

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: P1058054

Luminaire Tested: S122RDRP-S675D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058054
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-S675D840-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

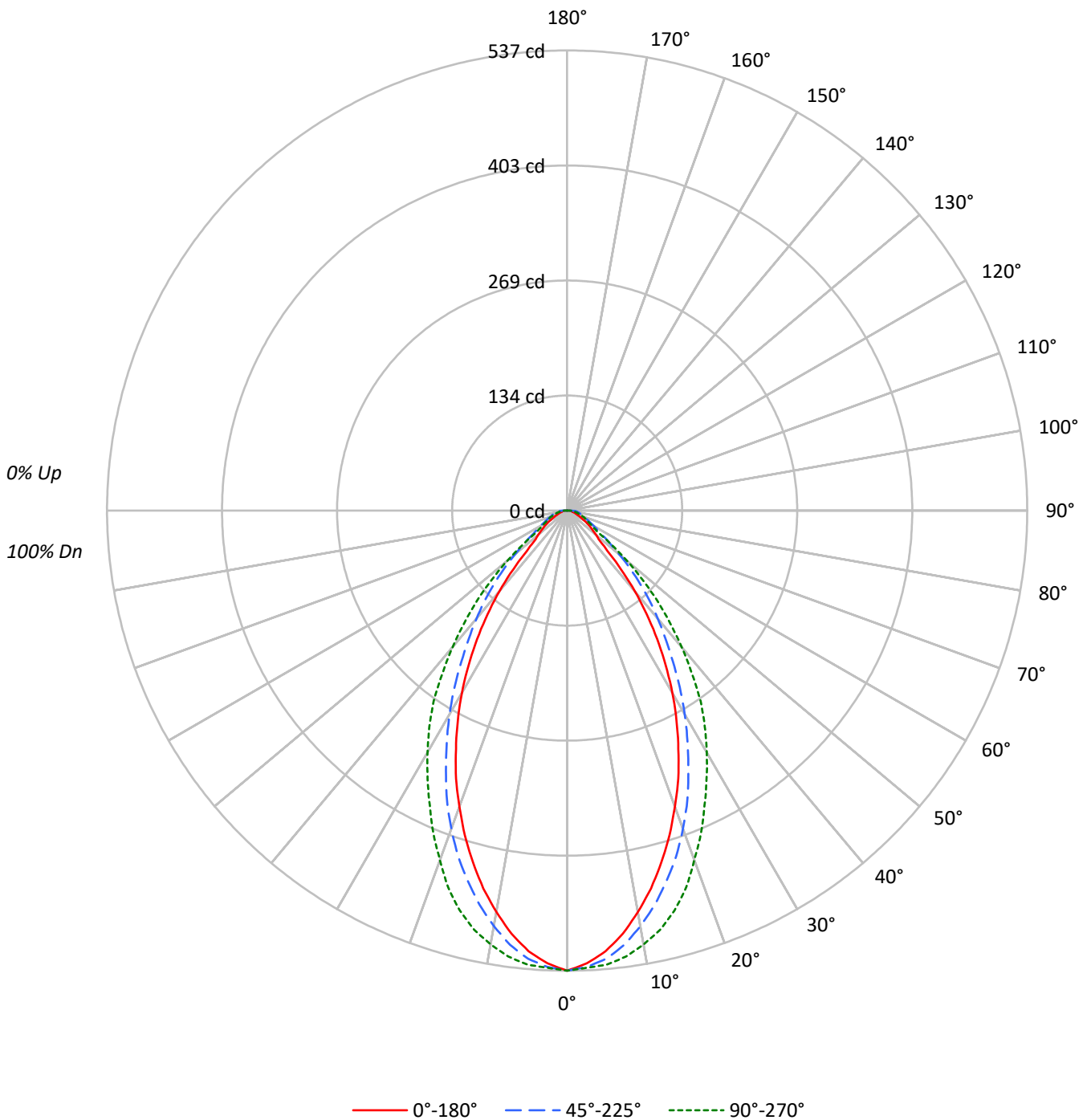
Lumens per Lamp: N/A
Luminaire Lumens: 647.7 lumens
Efficiency: N/A
Efficacy: 25.1 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	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°	9907	9907	9907
5°	9560	9725	9852
10°	8910	9224	9633
15°	8117	8553	9235
20°	7216	7760	8520
25°	6253	6817	7725
30°	5235	5847	6944
35°	4127	4841	6114
40°	2958	3960	5010
45°	1733	3129	3878
50°	1252	2274	2615
55°	1052	1625	1370
60°	841	1318	1170
65°	690	1166	1083
70°	588	1122	1014
75°	563	1198	991
80°	627	1477	1052
85°	1059	2308	1461

