

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: P1059284

Luminaire Tested: S123RDR-S560D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059284
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

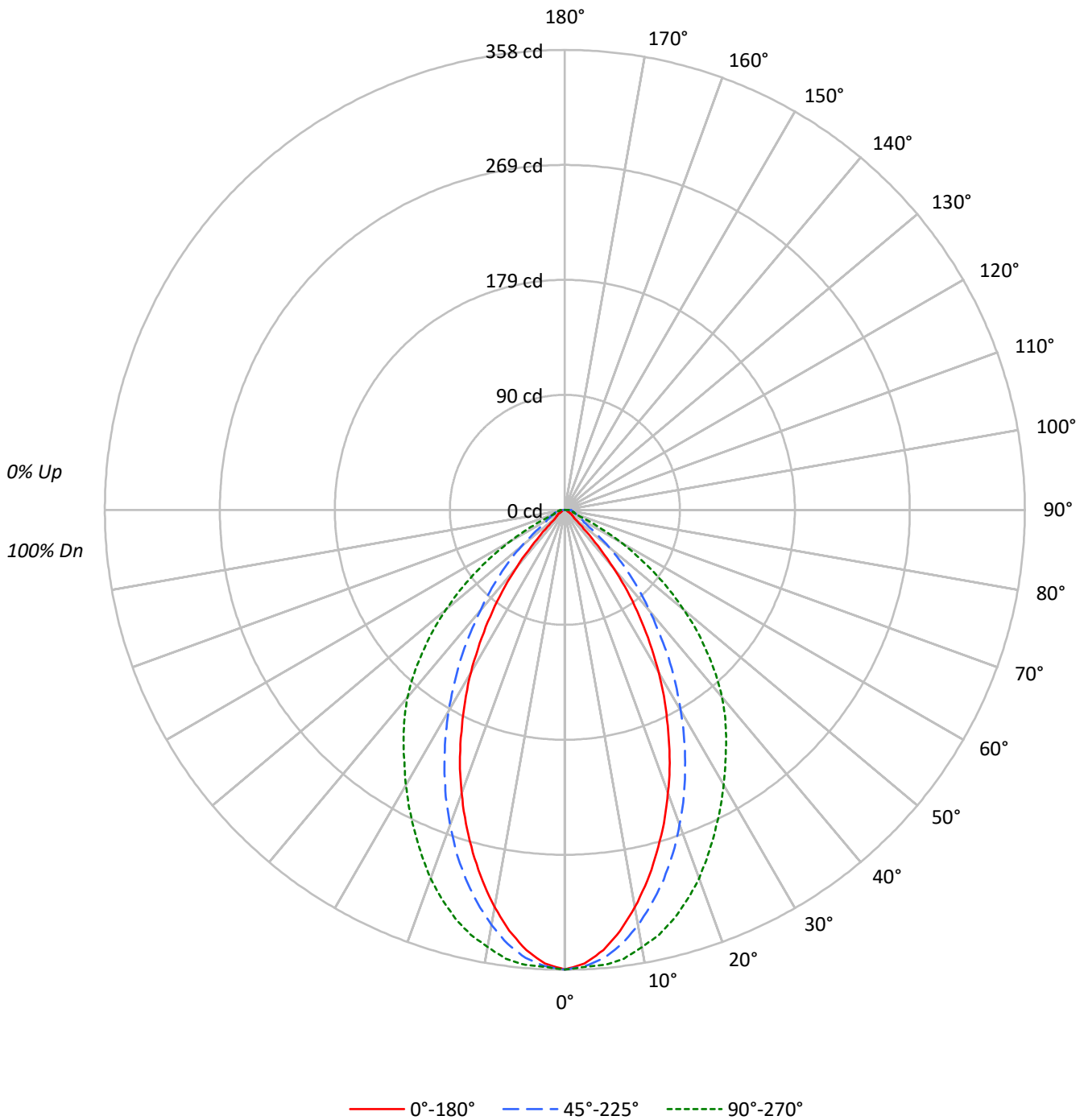
Lumens per Lamp: N/A
Luminaire Lumens: 429.8 lumens
Efficiency: N/A
Efficacy: 21.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059284

