



3. Radiated Emissions Requirements

3.1 Final radiation measurements were made on a three-meter:

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 30 MHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna (mode VULB9163) at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna (model BBHA9120D&9170) was used in frequencies 1 – 26.5 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts per meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro colts per meter (dBuV/m).

The actual field intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

$$(1) \text{Amplitude (dBuV/m)} = \text{FI (dBuV)} + \text{AF (dBuV)} + \text{CL (dBuV)} - \text{Gain (dB)}$$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

$$(2) \text{Actual Amplitude (dBuV/m)} = \text{Amplitude (dBuV)} - \text{Dis(dB)}$$

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency :

Transmitter Output < +30dBm

(b) For spurious frequency :

Spurious emission limits = fundamental emission limit /10



3.2 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
				Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4408B	MY45107753	Apr. 27, 2006	Apr. 26, 2007
Pre Amplifier	Agilent	8449B	3008A02237	May. 03, 2006	May. 02, 2007
Pre Amplifier	Agilent	8447D	2944A10961	Aug. 07, 2006	Aug. 07, 2007
Test Receiver	R&S	ESCI	100367	May. 03, 2006	May. 02, 2007
Biconilog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	Jun. 26, 2006	Jun. 25, 2007
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	Jun. 26, 2006	Jun. 25, 2007
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	May. 02, 2006	May. 01, 2007
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120E	0899	Jul. 29, 2006	Jul. 29, 2007

3.3 Test Configuration:

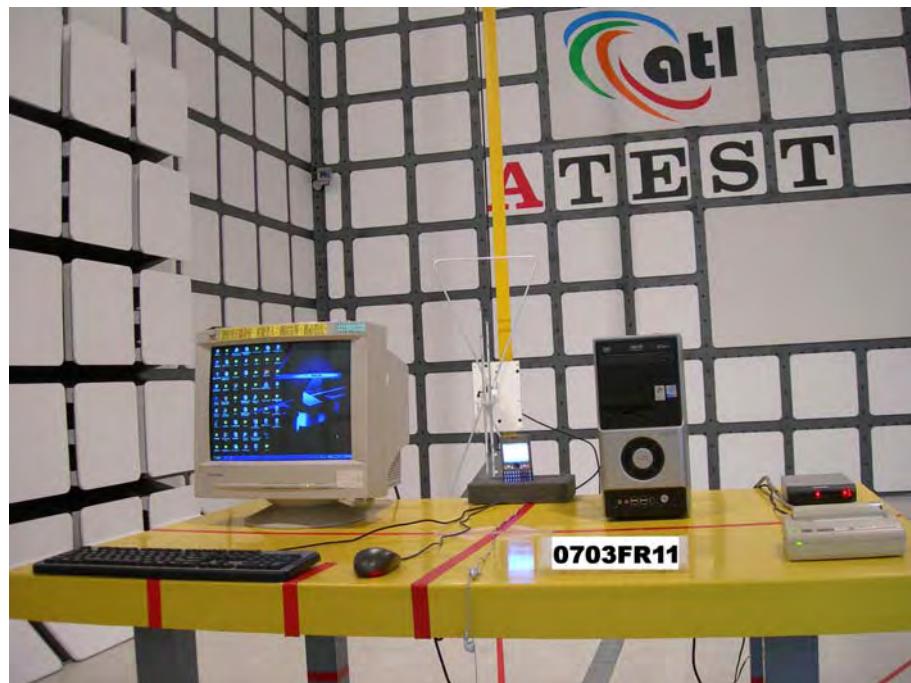


Figure 5. Front View of the Test Configuration



Figure 6. Rear View of the Test Configuration



Figure 7. Front View of the Test Configuration



Figure 8. Rear View of the Test Configuration



3.4 Test condition:

EUT tested in accordance with the specifications given by the manufacturer, and exercised in the most unfavorable manner.

The worst radiated emission was found in BPSK mode and the worst case was recorded.

3.5 Radiated Emissions Limits:

Frequency range (MHz)	Peak(dBuV)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960	54



3.6 Measurement Data of Radiated Emissions:

3.6.1 Open Field Radiated Emissions (Subpart B&C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Inventec Corporation
Model No : Mercury 619
EUT : PDA PHONE
Test Mode : 802.11b CH1 2412.000 (Local Frequency: 2412.000 MHz)
Test Date : 03/06/2007

Please refer to next page of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude – Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambient noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



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Radiated Emission Measurement

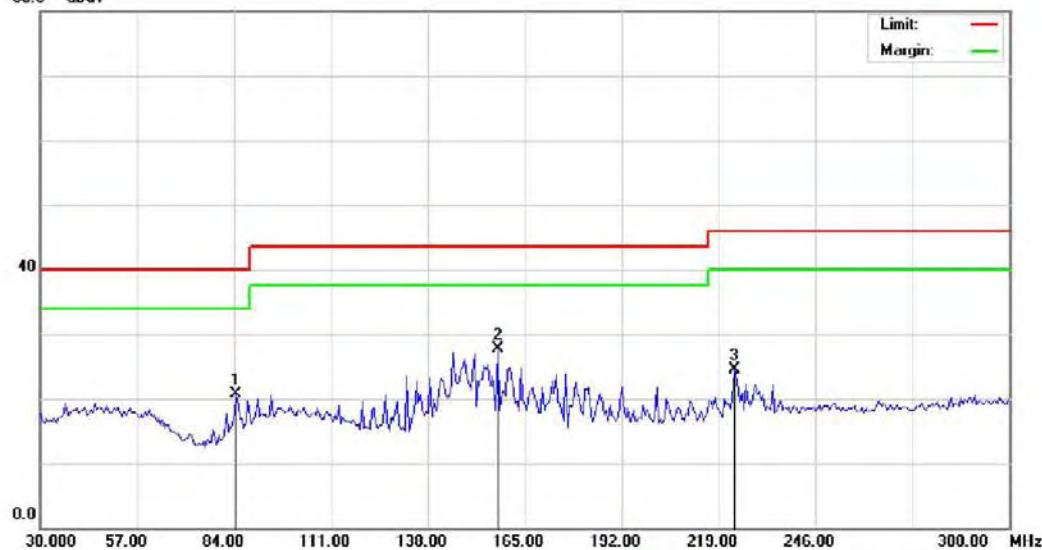
File :M619(EMI)

