

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



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060603

Luminaire Tested: S124RDRP-S795D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060603  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D935-X4F0-XX-UDD-WVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

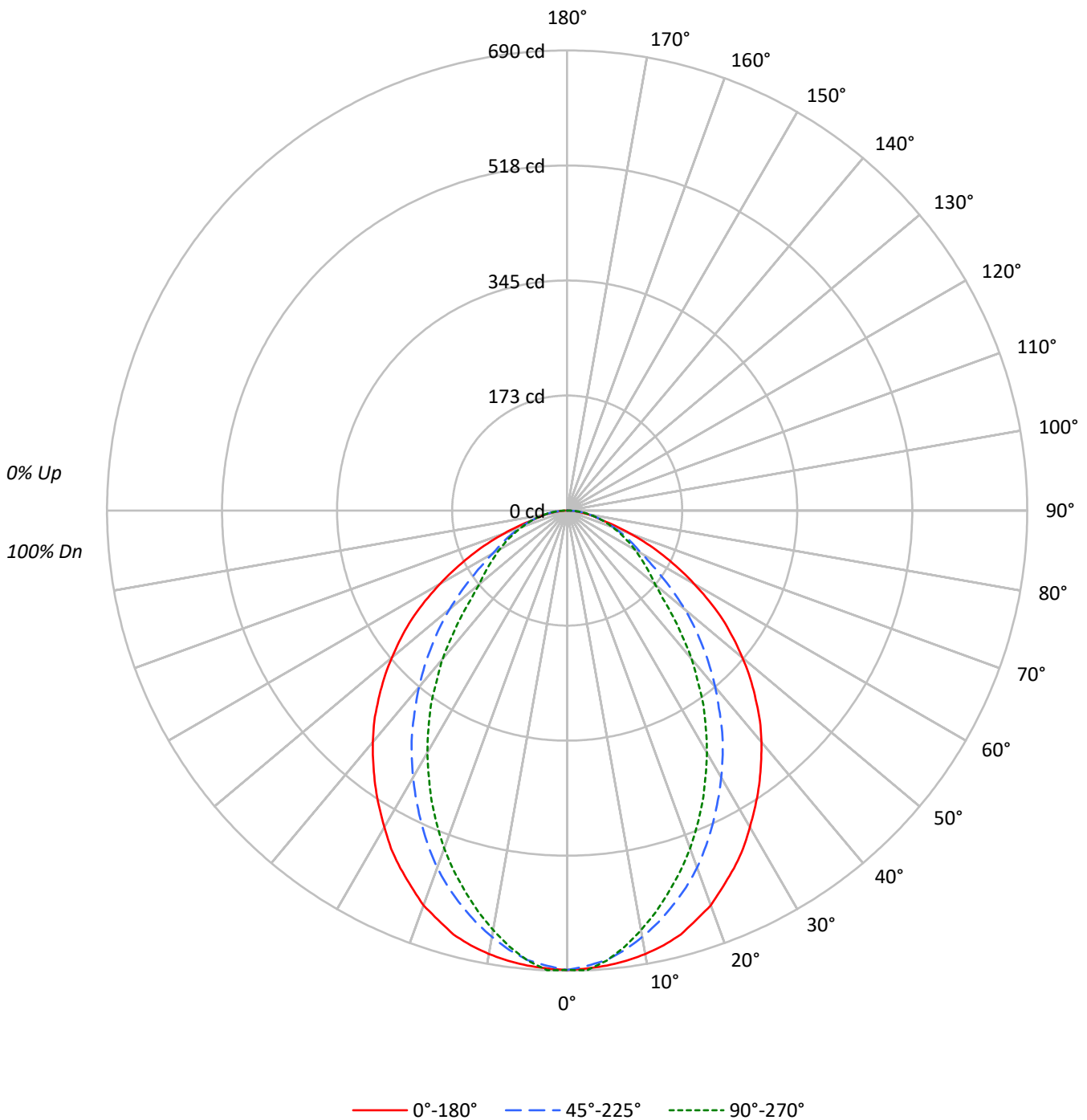
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1328.3 lumens  
Efficiency: N/A  
Efficacy: 51.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12  
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 (A<sub>in</sub>): 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: P1060603

CATALOG NUMBER: S124RDRP-S795D935-X4F0-XX-UDD-WVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1060603

CATALOG NUMBER: S124RDRP-S795D935-X4F0-XX-UDD-WVL-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	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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88					86				
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76					74				
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66					64				
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58					56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52					50				
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46					44				
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42					40				
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38					36				
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35					33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32					30				

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

	0°	45°	90°
0°	5932	5932	5932
5°	5919	5849	5856
10°	5903	5677	5585
15°	5867	5463	5268
20°	5771	5222	4940
25°	5622	4915	4568
30°	5449	4596	4169
35°	5276	4263	3744
40°	5096	3885	3267
45°	4870	3490	2730
50°	4598	3080	2310
55°	4277	2612	2139
60°	3792	2217	2022
65°	3234	2046	1913
70°	2528	1896	1813
75°	1723	1750	1750
80°	1488	1646	1686
85°	1284	1601	1759

