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## Indoor Distribution Test Report

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

Prepared For  
**TechBrite LLC**  
1000 Kieley Pl  
Cincinnati, OH 45217  
United States

Catalog Number  
**LT424SS1B35AC000,RT424SS1B35AC000**  
Order Number  
11748594  
Test Number  
11748594.10

Test Date

2017-05-11

Prepared By

Dane Hernandez-Adams, Technician

Approved By

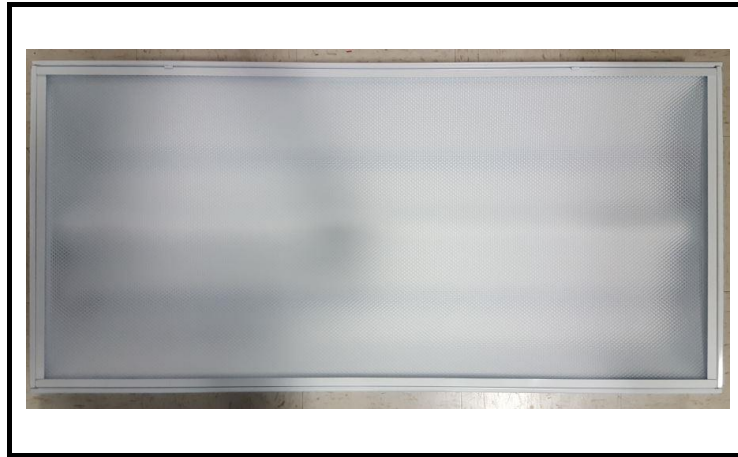
Tiffany Hamm, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** White steel housing, prismatic lens enclosure. Tested in an A.L.P EL 2x4 housing.  
**Lamp:** 224 white LEDs  
**Mounting:** Surface – Ceiling  
**Ballast/Driver:** Everline D10CC55UNVTZ-C

### Luminaire



### Luminaire Characteristics

Luminous Length: 45.00 in.  
Luminous Width: 21.00 in.

### Summary of Results

Total Luminaire Output:	3673 Lumens
Luminaire Efficacy:	120.6 lm/w
Maximum Candela:	1520 Candela

### Test Conditions

Test Temperature:	24.5 °C
Voltage:	120.0 VAC
Current:	0.2546 A
Power:	30.44 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	7.21 %

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



## Distribution - Goniophotometer

### Distribution Test Conditions

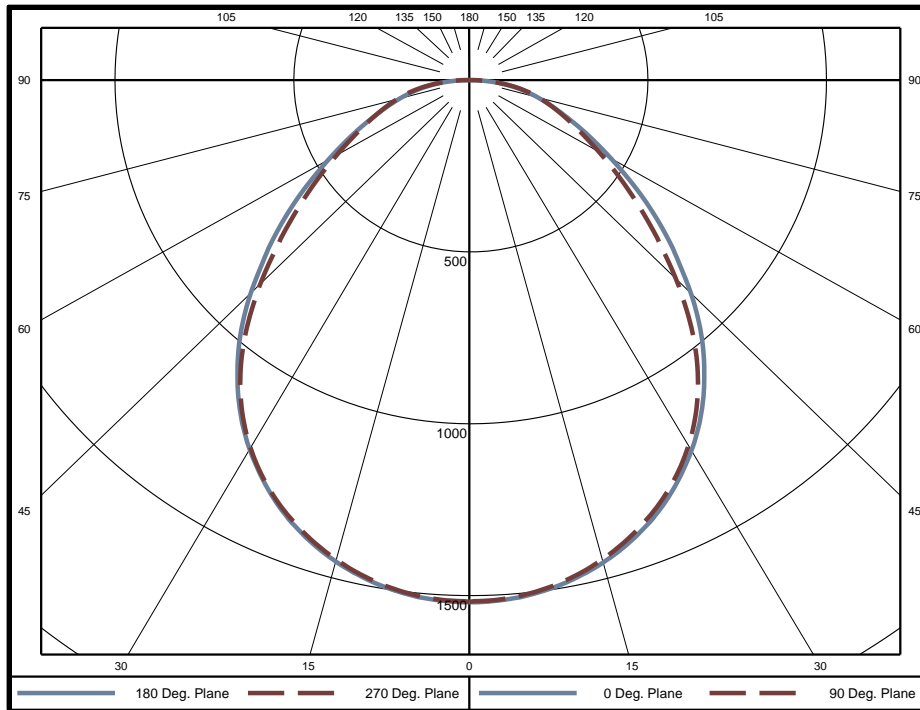
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	120.0 VAC	0.2546 A	30.44 W	0.996	60 Hz	7.21 %

