

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058333

Luminaire Tested: S122RDR-H290D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058333
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: S122RDR-H290D935-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

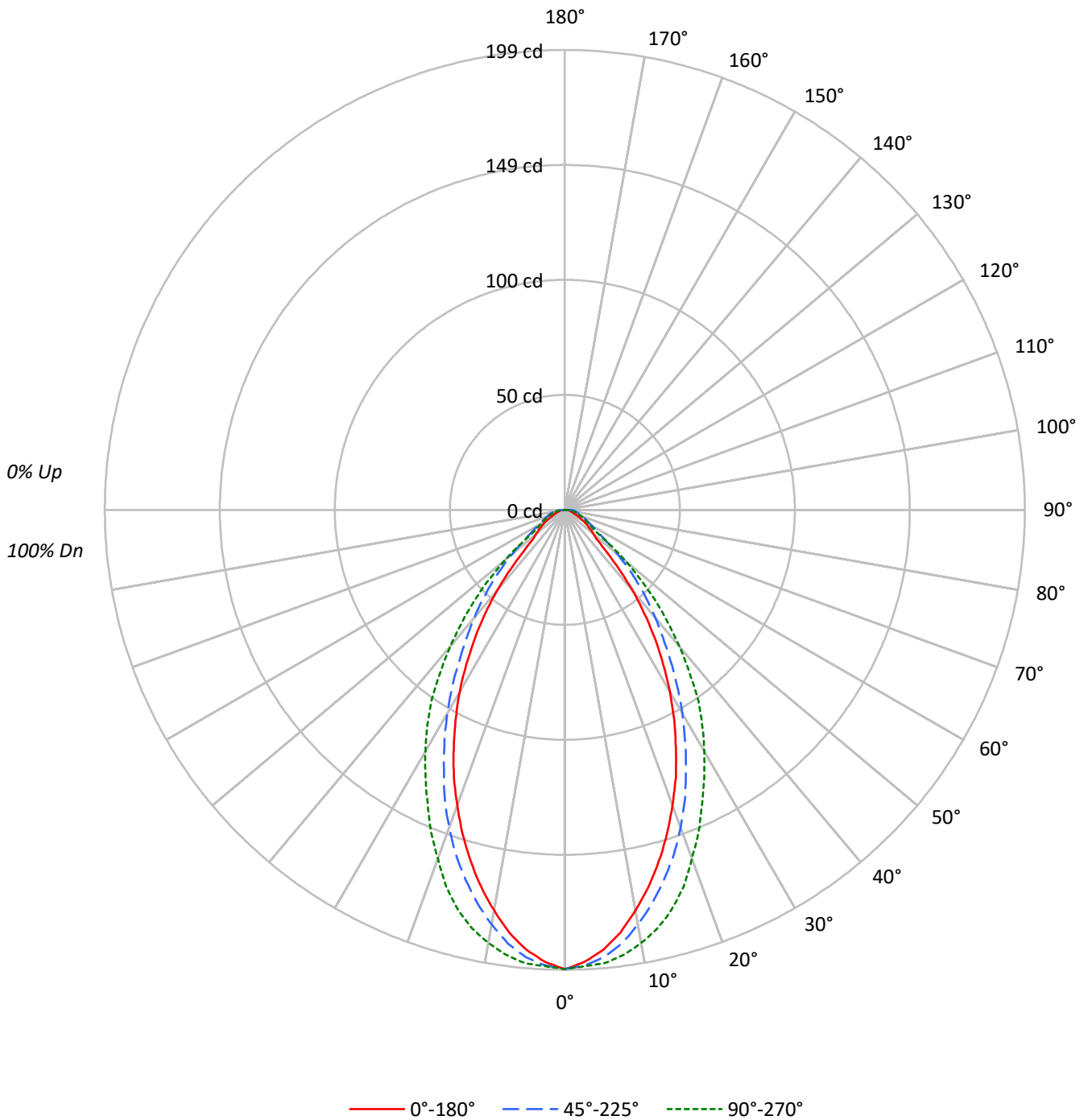
Lumens per Lamp: N/A
Luminaire Lumens: 239.8 lumens
Efficiency: N/A
Efficacy: 20.5 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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				
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°	3667	3667	3667
5°	3538	3599	3647
10°	3298	3414	3566
15°	3005	3165	3418
20°	2671	2873	3154
25°	2315	2523	2859
30°	1937	2165	2570
35°	1527	1793	2264
40°	1096	1467	1855
45°	642	1159	1435
50°	462	841	967
55°	389	602	508
60°	310	487	432
65°	258	432	402
70°	216	415	378
75°	207	442	364
80°	234	542	393
85°	381	847	550

