

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 #1372

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2437MHz(802.11b)

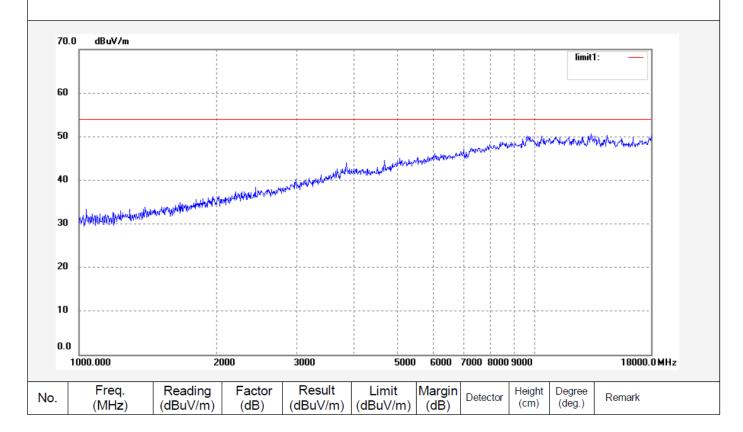
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 12:08:23 Engineer Signature: Distance: 3m





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 #1373

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2462MHz(802.11b)

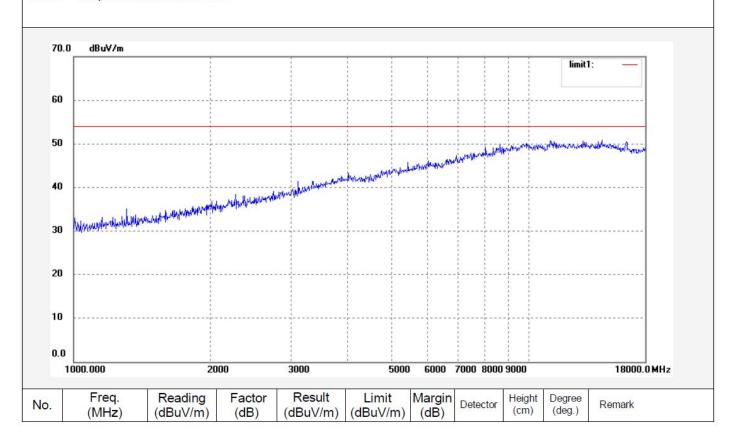
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 12:09:49 Engineer Signature: Distance: 3m





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 #1374

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2462MHz(802.11b)

Model: P709 Manufacturer: Alyos

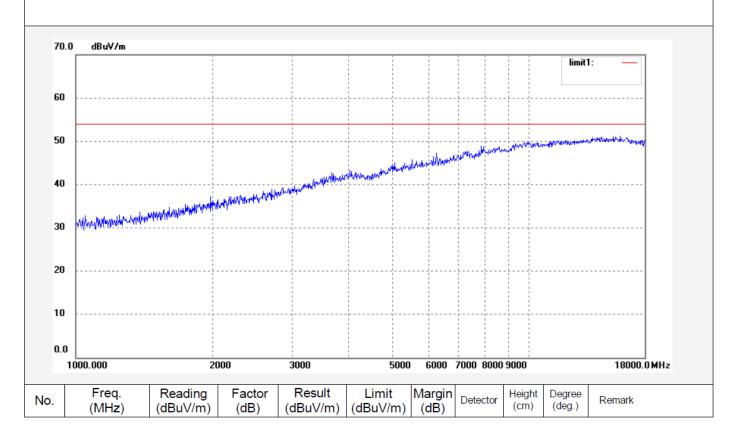
Note:

Report No:ATE20132094

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 12:10:26 Engineer Signature: Distance: 3m





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 #1368

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2412MHz(802.11g)

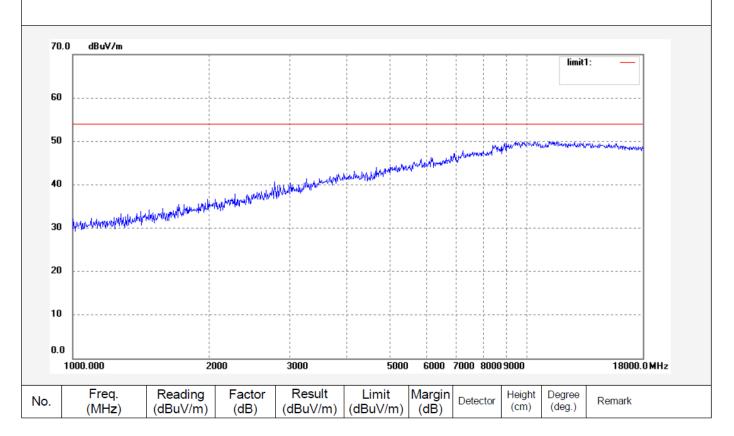
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:53:44 Engineer Signature: Distance: 3m





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 #1367

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2412MHz(802.11g)

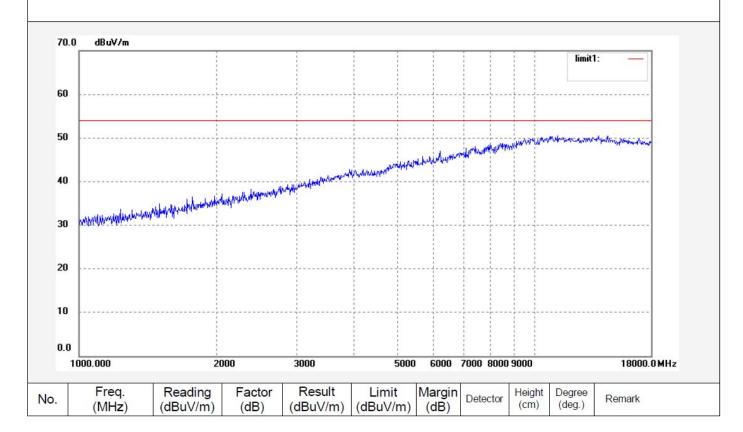
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:53:13 Engineer Signature: Distance: 3m





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 #1366

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2437MHz(802.11g)

