

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: P1061771

Luminaire Tested: S125RDR-S850D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061771  
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-S850D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

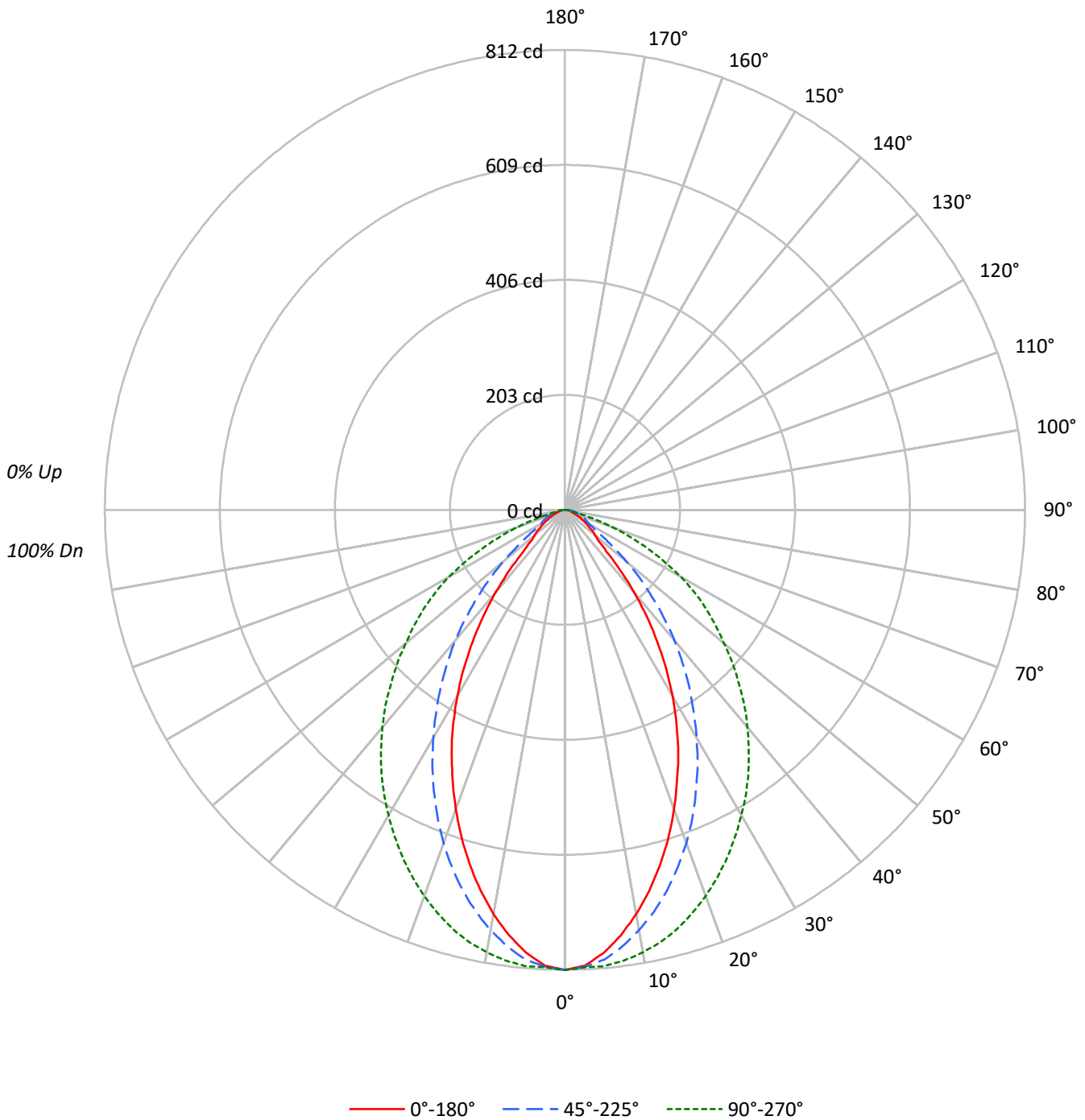
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1172.9 lumens  
Efficiency: N/A  
Efficacy: 45.5 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

