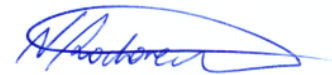


COMPLIANCE TESTING REPORT FOR AUSTRALIAN STANDARD AS/CA S008:2020 REQUIREMENTS FOR CUSTOMER CABLING PRODUCTS

Client: ZHEJIANG UNIVIEW TECHNOLOGIE CO.,LTD.
Address: No. 369, Xietong Road, Xixing Sub-district, Binjiang District, Hangzhou City, 310051, Zhejiang Province, China
Report Number: 1122UNICAB-LC6_S008
Date of Testing: 19 October 2023 to 10 Nov 2023
File Number: UNI230921

Product Name: CAT6 UTP Cable
Brand Name: UNV
Product Model No.s: CAB-LC6-OG and CAB-LC6-BU
Product Description: CAT6 Data Cable

Result: **Comply***
Compiled by: Philip Hitchcock
Test Engineer
Reviewed by: Nina Rodoreda
Test Engineer
Date of Issue: 22 November 2023



Results appearing herein relate only to the sample(s) tested.
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*** Refer to summary page for any conditions.**

SUMMARY OF COMPLIANCE WITH AUSTRALIAN STANDARD AS/CA S008:2020

The CAT6 UTP Cables, Model No.s CAB-LC6-OG and CAB-LC6-BU were supplied for AS/CA S008:2020 testing by ZHEJIANG UNIVIEW TECHNOLOGIE CO.,LTD. of No. 369, Xietong Road, Xixing Sub-district, Binjiang District, Hangzhou City, 310051, Zhejiang Province, China.

The Equipment Under Test (EUT) consisted of CAT6 Data Cables with Orange and Blue sheaths. The client advised that the cable was twisted 4 pair construction with a Polyester Rip Cord and Polyethylene (PE) Separator, High Density Polyethylene (HDPE) insulation, Polyvinyl Chloride (PVC) sheath with solid-bare copper, 0.52mm diameter conductors. The datasheet supplied by the client showed a temperature rating of -20°C to 60°C. Please also refer to the photos of the samples tested in Appendix B and the datasheet supplied by the client in Appendix C, at the rear of the report.

The EUT had the following sheath markings:

UNV DATA CABLE U/UTP AS/CA S008:2010 E496684 ZY001 CM (UL) 4PR 24AWG Category 6 ***m year/month

The client advised that production cables will have the following sheath markings:

UNV Model No. DATA CABLE U/UTP 4PR 24AWG AS/CA S008 2020 Category 6 ISO/IEC 11801 ED.2 & ANSI/TIA-568-C.2 ***m year/month

The requirements for labelling cable and cable products are specified in the ACMA Telecommunications Cabling (Customer Equipment and Customer Cabling) Notice.

The CAT6 UTP Cables, Model No.s CAB-LC6-OG and CAB-LC6-BU **COMPLY** with the tested clauses of AS/CA S008:2020.

SPECIAL CONDITIONS FOR COMPLIANCE:

The Cable must comply with Clause 5.6.3 requirements for insulation and sheath materials.

The Cabling Product must comply with Clause 5.1.2 and be fit for purpose for its intended use.

This Cable is compliant for indoor use only.

Possible Test Case Verdicts:

- test case does not apply to the test object **N(.A)**
- test object does meet the requirements..... **P(ass)**
- test object does not meet the requirements **F(ail)**
- testing was not performed **NT**
- noted..... **ND**

AS/CA S008:2020			
Clause	Requirement - Test	Result - Remark	Verdict
5.	REQUIREMENTS		P
5.1	GENERAL		P
5.1.1	Physically distinguishable Cabling products, other than pits and access holes, shall be physically distinguishable from products used for distribution or connection of Mains Supply.		P
5.1.2	Fitness for purpose A Cabling Product shall be fit for purpose for its intended use, e.g. a Category 6 Cord that meets its performance requirements.		NT
5.1.3	Twisted pair and quad For the purposes of this Standard, a quad is deemed to satisfy a requirement for which a twisted pair has been specified.		N
5.2	MARKINGS		P
5.2.1	Labelling Instrument		ND
5.2.2	Inappropriate markings Cabling products intended solely for ES1 or ES2 telecommunications circuits shall not bear markings indicating hazardous services.		P
5.2.3	Additional markings (excluding cable markings)		N
5.2.3.1	International protection (IP) rating		N
5.2.3.2	Multidiscipline telecommunications connecting hardware		N
5.2.3.3	Marking durability		N
5.3	UNDERGROUND CONDUIT		N
5.4	CABLE DISTRIBUTION DEVICES		N
5.5	THIS CLAUSE IS DELETED		ND

