

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: P1059243

Luminaire Tested: S123RDR-S340D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059243  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S340D950-X4F0-XX-UDD-SVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

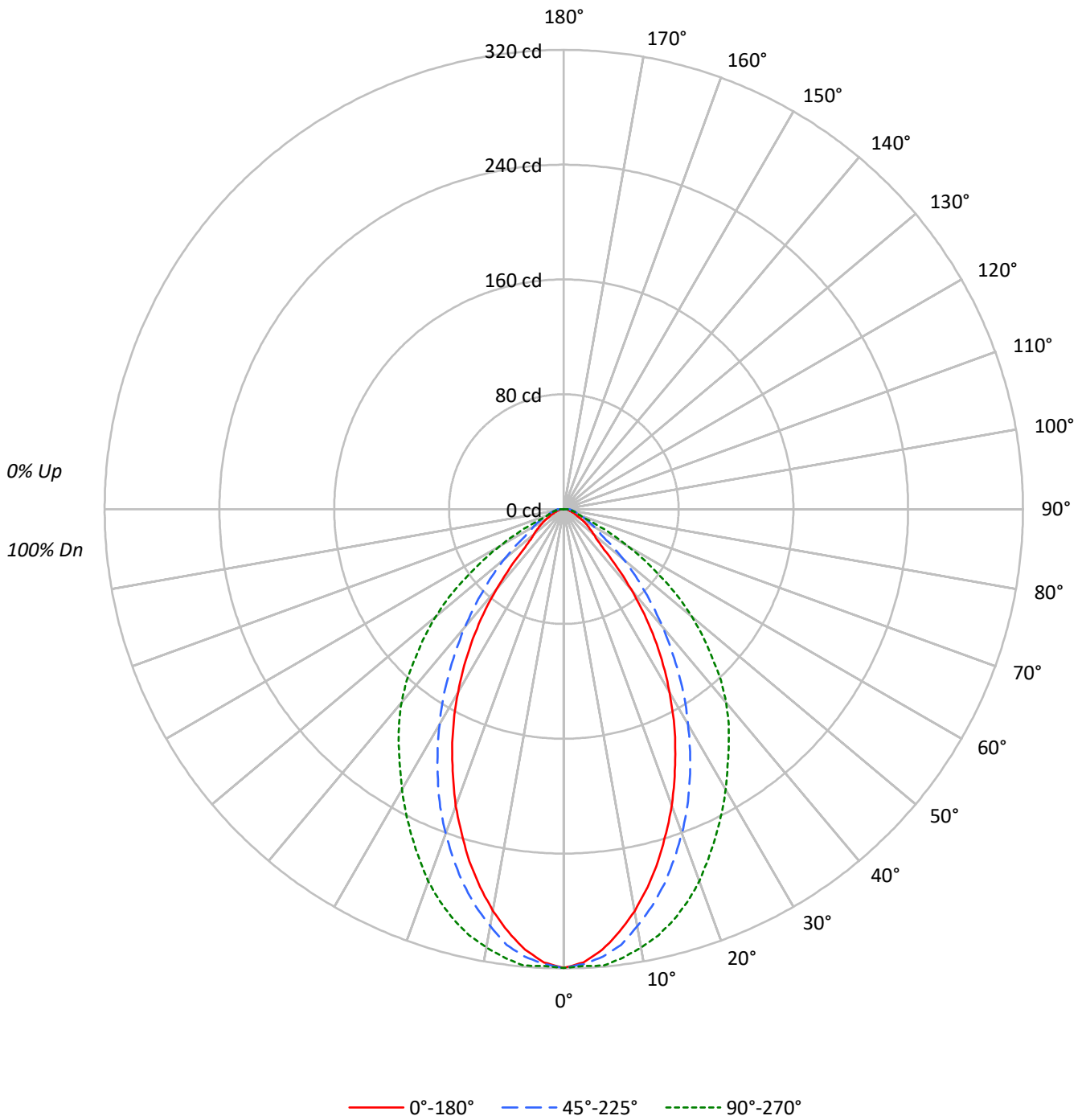
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 429.1 lumens  
Efficiency: N/A  
Efficacy: 34.3 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 1.08 / 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

