

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: P1059211

Luminaire Tested: S123RDR-S340D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059211  
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-S340D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

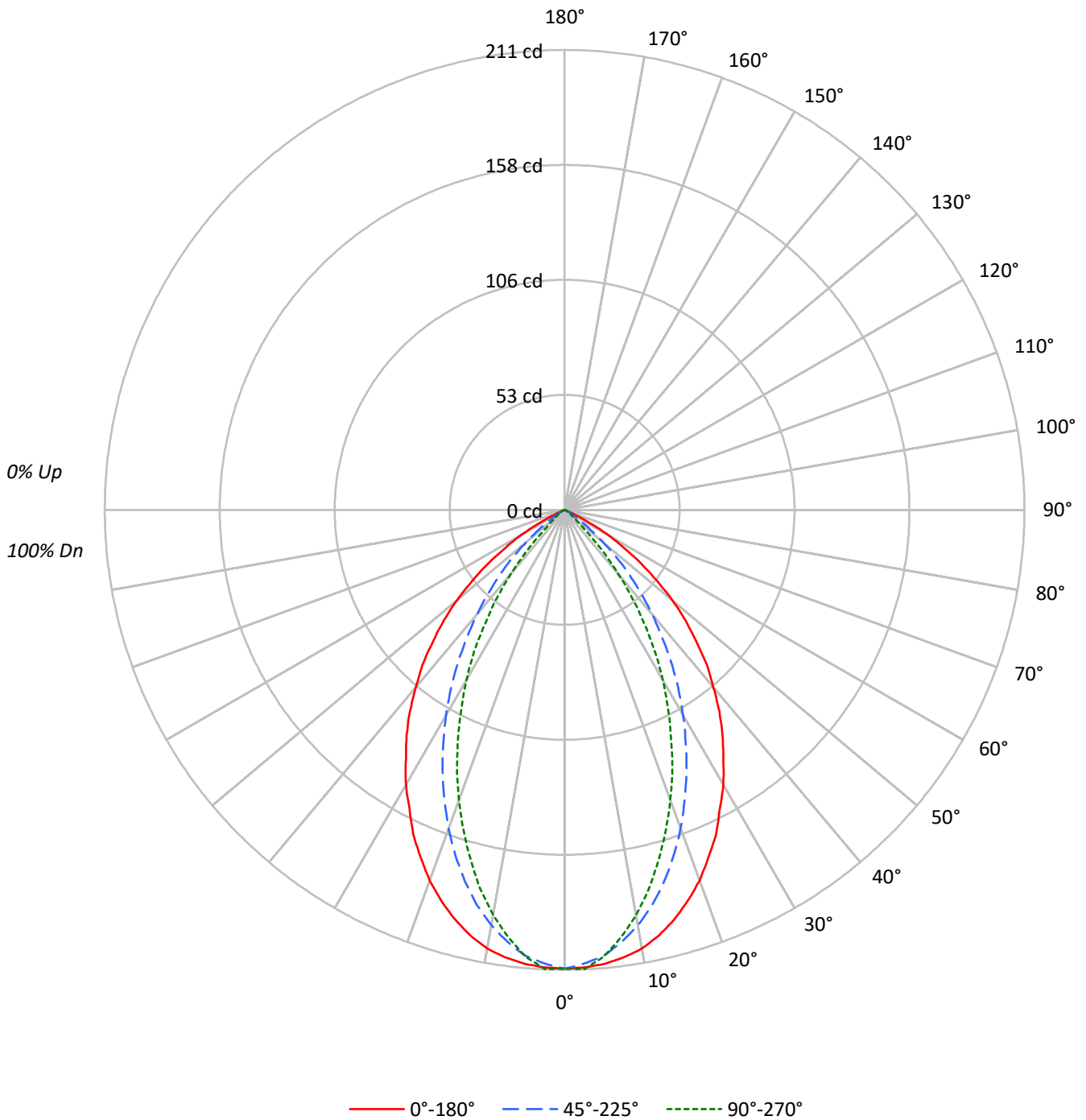
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 240.1 lumens  
Efficiency: N/A  
Efficacy: 19.2 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°	2472	2472	2472
5°	2465	2421	2425
10°	2437	2307	2251
15°	2364	2147	2023
20°	2262	1944	1771
25°	2130	1717	1498
30°	1976	1475	1222
35°	1812	1220	909
40°	1626	957	582
45°	1418	697	242
50°	1176	415	93
55°	868	174	70
60°	526	63	40
65°	142	39	19
70°	0	10	10
75°	0	0	14
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1418 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	19.4	8.1
10°-20°	50.0	20.8
20°-30°	62.3	25.9
30°-40°	55.7	23.2
40°-50°	35.2	14.6
50°-60°	14.7	6.1
60°-70°	2.8	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°	131.7	54.8
0°-40°	187.4	78.0
0°-60°	237.3	98.8
0°-90°	240.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	240.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	210	210	210	210	210	
5°	209	209	205	206	206	20
15°	194	190	177	169	166	55
25°	164	151	132	121	116	75
35°	126	108	85	70	63	79
45°	85	66	42	22	15	66
55°	42	29	8	3	3	38
65°	5	4	1	1	1	7
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°	210.5	210.5	210.5	210.5	210.5
2.5°	210.1	210.5	208.4	210.5	210.8
5°	209.1	208.8	205.4	206.1	205.7
7.5°	207.1	206.1	200.0	198.6	197.9
10°	204.4	201.6	193.5	190.1	188.8
12.5°	200.0	196.2	185.7	180.3	178.3
15°	194.5	189.8	176.6	169.1	166.4
17.5°	188.1	181.3	166.4	158.3	154.2
20°	181.0	171.5	155.6	145.7	141.7
22.5°	172.5	162.0	144.0	133.5	129.1
25°	164.4	151.1	132.5	121.0	115.6
27.5°	154.2	140.3	120.3	108.4	102.7
30°	145.7	129.8	108.8	95.6	90.1
32.5°	135.6	119.0	96.9	82.4	77.3
35°	126.4	108.1	85.1	69.8	63.4
37.5°	116.6	97.6	73.2	57.3	51.2
40°	106.1	87.1	62.4	44.7	38.0
42.5°	96.6	76.6	51.5	33.2	26.4
45°	85.4	66.4	42.0	22.4	14.6
47.5°	75.2	56.9	31.9	12.5	7.8
50°	64.4	47.1	22.7	6.4	5.1
52.5°	53.2	37.6	14.9	4.4	4.1
55°	42.4	29.1	8.5	3.4	3.4
57.5°	31.9	21.0	4.4	2.7	2.4
60°	22.4	13.9	2.7	2.0	1.7
62.5°	12.9	8.1	2.0	1.4	1.4
65°	5.1	3.7	1.4	0.7	0.7
67.5°	0.3	1.0	0.7	0.3	0.3
70°	0.0	0.0	0.3	0.3	0.3
72.5°	0.0	0.0	0.3	0.3	0.3
75°	0.0	0.0	0.0	0.0	0.3
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)