AS/CA S008:2020			
Clause	Requirement - Test	Result - Remark	Verdict
5.6	CABLES		P
5.6.1	General A customer Cable shall meet the requirements of Clauses 5.6.2 to 5.6.10 where specified in Clauses 5.6.11 to 5.6.18 of this Standard.		P
5.6.2	Conductor and optical fibre identification Shall use a system of identification such that all conductors, coaxial tubes or optical fibres within the Cable are readily distinguishable visually from one another.	4 twisted pairs. Pairs are identified as: Blue, orange, green and brown. The matching mate in the twisted pair is white insulation with a matching coloured stripe.	P
5.6.3	Insulation and sheath material		NT
	(a) shall use insulation and sheath materials suitable for telecommunications purposes;	HDPE insulation PVC sheath	NT
	(b) Where PVC insulation or sheath materials are used, they shall comply with the requirements of Table 1 or 2, as applicable: and		NT
	(c) Where non-PVC insulation or sheath materials are used, they shall comply with the requirements of AS 1049 for- (i) Tensile Strength Test (Aged/Unaged); (ii) Elongation Test (Aged/Unaged); and (iii) Shrinkback Tests for that particular type of insulation and sheath.		NT
5.6.4	Flammability A Cable that is required to comply with this Clause shall pass both – (a) the resistance to vertical flame propagation test as specified in AS/NZS IEC 60332.1.2 including Annex A; and (b) the falling flaming droplets/particles test as specified in AS/NZS IEC 60332.1.3 including Annex A.	Refer to table in Appendix A.	P
5.6.5	UV resistance Requirements of AS 1049 for Cables exposed to UV radiation.		N
5.6.6	Metallic conductors		P

AS/CA S008:2020			
Clause	Requirement - Test	Result - Remark	Verdict
5.6.6.1	<p>Conductor composition</p> <p>Any metallic conductors, other than copper-clad steel used as an inner conductor in coaxial Cable, or copper-clad aluminium with a centre conductor greater than 2mm used as an inner conductor in coaxial Cable-</p> <p>(1) shall be either plain or plated copper;</p> <p>(2) may be either a single, solid conductor or multi-stranded;</p> <p>(3) the DC resistance shall be less than the values given in Table 3; and</p> <p>(4) the conductor finish should be plain or tinned</p>	<p>Requirement: 88.76 Ω/km max.</p> <p>Measured: 88.39 Ω/km</p> <p>Solid plain copper diam. = 0.52mm</p> <p>All pairs measured and average calculated.</p>	P
5.6.6.2	<p>Electrical withstand voltage</p> <p>A multi-conductor Cable that is required to comply with this Clause by any of Clauses 5.6.10 to 5.6.18 of this Standard, when tested at a frequency of 50 Hz on at least 1 m length;</p> <p>(a) shall be able to withstand the appropriate AC voltage levels and test method listed in Table 4, without breakdown for a period of 60 s or a period of 2 s as stated; and</p> <p>(b) for Test 2 and 3, all Cables/Cordages shall comply to the Table 4 limits using the test specified in AS/NZS 3191 Table 2.1, test number 8(a), and using test method referred in Clause 3.5.1 of AS/NZS 1660.3.</p>		P
5.6.6.3	<p>Mutual capacitance</p> <p>(a) The maximum mutual capacitance between the two wires forming a pair measured at any frequency in the range 800 Hz to 1000 Hz shall not exceed the relevant value given in table 5.</p> <p>(b) The measurement, referred to in Clause 5.6.6.3 (a) shall be performed on a minimum Cable length of 100m</p> <p>(c) The mutual capacitance shall be corrected to a length of 1000m</p>	<p>Requirement: 80 nF/km max.</p> <p>Measured: 49.36 nF/km</p>	P

