

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: P1057819

Luminaire Tested: S122RDR-S1005D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057819
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D850-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 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

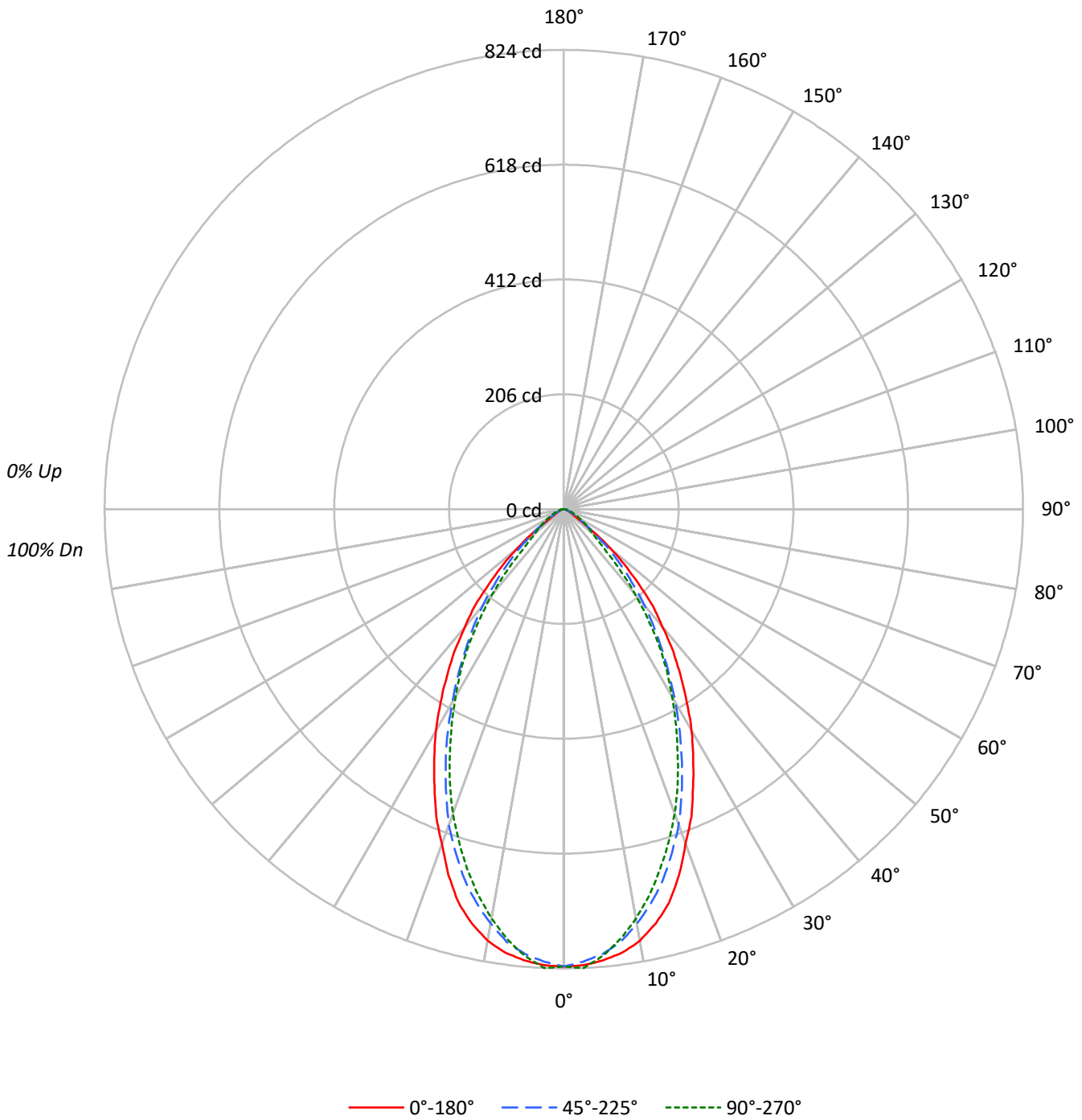
Lumens per Lamp: N/A
Luminaire Lumens: 882.8 lumens
Efficiency: N/A
Efficacy: 21.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92				
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76				
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64				
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59				
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47				
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15146	15146	15146
5°	15052	14839	14900
10°	14735	14152	13967
15°	13959	13145	12769
20°	12548	11839	11421
25°	11174	10206	9840
30°	9774	8519	8274
35°	8229	6902	6679
40°	6629	5446	4815
45°	4958	3933	2865
50°	3103	2541	1880
55°	1055	1370	1528
60°	605	845	1210
65°	428	572	930
70°	356	442	707
75°	235	349	585
80°	170	351	521
85°	0	0	339

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4958 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	8.6
10°-20°	193.7	21.9
20°-30°	233.2	26.4
30°-40°	199.2	22.6
40°-50°	116.7	13.2
50°-60°	42.3	4.8
60°-70°	15.0	1.7
70°-80°	6.0	0.7
80°-90°	1.0	0.1
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°	502.5	56.9
0°-40°	701.7	79.5
0°-60°	860.7	97.5
0°-90°	882.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	882.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	821	821	821	821	821	
5°	813	814	801	804	804	77
15°	731	719	688	675	668	203
25°	549	526	501	493	483	252
35°	365	338	306	303	296	228
45°	190	170	151	126	110	147
55°	33	46	43	44	48	41
65°	10	12	13	18	21	11
75°	3	5	5	7	8	4
85°	0	0	0	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	820.8	820.8	820.8	820.8	820.8
2.5°	819.2	820.8	812.6	820.8	824.1
5°	812.6	814.3	801.1	804.4	804.4
7.5°	802.8	801.1	783.1	779.8	778.2
10°	786.4	781.5	755.3	750.4	745.4
12.5°	761.8	752.0	724.1	716.0	709.4
15°	730.7	719.2	688.1	675.0	668.4
17.5°	688.1	675.0	645.5	632.4	625.8
20°	639.0	625.8	602.9	588.2	581.6
22.5°	598.0	576.7	552.1	542.3	534.1
25°	548.8	525.9	501.3	493.1	483.3
27.5°	503.0	475.1	450.5	444.0	435.8
30°	458.7	429.2	399.8	399.8	388.3
32.5°	411.2	383.4	352.2	350.6	344.1
35°	365.3	337.5	306.4	303.1	296.5
37.5°	322.8	294.9	265.4	255.6	247.4
40°	275.2	250.7	226.1	209.7	199.9
42.5°	237.6	209.7	185.1	165.5	152.4
45°	190.0	170.4	150.7	126.2	109.8
47.5°	147.5	134.3	118.0	90.1	81.9
50°	108.1	101.6	88.5	67.2	65.5
52.5°	68.8	72.1	63.9	52.4	57.3
55°	32.8	45.9	42.6	44.2	47.5
57.5°	21.3	22.9	31.1	36.0	39.3
60°	16.4	16.4	22.9	29.5	32.8
62.5°	13.1	13.1	18.0	24.6	26.2
65°	9.8	11.5	13.1	18.0	21.3
67.5°	8.2	8.2	9.8	14.7	16.4
70°	6.6	6.6	8.2	11.5	13.1
72.5°	4.9	4.9	6.6	9.8	9.8
75°	3.3	4.9	4.9	6.6	8.2
77.5°	3.3	3.3	3.3	4.9	6.6
80°	1.6	1.6	3.3	3.3	4.9
82.5°	1.6	1.6	1.6	1.6	3.3
85°	0.0	0.0	0.0	1.6	1.6
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)