



FCC RF EXPOSURE

TEST REPORT

For

BOOST ↑ CHARGE Wireless Charging Pad 10W

MODEL NUMBER: WIA001

FCC ID: K7SWIA001

REPORT NUMBER: 4789310719-3

ISSUE DATE: January 3, 2020

Prepared for

**Belkin International, Inc.
12045 E. Waterfront Drive, Playa Vista, CA 90094 USA**

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China

Tel: +86 769 22038881

Fax: +86 769 33244054

Website: www.ul.com

Revision History

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Belkin International, Inc.
Address: 12045 East Waterfront Drive, Playa Vista, CA 90094 USA

Manufacturer Information

Company Name: Belkin International, Inc.
Address: 12045 East Waterfront Drive, Playa Vista, CA 90094 USA

EUT Information

EUT Name: BOOST ↑ CHARGE Wireless Charging Pad 10W
Model: WIA001
Serial Model: /
Brand: Belkin
Sample Received Date: December 19, 2019
Sample Status: Normal
Sample ID: 2742458
Date of Tested: December 19, 2019 ~ December 26, 2019

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47CFR§1.1307	PASS
FCC 47CFR§1.1310	PASS
FCC 47CFR§2.1093	PASS
FCC 47CFR§2.1091	PASS

Prepared By:

Denny Huang
Project Engineer
Approved By:

Stephen Guo
Laboratory Manager

Checked By:

Shawn Wen
Laboratory Leader



2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC 47CFR§1.1307(b)(1), FCC 47CFR§1.1310, FCC 47CFR§2.1093, 680106 D01 RF Exposure wireless charging apps v03.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p>A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p>FCC (FCC Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p>IC (Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320.</p> <p>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B, the VCCI registration No. is C-20012 and T-20011</p>
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Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China



4. DESCRIPTION OF EUT

EUT Name	BOOST ↑ CHARGE Wireless Charging Pad 10W	
EUT Description	The EUT is a wireless charger.	
Model	WIA001	
Product Description	Operation Frequency	111 ~ 130kHz
Rated Output Power	Maximum 10W	
Antenna Type	Coil	
Antenna Number	1	
Ratings	Input: DC 5V 2A Output:5W Input: DC 9V 2A / DC 12V 1.5A Output: 10W	

Note:

1. The EUT contains following accessory devices

Product	Brand	Model	Description	Remark
Adapter 1	belkin	A138A-120150U-US5	AC Input: 100-240Vac~50/60Hz, 0.5A DC Output: 5V/2A, 9V/2A,12V/1.5A	Black and White (Optional)
Adapter 2	belkin	DSA-18QFB FUS A	AC Input: 100-240Vac~50/60Hz, 0.8A DC Output: 3.6V-6V/2A, 6V-9V/2A, 9V-12V/1.5A	Black and White (Optional)
USB cable	Belkin	F2CU012bt04	Length:1.3m	Black and White (Optional)

2. The above EUT information is declared by manufacturer and for more detailed features description, please refer the manufacturer's or user's manual.

5. REQUIREMENT

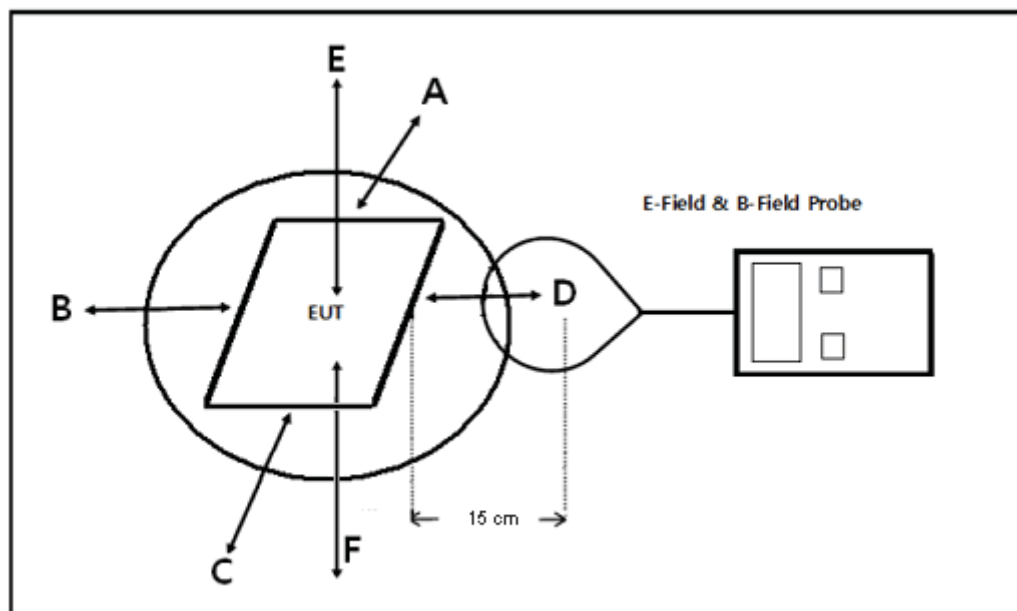
LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (Minutes)
0.3 -- 1.34	614	1.63	(100)*	30
1.34 -- 30	824/f	2.19/f	(180/f ²)*	30
30 -- 300	27.5	0.073	0.2	30
300 -- 1500	--	--	f/1500	30
1500 -- 100,000	--	--	1.0	30

METHOD OF MEASUREMENT

- The RF exposure test was performed in shielded chamber.
- The measurement probe was placed at test distance (15cm) which is between the edge of the charger and the geometric centre of probe.
- The measurement probe used to search of highest strength.
- The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- The EUT were measured according to the dictates of KDB 680106D01v03.

