

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 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: S124RDRP-S795D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
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: S124RDRP-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: -

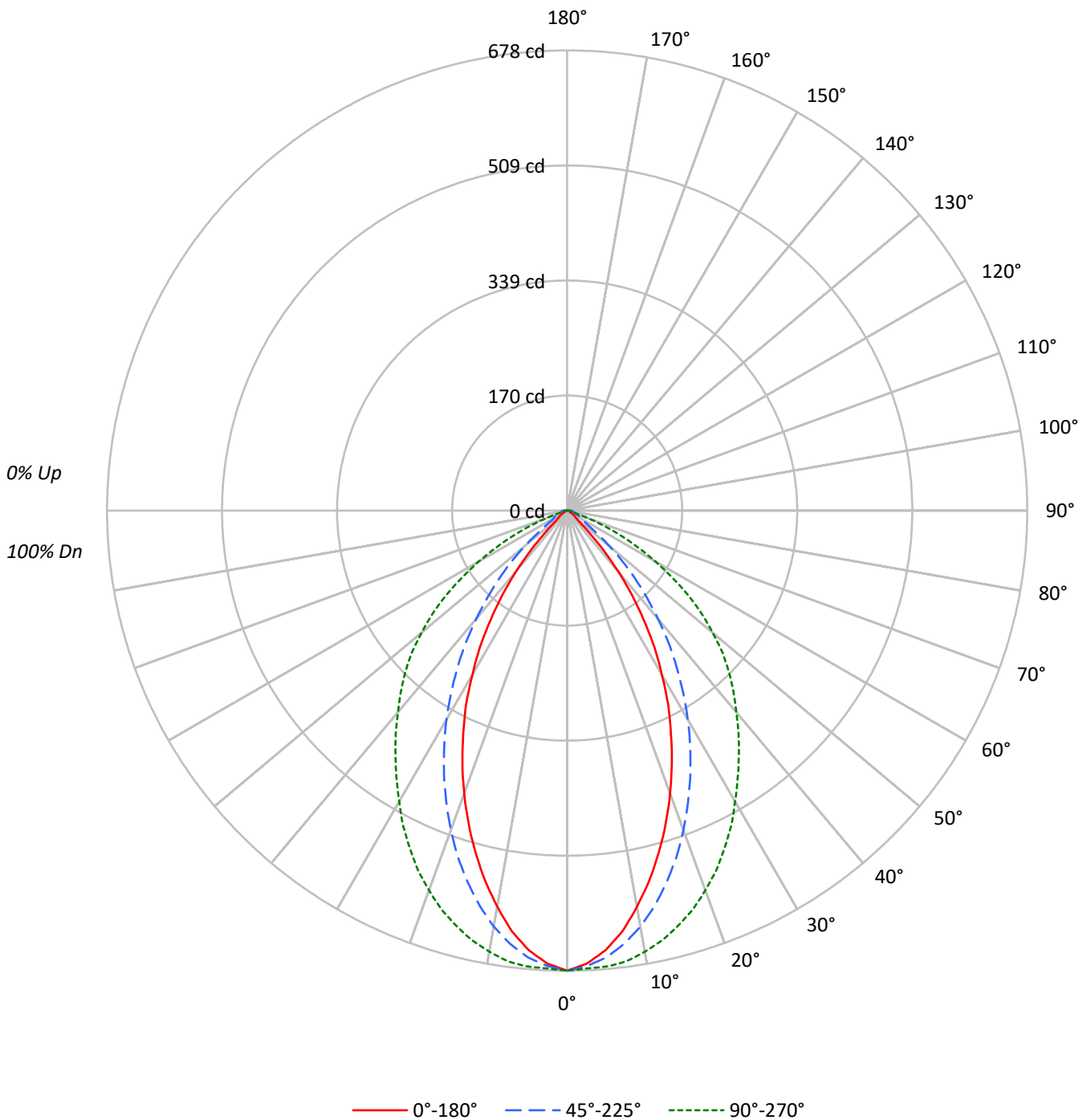
**Summary**

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 (A<sub>in</sub>): 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



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	14.57	15.85	14.94	16.16	16.47
	3H	0.00	0.00	0.00	0.00	0.00	14.93	16.05	15.31	16.38	16.75
	4H	0.00	0.54	0.00	0.89	1.27	14.89	15.94	15.30	16.29	16.68
	6H	0.85	1.82	1.27	2.19	2.58	14.87	15.83	15.28	16.20	16.60
	8H	1.53	2.45	1.97	2.84	3.24	14.86	15.77	15.29	16.16	16.57
	12H	2.34	3.21	2.77	3.59	4.02	14.86	15.73	15.29	16.11	16.54
4H	2H	0.28	1.33	0.69	1.68	2.07	14.37	15.42	14.78	15.77	16.16
	3H	1.71	2.56	2.12	2.97	3.37	14.77	15.62	15.18	16.03	16.43
	4H	3.16	3.92	3.59	4.34	4.79	14.75	15.51	15.18	15.93	16.38
	6H	4.40	5.06	4.87	5.51	5.98	14.77	15.43	15.23	15.87	16.34
	8H	4.97	5.59	5.44	6.03	6.51	14.78	15.39	15.25	15.84	16.31
	12H	5.65	6.19	6.13	6.67	7.15	14.82	15.36	15.30	15.84	16.32
8H	4H	4.23	4.85	4.70	5.29	5.77	14.65	15.26	15.12	15.71	16.18
	6H	5.84	6.35	6.35	6.84	7.33	14.70	15.20	15.20	15.70	16.18
	8H	6.68	7.13	7.20	7.65	8.14	14.76	15.21	15.28	15.73	16.22
	12H	7.64	8.04	8.16	8.54	9.11	14.88	15.27	15.39	15.77	16.34
12H	4H	4.42	4.96	4.91	5.45	5.92	14.61	15.15	15.10	15.64	16.11
	6H	6.19	6.64	6.71	7.16	7.65	14.67	15.12	15.19	15.64	16.13
	8H	7.21	7.61	7.73	8.11	8.68	14.77	15.17	15.29	15.67	16.24