

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: P1055237

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055237  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-3)  
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-S  
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

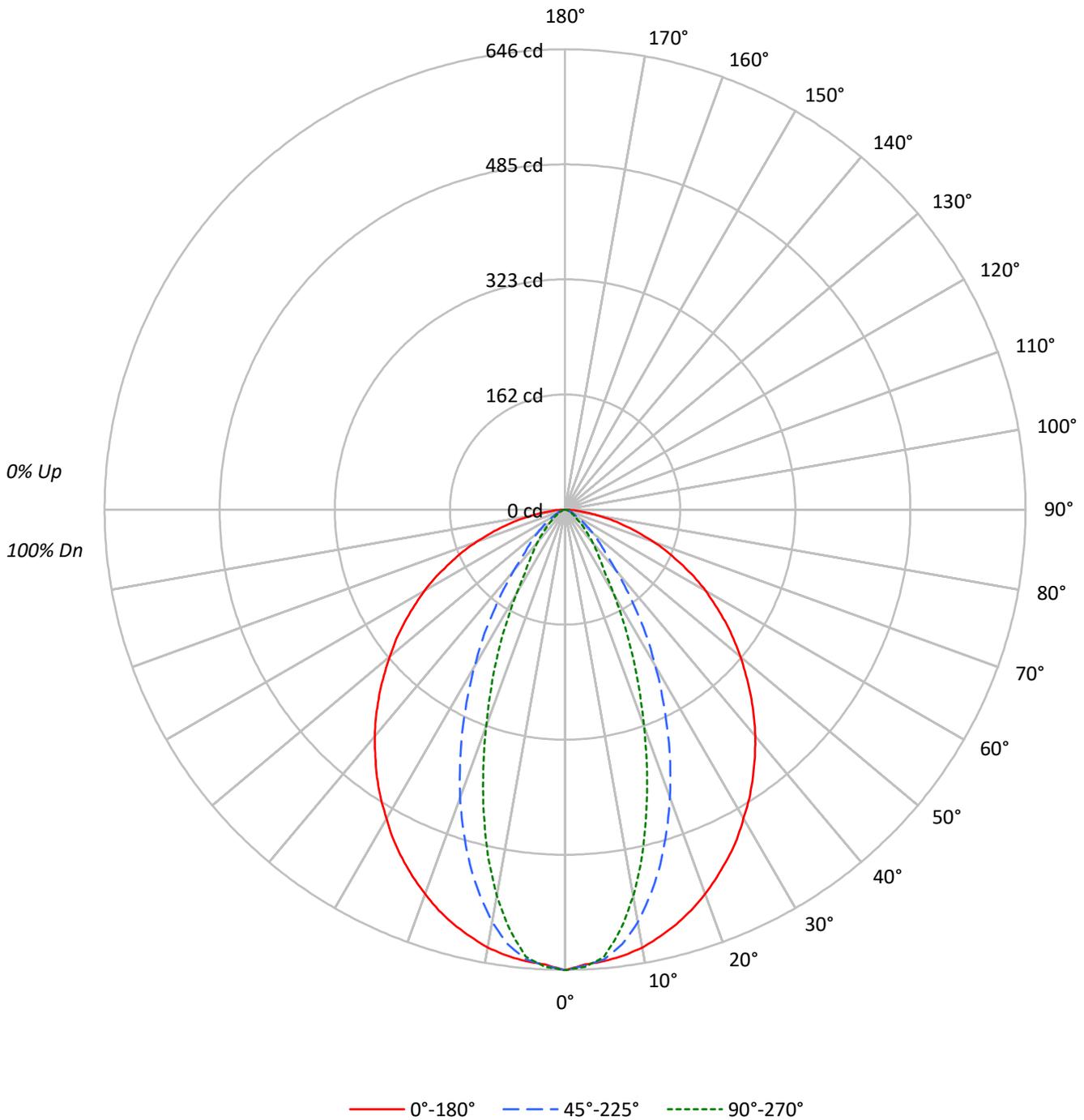
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 740.8 lumens  
Efficiency: N/A  
Efficacy: 28.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81  
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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71				
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64				
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58				
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53				
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45				
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39				

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

	0°	45°	90°
0°	12247	12247	12247
5°	12097	12052	11978
10°	12008	11308	10593
15°	11823	10115	8640
20°	11579	8674	6516
25°	11295	7103	4653
30°	10954	5546	2964
35°	10628	4068	1980
40°	10266	2743	1489
45°	9871	1932	1061
50°	9455	1471	746
55°	9054	1021	548
60°	8617	690	451
65°	7989	498	354
70°	7284	393	305
75°	6317	351	234
80°	5008	262	262
85°	2761	348	174

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9871 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.1	8.0
10°-20°	145.1	19.6
20°-30°	165.7	22.4
30°-40°	140.5	19.0
40°-50°	104.8	14.2
50°-60°	67.8	9.1
60°-70°	37.8	5.1
70°-80°	16.6	2.2
80°-90°	3.4	0.5
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°	369.9	49.9
0°-40°	510.4	68.9
0°-60°	683.0	92.2
0°-90°	740.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	740.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	646	646	646	646	646	
5°	636	644	634	627	630	60
15°	603	588	516	461	440	170
25°	540	477	340	249	223	249
35°	460	346	176	96	86	287
45°	368	219	72	47	40	284
55°	274	104	31	19	17	245
65°	178	38	11	9	8	177
75°	86	8	5	4	3	92
85°	13	1	2	1	1	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	646.4	646.4	646.4	646.4	646.4
2.5°	639.3	648.8	640.9	640.9	642.5
5°	636.1	644.0	633.7	627.4	629.8
7.5°	631.4	636.9	615.5	596.5	594.9
10°	624.2	626.6	587.8	558.5	550.6
12.5°	613.9	608.4	553.7	512.5	499.1
15°	602.8	587.8	515.7	461.0	440.5
17.5°	589.4	562.4	473.7	407.2	381.8
20°	574.3	536.3	430.2	350.9	323.2
22.5°	557.7	507.0	385.0	297.9	270.1
25°	540.3	476.9	339.8	248.7	222.6
27.5°	522.0	445.2	295.5	204.4	175.9
30°	500.7	412.7	253.5	161.6	135.5
32.5°	480.9	378.7	214.7	125.2	103.0
35°	459.5	346.2	175.9	95.9	85.6
37.5°	437.3	313.7	141.8	80.8	72.1
40°	415.1	281.2	110.9	68.1	60.2
42.5°	392.1	249.5	85.6	57.0	49.1
45°	368.4	218.6	72.1	46.7	39.6
47.5°	344.6	187.7	60.2	37.2	31.7
50°	320.8	158.4	49.9	29.3	25.3
52.5°	297.9	130.7	39.6	23.8	20.6
55°	274.1	103.8	30.9	19.0	16.6
57.5°	250.3	80.8	23.8	15.8	14.3
60°	227.4	61.0	18.2	12.7	11.9
62.5°	203.6	49.1	14.3	10.3	9.5
65°	178.2	38.0	11.1	8.7	7.9
67.5°	155.3	27.7	8.7	7.1	6.3
70°	131.5	19.0	7.1	6.3	5.5
72.5°	108.5	11.9	5.5	4.8	4.8
75°	86.3	7.9	4.8	4.0	3.2
77.5°	65.8	4.8	3.2	3.2	2.4
80°	45.9	3.2	2.4	2.4	2.4
82.5°	28.5	2.4	1.6	1.6	1.6
85°	12.7	0.8	1.6	0.8	0.8
87.5°	2.4	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)