

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: P1057910

Luminaire Tested: S122RDR-S290D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057910
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D927-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

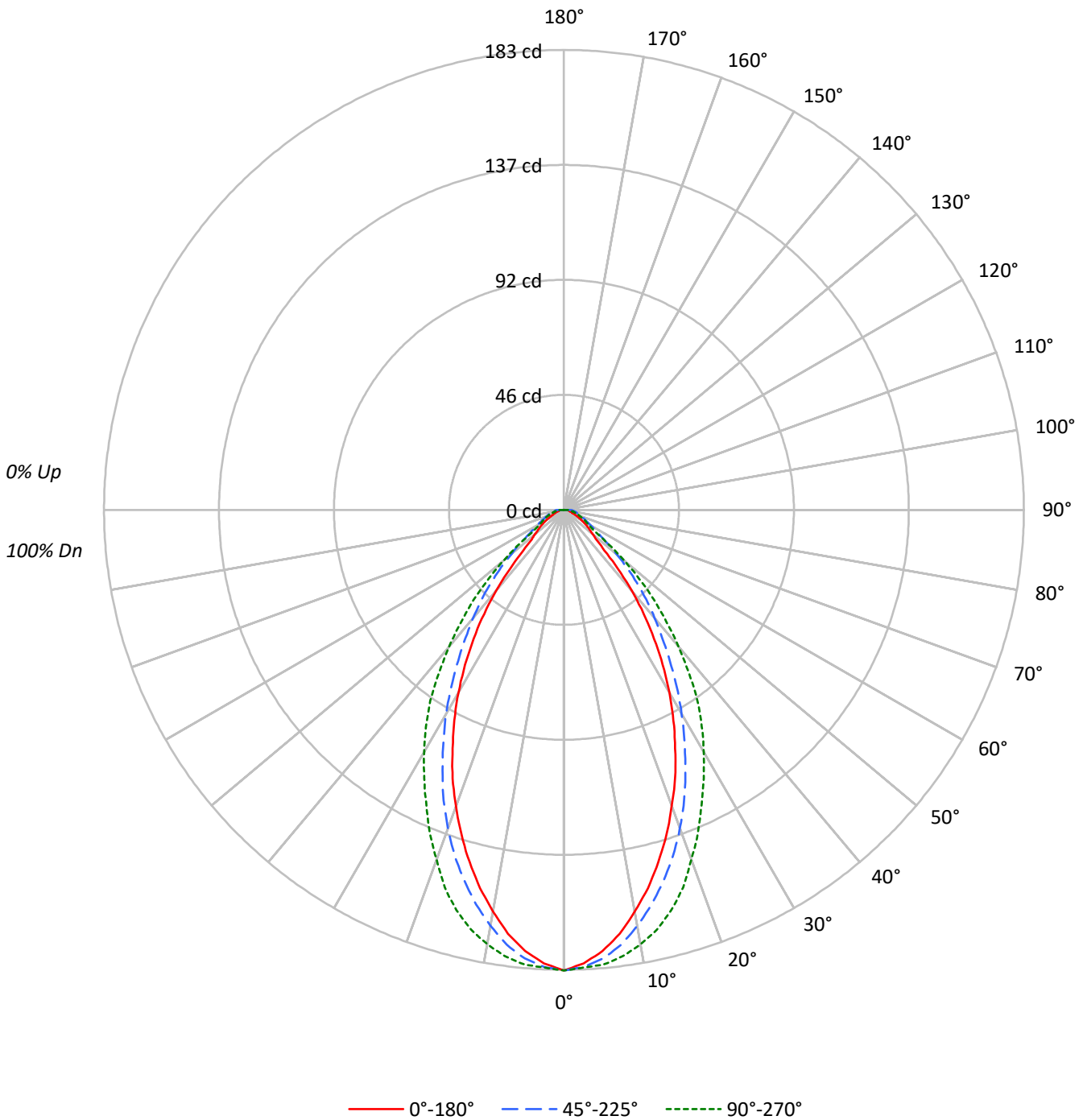
Lumens per Lamp: N/A
Luminaire Lumens: 221.1 lumens
Efficiency: N/A
Efficacy: 17.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1057910

CATALOG NUMBER: S122RDR-S290D927-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





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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				
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42				
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3382	3382	3382
5°	3264	3319	3364
10°	3041	3150	3288
15°	2772	2921	3152
20°	2464	2649	2908
25°	2134	2327	2637
30°	1788	1996	2371
35°	1410	1653	2088
40°	1009	1351	1710
45°	592	1067	1323
50°	428	778	893
55°	360	553	466
60°	288	450	399
65°	236	397	371
70°	200	383	345
75°	192	406	335
80°	213	499	361
85°	360	783	508

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1323 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.8	7.6
10°-20°	43.0	19.5
20°-30°	52.9	23.9
30°-40°	46.8	21.1
40°-50°	29.8	13.5
50°-60°	14.6	6.6
60°-70°	8.7	3.9
70°-80°	5.5	2.5
80°-90°	3.1	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°	112.7	51.0
0°-40°	159.5	72.1
0°-60°	203.9	92.2
0°-90°	221.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	221.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	183	183	183	183	183	
5°	176	180	179	180	182	16
15°	145	149	153	160	165	40
25°	105	109	114	121	130	48
35°	63	66	73	84	93	39
45°	23	29	41	46	51	19
55°	11	15	17	16	14	10
65°	5	10	9	8	8	5
75°	3	6	6	5	5	3
85°	2	3	4	3	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	183.3	183.3	183.3	183.3	183.3
2.5°	180.6	184.0	182.0	182.0	182.3
5°	176.2	179.9	179.2	179.9	181.6
7.5°	170.1	173.8	174.5	177.2	179.2
10°	162.3	166.1	168.1	172.5	175.5
12.5°	154.2	157.9	161.0	166.7	171.1
15°	145.1	149.1	152.9	159.6	165.0
17.5°	135.6	139.7	144.4	151.2	157.6
20°	125.5	129.2	134.9	141.4	148.1
22.5°	115.7	119.0	125.1	131.2	139.3
25°	104.8	108.6	114.3	121.4	129.5
27.5°	94.4	98.1	103.8	111.9	120.4
30°	83.9	87.3	93.7	102.1	111.3
32.5°	73.1	76.4	83.5	92.7	102.1
35°	62.6	65.9	73.4	83.5	92.7
37.5°	52.1	55.8	64.3	73.7	81.5
40°	41.9	46.3	56.1	64.3	71.0
42.5°	31.8	37.9	48.4	55.1	60.5
45°	22.7	29.1	40.9	46.0	50.7
47.5°	17.2	22.3	33.8	37.5	40.6
50°	14.9	18.3	27.1	29.8	31.1
52.5°	12.9	16.2	21.6	22.7	22.0
55°	11.2	14.9	17.2	16.2	14.5
57.5°	9.5	13.9	14.2	12.2	12.5
60°	7.8	12.5	12.2	10.5	10.8
62.5°	6.4	11.5	10.5	9.5	9.5
65°	5.4	10.1	9.1	8.5	8.5
67.5°	4.4	9.1	8.1	7.4	7.4
70°	3.7	8.1	7.1	6.4	6.4
72.5°	3.4	7.1	6.4	5.7	5.7
75°	2.7	6.1	5.7	5.1	4.7
77.5°	2.4	5.1	5.1	4.7	4.1
80°	2.0	4.4	4.7	4.1	3.4
82.5°	2.0	4.1	4.1	3.7	2.7
85°	1.7	3.4	3.7	3.4	2.4
87.5°	1.0	3.0	3.0	2.7	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)