


RF TEST REPORT



Report No.: 17070660-FCC-R2

Supersede Report No.: N/A

Applicant	AOC	
Product Name	Tablet PC	
Model No.	A726	
Serial No.	N/A	
Test Standard	FCC Part 15.247: 2016, ANSI C63.10: 2013	
Test Date	August 01 to 09, 2017	
Issue Date	August 10, 2017	
Test Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	
Equipment complied with the specification <input checked="" type="checkbox"/>		
Equipment did not comply with the specification <input type="checkbox"/>		
		
Loren Luo Test Engineer	David Huang Checked By	
This test report may be reproduced in full only Test result presented in this test report is applicable to the tested sample only		

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

Zone A, Floor 1, Building 2 Wan Ye Long Technology Park

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Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety

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1. Report Revision History

Report No.	Report Version	Description	Issue Date
17070660-FCC-R2	NONE	Original	August 10, 2017

2. Customer information

Applicant Name	AOC
Applicant Add	14F-5, NO.258, Liancheng Rd., Zhonghe Dist., New Taipei City, Taiwan
Manufacturer	China Great Wall Computer Shenzhen Co., Ltd.
Manufacturer Add	No.Great Wall Computer Industrial Park,Bao Shi East Road,Bao' an Bistrict,Shenzhen,P.R.China

3. Test site information

Test Lab A:

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES
Lab Address	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108
FCC Test Site No.	718246
IC Test Site No.	4842E-1
Test Software	Radiated Emission Program-To Shenzhen v2.0

Test Lab B:

Lab performing tests	SIEMIC (Nanjing-China) Laboratories
Lab Address	2-1 Longcang Avenue Yuhua Economic and Technology Development Park, Nanjing, China
FCC Test Site No.	986914
IC Test Site No.	4842B-1
Test Software	EZ_EMG(ver.lcp-03A1)

Note: We just perform Radiated Spurious Emission above 18GHz in the test Lab. B.

4. Equipment under Test (EUT) Information

Description of EUT:	Tablet PC
Main Model:	A726
Serial Model:	N/A
Date EUT received:	July 31, 2017
Test Date(s):	August 01 to 09, 2017
Equipment Category :	DTS
Antenna Gain:	Bluetooth/WIFI: 2dBi
Antenna Type:	PIFA antenna
Type of Modulation:	802.11b/g/n: DSSS, OFDM Bluetooth: GFSK, π /4DQPSK, 8DPSK
RF Operating Frequency (ies):	WIFI: 802.11b/g/n(20M): 2412-2462 MHz WIFI: 802.11n(40M): 2422-2452 MHz Bluetooth: 2402-2480 MHz
Max. Output Power:	802.11b: 11.50dBm 802.11g: 11.72dBm 802.11n(20M): 11.97dBm 802.11n(40M): 11.58dBm
Number of Channels:	WIFI :802.11b/g/n(20M): 11CH WIFI :802.11n(40M): 7CH Bluetooth: 79CH
Port:	Earphone Port, USB Port , SD Card Port

Input Power: Adapter:
Model: SC/5WM500100-US
Input: AC 100-240V~50/60Hz;0.4A
Output: DC 5.0V,1000mA
Battery:
Spec: 3.7V,2500mAh(9.25Wh)

Trade Name : AOC

FCC ID: 2AEB5-A726

Note: The difference between the old case 16071173 and new case 17070660: The only difference is updated the LCD, the other construction is the same.
So, we have retested the Radiated Emissions data in this report.

5. Test Summary

The product was tested in accordance with the following specifications.

All testing has been performed according to below product classification:

FCC Rules	Description of Test	Result
§15.205, §15.209, §15.247(d)	Radiated Spurious Emissions & Unwanted Emissions into Restricted Frequency Bands	Compliance

Measurement Uncertainty


Emissions		
Test Item	Description	Uncertainty
Radiated Spurious Emissions	Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	+5.6dB/-4.5dB
-	-	-

