

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: P1055573

Luminaire Tested: S123R3DR-S1000D950-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055573
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-S1000D950-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

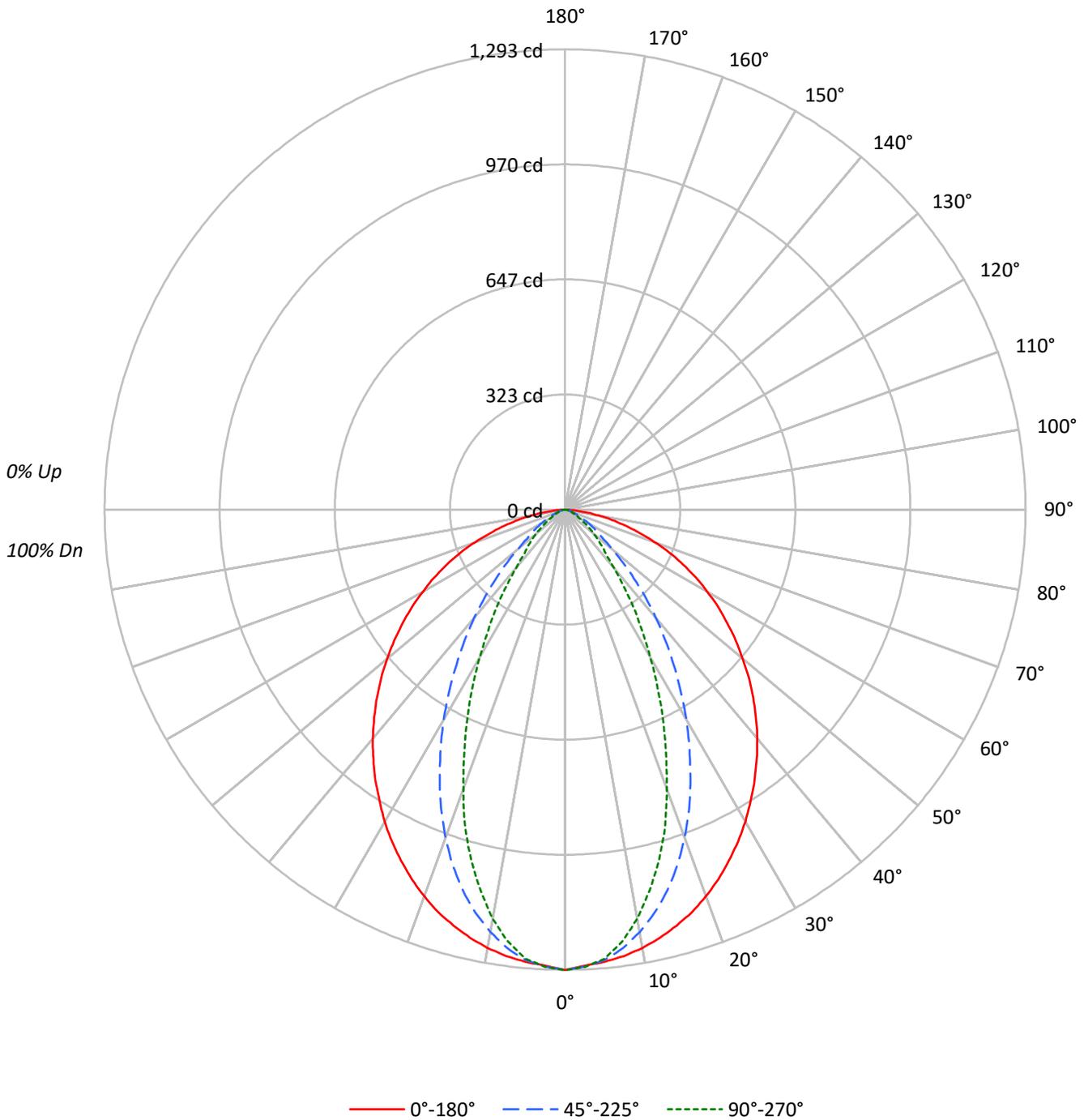
Lumens per Lamp: N/A
Luminaire Lumens: 1798.7 lumens
Efficiency: N/A
Efficacy: 51.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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	62	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°	15594	15594	15594
5°	15431	15371	15327
10°	15309	14753	14288
15°	15103	13833	12716
20°	14833	12584	10712
25°	14481	11073	8644
30°	14097	9489	6656
35°	13658	7832	4926
40°	13217	6232	3357
45°	12730	4662	2529
50°	12210	3243	1977
55°	11674	2371	1444
60°	11116	1775	1034
65°	10458	1190	804
70°	9465	864	649
75°	8166	629	512
80°	6554	514	424
85°	3389	512	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12730 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.6	6.6
10°-20°	311.2	17.3
20°-30°	391.0	21.7
30°-40°	364.2	20.2
40°-50°	278.8	15.5
50°-60°	185.3	10.3
60°-70°	99.9	5.6
70°-80°	40.9	2.3
80°-90°	7.8	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°	821.8	45.7
0°-40°	1186.0	65.9
0°-60°	1650.1	91.7
0°-90°	1798.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1798.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1293	1293	1293	1293	1293	
5°	1275	1288	1270	1265	1266	121
15°	1210	1190	1108	1043	1019	341