Data :#1

Date: 2007/03/06

Time: 下午 07:45:33

80.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC Class B 3M Radiation

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH01(2412MHz) Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		84.5400	35.52	-14.90	20.62	40.00	-19.38	peak	
2	*	157.4399	43.37	-15.70	27.67	43.50	-15.83	peak	
3		223.3199	36.79	-12.22	24.57	46.00	-21.43	peak	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(EMI)\Data :#1

Page: 1

Engineer Signature:



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Radiated Emission Measurement

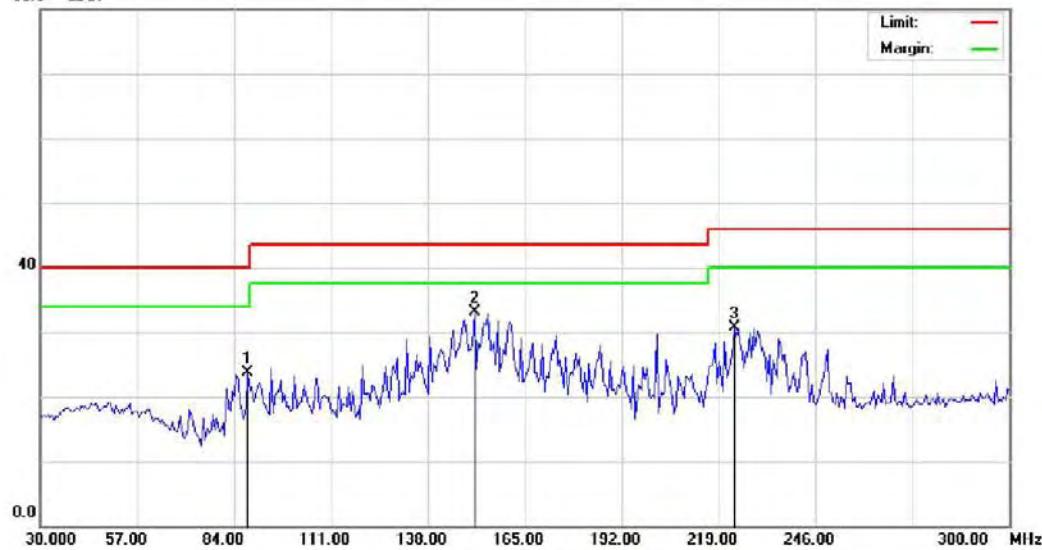
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Data :#3

Date: 2007/03/06

Time: 下午 07:54:04

80.0 dBuV



Site site #1

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC Class B 3M Radiation

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH01(2412MHz) Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		87.7800	37.57	-13.87	23.70	40.00	-16.30	peak	
2	*	150.9600	49.19	-15.99	33.20	43.50	-10.30	peak	
3		223.3199	43.01	-12.22	30.79	46.00	-15.21	peak	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(EMI)\Data :#3

Page: 1

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Radiated Emission Measurement

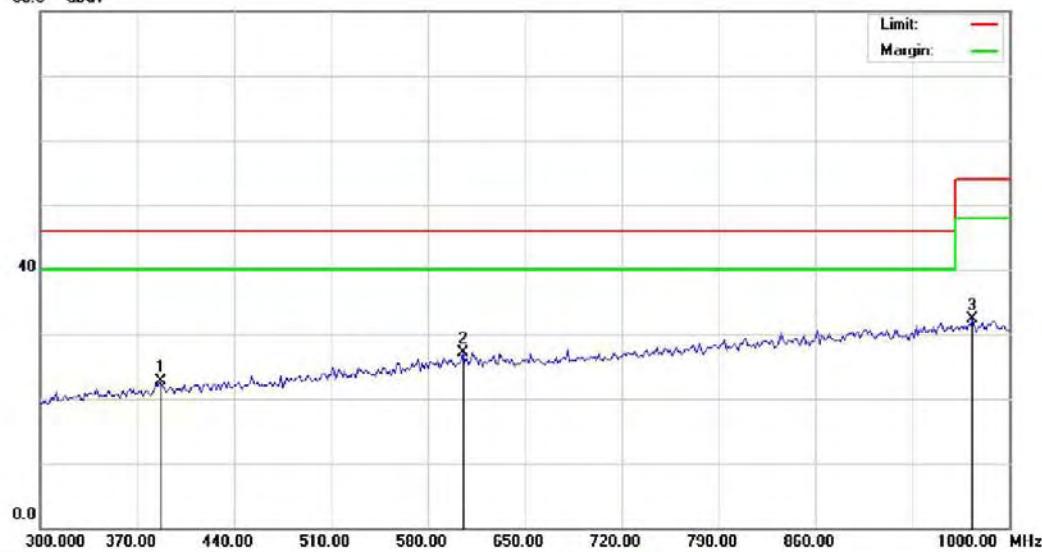
File :M619(EMI)

