The Institute for Interconnecting and Packaging Electronic Circuits 2215 Sanders Road • Northbrook, IL 60062



IPC-TM-650 TEST METHODS MANUAL

1.0 Scope This method of test covers the procedure for determining weight (average thickness - by weight measurement) of copper foil for printed circuits.

2.0 Applicable Documents None.

3.0 Test Specimen Use template described below to cut three samples of copper. Samples should be taken from near the left and right edges and the center across the width of the roll.

4.0 Apparatus

- **4.1** Balance capable of weighing accurately to ±0.1 grams.
- **4.2** Knife suitable for cutting copper.

Number 2.2.12 Subject Thickness of Copper By Weight	
Date 3/76	Revision A
Originating Task Group N/A	

4.3 Template precut to 254 sq. in. (0.164 sq. meters) [12 in $\pm 1/32$ in by 21-3/16 in $\pm 1/32$ in] (304.8mm by 538.2 +0.079mm).

5.0 Procedure

5.1 Identify the samples (left, center and right); weigh sections singly and record values.

5.2 Evaluation

- (1) One ounce copper foil (nominal 0.0014 in.) should weigh 50 grams ± 5 .
- (2) Two ounce copper foil (nominal 0.0028 in.) should weigh 100 grams ± 10 .
- (3) ''X'' ounce copper foil should weigh 50X grams $\pm 10\%$.