

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: P1055266

Luminaire Tested: S122R3DR-S865D930-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055266  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122R3DR-S865D930-X4F0-XX-UDD-FLL-B  
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

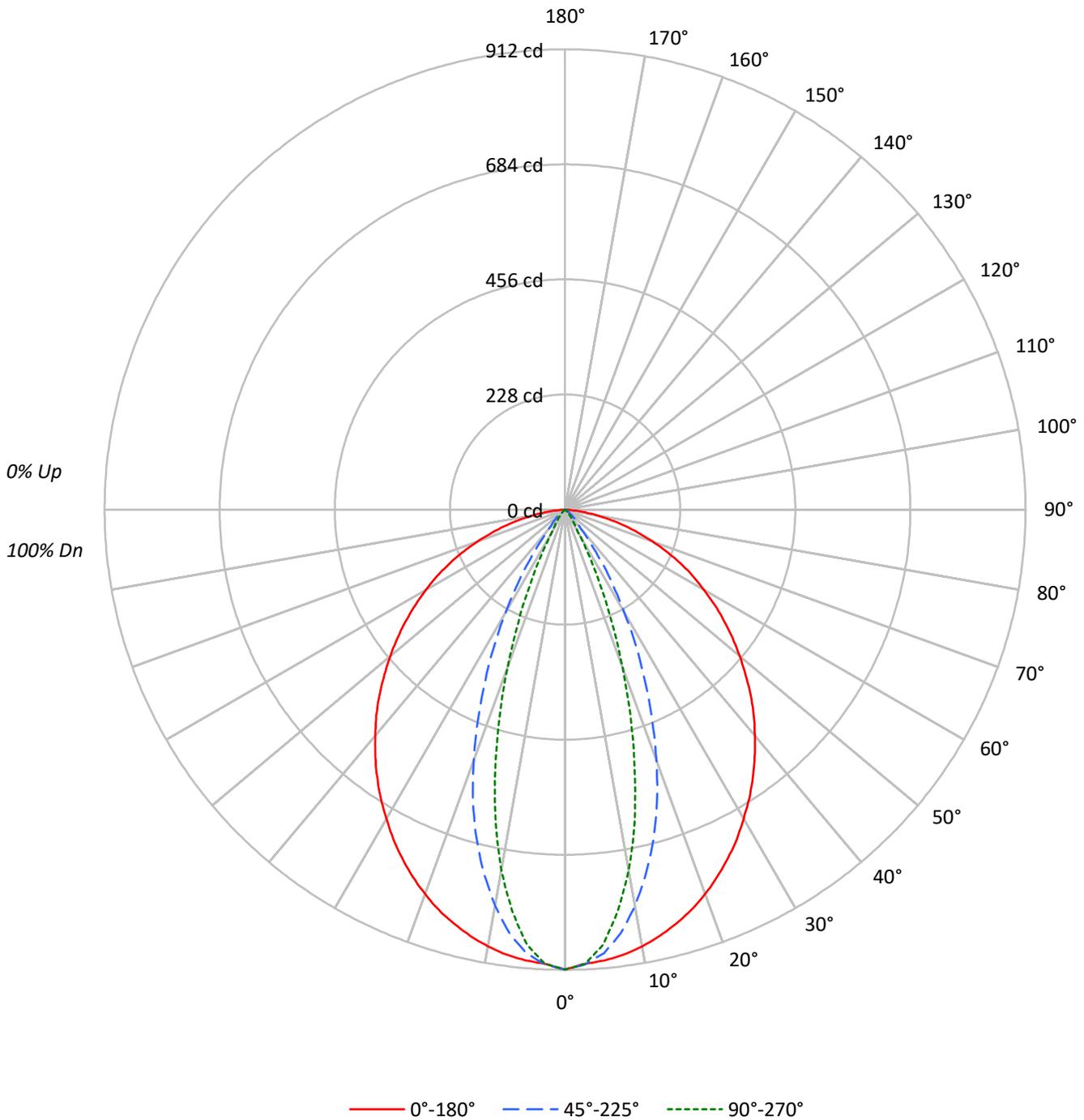
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 829.2 lumens  
Efficiency: N/A  
Efficacy: 23.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7  
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 34.7  
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: P1055266

