Version 1.0.0 Date: 2/5/2017. Initial release.

Calibration is not incorporated in to this test.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test Writer: Jeff Brown | | | | | | |
|  | Test Case Name | NRL Bi-static Arch Reflectivity Test | Test ID | | 1 |  |
|  | Description |  | Test Type | | White box | |
|  | Required hardware | Arch, Paired Horn Antenna’s,  Adjustable Metal Sample Table, VNA Sample and sample holder |  |  |  |  |
|  | Required software | MATLAB for extraction process |  |  |  |  |
|  | Version | 1.0.0 |  |  |  |  |
| Tester information | | | | | | |
|  | Name of tester |  | Date | |  |  |
|  | Hardware, software version |  | Time | |  |  |
| Step | Action | Expected result | Pass | Fail | N/A | Comment |
| 1 | Connect 2 ports of VNA to Horn Antennas |  |  |  |  |  |
| 2 | Place Antennas on Arch One at 5° left and one right of the Normal Incidence |  |  |  |  |  |
| 3 | Take first Reflectivity measurement and record results |  |  |  |  |  |
| 4 | Adjust Polarization |  |  |  |  |  |
| 5 | Take measurement again with polarization shift. Record Result |  |  |  |  |  |
| 6 | Move each antenna 5° out from normal |  |  |  |  |  |
| 7 | Repeat Steps 3 through 6 until antennas are 15° above horizon on each side |  |  |  |  |  |
| 8 | Switch Antennas and Return to Step 2 |  |  |  |  |  |
| 9 | Work through each Frequency band |  |  |  |  |  |