TEST NUMBER: P1059243

CATALOG NUMBER: S123RDR-S340D950-X4F0-XX-UDD-SVL-W

### 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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			89	
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79			79	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64			64	
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58			58	
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52			52	
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48			48	
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44			44	
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40			40	
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37			37	

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

	0°	45°	90°
0°	3754	3754	3754
5°	3633	3688	3764
10°	3390	3517	3698
15°	3089	3287	3601
20°	2749	3007	3449
25°	2383	2691	3252
30°	1997	2347	3059
35°	1583	1998	2874
40°	1121	1643	2696
45°	659	1299	2426
50°	493	986	2126
55°	416	667	1707
60°	336	568	1212
65°	264	486	639
70°	233	422	395
75°	218	395	377
80°	216	433	379
85°	269	647	485

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2426 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.4	6.9
10°-20°	76.5	17.8
20°-30°	97.4	22.7
30°-40°	91.6	21.3
40°-50°	66.0	15.4
50°-60°	38.1	8.9
60°-70°	17.4	4.1
70°-80°	8.7	2.0
80°-90°	4.1	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°	203.2	47.4
0°-40°	294.8	68.7
0°-60°	398.9	93.0
0°-90°	429.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	429.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	320	320	320	320	320	
5°	308	313	313	316	319	29
15°	254	263	270	286	296	71
25°	184	193	208	231	251	84
35°	110	120	139	172	200	68
45°	40	50	78	118	146	34
55°	20	21	33	62	83	18
65°	10	14	18	20	23	10
75°	5	9	9	8	8	5
85°	2	4	5	4	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	319.7	319.7	319.7	319.7	319.7
2.5°	316.1	320.1	317.3	317.7	318.5
5°	308.2	313.3	312.9	316.1	319.3
7.5°	297.0	303.0	306.2	310.9	315.3
10°	284.3	291.1	295.0	303.8	310.1
12.5°	269.6	278.4	283.5	295.0	304.2
15°	254.1	263.3	270.4	285.5	296.2
17.5°	236.7	246.6	255.7	273.6	286.7
20°	220.0	229.5	240.6	260.1	276.0
22.5°	201.7	212.1	224.8	245.4	263.3
25°	183.9	193.4	207.7	230.7	251.0
27.5°	166.0	175.5	190.6	216.0	238.3
30°	147.3	157.3	173.1	201.3	225.6
32.5°	129.1	138.6	156.5	187.0	212.4
35°	110.4	119.9	139.4	171.5	200.5
37.5°	92.1	102.1	122.7	158.8	188.6
40°	73.1	83.8	107.2	145.7	175.9
42.5°	55.2	66.7	91.7	132.2	162.0
45°	39.7	49.6	78.2	117.5	146.1
47.5°	31.0	36.1	65.9	102.5	131.4
50°	27.0	27.8	54.0	88.6	116.4
52.5°	23.4	24.2	42.5	75.4	100.5
55°	20.3	21.0	32.6	61.9	83.4
57.5°	17.1	18.3	27.0	49.2	67.1
60°	14.3	15.9	24.2	37.7	51.6
62.5°	11.5	14.3	20.6	27.8	36.9
65°	9.5	13.5	17.5	19.5	23.0
67.5°	7.9	12.3	14.7	13.9	13.5
70°	6.8	11.1	12.3	11.1	11.5
72.5°	5.6	10.3	10.3	9.5	9.5
75°	4.8	9.1	8.7	8.3	8.3
77.5°	4.0	7.9	7.5	7.1	6.8
80°	3.2	6.4	6.4	6.0	5.6
82.5°	2.8	5.2	5.2	5.2	4.4
85°	2.0	4.4	4.8	4.4	3.6
87.5°	1.6	4.0	4.0	3.6	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)