

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: P1059236

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059236
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-S340D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

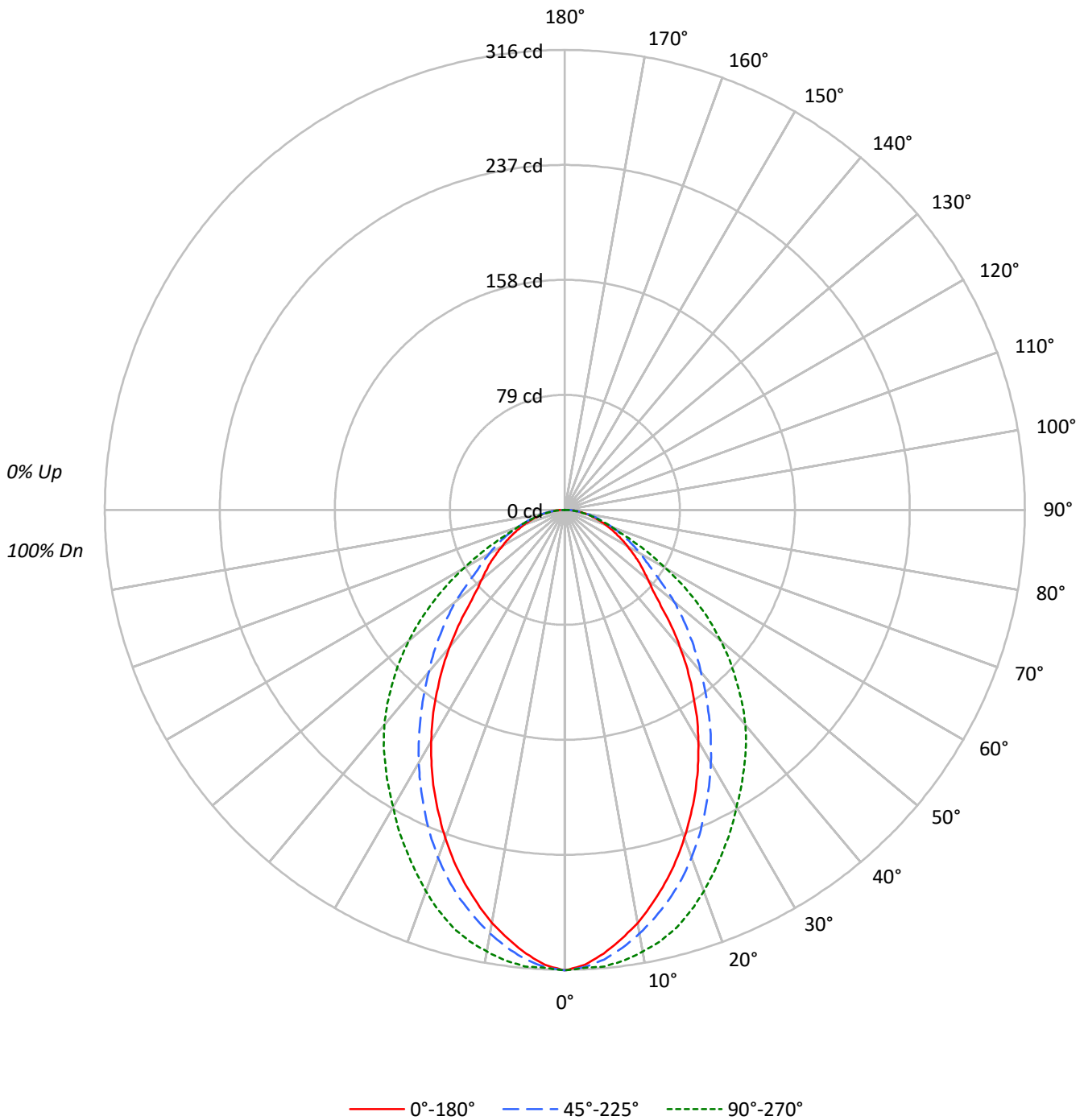
Lumens per Lamp: N/A
Luminaire Lumens: 571.5 lumens
Efficiency: N/A
Efficacy: 45.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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					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	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°	3715	3715	3715
5°	3607	3655	3712
10°	3436	3525	3675
15°	3229	3369	3612
20°	2999	3179	3485
25°	2753	2955	3340
30°	2489	2721	3199
35°	2196	2473	3079
40°	1887	2229	2957
45°	1553	2008	2772
50°	1363	1788	2554
55°	1261	1527	2262
60°	1158	1402	1872
65°	1081	1289	1473
70°	1020	1171	1171
75°	957	1075	1012
80°	906	981	852
85°	849	943	647

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2772 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.3	5.1
10°-20°	78.4	13.7
20°-30°	106.3	18.6
30°-40°	111.2	19.5
40°-50°	96.4	16.9
50°-60°	71.7	12.6
60°-70°	46.0	8.1
70°-80°	24.7	4.3
80°-90°	7.4	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°	214.0	37.4
0°-40°	325.2	56.9
0°-60°	493.4	86.3
0°-90°	571.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	571.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	306	311	310	312	315	29
15°	266	272	277	288	297	74
25°	212	219	228	243	258	97
35°	153	161	172	194	215	96
45°	94	100	121	147	167	74
55°	62	63	75	96	110	55
65°	39	42	46	49	53	39
75°	21	24	24	23	22	22
85°	6	8	7	6	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	316.4	316.4	316.4	316.4	316.4
2.5°	313.0	317.5	314.5	314.5	314.9
5°	306.0	311.2	310.1	312.3	314.9
7.5°	297.5	303.0	303.4	308.6	312.3
10°	288.2	293.8	295.6	303.0	308.2
12.5°	277.1	283.4	286.7	296.0	303.4
15°	265.6	271.9	277.1	288.2	297.1
17.5°	253.3	259.6	266.3	278.9	288.6
20°	240.0	246.7	254.4	267.1	278.9
22.5°	226.3	233.3	241.5	255.2	268.5
25°	212.5	219.2	228.1	243.3	257.8
27.5°	198.1	205.1	214.4	231.1	247.4
30°	183.6	190.6	200.7	218.5	235.9
32.5°	168.8	175.8	186.6	206.6	225.5
35°	153.2	160.6	172.5	194.4	214.8
37.5°	138.3	145.4	158.7	182.9	204.4
40°	123.1	130.6	145.4	171.4	192.9
42.5°	108.3	115.7	133.2	159.1	180.3
45°	93.5	100.5	120.9	146.9	166.9
47.5°	82.0	87.2	109.4	133.9	153.9
50°	74.6	76.4	97.9	121.3	139.8
52.5°	67.9	69.4	85.3	108.7	125.4
55°	61.6	63.1	74.6	95.7	110.5
57.5°	55.3	57.1	66.4	82.3	95.7
60°	49.3	51.6	59.7	70.5	79.7
62.5°	44.1	46.7	53.0	59.7	66.0
65°	38.9	42.3	46.4	49.3	53.0
67.5°	34.1	37.8	40.1	40.8	41.2
70°	29.7	33.4	34.1	34.1	34.1
72.5°	25.2	29.3	28.6	28.2	27.8
75°	21.1	24.5	23.7	22.6	22.3
77.5°	17.1	20.0	18.9	18.2	17.1
80°	13.4	15.6	14.5	13.7	12.6
82.5°	10.0	11.5	10.4	9.6	8.5
85°	6.3	7.8	7.0	5.9	4.8
87.5°	3.3	4.5	3.7	3.3	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)