# RF TEST REPORT



Report No.: 17070251-FCC-R1 V1

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	April 02 to 12, 2017		
Issue Date	April 18, 2017		
Test Result	Pass Fail		
Equipment complied with the specification			
Equipment did not comply with the specification			
Loven	Luo	David Huang	
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 South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108

Phone: +86 0755 2601 4629801 Email: China@siemic.com.cn



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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
17070251-FCC-R1	NONE	Original	April 13, 2017
17070251-FCC-R1 V1	V1	Change the internal photos	April 18, 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

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES	
	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park	
Lab Address	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	



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4. Equipment under To	est (EUT) Information
Description of EUT:	Tablet PC
Main Model:	A726
Serial Model:	N/A
Date EUT received:	April 01, 2017
Test Date(s):	April 02 to 12, 2017
Equipment Category :	DSS
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:	6.939dBm
Number of Channels:	WIFI:802.11b/g/n(20M): 11CH WIFI:802.11n(40M): 7CH

Port: Earphone Port, USB Port , SD Card Port

Bluetooth: 79CH



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Adapter:

Model: SC/5WM500100-US

Input: AC 100-240V~50/60Hz;0.4A

Input Power:
Output: DC 5.0V,1000mA

Battery:

Spec: 3.7V,2500mAh(9.25Wh)

Trade Name : AOC

FCC ID: 2AEB5-A726



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# 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 Emissions& Restricted Band	Compliance	

#### **Measurement Uncertainty**

Emissions						
Test Item	Description	Uncertainty				
Radiated Emissions& Restricted Band	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				
-	-	-				



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# 6. Measurements, Examination And Derived Results

# 6.1 Radiated Emissions & Restricted Band

Temperature	24°C
Relative Humidity	55%
Atmospheric Pressure	1013mbar
Test date :	April 12, 2017
Tested By :	Loren Luo

#### Requirement(s):

Spec	Item	Requirement Applicable						
47CFR§15. 205,	a)	Except higher limit as specified else emissions from the low-power radio exceed the field strength levels specified the level of any unwanted emissions the fundamental emission. The tight edges						
§15.209,	u)	Frequency range (MHz)	Field Strength (μV/m)					
§15.247(d)		30 - 88	100					
		88 – 216	150					
		216 960	200					
		Above 960						
Test Setup		Ant. Tower  Support Units  Turn Table  Ground Plane  Test Receiver						
Procedure	<ol> <li>The EUT was switched on and allowed to warm up to its normal operating condition.</li> <li>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</li> </ol>							



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	EUT, changing the antenna polarization, and adjusting the antenna height in the						
		following manner:					
		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 Quasiy 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					
		IGHz.					
		e resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video					
		dwidth is 10Hz with Peak detection for Average Measurement as below at					
		frequency above 1GHz.					
	5.	Steps 2 and 3 were repeated for the next frequency point, until all selected					
		frequency points were measured.					
Remark							
Result	<b>☑</b> Pa	ass Fail					
Test Data	Yes	N/A					
Test Plot	Yes (S	See below) V/A					



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Test Mode: Bluetooth Mode

#### Below 1GHz



### Test Data

# Horizontal Polarity Plot @3m

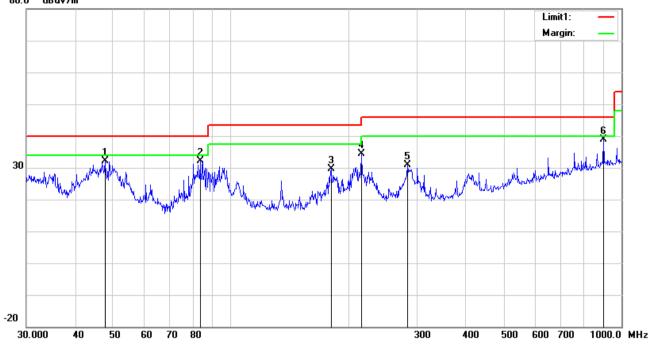
No.	P/L	Frequency	Reading	Detect	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degr
		(MHz)	(dBuV/m)	or	(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	ee ( )
		, ,	,		, ,	, ,	` ,	,	, ,		, ,	. ,
1	Н	47.8260	41.20	peak	9.36	22.34	0.78	29.00	40.00	-11.00	100	49
2	Н	81.4970	39.79	peak	7.66	22.41	1.06	26.10	40.00	-13.90	100	178
3	I	182.5592	40.51	peak	11.14	22.27	1.41	30.79	43.50	-12.71	100	222
4	I	287.9904	41.43	peak	13.07	22.29	1.77	33.98	46.00	-12.02	200	73
5	Н	406.0880	37.23	peak	15.82	22.00	2.02	33.07	46.00	-12.93	100	132
6	Н	900.1474	34.91	QP	22.50	20.88	3.07	39.60	46.00	-6.40	100	302



