

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: P1058006

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058006  
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-S485D935-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, 90 CRI LEDS  
Ballast/Driver: -

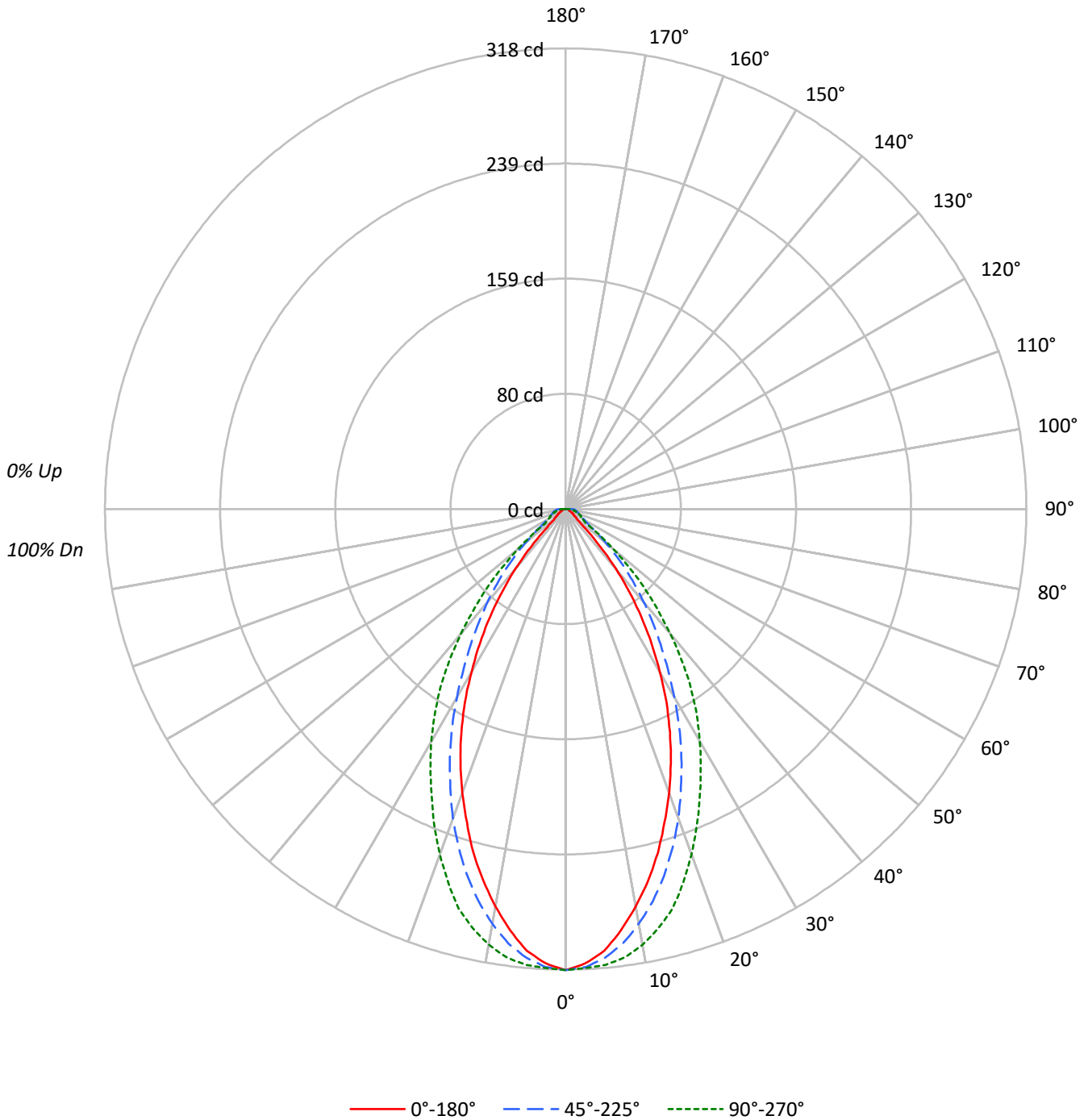
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 343.2 lumens  
Efficiency: N/A  
Efficacy: 17.5 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): 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									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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90													90															
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81													81															
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74													74															
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67													67															
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61													61															
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57													57															
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52													52															
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48													48															
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45													45															
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42													42															

