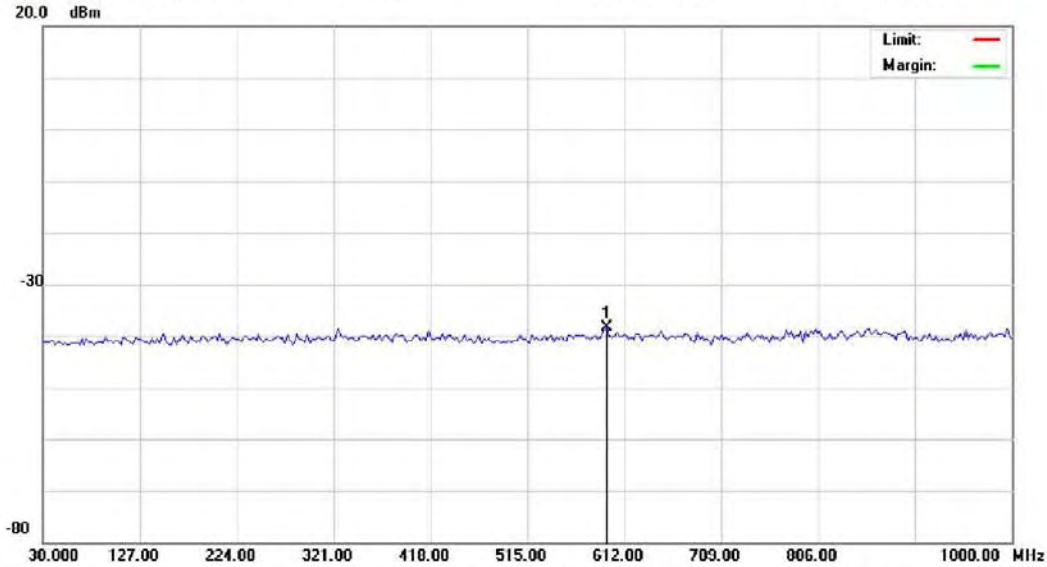




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Radiated Emission Measurement

File :M619(02-07-2007)(BT EDR) Data :#11 Date: 2007/02/07 Time: 下午 05:20:51



Site site #1 Polarization: Temperature: 26 °C
 Limit: Power: AC 110V/60Hz Humidity: 55 %
 EUT: PDA Distance:
 M/N: M619
 Mode: BT EDR
 Note: 2480(2DH1)

No.	Mk	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	595.0250	-44.43	6.02	-38.41			peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :M619(02-07-2007)(BT EDR)\Data :#11

Page: 1

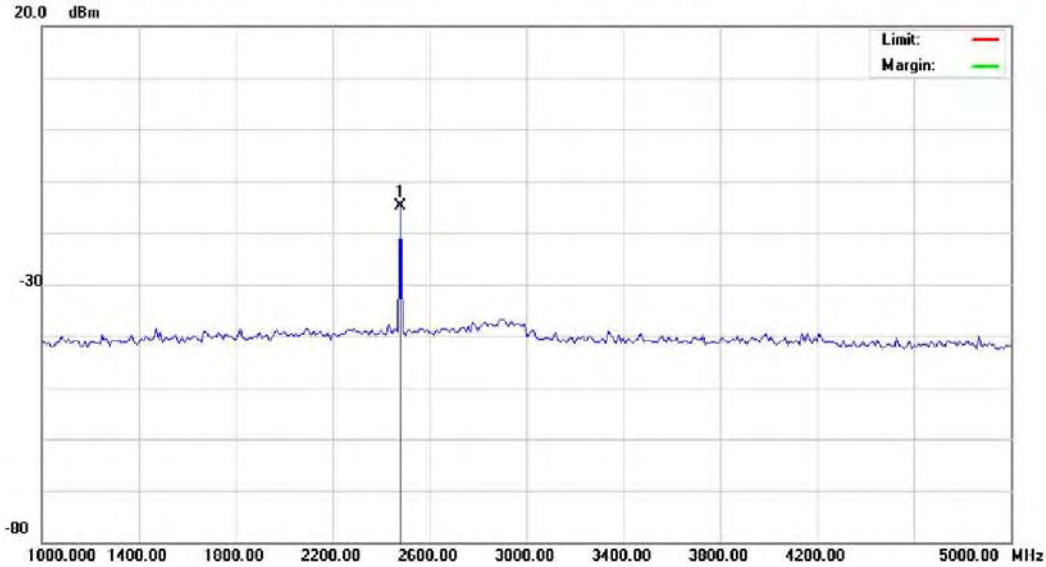
Engineer Signature:



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Radiated Emission Measurement

File :M619(02-07-2007)(BT EDR) Data :#12 Date: 2007/02/07 Time: 下午 05:21:04



Site site #1 Polarization: Temperature: 26 °C
 Limit: Power: AC 110V/60Hz Humidity: 55 %
 EUT: PDA Distance:
 M/N: M619
 Mode: BT EDR
 Note: 2480(2DH1)

No.	Mk	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	2480.000	-20.91	6.09	-14.82			peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :M619(02-07-2007)(BT EDR)\Data :#12

