

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: P1061777

Luminaire Tested: S125RDR-S850D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061777  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S850D840-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

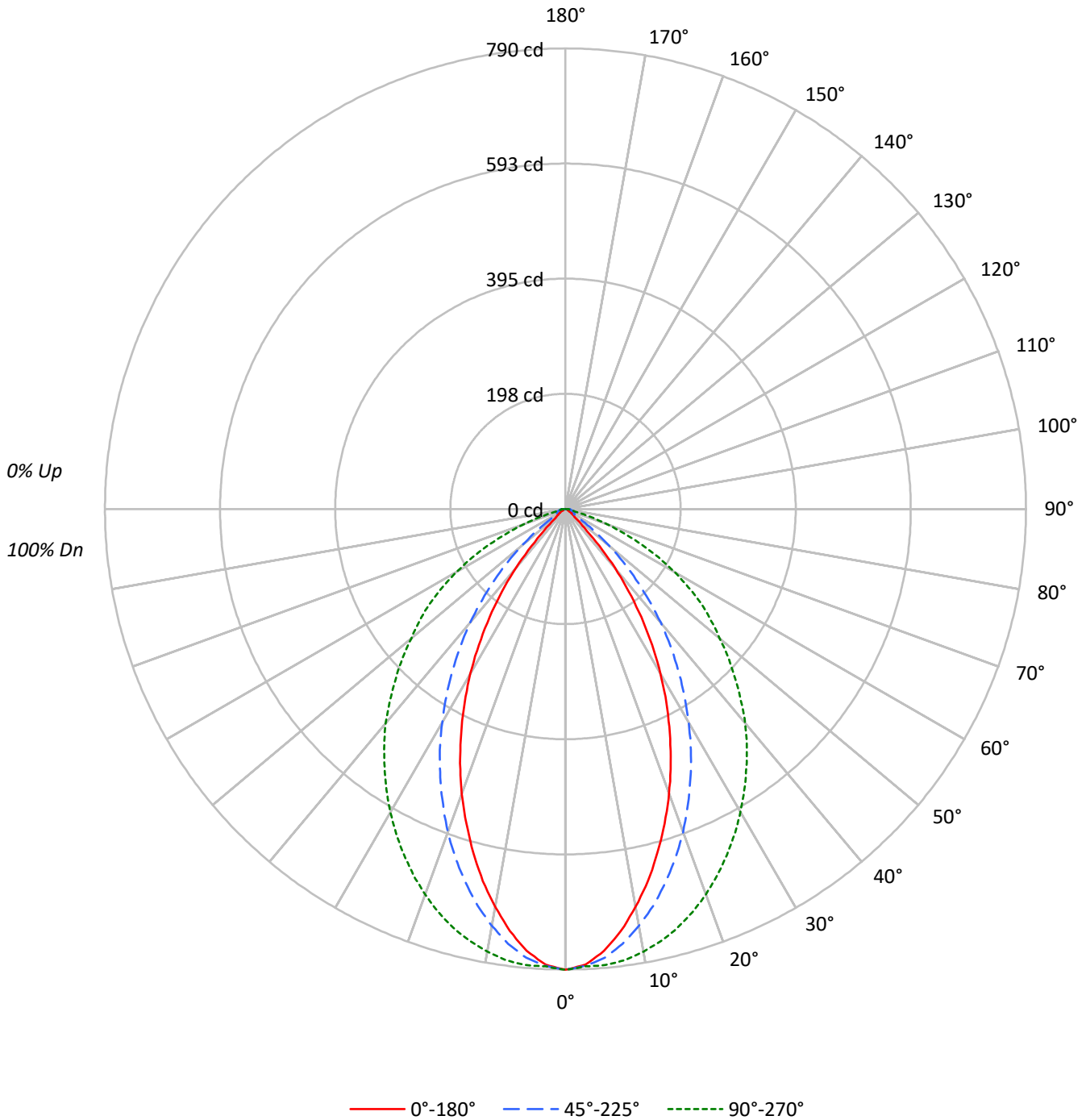
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1016.4 lumens  
Efficiency: N/A  
Efficacy: 39.4 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
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	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39

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

	0°	45°	90°
0°	5441	5441	5441
5°	5260	5341	5428
10°	4844	5076	5389
15°	4350	4725	5300
20°	3808	4322	5155
25°	3217	3859	4976
30°	2592	3358	4774
35°	1906	2830	4548
40°	1190	2283	4312
45°	445	1668	4009
50°	209	1042	3701
55°	152	432	3424
60°	107	227	2962
65°	64	269	2346
70°	58	314	1490
75°	77	311	466
80°	115	385	349
85°	229	616	458

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4009 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.5	7.1
10°-20°	187.6	18.5
20°-30°	239.0	23.5
30°-40°	222.4	21.9
40°-50°	152.4	15.0
50°-60°	83.9	8.3
60°-70°	39.7	3.9
70°-80°	12.5	1.2
80°-90°	6.4	0.6
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°	499.1	49.1
0°-40°	721.5	71.0
0°-60°	957.8	94.2
0°-90°	1016.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1016.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	790	790	790	790	790	
5°	761	771	773	779	785	70
15°	610	630	663	712	744	170
25°	423	450	508	590	655	193
35°	227	259	337	448	541	141
45°	46	77	171	304	412	44
55°	13	15	36	169	285	11
65°	4	5	16	62	144	4
75°	3	5	12	13	18	3
85°	3	7	8	7	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	790.3	790.3	790.3	790.3	790.3
2.5°	782.5	790.3	784.4	784.4	785.4
5°	761.1	770.8	772.7	778.6	785.4
7.5°	729.9	742.6	752.3	768.8	780.5
10°	692.9	708.5	726.0	753.3	770.8
12.5°	654.0	670.6	696.8	734.8	759.1
15°	610.2	629.7	662.8	712.4	743.5
17.5°	565.4	586.9	627.7	686.1	725.1
20°	519.7	542.1	589.8	655.0	703.6
22.5°	472.0	496.3	548.9	622.9	680.3
25°	423.4	449.6	508.0	589.8	655.0
27.5°	374.7	401.9	466.2	555.7	628.7
30°	326.0	354.3	422.4	520.7	600.5
32.5°	276.4	307.5	379.6	485.6	571.3
35°	226.8	258.9	336.7	447.7	541.1
37.5°	178.1	211.2	294.9	411.7	510.9
40°	132.4	165.4	254.0	375.7	479.8
42.5°	85.6	120.7	211.2	338.7	445.7
45°	45.7	76.9	171.3	303.6	411.7
47.5°	24.3	40.9	133.3	268.6	379.6
50°	19.5	22.4	97.3	233.6	345.5
52.5°	15.6	17.5	62.3	197.6	315.3
55°	12.7	14.6	36.0	169.3	285.2
57.5°	9.7	11.7	20.4	141.1	250.1
60°	7.8	8.8	16.5	112.9	215.1
62.5°	4.9	6.8	16.5	87.6	180.0
65°	3.9	4.9	16.5	62.3	144.0
67.5°	3.9	3.9	16.5	40.9	108.0
70°	2.9	2.9	15.6	26.3	74.0
72.5°	2.9	2.9	13.6	17.5	42.8
75°	2.9	4.9	11.7	12.7	17.5
77.5°	2.9	7.8	10.7	10.7	9.7
80°	2.9	7.8	9.7	8.8	8.8
82.5°	2.9	7.8	7.8	7.8	6.8
85°	2.9	6.8	7.8	6.8	5.8
87.5°	2.9	6.8	6.8	6.8	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)