

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: P1060583

Luminaire Tested: S124RDRP-S795D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060583  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D927-X4F0-XX-UDD-SVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

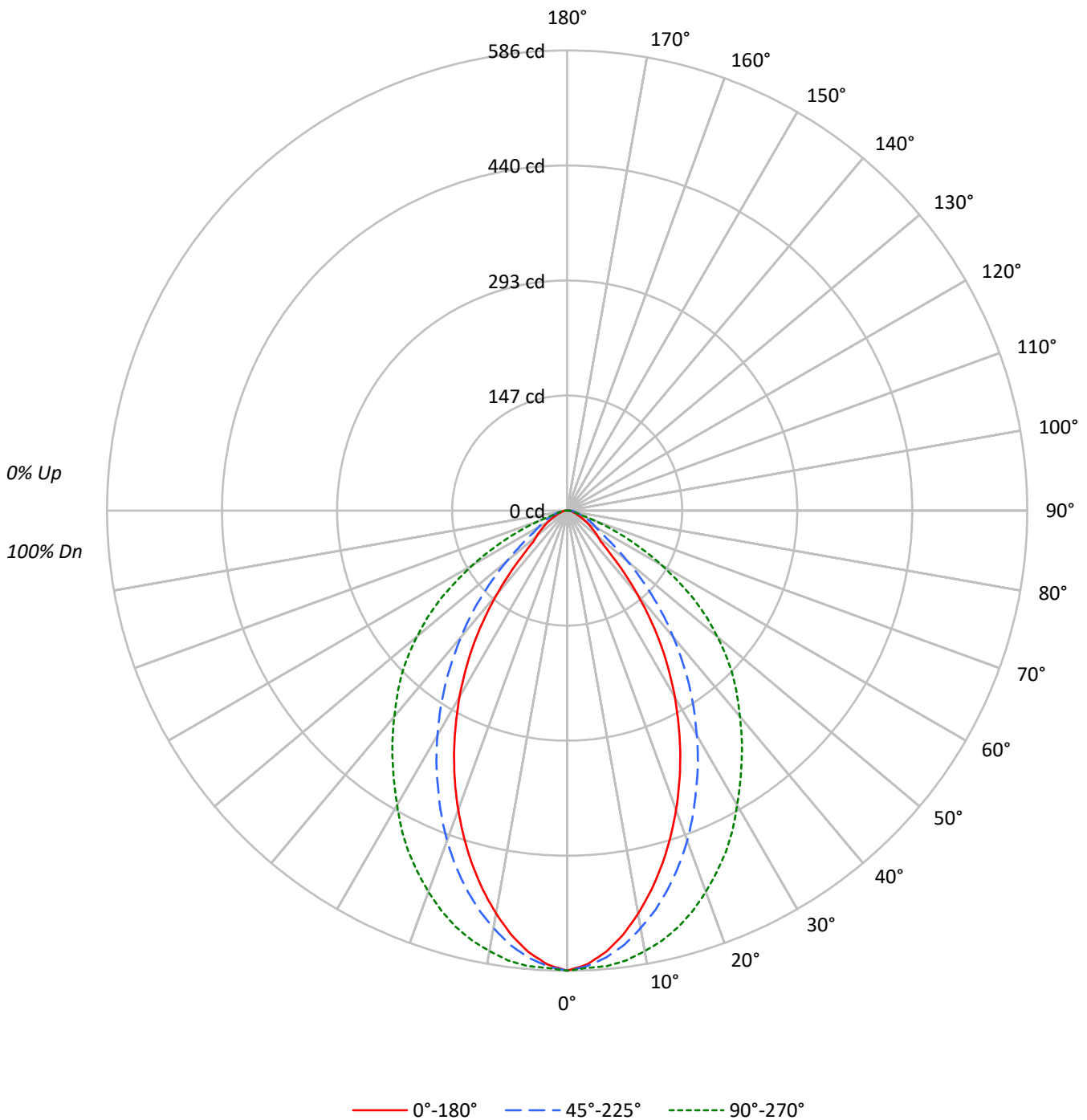
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 823.9 lumens  
Efficiency: N/A  
Efficacy: 31.9 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	5045	5045	5045
5°	4878	4936	5033
10°	4556	4719	4980
15°	4160	4439	4891
20°	3716	4099	4734
25°	3237	3697	4547
30°	2727	3283	4306
35°	2178	2845	4075
40°	1567	2363	3847
45°	944	1861	3640
50°	679	1348	3345
55°	570	907	2965
60°	462	718	2389
65°	365	654	1716
70°	320	544	919
75°	296	496	446
80°	298	516	407
85°	445	741	514

