

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: P1055171

Luminaire Tested: S122R3DR-S290D830-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055171
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-S290D830-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

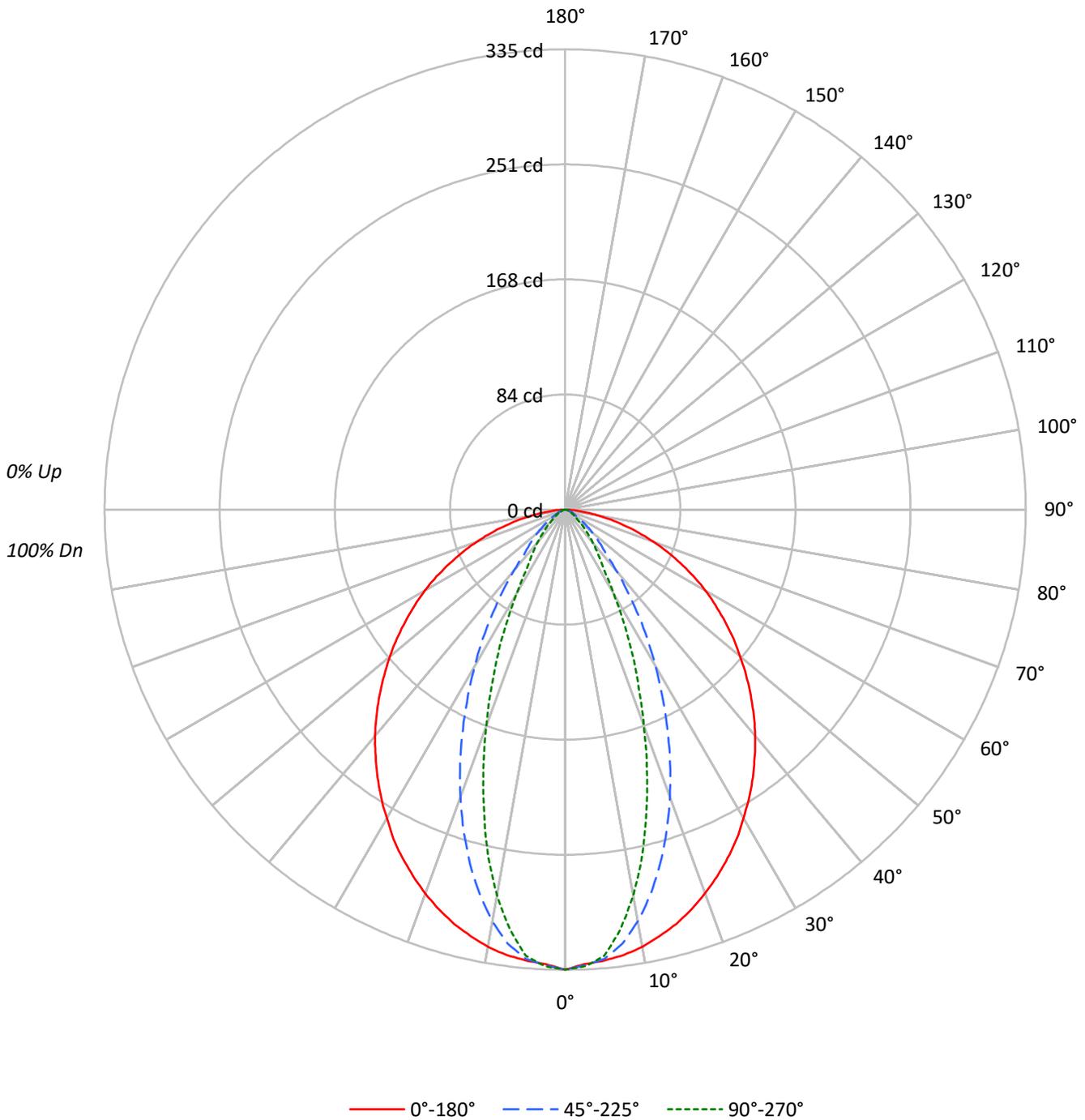
Lumens per Lamp: N/A
Luminaire Lumens: 383.6 lumens
Efficiency: N/A
Efficacy: 30.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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			100	
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71			71	
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64			64	
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			58	
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45			45	
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42			42	
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6343	6343	6343
5°	6265	6242	6202
10°	6220	5856	5485
15°	6124	5239	4474
20°	5996	4492	3375
25°	5849	3679	2410
30°	5673	2872	1536
35°	5502	2107	1025
40°	5317	1420	772
45°	5112	999	549
50°	4899	760	386
55°	4687	528	284
60°	4460	356	235
65°	4138	256	184
70°	3772	205	161
75°	3272	183	117
80°	2597	131	131
85°	1435	174	87

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5112 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.6	8.0
10°-20°	75.1	19.6
20°-30°	85.8	22.4
30°-40°	72.8	19.0
40°-50°	54.3	14.2
50°-60°	35.1	9.1
60°-70°	19.6	5.1
70°-80°	8.6	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°	191.5	49.9
0°-40°	264.3	68.9
0°-60°	353.7	92.2
0°-90°	383.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	383.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	335	335	335	335	335	
5°	329	334	328	325	326	31
15°	312	304	267	239	228	88
25°	280	247	176	129	115	129
35°	238	179	91	50	44	149
45°	191	113	37	24	20	147
55°	142	54	16	10	9	127
65°	92	20	6	4	4	92
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°	334.8	334.8	334.8	334.8	334.8
2.5°	331.1	336.0	331.9	331.9	332.7
5°	329.4	333.5	328.2	324.9	326.1
7.5°	327.0	329.8	318.8	308.9	308.1
10°	323.3	324.5	304.4	289.2	285.1
12.5°	317.9	315.1	286.8	265.4	258.5
15°	312.2	304.4	267.1	238.8	228.1
17.5°	305.2	291.3	245.3	210.9	197.7
20°	297.4	277.7	222.8	181.7	167.4
22.5°	288.8	262.6	199.4	154.3	139.9
25°	279.8	247.0	176.0	128.8	115.3
27.5°	270.4	230.6	153.0	105.8	91.1
30°	259.3	213.7	131.3	83.7	70.2
32.5°	249.0	196.1	111.2	64.8	53.3
35°	237.9	179.3	91.1	49.6	44.3
37.5°	226.5	162.5	73.4	41.8	37.3
40°	215.0	145.6	57.4	35.3	31.2
42.5°	203.1	129.2	44.3	29.5	25.4
45°	190.8	113.2	37.3	24.2	20.5
47.5°	178.5	97.2	31.2	19.3	16.4
50°	166.2	82.0	25.8	15.2	13.1
52.5°	154.3	67.7	20.5	12.3	10.7
55°	141.9	53.7	16.0	9.8	8.6
57.5°	129.6	41.8	12.3	8.2	7.4
60°	117.7	31.6	9.4	6.6	6.2
62.5°	105.4	25.4	7.4	5.3	4.9
65°	92.3	19.7	5.7	4.5	4.1
67.5°	80.4	14.4	4.5	3.7	3.3
70°	68.1	9.8	3.7	3.3	2.9
72.5°	56.2	6.2	2.9	2.5	2.5
75°	44.7	4.1	2.5	2.1	1.6
77.5°	34.1	2.5	1.6	1.6	1.2
80°	23.8	1.6	1.2	1.2	1.2
82.5°	14.8	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)