

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: P1058161

Luminaire Tested: S122RDR-S865D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058161  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D930-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

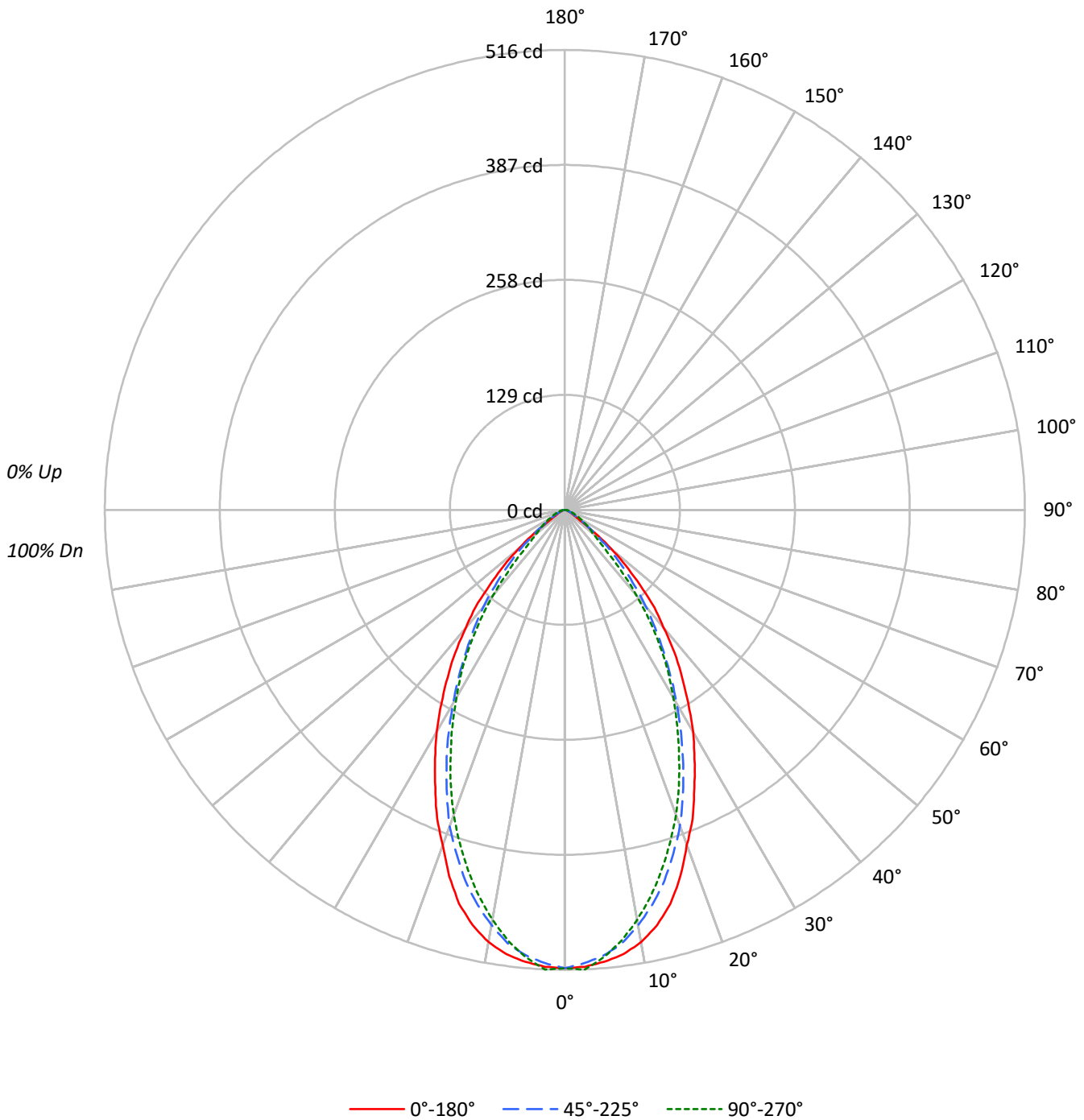
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 553.0 lumens  
Efficiency: N/A  
Efficacy: 15.8 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91  
Luminous Opening: Rectangular (W 0.15' 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

