TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

Supplier's Declaration of Conformity (SDoC) Testing

in accordance with the requirements of

TIA-968-B, TIA-968-B-1 and 47 CFR 68.318

for

Tripp Lite, Inc.
1111 West 35th Street
Chicago, IL 60609
(773) 869 1111

of

MOV Based Surge Protector

on

November 17, 2014

Tested by

Mark R. McSweeney

Reviewed by:

Larry K. Stillings

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Declaration and Terminal Equipment Information

I, the undersigned, Mark R. McSweeney
Compliance Worldwide, Inc.
357 Main Street
Sandown, NH 03873
hereby attest:

That the information contained in this submission for terminal equipment (listed below) certification is, to the best of my knowledge, complete and accurate. The equipment has been evaluated in all applicable conditions and complies with all the technical requirements of the document(s) for which approval is sought.

Trade Name / **Model Number**: MOV Based Surge Protector

Connecting Method: RJ 11C

Ringer Equivalence Number: 0.0B

Description: The MOV Based Surge Protector is a single line passive surge protector power strip with a single line loop start connector utilizing a MOV based protection circuit. Three different models employ the same protection scheme and are grouped under the same family description. The respective models numbers are:

AV810	TLP1208SAT	TLP808TEL
AVSWIV6	TLP1208TEL	TLP808TELTV
HT1210SAT3	TLP1208TELTV	TLP810NET
HT706TSAT	TLP1210SATG	TLP810SAT
MT-6PLUS	TLP604TEL	TMC-6
SK5TEL-0	TLP606RNET	TRAVELCUBE (1080J)
SUPER6+TEL	TLP608TEL	TRAVELER
SUPER6TEL12	TLP706TELC	TRAVELER100BT
SUPER7TEL15	TLP707TEL	TRAVELERC6
TLM626TEL15	TLP76RBTEL	TRAVELERC8
TLP1008TEL	TLP806TEL	BCPRO600
TLP1008TELTV	TLP808NETG	INTERNETOFFICE500
INTERNETOFFICE700	SMART1500LCD	OMNIVS1500XL
OMNISMART300PNP	SMART1500LCDXL	OMNIVS800
OMNISMART500	SMART1500SLT	OMNIVSINT1500XL
OMNISMART700	SMART750SLT	SMART1050SLT
OMNIVS1000	SMART750USB	SMART1200LCD
OMNIVS1500	TLP606SSTELB	TLP906RTEL

Signed this 21st day of July 2017

Mark R. McSweeney

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1 - Scope

This standard specifies technical criteria for terminal equipment approved in accordance with 47 CFR 68 for direct connection to the public switched telephone network, including private line services provided over wireline facilities owned by providers of wireline telecommunications. These technical criteria are intended to protect the telephone network from the harms defined in 47 CFR 68.3. Conformance to the technical criteria in this standard will not assure compatibility with wireline carrier services.

TE that is modified shall be re-approved under the requirements in effect at the time of the modification, not necessarily those requirements in effect at the time of the prior approval. Except as otherwise specified herein, a modification is any change that affects the compliance of TE to this standard. Repair to TE, where no modification has occurred, does not require re-approval.

Report number 443-14R1 was a revised version of report number 443-14. Changes include:

- Clause 5.1.3.4.2, page 22, of this report:

  Applied voltage was changed from 120 VAC to 300 VAC

Report number 443-14R2 is a revised version of report number 443-14R1. Changes include:

- Additional model numbers were added that are electrically identical to model numbers previously listed

Report number 443-14R3 is a revised version of report number 443-14R2. Changes include:

- Additional model numbers were added that are electrically identical to model numbers previously listed

---

Note: This report has been compiled to document MOV Based Surge Protector testing results in comparison to the requirements as specified in TIA-968-B, TIA-968-B-1 and 47 CFR 68.318. All results are based on a test of one sample, only in as much as that sample represents other production units. If any significant changes are made to the unit, the changes shall be evaluated and a retest may be required.

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2 - Product details

2.1 - Equipment description

Trade Name: MOV Based Surge Protector

Model Number: various (see below)

Serial Number: n/a

Input Power: n/a

Description: The MOV Based Surge Protector is a single line passive surge protector power strip with a single line loop start connector utilizing a MOV based protection circuit. Three different models employ the same protection scheme and are grouped under the same family description. The respective models numbers are:

AV810	TLP1208SAT	TLP808TEL
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HT706TSAT	TLP1210SATG	TLP810SAT
MT-6PLUS	TLP604TEL	TMC-6
SK5TEL-0	TLP606RNET	TRAVELCUBE (1080J)
SUPER6+TEL	TLP608TEL	TRAVELER
SUPER6TEL12	TLP706TELC	TRAVELER100BT
SUPER7TEL15	TLP707TEL	TRAVELERC6
TLM626TEL15	TLP76RBTEL	TRAVELERC8
TLP1008TEL	TLP806TEL	BCPRO600
TLP1008TELTV	TLP808NETG	INTERNETOFFICE500
INTERNETOFFICE700	SMART1500LCD	OMNIVS1500XL
OMNISMART300PNP	SMART1500LCDXL	OMNIVS800
OMNISMART500	SMART1500SLT	OMNIVSINT1500XL
OMNISMART700	SMART750SLT	SMART1050SLT
OMNIVS1000	SMART750USB	SMART1200LCD
OMNIVS1500	TLP606SSTELB	TLP906RTEL

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3 - Test parameters

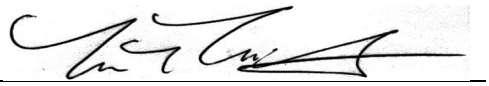
3.1 - Laboratory environment

Ambient Temperature	15 - 25	°C	Relative Humidity	30 - 75	%

3.2 - Results analysis

Based on this analysis the MOV Based Surge Protector complies with TIA-968-B, TIA-968-B-1 and 47 CFR 68.318 requirements.

Please see following data for complete results of testing with comparisons the required limit.

Test Engineer: 

Mark R. McSweeney
November 17, 2014

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EUT: MOV Based Surge Protector

3.3 - Test equipment list

Asset #	Manufacturer	Device	Model	Serial #
011	Compliance Design	Balance Analyzer	BA-100	3376
015	Compliance Design	Plug-in module	CDI 1500V 200A	n/a
016	Compliance Design	Plug-in module	CDI 2.5kV 1kA	n/a
017	Compliance Design	Plug-in module	CDI 800V 100A	n/a
018	Compliance Design	Surge Generator	CDI-1000i	3190
019	Compliance Design	AC Stress Analyzer	HVC-100	3166
021	Compliance Design	Network Analyzer	NA-100	3363
023	Compliance Design	Wideband Receiver	WBR-100	3053
040	Fluke	Multi-meter	45	5275215
041	Fluke	Multi-meter	45	4804030
044	Haefely	Surge Generator	P-Surge 4.1	083-061-06
048	Hewlett-Packard	Function Generator	33120A	US36018408
051	Hewlett-Packard	Digital Multimeter	34401A	US36047149
057	Hewlett-Packard	Oscilloscope	54610B	US37340501
066	Krohn-Hite	Programmable Filter	3945	5123
076	Stanford Research Systems	Network Signal Analyzer	SR780	31569

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4 - Test program

4.1 - Test requirements matrix

4.1.1 - Results key

C	Complies with requirement
D	Does not Comply with requirement
O	Outside scope of this report
N/A	Not Applicable

