

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: P1055670

Luminaire Tested: S123R3DR-S775D927-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055670  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123R3DR-S775D927-X4F0-XX-UDD-FLL-W  
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

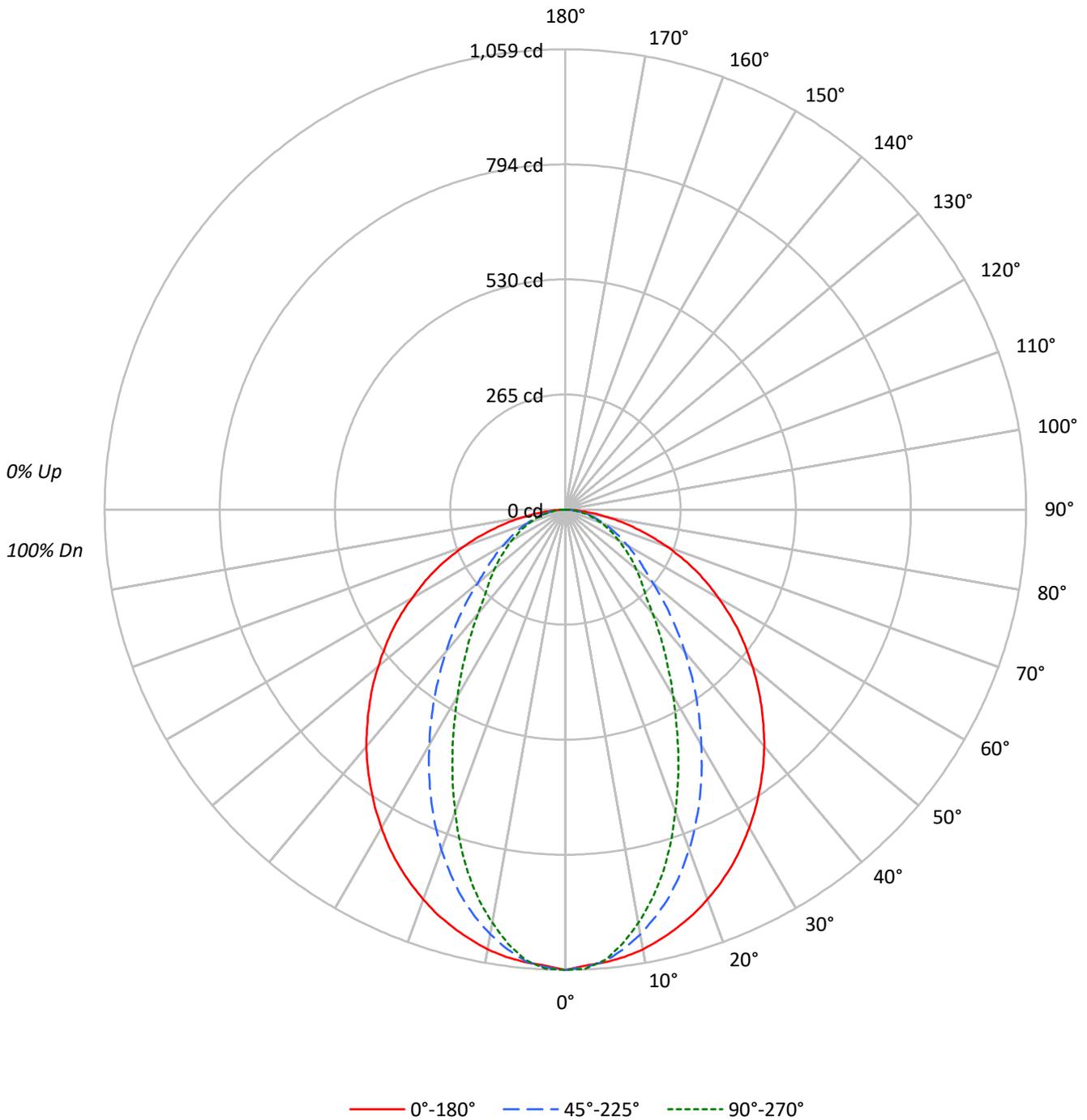
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1857.5 lumens  
Efficiency: N/A  
Efficacy: 70.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02  
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.4  
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: P1055670

