


Tower Power Supply Subassembly Stray Voltage Test


COVER SHEET

Program: GLAST
Procedure Number: LAT-DS-04849
Procedure Title: TPS Subassembly SVT
Paragraph Number: 5.1
Paragraph Title: Test Procedure Instructions/Information
Unit S/N: 3

TEST READINESS REVIEW COMPLETED AND APPROVED BY THE FOLLOWING:

Test Director: [Signature] Date: 12/14/04
Quality Assurance: [Signature]  Date: 12.14.04
Test Conductor: [Signature] Date: 12/14/04

REVIEWED AND APPROVED BY THE FOLLOWING:

Test Director: [Signature] Date: 12/15/04
Quality Assurance: [Signature]  Date: 12.14.04
Test Conductor: [Signature] Date: 12/15/04


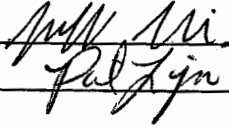
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Tower Power Supply Subassembly Stray Voltage Test

TEST DATA SHEET		Unit S/N: <p style="text-align: center; font-size: 2em;">3</p>	Date/Temperature: <p style="text-align: center;">12/14/04 RT</p>	
Title: Equipment		Operator: <p style="text-align: center; font-size: 1.5em;">JL</p>	QA:	
Para	Test Equipment Description and Manufacturer	Model/LAT Number	Serial/Rev. Number	*Cal./Val. Date
5.1.3-1	Record Model/LAT number, Serial/Revision number, Calibration due dates and Validation date for all equipment used in this procedure:			
	Manual Testing:			
	Digital Multimeter, Fluke	87 III	GLAT 1667	11.3.05
	Breakout Box Assembly, 78-Pin Connector,,SLAC	LAT-DS-03580	GLAT 1388	9/05
	Adapter cable (78 pin), SLAC	LAT-DS-04302	GLAT 1400	9/05
	Adapter cable, SLAC	LAT-DS-04615	GLAT 1649	9/05
	Automated Testing:			
	Personal Computer	Dell	PC 68023	N/A
	Data Logger, Agilent	34970A	GLAT 1151	9/05
	Power Supply, BK	1697	GLAT 0997	6.21.05
	BenchLink Software, Agilent	Data Logger II	N/A	N/A
	GPIB- USB, Agilent	82357A	MY 9315570	N/A
	Adapter cable (2), SLAC	LAT-DS-04612	GLAT 1439 GLAT 1438	9/05
	Adapter Y cable, SLAC	LAT-DS-04616	GLAT 1436	9/05
	Digital Multimeter, Fluke	87 III	GLAT 1667	11.3.05
	Shorting Plug (2)	LAT-DS-04380	GLAT 1482 GLAT 1486	N/A N/A

* This column is for recording the calibration due date for a given piece of equipment or the date that EGSE was validated.

Tower Power Supply Subassembly Stray Voltage Test


TEST DATA SHEET		Unit S/N: 3	Date/Temperature: 12/14/04 RT
Title: 5.1.4 Participant List		Operator: JL	QA: 
Para	Title	Print Name	Signature
5.1.4-1	Record names of all personnel that take part in the test/operation:		
	Engineer	Jeffrey Ludvik	
	QE	PAT LUSAN	

Tower Power Supply Subassembly Stray Voltage Test


COVER SHEET

Program: GLAST
Procedure Number: LAT-DS-04849
Procedure Title: TPS Subassembly SVT
Paragraph Number: 5.2
Paragraph Title: Manual SVT Testing
Unit S/N: 3

TEST READINESS REVIEW COMPLETED AND APPROVED BY THE FOLLOWING:


Test Director: *[Signature]*  Date: 12/14/04
Quality Assurance: *[Signature]* Date: 12.14.04
Test Conductor: *[Signature]* Date: 12/14/04

REVIEWED AND APPROVED BY THE FOLLOWING:

Test Director: *[Signature]*  Date: 12/15/04
Quality Assurance: *[Signature]* Date: 12.15.04
Test Conductor: *[Signature]* Date: 12/15/04


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Tower Power Supply Subassembly Stray Voltage Test

