

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: P1055264

Luminaire Tested: S122R3DR-S865D927-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055264  
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-S865D927-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: -

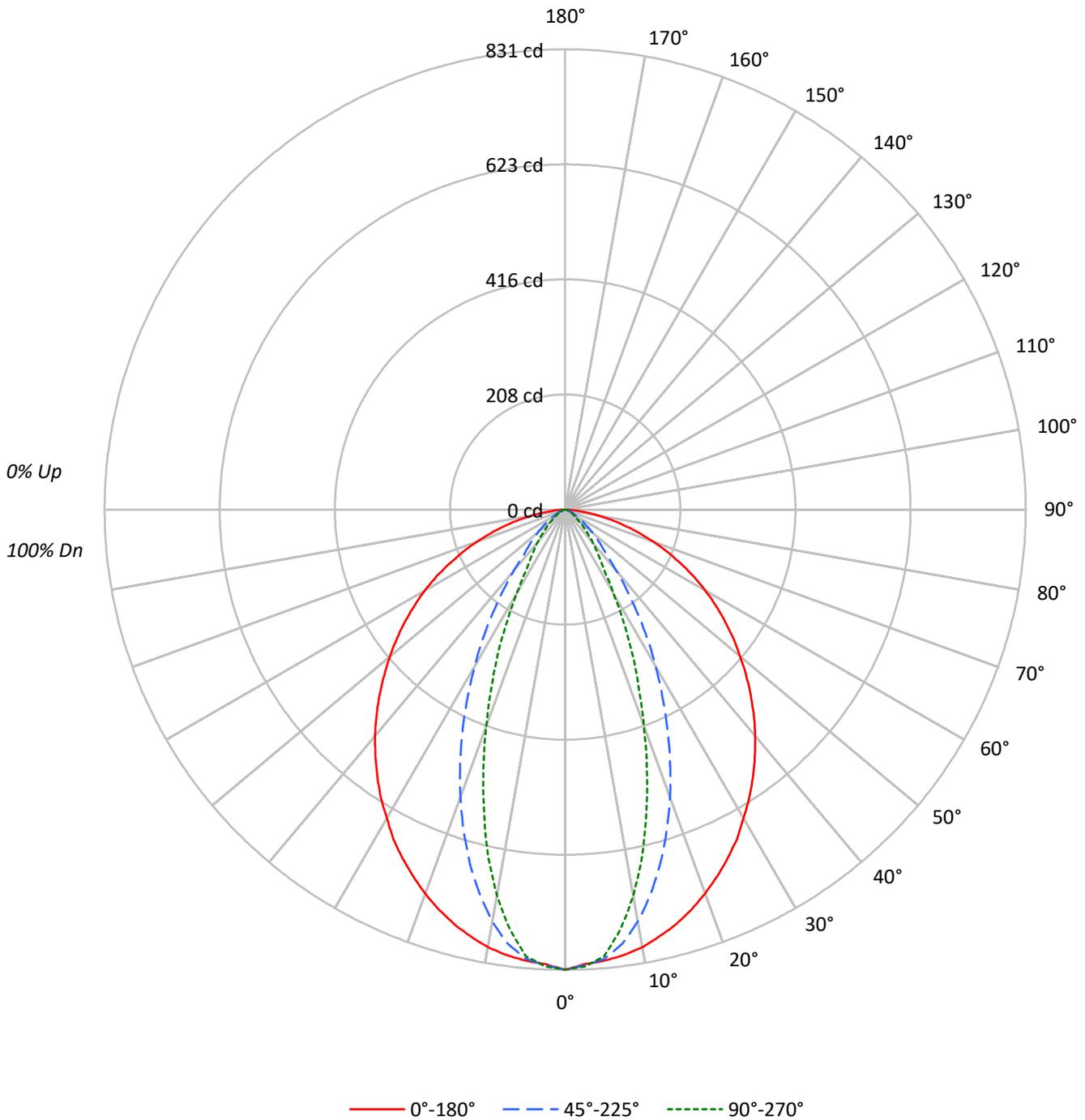
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 952.0 lumens  
Efficiency: N/A  
Efficacy: 27.4 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): 34.7  
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°	15738	15738	15738
5°	15547	15488	15391
10°	15433	14532	13611
15°	15195	12998	11102
20°	14881	11145	8373
25°	14514	9129	5981
30°	14076	7127	3809
35°	13655	5227	2542
40°	13192	3524	1914
45°	12684	2481	1364
50°	12152	1889	961
55°	11634	1311	707
60°	11072	887	580
65°	10270	641	457
70°	9362	510	393
75°	8125	447	300
80°	6437	338	338
85°	3543	435	217

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12684 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.9	8.0
10°-20°	186.4	19.6
20°-30°	212.9	22.4
30°-40°	180.6	19.0
40°-50°	134.7	14.2
50°-60°	87.1	9.1
60°-70°	48.5	5.1
70°-80°	21.3	2.2
80°-90°	4.4	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°	475.3	49.9
0°-40°	655.9	68.9
0°-60°	877.7	92.2
0°-90°	952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	952.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	831	831	831	831	831	
5°	818	828	814	806	809	78
15°	775	755	663	592	566	218
25°	694	613	437	320	286	320
35°	590	445	226	123	110	369
45°	473	281	93	60	51	365
55°	352	133	40	24	21	315
65°	229	49	14	11	10	228
75°	111	10	6	5	4	118
85°	16	1	2	1	1	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	830.7	830.7	830.7	830.7	830.7
2.5°	821.5	833.7	823.6	823.6	825.6
5°	817.5	827.6	814.4	806.3	809.3
7.5°	811.3	818.5	791.0	766.6	764.5
10°	802.2	805.2	755.4	717.7	707.5
12.5°	789.0	781.8	711.6	658.6	641.3
15°	774.7	755.4	662.7	592.5	566.0
17.5°	757.4	722.8	608.8	523.3	490.7
20°	738.1	689.2	552.8	451.0	415.3
22.5°	716.7	651.5	494.7	382.8	347.1
25°	694.3	612.8	436.7	319.7	286.1
27.5°	670.9	572.1	379.7	262.6	226.0
30°	643.4	530.4	325.8	207.7	174.1
32.5°	617.9	486.6	275.9	160.8	132.3
35°	590.4	444.9	226.0	123.2	109.9
37.5°	561.9	403.1	182.2	103.8	92.6
40°	533.4	361.4	142.5	87.5	77.4
42.5°	503.9	320.7	109.9	73.3	63.1
45°	473.4	281.0	92.6	60.1	50.9
47.5°	442.8	241.3	77.4	47.8	40.7
50°	412.3	203.6	64.1	37.7	32.6
52.5°	382.8	168.0	50.9	30.5	26.5
55°	352.2	133.4	39.7	24.4	21.4
57.5°	321.7	103.8	30.5	20.4	18.3
60°	292.2	78.4	23.4	16.3	15.3
62.5°	261.6	63.1	18.3	13.2	12.2
65°	229.1	48.9	14.3	11.2	10.2
67.5°	199.5	35.6	11.2	9.2	8.1
70°	169.0	24.4	9.2	8.1	7.1
72.5°	139.5	15.3	7.1	6.1	6.1
75°	111.0	10.2	6.1	5.1	4.1
77.5°	84.5	6.1	4.1	4.1	3.1
80°	59.0	4.1	3.1	3.1	3.1
82.5°	36.6	3.1	2.0	2.0	2.0
85°	16.3	1.0	2.0	1.0	1.0
87.5°	3.1	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)