

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: P1059202

Luminaire Tested: S123RDR-S340D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059202
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D927-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

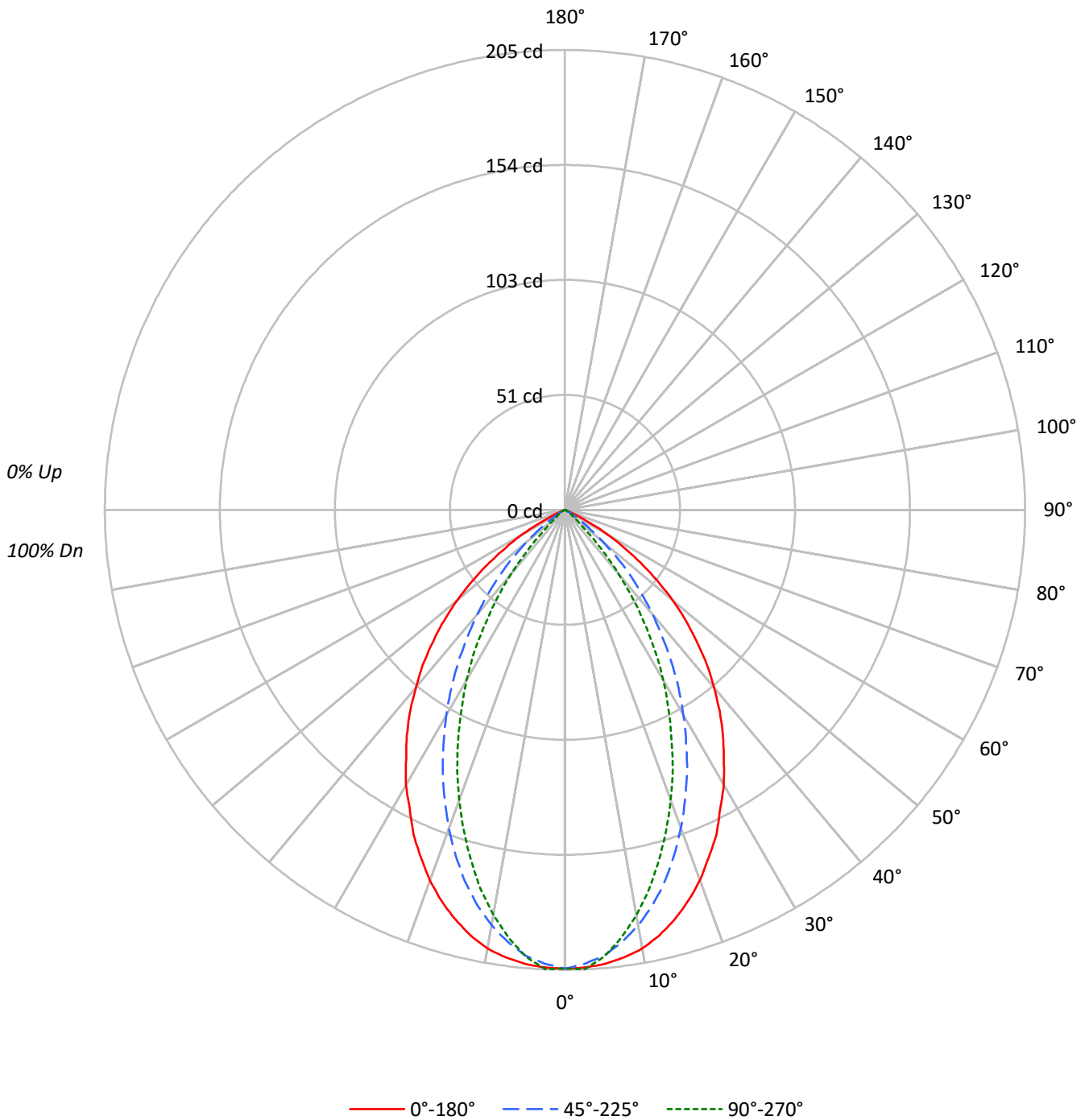
Lumens per Lamp: N/A
Luminaire Lumens: 233.3 lumens
Efficiency: N/A
Efficacy: 18.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059202

CATALOG NUMBER: S123RDR-S340D927-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1059202

CATALOG NUMBER: S123RDR-S340D927-X4F0-XX-UDD-BVL-B

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2401	2401	2401
5°	2395	2352	2356
10°	2368	2242	2187
15°	2298	2086	1966
20°	2197	1888	1719
25°	2069	1669	1455
30°	1920	1433	1188
35°	1760	1185	883
40°	1580	929	566
45°	1378	678	236
50°	1144	404	90
55°	843	168	68
60°	510	61	38
65°	136	36	19
70°	0	10	10
75°	0	0	14
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1378 cd/sqm



TEST NUMBER: P1059202

CATALOG NUMBER: S123RDR-S340D927-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.8	8.1
10°-20°	48.6	20.8
20°-30°	60.6	25.9
30°-40°	54.1	23.2
40°-50°	34.2	14.6
50°-60°	14.3	6.1
60°-70°	2.7	1.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	128.0	54.8
0°-40°	182.1	78.0
0°-60°	230.6	98.8
0°-90°	233.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	233.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	204	204	204	204	204	
5°	203	203	200	200	200	19
15°	189	184	172	164	162	53
25°	160	147	129	118	112	73
35°	123	105	83	68	62	77
45°	83	64	41	22	14	64
55°	41	28	8	3	3	37
65°	5	4	1	1	1	7
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1059202

CATALOG NUMBER: S123RDR-S340D927-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	204.5	204.5	204.5	204.5	204.5
2.5°	204.2	204.5	202.5	204.5	204.8
5°	203.2	202.8	199.5	200.2	199.9
7.5°	201.2	200.2	194.3	193.0	192.3
10°	198.6	195.9	188.0	184.7	183.4
12.5°	194.3	190.7	180.5	175.2	173.2
15°	189.0	184.4	171.6	164.3	161.7
17.5°	182.8	176.2	161.7	153.8	149.8
20°	175.8	166.6	151.1	141.6	137.6
22.5°	167.6	157.4	139.9	129.7	125.5
25°	159.7	146.9	128.8	117.6	112.3
27.5°	149.8	136.3	116.9	105.4	99.8
30°	141.6	126.1	105.7	92.9	87.6
32.5°	131.7	115.6	94.2	80.0	75.1
35°	122.8	105.0	82.7	67.8	61.6
37.5°	113.3	94.8	71.1	55.6	49.7
40°	103.1	84.6	60.6	43.5	36.9
42.5°	93.8	74.4	50.1	32.3	25.7
45°	83.0	64.5	40.8	21.7	14.2
47.5°	73.1	55.3	31.0	12.2	7.6
50°	62.6	45.8	22.1	6.3	4.9
52.5°	51.7	36.6	14.5	4.3	4.0
55°	41.2	28.3	8.2	3.3	3.3
57.5°	31.0	20.4	4.3	2.6	2.3
60°	21.7	13.5	2.6	2.0	1.6
62.5°	12.5	7.9	2.0	1.3	1.3
65°	4.9	3.6	1.3	0.7	0.7
67.5°	0.3	1.0	0.7	0.3	0.3
70°	0.0	0.0	0.3	0.3	0.3
72.5°	0.0	0.0	0.3	0.3	0.3
75°	0.0	0.0	0.0	0.0	0.3
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)