

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: P1055188

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055188
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)
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-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

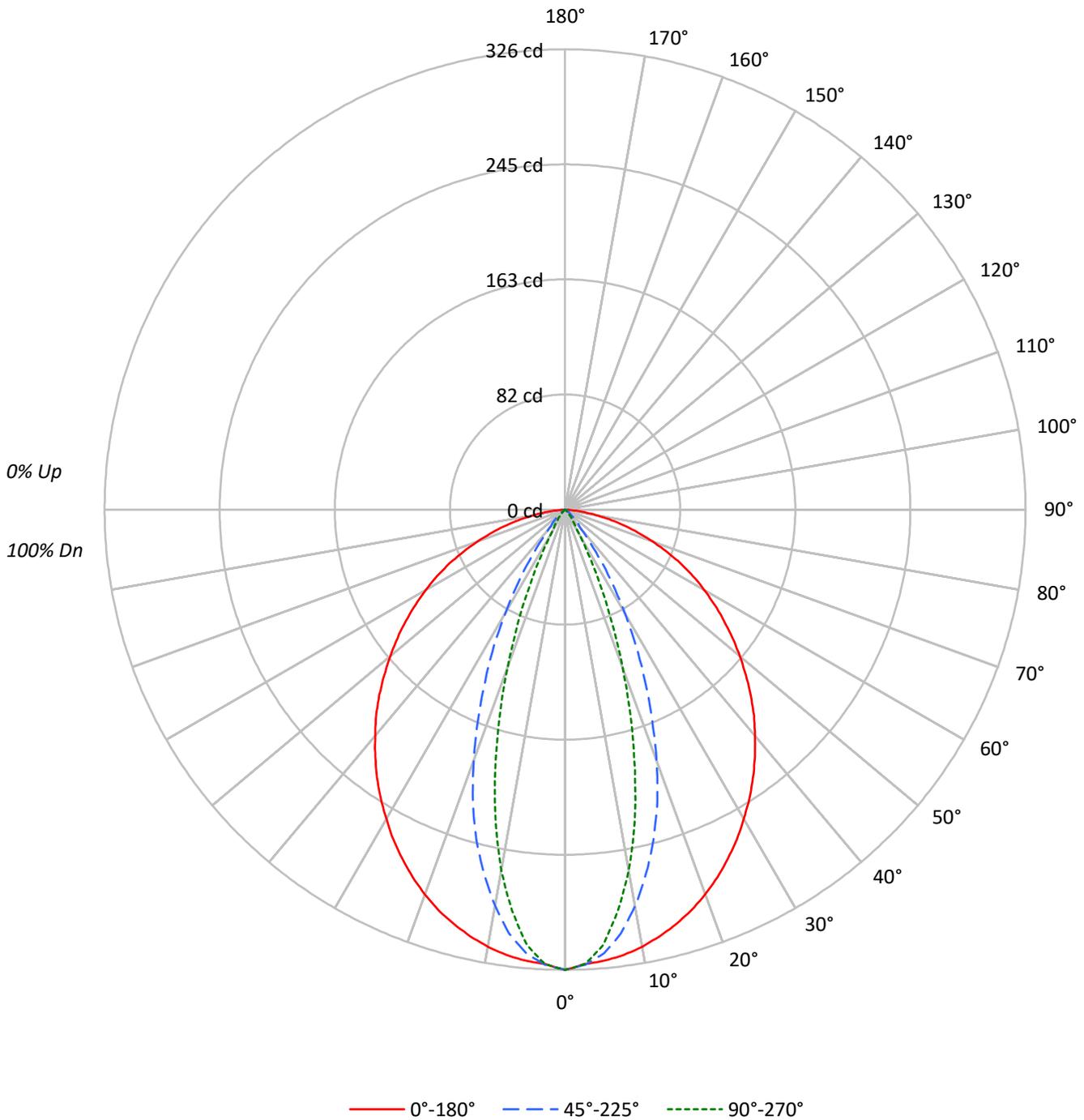
Lumens per Lamp: N/A
Luminaire Lumens: 296.6 lumens
Efficiency: N/A
Efficacy: 23.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	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	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91																																				
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81																																				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																																				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																																				
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61																																				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	59	66	62	58	56																																				
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52																																				
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49																																				
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45																																				
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	47	44	43																																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6176	6176	6176
5°	6101	6000	5888
10°	6048	5487	4996
15°	5961	4749	3742
20°	5849	3817	2395
25°	5703	2797	1229
30°	5535	1829	403
35°	5366	1013	234
40°	5171	408	129
45°	4981	271	51
50°	4760	153	21
55°	4542	73	13
60°	4304	27	0
65°	4048	18	0
70°	3634	22	0
75°	3126	29	0
80°	2368	0	0