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3640 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.8	6.5
10°-20°	140.9	17.1
20°-30°	182.9	22.2
30°-40°	175.8	21.3
40°-50°	130.4	15.8
50°-60°	79.9	9.7
60°-70°	38.8	4.7
70°-80°	14.8	1.8
80°-90°	6.6	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°	377.6	45.8
0°-40°	553.4	67.2
0°-60°	763.7	92.7
0°-90°	823.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	823.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	586	586	586	586	586	
5°	564	572	571	576	582	53
15°	467	480	498	528	549	130
25°	341	358	389	439	479	156
35°	207	226	271	335	388	128
45°	78	97	153	233	299	64
55°	38	40	60	136	198	34
65°	18	19	32	51	84	19
75°	9	14	15	13	13	10
85°	4	8	8	7	5	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	585.9	585.9	585.9	585.9	585.9
2.5°	578.5	585.2	580.7	582.2	582.9
5°	564.3	572.5	571.0	576.2	582.2
7.5°	544.9	554.6	557.6	568.0	577.7
10°	521.1	533.0	539.7	556.8	569.5
12.5°	495.0	507.6	520.3	543.4	560.6
15°	466.6	480.1	497.9	527.8	548.6
17.5°	436.8	451.7	473.3	509.1	533.7
20°	405.5	421.2	447.3	486.8	516.6
22.5°	373.5	389.9	418.9	462.9	497.9
25°	340.7	357.8	389.1	439.1	478.6
27.5°	307.1	325.0	360.8	413.7	457.0
30°	274.3	291.5	330.2	387.6	433.1
32.5°	240.8	258.7	300.4	360.8	410.0
35°	207.2	225.9	270.6	334.7	387.6
37.5°	172.9	193.1	240.0	309.4	365.3
40°	139.4	158.8	210.2	283.3	342.2
42.5°	106.6	127.5	181.9	257.2	320.5
45°	77.5	96.9	152.8	233.3	298.9
47.5°	58.1	70.1	126.0	211.0	275.1
50°	50.7	52.9	100.6	186.4	249.7
52.5°	44.0	45.5	78.3	159.5	224.4
55°	38.0	39.5	60.4	136.4	197.5
57.5°	32.1	33.5	48.5	114.1	167.0
60°	26.8	28.3	41.7	90.9	138.7
62.5°	22.4	23.1	37.3	69.3	111.1
65°	17.9	19.4	32.1	50.7	84.2
67.5°	14.9	16.4	26.1	35.0	58.9
70°	12.7	16.4	21.6	24.6	36.5
72.5°	10.4	14.9	17.9	17.1	17.1
75°	8.9	14.2	14.9	13.4	13.4
77.5°	7.5	12.7	11.9	11.2	10.4
80°	6.0	10.4	10.4	8.9	8.2
82.5°	5.2	8.2	8.2	8.2	6.7
85°	4.5	7.5	7.5	6.7	5.2
87.5°	3.0	6.0	6.7	6.0	3.7
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	5.43	6.77	5.80	7.08	7.40	14.54	15.88	14.90	16.19	16.50
	3H	6.48	7.66	6.86	7.99	8.36	15.04	16.23	15.42	16.56	16.92
	4H	6.99	8.10	7.39	8.45	8.83	15.05	16.16	15.45	16.51	16.89
	6H	7.45	8.46	7.86	8.83	9.23	15.05	16.07	15.47	16.44	16.83
	8H	7.64	8.60	8.07	8.99	9.40	15.05	16.01	15.48	16.40	16.81
	12H	7.85	8.77	8.28	9.16	9.59	15.05	15.97	15.48	16.35	16.78
4H	2H	6.53	7.64	6.93	7.99	8.37	14.43	15.53	14.83	15.88	16.27
	3H	7.80	8.71	8.21	9.11	9.51	15.00	15.91	15.42	16.31	16.72
	4H	8.51	9.32	8.94	9.74	10.18	15.05	15.86	15.49	16.28	16.72
	6H	9.14	9.84	9.60	10.29	10.75	15.10	15.80	15.57	16.25	16.71
	8H	9.38	10.04	9.85	10.48	10.96	15.12	15.77	15.59	16.22	16.69
	12H	9.66	10.24	10.15	10.72	11.20	15.15	15.73	15.64	16.21	16.69
8H	4H	8.93	9.59	9.40	10.03	10.50	15.00	15.65	15.47	16.10	16.57
	6H	9.81	10.35	10.31	10.84	11.32	15.09	15.63	15.59	16.12	16.60
	8H	10.22	10.70	10.74	11.21	11.70	15.15	15.63	15.67	16.15	16.64
	12H	10.70	11.12	11.21	11.62	12.19	15.25	15.68	15.77	16.17	16.74
12H	4H	8.98	9.55	9.46	10.04	10.51	14.97	15.55	15.46	16.03	16.51
	6H	9.92	10.40	10.44	10.92	11.41	15.07	15.55	15.59	16.07	16.56
	8H	10.44	10.86	10.95	11.36	11.93	15.18	15.60	15.69	16.10	16.67