

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: P1061798

Luminaire Tested: S125RDRP-S850D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061798  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S850D927-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

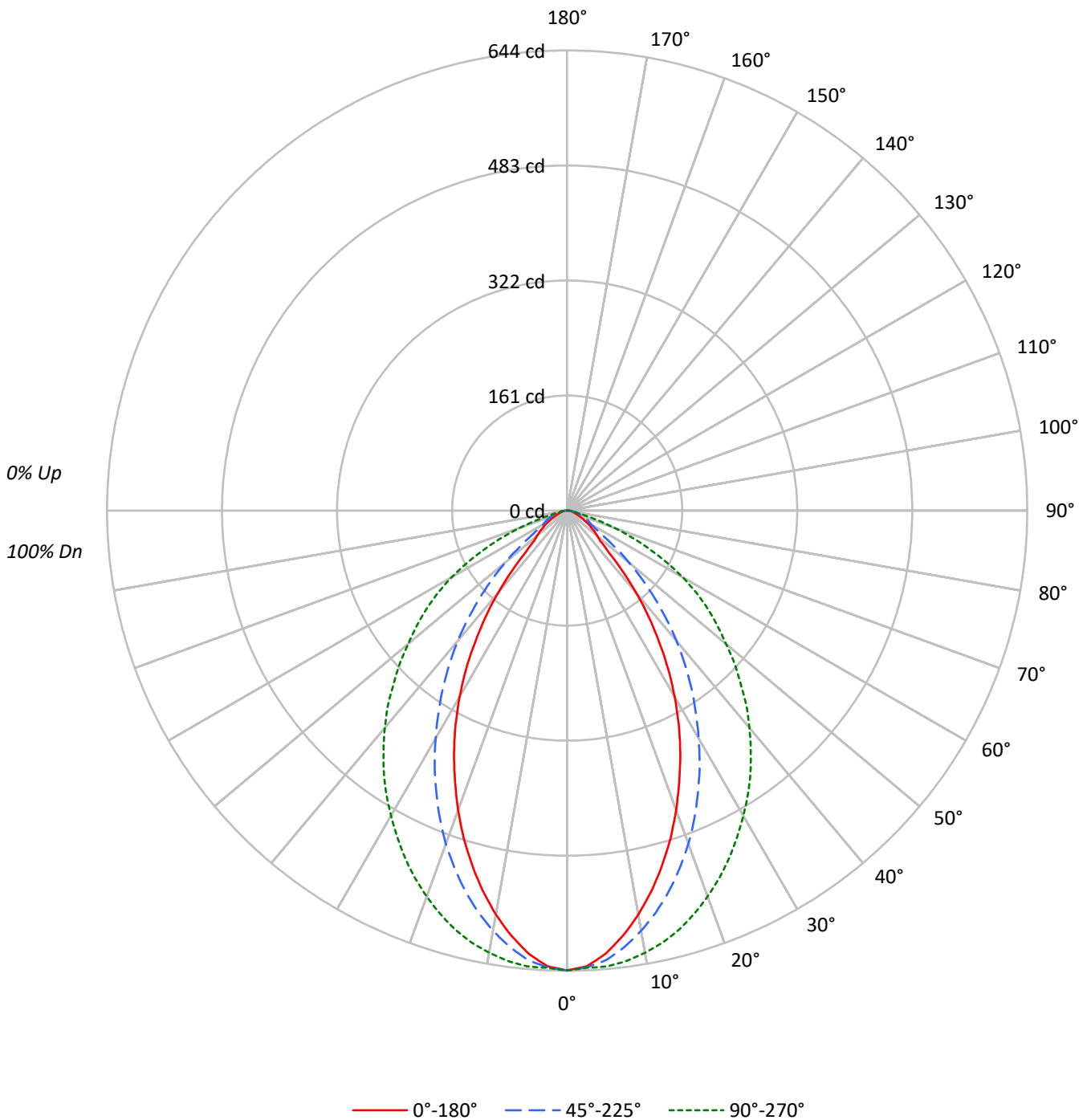
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 929.1 lumens  
Efficiency: N/A  
Efficacy: 36.0 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
Luminous Opening: Rectangular (W 0.39' 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	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36

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

	0°	45°	90°
0°	4431	4431	4431
5°	4300	4363	4426
10°	4013	4173	4392
15°	3662	3928	4325
20°	3266	3636	4212
25°	2847	3294	4077
30°	2391	2925	3920
35°	1886	2547	3760
40°	1352	2141	3567
45°	796	1680	3345
50°	589	1210	3107
55°	495	733	2886
60°	399	536	2575
65°	311	510	2064
70°	262	477	1399
75°	245	426	609
80°	242	424	393
85°	300	545	419