TEST DATA SHEET		Unit S/N: 3	Date: 12/14/04	
Title: 5.2 Manual SVT Testing		Operator: SL	QA: 	
Para./ Step	Description	Limits	Unit	Data
5.2.1	Pre-Operation Verifications			
-1	Notify QAE.	OK	OK/NG	OK
-2	Test Readiness Review is done.	OK	OK/NG	OK
-3	Record the EUT equipment:			
	Part number	NA	NA	LAT
	Serial number	NA	NA	3
-4	Power to the LAT or EGSE is off.	OFF	ON/OFF	OFF
-5	Set DMM to autoranging for resistance.	OK	OK/NG	OK
-6	Measure DMM lead resistance.	< 2.0	Ω	0.1
-8	Remove all shorting plugs from BOBs.	OK	OK/NG	OK
-9	Measure BOB to ground.	< 2.0	Ω	0.2
-11	Measure EUT to ground.	< 2.0	Ω	0.2
-12	All connector savers are installed on the flight connections.	OK	OK/NG	OK
-13	The test equipment and participant lists have been completed.	OK	OK/NG	OK


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Tower Power Supply Subassembly Stray Voltage Test

TEST DATA SHEET		Unit S/N: 3	Date: 12/14/04	
Title: 5.2 Manual SVT Testing		Operator: JL	QA: 	
Para.	Description	Limits	Unit	Data
5.2.2.	TEM Interface Connection, J1			
-1	The test configuration of the TPS Subassembly to TEM interfaces check.	OK	OK/NG	OK
	Mate connector saver to J2 of the TPS Subassembly.	OK	OK/NG	OK
	Mate connector saver to J1 of the TPS Subassembly	OK	OK/NG	OK
	Connect P2 of BOB cable LAT-DS-04302 to BOB J2	OK	OK/NG	OK
	Connect P1 of BOB cable LAT-DS-04302 to connector saver of TPS Subassembly J1.	OK	OK/NG	OK
	Connect J1 and J2 of Power Supply cable LAT-DS-04615 to the external power supply.	OK	OK/NG	OK
5.2.2.1	Stray Voltage Test			
-3	External power supply display reads	+27.8 - +28.2	Volts	28
-5	Connect P1 side of cable LAT-DS-04615 to connector saver J2 of the TPS Subassembly.	OK	OK/NG	OK
-7	External power supply display reads	+27.8 - +28.2 +26.5 - +29.5	Volts m Amps	28 31mA


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Tower Power Supply Subassembly Stray Voltage Test

TEST DATA SHEET		Unit S/N: 3		Date: 12/14/04		
Title: 5.2 Manual SVT Testing		Operator: JL		QA: 		
Para.	Signal Name	Black Neg.	Red Pos.	Limits	Unit	Data
5.2.2.1 -8	J1 - Stray Voltage					
	2_5_Digital_0	8	1	2-3	Volts	2.5
	2_5_Digital_1	8	2	2-3	Volts	2.5
	2_5_Digital_3	8	3	2-3	Volts	2.5
	TRK_DVDD_XYP0	8	4	< 500 m	Volts	0
	CAL_DVDD_XYP0	8	5	< 500 m	Volts	0
	TEM_VDD0	8	6	3-4	Volts	3.41
	TRK_PS_ON1	8	7	< 500 m	Volts	0
	TEM_GND0	8	8	< 500 m	Volts	0
	TEMP0A	8	9	< 500 m	Volts	0
	TEMPB0	8	10	< 500 m	Volts	0
	CAL_DVDD_XYP1	8	11	< 500 m	Volts	0
	CAL_BIAS_XYN0	8	12	< 500 m	Volts	0.007
	CAL_BIAS_SP_C1	8	13	< 500 m	Volts	0
	CAL_AGND0	8	14	< 500 m	Volts	0
	TRK_AGNDA0	8	15	< 500 m	Volts	0
	TRK_AGNDB0	8	16	< 500 m	Volts	0
	TRK_AGNDB1	8	17	< 500 m	Volts	0
	TRK_BIAS_SP_C0	8	18	< 500 m	Volts	0
	TRK_DVDD_XYP1	8	19	< 500 m	Volts	0
TRK_DVDD_XYN0	8	20	< 500 m	Volts	0	


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Tower Power Supply Subassembly Stray Voltage Test

