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Report No.: FCC11-RTE092803

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TEST REPORT

Applicant: Archos SA

Address of Applicant: 12 Rue Ampere Igny France 91430

Equipment Under Test (EUT)

Product Name: A80H

Model No.: 9081

Trade mark: Archos

FCC ID: SOV9081

Applicable standards: FCC CFR Title 47 Part 15 Subpart B:2010

Date of sample receipt: Aug. 26, 2011

Date of Test: Aug. 29-Sep. 27, 2011

Date of report issued: Sep. 28, 2011

Test Result: PASS *

Authorized Signature:

Kavin Yu Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the EBO product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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^{*} In the configuration tested, the EUT complied with the standards specified above.



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2 Version

Version No.	Date	Description
00	2011-09-28	Original

Prepared by:	Collan. He	Date:	2011-09-28	
	Project Engineer	<u> </u>		
Reviewed by:	Homs. Hu	Date:	2011-09-28	
	Reviewer			



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4 Test Summary

Test Item	Section in CFR 47	Result		
Conducted Emission	Part15.107	PASS		
Readiated Emissions	Part15.109	PASS		

PASS: The EUT complies with the essential requirements in the standard.



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5 General Information

5.1 Client Information

Applicant:	Archos SA		
Address of Applicant:	12 Rue Ampere Igny France 91430		
Manufacturer:	Archos SA		
Address of Manufacturer:	12 Rue Ampere Igny France 91430		
Factory:	Excelsior Electronics		
Address of Factory:	Sam Tuen Management Zone, Houjie, Dongguan Guangdong PRC		

5.2 General Description of E.U.T.

Product Name:	A80H
Model No.:	9081
Power supply:	Model:MD-TRC0620DC
	Input: AC 100-240V 0.3A(MAX)50/60Hz
	Output: DC 5.0V1.5A

5.3 Test mode and voltage

Test mode:	
PC mode	Keep the EUT exchange data with PC.
Test voltage:	AC 120V/60Hz



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5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● FCC —Registration No.: 600491

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 600491, July 20, 2010.

● Industry Canada (IC)

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-1.

5.5 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen,

China

Tel: 0755-27798480 Fax: 0755-27798960

5.6 Description of Support Units

Manufacturer	Description	Model	Serial Number
DELL	PC	OPTIPLEX745	GTS312
DELL	KEYBOARD	SK-8115	N/A
DELL	MOUSE	N/A	N/A
Cannon	Printer	IP1600	N/A
ELNEC	Encoder	Superpro/5000	N/A

5.7 Deviation from Standards

Biconical, log.per. antenna and horn antenna were used instead of dipole antenna. Semi-anechoic Chamber was used as alternation of open air test sites, and all test suites were performed with radiated method in it.

5.8 Abnormalities from Standard Conditions

None.

5.9 Other Information Requested by the Customer

None.



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6 Test Instruments list

Radia	Radiated Emission:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Mar. 30 2011	Mar. 29 2012		
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A		
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Jul. 04 2011	Jul. 03 2012		
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	Feb. 26 2011	Feb. 25 2012		
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 30 2011	June 29 2012		
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2011	Mar. 29 2012		
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
8	Coaxial Cable	GTS	N/A	GTS213	Apr. 01 2011	Mar. 31 2012		
9	Coaxial Cable	GTS	N/A	GTS211	Apr. 01 2011	Mar. 31 2012		
9	Coaxial cable	GTS	N/A	GTS210	Apr. 01 2011	Mar. 31 2012		
11	Coaxial Cable	GTS	N/A	GTS212	Apr. 01 2011	Mar. 31 2012		
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Jul. 04 2011	Jul. 03 2012		
13	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jul. 04 2011	Jul. 03 2012		
14	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 30 2011	June 29 2012		
15	Band filter	Amindeon	82346	GTS219	June 30 2011	June 29 2012		

Conducted Emission:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	Shielding Room	ZhongYu Electron	7.0(L)x3.0(W)x3.0(H)	GTS252	Jul. 04 2011	Jul. 03 2012	
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	Jul. 04 2011	Jul. 03 2012	
3	10dB Pulse Limita	Rohde & Schwarz	N/A	GTS224	Jul. 04 2011	Jul. 03 2012	
4	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	Jul. 04 2011	Jul. 03 2012	
5	Coaxial Cable	GTS	N/A	GTS227	Apr. 01 2011	Mar. 31 2012	
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A	



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7 Test results and Measurement Data

