

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: P1061508

Luminaire Tested: S125RDRP-S1090D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061508  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1090D950-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

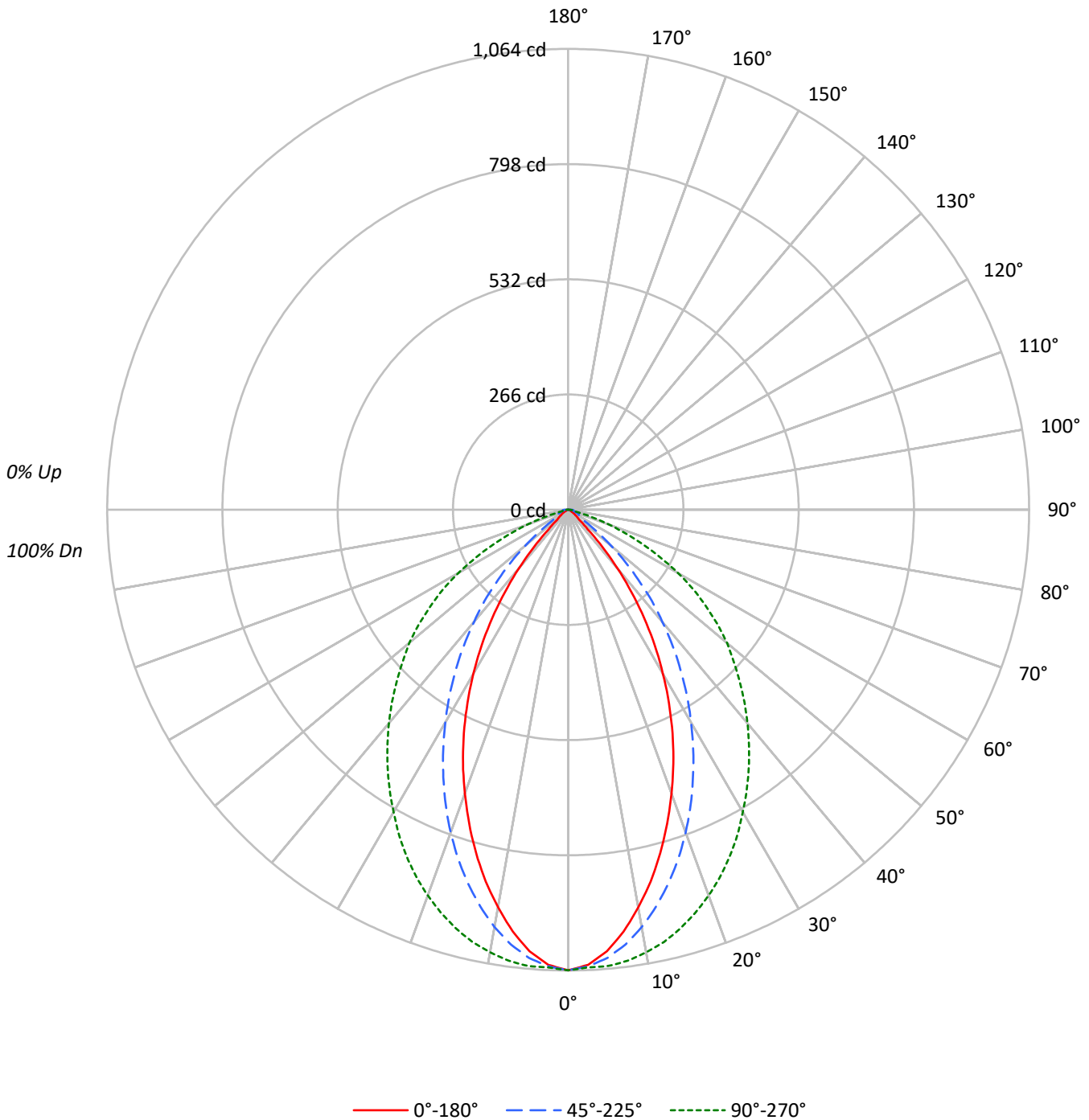
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1375.9 lumens  
Efficiency: N/A  
Efficacy: 39.3 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): 35  
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: P1061508

CATALOG NUMBER: S125RDRP-S1090D950-X4F0-XX-UDD-BVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1061508

CATALOG NUMBER: S125RDRP-S1090D950-X4F0-XX-UDD-BVL-W

**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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				38

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

	0°	45°	90°
0°	7322	7322	7322
5°	7073	7179	7310
10°	6518	6840	7254
15°	5854	6368	7135
20°	5108	5810	6944
25°	4327	5180	6706
30°	3476	4509	6407
35°	2572	3804	6108
40°	1593	3038	5788
45°	621	2221	5442
50°	291	1392	5127
55°	212	595	4653
60°	146	423	4035
65°	96	443	3138
70°	95	405	1975
75°	125	410	628
80°	186	468	420
85°	276	932	656

