

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: P1055990

Luminaire Tested: S124R3DR-S1195D850-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055990
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-S1195D850-X4F0-XX-UDD-FLL-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

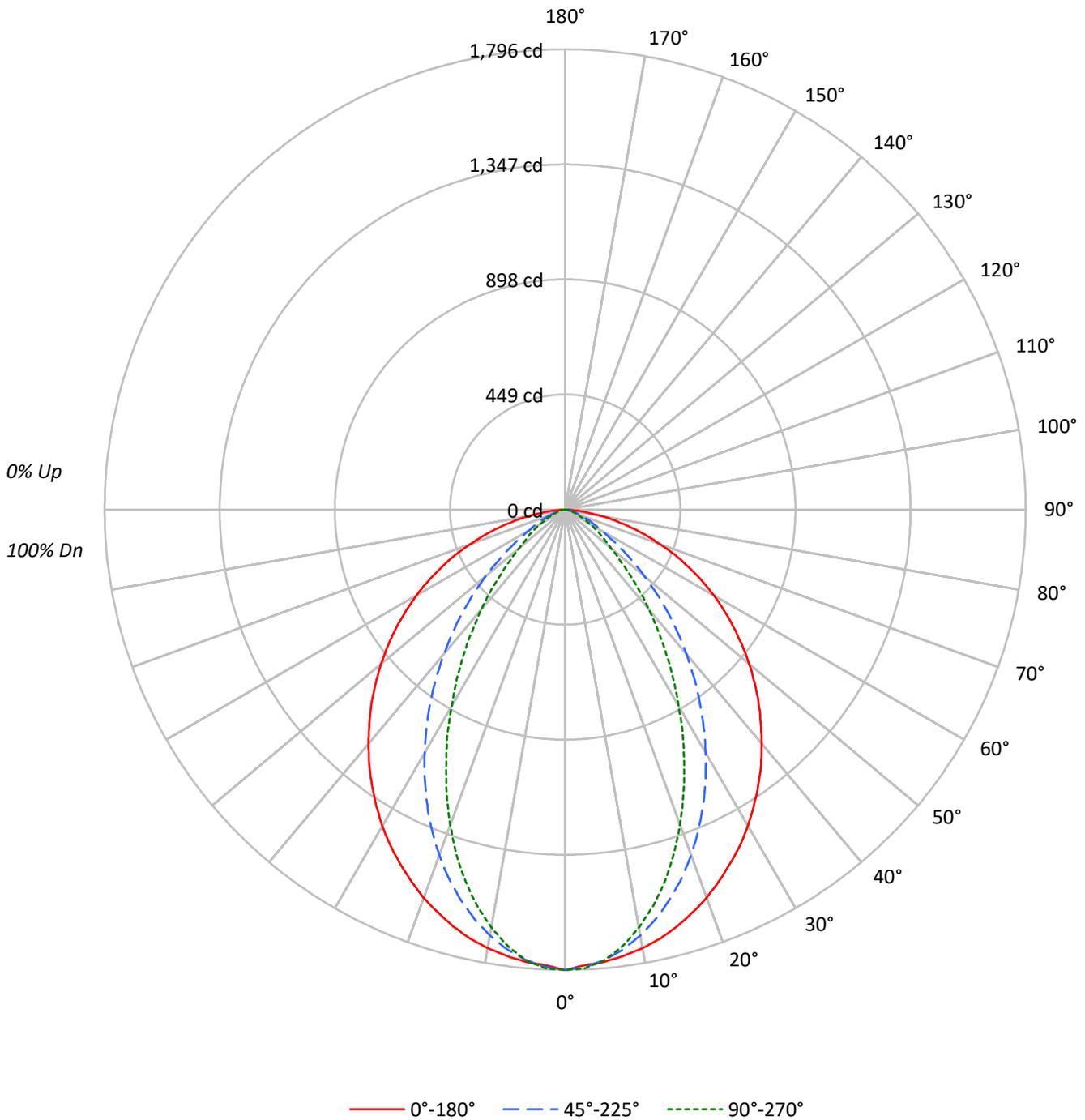
Lumens per Lamp: N/A
Luminaire Lumens: 2904.5 lumens
Efficiency: N/A
Efficacy: 69.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89				89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78				78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60				60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54				54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48				48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44				44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40				40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37				37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15882	15882	15882
5°	15720	15660	15660
10°	15602	15151	14865
15°	15416	14421	13747
20°	15170	13502	12322
25°	14864	12417	10704
30°	14548	11184	9016
35°	14171	9875	7419
40°	13763	8474	5849
45°	13343	7047	4371
50°	12883	5545	3198
55°	12375	4099	2553
60°	11830	2840	1952
65°	11128	2205	1435
70°	10074	1556	1124
75°	8800	1086	857
80°	7067	850	769
85°	3906	680	680

