

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: P1057907

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057907
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 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

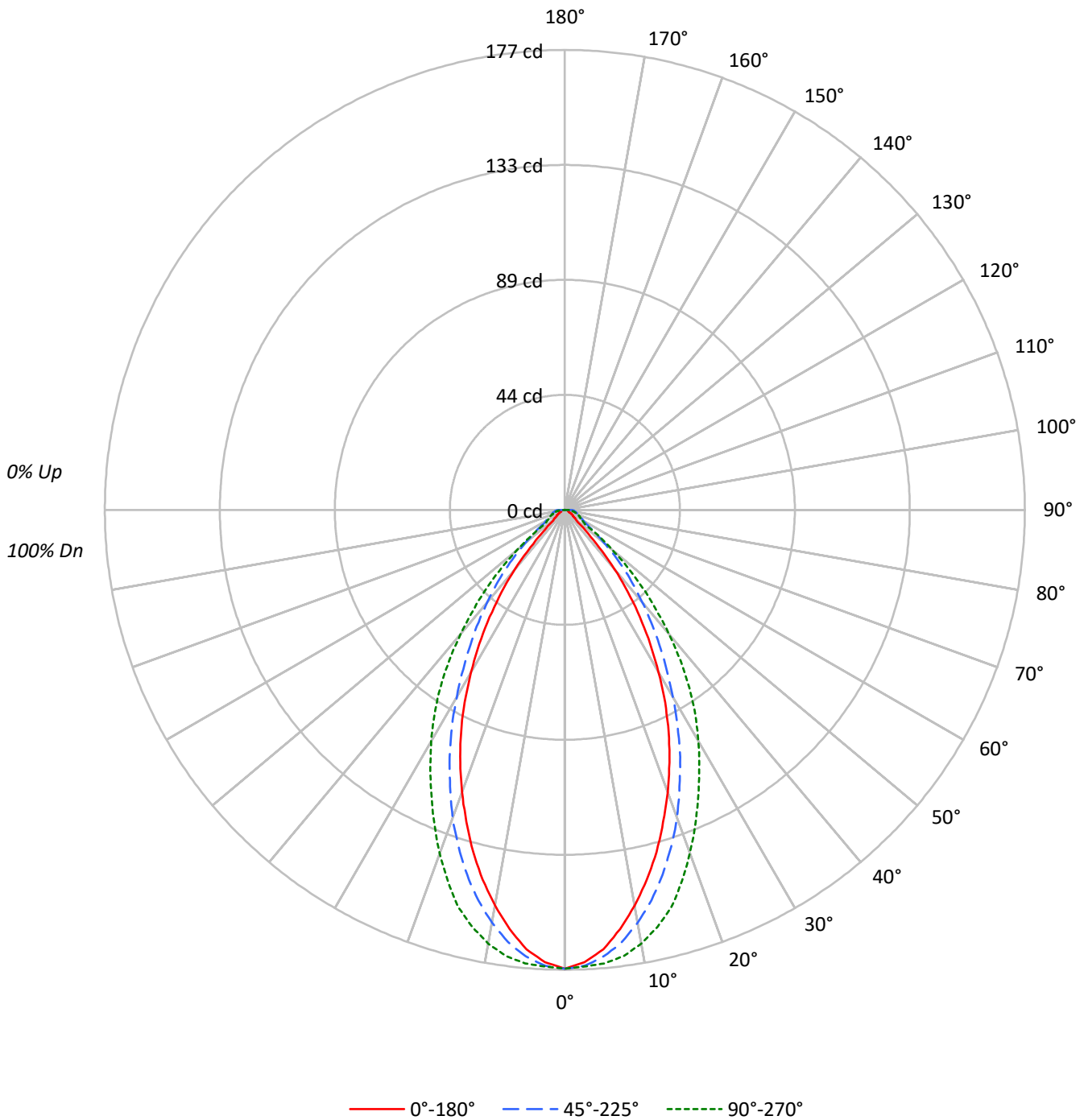
Lumens per Lamp: N/A
Luminaire Lumens: 190.3 lumens
Efficiency: N/A
Efficacy: 15.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3259	3259	3259
5°	3145	3195	3245
10°	2897	3022	3176
15°	2604	2778	3024
20°	2272	2478	2763
25°	1922	2136	2472
30°	1534	1773	2190
35°	1135	1426	1881
40°	718	1115	1498
45°	282	838	1104
50°	146	563	680
55°	119	370	306
60°	89	299	273
65°	74	279	279
70°	76	291	275
75°	100	335	292
80°	149	436	319
85°	212	720	423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 1438 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.2	8.5
10°-20°	40.8	21.4
20°-30°	48.5	25.5
30°-40°	40.3	21.2
40°-50°	22.5	11.8
50°-60°	9.1	4.8
60°-70°	5.8	3.1
70°-80°	4.4	2.3
80°-90°	2.8	1.5
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°	105.4	55.4
0°-40°	145.7	76.6
0°-60°	177.4	93.2
0°-90°	190.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	190.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	177	177	177	177	177	
5°	170	173	172	174	175	16
15°	136	140	145	153	158	38
25°	94	98	105	113	121	43
35°	50	55	63	74	84	31
45°	11	18	32	38	42	10
55°	4	8	12	11	10	3
65°	2	7	6	6	6	2
75°	1	5	5	4	4	1
85°	1	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	176.6	176.6	176.6	176.6	176.6
2.5°	174.2	176.9	175.6	175.6	175.9
5°	169.8	172.8	172.5	173.9	175.2
7.5°	162.7	166.1	167.8	170.8	173.2
10°	154.6	158.3	161.3	166.1	169.5
12.5°	145.8	149.5	153.9	160.0	164.4
15°	136.3	140.4	145.4	152.9	158.3
17.5°	125.8	130.2	136.0	144.1	149.8
20°	115.7	120.1	126.2	134.3	140.7
22.5°	105.2	108.9	115.3	123.5	131.2
25°	94.4	98.1	104.9	113.0	121.4
27.5°	83.5	87.3	94.0	102.5	112.0
30°	72.0	76.1	83.2	92.7	102.8
32.5°	61.2	65.3	72.7	83.2	93.4
35°	50.4	55.1	63.3	73.7	83.5
37.5°	39.9	45.3	54.5	64.3	73.1
40°	29.8	35.5	46.3	54.8	62.2
42.5°	19.6	26.4	38.9	46.0	51.8
45°	10.8	18.3	32.1	37.5	42.3
47.5°	6.1	11.8	25.4	29.8	32.5
50°	5.1	8.8	19.6	22.7	23.7
52.5°	4.1	8.1	14.9	16.6	15.9
55°	3.7	7.8	11.5	11.2	9.5
57.5°	3.0	7.8	9.1	8.1	8.1
60°	2.4	7.4	8.1	7.1	7.4
62.5°	2.0	7.1	7.4	6.8	6.8
65°	1.7	6.8	6.4	6.1	6.4
67.5°	1.4	6.1	6.1	5.8	5.8
70°	1.4	5.8	5.4	5.1	5.1
72.5°	1.4	5.1	5.1	4.7	4.7
75°	1.4	4.7	4.7	4.4	4.1
77.5°	1.4	4.1	4.4	4.1	3.7
80°	1.4	3.7	4.1	3.7	3.0
82.5°	1.4	3.4	3.7	3.4	2.7
85°	1.0	3.0	3.4	3.0	2.0
87.5°	1.0	3.0	3.4	2.7	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)