

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: P1059018

Luminaire Tested: S123RDR-S1000D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059018  
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-S1000D835-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: -

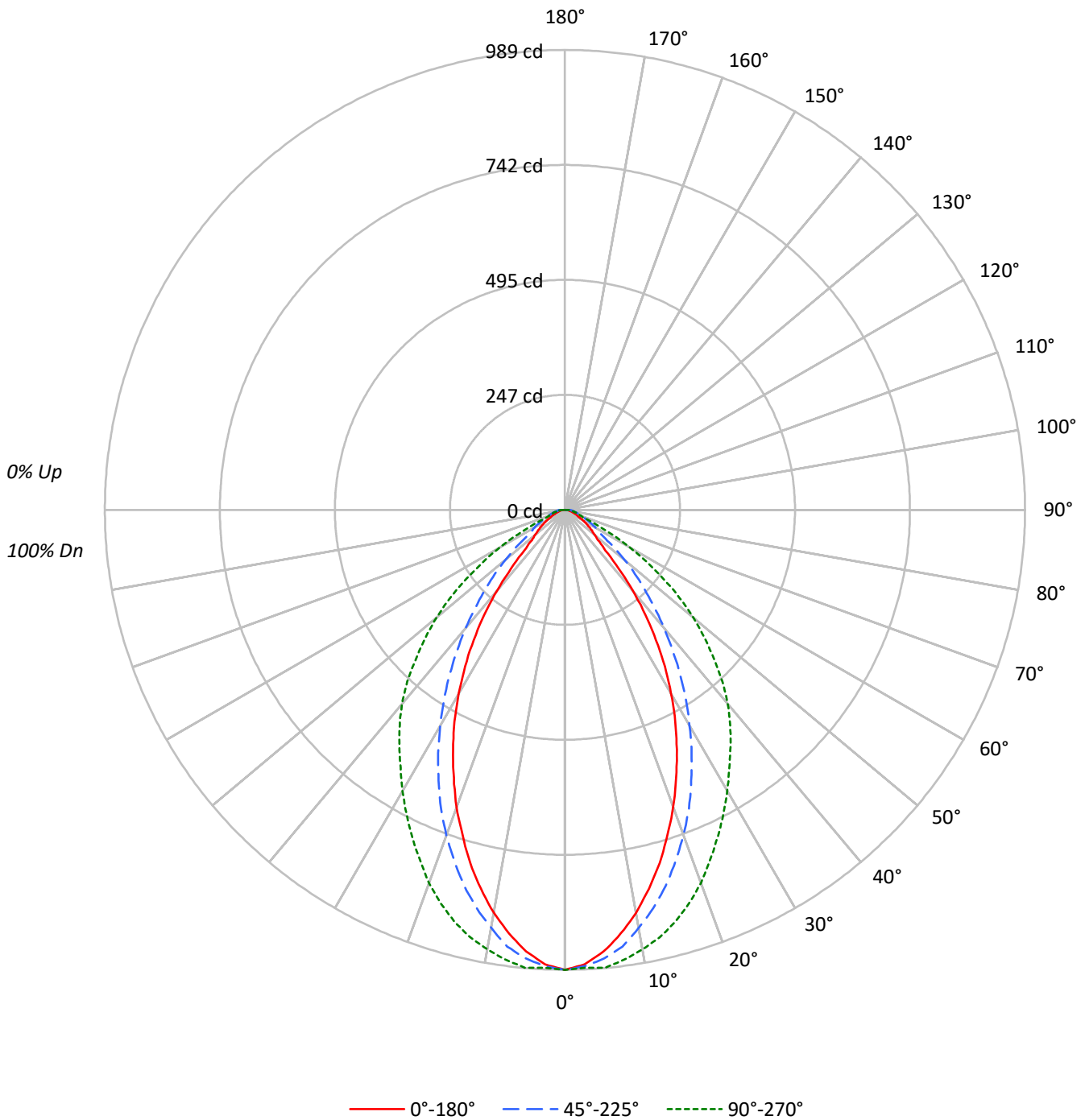
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1328.0 lumens  
Efficiency: N/A  
Efficacy: 37.9 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): 35  
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	102	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	90	81	74	68	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	60	69	64	60	68	63	59	58				
6	79	68	61	55	78	67	60	55	66	59	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	55	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	49	43	39	49	43	39	48	43	39	37				

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

	0°	45°	90°
0°	11617	11617	11617
5°	11242	11415	11647
10°	10492	10887	11444
15°	9561	10174	11145
20°	8507	9306	10673
25°	7372	8327	10063
30°	6182	7265	9464
35°	4897	6184	8896
40°	3466	5086	8345
45°	2041	4020	7509
50°	1527	3053	6578
55°	1284	2064	5284
60°	1038	1761	3753
65°	820	1503	1981
70°	718	1308	1222
75°	667	1225	1171
80°	663	1332	1163
85°	822	1981	1495

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7509 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.0	6.9
10°-20°	236.6	17.8
20°-30°	301.3	22.7
30°-40°	283.4	21.3
40°-50°	204.1	15.4
50°-60°	117.9	8.9
60°-70°	53.9	4.1
70°-80°	26.9	2.0
80°-90°	12.7	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°	629.0	47.4
0°-40°	912.5	68.7
0°-60°	1234.5	93.0
0°-90°	1328.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1328.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	989	989	989	989	989	
5°	954	970	968	978	988	89
15°	786	815	837	884	917	219
25°	569	598	643	714	777	260
35°	342	371	431	531	621	212
45°	123	154	242	364	452	104
55°	63	65	101	192	258	56
65°	30	42	54	60	71	30
75°	15	28	27	26	26	16
85°	6	14	15	14	11	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	989.3	989.3	989.3	989.3	989.3
2.5°	978.2	990.5	981.9	983.1	985.6
5°	953.7	969.6	968.4	978.2	988.1
7.5°	919.2	937.7	947.5	962.3	975.8
10°	879.9	900.8	913.1	940.1	959.8
12.5°	834.4	861.5	877.5	913.1	941.4
15°	786.5	814.8	836.9	883.6	916.8
17.5°	732.4	763.2	791.4	846.7	887.3
20°	680.8	710.3	744.7	805.0	854.1
22.5°	624.3	656.3	695.6	759.5	814.8
25°	569.0	598.5	642.7	714.0	776.7
27.5°	513.7	543.2	589.9	668.5	737.4
30°	455.9	486.7	535.8	623.1	698.0
32.5°	399.4	428.9	484.2	578.8	657.5
35°	341.6	371.1	431.4	530.9	620.6
37.5°	285.1	315.8	379.7	491.6	583.7
40°	226.1	259.3	331.8	451.0	544.4
42.5°	170.8	206.5	283.9	409.2	501.4
45°	122.9	153.6	242.1	363.8	452.2
47.5°	95.9	111.8	204.0	317.1	406.8
50°	83.6	86.0	167.1	274.1	360.1
52.5°	72.5	75.0	131.5	233.5	310.9
55°	62.7	65.1	100.8	191.7	258.1
57.5°	52.8	56.5	83.6	152.4	207.7
60°	44.2	49.2	75.0	116.7	159.8
62.5°	35.6	44.2	63.9	86.0	114.3
65°	29.5	41.8	54.1	60.2	71.3
67.5°	24.6	38.1	45.5	43.0	41.8
70°	20.9	34.4	38.1	34.4	35.6
72.5°	17.2	32.0	32.0	29.5	29.5
75°	14.7	28.3	27.0	25.8	25.8
77.5°	12.3	24.6	23.3	22.1	20.9
80°	9.8	19.7	19.7	18.4	17.2
82.5°	8.6	16.0	16.0	16.0	13.5
85°	6.1	13.5	14.7	13.5	11.1
87.5°	4.9	12.3	12.3	11.1	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)