



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
TRUE FOCUS™ 12V Light Bar DI-0254
Project Number
10461972
Test Number
748160

Test Date

2014-09-09

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

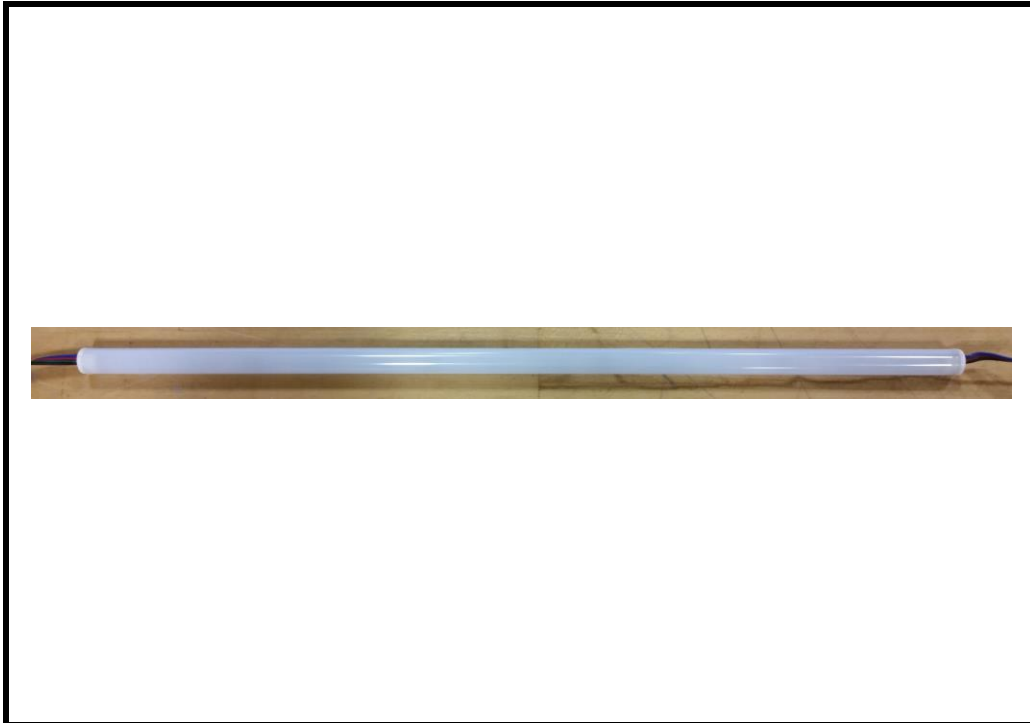
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Luminaire Description: White plastic housing, frosted plastic enclosure
Catalog Number: TRUE FOCUS™ 12V Light Bar DI-0254
Lamp: 15 red, 15 green, 15 blue LEDs
Mounting: Surface
Ballast/Driver: One Meanwell LPV-60-12

Luminaire

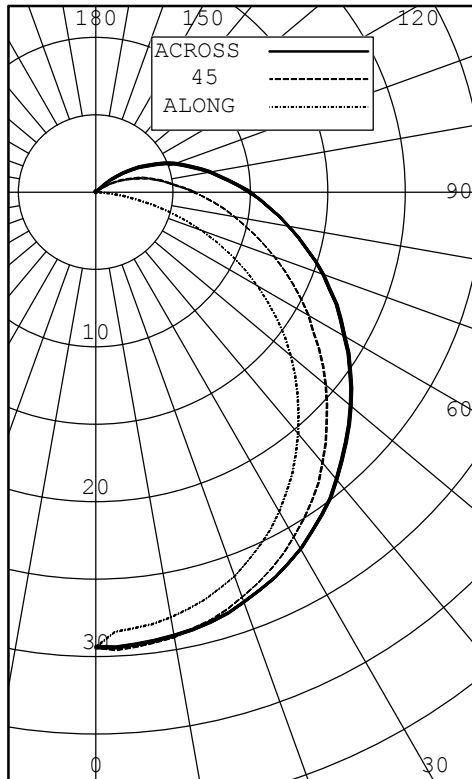


Test Conditions

Test Temperature:	25.3 °C
Voltage:	120.0 VAC
Current:	0.09857 A
Power:	5.247 W
Power Factor:	0.444
Frequency:	60 Hz
Current THD:	181 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	29	29	29	29	29	
5	28	30	30	30	29	3
15	27	29	29	29	29	8
25	25	27	27	27	27	12
35	22	24	24	25	25	15
45	18	20	21	22	23	16
55	14	16	18	19	20	16
65	10	12	14	16	17	14
75	5	7	11	13	14	11
85	1	4	8	10	11	8
90	0	3	6	9	10	
95	0	2	5	8	9	5
105	0	1	4	6	6	3
115	0	0	2	4	4	2
125	0	0	0	2	2	1
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	23	20.35
0-40	38	33.64
0-60	70	61.61
0-90	102	89.83
40-90	64	56.19
60-90	32	28.22
90-180	12	10.17
0-180	114	100.00

EFFICACY (LUMENS PER WATT): 21.9

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 18.750 INS
 WIDTH: 0.625 INS

LUMINANCE SUMMARY CD./SQ.M.

