

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: P1055563

Luminaire Tested: S123R3DR-S1000D930-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055563
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S1000D930-X4F0-XX-UDD-FLL-B
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

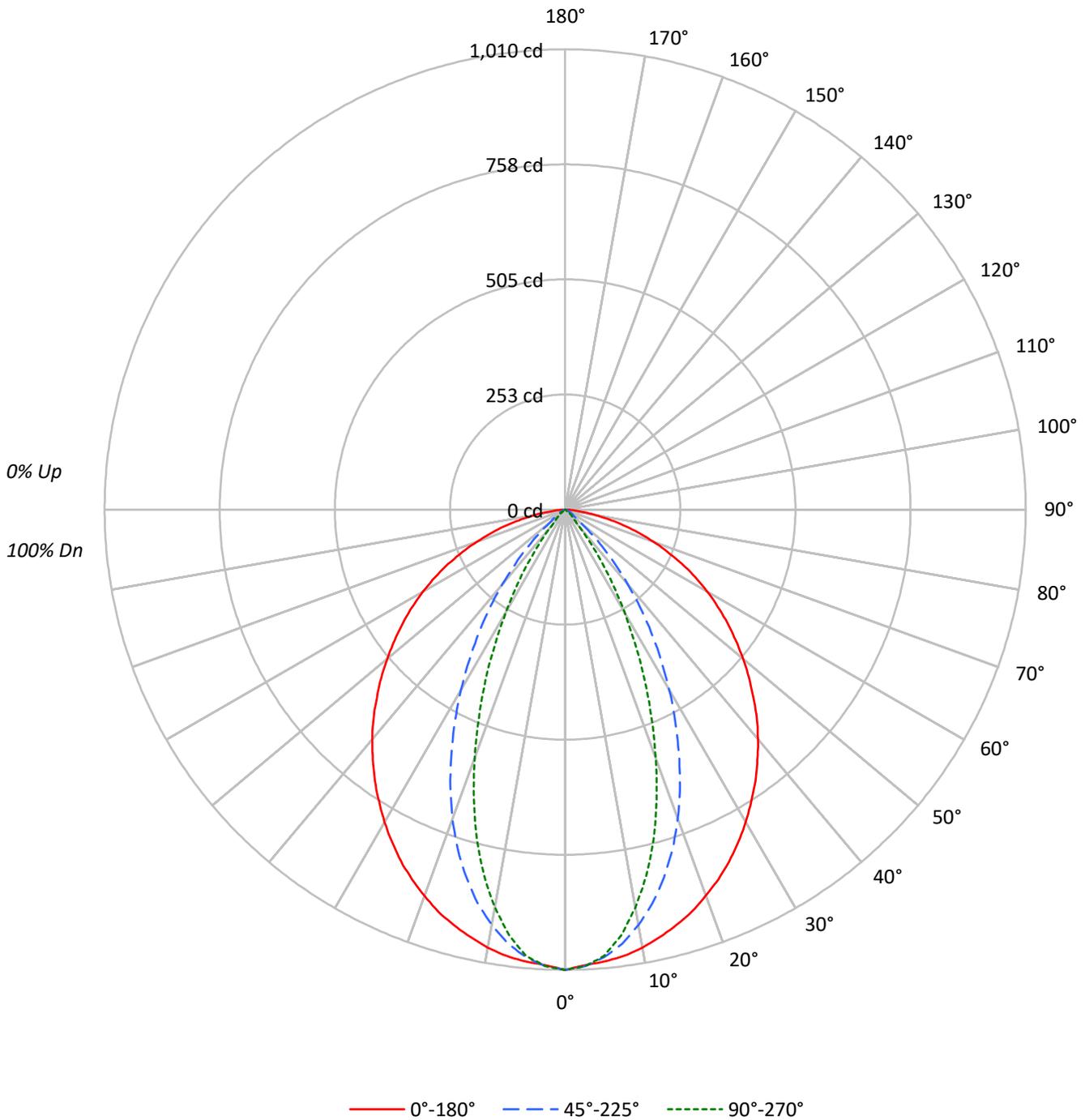
Lumens per Lamp: N/A
Luminaire Lumens: 1182.0 lumens
Efficiency: N/A
Efficacy: 34.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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

