

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: P1055222

Luminaire Tested: S122R3DR-S485D950-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055222  
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-S485D950-X4F0-XX-UDD-FLL-S  
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

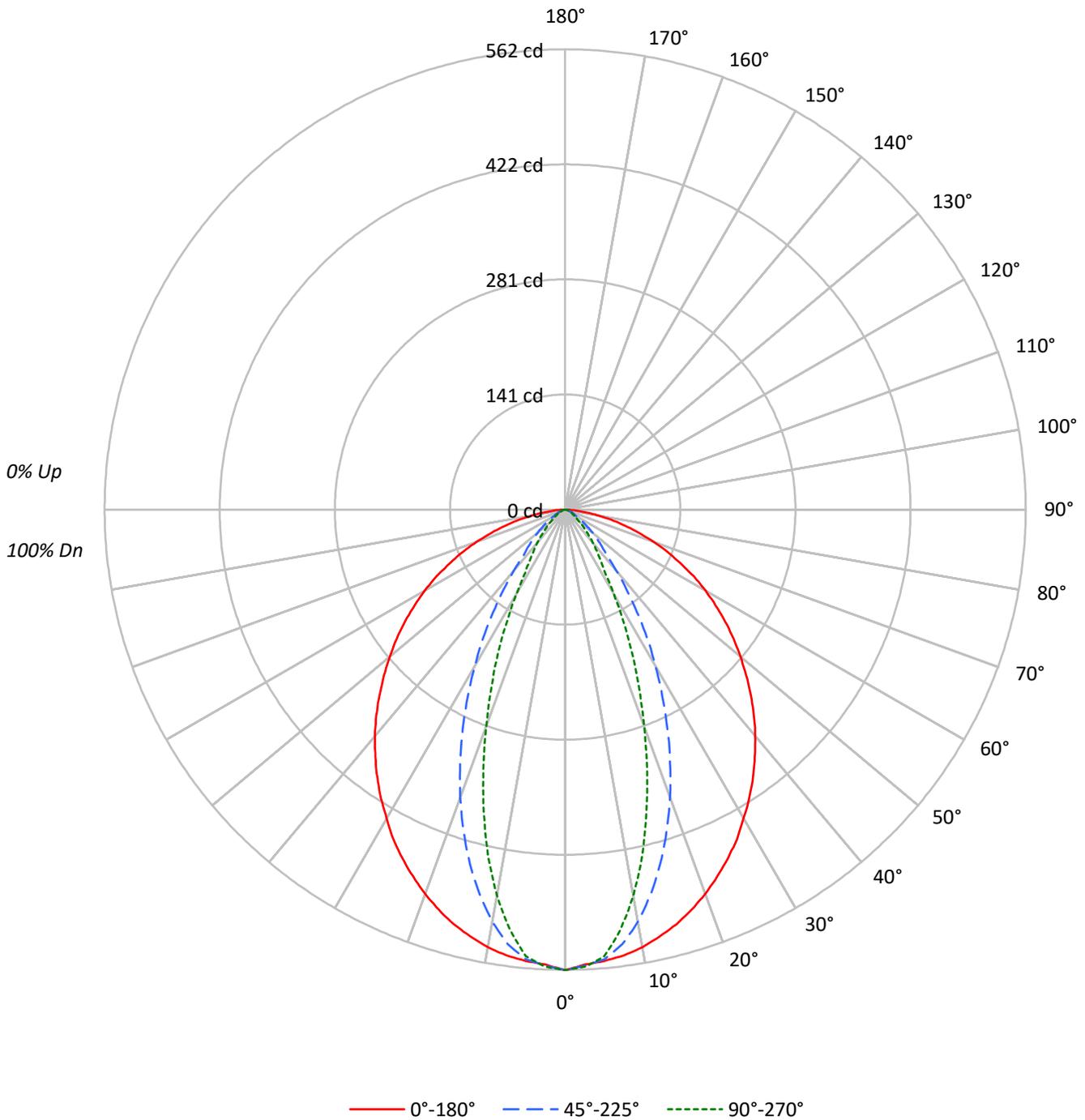
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 644.3 lumens  
Efficiency: N/A  
Efficacy: 33.7 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): 19.1  
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





