

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: P1058327

Luminaire Tested: S122RDRP-H290D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-H290D930-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

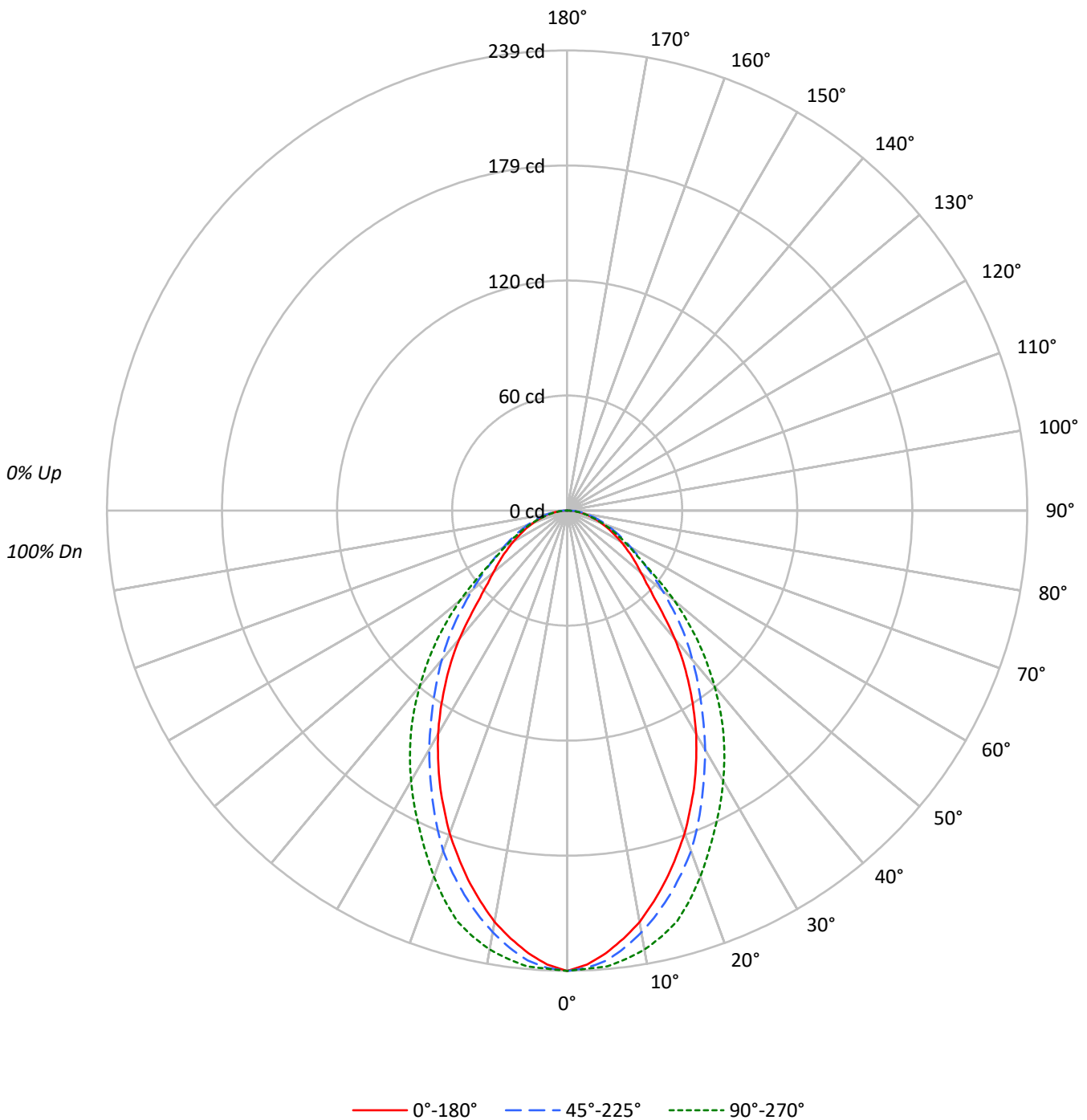
Lumens per Lamp: N/A
Luminaire Lumens: 389.4 lumens
Efficiency: N/A
Efficacy: 33.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4412	4412	4412
5°	4275	4345	4403
10°	4064	4167	4338
15°	3792	3945	4216
20°	3503	3694	3973
25°	3186	3370	3701
30°	2855	3053	3454
35°	2487	2728	3190
40°	2098	2440	2866
45°	1668	2156	2508
50°	1435	1852	2081
55°	1306	1586	1596
60°	1192	1410	1358
65°	1092	1275	1196
70°	1009	1182	1068
75°	941	1112	941
80°	882	1073	850
85°	889	1101	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2508 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.1	5.7
10°-20°	58.4	15.0
20°-30°	76.8	19.7
30°-40°	77.2	19.8
40°-50°	62.6	16.1
50°-60°	43.1	11.1
60°-70°	28.2	7.2
70°-80°	15.7	4.0
80°-90°	5.3	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°	157.2	40.4
0°-40°	234.4	60.2
0°-60°	340.1	87.3
0°-90°	389.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	389.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	239	239	239	239	239	
5°	231	235	235	236	238	22
15°	198	203	206	214	221	56
25°	156	161	166	173	182	72
35°	110	116	121	132	142	69
45°	64	71	83	90	96	51
55°	41	45	49	50	50	36
65°	25	30	29	28	27	25
75°	13	16	16	14	13	14
85°	4	6	5	4	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	239.1	239.1	239.1	239.1	239.1
2.5°	236.0	240.1	237.7	237.7	238.1
5°	230.8	235.3	234.6	235.6	237.7
7.5°	224.2	229.0	229.0	232.2	234.9
10°	216.9	221.8	222.4	227.3	231.5
12.5°	207.9	212.7	214.8	221.1	226.6
15°	198.5	203.4	206.5	214.1	220.7
17.5°	188.4	193.3	197.5	205.4	212.0
20°	178.4	182.9	188.1	195.0	202.3
22.5°	167.3	172.1	177.0	183.6	191.9
25°	156.5	160.7	165.5	172.8	181.8
27.5°	145.1	149.6	154.1	162.8	172.1
30°	134.0	138.5	143.3	152.3	162.1
