

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: P1057983

Luminaire Tested: S122RDR-S485D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057983  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D850-X4F0-XX-UDD-SVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

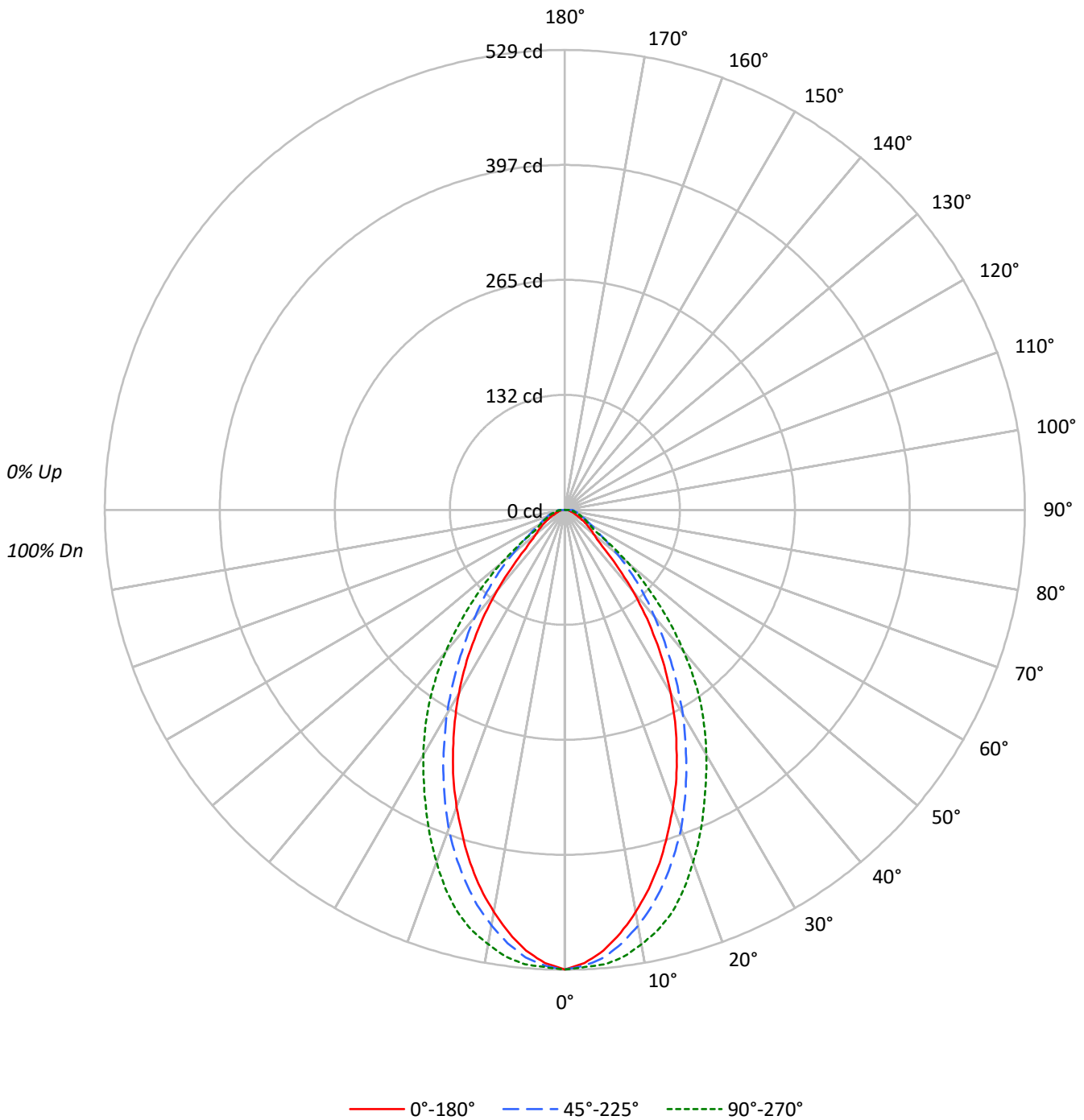
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 641.3 lumens  
Efficiency: N/A  
Efficacy: 32.7 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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: P1057983