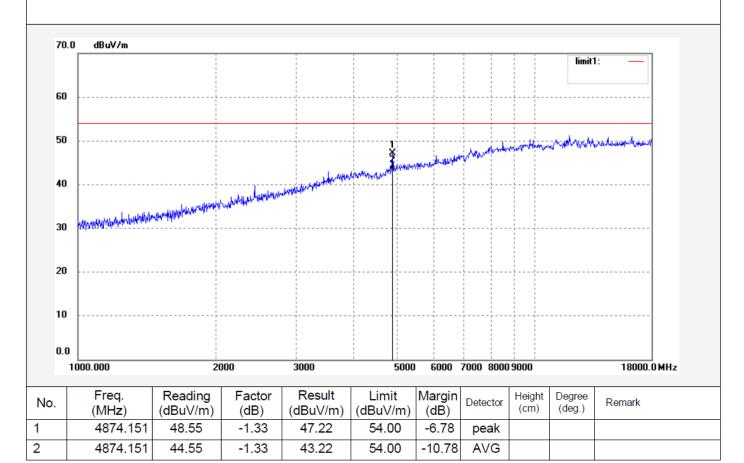
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:52:02 Engineer Signature: Distance: 3m





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 #1365

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2437MHz(802.11g)

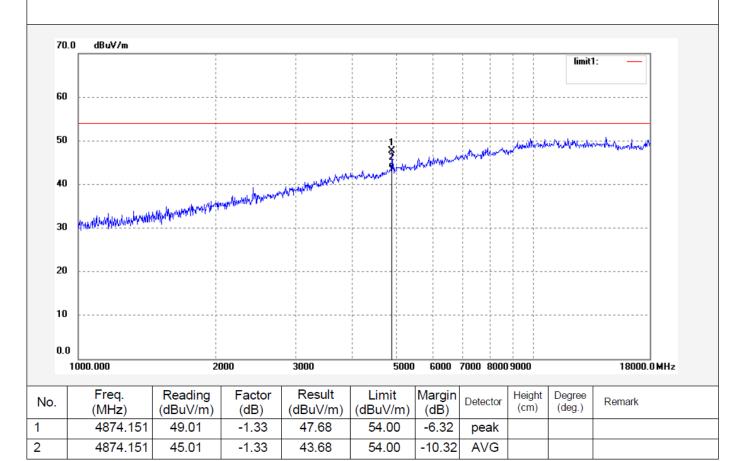
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:51:13 Engineer Signature: Distance: 3m





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 #1364

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2462MHz(802.11g)

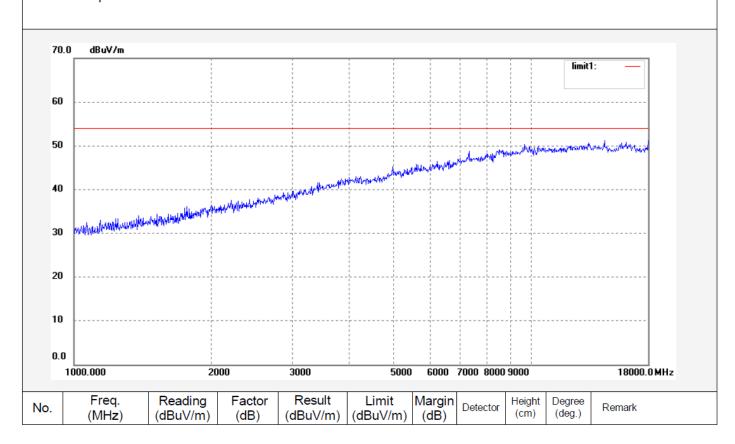
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:49:53 Engineer Signature: Distance: 3m





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 #1363

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2462MHz(802.11g)

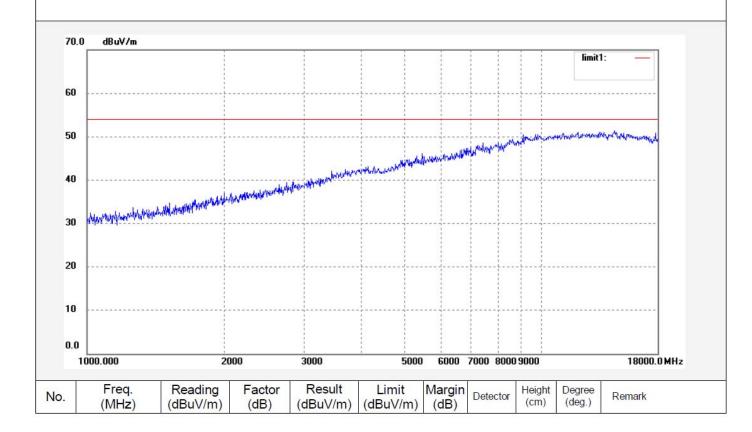
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:49:11 Engineer Signature: Distance: 3m





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 #1357

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2412MHz(802.11n)20MHz

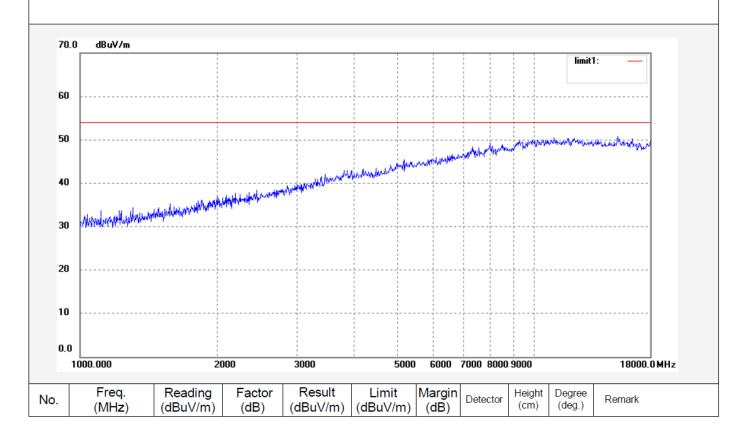
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:41:43 Engineer Signature: Distance: 3m





