

ENGINEERING PRACTICE STUDY

TITLE: MIL-PRF-28750/9, REPLACING FIGURE 5. BROADBAND CONDUCTED EMISSIONS WITH MIL-STD-461F FIGURE CE102-1. CE102 LIMIT (EUT POWER LEADS, AC AND DC) FOR ALL APPLICATIONS.

MIL-PRF-28750/10, REPLACING FIGURE 5. BROADBAND CONDUCTED EMISSIONS WITH MIL-STD-461F FIGURE CE102-1. CE102 LIMIT (EUT POWER LEADS, AC AND DC) FOR ALL APPLICATIONS. WITH RELAXED REQUIREMENTS.

24 April 2015

STUDY PROJECT

FINAL REPORT

Study Conducted by DLA Land and Maritime

Project Number: 5945-2015-022

Prepared by:

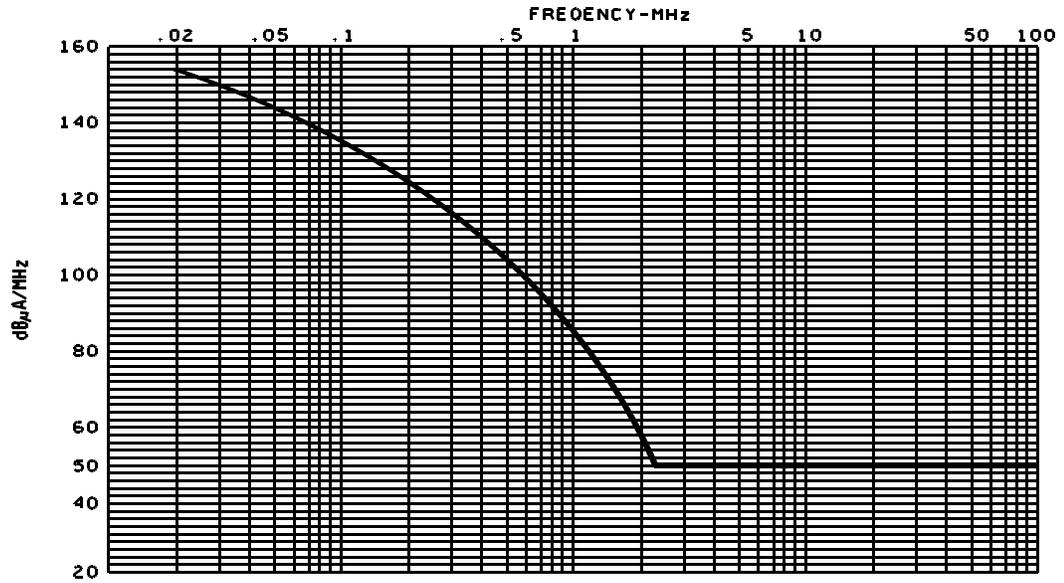
Erika Baker

- I. **OBJECTIVES:** Survey the manufacturers and document custodians/reviewers to determine the acceptability of modifying the stated documents to revise Figure 5 requirements to clarify intent and eliminate confusion by:
- A. Determine the acceptability of replacing MIL-PRF-28750/9 FIGURE 5 from the current Broadband conducted emissions. to MIL-STD-461F Figure CE102-1. CE102 limit (EUT power leads, AC and DC) for all applications. to support the electromagnetic interference measurement.
 - B. Determine the acceptability of replacing MIL-PRF-28750/10 Figure 5. from the current Broadband conducted emissions to MIL-STD-461F Figure CE102-1. CE102 limit (EUT power leads, AC and DC) for all applications., with relaxed requirements. We received a Manufacturer inquiry, requesting Figure 5 to be changed in order to reflect and support the current measurement using Line Impedance Stabilization Network (LISN) devices. See Attachment A for referenced examples of Figure 5.
