

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: P1060417

Luminaire Tested: S124RDR-S350D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060417  
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-S350D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

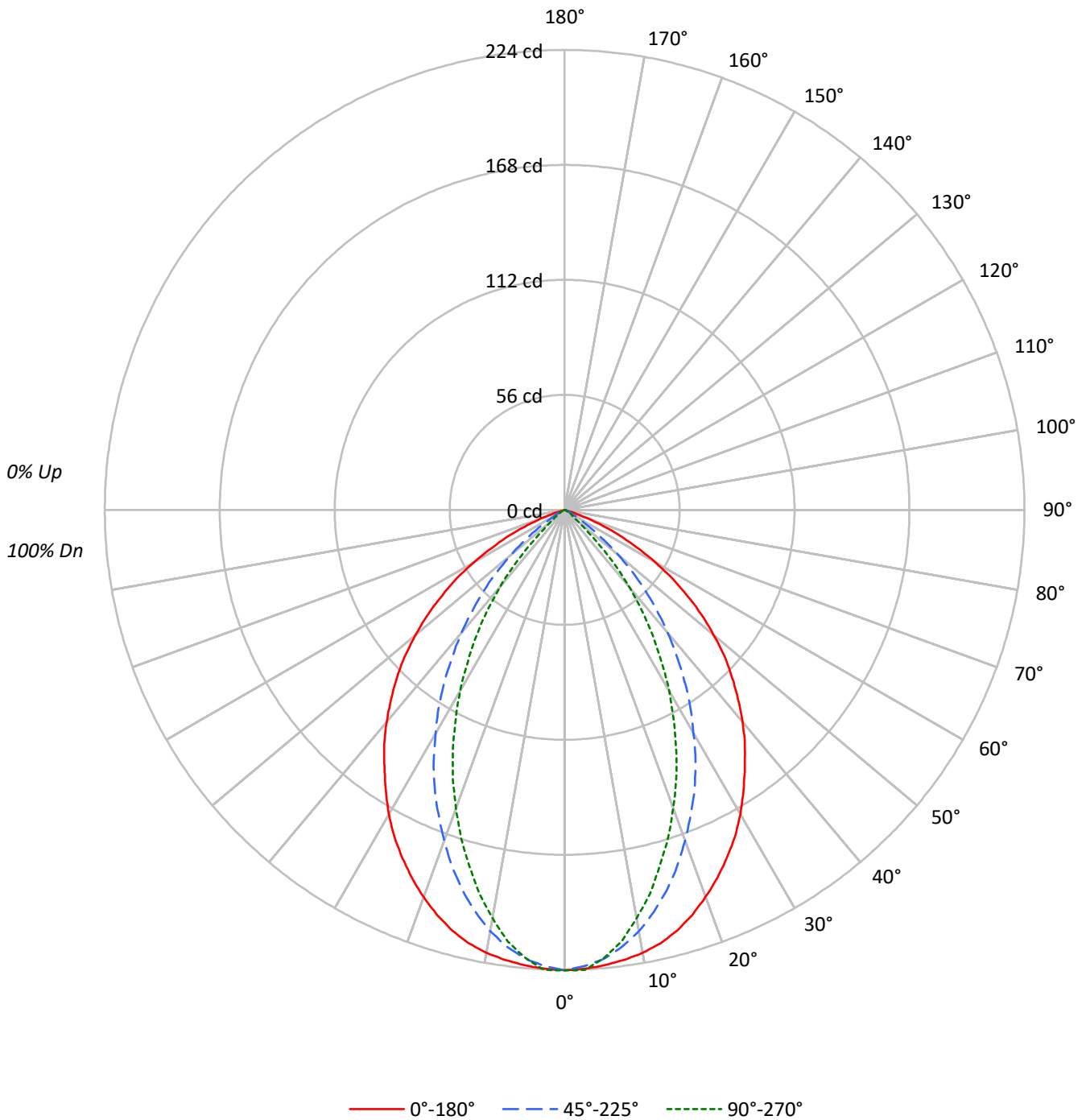
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 292.9 lumens  
Efficiency: N/A  
Efficacy: 23.4 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): 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	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	45	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°	1931	1931	1931
5°	1925	1897	1894
10°	1916	1822	1766
15°	1890	1711	1598
20°	1839	1572	1417
25°	1777	1423	1223
30°	1702	1248	1012
35°	1608	1070	787
40°	1516	878	550
45°	1405	675	273
50°	1269	455	91
55°	1094	234	63
60°	877	84	45
65°	601	47	20
70°	269	25	15
75°	0	10	10
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1405 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.7	7.1
10°-20°	54.3	18.5
20°-30°	70.3	24.0
30°-40°	66.8	22.8
40°-50°	47.3	16.1
50°-60°	24.3	8.3
60°-70°	8.5	2.9
70°-80°	0.7	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°	145.3	49.6
0°-40°	212.1	72.4
0°-60°	283.7	96.9
0°-90°	292.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	292.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	224	224	224	224	224	
5°	223	223	220	220	219	21
15°	212	206	192	183	179	60
25°	187	172	150	134	129	86
35°	153	131	102	82	75	96
45°	115	89	55	32	22	89
55°	73	48	16	4	4	65
65°	30	14	2	1	1	29
75°	0	0	0	0	0	2
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°	224.3	224.3	224.3	224.3	224.3
2.5°	223.7	224.3	222.4	224.0	224.3
5°	222.7	223.0	219.5	219.5	219.1
7.5°	221.1	220.4	214.6	212.3	212.0
10°	219.1	216.9	208.4	203.6	202.0
12.5°	216.2	212.0	200.7	193.5	191.6
15°	212.0	205.5	191.9	182.8	179.3
17.5°	206.8	198.4	182.2	171.2	167.6
20°	200.7	190.0	171.5	159.2	154.6
22.5°	194.2	181.9	160.5	146.5	142.0
25°	187.0	172.5	149.8	133.9	128.7
27.5°	179.6	162.4	138.1	121.6	114.8
30°	171.2	152.4	125.5	108.3	101.8
32.5°	162.1	141.3	114.1	95.6	87.8
35°	153.0	130.6	101.8	82.0	74.9
37.5°	144.3	120.6	89.5	68.7	61.9
40°	134.9	109.6	78.1	56.7	48.9
42.5°	125.1	98.9	66.5	44.4	36.0
45°	115.4	88.8	55.4	31.8	22.4
47.5°	105.7	78.1	44.7	20.1	12.0
50°	94.7	67.8	34.0	10.7	6.8
52.5°	84.3	58.0	24.3	6.2	5.2
55°	72.9	48.0	15.6	4.5	4.2
57.5°	62.2	38.3	8.8	3.6	3.2
60°	50.9	29.5	4.9	2.9	2.6
62.5°	39.5	21.4	3.2	1.9	1.6
65°	29.5	14.3	2.3	1.3	1.0
67.5°	19.5	8.1	1.6	0.6	0.6
70°	10.7	3.9	1.0	0.6	0.6
72.5°	3.9	1.3	0.6	0.3	0.3
75°	0.0	0.3	0.3	0.3	0.3
77.5°	0.0	0.0	0.0	0.0	0.3
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)