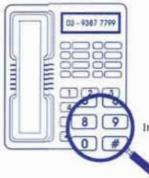


Comlabs

TEST REPORT ACL 1307





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TEST REPORT No: ACL 1307

Customer:

Radio Parts Group

562 Spencer St.,

West Melbourne VIC 3003

Telephone: Fax:

9321 8300

9329 0098

Product Evaluated: Cat.5e Indoor Cable and Patch cords

Relevant Standards:

AS/ACIF S 008:2001

Incorporating Amendment No. 1/2002

Requirements for Authorised Cabling Products.

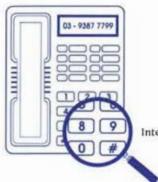
This laboratory is accredited by the National Association of Testing Authorities, Australia. The tests reported herein have been performed in accordance with its terms of accreditation. This document may not be reproduced except in full.

This report applies only to the sample tested.

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TEST REPORT No: ACL 1307

INDEX

Date of Test:	06-04-05	Number of Pages: 7
Number of Charts	· Nil	Number of Pictures: 2 (1 page)
Name of Tester:	Philip Hitchcock	(Sign) Philip Hethrock
Name of Authorised	Signatory: John	Villella

Other Documentation:

Appendix 1: Flammability Test Results

Product description: Cat.5e Indoor Cable and Patch cords. Stranded and Solid conductor indoor cable was tested. Patch cords were also tested. The patch cords were fitted with RJ45 plugs. The patch cords used the stranded version of the Cat. 5e cable, with a variety of sheath colours. Patch cords are supplied in a variety of lengths the longest being 10 meters. Blue and Red sheathed cables were fitted with zip cords. The conductor insulation material is high density polyethylene and the sheath material is PVC.

Country of Origin:

P.R. of China

Sheath Markings:

Red Sheath stranded conductors:

E213738 4P 24AWG 7X0.20 UTP

PATCH CORD ISO/IEC 11801 AND TIA/EIA 568 CMR (UL) C(UL) VERIFIED CAT 5e Green Sheath stranded conductors: DOSS E213738 4P 24AWG UTP PATCH CORD ISO/IEC 11801 AND TIA/EIA 568 CMR (UL) C(UL) VERIFIED CAT 5e

Yellow Sheath stranded conductors: DOSS E213738 4P 24AWG UTP PATCH CORD ISO/IEC 11801 AND TIA/EIA 568 CMR (UL) C(UL) VERIFIED CAT 5e

Blue Sheath stranded conductors: DOSS E213738 4P 24AWG 7X0.20 UTP PATCH CORD ISO/IEC 11801 AND TIA/EIA 568 CMR (UL) C(UL) VERIFIED CAT 5e

Blue Sheath solid conductors:

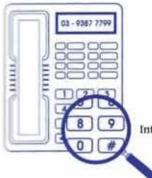
DOSS E213738 4P 24AWG UTP ISO/IEC 11801

AND TIA/EIA 568 CMR (UL) C(UL) VERIFIED CAT 5e

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Page 2 of 7



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REPORT

Statement of Compliance:

The customer equipment referred to in this report was found;

- (a) to COMPLY with the mandatory clauses tested, and
- (b) to COMPLY with the non-mandatory clauses tested of,

AS/ACIF S 008:2001

Incorporating Amendment No. 1/2002

Requirements for Authorised Cabling Products.

Uncertainty where relevant is preceded next to the applicable clause as **.

Determination of measurement uncertainty is based on the worst case scenario for all circumstances relating to the type of test being performed.

Clauses in Italics are non-mandatory.

The following clauses were NOT tested:

Clause 5.7.2.2.2 Non-PVC insulation and sheath requirements.

Clause 5.7.2.2.3 PVC insulation and sheath requirements.

These clauses are currently beyond the scope of this laboratory.

The conductor insulation material is high density polyethylene and the sheath material is PVC.

