

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: P1057947

Luminaire Tested: S122RDRP-S290D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057947
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-S290D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

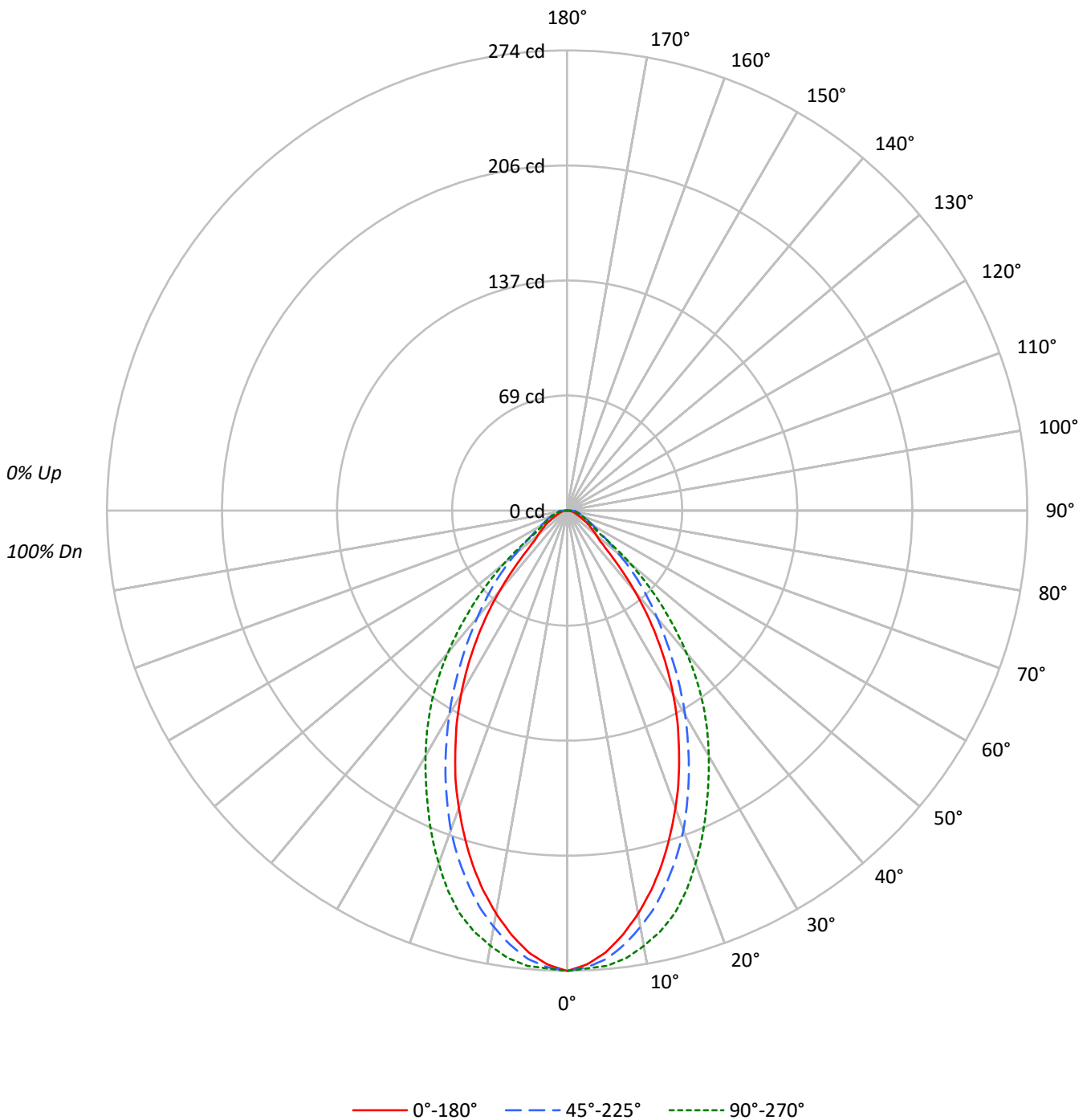
Lumens per Lamp: N/A
Luminaire Lumens: 332.5 lumens
Efficiency: N/A
Efficacy: 26.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5058	5058	5058
5°	4890	4964	5040
10°	4564	4716	4930
15°	4163	4380	4740
20°	3703	3976	4391
25°	3209	3492	3989
30°	2691	2994	3592
35°	2120	2478	3183
40°	1510	2002	2659
45°	892	1584	2062
50°	643	1145	1404
55°	537	827	708
60°	435	661	602
65°	354	585	550
70°	308	572	529
75°	292	577	520
80°	308	691	563
85°	423	1122	699

