

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: P1055566

Luminaire Tested: S123R3DR-S1000D935-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055566
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S1000D935-X4F0-XX-UDD-FLL-B
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

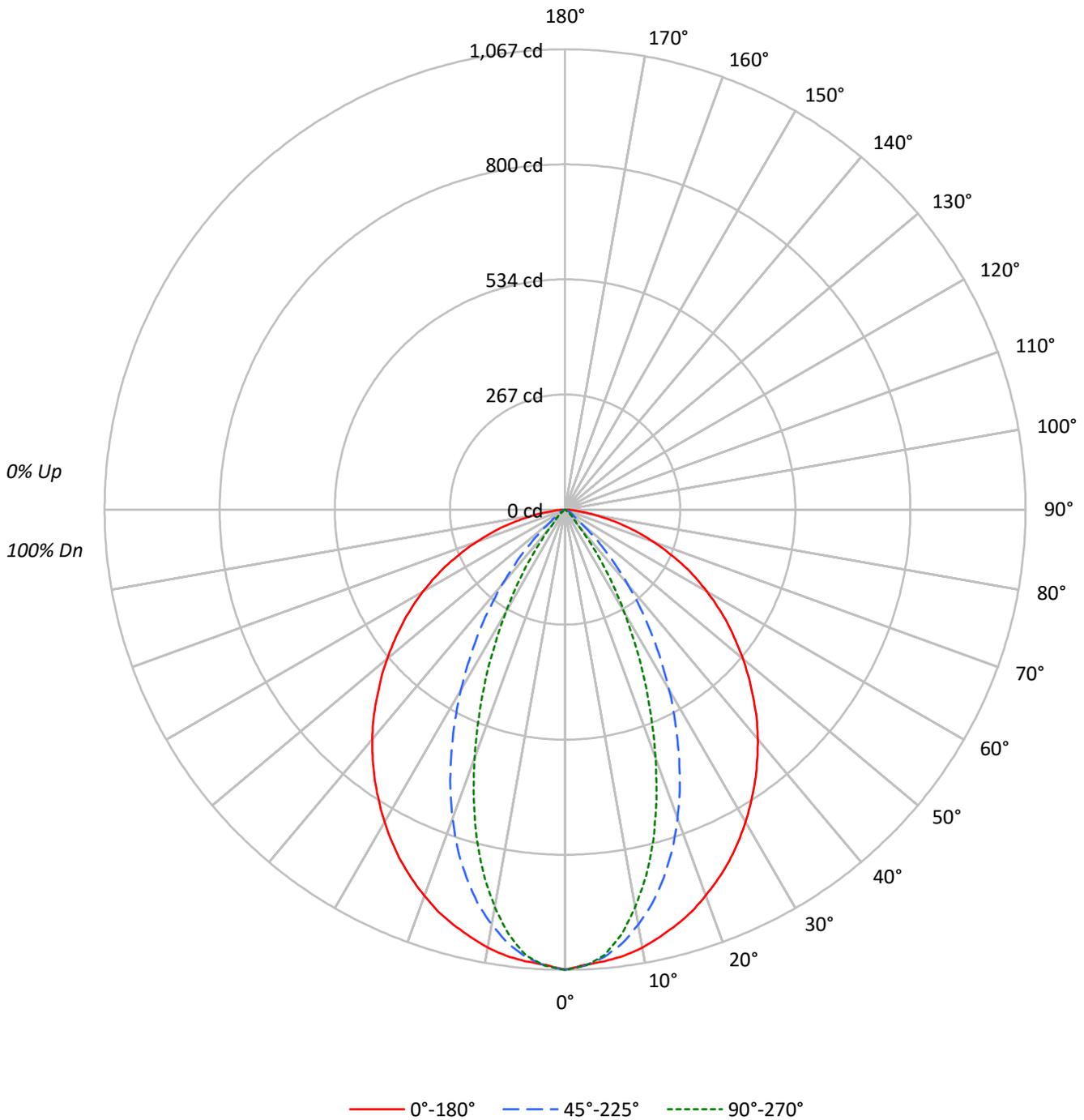
Lumens per Lamp: N/A
Luminaire Lumens: 1248.3 lumens
Efficiency: N/A
Efficacy: 36.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	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	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	81	70	63	58	79	69	62	57	67	61	57	66	61	56	64	60	56	54
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12859	12859	12859
5°	12721	12601	12560
10°	12624	11961	11459
15°	12443	11020	9874
20°	12222	9780	7865
25°	11966	8286	5799
30°	11645	6716	3805
35°	11302	5113	2084
40°	10935	3535	715
45°	10508	2056	414
50°	10085	810	249
55°	9652	511	116
60°	9151	321	53
65°	8521	157	31
70°	7646	78	39
75°	6494	51	51
80°	4839	76	0
85°	1840	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10508 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	7.8
10°-20°	248.2	19.9
20°-30°	296.0	23.7
30°-40°	251.1	20.1
40°-50°	170.7	13.7
50°-60°	105.8	8.5
60°-70°	53.6	4.3
70°-80°	21.8	1.8
80°-90°	3.4	0.3
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°	642.0	51.4
0°-40°	893.1	71.5
0°-60°	1169.6	93.7
0°-90°	1248.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1248.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1051	1061	1041	1033	1038	100
