

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: P1057861

Luminaire Tested: S122RDR-S1005D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057861
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 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

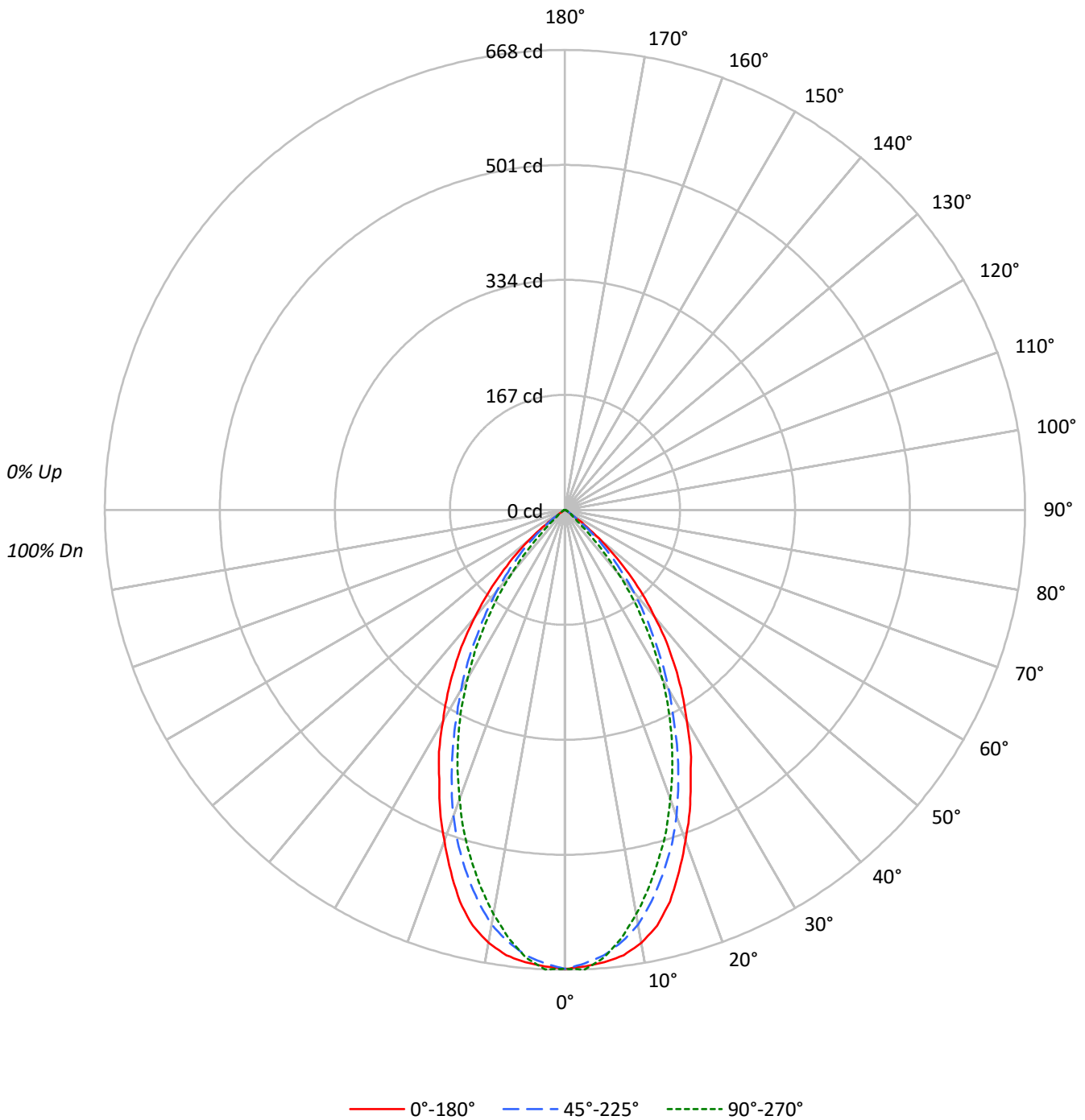
Lumens per Lamp: N/A
Luminaire Lumens: 626.9 lumens
Efficiency: N/A
Efficacy: 15.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1057861

CATALOG NUMBER: S122RDR-S1005D950-X4F0-XX-UDD-BVL-B

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	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12302	12302	12302
5°	12218	12034	12088
10°	11964	11462	11171
15°	11254	10474	10043
20°	10046	9300	8774
25°	8781	7863	7460
30°	7538	6426	6006
35°	6287	5017	4508
40°	4890	3700	2886
45°	3421	2463	1250
50°	1860	1295	445
55°	273	454	318
60°	52	103	207
65°	0	61	122
70°	0	0	76
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3421 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.2	9.8
10°-20°	154.4	24.6
20°-30°	179.9	28.7
30°-40°	144.2	23.0
40°-50°	71.6	11.4
50°-60°	14.1	2.3
60°-70°	1.2	0.2
70°-80°	0.1	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°	395.5	63.1
0°-40°	539.8	86.1
0°-60°	625.5	99.8
0°-90°	626.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	626.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	660	660	650	651	653	62
15°	589	578	548	534	526	164
25°	431	410	386	378	366	198
35°	279	251	223	213	200	174
45°	131	116	94	63	48	101
55°	8	17	14	8	10	17
65°	0	0	1	1	3	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	666.7	666.7	666.7	666.7	666.7
2.5°	663.8	666.7	659.6	666.7	668.1
5°	659.6	659.6	649.7	651.1	652.6
7.5°	652.6	649.7	632.8	630.0	627.2
10°	638.5	632.8	611.7	600.4	596.2
12.5°	618.7	610.3	582.1	569.4	562.4
15°	589.1	577.9	548.3	534.2	525.7
17.5°	551.1	541.2	513.0	497.5	489.1
20°	511.6	497.5	473.6	458.1	446.8
22.5°	473.6	455.2	429.9	418.6	407.3
25°	431.3	410.1	386.2	377.7	366.4
27.5°	396.0	369.3	341.1	335.4	325.6
30°	353.8	328.4	301.6	293.2	281.9
32.5°	317.1	288.9	262.2	252.3	242.4
35°	279.1	250.9	222.7	212.8	200.1
37.5°	242.4	215.6	187.5	171.9	160.7
40°	203.0	180.4	153.6	133.9	119.8
42.5°	167.7	148.0	122.6	97.2	83.2
45°	131.1	115.6	94.4	63.4	47.9
47.5°	97.2	86.0	69.1	36.6	25.4
50°	64.8	60.6	45.1	18.3	15.5
52.5°	35.2	38.1	26.8	11.3	12.7
55°	8.5	16.9	14.1	8.5	9.9
57.5°	1.4	2.8	7.0	7.0	7.0
60°	1.4	1.4	2.8	4.2	5.6
62.5°	1.4	0.0	1.4	2.8	4.2
65°	0.0	0.0	1.4	1.4	2.8
67.5°	0.0	0.0	0.0	1.4	1.4
70°	0.0	0.0	0.0	1.4	1.4
72.5°	0.0	0.0	0.0	0.0	1.4
75°	0.0	0.0	0.0	0.0	0.0
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)