AS/CA S008:2020			
Clause	Requirement - Test	Result - Remark	Verdict
5.6.6.4	Capacitance unbalance (a) The maximum capacitance unbalance between pairs measured at any frequency in the range 800 Hz to 1000 Hz shall not exceed the relevant value given in Table 5. (b) During the measurement referred to in Clause 5.6.6.4 (a), all conductors, other than those under test and the metallic shield (where applicable) shall be connected to earth. (c) The measurement shall be performed on a minimum Cable length of 100m. (d) The capacitance unbalance between two pairs of wires with one pair designated 'A' and 'B' and the second pair designated 'C' and 'D'. (e) The capacitance unbalance shall be corrected to a length of 500m.	Requirement: 300 pF per 500m max. Measured: 0.00 pF per 500m	P
5.6.6.5	Insulation resistance (a) shall not be less than the relevant value given in Table 5; (b) the measurement shall be made on a minimum length of 100m of Cable or Cordage at a potential of 500Vd.c. \pm 50Vd.c. and the reading taken after the application of the voltage for 60s; and (c) the insulation resistance shall be corrected to a length of 1000m.	Requirement: 1000 M Ω /km min Measured: > 1000 M Ω /km	P
5.6.7	Continuous metallic shield (a) any continuous metallic shield provided in the Cable shall be electrically conductive; and (b) Where a continuous foil shield is employed, a drain wire shall be placed in continuous contact with the metallic surface of the shield.		N
5.6.8	Water penetration test Water Penetration specified in Clause 5, Method-F5B or F5C of IEC 60794-1-22:2017.		N
5.6.9	Integral bearer or strengthener		N
5.6.10	Cable with specific attributes Where a cable is claimed to have specific attributes, such as rodent or termite resistance or armouring strength, evidentiary documentation shall be made available on request to support the claim.		N
5.6.11	Metallic paired cable		P

AS/CA S008:2020			
Clause	Requirement - Test	Result - Remark	Verdict
5.6.11.1	General requirements Metallic paired Cable, other than Cordage, a Cord or a Special Application Cable, shall comply with the following Clauses: 5.6.2, 5.6.3, 5.6.4, 5.6.5, 5.6.6.1, 5.6.6.2, 5.6.6.3, 5.6.6.4, 5.6.6.5, 5.6.7, 5.6.8, 5.6.9 and 5.6.10.		P
5.6.11.2	Construction A Cable intended to carry a frequency of 300 Hz or greater shall be shielded or of twisted pair construction.		P
5.6.11.3	Operating Temperature A Cable shall have a minimum continuous operating temperature rating of 60 °C	Refer to Appendix C – Datasheet Supplied by the Client	P
5.6.12	Cordage with metallic conductors		N
5.6.13	Cords with metallic conductors		N
5.6.14	Metallic jumper wire and jumper cable		N
5.6.15	Coaxial cable		N
5.6.16	Optical fibre cable		N
5.6.17	Blown fibre tube systems		N
5.6.18	Special application cables		N
5.6.19	ES3 generic cable		N
5.7	CONNECTING HARDWARE, INCLUDING PLUGS AND SOCKETS OF ALL DESIGNS		N
5.8	CABLING PRODUCTS FOR UNDERGROUND AND AERIAL INSTALLATIONS		N

****** END OF REPORT BODY ******

Appendix A – Additional Test Data

Appendix B – Photographic Record of Samples

Appendix C – Datasheet Supplied by the Client

Appendix A – Additional Test Data

5.6.4		TABLE: Flammability Test								P
No	Object	Duration of application of flame (S)	Time object remained alight after removal of flame (S)	Time until ignition of tissue paper (S)	Time until ignition of particle board (S)	Ignition of tissue paper	Particle board scorching	Extent of burning upwards (mm)*	Extent of burning downwards (mm)*	Result
1	Orange Cat6	60 sec	39 sec	NI	NI	NI	NI	400 mm	490 mm	Pass
2	Blue Cat6	60 sec	55 sec	NI	NI	NI	NI	385 mm	500 mm	Pass

