

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: P1060580

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060580  
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-S795D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

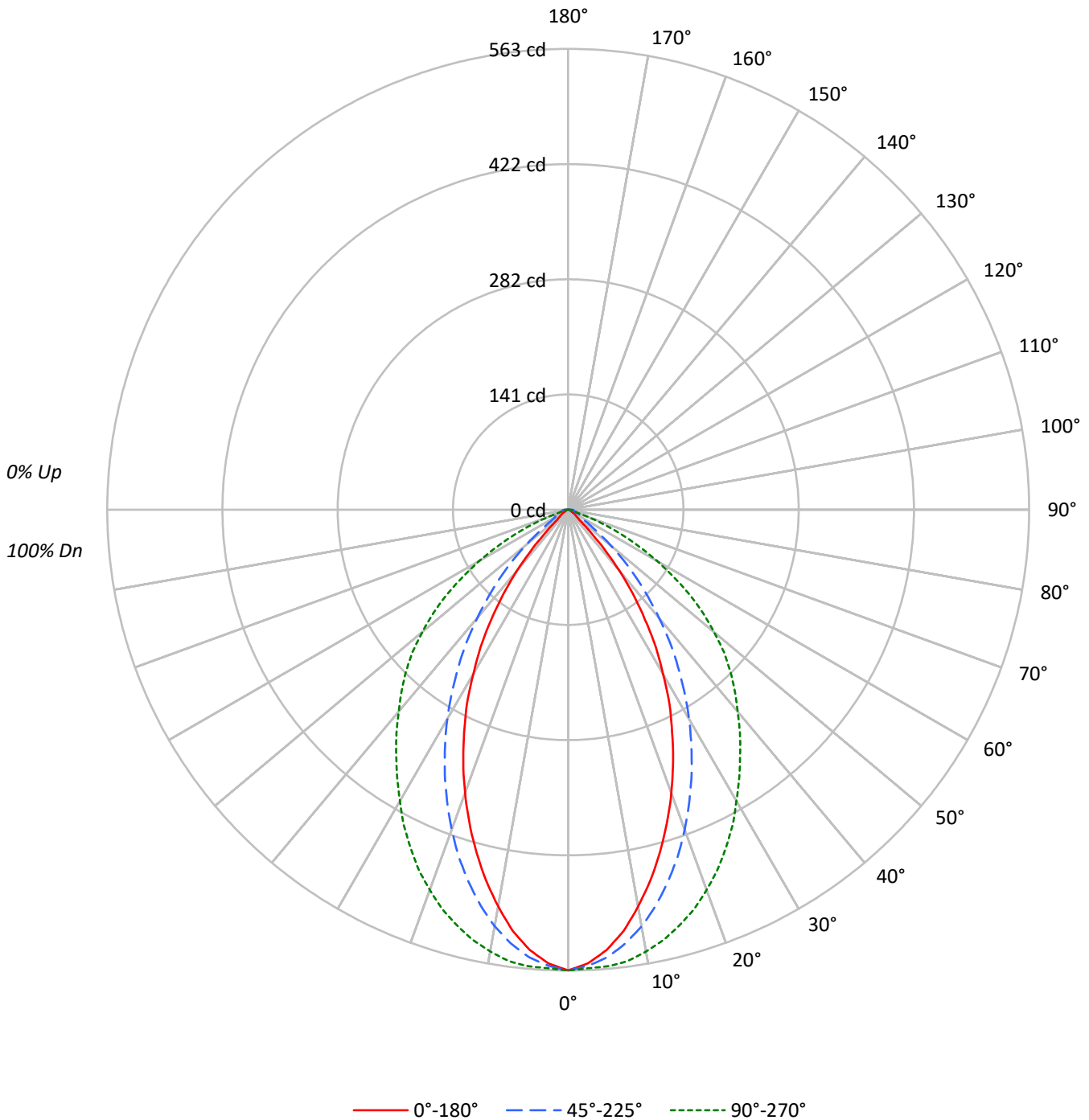
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 706.5 lumens  
Efficiency: N/A  
Efficacy: 27.4 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°	4847	4847	4847
5°	4666	4744	4840
10°	4303	4518	4792
15°	3862	4194	4686
20°	3375	3812	4530
25°	2855	3386	4329
30°	2306	2936	4085
35°	1717	2454	3849
40°	1089	1945	3621
45°	436	1426	3413
50°	190	908	3116
55°	146	470	2720
60°	103	320	2158
65°	75	320	1473
70°	76	282	675
75°	100	296	273
80°	149	332	298
85°	296	593	445