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2062 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.1	7.6
10°-20°	64.6	19.4
20°-30°	79.7	24.0
30°-40°	70.9	21.3
40°-50°	45.2	13.6
50°-60°	21.7	6.5
60°-70°	12.7	3.8
70°-80°	8.1	2.4
80°-90°	4.3	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°	169.4	51.0
0°-40°	240.3	72.3
0°-60°	307.3	92.4
0°-90°	332.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	332.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	274	274	274	274	274	
5°	264	269	268	270	272	25
15°	218	223	229	240	248	61
25°	158	164	172	184	196	72
35°	94	101	110	127	141	58
45°	34	44	61	70	79	29
55°	17	22	26	25	22	15
65°	8	15	13	12	13	8
75°	4	9	8	8	7	4
85°	2	5	5	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	274.1	274.1	274.1	274.1	274.1
2.5°	270.5	275.0	272.1	272.1	272.9
5°	264.0	268.8	268.0	269.7	272.1
7.5°	254.6	259.9	260.7	265.2	268.8
10°	243.6	249.3	251.7	258.3	263.1
12.5°	231.4	237.1	241.6	249.7	256.6
15°	217.9	223.2	229.3	239.9	248.1
17.5°	203.3	210.2	216.3	227.3	236.7
20°	188.6	195.1	202.5	213.0	223.6
22.5°	173.5	179.6	187.0	198.0	210.2
25°	157.6	163.8	171.5	183.7	195.9
27.5°	142.2	148.3	155.6	169.0	182.1
30°	126.3	132.4	140.5	154.4	168.6
32.5°	110.4	116.9	125.1	140.1	155.2
35°	94.1	101.4	110.0	126.7	141.3
37.5°	78.2	85.5	96.1	112.4	126.3
40°	62.7	71.3	83.1	97.8	110.4
42.5°	47.7	57.0	71.7	83.5	94.5
45°	34.2	44.4	60.7	70.5	79.0
47.5°	26.1	33.4	50.1	57.8	64.0
50°	22.4	26.9	39.9	45.6	48.9
52.5°	19.6	23.6	31.8	34.6	34.6
55°	16.7	21.6	25.7	24.8	22.0
57.5°	14.3	19.6	21.2	17.9	18.7
60°	11.8	17.9	17.9	15.9	16.3
62.5°	9.8	16.7	15.5	13.8	14.3
65°	8.1	14.7	13.4	12.2	12.6
67.5°	6.5	13.0	11.8	11.0	11.0
70°	5.7	11.8	10.6	9.8	9.8
72.5°	4.9	10.2	9.4	8.6	8.6
75°	4.1	9.0	8.1	7.7	7.3
77.5°	3.7	7.7	7.3	6.5	6.1
80°	2.9	6.5	6.5	6.1	5.3
82.5°	2.4	5.7	5.7	5.3	4.5
85°	2.0	4.9	5.3	4.5	3.3
87.5°	1.6	4.5	4.5	3.7	2.4
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	7.32	8.60	7.68	8.91	9.22	7.09	8.36	7.45	8.67	8.99
	3H	8.54	9.68	8.92	10.01	10.37	8.68	9.82	9.06	10.15	10.51
	4H	9.00	10.06	9.40	10.41	10.79	9.40	10.46	9.80	10.81	11.19
	6H	9.38	10.35	9.80	10.73	11.12	10.05	11.02	10.47	11.40	11.79
	8H	9.53	10.45	9.96	10.85	11.25	10.38	11.30	10.81	11.70	12.10
	12H	9.68	10.57	10.12	10.95	11.38	10.69	11.57	11.12	11.95	12.38
4H	2H	7.86	8.92	8.26	9.27	9.66	7.68	8.73	8.08	9.09	9.47
	3H	9.55	10.42	9.96	10.83	11.23	9.52	10.39	9.94	10.80	11.20
	4H	10.35	11.13	10.79	11.55	12.00	10.39	11.17	10.83	11.59	12.04
	6H	10.99	11.67	11.46	12.12	12.58	11.24	11.91	11.70	12.36	12.83
	8H	11.24	11.87	11.71	12.32	12.79	11.66	12.30	12.13	12.74	13.21
	12H	11.48	12.04	11.97	12.52	13.00	12.07	12.63	12.56	13.11	13.59
8H	4H	10.76	11.40	11.23	11.85	12.32	10.81	11.44	11.28	11.89	12.36
	6H	11.74	12.26	12.24	12.76	13.24	11.89	12.41	12.39	12.91	13.39
	8H	12.23	12.70	12.75	13.21	13.70	12.49	12.95	13.01	13.47	13.96
	12H	12.73	13.14	13.24	13.64	14.21	13.10	13.51	13.61	14.01	14.58
12H	4H	10.83	11.39	11.32	11.87	12.35	10.88	11.44	11.37	11.93	12.40
	6H	11.91	12.37	12.43	12.89	13.38	12.06	12.52	12.58	13.04	13.53
	8H	12.54	12.95	13.06	13.45	14.02	12.77	13.18	13.29	13.68	14.25