



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-0214  
Project Number  
10461972  
Test Number  
748170

Test Date

2014-09-16

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

The results contained in this report pertain only to the tested sample.  
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.



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

Luminaire Description: Grey plastic housing, no enclosure  
Catalog Number: SUNRISE™ 12V Light Bar DI-0214  
Lamp: 36 white LEDs  
Mounting: Surface  
Ballast/Driver: One Meanwell LPV-60-12

Luminaire

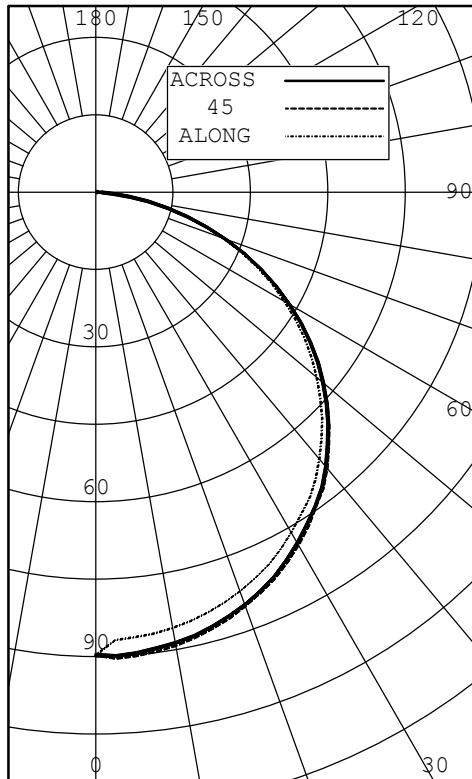


Test Conditions

Test Temperature:	24.7 °C
Voltage:	120.0 VAC
Current:	0.07698 A
Power:	3.926 W
Power Factor:	0.425
Frequency:	60 Hz
Current THD:	178 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	90	90	90	90	90	
5	87	91	90	90	90	9
10	86	90	89	89	89	
15	84	88	88	87	87	25
20	82	86	85	85	85	
25	80	83	83	82	82	38
30	76	79	79	78	78	
35	72	75	75	74	74	46
40	67	70	70	69	69	
45	62	65	64	64	64	49
50	56	58	58	57	58	
55	49	51	51	51	51	45
60	42	44	43	43	43	
65	35	36	36	35	35	35
70	26	27	27	27	27	
75	18	19	19	19	18	20
80	10	10	10	10	10	
85	4	4	4	4	4	5
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	71	26.22
0-40	117	43.36
0-60	212	78.19
0-90	271	100.00
40-90	153	56.64
60-90	59	21.81
90-180	0	0.00
0-180	271	100.00

EFFICACY (LUMENS PER WATT): 69.4

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

LUMINOUS LENGTH: 23.000 INS  
 WIDTH: 0.375 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3  
 SC: 1.3

ANGLE	ALONG	45	ACROSS
45	15757	16314	16251
55	15462	15977	15961
65	14670	15170	15110
75	12428	12930	12859
85	7217	7338	7451

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	90	90	90	90	90	90	
2.5	87	91	91	90	90	90	
5.0	87	91	90	90	90	90	9
7.5	86	90	90	89	89	89	
10.0	86	90	89	89	89	89	
12.5	85	89	89	88	88	88	
15.0	84	88	88	87	87	87	25
17.5	83	87	87	86	86	86	
20.0	82	86	85	85	85	85	
22.5	81	85	84	83	84	84	
25.0	80	83	83	82	82	82	38
27.5	78	81	81	80	80	80	
30.0	76	79	79	78	78	78	
32.5	74	77	77	76	76	76	
35.0	72	75	75	74	74	74	46
37.5	70	73	72	72	72	72	
40.0	67	70	70	69	69	69	
42.5	65	68	67	66	67	67	
45.0	62	65	64	64	64	64	49
47.5	59	62	61	61	61	61	
50.0	56	58	58	57	58	58	
52.5	53	55	54	54	54	54	
55.0	49	51	51	51	51	51	45
57.5	46	48	47	47	47	47	
60.0	42	44	43	43	43	43	
62.5	38	40	40	39	39	39	
65.0	35	36	36	35	35	35	35
67.5	31	32	31	31	31	31	
70.0	26	27	27	27	27	27	
72.5	22	23	23	23	23	23	
75.0	18	19	19	19	18	18	20
77.5	14	14	14	14	14	14	
80.0	10	10	10	10	10	10	
82.5	6	7	7	7	7	7	
85.0	4	4	4	4	4	4	5
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	.030	.99	1.101	.051	.010	.97	1.071	.030	.990	.96	0.990	.960	.93	0.950	.920	.90	0.910	.890	.87	0.85			
	2	1.030	.950	.880	.82	1.000	.930	.860	.81	0.980	.910	.850	.80	0.870	.820	.78	0.840	.800	.76	0.810	.780	.75	0.73			
	3	0.940	.830	.750	.68	0.920	.820	.740	.68	0.890	.800	.730	.67	0.770	.710	.66	0.740	.690	.65	0.720	.680	.64	0.62			
	4	0.870	.740	.650	.59	0.840	.730	.650	.58	0.820	.720	.640	.58	0.690	.620	.57	0.670	.610	.56	0.650	.600	.56	0.53			
	5	0.800	.660	.570	.50	0.780	.650	.560	.50	0.750	.640	.560	.50	0.620	.550	.49	0.600	.540	.49	0.580	.530	.48	0.46			
	6	0.730	.590	.500	.44	0.710	.580	.500	.43	0.690	.570	.490	.43	0.550	.480	.43	0.540	.470	.42	0.520	.460	.42	0.40			
	7	0.670	.530	.440	.38	0.650	.520	.430	.38	0.640	.510	.430	.37	0.500	.420	.37	0.480	.410	.36	0.470	.410	.36	0.34			
	8	0.620	.480	.390	.33	0.610	.470	.390	.33	0.590	.460	.380	.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	.28	0.390	.330	.28	0.26			
	10	0.530	.400	.310	.26	0.520	.390	.310	.26	0.510	.380	.310	.26	0.370	.300	.25	0.360	.300	.25	0.360	.290	.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	5.64	5.17
6.00	2.51	7.76
8.00	1.41	10.3
10.0	0.903	12.9
12.0	0.627	15.5
14.0	0.461	18.1
16.0	0.353	20.7

**Cone of Light Plot**

