

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: P1059214

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059214  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S340D930-X4F0-XX-UDD-SVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

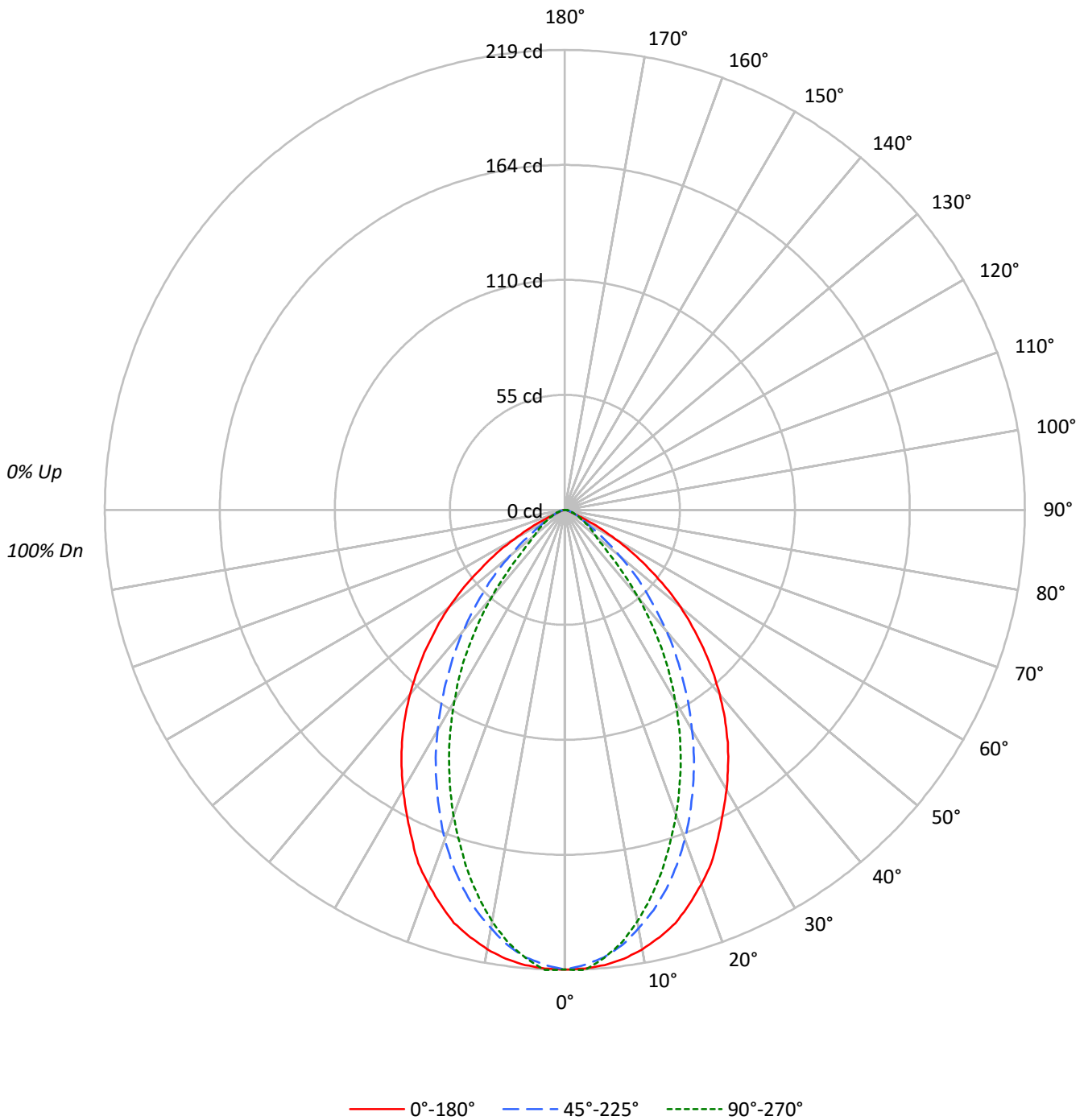
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 282.7 lumens  
Efficiency: N/A  
Efficacy: 22.6 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 0.85 / 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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	2570	2570	2570
5°	2565	2521	2525
10°	2534	2412	2372
15°	2476	2270	2168
20°	2372	2088	1936
25°	2235	1871	1691
30°	2087	1641	1425
35°	1938	1399	1147
40°	1757	1153	831
45°	1548	895	502
50°	1313	625	340
55°	999	375	285
60°	653	240	223
65°	272	178	178
70°	93	127	141
75°	77	91	109
80°	47	68	95
85°	40	40	94

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1548 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.2	7.2
10°-20°	52.9	18.7
20°-30°	67.9	24.0
30°-40°	63.7	22.5
40°-50°	44.4	15.7
50°-60°	23.0	8.1
60°-70°	7.8	2.8
70°-80°	2.3	0.8
80°-90°	0.5	0.2
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°	141.0	49.9
0°-40°	204.7	72.4
0°-60°	272.1	96.3
0°-90°	282.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	282.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	219	219	219	219	219	
5°	218	217	214	215	214	21
15°	204	199	187	181	178	57
25°	172	162	144	135	130	79
35°	135	119	98	85	80	84
45°	93	76	54	37	30	72
55°	49	37	18	14	14	44
65°	10	8	6	6	6	12
75°	2	2	2	2	2	2
85°	0	0	0	0	1	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	218.9	218.9	218.9	218.9	218.9
2.5°	218.6	218.9	216.9	218.9	219.3
5°	217.6	217.3	213.9	214.9	214.2
7.5°	215.6	214.5	209.1	207.8	207.8
10°	212.5	210.5	202.3	200.0	198.9
12.5°	208.4	205.7	195.2	190.8	189.1
15°	203.7	198.6	186.7	180.6	178.3
17.5°	196.9	190.1	177.3	170.1	166.4
20°	189.8	181.3	167.1	158.6	154.9
22.5°	182.3	172.2	155.9	146.8	142.7
25°	172.5	161.7	144.4	134.6	130.5
27.5°	163.0	151.5	133.2	122.0	117.9
30°	153.9	140.3	121.0	110.2	105.1
32.5°	144.7	129.5	109.5	97.6	92.9
35°	135.2	118.6	97.6	85.1	80.0
37.5°	125.1	108.1	86.4	72.9	66.8
40°	114.6	96.9	75.2	60.0	54.2
42.5°	104.0	86.8	64.1	48.5	41.7
45°	93.2	76.3	53.9	37.3	30.2
47.5°	82.4	65.8	44.1	27.1	22.7
50°	71.9	55.9	34.2	20.0	18.6
52.5°	60.3	46.4	25.8	16.6	16.3
55°	48.8	36.6	18.3	14.2	13.9
57.5°	38.6	28.5	13.2	11.9	11.5
60°	27.8	20.3	10.2	9.8	9.5
62.5°	18.3	13.9	8.1	7.8	7.8
65°	9.8	8.5	6.4	6.1	6.4
67.5°	4.1	4.7	4.7	5.1	5.1
70°	2.7	3.1	3.7	4.1	4.1
72.5°	2.0	2.4	2.7	3.1	3.1
75°	1.7	1.7	2.0	2.4	2.4
77.5°	1.0	1.4	1.4	1.7	2.0
80°	0.7	1.0	1.0	1.4	1.4
82.5°	0.3	0.7	0.7	1.0	1.0
85°	0.3	0.3	0.3	0.3	0.7
87.5°	0.0	0.0	0.0	0.0	0.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)