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1435 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.2	7.6
10°-20°	46.6	19.5
20°-30°	57.3	23.9
30°-40°	50.7	21.1
40°-50°	32.4	13.5
50°-60°	15.8	6.6
60°-70°	9.4	3.9
70°-80°	6.0	2.5
80°-90°	3.3	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°	122.2	51.0
0°-40°	172.9	72.1
0°-60°	221.0	92.2
0°-90°	239.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	239.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	199	199	199	199	199	
5°	191	195	194	195	197	18
15°	157	162	166	173	179	44
25°	114	118	124	132	140	52
35°	68	72	80	91	100	42
45°	25	32	44	50	55	21
55°	12	16	19	18	16	11
65°	6	11	10	9	9	6
75°	3	7	6	6	5	3
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°	198.7	198.7	198.7	198.7	198.7
2.5°	195.8	199.5	197.3	197.3	197.6
5°	191.0	195.1	194.3	195.1	196.9
7.5°	184.4	188.5	189.2	192.1	194.3
10°	176.0	180.0	182.2	187.0	190.3
12.5°	167.2	171.2	174.5	180.8	185.5
15°	157.3	161.7	165.7	173.1	178.9
17.5°	147.0	151.4	156.6	163.9	170.9
20°	136.0	140.1	146.3	153.3	160.6
22.5°	125.4	129.1	135.7	142.3	151.1
25°	113.7	117.7	123.9	131.6	140.4
27.5°	102.3	106.3	112.6	121.4	130.5
30°	90.9	94.6	101.6	110.7	120.6
32.5°	79.2	82.9	90.6	100.5	110.7
35°	67.8	71.5	79.6	90.6	100.5
37.5°	56.5	60.5	69.7	79.9	88.4
40°	45.5	50.2	60.9	69.7	77.0
42.5°	34.5	41.1	52.4	59.8	65.6
45°	24.6	31.5	44.4	49.9	55.0
47.5°	18.7	24.2	36.7	40.7	44.0
50°	16.1	19.8	29.3	32.3	33.7
52.5°	13.9	17.6	23.5	24.6	23.8
55°	12.1	16.1	18.7	17.6	15.8
57.5°	10.3	15.0	15.4	13.2	13.6
60°	8.4	13.6	13.2	11.4	11.7
62.5°	7.0	12.5	11.4	10.3	10.3
65°	5.9	11.0	9.9	9.2	9.2
67.5°	4.8	9.9	8.8	8.1	8.1
70°	4.0	8.8	7.7	7.0	7.0
72.5°	3.7	7.7	7.0	6.2	6.2
75°	2.9	6.6	6.2	5.5	5.1
77.5°	2.6	5.5	5.5	5.1	4.4
80°	2.2	4.8	5.1	4.4	3.7
82.5°	2.2	4.4	4.4	4.0	2.9
85°	1.8	3.7	4.0	3.7	2.6
87.5°	1.1	3.3	3.3	2.9	1.8
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	6.53	7.81	6.90	8.12	8.44	6.07	7.35	6.44	7.66	7.98
	3H	7.71	8.85	8.09	9.18	9.55	7.64	8.78	8.02	9.11	9.48
	4H	8.14	9.20	8.54	9.55	9.94	8.32	9.38	8.72	9.73	10.11
	6H	8.49	9.47	8.91	9.84	10.23	8.97	9.94	9.38	10.31	10.71
	8H	8.69	9.61	9.12	10.01	10.41	9.25	10.18	9.68	10.57	10.97
	12H	8.90	9.79	9.34	10.17	10.60	9.57	10.46	10.00	10.84	11.27
4H	2H	7.04	8.10	7.44	8.45	8.83	6.67	7.73	7.07	8.08	8.47
	3H	8.69	9.56	9.10	9.97	10.37	8.48	9.35	8.89	9.76	10.16
	4H	9.45	10.24	9.89	10.66	11.10	9.31	10.10	9.75	10.52	10.96
	6H	10.06	10.74	10.52	11.19	11.65	10.17	10.85	10.63	11.29	11.76
	8H	10.36	10.99	10.83	11.44	11.91	10.55	11.19	11.02	11.64	12.11
	12H	10.67	11.23	11.15	11.71	12.19	10.99	11.56	11.48	12.04	12.51
8H	4H	9.87	10.50	10.34	10.95	11.42	9.77	10.40	10.24	10.85	11.32
	6H	10.82	11.34	11.33	11.84	12.32	10.87	11.40	11.38	11.89	12.37
	8H	11.37	11.84	11.89	12.36	12.85	11.45	11.92	11.97	12.43	12.92
	12H	11.94	12.35	12.45	12.85	13.42	12.12	12.54	12.64	13.03	13.60
12H	4H	9.94	10.50	10.42	10.98	11.46	9.85	10.41	10.34	10.90	11.37
	6H	11.00	11.47	11.53	11.99	12.48	11.06	11.53	11.58	12.04	12.54
	8H	11.70	12.11	12.21	12.61	13.18	11.76	12.18	12.28	12.67	13.24