

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: P1060608

Luminaire Tested: S124RDR-S795D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060608  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S795D940-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

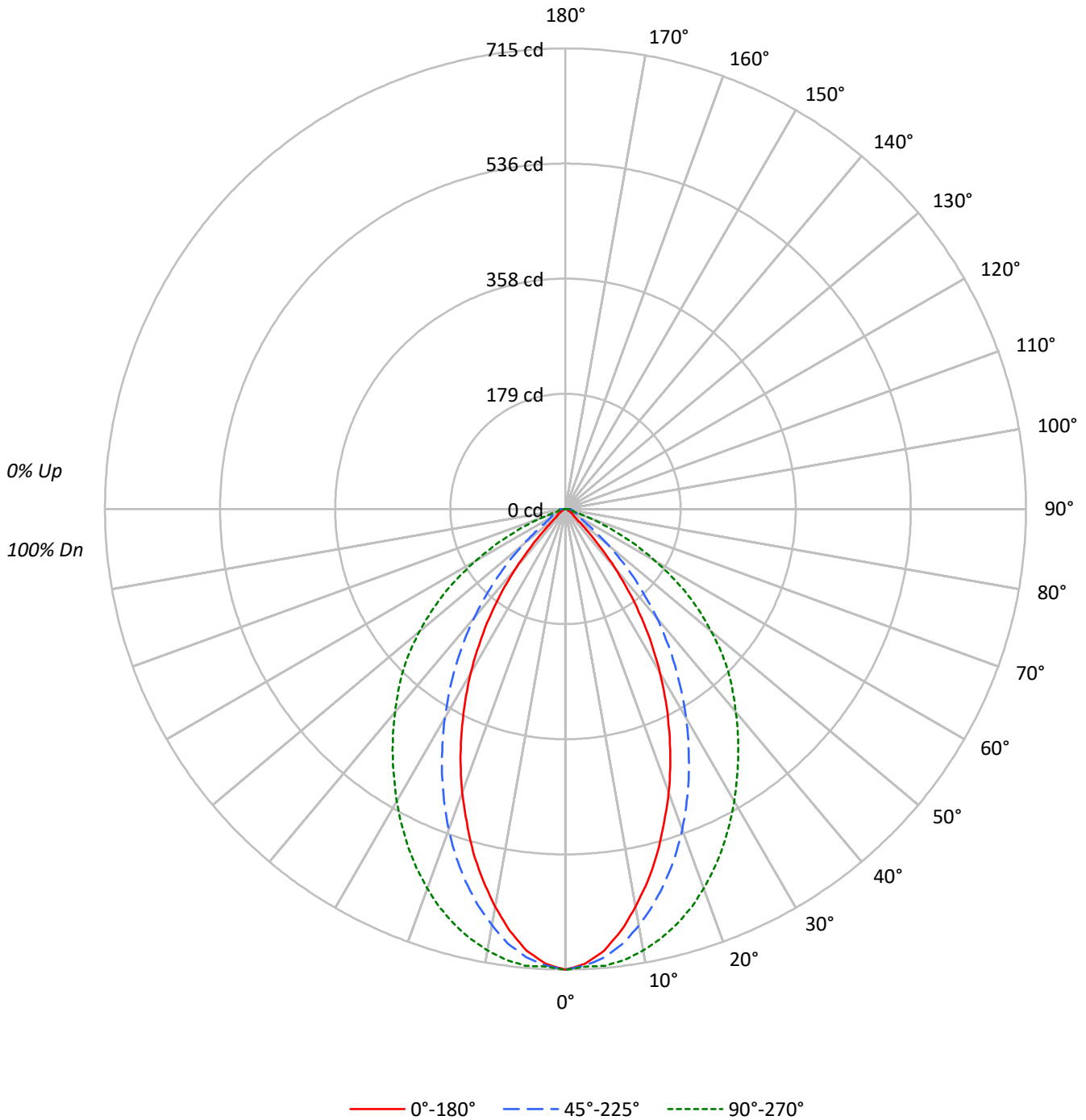
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 901.4 lumens  
Efficiency: N/A  
Efficacy: 34.9 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96  
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: P1060608

