

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: P1055190

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055190
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
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-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

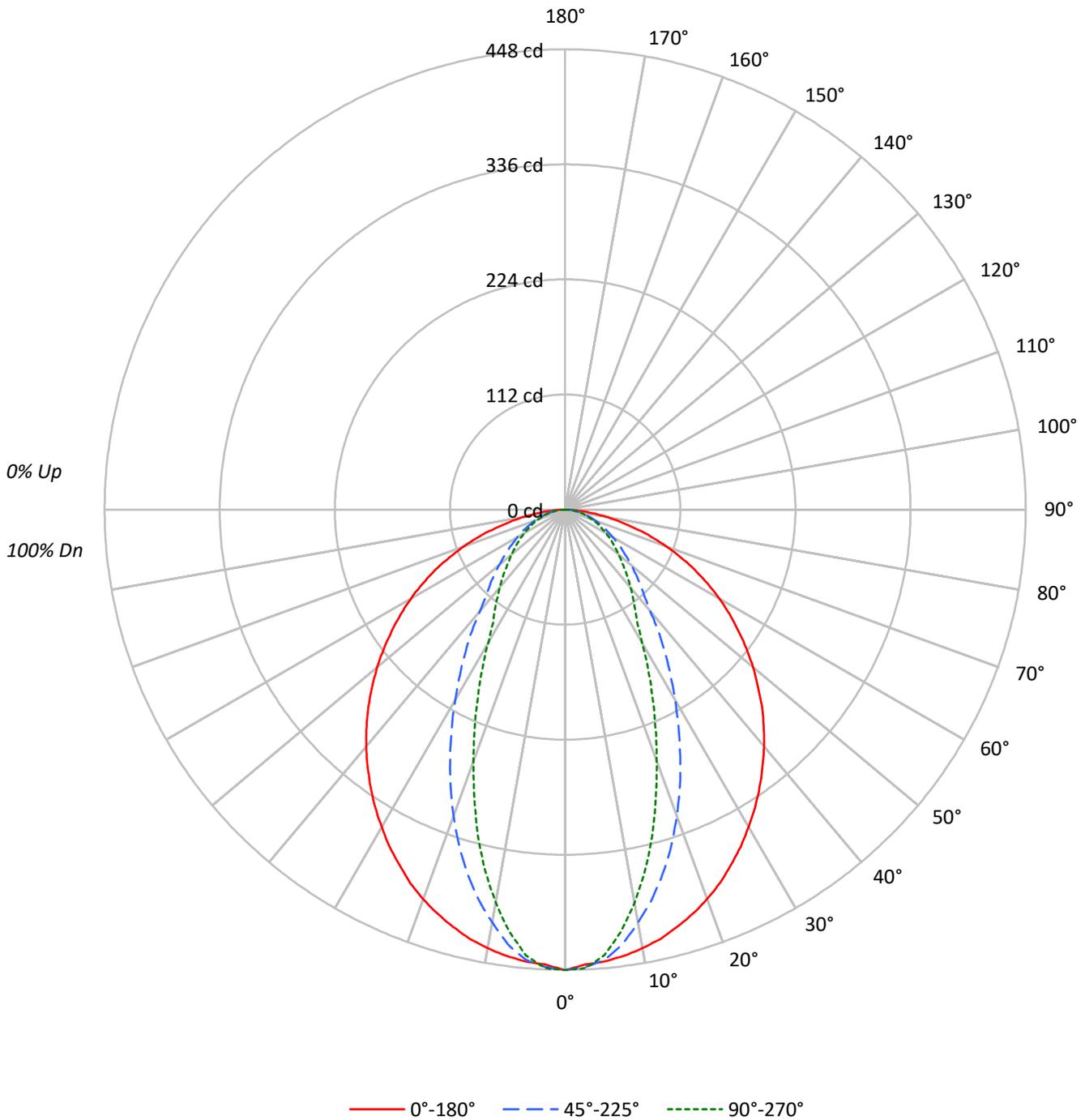
Lumens per Lamp: N/A
Luminaire Lumens: 677.9 lumens
Efficiency: N/A
Efficacy: 53.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8492	8492	8492
5°	8397	8368	8288
10°	8342	7851	7476
15°	8248	7196	6431
20°	8137	6399	5252
25°	7975	5531	4191
30°	7806	4673	3271
35°	7628	3909	2748
40°	7442	3171	2446
45°	7250	2770	2189
50°	7036	2452	1998
55°	6794	2216	1856
60°	6559	2016	1732
65°	6249	1847	1632
70°	5794	1723	1534
75°	5131	1567	1457
80°	4375	1473	1353
85°	3022	1304	1217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7250 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.1	6.1
10°-20°	103.7	15.3
20°-30°	127.8	18.8
30°-40°	122.6	18.1
40°-50°	105.7	15.6
50°-60°	82.0	12.1
60°-70°	56.2	8.3
70°-80°	30.5	4.5
80°-90°	8.4	1.2
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°	272.5	40.2
0°-40°	395.1	58.3
0°-60°	582.9	86.0
0°-90°	677.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	677.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	442	448	440	434	436	42
15°	420	408	367	337	328	119
25°	382	341	265	216	200	176
35°	330	262	169	126	119	206
45°	271	182	103	85	82	209
55°	206	109	67	58	56	184
65°	139	60	41	38	36	138
75°	70	27	21	20	20	75
85°	14	7	6	6	6	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	448.2	448.2	448.2	448.2	448.2
2.5°	443.3	450.8	445.6	445.6	446.7
5°	441.5	447.8	440.0	434.3	435.8
7.5°	438.1	442.6	426.8	414.9	414.5
10°	433.6	434.0	408.1	392.4	388.6
12.5°	428.0	422.0	389.0	365.4	359.8
15°	420.5	407.7	366.9	336.9	327.9
17.5°	412.6	393.1	343.3	305.8	293.4
20°	403.6	375.5	317.4	274.7	260.5
22.5°	393.5	358.6	291.6	244.7	229.7
25°	381.5	340.7	264.6	215.9	200.5
27.5°	369.9	322.3	238.7	190.4	174.6
30°	356.8	302.4	213.6	166.0	149.5
32.5°	343.7	282.2	190.4	142.8	130.4
35°	329.8	261.6	169.0	125.9	118.8
37.5°	315.5	241.3	148.8	114.7	108.3
40°	300.9	221.1	128.2	103.8	98.9
42.5°	285.9	201.2	113.9	94.8	90.3
45°	270.6	182.1	103.4	85.4	81.7
47.5°	254.1	163.0	93.3	77.6	74.2
50°	238.7	144.7	83.2	70.5	67.8
52.5°	222.2	126.7	75.0	64.1	61.8
55°	205.7	109.4	67.1	58.1	56.2
57.5°	189.6	92.9	59.6	52.5	51.0
60°	173.1	79.8	53.2	47.2	45.7
62.5°	156.3	69.3	47.2	42.3	40.8
65°	139.4	59.6	41.2	37.5	36.4
67.5°	121.8	50.2	36.0	33.0	32.2
70°	104.6	42.0	31.1	28.5	27.7
72.5°	87.7	34.1	26.2	24.4	23.6
75°	70.1	27.4	21.4	20.2	19.9
77.5°	54.7	21.4	17.2	16.5	16.1
80°	40.1	15.7	13.5	12.7	12.4
82.5°	26.6	10.9	9.7	9.4	9.0
85°	13.9	6.7	6.0	6.0	5.6
87.5°	4.5	3.0	3.0	3.0	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)