

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: P1057880

Luminaire Tested: S122RDR-S290D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057880  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S290D835-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

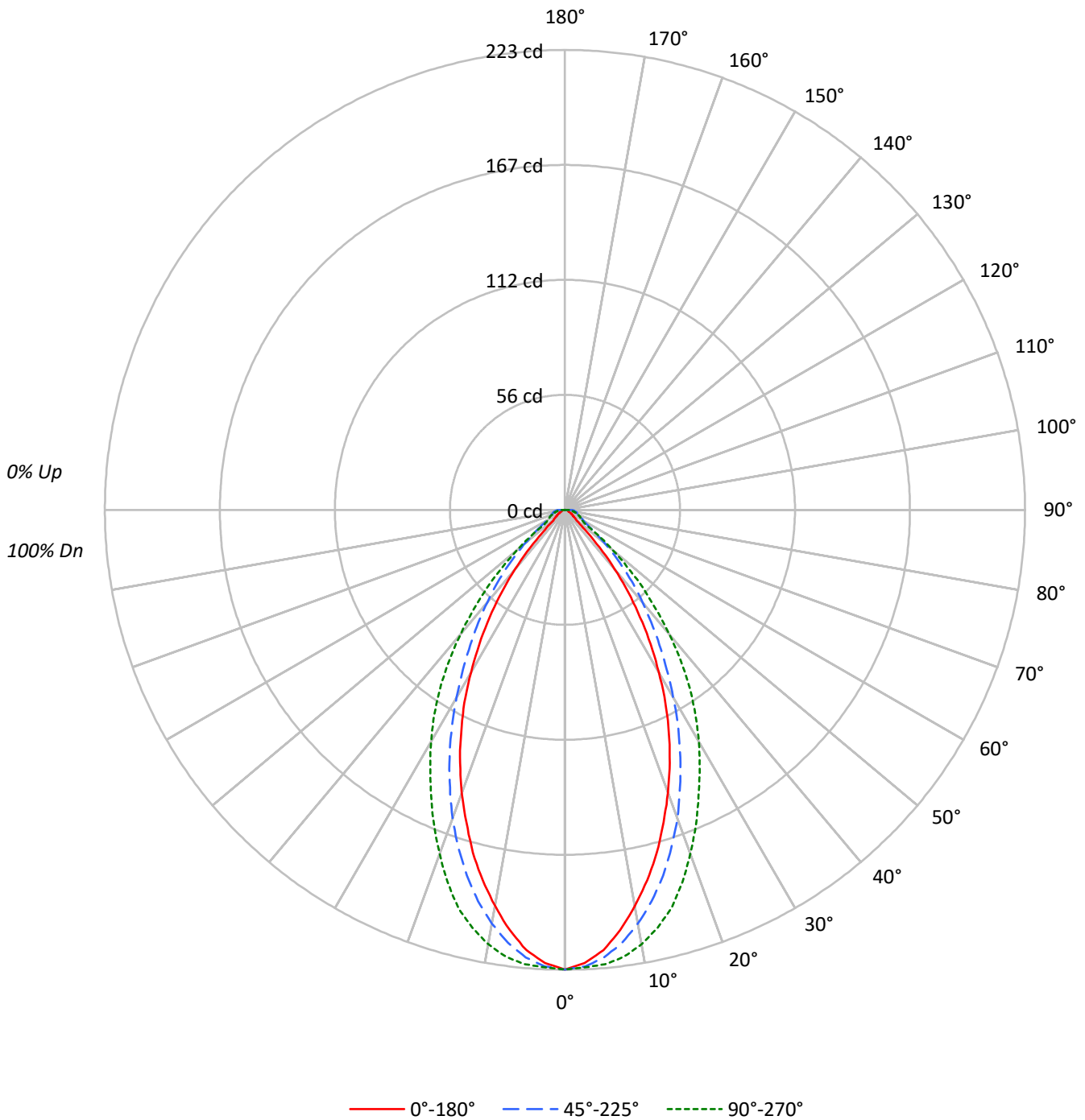
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 240.3 lumens  
Efficiency: N/A  
Efficacy: 19.2 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

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

	0°	45°	90°
0°	4113	4113	4113
5°	3969	4034	4097
10°	3656	3817	4008
15°	3288	3507	3817
20°	2867	3128	3487
25°	2425	2696	3121
30°	1937	2237	2766
35°	1433	1798	2377
40°	906	1409	1893
45°	358	1059	1394
50°	184	712	858
55°	151	466	386
60°	111	376	347
65°	92	354	354
70°	92	367	345
75°	121	428	364
80°	181	542	404
85°	275	910	550

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 1819 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.4	8.5
10°-20°	51.5	21.4
20°-30°	61.2	25.5
30°-40°	50.9	21.2
40°-50°	28.4	11.8
50°-60°	11.5	4.8
60°-70°	7.3	3.1
70°-80°	5.5	2.3
80°-90°	3.5	1.5
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°	133.1	55.4
0°-40°	184.0	76.6
0°-60°	223.9	93.2
0°-90°	240.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	240.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	223	223	223	223	223	
5°	214	218	218	220	221	20
15°	172	177	184	193	200	48
25°	119	124	132	143	153	54
35°	64	70	80	93	106	39
45°	14	23	41	47	53	13
55°	5	10	14	14	12	4
65°	2	8	8	8	8	2
75°	2	6	6	6	5	2
85°	1	4	4	4	3	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	222.9	222.9	222.9	222.9	222.9
2.5°	219.9	223.3	221.6	221.6	222.0
5°	214.3	218.2	217.8	219.5	221.2
7.5°	205.4	209.7	211.8	215.6	218.6
10°	195.1	199.8	203.7	209.7	213.9
12.5°	184.0	188.7	194.3	202.0	207.5
15°	172.1	177.2	183.6	193.0	199.8
17.5°	158.8	164.4	171.6	181.9	189.2
20°	146.0	151.6	159.3	169.5	177.6
22.5°	132.8	137.5	145.6	155.9	165.7
25°	119.1	123.8	132.4	142.6	153.3
27.5°	105.5	110.2	118.7	129.4	141.3
30°	90.9	96.1	105.0	117.0	129.8
32.5°	77.3	82.4	91.8	105.0	117.8
35°	63.6	69.6	79.8	93.1	105.5
37.5°	50.4	57.2	68.7	81.1	92.2
40°	37.6	44.8	58.5	69.2	78.6
42.5°	24.8	33.3	49.1	58.1	65.3
45°	13.7	23.1	40.6	47.4	53.4
47.5°	7.7	14.9	32.0	37.6	41.0
50°	6.4	11.1	24.8	28.6	29.9
52.5°	5.1	10.2	18.8	20.9	20.1
55°	4.7	9.8	14.5	14.1	12.0
57.5°	3.8	9.8	11.5	10.2	10.2
60°	3.0	9.4	10.2	9.0	9.4
62.5°	2.6	9.0	9.4	8.5	8.5
65°	2.1	8.5	8.1	7.7	8.1
67.5°	1.7	7.7	7.7	7.3	7.3
70°	1.7	7.3	6.8	6.4	6.4
72.5°	1.7	6.4	6.4	6.0	6.0
75°	1.7	6.0	6.0	5.6	5.1
77.5°	1.7	5.1	5.6	5.1	4.7
80°	1.7	4.7	5.1	4.7	3.8
82.5°	1.7	4.3	4.7	4.3	3.4
85°	1.3	3.8	4.3	3.8	2.6
87.5°	1.3	3.8	4.3	3.4	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)