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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
LT224SS1B35AC000,RT224SS1B35AC000
Order Number
11748594
Test Number
11748594.22

Test Date

2017-05-05

Prepared By

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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 2x2 housing.
Lamp: 112 white LEDs
Mounting: Surface – Ceiling
Ballast/Driver: Everline D700CC30UNVTZ-C

Luminaire



Luminaire Characteristics

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

Summary of Results

Total Luminaire Output: 2548 Lumens
Luminaire Efficacy: 111.2 lm/w
Maximum Candela: 1126 Candela

Test Conditions

Test Temperature: 25.1 °C
Voltage: 120.0 VAC
Current: 0.1921 A
Power: 22.92 W
Power Factor: 0.995
Frequency: 60 Hz
Current THD: 8.94 %

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



Distribution - Goniophotometer

Distribution Test Conditions

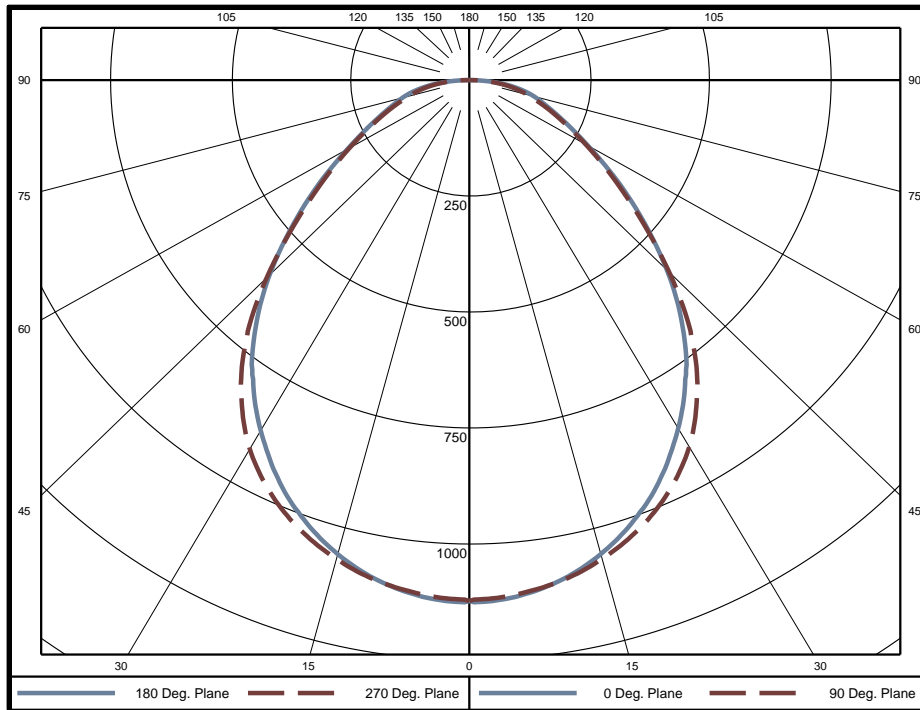
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.0 VAC	0.1921 A	22.92 W	0.995	60 Hz	8.94 %

Summary of Results

Spacing Criteria
 0-180: 1.16
 90-270: 1.16

Total Lumen Output: 2548 Lumens
Luminaire Efficacy: 111.2 lm/w
Maximum Candela: 1126 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	26.8	1.1%	60-65	120.7	4.7%	120-125	0	0.0%
5-10	79.1	3.1%	65-70	96.7	3.8%	125-130	0	0.0%
10-15	128.1	5.0%	70-75	77.6	3.0%	130-135	0	0.0%
15-20	171.6	6.7%	75-80	60.0	2.4%	135-140	0	0.0%
20-25	207.8	8.2%	80-85	39.5	1.6%	140-145	0	0.0%
25-30	234.3	9.2%	85-90	15.2	0.6%	145-150	0	0.0%
30-35	249.4	9.8%	90-95	0	0.0%	150-155	0	0.0%
35-40	251.8	9.9%	95-100	0	0.0%	155-160	0	0.0%
40-45	240.1	9.4%	100-105	0	0.0%	160-165	0	0.0%
45-50	215.4	8.5%	105-110	0	0.0%	165-170	0	0.0%
50-55	183.6	7.2%	110-115	0	0.0%	170-175	0	0.0%
55-60	150.5	5.9%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1349	52.9%
0-60	2139	83.9%
0-90	2548	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	1123	1123	1123	1123	1123	1123	1123	1123	1123	1123	1123	1123	1123	1123	1123	1123
5	1118	1116	1117	1114	1113	1114	1117	1116	1118	1116	1117	1114	1113	1114	1117	1116
10	1095	1094	1097	1096	1096	1096	1097	1094	1095	1094	1097	1096	1096	1096	1097	1094
15	1059	1058	1064	1068	1069	1068	1064	1058	1059	1058	1064	1068	1069	1068	1064	1058
20	1008	1010	1018	1027	1031	1027	1018	1010	1008	1010	1018	1027	1031	1027	1018	1010
25	946	948	960	974	981	974	960	948	946	948	960	974	981	974	960	948
30	871	873	886	905	916	905	886	873	871	873	886	905	916	905	886	873
35	787	788	800	818	828	818	800	788	787	788	800	818	828	818	800	788
40	694	693	702	715	721	715	702	693	694	693	702	715	721	715	702	693
45	587	587	596	594	593	594	596	587	587	587	596	594	593	594	596	587
50	477	481	484	469	468	469	484	481	477	481	484	469	468	469	484	481
55	377	378	373	364	366	364	373	378	377	378	373	364	366	364	373	378
60	290	289	282	278	284	278	282	289	290	289	282	278	284	278	282	289
65	226	223	209	211	219	211	209	223	226	223	209	211	219	211	209	223
70	178	178	159	162	169	162	159	178	178	178	159	162	169	162	159	178
75	143	138	124	124	128	124	124	138	143	138	124	124	128	124	124	138
80	104	98	90	87	91	87	90	98	104	98	90	87	91	87	90	98
85	55	53	49	47	48	47	49	53	55	53	49	47	48	47	49	53
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/m²)
Horizontal Angle (Degrees)

