

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P1061007

Luminaire Tested: S124RDR-H795D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061007  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-H795D935-X4F0-XX-UDD-SVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

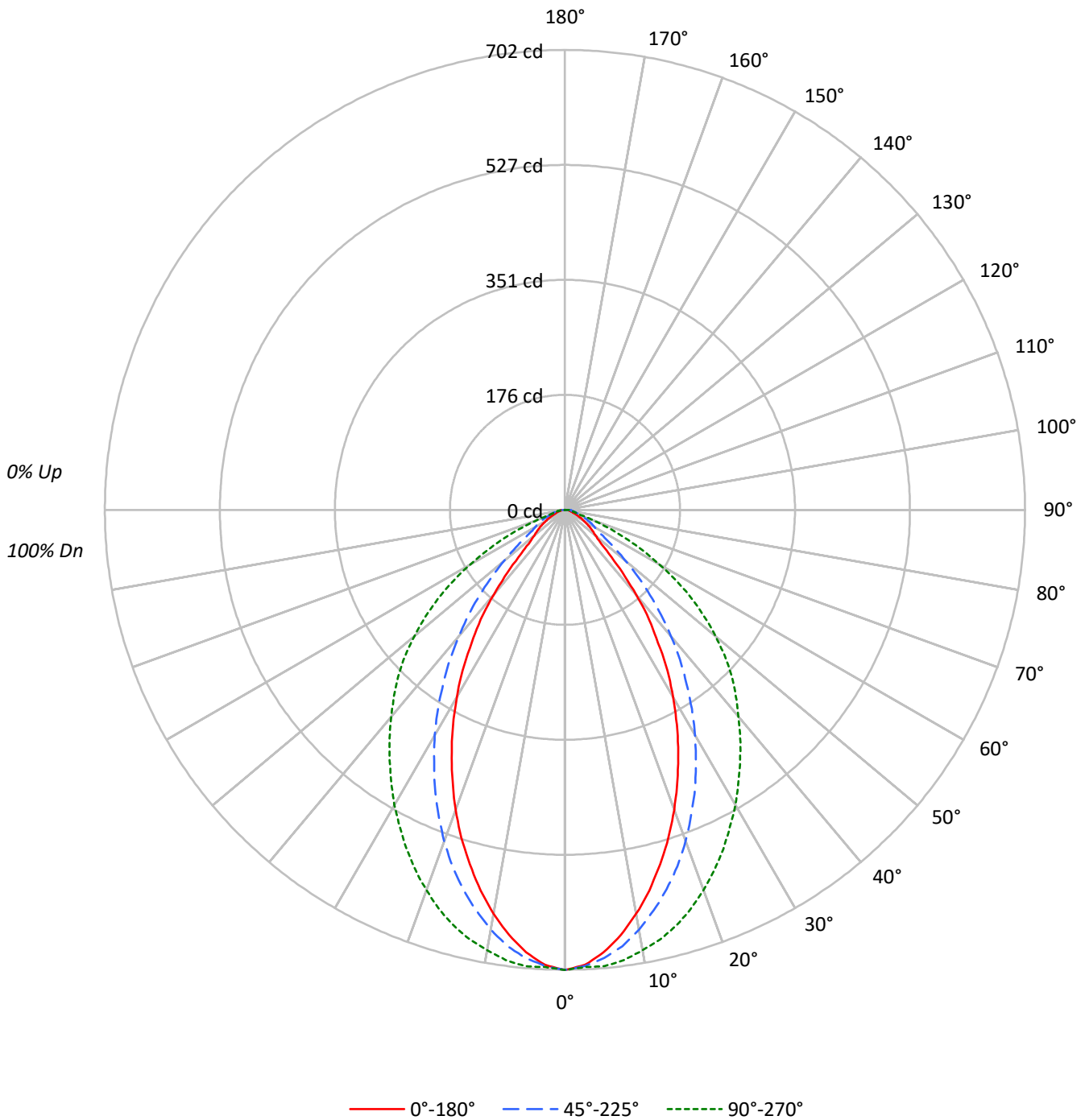
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 994.0 lumens  
Efficiency: N/A  
Efficacy: 42.3 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.5  
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: P1061007

CATALOG NUMBER: S124RDR-H795D935-X4F0-XX-UDD-SVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1061007

CATALOG NUMBER: S124RDR-H795D935-X4F0-XX-UDD-SVL-W

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									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	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	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89															89													
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79															79													
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70															70													
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63															63													
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57															57													
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51															51													
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47															47													
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43															43													
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39															39													
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36															36													

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

	0°	45°	90°
0°	6048	6048	6048
5°	5861	5935	6044
10°	5475	5688	5970
15°	4995	5344	5855
20°	4466	4933	5660
25°	3884	4459	5428
30°	3277	3948	5173
35°	2607	3399	4900
40°	1896	2832	4631
45°	1147	2236	4387
50°	820	1618	4016
55°	695	1096	3546
60°	568	892	2866
65°	448	799	2062
70°	375	672	1088
75°	339	625	549
80°	352	625	545
85°	464	929	622

