

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: P1060431

Luminaire Tested: S124RDRP-S350D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060431  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S350D930-X4F0-XX-UDD-SVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

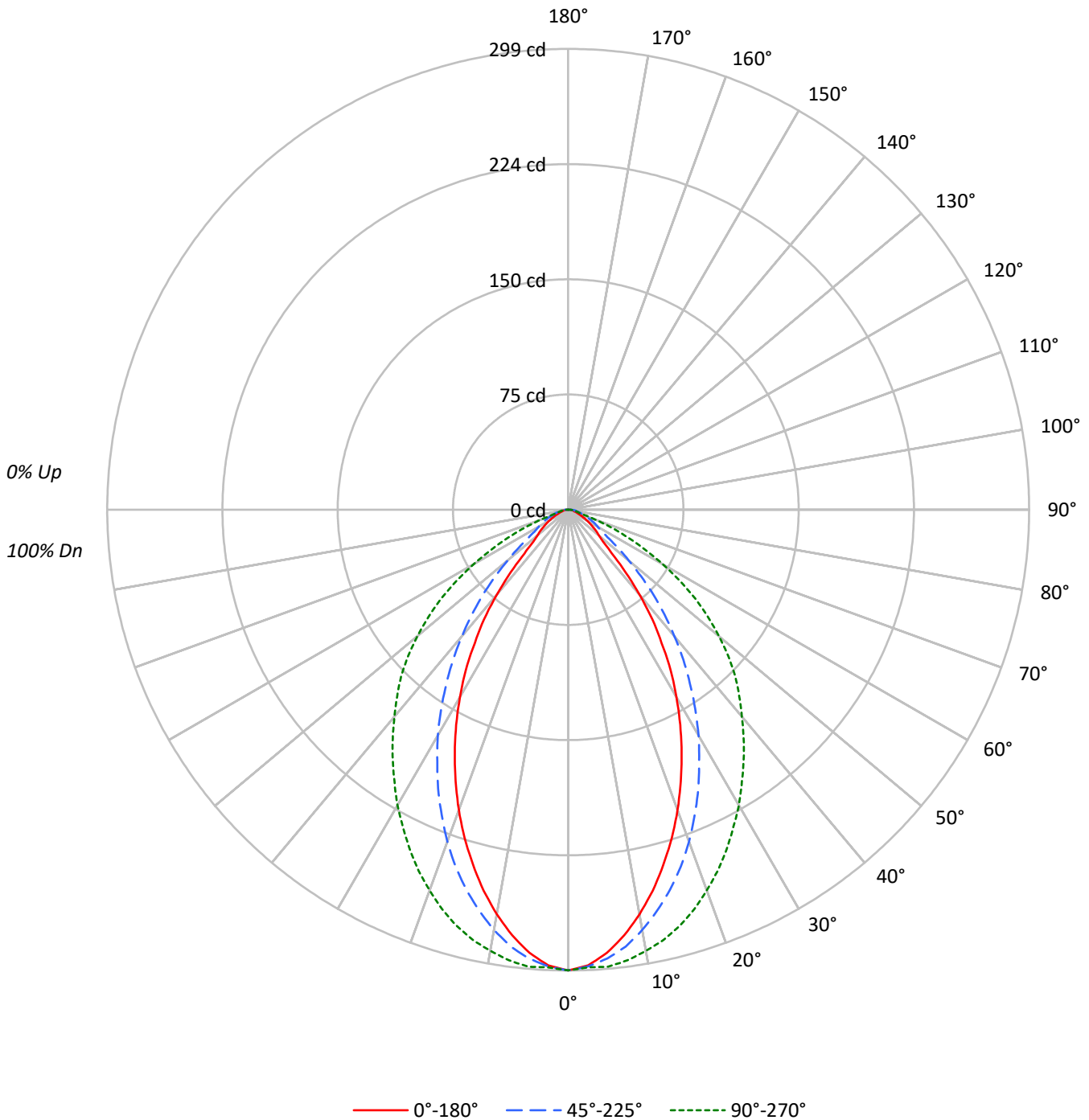
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 423.1 lumens  
Efficiency: N/A  
Efficacy: 33.8 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): 12.5  
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	104	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	66	75	70	66	73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	2574	2574	2574
5°	2495	2526	2572
10°	2330	2421	2541
15°	2126	2275	2492
20°	1901	2099	2408
25°	1653	1897	2310
30°	1395	1680	2201
35°	1109	1446	2086
40°	807	1205	1971
45°	488	952	1867
50°	350	689	1709
55°	296	467	1509
60°	241	379	1219
65°	192	340	878
70°	159	287	463
75°	143	266	233
80°	149	263	233
85°	198	395	267

