

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: P1056026

Luminaire Tested: S124R3DR-S350D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056026
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S350D935-X4F0-XX-UDD-FLL-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

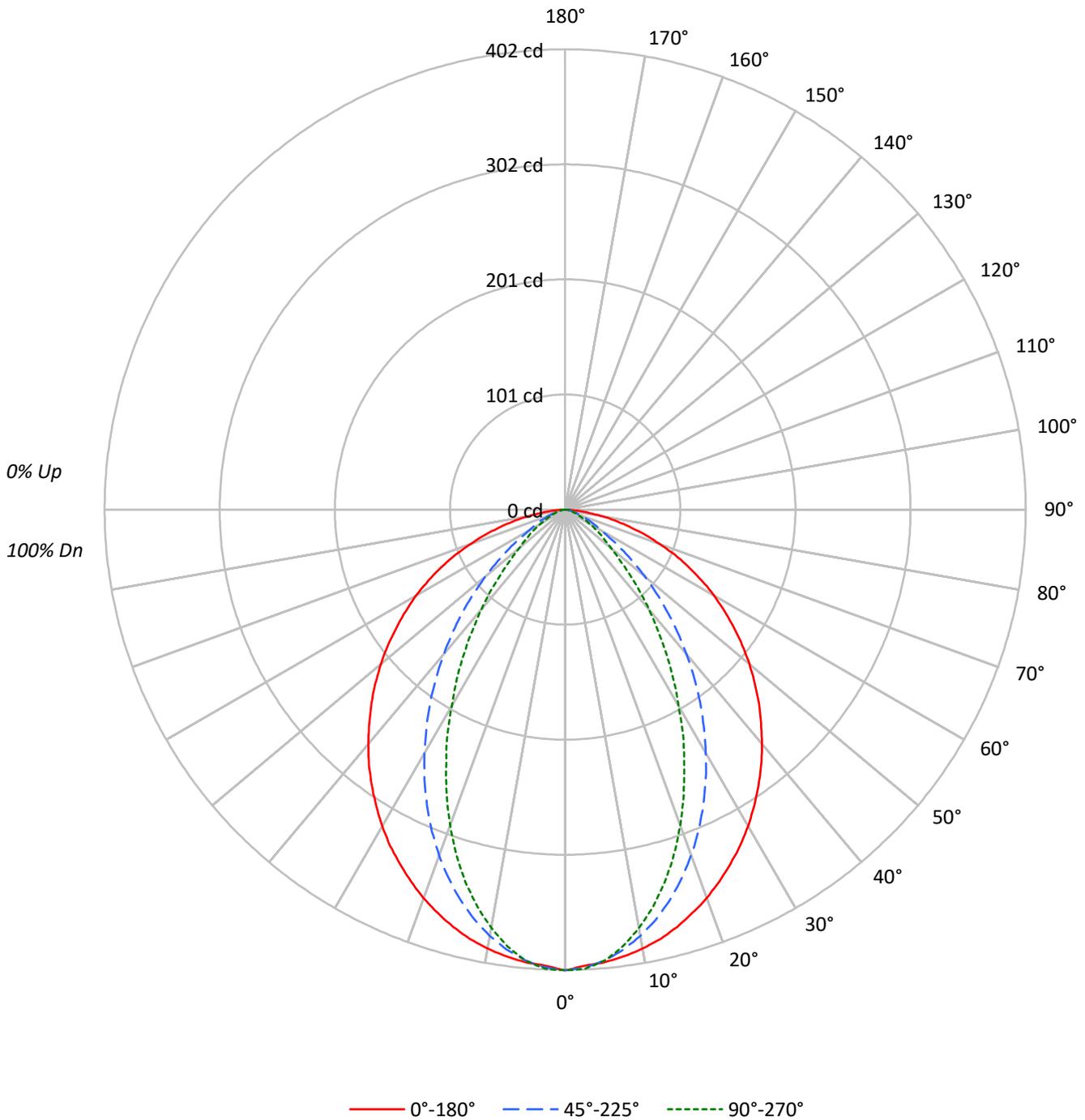
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 650.8 lumens
Efficiency: N/A
Efficacy: 51.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
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

