



MULTIPLE LISTEE REGISTRATION FORM

UNIQUE NUMBER

The purpose of this form is to register all Multiple Listees that will appear in Intertek's Directory's and to identify the source of listed products in the marketplace. The Applicant and the Multiple Listee shown in the listing report will appear separately in the directory under the same product classification for identical products, although, the product model numbers may differ between the Applicant and Multiple Listee.

NOTE: This form does not authorize the multiple listee to apply the Certification Mark to any product. Only the Applicant or the Applicant's manufacturer as noted on the Authorization to Mark is allowed to apply the Certification Label.

Intertek will charge the Applicant a report revision fee for each registered Multiple Listee added. There is also an annual fee, per Multiple Listee, that is billed to the Applicant to maintain this information in the Directory.

The Applicant warrants that it has the authority and permission from the Multiple Listee to place this Multiple Listee in the listing report and directory. The Applicant acknowledges that Intertek may provide notification to the Multiple Listee of changes affecting the product listing in the Directory. Intertek may confirm this Multiple Listee Registration information with the Multiple Listee.

Send the completed form to Local Engineering team / Sales Account Manager.

Applicant: Company Name: JIAXING HAITANG ELECTRONICS CO.,LTD
 Address: 1st Jinggong Rd, Yandong Village, Wuyuan Town, Haiyan, Zhejiang, China 314300
 Contact Person: Kaibin Zhang
 Email: Zhangkb@haitangcables.com
 Phone: +8615988388799 Fax: 0573-86851317
 Model Number/Product Line: CMR,CM,CMX

(Information must match what is listed in Report/Specification)

Trade Name(s) if applicable: NA

Listing Report Number/Specification Title: 160800354SHA-001

(One Report/Specification per form)

Multiple Listee: Company Name: Worldtec Distributing Corp.
 Address: 4100 Powerline Rd. Building O (Suite 03), Deerfield Beach FL, 33073 USA
 Contact Person: John Mazzie
 Email: jmazzie@worldteccorp.com
 Phone: +1 954-919-8006 Fax: +1 954-653-9886
 Model Number/Product Line: CMX, CM,CMR

(Information must match what is listed in Report/Specification)

Trade Name(s) if applicable: NA

Applicant's Authorization:

数字签名者: xuchen yao
日期: 2016.11.03
16:16:57 +08'00'

Xuchen Yao

(Signature of Authorized Person)

Xuchen Yao

(Printed Name of Authorized Person)

Genenal Manager

(Title)

2016.11.1

(Date)

Multiple Listee's Authorization:

数字签名者: John Mazzie
DN: cn=John Mazzie, o, ou,
email=jmazzie@worldteccorp.com,
c=CN
日期: 2016.11.01 15:52:39 +08'00'

John Mazzie

John Mazzie

(Signature of Authorized Person)

John Mazzie

(Printed Name of Authorized Person)

CEO

(Title)

2016.11.1

(Date)

If assistance is needed in the completion of this form, please contact the Local Engineering team / Sales Account Manager.



Intertek



Intertek

Intertek Testing Services Hong Kong Ltd

2/F Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.



Listing Constructional Data Report (CDR)

| 1.0 Reference and Address | | | |
|---------------------------|--|------------------------------|--|
| Report Number | 160800354SHA-001 | Original Issued: 19-Oct-2016 | Revised: 10-Nov-2016 |
| Standard(s) | Communications Cables(UL 444, Issued:2008/7/11 Ed:4 Rev:2010/04/30) Communications Cables(CSA C22.2 No.214, Issued:2008/07/11 Ed:7) (R2013) G2:2015/04/30 | | |
| Applicant | <u>JIAXING HAITANG ELECTRONICS CO., LTD</u> | Manufacturer | JIAXING HAITANG ELECTRONICS CO., LTD |
| Address | 1st Jinggong Rd, Yandong Village, Wuyuan Town, Haiyan,Zhejiang, China 314300 | Address | 1st Jinggong Rd, Yandong Village, Wuyuan Town, Haiyan,Zhejiang, China 314300 |
| Country | China | Country | China |
| Contact | Kaibin Zhang | Contact | Kaibin Zhang |
| Phone | 0573-86589308 | Phone | 0573-86589308 |
| FAX | 0573-86851317 | FAX | 0573-86851317 |
| Email | <u>zhangkb@haitangcables.com</u> | Email | <u>zhangkb@haitangcables.com</u> |

