

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: P1059295

Luminaire Tested: S123RDR-S560D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059295
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D930-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

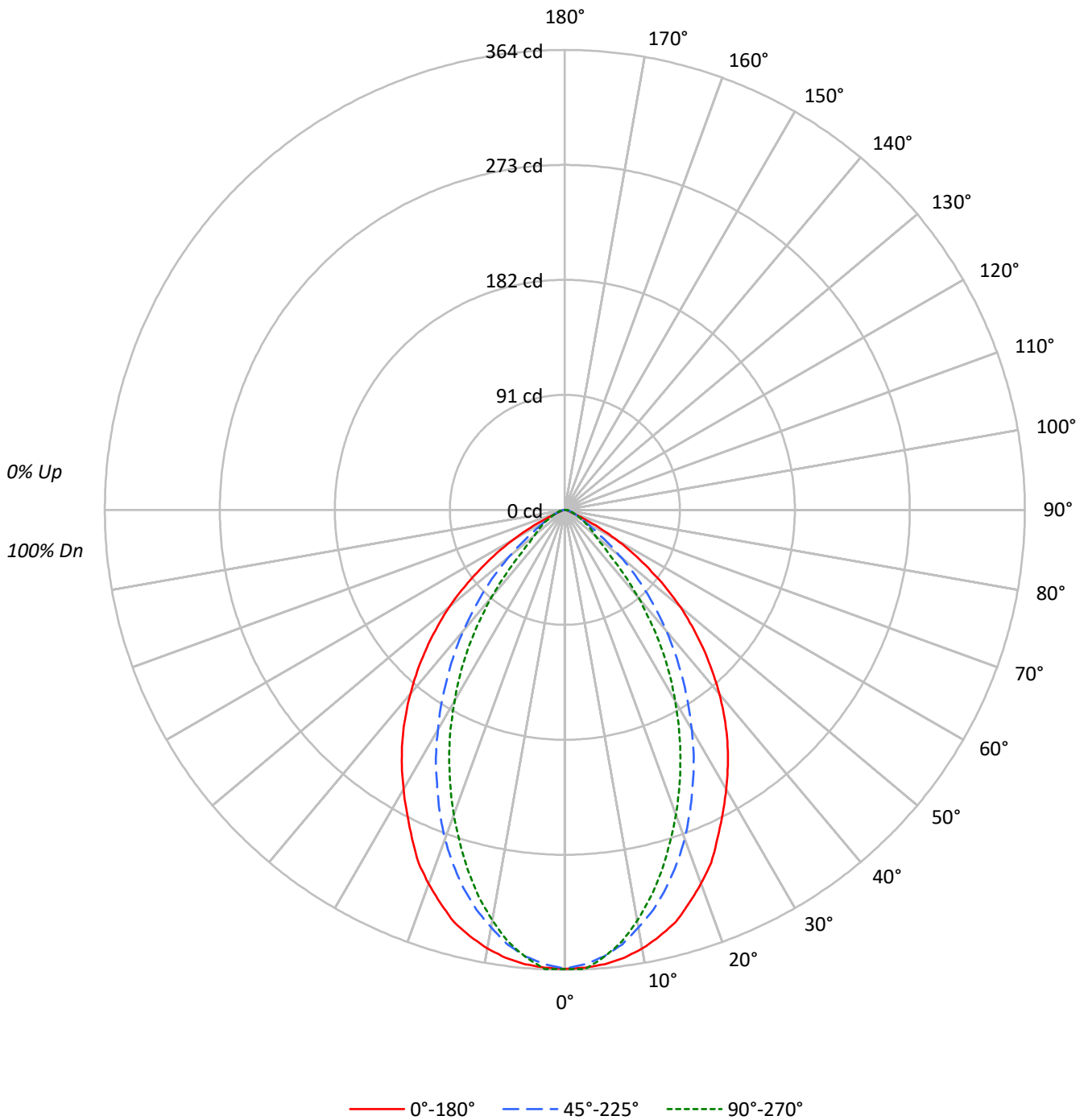
Lumens per Lamp: N/A
Luminaire Lumens: 468.9 lumens
Efficiency: N/A
Efficacy: 23.9 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059295

