

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: P1056024

Luminaire Tested: S124R3DR-S350D930-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056024
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S350D930-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

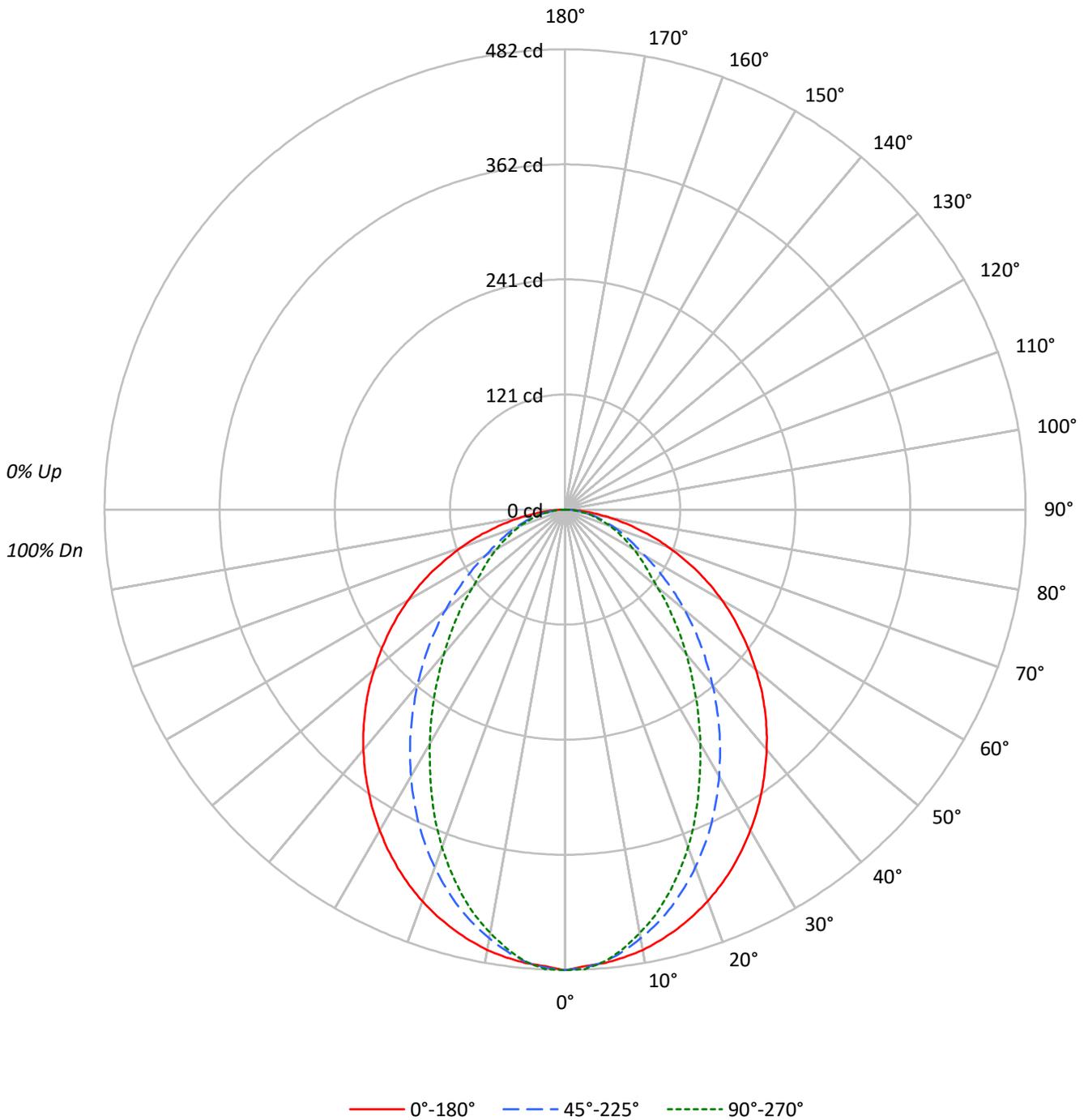
Lumens per Lamp: N/A
Luminaire Lumens: 960.5 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									20									20
RC	80									50									30									10									0									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	110	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86																												
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73																												
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63																												
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55																												
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																												
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43																												
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39																												
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35																												
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32																												
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4264	4264	4264
5°	4230	4220	4217
10°	4205	4094	4043
15°	4161	3940	3820
20°	4107	3753	3542
25°	4040	3538	3219
30°	3960	3293	2891
35°	3876	3037	2574
40°	3789	2772	2277
45°	3696	2516	2001
50°	3583	2245	1728
55°	3473	1975	1569
60°	3351	1694	1455
65°	3199	1538	1358
70°	2973	1422	1285
75°	2692	1308	1213
80°	2347	1212	1141
85°	1796	1116	1045

