

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: P1060437

Luminaire Tested: S124RDR-S350D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060437  
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-S350D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

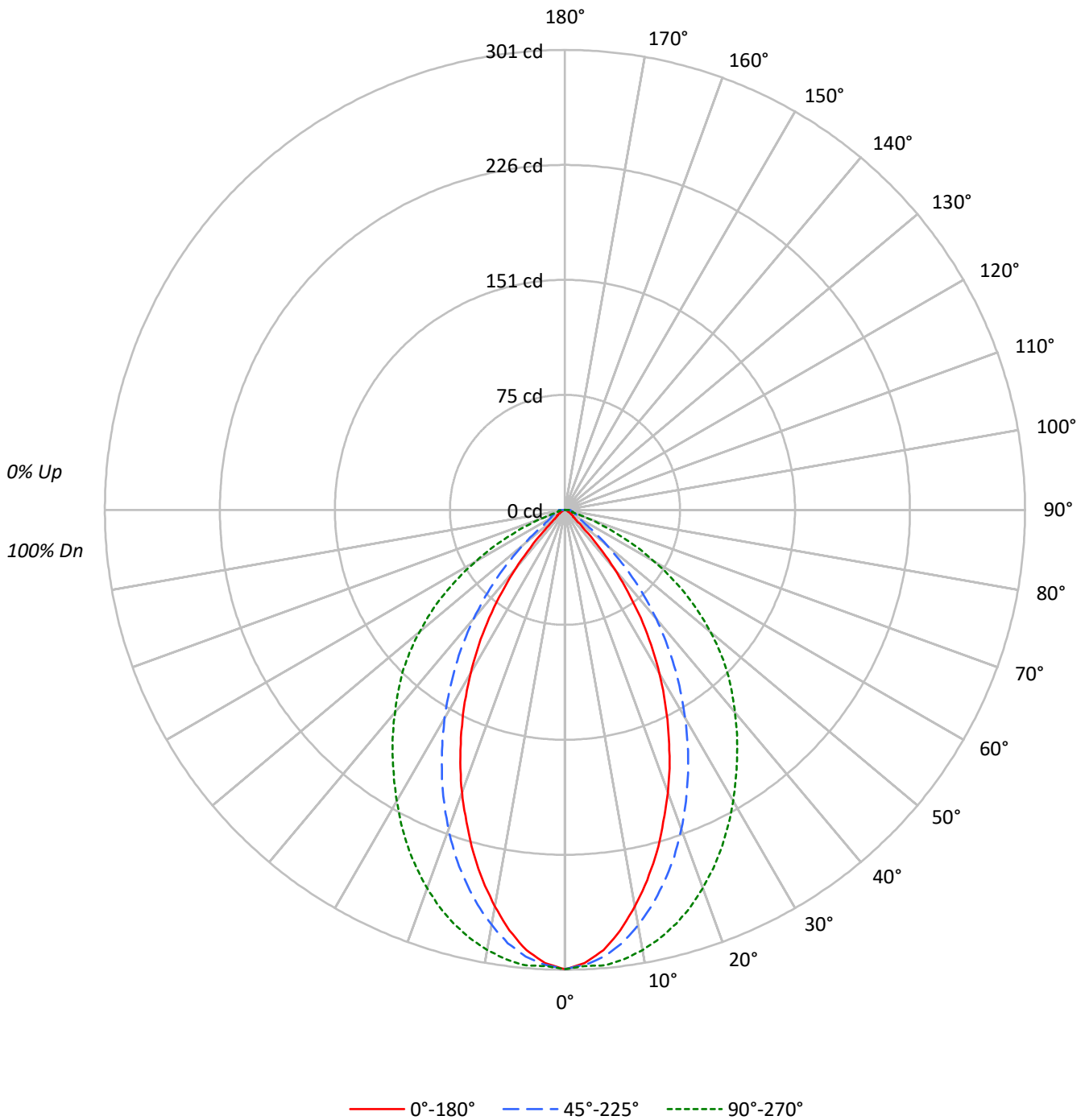
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 378.8 lumens  
Efficiency: N/A  
Efficacy: 30.3 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96  
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°	2589	2589	2589
5°	2501	2537	2586
10°	2304	2412	2558
15°	2069	2242	2501
20°	1804	2040	2415
25°	1522	1810	2310
30°	1228	1564	2189
35°	908	1309	2066
40°	563	1043	1944
45°	223	760	1830
50°	99	477	1664
55°	80	249	1456
60°	55	188	1161
65°	37	187	799
70°	35	169	373
75°	47	163	163
80°	69	193	193
85°	138	385	277

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1830 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.6	7.3
10°-20°	71.2	18.8
20°-30°	89.8	23.7
30°-40°	82.4	21.8
40°-50°	56.1	14.8
50°-60°	30.6	8.1
60°-70°	13.2	3.5
70°-80°	4.8	1.3
80°-90°	3.1	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°	188.6	49.8
0°-40°	271.0	71.5
0°-60°	357.7	94.4
0°-90°	378.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	378.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	301	301	301	301	301	
5°	289	293	294	297	299	27
15°	232	240	252	270	280	65
25°	160	172	190	221	243	73
35°	86	99	124	164	196	53
45°	18	31	62	111	150	17
55°	5	6	17	61	97	5
65°	2	2	9	19	39	2
75°	1	5	5	5	5	1
85°	1	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°	300.6	300.6	300.6	300.6	300.6
2.5°	297.0	300.6	298.1	298.8	298.8
5°	289.3	293.2	293.5	296.7	299.2
7.5°	277.6	283.3	286.1	292.5	296.7
10°	263.5	270.2	275.9	286.8	292.5
12.5°	248.4	256.1	264.6	279.1	287.2
15°	232.1	240.2	251.5	269.5	280.5
17.5°	214.1	224.0	237.8	259.3	272.7
20°	196.9	206.7	222.6	247.0	263.5
22.5°	178.9	189.1	206.7	233.9	253.7
25°	160.2	171.5	190.5	220.8	243.1
27.5°	141.8	153.8	173.9	207.1	231.8
30°	123.5	135.5	157.3	193.0	220.1
32.5°	104.8	117.1	140.8	178.2	208.1
35°	86.4	99.1	124.5	164.0	196.5
37.5°	67.7	81.1	108.3	150.3	184.9
40°	50.1	63.5	92.8	136.5	172.9
42.5°	33.5	46.9	76.9	123.1	161.6
45°	18.3	30.7	62.4	110.8	150.3
47.5°	9.9	16.9	48.3	98.8	137.6
50°	7.4	9.2	35.6	86.1	124.2
52.5°	6.4	7.1	24.7	72.7	110.8
55°	5.3	5.6	16.6	61.0	97.0
57.5°	4.2	4.6	12.3	49.4	82.2
60°	3.2	3.9	10.9	38.1	67.4
62.5°	2.5	3.2	10.2	27.9	53.3
65°	1.8	2.5	9.2	19.1	39.2
67.5°	1.8	2.8	7.8	12.3	26.5
70°	1.4	3.9	6.7	8.1	14.8
72.5°	1.4	4.2	5.6	5.6	5.6
75°	1.4	4.6	4.9	4.9	4.9
77.5°	1.4	4.2	4.6	4.2	4.2
80°	1.4	3.9	3.9	3.9	3.9
82.5°	1.4	3.5	3.9	3.9	3.2
85°	1.4	3.2	3.9	3.9	2.8
87.5°	1.1	3.2	3.5	3.5	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)