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## Photometric Test Report

Relevant Standards  
IES LM-79-2008  
ANSI C82.77-2002

**Prepared For**  
**TechBrite LLC**

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**Catalog Number**  
**VH48SS1B30DXXXX**

Order Number  
10917842  
Test Number  
1143993

Test Date

2015-08-20

Prepared By

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Approved By

Carissa Samonte-cam, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** White cast aluminum housing, white aluminum reflector, clear plastic prismatic lens enclosure  
**Lamp:** 584 white LEDs, eight boards with 73 LEDs each  
**Mounting:** Surface  
**Ballast/Driver:** One Everline D23CC90UNVT-F

#### Luminaire



#### Luminaire Characteristics

Luminous Length: 50.00 in.  
Luminous Width: 13.00 in.  
Luminous Height: 2.50 in.

#### Summary of Results

Total Luminaire Output: 14370 Lumens  
Luminaire Efficacy: 122 lm/w  
Maximum Candela: 4791 Candela

#### Electrical Data

Test Temperature: 24.3 °C  
Voltage: 480.0  
Current: 0.2780 A  
Power: 130.1 W  
Power Factor: 0.975  
Frequency: 60 Hz  
Current THD: 19.9 %

Laboratory results may not be representative of field performance  
Ballast factors have not been applied



## Distribution - Goniophotometer

### Distribution Test Conditions

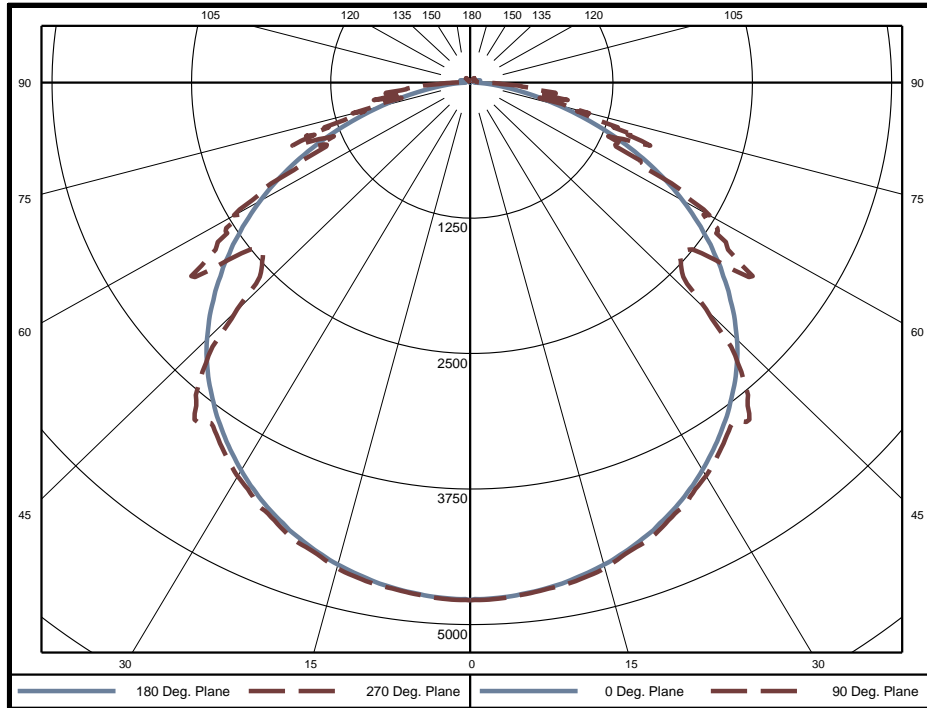
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.6 °C	120.0 VAC	0.9858 A	117.8 W	0.995	60 Hz	7.50 %

### Summary of Results

**Spacing Criteria**  
 0-180: 1.28  
 90-270: 1.28

**Total Lumen Output:** 14370 Lumens  
**Luminaire Efficacy:** 122.0 lm/w  
**Maximum Candela:** 4791 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	114	0.8%	60-65	954	6.6%	120-125	13	0.1%
5-10	339	2.4%	65-70	767	5.3%	125-130	12	0.1%
10-15	554	3.9%	70-75	578	4.0%	130-135	11	0.1%
15-20	753	5.2%	75-80	380	2.6%	135-140	8	0.1%
20-25	929	6.5%	80-85	272	1.9%	140-145	5	0.0%
25-30	1076	7.5%	85-90	151	1.1%	145-150	1	0.0%
30-35	1193	8.3%	90-95	50	0.3%	150-155	0	0.0%
35-40	1278	8.9%	95-100	29	0.2%	155-160	0	0.0%
40-45	1314	9.1%	100-105	28	0.2%	160-165	0	0.0%
45-50	1230	8.6%	105-110	27	0.2%	165-170	0	0.0%
50-55	1158	8.1%	110-115	22	0.2%	170-175	0	0.0%
55-60	1103	7.7%	115-120	17	0.1%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	6236	43.4%
0-60	11041	76.8%
0-90	14143	98.4%
90-180	223	1.6%



