

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: P1057924

Luminaire Tested: S122RDR-S290D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057924  
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-S290D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

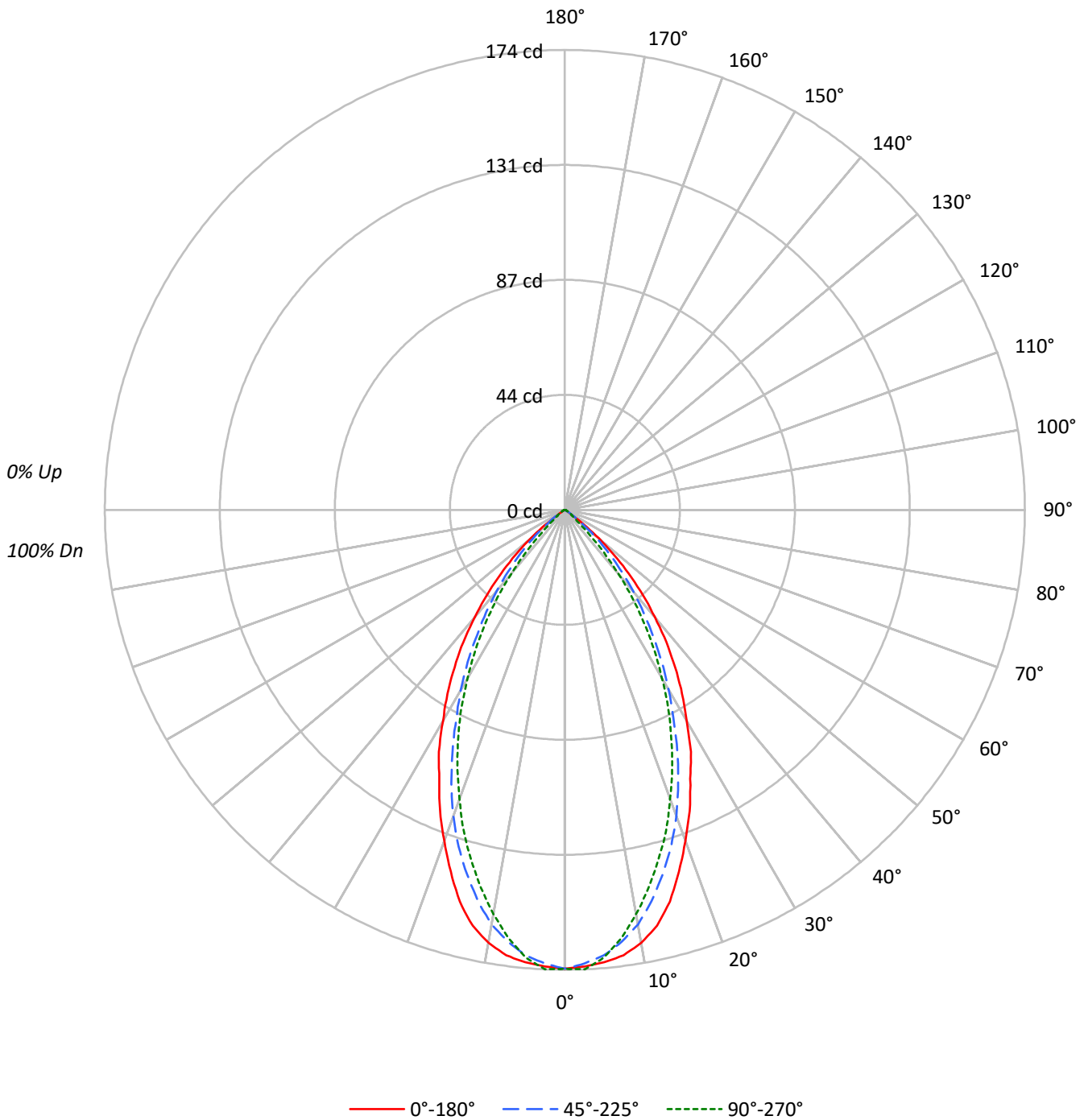
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 163.3 lumens  
Efficiency: N/A  
Efficacy: 13.1 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	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°	3203	3203	3203
5°	3182	3134	3149
10°	3116	2985	2910
15°	2932	2728	2615
20°	2618	2421	2286
25°	2286	2048	1942
30°	1962	1675	1564
35°	1638	1307	1174
40°	1274	964	752
45°	890	642	326
50°	485	336	115
55°	71	119	84
60°	15	26	55
65°	0	17	31
70°	0	0	22
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 890 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	15.9	9.8
10°-20°	40.2	24.6
20°-30°	46.9	28.7
30°-40°	37.6	23.0
40°-50°	18.7	11.4
50°-60°	3.7	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°	103.0	63.1
0°-40°	140.6	86.1
0°-60°	162.9	99.8
0°-90°	163.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	163.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	174	174	174	174	174	
5°	172	172	169	170	170	16
15°	154	150	143	139	137	43
25°	112	107	101	98	95	52
35°	73	65	58	55	52	45
45°	34	30	25	16	12	26
55°	2	4	4	2	3	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	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	173.6	173.6	173.6	173.6	173.6
2.5°	172.9	173.6	171.8	173.6	174.0
5°	171.8	171.8	169.2	169.6	170.0
7.5°	170.0	169.2	164.8	164.1	163.4
10°	166.3	164.8	159.3	156.4	155.3
12.5°	161.2	159.0	151.6	148.3	146.5
15°	153.5	150.5	142.8	139.1	136.9
17.5°	143.5	141.0	133.6	129.6	127.4
20°	133.3	129.6	123.3	119.3	116.4
22.5°	123.3	118.6	112.0	109.0	106.1
25°	112.3	106.8	100.6	98.4	95.4
27.5°	103.2	96.2	88.8	87.4	84.8
30°	92.1	85.5	78.6	76.4	73.4
32.5°	82.6	75.3	68.3	65.7	63.1
35°	72.7	65.3	58.0	55.4	52.1
37.5°	63.1	56.2	48.8	44.8	41.9
40°	52.9	47.0	40.0	34.9	31.2
42.5°	43.7	38.5	31.9	25.3	21.7
45°	34.1	30.1	24.6	16.5	12.5
47.5°	25.3	22.4	18.0	9.5	6.6
50°	16.9	15.8	11.7	4.8	4.0
52.5°	9.2	9.9	7.0	2.9	3.3
55°	2.2	4.4	3.7	2.2	2.6
57.5°	0.4	0.7	1.8	1.8	1.8
60°	0.4	0.4	0.7	1.1	1.5
62.5°	0.4	0.0	0.4	0.7	1.1
65°	0.0	0.0	0.4	0.4	0.7
67.5°	0.0	0.0	0.0	0.4	0.4
70°	0.0	0.0	0.0	0.4	0.4
72.5°	0.0	0.0	0.0	0.0	0.4
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)