Data :#2

Date: 2007/03/06

Time: 下午 07:49:48

80.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC Class B 3M Radiation

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH01(2412MHz) Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		386.8000	31.26	-8.54	22.72	46.00	-23.28	peak
2	*	605.2000	31.67	-4.58	27.09	46.00	-18.91	peak
3		973.3999	31.58	0.67	32.25	54.00	-21.75	peak

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(EMI)\Data :#2

Page: 1

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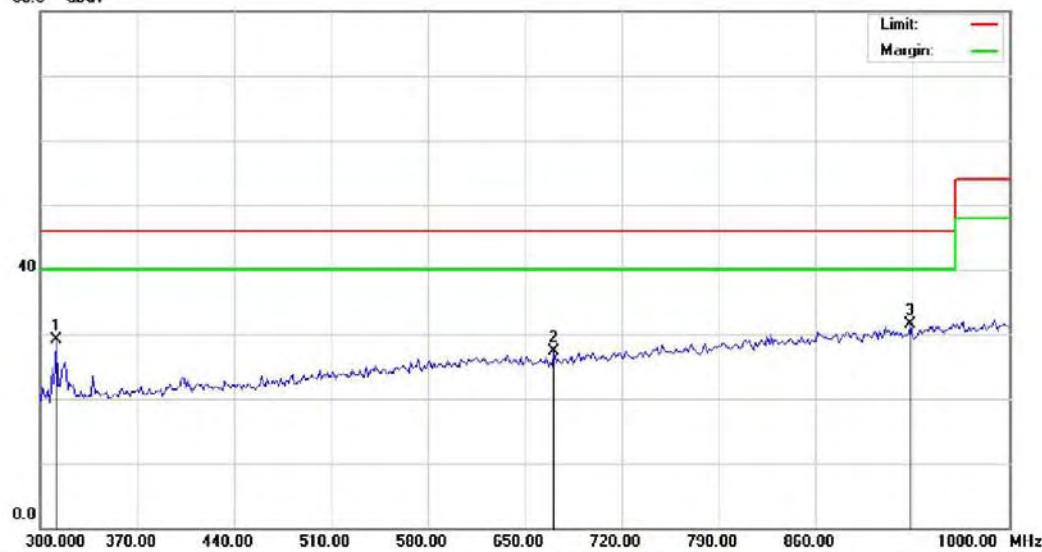
File :M619(EMI)

Data :#4

Date: 2007/03/06

Time: 下午 07:58:20

80.0 dBuV



Site site #1

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC Class B 3M Radiation

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH01(2412MHz) Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		311.1999	38.99	-9.82	29.17	46.00	-16.83	peak	
2		671.0000	31.60	-4.28	27.32	46.00	-18.68	peak	
3	*	928.6000	31.93	-0.35	31.58	46.00	-14.42	peak	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(EMI)\Data :#4

Page: 1

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Radiated Emission Measurement

File :M619(CH01)

Data :#3

Date: 2007/03/06

Time: 下午 01:55:15

125.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH01(2412MHz)(104cm) Tx Rate:bpsk ; Tx Power:13

2.7G-10G AV Scan

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dB			
1		2217.200	54.16	0.36	54.52	74.00	-19.48	peak	
2	*	2217.200	37.26	0.36	37.62	54.00	-16.38	AVG	

*:Maximum data x:Over limit !:over margin

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File :M619(CH01)\Data :#3

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Radiated Emission Measurement

File :M619(CH01)

Data :#1

Date: 2007/03/06

Time: 下午 01:50:12

125.0 dBuV



Site site #1

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH01(2412MHz)(154cm) Tx Rate:bpsk ; Tx Power:13

2.7G-10G AV Scan

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dB			
1		2207.000	54.26	0.45	54.71	74.00	-19.29	peak	
2	*	2207.000	37.22	0.45	37.67	54.00	-16.33	AVG	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH01)\Data :#1

Page: 1

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Radiated Emission Measurement

File :M619(CH01)

Data :#5

Date: 2007/03/06

Time: 下午 02:53:26

95.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH01(2412MHz)(104cm) Tx Rate:bpsk ; Tx Power:13

2.7G-10G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dB	Over	
								Detector
1		2700.000	39.19	22.58	61.77	74.00	-12.23	peak
2		2700.000	25.32	22.58	47.90	54.00	-6.10	AVG
3		4817.000	45.67	7.42	53.09	74.00	-20.91	peak
4	*	4817.000	43.11	7.42	50.53	54.00	-3.47	AVG
5		9580.250	38.67	17.31	55.98	74.00	-18.02	peak
6		9580.250	29.38	17.31	46.69	54.00	-7.31	AVG

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH01)\Data :#5

Page: 1

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Radiated Emission Measurement

File :M619(CH01)

Data :#7

Date: 2007/03/06

Time: 下午 03:00:15

95.0 dBuV



Site site #1

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH01(2412MHz)(154cm) Tx Rate:bpsk ; Tx Power:13

2.7G-10G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dB	Over	Detector	Comment
1	*	2700.000	38.93	22.58	61.51	74.00	-12.49	peak	
2	*	2700.000	24.66	22.58	47.24	54.00	-6.76	AVG	
3		4835.250	40.71	7.61	48.32	74.00	-25.68	peak	
4		9580.250	39.01	17.31	56.32	74.00	-17.68	peak	
5		9580.250	28.95	17.31	46.26	54.00	-7.74	AVG	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH01)\Data :#7

Page: 1

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Radiated Emission Measurement