TEST NUMBER: P1058161

CATALOG NUMBER: S122RDR-S865D930-X4F0-XX-UDD-SVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1058161

CATALOG NUMBER: S122RDR-S865D930-X4F0-XX-UDD-SVL-B

**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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

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

	0°	45°	90°
0°	9488	9488	9488
5°	9428	9297	9334
10°	9230	8865	8750
15°	8744	8234	7999
20°	7861	7417	7154
25°	7000	6393	6165
30°	6124	5335	5182
35°	5156	4323	4185
40°	4153	3411	3016
45°	3105	2463	1795
50°	1943	1590	1180
55°	660	859	959
60°	380	531	757
65°	271	358	581
70°	221	275	442
75°	150	221	364
80°	106	223	329
85°	0	0	212

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3105 cd/sqm



TEST NUMBER: P1058161

CATALOG NUMBER: S122RDR-S865D930-X4F0-XX-UDD-SVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	8.6
10°-20°	121.3	21.9
20°-30°	146.1	26.4
30°-40°	124.8	22.6
40°-50°	73.1	13.2
50°-60°	26.5	4.8
60°-70°	9.4	1.7
70°-80°	3.8	0.7
80°-90°	0.7	0.1
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°	314.8	56.9
0°-40°	439.6	79.5
0°-60°	539.2	97.5
0°-90°	553.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	553.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	514	514	514	514	514	
5°	509	510	502	504	504	48
15°	458	450	431	423	419	127
25°	344	329	314	309	303	158
35°	229	211	192	190	186	143
45°	119	107	94	79	69	92
55°	20	29	27	28	30	25
65°	6	7	8	11	13	7
75°	2	3	3	4	5	3
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



TEST NUMBER: P1058161

CATALOG NUMBER: S122RDR-S865D930-X4F0-XX-UDD-SVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	514.2	514.2	514.2	514.2	514.2
2.5°	513.1	514.2	509.0	514.2	516.2
5°	509.0	510.1	501.9	503.9	503.9
7.5°	502.9	501.9	490.6	488.5	487.5
10°	492.6	489.5	473.1	470.0	467.0
12.5°	477.2	471.1	453.6	448.5	444.4
15°	457.7	450.5	431.0	422.8	418.7
17.5°	431.0	422.8	404.4	396.1	392.0
20°	400.3	392.0	377.7	368.4	364.3
22.5°	374.6	361.3	345.9	339.7	334.6
25°	343.8	329.4	314.0	308.9	302.8
27.5°	315.1	297.6	282.2	278.1	273.0
30°	287.4	268.9	250.4	250.4	243.2
32.5°	257.6	240.2	220.7	219.6	215.5
35°	228.9	211.4	191.9	189.9	185.8
37.5°	202.2	184.7	166.3	160.1	155.0
40°	172.4	157.0	141.6	131.4	125.2
42.5°	148.8	131.4	116.0	103.7	95.4
45°	119.0	106.7	94.4	79.0	68.8
47.5°	92.4	84.2	73.9	56.4	51.3
50°	67.7	63.6	55.4	42.1	41.1
52.5°	43.1	45.2	40.0	32.8	35.9
55°	20.5	28.7	26.7	27.7	29.8
57.5°	13.3	14.4	19.5	22.6	24.6
60°	10.3	10.3	14.4	18.5	20.5
62.5°	8.2	8.2	11.3	15.4	16.4
65°	6.2	7.2	8.2	11.3	13.3
67.5°	5.1	5.1	6.2	9.2	10.3
70°	4.1	4.1	5.1	7.2	8.2
72.5°	3.1	3.1	4.1	6.2	6.2
75°	2.1	3.1	3.1	4.1	5.1
77.5°	2.1	2.1	2.1	3.1	4.1
80°	1.0	1.0	2.1	2.1	3.1
82.5°	1.0	1.0	1.0	1.0	2.1
85°	0.0	0.0	0.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)