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APPLICATION FOR VERIFICATION On Behalf of IMC INTERNATIONAL INC.

7 inch 3G TABLET Model No.: ROAD XT-71BG

FCC ID: 2ACI7-ROADXT-71BG

Prepared for : IMC INTERNATIONAL INC.

Address : 28E Jingang, xixiang, Bao an District, Shenzhen,

Guangdong Province, China

Prepared by : Accurate Technology Co., Ltd.

Address : F1, Bldg. A&D, Changyuan New Material Port, Keyuan

Rd., Science & Industry Park, Nanshan District, Shenzhen

518057, P.R. China

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Report No. : ATE20140929

Date of Test : Jun 04, 2014- Jun 25, 2014

Date of Report: Jun 25, 2014



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5.2.



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Test Report Declaration

Applicant : IMC INTERNATIONAL INC.

Manufacturer : IMC INTERNATIONAL INC.

EUT Description : 7 inch 3G TABLET

(A) MODEL NO.: ROAD XT-71BG

(B) Trade Name.: LOGIC

(C) POWER SUPPLY: DC 3.7V (Powered by battery) or AC 120V/60Hz

(Powered by adapter)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart B Class B & ANSI C63.4: 2009

The device described above is tested by Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both radiated and conducted emissions. The measurement results are contained in this test report and Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Accurate Technology Co., Ltd.

Date of Test:	Jun 04, 2014-Jun 25, 2014
Prepared by :	7 in Zharg
·	(Tim.zhang, Engineer)
Approved & Authorized Signer :	Lemil
	(Sean, Manager)



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1. TEST RESULTS SUMMARY

Test Items	Test Standard	Test Results
Power Line Conducted Emission	FCC Part 15 Subpart B	Pass
Radiated Emission	FCC Part 15 Subpart B	Pass



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2. GENERAL INFORMATION

2.1.Product of Device (EUT)

Product : 7 inch 3G TABLET Model No. : ROAD XT-71BG

Applicant : IMC INTERNATIONAL INC.

Address : 28E Jingang, xixiang, Bao an District, Shenzhen,

Guangdong Province, China

Manufacturer : IMC INTERNATIONAL INC.

Address : 28E Jingang, xixiang, Bao an District, Shenzhen,

Guangdong Province, China

Power Supply : DC 3.7V (Powered by Battery)

AC 120V/60Hz (Powered by Adapter)

Adapter : Model:DY-050150

Input: AC 100-240V 50/60Hz

Output: 5.0V 1.5A

Date of sample received : Jun 04, 2014

Date of Test : Jun 04, 2014-Jun 25, 2014

2.2. Accessory and Auxiliary Equipment

N/A



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2.3. Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen, May 10, 2004

Listed by FCC

The Registration Number is 253065

Listed by FCC

The Registration Number is 752051

Listed by Industry Canada

The Registration Number is 5077A-1

Listed by Industry Canada

The Registration Number is 5077A-2

Accredited by China National Accreditation Committee for

Laboratories

The Certificate Registration Number is L3193

Name of Firm : Accurate Technology Co., Ltd.

Site Location : F1, Bldg. A&D, Changyuan New Material Port, Keyuan

Rd., Science & Industry Park, Nanshan District, Shenzhen

518057, P.R. China

2.4. Measurement Uncertainty

Conducted emission expanded uncertainty : U=2.23dB, k=2 Power disturbance expanded uncertainty : U=2.92dB, k=2

Radiated emission expanded uncertainty :

U=3.08dB, k=2

(9kHz-30MHz)

Radiated emission expanded uncertainty

U=4.42dB, k=2

(30MHz-1000MHz)

Radiated emission expanded uncertainty

U=4.06dB, k=2

(Above 1GHz)



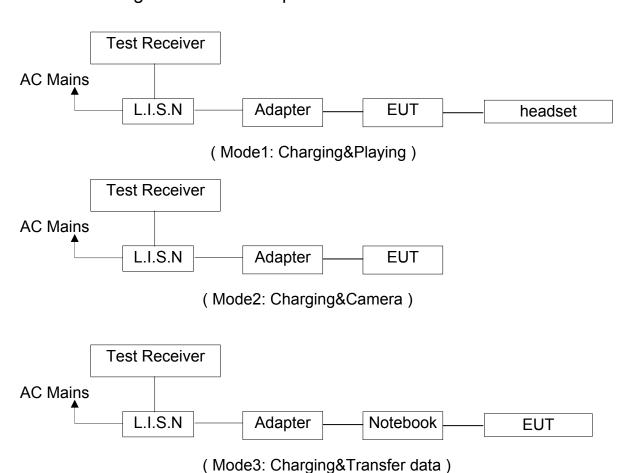
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3. POWER LINE CONDUCTED MEASUREMENT

3.1. For Power Line Conducted Emission

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval				
1.	Test Receiver	Rohde & Schwarz	ESCS30	100307	Jan. 11, 2014	1 Year				
2.	L.I.S.N.	Schwarzbeck	NLSK8126	8126431	Jan. 11, 2014	1 Year				
3.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	Jan. 11, 2014	1 Year				
1	50Ω Coaxial	Anritsu Corp	MP59B	620028393	Jan. 11, 2014	1 Year				
4.	Switch			3						
Expanded Uncertainty: U= 2.23dB, k=2										

3.2. Block Diagram of Test Setup





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3.3. Power Line Conducted Emission Measurement Limits (Class B)

Frequency	Limits dB(μV)					
MHz	Quasi-peak Level	Average Level				
0.15—0.50	66—56*	56—46*				
0.50—5.00	56	46				
5.00—30.0	60	50				

Notes: 1. *Decreasing linearly with logarithm of frequency.

3.4. Configuration of EUT on Measurement

The equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 3.2.
- 3.5.2. Turn on the power of all equipment.
- 3.5.3.Let the EUT work in test mode and measure it.

3.6. Test Procedure

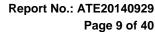
The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 500hm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2009 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7. Power Line Conducted Emission Measurement Results **PASS**.

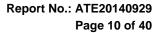
^{2.} The lower limit shall apply at the transition frequencies.





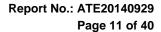
The frequency range from 150kHz to 30MHz is checked.

