

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: P1061912

Luminaire Tested: S125RDRP-H1090D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061912  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-H1090D950-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

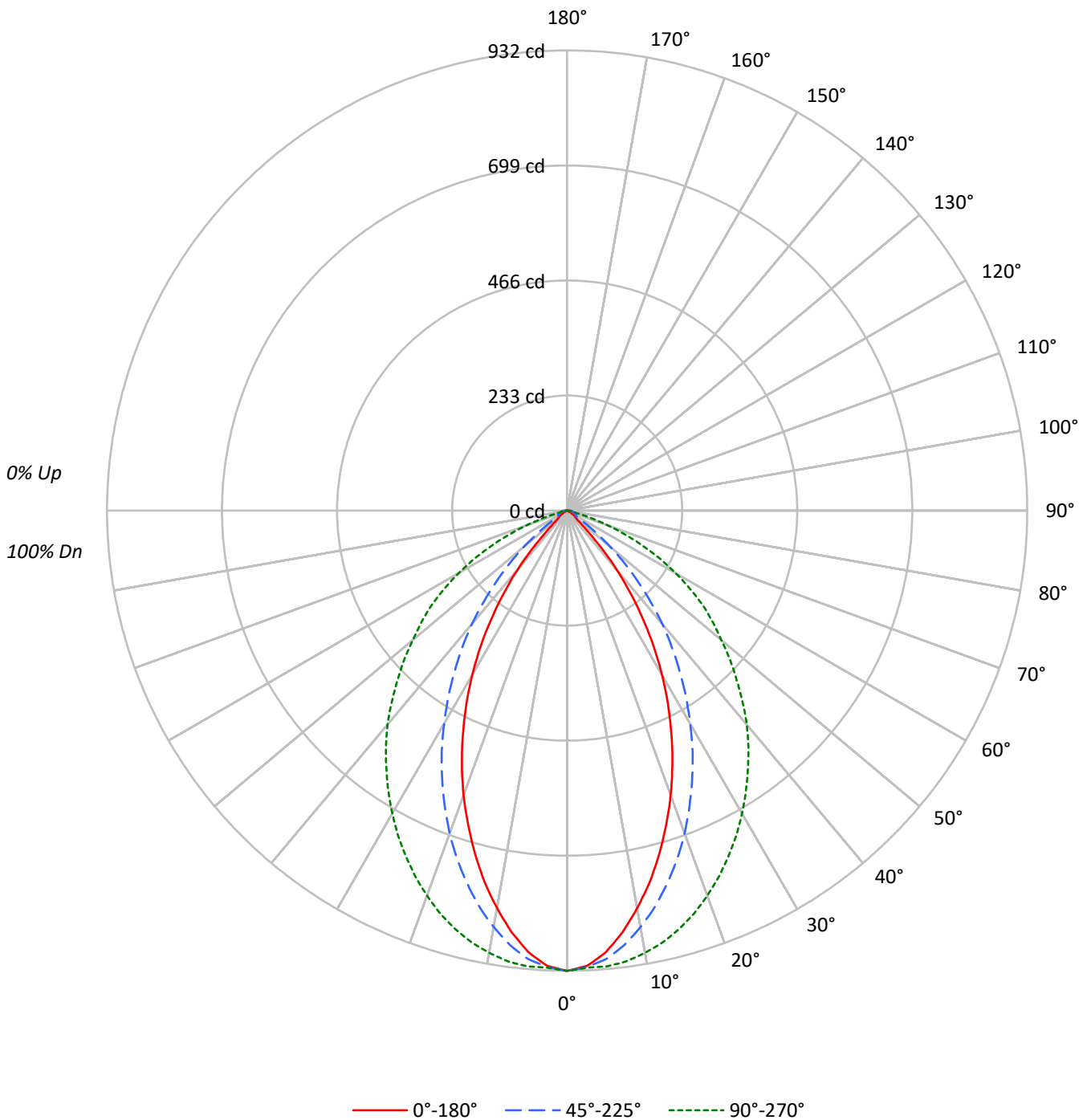
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1199.1 lumens  
Efficiency: N/A  
Efficacy: 38.4 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): 31.2  
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	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	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	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	68	74	70	67	65					65			
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59					59			
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54					54			
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49					49			
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42					42			
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39					39			

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

	0°	45°	90°
0°	6419	6419	6419
5°	6206	6301	6404
10°	5716	5988	6358
15°	5132	5573	6253
20°	4492	5098	6082
25°	3795	4553	5870
30°	3058	3962	5632
35°	2248	3339	5366
40°	1404	2694	5087
45°	526	1968	4729
50°	246	1230	4366
55°	179	510	4038
60°	127	269	3494
65°	75	318	2768
70°	68	370	1757
75°	90	367	551
80°	135	456	408
85°	269	727	545

