

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: P1061825

Luminaire Tested: S125RDR-S850D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061825  
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-S850D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

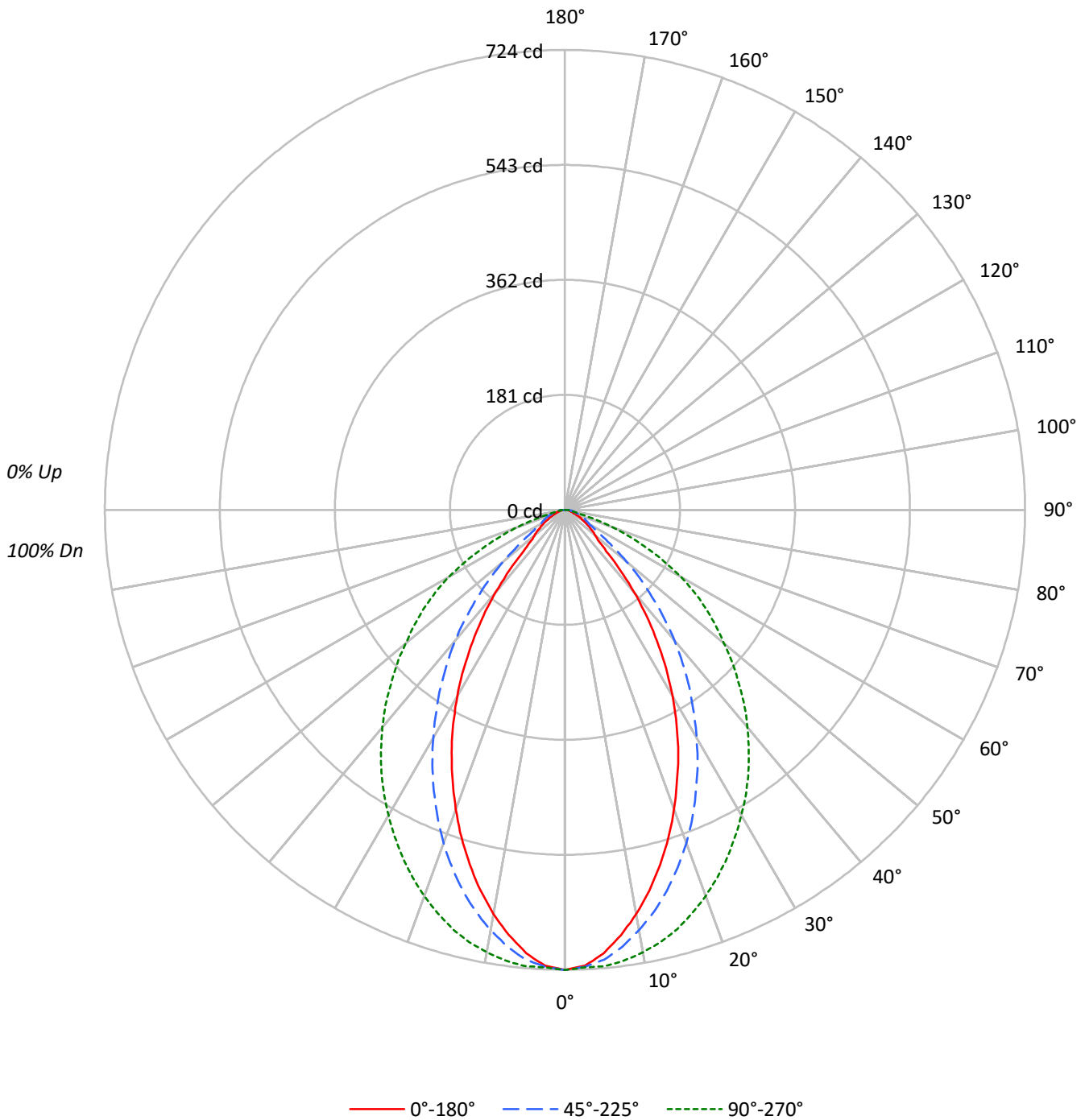
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1045.9 lumens  
Efficiency: N/A  
Efficacy: 40.5 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: P1061825

