

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: LUMIERE

Report Number: G2-2408-198-1

Luminaire Tested: 1237L-RD-X-12LEDG2-UNV/12-CS

Test Date: 2024-08-16

Test Information

Test Method: LM-79-2019
Report Number: G2-2408-198-1
Test Lab: Cooper Lighting Solutions
Test Date: 2024-08-16
Issue Date: 8/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMIERE
Catalog Number: 1237L-RD-X-12LEDG2-UNV/12-CS
Description: Rio 1237 with louver
Light Source: -
Ballast/Driver: -

Summary

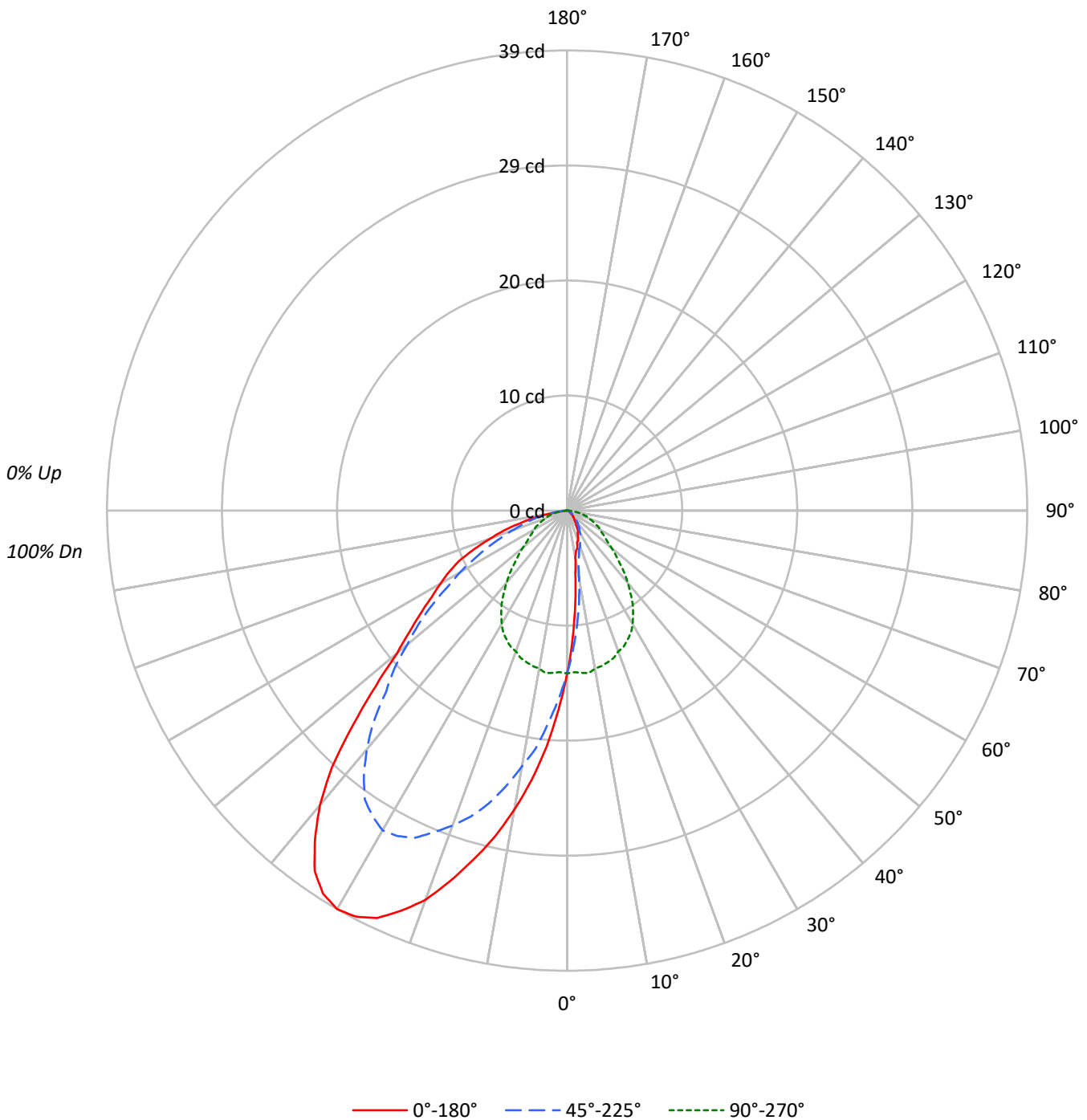
Lumens per Lamp: N/A
Luminaire Lumens: 42.9 lumens
Efficiency: N/A
Efficacy: 4.9 lumens/watt
Spacing Criteria (0/90/45): 1.74 / 1.19 / 1.47
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

