

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: P1059204

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059204  
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-S340D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

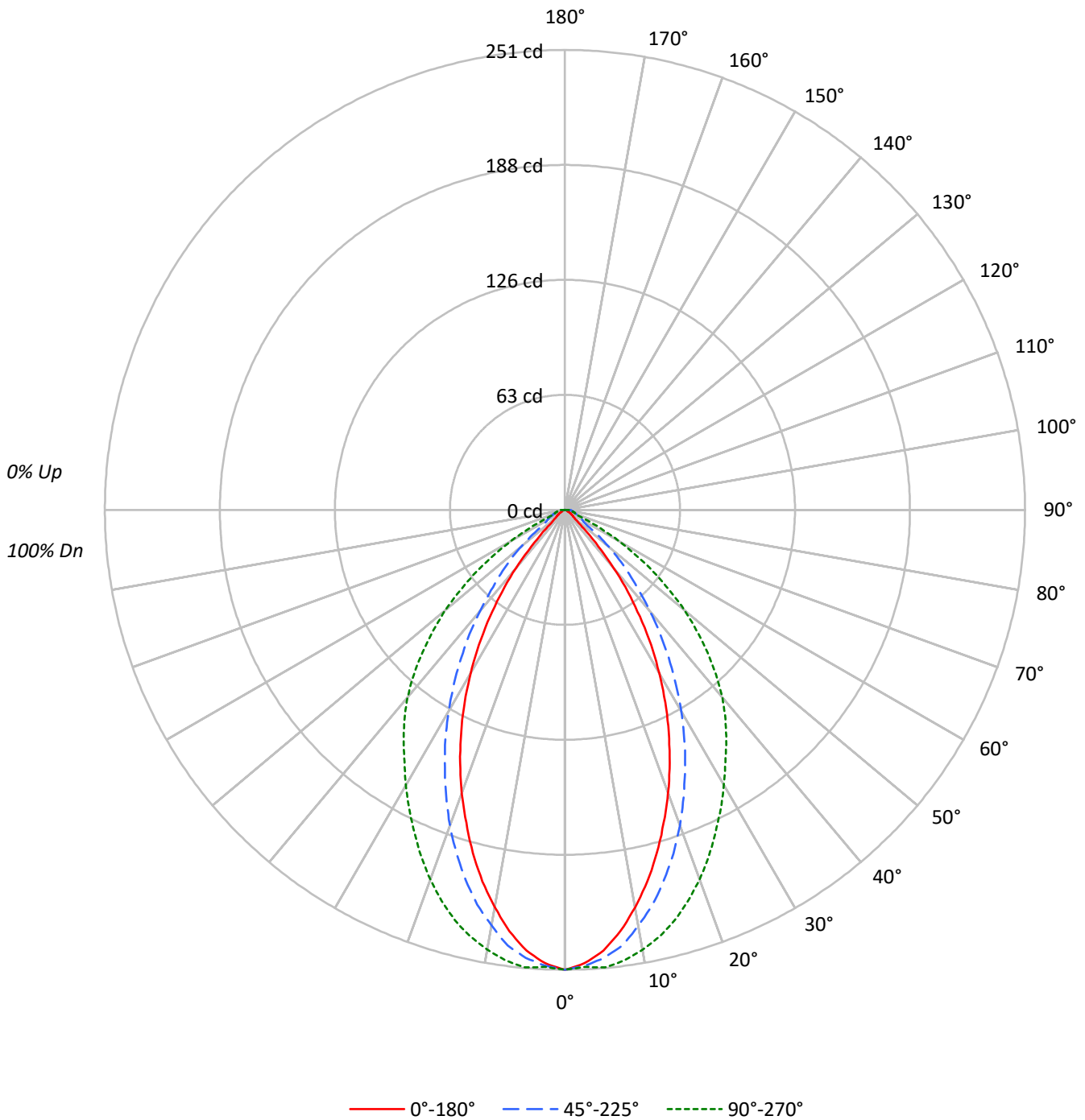
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 301.3 lumens  
Efficiency: N/A  
Efficacy: 24.1 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: P1059204

