

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: P1055152

Luminaire Tested: S122R3DR-S1005D850-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055152
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-S1005D850-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

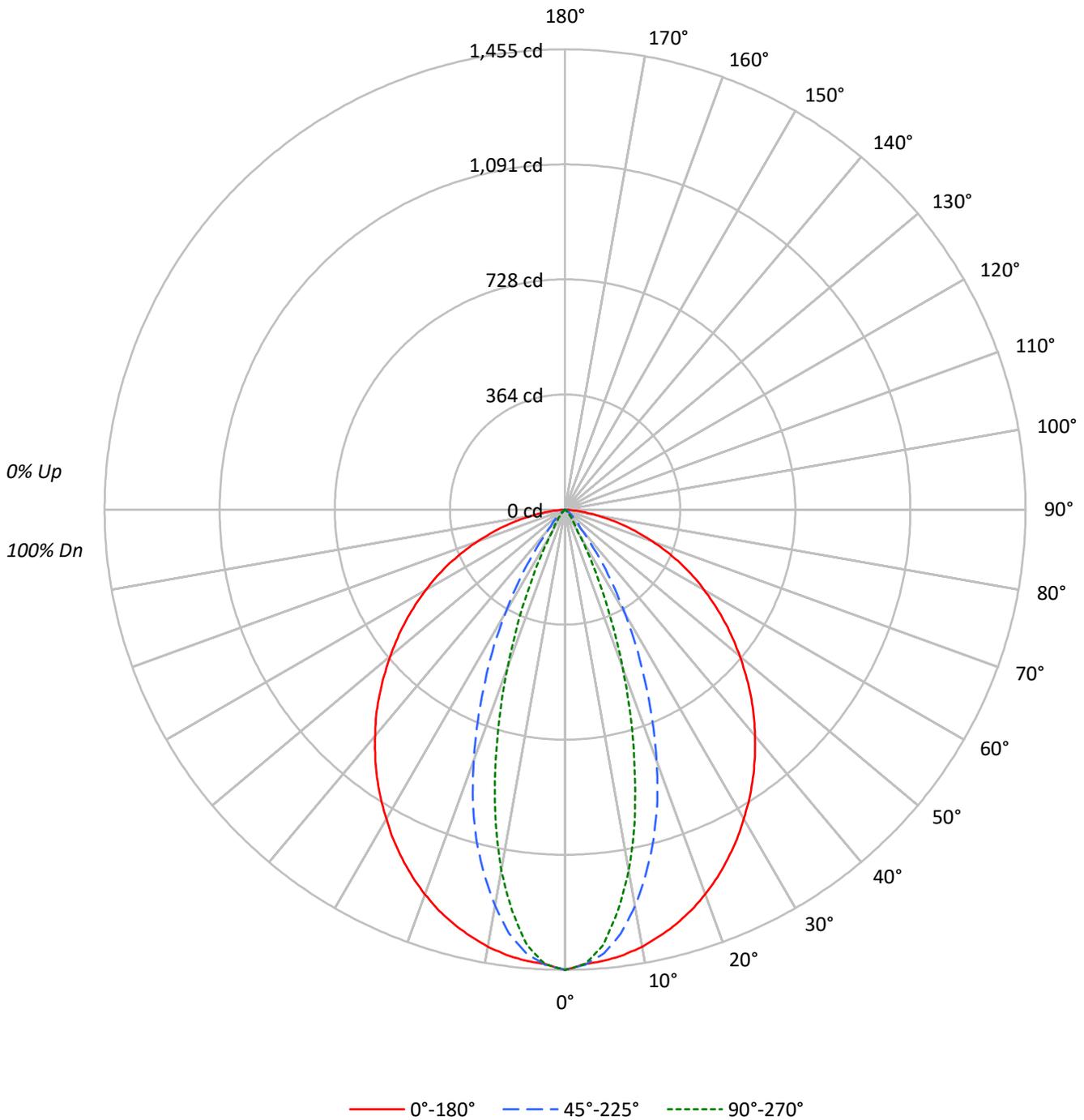
Lumens per Lamp: N/A
Luminaire Lumens: 1323.9 lumens
Efficiency: N/A
Efficacy: 31.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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	62	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	47	44	43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27568	27568	27568
5°	27228	26783	26274
10°	26997	24486	22299
15°	26605	21193	16698
20°	26101	17029	10690
25°	25453	12482	5490
30°	24699	8160	1794
35°	23945	4526	1045
40°	23082	1820	579
45°	22228	1211	225
50°	21248	690	97
55°	20274	330	56
60°	19204	125	0
65°	18071	76	0
70°	16214	94	0
75°	13959	124	0
80°	10583	0	0
85°	4369	370	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22228 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.5	9.9
10°-20°	303.1	22.9
20°-30°	307.7	23.2
30°-40°	230.9	17.4
40°-50°	161.7	12.2
50°-60°	99.0	7.5
60°-70°	58.9	4.5
70°-80°	27.2	2.1
80°-90°	4.9	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°	741.3	56.0
0°-40°	972.2	73.4
0°-60°	1232.8	93.1
0°-90°	1323.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1323.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1455	1455	1455	1455	1455	
