

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: P1055677

Luminaire Tested: S123R3DR-S775D940-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055677  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123R3DR-S775D940-X4F0-XX-UDD-FLL-B  
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

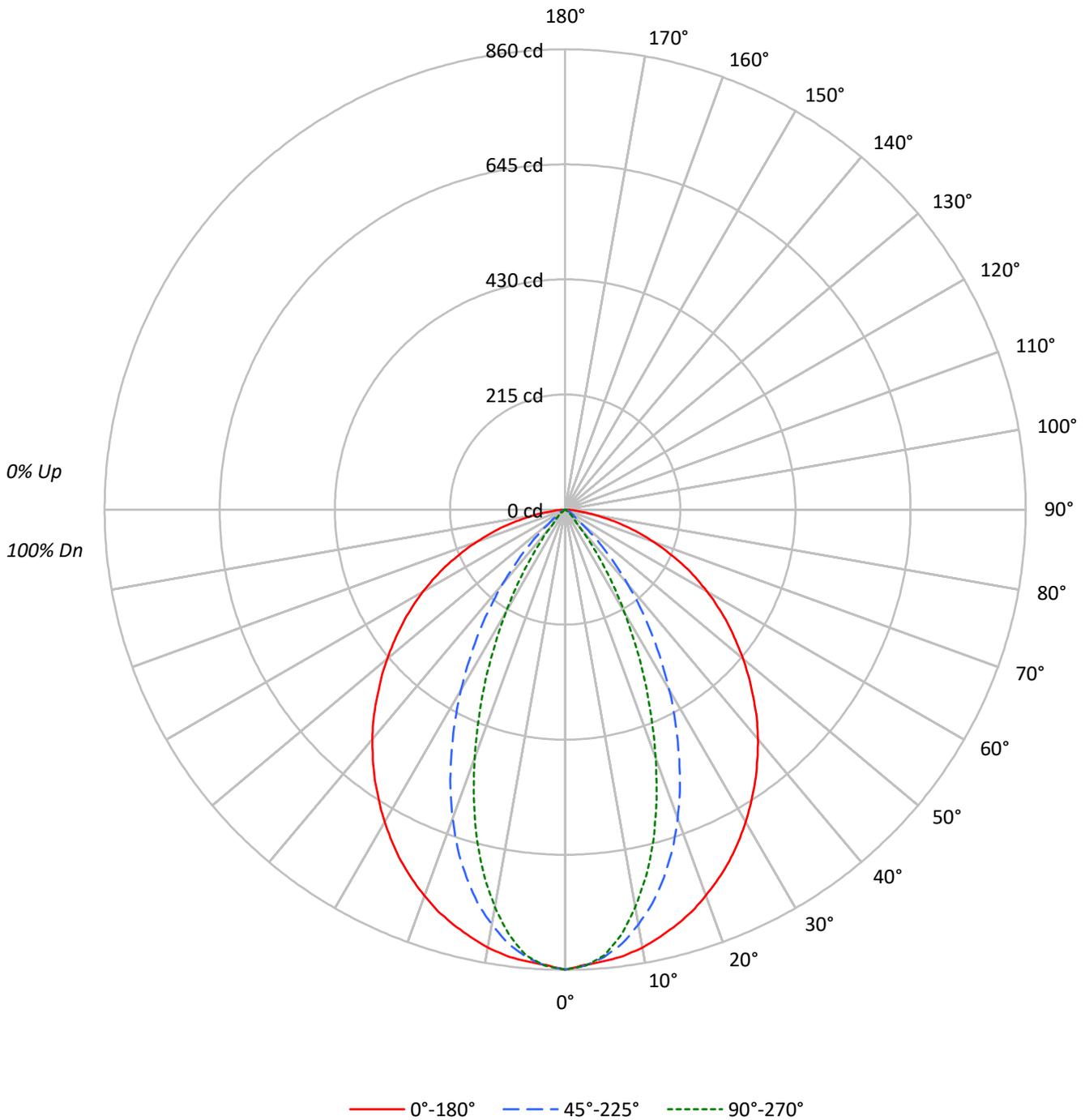
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1006.1 lumens  
Efficiency: N/A  
Efficacy: 38.1 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86  
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