- II. **BACKGROUND:** DLA Land and Maritime was notified of the manufacturer's inability to measure, using a Line Impedance Stabilization Network (LISN), the units or range supported by FIGURE 5 Broadband conducted emissions. It was requested FIGURE 5 be modified to reflect MIL-STD-461F FIGURE CE102 limit (EUT power leads, AC and DC) for all applications. to support the obtainable electromagnetic interference measurement.
- III. **RESULTS:** A survey letter was sent to all QPL manufacturers and document custodians/reviewers. The response supported eliminating the existing FIGURE 5 Broadband conducted emissions. As a result, MIL-PRF-28750/9, FIGURE 5 will be replaced with MIL-STD-461F Figure CE102-1. CE102 limit (EUT power leads, AC and DC) for all applications. MIL-PRF-28750/10, FIGURE 5 will be replaced with MIL-STD-461F Figure CE102-1. CE102 limit (EUT power leads, AC and DC) for all applications., using relaxed requirements. Figure 5 will be renamed Conducted emissions.
- IV. **CONCLUSIONS:** It was determined DLA Land and Maritime will update MIL-PRF-28750/9 and MIL-PRF-28750/10 to use MIL-STD-461F Figure CE102-1. CE102 limit (EUT power leads, AC and DC) for all applications. as Figure 5 to reflect obtainable measurements. For MIL-PRF-28750/9, MIL-STD-461F Figure CE102-1. CE102 limit (EUT power leads, AC and DC) for all applications will be implemented, as stated. For MIL-PRF-28750/10, MIL-STD-461F Figure CE102-1. CE102 limit (EUT power leads, AC and DC) for all applications will be implemented, with relaxed requirements. See Attachment A.
- V. **RECOMMENDATIONS:** If there is a specific need to further modify MIL-PRF-28750/9 and MIL-PRF-28750/10, please notify Erika Baker (614) 692-4481 or Email Erika.Baker@dla.mil. I will be glad to work with the manufacturers and document custodians/reviewers to find a solution.

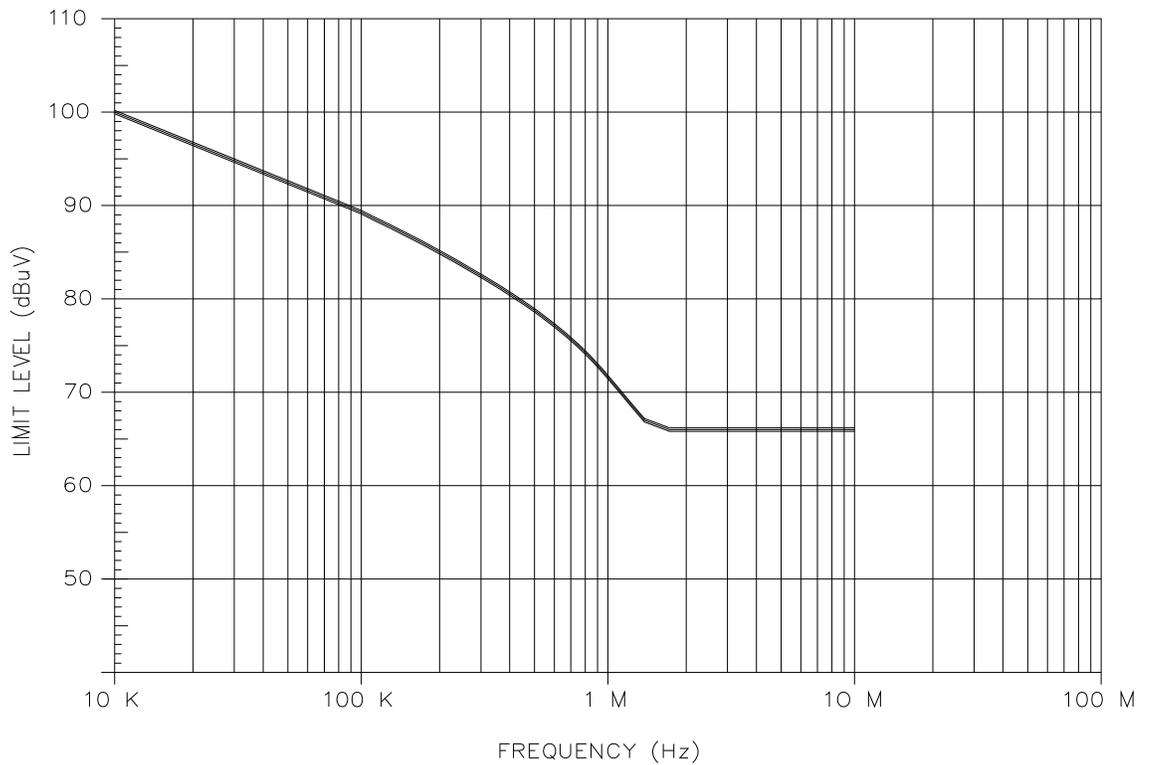
(5945-2015-022)

