

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P1061879

Luminaire Tested: S125RDR-H1090D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061879  
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-H1090D927-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

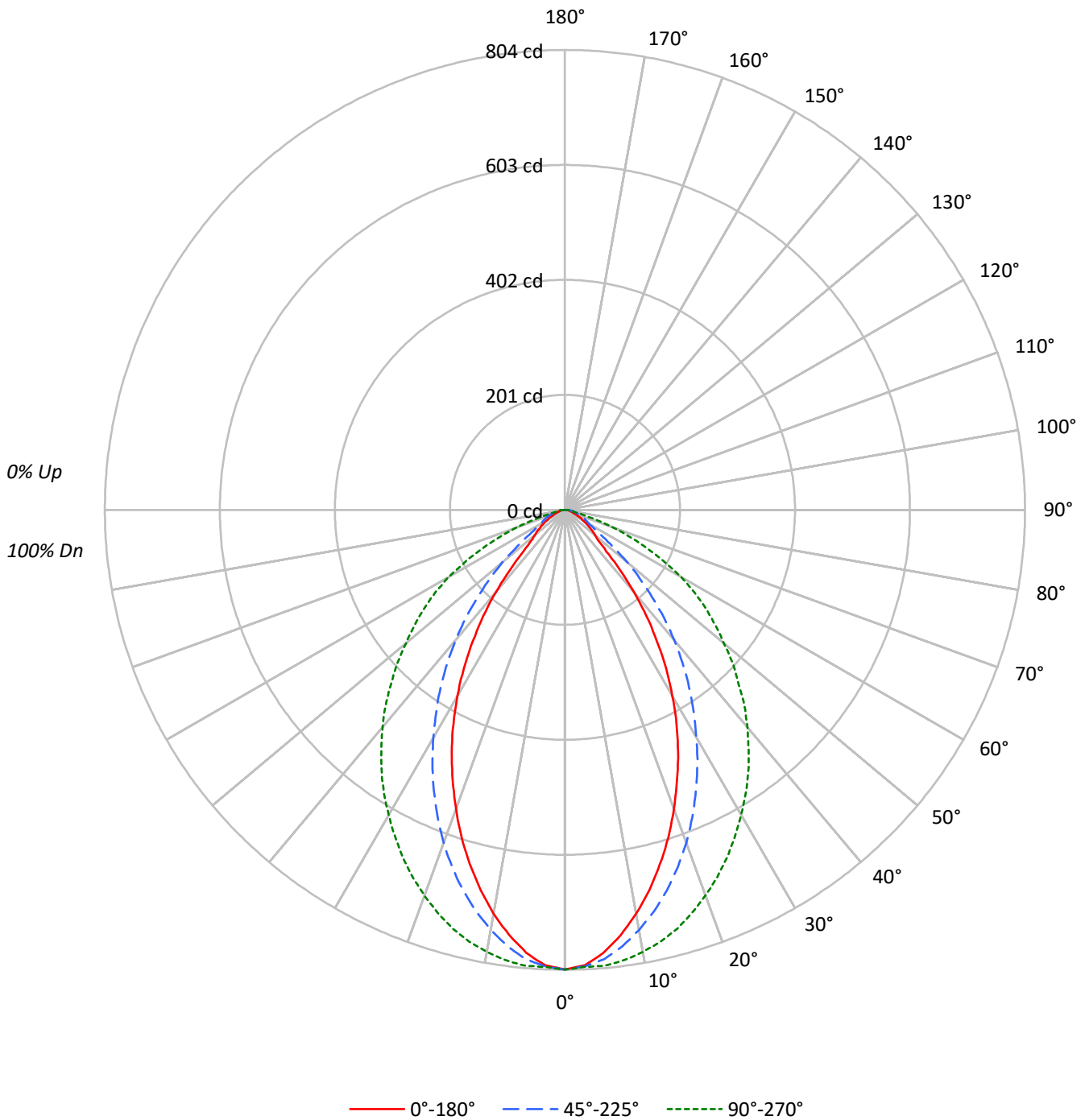
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1160.4 lumens  
Efficiency: N/A  
Efficacy: 37.2 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): 31.2  
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: P1061879

CATALOG NUMBER: S125RDR-H1090D927-X4F0-XX-UDD-SVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1061879

CATALOG NUMBER: S125RDR-H1090D927-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°	5533	5533	5533
5°	5370	5448	5528
10°	5012	5212	5485
15°	4573	4906	5402
20°	4079	4540	5259
25°	3556	4114	5091
30°	2986	3653	4896
35°	2356	3181	4695
40°	1688	2673	4455
45°	993	2097	4177
50°	735	1511	3880
55°	618	916	3605
60°	498	669	3215
65°	388	637	2577
70°	326	596	1745
75°	303	532	761
80°	301	527	492
85°	379	679	529

