belkin



BELKIN INTERNATIONAL

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Applicant	Belkin International, Inc.
FCC ID: K7SF7U027	IC: 3623A-F7U027
RF Exposure Requirem	ents (FCC KDB 680106 D01)
Requirements	Statements
(a)	127.8KHz
Power transfer frequency is less that 1	
MHz	
(b)	7.5W
Output power from each primary coil	
is less than 5 watts	
(c) The transfer system includes only single	Single coil
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	
(d)	Client device is placed directly in contact
Client device is inserted in or placed	with the transmitter
directly in contact with the transmitter	
(e)	16.26cm2 (diameter = 45.5mm)
The maximum coupling surface area of	
the transmit (charging) device is	
between 60 cm ₂ and 400 cm ₂ .	
(f) Aggregate leakage fields at 10 cm	Please refer to RE Exposure Popert
surrounding the device from all	Please refer to RF Exposure Report.
simultaneous transmitting coils are	
demonstrated to be less than 30% of	
the MPE limit.	

Rajesh Karki Rajesh Karki / Principal Regulatory Compliance Engineer **Belkin International, Inc.** Tel: 310-751-2817 E-mail: rajesh.karki@belkin.com Charging Mode with receiver

E-Field Measurement (10cm)						
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)	
Max E-field (V/m)	3.79	3.81	3.53	3.59	11.71	
Limit (V/m)	614	614	614	614	614	
Margin (V/m)	-610.21	-610.19	-610.47	-610.41	-602.29	
70 % Limit (V/m)	429.8	429.8	429.8	429.8	429.8	
70 % Margin (V/m)	-427.147	-427.133	-427.329	-427.287	-421.603	

H-Field Measurement (10cm)						
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)	
Max H-field (uT)	0.251	0.263	0.269	0.279	0.483	
Max H-field (A/m)	0.2008	0.2104	0.2152	0.2232	0.3864	
Limit (A/m)	1.63	1.63	1.63	1.63	1.63	
Margin (A/m)	-1.4292	-1.4196	-1.4148	-1.4068	-1.2436	
70 % Limit (A/m)	1.141	1.141	1.141	1.141	1.141	
70 % Margin (A/m)	-1.00044	-0.99372	-0.99036	-0.98476	-0.87052	

Charging Mode with receiver shift 12mm to top

E-Field Measurement (10cm)							
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)		
Max E-field (V/m)	2.79	3.8	4.02	3.11	12.11		
Limit (V/m)	614	614	614	614	614		
Margin (V/m)	-611.21	-610.2	-609.98	-610.89	-601.89		
70 % Limit (V/m)	429.8	429.8	429.8	429.8	429.8		
70 % Margin (V/m)	-427.847	-427.14	-426.986	-427.623	-421.323		

H-Field Measurement (10cm)						
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)	
Max H-field (uT)	0.334	0.323	0.463	0.474	0.796	
Max H-field (A/m)	0.2672	0.2584	0.3704	0.3792	0.6368	
Limit (A/m)	1.63	1.63	1.63	1.63	1.63	
Margin (A/m)	-1.3628	-1.3716	-1.2596	-1.2508	-0.9932	
70 % Limit (A/m)	1.141	1.141	1.141	1.141	1.141	
70 % Margin (A/m)	-0.95396	-0.96012	-0.88172	-0.87556	-0.69524	

Charging Mode with receiver shift 12mm to bottom

E-Field Measurement (10cm)						
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)	
Max E-field (V/m)	4.36	3.31	3.5	4.23	9.73	
Limit (V/m)	614	614	614	614	614	
Margin (V/m)	-609.64	-610.69	-610.5	-609.77	-604.27	
70 % Limit (V/m)	429.8	429.8	429.8	429.8	429.8	
70 % Margin (V/m)	-426.748	-427.483	-427.35	-426.839	-422.989	

H-Field Measurement (10cm)						
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)	
Max H-field (uT)	0.276	0.291	0.378	0.367	1.22	
Max H-field (A/m)	0.2208	0.2328	0.3024	0.2936	0.976	
Limit (A/m)	1.63	1.63	1.63	1.63	1.63	
Margin (A/m)	-1.4092	-1.3972	-1.3276	-1.3364	-0.654	
70 % Limit (A/m)	1.141	1.141	1.141	1.141	1.141	
70 % Margin (A/m)	-0.98644	-0.97804	-0.92932	-0.93548	-0.4578	