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1867 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.5	6.5
10°-20°	72.1	17.0
20°-30°	93.5	22.1
30°-40°	90.0	21.3
40°-50°	67.0	15.8
50°-60°	41.2	9.7
60°-70°	20.2	4.8
70°-80°	7.9	1.9
80°-90°	3.6	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°	193.2	45.7
0°-40°	283.2	66.9
0°-60°	391.4	92.5
0°-90°	423.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	423.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	299	299	299	299	299	
5°	289	293	292	295	298	27
15°	238	246	255	270	280	67
25°	174	183	200	225	243	80
35°	106	116	138	172	198	66
45°	40	50	78	121	153	33
55°	20	20	31	71	100	18
65°	9	10	17	27	43	10
75°	4	8	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	298.9	298.9	298.9	298.9	298.9
2.5°	295.9	299.3	296.6	296.9	297.2
5°	288.6	292.9	292.2	294.9	297.6
7.5°	278.5	283.6	285.9	291.2	294.9
10°	266.5	272.2	276.9	285.6	290.6
12.5°	253.2	259.8	266.5	278.2	285.9
15°	238.5	246.1	255.2	270.5	279.5
17.5°	223.4	231.1	242.8	260.5	271.9
20°	207.4	215.8	229.1	248.8	262.8
22.5°	190.7	199.7	214.4	236.8	253.5
25°	174.0	183.4	199.7	224.8	243.1
27.5°	157.3	166.3	184.0	212.1	232.1
30°	140.3	149.6	169.0	198.4	221.4
32.5°	123.9	132.6	153.3	185.4	209.7
35°	105.5	115.6	137.6	172.0	198.4
37.5°	89.8	98.9	122.6	158.6	187.0
40°	71.8	81.8	107.2	145.6	175.3
42.5°	55.1	65.1	92.5	132.6	164.3
45°	40.1	49.8	78.2	120.6	153.3
47.5°	30.4	36.1	64.1	108.9	140.9
50°	26.1	27.7	51.4	96.2	127.6
52.5°	23.0	23.7	40.1	83.5	114.2
55°	19.7	20.4	31.1	70.8	100.5
57.5°	16.7	17.0	25.0	58.8	85.8
60°	14.0	14.4	22.0	47.1	70.8
62.5°	11.7	12.0	19.7	36.4	56.4
65°	9.4	10.0	16.7	26.7	43.1
67.5°	7.7	9.0	14.0	18.7	30.1
70°	6.3	8.7	11.4	13.0	18.4
72.5°	5.3	8.0	9.7	9.4	9.0
75°	4.3	7.7	8.0	7.3	7.0
77.5°	3.7	6.7	6.7	6.0	5.7
80°	3.0	5.3	5.3	5.3	4.7
82.5°	2.7	4.3	4.7	4.7	3.7
85°	2.0	3.7	4.0	4.0	2.7
87.5°	1.3	3.3	3.7	3.3	2.0
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	3.06	4.40	3.42	4.71	5.03	12.24	13.58	12.60	13.89	14.21
	3H	4.17	5.36	4.55	5.69	6.06	12.75	13.94	13.13	14.27	14.63
	4H	4.69	5.80	5.09	6.15	6.53	12.77	13.88	13.17	14.23	14.61
	6H	5.12	6.14	5.54	6.51	6.91	12.78	13.80	13.19	14.17	14.56
	8H	5.32	6.28	5.75	6.67	7.08	12.78	13.75	13.21	14.14	14.54
	12H	5.50	6.42	5.93	6.81	7.24	12.78	13.71	13.22	14.09	14.52
4H	2H	4.21	5.32	4.61	5.67	6.05	12.13	13.24	12.53	13.59	13.97
	3H	5.55	6.46	5.96	6.86	7.27	12.72	13.63	13.13	14.03	14.44
	4H	6.29	7.10	6.72	7.52	7.96	12.78	13.59	13.21	14.01	14.45
	6H	6.90	7.60	7.36	8.04	8.51	12.85	13.56	13.32	14.00	14.47
	8H	7.14	7.79	7.61	8.24	8.71	12.88	13.54	13.35	13.99	14.46
	12H	7.38	7.96	7.86	8.44	8.91	12.93	13.51	13.41	13.99	14.46
8H	4H	6.75	7.41	7.22	7.86	8.33	12.74	13.39	13.21	13.84	14.31
	6H	7.60	8.14	8.10	8.63	9.11	12.86	13.40	13.36	13.90	14.38
	8H	8.00	8.49	8.52	9.00	9.49	12.95	13.43	13.47	13.95	14.44
	12H	8.43	8.86	8.94	9.35	9.92	13.07	13.50	13.58	13.99	14.56
12H	4H	6.81	7.39	7.29	7.87	8.34	12.71	13.29	13.19	13.77	14.25
	6H	7.73	8.22	8.25	8.73	9.22	12.84	13.33	13.37	13.84	14.33
	8H	8.25	8.68	8.77	9.17	9.75	12.98	13.41	13.49	13.90	14.47