

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: P1055169

Luminaire Tested: S122R3DR-S1005D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055169
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S1005D950-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

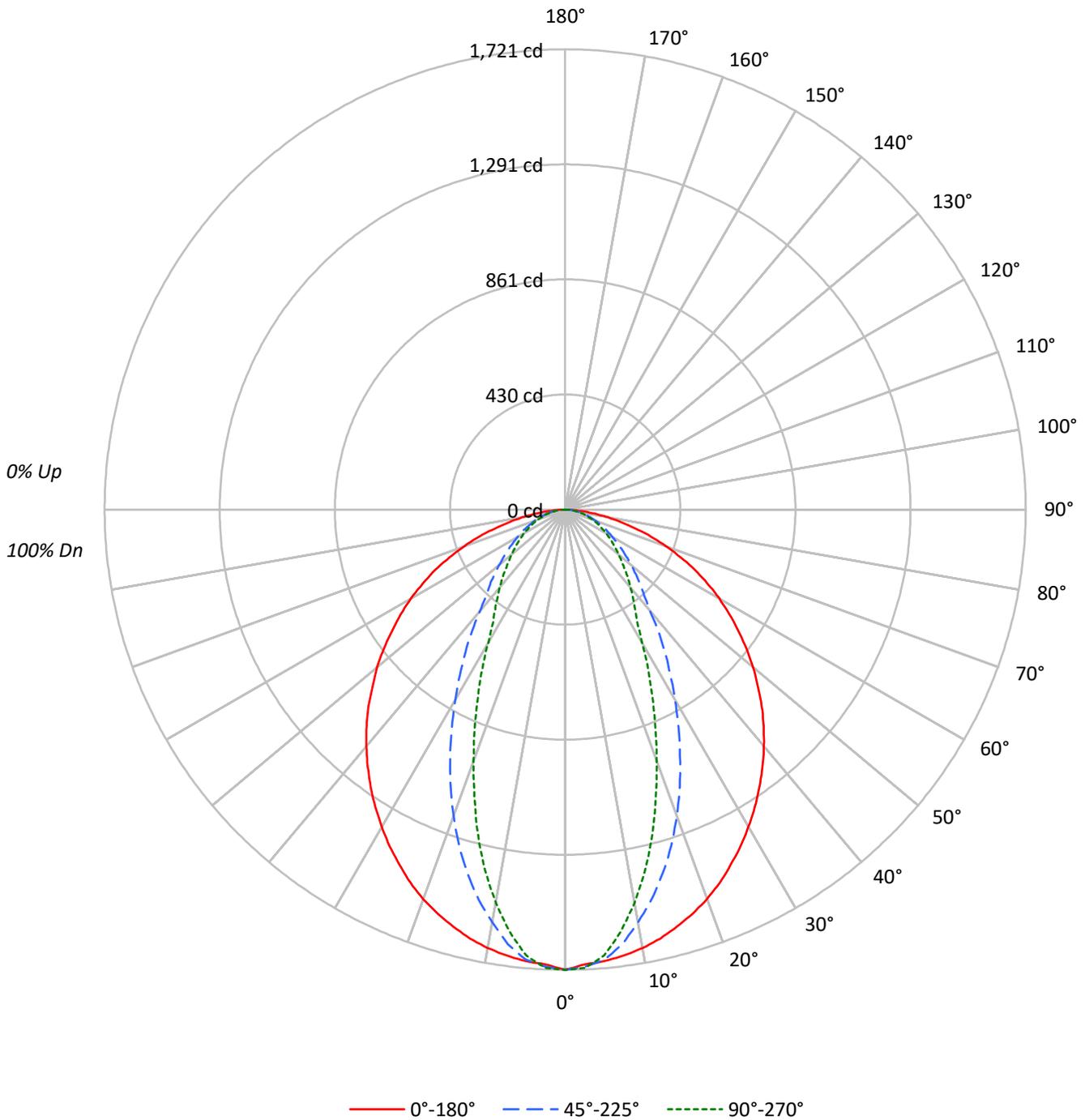
Lumens per Lamp: N/A
Luminaire Lumens: 2602.8 lumens
Efficiency: N/A
Efficacy: 62.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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: P1055169

