

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: P1060417

Luminaire Tested: S124RDRP-S350D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060417  
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: S124RDRP-S350D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

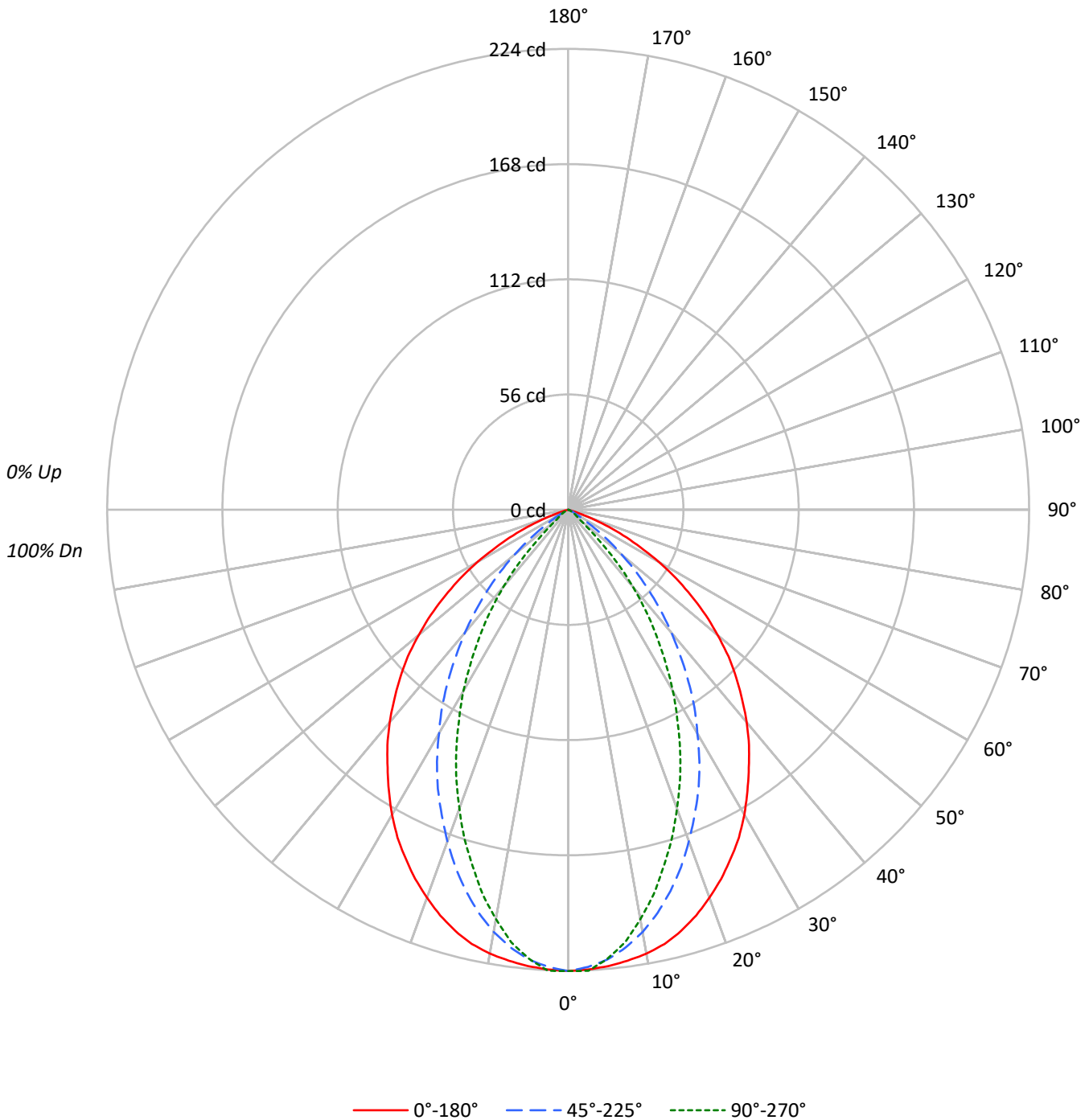
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 292.9 lumens  
Efficiency: N/A  
Efficacy: 23.4 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): 12.5  
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: P1060417

CATALOG NUMBER: S124RDRP-S350D927-X4F0-XX-UDD-BVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1060417

CATALOG NUMBER: S124RDRP-S350D927-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	1931	1931	1931
5°	1925	1897	1894
10°	1916	1822	1766
15°	1890	1711	1598
20°	1839	1572	1417
25°	1777	1423	1223
30°	1702	1248	1012
35°	1608	1070	787
40°	1516	878	550
45°	1405	675	273
50°	1269	455	91
55°	1094	234	63
60°	877	84	45
65°	601	47	20
70°	269	25	15
75°	0	10	10
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1405 cd/sqm