| 2.0 Product Description | |
|--------------------------------|---|
| Product | Communications Cable, Types CMX, CM,CMR |
| Brand name | NA |
| Description | The products covered by this report are communications cable intended for use in accordance with Canadian Electrical Code(CEC) in Canada and National Electrical Code (NEC) in the United States. See below for detail: See Section 6.1 Construction Detail for cable description. |
| Models | CMR, CM, CMX |
| Model Similarity | NA |
| Ratings | 300V |
| Other Ratings | See Section 6.1 Construction Detail for cable description. |

3.0 Product Photographs

None

4.0 Critical Components

| Photo # | Item no. ¹ | Name | Manufacturer/ trademark ² | Type / model ² | Technical data and securement means | Mark(s) of conformity ³ |
|---------|-----------------------|------|---|---------------------------|-------------------------------------|------------------------------------|
| 1 | 1 | NR | NR | NR | NR | NR |

NOTES:

- 1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.
- 2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.
- 3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.

5.0 Critical Unlisted CEC Components

No Unlisted CEC components are used in this report.

6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. Markings - The product is marked as follows:

Cable Marking: The following information is ink indented printed on the surface of the cables outer jacket at 40 maximum intervals:

- 1) Cable description
- 2) Cable manufacturer/company name or trade name
- 3) Conductor size ("AWG" is optional)
- 4) CMX or CM or CMR
- 5) c(ETL)us (optional)
- 6) ETL Lusted" (optional)
- 7) ETL Control Number (optional if cable manufacturer/company name and code identifying manufacturing location is present)
- 8) Temperature rating in "°C" (optional for 60°C rated cable)
- 9) Date of manufacture (optional)
- 10) Length markings (optional)

Label or Shipping Tag Markings: The following information appears on the label or shipping tag:

- 1) "ETL Listed" (optional)
- 2) "Communications Cable"
- 3) CMX or CM or CMR
- 4) c(ETL)us (optional)
- 5) ETL Control Number (optional if cable manufacturer/company name and code identifying manufacturing location is present)
- 6) Temperature Rating in "°C" (optional for 60°C rated cable)
- 7) Date of manufacture (Month and Year)
- 8) Conductor size AWG ("AWG" is optional)
- 9) Number of conductors or pairs
- 10) Length of cable in container or on reel
- 11) The label of the bundled cable shall indicate the above required information for every cable present in the construction.

Cautionary Markings - The following are required:

- 1) "ETL Listed" (optional)
- 2) "Communications Cable"
- 3) CMX or CM or CMR
- 4) c(ETL)us (optional)

6.0 Critical Features

- 5) ETL Control Number (optional if cable manufacturer/company name and code identifying manufacturing location is present)
- 6) Temperature Rating in "°C" (optional for 60°C rated cable)
- 7) Date of manufacture (Month and Year)
- 8) Conductor size AWG ("AWG " is optional)
- 9) Number of conductors or pairs
- 10) Length of cable in container or on reel
- 11) The label of the bundled cable shall indicate the above required information for every cable present in the construction.

6.1 Construction Detail

Communications Cable is Listed for use in accordance with Article 800 of The National Electrical Code and/or Section 60 of the Canadian Electrical Code (CEC). The cable is constructed in accordance with the harmonized Standard for Communications Cable, UL 444 / CSA C22.2 No. 214, and as shown below.

Construction A:

Communications Cables, Type CMX (60°C, 75°C)

General Character and Use - This cable is constructed in accordance with the Standard and as described below.

Assembly - Multiconductor jacketed cable employing eight insulated singles with non-integral jacket.

Conductor - In accordance with the Standard.

Insulation - HDPE, 8 mils minimum average thickness, 7 mils minimum thickness at any point.

Filler – Optional. If provided, HDPE, shaped in the form of 4-point star as shown illustration 1 , 28 mils maximum average width, 102 mils maximum average length.

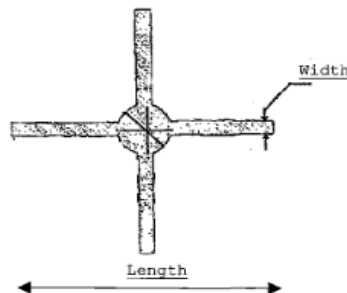
Shield – Optional, constructed in accordance with the Standard.

