

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: P1060273

Luminaire Tested: S124RDR-S1020D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060273  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1020D935-X4F0-XX-UDD-BVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

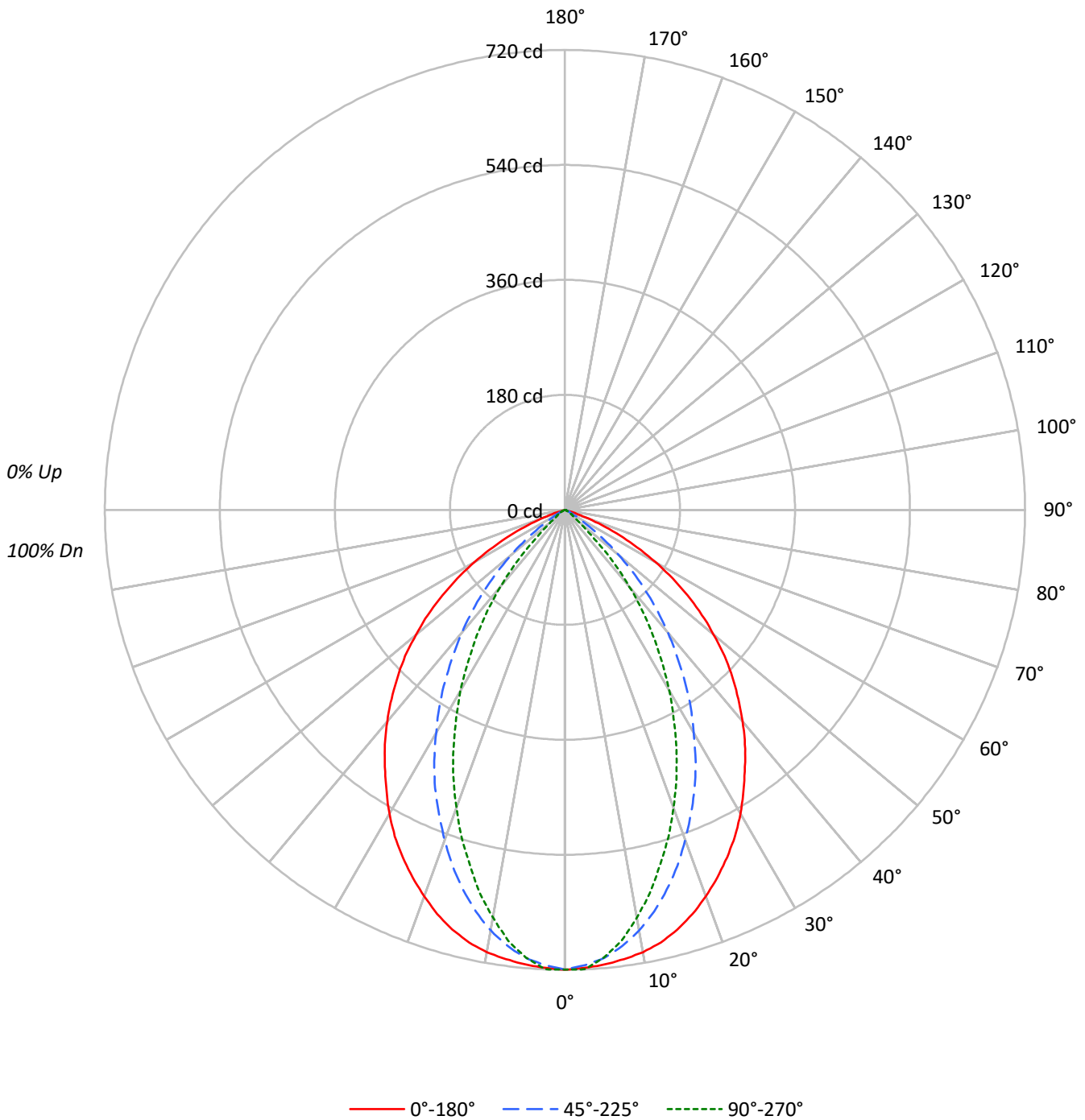
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 939.9 lumens  
Efficiency: N/A  
Efficacy: 26.9 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 35  
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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	6198	6198	6198
5°	6177	6087	6078
10°	6149	5849	5667
15°	6065	5490	5128
20°	5901	5043	4547
25°	5703	4566	3924
30°	5461	4003	3247
35°	5162	3433	2526
40°	4864	2818	1766
45°	4510	2166	874
50°	4069	1463	292
55°	3515	749	203
60°	2812	269	143
65°	1930	149	63
70°	864	78	53
75°	0	33	33
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4510 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.5	7.1
10°-20°	174.2	18.5
20°-30°	225.6	24.0
30°-40°	214.3	22.8
40°-50°	151.8	16.1
50°-60°	77.9	8.3
60°-70°	27.3	2.9
70°-80°	2.3	0.2
80°-90°	0.0	0.0
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°	466.3	49.6
0°-40°	680.6	72.4
0°-60°	910.3	96.8
0°-90°	939.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	939.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	715	716	704	704	703	68
15°	680	660	616	587	575	191
25°	600	553	481	430	413	276
35°	491	419	327	263	240	307
45°	370	285	178	102	72	285
55°	234	154	50	15	14	209
65°	95	46	7	4	3	94
75°	0	1	1	1	1	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	719.8	719.8	719.8	719.8	719.8
2.5°	717.8	719.8	713.6	718.8	719.8
5°	714.6	715.7	704.2	704.2	703.2
7.5°	709.4	707.4	688.6	681.3	680.3
10°	703.2	695.9	668.9	653.3	648.1
12.5°	693.8	680.3	643.9	621.0	614.8
15°	680.3	659.5	615.8	586.7	575.2
17.5°	663.7	636.6	584.6	549.2	537.8
20°	643.9	609.6	550.3	510.8	496.2
22.5°	623.1	583.6	514.9	470.2	455.6
25°	600.2	553.4	480.6	429.6	413.0
27.5°	576.3	521.2	443.1	390.1	368.2
30°	549.2	488.9	402.6	347.4	326.6
32.5°	520.1	453.5	366.2	306.9	281.9
35°	491.0	419.2	326.6	263.2	240.3
37.5°	462.9	387.0	287.1	220.5	198.7
40°	432.7	351.6	250.7	182.0	157.1
42.5°	401.5	317.3	213.2	142.5	115.5
45°	370.3	285.0	177.9	101.9	71.8
47.5°	339.1	250.7	143.6	64.5	38.5
50°	303.7	217.4	109.2	34.3	21.8
52.5°	270.5	186.2	78.0	19.8	16.6
55°	234.1	154.0	49.9	14.6	13.5
57.5°	199.7	122.7	28.1	11.4	10.4
60°	163.3	94.7	15.6	9.4	8.3
62.5°	126.9	68.7	10.4	6.2	5.2
65°	94.7	45.8	7.3	4.2	3.1
67.5°	62.4	26.0	5.2	2.1	2.1
70°	34.3	12.5	3.1	2.1	2.1
72.5°	12.5	4.2	2.1	1.0	1.0
75°	0.0	1.0	1.0	1.0	1.0
77.5°	0.0	0.0	0.0	0.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)