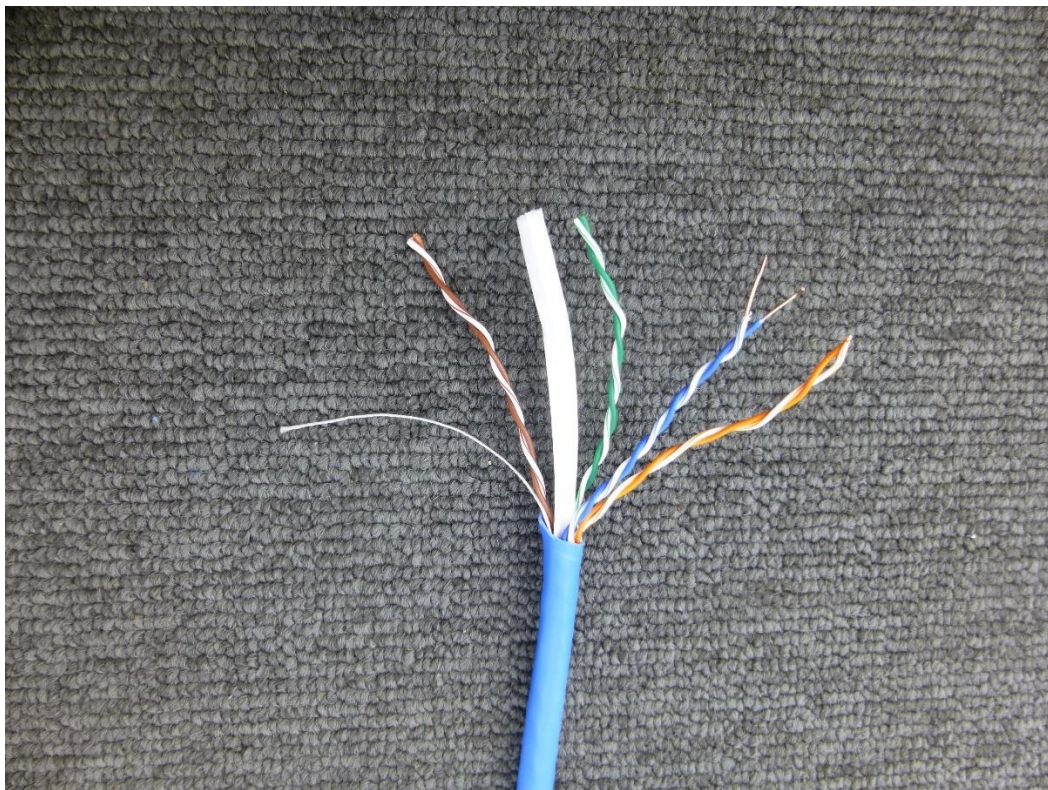
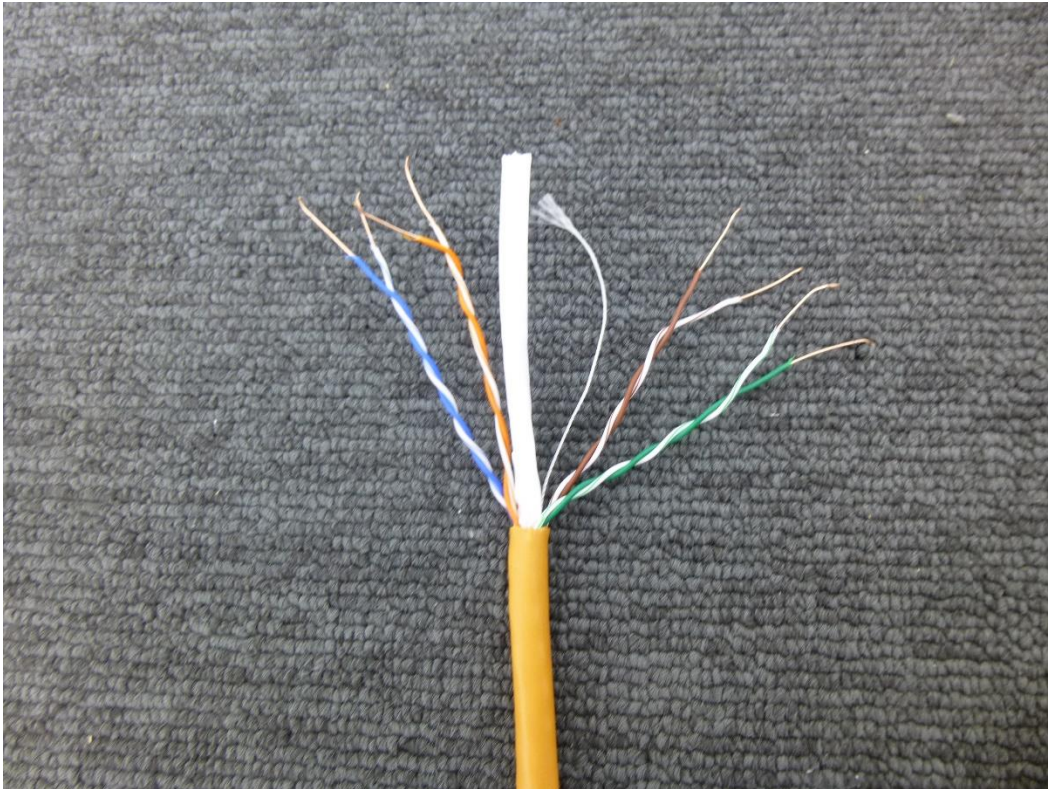
* Measured from lower edge of upper clamp. Start of burn was 475 mm from upper clamp. Limit for upward burn is > 50 mm and limit for downward burn is <540 mm from upper clamp (AS/NZS IEC 60332.1.2 and AS/NZS IEC 60332.1.3).