7.1 Conducted Emissions

Test Requirement:	FCC Part15 B Section 15.107						
Test Method:	ANSI C63.4:2003						
Test Frequency Range:	150kHz to 30MHz						
Class / Severity:	Class B						
Receiver setup:	RBW=9kHz, VBW=30kHz						
Limit:	[[[]]] [] [] [] [] [] [] []	Limit (c	lΒμV)				
	Frequency range (MHz)	Quasi-peak	Average				
	0.15-0.5 66 to 56* 56 to 46*						
	0.5-5	56	46				
	5-30	60	50				
	* Decreases with the logarithm						
Test procedure	The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.						
Test setup:	Reference Plane						
	AUX Equipment Test table/Insulation pla Remark E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Test table height=0.8m		er — AC power				
Test environment:	Temp.: 24 °C Hum	id.: 51% Pre	ss.: 1 012mbar				
Measurement Record:		Und	certainty: ± 3.45dB				
Test Instruments:	Refer to section 6 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Pass						



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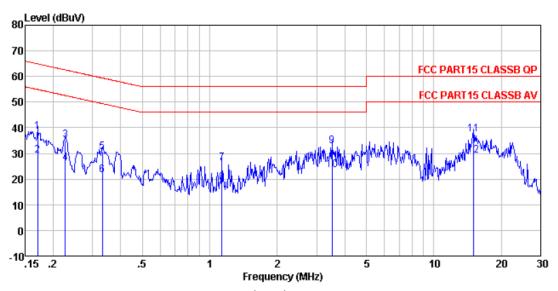
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Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Line:



Condition : FCC PART15 CLASSB QP LISN(2011) LINE

Job No : 733IT Test mode : PC mode Test engineer: Collin

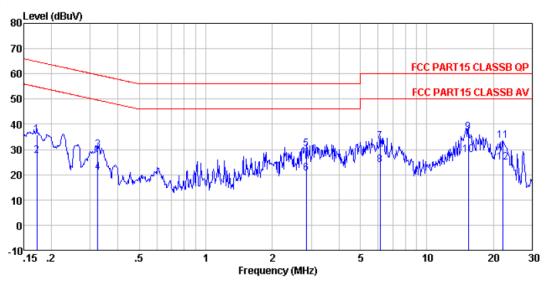
	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBu∜	dB	dB	dBu₹	dBuV	dB	
1	0.170	37.56	0.67	0.10	38.33	64.94	-26.61	QP
2	0.170	28.44	0.67	0.10	29.21	54.94	-25.73	Average
3	0.227	34.51	0.64	0.10	35.25		-27.32	
4	0.227	25.47	0.64	0.10	26.21	52.57	-26.36	Average
5	0.332	29.85	0.60	0.10	30.55	59.40	-28.85	QP
6	0.332	20.98	0.60	0.10	21.68	49.40	-27.72	Average
7	1.135	25.73	0.46	0.10	26.29	56.00	-29.71	QP
8	1.135	18.13	0.46	0.10	18.69	46.00	-27.31	Average
9	3.509	32.48	0.34	0.10	32.92	56.00	-23.08	QP
10	3.509	23.15	0.34	0.10	23.59	46.00	-22.41	Average
11	14.986	37.07	0.18	0.20	37.45	60.00	-22.55	QP
12	14.986	28.81	0.18	0.20	29.19	50.00	-20.81	Average



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Neutral:



Condition : FCC PART15 CLASSB QP LISN(2011) NEUTRAL

Job No : 733IT Test mode : PC mode Test engineer: Collin

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBu₹	dB	d₿	dBu₹	dBu∀	dB	
1 2 3 4 5 6 7 8 9 10 11	0. 172 0. 172 0. 325 0. 325 2. 854 2. 854 6. 153 6. 153 15. 388 15. 388 22. 180	35. 22 26. 84 29. 03 20. 18 29. 59 20. 18 32. 68 23. 56 36. 46 27. 55 33. 29	0. 67 0. 67 0. 60 0. 60 0. 36 0. 28 0. 28 0. 17 0. 17 0. 13	0.10 0.10 0.10 0.10 0.10 0.10 0.12 0.12	35. 99 27. 61 29. 73 20. 88 30. 05 20. 64 33. 08 23. 96 36. 83 27. 92 33. 63	64. 86 59. 57 59. 57 56. 00 56. 00 60. 00 60. 00 60. 00 60. 00	-29. 84 -38. 69 -25. 95 -35. 36 -26. 92 -36. 04 -23. 17 -32. 08 -26. 37	Average QP Average QP Average QP Average QP Average QP Average QP
12	22.180	24.56	0.13	0.21	24.90	60.00	-35.10	Average

Notes:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.



