

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: P1056035

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056035
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-S575D830-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, 80 CRI LEDS
Ballast/Driver: -

Summary

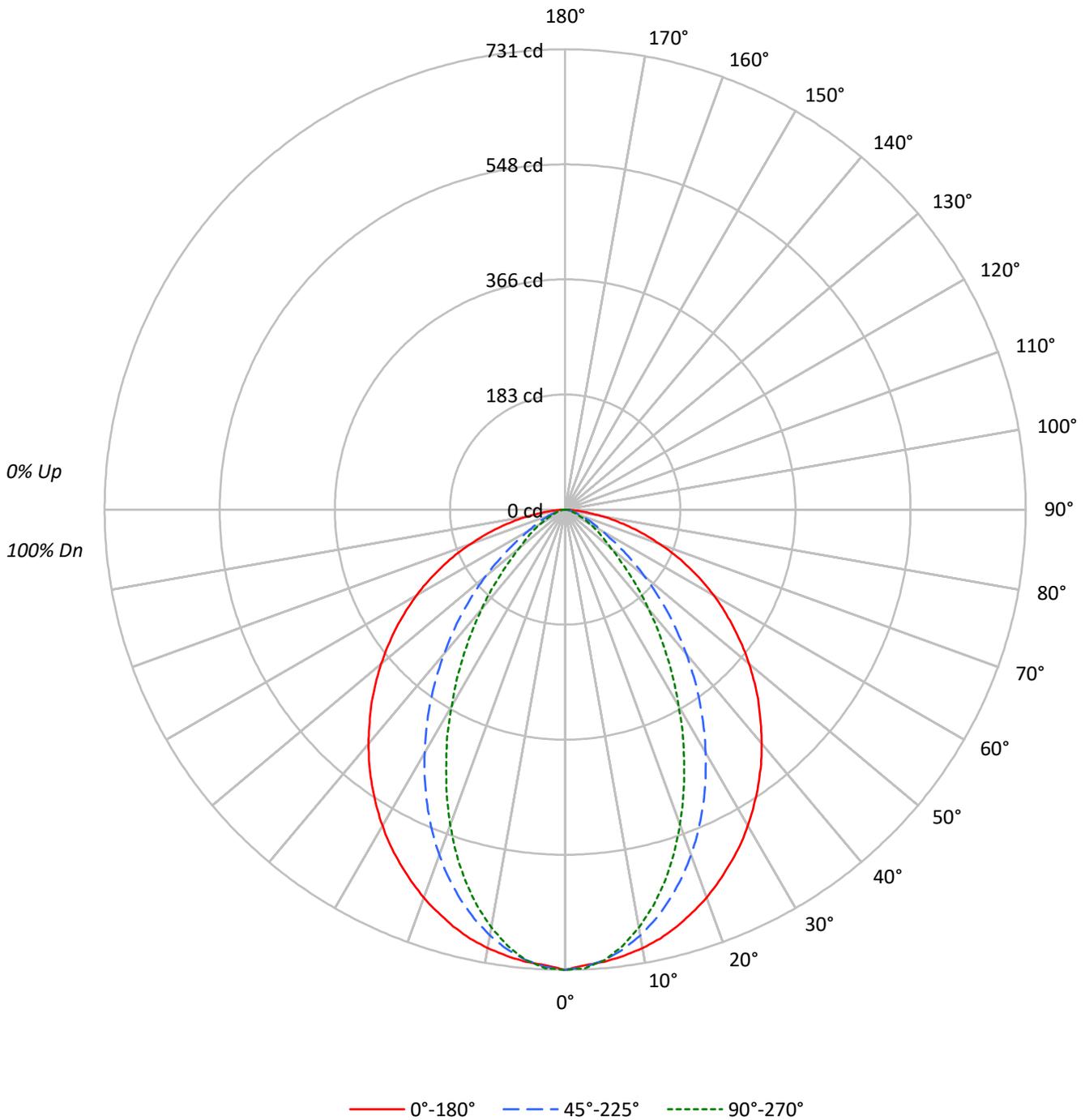
Lumens per Lamp: N/A
Luminaire Lumens: 1182.0 lumens
Efficiency: N/A
Efficacy: 61.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	6463	6463	6463
5°	6397	6373	6373
10°	6349	6166	6049
15°	6274	5869	5594
20°	6173	5495	5014
25°	6049	5053	4356
30°	5920	4551	3669
35°	5767	4018	3019
40°	5601	3449	2380
45°	5430	2868	1779
50°	5243	2256	1301
55°	5036	1668	1039
60°	4815	1155	794
65°	4527	897	584
70°	4100	633	458
75°	3580	441	348
80°	2877	346	311
85°	1593	274	274

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5430 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	5.7
10°-20°	181.2	15.3
20°-30°	241.6	20.4
30°-40°	243.3	20.6
40°-50°	199.5	16.9
50°-60°	136.4	11.5
60°-70°	76.2	6.4
70°-80°	30.2	2.6
80°-90°	5.7	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°	490.6	41.5
0°-40°	733.9	62.1
0°-60°	1069.9	90.5
0°-90°	1182.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1182.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	721	729	718	715	718	68
15°	685	678	641	619	611	193
25°	620	589	518	466	446	286
35°	534	478	372	302	280	334
45°	434	355	229	161	142	335
55°	327	229	108	72	67	292
65°	216	109	43	31	28	214
75°	105	29	13	11	10	112
85°	16	3	3	3	3	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	731.0	731.0	731.0	731.0	731.0
2.5°	724.2	733.1	726.9	727.6	729.0
5°	720.8	729.0	718.1	714.7	718.1
7.5°	714.7	720.8	704.5	697.7	699.0
10°	707.2	709.2	686.8	675.2	673.8
12.5°	697.7	694.9	665.7	648.7	644.6
15°	685.4	677.9	641.2	618.7	611.2
17.5°	671.1	658.2	613.9	584.7	573.8
20°	656.1	637.1	584.0	546.6	532.9
22.5°	638.5	614.6	552.0	506.4	490.7
25°	620.1	589.4	518.0	465.6	446.5
27.5°	601.0	563.6	482.6	424.0	405.0
30°	579.9	535.7	445.8	382.5	359.4
32.5°	557.5	507.1	409.1	341.7	319.9
35°	534.3	477.8	372.3	301.5	279.7
37.5°	510.5	447.9	335.6	263.4	241.6
40°	485.3	417.2	298.8	227.3	206.2
42.5°	459.4	385.9	263.4	193.3	173.6
45°	434.3	354.6	229.4	161.3	142.3
47.5°	407.7	323.3	196.0	131.4	115.0
50°	381.2	292.0	164.0	105.5	94.6
52.5°	353.9	260.7	134.8	86.4	79.0
55°	326.7	229.4	108.2	72.1	67.4
57.5°	299.5	198.1	83.7	61.3	55.8
60°	272.3	167.4	65.3	49.7	44.9
62.5°	244.4	136.8	53.8	39.5	35.4
65°	216.4	108.9	42.9	30.6	27.9
67.5°	188.5	83.0	32.7	23.8	21.8
70°	158.6	59.2	24.5	18.4	17.7
72.5°	132.7	40.2	17.7	14.3	13.6
75°	104.8	28.6	12.9	10.9	10.2
77.5°	81.0	18.4	9.5	8.8	8.2
80°	56.5	10.2	6.8	6.1	6.1
82.5°	34.7	5.4	4.8	4.1	4.1
85°	15.7	2.7	2.7	2.7	2.7
87.5°	2.7	1.4	1.4	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)