

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: P1056052

Luminaire Tested: S124R3DR-S575D935-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056052
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-S575D935-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

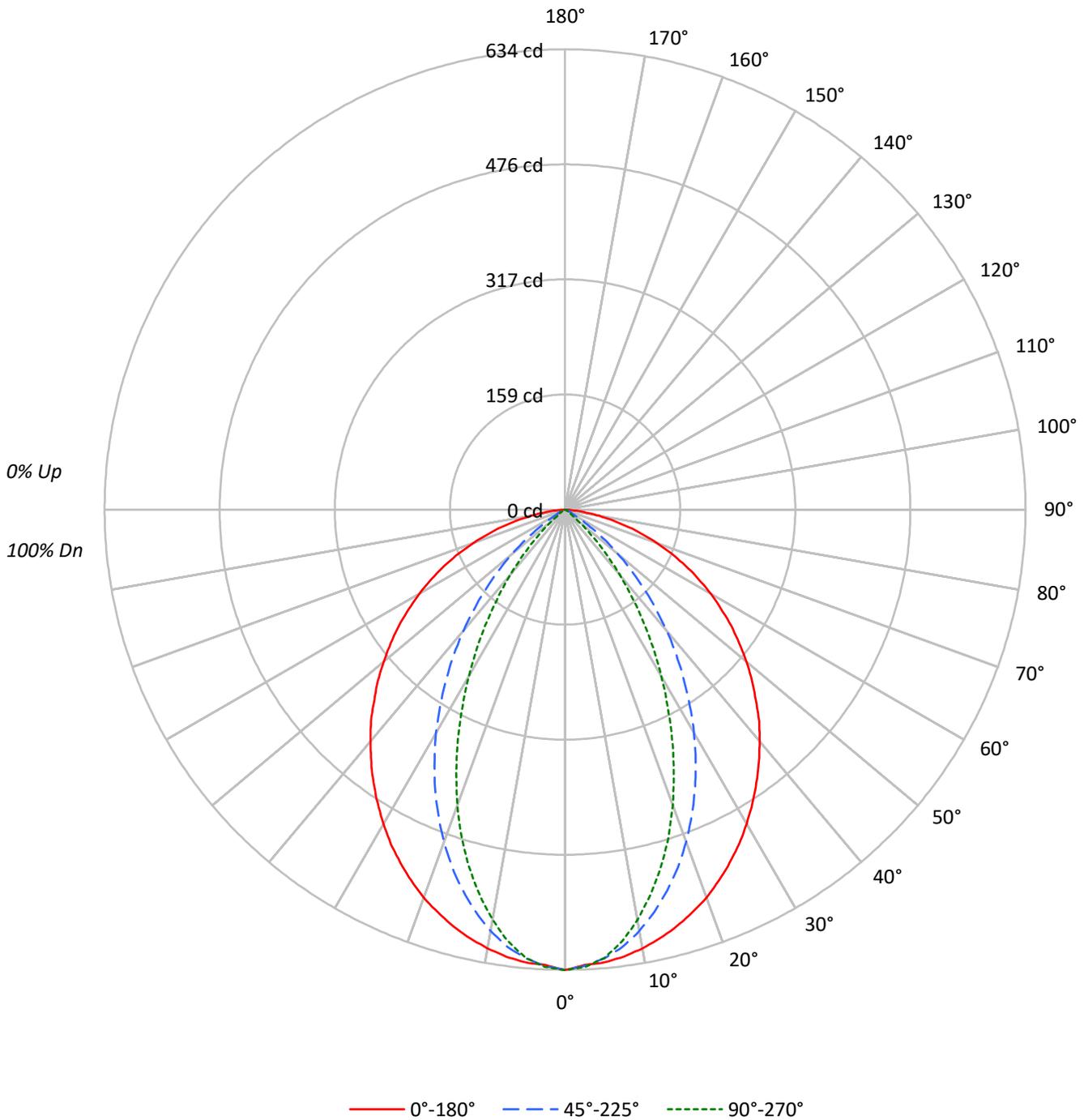
Lumens per Lamp: N/A
Luminaire Lumens: 886.4 lumens
Efficiency: N/A
Efficacy: 46.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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°	5607	5607	5607
5°	5557	5507	5502
10°	5510	5291	5152
15°	5441	4974	4666
20°	5353	4587	4078
25°	5235	4130	3403
30°	5104	3624	2704
35°	4960	3074	2013
40°	4808	2505	1342
45°	4641	1913	739
50°	4481	1308	205
55°	4304	709	134
60°	4090	219	78
65°	3824	142	40
70°	3456	65	16
75°	2972	20	0
80°	2245	0	0
85°	943	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4641 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	6.6
10°-20°	153.6	17.3
20°-30°	198.5	22.4
30°-40°	189.7	21.4
40°-50°	141.9	16.0
50°-60°	84.4	9.5
60°-70°	42.9	4.8
70°-80°	14.9	1.7
80°-90°	2.0	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°	410.6	46.3
0°-40°	600.3	67.7
0°-60°	826.6	93.3
0°-90°	886.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	886.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	626	631	620	617	620	59
15°	594	582	543	518	510	167
25°	537	499	423	368	349	247
35°	460	396	285	212	186	287
45°	371	285	153	82	59	287
55°	279	174	46	11	9	249
65°	183	70	7	2	2	181
75°	87	9	1	1	0	92
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°	634.2	634.2	634.2	634.2	634.2
2.5°	628.0	635.4	629.2	629.8	630.5
5°	626.1	631.1	620.5	617.4	619.9
7.5°	621.1	623.0	607.5	599.4	600.0
10°	613.7	611.8	589.4	575.8	573.9
12.5°	605.0	598.8	567.7	547.8	543.4
15°	594.4	582.0	543.4	517.9	509.8
17.5°	582.0	563.9	516.7	483.1	473.2
20°	568.9	544.0	487.5	445.8	433.4
22.5°	553.4	521.7	455.8	406.6	391.1
25°	536.6	499.3	423.4	367.5	348.8
27.5°	519.2	475.0	389.2	327.7	305.9
30°	499.9	449.5	355.0	287.3	264.9
32.5°	480.0	423.4	319.6	249.9	225.1
35°	459.5	396.1	284.8	212.0	186.5
37.5°	438.3	368.7	251.2	176.0	149.8
40°	416.6	340.7	217.0	141.8	116.3
42.5°	395.4	312.7	184.7	109.4	85.8
45°	371.2	284.8	153.0	81.5	59.1
47.5°	349.4	257.4	122.5	55.3	34.8
50°	325.8	228.2	95.1	32.3	14.9
52.5°	302.2	200.8	69.6	14.3	11.2
55°	279.2	173.5	46.0	10.6	8.7
57.5°	254.9	146.1	24.9	8.1	6.2
60°	231.3	119.4	12.4	6.2	4.4
62.5°	207.0	93.9	9.9	3.7	2.5
65°	182.8	70.3	6.8	2.5	1.9
67.5°	158.5	47.9	4.4	1.2	0.6
70°	133.7	29.2	2.5	0.6	0.6
72.5°	110.1	14.9	1.2	0.6	0.6
75°	87.0	9.3	0.6	0.6	0.0
77.5°	64.7	5.0	0.6	0.6	0.0
80°	44.1	1.9	0.0	0.0	0.0
82.5°	25.5	0.6	0.0	0.0	0.0
85°	9.3	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)