

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: P1057955

Luminaire Tested: S122RDR-S485D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057955  
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-S485D830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

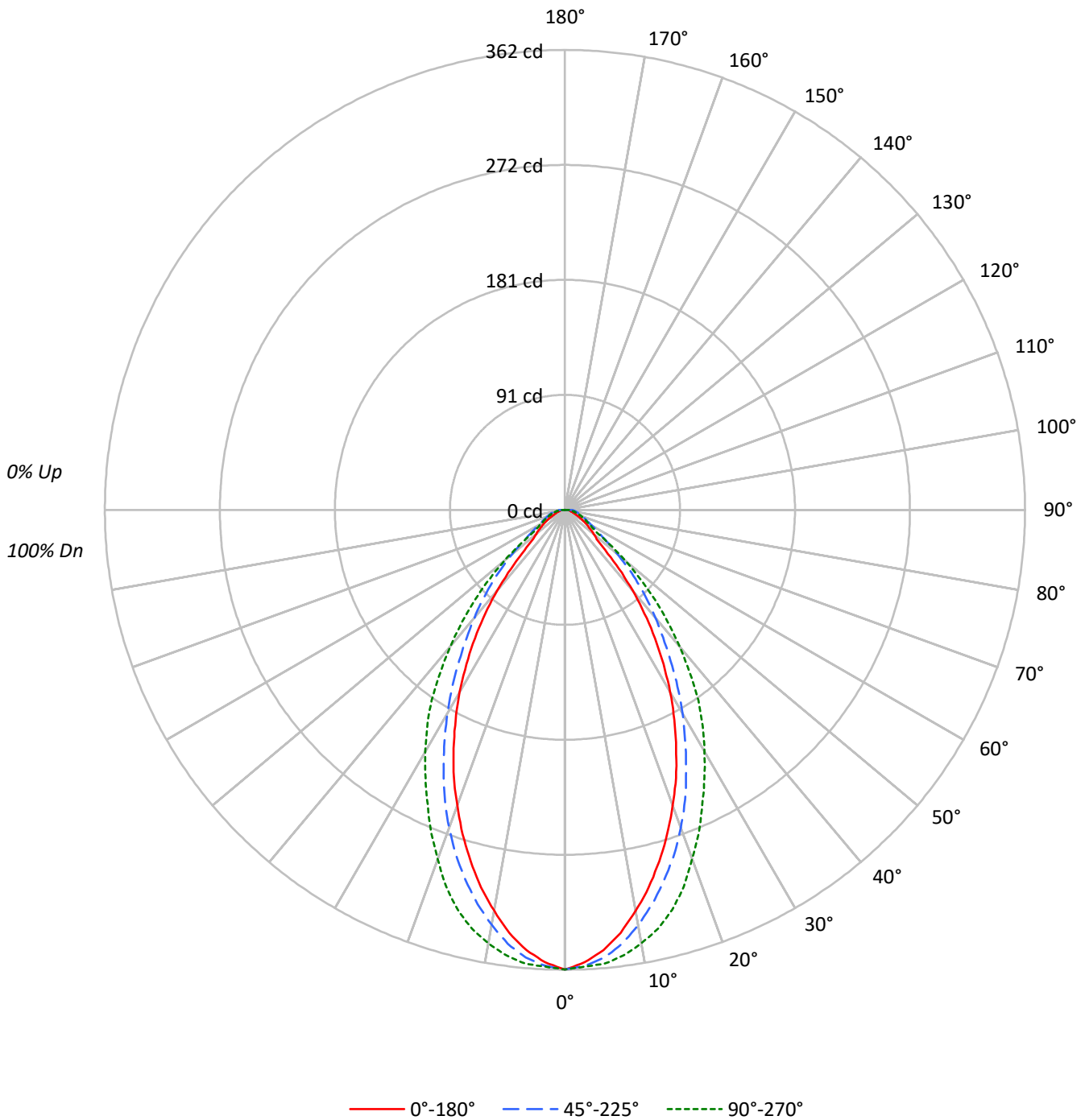
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 436.5 lumens  
Efficiency: N/A  
Efficacy: 22.3 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

