

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: P1055216

Luminaire Tested: S122R3DR-S485D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055216  
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-S485D935-X4F0-XX-UDD-FLL-S  
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

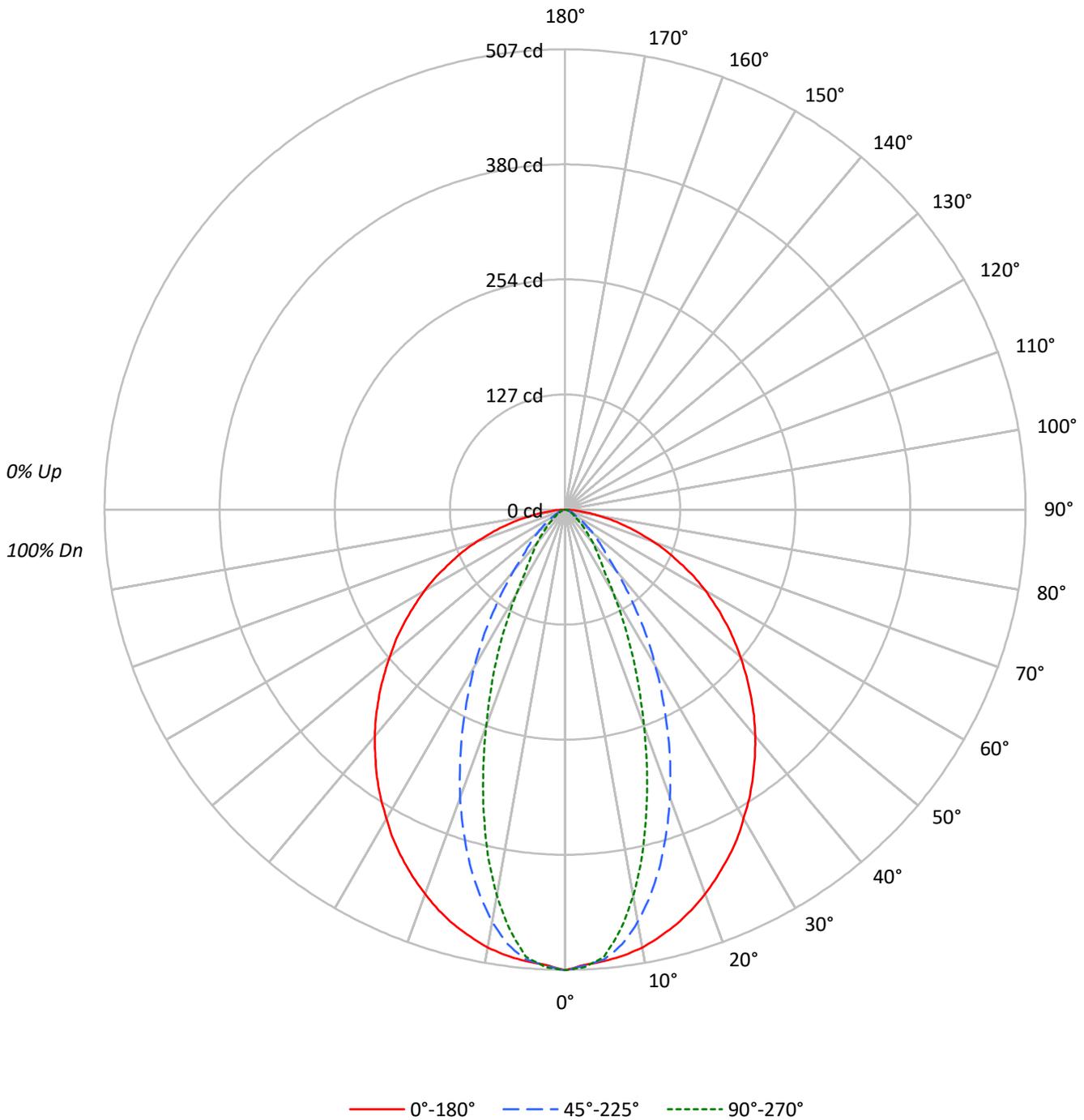
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 581.4 lumens  
Efficiency: N/A  
Efficacy: 30.4 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): 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





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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	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°	9613	9613	9613
5°	9496	9460	9401
10°	9425	8875	8313
15°	9281	7940	6781
20°	9089	6807	5115
25°	8863	5575	3652
30°	8598	4353	2326
35°	8340	3192	1554
40°	8058	2152	1170
45°	7746	1517	833
50°	7422	1155	587
55°	7105	799	433
60°	6760	542	352
65°	6272	390	278
70°	5717	310	244
75°	4963	271	183
80°	3939	207	207
85°	2152	261	130

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7746 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.4	8.0
10°-20°	113.9	19.6
20°-30°	130.1	22.4
30°-40°	110.3	19.0
40°-50°	82.3	14.2
50°-60°	53.2	9.1
60°-70°	29.6	5.1
70°-80°	13.0	2.2
80°-90°	2.7	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°	290.3	49.9
0°-40°	400.6	68.9
0°-60°	536.1	92.2
0°-90°	581.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	581.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	499	506	497	492	494	47
15°	473	461	405	362	346	133
25°	424	374	267	195	175	195
35°	361	272	138	75	67	225
45°	289	172	57	37	31	223
55°	215	82	24	15	13	192
65°	140	30	9	7	6	139
75°	68	6	4	3	2	72
85°	10	1	1	1	1	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	507.4	507.4	507.4	507.4	507.4
2.5°	501.8	509.2	503.0	503.0	504.3
5°	499.3	505.5	497.4	492.4	494.3
7.5°	495.5	499.9	483.1	468.2	466.9
10°	489.9	491.8	461.3	438.3	432.1
12.5°	481.9	477.5	434.6	402.3	391.7
15°	473.2	461.3	404.8	361.9	345.7
17.5°	462.6	441.5	371.8	319.6	299.7
20°	450.8	420.9	337.6	275.4	253.7
22.5°	437.7	397.9	302.2	233.8	212.0
25°	424.0	374.3	266.7	195.2	174.7
27.5°	409.7	349.4	231.9	160.4	138.0
30°	393.0	323.9	199.0	126.8	106.3
32.5°	377.4	297.2	168.5	98.2	80.8
35°	360.6	271.7	138.0	75.2	67.2
37.5°	343.2	246.2	111.3	63.4	56.6
40°	325.8	220.7	87.0	53.5	47.3
42.5°	307.8	195.9	67.2	44.8	38.5
45°	289.1	171.6	56.6	36.7	31.1
47.5°	270.5	147.4	47.3	29.2	24.9
50°	251.8	124.4	39.2	23.0	19.9
52.5°	233.8	102.6	31.1	18.7	16.2
55°	215.1	81.5	24.2	14.9	13.1
57.5°	196.5	63.4	18.7	12.4	11.2
60°	178.4	47.9	14.3	9.9	9.3
62.5°	159.8	38.5	11.2	8.1	7.5
65°	139.9	29.8	8.7	6.8	6.2
67.5°	121.9	21.8	6.8	5.6	5.0
70°	103.2	14.9	5.6	5.0	4.4
72.5°	85.2	9.3	4.4	3.7	3.7
75°	67.8	6.2	3.7	3.1	2.5
77.5°	51.6	3.7	2.5	2.5	1.9
80°	36.1	2.5	1.9	1.9	1.9
82.5°	22.4	1.9	1.2	1.2	1.2
85°	9.9	0.6	1.2	0.6	0.6
87.5°	1.9	0.6	0.6	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)