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3413 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.5	7.3
10°-20°	132.9	18.8
20°-30°	167.9	23.8
30°-40°	154.2	21.8
40°-50°	105.1	14.9
50°-60°	57.0	8.1
60°-70°	24.2	3.4
70°-80°	8.4	1.2
80°-90°	5.3	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°	352.3	49.9
0°-40°	506.5	71.7
0°-60°	668.6	94.6
0°-90°	706.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	706.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	540	548	549	553	560	50
15°	433	447	470	504	526	121
25°	300	320	356	412	456	137
35°	163	185	233	306	366	101
45°	36	57	117	207	280	33
55°	10	10	31	114	181	9
65°	4	4	16	36	72	4
75°	3	8	9	8	8	3
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	562.9	562.9	562.9	562.9	562.9
2.5°	554.7	561.4	557.7	559.2	560.7
5°	539.8	548.0	548.8	553.2	559.9
7.5°	518.9	528.6	534.6	545.8	556.2
10°	492.1	504.0	516.7	534.6	548.0
12.5°	463.8	476.4	495.1	520.4	538.3
15°	433.2	447.4	470.5	504.0	525.6
17.5°	401.1	416.8	444.4	483.9	511.5
20°	368.3	385.5	416.0	460.8	494.3
22.5°	334.8	352.7	386.2	436.9	476.4
25°	300.5	319.9	356.4	411.6	455.6
27.5°	267.7	285.6	325.8	386.2	434.7
30°	231.9	252.0	295.3	360.1	410.8
32.5°	199.1	218.5	263.9	333.3	388.5
35°	163.3	184.9	233.4	306.4	366.1
37.5°	129.7	150.6	203.5	281.1	344.5
40°	96.9	118.5	173.0	255.7	322.1
42.5°	64.9	88.0	143.9	229.6	301.2
45°	35.8	57.4	117.1	207.3	280.3
47.5°	18.6	31.3	91.7	184.9	258.0
50°	14.2	17.1	67.8	160.3	232.6
52.5°	11.9	12.7	46.2	135.7	207.3
55°	9.7	10.4	31.3	114.1	181.2
57.5°	7.5	8.2	22.4	93.2	152.1
60°	6.0	6.7	18.6	71.6	125.3
62.5°	4.5	5.2	17.9	52.9	98.4
65°	3.7	4.5	15.7	35.8	72.3
67.5°	3.0	4.5	13.4	23.1	48.5
70°	3.0	6.0	11.2	14.9	26.8
72.5°	3.0	6.7	9.7	9.7	9.7
75°	3.0	8.2	8.9	8.2	8.2
77.5°	3.0	7.5	7.5	7.5	7.5
80°	3.0	6.7	6.7	6.7	6.0
82.5°	3.0	6.0	6.7	6.7	5.2
85°	3.0	6.0	6.0	6.0	4.5
87.5°	2.2	6.0	6.0	6.0	3.0
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	13.93	15.20	14.29	15.51	15.83
	3H	0.00	0.00	0.00	0.00	0.00	14.28	15.41	14.66	15.74	16.11
	4H	0.00	0.00	0.00	0.24	0.63	14.25	15.30	14.65	15.65	16.03
	6H	0.21	1.18	0.63	1.55	1.94	14.22	15.19	14.64	15.56	15.95
	8H	0.90	1.81	1.33	2.20	2.60	14.21	15.12	14.64	15.51	15.92
	12H	1.70	2.57	2.14	2.96	3.39	14.21	15.08	14.64	15.46	15.90
4H	2H	0.00	0.69	0.04	1.04	1.42	13.73	14.78	14.13	15.13	15.51
	3H	1.06	1.92	1.48	2.32	2.73	14.12	14.98	14.54	15.38	15.79
	4H	2.51	3.27	2.94	3.69	4.14	14.10	14.87	14.54	15.29	15.73
	6H	3.76	4.42	4.22	4.86	5.33	14.12	14.78	14.59	15.23	15.70
	8H	4.33	4.94	4.80	5.39	5.86	14.13	14.75	14.60	15.20	15.67
	12H	5.01	5.55	5.50	6.03	6.51	14.17	14.71	14.66	15.20	15.67
8H	4H	3.58	4.20	4.05	4.64	5.12	14.00	14.62	14.47	15.07	15.54
	6H	5.19	5.70	5.70	6.19	6.68	14.06	14.56	14.56	15.05	15.54
	8H	6.03	6.48	6.55	7.00	7.49	14.11	14.56	14.64	15.08	15.57
	12H	7.00	7.40	7.52	7.90	8.47	14.23	14.63	14.75	15.12	15.70
12H	4H	3.77	4.31	4.26	4.80	5.27	13.97	14.51	14.45	14.99	15.47
	6H	5.54	5.99	6.06	6.51	7.00	14.02	14.48	14.55	14.99	15.48
	8H	6.56	6.96	7.08	7.46	8.03	14.13	14.53	14.64	15.02	15.59