

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: P1057909

Luminaire Tested: S122RDRP-S290D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057909
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S290D927-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

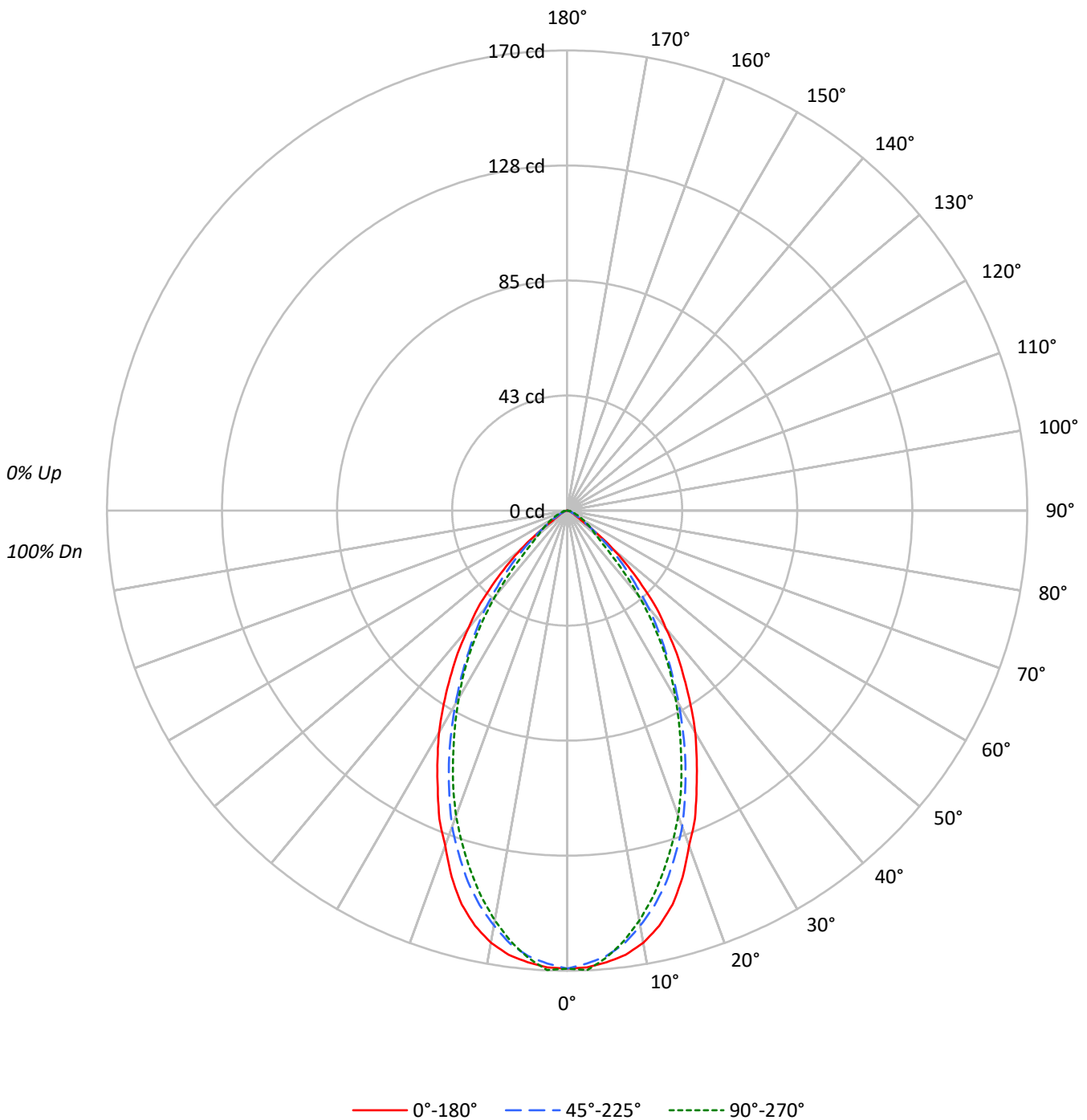
Lumens per Lamp: N/A
Luminaire Lumens: 182.0 lumens
Efficiency: N/A
Efficacy: 14.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1057909

CATALOG NUMBER: S122RDRP-S290D927-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1057909

CATALOG NUMBER: S122RDRP-S290D927-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3122	3122	3122
5°	3103	3060	3071
10°	3037	2917	2880
15°	2877	2711	2632
20°	2586	2441	2354
25°	2303	2105	2028
30°	2016	1756	1705
35°	1696	1424	1376
40°	1366	1123	992
45°	1023	812	590
50°	640	522	388
55°	219	283	315
60°	125	173	251
65°	87	118	192
70°	76	92	146
75°	50	71	121
80°	32	74	106
85°	0	0	64

