



A.L.P.

LIGHTING COMPONENTS, INC.

WORLD HEADQUARTERS: CHICAGO, IL U.S.A.

10163 U.S. HWY, 31 North • Charlevoix, MI 49720-9649

Thermal Expansion April 14, 2007

ACRYLIC

	Standard Temp																												
Degrees F	40	45	50	55	60	65	72	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180
Degrees C	4	7	10	13	16	18	22	24	27	29	32	35	38	41	43	46	49	52	54	57	60	63	66	68	71	74	77	79	82
Change in length (in) per foot of part length	-0.014	-0.012	-0.010	-0.008	-0.005	-0.003	0.000	0.001	0.004	0.006	0.008	0.010	0.012	0.015	0.017	0.019	0.021	0.024	0.026	0.028	0.030	0.032	0.035	0.037	0.039	0.041	0.044	0.046	0.048
Change in length (in) of a 4' long part	-0.057	-0.048	-0.039	-0.030	-0.021	-0.012	0.000	0.005	0.014	0.023	0.032	0.041	0.050	0.059	0.067	0.076	0.085	0.094	0.103	0.112	0.121	0.130	0.139	0.147	0.156	0.165	0.174	0.183	0.192
Change in length (mm) of a 1220mm long part	-1.444	-1.218	-0.992	-0.767	-0.541	-0.316	0.000	0.135	0.361	0.586	0.812	1.038	1.263	1.489	1.714	1.940	2.165	2.391	2.616	2.842	3.068	3.293	3.519	3.744	3.970	4.195	4.421	4.646	4.872
Rated expansion .000037 in/in/°F																													

POLYCARBONATE

	Standard Temp																												
Degrees F	40	45	50	55	60	65	72	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180
Degrees C	4	7	10	13	16	18	22	24	27	29	32	35	38	41	43	46	49	52	54	57	60	63	66	68	71	74	77	79	82
Change in length (in) per foot of part length	-0.013	-0.011	-0.009	-0.007	-0.005	-0.003	0.000	0.001	0.003	0.005	0.007	0.009	0.011	0.013	0.015	0.017	0.019	0.021	0.023	0.025	0.027	0.029	0.031	0.033	0.035	0.037	0.039	0.041	0.043
Change in length (in) of a 4' long part	-0.051	-0.043	-0.035	-0.027	-0.019	-0.011	0.000	0.005	0.013	0.021	0.029	0.037	0.045	0.053	0.061	0.069	0.077	0.085	0.093	0.101	0.109	0.117	0.125	0.133	0.141	0.149	0.157	0.165	0.173
Change in length (mm) of a 1220mm long part	-1.303	-1.099	-0.896	-0.692	-0.489	-0.285	0.000	0.122	0.326	0.529	0.733	0.937	1.140	1.344	1.547	1.751	1.955	2.158	2.362	2.565	2.769	2.973	3.176	3.380	3.583	3.787	3.991	4.194	4.398
Rated expansion .0000334 in/in/°F																													