

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: P1055560

Luminaire Tested: S123R3DR-S1000D927-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055560
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-S1000D927-X4F0-XX-UDD-FLL-B
Description: DEFINE 3, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

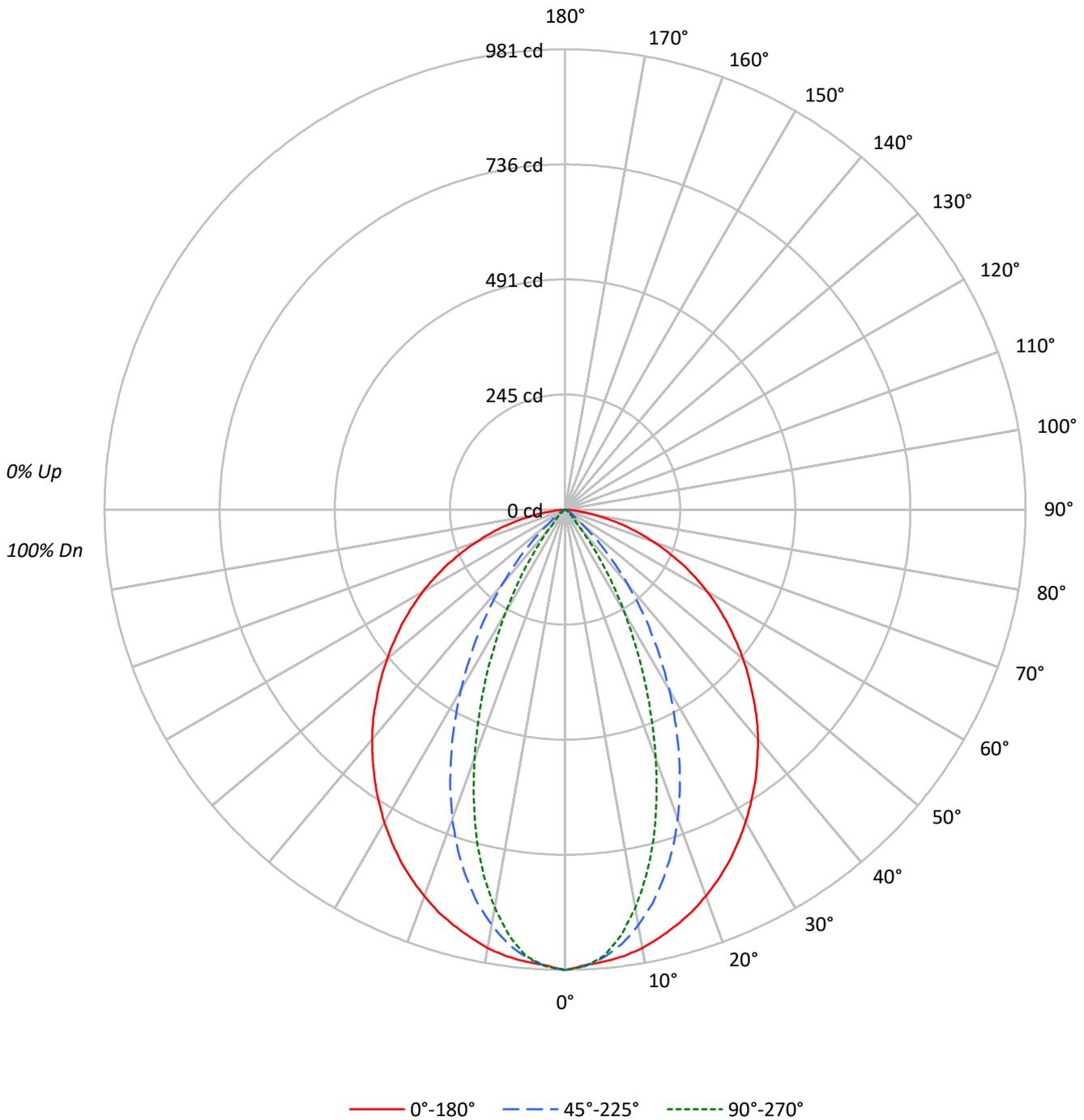
Lumens per Lamp: N/A
Luminaire Lumens: 1148.5 lumens
Efficiency: N/A
Efficacy: 33.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.7 / 0.86
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	11832	11832	11832
5°	11704	11593	11557
10°	11616	11005	10543
15°	11448	10140	9085
20°	11246	8999	7236
25°	11009	7624	5336
30°	10714	6178	3500
35°	10398	4705	1918
40°	10062	3253	656
45°	9668	1893	382
50°	9279	745	229
55°	8881	471	107
60°	8420	294	48
65°	7842	145	29
70°	7032	71	35
75°	5977	47	47
80°	4450	69	0
85°	1688	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9668 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	7.8
10°-20°	228.3	19.9
20°-30°	272.4	23.7
30°-40°	231.0	20.1
40°-50°	157.0	13.7
50°-60°	97.3	8.5
60°-70°	49.3	4.3
70°-80°	20.1	1.7
80°-90°	3.1	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°	590.7	51.4
0°-40°	821.7	71.5
0°-60°	1076.1	93.7
0°-90°	1148.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1148.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	981	981	981	981	981	
5°	967	976	958	951	955	92
15°	917	894	812	748	728	259
25°	828	750	573	443	401	381
35°	706	567	320	172	130	442
45°	567	372	111	28	22	438
55°	422	187	22	8	5	377
65°	275	46	5	1	1	272
75°	128	8	1	1	1	136
85°	12	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°	981.4	981.4	981.4	981.4	981.4
2.5°	972.2	985.4	974.2	973.2	974.2
5°	967.1	976.3	957.9	950.8	954.9
7.5°	960.0	964.0	933.5	915.2	915.2
10°	948.8	945.7	898.9	868.4	861.2
12.5°	933.5	921.3	860.2	812.4	799.1
15°	917.2	893.8	812.4	748.2	727.9
17.5°	898.9	863.3	760.4	677.0	647.4
20°	876.5	828.7	701.4	599.6	564.0
22.5°	853.1	791.0	639.3	520.2	480.5
25°	827.6	750.3	573.1	442.8	401.1
27.5°	799.1	707.5	508.0	368.5	322.7
30°	769.6	662.7	443.8	297.3	251.4
32.5°	738.1	615.9	379.7	232.1	189.3
35°	706.5	567.0	319.7	172.0	130.3
37.5°	672.9	518.2	261.6	119.1	82.5
40°	639.3	470.3	206.7	75.3	41.7
42.5°	604.7	420.4	156.8	37.7	28.5
45°	567.0	371.6	111.0	27.5	22.4
47.5°	531.4	324.7	73.3	22.4	17.3
50°	494.7	277.9	39.7	16.3	12.2
52.5°	458.1	233.1	28.5	12.2	8.1
55°	422.5	187.3	22.4	8.1	5.1
57.5°	385.8	147.6	17.3	5.1	3.1
60°	349.2	108.9	12.2	3.1	2.0
62.5°	312.5	75.3	8.1	2.0	1.0
65°	274.9	45.8	5.1	1.0	1.0
67.5°	236.2	31.6	3.1	1.0	1.0
70°	199.5	22.4	2.0	1.0	1.0
72.5°	162.9	14.3	1.0	1.0	0.0
75°	128.3	8.1	1.0	1.0	1.0
77.5°	94.7	3.1	1.0	1.0	0.0
80°	64.1	1.0	1.0	1.0	0.0
82.5°	35.6	0.0	1.0	1.0	0.0
85°	12.2	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)