

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: P1059222

Luminaire Tested: S123RDR-S340D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059222
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

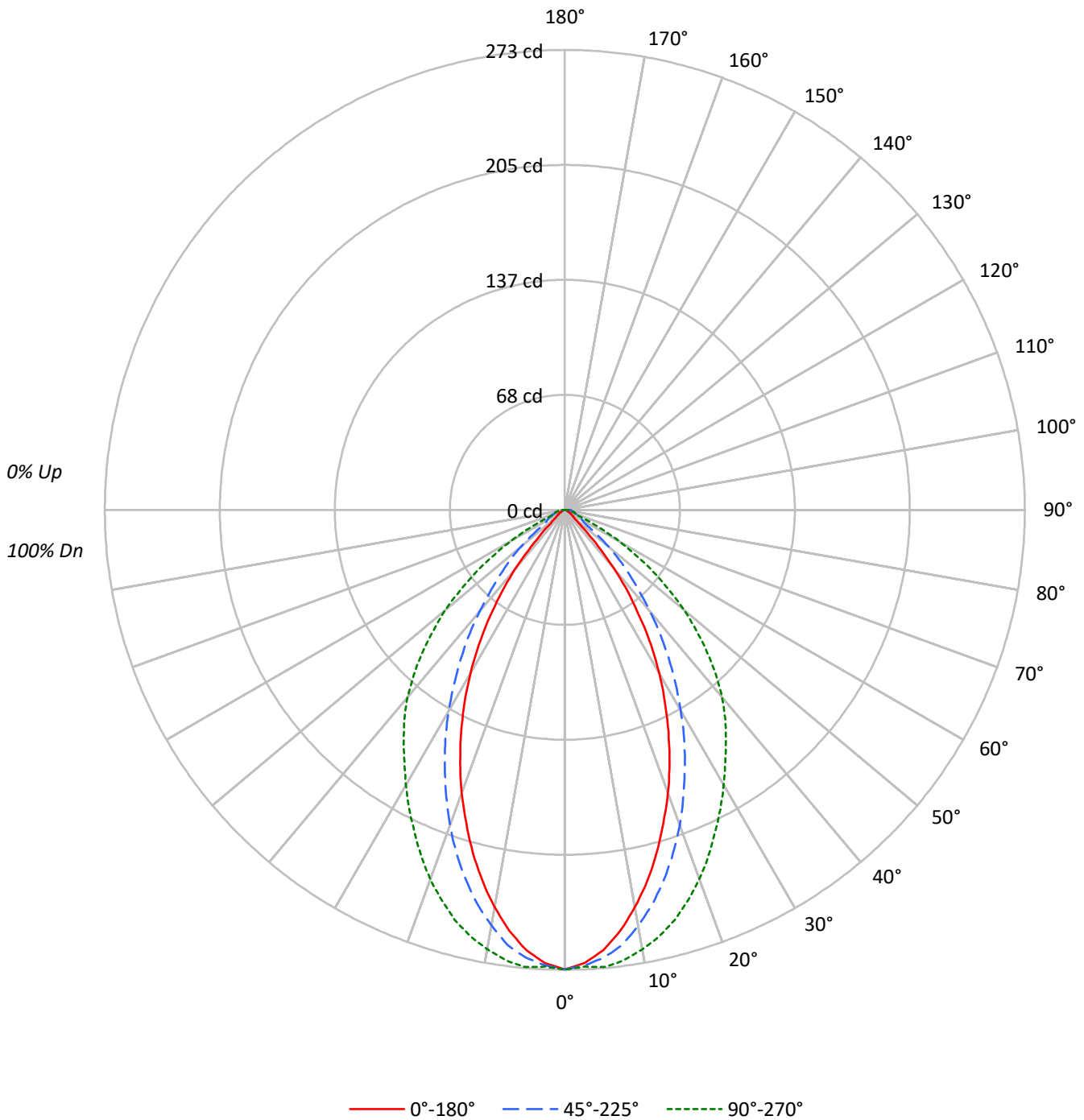
Lumens per Lamp: N/A
Luminaire Lumens: 327.5 lumens
Efficiency: N/A
Efficacy: 26.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059222

CATALOG NUMBER: S123RDR-S340D935-X4F0-XX-UDD-BVL-W

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	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	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	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
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	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3203	3203	3203
5°	3093	3144	3211
10°	2856	2988	3159
15°	2563	2763	3063
20°	2236	2490	2917
25°	1885	2183	2735
30°	1516	1867	2557
35°	1110	1537	2390
40°	693	1197	2226
45°	262	893	1983
50°	124	616	1690
55°	96	338	1306
60°	68	287	860
65°	50	250	358
70°	48	233	233
75°	64	245	245
80°	95	291	264
85°	189	485	391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1983 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.0	7.6
10°-20°	64.2	19.6
20°-30°	79.5	24.3
30°-40°	71.3	21.8
40°-50°	46.7	14.3
50°-60°	23.4	7.1
60°-70°	9.1	2.8
70°-80°	5.1	1.6
80°-90°	3.2	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°	168.7	51.5
0°-40°	240.0	73.3
0°-60°	310.1	94.7
0°-90°	327.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	327.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	273	273	273	273	273	
5°	262	267	267	270	272	24
15°	211	219	227	242	252	59
25°	146	154	168	192	211	66
35°	77	88	107	139	167	48
45°	16	26	54	92	119	15
55°	5	6	16	45	64	4
65°	2	5	9	12	13	2
75°	1	5	5	5	5	1
85°	1	4	4	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	272.8	272.8	272.8	272.8	272.8
2.5°	269.2	273.2	270.6	271.0	271.4
5°	262.4	266.7	266.7	269.6	272.4
7.5°	252.0	257.0	260.6	265.6	269.6
10°	239.5	245.6	250.6	259.5	264.9
12.5°	225.8	233.4	239.8	251.6	259.2
15°	210.8	219.4	227.3	242.3	252.0
17.5°	194.7	203.3	213.7	231.2	243.0
20°	178.9	187.5	199.3	219.0	233.4
22.5°	162.4	171.4	183.9	205.8	222.6
25°	145.5	154.5	168.5	192.5	211.1
27.5°	128.7	137.7	153.4	179.6	200.0
30°	111.8	120.8	137.7	165.6	188.6
32.5°	95.0	104.7	122.2	152.7	177.1
35°	77.4	87.8	107.2	139.4	166.7
37.5°	61.3	71.0	92.8	128.0	156.3
40°	45.2	55.6	78.1	116.9	145.2
42.5°	29.4	40.5	64.9	104.7	132.6
45°	15.8	25.5	53.8	92.1	119.4
47.5°	8.6	14.0	43.4	78.9	105.7
50°	6.8	7.9	33.7	67.4	92.5
52.5°	5.7	6.5	24.0	56.6	77.8
55°	4.7	5.7	16.5	45.2	63.8
57.5°	3.9	5.0	12.9	35.1	49.8
60°	2.9	4.3	12.2	25.8	36.6
62.5°	2.2	4.7	10.8	17.9	24.0
65°	1.8	5.4	9.0	11.8	12.9
67.5°	1.4	5.7	7.9	7.5	7.5
70°	1.4	5.4	6.8	6.5	6.8
72.5°	1.4	5.7	6.1	5.7	6.1
75°	1.4	5.4	5.4	5.4	5.4
77.5°	1.4	5.0	5.0	4.7	4.7
80°	1.4	4.3	4.3	4.3	3.9
82.5°	1.4	3.9	3.9	3.9	3.2
85°	1.4	3.6	3.6	3.6	2.9
87.5°	1.1	3.2	3.6	3.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)