

# Qualification Summary

Test Plan	Description	
TP-9229	Internal Test Procedure for Phase Over Temperature Requirements	
Products Tested	QTY	Testing Sequence
KMS-105Q-48.0-KMS +/-2.8ps	4	1,2
KMS-190Q-48.0-KMS +/-2.8ps	4	1,2
SMS-200Q-48.0-SMS +/-2.8ps	4	1,2
Testing Sequence 1	Requirements	Results
Phase Match Assemblies	+/-2.8ps	Pass
VSWR and Insertion Loss	Per Cable Specifications	Pass
Phase Over Temperature	Characterization Test	Recorded
VSWR and Insertion Loss	Per Cable Specifications	Pass
Testing Sequence 2	Requirements	Results
Phase Tracking Over Temperature	Measure and Record Results	Recorded
TP-9140	Internal Test Qualification Procedure for Space Flight Cables	
Products Tested	QTY	Testing Sequence
SMS-200Q-12.0-SMS	7	2
SMS-105Q-12.0-SMS	5	2
SSMS-060Q-12.0-SSMS	5	2
SMS-200Q-39.4-SMS	4	3
TMS-200Q-39.4-TMS	4	3
Cable 200Q	4 ft.	1
Cable 190Q	1 ft.	1
Testing Sequence 1	Requirements	Results
Group A Inspection Tests	Per MIL-DTL-17H	Pass
Group B Inspection Tests	Per MIL-DTL-17H	Pass
Testing Sequence 2	Requirements	Results
Insertion Loss (pre-Radiation)	Per Cable Specifications	Pass
Radiation Dosage	Cables Exposed to Various Levels of Radiation	Recorded
Insertion Loss (post-radiation)	Measure and Record Delta to Original Results	Recorded
Testing Sequence 3	Requirements	Results
DWV	Mil-STD-202 Method 301	Recorded
Radiation Dosage	Measure and Record Results	Recorded
Random and Sine Vibration	MIL-STD-202 Method 214A Conditions IIG, Swept Sine, 5-100Hz, 2 oct/min	Recorded
Thermal Cycles	100X Thermal Cycles	Recorded
Shielding Effectiveness	Measure and Record Results	Recorded
CW Power	Measure and Record Results	Recorded
Connector Retention	Measure and Record Results	Recorded
X-ray	MIL-STD 202 Method 209	Recorded
DPA	Verification of Mechanical Integrity	Recorded
VSWR and Insertion Loss	Recorded Between Each Step Above	Pass

**Summary:** Cable and connectors individually all passed industry requirements outlined in MIL standards for group A and B tests. Cable assemblies successfully passed testing sequences.