

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: P1056061

Luminaire Tested: S124R3DR-S795D830-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056061
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-S795D830-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

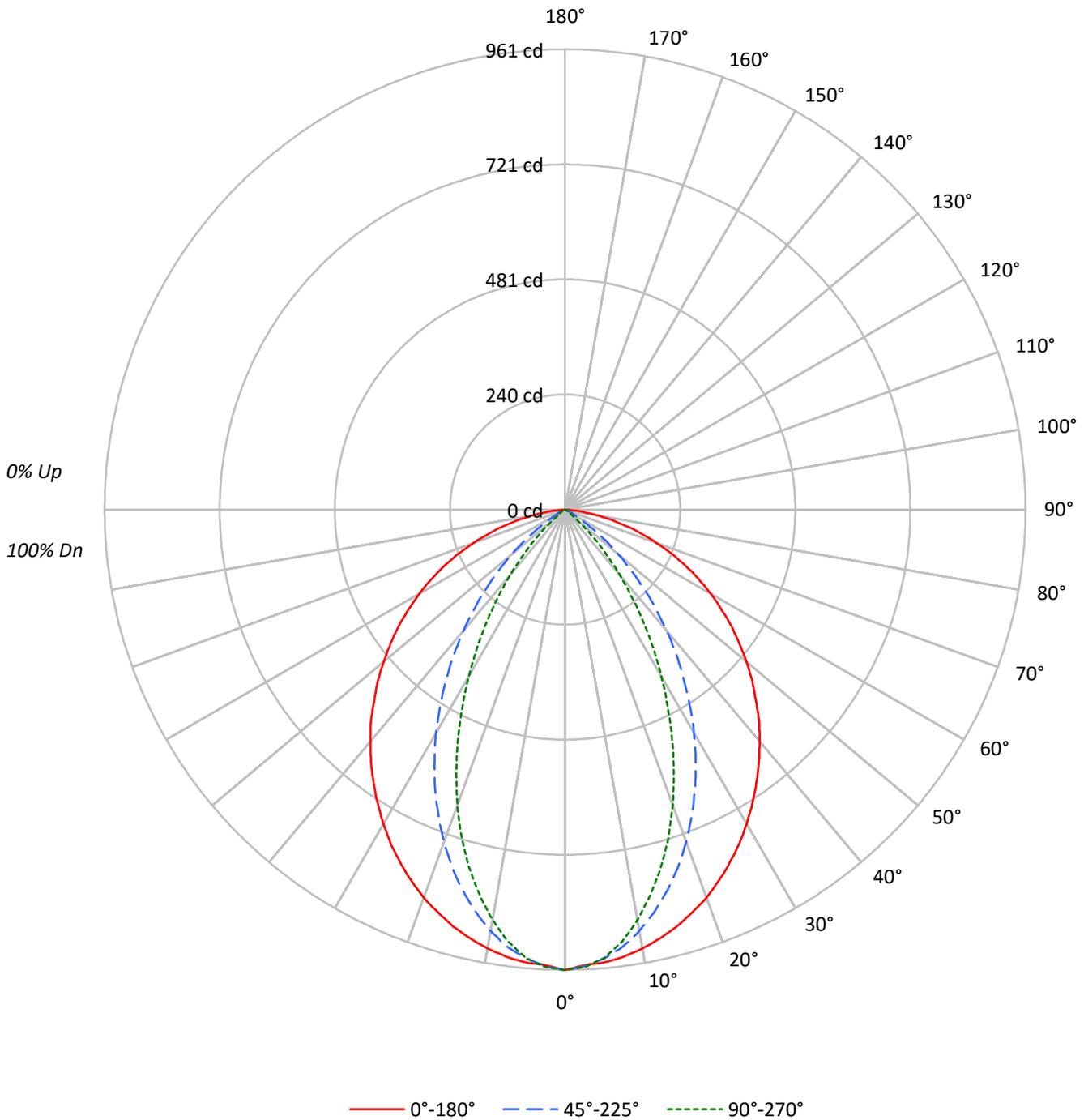
Lumens per Lamp: N/A
Luminaire Lumens: 1343.7 lumens
Efficiency: N/A
Efficacy: 50.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1056061

