

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: P1055195

Luminaire Tested: S122R3DR-S290D950-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055195
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-S290D950-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

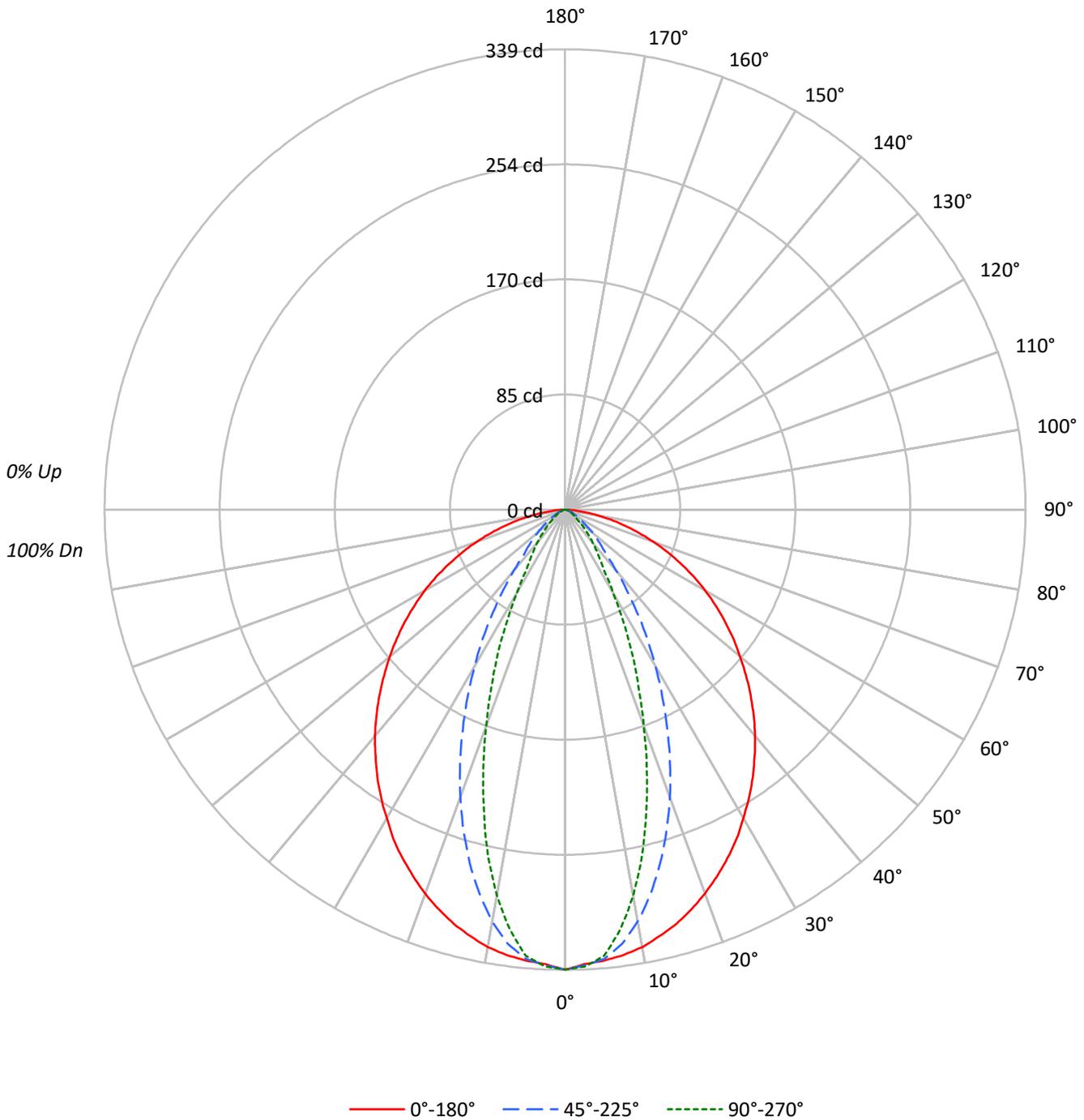
Lumens per Lamp: N/A
Luminaire Lumens: 388.3 lumens
Efficiency: N/A
Efficacy: 30.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	6419	6419	6419
5°	6341	6318	6278
10°	6295	5927	5552
15°	6198	5302	4529
20°	6069	4546	3415
25°	5920	3723	2440
30°	5740	2907	1553
35°	5569	2132	1036
40°	5382	1437	782
45°	5174	1013	557
50°	4958	772	392
55°	4747	535	287
60°	4517	364	235
65°	4187	260	188
70°	3817	205	161
75°	3316	183	124
80°	2629	131	131
85°	1435	174	87

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5174 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.0	8.0
10°-20°	76.0	19.6
20°-30°	86.9	22.4
30°-40°	73.7	19.0
40°-50°	55.0	14.2
50°-60°	35.5	9.2
60°-70°	19.8	5.1
70°-80°	8.7	2.2
80°-90°	1.8	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°	193.9	49.9
0°-40°	267.5	68.9
0°-60°	358.0	92.2
0°-90°	388.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	388.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	339	339	339	339	339	
5°	333	338	332	329	330	32
15°	316	308	270	242	231	89
25°	283	250	178	130	117	130
35°	241	182	92	50	45	151
45°	193	115	38	24	21	149
55°	144	54	16	10	9	128
65°	93	20	6	5	4	93
75°	45	4	2	2	2	48
85°	7	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°	338.8	338.8	338.8	338.8	338.8
2.5°	335.1	340.1	335.9	335.9	336.8
5°	333.4	337.6	332.2	328.9	330.1
7.5°	330.9	333.9	322.6	312.7	311.8
10°	327.2	328.5	308.1	292.7	288.6
12.5°	321.8	318.9	290.3	268.7	261.6
15°	316.0	308.1	270.3	241.7	230.9
17.5°	308.9	294.8	248.3	213.4	200.1
20°	301.0	281.1	225.5	183.9	169.4
22.5°	292.3	265.8	201.8	156.1	141.6
25°	283.2	250.0	178.1	130.4	116.7
27.5°	273.6	233.4	154.9	107.1	92.2
30°	262.4	216.3	132.9	84.7	71.0
32.5°	252.0	198.5	112.5	65.6	54.0
35°	240.8	181.5	92.2	50.2	44.8
37.5°	229.2	164.4	74.3	42.4	37.8
40°	217.6	147.4	58.1	35.7	31.6
42.5°	205.5	130.8	44.8	29.9	25.7
45°	193.1	114.6	37.8	24.5	20.8
47.5°	180.6	98.4	31.6	19.5	16.6
50°	168.2	83.0	26.2	15.4	13.3
52.5°	156.1	68.5	20.8	12.5	10.8
55°	143.7	54.4	16.2	10.0	8.7
57.5°	131.2	42.4	12.5	8.3	7.5
60°	119.2	32.0	9.6	6.6	6.2
62.5°	106.7	25.7	7.5	5.4	5.0
65°	93.4	19.9	5.8	4.6	4.2
67.5°	81.4	14.5	4.6	3.7	3.3
70°	68.9	10.0	3.7	3.3	2.9
72.5°	56.9	6.2	2.9	2.5	2.5
75°	45.3	4.2	2.5	2.1	1.7
77.5°	34.5	2.5	1.7	1.7	1.2
80°	24.1	1.7	1.2	1.2	1.2
82.5°	14.9	1.2	0.8	0.8	0.8
85°	6.6	0.4	0.8	0.4	0.4
87.5°	1.2	0.4	0.4	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)