

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: P1061456

Luminaire Tested: S125RDRP-S1090D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061456  
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: S125RDRP-S1090D840-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

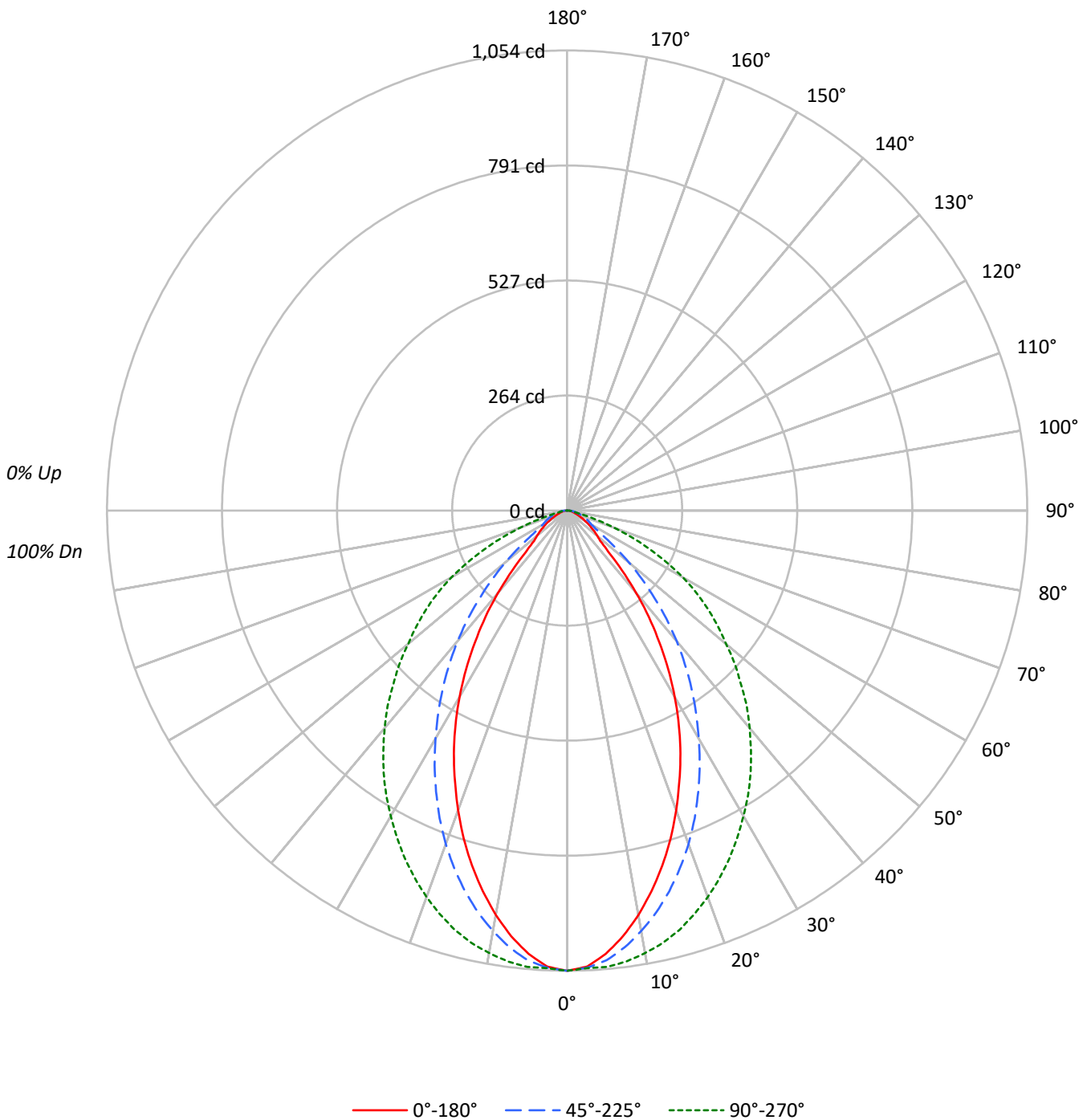
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1522.2 lumens  
Efficiency: N/A  
Efficacy: 43.5 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): 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

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### Luminous Intensity Polar Plot



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**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	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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																												
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70																												
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63																												
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56																												
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51																												
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																												
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42																												
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39																												
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36																												

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

	0°	45°	90°
0°	7258	7258	7258
5°	7044	7147	7251
10°	6574	6837	7195
15°	5999	6435	7086
20°	5351	5955	6899
25°	4665	5396	6679
30°	3917	4792	6422
35°	3090	4172	6159
40°	2214	3506	5844
45°	1303	2752	5479
50°	964	1983	5090
55°	810	1200	4728
60°	654	879	4219
65°	510	836	3382
70°	429	781	2291
75°	399	700	998
80°	397	694	646
85°	498	893	695

