

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: P1061762

Luminaire Tested: S125RDR-S850D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061762  
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: S125RDR-S850D830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

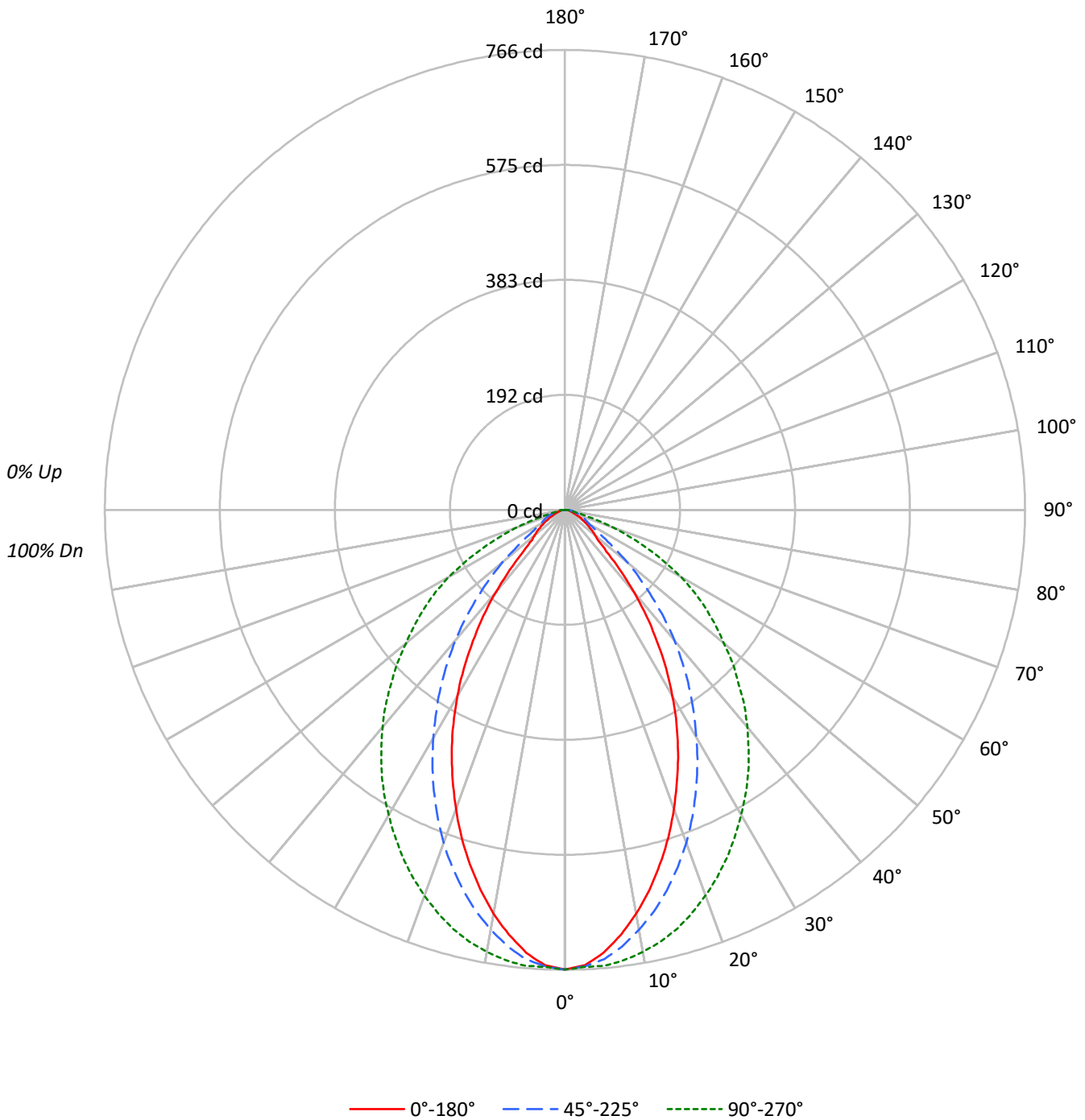
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1105.5 lumens  
Efficiency: N/A  
Efficacy: 42.8 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 (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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63				63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36				36

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

	0°	45°	90°
0°	5271	5271	5271
5°	5116	5191	5267
10°	4775	4965	5225
15°	4357	4674	5147
20°	3886	4325	5011
25°	3388	3919	4851
30°	2845	3481	4664
35°	2244	3031	4473
40°	1608	2547	4245
45°	946	1999	3980
50°	701	1440	3697
55°	588	873	3434
60°	475	638	3064
65°	370	606	2457
70°	310	568	1663
75°	290	508	724
80°	289	504	468
85°	355	648	506

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3980 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.5	6.4
10°-20°	185.3	16.8
20°-30°	242.2	21.9
30°-40°	235.8	21.3
40°-50°	176.2	15.9
50°-60°	109.3	9.9
60°-70°	57.4	5.2
70°-80°	20.9	1.9
80°-90°	7.9	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°	498.1	45.1
0°-40°	733.8	66.4
0°-60°	1019.3	92.2
0°-90°	1105.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1105.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	766	766	766	766	766	
5°	740	750	751	756	762	69
15°	611	629	656	696	722	171
25°	446	469	516	586	638	204
35°	267	296	361	457	532	166
45°	97	127	205	321	409	82
55°	49	52	73	189	286	44
65°	23	24	37	80	151	24
75°	11	13	19	21	27	12
85°	4	8	8	8	6	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	765.6	765.6	765.6	765.6	765.6
2.5°	759.3	765.6	761.1	761.1	762.0
5°	740.2	750.2	751.1	755.6	762.0
7.5°	713.8	725.7	732.9	746.5	756.5
10°	683.0	696.6	710.2	732.9	747.4
12.5°	648.5	664.8	684.8	715.7	736.5
15°	611.2	629.4	655.7	695.7	722.0
17.5°	572.2	591.2	623.9	672.1	703.9
20°	530.4	551.3	590.3	644.8	683.9
22.5°	487.7	511.3	554.0	615.8	662.1
25°	445.9	468.6	515.9	585.8	638.5
27.5°	402.3	425.9	477.7	554.9	613.0
30°	357.8	383.3	437.8	523.1	586.7
32.5°	313.3	339.7	398.7	490.4	560.4
35°	267.0	296.1	360.6	456.8	532.2
37.5°	223.4	254.3	321.5	422.3	502.2
40°	178.9	210.7	283.4	388.7	472.3
42.5°	135.3	168.0	244.3	354.2	442.3
45°	97.2	127.1	205.3	320.6	408.7
47.5°	74.5	91.7	168.9	286.1	378.7
50°	65.4	70.8	134.4	252.5	345.1
52.5°	57.2	60.8	99.9	219.8	316.1
55°	49.0	51.8	72.7	188.9	286.1
57.5°	41.8	44.5	55.4	160.8	255.2
60°	34.5	37.2	46.3	132.6	222.5
62.5°	29.1	30.0	41.8	106.3	186.2
65°	22.7	24.5	37.2	79.9	150.8
67.5°	19.1	20.0	32.7	57.2	116.2
70°	15.4	16.3	28.2	40.0	82.6
72.5°	13.6	13.6	23.6	29.1	52.7
75°	10.9	12.7	19.1	20.9	27.2
77.5°	9.1	12.7	16.3	15.4	14.5
80°	7.3	11.8	12.7	12.7	11.8
82.5°	6.4	10.0	10.9	10.0	9.1
85°	4.5	8.2	8.2	8.2	6.4
87.5°	3.6	7.3	6.4	6.4	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)