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### Below 1GHz





### Test Data

# Vertical Polarity Plot @3m

No.	P/L	Frequency	Reading	Detect	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degr
				or								<b>ee</b>
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	٧	47.6586	44.16	peak	9.43	22.34	0.78	32.03	40.00	-7.97	100	304
2	V	83.5222	45.67	peak	7.74	22.38	1.06	32.09	40.00	-7.91	200	15
3	V	180.6488	39.40	peak	11.04	22.25	1.37	29.56	43.50	-13.94	100	107
4	٧	216.0240	43.29	peak	11.88	22.35	1.59	34.41	46.00	-11.59	100	347
5	V	282.9852	38.58	peak	12.85	22.29	1.76	30.90	46.00	-15.10	100	68
6	٧	900.1474	34.10	peak	22.50	20.88	3.07	38.79	46.00	-7.21	100	218



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Test Mode: Bluetooth Mode

#### Below 1GHz



### Test Data

# Horizontal Polarity Plot @3m

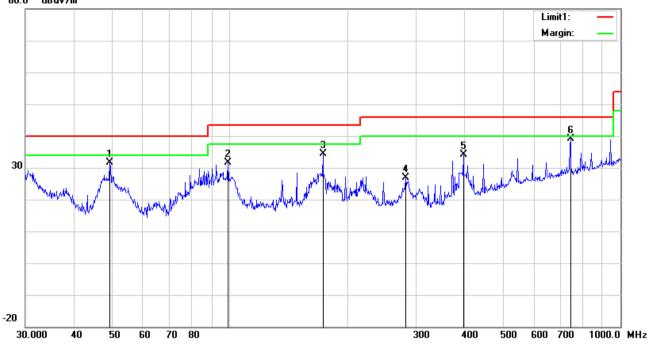
No.	P/L	Frequency	Reading	Detect or	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degr ee
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	Н	33.5624	28.61	peak	18.66	22.26	0.72	25.73	40.00	-14.27	100	66
2	Н	98.8326	36.63	peak	10.12	22.32	1.09	25.52	43.50	-17.98	100	278
3	I	197.8928	41.88	peak	11.98	22.37	1.54	33.03	43.50	-10.47	100	357
4	I	289.0021	36.57	peak	13.12	22.29	1.77	29.17	46.00	-16.83	100	41
5	Н	406.0880	39.81	peak	15.82	22.00	2.02	35.65	46.00	-10.35	100	323
6	Н	942.1305	33.64	QP	22.71	20.80	3.15	38.70	46.00	-7.30	100	151



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### Below 1GHz





### Test Data

# Vertical Polarity Plot @3m

No.	P/L	Frequency	Reading	Detect	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degr
	.,_			or								ее
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	V	49.3594	44.44	peak	8.68	22.37	0.79	31.54	40.00	-8.46	100	28
2	V	98.8326	42.86	peak	10.12	22.32	1.09	31.75	43.50	-11.75	100	130
3	V	173.2051	43.64	peak	11.54	22.26	1.36	34.28	43.50	-9.22	100	240
4	٧	281.9946	34.57	peak	12.81	22.29	1.76	26.85	46.00	-19.15	100	341
5	V	396.2415	38.58	peak	15.62	22.02	2.01	34.19	46.00	-11.81	100	267
6	V	744.8661	36.85	peak	20.74	21.27	2.84	39.16	46.00	-6.84	100	153



