

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: P1057811

Luminaire Tested: S122RDRP-S1005D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057811
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-S1005D840-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

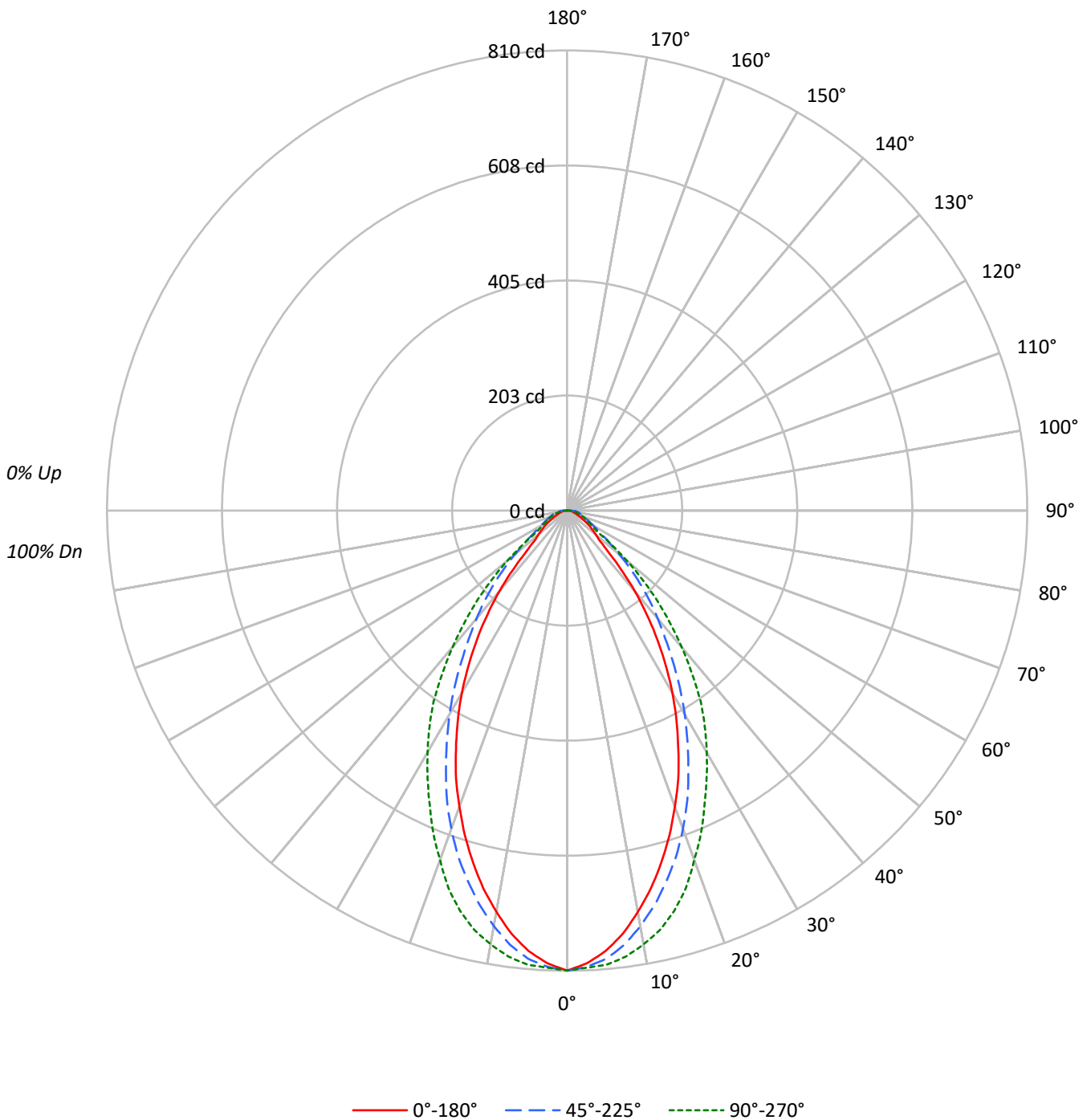
Lumens per Lamp: N/A
Luminaire Lumens: 976.8 lumens
Efficiency: N/A
Efficacy: 23.4 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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

TEST NUMBER: P1057811

CATALOG NUMBER: S122RDRP-S1005D840-X4F0-XX-UDD-SVL-S

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°	14941	14941	14941
5°	14416	14666	14859
10°	13436	13912	14527
15°	12243	12899	13926
20°	10883	11705	12848
25°	9429	10280	11650
30°	7894	8817	10472
35°	6226	7303	9220
40°	4461	5974	7556
45°	2612	4718	5848
50°	1886	3430	3944
55°	1586	2451	2065
60°	1270	1985	1764
65°	1044	1760	1629
70°	885	1694	1532
75°	856	1811	1490
80°	956	2221	1583
85°	1588	3472	2223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5848 cd/sqm