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5479 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.1	6.4
10°-20°	255.2	16.8
20°-30°	333.5	21.9
30°-40°	324.6	21.3
40°-50°	242.6	15.9
50°-60°	150.5	9.9
60°-70°	79.0	5.2
70°-80°	28.8	1.9
80°-90°	10.9	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°	685.8	45.1
0°-40°	1010.4	66.4
0°-60°	1403.4	92.2
0°-90°	1522.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1522.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1019	1033	1034	1040	1049	95
15°	842	867	903	958	994	235
25°	614	645	710	806	879	280
35°	368	408	496	629	733	229
45°	134	175	283	441	563	113
55°	68	71	100	260	394	61
65°	31	34	51	110	208	33
75°	15	18	26	29	38	16
85°	6	11	11	11	9	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1054.1	1054.1	1054.1	1054.1	1054.1
2.5°	1045.4	1054.1	1047.9	1047.9	1049.1
5°	1019.1	1032.9	1034.1	1040.4	1049.1
7.5°	982.9	999.1	1009.1	1027.9	1041.6
10°	940.3	959.1	977.9	1009.1	1029.1
12.5°	892.8	915.3	942.8	985.4	1014.1
15°	841.6	866.6	902.8	957.9	994.1
17.5°	787.8	814.0	859.1	925.3	969.1
20°	730.3	759.0	812.8	887.8	941.6
22.5°	671.5	704.0	762.8	847.8	911.6
25°	614.0	645.2	710.3	806.5	879.1
27.5°	554.0	586.5	657.7	764.0	844.1
30°	492.7	527.7	602.7	720.3	807.8
32.5°	431.4	467.7	549.0	675.2	771.5
35°	367.6	407.6	496.4	629.0	732.8
37.5°	307.6	350.1	442.7	581.5	691.5
40°	246.3	290.1	390.1	535.2	650.2
42.5°	186.3	231.3	336.4	487.7	609.0
45°	133.8	175.1	282.6	441.4	562.7
47.5°	102.5	126.3	232.6	393.9	521.4
50°	90.0	97.5	185.1	347.6	475.2
52.5°	78.8	83.8	137.6	302.6	435.2
55°	67.5	71.3	100.0	260.1	393.9
57.5°	57.5	61.3	76.3	221.3	351.4
60°	47.5	51.3	63.8	182.6	306.4
62.5°	40.0	41.3	57.5	146.3	256.3
65°	31.3	33.8	51.3	110.0	207.6
67.5°	26.3	27.5	45.0	78.8	160.1
70°	21.3	22.5	38.8	55.0	113.8
72.5°	18.8	18.8	32.5	40.0	72.5
75°	15.0	17.5	26.3	28.8	37.5
77.5°	12.5	17.5	22.5	21.3	20.0
80°	10.0	16.3	17.5	17.5	16.3
82.5°	8.8	13.8	15.0	13.8	12.5
85°	6.3	11.3	11.3	11.3	8.8
87.5°	5.0	10.0	8.8	8.8	6.3
90°	0.0	0.0	0.0	0.0	0.0



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**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	6.67	8.02	7.04	8.34	8.65	16.38	17.73	16.74	18.04	18.35
	3H	7.51	8.71	7.89	9.04	9.41	17.29	18.49	17.67	18.82	19.18
	4H	7.87	8.99	8.28	9.34	9.72	17.39	18.50	17.79	18.85	19.24
	6H	8.25	9.27	8.66	9.64	10.04	17.37	18.40	17.79	18.77	19.16
	8H	8.43	9.40	8.86	9.79	10.20	17.36	18.33	17.79	18.73	19.13
	12H	8.59	9.52	9.03	9.91	10.34	17.35	18.28	17.78	18.66	19.09
4H	2H	7.50	8.62	7.91	8.97	9.35	16.23	17.34	16.63	17.69	18.08
	3H	8.56	9.48	8.98	9.88	10.28	17.22	18.13	17.63	18.54	18.94
	4H	9.02	9.84	9.45	10.25	10.70	17.35	18.16	17.78	18.58	19.03
	6H	9.58	10.28	10.04	10.73	11.19	17.38	18.08	17.84	18.53	19.00
	8H	9.84	10.50	10.31	10.94	11.41	17.38	18.04	17.85	18.49	18.96
	12H	10.08	10.67	10.57	11.15	11.62	17.39	17.97	17.87	18.45	18.93
8H	4H	9.57	10.23	10.04	10.68	11.15	17.27	17.93	17.74	18.38	18.85
	6H	10.35	10.89	10.85	11.39	11.87	17.33	17.87	17.83	18.37	18.85
	8H	10.77	11.26	11.29	11.77	12.26	17.36	17.84	17.88	18.36	18.85
	12H	11.19	11.62	11.71	12.11	12.68	17.41	17.84	17.93	18.34	18.91
12H	4H	9.63	10.22	10.12	10.70	11.17	17.24	17.82	17.72	18.30	18.78
	6H	10.50	10.98	11.02	11.49	11.99	17.30	17.78	17.82	18.30	18.79
	8H	11.03	11.45	11.54	11.95	12.52	17.36	17.79	17.88	18.29	18.86