

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: P1059077

Luminaire Tested: S123RDR-S1000D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059077
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-S1000D950-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, 90 CRI LEDS
Ballast/Driver: -

Summary

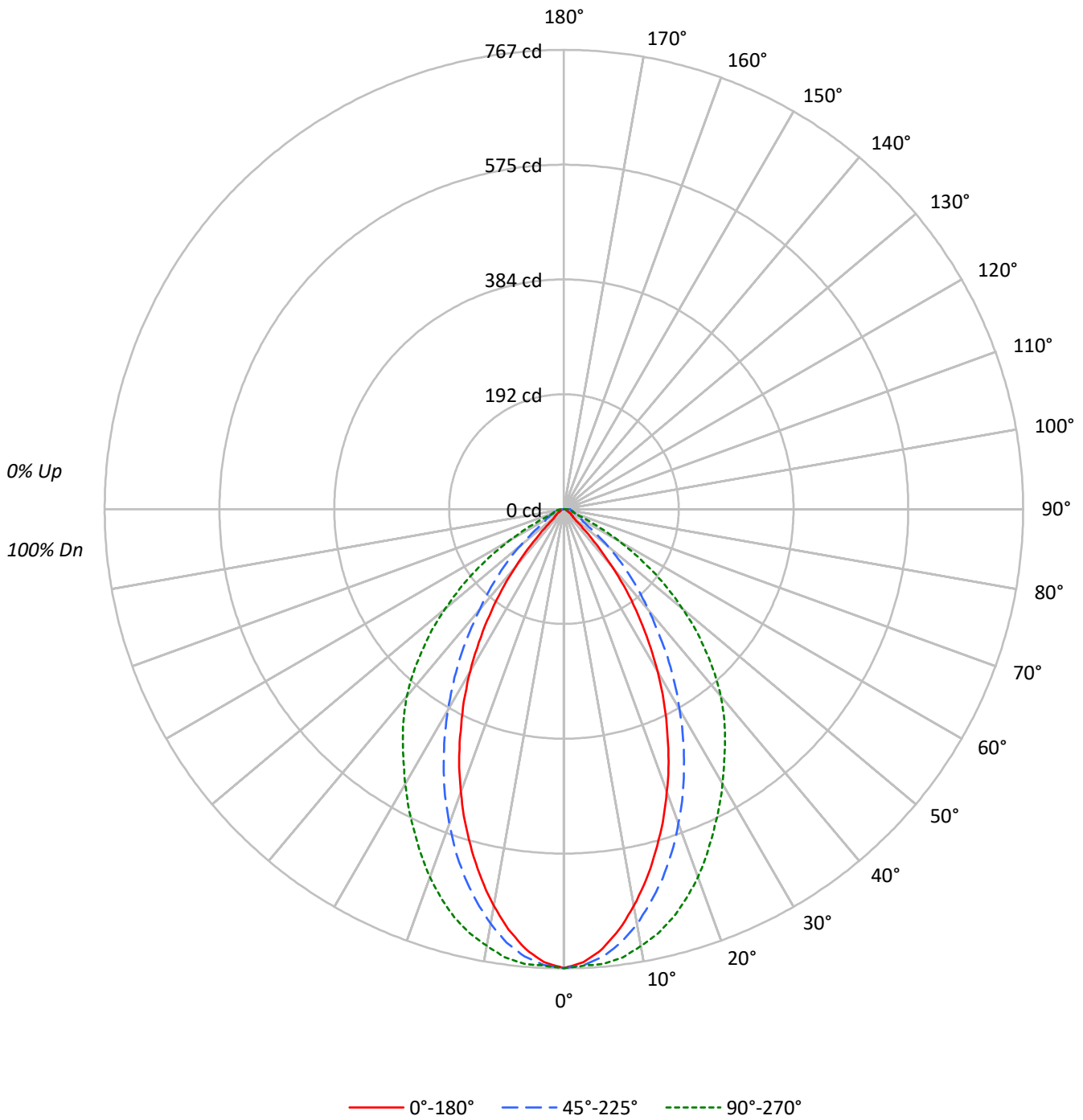
Lumens per Lamp: N/A
Luminaire Lumens: 921.0 lumens
Efficiency: N/A
Efficacy: 26.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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									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	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°	9003	9003	9003
5°	8692	8844	8982
10°	8023	8387	8834
15°	7197	7754	8580
20°	6284	6988	8175
25°	5286	6152	7670
30°	4244	5246	7185
35°	3109	4319	6722
40°	1922	3360	6254
45°	739	2531	5568
50°	364	1735	4711
55°	289	960	3695
60°	193	798	2478
65°	164	717	1109
70°	161	645	645
75°	213	690	640
80°	318	872	717
85°	472	1428	943

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5568 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.3	7.6
10°-20°	180.0	19.5
20°-30°	223.4	24.3
30°-40°	200.1	21.7
40°-50°	131.5	14.3
50°-60°	65.9	7.2
60°-70°	26.0	2.8
70°-80°	14.6	1.6
80°-90°	9.2	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°	473.6	51.4
0°-40°	673.8	73.2
0°-60°	871.2	94.6
0°-90°	921.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	921.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	767	767	767	767	767	
5°	737	749	750	755	762	68
15°	592	611	638	681	706	165
25°	408	434	475	542	592	187
35°	217	246	301	394	469	135
45°	44	74	152	257	335	42
55°	14	16	47	127	180	13
65°	6	16	26	33	40	6
75°	5	15	15	14	14	5
85°	4	11	11	11	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	766.7	766.7	766.7	766.7	766.7
2.5°	757.3	767.9	762.0	762.0	763.2
5°	737.4	749.1	750.3	755.0	762.0
7.5°	708.1	723.3	730.4	744.4	755.0
10°	672.9	689.3	703.4	728.0	740.9
12.5°	634.2	650.7	671.8	705.8	725.7
15°	592.0	610.8	637.8	681.1	705.8
17.5°	548.7	567.4	600.2	649.5	681.1
20°	502.9	524.0	559.2	615.5	654.2
22.5°	457.2	480.7	518.2	579.1	623.7
25°	408.0	433.8	474.8	541.6	592.0
27.5°	361.1	388.1	431.4	504.1	561.6
30°	313.0	340.0	386.9	465.4	529.9
32.5°	263.8	294.3	343.5	429.1	498.3
35°	216.9	246.2	301.3	393.9	468.9
37.5°	171.2	200.5	257.9	359.9	439.6
40°	125.4	155.9	219.2	327.1	408.0
42.5°	82.1	113.7	185.2	294.3	372.8
45°	44.5	73.9	152.4	256.7	335.3
47.5°	24.6	39.9	123.1	221.6	299.0
50°	19.9	22.3	95.0	188.7	257.9
52.5°	16.4	18.8	68.0	157.1	220.4
55°	14.1	16.4	46.9	126.6	180.5
57.5°	11.7	14.1	37.5	97.3	141.9
60°	8.2	14.1	34.0	71.5	105.5
62.5°	7.0	14.1	29.3	49.2	70.3
65°	5.9	16.4	25.8	32.8	39.9
67.5°	4.7	16.4	22.3	21.1	21.1
70°	4.7	16.4	18.8	17.6	18.8
72.5°	4.7	17.6	17.6	16.4	16.4
75°	4.7	15.2	15.2	14.1	14.1
77.5°	4.7	14.1	14.1	12.9	12.9
80°	4.7	12.9	12.9	11.7	10.6
82.5°	4.7	11.7	11.7	10.6	9.4
85°	3.5	10.6	10.6	10.6	7.0
87.5°	3.5	9.4	10.6	9.4	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)