

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: P1055246

Luminaire Tested: S122R3DR-S675D940-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055246
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-S675D940-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

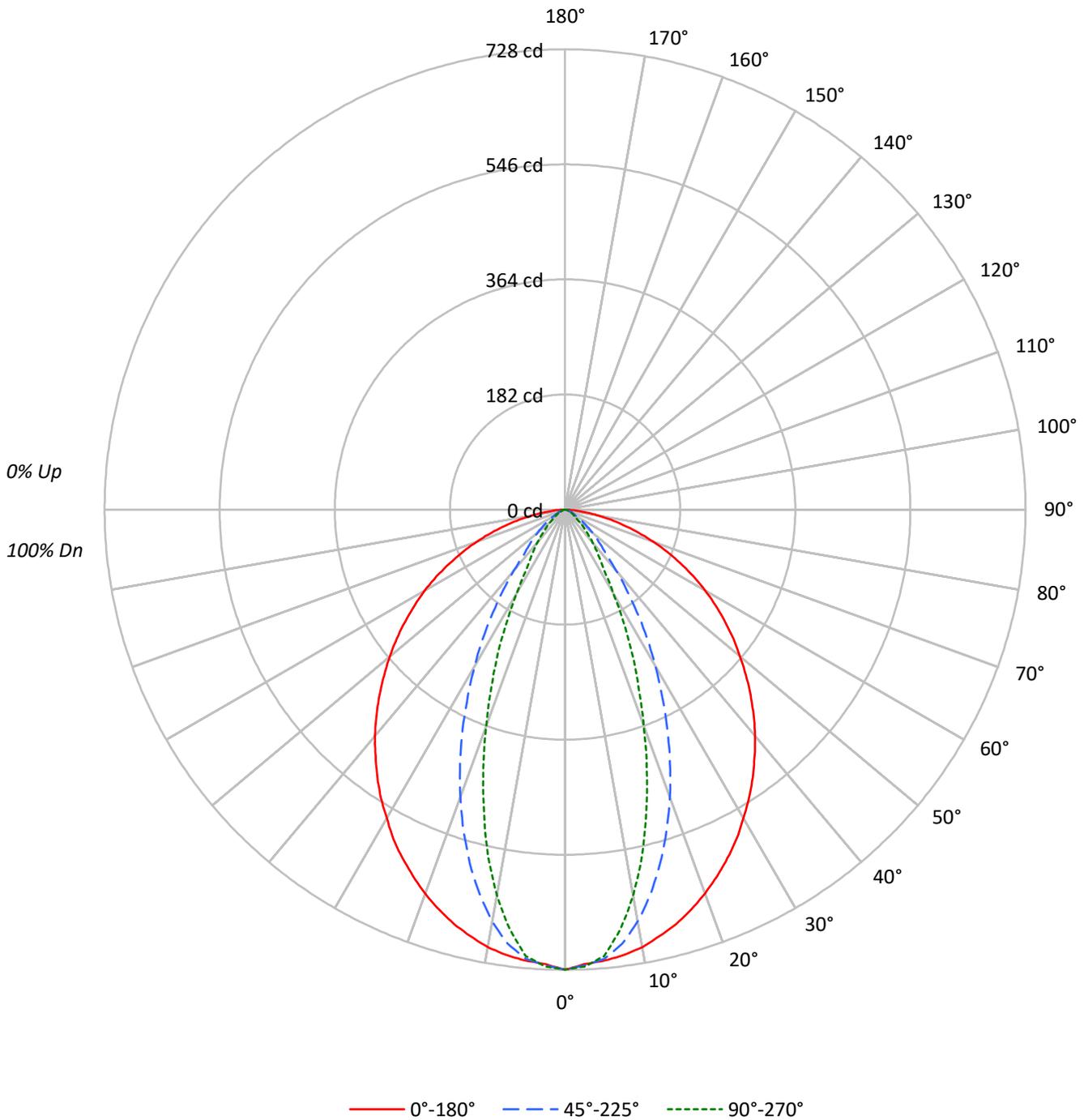
Lumens per Lamp: N/A
Luminaire Lumens: 833.9 lumens
Efficiency: N/A
Efficacy: 31.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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: P1055246