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5442 cd/sqm



TEST NUMBER: P1061508

CATALOG NUMBER: S125RDRP-S1090D950-X4F0-XX-UDD-BVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.5	7.1
10°-20°	252.7	18.4
20°-30°	321.8	23.4
30°-40°	299.6	21.8
40°-50°	206.2	15.0
50°-60°	116.7	8.5
60°-70°	55.1	4.0
70°-80°	17.2	1.3
80°-90°	9.0	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°	672.1	48.8
0°-40°	971.6	70.6
0°-60°	1294.6	94.1
0°-90°	1375.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1375.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1023	1038	1039	1048	1058	95
15°	821	848	893	961	1001	229
25°	570	606	682	796	883	260
35°	306	349	453	607	727	189
45°	64	102	228	412	559	60
55°	18	20	50	238	388	16
65°	6	7	27	85	193	7
75°	5	11	15	16	24	5
85°	4	10	12	11	8	4
90°	0	0	0	0	0	



TEST NUMBER: P1061508

CATALOG NUMBER: S125RDRP-S1090D950-X4F0-XX-UDD-BVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1063.5	1063.5	1063.5	1063.5	1063.5
2.5°	1051.7	1062.3	1055.2	1056.4	1057.6
5°	1023.3	1037.5	1038.7	1048.1	1057.6
7.5°	982.0	999.7	1012.7	1035.1	1050.5
10°	932.3	953.6	978.4	1015.0	1037.5
12.5°	879.1	904.0	938.2	990.2	1022.1
15°	821.2	848.4	893.3	960.7	1000.9
17.5°	759.8	790.5	844.9	925.2	976.0
20°	697.2	730.3	792.9	885.1	947.7
22.5°	634.5	668.8	738.5	841.3	917.0
25°	569.6	606.2	681.8	796.4	882.7
27.5°	503.4	541.2	625.1	750.3	846.1
30°	437.2	477.4	567.2	703.1	805.9
32.5°	372.2	412.4	510.5	655.8	766.9
35°	306.0	348.6	452.6	607.4	726.7
37.5°	239.9	286.0	395.9	557.7	685.4
40°	177.2	221.0	338.0	509.3	644.0
42.5°	118.2	160.7	286.0	460.8	601.5
45°	63.8	101.6	228.1	412.4	558.9
47.5°	34.3	54.4	178.4	365.1	517.6
50°	27.2	30.7	130.0	321.4	478.6
52.5°	22.5	24.8	85.1	280.1	433.7
55°	17.7	20.1	49.6	237.5	387.6
57.5°	14.2	16.5	31.9	197.3	342.7
60°	10.6	13.0	30.7	158.3	293.0
62.5°	8.3	9.5	28.4	121.7	241.1
65°	5.9	7.1	27.2	85.1	192.6
67.5°	4.7	5.9	24.8	54.4	144.2
70°	4.7	4.7	20.1	35.4	98.1
72.5°	4.7	8.3	17.7	23.6	59.1
75°	4.7	10.6	15.4	16.5	23.6
77.5°	4.7	11.8	13.0	13.0	13.0
80°	4.7	10.6	11.8	11.8	10.6
82.5°	4.7	9.5	10.6	11.8	9.5
85°	3.5	9.5	11.8	10.6	8.3
87.5°	3.5	9.5	10.6	9.5	5.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1061508  
 CATALOG NUMBER: S125RDRP-S1090D950-X4F0-XX-UDD-BVL-W

**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	0.00	0.00	0.00	0.00	0.00	16.16	17.45	16.53	17.76	18.08
	3H	0.00	0.00	0.00	0.00	0.16	16.88	18.02	17.26	18.35	18.72
	4H	0.00	0.28	0.00	0.63	1.02	16.90	17.97	17.31	18.32	18.70
	6H	0.48	1.45	0.89	1.82	2.22	16.86	17.83	17.27	18.20	18.60
	8H	1.12	2.04	1.55	2.43	2.84	16.83	17.76	17.26	18.15	18.55
	12H	1.71	2.59	2.14	2.97	3.40	16.82	17.70	17.25	18.08	18.51
4H	2H	0.67	1.73	1.07	2.08	2.47	15.95	17.02	16.36	17.37	17.75
	3H	1.48	2.35	1.89	2.75	3.16	16.71	17.58	17.12	17.98	18.38
	4H	2.48	3.26	2.92	3.68	4.12	16.74	17.51	17.17	17.93	18.38
	6H	3.76	4.43	4.22	4.87	5.34	16.72	17.38	17.18	17.83	18.30
	8H	4.34	4.96	4.81	5.41	5.88	16.70	17.32	17.17	17.77	18.24
	12H	4.90	5.45	5.39	5.94	6.41	16.71	17.26	17.20	17.74	18.22
8H	4H	3.90	4.52	4.37	4.97	5.44	16.62	17.24	17.09	17.69	18.16
	6H	5.46	5.97	5.96	6.46	6.95	16.61	17.12	17.11	17.62	18.10
	8H	6.26	6.71	6.78	7.23	7.72	16.62	17.08	17.15	17.60	18.09
	12H	7.10	7.50	7.62	8.00	8.57	16.68	17.09	17.20	17.58	18.15
12H	4H	4.12	4.67	4.61	5.16	5.63	16.58	17.13	17.07	17.61	18.09
	6H	5.83	6.29	6.35	6.80	7.30	16.56	17.02	17.09	17.54	18.03
	8H	6.82	7.23	7.34	7.72	8.30	16.61	17.01	17.13	17.51	18.08