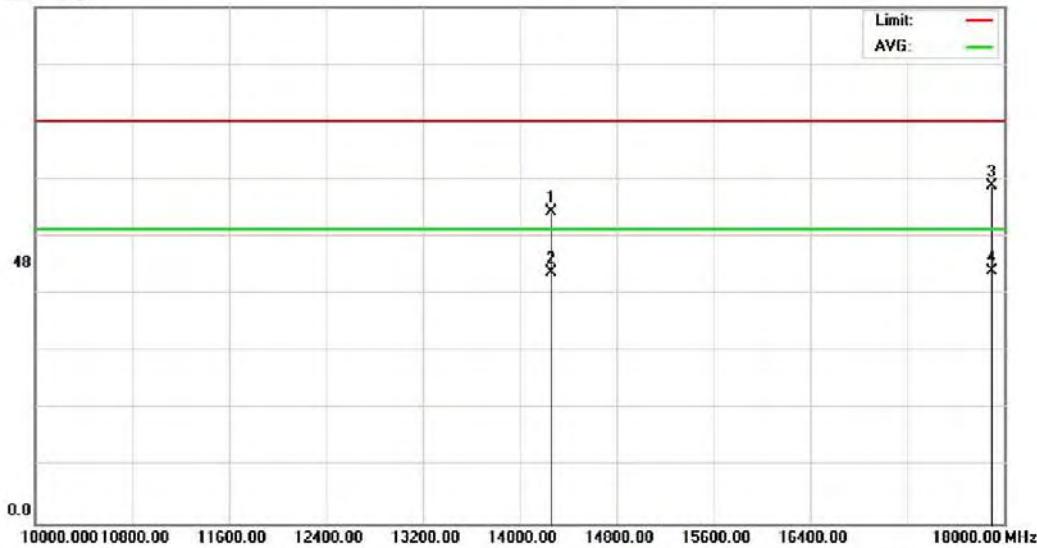
File :M619(CH01)

Data :#9

Date: 2007/03/06

Time: 下午 05:37:12

95.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 1m

M/N: M619

Mode: 11b

Note: CH01(2412MHz)(104cm)Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		14260.00	38.61	18.66	57.27	74.00	-16.73	peak	
2		14260.00	27.65	18.66	46.31	54.00	-7.69	AVG	
3		17900.00	37.15	24.96	62.11	74.00	-11.89	peak	
4	*	17900.00	21.53	24.96	46.49	54.00	-7.51	AVG	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH01)\Data :#9

Page: 1

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Radiated Emission Measurement

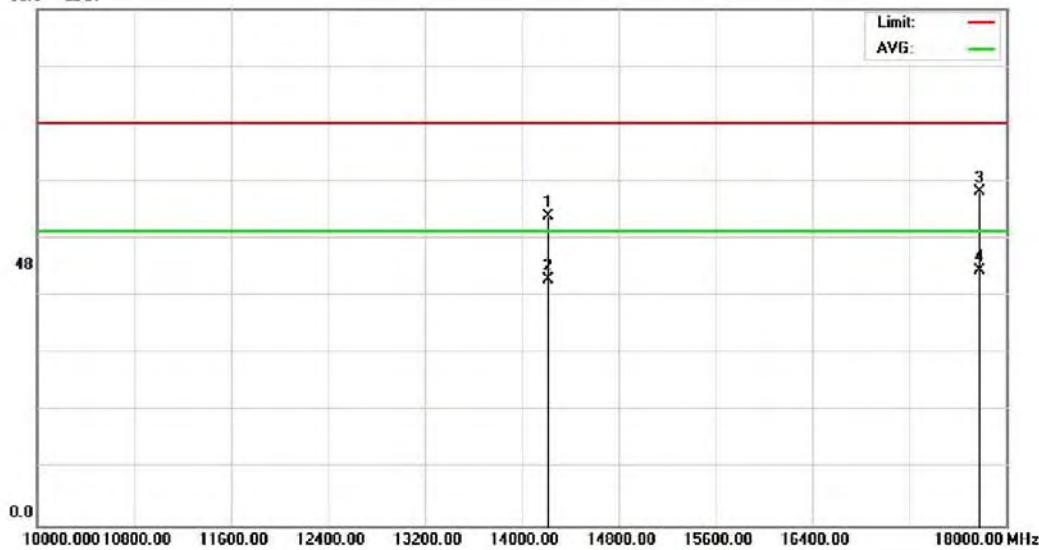
File :M619(CH01)

Data :#11

Date: 2007/03/06

Time: 下午 05:41:17

95.0 dBuV



Site site #1

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 1m

M/N: M619

Mode: 11b

Note: CH01(2412MHz)(154cm) Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		14220.00	38.10	18.78	56.88	74.00	-17.12	peak	
2		14220.00	26.35	18.78	45.13	54.00	-8.87	AVG	
3		17780.00	38.05	23.30	61.35	74.00	-12.65	peak	
4	*	17780.00	23.57	23.30	46.87	54.00	-7.13	AVG	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH01)\Data :#11

Page: 1

Engineer Signature:



3.6.2 Open Field Radiated Emissions (Subpart B&C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following

Applicant : Inventec Corporation
Model No : Mercury 619
EUT : PDA PHONE
Test Mode : 802.11b CH6 2437.000 (Local Frequency: 2437.000 MHz)
Test Date : 03/06/2007

Please refer to next page of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude – Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambient noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



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Radiated Emission Measurement