Attachment A

Current MIL-PRF-28750/9 FIGURE 5. Broadband conducted emissions.

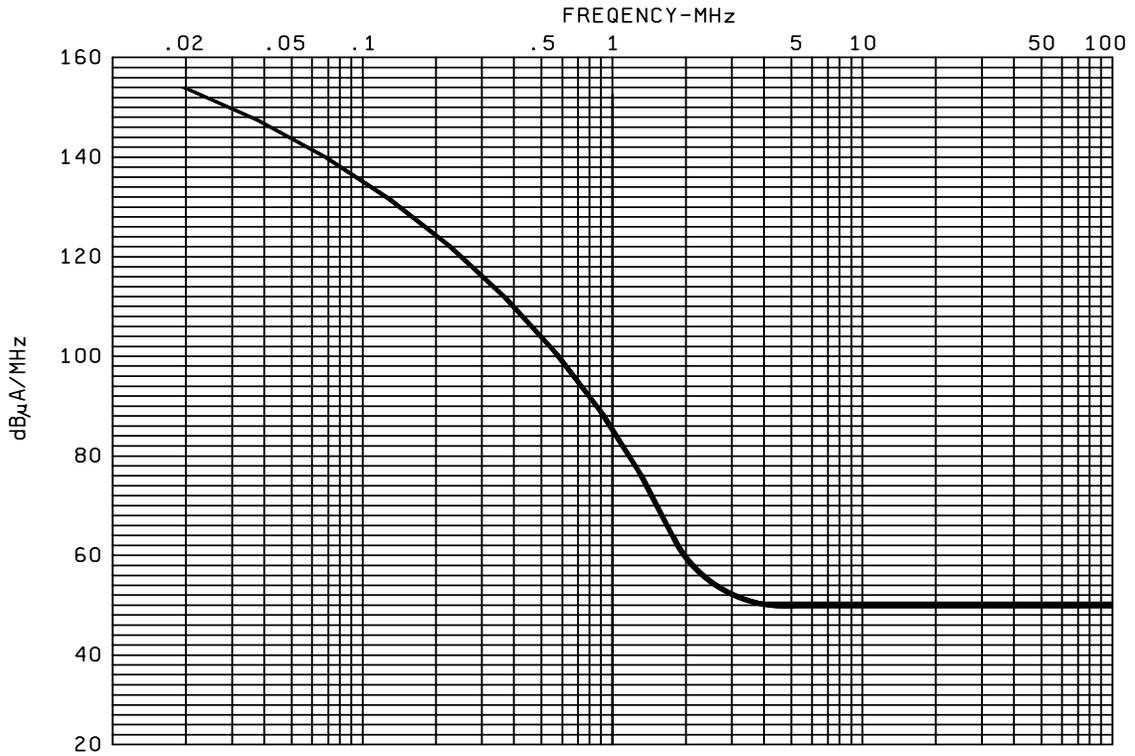


Proposed MIL-PRF-28750/9 FIGURE 5. Conducted emissions.



Attachment A

Current MIL-PRF-28750/10 FIGURE 5. Broadband conducted emissions.



Proposed MIL-PRF-28750/10 FIGURE 5. Conducted emissions.

