

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: P1060616

Luminaire Tested: S124RDR-S795D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060616  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S795D950-X4F0-XX-UDD-BVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

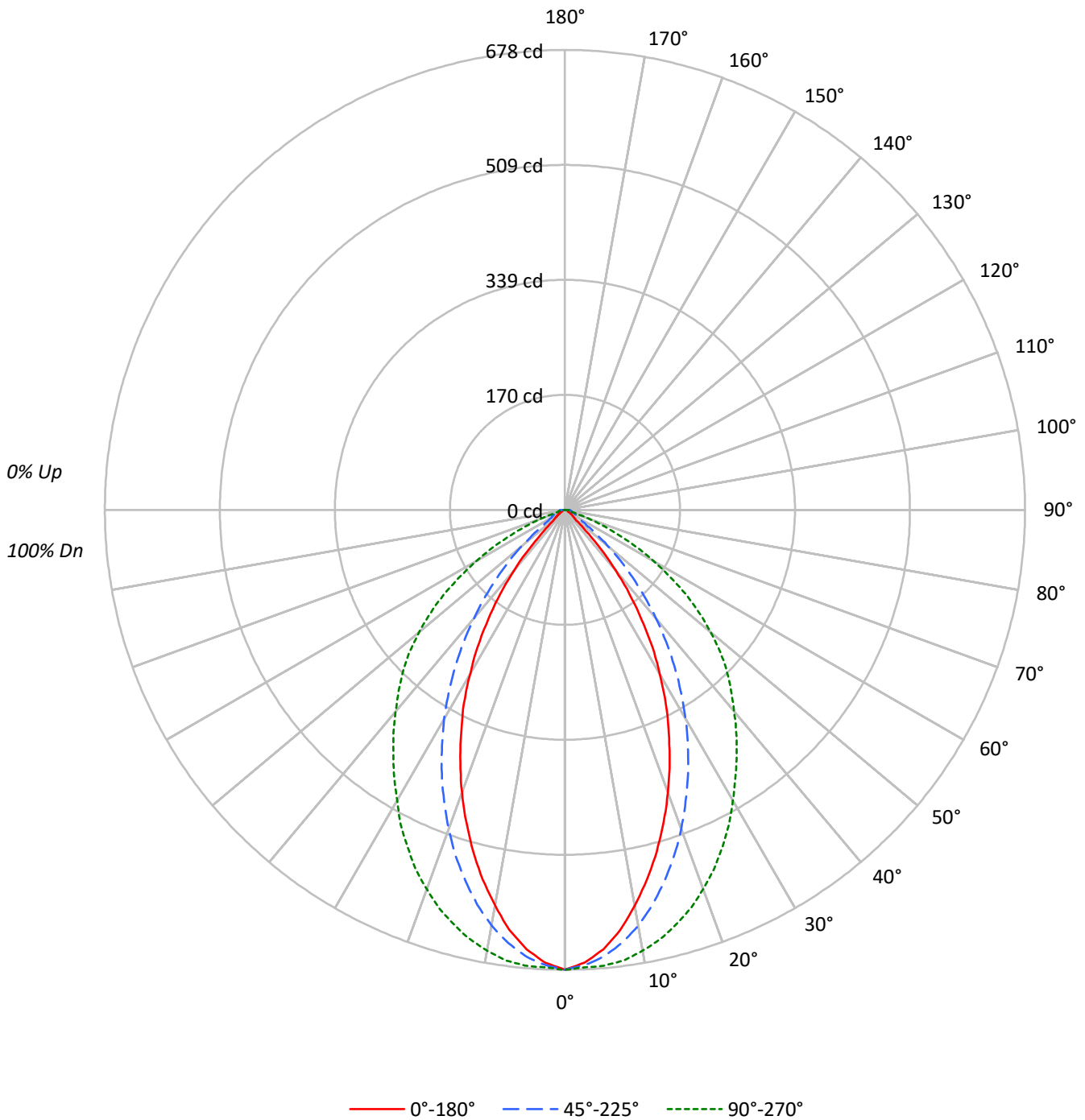
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 850.9 lumens  
Efficiency: N/A  
Efficacy: 33.0 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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	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	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5837	5837	5837
5°	5619	5712	5829
10°	5182	5440	5771
15°	4651	5051	5643
20°	4065	4591	5455
25°	3439	4078	5212
30°	2776	3536	4919
35°	2067	2954	4635
40°	1312	2342	4360
45°	525	1717	4111
50°	229	1094	3752
55°	176	566	3276
60°	124	386	2597
65°	92	385	1775
70°	91	340	813
75°	120	359	329
80°	179	402	357
85°	356	711	534

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4111 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.0	7.3
10°-20°	160.1	18.8
20°-30°	202.2	23.8
30°-40°	185.7	21.8
40°-50°	126.6	14.9
50°-60°	68.7	8.1
60°-70°	29.1	3.4
70°-80°	10.1	1.2
80°-90°	6.4	0.8
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°	424.3	49.9
0°-40°	609.9	71.7
0°-60°	805.2	94.6
0°-90°	850.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	850.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	650	660	661	666	674	60
15°	522	539	567	607	633	145
25°	362	385	429	496	549	165
35°	197	223	281	369	441	122
45°	43	69	141	250	338	40
55°	12	13	38	137	218	11
65°	4	5	19	43	87	5
75°	4	10	11	10	10	4
85°	4	7	7	7	5	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	677.9	677.9	677.9	677.9	677.9
2.5°	668.0	676.1	671.6	673.4	675.2
5°	650.1	660.0	660.8	666.2	674.3
7.5°	624.9	636.6	643.8	657.3	669.8
10°	592.6	607.0	622.2	643.8	660.0
12.5°	558.5	573.8	596.2	626.7	648.3
15°	521.7	538.7	566.6	607.0	633.0
17.5°	483.1	501.9	535.1	582.7	616.0
20°	443.6	464.2	501.0	554.9	595.3
22.5°	403.2	424.7	465.1	526.2	573.8
25°	361.9	385.2	429.2	495.6	548.6
27.5°	322.3	343.9	392.4	465.1	523.5
30°	279.2	303.5	355.6	433.7	494.7
32.5°	239.7	263.1	317.9	401.4	467.8
35°	196.6	222.7	281.0	369.0	440.9
37.5°	156.2	181.4	245.1	338.5	414.8
40°	116.7	142.8	208.3	308.0	387.9
42.5°	78.1	106.0	173.3	276.6	362.7
45°	43.1	69.1	141.0	249.6	337.6
47.5°	22.4	37.7	110.4	222.7	310.7
50°	17.1	20.7	81.7	193.0	280.1
52.5°	14.4	15.3	55.7	163.4	249.6
55°	11.7	12.6	37.7	137.4	218.2
57.5°	9.0	9.9	26.9	112.2	183.2
60°	7.2	8.1	22.4	86.2	150.8
62.5°	5.4	6.3	21.5	63.8	118.5
65°	4.5	5.4	18.9	43.1	87.1
67.5°	3.6	5.4	16.2	27.8	58.4
70°	3.6	7.2	13.5	18.0	32.3
72.5°	3.6	8.1	11.7	11.7	11.7
75°	3.6	9.9	10.8	9.9	9.9
77.5°	3.6	9.0	9.0	9.0	9.0
80°	3.6	8.1	8.1	8.1	7.2
82.5°	3.6	7.2	8.1	8.1	6.3
85°	3.6	7.2	7.2	7.2	5.4
87.5°	2.7	7.2	7.2	7.2	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)