Jacket - PVC, thickness in accordance with the table below.

| Cable Core Diameter, in. | Jacket with tensile strength at least 2500 lbf/in ² | |
|--------------------------|--|--------------------------------------|
| | Minimum average, mils | Minimum thickness at any point, mils |
| 0.00 - 0.13 | 15 | 12 |
| Over 0.13 - 0.35 | 15 | 12 |
| Over 0.35 - 0.40 | 18 | 14 |
| Over 0.40 - 0.70 | 18 | 14 |
| Over 0.70 - 1.50 | 30 | 24 |
| Over 1.50 - 2.50 | 45 | 36 |
| Over 2.50 - 3.50 | 60 | 48 |

illustration 1:

ILL. 1 - STAR FILLER DIMENSIONS



6.1 Construction Detail

Construction B:

Communications Cables, Types CMR, CM, CMX (60°C, 75°C)

Insulation – HDPE, min average thickness 9 mils, min thickness at any point 7 mils, and max average thickness 13 mils.

Assembly – Eight (8) conductors assembled in accordance with the Standard.

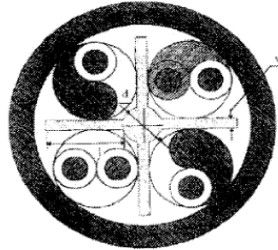
Star Filler (Optional) – If provided, PE, shaped in the form of 4-point star as shown in illustration 2 , 15 mils maximum average width, 236 mils maximum average length.

Ripcord (Optional) – Polyester.

Shield (Optional) - Constructed in accordance with the Standard.

Braid (Optional) - Constructed in accordance with the Standard

illustration 2:



Jacket – PVC shall be sourced from Jiaxing Haitang Electronics Co Ltd, Grade HT-PVC 3375, and thickness in accordance with the table below. A thicker jacket may be required in accordance with the Standard.

| Cable Core Diameter, in. | Minimum average, mils | Minimum thickness at any point, mils |
|--------------------------|-----------------------|--------------------------------------|
| 0.00 - 0.13 | 18 | 14 |
| Over 0.13 - 0.35 | 23 | 18 |
| Over 0.35 - 0.40 | 27 | 22 |
| Over 0.40 - 0.70 | 32 | 26 |
| Over 0.70 - 1.50 | 45 | 36 |
| Over 1.50 - 2.50 | 60 | 48 |
| Over 2.50 - 3.50 | 75 | 60 |

7.0 Illustrations

Illustration 1 - UL Report File E315492 Vol. 1 Sec. 1

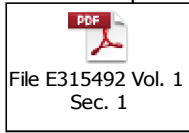


Illustration 2 - UL Report File E315492 Vol. 1 Sec. 2

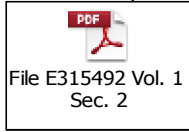


Illustration 3 - Cable Jacket Markings

5005610 JIAXING HAITANG ELECTRONICS CO., LTD CM COMMUNICATION CABLE c(ETL)us
23 AWG 60°C

(Type CM is for representative type reference)

Illustration 3a - Cable Jacket Markings

5005735 Worldtec Distributing Corp. CM COMMUNICATION CABLE c(ETL)us
23 AWG 60°C

(Type CM is for representative type reference)

Illustration 4 - Label Markings



(Type CM is for representative type reference)

Illustration 4a - Label Markings



(Type CM is for representative type reference)

| 8.0 Test Summary | | | |
|--|--------------------------|--------------|--------------------------|
| Evaluation Period | 2016-8-18~2016-10-9 | Project No. | 160800354SHA |
| Due to the previous testing performed under UL Report E468535 no additional testing was necessary. | | | |
| The Chemical Composition (Finger Pringing) Testing had been done by Intertek Testing Services Shenzhen Ltd. Guangzhou Branch. according to UL 2257, Test Location is Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, Guangzhou, China | | | |
| 8.1 Signatures | | | |
| A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0. | | | |
| Completed by: | Rimon Li | Reviewed by: | Miles Li |
| Title: | Engineer | Title: | Reviewer |
| Signature: | <i>Signature on file</i> | Signature: | <i>Signature on file</i> |

