

TEST REPORT

Report Number: 160426004GZU-001 Issued Date: May 16, 2016

Specimen Description

Product

Hard Case

Reference Number

382718

Sample Received Date

April 25,2016

Quantity of Sample

6 pieces

Test Content

Date Test Conducted

From April 28,2016 to May 15,2016

Test Requested

Performance Test

Test Standard/Method

: According to applicant's requirement

Test Results

Pass

Please see the following pages for details

Remark: When determining the test conclusion, the Measurement Uncertainty of test has been considered.

Prepared by:

Reviewed by:

Steven Zhou

Project Engineer

Intertek Guangzhou

William Su Supervisor

Intertek Guangzhou

Page 1 of 13

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense for damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an intertek certification program. And in this report * means the test item is subcontracted.

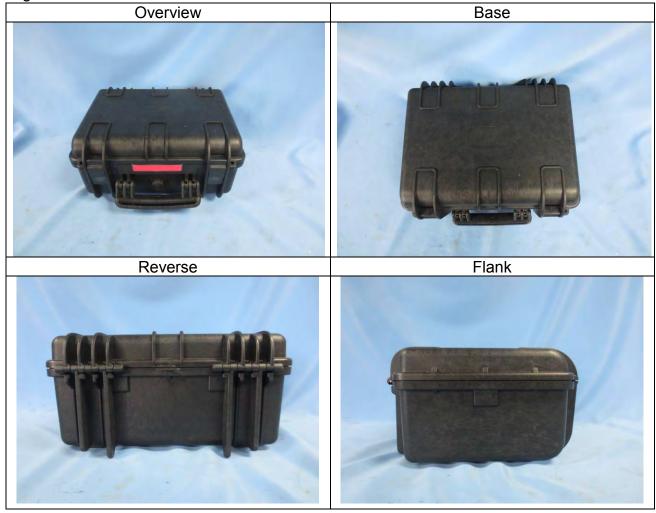


Sample Information:

Total 6 pieces specimens were received, no visual damage was found on these specimens before test.

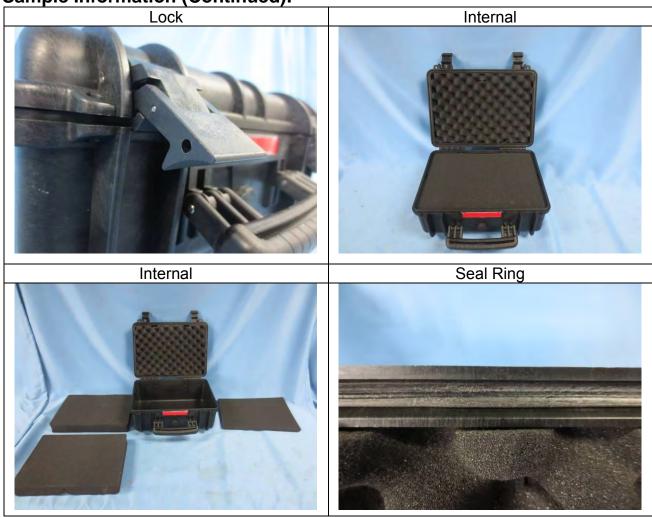
Sample's Size: 15.75"x13.5"x8.0"

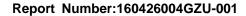
Weight: 7.96lbs





Sample Information (Continued):







Test Procedure

Test Items	Test Method	Sample Size	Test Purposes / Requirements	Results
1.Low temperature test	IEC60068-2-1 Sixth edition	1	Sample was placed in the chamber of -40°C for 72 hours, inspected by visual when temperature recovered to ambient, sample shall no deformation, crack and worked normally.	Pass
2.High temperature test	IEC60068-2-2 Fifth edition	1	Sample was placed in the chamber of 90°C for 72 hours, inspected by visual when temperature recovered to ambient, sample shall no deformation, crack and worked normally.	
3.Ultraviolet lamp exposure test	ASTM G154-12a	1	Specimens were cut from sample and placed in UV test chamber, exposure condition according to cycle 1 of ASTM G154 for 100 hours. Exposure condition: Cycle 1 Lamp UVA-340 Typical Irradiance:0.89W/m²/nm Approximate Wavelength:340nm Exposure cycle: 8 h UV at 60 (±3) °C Black Panel Temperature; 4 h Condensation at 50 (±3) °C Black Panel Temperature Inspected specimen by visual after ultraviolet exposure test and shall no color change, crack, deformation	Pass See appendix I
4.Salt spray test	ASTM B117-07	1	Sample was placed in the salt spray test chamber for 100 hours. Salt solution was prepared by dissolving 5 ± 1 parts by mass of sodium chloride in 95 parts of water. pH of salt solution e salt solution shall be such that when atomized at 35° C (95° F) the collected solution will be in the pH range from 6.5 to 7.2 Temperature of salt chamber: $35\pm2^{\circ}$ C After test, sample was gently washed in clean running water not warmer than 38° C to removed salt deposits from sample' surface and dried, then inspected sample by visual, shall no corrosion, rust.	Pass See appendix I



Test Procedure (Continued)

