

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: P1055621

Luminaire Tested: S123R3DR-S340D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055621
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S340D935-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

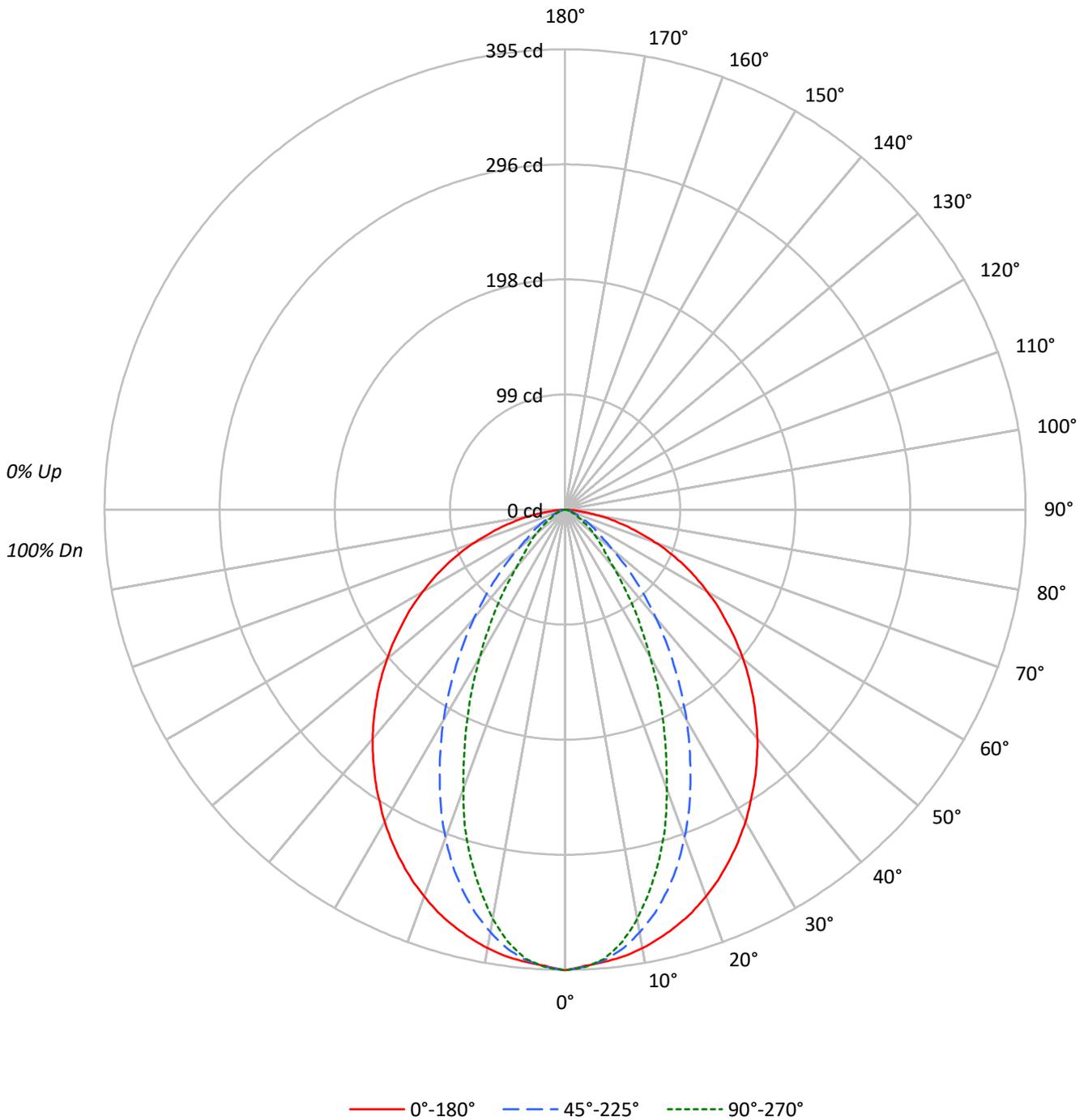
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 549.8 lumens
Efficiency: N/A
Efficacy: 43.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4767	4767	4767
5°	4716	4698	4685
10°	4680	4510	4368
15°	4617	4229	3887
20°	4534	3846	3274
25°	4427	3386	2642
30°	4309	2901	2035
35°	4176	2393	1506
40°	4040	1904	1026
45°	3891	1425	772
50°	3733	990	604
55°	3569	725	441
60°	3397	543	316
65°	3198	362	245
70°	2894	264	197
75°	2497	191	158
80°	2007	153	132
85°	1037	152	97

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3891 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.5	6.6
10°-20°	95.1	17.3
20°-30°	119.5	21.7
30°-40°	111.3	20.2
40°-50°	85.2	15.5
50°-60°	56.6	10.3
60°-70°	30.5	5.6
70°-80°	12.5	2.3
80°-90°	2.4	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°	251.2	45.7
0°-40°	362.5	65.9
0°-60°	504.4	91.7
0°-90°	549.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	549.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	395	395	395	395	395	
5°	390	394	388	387	387	37
15°	370	364	339	319	311	104
25°	333	310	254	212	199	153
35°	284	242	163	115	102	177
45°	228	169	84	49	45	176
55°	170	98	34	24	21	152
65°	112	38	13	9	9	111
75°	54	9	4	4	3	57
85°	8	1	1	1	1	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	395.4	395.4	395.4	395.4	395.4
2.5°	392.0	396.9	392.7	393.1	393.1
5°	389.7	393.9	388.2	386.7	387.1
7.5°	386.7	389.4	380.0	375.1	374.4
10°	382.3	383.0	368.4	359.8	356.8
12.5°	376.6	374.0	354.9	340.7	335.0
15°	369.9	363.9	338.8	318.9	311.4
17.5°	362.4	352.3	320.4	294.6	285.6
20°	353.4	339.2	299.8	267.6	255.2
22.5°	343.7	325.3	278.1	239.8	226.0
25°	332.8	310.3	254.5	212.1	198.6
27.5°	321.5	294.2	231.2	185.9	172.0
30°	309.5	277.7	208.4	160.4	146.2
32.5°	296.4	259.7	184.8	136.8	122.5
35°	283.7	241.7	162.6	115.1	102.3
37.5°	270.2	223.7	141.3	95.9	81.7
40°	256.7	205.4	121.0	77.2	65.2
42.5°	242.5	187.0	101.9	61.5	52.1
45°	228.2	168.6	83.6	49.1	45.3
47.5°	214.0	150.3	67.5	42.3	38.6
50°	199.0	132.7	52.8	36.0	32.2
52.5°	184.8	115.1	41.2	29.6	26.2
55°	169.8	98.2	34.5	24.0	21.0
57.5°	155.9	80.9	28.5	18.7	16.5
60°	140.9	65.6	22.5	14.6	13.1
62.5°	126.7	51.3	17.2	11.6	10.5
65°	112.1	37.9	12.7	9.4	8.6
67.5°	97.4	27.4	9.7	7.5	7.1
70°	82.1	20.6	7.5	6.0	5.6
72.5°	67.5	14.6	5.6	4.9	4.5
75°	53.6	9.0	4.1	3.7	3.4
77.5°	41.2	5.2	3.0	3.0	2.6
80°	28.9	3.0	2.2	2.2	1.9
82.5°	17.6	1.9	1.5	1.5	1.5
85°	7.5	1.1	1.1	1.1	0.7
87.5°	1.1	0.4	0.4	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)