

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: P1060264

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060264  
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-S1020D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

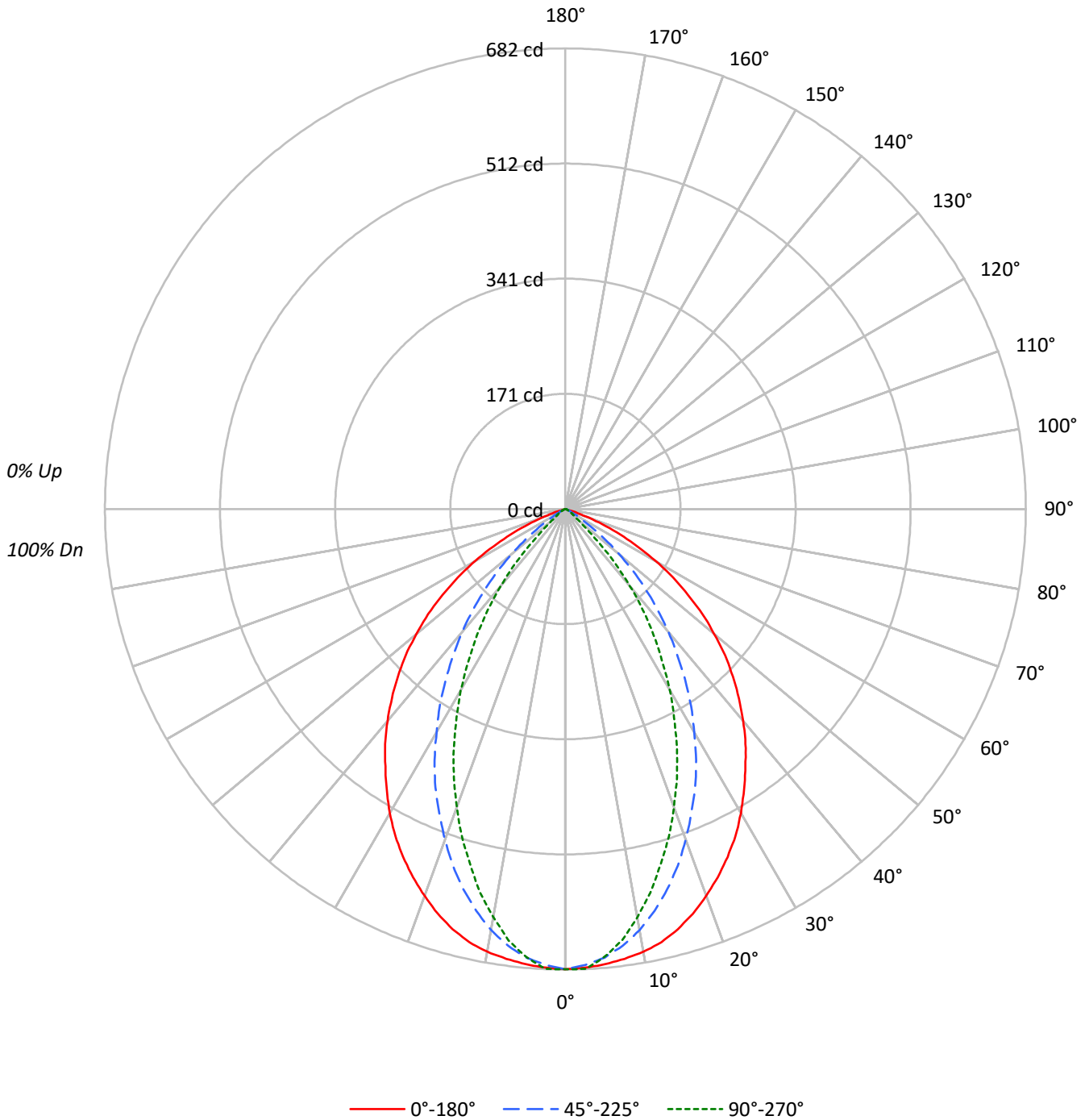
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 890.1 lumens  
Efficiency: N/A  
Efficacy: 25.4 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°	5869	5869	5869
5°	5849	5765	5756
10°	5823	5538	5366
15°	5743	5198	4856
20°	5587	4775	4306
25°	5401	4324	3716
30°	5171	3790	3075
35°	4887	3251	2392
40°	4607	2669	1672
45°	4271	2051	828
50°	3853	1385	277
55°	3327	710	192
60°	2663	255	136
65°	1826	141	61
70°	818	76	50
75°	0	33	33
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4271 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.0	7.1
10°-20°	165.0	18.5
20°-30°	213.6	24.0
30°-40°	203.0	22.8
40°-50°	143.7	16.1
50°-60°	73.8	8.3
60°-70°	25.8	2.9
70°-80°	2.2	0.3
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°	441.6	49.6
0°-40°	644.5	72.4
0°-60°	862.0	96.8
0°-90°	890.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	890.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	682	682	682	682	682	
5°	677	678	667	667	666	64
15°	644	624	583	556	545	181
25°	568	524	455	407	391	261
35°	465	397	309	249	228	291
45°	351	270	168	96	68	270
55°	222	146	47	14	13	198
65°	90	43	7	4	3	89
75°	0	1	1	1	1	7
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	681.6	681.6	681.6	681.6	681.6
2.5°	679.7	681.6	675.7	680.6	681.6
5°	676.7	677.7	666.9	666.9	665.9
7.5°	671.8	669.8	652.1	645.2	644.2
10°	665.9	659.0	633.4	618.6	613.7
12.5°	657.0	644.2	609.7	588.1	582.1
15°	644.2	624.5	583.1	555.5	544.7
17.5°	628.4	602.8	553.6	520.1	509.3
20°	609.7	577.2	521.1	483.6	469.9
22.5°	590.0	552.6	487.6	445.2	431.4
25°	568.4	524.0	455.1	406.8	391.1
27.5°	545.7	493.5	419.6	369.4	348.7
30°	520.1	463.0	381.2	329.0	309.3
32.5°	492.5	429.5	346.7	290.6	266.9
35°	464.9	397.0	309.3	249.2	227.5
37.5°	438.3	366.4	271.9	208.8	188.1
40°	409.8	332.9	237.4	172.4	148.7
42.5°	380.2	300.4	201.9	134.9	109.3
45°	350.7	269.9	168.4	96.5	68.0
47.5°	321.1	237.4	135.9	61.1	36.4
50°	287.6	205.9	103.4	32.5	20.7
52.5°	256.1	176.3	73.9	18.7	15.8
55°	221.6	145.8	47.3	13.8	12.8
57.5°	189.1	116.2	26.6	10.8	9.9
60°	154.6	89.6	14.8	8.9	7.9
62.5°	120.2	65.0	9.9	5.9	4.9
65°	89.6	43.3	6.9	3.9	3.0
67.5°	59.1	24.6	4.9	2.0	2.0
70°	32.5	11.8	3.0	2.0	2.0
72.5°	11.8	3.9	2.0	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)