CATALOG NUMBER: S124R3DR-S795D830-X4F0-XX-UDD-FLL-B

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64			64	
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57			57	
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52			52	
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47			47	
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43			43	
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40			40	
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37			37	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8500	8500	8500
5°	8423	8349	8340
10°	8352	8022	7811
15°	8248	7540	7075
20°	8114	6953	6182
25°	7935	6262	5159
30°	7736	5495	4099
35°	7518	4659	3052
40°	7289	3796	2035
45°	7036	2900	1119
50°	6793	1983	311
55°	6523	1074	203
60°	6200	334	117
65°	5797	218	59
70°	5237	98	23
75°	4509	31	0
80°	3406	0	0
85°	1430	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7036 cd/sqm



TEST NUMBER: P1056061

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.7	6.6
10°-20°	232.8	17.3
20°-30°	300.9	22.4
30°-40°	287.6	21.4
40°-50°	215.1	16.0
50°-60°	128.0	9.5
60°-70°	65.0	4.8
70°-80°	22.6	1.7
80°-90°	3.1	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°	622.4	46.3
0°-40°	910.0	67.7
0°-60°	1253.1	93.3
0°-90°	1343.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1343.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	961	961	961	961	961	
5°	949	957	941	936	940	90
15°	901	882	824	785	773	254
25°	813	757	642	557	529	375
35°	696	600	432	321	283	436
45°	563	432	232	124	90	435
55°	423	263	70	16	13	378
65°	277	106	10	4	3	274
75°	132	14	1	1	0	140
85°	14	0	0	0	0	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	961.4	961.4	961.4	961.4	961.4
2.5°	952.0	963.3	953.9	954.8	955.7
5°	949.1	956.7	940.7	935.9	939.7
7.5°	941.6	944.4	920.9	908.6	909.6
10°	930.3	927.5	893.5	872.8	870.0
12.5°	917.1	907.7	860.5	830.4	823.8
15°	901.1	882.2	823.8	785.1	772.9
17.5°	882.2	854.9	783.3	732.4	717.3
20°	862.4	824.7	739.0	675.8	657.0
22.5°	838.9	790.8	690.9	616.4	592.9
25°	813.4	756.9	641.9	557.0	528.8
27.5°	787.0	720.1	590.0	496.7	463.7
30°	757.8	681.5	538.2	435.5	401.5
32.5°	727.6	641.9	484.5	378.9	341.2
35°	696.5	600.4	431.7	321.4	282.8
37.5°	664.5	558.9	380.8	266.7	227.2
40°	631.5	516.5	328.9	214.9	176.3
42.5°	599.5	474.1	279.9	165.9	130.1
45°	562.7	431.7	231.9	123.5	89.5
47.5°	529.7	390.2	185.7	83.9	52.8
50°	493.9	345.9	144.2	49.0	22.6
52.5°	458.1	304.4	105.6	21.7	17.0
55°	423.2	263.0	69.7	16.0	13.2
57.5°	386.4	221.5	37.7	12.3	9.4
60°	350.6	181.0	18.9	9.4	6.6
62.5°	313.9	142.3	15.1	5.7	3.8
65°	277.1	106.5	10.4	3.8	2.8
67.5°	240.3	72.6	6.6	1.9	0.9
70°	202.6	44.3	3.8	0.9	0.9
72.5°	166.8	22.6	1.9	0.9	0.9
75°	132.0	14.1	0.9	0.9	0.0
77.5°	98.0	7.5	0.9	0.9	0.0
80°	66.9	2.8	0.0	0.0	0.0
82.5°	38.6	0.9	0.0	0.0	0.0
85°	14.1	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)