

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: P1058027

Luminaire Tested: S122RDR-S485D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058027  
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-S485D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

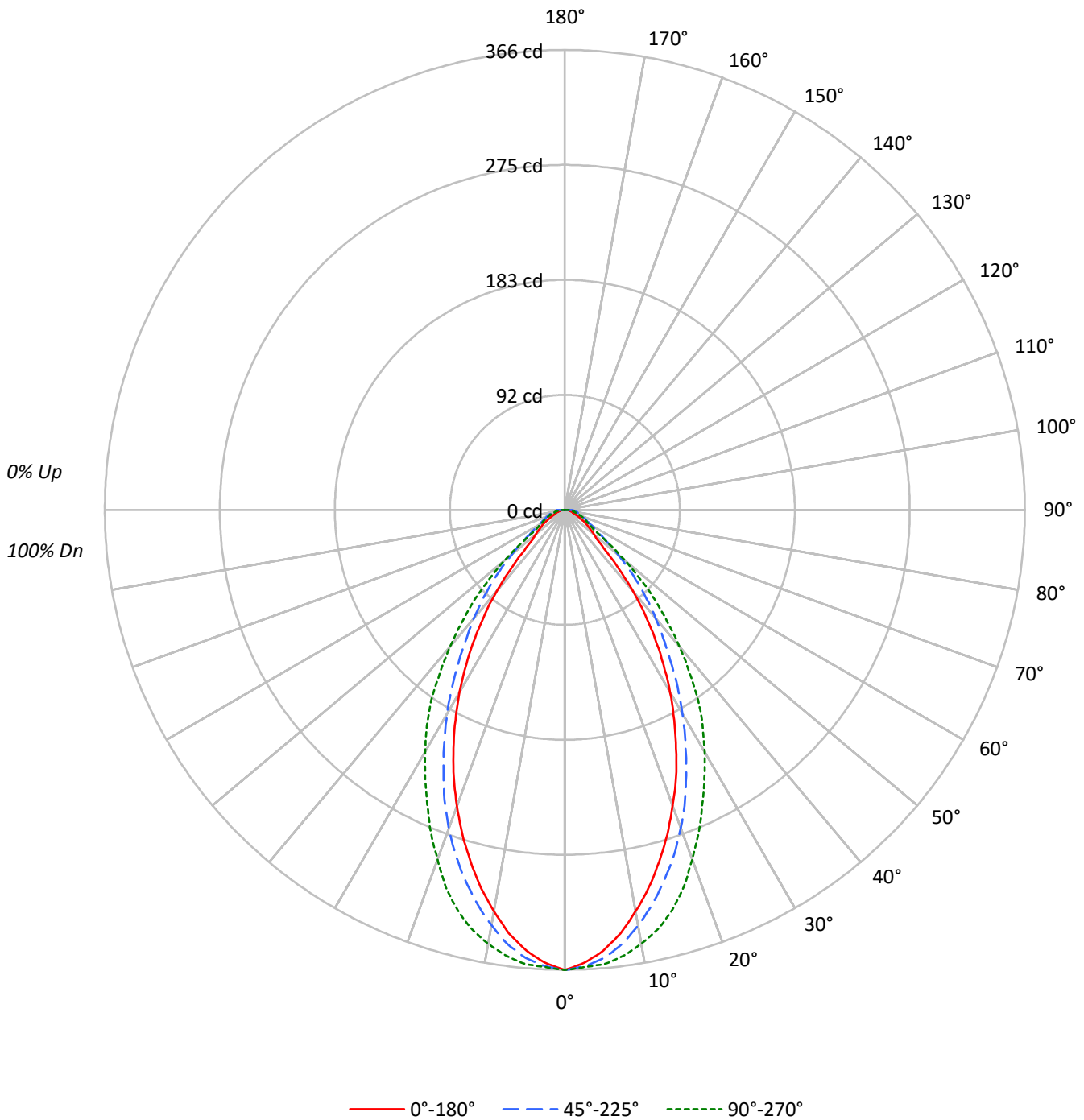
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 441.8 lumens  
Efficiency: N/A  
Efficacy: 22.5 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°	6757	6757	6757
5°	6522	6633	6722
10°	6078	6292	6571
15°	5538	5834	6300
20°	4923	5294	5812
25°	4265	4650	5269
30°	3571	3989	4737
35°	2816	3302	4172
40°	2019	2703	3418
45°	1182	2135	2646
50°	853	1553	1786
55°	717	1110	936
60°	572	897	797
65°	472	795	738
70°	399	766	691
75°	385	820	677
80°	436	1010	723
85°	720	1567	995

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2646 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.6	7.6
10°-20°	86.0	19.5
20°-30°	105.7	23.9
30°-40°	93.4	21.1
40°-50°	59.6	13.5
50°-60°	29.1	6.6
60°-70°	17.3	3.9
70°-80°	11.1	2.5
80°-90°	6.1	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°	225.2	51.0
0°-40°	318.6	72.1
0°-60°	407.4	92.2
0°-90°	441.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	441.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	366	366	366	366	366	
5°	352	360	358	360	363	33
15°	290	298	305	319	330	81
25°	210	217	228	243	259	96
35°	125	132	147	167	185	78
45°	45	58	82	92	101	38
55°	22	30	34	32	29	20
65°	11	20	18	17	17	11
75°	5	12	12	10	10	6
85°	3	7	7	7	5	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	366.2	366.2	366.2	366.2	366.2
2.5°	360.8	367.6	363.5	363.5	364.2
5°	352.1	359.5	358.1	359.5	362.9
7.5°	339.9	347.3	348.7	354.1	358.1
10°	324.4	331.8	335.8	344.6	350.7
12.5°	308.1	315.6	321.6	333.1	341.9
15°	289.9	298.0	305.4	318.9	329.8
17.5°	271.0	279.1	288.5	302.1	314.9
20°	250.7	258.1	269.6	282.5	296.0
22.5°	231.1	237.9	250.0	262.2	278.4
25°	209.5	216.9	228.4	242.6	258.8
27.5°	188.5	196.0	207.5	223.7	240.6
30°	167.6	174.3	187.2	204.1	222.3
32.5°	146.0	152.7	166.9	185.2	204.1
35°	125.0	131.8	146.6	166.9	185.2
37.5°	104.1	111.5	128.4	147.3	162.9
40°	83.8	92.6	112.2	128.4	141.9
42.5°	63.5	75.7	96.6	110.1	121.0
45°	45.3	58.1	81.8	91.9	101.4
47.5°	34.5	44.6	67.6	75.0	81.1
50°	29.7	36.5	54.1	59.5	62.2
52.5°	25.7	32.4	43.2	45.3	43.9
55°	22.3	29.7	34.5	32.4	29.1
57.5°	18.9	27.7	28.4	24.3	25.0
60°	15.5	25.0	24.3	20.9	21.6
62.5°	12.8	23.0	20.9	18.9	18.9
65°	10.8	20.3	18.2	16.9	16.9
67.5°	8.8	18.2	16.2	14.9	14.9
70°	7.4	16.2	14.2	12.8	12.8
72.5°	6.8	14.2	12.8	11.5	11.5
75°	5.4	12.2	11.5	10.1	9.5
77.5°	4.7	10.1	10.1	9.5	8.1
80°	4.1	8.8	9.5	8.1	6.8
82.5°	4.1	8.1	8.1	7.4	5.4
85°	3.4	6.8	7.4	6.8	4.7
87.5°	2.0	6.1	6.1	5.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)