

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: P1060609

Luminaire Tested: S124RDRP-S795D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060609  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D940-X4F0-XX-UDD-SVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

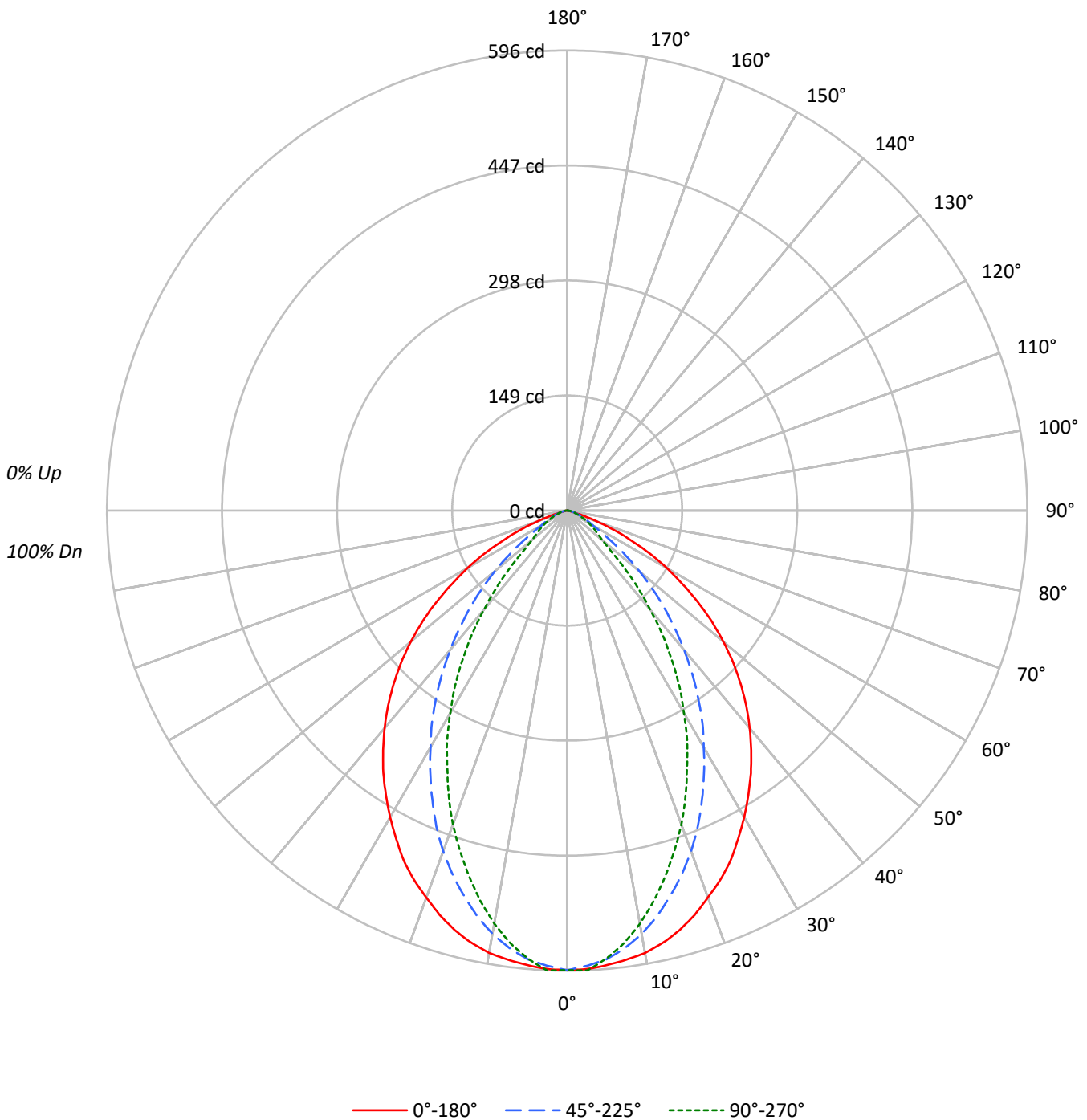
Lumens per Lamp: N/A  
Luminaire Lumens: 877.6 lumens  
Efficiency: N/A  
Efficacy: 34.0 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct

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: P1060609

CATALOG NUMBER: S124RDRP-S795D940-X4F0-XX-UDD-SVL-B

### Luminous Intensity Polar Plot



TEST NUMBER: P1060609

CATALOG NUMBER: S124RDRP-S795D940-X4F0-XX-UDD-SVL-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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80					80			
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43					43			
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

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

	0°	45°	90°
0°	5125	5125	5125
5°	5109	5044	5036
10°	5087	4868	4750
15°	5015	4604	4372
20°	4886	4302	3964
25°	4755	3927	3489
30°	4560	3518	3009
35°	4363	3111	2485
40°	4137	2648	1885
45°	3869	2164	1267
50°	3538	1640	786
55°	3109	1082	667
60°	2570	665	549
65°	1862	513	444
70°	1012	380	337
75°	223	279	306
80°	169	208	248
85°	168	168	247

