Testing Summary
GJ CF20 Laptop Docking Station
(7160-1265)
Summary of Tests Performed at Gamber-Johnson

Test Description	Test Parameters
Vibration – Operational Test date: Laptop: October, 2018 Tablet: August, 2018	MIL-STD-810G, Method 514.6, Procedure 1, Category 4, per Figure 514.6C-1. Test duration is 2 hours along three mutually orthogonal axes – not simultaneously (6 hours total). • Unit is unlocked • Panasonic provided operating conditions. • Tested in both laptop and tablet orientations.
Vibration – Operational **RF Connection** Test date: Laptop: October, 2018 Tablet: August, 2018	MIL-STD-810G, Method 514.6, Procedure 1, Category 4, per Figure 514.6C-1. Test duration is 2 hours along three mutually orthogonal axes – not simultaneously (6 hours total). • Unit is unlocked • Panasonic provided operating conditions • Test is performed simultaneously with operational test. • Test is monitored to record any breaks in RF connectivity during vibration. • Tested in both laptop and tablet orientations.
Vibration – Non-Operational (Minimum Integrity) Test date: Laptop: October, 2018 Tablet: August, 2018	MIL-STD-810G, Method 514.6, Category 24, per Figure 514.6E-1. Test duration is one hour along three mutually orthogonal axes – not simultaneously (3 hours total). • Unit is unlocked • Tested in both laptop and tablet orientations.
Mechanical Shock Safety - Non-Operational Test date: Laptop: October, 2018 Tablet: August, 2018	MIL-STD-810G, Method 516.6, Procedure 1, 3 positive and 3 negative pulses each axis (vertical, longitudinal and transverse), 18 pulses • 40G, 11ms half sine • Unit is unlocked • Tested in both laptop and tablet orientations.
Cycle Testing – Non-Operational Test date: October, 2018	30,000 cycles of the docking connector, latching and locking mechanisms
Electrostatic Discharge – Operational Test date: September, 2018	ISO 10605, Section 8, Table C.2, Category 2 – Direct Air Discharge

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Summary of Tests Performed at Independent Facility

Test Description	Test Parameters
Humidity Test date: September, 2018	MIL-STD 810G, Method 507.5, Procedure ll, Aggravated • Ten 24-hour cycles, temperature varied from 30°C to 60°C to 30°C at constant 95% relative humidity.
Thermal Shock Test date: October, 2018	Panasonic Toughbook Criteria Specification 85°C to -40°C, Non-Operating • 2hrs at each temperature, 50 cycles
Low Temperature: Operational Test date: August, 2018	MIL-STD 810G, Method 501.5, Procedure ll • -20°C Operating, 24 hours
Low Temperature: Storage Test date: September, 2018	MIL-STD 810G, Method 502.5, Procedure l • -40°C Non-Operating, 96 hours
High Temperature: Operational Test date: September, 2018	MIL-STD 810G, Method 501.5, Procedure ll • 50°C Operating, 96 hours
High Temperature: Storage Test date: October, 2018	Panasonic Toughbook Criteria Specification • 72 hour soak at 85°C
Shock – Crash Hazard Test date: September, 2018	SAE J1455, Section 4.11.3.5, per Figure 13 • Unit is unlocked • Tested in both laptop and tablet orientations.
EMC Testing Test date: August, 2018	EN 50498:2010
EMC Testing Test date: August 2018	EN 55032:2012 • VCCI-CISPR 32 – Class B • FCC Part 15, Subpart B – Class B

Other Certifications

Description
EN 50581:2012 RoHS2 Directive 2011/65/EU