Test mode : Cha	arging+Pl	aying					
MEASUREMENT	RESULT	: "IMC-	F02_fi	.n"			
6/7/2014 9:23							
Frequency MHz	Level dBµV		Limit dBµV		Detector	Line	PE
0.517062 0.933537 13.169925	36.20 38.40 32.20	10.7 10.8 11.3	56 56 60	19.8 17.6 27.8	QP QP QP	L1 L1 L1	GND GND GND
MEASUREMENT	RESULT	: "IMC-	F02_fi	.n2"			
6/7/2014 9:23							
Frequency MHz	Level dBµV				Detector	Line	PE
0.191358	35.40	10.5	54	18.6	AV	L1	GND
0.937272 25.549338	27.60 23.60	10.8 11.5	46 50	18.4 26.4	AV AV	$_{ m L1}$	GND GND
201013000	20.00	11.0		2011			0112
MEASUREMENT	RESULT	: "IMC-	F01_fi	in"			
6/7/2014 9:21							
Frequency MHz	Level dBµV				Detector	Line	PE
0.192124	44.90	10.5	64	19.0	QP	N	GND
0.933537 13.222605	38.30	10.8 11.3	56 60	17.7 24.0	OP	N N	GND GND
13.222003	30.00	11.5	00	24.0	Δt	IA	GND
MEASUREMENT	RESULT	: "IMC-	F01_fi	.n2"			
6/7/2014 9:21	.AM						
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.190596			54			N	GND
0.933537 26.273361	27.40 24.80	10.8 11.5	46 50	18.6 25.2		N N	GND GND





Test mode : Cha	arging+ Ca	amera					
MEASUREMENT	RESULT	: "IMC-	F05_fi	n"			
6/7/2014 3:34 Frequency MHz			Limit dBµV		Detector	Line	PE
0.447846 2.743053 5.717910	40.60		57 56 60	15.4	ÕР	L1 L1 L1	GND GND GND
MEASUREMENT	RESULT	: "IMC-	F05_fi	.n2"			
6/7/2014 3:34 Frequency MHz	Level		Limit dBµV		Detector	Line	PE
0.519130 2.798355 5.879946	29.20 28.60 25.90	11.0	46 46 50	17.4	AV	L1 L1 L1	GND GND GND
MEASUREMENT	RESULT:	"IMC-	F06_fi	.n"			
6/7/2014 3:37	'PM						
Frequency MHz	Level dBµV		Limit dBµV		Detector	Line	PE
0.451436 1.761133 5.279139			57 56 60		Q̈́Ρ	N N N	GND GND GND
MEASUREMENT	RESULT:	: "IMC-	F06_fi	.n2"			
6/7/2014 3:37 Frequency MHz			Limit dBµV	Margin dB	Detector	Line	PE
0.464229 2.843398 6.143900	28.30 26.00 24.20	10.7 11.0 11.2	47 46 50		AV AV AV	N N N	GND GND GND





Test mode : Cha	arging+ Tr	ansfer d	ata				
MEASUREMENT	RESULT	: "IMC-	V002_f	in"			
6/12/2014 10: Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.158622 2.854771 5.279139	55.40 31.90 29.80	11.0	66 56 60	24.1	QP	L1 L1 L1	GND GND GND
MEASUREMENT	RESULT	: "IMC-	V002_f	in2"			
6/12/2014 10: Frequency MHz	Level	Transd dB			Detector	Line	PE
0.160533 2.074313 5.342742	39.60 25.30 24.10	10.5 11.0 11.2	46	20.7	AV	L1 L1 L1	GND GND GND
MEASUREMENT	RESULT:	"IMC-	V001_f	in"			
6/12/2014 10: Frequency		Trange	Timi+	Margin	Detector	Tino	PE
Frequency MHz	dBµV		dBµV	_	Detector	Tine	PL
0.166406 3.598543 5.237158	28.10		56		QР	N N N	GND GND GND
MEASUREMENT	RESULT:	"IMC-	V001_f	in2"			
6/12/2014 10: Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.163769 2.765041 5.364113	41.40 24.60 22.10	11.0	55 46 50	21.4	AV	N N N	GND GND GND

Note: During the test, Let the EUT and PC maintain the status of transfer data to each other

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.

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CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: 7" 3G TABLET M/N:ROAD XT-71BG

Manufacturer: IMC

Operating Condition: Charging&Playing Test Site: 1#Shielding Room

Operator: Alen

Test Specification: N 120V/60Hz

Comment: Report No:ATE20140929 Start of Test: 6/7/2014 / 9:19:16AM

SCAN TABLE: "V 150K-30MHz fin"

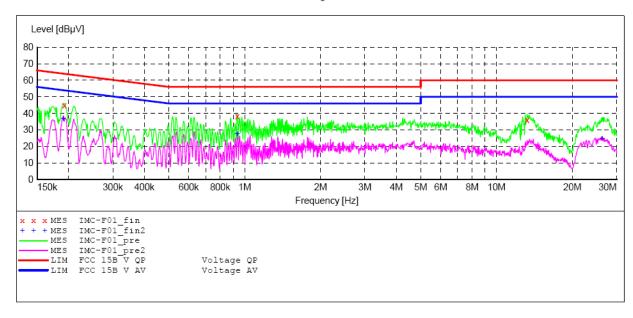
Short Description: __SUB_STD_VTERM2 1.70

Start Stop Step Detector Meas. IF Transducer

Frequency Frequency Width Time Bandw.

150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "IMC-F01 fin"

6/7/2014	9:21AM						
Freque	ncy Leve	el Transd	l Limit	Margin	Detector	Line	PΕ
	MHz dBp	ıV dE	dBµV	dB			
0.192	124 44.9	0 10.5	64	19.0	QP	N	GND
0.933	537 38.3	10.8	56	17.7	QP	N	GND
13.222	605 36.0	0 11.3	60	24.0	QP	N	GND

MEASUREMENT RESULT: "IMC-F01 fin2"

6/7/2014 9:2	1AM						
Frequency	Level	Transd	Limit	Margin	Detector	Line	PΕ
MHz	dΒμV	dB	dΒμV	dB			
0.190596	36.90	10.5	54	17.1	AV	N	GND
0.933537	27.40	10.8	46	18.6	AV	N	GND
26.273361	24.80	11.5	50	25.2	AV	N	GND

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CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: 7" 3G TABLET M/N:ROAD XT-71BG

Manufacturer: IMC

Operating Condition: Charging&Playing Test Site: 1#Shielding Room

Operator: Alen

Test Specification: L 120V/60Hz

Report No:ATE20140929 Comment: Start of Test: 6/7/2014 / 9:21:47AM

SCAN TABLE: "V 150K-30MHz fin"

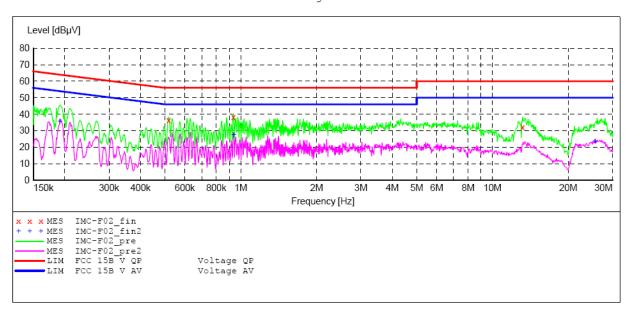
_SUB_STD_VTERM2 1.70 Short Description:

Stop Step Start Detector Meas. ΙF Transducer

Width Time Bandw.

