



CIRCULAR-POLARIZED ACRYLIC FILTERS

Circular-polarized filters enhance the contrast of all light emitting electronic displays. These filters are designed to allow light to travel through the filter in one direction while virtually eliminating any light that attempts to pass through the filter a second time. Ambient light that enters the display is not reflected back out of the display.

TECHNICAL DATA

Circular-polarized acrylic filters are made from laminating a very thin circular-polarizer between two acrylic sheets.

OPTICS

Using the National Bureau of Standards Resolution Test Chart of 1952, for matte surfaces, resolving power of Resolution Test Chart at 1.000" from target is chart pattern number 80.

TEMPERATURE CYCLING TEST

The filters shall withstand a temperature cycling test of 3 cycles, each cycle consisting of exposure at -54C for 16 hours and 1 hour equilibrium at room temperature and then 5 hours at +74C and then 2 hours at room temperature.

DRY HEAT TEST

The filters shall withstand exposure to dry heat consisting of 120 continuous hours at +74C (10% to 15% relative humidity).

COLD TEST

The filters shall withstand a sustained exposure to cold temperature consisting of 120 continuous hours at -54C.

RELATIVE HUMIDITY TEST

The filters shall withstand a sustained exposure of +49C at 50% relative humidity for 120 continuous hours.

WEATHER CYCLING TEST (REFERENCE ASTM-E239):

The filters shall withstand 36 cycles of accelerated weathering, each cycle consisting of 102 minutes sun, 18 minutes sun plus heavy mist using a 6000 watt Xenon Arc.

STANDARD ATMOSPHERE FOR CONDITIONING AND TESTING (ASTM-D-618):

The standard atmosphere for conditioning and testing is +23C at approximately 50% relative humidity. Preconditioning period is 12 hours.

PANELVIEW FILTER MATERIAL CODES			
COLOR	COLOR NO.	MATL CODE, 0.072"	MATL CODE, 0.132"
Neutral-gray (37%)	N001	-00A1-XX	-0SA1-XX
Amber	A001	-00A2-XX	-0SA2-XX
Blue	B001	-00A4-XX	-0SA4-XX
Green	G001	-00A5-XX	-0SA5-XX
Red	R003	-00A6-XX	-0SA6-XX
Material thickness tolerance: 0.072" +0.014", -0.018" and 0.132" +/- 0.025"			
MATERIAL CODE SUFFIX for SURFACE FINISH			
SURFACE FINISH TYPE	CODE		
Hardcoat, 54 Gloss units (matte)	H		
Hardcoat, 75 gloss units (matte)	J		
Hardcoat water-clear (Glossy)	W		
Cast-in Non-Glare	N		
Glossy	G		