

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: P1059032

Luminaire Tested: S123RDR-S1000D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059032
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D850-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

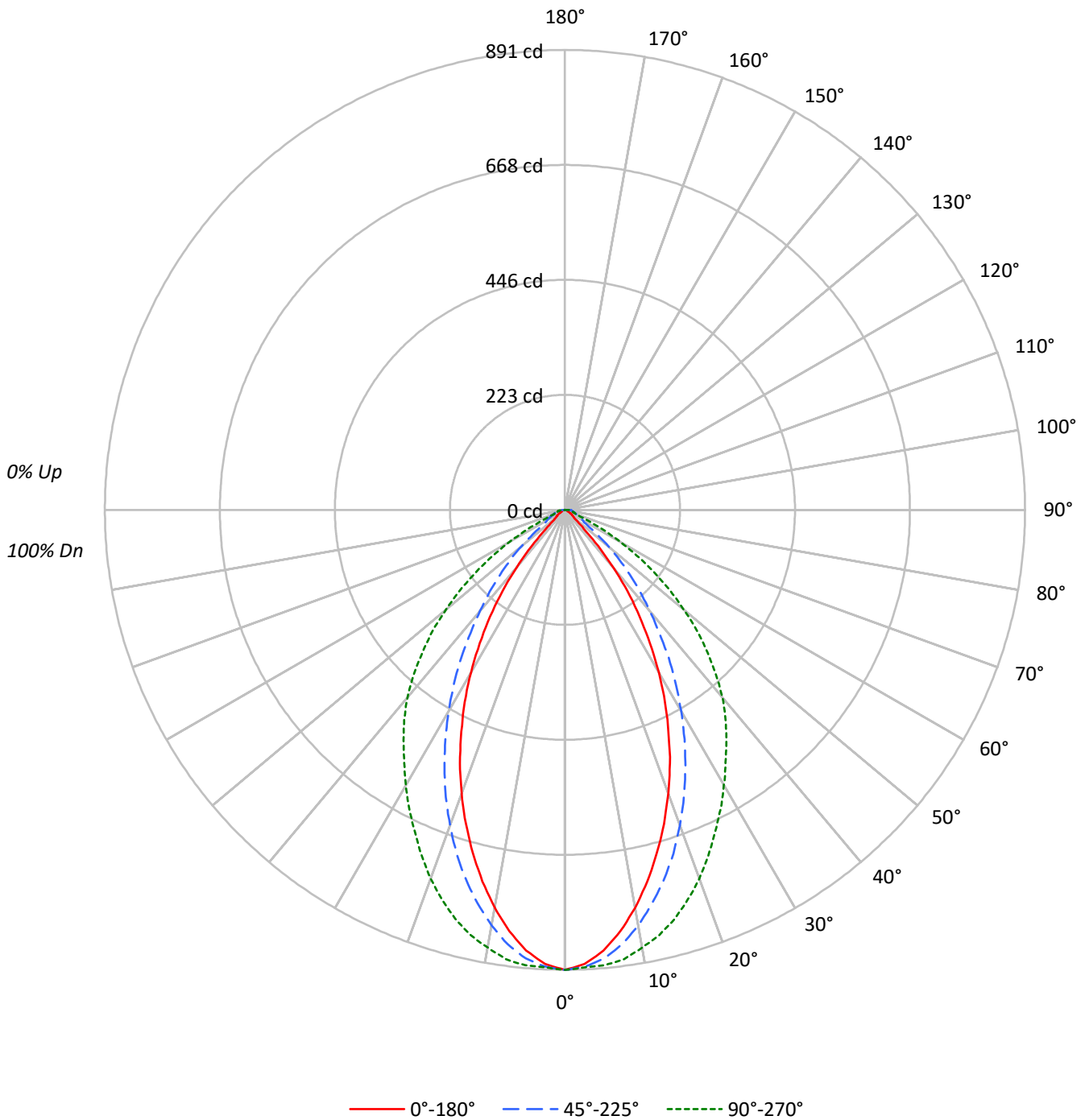
Lumens per Lamp: N/A
Luminaire Lumens: 1070.6 lumens
Efficiency: N/A
Efficacy: 30.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10466	10466	10466
5°	10104	10281	10441
10°	9328	9750	10270
15°	8366	9013	9973
20°	7306	8124	9503
25°	6145	7151	8917
30°	4934	6097	8352
35°	3614	5020	7814
40°	2235	3906	7270
45°	860	2943	6473
50°	424	2017	5477
55°	336	1116	4297
60°	223	928	2882
65°	189	834	1286
70°	189	748	748
75°	250	803	744
80°	372	1014	832
85°	552	1657	1105

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6473 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	7.6
10°-20°	209.2	19.5
20°-30°	259.7	24.3
30°-40°	232.6	21.7
40°-50°	152.9	14.3
50°-60°	76.6	7.2
60°-70°	30.3	2.8
70°-80°	17.0	1.6
80°-90°	10.7	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°	550.6	51.4
0°-40°	783.2	73.2
0°-60°	1012.8	94.6
0°-90°	1070.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1070.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	857	871	872	878	886	79
15°	688	710	741	792	820	192
25°	474	504	552	630	688	217
35°	252	286	350	458	545	156
45°	52	86	177	298	390	49
55°	16	19	54	147	210	15
65°	7	19	30	38	46	7
75°	6	18	18	16	16	6
85°	4	12	12	12	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	891.3	891.3	891.3	891.3	891.3
2.5°	880.4	892.7	885.8	885.8	887.2
5°	857.2	870.9	872.2	877.7	885.8
7.5°	823.2	840.9	849.0	865.4	877.7
10°	782.3	801.3	817.7	846.3	861.3
12.5°	737.3	756.4	780.9	820.4	843.6
15°	688.2	710.0	741.4	791.8	820.4
17.5°	637.8	659.6	697.8	755.0	791.8
20°	584.7	609.2	650.1	715.5	760.5
22.5°	531.5	558.8	602.4	673.2	725.0
25°	474.3	504.2	551.9	629.6	688.2
27.5°	419.8	451.1	501.5	586.0	652.8
30°	363.9	395.2	449.7	541.0	616.0
32.5°	306.6	342.1	399.3	498.8	579.2
35°	252.1	286.2	350.2	457.9	545.1
37.5°	199.0	233.0	299.8	418.4	511.1
40°	145.8	181.3	254.8	380.2	474.3
42.5°	95.4	132.2	215.3	342.1	433.4
45°	51.8	85.9	177.2	298.5	389.8
47.5°	28.6	46.3	143.1	257.6	347.5
50°	23.2	25.9	110.4	219.4	299.8
52.5°	19.1	21.8	79.0	182.6	256.2
55°	16.4	19.1	54.5	147.2	209.9
57.5°	13.6	16.4	43.6	113.1	164.9
60°	9.5	16.4	39.5	83.1	122.7
62.5°	8.2	16.4	34.1	57.2	81.8
65°	6.8	19.1	30.0	38.2	46.3
67.5°	5.5	19.1	25.9	24.5	24.5
70°	5.5	19.1	21.8	20.4	21.8
72.5°	5.5	20.4	20.4	19.1	19.1
75°	5.5	17.7	17.7	16.4	16.4
77.5°	5.5	16.4	16.4	15.0	15.0
80°	5.5	15.0	15.0	13.6	12.3
82.5°	5.5	13.6	13.6	12.3	10.9
85°	4.1	12.3	12.3	12.3	8.2
87.5°	4.1	10.9	12.3	10.9	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)