4.1.2 - TIA-968-B requirements

443-14R3 Reference	TIA-968-B Reference	Description	Result	Notes
5.1	4	Common requirements		Informative
5.1.1	4.1	Environmental simulation		Informative
5.1.1.1	4.1.1	Mechanical shock	C	
5.1.1.2	4.1.2	Type A voltage surges		Informative
5.1.1.2.1	4.1.2.1	Metallic	C	
5.1.1.2.2	4.1.2.2	Longitudinal	C	
5.1.1.3	4.1.3	Type B voltage surges		Informative
5.1.1.3.1	4.1.3.1	Metallic	C	
5.1.1.3.2	4.1.3.2	Longitudinal	C	
5.1.1.4	4.1.4	Power line surge		Informative
5.1.1.4.1	4.1.4.1	Phase-neutral surge	C	
5.1.2	4.2	Leakage current limitations	C	
5.1.3	4.3	Hazardous voltage limitations		Informative
5.1.3.1	4.3.1	General requirement	C	
5.1.3.2	4.3.2	Connection of non-approved equipment to approved TE	C	
5.1.3.3	4.3.3	Non-hazardous voltage source	C	

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443-14R3 Reference	TIA-968-B Reference	Description	Result	Notes
5.1.3.4	4.3.4	Intentional paths to ground		Informative
5.1.3.4.1	4.3.4.1	Connections with operational paths to ground	C	
5.1.3.4.2	4.3.4.2	Connections with protective paths to ground	C	
5.1.4	4.4	Billing protection		Informative
5.1.4.1	4.4.1	Call duration requirements		Informative
5.1.4.1.1	4.4.1.1	Protective circuitry	N/A	1
5.1.4.1.2	4.4.1.2	Terminal equipment for data applications	C	
5.1.4.2	4.4.2	On hook signal requirements		Informative
5.1.4.2.1	4.4.2.1	Total on hook power	C	
5.1.4.3	4.4.3	Signaling interference requirements		Informative
5.1.4.3.1	4.4.3.1	SF/guard band limitations	C	
5.1.5	4.5	Encoded analog content	N/A	2
5.1.6	4.6	Connectors and wiring configurations		Informative
5.1.6.1	4.6.1	Introduction	C	
5.1.6.2	4.6.2	Wiring configurations	C	
5.1.6.3	4.6.3	Multi-line, private branch exchange (PBX), and key telephone systems.	C	
5.1.7	4.7	Allowable net amplification between ports		Informative
5.1.7.1	4.7.1	General		Informative
5.1.7.2	4.7.2	Allowable net amplification between network interface ports	N/A	3
5.1.7.3	4.7.3	Allowable net amplification between ports for other approved TE and network interface ports	N/A	3
5.1.7.4	4.7.4	Single frequency (SF) guard band	N/A	3
5.1.7.5	4.7.5	SF cutoff	N/A	3
5.2	5	Interface requirements		Informative
5.2.1	5.1	Analog voice band interface requirements		Informative

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443-14R3 Reference	TIA-968-B Reference	Description	Result	Notes
5.2.1.1	5.1.1	General analog voice band signal power limits		Informative
5.2.1.2	5.1.2	Limitations on signals not intended for network control signaling	C	
5.2.1.3	5.1.3	Limitations on signals intended for network control signaling	C	
5.2.1.4	5.1.4	Limitations on non-approved signal sources	N/A	4
5.2.1.5	5.1.5	Through transmission limitations		Informative
5.2.1.5.1	5.1.5.1	DC conditions	N/A	5
5.2.1.5.2	5.1.5.2	Data terminal equipment jack limitations	N/A	6
5.2.1.5.2	5.1.5.3	Allowable net amplification between ports	N/A	3
5.2.1.5.4	5.1.5.4	Tie trunk interface limitations	N/A	7
5.2.1.6	5.1.6	Signal power in the 3995-4005 Hz band	C	
5.2.1.7	5.1.7	Longitudinal voltage at frequencies below 4 kHz	C	
5.2.1.8	5.1.8	Voltages from 4 - 30000 kHz		Informative
5.2.1.8.1	5.1.8.1	Metallic voltage 4 - 270 kHz	C	
5.2.1.8.2	5.1.8.2	Metallic voltage 270 - 30000 kHz	C	
5.2.1.8.3	5.1.8.3	Longitudinal voltage 4 - 270 kHz	C	
5.2.1.8.4.	5.1.8.4	Longitudinal voltage 270 - 6000 kHz	C	
5.2.1.9	5.1.9	Conditions for 5.1.7 and 5.1.8	C	
5.2.1.10	5.1.10	Analog voice band transverse balance limits	C	
5.2.1.11	5.1.11	Loop start interfaces		Informative
5.2.1.11.1	5.1.11.1	General requirements		Informative
5.2.1.11.2	5.1.11.2	Limitations on loop start interfaces		Informative
5.2.1.11.2.1	5.1.11.2.1	On hook resistance up to 100 V	C	
5.2.1.11.2.2	5.1.11.2.2	On hook resistance 100 - 200 V	C	
5.2.1.11.2.3	5.1.11.2.3	DC current during ringing	C	

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443-14R3 Reference	TIA-968-B Reference	Description	Result	Notes
5.2.1.11.2.4	5.1.11.2.4	Metallic ringing frequency impedance	C	
5.2.1.11.2.5	5.1.11.2.5	Longitudinal ringing frequency impedance	C	
5.2.1.11.2.6	5.1.11.2.6	REN calculation	C	
5.2.1.11.3	5.1.11.3	Transitioning to the off hook state	C	
5.2.1.11.4	5.1.11.4	Loop current requirements	C	

4.1.3 - CFR 47 Part 68.318 requirements

443-14R3 Reference	Part 68.318 Reference	Description	Result	Notes
5.3.1	68.318(b)	Terminal equipment with automatic dialing capability	C	
5.1.2	68.318(c)	Line seizure by automatic telephone dialing systems.	C	
5.1.3	68.318(d)	Telephone facsimile machines requirements	C	
5.1.4	68.318(e)	Equal access to common carriers requirements	C	

Notes:	
1	TE is not protective circuitry
2	TE does not include encoded analog content
3	TE does not support through transmission ports
4	TE does not support connection of non-approved signal sources
5	TE does not supply DC power to attached equipemnt
6	TE does not support data jack connections
7	TE is not a tie trunk interface

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5 - Test results

5.1 - Common requirements

5.1.1 - Environmental simulation

5.1.1.1 - Mechanical shock

Test equipment used: n/a

Data:

Weight of TE - | 0.200 | kg

Handheld items

| X | - (18) random 1.5m drops

Desk/Table Top Equipment:

| X | - (6) random 750mm drops

Notes: None

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5.1.1.2 - Type A voltage surge

5.1.1.2.1 - Metallic voltage surge

Test equipment used: 017, 018, 041

Data:

Tip-ring surge - 4 surges - 800 V, 100 amp, 10x560uS

On-Hook	X	X		Off Hook	n/a	n/a
	Positive	Negative			Positive	Negative

Notes: TE does not transition to off hook state.

5.1.1.2.2 - Longitudinal voltage surge

Test equipment used: 017, 018, 041

Data:

T,R - ground surge - 4 surges - 1500 V, 200 amp, 10x160uS

On-Hook	X	X		Off Hook	n/a	n/a
	Positive	Negative			Positive	Negative

T,R, - non-registered leads Surge - 4 surges - 1500, 200 amp, 10x160uS

On-Hook	X	X		Off Hook	n/a	n/a
	Positive	Negative			Positive	Negative

Notes: TE does not transition to off hook state.

