



# Test Setup photos for RM-1072 SAR Compliance Test Report

Test report no.: SAR\_Photo\_RM-1072\_02 Date of report: 2014-12-12 **Template version:** 19.81 Number of pages: TCC Microsoft Salo Laboratory Microsoft **Testing laboratory:** Client: P.O.Box 303 P.O. Box 68 Joensuunkatu 7E Sinitaival 5 FIN-24101 SALO, FINLAND FIN-33721 TAMPERE, FINLAND Tel. +358 71 800 8000 Tel. +358 (0) 7180 08000 Fax. +358 71 80 44122 Fax. +358 (0) 7180 46880

Responsible test engineer:

Measurements made

by:

Nina Koskinen, Teuvo Miettinen, Marko Laaksonen, Sami Savela, Juha Korkeakoski, Jani Tuomela, Juha-Matti Varjonen, Eva Lehtinen

Product contact person:

Juha Paukku

Tested device: RM-1072

FCC ID: PYARM-1072

**Supplement reports:** FCC\_RM-1072\_01

Testing has been carried out in accordance with:

47CFR §2.1093

Jani Tuomela

Radiofrequency Radiation Exposure Evaluation: Portable Devices

FCC published RF exposure KDB procedures

RSS-102, Issue 4

Evaluation Procedure for Mobile and Portable Radio Transmitters with Respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields

IEEE 1528 - 2013

IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Technique

**Documentation:** 

The documentation of the testing performed on the tested devices is archived for 15 years at TCC Microsoft.

**Test results:** 

The tested device complies with the requirements in respect of all parameters subject to the test. The test results and statements relate only to the items tested. The test report shall not be reproduced except in full, without written approval of the laboratory.

**Date and signatures:** 

For the contents:

SAR Report SAR\_Photo\_RM-1072\_02 Applicant: Microsoft Type: RM-1072





$\sim$	NI	T	١	тς

1.	PICTURE OF THE DEVICE				
2.	TEST	POSITIONS			
2	2.1	Against Phantom Head			
2	2.2	BODY WORN CONFIGURATION			
2	2.3	Wireless Router Configuration			
3	DESC	CRIPTION OF THE ANTENNA			





## 1. PICTURE OF THE DEVICE







#### 2. TEST POSITIONS

#### 2.1 Against Phantom Head

Measurements were made in "cheek" and "tilt" positions on both the left hand and right hand sides of the phantom.

The positions used in the measurements were according to IEEE 1528 "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".



Photo of the Device in "Cheek" position



Photo of the Device in "Tilt" position

#### 2.2 Body Worn Configuration

The device was placed in the SPEAG holder using the Microsoft spacer and placed below the flat phantom. The distance between the device and the phantom was kept at the separation distance indicated in the photo below using a separate flat spacer that was removed before the start of the measurements. The device was oriented with both sides facing the phantom to find the highest results.



Photo of the device positioned for Body SAR measurement.

The spacer was removed for the tests.

Microsoft body-worn accessories are commonly available for the separation distance used in this testing.

SAR Report SAR\_Photo\_RM-1072\_02 Applicant: Microsoft Type: RM-1072





### 2.3 Wireless Router Configuration

The device was placed in the SPEAG holder using the Microsoft spacer and, in sequence, the back, display and each of the 4 edges was positioned 10 mm away from the flat phantom. The spacer was removed before the start of the measurements.



Photo of the device positioned for WR mode measurement –back facing phantom. The spacer was removed before the start of the measurements.



Photo of the device positioned for WR mode measurement – display facing phantom. The spacer was removed before the start of the measurements.



Photo of the device positioned for WR mode measurement – top edge facing phantom. The spacer was removed before the start of the measurements.







Photo of the device positioned for WR mode measurement – bottom edge facing phantom. The spacer was removed before the start of the measurements.



Photo of the device positioned for WR mode measurement – left edge facing phantom.

The spacer was removed before the start of the measurements.



Photo of the device positioned for WR mode measurement – right edge facing phantom.

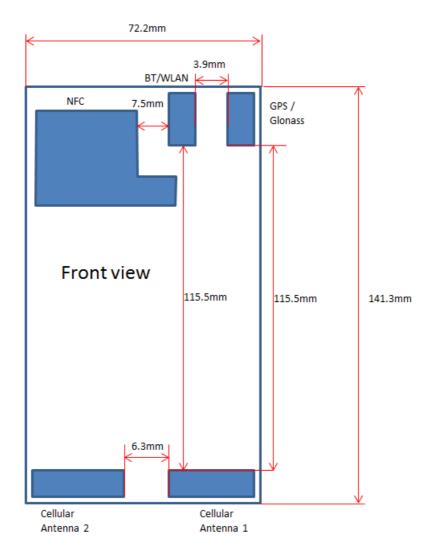
The spacer was removed before the start of the measurements





#### 3. DESCRIPTION OF THE ANTENNA

The device has 2 separate internal antennas for cellular, AWS and PCS use and and one internal antenna for WLAN use. The cellular antenna 'Main antenna 1' is located at the near right bottom underneath the back cover and cellular antenna 'Main antenna 2' is located at the near left bottom underneath the back cover. The WLAN antenna is located at the top right corner underneath the back cover.







Schematics showing Tx and Rx circuitry, antenna switch, conducted ports and antenna.

