

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: P1055159

Luminaire Tested: S122R3DR-S1005D930-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055159
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S1005D930-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

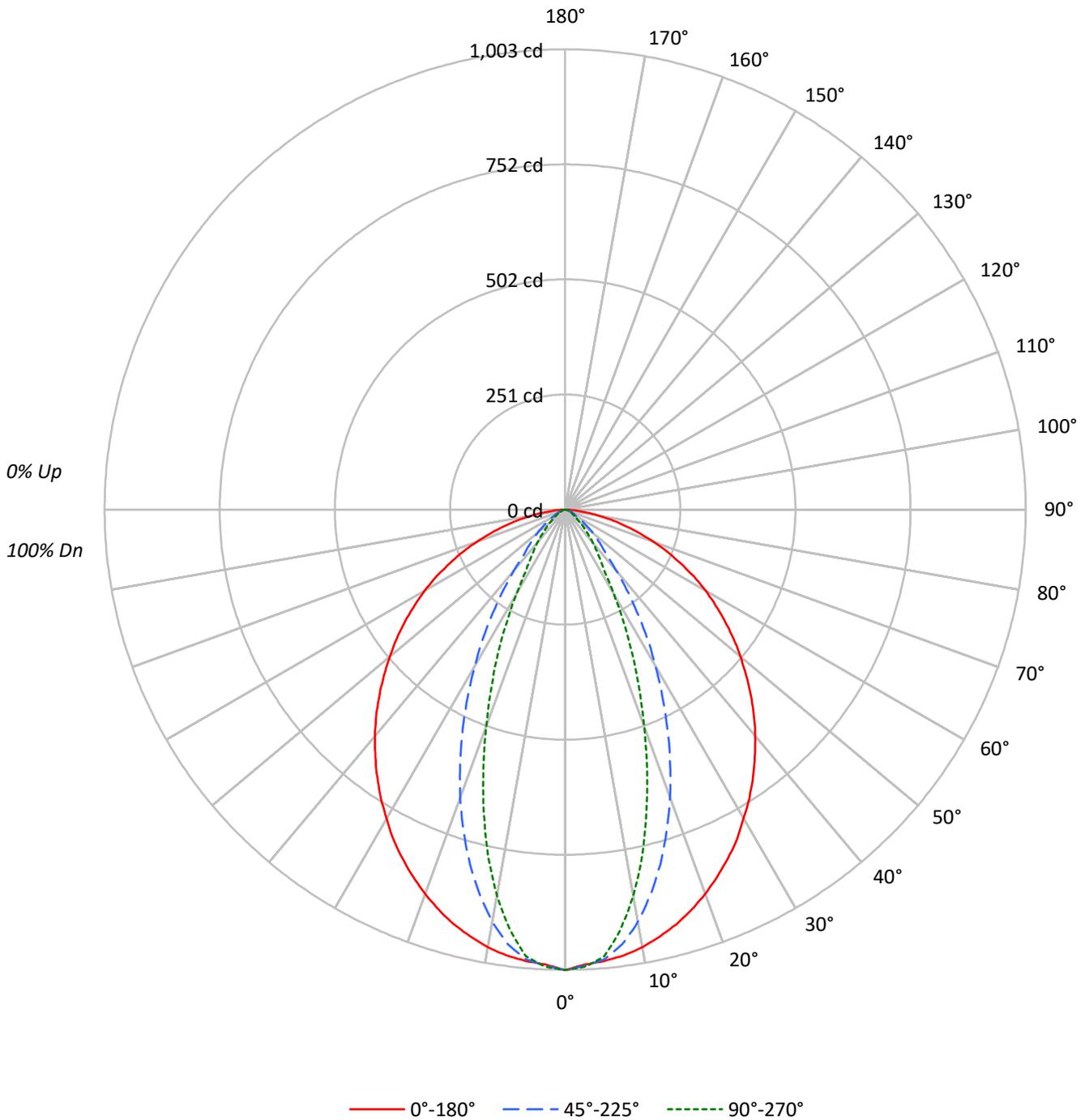
Lumens per Lamp: N/A
Luminaire Lumens: 1149.8 lumens
Efficiency: N/A
Efficacy: 27.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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: P1055159