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3869 cd/sqm



TEST NUMBER: P1060609

CATALOG NUMBER: S124RDRP-S795D940-X4F0-XX-UDD-SVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.1	6.3
10°-20°	146.5	16.7
20°-30°	194.0	22.1
30°-40°	192.6	21.9
40°-50°	148.2	16.9
50°-60°	88.3	10.1
60°-70°	40.2	4.6
70°-80°	10.4	1.2
80°-90°	2.3	0.3
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°	395.6	45.1
0°-40°	588.2	67.0
0°-60°	824.7	94.0
0°-90°	877.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	877.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	591	592	584	584	583	56
15°	562	548	516	499	490	158
25°	500	464	413	379	367	230
35°	415	363	296	251	236	259
45°	318	256	178	124	104	245
55°	207	148	72	45	44	185
65°	91	54	25	22	22	92
75°	7	8	8	9	9	14
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P1060609

CATALOG NUMBER: S124RDRP-S795D940-X4F0-XX-UDD-SVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	595.2	595.2	595.2	595.2	595.2
2.5°	594.4	595.2	590.2	594.4	596.1
5°	591.0	591.9	583.5	583.5	582.6
7.5°	586.8	585.2	571.7	566.7	565.0
10°	581.8	575.9	556.7	546.6	543.2
12.5°	573.4	564.2	538.2	524.0	518.1
15°	562.5	548.3	516.4	498.8	490.4
17.5°	549.1	531.5	493.8	471.1	461.9
20°	533.2	509.7	469.5	441.0	432.6
22.5°	518.1	488.8	442.6	409.9	400.7
25°	500.5	464.4	413.3	378.9	367.2
27.5°	479.5	441.0	384.0	348.7	337.0
30°	458.6	415.8	353.8	316.9	302.6
32.5°	436.8	389.8	326.1	284.2	270.8
35°	415.0	363.0	295.9	250.7	236.4
37.5°	391.5	336.2	265.8	218.8	202.9
40°	368.0	310.2	235.6	187.8	167.7
42.5°	343.7	283.4	206.2	155.9	135.8
45°	317.7	255.7	177.7	124.1	104.0
47.5°	291.7	229.7	149.2	93.1	74.6
50°	264.1	202.0	122.4	67.9	58.7
52.5°	236.4	175.2	95.6	52.8	50.3
55°	207.1	147.5	72.1	45.3	44.4
57.5°	176.9	122.4	52.0	39.4	37.7
60°	149.2	98.9	38.6	33.5	31.9
62.5°	120.7	74.6	31.9	27.7	26.0
65°	91.4	54.5	25.2	21.8	21.8
67.5°	66.2	36.9	20.1	17.6	16.8
70°	40.2	22.6	15.1	14.3	13.4
72.5°	20.1	13.4	11.7	10.9	10.9
75°	6.7	8.4	8.4	9.2	9.2
77.5°	5.0	5.9	5.9	6.7	6.7
80°	3.4	4.2	4.2	5.0	5.0
82.5°	2.5	2.5	3.4	3.4	4.2
85°	1.7	1.7	1.7	2.5	2.5
87.5°	0.8	0.8	0.8	1.7	1.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060609  
 CATALOG NUMBER: S124RDRP-S795D940-X4F0-XX-UDD-SVL-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	14.80	16.13	15.16	16.44	16.76	6.34	7.68	6.71	7.99	8.31
	3H	15.31	16.49	15.69	16.82	17.18	7.16	8.34	7.54	8.67	9.04
	4H	15.27	16.37	15.67	16.72	17.10	7.44	8.54	7.85	8.89	9.28
	6H	15.21	16.21	15.62	16.58	16.98	7.62	8.62	8.03	8.99	9.39
	8H	15.17	16.12	15.60	16.51	16.92	7.68	8.63	8.11	9.03	9.43
	12H	15.13	16.04	15.56	16.42	16.86	7.73	8.64	8.16	9.02	9.45
4H	2H	14.64	15.74	15.04	16.09	16.47	6.79	7.89	7.19	8.24	8.62
	3H	15.19	16.09	15.61	16.49	16.89	7.75	8.65	8.17	9.05	9.46
	4H	15.16	15.96	15.60	16.38	16.82	8.12	8.91	8.55	9.33	9.78
	6H	15.11	15.79	15.57	16.24	16.71	8.37	9.05	8.83	9.50	9.96
	8H	15.06	15.70	15.53	16.15	16.62	8.45	9.09	8.92	9.54	10.01
	12H	15.02	15.59	15.51	16.07	16.55	8.53	9.09	9.02	9.58	10.05
8H	4H	15.05	15.69	15.52	16.14	16.61	8.21	8.84	8.67	9.29	9.76
	6H	14.99	15.51	15.49	16.01	16.49	8.51	9.04	9.02	9.53	10.01
	8H	14.94	15.41	15.46	15.93	16.42	8.65	9.12	9.17	9.63	10.12
	12H	14.91	15.32	15.43	15.82	16.39	8.78	9.20	9.30	9.69	10.26
12H	4H	15.01	15.57	15.49	16.06	16.53	8.18	8.74	8.67	9.23	9.70
	6H	14.93	15.40	15.46	15.92	16.41	8.49	8.96	9.02	9.48	9.97
	8H	14.91	15.32	15.42	15.82	16.39	8.67	9.08	9.18	9.58	10.15