

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061824

Luminaire Tested: S125RDR-S850D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061824  
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: S125RDR-S850D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

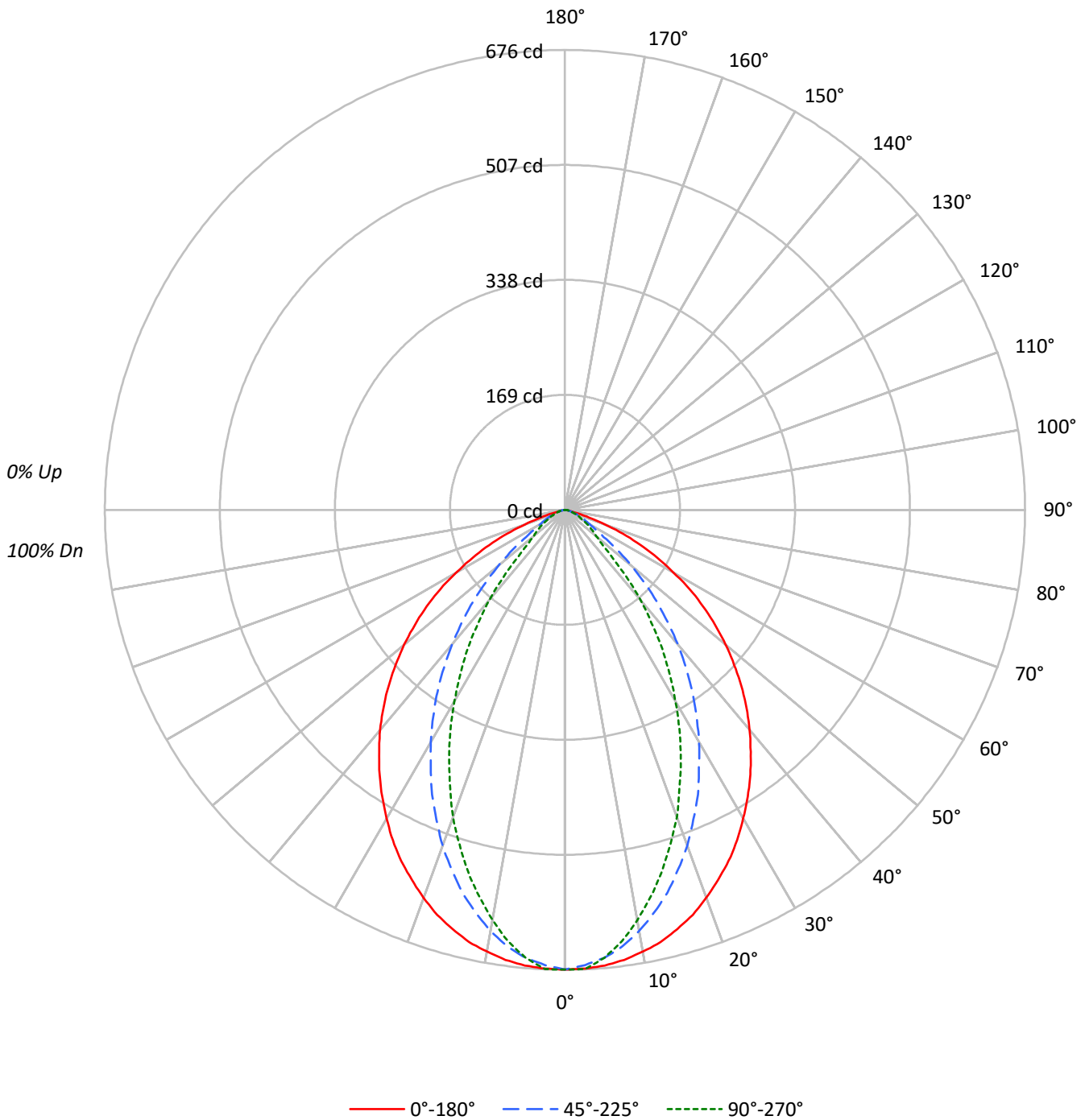
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 977.3 lumens  
Efficiency: N/A  
Efficacy: 37.9 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 (Ain): 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°	4652	4652	4652
5°	4647	4569	4569
10°	4610	4394	4280
15°	4548	4150	3923
20°	4448	3850	3523
25°	4325	3509	3059
30°	4164	3133	2581
35°	3991	2743	2093
40°	3797	2315	1551
45°	3570	1856	937
50°	3301	1361	644
55°	2978	834	535
60°	2530	567	426
65°	2001	433	336
70°	1262	312	276
75°	412	229	229
80°	135	170	206
85°	71	134	134

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3570 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.5	6.4
10°-20°	165.1	16.9
20°-30°	217.1	22.2
30°-40°	213.3	21.8
40°-50°	161.4	16.5
50°-60°	97.8	10.0
60°-70°	46.2	4.7
70°-80°	12.1	1.2
80°-90°	1.8	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°	444.7	45.5
0°-40°	658.0	67.3
0°-60°	917.2	93.9
0°-90°	977.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	977.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	676	676	676	676	676	
5°	672	671	661	662	661	64
15°	638	621	582	560	550	180
25°	569	526	462	419	403	262
35°	475	411	326	269	249	296
45°	367	288	191	121	96	282
55°	248	170	70	47	45	221
65°	123	63	27	22	21	121
75°	16	10	9	9	9	24
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°	675.7	675.7	675.7	675.7	675.7
2.5°	674.9	674.9	669.7	675.7	675.7
5°	672.3	670.6	661.1	662.0	661.1
7.5°	667.2	663.7	647.4	643.1	639.7
10°	659.4	652.6	628.5	618.2	612.2
12.5°	650.8	638.8	606.2	591.6	582.2
15°	638.0	620.8	582.2	559.8	550.4
17.5°	624.2	599.3	553.8	527.2	515.2
20°	607.1	577.9	525.5	492.9	480.8
22.5°	588.2	553.8	492.9	456.8	440.5
25°	569.3	526.3	461.9	419.0	402.7
27.5°	547.8	498.9	426.7	382.1	364.1
30°	523.8	471.4	394.1	347.7	324.6
32.5°	499.7	443.1	359.8	309.1	285.9
35°	474.8	411.3	326.3	268.8	249.0
37.5°	448.2	381.2	291.9	231.8	208.6
40°	422.4	351.2	257.6	194.1	172.6
42.5°	395.0	321.1	223.2	157.1	133.1
45°	366.6	288.5	190.6	121.1	96.2
47.5°	337.4	259.3	158.0	89.3	72.1
50°	308.2	228.4	127.1	66.1	60.1
52.5°	278.2	198.3	96.2	55.0	52.4
55°	248.1	170.0	69.5	47.2	44.6
57.5°	217.2	139.1	52.4	40.4	37.8
60°	183.7	111.6	41.2	33.5	30.9
62.5°	152.8	87.6	33.5	27.5	25.8
65°	122.8	62.7	26.6	22.3	20.6
67.5°	91.9	42.1	20.6	17.2	17.2
70°	62.7	27.5	15.5	13.7	13.7
72.5°	37.8	16.3	11.2	11.2	11.2
75°	15.5	10.3	8.6	8.6	8.6
77.5°	5.2	6.0	6.0	6.9	6.9
80°	3.4	3.4	4.3	5.2	5.2
82.5°	1.7	2.6	2.6	3.4	3.4
85°	0.9	0.9	1.7	1.7	1.7
87.5°	0.0	0.0	0.0	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)