

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: P1060502

Luminaire Tested: S124RDRP-S575D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060502
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D927-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

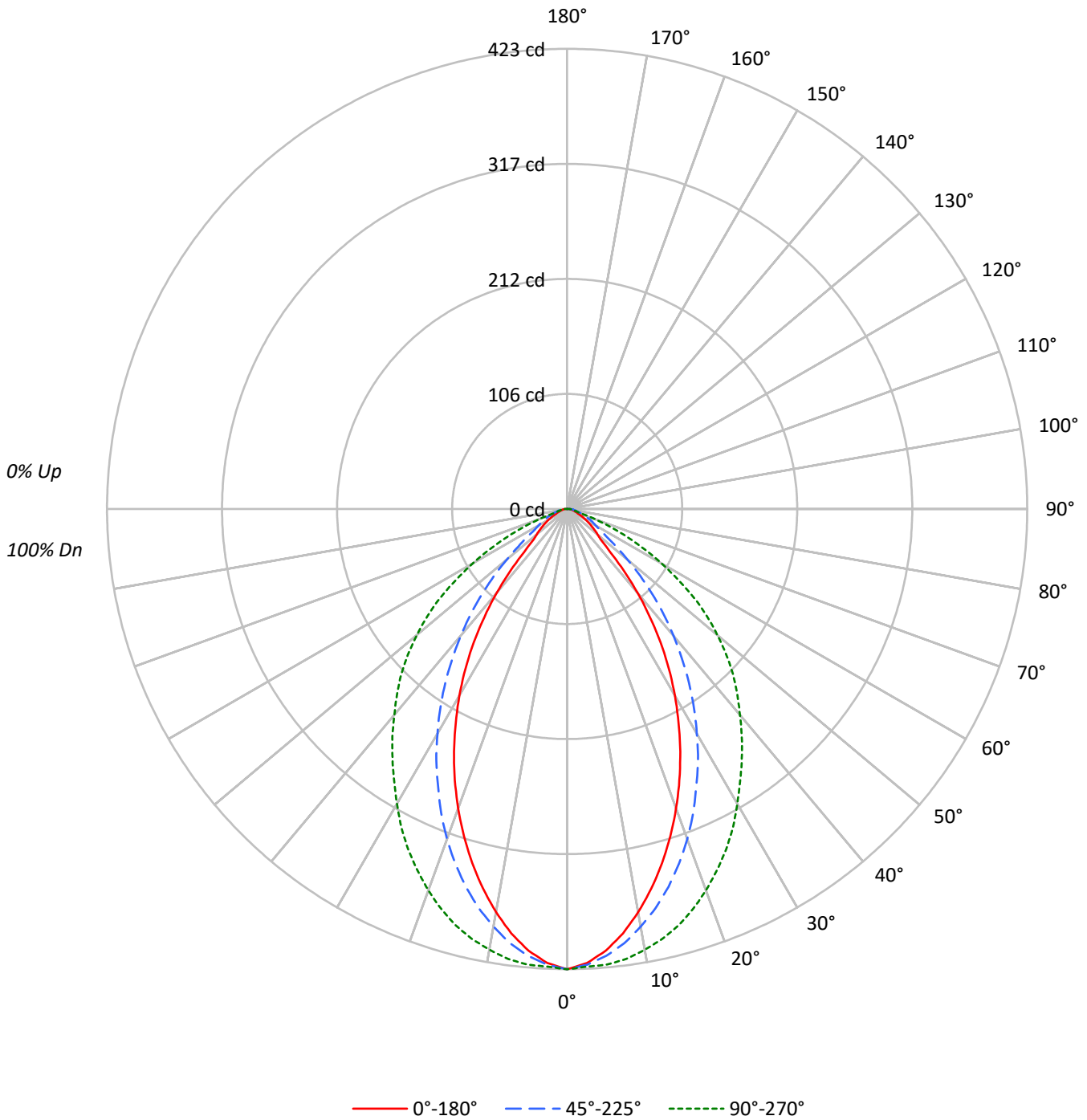
Lumens per Lamp: N/A
Luminaire Lumens: 594.9 lumens
Efficiency: N/A
Efficacy: 30.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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: P1060502

CATALOG NUMBER: S124RDRP-S575D927-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1060502

CATALOG NUMBER: S124RDRP-S575D927-X4F0-XX-UDD-SVL-S

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	111	108	105	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	67	75	70	66	73	68	65	63					63			
5	84	73	66	61	82	72	65	60	70	64	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	49	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43					43			
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3643	3643	3643
5°	3522	3564	3634
10°	3290	3408	3596
15°	3004	3206	3532
20°	2683	2960	3418
25°	2337	2670	3284
30°	1970	2371	3110
35°	1573	2054	2942
40°	1132	1706	2778
45°	682	1344	2629
50°	490	974	2415
55°	413	655	2142
60°	334	518	1724
65°	263	471	1239
70°	232	393	665
75°	216	359	323
80°	213	372	293
85°	316	534	375

