

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: P1055666

Luminaire Tested: S123R3DR-S775D850-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055666  
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-S775D850-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, 80 CRI LEDS  
Ballast/Driver: -

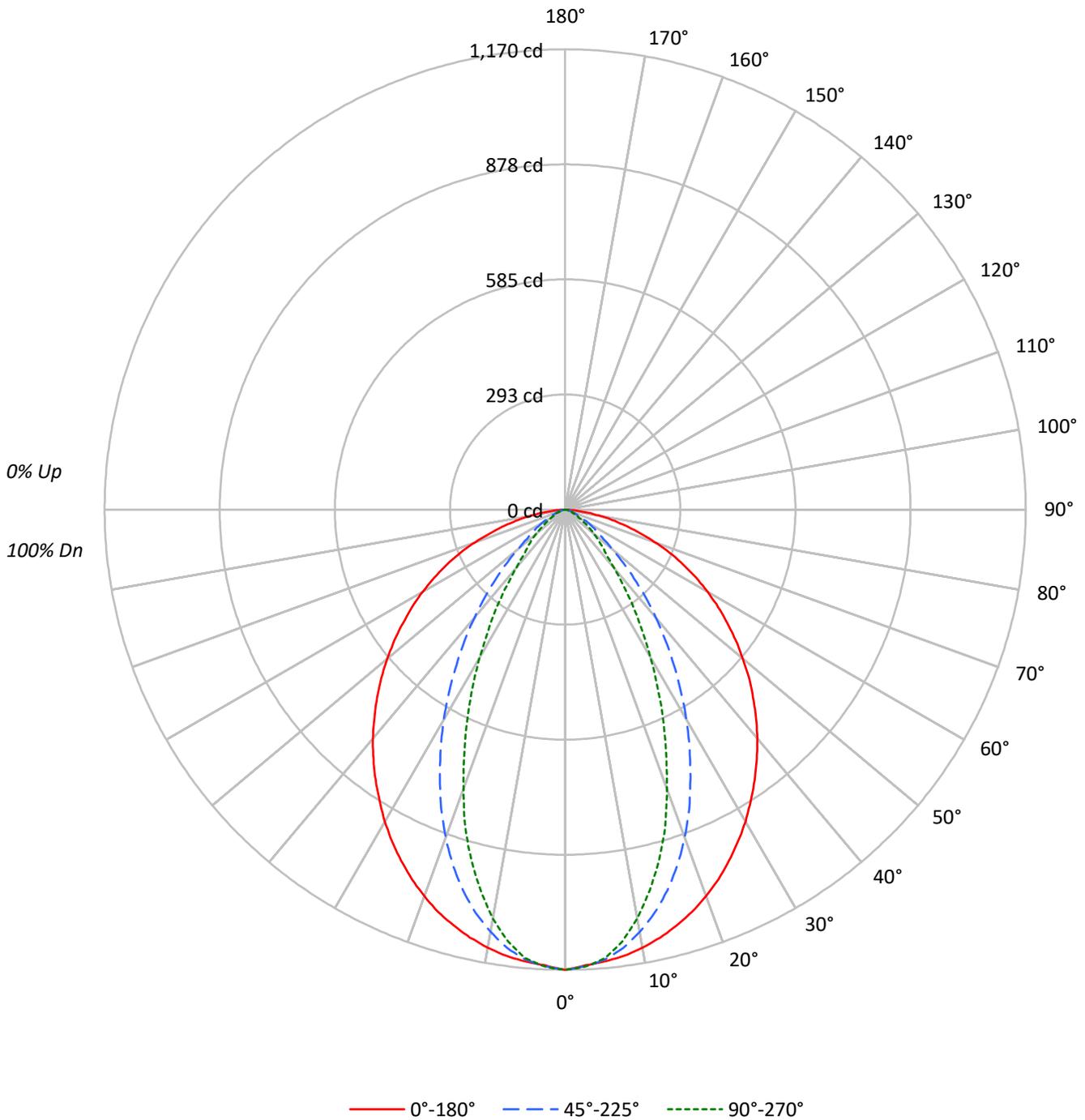
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1627.1 lumens  
Efficiency: N/A  
Efficacy: 61.6 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): 26.4  
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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	14106	14106	14106
5°	13959	13905	13865
10°	13849	13345	12926
15°	13662	12513	11503
20°	13418	11383	9689
25°	13101	10017	7819
30°	12752	8584	6021
35°	12356	7084	4457
40°	11957	5638	3038
45°	11516	4217	2288
50°	11046	2934	1789
55°	10560	2144	1305
60°	10055	1604	936
65°	9460	1076	727
70°	8562	783	585
75°	7388	568	466
80°	5929	465	382
85°	3071	456	304

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11516 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.2	6.6
10°-20°	281.5	17.3
20°-30°	353.7	21.7
30°-40°	329.4	20.2
40°-50°	252.2	15.5
50°-60°	167.6	10.3
60°-70°	90.4	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°	743.4	45.7
0°-40°	1072.8	65.9
0°-60°	1492.6	91.7
0°-90°	1627.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1627.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1153	1166	1149	1144	1146	109
15°	1095	1077	1002	944	922	308
25°	985	918	753	628	588	453
35°	840	715	481	340	303	525
45°	675	499	247	145	134	521
55°	502	291	102	71	62	450
65°	332	112	38	28	26	328
75°	159	27	12	11	10	170
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°	1170.0	1170.0	1170.0	1170.0	1170.0
2.5°	1160.0	1174.4	1162.2	1163.3	1163.3
5°	1153.4	1165.6	1148.9	1144.5	1145.6
7.5°	1144.5	1152.2	1124.5	1110.1	1107.9
10°	1131.2	1133.4	1090.1	1064.6	1055.8
12.5°	1114.5	1106.8	1050.2	1008.1	991.4
15°	1094.6	1076.8	1002.5	943.8	921.6
17.5°	1072.4	1042.5	948.2	871.7	845.1
20°	1045.8	1003.6	887.2	791.8	755.2
22.5°	1017.0	962.6	822.9	709.8	668.7
25°	984.8	918.3	753.0	627.7	587.8
27.5°	951.5	870.6	684.3	550.1	509.0
30°	916.0	821.8	616.6	474.7	432.5
32.5°	877.2	768.5	546.7	404.8	362.6
35°	839.5	715.3	481.3	340.5	302.8
37.5°	799.6	662.1	418.1	283.9	241.8
40°	759.7	607.7	358.2	228.5	193.0
42.5°	717.5	553.4	301.6	181.9	154.2
45°	675.4	499.0	247.3	145.3	134.2
47.5°	633.2	444.7	199.6	125.3	114.2
50°	588.9	392.6	156.4	106.5	95.4
52.5°	546.7	340.5	122.0	87.6	77.6
55°	502.4	290.6	102.0	71.0	62.1
57.5°	461.3	239.5	84.3	55.4	48.8
60°	417.0	194.1	66.5	43.3	38.8
62.5°	374.8	151.9	51.0	34.4	31.1
65°	331.6	112.0	37.7	27.7	25.5
67.5°	288.3	81.0	28.8	22.2	21.1
70°	242.9	61.0	22.2	17.7	16.6
72.5°	199.6	43.3	16.6	14.4	13.3
75°	158.6	26.6	12.2	11.1	10.0
77.5°	122.0	15.5	8.9	8.9	7.8
80°	85.4	8.9	6.7	6.7	5.5
82.5°	52.1	5.5	4.4	4.4	4.4
85°	22.2	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)