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5.1.1.3 - Type B voltage surge

5.1.1.3.1 - Metallic voltage surge

Test equipment used: 044

Data:

Tip-ring surge - 4 surges - 1000 V, 25 amp, 9x720uS

On-Hook	X	X		Off Hook	n/a	n/a
	Positive	Negative			Positive	Negative

Notes: TE does not transition to off hook state.

5.1.1.3.2 - Longitudinal voltage surge

Test equipment used: 044

Data:

T,R - ground surge - 4 surges - 1500 V, 37.5 amp, 9x720uS

On-Hook	X	X		Off Hook	n/a	n/a
	Positive	Negative			Positive	Negative

T,R - non-registered leads surge - 4 surges - 1500 V, 37.5 amp, 9x720uS

On-Hook	X	X		Off Hook	n/a	n/a
	Positive	Negative			Positive	Negative

Notes: TE does not transition to off hook state.

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5.1.1.4 - Power line surge

5.1.1.4.1 - Phase to neutral surge

Test equipment used: 015, 041

Data:

Phase to neutral surge - 6 Surges - 2500 V, 1000 amp, 2x10uS

On-Hook:

Positive	X	X	X
Negative	X	X	X

Off-Hook:

Positive	n/a	n/a	n/a
Negative	n/a	n/a	n/a

Notes: TE does not transition to off hook state.

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5.1.2 - Leakage current limitations

Test equipment used: 019, 041, 051

Data:

Leads	Voltage VAC	Pre surge mA	Post B surge mA	Post A surge mA	Limit mA
Telephone to Mains Power	1500	< 0.1	< 0.1	< 0.1	
Telephone to Surfaces	1000	< 0.1	< 0.1	< 0.1	
Telephone to Non-registered leads	1000	n/a	n/a	n/a	
Telephone to Aux leads	1000	n/a	n/a	n/a	
Telephone to E&M leads	1000	n/a	n/a	n/a	
Mains Power to Surfaces	1500	< 0.1	< 0.1	< 0.1	
Mains Power to Non-registered leads	1500	n/a	n/a	n/a	
Mains Power to Aux Leads	1500	n/a	n/a	n/a	**< 10**
Mains Power to E&M leads	1500	n/a	n/a	n/a	
Mains Power to PR, PC, CY1 and CY2 leads	1500	n/a	n/a	n/a	
Surfaces to Aux Leads	1500	n/a	n/a	n/a	
Surfaces to E&M leads	1000	n/a	n/a	n/a	
Non-registered to Aux Leads	1000	n/a	n/a	n/a	
Non-registered to E&M leads	1000	n/a	n/a	n/a	
Aux Leads to E&M leads	1000	n/a	n/a	n/a	

Notes: **If any lead has an intentional conducting path to ground it may be excluded from the leakage test. Leads excluded for this reason shall comply with the requirements of 4.2.3.3**

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5.1.3 - Hazardous voltage limitations

5.1.3.1 - General requirement

Test equipment used: 057

Data:

Condition	Leads	Voltage $Volts_{Peak}$	Duration mS	Limits	
				$Volts_{Peak}$	mS
Pre surge	Tip - Ring	< 70	< 1000	< 70	< 1000
	Tip - Ground	< 70	< 1000		
	Ring - Ground	< 70	< 1000		
Post B surge	Tip - Ring	< 70	< 1000		
	Tip - Ground	< 70	< 1000		
	Ring - Ground	< 70	< 1000		
Post A surge	Tip - Ring	< 70	< 1000		
	Tip - Ground	< 70	< 1000		
	Ring - Ground	< 70	< 1000		

Notes: None

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5.1.3.2 - Connection of non-approved equipment to approved TE

Test equipment used: n/a

Data:

Leads to telephone connections are reasonably physically separated and restrained from and are neither routed in the same cable as, nor use the same connector as, leads or metallic paths connecting power connections.

Leads to telephone connections are also reasonably physically separated and restrained from and neither routed in the same cable as, nor use adjacent pins on the same connector as, metallic paths that lead to non-approved equipment, when the voltage on such metallic paths exceed the non-hazardous voltage source limits of TIA-968

- Attention is called to the fact that Tip and Ring are routed away from mains power leads.
- A good physical separation is maintained between telephone leads and leads to non-certified equipment that has hazardous voltages (greater than 42.4 volts peak or 80V DC).
- Routing of leads is through back panel, then to the interface printed circuit board.

Additional Remarks: None

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.1.3.3 - Non hazardous voltage source

Test equipment used: n/a

Data:

n/a	- Unit is powered from non-hazardous (less than 42.4 volts peak or 80 VDC) supply voltages.
n/a	- TE is powered from mains power
n/a	- TE is battery powered (Please specify)
n/a	- TE is line powered -48 VDC

TE is powered from an external power supply as follows:

n/a	12VAC	n/a	12VDC
n/a	9VAC	n/a	9VDC
n/a	6VAC	n/a	6VDC
n/a	Other	n/a	Other

(Please specify)	(Please specify)
n/a	n/a
MANUFACTURER	MODEL NAME AND NUMBER
n/a	n/a

Notes: TE is a passive surge protector and has no power supply

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.1.3.4 - Intentional paths to ground

5.1.3.4.1 - Connections with operational paths to ground

Test equipment used: 041, 051, 134

Data:

Condition	Applied Current mA	Test Points	Measured mVDC	Limit mVDC
Pre surge	1000	Tip – Ground	n/a	**< 100**
		Ring – Ground	n/a	
Post B surge		Tip – Ground	n/a	
		Ring – Ground	n/a	
Post A surge		Tip – Ground	n/a	
		Ring – Ground	n/a	

Notes: TE has no intentional operational paths to ground

5.1.3.4.2 - Connections with protective paths to ground

Test equipment used: 019, 041, 051

Data:

Condition	Applied Voltage VAC	Test Points	Measured mA	Limit mA
Pre surge	300	Tip – Ground	< 0.1	**< 10**
		Ring – Ground	< 0.1	
Post B surge		Tip – Ground	< 0.1	
		Ring – Ground	< 0.1	
Post A surge		Tip – Ground	< 0.1	
		Ring – Ground	< 0.1	

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.1.4 - Billing protection

5.1.4.1 - Call duration requirements on data equipment

5.1.4.1.1 - Protective circuitry

Test equipment used: 023, 057

Data:

Condition	Parameter	Measured S	Limit S
Pre surge	Data transmission in first 2 seconds of answering call	n/a	> 2
Post B surge		n/a	
Post surge		n/a	

Notes: TE does not transition to off hook state.

5.1.4.1.2 - Approved terminal equipment for data applications

Test equipment used: 023, 057

Data:

Condition	Parameter	Measured S	Limit S
Pre surge	Data transmission in first 2 seconds of answering call	n/a	> 2
Post B surge		n/a	
Post A surge		n/a	

Notes: TE does not transition to off hook state.

