

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: P1059228

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059228
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D935-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

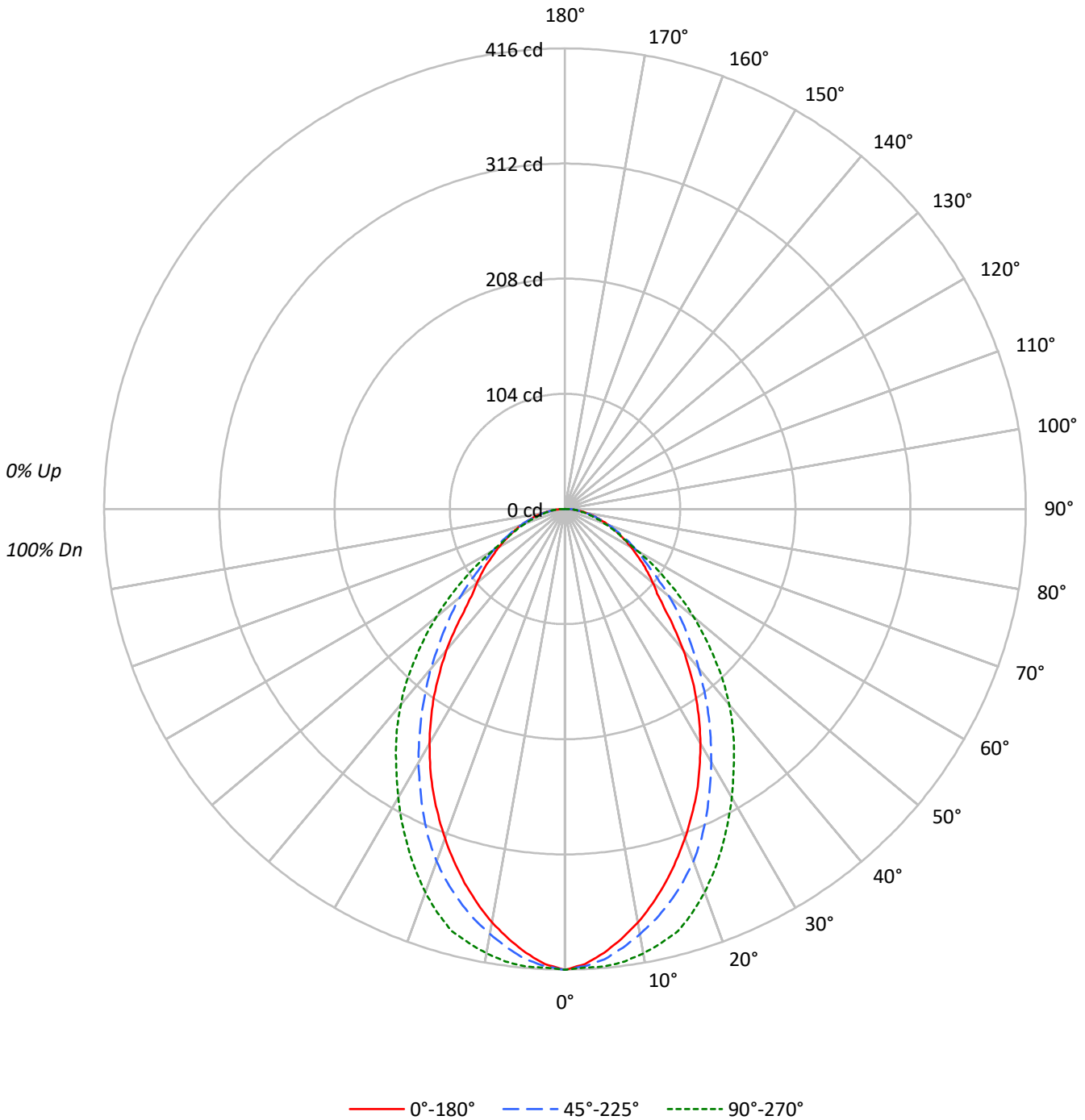
Lumens per Lamp: N/A
Luminaire Lumens: 731.3 lumens
Efficiency: N/A
Efficacy: 58.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059228

