Test Report Number: 151225010SZN-002

Applicant:	:	Spector & Co. 5700 Kieran Rd, Montreal, QC, H4S 2B5	Date:		Jan 08, 2016
Attn	:	productcompliance@spectorandco.com			
Vendor NO	:	USC056			
Type of Product	:	3000 mAh ALUMINUM POWER BANK			
Brand	:	SPECTECH			
Model No. of Product	:	T1027			
Country of Origin	:	China	**Date of Received**	:	Dec 25, 2015
Date of test Conducted	:	Dec 25, 2015~Jan 05, 2016			
Test Required	:	Only UL 2054 Clause 9, Clause 10 and Clause 11 per SPECTOR&CO requirement.			
Sample Quantity	:	5 pieces			

****

Conclusion:

☒ The submitted sample complied with TEST REQUIRED.
☐ The submitted sample failed to comply with TEST REQUIRED.

Remark:

- Package was not provided.

****

Tested By:

Bernie Chen
Engineer
Intertek Testing Service SZ

Approved By:

Digitally signed by Wisons Lin
DN: cn=Wisons Lin, o=Intertek Testing Services SZ, ou, email=wisons.lin@intertek.com, c=CN

Wisons Lin
Team leader
Intertek Testing Services SZ

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.china.intertek-etlsemko.com

TEST CONDUCT				
EVALUATION	**CITATION**	**CRITERIA**	**Measurement / Comments**	**Rating**
1. Short-Circuit Test	Refer UL 2054 Clause 9	Each fully charged test sample battery pack, in turn, is to be short-circuited by connecting the positive and negative terminals of the battery with a circuit load having a resistance load of 80±20 m ohm. The temperature of the battery case is to be recorded during the test. The battery is to discharge until a fire or explosion is obtained, or until it is completely discharged and/or the cell case temperature has returned to 10°C of ambient temperature. Tests are to be conducted at 20 ±5°C and at 55 ±5°C; The batteries are to reach equilibrium at 20±5°C or 55 ±5°C as applicable, before the terminals are connected. For all samples tested, the samples shall not explode or catch fire and the tests shall not result in chemical leaks caused by cracking, rupturing or bursting of the cell casing. The temperature of the internal cell casings shall not exceed 150°C for lithium chemistries.	Complied	P

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.china.intertek-etlsemko.com

TEST CONDUCT				
EVALUATION	**CITATION**	**CRITERIA**	**Measurement / Comments**	**Rating**
2. Abnormal Charging Test	Refer UL 2054 Clause10	The batteries are to be tested in an ambient temperature of 20 ±5°C ,A thermocouple is to be attached to the cells of each test sample battery. Each battery shall be discharged at a constant current of 0.2C/1 hour, to a manufacturer specified discharge endpoint voltage. Each of the test sample batteries are to be subjected to the following overcharge conditions, in sequential order. a) The battery is to be initially charged using a constant current charging mode with a current limit of three times the maximum current Ic, specified by the manufacturer until the maximum specified charger output voltage is reached. At that point, the battery is to be charged with a constant maximum specified charger output voltage and a current limit of three times the maximum current Ic. Charging duration is the time required to reach the manufacturer's specified end-of-charge condition plus seven additional hours. The temperature on the cell casing shall be monitored. A re-settable protective device such as a PTC that actuates during the test shall be allowed to reset and the test shall be resumed, cycling as often as necessary, but no less than 10 times, to complete the test. Automatic reset devices are allowed to cycle during the test. When an overcurrent protective device operates during the test, the test is repeated with the same charging time, but with the battery connected to the maximum load that does not cause the protective devices to operate. b) The charge condition in accordance with (a) shall be conducted with each single component fault that is likely to occur in the charging circuit and which would result in overcharging of the battery. The samples shall not explode or catch fire. For battery pack samples, tests shall not result in chemical leaks caused by cracking, rupturing or bursting of the cell casing.	Complied	P

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.china.intertek-etlsemko.com

TEST CONDUCT				
EVALUATION	**CITATION**	**CRITERIA**	**Measurement / Comments**	**Rating**
3. Abusive Overcharge Test	Refer UL 2054 Clause11	The batteries are to be tested in an ambient temperature of 20 ±5°C. Sample batteries are to be subjected to a constant charging current at 10 times the C5 amp rate, using a supply voltage sufficient to maintain the 10 times C5 amp rate throughout the duration of the test. During the test, the temperature is to be measured on the internal cell casing of each sample. The test is to continue until the cell or battery explodes, vents, or a single operation protective device operates, and the temperature of the internal cell casing reaches steady state conditions or returns to ambient. If a PTC or other re-settable protection device operates during the test, it is to be reset a minimum of 10 times during the test. An automatic reset device is allowed to cycle during the test. During the tests, batteries supplied with protective devices shall be subjected to a single component fault using any single fault condition which is likely to occur in the charging circuit and which would result in overcharging of the battery. The samples shall not explode or catch fire.	Complied	P

