

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: P1059218

Luminaire Tested: S123RDR-S340D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059218
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D930-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

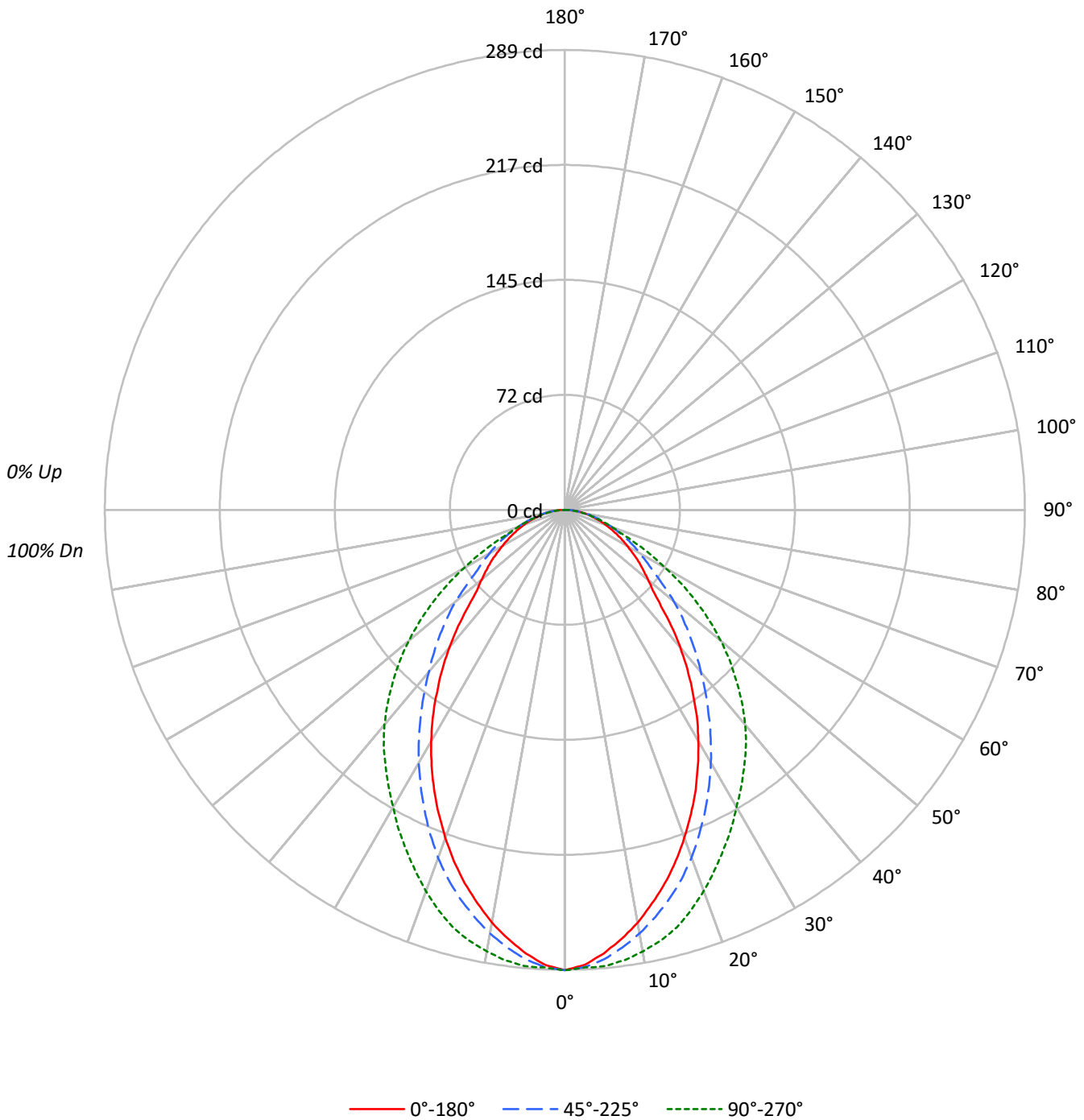
Lumens per Lamp: N/A
Luminaire Lumens: 522.5 lumens
Efficiency: N/A
Efficacy: 41.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059218

