

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: LUMIERE

Report Number: P221901

Luminaire Tested: **9004-W2-[RW, RI]-LED4097-S-BK-L1-UNV**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P221901
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29491)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 9004-W2-[RW, RI]-LED4097-S-BK-L1-UNV
Description: LUMIERE LANTERRA 9004 LED WALL LUMINAIRE, RECESSED LENS, SPOT OPTIC, BLACK HOUSING.
Light Source: (1) 4000K CCT, 97 CRI LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1645.3 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 0.27 / 0.27 / 0.27
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: General Diffuse

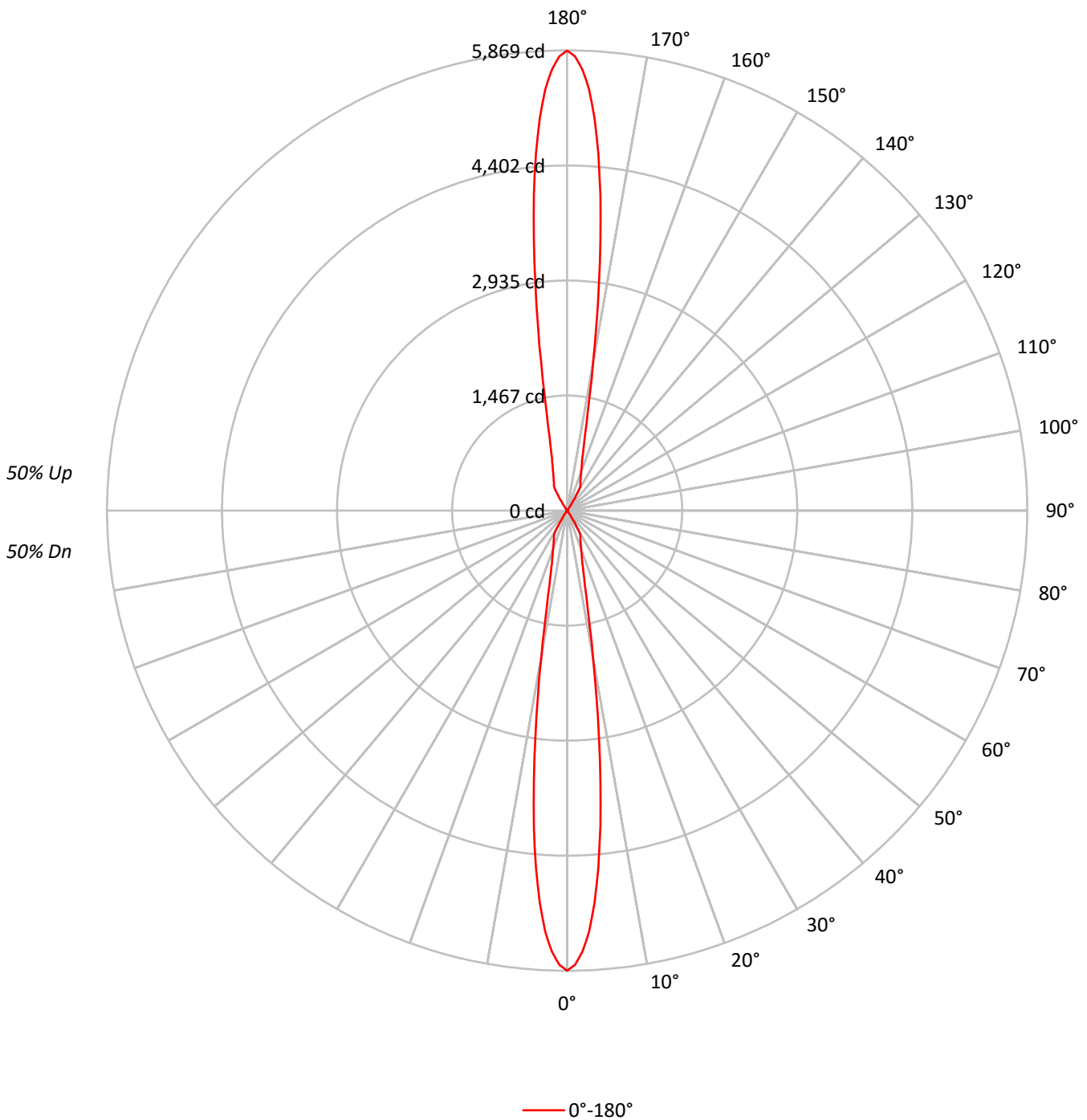
Input Watts (W): 19.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P221901

CATALOG NUMBER: 9004-W2-[RW, RI]-LED4097-S-BK-L1-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P221901

