

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: P1060394

Luminaire Tested: S124RDR-S350D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060394  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S350D835-X4F0-XX-UDD-SVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

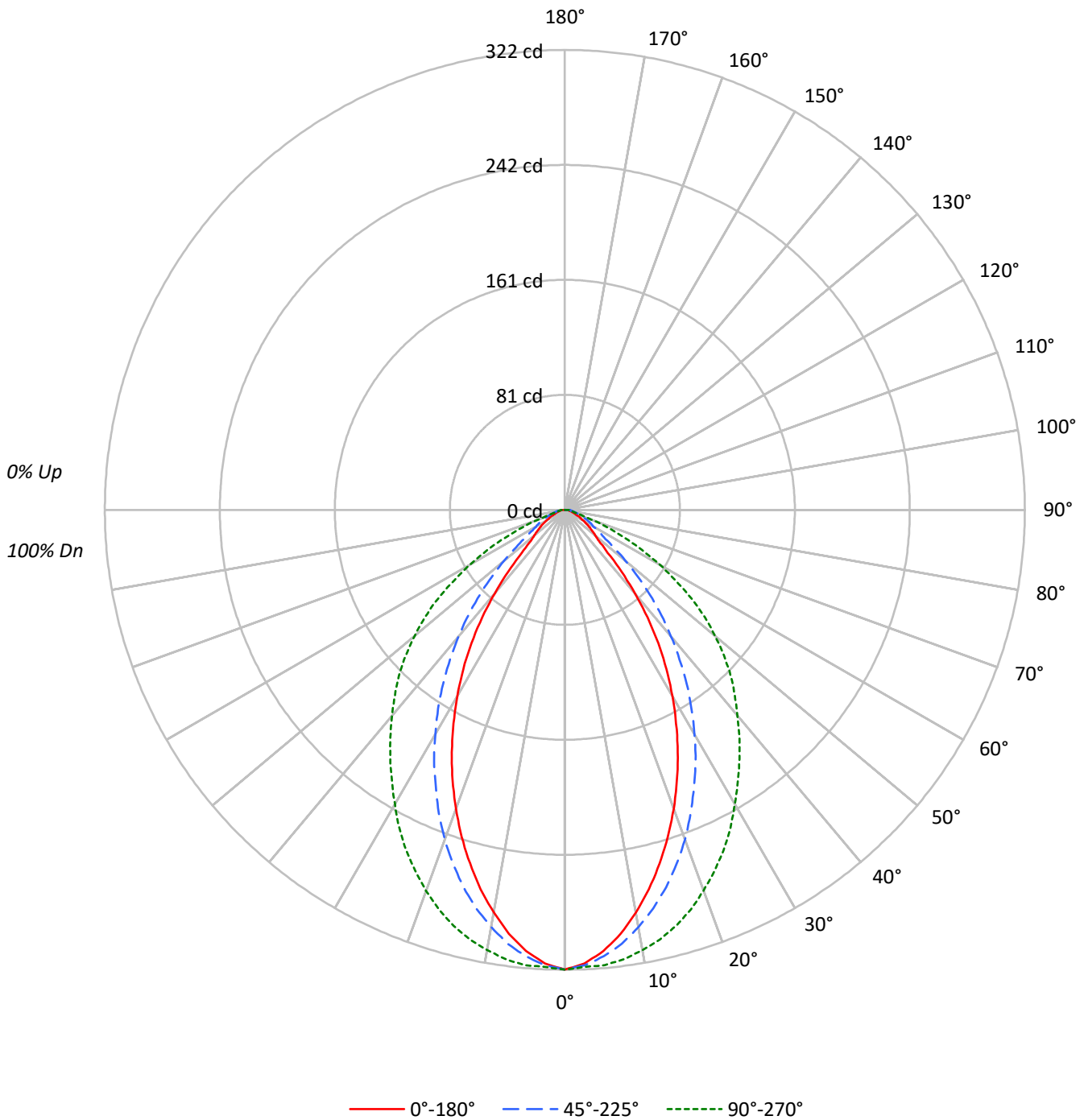
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 452.7 lumens  
Efficiency: N/A  
Efficacy: 36.2 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43				43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

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

	0°	45°	90°
0°	2772	2772	2772
5°	2680	2712	2765
10°	2503	2593	2736
15°	2286	2439	2687
20°	2042	2252	2601
25°	1779	2031	2498
30°	1498	1804	2367
35°	1197	1563	2239
40°	861	1298	2113
45°	519	1023	2000
50°	374	741	1838
55°	314	498	1629
60°	253	394	1312
65°	200	359	943
70°	176	300	506
75°	163	273	246
80°	164	283	223
85°	247	405	287

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2000 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.6	6.5
10°-20°	77.4	17.1
20°-30°	100.5	22.2
30°-40°	96.6	21.3
40°-50°	71.6	15.8
50°-60°	43.9	9.7
60°-70°	21.3	4.7
70°-80°	8.1	1.8
80°-90°	3.7	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°	207.5	45.8
0°-40°	304.0	67.2
0°-60°	419.6	92.7
0°-90°	452.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	452.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	322	322	322	322	322	
5°	310	315	314	317	320	29
15°	256	264	274	290	301	72
25°	187	197	214	241	263	86
35°	114	124	149	184	213	71
45°	43	53	84	128	164	35
55°	21	22	33	75	108	19
65°	10	11	18	28	46	10
75°	5	8	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	321.9	321.9	321.9	321.9	321.9
2.5°	317.8	321.5	319.1	319.9	320.3
5°	310.0	314.6	313.7	316.6	319.9
7.5°	299.4	304.7	306.4	312.1	317.4
10°	286.3	292.8	296.5	306.0	312.9
12.5°	272.0	278.9	285.9	298.6	308.0
15°	256.4	263.8	273.6	290.0	301.4
17.5°	240.0	248.2	260.1	279.7	293.3
20°	222.8	231.4	245.7	267.5	283.8
22.5°	205.2	214.2	230.2	254.3	273.6
25°	187.2	196.6	213.8	241.2	262.9
27.5°	168.7	178.6	198.2	227.3	251.1
30°	150.7	160.1	181.4	213.0	238.0
32.5°	132.3	142.1	165.1	198.2	225.3
35°	113.9	124.1	148.7	183.9	213.0
37.5°	95.0	106.1	131.9	170.0	200.7
40°	76.6	87.2	115.5	155.6	188.0
42.5°	58.6	70.0	99.9	141.3	176.1
45°	42.6	53.2	84.0	128.2	164.2
47.5°	31.9	38.5	69.2	115.9	151.1
50°	27.9	29.1	55.3	102.4	137.2
52.5°	24.2	25.0	43.0	87.6	123.3
55°	20.9	21.7	33.2	75.0	108.5
57.5°	17.6	18.4	26.6	62.7	91.7
60°	14.7	15.6	22.9	50.0	76.2
62.5°	12.3	12.7	20.5	38.1	61.0
65°	9.8	10.6	17.6	27.9	46.3
67.5°	8.2	9.0	14.3	19.2	32.4
70°	7.0	9.0	11.9	13.5	20.1
72.5°	5.7	8.2	9.8	9.4	9.4
75°	4.9	7.8	8.2	7.4	7.4
77.5°	4.1	7.0	6.6	6.1	5.7
80°	3.3	5.7	5.7	4.9	4.5
82.5°	2.9	4.5	4.5	4.5	3.7
85°	2.5	4.1	4.1	3.7	2.9
87.5°	1.6	3.3	3.7	3.3	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)