25°	1089	1015	832	694	650	501
35°	928	791	532	376	335	580
45°	747	552	273	161	148	576
55°	555	321	113	78	69	498
65°	367	124	42	31	28	362
75°	175	29	14	12	11	188
85°	24	4	4	4	2	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1293.4	1293.4	1293.4	1293.4	1293.4
2.5°	1282.3	1298.3	1284.8	1286.0	1286.0
5°	1275.0	1288.5	1270.1	1265.2	1266.4
7.5°	1265.2	1273.8	1243.1	1227.2	1224.7
10°	1250.5	1252.9	1205.1	1176.9	1167.1
12.5°	1232.1	1223.5	1161.0	1114.4	1096.0
15°	1210.0	1190.4	1108.3	1043.3	1018.8
17.5°	1185.5	1152.4	1048.2	963.6	934.2
20°	1156.1	1109.5	980.8	875.3	834.9
22.5°	1124.2	1064.1	909.7	784.6	739.2
25°	1088.6	1015.1	832.4	693.9	649.8
27.5°	1051.9	962.4	756.4	608.1	562.7
30°	1012.6	908.4	681.6	524.7	478.1
32.5°	969.7	849.6	604.4	447.5	400.9
35°	928.0	790.7	532.1	376.4	334.7
37.5°	883.9	731.9	462.2	313.8	267.3
40°	839.8	671.8	396.0	252.5	213.3
42.5°	793.2	611.7	333.5	201.1	170.4
45°	746.6	551.7	273.4	160.6	148.3
47.5°	700.0	491.6	220.7	138.5	126.3
50°	651.0	434.0	172.9	117.7	105.4
52.5°	604.4	376.4	134.9	96.8	85.8
55°	555.4	321.2	112.8	78.5	68.7
57.5°	510.0	264.8	93.2	61.3	53.9
60°	461.0	214.5	73.6	47.8	42.9
62.5°	414.4	168.0	56.4	38.0	34.3
65°	366.6	123.8	41.7	30.6	28.2
67.5°	318.7	89.5	31.9	24.5	23.3
70°	268.5	67.4	24.5	19.6	18.4
72.5°	220.7	47.8	18.4	15.9	14.7
75°	175.3	29.4	13.5	12.3	11.0
77.5°	134.9	17.2	9.8	9.8	8.6
80°	94.4	9.8	7.4	7.4	6.1
82.5°	57.6	6.1	4.9	4.9	4.9
85°	24.5	3.7	3.7	3.7	2.5
87.5°	3.7	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)