

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: P1055167

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055167
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)
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-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

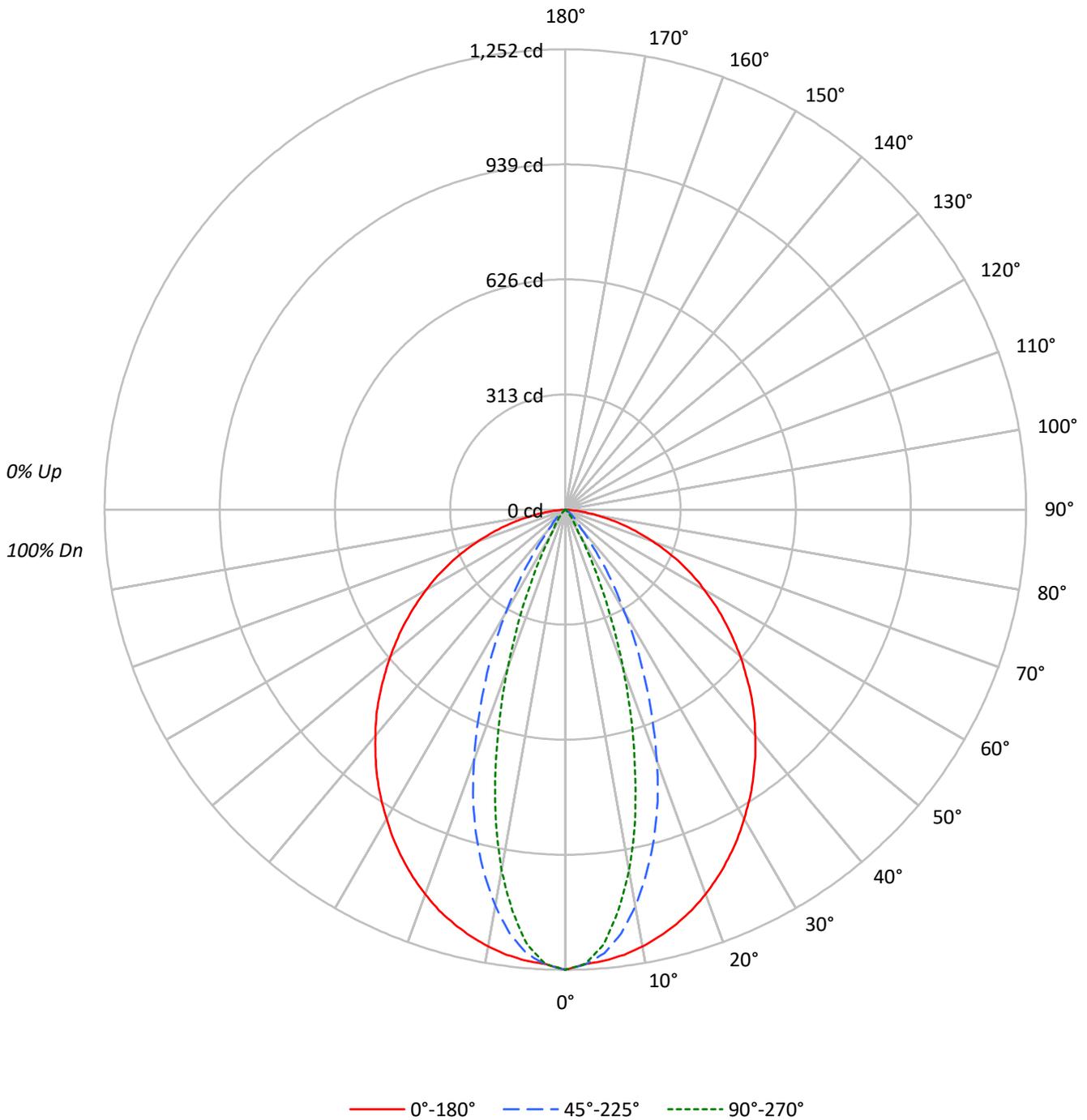
Lumens per Lamp: N/A
Luminaire Lumens: 1138.8 lumens
Efficiency: N/A
Efficacy: 27.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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: P1055167

