

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: P1055144

Luminaire Tested: S122R3DR-S1005D830-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055144  
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-S1005D830-X4F0-XX-UDD-FLL-S  
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

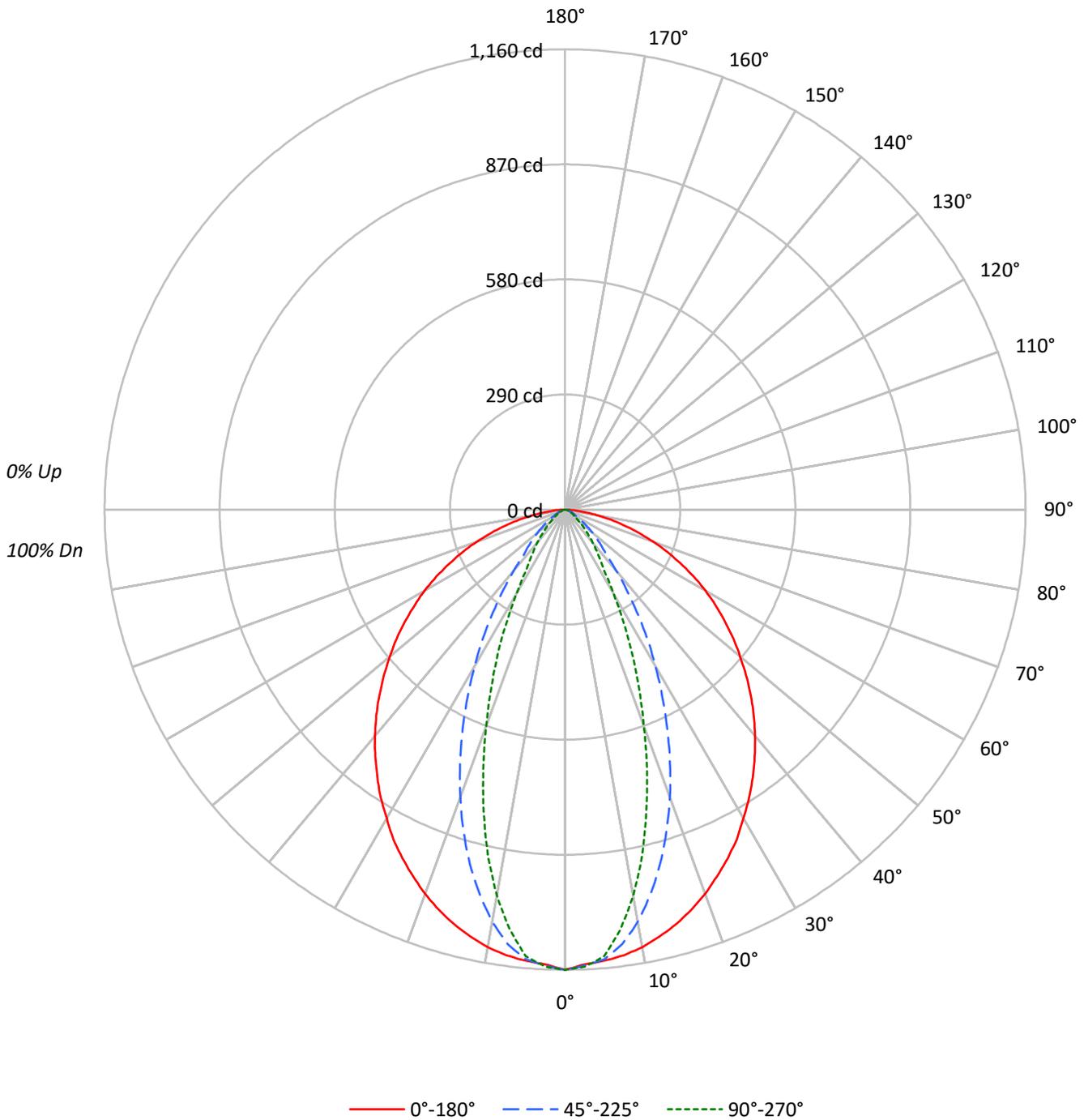
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1329.3 lumens  
Efficiency: N/A  
Efficacy: 31.7 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): 41.9  
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°	21975	21975	21975
5°	21709	21628	21492
10°	21549	20292	19005
15°	21219	18151	15503
20°	20779	15563	11694
25°	20267	12748	8349
30°	19654	9952	5318
35°	19070	7299	3550
40°	18423	4922	2671
45°	17710	3467	1905
50°	16968	2641	1341
55°	16245	1830	988
60°	15460	1239	807
65°	14337	892	637
70°	13073	709	554
75°	11339	622	417
80°	8990	469	469
85°	4935	609	304

