

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: P1055642

Luminaire Tested: S123R3DR-S560D927-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055642
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S560D927-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

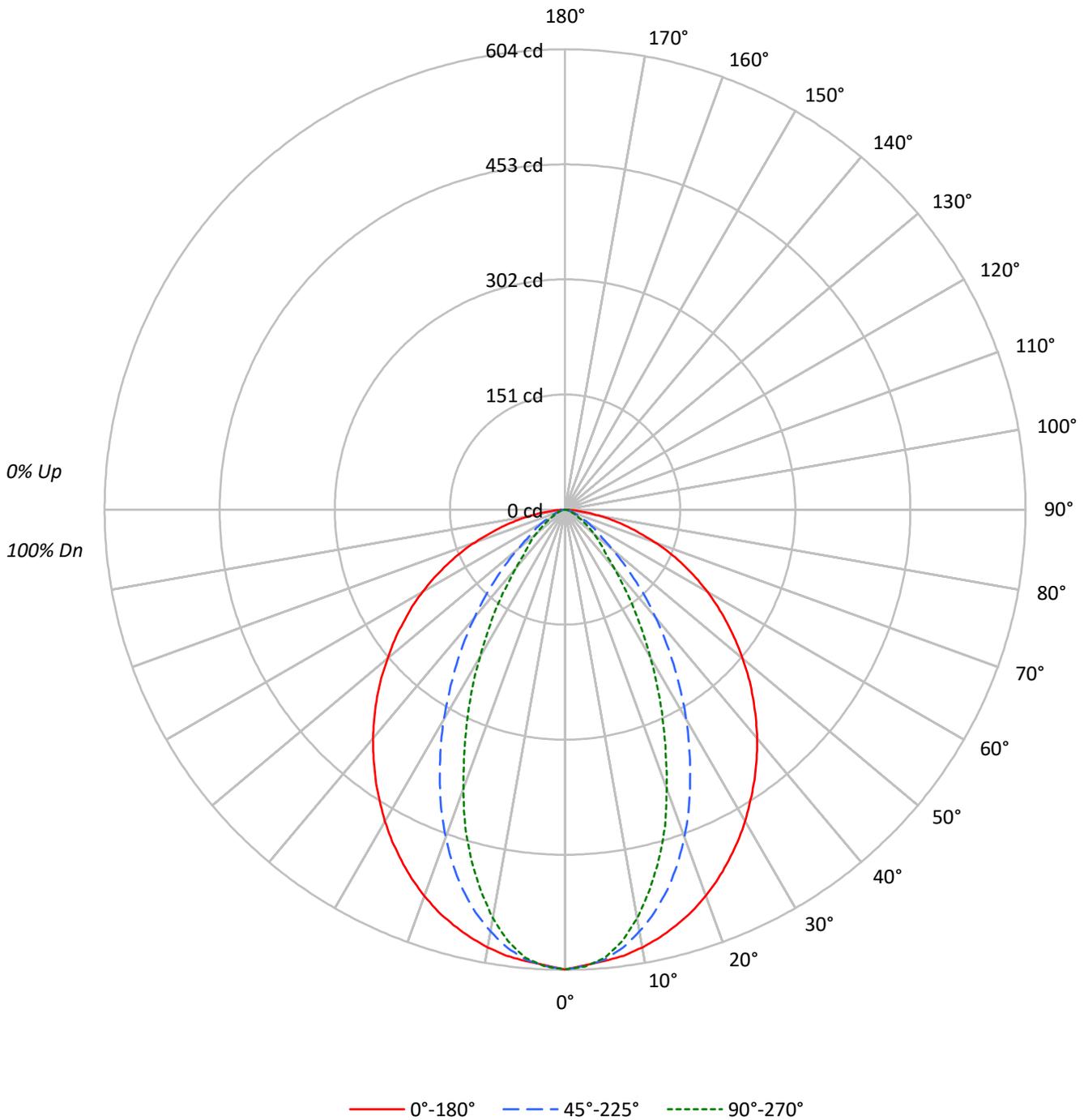
Lumens per Lamp: N/A
Luminaire Lumens: 839.3 lumens
Efficiency: N/A
Efficacy: 43.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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			100	
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			79	
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70			70	
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62			62	
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56			56	
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51			51	
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46			46	
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42			42	
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39			39	
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36			36	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7276	7276	7276
5°	7200	7173	7151
10°	7143	6884	6667
15°	7047	6454	5934
20°	6922	5872	4999
25°	6758	5167	4033
30°	6578	4428	3106
35°	6374	3655	2299
40°	6168	2908	1566
45°	5940	2176	1180
50°	5698	1514	923
55°	5446	1106	673
60°	5187	827	482
65°	4878	556	377
70°	4417	402	303
75°	3810	293	238
80°	3055	236	201
85°	1577	235	152

