

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: P1057817

Luminaire Tested: S122RDR-S1005D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057817  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S1005D850-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

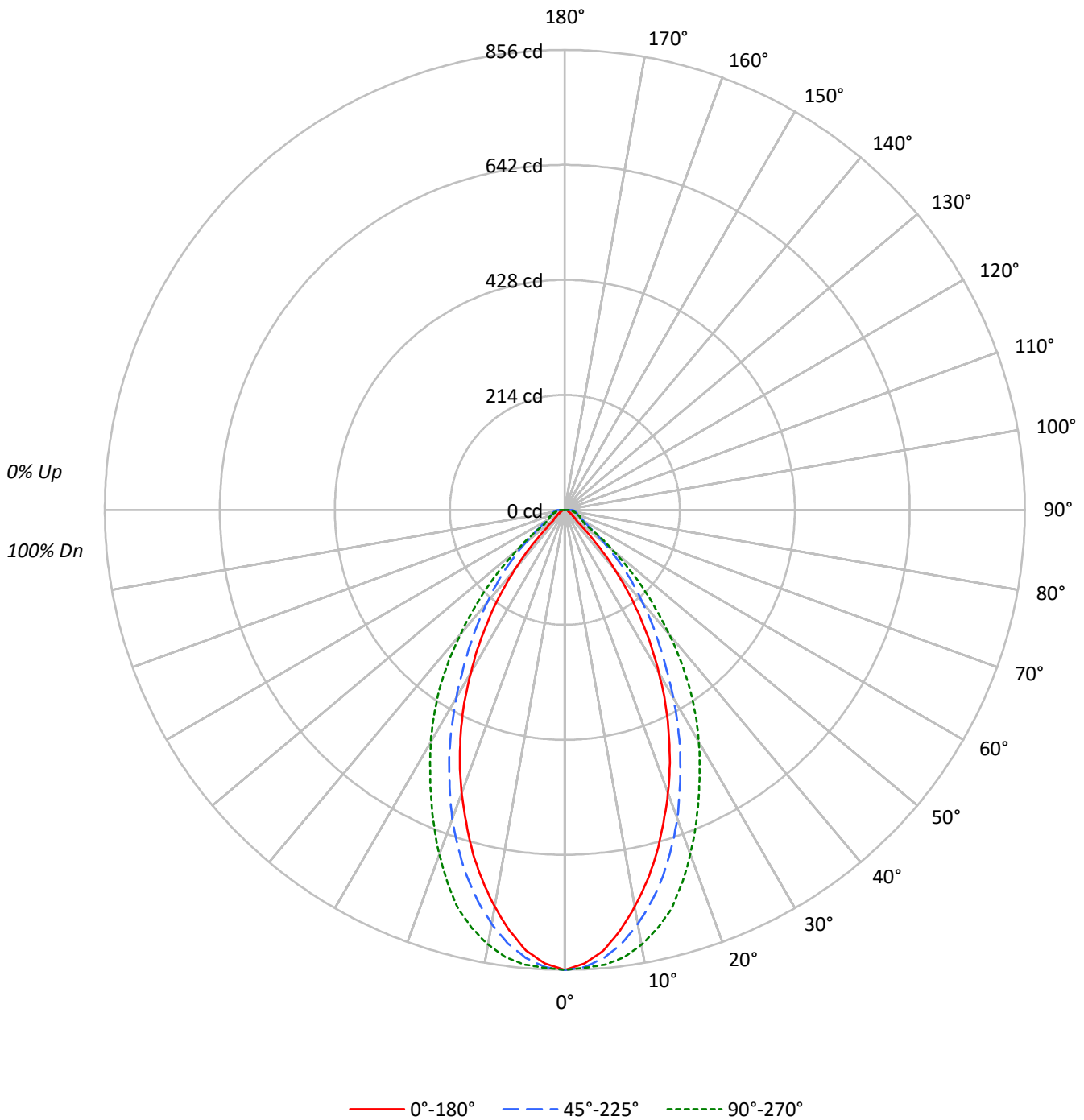
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 923.2 lumens  
Efficiency: N/A  
Efficacy: 22.1 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42				

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

	0°	45°	90°
0°	15805	15805	15805
5°	15257	15500	15743
10°	14049	14664	15402
15°	12631	13477	14670
20°	11018	12018	13404
25°	9321	10355	11992
30°	7447	8600	10628
35°	5508	6911	9130
40°	3478	5415	7272
45°	1370	4068	5352
50°	706	2733	3298
55°	579	1795	1477
60°	424	1454	1332
65°	358	1362	1362
70°	356	1419	1327
75°	471	1640	1405
80°	701	2093	1573
85°	1037	3472	2075

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 6938 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.3	8.5
10°-20°	197.9	21.4
20°-30°	235.1	25.5
30°-40°	195.6	21.2
40°-50°	109.2	11.8
50°-60°	44.1	4.8
60°-70°	28.2	3.1
70°-80°	21.2	2.3
80°-90°	13.5	1.5
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°	511.4	55.4
0°-40°	706.9	76.6
0°-60°	860.3	93.2
0°-90°	923.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	923.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	824	838	837	843	850	76
15°	661	681	706	742	768	184
25°	458	476	509	548	589	209
35°	244	267	307	358	405	152
45°	52	89	156	182	205	49
55°	18	38	56	54	46	16
65°	8	33	31	30	31	8
75°	7	23	23	21	20	7
85°	5	15	16	15	10	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	856.5	856.5	856.5	856.5	856.5
2.5°	845.0	858.1	851.6	851.6	853.2
5°	823.7	838.4	836.8	843.4	849.9
7.5°	789.2	805.6	813.8	828.6	840.1
10°	749.8	767.9	782.6	805.6	822.0
12.5°	707.2	725.2	746.5	776.1	797.4
15°	661.2	680.9	705.5	741.6	767.9
17.5°	610.4	631.7	659.6	699.0	726.9
20°	561.1	582.5	612.0	651.4	682.6
22.5°	510.3	528.3	559.5	598.9	636.6
25°	457.8	475.8	508.6	548.0	589.0
27.5°	405.3	423.3	456.1	497.2	543.1
30°	349.5	369.2	403.6	449.6	498.8
32.5°	297.0	316.7	352.8	403.6	452.9
35°	244.5	267.4	306.8	357.7	405.3
37.5°	193.6	219.9	264.2	311.7	354.4
40°	144.4	172.3	224.8	265.8	301.9
42.5°	95.2	128.0	188.7	223.1	251.0
45°	52.5	88.6	155.9	182.1	205.1
47.5°	29.5	57.4	123.1	144.4	157.5
50°	24.6	42.7	95.2	109.9	114.9
52.5°	19.7	39.4	72.2	80.4	77.1
55°	18.0	37.7	55.8	54.1	45.9
57.5°	14.8	37.7	44.3	39.4	39.4
60°	11.5	36.1	39.4	34.5	36.1
62.5°	9.8	34.5	36.1	32.8	32.8
65°	8.2	32.8	31.2	29.5	31.2
67.5°	6.6	29.5	29.5	27.9	27.9
70°	6.6	27.9	26.3	24.6	24.6
72.5°	6.6	24.6	24.6	23.0	23.0
75°	6.6	23.0	23.0	21.3	19.7
77.5°	6.6	19.7	21.3	19.7	18.0
80°	6.6	18.0	19.7	18.0	14.8
82.5°	6.6	16.4	18.0	16.4	13.1
85°	4.9	14.8	16.4	14.8	9.8
87.5°	4.9	14.8	16.4	13.1	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)