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1023 cd/sqm



TEST NUMBER: P1057909

CATALOG NUMBER: S122RDRP-S290D927-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.6	8.6
10°-20°	39.9	21.9
20°-30°	48.1	26.4
30°-40°	41.1	22.6
40°-50°	24.1	13.2
50°-60°	8.7	4.8
60°-70°	3.1	1.7
70°-80°	1.2	0.7
80°-90°	0.2	0.1
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°	103.6	56.9
0°-40°	144.7	79.5
0°-60°	177.4	97.5
0°-90°	182.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	182.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	169	169	169	169	169	
5°	168	168	165	166	166	16
15°	151	148	142	139	138	42
25°	113	108	103	102	100	52
35°	75	70	63	62	61	47
45°	39	35	31	26	23	30
55°	7	10	9	9	10	8
65°	2	2	3	4	4	2
75°	1	1	1	1	2	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1057909

CATALOG NUMBER: S122RDRP-S290D927-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	169.2	169.2	169.2	169.2	169.2
2.5°	168.9	169.2	167.5	169.2	169.9
5°	167.5	167.9	165.2	165.8	165.8
7.5°	165.5	165.2	161.4	160.8	160.4
10°	162.1	161.1	155.7	154.7	153.7
12.5°	157.1	155.0	149.3	147.6	146.2
15°	150.6	148.3	141.9	139.2	137.8
17.5°	141.9	139.2	133.1	130.4	129.0
20°	131.7	129.0	124.3	121.3	119.9
22.5°	123.3	118.9	113.8	111.8	110.1
25°	113.1	108.4	103.4	101.7	99.6
27.5°	103.7	97.9	92.9	91.5	89.8
30°	94.6	88.5	82.4	82.4	80.0
32.5°	84.8	79.0	72.6	72.3	70.9
35°	75.3	69.6	63.2	62.5	61.1
37.5°	66.5	60.8	54.7	52.7	51.0
40°	56.7	51.7	46.6	43.2	41.2
42.5°	49.0	43.2	38.2	34.1	31.4
45°	39.2	35.1	31.1	26.0	22.6
47.5°	30.4	27.7	24.3	18.6	16.9
50°	22.3	20.9	18.2	13.8	13.5
52.5°	14.2	14.9	13.2	10.8	11.8
55°	6.8	9.5	8.8	9.1	9.8
57.5°	4.4	4.7	6.4	7.4	8.1
60°	3.4	3.4	4.7	6.1	6.8
62.5°	2.7	2.7	3.7	5.1	5.4
65°	2.0	2.4	2.7	3.7	4.4
67.5°	1.7	1.7	2.0	3.0	3.4
70°	1.4	1.4	1.7	2.4	2.7
72.5°	1.0	1.0	1.4	2.0	2.0
75°	0.7	1.0	1.0	1.4	1.7
77.5°	0.7	0.7	0.7	1.0	1.4
80°	0.3	0.3	0.7	0.7	1.0
82.5°	0.3	0.3	0.3	0.3	0.7
85°	0.0	0.0	0.0	0.3	0.3
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: P1057909

CATALOG NUMBER: S122RDRP-S290D927-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	0.00	0.97	0.18	1.29	1.60	3.22	4.38	3.58	4.69	5.01
	3H	0.36	1.38	0.74	1.71	2.08	3.95	4.97	4.33	5.30	5.67
	4H	0.50	1.44	0.90	1.79	2.18	4.17	5.12	4.58	5.47	5.86
	6H	0.57	1.44	0.99	1.81	2.21	4.33	5.20	4.75	5.57	5.96
	8H	0.57	1.38	1.00	1.77	2.18	4.36	5.18	4.80	5.57	5.98
	12H	0.53	1.31	0.96	1.69	2.12	4.36	5.14	4.79	5.52	5.95
4H	2H	0.12	1.07	0.53	1.42	1.81	3.18	4.13	3.59	4.48	4.87
	3H	0.82	1.58	1.23	1.99	2.39	4.07	4.84	4.48	5.24	5.65
	4H	1.05	1.74	1.49	2.16	2.60	4.36	5.04	4.80	5.46	5.91
	6H	1.17	1.76	1.64	2.21	2.68	4.59	5.18	5.06	5.63	6.10
	8H	1.17	1.72	1.64	2.17	2.64	4.64	5.18	5.11	5.63	6.11
	12H	1.13	1.61	1.62	2.10	2.57	4.65	5.13	5.14	5.61	6.09
8H	4H	1.17	1.71	1.64	2.16	2.64	4.29	4.84	4.76	5.29	5.76
	6H	1.33	1.77	1.84	2.27	2.75	4.56	5.00	5.07	5.50	5.99
	8H	1.35	1.75	1.88	2.26	2.76	4.62	5.02	5.15	5.53	6.03
	12H	1.32	1.67	1.84	2.17	2.74	4.67	5.01	5.18	5.51	6.09
12H	4H	1.15	1.63	1.64	2.12	2.59	4.24	4.72	4.73	5.21	5.68
	6H	1.32	1.72	1.85	2.24	2.73	4.51	4.91	5.04	5.42	5.92
	8H	1.37	1.72	1.89	2.22	2.79	4.59	4.94	5.11	5.44	6.01