

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: P1056044

Luminaire Tested: S124R3DR-S575D850-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056044
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-S575D850-X4F0-XX-UDD-FLL-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

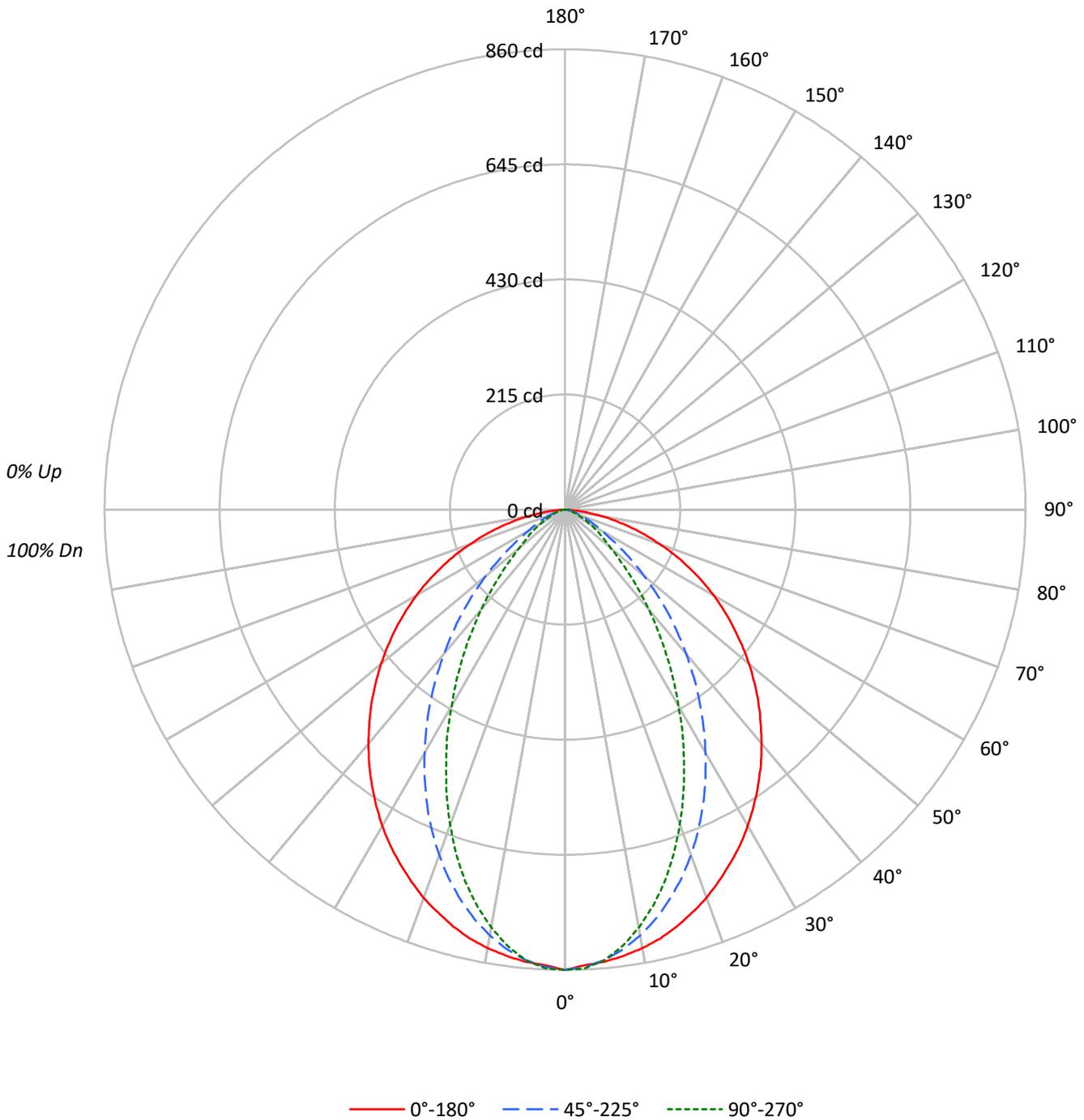
Lumens per Lamp: N/A
Luminaire Lumens: 1390.7 lumens
Efficiency: N/A
Efficacy: 72.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1056044