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 #1358

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2412MHz(802.11n)20MHz

Model: P709 Manufacturer: Alyos

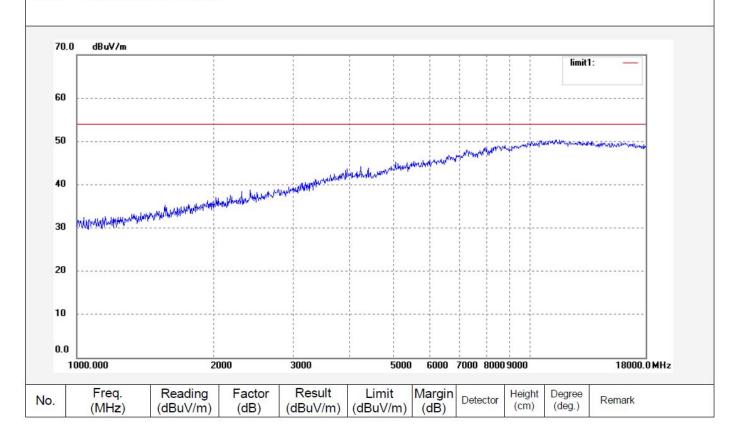
Note:

Report No:ATE20132094

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:42:43 Engineer Signature: Distance: 3m





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 #1359

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2437MHz(802.11n)20MHz

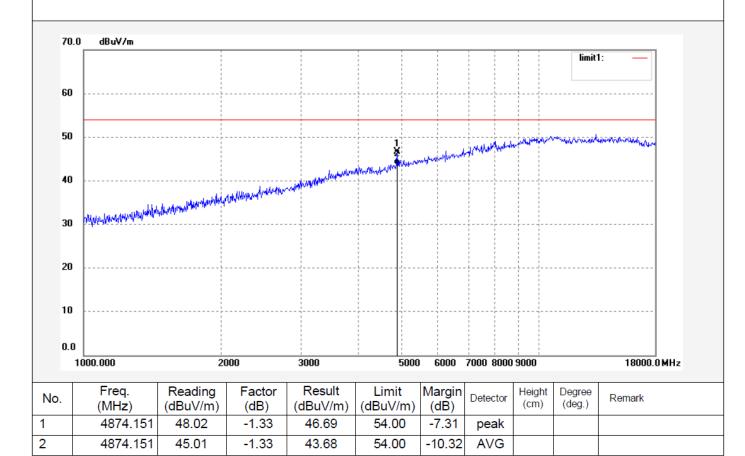
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:44:36 Engineer Signature: Distance: 3m





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 #1360

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2437MHz(802.11n)20MHz

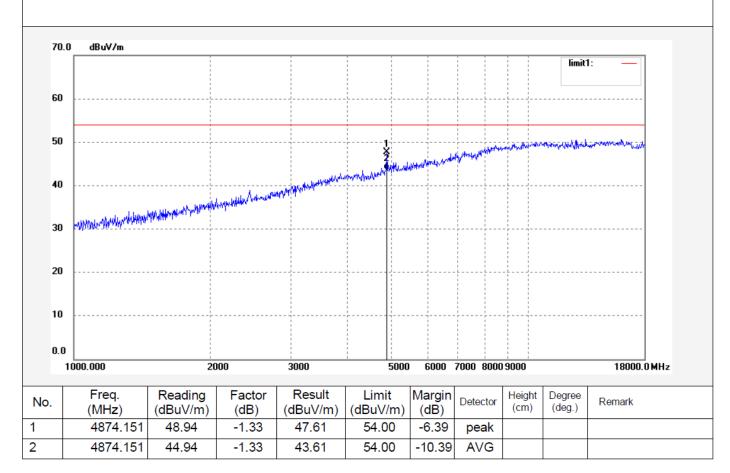
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:45:31 Engineer Signature: Distance: 3m





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 #1361

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2462MHz(802.11n)20MHz

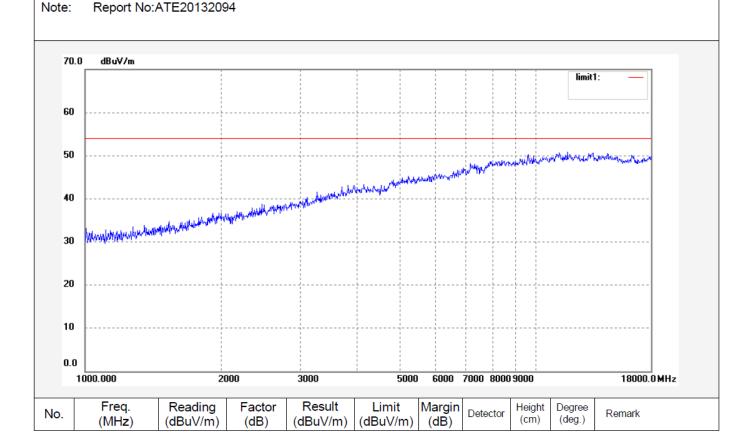
Model: P709 Manufacturer: Alyos

anulaciulei. Alyos

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:47:05 Engineer Signature: Distance: 3m





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 #1362

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

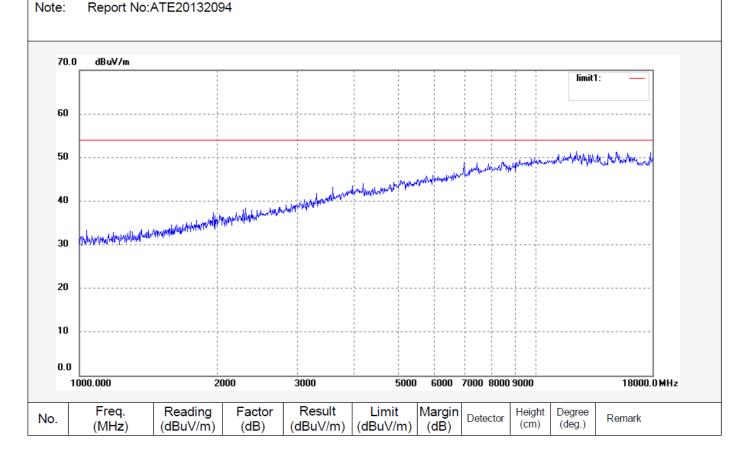
Mode: TX 2462MHz(802.11n)20MHz

Model: P709 Manufacturer: Alyos

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:47:42 Engineer Signature: Distance: 3m





