

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: P1061812

Luminaire Tested: S125RDRP-S850D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061812  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S850D935-X4F0-XX-UDD-BVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

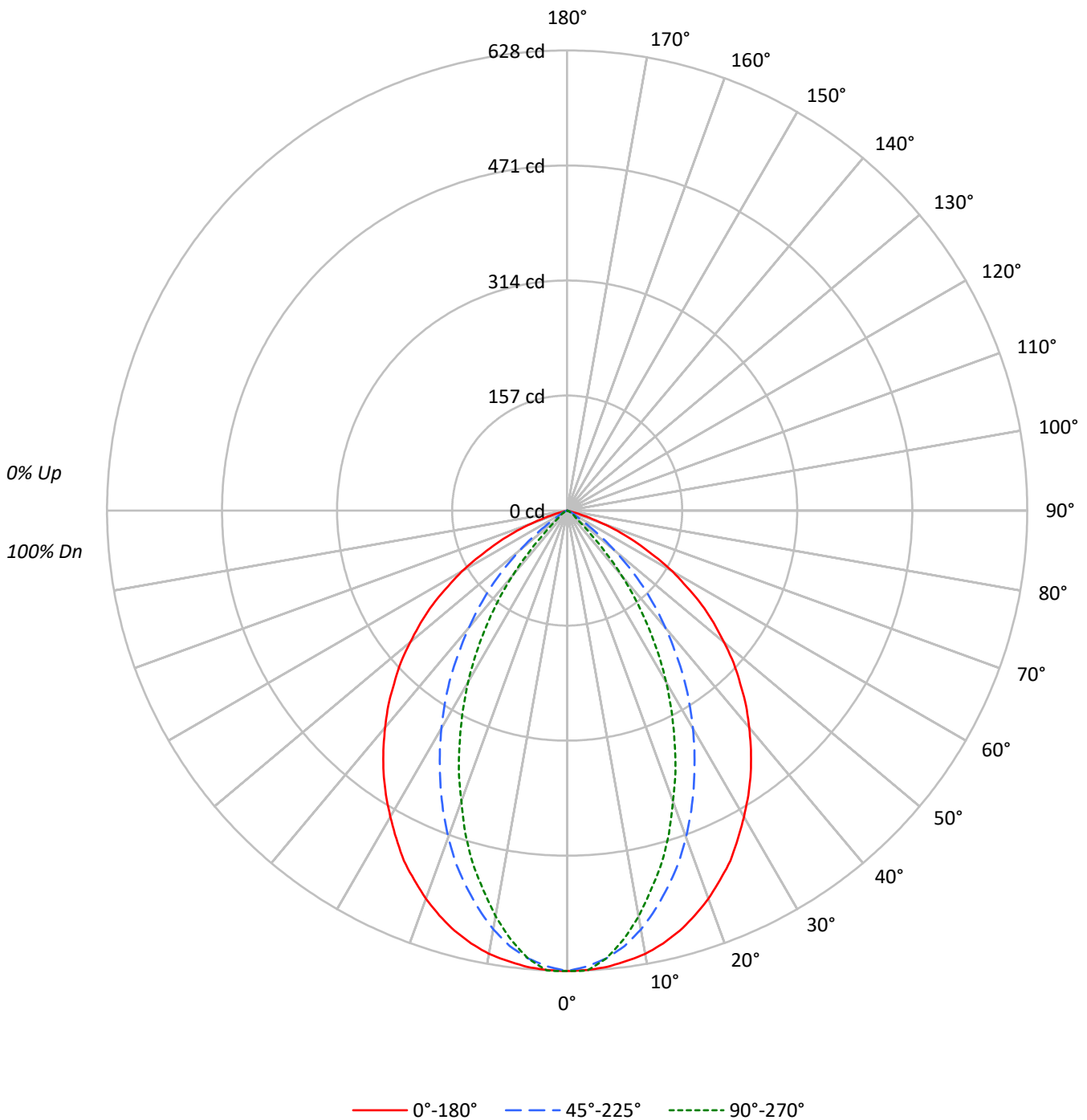
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 811.8 lumens  
Efficiency: N/A  
Efficacy: 31.5 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
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: P1061812

CATALOG NUMBER: S125RDRP-S850D935-X4F0-XX-UDD-BVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1061812

CATALOG NUMBER: S125RDRP-S850D935-X4F0-XX-UDD-BVL-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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	4327	4327	4327
5°	4320	4240	4240
10°	4295	4057	3930
15°	4231	3788	3551
20°	4130	3475	3092
25°	4005	3111	2632
30°	3836	2729	2149
35°	3672	2327	1610
40°	3472	1878	1044
45°	3253	1421	452
50°	2993	906	169
55°	2697	399	119
60°	2283	171	80
65°	1729	108	41
70°	1051	50	16
75°	221	21	21
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3253 cd/sqm



