

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: P1060538

Luminaire Tested: S124RDRP-S575D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060538  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S575D950-X4F0-XX-UDD-SVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

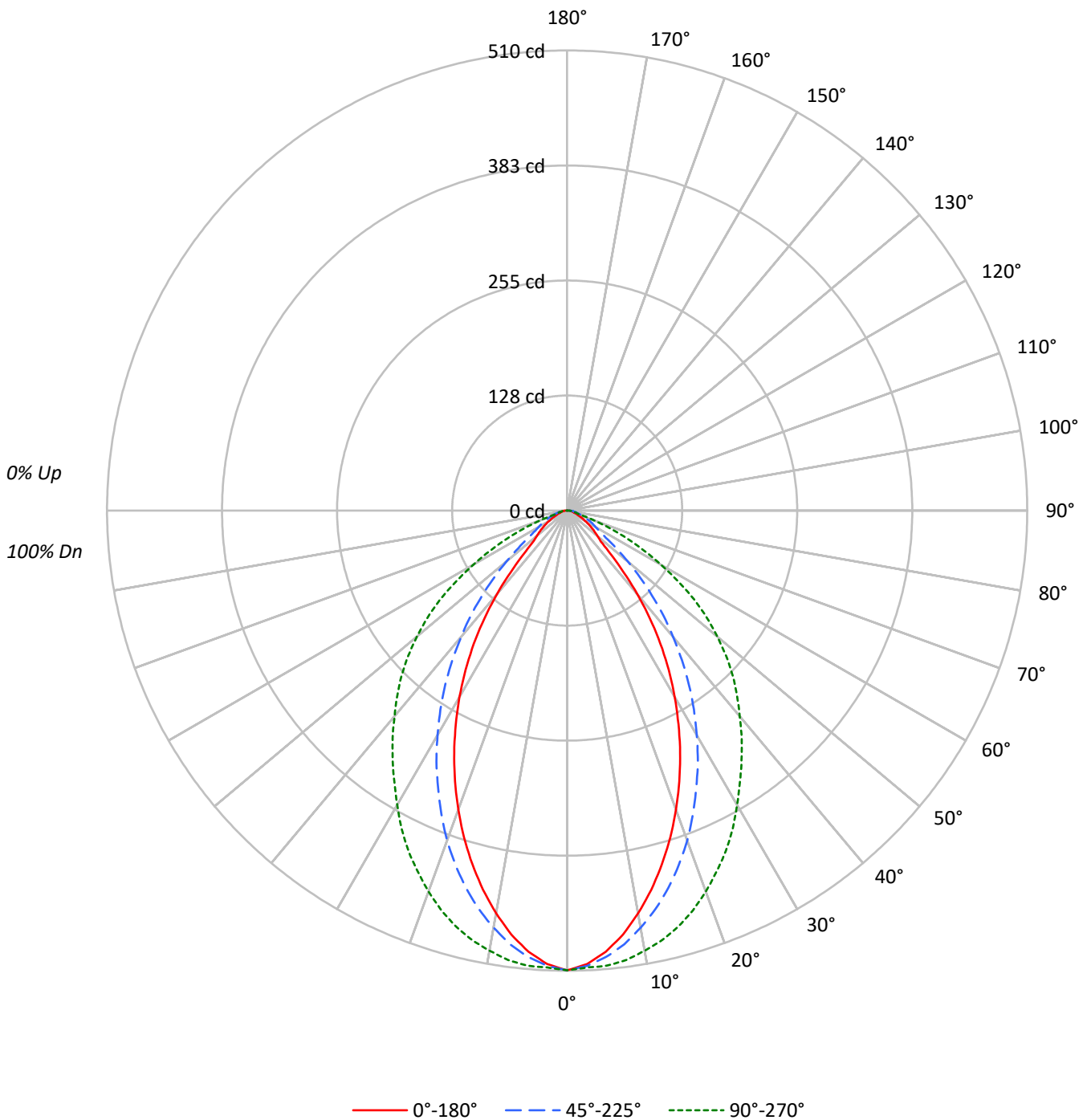
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 716.5 lumens  
Efficiency: N/A  
Efficacy: 36.6 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	4387	4387	4387
5°	4242	4293	4376
10°	3962	4104	4331
15°	3618	3860	4253
20°	3232	3565	4117
25°	2815	3215	3954
30°	2372	2856	3745
35°	1894	2474	3544
40°	1362	2055	3345
45°	821	1618	3166
50°	591	1172	2910
55°	497	788	2579
60°	401	625	2077
65°	318	568	1494
70°	277	473	801
75°	260	433	389
80°	258	451	352
85°	385	642	445