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

	0°	45°	90°
0°	5875	5875	5875
5°	5672	5762	5853
10°	5222	5451	5726
15°	4696	5011	5454
20°	4096	4467	4982
25°	3465	3850	4459
30°	2768	3196	3950
35°	2048	2570	3395
40°	1294	2014	2703
45°	509	1511	1988
50°	261	1016	1226
55°	216	666	550
60°	159	539	495
65°	131	506	506
70°	129	529	491
75°	171	606	520
80°	255	776	584
85°	381	1291	783

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 2581 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.1	8.5
10°-20°	73.6	21.4
20°-30°	87.4	25.5
30°-40°	72.7	21.2
40°-50°	40.6	11.8
50°-60°	16.4	4.8
60°-70°	10.5	3.1
70°-80°	7.8	2.3
80°-90°	5.0	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°	190.1	55.4
0°-40°	262.8	76.6
0°-60°	319.8	93.2
0°-90°	343.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	343.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	318	318	318	318	318	
5°	306	312	311	314	316	28
15°	246	253	262	276	286	68
25°	170	177	189	204	219	78
35°	91	99	114	133	151	56
45°	20	33	58	68	76	18
55°	7	14	21	20	17	6
65°	3	12	12	11	12	3
75°	2	8	8	8	7	3
85°	2	6	6	6	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	318.4	318.4	318.4	318.4	318.4
2.5°	314.1	319.0	316.6	316.6	317.2
5°	306.2	311.7	311.1	313.5	316.0
7.5°	293.4	299.5	302.5	308.0	312.3
10°	278.7	285.5	290.9	299.5	305.6
12.5°	262.9	269.6	277.5	288.5	296.4
15°	245.8	253.1	262.3	275.7	285.5
17.5°	226.9	234.8	245.2	259.8	270.2
20°	208.6	216.5	227.5	242.2	253.7
22.5°	189.7	196.4	208.0	222.6	236.7
25°	170.2	176.9	189.1	203.7	219.0
27.5°	150.7	157.4	169.6	184.8	201.9
30°	129.9	137.2	150.0	167.1	185.4
32.5°	110.4	117.7	131.1	150.0	168.3
35°	90.9	99.4	114.1	133.0	150.7
37.5°	72.0	81.7	98.2	115.9	131.7
40°	53.7	64.0	83.6	98.8	112.2
42.5°	35.4	47.6	70.1	83.0	93.3
45°	19.5	32.9	57.9	67.7	76.2
47.5°	11.0	21.3	45.7	53.7	58.6
50°	9.1	15.9	35.4	40.9	42.7
52.5°	7.3	14.6	26.8	29.9	28.7
55°	6.7	14.0	20.7	20.1	17.1
57.5°	5.5	14.0	16.5	14.6	14.6
60°	4.3	13.4	14.6	12.8	13.4
62.5°	3.7	12.8	13.4	12.2	12.2
65°	3.0	12.2	11.6	11.0	11.6
67.5°	2.4	11.0	11.0	10.4	10.4
70°	2.4	10.4	9.8	9.1	9.1
72.5°	2.4	9.1	9.1	8.5	8.5
75°	2.4	8.5	8.5	7.9	7.3
77.5°	2.4	7.3	7.9	7.3	6.7
80°	2.4	6.7	7.3	6.7	5.5
82.5°	2.4	6.1	6.7	6.1	4.9
85°	1.8	5.5	6.1	5.5	3.7
87.5°	1.8	5.5	6.1	4.9	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)