

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: P1060267

Luminaire Tested: S124RDR-S1020D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060267  
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-S1020D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

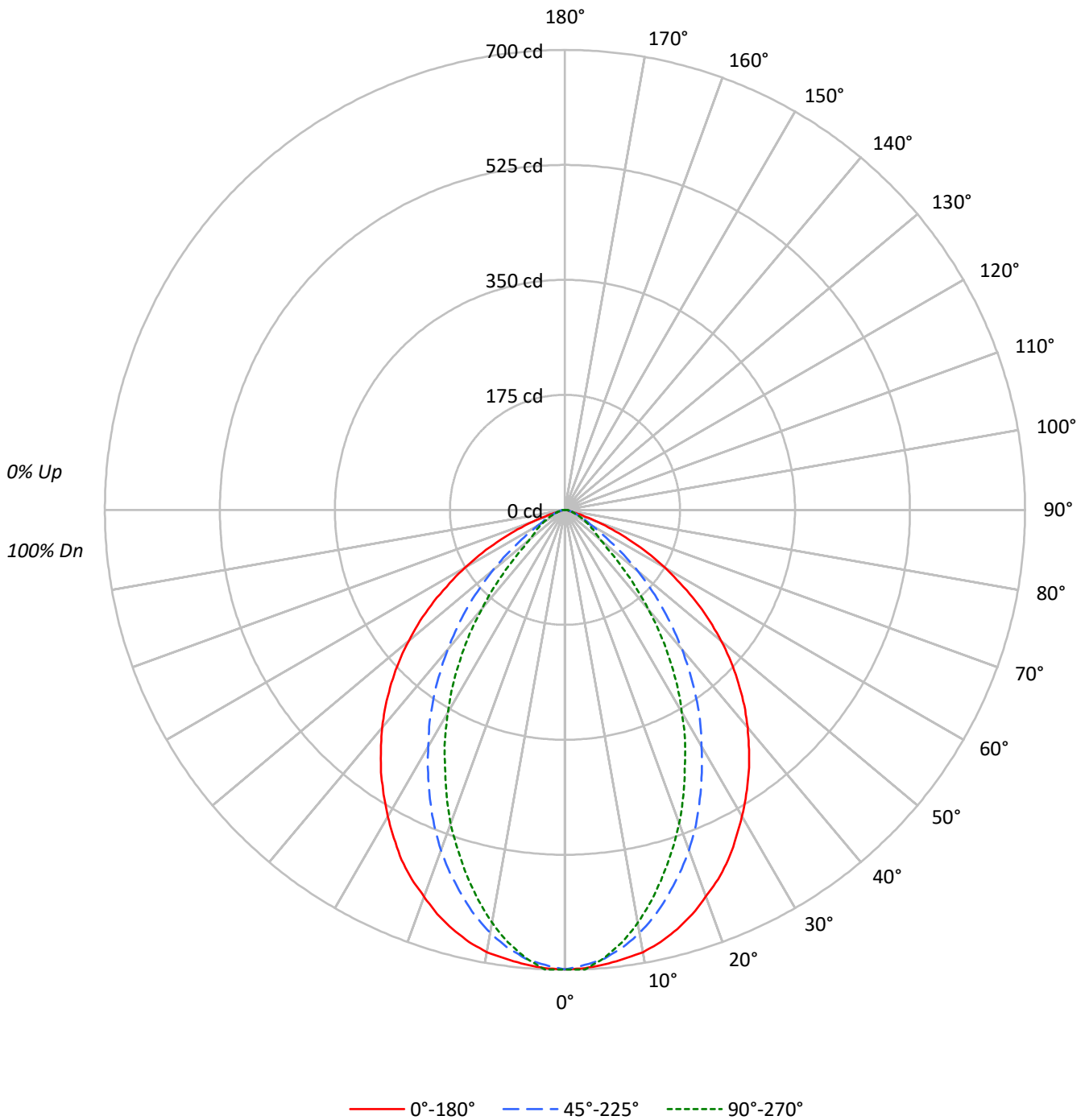
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1031.1 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): 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	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°	6023	6023	6023
5°	6002	5926	5918
10°	5977	5719	5581
15°	5892	5410	5137
20°	5741	5055	4658
25°	5587	4614	4099
30°	5357	4133	3536
35°	5126	3655	2920
40°	4861	3112	2214
45°	4546	2543	1487
50°	4157	1926	924
55°	3653	1272	784
60°	3019	780	644
65°	2188	603	522
70°	1191	446	398
75°	263	329	359
80°	193	243	293
85°	198	198	296

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4546 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.8	6.3
10°-20°	172.1	16.7
20°-30°	228.0	22.1
30°-40°	226.3	21.9
40°-50°	174.1	16.9
50°-60°	103.8	10.1
60°-70°	47.2	4.6
70°-80°	12.2	1.2
80°-90°	2.7	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°	464.9	45.1
0°-40°	691.1	67.0
0°-60°	969.0	94.0
0°-90°	1031.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1031.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	694	695	686	686	685	66
15°	661	644	607	586	576	186
25°	588	546	486	445	431	270
35°	488	426	348	294	278	304
45°	373	300	209	146	122	287
55°	243	173	85	53	52	217
65°	107	64	30	26	26	108
75°	8	10	10	11	11	17
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	699.4	699.4	699.4	699.4	699.4
2.5°	698.4	699.4	693.4	698.4	700.3
5°	694.4	695.4	685.6	685.6	684.6
7.5°	689.5	687.5	671.8	665.9	663.9
10°	683.6	676.7	654.0	642.2	638.3
12.5°	673.7	662.9	632.4	615.6	608.7
15°	660.9	644.2	606.8	586.1	576.2
17.5°	645.2	624.5	580.2	553.6	542.7
20°	626.5	598.9	551.6	518.1	508.3
22.5°	608.7	574.3	520.1	481.7	470.8
25°	588.0	545.7	485.6	445.2	431.4
27.5°	563.4	518.1	451.1	409.8	396.0
30°	538.8	488.6	415.7	372.3	355.6
32.5°	513.2	458.0	383.2	333.9	318.2
35°	487.6	426.5	347.7	294.5	277.8
37.5°	460.0	395.0	312.2	257.1	238.4
40°	432.4	364.5	276.8	220.6	197.0
42.5°	403.9	332.9	242.3	183.2	159.6
45°	373.3	300.4	208.8	145.8	122.1
47.5°	342.8	269.9	175.3	109.3	87.7
50°	310.3	237.4	143.8	79.8	69.0
52.5°	277.8	205.9	112.3	62.1	59.1
55°	243.3	173.4	84.7	53.2	52.2
57.5°	207.8	143.8	61.1	46.3	44.3
60°	175.3	116.2	45.3	39.4	37.4
62.5°	141.8	87.7	37.4	32.5	30.5
65°	107.4	64.0	29.6	25.6	25.6
67.5°	77.8	43.3	23.6	20.7	19.7
70°	47.3	26.6	17.7	16.7	15.8
72.5°	23.6	15.8	13.8	12.8	12.8
75°	7.9	9.9	9.9	10.8	10.8
77.5°	5.9	6.9	6.9	7.9	7.9
80°	3.9	4.9	4.9	5.9	5.9
82.5°	3.0	3.0	3.9	3.9	4.9
85°	2.0	2.0	2.0	3.0	3.0
87.5°	1.0	1.0	1.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)