Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P1055559

Luminaire Tested: S123R3DR-S1000D850-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1055559
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-4)
Test Lab:	INNOVATION CENTER
Issue Date:	7/25/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	NEO-RAY
Catalog Number:	S123R3DR-S1000D850-X4F0-XX-UDD-FLL-W
Description:	DEFINE 3, WHITE 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:	3341.8 lumens
Efficiency:	N/A
Efficacy:	96.3 lumens/watt
Spacing Criteria (0/90/45):	1.19 / 0.83 / 1.02
Luminous Opening:	Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type:	Direct

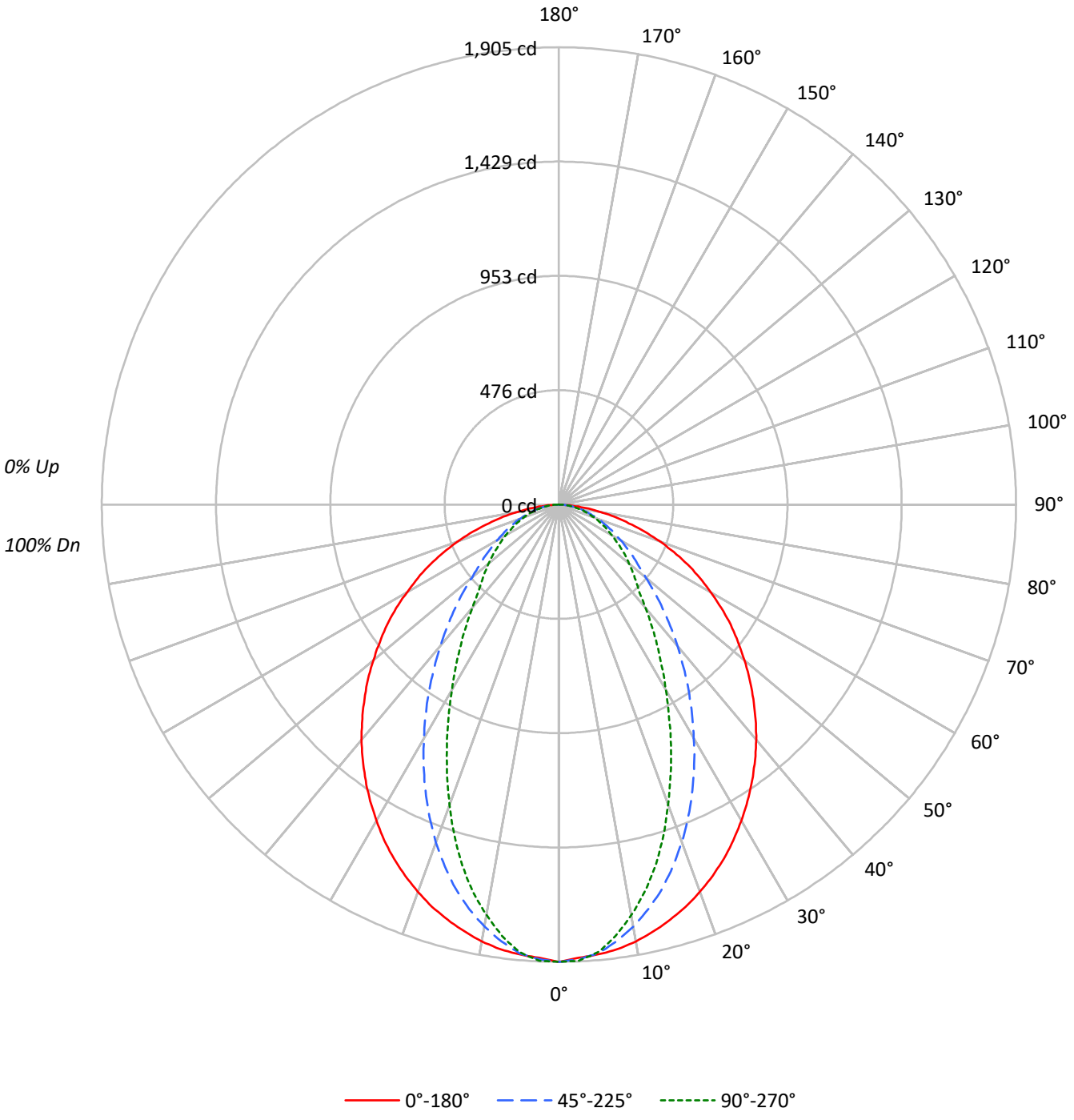
Input Watts (W):	34.7
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1055559
CATALOG NUMBER: S123R3DR-S1000D850-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1055559
CATALOG NUMBER: S123R3DR-S1000D850-X4F0-XX-UDD-FLL-W

