

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: P1059221

Luminaire Tested: S123RDR-S340D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059221
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-S340D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

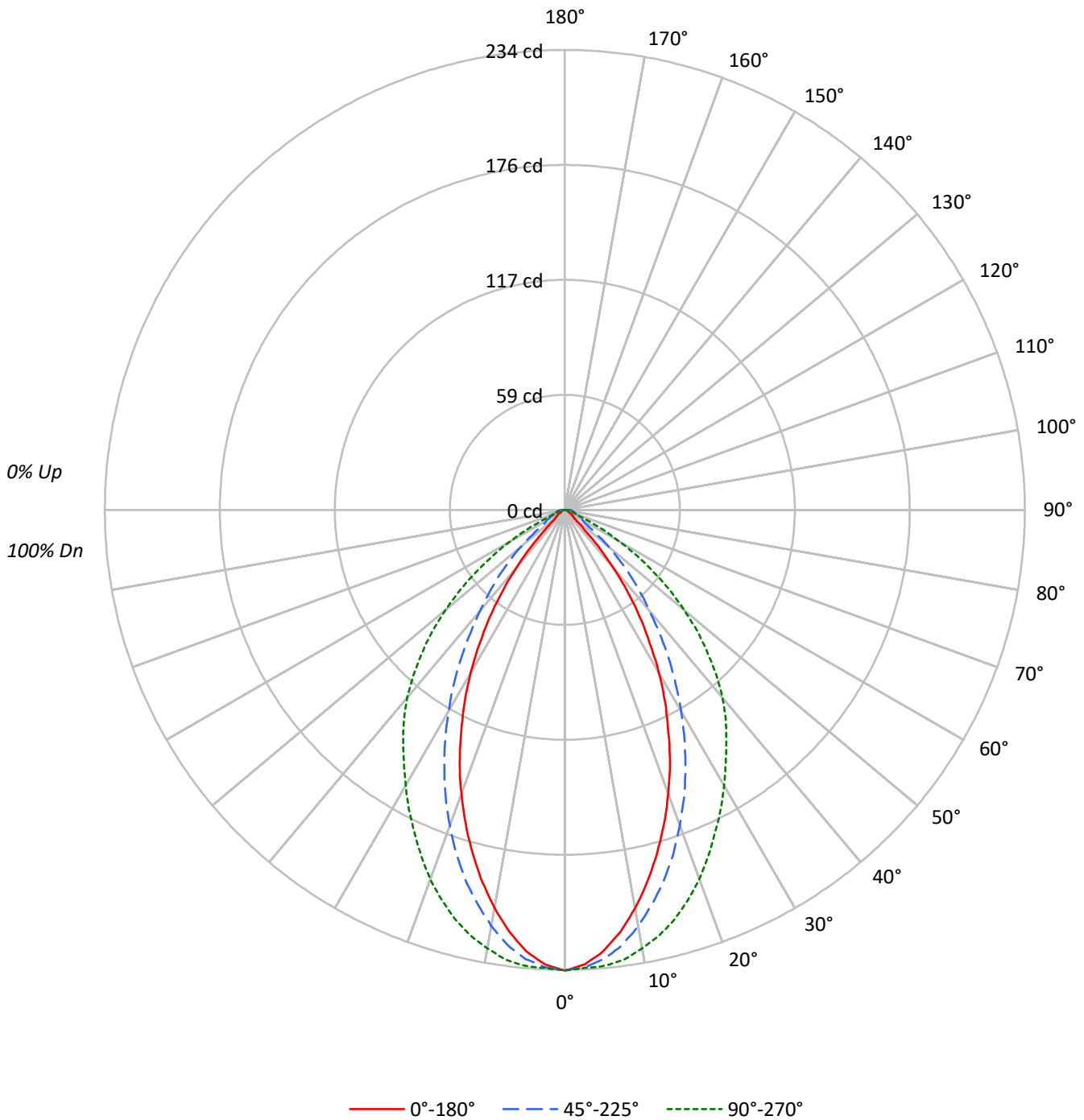
Lumens per Lamp: N/A
Luminaire Lumens: 281.5 lumens
Efficiency: N/A
Efficacy: 22.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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°	2752	2752	2752
5°	2657	2704	2745
10°	2453	2564	2701
15°	2200	2371	2622
20°	1921	2136	2499
25°	1616	1880	2345
30°	1298	1604	2197
35°	950	1320	2054
40°	587	1027	1911
45°	226	774	1702
50°	111	530	1440
55°	88	293	1130
60°	59	244	759
65°	50	220	339
70°	48	196	196
75°	64	213	195
80°	95	264	216
85°	148	431	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1702 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.5	7.6
10°-20°	55.0	19.5
20°-30°	68.3	24.3
30°-40°	61.2	21.7
40°-50°	40.2	14.3
50°-60°	20.1	7.2
60°-70°	8.0	2.8
70°-80°	4.4	1.6
80°-90°	2.8	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°	144.8	51.4
0°-40°	206.0	73.2
0°-60°	266.3	94.6
0°-90°	281.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	281.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	234	234	234	234	234	
5°	225	229	229	231	233	21
15°	181	187	195	208	216	50
25°	125	133	145	166	181	57
35°	66	75	92	120	143	41
45°	14	23	47	78	102	13
55°	4	5	14	39	55	4
65°	2	5	8	10	12	2
75°	1	5	5	4	4	1
85°	1	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	234.4	234.4	234.4	234.4	234.4
2.5°	231.5	234.7	232.9	232.9	233.3
5°	225.4	229.0	229.4	230.8	232.9
7.5°	216.5	221.1	223.3	227.6	230.8
10°	205.7	210.7	215.0	222.6	226.5
12.5°	193.9	198.9	205.3	215.7	221.8
15°	181.0	186.7	195.0	208.2	215.7
17.5°	167.7	173.5	183.5	198.5	208.2
20°	153.7	160.2	170.9	188.1	200.0
22.5°	139.8	146.9	158.4	177.0	190.7
25°	124.7	132.6	145.1	165.6	181.0
27.5°	110.4	118.6	131.9	154.1	171.7
30°	95.7	103.9	118.3	142.3	162.0
32.5°	80.6	90.0	105.0	131.2	152.3
35°	66.3	75.3	92.1	120.4	143.3
37.5°	52.3	61.3	78.8	110.0	134.4
40°	38.3	47.7	67.0	100.0	124.7
42.5°	25.1	34.8	56.6	90.0	114.0
45°	13.6	22.6	46.6	78.5	102.5
47.5°	7.5	12.2	37.6	67.7	91.4
50°	6.1	6.8	29.0	57.7	78.8
52.5°	5.0	5.7	20.8	48.0	67.4
55°	4.3	5.0	14.3	38.7	55.2
57.5°	3.6	4.3	11.5	29.7	43.4
60°	2.5	4.3	10.4	21.9	32.3
62.5°	2.2	4.3	9.0	15.1	21.5
65°	1.8	5.0	7.9	10.0	12.2
67.5°	1.4	5.0	6.8	6.5	6.5
70°	1.4	5.0	5.7	5.4	5.7
72.5°	1.4	5.4	5.4	5.0	5.0
75°	1.4	4.7	4.7	4.3	4.3
77.5°	1.4	4.3	4.3	3.9	3.9
80°	1.4	3.9	3.9	3.6	3.2
82.5°	1.4	3.6	3.6	3.2	2.9
85°	1.1	3.2	3.2	3.2	2.2
87.5°	1.1	2.9	3.2	2.9	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)