

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: P1057997

Luminaire Tested: S122RDR-S485D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057997  
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-S485D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

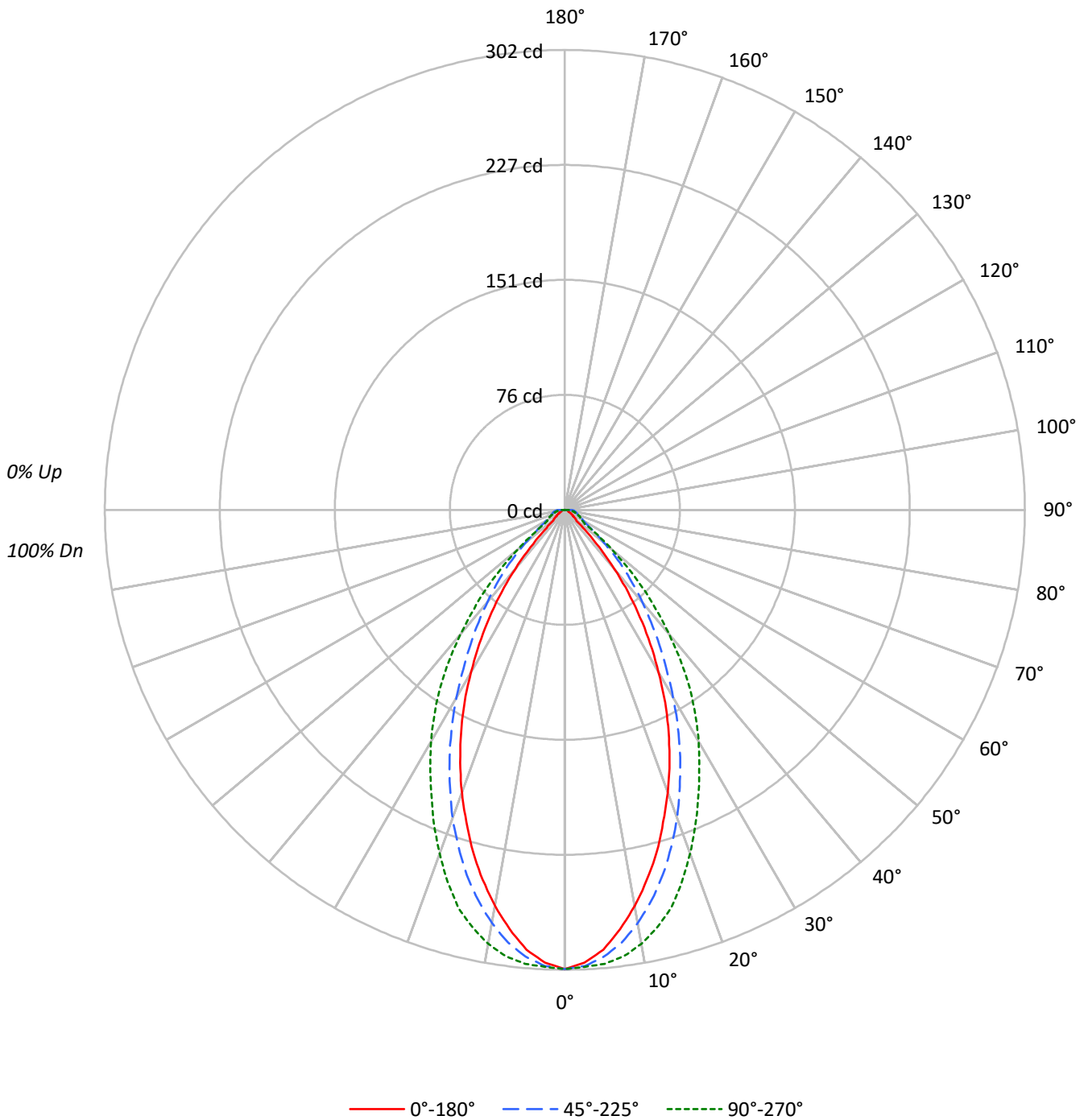
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 325.0 lumens  
Efficiency: N/A  
Efficacy: 16.6 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									
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	0																			
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57																												
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	60	55	50	59	54	50	58	54	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45																												
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42																												

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

	0°	45°	90°
0°	5563	5563	5563
5°	5370	5457	5542
10°	4947	5162	5423
15°	4447	4745	5164
20°	3878	4230	4719
25°	3280	3644	4221
30°	2621	3028	3742
35°	1940	2433	3215
40°	1224	1905	2561
45°	483	1433	1884
50°	250	962	1160
55°	206	631	521
60°	148	513	469
65°	127	480	480
70°	124	496	469
75°	164	577	492
80°	244	733	553
85°	360	1228	741

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 2454 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.6	8.5
10°-20°	69.7	21.4
20°-30°	82.8	25.5
30°-40°	68.9	21.2
40°-50°	38.5	11.8
50°-60°	15.5	4.8
60°-70°	9.9	3.1
70°-80°	7.5	2.3
80°-90°	4.8	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°	180.0	55.4
0°-40°	248.9	76.6
0°-60°	302.9	93.2
0°-90°	325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	325.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	302	302	302	302	302	
5°	290	295	295	297	299	27
15°	233	240	248	261	270	65
25°	161	168	179	193	207	73
35°	86	94	108	126	143	53
45°	18	31	55	64	72	17
55°	6	13	20	19	16	6
65°	3	12	11	10	11	3
75°	2	8	8	8	7	2
85°	2	5	6	5	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	301.5	301.5	301.5	301.5	301.5
2.5°	297.5	302.1	299.8	299.8	300.3
5°	289.9	295.1	294.6	296.9	299.2
7.5°	277.8	283.6	286.5	291.7	295.7
10°	264.0	270.3	275.5	283.6	289.4
12.5°	248.9	255.3	262.8	273.2	280.7
15°	232.8	239.7	248.4	261.1	270.3
17.5°	214.9	222.4	232.2	246.0	255.9
20°	197.5	205.0	215.4	229.3	240.3
22.5°	179.6	186.0	197.0	210.8	224.1
25°	161.1	167.5	179.0	192.9	207.3
27.5°	142.7	149.0	160.6	175.0	191.2
30°	123.0	130.0	142.1	158.3	175.6
32.5°	104.5	111.5	124.2	142.1	159.4
35°	86.1	94.1	108.0	125.9	142.7
37.5°	68.2	77.4	93.0	109.7	124.8
40°	50.8	60.6	79.1	93.6	106.3
42.5°	33.5	45.1	66.4	78.6	88.4
45°	18.5	31.2	54.9	64.1	72.2
47.5°	10.4	20.2	43.3	50.8	55.4
50°	8.7	15.0	33.5	38.7	40.4
52.5°	6.9	13.9	25.4	28.3	27.1
55°	6.4	13.3	19.6	19.1	16.2
57.5°	5.2	13.3	15.6	13.9	13.9
60°	4.0	12.7	13.9	12.1	12.7
62.5°	3.5	12.1	12.7	11.6	11.6
65°	2.9	11.6	11.0	10.4	11.0
67.5°	2.3	10.4	10.4	9.8	9.8
70°	2.3	9.8	9.2	8.7	8.7
72.5°	2.3	8.7	8.7	8.1	8.1
75°	2.3	8.1	8.1	7.5	6.9
77.5°	2.3	6.9	7.5	6.9	6.4
80°	2.3	6.4	6.9	6.4	5.2
82.5°	2.3	5.8	6.4	5.8	4.6
85°	1.7	5.2	5.8	5.2	3.5
87.5°	1.7	5.2	5.8	4.6	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)