

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: P1055236

Luminaire Tested: S122R3DR-S675D927-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055236  
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-S675D927-X4F0-XX-UDD-FLL-B  
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

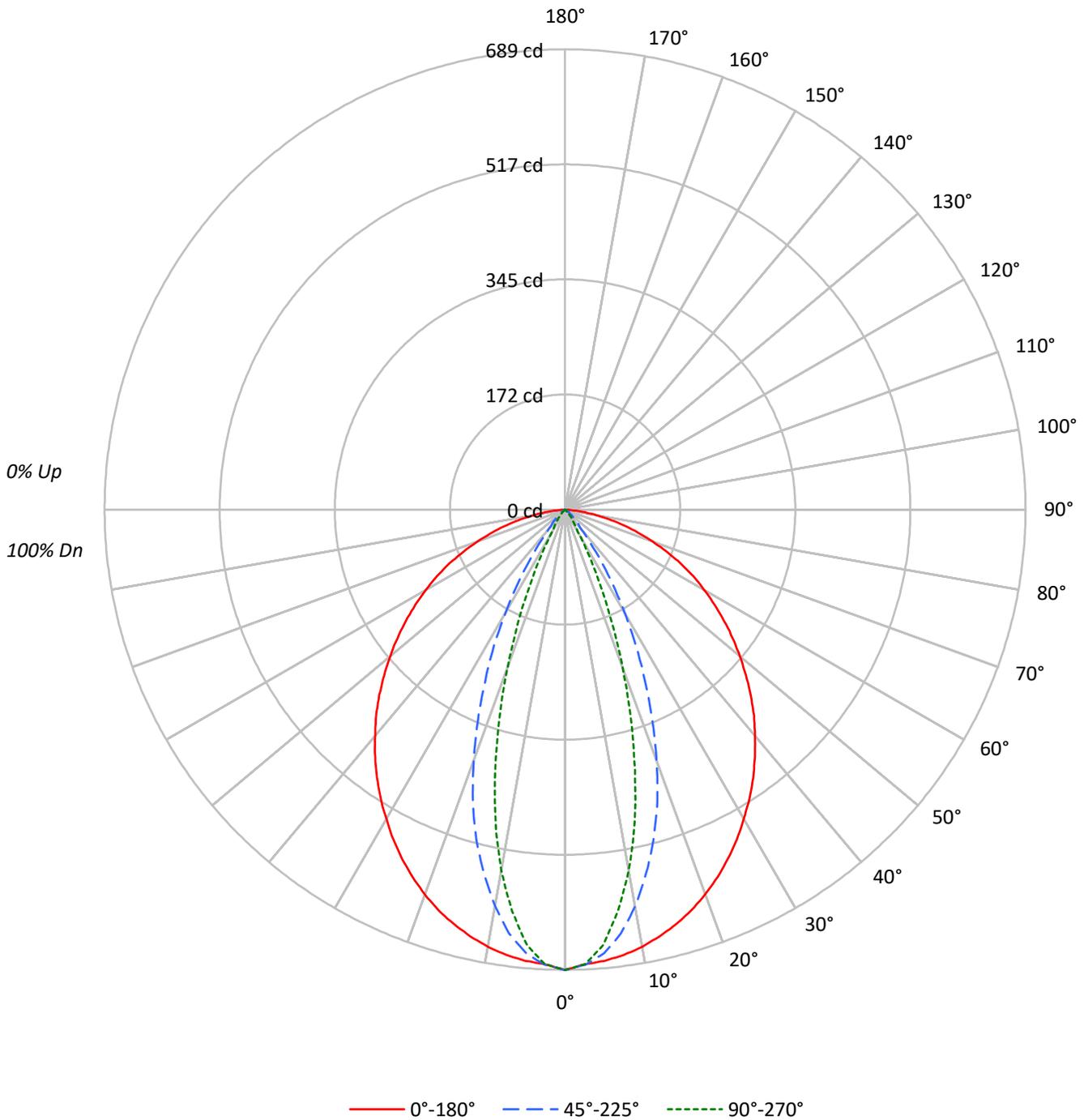
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 627.0 lumens  
Efficiency: N/A  
Efficacy: 23.8 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): 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

