



LITHIUM BATTERIES TEST SUMMARY

IN ACCORDANCE WITH SUB-SECTION 38.3 OF UN MANUAL OF TESTS AND CRITERIA


1	Product Manufacturer	Makita Corporation 3-11-8, Sumiyoshi-cho, Anjo, Aichi, 446-8502, Japan Phone : +81 (0)566-98-1711 www.makita.com
2	Model	Detachable Lithium-ion Batteries – Rechargeable Makita Type : BL Separable Lithium-ion Batteries – Rechargeable Makita Type : PDC Integral Lithium-ion Batteries – Rechargeable for Makita Cordless Cleaner Integral Lithium-ion Batteries – Rechargeable for Makita Cordless Screwdriver For detailed list of models see product test information table
3	Voltage rating	3.6V / 7.2V / 10.8V (12Vmax.) / 14.4V / 18V / 36V (40Vmax.)
4	Ah rating	1.3Ah / 1.5Ah / 2.0Ah / 2.5Ah / 3.0Ah / 4.0Ah / 5.0Ah / 6.0Ah / 33.5Ah
5	Wh rating	5.4Wh / 10.8Wh / 14.0Wh / 17.0Wh / 22.0Wh / 27.0Wh / 36.0Wh / 44.0Wh / 54.0Wh / 58.0Wh / 72.0Wh / 80.0Wh / 87.0Wh / 90.0Wh / 94.0Wh / 108.0Wh / 144.0Wh / 180.0Wh / 1206Wh

List of Tests Conducted and Results

PERFORMED TESTS		RESULTS
38.3.4.1 T1	Altitude Simulation	Passed
38.3.4.2 T2	Thermal Test	Passed
38.3.4.3 T3	Vibration	Passed
38.3.4.4 T4	Shock	Passed
38.3.4.5 T5	External Short Circuit	Passed
38.3.4.7 T7	Overcharge	Passed

(Note that tests T6 and T8 are not applicable to batteries.)



Revision Date: 2021-1-25	Revision Number: 2.0
RESEARCH & DEVELOPMENT PLANNING DEPARTMENT GENERAL MANAGER Yoshihisa Inuzuka	Signature 

The UN 38.3 tests were performed by one of the following test houses and were tested to UN Manual Test and Criteria Revision 3 Amendment 1 or subsequent revisions or amendments.

<p>Tohoku Murata Manufacturing Co., Ltd. 1-1 Shimosugishita, Takakura, Hiwada-machi, Koriyama-shi, Fukushima, 963-0531 Japan Phone: +81-24-955-7770 e-mail: tmm-qa-compliance@murata.com Website: https://www.murata.com/en-global/group/tohokumurata</p>	<p>Samsung SDI Co., Ltd 467, Beonyeong-ro, Seobuk-gu, Cheonan-si, Chungcheongnam-do, Korea Phone: +82-41-560-3114 e-mail: lian55.kim@samsung.com Website: http://samsungsdi.co.kr</p>
<p>CQC Intime Testing Technology Co.,Ltd. East Taihu Technology and Finance City, No.1368 Wuzhong Dadao Rd., Wuzhong Economic Development Zone, Suzhou, Jiangsu. Phone: 0512-66303623 e-mail: cqc_jszlb@126.com Website: http://www.cqc-it.com</p>	<p>Celxpert(Kunshan) Energy Co.Ltd NO.1111,Hanpu Road,Yushan Town,Kunshan City,Jiangsu Province,P.R.China Phone: +86-0512-57775999-8239 e-mail: Frank_Gao@cn.celxpert.com Website: http://www.celxpert.com.tw</p>
<p>Murata Energy Device Wuxi Co., Ltd. No.27 Changjiang Road, New District,Wuxi,Jiangsu Province, 214028 P.R.C. Phone: +86-510-8523-9120 e-mail: mdw-qa-comp@murata.com Website: https://www.murata.com/en-global/group/tohokumurata</p>	<p>Shanghai Research Institute of Chemical Industry Testing Center No.345 East Yunling Road, Putuo, Shanghai,China Phone: +86-21-3176555 e-mail: battery@ghs.cn Website: http://www.ghs.cn</p>
<p>HCT CO.,LTD. 74, Seoicheon-ro 578beon-gil, Majang- myeon, Icheon-si, Gyeonggi-do, 17383 KOREA Phone:031-645-6300 e-mail:E_safety@hct.co.kr Website: http://www.hct.co.kr/</p>	



