

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: P1057919

Luminaire Tested: S122RDRP-S290D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057919
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-S290D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

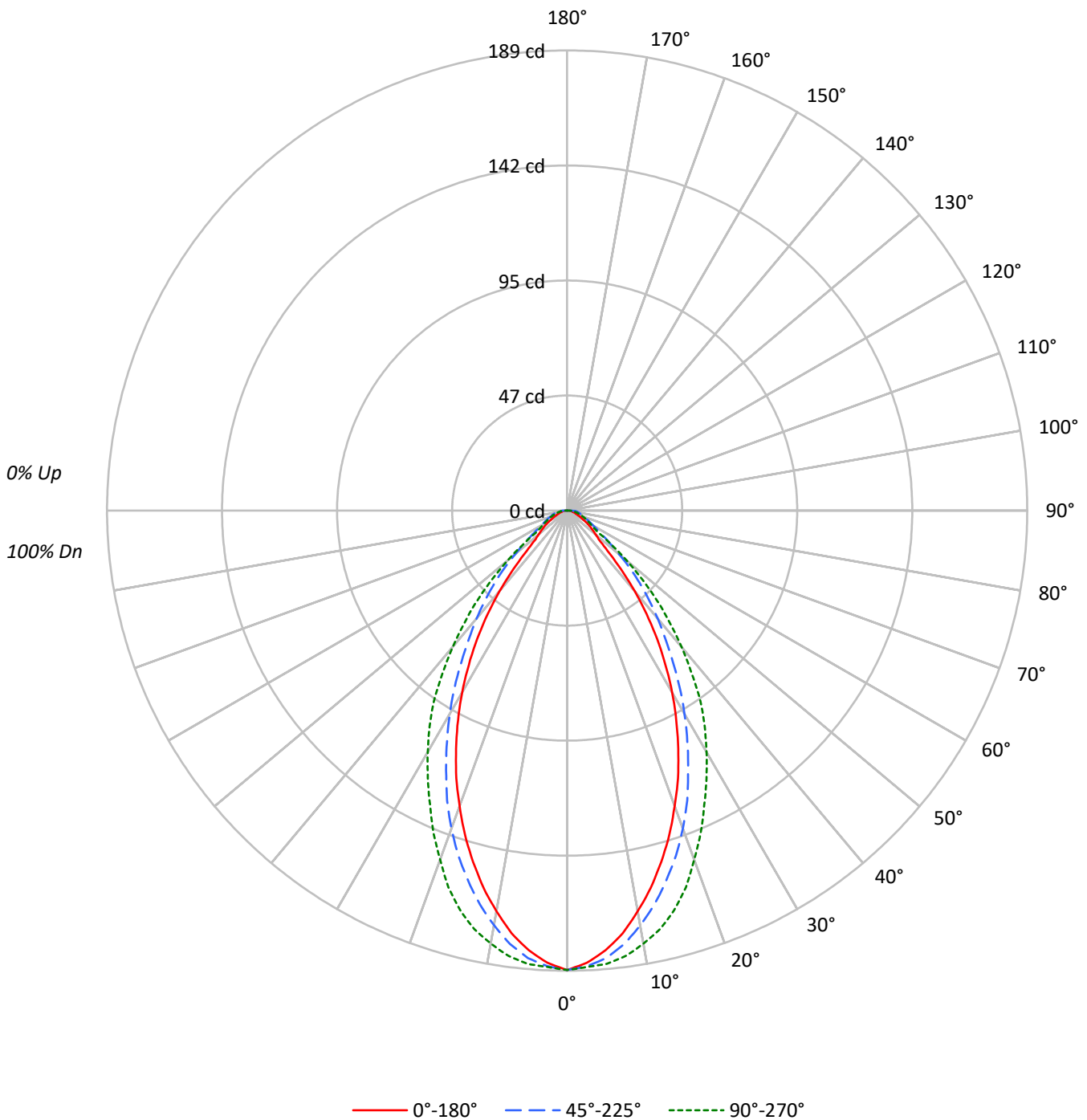
Lumens per Lamp: N/A
Luminaire Lumens: 227.6 lumens
Efficiency: N/A
Efficacy: 18.2 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (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

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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°	3482	3482	3482
5°	3358	3417	3462
10°	3131	3242	3384
15°	2852	3005	3246
20°	2535	2728	2995
25°	2197	2394	2714
30°	1839	2054	2440
35°	1451	1701	2149
40°	1041	1392	1761
45°	608	1099	1362
50°	439	798	919
55°	370	573	483
60°	295	461	410
65°	245	410	380
70°	205	394	356
75°	200	421	349
80°	223	521	372
85°	360	805	508

