

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: P1059207

Luminaire Tested: S123RDR-S340D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059207  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S340D927-X4F0-XX-UDD-SVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

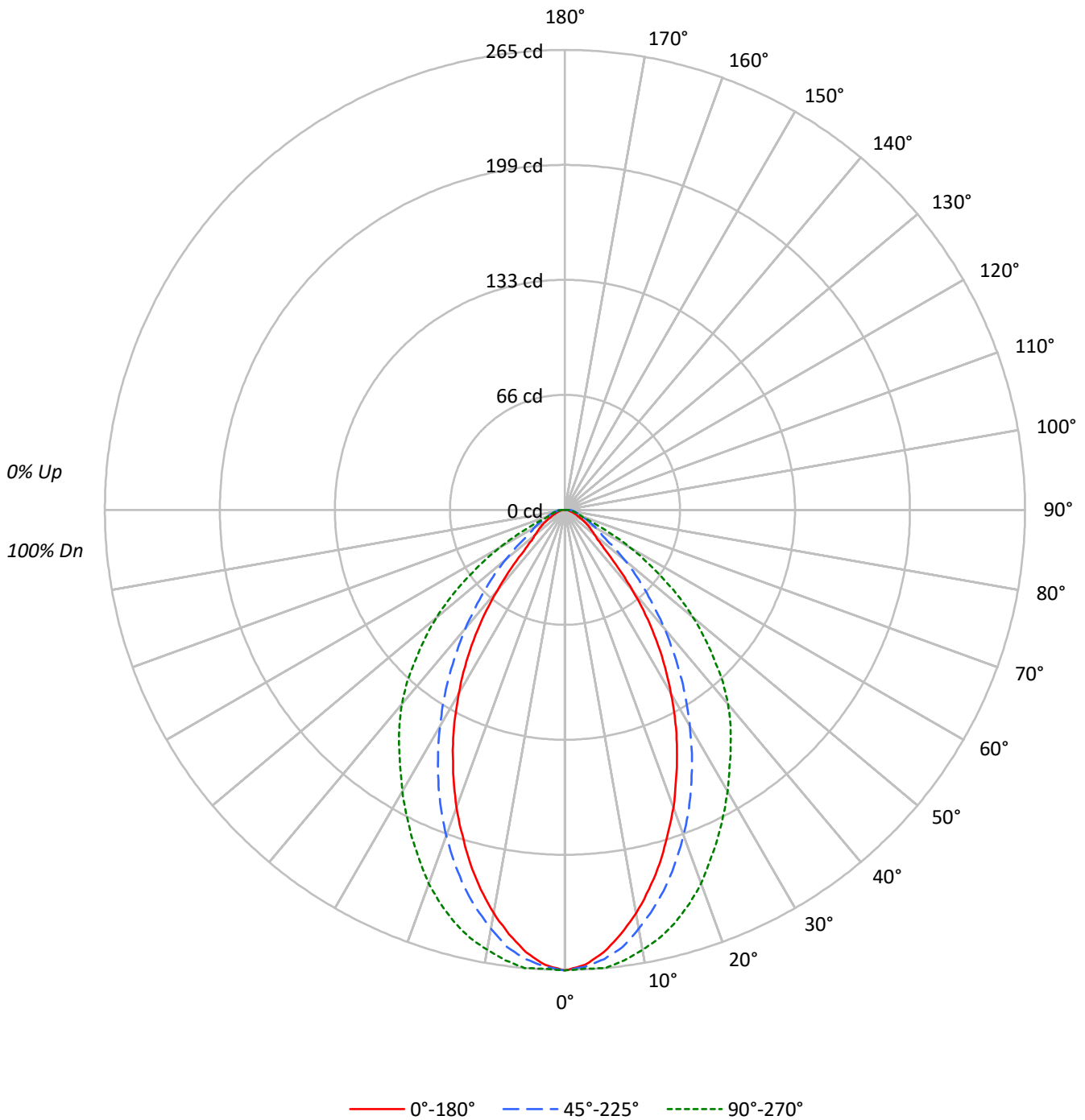
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 356.3 lumens  
Efficiency: N/A  
Efficacy: 28.5 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

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

	0°	45°	90°
0°	3116	3116	3116
5°	3016	3062	3125
10°	2815	2921	3070
15°	2565	2730	2991
20°	2283	2497	2864
25°	1978	2235	2700
30°	1658	1950	2540
35°	1315	1659	2387
40°	930	1364	2240
45°	548	1079	2014
50°	409	818	1765
55°	344	553	1417
60°	279	472	1008
65°	220	403	531
70°	192	350	330
75°	181	331	313
80°	176	358	311
85°	216	539	404

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2014 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.4	6.9
10°-20°	63.5	17.8
20°-30°	80.9	22.7
30°-40°	76.1	21.3
40°-50°	54.8	15.4
50°-60°	31.6	8.9
60°-70°	14.5	4.1
70°-80°	7.2	2.0
80°-90°	3.4	1.0
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°	168.8	47.4
0°-40°	244.8	68.7
0°-60°	331.2	93.0
0°-90°	356.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	356.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	265	265	265	265	265	
5°	256	260	260	262	265	24
15°	211	219	225	237	246	59
25°	153	161	172	192	208	70
35°	92	100	116	142	166	57
45°	33	41	65	98	121	28
55°	17	18	27	51	69	15
65°	8	11	14	16	19	8
75°	4	8	7	7	7	4
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	265.4	265.4	265.4	265.4	265.4
2.5°	262.5	265.8	263.5	263.8	264.5
5°	255.9	260.2	259.8	262.5	265.1
7.5°	246.6	251.6	254.2	258.2	261.8
10°	236.1	241.7	245.0	252.3	257.5
12.5°	223.9	231.2	235.4	245.0	252.6
15°	211.0	218.6	224.6	237.1	246.0
17.5°	196.5	204.8	212.4	227.2	238.1
20°	182.7	190.6	199.8	216.0	229.2
22.5°	167.5	176.1	186.6	203.8	218.6
25°	152.7	160.6	172.5	191.6	208.4
27.5°	137.8	145.7	158.3	179.4	197.8
30°	122.3	130.6	143.8	167.2	187.3
32.5°	107.2	115.1	129.9	155.3	176.4
35°	91.7	99.6	115.7	142.4	166.5
37.5°	76.5	84.7	101.9	131.9	156.6
40°	60.7	69.6	89.0	121.0	146.1
42.5°	45.8	55.4	76.2	109.8	134.5
45°	33.0	41.2	65.0	97.6	121.3
47.5°	25.7	30.0	54.7	85.1	109.1
50°	22.4	23.1	44.8	73.5	96.6
52.5°	19.5	20.1	35.3	62.7	83.4
55°	16.8	17.5	27.0	51.4	69.2
57.5°	14.2	15.2	22.4	40.9	55.7
60°	11.9	13.2	20.1	31.3	42.9
62.5°	9.6	11.9	17.1	23.1	30.7
65°	7.9	11.2	14.5	16.2	19.1
67.5°	6.6	10.2	12.2	11.5	11.2
70°	5.6	9.2	10.2	9.2	9.6
72.5°	4.6	8.6	8.6	7.9	7.9
75°	4.0	7.6	7.3	6.9	6.9
77.5°	3.3	6.6	6.3	5.9	5.6
80°	2.6	5.3	5.3	4.9	4.6
82.5°	2.3	4.3	4.3	4.3	3.6
85°	1.6	3.6	4.0	3.6	3.0
87.5°	1.3	3.3	3.3	3.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)