

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: P1061797

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061797  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
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-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

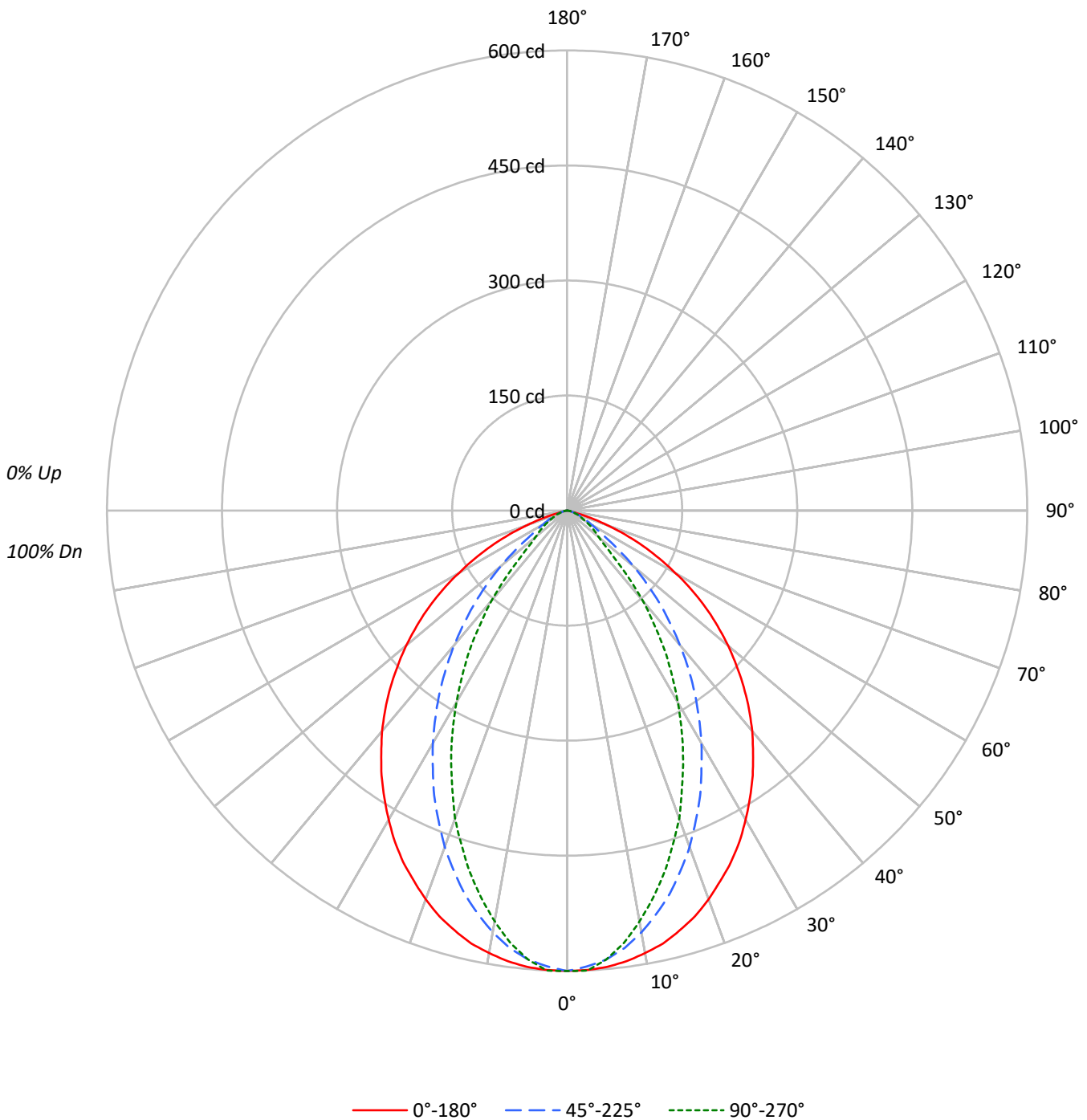
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 868.2 lumens  
Efficiency: N/A  
Efficacy: 33.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	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	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	4133	4133	4133
5°	4128	4060	4060
10°	4096	3904	3803
15°	4040	3687	3486
20°	3952	3420	3130
25°	3842	3118	2718
30°	3699	2783	2292
35°	3545	2437	1859
40°	3373	2056	1378
45°	3171	1649	832
50°	2933	1209	572
55°	2646	742	477
60°	2247	504	379
65°	1777	384	298
70°	1121	276	246
75°	364	202	202
80°	123	151	182
85°	63	118	118

