

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: P1059226

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059226  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)  
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-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

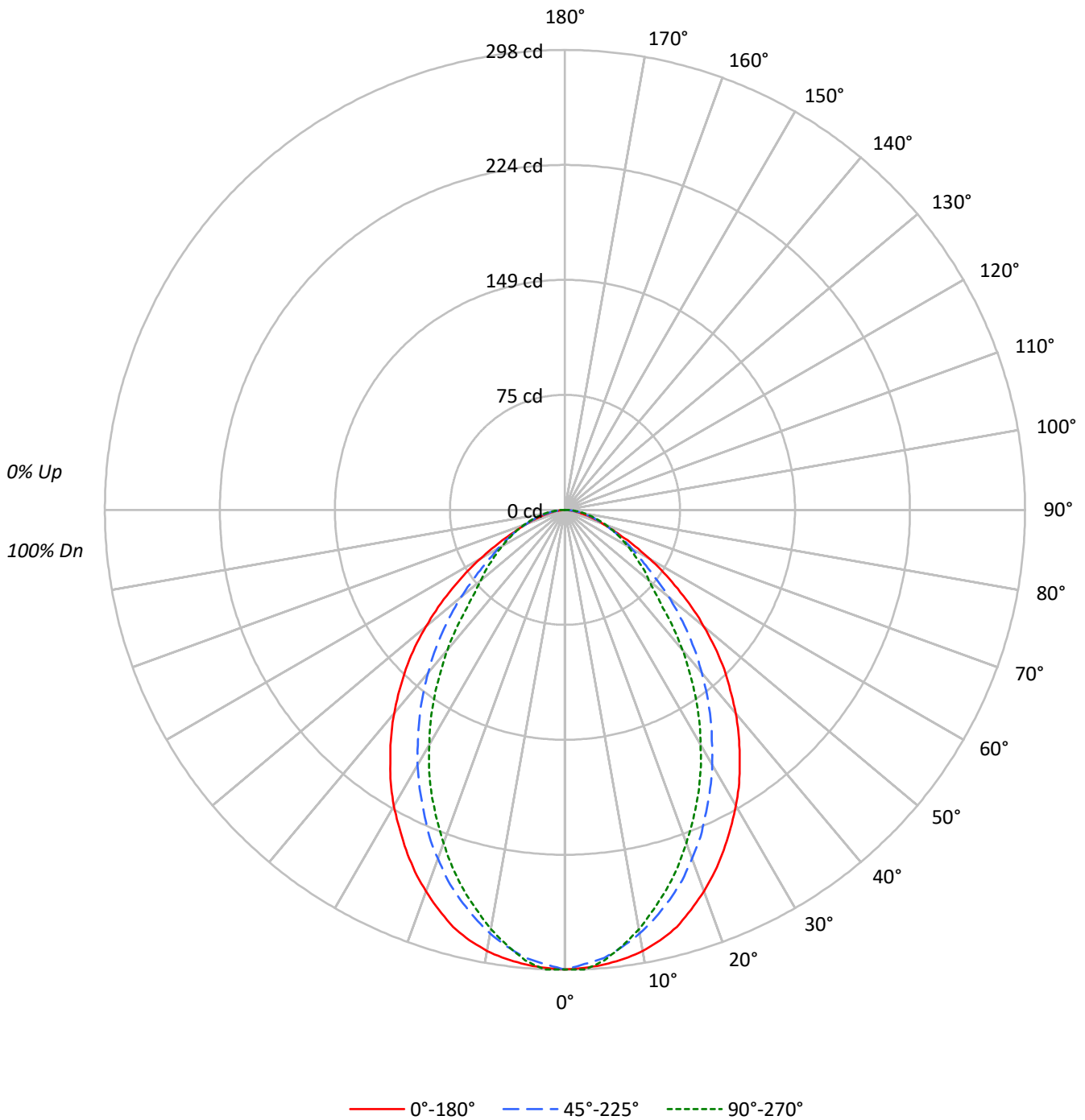
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 520.9 lumens  
Efficiency: N/A  
Efficacy: 41.7 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 0.95 / 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

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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3497	3497	3497
5°	3484	3434	3455
10°	3461	3324	3291
15°	3403	3180	3094
20°	3288	3005	2872
25°	3154	2801	2643
30°	3003	2587	2382
35°	2827	2355	2109
40°	2640	2112	1816
45°	2420	1867	1491
50°	2145	1602	1295
55°	1824	1341	1187
60°	1489	1170	1101
65°	1134	1034	1025
70°	886	920	958
75°	712	830	894
80°	534	676	825
85°	283	431	728

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2420 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.6	5.3
10°-20°	74.4	14.3
20°-30°	101.1	19.4
30°-40°	104.8	20.1
40°-50°	88.4	17.0
50°-60°	62.7	12.0
60°-70°	38.4	7.4
70°-80°	19.1	3.7
80°-90°	4.3	0.8
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°	203.1	39.0
0°-40°	307.9	59.1
0°-60°	459.1	88.1
0°-90°	520.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	520.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	298	298	298	298	298	
5°	296	296	291	293	293	28
15°	280	274	262	257	254	79
25°	243	233	216	208	204	112
35°	197	182	164	153	147	123
45°	146	130	112	97	90	112
55°	89	80	66	60	58	80
65°	41	39	37	37	37	42
75°	16	17	18	19	20	17
85°	2	2	3	5	5	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	297.8	297.8	297.8	297.8	297.8
2.5°	297.1	297.4	294.6	297.8	298.1
5°	295.6	295.6	291.3	293.1	293.1
7.5°	293.5	292.8	285.6	285.6	284.9
10°	290.3	288.1	278.8	277.0	276.0
12.5°	285.6	282.0	270.6	267.4	265.2
15°	279.9	274.5	261.6	257.0	254.5
17.5°	271.7	266.3	252.0	245.5	242.7
20°	263.1	255.2	240.5	234.1	229.8
22.5°	253.8	243.7	229.4	221.5	216.9
25°	243.4	232.6	216.2	208.3	204.0
27.5°	232.3	220.5	203.7	194.7	190.4
30°	221.5	207.9	190.8	180.7	175.7
32.5°	210.1	194.7	177.2	166.8	161.8
35°	197.2	182.2	164.3	152.8	147.1
37.5°	185.0	169.7	151.0	138.9	132.4
40°	172.2	156.8	137.8	125.3	118.5
42.5°	158.6	143.9	125.3	110.6	104.2
45°	145.7	130.3	112.4	97.0	89.8
47.5°	131.7	117.4	99.9	84.1	79.1
50°	117.4	104.2	87.7	73.4	70.9
52.5°	103.4	92.3	75.5	66.2	65.1
55°	89.1	79.8	65.5	59.8	58.0
57.5°	75.9	69.1	56.2	53.3	52.6
60°	63.4	57.6	49.8	48.0	46.9
62.5°	51.2	48.0	43.3	42.6	41.9
65°	40.8	39.4	37.2	37.2	36.9
67.5°	32.2	32.2	31.9	32.6	32.2
70°	25.8	26.1	26.8	27.6	27.9
72.5°	20.4	21.5	22.2	23.3	23.6
75°	15.7	16.8	18.3	19.0	19.7
77.5°	11.5	12.5	14.0	15.0	15.7
80°	7.9	8.6	10.0	11.5	12.2
82.5°	5.0	5.4	6.4	7.9	8.6
85°	2.1	2.5	3.2	4.7	5.4
87.5°	0.0	0.0	0.4	1.4	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)