

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: P1059277

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
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-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

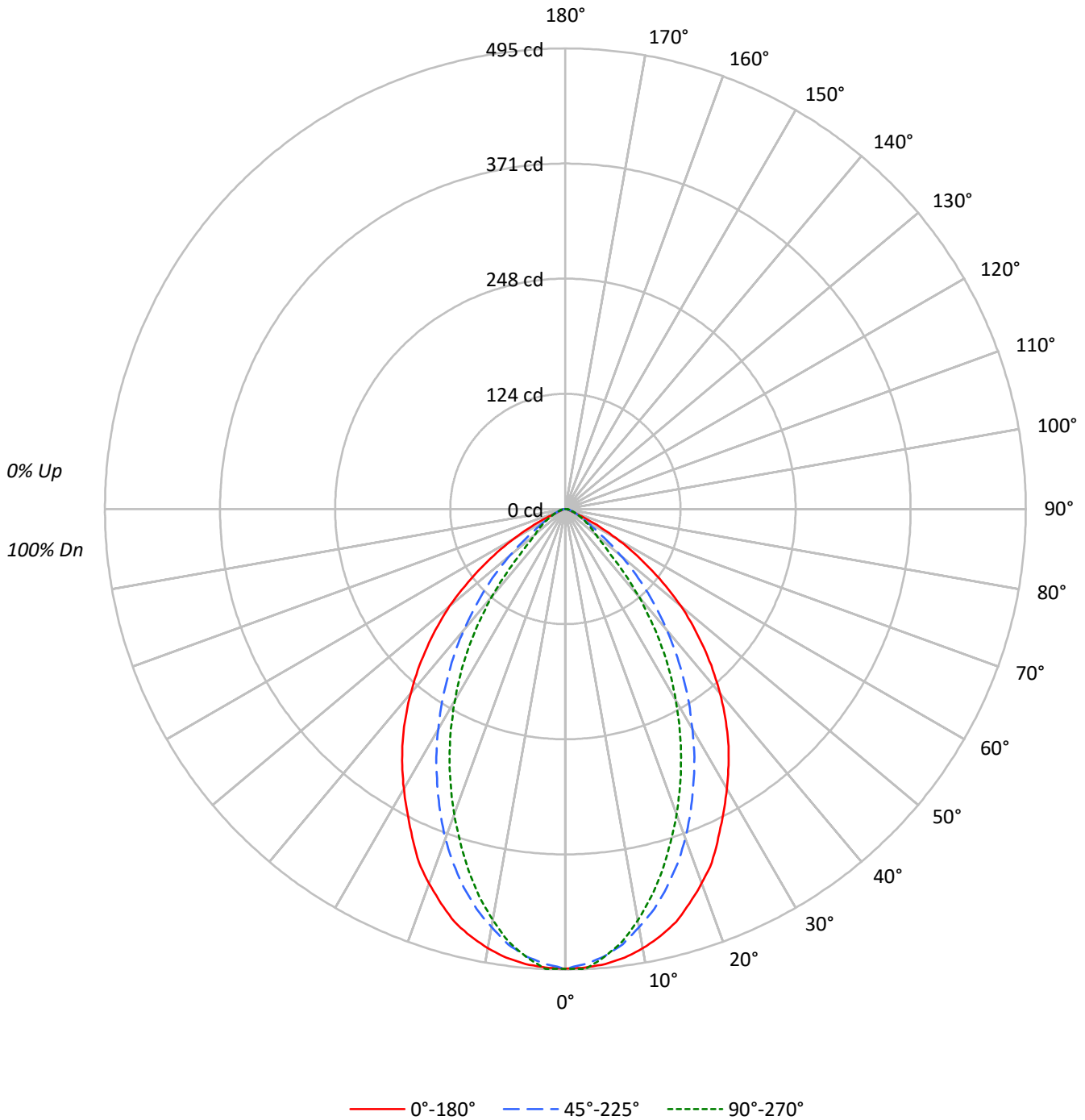
Lumens per Lamp: N/A
Luminaire Lumens: 637.9 lumens
Efficiency: N/A
Efficacy: 32.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66				66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55				55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46				46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42				42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5802	5802	5802
5°	5789	5689	5698
10°	5719	5444	5354
15°	5588	5123	4891
20°	5352	4712	4369
25°	5044	4221	3816
30°	4709	3703	3215
35°	4375	3158	2587
40°	3962	2603	1876
45°	3492	2019	1131
50°	2963	1412	769
55°	2254	846	643
60°	1473	538	503
65°	617	403	403
70°	209	288	316
75°	172	209	245
80°	101	156	210
85°	108	108	202

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3492 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	7.2
10°-20°	119.4	18.7
20°-30°	153.2	24.0
30°-40°	143.7	22.5
40°-50°	100.3	15.7
50°-60°	51.8	8.1
60°-70°	17.7	2.8
70°-80°	5.1	0.8
80°-90°	1.1	0.2
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°	318.2	49.9
0°-40°	461.9	72.4
0°-60°	614.0	96.3
0°-90°	637.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	637.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	491	490	483	485	483	47
15°	460	448	421	408	402	129
25°	389	365	326	304	294	179
35°	305	268	220	192	180	190
45°	210	172	122	84	68	162
55°	110	83	41	32	31	99
65°	22	19	14	14	14	26
75°	4	4	5	5	5	4
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	494.1	494.1	494.1	494.1	494.1
2.5°	493.3	494.1	489.5	494.1	494.9
5°	491.1	490.3	482.6	484.9	483.4
7.5°	486.5	484.2	471.9	468.9	468.9
10°	479.6	475.0	456.6	451.3	449.0
12.5°	470.4	464.3	440.6	430.6	426.8
15°	459.7	448.2	421.4	407.7	402.3
17.5°	444.4	429.1	400.0	384.0	375.6
20°	428.3	409.2	377.1	358.0	349.6
22.5°	411.5	388.6	351.8	331.2	322.0
25°	389.3	364.8	325.8	303.7	294.5
27.5°	367.9	341.9	300.6	275.4	266.2
30°	347.3	316.7	273.1	248.6	237.1
32.5°	326.6	292.2	247.1	220.3	209.6
35°	305.2	267.7	220.3	192.0	180.5
37.5°	282.2	244.0	195.0	164.4	150.7
40°	258.5	218.8	169.8	135.4	122.4
42.5°	234.8	195.8	144.6	109.4	94.1
45°	210.3	172.1	121.6	84.1	68.1
47.5°	185.9	148.4	99.4	61.2	51.2
50°	162.2	126.2	77.3	45.1	42.1
52.5°	136.1	104.8	58.1	37.5	36.7
55°	110.1	82.6	41.3	32.1	31.4
57.5°	87.2	64.2	29.8	26.8	26.0
60°	62.7	45.9	22.9	22.2	21.4
62.5°	41.3	31.4	18.4	17.6	17.6
65°	22.2	19.1	14.5	13.8	14.5
67.5°	9.2	10.7	10.7	11.5	11.5
70°	6.1	6.9	8.4	9.2	9.2
72.5°	4.6	5.4	6.1	6.9	6.9
75°	3.8	3.8	4.6	5.4	5.4
77.5°	2.3	3.1	3.1	3.8	4.6
80°	1.5	2.3	2.3	3.1	3.1
82.5°	0.8	1.5	1.5	2.3	2.3
85°	0.8	0.8	0.8	0.8	1.5
87.5°	0.0	0.0	0.0	0.0	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)