

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: P1057911

Luminaire Tested: S122RDR-S290D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057911  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S290D927-X4F0-XX-UDD-SVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

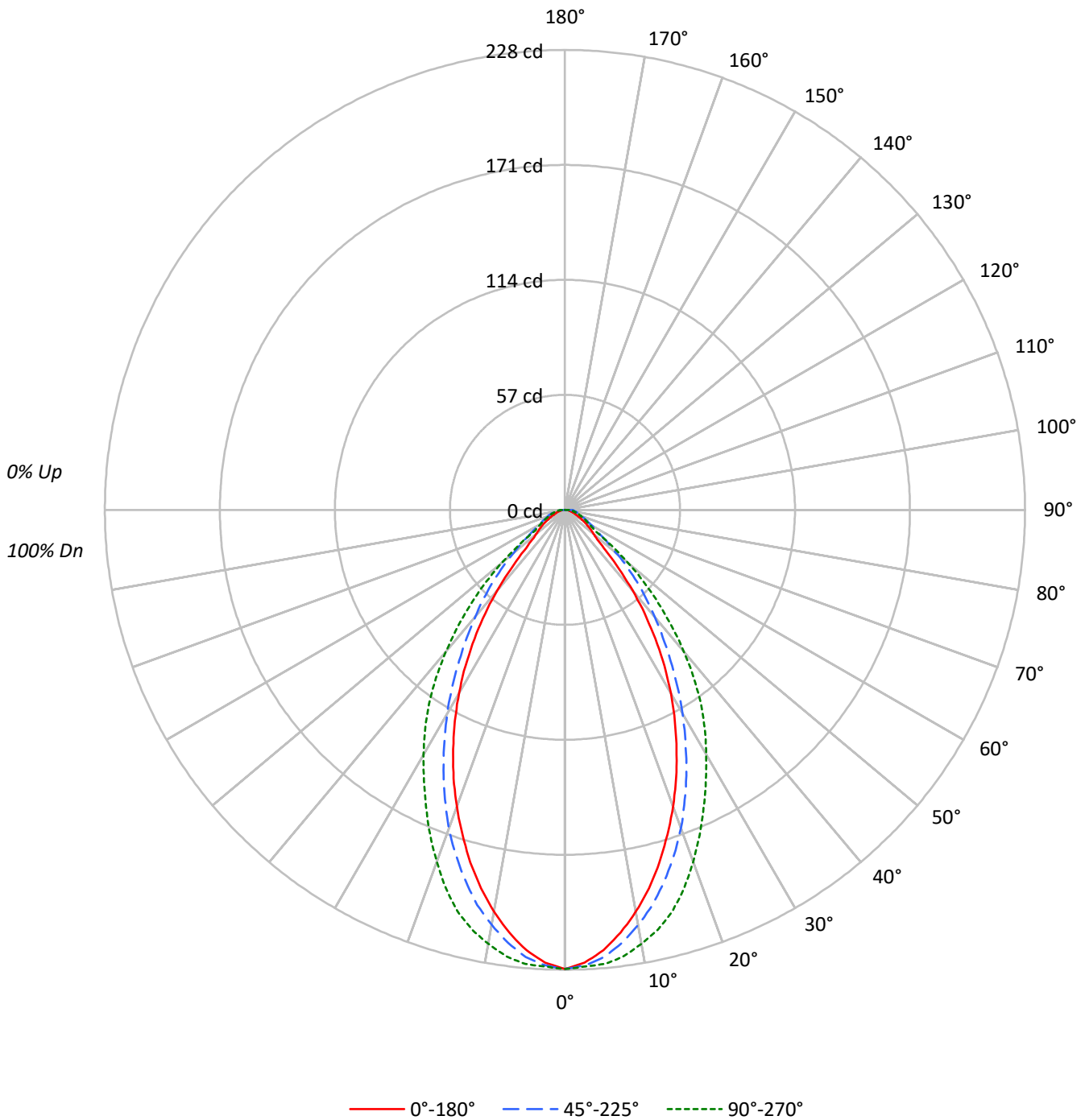
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 276.1 lumens  
Efficiency: N/A  
Efficacy: 22.1 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95  
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

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

	0°	45°	90°
0°	4200	4200	4200
5°	4060	4123	4186
10°	3791	3916	4094
15°	3458	3637	3935
20°	3075	3301	3647
25°	2665	2899	3313
30°	2235	2487	2983
35°	1759	2057	2645
40°	1255	1662	2209
45°	741	1315	1712
50°	534	950	1166
55°	447	685	589
60°	362	550	498
65°	297	489	458
70°	254	475	437
75°	242	485	435
80°	255	574	468
85°	360	932	572

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1712 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.9	7.6
10°-20°	53.6	19.4
20°-30°	66.2	24.0
30°-40°	58.9	21.3
40°-50°	37.6	13.6
50°-60°	18.0	6.5
60°-70°	10.6	3.8
70°-80°	6.8	2.4
80°-90°	3.6	1.3
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°	140.7	51.0
0°-40°	199.6	72.3
0°-60°	255.2	92.4
0°-90°	276.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	276.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	228	228	228	228	228	
5°	219	223	223	224	226	20
15°	181	185	190	199	206	50
25°	131	136	142	153	163	60
35°	78	84	91	105	117	49
45°	28	37	50	58	66	24
55°	14	18	21	21	18	13
65°	7	12	11	10	10	7
75°	3	7	7	6	6	4
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	227.6	227.6	227.6	227.6	227.6
2.5°	224.6	228.3	226.0	226.0	226.6
5°	219.2	223.2	222.6	223.9	226.0
7.5°	211.4	215.8	216.5	220.2	223.2
10°	202.3	207.0	209.0	214.5	218.5
12.5°	192.1	196.9	200.6	207.3	213.1
15°	181.0	185.4	190.4	199.2	206.0
17.5°	168.8	174.5	179.6	188.7	196.5
20°	156.6	162.0	168.1	176.9	185.7
22.5°	144.1	149.2	155.3	164.4	174.5
25°	130.9	136.0	142.4	152.6	162.7
27.5°	118.0	123.1	129.2	140.4	151.2
30°	104.9	109.9	116.7	128.2	140.0
32.5°	91.7	97.1	103.8	116.4	128.9
35°	78.1	84.2	91.3	105.2	117.4
37.5°	64.9	71.0	79.8	93.4	104.9
40°	52.1	59.2	69.0	81.2	91.7
42.5°	39.6	47.4	59.5	69.3	78.5
45°	28.4	36.9	50.4	58.5	65.6
47.5°	21.6	27.7	41.6	48.0	53.1
50°	18.6	22.3	33.1	37.9	40.6
52.5°	16.2	19.6	26.4	28.8	28.8
55°	13.9	17.9	21.3	20.6	18.3
57.5°	11.8	16.2	17.6	14.9	15.6
60°	9.8	14.9	14.9	13.2	13.5
62.5°	8.1	13.9	12.9	11.5	11.8
65°	6.8	12.2	11.2	10.1	10.5
67.5°	5.4	10.8	9.8	9.1	9.1
70°	4.7	9.8	8.8	8.1	8.1
72.5°	4.1	8.5	7.8	7.1	7.1
75°	3.4	7.4	6.8	6.4	6.1
77.5°	3.0	6.4	6.1	5.4	5.1
80°	2.4	5.4	5.4	5.1	4.4
82.5°	2.0	4.7	4.7	4.4	3.7
85°	1.7	4.1	4.4	3.7	2.7
87.5°	1.4	3.7	3.7	3.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)