

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: P1059188

Luminaire Tested: S123RDR-S340D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059188
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-S340D840-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, 80 CRI LEDS
Ballast/Driver: -

Summary

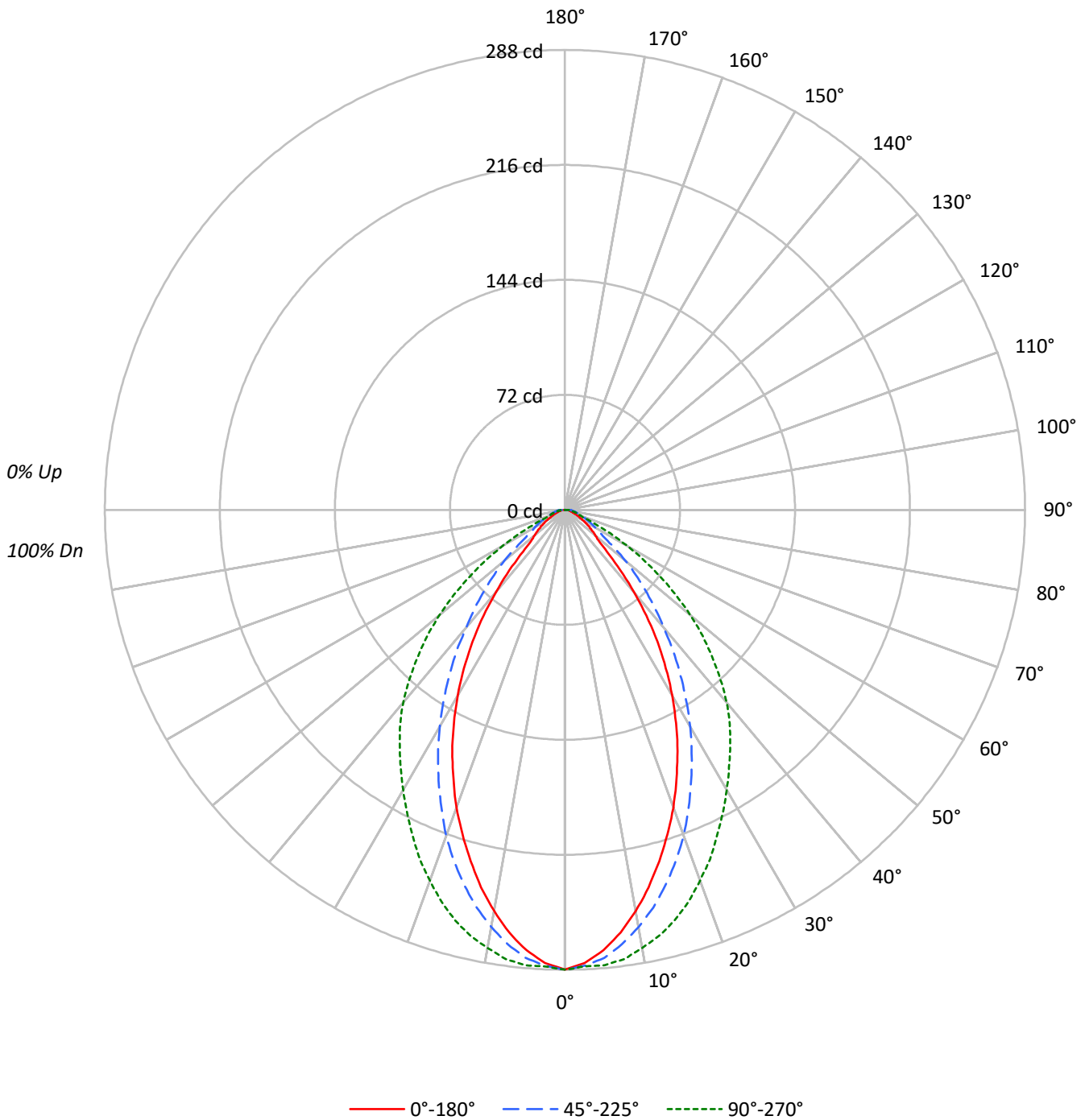
Lumens per Lamp: N/A
Luminaire Lumens: 385.5 lumens
Efficiency: N/A
Efficacy: 30.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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	59	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°	3381	3381	3381
5°	3264	3319	3374
10°	3042	3162	3322
15°	2769	2958	3234
20°	2479	2715	3088
25°	2161	2423	2919
30°	1818	2126	2747
35°	1446	1802	2585
40°	1030	1468	2416
45°	614	1179	2164
50°	453	899	1872
55°	379	610	1488
60°	305	503	1045
65°	245	431	561
70°	203	374	347
75°	191	363	322
80°	196	399	311
85°	283	566	391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2164 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.4	6.9
10°-20°	68.7	17.8
20°-30°	87.6	22.7
30°-40°	82.4	21.4
40°-50°	59.2	15.4
50°-60°	34.0	8.8
60°-70°	15.5	4.0
70°-80°	7.8	2.0
80°-90°	3.8	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°	182.8	47.4
0°-40°	265.2	68.8
0°-60°	358.4	93.0
0°-90°	385.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	385.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	288	288	288	288	288	
5°	277	282	282	284	286	26
15°	228	236	243	256	266	64
25°	167	174	187	207	225	76
35°	101	108	126	154	180	62
45°	37	45	71	105	130	31
55°	18	19	30	55	73	17
65°	9	12	16	17	20	9
75°	4	8	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	287.9	287.9	287.9	287.9	287.9
2.5°	284.1	288.3	285.8	285.8	286.2
5°	276.9	282.4	281.6	283.7	286.2
7.5°	266.9	272.7	274.4	279.5	283.7
10°	255.1	261.8	265.2	273.2	278.6
12.5°	242.1	249.6	255.1	265.2	273.2
15°	227.8	235.8	243.3	256.4	266.0
17.5°	213.1	221.1	230.7	245.8	257.2
20°	198.4	206.3	217.3	233.2	247.1
22.5°	182.4	190.4	202.1	220.2	237.0
25°	166.8	174.4	187.0	207.2	225.3
27.5°	150.5	158.0	171.9	193.7	213.9
30°	134.1	141.6	156.8	180.3	202.6
32.5°	117.7	124.8	141.2	167.3	191.2
35°	100.9	108.0	125.7	154.2	180.3
37.5°	83.6	90.8	111.4	142.5	169.4
40°	67.2	75.2	95.8	130.7	157.6
42.5°	51.3	59.7	83.2	118.1	144.1
45°	37.0	45.0	71.0	104.6	130.3
47.5°	28.2	32.4	60.1	91.2	116.8
50°	24.8	25.2	49.2	79.0	102.5
52.5°	21.4	21.9	38.2	67.2	87.4
55°	18.5	18.9	29.8	55.1	72.7
57.5°	15.5	16.4	24.4	43.7	58.4
60°	13.0	14.7	21.4	33.2	44.5
62.5°	10.5	13.4	18.5	24.4	31.9
65°	8.8	12.2	15.5	17.2	20.2
67.5°	7.1	11.3	13.0	12.2	12.2
70°	5.9	10.1	10.9	10.1	10.1
72.5°	5.0	9.7	9.2	8.4	8.4
75°	4.2	8.4	8.0	7.1	7.1
77.5°	3.8	7.1	6.7	6.3	5.9
80°	2.9	5.9	5.9	5.5	4.6
82.5°	2.5	5.0	5.0	4.6	3.8
85°	2.1	4.2	4.2	3.8	2.9
87.5°	1.7	3.8	3.8	3.4	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)