

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: P1057964

Luminaire Tested: S122RDR-S485D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057964  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D835-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

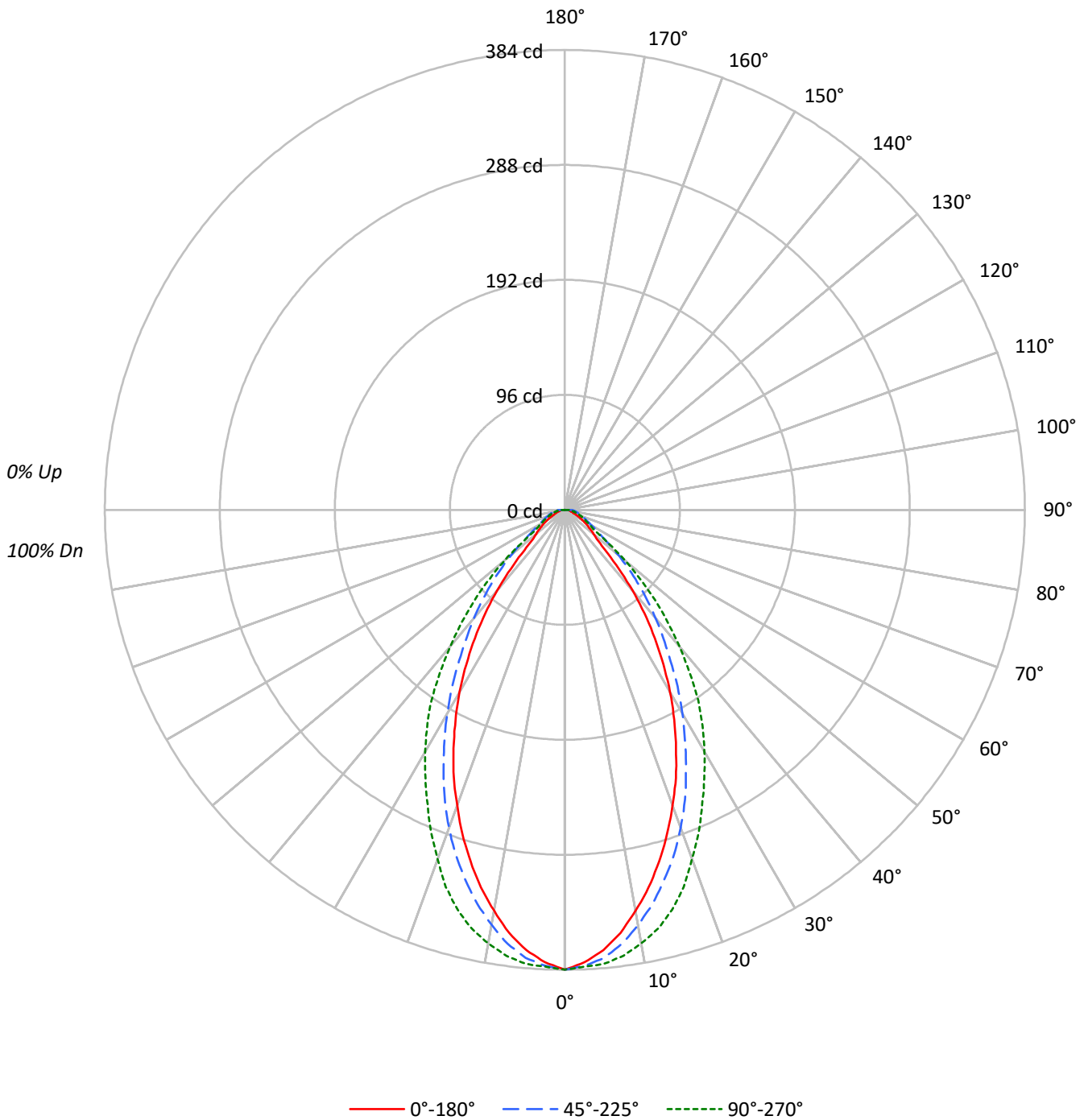
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 463.1 lumens  
Efficiency: N/A  
Efficacy: 23.6 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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	101	99	97	98	96	94	94	93	91	89			89	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	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	66	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	44	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°	7084	7084	7084
5°	6835	6954	7046
10°	6371	6595	6888
15°	5806	6117	6604
20°	5161	5549	6091
25°	4471	4874	5524
30°	3744	4180	4965
35°	2951	3462	4372
40°	2115	2833	3582
45°	1240	2236	2771
50°	896	1628	1872
55°	753	1161	981
60°	602	941	838
65°	493	834	773
70°	421	804	728
75°	406	856	706
80°	446	1052	754
85°	741	1651	1059

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2771 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.2	7.6
10°-20°	90.1	19.5
20°-30°	110.8	23.9
30°-40°	97.9	21.1
40°-50°	62.5	13.5
50°-60°	30.5	6.6
60°-70°	18.2	3.9
70°-80°	11.6	2.5
80°-90°	6.4	1.4
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°	236.1	51.0
0°-40°	334.0	72.1
0°-60°	427.0	92.2
0°-90°	463.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	463.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	369	377	375	377	380	34
15°	304	312	320	334	346	85
25°	220	227	239	254	271	100
35°	131	138	154	175	194	81
45°	48	61	86	96	106	40
55°	23	31	36	34	30	21
65°	11	21	19	18	18	11
75°	6	13	12	11	10	6
85°	4	7	8	7	5	3
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	383.9	383.9	383.9	383.9	383.9
2.5°	378.2	385.3	381.1	381.1	381.8
5°	369.0	376.8	375.4	376.8	380.4
7.5°	356.3	364.1	365.5	371.2	375.4
10°	340.0	347.8	352.0	361.2	367.6
12.5°	323.0	330.8	337.2	349.2	358.4
15°	303.9	312.4	320.2	334.3	345.7
17.5°	284.0	292.5	302.5	316.6	330.1
20°	262.8	270.6	282.6	296.1	310.2
22.5°	242.2	249.3	262.1	274.8	291.8
25°	219.6	227.4	239.4	254.3	271.3
27.5°	197.6	205.4	217.5	234.5	252.2
30°	175.7	182.7	196.2	213.9	233.0
32.5°	153.0	160.1	175.0	194.1	213.9
35°	131.0	138.1	153.7	175.0	194.1
37.5°	109.1	116.9	134.6	154.4	170.7
40°	87.8	97.0	117.6	134.6	148.7
42.5°	66.6	79.3	101.3	115.5	126.8
45°	47.5	60.9	85.7	96.3	106.2
47.5°	36.1	46.7	70.8	78.6	85.0
50°	31.2	38.2	56.7	62.3	65.2
52.5°	26.9	34.0	45.3	47.5	46.0
55°	23.4	31.2	36.1	34.0	30.5
57.5°	19.8	29.0	29.7	25.5	26.2
60°	16.3	26.2	25.5	22.0	22.7
62.5°	13.5	24.1	22.0	19.8	19.8
65°	11.3	21.2	19.1	17.7	17.7
67.5°	9.2	19.1	17.0	15.6	15.6
70°	7.8	17.0	14.9	13.5	13.5
72.5°	7.1	14.9	13.5	12.0	12.0
75°	5.7	12.7	12.0	10.6	9.9
77.5°	5.0	10.6	10.6	9.9	8.5
80°	4.2	9.2	9.9	8.5	7.1
82.5°	4.2	8.5	8.5	7.8	5.7
85°	3.5	7.1	7.8	7.1	5.0
87.5°	2.1	6.4	6.4	5.7	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)