CATALOG NUMBER: S122R3DR-S675D940-X4F0-XX-UDD-FLL-S

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13785	13785	13785
5°	13617	13568	13482
10°	13519	12728	11922
15°	13310	11386	9725
20°	13035	9762	7335
25°	12712	7996	5239
30°	12330	6241	3336
35°	11962	4579	2227
40°	11557	3087	1677
45°	11109	2173	1195
50°	10643	1656	840
55°	10190	1149	618
60°	9696	777	508
65°	8993	560	399
70°	8198	443	343
75°	7115	395	264
80°	5641	295	295
85°	3109	391	196

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11109 cd/sqm



TEST NUMBER: P1055246

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	8.0
10°-20°	163.3	19.6
20°-30°	186.5	22.4
30°-40°	158.2	19.0
40°-50°	118.0	14.2
50°-60°	76.3	9.1
60°-70°	42.5	5.1
70°-80°	18.7	2.2
80°-90°	3.9	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°	416.3	49.9
0°-40°	574.5	68.9
0°-60°	768.8	92.2
0°-90°	833.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	833.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	728	728	728	728	728	
5°	716	725	713	706	709	68
15°	679	662	580	519	496	191
25°	608	537	382	280	251	280
35°	517	390	198	108	96	323
45°	415	246	81	53	45	320
55°	308	117	35	21	19	276
65°	201	43	12	10	9	199
75°	97	9	5	4	4	104
85°	14	1	2	1	1	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	727.6	727.6	727.6	727.6	727.6
2.5°	719.6	730.3	721.4	721.4	723.2
5°	716.0	725.0	713.4	706.2	708.9
7.5°	710.7	716.9	692.9	671.5	669.7
10°	702.7	705.3	661.6	628.7	619.7
12.5°	691.1	684.8	623.3	576.9	561.8
15°	678.6	661.6	580.5	519.0	495.8
17.5°	663.4	633.1	533.2	458.3	429.8
20°	646.5	603.7	484.2	395.0	363.8
22.5°	627.8	570.7	433.4	335.3	304.1
25°	608.1	536.8	382.5	280.0	250.6
27.5°	587.6	501.1	332.6	230.1	198.0
30°	563.6	464.6	285.3	181.9	152.5
32.5°	541.3	426.2	241.7	140.9	115.9
35°	517.2	389.7	198.0	107.9	96.3
37.5°	492.2	353.1	159.6	91.0	81.1
40°	467.3	316.6	124.8	76.7	67.8
42.5°	441.4	280.9	96.3	64.2	55.3
45°	414.6	246.1	81.1	52.6	44.6
47.5°	387.9	211.3	67.8	41.9	35.7
50°	361.1	178.3	56.2	33.0	28.5
52.5°	335.3	147.1	44.6	26.8	23.2
55°	308.5	116.8	34.8	21.4	18.7
57.5°	281.8	91.0	26.8	17.8	16.1
60°	255.9	68.7	20.5	14.3	13.4
62.5°	229.2	55.3	16.1	11.6	10.7
65°	200.6	42.8	12.5	9.8	8.9
67.5°	174.8	31.2	9.8	8.0	7.1
70°	148.0	21.4	8.0	7.1	6.2
72.5°	122.2	13.4	6.2	5.4	5.4
75°	97.2	8.9	5.4	4.5	3.6
77.5°	74.0	5.4	3.6	3.6	2.7
80°	51.7	3.6	2.7	2.7	2.7
82.5°	32.1	2.7	1.8	1.8	1.8
85°	14.3	0.9	1.8	0.9	0.9
87.5°	2.7	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)