

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: P1055571

Luminaire Tested: S123R3DR-S1000D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055571  
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-S1000D940-X4F0-XX-UDD-FLL-W  
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

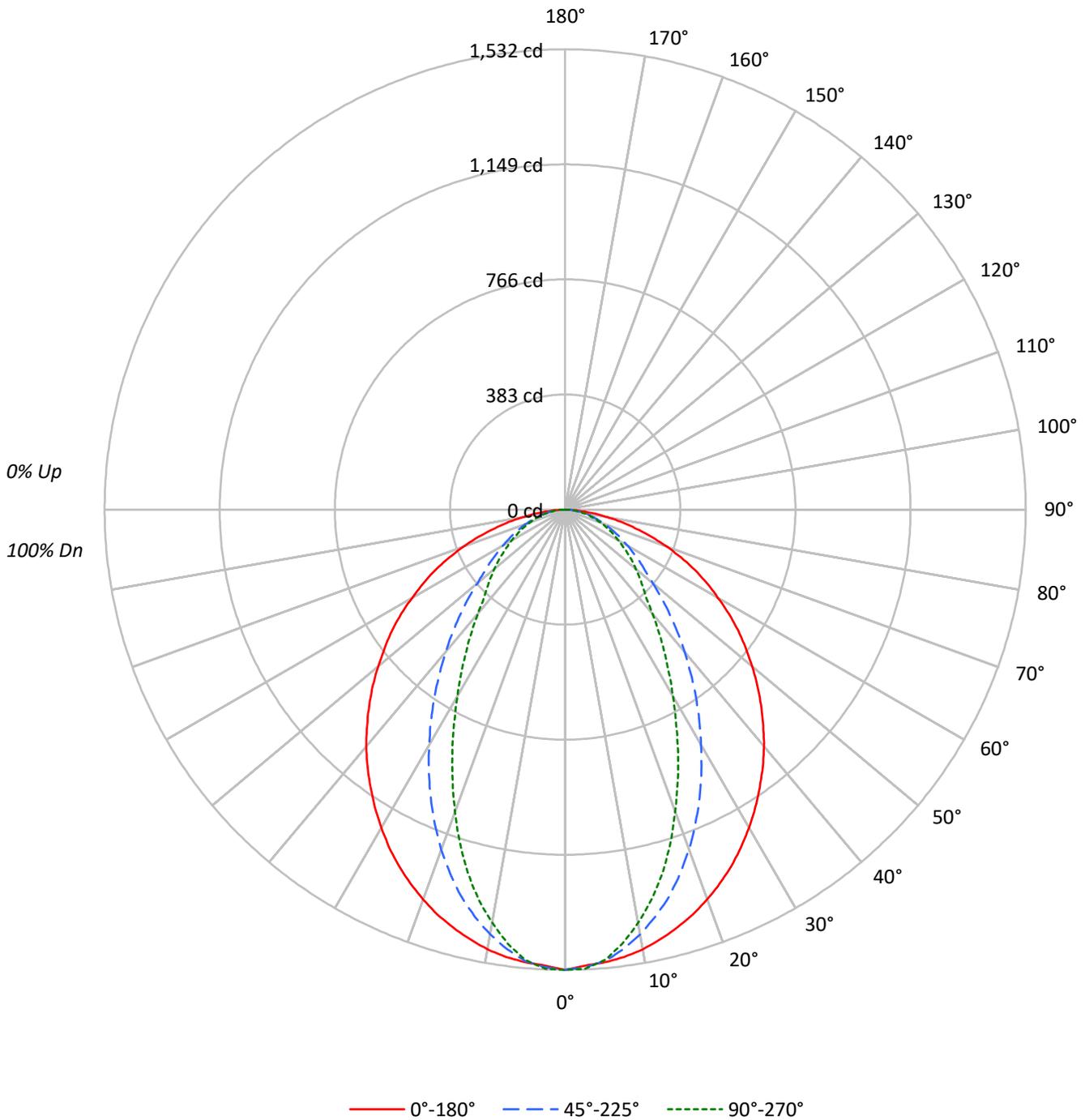
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2687.0 lumens  
Efficiency: N/A  
Efficacy: 77.4 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

