

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: P1055181

Luminaire Tested: S122R3DR-S290D850-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055181
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-S290D850-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

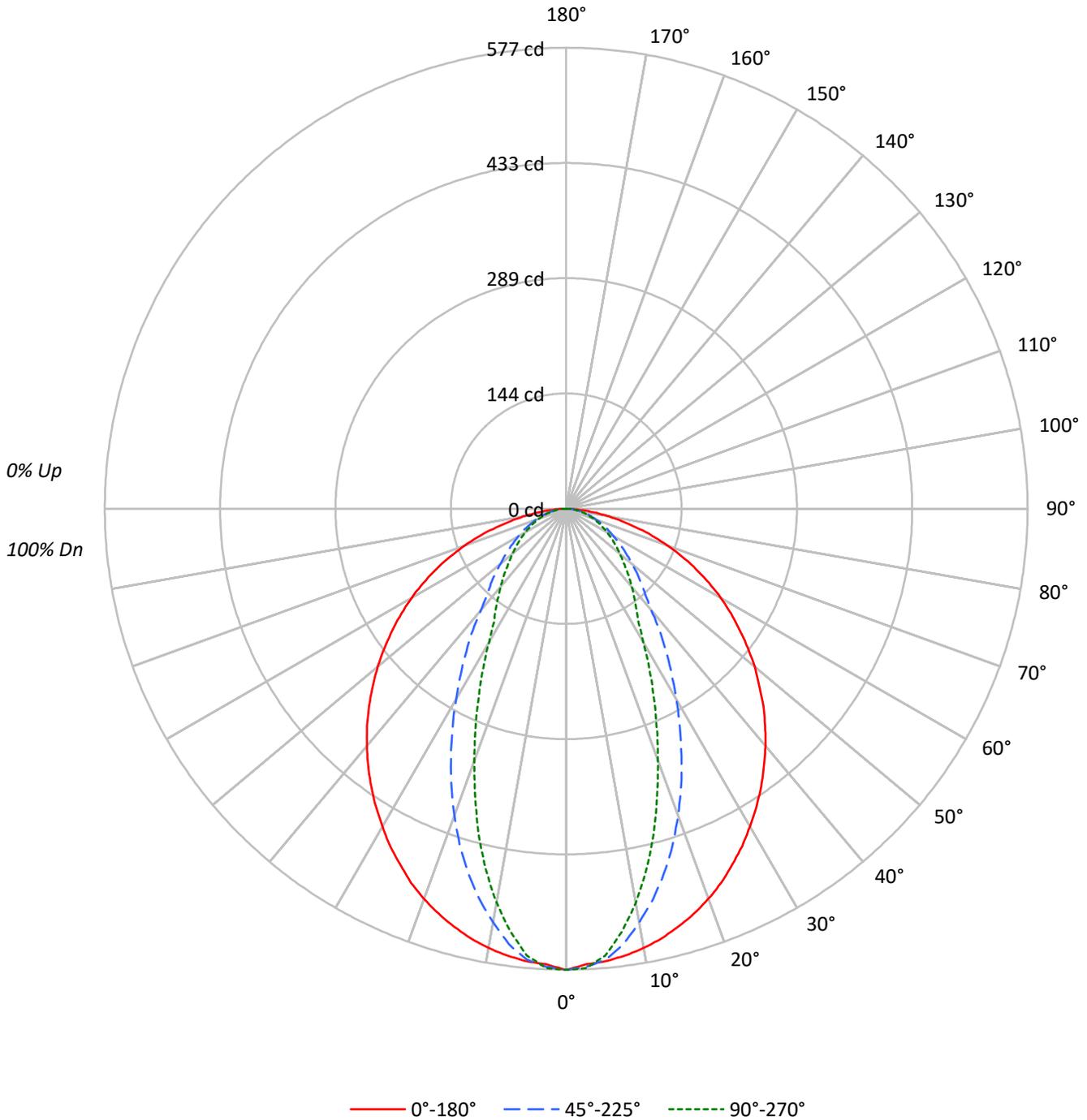
Lumens per Lamp: N/A
Luminaire Lumens: 873.2 lumens
Efficiency: N/A
Efficacy: 69.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	10937	10937	10937
5°	10814	10778	10677
10°	10744	10113	9631
15°	10623	9270	8285
20°	10482	8242	6764
25°	10272	7124	5398
30°	10052	6018	4213
35°	9825	5035	3539
40°	9586	4083	3151
45°	9338	3569	2819
50°	9063	3160	2576
55°	8753	2854	2391
60°	8450	2596	2232
65°	8051	2380	2098
70°	7462	2221	1978
75°	6610	2013	1874
80°	5630	1898	1735
85°	3891	1674	1565

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9338 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.9	6.1
10°-20°	133.6	15.3
20°-30°	164.6	18.8
30°-40°	157.9	18.1
40°-50°	136.2	15.6
50°-60°	105.6	12.1
60°-70°	72.3	8.3
70°-80°	39.3	4.5
80°-90°	10.8	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°	351.0	40.2
0°-40°	508.9	58.3
0°-60°	750.8	86.0
0°-90°	873.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	873.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	569	577	567	560	561	54
15°	542	525	473	434	422	153
25°	491	439	341	278	258	226
35°	425	337	218	162	153	266
45°	348	235	133	110	105	269
55°	265	141	86	75	72	237
65°	180	77	53	48	47	177
75°	90	35	28	26	26	97
85°	18	9	8	8	7	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	577.3	577.3	577.3	577.3	577.3
2.5°	571.0	580.7	573.9	573.9	575.4
5°	568.6	576.8	566.7	559.5	561.4
7.5°	564.3	570.1	549.8	534.4	533.9
10°	558.5	559.0	525.7	505.4	500.6
12.5°	551.2	543.5	501.0	470.6	463.4
15°	541.6	525.2	472.6	433.9	422.4
17.5°	531.5	506.4	442.2	393.9	378.0
20°	519.9	483.7	408.8	353.8	335.5
22.5°	506.8	461.9	375.5	315.2	295.9
25°	491.4	438.8	340.8	278.0	258.2
27.5°	476.4	415.1	307.5	245.2	224.9
30°	459.5	389.5	275.1	213.8	192.6
32.5°	442.6	363.5	245.2	183.9	168.0
35°	424.8	336.9	217.7	162.2	153.0
37.5°	406.4	310.9	191.6	147.7	139.5
40°	387.6	284.8	165.1	133.7	127.4
42.5°	368.3	259.2	146.7	122.1	116.3
45°	348.5	234.6	133.2	110.1	105.2
47.5°	327.3	210.0	120.2	99.9	95.6
50°	307.5	186.3	107.2	90.7	87.4
52.5°	286.2	163.2	96.5	82.5	79.6
55°	265.0	140.9	86.4	74.8	72.4
57.5°	244.2	119.7	76.7	67.6	65.6
60°	223.0	102.8	68.5	60.8	58.9
62.5°	201.3	89.3	60.8	54.5	52.6
65°	179.6	76.7	53.1	48.3	46.8
67.5°	156.9	64.7	46.3	42.5	41.5
70°	134.7	54.1	40.1	36.7	35.7
72.5°	113.0	43.9	33.8	31.4	30.4
75°	90.3	35.2	27.5	26.1	25.6
77.5°	70.5	27.5	22.2	21.2	20.8
80°	51.6	20.3	17.4	16.4	15.9
82.5°	34.3	14.0	12.6	12.1	11.6
85°	17.9	8.7	7.7	7.7	7.2
87.5°	5.8	3.9	3.9	3.9	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)