

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059227

Luminaire Tested: S123RDRP-S340D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059227  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDRP-S340D935-X4F0-XX-UDD-WVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

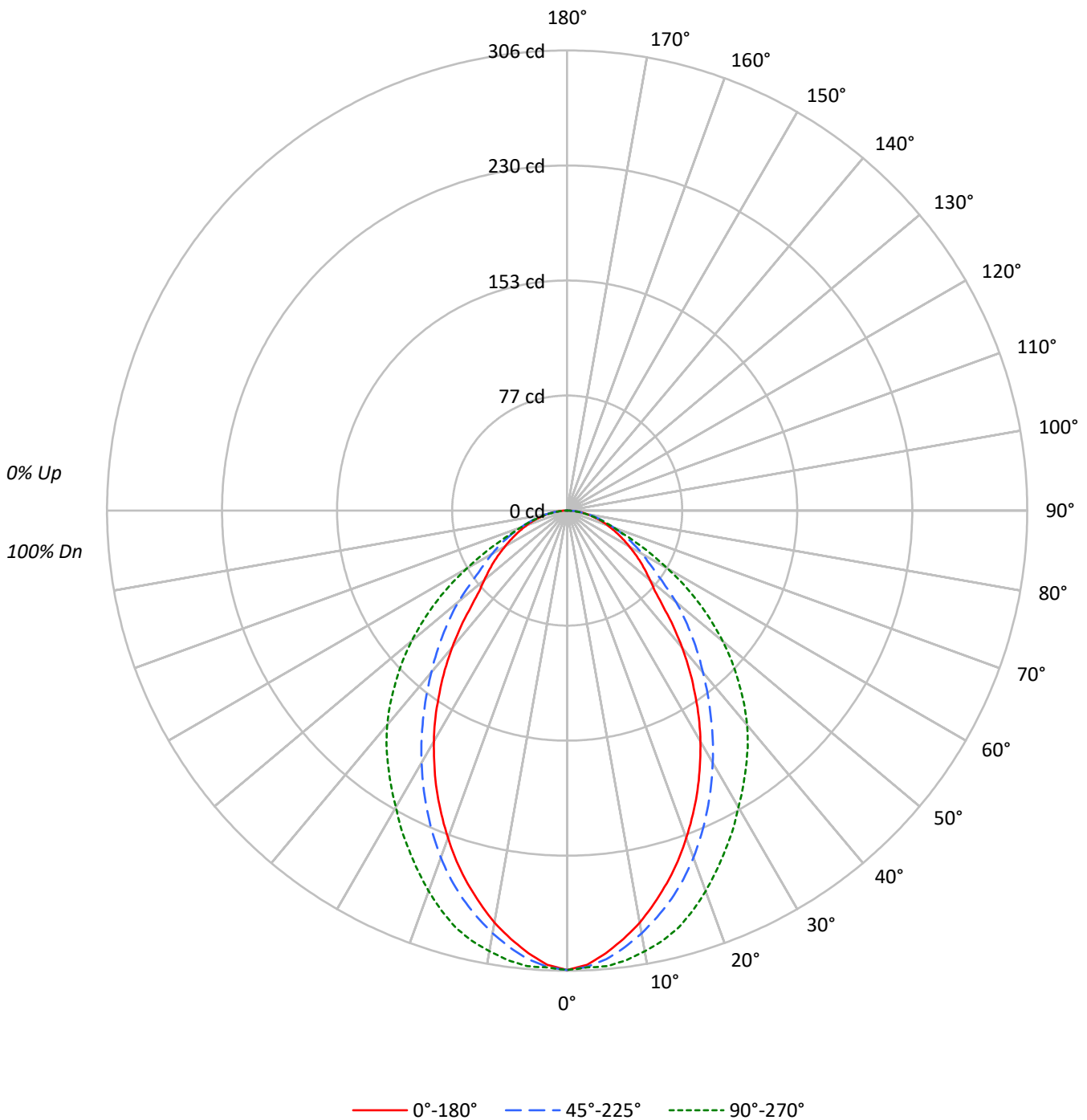
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 551.8 lumens  
Efficiency: N/A  
Efficacy: 44.1 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1  
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

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

	0°	45°	90°
0°	3587	3587	3587
5°	3483	3529	3585
10°	3318	3403	3548
15°	3117	3252	3488
20°	2895	3070	3365
25°	2659	2854	3225
30°	2404	2626	3089
35°	2120	2387	2973
40°	1823	2152	2854
45°	1498	1940	2677
50°	1315	1726	2466
55°	1218	1474	2184
60°	1118	1355	1808
65°	1045	1245	1423
70°	985	1130	1130
75°	926	1039	975
80°	872	947	825
85°	822	916	633