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4729 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.5	7.1
10°-20°	221.3	18.5
20°-30°	282.0	23.5
30°-40°	262.4	21.9
40°-50°	179.8	15.0
50°-60°	99.0	8.3
60°-70°	46.9	3.9
70°-80°	14.7	1.2
80°-90°	7.5	0.6
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°	588.8	49.1
0°-40°	851.2	71.0
0°-60°	1130.0	94.2
0°-90°	1199.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1199.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	898	909	912	918	927	83
15°	720	743	782	840	877	201
25°	500	530	599	696	773	228
35°	268	305	397	528	638	166
45°	54	91	202	358	486	51
55°	15	17	42	200	336	14
65°	5	6	20	74	170	5
75°	3	6	14	15	21	4
85°	3	8	9	8	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	932.3	932.3	932.3	932.3	932.3
2.5°	923.1	932.3	925.4	925.4	926.6
5°	897.9	909.4	911.6	918.5	926.6
7.5°	861.1	876.1	887.5	907.1	920.8
10°	817.5	835.9	856.5	888.7	909.4
12.5°	771.6	791.1	822.1	866.9	895.6
15°	719.9	742.9	781.9	840.5	877.2
17.5°	667.1	692.3	740.6	809.5	855.4
20°	613.1	639.5	695.8	772.7	830.1
22.5°	556.9	585.6	647.6	734.8	802.6
25°	499.5	530.5	599.3	695.8	772.7
27.5°	442.0	474.2	550.0	655.6	741.7
30°	384.6	417.9	498.3	614.3	708.4
32.5°	326.1	362.8	447.8	572.9	674.0
35°	267.5	305.4	397.3	528.2	638.4
37.5°	210.1	249.2	347.9	485.7	602.8
40°	156.2	195.2	299.7	443.2	566.0
42.5°	101.0	142.4	249.2	399.6	525.9
45°	54.0	90.7	202.1	358.2	485.7
47.5°	28.7	48.2	157.3	316.9	447.8
50°	23.0	26.4	114.8	275.6	407.6
52.5°	18.4	20.7	73.5	233.1	372.0
55°	14.9	17.2	42.5	199.8	336.4
57.5°	11.5	13.8	24.1	166.5	295.1
60°	9.2	10.3	19.5	133.2	253.7
62.5°	5.7	8.0	19.5	103.3	212.4
65°	4.6	5.7	19.5	73.5	169.9
67.5°	4.6	4.6	19.5	48.2	127.4
70°	3.4	3.4	18.4	31.0	87.3
72.5°	3.4	3.4	16.1	20.7	50.5
75°	3.4	5.7	13.8	14.9	20.7
77.5°	3.4	9.2	12.6	12.6	11.5
80°	3.4	9.2	11.5	10.3	10.3
82.5°	3.4	9.2	9.2	9.2	8.0
85°	3.4	8.0	9.2	8.0	6.9
87.5°	3.4	8.0	8.0	8.0	4.6
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	0.00	0.00	0.00	0.00	0.00	15.51	16.79	15.87	17.10	17.42
	3H	0.00	0.00	0.00	0.00	0.00	16.29	17.43	16.67	17.76	18.12
	4H	0.00	0.00	0.00	0.00	0.00	16.32	17.38	16.72	17.73	18.11
	6H	0.00	0.15	0.00	0.52	0.91	16.27	17.25	16.69	17.62	18.01
	8H	0.00	0.77	0.28	1.16	1.56	16.25	17.17	16.68	17.56	17.97
	12H	0.59	1.46	1.02	1.85	2.28	16.23	17.11	16.67	17.49	17.92
4H	2H	0.00	0.35	0.00	0.70	1.08	15.29	16.35	15.69	16.70	17.08
	3H	0.15	1.02	0.57	1.42	1.83	16.12	16.98	16.53	17.38	17.79
	4H	0.74	1.51	1.18	1.93	2.38	16.15	16.92	16.59	17.34	17.79
	6H	2.24	2.90	2.70	3.35	3.82	16.14	16.80	16.60	17.25	17.72
	8H	2.98	3.60	3.45	4.05	4.52	16.12	16.74	16.59	17.19	17.66
	12H	3.71	4.26	4.20	4.74	5.22	16.12	16.67	16.61	17.15	17.63
8H	4H	2.79	3.41	3.26	3.86	4.33	16.04	16.66	16.51	17.10	17.58
	6H	4.54	5.04	5.04	5.54	6.02	16.04	16.54	16.54	17.04	17.52
	8H	5.49	5.94	6.01	6.46	6.95	16.04	16.50	16.57	17.01	17.51
	12H	6.42	6.82	6.93	7.31	7.88	16.09	16.49	16.60	16.99	17.56
12H	4H	3.09	3.64	3.58	4.12	4.60	15.99	16.54	16.48	17.02	17.50
	6H	5.00	5.45	5.52	5.97	6.46	15.99	16.45	16.52	16.96	17.46
	8H	6.13	6.53	6.64	7.03	7.60	16.03	16.43	16.55	16.93	17.50