### Summary of Results

**Spacing Criteria**  
 0-180: 1.22  
 90-270: 1.22

**Total Lumen Output:** 3673 Lumens  
**Luminaire Efficacy:** 120.6 lm/w  
**Maximum Candela:** 1520 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	36.2	1.0%	60-65	189.6	5.2%	120-125	0	0.0%
5-10	107.3	2.9%	65-70	152.6	4.2%	125-130	0	0.0%
10-15	174.3	4.7%	70-75	121.3	3.3%	130-135	0	0.0%
15-20	234.5	6.4%	75-80	91.7	2.5%	135-140	0	0.0%
20-25	285.5	7.8%	80-85	58.7	1.6%	140-145	0	0.0%
25-30	324.6	8.8%	85-90	22.4	0.6%	145-150	0	0.0%
30-35	349.0	9.5%	90-95	0	0.0%	150-155	0	0.0%
35-40	356.1	9.7%	95-100	0	0.0%	155-160	0	0.0%
40-45	344.1	9.4%	100-105	0	0.0%	160-165	0	0.0%
45-50	315.9	8.6%	105-110	0	0.0%	165-170	0	0.0%
50-55	276.9	7.5%	110-115	0	0.0%	170-175	0	0.0%
55-60	232.5	6.3%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1868	50.8%
0-60	3037	82.7%
0-90	3673	100.0%
90-180	0	0.0%



**Candela Tabulation**  
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	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	1519	1519	1519	1519	1519	1519	1519	1519	1519	1519	1519	1519	1519	1519	1519	1519
5	1512	1512	1512	1510	1509	1510	1512	1512	1512	1512	1512	1510	1509	1510	1512	1512
10	1490	1490	1490	1486	1485	1486	1490	1490	1490	1490	1490	1486	1485	1486	1490	1490
15	1453	1453	1450	1447	1445	1447	1450	1453	1453	1453	1450	1447	1445	1447	1450	1453
20	1401	1400	1395	1392	1390	1392	1395	1400	1401	1400	1395	1392	1390	1392	1395	1400
25	1333	1329	1324	1322	1321	1322	1324	1329	1333	1329	1324	1322	1321	1322	1324	1329
30	1248	1243	1236	1234	1232	1234	1236	1243	1248	1243	1236	1234	1232	1234	1236	1243
35	1145	1137	1129	1124	1121	1124	1129	1137	1145	1137	1129	1124	1121	1124	1129	1137
40	1024	1014	1002	988	983	988	1002	1014	1024	1014	1002	988	983	988	1002	1014
45	884	877	860	836	827	836	860	877	884	877	860	836	827	836	860	877
50	739	736	713	683	673	683	713	736	739	736	713	683	673	683	713	736
55	597	591	567	545	538	545	567	591	597	591	567	545	538	545	567	591
60	465	457	440	429	425	429	440	457	465	457	440	429	425	429	440	457
65	358	349	337	337	336	337	337	349	358	349	337	337	336	337	337	349
70	272	265	257	265	267	265	257	265	272	265	257	265	267	265	257	265
75	204	199	196	205	208	205	196	199	204	199	196	205	208	205	196	199
80	141	137	139	144	147	144	139	137	141	137	139	144	147	144	139	137
85	72	70	73	77	77	77	73	70	72	70	73	77	77	77	73	70
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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)

