

Testing Summary

CF33 Laptop Docking Station and Cradle

(7160-0909, 7160-0910)

Summary of Tests Performed at Gamber-Johnson

Test Description	Test Parameters			
Vibration –	MIL-STD-810G, Method 514.6, Procedure 1, Category 4, per Figure			
Operational	514.6C-1. Test duration is one hour along three mutually orthogonal			
Test date: July, 2017	axes – not simultaneously (3 hours total).			
	Unit is unlocked			
	 Panasonic provided operating conditions. 			
	 Tested in both laptop and tablet orientations. 			
Vibration –	MIL-STD-810G, Method 514.6, Procedure 1, Category 4, per Figure			
Operational	514.6C-1. Test duration is one hour along three mutually orthogonal			
RF Connection	axes – not simultaneously (3 hours total).			
Test date: July, 2017	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 –	MIL-STD-810G, Method 514.6, Category 24, per Figure 514.6E-1. Test			
Non-Operational	duration is one hour along three mutually orthogonal axes – not			
(Minimum Integrity)	simultaneously.			
Test date: July, 2017	Unit is unlocked			
	 Tested in both laptop and tablet orientations. 			
Mechanical Shock	MIL-STD-810G, Method 516.6, Procedure 1, 3 positive and 3 negative			
Safety -	pulses each axis (vertical, longitudinal and transverse), 18 pulses			
Non-Operational	 40G, 11ms half sine 			
Test date: July, 2017	Unit is unlocked			
	 Tested in both laptop and tablet orientations. 			
Cycle Testing –	30,000 cycles of the docking connector, latching and locking			
Non-Operational	mechanisms			
Test date: July, 2017				
Electrostatic	ISO 10605, Section 8, Table C.2, Category 2 – Direct Air Discharge			
Discharge –				
Operational				
Test date: July, 2017				

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Gamber-Johnson LLC · 3001 Borham Avenue · Stevens Point, Wisconsin 54481 PHONE: 1-715-344-3790 · FAX: 1-715-344-5209 · EMAIL: gamberj@gamberjohnson.com · www.gamberjohnson.com



Summary o	of Tests	Performed	at Independ	lent Facility
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Test Description	Test Parameters			
Humidity	MIL-STD 810G, Method 507.5, Procedure II, Aggravated, Table 507.5-			
Test date: June, 2017	IX			
	 Ten 24-hour cycles, temperature varied from 30°C to 60°C to 			
	30°C at constant 95% relative humidity.			
Thermal Shock	MIL-STD 810G, Method 503.5, Procedure I-C			
Test date: June,2017	 Fifty cycles from 85°C to -40°C to 85°C 			
Low Temperature:	MIL-STD 810G, Method 502.5, Procedure II			
Operational	 -10°C Operating, 24 hours 			
Test date: June, 2017				
Low Temperature:	MIL-STD 810G, Method 502.5, Procedure l			
Storage	 -40°C Non-Operating, 72 hours 			
Test date: June, 2017				
High Temperature:	MIL-STD 810G, Method 501.5, Procedure II, Table 501.5-II, Induced			
Operational	Conditions			
Test date: June, 2017	 Five 24-hour cycles, temperature @ 63°C 			
High Temperature:	MIL-STD 810G, Method 502.5, Procedure I, Table 502.5-III, Induced			
Storage	Conditions			
Test date: June, 2017	 72 hour soak at 85°C 			
Shock – Crash Hazard	SAE J1455, Section 4.11.3.5, per Figure 13			
Test date: July, 2017	Unit is unlocked			
	 Tested in both laptop and tablet orientations. 			
EMC Testing	EN 50498:2010			
Test date: July, 2017				
EMC Testing	EN 55032:2015			
Test date: July 2017	CISPR 22 – Class A			
	 FCC Part 15, Subpart B – Class A 			

Other Certifications

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

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