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### Above 1GHz

Test Mode: Transmitting Mode

### Low Channel (2402 MHz) ( GFSK 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)
4804	39.54	AV	V	33.67	6.86	32.66	47.41	54	-6.59
4804	39.97	AV	Н	33.67	6.86	32.66	47.84	54	-6.16
4804	49.03	PK	V	33.67	6.86	32.66	56.9	74	-17.1
4804	45.7	PK	Н	33.67	6.86	32.66	53.57	74	-20.43
17810	24.06	AV	V	45.03	11.21	32.38	47.92	54	-6.08
17810	24.59	AV	Н	45.03	11.21	32.38	48.45	54	-5.55
17810	40.5	PK	V	45.03	11.21	32.38	64.36	74	-9.64
17810	41.55	PK	Н	45.03	11.21	32.38	65.41	74	-8.59

### Middle Channel (2441 MHz) ( GFSK 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)
4882	39.55	AV	V	33.71	6.95	32.74	47.47	54	-6.53
4882	38.79	AV	Н	33.71	6.95	32.74	46.71	54	-7.29
4882	49.28	PK	V	33.71	6.95	32.74	57.2	74	-16.8
4882	47.26	PK	Н	33.71	6.95	32.74	55.18	74	-18.82
17816	24.57	AV	V	45.15	11.18	32.41	48.49	54	-5.51
17816	23.39	AV	Н	45.15	11.18	32.41	47.31	54	-6.69
17816	41.38	PK	V	45.15	11.18	32.41	65.3	74	-8.7
17816	41.21	PK	Н	45.15	11.18	32.41	65.13	74	-8.87



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#### High Channel (2480 MHz) ( GFSK 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)
4960	36.97	AV	V	33.9	6.76	32.74	44.89	54	-9.11
4960	37.79	AV	Н	33.9	6.76	32.74	45.71	54	-8.29
4960	47.95	PK	V	33.9	6.76	32.74	55.87	74	-18.13
4960	47.17	PK	Н	33.9	6.76	32.74	55.09	74	-18.91
17825	23.1	AV	V	45.22	11.35	32.38	47.29	54	-6.71
17825	23.93	AV	Н	45.22	11.35	32.38	48.12	54	-5.88
17825	42.87	PK	V	45.22	11.35	32.38	67.06	74	-6.94
17825	41.19	PK	Н	45.22	11.35	32.38	65.38	74	-8.62

#### Note:

- 1, The testing has been conformed to 10\*2480MHz=24,800MHz
- 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.



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### Above 1GHz

Test Mode: Transmitting Mode

### Low Channel (2402 MHz) ( GFSK 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)
4804	39.64	AV	V	33.67	6.86	32.66	47.51	54	-6.49
4804	39.02	AV	Н	33.67	6.86	32.66	46.89	54	-7.11
4804	48.43	PK	V	33.67	6.86	32.66	56.3	74	-17.7
4804	45.34	PK	Н	33.67	6.86	32.66	53.21	74	-20.79
17808	24.01	AV	V	45.03	11.21	32.38	47.87	54	-6.13
17808	24.62	AV	Н	45.03	11.21	32.38	48.48	54	-5.52
17808	40.37	PK	V	45.03	11.21	32.38	64.23	74	-9.77
17808	42.45	PK	Н	45.03	11.21	32.38	66.31	74	-7.69

### Middle Channel (2441 MHz) ( GFSK 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)
4882	39.32	AV	V	33.71	6.95	32.74	47.24	54	-6.76
4882	38.67	AV	Н	33.71	6.95	32.74	46.59	54	-7.41
4882	48.46	PK	V	33.71	6.95	32.74	56.38	74	-17.62
4882	47.2	PK	Н	33.71	6.95	32.74	55.12	74	-18.88
17811	24.5	AV	V	45.15	11.18	32.41	48.42	54	-5.58
17811	22.97	AV	Н	45.15	11.18	32.41	46.89	54	-7.11
17811	40.46	PK	V	45.15	11.18	32.41	64.38	74	-9.62
17811	41.16	PK	Н	45.15	11.18	32.41	65.08	74	-8.92



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#### High Channel (2480 MHz) ( GFSK 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)
4960	38.25	AV	V	33.9	6.76	32.74	46.17	54	-7.83
4960	38.73	AV	Н	33.9	6.76	32.74	46.65	54	-7.35
4960	48.18	PK	V	33.9	6.76	32.74	56.1	74	-17.9
4960	47.3	PK	Н	33.9	6.76	32.74	55.22	74	-18.78
17823	24.05	AV	V	45.22	11.35	32.38	48.24	54	-5.76
17823	24.29	AV	Н	45.22	11.35	32.38	48.48	54	-5.52
17823	42.38	PK	V	45.22	11.35	32.38	66.57	74	-7.43
17823	41.24	PK	Н	45.22	11.35	32.38	65.43	74	-8.57

#### Note:

- 1, The testing has been conformed to 10\*2480MHz=24,800MHz
- 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.



