

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: P1055242

Luminaire Tested: S122R3DR-S675D935-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055242  
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-S675D935-X4F0-XX-UDD-FLL-B  
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

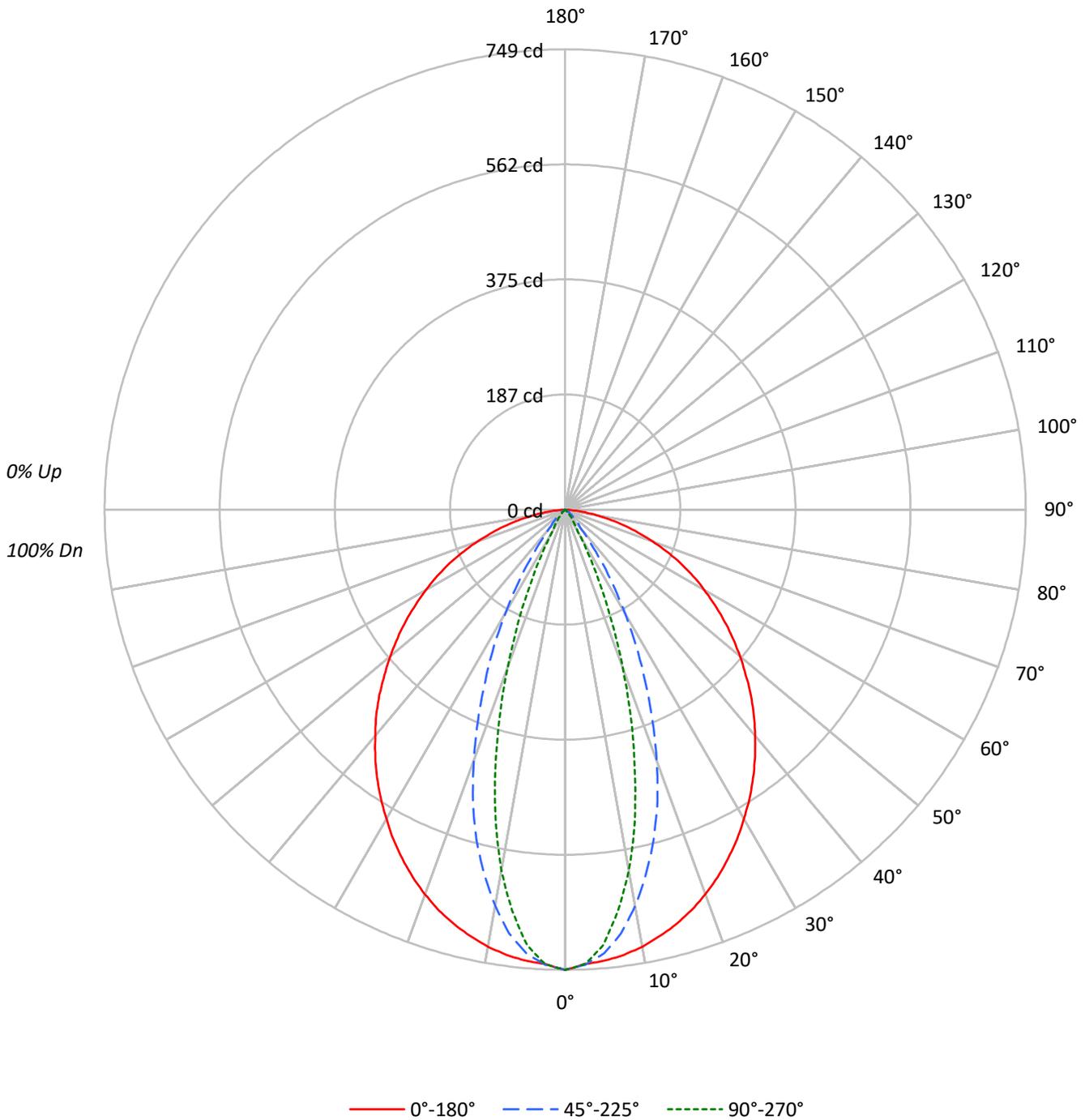
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 681.5 lumens  
Efficiency: N/A  
Efficacy: 25.8 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				100
1	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81				81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61				61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	59	66	62	58	56				56
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52				52
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49				49
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45				45
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	47	44	43				43

