

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: P1055212

Luminaire Tested: S122R3DR-S485D930-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055212  
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-S485D930-X4F0-XX-UDD-FLL-B  
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

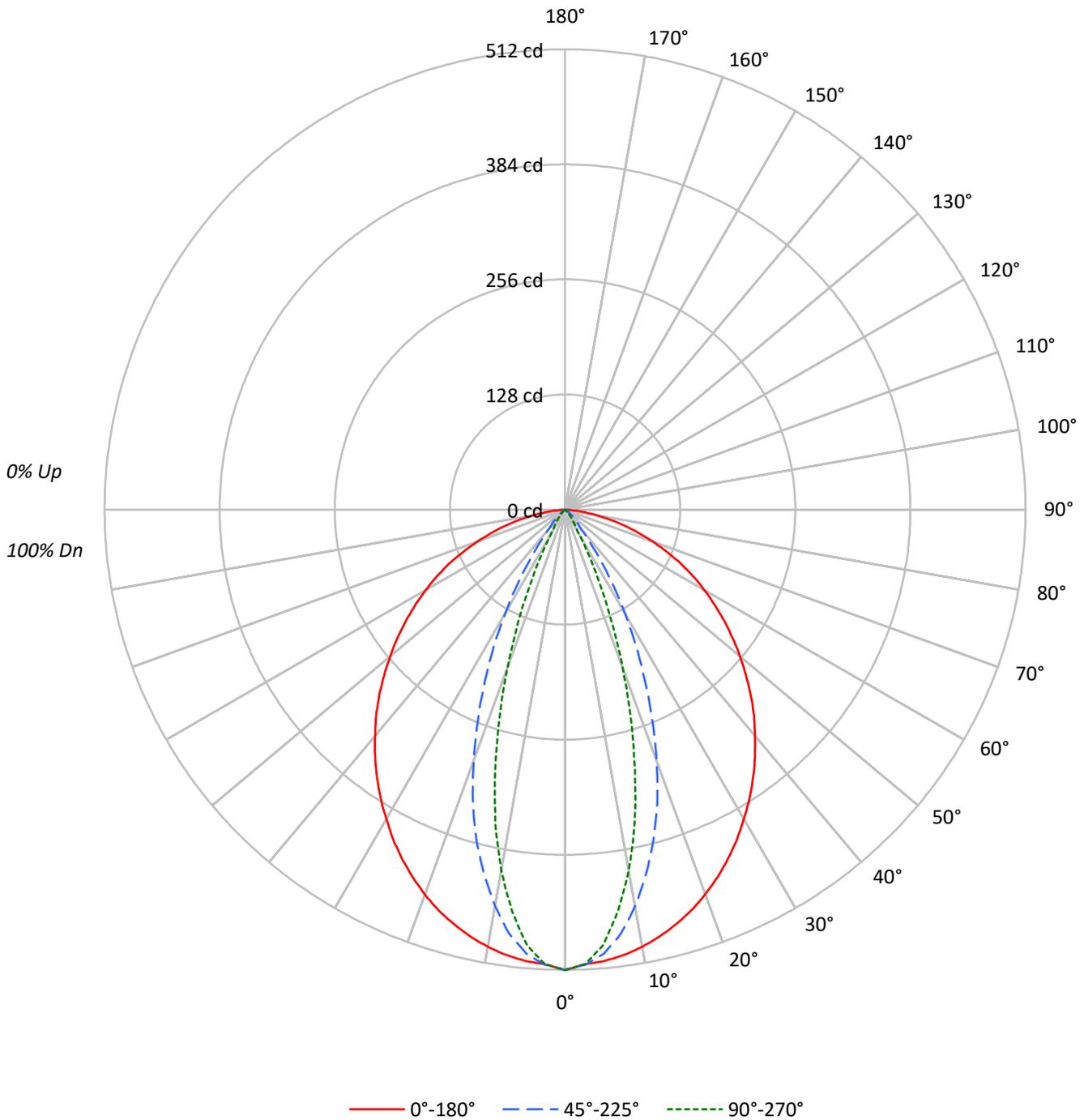
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 466.0 lumens  
Efficiency: N/A  
Efficacy: 24.4 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): 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										
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	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°	9704	9704	9704
5°	9585	9427	9249
10°	9504	8621	7849
15°	9366	7459	5878
20°	9188	5994	3762
25°	8960	4394	1932
30°	8694	2872	630
35°	8428	1594	368
40°	8124	641	203
45°	7824	426	78
50°	7481	242	35
55°	7138	116	20
60°	6760	45	0
65°	6361	27	0
70°	5706	33	0
75°	4912	44	0
80°	3720	0	0
85°	1543	130	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7824 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.9	9.9
10°-20°	106.7	22.9
20°-30°	108.3	23.2
30°-40°	81.3	17.4
40°-50°	56.9	12.2
50°-60°	34.8	7.5
60°-70°	20.8	4.5
70°-80°	9.6	2.1
80°-90°	1.7	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°	260.9	56.0
0°-40°	342.2	73.4
0°-60°	434.0	93.1
0°-90°	466.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	466.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	512	512	512	512	512	
5°	504	509	496	486	486	48
15°	478	452	380	322	300	135
25°	429	353	210	120	92	197
35°	364	237	69	21	16	228
45°	292	125	16	5	3	225
55°	216	38	4	1	1	193
65°	142	11	1	1	0	140
75°	67	1	1	1	0	71
85°	7	0	1	1	0	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	512.2	512.2	512.2	512.2	512.2
2.5°	506.3	514.0	506.9	505.7	506.3
5°	504.0	508.7	495.7	486.3	486.3
7.5°	499.9	499.9	475.7	456.3	450.4
10°	494.0	487.5	448.1	416.8	408.0
12.5°	486.3	471.0	415.7	371.5	357.4
15°	477.5	451.6	380.3	322.1	299.7
17.5°	467.5	429.8	340.9	268.5	242.6
20°	455.7	406.2	297.3	213.7	186.6
22.5°	442.8	380.3	253.2	164.9	136.0
25°	428.6	353.3	210.2	120.1	92.4
27.5°	413.9	325.0	170.7	82.4	56.5
30°	397.4	295.6	131.3	48.9	28.8
32.5°	381.5	267.3	98.3	26.5	21.2
35°	364.4	237.3	68.9	20.6	15.9
37.5°	346.8	209.0	42.4	15.3	11.8
40°	328.5	180.2	25.9	11.2	8.2
42.5°	310.9	153.1	20.6	7.7	5.3
45°	292.0	125.4	15.9	4.7	2.9
47.5°	272.6	100.1	11.8	2.9	1.8
50°	253.8	77.7	8.2	1.8	1.2
52.5°	234.9	57.1	5.3	1.2	0.6
55°	216.1	38.3	3.5	1.2	0.6
57.5°	197.2	27.1	2.4	0.6	0.6
60°	178.4	21.2	1.2	0.6	0.0
62.5°	160.7	16.5	1.2	0.6	0.6
65°	141.9	11.2	0.6	0.6	0.0
67.5°	121.9	7.1	0.6	0.6	0.0
70°	103.0	4.1	0.6	0.6	0.0
72.5°	84.8	2.4	0.6	0.6	0.0
75°	67.1	1.2	0.6	0.6	0.0
77.5°	50.0	0.6	0.0	0.6	0.0
80°	34.1	0.0	0.0	0.6	0.0
82.5°	20.0	0.0	0.0	0.6	0.0
85°	7.1	0.0	0.6	0.6	0.0
87.5°	0.0	0.0	0.6	0.6	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)