Charging Mode with receiver shift 12mm to left

E-Field Measurement (10cm)						
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)	
Max E-field (V/m)	3.46	3.21	3.44	3.78	10.5	
Limit (V/m)	614	614	614	614	614	
Margin (V/m)	-610.54	-610.79	-610.56	-610.22	-603.5	
70 % Limit (V/m)	429.8	429.8	429.8	429.8	429.8	
70 % Margin (V/m)	-427.378	-427.553	-427.392	-427.154	-422.45	

H-Field Measurement (10cm)						
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)	
Max H-field (uT)	0.437	0.465	0.336	0.344	0.847	
Max H-field (A/m)	0.3496	0.372	0.2688	0.2752	0.6776	
Limit (A/m)	1.63	1.63	1.63	1.63	1.63	
Margin (A/m)	-1.2804	-1.258	-1.3612	-1.3548	-0.9524	
70 % Limit (A/m)	1.141	1.141	1.141	1.141	1.141	
70 % Margin (A/m)	-0.89628	-0.8806	-0.95284	-0.94836	-0.66668	

Charging Mode with receiver shift 12mm to right

E-Field Measurement (10cm)						
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)	
Max E-field (V/m)	2.97	3.34	3.49	3.18	12.63	
Limit (V/m)	614	614	614	614	614	
Margin (V/m)	-611.03	-610.66	-610.51	-610.82	-601.37	
70 % Limit (V/m)	429.8	429.8	429.8	429.8	429.8	
70 % Margin (V/m)	-427.721	-427.462	-427.357	-427.574	-420.959	

H-Field Measurement (10cm)						
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)	
Max H-field (uT)	0.464	0.459	0.31	0.325	0.665	
Max H-field (A/m)	0.3712	0.3672	0.248	0.26	0.532	
Limit (A/m)	1.63	1.63	1.63	1.63	1.63	
Margin (A/m)	-1.2588	-1.2628	-1.382	-1.37	-1.098	
70 % Limit (A/m)	1.141	1.141	1.141	1.141	1.141	
70 % Margin (A/m)	-0.88116	-0.88396	-0.9674	-0.959	-0.7686	

Charging Mode airgap 3mm

E-Field Measurement (10cm)						
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)	
Max E-field (V/m)	3.94	2.91	3.85	3.36	10.29	
Limit (V/m)	614	614	614	614	614	
Margin (V/m)	-610.06	-611.09	-610.15	-610.64	-603.71	
70 % Limit (V/m)	429.8	429.8	429.8	429.8	429.8	
70 % Margin (V/m)	-427.042	-427.763	-427.105	-427.448	-422.597	

H-Field Measurement (10cm)							
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)		
Max H-field (uT)	0.307	0.258	0.254	0.271	0.903		
Max H-field (A/m)	0.2456	0.2064	0.2032	0.2168	0.7224		
Limit (A/m)	1.63	1.63	1.63	1.63	1.63		
Margin (A/m)	-1.3844	-1.4236	-1.4268	-1.4132	-0.9076		
70 % Limit (A/m)	1.141	1.141	1.141	1.141	1.141		
70 % Margin (A/m)	-0.96908	-0.99652	-0.99876	-0.98924	-0.63532		

Standby Mode

E-Field Measurement (10cm)							
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)		
Max E-field (V/m)	0.38	0.39	0.38	0.42	0.36		
Limit (V/m)	614	614	614	614	614		
Margin (V/m)	-613.62	-613.61	-613.62	-613.58	-613.64		
70 % Limit (V/m)	429.8	429.8	429.8	429.8	429.8		
70 % Margin (V/m)	-429.534	-429.527	-429.534	-429.506	-429.548		

H-Field Measurement (10cm)							
EUT Side	Left	Right	Тор	Bottom	Z-axis (Above)		
Max H-field (uT)	0.241	0.245	0.245	0.241	0.446		
Max H-field (A/m)	0.1928	0.196	0.196	0.1928	0.3568		
Limit (A/m)	1.63	1.63	1.63	1.63	1.63		
Margin (A/m)	-1.4372	-1.434	-1.434	-1.4372	-1.2732		
70 % Limit (A/m)	1.141	1.141	1.141	1.141	1.141		
70 % Margin (A/m)	-1.00604	-1.0038	-1.0038	-1.00604	-0.89124		