

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



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061788

Luminaire Tested: S125RDRP-S850D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061788  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S850D850-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

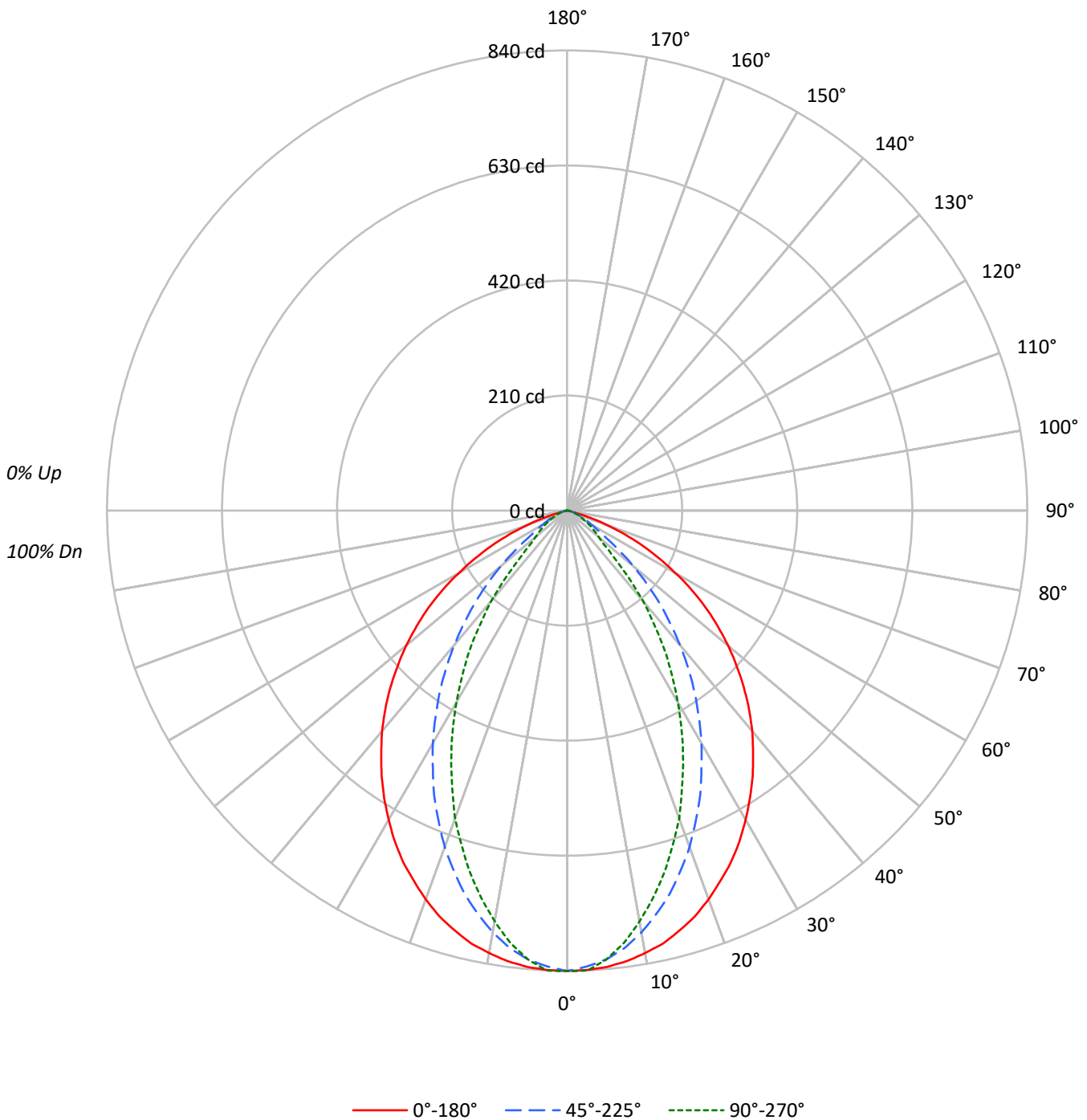
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1215.4 lumens  
Efficiency: N/A  
Efficacy: 47.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
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 (A<sub>in</sub>): 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: P1061788

CATALOG NUMBER: S125RDRP-S850D850-X4F0-XX-UDD-SVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1061788

CATALOG NUMBER: S125RDRP-S850D850-X4F0-XX-UDD-SVL-B

**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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	5786	5786	5786
5°	5779	5683	5683
10°	5734	5465	5323
15°	5655	5161	4879
20°	5532	4788	4382
25°	5379	4364	3805
30°	5179	3896	3210
35°	4963	3411	2603
40°	4722	2880	1929
45°	4440	2309	1165
50°	4107	1692	801
55°	3704	1038	666
60°	3147	706	529
65°	2488	539	417
70°	1570	387	344
75°	511	285	285
80°	170	210	254
85°	87	166	166