6. Measurements, Examination And Derived Results

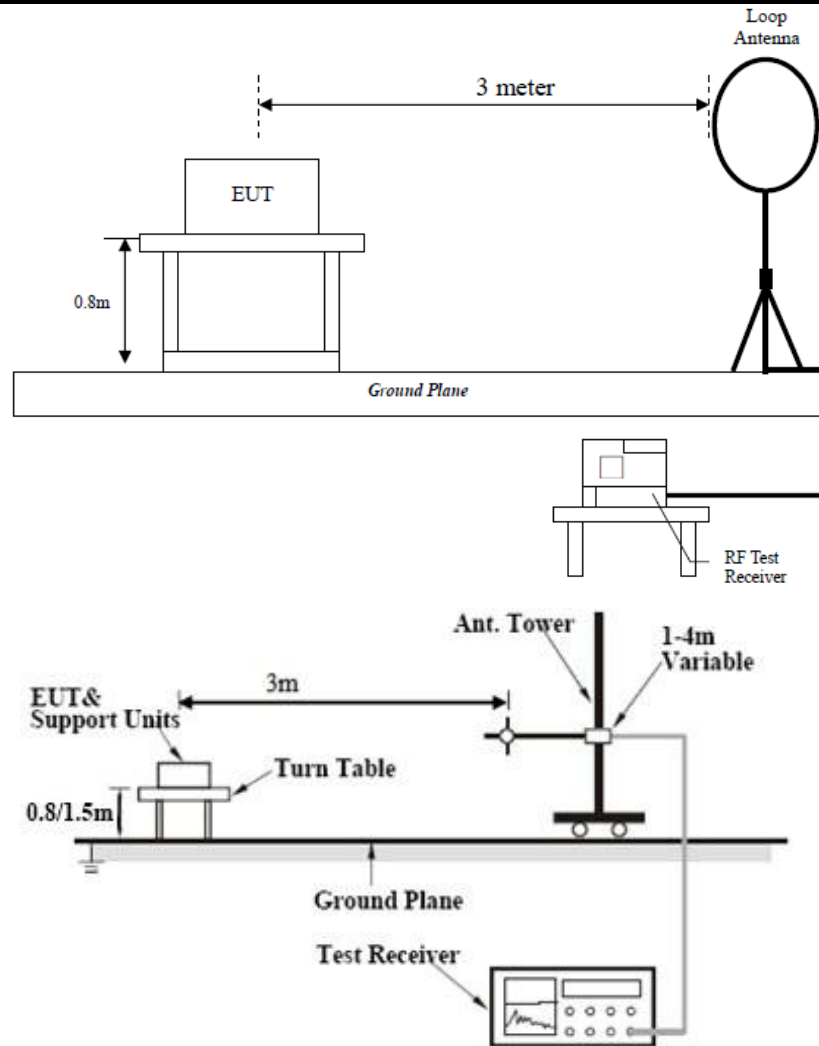
6.1 Radiated Spurious Emissions & Restricted Band

Temperature	25°C
Relative Humidity	50%
Atmospheric Pressure	1008mbar
Test date :	August 08, 2017
Tested By :	Loren Luo

Requirement(s):

Spec	Item	Requirement	Applicable																
47CFR§15.205, §15.209, §15.247(d)	a)	Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges																	
		<table><tr><th>Frequency range (MHz)</th><th>Field Strength (µV/m)</th></tr><tr><td>0.009~0.490</td><td>2400/F(KHz)</td></tr><tr><td>0.490~1.705</td><td>24000/F(KHz)</td></tr><tr><td>1.705~30.0</td><td>30</td></tr><tr><td>30 – 88</td><td>100</td></tr><tr><td>88 – 216</td><td>150</td></tr><tr><td>216 960</td><td>200</td></tr><tr><td>Above 960</td><td>500</td></tr></table>		Frequency range (MHz)	Field Strength (µV/m)	0.009~0.490	2400/F(KHz)	0.490~1.705	24000/F(KHz)	1.705~30.0	30	30 – 88	100	88 – 216	150	216 960	200	Above 960	500
		Frequency range (MHz)		Field Strength (µV/m)															
		0.009~0.490		2400/F(KHz)															
		0.490~1.705		24000/F(KHz)															
		1.705~30.0		30															
		30 – 88		100															
		88 – 216		150															
		216 960		200															
Above 960	500																		

Test Setup



Procedure

1. The EUT was switched on and allowed to warm up to its normal operating condition.
2. The test was carried out at the selected frequency points obtained from the EUT characterization. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:
 - a. Vertical or horizontal polarization (whichever gave the higher emission level over a full rotation of the EUT) was chosen.
 - b. The EUT was then rotated to the direction that gave the maximum emission.
 - c. Finally, the antenna height was adjusted to the height that gave the maximum emission.
3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi Peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz with Peak detection for Peak measurement at frequency above

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	<p>1GHz.</p> <p>The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz with Peak detection for Average Measurement as below at frequency above 1GHz.</p> <p>5. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.</p>
Remark	
Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

Test Data ☒ Yes ☐ N/A

Test Plot ☐ Yes (See below) ☒ N/A

Test Result:

Test Mode:	Transmitting Mode
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Frequency range: 9KHz - 30MHz

