

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: P1059227

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059227
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

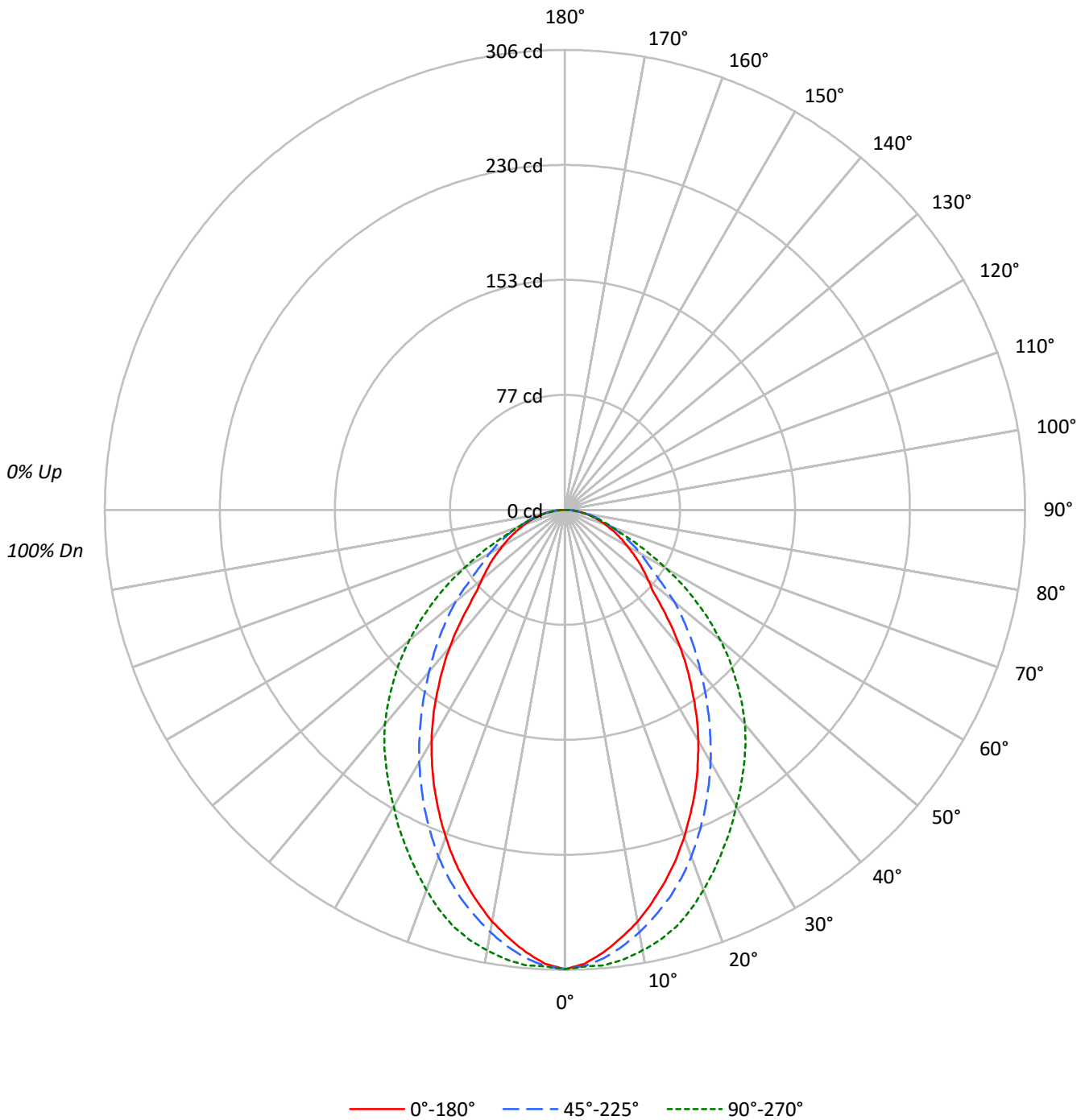
Lumens per Lamp: N/A
Luminaire Lumens: 551.8 lumens
Efficiency: N/A
Efficacy: 44.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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										
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	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	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	75	75	75														
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	65	65	65	65	65														
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57	57	57	57	57														
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51	51	51	51	51	51	51														
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45														
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41	41	41	41	41	41	41														
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37	37	37	37	37	37	37														
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34	34	34	34	34	34	34														
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31	31	31	31	31	31	31														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3587	3587	3587
5°	3483	3529	3585
10°	3318	3403	3548
15°	3117	3252	3488
20°	2895	3070	3365
25°	2659	2854	3225
30°	2404	2626	3089
35°	2120	2387	2973
40°	1823	2152	2854
45°	1498	1940	2677
50°	1315	1726	2466
55°	1218	1474	2184
60°	1118	1355	1808
65°	1045	1245	1423
70°	985	1130	1130
75°	926	1039	975
80°	872	947	825
85°	822	916	633

