

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: P1055564

Luminaire Tested: S123R3DR-S1000D930-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055564  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123R3DR-S1000D930-X4F0-XX-UDD-FLL-S  
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

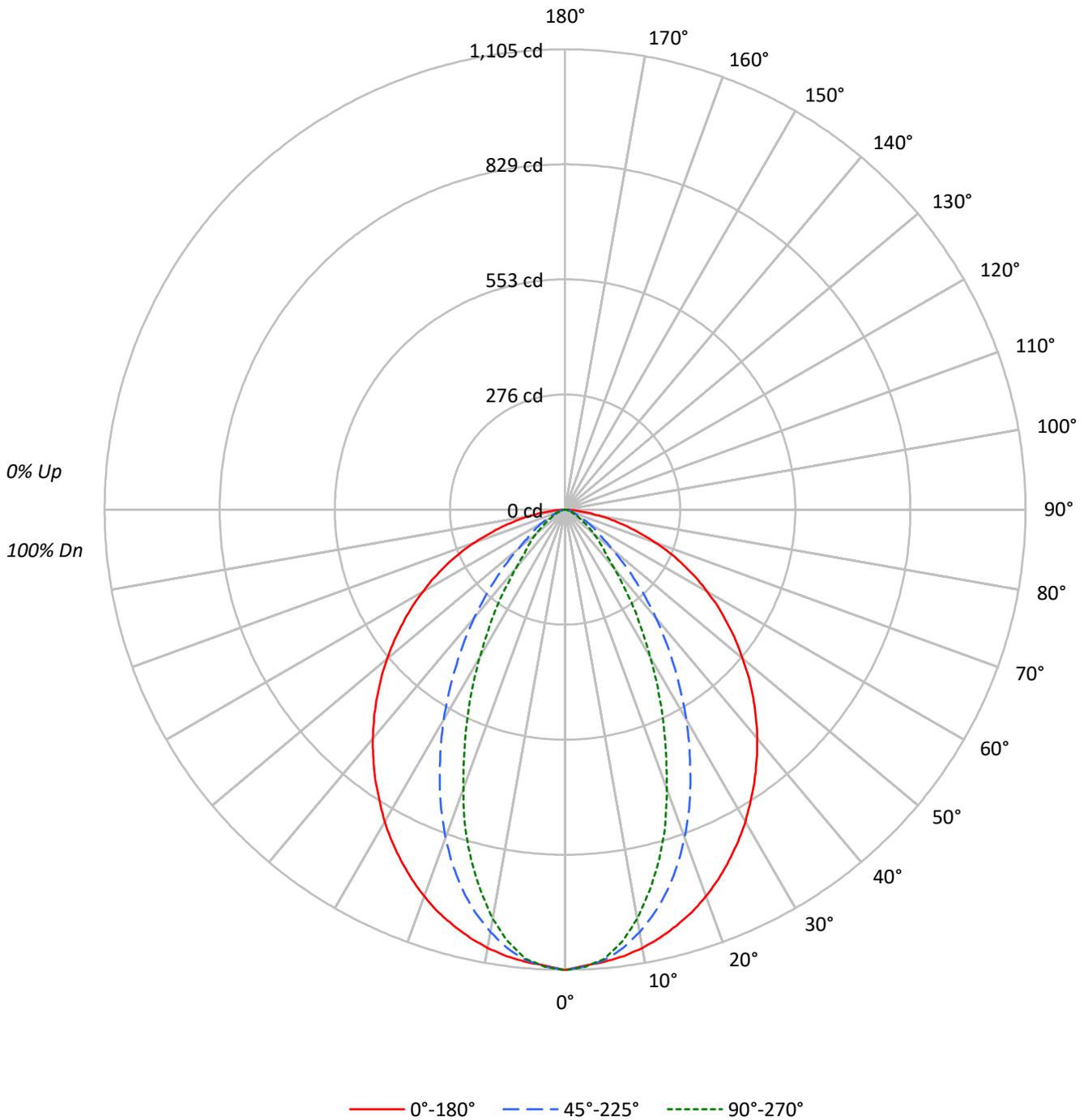
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1537.1 lumens  
Efficiency: N/A  
Efficacy: 44.3 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94  
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 34.7  
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	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			79	
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70			70	
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62			62	
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56			56	
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51			51	
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46			46	
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42			42	
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39			39	
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36			36	

