

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: P1056070

Luminaire Tested: S124R3DR-S795D850-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056070
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-S795D850-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

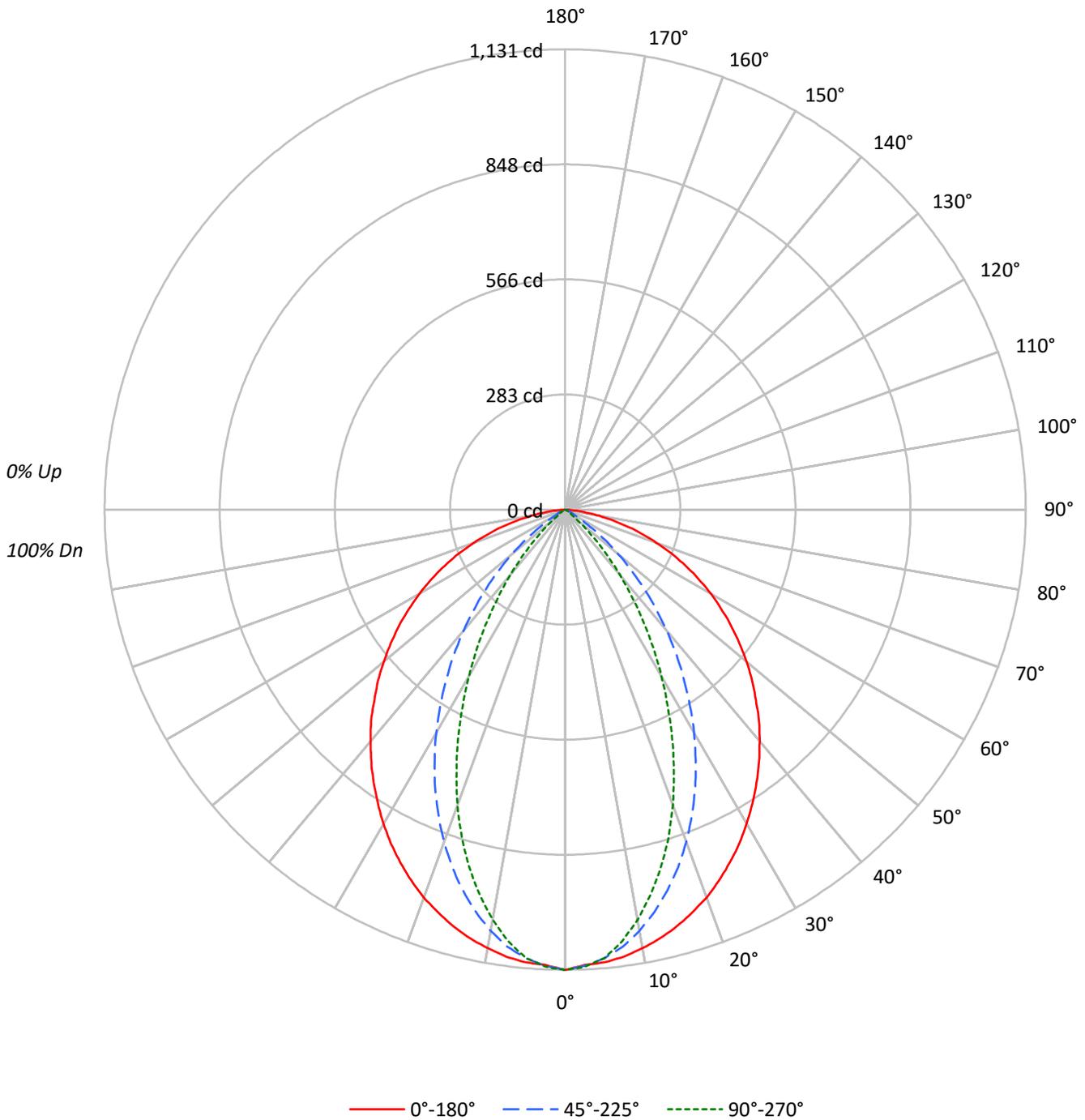
Lumens per Lamp: N/A
Luminaire Lumens: 1581.0 lumens
Efficiency: N/A
Efficacy: 59.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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

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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°	10001	10001	10001
5°	9912	9823	9813
10°	9827	9438	9190
15°	9704	8872	8324
20°	9547	8181	7273
25°	9337	7367	6069
30°	9102	6464	4823
35°	8846	5482	3591
40°	8575	4467	2394
45°	8279	3411	1318
50°	7993	2334	366
55°	7675	1266	239
60°	7294	393	138
65°	6820	255	69
70°	6163	114	28
75°	5305	38	0
80°	4007	0	0
85°	1684	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8279 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	6.6
10°-20°	274.0	17.3
20°-30°	354.0	22.4
30°-40°	338.4	21.4
40°-50°	253.0	16.0
50°-60°	150.6	9.5
60°-70°	76.5	4.8
70°-80°	26.6	1.7
80°-90°	3.6	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°	732.3	46.3
0°-40°	1070.7	67.7
0°-60°	1474.3	93.3
0°-90°	1581.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1581.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1131	1131	1131	1131	1131	
5°	1117	1126	1107	1101	1106	106
15°	1060	1038	969	924	909	299
25°	957	890	755	655	622	441
35°	820	706	508	378	333	512
45°	662	508	273	145	105	512
55°	498	309	82	19	16	445
65°	326	125	12	4	3	322
75°	155	17	1	1	0	165
85°	17	0	0	0	0	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1131.2	1131.2	1131.2	1131.2	1131.2
2.5°	1120.1	1133.4	1122.3	1123.4	1124.5
5°	1116.8	1125.6	1106.8	1101.2	1105.7
7.5°	1107.9	1111.2	1083.5	1069.1	1070.2
10°	1094.6	1091.3	1051.3	1026.9	1023.6
12.5°	1079.1	1068.0	1012.5	977.0	969.3
15°	1060.2	1038.0	969.3	923.8	909.4
17.5°	1038.0	1005.9	921.6	861.7	843.9
20°	1014.7	970.4	869.5	795.2	773.0
22.5°	987.0	930.5	812.9	725.3	697.6
25°	957.1	890.5	755.2	655.4	622.1
27.5°	926.0	847.3	694.2	584.4	545.6
30°	891.6	801.8	633.2	512.4	472.4
32.5°	856.1	755.2	570.0	445.8	401.5
35°	819.6	706.4	507.9	378.2	332.7
37.5°	781.8	657.6	448.0	313.8	267.3
40°	743.0	607.7	387.0	252.9	207.4
42.5°	705.3	557.8	329.4	195.2	153.0
45°	662.1	507.9	272.8	145.3	105.4
47.5°	623.3	459.1	218.5	98.7	62.1
50°	581.1	407.0	169.7	57.7	26.6
52.5°	539.0	358.2	124.2	25.5	20.0
55°	497.9	309.4	82.1	18.9	15.5
57.5°	454.7	260.6	44.4	14.4	11.1
60°	412.5	212.9	22.2	11.1	7.8
62.5°	369.3	167.5	17.7	6.7	4.4
65°	326.0	125.3	12.2	4.4	3.3
67.5°	282.8	85.4	7.8	2.2	1.1
70°	238.4	52.1	4.4	1.1	1.1
72.5°	196.3	26.6	2.2	1.1	1.1
75°	155.3	16.6	1.1	1.1	0.0
77.5°	115.3	8.9	1.1	1.1	0.0
80°	78.7	3.3	0.0	0.0	0.0
82.5°	45.5	1.1	0.0	0.0	0.0
85°	16.6	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)