

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P892214

Luminaire Tested: **1027N**

Issue Date: 10/24/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P892214  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P222643)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 10/24/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: 1027N  
Description: Define Patient, Downlight with Narrow 25deg

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

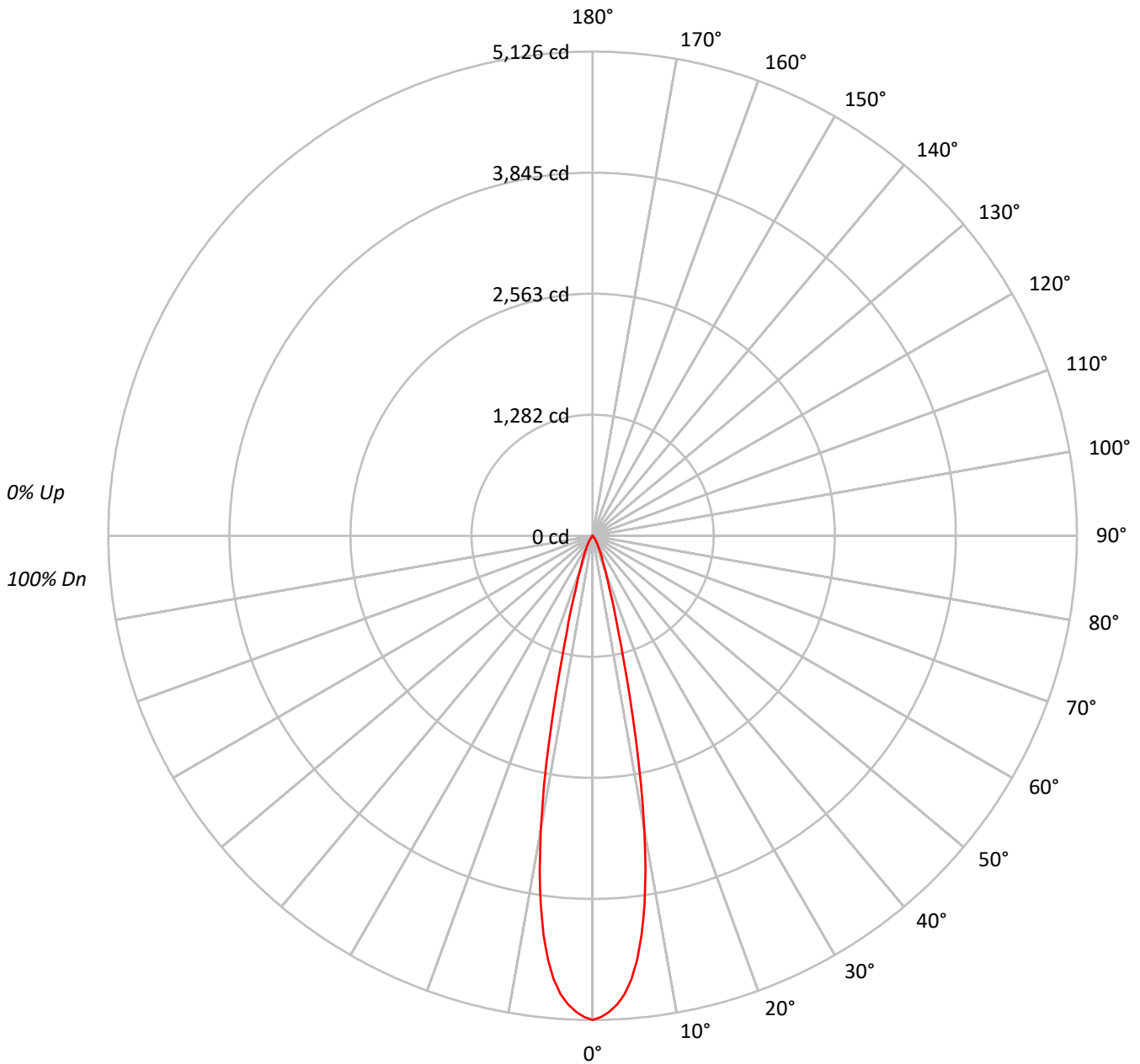
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 864.0 lumens  
Efficiency: N/A  
Efficacy: 83.9 lumens/watt  
Spacing Criteria (0/90/45): 0.39 / 0.39 / 0.35  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 10.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 25 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	100	99	97
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97	97	96	95
2	112	109	106	104	110	107	104	102	104	102	100	101	99	98	98	97	96	95	95	93	92
3	109	105	101	99	107	103	100	98	101	98	96	99	97	95	96	95	93	92	92	91	90
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	95	93	91	90	89	88	88
5	103	98	94	91	102	97	94	91	95	92	90	94	91	89	93	90	89	88	87	86	86
6	101	95	91	89	99	94	91	88	93	90	88	92	89	87	91	88	87	86	85	84	84
7	98	92	89	86	97	92	88	86	91	88	85	90	87	85	89	87	85	84	83	82	82
8	96	90	86	84	95	90	86	84	89	86	83	88	85	83	87	85	83	82	81	80	80
9	94	88	84	82	93	88	84	82	87	84	82	86	83	81	85	83	81	80	79	79	79
10	92	86	82	80	91	86	82	80	85	82	80	84	82	80	84	81	79	79	79	79	79

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

	0°
0°	2529074
5°	2335180
10°	1580582
15°	537756
20°	197522
25°	104685
30°	53780
35°	25116
40°	8244
45°	4186
50°	1919
55°	688
60°	789
65°	0
70°	0
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	401.1	46.4
10°-20°	337.2	39.0
20°-30°	92.5	10.7
30°-40°	27.0	3.1
40°-50°	5.0	0.6
50°-60°	1.1	0.1
60°-70°	0.1	0.0
70°-80°	0.0	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°	830.8	96.2
0°-40°	857.8	99.3
0°-60°	863.9	100.0
0°-90°	864.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	864.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5126	
5°	4715	401
15°	1053	337
25°	192	93
35°	42	27
45°	6	5
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5126.0
1°	5096.2
2°	5043.4
3°	4967.7
4°	4863.9
5°	4715.0
6°	4511.5
7°	4257.1
8°	3946.5
9°	3579.6
10°	3154.9
11°	2689.4
12°	2205.1
13°	1743.0
14°	1349.0
15°	1052.8
17.5°	594.0
20°	376.2
22.5°	268.1
25°	192.3
27.5°	136.1
30°	94.4
32.5°	66.4
35°	41.7
37.5°	17.0
40°	12.8
42.5°	9.4
45°	6.0
47.5°	3.4
50°	2.5
52.5°	1.7
55°	0.8
57.5°	0.8
60°	0.8
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°		0.0
87.5°		0.0



(END OF REPORT)