TEST DATA SHEET		Unit S/N: 3		Date: 12/14/04		
Title: 5.2 Manual SVT Testing		Operator: JL		QA: 		
Para.	Signal Name	Black Neg.	Red Pos.	Limits	Unit	Data
5.2.2.1 -8	J1 – Stray Voltage					
	TEM_CURR_H	8	21	1.8-2.4	Volts	2.12
	TEM_CURR_L	8	22	1.8-2.4	Volts	2.13
	CAL_BIAS_XYP0	8	23	< 500 m	Volts	0.009
	CAL_BIAS_XYP1	8	24	< 500 m	Volts	0.01
	TRK_AVDDDB_XYP0	8	25	< 500 m	Volts	0
	TRK_PS_ON0	8	26	< 500 m	Volts	0
	TEM_GND1	8	27	< 500 m	Volts	0
	TEMP1A	8	28	< 500 m	Volts	0
	TEMPB1	8	29	< 500 m	Volts	0
	CAL_DVDD_XYN0	8	30	< 500 m	Volts	0
	CAL_BIAS_XYN1	8	31	< 500 m	Volts	0.00 0.010
	CAL_BIAS_SP_C0	8	32	< 500 m	Volts	0
	CAL_AGND1	8	33	< 500 m	Volts	0
	TRK_AGNDA1	8	34	< 500 m	Volts	0
	TRK_AGNDA2	8	35	< 500 m	Volts	0
	TRK_AVDDDB_XYP1	8	36	< 500 m	Volts	0
	TRK_AGNDB2	8	37	< 500 m	Volts	0
	TRK_BIAS_SP_C1	8	38	< 500 m	Volts	0
	TRK_DVDD_XYN1	8	39	< 500 m	Volts	0
TRK_BIAS-CURR.	8	40	< 500 m	Volts	0	


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TEST DATA SHEET		Unit S/N: 3		Date: 12/14/04		
Title: 5.2 Manual SVT Testing		Operator: SL		QA: 		
Para.	Signal Name	Black Neg.	Red Pos.	Limits	Unit	Data
5.2.2.1 -8	J1 - Stray Voltage					
	TRK_DET_BIAS_YN0	8	41	< 500 m	Volts	.007
	TRK_DET-BIAS_YN1	8	42	< 500 m	Volts	.007
	CAL_AVDD0_XYP0	8	43	< 500 m	Volts	0
	TRK_AVDDA_XYP0	8	44	< 500 m	Volts	0
	TEM_VDD1	8	45	3-4	Volts	3.41
	CAL_PS_ON0	8	46	< 500 m	Volts	0
	TEM_GND2	8	47	< 500 m	Volts	0
	VDD_A	8	48	< 500 m	Volts	0
	CAL_DGND0	8	49	< 500 m	Volts	0
	CAL_DVDD_XYN1	8	50	< 500 m	Volts	0
	CAL_BIAS_GND0	8	51	< 500 m	Volts	0
	CAL_AVDD_XYP1	8	52	< 500 m	Volts	0
	CAL_AGND2	8	53	< 500 m	Volts	0
	TRK_AVDDA_XYP1	8	54	< 500 m	Volts	0
	TRK_AVDDDB_XYN0	8	55	< 500 m	Volts	0
	TRK_AVDDDB_XYN1	8	56	< 500 m	Volts	0
	TRK_DET_BIAS_XP0	8	57	< 500 m	Volts	0
	TRK_DGND0	8	58	< 500 m	Volts	0
	TRK_DGND1	8	59	< 500 m	Volts	0
CAL_BIAS_CURR	8	60	< 500 m	Volts	0.01	

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Tower Power Supply Subassembly Stray Voltage Test

TEST DATA SHEET		Unit S/N: 3		Date: 12/14/04		
Title: 5.2 Manual SVT Testing		Operator: JL		QA: 		
Para.	Signal Name	Black Neg.	Red Pos.	Limits	Unit	Data
5.2.2.1 -8	J1 - Stray Voltage					
	TRK_DET_BIAS_XN0	8	61	< 500 m	Volts	0.007
	TRK_DET_BIAS_XN1	8	62	< 500 m	Volts	0.007
	TRK_DET_BIAS_YP0	8	63	< 500 m	Volts	0.007
	TRK_DET_BIAS_YP1	8	64	< 500 m	Volts	0.007
	TEM_VDD2	8	65	3-4	Volts	3.41
	CAL_PS_ON1	8	66	< 500 m	Volts	0
	VDD_B	8	67	< 500 m	Volts	0
	CAL_DGND1	8	68	< 500 m	Volts	0
	CAL_DGND2	8	69	< 500 m	Volts	0
	CAL_BIAS_GND1	8	70	< 500 m	Volts	0
	CAL_AVDD_XYN0	8	71	< 500 m	Volts	0
	CAL_AVDD_XYN1	8	72	< 500 m	Volts	0
	TRK_AVDDA_XYN0	8	73	< 500 m	Volts	0
	TRK_AVDDA_XYN1	8	74	< 500 m	Volts	0
	TRK_BIAS_AGND0	8	75	< 500 m	Volts	0
	TRK_BIAS_AGND1	8	76	< 500 m	Volts	0
	TRK_DET_BIAS_XP1	8	77	< 500 m	Volts	0.007
	TRK_DGND2	8	78	< 500 m	Volts	0

