

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: P1060597

Luminaire Tested: S124RDR-S795D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060597  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S795D935-X4F0-XX-UDD-BVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

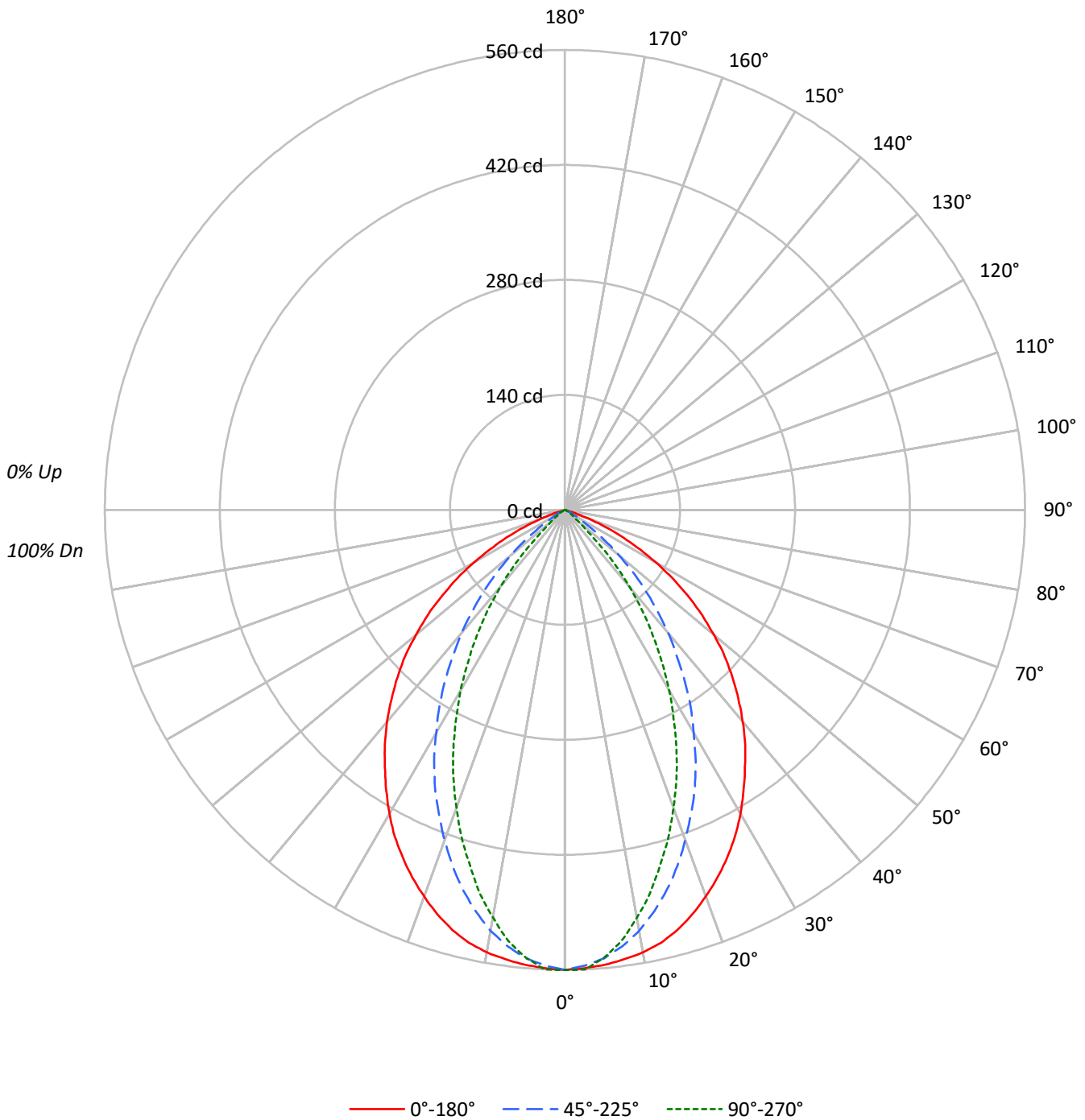
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 731.4 lumens  
Efficiency: N/A  
Efficacy: 28.4 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98  
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: P1060597

