

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: P1055263

Luminaire Tested: S122R3DR-S865D927-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055263
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S865D927-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

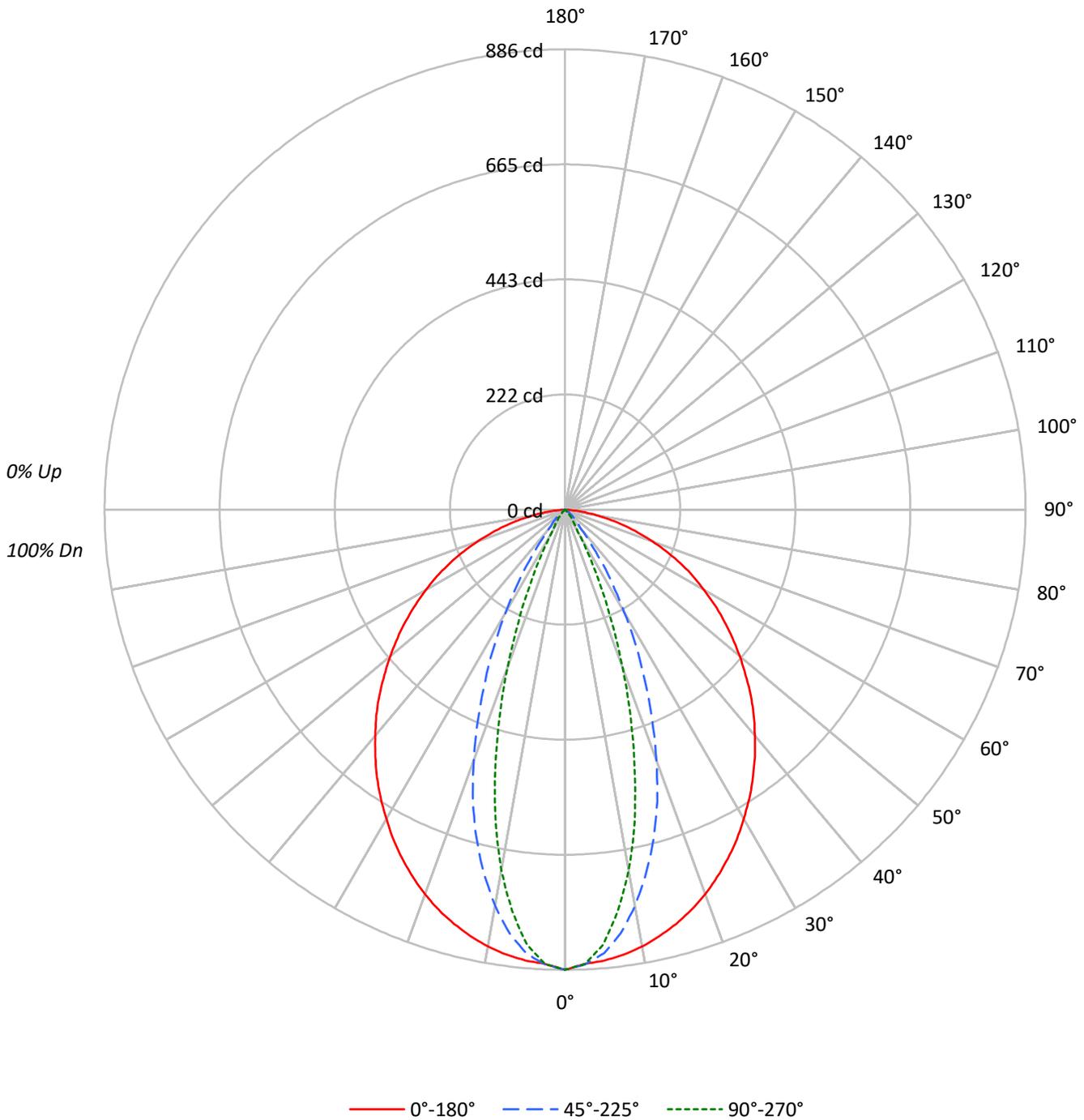
Lumens per Lamp: N/A
Luminaire Lumens: 805.7 lumens
Efficiency: N/A
Efficacy: 23.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	56
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16780	16780	16780
5°	16572	16302	15992
10°	16431	14904	13572
15°	16193	12898	10164
20°	15885	10365	6506
25°	15492	7597	3341
30°	15034	4966	1092
35°	14573	2755	636
40°	14048	1108	354
45°	13528	737	137
50°	12933	421	59
55°	12340	201	33
60°	11690	76	0
65°	10997	45	0
70°	9871	55	0
75°	8499	73	0
80°	6437	0	0
85°	2652	217	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13528 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	9.9
10°-20°	184.5	22.9
20°-30°	187.3	23.2
30°-40°	140.5	17.4
40°-50°	98.4	12.2
50°-60°	60.2	7.5
60°-70°	35.9	4.5
70°-80°	16.5	2.1
80°-90°	3.0	0.4
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°	451.2	56.0
0°-40°	591.7	73.4
0°-60°	750.4	93.1
0°-90°	805.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	805.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	886	886	886	886	886	
5°	871	880	857	841	841	83
15°	826	781	658	557	518	233
25°	741	611	363	208	160	341
35°	630	410	119	36	28	394
45°	505	217	28	8	5	389
55°	374	66	6	2	1	334
65°	245	19	1	1	0	242
75°	116	2	1	1	0	123
85°	12	0	1	1	0	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	885.7	885.7	885.7	885.7	885.7
2.5°	875.5	888.7	876.5	874.5	875.5
5°	871.4	879.6	857.2	840.9	840.9
7.5°	864.3	864.3	822.6	789.0	778.8
10°	854.1	842.9	774.7	720.8	705.5
12.5°	840.9	814.4	718.7	642.4	617.9
15°	825.6	780.8	657.6	556.9	518.2
17.5°	808.3	743.1	589.4	464.2	419.4
20°	787.9	702.4	514.1	369.5	322.7
22.5°	765.5	657.6	437.7	285.0	235.2
25°	741.1	610.8	363.4	207.7	159.8
27.5°	715.7	561.9	295.2	142.5	97.7
30°	687.2	511.0	227.0	84.5	49.9
32.5°	659.7	462.2	170.0	45.8	36.6
35°	630.1	410.3	119.1	35.6	27.5
37.5°	599.6	361.4	73.3	26.5	20.4
40°	568.0	311.5	44.8	19.3	14.3
42.5°	537.5	264.7	35.6	13.2	9.2
45°	504.9	216.8	27.5	8.1	5.1
47.5°	471.3	173.1	20.4	5.1	3.1
50°	438.8	134.4	14.3	3.1	2.0
52.5°	406.2	98.7	9.2	2.0	1.0
55°	373.6	66.2	6.1	2.0	1.0
57.5°	341.0	46.8	4.1	1.0	1.0
60°	308.5	36.6	2.0	1.0	0.0
62.5°	277.9	28.5	2.0	1.0	1.0
65°	245.3	19.3	1.0	1.0	0.0
67.5°	210.7	12.2	1.0	1.0	0.0
70°	178.2	7.1	1.0	1.0	0.0
72.5°	146.6	4.1	1.0	1.0	0.0
75°	116.1	2.0	1.0	1.0	0.0
77.5°	86.5	1.0	0.0	1.0	0.0
80°	59.0	0.0	0.0	1.0	0.0
82.5°	34.6	0.0	0.0	1.0	0.0
85°	12.2	0.0	1.0	1.0	0.0
87.5°	0.0	0.0	1.0	1.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)