

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: P1055646

Luminaire Tested: S123R3DR-S560D930-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055646  
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-S560D930-X4F0-XX-UDD-FLL-W  
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

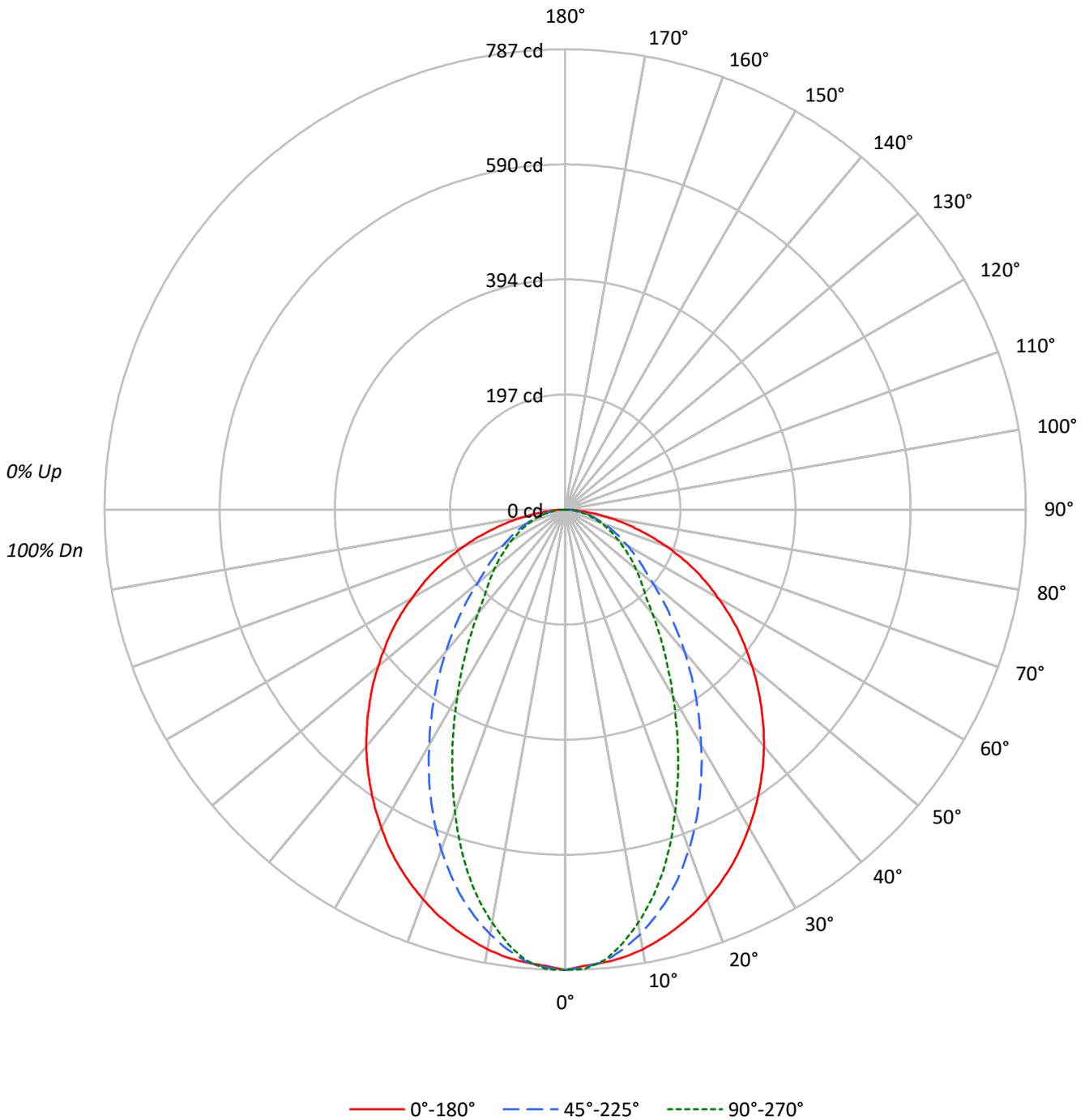
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1380.6 lumens  
Efficiency: N/A  
Efficacy: 72.3 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): 19.1  
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: P1055646