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1362 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.3	7.6
10°-20°	44.3	19.5
20°-30°	54.4	23.9
30°-40°	48.1	21.1
40°-50°	30.7	13.5
50°-60°	15.0	6.6
60°-70°	8.9	3.9
70°-80°	5.7	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°	116.0	51.0
0°-40°	164.1	72.1
0°-60°	209.8	92.2
0°-90°	227.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	227.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	189	189	189	189	189	
5°	181	185	184	185	187	17
15°	149	154	157	164	170	42
25°	108	112	118	125	133	49
35°	64	68	76	86	95	40
45°	23	30	42	47	52	20
55°	12	15	18	17	15	10
65°	6	10	9	9	9	6
75°	3	6	6	5	5	3
85°	2	4	4	4	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	188.7	188.7	188.7	188.7	188.7
2.5°	185.9	189.4	187.3	187.3	187.6
5°	181.3	185.2	184.5	185.2	186.9
7.5°	175.1	178.9	179.6	182.4	184.5
10°	167.1	170.9	173.0	177.5	180.6
12.5°	158.7	162.5	165.7	171.6	176.1
15°	149.3	153.5	157.3	164.3	169.9
17.5°	139.6	143.8	148.6	155.6	162.2
20°	129.1	133.0	138.9	145.5	152.5
22.5°	119.0	122.5	128.8	135.1	143.4
25°	107.9	111.7	117.6	125.0	133.3
27.5°	97.1	100.9	106.9	115.2	123.9
30°	86.3	89.8	96.4	105.1	114.5
32.5°	75.2	78.7	86.0	95.4	105.1
35°	64.4	67.9	75.5	86.0	95.4
37.5°	53.6	57.4	66.1	75.9	83.9
40°	43.2	47.7	57.8	66.1	73.1
42.5°	32.7	39.0	49.8	56.7	62.3
45°	23.3	29.9	42.1	47.3	52.2
47.5°	17.8	23.0	34.8	38.6	41.8
50°	15.3	18.8	27.8	30.6	32.0
52.5°	13.2	16.7	22.3	23.3	22.6
55°	11.5	15.3	17.8	16.7	15.0
57.5°	9.7	14.3	14.6	12.5	12.9
60°	8.0	12.9	12.5	10.8	11.1
62.5°	6.6	11.8	10.8	9.7	9.7
65°	5.6	10.4	9.4	8.7	8.7
67.5°	4.5	9.4	8.4	7.7	7.7
70°	3.8	8.4	7.3	6.6	6.6
72.5°	3.5	7.3	6.6	5.9	5.9
75°	2.8	6.3	5.9	5.2	4.9
77.5°	2.4	5.2	5.2	4.9	4.2
80°	2.1	4.5	4.9	4.2	3.5
82.5°	2.1	4.2	4.2	3.8	2.8
85°	1.7	3.5	3.8	3.5	2.4
87.5°	1.0	3.1	3.1	2.8	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	6.37	7.65	6.74	7.96	8.28	5.88	7.16	6.24	7.47	7.78
	3H	7.54	8.68	7.92	9.01	9.38	7.45	8.59	7.83	8.92	9.28
	4H	7.98	9.04	8.38	9.39	9.77	8.13	9.20	8.54	9.55	9.93
	6H	8.32	9.29	8.73	9.66	10.06	8.79	9.77	9.20	10.14	10.53
	8H	8.51	9.44	8.94	9.83	10.24	9.08	10.00	9.51	10.40	10.80
	12H	8.73	9.61	9.16	10.00	10.43	9.39	10.28	9.82	10.66	11.09
4H	2H	6.87	7.93	7.27	8.28	8.67	6.48	7.54	6.88	7.89	8.28
	3H	8.52	9.39	8.93	9.79	10.20	8.29	9.16	8.70	9.56	9.97
	4H	9.28	10.07	9.72	10.49	10.93	9.13	9.91	9.56	10.33	10.77
	6H	9.88	10.56	10.34	11.00	11.47	9.99	10.67	10.45	11.12	11.58
	8H	10.18	10.82	10.65	11.26	11.73	10.38	11.02	10.85	11.46	11.94
	12H	10.49	11.05	10.98	11.54	12.01	10.81	11.38	11.30	11.86	12.33
8H	4H	9.70	10.33	10.17	10.78	11.25	9.58	10.22	10.05	10.67	11.14
	6H	10.64	11.16	11.14	11.66	12.14	10.70	11.22	11.20	11.72	12.20
	8H	11.19	11.66	11.71	12.18	12.67	11.28	11.75	11.80	12.26	12.76
	12H	11.76	12.17	12.27	12.67	13.24	11.94	12.36	12.46	12.85	13.43
12H	4H	9.77	10.33	10.26	10.82	11.29	9.67	10.23	10.15	10.71	11.19
	6H	10.83	11.29	11.35	11.81	12.30	10.89	11.36	11.41	11.87	12.37
	8H	11.52	11.94	12.04	12.43	13.00	11.60	12.01	12.11	12.51	13.08