

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: P1057916

Luminaire Tested: S122RDR-S290D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057916  
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-S290D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

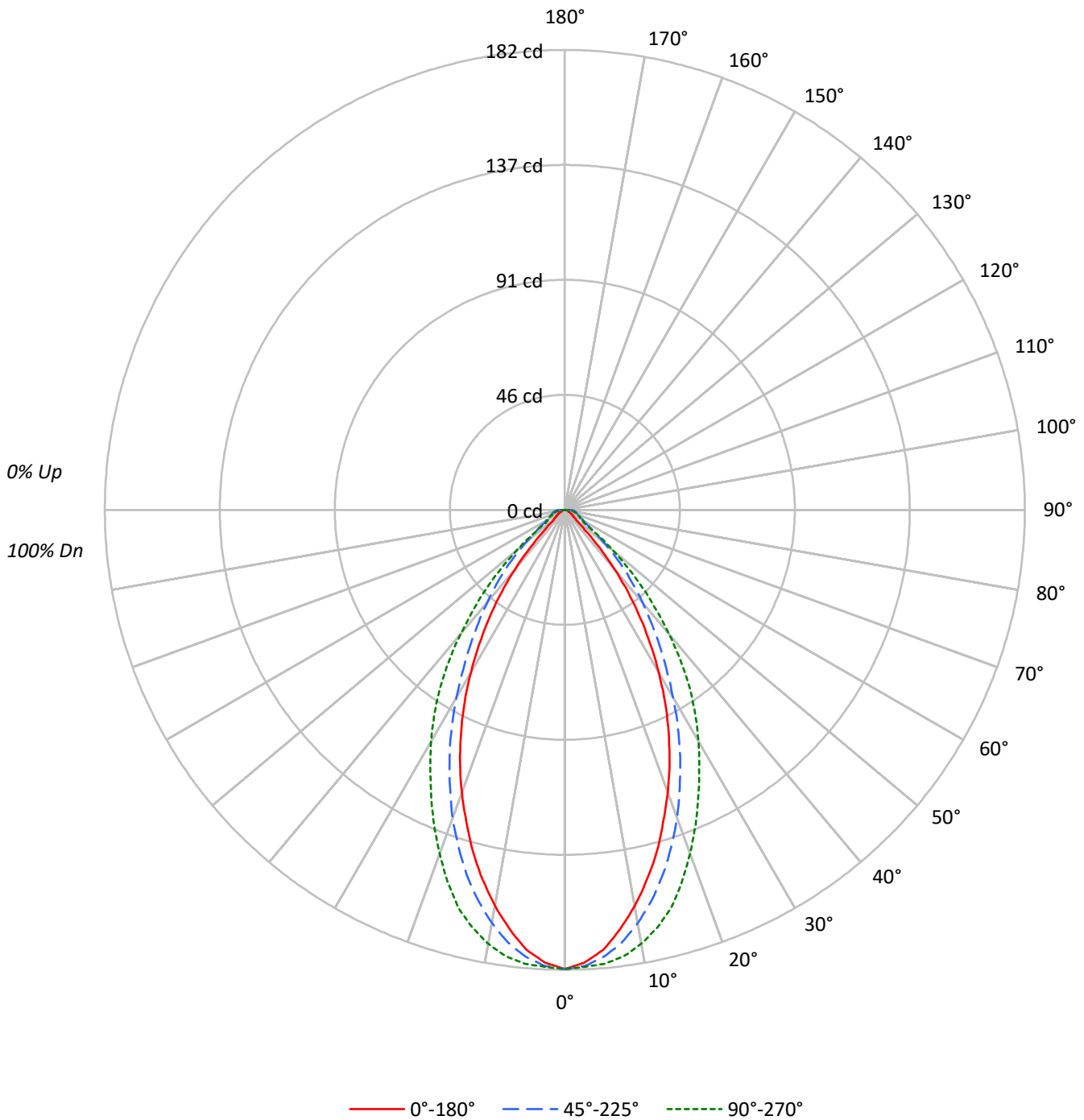
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 195.9 lumens  
Efficiency: N/A  
Efficacy: 15.7 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): 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									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	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°	3353	3353	3353
5°	3238	3288	3340
10°	2981	3112	3268
15°	2680	2860	3112
20°	2339	2549	2843
25°	1977	2197	2545
30°	1581	1824	2254
35°	1169	1466	1937
40°	737	1149	1544
45°	290	864	1135
50°	149	580	700
55°	122	380	312
60°	89	310	284
65°	74	288	288
70°	76	302	281
75°	100	349	299
80°	149	446	329
85°	212	741	445

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 1481 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	16.6	8.5
10°-20°	42.0	21.4
20°-30°	49.9	25.5
30°-40°	41.5	21.2
40°-50°	23.2	11.8
50°-60°	9.4	4.8
60°-70°	6.0	3.1
70°-80°	4.5	2.3
80°-90°	2.9	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°	108.5	55.4
0°-40°	150.0	76.6
0°-60°	182.5	93.2
0°-90°	195.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	195.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	182	182	182	182	182	
5°	175	178	178	179	180	16
15°	140	144	150	157	163	39
25°	97	101	108	116	125	44
35°	52	57	65	76	86	32
45°	11	19	33	39	44	10
55°	4	8	12	12	10	3
65°	2	7	7	6	7	2
75°	1	5	5	4	4	1
85°	1	3	4	3	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	181.7	181.7	181.7	181.7	181.7
2.5°	179.3	182.1	180.7	180.7	181.0
5°	174.8	177.9	177.5	178.9	180.3
7.5°	167.4	170.9	172.7	175.8	178.2
10°	159.1	162.9	166.1	170.9	174.4
12.5°	150.0	153.9	158.4	164.7	169.2
15°	140.3	144.5	149.7	157.4	162.9
17.5°	129.5	134.0	139.9	148.3	154.2
20°	119.1	123.6	129.8	138.2	144.8
22.5°	108.3	112.1	118.7	127.1	135.1
25°	97.1	101.0	107.9	116.3	125.0
27.5°	86.0	89.8	96.8	105.5	115.2
30°	74.2	78.3	85.6	95.4	105.8
32.5°	63.0	67.2	74.8	85.6	96.1
35°	51.9	56.7	65.1	75.9	86.0
37.5°	41.1	46.6	56.0	66.1	75.2
40°	30.6	36.6	47.7	56.4	64.1
42.5°	20.2	27.2	40.0	47.3	53.3
45°	11.1	18.8	33.1	38.6	43.5
47.5°	6.3	12.2	26.1	30.6	33.4
50°	5.2	9.1	20.2	23.3	24.4
52.5°	4.2	8.4	15.3	17.1	16.4
55°	3.8	8.0	11.8	11.5	9.7
57.5°	3.1	8.0	9.4	8.4	8.4
60°	2.4	7.7	8.4	7.3	7.7
62.5°	2.1	7.3	7.7	7.0	7.0
65°	1.7	7.0	6.6	6.3	6.6
67.5°	1.4	6.3	6.3	5.9	5.9
70°	1.4	5.9	5.6	5.2	5.2
72.5°	1.4	5.2	5.2	4.9	4.9
75°	1.4	4.9	4.9	4.5	4.2
77.5°	1.4	4.2	4.5	4.2	3.8
80°	1.4	3.8	4.2	3.8	3.1
82.5°	1.4	3.5	3.8	3.5	2.8
85°	1.0	3.1	3.5	3.1	2.1
87.5°	1.0	3.1	3.5	2.8	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)