BLOCK DIAGRAM OF TEST SETUP





Note: As bottom point is not required to test for desktop devices, so we scanning all the surfaces and recorded the worst level in F.

EQUIPMENT APPROVAL CONSIDERATIONS

The EUT does comply with KDB 680106D01v03.

1) Power transfer frequency is less than 1MHz.

Yes; The device operated in the frequency range from 110kHz to 205kHz.

2) Output power from each primary coil is less than or equal to 15 watts.

Yes; The maximum output power of each primary coil is 10 watts.

3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.

Yes; The transfer system includes only single coils.

4) Client device is placed directly in contact with the transmitter.

Yes; Client device is placed directly in contact with the transmitter.

5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

Yes; The EUT is a mobile device.

6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Yes; The EUT field strength levels are less than 50% of the MPE limit.

MEASURING INSTRUMENT USED

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Electric and Magnetic Field Analyzer	Narda	EHP-200A	170WX90204	April 21, 2019	April 21, 2020

**E FIELD AND H FIELD STRENGTH TEST RESULT**

Test mode for wireless charger:

Config	Test Mode	Description
Mode 1	Standby	WIA001 Wireless Charger powered by A138A-120150U-US5 adapter.
Mode 2	Operating	WIA001 Wireless Charger powered by A138A-120150U-US5 adapter and with 5W wireless charging load at center.
Mode 3	Operating	WIA001 Wireless Charger powered by A138A-120150U-US5 adapter and with 10W wireless charging load at center.
Mode 4	Operating	WIA001 Wireless Charger powered by A138A-120150U-US5 adapter and with 5W wireless charging load and 3mm airgap at center.
Mode 5	Operating	WIA001 Wireless Charger powered by A138A-120150U-US5 adapter and with 10W wireless charging load and 3mm airgap at center.
Mode 6	Standby	WIA001 Wireless Charger powered by DSA-18QFB FUS A adapter.
Mode 7	Operating	WIA001 Wireless Charger powered by DSA-18QFB FUS A adapter and with 5W wireless charging load at center.
Mode 8	Operating	WIA001 Wireless Charger powered by DSA-18QFB FUS A adapter and with 10W wireless charging load at center.
Mode 9	Operating	WIA001 Wireless Charger powered by DSA-18QFB FUS A adapter and with 5W wireless charging load and 3mm airgap at center.
Mode 10	Operating	WIA001 Wireless Charger powered by DSA-18QFB FUS A adapter and with 10W wireless charging load and 3mm airgap at center.

Note:

1. Phone 5W, 20-50% power charging.
2. 10W Load, >90% power charging.



H-Filed Strength at 15 cm from the edges surrounding the EUT and 20cm above the top surface of the EUT

Test Position	H-Filed Strength Measure Result			Limits (A/m)
	Mode 1	Mode 2	Mode 3	
	A/m			
A	0.1074	0.0543	0.0735	1.63
B	0.0915	0.0628	0.0938	1.63
C	0.0980	0.0564	0.1132	1.63
D	0.1324	0.0954	0.1365	1.63
E	0.2039	0.1095	0.4213	1.63
F	0.1453	0.1042	0.1415	1.63

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 4	Mode 5	
	A/m		
A	0.0547	0.0743	1.63
B	0.0630	0.0911	1.63
C	0.0628	0.1101	1.63
D	0.0892	0.1380	1.63
E	0.1021	0.4235	1.63
F	0.0988	0.1439	1.63

Test Position	H-Filed Strength Measure Result			Limits (A/m)
	Mode 6	Mode 7	Mode 8	
	A/m			
A	0.1081	0.0551	0.0751	1.63
B	0.0971	0.0640	0.0942	1.63
C	0.0943	0.0636	0.1141	1.63
D	0.1372	0.0947	0.1402	1.63
E	0.1914	0.1028	0.4199	1.63
F	0.1501	0.1011	0.1497	1.63

Test Position	H-Filed Strength Measure Result		Limits (A/m)
	Mode 9	Mode 10	
	A/m		
A	0.0577	0.0788	1.63
B	0.0608	0.0951	1.63
C	0.0615	0.1175	1.63
D	0.0920	0.1359	1.63
E	0.1003	0.4241	1.63
F	0.1005	0.1444	1.63



E-Filed Strength at 15 cm from the edges surrounding the EUT and 20cm above the top surface of the EUT

Test Position	E-Filed Strength Measure Result			Limits (V/m)
	Mode 1	Mode 2	Mode 3	
	V/m			
A	0.4284	0.6418	1.1617	614
B	0.4175	0.5579	0.8599	614
C	0.4163	0.5940	0.8281	614
D	0.4081	0.6440	0.9724	614
E	0.4121	0.7672	1.7062	614
F	0.4313	0.6652	1.1913	614

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 4	Mode 5	
	V/m		
A	0.6655	1.1510	614
B	0.5520	0.8703	614
C	0.6142	0.8344	614
D	0.6564	0.9949	614
E	0.7733	1.7113	614
F	0.6871	1.1805	614

Test Position	E-Filed Strength Measure Result			Limits (V/m)
	Mode 6	Mode 7	Mode 8	
	V/m			
A	0.4422	0.6721	1.0969	614
B	0.4253	0.6322	0.9235	614
C	0.4175	0.5626	0.8351	614
D	0.4083	0.6278	1.0127	614
E	0.4083	0.7795	1.6985	614
F	0.4523	0.7044	1.1221	614

Test Position	E-Filed Strength Measure Result		Limits (V/m)
	Mode 9	Mode 10	
	V/m		
A	0.7024	1.0872	614
B	0.6624	0.9368	614
C	0.5803	0.8409	614
D	0.6444	1.0324	614
E	0.8018	1.7088	614
F	0.7241	1.1198	614