

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: P1055214

Luminaire Tested: S122R3DR-S485D930-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055214  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122R3DR-S485D930-X4F0-XX-UDD-FLL-W  
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

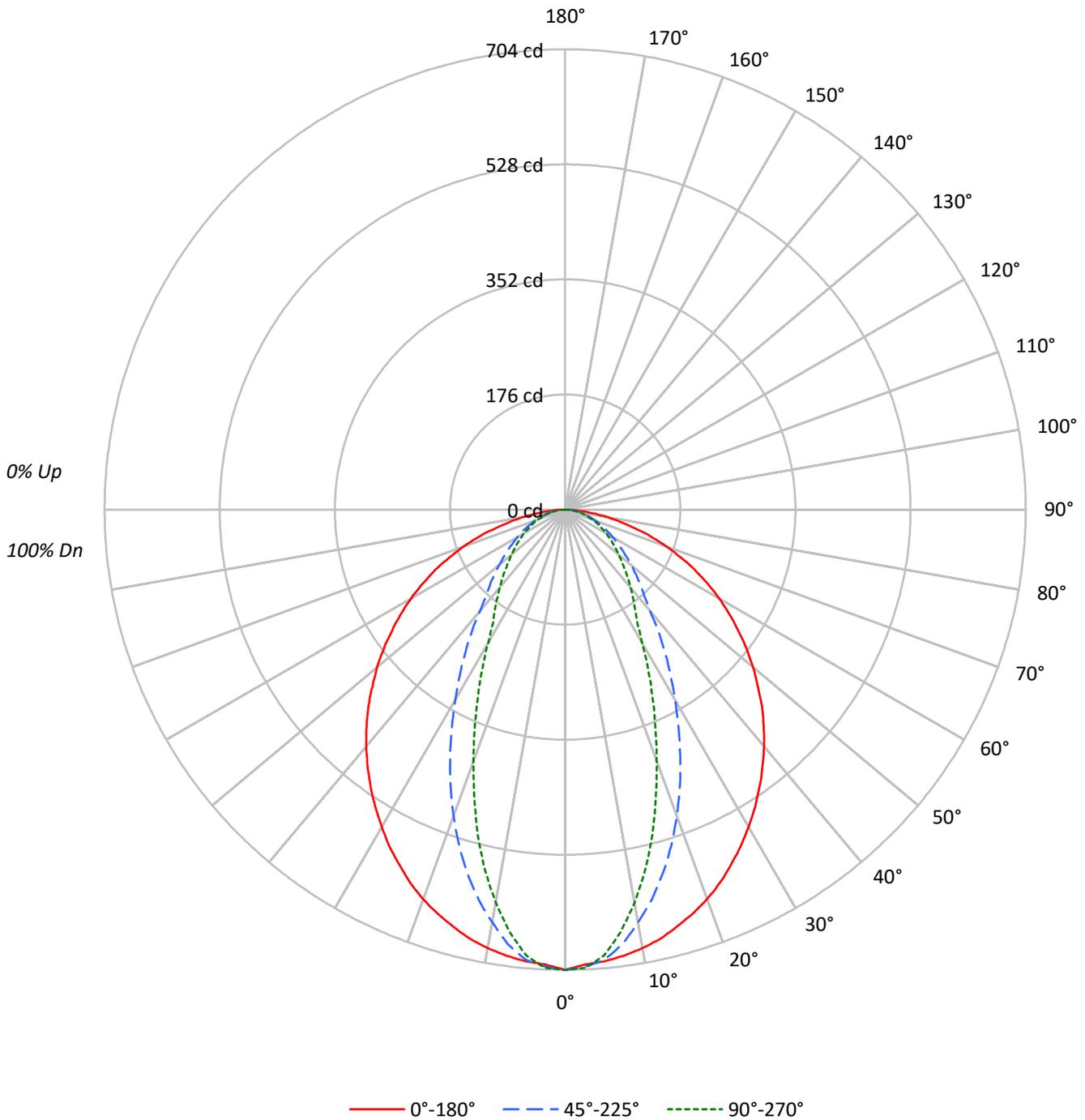
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1065.1 lumens  
Efficiency: N/A  
Efficacy: 55.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.1  
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: P1055214

