

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: P1059074

Luminaire Tested: S123RDR-S1000D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059074
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D940-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

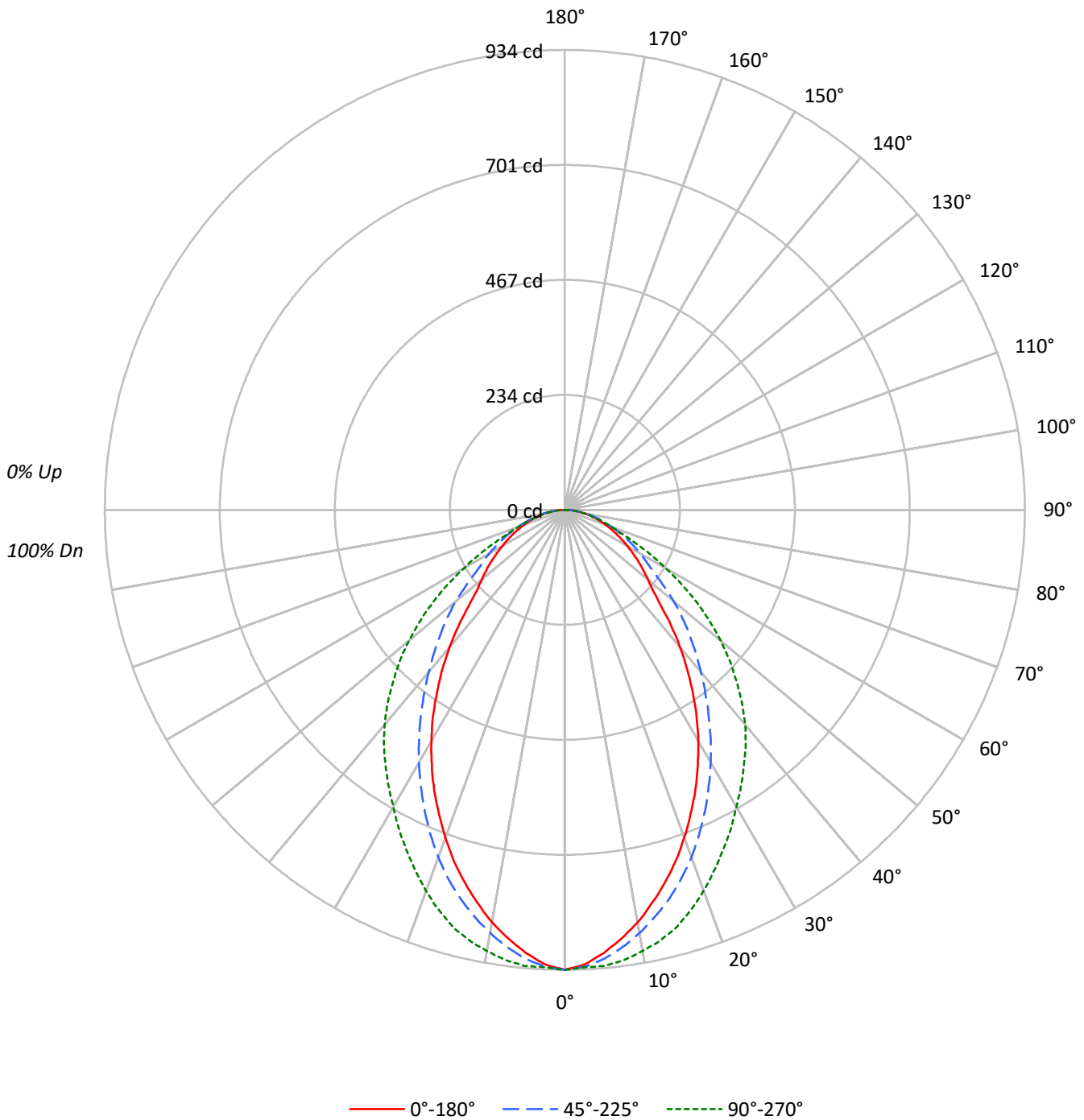
Lumens per Lamp: N/A
Luminaire Lumens: 1687.3 lumens
Efficiency: N/A
Efficacy: 48.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10969	10969	10969
5°	10649	10791	10959
10°	10146	10407	10850
15°	9532	9944	10664
20°	8853	9387	10290
25°	8130	8726	9861
30°	7350	8032	9444
35°	6484	7299	9088
40°	5574	6581	8728
45°	4583	5928	8184
50°	4021	5281	7541
55°	3722	4506	6680
60°	3419	4140	5528
65°	3195	3804	4351
70°	3008	3457	3457
75°	2831	3180	2981
80°	2664	2887	2516
85°	2506	2802	1913

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8184 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.4	5.1
10°-20°	231.5	13.7
20°-30°	313.9	18.6
30°-40°	328.2	19.5
40°-50°	284.7	16.9
50°-60°	211.8	12.6
60°-70°	135.9	8.1
70°-80°	72.9	4.3
80°-90°	22.0	1.3
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°	631.9	37.4
0°-40°	960.1	56.9
0°-60°	1456.6	86.3
0°-90°	1687.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1687.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	934	934	934	934	934	
5°	903	919	916	922	930	85
15°	784	803	818	851	877	220
25°	628	647	674	718	761	288
35°	452	474	509	574	634	282
45°	276	297	357	434	493	217
55°	182	186	220	282	326	163
65°	115	125	137	146	157	114
75°	62	72	70	67	66	66
85°	19	23	21	18	14	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	934.1	934.1	934.1	934.1	934.1
2.5°	924.2	937.4	928.6	928.6	929.7
5°	903.4	918.8	915.5	922.1	929.7
7.5°	878.2	894.7	895.8	911.1	922.1
10°	850.9	867.3	872.8	894.7	910.0
12.5°	818.0	836.6	846.5	873.9	895.8
15°	784.1	802.7	818.0	850.9	877.2
17.5°	747.9	766.6	786.3	823.5	852.0
20°	708.5	728.2	751.2	788.5	823.5
22.5°	668.0	688.8	712.9	753.4	792.8
25°	627.5	647.2	673.5	718.4	761.1
27.5°	584.8	605.6	633.0	682.2	730.4
30°	542.1	562.9	592.4	645.0	696.5
32.5°	498.3	519.1	550.8	610.0	665.8
35°	452.3	474.2	509.2	573.8	634.0
37.5°	408.5	429.3	468.7	539.9	603.4
40°	363.6	385.5	429.3	505.9	569.4
42.5°	319.8	341.7	393.1	469.8	532.2
45°	276.0	296.8	357.0	433.6	492.8
47.5°	242.0	257.3	323.0	395.3	454.5
50°	220.1	225.6	289.1	358.1	412.8
52.5°	200.4	204.8	251.9	320.9	370.1
55°	181.8	186.2	220.1	282.5	326.3
57.5°	163.2	168.6	196.0	243.1	282.5
60°	145.6	152.2	176.3	208.1	235.4
62.5°	130.3	138.0	156.6	176.3	194.9
65°	115.0	124.8	136.9	145.6	156.6
67.5°	100.7	111.7	118.3	120.5	121.6
70°	87.6	98.6	100.7	100.7	100.7
72.5°	74.5	86.5	84.3	83.2	82.1
75°	62.4	72.3	70.1	66.8	65.7
77.5°	50.4	59.1	55.8	53.7	50.4
80°	39.4	46.0	42.7	40.5	37.2
82.5°	29.6	33.9	30.7	28.5	25.2
85°	18.6	23.0	20.8	17.5	14.2
87.5°	9.9	13.1	11.0	9.9	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)