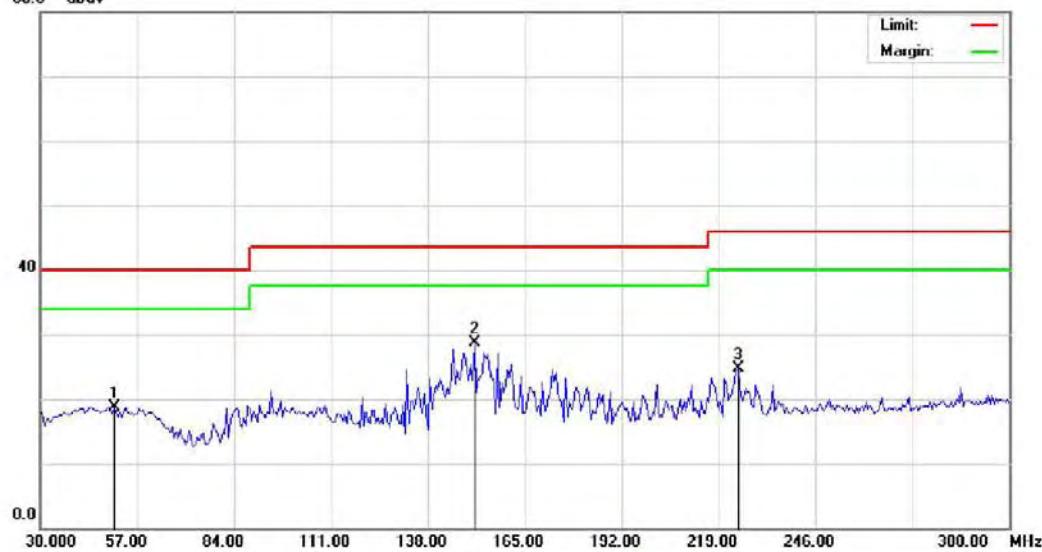
File :M619(EMI)

Data :#5

Date: 2007/03/06

Time: 下午 08:06:02

80.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC Class B 3M Radiation

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH06(2437MHz) Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dB			
1		50.5200	30.96	-12.17	18.79	40.00	-21.21	peak	
2	*	150.9600	44.61	-15.99	28.62	43.50	-14.88	peak	
3		224.4000	36.91	-12.17	24.74	46.00	-21.26	peak	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(EMI)\Data :#5

Page: 1

Engineer Signature:



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Radiated Emission Measurement

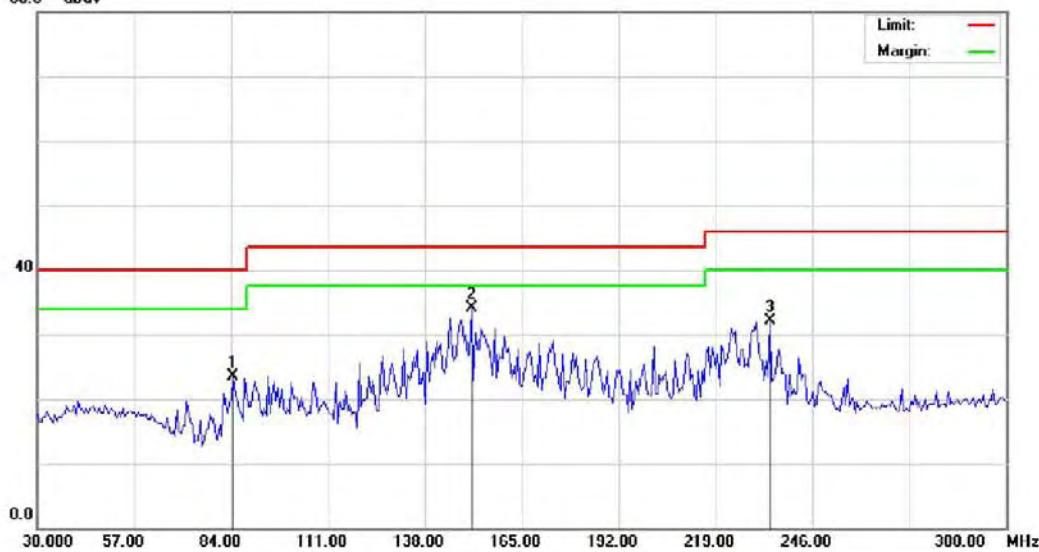
File :M619(EMI)

Data :#7

Date: 2007/03/06

Time: 下午 08:14:32

80.0 dBuV



Site site #1

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC Class B 3M Radiation

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH06(2437MHz) Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		84.5400	38.39	-14.90	23.49	40.00	-16.51	peak	
2	*	150.9600	50.13	-15.99	34.14	43.50	-9.36	peak	
3		234.1200	43.94	-11.75	32.19	46.00	-13.81	peak	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(EMI)\Data :#7

Page: 1

Engineer Signature:



A Test Lab Techno Corp.
 Tel: +886-3-271-0188 Fax: +886-3-271-0190
 NO.140-1,Changan Street,Bade City,Taoyuan Country 344,Taiwan,

Radiated Emission Measurement

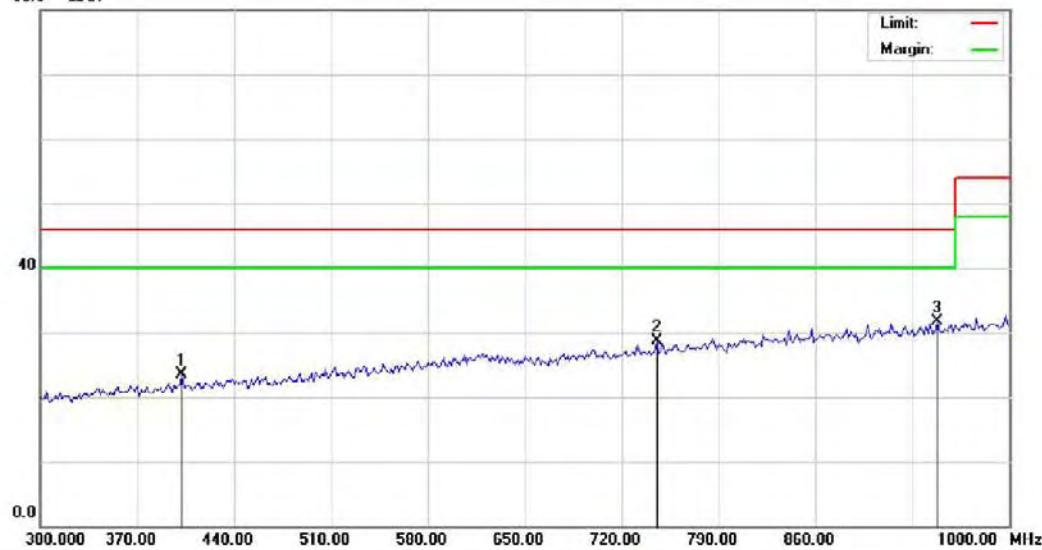
File :M619(EMI)