CATALOG NUMBER: S123R3DR-S560D930-X4F0-XX-UDD-FLL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1055646

CATALOG NUMBER: S123R3DR-S560D930-X4F0-XX-UDD-FLL-W

**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				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°	9491	9491	9491
5°	9406	9384	9362
10°	9348	9031	8786
15°	9238	8554	8024
20°	9103	7939	7055
25°	8945	7229	6070
30°	8746	6467	5131
35°	8535	5719	4333
40°	8321	4994	3642
45°	8072	4307	3212
50°	7818	3667	2949
55°	7586	3266	2722
60°	7268	2954	2541
65°	6969	2704	2385
70°	6497	2492	2242
75°	5813	2306	2110
80°	4985	2125	1965
85°	3500	1950	1867

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8072 cd/sqm



TEST NUMBER: P1055646

CATALOG NUMBER: S123R3DR-S560D930-X4F0-XX-UDD-FLL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.0	5.3
10°-20°	193.1	14.0
20°-30°	254.3	18.4
30°-40°	258.1	18.7
40°-50°	224.4	16.3
50°-60°	175.8	12.7
60°-70°	119.4	8.7
70°-80°	64.7	4.7
80°-90°	17.8	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°	520.3	37.7
0°-40°	778.5	56.4
0°-60°	1178.6	85.4
0°-90°	1380.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1380.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	787	787	787	787	787	
5°	777	787	775	768	774	74
15°	740	730	685	652	643	209
25°	672	632	543	476	456	310
35°	580	511	389	314	294	363
45°	473	380	253	195	188	365
55°	361	251	155	132	130	322
65°	244	135	95	85	84	241
75°	125	62	50	46	45	133
85°	25	15	14	13	14	32
90°	0	0	0	0	0	



TEST NUMBER: P1055646

CATALOG NUMBER: S123R3DR-S560D930-X4F0-XX-UDD-FLL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	787.2	787.2	787.2	787.2	787.2
2.5°	780.7	790.7	783.1	783.6	786.0
5°	777.2	786.6	775.4	768.3	773.6
7.5°	771.9	778.9	758.3	747.1	748.9
10°	763.6	766.0	737.7	720.1	717.7
12.5°	752.4	748.3	713.0	687.1	683.0
15°	740.1	729.5	685.3	651.8	642.9
17.5°	725.9	708.3	652.9	611.7	598.2
20°	709.5	684.7	618.8	566.4	549.9
22.5°	691.8	660.0	581.7	519.9	502.8
25°	672.4	631.7	543.4	475.7	456.3
27.5°	651.2	603.5	504.6	432.2	410.4
30°	628.2	574.0	464.5	389.8	368.6
32.5°	604.7	542.8	426.3	350.3	329.7
35°	579.9	511.0	388.6	314.4	294.4
37.5°	554.6	478.7	352.1	280.3	261.4
40°	528.7	445.7	317.3	248.5	231.4
42.5°	501.0	412.7	283.8	218.4	205.5
45°	473.4	379.8	252.6	194.9	188.4
47.5°	445.7	346.2	223.1	178.4	172.5
50°	416.8	313.8	195.5	163.1	157.2
52.5°	388.6	282.0	172.5	148.4	144.2
55°	360.9	250.8	155.4	132.5	129.5
57.5°	332.1	220.2	138.4	120.1	116.6
60°	301.4	190.8	122.5	107.2	105.4
62.5°	273.8	163.1	108.3	96.0	94.2
65°	244.3	135.4	94.8	84.8	83.6
67.5°	214.3	112.5	82.4	74.2	73.6
70°	184.3	94.8	70.7	64.2	63.6
72.5°	154.8	78.3	59.5	55.3	54.2
75°	124.8	62.4	49.5	45.9	45.3
77.5°	97.7	48.3	39.4	37.1	36.5
80°	71.8	35.9	30.6	28.8	28.3
82.5°	47.1	24.7	21.8	20.6	20.6
85°	25.3	15.3	14.1	13.0	13.5
87.5°	8.8	6.5	6.5	5.9	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)