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4870 cd/sqm

TEST NUMBER: P1060603

CATALOG NUMBER: S124RDRP-S795D935-X4F0-XX-UDD-WVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.1	4.8
10°-20°	174.1	13.1
20°-30°	241.6	18.2
30°-40°	259.0	19.5
40°-50°	229.5	17.3
50°-60°	172.9	13.0
60°-70°	112.0	8.4
70°-80°	57.5	4.3
80°-90°	17.6	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°	479.8	36.1
0°-40°	738.8	55.6
0°-60°	1141.2	85.9
0°-90°	1328.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1328.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	689	689	689	689	689	
5°	685	686	677	678	678	65
15°	658	644	613	597	591	185
25°	592	560	517	490	481	272
35°	502	456	406	369	356	314
45°	400	348	287	242	224	308
55°	285	237	174	146	142	253
65°	159	128	100	95	94	157
75°	52	54	53	53	53	61
85°	13	14	16	18	18	15
90°	0	0	0	0	0	



TEST NUMBER: P1060603

CATALOG NUMBER: S124RDRP-S795D935-X4F0-XX-UDD-WVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	688.9	688.9	688.9	688.9	688.9
2.5°	687.2	689.7	683.2	688.1	689.7
5°	684.8	685.6	676.7	677.5	677.5
7.5°	680.8	679.1	664.6	660.5	659.7
10°	675.1	670.2	649.2	641.1	638.7
12.5°	667.8	658.9	632.2	620.9	616.0
15°	658.1	643.5	612.8	597.4	590.9
17.5°	643.5	624.9	592.5	573.1	565.8
20°	629.8	604.7	569.9	545.6	539.1
22.5°	610.3	583.6	544.0	518.1	510.0
25°	591.7	560.2	517.3	489.7	480.8
27.5°	571.5	535.9	489.7	460.6	449.3
30°	548.0	510.0	462.2	431.4	419.3
32.5°	525.3	484.9	433.9	399.9	386.9
35°	501.9	456.5	405.5	369.1	356.2
37.5°	477.6	429.8	374.0	338.4	321.4
40°	453.3	403.1	345.6	305.2	290.6
42.5°	428.2	375.6	316.5	274.4	255.8
45°	399.9	348.1	286.6	242.0	224.2
47.5°	372.4	321.4	259.0	210.5	194.3
50°	343.2	293.0	229.9	182.9	172.4
52.5°	314.1	263.9	201.6	161.9	157.0
55°	284.9	237.2	174.0	146.5	142.5
57.5°	252.6	209.7	149.8	132.8	129.5
60°	220.2	179.7	128.7	119.8	117.4
62.5°	188.6	153.8	114.1	106.9	105.2
65°	158.7	127.9	100.4	94.7	93.9
67.5°	129.5	105.2	87.4	84.2	82.6
70°	100.4	84.2	75.3	73.7	72.0
72.5°	74.5	68.0	63.9	63.1	62.3
75°	51.8	54.2	52.6	52.6	52.6
77.5°	41.3	42.1	42.9	43.7	42.9
80°	30.0	32.4	33.2	34.8	34.0
82.5°	21.0	22.7	25.1	25.9	26.7
85°	13.0	13.8	16.2	17.8	17.8
87.5°	5.7	6.5	8.1	9.7	10.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060603  
 CATALOG NUMBER: S124RDRP-S795D935-X4F0-XX-UDD-WVL-B

**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	16.63	18.12	16.99	18.44	18.75	13.19	14.69	13.56	15.00	15.32
	3H	17.83	19.17	18.21	19.50	19.86	14.89	16.23	15.26	16.56	16.92
	4H	18.14	19.40	18.54	19.75	20.12	15.56	16.82	15.96	17.17	17.55
	6H	18.34	19.50	18.75	19.87	20.26	16.11	17.27	16.52	17.64	18.03
	8H	18.40	19.50	18.82	19.89	20.30	16.33	17.44	16.76	17.83	18.23
	12H	18.43	19.49	18.86	19.87	20.30	16.50	17.56	16.93	17.94	18.37
4H	2H	16.77	18.03	17.17	18.38	18.76	13.85	15.11	14.25	15.46	15.84
	3H	18.17	19.21	18.58	19.61	20.02	15.76	16.81	16.17	17.21	17.61
	4H	18.60	19.54	19.03	19.95	20.39	16.56	17.50	16.99	17.92	18.36
	6H	18.92	19.74	19.38	20.18	20.64	17.25	18.07	17.71	18.51	18.97
	8H	19.02	19.78	19.48	20.23	20.69	17.52	18.29	17.99	18.73	19.20
	12H	19.09	19.77	19.57	20.25	20.72	17.75	18.43	18.23	18.91	19.38
8H	4H	18.72	19.49	19.19	19.93	20.40	16.88	17.64	17.34	18.09	18.55
	6H	19.14	19.78	19.64	20.27	20.75	17.71	18.34	18.20	18.83	19.31
	8H	19.30	19.87	19.82	20.38	20.87	18.07	18.64	18.59	19.15	19.64
	12H	19.43	19.93	19.94	20.42	20.99	18.41	18.91	18.92	19.40	19.96
12H	4H	18.73	19.41	19.21	19.89	20.36	16.91	17.59	17.39	18.07	18.54
	6H	19.17	19.74	19.68	20.25	20.74	17.77	18.33	18.28	18.84	19.33
	8H	19.38	19.88	19.89	20.37	20.94	18.20	18.70	18.71	19.19	19.76