CATALOG NUMBER: S124RDR-S795D940-X4F0-XX-UDD-BVL-W

### Luminous Intensity Polar Plot



TEST NUMBER: P1060608

CATALOG NUMBER: S124RDR-S795D940-X4F0-XX-UDD-BVL-W

**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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72				72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59				59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54				54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45				45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39				39

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

	0°	45°	90°
0°	6159	6159	6159
5°	5950	6037	6153
10°	5483	5740	6085
15°	4925	5336	5950
20°	4292	4854	5747
25°	3621	4307	5496
30°	2921	3723	5208
35°	2162	3115	4916
40°	1340	2482	4623
45°	532	1810	4355
50°	236	1136	3959
55°	189	593	3465
60°	131	448	2761
65°	86	444	1899
70°	86	400	889
75°	113	393	393
80°	169	456	456
85°	336	909	662

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4355 cd/sqm



TEST NUMBER: P1060608

CATALOG NUMBER: S124RDR-S795D940-X4F0-XX-UDD-BVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.6	7.3
10°-20°	169.3	18.8
20°-30°	213.7	23.7
30°-40°	196.1	21.8
40°-50°	133.5	14.8
50°-60°	72.7	8.1
60°-70°	31.5	3.5
70°-80°	11.5	1.3
80°-90°	7.4	0.8
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°	448.7	49.8
0°-40°	644.7	71.5
0°-60°	851.0	94.4
0°-90°	901.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	901.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	715	715	715	715	715	
5°	688	698	698	706	712	64
15°	552	572	598	641	667	154
25°	381	408	453	526	578	174
35°	206	236	296	390	468	127
45°	44	73	149	264	358	41
55°	13	13	40	145	231	11
65°	4	6	22	45	93	5
75°	3	11	12	12	12	4
85°	3	8	9	9	7	3
90°	0	0	0	0	0	



TEST NUMBER: P1060608

CATALOG NUMBER: S124RDR-S795D940-X4F0-XX-UDD-BVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	715.2	715.2	715.2	715.2	715.2
2.5°	706.8	715.2	709.3	711.0	711.0
5°	688.3	697.6	698.4	706.0	711.8
7.5°	660.6	674.1	680.8	695.9	706.0
10°	627.1	643.0	656.4	682.5	695.9
12.5°	591.0	609.4	629.6	664.0	683.3
15°	552.4	571.7	598.5	641.3	667.4
17.5°	509.5	533.0	565.8	617.0	648.9
20°	468.4	491.9	529.7	587.6	627.1
22.5°	425.6	449.9	491.9	556.5	603.6
25°	381.1	408.0	453.3	525.5	578.4
27.5°	337.5	366.0	413.8	492.8	551.5
30°	293.8	322.3	374.4	459.2	523.8
32.5°	249.3	278.7	334.9	423.9	495.3
35°	205.7	235.9	296.3	390.3	467.6
37.5°	161.2	193.1	257.7	357.6	439.9
40°	119.2	151.1	220.8	324.9	411.3
42.5°	79.7	111.6	183.0	293.0	384.5
45°	43.7	73.0	148.6	263.6	357.6
47.5°	23.5	40.3	115.0	235.0	327.4
50°	17.6	21.8	84.8	204.8	295.5
52.5°	15.1	16.8	58.8	172.9	263.6
55°	12.6	13.4	39.5	145.2	230.8
57.5°	10.1	10.9	29.4	117.5	195.6
60°	7.6	9.2	26.0	90.7	160.3
62.5°	5.9	7.6	24.3	66.3	126.8
65°	4.2	5.9	21.8	45.3	93.2
67.5°	4.2	6.7	18.5	29.4	63.0
70°	3.4	9.2	15.9	19.3	35.3
72.5°	3.4	10.1	13.4	13.4	13.4
75°	3.4	10.9	11.8	11.8	11.8
77.5°	3.4	10.1	10.9	10.1	10.1
80°	3.4	9.2	9.2	9.2	9.2
82.5°	3.4	8.4	9.2	9.2	7.6
85°	3.4	7.6	9.2	9.2	6.7
87.5°	2.5	7.6	8.4	8.4	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)