TEST NUMBER: P105222

CATALOG NUMBER: S122R3DR-S485D950-X4F0-XX-UDD-FLL-S

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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°	10651	10651	10651
5°	10521	10481	10416
10°	10444	9835	9211
15°	10284	8797	7512
20°	10071	7543	5667
25°	9821	6177	4047
30°	9525	4824	2577
35°	9242	3536	1721
40°	8928	2384	1296
45°	8582	1680	922
50°	8223	1279	648
55°	7875	889	479
60°	7491	599	390
65°	6949	430	309
70°	6337	343	266
75°	5497	300	205
80°	4364	229	229
85°	2391	304	152

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8582 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.4	8.0
10°-20°	126.2	19.6
20°-30°	144.1	22.4
30°-40°	122.2	19.0
40°-50°	91.2	14.2
50°-60°	58.9	9.1
60°-70°	32.9	5.1
70°-80°	14.4	2.2
80°-90°	3.0	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°	321.7	49.9
0°-40°	443.9	68.9
0°-60°	594.0	92.2
0°-90°	644.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	644.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	562	562	562	562	562	
5°	553	560	551	546	548	53
15°	524	511	448	401	383	148
25°	470	415	296	216	194	216
35°	400	301	153	83	74	250
45°	320	190	63	41	34	247
55°	238	90	27	16	14	213
65°	155	33	10	8	7	154
75°	75	7	4	3	3	80
85°	11	1	1	1	1	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	562.2	562.2	562.2	562.2	562.2
2.5°	556.0	564.2	557.3	557.3	558.7
5°	553.2	560.1	551.1	545.6	547.7
7.5°	549.1	553.9	535.3	518.8	517.4
10°	542.9	544.9	511.2	485.7	478.8
12.5°	533.9	529.1	481.6	445.7	434.0
15°	524.3	511.2	448.5	401.0	383.0
17.5°	512.6	489.1	412.0	354.1	332.1
20°	499.5	466.4	374.1	305.2	281.1
22.5°	485.0	440.9	334.8	259.0	234.9
25°	469.8	414.7	295.5	216.3	193.6
27.5°	454.0	387.2	257.0	177.7	152.9
30°	435.4	358.9	220.5	140.5	117.8
32.5°	418.2	329.3	186.7	108.9	89.6
35°	399.6	301.1	152.9	83.4	74.4
37.5°	380.3	272.8	123.3	70.3	62.7
40°	361.0	244.6	96.4	59.2	52.4
42.5°	341.0	217.0	74.4	49.6	42.7
45°	320.3	190.1	62.7	40.6	34.4
47.5°	299.7	163.3	52.4	32.4	27.6
50°	279.0	137.8	43.4	25.5	22.0
52.5°	259.0	113.7	34.4	20.7	17.9
55°	238.4	90.2	26.9	16.5	14.5
57.5°	217.7	70.3	20.7	13.8	12.4
60°	197.7	53.0	15.8	11.0	10.3
62.5°	177.1	42.7	12.4	9.0	8.3
65°	155.0	33.1	9.6	7.6	6.9
67.5°	135.0	24.1	7.6	6.2	5.5
70°	114.4	16.5	6.2	5.5	4.8
72.5°	94.4	10.3	4.8	4.1	4.1
75°	75.1	6.9	4.1	3.4	2.8
77.5°	57.2	4.1	2.8	2.8	2.1
80°	40.0	2.8	2.1	2.1	2.1
82.5°	24.8	2.1	1.4	1.4	1.4
85°	11.0	0.7	1.4	0.7	0.7
87.5°	2.1	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)