Testing is performed at an internationally recognized, independent research, engineering and evaluation laboratory who by contractual agreement with their clients does not allow the use of their name or logo because doing so may imply an endorsement of products or services. For this reason, all references to said independent third party lab have been removed. Should you require the full unedited version, please contact the company identified below.

Mechanical Engineering Division
June 23, 2016

SUMMARY OF TESTS PERFORMED

Project Number: 18.04481.31

Company: Panasonic System Communications Company
Two Riverfront Plaza
Newark, NJ 07102
Attn: Pala Vachirabanjong

Equipment Tested: Panasonic CF-20

Test Dates: May 5, 2016 – June 22, 2016

Notes: *The test item was evaluated for ability to boot into the Windows® operating system following each of the tests described within this summary report or for the ability to play an audio/visual file during the test parameter application. A listing of summarized tests and results appear in the accompanying table. Full details will be provided in Report Number 18.04481.31.100.FR1.*

Report Written By:

Eric Dornes
Principal Engineer
Structural Dynamics and Product Assurance Section

Summary of Tests Performed on the Panasonic CF-20

Test Description	Test Parameters	Test Results
Altitude: Storage/Air Transport	MIL-STD-810G, Method 500.5, Procedure I • 50,000ft Non-Operating	PASS
Altitude: Operation/Air Carriage	MIL-STD-810G, Method 500.5, Procedure II • 50,000ft Operating	PASS
High Temperature: Storage	MIL-STD-810G, Method 501.5, Procedure I • 160°F Non-Operating, 7 days	PASS
High Temperature: Operation	MIL-STD-810G, Method 501.5, Procedure II (constant) • 145°F Operating	PASS
High Temperature: Tactical – Standby to Operational	MIL-STD-810G, Method 501.5, Procedure III • 160°F Standby • 145°F Operating	PASS
Low Temperature: Storage	MIL-STD-810G, Method 502.5, Procedure I • -60°F Non-Operating	PASS
Low Temperature: Operation	MIL-STD-810G, Method 502.5, Procedure II • -20°F Operating	PASS
Temperature Shock	MIL-STD-810G, Method 503.5, Procedure I • From 200°F to -60°F, three cycles	PASS
Solar Radiation	MIL-STD-810G, Method 505.5, Procedure I • Cyclic heat, 7 days	PASS
Rain: Blowing	MIL-STD-810G, Method 506.5, Procedure I (Aggravated) • 70MPH, 30 minutes per side	PASS
Rain: Drip	MIL-STD-810G, Method 506.5, Procedure III	PASS
Humidity	MIL-STD-810G, Method 507.5, Procedure I • Cycle B3 for normal test duration of natural or induced cycles (15 days)	PASS
Humidity	MIL-STD-810G, Method 507.5, Procedure II (Aggravated) • Temp. cycles 86°F to 140°F; 95%RH	PASS
Salt Fog	MIL-STD-810G, Method 509.5, Procedure I • Testing performed on an entire CF-20 as well as the tablet portion only	PASS
Sand and Dust: Blowing Dust	MIL-STD-810G, Method 510.5, Procedure I • Dust concentration of 0.3±0.2g/ft^3 (10.6±7g/m^3) • Operating temperature of 140°F • Testing performed on an entire CF-20 as well as the tablet portion only	PASS
Sand and Dust: Blowing Sand	MIL-STD-810G, Method 510.5, Procedure II • Sand concentration of 0.06±0.015g/ft^3 (2.2±0.5 g/m^3) • Operating temperature of 140°F • Testing performed on an entire CF-20 as well as the tablet portion only	PASS
Explosive Atmosphere	MIL-STD-810G, Method 511.5 Procedure I	
Vibration: General Vibration – operating	MIL-STD-810G, Method 514.6, Procedure I (Transportation) • Category 4, Typical mission/field transportation scenario, Figure 514.6C-1, 2hr/axis • Category 20, Ground vehicles – Ground mobile, Composite wheeled vehicles, Figure 514.6C-3, 2hr/axis	PASS
Vibration: General Vibration – non-operating	MIL-STD-810G, Method 514.6, Procedure II (Transportation) • Category 5, Loose cargo	PASS

Test Description	Test Parameters	Test Results
Shock: Functional	MIL-STD-810G, Method 516.6, Procedure I • 40g, 11ms - Operating	PASS
Shock: Transit-Drop 36-inch	MIL-STD-810G, Method 516.6, Procedure IV • 26 drops – 36in height on to 2in plywood – operating • All drops performed on the same unit • The drop heights of 36in and 48in were performed on the same CF-20 unit	PASS
Shock: Transit-Drop 48-inch	MIL-STD-810G, Method 516.6, Procedure IV • 26 drops – 48in height on to 2in plywood – operating • All drops performed on the same unit • The drop height of 48in was performed on an entire CF-20 unit as well as the CF-20 tablet portion only	PASS
Shock: Transit-Drop 60-inch	MIL-STD-810G, Method 516.6, Procedure IV • 26 drops – 60in height on to 2in plywood – operating • All drops performed on the same unit • The drop heights of 48in and 60in were performed on the same CF-20 tablet portion only	PASS
Freeze/Thaw	MIL-STD-810G, Method 524, Procedure III	PASS