

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: P1060438

Luminaire Tested: S124RDR-S350D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060438  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S350D935-X4F0-XX-UDD-SVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

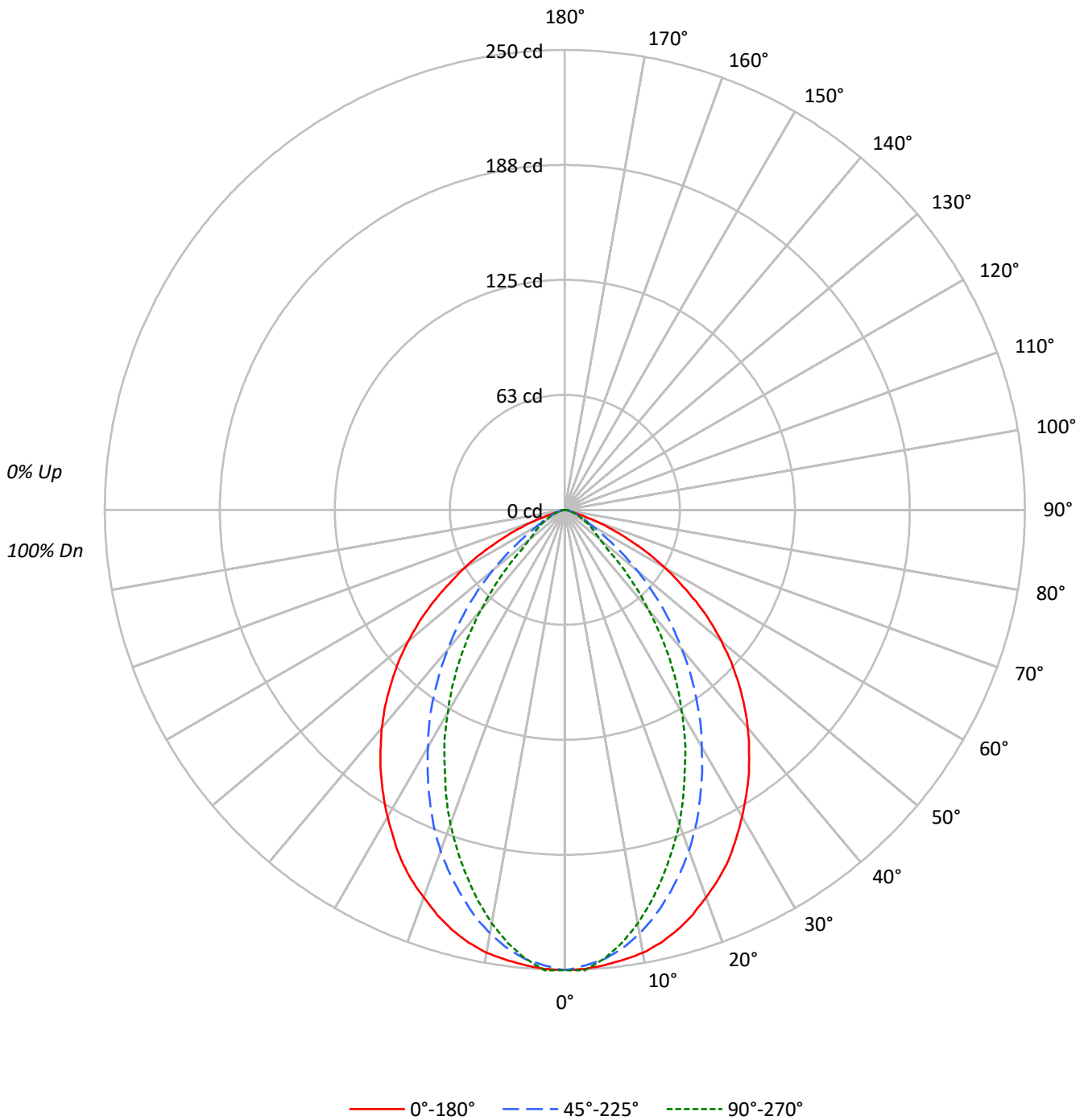
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 368.8 lumens  
Efficiency: N/A  
Efficacy: 29.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02  
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	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	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	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	2155	2155	2155
5°	2147	2120	2117
10°	2138	2045	1996
15°	2107	1935	1837
20°	2054	1808	1666
25°	1998	1650	1466
30°	1916	1479	1265
35°	1833	1308	1045
40°	1739	1113	792
45°	1626	910	532
50°	1487	689	331
55°	1306	455	281
60°	1080	279	231
65°	782	216	187
70°	425	159	141
75°	93	116	130
80°	69	89	104
85°	69	69	109

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1626 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.2	6.3
10°-20°	61.6	16.7
20°-30°	81.5	22.1
30°-40°	80.9	21.9
40°-50°	62.3	16.9
50°-60°	37.1	10.1
60°-70°	16.9	4.6
70°-80°	4.4	1.2
80°-90°	1.0	0.3
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°	166.3	45.1
0°-40°	247.2	67.0
0°-60°	346.6	94.0
0°-90°	368.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	368.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	250	250	250	250	250	
5°	248	249	245	245	245	24
15°	236	230	217	210	206	66
25°	210	195	174	159	154	97
35°	174	153	124	105	99	109
45°	134	108	75	52	44	103
55°	87	62	30	19	19	78
65°	38	23	11	9	9	39
75°	3	4	4	4	4	6
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	250.2	250.2	250.2	250.2	250.2
2.5°	249.8	250.2	248.0	249.8	250.5
5°	248.4	248.7	245.2	245.2	244.9
7.5°	246.6	245.9	240.3	238.2	237.5
10°	244.5	242.0	233.9	229.7	228.3
12.5°	241.0	237.1	226.2	220.2	217.7
15°	236.4	230.4	217.0	209.6	206.1
17.5°	230.8	223.4	207.5	198.0	194.1
20°	224.1	214.2	197.3	185.3	181.8
22.5°	217.7	205.4	186.0	172.3	168.4
25°	210.3	195.2	173.7	159.3	154.3
27.5°	201.5	185.3	161.4	146.6	141.6
30°	192.7	174.8	148.7	133.2	127.2
32.5°	183.6	163.8	137.1	119.4	113.8
35°	174.4	152.6	124.4	105.3	99.4
37.5°	164.5	141.3	111.7	92.0	85.3
40°	154.7	130.4	99.0	78.9	70.5
42.5°	144.5	119.1	86.7	65.5	57.1
45°	133.5	107.5	74.7	52.1	43.7
47.5°	122.6	96.5	62.7	39.1	31.4
50°	111.0	84.9	51.4	28.5	24.7
52.5°	99.4	73.6	40.2	22.2	21.1
55°	87.0	62.0	30.3	19.0	18.7
57.5°	74.3	51.4	21.8	16.6	15.9
60°	62.7	41.6	16.2	14.1	13.4
62.5°	50.7	31.4	13.4	11.6	10.9
65°	38.4	22.9	10.6	9.2	9.2
67.5°	27.8	15.5	8.5	7.4	7.0
70°	16.9	9.5	6.3	6.0	5.6
72.5°	8.5	5.6	4.9	4.6	4.6
75°	2.8	3.5	3.5	3.9	3.9
77.5°	2.1	2.5	2.5	2.8	2.8
80°	1.4	1.8	1.8	2.1	2.1
82.5°	1.1	1.1	1.4	1.4	1.8
85°	0.7	0.7	0.7	1.1	1.1
87.5°	0.4	0.4	0.4	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)