

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: P1059269

Luminaire Tested: S123RDR-S560D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059269
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-S560D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

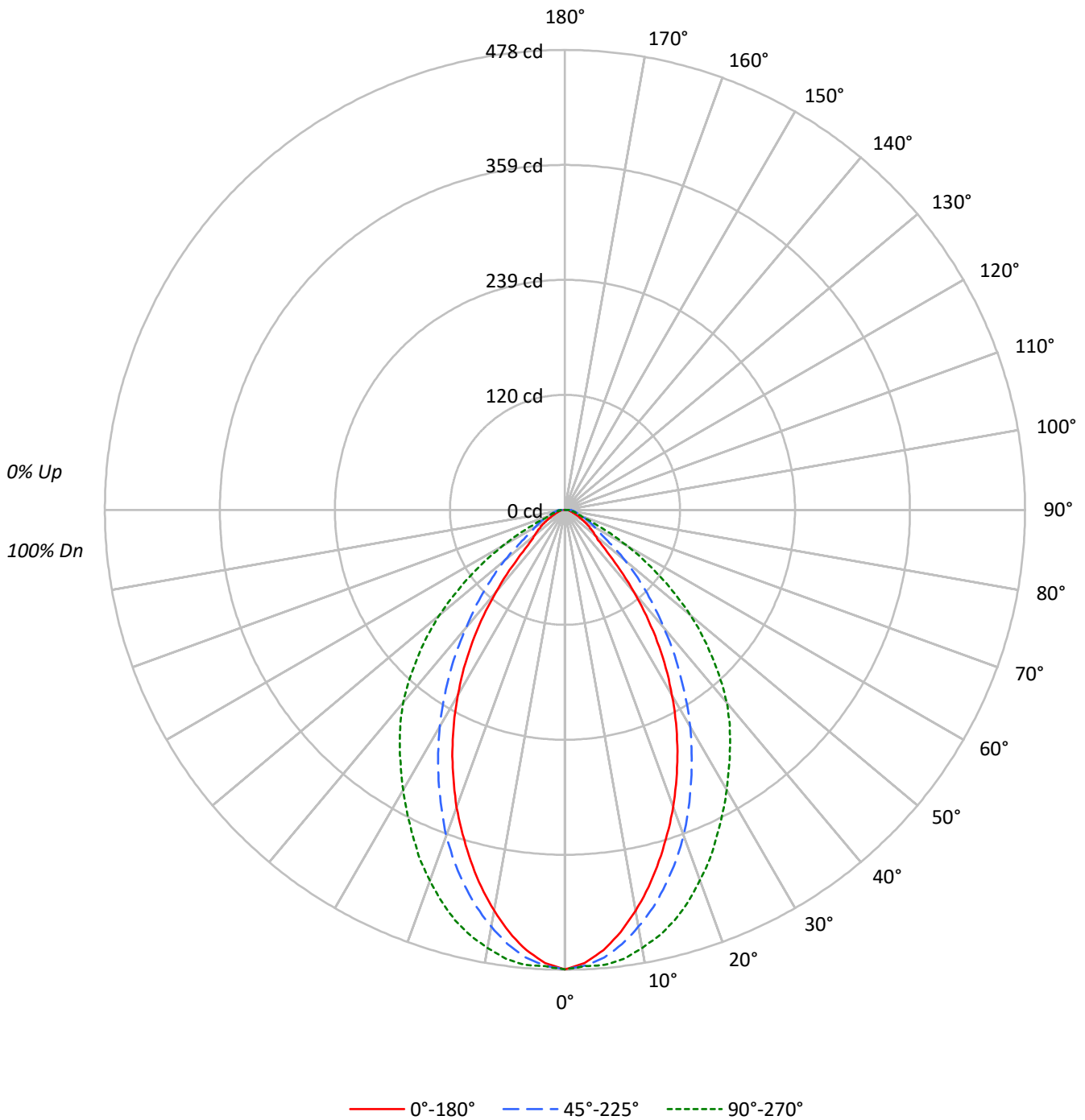
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 639.7 lumens
Efficiency: N/A
Efficacy: 32.6 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): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5608	5608	5608
5°	5416	5507	5597
10°	5046	5246	5512
15°	4594	4908	5366
20°	4112	4505	5123
25°	3586	4020	4842
30°	3016	3527	4557
35°	2398	2989	4288
40°	1711	2437	4008
45°	1020	1956	3589
50°	751	1491	3107
55°	628	1013	2469
60°	507	836	1736
65°	406	717	931
70°	336	621	573
75°	318	599	540
80°	331	663	521
85°	472	943	660

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3589 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.9	6.9
10°-20°	114.0	17.8
20°-30°	145.4	22.7
30°-40°	136.8	21.4
40°-50°	98.3	15.4
50°-60°	56.3	8.8
60°-70°	25.8	4.0
70°-80°	13.0	2.0
80°-90°	6.3	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°	303.2	47.4
0°-40°	440.0	68.8
0°-60°	594.6	93.0
0°-90°	639.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	639.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	478	478	478	478	478	
5°	460	468	467	471	475	43
15°	378	391	404	425	441	106
25°	277	289	310	344	374	126
35°	167	179	208	256	299	104
45°	61	75	118	174	216	51
55°	31	31	50	91	121	28
65°	15	20	26	29	34	15
75°	7	14	13	12	12	8
85°	4	7	7	6	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	477.6	477.6	477.6	477.6	477.6
2.5°	471.3	478.3	474.1	474.1	474.8
5°	459.5	468.5	467.2	470.6	474.8
7.5°	442.8	452.5	455.3	463.7	470.6
10°	423.2	434.4	440.0	453.2	462.3
12.5°	401.6	414.2	423.2	440.0	453.2
15°	377.9	391.2	403.7	425.3	441.4
17.5°	353.5	366.8	382.8	407.9	426.7
20°	329.1	342.3	360.5	387.0	410.0
22.5°	302.6	315.9	335.4	365.4	393.2
25°	276.8	289.4	310.3	343.7	373.7
27.5°	249.6	262.2	285.2	321.4	354.9
30°	222.4	235.0	260.1	299.1	336.1
32.5°	195.2	207.1	234.3	277.5	317.2
35°	167.3	179.2	208.5	255.9	299.1
37.5°	138.8	150.6	184.8	236.4	281.0
40°	111.6	124.8	159.0	216.8	261.5
42.5°	85.1	99.0	138.1	195.9	239.2
45°	61.4	74.6	117.8	173.6	216.1
47.5°	46.7	53.7	99.7	151.3	193.8
50°	41.1	41.8	81.6	131.1	170.1
52.5°	35.6	36.3	63.4	111.6	145.0
55°	30.7	31.4	49.5	91.3	120.6
57.5°	25.8	27.2	40.4	72.5	96.9
60°	21.6	24.4	35.6	55.1	73.9
62.5°	17.4	22.3	30.7	40.4	53.0
65°	14.6	20.2	25.8	28.6	33.5
67.5°	11.9	18.8	21.6	20.2	20.2
70°	9.8	16.7	18.1	16.7	16.7
72.5°	8.4	16.0	15.3	13.9	13.9
75°	7.0	13.9	13.2	11.9	11.9
77.5°	6.3	11.9	11.2	10.5	9.8
80°	4.9	9.8	9.8	9.1	7.7
82.5°	4.2	8.4	8.4	7.7	6.3
85°	3.5	7.0	7.0	6.3	4.9
87.5°	2.8	6.3	6.3	5.6	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)