CATALOG NUMBER: S122R3DR-S1005D950-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1055169

CATALOG NUMBER: S122R3DR-S1005D950-X4F0-XX-UDD-FLL-W

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				75
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				66
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				58
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				46
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				35
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32602	32602	32602
5°	32234	32124	31823
10°	32026	30142	28703
15°	31663	27629	24692
20°	31243	24569	20162
25°	30619	21235	16090
30°	29965	17941	12559
35°	29283	15008	10549
40°	28573	12171	9393
45°	27833	10640	8405
50°	27013	9414	7675
55°	26091	8506	7128
60°	25187	7741	6650
65°	23993	7097	6258
70°	22235	6614	5899
75°	19698	6002	5585
80°	16791	5652	5182
85°	11565	5000	4695

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 27833 cd/sqm



TEST NUMBER: P1055169

CATALOG NUMBER: S122R3DR-S1005D950-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.7	6.1
10°-20°	398.1	15.3
20°-30°	490.6	18.8
30°-40°	470.7	18.1
40°-50°	406.0	15.6
50°-60°	314.9	12.1
60°-70°	215.7	8.3
70°-80°	117.1	4.5
80°-90°	32.1	1.2
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°	1046.4	40.2
0°-40°	1517.0	58.3
0°-60°	2237.9	86.0
0°-90°	2602.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2602.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1721	1721	1721	1721	1721	
5°	1695	1719	1689	1668	1673	161
15°	1614	1565	1409	1294	1259	455
25°	1465	1308	1016	829	770	675
35°	1266	1004	649	483	456	792
45°	1039	699	397	328	314	801
55°	790	420	258	223	216	707
65°	535	229	158	144	140	528
75°	269	105	82	78	76	288
85°	53	26	23	23	22	68
90°	0	0	0	0	0	



TEST NUMBER: P1055169

CATALOG NUMBER: S122R3DR-S1005D950-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1720.8	1720.8	1720.8	1720.8	1720.8
2.5°	1702.1	1730.9	1710.7	1710.7	1715.0
5°	1694.9	1719.3	1689.1	1667.5	1673.3
7.5°	1681.9	1699.2	1638.8	1592.7	1591.3
10°	1664.7	1666.1	1566.8	1506.4	1492.0
12.5°	1643.1	1620.1	1493.5	1402.8	1381.2
15°	1614.3	1565.4	1408.6	1293.5	1258.9
17.5°	1584.1	1509.3	1317.9	1174.0	1126.6
20°	1549.6	1441.7	1218.6	1054.6	1000.0
22.5°	1510.7	1376.9	1119.4	939.5	882.0
25°	1464.7	1307.8	1015.8	828.7	769.7
27.5°	1420.1	1237.3	916.5	730.9	670.5
30°	1369.7	1161.1	820.1	637.4	574.1
32.5°	1319.4	1083.4	730.9	548.2	500.7
35°	1266.1	1004.3	648.9	483.4	456.1
37.5°	1211.5	926.6	571.2	440.3	415.8
40°	1155.3	848.9	492.1	398.5	379.8
42.5°	1097.8	772.6	437.4	364.0	346.7
45°	1038.8	699.2	397.1	328.0	313.7
47.5°	975.5	625.9	358.3	297.8	284.9
50°	916.5	555.4	319.4	270.5	260.4
52.5°	853.2	486.3	287.8	246.0	237.4
55°	789.9	420.1	257.5	223.0	215.8
57.5°	728.0	356.8	228.8	201.4	195.7
60°	664.7	306.5	204.3	181.3	175.5
62.5°	600.0	266.2	181.3	162.6	156.8
65°	535.2	228.8	158.3	143.9	139.6
67.5°	467.6	192.8	138.1	126.6	123.7
70°	401.4	161.1	119.4	109.3	106.5
72.5°	336.7	130.9	100.7	93.5	90.6
75°	269.1	105.0	82.0	77.7	76.3
77.5°	210.1	82.0	66.2	63.3	61.9
80°	153.9	60.4	51.8	48.9	47.5
82.5°	102.2	41.7	37.4	36.0	34.5
85°	53.2	25.9	23.0	23.0	21.6
87.5°	17.3	11.5	11.5	11.5	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)