

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: P1057906

Luminaire Tested: S122RDR-S290D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057906  
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-S290D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

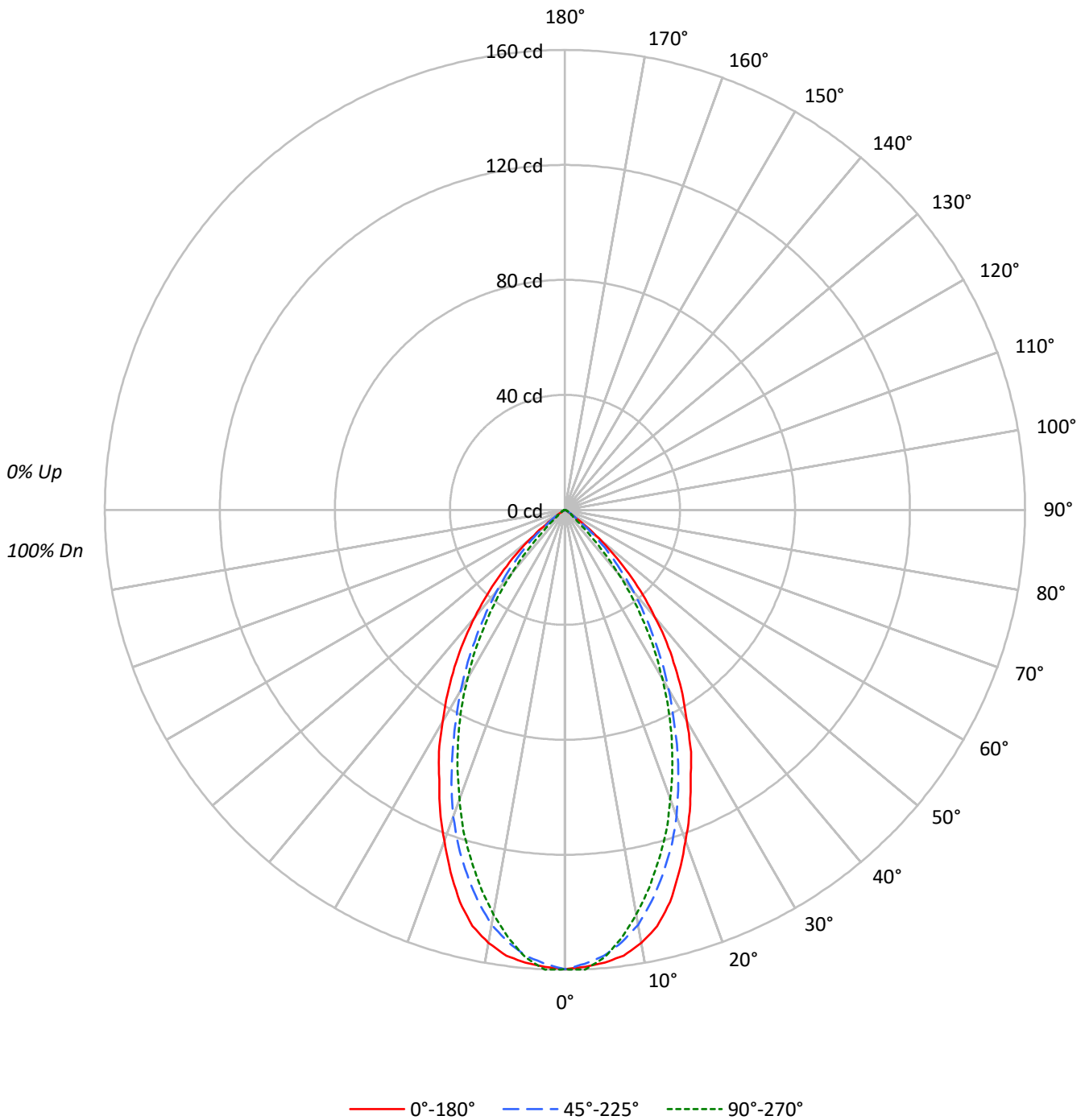
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 150.2 lumens  
Efficiency: N/A  
Efficacy: 12.0 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): 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	
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	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	63
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°	2949	2949	2949
5°	2928	2884	2897
10°	2867	2747	2678
15°	2697	2510	2407
20°	2407	2229	2103
25°	2105	1883	1788
30°	1807	1541	1440
35°	1507	1203	1081
40°	1171	886	691
45°	819	590	300
50°	445	310	106
55°	64	109	77
60°	11	26	52
65°	0	13	31
70°	0	0	16
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 819 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	14.7	9.8
10°-20°	37.0	24.6
20°-30°	43.1	28.7
30°-40°	34.6	23.0
40°-50°	17.2	11.4
50°-60°	3.4	2.3
60°-70°	0.3	0.2
70°-80°	0.0	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°	94.8	63.1
0°-40°	129.4	86.1
0°-60°	149.9	99.8
0°-90°	150.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	150.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	160	160	160	160	160	
5°	158	158	156	156	156	15
15°	141	138	131	128	126	39
25°	103	98	92	90	88	48
35°	67	60	53	51	48	42
45°	31	28	23	15	12	24
55°	2	4	3	2	2	4
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	159.8	159.8	159.8	159.8	159.8
2.5°	159.1	159.8	158.1	159.8	160.1
5°	158.1	158.1	155.7	156.0	156.4
7.5°	156.4	155.7	151.7	151.0	150.3
10°	153.0	151.7	146.6	143.9	142.9
12.5°	148.3	146.3	139.5	136.5	134.8
15°	141.2	138.5	131.4	128.0	126.0
17.5°	132.1	129.7	122.9	119.2	117.2
20°	122.6	119.2	113.5	109.8	107.1
22.5°	113.5	109.1	103.0	100.3	97.6
25°	103.4	98.3	92.5	90.5	87.8
27.5°	94.9	88.5	81.7	80.4	78.0
30°	84.8	78.7	72.3	70.3	67.6
32.5°	76.0	69.2	62.8	60.5	58.1
35°	66.9	60.1	53.4	51.0	48.0
37.5°	58.1	51.7	44.9	41.2	38.5
40°	48.6	43.2	36.8	32.1	28.7
42.5°	40.2	35.5	29.4	23.3	19.9
45°	31.4	27.7	22.6	15.2	11.5
47.5°	23.3	20.6	16.6	8.8	6.1
50°	15.5	14.5	10.8	4.4	3.7
52.5°	8.4	9.1	6.4	2.7	3.0
55°	2.0	4.1	3.4	2.0	2.4
57.5°	0.3	0.7	1.7	1.7	1.7
60°	0.3	0.3	0.7	1.0	1.4
62.5°	0.3	0.0	0.3	0.7	1.0
65°	0.0	0.0	0.3	0.3	0.7
67.5°	0.0	0.0	0.0	0.3	0.3
70°	0.0	0.0	0.0	0.3	0.3
72.5°	0.0	0.0	0.0	0.0	0.3
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)