CATALOG NUMBER: S122R3DR-S865D930-X4F0-XX-UDD-FLL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1055266

CATALOG NUMBER: S122R3DR-S865D930-X4F0-XX-UDD-FLL-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	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	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91				
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	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	66	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	56				
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52				
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49				
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45				
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43				

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

	0°	45°	90°
0°	17269	17269	17269
5°	17056	16778	16458
10°	16910	15339	13969
15°	16666	13275	10460
20°	16349	10668	6696
25°	15944	7818	3439
30°	15471	5110	1122
35°	14999	2836	655
40°	14458	1140	364
45°	13925	758	139
50°	13311	433	62
55°	12700	208	33
60°	12031	80	0
65°	11319	45	0
70°	10159	55	0
75°	8740	73	0
80°	6634	0	0
85°	2739	217	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13925 cd/sqm



TEST NUMBER: P1055266

CATALOG NUMBER: S122R3DR-S865D930-X4F0-XX-UDD-FLL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.7	9.9
10°-20°	189.9	22.9
20°-30°	192.8	23.2
30°-40°	144.6	17.4
40°-50°	101.3	12.2
50°-60°	62.0	7.5
60°-70°	36.9	4.5
70°-80°	17.0	2.1
80°-90°	3.0	0.4
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°	464.3	56.0
0°-40°	609.0	73.4
0°-60°	772.3	93.1
0°-90°	829.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	829.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	897	905	882	865	865	85
15°	850	804	677	573	533	239
25°	763	629	374	214	164	351
35°	648	422	123	37	28	405
45°	520	223	28	8	5	401
55°	384	68	6	2	1	344
65°	252	20	1	1	0	249
75°	119	2	1	1	0	127
85°	13	0	1	1	0	21
90°	0	0	0	0	0	



TEST NUMBER: P1055266

CATALOG NUMBER: S122R3DR-S865D930-X4F0-XX-UDD-FLL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	911.5	911.5	911.5	911.5	911.5
2.5°	901.0	914.7	902.1	900.0	901.0
5°	896.8	905.2	882.2	865.4	865.4
7.5°	889.5	889.5	846.6	812.0	801.5
10°	879.0	867.5	797.3	741.8	726.1
12.5°	865.4	838.2	739.7	661.1	636.0
15°	849.7	803.6	676.8	573.1	533.3
17.5°	831.9	764.8	606.6	477.8	431.7
20°	810.9	722.9	529.1	380.3	332.1
22.5°	787.9	676.8	450.5	293.4	242.0
25°	762.7	628.6	374.0	213.7	164.5
27.5°	736.5	578.3	303.8	146.7	100.6
30°	707.2	526.0	233.6	87.0	51.3
32.5°	678.9	475.7	175.0	47.1	37.7
35°	648.5	422.2	122.6	36.7	28.3
37.5°	617.1	371.9	75.4	27.2	21.0
40°	584.6	320.6	46.1	19.9	14.7
42.5°	553.2	272.4	36.7	13.6	9.4
45°	519.7	223.2	28.3	8.4	5.2
47.5°	485.1	178.1	21.0	5.2	3.1
50°	451.6	138.3	14.7	3.1	2.1
52.5°	418.0	101.6	9.4	2.1	1.0
55°	384.5	68.1	6.3	2.1	1.0
57.5°	351.0	48.2	4.2	1.0	1.0
60°	317.5	37.7	2.1	1.0	0.0
62.5°	286.0	29.3	2.1	1.0	1.0
65°	252.5	19.9	1.0	1.0	0.0
67.5°	216.9	12.6	1.0	1.0	0.0
70°	183.4	7.3	1.0	1.0	0.0
72.5°	150.9	4.2	1.0	1.0	0.0
75°	119.4	2.1	1.0	1.0	0.0
77.5°	89.1	1.0	0.0	1.0	0.0
80°	60.8	0.0	0.0	1.0	0.0
82.5°	35.6	0.0	0.0	1.0	0.0
85°	12.6	0.0	1.0	1.0	0.0
87.5°	0.0	0.0	1.0	1.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)