

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: P1057920

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057920
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
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-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

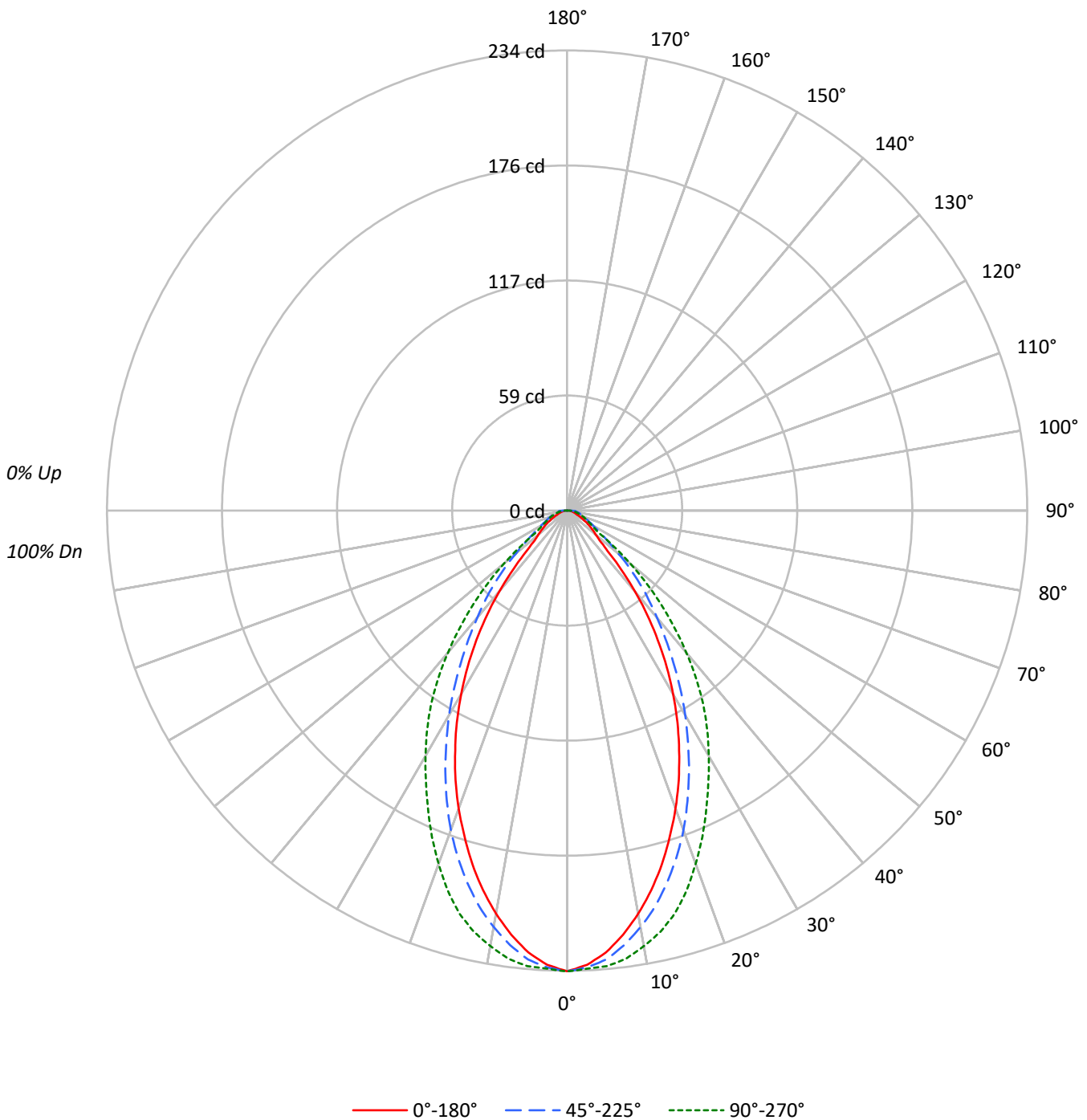
Lumens per Lamp: N/A
Luminaire Lumens: 284.2 lumens
Efficiency: N/A
Efficacy: 22.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	4323	4323	4323
5°	4179	4244	4307
10°	3901	4030	4214
15°	3557	3744	4050
20°	3165	3397	3753
25°	2742	2985	3408
30°	2299	2559	3070
35°	1811	2117	2721
40°	1291	1710	2271
45°	762	1354	1761
50°	548	979	1200
55°	460	705	605
60°	373	565	513
65°	306	502	472
70°	264	491	453
75°	250	499	449
80°	255	595	478
85°	360	953	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1761 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.5	7.6
10°-20°	55.2	19.4
20°-30°	68.1	24.0
30°-40°	60.6	21.3
40°-50°	38.7	13.6
50°-60°	18.6	6.5
60°-70°	10.9	3.8
70°-80°	7.0	2.5
80°-90°	3.7	1.3
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°	144.8	51.0
0°-40°	205.4	72.3
0°-60°	262.6	92.4
0°-90°	284.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	284.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	234	234	234	234	234	
5°	226	230	229	230	232	21
15°	186	191	196	205	212	52
25°	135	140	147	157	167	62
35°	80	87	94	108	121	50
45°	29	38	52	60	68	25
55°	14	18	22	21	19	13
65°	7	12	12	10	11	7
75°	4	8	7	7	6	4
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	234.3	234.3	234.3	234.3	234.3
2.5°	231.2	235.0	232.5	232.5	233.2
5°	225.6	229.8	229.1	230.5	232.5
7.5°	217.6	222.1	222.8	226.6	229.8
10°	208.2	213.1	215.1	220.7	224.9
12.5°	197.7	202.6	206.4	213.4	219.3
15°	186.2	190.8	196.0	205.0	212.0
17.5°	173.7	179.6	184.9	194.3	202.3
20°	161.2	166.8	173.0	182.1	191.1
22.5°	148.3	153.5	159.8	169.2	179.6
25°	134.7	139.9	146.6	157.0	167.4
27.5°	121.5	126.7	133.0	144.5	155.6