CATALOG NUMBER: S124RDR-S795D935-X4F0-XX-UDD-BVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1060597

CATALOG NUMBER: S124RDR-S795D935-X4F0-XX-UDD-BVL-B

**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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91				91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82				82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66				66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55				55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42				42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39				39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4824	4824	4824
5°	4807	4737	4730
10°	4785	4551	4410
15°	4720	4272	3990
20°	4592	3924	3538
25°	4438	3553	3054
30°	4250	3115	2528
35°	4017	2672	1966
40°	3785	2193	1374
45°	3510	1685	681
50°	3167	1139	228
55°	2734	584	158
60°	2189	208	112
65°	1502	116	49
70°	672	60	40
75°	0	27	27
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3510 cd/sqm



TEST NUMBER: P1060597

CATALOG NUMBER: S124RDR-S795D935-X4F0-XX-UDD-BVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.7	7.1
10°-20°	135.6	18.5
20°-30°	175.5	24.0
30°-40°	166.8	22.8
40°-50°	118.1	16.1
50°-60°	60.6	8.3
60°-70°	21.2	2.9
70°-80°	1.8	0.2
80°-90°	0.0	0.0
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°	362.9	49.6
0°-40°	529.7	72.4
0°-60°	708.4	96.9
0°-90°	731.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	731.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	560	560	560	560	560	
5°	556	557	548	548	547	53
15°	529	513	479	456	448	149
25°	467	431	374	334	321	215
35°	382	326	254	205	187	239
45°	288	222	138	79	56	222
55°	182	120	39	11	10	163
65°	74	36	6	3	2	73
75°	0	1	1	1	1	6
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P1060597

CATALOG NUMBER: S124RDR-S795D935-X4F0-XX-UDD-BVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	560.2	560.2	560.2	560.2	560.2
2.5°	558.5	560.2	555.3	559.3	560.2
5°	556.1	556.9	548.0	548.0	547.2
7.5°	552.1	550.4	535.9	530.2	529.4
10°	547.2	541.5	520.5	508.3	504.3
12.5°	539.9	529.4	501.1	483.3	478.4
15°	529.4	513.2	479.2	456.5	447.6
17.5°	516.4	495.4	454.9	427.4	418.5
20°	501.1	474.4	428.2	397.5	386.1
22.5°	484.9	454.1	400.7	365.9	354.5
25°	467.1	430.6	374.0	334.3	321.4
27.5°	448.4	405.5	344.8	303.6	286.6
30°	427.4	380.5	313.3	270.4	254.2
32.5°	404.7	352.9	284.9	238.8	219.4
35°	382.1	326.2	254.2	204.8	187.0
37.5°	360.2	301.1	223.4	171.6	154.6
40°	336.7	273.6	195.1	141.7	122.2
42.5°	312.5	246.9	165.9	110.9	89.9
45°	288.2	221.8	138.4	79.3	55.9
47.5°	263.9	195.1	111.7	50.2	30.0
50°	236.4	169.2	85.0	26.7	17.0
52.5°	210.5	144.9	60.7	15.4	13.0
55°	182.1	119.8	38.9	11.3	10.5
57.5°	155.4	95.5	21.9	8.9	8.1
60°	127.1	73.7	12.1	7.3	6.5
62.5°	98.8	53.4	8.1	4.9	4.0
65°	73.7	35.6	5.7	3.2	2.4
67.5°	48.6	20.2	4.0	1.6	1.6
70°	26.7	9.7	2.4	1.6	1.6
72.5°	9.7	3.2	1.6	0.8	0.8
75°	0.0	0.8	0.8	0.8	0.8
77.5°	0.0	0.0	0.0	0.0	0.8
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	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)