TEST NUMBER: P1061812

CATALOG NUMBER: S125RDRP-S850D935-X4F0-XX-UDD-BVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.9	7.1
10°-20°	151.0	18.6
20°-30°	193.9	23.9
30°-40°	182.5	22.5
40°-50°	127.6	15.7
50°-60°	68.2	8.4
60°-70°	27.2	3.3
70°-80°	3.5	0.4
80°-90°	0.0	0.0
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°	402.8	49.6
0°-40°	585.3	72.1
0°-60°	781.1	96.2
0°-90°	811.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	811.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	625	623	614	615	614	59
15°	594	574	531	506	498	167
25°	527	481	410	365	346	242
35°	437	367	277	214	192	273
45°	334	250	146	70	46	258
55°	225	138	33	12	10	199
65°	106	42	7	3	2	106
75°	8	2	1	1	1	16
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1061812

CATALOG NUMBER: S125RDRP-S850D935-X4F0-XX-UDD-BVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	628.4	628.4	628.4	628.4	628.4
2.5°	627.6	628.4	622.6	627.6	628.4
5°	625.1	623.4	613.5	615.1	613.5
7.5°	620.1	616.0	599.4	593.6	590.3
10°	614.3	605.2	580.3	567.9	562.1
12.5°	605.2	591.9	557.1	538.0	529.7
15°	593.6	574.5	531.4	506.5	498.2
17.5°	579.5	554.6	504.9	474.2	461.8
20°	563.7	530.6	474.2	437.7	422.0
22.5°	545.5	507.4	442.7	402.1	386.3
25°	527.2	480.8	409.5	364.8	346.5
27.5°	504.9	453.5	376.4	328.3	308.4
30°	482.5	426.1	343.2	291.0	270.3
32.5°	460.1	397.1	310.0	252.0	231.3
35°	436.9	367.2	276.9	213.9	191.5
37.5°	412.0	337.4	241.2	177.4	154.2
40°	386.3	308.4	208.9	141.8	116.1
42.5°	361.4	279.4	176.6	106.9	78.8
45°	334.1	250.4	145.9	70.5	46.4
47.5°	308.4	222.2	114.4	40.6	24.0
50°	279.4	193.2	84.6	21.6	15.8
52.5°	252.0	165.0	56.4	14.1	12.4
55°	224.7	137.6	33.2	11.6	9.9
57.5°	193.2	111.1	18.2	9.1	7.5
60°	165.8	87.0	12.4	6.6	5.8
62.5°	134.3	63.8	9.1	5.0	4.1
65°	106.1	42.3	6.6	3.3	2.5
67.5°	78.8	24.9	4.1	1.7	1.7
70°	52.2	13.3	2.5	0.8	0.8
72.5°	27.4	5.8	1.7	0.8	0.8
75°	8.3	2.5	0.8	0.8	0.8
77.5°	0.0	0.8	0.0	0.0	0.8
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1061812  
 CATALOG NUMBER: S125RDRP-S850D935-X4F0-XX-UDD-BVL-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	14.03	15.30	14.40	15.61	15.92	0.00	0.00	0.00	0.00	0.00
	3H	14.62	15.73	15.00	16.06	16.43	0.00	0.00	0.00	0.00	0.00
	4H	14.58	15.61	14.99	15.97	16.35	0.00	0.00	0.00	0.00	0.00
	6H	14.50	15.44	14.91	15.81	16.21	0.00	0.00	0.00	0.00	0.00
	8H	14.45	15.34	14.88	15.74	16.14	0.00	0.00	0.00	0.00	0.00
	12H	14.40	15.26	14.84	15.64	16.07	0.00	0.00	0.00	0.00	0.00
4H	2H	13.81	14.84	14.21	15.19	15.58	0.00	0.00	0.00	0.00	0.00
	3H	14.40	15.23	14.81	15.64	16.04	0.00	0.00	0.00	0.00	0.00
	4H	14.35	15.09	14.78	15.51	15.96	0.00	0.00	0.00	0.00	0.00
	6H	14.26	14.90	14.73	15.35	15.82	0.00	0.00	0.00	0.00	0.00
	8H	14.20	14.80	14.67	15.24	15.72	0.00	0.00	0.00	0.00	0.00
	12H	14.15	14.67	14.64	15.16	15.63	0.00	0.00	0.00	0.00	0.00
8H	4H	14.20	14.80	14.67	15.24	15.72	0.00	0.00	0.00	0.00	0.00
	6H	14.10	14.58	14.60	15.07	15.56	0.00	0.00	0.00	0.00	0.00
	8H	14.03	14.46	14.55	14.98	15.47	0.00	0.00	0.00	0.00	0.00
	12H	13.98	14.36	14.50	14.86	15.43	0.00	0.00	0.00	0.00	0.00
12H	4H	14.15	14.67	14.64	15.16	15.63	0.00	0.00	0.00	0.00	0.00
	6H	14.03	14.46	14.55	14.98	15.47	0.00	0.00	0.00	0.00	0.00
	8H	13.98	14.36	14.50	14.86	15.43	0.00	0.00	0.00	0.00	0.00