

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: P1060568

Luminaire Tested: S124RDR-S795D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060568
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D840-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

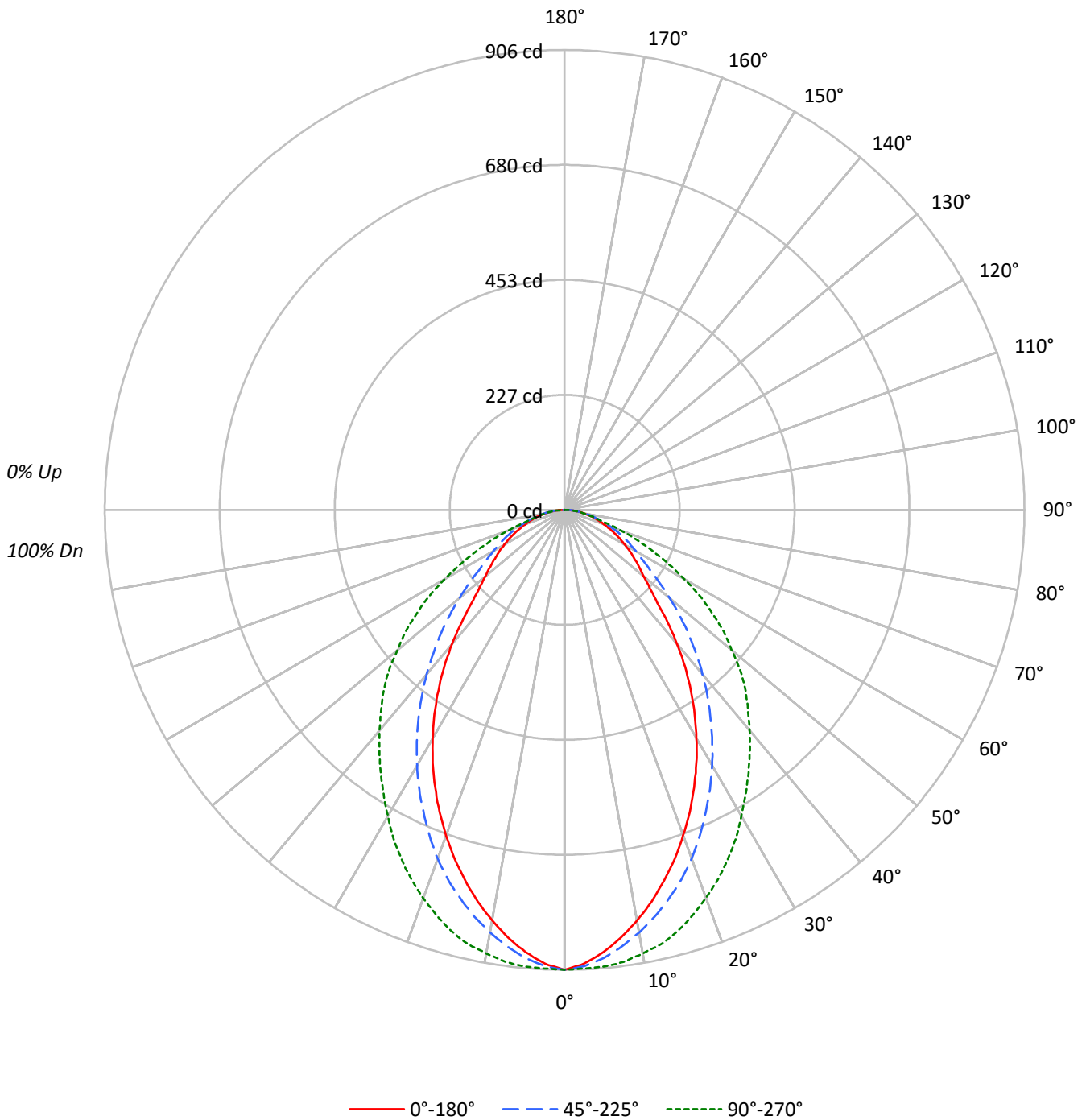
Lumens per Lamp: N/A
Luminaire Lumens: 1649.9 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1060568