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.1.4.2 - On hook signal requirements

5.1.4.2.1 - Total on hook power

Test equipment used: 023, 040, 051, 066

Data:

Condition	Band Hz	Measured dBm	Limit dBm
Pre surge	200 - 4000	-105	< -55
Post B surge		-103	
Post A surge		-102	

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.1.4.3 - Signaling interference requirements

5.1.4.3.1 - SF/guard band limitations

Test equipment used: 023, 040, 051, 066

Data:

Condition	State	Band Hz	Level dBm	Limit dBm
Pre surge	Off hook min	800 - 2450	n/a	**see below**
		2450 - 2750	n/a	**< level in 800-2450 band**
	Off hook max	800 - 2450	n/a	**see below**
		2450 - 2750	n/a	**< level in 800-2450 band**
Post B surge	Off hook min	800 - 2450	n/a	**see below**
		2450 - 2750	n/a	**< level in 800-2450 band**
	Off hook max	800 - 2450	n/a	**see below**
		2450 - 2750	n/a	**< level in 800-2450 band**
Post A surge	Off hook min	800 - 2450	n/a	**see below**
		2450 - 2750	n/a	**< level in 800-2450 band**
	Off hook max	800 - 2450	n/a	**see below**
		2450 - 2750	n/a	**< level in 800-2450 band**

Notes: TE does not transition to off hook state.

5.1.5 - Encoded analog content

Test equipment used: n/a

Data:

TE contains no encoded analog content

Notes: None

5.1.6 - Connectors and wiring configurations

5.1.6.1 - Introduction

Test equipment used: n/a

Data:

X	Connection is made with a connector conforming with TIA-1096-A
	Connection is made by direct attachment

Notes:

5.1.6.2 - Wiring configurations

Test equipment used: n/a

Data:

OK	The supplied connector is wired in accordance with TIA-1096-A

Notes: None

5.1.7 - Allowable net amplification between ports

Test equipment used: n/a

Data:

TE has no through transmission ports within meaning of TIA-968-B.

Notes: None

5.2 - Interface requirements

5.2.1 - Analog voice band interface requirements

5.2.1.1 - General analog voice band signal power limits

Test equipment used: n/a

Data:

This section is informative in nature

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.2 - Limitations on signals not intended for network control signaling

Test equipment used: 023, 051, 066

Data:

Condition	State	Parameter	Measured dBm	Limit dBm
Pre surge	Off hook min	Non-Live Voice	n/a	**< -9**
		Data signals	n/a	
		Other Signals	n/a	
	Off hook max	Non-Live Voice	n/a	
		Data signals	n/a	
		Other Signals	n/a	
Post B surge	Off hook min	Non-Live Voice	n/a	
		Data signals	n/a	
		Other Signals	n/a	
	Off hook max	Non-Live Voice	n/a	
		Data signals	n/a	
		Other Signals	n/a	
Post A surge	Off hook min	Non-Live Voice	n/a	
		Data signals	n/a	
		Other Signals	n/a	
	Off hook max	Non-Live Voice	n/a	
		Data signals	n/a	
		Other Signals	n/a	

Notes: TE has no internal signal generator

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.3 - Limitations signals intended for network control signaling

Test equipment used: 023, 051, 066

Data:

State	Digit	Low Freq Hz	High Freq Hz	Pre surge dBm	Post B surge dBm	Post A surge dBm	Limit dBm
Off hook min	0	932	1329	n/a	n/a	n/a	< 0
	1	694	1210	n/a	n/a	n/a	
	2	694	1329	n/a	n/a	n/a	
	3	694	1467	n/a	n/a	n/a	
	4	774	1210	n/a	n/a	n/a	
	5	774	1329	n/a	n/a	n/a	
	6	774	1467	n/a	n/a	n/a	
	7	853	1210	n/a	n/a	n/a	
	8	853	1329	n/a	n/a	n/a	
	9	853	1467	n/a	n/a	n/a	
	#	932	1467	n/a	n/a	n/a	
	*	932	1210	n/a	n/a	n/a	
Off hook max	0	932	1329	n/a	n/a	n/a	
	1	694	1210	n/a	n/a	n/a	
	2	694	1329	n/a	n/a	n/a	
	3	694	1467	n/a	n/a	n/a	
	4	774	1210	n/a	n/a	n/a	
	5	774	1329	n/a	n/a	n/a	
	6	774	1467	n/a	n/a	n/a	
	7	853	1210	n/a	n/a	n/a	
	8	853	1329	n/a	n/a	n/a	
	9	853	1467	n/a	n/a	n/a	
	#	932	1467	n/a	n/a	n/a	
	*	932	1210	n/a	n/a	n/a	

Notes: TE has no internal DTMF generator

5.2.1.4 - Limitations on non-approved signal sources

Test equipment used: 023, 048, 051, 066, 076

Data:

TE does not support connection of non-approved signal sources

Notes: None

5.2.1.5 - Through transmission limitations

5.2.1.5.1 - DC conditions

Test equipment used: 023, 048, 051, 066, 076

Data:

Parameter	Pre surge	Post B surge	Post A surge	Limit
Open circuit voltage	n/a	n/a	n/a	< 56.5 V
Short circuit current	n/a	n/a	n/a	< 140 mA
Current into 430 ohms	n/a	n/a	n/a	> 20 mA

Notes: TE does not supply DC power to other connected equipment.

5.2.1.5.2 - Data terminal equipment jack limitations

Test equipment used: 023, 048, 051, 066, 076

Data:

TE does not support through transmission equipment connection to data terminal equipment jacks.

Notes: None

5.2.1.5.3 - Allowable net amplification between ports

Test equipment used: 023, 048, 051, 066, 076

Data:

Net amplification between ports, if applicable, is covered in clause 5.1.7 of this report.

Notes: None

5.2.1.5.4 - Tie trunk interface limitations

Test equipment used: 023, 048, 051, 066, 076

Data:

TE is not classified as a tie trunk interface

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.6 - Signal power in the 3995-4005 Hz band

5.2.1.6.1 - Power from internal signal sources in approved TE

Test equipment used: 023, 051, 066

Data:

Condition	State	Measured dBm	Limit dBm
Pre surge	Off hook min	n/a	**< -27**
	Off hook max	n/a	
Post B surge	Off hook min	n/a	
	Off hook max	n/a	
Post A surge	Off hook min	n/a	
	Off hook max	n/a	

Notes: TE does not transition to off hook state.

5.2.1.6.2 - TE with through transmission paths

Test equipment used: 023, 051, 066

Data:

Condition	State	Loss 600 - 4000 Hz dB	Loss 3995 - 4005 Hz dB	Net Loss dB	Limit dB
Pre surge	Off hook min	n/a	n/a	n/a	**< 3**
	Off hook max	n/a	n/a	n/a	
Post B surge	Off hook min	n/a	n/a	n/a	
	Off hook max	n/a	n/a	n/a	
Post A surge	Off hook min	n/a	n/a	n/a	
	Off hook max	n/a	n/a	n/a	

Notes: TE has no through transmission path within meaning of TIA-968-B

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.7 - Longitudinal voltage at frequencies below 4 kHz

Test equipment used: 023, 051, 066

Data:

Condition	State	Measured dBV	Correction Factor dB	Corrected dBV	Limit dBV
Pre surge	On hook	-90.2	+3.1	-87.1	**< -30**
	Off hook min	n/a		n/a	
	Off hook max	n/a		n/a	
Post B surge	On hook	-91.7		-88.6	
	Off hook min	n/a		n/a	
	Off hook max	n/a		n/a	
Post A surge	On hook	-91.3		-88.2	
	Off hook min	n/a		n/a	
	Off hook max	n/a		n/a	

Notes: TE does not transition to off hook state.

