

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: P1060455

Luminaire Tested: S124RDR-S350D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060455  
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-S350D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

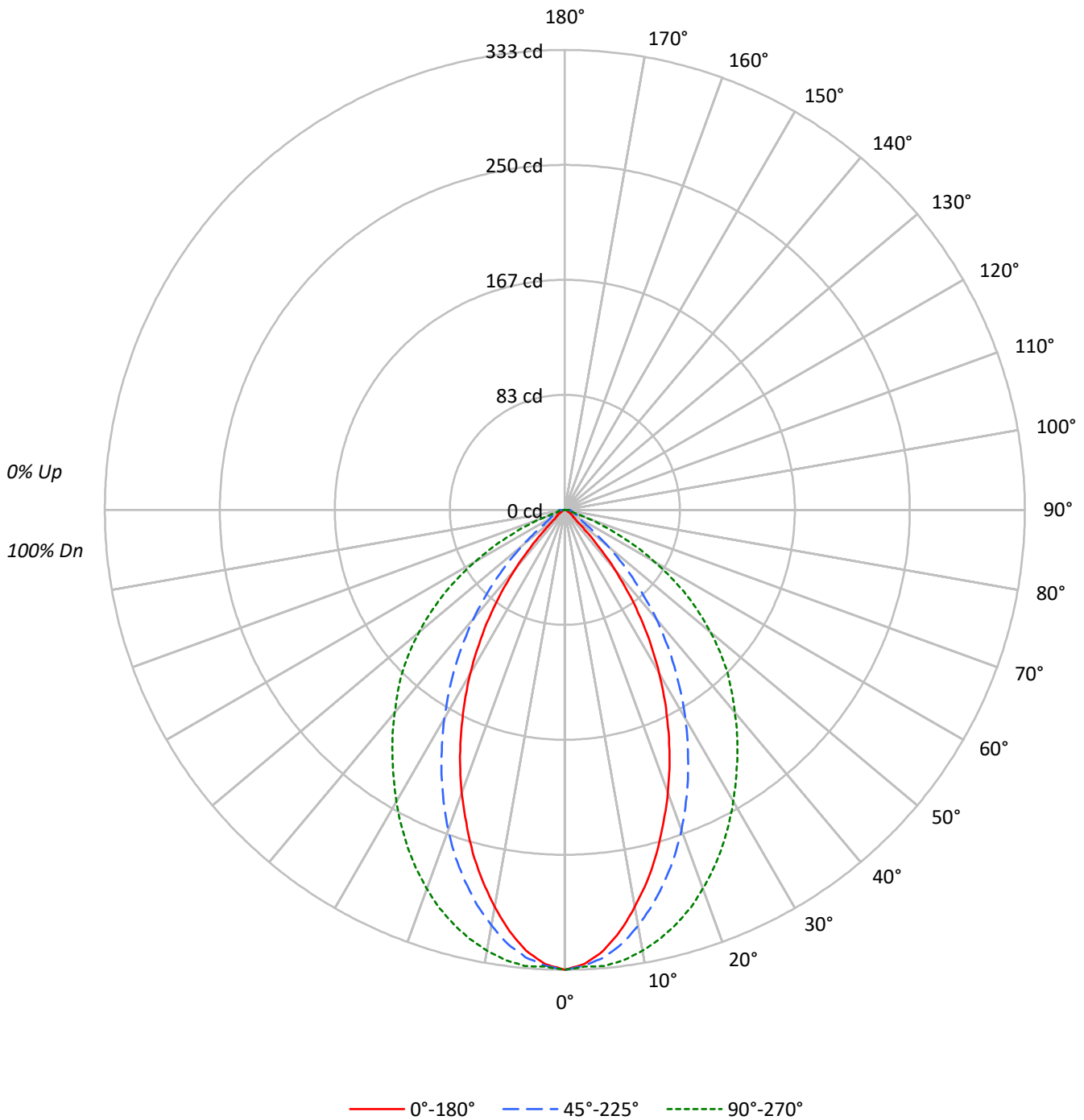
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 419.8 lumens  
Efficiency: N/A  
Efficacy: 33.6 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°	2868	2868	2868
5°	2770	2811	2865
10°	2553	2673	2834
15°	2293	2485	2771
20°	1999	2261	2676
25°	1686	2006	2559
30°	1360	1733	2425
35°	1007	1451	2289
40°	624	1156	2153
45°	247	843	2028
50°	110	529	1843
55°	89	276	1614
60°	60	208	1287
65°	41	208	884
70°	40	186	413
75°	53	183	183
80°	79	213	213
85°	158	425	306

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2028 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.5	7.3
10°-20°	78.8	18.8
20°-30°	99.5	23.7
30°-40°	91.3	21.8
40°-50°	62.2	14.8
50°-60°	33.9	8.1
60°-70°	14.7	3.5
70°-80°	5.4	1.3
80°-90°	3.4	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°	208.9	49.8
0°-40°	300.2	71.5
0°-60°	396.3	94.4
0°-90°	419.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	419.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	333	333	333	333	333	
5°	320	325	325	329	332	30
15°	257	266	279	299	311	72
25°	178	190	211	245	269	81
35°	96	110	138	182	218	59
45°	20	34	69	123	166	19
55°	6	6	18	68	108	5
65°	2	3	10	21	43	2
75°	2	5	6	6	6	2
85°	2	4	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°	333.0	333.0	333.0	333.0	333.0
2.5°	329.1	333.0	330.3	331.1	331.1
5°	320.5	324.8	325.2	328.7	331.5
7.5°	307.6	313.9	317.0	324.1	328.7
10°	292.0	299.4	305.7	317.8	324.1
12.5°	275.2	283.8	293.2	309.2	318.2
15°	257.2	266.2	278.7	298.6	310.8
17.5°	237.3	248.2	263.5	287.3	302.2
20°	218.1	229.1	246.7	273.6	292.0
22.5°	198.2	209.5	229.1	259.2	281.1
25°	177.5	190.0	211.1	244.7	269.3
27.5°	157.1	170.4	192.7	229.5	256.8
30°	136.8	150.1	174.3	213.8	243.9
32.5°	116.1	129.8	156.0	197.4	230.6
35°	95.8	109.8	138.0	181.8	217.7
37.5°	75.1	89.9	120.0	166.5	204.8
40°	55.5	70.4	102.8	151.3	191.5
42.5°	37.1	52.0	85.2	136.4	179.0
45°	20.3	34.0	69.2	122.7	166.5
47.5°	10.9	18.8	53.6	109.5	152.4
50°	8.2	10.2	39.5	95.4	137.6
52.5°	7.0	7.8	27.4	80.5	122.7
55°	5.9	6.3	18.4	67.6	107.5
57.5°	4.7	5.1	13.7	54.7	91.1
60°	3.5	4.3	12.1	42.2	74.7
62.5°	2.7	3.5	11.3	30.9	59.0
65°	2.0	2.7	10.2	21.1	43.4
67.5°	2.0	3.1	8.6	13.7	29.3
70°	1.6	4.3	7.4	9.0	16.4
72.5°	1.6	4.7	6.3	6.3	6.3
75°	1.6	5.1	5.5	5.5	5.5
77.5°	1.6	4.7	5.1	4.7	4.7
80°	1.6	4.3	4.3	4.3	4.3
82.5°	1.6	3.9	4.3	4.3	3.5
85°	1.6	3.5	4.3	4.3	3.1
87.5°	1.2	3.5	3.9	3.9	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)