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4440 cd/sqm



TEST NUMBER: P1061788

CATALOG NUMBER: S125RDRP-S850D850-X4F0-XX-UDD-SVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.7	6.4
10°-20°	205.3	16.9
20°-30°	270.0	22.2
30°-40°	265.3	21.8
40°-50°	200.7	16.5
50°-60°	121.7	10.0
60°-70°	57.5	4.7
70°-80°	15.0	1.2
80°-90°	2.3	0.2
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°	553.0	45.5
0°-40°	818.3	67.3
0°-60°	1140.7	93.9
0°-90°	1215.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1215.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	840	840	840	840	840	
5°	836	834	822	823	822	79
15°	793	772	724	696	684	223
25°	708	655	574	521	501	325
35°	590	512	406	334	310	369
45°	456	359	237	151	120	351
55°	309	211	86	59	56	275
65°	153	78	33	28	26	151
75°	19	13	11	11	11	30
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



TEST NUMBER: P1061788

CATALOG NUMBER: S125RDRP-S850D850-X4F0-XX-UDD-SVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	840.4	840.4	840.4	840.4	840.4
2.5°	839.3	839.3	832.9	840.4	840.4
5°	836.1	834.0	822.3	823.3	822.3
7.5°	829.7	825.5	805.2	799.8	795.6
10°	820.1	811.6	781.7	768.9	761.4
12.5°	809.4	794.5	753.9	735.8	724.0
15°	793.4	772.1	724.0	696.2	684.5
17.5°	776.3	745.4	688.8	655.7	640.7
20°	755.0	718.7	653.5	613.0	598.0
22.5°	731.5	688.8	613.0	568.1	547.8
25°	708.0	654.6	574.5	521.1	500.8
27.5°	681.3	620.4	530.7	475.2	452.8
30°	651.4	586.3	490.1	432.5	403.7
32.5°	621.5	551.0	447.4	384.4	355.6
35°	590.5	511.5	405.8	334.2	309.7
37.5°	557.4	474.1	363.1	288.3	259.5
40°	525.4	436.8	320.4	241.3	214.6
42.5°	491.2	399.4	277.6	195.4	165.5
45°	456.0	358.8	237.1	150.6	119.6
47.5°	419.7	322.5	196.5	111.1	89.7
50°	383.4	284.1	158.0	82.2	74.8
52.5°	346.0	246.7	119.6	68.3	65.1
55°	308.6	211.4	86.5	58.7	55.5
57.5°	270.2	173.0	65.1	50.2	47.0
60°	228.5	138.8	51.3	41.6	38.4
62.5°	190.1	108.9	41.6	34.2	32.0
65°	152.7	78.0	33.1	27.8	25.6
67.5°	114.3	52.3	25.6	21.4	21.4
70°	78.0	34.2	19.2	17.1	17.1
72.5°	47.0	20.3	13.9	13.9	13.9
75°	19.2	12.8	10.7	10.7	10.7
77.5°	6.4	7.5	7.5	8.5	8.5
80°	4.3	4.3	5.3	6.4	6.4
82.5°	2.1	3.2	3.2	4.3	4.3
85°	1.1	1.1	2.1	2.1	2.1
87.5°	0.0	0.0	0.0	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1061788

CATALOG NUMBER: S125RDRP-S850D850-X4F0-XX-UDD-SVL-B

**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	15.43	16.76	15.79	17.07	17.39	6.09	7.42	6.45	7.73	8.04
	3H	16.13	17.31	16.51	17.64	18.01	6.87	8.05	7.25	8.38	8.74
	4H	16.15	17.25	16.55	17.60	17.98	7.12	8.21	7.52	8.56	8.95
	6H	16.08	17.09	16.50	17.46	17.85	7.29	8.30	7.71	8.67	9.06
	8H	16.04	16.99	16.47	17.38	17.79	7.34	8.29	7.77	8.68	9.09
	12H	16.00	16.91	16.43	17.29	17.72	7.35	8.26	7.78	8.64	9.07
4H	2H	15.26	16.36	15.66	16.71	17.09	6.57	7.67	6.97	8.02	8.40
	3H	16.01	16.90	16.42	17.30	17.71	7.48	8.37	7.89	8.78	9.18
	4H	16.02	16.82	16.46	17.24	17.68	7.80	8.59	8.23	9.01	9.45
	6H	15.96	16.65	16.43	17.09	17.56	8.05	8.74	8.52	9.18	9.65
	8H	15.91	16.55	16.38	17.00	17.47	8.12	8.76	8.59	9.20	9.68
	12H	15.87	16.43	16.35	16.91	17.39	8.14	8.71	8.63	9.19	9.66
8H	4H	15.91	16.54	16.38	16.99	17.46	7.91	8.55	8.38	8.99	9.46
	6H	15.83	16.35	16.33	16.85	17.33	8.22	8.74	8.73	9.24	9.72
	8H	15.78	16.24	16.30	16.76	17.25	8.33	8.80	8.85	9.31	9.80
	12H	15.74	16.15	16.25	16.64	17.22	8.39	8.80	8.91	9.30	9.87
12H	4H	15.86	16.43	16.35	16.91	17.38	7.88	8.44	8.37	8.93	9.40
	6H	15.77	16.24	16.30	16.76	17.25	8.19	8.66	8.72	9.18	9.67
	8H	15.74	16.15	16.25	16.65	17.22	8.33	8.75	8.85	9.24	9.81