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 #1351

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2422MHz(802.11n)40MHz

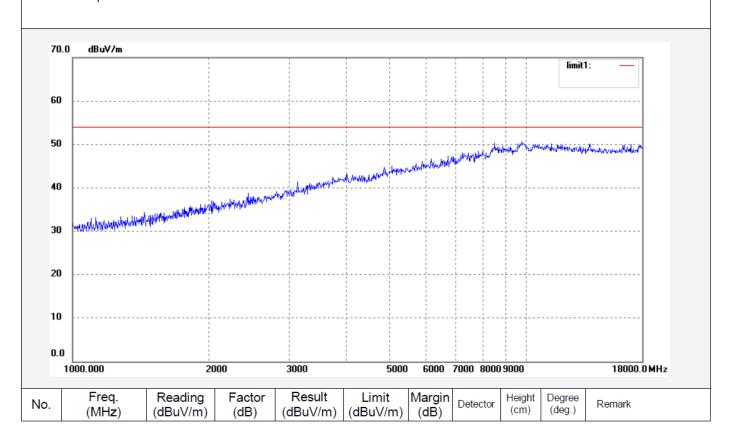
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:32:39 Engineer Signature: Distance: 3m





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 #1352

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2422MHz(802.11n)40MHz

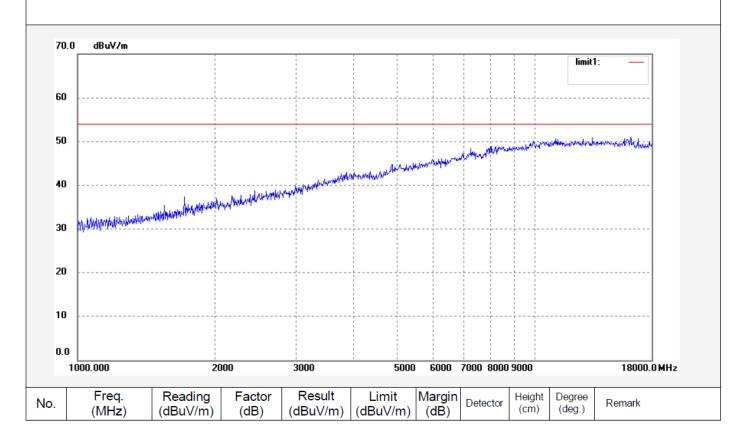
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:34:23 Engineer Signature: Distance: 3m





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 #1353

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2437MHz(802.11n)40MHz

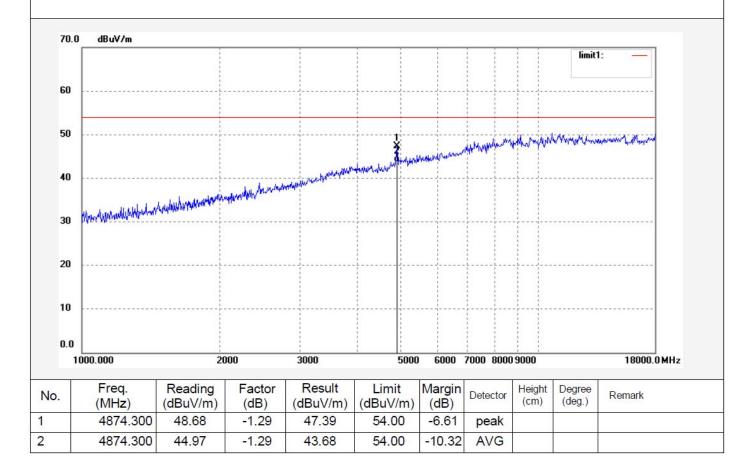
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:36:06 Engineer Signature: Distance: 3m





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 #1354

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2437MHz(802.11n)40MHz

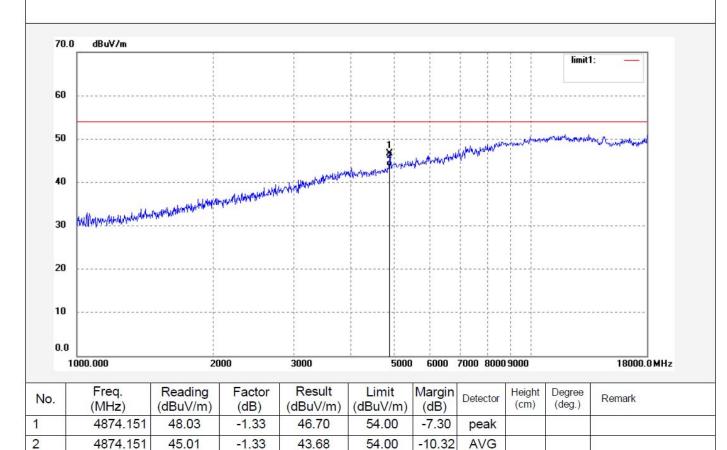
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:36:54 Engineer Signature: Distance: 3m





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 #1355

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2452MHz(802.11n)40MHz

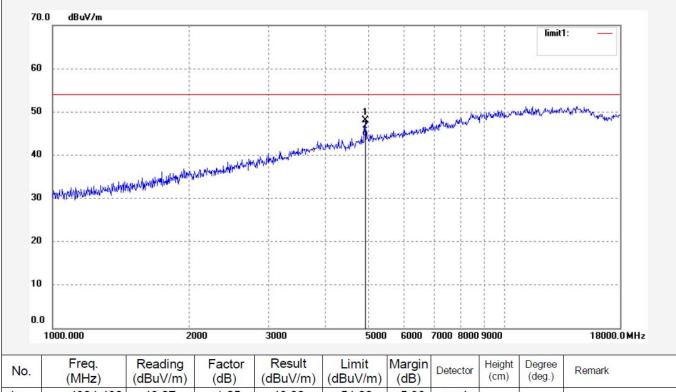
Model: P709 Manufacturer: Alyos

Report No:ATE20132094 Note:

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:38:40 Engineer Signature: Distance: 3m





