

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: P1057934

Luminaire Tested: S122RDR-S290D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057934  
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-S290D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

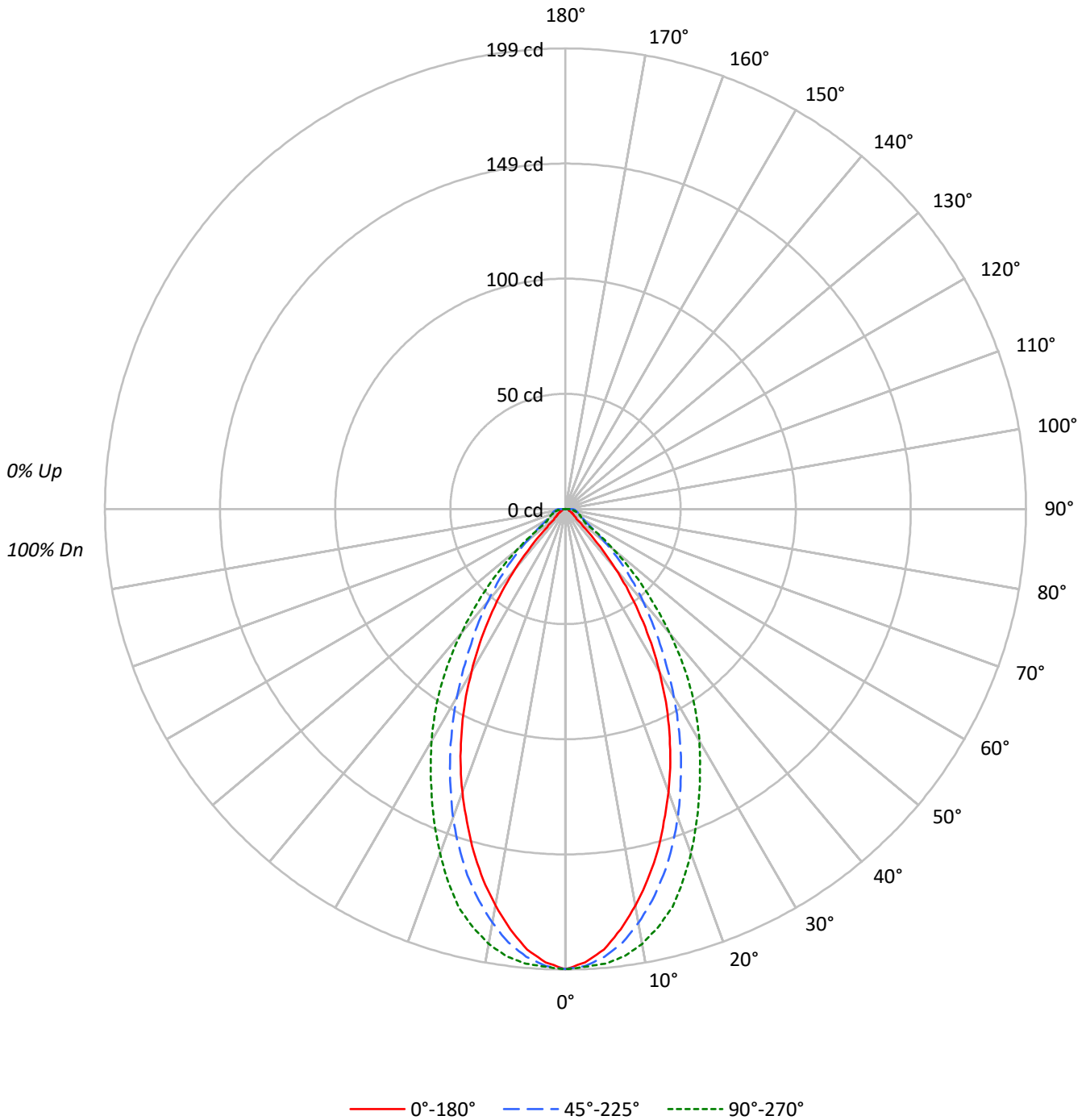
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 214.2 lumens  
Efficiency: N/A  
Efficacy: 17.1 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): 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°	3668	3668	3668
5°	3540	3597	3653
10°	3260	3403	3575
15°	2930	3127	3404
20°	2557	2788	3110
25°	2162	2402	2783
30°	1728	1996	2465
35°	1277	1604	2117
40°	807	1257	1689
45°	318	945	1242
50°	164	634	766
55°	135	415	344
60°	100	336	310
65°	83	314	314
70°	81	329	308
75°	107	378	328
80°	159	489	361
85°	233	805	487

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 1608 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	18.2	8.5
10°-20°	45.9	21.4
20°-30°	54.6	25.5
30°-40°	45.4	21.2
40°-50°	25.4	11.8
50°-60°	10.2	4.8
60°-70°	6.6	3.1
70°-80°	4.9	2.3
80°-90°	3.1	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°	118.7	55.4
0°-40°	164.0	76.6
0°-60°	199.7	93.2
0°-90°	214.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	214.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	199	199	199	199	199	
5°	191	195	194	196	197	18
15°	153	158	164	172	178	43
25°	106	110	118	127	137	48
35°	57	62	71	83	94	35
45°	12	21	36	42	48	11
55°	4	9	13	13	11	4
65°	2	8	7	7	7	2
75°	2	5	5	5	5	2
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°	198.8	198.8	198.8	198.8	198.8
2.5°	196.1	199.1	197.6	197.6	198.0
5°	191.1	194.6	194.2	195.7	197.2
7.5°	183.1	186.9	188.9	192.3	194.9
10°	174.0	178.2	181.6	186.9	190.8
12.5°	164.1	168.3	173.2	180.1	185.0
15°	153.4	158.0	163.7	172.1	178.2
17.5°	141.6	146.6	153.1	162.2	168.7
20°	130.2	135.2	142.0	151.2	158.4
22.5°	118.4	122.6	129.8	139.0	147.7
25°	106.2	110.4	118.0	127.2	136.7
27.5°	94.0	98.2	105.8	115.4	126.0
30°	81.1	85.7	93.7	104.3	115.7
32.5°	68.9	73.5	81.9	93.7	105.1
35°	56.7	62.1	71.2	83.0	94.0
37.5°	44.9	51.0	61.3	72.3	82.2
40°	33.5	40.0	52.2	61.7	70.1
42.5°	22.1	29.7	43.8	51.8	58.3
45°	12.2	20.6	36.2	42.3	47.6
47.5°	6.9	13.3	28.6	33.5	36.6
50°	5.7	9.9	22.1	25.5	26.7
52.5°	4.6	9.1	16.8	18.7	17.9
55°	4.2	8.8	12.9	12.6	10.7
57.5°	3.4	8.8	10.3	9.1	9.1
60°	2.7	8.4	9.1	8.0	8.4
62.5°	2.3	8.0	8.4	7.6	7.6
65°	1.9	7.6	7.2	6.9	7.2
67.5°	1.5	6.9	6.9	6.5	6.5
70°	1.5	6.5	6.1	5.7	5.7
72.5°	1.5	5.7	5.7	5.3	5.3
75°	1.5	5.3	5.3	4.9	4.6
77.5°	1.5	4.6	4.9	4.6	4.2
80°	1.5	4.2	4.6	4.2	3.4
82.5°	1.5	3.8	4.2	3.8	3.0
85°	1.1	3.4	3.8	3.4	2.3
87.5°	1.1	3.4	3.8	3.0	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)