

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: P1059246

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059246  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S340D950-X4F0-XX-UDD-WVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

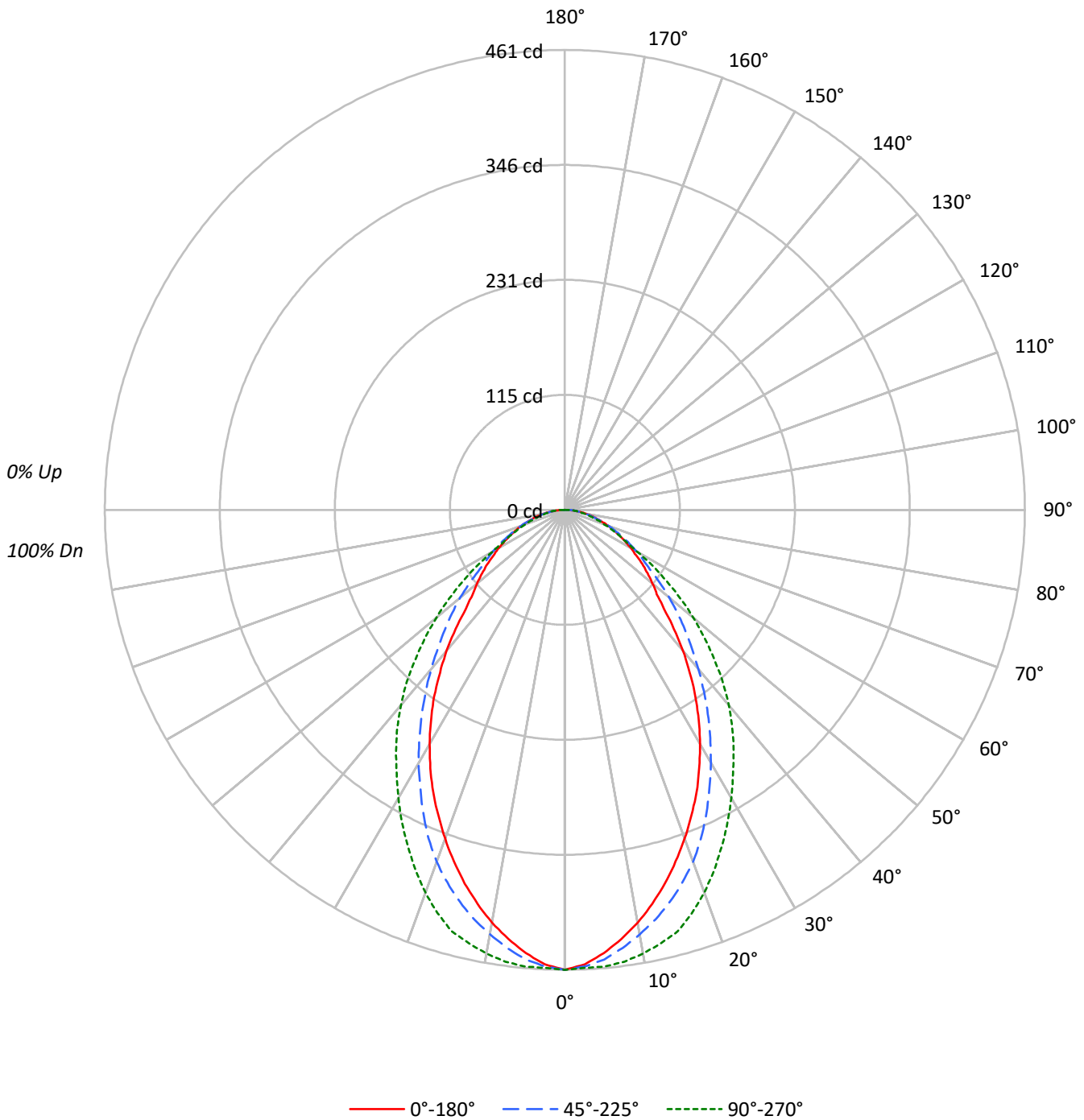
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 810.3 lumens  
Efficiency: N/A  
Efficacy: 64.8 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09  
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	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

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

	0°	45°	90°
0°	5414	5414	5414
5°	5258	5333	5416
10°	5011	5153	5385
15°	4713	4945	5316
20°	4384	4691	5103
25°	4046	4349	4822
30°	3674	3971	4525
35°	3271	3584	4227
40°	2822	3193	3918
45°	2333	2826	3512
50°	2095	2494	3067
55°	1941	2129	2543
60°	1790	1938	1947
65°	1664	1753	1631
70°	1566	1593	1432
75°	1475	1425	1261
80°	1393	1285	1183
85°	1334	1442	1334

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3512 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.7	5.3
10°-20°	115.1	14.2
20°-30°	155.7	19.2
30°-40°	160.0	19.7
40°-50°	134.3	16.6
50°-60°	96.3	11.9
60°-70°	61.3	7.6
70°-80°	33.7	4.2
80°-90°	11.2	1.4
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°	313.4	38.7
0°-40°	473.4	58.4
0°-60°	704.1	86.9
0°-90°	810.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	810.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	461	461	461	461	461	
5°	446	454	452	456	460	42
15°	388	398	407	424	437	109
25°	312	324	336	354	372	143
35°	228	240	250	272	295	142
45°	140	153	170	195	212	111
55°	95	97	104	118	124	85
65°	60	64	63	60	59	60
75°	32	36	31	29	28	35
85°	10	10	11	11	10	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	461.1	461.1	461.1	461.1	461.1
2.5°	456.0	462.3	458.0	458.4	459.5
5°	446.1	454.0	452.4	455.6	459.5
7.5°	433.8	442.5	442.9	450.4	456.8
10°	420.3	429.4	432.2	443.7	451.6
12.5°	404.4	414.3	420.3	434.5	444.9
15°	387.7	398.4	406.8	424.2	437.3
17.5°	369.5	381.0	391.7	410.3	423.8
20°	350.8	363.1	375.4	392.9	408.4
22.5°	331.4	344.1	356.8	373.8	390.9
25°	312.3	324.2	335.7	354.0	372.2
27.5°	291.7	304.0	313.9	334.1	353.2
30°	271.0	283.3	292.9	313.9	333.7
32.5°	249.6	262.3	271.0	292.9	313.5
35°	228.2	240.5	250.0	272.2	294.9
37.5°	205.6	219.1	228.6	253.6	275.8
40°	184.1	196.8	208.3	234.5	255.6
42.5°	161.9	175.0	188.1	215.1	234.5
45°	140.5	152.8	170.2	194.9	211.5
47.5°	125.0	132.9	153.2	173.8	189.7
50°	114.7	117.9	136.5	154.8	167.9
52.5°	104.4	106.8	119.5	136.1	146.0
55°	94.8	96.8	104.0	117.9	124.2
57.5°	84.5	86.5	92.5	100.4	104.0
60°	76.2	77.8	82.5	83.7	82.9
62.5°	67.9	70.2	72.6	69.8	68.7
65°	59.9	63.5	63.1	59.5	58.7
67.5°	52.8	56.4	54.4	50.8	49.6
70°	45.6	49.2	46.4	42.9	41.7
72.5°	38.9	42.9	38.5	35.3	34.5
75°	32.5	35.7	31.4	29.0	27.8
77.5°	26.6	29.0	25.0	23.0	22.2
80°	20.6	22.2	19.0	17.9	17.5
82.5°	15.1	15.9	13.9	14.7	14.3
85°	9.9	10.3	10.7	11.1	9.9
87.5°	4.8	6.7	6.7	6.3	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)