

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: P1060446

Luminaire Tested: S124RDR-S350D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060446  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S350D940-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

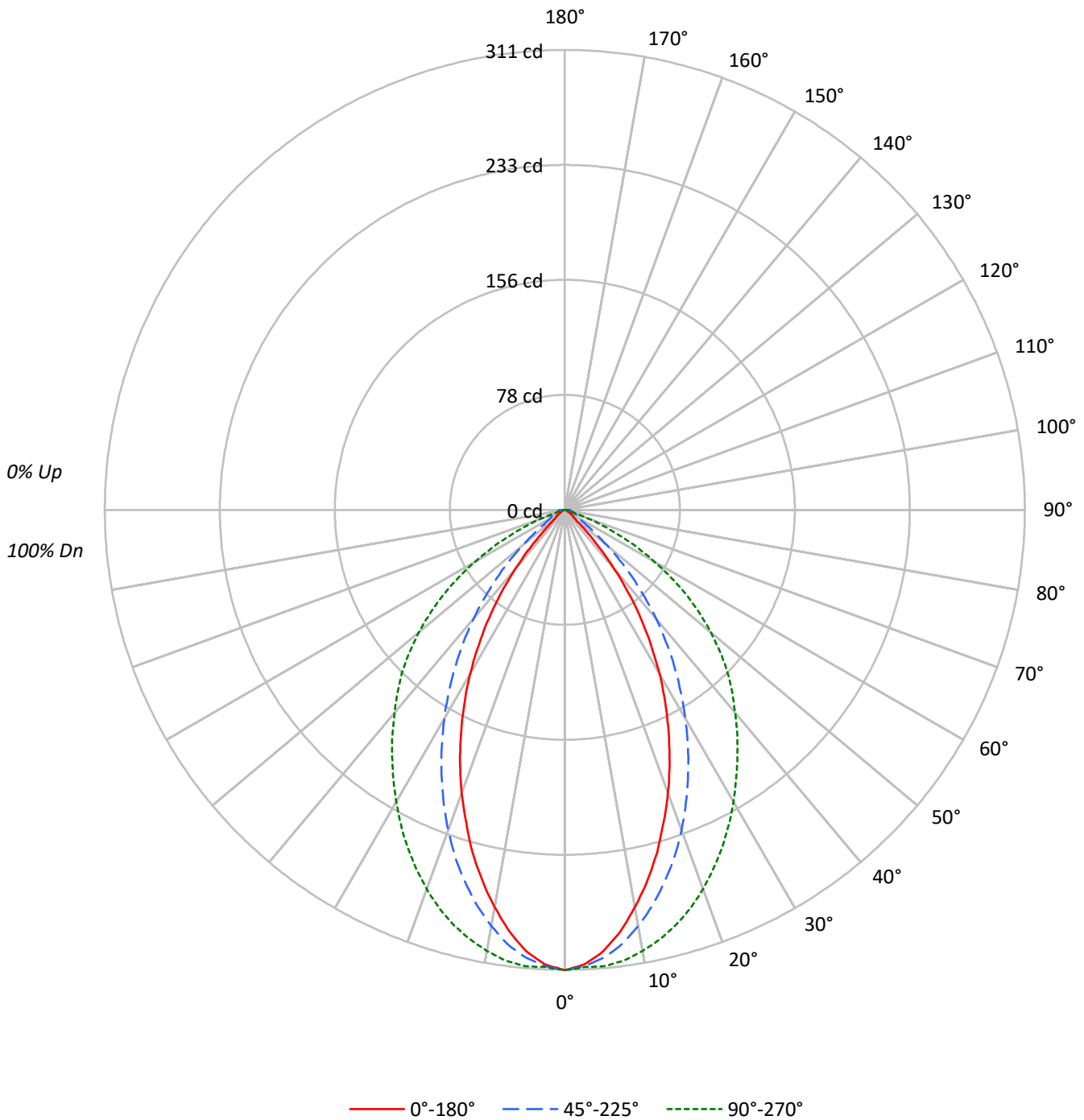
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 392.3 lumens  
Efficiency: N/A  
Efficacy: 31.4 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97  
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	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

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

	0°	45°	90°
0°	2681	2681	2681
5°	2590	2628	2678
10°	2386	2498	2649
15°	2143	2322	2590
20°	1868	2113	2501
25°	1576	1875	2391
30°	1272	1621	2267
35°	941	1356	2139
40°	583	1080	2012
45°	231	788	1895
50°	103	494	1723
55°	83	258	1509
60°	57	195	1202
65°	37	194	827
70°	38	174	385
75°	50	170	170
80°	74	198	198
85°	148	395	287

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1895 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.6	7.3
10°-20°	73.7	18.8
20°-30°	93.0	23.7
30°-40°	85.4	21.8
40°-50°	58.1	14.8
50°-60°	31.7	8.1
60°-70°	13.7	3.5
70°-80°	5.0	1.3
80°-90°	3.2	0.8
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°	195.3	49.8
0°-40°	280.6	71.5
0°-60°	370.4	94.4
0°-90°	392.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	392.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	311	311	311	311	311	
5°	300	304	304	307	310	28
15°	240	249	260	279	290	67
25°	166	178	197	229	252	76
35°	90	103	129	170	204	55
45°	19	32	65	115	156	18
55°	6	6	17	63	100	5
65°	2	3	10	20	41	2
75°	2	5	5	5	5	2
85°	2	3	4	4	3	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	311.3	311.3	311.3	311.3	311.3
2.5°	307.6	311.3	308.7	309.5	309.5
5°	299.6	303.6	304.0	307.3	309.8
7.5°	287.5	293.4	296.3	302.9	307.3
10°	272.9	279.9	285.7	297.0	302.9
12.5°	257.2	265.3	274.0	289.0	297.4
15°	240.4	248.8	260.5	279.1	290.5
17.5°	221.8	232.0	246.3	268.5	282.4
20°	203.9	214.1	230.6	255.8	272.9
22.5°	185.2	195.8	214.1	242.2	262.7
25°	165.9	177.6	197.3	228.7	251.7
27.5°	146.9	159.3	180.1	214.5	240.1
30°	127.9	140.3	163.0	199.9	228.0
32.5°	108.5	121.3	145.8	184.5	215.6
35°	89.5	102.7	129.0	169.9	203.5
37.5°	70.2	84.0	112.2	155.6	191.5
40°	51.9	65.8	96.1	141.4	179.0
42.5°	34.7	48.6	79.7	127.5	167.3
45°	19.0	31.8	64.7	114.7	155.6
47.5°	10.2	17.5	50.1	102.3	142.5
50°	7.7	9.5	36.9	89.2	128.6
52.5°	6.6	7.3	25.6	75.3	114.7
55°	5.5	5.8	17.2	63.2	100.5
57.5°	4.4	4.7	12.8	51.2	85.1
60°	3.3	4.0	11.3	39.5	69.8
62.5°	2.6	3.3	10.6	28.9	55.2
65°	1.8	2.6	9.5	19.7	40.6
67.5°	1.8	2.9	8.0	12.8	27.4
70°	1.5	4.0	6.9	8.4	15.3
72.5°	1.5	4.4	5.8	5.8	5.8
75°	1.5	4.7	5.1	5.1	5.1
77.5°	1.5	4.4	4.7	4.4	4.4
80°	1.5	4.0	4.0	4.0	4.0
82.5°	1.5	3.7	4.0	4.0	3.3
85°	1.5	3.3	4.0	4.0	2.9
87.5°	1.1	3.3	3.7	3.7	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)