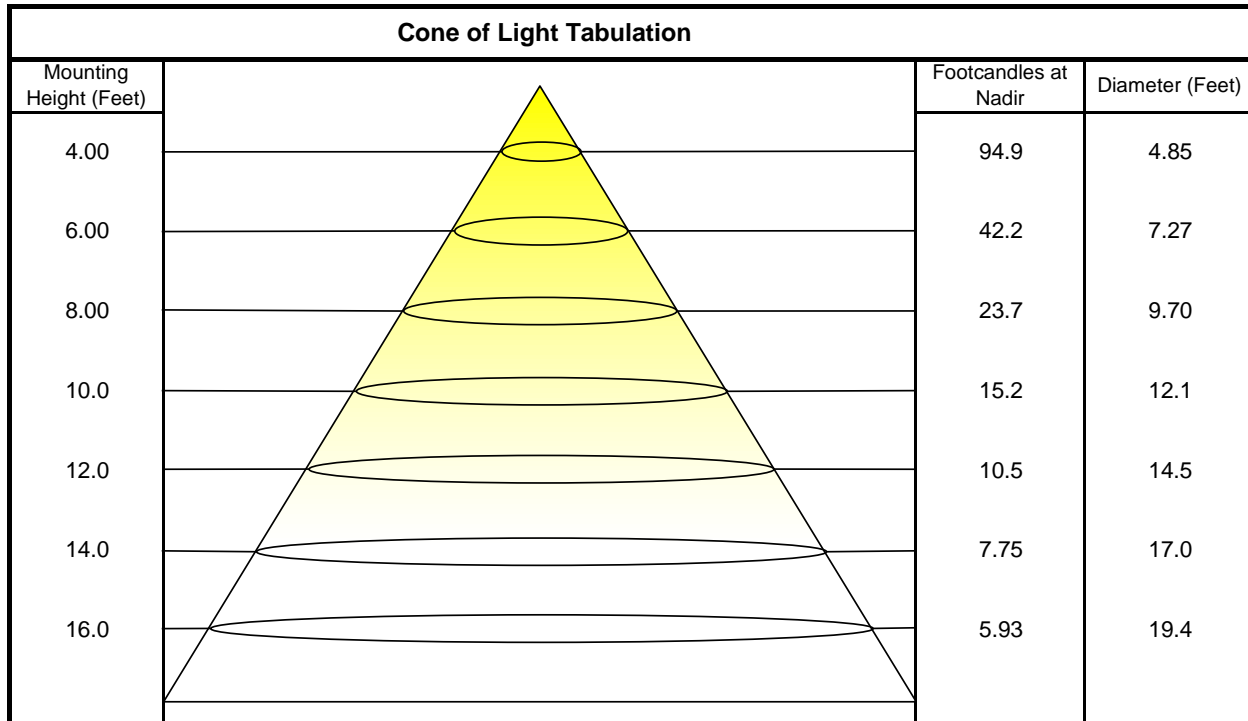
Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
0	2491	2491	2491
45	2051	1996	1917
55	1706	1621	1540
65	1391	1306	1305
75	1292	1243	1315
85	1363	1380	1444



### 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	4372	4372	4372	4372	4271	4271	4271	4271	4081	4081	4081	3907	3907	3907	3748	3748	3748	3673
1	4012	3844	3693	3557	3913	3761	3624	3499	3605	3492	3389	3462	3370	3285	3330	3257	3188	3112
2	3672	3383	3144	2943	3577	3314	3094	2908	3185	3000	2840	3066	2911	2776	2955	2828	2715	2637
3	3367	2997	2711	2483	3277	2940	2675	2461	2832	2605	2418	2731	2538	2376	2639	2475	2336	2258
4	3097	2676	2367	2132	3015	2628	2340	2117	2537	2286	2088	2453	2236	2060	2374	2187	2033	1956
5	2860	2407	2090	1856	2785	2366	2068	1846	2289	2027	1826	2218	1987	1806	2151	1949	1787	1712
6	2650	2179	1862	1635	2582	2144	1845	1628	2079	1812	1614	2018	1781	1600	1961	1751	1586	1513
7	2464	1984	1673	1455	2402	1955	1660	1450	1899	1633	1440	1847	1608	1429	1798	1583	1419	1349
8	2299	1817	1515	1307	2242	1792	1504	1303	1744	1482	1295	1699	1461	1287	1657	1441	1280	1211
9	2152	1673	1380	1182	2101	1651	1371	1179	1610	1353	1173	1571	1336	1167	1534	1319	1161	1096
10	2020	1548	1265	1077	1974	1529	1257	1074	1493	1242	1070	1459	1228	1065	1427	1214	1060	998