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2629 cd/sqm

TEST NUMBER: P1060502

CATALOG NUMBER: S124RDRP-S575D927-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	6.5
10°-20°	101.8	17.1
20°-30°	132.1	22.2
30°-40°	126.9	21.3
40°-50°	94.2	15.8
50°-60°	57.7	9.7
60°-70°	28.0	4.7
70°-80°	10.7	1.8
80°-90°	4.8	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°	272.7	45.8
0°-40°	399.6	67.2
0°-60°	551.5	92.7
0°-90°	594.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	594.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	423	423	423	423	423	
5°	408	413	412	416	420	38
15°	337	347	360	381	396	94
25°	246	258	281	317	346	112
35°	150	163	195	242	280	93
45°	56	70	110	168	216	46
55°	28	28	44	98	143	25
65°	13	14	23	37	61	13
75°	6	10	11	10	10	7
85°	3	5	5	5	4	3
90°	0	0	0	0	0	



TEST NUMBER: P1060502

CATALOG NUMBER: S124RDRP-S575D927-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	423.1	423.1	423.1	423.1	423.1
2.5°	417.7	422.6	419.3	420.4	421.0
5°	407.5	413.4	412.3	416.1	420.4
7.5°	393.5	400.5	402.7	410.2	417.2
10°	376.3	384.9	389.7	402.1	411.3
12.5°	357.4	366.6	375.7	392.4	404.8
15°	337.0	346.7	359.6	381.1	396.2
17.5°	315.4	326.2	341.8	367.7	385.4
20°	292.8	304.1	323.0	351.5	373.0
22.5°	269.7	281.5	302.5	334.3	359.6
25°	246.0	258.4	281.0	317.1	345.6
27.5°	221.8	234.7	260.5	298.8	330.0
30°	198.1	210.5	238.5	279.9	312.8
32.5°	173.9	186.8	216.9	260.5	296.1
35°	149.6	163.1	195.4	241.7	279.9
37.5°	124.9	139.4	173.3	223.4	263.8
40°	100.7	114.7	151.8	204.6	247.1
42.5°	77.0	92.1	131.3	185.7	231.5
45°	56.0	70.0	110.4	168.5	215.9
47.5°	42.0	50.6	91.0	152.3	198.6
50°	36.6	38.2	72.7	134.6	180.3
52.5°	31.8	32.8	56.5	115.2	162.0
55°	27.5	28.5	43.6	98.5	142.7
57.5°	23.1	24.2	35.0	82.4	120.6
60°	19.4	20.5	30.1	65.7	100.1
62.5°	16.1	16.7	26.9	50.1	80.2
65°	12.9	14.0	23.1	36.6	60.8
67.5°	10.8	11.8	18.8	25.3	42.5
70°	9.2	11.8	15.6	17.8	26.4
72.5°	7.5	10.8	12.9	12.4	12.4
75°	6.5	10.2	10.8	9.7	9.7
77.5°	5.4	9.2	8.6	8.1	7.5
80°	4.3	7.5	7.5	6.5	5.9
82.5°	3.8	5.9	5.9	5.9	4.8
85°	3.2	5.4	5.4	4.8	3.8
87.5°	2.2	4.3	4.8	4.3	2.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1060502
 CATALOG NUMBER: S124RDRP-S575D927-X4F0-XX-UDD-SVL-S

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	4.30	5.64	4.66	5.95	6.26	13.41	14.75	13.77	15.06	15.37
	3H	5.35	6.53	5.72	6.86	7.23	13.91	15.10	14.29	15.43	15.79
	4H	5.86	6.97	6.26	7.32	7.70	13.92	15.03	14.33	15.38	15.76
	6H	6.31	7.33	6.73	7.70	8.10	13.92	14.94	14.34	15.31	15.70
	8H	6.51	7.47	6.94	7.86	8.27	13.92	14.88	14.35	15.27	15.68
	12H	6.72	7.64	7.15	8.02	8.45	13.92	14.84	14.35	15.22	15.65
4H	2H	5.39	6.50	5.79	6.85	7.23	13.30	14.40	13.70	14.75	15.14
	3H	6.66	7.57	7.08	7.97	8.38	13.87	14.78	14.29	15.18	15.59
	4H	7.37	8.18	7.80	8.60	9.04	13.92	14.73	14.36	15.15	15.59
	6H	8.00	8.70	8.46	9.15	9.61	13.97	14.67	14.44	15.12	15.59
	8H	8.25	8.90	8.72	9.35	9.82	13.99	14.64	14.46	15.09	15.56
	12H	8.52	9.10	9.01	9.58	10.06	14.02	14.60	14.51	15.08	15.56
8H	4H	7.80	8.45	8.27	8.90	9.37	13.87	14.52	14.34	14.97	15.44
	6H	8.67	9.21	9.18	9.71	10.19	13.96	14.50	14.47	15.00	15.48
	8H	9.08	9.56	9.60	10.08	10.57	14.02	14.50	14.54	15.02	15.51
	12H	9.56	9.98	10.07	10.48	11.05	14.12	14.55	14.64	15.04	15.61
12H	4H	7.84	8.42	8.33	8.90	9.38	13.84	14.42	14.33	14.90	15.38
	6H	8.79	9.27	9.31	9.78	10.27	13.94	14.42	14.46	14.94	15.43
	8H	9.30	9.73	9.82	10.22	10.79	14.05	14.47	14.56	14.97	15.54