9.0 Correlation Page For Multiple Listings

The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.

| | |
|--------------|--|
| BASIC LISTEE | JIAXING HAITANG ELECTRONICS CO., LTD |
| Address | 1st Jinggong Rd, Yandong Village, Wuyuan Town, Haiyan,Zhejiang, China 314300 |
| Country | China |
| Product | Communications Cable, Types CMX, CM,CMR |

| | |
|-------------------|---|
| MULTIPLE LISTEE 1 | Worldtec Distributing Corp. |
| Address | 4100 Powerline Rd. Building O (Suite 03), Deerfield Beach FL, 33073 USA |
| Country | USA |
| Brand Name | |

| | |
|-------------------------|--|
| ASSOCIATED MANUFACTURER | All manufacturers shown in Section 1.0 |
| Address | |
| Country | |

| | |
|--------------------------|---------------------|
| MULTIPLE LISTEE 1 MODELS | BASIC LISTEE MODELS |
| CMX, CM, CMR | CMX, CM, CMR |

| | |
|-------------------|------|
| MULTIPLE LISTEE 2 | None |
| Address | |
| Country | |
| Brand Name | |

| | |
|-------------------------|--|
| ASSOCIATED MANUFACTURER | |
| Address | |
| Country | |

| | |
|--------------------------|---------------------|
| MULTIPLE LISTEE 2 MODELS | BASIC LISTEE MODELS |
| | |

| | |
|-------------------|------|
| MULTIPLE LISTEE 3 | None |
| Address | |
| Country | |
| Brand Name | |

| | |
|-------------------------|--|
| ASSOCIATED MANUFACTURER | |
| Address | |
| Country | |

| | |
|--------------------------|---------------------|
| MULTIPLE LISTEE 3 MODELS | BASIC LISTEE MODELS |
| | |

10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

- 1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issue by Intertek
- 4) a product descriptor that identifies the standards used for certification. Example:

For US standards, the words, "Conforms to" shall appear with the standard number along with the word, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

For Canadian standards, the words "Certified to CAN/CSA Standard CXX No. XX." shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use.

The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

Note to Intertek Follow Up Inspector: The Component Evaluation Center, CEC, will notify you in writing when these components must be selected and sent to the CEC for re-evaluation

Ship the samples to:

Intertek Testing Services Shanghai Limited
ETL Component Evaluation Center
Building No. 86, 1198 Qinzhou Road (North)
Shanghai 200233, China
Attn: Ms. Dansy Xu

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

10.2 Follow-up Services Sample(s)

In accordance with Intertek Follow-up Services, one sample of each basic Flexible Cord type and temperature rating authorized in this listing report, shall be submitted on a frequency as shown in below table for Follow-up tests.

For CMX Listed Cables

CMX Listed cables shall be tested to the VW-1 test specified in CSA C22.2 No.2556 or UL 2556.

For CM Listed Cables

CM Listed cables shall be tested to the UL Flame Exposure Test described in UL 1685. The char height for each specimen shall be less than 244cm (8 ft) when measured from the bottom of the cable tray.

Minimum samples length (Feet) = $8 \times ((4/D) + 0.33)$

D = the diameter of the cable in inches.

For a flat cable, the diameter is to be an equivalent diameter calculated using the following formula:

$$D_e = 1.1284 \times (TW)^{1/2}$$

Where T is the length of the minor axis of the flat cable in inches and W is the length of the major axis of the flat cable in inches.

For CMR Listed Cables

CMR cables shall comply with the limites stated in the Test for Flame Propagation Height of Electrical and Optical-Fiber Cables Installed Vertically in Shafts, UL 1666.

Minimum sample length (Feet) = $16.5 \times (12/D)$

D = the diameter of the cable in inches.

The selected sample shall be marked by the Intertek inspector as a selected test sample and submitted to Intertek - Shanghai, attention to the person who prepared this report and referencing the Listing Report Number at the top of this page.

If compliance is documented, the ETL Listing services remain in place. In the event the submitted samples fails to comply with the requirements, the participant will be required to submit a letter of correction and another length of cable will be selected and tested.

