

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: P1056062

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056062
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-9)
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-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

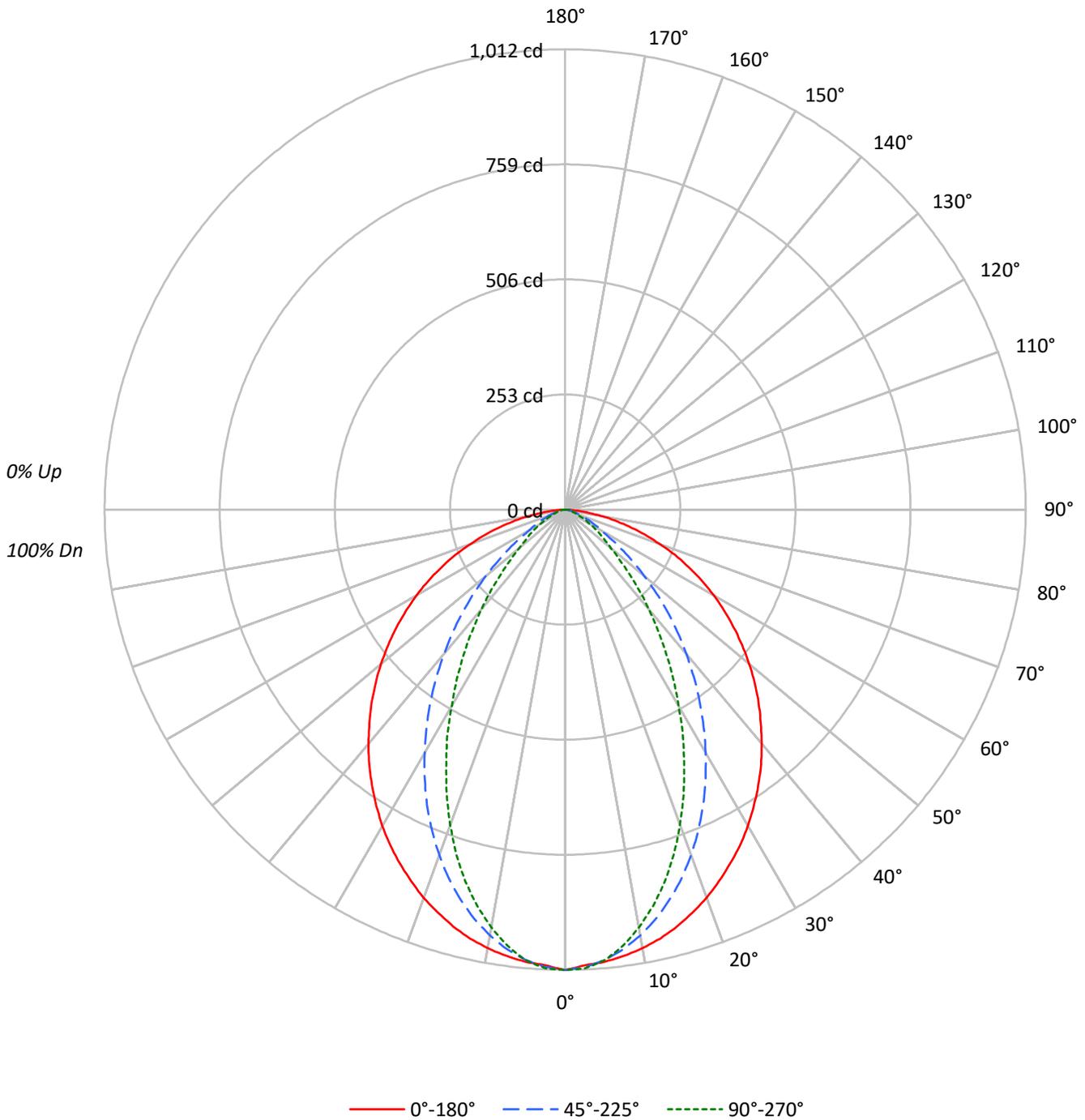
Lumens per Lamp: N/A
Luminaire Lumens: 1636.9 lumens
Efficiency: N/A
Efficacy: 62.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8950	8950	8950
5°	8859	8825	8825
10°	8792	8538	8377
15°	8687	8127	7747
20°	8549	7609	6944
25°	8377	6998	6032
30°	8198	6303	5081
35°	7986	5565	4181
40°	7756	4776	3296
45°	7518	3971	2463
50°	7260	3125	1802
55°	6974	2311	1438
60°	6666	1600	1100
65°	6270	1243	808
70°	5677	876	633
75°	4960	611	482
80°	3982	479	433
85°	2201	385	385

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7518 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.9	5.7
10°-20°	250.9	15.3
20°-30°	334.6	20.4
30°-40°	336.9	20.6
40°-50°	276.3	16.9
50°-60°	188.9	11.5
60°-70°	105.5	6.4
70°-80°	41.8	2.6
80°-90°	8.0	0.5
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°	679.4	41.5
0°-40°	1016.3	62.1
0°-60°	1481.5	90.5
0°-90°	1636.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1636.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1012	1012	1012	1012	1012	
5°	998	1010	994	990	994	95
15°	949	939	888	857	846	267
25°	859	816	717	645	618	396
35°	740	662	516	418	387	463
45°	601	491	318	223	197	464
55°	452	318	150	100	93	405
65°	300	151	59	42	39	296
75°	145	40	18	15	14	156
85°	22	4	4	4	4	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1012.3	1012.3	1012.3	1012.3	1012.3
2.5°	1002.9	1015.1	1006.6	1007.6	1009.5
5°	998.2	1009.5	994.4	989.7	994.4
7.5°	989.7	998.2	975.5	966.1	968.0
10°	979.3	982.1	951.0	935.0	933.1
12.5°	966.1	962.3	921.8	898.2	892.6
15°	949.1	938.8	887.9	856.8	846.4
17.5°	929.3	911.4	850.2	809.6	794.6
20°	908.6	882.2	808.7	756.9	738.0
22.5°	884.1	851.1	764.4	701.3	679.6
25°	858.7	816.2	717.3	644.7	618.3
27.5°	832.3	780.4	668.3	587.2	560.8
30°	803.0	741.8	617.4	529.7	497.7
32.5°	771.9	702.2	566.5	473.2	443.0
35°	739.9	661.7	515.6	417.5	387.4
37.5°	706.9	620.2	464.7	364.8	334.6
40°	672.0	577.8	413.8	314.8	285.6
42.5°	636.2	534.4	364.8	267.7	240.3
45°	601.3	491.1	317.6	223.4	197.0
47.5°	564.6	447.7	271.5	181.9	159.3
50°	527.8	404.4	227.2	146.1	131.0
52.5°	490.1	361.0	186.6	119.7	109.3
55°	452.4	317.6	149.9	99.9	93.3
57.5°	414.7	274.3	115.9	84.8	77.3
60°	377.0	231.9	90.5	68.8	62.2
62.5°	338.4	189.5	74.5	54.7	49.0
65°	299.7	150.8	59.4	42.4	38.6
67.5°	261.1	115.0	45.2	33.0	30.2
70°	219.6	82.0	33.9	25.4	24.5
72.5°	183.8	55.6	24.5	19.8	18.9
75°	145.2	39.6	17.9	15.1	14.1
77.5°	112.2	25.4	13.2	12.3	11.3
80°	78.2	14.1	9.4	8.5	8.5
82.5°	48.1	7.5	6.6	5.7	5.7
85°	21.7	3.8	3.8	3.8	3.8
87.5°	3.8	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)