	13.20	13.82	14.29
	12H	9.17	9.74	9.66	10.23	10.70	12.86	13.43	13.34	13.91	14.39
8H	4H	8.54	9.18	9.01	9.63	10.10	12.44	13.08	12.90	13.53	14.00
	6H	9.45	9.98	9.95	10.47	10.95	12.77	13.30	13.27	13.79	14.27
	8H	9.86	10.34	10.38	10.85	11.35	12.96	13.43	13.48	13.95	14.44
	12H	10.28	10.70	10.80	11.20	11.77	13.20	13.63	13.72	14.12	14.69
12H	4H	8.59	9.17	9.08	9.65	10.12	12.42	13.00	12.91	13.48	13.95
	6H	9.58	10.06	10.10	10.57	11.06	12.78	13.26	13.30	13.78	14.27
	8H	10.12	10.54	10.63	11.03	11.61	13.04	13.46	13.55	13.96	14.53