85°	978	87	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4981 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.2	9.9
10°-20°	67.9	22.9
20°-30°	69.0	23.2
30°-40°	51.7	17.4
40°-50°	36.2	12.2
50°-60°	22.2	7.5
60°-70°	13.2	4.5
70°-80°	6.1	2.1
80°-90°	1.1	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°	166.1	56.0
0°-40°	217.8	73.4
0°-60°	276.2	93.1
0°-90°	296.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	296.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	326	326	326	326	326	
5°	321	324	316	310	310	30
15°	304	287	242	205	191	86
25°	273	225	134	76	59	126
35°	232	151	44	13	10	145
45°	186	80	10	3	2	143
55°	138	24	2	1	0	123
65°	90	7	0	0	0	89
75°	43	1	0	0	0	45
85°	4	0	0	0	0	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	326.0	326.0	326.0	326.0	326.0
2.5°	322.3	327.2	322.7	321.9	322.3
5°	320.8	323.8	315.5	309.6	309.6
7.5°	318.2	318.2	302.8	290.4	286.7
10°	314.4	310.3	285.2	265.3	259.7
12.5°	309.6	299.8	264.6	236.5	227.5
15°	303.9	287.4	242.1	205.0	190.8
17.5°	297.6	273.6	217.0	170.9	154.4
20°	290.1	258.6	189.3	136.0	118.8
22.5°	281.8	242.1	161.1	104.9	86.6
25°	272.8	224.9	133.8	76.5	58.8
27.5°	263.5	206.9	108.7	52.5	36.0
30°	253.0	188.1	83.6	31.1	18.4
32.5°	242.8	170.1	62.6	16.9	13.5
35°	232.0	151.0	43.8	13.1	10.1
37.5°	220.7	133.0	27.0	9.7	7.5
40°	209.1	114.7	16.5	7.1	5.2
42.5°	197.9	97.4	13.1	4.9	3.4
45°	185.9	79.8	10.1	3.0	1.9
47.5°	173.5	63.7	7.5	1.9	1.1
50°	161.5	49.5	5.2	1.1	0.7
52.5°	149.5	36.4	3.4	0.7	0.4
55°	137.5	24.4	2.2	0.7	0.4
57.5°	125.5	17.2	1.5	0.4	0.4
60°	113.6	13.5	0.7	0.4	0.0
62.5°	102.3	10.5	0.7	0.4	0.4
65°	90.3	7.1	0.4	0.4	0.0
67.5°	77.6	4.5	0.4	0.4	0.0
70°	65.6	2.6	0.4	0.4	0.0
72.5°	54.0	1.5	0.4	0.4	0.0
75°	42.7	0.7	0.4	0.4	0.0
77.5°	31.9	0.4	0.0	0.4	0.0
80°	21.7	0.0	0.0	0.4	0.0
82.5°	12.7	0.0	0.0	0.4	0.0
85°	4.5	0.0	0.4	0.4	0.0
87.5°	0.0	0.0	0.4	0.4	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)