

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: P1058168

Luminaire Tested: S122RDR-S865D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058168  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D935-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

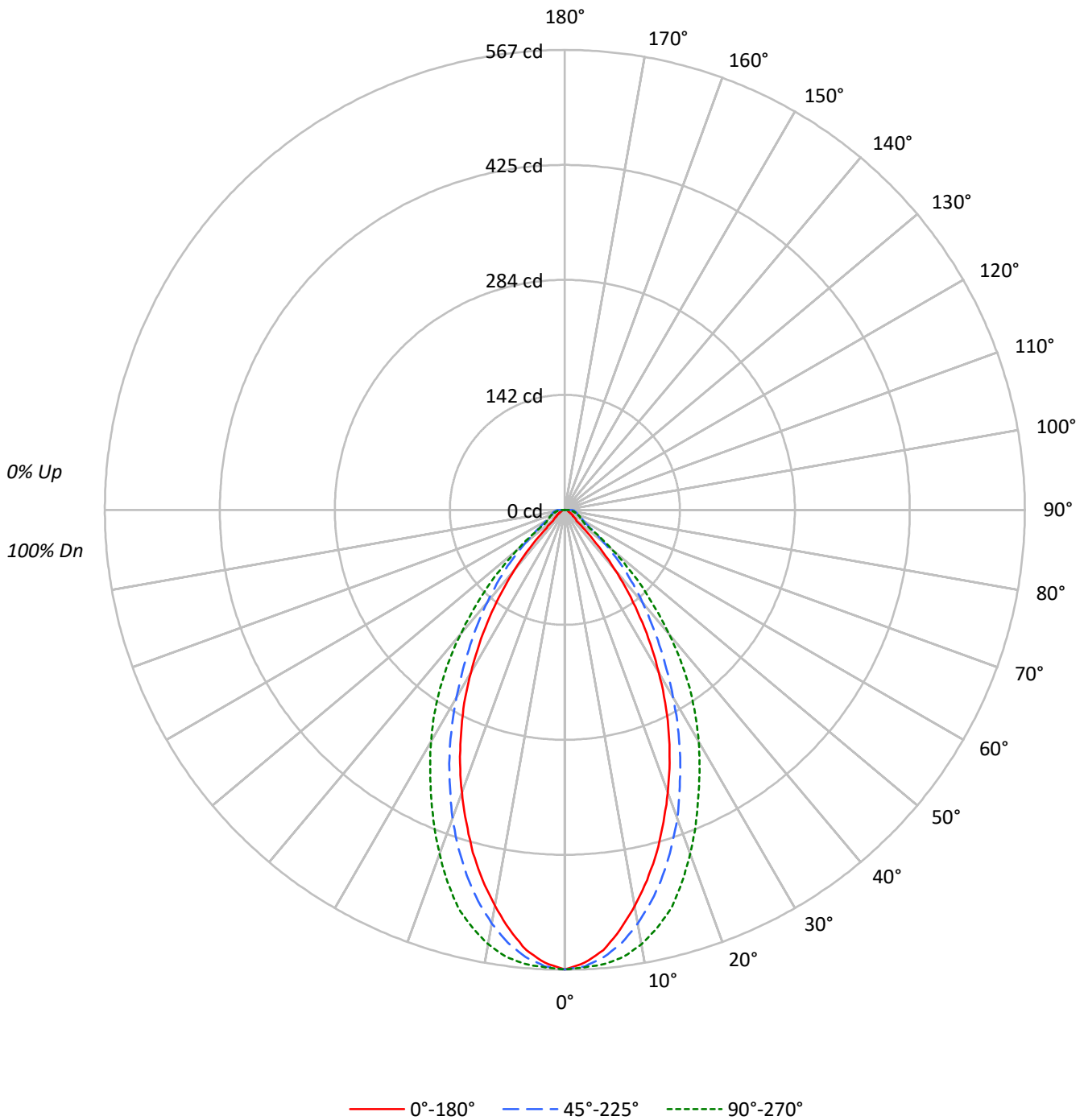
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 610.7 lumens  
Efficiency: N/A  
Efficacy: 17.4 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 35  
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				
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42				

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

	0°	45°	90°
0°	10455	10455	10455
5°	10093	10254	10414
10°	9294	9700	10189
15°	8356	8916	9705
20°	7289	7951	8866
25°	6165	6851	7934
30°	4926	5689	7031
35°	3643	4573	6039
40°	2300	3582	4810
45°	906	2690	3541
50°	468	1809	2182
55°	383	1187	978
60°	280	960	882
65°	236	899	899
70°	232	939	879
75°	307	1084	927
80°	457	1381	1041
85°	699	2308	1376

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 4611 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.8	8.5
10°-20°	130.9	21.4
20°-30°	155.5	25.5
30°-40°	129.4	21.2
40°-50°	72.3	11.8
50°-60°	29.2	4.8
60°-70°	18.7	3.1
70°-80°	14.0	2.3
80°-90°	8.9	1.5
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°	338.3	55.4
0°-40°	467.7	76.6
0°-60°	569.1	93.2
0°-90°	610.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	610.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	545	555	554	558	562	50
15°	437	450	467	491	508	122
25°	303	315	336	362	390	138
35°	162	177	203	237	268	100
45°	35	59	103	120	136	33
55°	12	25	37	36	30	10
65°	5	22	21	20	21	5
75°	4	15	15	14	13	5
85°	3	10	11	10	6	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	566.6	566.6	566.6	566.6	566.6
2.5°	559.0	567.7	563.3	563.3	564.4
5°	544.9	554.6	553.6	557.9	562.2
7.5°	522.1	532.9	538.4	548.1	555.7
10°	496.0	508.0	517.7	532.9	543.8
12.5°	467.8	479.8	493.9	513.4	527.5
15°	437.4	450.4	466.7	490.6	508.0
17.5°	403.8	417.9	436.3	462.4	480.8
20°	371.2	385.3	404.9	430.9	451.5
22.5°	337.6	349.5	370.1	396.2	421.1
25°	302.8	314.8	336.5	362.5	389.7
27.5°	268.1	280.0	301.7	328.9	359.3
30°	231.2	244.2	267.0	297.4	330.0
32.5°	196.5	209.5	233.4	267.0	299.6
35°	161.7	176.9	203.0	236.6	268.1
37.5°	128.1	145.4	174.8	206.2	234.4
40°	95.5	114.0	148.7	175.8	199.7
42.5°	63.0	84.7	124.8	147.6	166.1
45°	34.7	58.6	103.1	120.5	135.7
47.5°	19.5	38.0	81.4	95.5	104.2
50°	16.3	28.2	63.0	72.7	76.0
52.5°	13.0	26.0	47.8	53.2	51.0
55°	11.9	25.0	36.9	35.8	30.4
57.5°	9.8	25.0	29.3	26.0	26.0
60°	7.6	23.9	26.0	22.8	23.9
62.5°	6.5	22.8	23.9	21.7	21.7
65°	5.4	21.7	20.6	19.5	20.6
67.5°	4.3	19.5	19.5	18.5	18.5
70°	4.3	18.5	17.4	16.3	16.3
72.5°	4.3	16.3	16.3	15.2	15.2
75°	4.3	15.2	15.2	14.1	13.0
77.5°	4.3	13.0	14.1	13.0	11.9
80°	4.3	11.9	13.0	11.9	9.8
82.5°	4.3	10.9	11.9	10.9	8.7
85°	3.3	9.8	10.9	9.8	6.5
87.5°	3.3	9.8	10.9	8.7	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)