



Radiated RF Immunity per IEC / EN 61000-4-3

Manufacturer:	Aleph Objects Inc	Project Number:	B40815
Customer Representative:	Seth Sinnema	Test Area:	CALC
Model:	KT-PR0016	S/N:	KT-PR0016-6616
Standard Referenced:	EN55024: 2010	Date:	August 14, 2014
Temperature:	26.3°C	Humidity:	56%
Input Voltage:	230VAC 50Hz	Pressure:	838 mb
Configuration of Unit:	Printing test gcode file off SD card		
Test Engineer:	Mark Novak		

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Frequency (MHz)	Modulation			Step Size (%)	Field (V/m)	Polarity (V or H)	Dwell (sec)	Comments	Criteria Met	Pass / Fail	
	Type	%	Freq								Form
80 - 1000	AM	80	1kHz	Sine	1	3	V	3	Front. Uit stopped at 145.3357MHz. Was not repeatable. Passed the remainder of the test.	A	Pass
80 - 1000	AM	80	1kHz	Sine	1	3	H	3	Unit stopped at 93.806. Restarted and stopped again at that frequency. Continuing test starting at 100.5730 MHz. Stopped immediately. Starting at 130.2638. Completed test. Removed USB cable and ran 90 – 200 MHz twice and Unit passed both tests. Seems like USB was acting as antenna.	C	Fail
80 - 1000	AM	80	1kHz	Sine	1		V	3	Right No testeing done.		
80 - 1000	AM	80	1kHz	Sine	1		H	3			



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	Type	%	Freq							
80 - 1000	AM	80	1kHz	Sine	1	V	3	Back USB connected. Unit stopped at 97.615. Repeated and unit failed at 94.74 Continued test 130.2679	C	Fail
80 - 1000	AM	80	1kHz	Sine	1	H	3		A	Pass
80 - 1000	AM	80	1kHz	Sine	1	V	3	Left Unit stopped at 96.6467 repeated and it failed again. Jumped to 130.2679 and continued test. Unit passed . Running 90 – 160 without USB cable. Unit failed at 105.532 Repeated test and unit passed	C	Fail
80 - 1000	AM	80	1kHz	Sine	1	H	3		A	Pass



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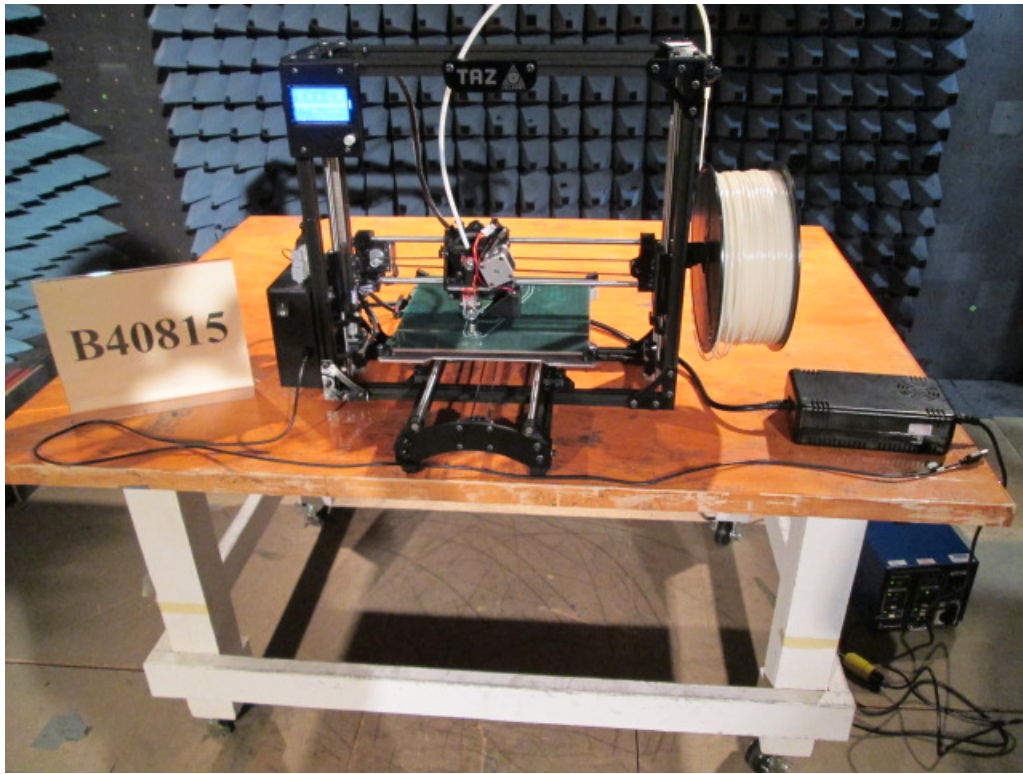


Figure B1. Radiated RF Immunity Test Setup – Front Side.

Figure B2. Radiated RF Immunity Test Setup – Right Side.