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2677 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.3	5.1
10°-20°	75.7	13.7
20°-30°	102.7	18.6
30°-40°	107.4	19.5
40°-50°	93.1	16.9
50°-60°	69.3	12.6
60°-70°	44.4	8.1
70°-80°	23.8	4.3
80°-90°	7.2	1.3
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°	206.6	37.4
0°-40°	314.0	56.9
0°-60°	476.4	86.3
0°-90°	551.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	551.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	306	306	306	306	306	
5°	296	300	299	302	304	28
15°	256	262	268	278	287	72
25°	205	212	220	235	249	94
35°	148	155	166	188	207	92
45°	90	97	117	142	161	71
55°	60	61	72	92	107	53
65°	38	41	45	48	51	37
75°	20	24	23	22	22	22
85°	6	8	7	6	5	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	305.5	305.5	305.5	305.5	305.5
2.5°	302.3	306.6	303.7	303.7	304.1
5°	295.5	300.5	299.4	301.5	304.1
7.5°	287.2	292.6	293.0	298.0	301.5
10°	278.3	283.6	285.4	292.6	297.6
12.5°	267.5	273.6	276.8	285.8	293.0
15°	256.4	262.5	267.5	278.3	286.9
17.5°	244.6	250.7	257.1	269.3	278.6
20°	231.7	238.2	245.7	257.9	269.3
22.5°	218.5	225.3	233.1	246.4	259.3
25°	205.2	211.7	220.3	234.9	248.9
27.5°	191.2	198.0	207.0	223.1	238.9
30°	177.3	184.1	193.7	210.9	227.8
32.5°	163.0	169.8	180.1	199.5	217.7
35°	147.9	155.1	166.5	187.7	207.4
37.5°	133.6	140.4	153.3	176.6	197.3
40°	118.9	126.1	140.4	165.5	186.2
42.5°	104.6	111.7	128.6	153.6	174.1
45°	90.2	97.1	116.8	141.8	161.2
47.5°	79.1	84.2	105.6	129.3	148.6
50°	72.0	73.8	94.5	117.1	135.0
52.5°	65.5	67.0	82.4	104.9	121.0
55°	59.5	60.9	72.0	92.4	106.7
57.5°	53.4	55.2	64.1	79.5	92.4
60°	47.6	49.8	57.7	68.0	77.0
62.5°	42.6	45.1	51.2	57.7	63.7
65°	37.6	40.8	44.8	47.6	51.2
67.5°	32.9	36.5	38.7	39.4	39.8
70°	28.7	32.2	32.9	32.9	32.9
72.5°	24.4	28.3	27.6	27.2	26.9
75°	20.4	23.6	22.9	21.8	21.5
77.5°	16.5	19.3	18.3	17.5	16.5
80°	12.9	15.0	14.0	13.3	12.2
82.5°	9.7	11.1	10.0	9.3	8.2
85°	6.1	7.5	6.8	5.7	4.7
87.5°	3.2	4.3	3.6	3.2	1.8
90°	0.0	0.0	0.0	0.0	0.0



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	11.23	12.71	11.59	13.03	13.34	13.98	15.46	14.35	15.78	16.09
	3H	12.94	14.26	13.31	14.59	14.95	15.00	16.33	15.38	16.66	17.02
	4H	13.60	14.84	14.00	15.19	15.57	15.37	16.61	15.77	16.96	17.34
	6H	14.10	15.25	14.51	15.61	16.01	15.62	16.77	16.03	17.14	17.53
	8H	14.28	15.37	14.70	15.76	16.16	15.69	16.79	16.12	17.18	17.58
	12H	14.40	15.45	14.83	15.83	16.26	15.73	16.77	16.16	17.16	17.59
4H	2H	12.00	13.25	12.41	13.60	13.98	14.25	15.50	14.65	15.85	16.23
	3H	13.93	14.96	14.34	15.36	15.76	15.50	16.54	15.92	16.94	17.34
	4H	14.73	15.66	15.17	16.08	16.52	15.99	16.92	16.42	17.34	17.78
	6H	15.37	16.18	15.83	16.63	17.09	16.37	17.18	16.83	17.62	18.08
	8H	15.60	16.36	16.07	16.80	17.27	16.48	17.24	16.95	17.68	18.15
	12H	15.78	16.45	16.26	16.93	17.40	16.55	17.23	17.04	17.71	18.18
8H	4H	15.05	15.81	15.52	16.25	16.72	16.18	16.94	16.65	17.38	17.85
	6H	15.85	16.47	16.34	16.96	17.44	16.67	17.30	17.17	17.79	18.27
	8H	16.17	16.73	16.69	17.24	17.73	16.85	17.41	17.36	17.92	18.41
	12H	16.45	16.95	16.96	17.44	18.01	16.98	17.48	17.49	17.97	18.53
12H	4H	15.08	15.75	15.56	16.23	16.70	16.20	16.87	16.68	17.35	17.82
	6H	15.90	16.46	16.42	16.97	17.46	16.71	17.27	17.22	17.78	18.27
	8H	16.29	16.79	16.80	17.28	17.85	16.94	17.43	17.45	17.93	18.49