

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: G2-1802-569-25

Luminaire Tested: **230-8LED4010-12-BK-LSL**

Test Date: 04/06/18

Test Information

Test Method: LM-79-08
Report Number: G2-1802-569-25
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-569-25)
Test Lab: INNOVATION CENTER(G2)
Test Date: 04/06/18
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 230-8LED4010-12-BK-LSL
Description: CAMBRIA 203 LED LUMINAIRE, 8 WATT, 4000K CCT, 10 DEGREE SPOT OPTIC,
REGRESSED HOOD BLACK, LINEAR SPREAD LENS
Light Source: (1) SORAA 4000K 95 CRI 10°NSP LED
SM16-07-10D-940-03
Ballast/Driver: CHROMA POWER SUPPLY IN0004

Summary

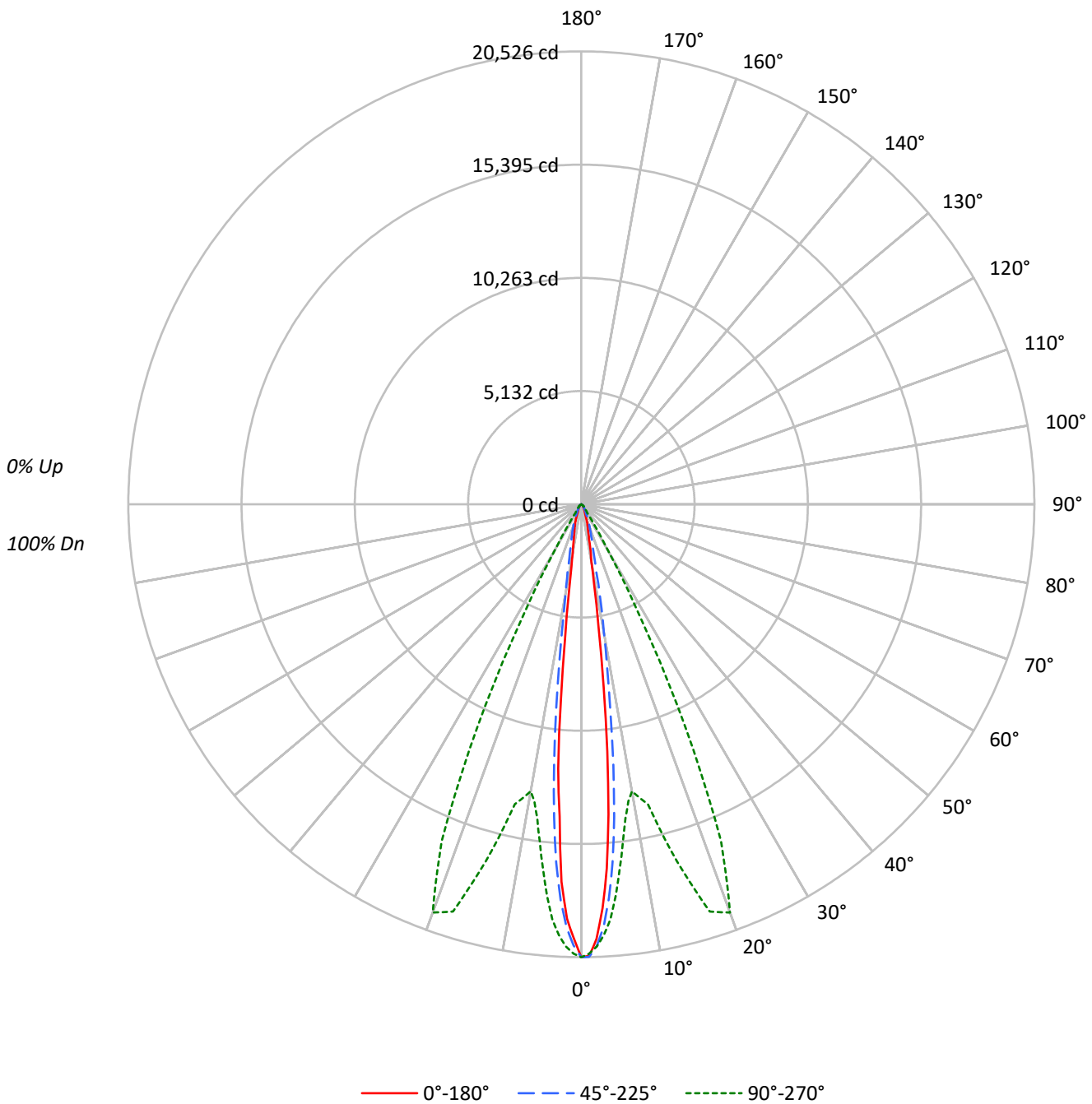
Lumens per Lamp: N/A
Luminaire Lumens: 4000.0 lumens
Efficiency: N/A
Efficacy: 500.0 lumens/watt
Spacing Criteria (0/90/45): 0.21 / 0.89 / 0.26
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 8
Input Voltage (V): 12.0
Input Current (Ain): 0.709
Voltage Rise (V): NR
Power Factor: 0.9468
Total Harmonic Distortion (THDi): 27.5
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 9 HR
Ambient Temperature (°C): 24.9
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96
2	110	106	103	100	108	105	102	99	101	99	97	99	97	95	96	94	93	91
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87
4	102	96	92	88	101	95	91	88	93	90	87	91	88	86	89	87	85	84
5	99	92	87	84	97	91	87	84	89	86	83	88	85	82	86	84	81	80
6	95	88	83	80	94	87	83	80	86	82	79	85	81	79	83	81	78	77
7	92	85	80	77	91	84	79	76	83	79	76	82	78	76	81	78	75	74
8	89	81	77	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71
9	86	78	74	71	85	78	74	71	77	73	70	76	73	70	76	72	70	69
10	83	76	71	68	82	75	71	68	75	71	68	74	70	68	73	70	68	67