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

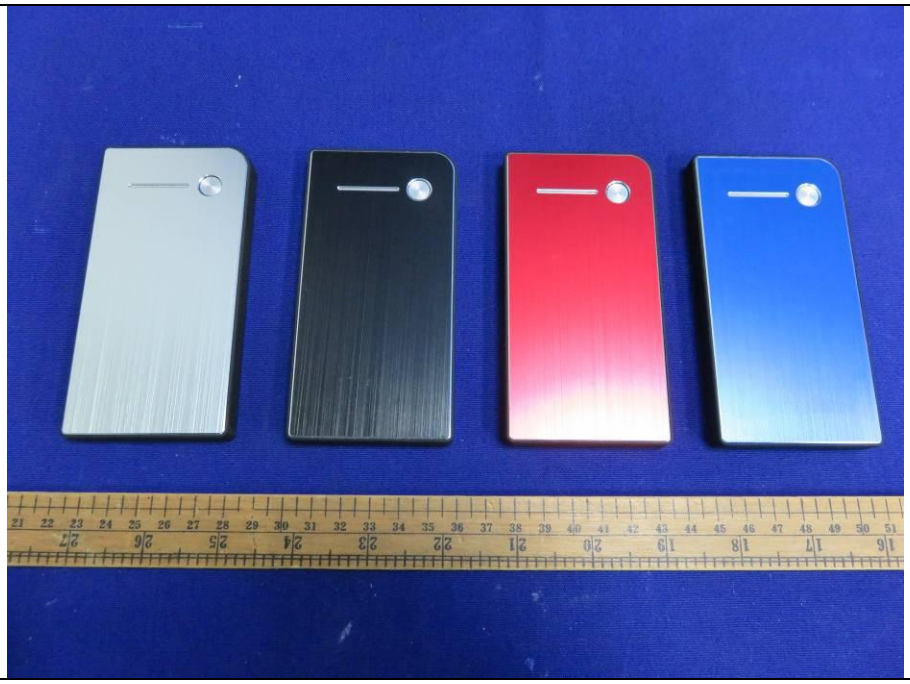
Results Key

-	For information only
P	Pass
F	Fail
NA	Not applicable

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.china.intertek-etlsemko.com

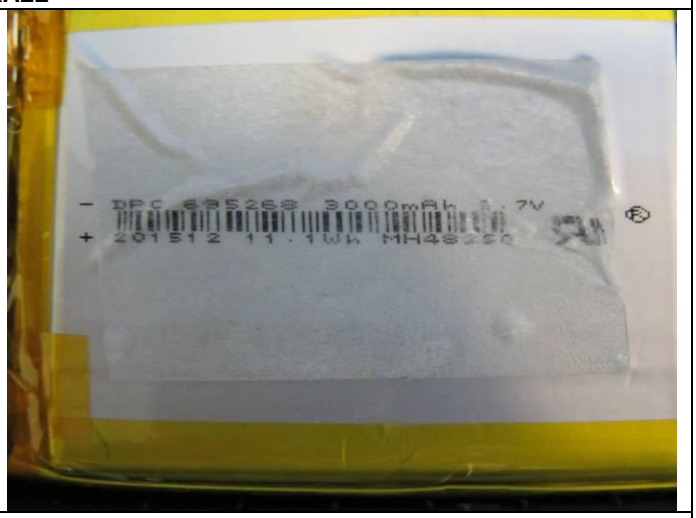
Test Report Number: 151225010SZN-002

Photo



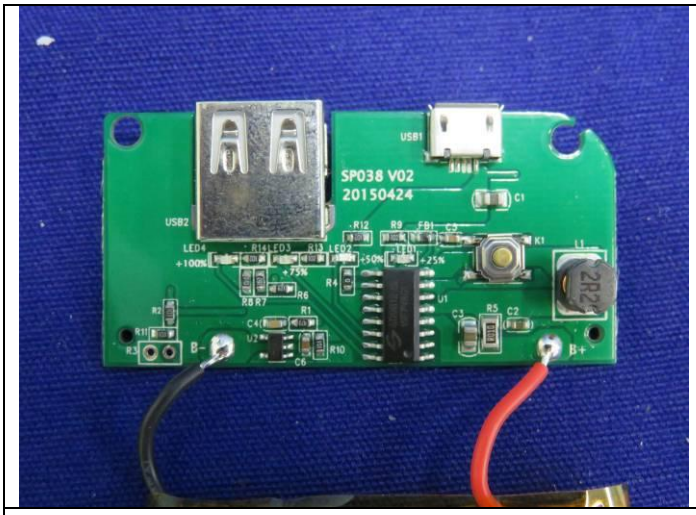
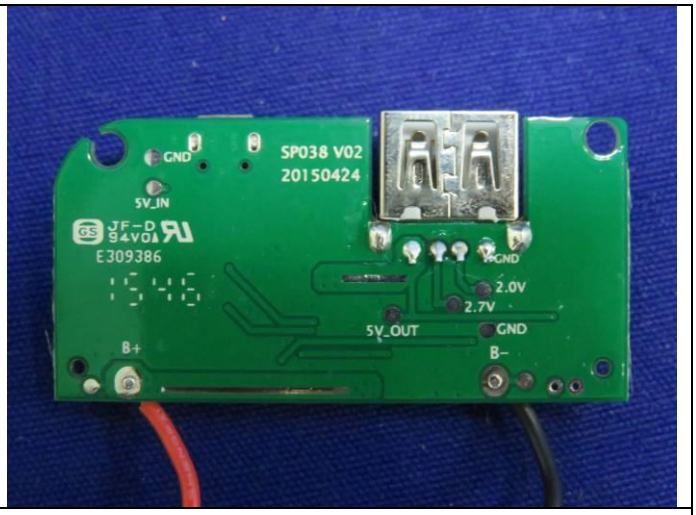
OVERALL

USB PORT



Battery

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.china.intertek-etlsemko.com

	
PCB	**PCB**

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.china.intertek-etlsemko.com

Test Report Number: 151225010SZN-002

Testing History

Previous Report No#	Report Issued Date	Test Type	Overall Rating	Failure Reason
---	---	---	---	---

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.china.intertek-etlsemko.com