

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: P1059209

Luminaire Tested: S123RDR-S340D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059209
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-S340D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

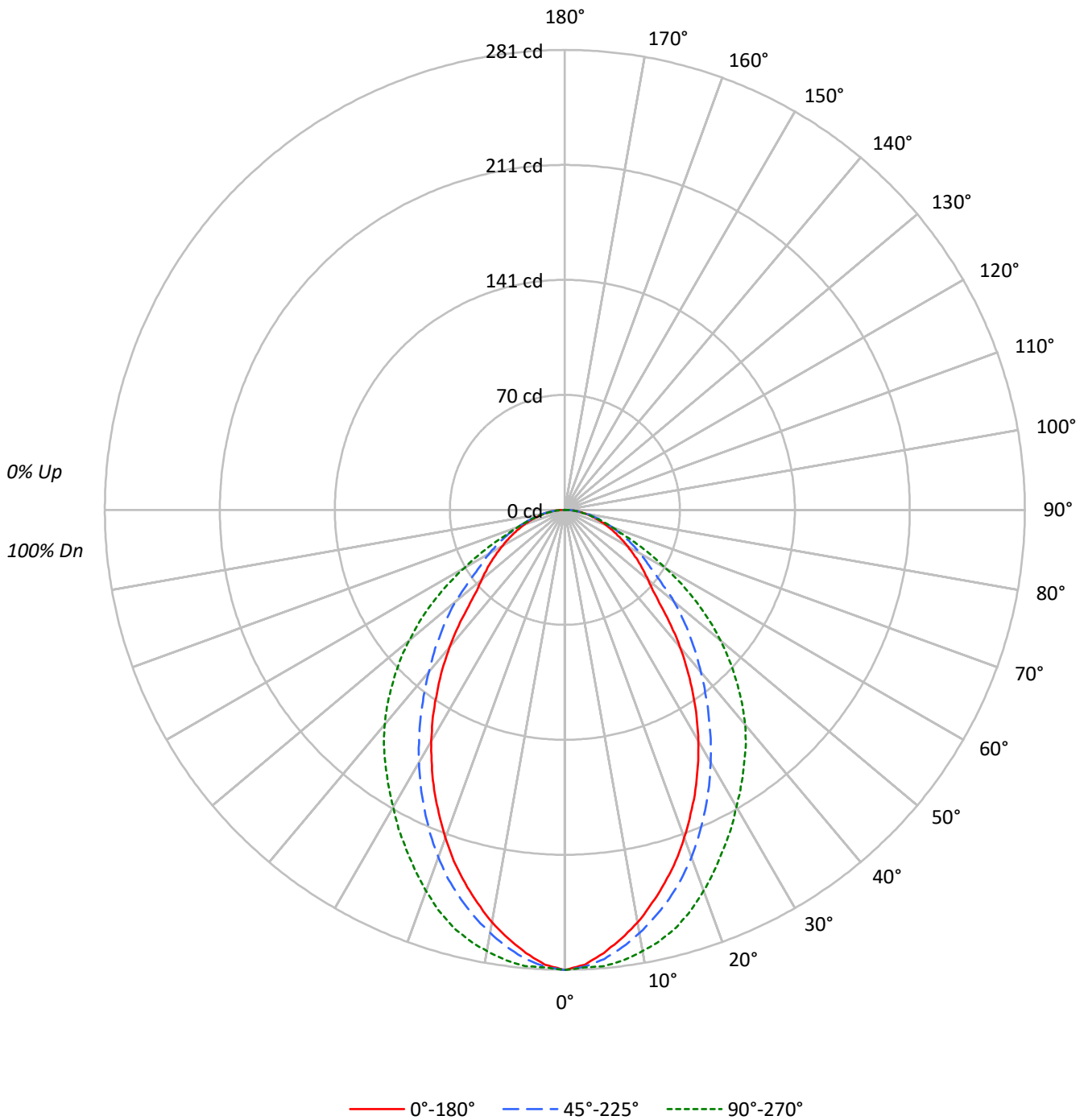
Lumens per Lamp: N/A
Luminaire Lumens: 507.7 lumens
Efficiency: N/A
Efficacy: 40.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3301	3301	3301
5°	3204	3247	3298
10°	3052	3131	3265
15°	2868	2992	3208
20°	2664	2824	3097
25°	2446	2625	2967
30°	2211	2418	2842
35°	1951	2196	2735
40°	1677	1980	2626
45°	1378	1784	2463
50°	1209	1589	2269
55°	1120	1355	2010
60°	1029	1247	1663
65°	961	1145	1309
70°	906	1040	1040
75°	853	957	898
80°	805	872	757
85°	754	849	579

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2463 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.0	5.1
10°-20°	69.7	13.7
20°-30°	94.5	18.6
30°-40°	98.8	19.5
40°-50°	85.7	16.9
50°-60°	63.7	12.5
60°-70°	40.9	8.1
70°-80°	21.9	4.3
80°-90°	6.6	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°	190.1	37.4
0°-40°	288.9	56.9
0°-60°	438.3	86.3
0°-90°	507.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	507.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	281	281	281	281	281	
5°	272	276	276	277	280	25
15°	236	242	246	256	264	66
25°	189	195	203	216	229	87
35°	136	143	153	173	191	85
45°	83	89	107	130	148	65
55°	55	56	66	85	98	49
65°	35	38	41	44	47	34
75°	19	22	21	20	20	20
85°	6	7	6	5	4	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	281.1	281.1	281.1	281.1	281.1
2.5°	278.1	282.1	279.4	279.4	279.8
5°	271.8	276.5	275.5	277.4	279.8
7.5°	264.3	269.2	269.5	274.2	277.4
10°	256.0	261.0	262.6	269.2	273.8
12.5°	246.1	251.7	254.7	262.9	269.5
15°	235.9	241.5	246.1	256.0	263.9
17.5°	225.1	230.7	236.6	247.8	256.4
20°	213.2	219.1	226.0	237.2	247.8
22.5°	201.0	207.3	214.5	226.7	238.6
25°	188.8	194.7	202.6	216.2	229.0
27.5°	176.0	182.2	190.5	205.3	219.8
30°	163.1	169.4	178.3	194.1	209.6
32.5°	149.9	156.2	165.7	183.5	200.3
35°	136.1	142.7	153.2	172.7	190.8
37.5°	122.9	129.2	141.0	162.4	181.6
40°	109.4	116.0	129.2	152.2	171.3
42.5°	96.2	102.8	118.3	141.4	160.1
45°	83.0	89.3	107.4	130.5	148.3
47.5°	72.8	77.4	97.2	119.0	136.7
50°	66.2	67.9	87.0	107.7	124.2
52.5°	60.3	61.6	75.8	96.5	111.4
55°	54.7	56.0	66.2	85.0	98.2
57.5°	49.1	50.7	59.0	73.2	85.0
60°	43.8	45.8	53.1	62.6	70.8
62.5°	39.2	41.5	47.1	53.1	58.7
65°	34.6	37.6	41.2	43.8	47.1
67.5°	30.3	33.6	35.6	36.2	36.6
70°	26.4	29.7	30.3	30.3	30.3
72.5°	22.4	26.0	25.4	25.0	24.7
75°	18.8	21.7	21.1	20.1	19.8
77.5°	15.2	17.8	16.8	16.1	15.2
80°	11.9	13.8	12.9	12.2	11.2
82.5°	8.9	10.2	9.2	8.6	7.6
85°	5.6	6.9	6.3	5.3	4.3
87.5°	3.0	4.0	3.3	3.0	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)