Freq.	Detection	Factor	Reading	Result	Limit@3m	Margin
(MHz)	value	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
--	--	--	--	--	--	>20
--	--	--	--	--	--	>20

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

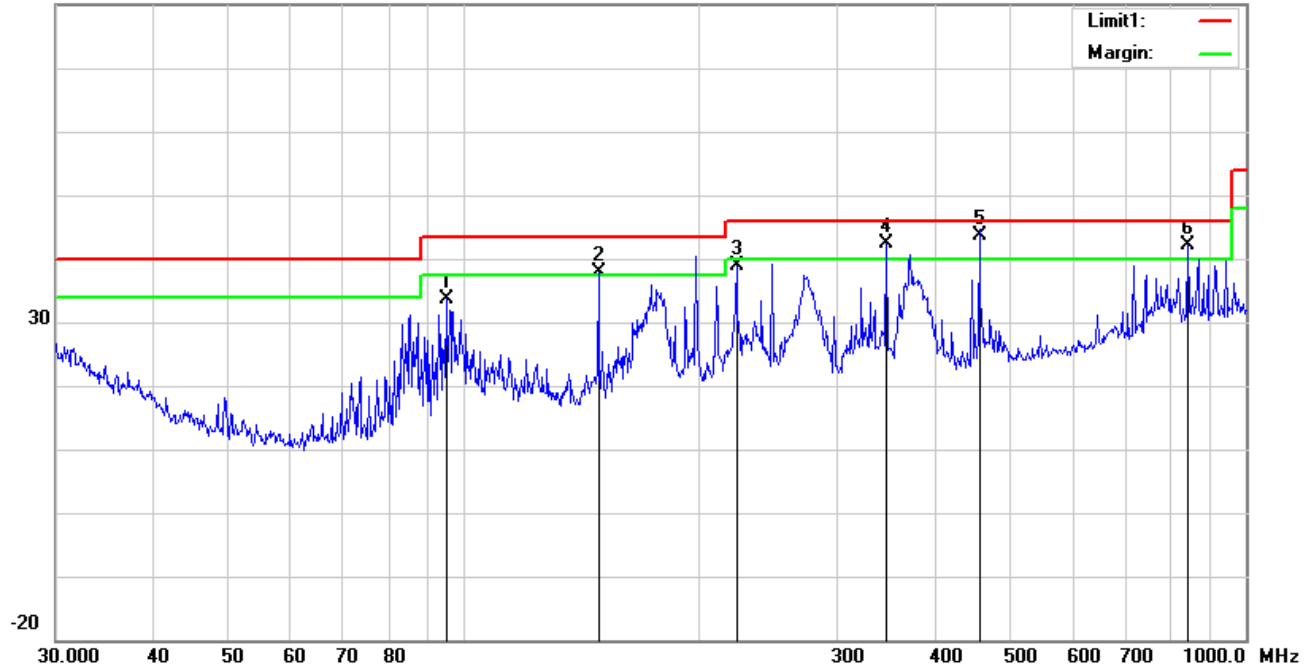
Distance extrapolation factor = $40 \log (\text{specific distance}/\text{test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