TEST NUMBER: P1056026
CATALOG NUMBER: S124R3DR-S350D935-X4F0-XX-UDD-FLL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1056026

CATALOG NUMBER: S124R3DR-S350D935-X4F0-XX-UDD-FLL-S

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3559	3559	3559
5°	3523	3509	3509
10°	3496	3394	3331
15°	3454	3231	3080
20°	3399	3025	2761
25°	3330	2782	2398
30°	3260	2506	2020
35°	3175	2213	1662
40°	3084	1899	1311
45°	2990	1579	979
50°	2887	1242	717
55°	2773	919	572
60°	2651	637	437
65°	2494	494	322
70°	2257	349	251
75°	1971	243	191
80°	1583	188	173
85°	872	152	152

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2990 cd/sqm



TEST NUMBER: P1056026

CATALOG NUMBER: S124R3DR-S350D935-X4F0-XX-UDD-FLL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.3	5.7
10°-20°	99.8	15.3
20°-30°	133.0	20.4
30°-40°	134.0	20.6
40°-50°	109.9	16.9
50°-60°	75.1	11.5
60°-70°	42.0	6.4
70°-80°	16.6	2.6
80°-90°	3.1	0.5
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°	270.1	41.5
0°-40°	404.1	62.1
0°-60°	589.0	90.5
0°-90°	650.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	650.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	402	402	402	402	402	
5°	397	401	395	394	395	38
15°	377	373	353	341	336	106
25°	341	324	285	256	246	157
35°	294	263	205	166	154	184
45°	239	195	126	89	78	184
55°	180	126	60	40	37	161
65°	119	60	24	17	15	118
75°	58	16	7	6	6	62
85°	9	2	2	2	2	12
90°	0	0	0	0	0	



TEST NUMBER: P1056026

CATALOG NUMBER: S124R3DR-S350D935-X4F0-XX-UDD-FLL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	402.5	402.5	402.5	402.5	402.5
2.5°	398.7	403.6	400.2	400.6	401.4
5°	396.9	401.4	395.4	393.5	395.4
7.5°	393.5	396.9	387.9	384.1	384.9
10°	389.4	390.5	378.1	371.8	371.0
12.5°	384.1	382.6	366.5	357.1	354.9
15°	377.4	373.3	353.0	340.7	336.5
17.5°	369.5	362.4	338.0	321.9	315.9
20°	361.3	350.8	321.5	300.9	293.4
22.5°	351.5	338.4	303.9	278.8	270.2
25°	341.4	324.5	285.2	256.3	245.8
27.5°	330.9	310.3	265.7	233.5	223.0
30°	319.3	294.9	245.5	210.6	197.9
32.5°	306.9	279.2	225.2	188.1	176.1
35°	294.2	263.1	205.0	166.0	154.0
37.5°	281.1	246.6	184.8	145.0	133.0
40°	267.2	229.7	164.5	125.2	113.6
42.5°	253.0	212.5	145.0	106.4	95.6
45°	239.1	195.2	126.3	88.8	78.3
47.5°	224.5	178.0	107.9	72.3	63.3
50°	209.9	160.8	90.3	58.1	52.1
52.5°	194.9	143.5	74.2	47.6	43.5
55°	179.9	126.3	59.6	39.7	37.1
57.5°	164.9	109.1	46.1	33.7	30.7
60°	149.9	92.2	36.0	27.4	24.7
62.5°	134.5	75.3	29.6	21.7	19.5
65°	119.2	60.0	23.6	16.9	15.4
67.5°	103.8	45.7	18.0	13.1	12.0
70°	87.3	32.6	13.5	10.1	9.7
72.5°	73.1	22.1	9.7	7.9	7.5
75°	57.7	15.7	7.1	6.0	5.6
77.5°	44.6	10.1	5.2	4.9	4.5
80°	31.1	5.6	3.7	3.4	3.4
82.5°	19.1	3.0	2.6	2.2	2.2
85°	8.6	1.5	1.5	1.5	1.5
87.5°	1.5	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)