TEST NUMBER: P1061771

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-SVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1061771

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-SVL-S

**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°	5593	5593	5593
5°	5428	5508	5587
10°	5066	5268	5544
15°	4623	4959	5460
20°	4123	4589	5317
25°	3594	4158	5146
30°	3018	3692	4949
35°	2381	3215	4746
40°	1706	2702	4504
45°	1004	2121	4222
50°	743	1527	3923
55°	624	926	3643
60°	504	676	3251
65°	393	644	2607
70°	330	602	1765
75°	309	537	769
80°	305	535	496
85°	379	687	529

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4222 cd/sqm



TEST NUMBER: P1061771

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.8	6.4
10°-20°	196.6	16.8
20°-30°	257.0	21.9
30°-40°	250.1	21.3
40°-50°	186.9	15.9
50°-60°	115.9	9.9
60°-70°	60.9	5.2
70°-80°	22.2	1.9
80°-90°	8.4	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°	528.4	45.1
0°-40°	778.5	66.4
0°-60°	1081.4	92.2
0°-90°	1172.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1172.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	812	812	812	812	812	
5°	785	796	797	802	808	73
15°	648	668	696	738	766	181
25°	473	497	547	622	677	216
35°	283	314	382	485	565	176
45°	103	135	218	340	434	87
55°	52	55	77	200	304	47
65°	24	26	40	85	160	25
75°	12	14	20	22	29	13
85°	5	9	9	9	7	5
90°	0	0	0	0	0	



TEST NUMBER: P1061771

CATALOG NUMBER: S125RDR-S850D835-X4F0-XX-UDD-SVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	812.3	812.3	812.3	812.3	812.3
2.5°	805.5	812.3	807.5	807.5	808.4
5°	785.3	795.9	796.9	801.7	808.4
7.5°	757.4	769.9	777.6	792.0	802.6
10°	724.6	739.1	753.5	777.6	793.0
12.5°	688.0	705.3	726.5	759.3	781.4
15°	648.5	667.7	695.7	738.1	766.0
17.5°	607.0	627.3	662.0	713.0	746.8
20°	562.7	584.9	626.3	684.1	725.6
22.5°	517.4	542.5	587.8	653.3	702.4
25°	473.1	497.2	547.3	621.5	677.4
27.5°	426.9	451.9	506.8	588.7	650.4
30°	379.6	406.6	464.4	555.0	622.5
32.5°	332.4	360.4	423.0	520.3	594.5
35°	283.3	314.1	382.5	484.7	564.6
37.5°	237.0	269.8	341.1	448.1	532.9
40°	189.8	223.5	300.6	412.4	501.1
42.5°	143.6	178.3	259.2	375.8	469.3
45°	103.1	134.9	217.8	340.1	433.6
47.5°	79.0	97.3	179.2	303.5	401.8
50°	69.4	75.2	142.6	267.9	366.2
52.5°	60.7	64.6	106.0	233.2	335.3
55°	52.0	54.9	77.1	200.4	303.5
57.5°	44.3	47.2	58.8	170.6	270.8
60°	36.6	39.5	49.1	140.7	236.1
62.5°	30.8	31.8	44.3	112.7	197.5
65°	24.1	26.0	39.5	84.8	160.0
67.5°	20.2	21.2	34.7	60.7	123.3
70°	16.4	17.3	29.9	42.4	87.7
72.5°	14.5	14.5	25.1	30.8	55.9
75°	11.6	13.5	20.2	22.2	28.9
77.5°	9.6	13.5	17.3	16.4	15.4
80°	7.7	12.5	13.5	13.5	12.5
82.5°	6.7	10.6	11.6	10.6	9.6
85°	4.8	8.7	8.7	8.7	6.7
87.5°	3.9	7.7	6.7	6.7	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)