TEST NUMBER: P1060417

CATALOG NUMBER: S124RDRP-S350D927-X4F0-XX-UDD-BVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.7	7.1
10°-20°	54.3	18.5
20°-30°	70.3	24.0
30°-40°	66.8	22.8
40°-50°	47.3	16.1
50°-60°	24.3	8.3
60°-70°	8.5	2.9
70°-80°	0.7	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°	145.3	49.6
0°-40°	212.1	72.4
0°-60°	283.7	96.9
0°-90°	292.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	292.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	224	224	224	224	224	
5°	223	223	220	220	219	21
15°	212	206	192	183	179	60
25°	187	172	150	134	129	86
35°	153	131	102	82	75	96
45°	115	89	55	32	22	89
55°	73	48	16	4	4	65
65°	30	14	2	1	1	29
75°	0	0	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P1060417

CATALOG NUMBER: S124RDRP-S350D927-X4F0-XX-UDD-BVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	224.3	224.3	224.3	224.3	224.3
2.5°	223.7	224.3	222.4	224.0	224.3
5°	222.7	223.0	219.5	219.5	219.1
7.5°	221.1	220.4	214.6	212.3	212.0
10°	219.1	216.9	208.4	203.6	202.0
12.5°	216.2	212.0	200.7	193.5	191.6
15°	212.0	205.5	191.9	182.8	179.3
17.5°	206.8	198.4	182.2	171.2	167.6
20°	200.7	190.0	171.5	159.2	154.6
22.5°	194.2	181.9	160.5	146.5	142.0
25°	187.0	172.5	149.8	133.9	128.7
27.5°	179.6	162.4	138.1	121.6	114.8
30°	171.2	152.4	125.5	108.3	101.8
32.5°	162.1	141.3	114.1	95.6	87.8
35°	153.0	130.6	101.8	82.0	74.9
37.5°	144.3	120.6	89.5	68.7	61.9
40°	134.9	109.6	78.1	56.7	48.9
42.5°	125.1	98.9	66.5	44.4	36.0
45°	115.4	88.8	55.4	31.8	22.4
47.5°	105.7	78.1	44.7	20.1	12.0
50°	94.7	67.8	34.0	10.7	6.8
52.5°	84.3	58.0	24.3	6.2	5.2
55°	72.9	48.0	15.6	4.5	4.2
57.5°	62.2	38.3	8.8	3.6	3.2
60°	50.9	29.5	4.9	2.9	2.6
62.5°	39.5	21.4	3.2	1.9	1.6
65°	29.5	14.3	2.3	1.3	1.0
67.5°	19.5	8.1	1.6	0.6	0.6
70°	10.7	3.9	1.0	0.6	0.6
72.5°	3.9	1.3	0.6	0.3	0.3
75°	0.0	0.3	0.3	0.3	0.3
77.5°	0.0	0.0	0.0	0.0	0.3
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



TEST NUMBER: P1060417  
 CATALOG NUMBER: S124RDRP-S350D927-X4F0-XX-UDD-BVL-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	10.82	12.08	11.19	12.39	12.71	0.00	0.00	0.00	0.00	0.00
	3H	11.10	12.20	11.48	12.54	12.90	0.00	0.00	0.00	0.00	0.00
	4H	11.02	12.05	11.43	12.40	12.78	0.00	0.00	0.00	0.00	0.00
	6H	10.94	11.87	11.35	12.25	12.64	0.00	0.00	0.00	0.00	0.00
	8H	10.89	11.78	11.32	12.17	12.57	0.00	0.00	0.00	0.00	0.00
	12H	10.84	11.69	11.28	12.07	12.50	0.00	0.00	0.00	0.00	0.00
4H	2H	10.59	11.62	11.00	11.97	12.36	0.00	0.00	0.00	0.00	0.00
	3H	10.88	11.71	11.29	12.11	12.52	0.00	0.00	0.00	0.00	0.00
	4H	10.79	11.52	11.22	11.94	12.39	0.00	0.00	0.00	0.00	0.00
	6H	10.70	11.33	11.16	11.78	12.25	0.00	0.00	0.00	0.00	0.00
	8H	10.64	11.23	11.11	11.67	12.15	0.00	0.00	0.00	0.00	0.00
	12H	10.59	11.10	11.07	11.59	12.06	0.00	0.00	0.00	0.00	0.00
8H	4H	10.64	11.23	11.11	11.67	12.15	0.00	0.00	0.00	0.00	0.00
	6H	10.53	11.01	11.03	11.50	11.99	0.00	0.00	0.00	0.00	0.00
	8H	10.46	10.89	10.99	11.41	11.90	0.00	0.00	0.00	0.00	0.00
	12H	10.41	10.79	10.93	11.29	11.86	0.00	0.00	0.00	0.00	0.00
12H	4H	10.59	11.10	11.07	11.59	12.06	0.00	0.00	0.00	0.00	0.00
	6H	10.46	10.89	10.99	11.41	11.90	0.00	0.00	0.00	0.00	0.00
	8H	10.41	10.79	10.93	11.29	11.86	0.00	0.00	0.00	0.00	0.00