

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: P1057928

Luminaire Tested: S122RDRP-S290D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057928
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-S290D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

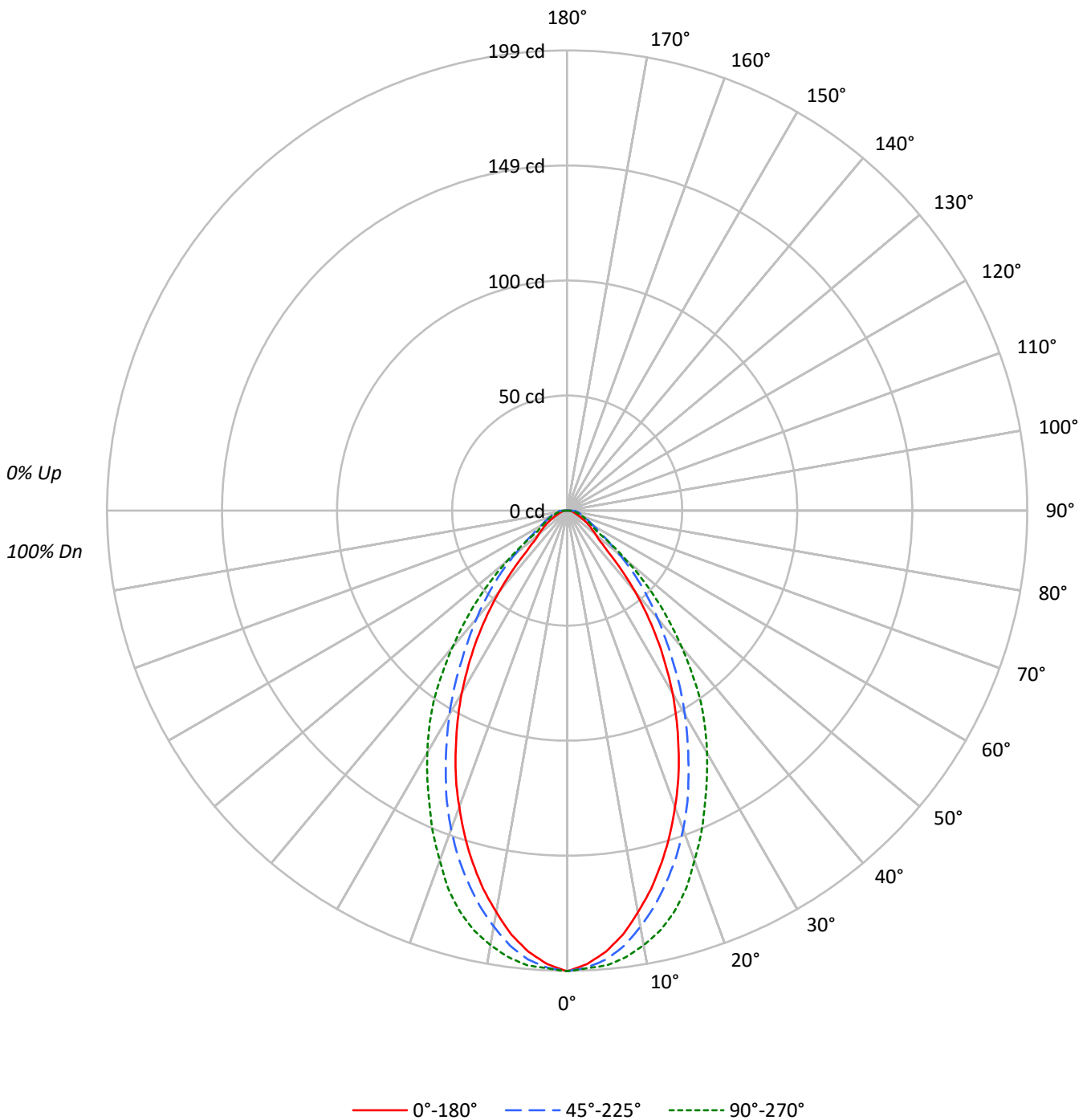
Lumens per Lamp: N/A
Luminaire Lumens: 240.3 lumens
Efficiency: N/A
Efficacy: 19.2 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	3676	3676	3676
5°	3547	3608	3656
10°	3305	3423	3575
15°	3013	3173	3427
20°	2678	2881	3162
25°	2321	2529	2867
30°	1943	2169	2576
35°	1532	1798	2268
40°	1098	1469	1860
45°	642	1161	1438
50°	465	844	970
55°	389	602	508
60°	314	487	435
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: 1438 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.3	7.6
10°-20°	46.8	19.5
20°-30°	57.5	23.9
30°-40°	50.8	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°	122.5	51.0
0°-40°	173.3	72.1
0°-60°	221.6	92.2
0°-90°	240.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	240.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	199	199	199	199	199	
5°	192	196	195	196	197	18
15°	158	162	166	174	179	44
25°	114	118	124	132	141	52
35°	68	72	80	91	101	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°	199.2	199.2	199.2	199.2	199.2
2.5°	196.3	200.0	197.8	197.8	198.1
5°	191.5	195.6	194.8	195.6	197.4
7.5°	184.9	188.9	189.7	192.6	194.8
10°	176.4	180.5	182.7	187.5	190.8
12.5°	167.6	171.7	175.0	181.2	186.0
15°	157.7	162.1	166.1	173.5	179.4
17.5°	147.4	151.8	157.0	164.3	171.3
20°	136.4	140.4	146.7	153.6	161.0
22.5°	125.7	129.4	136.0	142.6	151.4
25°	114.0	118.0	124.2	132.0	140.8