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CLAUSE	PARAMETER (S 008)	REPORT
5.1	GENERAL ** 0%	*
5.1.1	Cabling products shall be distinguishable from mains power products.	Complies
5.1.2	Distributors for multidisipline use shall comply with Clause 5.4	N.A.
5.1.3	NTDEs for multidisipline use shall comply with Clause 5.5	N.A.
5.1.4	Cable for multidisipline use shall comply with Clause 5.10	N.A.
5.2	MARKINGS ** 0%	*
5.2.1	General	*
5.2.1.1	Labelling requirements are specified in ACA Telecommunications Labelling Notice	Noted
5.2.2	Requirements	*
5.2.1.2	Cabling products shall not bear hazardous voltage markings	Complies
5.2.1.3	Cabling products (excluding cables) (a) assessed against AS1939 shall display IP rating (b) products for multidisipline use, markings shall be visible when equipment is installed.	N.A.
5.3	OUTDOOR TELECOMMUNICATIONS CONDUIT/PIPE	*
		N.A.
5.4	CABLE DISTRIBUTION DEVICES ** 3%	*
N.		N.A.
5.5	NTD ENCLOSURE	*
		N.A.
5.6	OPTICAL FIBRE ENCLOSURES	*
		N.A.
5.7	CUSTOMER CABLES ** 2%	*
5.7.1	Application	Noted
5.7.2	General requirements	*
5.7.2.1	Cable	*
5.7.2.1.1	Cable shall not be of a type commonly used for mains power	Complies
5,7.2,1.2	Outdoor Cable to be installed underground shall comply with the requirements for water penetration	N.A.
5.7.2.1.3	Where telecommunications cable does not exist or cable designed for multidisipline use cable, requirements of Clause 5.10 apply	
5.7.2.1.4	Underground blown fibre tube shall comply with - (a) IPX8 requirements of AS 1939 (b) sheath requirements of Clause 5.7.2.2.2 or 5.7.2.2.3	N.A.

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CLAUSE	PARAMETER (S 008)	REPORT
5.7.2.2	Insulation and sheath materials	*
5.7.2.2.1	Telecommunications use, insulation and sheath materials shall be suitable	Complies
5,7.2.2.2	Non-PVC insulation and sheath shall comply with the requirements of AS1049 for- (a) Tensile Strength Test (Aged/Unaged); (b) Elongation Test (Aged/Unaged); (c) Shrinkback Tests for insulation and sheathing; and (d) UV, (sheath of outdoor cable only)	
5.7.2.2.3	PVC insulation and sheath materials shall comply with- (a) S008 Table 1 and 2 requirements; and (b) Requirements of AS 1049 (sheath of outdoor cable only).	Not Tested
5.7.2.3	Wire and optical fibre identification: (a) A system of wire or fibre identification shall be used in all multi wire or multi fibre customer cabling (b) All wires or fibres shall be visually distinguishable	Complies
5.7.2.4	Flammability: Cables, cordage and cords for indoor installation shall pass the combustion propagation test of Clause 3.8 Table 3.3 of AS/NZS 3191 refer to Appendix 1	Complies
5.8	Requirements of metallic customer cables ** 2%	*
5.8.1	Conductors (a) Metallic conductors (other than copper clad steel), shall be either plain or plated copper, single or multistranded (b) DC resistance shall be less than values in S008 Table 3 Conductors should be plain or tinned. Tinned conductors shall comply with the tinning test of Table 2.2 of AS 1125	Complies
5.8.1.1	Shield: (a) Where provided; shall be electrically continuous (b) Drain wire shall be in contact with lapped tape shield.	N.A.
5.8.2	Electrical characteristics of metallic customer cables	
5.8.2.1	Withstand voltage of multi wire cable shall comply with S008 Table 4	Complies
5.8.2.2	Mutual capacitance shall comply with S008 Table 5	Complies
5.8.2.3	Capacitance unbalance shall comply with S008 Table 5	Complies