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Tower Power Supply Subassembly Stray Voltage Test

COVER SHEET

Program: GLAST

Procedure Number: LAT-TD-04849

Procedure Title: TPS Subassembly SVT Procedure

Paragraph Number: 5.3

Paragraph Title: Automated SVT Testing *NOT PERFORMED*

Unit S/N: 3

MANUAL TEST PERFORMED



12/14/05

TEST READINESS REVIEW COMPLETED AND APPROVED BY THE FOLLOWING:

Test Director: _____ Date: _____
Quality Assurance: _____ Date: _____
Test Conductor: _____ Date: _____

REVIEWED AND APPROVED BY THE FOLLOWING:

Test Director: _____ Date: _____
Quality Assurance: _____ Date: _____
Test Conductor: _____ Date: _____

Tower Power Supply Subassembly Stray Voltage Test

TEST DATA SHEET		Unit S/N:	Date:	
Title: 5.3 Automated SVT Testing		Operator:	QA:	
Para./ Step	Description	Limits	Unit	Data
5.3.1	Pre-Operation Verifications			
-1	Notify QAE.	OK	OK/NG	
-2	Test Readiness Review is done.	OK	OK/NG	
-3	Record the EUT equipment:			
	Part number	NA	NA	
	Serial number	NA	NA	
-4	Power to the LAT or EGSE is off.	OFF	ON/OFF	
-5	Set DMM to autoranging for resistance.	OK	OK/NG	
-6	Measure DMM lead resistance.	< 2.0	Ω	
-7	Measure test equipment to ground.	< 2.0	Ω	
-9	Measure EUT to ground.	< 2.0	Ω	
5.3.1.2 -48	Data Logger continuity and isolation checks are complete	OK	OK/NG	
-49	All connector savers are installed on the flight connections.	OK	OK/NG	
-50	The test equipment and participant lists have been completed.	OK	OK/NG	

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TEST DATA SHEET		Unit S/N:	Date:	
Title: 5.3 Automated SVT Testing		Operator:	QA:	
Para.	Description	Limits	Unit	Data
5.3.2	TEM Interface Connection, J1			
-1	Verify configuration and connection sequence of the TPS Subassembly to TEM interface checks.	OK	OK/NG	
	Install cable assembly LAT-DS-04612 into Data Logger J100.	OK	OK/NG	
	Install cable assembly LAT-DS-04612 into Data Logger J200.	OK	OK/NG	
	Connect J100 of cable LAT-DS-04616 to connect J1 of cable LAT-DS-04612 (J100 side).	OK	OK/NG	
	Connect J200 of cable LAT-DS-04616 to connect J1 of cable LAT-DS-04612 (J200 side).	OK	OK/NG	
	Connect GPIB between Data Logger and PC computer	OK	OK/NG	
	Connect J1 of cable LAT-DS-04616 to connector saver of TPS Subassembly S J1.	OK	OK/NG	
	Connect J1 and J2 of Power Supply cable LAT-DS-04615 to the external power supply.	OK	OK/NG	

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Tower Power Supply Subassembly Stray Voltage Test

TEST DATA SHEET		Unit S/N:	Date:	
Title: 5.3 Automated SVT Testing		Operator:	QA:	
Para.	Description	Limits	Unit	Data
5.3.2	TEM Interface Connection, J1			
-4	External power supply display reads	+27.8 - +28.2	Volts	
-6	Connect P1 side of cable LAT-DS-04615 to connector saver J2 of the TPS Subassembly.	OK	OK/NG	
-8	External power supply display reads	+27.8 - +28.2 +26.5 - +29.5	Volts m Amps	
-34	Verify that the data all passed.	OK	OK/NG	

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