

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: P1055217

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055217  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)  
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-W  
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

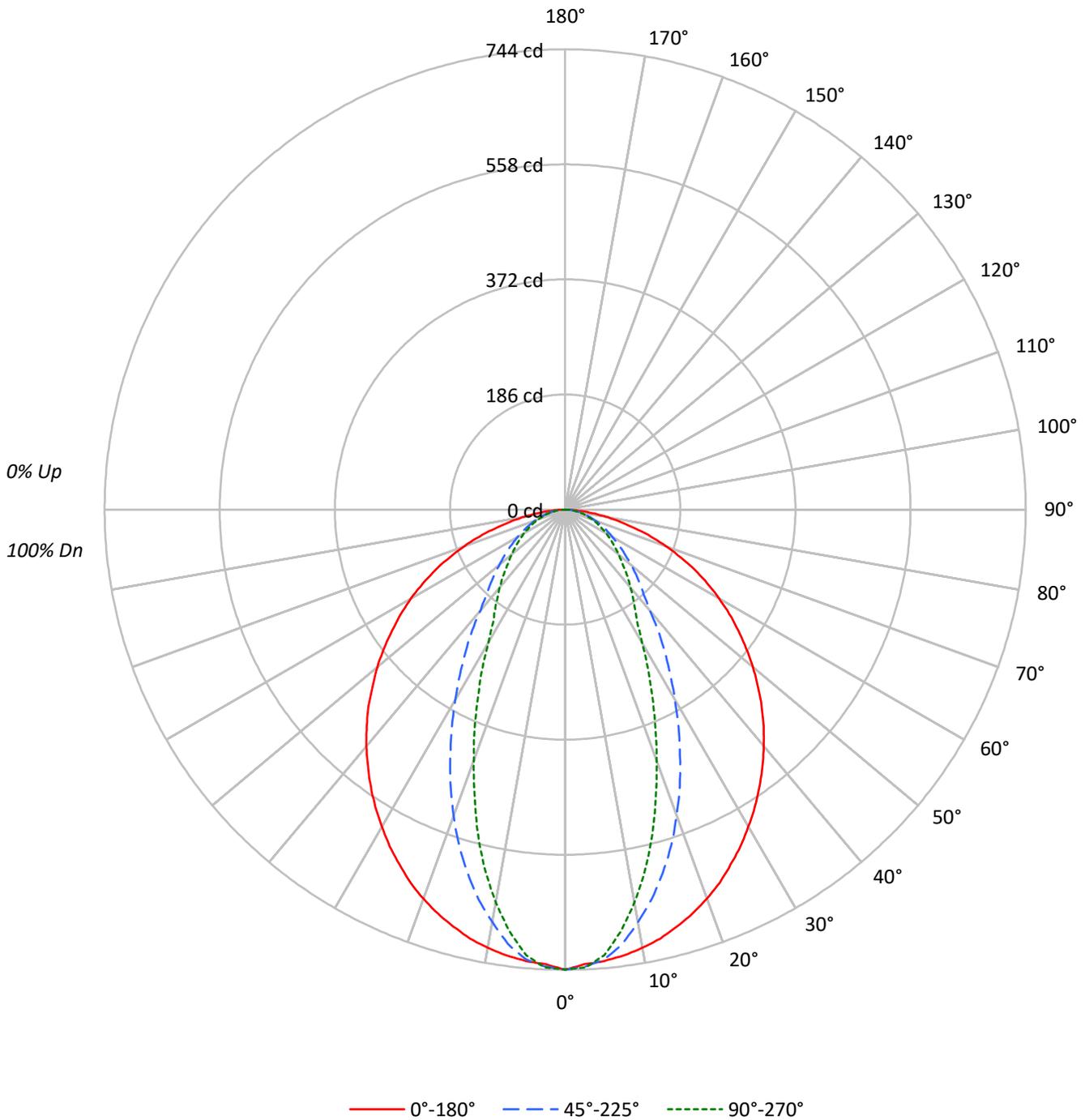
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1124.8 lumens  
Efficiency: N/A  
Efficacy: 58.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9  
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	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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14088	14088	14088
5°	13929	13883	13752
10°	13840	13026	12405
15°	13683	11939	10670
20°	13500	10617	8712
25°	13233	9177	6953
30°	12949	7753	5428
35°	12656	6485	4559
40°	12349	5258	4059
45°	12028	4598	3631
50°	11675	4067	3316
55°	11274	3676	3082
60°	10886	3346	2876
65°	10369	3066	2703
70°	9611	2858	2548
75°	8513	2591	2416
80°	7255	2444	2237
85°	5000	2152	2022

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12028 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.1	6.1
10°-20°	172.0	15.3
20°-30°	212.0	18.8
30°-40°	203.4	18.1
40°-50°	175.4	15.6
50°-60°	136.1	12.1
60°-70°	93.2	8.3
70°-80°	50.6	4.5
80°-90°	13.9	1.2
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°	452.2	40.2
0°-40°	655.6	58.3
0°-60°	967.1	86.0
0°-90°	1124.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1124.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	732	743	730	721	723	70
15°	698	676	609	559	544	197
25°	633	565	439	358	333	292
35°	547	434	280	209	197	342
45°	449	302	172	142	136	346
55°	341	182	111	96	93	306
65°	231	99	68	62	60	228
75°	116	45	35	34	33	125
85°	23	11	10	10	9	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	743.6	743.6	743.6	743.6	743.6
2.5°	735.5	748.0	739.3	739.3	741.1
5°	732.4	743.0	730.0	720.6	723.1
7.5°	726.8	734.3	708.2	688.3	687.7
10°	719.4	720.0	677.1	651.0	644.8
12.5°	710.1	700.1	645.4	606.2	596.9
15°	697.6	676.5	608.7	559.0	544.0
17.5°	684.6	652.2	569.5	507.4	486.8
20°	669.6	623.0	526.6	455.8	432.1
22.5°	652.9	595.0	483.7	406.0	381.1
25°	633.0	565.2	439.0	358.1	332.6
27.5°	613.7	534.7	396.1	315.9	289.7
30°	591.9	501.8	354.4	275.4	248.1
32.5°	570.2	468.2	315.9	236.9	216.4
35°	547.2	434.0	280.4	208.9	197.1
37.5°	523.5	400.4	246.8	190.3	179.7
40°	499.3	366.8	212.6	172.2	164.1
42.5°	474.4	333.9	189.0	157.3	149.8
45°	448.9	302.2	171.6	141.8	135.5
47.5°	421.6	270.5	154.8	128.7	123.1
50°	396.1	240.0	138.0	116.9	112.5
52.5°	368.7	210.2	124.4	106.3	102.6
55°	341.3	181.6	111.3	96.4	93.3
57.5°	314.6	154.2	98.9	87.0	84.6
60°	287.3	132.4	88.3	78.3	75.9
62.5°	259.3	115.0	78.3	70.3	67.8
65°	231.3	98.9	68.4	62.2	60.3
67.5°	202.1	83.3	59.7	54.7	53.5
70°	173.5	69.6	51.6	47.3	46.0
72.5°	145.5	56.6	43.5	40.4	39.2
75°	116.3	45.4	35.4	33.6	33.0
77.5°	90.8	35.4	28.6	27.4	26.7
80°	66.5	26.1	22.4	21.1	20.5
82.5°	44.1	18.0	16.2	15.5	14.9
85°	23.0	11.2	9.9	9.9	9.3
87.5°	7.5	5.0	5.0	5.0	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)