

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: P1058168

Luminaire Tested: S122RDRP-S865D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058168
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D935-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

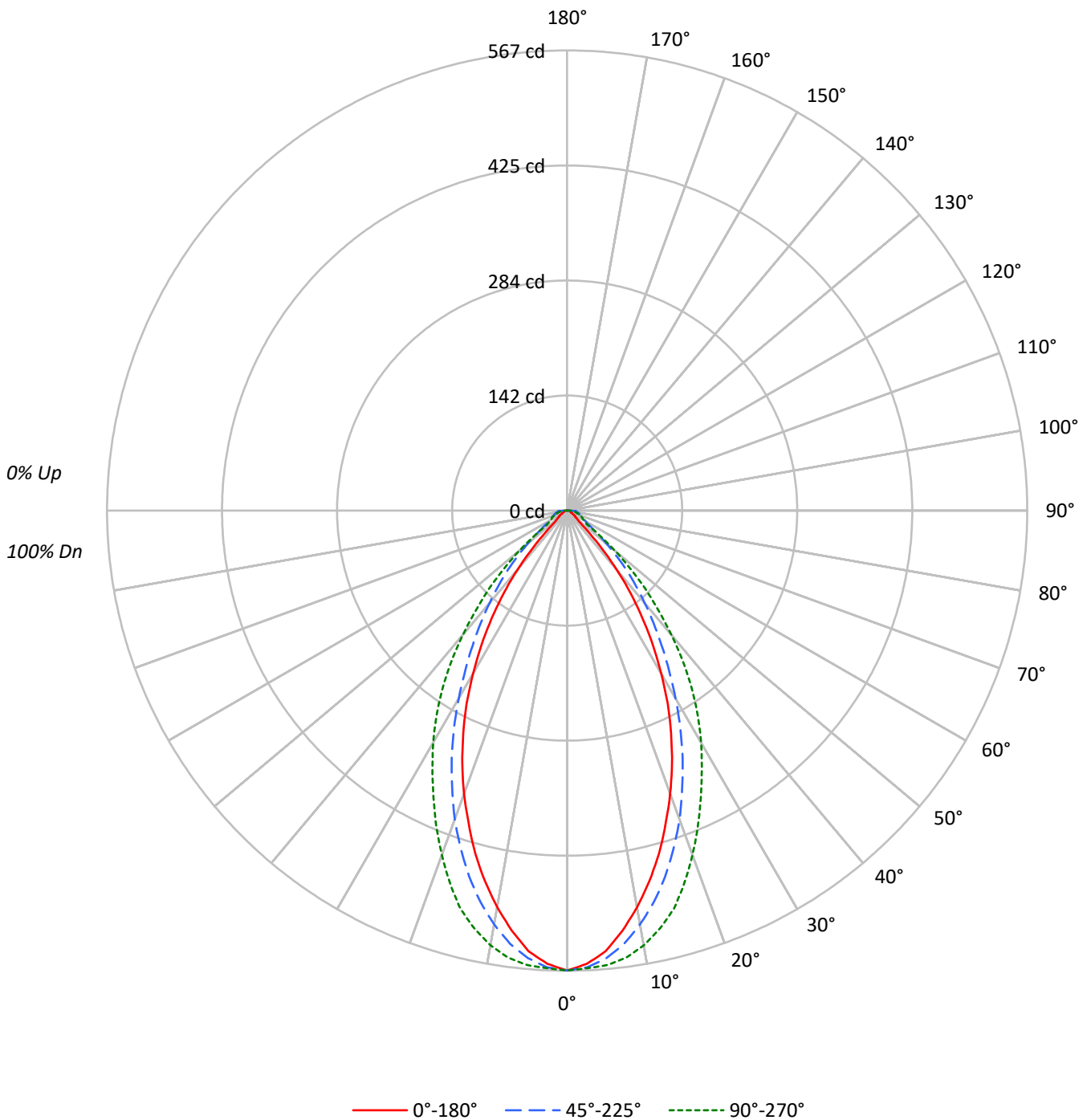
Lumens per Lamp: N/A
Luminaire Lumens: 610.7 lumens
Efficiency: N/A
Efficacy: 17.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10455	10455	10455
5°	10093	10254	10414
10°	9294	9700	10189
15°	8356	8916	9705
20°	7289	7951	8866
25°	6165	6851	7934
30°	4926	5689	7031
35°	3643	4573	6039
40°	2300	3582	4810
45°	906	2690	3541
50°	468	1809	2182
55°	383	1187	978
60°	280	960	882
65°	236	899	899
70°	232	939	879
75°	307	1084	927
80°	457	1381	1041
85°	699	2308	1376

