

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: P1060907

Luminaire Tested: S124RDR-H575D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060907
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: S124RDR-H575D927-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

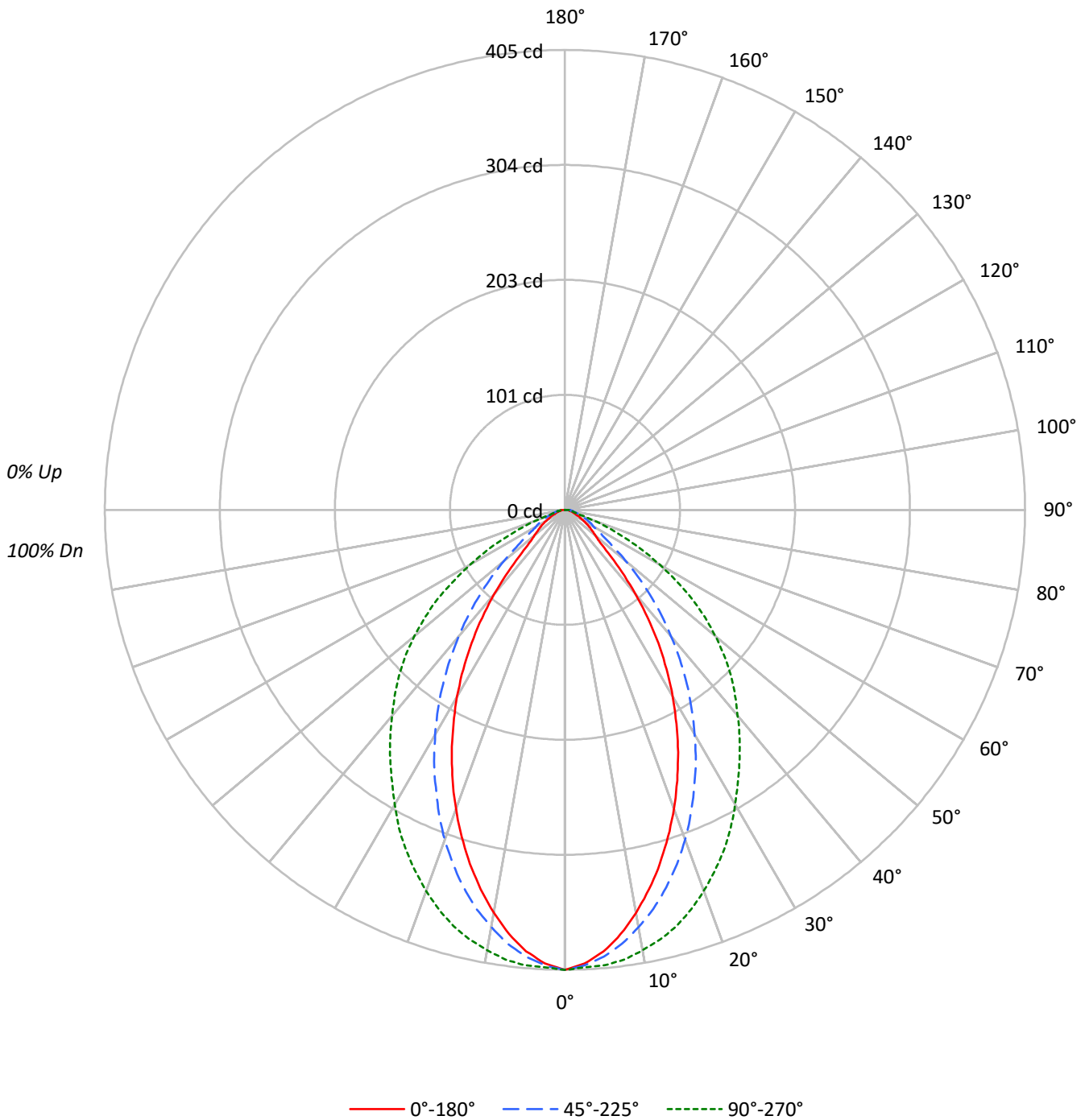
Lumens per Lamp: N/A
Luminaire Lumens: 569.7 lumens
Efficiency: N/A
Efficacy: 32.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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: P1060907

CATALOG NUMBER: S124RDR-H575D927-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1060907

CATALOG NUMBER: S124RDR-H575D927-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3488	3488	3488
5°	3373	3413	3480
10°	3150	3263	3443
15°	2877	3069	3382
20°	2570	2834	3273
25°	2239	2557	3144
30°	1886	2270	2978
35°	1506	1967	2817
40°	1084	1634	2660
45°	653	1287	2517
50°	469	932	2314
55°	395	626	2051
60°	320	498	1652
65°	253	452	1186
70°	222	375	637
75°	206	343	309
80°	203	357	283
85°	306	514	356