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# 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	>
Positioning Controller	UC3000	MF780208282	11/18/2016	11/17/2017	>
OPT 010 AMPLIFIER (0.1-1300MHz)	8447E	2727A02430	08/31/2016	08/30/2017	<b>(</b>
Microwave Preamplifier (1 ~ 26.5GHz)	8449B	3008A02402	03/23/2017	03/22/2018	<b>&gt;</b>
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/20/2016	09/19/2017	>
Double Ridge Horn Antenna (1 ~18GHz)	AH-118	71283	09/23/2016	09/22/2017	<b>(</b>
Universal Radio Communication Tester	CMU200	121393	09/24/2016	09/23/2017	<b>\</b>



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# Annex B. EUT And Test Setup Photographs

#### Photograph: EUT External Photo Annex B.i.

Screen 1





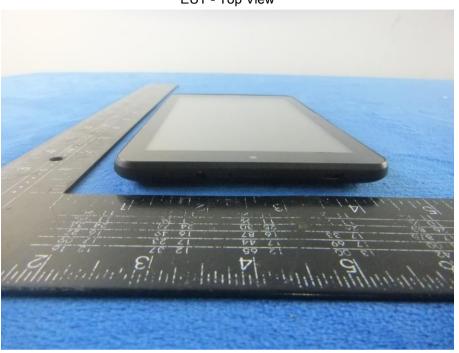
**EUT - Rear View** 



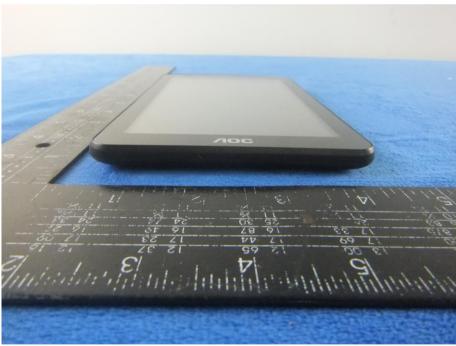


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EUT - Top View



EUT - Bottom View





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#### EUT - Left View



EUT - Right View





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#### **EUT - Front View**



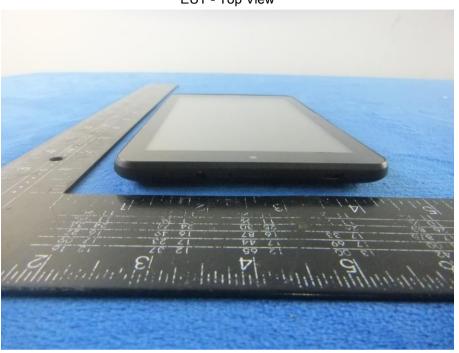
**EUT - Rear View** 





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EUT - Top View



EUT - Bottom View





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#### EUT - Left View



EUT - Right View





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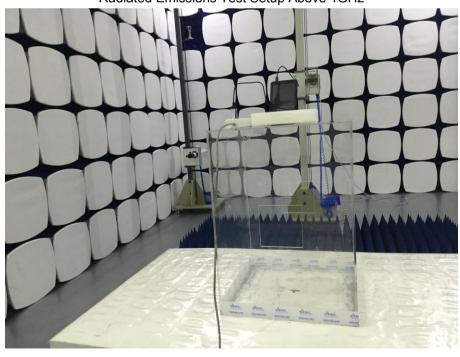
# Annex B.iii. Photograph: Test Setup Photo