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17710 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.0	8.0
10°-20°	260.3	19.6
20°-30°	297.4	22.4
30°-40°	252.2	19.0
40°-50°	188.2	14.2
50°-60°	121.6	9.1
60°-70°	67.8	5.1
70°-80°	29.8	2.2
80°-90°	6.1	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°	663.7	49.9
0°-40°	915.9	68.9
0°-60°	1225.6	92.2
0°-90°	1329.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1329.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1160	1160	1160	1160	1160	
5°	1142	1156	1137	1126	1130	108
15°	1082	1055	925	827	790	305
25°	970	856	610	446	399	446
35°	824	621	316	172	154	515
45°	661	392	129	84	71	510
55°	492	186	55	34	30	440
65°	320	68	20	16	14	318
75°	155	14	8	7	6	165
85°	23	1	3	1	1	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1159.9	1159.9	1159.9	1159.9	1159.9
2.5°	1147.1	1164.2	1150.0	1150.0	1152.8
5°	1141.5	1155.7	1137.2	1125.8	1130.1
7.5°	1132.9	1142.9	1104.5	1070.4	1067.5
10°	1120.1	1124.4	1054.8	1002.2	987.9
12.5°	1101.7	1091.7	993.6	919.7	895.5
15°	1081.8	1054.8	925.4	827.3	790.4
17.5°	1057.6	1009.3	850.1	730.6	685.2
20°	1030.6	962.4	771.9	629.7	580.0
22.5°	1000.7	909.8	690.8	534.5	484.7
25°	969.5	855.7	609.8	446.4	399.4
27.5°	936.8	798.9	530.2	366.7	315.6
30°	898.4	740.6	454.9	290.0	243.1
32.5°	862.8	679.5	385.2	224.6	184.8
35°	824.5	621.2	315.6	172.0	153.5
37.5°	784.7	562.9	254.4	145.0	129.4
40°	744.9	504.6	199.0	122.2	108.0
42.5°	703.6	447.8	153.5	102.3	88.1
45°	661.0	392.3	129.4	83.9	71.1
47.5°	618.4	336.9	108.0	66.8	56.9
50°	575.7	284.3	89.6	52.6	45.5
52.5°	534.5	234.5	71.1	42.6	37.0
55°	491.8	186.2	55.4	34.1	29.9
57.5°	449.2	145.0	42.6	28.4	25.6
60°	408.0	109.5	32.7	22.7	21.3
62.5°	365.3	88.1	25.6	18.5	17.1
65°	319.8	68.2	19.9	15.6	14.2
67.5°	278.6	49.8	15.6	12.8	11.4
70°	236.0	34.1	12.8	11.4	10.0
72.5°	194.7	21.3	10.0	8.5	8.5
75°	154.9	14.2	8.5	7.1	5.7
77.5°	118.0	8.5	5.7	5.7	4.3
80°	82.4	5.7	4.3	4.3	4.3
82.5°	51.2	4.3	2.8	2.8	2.8
85°	22.7	1.4	2.8	1.4	1.4
87.5°	4.3	1.4	1.4	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)