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2517 cd/sqm



TEST NUMBER: P1060907

CATALOG NUMBER: S124RDR-H575D927-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.2	6.5
10°-20°	97.4	17.1
20°-30°	126.4	22.2
30°-40°	121.5	21.3
40°-50°	90.2	15.8
50°-60°	55.2	9.7
60°-70°	26.8	4.7
70°-80°	10.2	1.8
80°-90°	4.6	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°	261.1	45.8
0°-40°	382.6	67.2
0°-60°	528.0	92.7
0°-90°	569.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	569.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	390	396	395	398	403	36
15°	323	332	344	365	379	90
25°	236	247	269	304	331	108
35°	143	156	187	231	268	89
45°	54	67	106	161	207	44
55°	26	27	42	94	137	24
65°	12	13	22	35	58	13
75°	6	10	10	9	9	7
85°	3	5	5	5	4	3
90°	0	0	0	0	0	



TEST NUMBER: P1060907

CATALOG NUMBER: S124RDR-H575D927-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	405.1	405.1	405.1	405.1	405.1
2.5°	400.0	404.6	401.5	402.6	403.1
5°	390.2	395.8	394.8	398.4	402.6
7.5°	376.8	383.5	385.5	392.8	399.5
10°	360.3	368.5	373.2	385.0	393.8
12.5°	342.2	351.0	359.8	375.7	387.6
15°	322.7	331.9	344.3	364.9	379.4
17.5°	302.0	312.4	327.3	352.0	369.0
20°	280.4	291.2	309.3	336.6	357.2
22.5°	258.2	269.6	289.7	320.1	344.3
25°	235.6	247.4	269.1	303.6	330.9
27.5°	212.4	224.7	249.5	286.1	316.0
30°	189.7	201.5	228.3	268.0	299.5
32.5°	166.5	178.9	207.7	249.5	283.5
35°	143.3	156.2	187.1	231.4	268.0
37.5°	119.6	133.5	166.0	213.9	252.6
40°	96.4	109.8	145.4	195.9	236.6
42.5°	73.7	88.1	125.8	177.8	221.6
45°	53.6	67.0	105.7	161.3	206.7
47.5°	40.2	48.5	87.1	145.9	190.2
50°	35.0	36.6	69.6	128.9	172.7
52.5°	30.4	31.4	54.1	110.3	155.1
55°	26.3	27.3	41.7	94.3	136.6
57.5°	22.2	23.2	33.5	78.9	115.5
60°	18.6	19.6	28.9	62.9	95.9
62.5°	15.5	16.0	25.8	47.9	76.8
65°	12.4	13.4	22.2	35.0	58.2
67.5°	10.3	11.3	18.0	24.2	40.7
70°	8.8	11.3	14.9	17.0	25.3
72.5°	7.2	10.3	12.4	11.9	11.9
75°	6.2	9.8	10.3	9.3	9.3
77.5°	5.2	8.8	8.2	7.7	7.2
80°	4.1	7.2	7.2	6.2	5.7
82.5°	3.6	5.7	5.7	5.7	4.6
85°	3.1	5.2	5.2	4.6	3.6
87.5°	2.1	4.1	4.6	4.1	2.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060907
 CATALOG NUMBER: S124RDR-H575D927-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	4.16	5.50	4.52	5.81	6.12	13.26	14.60	13.62	14.91	15.22
	3H	5.20	6.39	5.58	6.72	7.08	13.76	14.95	14.14	15.27	15.64
	4H	5.71	6.82	6.12	7.17	7.55	13.77	14.88	14.17	15.23	15.61
	6H	6.17	7.18	6.58	7.55	7.95	13.77	14.79	14.19	15.16	15.55
	8H	6.36	7.32	6.79	7.71	8.12	13.77	14.73	14.20	15.12	15.53
	12H	6.57	7.49	7.00	7.88	8.31	13.77	14.69	14.20	15.07	15.50
4H	2H	5.25	6.36	5.66	6.71	7.09	13.15	14.25	13.55	14.60	14.99
	3H	6.52	7.43	6.93	7.83	8.23	13.72	14.63	14.14	15.03	15.44
	4H	7.23	8.04	7.66	8.45	8.90	13.77	14.58	14.21	15.00	15.44
	6H	7.86	8.56	8.32	9.00	9.47	13.82	14.52	14.29	14.97	15.43
	8H	8.10	8.76	8.57	9.20	9.67	13.84	14.49	14.31	14.94	15.41
	12H	8.38	8.96	8.87	9.44	9.92	13.87	14.45	14.36	14.93	15.41
8H	4H	7.65	8.30	8.12	8.75	9.22	13.72	14.37	14.19	14.82	15.29
	6H	8.53	9.07	9.03	9.56	10.04	13.81	14.35	14.32	14.84	15.33
	8H	8.94	9.42	9.46	9.93	10.43	13.87	14.36	14.40	14.87	15.36
	12H	9.42	9.85	9.94	10.34	10.91	13.97	14.40	14.49	14.89	15.46
12H	4H	7.69	8.27	8.18	8.76	9.23	13.69	14.27	14.18	14.75	15.23
	6H	8.64	9.12	9.16	9.64	10.13	13.79	14.27	14.31	14.79	15.28
	8H	9.16	9.59	9.68	10.08	10.65	13.90	14.32	14.41	14.82	15.39