27.5°	102.6	106.6	112.8	121.7	130.9
30°	91.2	94.8	101.8	111.0	120.9
32.5°	79.4	83.1	90.8	100.7	111.0
35°	68.0	71.7	79.8	90.8	100.7
37.5°	56.6	60.7	69.8	80.1	88.6
40°	45.6	50.4	61.0	69.8	77.2
42.5°	34.6	41.2	52.6	59.9	65.8
45°	24.6	31.6	44.5	50.0	55.1
47.5°	18.7	24.3	36.8	40.8	44.1
50°	16.2	19.8	29.4	32.3	33.8
52.5°	14.0	17.6	23.5	24.6	23.9
55°	12.1	16.2	18.7	17.6	15.8
57.5°	10.3	15.1	15.4	13.2	13.6
60°	8.5	13.6	13.2	11.4	11.8
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	6.56	7.84	6.93	8.16	8.47	6.06	7.34	6.43	7.66	7.97
	3H	7.73	8.87	8.11	9.20	9.56	7.64	8.78	8.02	9.11	9.47
	4H	8.16	9.22	8.56	9.57	9.95	8.31	9.37	8.71	9.72	10.11
	6H	8.50	9.48	8.92	9.85	10.25	8.96	9.94	9.37	10.31	10.70
	8H	8.70	9.62	9.13	10.02	10.42	9.24	10.17	9.68	10.56	10.97
	12H	8.91	9.80	9.35	10.18	10.61	9.56	10.45	10.00	10.83	11.26
4H	2H	7.06	8.12	7.46	8.47	8.86	6.66	7.73	7.07	8.08	8.46
	3H	8.70	9.57	9.11	9.98	10.38	8.47	9.35	8.89	9.75	10.15
	4H	9.46	10.24	9.89	10.66	11.11	9.31	10.09	9.74	10.51	10.95
	6H	10.06	10.74	10.53	11.19	11.66	10.16	10.84	10.62	11.29	11.75
	8H	10.36	11.00	10.83	11.44	11.92	10.55	11.18	11.01	11.63	12.10
	12H	10.67	11.23	11.16	11.72	12.19	10.99	11.55	11.47	12.03	12.51
8H	4H	9.87	10.51	10.34	10.96	11.43	9.76	10.40	10.23	10.84	11.31
	6H	10.82	11.35	11.33	11.84	12.32	10.87	11.39	11.37	11.89	12.37
	8H	11.37	11.84	11.89	12.35	12.85	11.44	11.91	11.96	12.42	12.92
	12H	11.93	12.35	12.45	12.84	13.42	12.12	12.53	12.63	13.03	13.60
12H	4H	9.94	10.50	10.43	10.99	11.46	9.84	10.41	10.33	10.89	11.36
	6H	11.01	11.47	11.53	11.99	12.48	11.05	11.52	11.57	12.04	12.53
	8H	11.70	12.11	12.21	12.61	13.18	11.76	12.17	12.27	12.67	13.24