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2677 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.3	5.1
10°-20°	75.7	13.7
20°-30°	102.7	18.6
30°-40°	107.4	19.5
40°-50°	93.1	16.9
50°-60°	69.3	12.6
60°-70°	44.4	8.1
70°-80°	23.8	4.3
80°-90°	7.2	1.3
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°	206.6	37.4
0°-40°	314.0	56.9
0°-60°	476.4	86.3
0°-90°	551.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	551.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	306	306	306	306	306	
5°	296	300	299	302	304	28
15°	256	262	268	278	287	72
25°	205	212	220	235	249	94
35°	148	155	166	188	207	92
45°	90	97	117	142	161	71
55°	60	61	72	92	107	53
65°	38	41	45	48	51	37
75°	20	24	23	22	22	22
85°	6	8	7	6	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	305.5	305.5	305.5	305.5	305.5
2.5°	302.3	306.6	303.7	303.7	304.1
5°	295.5	300.5	299.4	301.5	304.1
7.5°	287.2	292.6	293.0	298.0	301.5
10°	278.3	283.6	285.4	292.6	297.6
12.5°	267.5	273.6	276.8	285.8	293.0
15°	256.4	262.5	267.5	278.3	286.9
17.5°	244.6	250.7	257.1	269.3	278.6
20°	231.7	238.2	245.7	257.9	269.3
22.5°	218.5	225.3	233.1	246.4	259.3
25°	205.2	211.7	220.3	234.9	248.9
27.5°	191.2	198.0	207.0	223.1	238.9
30°	177.3	184.1	193.7	210.9	227.8
32.5°	163.0	169.8	180.1	199.5	217.7
35°	147.9	155.1	166.5	187.7	207.4
37.5°	133.6	140.4	153.3	176.6	197.3
40°	118.9	126.1	140.4	165.5	186.2
42.5°	104.6	111.7	128.6	153.6	174.1
45°	90.2	97.1	116.8	141.8	161.2
47.5°	79.1	84.2	105.6	129.3	148.6
50°	72.0	73.8	94.5	117.1	135.0
52.5°	65.5	67.0	82.4	104.9	121.0
55°	59.5	60.9	72.0	92.4	106.7
57.5°	53.4	55.2	64.1	79.5	92.4
60°	47.6	49.8	57.7	68.0	77.0
62.5°	42.6	45.1	51.2	57.7	63.7
65°	37.6	40.8	44.8	47.6	51.2
67.5°	32.9	36.5	38.7	39.4	39.8
70°	28.7	32.2	32.9	32.9	32.9
72.5°	24.4	28.3	27.6	27.2	26.9
75°	20.4	23.6	22.9	21.8	21.5
77.5°	16.5	19.3	18.3	17.5	16.5
80°	12.9	15.0	14.0	13.3	12.2
82.5°	9.7	11.1	10.0	9.3	8.2
85°	6.1	7.5	6.8	5.7	4.7
87.5°	3.2	4.3	3.6	3.2	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)