

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: P1057811

Luminaire Tested: S122RDR-S1005D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057811  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S1005D840-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

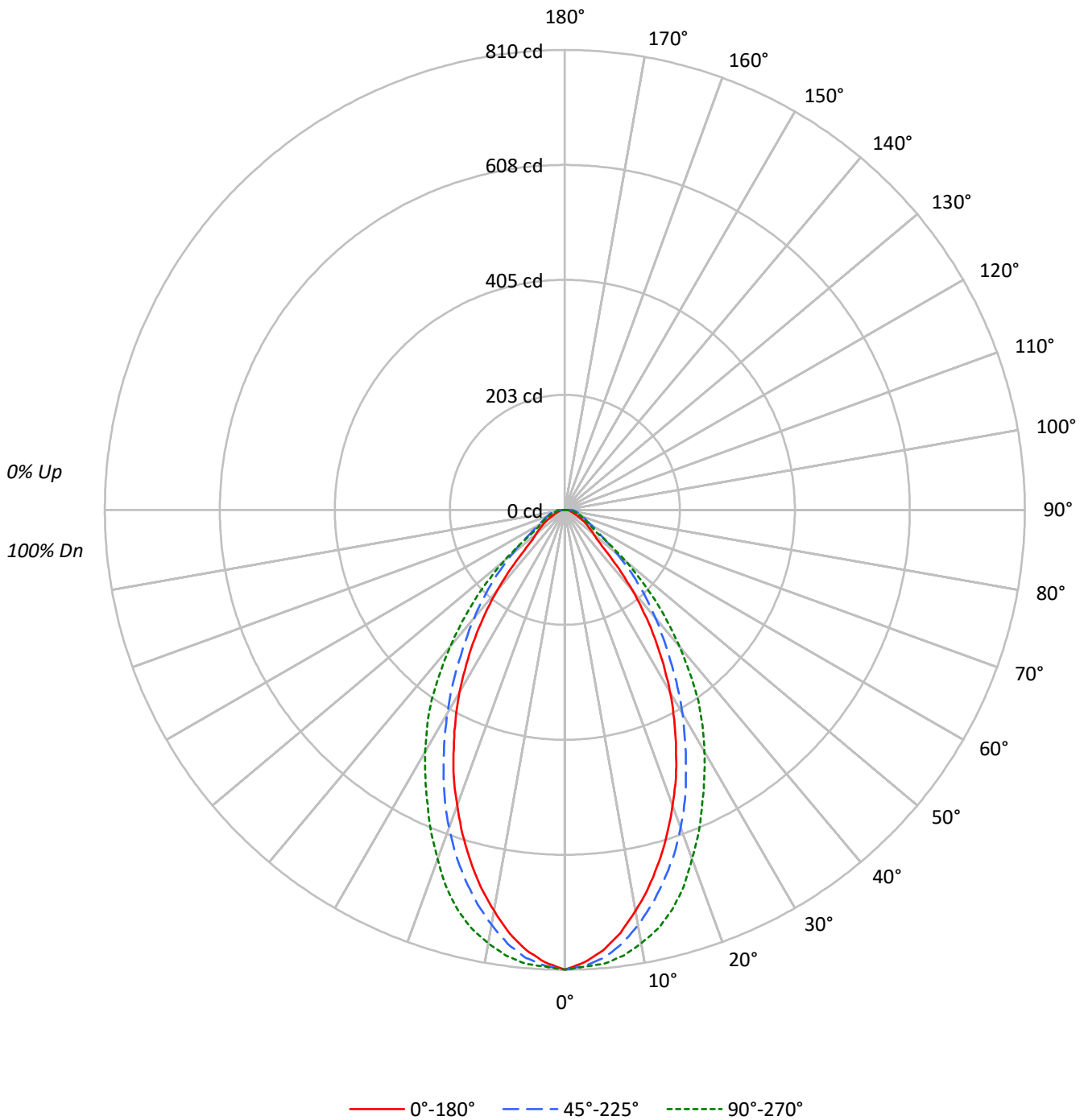
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 976.8 lumens  
Efficiency: N/A  
Efficacy: 23.4 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
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