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

ANGLE	ALONG	45	ACROSS
45	3451	3088	3064
55	3297	2901	2953
65	3051	2746	2900
75	2529	2650	2901
85	1441	2769	3075

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA

ANGLE	PLANE					AVERAGE	OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS		
0	29	29	29	29	29	29	
5	28	30	30	30	29	29	3
10	28	29	29	29	29	29	
15	27	29	29	29	29	29	8
20	26	28	28	28	28	28	
25	25	27	27	27	27	27	12
30	24	25	26	26	27	26	
35	22	24	24	25	25	24	15
40	20	22	23	24	24	23	
45	18	20	21	22	23	21	16
50	16	18	19	21	22	19	
55	14	16	18	19	20	18	16
60	12	14	16	18	19	16	
65	10	12	14	16	17	14	14
70	7	9	12	15	16	12	
75	5	7	11	13	14	10	11
80	3	5	9	12	13	9	
85	1	4	8	10	11	7	8
90	0	3	6	9	10	6	
95	0	2	5	8	9	5	5
100	0	1	4	7	8	4	
105	0	1	4	6	6	3	3
110	0	0	3	5	5	3	
115	0	0	2	4	4	2	2
120	0	0	1	3	3	1	
125	0	0	0	2	2	1	1
130	0	0	0	1	1	0	
135	0	0	0	0	0	0	0
140	0	0	0	0	0	0	
145	0	0	0	0	0	0	0
150	0	0	0	0	0	0	
155	0	0	0	0	0	0	0
160	0	0	0	0	0	0	
165	0	0	0	0	0	0	0
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	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	1.211	1.211	1.211	1.211	1.171	1.171	1.171	1.171	1.131	1.131	1.131	1.131	1.051	1.051	1.051	0.990	0.990	0.990	0.930	0.930	0.930	0.930	0.930	0.930	0.90
1	1.081	1.020	0.970	0.92	1.050	0.990	0.940	0.90	1.010	0.960	0.910	0.87	0.900	0.860	0.83	0.840	0.810	0.78	0.790	0.760	0.74	0.71	0.71	0.71	0.71
2	0.980	0.890	0.810	0.74	0.950	0.860	0.790	0.72	0.910	0.830	0.760	0.71	0.780	0.720	0.67	0.730	0.680	0.64	0.680	0.650	0.61	0.59	0.59	0.59	0.59
3	0.890	0.770	0.680	0.61	0.860	0.750	0.660	0.59	0.830	0.720	0.650	0.58	0.680	0.610	0.56	0.640	0.580	0.54	0.600	0.560	0.51	0.49	0.49	0.49	0.49
4	0.820	0.690	0.590	0.52	0.790	0.670	0.580	0.51	0.760	0.650	0.560	0.50	0.610	0.540	0.48	0.570	0.510	0.46	0.540	0.490	0.44	0.42	0.42	0.42	0.42
5	0.750	0.610	0.510	0.44	0.720	0.590	0.500	0.43	0.690	0.570	0.490	0.42	0.540	0.470	0.41	0.510	0.440	0.40	0.480	0.430	0.38	0.36	0.36	0.36	0.36
6	0.690	0.540	0.450	0.38	0.660	0.530	0.440	0.37	0.640	0.510	0.430	0.36	0.480	0.410	0.35	0.460	0.390	0.34	0.430	0.370	0.33	0.31	0.31	0.31	0.31
7	0.630	0.480	0.390	0.33	0.610	0.470	0.380	0.32	0.590	0.460	0.370	0.31	0.430	0.360	0.30	0.410	0.340	0.29	0.390	0.330	0.28	0.26	0.26	0.26	0.26
8	0.590	0.440	0.350	0.28	0.560	0.430	0.340	0.28	0.540	0.410	0.330	0.28	0.390	0.320	0.27	0.370	0.310	0.26	0.350	0.300	0.25	0.23	0.23	0.23	0.23
9	0.540	0.400	0.310	0.25	0.520	0.390	0.300	0.24	0.500	0.380	0.300	0.24	0.360	0.290	0.24	0.340	0.270	0.23	0.320	0.260	0.22	0.20	0.20	0.20	0.20
10	0.500	0.360	0.270	0.22	0.490	0.350	0.270	0.22	0.470	0.340	0.270	0.21	0.330	0.260	0.21	0.310	0.250	0.20	0.300	0.240	0.20	0.18	0.18	0.18	0.18

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	1.85	5.16
6.00	0.822	7.74
8.00	0.462	10.3
10.0	0.296	12.9
12.0	0.205	15.5
14.0	0.151	18.1
16.0	0.116	20.6

Cone of Light Plot

