

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: P1055225

Luminaire Tested: S122R3DR-S675D830-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055225
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-S675D830-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, 80 CRI LEDS
Ballast/Driver: -

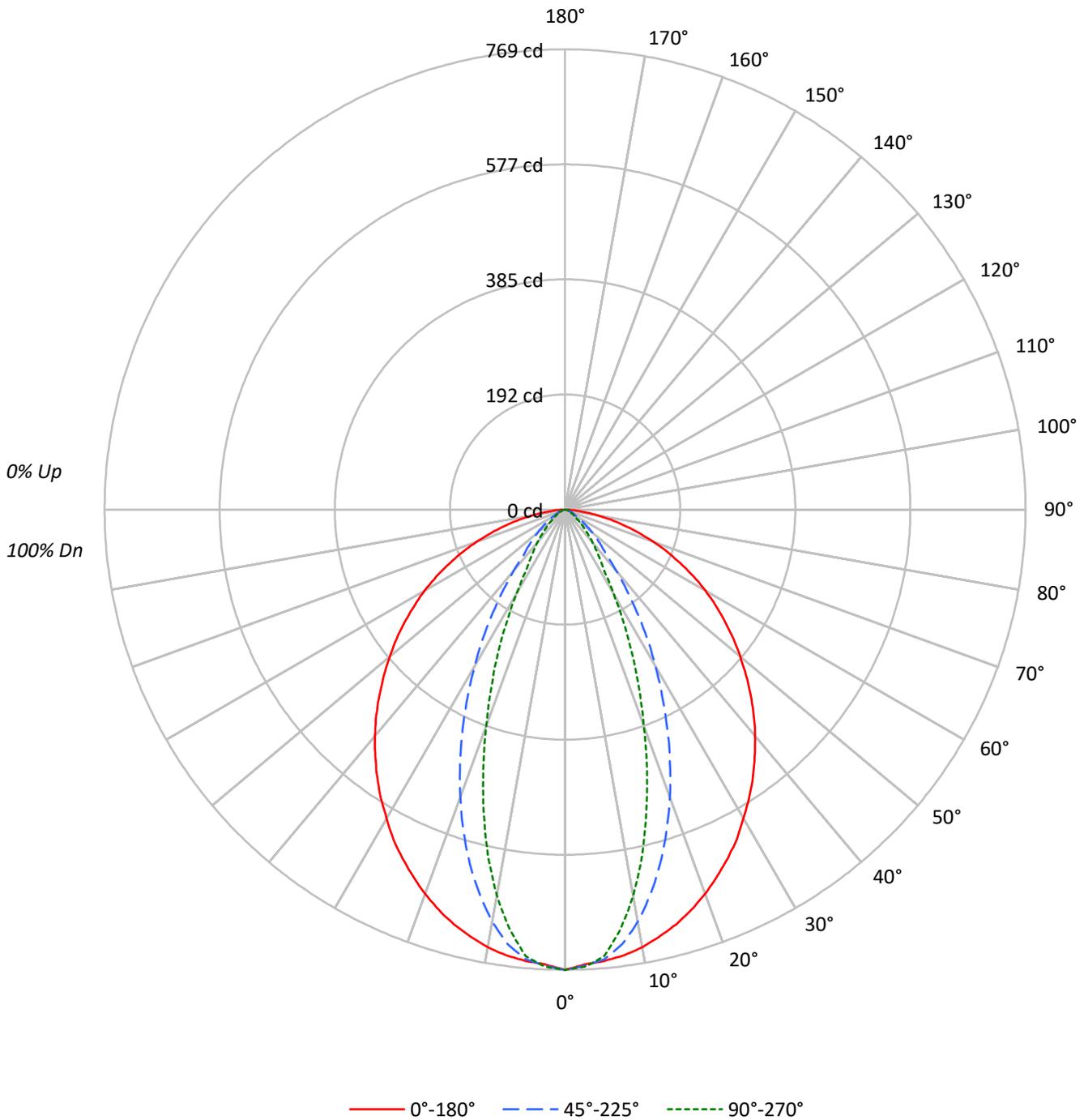
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 881.4 lumens
Efficiency: N/A
Efficacy: 33.4 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): 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

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Luminous Intensity Polar Plot





TEST NUMBER: P105225

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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	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°	14571	14571	14571
5°	14395	14340	14250
10°	14288	13455	12603
15°	14069	12035	10280
20°	13777	10319	7754
25°	13437	8454	5538
30°	13032	6598	3527
35°	12644	4839	2354
40°	12215	3265	1771
45°	11744	2299	1262
50°	11250	1751	890
55°	10771	1216	654
60°	10250	822	534
65°	9508	592	421
70°	8669	471	366
75°	7518	417	278
80°	5968	305	305
85°	3282	413	196

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11744 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.3	8.0
10°-20°	172.6	19.6
20°-30°	197.2	22.4
30°-40°	167.2	19.0
40°-50°	124.8	14.2
50°-60°	80.6	9.1
60°-70°	45.0	5.1
70°-80°	19.7	2.2
80°-90°	4.1	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°	440.1	49.9
0°-40°	607.3	68.9
0°-60°	812.7	92.2
0°-90°	881.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	881.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	757	766	754	746	749	72
15°	717	699	614	549	524	202
25°	643	567	404	296	265	296
35°	547	412	209	114	102	342
45°	438	260	86	56	47	338
55°	326	124	37	23	20	292
65°	212	45	13	10	9	211
75°	103	9	6	5	4	110
85°	15	1	2	1	1	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	769.1	769.1	769.1	769.1	769.1
2.5°	760.6	771.9	762.5	762.5	764.4
5°	756.9	766.3	754.0	746.5	749.3
7.5°	751.2	757.8	732.4	709.7	707.8
10°	742.7	745.6	699.4	664.5	655.1
12.5°	730.5	723.9	658.8	609.8	593.8
15°	717.3	699.4	613.6	548.6	524.1
17.5°	701.3	669.2	563.6	484.5	454.3
20°	683.3	638.1	511.8	417.5	384.6
22.5°	663.5	603.2	458.1	354.4	321.4
25°	642.8	567.4	404.4	296.0	264.9
27.5°	621.1	529.7	351.6	243.2	209.2
30°	595.7	491.1	301.6	192.3	161.2
32.5°	572.1	450.5	255.4	148.9	122.5
35°	546.7	411.9	209.2	114.0	101.8
37.5°	520.3	373.2	168.7	96.1	85.8
40°	493.9	334.6	132.0	81.1	71.6
42.5°	466.6	296.9	101.8	67.9	58.4
45°	438.3	260.1	85.8	55.6	47.1
47.5°	410.0	223.4	71.6	44.3	37.7
50°	381.7	188.5	59.4	34.9	30.2
52.5°	354.4	155.5	47.1	28.3	24.5
55°	326.1	123.5	36.8	22.6	19.8
57.5°	297.8	96.1	28.3	18.9	17.0
60°	270.5	72.6	21.7	15.1	14.1
62.5°	242.2	58.4	17.0	12.3	11.3
65°	212.1	45.2	13.2	10.4	9.4
67.5°	184.7	33.0	10.4	8.5	7.5
70°	156.5	22.6	8.5	7.5	6.6
72.5°	129.1	14.1	6.6	5.7	5.7
75°	102.7	9.4	5.7	4.7	3.8
77.5°	78.2	5.7	3.8	3.8	2.8
80°	54.7	3.8	2.8	2.8	2.8
82.5°	33.9	2.8	1.9	1.9	1.9
85°	15.1	0.9	1.9	0.9	0.9
87.5°	2.8	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)