CATALOG NUMBER: S123R3DR-S775D927-X4F0-XX-UDD-FLL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1055670

CATALOG NUMBER: S123R3DR-S775D927-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				
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74				
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50				
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40				
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

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

	0°	45°	90°
0°	12769	12769	12769
5°	12656	12626	12597
10°	12579	12152	11822
15°	12429	11509	10798
20°	12248	10682	9493
25°	12035	9727	8167
30°	11768	8701	6904
35°	11485	7695	5830
40°	11196	6720	4899
45°	10859	5794	4322
50°	10520	4933	3967
55°	10207	4395	3664
60°	9780	3974	3419
65°	9380	3637	3209
70°	8742	3352	3017
75°	7821	3098	2842
80°	6707	2861	2638
85°	4717	2628	2518

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10859 cd/sqm



TEST NUMBER: P1055670

CATALOG NUMBER: S123R3DR-S775D927-X4F0-XX-UDD-FLL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.2	5.3
10°-20°	259.8	14.0
20°-30°	342.2	18.4
30°-40°	347.3	18.7
40°-50°	301.9	16.3
50°-60°	236.5	12.7
60°-70°	160.7	8.7
70°-80°	87.1	4.7
80°-90°	24.0	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°	700.1	37.7
0°-40°	1047.4	56.4
0°-60°	1585.8	85.4
0°-90°	1857.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1857.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1046	1058	1043	1034	1041	99
15°	996	982	922	877	865	281
25°	905	850	731	640	614	416
35°	780	688	523	423	396	488
45°	637	511	340	262	254	492
55°	486	338	209	178	174	433
65°	329	182	128	114	112	325
75°	168	84	66	62	61	179
85°	34	21	19	17	18	43
90°	0	0	0	0	0	



TEST NUMBER: P1055670

CATALOG NUMBER: S123R3DR-S775D927-X4F0-XX-UDD-FLL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1059.1	1059.1	1059.1	1059.1	1059.1
2.5°	1050.4	1063.9	1053.6	1054.4	1057.6
5°	1045.7	1058.4	1043.3	1033.8	1040.9
7.5°	1038.5	1048.1	1020.3	1005.3	1007.7
10°	1027.5	1030.6	992.6	968.8	965.7
12.5°	1012.4	1006.9	959.3	924.5	918.9
15°	995.8	981.5	922.1	876.9	865.1
17.5°	976.8	953.0	878.5	823.1	804.9
20°	954.6	921.3	832.6	762.1	739.9
22.5°	930.8	888.0	782.7	699.5	676.5
25°	904.7	850.0	731.2	640.1	613.9
27.5°	876.2	812.0	678.9	581.5	552.1
30°	845.3	772.4	625.0	524.4	495.9
32.5°	813.6	730.4	573.5	471.3	443.6
35°	780.3	687.6	522.8	423.0	396.1
37.5°	746.2	644.0	473.7	377.1	351.7
40°	711.4	599.7	427.0	334.3	311.3
42.5°	674.1	555.3	381.8	293.9	276.5
45°	636.9	511.0	339.8	262.2	253.5
47.5°	599.7	465.8	300.2	240.0	232.1
50°	560.9	422.2	263.0	219.4	211.5
52.5°	522.8	379.5	232.1	199.6	194.1
55°	485.6	337.5	209.1	178.2	174.3
57.5°	446.8	296.3	186.2	161.6	156.9
60°	405.6	256.7	164.8	144.2	141.8
62.5°	368.4	219.4	145.8	129.1	126.7
65°	328.8	182.2	127.5	114.1	112.5
67.5°	288.4	151.3	110.9	99.8	99.0
70°	248.0	127.5	95.1	86.3	85.6
72.5°	208.3	105.4	80.0	74.5	72.9
75°	167.9	84.0	66.5	61.8	61.0
77.5°	131.5	65.0	53.1	49.9	49.1
80°	96.6	48.3	41.2	38.8	38.0
82.5°	63.4	33.3	29.3	27.7	27.7
85°	34.1	20.6	19.0	17.4	18.2
87.5°	11.9	8.7	8.7	7.9	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)