

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: P1055183

Luminaire Tested: S122R3DR-S290D927-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055183
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-S290D927-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

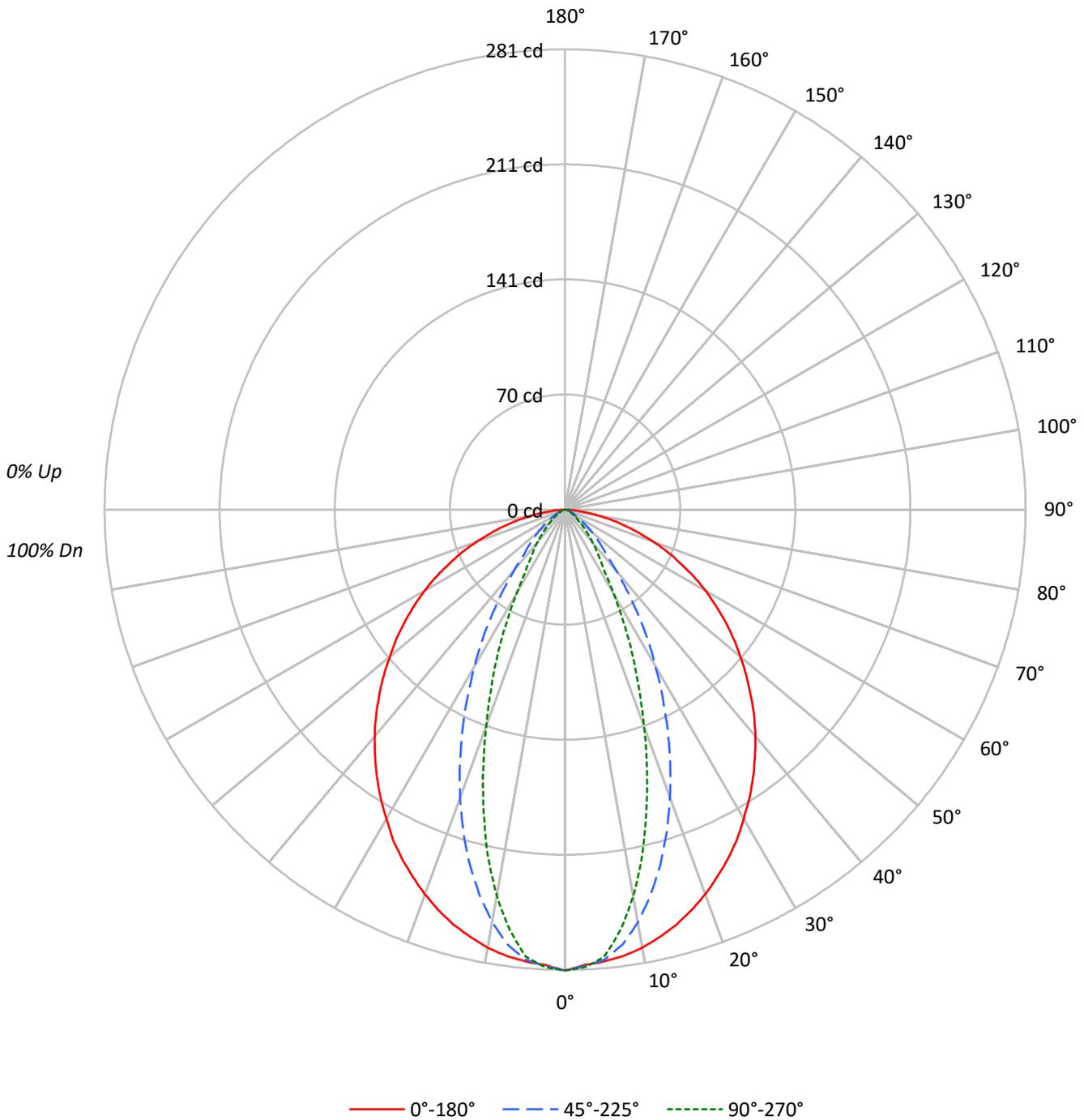
Lumens per Lamp: N/A
Luminaire Lumens: 322.4 lumens
Efficiency: N/A
Efficacy: 25.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	5331	5331	5331
5°	5266	5245	5213
10°	5227	4921	4609
15°	5147	4403	3760
20°	5040	3774	2837
25°	4917	3092	2026
30°	4767	2413	1291
35°	4626	1769	860
40°	4469	1195	648
45°	4295	841	461
50°	4115	640	324
55°	3941	443	238
60°	3751	299	197
65°	3479	215	152
70°	3169	172	133
75°	2752	154	102
80°	2182	109	109
85°	1196	152	65

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4295 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.7	8.0
10°-20°	63.1	19.6
20°-30°	72.1	22.4
30°-40°	61.2	19.0
40°-50°	45.6	14.2
50°-60°	29.5	9.1
60°-70°	16.4	5.1
70°-80°	7.2	2.2
80°-90°	1.5	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°	161.0	49.9
0°-40°	222.1	68.9
0°-60°	297.3	92.2
0°-90°	322.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	322.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	281	281	281	281	281	
5°	277	280	276	273	274	26
15°	262	256	224	201	192	74
25°	235	208	148	108	97	108
35°	200	151	76	42	37	125
45°	160	95	31	20	17	124
55°	119	45	13	8	7	107
65°	78	17	5	4	3	77
75°	38	3	2	2	1	40
85°	6	0	1	0	0	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	281.4	281.4	281.4	281.4	281.4
2.5°	278.3	282.4	278.9	278.9	279.6
5°	276.9	280.3	275.8	273.1	274.1
7.5°	274.8	277.2	267.9	259.6	258.9
10°	271.7	272.7	255.8	243.1	239.6
12.5°	267.2	264.8	241.0	223.1	217.2
15°	262.4	255.8	224.5	200.7	191.7
17.5°	256.5	244.8	206.2	177.2	166.2
20°	250.0	233.4	187.2	152.7	140.7
22.5°	242.7	220.7	167.6	129.6	117.6
25°	235.2	207.6	147.9	108.3	96.9
27.5°	227.2	193.8	128.6	89.0	76.5
30°	217.9	179.6	110.3	70.3	59.0
32.5°	209.3	164.8	93.4	54.5	44.8
35°	200.0	150.7	76.5	41.7	37.2
37.5°	190.3	136.5	61.7	35.2	31.4
40°	180.7	122.4	48.3	29.7	26.2
42.5°	170.7	108.6	37.2	24.8	21.4
45°	160.3	95.2	31.4	20.3	17.2
47.5°	150.0	81.7	26.2	16.2	13.8
50°	139.6	69.0	21.7	12.8	11.0
52.5°	129.6	56.9	17.2	10.3	9.0
55°	119.3	45.2	13.4	8.3	7.2
57.5°	109.0	35.2	10.3	6.9	6.2
60°	99.0	26.5	7.9	5.5	5.2
62.5°	88.6	21.4	6.2	4.5	4.1
65°	77.6	16.6	4.8	3.8	3.4
67.5°	67.6	12.1	3.8	3.1	2.8
70°	57.2	8.3	3.1	2.8	2.4
72.5°	47.2	5.2	2.4	2.1	2.1
75°	37.6	3.4	2.1	1.7	1.4
77.5°	28.6	2.1	1.4	1.4	1.0
80°	20.0	1.4	1.0	1.0	1.0
82.5°	12.4	1.0	0.7	0.7	0.7
85°	5.5	0.3	0.7	0.3	0.3
87.5°	1.0	0.3	0.3	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)