

Dust Test

Prepared for: Southern Avionics Company P.O. Box 5345 Beaumont, TX 77726-5345 Attention: Ms. Caroline Morales	Test Dates	
	Start:	1/20/2010
	Completion:	1/21/2010
	Environ Test Number:	41415-1
	Purchase Order Number:	09111801
	Purchase Date:	11/18/2009

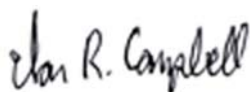
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Environ Laboratories LLC certifies that one Large and one Small Enclosure were subjected to an IP6X Dust Test as specified in *IEC 60529*, Edition 2.1, 2001-02, Paragraph 13.4, Category 1, as requested in Southern Avionics Company purchase order 09111801, dated November 18, 2009.

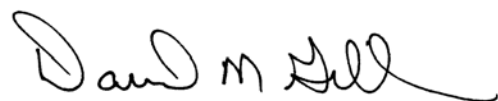
Manufacturer	Southern Avionics Company	
Device	Small Enclosure	Large Enclosure
Part Number	SLM33001	SLM33002
Serial Number	SE125 Single	SE125 Dual

The results of this test apply only to the units identified in this Engineering Report by device identifier and model / part number, or serial number.

The large enclosure was placed on the mounting rack inside the dust chamber. All closure bolts were torqued to 20 in-lbs. A line to the vacuum pump was connected to the unit. Internal unit pressure was reduced by 2 kPa and a leak rate was measured. The correct amount of talcum powder was introduced into the chamber and the chamber was sealed. The dust activation system was started and the vacuum pump was energized. The test was conducted for 8 hours. The test unit was removed from the chamber at the completion of the exposure and inspected. The same process was then repeated for the small enclosure. Post-test visual inspection revealed no dust inside either the large or small enclosure. The test units met the requirements of the Dust Test of *IEC 60529*, Edition 2.1, 2001-02, Paragraph 13.4, Category 1, at Degree of Protection IP6X. The units were returned to the client for further evaluation.



Ian R. Campbell, Test Engineer



David M. Gillen, Vice President

Instrumentation

All instrumentation is calibrated regularly by instruments directly traceable to the National Institute of Standards and Technology, and in accordance with *MIL-I-45208A*, *ANSI/NCSL Z540.3-2006*, and *ISO/IEC 17025: 2005*.

Equipment Number	Description	Manufacturer	Model Number	Last Calibration	Due Calibration	Range
400-049	Stopwatch	Extech Instruments	365510	11/23/2009	11/23/2010	0 to 23 hrs 59 mins 59 sec
710-202	Digital Pressure Gauge	Meriam Instruments	2110-AI2000	9/9/2009	9/9/2010	0 to 2000 mmHg
717-111	Gas - Mass Flow Controller	Alicat Scientific	MC-1SLPM-D	11/5/2009	11/5/2010	0 to 1 SLPM (N ₂)
740-064	Dial Torque Wrench	MAC Quality Tools	TWD X 150IN	8/4/2009	8/4/2010	0 to 150 in/lbs; 0 to 18 Newton Meters