### Screen 1



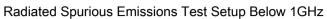


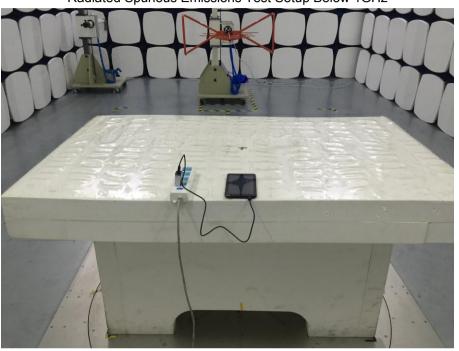
Radiated Emissions Test Setup Above 1GHz



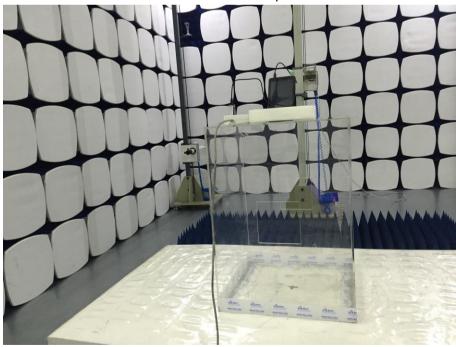


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Radiated Emissions Test Setup Above 1GHz





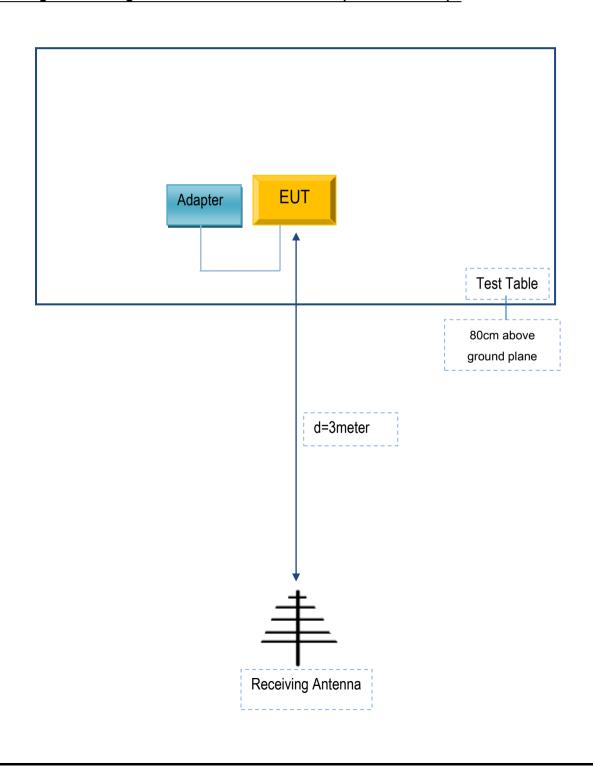
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# Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

### Annex C.ii. TEST SET UP BLOCK

Screen 1& Screen 2

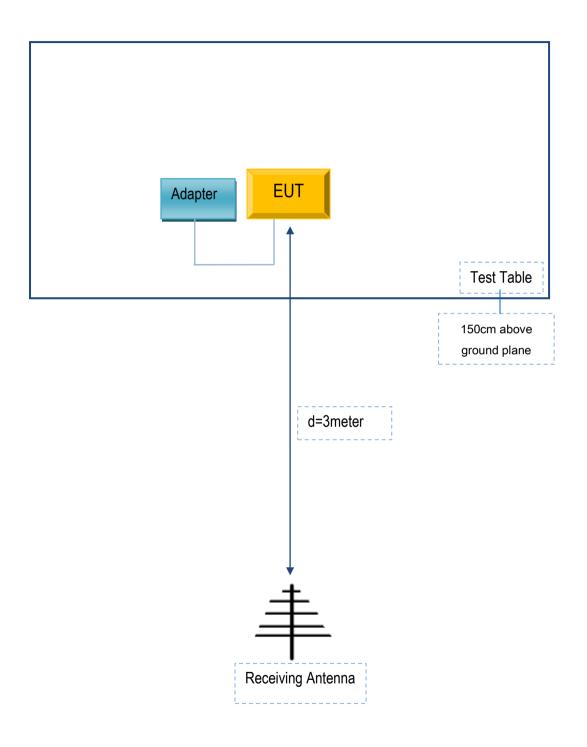
Block Configuration Diagram for Radiated Emissions (Below 1GHz).





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





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### Annex C. il. 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



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# Annex E. DECLARATION OF SIMILARITY