Frequency Frequency 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "IMC-F02 fin"

6.	/7/2014 9:23	AM						
	Frequency MHz	Level dBµV		Limit dBµV	Margin dB	Detector	Line	PE
	0.517062	36.20	10.7	56	19.8	QP	L1	GND
	0.933537	38.40	10.8	56	17.6	QP	L1	GND
	13 169925	32 20	11 3	60	27.8	ΩP	T.1	CND

MEASUREMENT RESULT: "IMC-F02 fin2"

6/7/2014 9	9:23AM						
Frequenc	cy Level	Transd	Limit	Margin	Detector	Line	PΕ
ME	łz dΒμV	dB	dΒμV	dB			
0.19135	35.40	10.5	54	18.6	AV	L1	GND
0.93727	72 27.60	10.8	46	18.4	AV	L1	GND
25.54933	38 23.60	11.5	50	26.4	AV	L1	GND

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CONDUCTED EMISSION STANDARD FCC PART15B

7" 3G TABLET M/N:ROAD XT-71BG EUT:

Manufacturer: IMC Operating Condition: Camera

Test Site: 1#Shielding Room

Operator: Alen

Test Specification: N 120V/60Hz

Report NO:ATE2014929 Comment: Start of Test: 6/7/2014 / 3:35:28PM

SCAN TABLE: "V 150K-30MHz fin"

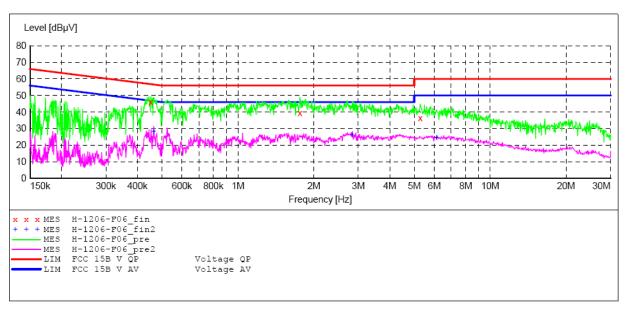
_SUB_STD_VTERM2 1.70 Short Description:

Start Stop Step IF Detector Meas. Transducer

Frequency Frequency Width Time Bandw.

NSLK8126 2008 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz

Average



MEASUREMENT RESULT: "IMC-F06 fin"

6/7/2014 3:37PM Frequency Level Transd Limit Margin Detector Line PΕ MHz dBuV dΒ dΒμV dΒ 0.451436 46.00 10.7 57 10.8 OP N GND 1.761133 39.50 16.5 QP 11.0 56 N GND 5.279139 QΡ 36.50 11.2 60 23.5 GND

MEASUREMENT RESULT: "IMC-F06 fin2"

6/7/20	14 3:37E	M						
Fre	quency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dΒμV	dB	dΒμV	dB			
0.	464229	28.30	10.7	47	18.3	AV	N	GND
2.	843398	26.00	11.0	46	20.0	AV	N	GND
6.	143900	24.20	11.2	50	25.8	AV	N	GND

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CONDUCTED EMISSION STANDARD FCC PART15B

EUT: 7" 3G TABLET M/N:ROAD XT-71BG

Manufacturer: IMC Operating Condition: Camera

Test Site: 1#Shielding Room

Operator: Alen

Test Specification: L 120V/60Hz

Comment: Report NO:ATE2014929 Start of Test: 6/7/2014 / 3:33:00PM

SCAN TABLE: "V 150K-30MHz fin"

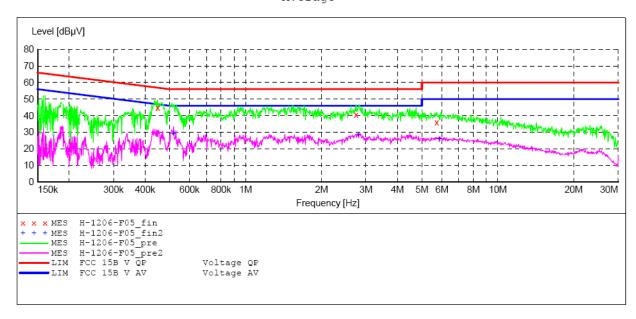
Short Description: _SUB_STD_VTERM2 1.70

Start Stop Step Detector Meas. IF Transducer

Frequency Frequency Width Time Bandw.

150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "IMC-F05 fin"

6/7/2014	3:34PM						
Freque	ncy Le	vel Transc	l Limit	Margin	Detector	Line	PE
-	MHz d	lBµV dE	dBµV	dB			
0.447	846 44	.80 10.7	57	12.1	QP	L1	GND
2.743	053 40	.60 11.0	56	15.4	QP	L1	GND
5.717	910 36	.10 11.2	60	23.9	QP	L1	GND

MEASUREMENT RESULT: "IMC-F05 fin2"

6/	7/2014 3:34	PM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dΒμV	dB	dΒμV	dB			
	0.519130	29.20	10.7	46	16.8	AV	L1	GND
	2.798355	28.60	11.0	46	17.4	AV	L1	GND
	5.879946	25.90	11.2	50	24.1	AV	L1	GND

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CONDUCTED EMISSION STANDARD FCC PART 15 B

7" 3G TABLET M/N:ROAD XT-71BG EUT:

Manufacturer: IMC

Operating Condition: Transfer data Test Site: 1#Shielding Room

Operator: Alen

Test Specification: N 120V/60Hz

Report No:ATE20140929 Comment: Start of Test: 6/12/2014 / 10:40:25AM

SCAN TABLE: "V 150K-30MHz fin"

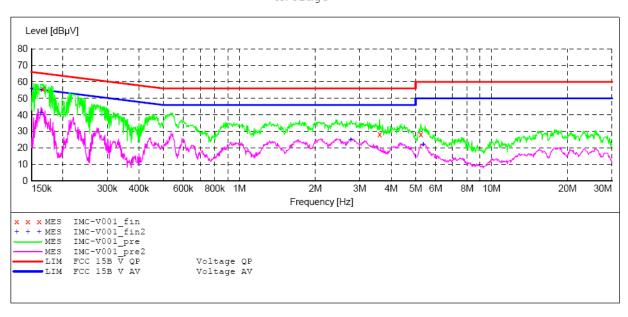
_SUB_STD_VTERM2 1.70 Short Description:

Step Stop ΙF Start Detector Meas. Transducer

Width Time Bandw.

