

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: P1058009

Luminaire Tested: S122RDR-S485D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058009  
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-S485D935-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, 90 CRI LEDS  
Ballast/Driver: -

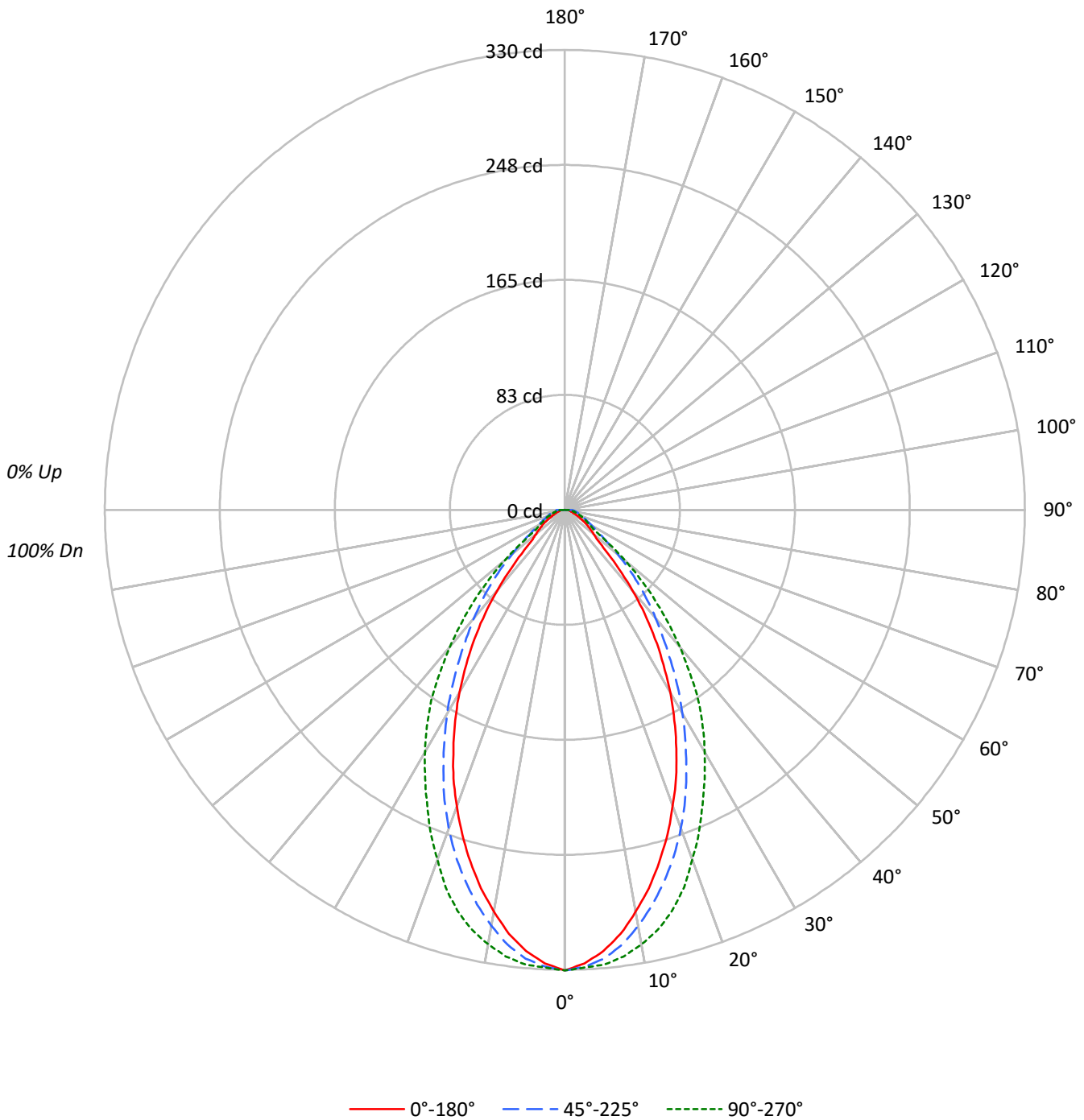
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 398.7 lumens  
Efficiency: N/A  
Efficacy: 20.3 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 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°	6099	6099	6099
5°	5885	5987	6066
10°	5484	5679	5930
15°	4997	5267	5685
20°	4444	4778	5245
25°	3850	4196	4756
30°	3222	3599	4274
35°	2541	2980	3764
40°	1821	2438	3086
45°	1067	1926	2388
50°	769	1401	1610
55°	647	1001	843
60°	517	812	720
65°	428	720	664
70°	361	691	626
75°	349	741	606
80°	393	903	648
85°	635	1419	910

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2388 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.3	7.6
10°-20°	77.6	19.5
20°-30°	95.4	23.9
30°-40°	84.3	21.1
40°-50°	53.8	13.5
50°-60°	26.3	6.6
60°-70°	15.6	3.9
70°-80°	10.0	2.5
80°-90°	5.5	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°	203.3	51.0
0°-40°	287.6	72.1
0°-60°	367.6	92.2
0°-90°	398.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	398.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	330	330	330	330	330	
5°	318	324	323	324	328	30
15°	262	269	276	288	298	73
25°	189	196	206	219	234	87
35°	113	119	132	151	167	70
45°	41	52	74	83	92	34
55°	20	27	31	29	26	18
65°	10	18	16	15	15	10
75°	5	11	10	9	8	5
85°	3	6	7	6	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	330.5	330.5	330.5	330.5	330.5
2.5°	325.7	331.8	328.1	328.1	328.7
5°	317.7	324.4	323.2	324.4	327.5
7.5°	306.8	313.5	314.7	319.6	323.2
10°	292.7	299.4	303.1	311.0	316.5
12.5°	278.1	284.8	290.3	300.7	308.6
15°	261.6	268.9	275.7	287.9	297.6
17.5°	244.6	251.9	260.4	272.6	284.2
20°	226.3	233.0	243.3	254.9	267.1
22.5°	208.6	214.7	225.6	236.6	251.3
25°	189.1	195.8	206.1	218.9	233.6
27.5°	170.2	176.9	187.2	201.9	217.1
30°	151.2	157.3	168.9	184.2	200.6
32.5°	131.7	137.8	150.6	167.1	184.2
35°	112.8	118.9	132.3	150.6	167.1
37.5°	93.9	100.6	115.9	132.9	147.0
40°	75.6	83.6	101.2	115.9	128.1
42.5°	57.3	68.3	87.2	99.4	109.2
45°	40.9	52.4	73.8	82.9	91.5
47.5°	31.1	40.3	61.0	67.7	73.2
50°	26.8	32.9	48.8	53.7	56.1
52.5°	23.2	29.3	39.0	40.9	39.6
55°	20.1	26.8	31.1	29.3	26.2
57.5°	17.1	25.0	25.6	22.0	22.6
60°	14.0	22.6	22.0	18.9	19.5
62.5°	11.6	20.7	18.9	17.1	17.1
65°	9.8	18.3	16.5	15.2	15.2
67.5°	7.9	16.5	14.6	13.4	13.4
70°	6.7	14.6	12.8	11.6	11.6
72.5°	6.1	12.8	11.6	10.4	10.4
75°	4.9	11.0	10.4	9.1	8.5
77.5°	4.3	9.1	9.1	8.5	7.3
80°	3.7	7.9	8.5	7.3	6.1
82.5°	3.7	7.3	7.3	6.7	4.9
85°	3.0	6.1	6.7	6.1	4.3
87.5°	1.8	5.5	5.5	4.9	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)