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.8 - Voltages from 4 - 30000 kHz

5.2.1.8.1 - Metallic voltage 4 - 270 kHz

Test equipment used: 023, 051, 066

Data:

Condition	State	Band kHz	Measured dBV	Limit dBV
Pre surge	On hook	4 - 12	-107.9	**-14 to -20***
		12 - 90	-107.4	**-20 to -55****
		90 - 270	-111.3	**< -55**
	Off hook min	4 - 12	n/a	**-14 to -20***
		12 - 90	n/a	**-20 to -55****
		90 - 270	n/a	**< -55**
	Off hook max	4 - 12	n/a	**-14 to -20***
		12 - 90	n/a	**-20 to -55****
		90 - 270	n/a	**< -55**
Post B surge	On hook	4 - 12	-107.7	**-14 to -20***
		12 - 90	-108.1	**-20 to -55****
		90 - 270	-110.0	**< -55**
	Off hook min	4 - 12	n/a	**-14 to -20***
		12 - 90	n/a	**-20 to -55****
		90 - 270	n/a	**< -55**
	Off hook max	4 - 12	n/a	**-14 to -20***
		12 - 90	n/a	**-20 to -55****
		90 - 270	n/a	**< -55**
Post A surge	On hook	4 - 12	-106.9	**-14 to -20***
		12 - 90	-107.4	**-20 to -55****
		90 - 270	-110.7	**< -55**
	Off hook min	4 - 12	n/a	**-14 to -20***
		12 - 90	n/a	**-20 to -55****
		90 - 270	n/a	**< -55**
	Off hook max	4 - 12	n/a	**-14 to -20***
		12 - 90	n/a	**-20 to -55****
		90 - 270	n/a	**< -55**

Notes: * Limit from 4 kHz - 12 kHz = $-(6.4 + 12.6 \log f)$
** Limit from 12 kHz - 90 kHz = $(23 - 40 \log f)$
TE does not transition to off hook state.

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.8.2 - Metallic voltage 270 - 30000 kHz

Test equipment used: 023, 057, 066

Data:

Condition	State	Measured dBV	Limit dBV
Pre surge	On hook	-56.4	**< -15**
	Off hook min	n/a	
	Off hook max	n/a	
Post B surge	On hook	-57.0	
	Off hook min	n/a	
	Off hook max	n/a	
Post A surge	On hook	-56.7	
	Off hook min	n/a	
	Off hook max	n/a	

Notes: TE does not transition to off hook state.

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.8.3 - Longitudinal voltage 4 - 270 kHz

Test equipment used: 023, 051, 066

Data:

State	Condition	Band kHz	Measured dBV	Correction Factor dB	Corrected dBV	Limit dBV
Pre surge	On hook	4 - 12	-108.2	+1.4	-106.8	**-30 to -40 ***
		12 - 42	-110.0	+4.0	-106.0	**-40 to -62 ****
		42 - 270	-106.2	+4.0	-102.2	**< -62**
	Off hook min	4 - 12	n/a	+1.4	n/a	**-30 to -40 ***
		12 - 42	n/a	+4.0	n/a	**-40 to -62 ****
		42 - 270	n/a	+4.0	n/a	**< -62**
	Off hook max	4 - 12	n/a	+1.4	n/a	**-30 to -40 ***
		12 - 42	n/a	+4.0	n/a	**-40 to -62 ****
		42 - 270	n/a	+4.0	n/a	**< -62**
Post B surge	On hook	4 - 12	-109.1	+1.4	-107.7	**-30 to -40 ***
		12 - 42	-111.1	+4.0	-107.1	**-40 to -62 ****
		42 - 270	-107.3	+4.0	-103.3	**< -62**
	Off hook min	4 - 12	n/a	+1.4	n/a	**-30 to -40 ***
		12 - 42	n/a	+4.0	n/a	**-40 to -62 ****
		42 - 270	n/a	+4.0	n/a	**< -62**
	Off hook max	4 - 12	n/a	+1.4	n/a	**-30 to -40 ***
		12 - 42	n/a	+4.0	n/a	**-40 to -62 ****
		42 - 270	n/a	+4.0	n/a	**< -62**
Post A surge	On hook	4 - 12	-108.6	+1.4	-107.2	**-30 to -40 ***
		12 - 42	-110.9	+4.0	-106.9	**-40 to -62 ****
		42 - 270	-106.7	+4.0	-102.7	**< -62**
	Off hook min	4 - 12	n/a	+1.4	n/a	**-30 to -40 ***
		12 - 42	n/a	+4.0	n/a	**-40 to -62 ****
		42 - 270	n/a	+4.0	n/a	**< -62**
	Off hook max	4 - 12	n/a	+1.4	n/a	**-30 to -40 ***
		12 - 42	n/a	+4.0	n/a	**-40 to -62 ****
		42 - 270	n/a	+4.0	n/a	**< -62**

Notes: * Limit from 4 kHz - 12 kHz = -(18.4 + 20 log f)
** Limit from 12 kHz - 42 kHz = (3.0 - 40 log f)
TE does not transition to off hook state.

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.8.4- Longitudinal voltage 270 - 6000 kHz

Test equipment used: 023, 057, 066

Data:

State	Condition	Measured dBV	Correction Factor dB	Corrected dBV	Limit dBV
Pre surge	On hook	-58.1	+4.0	-54.1	**< -30**
	Off hook min	n/a		n/a	
	Off hook max	n/a		n/a	
Post B surge	On hook	-57.9		-53.9	
	Off hook min	n/a		n/a	
	Off hook max	n/a		n/a	
Post A surge	On hook	-58.3		-54.3	
	Off hook min	n/a		n/a	
	Off hook max	n/a		n/a	

Notes: TE does not transition to off hook state.

5.2.1.9 - Conditions for in and out of band voltage measurements

Test equipment used: n/a

Data:

OK	All of the metallic and longitudinal voltage measurements were made when the TE was connected to an appropriate termination specified in TIA-968-B and with the TE placed in all operating states except network control signalling.

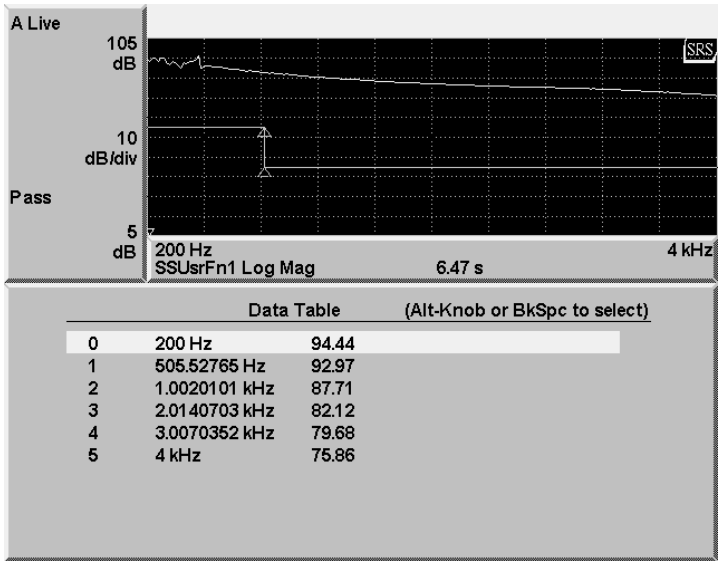
Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