CATALOG NUMBER: S122RDR-S485D850-X4F0-XX-UDD-SVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1057983

CATALOG NUMBER: S122RDR-S485D850-X4F0-XX-UDD-SVL-W

**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	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	9756	9756	9756
5°	9430	9575	9721
10°	8803	9097	9509
15°	8029	8449	9141
20°	7142	7668	8469
25°	6189	6735	7694
30°	5188	5774	6931
35°	4089	4778	6141
40°	2915	3861	5128
45°	1722	3056	3977
50°	1240	2210	2707
55°	1036	1592	1364
60°	841	1277	1159
65°	685	1131	1065
70°	593	1101	1020
75°	563	1119	1005
80°	584	1339	1084
85°	826	2160	1334

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3977 cd/sqm



TEST NUMBER: P1057983

CATALOG NUMBER: S122RDR-S485D850-X4F0-XX-UDD-SVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.5	7.6
10°-20°	124.6	19.4
20°-30°	153.7	24.0
30°-40°	136.7	21.3
40°-50°	87.3	13.6
50°-60°	41.9	6.5
60°-70°	24.6	3.8
70°-80°	15.7	2.4
80°-90°	8.4	1.3
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°	326.8	51.0
0°-40°	463.5	72.3
0°-60°	592.7	92.4
0°-90°	641.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	641.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	529	529	529	529	529	
5°	509	518	517	520	525	47
15°	420	430	442	463	478	117
25°	304	316	331	354	378	139
35°	182	196	212	244	273	113
45°	66	86	117	136	152	55
55°	32	42	50	48	42	29
65°	16	28	26	24	24	16
75°	8	17	16	15	14	9
85°	4	9	10	9	6	4
90°	0	0	0	0	0	



TEST NUMBER: P1057983

CATALOG NUMBER: S122RDR-S485D850-X4F0-XX-UDD-SVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	528.7	528.7	528.7	528.7	528.7
2.5°	521.7	530.3	524.8	524.8	526.4
5°	509.1	518.5	516.9	520.1	524.8
7.5°	491.0	501.2	502.8	511.4	518.5
10°	469.8	480.8	485.5	498.1	507.5
12.5°	446.2	457.2	465.9	481.6	495.0
15°	420.3	430.5	442.3	462.7	478.5
17.5°	392.0	405.4	417.2	438.4	456.5
20°	363.7	376.3	390.5	410.9	431.3
22.5°	334.7	346.5	360.6	381.8	405.4
25°	304.0	315.8	330.8	354.3	377.9
27.5°	274.2	286.0	300.1	326.0	351.2
30°	243.5	255.3	271.0	297.8	325.3
32.5°	212.9	225.5	241.2	270.3	299.3
35°	181.5	195.6	212.1	244.3	272.6
37.5°	150.8	165.0	185.4	216.8	243.5
40°	121.0	137.5	160.3	188.6	212.9
42.5°	91.9	110.0	138.3	161.1	182.3
45°	66.0	85.6	117.1	135.9	152.4
47.5°	50.3	64.4	96.6	111.6	123.3
50°	43.2	51.9	77.0	88.0	94.3
52.5°	37.7	45.6	61.3	66.8	66.8
55°	32.2	41.6	49.5	47.9	42.4
57.5°	27.5	37.7	40.9	34.6	36.1
60°	22.8	34.6	34.6	30.6	31.4
62.5°	18.9	32.2	29.9	26.7	27.5
65°	15.7	28.3	25.9	23.6	24.4
67.5°	12.6	25.1	22.8	21.2	21.2
70°	11.0	22.8	20.4	18.9	18.9
72.5°	9.4	19.6	18.1	16.5	16.5
75°	7.9	17.3	15.7	14.9	14.1
77.5°	7.1	14.9	14.1	12.6	11.8
80°	5.5	12.6	12.6	11.8	10.2
82.5°	4.7	11.0	11.0	10.2	8.6
85°	3.9	9.4	10.2	8.6	6.3
87.5°	3.1	8.6	8.6	7.1	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)