

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: P1061741

Luminaire Tested: S125RDR-S610D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061741  
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-S610D940-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, 90 CRI LEDS  
Ballast/Driver: -

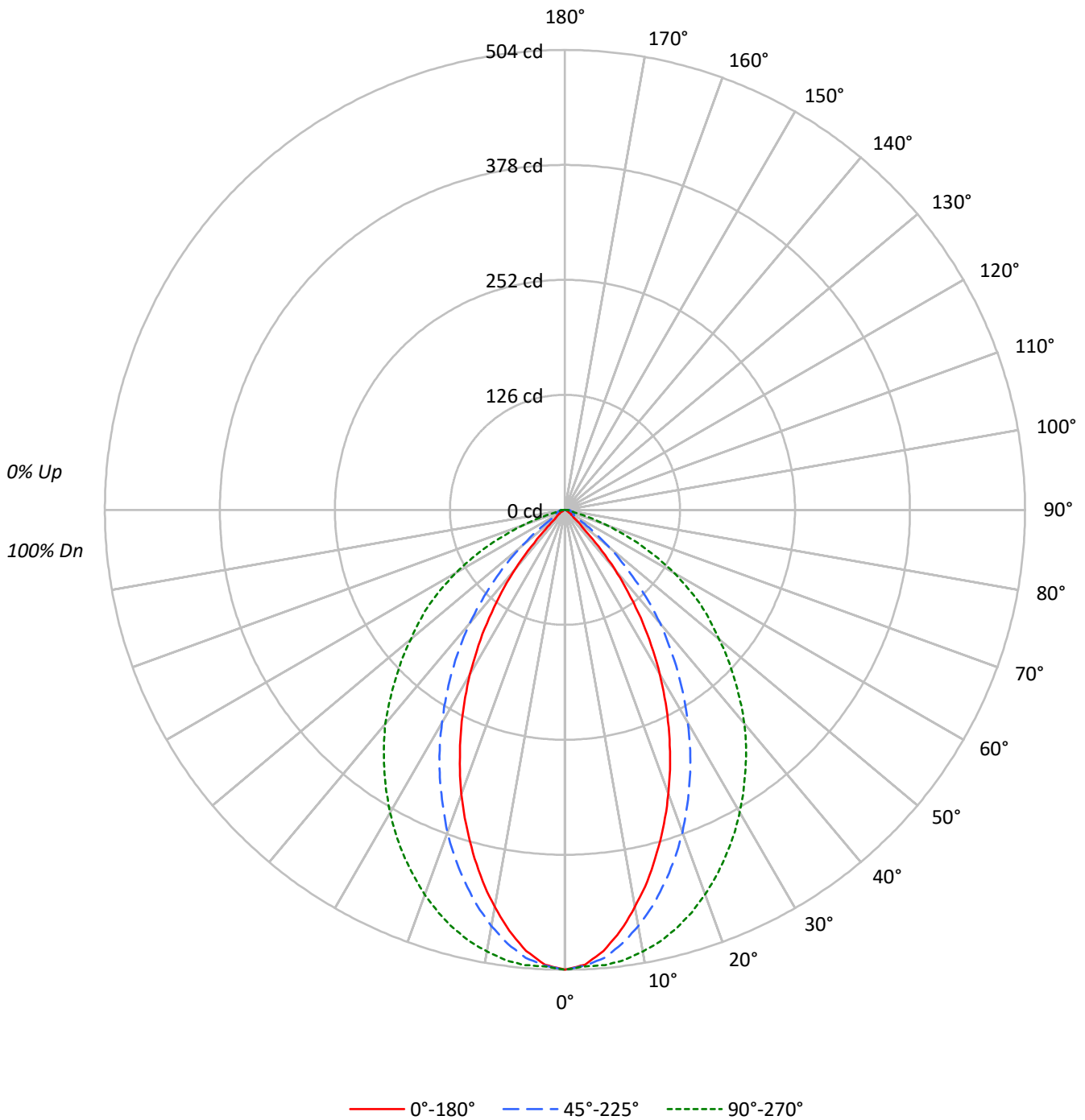
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 648.1 lumens  
Efficiency: N/A  
Efficacy: 33.1 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): 19.6  
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: P1061741