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4611 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.8	8.5
10°-20°	130.9	21.4
20°-30°	155.5	25.5
30°-40°	129.4	21.2
40°-50°	72.3	11.8
50°-60°	29.2	4.8
60°-70°	18.7	3.1
70°-80°	14.0	2.3
80°-90°	8.9	1.5
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°	338.3	55.4
0°-40°	467.7	76.6
0°-60°	569.1	93.2
0°-90°	610.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	610.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	545	555	554	558	562	50
15°	437	450	467	491	508	122
25°	303	315	336	362	390	138
35°	162	177	203	237	268	100
45°	35	59	103	120	136	33
55°	12	25	37	36	30	10
65°	5	22	21	20	21	5
75°	4	15	15	14	13	5
85°	3	10	11	10	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	566.6	566.6	566.6	566.6	566.6
2.5°	559.0	567.7	563.3	563.3	564.4
5°	544.9	554.6	553.6	557.9	562.2
7.5°	522.1	532.9	538.4	548.1	555.7
10°	496.0	508.0	517.7	532.9	543.8
12.5°	467.8	479.8	493.9	513.4	527.5
15°	437.4	450.4	466.7	490.6	508.0
17.5°	403.8	417.9	436.3	462.4	480.8
20°	371.2	385.3	404.9	430.9	451.5
22.5°	337.6	349.5	370.1	396.2	421.1
25°	302.8	314.8	336.5	362.5	389.7
27.5°	268.1	280.0	301.7	328.9	359.3
30°	231.2	244.2	267.0	297.4	330.0
32.5°	196.5	209.5	233.4	267.0	299.6
35°	161.7	176.9	203.0	236.6	268.1
37.5°	128.1	145.4	174.8	206.2	234.4
40°	95.5	114.0	148.7	175.8	199.7
42.5°	63.0	84.7	124.8	147.6	166.1
45°	34.7	58.6	103.1	120.5	135.7
47.5°	19.5	38.0	81.4	95.5	104.2
50°	16.3	28.2	63.0	72.7	76.0
52.5°	13.0	26.0	47.8	53.2	51.0
55°	11.9	25.0	36.9	35.8	30.4
57.5°	9.8	25.0	29.3	26.0	26.0
60°	7.6	23.9	26.0	22.8	23.9
62.5°	6.5	22.8	23.9	21.7	21.7
65°	5.4	21.7	20.6	19.5	20.6
67.5°	4.3	19.5	19.5	18.5	18.5
70°	4.3	18.5	17.4	16.3	16.3
72.5°	4.3	16.3	16.3	15.2	15.2
75°	4.3	15.2	15.2	14.1	13.0
77.5°	4.3	13.0	14.1	13.0	11.9
80°	4.3	11.9	13.0	11.9	9.8
82.5°	4.3	10.9	11.9	10.9	8.7
85°	3.3	9.8	10.9	9.8	6.5
87.5°	3.3	9.8	10.9	8.7	5.4
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	6.53	7.75	6.90	8.06	8.38	7.58	8.80	7.95	9.11	9.43
	3H	7.86	8.94	8.24	9.27	9.64	9.62	10.71	10.01	11.04	11.41
	4H	8.43	9.44	8.83	9.79	10.17	10.58	11.59	10.98	11.94	12.33
	6H	8.98	9.91	9.40	10.29	10.68	11.52	12.45	11.94	12.82	13.22
	8H	9.31	10.19	9.74	10.58	10.98	11.98	12.85	12.41	13.25	13.65
	12H	9.62	10.46	10.05	10.84	11.27	12.40	13.24	12.83	13.62	14.05
4H	2H	7.49	8.50	7.89	8.85	9.24	8.26	9.27	8.67	9.62	10.01
	3H	9.51	10.35	9.93	10.75	11.16	10.56	11.39	10.97	11.79	12.20
	4H	10.59	11.34	11.03	11.76	12.21	11.70	12.45	12.14	12.87	13.31
	6H	11.46	12.10	11.92	12.55	13.02	12.87	13.52	13.33	13.96	14.43
	8H	11.87	12.47	12.34	12.92	13.39	13.43	14.04	13.90	14.49	14.96
	12H	12.25	12.79	12.74	13.27	13.74	13.98	14.51	14.47	15.00	15.47
8H	4H	11.36	11.97	11.83	12.42	12.89	12.25	12.86	12.72	13.31	13.78
	6H	12.70	13.19	13.20	13.69	14.17	13.70	14.20	14.21	14.70	15.18
	8H	13.41	13.86	13.94	14.38	14.87	14.47	14.92	15.00	15.43	15.93
	12H	14.11	14.51	14.63	15.00	15.57	15.26	15.66	15.78	16.15	16.72
12H	4H	11.52	12.05	12.01	12.54	13.01	12.36	12.89	12.85	13.38	13.85
	6H	13.02	13.46	13.54	13.98	14.47	13.93	14.38	14.45	14.89	15.39
	8H	13.92	14.32	14.44	14.81	15.38	14.84	15.23	15.36	15.73	16.30