

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: P1060411

Luminaire Tested: S124RDR-S350D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060411  
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-S350D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

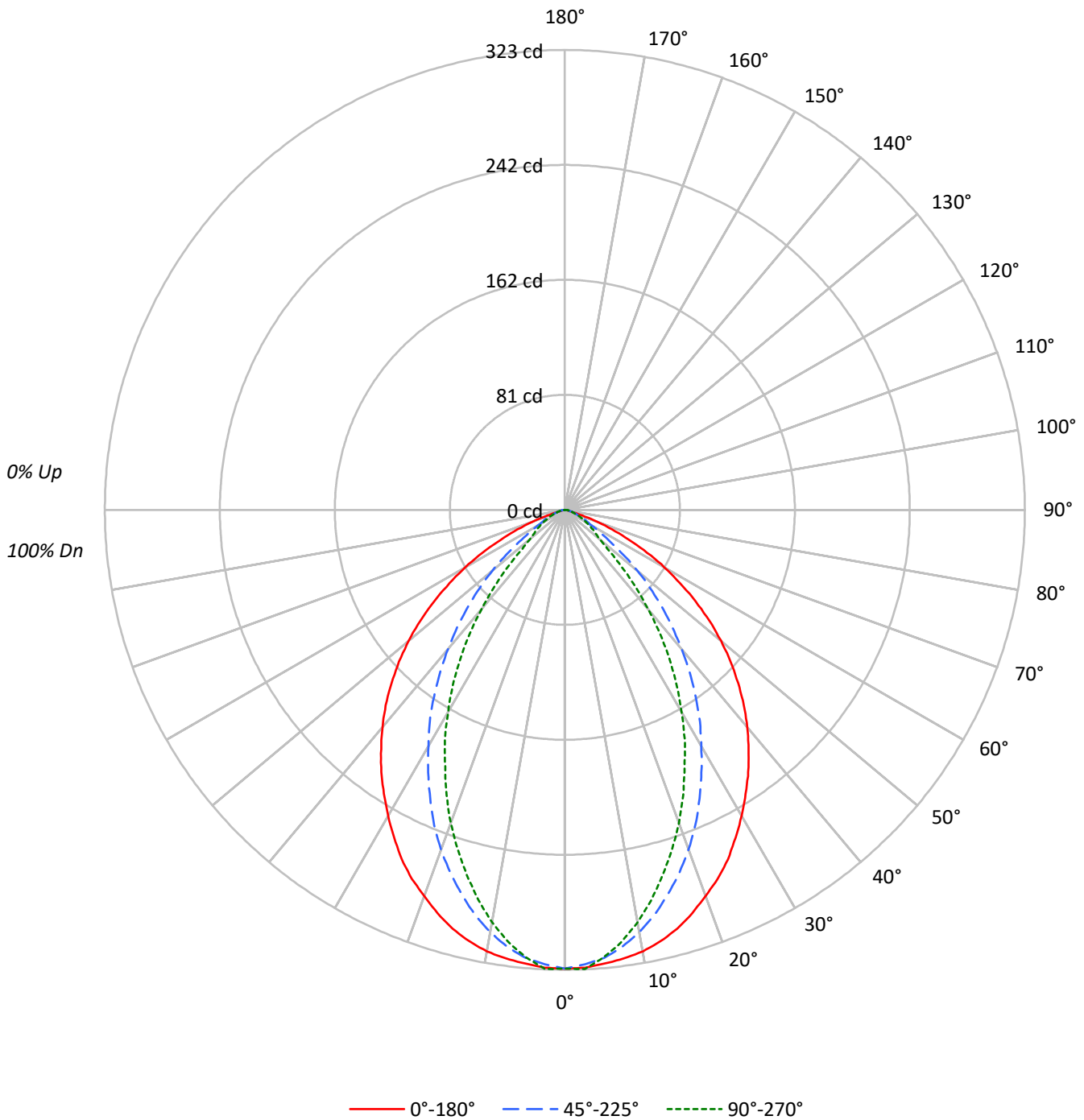
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 475.1 lumens  
Efficiency: N/A  
Efficacy: 38.0 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°	2775	2775	2775
5°	2765	2731	2726
10°	2753	2635	2572
15°	2715	2492	2367
20°	2645	2329	2146
25°	2574	2125	1889
30°	2468	1904	1629
35°	2361	1684	1346
40°	2239	1433	1021
45°	2095	1172	686
50°	1916	888	426
55°	1683	586	362
60°	1392	360	296
65°	1009	277	240
70°	549	206	184
75°	120	150	166
80°	89	114	134
85°	89	89	138

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2095 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.8	6.3
10°-20°	79.3	16.7
20°-30°	105.0	22.1
30°-40°	104.2	21.9
40°-50°	80.2	16.9
50°-60°	47.8	10.1
60°-70°	21.7	4.6
70°-80°	5.6	1.2
80°-90°	1.3	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°	214.2	45.1
0°-40°	318.4	67.0
0°-60°	446.4	94.0
0°-90°	475.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	475.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	322	322	322	322	322	
5°	320	320	316	316	315	30
15°	304	297	280	270	266	86
25°	271	251	224	205	199	124
35°	225	196	160	136	128	140
45°	172	138	96	67	56	132
55°	112	80	39	24	24	100
65°	50	30	14	12	12	50
75°	4	4	4	5	5	8
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°	322.2	322.2	322.2	322.2	322.2
2.5°	321.8	322.2	319.5	321.8	322.7
5°	319.9	320.4	315.9	315.9	315.4
7.5°	317.7	316.8	309.5	306.8	305.9
10°	314.9	311.8	301.3	295.9	294.1
12.5°	310.4	305.4	291.3	283.6	280.5
15°	304.5	296.8	279.5	270.0	265.5
17.5°	297.2	287.7	267.3	255.0	250.0
20°	288.6	275.9	254.1	238.7	234.2
22.5°	280.5	264.6	239.6	221.9	216.9
25°	270.9	251.4	223.7	205.1	198.8
27.5°	259.6	238.7	207.8	188.8	182.4
30°	248.2	225.1	191.5	171.5	163.8
32.5°	236.4	211.0	176.5	153.8	146.6
35°	224.6	196.5	160.2	135.7	128.0
37.5°	211.9	182.0	143.9	118.4	109.8
40°	199.2	167.9	127.5	101.7	90.8
42.5°	186.1	153.4	111.6	84.4	73.5
45°	172.0	138.4	96.2	67.2	56.3
47.5°	157.9	124.3	80.8	50.4	40.4
50°	143.0	109.4	66.3	36.8	31.8
52.5°	128.0	94.8	51.7	28.6	27.2
55°	112.1	79.9	39.0	24.5	24.1
57.5°	95.8	66.3	28.1	21.3	20.4
60°	80.8	53.5	20.9	18.2	17.2
62.5°	65.3	40.4	17.2	15.0	14.1
65°	49.5	29.5	13.6	11.8	11.8
67.5°	35.9	20.0	10.9	9.5	9.1
70°	21.8	12.3	8.2	7.7	7.3
72.5°	10.9	7.3	6.4	5.9	5.9
75°	3.6	4.5	4.5	5.0	5.0
77.5°	2.7	3.2	3.2	3.6	3.6
80°	1.8	2.3	2.3	2.7	2.7
82.5°	1.4	1.4	1.8	1.8	2.3
85°	0.9	0.9	0.9	1.4	1.4
87.5°	0.5	0.5	0.5	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)