IAST ITAMS		Sample Size	Test Purposes / Requirements	Results	
5.Performance of Lock	Applicant's requirement	THE TOTAL AND THE COVER AND THE HONDINESS WHITE SAME		Pass	
6.IP67	IEC60529 edition 2.2 Clause 13.6 and clause 14.2.7	2	Test item:IP6X Sample was made a hole and connected with vacuum pump, and make sure pressure inside of sample was lower than surrounding atmospheric pressure, not exceed than 2.0KPa Sample was placed in the dust chamber of IEC60529 for 8 hours Shall no dust entrance in the internal of sample after IP6X test. Test item:IPX7 Sample was placed into water tank, and make sure the lowest point of sample was located 1000mm below the surface of water. The temperature of sample and water were different by more than 5K. Test duration :30 min Shall no water entrance in the internal of sample after IPX7 test.	Pass	
7.Free fall drop test	Fed-std-101C Method 5007.1 march 13,1980	1	The steel lump of 14 Kg were enclosed into sample and locked, then the sample was made to performed free fall drop test at height of 25 inches, contained corner, edge, face, total 26 drops, impact plane was steel. Sample shall no crack, broken and can worked normally.	Pass	



Test Procedure (Continued)

Test Items	Test Method	Sample Size	Test Purposes / Requirements				Results
8.Low temperature free fall drop test	Fed-std-101C Method 5007.1 march 13,1980	1	while the sample v	vas stabilized au d, then the sam t of 25 inches i cts, impact plane	nd then put steel I ple was made to mmediately,contain was steel.		Pass
9. Random vibration test	ASTM D4169-01	1	Sample was withste Every orientation of broken and power street to broken a	of sample be tes spectral density	sted for 40 minute	For level II, s ,shall no loosen, s ,shall no loosen, III 0.000025 0.005 0.0005 0.0005 0.00005 0.37	Pass See appendix I
10.Spray test	ASTM D4169-01	1				le and 40 minutes structural integrity,	Pass



Test Procedure (Continued)

Test Items	Test Method	Sample Size	Test Purposes / Requirements	Results
11.Impact resistance test	ATA300 revision 8.0 B-2-5	1	A bar of 3.2 centimeters in diameter with a hemispherical end, weighing 6 kilograms, and height of 0.5m from bottom of bar to the top of sample, Impact point was the weakest of any exterior surface of sample. Shall no crack, broken or degrade the structural strength of sample.	Pass
12.Immersion test	MIL-STD-810 F Notice 3 method 512.4	1	Sample was placed into water tank, and make sure the lowest point of sample was located 1000mm below the surface of water. Test duration :60 minutes Shall no water entrance in the internal of sample after test	Pass

Please see appendix I for more details

Science City, GETDD Guangzhou Tel: (86-20) 8213 9688 Fax: (86-20) 3205 7538

Website: www.intertek-etlsemko.com GZPERF-BRAND V0 (August 16, 2012)



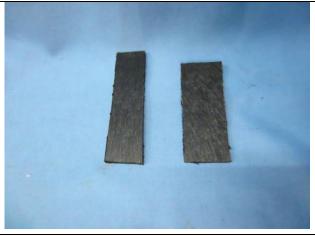
Appendix I

3. Ultraviolet lamp exposure test

A half of samples were sealed with aluminum foil in ultraviolet exposure test for result's

comparison after test, no color change, crack, deformation was found after test.





**************End of page*************************



Appendix I (Continued)

4. Salt spray test



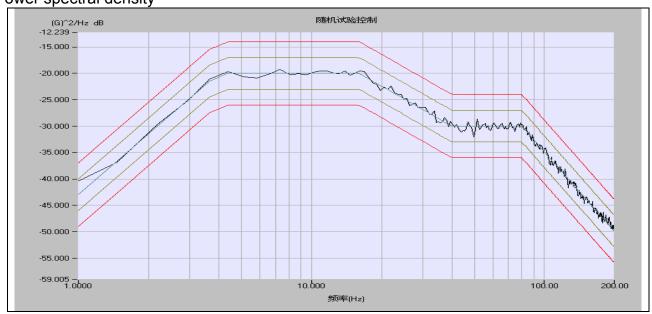
Website: www.intertek-etlsemko.com



Appendix I (Continued)

9. Random vibration test

Power spectral density



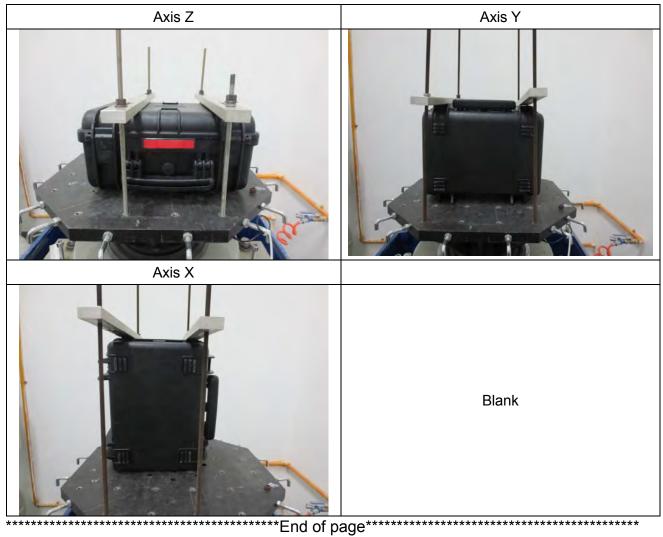
Website: www.intertek-et/semko.com



Appendix I (Continued)

9. Random vibration test

Test axis





REVISION SUMMARY

Date	Project Handler Reviewer	Page	Description of Change
	_		None