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3166 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.8	6.5
10°-20°	122.6	17.1
20°-30°	159.0	22.2
30°-40°	152.9	21.3
40°-50°	113.4	15.8
50°-60°	69.5	9.7
60°-70°	33.8	4.7
70°-80°	12.9	1.8
80°-90°	5.8	0.8
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°	328.4	45.8
0°-40°	481.2	67.2
0°-60°	664.1	92.7
0°-90°	716.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	716.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	491	498	497	501	506	46
15°	406	418	433	459	477	113
25°	296	311	338	382	416	135
35°	180	196	235	291	337	112
45°	67	84	133	203	260	56
55°	33	34	52	119	172	30
65°	16	17	28	44	73	16
75°	8	12	13	12	12	8
85°	4	6	6	6	4	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	509.5	509.5	509.5	509.5	509.5
2.5°	503.1	508.9	505.0	506.3	506.9
5°	490.7	497.9	496.6	501.1	506.3
7.5°	473.9	482.3	484.9	494.0	502.4
10°	453.1	463.5	469.3	484.3	495.3
12.5°	430.5	441.5	452.5	472.6	487.5
15°	405.8	417.5	433.0	459.0	477.1
17.5°	379.9	392.9	411.7	442.8	464.2
20°	352.7	366.3	389.0	423.3	449.3
22.5°	324.8	339.0	364.3	402.6	433.0
25°	296.3	311.2	338.4	381.8	416.2
27.5°	267.1	282.6	313.8	359.8	397.4
30°	238.6	253.5	287.2	337.1	376.6
32.5°	209.4	224.9	261.3	313.8	356.5
35°	180.2	196.4	235.3	291.1	337.1
37.5°	150.4	167.9	208.7	269.0	317.7
40°	121.2	138.1	182.8	246.3	297.6
42.5°	92.7	110.9	158.2	223.7	278.8
45°	67.4	84.3	132.9	202.9	260.0
47.5°	50.6	60.9	109.6	183.5	239.2
50°	44.1	46.0	87.5	162.1	217.2
52.5°	38.2	39.5	68.1	138.7	195.1
55°	33.1	34.4	52.5	118.6	171.8
57.5°	27.9	29.2	42.1	99.2	145.2
60°	23.3	24.6	36.3	79.1	120.6
62.5°	19.4	20.1	32.4	60.3	96.6
65°	15.6	16.9	27.9	44.1	73.3
67.5°	13.0	14.3	22.7	30.5	51.2
70°	11.0	14.3	18.8	21.4	31.8
72.5°	9.1	13.0	15.6	14.9	14.9
75°	7.8	12.3	13.0	11.7	11.7
77.5°	6.5	11.0	10.4	9.7	9.1
80°	5.2	9.1	9.1	7.8	7.1
82.5°	4.5	7.1	7.1	7.1	5.8
85°	3.9	6.5	6.5	5.8	4.5
87.5°	2.6	5.2	5.8	5.2	3.2
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	4.96	6.29	5.32	6.61	6.92	14.05	15.39	14.42	15.70	16.02
	3H	6.00	7.19	6.38	7.52	7.89	14.55	15.74	14.93	16.07	16.43
	4H	6.52	7.63	6.92	7.98	8.36	14.57	15.67	14.97	16.02	16.41
	6H	6.97	7.99	7.38	8.36	8.75	14.57	15.58	14.98	15.95	16.35
	8H	7.16	8.12	7.59	8.51	8.92	14.56	15.53	14.99	15.92	16.32
	12H	7.37	8.29	7.80	8.67	9.10	14.56	15.48	14.99	15.86	16.29
4H	2H	6.05	7.16	6.45	7.51	7.89	13.94	15.05	14.34	15.40	15.78
	3H	7.32	8.23	7.74	8.63	9.04	14.52	15.42	14.93	15.83	16.23
	4H	8.03	8.84	8.46	9.26	9.70	14.57	15.38	15.00	15.79	16.24
	6H	8.66	9.36	9.12	9.80	10.27	14.62	15.32	15.08	15.76	16.23
	8H	8.90	9.55	9.37	10.00	10.47	14.63	15.29	15.10	15.73	16.21
	12H	9.18	9.75	9.66	10.24	10.71	14.67	15.24	15.15	15.73	16.20
8H	4H	8.45	9.11	8.92	9.56	10.03	14.52	15.17	14.98	15.62	16.09
	6H	9.33	9.87	9.83	10.36	10.84	14.61	15.14	15.11	15.64	16.12
	8H	9.73	10.22	10.26	10.73	11.22	14.67	15.15	15.19	15.66	16.16
	12H	10.21	10.64	10.73	11.13	11.70	14.77	15.19	15.28	15.69	16.26
12H	4H	8.50	9.08	8.98	9.56	10.03	14.49	15.07	14.97	15.55	16.02
	6H	9.44	9.93	9.96	10.44	10.93	14.59	15.07	15.11	15.58	16.08
	8H	9.96	10.38	10.47	10.88	11.45	14.69	15.12	15.21	15.61	16.18