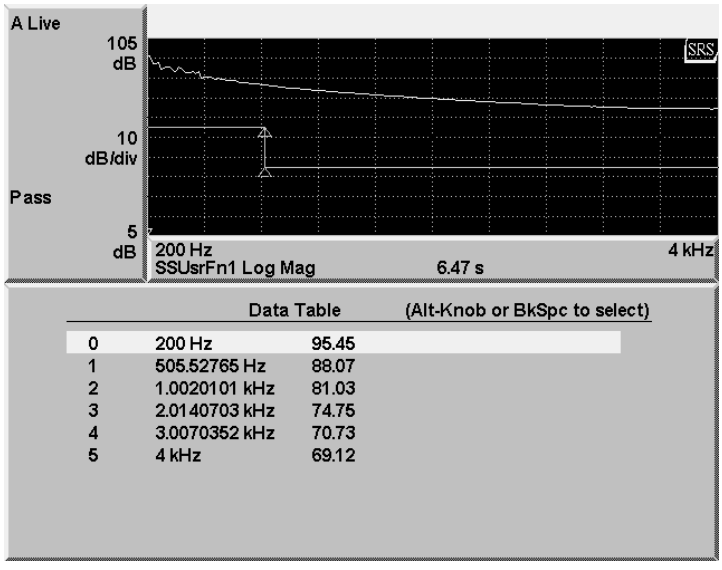
5.2.1.10 - Analog voice band transverse balance limits

Test equipment used: 011, 051, 066, 076

Data:

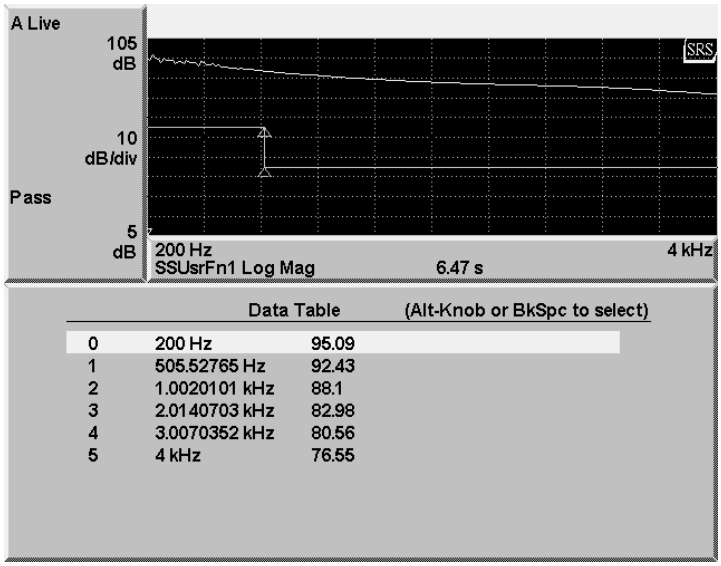


Transverse balance pre surge



Transverse balance post B surge

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector



Transverse balance post A surge

Notes: TE does not transition to off hook state.

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.11 - Loop start interfaces

5.2.1.11.1 - General

5.2.1.11.2 - Limitations on loop start interfaces

5.2.1.11.2.1 - On-hook resistance up to 100 V

5.2.1.11.2.1.1 - On-hook resistance up to 100 V - pre surge

Test equipment used: 021, 040, 051

Data:

Voltage VDC	Current T-R uA	Impedance T-R Mohms	Current T-Ground uA	Impedance T-Ground Mohms	Current R-Ground uA	Impedance R-Ground Mohms	Limit Mohms
1	< 0.1	> 10	< 0.1	> 10	< 0.1	> 10	
10	< 1.0	> 10	< 1.0	> 10	< 1.0	> 10	
20	< 1.0	> 20	< 1.0	> 20	< 1.0	> 20	
30	< 1.0	> 30	< 1.0	> 30	< 1.0	> 30	
40	< 1.0	> 40	< 1.0	> 40	< 1.0	> 40	
50	< 1.0	> 50	< 1.0	> 50	< 1.0	> 50	**> 5**
60	< 1.0	> 60	< 1.0	> 60	< 1.0	> 60	
70	< 1.0	> 70	< 1.0	> 70	< 1.0	> 70	
80	< 1.0	> 80	< 1.0	> 80	< 1.0	> 80	
90	< 1.0	> 90	< 1.0	> 90	< 1.0	> 90	
100	< 1.0	> 100	< 1.0	> 100	< 1.0	> 100	

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.11.2.1.2 - On-hook resistance up to 100 V - post B surge

Test equipment used: 021, 040, 051

Data:

Voltage VDC	Current T-R uA	Impedance T-R Mohms	Current T-Ground uA	Impedance T-Ground Mohms	Current R-Ground uA	Impedance R-Ground Mohms	Limit Mohms
1	< 0.1	> 10	< 0.1	> 10	< 0.1	> 10	
10	< 1.0	> 10	< 1.0	> 10	< 1.0	> 10	
20	< 1.0	> 20	< 1.0	> 20	< 1.0	> 20	
30	< 1.0	> 30	< 1.0	> 30	< 1.0	> 30	
40	< 1.0	> 40	< 1.0	> 40	< 1.0	> 40	
50	< 1.0	> 50	< 1.0	> 50	< 1.0	> 50	**> 5**
60	< 1.0	> 60	< 1.0	> 60	< 1.0	> 60	
70	< 1.0	> 70	< 1.0	> 70	< 1.0	> 70	
80	< 1.0	> 80	< 1.0	> 80	< 1.0	> 80	
90	< 1.0	> 90	< 1.0	> 90	< 1.0	> 90	
100	< 1.0	> 100	< 1.0	> 100	< 1.0	> 100	

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.11.2.1.3 - On-hook resistance up to 100 V - post A surge

Test equipment used: 021, 040, 051

Data:

Voltage VDC	Current T-R uA	Impedance T-R Mohms	Current T-Ground uA	Impedance T-Ground Mohms	Current R-Ground uA	Impedance R-Ground Mohms	Limit Mohms
1	< 0.1	> 10	< 0.1	> 10	< 0.1	> 10	
10	< 1.0	> 10	< 1.0	> 10	< 1.0	> 10	
20	< 1.0	> 20	< 1.0	> 20	< 1.0	> 20	
30	< 1.0	> 30	< 1.0	> 30	< 1.0	> 30	
40	< 1.0	> 40	< 1.0	> 40	< 1.0	> 40	
50	< 1.0	> 50	< 1.0	> 50	< 1.0	> 50	**> 5**
60	< 1.0	> 60	< 1.0	> 60	< 1.0	> 60	
70	< 1.0	> 70	< 1.0	> 70	< 1.0	> 70	
80	< 1.0	> 80	< 1.0	> 80	< 1.0	> 80	
90	< 1.0	> 90	< 1.0	> 90	< 1.0	> 90	
100	< 1.0	> 100	< 1.0	> 100	< 1.0	> 100	

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.11.2.2 - On-hook resistance 100 - 200 V

Test equipment used: 021, 040, 051

Data:

Condition	Voltage VDC	Current T-R uA	Impedance T-R Mohms	Current T-Ground uA	Impedance T-Ground Mohms	Current R-Ground uA	Impedance R-Ground Mohms	Limit Mohms
Pre surge	150	< 1.0	> 150	< 1.0	> 150	< 1.0	> 150	**> 0.030**
	200	< 1.0	> 200	< 1.0	> 200	< 1.0	> 200	
Post B surge	150	< 1.0	> 150	< 1.0	> 150	< 1.0	> 150	
	200	< 1.0	> 200	< 1.0	> 200	< 1.0	> 200	
Post A surge	150	< 1.0	> 150	< 1.0	> 150	< 1.0	> 150	
	200	< 1.0	> 200	< 1.0	> 200	< 1.0	> 200	

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.11.2.3 - DC current during ringing

Test equipment used: 021, 040, 048, 051

Data:

