

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: P1059309

Luminaire Tested: S123RDR-S560D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059309  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S560D935-X4F0-XX-UDD-WVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

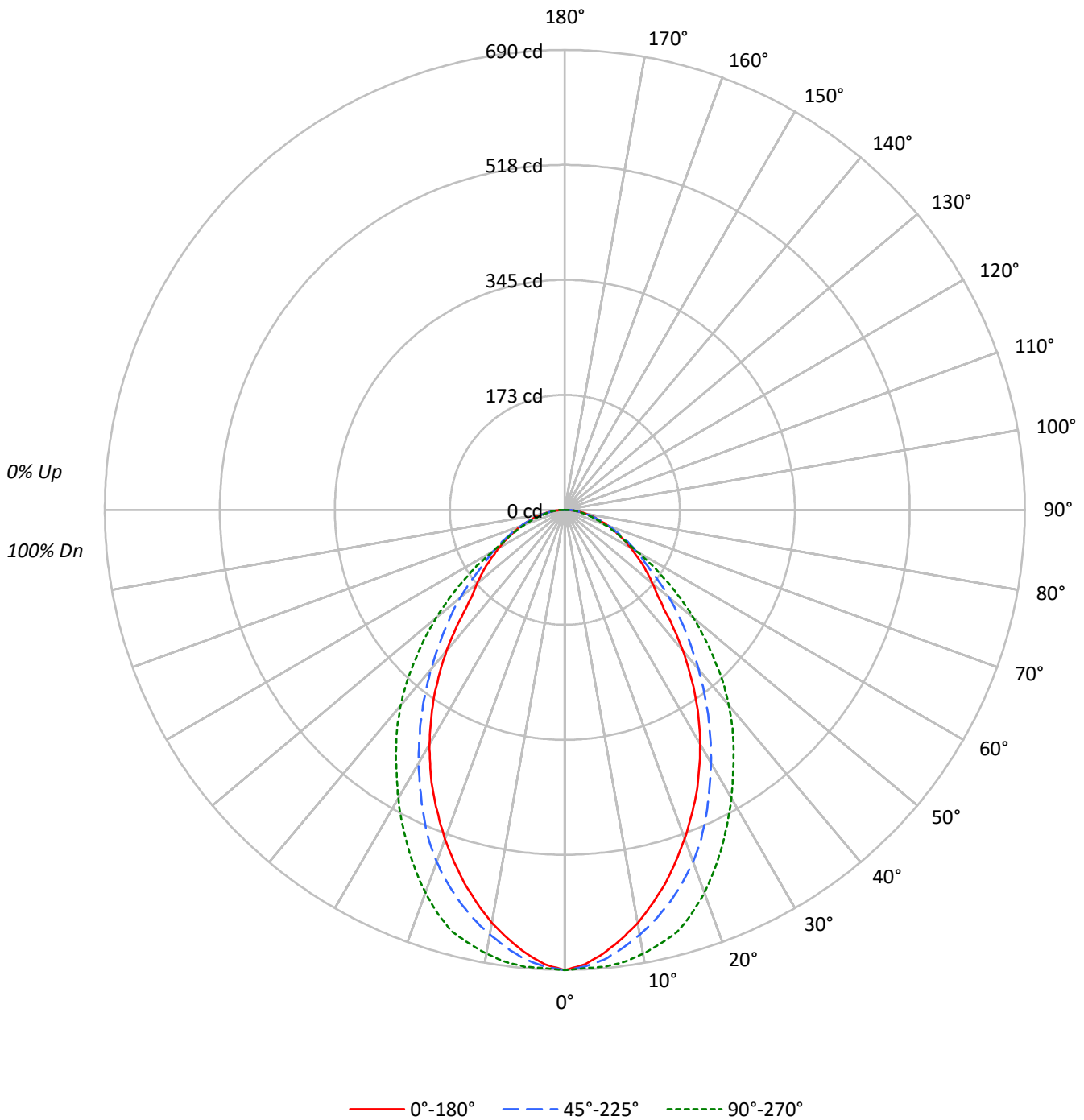
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1213.3 lumens  
Efficiency: N/A  
Efficacy: 61.9 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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: P1059309