CATALOG NUMBER: S125RDR-S850D940-X4F0-XX-UDD-SVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1061825

CATALOG NUMBER: S125RDR-S850D940-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36

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

	0°	45°	90°
0°	4987	4987	4987
5°	4840	4911	4983
10°	4517	4698	4944
15°	4122	4422	4869
20°	3677	4092	4741
25°	3205	3707	4589
30°	2691	3292	4413
35°	2123	2867	4232
40°	1522	2410	4016
45°	895	1891	3764
50°	663	1363	3497
55°	557	825	3249
60°	450	603	2899
65°	350	573	2323
70°	294	535	1574
75°	274	479	686
80°	274	476	444
85°	340	608	474

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3764 cd/sqm



TEST NUMBER: P1061825

CATALOG NUMBER: S125RDR-S850D940-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.7	6.4
10°-20°	175.3	16.8
20°-30°	229.1	21.9
30°-40°	223.0	21.3
40°-50°	166.7	15.9
50°-60°	103.4	9.9
60°-70°	54.3	5.2
70°-80°	19.8	1.9
80°-90°	7.5	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°	471.2	45.1
0°-40°	694.2	66.4
0°-60°	964.3	92.2
0°-90°	1045.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1045.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	700	710	711	715	721	65
15°	578	595	620	658	683	161
25°	422	443	488	554	604	193
35°	253	280	341	432	504	157
45°	92	120	194	303	387	77
55°	46	49	69	179	271	42
65°	22	23	35	76	143	22
75°	10	12	18	20	26	11
85°	4	8	8	8	6	5
90°	0	0	0	0	0	



TEST NUMBER: P1061825

CATALOG NUMBER: S125RDR-S850D940-X4F0-XX-UDD-SVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	724.3	724.3	724.3	724.3	724.3
2.5°	718.3	724.3	720.0	720.0	720.9
5°	700.3	709.7	710.6	714.9	720.9
7.5°	675.3	686.5	693.4	706.3	715.7
10°	646.1	659.0	671.9	693.4	707.1
12.5°	613.5	628.9	647.9	677.1	696.8
15°	578.3	595.4	620.4	658.2	683.1
17.5°	541.3	559.4	590.3	635.8	665.9
20°	501.8	521.5	558.5	610.0	647.0
22.5°	461.4	483.7	524.1	582.6	626.4
25°	421.9	443.4	488.0	554.2	604.0
27.5°	380.6	403.0	451.9	525.0	580.0
30°	338.5	362.6	414.1	494.9	555.1
32.5°	296.4	321.3	377.2	464.0	530.1
35°	252.6	280.1	341.1	432.2	503.5
37.5°	211.4	240.6	304.2	399.5	475.1
40°	169.3	199.3	268.1	367.7	446.8
42.5°	128.0	159.0	231.1	335.1	418.4
45°	91.9	120.3	194.2	303.3	386.6
47.5°	70.5	86.8	159.8	270.7	358.3
50°	61.9	67.0	127.2	238.9	326.5
52.5°	54.1	57.6	94.5	207.9	299.0
55°	46.4	49.0	68.7	178.7	270.7
57.5°	39.5	42.1	52.4	152.1	241.4
60°	32.7	35.2	43.8	125.4	210.5
62.5°	27.5	28.4	39.5	100.5	176.1
65°	21.5	23.2	35.2	75.6	142.6
67.5°	18.0	18.9	30.9	54.1	110.0
70°	14.6	15.5	26.6	37.8	78.2
72.5°	12.9	12.9	22.3	27.5	49.8
75°	10.3	12.0	18.0	19.8	25.8
77.5°	8.6	12.0	15.5	14.6	13.7
80°	6.9	11.2	12.0	12.0	11.2
82.5°	6.0	9.5	10.3	9.5	8.6
85°	4.3	7.7	7.7	7.7	6.0
87.5°	3.4	6.9	6.0	6.0	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)