

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: P1059167

Luminaire Tested: S123RDR-S340D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059167
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D830-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

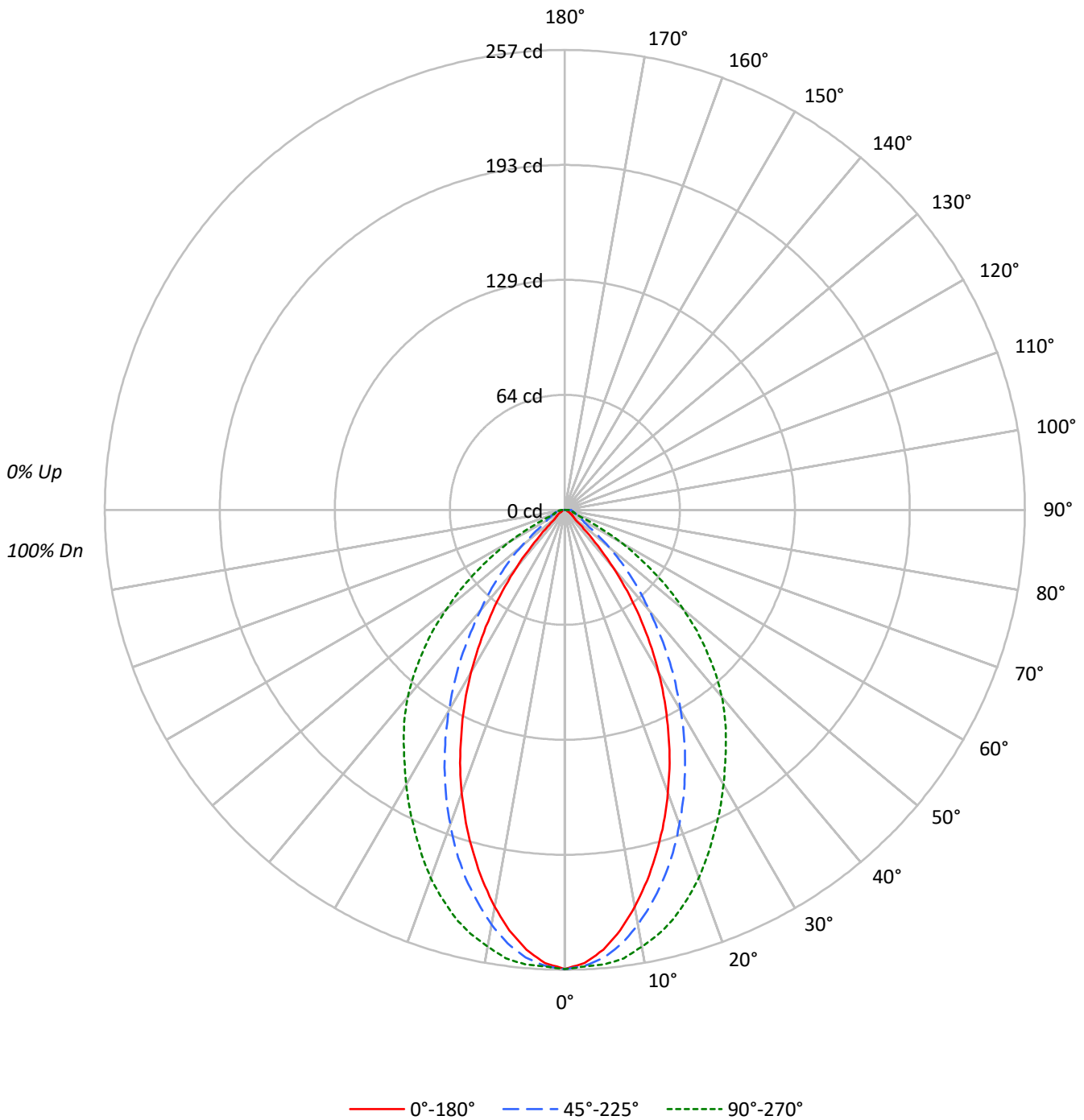
Lumens per Lamp: N/A
Luminaire Lumens: 308.2 lumens
Efficiency: N/A
Efficacy: 24.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3013	3013	3013
5°	2909	2960	3006
10°	2685	2807	2956
15°	2408	2594	2871
20°	2103	2338	2735
25°	1769	2059	2567
30°	1420	1756	2404
35°	1041	1445	2249
40°	644	1125	2092
45°	247	847	1863
50°	122	581	1577
55°	96	321	1237
60°	63	268	829
65°	56	239	370
70°	55	216	216
75°	73	231	213
80°	108	291	237
85°	162	472	323

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1863 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	7.6
10°-20°	60.2	19.5
20°-30°	74.7	24.3
30°-40°	67.0	21.7
40°-50°	44.0	14.3
50°-60°	22.1	7.2
60°-70°	8.7	2.8
70°-80°	4.9	1.6
80°-90°	3.1	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°	158.5	51.4
0°-40°	225.5	73.2
0°-60°	291.6	94.6
0°-90°	308.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	308.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	257	257	257	257	257	
5°	247	251	251	253	255	23
15°	198	204	213	228	236	55
25°	136	145	159	181	198	62
35°	73	82	101	132	157	45
45°	15	25	51	86	112	14
55°	5	6	16	42	60	4
65°	2	6	9	11	13	2
75°	2	5	5	5	5	2
85°	1	4	4	4	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	256.6	256.6	256.6	256.6	256.6
2.5°	253.4	257.0	255.0	255.0	255.4
5°	246.8	250.7	251.1	252.7	255.0
7.5°	237.0	242.1	244.4	249.1	252.7
10°	225.2	230.7	235.4	243.6	247.9
12.5°	212.2	217.7	224.8	236.2	242.8
15°	198.1	204.4	213.4	227.9	236.2
17.5°	183.6	189.9	200.9	217.3	227.9
20°	168.3	175.4	187.1	206.0	218.9
22.5°	153.0	160.8	173.4	193.8	208.7
25°	136.5	145.2	158.9	181.2	198.1
27.5°	120.8	129.9	144.4	168.7	187.9
30°	104.7	113.8	129.5	155.7	177.3
32.5°	88.3	98.5	114.9	143.6	166.7
35°	72.6	82.4	100.8	131.8	156.9
37.5°	57.3	67.1	86.3	120.4	147.1
40°	42.0	52.2	73.4	109.5	136.5
42.5°	27.5	38.1	62.0	98.5	124.8
45°	14.9	24.7	51.0	85.9	112.2
47.5°	8.2	13.3	41.2	74.1	100.0
50°	6.7	7.5	31.8	63.2	86.3
52.5°	5.5	6.3	22.8	52.6	73.8
55°	4.7	5.5	15.7	42.4	60.4
57.5°	3.9	4.7	12.6	32.6	47.5
60°	2.7	4.7	11.4	23.9	35.3
62.5°	2.4	4.7	9.8	16.5	23.5
65°	2.0	5.5	8.6	11.0	13.3
67.5°	1.6	5.5	7.5	7.1	7.1
70°	1.6	5.5	6.3	5.9	6.3
72.5°	1.6	5.9	5.9	5.5	5.5
75°	1.6	5.1	5.1	4.7	4.7
77.5°	1.6	4.7	4.7	4.3	4.3
80°	1.6	4.3	4.3	3.9	3.5
82.5°	1.6	3.9	3.9	3.5	3.1
85°	1.2	3.5	3.5	3.5	2.4
87.5°	1.2	3.1	3.5	3.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)