

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: P1059047

Luminaire Tested: S123RDR-S1000D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059047
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-S1000D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

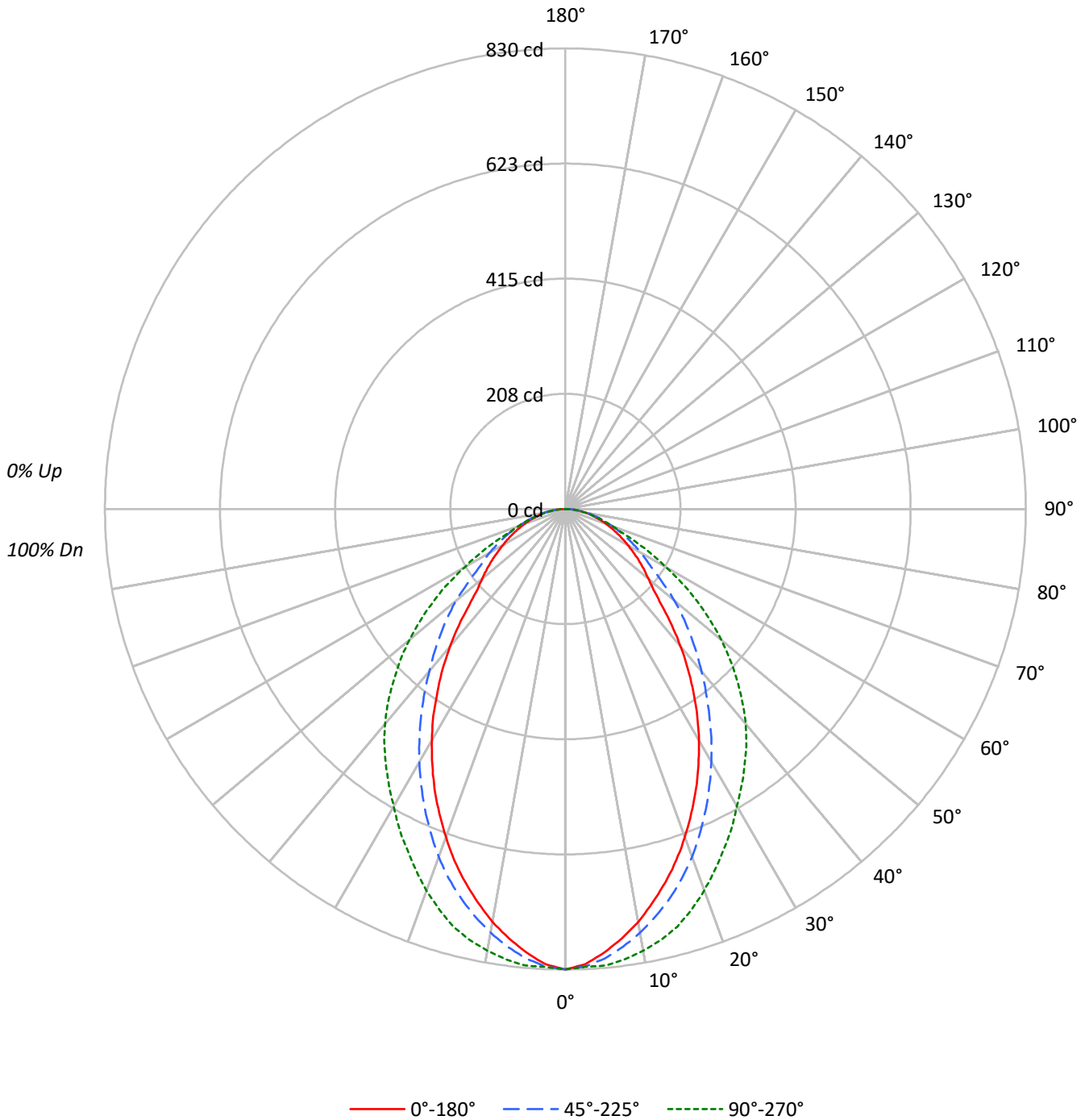
Lumens per Lamp: N/A
Luminaire Lumens: 1499.0 lumens
Efficiency: N/A
Efficacy: 42.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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									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	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°	9744	9744	9744
5°	9460	9587	9735
10°	9013	9246	9639
15°	8468	8834	9472
20°	7865	8340	9142
25°	7222	7752	8760
30°	6530	7136	8389
35°	5760	6485	8075
40°	4951	5846	7755
45°	4072	5266	7270
50°	3571	4691	6701
55°	3306	4002	5935
60°	3039	3678	4913
65°	2837	3379	3865
70°	2671	3073	3073
75°	2518	2827	2650
80°	2367	2563	2238
85°	2223	2492	1698

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7270 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.7	5.1
10°-20°	205.7	13.7
20°-30°	278.9	18.6
30°-40°	291.6	19.5
40°-50°	252.9	16.9
50°-60°	188.1	12.6
60°-70°	120.7	8.1
70°-80°	64.7	4.3
80°-90°	19.6	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°	561.3	37.4
0°-40°	852.9	56.9
0°-60°	1294.0	86.3
0°-90°	1499.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1499.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	830	830	830	830	830	
5°	803	816	813	819	826	75
15°	697	713	727	756	779	195
25°	557	575	598	638	676	256
35°	402	421	452	510	563	251
45°	245	264	317	385	438	193
55°	162	165	196	251	290	145
65°	102	111	122	129	139	102
75°	56	64	62	59	58	59
85°	16	20	18	16	13	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	829.8	829.8	829.8	829.8	829.8
2.5°	821.1	832.8	825.0	825.0	825.9
5°	802.6	816.2	813.3	819.1	825.9
7.5°	780.2	794.8	795.8	809.4	819.1
10°	755.9	770.5	775.4	794.8	808.4
12.5°	726.7	743.3	752.0	776.3	795.8
15°	696.6	713.1	726.7	755.9	779.2
17.5°	664.5	681.0	698.5	731.6	756.9
20°	629.4	646.9	667.4	700.4	731.6
22.5°	593.4	611.9	633.3	669.3	704.3
25°	557.4	575.0	598.3	638.2	676.1
27.5°	519.5	538.0	562.3	606.1	648.9
30°	481.6	500.0	526.3	573.0	618.7
32.5°	442.6	461.1	489.3	541.9	591.5
35°	401.8	421.2	452.4	509.8	563.3
37.5°	362.9	381.4	416.4	479.6	536.0
40°	323.0	342.4	381.4	449.5	505.9
42.5°	284.1	303.5	349.3	417.4	472.8
45°	245.2	263.6	317.1	385.2	437.8
47.5°	215.0	228.6	287.0	351.2	403.7
50°	195.5	200.4	256.8	318.1	366.8
52.5°	178.0	181.9	223.8	285.0	328.8
55°	161.5	165.4	195.5	251.0	289.9
57.5°	145.0	149.8	174.1	216.0	251.0
60°	129.4	135.2	156.6	184.8	209.2
62.5°	115.8	122.6	139.1	156.6	173.2
65°	102.1	110.9	121.6	129.4	139.1
67.5°	89.5	99.2	105.1	107.0	108.0
70°	77.8	87.6	89.5	89.5	89.5
72.5°	66.2	76.9	74.9	73.9	73.0
75°	55.5	64.2	62.3	59.3	58.4
77.5°	44.8	52.5	49.6	47.7	44.8
80°	35.0	40.9	37.9	36.0	33.1
82.5°	26.3	30.2	27.2	25.3	22.4
85°	16.5	20.4	18.5	15.6	12.6
87.5°	8.8	11.7	9.7	8.8	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)