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

### Luminous Intensity Polar Plot





TEST NUMBER: P1059204

CATALOG NUMBER: S123RDR-S340D927-X4F0-XX-UDD-BVL-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	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°	2947	2947	2947
5°	2845	2893	2955
10°	2627	2748	2906
15°	2357	2542	2819
20°	2057	2292	2683
25°	1735	2008	2517
30°	1395	1718	2352
35°	1021	1413	2199
40°	638	1102	2048
45°	241	822	1823
50°	115	566	1555
55°	88	311	1202
60°	61	263	789
65°	44	228	331
70°	45	216	216
75°	59	222	222
80°	88	270	243
85°	175	445	350

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1823 cd/sqm



TEST NUMBER: P1059204

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.0	7.6
10°-20°	59.1	19.6
20°-30°	73.1	24.3
30°-40°	65.6	21.8
40°-50°	43.0	14.3
50°-60°	21.5	7.1
60°-70°	8.4	2.8
70°-80°	4.7	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°	155.3	51.5
0°-40°	220.8	73.3
0°-60°	285.3	94.7
0°-90°	301.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	301.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	251	251	251	251	251	
5°	241	245	245	248	251	22
15°	194	202	209	223	232	54
25°	134	142	155	177	194	61
35°	71	81	99	128	153	44
45°	14	23	50	85	110	14
55°	4	5	15	42	59	4
65°	2	5	8	11	12	2
75°	1	5	5	5	5	1
85°	1	3	3	3	3	1
90°	0	0	0	0	0	



TEST NUMBER: P1059204

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	251.0	251.0	251.0	251.0	251.0
2.5°	247.7	251.3	249.0	249.3	249.7
5°	241.4	245.4	245.4	248.0	250.7
7.5°	231.9	236.5	239.8	244.4	248.0
10°	220.3	225.9	230.5	238.8	243.7
12.5°	207.8	214.7	220.7	231.5	238.5
15°	193.9	201.9	209.1	223.0	231.9
17.5°	179.1	187.0	196.6	212.7	223.6
20°	164.6	172.5	183.4	201.5	214.7
22.5°	149.4	157.7	169.2	189.3	204.8
25°	133.9	142.2	155.0	177.1	194.3
27.5°	118.4	126.7	141.2	165.2	184.0
30°	102.9	111.2	126.7	152.4	173.5
32.5°	87.4	96.3	112.5	140.5	162.9
35°	71.2	80.8	98.6	128.3	153.4
37.5°	56.4	65.3	85.4	117.7	143.8
40°	41.6	51.1	71.9	107.5	133.6
42.5°	27.0	37.3	59.7	96.3	122.0
45°	14.5	23.4	49.5	84.8	109.8
47.5°	7.9	12.9	39.9	72.6	97.3
50°	6.3	7.3	31.0	62.0	85.1
52.5°	5.3	5.9	22.1	52.1	71.6
55°	4.3	5.3	15.2	41.6	58.7
57.5°	3.6	4.6	11.9	32.3	45.8
60°	2.6	4.0	11.2	23.7	33.6
62.5°	2.0	4.3	9.9	16.5	22.1
65°	1.6	4.9	8.2	10.9	11.9
67.5°	1.3	5.3	7.3	6.9	6.9
70°	1.3	4.9	6.3	5.9	6.3
72.5°	1.3	5.3	5.6	5.3	5.6
75°	1.3	4.9	4.9	4.9	4.9
77.5°	1.3	4.6	4.6	4.3	4.3
80°	1.3	4.0	4.0	4.0	3.6
82.5°	1.3	3.6	3.6	3.6	3.0
85°	1.3	3.3	3.3	3.3	2.6
87.5°	1.0	3.0	3.3	3.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)