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	10127306	10127306	10127306
5°	6988623	8819912	5955601
10°	1298317	6618188	1124123
15°	581119	8563602	613401
20°	298697	10337530	373358
25°	189228	6073149	197829
30°	135020	1368376	153023
35°	104681	285553	114197
40°	81409	172995	91586
45°	66146	132292	77170
50°	48510	97020	60637
55°	40773	67954	54363
60°	15591	15591	31182
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1131.8	28.3
10°-20°	1436.1	35.9
20°-30°	1071.4	26.8
30°-40°	200.1	5.0
40°-50°	105.7	2.6
50°-60°	50.3	1.3
60°-70°	4.7	0.1
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°	3639.2	91.0
0°-40°	3839.3	96.0
0°-60°	3995.3	99.9
0°-90°	4000.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4000.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	20526	20526	20526	20526	20526	
5°	14111	16276	17808	14222	12025	902
15°	1138	1944	16766	1770	1201	340
25°	348	600	11156	632	363	165
35°	174	237	474	237	190	107
45°	95	126	190	126	111	73
55°	47	47	79	63	63	37
65°	0	0	0	0	0	2
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	20526.4	20526.4	20526.4	20526.4	20526.4	20526.4	20526.4	20526.4	20526.4
1°	20463.2	20526.4	20510.6	20494.8	20368.4	20178.8	20004.9	19831.1	19673.1
2°	19704.7	19941.7	20036.5	20163.0	20052.3	19688.9	19167.4	18756.6	18788.2
3°	18330.0	18898.8	19183.2	19609.9	19546.7	18930.4	17982.3	17160.6	17129.0
4°	16544.4	17271.2	17903.3	18804.0	18851.4	17887.5	16291.5	14964.2	14174.1
5°	14110.9	15138.0	16275.7	17682.1	17808.5	16576.0	14221.5	12293.7	12025.1
6°	11250.8	12625.5	14237.3	16228.3	16623.4	14901.0	11851.3	9259.8	8880.5
7°	8311.7	9844.5	11882.9	14711.4	15438.2	13289.2	9307.2	6462.9	6052.0
8°	5530.6	7015.9	9512.6	13147.0	14363.7	11724.9	7047.6	4377.1	4061.0
9°	3681.8	4708.9	7426.8	11882.9	13621.1	10476.5	5309.4	3112.9	2844.3
10°	2591.5	3191.9	5909.8	10966.4	13210.2	9528.4	4061.0	2433.5	2243.8
12.5°	1596.0	1801.4	3128.7	9402.0	13921.3	7679.6	2496.7	1690.8	1580.2
15°	1137.7	1295.7	1943.6	8675.1	16765.6	6652.5	1769.8	1295.7	1200.9
17.5°	853.3	979.7	1438.0	8248.5	19357.1	5925.6	1374.7	1011.3	932.3
20°	568.9	679.5	1090.3	7284.6	19688.9	4866.9	1074.5	805.9	711.1
22.5°	426.6	489.9	821.7	5262.0	16528.6	3413.2	821.7	584.7	474.1
25°	347.6	379.2	600.5	2954.9	11156.0	1991.0	632.1	426.6	363.4
27.5°	284.4	316.0	442.4	1453.8	5846.6	1169.3	458.2	331.8	316.0
30°	237.0	252.8	347.6	758.5	2401.9	679.5	363.4	284.4	268.6
32.5°	189.6	221.2	284.4	458.2	963.9	442.4	284.4	237.0	221.2
35°	173.8	189.6	237.0	331.8	474.1	316.0	237.0	205.4	189.6
37.5°	142.2	173.8	205.4	252.8	331.8	252.8	205.4	189.6	173.8
40°	126.4	142.2	173.8	221.2	268.6	221.2	173.8	158.0	142.2
42.5°	110.6	126.4	158.0	173.8	221.2	173.8	158.0	142.2	126.4
45°	94.8	110.6	126.4	158.0	189.6	158.0	126.4	126.4	110.6
47.5°	79.0	94.8	110.6	126.4	158.0	126.4	110.6	94.8	94.8
50°	63.2	79.0	94.8	110.6	126.4	110.6	94.8	79.0	79.0
52.5°	47.4	63.2	79.0	79.0	94.8	79.0	79.0	63.2	63.2
55°	47.4	47.4	47.4	63.2	79.0	63.2	63.2	47.4	63.2
57.5°	31.6	31.6	31.6	31.6	31.6	31.6	47.4	47.4	47.4
60°	15.8	15.8	15.8	15.8	15.8	15.8	31.6	31.6	31.6
62.5°	0.0	0.0	0.0	0.0	15.8	15.8	15.8	15.8	15.8
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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

(END OF REPORT)