

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: P1057884

Luminaire Tested: S122RDR-S290D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057884  
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-S290D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

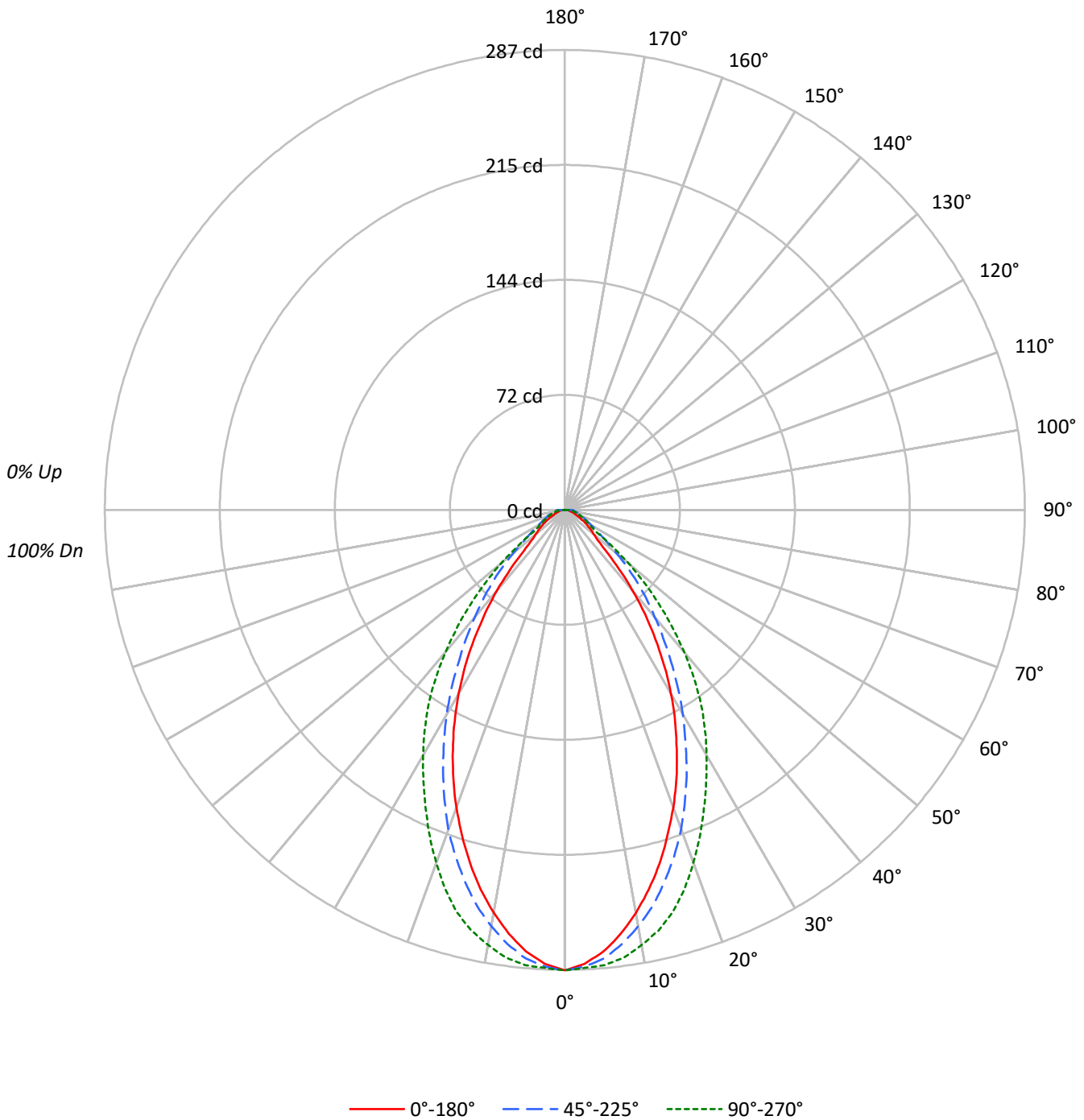
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 348.5 lumens  
Efficiency: N/A  
Efficacy: 27.9 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°	5303	5303	5303
5°	5125	5205	5283
10°	4784	4945	5168
15°	4363	4592	4967
20°	3882	4167	4603
25°	3363	3661	4182
30°	2821	3139	3767
35°	2221	2597	3338
40°	1585	2098	2787
45°	937	1660	2161
50°	675	1200	1470
55°	563	865	743
60°	458	694	631
65°	371	616	576
70°	324	599	550
75°	307	606	549
80°	319	723	595
85°	445	1186	720

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2161 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.4	7.6
10°-20°	67.7	19.4
20°-30°	83.5	24.0
30°-40°	74.3	21.3
40°-50°	47.4	13.6
50°-60°	22.8	6.5
60°-70°	13.4	3.8
70°-80°	8.5	2.4
80°-90°	4.6	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°	177.6	51.0
0°-40°	251.9	72.3
0°-60°	322.1	92.4
0°-90°	348.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	348.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	287	287	287	287	287	
5°	277	282	281	283	285	26
15°	228	234	240	252	260	64
25°	165	172	180	193	205	76
35°	99	106	115	133	148	61
45°	36	46	64	74	83	30
55°	18	23	27	26	23	16
65°	8	15	14	13	13	9
75°	4	9	8	8	8	5
85°	2	5	6	5	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	287.4	287.4	287.4	287.4	287.4
2.5°	283.5	288.2	285.2	285.2	286.1
5°	276.7	281.8	281.0	282.7	285.2
7.5°	266.9	272.4	273.3	278.0	281.8
10°	255.3	261.3	263.9	270.7	275.8
12.5°	242.5	248.5	253.2	261.7	269.0
15°	228.4	234.0	240.4	251.5	260.0
17.5°	213.1	220.3	226.7	238.3	248.1
20°	197.7	204.5	212.2	223.3	234.4
22.5°	181.9	188.3	196.0	207.5	220.3
25°	165.2	171.6	179.8	192.6	205.4
27.5°	149.0	155.4	163.1	177.2	190.9
30°	132.4	138.8	147.3	161.8	176.8
32.5°	115.7	122.5	131.1	146.9	162.7
35°	98.6	106.3	115.3	132.8	148.2
37.5°	82.0	89.7	100.8	117.8	132.4
40°	65.8	74.7	87.1	102.5	115.7
42.5°	50.0	59.8	75.1	87.5	99.1
45°	35.9	46.5	63.6	73.9	82.8
47.5°	27.3	35.0	52.5	60.6	67.0
50°	23.5	28.2	41.8	47.8	51.2
52.5°	20.5	24.8	33.3	36.3	36.3
55°	17.5	22.6	26.9	26.0	23.1
57.5°	14.9	20.5	22.2	18.8	19.6
60°	12.4	18.8	18.8	16.7	17.1
62.5°	10.2	17.5	16.2	14.5	14.9
65°	8.5	15.4	14.1	12.8	13.2
67.5°	6.8	13.7	12.4	11.5	11.5
70°	6.0	12.4	11.1	10.2	10.2
72.5°	5.1	10.7	9.8	9.0	9.0
75°	4.3	9.4	8.5	8.1	7.7
77.5°	3.8	8.1	7.7	6.8	6.4
80°	3.0	6.8	6.8	6.4	5.6
82.5°	2.6	6.0	6.0	5.6	4.7
85°	2.1	5.1	5.6	4.7	3.4
87.5°	1.7	4.7	4.7	3.8	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)