Condition	Frequency Hz	Voltage V_{rms}	Current mA	Voltage V_{rms}	Current mA	Limit mA
Pre surge	15.3	40	< 0.1	130	< 0.1	< 3.0
	20	40	< 0.1	130	< 0.1	
	30	40	< 0.1	130	< 0.1	
	40	65	< 0.1	130	< 0.1	
	50	65	< 0.1	150	< 0.1	
	68	65	< 0.1	150	< 0.1	
Post B surge	15.3	40	< 0.1	130	< 0.1	
	20	40	< 0.1	130	< 0.1	
	30	40	< 0.1	130	< 0.1	
	40	65	< 0.1	130	< 0.1	
	50	65	< 0.1	150	< 0.1	
	68	65	< 0.1	150	< 0.1	
Post A surge	15.3	40	< 0.1	130	< 0.1	
	20	40	< 0.1	130	< 0.1	
	30	40	< 0.1	130	< 0.1	
	40	65	< 0.1	130	< 0.1	
	50	65	< 0.1	150	< 0.1	
	68	65	< 0.1	150	< 0.1	

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.11.2.4 - Metallic ringing frequency impedance

Test equipment used: 021, 040, 048, 051

Data:

Condition	Freq. Hz	Voltage V_{rms}	Current mA	Impedance kohms	Voltage V_{rms}	Current mA	Impedance kohms	Limit kohms
Pre surge	15.3	40	< 0.1	> 400	130	< 0.1	> 1300	
	20	40	< 0.1	> 400	130	< 0.1	> 1300	
	30	40	< 0.1	> 400	130	< 0.1	> 1300	
	40	65	< 0.1	> 650	130	< 0.1	> 1300	
	50	65	< 0.1	> 650	150	< 0.1	> 1500	
	68	65	< 0.1	> 650	150	< 0.1	> 1500	
Post B surge	15.3	40	< 0.1	> 400	130	< 0.1	> 1300	
	20	40	< 0.1	> 400	130	< 0.1	> 1300	
	30	40	< 0.1	> 400	130	< 0.1	> 1300	
	40	65	< 0.1	> 650	130	< 0.1	> 1300	
	50	65	< 0.1	> 650	150	< 0.1	> 1500	
	68	65	< 0.1	> 650	150	< 0.1	> 1500	
Post A surge	15.3	40	< 0.1	> 400	130	< 0.1	> 1300	
	20	40	< 0.1	> 400	130	< 0.1	> 1300	
	30	40	< 0.1	> 400	130	< 0.1	> 1300	
	40	65	< 0.1	> 650	130	< 0.1	> 1300	
	50	65	< 0.1	> 650	150	< 0.1	> 1500	
	68	65	< 0.1	> 650	150	< 0.1	> 1500	

> 1.600

Notes: **Use** 400k **ohms for REN calculation in Section 5.2.1.11.2.6**

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.11.2.5 - Longitudinal ringing frequency impedance

Test equipment used: 021, 040, 048, 051

Data:

State	Frequency Hz	Voltage V_{rms}	Current Tip-Ground uA	Impedance Tip-Ground Ohms	Current Ring-Ground uA	Impedance Ring-Ground Ohms	Limit ohms
Pre surge	15.3	40 / 130	< 400 / < 1300	>100k	< 400 / < 1300	>100k	**> 100k**
	20	40 / 130	< 400 / < 1300	>100k	< 400 / < 1300	>100k	
	30	40 / 130	< 400 / < 1300	>100k	< 400 / < 1300	>100k	
	40	65 / 130	< 650 / < 1300	>100k	< 650 / < 1300	>100k	
	50	65 / 150	< 650 / < 1500	>100k	< 650 / < 1500	>100k	
	68	65 / 150	< 650 / < 1500	>100k	< 650 / < 1500	>100k	
Post B surge	15.3	40 / 130	< 400 / < 1300	>100k	< 400 / < 1300	>100k	
	20	40 / 130	< 400 / < 1300	>100k	< 400 / < 1300	>100k	
	30	40 / 130	< 400 / < 1300	>100k	< 400 / < 1300	>100k	
	40	65 / 130	< 650 / < 1300	>100k	< 650 / < 1300	>100k	
	50	65 / 150	< 650 / < 1500	>100k	< 650 / < 1500	>100k	
	68	65 / 150	< 650 / < 1500	>100k	< 650 / < 1500	>100k	
Post A surge	15.3	40 / 130	< 400 / < 1300	>100k	< 400 / < 1300	>100k	
	20	40 / 130	< 400 / < 1300	>100k	< 400 / < 1300	>100k	
	30	40 / 130	< 400 / < 1300	>100k	< 400 / < 1300	>100k	
	40	65 / 130	< 650 / < 1300	>100k	< 650 / < 1300	>100k	
	50	65 / 150	< 650 / < 1500	>100k	< 650 / < 1500	>100k	
	68	65 / 150	< 650 / < 1500	>100k	< 650 / < 1500	>100k	

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.11.2.6 - REN Calculation

Test equipment used: n/a

Data:

Minimum AC Impedance (from section 4.3.6.) 1600 ohms

Ringer Type B Impedance Limitation 1600 ohms

Calculation:

8000 ohms / 400 000 ohms = 0.020

Parameter	Calculated		Limit
REN	**0.0**	B	< 5.0B

Notes: None

5.2.1.11.3 - Transitioning to the off hook state

Test equipment used: 023, 051

Data:

OK	The TE does not by design leave the on-hook state by operations performed on tip and ring leads for any other purpose than to request service or answer an incoming call

Notes: None

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.2.1.11.4 - Loop current requirements

Test equipment used: 021, 057

Data:

State 1 - Low Current			
Time S	Pre Surge Current mA	Post B Current mA	Post A Current mA
1	n/a	n/a	n/a
2	n/a	n/a	n/a
3	n/a	n/a	n/a
4	n/a	n/a	n/a
5	n/a	n/a	n/a

State 2 - Mid Current			
Time S	Pre Surge Current mA	Post B Current mA	Post A Current mA
1	n/a	n/a	n/a
2	n/a	n/a	n/a
3	n/a	n/a	n/a
4	n/a	n/a	n/a
5	n/a	n/a	n/a

State 3 - High Current			
Time S	Pre Surge Current mA	Post B Current mA	Post A Current mA
1	n/a	n/a	n/a
2	n/a	n/a	n/a
3	n/a	n/a	n/a
4	n/a	n/a	n/a
5	n/a	n/a	n/a

Notes: TE does not transition to off hook state.

TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

5.3 - 47 CFR Part 68.318 requirements

5.3.1 - Automatic dialing capability

Test equipment used: 023, 057

Data:

TE does not support automatic dialing.

Notes: None

5.3.2 - Line seizure by automatic telephone dialing systems

Test equipment used: 023, 057

Data:

TE does not support automatic dialing.

Notes: None

5.3.3 - Telephone facsimile machine requirements

Test equipment used: n/a

Data:

TE is not classified as a facsimile machine within meaning of Part 68 rules.

Notes: None

5.3.4 - Equal access to common carriers requirements

Test equipment used: n/a

Data:

Customer will provide attestation to support requirements of this section upon request.