Frequency Frequency 150.0 kHz 30.0 MHz NSLK8126 2008 4.5 kHz QuasiPeak 1.0 s 9 kHz

Average



PΕ

MEASUREMENT RESULT: "IMC-V001 fin"

6/12/2014	10:5	5AM				
-	cy Hz		Transd dB		Detector	Line

0.166406 55.90 10.5 65 9.2 QP N GND 3.598543 28.10 11.1 56 27.9 QP N GND 5.237158 28.20 11.2 60 31.8 QP N GND		MHz	dΒμV	dВ	dΒμV	dB			
	3.59	8543	28.10	11.1	56	27.9	ÕР	N	GND

MEASUREMENT RESULT: "IMC-V001 fin2"

.4 IU:5	PIAC						
iency	Level	Transd	Limit	Margin	Detector	Line	PΕ
MHz	dBuV	dB	dBuV	dB			
3769	41.40	10.5	55	13.9	AV	N	GND
5041	24 60	11 0	16	21 /	7\77	NT	GND
3041	24.00	11.0	40	Z I • 4	AV	IV	GND
4113	22.10	11.2	50	27.9	AV	N	GND
	ency MHz 33769 55041	MHZ dBμV 53769 41.40 55041 24.60	lency Level Transd dB μV dB 3769 41.40 10.5 55041 24.60 11.0	lency Level Transd Limit MHz dBμV dB dBμV 33769 41.40 10.5 55 55041 24.60 11.0 46	Lency Level Transd Limit Margin MHz dBμV dB dBμV dB 33769 41.40 10.5 55 13.9 55041 24.60 11.0 46 21.4	Lency Level Transd Limit Margin Detector MHz dBμV dB dBμV dB 33769 41.40 10.5 55 13.9 AV 35041 24.60 11.0 46 21.4 AV	lency Level Transd Limit Margin Detector Line MHz dBμV dB dB dB N

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CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: 7" 3G TABLET M/N:ROAD XT-71BG

Manufacturer: IMC

Operating Condition: Transfer data
Test Site: 1#Shielding Room

Operator: Alen

Test Specification: L 120V/60Hz

Comment: Report No:ATE20140929 Start of Test: 6/12/2014 / 10:56:08AM

SCAN TABLE: "V 150K-30MHz fin"

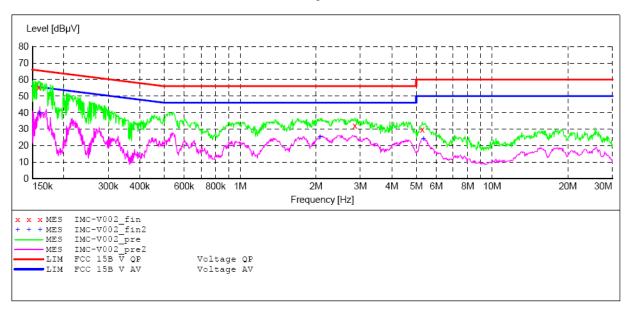
Short Description: __SUB_STD VTERM2 1.70

Start Stop Step Detector Meas. IF Transducer

Frequency Frequency Width Time Bandw.

150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "IMC-V002 fin"

6/12/2014	10:58AM						
Frequer	ncy Lev	vel Trans	d Limit	Margin	Detector	Line	PΕ
1	MHz di	BµV di	B dBµV	dB			
0.1586	622 55.	.40 10.	5 66	10.1	QP	L1	GND
2.8547	771 31.	.90 11.	0 56	24.1	QP	L1	GND
5.2791	139 29.	.80 11.	2 60	30.2	OP	L1	GND

MEASUREMENT RESULT: "IMC-V002 fin2"

6/12/2014 10:	:58AM						
Frequency	Level	Transd	Limit	Margin	Detector	Line	PΕ
MHz	dBuV	dB	dBuV	dB			
	1		'				
0.160533	39.60	10.5	55	15.8	AV	L1	GND
2.074313	25.30	11.0	46		AV	L1	GND
5.342742	24.10	11.2	50	25.9	AV	L1	GND



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4. RADIATED EMISSION MEASUREMENT

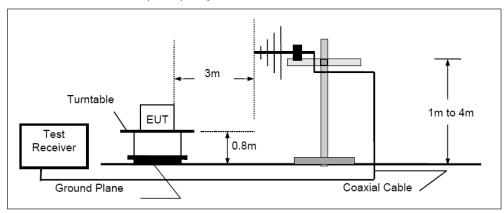
4.1. For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.
						Interval
1.	Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 11, 2014	1 Year
2.	Test Receiver	Rohde &	ESCS30	100307	Jan. 11, 2014	1 Year
		Schwarz				
3.	Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 15, 2014	1 Year
4.	Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 15, 2014	1 Year
5.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 15, 2014	1 Year
6.	50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	Jan. 11, 2014	1 Year
12.	Pre-Amplifier	Rohde & Schwarz	CBLU11835	3791	Jan. 11, 2014	1 Year
			40-01			

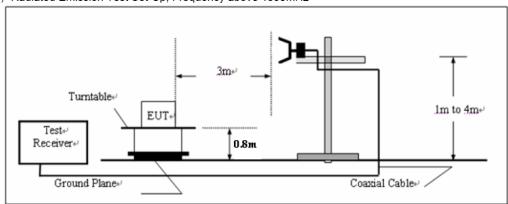
Expanded Uncertainty (9kHz-30MHz): U=3.08dB, k=2 Expanded Uncertainty (30MHz-1000MHz): U=4.42dB, k=2 Expanded Uncertainty (Above 1GHz): U=4.06dB, k=2

