

AN/SLO-32-AN/ULM-4 TEST CRITERIA

Averaging Methods:

- Average Quadrant ERP:
- +/- 30 degrees of array boresight.
- Average Quadrant Hit Count:
- +/- 30 degrees of array boresight.
- Variance Tests for full quadrant.
- Bow/Stern Region:
- +/- 10 Degrees off the bow or stern.

ERP:

- No quadrant ERP will be more than 9db below maximum quadrant ERP.
- No more than 10 degrees of quadrant will be more than 6db below average for that quadrant.
- Transponder/Repeater quadrant averages will be within 6db.

Hit Count:

- Average Hit Count per quadrant will be 75% (or above) for I Band.
- Average Hit Count per quadrant will be 75% (or above) for J Band.
- No Hit Count below 50% for 10 degrees or more (less bow/stern region).

Level of Qualification:

- LEVEL ONE (Optimum Performance):
- All test items SAT.
- All Hit Counts at least 85%.
- Ensures full azimuth coverage in both bands.
- Verifies all transmitters operating properly.
- LEVEL TWO (Minor Degradation):
- All Hit Count items SAT.

- ERP Variance items SAT.
- No "GAPS" in azimuth coverage.
- ERP may exhibit minor (non-catastrophic) failure.
- LEVEL THREE (Moderate Degradation):
- No more than one UNSAT per Hit Count item.
- No more than one UNSAT per ERP Variance item.
- No more than two UNSAT's per remaining items.
- System exhibits degraded performance which equates to reduced operational capability.
- LEVEL FOUR (Major Degradation):
- Two or more UNSAT's in any Hit Count item.
- Two or more UNSAT's in any ERP Variance item.
- Three or more UNSAT's in any remaining item.
- System operational capability severely reduced.

LEVELS TABLE

Criteria Item	Certification Levels			
	One	Two	Three	Four
ERP Transponder vs. Repeater				
I Band	SAT	<= 1 UNSAT	<= 2 UNSAT	<= 3 UNSAT
J Band	SAT	<= 1 UNSAT	<= 2 UNSAT	<= 3 UNSAT
ERP Quadrant vs. Quadrant				
Repeater I Band	SAT	<= 1 UNSAT	<= 2 UNSAT	<= 3 UNSAT
Repeater J Band	SAT	<= 1 UNSAT	<= 2 UNSAT	<= 3 UNSAT
Transponder I Band	SAT	<= 1 UNSAT	<= 2 UNSAT	<= 3 UNSAT
Transponder J Band	SAT	<= 1 UNSAT	<= 2 UNSAT	<= 3 UNSAT

ERP Variance				
Repeater I Band	SAT	SAT	<= 1 UNSAT	<= 2 UNSAT
Repeater J Band	SAT	SAT	<= 1 UNSAT	<= 2 UNSAT
Transponder I Band	SAT	SAT	<= 1 UNSAT	<= 2 UNSAT
Transponder J Band	SAT	SAT	<= 1 UNSAT	<= 2 UNSAT
Hit Count Percentage				
I Band	>85%	SAT	<= 1 UNSAT	<= 2 UNSAT
J Band	>85%	SAT	<= 1 UNSAT	<= 2 UNSAT
Hit Count Variance				
I Band	SAT	SAT	<= 1 UNSAT	<= 2 UNSAT
J Band	SAT	SAT	<= 1 UNSAT	<= 2 UNSAT