

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: P1059210

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059210  
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-S340D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

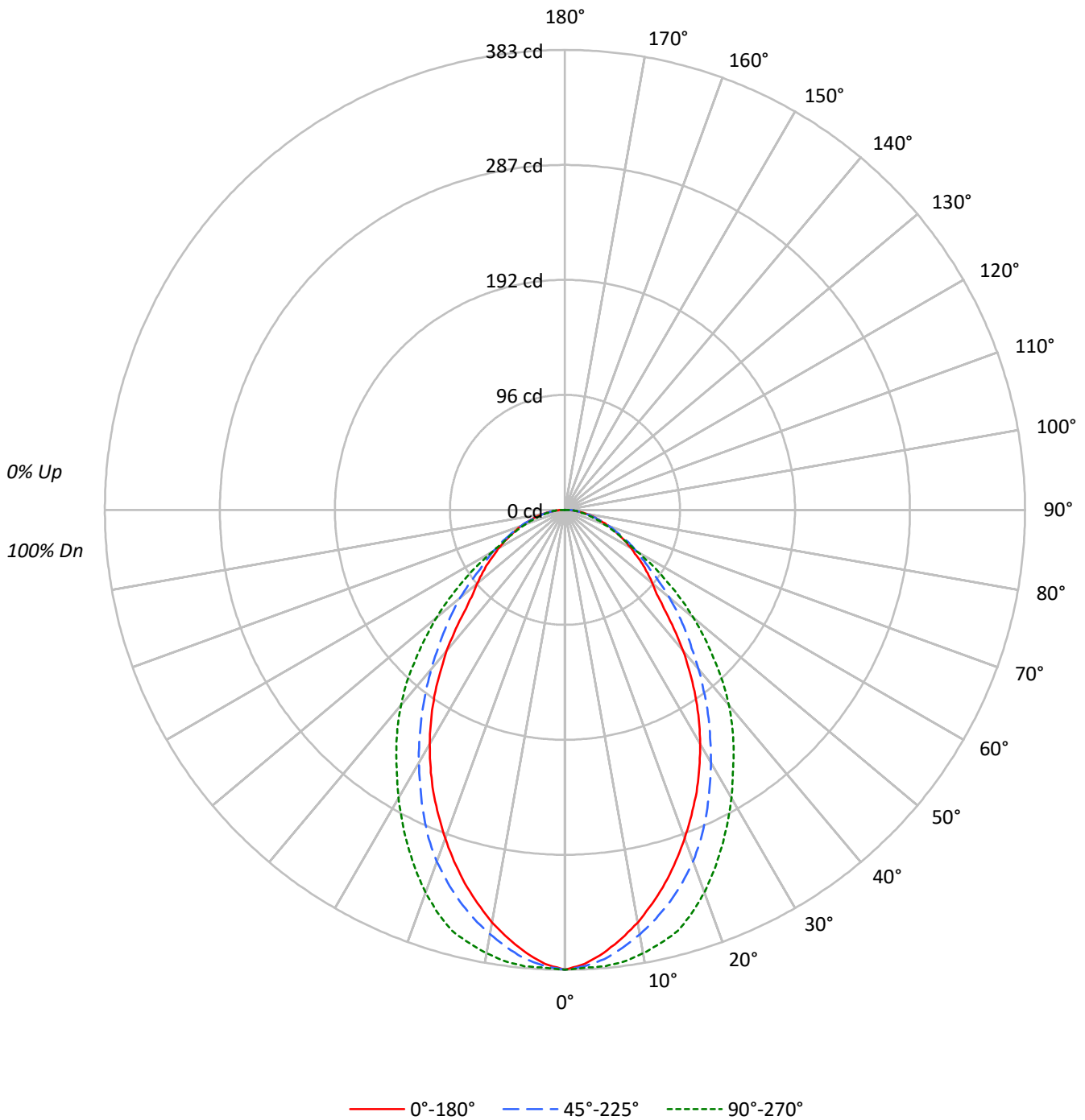
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 672.9 lumens  
Efficiency: N/A  
Efficacy: 53.8 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

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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	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°	4496	4496	4496
5°	4366	4428	4498
10°	4161	4279	4471
15°	3914	4107	4414
20°	3640	3895	4237
25°	3360	3612	4005
30°	3052	3298	3757
35°	2716	2976	3509
40°	2344	2652	3253
45°	1938	2348	2916
50°	1739	2072	2547
55°	1613	1767	2111
60°	1487	1609	1618
65°	1384	1456	1356
70°	1301	1325	1188
75°	1225	1180	1048
80°	1156	1068	981
85°	1105	1199	1105

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2916 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.5	5.3
10°-20°	95.5	14.2
20°-30°	129.3	19.2
30°-40°	132.8	19.7
40°-50°	111.6	16.6
50°-60°	80.0	11.9
60°-70°	50.9	7.6
70°-80°	28.0	4.2
80°-90°	9.3	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°	260.3	38.7
0°-40°	393.1	58.4
0°-60°	584.6	86.9
0°-90°	672.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	672.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	383	383	383	383	383	
5°	370	377	376	378	382	35
15°	322	331	338	352	363	90
25°	259	269	279	294	309	119
35°	190	200	208	226	245	118
45°	117	127	141	162	176	92
55°	79	80	86	98	103	70
65°	50	53	52	49	49	50
75°	27	30	26	24	23	29
85°	8	9	9	9	8	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	382.9	382.9	382.9	382.9	382.9
2.5°	378.6	383.9	380.3	380.6	381.6
5°	370.4	377.0	375.7	378.3	381.6
7.5°	360.2	367.4	367.8	374.0	379.3
10°	349.0	356.6	358.9	368.4	375.0
12.5°	335.8	344.0	349.0	360.8	369.4
15°	322.0	330.9	337.8	352.3	363.1
17.5°	306.8	316.4	325.2	340.7	351.9
20°	291.3	301.5	311.7	326.2	339.1
22.5°	275.2	285.7	296.3	310.4	324.6
25°	259.3	269.2	278.8	293.9	309.1
27.5°	242.2	252.4	260.7	277.5	293.3
30°	225.1	235.3	243.2	260.7	277.1
32.5°	207.3	217.8	225.1	243.2	260.3
35°	189.5	199.7	207.6	226.1	244.8
37.5°	170.7	181.9	189.8	210.6	229.0
40°	152.9	163.4	173.0	194.8	212.2
42.5°	134.4	145.3	156.2	178.6	194.8
45°	116.7	126.9	141.4	161.8	175.6
47.5°	103.8	110.4	127.2	144.3	157.5
50°	95.2	97.9	113.4	128.5	139.4
52.5°	86.7	88.6	99.2	113.0	121.3
55°	78.8	80.4	86.3	97.9	103.1
57.5°	70.2	71.8	76.8	83.4	86.3
60°	63.3	64.6	68.5	69.5	68.9
62.5°	56.4	58.3	60.3	58.0	57.0
65°	49.8	52.7	52.4	49.4	48.8
67.5°	43.8	46.8	45.1	42.2	41.2
70°	37.9	40.9	38.6	35.6	34.6
72.5°	32.3	35.6	32.0	29.3	28.7
75°	27.0	29.7	26.0	24.1	23.1
77.5°	22.1	24.1	20.8	19.1	18.5
80°	17.1	18.5	15.8	14.8	14.5
82.5°	12.5	13.2	11.5	12.2	11.9
85°	8.2	8.6	8.9	9.2	8.2
87.5°	4.0	5.6	5.6	5.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)