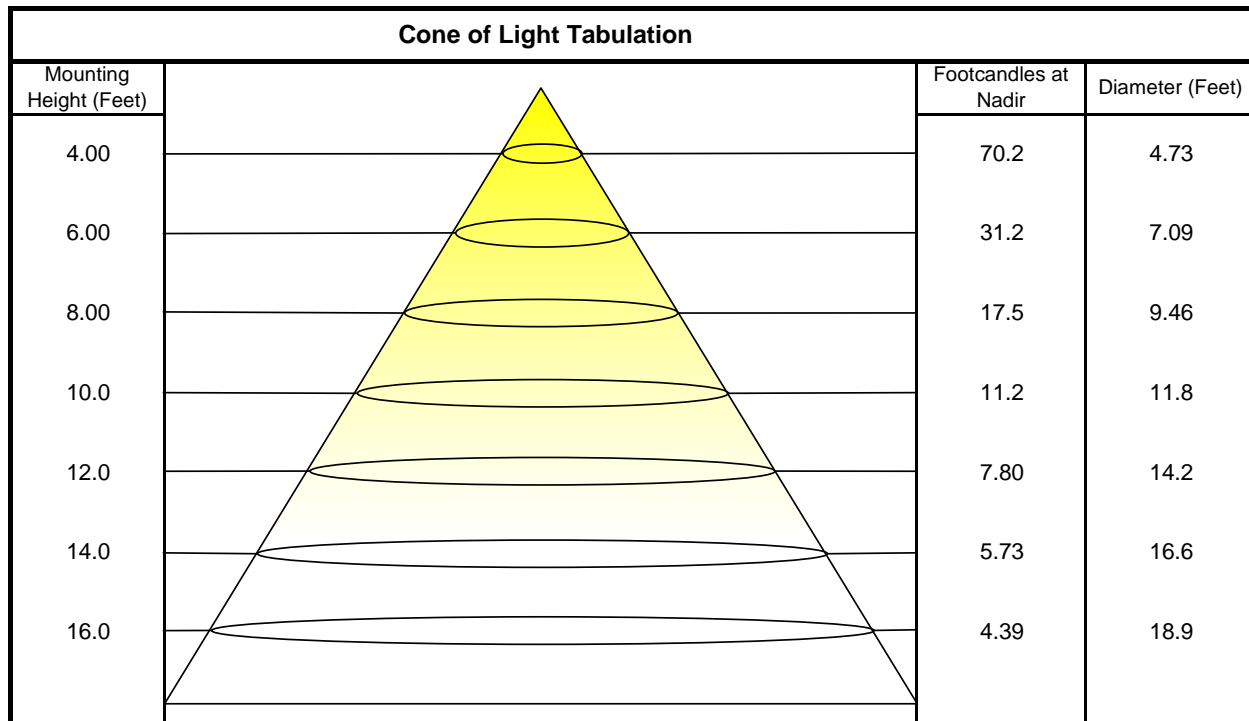
Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
0	3946	3946	3946
45	2919	2961	2949
55	2309	2286	2242
65	1882	1734	1820
75	1941	1681	1742
85	2213	1968	1938