TEST NUMBER: P1057955

CATALOG NUMBER: S122RDR-S485D830-X4F0-XX-UDD-SVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1057955

CATALOG NUMBER: S122RDR-S485D830-X4F0-XX-UDD-SVL-S

**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
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°	6676	6676	6676
5°	6442	6553	6640
10°	6005	6217	6492
15°	5471	5765	6224
20°	4864	5231	5742
25°	4215	4595	5206
30°	3528	3940	4679
35°	2782	3264	4120
40°	1994	2669	3377
45°	1166	2109	2612
50°	844	1533	1763
55°	708	1094	923
60°	568	886	790
65°	467	786	729
70°	394	755	685
75°	378	806	663
80°	425	988	712
85°	699	1546	995

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2612 cd/sqm



TEST NUMBER: P1057955

CATALOG NUMBER: S122RDR-S485D830-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.2	7.6
10°-20°	84.9	19.5
20°-30°	104.4	23.9
30°-40°	92.3	21.1
40°-50°	58.9	13.5
50°-60°	28.7	6.6
60°-70°	17.1	3.9
70°-80°	10.9	2.5
80°-90°	6.0	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°	222.5	51.0
0°-40°	314.8	72.1
0°-60°	402.4	92.2
0°-90°	436.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	436.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	362	362	362	362	362	
5°	348	355	354	355	358	32
15°	286	294	302	315	326	80
25°	207	214	226	240	256	95
35°	124	130	145	165	183	77
45°	45	57	81	91	100	38
55°	22	29	34	32	29	20
65°	11	20	18	17	17	11
75°	5	12	11	10	9	6
85°	3	7	7	7	5	3
90°	0	0	0	0	0	



TEST NUMBER: P1057955

CATALOG NUMBER: S122RDR-S485D830-X4F0-XX-UDD-SVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	361.8	361.8	361.8	361.8	361.8
2.5°	356.5	363.2	359.2	359.2	359.8
5°	347.8	355.2	353.8	355.2	358.5
7.5°	335.8	343.2	344.5	349.8	353.8
10°	320.5	327.8	331.8	340.5	346.5
12.5°	304.4	311.8	317.8	329.1	337.8
15°	286.4	294.4	301.8	315.1	325.8
17.5°	267.7	275.7	285.1	298.4	311.1
20°	247.7	255.0	266.4	279.1	292.4
22.5°	228.3	235.0	247.0	259.0	275.1
25°	207.0	214.3	225.7	239.7	255.7
27.5°	186.3	193.6	205.0	221.0	237.7
30°	165.6	172.2	184.9	201.6	219.6
32.5°	144.2	150.9	164.9	182.9	201.6
35°	123.5	130.2	144.9	164.9	182.9
37.5°	102.8	110.2	126.8	145.5	160.9
40°	82.8	91.5	110.8	126.8	140.2
42.5°	62.8	74.8	95.5	108.8	119.5
45°	44.7	57.4	80.8	90.8	100.1
47.5°	34.0	44.1	66.8	74.1	80.1
50°	29.4	36.1	53.4	58.8	61.4
52.5°	25.4	32.0	42.7	44.7	43.4
55°	22.0	29.4	34.0	32.0	28.7
57.5°	18.7	27.4	28.0	24.0	24.7
60°	15.4	24.7	24.0	20.7	21.4
62.5°	12.7	22.7	20.7	18.7	18.7
65°	10.7	20.0	18.0	16.7	16.7
67.5°	8.7	18.0	16.0	14.7	14.7
70°	7.3	16.0	14.0	12.7	12.7
72.5°	6.7	14.0	12.7	11.3	11.3
75°	5.3	12.0	11.3	10.0	9.3
77.5°	4.7	10.0	10.0	9.3	8.0
80°	4.0	8.7	9.3	8.0	6.7
82.5°	4.0	8.0	8.0	7.3	5.3
85°	3.3	6.7	7.3	6.7	4.7
87.5°	2.0	6.0	6.0	5.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)