

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: P1055189

Luminaire Tested: S122R3DR-S290D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055189
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-S290D935-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

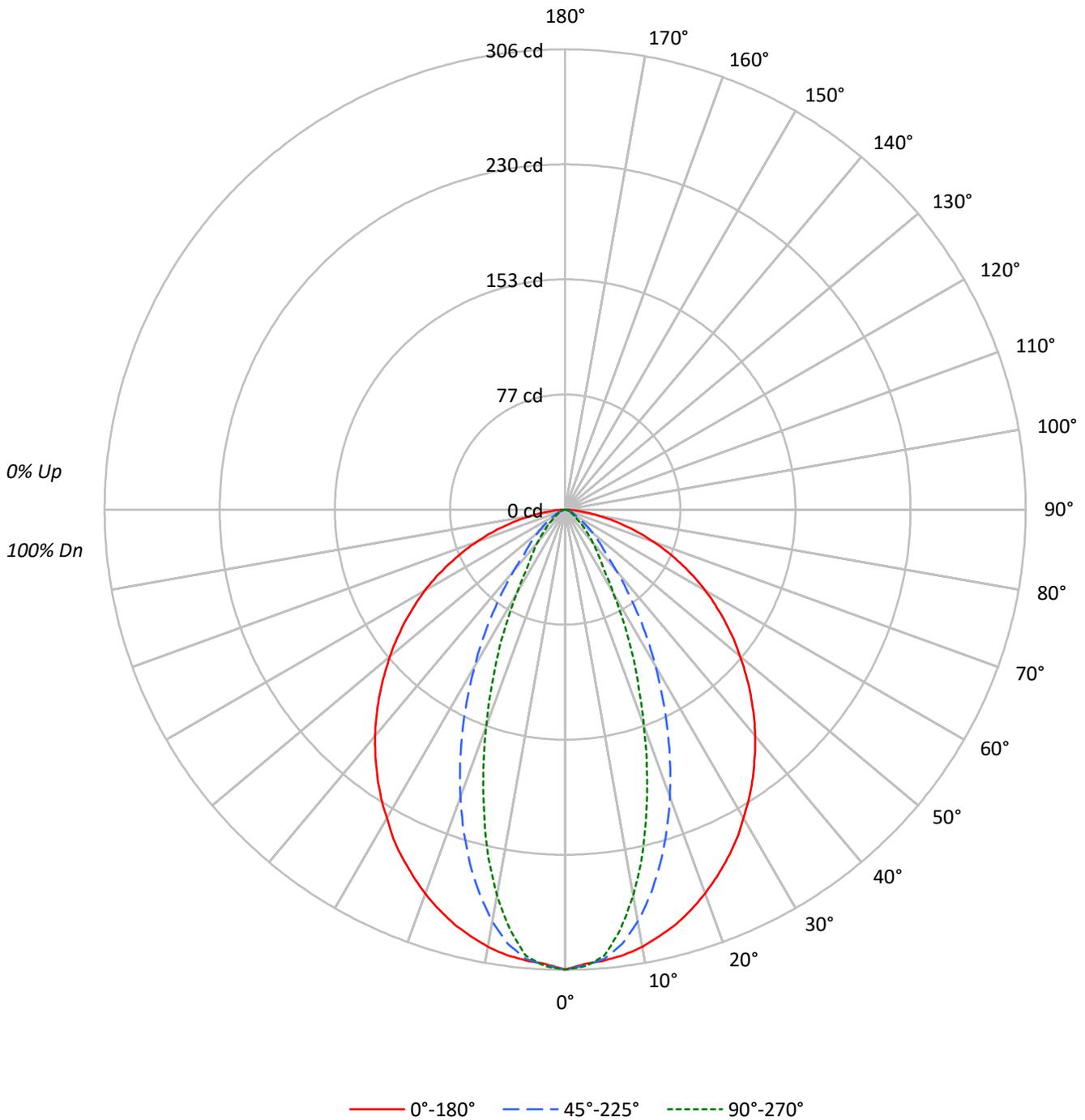
Lumens per Lamp: N/A
Luminaire Lumens: 350.4 lumens
Efficiency: N/A
Efficacy: 27.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	5794	5794	5794
5°	5723	5702	5666
10°	5681	5350	5012
15°	5594	4786	4088
20°	5478	4103	3083
25°	5343	3361	2201
30°	5180	2623	1402
35°	5028	1924	937
40°	4857	1298	705
45°	4670	914	501
50°	4474	696	354
55°	4284	482	261
60°	4077	326	212
65°	3779	233	166
70°	3446	188	144
75°	2987	161	110
80°	2368	120	120
85°	1304	152	87

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4670 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.0	8.0
10°-20°	68.6	19.6
20°-30°	78.4	22.4
30°-40°	66.5	19.0
40°-50°	49.6	14.2
50°-60°	32.0	9.1
60°-70°	17.9	5.1
70°-80°	7.8	2.2
80°-90°	1.6	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°	175.0	49.9
0°-40°	241.5	68.9
0°-60°	323.1	92.2
0°-90°	350.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	350.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	306	306	306	306	306	
5°	301	305	300	297	298	29
15°	285	278	244	218	208	80
25°	256	226	161	118	105	118
35°	217	164	83	45	40	136
45°	174	103	34	22	19	134
55°	130	49	15	9	8	116
65°	84	18	5	4	4	84
75°	41	4	2	2	2	44
85°	6	0	1	0	0	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	305.8	305.8	305.8	305.8	305.8
2.5°	302.4	306.9	303.2	303.2	303.9
5°	300.9	304.7	299.8	296.8	297.9
7.5°	298.7	301.3	291.2	282.2	281.4
10°	295.3	296.4	278.1	264.2	260.5
12.5°	290.4	287.8	262.0	242.5	236.1
15°	285.2	278.1	244.0	218.1	208.4
17.5°	278.8	266.1	224.1	192.6	180.6
20°	271.7	253.7	203.5	166.0	152.9
22.5°	263.8	239.8	182.1	140.9	127.8
25°	255.6	225.6	160.8	117.7	105.3
27.5°	247.0	210.6	139.8	96.7	83.2
30°	236.8	195.2	119.9	76.5	64.1
32.5°	227.5	179.1	101.6	59.2	48.7
35°	217.4	163.8	83.2	45.3	40.5
37.5°	206.9	148.4	67.1	38.2	34.1
40°	196.4	133.0	52.5	32.2	28.5
42.5°	185.5	118.0	40.5	27.0	23.2
45°	174.3	103.4	34.1	22.1	18.7
47.5°	163.0	88.8	28.5	17.6	15.0
50°	151.8	75.0	23.6	13.9	12.0
52.5°	140.9	61.8	18.7	11.2	9.7
55°	129.7	49.1	14.6	9.0	7.9
57.5°	118.4	38.2	11.2	7.5	6.7
60°	107.6	28.9	8.6	6.0	5.6
62.5°	96.3	23.2	6.7	4.9	4.5
65°	84.3	18.0	5.2	4.1	3.7
67.5°	73.5	13.1	4.1	3.4	3.0
70°	62.2	9.0	3.4	3.0	2.6
72.5°	51.3	5.6	2.6	2.2	2.2
75°	40.8	3.7	2.2	1.9	1.5
77.5°	31.1	2.2	1.5	1.5	1.1
80°	21.7	1.5	1.1	1.1	1.1
82.5°	13.5	1.1	0.7	0.7	0.7
85°	6.0	0.4	0.7	0.4	0.4
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)