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 #1356

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

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

EUT: Tablet PC

Mode: TX 2452MHz(802.11n)40MHz

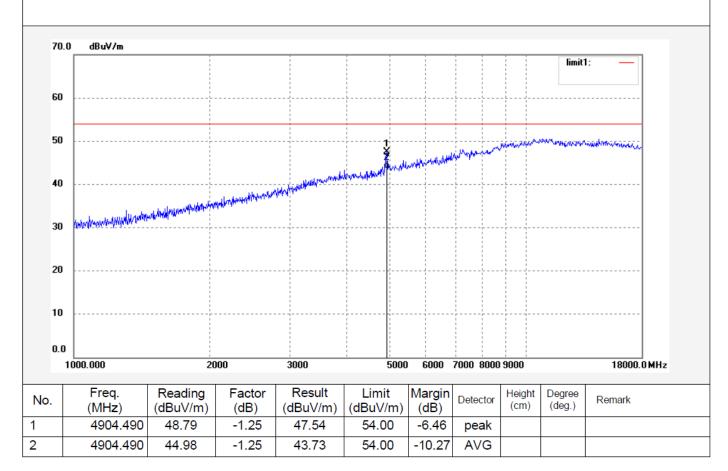
Model: P709 Manufacturer: Alyos

Note: Report No:ATE20132094

Polarization: Horizontal

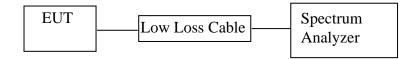
Power Source: AC 120V/60Hz

Date: 2013/09/30 Time: 11:39:24 Engineer Signature: Distance: 3m



10. CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST

10.1.Block Diagram of Test Setup



10.2. The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

10.3.EUT Configuration on Measurement

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

10.4. Operating Condition of EUT

- 10.4.1. Setup the EUT and simulator as shown as Section 10.1.
- 10.4.2. Turn on the power of all equipment.
- 10.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

10.5.Test Procedure

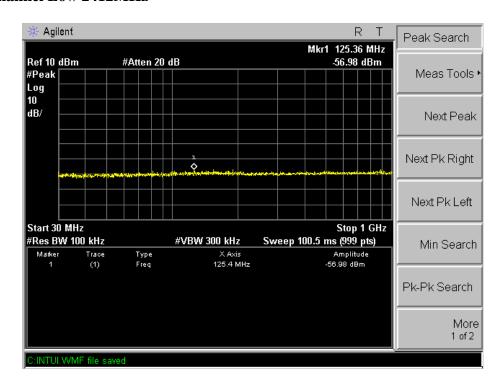
- 10.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.
- 10.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz (below 1GHz).
- 10.5.3.Set RBW of spectrum analyzer to 1MHz and VBW to 3MHz (above 1GHz).
- 10.5.4. The Conducted Spurious Emission was measured and recorded.

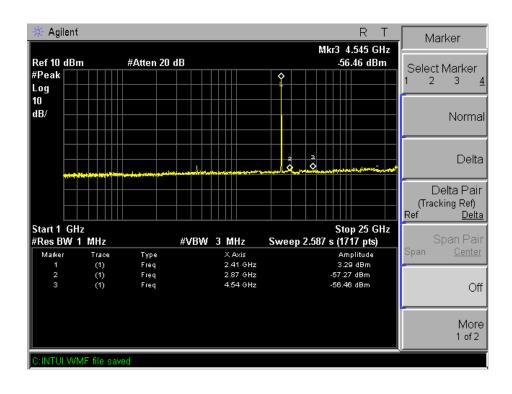
10.6.Test Result

Pass.

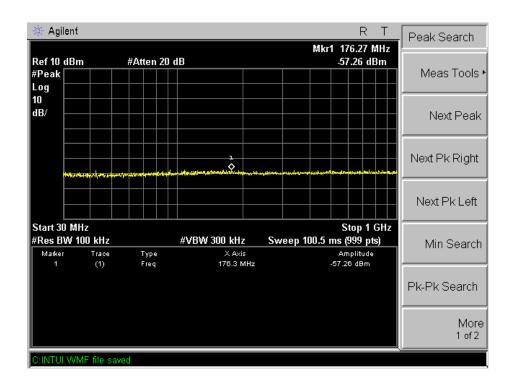
The spectrum analyzer plots are attached as below.