Test Mode: Bluetooth Mode

30MHz -1GHz

80.0 dBuV/m



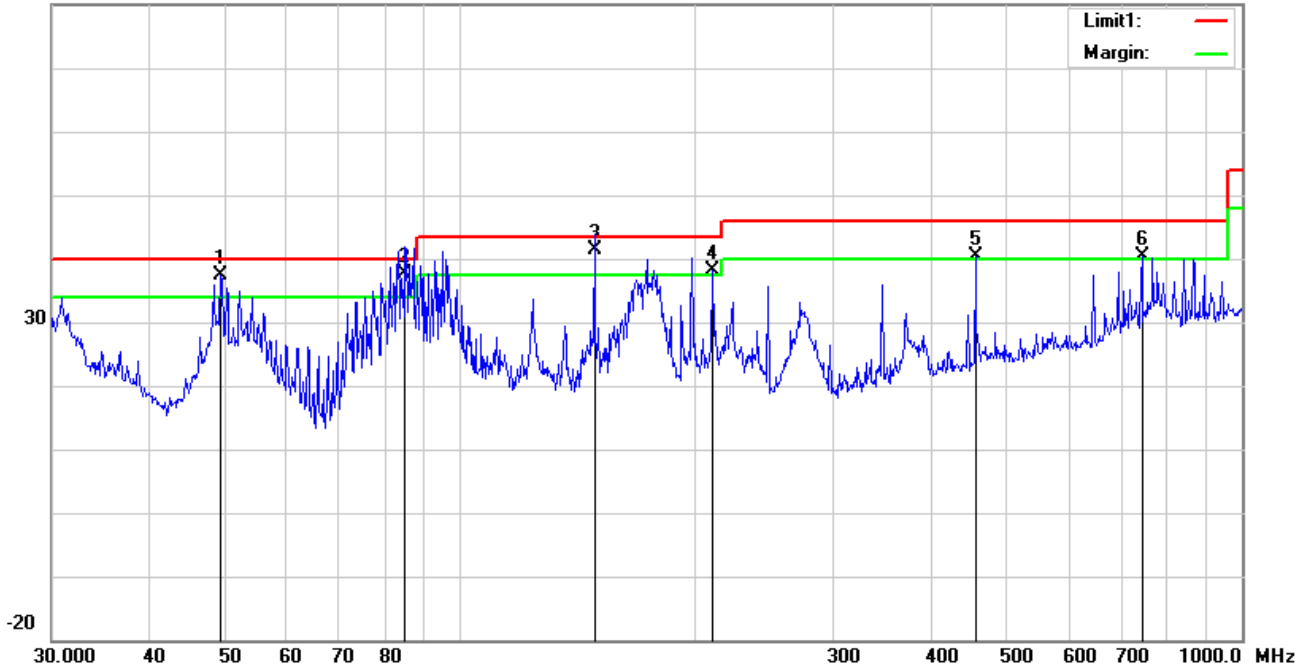
Test Data

Horizontal Polarity Plot @3m

No.	P/L	Frequency	Reading	Detect or	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	H	94.7601	45.78	peak	9.14	22.32	0.99	33.59	43.50	-9.91	100	86
2	H	148.4410	46.41	QP	12.60	22.35	1.33	37.99	43.50	-5.51	100	11
3	H	222.9502	47.88	peak	11.78	22.34	1.61	38.93	46.00	-7.07	100	227
4	H	346.8092	47.93	QP	14.58	22.16	2.02	42.37	46.00	-3.63	100	300
5	H	455.9058	46.47	QP	16.82	21.90	2.16	43.55	46.00	-2.45	100	203
6	H	842.1296	38.46	QP	21.86	21.04	2.88	42.16	46.00	-3.84	100	89

30MHz -1GHz

80.0 dBuV/m



Test Data

Vertical Polarity Plot @3m

No.	P/L	Frequency	Reading	Detect or	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	V	49.3594	50.21	QP	8.68	22.37	0.79	37.31	40.00	-2.69	100	194
2	V	84.9995	51.10	QP	7.80	22.37	1.07	37.60	40.00	-2.40	100	126
3	V	148.4410	49.82	QP	12.60	22.35	1.33	41.40	43.50	-2.10	100	152
4	V	210.0482	46.88	QP	11.96	22.36	1.57	38.05	43.50	-5.45	100	166
5	V	455.9058	43.29	QP	16.82	21.90	2.16	40.37	46.00	-5.63	100	171
6	V	744.8661	38.06	QP	20.74	21.27	2.84	40.37	46.00	-5.63	100	114

Above 1GHz

Test Mode:	Transmitting Mode
------------	-------------------

Low Channel (2412 MHz)(g mode worst case)

Frequency (MHz)	S.A. Reading (dBμV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4824	39.85	AV	V	33.39	7.22	48.46	32	54	-22.00
4824	36.74	AV	H	33.39	7.22	48.46	28.89	54	-25.11
4824	51.22	PK	V	33.39	7.22	48.46	43.37	74	-30.63
4824	50.38	PK	H	33.39	7.22	48.46	42.53	74	-31.47
3825	34.52	AV	V	31.41	6.8	49.2	23.53	54	-30.47
3825	33.11	AV	H	31.41	6.8	49.2	22.12	54	-31.88
3825	44.2	PK	V	31.41	6.8	49.2	33.21	74	-40.79
3825	43.25	PK	H	31.41	6.8	49.2	32.26	74	-41.74

Middle Channel (2437 MHz) (n20 mode worst case)

Frequency (MHz)	S.A. Reading (dBμV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874	41.22	AV	V	33.62	7.53	48.36	34.01	54	-19.99
4874	39.76	AV	H	33.62	7.53	48.36	32.55	54	-21.45
4874	49.26	PK	V	33.62	7.53	48.36	42.05	74	-31.95
4874	47.51	PK	H	33.62	7.53	48.36	40.3	74	-33.70
7984	27.31	AV	V	37.89	7.3	47.29	25.21	54	-28.79
7984	26.58	AV	H	37.89	7.3	47.29	24.48	54	-29.52
7984	45.16	PK	V	37.89	7.3	47.29	43.06	74	-30.94
7984	42.58	PK	H	37.89	7.3	47.29	40.48	74	-33.52

