

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: P1058023

Luminaire Tested: S122RDR-S485D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058023  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D950-X4F0-XX-UDD-BVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

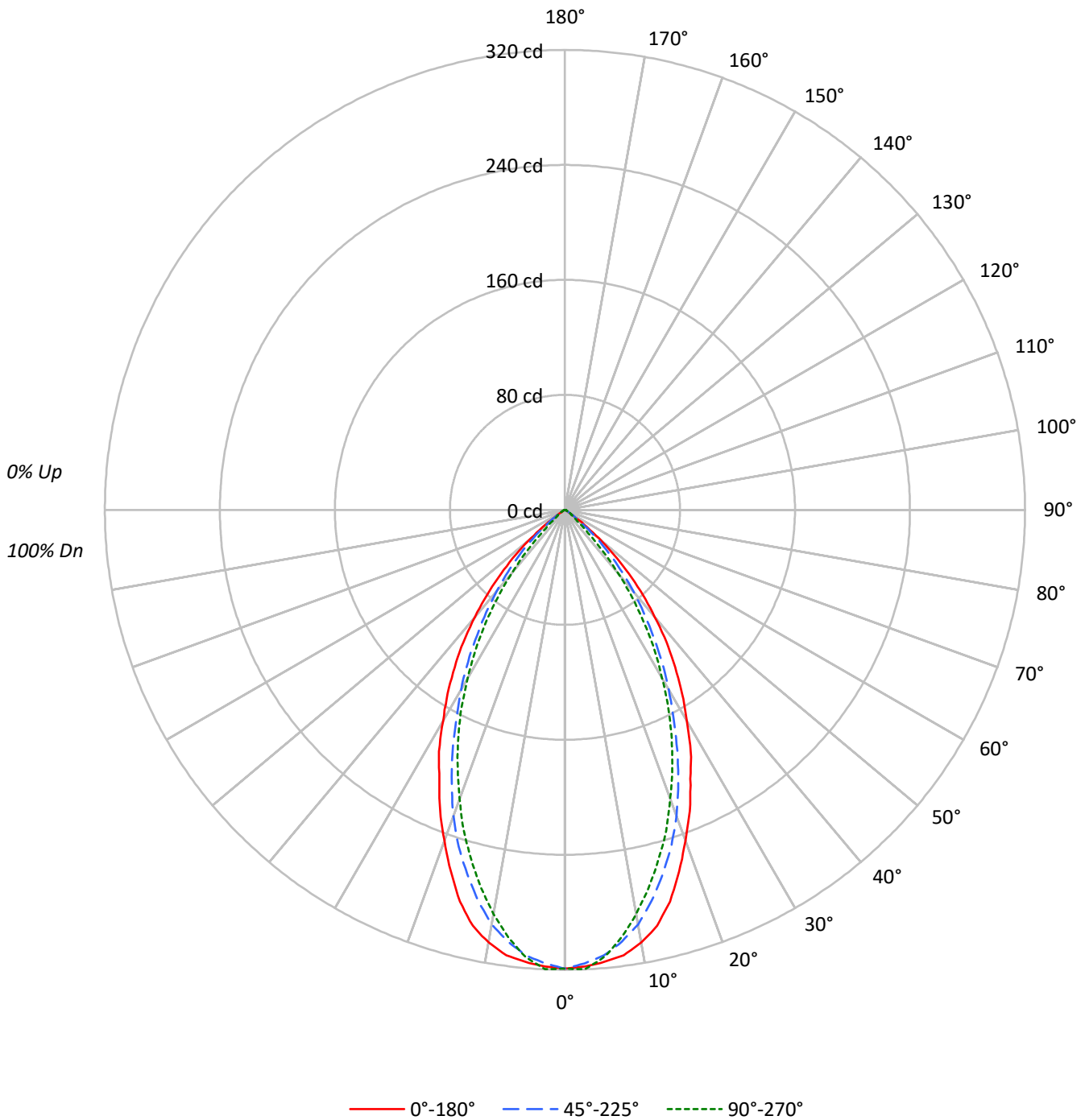
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 300.2 lumens  
Efficiency: N/A  
Efficacy: 15.3 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88  
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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93				
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86				
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79				
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73				
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67				
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62				
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58				
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54				
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51				
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47				

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

	0°	45°	90°
0°	5890	5890	5890
5°	5850	5762	5788
10°	5728	5488	5349
15°	5389	5015	4808
20°	4811	4454	4200
25°	4204	3765	3573
30°	3609	3077	2876
35°	3010	2401	2158
40°	2341	1773	1383
45°	1639	1180	598
50°	890	620	212
55°	129	216	151
60°	26	48	100
65°	0	31	57
70°	0	0	38
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1639 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.3	9.8
10°-20°	73.9	24.6
20°-30°	86.2	28.7
30°-40°	69.1	23.0
40°-50°	34.3	11.4
50°-60°	6.8	2.3
60°-70°	0.6	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	189.4	63.1
0°-40°	258.4	86.1
0°-60°	299.5	99.8
0°-90°	300.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	300.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	319	319	319	319	319	
5°	316	316	311	312	312	30
15°	282	277	262	256	252	78
25°	206	196	185	181	176	95
35°	134	120	107	102	96	83
45°	63	55	45	30	23	48
55°	4	8	7	4	5	8
65°	0	0	1	1	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	319.2	319.2	319.2	319.2	319.2
2.5°	317.9	319.2	315.8	319.2	319.9
5°	315.8	315.8	311.1	311.8	312.5
7.5°	312.5	311.1	303.0	301.7	300.3
10°	305.7	303.0	292.9	287.5	285.5
12.5°	296.3	292.2	278.7	272.6	269.3
15°	282.1	276.7	262.5	255.8	251.7
17.5°	263.9	259.1	245.7	238.2	234.2
20°	245.0	238.2	226.8	219.3	213.9
22.5°	226.8	218.0	205.8	200.4	195.0
25°	206.5	196.4	184.9	180.9	175.5
27.5°	189.6	176.8	163.3	160.6	155.9
30°	169.4	157.2	144.4	140.4	135.0
32.5°	151.8	138.3	125.5	120.8	116.1
35°	133.6	120.1	106.6	101.9	95.8
37.5°	116.1	103.3	89.8	82.3	76.9
40°	97.2	86.4	73.6	64.1	57.4
42.5°	80.3	70.9	58.7	46.6	39.8
45°	62.8	55.3	45.2	30.4	22.9
47.5°	46.6	41.2	33.1	17.5	12.1
50°	31.0	29.0	21.6	8.8	7.4
52.5°	16.9	18.2	12.8	5.4	6.1
55°	4.0	8.1	6.7	4.0	4.7
57.5°	0.7	1.3	3.4	3.4	3.4
60°	0.7	0.7	1.3	2.0	2.7
62.5°	0.7	0.0	0.7	1.3	2.0
65°	0.0	0.0	0.7	0.7	1.3
67.5°	0.0	0.0	0.0	0.7	0.7
70°	0.0	0.0	0.0	0.7	0.7
72.5°	0.0	0.0	0.0	0.0	0.7
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)