

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: P1057910

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057910
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
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-S
Description: DEFINE 2 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

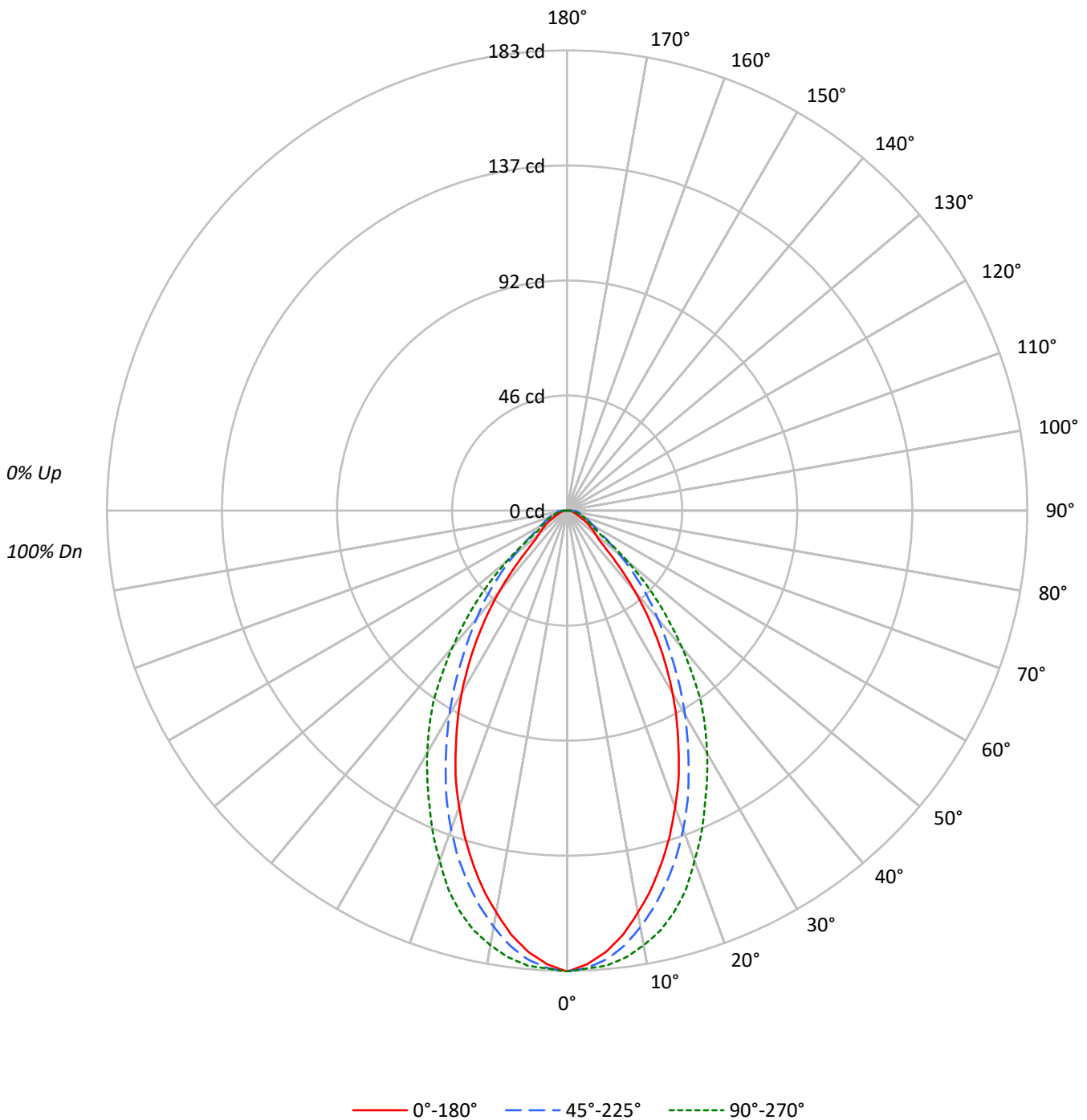
Lumens per Lamp: N/A
Luminaire Lumens: 221.1 lumens
Efficiency: N/A
Efficacy: 17.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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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	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3382	3382	3382
5°	3264	3319	3364
10°	3041	3150	3288
15°	2772	2921	3152
20°	2464	2649	2908
25°	2134	2327	2637
30°	1788	1996	2371
35°	1410	1653	2088
40°	1009	1351	1710
45°	592	1067	1323
50°	428	778	893
55°	360	553	466
60°	288	450	399
65°	236	397	371
70°	200	383	345
75°	192	406	335
80°	213	499	361
85°	360	783	508

