

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: P1056034

Luminaire Tested: S124R3DR-S575D830-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056034
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-S575D830-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, 80 CRI LEDS
Ballast/Driver: -

Summary

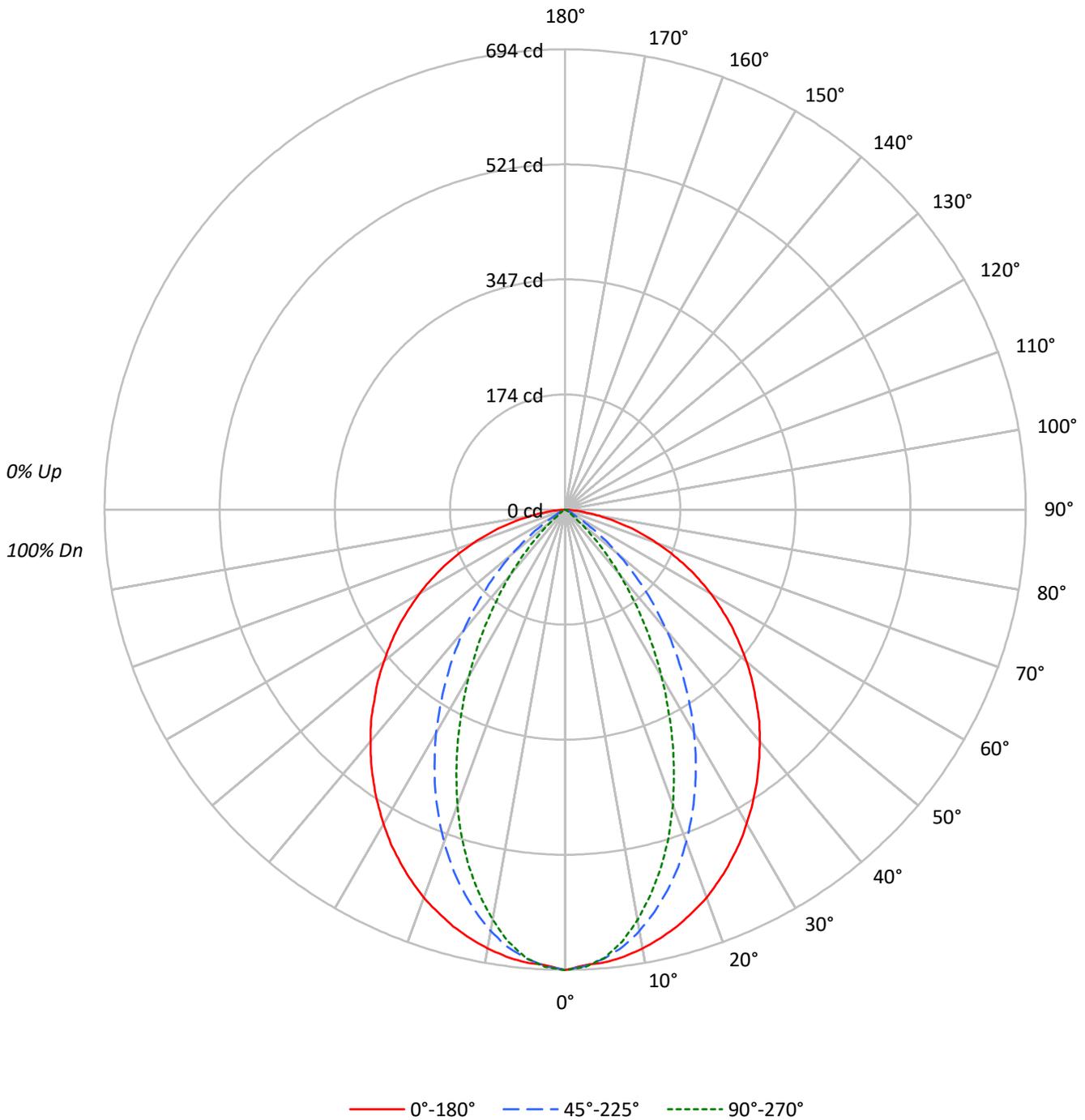
Lumens per Lamp: N/A
Luminaire Lumens: 970.4 lumens
Efficiency: N/A
Efficacy: 50.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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°	6139	6139	6139
5°	6083	6029	6023
10°	6031	5793	5640
15°	5956	5445	5108
20°	5860	5021	4464
25°	5730	4522	3725
30°	5586	3968	2961
35°	5429	3364	2204
40°	5263	2741	1469
45°	5080	2093	809
50°	4906	1432	224
55°	4711	777	146
60°	4477	240	85
65°	4186	157	42
70°	3782	70	18
75°	3255	24	0
80°	2459	0	0
85°	1035	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5080 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.0	6.6
10°-20°	168.1	17.3
20°-30°	217.3	22.4
30°-40°	207.7	21.4
40°-50°	155.3	16.0
50°-60°	92.4	9.5
60°-70°	46.9	4.8
70°-80°	16.3	1.7
80°-90°	2.2	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°	449.5	46.3
0°-40°	657.1	67.7
0°-60°	904.9	93.3
0°-90°	970.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	970.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	694	694	694	694	694	
5°	685	691	679	676	679	65
15°	651	637	595	567	558	183
25°	587	547	464	402	382	271
35°	503	434	312	232	204	315
45°	406	312	167	89	65	314
55°	306	190	50	12	10	273
65°	200	77	8	3	2	198
75°	95	10	1	1	0	101
85°	10	0	0	0	0	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	694.3	694.3	694.3	694.3	694.3
2.5°	687.5	695.6	688.8	689.5	690.2
5°	685.4	690.9	679.3	675.9	678.6
7.5°	680.0	682.0	665.0	656.1	656.8
10°	671.8	669.8	645.3	630.3	628.2
12.5°	662.3	655.5	621.4	599.7	594.9
15°	650.7	637.1	594.9	567.0	558.1
17.5°	637.1	617.3	565.6	528.9	518.0
20°	622.8	595.6	533.6	488.0	474.4
22.5°	605.8	571.1	498.9	445.1	428.1
25°	587.4	546.6	463.5	402.3	381.8
27.5°	568.3	520.0	426.1	358.7	334.9
30°	547.2	492.1	388.7	314.5	290.0
32.5°	525.5	463.5	349.9	273.6	246.4
35°	503.0	433.6	311.7	232.1	204.2
37.5°	479.9	403.6	275.0	192.6	164.0
40°	456.0	373.0	237.5	155.2	127.3
42.5°	432.9	342.4	202.2	119.8	93.9
45°	406.3	311.7	167.4	89.2	64.7
47.5°	382.5	281.8	134.1	60.6	38.1
50°	356.7	249.8	104.1	35.4	16.3
52.5°	330.8	219.8	76.2	15.7	12.3
55°	305.6	189.9	50.4	11.6	9.5
57.5°	279.1	160.0	27.2	8.8	6.8
60°	253.2	130.7	13.6	6.8	4.8
62.5°	226.7	102.8	10.9	4.1	2.7
65°	200.1	76.9	7.5	2.7	2.0
67.5°	173.6	52.4	4.8	1.4	0.7
70°	146.3	32.0	2.7	0.7	0.7
72.5°	120.5	16.3	1.4	0.7	0.7
75°	95.3	10.2	0.7	0.7	0.0
77.5°	70.8	5.4	0.7	0.7	0.0
80°	48.3	2.0	0.0	0.0	0.0
82.5°	27.9	0.7	0.0	0.0	0.0
85°	10.2	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)