Data :#6

Date: 2007/03/06

Time: 下午 08:10:17

80.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC Class B 3M Radiation

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH06(2437MHz) Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		402.1999	31.88	-8.29	23.59	46.00	-22.41	peak	
2		745.2000	31.87	-3.11	28.76	46.00	-17.24	peak	
3	*	948.2000	31.40	0.23	31.63	46.00	-14.37	peak	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(EMI)\Data :#6

Page: 1

Engineer Signature:



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NO.140-1,Changan Street,Bade City,Taoyuan Country 344,Taiwan,

Radiated Emission Measurement

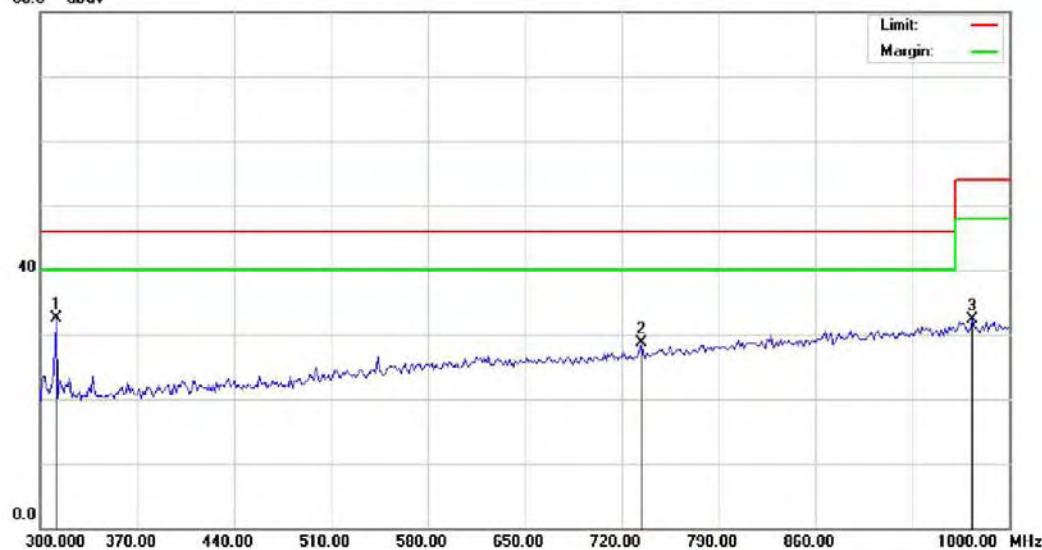
File :M619(EMI)

Data :#8

Date: 2007/03/06

Time: 下午 08:18:49

80.0 dBuV



Site site #1

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC Class B 3M Radiation

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH06(2437MHz) Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV	dB	Detector	
1	*	311.1999	42.25	-9.82	32.43	46.00	-13.57	peak
2		734.0000	31.95	-3.34	28.61	46.00	-17.39	peak
3		973.3999	31.60	0.67	32.27	54.00	-21.73	peak

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(EMI)\Data :#8

Page: 1

Engineer Signature:



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Radiated Emission Measurement

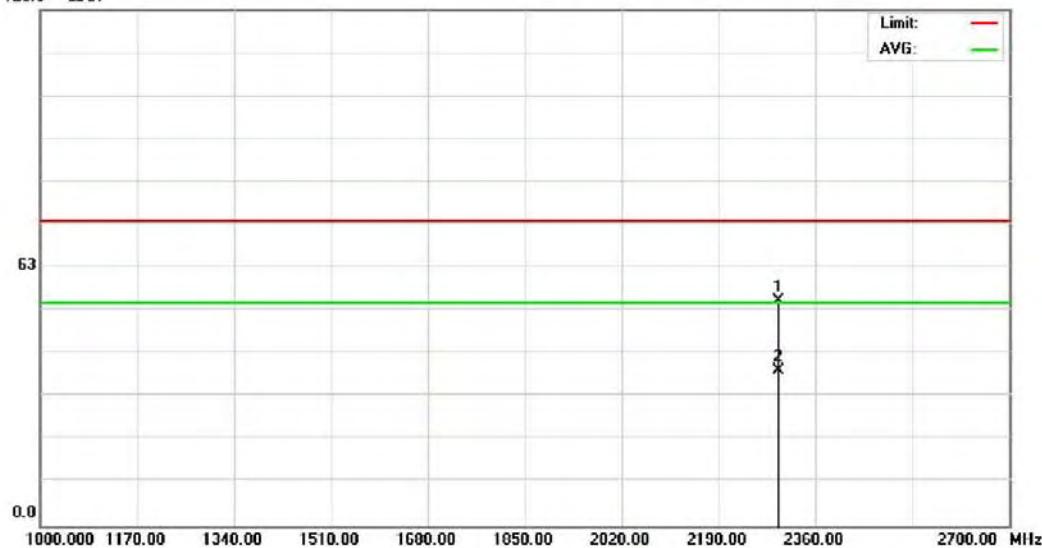
File :M619(CH06)

