

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: P1059230

Luminaire Tested: S123RDR-S340D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059230
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D940-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

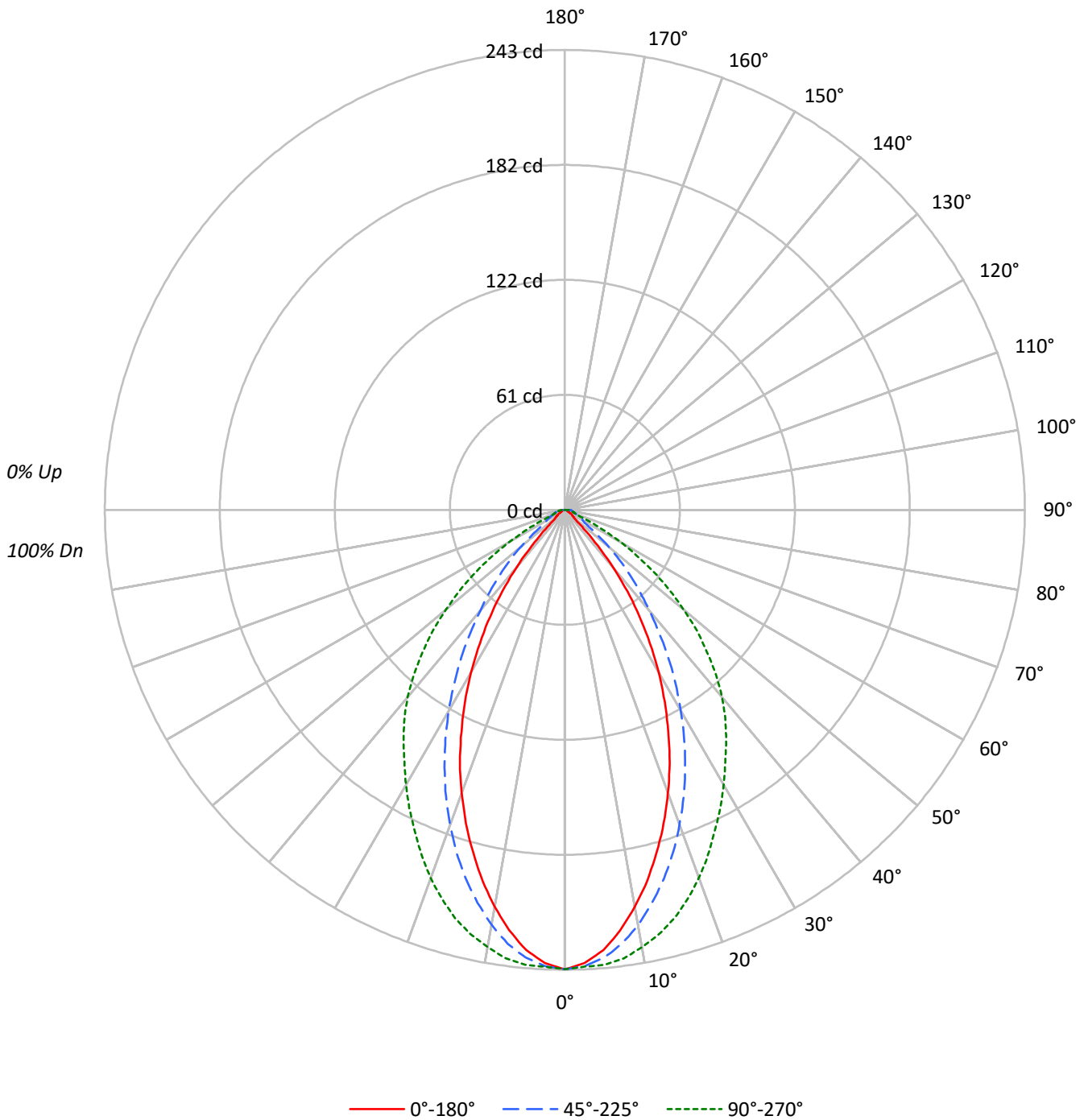
Lumens per Lamp: N/A
Luminaire Lumens: 291.6 lumens
Efficiency: N/A
Efficacy: 23.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2850	2850	2850
5°	2752	2799	2844
10°	2540	2655	2797
15°	2278	2454	2716
20°	1989	2212	2588
25°	1674	1947	2428
30°	1344	1661	2275
35°	985	1368	2129
40°	609	1064	1980
45°	234	802	1764
50°	115	550	1492
55°	92	303	1171
60°	61	254	784
65°	53	228	350
70°	51	203	203
75°	68	218	204
80°	101	277	223
85°	148	445	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1764 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.3	7.6
10°-20°	57.0	19.5
20°-30°	70.7	24.3
30°-40°	63.4	21.7
40°-50°	41.7	14.3
50°-60°	20.9	7.2
60°-70°	8.3	2.8
70°-80°	4.6	1.6
80°-90°	2.9	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°	150.0	51.4
0°-40°	213.3	73.1
0°-60°	275.8	94.6
0°-90°	291.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	291.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	243	243	243	243	243	
5°	234	237	238	239	241	22
15°	187	193	202	216	223	52
25°	129	137	150	172	187	59
35°	69	78	95	125	148	43
45°	14	23	48	81	106	13
55°	4	5	15	40	57	4
65°	2	5	8	10	13	2
75°	2	5	5	4	4	2
85°	1	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	242.7	242.7	242.7	242.7	242.7
2.5°	239.8	243.1	241.3	241.3	241.6
5°	233.5	237.2	237.5	239.0	241.3
7.5°	224.2	229.0	231.2	235.7	239.0
10°	213.0	218.2	222.7	230.5	234.6
12.5°	200.8	206.0	212.7	223.4	229.7
15°	187.4	193.4	201.9	215.6	223.4
17.5°	173.7	179.6	190.0	205.6	215.6
20°	159.2	165.9	177.0	194.9	207.1
22.5°	144.8	152.2	164.1	183.4	197.5
25°	129.2	137.3	150.3	171.5	187.4
27.5°	114.3	122.9	136.6	159.6	177.8
30°	99.1	107.6	122.5	147.3	167.8
32.5°	83.5	93.2	108.7	135.8	157.7
35°	68.7	77.9	95.4	124.7	148.5
37.5°	54.2	63.5	81.7	113.9	139.2
40°	39.7	49.4	69.4	103.6	129.2
42.5°	26.0	36.0	58.6	93.2	118.0
45°	14.1	23.4	48.3	81.3	106.2
47.5°	7.8	12.6	39.0	70.1	94.6
50°	6.3	7.1	30.1	59.8	81.7
52.5°	5.2	5.9	21.5	49.7	69.8
55°	4.5	5.2	14.8	40.1	57.2
57.5°	3.7	4.5	11.9	30.8	44.9
60°	2.6	4.5	10.8	22.6	33.4
62.5°	2.2	4.5	9.3	15.6	22.3
65°	1.9	5.2	8.2	10.4	12.6
67.5°	1.5	5.2	7.1	6.7	6.7
70°	1.5	5.2	5.9	5.6	5.9
72.5°	1.5	5.6	5.6	5.2	5.2
75°	1.5	4.8	4.8	4.5	4.5
77.5°	1.5	4.5	4.5	4.1	4.1
80°	1.5	4.1	4.1	3.7	3.3
82.5°	1.5	3.7	3.7	3.3	3.0
85°	1.1	3.3	3.3	3.3	2.2
87.5°	1.1	3.0	3.3	3.0	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)