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5940 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.8	6.6
10°-20°	145.2	17.3
20°-30°	182.5	21.7
30°-40°	169.9	20.2
40°-50°	130.1	15.5
50°-60°	86.5	10.3
60°-70°	46.6	5.6
70°-80°	19.1	2.3
80°-90°	3.7	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°	383.5	45.7
0°-40°	553.4	65.9
0°-60°	770.0	91.7
0°-90°	839.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	839.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	604	604	604	604	604	
5°	595	601	593	590	591	56
15°	565	556	517	487	475	159
25°	508	474	388	324	303	234
35°	433	369	248	176	156	271
45°	348	257	128	75	69	269
55°	259	150	53	37	32	232
65°	171	58	20	14	13	169
75°	82	14	6	6	5	88
85°	11	2	2	2	1	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	603.5	603.5	603.5	603.5	603.5
2.5°	598.4	605.8	599.5	600.1	600.1
5°	594.9	601.2	592.7	590.4	590.9
7.5°	590.4	594.4	580.1	572.6	571.5
10°	583.5	584.7	562.3	549.2	544.6
12.5°	574.9	570.9	541.7	520.0	511.4
15°	564.6	555.5	517.1	486.8	475.4
17.5°	553.2	537.7	489.1	449.6	435.9
20°	539.5	517.7	457.7	408.5	389.6
22.5°	524.6	496.6	424.5	366.1	345.0
25°	508.0	473.7	388.4	323.8	303.2
27.5°	490.8	449.1	353.0	283.7	262.6
30°	472.5	423.9	318.1	244.8	223.1
32.5°	452.5	396.4	282.0	208.8	187.1
35°	433.1	369.0	248.3	175.6	156.2
37.5°	412.5	341.5	215.7	146.4	124.7
40°	391.9	313.5	184.8	117.8	99.5
42.5°	370.1	285.5	155.6	93.8	79.5
45°	348.4	257.4	127.6	74.9	69.2
47.5°	326.7	229.4	103.0	64.6	58.9
50°	303.8	202.5	80.7	54.9	49.2
52.5°	282.0	175.6	62.9	45.2	40.0
55°	259.1	149.9	52.6	36.6	32.0
57.5°	238.0	123.6	43.5	28.6	25.2
60°	215.1	100.1	34.3	22.3	20.0
62.5°	193.4	78.4	26.3	17.7	16.0
65°	171.0	57.8	19.5	14.3	13.2
67.5°	148.7	41.8	14.9	11.4	10.9
70°	125.3	31.5	11.4	9.2	8.6
72.5°	103.0	22.3	8.6	7.4	6.9
75°	81.8	13.7	6.3	5.7	5.1
77.5°	62.9	8.0	4.6	4.6	4.0
80°	44.0	4.6	3.4	3.4	2.9
82.5°	26.9	2.9	2.3	2.3	2.3
85°	11.4	1.7	1.7	1.7	1.1
87.5°	1.7	0.6	0.6	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)