Data :#1

Date: 2007/03/06

Time: 下午 02:24:39

125.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH06(2437MHz)(104cm) Tx Rate:bpsk ; Tx Power:13

2.7G-10G AV Scan

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dB			
1		2295.400	54.07	0.48	54.55	74.00	-19.45	peak	
2	*	2295.400	37.23	0.48	37.71	54.00	-16.29	AVG	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH06)\Data :#1

Page: 1

Engineer Signature:



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Radiated Emission Measurement

File :M619(CH06)

Data :#3

Date: 2007/03/06

Time: 下午 02:30:31

125.0 dBuV



Site site #1

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH06(2437MHz)(154cm) Tx Rate:bpsk ; Tx Power:13

2.7G-10G AV Scan

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dB			
1		2244.400	54.10	0.46	54.56	74.00	-19.44	peak	
2	*	2244.400	37.28	0.46	37.74	54.00	-16.26	AVG	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH06)\Data :#3

Page: 1

Engineer Signature:



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Radiated Emission Measurement

File :M619(CH06)

Data :#7

Date: 2007/03/06

Time: 下午 02:47:00

95.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH06(2437MHz)(104cm) Tx Rate:bpsk ; Tx Power:13

2.7G-10G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		2700.000	39.34	22.58	61.92	74.00	-12.08	peak	
2		2700.000	25.35	22.58	47.93	54.00	-6.07	AVG	
3		4871.750	48.31	7.72	56.03	74.00	-17.97	peak	
4	*	4871.750	44.85	7.72	52.57	54.00	-1.43	AVG	
5		9598.500	38.95	17.41	56.36	74.00	-17.64	peak	
6		9598.500	29.37	17.41	46.78	54.00	-7.22	AVG	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH06)\Data :#7

Page: 1

Engineer Signature:



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Radiated Emission Measurement

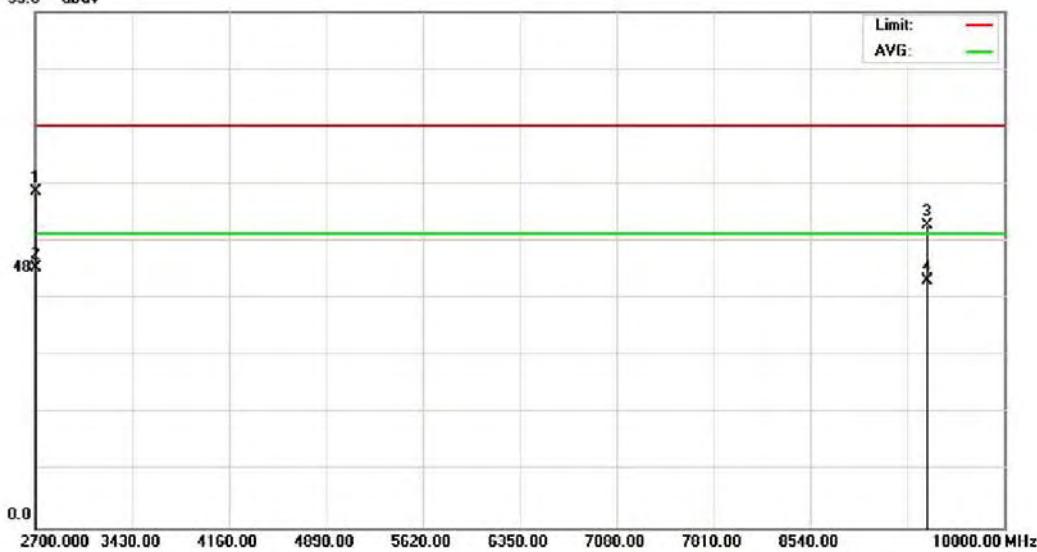
File :M619(CH06)

Data :#5

Date: 2007/03/06

Time: 下午 02:42:03

95.0 dBuV



Site site #1

Polarization: **Horizontal**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH06(2437MHz)(154cm) Tx Rate:bpsk ; Tx Power:13

2.7G-10G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		2700.000	39.32	22.58	61.90	74.00	-12.10	peak	
2	*	2700.000	25.36	22.58	47.94	54.00	-6.06	AVG	
3		9416.000	38.75	17.06	55.81	74.00	-18.19	peak	
4		9416.000	28.38	17.06	45.44	54.00	-8.56	AVG	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH06)\Data :#5

Page: 1

Engineer Signature:



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Radiated Emission Measurement

File :M619(CH06)

Data :#11

Date: 2007/03/06

Time: 下午 06:07:49

95.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC part 15 (PK)

Power:

Humidity: 60 %

EUT: PDA

Distance: 1m

M/N: M619

Mode: 11b

Note: CH06(2437MHz)(104cm)Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		14120.00	37.62	18.87	56.49	74.00	-17.51	peak	
2	*	14120.00	27.49	18.87	46.36	54.00	-7.64	AVG	
3		17880.00	37.73	24.37	62.10	74.00	-11.90	peak	
4		17880.00	21.68	24.37	46.05	54.00	-7.95	AVG	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH06)\Data :#11

Page: 1

Engineer Signature:



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Radiated Emission Measurement

