

ENVIRONMENTAL QUALIFICATION FORM

NOMENCLATURE: COMMUNICATIONS ANTENNA (PUBLIC SERVICE BAND)
 TYPE/MODEL/PART NO.: AV-14 TSO NO.: C37d, C38d
 MANUFACTURER'S SPECIFICATION AND/OR OTHER APPLICABLE SPECIFICATION: AV-14
PRODUCT DRAWING PACKAGE AND ELECTRICAL TEST SPECIFICATION 34-154
 MANUFACTURER: R.A. MILLER INDUSTRIES, INC.
 ADDRESS: 14500 168TH AVENUE GRAND HAVEN, MI 49417

| CONDITIONS | SECTION | DESCRIPTION OF CONDUCTED TESTS |
|---|--|---|
| TEMPERATURE AND ALTITUDE | 4.0 REV. 1 | EQUIPMENT TESTED TO CATEGORY D2 |
| LOW TEMPERATURE HIGH TEMPERATURE IN-FLIGHT LOSS OF COOLING ALTITUDE DECOMPRESSION OVERPRESSURE | 4.5.1 4.5.2 & 4.5.3 4.5.4 4.6.1 4.6.2 4.6.3 | (IN-FLIGHT LOSS OF COOLING TEST IS NOT APPLICABLE) |
| TEMPERATURE VARIATION | 5.0 | EQUIPMENT TESTED TO CATEGORY A |
| HUMIDITY | 6.0 | EQUIPMENT TESTED TO CATEGORY C |
| SHOCK | 7.0 | EQUIPMENT TESTED TO OPERATIONAL TEST ONLY |
| OPERATIONAL CRASH SAFETY | 7.2 7.3 | |
| VIBRATION | 8.0 | EQUIPMENT TESTED TO CATEGORY S |
| EXPLOSION | 9.0 | EQUIPMENT IDENTIFIED AS CATEGORY X - NO TEST REQUIRED |
| WATERPROOFNESS | 10.0 | EQUIPMENT TESTED TO CATEGORY S |
| FLUIDS SUSCEPTIBILITY | 11.0 | EQUIPMENT IDENTIFIED AS CATEGORY X - NO TEST REQUIRED |
| SAND AND DUST | 12.0 | EQUIPMENT TESTED TO CATEGORY D |
| FUNGUS | 13.0 | EQUIPMENT IDENTIFIED AS CATEGORY F - NO TEST REQUIRED |
| SALT SPRAY | 14.0 | EQUIPMENT TESTED TO CATEGORY S |

ENVIRONMENTAL QUALIFICATION FORM – CONTINUED

| | | |
|--|------|---|
| MAGNETIC EFFECT | 15.0 | EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED |
| POWER INPUT | 16.0 | EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED |
| VOLTAGE SPIKE | 17.0 | EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED |
| AUDIO FREQUENCY SUSCEPTIBILITY | 18.0 | EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED |
| INDUCED SIGNAL SUSCEPTIBILITY | 19.0 | EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED |
| RADIO FREQUENCY SUSCEPTIBILITY | 20.0 | EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED |
| RADIO FREQUENCY EMISSION | 21.0 | EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED |
| LIGHTNING INDUCED TRANSIENT SUSCEPTIBILITY | 22.0 | EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED |
| LIGHTNING DIRECT EFFECTS TEST | 23.0 | EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED |
| ICING | 24.0 | EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED |
| OTHER TEST | | |