

### RF EXPOSURE TEST REPORT

**FOR** 

**WIRELESS CHARGER** 

MODEL NUMBER: CW1 WIRELESS CHARGER

**REPORT NUMBER: 15U20782-1A** 

FCC ID: 2AB8ZND8 IC: 1000X-ND8

**ISSUE DATE: September 4, 2015** 

Prepared for INTEL CORPORATION

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Prepared by

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NVLAP LAB CODE 200065-0

# **Revision History**

Rev.	Issue Date	Revisions	Revised By
	8/21/2015	Initial Issue	
Α	9/4/2015	Added IC registration Number Section 5.1 – corrected frequency	Dave Weaver
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## 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** Intel Corporation

2200 Mission College Boulevard Santa Clara, Ca 95052, U.S.A

**EUT DESCRIPTION:** WIRELESS CHARGER

MODEL: CW1

SERIAL NUMBER: SYSTEM: W08222FZ5310009

BOARD: W02152FZ52900YJ

**DATE TESTED:** 8/14/2015

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For

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## 2. TEST METHODOLOGY

All measurements were made in accordance to §3 of KDB 680106 D01 v02 RF Exposure Wireless Charging Apps.

# 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <a href="http://ts.nist.gov/standards/scopes/2000650.htm">http://ts.nist.gov/standards/scopes/2000650.htm</a>.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment used to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

### 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Magnetic Field	+/- 23 %
Electric Field	+/- 14 %

Uncertainty figures are valid to a confidence level of 95%.

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## 5. EQUIPMENT UNDER TEST

#### 5.1. **DESCRIPTION OF EUT**

The EUT is a wireless charger intended to charge Intel bracelet BLE module NDW1

### **GENERAL INFORMATION**

Input Power	5V, 1A	
Output Power (Load)	Not Applicable	
Frequencies generated or used by the EUT.	205 kHz	

#### 5.2. **TEST CONFIGURATION AND MODE**

E and H Field measurements were performed at a distance of 10cm laterally from the edges of the EUT. Testing was performed with three configurations: EUT charging the module installed into a host with a metal band, EUT charging the module installed into a host with a Leather band, and EUT without a load.

See section 8 for photographs of the test setup.

## 6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was used for the tests documented in this report:

Test Equipment List							
Description Manufacturer		Model	Local ID (T No.)	Cal Date	Cal Due		
Electric and Magnetic Field Probe	Narda	EHP-200A	1085	12/08/2014	12/08/2015		

#### SUPPORT EQUIPMENT

Support Equipment List							
Description	Manufacturer	Model	Serial Number	FCC ID			
AC Adapter	Salcomp	S01A22	Not Available	N/A			
BLE module	Intel	NDW1	Not Available	2AB8ZND4			

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### 7. Test results

# 7.1.1. ELECTRIC FIELD STRENGTH AND MAGNETIC FIELD STRENGTH

**EUT and Watch with Metal Band** 

201 and Water With Motal Band						
Position	Lateral Distance	Electric Field	Limit	Magnetic Field	Limit	
	from EUT (cm)	Strength (V/m)	(V/m)	Strength (A/m)	(A/m)	
Edge 1	10	0.116	614.0	0.026	1.63	
Edge 2	10	0.133	614.0	0.092	1.63	
Edge 3	10	0.092	614.0	0.057	1.63	
Edge 4	10	0.092	614.0	0.048	1.63	
Тор	10	0.118	614.0	0.102	1.63	

**EUT and Watch with Leather Band** 

Position	Lateral Distance	Electric Field	Limit	Magnetic Field	Limit	
	from EUT (cm)	Strength (V/m)	(V/m)	Strength (A/m)	(A/m)	
Edge 1	10	0.136	614.0	0.074	1.63	
Edge 2	10	0.134	614.0	0.050	1.63	
Edge 3	10	0.094	614.0	0.218	1.63	
Edge 4	10	0.086	614.0	0.038	1.63	
Тор	10	0.159	614.0	0.208	1.63	

**EUT without Watch** 

LOT Without Water						
Position	Lateral Distance	Electric Field	Limit	Magnetic Field	Limit	
	from EUT (cm)	Strength (V/m)	(V/m)	Strength (A/m)	(A/m)	
Edge 1	10	0.078	614.0	0.107	1.63	
Edge 2	10	0.084	614.0	0.048	1.63	
Edge 3	10	0.085	614.0	0.181	1.63	
Edge 4	10	0.076	614.0	0.057	1.63	
Тор	10	0.143	614.0	0.795	1.63	

Reported Measurements are the RMS average of multiple sweeps over a period of 30s