

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: G2-1802-569-33

Luminaire Tested: **230-8LED4036-12-BK-LSL**

Test Date: 04/06/18

Test Information

Test Method: LM-79-08
Report Number: G2-1802-569-33
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-569-33)
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: 230-8LED4036-12-BK-LSL
Description: CAMBRIA 203 LED LUMINAIRE, 8 WATT, 4000K CCT, 36 DEGREE WIDE OPTIC,
REGRESSED HOOD BLACK, LINEAR SPREAD LENS
Light Source: (1) SORAA 4000K 95 CRI LED
SM16-07-36D-940-03
Ballast/Driver: (1) CHROMA POWER SUPPLY IN0004

Summary

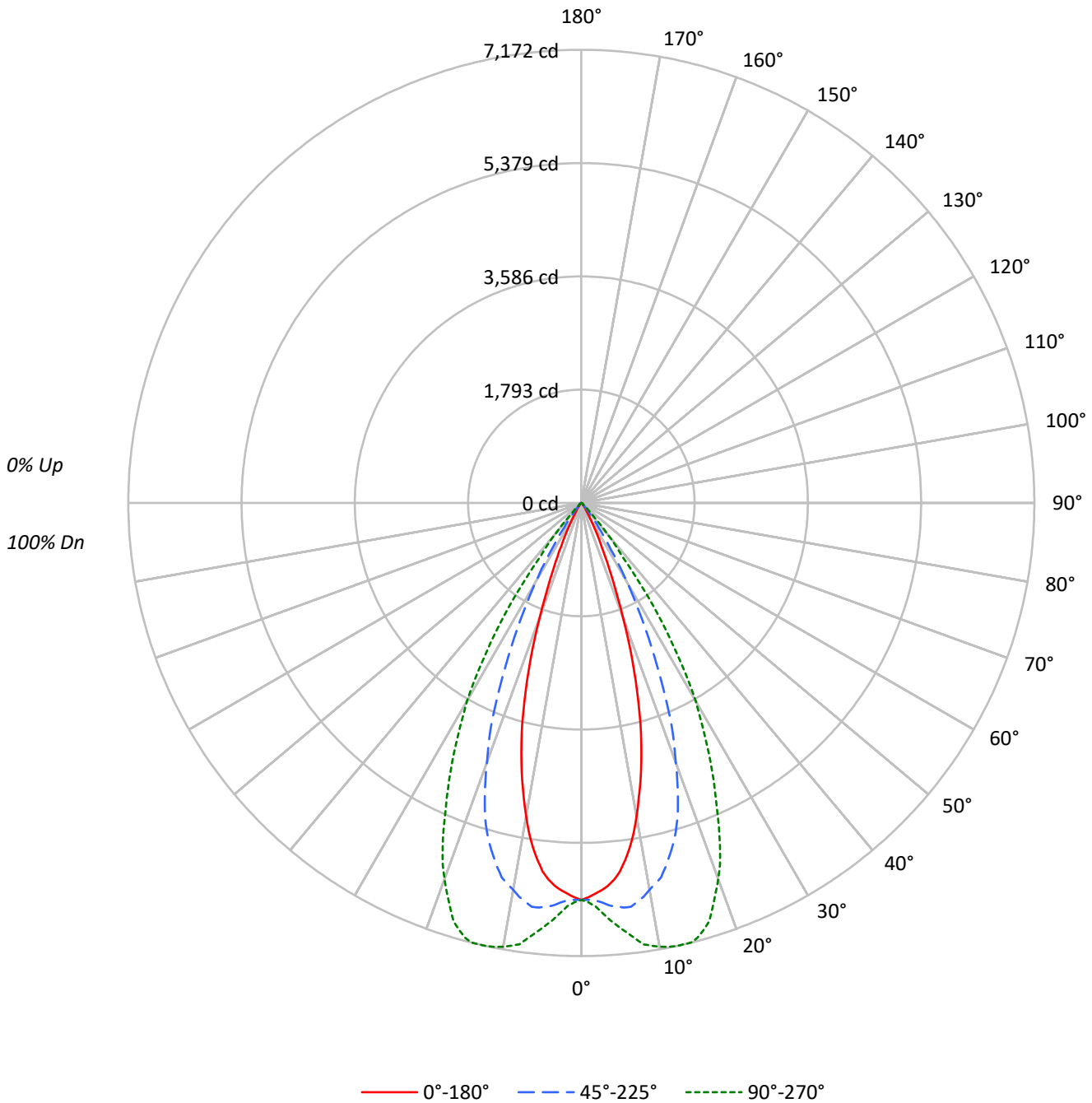
Lumens per Lamp: N/A
Luminaire Lumens: 4000.0 lumens
Efficiency: N/A
Efficacy: 512.8 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 1.02 / 0.74
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 7.8
Input Voltage (V): 12.0
Input Current (Ain): 0.681
Voltage Rise (V): NR
Power Factor: 0.9907
Total Harmonic Distortion (THDi): 27.5%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): 24.9
Test Distance: 25 FT