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	3033	3033	3033	3033	2963	2963	2963	2963	2831	2831	2831	2711	2711	2711	2600	2600	2600	2548
1	2789	2675	2573	2480	2721	2617	2524	2440	2510	2433	2363	2411	2349	2291	2320	2270	2223	2171
2	2558	2362	2200	2063	2493	2315	2165	2039	2225	2100	1992	2143	2039	1947	2067	1981	1904	1851
3	2350	2099	1905	1750	2289	2060	1880	1734	1985	1831	1704	1916	1785	1675	1852	1741	1647	1593
4	2166	1879	1669	1509	2110	1846	1650	1498	1784	1613	1478	1725	1578	1458	1671	1544	1439	1387
5	2003	1694	1478	1318	1952	1666	1463	1311	1613	1434	1297	1564	1407	1284	1518	1381	1270	1219
6	1859	1537	1320	1165	1811	1513	1309	1160	1468	1286	1150	1426	1264	1141	1387	1243	1131	1081
7	1730	1402	1189	1040	1687	1382	1180	1036	1343	1161	1029	1307	1144	1022	1274	1127	1015	966
8	1615	1286	1078	936	1577	1268	1071	933	1235	1056	928	1204	1042	922	1175	1028	917	871
9	1513	1185	984	849	1478	1170	978	847	1142	966	842	1115	954	838	1089	942	834	789
10	1421	1097	903	774	1390	1084	898	773	1060	888	769	1036	878	766	1014	868	763	720

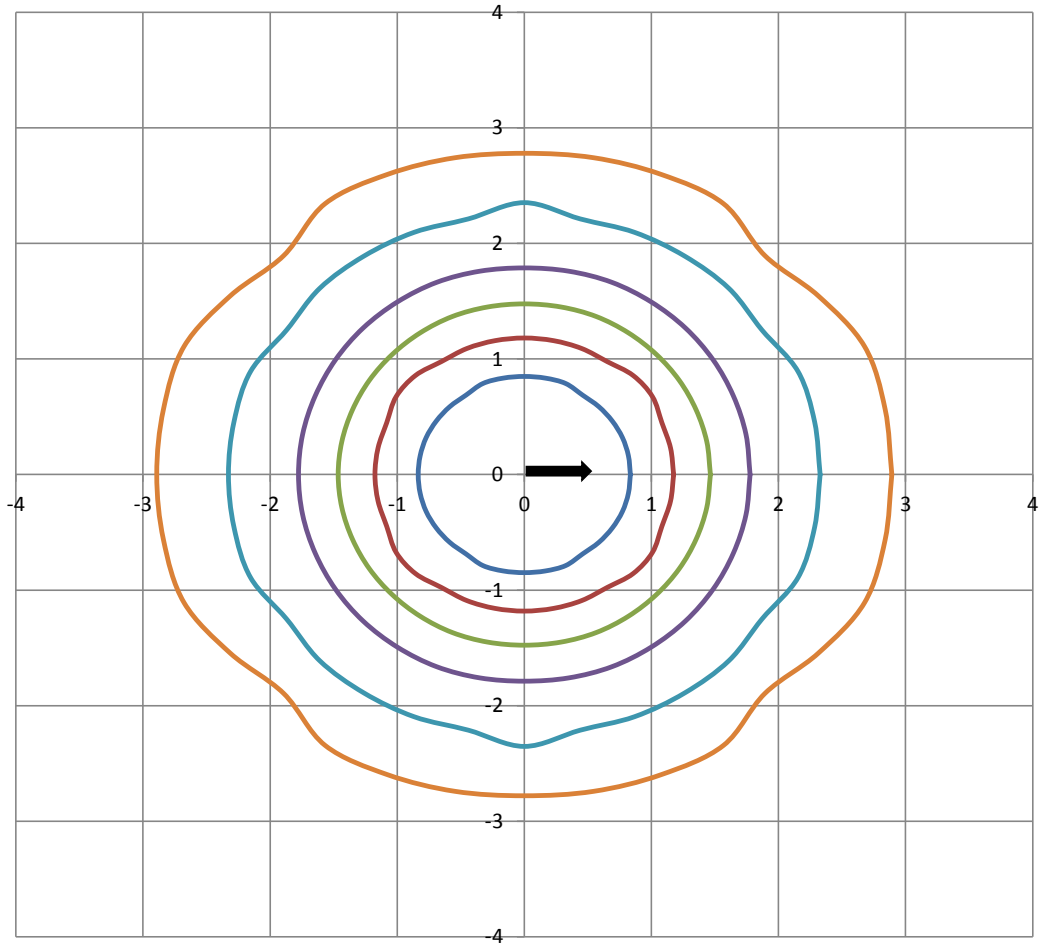
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1123 Candela
Central Cone Intensity:	1120 Candela
Beam Flux:	1648.0 Lumens
Beam Angle (0-180):	92.3 Degrees
Beam Angle (90-270):	92.4 Degrees
Field Angle (0-180):	158.0 Degrees
Field Angle (90-270):	154.5 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

