

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: P1055276

Luminaire Tested: S122R3DR-S865D950-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055276
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-S865D950-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

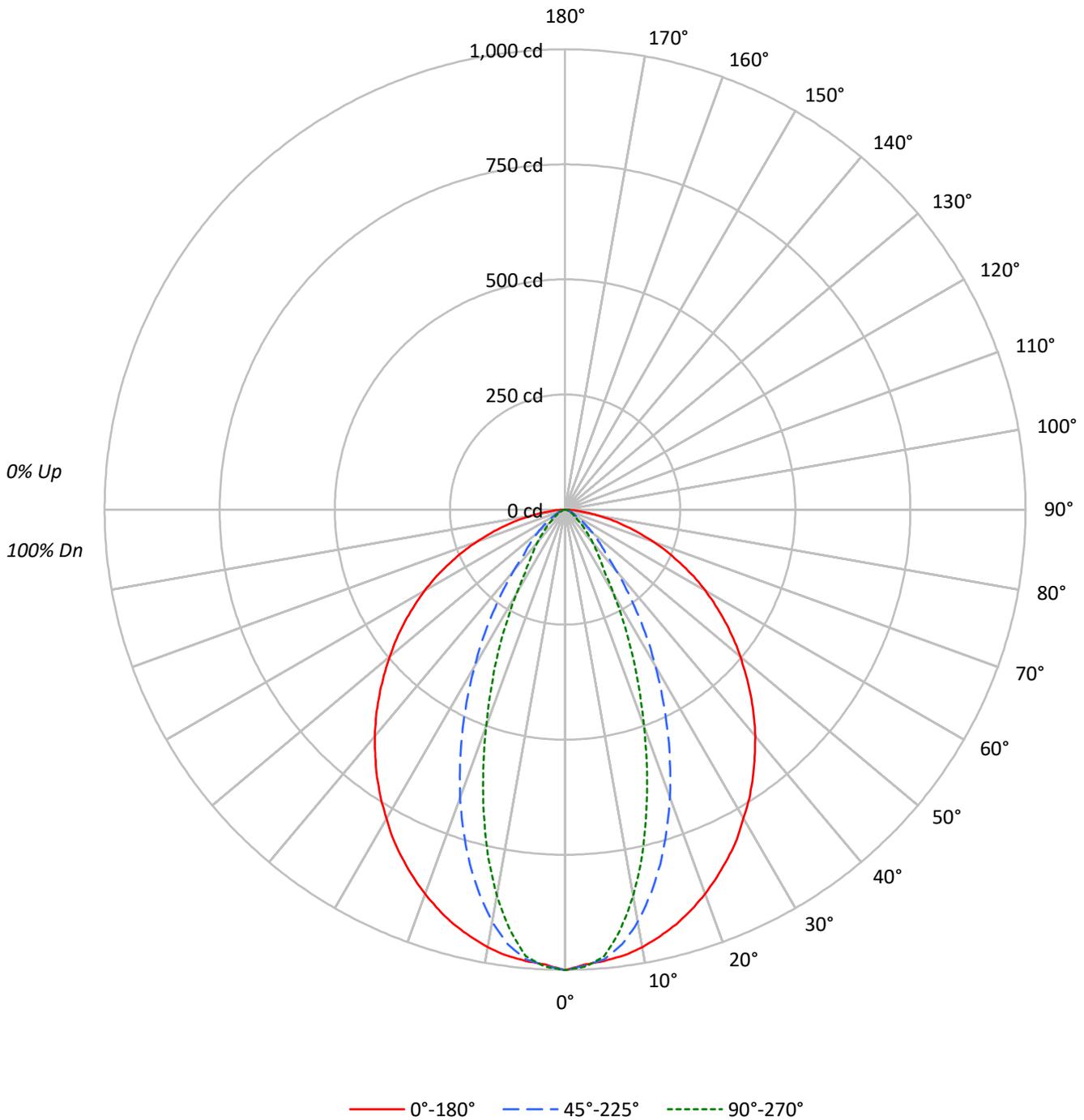
Lumens per Lamp: N/A
Luminaire Lumens: 1146.5 lumens
Efficiency: N/A
Efficacy: 33.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	18953	18953	18953
5°	18722	18653	18535
10°	18584	17501	16391
15°	18298	15654	13369
20°	17920	13422	10085
25°	17478	10994	7202
30°	16950	8582	4585
35°	16447	6296	3062
40°	15888	4244	2305
45°	15275	2990	1642
50°	14634	2275	1155
55°	14012	1579	849
60°	13330	1069	697
65°	12364	771	551
70°	11273	609	476
75°	9780	542	359
80°	7757	404	404
85°	4261	543	261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15275 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	8.0
10°-20°	224.5	19.6
20°-30°	256.4	22.4
30°-40°	217.5	19.0
40°-50°	162.3	14.2
50°-60°	104.9	9.1
60°-70°	58.5	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°	572.4	49.9
0°-40°	789.9	68.9
0°-60°	1057.0	92.2
0°-90°	1146.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1146.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1000	1000	1000	1000	1000	
5°	984	997	981	971	975	93
15°	933	910	798	714	682	263
25°	836	738	526	385	344	385
35°	711	536	272	148	132	444
45°	570	338	112	72	61	440
55°	424	161	48	29	26	379
65°	276	59	17	14	12	274
75°	134	12	7	6	5	142
85°	20	1	2	1	1	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1000.4	1000.4	1000.4	1000.4	1000.4
2.5°	989.3	1004.1	991.8	991.8	994.2
5°	984.4	996.7	980.8	971.0	974.6
7.5°	977.1	985.7	952.6	923.1	920.7
10°	966.0	969.7	909.7	864.3	852.0
12.5°	950.1	941.5	856.9	793.2	772.3
15°	932.9	909.7	798.1	713.5	681.6
17.5°	912.1	870.4	733.1	630.1	590.9
20°	888.8	830.0	665.7	543.1	500.2
22.5°	863.1	784.6	595.8	461.0	418.0
25°	836.1	738.0	525.9	384.9	344.5
27.5°	807.9	689.0	457.3	316.3	272.2
30°	774.8	638.7	392.3	250.1	209.6
32.5°	744.2	586.0	332.2	193.7	159.4
35°	711.1	535.7	272.2	148.3	132.4
37.5°	676.7	485.5	219.4	125.0	111.6
40°	642.4	435.2	171.6	105.4	93.2
42.5°	606.8	386.2	132.4	88.3	76.0
45°	570.1	338.4	111.6	72.3	61.3
47.5°	533.3	290.6	93.2	57.6	49.0
50°	496.5	245.2	77.2	45.4	39.2
52.5°	461.0	202.3	61.3	36.8	31.9
55°	424.2	160.6	47.8	29.4	25.7
57.5°	387.4	125.0	36.8	24.5	22.1
60°	351.8	94.4	28.2	19.6	18.4
62.5°	315.1	76.0	22.1	15.9	14.7
65°	275.8	58.8	17.2	13.5	12.3
67.5°	240.3	42.9	13.5	11.0	9.8
70°	203.5	29.4	11.0	9.8	8.6
72.5°	168.0	18.4	8.6	7.4	7.4
75°	133.6	12.3	7.4	6.1	4.9
77.5°	101.8	7.4	4.9	4.9	3.7
80°	71.1	4.9	3.7	3.7	3.7
82.5°	44.1	3.7	2.5	2.5	2.5
85°	19.6	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)