TEST NUMBER: G2-1802-569-33
CATALOG NUMBER: 230-8LED4036-12-BK-LSL

Luminous Intensity Polar Plot





TEST NUMBER: G2-1802-569-33
 CATALOG NUMBER: 230-8LED4036-12-BK-LSL

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	114	112	109	107	112	109	107	106	105	104	102	102	101	99	98	97	97	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	90
3	105	99	95	91	103	98	94	90	95	92	89	93	90	87	90	88	86	85
4	100	93	89	85	98	92	88	84	90	86	83	88	85	82	87	84	82	80
5	96	89	83	80	94	88	83	79	86	82	79	84	81	78	83	80	77	76
6	92	84	79	75	90	83	78	75	82	77	74	80	77	74	79	76	73	72
7	88	80	75	71	87	79	74	71	78	74	70	77	73	70	76	72	70	68
8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	73	69	66	65
9	81	72	67	64	80	72	67	64	71	67	63	70	66	63	70	66	63	62
10	78	69	64	61	77	69	64	61	68	64	60	67	63	60	67	63	60	59

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3099509	3099509	3099509
5°	2962274	3176179	3331741
10°	2524392	3114509	3573517
15°	1845105	2861208	3636681
20°	1017009	2295123	3325888
25°	413242	1538974	2721703
30°	134223	827668	2065354
35°	63061	283806	1182446
40°	33749	84308	421474
45°	18281	36562	91335
50°	10055	20110	30165
55°	11268	11268	11268
60°	12927	12927	12927
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: G2-1802-569-33
 CATALOG NUMBER: 230-8LED4036-12-BK-LSL

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	604.1	15.1
10°-20°	1498.8	37.5
20°-30°	1301.0	32.5
30°-40°	514.6	12.9
40°-50°	66.1	1.7
50°-60°	13.9	0.3
60°-70°	1.6	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°	3403.8	85.1
0°-40°	3918.5	98.0
0°-60°	3998.5	100.0
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°	22.5°	45°	67.5°	90°	Flux
0°	6282	6282	6282	6282	6282	
5°	5981	6151	6413	6662	6727	541
15°	3612	4240	5602	6727	7120	961
25°	759	1112	2827	4555	5000	379
35°	105	144	471	1492	1963	70
45°	26	39	52	105	131	24
55°	13	13	13	13	13	12
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	0



TEST NUMBER: G2-1802-569-33
 CATALOG NUMBER: 230-8LED4036-12-BK-LSL

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6282.2	6282.2	6282.2	6282.2	6282.2
1°	6242.9	6256.0	6282.2	6308.4	6321.4
2°	6190.6	6229.8	6295.3	6360.7	6386.9
3°	6138.2	6216.7	6334.5	6452.3	6504.7
4°	6072.8	6190.6	6386.9	6543.9	6622.5
5°	5981.2	6151.3	6413.1	6661.7	6727.2
6°	5863.4	6085.9	6439.2	6727.2	6831.9
7°	5693.2	5994.2	6439.2	6792.6	6936.6
8°	5510.0	5850.3	6373.8	6845.0	7054.4
9°	5287.5	5693.2	6308.4	6884.2	7093.6
10°	5038.8	5496.9	6216.7	6897.3	7132.9
11°	4764.0	5287.5	6138.2	6884.2	7159.1
12°	4502.2	5051.9	6059.7	6871.1	7172.2
13°	4214.3	4803.2	5915.7	6845.0	7172.2
14°	3926.4	4528.4	5758.7	6792.6	7172.2
15°	3612.3	4240.5	5601.6	6727.2	7119.8
16°	3272.0	3939.4	5418.4	6661.7	7028.2
17°	2944.8	3638.4	5209.0	6530.8	6923.5
18°	2591.4	3272.0	4947.2	6347.6	6727.2
19°	2277.3	2918.6	4672.4	6138.2	6530.8
20°	1937.0	2565.2	4371.3	5915.7	6334.5
21°	1622.9	2224.9	4096.5	5667.0	6125.1
22°	1348.1	1871.6	3821.7	5431.5	5863.4
23°	1125.6	1570.5	3481.4	5195.9	5575.4
24°	929.2	1321.9	3154.2	4908.0	5274.4
25°	759.1	1112.5	2827.0	4554.6	4999.6
26°	628.2	929.2	2526.0	4240.5	4724.7
27°	497.3	759.1	2224.9	3913.3	4436.8
28°	392.6	615.1	1950.1	3625.3	4148.9
29°	314.1	484.3	1688.3	3258.9	3874.0
30°	235.6	392.6	1452.8	2970.9	3625.3
32.5°	144.0	222.5	876.9	2290.4	2800.8
35°	104.7	144.0	471.2	1492.0	1963.2
37.5°	65.4	91.6	235.6	837.6	1060.1
40°	52.4	65.4	130.9	392.6	654.4
42.5°	39.3	52.4	78.5	183.2	261.8
45°	26.2	39.3	52.4	104.7	130.9
47.5°	26.2	26.2	26.2	52.4	65.4
50°	13.1	13.1	26.2	26.2	39.3
52.5°	13.1	13.1	13.1	26.2	26.2
55°	13.1	13.1	13.1	13.1	13.1
57.5°	13.1	13.1	13.1	13.1	13.1
60°	13.1	13.1	13.1	13.1	13.1
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: G2-1802-569-33
CATALOG NUMBER: 230-8LED4036-12-BK-LSL

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)