5°	1432	1445	1408	1382	1382	136
15°	1356	1283	1080	915	851	382
25°	1218	1004	597	341	263	560
35°	1035	674	196	58	45	647
45°	830	356	45	13	8	639
55°	614	109	10	3	2	549
65°	403	32	2	2	0	397
75°	191	3	2	2	0	203
85°	20	0	2	2	0	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1455.1	1455.1	1455.1	1455.1	1455.1
2.5°	1438.4	1460.1	1440.1	1436.7	1438.4
5°	1431.7	1445.1	1408.3	1381.5	1381.5
7.5°	1420.0	1420.0	1351.4	1296.2	1279.5
10°	1403.3	1384.9	1272.8	1184.2	1159.1
12.5°	1381.5	1338.0	1180.8	1055.4	1015.2
15°	1356.4	1282.8	1080.5	914.9	851.3
17.5°	1328.0	1221.0	968.4	762.7	689.1
20°	1294.6	1154.1	844.6	607.1	530.2
22.5°	1257.8	1080.5	719.2	468.3	386.4
25°	1217.6	1003.5	597.1	341.2	262.6
27.5°	1175.8	923.2	485.0	234.2	160.6
30°	1129.0	839.6	373.0	138.8	82.0
32.5°	1083.8	759.3	279.3	75.3	60.2
35°	1035.3	674.0	195.7	58.5	45.2
37.5°	985.1	593.8	120.4	43.5	33.5
40°	933.3	511.8	73.6	31.8	23.4
42.5°	883.1	434.9	58.5	21.7	15.1
45°	829.6	356.3	45.2	13.4	8.4
47.5°	774.4	284.3	33.5	8.4	5.0
50°	720.9	220.8	23.4	5.0	3.3
52.5°	667.3	162.2	15.1	3.3	1.7
55°	613.8	108.7	10.0	3.3	1.7
57.5°	560.3	76.9	6.7	1.7	1.7
60°	506.8	60.2	3.3	1.7	0.0
62.5°	456.6	46.8	3.3	1.7	1.7
65°	403.1	31.8	1.7	1.7	0.0
67.5°	346.2	20.1	1.7	1.7	0.0
70°	292.7	11.7	1.7	1.7	0.0
72.5°	240.8	6.7	1.7	1.7	0.0
75°	190.7	3.3	1.7	1.7	0.0
77.5°	142.2	1.7	0.0	1.7	0.0
80°	97.0	0.0	0.0	1.7	0.0
82.5°	56.9	0.0	0.0	1.7	0.0
85°	20.1	0.0	1.7	1.7	0.0
87.5°	0.0	0.0	1.7	1.7	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)