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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	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	81	70	63	58	79	69	62	57	67	61	57	66	61	56	64	60	56	54				
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46				
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43				
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12177	12177	12177
5°	12046	11932	11894
10°	11955	11325	10852
15°	11783	10436	9350
20°	11574	9262	7447
25°	11331	7847	5491
30°	11027	6359	3603
35°	10702	4842	1974
40°	10356	3348	677
45°	9951	1947	392
50°	9551	767	236
55°	9139	483	109
60°	8666	304	51
65°	8071	148	29
70°	7240	74	35
75°	6149	47	47
80°	4582	69	0
85°	1743	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9951 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.6	7.8
10°-20°	235.0	19.9
20°-30°	280.3	23.7
30°-40°	237.8	20.1
40°-50°	161.6	13.7
50°-60°	100.2	8.5
60°-70°	50.7	4.3
70°-80°	20.7	1.7
80°-90°	3.2	0.3
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°	607.9	51.4
0°-40°	845.7	71.5
0°-60°	1107.5	93.7
0°-90°	1182.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1182.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	995	1005	986	979	983	94
15°	944	920	836	770	749	266
25°	852	772	590	456	413	392
35°	727	584	329	177	134	454
45°	584	382	114	28	23	451
55°	435	193	23	8	5	388
65°	283	47	5	1	1	279
75°	132	8	1	1	1	140
85°	13	0	0	1	0	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1010.0	1010.0	1010.0	1010.0	1010.0
2.5°	1000.6	1014.2	1002.7	1001.6	1002.7
5°	995.3	1004.8	985.9	978.6	982.8
7.5°	988.0	992.2	960.7	941.9	941.9
10°	976.5	973.3	925.1	893.7	886.4
12.5°	960.7	948.2	885.3	836.1	822.5
15°	944.0	919.9	836.1	770.1	749.1
17.5°	925.1	888.5	782.6	696.7	666.3
20°	902.1	852.8	721.9	617.1	580.4
22.5°	878.0	814.1	658.0	535.4	494.5
25°	851.8	772.2	589.9	455.8	412.8
27.5°	822.5	728.2	522.8	379.3	332.1
30°	792.1	682.1	456.8	305.9	258.8
32.5°	759.6	633.9	390.8	238.9	194.9
35°	727.1	583.6	329.0	177.1	134.1
37.5°	692.5	533.3	269.3	122.6	84.9
40°	658.0	484.0	212.7	77.5	43.0
42.5°	622.3	432.7	161.3	38.8	29.3
45°	583.6	382.4	114.2	28.3	23.0
47.5°	546.9	334.2	75.4	23.0	17.8
50°	509.2	286.0	40.9	16.8	12.6
52.5°	471.5	239.9	29.3	12.6	8.4
55°	434.8	192.8	23.0	8.4	5.2
57.5°	397.1	151.9	17.8	5.2	3.1
60°	359.4	112.1	12.6	3.1	2.1
62.5°	321.6	77.5	8.4	2.1	1.0
65°	282.9	47.1	5.2	1.0	1.0
67.5°	243.1	32.5	3.1	1.0	1.0
70°	205.4	23.0	2.1	1.0	1.0
72.5°	167.6	14.7	1.0	1.0	0.0
75°	132.0	8.4	1.0	1.0	1.0
77.5°	97.4	3.1	1.0	1.0	0.0
80°	66.0	1.0	1.0	1.0	0.0
82.5°	36.7	0.0	1.0	1.0	0.0
85°	12.6	0.0	0.0	1.0	0.0
87.5°	0.0	0.0	0.0	1.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)