

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: P1059180

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059180  
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-S340D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

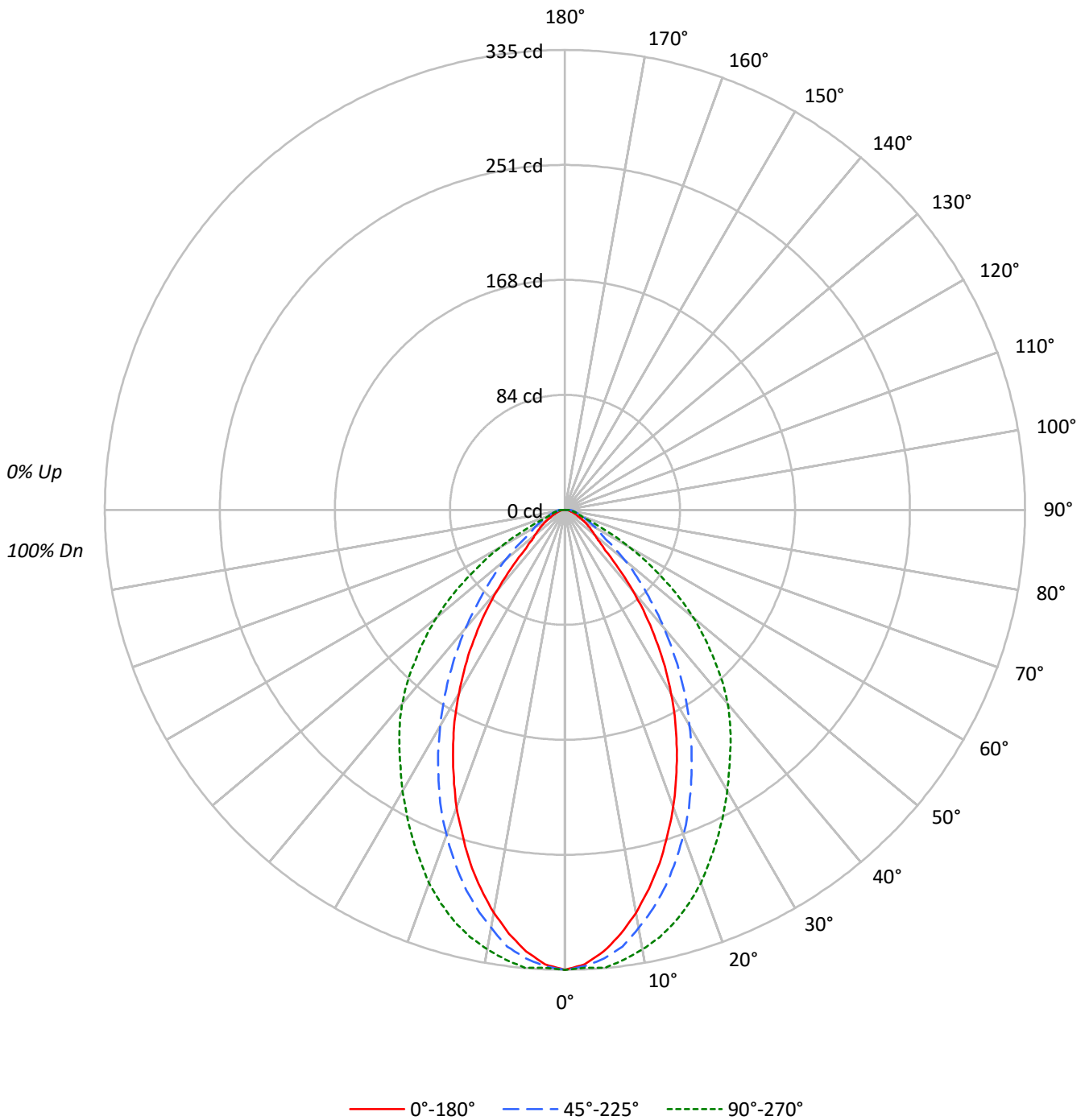
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 449.8 lumens  
Efficiency: N/A  
Efficacy: 36.0 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 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

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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				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°	3935	3935	3935
5°	3807	3866	3945
10°	3553	3688	3876
15°	3239	3446	3775
20°	2882	3152	3615
25°	2497	2821	3409
30°	2094	2461	3205
35°	1659	2094	3013
40°	1174	1723	2827
45°	691	1362	2544
50°	517	1034	2229
55°	434	698	1789
60°	352	597	1271
65°	278	508	670
70°	244	443	415
75°	227	417	395
80°	223	453	392
85°	283	674	498

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2544 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.8	6.9
10°-20°	80.1	17.8
20°-30°	102.1	22.7
30°-40°	96.0	21.3
40°-50°	69.1	15.4
50°-60°	39.9	8.9
60°-70°	18.3	4.1
70°-80°	9.1	2.0
80°-90°	4.3	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°	213.0	47.4
0°-40°	309.1	68.7
0°-60°	418.1	93.0
0°-90°	449.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	449.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	335	335	335	335	335	
5°	323	328	328	331	335	30
15°	266	276	284	299	310	74
25°	193	203	218	242	263	88
35°	116	126	146	180	210	72
45°	42	52	82	123	153	35
55°	21	22	34	65	87	19
65°	10	14	18	20	24	10
75°	5	10	9	9	9	5
85°	2	5	5	5	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	335.1	335.1	335.1	335.1	335.1
2.5°	331.3	335.5	332.6	333.0	333.8
5°	323.0	328.4	328.0	331.3	334.7
7.5°	311.4	317.6	320.9	325.9	330.5
10°	298.0	305.1	309.3	318.4	325.1
12.5°	282.6	291.8	297.2	309.3	318.8
15°	266.4	276.0	283.5	299.3	310.5
17.5°	248.1	258.5	268.1	286.8	300.5
20°	230.6	240.6	252.2	272.6	289.3
22.5°	211.5	222.3	235.6	257.2	276.0
25°	192.7	202.7	217.7	241.8	263.1
27.5°	174.0	184.0	199.8	226.4	249.7
30°	154.4	164.8	181.5	211.0	236.4
32.5°	135.3	145.3	164.0	196.1	222.7
35°	115.7	125.7	146.1	179.8	210.2
37.5°	96.6	107.0	128.6	166.5	197.7
40°	76.6	87.8	112.4	152.8	184.4
42.5°	57.9	69.9	96.2	138.6	169.8
45°	41.6	52.0	82.0	123.2	153.2
47.5°	32.5	37.9	69.1	107.4	137.8
50°	28.3	29.1	56.6	92.8	122.0
52.5°	24.6	25.4	44.5	79.1	105.3
55°	21.2	22.1	34.1	64.9	87.4
57.5°	17.9	19.1	28.3	51.6	70.3
60°	15.0	16.6	25.4	39.5	54.1
62.5°	12.1	15.0	21.6	29.1	38.7
65°	10.0	14.2	18.3	20.4	24.1
67.5°	8.3	12.9	15.4	14.6	14.2
70°	7.1	11.7	12.9	11.7	12.1
72.5°	5.8	10.8	10.8	10.0	10.0
75°	5.0	9.6	9.2	8.7	8.7
77.5°	4.2	8.3	7.9	7.5	7.1
80°	3.3	6.7	6.7	6.2	5.8
82.5°	2.9	5.4	5.4	5.4	4.6
85°	2.1	4.6	5.0	4.6	3.7
87.5°	1.7	4.2	4.2	3.7	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)