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CLAUSE	PARAMETER (S 008)		REPORT
5.8.2.5	Additional electrical requirements of coaxial cable		N.A.
5.8.3	Jumper Wire		N.A.
5.8.4	Metallic cordage (a) Conductors should be stranded or tinsel. (b) Cordage shall comply with these Clauses: 5.7.2.2 Insulation and sheath materials 5.7.2.3 Wire and optical fibre identification 5.7.2.4 Flammability 5.8.1 Conductors 5.8.1.1 Shield 5.8.2.1 Withstand voltage 5.8.2.4 Insulation resistance. (c) Cords shall be secured in any plug or socket	Not tested Complies Complies Complies N.A. Complies Complies Complies Complies	Insulation and sheath materials Not tested All other applicable clauses: Complies
5.9	Requirements of optical fibre customer cables and cords		* N.A.
5.10	Requirements of cables intended for special applications		N.A.
5.11	Connecting hardware, plugs and sockets of all designs		*
5.11.1	General		
5.11.1.1	Insulation Resistance shall be greater than 100MΩ	0/45	Complies
5.11,1.2	Contact Resistance (a) Contact Resistance for connectors other than 8 and 6 position modular and 600 series shall comply with IEC 60352-4, Clause 12.3.1 (b) 2 piece connectors and shield terminations shall not exceed 50mΩ.		Complies
5.11.1.3	Electric Strength of conductors at TNV shall comply with Clause 6.2.2 of IEC 60603-7		Complies
5.11.1.4	Protection against contact with exposed circuits conductors and shields shall comply with probe test of AS/NZS 60950		Complies
5,11.1.5	Weather resistance of plugs and sockets exposed to weather shall be IPX3 or better.		N.A.
5.11.2	Eight (8) position modular plugs and sockets shall also comply with IEC 60603-7 Clause 3, Clause 6.2 and Clause 6.3		Complies

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Page 6 of 7



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CLAUSE	PARAMETER (S 008)	REPORT
5.11.3	Six (6) position modular plugs and sockets, to be mechanically designed according to CFR FCC 47, parts a and b and shall comply with the following clauses of IEC 60603-7: (a) 6.2.2 Voltage proof (b) 6.2.3 Admissible current (c) 6.2.4 Initial contact resistance (d) 6.2.5 Initial insulation resistance (e) 6.3.1 Mechanical operation (Cycle) (f) 6.3.2 Effectiveness of a connector coupling device.	N.A.
5.11.4	600 series plugs and sockets shall also comply with Clauses 5.11.4.1, 5.11.4.2 and 5.11.4.3	N.A.
5.11.4.1	Contact composition. 600 series contact metal shall be composed of solid Monel Alloy 400	
5.11.4.2	Mechanical compatibility 600 series sockets should be designed to accept one or more plugs. Nominal Mating dimensions shall be in accordance with Figure 1	
5.11.4.3	Connections 600 series plugs and sockets shall have, as a minimum, contacts 2 and 6.	
5.11.4.4	Resistance of plug/socket combination 600 series shall not exceed 75mΩ between cord termination points	
5.12	Cabling components for use on underground and aerial installations	*
		N.A.

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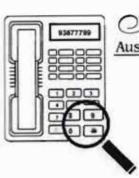
CLAUSE	PARAMETER (S 008)	REPORT
5.11.3	Six (6) position modular plugs and sockets, to be mechanically designed according to CFR FCC 47, parts a and b and shall comply with the following clauses of IEC 60603-7: (a) 6.2.2 Voltage proof (b) 6.2.3 Admissible current (c) 6.2.4 Initial contact resistance (d) 6.2.5 Initial insulation resistance (e) 6.3.1 Mechanical operation (Cycle) (f) 6.3.2 Effectiveness of a connector coupling device.	N.A.
5.11.4	600 series plugs and sockets shall also comply with Clauses 5.11.4.1, 5.11.4.2 and 5.11.4.3	N.A.
5.11.4.1	Contact composition. 600 series contact metal shall be composed of solid Monel Alloy 400	
5.11.4.2	Mechanical compatibility 600 series sockets should be designed to accept one or more plugs. Nominal Mating dimensions shall be in accordance with Figure 1	
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5.11.4.4	Resistance of plug/socket combination 600 series shall not exceed 75mΩ between cord termination points	
5.12	Cabling components for use on underground and aerial installations	
		N.A.

