

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: P1056082

Luminaire Tested: S124R3DR-S795D940-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056082
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-S795D940-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

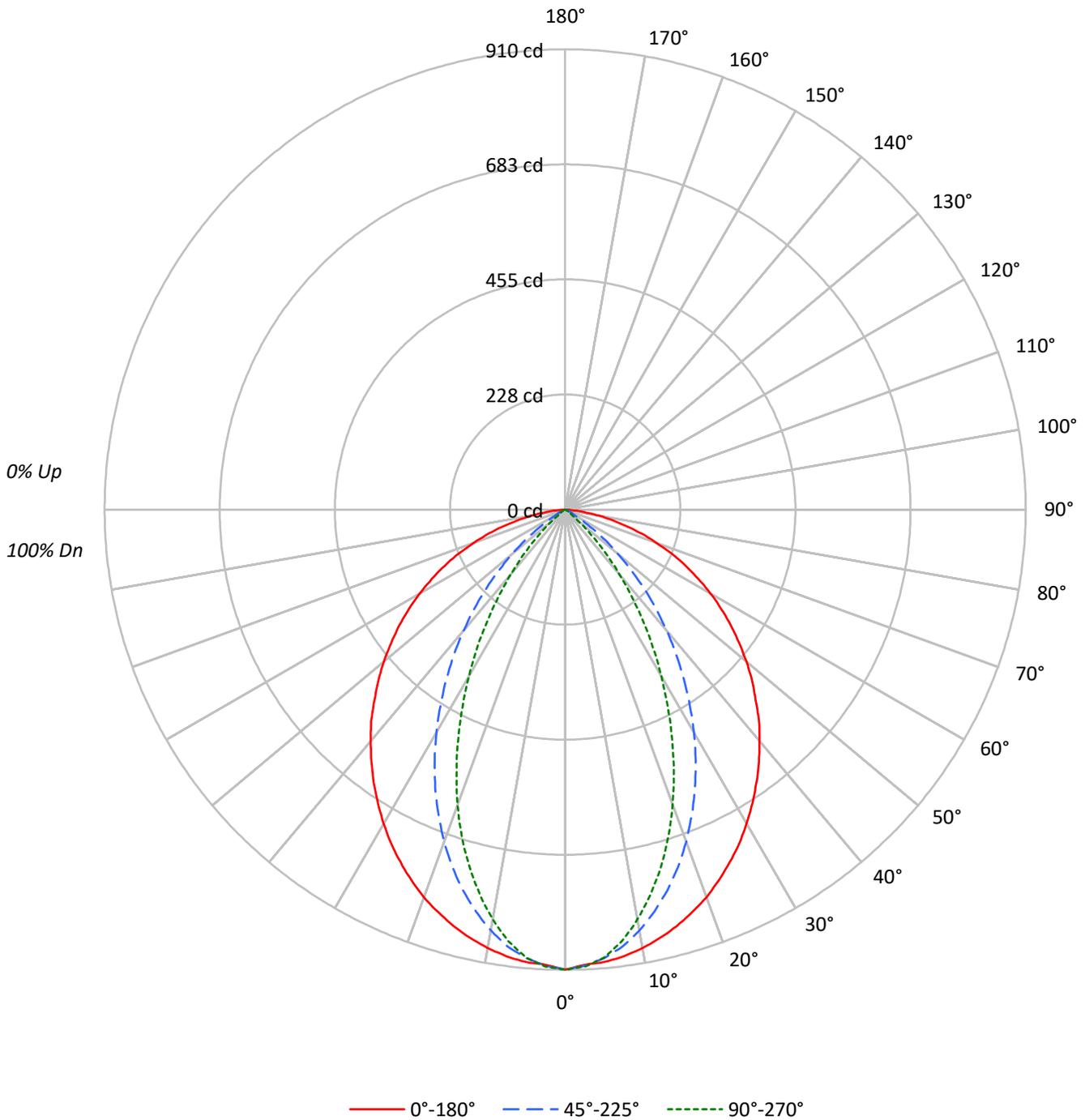
Lumens per Lamp: N/A
Luminaire Lumens: 1271.3 lumens
Efficiency: N/A
Efficacy: 48.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	8041	8041	8041
5°	7970	7898	7890
10°	7901	7589	7389
15°	7803	7134	6693
20°	7677	6578	5848
25°	7507	5924	4880
30°	7319	5198	3878
35°	7113	4408	2887
40°	6895	3592	1924
45°	6657	2743	1059
50°	6428	1876	294
55°	6172	1017	193
60°	5865	315	110
65°	5485	205	56
70°	4956	93	23
75°	4263	31	0
80°	3223	0	0
85°	1359	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6657 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.9	6.6
10°-20°	220.3	17.3
20°-30°	284.7	22.4
30°-40°	272.1	21.4
40°-50°	203.5	16.0
50°-60°	121.1	9.5
60°-70°	61.5	4.8
70°-80°	21.4	1.7
80°-90°	2.9	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°	588.8	46.3
0°-40°	860.9	67.7
0°-60°	1185.5	93.3
0°-90°	1271.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1271.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	898	905	890	886	889	85
15°	852	835	779	743	731	240
25°	770	716	607	527	500	354
35°	659	568	408	304	268	412
45°	532	408	219	117	85	412
55°	400	249	66	15	12	357
65°	262	101	10	4	3	259
75°	125	13	1	1	0	132
85°	13	0	0	0	0	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	909.5	909.5	909.5	909.5	909.5
2.5°	900.6	911.3	902.4	903.3	904.2
5°	898.0	905.1	889.9	885.5	889.0
7.5°	890.8	893.5	871.2	859.6	860.5
10°	880.1	877.4	845.3	825.7	823.0
12.5°	867.6	858.7	814.1	785.6	779.4
15°	852.5	834.6	779.4	742.8	731.2
17.5°	834.6	808.8	741.0	692.9	678.6
20°	815.9	780.2	699.1	639.4	621.5
22.5°	793.6	748.1	653.6	583.2	560.9
25°	769.5	716.0	607.3	527.0	500.2
27.5°	744.6	681.3	558.2	469.9	438.7
30°	716.9	644.7	509.2	412.0	379.9
32.5°	688.4	607.3	458.3	358.5	322.8
35°	659.0	568.0	408.4	304.1	267.5
37.5°	628.7	528.8	360.3	252.4	214.9
40°	597.4	488.7	311.2	203.3	166.7
42.5°	567.1	448.5	264.8	156.9	123.1
45°	532.4	408.4	219.4	116.8	84.7
47.5°	501.1	369.2	175.7	79.4	49.9
50°	467.3	327.3	136.4	46.4	21.4
52.5°	433.4	288.0	99.9	20.5	16.1
55°	400.4	248.8	66.0	15.2	12.5
57.5°	365.6	209.6	35.7	11.6	8.9
60°	331.7	171.2	17.8	8.9	6.2
62.5°	296.9	134.6	14.3	5.4	3.6
65°	262.2	100.8	9.8	3.6	2.7
67.5°	227.4	68.7	6.2	1.8	0.9
70°	191.7	41.9	3.6	0.9	0.9
72.5°	157.8	21.4	1.8	0.9	0.9
75°	124.8	13.4	0.9	0.9	0.0
77.5°	92.7	7.1	0.9	0.9	0.0
80°	63.3	2.7	0.0	0.0	0.0
82.5°	36.6	0.9	0.0	0.0	0.0
85°	13.4	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)