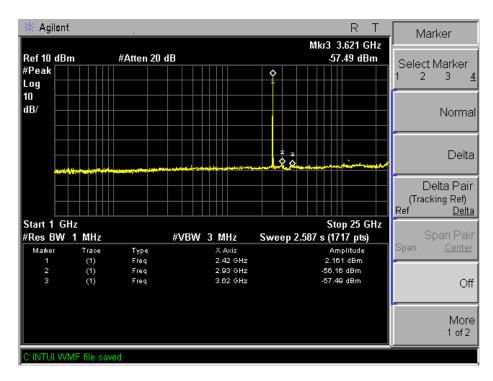
TX 802.11b Channel Low 2412MHz



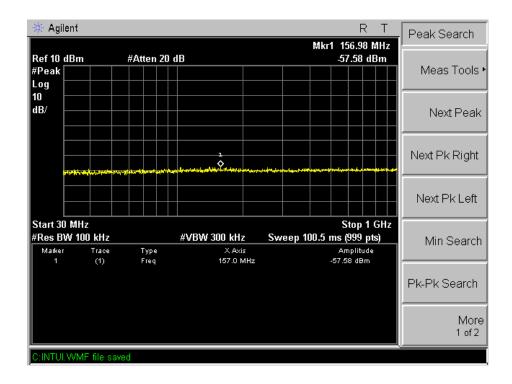


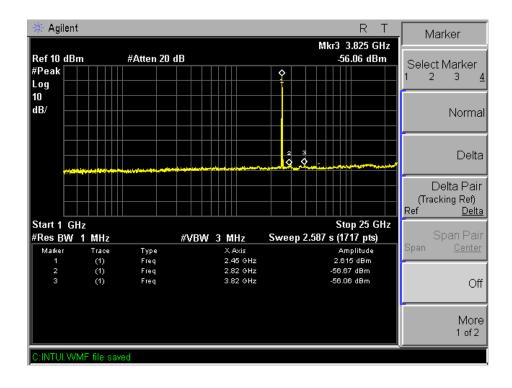
TX 802.11b Channel Middle 2437MHz



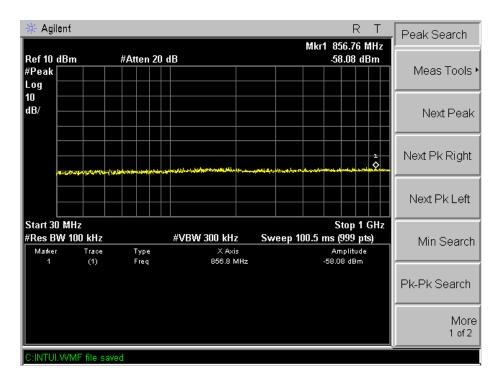


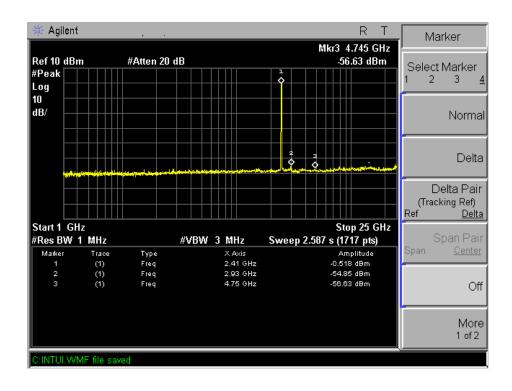
TX 802.11b Channel High 2462MHz



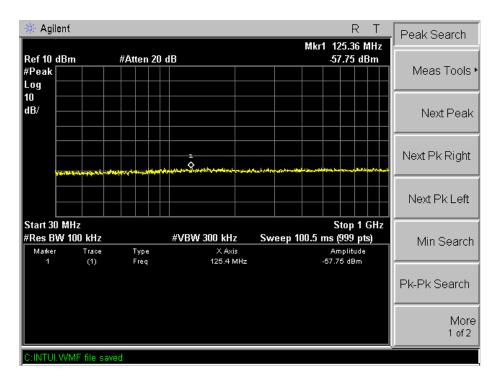


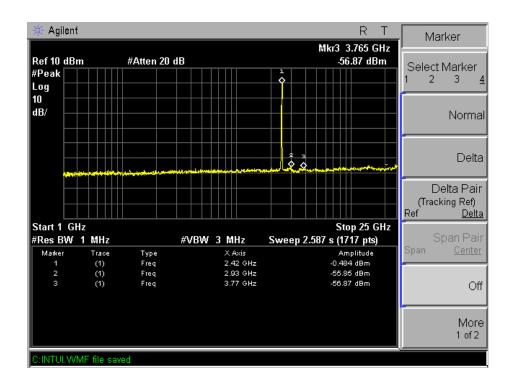
TX 802.11g Channel Low 2412MHz



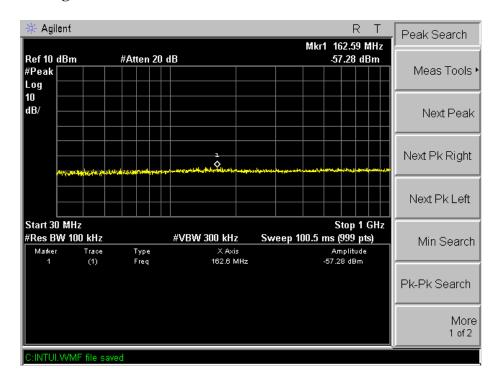


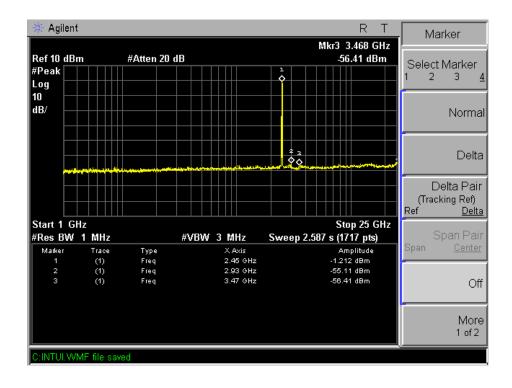
TX 802.11g Channel Middle 2437MHz



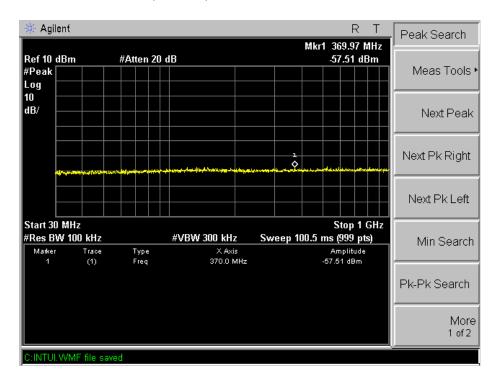


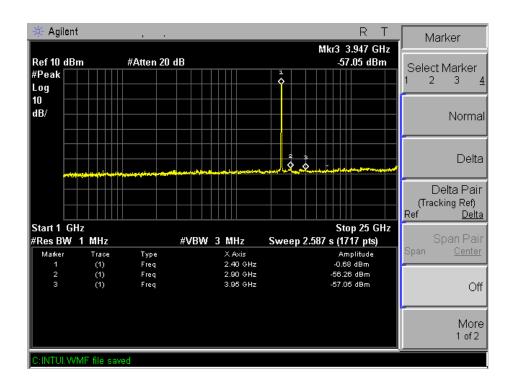
TX 802.11g Channel High 2462MHz



