

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: P1057930

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057930  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S290D935-X4F0-XX-UDD-WVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

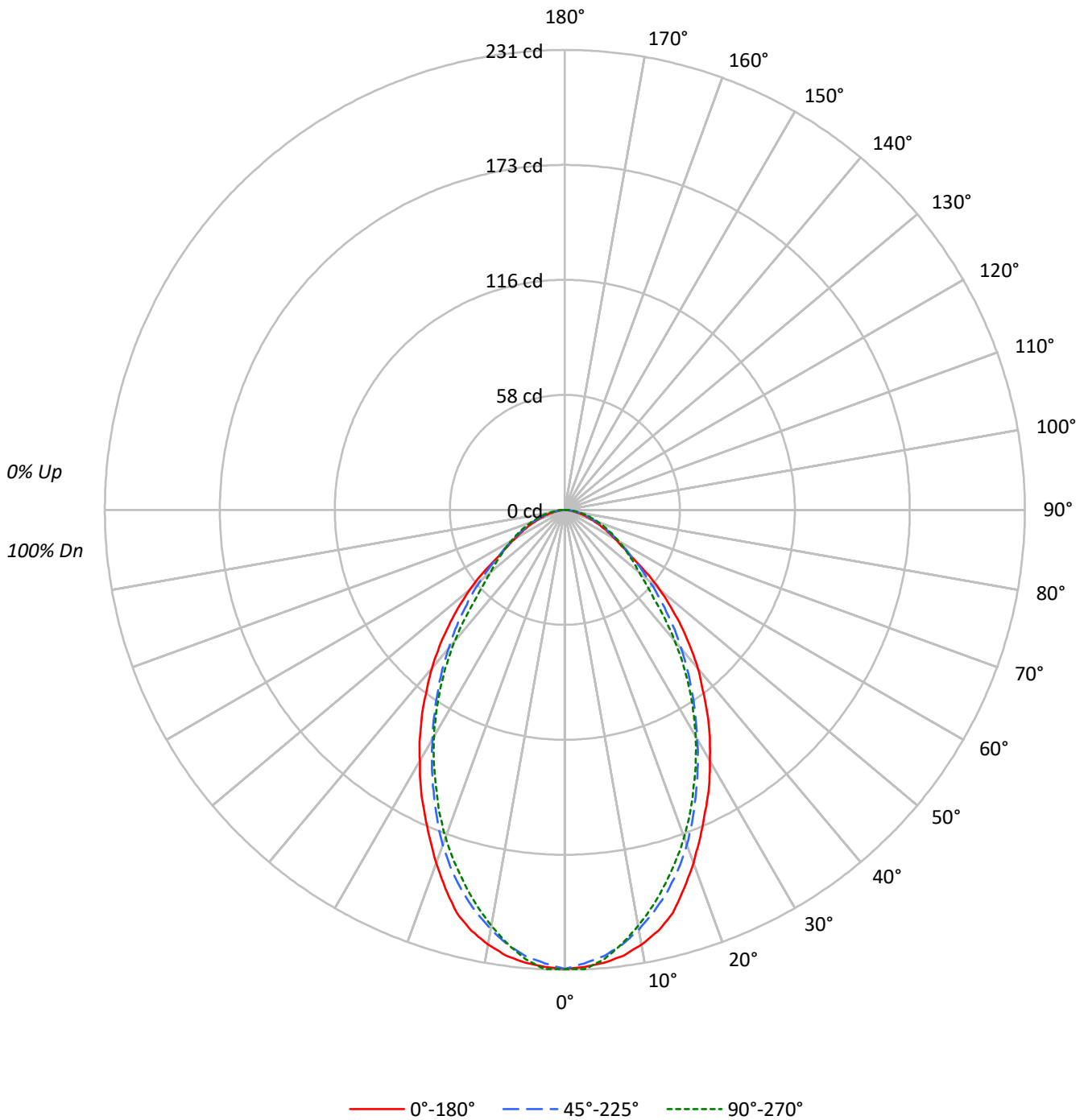
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 350.2 lumens  
Efficiency: N/A  
Efficacy: 28.0 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02  
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	4255	4255	4255
5°	4229	4168	4195
10°	4154	4010	3976
15°	4004	3794	3718
20°	3705	3519	3438
25°	3400	3176	3117
30°	3104	2832	2800
35°	2811	2505	2449
40°	2503	2185	2069
45°	2156	1879	1657
50°	1780	1582	1392
55°	1287	1313	1251
60°	1070	1126	1137
65°	913	978	1044
70°	755	874	950
75°	627	734	863
80°	468	584	776
85°	148	318	699

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2156 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.3	6.1
10°-20°	56.1	16.0
20°-30°	72.6	20.7
30°-40°	71.2	20.3
40°-50°	56.1	16.0
50°-60°	36.8	10.5
60°-70°	22.4	6.4
70°-80°	11.2	3.2
80°-90°	2.4	0.7
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°	150.1	42.9
0°-40°	221.3	63.2
0°-60°	314.2	89.7
0°-90°	350.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	350.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	231	231	231	231	231	
5°	228	228	225	226	226	22
15°	210	207	199	196	195	58
25°	167	162	156	155	153	77
35°	125	118	111	111	109	78
45°	83	78	72	67	64	64
55°	40	42	41	39	39	38
65°	21	21	22	24	24	21
75°	9	9	10	12	12	9
85°	1	1	2	3	3	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	230.6	230.6	230.6	230.6	230.6
2.5°	229.8	230.2	228.0	230.2	230.9
5°	228.3	228.3	225.0	226.5	226.5
7.5°	225.8	225.4	220.3	220.3	219.9
10°	221.7	220.3	214.0	212.9	212.2
12.5°	216.6	214.0	206.7	204.9	203.8
15°	209.6	206.7	198.6	196.0	194.6
17.5°	199.3	196.4	189.4	186.5	185.0
20°	188.7	184.3	179.2	176.6	175.1
22.5°	177.7	172.5	167.8	165.9	164.5
25°	167.0	161.5	156.0	155.3	153.1
27.5°	156.8	150.2	144.6	144.3	142.4
30°	145.7	138.8	132.9	133.3	131.4
32.5°	135.5	128.9	121.9	122.3	120.0
35°	124.8	117.8	111.2	110.9	108.7
37.5°	113.8	107.2	101.0	99.5	97.3
40°	103.9	97.3	90.7	88.1	85.9
42.5°	93.2	87.4	81.5	77.5	74.5
45°	82.6	77.5	72.0	66.8	63.5
47.5°	72.3	68.3	63.5	57.3	55.1
50°	62.0	59.1	55.1	49.6	48.5
52.5°	51.4	50.3	47.7	44.1	43.7
55°	40.0	42.2	40.8	39.3	38.9
57.5°	33.8	34.1	35.2	34.9	34.9
60°	29.0	29.0	30.5	30.8	30.8
62.5°	24.6	25.0	26.4	27.2	27.2
65°	20.9	21.3	22.4	23.5	23.9
67.5°	17.3	18.0	19.1	20.2	20.6
70°	14.0	14.7	16.2	17.3	17.6
72.5°	11.4	11.7	13.2	14.3	14.7
75°	8.8	9.2	10.3	11.7	12.1
77.5°	6.2	7.0	8.1	9.2	9.9
80°	4.4	4.8	5.5	7.0	7.3
82.5°	2.6	2.9	3.7	4.8	5.1
85°	0.7	1.1	1.5	2.6	3.3
87.5°	0.0	0.0	0.0	0.7	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)