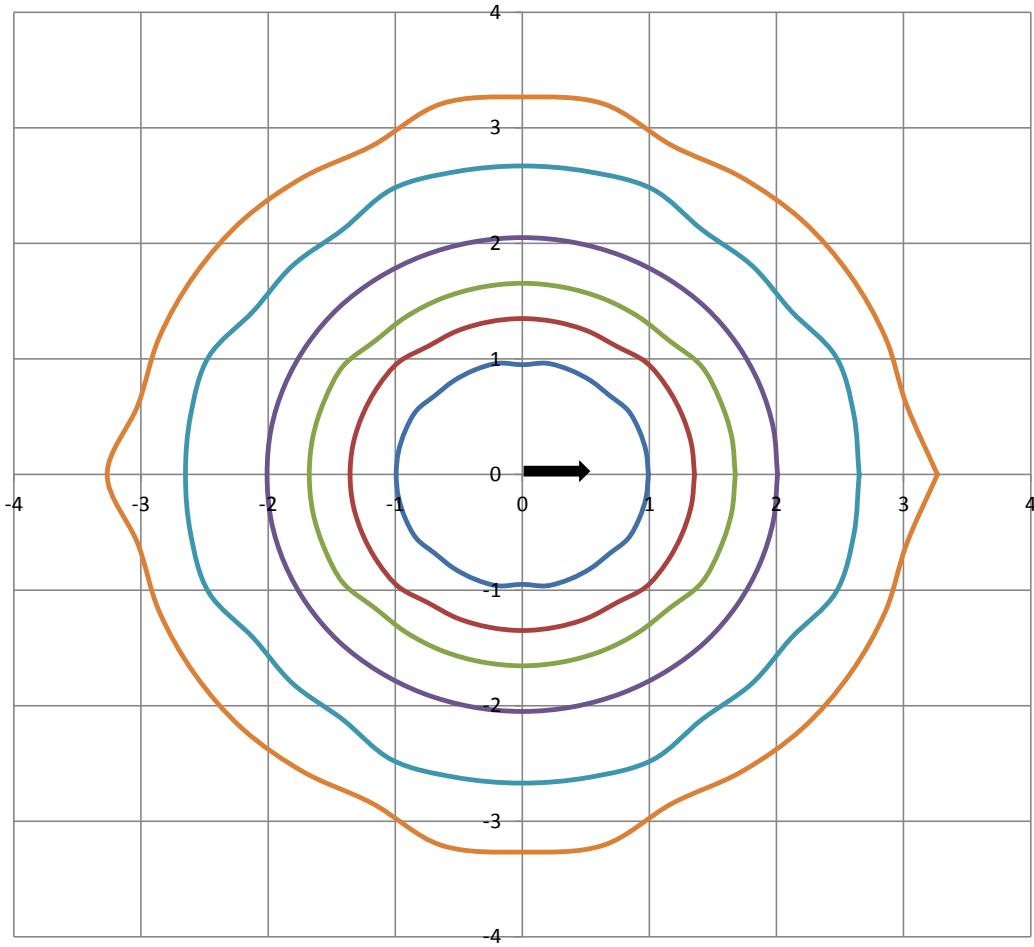
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1519 Candela
Central Cone Intensity:	1516 Candela
Beam Flux:	2425.0 Lumens
Beam Angle (0-180):	98.5 Degrees
Beam Angle (90-270):	94.1 Degrees
Field Angle (0-180):	158.3 Degrees
Field Angle (90-270):	159.2 Degrees





### ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

