

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: P1056051

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056051
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-7)
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-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

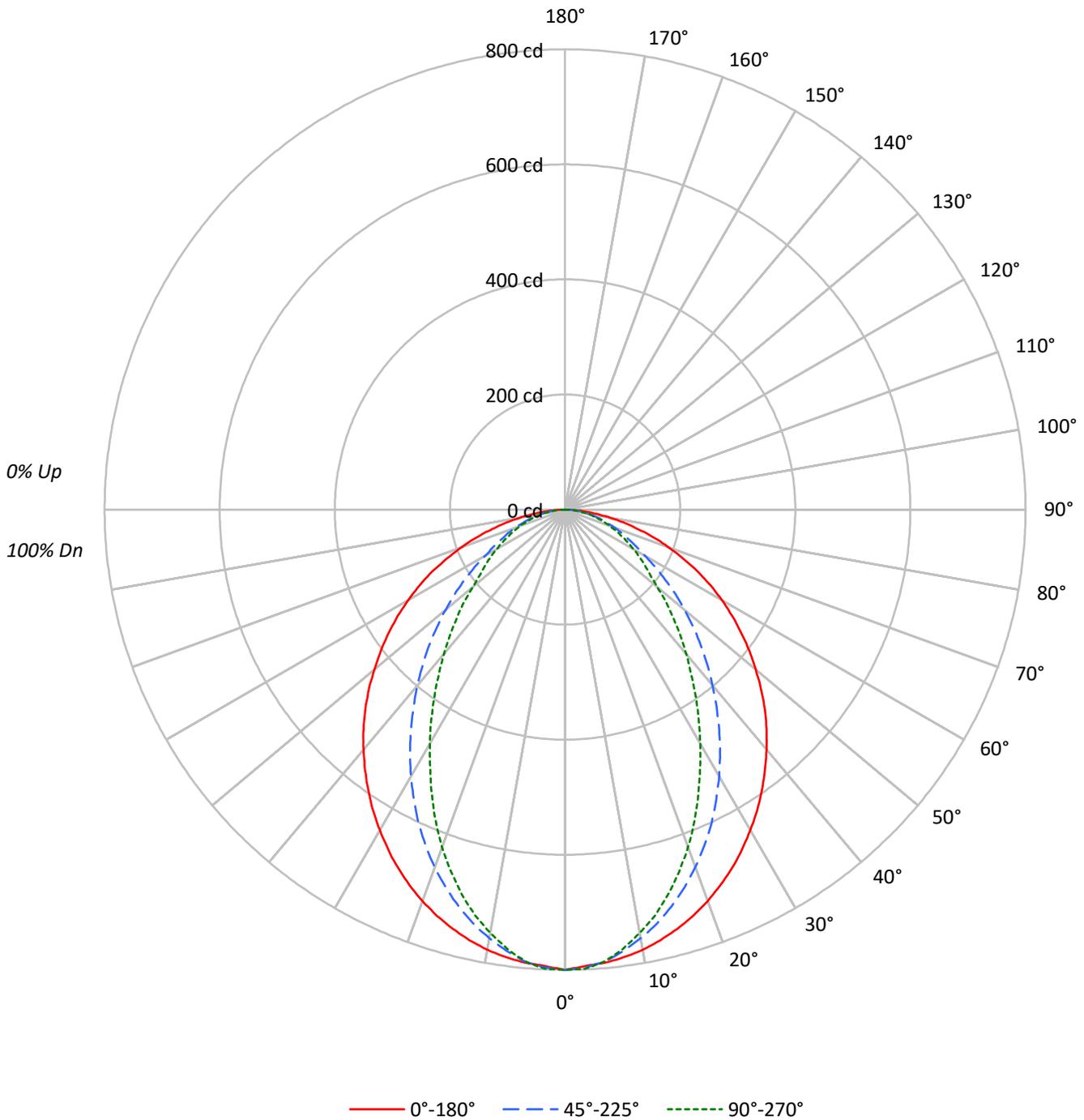
Lumens per Lamp: N/A
Luminaire Lumens: 1593.6 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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									
RC	80									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																			
1	110	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73																			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63																			
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55																			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																			
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43																			
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39																			
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35																			
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32																			
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7074	7074	7074
5°	7018	7002	6997
10°	6978	6793	6707
15°	6903	6537	6338
20°	6814	6227	5878
25°	6703	5870	5341
30°	6570	5464	4796
35°	6431	5039	4270
40°	6286	4600	3779
45°	6132	4174	3320
50°	5945	3725	2866
55°	5763	3276	2605
60°	5559	2812	2415
65°	5310	2550	2253
70°	4932	2360	2130
75°	4465	2173	2012
80°	3895	2006	1889
85°	2982	1856	1735

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6132 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	4.7
10°-20°	202.1	12.7
20°-30°	279.8	17.6
30°-40°	300.3	18.8
40°-50°	273.1	17.1
50°-60°	215.0	13.5
60°-70°	147.2	9.2
70°-80°	79.2	5.0
80°-90°	22.4	1.4
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°	556.3	34.9
0°-40°	856.6	53.8
0°-60°	1344.8	84.4
0°-90°	1593.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1593.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	791	800	789	785	788	75
15°	754	746	714	695	692	213
25°	687	659	602	558	548	316
35°	596	549	467	410	396	373
45°	490	428	334	276	266	378
55°	374	303	212	171	169	334
65°	254	181	122	108	108	250
75°	131	80	64	58	59	140
85°	29	20	18	17	17	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	800.1	800.1	800.1	800.1	800.1
2.5°	794.2	803.7	796.6	797.8	799.0
5°	790.7	799.5	788.9	784.8	788.4
7.5°	784.8	790.7	774.2	766.6	770.1
10°	777.2	778.3	756.6	745.4	747.1
12.5°	766.6	763.6	737.1	721.2	722.4
15°	754.2	746.0	714.2	694.7	692.4
17.5°	740.1	726.5	688.9	664.1	659.4
20°	724.2	705.9	661.8	630.0	624.7
22.5°	706.5	683.0	632.3	594.7	587.0
25°	687.1	658.8	601.7	558.1	547.5
27.5°	665.9	632.9	568.7	521.1	507.5
30°	643.5	605.8	535.2	484.0	469.8
32.5°	620.6	578.2	501.0	446.9	432.2
35°	595.8	549.3	466.9	410.4	395.6
37.5°	570.5	519.3	432.2	375.0	359.7
40°	544.6	489.3	398.6	339.7	327.4
42.5°	518.1	458.6	365.6	306.7	295.6
45°	490.4	428.0	333.8	276.1	265.5
47.5°	462.2	396.8	301.4	247.3	237.3
50°	432.2	365.6	270.8	219.0	208.4
52.5°	403.3	333.8	241.4	191.3	186.0
55°	373.9	302.6	212.5	171.3	169.0
57.5°	344.4	271.4	186.0	155.4	153.1
60°	314.4	240.8	159.0	138.9	136.6
62.5°	284.4	210.8	138.9	123.1	121.9
65°	253.8	181.3	121.9	108.3	107.7
67.5°	221.4	153.1	106.6	95.4	94.8
70°	190.8	124.8	91.3	82.4	82.4
72.5°	161.9	98.9	77.1	70.1	70.1
75°	130.7	79.5	63.6	58.3	58.9
77.5°	103.0	62.4	51.2	47.7	47.7
80°	76.5	46.5	39.4	36.5	37.1
82.5°	51.8	32.4	28.3	26.5	26.5
85°	29.4	20.0	18.3	17.1	17.1
87.5°	10.6	9.4	8.8	7.7	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)