

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: P1056022

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056022
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-8)
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-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

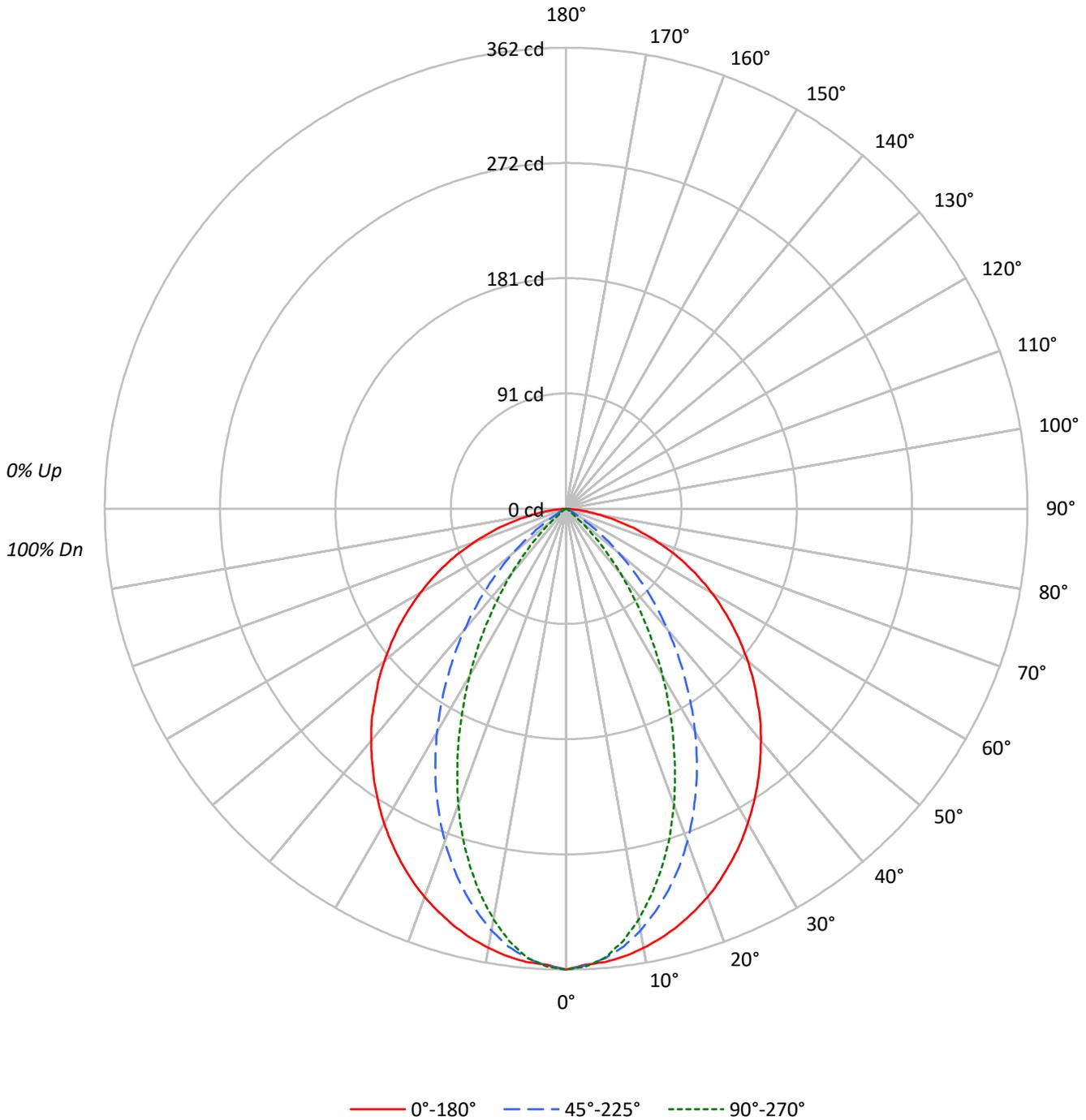
Lumens per Lamp: N/A
Luminaire Lumens: 505.9 lumens
Efficiency: N/A
Efficacy: 40.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	
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	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3201	3201	3201
5°	3171	3144	3140
10°	3145	3020	2940
15°	3106	2839	2664
20°	3055	2618	2327
25°	2987	2358	1942
30°	2913	2068	1544
35°	2830	1754	1149
40°	2745	1429	766
45°	2650	1092	421
50°	2557	747	117
55°	2456	405	77
60°	2334	126	44
65°	2182	82	23
70°	1972	36	10
75°	1698	14	0
80°	1283	0	0
85°	538	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2650 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.4	6.6
10°-20°	87.7	17.3
20°-30°	113.3	22.4
30°-40°	108.3	21.4
40°-50°	81.0	16.0
50°-60°	48.2	9.5
60°-70°	24.5	4.8
70°-80°	8.5	1.7
80°-90°	1.2	0.2
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°	234.3	46.3
0°-40°	342.6	67.7
0°-60°	471.8	93.2
0°-90°	505.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	505.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	362	362	362	362	362	
5°	357	360	354	352	354	34
15°	339	332	310	296	291	96
25°	306	285	242	210	199	141
35°	262	226	162	121	106	164
45°	212	162	87	46	34	164
55°	159	99	26	6	5	142
65°	104	40	4	1	1	103
75°	50	5	0	0	0	53
85°	5	0	0	0	0	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	362.0	362.0	362.0	362.0	362.0
2.5°	358.4	362.7	359.1	359.5	359.8
5°	357.3	360.2	354.2	352.4	353.8
7.5°	354.5	355.6	346.7	342.1	342.4
10°	350.3	349.2	336.4	328.6	327.5
12.5°	345.3	341.7	324.0	312.6	310.2
15°	339.3	332.2	310.2	295.6	291.0
17.5°	332.2	321.9	294.9	275.7	270.1
20°	324.7	310.5	278.2	254.4	247.3
22.5°	315.8	297.7	260.1	232.1	223.2
25°	306.2	285.0	241.7	209.7	199.1
27.5°	296.3	271.1	222.1	187.0	174.6
30°	285.3	256.6	202.6	163.9	151.2
32.5°	274.0	241.7	182.4	142.7	128.5
35°	262.2	226.0	162.5	121.0	106.5
37.5°	250.2	210.4	143.4	100.4	85.5
40°	237.8	194.5	123.8	80.9	66.4
42.5°	225.7	178.5	105.4	62.5	49.0
45°	211.9	162.5	87.3	46.5	33.7
47.5°	199.4	146.9	69.9	31.6	19.9
50°	185.9	130.2	54.3	18.5	8.5
52.5°	172.5	114.6	39.7	8.2	6.4
55°	159.3	99.0	26.3	6.0	5.0
57.5°	145.5	83.4	14.2	4.6	3.5
60°	132.0	68.1	7.1	3.5	2.5
62.5°	118.2	53.6	5.7	2.1	1.4
65°	104.3	40.1	3.9	1.4	1.1
67.5°	90.5	27.3	2.5	0.7	0.4
70°	76.3	16.7	1.4	0.4	0.4
72.5°	62.8	8.5	0.7	0.4	0.4
75°	49.7	5.3	0.4	0.4	0.0
77.5°	36.9	2.8	0.4	0.4	0.0
80°	25.2	1.1	0.0	0.0	0.0
82.5°	14.5	0.4	0.0	0.0	0.0
85°	5.3	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)