**Candela Tabulation**  
Horizontal Angle (Degrees)

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	4776	4776	4776	4776	4776	4776	4776	4776	4776	4776	4776	4776	4776	4776	4776	4776
5	4748	4756	4762	4773	4753	4773	4762	4756	4748	4756	4762	4773	4753	4773	4762	4756
10	4694	4696	4709	4725	4709	4725	4709	4696	4694	4696	4709	4725	4709	4725	4709	4696
15	4602	4611	4630	4651	4631	4651	4630	4611	4602	4611	4630	4651	4631	4651	4630	4611
20	4477	4485	4515	4530	4515	4530	4515	4485	4477	4485	4515	4530	4515	4530	4515	4485
25	4320	4330	4354	4362	4358	4362	4354	4330	4320	4330	4354	4362	4358	4362	4354	4330
30	4124	4141	4164	4167	4185	4167	4164	4141	4124	4141	4164	4167	4185	4167	4164	4141
35	3899	3918	3943	3971	3966	3971	3943	3918	3899	3918	3943	3971	3966	3971	3943	3918
40	3646	3661	3687	3866	3823	3866	3687	3661	3646	3661	3687	3866	3823	3866	3687	3661
45	3348	3364	3428	3335	2956	3335	3428	3364	3348	3364	3428	3335	2956	3335	3428	3364
50	2993	3013	3118	2395	2437	2395	3118	3013	2993	3013	3118	2395	2437	2395	3118	3013
55	2605	2617	2300	2380	2940	2380	2300	2617	2605	2617	2300	2380	2940	2380	2300	2617
60	2181	2268	1795	2389	2447	2389	1795	2268	2181	2268	1795	2389	2447	2389	1795	2268
65	1733	1793	1908	1681	1533	1681	1908	1793	1733	1793	1908	1681	1533	1681	1908	1793
70	1261	1142	1323	1193	1697	1193	1323	1142	1261	1142	1323	1193	1697	1193	1323	1142
75	818	733	811	968	1091	968	811	733	818	733	811	968	1091	968	811	733
80	445	401	668	626	713	626	668	401	445	401	668	626	713	626	668	401
85	196	271	474	506	536	506	474	271	196	271	474	506	536	506	474	271
90	47	150	213	158	165	158	213	150	47	150	213	158	165	158	213	150
95	46	59	55	62	66	62	55	59	46	59	55	62	66	62	55	59
100	85	41	45	51	54	51	45	41	85	41	45	51	54	51	45	41
105	86	45	46	54	57	54	46	45	86	45	46	54	57	54	46	45
110	62	50	40	47	50	47	40	50	62	50	40	47	50	47	40	50
115	42	37	36	39	42	39	36	37	42	37	36	39	42	39	36	37
120	28	33	31	33	35	33	31	33	28	33	31	33	35	33	31	33
125	19	23	33	26	28	26	33	23	19	23	33	26	28	26	33	23
130	13	13	39	32	25	32	39	13	13	13	39	32	25	32	39	13
135	8	6	40	44	53	44	40	6	8	6	40	44	53	44	40	6
140	4	3	9	50	31	50	9	3	4	3	9	50	31	50	9	3
145	1	1	4	11	17	11	4	1	1	1	4	11	17	11	4	1
150	1	0	0	5	7	5	0	0	1	0	0	5	7	5	0	0
155	0	0	0	1	2	1	0	0	0	0	0	1	2	1	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Average Luminance (cd/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

	0	45	90
0	11390	11390	11390
45	10750	9870	8362
55	10110	7681	9591
65	8829	7872	6124
75	6353	4557	5852
85	3415	4387	4581



### Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	17048	17048	17048	17048	16626	16626	16626	16626	15837	15837	15837	15116	15116	15116	14453	14453	14453	14142
1	15511	14799	14161	13586	15093	14449	13869	13343	13794	13317	12879	13193	12804	12444	12638	12326	12034	11714
2	14091	12880	11878	11036	13688	12587	11667	10886	12038	11265	10596	11532	10887	10320	11063	10531	10057	9729
3	12835	11297	10106	9157	12456	11051	9948	9059	10588	9645	8868	10160	9358	8684	9762	9086	8506	8179
4	11743	9998	8720	7744	11392	9791	8599	7677	9399	8365	7545	9036	8142	7417	8698	7929	7293	6970
5	10793	8925	7619	6656	10471	8749	7524	6608	8417	7339	6513	8107	7163	6421	7819	6993	6331	6016
6	9961	8028	6730	5799	9668	7878	6654	5764	7594	6505	5693	7330	6363	5624	7082	6226	5557	5253
7	9230	7271	6002	5112	8965	7143	5940	5085	6900	5819	5031	6672	5702	4978	6458	5589	4926	4634
8	8588	6630	5398	4552	8348	6519	5347	4531	6309	5247	4489	6112	5150	4447	5927	5056	4406	4126
9	8020	6080	4892	4089	7803	5984	4849	4072	5802	4765	4038	5630	4684	4005	5468	4605	3971	3705
10	7516	5605	4462	3701	7319	5522	4426	3687	5363	4355	3660	5213	4287	3632	5071	4220	3605	3351

### Cone of Light Tabulation

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	299	5.18
6.00	133	7.77
8.00	74.6	10.4
10.0	47.8	12.9
12.0	33.2	15.5
14.0	24.4	18.1
16.0	18.7	20.7

### Cone of Light Plot

