



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-0213
Project Number
10461972
Test Number
748169

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.
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Luminaire Description: Grey plastic housing, no enclosure
Catalog Number: SUNRISE™ 12V Light Bar DI-0213
Lamp: 36 white LEDs
Mounting: Surface
Ballast/Driver: One Meanwell LPV-60-12

Luminaire

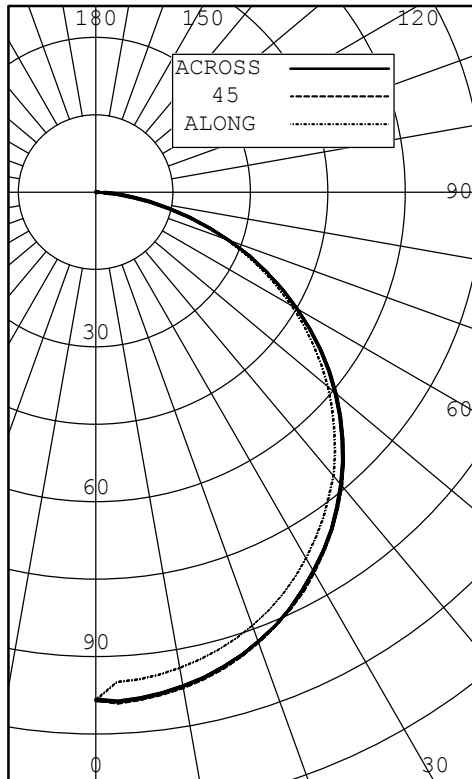


Test Conditions

Test Temperature:	24.9 °C
Voltage:	120.0 VAC
Current:	0.08111 A
Power:	4.175 W
Power Factor:	0.429
Frequency:	60 Hz
Current THD:	179 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	98	98	98	98	98	
5	95	100	99	98	99	9
10	94	98	98	97	97	
15	92	96	96	95	95	27
20	89	94	93	92	93	
25	86	90	89	88	89	41
30	82	86	85	84	85	
35	77	81	80	79	80	50
40	72	75	74	74	74	
45	65	68	68	67	68	52
50	59	61	61	60	61	
55	52	54	53	53	53	47
60	44	46	45	45	45	
65	36	37	37	36	37	36
70	27	28	28	28	28	
75	18	19	19	19	19	20
80	10	11	11	11	11	
85	4	4	4	4	4	5
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	77	26.87
0-40	127	44.16
0-60	226	78.73
0-90	287	100.00
40-90	160	55.84
60-90	61	21.27
90-180	0	0.00
0-180	287	100.00

EFFICACY (LUMENS PER WATT): 68.3

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 23.000 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	16633	17271	17220
55	16135	16700	16700
65	15095	15661	15601
75	12706	13173	13173
85	7835	8579	8693

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	98	98	98	98	98	98	
2.5	95	100	99	98	99	99	
5.0	95	100	99	98	99	98	9
7.5	94	99	98	97	98	98	
10.0	94	98	98	97	97	97	
12.5	93	97	97	96	96	96	
15.0	92	96	96	95	95	95	27
17.5	91	95	94	94	94	94	
20.0	89	94	93	92	93	92	
22.5	88	92	91	90	91	91	
25.0	86	90	89	88	89	89	41
27.5	84	88	87	86	87	87	
30.0	82	86	85	84	85	84	
32.5	79	83	82	82	82	82	
35.0	77	81	80	79	80	79	50
37.5	74	78	77	76	77	77	
40.0	72	75	74	74	74	74	
42.5	69	72	71	71	71	71	
45.0	65	68	68	67	68	67	52
47.5	62	65	64	64	64	64	
50.0	59	61	61	60	61	61	
52.5	55	58	57	57	57	57	
55.0	52	54	53	53	53	53	47
57.5	48	50	49	49	49	49	
60.0	44	46	45	45	45	45	
62.5	40	42	41	41	41	41	
65.0	36	37	37	36	37	37	36
67.5	31	33	32	32	32	32	
70.0	27	28	28	28	28	28	
72.5	23	24	23	23	23	23	
75.0	18	19	19	19	19	19	20
77.5	14	15	15	15	15	15	
80.0	10	11	11	11	11	11	
82.5	7	7	7	7	7	7	
85.0	4	4	4	4	4	4	5
87.5	2	2	2	2	2	2	
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	.96	0.980	.960	.93	0.950	.920	.90	0.910	.890	.87	0.85			
	2	1.030	.950	.880	.82	1.000	.930	.870	.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	.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	.750	.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	0.760	.640	.560	.50	0.620	.550	.50	0.600	.540	.49	0.580	.530	.48	0.46			
	6	0.740	.600	.500	.44	0.720	.590	.500	.44	0.700	.580	.490	.43	0.560	.480	.43	0.540	.480	.43	0.530	.470	.42	0.40			
	7	0.670	.530	.440	.38	0.660	.520	.440	.38	0.640	.520	.430	.37	0.500	.420	.37	0.480	.420	.37	0.470	.410	.37	0.35			
	8	0.620	.480	.400	.33	0.610	.470	.390	.33	0.590	.470	.390	.33	0.450	.380	.33	0.440	.370	.33	0.430	.370	.32	0.30			
	9	0.580	.440	.350	.29	0.560	.430	.350	.29	0.550	.420	.350	.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	.390	.310	.26	0.380	.300	.26	0.370	.300	.25	0.360	.300	.25	0.24			

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	6.19	5.08
6.00	2.75	7.63
8.00	1.55	10.2
10.0	0.990	12.7
12.0	0.687	15.3
14.0	0.505	17.8
16.0	0.387	20.3

Cone of Light Plot