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

	0°	45°	90°
0°	14192	14192	14192
5°	14016	13788	13526
10°	13898	12605	11479
15°	13697	10909	8597
20°	13436	8766	5502
25°	13103	6426	2826
30°	12715	4200	923
35°	12328	2329	537
40°	11881	937	299
45°	11443	622	115
50°	10938	357	50
55°	10438	172	30
60°	9886	64	0
65°	9302	40	0
70°	8348	50	0
75°	7188	66	0
80°	5444	0	0
85°	2239	196	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11443 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.2	9.9
10°-20°	156.0	22.9
20°-30°	158.4	23.2
30°-40°	118.9	17.4
40°-50°	83.2	12.2
50°-60°	50.9	7.5
60°-70°	30.4	4.5
70°-80°	14.0	2.1
80°-90°	2.5	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°	381.6	56.0
0°-40°	500.5	73.4
0°-60°	634.7	93.1
0°-90°	681.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	681.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	737	744	725	711	711	70
15°	698	660	556	471	438	197
25°	627	517	307	176	135	289
35°	533	347	101	30	23	333
45°	427	183	23	7	4	329
55°	316	56	5	2	1	283
65°	208	16	1	1	0	204
75°	98	2	1	1	0	104
85°	10	0	1	1	0	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	749.1	749.1	749.1	749.1	749.1
2.5°	740.5	751.7	741.3	739.6	740.5
5°	737.0	743.9	725.0	711.2	711.2
7.5°	731.0	731.0	695.7	667.3	658.7
10°	722.4	712.9	655.2	609.6	596.7
12.5°	711.2	688.8	607.9	543.3	522.6
15°	698.3	660.4	556.2	471.0	438.3
17.5°	683.6	628.5	498.5	392.6	354.7
20°	666.4	594.1	434.8	312.5	272.9
22.5°	647.5	556.2	370.2	241.1	198.9
25°	626.8	516.6	307.4	175.6	135.2
27.5°	605.3	475.3	249.7	120.5	82.7
30°	581.2	432.2	192.0	71.5	42.2
32.5°	557.9	390.9	143.8	38.7	31.0
35°	533.0	347.0	100.7	30.1	23.2
37.5°	507.1	305.7	62.0	22.4	17.2
40°	480.4	263.5	37.9	16.4	12.1
42.5°	454.6	223.9	30.1	11.2	7.7
45°	427.1	183.4	23.2	6.9	4.3
47.5°	398.6	146.4	17.2	4.3	2.6
50°	371.1	113.7	12.1	2.6	1.7
52.5°	343.5	83.5	7.7	1.7	0.9
55°	316.0	56.0	5.2	1.7	0.9
57.5°	288.4	39.6	3.4	0.9	0.9
60°	260.9	31.0	1.7	0.9	0.0
62.5°	235.1	24.1	1.7	0.9	0.9
65°	207.5	16.4	0.9	0.9	0.0
67.5°	178.2	10.3	0.9	0.9	0.0
70°	150.7	6.0	0.9	0.9	0.0
72.5°	124.0	3.4	0.9	0.9	0.0
75°	98.2	1.7	0.9	0.9	0.0
77.5°	73.2	0.9	0.0	0.9	0.0
80°	49.9	0.0	0.0	0.9	0.0
82.5°	29.3	0.0	0.0	0.9	0.0
85°	10.3	0.0	0.9	0.9	0.0
87.5°	0.0	0.0	0.9	0.9	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)