

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: P1055654

Luminaire Tested: S123R3DR-S560D950-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055654
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-S560D950-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

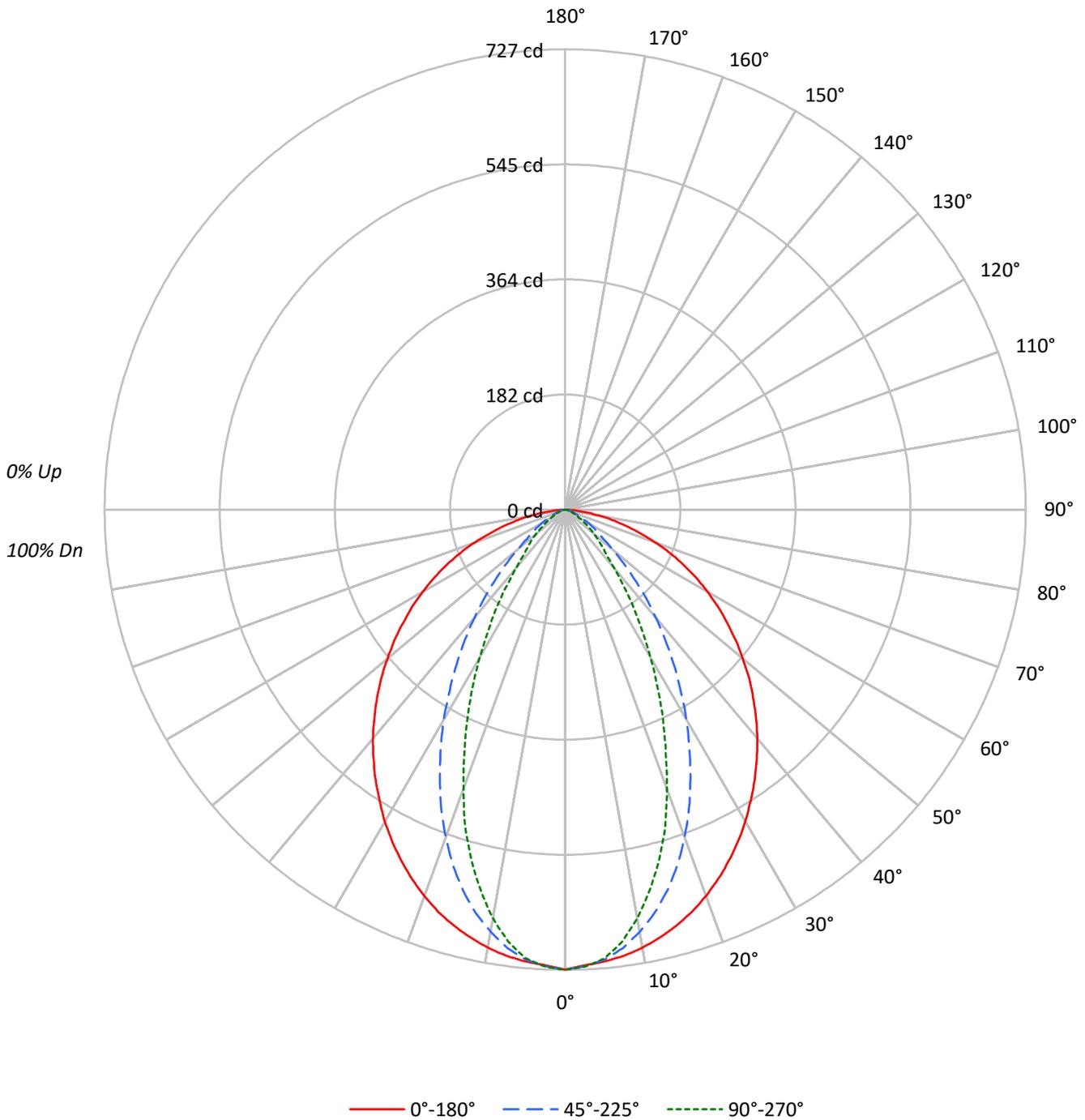
Lumens per Lamp: N/A
Luminaire Lumens: 1010.8 lumens
Efficiency: N/A
Efficacy: 52.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8763	8763	8763
5°	8671	8638	8613
10°	8603	8291	8030
15°	8488	7774	7146
20°	8336	7071	6020
25°	8139	6223	4857
30°	7923	5332	3741
35°	7676	4401	2768
40°	7427	3502	1887
45°	7154	2619	1422
50°	6861	1821	1110
55°	6560	1333	811
60°	6245	996	581
65°	5877	668	451
70°	5319	486	363
75°	4588	354	289
80°	3680	285	236
85°	1909	290	194

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7154 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.2	6.6
10°-20°	174.9	17.3
20°-30°	219.7	21.7
30°-40°	204.7	20.2
40°-50°	156.7	15.5
50°-60°	104.1	10.3
60°-70°	56.1	5.6
70°-80°	23.0	2.3
80°-90°	4.4	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°	461.8	45.7
0°-40°	666.5	65.9
0°-60°	927.2	91.7
0°-90°	1010.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1010.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	727	727	727	727	727	
5°	716	724	714	711	712	68
15°	680	669	623	586	572	192
25°	612	570	468	390	365	282
35°	522	444	299	212	188	326
45°	420	310	154	90	83	324
55°	312	180	63	44	39	280
65°	206	70	23	17	16	204
75°	98	16	8	7	6	105
85°	14	2	2	2	1	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	726.8	726.8	726.8	726.8	726.8
2.5°	720.6	729.6	722.0	722.7	722.7
5°	716.5	724.1	713.7	711.0	711.7
7.5°	711.0	715.8	698.6	689.6	688.2
10°	702.7	704.1	677.2	661.4	655.9
12.5°	692.4	687.5	652.4	626.2	615.9
15°	680.0	668.9	622.8	586.3	572.5
17.5°	666.2	647.6	589.0	541.5	525.0
20°	649.7	623.5	551.1	491.9	469.2
22.5°	631.7	598.0	511.2	440.9	415.4
25°	611.8	570.4	467.8	389.9	365.1
27.5°	591.1	540.8	425.1	341.7	316.2
30°	569.1	510.5	383.0	294.9	268.7
32.5°	544.9	477.4	339.6	251.5	225.3
35°	521.5	444.4	299.0	211.5	188.1
37.5°	496.7	411.3	259.7	176.4	150.2
40°	471.9	377.5	222.5	141.9	119.9
42.5°	445.7	343.8	187.4	113.0	95.8
45°	419.6	310.0	153.6	90.2	83.4
47.5°	393.4	276.3	124.0	77.8	71.0
50°	365.8	243.9	97.1	66.1	59.2
52.5°	339.6	211.5	75.8	54.4	48.2
55°	312.1	180.5	63.4	44.1	38.6
57.5°	286.6	148.8	52.4	34.4	30.3
60°	259.0	120.6	41.3	26.9	24.1
62.5°	232.9	94.4	31.7	21.4	19.3
65°	206.0	69.6	23.4	17.2	15.8
67.5°	179.1	50.3	17.9	13.8	13.1
70°	150.9	37.9	13.8	11.0	10.3
72.5°	124.0	26.9	10.3	9.0	8.3
75°	98.5	16.5	7.6	6.9	6.2
77.5°	75.8	9.6	5.5	5.5	4.8
80°	53.0	5.5	4.1	4.1	3.4
82.5°	32.4	3.4	2.8	2.8	2.8
85°	13.8	2.1	2.1	2.1	1.4
87.5°	2.1	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)