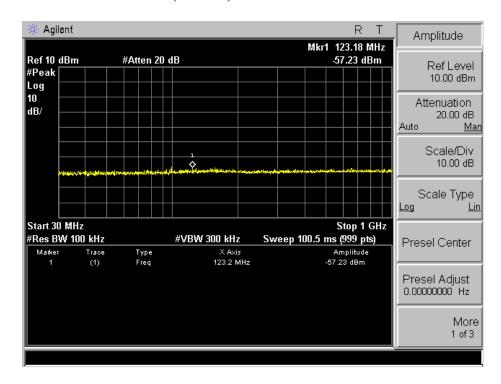


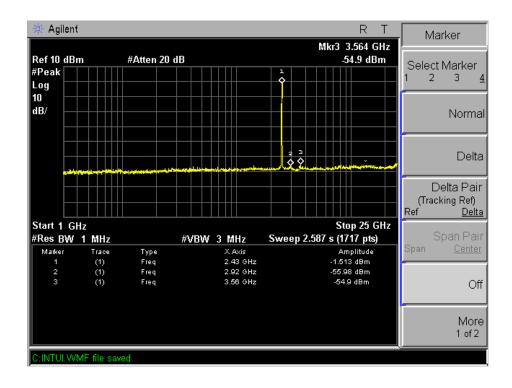
TX 802.11n Channel Low 2412MHz (20MHz)



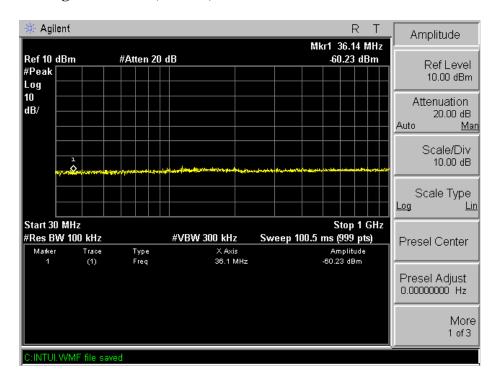


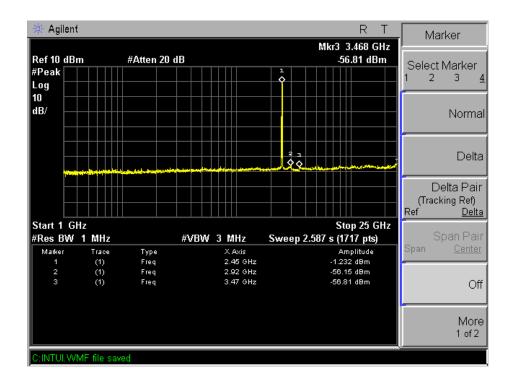
TX 802.11n Channel Middle 2437MHz (20MHz)



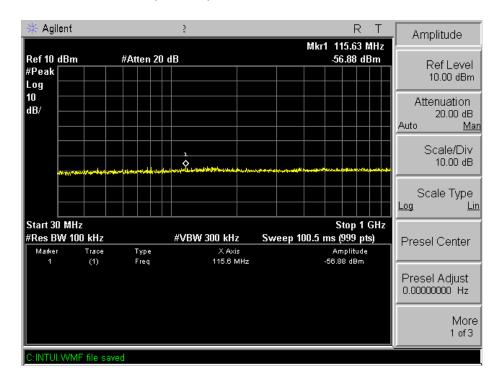


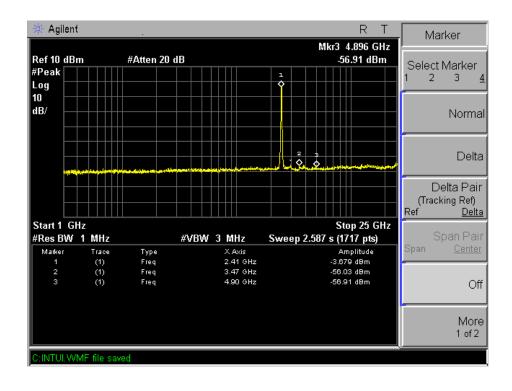
TX 802.11n Channel High 2462MHz (20MHz)



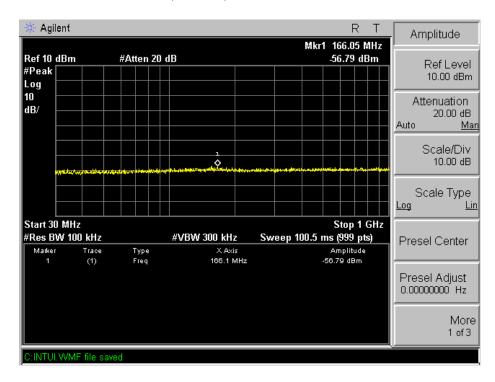


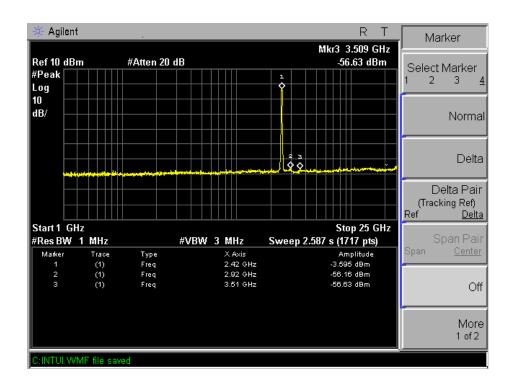
TX 802.11n Channel Low 2422MHz (40MHz)



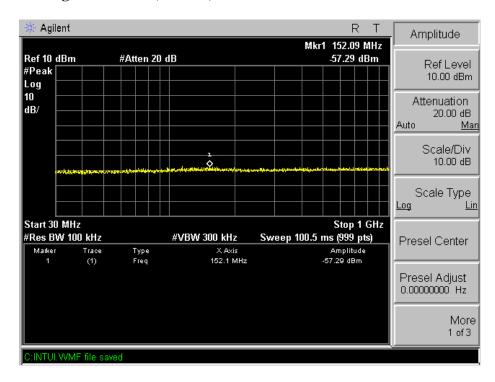


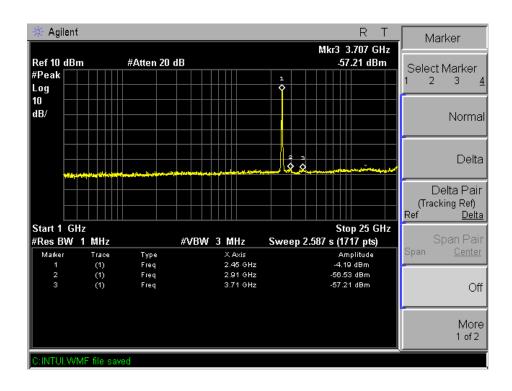
TX 802.11n Channel Middle 2437MHz (40MHz)





