

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: P1059308

Luminaire Tested: S123RDR-S560D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059308
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-S560D935-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

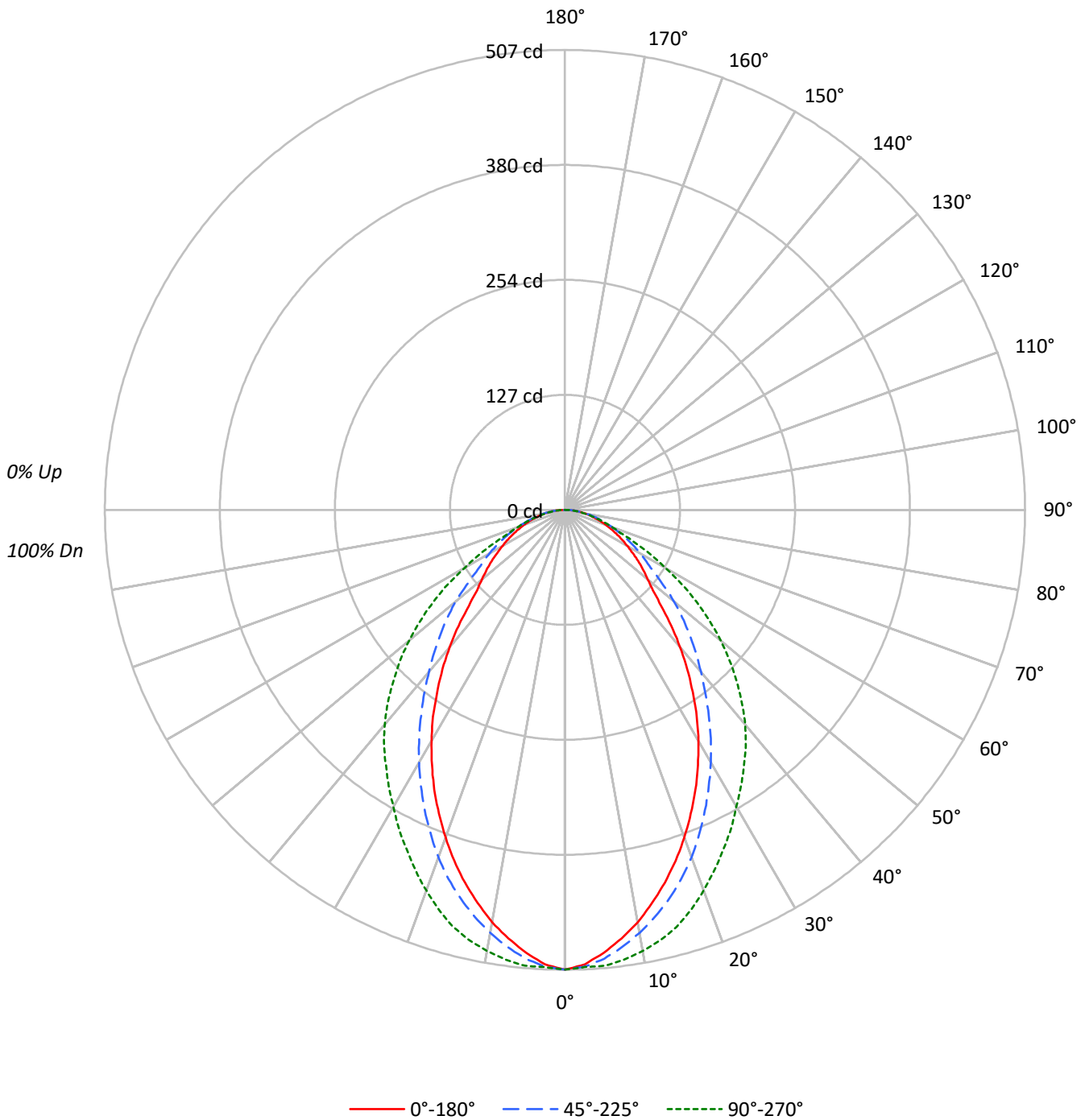
Lumens per Lamp: N/A
Luminaire Lumens: 915.5 lumens
Efficiency: N/A
Efficacy: 46.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5951	5951	5951
5°	5778	5855	5947
10°	5505	5647	5888
15°	5171	5396	5785
20°	4803	5093	5583
25°	4412	4734	5351
30°	3988	4359	5124
35°	3518	3961	4931
40°	3024	3570	4737
45°	2486	3217	4441
50°	2181	2866	4092
55°	2019	2444	3626
60°	1855	2248	2999
65°	1734	2064	2362
70°	1631	1878	1878
75°	1538	1724	1620
80°	1447	1569	1366
85°	1361	1522	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4441 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.9	5.1
10°-20°	125.6	13.7
20°-30°	170.3	18.6
30°-40°	178.1	19.5
40°-50°	154.5	16.9
50°-60°	114.9	12.6
60°-70°	73.7	8.1
70°-80°	39.5	4.3
80°-90°	11.9	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°	342.8	37.4
0°-40°	520.9	56.9
0°-60°	790.3	86.3
0°-90°	915.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	915.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	490	498	497	500	504	46
15°	425	436	444	462	476	119
25°	340	351	365	390	413	156
35°	245	257	276	311	344	153
45°	150	161	194	235	267	118
55°	99	101	119	153	177	88
65°	62	68	74	79	85	62
75°	34	39	38	36	36	36
85°	10	12	11	10	8	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	506.8	506.8	506.8	506.8	506.8
2.5°	501.5	508.6	503.9	503.9	504.5
5°	490.2	498.5	496.7	500.3	504.5
7.5°	476.5	485.4	486.0	494.4	500.3
10°	461.7	470.6	473.6	485.4	493.8
12.5°	443.9	454.0	459.3	474.2	486.0
15°	425.4	435.5	443.9	461.7	475.9
17.5°	405.8	415.9	426.6	446.8	462.3
20°	384.4	395.1	407.6	427.8	446.8
22.5°	362.5	373.7	386.8	408.8	430.2
25°	340.5	351.2	365.4	389.8	413.0
27.5°	317.3	328.6	343.4	370.2	396.3
30°	294.1	305.4	321.5	350.0	377.9
32.5°	270.4	281.6	298.9	331.0	361.3
35°	245.4	257.3	276.3	311.4	344.0
37.5°	221.6	232.9	254.3	292.9	327.4
40°	197.3	209.2	232.9	274.5	309.0
42.5°	173.5	185.4	213.3	254.9	288.8
45°	149.7	161.0	193.7	235.3	267.4
47.5°	131.3	139.6	175.3	214.5	246.6
50°	119.4	122.4	156.9	194.3	224.0
52.5°	108.7	111.1	136.7	174.1	200.8
55°	98.6	101.0	119.4	153.3	177.1
57.5°	88.5	91.5	106.4	131.9	153.3
60°	79.0	82.6	95.7	112.9	127.7
62.5°	70.7	74.9	85.0	95.7	105.8
65°	62.4	67.7	74.3	79.0	85.0
67.5°	54.7	60.6	64.2	65.4	66.0
70°	47.5	53.5	54.7	54.7	54.7
72.5°	40.4	46.9	45.8	45.2	44.6
75°	33.9	39.2	38.0	36.2	35.7
77.5°	27.3	32.1	30.3	29.1	27.3
80°	21.4	25.0	23.2	22.0	20.2
82.5°	16.0	18.4	16.6	15.4	13.7
85°	10.1	12.5	11.3	9.5	7.7
87.5°	5.3	7.1	5.9	5.3	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)