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-0257
Project Number
10461972
Test Number
748159

Test Date

2014-09-18

Prepared By

Javier Caban, Technician

Approved By

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-0257
Lamp:	Six red, six green, six blue LEDs
Mounting:	Surface
Ballast/Driver:	One Meanwell LPV-60-12

Luminaire

Test Conditions

Test Temperature:	24.7	°C
Voltage:	120.0	VAC
Current:	0.05186	A
Power:	2.405	W
Power Factor:	0.386	
Frequency:	60	Hz
Current THD:	160	%

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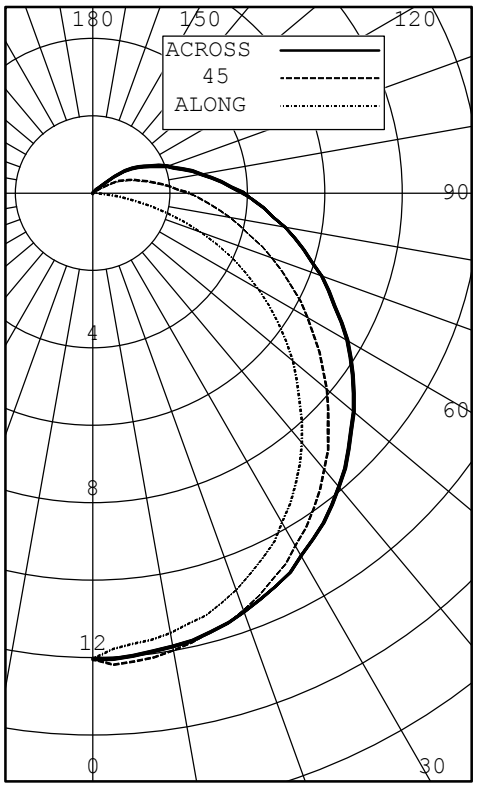

INTENSITY(CANDLEPOWER) SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	12	12	12	12	12	
5	12	12	12	12	12	1
15	11	12	12	12	12	3
25	10	11	11	11	11	5
35	9	9	10	10	10	6
45	8	8	9	9	9	7
55	6	6	7	8	8	6
65	4	5	6	7	7	6
75	2	3	4	5	6	4
85	0	2	3	4	4	3
90	0	1	3	4	4	
95	0	1	2	3	3	2
105	0	0	1	2	2	1
115	0	0	1	1	2	1
125	0	0	0	1	1	0
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	9	20.67
0-40	16	34.13
0-60	29	62.32
0-90	41	90.34
40-90	26	56.21
60-90	13	28.01
90-180	4	9.66
0-180	46	100.00

EFFICACY (LUMENS PER WATT): 19.1

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 8.750 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	3026	2697	2687
55	2890	2526	2588
65	2682	2366	2500
75	2190	2239	2491
85	1138	2311	2607

TESTED IN ACCORDANCE WITH IES PROCEDURES.

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INTENSITY(CANDLEPOWER) DATA

ANGLE	PLANE						OUTPUT
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	LUMENS
0	12	12	12	12	12	12	
5	12	12	12	12	12	12	1
10	12	12	12	12	12	12	
15	11	12	12	12	12	12	3
20	11	11	11	12	12	11	
25	10	11	11	11	11	11	5
30	10	10	11	11	11	10	
35	9	9	10	10	10	10	6
40	8	9	9	10	10	9	
45	8	8	9	9	9	9	7
50	7	7	8	9	9	8	
55	6	6	7	8	8	7	6
60	5	5	6	7	8	6	
65	4	5	6	7	7	6	6
70	3	4	5	6	6	5	
75	2	3	4	5	6	4	4
80	1	2	4	5	5	3	
85	0	2	3	4	4	3	3
90	0	1	3	4	4	2	
95	0	1	2	3	3	2	2
100	0	0	2	3	3	2	
105	0	0	1	2	2	1	1
110	0	0	1	2	2	1	
115	0	0	1	1	2	1	1
120	0	0	0	1	1	1	
125	0	0	0	1	1	0	0
130	0	0	0	0	0	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	

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COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC	90				80				70				50			30			10			0
WALL	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																						
0	1.21	1.21	1.21	1.21	1.17	1.17	1.17	1.17	1.13	1.13	1.13	1.13	1.06	1.06	1.06	0.99	0.99	0.99	0.93	0.93	0.93	0.90
1	1.08	1.02	0.97	0.92	1.04	0.99	0.94	0.89	1.01	0.96	0.91	0.87	0.89	0.86	0.82	0.84	0.81	0.78	0.79	0.76	0.74	0.71
2	0.98	0.89	0.81	0.74	0.95	0.86	0.78	0.72	0.91	0.83	0.76	0.70	0.78	0.72	0.67	0.73	0.68	0.64	0.69	0.65	0.61	0.59
3	0.89	0.77	0.68	0.60	0.86	0.75	0.66	0.59	0.83	0.72	0.64	0.58	0.68	0.61	0.56	0.64	0.58	0.54	0.60	0.56	0.51	0.49
4	0.82	0.68	0.58	0.51	0.79	0.66	0.57	0.50	0.76	0.64	0.56	0.49	0.61	0.53	0.48	0.57	0.51	0.46	0.54	0.49	0.44	0.42
5	0.75	0.60	0.51	0.43	0.72	0.59	0.50	0.43	0.69	0.57	0.48	0.42	0.54	0.46	0.41	0.51	0.44	0.39	0.48	0.42	0.38	0.36
6	0.69	0.54	0.44	0.37	0.66	0.52	0.43	0.37	0.64	0.51	0.42	0.36	0.48	0.41	0.35	0.45	0.39	0.34	0.43	0.37	0.33	0.30
7	0.63	0.48	0.39	0.32	0.61	0.47	0.38	0.32	0.58	0.45	0.37	0.31	0.43	0.35	0.30	0.41	0.34	0.29	0.39	0.33	0.28	0.26
8	0.58	0.43	0.34	0.28	0.56	0.42	0.34	0.28	0.54	0.41	0.33	0.27	0.39	0.32	0.26	0.37	0.30	0.26	0.35	0.29	0.25	0.23
9	0.54	0.39	0.30	0.24	0.52	0.38	0.30	0.24	0.50	0.37	0.29	0.24	0.35	0.28	0.23	0.34	0.27	0.22	0.32	0.26	0.22	0.20
10	0.50	0.36	0.27	0.21	0.48	0.35	0.26	0.21	0.47	0.34	0.26	0.21	0.32	0.25	0.20	0.31	0.24	0.20	0.29	0.23	0.19	0.17

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.

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Cone of Light

Cone Of Light Tabulation

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	0.754	5.14
6.00	0.335	7.70
8.00	0.188	10.3
10.0	0.121	12.8
12.0	0.0837	15.4
14.0	0.0615	18.0
16.0	0.0471	20.5

Cone of Light Plot