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3878 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.2	7.6
10°-20°	126.0	19.5
20°-30°	154.9	23.9
30°-40°	136.9	21.1
40°-50°	87.4	13.5
50°-60°	42.6	6.6
60°-70°	25.4	3.9
70°-80°	16.2	2.5
80°-90°	8.9	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°	330.1	51.0
0°-40°	467.1	72.1
0°-60°	597.1	92.2
0°-90°	647.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	647.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	537	537	537	537	537	
5°	516	527	525	527	532	48
15°	425	437	448	468	483	119
25°	307	318	335	356	379	141
35°	183	193	215	245	271	114
45°	66	85	120	135	149	56
55°	33	44	50	48	43	29
65°	16	30	27	25	25	16
75°	8	18	17	15	14	9
85°	5	10	11	10	7	5
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	536.9	536.9	536.9	536.9	536.9
2.5°	528.9	538.8	532.9	532.9	533.9
5°	516.1	527.0	525.0	527.0	531.9
7.5°	498.2	509.1	511.1	519.0	525.0
10°	475.5	486.4	492.3	505.2	514.1
12.5°	451.7	462.6	471.5	488.3	501.2
15°	424.9	436.8	447.7	467.5	483.4
17.5°	397.2	409.1	423.0	442.8	461.6
20°	367.5	378.4	395.2	414.0	433.9
22.5°	338.8	348.7	366.5	384.3	408.1
25°	307.1	318.0	334.8	355.6	379.4
27.5°	276.4	287.3	304.1	327.9	352.6
30°	245.7	255.6	274.4	299.1	325.9
32.5°	214.0	223.9	244.7	271.4	299.1
35°	183.2	193.2	214.9	244.7	271.4
37.5°	152.5	163.4	188.2	215.9	238.7
40°	122.8	135.7	164.4	188.2	208.0
42.5°	93.1	110.9	141.6	161.5	177.3
45°	66.4	85.2	119.9	134.7	148.6
47.5°	50.5	65.4	99.1	109.9	118.9
50°	43.6	53.5	79.2	87.2	91.1
52.5°	37.6	47.5	63.4	66.4	64.4
55°	32.7	43.6	50.5	47.5	42.6
57.5°	27.7	40.6	41.6	35.7	36.6
60°	22.8	36.6	35.7	30.7	31.7
62.5°	18.8	33.7	30.7	27.7	27.7
65°	15.8	29.7	26.7	24.8	24.8
67.5°	12.9	26.7	23.8	21.8	21.8
70°	10.9	23.8	20.8	18.8	18.8
72.5°	9.9	20.8	18.8	16.8	16.8
75°	7.9	17.8	16.8	14.9	13.9
77.5°	6.9	14.9	14.9	13.9	11.9
80°	5.9	12.9	13.9	11.9	9.9
82.5°	5.9	11.9	11.9	10.9	7.9
85°	5.0	9.9	10.9	9.9	6.9
87.5°	3.0	8.9	8.9	7.9	5.0
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	9.99	11.27	10.36	11.58	11.90	9.53	10.80	9.89	11.12	11.43
	3H	11.17	12.31	11.55	12.64	13.00	11.09	12.22	11.47	12.55	12.92
	4H	11.60	12.66	12.00	13.01	13.39	11.77	12.83	12.17	13.18	13.57
	6H	11.94	12.92	12.36	13.29	13.68	12.42	13.39	12.83	13.77	14.16
	8H	12.14	13.06	12.57	13.45	13.86	12.70	13.63	13.14	14.02	14.43
	12H	12.36	13.24	12.79	13.62	14.05	13.02	13.91	13.45	14.29	14.72
4H	2H	10.49	11.55	10.90	11.91	12.29	10.12	11.18	10.52	11.53	11.92
	3H	12.14	13.02	12.55	13.42	13.82	11.92	12.79	12.33	13.20	13.60
	4H	12.90	13.69	13.34	14.11	14.55	12.76	13.55	13.20	13.97	14.41
	6H	13.51	14.19	13.97	14.63	15.10	13.62	14.30	14.08	14.75	15.21
	8H	13.80	14.44	14.27	14.89	15.36	14.01	14.65	14.48	15.09	15.56
	12H	14.12	14.68	14.61	15.16	15.64	14.44	15.01	14.93	15.49	15.96
8H	4H	13.32	13.96	13.79	14.41	14.88	13.22	13.86	13.69	14.31	14.78
	6H	14.27	14.80	14.78	15.29	15.77	14.33	14.85	14.83	15.35	15.83
	8H	14.82	15.29	15.34	15.80	16.30	14.91	15.38	15.43	15.89	16.39
	12H	15.39	15.80	15.90	16.30	16.87	15.58	15.99	16.09	16.49	17.06
12H	4H	13.39	13.96	13.88	14.44	14.91	13.31	13.87	13.79	14.35	14.83
	6H	14.46	14.93	14.98	15.44	15.93	14.52	14.99	15.04	15.50	15.99
	8H	15.15	15.56	15.67	16.06	16.63	15.23	15.64	15.74	16.14	16.71