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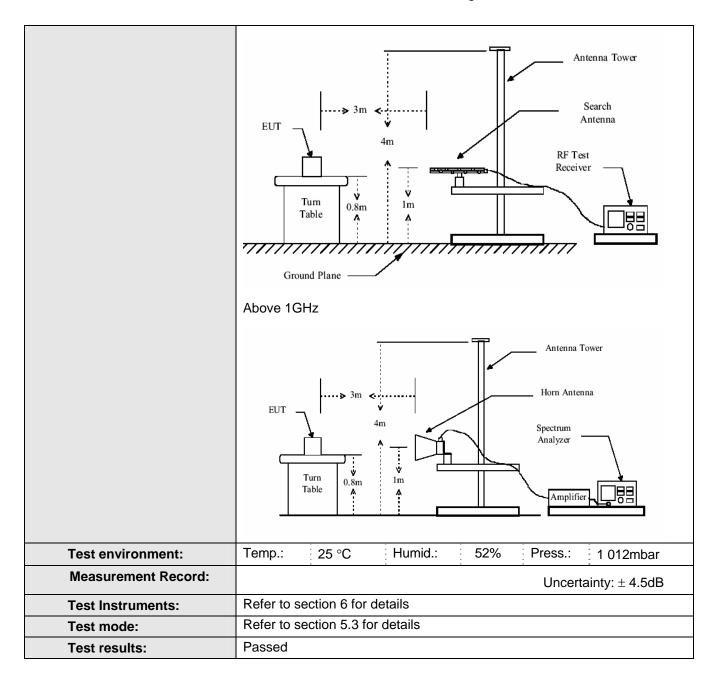
7.2 Radiated Emission

Test Requirement:	FCC Part15 B S	Section 15.10	9						
Test Method:	ANSI C63.4:2003								
Test Frequency Range:	30MHz to 12000MHz								
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)								
Receiver setup:									
·	Frequency Detector RBW VBW Rema								
	30MHz- 1GHz	Quasi-pea	k 100KHz	300KHz	Quasi-peak Value				
	Above 1GHz	Peak	1MHz	3MHz	Peak Value				
	Above 10112	Peak	1MHz	10Hz	Average Value				
Limit:									
	Freque		Limit (dBuV		Remark				
	30MHz-8	8MHz	40.0)	Quasi-peak Value				
	88MHz-2		43.5		Quasi-peak Value				
	216MHz-9		46.0		Quasi-peak Value				
	960MHz-	·1GHz	54.0)	Quasi-peak Value				
	Above 1GHz 54.0 Average Value								
	74.0 Peak Value								
Test Procedure:	 a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 								
Test setup:	Below 1GHz	<u> </u>	cified and then	•					



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Note:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor



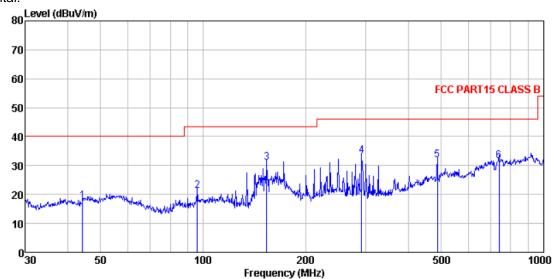
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Measurement Data

Below 1GHz:

Horizontal:



3m chamber FCC PART15 CLASS B 3m VULB9163-NEW HORIZONTAL Condition

Job No. : 733IT : PC Mode Test Mode Test Engineer: Collin

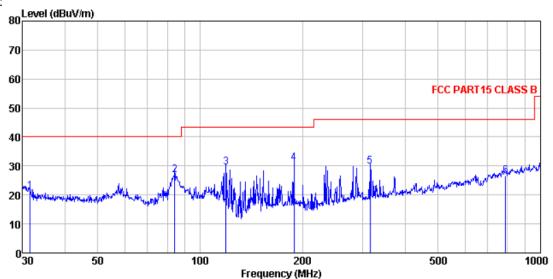
	Freq	ReadAntenna Level Factor				Limit Level Line			Remark
	MHz	dBu∜	dB/m	dB	<u>ab</u>	dBuV/m	dBuV/m	dB	
1 2 3 4 5 6	96.10	40.74 51.19 52.11 43.57	10.39 11.49 17.62	1.12 1.54 2.05 2.38	31.71 32.00 32.30 31.71	31.12 33.35 31.86	43.50 43.50 46.00 46.00	-22.30 -12.38 -12.65 -14.14	QP QP QP QP



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Vertical:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163-NEW VERTICAL : 733IT : PC Mode Condition

