

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: P1055574

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055574  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-4)  
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-W  
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

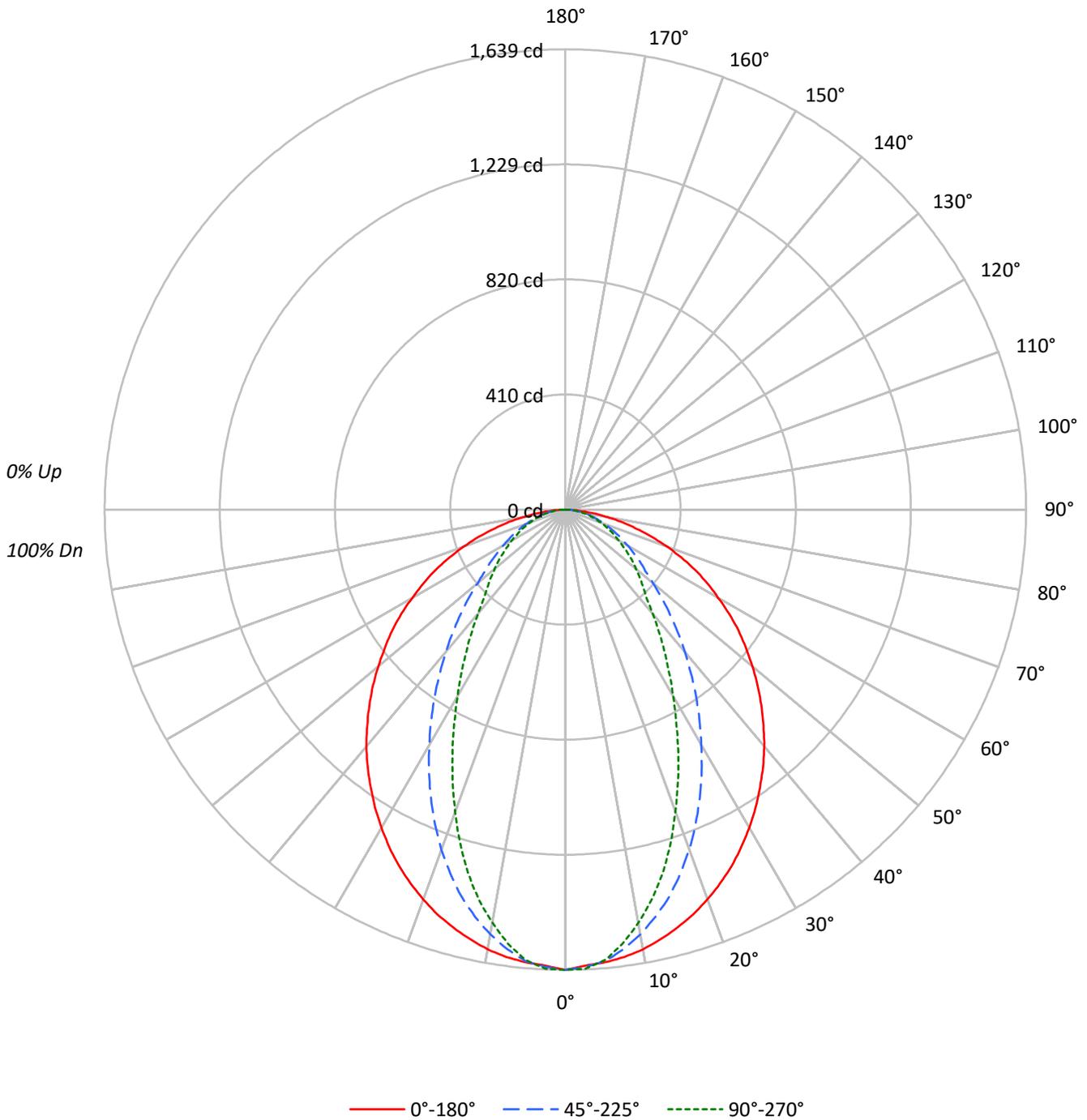
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2874.7 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02  
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				
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74				
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50				
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40				
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	19762	19762	19762
5°	19585	19541	19496
10°	19467	18806	18295
15°	19234	17811	16709
20°	18954	16532	14691
25°	18624	15053	12639
30°	18211	13466	10683
35°	17774	11908	9022
40°	17327	10400	7583
45°	16807	8967	6689
50°	16281	7634	6139
55°	15796	6804	5669
60°	15136	6149	5290
65°	14515	5631	4967
70°	13526	5185	4667
75°	12107	4798	4397
80°	10387	4423	4082
85°	7290	4067	3901