CATALOG NUMBER: S122R3DR-S1005D930-X4F0-XX-UDD-FLL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1055159

CATALOG NUMBER: S122R3DR-S1005D930-X4F0-XX-UDD-FLL-S

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	100	102	99	97	98	96	94	94	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71			71	
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64			64	
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			58	
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45			45	
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42			42	
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19008	19008	19008
5°	18779	18708	18590
10°	18640	17553	16441
15°	18353	15701	13410
20°	17974	13462	10115
25°	17530	11027	7222
30°	17000	8609	4601
35°	16495	6314	3071
40°	15935	4256	2310
45°	15321	2998	1648
50°	14678	2284	1158
55°	14051	1585	852
60°	13372	1072	697
65°	12404	771	551
70°	11306	615	476
75°	9809	542	359
80°	7779	404	404
85°	4282	543	261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15321 cd/sqm



TEST NUMBER: P1055159

CATALOG NUMBER: S122R3DR-S1005D930-X4F0-XX-UDD-FLL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.7	8.0
10°-20°	225.2	19.6
20°-30°	257.2	22.4
30°-40°	218.1	19.0
40°-50°	162.7	14.2
50°-60°	105.2	9.1
60°-70°	58.6	5.1
70°-80°	25.7	2.2
80°-90°	5.3	0.5
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°	574.1	49.9
0°-40°	792.2	68.9
0°-60°	1060.1	92.2
0°-90°	1149.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1149.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1003	1003	1003	1003	1003	
5°	987	1000	984	974	978	94
15°	936	912	800	716	684	263
25°	839	740	528	386	346	386
35°	713	537	273	149	133	446
45°	572	339	112	72	62	441
55°	425	161	48	30	26	380
65°	277	59	17	14	12	275
75°	134	12	7	6	5	143
85°	20	1	2	1	1	28
90°	0	0	0	0	0	



TEST NUMBER: P1055159

CATALOG NUMBER: S122R3DR-S1005D930-X4F0-XX-UDD-FLL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1003.3	1003.3	1003.3	1003.3	1003.3
2.5°	992.3	1007.0	994.7	994.7	997.2
5°	987.4	999.7	983.7	973.8	977.5
7.5°	980.0	988.6	955.4	925.9	923.4
10°	968.9	972.6	912.4	866.9	854.6
12.5°	952.9	944.3	859.5	795.5	774.6
15°	935.7	912.4	800.5	715.6	683.7
17.5°	914.8	873.0	735.3	632.0	592.7
20°	891.5	832.4	667.7	544.7	501.7
22.5°	865.6	786.9	597.6	462.3	419.3
25°	838.6	740.2	527.5	386.1	345.5
27.5°	810.3	691.0	458.6	317.2	273.0
30°	777.1	640.6	393.5	250.8	210.3
32.5°	746.4	587.7	333.2	194.3	159.8
35°	713.2	537.3	273.0	148.8	132.8
37.5°	678.7	486.9	220.1	125.4	111.9
40°	644.3	436.5	172.1	105.7	93.4
42.5°	608.6	387.3	132.8	88.5	76.2
45°	571.8	339.4	111.9	72.5	61.5
47.5°	534.9	291.4	93.4	57.8	49.2
50°	498.0	245.9	77.5	45.5	39.3
52.5°	462.3	202.9	61.5	36.9	32.0
55°	425.4	161.1	48.0	29.5	25.8
57.5°	388.6	125.4	36.9	24.6	22.1
60°	352.9	94.7	28.3	19.7	18.4
62.5°	316.0	76.2	22.1	16.0	14.8
65°	276.7	59.0	17.2	13.5	12.3
67.5°	241.0	43.0	13.5	11.1	9.8
70°	204.1	29.5	11.1	9.8	8.6
72.5°	168.5	18.4	8.6	7.4	7.4
75°	134.0	12.3	7.4	6.1	4.9
77.5°	102.1	7.4	4.9	4.9	3.7
80°	71.3	4.9	3.7	3.7	3.7
82.5°	44.3	3.7	2.5	2.5	2.5
85°	19.7	1.2	2.5	1.2	1.2
87.5°	3.7	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)