

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: P1059179

Luminaire Tested: S123RDR-S340D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059179
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-S340D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

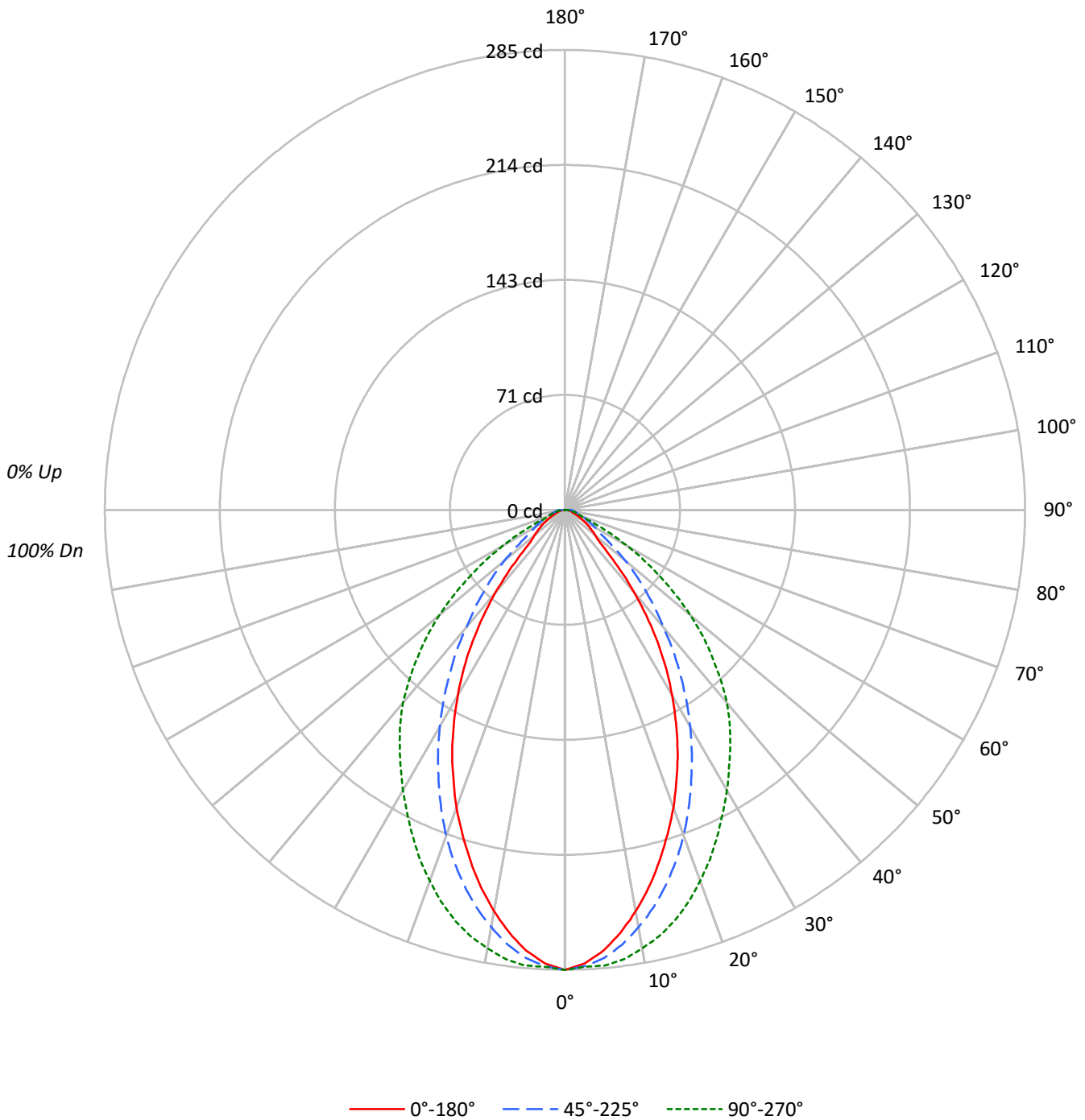
Lumens per Lamp: N/A
Luminaire Lumens: 381.7 lumens
Efficiency: N/A
Efficacy: 30.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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°	3348	3348	3348
5°	3232	3286	3341
10°	3012	3131	3290
15°	2743	2929	3202
20°	2454	2688	3058
25°	2140	2400	2891
30°	1801	2104	2720
35°	1432	1783	2559
40°	1021	1455	2393
45°	608	1167	2142
50°	449	890	1854
55°	375	604	1474
60°	303	498	1036
65°	242	428	556
70°	199	371	343
75°	191	358	322
80°	196	392	311
85°	283	566	391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2142 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.2	6.9
10°-20°	68.0	17.8
20°-30°	86.8	22.7
30°-40°	81.6	21.4
40°-50°	58.6	15.4
50°-60°	33.6	8.8
60°-70°	15.4	4.0
70°-80°	7.7	2.0
80°-90°	3.8	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°	181.0	47.4
0°-40°	262.6	68.8
0°-60°	354.9	93.0
0°-90°	381.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	381.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	285	285	285	285	285	
5°	274	280	279	281	283	25
15°	226	234	241	254	263	63
25°	165	173	185	205	223	75
35°	100	107	124	153	178	62
45°	37	44	70	104	129	31
55°	18	19	30	54	72	16
65°	9	12	15	17	20	9
75°	4	8	8	7	7	5
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°	285.1	285.1	285.1	285.1	285.1
2.5°	281.3	285.5	283.0	283.0	283.4
5°	274.2	279.7	278.8	280.9	283.4
7.5°	264.3	270.1	271.7	276.7	280.9
10°	252.6	259.3	262.6	270.5	275.9
12.5°	239.7	247.2	252.6	262.6	270.5
15°	225.6	233.5	240.9	253.8	263.4
17.5°	211.0	218.9	228.5	243.4	254.7
20°	196.4	204.3	215.1	231.0	244.7
22.5°	180.6	188.5	200.2	218.1	234.7
25°	165.2	172.7	185.2	205.2	223.1
27.5°	149.0	156.5	170.2	191.8	211.8
30°	132.8	140.2	155.2	178.5	200.6
32.5°	116.5	123.6	139.8	165.6	189.3
35°	99.9	106.9	124.4	152.7	178.5
37.5°	82.8	89.9	110.3	141.1	167.7
40°	66.6	74.5	94.9	129.4	156.1
42.5°	50.8	59.1	82.4	116.9	142.7
45°	36.6	44.5	70.3	103.6	129.0
47.5°	27.9	32.0	59.5	90.3	115.7
50°	24.6	25.0	48.7	78.2	101.5
52.5°	21.2	21.6	37.9	66.6	86.6
55°	18.3	18.7	29.5	54.5	72.0
57.5°	15.4	16.2	24.1	43.3	57.8
60°	12.9	14.6	21.2	32.9	44.1
62.5°	10.4	13.3	18.3	24.1	31.6
65°	8.7	12.1	15.4	17.1	20.0
67.5°	7.1	11.2	12.9	12.1	12.1
70°	5.8	10.0	10.8	10.0	10.0
72.5°	5.0	9.6	9.2	8.3	8.3
75°	4.2	8.3	7.9	7.1	7.1
77.5°	3.7	7.1	6.7	6.2	5.8
80°	2.9	5.8	5.8	5.4	4.6
82.5°	2.5	5.0	5.0	4.6	3.7
85°	2.1	4.2	4.2	3.7	2.9
87.5°	1.7	3.7	3.7	3.3	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)