



Highlights of CISPR 11 Edition 5.0 Amendment 1 and the Impact on Your Testing

Background

The recent publication of Amendment 1 to CISPR 11 Edition 5.0 is more than a cosmetic update with grammar corrections. Amendment 1 clarifies acceptable measurement distances and limits for Radiated Emissions testing for Group I, Class A and Class B products.

In years past there has been confusion regarding 3m measurement and its acceptability to all products. Previous versions implied that when 10m measurements were not possible, they could be interpolated using the inverse proportionality calculation to convert the 10m to a 3m limit. However, these versions never specified conditions under which 10m measurements were not possible, which led some manufacturers to take a conservative approach that 3m measurements were not possible.

Details on Changes

Amendment 1 for CISPR 11 Edition 5.0 includes revised information in both Table 4 for Class A products and Table 5 for Class B products to include 3m measurement limits. The associated limits for a class A product $\leq 20\text{kVA}$ are 50dBuV/m from 30-230MHz and 57dBuV/m from 230-1000MHz.¹ The associated limits for a class B product are 40dBuV/m from 30-230MHz and 47dBuV/m from 230-1000MHz.¹ Notes attached to Tables 4 and 5 explicitly state that 3m limits apply only to small equipment.

Under definition 3.10, small equipment is described as “equipment either positioned on a table top or standing on the floor which, including its cables, fits in a cylindrical test volume of 1.2m in diameter and 1.5m above the ground plane.”²

Conclusion

The clarifications in Amendment 1 of CISPR 11 Edition 5 provide a definitive resolution to the acceptance of data measured and compared to 3m limits if the product meets the criteria for small equipment as defined in Section 3.10. Therefore, conservative companies who chose to measure only at a 10m separation distance can now maintain a high degree of confidence that data measured at a 3m separation distance is also valid and accepted by the international standards committee.

¹ IEC CISPR 11 Edition 5.0 Amendment 1 (2010-03) (p. 3).

² IEC CISPR 11 Edition 5.0 Amendment 1 (2010-03) (p. 2).