

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: P1059205

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059205  
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-S340D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

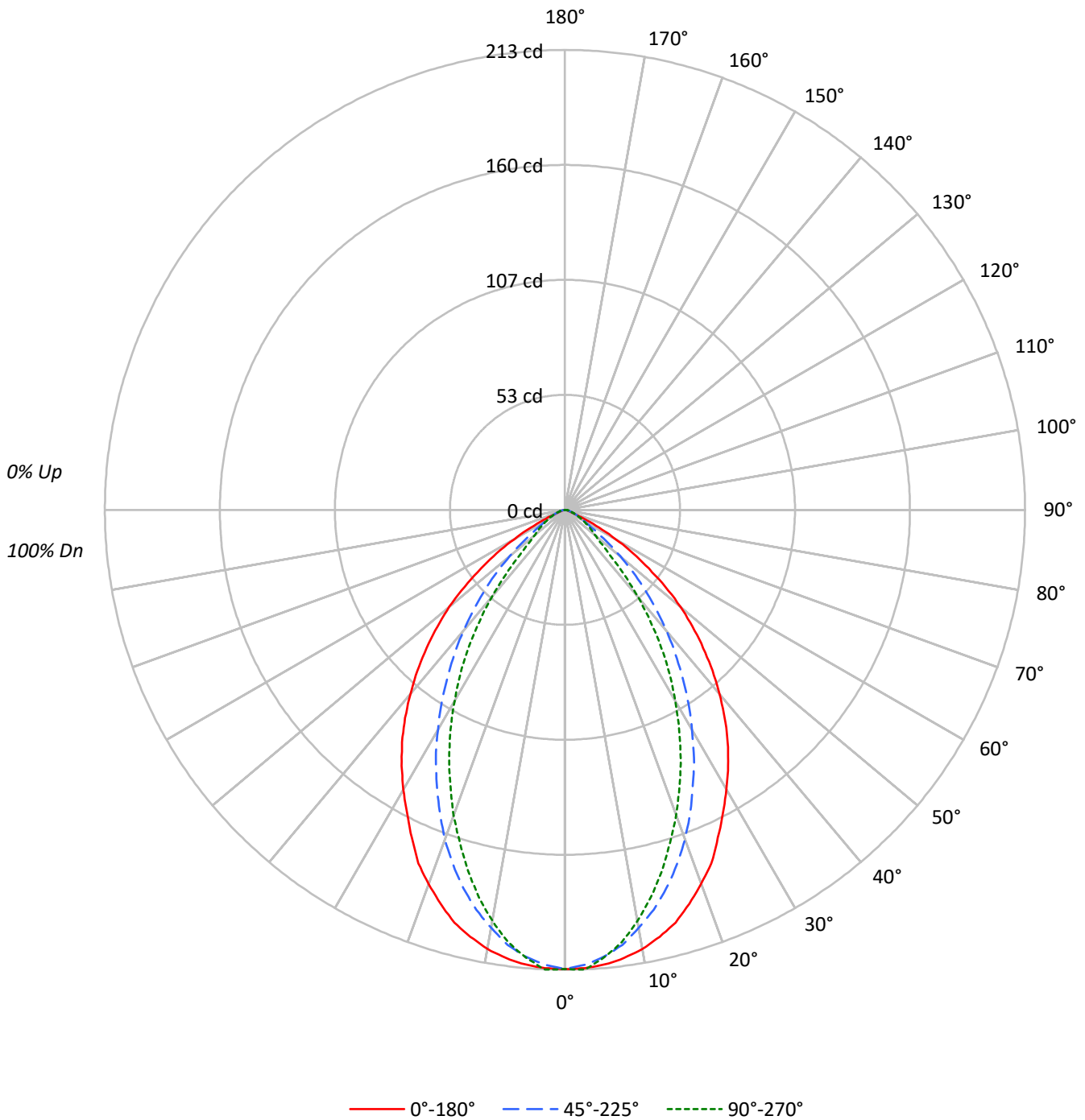
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 274.6 lumens  
Efficiency: N/A  
Efficacy: 22.0 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	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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				73
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66				66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55				55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46				46
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42				42
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39				39

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

	0°	45°	90°
0°	2498	2498	2498
5°	2492	2449	2453
10°	2462	2344	2305
15°	2406	2206	2106
20°	2304	2029	1881
25°	2171	1818	1643
30°	2027	1595	1384
35°	1884	1359	1114
40°	1706	1121	808
45°	1505	870	487
50°	1275	608	331
55°	970	364	276
60°	634	233	216
65°	267	175	175
70°	89	124	137
75°	73	91	104
80°	47	68	88
85°	40	40	94

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1505 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	19.6	7.2
10°-20°	51.4	18.7
20°-30°	65.9	24.0
30°-40°	61.9	22.5
40°-50°	43.2	15.7
50°-60°	22.3	8.1
60°-70°	7.6	2.8
70°-80°	2.2	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°	137.0	49.9
0°-40°	198.9	72.4
0°-60°	264.4	96.3
0°-90°	274.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	274.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	213	213	213	213	213	
5°	211	211	208	209	208	20
15°	198	193	182	176	173	55
25°	168	157	140	131	127	77
35°	131	115	95	83	78	82
45°	91	74	52	36	29	70
55°	47	36	18	14	14	43
65°	10	8	6	6	6	11
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°	212.7	212.7	212.7	212.7	212.7
2.5°	212.4	212.7	210.8	212.7	213.1
5°	211.4	211.1	207.8	208.8	208.1
7.5°	209.4	208.5	203.2	201.9	201.9
10°	206.5	204.5	196.6	194.3	193.3
12.5°	202.5	199.9	189.7	185.4	183.8
15°	197.9	193.0	181.5	175.5	173.2
17.5°	191.3	184.7	172.2	165.3	161.7
20°	184.4	176.2	162.4	154.1	150.5
22.5°	177.2	167.3	151.5	142.6	138.6
25°	167.6	157.1	140.3	130.7	126.8
27.5°	158.4	147.2	129.4	118.6	114.6
30°	149.5	136.3	117.6	107.0	102.1
32.5°	140.6	125.8	106.4	94.8	90.2
35°	131.4	115.3	94.8	82.7	77.7
37.5°	121.5	105.1	84.0	70.8	64.9
40°	111.3	94.2	73.1	58.3	52.7
42.5°	101.1	84.3	62.2	47.1	40.5
45°	90.6	74.1	52.4	36.2	29.3
47.5°	80.0	63.9	42.8	26.3	22.1
50°	69.8	54.3	33.3	19.4	18.1
52.5°	58.6	45.1	25.0	16.1	15.8
55°	47.4	35.6	17.8	13.8	13.5
57.5°	37.5	27.7	12.8	11.5	11.2
60°	27.0	19.8	9.9	9.6	9.2
62.5°	17.8	13.5	7.9	7.6	7.6
65°	9.6	8.2	6.3	5.9	6.3
67.5°	4.0	4.6	4.6	4.9	4.9
70°	2.6	3.0	3.6	4.0	4.0
72.5°	2.0	2.3	2.6	3.0	3.0
75°	1.6	1.6	2.0	2.3	2.3
77.5°	1.0	1.3	1.3	1.6	2.0
80°	0.7	1.0	1.0	1.3	1.3
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)