

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: P1058135

Luminaire Tested: S122RDRP-S865D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058135
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-S865D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

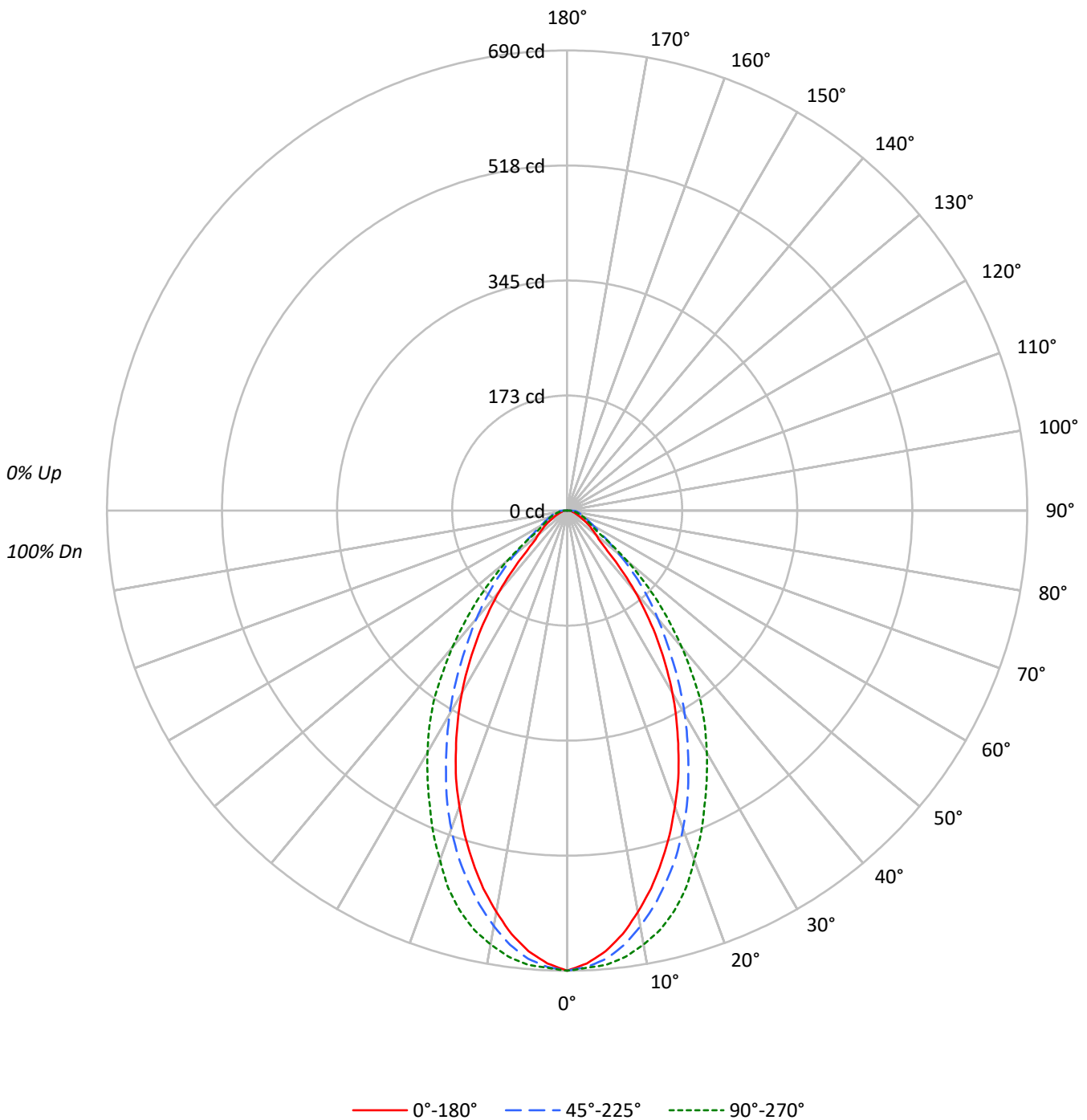
Lumens per Lamp: N/A
Luminaire Lumens: 832.3 lumens
Efficiency: N/A
Efficacy: 23.8 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	12730	12730	12730
5°	12284	12496	12660
10°	11448	11853	12378
15°	10432	10990	11867
20°	9272	9973	10947
25°	8034	8759	9926
30°	6727	7513	8923
35°	5305	6222	7857
40°	3801	5090	6439
45°	2226	4019	4982
50°	1608	2922	3362
55°	1351	2088	1760
60°	1081	1690	1502
65°	891	1502	1388
70°	755	1441	1306
75°	727	1540	1269
80°	808	1891	1350
85°	1355	2964	1884