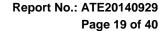
4.2. TEST CONFIGURATION

(A) Radiated Emission Test Set-Up, Frequency below 1000MHz



(B) Radiated Emission Test Set-Up, Frequency above 1000MHz

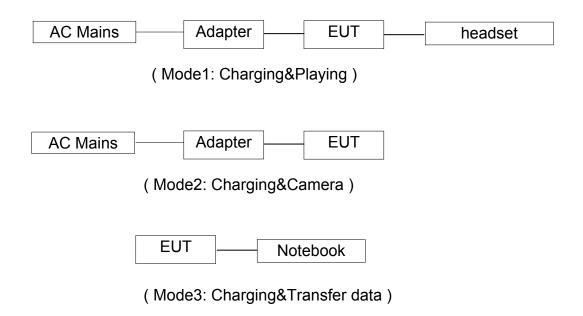




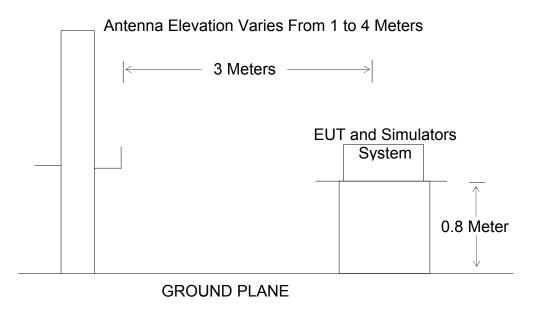


4.3. Block Diagram of Test Setup

4.3.1. Block diagram of connection between the EUT and simulators



4.3.2. Anechoic Chamber Test Setup Diagram





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4.4.Radiated Emission Limit (Class B)

Frequency	Distance	Field Strengths Limit		
MHz	Meters	μV/m	dB(μV/m)	
30-88	3	100	40.0	
88-216	3	150	43.5	
216-960	3	200	46.0	
960-1000	3	500	54.0	

Remark: (1) Emission level dB (μ V) = 20 log Emission level μ V/m.

- (2)The smaller limit shall apply at the cross point between two frequency bands.
- (3)Distance is the distance in meters between the measuring instrument antenna and the closest point of any part of the device or system.

4.5.EUT Configuration on Measurement

The equipment is installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.6. Operating Condition of EUT

- 4.6.1. Setup the EUT and simulator as shown as Section 4.2.
- 4.6.2. Turn on the power of all equipment.
- 4.6.3.Let the EUT work in test mode and measure it.

4.7.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated emission measurement.

For emission frequencies measured below 1GHz and above 1GHz, set the spectrum analyzer on a 100KHz and 1MHz resolution bandwidth respectively in the test process.

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	Peak	100kHz	100kHz
Above 1000	Peak	1MHz	1MHz
Above 1000	Average	1MHz	10Hz

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Sample Calculation Example

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. For the limit is employed average value, therefore the peak value can be transferred to average value by subtracting the duty factor. The basic equation with a sample calculation is as follows:

Peak = Reading + Corrected Factor

where

Corr. Factor = Antenna Factor + Cable Factor - Amplifier Gain (if any)

And the average value is

Average = Peak Value + Duty Factor or Set RBW = 1MHz, VBW = 10Hz.

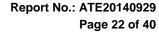
Note:

If the measured frequencies are fall in the restricted frequency band, the limit employed must be quasi peak value when frequencies are below or equal to 1GHz. And the measuring instrument is set to quasi peak detector function.

4.8. Radiated Emission Noise Measurement Result

PASS.

Test mode : Charging+ Playing											
	Belov	v 1G									
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			
	1	144.8418	61.89	-23.69	38.20	43.50	-5.30	QP			
	2	204.9550	59.32	-20.05	39.27	43.50	-4.23	QP			
11-21-1	3	400.4318	57.45	-15.63	41.82	46.00	-4.18	QP			
Horizontal	Abov	e 1G									
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margir (dB)	Detector			
	1	1004.840	55.61	-10.78	44.83	74.00	-29.17	' peak			
	2	1085.544	58.38	-10.61	47.77	74.00	-26.23	B peak			
	3	1462.032	50.32	-9.79	40.53	74.00	-33.47	' peak			
	Belov	v 1G		•			<u> </u>				
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			
	1	87.7248	57.68	-21.62	36.06	40.00	-3.94	QP			
	2	145.8611	63.35	-23.72	39.63	43.50	-3.87	QP			
Martinal	3	204.9551	58.52	-20.05	38.47	43.50	-5.03	QP			
Vertical	Abov	e 1G						<u> </u>			
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			
	1	1085.544	56.73	-10.61	46.12	74.00	-27.88	peak			
	2	1099.611	58.21	-10.58	47.63	74.00	-26.37	peak			
	3	1128.295	54.82	-10.52	44.30	74.00	-29.70	peak			





Test mode: Charging+ Camera Below 1G Freq. Reading Factor Result Limit Margin Detector No. (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) QΡ 1 145.8611 59.36 -23.72 35.64 43.50 -7.862 199.9856 58.97 -20.24 QΡ 38.73 43.50 -4.773 399.0302 55.32 -15.64 39.68 46.00 -6.32QΡ Horizontal Above 1G Freq. Reading Factor Result Limit Margin No. Detector (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) 1 1009.703 58.71 -10.78 47.93 74.00 -26.07 peak 2 1076.844 63.60 -10.64 52.96 74.00 -21.04 peak 3 1133.756 63.13 -10.50 52.63 74.00 -21.37 peak Below 1G Freq. Reading Factor Result Limit Margin Detector No. (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) 57.50 35.90 QP 1 86.8068 -21.60 40.00 -4.10 2 144.3348 63.07 -23.67 39.40 43.50 -4.10 QΡ 3 200.6881 58.56 -20.22 38.34 43.50 -5.16 QΡ Vertical Above 1G Margin Reading Factor Result Limit Freq. No. Detector (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) 1 1063.068 -10.65 74.00 62.26 51.61 -22.39 peak 2 1075.112 62.97 -10.63 52.34 74.00 -21.66 peak 3 1085.544 61.43 -10.61 50.82 74.00 -23.18 peak



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Test mode :	Charg	jing+ Trans	fer data					
	Belov	w 1G						
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	144.8418	60.25	-23.69	36.56	43.50	-6.94	QP
	2	200.6880	59.01	-20.22	38.79	43.50	-4.71	QP
	3	375.9384	56.35	-15.81	40.54	46.00	-5.46	QP
Horizontal	Abov	e 1G						<u>.</u>
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	1011.330	58.76	-10.78	47.98	74.00	-26.02	peak
	2	1071.657	61.48	-10.64	50.84	74.00	-23.16	peak
	3	1101.383	61.95	-10.58	51.37	74.00	-22.63	peak
	Belov	w 1G						
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	87.4177	57.23	-21.61	35.62	40.00	-4.38	QP
	2	199.2855	59.12	-20.27	38.85	43.50	-4.65	QP
\	3	379.9141	56.38	-15.78	40.60	46.00	-5.40	QP
Vertical	Abov	e 1G						
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margir (dB)	Detector
	1	1012.959	59.62	-10.76	48.86	74.00	-25.14	peak
	2	1071.657	62.48	-10.64	51.84	74.00	-22.16	peak
	3	1101.383	62.67	-10.58	52.09	74.00	-21.91	peak