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CATALOG NUMBER: S122RDRP-S1005D840-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.2	7.6
10°-20°	190.1	19.5
20°-30°	233.6	23.9
30°-40°	206.5	21.1
40°-50°	131.8	13.5
50°-60°	64.3	6.6
60°-70°	38.3	3.9
70°-80°	24.5	2.5
80°-90°	13.5	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°	497.9	51.0
0°-40°	704.4	72.1
0°-60°	900.5	92.2
0°-90°	976.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	976.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	778	795	792	795	802	72
15°	641	659	675	705	729	179
25°	463	480	505	536	572	212
35°	276	291	324	369	409	172
45°	100	128	181	203	224	84
55°	49	66	76	72	64	44
65°	24	45	40	37	37	24
75°	12	27	25	22	21	13
85°	8	15	16	15	10	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.7	809.7	809.7	809.7	809.7
2.5°	797.7	812.7	803.7	803.7	805.2
5°	778.3	794.7	791.8	794.7	802.2
7.5°	751.4	767.8	770.8	782.8	791.8
10°	717.1	733.5	742.5	761.9	775.3
12.5°	681.2	697.6	711.1	736.5	755.9
15°	640.9	658.8	675.2	705.1	729.0
17.5°	599.0	617.0	637.9	667.8	696.1
20°	554.2	570.7	596.1	624.4	654.3
22.5°	510.9	525.8	552.7	579.6	615.5
25°	463.1	479.5	504.9	536.3	572.2
27.5°	416.8	433.2	458.6	494.5	531.8
30°	370.5	385.4	413.8	451.1	491.5
32.5°	322.7	337.6	369.0	409.3	451.1
35°	276.4	291.3	324.2	369.0	409.3
37.5°	230.1	246.5	283.8	325.7	360.0
40°	185.2	204.7	248.0	283.8	313.7
42.5°	140.4	167.3	213.6	243.5	267.4
45°	100.1	128.5	180.8	203.2	224.1
47.5°	76.2	98.6	149.4	165.8	179.3
50°	65.7	80.7	119.5	131.5	137.4
52.5°	56.8	71.7	95.6	100.1	97.1
55°	49.3	65.7	76.2	71.7	64.2
57.5°	41.8	61.2	62.7	53.8	55.3
60°	34.4	55.3	53.8	46.3	47.8
62.5°	28.4	50.8	46.3	41.8	41.8
65°	23.9	44.8	40.3	37.3	37.3
67.5°	19.4	40.3	35.9	32.9	32.9
70°	16.4	35.9	31.4	28.4	28.4
72.5°	14.9	31.4	28.4	25.4	25.4
75°	12.0	26.9	25.4	22.4	20.9
77.5°	10.5	22.4	22.4	20.9	17.9
80°	9.0	19.4	20.9	17.9	14.9
82.5°	9.0	17.9	17.9	16.4	12.0
85°	7.5	14.9	16.4	14.9	10.5
87.5°	4.5	13.4	13.4	12.0	7.5
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	11.42	12.70	11.78	13.01	13.33	10.95	12.23	11.32	12.54	12.86
	3H	12.60	13.73	12.98	14.06	14.43	12.51	13.65	12.89	13.98	14.35
	4H	13.03	14.09	13.43	14.44	14.82	13.20	14.26	13.60	14.61	14.99
	6H	13.37	14.35	13.79	14.72	15.11	13.84	14.82	14.26	15.19	15.58
	8H	13.57	14.50	14.00	14.89	15.29	14.13	15.06	14.56	15.45	15.85
	12H	13.79	14.68	14.22	15.06	15.49	14.45	15.34	14.88	15.72	16.15
4H	2H	11.92	12.98	12.32	13.33	13.72	11.55	12.61	11.95	12.96	13.35
	3H	13.57	14.44	13.98	14.85	15.25	13.35	14.23	13.76	14.63	15.03
	4H	14.33	15.12	14.77	15.54	15.98	14.19	14.98	14.63	15.40	15.84
	6H	14.94	15.62	15.40	16.06	16.53	15.04	15.72	15.51	16.17	16.64
	8H	15.24	15.87	15.71	16.32	16.79	15.43	16.07	15.90	16.52	16.99
	12H	15.55	16.11	16.04	16.60	17.07	15.87	16.44	16.36	16.92	17.39
8H	4H	14.75	15.39	15.22	15.83	16.31	14.65	15.28	15.12	15.73	16.20
	6H	15.70	16.22	16.20	16.72	17.20	15.75	16.28	16.26	16.77	17.25
	8H	16.25	16.72	16.77	17.23	17.72	16.33	16.80	16.85	17.32	17.81
	12H	16.81	17.23	17.33	17.72	18.29	17.00	17.42	17.52	17.91	18.48
12H	4H	14.82	15.38	15.31	15.87	16.34	14.73	15.29	15.22	15.78	16.25
	6H	15.88	16.35	16.40	16.87	17.36	15.94	16.41	16.46	16.92	17.42
	8H	16.58	16.99	17.09	17.49	18.06	16.65	17.06	17.16	17.56	18.13