Job No. Test Mode Test Engineer: Collin

	Freq		Antenna Factor					Over Limit	Remark
	MHz	dBu∜	dB/m	dB		dBuV/m	dBuV/m	<u>dB</u>	
1 2 3 4 5 6	84.11 119.02 188.41 315.48	52.77 51.77 48.21	10.33 7.22 9.58	1.00 1.31 1.72 2.10	31.81 32.20 32.30	26.88 29.49 30.87 29.74	40.00 43.50 43.50 46.00	-13.12 -14.01 -12.63 -16.26	QP QP QP QP

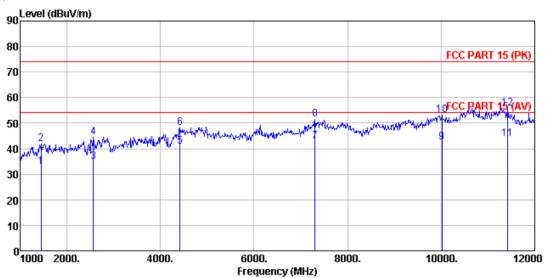


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Above 1GHz:

Horizontal:



Site : 3m chamber

Condition : FCC PART 15 (PK) 3m BBHA9120D ANT(>1GHZ) HORIZONTAL

Job No. : 733IT Test Mode : PC mode Test Engineer: Collin

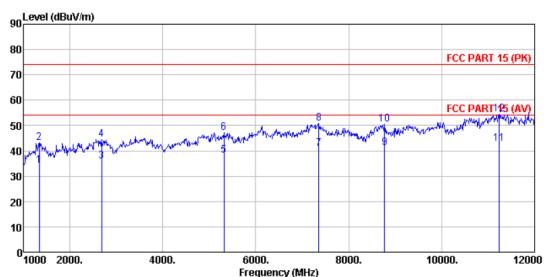
	Freq	ReadAntenna Level Factor			Preamp Factor		Limit Line	Over Limit	Remark
	MHz	dBu∜	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1448.00	27.48	25.35	2.46	22.34	32.95	54.00	-21.05	Average
2	1448.00	36.43	25.35	2.46	22.34	41.90	74.00	-32.10	Peak
3	2568.00	34.18	27.68	3.61	30.62	34.85	54.00	-19.15	Average
4	2568.00	43.96	27.68	3.61	30.62	44.63	74.00	-29.37	Peak
4 5	4416.00	29.67	31.13	4.68	24.77	40.71	54.00	-13.29	Average
6	4416.00	37.12	31.13	4.68	24.77	48.16	74.00	-25.84	Peak
7	7300.00	26.34	36.33	6.90	26.58	42.99	54.00	-11.01	Average
8	7300.00	34.87	36.33	6.90	26.58	51.52	74.00	-22.48	Peak
9	10016.00	19.51	39.12	9.11	25.19	42.55	54.00	-11.45	Average
10	10016.00	30.17	39.12	9.11	25.19	53.21	74.00	-20.79	Peak
11	11416.00	18.55	39.92	10.11	24.81	43.77	54.00	-10.23	Average
12	11416.00	30.48	39.92	10.11	24.81	55.70	74.00	-18.30	Peak



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Vertical:



Site : 3m chamber

Condition : FCC PART 15 (PK) 3m BBHA9120D ANT(>1GHZ) VERTICAL Job No. : 733IT

Test Mode : PC mode Test Engineer: Collin

lest	Engineer: Freq	Read	Intenna Factor		Preamp Factor		Limit Line	Over	Remark
	rieq	rever	ractor	LUSS	ractor	rever	Line	LIMIC	Kemark
	MHz	dBu∜	dB/m	₫B	₫B	dBuV/m	dBuV/m	₫B	
1	1336.00	26.78	25.69	2.41	20.52	34.36	54.00	-19.64	Average
2	1336.00	35.70	25.69	2.41	20.52	43.28	74.00	-30.72	Peak
3	2680.00	34.52	28.08	3.70	30.45	35.85	54.00	-18.15	Average
4 5	2680.00	43.24	28.08	3.70	30.45	44.57	74.00	-29.43	Peak
5	5312.00	24.58	31.69	5.71	23.83	38.15	54.00	-15.85	Average
6	5312.00	33.58	31.69	5.71	23.83	47.15	74.00	-26.85	Peak
7	7356.00	24.17	36.45	6.92	26.70	40.84	54.00	-13.16	Average
8	7356.00	33.99	36.45	6.92	26.70	50.66	74.00	-23.34	Peak
9	8770.00	22.29	36.93	8.25	26.19	41.28	54.00	-12.72	Average
10	8770.00	31.49	36.93	8.25	26.19	50.48	74.00	-23.52	Peak
11	11234.00	17.52	40.11	10.00	24.69	42.94	54.00	-11.06	Average
12	11234.00	29.06	40.11	10.00	24.69	54.48	74.00	-19.52	Peak