

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: P1059220

Luminaire Tested: S123RDR-S340D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059220  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S340D935-X4F0-XX-UDD-BVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

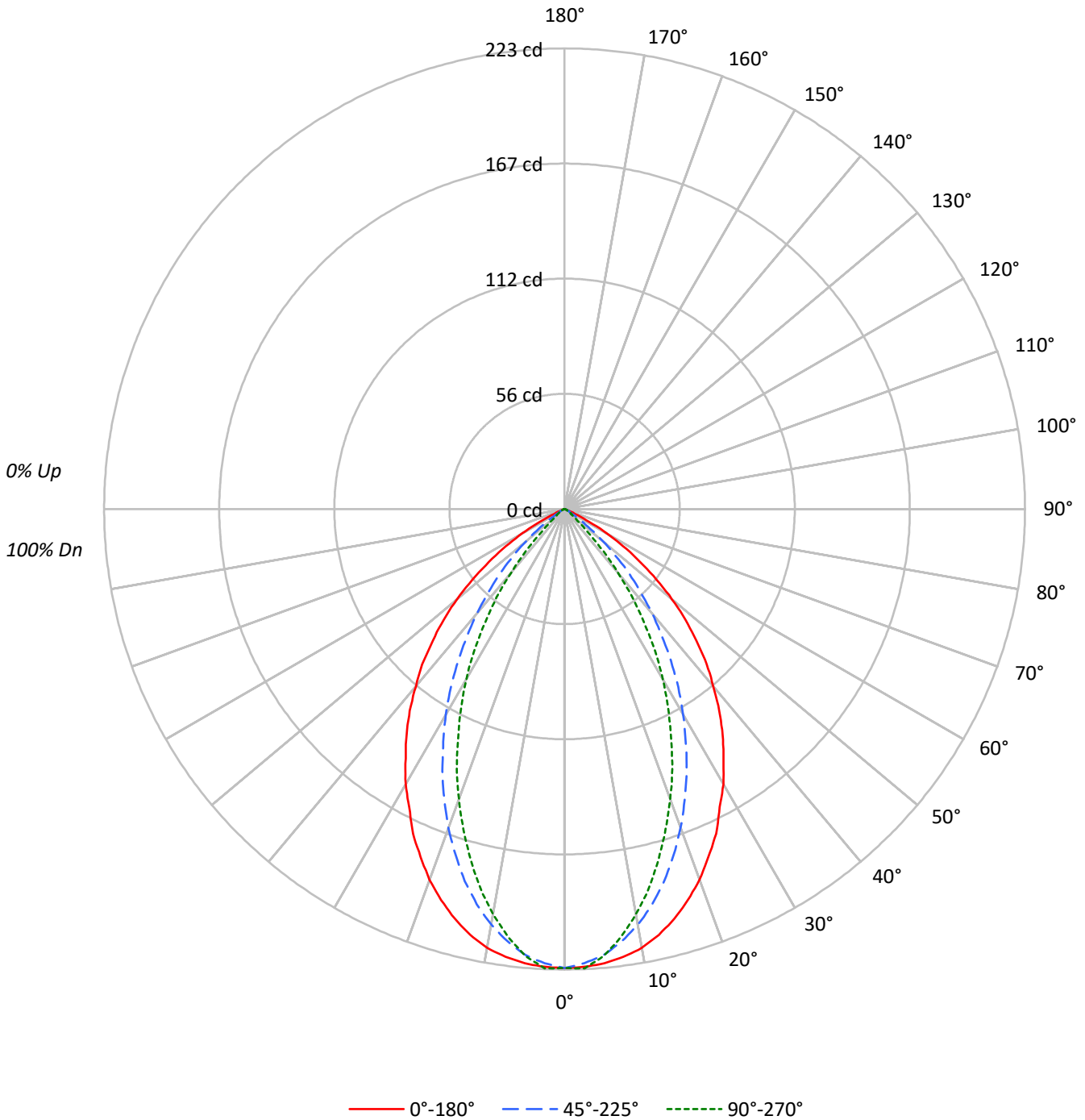
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 253.6 lumens  
Efficiency: N/A  
Efficacy: 20.3 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94  
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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

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

	0°	45°	90°
0°	2610	2610	2610
5°	2603	2557	2560
10°	2573	2437	2376
15°	2497	2267	2136
20°	2388	2053	1869
25°	2249	1813	1581
30°	2087	1558	1291
35°	1914	1287	959
40°	1717	1010	615
45°	1498	737	256
50°	1242	438	99
55°	915	182	74
60°	554	68	42
65°	150	39	19
70°	0	14	14
75°	0	0	18
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1498 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.5	8.1
10°-20°	52.8	20.8
20°-30°	65.8	25.9
30°-40°	58.8	23.2
40°-50°	37.1	14.6
50°-60°	15.5	6.1
60°-70°	2.9	1.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	139.1	54.8
0°-40°	197.9	78.0
0°-60°	250.6	98.8
0°-90°	253.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	253.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	222	222	222	222	222	
5°	221	220	217	218	217	21
15°	205	200	186	179	176	58
25°	174	160	140	128	122	79
35°	134	114	90	74	67	83
45°	90	70	44	24	15	70
55°	45	31	9	4	4	40
65°	5	4	1	1	1	8
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	222.3	222.3	222.3	222.3	222.3
2.5°	221.9	222.3	220.1	222.3	222.6
5°	220.8	220.5	216.9	217.6	217.2
7.5°	218.7	217.6	211.2	209.7	209.0
10°	215.8	212.9	204.4	200.8	199.3
12.5°	211.2	207.2	196.1	190.4	188.3
15°	205.4	200.4	186.5	178.6	175.7
17.5°	198.6	191.5	175.7	167.1	162.8
20°	191.1	181.1	164.3	153.9	149.6
22.5°	182.2	171.1	152.1	141.0	136.4
25°	173.6	159.6	139.9	127.8	122.0
27.5°	162.8	148.2	127.1	114.5	108.4
30°	153.9	137.1	114.9	100.9	95.2
32.5°	143.2	125.6	102.4	87.0	81.6
35°	133.5	114.2	89.8	73.7	66.9
37.5°	123.1	103.1	77.3	60.5	54.0
40°	112.0	92.0	65.9	47.2	40.1
42.5°	102.0	80.9	54.4	35.1	27.9
45°	90.2	70.1	44.4	23.6	15.4
47.5°	79.5	60.1	33.6	13.2	8.2
50°	68.0	49.7	24.0	6.8	5.4
52.5°	56.2	39.7	15.7	4.7	4.3
55°	44.7	30.8	8.9	3.6	3.6
57.5°	33.6	22.2	4.7	2.9	2.5
60°	23.6	14.7	2.9	2.1	1.8
62.5°	13.6	8.6	2.1	1.4	1.4
65°	5.4	3.9	1.4	0.7	0.7
67.5°	0.4	1.1	0.7	0.4	0.4
70°	0.0	0.0	0.4	0.4	0.4
72.5°	0.0	0.0	0.4	0.4	0.4
75°	0.0	0.0	0.0	0.0	0.4
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)