LEGEND	
P	Pass
F	Does not comply
NA	Not applicable
NI	No ignition

NOTE:

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 AS ENVISAGED BY THE REFERENCE SPECIFICATION, E.G. INDIVIDUAL FIRE TESTS TO PROVE AN OVERALL ACCEPTABLE FIRE HAZARD LEVEL.

Appendix B – Photographic Record of Sample

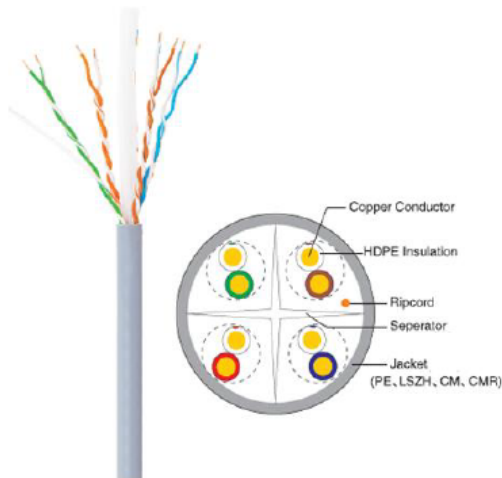


Appendix C – Datasheet Supplied by the Client



UTP Category 6 Cables

Content of Data Sheet			
Product model	CAB-LC3100A-E-IN		
Product specification	Quality verified by latest standard AS/CA S008:2020		
Test Standard	ISO/IEC11801, TIA-568-C.2		
Conductor	Material	Solid-Bare Copper	
	AWG	24	
	Nom.O.D.(mm)	0.52±0.03 mm	
	DC resistance	≤95 Ω/km	
Insulation	Material	HDPE	
	Thickness	0.2±0.02 mm	
	Diameter	0.93±0.05 mm	
	Color	Blue/White- Blue	Green/White-Green
		Orange/White-Orange	Brown/White-Brown
Pitch	Offset pitch	≤20 mm	
	Cable pitch	≤120 mm	
Sheath	Material	PVC(complies RoHS/REACH)	
	External O.D.	5.8±0.3 mm	
	Color	Orange	
	Tensile strength	>13.5 Mpa	
	Thickness	0.6±0.05 mm	
Surface Printing	Letter height	3.0±0.3 mm	
	Color	Black	
	Print error & Space	1±0.005 m	
	Case number	Yes	
Packing	Packing	Carton + Plastic shaft	



Appendix C – Datasheet Supplied by the Client



	Once packing dimension	331mm*255mm*338mm		
	Twice packing dimension	550mm*350mm*360mm		
	Twice packing quantity	2 cases		
Packing length	305±1m			
Rip-cord	Yes	Crossing backbone		Yes
Ambient temperature	-20°C ~ 60°C			

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*Product specifications and availability are subject to change without notice.