

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: P1055567

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055567
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
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-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

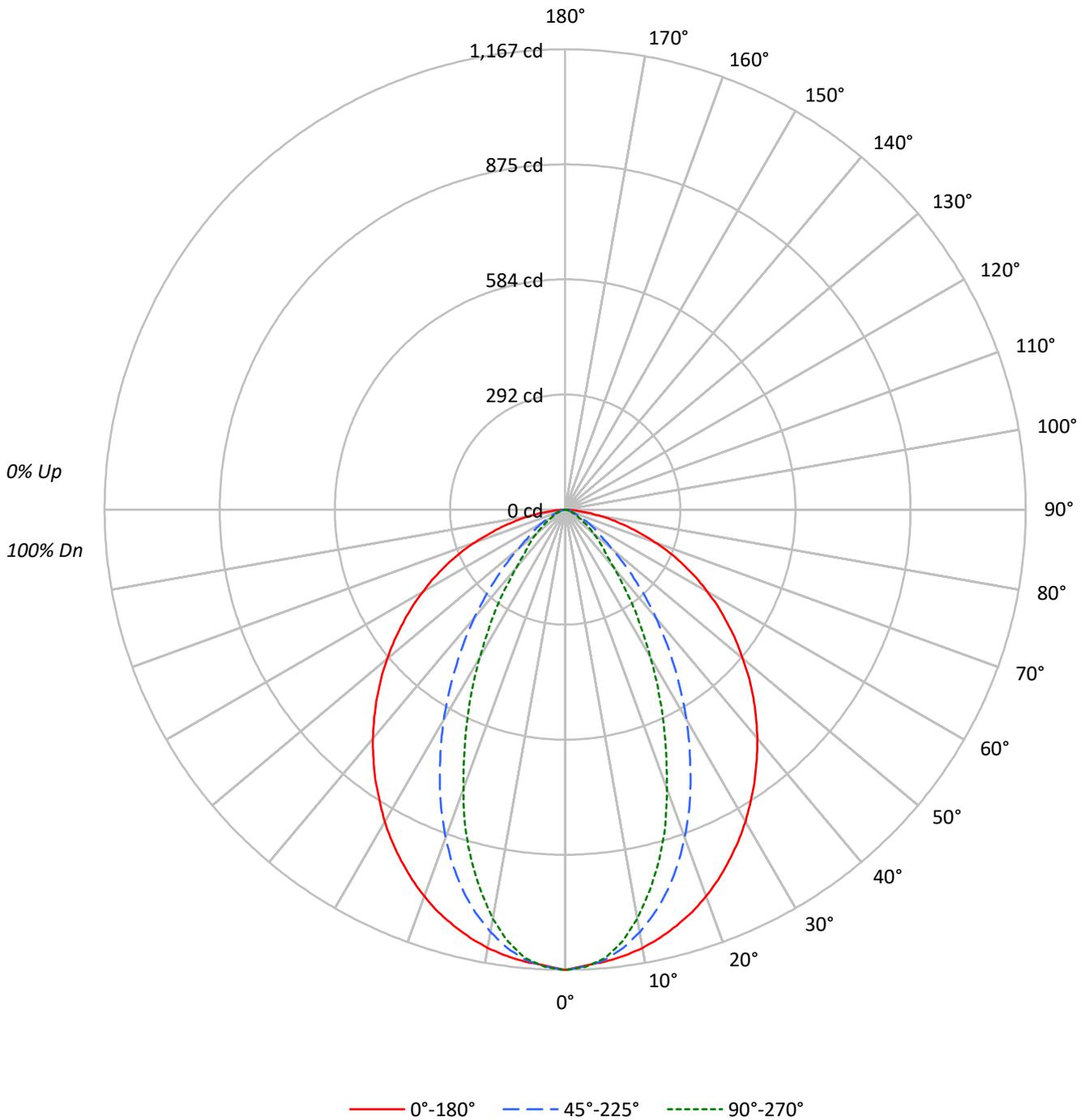
Lumens per Lamp: N/A
Luminaire Lumens: 1623.4 lumens
Efficiency: N/A
Efficacy: 46.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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	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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39				39
10	61	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14073	14073	14073
5°	13926	13873	13832
10°	13817	13315	12895
15°	13631	12484	11476
20°	13387	11356	9668
25°	13070	9994	7801
30°	12723	8565	6007
35°	12328	7068	4446
40°	11928	5625	3030
45°	11489	4206	2283
50°	11019	2926	1786
55°	10535	2140	1303
60°	10031	1601	933
65°	9437	1073	725
70°	8541	779	585
75°	7369	568	466
80°	5915	458	382
85°	3057	456	304

