

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: P1060447

Luminaire Tested: S124RDR-S350D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060447  
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-S350D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

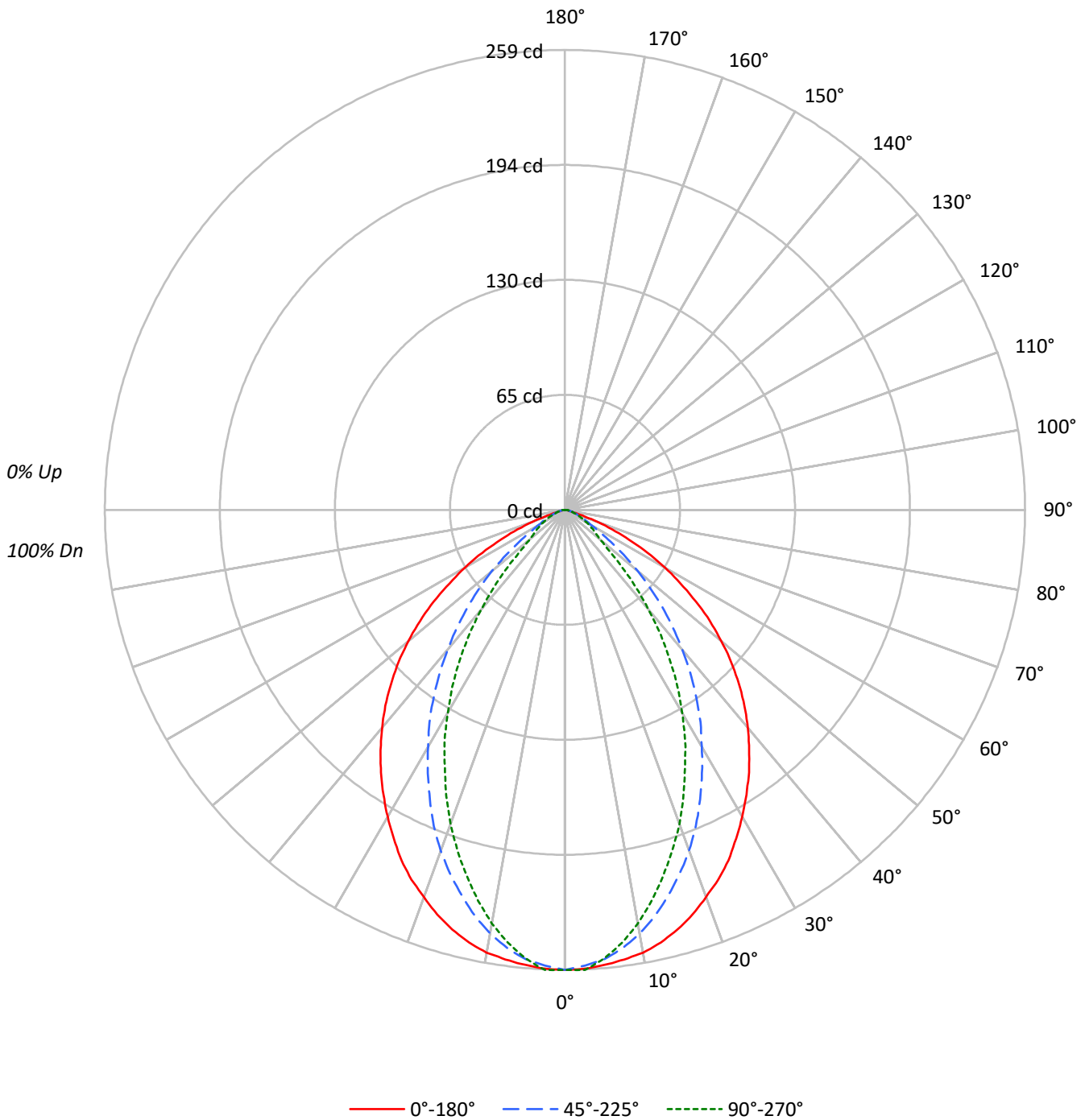
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 382.0 lumens  
Efficiency: N/A  
Efficacy: 30.6 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°	2231	2231	2231
5°	2224	2196	2192
10°	2214	2119	2068
15°	2182	2004	1903
20°	2127	1872	1726
25°	2069	1709	1518
30°	1985	1531	1310
35°	1899	1354	1082
40°	1801	1152	821
45°	1684	943	550
50°	1539	714	342
55°	1353	471	290
60°	1119	289	239
65°	811	222	194
70°	441	166	146
75°	96	120	133
80°	74	89	109
85°	69	69	109

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1684 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.0	6.3
10°-20°	63.8	16.7
20°-30°	84.5	22.1
30°-40°	83.8	21.9
40°-50°	64.5	16.9
50°-60°	38.4	10.1
60°-70°	17.5	4.6
70°-80°	4.5	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°	172.2	45.1
0°-40°	256.0	67.0
0°-60°	359.0	94.0
0°-90°	382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	382.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	259	259	259	259	259	
5°	257	258	254	254	254	24
15°	245	239	225	217	214	69
25°	218	202	180	165	160	100
35°	181	158	129	109	103	113
45°	138	111	77	54	45	106
55°	90	64	31	20	19	80
65°	40	24	11	10	10	40
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°	259.1	259.1	259.1	259.1	259.1
2.5°	258.7	259.1	256.9	258.7	259.4
5°	257.3	257.6	254.0	254.0	253.6
7.5°	255.4	254.7	248.9	246.7	245.9
10°	253.2	250.7	242.3	237.9	236.5
12.5°	249.6	245.6	234.3	228.1	225.5
15°	244.8	238.6	224.8	217.1	213.5
17.5°	239.0	231.3	214.9	205.1	201.1
20°	232.1	221.9	204.3	191.9	188.3
22.5°	225.5	212.7	192.7	178.4	174.4
25°	217.8	202.2	179.9	164.9	159.8
27.5°	208.7	191.9	167.1	151.8	146.7
30°	199.6	181.0	154.0	137.9	131.7
32.5°	190.1	169.7	141.9	123.7	117.9
35°	180.6	158.0	128.8	109.1	102.9
37.5°	170.4	146.3	115.7	95.2	88.3
40°	160.2	135.0	102.5	81.7	73.0
42.5°	149.6	123.3	89.8	67.9	59.1
45°	138.3	111.3	77.4	54.0	45.2
47.5°	127.0	100.0	65.0	40.5	32.5
50°	114.9	87.9	53.3	29.6	25.5
52.5°	102.9	76.3	41.6	23.0	21.9
55°	90.1	64.2	31.4	19.7	19.3
57.5°	77.0	53.3	22.6	17.2	16.4
60°	65.0	43.1	16.8	14.6	13.9
62.5°	52.5	32.5	13.9	12.0	11.3
65°	39.8	23.7	10.9	9.5	9.5
67.5°	28.8	16.1	8.8	7.7	7.3
70°	17.5	9.9	6.6	6.2	5.8
72.5°	8.8	5.8	5.1	4.7	4.7
75°	2.9	3.6	3.6	4.0	4.0
77.5°	2.2	2.6	2.6	2.9	2.9
80°	1.5	1.8	1.8	2.2	2.2
82.5°	1.1	1.1	1.5	1.5	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)