

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: P1059233

Luminaire Tested: S123RDRP-S340D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059233
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-S340D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

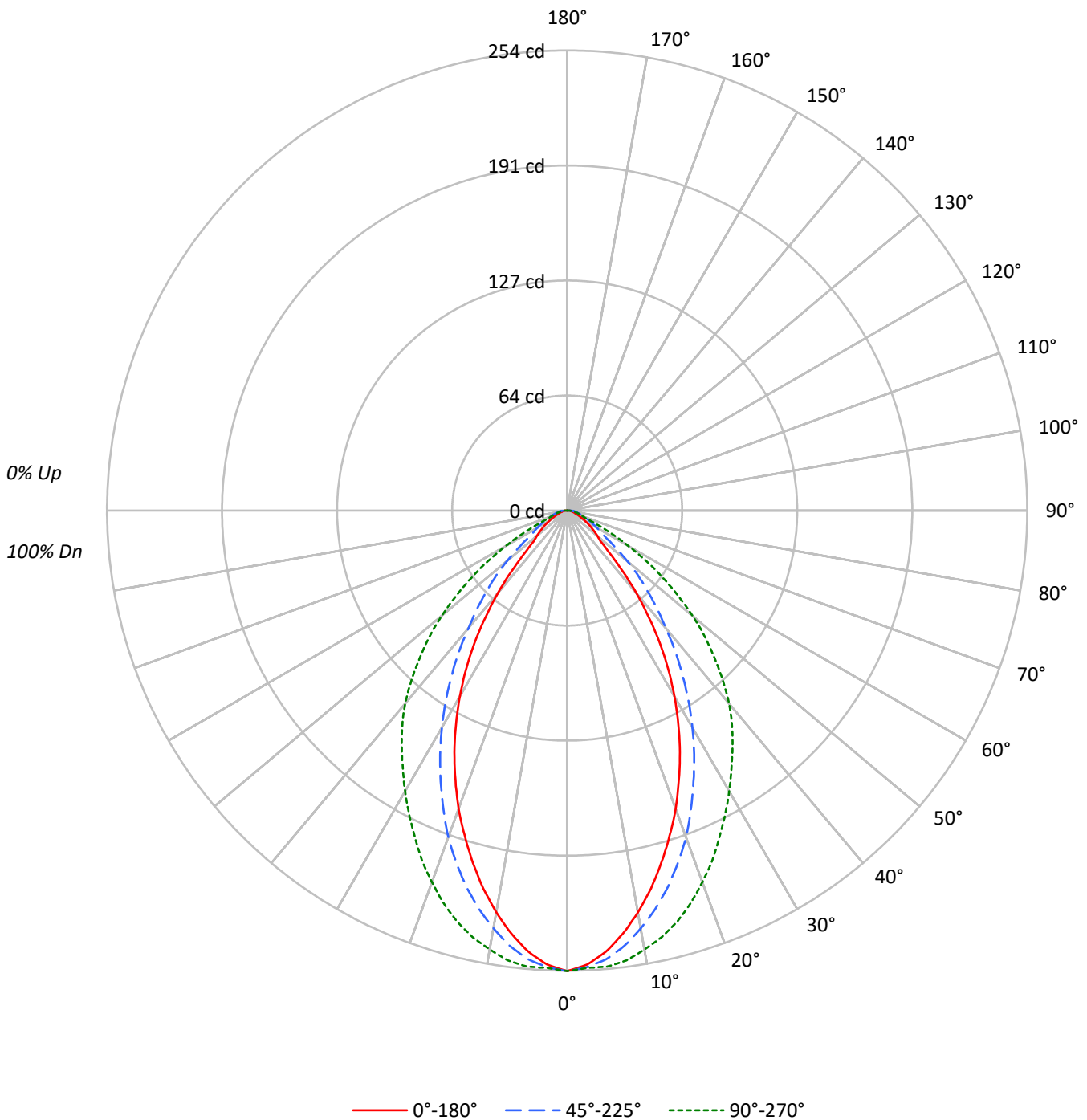
Lumens per Lamp: N/A
Luminaire Lumens: 340.4 lumens
Efficiency: N/A
Efficacy: 27.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1059233

CATALOG NUMBER: S123RDRP-S340D940-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1059233

CATALOG NUMBER: S123RDRP-S340D940-X4F0-XX-UDD-SVL-S

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	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°	2985	2985	2985
5°	2882	2930	2979
10°	2685	2793	2933
15°	2445	2612	2856
20°	2189	2397	2727
25°	1908	2139	2577
30°	1605	1877	2426
35°	1277	1591	2282
40°	911	1297	2134
45°	543	1041	1910
50°	400	793	1653
55°	334	538	1314
60°	270	444	923
65°	217	381	495
70°	179	330	306
75°	168	322	286
80°	176	352	277
85°	256	498	350