10.2 Follow-up Services Sample(s) (continued)

If the submitted sample complies with the requirements, the ETL Listing services will remain intact. In the event another non-compliance is documented, Intertek will issue documentation instructing the participant to place the production on hold. The participant will not be allowed to apply the ETL mark to continue production of the effected construction until the problem has been evaluated and corrected. An Intertek inspector will then return to the manufacturing location to select two more samples for testing. Each of the samples will be from two different and consecutive production lots.

If both cable samples comply with the requirements, Intertek will notify the participant and production and labeling will be allowed to continue as normal. If one samples complies with the requirements, and the other does not, Intertek will contact the participant in writing and the lot from which the nonconforming sample was taken will be segregated and held in order to remove the ETL marks from the production run. The participant must also continue to evaluate the problem. If both samples do not comply with the requirements, Intertek will notify the participant in writing to place the production on hold and remove the ETL marks.

The fee for the service is above and beyond the Follow-up Service fees. The fee will be based on the current price for the tests actually conducted. The amount of the fee will be forwarded at that time. The selected sample shall be marked by the Intertek inspector as a selected test sample and submitted to Intertek - Shanghai, attention to the person who prepared this report and referencing the Listing Report number at the top of the page.

10.3 Follow-up Services Sample(s) For Chemical Composition (Finger Pringing) Testing

In accordance with Intertek Follow-up Services, a minimum 12 inch (30 cm) length of cable for each type of insulation composition shall be submitted on a frequency of one sample per twelve (12) months for analytical finger print verification, using UL Subject 2257 Outline of Investigation as a guideline test method to verify continued use of same insulation chemical composition that produced compliant test results. Data will be kept year to year and compared. Insulation compositions must not significantly deviate year on year. It is required that same insulation materials be used unless new/revised materials are re-evaluated and approved by Intertek Laboratory. Note: Note: UL Subject 2257 outlines the identification tests for plenum cables and includes FTIR using reflectance accessory, TGA per ASTM D3850, ICP/AA (inductively coupled plasma/atomic absorption) for certain materials, chlorine/bromine content per ASTM E442, DSC (differential scanning calorimetry) per ASTM D3418 on all but PVC, melt flow per ASTM D1238 on all but PVC and PTFE and specific gravity per ASTM D792.

If submitted sample complies with requirements (has not changed), ETL Listing services will remain intact. In the event a non-compliance is documented, Intertek will issue documentation instructing participant to place production on hold. The participant will not be allowed to apply the ETL mark to continued production of the effected construction until the problem has been evaluated and corrected. An Intertek inspector will then return to manufacturing location to select two more samples for testing. Each of the samples will be from two different and consecutive production lots.

If both samples comply with requirements, Intertek will notify the participant and production and labeling will be allowed to continue as normal. If one samples complies with requirements, and the other does not, Intertek will contact the participant in writing and the lot from which the nonconforming sample was taken will be segregated and held in order to remove the ETL marks from the production run. The participant must also continue to evaluate the problem. If both samples do not comply with the requirements, Intertek will notify participant in writing to place the production on hold and remove ETL marks.

Fees for the service is above and beyond the Follow-up Service Fees and estimated to be \$300 per each different material in each sampled cable construction, annually. Selected sample shall be marked by the Intertek inspector as a selected test sample and submitted to Intertek .

11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

Required Tests

Spark Test After Insulating (UL 444, Section 6.1), Continuity (UL 444, Section 6.2), Dielectric Strength (UL 444, Section 6.3)

11.1 Spark Test After Insulating (UL 444, Section 6.1)

100% of production shall be tested. The Spark voltage shall be maintained at 1750 V for an ac test and 2500 V for a dc test. No insulated conductor shall show more than an average of one fault per 915 m (3000 ft) in any reel length.

11.2 Continuity (UL 444, Section 6.2)

This test is required on completed cable before shipment or on master reels before packaging (put-up). The insulated conductor shall be continuous throughout.

11.3 Dielectric Strength (UL 444, Section 6.3)

This test is required on the completed cable before shipment or on master reels before packaging (put-up). The insulation shall withstand, without breakdown, a voltage of 2.5 kV dc or 1.5 kV ac for a minimum of 2 seconds, applied between conductors and between conductors and shields (if present). The insulation shall not breakdown.

Test Equipment

All equipments used for production line testing must be calibrated annually, and the calibration must be traceable to NIST or the applicable national organization relevant to the country where the inspection is conducted.