Note: During the test, Let the EUT and PC maintain the status of transfer data to each other



Below 1G

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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: alen #4388

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: 7" 3G Tablet

Mode: Video Playing

Model: ROAD XT-71BG

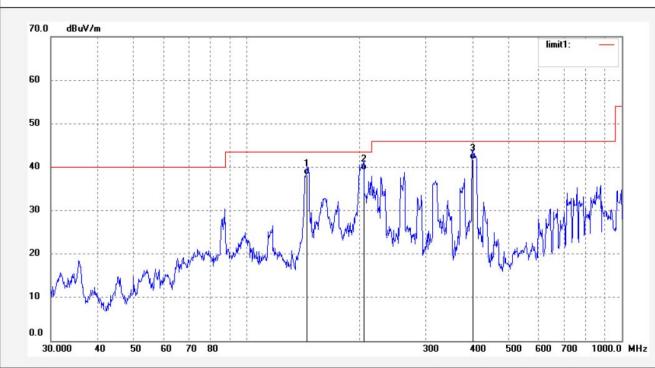
Manufacturer: IMC

Note: Report No:ATE20140929

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 14/06/14/ Time: 11/05/42 Engineer Signature: Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	144.8418	61.89	-23.69	38.20	43.50	-5.30	QP			
2	204.9550	59.32	-20.05	39.27	43.50	-4.23	QP			
3	400.4318	57.45	-15.63	41.82	46.00	-4.18	QP			



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Page 25 of 40 Site: 1# Chamber Tel:+86-0755-26503290

Report No.: ATE20140929

Fax:+86-0755-26503396

Job No.: alen #4389

Standard: FCC Class B 3M Radiated

Radiation Test Test item:

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: 7" 3G Tablet Mode: Video Playing **ROAD XT-71BG** Model:

Manufacturer: IMC

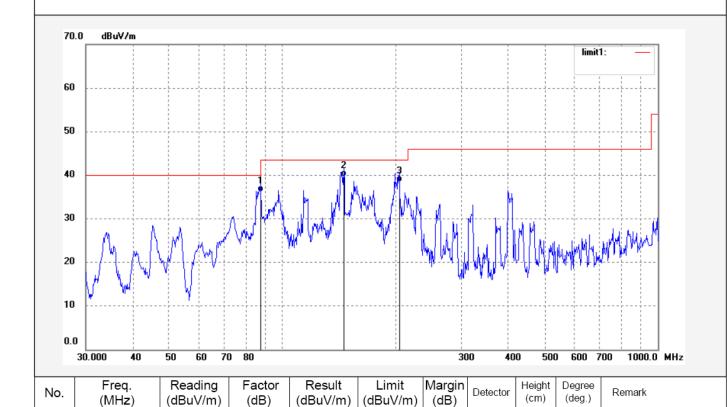
Note: Report No:ATE20140929

Vertical Polarization:

Power Source: AC 120V/60Hz

Date: 14/06/14/ Time: 11/06/27 Engineer Signature:

Distance: 3m



(MHz)

87.7248

145.8611

204.9551

1

2

3

(dBuV/m)

57.68

63.35

58.52

(dB)

-21.62

-23.72

-20.05

(dBuV/m)

36.06

39.63

38.47

-3.94

-3.87

-5.03

40.00

43.50

43.50

QP

QΡ

QΡ



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Report No.: ATE20140929

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Job No.: alen #4386

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: 7" 3G Tablet

Mode: Transfer data

Model: ROAD XT-71BG

Manufacturer: IMC

Note: Report No:ATE20140929

Polarization: Horizontal Power Source: DC 5V

Date: 14/06/14/ Time: 10/52/24 Engineer Signature: Distance: 3m

70.0 dBuV/m limit1: 60 50 40 30 20 10 0.0 30.000 40 50 60 70 80 300 400 500 600 700 1000.0 MHz



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Report No.: ATE20140929 Page 27 of 40

Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: alen #4387

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: 7" 3G Tablet

Mode: Transfer data

Model: ROAD XT-71BG

Manufacturer: IMC

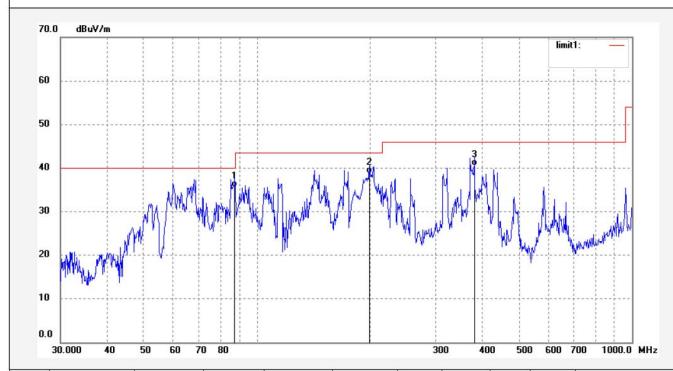
Note: Report No:ATE20140929

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 14/06/14/ Time: 10/53/32 Engineer Signature:

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	87.4177	57.23	-21.61	35.62	40.00	-4.38	QP	0	2	
2	199.2855	59.12	-20.27	38.85	43.50	-4.65	QP			
3	379.9141	56.38	-15.78	40.60	46.00	-5.40	QP			



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Report No.: ATE20140929

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Job No.: alen #4391

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: 7" 3G Tablet

Mode:

Model: **ROAD XT-71BG**

Manufacturer: IMC

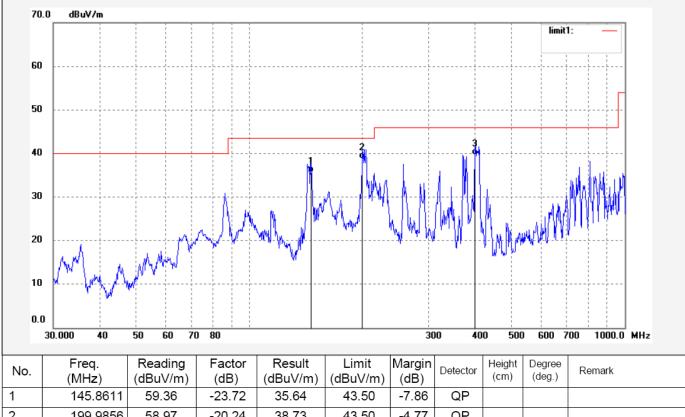
Camera

Note: Report No:ATE20140929 Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 14/06/14/ Time: 11/10/01 Engineer Signature: Distance: 3m







