



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-0210
Project Number
10461972
Test Number
748162

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

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Grey plastic housing, no enclosure
Catalog Number: SUNRISE™ 12V Light Bar DI-0210
Lamp: Nine white LEDs
Mounting: Surface
Ballast/Driver: One Meanwell LPV-60-12

Luminaire

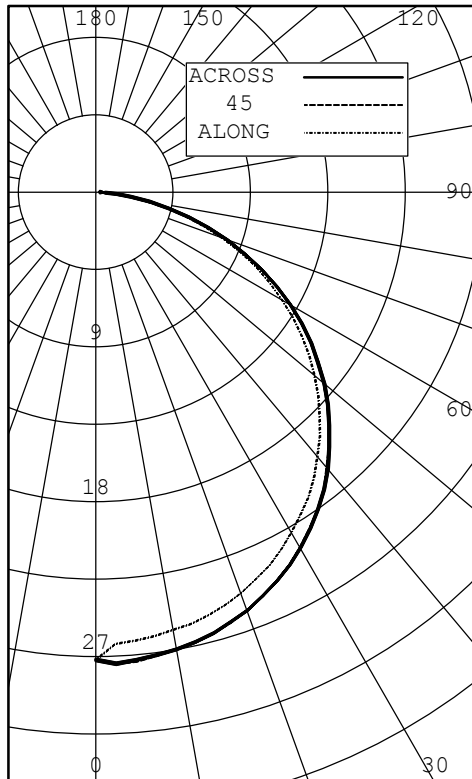


Test Conditions

Test Temperature:	25.3 °C
Voltage:	120.0 VAC
Current:	0.03341 A
Power:	1.273 W
Power Factor:	0.317
Frequency:	60 Hz
Current THD:	118 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	27	27	27	27	27	
5	26	27	27	27	27	3
10	26	27	27	27	27	
15	25	26	27	27	27	7
20	25	26	26	26	26	
25	24	25	25	25	25	11
30	23	24	24	24	24	
35	22	22	23	23	23	14
40	20	21	21	21	21	
45	18	19	19	19	19	15
50	17	17	17	17	17	
55	15	15	15	15	15	14
60	13	13	13	13	13	
65	10	11	11	11	11	10
70	8	8	8	8	8	
75	5	6	6	6	6	6
80	3	3	3	3	3	
85	1	1	1	1	1	1
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	21	26.35
0-40	35	43.49
0-60	64	78.13
0-90	82	100.00
40-90	46	56.51
60-90	18	21.87
90-180	0	0.00
0-180	82	100.00

EFFICACY (LUMENS PER WATT): 62.7

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 5.500 INS
 WIDTH: 0.375 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3
 SC: 1.3

ANGLE	ALONG	45	ACROSS
45	19555	20483	20483
55	19194	20057	20123
65	18226	19005	19010
75	15679	16279	16468
85	8622	9941	10819

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	27	27	27	27	27	27	
2.5	26	27	27	28	27	27	
5.0	26	27	27	27	27	27	3
7.5	26	27	27	27	27	27	
10.0	26	27	27	27	27	27	
12.5	26	27	27	27	27	27	
15.0	25	26	27	27	27	26	7
17.5	25	26	26	26	26	26	
20.0	25	26	26	26	26	26	
22.5	24	25	25	26	25	25	
25.0	24	25	25	25	25	25	11
27.5	23	24	24	24	24	24	
30.0	23	24	24	24	24	24	
32.5	22	23	23	23	23	23	
35.0	22	22	23	23	23	22	14
37.5	21	22	22	22	22	22	
40.0	20	21	21	21	21	21	
42.5	19	20	20	20	20	20	
45.0	18	19	19	19	19	19	15
47.5	18	18	18	18	18	18	
50.0	17	17	17	17	17	17	
52.5	16	16	16	16	16	16	
55.0	15	15	15	15	15	15	14
57.5	14	14	14	14	14	14	
60.0	13	13	13	13	13	13	
62.5	11	12	12	12	12	12	
65.0	10	11	11	11	11	11	10
67.5	9	9	9	10	9	9	
70.0	8	8	8	8	8	8	
72.5	7	7	7	7	7	7	
75.0	5	6	6	6	6	6	6
77.5	4	4	4	4	4	4	
80.0	3	3	3	3	3	3	
82.5	2	2	2	2	2	2	
85.0	1	1	1	1	1	1	1
87.5	0	0	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	1.091	.051	.010	.97	1.071	.030	.990	.95	0.980	.950	.92	0.940	.920	.90	0.910	.890	.87	0.85			
	2	1.020	.940	.880	.81	1.000	.920	.860	.80	0.980	.900	.850	.80	0.870	.820	.78	0.840	.800	.76	0.810	.770	.74	0.72			
	3	0.940	.830	.750	.68	0.910	.810	.740	.67	0.890	.800	.730	.67	0.770	.710	.66	0.740	.690	.64	0.720	.670	.63	0.61			
	4	0.860	.740	.650	.58	0.840	.730	.640	.58	0.820	.710	.640	.57	0.690	.620	.57	0.670	.610	.56	0.650	.590	.55	0.53			
	5	0.800	.660	.570	.50	0.770	.650	.560	.50	0.750	.640	.550	.49	0.620	.540	.49	0.600	.530	.48	0.580	.520	.48	0.46			
	6	0.730	.590	.500	.43	0.710	.580	.490	.43	0.690	.570	.490	.43	0.550	.480	.42	0.530	.470	.42	0.520	.460	.41	0.39			
	7	0.670	.520	.430	.38	0.650	.520	.430	.37	0.640	.510	.430	.37	0.490	.420	.37	0.480	.410	.36	0.470	.410	.36	0.34			
	8	0.620	.470	.390	.33	0.600	.470	.380	.33	0.590	.460	.380	.32	0.450	.370	.32	0.440	.370	.32	0.420	.360	.32	0.30			
	9	0.570	.430	.340	.28	0.560	.430	.340	.28	0.540	.420	.340	.28	0.410	.330	.28	0.400	.330	.28	0.380	.320	.28	0.26			
	10	0.530	.390	.300	.25	0.520	.390	.300	.25	0.510	.380	.300	.25	0.370	.300	.25	0.360	.290	.25	0.350	.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	1.71	5.16
6.00	0.758	7.73
8.00	0.426	10.3
10.0	0.273	12.9
12.0	0.190	15.5
14.0	0.139	18.0
16.0	0.107	20.6

Cone of Light Plot

