

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: P1056049

Luminaire Tested: S124R3DR-S575D930-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056049
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-S575D930-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

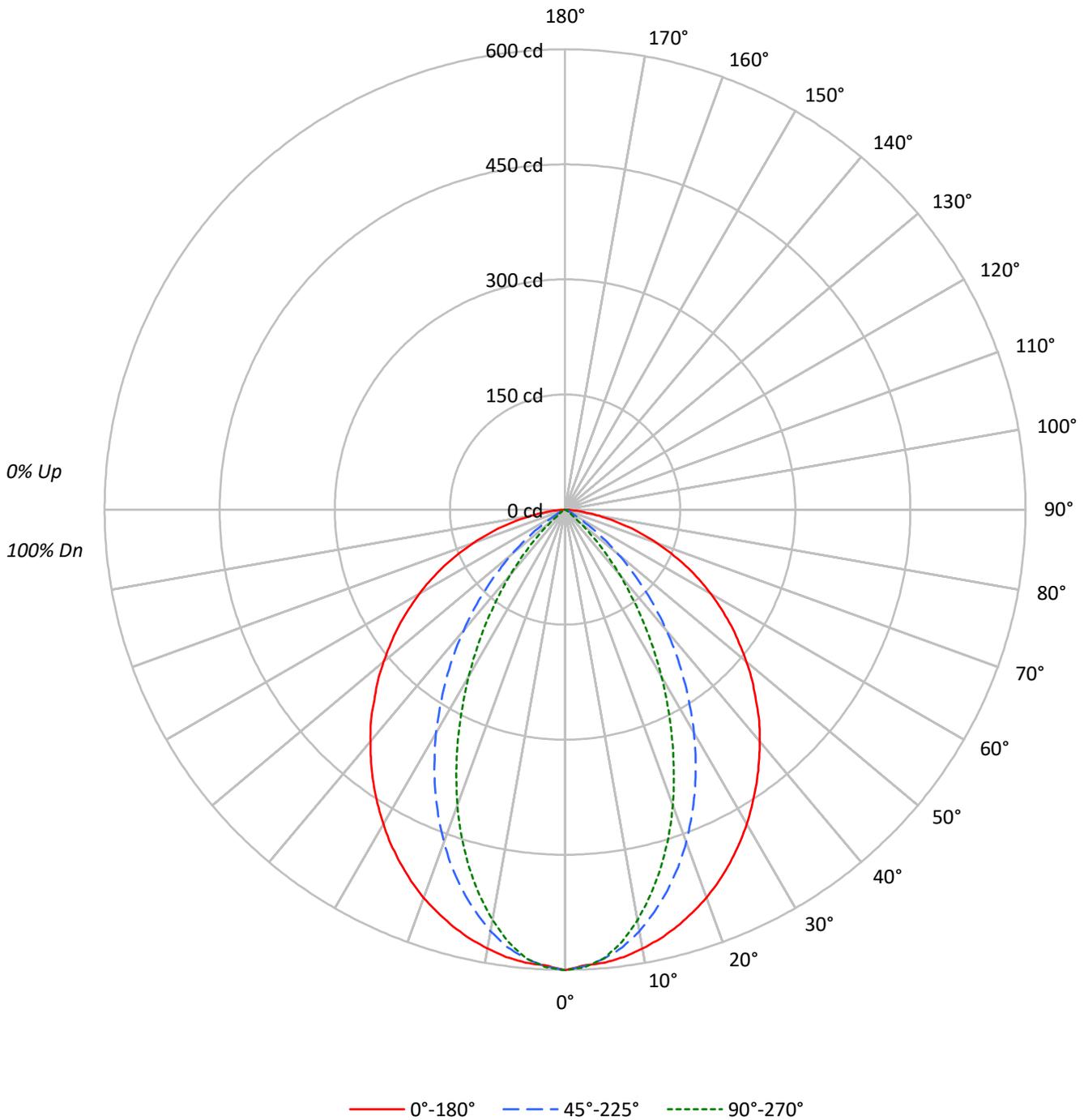
Lumens per Lamp: N/A
Luminaire Lumens: 839.4 lumens
Efficiency: N/A
Efficacy: 43.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	5309	5309	5309
5°	5262	5215	5210
10°	5217	5010	4879
15°	5152	4710	4419
20°	5069	4343	3861
25°	4957	3911	3222
30°	4833	3432	2560
35°	4696	2911	1906
40°	4553	2372	1271
45°	4395	1811	699
50°	4243	1239	194
55°	4076	672	126
60°	3873	209	72
65°	3621	136	38
70°	3273	62	16
75°	2815	20	0
80°	2128	0	0
85°	893	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4395 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	6.6
10°-20°	145.4	17.3
20°-30°	188.0	22.4
30°-40°	179.6	21.4
40°-50°	134.3	16.0
50°-60°	80.0	9.5
60°-70°	40.6	4.8
70°-80°	14.1	1.7
80°-90°	1.9	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°	388.8	46.3
0°-40°	568.4	67.7
0°-60°	782.7	93.3
0°-90°	839.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	839.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	600	600	600	600	600	
5°	593	598	588	585	587	56
15°	563	551	515	490	483	159
25°	508	473	401	348	330	234
35°	435	375	270	201	177	272
45°	352	270	145	77	56	272
55°	264	164	44	10	8	236
65°	173	66	6	2	2	171
75°	82	9	1	1	0	87
85°	9	0	0	0	0	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	600.5	600.5	600.5	600.5	600.5
2.5°	594.6	601.7	595.8	596.4	597.0
5°	592.9	597.6	587.6	584.6	587.0
7.5°	588.2	589.9	575.2	567.6	568.2
10°	581.1	579.3	558.1	545.2	543.4
12.5°	572.9	567.0	537.5	518.7	514.6
15°	562.9	551.1	514.6	490.4	482.8
17.5°	551.1	534.0	489.3	457.5	448.0
20°	538.7	515.2	461.6	422.1	410.4
22.5°	524.0	494.0	431.6	385.1	370.3
25°	508.1	472.8	400.9	348.0	330.3
27.5°	491.6	449.8	368.6	310.3	289.7
30°	473.4	425.7	336.2	272.0	250.8
32.5°	454.5	400.9	302.6	236.7	213.1
35°	435.1	375.0	269.7	200.8	176.6
37.5°	415.1	349.1	237.9	166.6	141.9
40°	394.5	322.6	205.5	134.2	110.1
42.5°	374.5	296.1	174.9	103.6	81.2
45°	351.5	269.7	144.8	77.1	55.9
47.5°	330.9	243.7	116.0	52.4	33.0
50°	308.5	216.1	90.1	30.6	14.1
52.5°	286.1	190.2	65.9	13.5	10.6
55°	264.4	164.3	43.6	10.0	8.2
57.5°	241.4	138.4	23.6	7.7	5.9
60°	219.0	113.0	11.8	5.9	4.1
62.5°	196.1	88.9	9.4	3.5	2.4
65°	173.1	66.5	6.5	2.4	1.8
67.5°	150.1	45.3	4.1	1.2	0.6
70°	126.6	27.7	2.4	0.6	0.6
72.5°	104.2	14.1	1.2	0.6	0.6
75°	82.4	8.8	0.6	0.6	0.0
77.5°	61.2	4.7	0.6	0.6	0.0
80°	41.8	1.8	0.0	0.0	0.0
82.5°	24.1	0.6	0.0	0.0	0.0
85°	8.8	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)