

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: P1058180

Luminaire Tested: S122RDRP-S865D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058180
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-S865D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

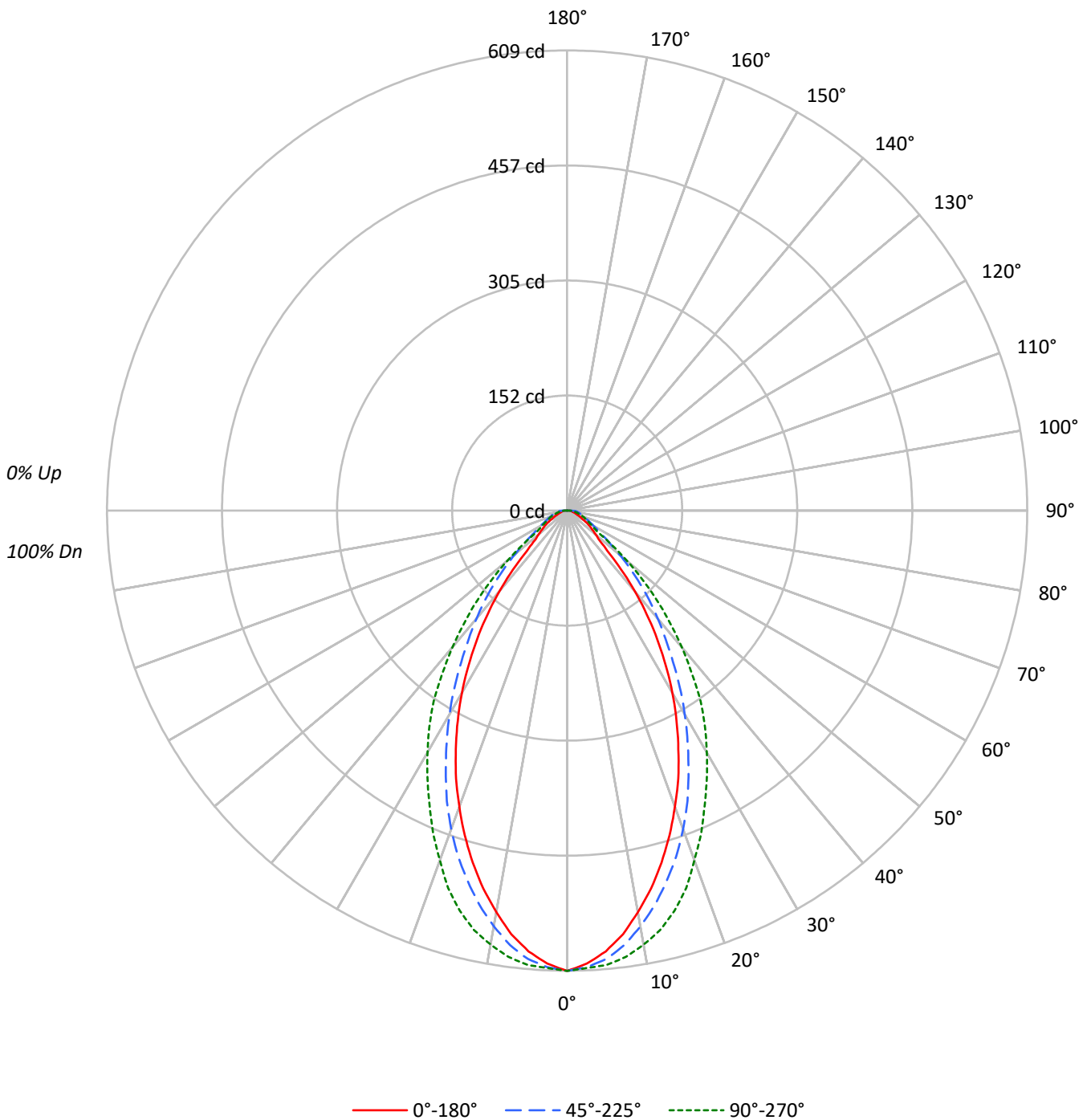
Lumens per Lamp: N/A
Luminaire Lumens: 734.9 lumens
Efficiency: N/A
Efficacy: 21.0 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	11241	11241	11241
5°	10847	11034	11180
10°	10109	10467	10929
15°	9212	9705	10478
20°	8189	8807	9667
25°	7093	7735	8765
30°	5938	6633	7879
35°	4683	5494	6938
40°	3358	4495	5685
45°	1965	3549	4400
50°	1421	2581	2968
55°	1194	1843	1554
60°	956	1495	1329
65°	786	1323	1227
70°	669	1273	1155
75°	642	1362	1119
80°	712	1668	1190
85°	1186	2625	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4400 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.8	7.6
10°-20°	143.0	19.5
20°-30°	175.8	23.9
30°-40°	155.4	21.1
40°-50°	99.2	13.5
50°-60°	48.4	6.6
60°-70°	28.8	3.9
70°-80°	18.4	2.5
80°-90°	10.1	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°	374.6	51.0
0°-40°	530.0	72.1
0°-60°	677.6	92.2
0°-90°	734.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	734.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	609	609	609	609	609	
5°	586	598	596	598	604	54
15°	482	496	508	530	548	135
25°	348	361	380	404	430	159
35°	208	219	244	278	308	129
45°	75	97	136	153	169	63
55°	37	50	57	54	48	33
65°	18	34	30	28	28	18
75°	9	20	19	17	16	10
85°	6	11	12	11	8	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	609.2	609.2	609.2	609.2	609.2
2.5°	600.2	611.4	604.7	604.7	605.8
5°	585.6	597.9	595.7	597.9	603.6
7.5°	565.4	577.7	580.0	589.0	595.7
10°	539.5	551.9	558.6	573.2	583.3
12.5°	512.5	524.9	535.0	554.1	568.7
15°	482.2	495.7	508.0	530.5	548.5
17.5°	450.7	464.2	479.9	502.4	523.8
20°	417.0	429.4	448.5	469.8	492.3
22.5°	384.4	395.6	415.9	436.1	463.1
25°	348.4	360.8	379.9	403.5	430.5
27.5°	313.6	326.0	345.1	372.0	400.1
30°	278.7	290.0	311.3	339.4	369.8
