

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: P1059041

Luminaire Tested: S123RDR-S1000D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059041
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-S1000D927-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

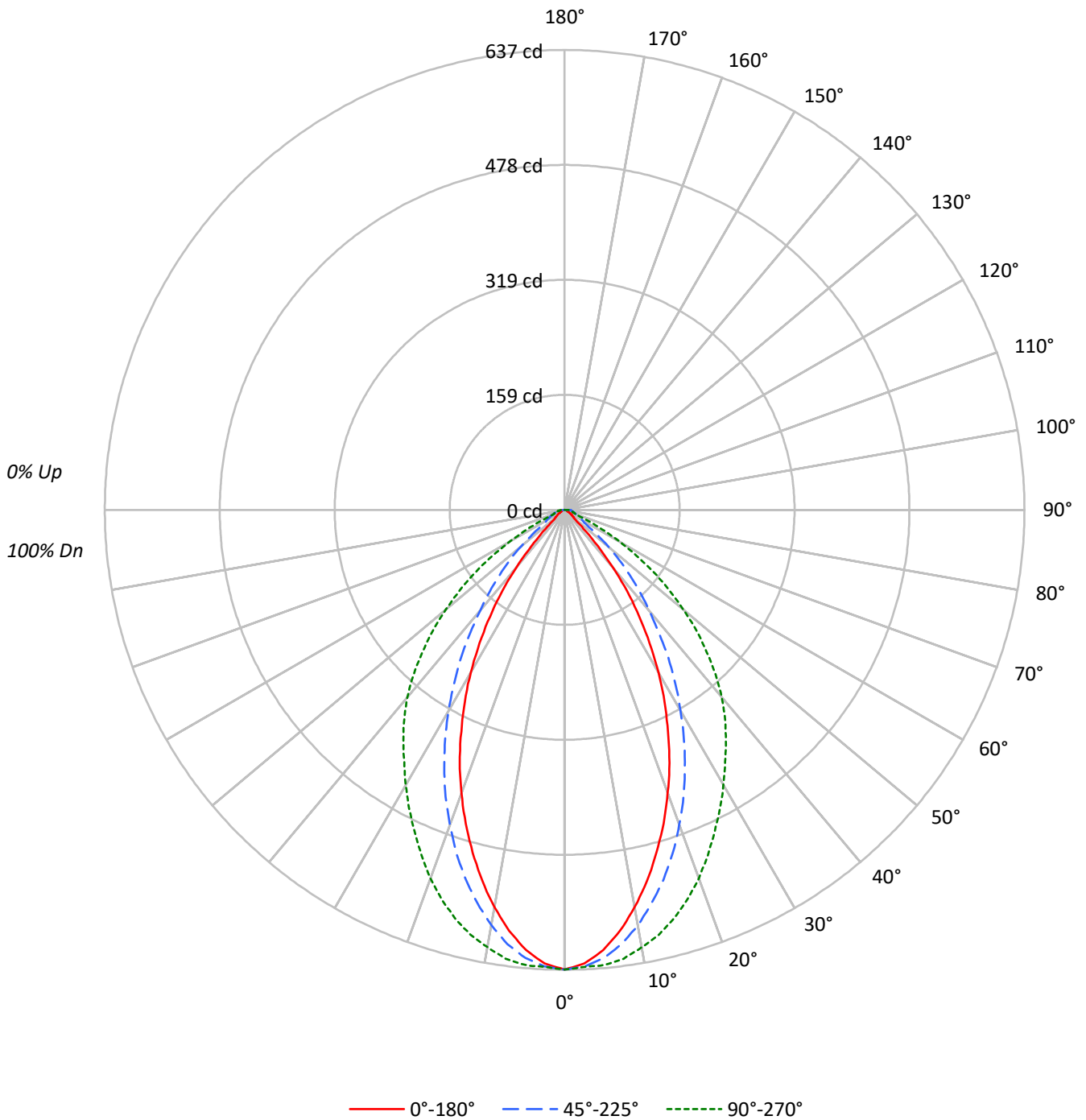
Lumens per Lamp: N/A
Luminaire Lumens: 764.8 lumens
Efficiency: N/A
Efficacy: 21.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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			100	
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90	
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81			81	
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73			73	
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66			66	
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60			60	
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55			55	
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50			50	
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46			46	
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43			43	
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40			40	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7476	7476	7476
5°	7217	7343	7459
10°	6663	6965	7337
15°	5976	6438	7124
20°	5218	5803	6788
25°	4390	5109	6369
30°	3524	4357	5966
35°	2582	3587	5582
40°	1597	2790	5193
45°	614	2102	4623
50°	301	1441	3913
55°	240	796	3069
60°	160	662	2057
65°	136	595	920
70°	134	536	536
75°	177	576	531
80°	264	724	595
85°	391	1186	781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4623 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.4	7.6
10°-20°	149.5	19.5
20°-30°	185.5	24.3
30°-40°	166.2	21.7
40°-50°	109.2	14.3
50°-60°	54.7	7.2
60°-70°	21.6	2.8
