

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: P1060427

Luminaire Tested: S124RDRP-S350D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060427  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S350D930-X4F0-XX-UDD-BVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

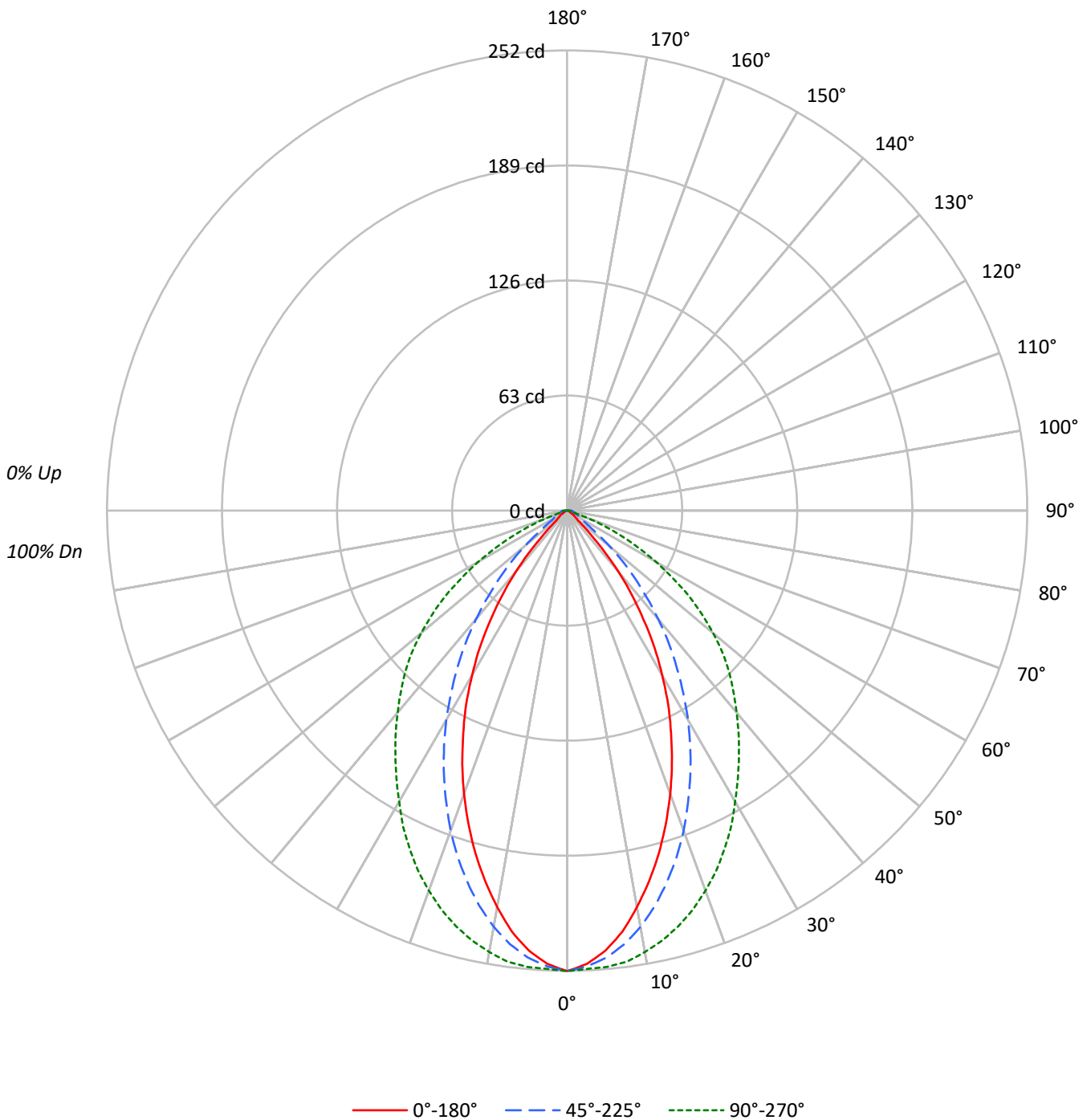
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 316.5 lumens  
Efficiency: N/A  
Efficacy: 25.3 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96  
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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	2172	2172	2172
5°	2090	2125	2168
10°	1927	2024	2147
15°	1730	1879	2099
20°	1512	1708	2029
25°	1279	1516	1939
30°	1033	1315	1830
35°	768	1099	1724
40°	488	871	1622
45°	195	638	1530
50°	84	407	1396
55°	65	210	1219
60°	47	143	966
65°	35	143	660
70°	33	126	302
75°	43	133	123
80°	64	149	134
85°	128	267	198