TEST NUMBER: P1055677

CATALOG NUMBER: S123R3DR-S775D940-X4F0-XX-UDD-FLL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1055677

CATALOG NUMBER: S123R3DR-S775D940-X4F0-XX-UDD-FLL-B

**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	112	108	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	81	70	63	57	79	69	62	57	67	61	57	66	61	56	64	60	56	54
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40

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

	0°	45°	90°
0°	10364	10364	10364
5°	10252	10155	10122
10°	10175	9640	9236
15°	10028	8882	7958
20°	9851	7883	6338
25°	9645	6678	4673
30°	9385	5413	3067
35°	9108	4121	1679
40°	8814	2849	576
45°	8469	1657	334
50°	8129	653	201
55°	7779	412	95
60°	7376	258	43
65°	6870	128	26
70°	6162	63	32
75°	5236	42	42
80°	3902	62	0
85°	1480	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8469 cd/sqm



TEST NUMBER: P1055677

CATALOG NUMBER: S123R3DR-S775D940-X4F0-XX-UDD-FLL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.8	7.8
10°-20°	200.0	19.9
20°-30°	238.6	23.7
30°-40°	202.4	20.1
40°-50°	137.6	13.7
50°-60°	85.3	8.5
60°-70°	43.2	4.3
70°-80°	17.6	1.8
80°-90°	2.7	0.3
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°	517.4	51.4
0°-40°	719.8	71.5
0°-60°	942.6	93.7
0°-90°	1006.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1006.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	847	855	839	833	836	80
15°	803	783	712	655	638	226
25°	725	657	502	388	351	334
35°	619	497	280	151	114	387
45°	497	326	97	24	20	384
55°	370	164	20	7	4	331
65°	241	40	4	1	1	238
75°	112	7	1	1	1	119
85°	11	0	0	1	0	19
90°	0	0	0	0	0	



TEST NUMBER: P1055677

CATALOG NUMBER: S123R3DR-S775D940-X4F0-XX-UDD-FLL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	859.6	859.6	859.6	859.6	859.6
2.5°	851.6	863.2	853.4	852.5	853.4
5°	847.1	855.1	839.1	832.9	836.4
7.5°	840.9	844.4	817.7	801.6	801.6
10°	831.1	828.4	787.4	760.6	754.4
12.5°	817.7	807.0	753.5	711.6	700.0
15°	803.4	782.9	711.6	655.4	637.6
17.5°	787.4	756.2	666.1	593.0	567.1
20°	767.8	725.9	614.4	525.2	494.0
22.5°	747.3	692.9	560.0	455.7	420.9
25°	725.0	657.2	502.0	387.9	351.3
27.5°	700.0	619.7	445.0	322.8	282.7
30°	674.1	580.5	388.8	260.4	220.3
32.5°	646.5	539.5	332.6	203.3	165.9
35°	618.8	496.7	280.0	150.7	114.1
37.5°	589.4	453.9	229.2	104.3	72.2
40°	560.0	412.0	181.0	66.0	36.6
42.5°	529.7	368.3	137.3	33.0	25.0
45°	496.7	325.5	97.2	24.1	19.6
47.5°	465.5	284.5	64.2	19.6	15.2
50°	433.4	243.4	34.8	14.3	10.7
52.5°	401.3	204.2	25.0	10.7	7.1
55°	370.1	164.1	19.6	7.1	4.5
57.5°	338.0	129.3	15.2	4.5	2.7
60°	305.9	95.4	10.7	2.7	1.8
62.5°	273.8	66.0	7.1	1.8	0.9
65°	240.8	40.1	4.5	0.9	0.9
67.5°	206.9	27.6	2.7	0.9	0.9
70°	174.8	19.6	1.8	0.9	0.9
72.5°	142.7	12.5	0.9	0.9	0.0
75°	112.4	7.1	0.9	0.9	0.9
77.5°	82.9	2.7	0.9	0.9	0.0
80°	56.2	0.9	0.9	0.9	0.0
82.5°	31.2	0.0	0.9	0.9	0.0
85°	10.7	0.0	0.0	0.9	0.0
87.5°	0.0	0.0	0.0	0.9	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)