

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: P1059161

Luminaire Tested: S123RDRP-S1165D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059161
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

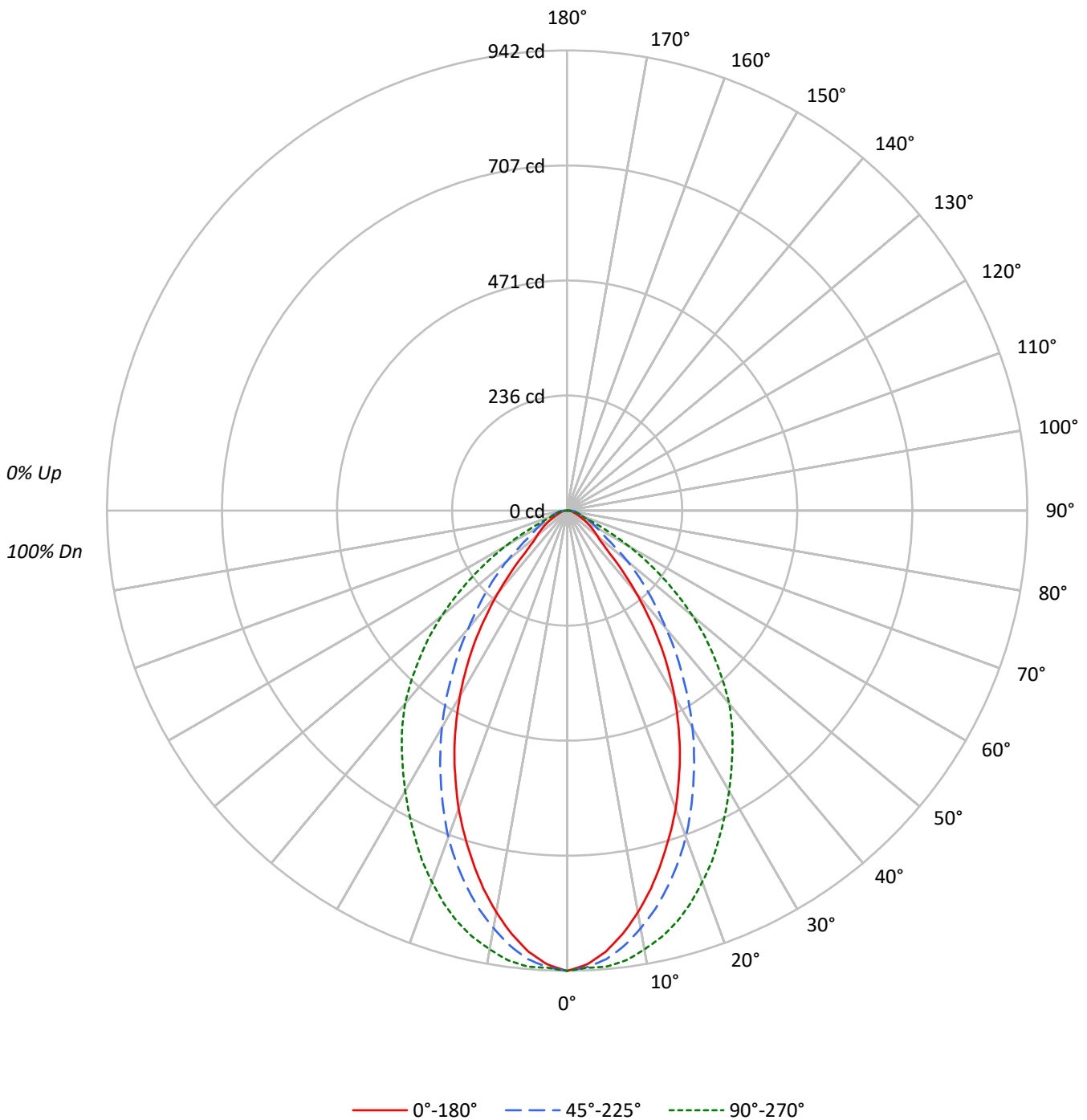
Lumens per Lamp: N/A
Luminaire Lumens: 1262.0 lumens
Efficiency: N/A
Efficacy: 30.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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

TEST NUMBER: P1059161

CATALOG NUMBER: S123RDRP-S1165D950-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot



TEST NUMBER: P1059161

CATALOG NUMBER: S123RDRP-S1165D950-X4F0-XX-UDD-SVL-S

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79																												
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71																												
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64																												
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58																												
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52																												
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48																												
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44																												
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40																												
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11065	11065	11065
5°	10685	10864	11042
10°	9956	10350	10874
15°	9064	9683	10586
20°	8114	8887	10108
25°	7075	7931	9553
30°	5950	6957	8990
35°	4732	5896	8459
40°	3374	4807	7908
45°	2011	3861	7081
50°	1483	2939	6131
55°	1239	2000	4872
60°	1000	1649	3424
65°	803	1414	1834
70°	663	1229	1133
75°	626	1184	1062
80°	649	1305	1021
85°	930	1859	1293

