

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: P1055270

Luminaire Tested: S122R3DR-S865D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055270
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-S865D935-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

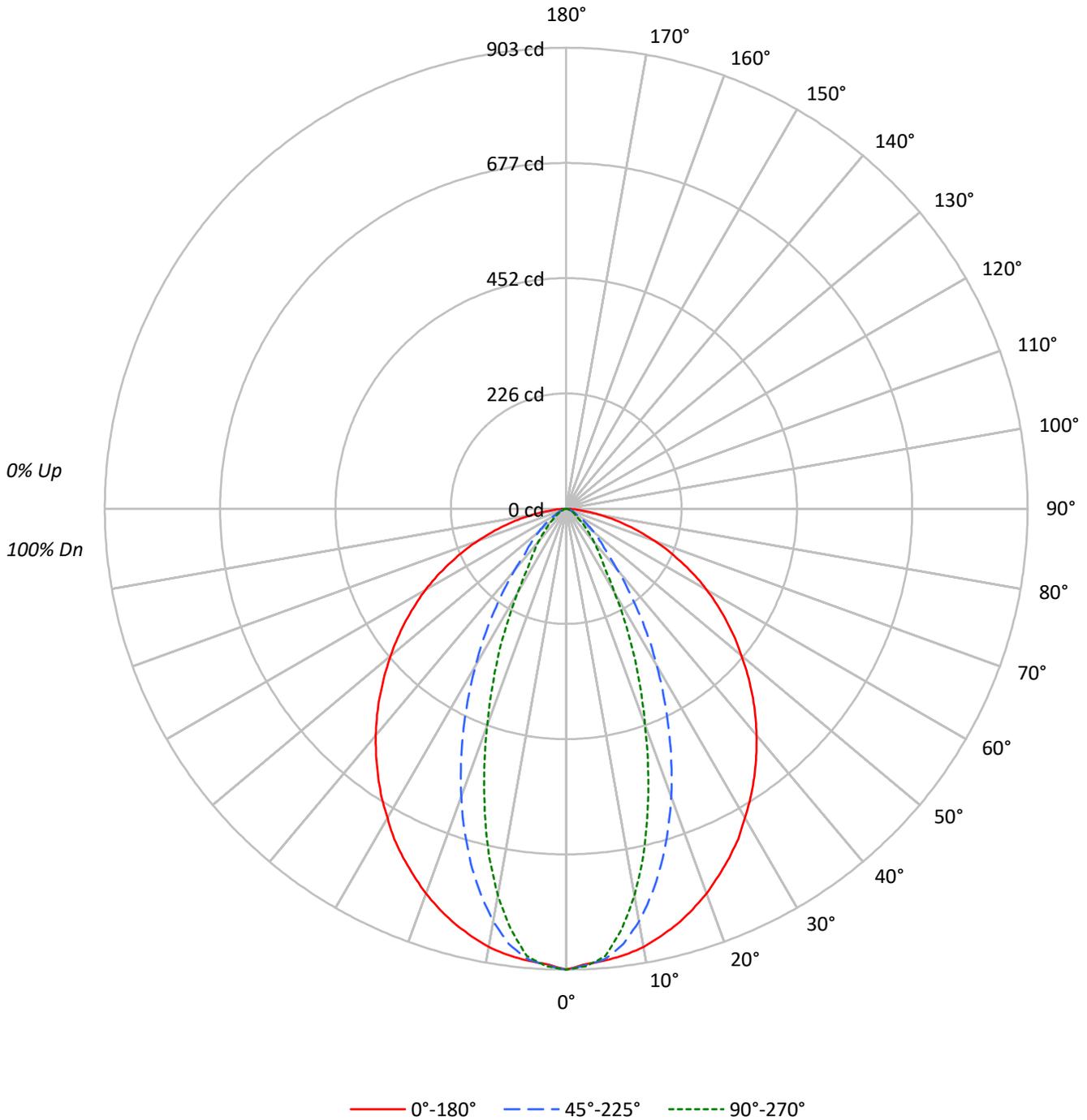
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1034.7 lumens
Efficiency: N/A
Efficacy: 29.8 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): 34.7
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





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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°	17106	17106	17106
5°	16898	16835	16728
10°	16774	15794	14794
15°	16515	14128	12067
20°	16174	12113	9101
25°	15774	9923	6499
30°	15298	7747	4139
35°	14842	5680	2764
40°	14340	3831	2080
45°	13785	2698	1482
50°	13208	2054	1043
55°	12644	1427	766
60°	12031	962	629
65°	11158	695	498
70°	10176	554	427
75°	8828	483	322
80°	7005	360	360
85°	3848	478	239

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13785 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	8.0
10°-20°	202.6	19.6
20°-30°	231.4	22.4
30°-40°	196.3	19.0
40°-50°	146.5	14.2
50°-60°	94.6	9.1
60°-70°	52.8	5.1
70°-80°	23.2	2.2
80°-90°	4.8	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°	516.6	49.9
0°-40°	712.9	68.9
0°-60°	954.0	92.2
0°-90°	1034.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1034.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	903	903	903	903	903	
5°	888	900	885	876	880	84
15°	842	821	720	644	615	237
25°	755	666	475	347	311	347
35°	642	484	246	134	120	401
45°	514	305	101	65	55	397
55°	383	145	43	27	23	342
65°	249	53	16	12	11	248
75°	121	11	7	6	4	129
85°	18	1	2	1	1	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	902.9	902.9	902.9	902.9	902.9
2.5°	892.9	906.2	895.1	895.1	897.3
5°	888.5	899.5	885.2	876.3	879.6
7.5°	881.8	889.6	859.7	833.1	830.9
10°	871.9	875.2	821.0	780.0	769.0
12.5°	857.5	849.7	773.4	715.9	697.1
15°	842.0	821.0	720.3	643.9	615.2
17.5°	823.2	785.6	661.6	568.7	533.3
20°	802.2	749.1	600.8	490.2	451.4
22.5°	778.9	708.1	537.7	416.0	377.3
25°	754.6	666.1	474.7	347.4	310.9
27.5°	729.1	621.8	412.7	285.5	245.6
30°	699.3	576.5	354.1	225.7	189.2
32.5°	671.6	528.9	299.8	174.8	143.8
35°	641.7	483.5	245.6	133.9	119.5
37.5°	610.8	438.1	198.1	112.9	100.7
40°	579.8	392.8	154.9	95.2	84.1
42.5°	547.7	348.5	119.5	79.7	68.6
45°	514.5	305.4	100.7	65.3	55.3
47.5°	481.3	262.2	84.1	52.0	44.3
50°	448.1	221.3	69.7	40.9	35.4
52.5°	416.0	182.6	55.3	33.2	28.8
55°	382.8	144.9	43.2	26.6	23.2
57.5°	349.6	112.9	33.2	22.1	19.9
60°	317.5	85.2	25.4	17.7	16.6
62.5°	284.4	68.6	19.9	14.4	13.3
65°	248.9	53.1	15.5	12.2	11.1
67.5°	216.9	38.7	12.2	10.0	8.9
70°	183.7	26.6	10.0	8.9	7.7
72.5°	151.6	16.6	7.7	6.6	6.6
75°	120.6	11.1	6.6	5.5	4.4
77.5°	91.8	6.6	4.4	4.4	3.3
80°	64.2	4.4	3.3	3.3	3.3
82.5°	39.8	3.3	2.2	2.2	2.2
85°	17.7	1.1	2.2	1.1	1.1
87.5°	3.3	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)