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16807 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.9	5.3
10°-20°	402.0	14.0
20°-30°	529.5	18.4
30°-40°	537.5	18.7
40°-50°	467.2	16.3
50°-60°	366.0	12.7
60°-70°	248.7	8.7
70°-80°	134.8	4.7
80°-90°	37.1	1.3
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°	1083.5	37.7
0°-40°	1620.9	56.4
0°-60°	2454.1	85.4
0°-90°	2874.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2874.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1639	1639	1639	1639	1639	
5°	1618	1638	1615	1600	1611	154
15°	1541	1519	1427	1357	1339	434
25°	1400	1315	1132	991	950	644
35°	1208	1064	809	655	613	755
45°	986	791	526	406	392	761
55°	752	522	324	276	270	671
65°	509	282	197	176	174	502
75°	260	130	103	96	94	277
85°	53	32	29	27	28	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1639.1	1639.1	1639.1	1639.1	1639.1
2.5°	1625.6	1646.5	1630.5	1631.7	1636.6
5°	1618.3	1637.9	1614.6	1599.9	1610.9
7.5°	1607.2	1621.9	1579.0	1555.7	1559.4
10°	1590.1	1595.0	1536.1	1499.3	1494.4
12.5°	1566.8	1558.2	1484.6	1430.7	1422.1
15°	1541.0	1519.0	1427.0	1357.1	1338.7
17.5°	1511.6	1474.8	1359.6	1273.8	1245.6
20°	1477.3	1425.8	1288.5	1179.4	1145.0
22.5°	1440.5	1374.3	1211.2	1082.5	1047.0
25°	1400.0	1315.4	1131.6	990.6	950.1
27.5°	1355.9	1256.6	1050.6	899.8	854.5
30°	1308.1	1195.3	967.3	811.6	767.4
32.5°	1259.1	1130.3	887.6	729.4	686.5
35°	1207.6	1064.1	809.1	654.7	613.0
37.5°	1154.8	996.7	733.1	583.6	544.3
40°	1100.9	928.0	660.8	517.4	481.8
42.5°	1043.3	859.4	590.9	454.8	427.9
45°	985.7	790.7	525.9	405.8	392.3
47.5°	928.0	720.9	464.6	371.5	359.2
50°	868.0	653.4	407.0	339.6	327.3
52.5°	809.1	587.2	359.2	308.9	300.4
55°	751.5	522.3	323.7	275.8	269.7
57.5°	691.4	458.5	288.1	250.1	242.7
60°	627.7	397.2	255.0	223.1	219.4
62.5°	570.1	339.6	225.6	199.8	196.2
65°	508.8	282.0	197.4	176.5	174.1
67.5°	446.2	234.2	171.6	154.5	153.2
70°	383.7	197.4	147.1	133.6	132.4
72.5°	322.4	163.1	123.8	115.2	112.8
75°	259.9	130.0	103.0	95.6	94.4
77.5°	203.5	100.5	82.1	77.2	76.0
80°	149.6	74.8	63.7	60.1	58.8
82.5°	98.1	51.5	45.4	42.9	42.9
85°	52.7	31.9	29.4	27.0	28.2
87.5°	18.4	13.5	13.5	12.3	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)