CATALOG NUMBER: 9004-W2-[RW, RI]-LED4097-S-BK-L1-UNV

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	101	98	95	93	93	91	88	86	78	76	75	65	65	64	54	54	53	48
2	95	90	86	82	88	84	80	77	73	70	68	62	61	59	53	52	51	47
3	90	83	78	74	83	78	74	70	68	65	63	59	57	56	51	50	49	45
4	85	77	72	68	79	73	68	64	64	61	58	57	54	53	49	48	47	44
5	81	72	67	62	75	68	63	60	61	57	55	54	52	50	48	46	45	42
6	77	68	62	58	72	65	60	56	58	54	52	52	49	48	46	45	43	41
7	73	64	58	54	69	61	56	53	55	52	49	50	47	45	45	43	42	40
8	70	61	55	51	66	58	53	50	53	49	47	48	46	44	44	42	41	39
9	67	58	52	49	63	56	51	47	51	47	45	47	44	42	42	41	39	38
10	64	55	50	47	61	53	48	45	49	45	43	45	42	41	41	40	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	723866
5°	565546
10°	238210
15°	100944
20°	68348
25°	54275
30°	40179
35°	3644
40°	1336
45°	401
50°	326
55°	366
60°	247
65°	204
70°	108
75°	143
80°	213
85°	0



TEST NUMBER: P221901

CATALOG NUMBER: 9004-W2-[RW, RI]-LED4097-S-BK-L1-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.8	20.9
10°-20°	242.9	14.8
20°-30°	185.5	11.3
30°-40°	45.5	2.8
40°-50°	2.4	0.1
50°-60°	1.4	0.1
60°-70°	0.7	0.0
70°-80°	0.3	0.0
80°-90°	0.1	0.0
90°-100°	0.2	0.0
100°-110°	0.3	0.0
110°-120°	0.7	0.0
120°-130°	1.4	0.1
130°-140°	2.4	0.1
140°-150°	45.5	2.8
150°-160°	185.5	11.3
160°-170°	242.9	14.8
170°-180°	343.8	20.9
0°-30°	772.3	46.9
0°-40°	817.8	49.7
0°-60°	821.6	49.9
0°-90°	822.7	50.0
90°-120°	1.2	0.1
90°-150°	50.5	3.1
90°-180°	823.0	50.0
0°-180°	1645.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	5869	
5°	4568	344
15°	790	243
25°	399	186
35°	24	45
45°	2	2
55°	2	1
65°	1	1
75°	0	0
85°	0	0
90°	0	0
95°	0	0
105°	0	0
115°	1	1
125°	2	1
135°	2	2
145°	24	45
155°	399	186
165°	790	243
175°	4568	344
180°	5869	



TEST NUMBER: P221901

CATALOG NUMBER: 9004-W2-[RW, RI]-LED4097-S-BK-L1-UNV

CANDELA DISTRIBUTION (FULL):

	0°
0°	5868.6
1°	5793.3
2°	5627.6
3°	5373.4
4°	5017.4
5°	4567.6
6°	4050.5
7°	3482.4
8°	2910.3
9°	2386.5
10°	1901.9
11°	1518.1
12°	1237.0
13°	1038.1
14°	896.6
15°	790.5
16°	709.0
17°	649.7
18°	602.6
19°	558.5
20°	520.7
22.5°	449.1
25°	398.8
26°	385.2
27°	373.9
28°	362.6
29°	332.8
30°	282.1
32.5°	127.0
35°	24.2
37.5°	13.3
40°	8.3
42.5°	3.6
45°	2.3
47.5°	2.0
50°	1.7
52.5°	1.7
55°	1.7
57.5°	1.3
60°	1.0
62.5°	1.0
65°	0.7
67.5°	0.3
70°	0.3
72.5°	0.3



TEST NUMBER: P221901

CATALOG NUMBER: 9004-W2-[RW, RI]-LED4097-S-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	0°
75°	0.3
77.5°	0.3
80°	0.3
82.5°	0.3
85°	0.0
87.5°	0.0
90°	0.0
92.5°	0.0
95°	0.0
97.5°	0.3
100°	0.3
102.5°	0.3
105°	0.3
107.5°	0.3
110°	0.3
112.5°	0.3
115°	0.7
117.5°	1.0
120°	1.0
122.5°	1.3
125°	1.7
127.5°	1.7
130°	1.7
132.5°	2.0
135°	2.3
137.5°	3.6
140°	8.3
142.5°	13.3
145°	24.2
147.5°	127.0
150°	282.1
151°	332.8
152°	362.6
153°	373.9
154°	385.2
155°	398.8
157.5°	449.1
160°	520.7
161°	558.5
162°	602.6
163°	649.7
164°	709.0
165°	790.5
166°	896.6
167°	1038.1



TEST NUMBER: P221901

CATALOG NUMBER: 9004-W2-[RW, RI]-LED4097-S-BK-L1-UNV

CANDELA DISTRIBUTION (continued):

	0°
168°	1237.0
169°	1518.1
170°	1901.9
171°	2386.5
172°	2910.3
173°	3482.4
174°	4050.5
175°	4567.6
176°	5017.4
177°	5373.4
178°	5627.6
179°	5793.3
180°	5868.6

(END OF REPORT)