15°	997	972	883	813	791	281
25°	900	815	623	481	436	414
35°	768	616	347	187	142	480
45°	616	404	121	30	24	476
55°	459	204	24	9	6	410
65°	299	50	6	1	1	295
75°	139	9	1	1	1	148
85°	13	0	0	1	0	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1066.6	1066.6	1066.6	1066.6	1066.6
2.5°	1056.6	1071.0	1058.9	1057.8	1058.9
5°	1051.1	1061.1	1041.2	1033.4	1037.8
7.5°	1043.4	1047.8	1014.6	994.7	994.7
10°	1031.2	1027.9	977.0	943.8	936.0
12.5°	1014.6	1001.3	934.9	882.9	868.6
15°	996.9	971.5	882.9	813.2	791.1
17.5°	977.0	938.3	826.5	735.8	703.7
20°	952.6	900.6	762.3	651.7	613.0
22.5°	927.2	859.7	694.8	565.4	522.2
25°	899.5	815.4	622.9	481.3	435.9
27.5°	868.6	769.0	552.1	400.5	350.7
30°	836.5	720.3	482.4	323.1	273.3
32.5°	802.2	669.4	412.7	252.3	205.8
35°	767.9	616.3	347.4	187.0	141.6
37.5°	731.4	563.2	284.4	129.5	89.6
40°	694.8	511.2	224.6	81.9	45.4
42.5°	657.2	457.0	170.4	40.9	31.0
45°	616.3	403.8	120.6	29.9	24.3
47.5°	577.6	353.0	79.7	24.3	18.8
50°	537.7	302.1	43.2	17.7	13.3
52.5°	497.9	253.4	31.0	13.3	8.9
55°	459.2	203.6	24.3	8.9	5.5
57.5°	419.3	160.4	18.8	5.5	3.3
60°	379.5	118.4	13.3	3.3	2.2
62.5°	339.7	81.9	8.9	2.2	1.1
65°	298.7	49.8	5.5	1.1	1.1
67.5°	256.7	34.3	3.3	1.1	1.1
70°	216.9	24.3	2.2	1.1	1.1
72.5°	177.0	15.5	1.1	1.1	0.0
75°	139.4	8.9	1.1	1.1	1.1
77.5°	102.9	3.3	1.1	1.1	0.0
80°	69.7	1.1	1.1	1.1	0.0
82.5°	38.7	0.0	1.1	1.1	0.0
85°	13.3	0.0	0.0	1.1	0.0
87.5°	0.0	0.0	0.0	1.1	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)