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11489 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.9	6.6
10°-20°	280.9	17.3
20°-30°	352.9	21.7
30°-40°	328.7	20.2
40°-50°	251.6	15.5
50°-60°	167.2	10.3
60°-70°	90.2	5.6
70°-80°	37.0	2.3
80°-90°	7.1	0.4
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°	741.7	45.7
0°-40°	1070.3	65.9
0°-60°	1489.2	91.7
0°-90°	1623.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1623.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1167	1167	1167	1167	1167	
5°	1151	1163	1146	1142	1143	109
15°	1092	1074	1000	942	919	308
25°	982	916	751	626	586	452
35°	838	714	480	340	302	524
45°	674	498	247	145	134	520
55°	501	290	102	71	62	449
65°	331	112	38	28	25	327
75°	158	27	12	11	10	169
85°	22	3	3	3	2	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1167.3	1167.3	1167.3	1167.3	1167.3
2.5°	1157.3	1171.7	1159.5	1160.7	1160.7
5°	1150.7	1162.9	1146.3	1141.8	1142.9
7.5°	1141.8	1149.6	1121.9	1107.5	1105.3
10°	1128.6	1130.8	1087.6	1062.2	1053.3
12.5°	1112.0	1104.2	1047.8	1005.8	989.2
15°	1092.1	1074.3	1000.2	941.6	919.4
17.5°	1069.9	1040.0	946.0	869.7	843.1
20°	1043.4	1001.3	885.1	790.0	753.5
22.5°	1014.6	960.4	821.0	708.1	667.2
25°	982.5	916.1	751.3	626.2	586.4
27.5°	949.3	868.6	682.7	548.8	507.9
30°	913.9	819.9	615.2	473.6	431.5
32.5°	875.2	766.8	545.5	403.8	361.8
35°	837.6	713.7	480.2	339.7	302.1
37.5°	797.7	660.5	417.1	283.2	241.2
40°	757.9	606.3	357.4	227.9	192.5
42.5°	715.9	552.1	301.0	181.5	153.8
45°	673.8	497.9	246.7	144.9	133.9
47.5°	631.8	443.7	199.2	125.0	114.0
50°	587.5	391.7	156.0	106.2	95.2
52.5°	545.5	339.7	121.7	87.4	77.5
55°	501.2	289.9	101.8	70.8	62.0
57.5°	460.3	239.0	84.1	55.3	48.7
60°	416.0	193.6	66.4	43.2	38.7
62.5°	374.0	151.6	50.9	34.3	31.0
65°	330.8	111.8	37.6	27.7	25.4
67.5°	287.7	80.8	28.8	22.1	21.0
70°	242.3	60.9	22.1	17.7	16.6
72.5°	199.2	43.2	16.6	14.4	13.3
75°	158.2	26.6	12.2	11.1	10.0
77.5°	121.7	15.5	8.9	8.9	7.7
80°	85.2	8.9	6.6	6.6	5.5
82.5°	52.0	5.5	4.4	4.4	4.4
85°	22.1	3.3	3.3	3.3	2.2
87.5°	3.3	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)