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3345 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.3	6.4
10°-20°	155.8	16.8
20°-30°	203.6	21.9
30°-40°	198.1	21.3
40°-50°	148.1	15.9
50°-60°	91.8	9.9
60°-70°	48.2	5.2
70°-80°	17.6	1.9
80°-90°	6.6	0.7
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°	418.6	45.1
0°-40°	616.7	66.4
0°-60°	856.7	92.2
0°-90°	929.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	929.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	644	644	644	644	644	
5°	622	630	631	635	640	58
15°	514	529	551	585	607	143
25°	375	394	434	492	537	171
35°	224	249	303	384	447	140
45°	82	107	172	270	344	69
55°	41	44	61	159	240	37
65°	19	21	31	67	127	20
75°	9	11	16	18	23	10
85°	4	7	7	7	5	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	643.5	643.5	643.5	643.5	643.5
2.5°	638.1	643.5	639.7	639.7	640.4
5°	622.1	630.5	631.3	635.1	640.4
7.5°	600.0	609.9	616.0	627.4	635.8
10°	574.0	585.5	596.9	616.0	628.2
12.5°	545.0	558.7	575.5	601.5	619.0
15°	513.7	529.0	551.1	584.7	606.8
17.5°	480.9	496.9	524.4	564.9	591.6
20°	445.8	463.3	496.2	542.0	574.8
22.5°	409.9	429.7	465.6	517.5	556.5
25°	374.8	393.9	433.6	492.3	536.6
27.5°	338.1	358.0	401.5	466.4	515.2
30°	300.7	322.1	367.9	439.7	493.1
32.5°	263.3	285.5	335.1	412.2	471.0
35°	224.4	248.8	303.0	383.9	447.3
37.5°	187.8	213.7	270.2	354.9	422.1
40°	150.4	177.1	238.2	326.7	396.9
42.5°	113.7	141.2	205.3	297.7	371.7
45°	81.7	106.9	172.5	269.5	343.5
47.5°	62.6	77.1	142.0	240.4	318.3
50°	55.0	59.5	113.0	212.2	290.1
52.5°	48.1	51.1	84.0	184.7	265.6
55°	41.2	43.5	61.1	158.8	240.4
57.5°	35.1	37.4	46.6	135.1	214.5
60°	29.0	31.3	38.9	111.4	187.0
62.5°	24.4	25.2	35.1	89.3	156.5
65°	19.1	20.6	31.3	67.2	126.7
67.5°	16.0	16.8	27.5	48.1	97.7
70°	13.0	13.7	23.7	33.6	69.5
72.5°	11.4	11.4	19.8	24.4	44.3
75°	9.2	10.7	16.0	17.6	22.9
77.5°	7.6	10.7	13.7	13.0	12.2
80°	6.1	9.9	10.7	10.7	9.9
82.5°	5.3	8.4	9.2	8.4	7.6
85°	3.8	6.9	6.9	6.9	5.3
87.5°	3.1	6.1	5.3	5.3	3.8
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	4.96	6.31	5.32	6.62	6.93	14.66	16.01	15.03	16.32	16.64
	3H	5.80	6.99	6.18	7.32	7.69	15.57	16.77	15.95	17.10	17.47
	4H	6.16	7.27	6.56	7.62	8.01	15.67	16.79	16.08	17.14	17.52
	6H	6.53	7.55	6.94	7.92	8.32	15.66	16.69	16.07	17.06	17.45
	8H	6.71	7.68	7.14	8.07	8.47	15.65	16.62	16.08	17.01	17.41
	12H	6.87	7.80	7.30	8.18	8.61	15.63	16.56	16.06	16.95	17.38
4H	2H	5.79	6.90	6.19	7.25	7.64	14.51	15.63	14.92	15.98	16.36
	3H	6.84	7.76	7.26	8.16	8.56	15.50	16.42	15.92	16.82	17.22
	4H	7.30	8.12	7.73	8.54	8.98	15.63	16.45	16.07	16.87	17.31
	6H	7.86	8.56	8.32	9.01	9.47	15.66	16.37	16.13	16.82	17.28
	8H	8.11	8.77	8.58	9.22	9.69	15.66	16.32	16.13	16.77	17.24
	12H	8.35	8.94	8.84	9.42	9.89	15.67	16.26	16.16	16.74	17.21
8H	4H	7.85	8.51	8.32	8.96	9.43	15.56	16.22	16.02	16.66	17.13
	6H	8.63	9.17	9.13	9.67	10.15	15.62	16.16	16.12	16.65	17.13
	8H	9.05	9.53	9.57	10.05	10.54	15.65	16.13	16.17	16.64	17.14
	12H	9.46	9.89	9.98	10.39	10.96	15.70	16.13	16.21	16.62	17.19
12H	4H	7.91	8.50	8.40	8.98	9.45	15.52	16.11	16.01	16.59	17.06
	6H	8.78	9.26	9.30	9.77	10.27	15.58	16.07	16.10	16.58	17.07
	8H	9.30	9.73	9.82	10.23	10.80	15.65	16.08	16.16	16.57	17.14