

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060454

Luminaire Tested: S124RDR-S350D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060454  
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: S124RDR-S350D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

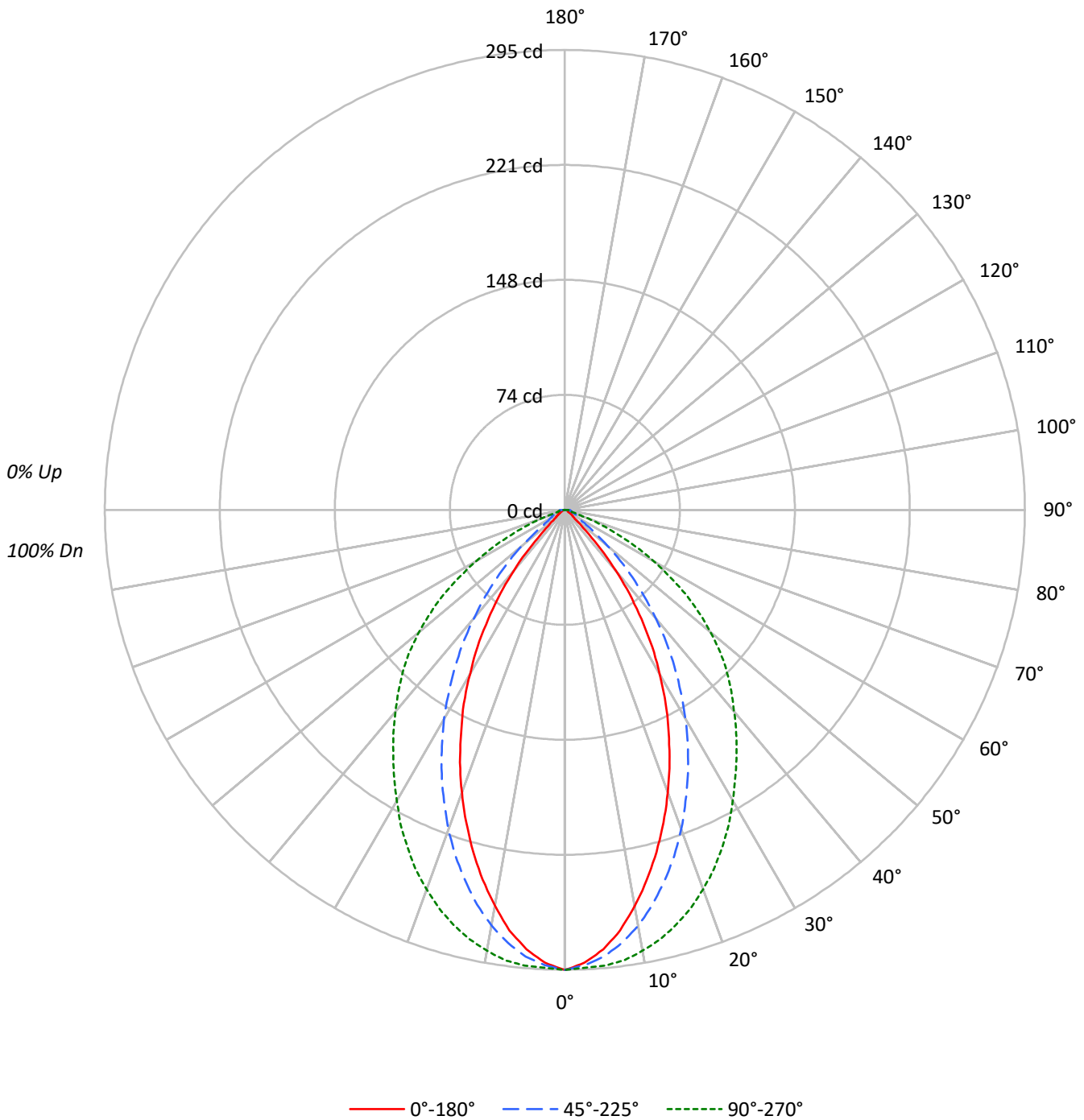
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 370.3 lumens  
Efficiency: N/A  
Efficacy: 29.6 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97  
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 (Ain): 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°	2541	2541	2541
5°	2446	2486	2537
10°	2255	2368	2511
15°	2025	2198	2456
20°	1770	1999	2374
25°	1496	1775	2269
30°	1208	1539	2141
35°	900	1286	2017
40°	571	1020	1897
45°	229	748	1789
50°	99	477	1633
55°	77	246	1426
60°	53	169	1132
65°	41	167	772
70°	40	149	355
75°	53	156	143
80°	79	174	154
85°	158	306	227

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1789 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.0	7.3
10°-20°	69.7	18.8
20°-30°	88.0	23.8
30°-40°	80.8	21.8
40°-50°	55.1	14.9
50°-60°	29.9	8.1
60°-70°	12.7	3.4
70°-80°	4.4	1.2
80°-90°	2.8	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°	184.7	49.9
0°-40°	265.5	71.7
0°-60°	350.5	94.6
0°-90°	370.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	370.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	295	295	295	295	295	
5°	283	287	288	290	294	26
15°	227	234	247	264	276	63
25°	158	168	187	216	239	72
35°	86	97	122	161	192	53
45°	19	30	61	109	147	17
55°	5	6	16	60	95	5
65°	2	2	8	19	38	2
75°	2	4	5	4	4	2
85°	2	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°	295.1	295.1	295.1	295.1	295.1
2.5°	290.8	294.3	292.3	293.1	293.9
5°	283.0	287.2	287.6	290.0	293.5
7.5°	272.0	277.1	280.2	286.1	291.5
10°	257.9	264.2	270.8	280.2	287.2
12.5°	243.1	249.7	259.5	272.8	282.2
15°	227.1	234.5	246.6	264.2	275.5
17.5°	210.3	218.5	232.9	253.6	268.1
20°	193.1	202.1	218.1	241.5	259.1
22.5°	175.5	184.9	202.4	229.0	249.7
25°	157.5	167.7	186.8	215.7	238.8
27.5°	140.3	149.7	170.8	202.4	227.8
30°	121.5	132.1	154.8	188.8	215.3
32.5°	104.3	114.5	138.3	174.7	203.6
35°	85.6	96.9	122.3	160.6	191.9
37.5°	68.0	78.9	106.7	147.3	180.6
40°	50.8	62.1	90.7	134.0	168.8
42.5°	34.0	46.1	75.4	120.4	157.9
45°	18.8	30.1	61.4	108.6	146.9
47.5°	9.8	16.4	48.1	96.9	135.2
50°	7.4	9.0	35.6	84.0	121.9
52.5°	6.3	6.6	24.2	71.1	108.6
55°	5.1	5.5	16.4	59.8	95.0
57.5°	3.9	4.3	11.7	48.9	79.7
60°	3.1	3.5	9.8	37.5	65.7
62.5°	2.3	2.7	9.4	27.7	51.6
65°	2.0	2.3	8.2	18.8	37.9
67.5°	1.6	2.3	7.0	12.1	25.4
70°	1.6	3.1	5.9	7.8	14.1
72.5°	1.6	3.5	5.1	5.1	5.1
75°	1.6	4.3	4.7	4.3	4.3
77.5°	1.6	3.9	3.9	3.9	3.9
80°	1.6	3.5	3.5	3.5	3.1
82.5°	1.6	3.1	3.5	3.5	2.7
85°	1.6	3.1	3.1	3.1	2.3
87.5°	1.2	3.1	3.1	3.1	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)