

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: P1055568

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055568  
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-S1000D935-X4F0-XX-UDD-FLL-W  
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

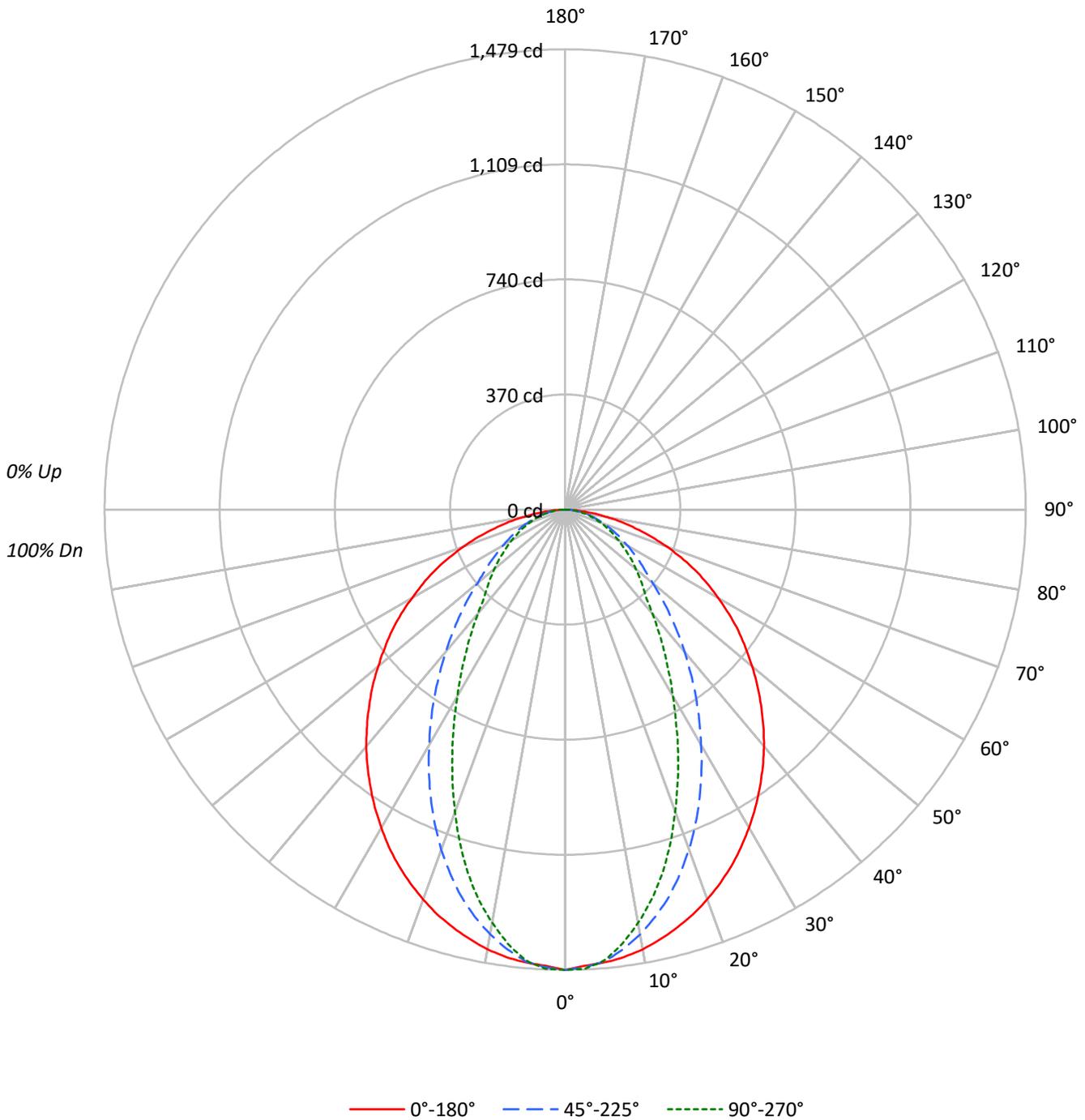
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2594.4 lumens  
Efficiency: N/A  
Efficacy: 74.8 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	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°	17835	17835	17835
5°	17676	17636	17596
10°	17568	16973	16511
15°	17360	16075	15080
20°	17106	14920	13259
25°	16809	13585	11407
30°	16436	12154	9642
35°	16040	10747	8142
40°	15638	9386	6843
45°	15168	8094	6038
50°	14694	6889	5541
55°	14256	6140	5116
60°	13660	5548	4777
65°	13100	5081	4482
70°	12207	4681	4212
75°	10928	4328	3969
80°	9373	3992	3687
85°	6585	3680	3514