TEST NUMBER: P1055571

CATALOG NUMBER: S123R3DR-S1000D940-X4F0-XX-UDD-FLL-W

### 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°	18472	18472	18472
5°	18306	18265	18223
10°	18195	17578	17101
15°	17979	16648	15618
20°	17716	15451	13732
25°	17408	14070	11814
30°	17022	12586	9986
35°	16612	11131	8434
40°	16195	9720	7087
45°	15708	8382	6252
50°	15217	7135	5739
55°	14764	6358	5299
60°	14147	5746	4946
65°	13568	5263	4641
70°	12644	4847	4364
75°	11315	4486	4109
80°	9706	4138	3819
85°	6820	3804	3652

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15708 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.0	5.3
10°-20°	375.7	14.0
20°-30°	495.0	18.4
30°-40°	502.4	18.7
40°-50°	436.7	16.3
50°-60°	342.1	12.7
60°-70°	232.4	8.7
70°-80°	126.0	4.7
80°-90°	34.7	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°	1012.7	37.7
0°-40°	1515.1	56.4
0°-60°	2293.9	85.4
0°-90°	2687.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2687.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1532	1532	1532	1532	1532	
5°	1513	1531	1509	1495	1506	144
15°	1440	1420	1334	1268	1251	406
25°	1309	1230	1058	926	888	602
35°	1129	995	756	612	573	706
45°	921	739	492	379	367	711
55°	702	488	302	258	252	627
65°	476	264	184	165	163	470
75°	243	122	96	89	88	259
85°	49	30	28	25	26	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1532.1	1532.1	1532.1	1532.1	1532.1
2.5°	1519.5	1539.0	1524.1	1525.2	1529.8
5°	1512.6	1530.9	1509.2	1495.4	1505.7
7.5°	1502.3	1516.0	1475.9	1454.2	1457.6
10°	1486.2	1490.8	1435.8	1401.4	1396.9
12.5°	1464.5	1456.4	1387.7	1337.3	1329.2
15°	1440.4	1419.8	1333.8	1268.5	1251.3
17.5°	1412.9	1378.5	1270.8	1190.6	1164.2
20°	1380.8	1332.7	1204.3	1102.4	1070.3
22.5°	1346.4	1284.6	1132.2	1011.8	978.6
25°	1308.6	1229.6	1057.7	925.9	888.1
27.5°	1267.4	1174.6	982.0	841.1	798.7
30°	1222.7	1117.3	904.1	758.6	717.3
32.5°	1176.8	1056.5	829.6	681.8	641.7
35°	1128.7	994.6	756.3	611.9	573.0
37.5°	1079.4	931.6	685.3	545.5	508.8
40°	1029.0	867.4	617.6	483.6	450.3
42.5°	975.2	803.3	552.3	425.1	399.9
45°	921.3	739.1	491.6	379.3	366.7
47.5°	867.4	673.8	434.3	347.2	335.8
50°	811.3	610.8	380.4	317.4	306.0
52.5°	756.3	548.9	335.8	288.8	280.7
55°	702.4	488.2	302.5	257.8	252.1
57.5°	646.3	428.6	269.3	233.8	226.9
60°	586.7	371.3	238.3	208.6	205.1
62.5°	532.8	317.4	210.8	186.8	183.3
65°	475.6	263.6	184.5	165.0	162.7
67.5°	417.1	218.9	160.4	144.4	143.2
70°	358.7	184.5	137.5	124.9	123.8
72.5°	301.4	152.4	115.7	107.7	105.4
75°	242.9	121.5	96.3	89.4	88.2
77.5°	190.2	94.0	76.8	72.2	71.0
80°	139.8	69.9	59.6	56.1	55.0
82.5°	91.7	48.1	42.4	40.1	40.1
85°	49.3	29.8	27.5	25.2	26.4
87.5°	17.2	12.6	12.6	11.5	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)