

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: P1059239

Luminaire Tested: S123RDR-S340D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059239  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S340D950-X4F0-XX-UDD-BVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

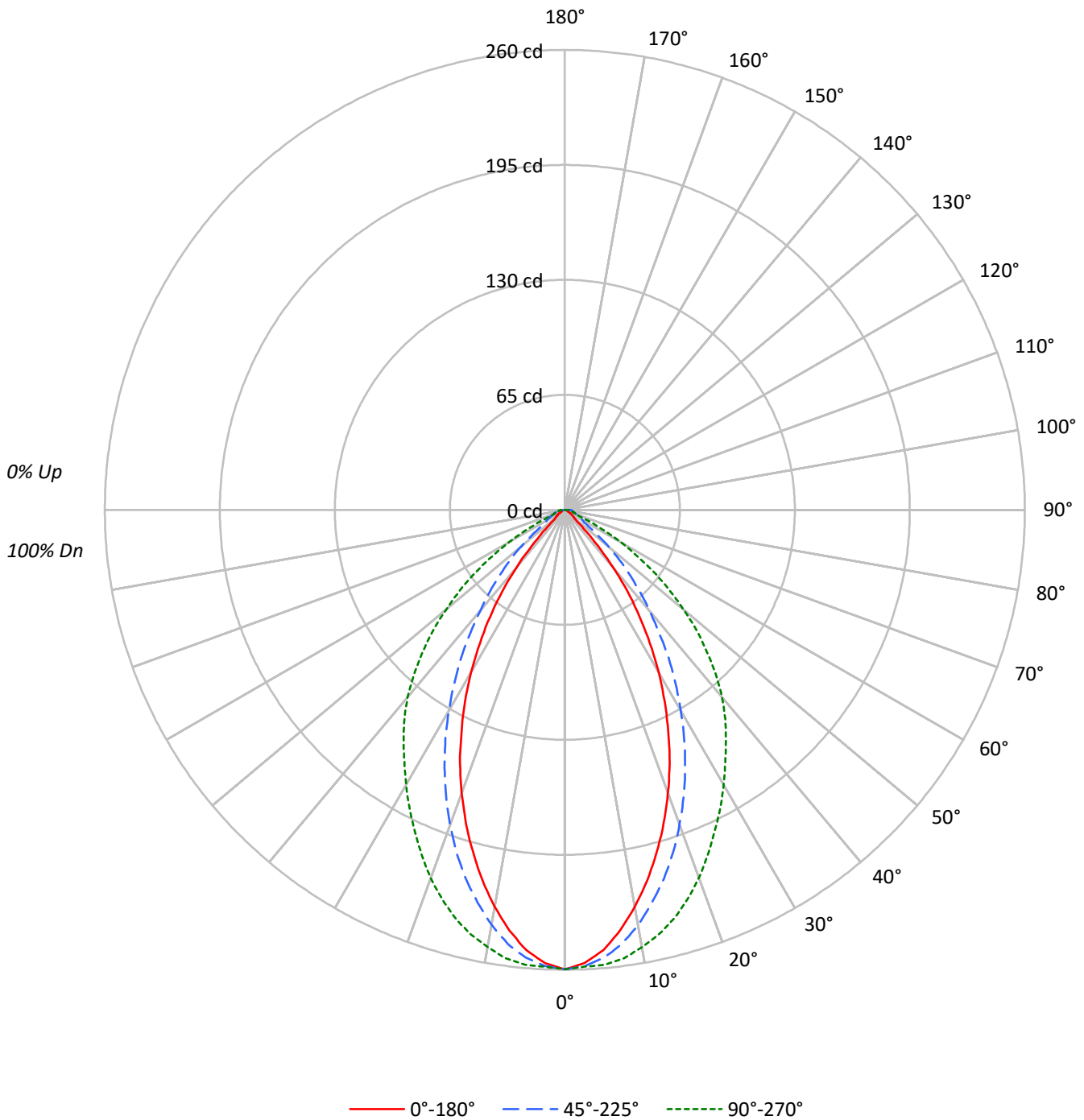
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 312.0 lumens  
Efficiency: N/A  
Efficacy: 25.0 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.06 / 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	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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40				

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

	0°	45°	90°
0°	3050	3050	3050
5°	2944	2995	3042
10°	2717	2841	2993
15°	2437	2626	2905
20°	2128	2367	2769
25°	1791	2083	2598
30°	1437	1776	2434
35°	1054	1464	2276
40°	651	1139	2118
45°	251	857	1886
50°	124	588	1597
55°	98	326	1253
60°	66	270	838
65°	56	242	375
70°	55	220	220
75°	73	236	218
80°	108	298	243
85°	162	485	323

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1886 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.8	7.6
10°-20°	61.0	19.5
20°-30°	75.7	24.2
30°-40°	67.8	21.7
40°-50°	44.6	14.3
50°-60°	22.3	7.2
60°-70°	8.8	2.8
70°-80°	5.0	1.6
80°-90°	3.1	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°	160.4	51.4
0°-40°	228.2	73.1
0°-60°	295.1	94.6
0°-90°	312.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	312.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	260	260	260	260	260	
5°	250	254	254	256	258	23
15°	200	207	216	231	239	56
25°	138	147	161	184	200	63
35°	74	83	102	133	159	46
45°	15	25	52	87	114	14
55°	5	6	16	43	61	4
65°	2	6	9	11	14	2
75°	2	5	5	5	5	2
85°	1	4	4	4	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	259.7	259.7	259.7	259.7	259.7
2.5°	256.5	260.1	258.1	258.1	258.5
5°	249.8	253.7	254.1	255.7	258.1
7.5°	239.8	245.0	247.4	252.1	255.7
10°	227.9	233.5	238.3	246.6	251.0
12.5°	214.8	220.4	227.5	239.0	245.8
15°	200.5	206.9	216.0	230.7	239.0
17.5°	185.8	192.2	203.3	220.0	230.7
20°	170.3	177.5	189.4	208.5	221.6
22.5°	154.9	162.8	175.5	196.2	211.2
25°	138.2	146.9	160.8	183.5	200.5
27.5°	122.3	131.4	146.1	170.7	190.2
30°	106.0	115.2	131.0	157.6	179.5
32.5°	89.3	99.7	116.3	145.3	168.8
35°	73.5	83.4	102.1	133.4	158.8
37.5°	58.0	67.9	87.4	121.9	148.9
40°	42.5	52.8	74.3	110.8	138.2
42.5°	27.8	38.5	62.7	99.7	126.3
45°	15.1	25.0	51.6	87.0	113.6
47.5°	8.3	13.5	41.7	75.0	101.3
50°	6.8	7.5	32.2	63.9	87.4
52.5°	5.6	6.4	23.0	53.2	74.7
55°	4.8	5.6	15.9	42.9	61.2
57.5°	4.0	4.8	12.7	33.0	48.0
60°	2.8	4.8	11.5	24.2	35.7
62.5°	2.4	4.8	9.9	16.7	23.8
65°	2.0	5.6	8.7	11.1	13.5
67.5°	1.6	5.6	7.5	7.1	7.1
70°	1.6	5.6	6.4	6.0	6.4
72.5°	1.6	6.0	6.0	5.6	5.6
75°	1.6	5.2	5.2	4.8	4.8
77.5°	1.6	4.8	4.8	4.4	4.4
80°	1.6	4.4	4.4	4.0	3.6
82.5°	1.6	4.0	4.0	3.6	3.2
85°	1.2	3.6	3.6	3.6	2.4
87.5°	1.2	3.2	3.6	3.2	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)