

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: P1059197

Luminaire Tested: S123RDR-S340D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059197
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D850-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

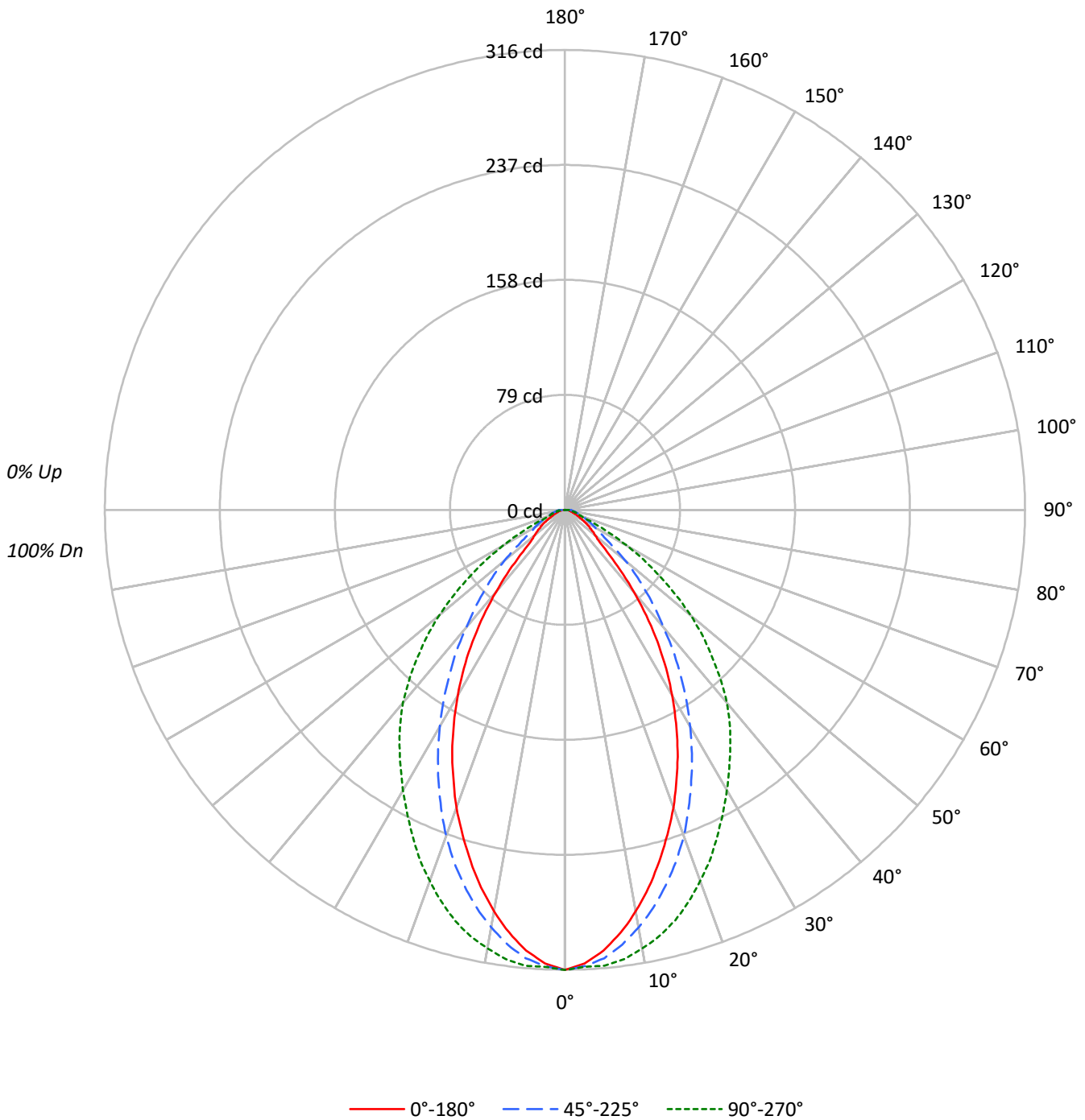
Lumens per Lamp: N/A
Luminaire Lumens: 423.4 lumens
Efficiency: N/A
Efficacy: 33.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (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	0
RW	70	50	30	10	70	50	30	10	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			100	
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79			79	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64			64	
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58			58	
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52			52	
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48			48	
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44			44	
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40			40	
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37			37	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3712	3712	3712
5°	3585	3645	3705
10°	3340	3472	3649
15°	3040	3248	3551
20°	2722	2982	3391
25°	2374	2661	3205
30°	1996	2334	3016
35°	1588	1978	2838
40°	1131	1613	2653
45°	674	1295	2376
50°	497	986	2057
55°	416	671	1634
60°	336	552	1148
65°	270	475	617
70°	223	412	381
75°	209	399	354
80°	216	440	345
85°	310	620	431