32.5°	242.8	254.0	277.6	308.0	339.4
35°	207.9	219.2	243.9	277.6	308.0
37.5°	173.1	185.5	213.6	245.0	270.9
40°	139.4	154.0	186.6	213.6	236.0
42.5°	105.7	125.9	160.7	183.2	201.2
45°	75.3	96.7	136.0	152.9	168.6
47.5°	57.3	74.2	112.4	124.8	134.9
50°	49.5	60.7	89.9	98.9	103.4
52.5°	42.7	54.0	71.9	75.3	73.1
55°	37.1	49.5	57.3	54.0	48.3
57.5°	31.5	46.1	47.2	40.5	41.6
60°	25.9	41.6	40.5	34.8	36.0
62.5°	21.4	38.2	34.8	31.5	31.5
65°	18.0	33.7	30.3	28.1	28.1
67.5°	14.6	30.3	27.0	24.7	24.7
70°	12.4	27.0	23.6	21.4	21.4
72.5°	11.2	23.6	21.4	19.1	19.1
75°	9.0	20.2	19.1	16.9	15.7
77.5°	7.9	16.9	16.9	15.7	13.5
80°	6.7	14.6	15.7	13.5	11.2
82.5°	6.7	13.5	13.5	12.4	9.0
85°	5.6	11.2	12.4	11.2	7.9
87.5°	3.4	10.1	10.1	9.0	5.6
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	10.44	11.72	10.80	12.03	12.34	9.96	11.24	10.33	11.56	11.87
	3H	11.61	12.75	11.99	13.08	13.45	11.53	12.66	11.91	12.99	13.36
	4H	12.04	13.10	12.44	13.45	13.84	12.21	13.27	12.61	13.62	14.00
	6H	12.39	13.36	12.80	13.73	14.13	12.85	13.83	13.27	14.20	14.60
	8H	12.58	13.51	13.01	13.90	14.30	13.14	14.07	13.57	14.46	14.86
	12H	12.80	13.68	13.23	14.07	14.50	13.46	14.35	13.89	14.73	15.16
4H	2H	10.94	12.00	11.34	12.35	12.73	10.56	11.62	10.96	11.97	12.36
	3H	12.58	13.46	13.00	13.86	14.27	12.36	13.24	12.77	13.64	14.04
	4H	13.34	14.13	13.78	14.55	14.99	13.20	13.99	13.64	14.41	14.85
	6H	13.95	14.63	14.41	15.07	15.54	14.06	14.74	14.52	15.18	15.65
	8H	14.24	14.88	14.71	15.33	15.80	14.45	15.08	14.92	15.53	16.00
	12H	14.56	15.12	15.04	15.60	16.08	14.89	15.45	15.37	15.93	16.41
8H	4H	13.76	14.40	14.23	14.85	15.32	13.66	14.30	14.13	14.74	15.22
	6H	14.71	15.23	15.21	15.73	16.21	14.77	15.29	15.27	15.79	16.27
	8H	15.26	15.73	15.78	16.24	16.74	15.35	15.82	15.87	16.33	16.83
	12H	15.82	16.24	16.34	16.73	17.30	16.02	16.43	16.53	16.93	17.50
12H	4H	13.83	14.40	14.32	14.88	15.35	13.74	14.31	14.23	14.79	15.26
	6H	14.90	15.37	15.42	15.88	16.37	14.95	15.42	15.47	15.94	16.43
	8H	15.59	16.00	16.10	16.50	17.07	15.67	16.08	16.18	16.58	17.15