

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: P1057988

Luminaire Tested: S122RDR-S485D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057988  
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-S485D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

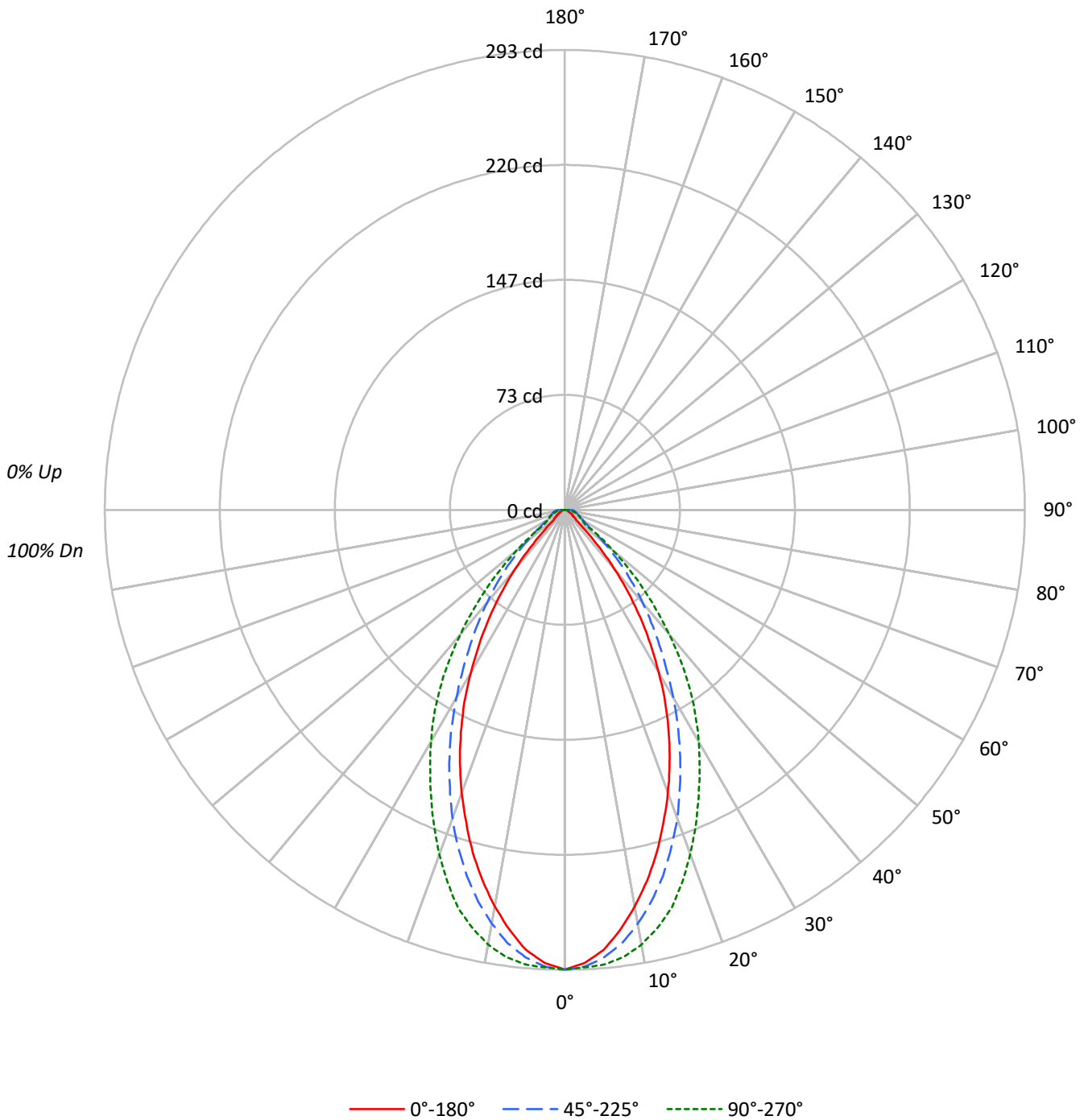
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 315.8 lumens  
Efficiency: N/A  
Efficacy: 16.1 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): 19.6  
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°	5405	5405	5405
5°	5218	5301	5385
10°	4806	5016	5269
15°	4321	4610	5017
20°	3768	4110	4585
25°	3188	3543	4103
30°	2546	2943	3635
35°	1883	2363	3122
40°	1190	1852	2488
45°	470	1391	1829
50°	241	933	1128
55°	199	614	505
60°	144	498	454
65°	122	467	467
70°	119	486	453
75°	157	563	478
80°	234	712	542
85°	360	1186	720

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 2369 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.8	8.5
10°-20°	67.7	21.4
20°-30°	80.4	25.5
30°-40°	66.9	21.2
40°-50°	37.4	11.8
50°-60°	15.1	4.8
60°-70°	9.6	3.1
70°-80°	7.2	2.3
80°-90°	4.6	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°	174.9	55.4
0°-40°	241.8	76.6
0°-60°	294.3	93.2
0°-90°	315.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	315.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	293	293	293	293	293	
5°	282	287	286	288	291	26
15°	226	233	241	254	263	63
25°	157	163	174	187	202	71
35°	84	92	105	122	139	52
45°	18	30	53	62	70	17
55°	6	13	19	18	16	5
65°	3	11	11	10	11	3
75°	2	8	8	7	7	2
85°	2	5	6	5	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	292.9	292.9	292.9	292.9	292.9
2.5°	289.0	293.5	291.3	291.3	291.8
5°	281.7	286.8	286.2	288.5	290.7
7.5°	269.9	275.5	278.4	283.4	287.3
10°	256.5	262.6	267.7	275.5	281.2
12.5°	241.9	248.0	255.3	265.4	272.7
15°	226.2	232.9	241.3	253.7	262.6
17.5°	208.8	216.1	225.6	239.1	248.6
20°	191.9	199.2	209.3	222.8	233.5
22.5°	174.5	180.7	191.4	204.8	217.7
25°	156.6	162.7	174.0	187.4	201.5
27.5°	138.6	144.8	156.0	170.0	185.8
30°	119.5	126.3	138.1	153.8	170.6
32.5°	101.6	108.3	120.7	138.1	154.9
35°	83.6	91.5	104.9	122.3	138.6
37.5°	66.2	75.2	90.4	106.6	121.2
40°	49.4	58.9	76.9	90.9	103.3
42.5°	32.5	43.8	64.5	76.3	85.9
45°	18.0	30.3	53.3	62.3	70.1
47.5°	10.1	19.6	42.1	49.4	53.9
50°	8.4	14.6	32.5	37.6	39.3
52.5°	6.7	13.5	24.7	27.5	26.4
55°	6.2	12.9	19.1	18.5	15.7
57.5°	5.1	12.9	15.2	13.5	13.5
60°	3.9	12.3	13.5	11.8	12.3
62.5°	3.4	11.8	12.3	11.2	11.2
65°	2.8	11.2	10.7	10.1	10.7
67.5°	2.2	10.1	10.1	9.5	9.5
70°	2.2	9.5	9.0	8.4	8.4
72.5°	2.2	8.4	8.4	7.9	7.9
75°	2.2	7.9	7.9	7.3	6.7
77.5°	2.2	6.7	7.3	6.7	6.2
80°	2.2	6.2	6.7	6.2	5.1
82.5°	2.2	5.6	6.2	5.6	4.5
85°	1.7	5.1	5.6	5.1	3.4
87.5°	1.7	5.1	5.6	4.5	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)