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1530 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.1	7.3
10°-20°	59.5	18.8
20°-30°	75.2	23.8
30°-40°	69.1	21.8
40°-50°	47.1	14.9
50°-60°	25.5	8.1
60°-70°	10.8	3.4
70°-80°	3.7	1.2
80°-90°	2.4	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°	157.8	49.9
0°-40°	226.9	71.7
0°-60°	299.5	94.6
0°-90°	316.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	316.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	252	252	252	252	252	
5°	242	246	246	248	251	22
15°	194	200	211	226	236	54
25°	135	143	160	184	204	62
35°	73	83	104	137	164	45
45°	16	26	52	93	126	15
55°	4	5	14	51	81	4
65°	2	2	7	16	32	2
75°	1	4	4	4	4	1
85°	1	3	3	3	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	252.2	252.2	252.2	252.2	252.2
2.5°	248.5	251.5	249.8	250.5	251.2
5°	241.8	245.5	245.8	247.8	250.8
7.5°	232.5	236.8	239.5	244.5	249.2
10°	220.4	225.8	231.5	239.5	245.5
12.5°	207.7	213.4	221.8	233.1	241.1
15°	194.1	200.4	210.8	225.8	235.5
17.5°	179.7	186.7	199.1	216.8	229.1
20°	165.0	172.7	186.4	206.4	221.4
22.5°	150.0	158.0	173.0	195.7	213.4
25°	134.6	143.3	159.6	184.4	204.1
27.5°	119.9	127.9	146.0	173.0	194.7
30°	103.9	112.9	132.3	161.3	184.0
32.5°	89.2	97.9	118.2	149.3	174.0
35°	73.1	82.8	104.5	137.3	164.0
37.5°	58.1	67.5	91.2	125.9	154.3
40°	43.4	53.1	77.5	114.6	144.3
42.5°	29.1	39.4	64.5	102.9	134.9
45°	16.0	25.7	52.4	92.9	125.6
47.5°	8.3	14.0	41.1	82.8	115.6
50°	6.3	7.7	30.4	71.8	104.2
52.5°	5.3	5.7	20.7	60.8	92.9
55°	4.3	4.7	14.0	51.1	81.2
57.5°	3.3	3.7	10.0	41.7	68.1
60°	2.7	3.0	8.3	32.1	56.1
62.5°	2.0	2.3	8.0	23.7	44.1
65°	1.7	2.0	7.0	16.0	32.4
67.5°	1.3	2.0	6.0	10.4	21.7
70°	1.3	2.7	5.0	6.7	12.0
72.5°	1.3	3.0	4.3	4.3	4.3
75°	1.3	3.7	4.0	3.7	3.7
77.5°	1.3	3.3	3.3	3.3	3.3
80°	1.3	3.0	3.0	3.0	2.7
82.5°	1.3	2.7	3.0	3.0	2.3
85°	1.3	2.7	2.7	2.7	2.0
87.5°	1.0	2.7	2.7	2.7	1.3
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	0.00	0.00	0.00	0.00	0.00	11.13	12.41	11.50	12.72	13.03
	3H	0.00	0.00	0.00	0.00	0.00	11.49	12.61	11.87	12.95	13.31
	4H	0.00	0.00	0.00	0.00	0.00	11.45	12.50	11.86	12.85	13.24
	6H	0.00	0.00	0.00	0.00	0.00	11.43	12.39	11.84	12.76	13.16
	8H	0.00	0.00	0.00	0.00	0.00	11.42	12.33	11.85	12.72	13.12
	12H	0.00	0.00	0.00	0.06	0.49	11.41	12.29	11.85	12.67	13.10
4H	2H	0.00	0.00	0.00	0.00	0.00	10.93	11.98	11.34	12.33	12.72
	3H	0.00	0.00	0.00	0.00	0.00	11.33	12.18	11.74	12.59	12.99
	4H	0.00	0.47	0.14	0.89	1.33	11.31	12.07	11.74	12.49	12.94
	6H	0.92	1.58	1.39	2.03	2.50	11.33	11.99	11.79	12.43	12.90
	8H	1.49	2.10	1.96	2.55	3.02	11.34	11.95	11.81	12.40	12.87
	12H	2.15	2.70	2.64	3.18	3.66	11.37	11.91	11.86	12.40	12.87
8H	4H	0.77	1.38	1.24	1.83	2.30	11.21	11.82	11.68	12.27	12.74
	6H	2.36	2.87	2.87	3.36	3.85	11.26	11.76	11.76	12.26	12.74
	8H	3.21	3.66	3.73	4.17	4.67	11.31	11.77	11.84	12.28	12.78
	12H	4.17	4.57	4.69	5.07	5.64	11.43	11.83	11.95	12.33	12.90
12H	4H	0.96	1.50	1.44	1.98	2.46	11.17	11.71	11.66	12.20	12.67
	6H	2.71	3.16	3.24	3.68	4.17	11.23	11.68	11.75	12.19	12.69
	8H	3.74	4.14	4.26	4.64	5.21	11.33	11.73	11.85	12.23	12.80