F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Report No.: ATE20140929
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Site: 1# Chamber

Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: alen #4390

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: 7" 3G Tablet

Mode: Camera

Model: ROAD XT-71BG

Manufacturer: IMC

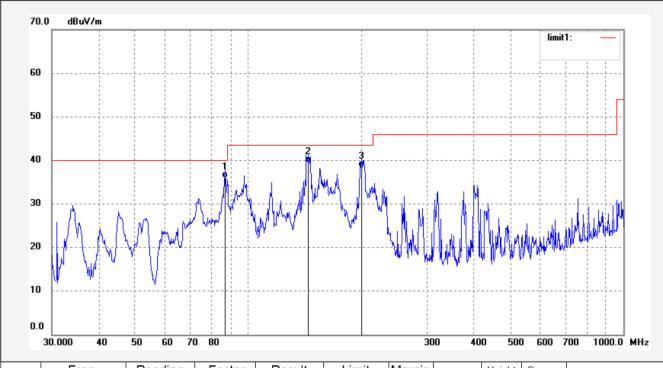
Note: Report No:ATE20140929

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 14/06/14/ Time: 11/08/38 Engineer Signature:

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	86.8068	57.50	-21.60	35.90	40.00	-4.10	QP			
2	144.3348	63.07	-23.67	39.40	43.50	-4.10	QP			
3	200.6881	58.56	-20.22	38.34	43.50	-5.16	QP			



Above 1G

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Manufacturer: IMC

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Distance: 3m

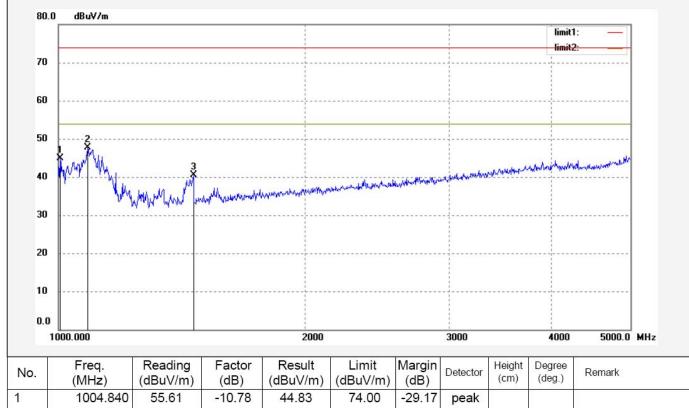
Site: 1# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: alen #4376 Horizontal Polarization:

Standard: FCC PK Power Source: AC 120V/60Hz

Test item: Radiation Test Date: 14/06/14/ Temp.(C)/Hum.(%) 25 C / 55 % Time: 10/40/41 EUT: 7" 3G Tablet **Engineer Signature:**

Mode: Video Playing Model: **ROAD XT-71BG**



N	Ю.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1		1004.840	55.61	-10.78	44.83	74.00	-29.17	peak			
2		1085.544	58.38	-10.61	47.77	74.00	-26.23	peak			
3		1462.032	50.32	-9.79	40.53	74.00	-33.47	peak			



F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Page 31 of 40
Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Report No.: ATE20140929

Job No.: alen #4377 Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: 7" 3G Tablet

Mode: Video Playing

Model: ROAD XT-71BG

Manufacturer: IMC

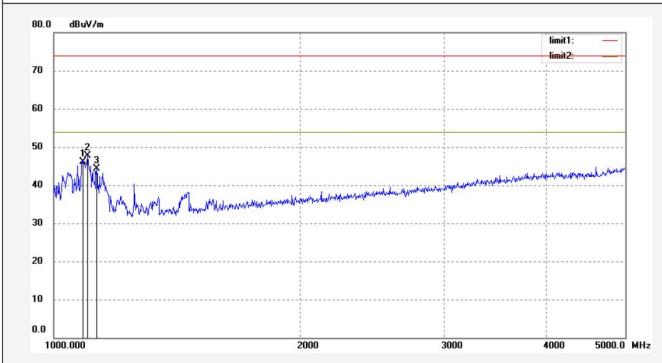
Note: Report No:ATE20140929

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 14/06/14/ Time: 10/41/37 Engineer Signature:

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1085.544	56.73	-10.61	46.12	74.00	-27.88	peak			
2	1099.611	58.21	-10.58	47.63	74.00	-26.37	peak			
3	1128.295	54.82	-10.52	44.30	74.00	-29.70	peak			



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Report No.: ATE20140929

Job No.: alen #4380 Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: 7" 3G Tablet

Mode: Transfer data

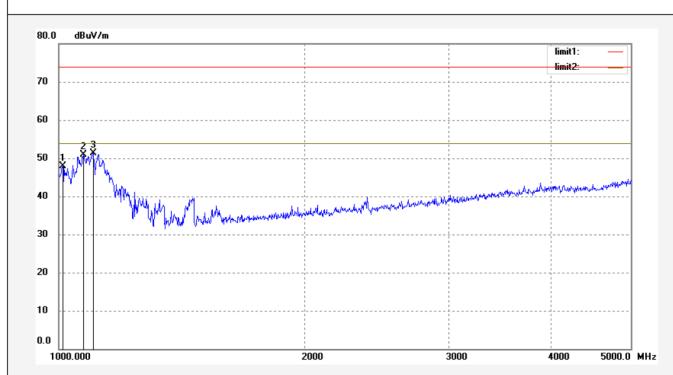
Model: ROAD XT-71BG

Manufacturer: IMC

Note: Report No:ATE20140929

Polarization: Horizontal Power Source: DC 5V

Date: 14/06/14/
Time: 10/45/37
Engineer Signature:
Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1011.330	58.76	-10.78	47.98	74.00	-26.02	peak			
2	1071.657	61.48	-10.64	50.84	74.00	-23.16	peak			
3	1101.383	61.95	-10.58	51.37	74.00	-22.63	peak			