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2376 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	6.9
10°-20°	75.4	17.8
20°-30°	96.2	22.7
30°-40°	90.5	21.4
40°-50°	65.0	15.4
50°-60°	37.3	8.8
60°-70°	17.1	4.0
70°-80°	8.6	2.0
80°-90°	4.2	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°	200.7	47.4
0°-40°	291.2	68.8
0°-60°	393.6	93.0
0°-90°	423.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	423.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	304	310	309	312	314	28
15°	250	259	267	282	292	70
25°	183	192	205	228	247	84
35°	111	119	138	169	198	69
45°	41	49	78	115	143	34
55°	20	21	33	60	80	18
65°	10	13	17	19	22	10
75°	5	9	9	8	8	5
85°	2	5	5	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	316.1	316.1	316.1	316.1	316.1
2.5°	312.0	316.6	313.8	313.8	314.3
5°	304.1	310.1	309.2	311.5	314.3
7.5°	293.1	299.5	301.4	306.9	311.5
10°	280.1	287.5	291.2	300.0	306.0
12.5°	265.8	274.1	280.1	291.2	300.0
15°	250.1	258.9	267.2	281.5	292.1
17.5°	234.0	242.8	253.4	270.0	282.4
20°	217.8	226.6	238.6	256.1	271.4
22.5°	200.3	209.1	222.0	241.8	260.3
25°	183.2	191.5	205.4	227.5	247.4
27.5°	165.2	173.5	188.8	212.8	234.9
30°	147.2	155.5	172.1	198.0	222.4
32.5°	129.2	137.1	155.1	183.7	210.0
35°	110.8	118.6	138.0	169.4	198.0
37.5°	91.8	99.7	122.3	156.5	186.0
40°	73.8	82.6	105.2	143.5	173.1
42.5°	56.3	65.5	91.4	129.7	158.3
45°	40.6	49.4	78.0	114.9	143.1
47.5°	30.9	35.5	66.0	100.1	128.3
50°	27.2	27.7	54.0	86.8	112.6
52.5°	23.5	24.0	42.0	73.8	96.0
55°	20.3	20.8	32.8	60.5	79.8
57.5°	17.1	18.0	26.8	48.0	64.1
60°	14.3	16.2	23.5	36.5	48.9
62.5°	11.5	14.8	20.3	26.8	35.1
65°	9.7	13.4	17.1	18.9	22.2
67.5°	7.8	12.5	14.3	13.4	13.4
70°	6.5	11.1	12.0	11.1	11.1
72.5°	5.5	10.6	10.2	9.2	9.2
75°	4.6	9.2	8.8	7.8	7.8
77.5°	4.2	7.8	7.4	6.9	6.5
80°	3.2	6.5	6.5	6.0	5.1
82.5°	2.8	5.5	5.5	5.1	4.2
85°	2.3	4.6	4.6	4.2	3.2
87.5°	1.8	4.2	4.2	3.7	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)