TEST NUMBER: P1057811

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-SVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1057811

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-SVL-S

**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	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	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

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

	0°	45°	90°
0°	14941	14941	14941
5°	14416	14666	14859
10°	13436	13912	14527
15°	12243	12899	13926
20°	10883	11705	12848
25°	9429	10280	11650
30°	7894	8817	10472
35°	6226	7303	9220
40°	4461	5974	7556
45°	2612	4718	5848
50°	1886	3430	3944
55°	1586	2451	2065
60°	1270	1985	1764
65°	1044	1760	1629
70°	885	1694	1532
75°	856	1811	1490
80°	956	2221	1583
85°	1588	3472	2223

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5848 cd/sqm



TEST NUMBER: P1057811

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.2	7.6
10°-20°	190.1	19.5
20°-30°	233.6	23.9
30°-40°	206.5	21.1
40°-50°	131.8	13.5
50°-60°	64.3	6.6
60°-70°	38.3	3.9
70°-80°	24.5	2.5
80°-90°	13.5	1.4
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°	497.9	51.0
0°-40°	704.4	72.1
0°-60°	900.5	92.2
0°-90°	976.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	976.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	778	795	792	795	802	72
15°	641	659	675	705	729	179
25°	463	480	505	536	572	212
35°	276	291	324	369	409	172
45°	100	128	181	203	224	84
55°	49	66	76	72	64	44
65°	24	45	40	37	37	24
75°	12	27	25	22	21	13
85°	8	15	16	15	10	7
90°	0	0	0	0	0	



TEST NUMBER: P1057811

CATALOG NUMBER: S122RDR-S1005D840-X4F0-XX-UDD-SVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	809.7	809.7	809.7	809.7	809.7
2.5°	797.7	812.7	803.7	803.7	805.2
5°	778.3	794.7	791.8	794.7	802.2
7.5°	751.4	767.8	770.8	782.8	791.8
10°	717.1	733.5	742.5	761.9	775.3
12.5°	681.2	697.6	711.1	736.5	755.9
15°	640.9	658.8	675.2	705.1	729.0
17.5°	599.0	617.0	637.9	667.8	696.1
20°	554.2	570.7	596.1	624.4	654.3
22.5°	510.9	525.8	552.7	579.6	615.5
25°	463.1	479.5	504.9	536.3	572.2
27.5°	416.8	433.2	458.6	494.5	531.8
30°	370.5	385.4	413.8	451.1	491.5
32.5°	322.7	337.6	369.0	409.3	451.1
35°	276.4	291.3	324.2	369.0	409.3
37.5°	230.1	246.5	283.8	325.7	360.0
40°	185.2	204.7	248.0	283.8	313.7
42.5°	140.4	167.3	213.6	243.5	267.4
45°	100.1	128.5	180.8	203.2	224.1
47.5°	76.2	98.6	149.4	165.8	179.3
50°	65.7	80.7	119.5	131.5	137.4
52.5°	56.8	71.7	95.6	100.1	97.1
55°	49.3	65.7	76.2	71.7	64.2
57.5°	41.8	61.2	62.7	53.8	55.3
60°	34.4	55.3	53.8	46.3	47.8
62.5°	28.4	50.8	46.3	41.8	41.8
65°	23.9	44.8	40.3	37.3	37.3
67.5°	19.4	40.3	35.9	32.9	32.9
70°	16.4	35.9	31.4	28.4	28.4
72.5°	14.9	31.4	28.4	25.4	25.4
75°	12.0	26.9	25.4	22.4	20.9
77.5°	10.5	22.4	22.4	20.9	17.9
80°	9.0	19.4	20.9	17.9	14.9
82.5°	9.0	17.9	17.9	16.4	12.0
85°	7.5	14.9	16.4	14.9	10.5
87.5°	4.5	13.4	13.4	12.0	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)