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### Luminous Intensity Polar Plot





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**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	62	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	47	44	43				

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

	0°	45°	90°
0°	13057	13057	13057
5°	12896	12685	12444
10°	12786	11599	10562
15°	12602	10039	7908
20°	12363	8067	5063
25°	12056	5912	2601
30°	11698	3866	849
35°	11342	2144	495
40°	10932	863	275
45°	10527	573	107
50°	10063	327	47
55°	9602	159	26
60°	9094	61	0
65°	8558	36	0
70°	7678	44	0
75°	6610	59	0
80°	5008	0	0
85°	2065	174	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10527 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.8	9.9
10°-20°	143.6	22.9
20°-30°	145.8	23.2
30°-40°	109.4	17.4
40°-50°	76.6	12.2
50°-60°	46.9	7.5
60°-70°	27.9	4.5
70°-80°	12.9	2.1
80°-90°	2.3	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°	351.1	56.0
0°-40°	460.5	73.4
0°-60°	583.9	93.1
0°-90°	627.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	627.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	689	689	689	689	689	
5°	678	684	667	654	654	64
15°	642	608	512	433	403	181
25°	577	475	283	162	124	265
35°	490	319	93	28	21	306
45°	393	169	21	6	4	303
55°	291	52	5	2	1	260
65°	191	15	1	1	0	188
75°	90	2	1	1	0	96
85°	10	0	1	1	0	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	689.2	689.2	689.2	689.2	689.2
2.5°	681.3	691.6	682.1	680.5	681.3
5°	678.1	684.4	667.0	654.3	654.3
7.5°	672.6	672.6	640.1	613.9	606.0
10°	664.6	655.9	602.9	560.9	549.0
12.5°	654.3	633.7	559.3	499.9	480.9
15°	642.5	607.6	511.8	433.3	403.2
17.5°	629.0	578.3	458.7	361.2	326.4
20°	613.2	546.6	400.1	287.6	251.1
22.5°	595.7	511.8	340.6	221.8	183.0
25°	576.7	475.3	282.8	161.6	124.4
27.5°	556.9	437.3	229.7	110.9	76.0
30°	534.7	397.7	176.7	65.8	38.8
32.5°	513.3	359.7	132.3	35.6	28.5
35°	490.4	319.3	92.7	27.7	21.4
37.5°	466.6	281.2	57.0	20.6	15.8
40°	442.0	242.4	34.9	15.1	11.1
42.5°	418.3	206.0	27.7	10.3	7.1
45°	392.9	168.7	21.4	6.3	4.0
47.5°	366.8	134.7	15.8	4.0	2.4
50°	341.4	104.6	11.1	2.4	1.6
52.5°	316.1	76.8	7.1	1.6	0.8
55°	290.7	51.5	4.8	1.6	0.8
57.5°	265.4	36.4	3.2	0.8	0.8
60°	240.0	28.5	1.6	0.8	0.0
62.5°	216.3	22.2	1.6	0.8	0.8
65°	190.9	15.1	0.8	0.8	0.0
67.5°	164.0	9.5	0.8	0.8	0.0
70°	138.6	5.5	0.8	0.8	0.0
72.5°	114.1	3.2	0.8	0.8	0.0
75°	90.3	1.6	0.8	0.8	0.0
77.5°	67.3	0.8	0.0	0.8	0.0
80°	45.9	0.0	0.0	0.8	0.0
82.5°	26.9	0.0	0.0	0.8	0.0
85°	9.5	0.0	0.8	0.8	0.0
87.5°	0.0	0.0	0.8	0.8	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)