High Channel (2462 MHz) (n20 mode worst case)

Frequency (MHz)	S.A. Reading (dBμV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4924	40.75	AV	V	33.74	7.78	48.34	33.93	54	-20.07
4924	38.46	AV	H	33.74	7.78	48.34	31.64	54	-22.36
4924	53.06	PK	V	33.74	7.78	48.34	46.24	74	-27.76
4924	51.24	PK	H	33.74	7.78	48.34	44.42	74	-29.58
17536	21.63	AV	V	41.99	17	46.01	34.61	54	-19.39
17536	19.84	AV	H	41.99	17	46.01	32.82	54	-21.18
17536	45.17	PK	V	41.99	17	46.01	58.15	74	-15.85
17536	44.26	PK	H	41.99	17	46.01	57.24	74	-16.76

Note:

1, The testing has been conformed to $10 \times 2472 \text{ MHz} = 24,620 \text{ MHz}$

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

4, The radiated spurious test above 18GHz is subcontracted to SIEMIC (Nanjing-China) Laboratories. and found 30dB below the limit at least.

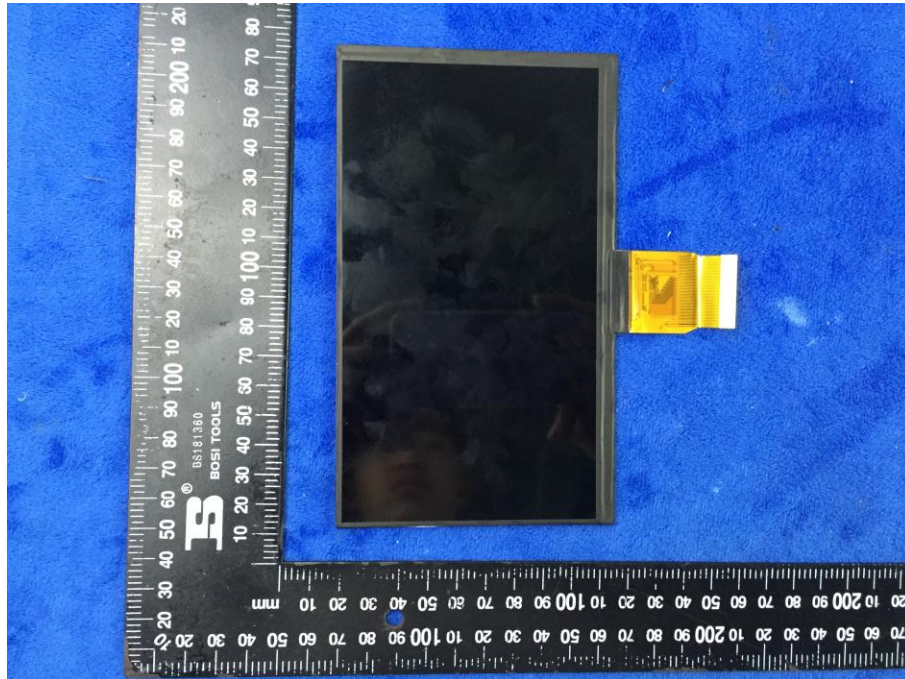
Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Due	In use
Radiated Emissions					
EMI test receiver	ESL6	100262	09/16/2016	09/15/2017	<input checked="" type="checkbox"/>
Positioning Controller	UC3000	MF780208282	11/18/2016	11/17/2017	<input checked="" type="checkbox"/>
OPT 010 AMPLIFIER (0.1-1300MHz)	8447E	2727A02430	08/31/2016	08/30/2017	<input checked="" type="checkbox"/>
Microwave Preamplifier (1 ~ 26.5GHz)	8449B	3008A02402	03/23/2017	03/22/2018	<input checked="" type="checkbox"/>
Horn Antenna	BBHA9170	3145226D1	09/28/2016	09/27/2017	<input checked="" type="checkbox"/>
Active Antenna (9kHz-30MHz)	AL-130	121031	10/13/2016	10/12/2017	<input checked="" type="checkbox"/>
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/20/2016	09/19/2017	<input checked="" type="checkbox"/>
Double Ridge Horn Antenna (1 ~18GHz)	AH-118	71283	09/23/2016	09/22/2017	<input checked="" type="checkbox"/>
Universal Radio Communication Tester	CMU200	121393	09/24/2016	09/23/2017	<input checked="" type="checkbox"/>