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15168 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.1	5.3
10°-20°	362.8	14.0
20°-30°	477.9	18.4
30°-40°	485.1	18.7
40°-50°	421.6	16.3
50°-60°	330.3	12.7
60°-70°	224.4	8.7
70°-80°	121.6	4.7
80°-90°	33.5	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°	977.9	37.7
0°-40°	1462.9	56.4
0°-60°	2214.9	85.4
0°-90°	2594.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2594.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1479	1479	1479	1479	1479	
5°	1460	1478	1457	1444	1454	139
15°	1391	1371	1288	1225	1208	392
25°	1264	1187	1021	894	858	582
35°	1090	960	730	591	553	682
45°	890	714	475	366	354	687
55°	678	471	292	249	243	605
65°	459	254	178	159	157	453
75°	235	117	93	86	85	250
85°	48	29	27	24	25	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1479.3	1479.3	1479.3	1479.3	1479.3
2.5°	1467.1	1485.9	1471.6	1472.7	1477.1
5°	1460.5	1478.2	1457.2	1443.9	1453.9
7.5°	1450.5	1463.8	1425.1	1404.1	1407.4
10°	1435.0	1439.5	1386.4	1353.2	1348.7
12.5°	1414.0	1406.3	1339.9	1291.2	1283.5
15°	1390.8	1370.9	1287.9	1224.8	1208.2
17.5°	1364.2	1331.0	1227.0	1149.6	1124.1
20°	1333.3	1286.8	1162.9	1064.4	1033.4
22.5°	1300.1	1240.3	1093.2	977.0	944.9
25°	1263.6	1187.2	1021.2	894.0	857.5
27.5°	1223.7	1134.1	948.2	812.1	771.2
30°	1180.6	1078.8	873.0	732.5	692.6
32.5°	1136.3	1020.1	801.1	658.3	619.6
35°	1089.8	960.4	730.2	590.8	553.2
37.5°	1042.3	899.5	661.6	526.7	491.3
40°	993.6	837.6	596.4	466.9	434.8
42.5°	941.6	775.6	533.3	410.5	386.1
45°	889.6	713.7	474.7	366.2	354.1
47.5°	837.6	650.6	419.3	335.3	324.2
50°	783.4	589.7	367.3	306.5	295.4
52.5°	730.2	530.0	324.2	278.8	271.1
55°	678.2	471.3	292.1	248.9	243.4
57.5°	624.0	413.8	260.0	225.7	219.1
60°	566.5	358.5	230.1	201.4	198.1
62.5°	514.5	306.5	203.6	180.3	177.0
65°	459.2	254.5	178.1	159.3	157.1
67.5°	402.7	211.3	154.9	139.4	138.3
70°	346.3	178.1	132.8	120.6	119.5
72.5°	291.0	147.2	111.8	104.0	101.8
75°	234.6	117.3	92.9	86.3	85.2
77.5°	183.7	90.7	74.1	69.7	68.6
80°	135.0	67.5	57.5	54.2	53.1
82.5°	88.5	46.5	40.9	38.7	38.7
85°	47.6	28.8	26.6	24.3	25.4
87.5°	16.6	12.2	12.2	11.1	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)