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3696 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	4.7
10°-20°	121.8	12.7
20°-30°	168.6	17.6
30°-40°	181.0	18.8
40°-50°	164.6	17.1
50°-60°	129.6	13.5
60°-70°	88.7	9.2
70°-80°	47.7	5.0
80°-90°	13.5	1.4
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°	335.3	34.9
0°-40°	516.3	53.8
0°-60°	810.5	84.4
0°-90°	960.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	960.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	482	482	482	482	482	
5°	477	482	476	473	475	45
15°	455	450	430	419	417	128
25°	414	397	363	336	330	191
35°	359	331	281	247	238	225
45°	296	258	201	166	160	228
55°	225	182	128	103	102	201
65°	153	109	74	65	65	151
75°	79	48	38	35	36	84
85°	18	12	11	10	10	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	482.3	482.3	482.3	482.3	482.3
2.5°	478.7	484.4	480.1	480.8	481.6
5°	476.6	481.9	475.5	473.0	475.2
7.5°	473.0	476.6	466.6	462.0	464.2
10°	468.4	469.1	456.0	449.3	450.3
12.5°	462.0	460.3	444.3	434.7	435.4
15°	454.6	449.6	430.5	418.7	417.3
17.5°	446.1	437.9	415.2	400.3	397.5
20°	436.5	425.5	398.9	379.7	376.5
22.5°	425.8	411.6	381.1	358.4	353.8
25°	414.1	397.1	362.7	336.4	330.0
27.5°	401.4	381.5	342.8	314.1	305.9
30°	387.9	365.2	322.6	291.7	283.2
32.5°	374.0	348.5	302.0	269.3	260.5
35°	359.1	331.1	281.4	247.3	238.5
37.5°	343.9	313.0	260.5	226.0	216.8
40°	328.3	294.9	240.2	204.8	197.3
42.5°	312.3	276.4	220.4	184.9	178.1
45°	295.6	258.0	201.2	166.4	160.0
47.5°	278.6	239.2	181.7	149.0	143.0
50°	260.5	220.4	163.2	132.0	125.6
52.5°	243.1	201.2	145.5	115.3	112.1
55°	225.3	182.4	128.1	103.3	101.8
57.5°	207.6	163.6	112.1	93.7	92.3
60°	189.5	145.1	95.8	83.7	82.3
62.5°	171.4	127.0	83.7	74.2	73.5
65°	152.9	109.3	73.5	65.3	64.9
67.5°	133.4	92.3	64.2	57.5	57.1
70°	115.0	75.2	55.0	49.7	49.7
72.5°	97.6	59.6	46.5	42.2	42.2
75°	78.8	47.9	38.3	35.1	35.5
77.5°	62.1	37.6	30.9	28.7	28.7
80°	46.1	28.0	23.8	22.0	22.4
82.5°	31.2	19.5	17.0	16.0	16.0
85°	17.7	12.1	11.0	10.3	10.3
87.5°	6.4	5.7	5.3	4.6	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)