CATALOG NUMBER: S124RDR-S795D840-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1060568

CATALOG NUMBER: S124RDR-S795D840-X4F0-XX-UDD-WVL-S

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7804	7804	7804
5°	7563	7661	7809
10°	7185	7393	7759
15°	6741	7071	7664
20°	6259	6703	7460
25°	5731	6246	7221
30°	5167	5781	6924
35°	4554	5273	6641
40°	3876	4752	6375
45°	3147	4199	6143
50°	2724	3614	5752
55°	2524	3066	5334
60°	2356	2764	4679
65°	2207	2594	3890
70°	2057	2392	2941
75°	1960	2213	2116
80°	1835	2023	1790
85°	1690	1877	1403

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6143 cd/sqm



TEST NUMBER: P1060568

CATALOG NUMBER: S124RDR-S795D840-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.7	5.1
10°-20°	224.9	13.6
20°-30°	307.1	18.6
30°-40°	321.7	19.5
40°-50°	278.5	16.9
50°-60°	209.2	12.7
60°-70°	134.9	8.2
70°-80°	69.2	4.2
80°-90°	20.6	1.3
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°	615.7	37.3
0°-40°	937.4	56.8
0°-60°	1425.1	86.4
0°-90°	1649.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1649.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	875	888	886	893	903	82
15°	756	775	793	829	860	212
25°	603	626	657	709	760	277
35°	433	458	502	568	632	270
45°	258	285	345	429	504	204
55°	168	174	204	292	355	151
65°	108	110	127	154	191	108
75°	59	66	66	66	64	62
85°	17	20	19	18	14	19
90°	0	0	0	0	0	



TEST NUMBER: P1060568

CATALOG NUMBER: S124RDR-S795D840-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	906.3	906.3	906.3	906.3	906.3
2.5°	894.9	906.3	899.6	901.5	904.4
5°	874.9	888.2	886.3	893.0	903.4
7.5°	850.2	864.5	867.3	882.5	897.7
10°	821.7	837.9	845.5	868.3	887.3
12.5°	790.4	807.5	820.8	849.3	876.8
15°	756.2	775.2	793.2	829.3	859.7
17.5°	721.0	740.0	763.8	803.7	837.9
20°	683.0	703.9	731.5	773.3	814.1
22.5°	644.1	665.9	695.4	741.0	788.5
25°	603.2	626.0	657.4	708.7	760.0
27.5°	562.4	585.2	620.3	674.5	730.5
30°	519.6	543.4	581.4	640.3	696.3
32.5°	476.9	502.5	541.5	604.2	664.0
35°	433.2	457.9	501.6	568.1	631.7
37.5°	389.5	415.1	461.7	532.9	599.4
40°	344.8	371.4	422.7	497.8	567.1
42.5°	300.2	328.7	382.8	461.7	534.8
45°	258.4	285.0	344.8	429.4	504.4
47.5°	227.0	245.1	306.8	398.0	470.2
50°	203.3	212.8	269.8	363.8	429.4
52.5°	185.2	191.9	235.6	326.8	396.1
55°	168.1	173.8	204.2	291.6	355.3
57.5°	152.9	155.8	180.5	257.4	316.3
60°	136.8	139.6	160.5	220.4	271.7
62.5°	122.5	124.4	144.4	185.2	230.8
65°	108.3	110.2	127.3	153.9	190.9
67.5°	95.0	97.8	111.1	125.4	152.0
70°	81.7	87.4	95.0	101.6	116.8
72.5°	70.3	76.0	79.8	81.7	82.6
75°	58.9	65.5	66.5	65.5	63.6
77.5°	47.5	53.2	53.2	51.3	49.4
80°	37.0	41.8	40.8	38.9	36.1
82.5°	27.5	30.4	29.4	27.5	24.7
85°	17.1	19.9	19.0	18.0	14.2
87.5°	8.5	11.4	10.4	9.5	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)