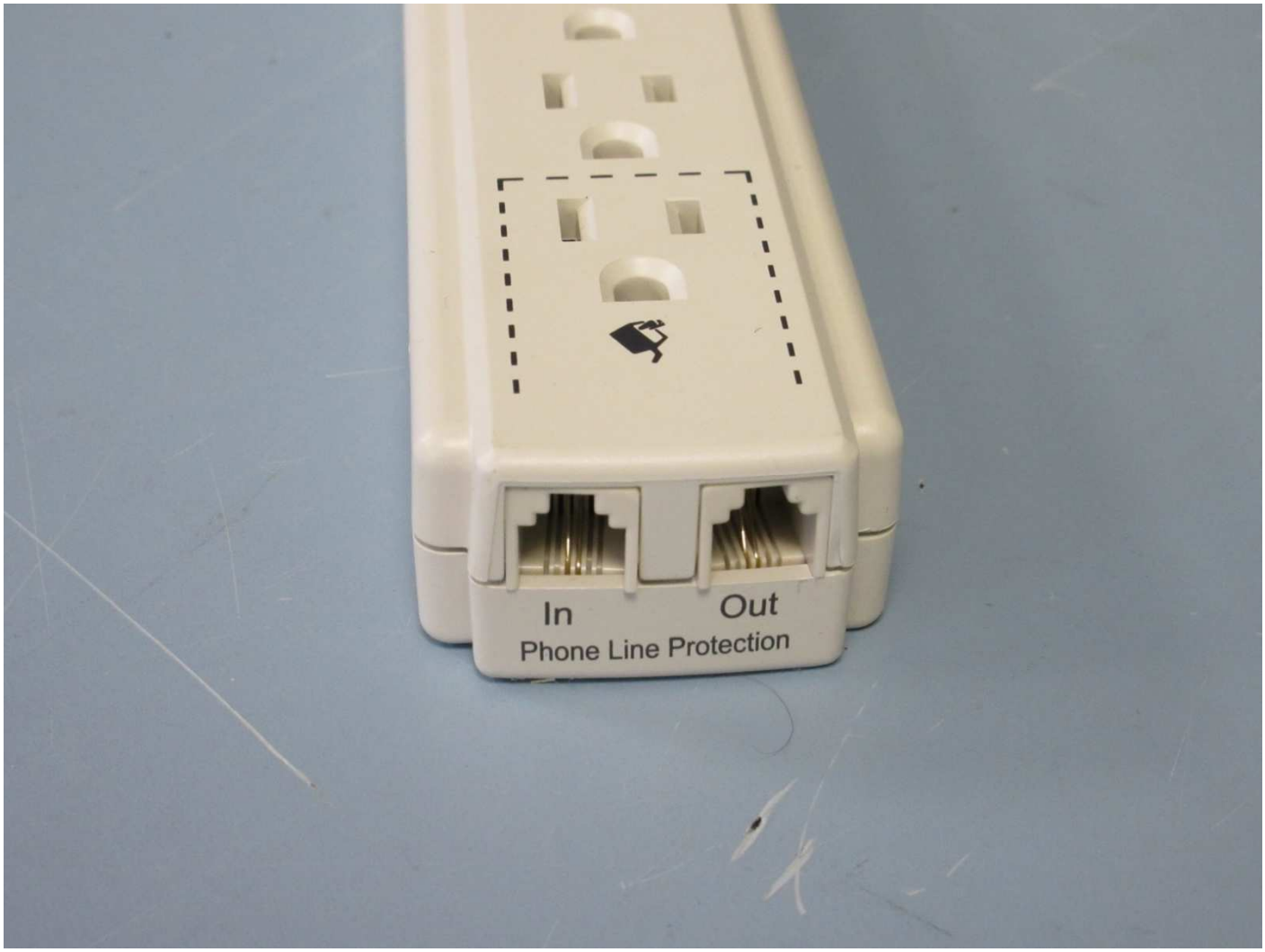
Notes: None

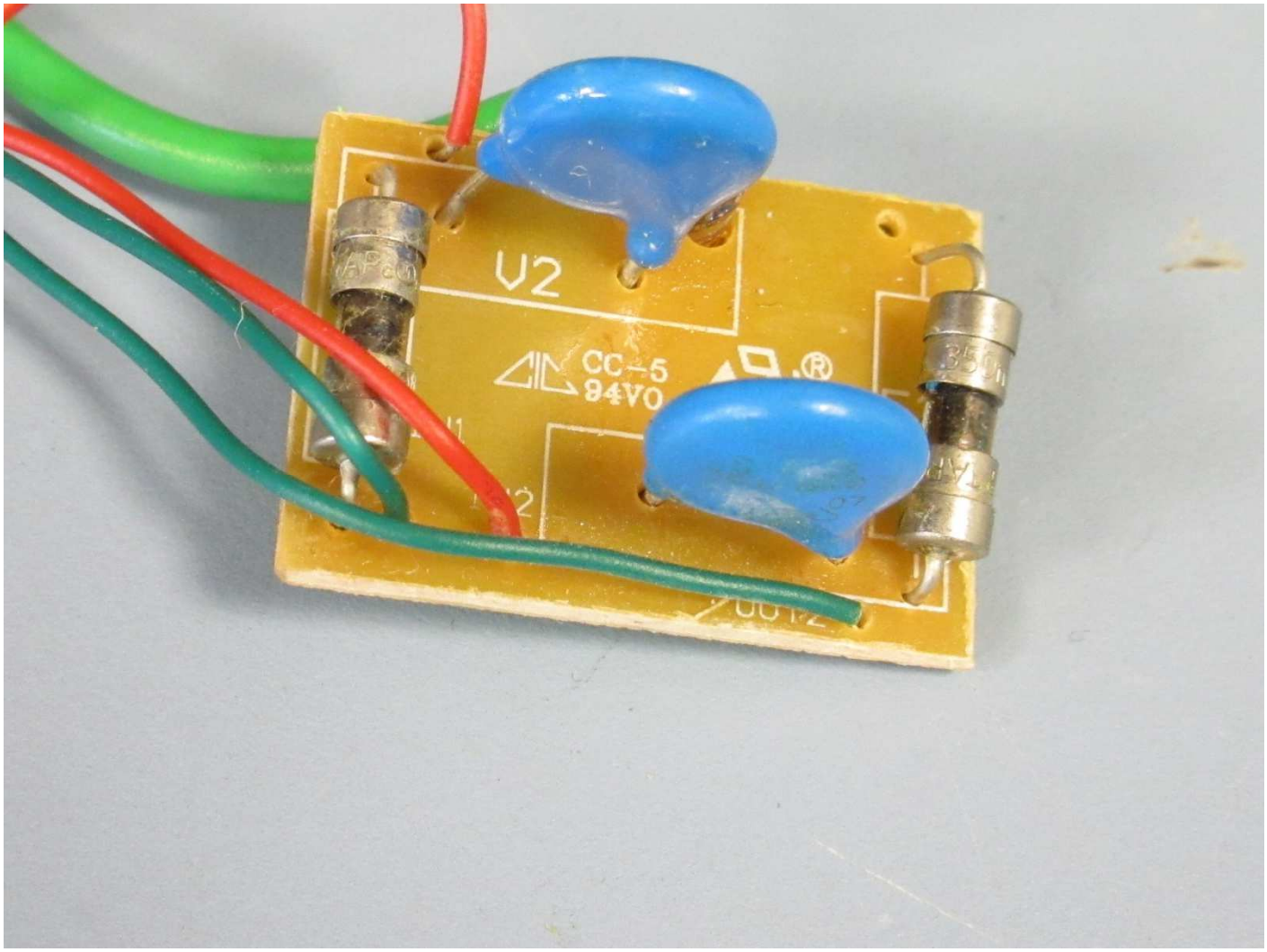
TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

6 - Photographs



TEST NUMBER: 443-14R3
MANUFACTURER: Tripp Lite, Inc.
EUT: MOV Based Surge Protector

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