TX 802.11n Channel High 2452MHz (40MHz)





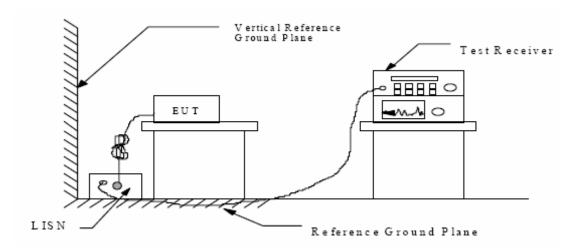
11.AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

11.1.Block Diagram of Test Setup

11.1.1.Block diagram of connection between the EUT and simulators



11.1.2.Shielding Room Test Setup Diagram



11.2. The Emission Limit

11.2.1.Conducted Emission Measurement Limits According to Section 15.207(a)

Frequency	Limit dB(μV)				
(MHz)	Quasi-peak Level	Average Level			
0.15 - 0.50	66.0 - 56.0 *	56.0 – 46.0 *			
0.50 - 5.00	56.0	46.0			
5.00 - 30.00	60.0	50.0			

^{*} Decreases with the logarithm of the frequency.

11.3. Configuration of EUT on Measurement

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

11.4. Operating Condition of EUT

- 11.4.1. Setup the EUT and simulator as shown as Section 11.1.
- 11.4.2.Turn on the power of all equipment.
- 11.4.3.Let the EUT work in (Charging) mode measure it.

11.5.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.

11.6.Power Line Conducted Emission Measurement Results

CONDUCTED EMISSION STANDARD FCC PART 15 B

Tablet PC M/N:P709 EUT:

Manufacturer: Alyos Operating Condition: Charging

1#Shielding Room Test Site:

Operator: Alen

Test Specification: N 120V/60Hz

Comment: Report No:ATE20132094 Start of Test: 9/29/2013 / 11:15:36AM

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

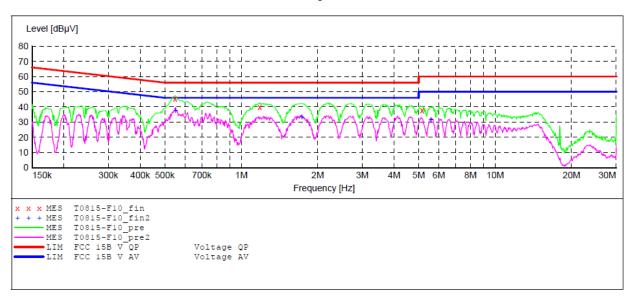
_SUB_STD_VTERM2 1.70 Short Description:

Start Stop Step Detector Meas. ΙF Transducer

Width Time Bandw.

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

Average



MEASUREMENT RESULT: "T0815-F10 fin"

9/	/29/2013 11:	18AM						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PΕ
	MHz	dΒμV	dB	dΒμV	dB			
	0.548969	4E 20	12 6	E.C	10 7	OD	NT	CME
	0.548969	45.50	12.0	20	10.7	QP	N	GND
	1.181465	40.10	12.5	56	15.9	QP	N	GND
	5.154195	37.80	12.3	60	22.2	QP	N	GND

MEASUREMENT RESULT: "T0815-F10 fin2"

9/29/2013	11:18A	M						
Freque	ncy L	evel Tra	nsd Li	mit Ma	rgin I	Detector :	Line	PΕ
	MHz	dΒμV	dB d	BμV	dB			
0.551	165 3	7.90 1	.2.6	46	8.1 <i>I</i>	$A\nabla$	N (GND
1.733	234 3	3.40 1	.2.4	46	12.6 F	AV I	N	GND
5.582	581 3	1.80 1	2.2	50	18.2 F	AV :	N	GND

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Tablet PC M/N:P709

Alyos Manufacturer: Operating Condition: Charging

Test Site: 1#Shielding Room

Operator: Alen Test Specification: L 120V/60Hz

Comment: Report No:ATE20132094 Start of Test: 9/29/2013 / 11:19:15AM

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

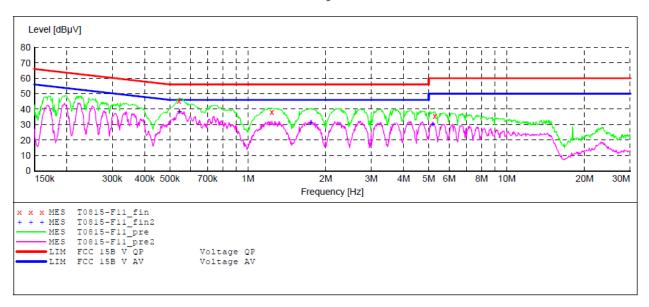
_SUB_STD_VTERM2 1.70 Short Description:

Start Stop Step Detector Meas. IFTransducer

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: "T0815-F11 fin"

9/29/2013	11:21AM						
Frequen	cy Lev	el Transo	l Limit	Margin	Detector	Line	PE
M	Hz de	βµV dE	3 dBµV	dB			
0.5424	34 45.	40 12.6	5 56	10.6	QP	L1	GND
1.2394	40 38.	40 12.5	5 56	17.6	QP	L1	GND
5.2791	39 35.	40 12.3	60	24.6	QP	L1	GND

MEASUREMENT RESULT: "T0815-F11 fin2"

9/29/2013 11:21AM									
Frequency	Level	Transd	Limit	Margin	Detector	Line	PE		
MHz	dΒμV	dB	dΒμV	dB					
0.544604	38.80	12.6	46	7.2	AV	L1	GND		
1.754116	31.40	12.4	46	14.6	AV	L1	GND		
5.195511	30.70	12.3	50	19.3	AV	L1	GND		

12.ANTENNA REQUIREMENT

12.1.The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

12.2.Antenna Construction

Device is equipped with unique antenna, which isn't displaced by other antenna. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna