

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: P1059035

Luminaire Tested: S123RDR-S1000D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059035  
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-S1000D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

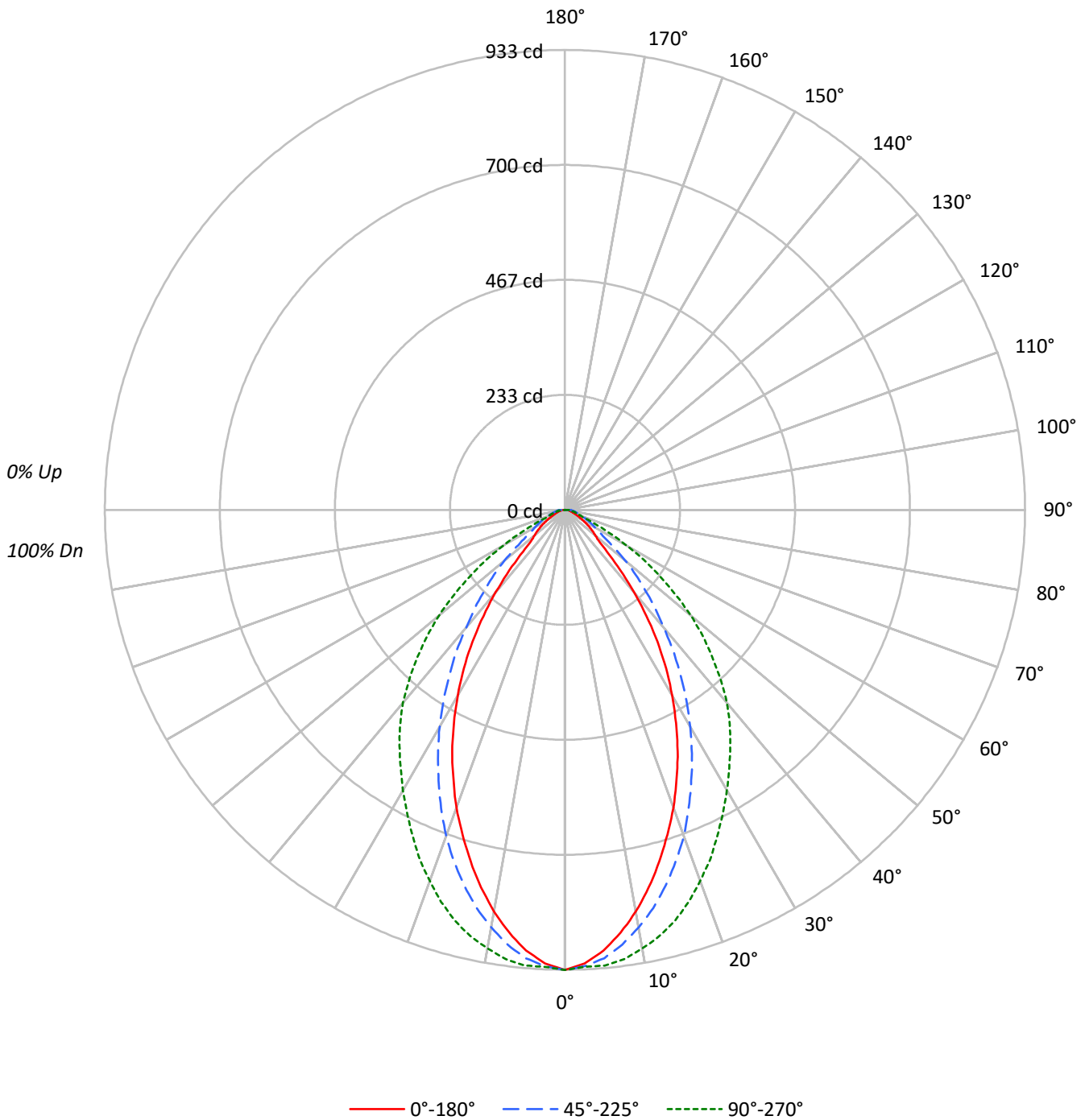
Lumens per Lamp: N/A  
Luminaire Lumens: 1250.0 lumens  
Efficiency: N/A  
Efficacy: 35.7 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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			100	
1	111	108	105	102	109	106	103	100	101	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	91	81	74	69	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	61	69	64	60	68	63	59	58			58	
6	79	68	61	56	78	67	60	55	66	60	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	56	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	50	43	39	49	43	39	48	43	39	37			37	