Description of Battery and Test Information

Model numbers	Physical Description	Battery weight (kg)	Wh rating	Test report number	Test report date	Applicable UN Numbers acc. to UN Model Regulations
BL0715 7.2V 1.5 Ah	Detachable cluster lithium-ion accumulator	0.12	10.8	QA-7349	10-Oct-2017	UN3480/ UN3481
BL1013/BL1014 10.8V/12Vmax. 1.3Ah	Detachable cluster lithium-ion accumulator	0.17	14.0	QA-7332 QA-7357	4-Oct-2017 20-Oct-2017	UN3480/ UN3481
BL1013/BL1014 10.8V/12Vmax. 1.3Ah	Detachable slide in lithium-ion accumulator	0.18	14.0	MT0038801	4-Mar-2011	UN3480/ UN3481
BL1015/BL1016 10.8V/12Vmax. 1.5Ah	Detachable slide in lithium-ion accumulator	0.25	17.0	CPK-QA-Lab- UN383PACK1402 CPK-Lab- UN383PACK15060	16-Aug-2014 16-Aug-2015	UN3480/ UN3481
BL1021B 12Vmax. 2.0Ah	Detachable slide in lithium-ion accumulator	0.24	22.0	CPK-QA-Lab- UN383PACK15063	20-Aug-2015	UN3480/ UN3481
BL1040B/BL1041B 10.8V/12Vmax. 4.0Ah	Detachable slide in lithium-ion accumulator	0.43	44.0	CPK-Lab- UN383PACK14042 CPK-QA-Lab- UN383PACK15062	23-Dec-2014 23-Aug-2015	UN3480/ UN3481
BL1415N 14.4V 1.5Ah	Detachable slide in lithium-ion accumulator	0.32	22.0	SDI-UN-131101-02	17-Dec-2017	UN3480/ UN3481
BL1415NA 14.4V 1.5Ah	Detachable slide in lithium-ion accumulator	0.40	21.6	MT0045738	15-Jul-2011	UN3480/ UN3481
BL1430B 14.4V 3.0Ah	Detachable slide in lithium-ion accumulator	0.50	44.0	SDI-UN-P160118-01	18-Jan-2016	UN3480/ UN348
BL1440 14.4V 4.0Ah	Detachable slide in lithium-ion accumulator	0.53	58.0	QA-7358	20-Oct-2017	UN3480/ UN3481
BL1450 14.4V 5.0Ah	Detachable slide in lithium-ion accumulator	0.51	72.0	SDI-UN-P140807-01	11-Aug-2014	UN3480/ UN348
BL1460A 14.4V 6.0Ah	Detachable slide in lithium-ion accumulator	0.54	87.0	CPK-QA-Lab- UN383PACK15061	12-June-2015	UN3480/ UN3481



BL1460B 14.4V 6.0Ah	Detachable slide in lithium-ion accumulator	0.54	87.0	CPK-QA-Lab- UN383PACK15027	12-June-2015	UN3480/ UN3481
BL1415G 14.4V 1.5Ah	Detachable slide in lithium-ion accumulator	0.33	22.0	CPK-QA-Lab- UN383PACK16008	01-Mar-2016	UN3480/ UN3481
BL1815N 18V 1.5Ah	Detachable slide in lithium-ion accumulator	0.36	27.0	MT0059172	15-Feb-2012	UN3480/ UN3481
BL1815N 18V 1.5Ah	Detachable slide in lithium-ion accumulator	0.36	27.0	CPK-QA-Lab- UN383PACK13025	13-Oct-2013	UN3480/ UN3481
BL1820B 18V 2.0Ah	Detachable slide in lithium-ion accumulator	0.38	36.0	QA-7337	5-Oct-2017	UN3480/ UN3481
BL1830B 18V 3.0Ah	Detachable slide in lithium-ion accumulator	0.64	54.0	QA-7344	5-Oct-2017	UN3480/ UN3481
BL1830B 18V 3.0Ah	Detachable slide in lithium-ion accumulator	0.60	54.0	SDI-UN-P160314-01	14-Mar-2016	UN3480/ UN3481
BL1840B 18V 4.0Ah	Detachable slide in lithium-ion accumulator	0.65	72.0	QA-7285	1-Sep-2017	UN3480/ UN3481
BL1840B 18V 4.0Ah	Detachable slide in lithium-ion accumulator	0.60	72.0	SDI-UN-P150209-01	10-Feb-2015	UN3480/ UN3481
BL1850B 18V 5.0Ah	Detachable slide in lithium-ion accumulator	0.64	90.0	QA-7286	1-Sep-2017	UN3480/ UN3481
BL1850B 18V 5.0Ah	Detachable slide in lithium-ion accumulator	0.62	90.0	SDI-UN-P160104-01	4-Jan-2016	UN3480/ UN3481
BL1860B 18V 6.0Ah	Detachable slide in lithium-ion accumulator	0.67	108.0	2017126J17835	7-Dec-2017	UN3480/ UN3481
BL1815G 18V 1.5Ah	Detachable slide in lithium-ion accumulator	0.39	27.0	CPK-QA-Lab- UN383PACK16012	23-Mar-2016	UN3480/ UN3481
BL3626 36V 2.6Ah	Detachable slide in lithium-ion accumulator	1.34	94.0	QA-7346	6-Oct-2017	UN3480/ UN3481



BL3622A 36V 2.2Ah	Detachable slide in lithium-ion accumulator	1.33	80.0	QA-7348	6-Oct-2017	UN3480/ UN3481
Integral Batteries for DF001D	Integral lithium- ion accumulator	0.13	5.4	CPK-QA-Lab- UN383PACK16026	26-Dec-2016	UN3480/ UN3481
Integral Batteries for CL105D	Integral lithium- ion accumulator	0.18	14.0	CPK-QA-Lab- UN383PACK13028- K092-1-1	18-May-2014	UN3480/ UN3481
Integral Batteries for CL104D	Integral lithium- ion accumulator	0.18	17.0	CPK-QA-Lab- UN383PACK16022-1- 1-1-1	27-Feb-2018	UN3480/ UN3481
BL4025 40Vmax. 2.5Ah	Detachable slide in lithium-ion accumulator	0.70	90.0	MDW-B19090	12-Sep-2019	UN3480/ UN3481
BL4040 40Vmax. 4.0Ah	Detachable slide in lithium-ion accumulator	1.04	144.0	1119040200	20-May-2019	UN3480/ UN3481
BL4020 40Vmax. 2.0Ah	Detachable slide in lithium-ion accumulator	0.68	72.0	1120010340	27-Feb-2020	UN3480/ UN3481
BL4050F 40Vmax. 5.0Ah	Detachable slide in lithium-ion accumulator	1.31	180.0	1120050246	28-Jun-2020	UN3480/ UN3481
PDC1200 36V 33.5Ah	Separable lithium-ion accumulator	8.80	1206	HCT-BA-2002-RE016	13-Feb-2020	UN3480/ UN3481