CATALOG NUMBER: S123RDR-S340D930-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1059218

CATALOG NUMBER: S123RDR-S340D930-X4F0-XX-UDD-WVL-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	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																				
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75																				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51																				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41																				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37																				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34																				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3397	3397	3397
5°	3298	3342	3394
10°	3142	3223	3360
15°	2952	3079	3302
20°	2742	2907	3186
25°	2517	2703	3054
30°	2277	2488	2925
35°	2008	2261	2815
40°	1726	2037	2702
45°	1420	1837	2534
50°	1246	1635	2335
55°	1153	1396	2070
60°	1059	1282	1712
65°	989	1178	1348
70°	930	1071	1071
75°	876	985	921
80°	825	893	778
85°	781	862	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2534 cd/sqm



TEST NUMBER: P1059218

CATALOG NUMBER: S123RDR-S340D930-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.8	5.1
10°-20°	71.7	13.7
20°-30°	97.2	18.6
30°-40°	101.6	19.5
40°-50°	88.2	16.9
50°-60°	65.6	12.6
60°-70°	42.1	8.1
70°-80°	22.6	4.3
80°-90°	6.8	1.3
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°	195.7	37.4
0°-40°	297.3	56.9
0°-60°	451.1	86.3
0°-90°	522.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	522.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	289	289	289	289	289	
5°	280	284	284	286	288	26
15°	243	249	253	264	272	68
25°	194	200	209	222	236	89
35°	140	147	158	178	196	87
45°	86	92	111	134	153	67
55°	56	58	68	88	101	50
65°	36	39	42	45	48	35
75°	19	22	22	21	20	20
85°	6	7	6	5	4	7
90°	0	0	0	0	0	



TEST NUMBER: P1059218

CATALOG NUMBER: S123RDR-S340D930-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	289.3	289.3	289.3	289.3	289.3
2.5°	286.2	290.3	287.6	287.6	287.9
5°	279.8	284.5	283.5	285.5	287.9
7.5°	272.0	277.1	277.4	282.2	285.5
10°	263.5	268.6	270.3	277.1	281.8
12.5°	253.3	259.1	262.1	270.6	277.4
15°	242.8	248.6	253.3	263.5	271.6
17.5°	231.6	237.4	243.5	255.0	263.8
20°	219.4	225.5	232.6	244.2	255.0
22.5°	206.9	213.3	220.8	233.3	245.5
25°	194.3	200.4	208.6	222.5	235.7
27.5°	181.1	187.5	196.0	211.3	226.2
30°	167.9	174.3	183.5	199.7	215.7
32.5°	154.3	160.7	170.6	188.9	206.2
35°	140.1	146.8	157.7	177.7	196.4
37.5°	126.5	132.9	145.1	167.2	186.9
40°	112.6	119.4	132.9	156.7	176.3
42.5°	99.0	105.8	121.7	145.5	164.8
45°	85.5	91.9	110.6	134.3	152.6
47.5°	74.9	79.7	100.0	122.4	140.7
50°	68.2	69.9	89.5	110.9	127.8
52.5°	62.1	63.4	78.0	99.4	114.6
55°	56.3	57.7	68.2	87.5	101.1
57.5°	50.5	52.2	60.7	75.3	87.5
60°	45.1	47.1	54.6	64.4	72.9
62.5°	40.4	42.7	48.5	54.6	60.4
65°	35.6	38.7	42.4	45.1	48.5
67.5°	31.2	34.6	36.6	37.3	37.6
70°	27.1	30.5	31.2	31.2	31.2
72.5°	23.1	26.8	26.1	25.8	25.4
75°	19.3	22.4	21.7	20.7	20.3
77.5°	15.6	18.3	17.3	16.6	15.6
80°	12.2	14.2	13.2	12.5	11.5
82.5°	9.2	10.5	9.5	8.8	7.8
85°	5.8	7.1	6.4	5.4	4.4
87.5°	3.1	4.1	3.4	3.1	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)