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4387 cd/sqm



TEST NUMBER: P1061007

CATALOG NUMBER: S124RDR-H795D935-X4F0-XX-UDD-SVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.7	6.5
10°-20°	169.4	17.0
20°-30°	219.7	22.1
30°-40°	211.5	21.3
40°-50°	157.4	15.8
50°-60°	96.8	9.7
60°-70°	47.5	4.8
70°-80°	18.5	1.9
80°-90°	8.4	0.9
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°	453.8	45.7
0°-40°	665.4	66.9
0°-60°	919.5	92.5
0°-90°	994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	994.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	678	688	687	693	699	63
15°	560	578	600	636	657	157
25°	409	431	469	528	571	187
35°	248	272	323	404	466	155
45°	94	117	184	283	360	78
55°	46	48	73	166	236	42
65°	22	24	39	63	101	23
75°	10	18	19	17	16	11
85°	5	9	9	9	6	5
90°	0	0	0	0	0	

TEST NUMBER: P1061007

CATALOG NUMBER: S124RDR-H795D935-X4F0-XX-UDD-SVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	702.3	702.3	702.3	702.3	702.3
2.5°	695.3	703.1	696.8	697.6	698.4
5°	678.0	688.2	686.6	692.9	699.2
7.5°	654.4	666.2	671.7	684.3	692.9
10°	626.2	639.5	650.5	670.9	682.7
12.5°	594.8	610.5	626.2	653.7	671.7
15°	560.3	578.3	599.5	635.6	656.8
17.5°	525.0	543.0	570.5	612.1	638.8
20°	487.3	506.9	538.3	584.6	617.6
22.5°	448.1	469.3	503.8	556.4	595.6
25°	408.8	430.8	469.3	528.1	571.3
27.5°	369.6	390.8	432.4	498.3	545.4
30°	329.6	351.5	397.1	466.1	520.3
32.5°	291.1	311.5	360.2	435.5	492.8
35°	248.0	271.5	323.3	404.1	466.1
37.5°	211.1	232.3	288.0	372.7	439.4
40°	168.7	192.3	251.9	342.1	412.0
42.5°	129.5	153.0	217.4	311.5	386.1
45°	94.2	116.9	183.6	283.3	360.2
47.5°	71.4	84.7	150.7	255.8	331.1
50°	61.2	65.1	120.8	226.0	299.8
52.5°	54.1	55.7	94.2	196.2	268.4
55°	46.3	47.9	73.0	166.4	236.2
57.5°	39.2	40.0	58.9	138.1	201.7
60°	33.0	33.7	51.8	110.6	166.4
62.5°	27.5	28.2	46.3	85.5	132.6
65°	22.0	23.5	39.2	62.8	101.2
67.5°	18.0	21.2	33.0	43.9	70.6
70°	14.9	20.4	26.7	30.6	43.2
72.5°	12.6	18.8	22.8	22.0	21.2
75°	10.2	18.0	18.8	17.3	16.5
77.5°	8.6	15.7	15.7	14.1	13.3
80°	7.1	12.6	12.6	12.6	11.0
82.5°	6.3	10.2	11.0	11.0	8.6
85°	4.7	8.6	9.4	9.4	6.3
87.5°	3.1	7.8	8.6	7.8	4.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1061007  
 CATALOG NUMBER: S124RDR-H795D935-X4F0-XX-UDD-SVL-W

**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	6.03	7.38	6.40	7.69	8.00	15.21	16.55	15.57	16.86	17.18
	3H	7.14	8.34	7.52	8.66	9.03	15.71	16.90	16.09	17.23	17.60
	4H	7.66	8.77	8.06	9.12	9.51	15.73	16.84	16.13	17.19	17.58
	6H	8.10	9.12	8.51	9.49	9.88	15.74	16.76	16.16	17.13	17.53
	8H	8.29	9.26	8.72	9.65	10.05	15.75	16.71	16.18	17.10	17.51
	12H	8.47	9.39	8.90	9.78	10.21	15.75	16.67	16.18	17.06	17.49
4H	2H	7.18	8.29	7.58	8.64	9.02	15.10	16.21	15.50	16.56	16.94
	3H	8.52	9.43	8.93	9.83	10.24	15.69	16.60	16.10	17.00	17.40
	4H	9.25	10.07	9.69	10.48	10.93	15.75	16.56	16.18	16.98	17.42
	6H	9.86	10.57	10.33	11.01	11.48	15.82	16.52	16.28	16.97	17.44
	8H	10.11	10.76	10.58	11.21	11.68	15.85	16.51	16.32	16.95	17.42
	12H	10.34	10.93	10.83	11.41	11.88	15.89	16.47	16.38	16.96	17.43
8H	4H	9.72	10.38	10.19	10.82	11.29	15.70	16.36	16.17	16.81	17.28
	6H	10.57	11.11	11.08	11.61	12.09	15.83	16.37	16.33	16.86	17.35
	8H	10.98	11.46	11.50	11.98	12.47	15.91	16.40	16.44	16.91	17.40
	12H	11.40	11.83	11.92	12.33	12.90	16.04	16.46	16.55	16.96	17.53
12H	4H	9.77	10.36	10.26	10.84	11.31	15.68	16.26	16.16	16.74	17.21
	6H	10.71	11.19	11.23	11.71	12.20	15.81	16.30	16.33	16.81	17.30
	8H	11.23	11.66	11.74	12.15	12.72	15.95	16.37	16.46	16.87	17.44