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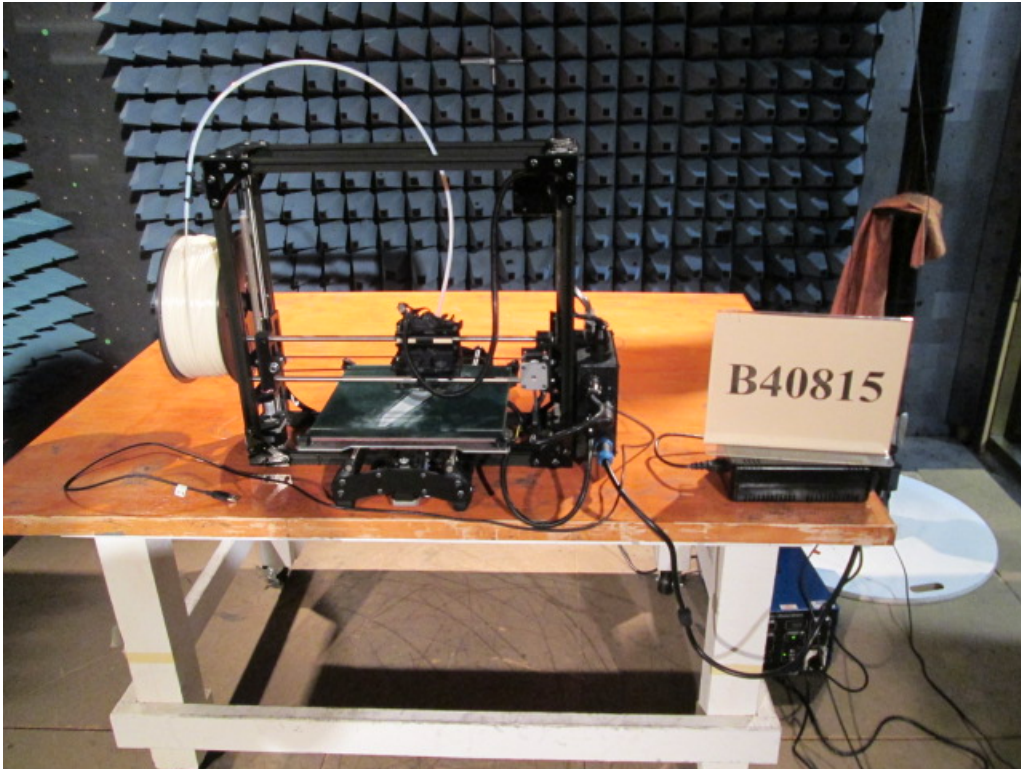


Figure B3. Radiated RF Immunity Test Setup – Back Side.



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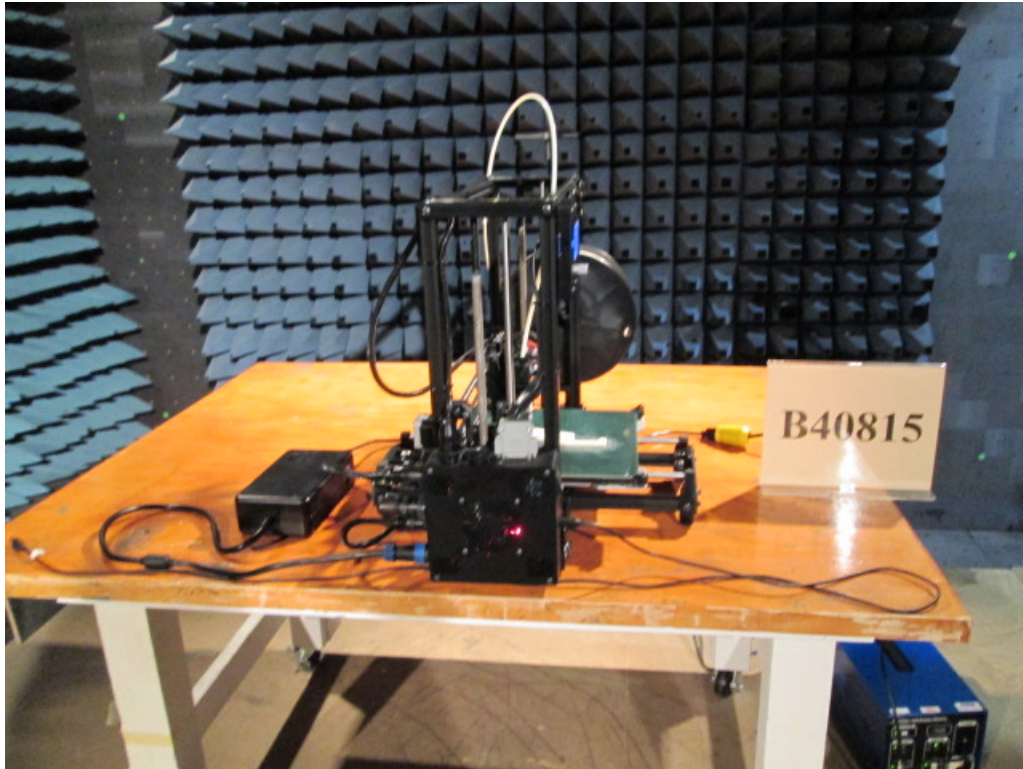


Figure B4. Radiated RF Immunity Test Setup – Left Side.



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Test Equipment List

ID Number	Manufacturer	Model #	Serial #	Description	Cal Date	Cal Due
1005	EMCO	3140	1012	Biconilog Antenna	NA	NA
1056	Marconi	2041	119332/001	Signal Generator 10kHz - 2.7GHz	06/20/2014	06/20/2015
1058	Ray Proof	RF Shield Room	6698	Completely Anechoic Lined Chamber	07/13/2014	07/13/2015
1181	EMCI	RFS	NA	Initial Release 02 July 2004	NA	NA
1455	Giga-tronics	GT-8888A	8888A03337	10 MHz to 8 GHz, +20 dBm, 25 Vdc Power Meter	05/13/2014	05/13/2015
1456	Werlatone	C3908-10	98095	1500 Watts, 50 dB Dual Directional Coupler 80 MHz	05/29/2014	05/29/2015
1478	Ophir	5127F	1100	RF Amplifier, 200 Watt, 20 - 1000 MHz	NA	NA
1537	Extech Instruments	445715	Z315813	Hygro-Thermometer	03/21/2014	03/21/2015