30°	107.9	113.1	120.1	131.9	144.1
32.5°	94.3	99.9	106.9	119.8	132.6
35°	80.4	86.7	94.0	108.3	120.8
37.5°	66.8	73.1	82.2	96.1	107.9
40°	53.6	60.9	71.0	83.5	94.3
42.5°	40.7	48.7	61.3	71.4	80.8
45°	29.2	37.9	51.9	60.2	67.5
47.5°	22.3	28.5	42.8	49.4	54.7
50°	19.1	23.0	34.1	39.0	41.8
52.5°	16.7	20.2	27.2	29.6	29.6
55°	14.3	18.5	21.9	21.2	18.8
57.5°	12.2	16.7	18.1	15.3	16.0
60°	10.1	15.3	15.3	13.6	13.9
62.5°	8.4	14.3	13.2	11.8	12.2
65°	7.0	12.5	11.5	10.4	10.8
67.5°	5.6	11.1	10.1	9.4	9.4
70°	4.9	10.1	9.1	8.4	8.4
72.5°	4.2	8.7	8.0	7.3	7.3
75°	3.5	7.7	7.0	6.6	6.3
77.5°	3.1	6.6	6.3	5.6	5.2
80°	2.4	5.6	5.6	5.2	4.5
82.5°	2.1	4.9	4.9	4.5	3.8
85°	1.7	4.2	4.5	3.8	2.8
87.5°	1.4	3.8	3.8	3.1	2.1
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	6.76	8.03	7.12	8.34	8.66	6.54	7.82	6.91	8.13	8.45
	3H	7.99	9.12	8.37	9.45	9.82	8.14	9.28	8.52	9.61	9.97
	4H	8.45	9.50	8.85	9.86	10.24	8.86	9.92	9.26	10.27	10.65
	6H	8.82	9.79	9.23	10.16	10.56	9.51	10.48	9.92	10.85	11.25
	8H	8.97	9.90	9.41	10.29	10.69	9.83	10.75	10.26	11.15	11.55
	12H	9.13	10.01	9.56	10.39	10.83	10.13	11.01	10.56	11.40	11.83
4H	2H	7.31	8.36	7.71	8.72	9.10	7.14	8.20	7.54	8.55	8.93
	3H	9.00	9.87	9.42	10.28	10.68	8.98	9.85	9.40	10.26	10.66
	4H	9.81	10.59	10.24	11.01	11.45	9.86	10.64	10.29	11.06	11.50
	6H	10.44	11.12	10.91	11.57	12.03	10.70	11.37	11.16	11.82	12.29
	8H	10.69	11.33	11.16	11.78	12.25	11.11	11.75	11.58	12.20	12.67
	12H	10.94	11.50	11.42	11.98	12.46	11.52	12.08	12.00	12.56	13.03
8H	4H	10.23	10.86	10.70	11.31	11.78	10.28	10.91	10.75	11.36	11.83
	6H	11.20	11.72	11.70	12.22	12.70	11.36	11.88	11.86	12.37	12.85
	8H	11.70	12.16	12.22	12.68	13.17	11.94	12.41	12.46	12.92	13.42
	12H	12.20	12.61	12.71	13.10	13.68	12.54	12.95	13.06	13.45	14.02
12H	4H	10.29	10.85	10.78	11.34	11.81	10.35	10.91	10.84	11.40	11.87
	6H	11.37	11.84	11.89	12.35	12.85	11.52	11.99	12.05	12.51	13.00
	8H	12.01	12.42	12.53	12.92	13.49	12.23	12.64	12.74	13.14	13.71