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1910 cd/sqm



TEST NUMBER: P1059233

CATALOG NUMBER: S123RDRP-S340D940-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.3	6.9
10°-20°	60.7	17.8
20°-30°	77.4	22.7
30°-40°	72.8	21.4
40°-50°	52.3	15.4
50°-60°	30.0	8.8
60°-70°	13.7	4.0
70°-80°	6.9	2.0
80°-90°	3.4	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°	161.4	47.4
0°-40°	234.2	68.8
0°-60°	316.5	93.0
0°-90°	340.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	340.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	254	254	254	254	254	
5°	244	249	249	250	253	23
15°	201	208	215	226	235	56
25°	147	154	165	183	199	67
35°	89	95	111	136	159	55
45°	33	40	63	92	115	27
55°	16	17	26	49	64	15
65°	8	11	14	15	18	8
75°	4	7	7	6	6	4
85°	2	4	4	3	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1059233

CATALOG NUMBER: S123RDRP-S340D940-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	254.2	254.2	254.2	254.2	254.2
2.5°	250.9	254.6	252.3	252.3	252.7
5°	244.5	249.4	248.6	250.5	252.7
7.5°	235.6	240.8	242.3	246.8	250.5
10°	225.2	231.2	234.2	241.2	246.0
12.5°	213.7	220.4	225.2	234.2	241.2
15°	201.1	208.2	214.9	226.4	234.9
17.5°	188.1	195.2	203.7	217.1	227.1
20°	175.2	182.2	191.8	206.0	218.2
22.5°	161.1	168.1	178.5	194.4	209.3
25°	147.3	154.0	165.1	182.9	198.9
27.5°	132.8	139.5	151.8	171.1	188.9
30°	118.4	125.1	138.4	159.2	178.9
32.5°	103.9	110.2	124.7	147.7	168.8
35°	89.1	95.4	111.0	136.2	159.2
37.5°	73.8	80.2	98.3	125.8	149.5
40°	59.4	66.4	84.6	115.4	139.2
42.5°	45.3	52.7	73.5	104.3	127.3
45°	32.7	39.7	62.7	92.4	115.0
47.5°	24.9	28.6	53.1	80.5	103.2
50°	21.9	22.3	43.4	69.8	90.5
52.5°	18.9	19.3	33.8	59.4	77.2
55°	16.3	16.7	26.3	48.6	64.2
57.5°	13.7	14.5	21.5	38.6	51.6
60°	11.5	13.0	18.9	29.3	39.3
62.5°	9.3	11.9	16.3	21.5	28.2
65°	7.8	10.8	13.7	15.2	17.8
67.5°	6.3	10.0	11.5	10.8	10.8
70°	5.2	8.9	9.6	8.9	8.9
72.5°	4.5	8.5	8.2	7.4	7.4
75°	3.7	7.4	7.1	6.3	6.3
77.5°	3.3	6.3	5.9	5.6	5.2
80°	2.6	5.2	5.2	4.8	4.1
82.5°	2.2	4.5	4.5	4.1	3.3
85°	1.9	3.7	3.7	3.3	2.6
87.5°	1.5	3.3	3.3	3.0	1.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059233
 CATALOG NUMBER: S123RDRP-S340D940-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	3.79	5.11	4.16	5.42	5.74	11.01	12.33	11.37	12.64	12.95
	3H	5.19	6.36	5.57	6.69	7.05	11.25	12.41	11.63	12.74	13.11
	4H	5.75	6.84	6.15	7.19	7.57	11.35	12.44	11.75	12.79	13.18
	6H	6.20	7.20	6.62	7.57	7.97	11.46	12.46	11.87	12.83	13.23
	8H	6.39	7.34	6.82	7.73	8.13	11.51	12.46	11.94	12.85	13.25
	12H	6.58	7.49	7.01	7.87	8.30	11.56	12.46	11.99	12.85	13.28
4H	2H	4.86	5.95	5.26	6.30	6.68	10.97	12.06	11.37	12.41	12.79
	3H	6.54	7.44	6.96	7.84	8.24	11.34	12.23	11.75	12.63	13.04
	4H	7.37	8.17	7.81	8.59	9.04	11.52	12.32	11.96	12.74	13.18
	6H	8.03	8.72	8.49	9.17	9.63	11.74	12.43	12.21	12.88	13.35
	8H	8.29	8.93	8.76	9.38	9.85	11.84	12.49	12.31	12.94	13.41
	12H	8.55	9.12	9.03	9.60	10.08	11.96	12.53	12.44	13.01	13.49
8H	4H	7.81	8.46	8.28	8.90	9.38	11.57	12.21	12.03	12.66	13.13
	6H	8.76	9.29	9.27	9.79	10.27	11.90	12.43	12.40	12.92	13.41
	8H	9.23	9.71	9.75	10.23	10.72	12.09	12.56	12.61	13.08	13.57
	12H	9.72	10.14	10.23	10.63	11.20	12.32	12.74	12.83	13.24	13.81
12H	4H	7.87	8.44	8.36	8.93	9.40	11.56	12.13	12.04	12.61	13.09
	6H	8.91	9.39	9.43	9.91	10.40	11.93	12.40	12.45	12.92	13.41
	8H	9.51	9.93	10.03	10.43	11.00	12.19	12.61	12.70	13.10	13.67