Input Watts (W): 8.83
Input Voltage (V): 120.0
Input Current (Ain): 0.0746
Voltage Rise (V): NR
Power Factor: 0.9863
Total Harmonic Distortion (THDi): 12.4%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): 24.5
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	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			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88					86				
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75					73				
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65					63				
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56					54				
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49					47				
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43					41				
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39					37				
8	62	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35					33				
9	58	45	37	32	57	45	37	32	44	37	32	43	36	31	42	36	31					30				
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28					27				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	900	900	900	900	900
5°	517	635	904	1179	1316
10°	265	384	901	1457	1703
15°	223	263	898	1736	2067
20°	187	222	882	1972	2437
25°	151	194	871	2203	2743
30°	128	166	836	2358	2938
35°	104	143	773	2381	2971
40°	85	119	681	2248	2776
45°	65	92	581	2002	2362
50°	51	71	497	1796	1908
55°	45	68	444	1592	1718
60°	39	52	418	1370	1618
65°	31	46	401	1158	1559
70°	19	19	382	954	1316
75°	25	25	378	807	1033
80°	0	0	301	564	601
85°	0	0	299	374	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°
 Vertical Angle: 45°
 Luminance: 2362 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.3	3.1
10°-20°	4.3	9.9
20°-30°	7.5	17.4
30°-40°	9.3	21.7
40°-50°	8.2	19.1
50°-60°	5.9	13.7
60°-70°	4.1	9.5
70°-80°	2.1	4.8
80°-90°	0.4	0.9
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°	13.0	30.4
0°-40°	22.3	52.1
0°-60°	36.4	84.9
0°-90°	42.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	42.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	8	10	14	18	20	1
15°	3	4	13	26	31	1
25°	2	3	12	31	38	1
35°	1	2	10	30	37	1
45°	1	1	6	22	26	1
55°	0	1	4	14	15	0
65°	0	0	3	8	10	0
75°	0	0	2	3	4	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
2.5°	10.8	11.0	10.9	11.3	11.3	11.7	12.1	12.5	12.9	13.5	13.7
5°	7.9	8.1	8.2	8.7	9.0	9.7	10.4	11.4	12.3	13.3	13.8
7.5°	5.3	5.5	5.5	6.0	6.7	7.7	8.9	10.2	11.6	13.1	13.9
10°	4.0	4.1	4.2	4.3	4.8	5.8	7.2	8.9	10.9	12.7	13.6
12.5°	3.5	3.6	3.6	3.8	3.9	4.3	5.6	7.7	10.0	12.3	13.5
15°	3.3	3.3	3.3	3.5	3.6	3.9	4.6	6.4	9.2	11.9	13.3
17.5°	2.8	3.0	2.9	3.1	3.2	3.4	3.9	5.3	8.4	11.5	13.1
20°	2.7	2.7	2.7	2.9	2.9	3.2	3.5	4.3	7.3	11.0	12.7
22.5°	2.4	2.5	2.4	2.6	2.6	2.9	3.2	3.9	6.5	10.4	12.5
25°	2.1	2.2	2.3	2.4	2.5	2.7	3.0	3.6	5.7	10.0	12.1
27.5°	2.0	2.0	2.0	2.1	2.2	2.5	2.8	3.1	5.2	9.4	11.7
30°	1.7	1.8	1.8	1.9	2.0	2.2	2.5	2.9	4.5	8.8	11.1
32.5°	1.4	1.5	1.4	1.5	1.7	1.9	2.2	2.6	3.8	7.9	10.4
35°	1.3	1.4	1.3	1.4	1.6	1.8	2.0	2.4	3.4	7.3	9.7
37.5°	1.0	1.1	1.2	1.2	1.4	1.5	1.8	2.1	2.9	6.5	8.8
