

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: P1055174

Luminaire Tested: S122R3DR-S290D835-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055174
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-S290D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

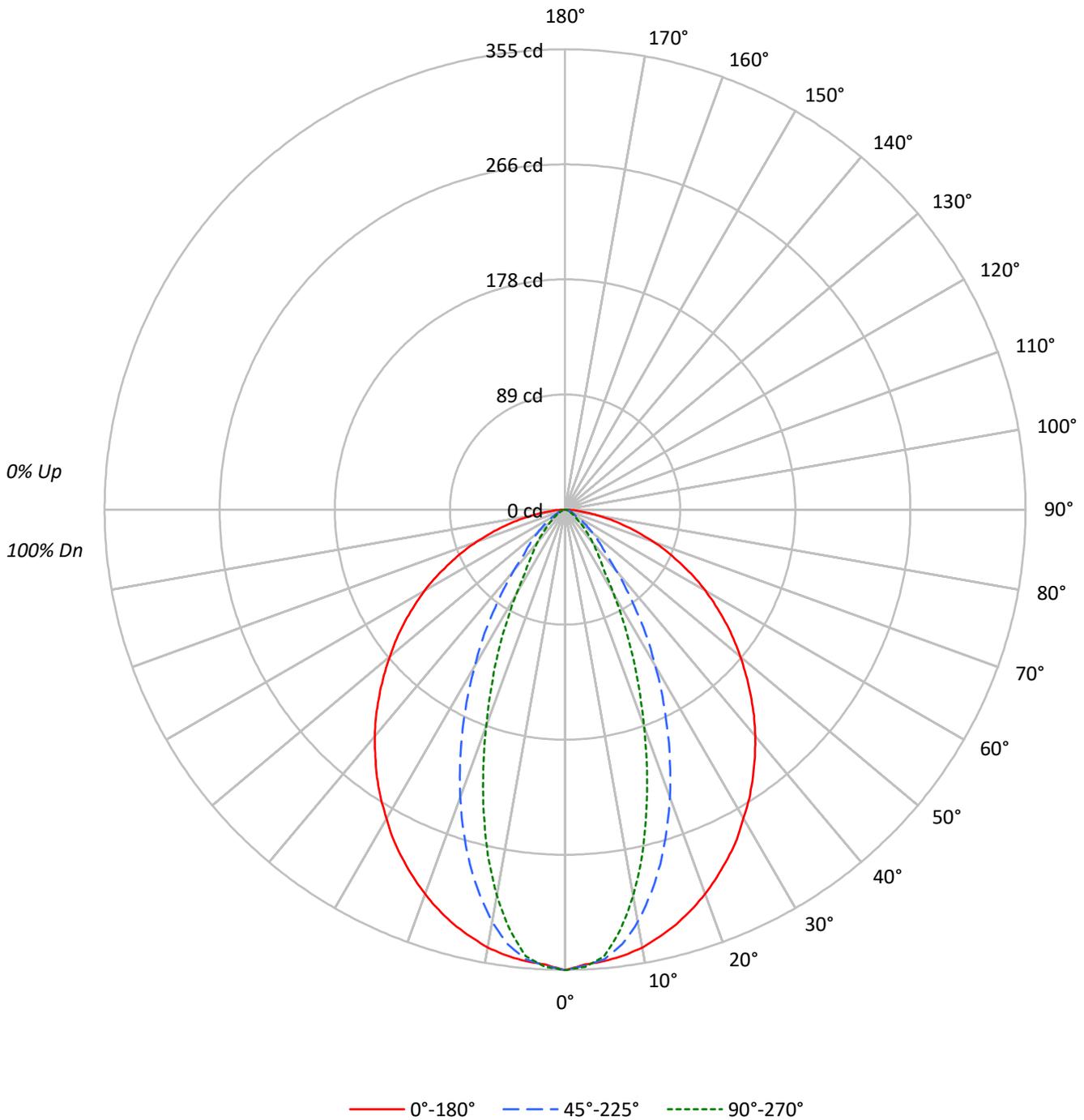
Lumens per Lamp: N/A
Luminaire Lumens: 407.0 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	6730	6730	6730
5°	6647	6622	6580
10°	6599	6214	5820
15°	6496	5559	4747
20°	6363	4764	3581
25°	6204	3903	2557
30°	6018	3047	1628
35°	5840	2234	1087
40°	5641	1506	819
45°	5423	1061	584
50°	5196	808	410
55°	4974	562	301
60°	4733	379	246
65°	4389	273	197
70°	4005	216	166
75°	3470	190	124
80°	2749	142	142
85°	1522	196	87

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5423 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.5	8.0
10°-20°	79.7	19.6
20°-30°	91.0	22.4
30°-40°	77.2	19.0
40°-50°	57.6	14.2
50°-60°	37.2	9.1
60°-70°	20.8	5.1
70°-80°	9.1	2.2
80°-90°	1.9	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°	203.2	49.9
0°-40°	280.4	68.9
0°-60°	375.3	92.2
0°-90°	407.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	407.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	355	355	355	355	355	
5°	350	354	348	345	346	33
15°	331	323	283	253	242	93
25°	297	262	187	137	122	137
35°	252	190	97	53	47	158
45°	202	120	40	26	22	156
55°	151	57	17	10	9	135
65°	98	21	6	5	4	97
75°	47	4	3	2	2	51
85°	7	0	1	0	0	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	355.2	355.2	355.2	355.2	355.2
2.5°	351.3	356.5	352.1	352.1	353.0
5°	349.5	353.9	348.2	344.7	346.0
7.5°	346.9	349.9	338.2	327.7	326.9
10°	343.0	344.3	323.0	306.9	302.5
12.5°	337.3	334.3	304.2	281.6	274.2
15°	331.2	323.0	283.4	253.3	242.0
17.5°	323.8	309.0	260.3	223.7	209.8
20°	315.6	294.7	236.3	192.8	177.6
22.5°	306.4	278.6	211.5	163.7	148.4
25°	296.8	262.0	186.7	136.7	122.3
27.5°	286.8	244.6	162.4	112.3	96.6
30°	275.1	226.8	139.3	88.8	74.4
32.5°	264.2	208.1	118.0	68.8	56.6
35°	252.5	190.2	96.6	52.7	47.0
37.5°	240.3	172.4	77.9	44.4	39.6
40°	228.1	154.5	60.9	37.4	33.1
42.5°	215.5	137.1	47.0	31.3	27.0
45°	202.4	120.1	39.6	25.7	21.8
47.5°	189.3	103.2	33.1	20.5	17.4
50°	176.3	87.1	27.4	16.1	13.9
52.5°	163.7	71.8	21.8	13.1	11.3
55°	150.6	57.0	17.0	10.4	9.1
57.5°	137.5	44.4	13.1	8.7	7.8
60°	124.9	33.5	10.0	7.0	6.5
62.5°	111.9	27.0	7.8	5.7	5.2
65°	97.9	20.9	6.1	4.8	4.4
67.5°	85.3	15.2	4.8	3.9	3.5
70°	72.3	10.4	3.9	3.5	3.0
72.5°	59.6	6.5	3.0	2.6	2.6
75°	47.4	4.4	2.6	2.2	1.7
77.5°	36.1	2.6	1.7	1.7	1.3
80°	25.2	1.7	1.3	1.3	1.3
82.5°	15.7	1.3	0.9	0.9	0.9
85°	7.0	0.4	0.9	0.4	0.4
87.5°	1.3	0.4	0.4	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)