



DEFENSE LOGISTICS AGENCY
LAND AND MARITIME
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December 7, 2017

DSCC-V (VAI/Mr. Funk/614-506-4980)

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: EP Study to investigate the replacement of the MIL-DTL-17 Weathering test with Measurement 3306 of MIL-STD-1678-3. Project number 6145-2017-008.

The purpose of this EPS is to examine replacing the MIL-DTL-17 Weathering test with the MIL-STD-1678-3 test method.

Question #1. MIL-DTL-17 currently has the following Weathering test requirements:

3.7.30 Weathering. When cables are tested as specified in [4.8.32](#), the tensile strength and elongation shall be no less than 75% of their un-weathered values ([see 3.1](#)). The surface shall exhibit no signs of cracking when examined using 3X magnification.

4.8.32 Weathering ([see 3.7.30](#)). Jacket material shall be tested in accordance with ASTM D2565. The following conditions shall apply:

Xenon arc lamp
6500 Watt
Borosilicate glass filters
Irradiance: 1.75 w/m² at 500 nm
Exposure: Arc lamp on: 18 hours.
 Black panel temperature 50 ± 2°C
 Relative humidity 50 ± 2%
 (for 18 minutes every 2 hours, water
 is sprayed onto specimen)
Arc lamp off: 6 hours.
 Temperature 25° ± 2°C
 Relative humidity 90-95%

Total exposure time: 1000 hours.

Measurement 3306 of MIL-STD-1678-3 contains the following Weathering test requirements:

TABLE 3306-I. Conditions for weathering tests.	
Conditions	
Xenon arc lamp	6,000 Watts
Borosilicate glass filters irradiance	0.35 Watts per square meter at 340 nm
Procedure	
Exposure – arc lamp on	18 hours
arc lamp off	Black panel temp $63 \pm 2^{\circ}\text{C}$
Total exposure	Relative humidity 50 ± 2 percent (Water is sprayed onto the specimen for 18 minutes every 2 hours)
	6 hours
	Temperature $25 \pm 2^{\circ}\text{C}$
	Relative humidity 90 to 95 percent
	1,200 hours

The purpose of this EPS is to determine if DLA should change the MIL-DTL-17 Weathering test requirements to Measurement 3306 of MIL-STD-1678-3?

Applicable documents include MIL-DTL-17 and MIL-STD-1678-3.

Please provide this office with your response or comments within 30 days of the date of this Memorandum. Lack of response will be construed as concurrence or lack of interest.

If there are any questions please contact Mr. Jeremy Funk, phone number 614-692-6608, facsimile transmission, 614-692-6939, e-mail Jeremy.Funk@dla.mil, or may be mailed via the US Postal Service to DLA LAND AND MARITIME, ATTN: VAI (Attention: Jeremy Funk), P.O. Box 3990, Columbus, OH 43218-3990.

Sincerely,

/ SIGNED /

ABDONASSER M. ABDOUNI
Chief,
Interconnection Branch