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Distance: 3m

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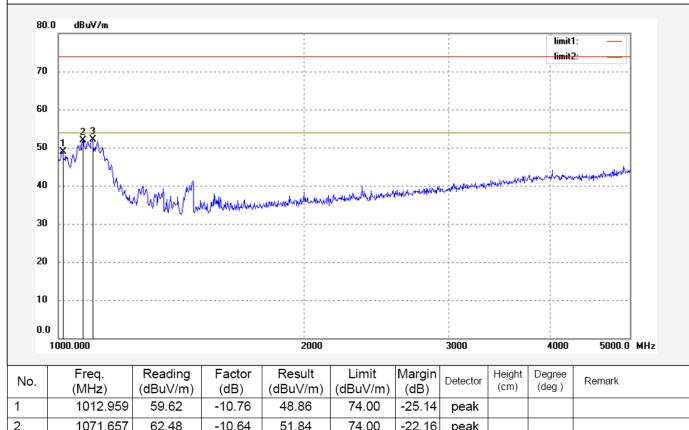
Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: alen #4381 Vertical Polarization: Standard: FCC PK Power Source: DC 5V

Test item: Radiation Test Date: 14/06/14/ Temp.(C)/Hum.(%) 25 C / 55 % Time: 10/46/44 EUT: 7" 3G Tablet Engineer Signature:

Mode: Transfer data Model: **ROAD XT-71BG**

Manufacturer: IMC



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1012.959	59.62	-10.76	48.86	74.00	-25.14	peak			
2	1071.657	62.48	-10.64	51.84	74.00	-22.16	peak			
3	1101.383	62.67	-10.58	52.09	74.00	-21.91	peak			



Site: 1# Chamber Tel:+86-0755-26503290 F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Fax:+86-0755-26503396 Science & Industry Park, Nanshan Shenzhen, P.R. China

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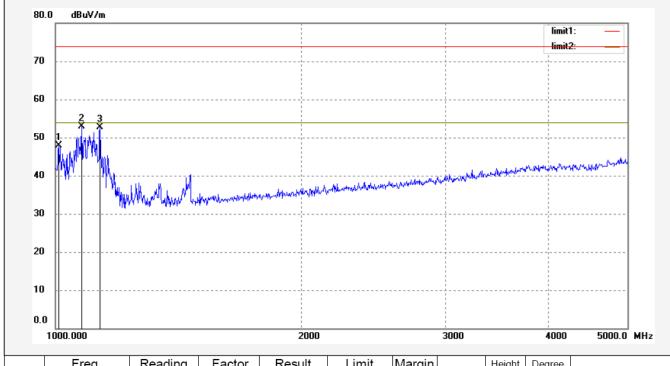
Job No.: alen #4379 Polarization: Horizontal

Standard: FCC PK Power Source: AC 120V/60Hz

Test item: Radiation Test Date: 14/06/14/ Temp.(C)/Hum.(%) 25 C / 55 % Time: 10/44/09

EUT: 7" 3G Tablet Engineer Signature: Mode: Camera Distance: 3m

Model: **ROAD XT-71BG** Manufacturer: IMC



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1009.703	58.71	-10.78	47.93	74.00	-26.07	peak			
2	1076.844	63.60	-10.64	52.96	74.00	-21.04	peak			
3	1133.756	63.13	-10.50	52.63	74.00	-21.37	peak			



Page 35 of 40 Site: 1# Chamber Tel:+86-0755-26503290

Report No.: ATE20140929

Fax:+86-0755-26503396

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> Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 14/06/14/ Time: 10/42/53 Engineer Signature:

Distance: 3m

Job No.: alen #4378 Standard: FCC PK

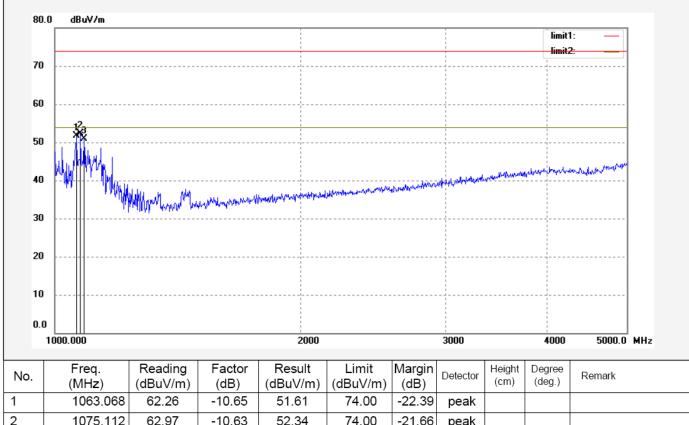
Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: 7" 3G Tablet Mode: Camera

Model: ROAD XT-71BG

Manufacturer: IMC



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1063.068	62.26	-10.65	51.61	74.00	-22.39	peak			
2	1075.112	62.97	-10.63	52.34	74.00	-21.66	peak			
3	1085.544	61.43	-10.61	50.82	74.00	-23.18	peak			



5. PHOTOGRAPHS

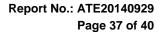
5.1.Photos of Radiated Measurement

Playing mode(below 1GHz)



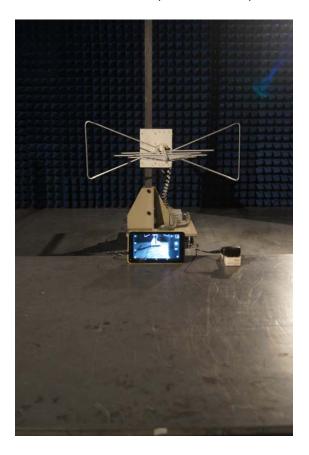
Transfer data mode(below 1GHz)



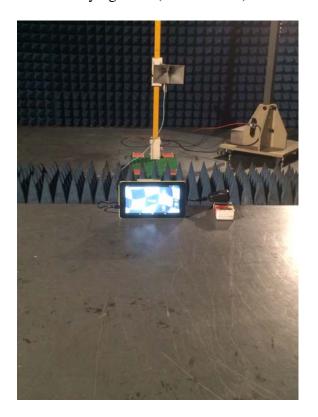


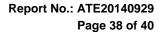


Camera mode(below 1GHz)



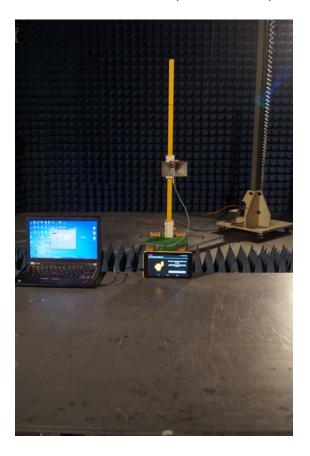
Playing mode(above 1GHz)





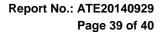


Transfer data mode(above 1GHz)



Camera mode(above 1GHz)







5.2.Photograph of set-up for Mains Terminal Disturbance Voltage Playing mode



Transfer data mode





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Camera mode