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4177 cd/sqm



TEST NUMBER: P1061879

CATALOG NUMBER: S125RDR-H1090D927-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.0	6.4
10°-20°	194.5	16.8
20°-30°	254.2	21.9
30°-40°	247.5	21.3
40°-50°	184.9	15.9
50°-60°	114.7	9.9
60°-70°	60.3	5.2
70°-80°	21.9	1.9
80°-90°	8.3	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°	522.8	45.1
0°-40°	770.2	66.4
0°-60°	1069.9	92.2
0°-90°	1160.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1160.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	777	787	788	793	800	72
15°	642	661	688	730	758	179
25°	468	492	542	615	670	214
35°	280	311	378	480	559	174
45°	102	134	215	336	429	86
55°	52	54	76	198	300	46
65°	24	26	39	84	158	25
75°	11	13	20	22	29	12
85°	5	9	9	9	7	5
90°	0	0	0	0	0	



TEST NUMBER: P1061879

CATALOG NUMBER: S125RDR-H1090D927-X4F0-XX-UDD-SVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	803.6	803.6	803.6	803.6	803.6
2.5°	796.9	803.6	798.8	798.8	799.8
5°	776.9	787.4	788.3	793.1	799.8
7.5°	749.3	761.7	769.3	783.6	794.1
10°	716.9	731.2	745.5	769.3	784.5
12.5°	680.6	697.8	718.8	751.2	773.1
15°	641.5	660.6	688.3	730.2	757.8
17.5°	600.6	620.6	654.9	705.4	738.8
20°	556.7	578.6	619.6	676.8	717.8
22.5°	511.9	536.7	581.5	646.3	694.9
25°	468.1	491.9	541.5	614.9	670.1
27.5°	422.3	447.1	501.4	582.4	643.5
30°	375.6	402.3	459.5	549.1	615.8
32.5°	328.9	356.5	418.5	514.8	588.2
35°	280.3	310.8	378.4	479.5	558.6
37.5°	234.5	266.9	337.5	443.3	527.2
40°	187.8	221.2	297.4	408.0	495.7
42.5°	142.0	176.4	256.4	371.8	464.2
45°	102.0	133.5	215.4	336.5	429.0
47.5°	78.2	96.3	177.3	300.3	397.5
50°	68.6	74.4	141.1	265.0	362.2
52.5°	60.1	63.9	104.9	230.7	331.7
55°	51.5	54.3	76.3	198.3	300.3
57.5°	43.9	46.7	58.1	168.7	267.9
60°	36.2	39.1	48.6	139.2	233.5
62.5°	30.5	31.5	43.9	111.5	195.4
65°	23.8	25.7	39.1	83.9	158.2
67.5°	20.0	21.0	34.3	60.1	122.0
70°	16.2	17.2	29.6	41.9	86.7
72.5°	14.3	14.3	24.8	30.5	55.3
75°	11.4	13.3	20.0	21.9	28.6
77.5°	9.5	13.3	17.2	16.2	15.3
80°	7.6	12.4	13.3	13.3	12.4
82.5°	6.7	10.5	11.4	10.5	9.5
85°	4.8	8.6	8.6	8.6	6.7
87.5°	3.8	7.6	6.7	6.7	4.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061879  
 CATALOG NUMBER: S125RDR-H1090D927-X4F0-XX-UDD-SVL-S

**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	5.73	7.08	6.10	7.39	7.71	15.43	16.78	15.80	17.10	17.41
	3H	6.57	7.77	6.95	8.10	8.46	16.35	17.54	16.73	17.87	18.24
	4H	6.93	8.04	7.33	8.40	8.78	16.44	17.56	16.85	17.91	18.29
	6H	7.30	8.33	7.71	8.70	9.09	16.43	17.46	16.84	17.83	18.22
	8H	7.48	8.45	7.91	8.84	9.25	16.42	17.39	16.85	17.78	18.19
	12H	7.65	8.58	8.08	8.96	9.39	16.40	17.33	16.84	17.72	18.15
4H	2H	6.56	7.68	6.96	8.03	8.41	15.28	16.40	15.69	16.75	17.13
	3H	7.62	8.53	8.03	8.94	9.34	16.27	17.19	16.69	17.59	17.99
	4H	8.07	8.89	8.51	9.31	9.75	16.40	17.22	16.84	17.64	18.08
	6H	8.63	9.33	9.09	9.78	10.24	16.43	17.14	16.90	17.59	18.05
	8H	8.89	9.55	9.36	9.99	10.46	16.44	17.09	16.90	17.54	18.01
	12H	9.13	9.72	9.62	10.20	10.67	16.44	17.03	16.93	17.51	17.98
8H	4H	8.63	9.29	9.10	9.73	10.20	16.33	16.99	16.80	17.43	17.90
	6H	9.40	9.94	9.90	10.44	10.92	16.39	16.93	16.89	17.42	17.90
	8H	9.82	10.31	10.34	10.82	11.31	16.42	16.90	16.94	17.42	17.91
	12H	10.24	10.67	10.75	11.16	11.73	16.47	16.90	16.98	17.39	17.96
12H	4H	8.69	9.27	9.17	9.75	10.23	16.29	16.88	16.78	17.36	17.83
	6H	9.55	10.03	10.07	10.54	11.04	16.35	16.84	16.87	17.35	17.84
	8H	10.07	10.50	10.59	11.00	11.57	16.42	16.85	16.93	17.34	17.91