

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: P1059245

Luminaire Tested: S123RDR-S340D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059245
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-S340D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

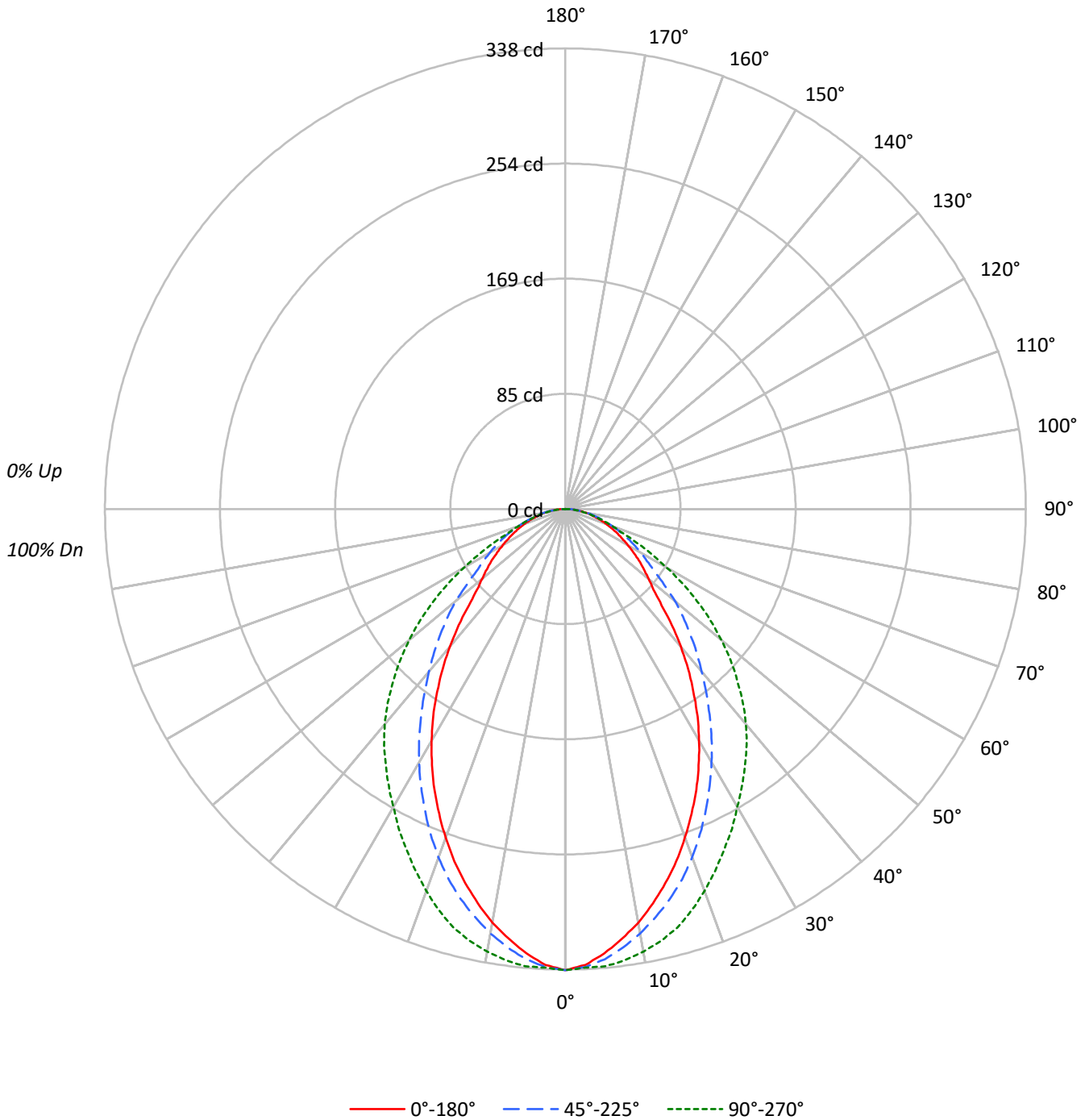
Lumens per Lamp: N/A
Luminaire Lumens: 611.4 lumens
Efficiency: N/A
Efficacy: 48.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	66	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°	3975	3975	3975
5°	3859	3910	3971
10°	3676	3771	3932
15°	3454	3603	3865
20°	3208	3401	3729
25°	2946	3161	3573
30°	2663	2911	3422
35°	2349	2645	3294
40°	2019	2385	3162
45°	1661	2149	2966
50°	1458	1914	2733
55°	1349	1634	2422
60°	1240	1501	2003
65°	1159	1378	1575
70°	1088	1253	1253
75°	1025	1152	1080
80°	967	1048	913
85°	903	1010	701

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2966 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.3	5.1
10°-20°	83.9	13.7
20°-30°	113.8	18.6
30°-40°	118.9	19.5
40°-50°	103.2	16.9
50°-60°	76.7	12.6
60°-70°	49.2	8.1
70°-80°	26.4	4.3
80°-90°	8.0	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°	229.0	37.4
0°-40°	347.9	56.9
0°-60°	527.8	86.3
0°-90°	611.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	611.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	338	338	338	338	338	
5°	327	333	332	334	337	31
15°	284	291	296	308	318	80
25°	227	234	244	260	276	104
35°	164	172	184	208	230	102
45°	100	108	129	157	179	79
55°	66	68	80	102	118	59
65°	42	45	50	53	57	41
75°	23	26	25	24	24	24
85°	7	8	8	6	5	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	338.5	338.5	338.5	338.5	338.5
2.5°	334.9	339.7	336.5	336.5	336.9
5°	327.4	332.9	331.7	334.1	336.9
7.5°	318.2	324.2	324.6	330.2	334.1
10°	308.3	314.3	316.3	324.2	329.8
12.5°	296.4	303.2	306.7	316.7	324.6
15°	284.1	290.9	296.4	308.3	317.9
17.5°	271.0	277.8	284.9	298.4	308.7
20°	256.7	263.9	272.2	285.7	298.4
22.5°	242.1	249.6	258.3	273.0	287.3
25°	227.4	234.5	244.0	260.3	275.8
27.5°	211.9	219.4	229.4	247.2	264.7
30°	196.4	204.0	214.7	233.7	252.4
32.5°	180.6	188.1	199.6	221.0	241.3
35°	163.9	171.8	184.5	207.9	229.8
37.5°	148.0	155.6	169.8	195.6	218.6
40°	131.7	139.7	155.6	183.3	206.3
42.5°	115.9	123.8	142.5	170.2	192.9
45°	100.0	107.5	129.4	157.1	178.6
47.5°	87.7	93.3	117.1	143.3	164.7
50°	79.8	81.7	104.8	129.8	149.6
52.5°	72.6	74.2	91.3	116.3	134.1
55°	65.9	67.5	79.8	102.4	118.3
57.5°	59.1	61.1	71.0	88.1	102.4
60°	52.8	55.2	63.9	75.4	85.3
62.5°	47.2	50.0	56.7	63.9	70.6
65°	41.7	45.2	49.6	52.8	56.7
67.5°	36.5	40.5	42.9	43.6	44.0
70°	31.7	35.7	36.5	36.5	36.5
72.5°	27.0	31.3	30.6	30.2	29.8
75°	22.6	26.2	25.4	24.2	23.8
77.5°	18.3	21.4	20.2	19.4	18.3
80°	14.3	16.7	15.5	14.7	13.5
82.5°	10.7	12.3	11.1	10.3	9.1
85°	6.7	8.3	7.5	6.3	5.2
87.5°	3.6	4.8	4.0	3.6	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)