

Scaled data based on original data using
LM-79-2019 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: S123RDR-S340D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S123RDR-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

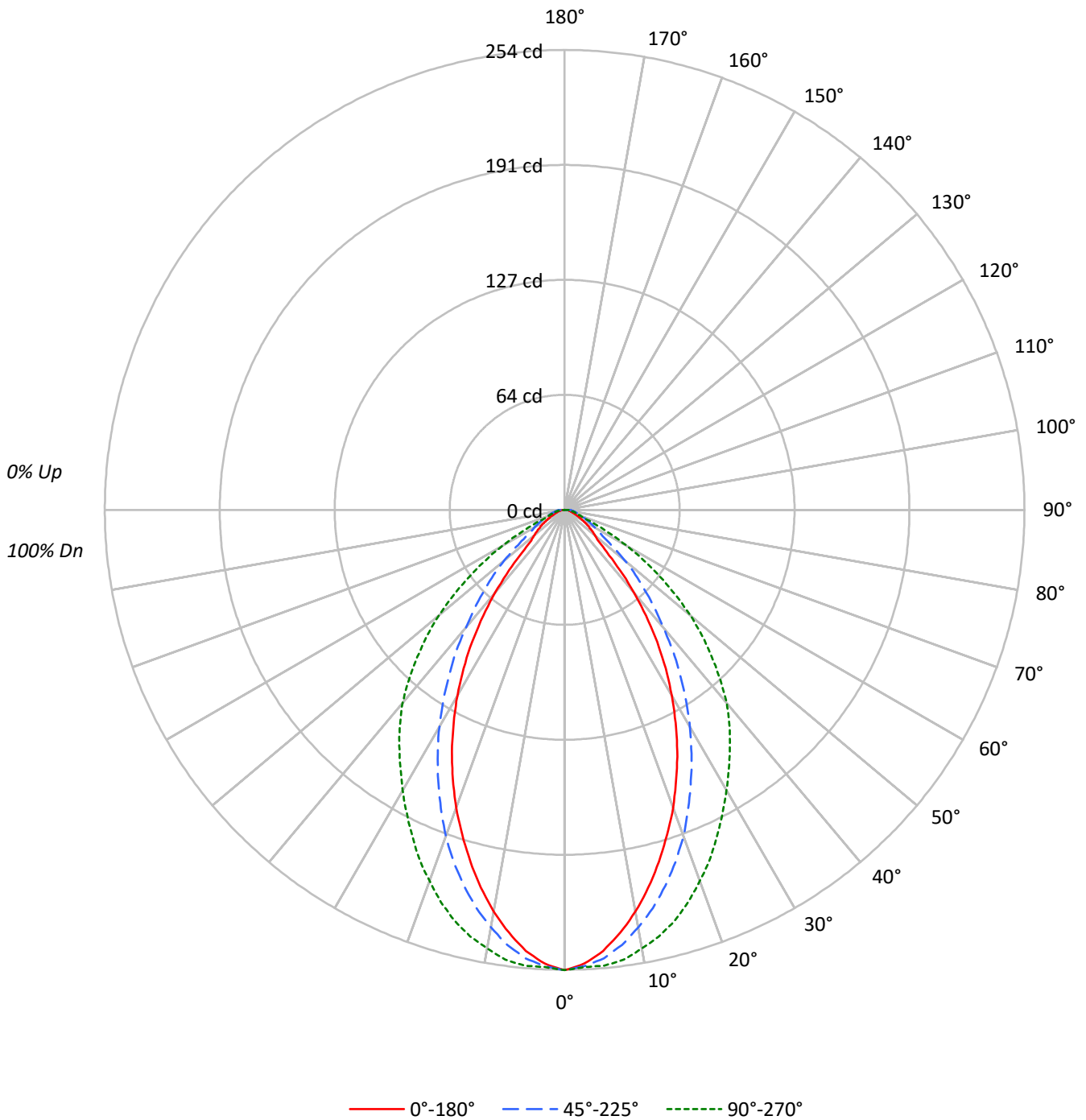
Lumens per Lamp: N/A
Luminaire Lumens: 340.4 lumens
Efficiency: N/A
Efficacy: 27.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (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: P1059233

CATALOG NUMBER: S123RDR-S340D940-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1059233

CATALOG NUMBER: S123RDR-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: S123RDR-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: S123RDR-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

(END OF REPORT)