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7081 cd/sqm



TEST NUMBER: P1059161

CATALOG NUMBER: S123RDRP-S1165D950-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	6.9
10°-20°	224.9	17.8
20°-30°	286.8	22.7
30°-40°	269.8	21.4
40°-50°	193.9	15.4
50°-60°	111.2	8.8
60°-70°	50.8	4.0
70°-80°	25.5	2.0
80°-90°	12.5	1.0
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°	598.2	47.4
0°-40°	868.1	68.8
0°-60°	1173.1	93.0
0°-90°	1262.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1262.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	942	942	942	942	942	
5°	906	924	922	928	937	84
15°	746	772	796	839	871	208
25°	546	571	612	678	737	249
35°	330	354	411	505	590	204
45°	121	147	232	342	426	101
55°	60	62	98	180	238	54
65°	29	40	51	56	66	29
75°	14	28	26	23	23	15
85°	7	14	14	12	10	7
90°	0	0	0	0	0	



TEST NUMBER: P1059161

CATALOG NUMBER: S123RDRP-S1165D950-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	942.3	942.3	942.3	942.3	942.3
2.5°	929.9	943.7	935.4	935.4	936.8
5°	906.5	924.4	921.7	928.5	936.8
7.5°	873.5	892.8	898.3	914.8	928.5
10°	835.0	857.0	868.0	894.1	912.0
12.5°	792.3	817.1	835.0	868.0	894.1
15°	745.6	771.7	796.5	839.1	870.8
17.5°	697.4	723.6	755.2	804.7	841.9
20°	649.3	675.4	711.2	763.5	808.9
22.5°	597.0	623.1	661.7	720.8	775.8
25°	546.1	570.9	612.1	678.2	737.3
27.5°	492.5	517.2	562.6	634.2	700.2
30°	438.8	463.6	513.1	590.1	663.0
32.5°	385.2	408.6	462.2	547.5	625.9
35°	330.1	353.5	411.3	504.8	590.1
37.5°	273.7	297.1	364.5	466.3	554.4
40°	220.1	246.2	313.6	427.8	515.9
42.5°	167.8	195.3	272.4	386.5	471.8
45°	121.1	147.2	232.5	342.5	426.4
47.5°	92.2	105.9	196.7	298.5	382.4
50°	81.2	82.5	160.9	258.6	335.6
52.5°	70.2	71.5	125.2	220.1	286.1
55°	60.5	61.9	97.7	180.2	238.0
57.5°	50.9	53.6	79.8	143.1	191.2
60°	42.6	48.1	70.2	108.7	145.8
62.5°	34.4	44.0	60.5	79.8	104.5
65°	28.9	39.9	50.9	56.4	66.0
67.5°	23.4	37.1	42.6	39.9	39.9
70°	19.3	33.0	35.8	33.0	33.0
72.5°	16.5	31.6	30.3	27.5	27.5
75°	13.8	27.5	26.1	23.4	23.4
77.5°	12.4	23.4	22.0	20.6	19.3
80°	9.6	19.3	19.3	17.9	15.1
82.5°	8.3	16.5	16.5	15.1	12.4
85°	6.9	13.8	13.8	12.4	9.6
87.5°	5.5	12.4	12.4	11.0	6.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1059161
 CATALOG NUMBER: S123RDRP-S1165D950-X4F0-XX-UDD-SVL-S

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	8.33	9.65	8.70	9.96	10.28	15.56	16.88	15.93	17.19	17.51
	3H	9.73	10.90	10.11	11.23	11.60	15.80	16.97	16.18	17.30	17.66
	4H	10.29	11.38	10.70	11.74	12.12	15.90	16.99	16.31	17.34	17.73
	6H	10.76	11.76	11.17	12.13	12.52	16.01	17.01	16.43	17.38	17.78
	8H	10.94	11.89	11.37	12.28	12.69	16.06	17.01	16.49	17.40	17.80
	12H	11.14	12.04	11.57	12.43	12.86	16.11	17.02	16.54	17.40	17.83
4H	2H	9.41	10.50	9.81	10.85	11.23	15.52	16.61	15.92	16.96	17.35
	3H	11.10	11.99	11.51	12.39	12.80	15.89	16.78	16.30	17.19	17.59
	4H	11.93	12.73	12.37	13.15	13.59	16.07	16.87	16.51	17.29	17.73
	6H	12.59	13.28	13.05	13.73	14.19	16.30	16.99	16.76	17.43	17.90
	8H	12.85	13.49	13.32	13.94	14.41	16.40	17.04	16.87	17.49	17.96
	12H	13.10	13.68	13.59	14.16	14.63	16.51	17.08	17.00	17.57	18.04
8H	4H	12.37	13.01	12.84	13.46	13.93	16.12	16.76	16.59	17.21	17.68
	6H	13.32	13.85	13.82	14.35	14.83	16.45	16.98	16.95	17.48	17.96
	8H	13.79	14.26	14.31	14.78	15.27	16.64	17.12	17.16	17.63	18.12
	12H	14.27	14.69	14.78	15.18	15.76	16.87	17.30	17.39	17.79	18.36
12H	4H	12.43	13.00	12.91	13.48	13.95	16.11	16.68	16.60	17.17	17.64
	6H	13.47	13.95	13.99	14.46	14.95	16.48	16.95	17.00	17.47	17.96
	8H	14.06	14.48	14.58	14.98	15.55	16.74	17.16	17.25	17.65	18.23