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1323 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.8	7.6
10°-20°	43.0	19.5
20°-30°	52.9	23.9
30°-40°	46.8	21.1
40°-50°	29.8	13.5
50°-60°	14.6	6.6
60°-70°	8.7	3.9
70°-80°	5.5	2.5
80°-90°	3.1	1.4
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°	112.7	51.0
0°-40°	159.5	72.1
0°-60°	203.9	92.2
0°-90°	221.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	221.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	183	183	183	183	183	
5°	176	180	179	180	182	16
15°	145	149	153	160	165	40
25°	105	109	114	121	130	48
35°	63	66	73	84	93	39
45°	23	29	41	46	51	19
55°	11	15	17	16	14	10
65°	5	10	9	8	8	5
75°	3	6	6	5	5	3
85°	2	3	4	3	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	183.3	183.3	183.3	183.3	183.3
2.5°	180.6	184.0	182.0	182.0	182.3
5°	176.2	179.9	179.2	179.9	181.6
7.5°	170.1	173.8	174.5	177.2	179.2
10°	162.3	166.1	168.1	172.5	175.5
12.5°	154.2	157.9	161.0	166.7	171.1
15°	145.1	149.1	152.9	159.6	165.0
17.5°	135.6	139.7	144.4	151.2	157.6
20°	125.5	129.2	134.9	141.4	148.1
22.5°	115.7	119.0	125.1	131.2	139.3
25°	104.8	108.6	114.3	121.4	129.5
27.5°	94.4	98.1	103.8	111.9	120.4
30°	83.9	87.3	93.7	102.1	111.3
32.5°	73.1	76.4	83.5	92.7	102.1
35°	62.6	65.9	73.4	83.5	92.7
37.5°	52.1	55.8	64.3	73.7	81.5
40°	41.9	46.3	56.1	64.3	71.0
42.5°	31.8	37.9	48.4	55.1	60.5
45°	22.7	29.1	40.9	46.0	50.7
47.5°	17.2	22.3	33.8	37.5	40.6
50°	14.9	18.3	27.1	29.8	31.1
52.5°	12.9	16.2	21.6	22.7	22.0
55°	11.2	14.9	17.2	16.2	14.5
57.5°	9.5	13.9	14.2	12.2	12.5
60°	7.8	12.5	12.2	10.5	10.8
62.5°	6.4	11.5	10.5	9.5	9.5
65°	5.4	10.1	9.1	8.5	8.5
67.5°	4.4	9.1	8.1	7.4	7.4
70°	3.7	8.1	7.1	6.4	6.4
72.5°	3.4	7.1	6.4	5.7	5.7
75°	2.7	6.1	5.7	5.1	4.7
77.5°	2.4	5.1	5.1	4.7	4.1
80°	2.0	4.4	4.7	4.1	3.4
82.5°	2.0	4.1	4.1	3.7	2.7
85°	1.7	3.4	3.7	3.4	2.4
87.5°	1.0	3.0	3.0	2.7	1.7
90°	0.0	0.0	0.0	0.0	0.0

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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	6.28	7.56	6.64	7.87	8.19	5.80	7.08	6.16	7.39	7.70
	3H	7.44	8.58	7.82	8.91	9.28	7.34	8.48	7.72	8.81	9.18
	4H	7.87	8.94	8.28	9.29	9.67	8.02	9.08	8.42	9.43	9.82
	6H	8.22	9.20	8.64	9.57	9.96	8.68	9.66	9.09	10.03	10.42
	8H	8.41	9.34	8.84	9.73	10.13	8.97	9.89	9.40	10.28	10.69
	12H	8.63	9.52	9.06	9.90	10.33	9.29	10.17	9.72	10.56	10.99
4H	2H	6.77	7.84	7.18	8.19	8.57	6.39	7.45	6.79	7.80	8.19
	3H	8.41	9.28	8.82	9.69	10.09	8.18	9.05	8.59	9.45	9.86
	4H	9.18	9.96	9.61	10.38	10.82	9.02	9.80	9.45	10.22	10.67
	6H	9.78	10.46	10.24	10.91	11.37	9.88	10.56	10.35	11.01	11.48
	8H	10.08	10.71	10.55	11.16	11.63	10.27	10.91	10.74	11.36	11.83
	12H	10.39	10.96	10.88	11.44	11.91	10.72	11.28	11.20	11.76	12.24
8H	4H	9.59	10.23	10.06	10.68	11.15	9.47	10.11	9.94	10.56	11.03
	6H	10.54	11.07	11.05	11.56	12.04	10.59	11.12	11.10	11.61	12.09
	8H	11.09	11.56	11.62	12.08	12.57	11.17	11.64	11.69	12.16	12.65
	12H	11.66	12.08	12.18	12.57	13.14	11.85	12.26	12.36	12.76	13.33
12H	4H	9.66	10.23	10.15	10.71	11.18	9.56	10.12	10.04	10.60	11.08
	6H	10.73	11.20	11.25	11.71	12.21	10.78	11.25	11.30	11.77	12.26
	8H	11.43	11.84	11.94	12.34	12.91	11.49	11.91	12.01	12.40	12.97