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13343 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.6	5.7
10°-20°	445.2	15.3
20°-30°	593.8	20.4
30°-40°	597.9	20.6
40°-50°	490.3	16.9
50°-60°	335.1	11.5
60°-70°	187.3	6.4
70°-80°	74.3	2.6
80°-90°	14.1	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°	1205.6	41.5
0°-40°	1803.5	62.1
0°-60°	2628.9	90.5
0°-90°	2904.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2904.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1796	1796	1796	1796	1796	
5°	1771	1791	1764	1756	1764	168
15°	1684	1666	1576	1520	1502	475
25°	1524	1448	1273	1144	1097	702
35°	1313	1174	915	741	687	821
45°	1067	871	564	396	350	823
55°	803	564	266	177	166	718
65°	532	268	105	75	69	526
75°	258	70	32	27	25	276
85°	38	7	7	7	7	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1796.3	1796.3	1796.3	1796.3	1796.3
2.5°	1779.6	1801.3	1786.3	1787.9	1791.3
5°	1771.2	1791.3	1764.5	1756.2	1764.5
7.5°	1756.2	1771.2	1731.1	1714.4	1717.7
10°	1737.8	1742.8	1687.6	1659.2	1655.8
12.5°	1714.4	1707.7	1635.7	1593.9	1583.9
15°	1684.2	1665.9	1575.5	1520.3	1501.9
17.5°	1649.1	1617.3	1508.6	1436.7	1410.0
20°	1612.3	1565.5	1435.0	1343.1	1309.6
22.5°	1568.8	1510.3	1356.4	1244.4	1205.9
25°	1523.7	1448.4	1272.8	1144.0	1097.2
27.5°	1476.9	1384.9	1185.8	1042.0	995.2
30°	1425.0	1316.3	1095.5	940.0	883.1
32.5°	1369.8	1246.0	1005.2	839.6	786.1
35°	1312.9	1174.1	914.9	740.9	687.4
37.5°	1254.4	1100.5	824.6	647.3	593.8
40°	1192.5	1025.3	734.2	558.6	506.8
42.5°	1129.0	948.3	647.3	475.0	426.5
45°	1067.1	871.4	563.6	396.4	349.6
47.5°	1001.9	794.5	481.7	322.8	282.7
50°	936.6	717.5	403.1	259.2	232.5
52.5°	869.7	640.6	331.2	212.4	194.0
55°	802.8	563.6	265.9	177.3	165.6
57.5°	735.9	486.7	205.7	150.5	137.1
60°	669.0	411.4	160.6	122.1	110.4
62.5°	600.4	336.2	132.1	97.0	87.0
65°	531.9	267.6	105.4	75.3	68.6
67.5°	463.3	204.1	80.3	58.5	53.5
70°	389.7	145.5	60.2	45.2	43.5
72.5°	326.1	98.7	43.5	35.1	33.5
75°	257.6	70.2	31.8	26.8	25.1
77.5°	199.0	45.2	23.4	21.7	20.1
80°	138.8	25.1	16.7	15.1	15.1
82.5°	85.3	13.4	11.7	10.0	10.0
85°	38.5	6.7	6.7	6.7	6.7
87.5°	6.7	3.3	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)