

# K & S Laboratories, Inc.

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September 3, 2004

Project 04393

Mr. Stuart Blankstein  
ACL Inc.  
1960 E. Devon Avenue  
Elk Grove Village, IL 60007

Dear Mr. Blankstein:

The sample of laminated matting identified as **Dualmat** has been tested according to the general methodology of ESD 4.1 for surface resistivity ( $R_{IT}$ ) and surface to groundable point ( $R_{TG}$ ) at applied voltages of 10 and 100 volts. The test conditions were 15%RH, 73F and 50%RH, 73F. The electrode separation for the surface testing was 12 inches, except for some quick checks at 4 inches and 24 inches.

## TEST RESULTS

### Average Resistances (Ohms)

	$R_{IT}$		$R_{TG}$	
	<u>At 10 V</u>	<u>At 100 V</u>	<u>At 10 V</u>	<u>At 100 V</u>
At 15%RH	2.4(10 <sup>7</sup> )	2.0(10 <sup>7</sup> )	9.4(10 <sup>6</sup> )	7.8(10 <sup>6</sup> )
At 50%RH	3.1(10 <sup>6</sup> )	2.8(10 <sup>6</sup> )	1.4(10 <sup>6</sup> )	1.3(10 <sup>6</sup> )

Due to the type of construction, there was very little difference in resistance readings as a function of electrode spacing. However, statistically though not practically significant differences can result from different electrode surfaces, e.g., damp paper.

Some small differences could result from recent environmental history and conditioning time. The results reported are for conditioning time of 24 to 48 hours.

Some additional tests were done for charge decay time using the methodology of FTMS 4046(101c). Due to the high level of conductivity of the material, decay times were measured at

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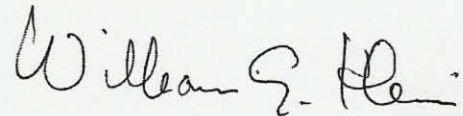
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less than 0.01 second. This is not an appropriate test method for material of this sort but is often cited and therefore is included here.

If you have any questions, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in black ink, appearing to read "William G. Klein". The signature is written in a cursive style with a large initial "W" and a long horizontal stroke at the end.

William G. Klein

WGK/ma