



UL Verification Services Inc.  
7036 Snowdrift Road  
Allentown, PA 18106  
610-774-1300

## Photometric Indoor Test Report

Relevant Standards  
IES LM-79-2008  
ANSI C82.77-2002

Prepared For  
Elemental LED Inc, DBA Diode LED  
Wes Buck  
Suite 211, 1195 Park Ave.  
Emeryville, CA 94608  
United States

Catalog Number  
SUNRISE™ 12V Light Bar DI-0201  
Project Number  
10461972  
Test Number  
748164

Test Date

2014-09-15

Prepared By

Handwritten signature of Javier Caban in black ink.

Javier Caban, Technician

Approved By

Handwritten signature of Eric M. Gaudreau in black ink.

Eric Gaudreau, Engineering Project Handler

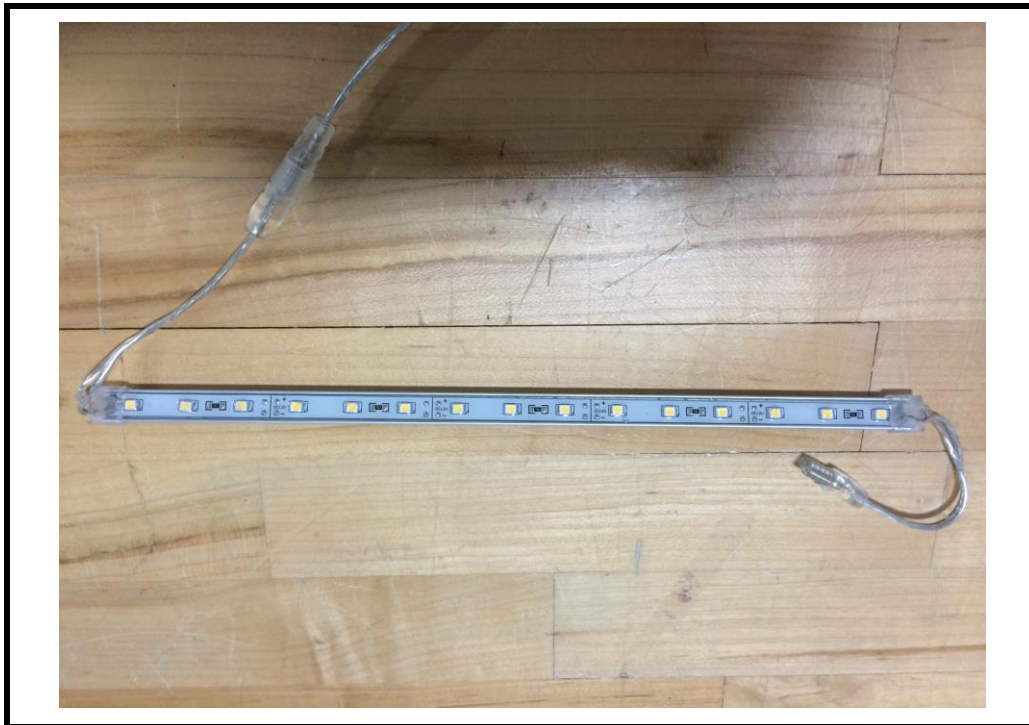
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Luminaire Description: Grey plastic housing, no enclosure  
Catalog Number: SUNRISE™ 12V Light Bar DI-0201  
Lamp: 15 white LEDs  
Mounting: Surface  
Ballast/Driver: One Meanwell LPV-60-12

Luminaire

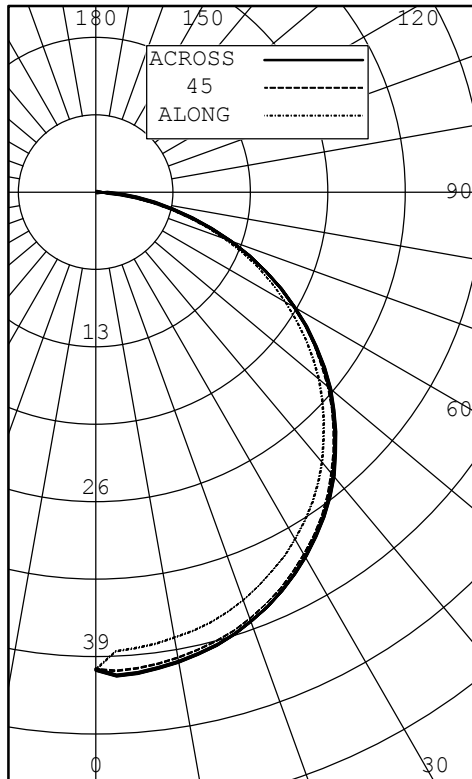


Test Conditions

Test Temperature:	25.2 °C
Voltage:	120.0 VAC
Current:	0.04371 A
Power:	1.910 W
Power Factor:	0.364
Frequency:	60 Hz
Current THD:	146 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	40	40	40	40	40	
5	38	40	40	40	41	4
10	38	40	40	40	40	
15	37	39	39	39	39	11
20	36	38	38	38	38	
25	35	37	37	37	37	17
30	34	35	35	35	35	
35	32	33	33	33	33	21
40	30	31	31	31	31	
45	27	28	28	28	28	22
50	24	25	26	26	26	
55	22	22	22	23	23	20
60	18	19	19	19	19	
65	15	16	16	16	16	15
70	12	12	12	12	12	
75	8	8	8	8	8	9
80	5	5	5	5	5	
85	2	2	2	2	2	2
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	32	26.28
0-40	52	43.38
0-60	94	77.92
0-90	120	100.00
40-90	68	56.62
60-90	27	22.08
90-180	0	0.00
0-180	120	100.00

