

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: P1055227

Luminaire Tested: S122R3DR-S675D835-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055227  
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-S675D835-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, 80 CRI LEDS  
Ballast/Driver: -

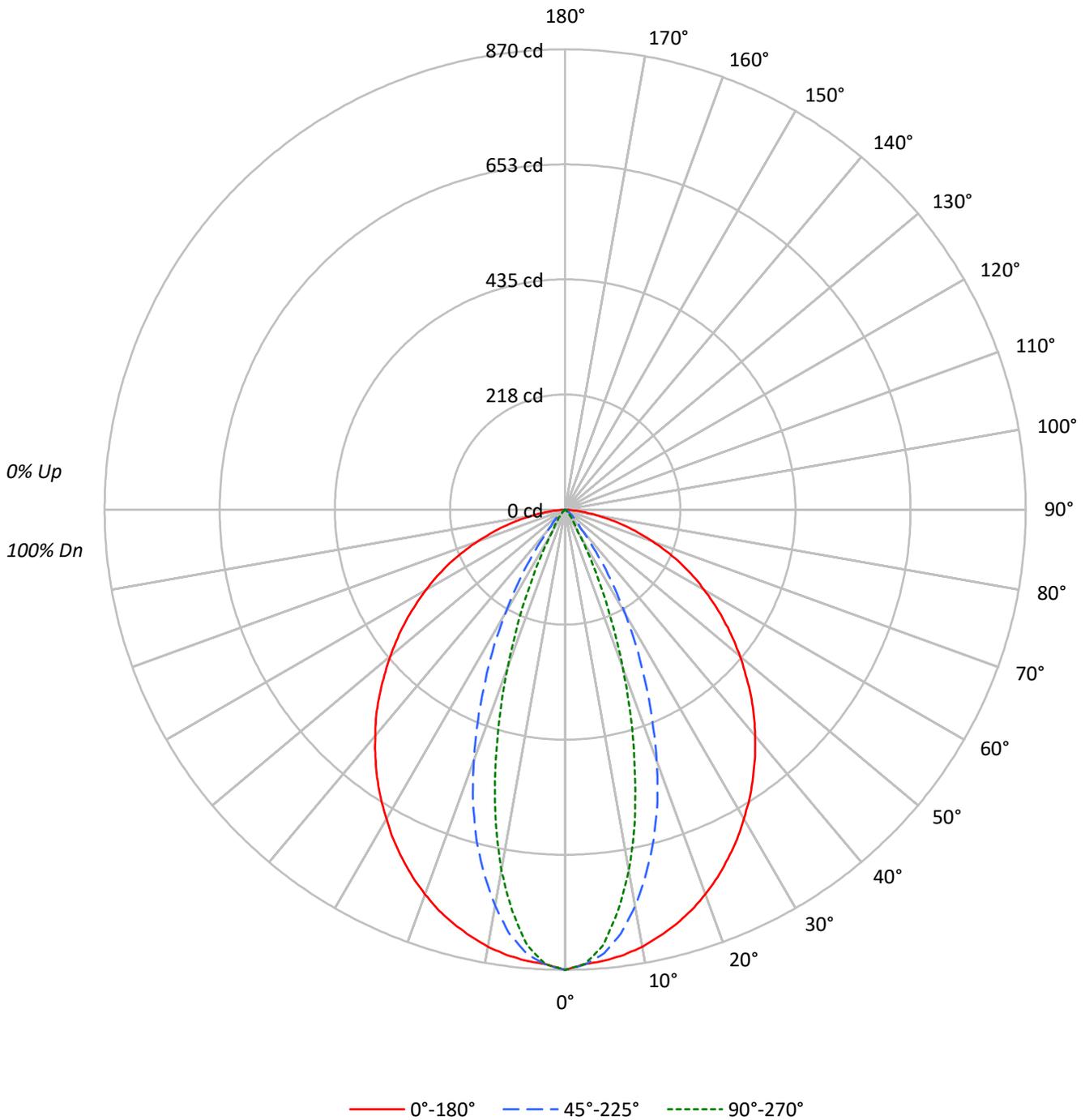
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 791.5 lumens  
Efficiency: N/A  
Efficacy: 30.0 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°	16483	16483	16483
5°	16280	16013	15709
10°	16141	14640	13332
15°	15907	12671	9984
20°	15605	10182	6391
25°	15218	7463	3282
30°	14767	4879	1072
35°	14317	2706	624
40°	13800	1088	346
45°	13290	723	134
50°	12704	413	59
55°	12122	198	33
60°	11481	76	0
65°	10804	45	0
70°	9694	55	0
75°	8345	73	0
80°	6328	0	0
85°	2609	217	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13290 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.0	9.9
10°-20°	181.2	22.9
20°-30°	184.0	23.2
30°-40°	138.1	17.4
40°-50°	96.7	12.2
50°-60°	59.2	7.5
60°-70°	35.2	4.5
70°-80°	16.3	2.1
80°-90°	2.9	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°	443.2	56.0
0°-40°	581.3	73.4
0°-60°	737.1	93.1
0°-90°	791.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	791.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	870	870	870	870	870	
5°	856	864	842	826	826	81
15°	811	767	646	547	509	228
25°	728	600	357	204	157	335
35°	619	403	117	35	27	387
45°	496	213	27	8	5	382
55°	367	65	6	2	1	328
65°	241	19	1	1	0	237
75°	114	2	1	1	0	121
85°	12	0	1	1	0	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	870	870	870	870	870
2.5°	860	873	861	859	860
5°	856	864	842	826	826
7.5°	849	849	808	775	765
10°	839	828	761	708	693
12.5°	826	800	706	631	607
15°	811	767	646	547	509
17.5°	794	730	579	456	412
20°	774	690	505	363	317
22.5°	752	646	430	280	231
25°	728	600	357	204	157
27.5°	703	552	290	140	96
30°	675	502	223	83	49
32.5°	648	454	167	45	36
35°	619	403	117	35	27
37.5°	589	355	72	26	20
40°	558	306	44	19	14
42.5°	528	260	35	13	9
45°	496	213	27	8	5
47.5°	463	170	20	5	3
50°	431	132	14	3	2
52.5°	399	97	9	2	1
55°	367	65	6	2	1
57.5°	335	46	4	1	1
60°	303	36	2	1	0
62.5°	273	28	2	1	1
65°	241	19	1	1	0
67.5°	207	12	1	1	0
70°	175	7	1	1	0
72.5°	144	4	1	1	0
75°	114	2	1	1	0
77.5°	85	1	0	1	0
80°	58	0	0	1	0
82.5°	34	0	0	1	0
85°	12	0	1	1	0
87.5°	0	0	1	1	0
90°	0	0	0	0	0

(END OF REPORT)