40°	1.0	1.0	1.0	1.2	1.2	1.4	1.7	2.0	2.6	5.8	8.0
42.5°	0.8	0.9	0.8	0.9	1.1	1.2	1.5	1.8	2.3	5.0	7.2
45°	0.7	0.7	0.7	0.7	0.8	1.0	1.2	1.5	1.9	4.2	6.3
47.5°	0.7	0.7	0.6	0.7	0.8	0.9	1.1	1.3	1.8	3.7	5.6
50°	0.5	0.5	0.5	0.6	0.6	0.7	0.9	1.2	1.6	3.1	4.9
52.5°	0.4	0.4	0.4	0.5	0.5	0.6	0.8	1.0	1.4	2.6	4.3
55°	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.9	1.3	2.3	3.9
57.5°	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.7	1.1	2.0	3.5
60°	0.3	0.4	0.3	0.4	0.3	0.4	0.5	0.7	1.0	1.8	3.2
62.5°	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.9	1.7	3.0
65°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.7	1.3	2.6
67.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.6	1.1	2.3
70°	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.4	0.9	2.0
72.5°	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.4	0.8	1.8
75°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.6	1.5
77.5°	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.7	1.3
80°	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.4	0.8
82.5°	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
2.5°	13.8	14.4	15.0	15.4	15.9	16.3	16.6	16.7	17.0	16.9
5°	14.3	15.3	16.4	17.2	18.0	19.0	19.5	19.8	20.3	20.1
7.5°	14.5	16.0	17.6	18.9	20.3	21.3	22.2	22.5	23.0	23.0
10°	14.6	16.5	18.7	20.4	22.0	23.5	24.7	25.1	25.7	25.7
12.5°	14.8	17.1	19.7	21.9	23.9	25.5	27.0	27.5	28.3	28.3
15°	14.8	17.8	20.9	23.3	25.7	27.7	29.1	29.9	30.6	30.6
17.5°	14.8	18.2	21.6	24.4	27.2	29.2	31.1	32.0	33.0	32.9
20°	14.6	18.4	22.3	25.5	28.4	30.8	33.0	34.0	35.1	35.1
22.5°	14.4	18.6	22.8	26.4	29.5	32.3	34.5	35.5	36.7	36.7
25°	14.2	18.7	23.2	26.9	30.6	33.4	35.8	36.8	38.0	38.1
27.5°	13.9	18.7	23.4	27.2	31.1	34.1	36.5	37.5	38.8	38.8
30°	13.5	18.4	23.2	27.5	31.3	34.3	36.5	37.7	39.1	39.0
32.5°	12.7	17.8	22.6	27.0	30.7	33.7	35.9	37.1	38.4	38.5
35°	12.2	17.1	22.0	26.3	29.9	32.8	34.8	36.0	37.3	37.3
37.5°	11.3	16.1	21.0	25.0	28.3	31.1	33.0	34.0	35.1	35.1
40°	10.3	15.0	19.6	23.2	26.4	29.0	30.5	31.5	32.6	32.6
42.5°	9.3	13.7	18.0	21.3	24.3	26.4	27.8	28.5	29.5	29.5
45°	8.4	12.3	16.2	19.2	21.7	23.7	24.8	25.1	25.4	25.6
47.5°	7.5	11.2	14.8	17.5	19.9	21.2	21.7	21.6	21.8	22.0
50°	6.7	10.1	13.4	15.9	17.7	18.6	18.6	18.6	18.9	18.8
52.5°	6.1	9.2	12.2	14.3	15.9	16.0	16.0	16.2	16.7	16.8
55°	5.6	8.6	11.2	13.0	14.0	13.8	14.2	14.5	15.1	15.1
57.5°	5.0	7.9	10.3	11.7	12.0	12.0	12.5	13.0	13.5	13.6
60°	4.7	7.4	9.5	10.5	10.5	10.4	11.1	11.7	12.3	12.4
62.5°	4.4	7.0	8.7	9.2	8.9	9.0	10.0	10.7	11.3	11.3
65°	4.0	6.3	7.9	7.8	7.5	7.8	8.9	9.7	10.2	10.1
67.5°	3.6	5.8	6.9	6.6	6.1	6.6	8.0	8.1	8.6	8.5
70°	3.2	5.2	5.8	5.2	5.0	5.7	6.7	6.7	7.1	6.9
72.5°	3.0	4.6	4.7	4.2	4.0	4.8	5.5	5.4	5.6	5.6
75°	2.6	3.9	3.7	3.1	3.2	3.7	4.2	4.0	4.1	4.1
77.5°	2.3	3.2	2.9	2.5	2.4	2.8	3.1	2.9	3.0	2.9
80°	1.8	2.3	2.0	1.5	1.5	1.8	1.9	1.7	1.6	1.6
82.5°	1.3	1.5	1.3	1.0	1.0	1.1	1.0	0.7	0.6	0.6
85°	0.9	0.9	0.7	0.5	0.5	0.3	0.3	0.1	0.1	0.0
87.5°	0.4	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)