

STANDARD INFORMATION

Standard: UL 758

Standard ID:

Appliance Wiring Material [UL 758:2014 Ed.3+R:13Oct2021]

Previous Standard ID:

Appliance Wiring Material [UL 758:2014 Ed.3+R:17Aug2021]

Appliance Wiring Material [UL 758:2014 Ed.3+R:21May2021]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **August 17, 2023**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

All reports must be certified to the October 13, 2021 revision prior to the effective date.

Overview of Changes:

August 17, 2021:

- Addition of Laser Marking Requirements

October 13, 2021

- Revisions to Conductors
- Revisions to Annealed Copper Wires and Tinned Annealed Copper Wires

Specific details of new/revised requirements are found in table below.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
The following changes reflect the August 17, 2021 revision:		
50	Info	Surface Marking of AWM
50.1		Surface marking is not required for appliance wiring material. <u>If present, the marking shall be made using surface printing, indent marking, embossing, or a marker tape under the jacket. The thickness of the insulation or jacket under the printing shall not be reduced below the minimum required.</u> <u>Laser printing shall be acceptable if it does not reduce the tensile strength and elongation (unaged and after conditioning) below the minimum allowed for the material. The laser-imprinted area shall not be buffed or skived during the test.</u>



CLAUSE VERDICT COMMENT

The following changes reflect the October 13, 2021 revision:

5 Info **Conductor**

Conductor – metal specifications

Table 5.3

Conductor metal	ASTM reference for the metal	Temperature limit for the metal, °C (°F)	Other limits
Copper, uncoated, diameter of each strand or thickness of rectangular or tubular conductor less than 0.015 inch (0.38 mm)	ANSI/ASTM B 3	150 (302)	<u>Uncoated conductor smaller than 0.003 inch (0.079 mm) meet the elongation requirements for 40 AWG conductors shown in ASTM B 3.</u>
Copper, uncoated, diameter of each strand or thickness of rectangular or tubular conductor at least 0.015 inch (0.38 mm)	ANSI/ASTM B 3	200 (392)	<u>Uncoated conductor smaller than 0.003 inch (0.079 mm) meet the elongation requirements for 40 AWG conductors shown in ASTM B 3.</u>
Copper, tin-coated, diameter of each strand or thickness of rectangular or tubular conductor less than 0.015 inch (0.38 mm)	ANSI/ASTM B 33	150 (302)	<u>Tin-coated conductor smaller than 0.003 inch (0.079 mm) meet the elongation requirements for 40 AWG conductors shown in ASTM B33.</u>
Copper, tin-coated, diameter of each strand or thickness of rectangular or tubular conductor at least 0.015 inch (0.38 mm)	ANSI/ASTM B 33	200 (392)	<u>Tin-coated conductor smaller than 0.003 inch (0.079 mm) meet the elongation requirements for 40 AWG conductors shown in ASTM B 33.</u>

Note: Only modified sections of the table are shown.

5.6 Info **Resistance**



CLAUSE	VERDICT	COMMENT
5.6.3		Special alloy copper conductors having a conductivity of not less than 80 <u>55</u> percent of 100 percent IACS (International Annealed Copper Standard) copper are not prohibited from being used when the finished wire or cable is suitable for the use, and when the cross section of the conductor is sufficient to give it a conductivity of not less than 80 <u>55</u> percent of the 100 percent IACS (International Annealed Copper Standard) conductor and the tag is marked to indicate its nominal AWG size.