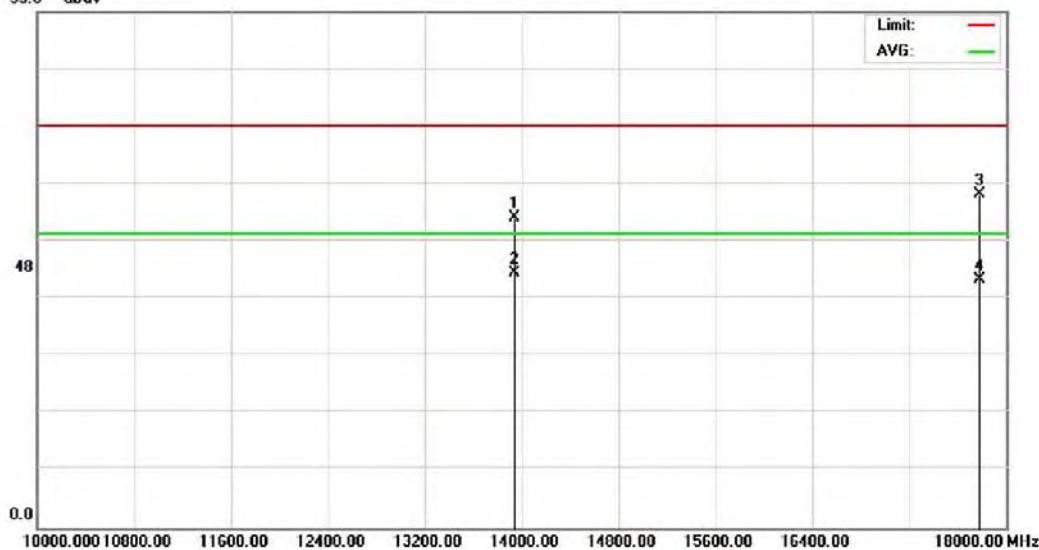
File :M619(CH06)

Data :#9

Date: 2007/03/06

Time: 下午 06:03:19

95.0 dBuV



Site site #1

Polarization: **Horizontal** Temperature: 22 °C

Limit: FCC part 15 (PK)

Power: Humidity: 60 %

EUT: PDA

Distance: 1m

M/N: M619

Mode: 11b

Note: CH06(2437MHz)(154cm)Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		13940.00	38.53	18.54	57.07	74.00	-16.93	peak	
2	*	13940.00	28.36	18.54	46.90	54.00	-7.10	AVG	
3		17780.00	38.11	23.30	61.41	74.00	-12.59	peak	
4		17780.00	22.35	23.30	45.65	54.00	-8.35	AVG	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(CH06)\Data :#9

Page: 1

Engineer Signature:



3.6.3 Open Field Radiated Emissions (Subpart B&C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Inventec Corporation
Model No : Mercury 619
EUT : PDA PHONE
Test Mode : 802.11b CH11 2462.000 (Local Frequency: 2462.000 MHz)
Test Date : 03/06/2007

Please refer to next page of detail testing data.

Notes:

1. Margin= Amplitude - Limits
2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
3. Height of table for EUT placed: 0.8 Meter.
4. ANT= Antenna height.
5. Amplitude= Reading Amplitude – Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambient noise.
8. All frequencies from 30MHz to 26.5GHz have been tested



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Radiated Emission Measurement

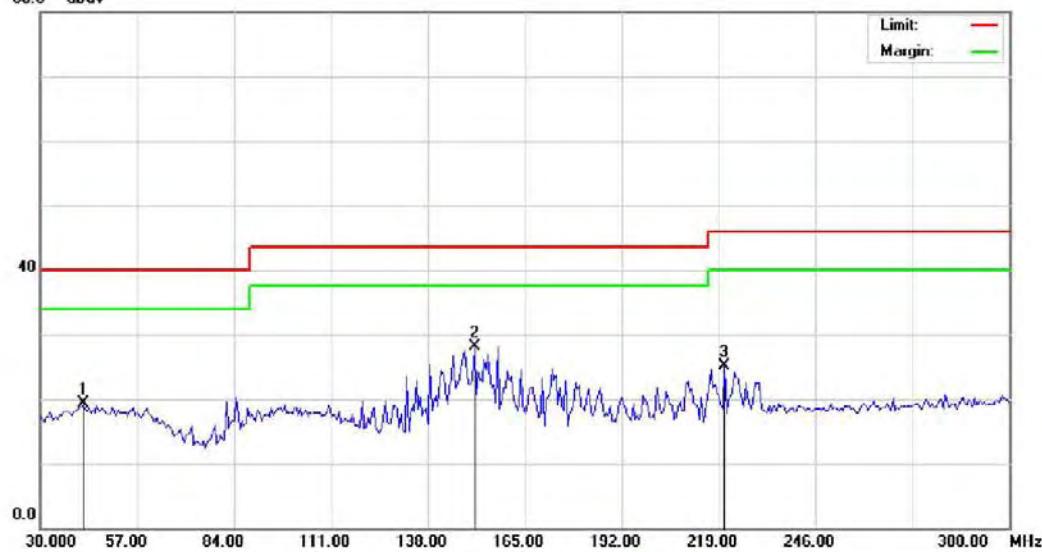
File :M619(EMI)

Data :#9

Date: 2007/03/06

Time: 下午 08:51:45

80.0 dBuV



Site site #1

Polarization: **Vertical**

Temperature: 22 °C

Limit: FCC Class B 3M Radiation

Power:

Humidity: 60 %

EUT: PDA

Distance: 3m

M/N: M619

Mode: 11b

Note: CH11(2462MHz) Tx Rate:bpsk ; Tx Power:13

10G - 18G PK Scan Att:0 ; REF:95 ; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		41.8800	31.19	-11.87	19.32	40.00	-20.68	peak	
2	*	150.9600	44.05	-15.99	28.06	43.50	-15.44	peak	
3		220.6200	37.39	-12.35	25.04	46.00	-20.96	peak	

*:Maximum data x:Over limit !:over margin

•Reference Only

File :M619(EMI)\Data :#9

Page: 1

Engineer Signature: