

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: P1059278

Luminaire Tested: S123RDR-S560D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059278
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-S560D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

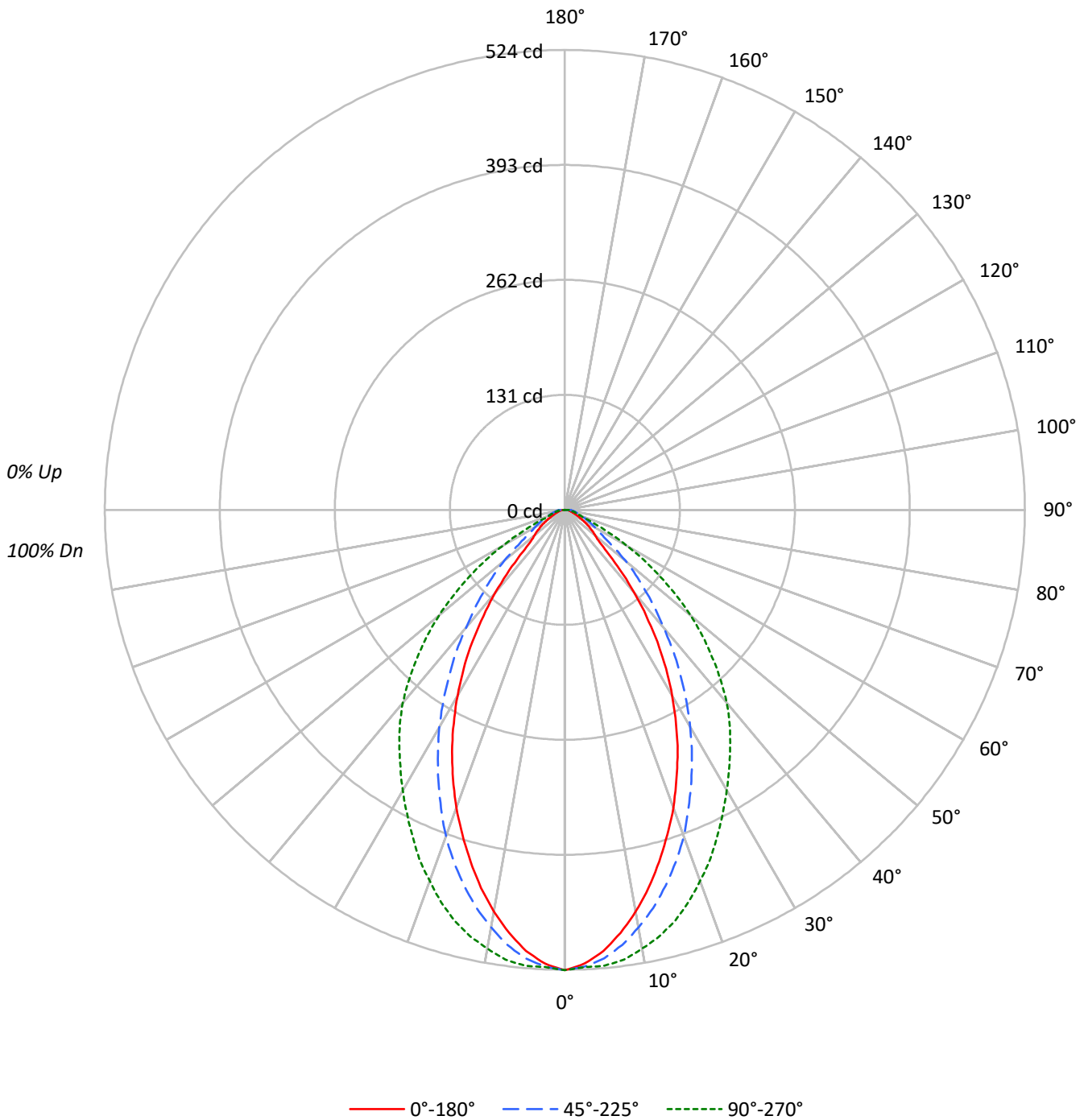
Lumens per Lamp: N/A
Luminaire Lumens: 702.5 lumens
Efficiency: N/A
Efficacy: 35.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6159	6159	6159
5°	5948	6047	6146
10°	5542	5761	6054
15°	5045	5389	5892
20°	4516	4947	5626
25°	3939	4414	5317
30°	3312	3872	5005
35°	2635	3281	4709
40°	1878	2676	4401
45°	1119	2149	3942
50°	826	1637	3412
55°	690	1114	2713
60°	557	918	1907
65°	447	786	1022
70°	367	683	632
75°	349	658	590
80°	365	724	568
85°	512	1037	728

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3942 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.2	6.9
10°-20°	125.2	17.8
20°-30°	159.7	22.7
30°-40°	150.2	21.4
40°-50°	107.9	15.4
50°-60°	61.9	8.8
60°-70°	28.3	4.0
70°-80°	14.2	2.0
80°-90°	6.9	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°	333.0	47.4
0°-40°	483.2	68.8
0°-60°	653.0	93.0
0°-90°	702.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	702.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	505	514	513	517	521	47
15°	415	430	443	467	485	116
25°	304	318	341	378	410	139
35°	184	197	229	281	328	114
45°	67	82	129	191	237	56
55°	34	34	54	100	132	30
65°	16	22	28	31	37	16
75°	8	15	14	13	13	8
85°	4	8	8	7	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	524.5	524.5	524.5	524.5	524.5
2.5°	517.6	525.3	520.7	520.7	521.4
5°	504.6	514.5	513.0	516.8	521.4
7.5°	486.2	496.9	500.0	509.2	516.8
10°	464.8	477.0	483.2	497.7	507.7
12.5°	441.0	454.8	464.8	483.2	497.7
15°	415.0	429.6	443.3	467.1	484.7
17.5°	388.2	402.8	420.4	447.9	468.6
20°	361.4	376.0	395.9	425.0	450.2
22.5°	332.3	346.9	368.3	401.2	431.9
25°	304.0	317.8	340.7	377.5	410.4
27.5°	274.1	287.9	313.2	353.0	389.7
30°	244.3	258.0	285.6	328.5	369.1
32.5°	214.4	227.4	257.3	304.7	348.4
35°	183.8	196.8	228.9	281.0	328.5
37.5°	152.4	165.4	202.9	259.6	308.6
40°	122.5	137.1	174.6	238.1	287.1
42.5°	93.4	108.7	151.6	215.2	262.6
45°	67.4	81.9	129.4	190.7	237.4
47.5°	51.3	59.0	109.5	166.2	212.9
50°	45.2	45.9	89.6	144.0	186.8
52.5°	39.1	39.8	69.7	122.5	159.3
55°	33.7	34.5	54.4	100.3	132.5
57.5°	28.3	29.9	44.4	79.6	106.4
60°	23.7	26.8	39.1	60.5	81.2
62.5°	19.1	24.5	33.7	44.4	58.2
65°	16.1	22.2	28.3	31.4	36.8
67.5°	13.0	20.7	23.7	22.2	22.2
70°	10.7	18.4	19.9	18.4	18.4
72.5°	9.2	17.6	16.8	15.3	15.3
75°	7.7	15.3	14.5	13.0	13.0
77.5°	6.9	13.0	12.3	11.5	10.7
80°	5.4	10.7	10.7	10.0	8.4
82.5°	4.6	9.2	9.2	8.4	6.9
85°	3.8	7.7	7.7	6.9	5.4
87.5°	3.1	6.9	6.9	6.1	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)