CATALOG NUMBER: S124R3DR-S575D850-X4F0-XX-UDD-FLL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1056044

CATALOG NUMBER: S124R3DR-S575D850-X4F0-XX-UDD-FLL-S

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				89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78				78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60				60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54				54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48				48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44				44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40				40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37				37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7604	7604	7604
5°	7527	7499	7499
10°	7470	7255	7118
15°	7382	6905	6583
20°	7264	6465	5900
25°	7118	5946	5125
30°	6966	5356	4317
35°	6786	4729	3553
40°	6590	4058	2801
45°	6388	3375	2093
50°	6169	2655	1531
55°	5925	1962	1222
60°	5664	1360	935
65°	5328	1056	686
70°	4824	744	538
75°	4212	519	410
80°	3386	407	367
85°	1867	325	325

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6388 cd/sqm



TEST NUMBER: P1056044

CATALOG NUMBER: S124R3DR-S575D850-X4F0-XX-UDD-FLL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.8	5.7
10°-20°	213.2	15.3
20°-30°	284.3	20.4
30°-40°	286.3	20.6
40°-50°	234.8	16.9
50°-60°	160.5	11.5
60°-70°	89.7	6.4
70°-80°	35.5	2.6
80°-90°	6.7	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°	577.3	41.5
0°-40°	863.6	62.1
0°-60°	1258.8	90.5
0°-90°	1390.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1390.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	848	858	845	841	845	80
15°	806	798	754	728	719	227
25°	730	694	610	548	525	336
35°	629	562	438	355	329	393
45°	511	417	270	190	167	394
55°	384	270	127	85	79	344
65°	255	128	50	36	33	252
75°	123	34	15	13	12	132
85°	18	3	3	3	3	26
90°	0	0	0	0	0	



TEST NUMBER: P1056044

CATALOG NUMBER: S124R3DR-S575D850-X4F0-XX-UDD-FLL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	860.1	860.1	860.1	860.1	860.1
2.5°	852.1	862.5	855.3	856.1	857.7
5°	848.1	857.7	844.9	840.9	844.9
7.5°	840.9	848.1	828.9	820.9	822.5
10°	832.1	834.5	808.1	794.4	792.8
12.5°	820.9	817.7	783.2	763.2	758.4
15°	806.5	797.7	754.4	728.0	719.2
17.5°	789.6	774.4	722.4	687.9	675.1
20°	772.0	749.6	687.1	643.1	627.1
22.5°	751.2	723.2	649.5	595.8	577.4
25°	729.6	693.5	609.5	547.8	525.4
27.5°	707.2	663.1	567.8	498.9	476.5
30°	682.3	630.3	524.6	450.1	422.9
32.5°	655.9	596.6	481.3	402.0	376.4
35°	628.7	562.2	438.1	354.8	329.2
37.5°	600.6	527.0	394.8	309.9	284.3
40°	571.0	490.9	351.6	267.5	242.7
42.5°	540.6	454.1	309.9	227.4	204.2
45°	510.9	417.2	269.9	189.8	167.4
47.5°	479.7	380.4	230.6	154.6	135.3
50°	448.5	343.6	193.0	124.1	111.3
52.5°	416.4	306.7	158.6	101.7	92.9
55°	384.4	269.9	127.3	84.9	79.3
57.5°	352.4	233.0	98.5	72.1	65.7
60°	320.3	197.0	76.9	58.5	52.9
62.5°	287.5	161.0	63.3	46.4	41.6
65°	254.7	128.1	50.5	36.0	32.8
67.5°	221.8	97.7	38.4	28.0	25.6
70°	186.6	69.7	28.8	21.6	20.8
72.5°	156.2	47.3	20.8	16.8	16.0
75°	123.3	33.6	15.2	12.8	12.0
77.5°	95.3	21.6	11.2	10.4	9.6
80°	66.5	12.0	8.0	7.2	7.2
82.5°	40.8	6.4	5.6	4.8	4.8
85°	18.4	3.2	3.2	3.2	3.2
87.5°	3.2	1.6	1.6	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)