CATALOG NUMBER: S123RDR-S560D927-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1059284

CATALOG NUMBER: S123RDR-S560D927-X4F0-XX-UDD-BVL-S

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4201	4201	4201
5°	4056	4127	4192
10°	3744	3913	4122
15°	3359	3618	4003
20°	2933	3260	3815
25°	2467	2871	3580
30°	1981	2447	3353
35°	1451	2015	3136
40°	897	1568	2919
45°	345	1181	2599
50°	170	809	2199
55°	135	448	1724
60°	89	373	1155
65°	75	333	517
70°	76	302	302
75°	100	322	299
80°	149	406	331
85°	216	660	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2599 cd/sqm



TEST NUMBER: P1059284

CATALOG NUMBER: S123RDR-S560D927-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.8	7.6
10°-20°	84.0	19.5
20°-30°	104.2	24.3
30°-40°	93.4	21.7
40°-50°	61.4	14.3
50°-60°	30.8	7.2
60°-70°	12.1	2.8
70°-80°	6.8	1.6
80°-90°	4.3	1.0
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°	221.0	51.4
0°-40°	314.4	73.2
0°-60°	406.5	94.6
0°-90°	429.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	429.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	344	350	350	352	356	32
15°	276	285	298	318	329	77
25°	190	202	222	253	276	87
35°	101	115	141	184	219	63
45°	21	34	71	120	156	20
55°	7	8	22	59	84	6
65°	3	8	12	15	19	3
75°	2	7	7	7	7	2
85°	2	5	5	5	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1059284

CATALOG NUMBER: S123RDR-S560D927-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	357.8	357.8	357.8	357.8	357.8
2.5°	353.4	358.3	355.6	355.6	356.1
5°	344.1	349.6	350.1	352.3	355.6
7.5°	330.4	337.5	340.8	347.4	352.3
10°	314.0	321.7	328.2	339.7	345.7
12.5°	296.0	303.6	313.5	329.3	338.6
15°	276.3	285.0	297.6	317.8	329.3
17.5°	256.0	264.8	280.1	303.1	317.8
20°	234.7	244.5	260.9	287.2	305.3
22.5°	213.4	224.3	241.8	270.2	291.0
25°	190.4	202.4	221.6	252.7	276.3
27.5°	168.5	181.1	201.3	235.2	262.0
30°	146.1	158.6	180.5	217.2	247.3
32.5°	123.1	137.3	160.3	200.2	232.5
35°	101.2	114.9	140.6	183.8	218.8
37.5°	79.9	93.5	120.4	167.9	205.1
40°	58.5	72.8	102.3	152.6	190.4
42.5°	38.3	53.1	86.4	137.3	174.0
45°	20.8	34.5	71.1	119.8	156.5
47.5°	11.5	18.6	57.4	103.4	139.5
50°	9.3	10.4	44.3	88.1	120.4
52.5°	7.7	8.8	31.7	73.3	102.8
55°	6.6	7.7	21.9	59.1	84.2
57.5°	5.5	6.6	17.5	45.4	66.2
60°	3.8	6.6	15.9	33.4	49.2
62.5°	3.3	6.6	13.7	23.0	32.8
65°	2.7	7.7	12.0	15.3	18.6
67.5°	2.2	7.7	10.4	9.8	9.8
70°	2.2	7.7	8.8	8.2	8.8
72.5°	2.2	8.2	8.2	7.7	7.7
75°	2.2	7.1	7.1	6.6	6.6
77.5°	2.2	6.6	6.6	6.0	6.0
80°	2.2	6.0	6.0	5.5	4.9
82.5°	2.2	5.5	5.5	4.9	4.4
85°	1.6	4.9	4.9	4.9	3.3
87.5°	1.6	4.4	4.9	4.4	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)