CATALOG NUMBER: S123RDR-S560D935-X4F0-XX-UDD-WVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1059309

CATALOG NUMBER: S123RDR-S560D935-X4F0-XX-UDD-WVL-W

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									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	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	108	104	101	97	100	97	94	96	94	92	92	91	89	87																												
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75																												
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66																												
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58																												
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51																												
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46																												
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41																												
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38																												
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34																												
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32																												

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

	0°	45°	90°
0°	8108	8108	8108
5°	7873	7985	8111
10°	7504	7716	8063
15°	7058	7405	7960
20°	6564	7024	7641
25°	6060	6513	7222
30°	5504	5946	6775
35°	4898	5367	6329
40°	4226	4783	5866
45°	3494	4233	5259
50°	3137	3734	4593
55°	2907	3188	3808
60°	2680	2903	2917
65°	2492	2626	2442
70°	2345	2386	2142
75°	2209	2128	1887
80°	2090	1927	1765
85°	2007	2156	2007

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5259 cd/sqm



TEST NUMBER: P1059309

CATALOG NUMBER: S123RDR-S560D935-X4F0-XX-UDD-WVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.0	5.3
10°-20°	172.3	14.2
20°-30°	233.1	19.2
30°-40°	239.5	19.7
40°-50°	201.2	16.6
50°-60°	144.2	11.9
60°-70°	91.8	7.6
70°-80°	50.5	4.2
80°-90°	16.8	1.4
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°	469.3	38.7
0°-40°	708.8	58.4
0°-60°	1054.2	86.9
0°-90°	1213.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1213.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	690	690	690	690	690	
5°	668	680	677	682	688	63
15°	581	597	609	635	655	163
25°	468	486	503	530	557	214
35°	342	360	374	408	442	213
45°	210	229	255	292	317	166
55°	142	145	156	176	186	127
65°	90	95	94	89	88	89
75°	49	54	47	43	42	52
85°	15	15	16	17	15	16
90°	0	0	0	0	0	



TEST NUMBER: P1059309

CATALOG NUMBER: S123RDR-S560D935-X4F0-XX-UDD-WVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	690.5	690.5	690.5	690.5	690.5
2.5°	682.8	692.3	685.7	686.3	688.1
5°	667.9	679.8	677.4	682.2	688.1
7.5°	649.5	662.6	663.2	674.4	684.0
10°	629.3	643.0	647.1	664.3	676.2
12.5°	605.5	620.4	629.3	650.7	666.1
15°	580.6	596.6	609.1	635.2	654.8
17.5°	553.2	570.5	586.5	614.4	634.6
20°	525.3	543.7	562.1	588.3	611.5
22.5°	496.2	515.2	534.2	559.8	585.3
25°	467.7	485.5	502.7	530.1	557.4
27.5°	436.8	455.2	470.0	500.3	528.9
30°	405.9	424.3	438.5	470.0	499.7
32.5°	373.8	392.8	405.9	438.5	469.4
35°	341.7	360.1	374.4	407.6	441.5
37.5°	307.8	328.0	342.3	379.7	413.0
40°	275.7	294.7	312.0	351.2	382.7
42.5°	242.4	262.1	281.7	322.1	351.2
45°	210.4	228.8	254.9	291.8	316.7
47.5°	187.2	199.1	229.4	260.3	284.0
50°	171.7	176.5	204.4	231.7	251.4
52.5°	156.3	159.8	178.9	203.8	218.7
55°	142.0	145.0	155.7	176.5	186.0
57.5°	126.6	129.5	138.5	150.3	155.7
60°	114.1	116.5	123.6	125.4	124.2
62.5°	101.6	105.2	108.7	104.6	102.8
65°	89.7	95.1	94.5	89.1	87.9
67.5°	79.0	84.4	81.4	76.1	74.3
70°	68.3	73.7	69.5	64.2	62.4
72.5°	58.2	64.2	57.6	52.9	51.7
75°	48.7	53.5	46.9	43.4	41.6
77.5°	39.8	43.4	37.4	34.5	33.3
80°	30.9	33.3	28.5	26.7	26.1
82.5°	22.6	23.8	20.8	22.0	21.4
85°	14.9	15.4	16.0	16.6	14.9
87.5°	7.1	10.1	10.1	9.5	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)