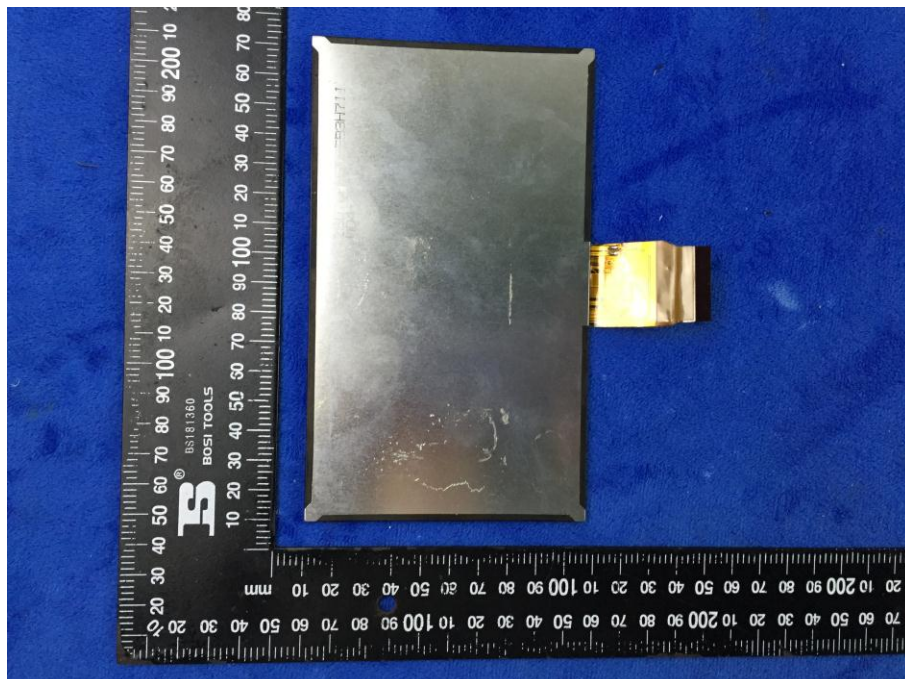
Annex B. EUT and Test Setup Photographs

Annex B.i. Photograph: EUT Internal Photo

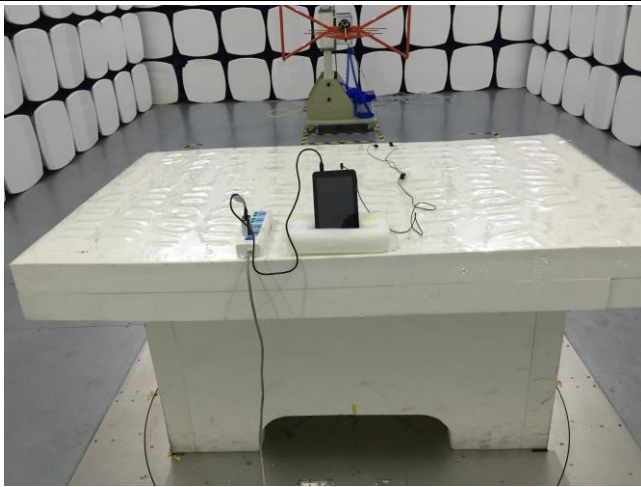
LCD – Front View



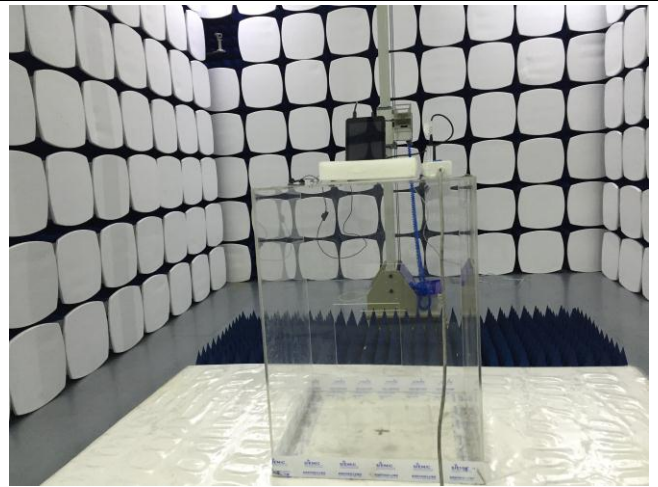
LCD – Rear View



Annex B.iii. Photograph: Test Setup Photo



Radiated Spurious Emissions Test Setup Below 1GHz

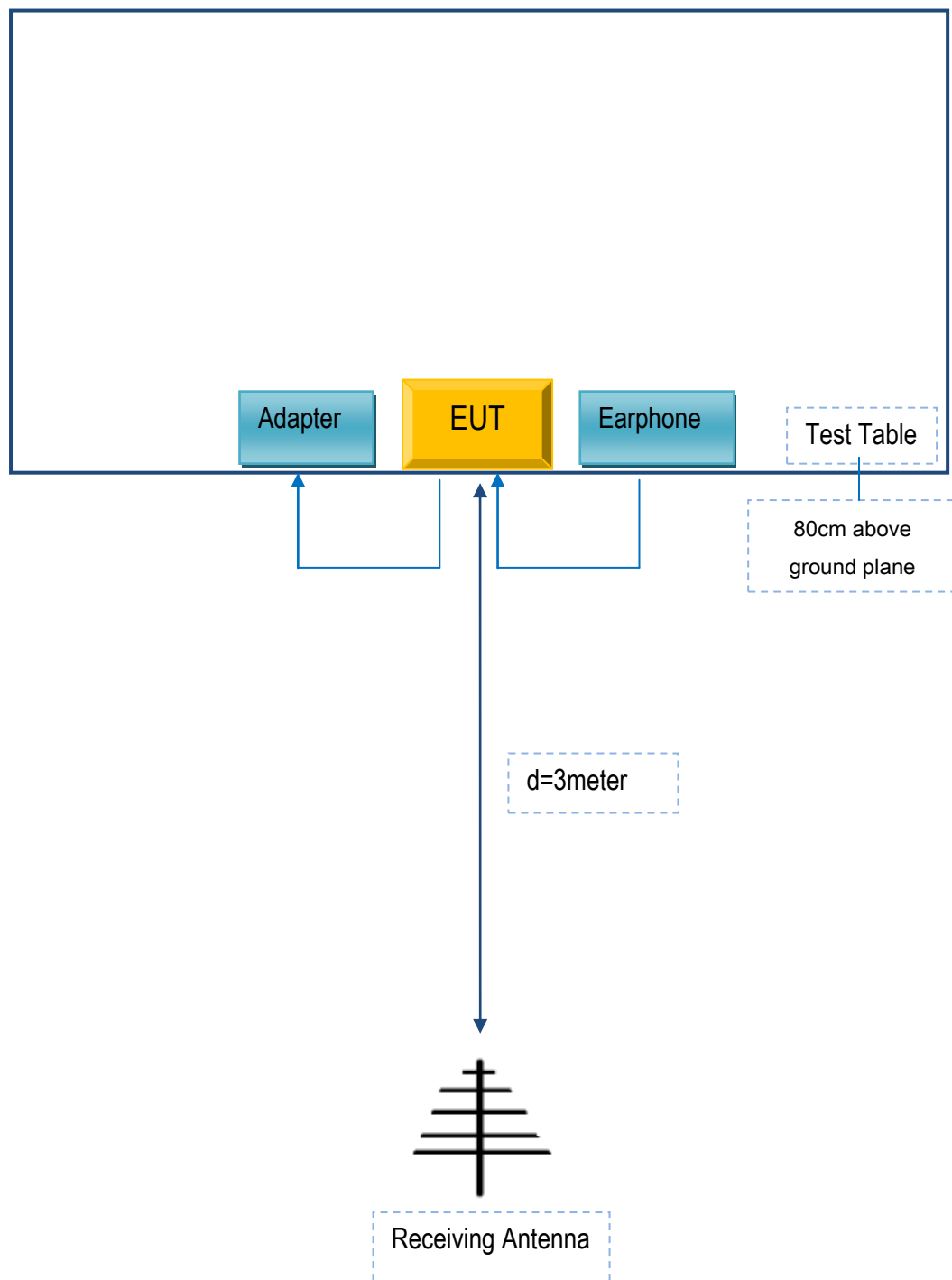


Radiated Spurious Emissions Test Setup Above
1GHz

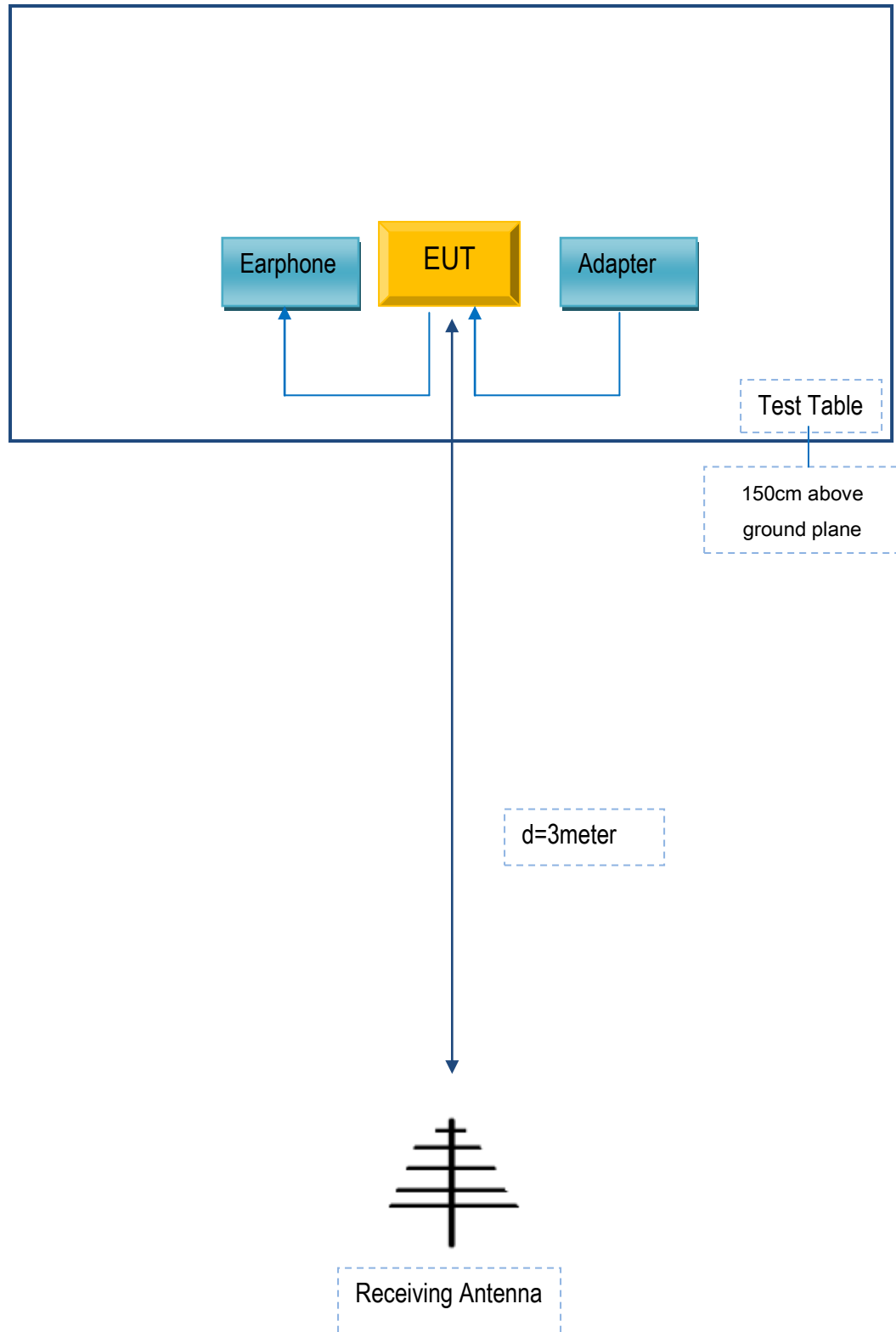
Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

Annex C.ii. TEST SET UP BLOCK

Block Configuration Diagram for Radiated Emissions (Below 1GHz) .



Block Configuration Diagram for Radiated Emissions (Above 1GHz) .



Annex C. ii. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Supporting Equipment:

Manufacturer	Equipment Description	Model	Serial No
AOC	Adapter	SC/5WM500100-US	A72S

Supporting Cable:

Cable type	Shield Type	Ferrite Core	Length	Serial No
USB Cable	Un-shielding	No	0.8m	A72S

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Annex D. User Manual / Block Diagram / Schematics / Partlist

Please see attachment

Annex E. DECLARATION OF SIMILARITY

Declaration Letter

(Original approval holder)

Company name	AOC
Address	14F-5, NO.258, Liancheng Rd., Zhonghe Dist., New Taipei City, Taiwan

Declare that the following company:

(New approval holder)

Company name	AOC
Address	14F-5, NO.258, Liancheng Rd., Zhonghe Dist., New Taipei City, Taiwan

is here to declare that PCB ,Antenna and Appearance shape , accessories are the same . The only difference is listed as below

(Difference from original approval holder's)

	Model	Difference
Original	A726	
New	A726	New screen

and apply for own approval or certificate.

Attestation:

Date:	Name: (this must be a person)	Function:	Signature: (or official company stamp)
2017-8-11	李尚諭 SY.Lee	Design Manager	SY.Lee