EFFICACY (LUMENS PER WATT): 63.4

\*\*\* THIS IS AN ABSOLUTE TEST \*\*\*

LUMINOUS LENGTH: 9.250 INS  
 WIDTH: 0.375 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3  
 SC (ALONG): 1.2, SC (ACROSS): 1.3

ANGLE	ALONG	45	ACROSS
45	17125	17920	18047
55	16788	17556	17634
65	15965	16658	16769
75	13898	14433	14644
85	9741	10023	10808

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA  
 IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0.0	40	40	40	40	40	40	
2.5	39	40	40	41	41	40	
5.0	38	40	40	40	41	40	4
7.5	38	40	40	40	40	40	
10.0	38	40	40	40	40	40	
12.5	38	39	39	40	40	39	
15.0	37	39	39	39	39	39	11
17.5	37	39	39	39	39	38	
20.0	36	38	38	38	38	38	
22.5	36	37	37	38	38	37	
25.0	35	37	37	37	37	37	17
27.5	34	36	36	36	36	36	
30.0	34	35	35	35	35	35	
32.5	33	34	34	34	34	34	
35.0	32	33	33	33	33	33	21
37.5	31	32	32	32	32	32	
40.0	30	31	31	31	31	31	
42.5	28	30	30	30	30	29	
45.0	27	28	28	28	28	28	22
47.5	26	27	27	27	27	27	
50.0	24	25	26	26	26	25	
52.5	23	24	24	24	24	24	
55.0	22	22	22	23	23	22	20
57.5	20	21	21	21	21	21	
60.0	18	19	19	19	19	19	
62.5	17	17	17	18	18	17	
65.0	15	16	16	16	16	16	15
67.5	13	14	14	14	14	14	
70.0	12	12	12	12	12	12	
72.5	10	10	10	10	10	10	
75.0	8	8	8	8	8	8	9
77.5	6	6	7	7	7	7	
80.0	5	5	5	5	5	5	
82.5	3	3	3	3	4	3	
85.0	2	2	2	2	2	2	2
87.5	1	1	1	1	1	1	
90.0	0	0	0	0	0	0	



COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC WALL	90				80				70				50				30				10				0	
	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR	0	1.221	.221	.221	.22	1.191	.191	.191	.19	1.161	.161	.161	.16	1.111	.111	.111	.11	1.061	.061	.061	.06	1.021	.021	.021	.02	1.00
	1	1.121	.071	.071	.030	.99	1.101	.051	.051	.010	.98	1.071	.030	.990	.96	0.990	.960	.93	0.950	.930	.90	0.910	.890	.88	0.86	
	2	1.030	.950	.880	.82	1.000	.930	.870	.81	0.980	.910	.850	.80	0.870	.830	.78	0.840	.800	.77	0.810	.780	.75	0.73			
	3	0.940	.830	.750	.69	0.920	.820	.740	.68	0.890	.800	.730	.67	0.770	.710	.66	0.750	.700	.65	0.720	.680	.64	0.62			
	4	0.870	.740	.650	.59	0.850	.730	.650	.59	0.820	.720	.640	.58	0.690	.630	.57	0.670	.610	.57	0.650	.600	.56	0.54			
	5	0.800	.670	.570	.50	0.780	.650	.570	.50	0.750	.640	.560	.50	0.620	.550	.49	0.600	.540	.49	0.580	.530	.48	0.46			
	6	0.740	.590	.500	.44	0.720	.580	.500	.44	0.700	.570	.490	.43	0.560	.480	.43	0.540	.470	.42	0.520	.470	.42	0.40			
	7	0.670	.530	.440	.38	0.660	.520	.440	.38	0.640	.510	.430	.37	0.500	.420	.37	0.480	.420	.37	0.470	.410	.36	0.34			
	8	0.620	.480	.390	.33	0.610	.470	.390	.33	0.590	.460	.390	.33	0.450	.380	.33	0.440	.370	.32	0.430	.370	.32	0.30			
	9	0.580	.440	.350	.29	0.560	.430	.350	.29	0.550	.420	.340	.29	0.410	.340	.29	0.400	.330	.29	0.390	.330	.28	0.27			
	10	0.530	.400	.310	.26	0.520	.390	.310	.26	0.510	.380	.310	.26	0.370	.300	.26	0.370	.300	.25	0.360	.300	.25	0.23			

THE ABOVE COEFFICIENTS HAVE BEEN CALCULATED BASED ON LUMINAIRE LUMENS  
 BECAUSE IN AN ABSOLUTE TEST THE BARE LAMP LUMENS ARE UNKNOWN.  
 LIGHTING DESIGN CALCULATIONS MADE USING THESE COEFFICIENTS SHOULD  
 THEREFORE USE THE LUMINAIRE LUMENS IN THE CALCULATION FORMULA

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.  
 BALLAST AND FIELD FACTORS HAVE NOT BEEN APPLIED.

TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST  
 LUMINOUS OPENING OF LUMINAIRE.



## Cone of Light

**Cone Of Light Tabulation**

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	2.51	5.16
6.00	1.12	7.73
8.00	0.629	10.3
10.0	0.402	12.9
12.0	0.279	15.5
14.0	0.205	18.0
16.0	0.157	20.6

**Cone of Light Plot**