32.5°	122.2	127.0	131.9	141.9	152.0
35°	110.4	115.6	121.1	131.9	141.6
37.5°	98.9	104.5	111.0	122.2	130.5
40°	87.1	93.0	101.3	111.0	119.0
42.5°	74.6	81.9	92.0	100.3	107.6
45°	63.9	71.1	82.6	89.9	96.1
47.5°	55.9	61.8	72.9	79.1	84.3
50°	50.0	54.5	64.5	69.1	72.5
52.5°	45.1	49.6	56.6	59.7	60.7
55°	40.6	45.1	49.3	50.3	49.6
57.5°	36.1	40.9	43.4	42.3	42.3
60°	32.3	37.5	38.2	36.8	36.8
62.5°	28.5	33.7	33.7	31.9	31.9
65°	25.0	29.8	29.2	27.8	27.4
67.5°	21.9	26.4	25.3	23.9	23.6
70°	18.7	22.9	21.9	20.1	19.8
72.5°	16.0	19.8	18.4	17.0	16.3
75°	13.2	16.3	15.6	13.9	13.2
77.5°	10.8	13.2	12.5	11.1	10.4
80°	8.3	10.4	10.1	8.7	8.0
82.5°	6.2	8.0	7.6	6.6	5.6
85°	4.2	5.6	5.2	4.5	3.5
87.5°	2.1	3.8	3.5	3.1	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	11.88	13.32	12.25	13.63	13.95	12.24	13.68	12.61	13.99	14.31
	3H	13.43	14.72	13.81	15.05	15.41	13.59	14.88	13.97	15.21	15.57
	4H	14.00	15.21	14.40	15.56	15.94	14.07	15.28	14.47	15.63	16.01
	6H	14.43	15.55	14.85	15.91	16.31	14.43	15.54	14.84	15.91	16.30
	8H	14.58	15.64	15.01	16.03	16.44	14.54	15.60	14.97	15.99	16.40
	12H	14.70	15.71	15.13	16.10	16.53	14.62	15.63	15.05	16.02	16.45
4H	2H	12.47	13.68	12.87	14.03	14.41	12.76	13.97	13.16	14.32	14.70
	3H	14.29	15.30	14.71	15.70	16.10	14.33	15.33	14.74	15.73	16.14
	4H	15.04	15.94	15.48	16.36	16.80	14.94	15.84	15.37	16.25	16.69
	6H	15.63	16.41	16.09	16.86	17.32	15.42	16.20	15.88	16.65	17.11
	8H	15.84	16.57	16.30	17.01	17.48	15.58	16.32	16.05	16.76	17.23
	12H	16.01	16.66	16.49	17.14	17.61	15.71	16.36	16.19	16.84	17.31
8H	4H	15.33	16.06	15.79	16.50	16.97	15.24	15.97	15.70	16.41	16.88
	6H	16.08	16.69	16.58	17.18	17.66	15.86	16.46	16.36	16.95	17.43
	8H	16.41	16.95	16.92	17.46	17.95	16.11	16.65	16.62	17.16	17.65
	12H	16.69	17.17	17.21	17.67	18.23	16.32	16.80	16.83	17.29	17.86
12H	4H	15.35	16.00	15.83	16.48	16.95	15.27	15.92	15.76	16.40	16.88
	6H	16.14	16.69	16.66	17.20	17.69	15.93	16.48	16.45	16.99	17.48
	8H	16.54	17.02	17.05	17.51	18.08	16.25	16.73	16.77	17.23	17.79