

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: P1059122

Luminaire Tested: S123RDR-S1165D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059122
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-S1165D927-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

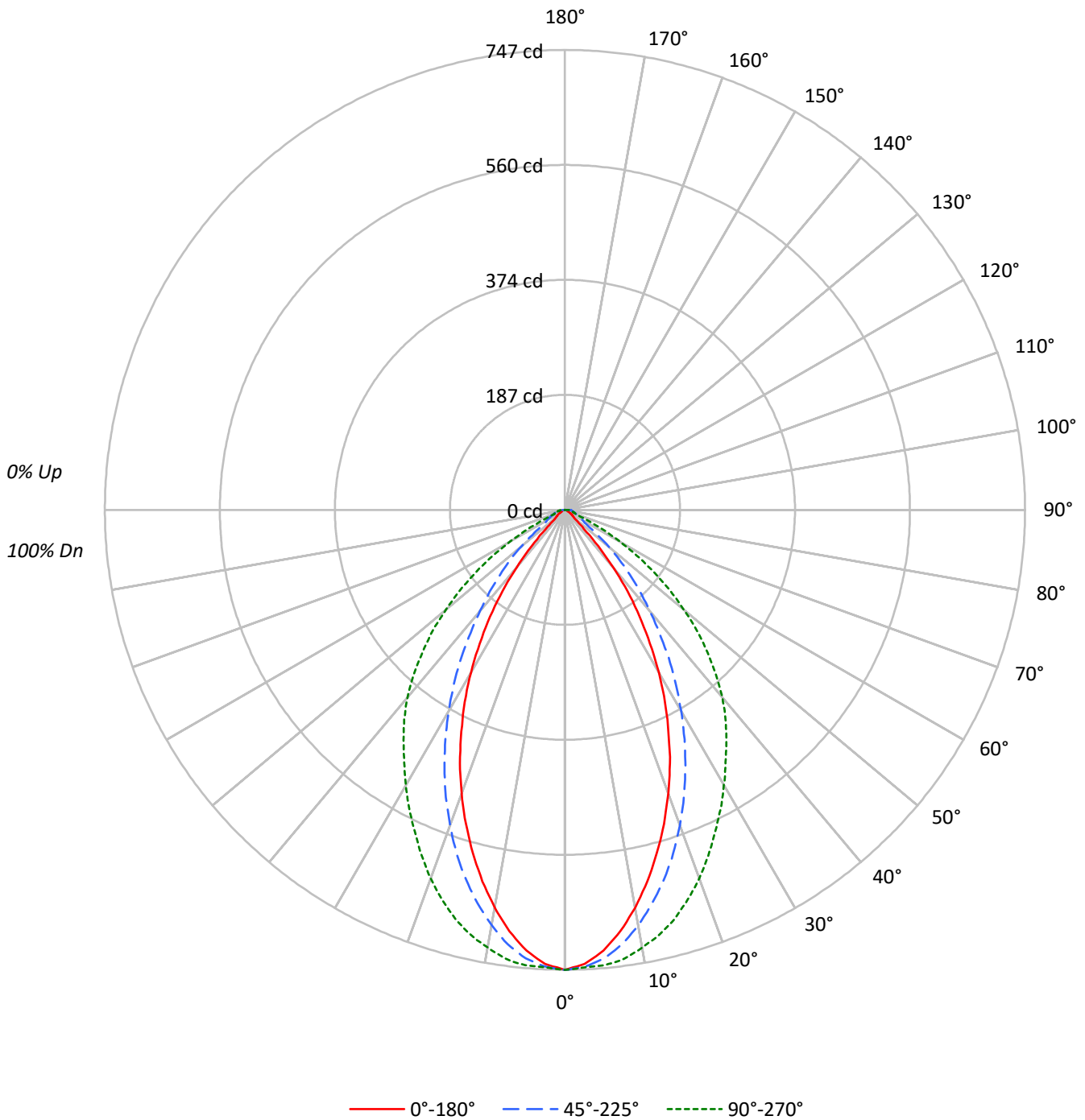
Lumens per Lamp: N/A
Luminaire Lumens: 897.5 lumens
Efficiency: N/A
Efficacy: 21.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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°	8774	8774	8774
5°	8470	8619	8753
10°	7819	8174	8610
15°	7014	7555	8361
20°	6124	6810	7966
25°	5151	5995	7476
30°	4135	5112	7002
35°	3030	4209	6551
40°	1873	3274	6095
45°	721	2466	5427
50°	354	1690	4593
55°	280	936	3601
60°	188	777	2414
65°	158	697	1078
70°	158	628	628
75°	209	676	622
80°	311	852	697
85°	458	1388	930

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5427 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	7.6
10°-20°	175.4	19.5
20°-30°	217.7	24.3
30°-40°	195.0	21.7
40°-50°	128.2	14.3
50°-60°	64.2	7.2
60°-70°	25.4	2.8
70°-80°	14.2	1.6
80°-90°	8.9	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°	461.6	51.4
0°-40°	656.6	73.2
0°-60°	849.0	94.6
0°-90°	897.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	897.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	719	730	731	736	743	67
15°	577	595	622	664	688	161
25°	398	423	463	528	577	182
35°	211	240	294	384	457	131
45°	43	72	148	250	327	41
55°	14	16	46	123	176	12
65°	6	16	25	32	39	6
75°	5	15	15	14	14	5
85°	3	10	10	10	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	747.2	747.2	747.2	747.2	747.2
2.5°	738.1	748.3	742.6	742.6	743.8
5°	718.6	730.1	731.2	735.8	742.6
7.5°	690.1	704.9	711.8	725.5	735.8
10°	655.8	671.8	685.5	709.5	722.1
12.5°	618.1	634.1	654.7	687.8	707.2
15°	577.0	595.2	621.5	663.8	687.8
17.5°	534.7	553.0	585.0	632.9	663.8
20°	490.1	510.7	545.0	599.8	637.5
22.5°	445.6	468.4	505.0	564.4	607.8
25°	397.6	422.7	462.7	527.8	577.0
27.5°	351.9	378.2	420.4	491.3	547.3
30°	305.0	331.3	377.0	453.6	516.4
32.5°	257.1	286.8	334.8	418.2	485.6
35°	211.4	239.9	293.6	383.9	457.0
37.5°	166.8	195.4	251.4	350.7	428.4
40°	122.2	152.0	213.6	318.8	397.6
42.5°	80.0	110.8	180.5	286.8	363.3
45°	43.4	72.0	148.5	250.2	326.8
47.5°	24.0	38.8	120.0	215.9	291.3
50°	19.4	21.7	92.5	183.9	251.4
52.5°	16.0	18.3	66.3	153.1	214.8
55°	13.7	16.0	45.7	123.4	175.9
57.5°	11.4	13.7	36.6	94.8	138.2
60°	8.0	13.7	33.1	69.7	102.8
62.5°	6.9	13.7	28.6	48.0	68.6
65°	5.7	16.0	25.1	32.0	38.8
67.5°	4.6	16.0	21.7	20.6	20.6
70°	4.6	16.0	18.3	17.1	18.3
72.5°	4.6	17.1	17.1	16.0	16.0
75°	4.6	14.9	14.9	13.7	13.7
77.5°	4.6	13.7	13.7	12.6	12.6
80°	4.6	12.6	12.6	11.4	10.3
82.5°	4.6	11.4	11.4	10.3	9.1
85°	3.4	10.3	10.3	10.3	6.9
87.5°	3.4	9.1	10.3	9.1	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)