

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: P1061821

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061821  
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-S850D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

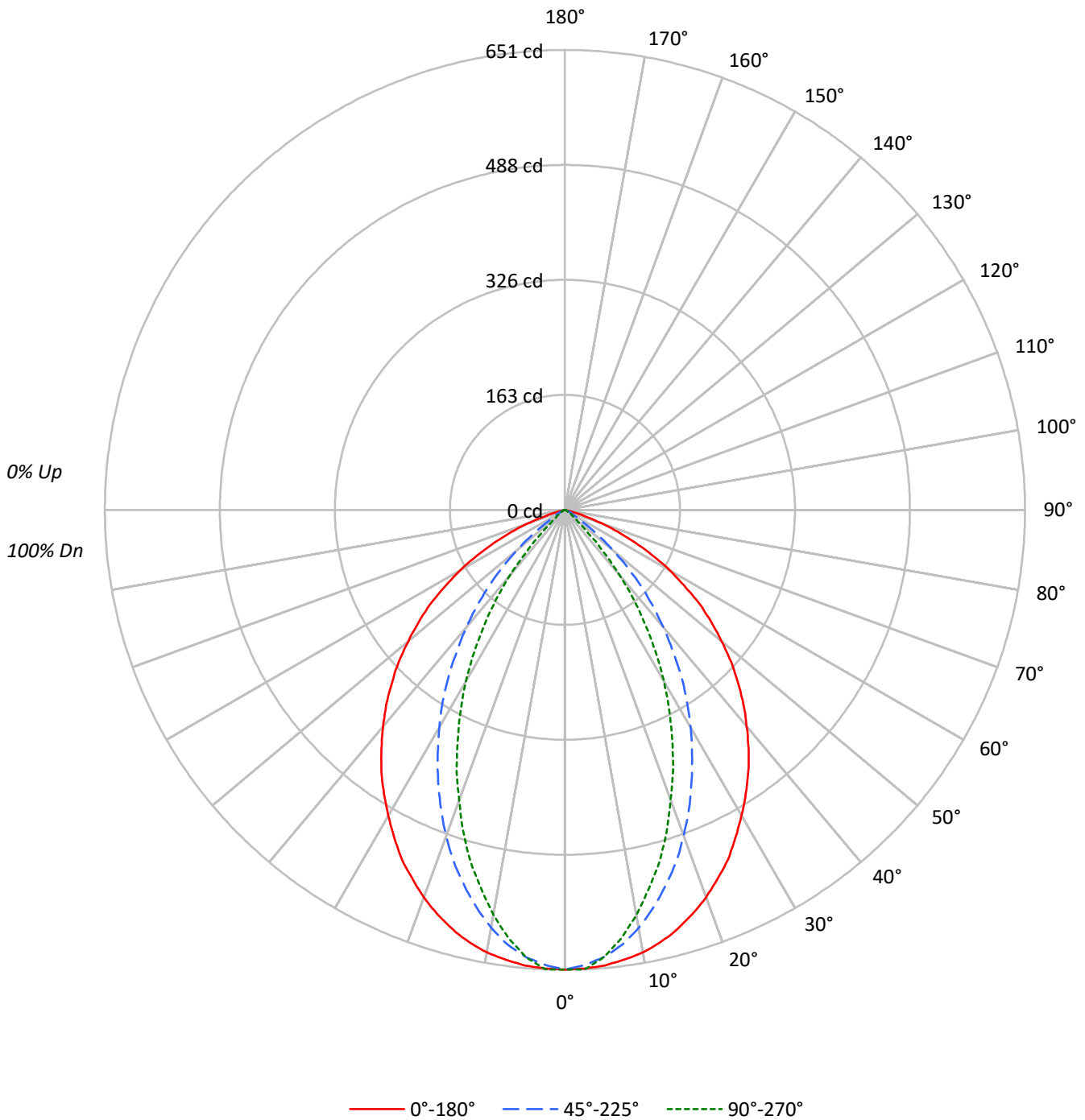
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 840.8 lumens  
Efficiency: N/A  
Efficacy: 32.6 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°	4481	4481	4481
5°	4475	4391	4391
10°	4448	4202	4070
15°	4382	3923	3678
20°	4278	3598	3202
25°	4149	3222	2727
30°	3973	2826	2225
35°	3803	2411	1667
40°	3596	1945	1080
45°	3369	1471	468
50°	3099	938	175
55°	2793	412	124
60°	2364	178	83
65°	1790	112	42
70°	1089	52	18
75°	229	24	24
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3369 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.0	7.1
10°-20°	156.4	18.6
20°-30°	200.8	23.9
30°-40°	189.0	22.5
40°-50°	132.2	15.7
50°-60°	70.6	8.4
60°-70°	28.2	3.3
70°-80°	3.7	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°	417.2	49.6
0°-40°	606.2	72.1
0°-60°	808.9	96.2
0°-90°	840.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	651	651	651	651	651	
5°	647	646	635	637	635	61
15°	615	595	550	525	516	173
25°	546	498	424	378	359	251
35°	452	380	287	222	198	282
45°	346	259	151	73	48	267
55°	233	142	34	12	10	206
65°	110	44	7	3	3	109
75°	9	3	1	1	1	17
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°	650.8	650.8	650.8	650.8	650.8
2.5°	649.9	650.8	644.8	649.9	650.8
5°	647.4	645.6	635.3	637.1	635.3
7.5°	642.2	637.9	620.8	614.7	611.3
10°	636.2	626.8	601.0	588.1	582.1
12.5°	626.8	613.0	577.0	557.2	548.6
15°	614.7	595.0	550.3	524.6	516.0
17.5°	600.1	574.4	522.9	491.1	478.2
20°	583.8	549.5	491.1	453.3	437.0
22.5°	564.9	525.4	458.5	416.4	400.1
25°	546.1	498.0	424.1	377.8	358.9
27.5°	522.9	469.6	389.8	340.0	319.4
30°	499.7	441.3	355.5	301.4	279.9
32.5°	476.5	411.3	321.1	261.0	239.5
35°	452.5	380.3	286.8	221.5	198.3
37.5°	426.7	349.4	249.8	183.7	159.7
40°	400.1	319.4	216.4	146.8	120.2
42.5°	374.3	289.3	182.9	110.8	81.6
45°	346.0	259.3	151.1	73.0	48.1
47.5°	319.4	230.1	118.5	42.1	24.9
50°	289.3	200.0	87.6	22.3	16.3
52.5°	261.0	170.9	58.4	14.6	12.9
55°	232.7	142.5	34.3	12.0	10.3
57.5°	200.0	115.0	18.9	9.4	7.7
60°	171.7	90.2	12.9	6.9	6.0
62.5°	139.1	66.1	9.4	5.2	4.3
65°	109.9	43.8	6.9	3.4	2.6
67.5°	81.6	25.8	4.3	1.7	1.7
70°	54.1	13.7	2.6	0.9	0.9
72.5°	28.3	6.0	1.7	0.9	0.9
75°	8.6	2.6	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)