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

Luminous Intensity Polar Plot





TEST NUMBER: P1055167

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

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	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81				81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61				61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	56				56
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52				52
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49				49
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45				45
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43				43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23715	23715	23715
5°	23423	23041	22601
10°	23222	21064	19182
15°	22888	18231	14363
20°	22452	14650	9196
25°	21895	10737	4722
30°	21247	7018	1542
35°	20598	3893	897
40°	19855	1566	497
45°	19120	1040	193
50°	18277	592	85
55°	17440	284	46
60°	16521	110	0
65°	15542	63	0
70°	13948	78	0
75°	12005	102	0
80°	9099	0	0
85°	3761	304	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19120 cd/sqm



TEST NUMBER: P1055167

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.2	9.9
10°-20°	260.7	22.9
20°-30°	264.7	23.2
30°-40°	198.6	17.4
40°-50°	139.1	12.2
50°-60°	85.1	7.5
60°-70°	50.7	4.5
70°-80°	23.4	2.1
80°-90°	4.2	0.4
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°	637.7	56.0
0°-40°	836.3	73.4
0°-60°	1060.5	93.1
0°-90°	1138.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1138.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1252	1252	1252	1252	1252	
5°	1232	1243	1212	1188	1188	117
15°	1167	1104	930	787	732	329
25°	1047	863	514	294	226	482
35°	891	580	168	50	39	557
45°	714	306	39	12	7	550
55°	528	94	9	3	1	472
65°	347	27	1	1	0	342
75°	164	3	1	1	0	174
85°	17	0	1	1	0	29
90°	0	0	0	0	0	



TEST NUMBER: P1055167

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1251.7	1251.7	1251.7	1251.7	1251.7
2.5°	1237.4	1256.1	1238.8	1235.9	1237.4
5°	1231.6	1243.1	1211.5	1188.4	1188.4
7.5°	1221.5	1221.5	1162.5	1115.1	1100.7
10°	1207.1	1191.3	1094.9	1018.7	997.1
12.5°	1188.4	1151.0	1015.8	907.9	873.3
15°	1166.9	1103.5	929.5	787.0	732.3
17.5°	1142.4	1050.3	833.1	656.1	592.8
20°	1113.6	992.8	726.6	522.3	456.1
22.5°	1082.0	929.5	618.7	402.9	332.4
25°	1047.4	863.3	513.6	293.5	225.9
27.5°	1011.5	794.2	417.2	201.4	138.1
30°	971.2	722.3	320.8	119.4	70.5
32.5°	932.3	653.2	240.3	64.7	51.8
35°	890.6	579.8	168.3	50.4	38.8
37.5°	847.4	510.8	103.6	37.4	28.8
40°	802.8	440.3	63.3	27.3	20.1
42.5°	759.7	374.1	50.4	18.7	12.9
45°	713.6	306.5	38.8	11.5	7.2
47.5°	666.2	244.6	28.8	7.2	4.3
50°	620.1	189.9	20.1	4.3	2.9
52.5°	574.1	139.6	12.9	2.9	1.4
55°	528.0	93.5	8.6	2.9	1.4
57.5°	482.0	66.2	5.8	1.4	1.4
60°	436.0	51.8	2.9	1.4	0.0
62.5°	392.8	40.3	2.9	1.4	1.4
65°	346.7	27.3	1.4	1.4	0.0
67.5°	297.8	17.3	1.4	1.4	0.0
70°	251.8	10.1	1.4	1.4	0.0
72.5°	207.2	5.8	1.4	1.4	0.0
75°	164.0	2.9	1.4	1.4	0.0
77.5°	122.3	1.4	0.0	1.4	0.0
80°	83.4	0.0	0.0	1.4	0.0
82.5°	48.9	0.0	0.0	1.4	0.0
85°	17.3	0.0	1.4	1.4	0.0
87.5°	0.0	0.0	1.4	1.4	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)