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

Luminous Intensity Polar Plot





TEST NUMBER: P1059228

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

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4887	4887	4887
5°	4746	4813	4888
10°	4523	4650	4860
15°	4254	4463	4798
20°	3956	4234	4605
25°	3652	3926	4353
30°	3317	3584	4084
35°	2952	3234	3815
40°	2548	2882	3536
45°	2106	2552	3170
50°	1891	2251	2768
55°	1752	1920	2295
60°	1616	1750	1759
65°	1503	1581	1473
70°	1415	1439	1291
75°	1334	1284	1139
80°	1258	1163	1068
85°	1213	1307	1213

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3170 cd/sqm



TEST NUMBER: P1059228

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	5.3
10°-20°	103.8	14.2
20°-30°	140.5	19.2
30°-40°	144.4	19.7
40°-50°	121.2	16.6
50°-60°	86.9	11.9
60°-70°	55.3	7.6
70°-80°	30.4	4.2
80°-90°	10.1	1.4
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°	282.9	38.7
0°-40°	427.2	58.4
0°-60°	635.4	86.9
0°-90°	731.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	731.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	403	410	408	411	415	38
15°	350	360	367	383	395	98
25°	282	293	303	320	336	129
35°	206	217	226	246	266	128
45°	127	138	154	176	191	100
55°	86	87	94	106	112	76
65°	54	57	57	54	53	54
75°	29	32	28	26	25	31
85°	9	9	10	10	9	10
90°	0	0	0	0	0	



TEST NUMBER: P1059228

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	416.2	416.2	416.2	416.2	416.2
2.5°	411.5	417.3	413.3	413.7	414.7
5°	402.6	409.7	408.3	411.2	414.7
7.5°	391.5	399.3	399.7	406.5	412.2
10°	379.3	387.5	390.0	400.4	407.6
12.5°	365.0	373.9	379.3	392.2	401.5
15°	349.9	359.6	367.1	382.9	394.7
17.5°	333.4	343.8	353.5	370.3	382.5
20°	316.6	327.7	338.8	354.6	368.5
22.5°	299.1	310.5	322.0	337.4	352.8
25°	281.9	292.6	303.0	319.5	336.0
27.5°	263.2	274.4	283.3	301.6	318.8
30°	244.6	255.7	264.3	283.3	301.2
32.5°	225.3	236.7	244.6	264.3	282.9
35°	205.9	217.0	225.6	245.7	266.1
37.5°	185.5	197.7	206.3	228.9	248.9
40°	166.2	177.6	188.0	211.7	230.7
42.5°	146.1	157.9	169.8	194.1	211.7
45°	126.8	137.9	153.7	175.9	190.9
47.5°	112.8	120.0	138.2	156.9	171.2
50°	103.5	106.4	123.2	139.7	151.5
52.5°	94.2	96.3	107.8	122.8	131.8
55°	85.6	87.4	93.8	106.4	112.1
57.5°	76.3	78.1	83.5	90.6	93.8
60°	68.8	70.2	74.5	75.6	74.9
62.5°	61.2	63.4	65.5	63.0	62.0
65°	54.1	57.3	56.9	53.7	53.0
67.5°	47.6	50.9	49.1	45.8	44.8
70°	41.2	44.4	41.9	38.7	37.6
72.5°	35.1	38.7	34.7	31.9	31.2
75°	29.4	32.2	28.3	26.1	25.1
77.5°	24.0	26.1	22.6	20.8	20.1
80°	18.6	20.1	17.2	16.1	15.8
82.5°	13.6	14.3	12.5	13.3	12.9
85°	9.0	9.3	9.7	10.0	9.0
87.5°	4.3	6.1	6.1	5.7	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)