

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: P1056073

Luminaire Tested: S124R3DR-S795D927-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056073
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-S795D927-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

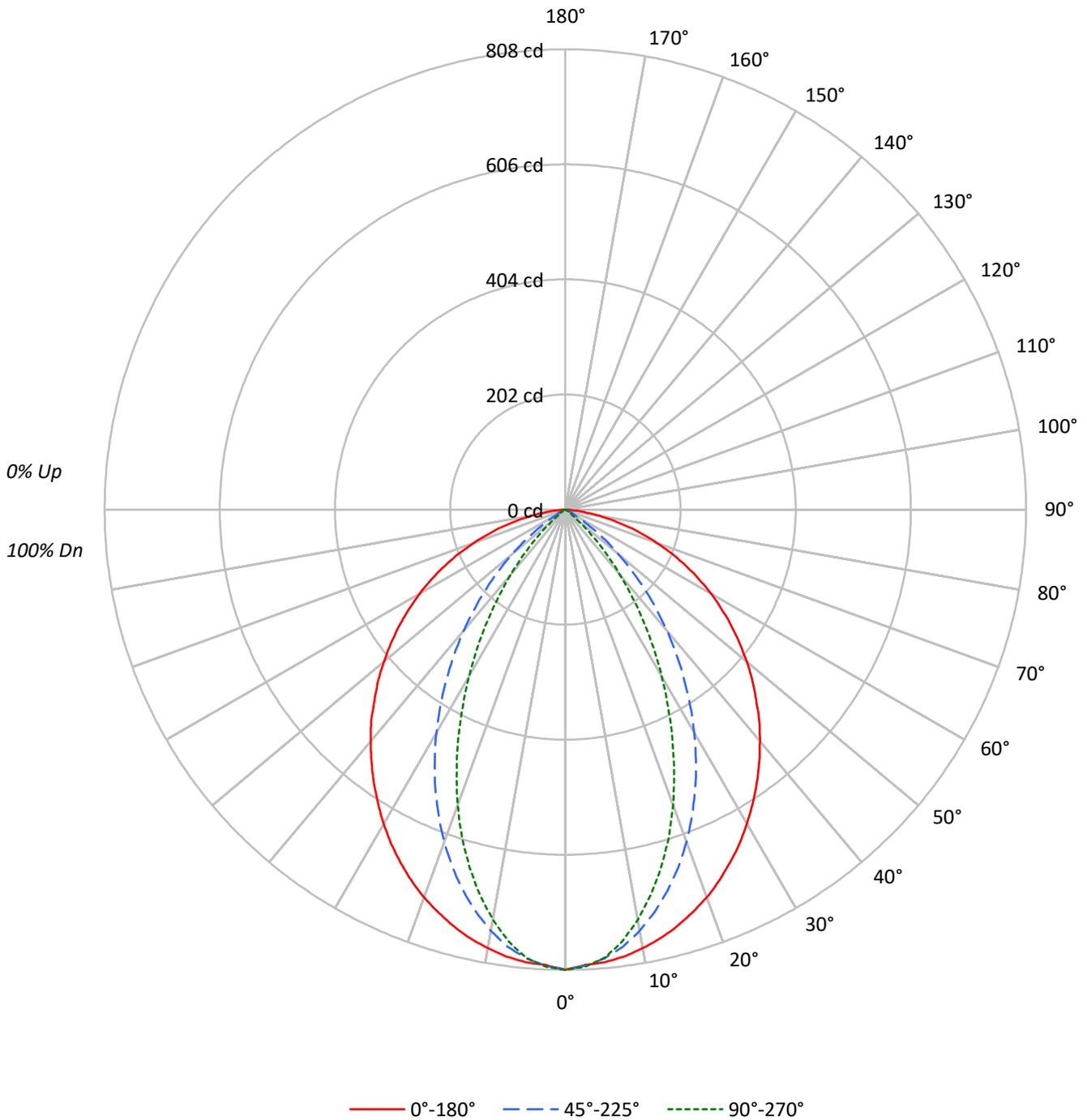
Lumens per Lamp: N/A
Luminaire Lumens: 1129.4 lumens
Efficiency: N/A
Efficacy: 42.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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°	7144	7144	7144
5°	7080	7017	7010
10°	7020	6742	6565
15°	6932	6338	5946
20°	6819	5844	5196
25°	6670	5263	4335
30°	6502	4618	3446
35°	6318	3916	2566
40°	6126	3191	1709
45°	5913	2437	942
50°	5710	1667	261
55°	5483	903	171
60°	5211	279	97
65°	4872	182	50
70°	4402	83	21
75°	3788	27	0
80°	2861	0	0
85°	1207	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5913 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	6.6
10°-20°	195.7	17.3
20°-30°	252.9	22.4
30°-40°	241.7	21.4
40°-50°	180.8	16.0
50°-60°	107.6	9.5
60°-70°	54.6	4.8
70°-80°	19.0	1.7
80°-90°	2.6	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°	523.1	46.3
0°-40°	764.8	67.7
0°-60°	1053.2	93.3
0°-90°	1129.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1129.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	798	804	791	787	790	76
15°	757	742	692	660	650	213
25°	684	636	540	468	444	315
35°	585	505	363	270	238	366
45°	473	363	195	104	75	366
55°	356	221	59	14	11	318
65°	233	90	9	3	2	230
75°	111	12	1	1	0	118
85°	12	0	0	0	0	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.0	808.0	808.0	808.0	808.0
2.5°	800.1	809.6	801.7	802.5	803.3
5°	797.7	804.1	790.6	786.6	789.8
7.5°	791.4	793.8	774.0	763.7	764.5
10°	781.9	779.5	751.0	733.6	731.2
12.5°	770.8	762.9	723.3	697.9	692.4
15°	757.3	741.5	692.4	659.9	649.6
17.5°	741.5	718.5	658.3	615.5	602.8
20°	724.8	693.2	621.1	568.0	552.2
22.5°	705.0	664.6	580.7	518.1	498.3
25°	683.7	636.1	539.5	468.2	444.4
27.5°	661.5	605.2	495.9	417.5	389.8
30°	636.9	572.7	452.3	366.0	337.5
32.5°	611.6	539.5	407.2	318.5	286.8
35°	585.4	504.6	362.8	270.1	237.7
37.5°	558.5	469.8	320.0	224.2	190.9
40°	530.8	434.1	276.5	180.6	148.1
42.5°	503.8	398.5	235.3	139.4	109.3
45°	472.9	362.8	194.9	103.8	75.3
47.5°	445.2	328.0	156.1	70.5	44.4
50°	415.1	290.7	121.2	41.2	19.0
52.5°	385.0	255.9	88.7	18.2	14.3
55°	355.7	221.0	58.6	13.5	11.1
57.5°	324.8	186.2	31.7	10.3	7.9
60°	294.7	152.1	15.8	7.9	5.5
62.5°	263.8	119.6	12.7	4.8	3.2
65°	232.9	89.5	8.7	3.2	2.4
67.5°	202.0	61.0	5.5	1.6	0.8
70°	170.3	37.2	3.2	0.8	0.8
72.5°	140.2	19.0	1.6	0.8	0.8
75°	110.9	11.9	0.8	0.8	0.0
77.5°	82.4	6.3	0.8	0.8	0.0
80°	56.2	2.4	0.0	0.0	0.0
82.5°	32.5	0.8	0.0	0.0	0.0
85°	11.9	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)