CATALOG NUMBER: S122R3DR-S485D930-X4F0-XX-UDD-FLL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1055214

CATALOG NUMBER: S122R3DR-S485D930-X4F0-XX-UDD-FLL-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			100	
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87			87	
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75			75	
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66			66	
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58			58	
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52			52	
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46			46	
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42			42	
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38			38	
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35			35	
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32			32	

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

	0°	45°	90°
0°	13342	13342	13342
5°	13191	13145	13022
10°	13105	12335	11745
15°	12957	11306	10105
20°	12785	10055	8250
25°	12530	8690	6585
30°	12262	7342	5139
35°	11983	6141	4316
40°	11693	4981	3843
45°	11390	4354	3440
50°	11053	3852	3142
55°	10676	3481	2917
60°	10307	3168	2721
65°	9818	2905	2560
70°	9101	2709	2415
75°	8059	2460	2284
80°	6874	2313	2117
85°	4739	2043	1913

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11390 cd/sqm



TEST NUMBER: P105214

CATALOG NUMBER: S122R3DR-S485D930-X4F0-XX-UDD-FLL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.5	6.1
10°-20°	162.9	15.3
20°-30°	200.7	18.8
30°-40°	192.6	18.1
40°-50°	166.1	15.6
50°-60°	128.9	12.1
60°-70°	88.2	8.3
70°-80°	47.9	4.5
80°-90°	13.1	1.2
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°	428.2	40.2
0°-40°	620.8	58.3
0°-60°	915.8	86.0
0°-90°	1065.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1065.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	704	704	704	704	704	
5°	694	704	691	682	685	66
15°	661	641	576	529	515	186
25°	599	535	416	339	315	276
35°	518	411	266	198	187	324
45°	425	286	162	134	128	328
55°	323	172	105	91	88	289
65°	219	94	65	59	57	216
75°	110	43	34	32	31	118
85°	22	11	9	9	9	28
90°	0	0	0	0	0	



TEST NUMBER: P1055214

CATALOG NUMBER: S122R3DR-S485D930-X4F0-XX-UDD-FLL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	704.2	704.2	704.2	704.2	704.2
2.5°	696.5	708.3	700.0	700.0	701.8
5°	693.6	703.6	691.2	682.4	684.7
7.5°	688.3	695.3	670.6	651.8	651.2
10°	681.2	681.8	641.2	616.4	610.5
12.5°	672.4	662.9	611.1	574.0	565.2
15°	660.6	640.6	576.4	529.3	515.2
17.5°	648.2	617.6	539.3	480.4	461.0
20°	634.1	589.9	498.7	431.6	409.2
22.5°	618.2	563.4	458.1	384.5	360.9
25°	599.4	535.2	415.7	339.1	315.0
27.5°	581.1	506.3	375.0	299.1	274.4
30°	560.5	475.1	335.6	260.8	234.9
32.5°	539.9	443.3	299.1	224.3	204.9
35°	518.1	411.0	265.5	197.8	186.6
37.5°	495.7	379.2	233.7	180.2	170.2
40°	472.8	347.4	201.4	163.1	155.4
42.5°	449.2	316.2	179.0	149.0	141.9
45°	425.1	286.1	162.5	134.2	128.4
47.5°	399.2	256.1	146.6	121.9	116.6
50°	375.0	227.3	130.7	110.7	106.6
52.5°	349.1	199.0	117.8	100.7	97.1
55°	323.2	171.9	105.4	91.3	88.3
57.5°	297.9	146.0	93.6	82.4	80.1
60°	272.0	125.4	83.6	74.2	71.8
62.5°	245.5	108.9	74.2	66.5	64.2
65°	219.0	93.6	64.8	58.9	57.1
67.5°	191.3	78.9	56.5	51.8	50.6
70°	164.3	65.9	48.9	44.7	43.6
72.5°	137.8	53.6	41.2	38.3	37.1
75°	110.1	43.0	33.6	31.8	31.2
77.5°	86.0	33.6	27.1	25.9	25.3
80°	63.0	24.7	21.2	20.0	19.4
82.5°	41.8	17.1	15.3	14.7	14.1
85°	21.8	10.6	9.4	9.4	8.8
87.5°	7.1	4.7	4.7	4.7	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)