

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: P1059170

Luminaire Tested: S123RDR-S340D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

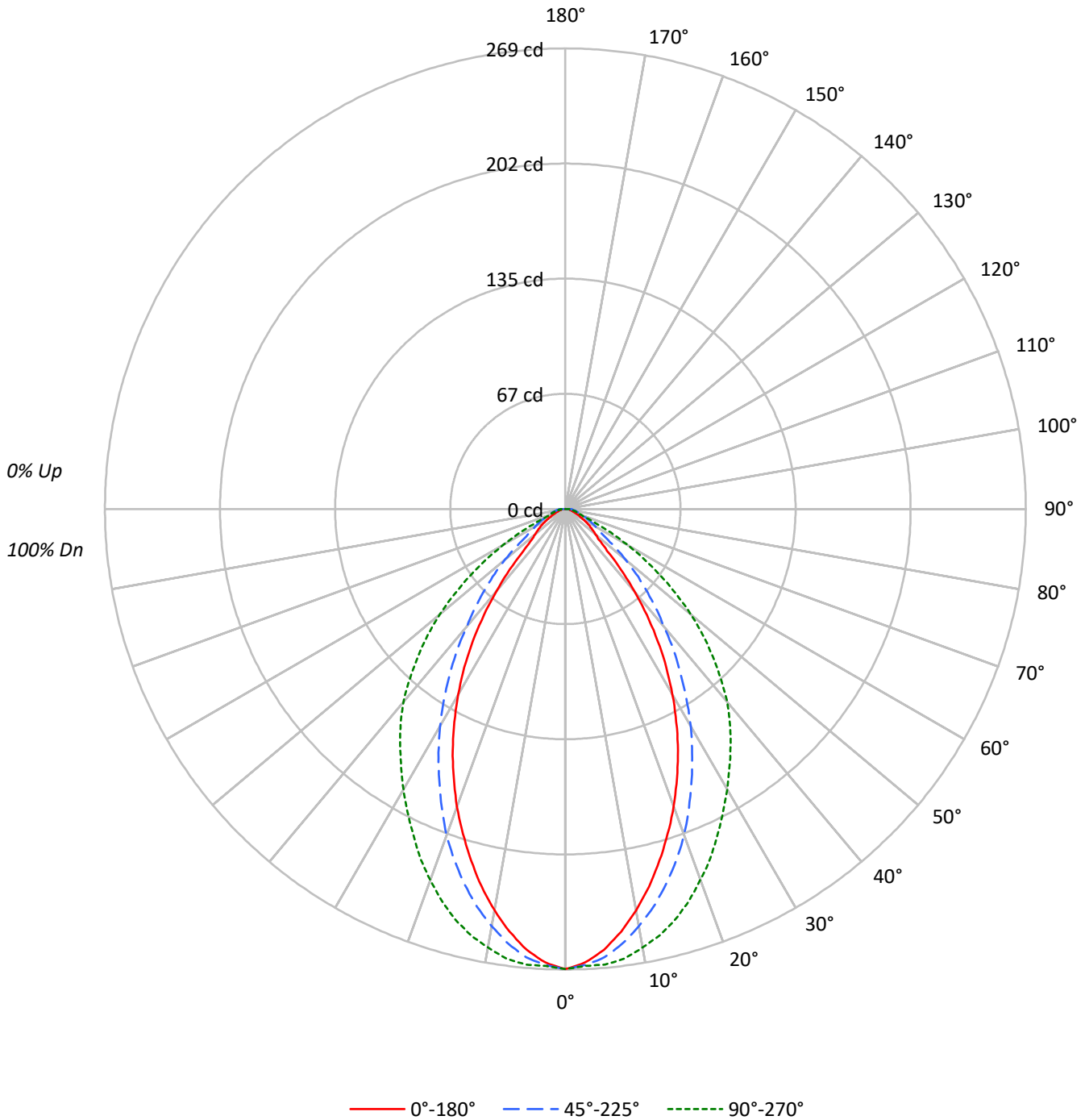
Test Method: LM-79-2019  
Report Number: P1059170  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S340D830-X4F0-XX-UDD-SVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 359.8 lumens  
Efficiency: N/A  
Efficacy: 28.8 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.07 / 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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

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

	0°	45°	90°
0°	3155	3155	3155
5°	3047	3098	3148
10°	2839	2951	3101
15°	2585	2761	3018
20°	2313	2534	2882
25°	2017	2261	2723
30°	1696	1984	2564
35°	1349	1681	2413
40°	963	1370	2255
45°	573	1101	2019
50°	422	839	1748
55°	354	569	1390
60°	287	470	977
65°	228	403	522
70°	189	350	323
75°	177	340	304
80°	183	372	291
85°	269	525	364

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2019 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.7	6.9
10°-20°	64.1	17.8
20°-30°	81.8	22.7
30°-40°	76.9	21.4
40°-50°	55.3	15.4
50°-60°	31.7	8.8
60°-70°	14.5	4.0
70°-80°	7.3	2.0
80°-90°	3.5	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°	170.6	47.4
0°-40°	247.5	68.8
0°-60°	334.5	93.0
0°-90°	359.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	359.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	269	269	269	269	269	
5°	258	264	263	265	267	24
15°	213	220	227	239	248	59
25°	156	163	174	193	210	71
35°	94	101	117	144	168	58
45°	34	42	66	98	122	29
55°	17	18	28	51	68	15
65°	8	11	14	16	19	8
75°	4	8	8	7	7	4
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	268.7	268.7	268.7	268.7	268.7
2.5°	265.2	269.1	266.7	266.7	267.1
5°	258.5	263.6	262.8	264.8	267.1
7.5°	249.1	254.6	256.1	260.8	264.8
10°	238.1	244.4	247.5	255.0	260.1
12.5°	225.9	233.0	238.1	247.5	255.0
15°	212.6	220.0	227.1	239.3	248.3
17.5°	198.9	206.3	215.3	229.5	240.0
20°	185.1	192.6	202.8	217.7	230.6
22.5°	170.2	177.7	188.7	205.5	221.2
25°	155.7	162.8	174.5	193.4	210.2
27.5°	140.4	147.5	160.4	180.8	199.6
30°	125.1	132.2	146.3	168.3	189.1
32.5°	109.8	116.5	131.8	156.1	178.5
35°	94.1	100.8	117.3	144.0	168.3
37.5°	78.1	84.7	103.9	133.0	158.1
40°	62.8	70.2	89.4	122.0	147.1
42.5°	47.9	55.7	77.7	110.2	134.5
45°	34.5	42.0	66.3	97.7	121.6
47.5°	26.3	30.2	56.1	85.1	109.0
50°	23.1	23.5	45.9	73.7	95.7
52.5°	20.0	20.4	35.7	62.8	81.6
55°	17.3	17.7	27.8	51.4	67.9
57.5°	14.5	15.3	22.7	40.8	54.5
60°	12.2	13.7	20.0	31.0	41.6
62.5°	9.8	12.6	17.3	22.7	29.8
65°	8.2	11.4	14.5	16.1	18.8
67.5°	6.7	10.6	12.2	11.4	11.4
70°	5.5	9.4	10.2	9.4	9.4
72.5°	4.7	9.0	8.6	7.8	7.8
75°	3.9	7.8	7.5	6.7	6.7
77.5°	3.5	6.7	6.3	5.9	5.5
80°	2.7	5.5	5.5	5.1	4.3
82.5°	2.4	4.7	4.7	4.3	3.5
85°	2.0	3.9	3.9	3.5	2.7
87.5°	1.6	3.5	3.5	3.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)