



SHEKHAR BANERJEE  
 BIRLA CABLE LTD (FORMERLY BIRLA ERICSS  
 UDYOG VIHAR  
 PO CHORHATA  
 REWA MADHYA PRADESH 486006 INDIA

Date: 2019/01/03  
 Subscriber: 100099322  
 PartySite: 165042  
 File No: E339094  
 Project No: 4788799292  
 PD No: 19000382  
 Type: L  
 PO Number: 4407000268

Subject: **Procedure And/Or Report Material**

The following material resulting from the investigation under the above numbers is enclosed.

**Issue**

<u>Date</u>	<u>Vol</u>	<u>Sec</u>	<u>Pages</u>	<u>Revised Date</u>
	1		Revised Index Page(s) 1	2018/12/21
	1		Appendix	
2016/11/28	1	3	Cert of Compliance	
2016/11/28	1	3	Revised Description Page(s) 1	2018/12/21
2016/11/28	1	3	New Test Record 2	2018/12/21

ANURAG SINGHAL, UL INSPECTION CENTER INDIA, SY NO 24 KUNDALAHALLI, K R PURAM HOBOLI, SOUTH TALUK, WHITEFIELD, BANGALORE, India, 560066., PHONE: 80-2520-4400, FAX: 80-2520-4407, EMAIL: ANURAG.SINGHAL@ul.com

Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

Please review this material and report any inaccuracies to UL's Customer Service Professionals. Contact information for all of UL's global offices can be found at <http://ul.com/aboutul/locations>.

If you'd like to receive updated materials FASTER, UL offers electronic access and/or delivery of this material. For more details, contact UL's Customer Service Professionals as shown above.

This material is provided on behalf of UL LLC (UL) or any authorized licensee of UL.

NWT File

UL INSPECTION CENTER 362

## INDEX

Cable Type	Insulation	Jacket	Section
CMG	HDPE	FRPE	1
CMR	HDPE	FRPE	2
CMR, <b>CM</b>	HDPE	PVC	3

## COMMUNICATIONS CABLE (DUZX, DUZX3, DUZX7, DUZX9)

TABLE A - SAMPLE SELECTION GUIDE

Sample Group	Cable Types	Report Date	Additional Info
1	Reserved for Future Use		
2	CMR	2014-11-27	-
	CMR	2016-11-28	-
3	<b>CM</b>	<b>2016-11-28</b>	-
4	Reserved for Future Use		
5	CMG	2014-11-26	-
6	Reserved for Future Use		
7	Reserved for Future Use		
8	Reserved for Future Use		
9	Reserved for Future Use		
10	Reserved for Future Use		

COMMUNICATIONS CABLE (DUZX, DUZX3, DUZX7, DUZX9)

INDEX TO FOOTNOTES:


## DESCRIPTION

## PRODUCT COVERED:

USL and CNL: Communications Cable, Type **CM**, CMR 75°C.

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE USE):

USL indicates compliance with UL 444.

CNL indicates compliance with CSA C22.2 No. 214.

## CONSTRUCTION DETAILS:

General Character and Use - This cable is constructed in accordance with the Standard for Communications Cable, UL 444/CSA-C22.2 No. 214 and as described below.

Assembly - Jacketed cable employing Eight (8) insulated conductors assembled in accordance with the Standard.

Conductor - In accordance with the Standard.

Insulation - HDPE with min average thickness 9 mils, min thickness at any point 8 mils, 17 mils maximum average thickness.

Filler (Optional) - HDPE, cross-filler as shown in ILL. 1, 96 mils maximum average length (l), 28 mils maximum average width (w).

Rip Cord (Optional) - Polyester, one number.

Jacket - PVC with min average thickness 23 mils, min thickness at any point 18 mils for tensile strength less than 17.24MPa (2500 psi). PVC with min average thickness 18 mils, min thickness at any point 16 mils for tensile strength at least 17.24MPa (2500 psi). PVC shall be from Universal Cable Limited, Grade U-04.

Marking - In accordance with the Standard.

# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20190103-E339094  
**Report Reference** E339094-20161128  
**Issue Date** 2019-JANUARY-03

**Issued to:** Birla Cable Ltd (formerly Birla Ericsson Optical Ltd)  
UDYOG VIHAR  
PO CHORHATA  
REWA MP 486006 INDIA

**This is to certify that representative samples of** COMMUNICATIONS CABLE  
Communications Cable, Type CM, CMR 75°C. .

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** UL 444, Communications Cables.  
CSA C22.2 No. 214-08, Communications Cables.

**Additional Information:** See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



## DESCRIPTION

## PRODUCT COVERED:

USL and CNL: Communications Cable, Type **CM**, CMR 75°C.

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE USE):

USL indicates compliance with UL 444.

CNL indicates compliance with CSA C22.2 No. 214.

## CONSTRUCTION DETAILS:

General Character and Use - This cable is constructed in accordance with the Standard for Communications Cable, UL 444/CSA-C22.2 No. 214 and as described below.

Assembly - Jacketed cable employing Eight (8) insulated conductors assembled in accordance with the Standard.

Conductor - In accordance with the Standard.

Insulation - HDPE with min average thickness 9 mils, min thickness at any point 8 mils, 17 mils maximum average thickness.

Filler (Optional) - HDPE, cross-filler as shown in ILL. 1, 96 mils maximum average length (l), 28 mils maximum average width (w).

Rip Cord (Optional) - Polyester, one number.

Jacket - PVC with min average thickness 23 mils, min thickness at any point 18 mils for tensile strength less than 17.24MPa (2500 psi). PVC with min average thickness 18 mils, min thickness at any point 16 mils for tensile strength at least 17.24MPa (2500 psi). PVC shall be from Universal Cable Limited, Grade U-04.

Marking - In accordance with the Standard.

## GENERAL:

The type 'CMR' construction cable which was used for test purposes under previous investigation is considered representative of type 'CM' construction and hence no additional tests are considered necessary for addition of type 'CM' construction.

## Test Record Summary:

The results of this investigation, including construction review and testing, indicate that the products evaluated comply with the applicable requirements in the standards noted below and, therefore, such products are judged eligible to bear UL's Mark as described on the Conclusion Page of this Report. Any information and documentation involving UL Mark services are provided on behalf of UL LLC or any authorized licensee of UL.

Applicable Standards			
Standard Name	Standard ID Number	Edition or Publication Date	Revision Publication Date
Communications Cables	UL 444	5 <sup>th</sup> Issued 2018-09-24	None
Communications Cables	CSA C22.2 No. 214	8 <sup>th</sup> Issued 2018-09-01	None

Report by:

Reviewed by:

Aravind Chakravarthy V  
Project Engineer

HeeJo Jang  
Senior Project Engineer

Shilpa A  
Project Engineer