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4982 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	7.6
10°-20°	161.9	19.5
20°-30°	199.0	23.9
30°-40°	176.0	21.1
40°-50°	112.3	13.5
50°-60°	54.8	6.6
60°-70°	32.6	3.9
70°-80°	20.8	2.5
80°-90°	11.5	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°	424.2	51.0
0°-40°	600.2	72.1
0°-60°	767.3	92.2
0°-90°	832.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	832.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	690	690	690	690	690	
5°	663	677	675	677	684	62
15°	546	561	575	601	621	152
25°	395	409	430	457	488	181
35°	236	248	276	314	349	146
45°	85	110	154	173	191	72
55°	42	56	65	61	55	38
65°	20	38	34	32	32	20
75°	10	23	22	19	18	11
85°	6	13	14	13	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	689.9	689.9	689.9	689.9	689.9
2.5°	679.7	692.5	684.8	684.8	686.1
5°	663.2	677.2	674.6	677.2	683.5
7.5°	640.3	654.3	656.8	667.0	674.6
10°	611.0	625.0	632.6	649.2	660.6
12.5°	580.4	594.4	605.9	627.5	644.1
15°	546.1	561.3	575.3	600.8	621.2
17.5°	510.4	525.7	543.5	569.0	593.2
20°	472.2	486.2	507.9	532.1	557.5
22.5°	435.3	448.1	471.0	493.9	524.4
25°	394.6	408.6	430.2	457.0	487.5
27.5°	355.1	369.1	390.8	421.3	453.2
30°	315.7	328.4	352.6	384.4	418.8
32.5°	274.9	287.7	314.4	348.8	384.4
35°	235.5	248.2	276.2	314.4	348.8
37.5°	196.0	210.0	241.9	277.5	306.8
40°	157.8	174.4	211.3	241.9	267.3
42.5°	119.7	142.6	182.0	207.5	227.8
45°	85.3	109.5	154.0	173.1	190.9
47.5°	64.9	84.0	127.3	141.3	152.7
50°	56.0	68.7	101.8	112.0	117.1
52.5°	48.4	61.1	81.5	85.3	82.7
55°	42.0	56.0	64.9	61.1	54.7
57.5°	35.6	52.2	53.5	45.8	47.1
60°	29.3	47.1	45.8	39.5	40.7
62.5°	24.2	43.3	39.5	35.6	35.6
65°	20.4	38.2	34.4	31.8	31.8
67.5°	16.5	34.4	30.5	28.0	28.0
70°	14.0	30.5	26.7	24.2	24.2
72.5°	12.7	26.7	24.2	21.6	21.6
75°	10.2	22.9	21.6	19.1	17.8
77.5°	8.9	19.1	19.1	17.8	15.3
80°	7.6	16.5	17.8	15.3	12.7
82.5°	7.6	15.3	15.3	14.0	10.2
85°	6.4	12.7	14.0	12.7	8.9
87.5°	3.8	11.5	11.5	10.2	6.4
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	10.87	12.15	11.23	12.46	12.77	10.39	11.67	10.76	11.98	12.30
	3H	12.04	13.18	12.42	13.51	13.88	11.95	13.09	12.33	13.42	13.79
	4H	12.47	13.53	12.87	13.88	14.27	12.64	13.70	13.04	14.05	14.43
	6H	12.81	13.79	13.23	14.16	14.56	13.28	14.26	13.70	14.63	15.03
	8H	13.01	13.94	13.44	14.33	14.73	13.57	14.50	14.00	14.89	15.29
	12H	13.23	14.11	13.66	14.50	14.93	13.89	14.78	14.32	15.16	15.59
4H	2H	11.37	12.43	11.77	12.78	13.17	10.99	12.05	11.39	12.40	12.79
	3H	13.01	13.89	13.43	14.29	14.70	12.79	13.67	13.20	14.07	14.47
	4H	13.78	14.56	14.21	14.98	15.42	13.63	14.42	14.07	14.84	15.28
	6H	14.38	15.06	14.84	15.50	15.97	14.49	15.17	14.95	15.61	16.08
	8H	14.67	15.31	15.14	15.76	16.23	14.88	15.52	15.35	15.96	16.43
	12H	14.99	15.55	15.48	16.04	16.51	15.32	15.88	15.80	16.36	16.84
8H	4H	14.19	14.83	14.66	15.28	15.75	14.09	14.73	14.56	15.17	15.64
	6H	15.14	15.66	15.64	16.16	16.64	15.20	15.72	15.70	16.22	16.70
	8H	15.69	16.16	16.21	16.67	17.16	15.78	16.25	16.30	16.76	17.25
	12H	16.25	16.67	16.77	17.16	17.73	16.45	16.86	16.96	17.36	17.93
12H	4H	14.26	14.83	14.75	15.31	15.78	14.17	14.73	14.66	15.22	15.69
	6H	15.32	15.79	15.85	16.31	16.80	15.38	15.85	15.91	16.37	16.86
	8H	16.02	16.43	16.53	16.93	17.50	16.10	16.51	16.61	17.01	17.58