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

	0°	45°	90°
0°	10960	10960	10960
5°	10584	10761	10937
10°	9862	10252	10772
15°	8978	9590	10485
20°	8036	8802	10012
25°	7008	7855	9462
30°	5894	6891	8906
35°	4688	5840	8379
40°	3342	4763	7833
45°	1991	3824	7015
50°	1469	2912	6074
55°	1228	1980	4825
60°	991	1632	3391
65°	795	1400	1817
70°	656	1215	1123
75°	617	1175	1053
80°	642	1292	1014
85°	916	1832	1280

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7015 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.7	6.9
10°-20°	222.7	17.8
20°-30°	284.1	22.7
30°-40°	267.3	21.4
40°-50°	192.1	15.4
50°-60°	110.1	8.8
60°-70°	50.3	4.0
70°-80°	25.3	2.0
80°-90°	12.4	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°	592.6	47.4
0°-40°	859.9	68.8
0°-60°	1162.0	93.0
0°-90°	1250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1250.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	898	916	913	920	928	83
15°	738	764	789	831	862	206
25°	541	566	606	672	730	247
35°	327	350	407	500	584	202
45°	120	146	230	339	422	100
55°	60	61	97	178	236	54
65°	29	40	50	56	65	29
75°	14	27	26	23	23	15
85°	7	14	14	12	10	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	933.4	933.4	933.4	933.4	933.4
2.5°	921.1	934.7	926.5	926.5	927.9
5°	897.9	915.6	912.9	919.7	927.9
7.5°	865.2	884.3	889.8	906.1	919.7
10°	827.1	848.9	859.8	885.7	903.4
12.5°	784.8	809.4	827.1	859.8	885.7
15°	738.5	764.4	788.9	831.2	862.5
17.5°	690.8	716.7	748.0	797.1	833.9
20°	643.1	669.0	704.4	756.2	801.2
22.5°	591.4	617.2	655.4	714.0	768.5
25°	540.9	565.5	606.3	671.7	730.3
27.5°	487.8	512.3	557.3	628.1	693.5
30°	434.7	459.2	508.2	584.5	656.8
32.5°	381.5	404.7	457.8	542.3	620.0
35°	327.0	350.2	407.4	500.1	584.5
37.5°	271.1	294.3	361.1	461.9	549.1
40°	218.0	243.9	310.7	423.8	511.0
42.5°	166.2	193.5	269.8	382.9	467.4
45°	119.9	145.8	230.3	339.3	422.4
47.5°	91.3	104.9	194.8	295.7	378.8
50°	80.4	81.8	159.4	256.2	332.5
52.5°	69.5	70.9	124.0	218.0	283.4
55°	60.0	61.3	96.7	178.5	235.7
57.5°	50.4	53.1	79.0	141.7	189.4
60°	42.2	47.7	69.5	107.6	144.4
62.5°	34.1	43.6	60.0	79.0	103.6
65°	28.6	39.5	50.4	55.9	65.4
67.5°	23.2	36.8	42.2	39.5	39.5
70°	19.1	32.7	35.4	32.7	32.7
72.5°	16.4	31.3	30.0	27.3	27.3
75°	13.6	27.3	25.9	23.2	23.2
77.5°	12.3	23.2	21.8	20.4	19.1
80°	9.5	19.1	19.1	17.7	15.0
82.5°	8.2	16.4	16.4	15.0	12.3
85°	6.8	13.6	13.6	12.3	9.5
87.5°	5.5	12.3	12.3	10.9	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)