

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: P1061758

Luminaire Tested: S125RDR-S850D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061758  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S850D830-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

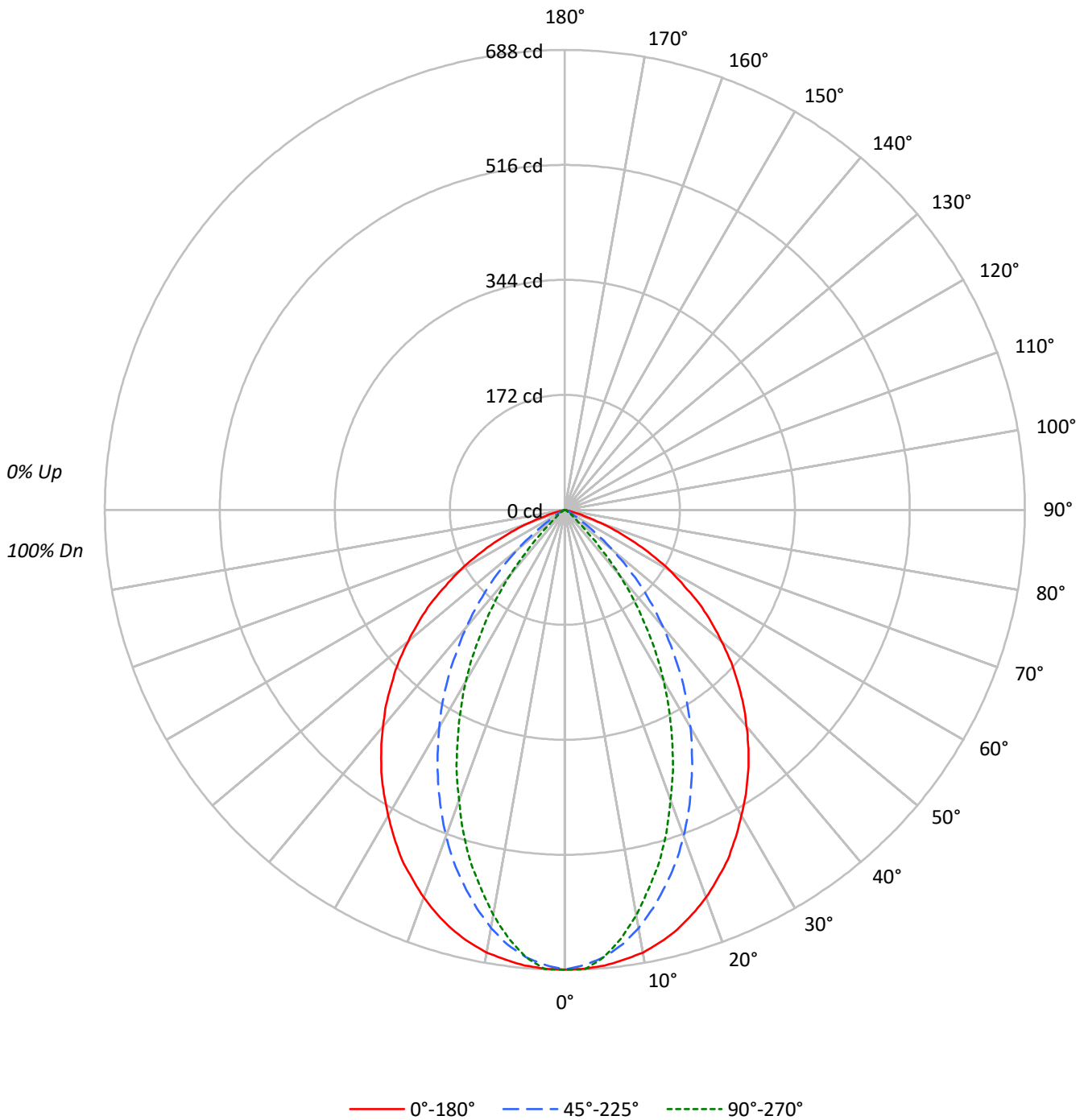
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 888.7 lumens  
Efficiency: N/A  
Efficacy: 34.4 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	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°	4736	4736	4736
5°	4730	4642	4642
10°	4702	4442	4302
15°	4632	4146	3888
20°	4522	3804	3384
25°	4385	3406	2882
30°	4199	2987	2353
35°	4020	2548	1762
40°	3801	2056	1142
45°	3561	1555	495
50°	3276	992	184
55°	2952	436	131
60°	2499	187	88
65°	1893	119	44
70°	1151	54	18
75°	242	24	24
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3561 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.4	7.1
10°-20°	165.3	18.6
20°-30°	212.2	23.9
30°-40°	199.8	22.5
40°-50°	139.7	15.7
50°-60°	74.6	8.4
60°-70°	29.8	3.3
70°-80°	3.8	0.4
80°-90°	0.0	0.0
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°	441.0	49.6
0°-40°	640.8	72.1
0°-60°	855.1	96.2
0°-90°	888.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	888.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	684	682	672	673	672	65
15°	650	629	582	554	545	183
25°	577	526	448	399	379	265
35°	478	402	303	234	210	298
45°	366	274	160	77	51	282
55°	246	151	36	13	11	218
65°	116	46	7	4	3	116
75°	9	3	1	1	1	18
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	687.9	687.9	687.9	687.9	687.9
2.5°	687.0	687.9	681.5	687.0	687.9
5°	684.3	682.5	671.6	673.4	671.6
7.5°	678.8	674.3	656.1	649.8	646.2
10°	672.5	662.5	635.3	621.7	615.3
12.5°	662.5	648.0	609.9	589.0	579.9
15°	649.8	628.9	581.7	554.5	545.4
17.5°	634.4	607.1	552.7	519.1	505.5
20°	617.1	580.8	519.1	479.2	461.9
22.5°	597.1	555.4	484.6	440.1	422.9
25°	577.2	526.4	448.3	399.3	379.3
27.5°	552.7	496.4	412.0	359.4	337.6
30°	528.2	466.5	375.7	318.5	295.9
32.5°	503.7	434.7	339.4	275.9	253.2
35°	478.3	402.0	303.1	234.1	209.6
37.5°	451.0	369.4	264.1	194.2	168.8
40°	422.9	337.6	228.7	155.2	127.1
42.5°	395.7	305.8	193.3	117.1	86.2
45°	365.7	274.1	159.7	77.1	50.8
47.5°	337.6	243.2	125.2	44.5	26.3
50°	305.8	211.5	92.6	23.6	17.2
52.5°	275.9	180.6	61.7	15.4	13.6
55°	245.9	150.6	36.3	12.7	10.9
57.5°	211.5	121.6	20.0	10.0	8.2
60°	181.5	95.3	13.6	7.3	6.4
62.5°	147.0	69.9	10.0	5.4	4.5
65°	116.2	46.3	7.3	3.6	2.7
67.5°	86.2	27.2	4.5	1.8	1.8
70°	57.2	14.5	2.7	0.9	0.9
72.5°	29.9	6.4	1.8	0.9	0.9
75°	9.1	2.7	0.9	0.9	0.9
77.5°	0.0	0.9	0.0	0.0	0.9
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)