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Test Setup photos for RM-1085 SAR Compliance Test Report

Date of report:

Client:

person:

Number of pages:

Product contact

Test report no.: **Template version:**

20.00

Testing laboratory:

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SAR_Photo_RM-1085_04

Responsible test engineer:

Tested device:

FCC ID:

Measurements made

by:

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J-P Karppanen, Juha Korkeakoski,

RM-1085, HW: 2110 **PYARM-1085**

Supplement reports: FCC_RM-1085_03

Testing has been carried out in accordance with: 47CFR §2.1093

Radiofrequency Radiation Exposure Evaluation: Portable Devices

FCC published RF exposure KDB procedures

RSS-102, Issue 5

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-1085_04 Applicant: Microsoft

Type: RM-1085





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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 15 mm 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.

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2.3 Wireless Router 10 mm 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. Additionally, the device has also 2 separate internal antennas for WLAN use. The cellular antenna 'Main antenna 1' is located at the near left bottom underneath the back cover and cellular antenna 'Main antenna 2' is located at the near right bottom underneath the back cover. The both WLAN antennas are located at top of the device. WLAN main antenna is located near the left edge and WLAN secondary antenna beside it.

Phone outside dimensions and distance between radiators for Main antennas, BT/Wifi