CATALOG NUMBER: S123RDR-S560D930-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1059295

CATALOG NUMBER: S123RDR-S560D930-X4F0-XX-UDD-SVL-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	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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91			91	
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82			82	
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73			73	
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66			66	
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60			60	
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55			55	
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50			50	
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46			46	
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42			42	
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4266	4266	4266
5°	4255	4182	4189
10°	4204	4003	3936
15°	4109	3766	3596
20°	3935	3464	3211
25°	3708	3103	2805
30°	3462	2721	2363
35°	3217	2321	1902
40°	2914	1913	1380
45°	2567	1485	830
50°	2178	1038	564
55°	1658	622	473
60°	1083	397	369
65°	453	297	297
70°	154	213	230
75°	127	154	177
80°	74	115	149
85°	81	81	148

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2567 cd/sqm



TEST NUMBER: P1059295

CATALOG NUMBER: S123RDR-S560D930-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.5	7.2
10°-20°	87.8	18.7
20°-30°	112.6	24.0
30°-40°	105.7	22.5
40°-50°	73.7	15.7
50°-60°	38.1	8.1
60°-70°	13.0	2.8
70°-80°	3.7	0.8
80°-90°	0.8	0.2
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°	233.9	49.9
0°-40°	339.6	72.4
0°-60°	451.4	96.3
0°-90°	468.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	468.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	363	363	363	363	363	
5°	361	360	355	356	355	34
15°	338	330	310	300	296	95
25°	286	268	240	223	216	132
35°	224	197	162	141	133	140
45°	155	126	89	62	50	119
55°	81	61	30	24	23	73
65°	16	14	11	10	11	19
75°	3	3	3	4	4	3
85°	1	1	1	1	1	0
90°	0	0	0	0	0	



TEST NUMBER: P1059295

CATALOG NUMBER: S123RDR-S560D930-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	363.3	363.3	363.3	363.3	363.3
2.5°	362.7	363.3	359.9	363.3	363.8
5°	361.0	360.4	354.8	356.5	355.4
7.5°	357.6	355.9	346.9	344.7	344.7
10°	352.6	349.2	335.7	331.8	330.1
12.5°	345.8	341.3	323.9	316.6	313.8
15°	338.0	329.5	309.8	299.7	295.8
17.5°	326.7	315.5	294.1	282.3	276.1
20°	314.9	300.8	277.2	263.2	257.0
22.5°	302.5	285.7	258.7	243.5	236.7
25°	286.2	268.2	239.5	223.2	216.5
27.5°	270.5	251.4	221.0	202.4	195.7
30°	255.3	232.8	200.7	182.8	174.3
32.5°	240.1	214.8	181.6	161.9	154.1
35°	224.4	196.8	161.9	141.1	132.7
37.5°	207.5	179.4	143.4	120.9	110.8
40°	190.1	160.8	124.8	99.5	90.0
42.5°	172.6	144.0	106.3	80.4	69.2
45°	154.6	126.5	89.4	61.9	50.0
47.5°	136.6	109.1	73.1	45.0	37.7
50°	119.2	92.8	56.8	33.2	30.9
52.5°	100.1	77.0	42.7	27.6	27.0
55°	81.0	60.7	30.4	23.6	23.1
57.5°	64.1	47.2	21.9	19.7	19.1
60°	46.1	33.7	16.9	16.3	15.7
62.5°	30.4	23.1	13.5	12.9	12.9
65°	16.3	14.1	10.7	10.1	10.7
67.5°	6.7	7.9	7.9	8.4	8.4
70°	4.5	5.1	6.2	6.7	6.7
72.5°	3.4	3.9	4.5	5.1	5.1
75°	2.8	2.8	3.4	3.9	3.9
77.5°	1.7	2.2	2.2	2.8	3.4
80°	1.1	1.7	1.7	2.2	2.2
82.5°	0.6	1.1	1.1	1.7	1.7
85°	0.6	0.6	0.6	0.6	1.1
87.5°	0.0	0.0	0.0	0.0	0.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)