CATALOG NUMBER: S125RDR-S610D940-X4F0-XX-UDD-BVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1061741

CATALOG NUMBER: S125RDR-S610D940-X4F0-XX-UDD-BVL-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	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°	3469	3469	3469
5°	3354	3405	3461
10°	3090	3237	3436
15°	2774	3012	3379
20°	2428	2756	3288
25°	2051	2461	3173
30°	1653	2141	3044
35°	1215	1805	2900
40°	759	1456	2749
45°	284	1063	2556
50°	133	665	2360
55°	97	276	2182
60°	69	145	1888
65°	41	171	1496
70°	38	199	950
75°	51	197	298
80°	75	246	222
85°	150	395	292

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2556 cd/sqm



TEST NUMBER: P1061741

CATALOG NUMBER: S125RDR-S610D940-X4F0-XX-UDD-BVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.2	7.1
10°-20°	119.6	18.5
20°-30°	152.4	23.5
30°-40°	141.8	21.9
40°-50°	97.2	15.0
50°-60°	53.5	8.3
60°-70°	25.3	3.9
70°-80°	8.0	1.2
80°-90°	4.1	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°	318.2	49.1
0°-40°	460.1	71.0
0°-60°	610.8	94.2
0°-90°	648.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	648.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	504	504	504	504	504	
5°	485	492	493	496	501	45
15°	389	402	423	454	474	108
25°	270	287	324	376	418	123
35°	145	165	215	286	345	90
45°	29	49	109	194	262	28
55°	8	9	23	108	182	7
65°	2	3	10	40	92	3
75°	2	3	7	8	11	2
85°	2	4	5	4	4	2
90°	0	0	0	0	0	



TEST NUMBER: P1061741

CATALOG NUMBER: S125RDR-S610D940-X4F0-XX-UDD-BVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	503.9	503.9	503.9	503.9	503.9
2.5°	498.9	503.9	500.2	500.2	500.8
5°	485.3	491.5	492.7	496.5	500.8
7.5°	465.4	473.5	479.7	490.3	497.7
10°	441.9	451.8	463.0	480.3	491.5
12.5°	417.0	427.6	444.3	468.5	484.1
15°	389.1	401.5	422.6	454.3	474.1
17.5°	360.6	374.2	400.3	437.5	462.3
20°	331.4	345.7	376.1	417.7	448.7
22.5°	301.0	316.5	350.0	397.2	433.8
25°	270.0	286.7	323.9	376.1	417.7
27.5°	238.9	256.3	297.3	354.4	400.9
30°	207.9	225.9	269.3	332.0	382.9
32.5°	176.2	196.1	242.0	309.7	364.3
35°	144.6	165.1	214.7	285.5	345.0
37.5°	113.6	134.7	188.0	262.5	325.8
40°	84.4	105.5	162.0	239.5	305.9
42.5°	54.6	77.0	134.7	216.0	284.2
45°	29.2	49.0	109.2	193.6	262.5
47.5°	15.5	26.1	85.0	171.3	242.0
50°	12.4	14.3	62.1	148.9	220.3
52.5°	9.9	11.2	39.7	126.0	201.1
55°	8.1	9.3	23.0	108.0	181.8
57.5°	6.2	7.4	13.0	90.0	159.5
60°	5.0	5.6	10.5	72.0	137.1
62.5°	3.1	4.3	10.5	55.9	114.8
65°	2.5	3.1	10.5	39.7	91.8
67.5°	2.5	2.5	10.5	26.1	68.9
70°	1.9	1.9	9.9	16.8	47.2
72.5°	1.9	1.9	8.7	11.2	27.3
75°	1.9	3.1	7.4	8.1	11.2
77.5°	1.9	5.0	6.8	6.8	6.2
80°	1.9	5.0	6.2	5.6	5.6
82.5°	1.9	5.0	5.0	5.0	4.3
85°	1.9	4.3	5.0	4.3	3.7
87.5°	1.9	4.3	4.3	4.3	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)