

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: P1059076

Luminaire Tested: S123RDR-S1000D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059076
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

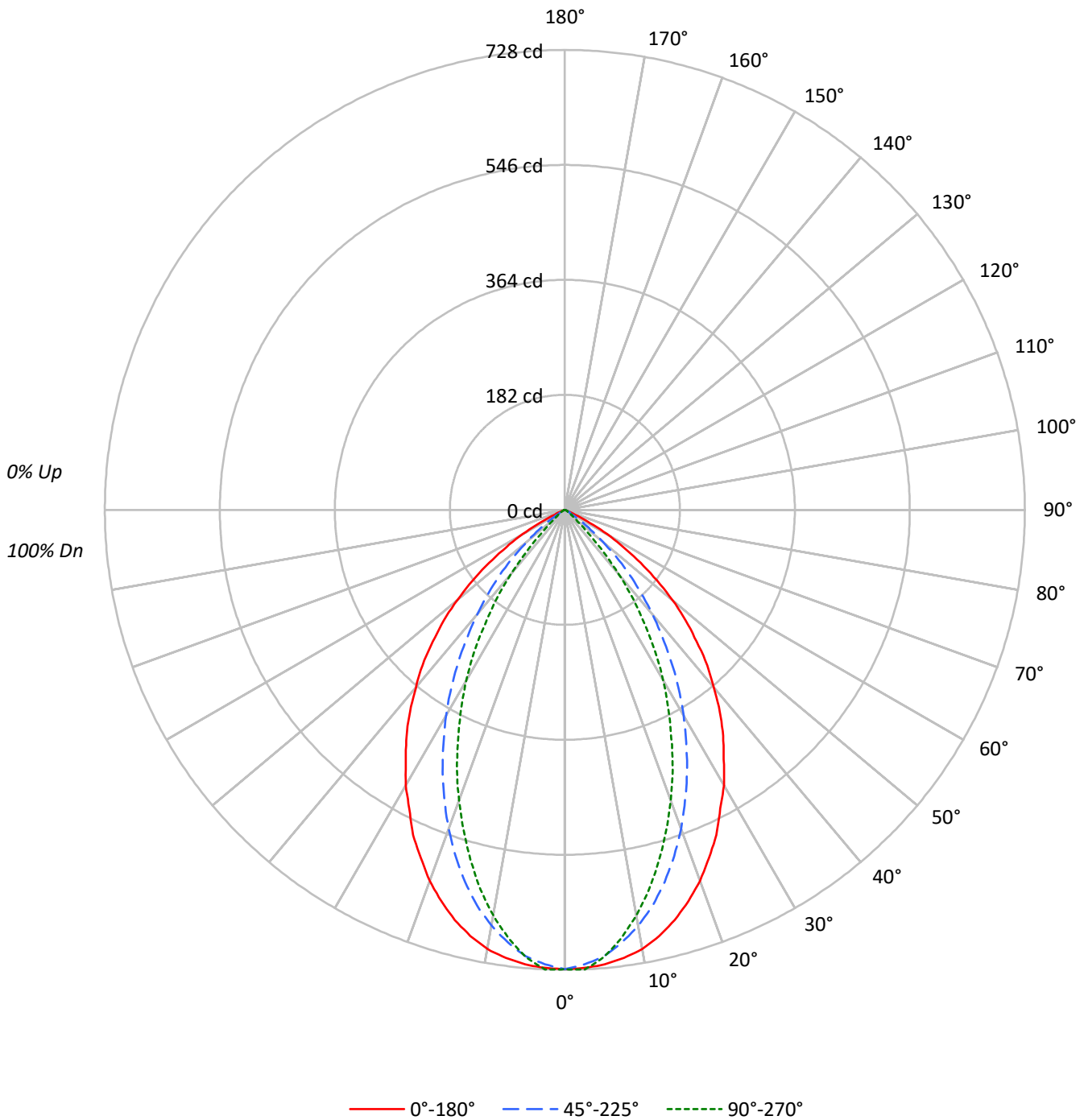
Lumens per Lamp: N/A
Luminaire Lumens: 829.7 lumens
Efficiency: N/A
Efficacy: 23.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8538	8538	8538
5°	8515	8363	8377
10°	8418	7971	7775
15°	8169	7416	6989
20°	7813	6715	6116
25°	7357	5931	5172
30°	6826	5095	4222
35°	6260	4213	3138
40°	5618	3302	2010
45°	4899	2411	835
50°	4065	1432	322
55°	2995	600	240
60°	1815	221	139
65°	489	131	64
70°	0	41	41
75°	0	0	54
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4899 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.9	8.1
10°-20°	172.7	20.8
20°-30°	215.3	25.9
30°-40°	192.5	23.2
40°-50°	121.5	14.6
50°-60°	50.8	6.1
60°-70°	9.6	1.2
70°-80°	0.3	0.0
80°-90°	0.0	0.0
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°	455.0	54.8
0°-40°	647.4	78.0
0°-60°	819.8	98.8
0°-90°	829.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	829.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	727	727	727	727	727	
5°	722	721	710	712	711	68
15°	672	656	610	584	575	189
25°	568	522	458	418	399	260
35°	437	374	294	241	219	272
45°	295	230	145	77	50	228
55°	146	101	29	12	12	131
65°	18	13	5	2	2	25
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	727.1	727.1	727.1	727.1	727.1
2.5°	725.9	727.1	720.0	727.1	728.2
5°	722.4	721.2	709.5	711.8	710.7
7.5°	715.4	711.8	690.8	686.1	683.7
10°	706.0	696.6	668.5	656.8	652.1
12.5°	690.8	677.9	641.6	622.9	615.8
15°	672.0	655.6	610.0	584.2	574.9
17.5°	649.8	626.4	574.9	546.8	532.7
20°	625.2	592.4	537.4	503.4	489.4
22.5°	595.9	559.6	497.6	461.3	446.1
25°	567.8	522.2	457.8	418.0	399.2
27.5°	532.7	484.7	415.6	374.7	354.7
30°	503.4	448.4	375.8	330.2	311.4
32.5°	468.3	410.9	334.8	284.5	266.9
35°	436.7	373.5	293.9	241.2	218.9
37.5°	402.8	337.2	252.9	197.9	176.8
40°	366.5	300.9	215.4	154.5	131.1
42.5°	333.7	264.6	178.0	114.7	91.3
45°	295.0	229.5	145.2	77.3	50.3
47.5°	259.9	196.7	110.1	43.3	26.9
50°	222.5	162.7	78.4	22.2	17.6
52.5°	183.8	130.0	51.5	15.2	14.0
55°	146.3	100.7	29.3	11.7	11.7
57.5°	110.1	72.6	15.2	9.4	8.2
60°	77.3	48.0	9.4	7.0	5.9
62.5°	44.5	28.1	7.0	4.7	4.7
65°	17.6	12.9	4.7	2.3	2.3
67.5°	1.2	3.5	2.3	1.2	1.2
70°	0.0	0.0	1.2	1.2	1.2
72.5°	0.0	0.0	1.2	1.2	1.2
75°	0.0	0.0	0.0	0.0	1.2
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)