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Page 7 of 7



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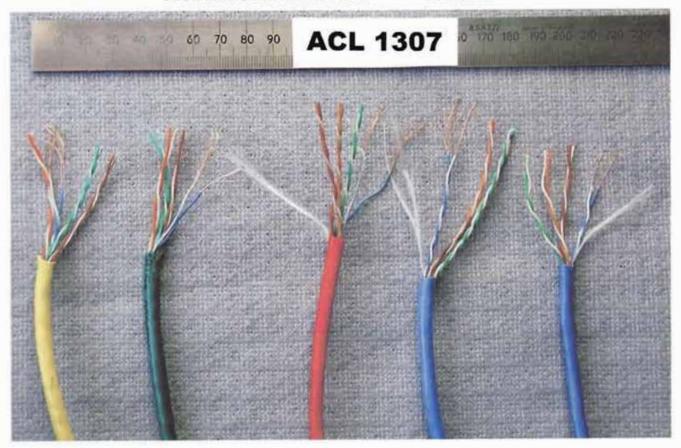
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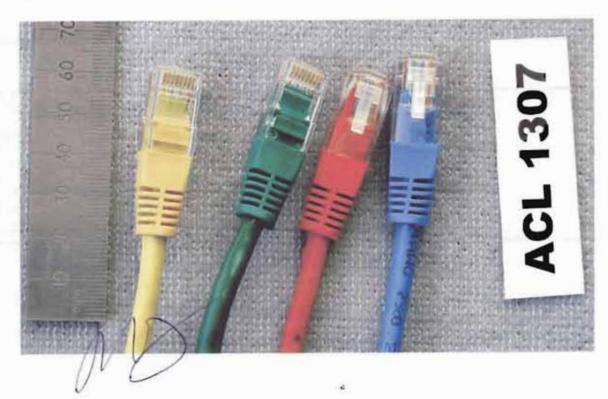
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TEST REPORT No: ACL 1307

Appendix 1: Flammability Test Results

Product Evaluated: Cat.5e Indoor Cable and Cordage

Relevant Standards: AS/ACIF S 008:2001 Incorporating Amendment No. 1/2002

CLAUSE 5.7.2.4,

AS 3191:1996, CLAUSE 3.8, TABLE 3.3 AND AS 1660, METHOD 5.6: FIRE TESTS-TEST FOR

COMBUSTION PROPAGATION.

The sample was prepared, tested and evaluated as per AS 1660, METHOD 5.6: FIRE TESTS-TEST FOR COMBUSTION PROPAGATION and evaluated against the criteria contained in AS3191:1996, TABLE 3.3.

RESULTS:

The sample tested COMPLIES with Clause 5.7.2.4 of AS/ACIF S008:2001

Individual items of this test report should not be quoted in isolation as proof of product acceptability nor applied to directly assess performance under conditions other than envisaged by the reference specification, e.g. individual fire tests to prove an overall acceptable fire hazard level.

Sample:	Cat.5e Solid Conductor Blue Sheath	RESULTS:	
Falling part	icles shall not ignite tissue underlay	Complies	
Cable shall	be self extinguishing	Complies	
Time taken	before burning ceases	0 seconds	
Distance from the uppermost end of the charred or affected area to the underside of the top clamp		310 mm	(shall be >50mm)

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Appendix 1, Page 1





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Appendix 1: Flammability Test Results CONTINUED

Sample:	Cat.5e Stranded Conductor Blue Sheath	RESULTS:	
Falling part	icles shall not ignite tissue underlay	Complies	
Cable shall be self extinguishing		Complies	
Time taken	before burning ceases	3 minutes 29 seconds	
	om the uppermost end of the charred area to the underside of the top	130mm (shall be >50mm)	

Sample:	Cat.5e Stranded Conductor Yellow Sheath	RESULTS:	
Falling part	icles shall not ignite tissue underlay	Complies	
Cable shall be self extinguishing		Complies	
Time taken	before burning ceases	2 minutes 24 seconds	
Distance from the uppermost end of the charred or affected area to the underside of the top clamp		250mm (shall be >50mm)	

Sample:	Cat.5e Stranded Conductor Green Sheath	RESULTS:	
Falling part	icles shall not ignite tissue underlay	Complies	
Cable shall be self extinguishing		Complies	
Time taken	before burning ceases	1 minute 24 seconds	
Distance from the uppermost end of the charred or affected area to the underside of the top clamp		300mm (shall be >50mm)	

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Appendix 1, Page 2





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Appendix 1: Flammability Test Results CONTINUED

Sample:	Cat.5e Stranded Conductor Red Sheath	RESULTS:
Falling part	icles shall not ignite tissue underlay	Complies
Cable shall be self extinguishing		Complies
Time taken	before burning ceases	1 minutes 03 seconds
Distance from the uppermost end of the charred or affected area to the underside of the top clamp		300mm (shall be >50mm)

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Appendix 1, Page 3



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