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22972	22972	22972
5°	22767	22715	22663
10°	22629	21861	21267
15°	22360	20706	19424
20°	22033	19217	17078
25°	21650	17498	14693
30°	21169	15653	12419
35°	20661	13844	10488
40°	20142	12089	8815
45°	19536	10425	7775
50°	18925	8874	7137
55°	18363	7908	6590
60°	17595	7147	6151
65°	16871	6544	5774
70°	15725	6028	5425
75°	14073	5576	5110
80°	12074	5145	4749
85°	8480	4731	4537

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 19536 cd/sqm

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1055559
CATALOG NUMBER: S123R3DR-S1000D850-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.6	5.3
10°-20°	467.3	14.0
20°-30°	615.6	18.4
30°-40°	624.8	18.7
40°-50°	543.1	16.3
50°-60°	425.5	12.7
60°-70°	289.1	8.7
70°-80°	156.7	4.7
80°-90°	43.1	1.3
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°	1259.5	37.7
0°-40°	1884.3	56.4
0°-60°	2852.9	85.4
0°-90°	3341.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3341.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1905	1905	1905	1905	1905	
5°	1881	1904	1877	1860	1873	179
15°	1791	1766	1659	1578	1556	505
25°	1628	1529	1315	1152	1104	749
35°	1404	1237	941	761	713	878
45°	1146	919	611	472	456	884
55°	874	607	376	321	314	780
65°	591	328	229	205	202	584
75°	302	151	120	111	110	323
85°	61	37	34	31	33	77
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

TEST NUMBER: P1055559
CATALOG NUMBER: S123R3DR-S1000D850-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1905.4	*1905.4*	1905.4	1905.4	1905.4
2.5°	*1889.7*	*1914.0*	*1895.4*	*1896.9*	*1902.6*
5°	1881.2	*1904.0*	1876.9	1859.8	1872.6
7.5°	1868.4	*1885.5*	1835.6	1808.5	1812.8
10°	1848.4	*1854.1*	1785.7	1742.9	1737.2
12.5°	1821.3	*1811.3*	1725.8	1663.1	1653.2
15°	1791.4	*1765.7*	1658.9	1577.6	1556.2
17.5°	1757.2	*1714.4*	1580.5	1480.7	1447.9
20°	1717.3	*1657.4*	1497.8	1371.0	1331.1
22.5°	1674.5	*1597.6*	1408.0	1258.4	1217.1
25°	1627.5	*1529.2*	1315.4	1151.5	1104.5
27.5°	1576.2	*1460.8*	1221.3	1046.0	993.3
30°	1520.6	*1389.5*	1124.4	943.4	892.1
32.5°	1463.6	*1314.0*	1031.8	848.0	798.1
35°	1403.8	*1237.0*	940.6	761.0	712.6
37.5°	1342.5	*1158.6*	852.2	678.4	632.8
40°	1279.8	*1078.8*	768.1	601.4	560.1
42.5°	1212.8	*999.0*	686.9	528.7	497.4
45°	1145.8	*919.2*	611.4	471.7	456.0
47.5°	1078.8	*838.0*	540.1	431.8	417.6
50°	1009.0	*759.6*	473.1	394.8	380.5
52.5°	940.6	*682.6*	417.6	359.1	349.2
55°	873.6	*607.1*	376.2	320.7	313.5
57.5°	803.8	*533.0*	334.9	290.7	282.2
60°	729.7	*461.7*	296.4	259.4	255.1
62.5°	662.7	*394.8*	262.2	232.3	228.0
65°	591.4	*327.8*	229.4	205.2	202.4
67.5°	518.7	*272.2*	199.5	179.6	178.1
70°	446.1	*229.4*	171.0	155.3	153.9
72.5°	374.8	*189.5*	143.9	134.0	131.1
75°	302.1	*151.1*	119.7	111.2	109.7
77.5°	236.6	*116.9*	95.5	89.8	88.4
80°	173.9	*86.9*	74.1	69.8	68.4
82.5°	114.0	*59.9*	52.7	49.9	49.9
85°	61.3	*37.1*	34.2	31.4	32.8
87.5°	21.4	*15.7*	15.7	14.3	15.7
90°	0.0	*0.0*	0.0	0.0	0.0

(END OF REPORT)