70°-80°	12.1	1.6
80°-90°	7.6	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°	393.3	51.4
0°-40°	559.5	73.2
0°-60°	723.4	94.6
0°-90°	764.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	764.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	612	622	623	627	633	57
15°	492	507	530	566	586	137
25°	339	360	394	450	492	155
35°	180	204	250	327	389	112
45°	37	61	127	213	278	35
55°	12	14	39	105	150	10
65°	5	14	21	27	33	5
75°	4	13	13	12	12	4
85°	3	9	9	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	636.7	636.7	636.7	636.7	636.7
2.5°	628.9	637.6	632.8	632.8	633.7
5°	612.3	622.1	623.0	626.9	632.8
7.5°	588.0	600.6	606.5	618.2	626.9
10°	558.8	572.4	584.1	604.5	615.3
12.5°	526.7	540.3	557.8	586.0	602.6
15°	491.6	507.2	529.6	565.6	586.0
17.5°	455.6	471.2	498.4	539.3	565.6
20°	417.6	435.2	464.4	511.1	543.2
22.5°	379.7	399.1	430.3	480.9	517.9
25°	338.8	360.2	394.3	449.8	491.6
27.5°	299.8	322.2	358.2	418.6	466.3
30°	259.9	282.3	321.3	386.5	440.0
32.5°	219.0	244.3	285.2	356.3	413.7
35°	180.1	204.4	250.2	327.1	389.4
37.5°	142.1	166.5	214.2	298.9	365.1
40°	104.2	129.5	182.0	271.6	338.8
42.5°	68.1	94.4	153.8	244.3	309.6
45°	37.0	61.3	126.6	213.2	278.4
47.5°	20.4	33.1	102.2	184.0	248.2
50°	16.5	18.5	78.9	156.7	214.2
52.5°	13.6	15.6	56.5	130.4	183.0
55°	11.7	13.6	38.9	105.1	149.9
57.5°	9.7	11.7	31.2	80.8	117.8
60°	6.8	11.7	28.2	59.4	87.6
62.5°	5.8	11.7	24.3	40.9	58.4
65°	4.9	13.6	21.4	27.3	33.1
67.5°	3.9	13.6	18.5	17.5	17.5
70°	3.9	13.6	15.6	14.6	15.6
72.5°	3.9	14.6	14.6	13.6	13.6
75°	3.9	12.7	12.7	11.7	11.7
77.5°	3.9	11.7	11.7	10.7	10.7
80°	3.9	10.7	10.7	9.7	8.8
82.5°	3.9	9.7	9.7	8.8	7.8
85°	2.9	8.8	8.8	8.8	5.8
87.5°	2.9	7.8	8.8	7.8	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)