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3171 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.5	6.4
10°-20°	146.6	16.9
20°-30°	192.9	22.2
30°-40°	189.5	21.8
40°-50°	143.4	16.5
50°-60°	86.9	10.0
60°-70°	41.0	4.7
70°-80°	10.7	1.2
80°-90°	1.6	0.2
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°	395.0	45.5
0°-40°	584.5	67.3
0°-60°	814.8	93.9
0°-90°	868.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	868.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	600	600	600	600	600	
5°	597	596	587	588	587	57
15°	567	552	517	497	489	160
25°	506	468	410	372	358	232
35°	422	365	290	239	221	263
45°	326	256	169	108	85	251
55°	220	151	62	42	40	196
65°	109	56	24	20	18	108
75°	14	9	8	8	8	21
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	600.3	600.3	600.3	600.3	600.3
2.5°	599.6	599.6	595.0	600.3	600.3
5°	597.3	595.7	587.4	588.1	587.4
7.5°	592.7	589.6	575.1	571.3	568.3
10°	585.8	579.7	558.4	549.2	543.9
12.5°	578.2	567.5	538.5	525.6	517.2
15°	566.8	551.5	517.2	497.3	489.0
17.5°	554.6	532.4	492.0	468.4	457.7
20°	539.3	513.4	466.8	437.8	427.2
22.5°	522.5	492.0	437.8	405.8	391.3
25°	505.7	467.6	410.4	372.2	357.8
27.5°	486.7	443.2	379.1	339.4	323.4
30°	465.3	418.8	350.1	308.9	288.3
32.5°	443.9	393.6	319.6	274.6	254.0
35°	421.8	365.4	289.9	238.8	221.2
37.5°	398.2	338.7	259.4	206.0	185.4
40°	375.3	312.0	228.8	172.4	153.3
42.5°	350.9	285.3	198.3	139.6	118.2
45°	325.7	256.3	169.3	107.6	85.4
47.5°	299.8	230.4	140.4	79.3	64.1
50°	273.8	202.9	112.9	58.7	53.4
52.5°	247.1	176.2	85.4	48.8	46.5
55°	220.4	151.0	61.8	42.0	39.7
57.5°	193.0	123.6	46.5	35.9	33.6
60°	163.2	99.2	36.6	29.7	27.5
62.5°	135.8	77.8	29.7	24.4	22.9
65°	109.1	55.7	23.6	19.8	18.3
67.5°	81.6	37.4	18.3	15.3	15.3
70°	55.7	24.4	13.7	12.2	12.2
72.5°	33.6	14.5	9.9	9.9	9.9
75°	13.7	9.2	7.6	7.6	7.6
77.5°	4.6	5.3	5.3	6.1	6.1
80°	3.1	3.1	3.8	4.6	4.6
82.5°	1.5	2.3	2.3	3.1	3.1
85°	0.8	0.8	1.5	1.5	1.5
87.5°	0.0	0.0	0.0	0.8	0.8
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	14.26	15.59	14.63	15.90	16.22	4.92	6.25	5.29	6.57	6.88
	3H	14.97	16.14	15.35	16.47	16.84	5.70	6.88	6.08	7.21	7.58
	4H	14.98	16.08	15.39	16.43	16.81	5.95	7.05	6.35	7.40	7.78
	6H	14.91	15.92	15.33	16.29	16.68	6.13	7.14	6.55	7.51	7.90
	8H	14.87	15.82	15.30	16.22	16.62	6.18	7.13	6.61	7.52	7.92
	12H	14.83	15.74	15.26	16.12	16.55	6.18	7.09	6.62	7.48	7.91
4H	2H	14.09	15.19	14.49	15.54	15.92	5.41	6.50	5.81	6.85	7.24
	3H	14.84	15.73	15.25	16.13	16.54	6.31	7.21	6.73	7.61	8.01
	4H	14.86	15.65	15.29	16.07	16.51	6.62	7.42	7.06	7.84	8.28
	6H	14.79	15.48	15.26	15.92	16.39	6.89	7.57	7.35	8.02	8.48
	8H	14.74	15.38	15.21	15.83	16.30	6.95	7.59	7.42	8.04	8.51
	12H	14.70	15.26	15.19	15.75	16.22	6.98	7.54	7.47	8.02	8.50
8H	4H	14.74	15.38	15.21	15.82	16.29	6.74	7.37	7.21	7.82	8.29
	6H	14.66	15.18	15.17	15.68	16.16	7.06	7.57	7.56	8.07	8.55
	8H	14.61	15.08	15.13	15.59	16.08	7.16	7.63	7.69	8.15	8.64
	12H	14.57	14.98	15.08	15.48	16.05	7.23	7.64	7.74	8.13	8.70
12H	4H	14.69	15.26	15.18	15.74	16.21	6.71	7.27	7.19	7.75	8.23
	6H	14.61	15.07	15.13	15.59	16.08	7.03	7.49	7.55	8.01	8.50
	8H	14.57	14.98	15.09	15.48	16.05	7.17	7.58	7.69	8.08	8.65