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

	0°	45°	90°
0°	13326	13326	13326
5°	13187	13136	13098
10°	13083	12608	12211
15°	12907	11821	10867
20°	12676	10754	9154
25°	12377	9464	7387
30°	12048	8109	5688
35°	11673	6692	4209
40°	11296	5326	2869
45°	10880	3983	2162
50°	10434	2770	1690
55°	9976	2026	1234
60°	9498	1517	885
65°	8938	1016	688
70°	8086	740	553
75°	6978	536	438
80°	5603	437	361
85°	2905	429	290

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10880 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.2	6.6
10°-20°	266.0	17.3
20°-30°	334.2	21.7
30°-40°	311.2	20.2
40°-50°	238.2	15.5
50°-60°	158.4	10.3
60°-70°	85.4	5.6
70°-80°	35.0	2.3
80°-90°	6.7	0.4
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°	702.3	45.7
0°-40°	1013.5	65.9
0°-60°	1410.1	91.7
0°-90°	1537.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1537.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1090	1101	1085	1081	1082	103
15°	1034	1017	947	892	871	291
25°	930	868	711	593	555	428
35°	793	676	455	322	286	496
45°	638	472	234	137	127	492
55°	475	274	96	67	59	425
65°	313	106	36	26	24	310
75°	150	25	12	10	9	160
85°	21	3	3	3	2	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1105.3	<i>1105.3</i>	1105.3	1105.3	1105.3
2.5°	<i>1095.9</i>	<i>1109.5</i>	<i>1098.0</i>	<i>1099.0</i>	<i>1099.0</i>
5°	1089.6	<i>1101.1</i>	1085.4	1081.2	1082.3
7.5°	1081.2	<i>1088.6</i>	1062.4	1048.8	1046.7
10°	1068.7	<i>1070.8</i>	1029.9	1005.8	997.4
12.5°	1052.9	<i>1045.6</i>	992.2	952.4	936.7
15°	1034.1	<i>1017.3</i>	947.1	891.6	870.6
17.5°	1013.1	<i>984.8</i>	895.8	823.5	798.4
20°	988.0	<i>948.2</i>	838.2	748.1	713.5
22.5°	960.7	<i>909.4</i>	777.4	670.5	631.8
25°	930.4	<i>867.5</i>	711.4	593.0	555.3
27.5°	898.9	<i>822.5</i>	646.4	519.7	480.9
30°	865.4	<i>776.4</i>	582.5	448.4	408.6
32.5°	828.7	<i>726.1</i>	516.5	382.4	342.6
35°	793.1	<i>675.8</i>	454.7	321.6	286.0
37.5°	755.4	<i>625.5</i>	395.0	268.2	228.4
40°	717.7	<i>574.1</i>	338.4	215.8	182.3
42.5°	677.9	<i>522.8</i>	285.0	171.8	145.6
45°	638.1	<i>471.5</i>	233.6	137.2	126.8
47.5°	598.2	<i>420.1</i>	188.6	118.4	107.9
50°	556.3	<i>370.9</i>	147.7	100.6	90.1
52.5°	516.5	<i>321.6</i>	115.2	82.8	73.3
55°	474.6	<i>274.5</i>	96.4	67.1	58.7
57.5°	435.8	<i>226.3</i>	79.6	52.4	46.1
60°	393.9	<i>183.3</i>	62.9	40.9	36.7
62.5°	354.1	<i>143.5</i>	48.2	32.5	29.3
65°	313.3	<i>105.8</i>	35.6	26.2	24.1
67.5°	272.4	<i>76.5</i>	27.2	21.0	19.9
70°	229.4	<i>57.6</i>	21.0	16.8	15.7
72.5°	188.6	<i>40.9</i>	15.7	13.6	12.6
75°	149.8	<i>25.1</i>	11.5	10.5	9.4
77.5°	115.2	<i>14.7</i>	8.4	8.4	7.3
80°	80.7	<i>8.4</i>	6.3	6.3	5.2
82.5°	49.2	<i>5.2</i>	4.2	4.2	4.2
85°	21.0	<i>3.1</i>	3.1	3.1	2.1
87.5°	3.1	<i>1.0</i>	1.0	1.0	1.0
90°	0.0	<i>0.0</i>	0.0	0.0	0.0

(END OF REPORT)