

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: P1056050

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056050
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-9)
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-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

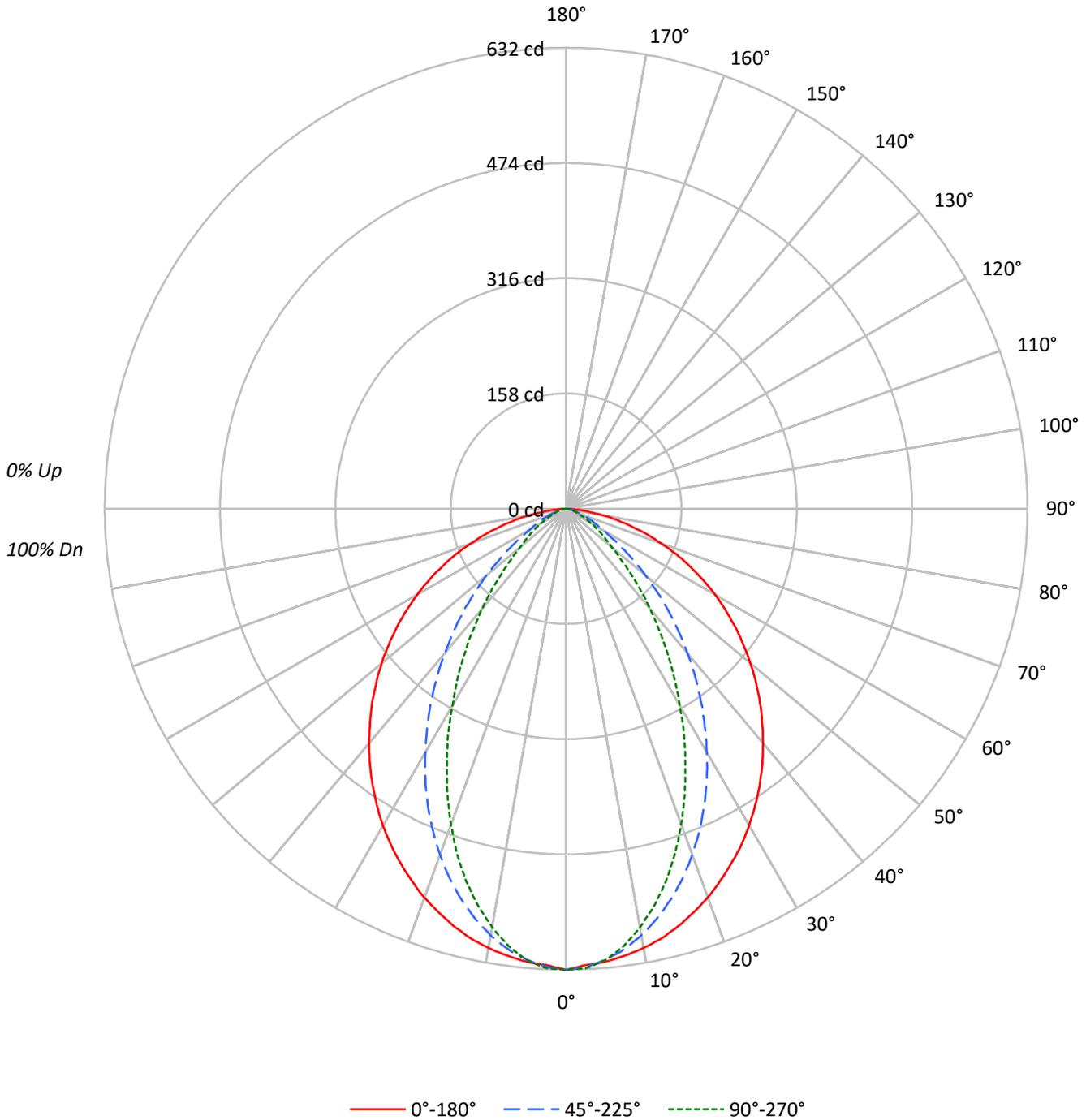
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1022.5 lumens
Efficiency: N/A
Efficacy: 53.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90				89	
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79				78	
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70				68	
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62				60	
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56				54	
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50				48	
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46				44	
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42				40	
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38				37	
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35				34	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5590	5590	5590
5°	5534	5512	5512
10°	5492	5334	5233
15°	5427	5076	4839
20°	5340	4753	4337
25°	5233	4370	3768
30°	5121	3937	3174
35°	4989	3477	2612
40°	4845	2984	2059
45°	4696	2481	1539
50°	4535	1952	1125
55°	4356	1443	899
60°	4164	999	688
65°	3916	776	504
70°	3547	548	396
75°	3098	383	301
80°	2490	300	270
85°	1369	243	243

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4696 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	5.7
10°-20°	156.7	15.3
20°-30°	209.0	20.4
30°-40°	210.5	20.6
40°-50°	172.6	16.9
50°-60°	118.0	11.5
60°-70°	65.9	6.4
70°-80°	26.1	2.6
80°-90°	5.0	0.5
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°	424.4	41.5
0°-40°	634.9	62.1
0°-60°	925.4	90.5
0°-90°	1022.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1022.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	624	631	621	618	621	59
15°	593	586	555	535	529	167
25°	536	510	448	403	386	247
35°	462	413	322	261	242	289
45°	376	307	198	140	123	290
55°	283	198	94	62	58	253
65°	187	94	37	26	24	185
75°	91	25	11	9	9	97
85°	14	2	2	2	2	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	632.3	632.3	632.3	632.3	632.3
2.5°	626.4	634.1	628.8	629.4	630.6
5°	623.5	630.6	621.1	618.2	621.1
7.5°	618.2	623.5	609.4	603.5	604.7
10°	611.7	613.5	594.1	584.1	582.9
12.5°	603.5	601.1	575.8	561.1	557.6
15°	592.9	586.4	554.6	535.2	528.7
17.5°	580.5	569.3	531.1	505.7	496.3
20°	567.6	551.1	505.2	472.8	461.0
22.5°	552.3	531.7	477.5	438.0	424.5
25°	536.4	509.9	448.0	402.7	386.2
27.5°	519.9	487.5	417.4	366.8	350.3
30°	501.6	463.4	385.6	330.9	310.9
32.5°	482.2	438.6	353.8	295.6	276.7
35°	462.2	413.3	322.1	260.8	242.0
37.5°	441.6	387.4	290.3	227.9	209.0
40°	419.8	360.9	258.5	196.6	178.4
42.5°	397.4	333.8	227.9	167.2	150.1
45°	375.6	306.7	198.4	139.5	123.1
47.5°	352.7	279.7	169.6	113.6	99.5
50°	329.7	252.6	141.9	91.3	81.8
52.5°	306.2	225.5	116.6	74.8	68.3
55°	282.6	198.4	93.6	62.4	58.3
57.5°	259.1	171.3	72.4	53.0	48.3
60°	235.5	144.8	56.5	43.0	38.9
62.5°	211.4	118.3	46.5	34.1	30.6
65°	187.2	94.2	37.1	26.5	24.1
67.5°	163.1	71.8	28.3	20.6	18.8
70°	137.2	51.2	21.2	15.9	15.3
72.5°	114.8	34.7	15.3	12.4	11.8
75°	90.7	24.7	11.2	9.4	8.8
77.5°	70.1	15.9	8.2	7.7	7.1
80°	48.9	8.8	5.9	5.3	5.3
82.5°	30.0	4.7	4.1	3.5	3.5
85°	13.5	2.4	2.4	2.4	2.4
87.5°	2.4	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)