Page: 1

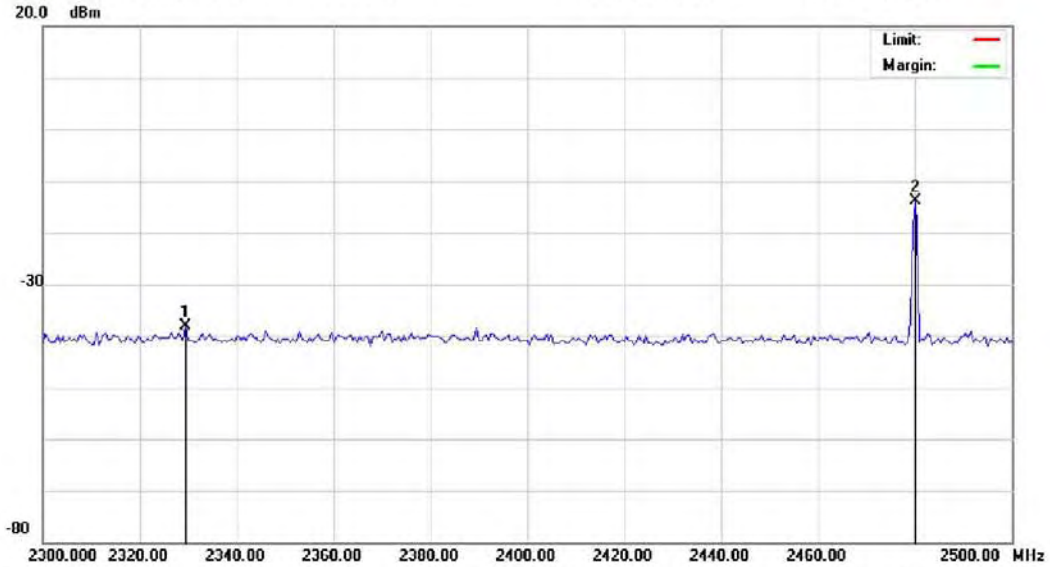
Engineer Signature:



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Radiated Emission Measurement

File :M619(02-07-2007)(BT EDR) Data :#13 Date: 2007/02/07 Time: 下午 05:21:17



Site site #1 Polarization: Temperature: 26 °C
 Limit: Power: AC 110V/60Hz Humidity: 55 %
 EUT: PDA Distance:
 M/N: M619
 Mode: BT EDR
 Note: 2480(2DH1)

No.	Mk	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1		2329.500	-44.22	6.09	-38.13			peak	
2	*	2480.000	-20.01	6.09	-13.92			peak	

*:Maximum data x:Over limit l:over margin ●Reference Only

File :M619(02-07-2007)(BT EDR)\Data :#13

Page: 1

Engineer Signature:

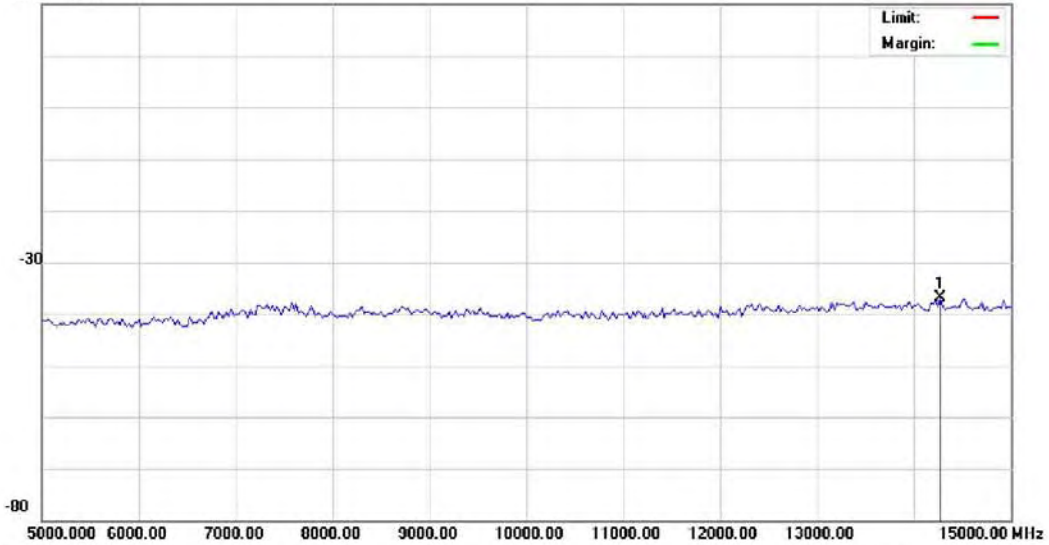


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Radiated Emission Measurement

File :M619(02-07-2007)(BT EDR) Data :#14 Date: 2007/02/07 Time: 下午 05:21:30

20.0 dBm



Site site #1 Polarization: Temperature: 26 °C
 Limit: Power: AC 110V/60Hz Humidity: 55 %
 EUT: PDA Distance:
 M/N: M619
 Mode: BT EDR
 Note: 2480(2DH1)

No.	Mk	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	14275.00	-43.53	6.54	-36.99			peak	

*:Maximum data x:Over limit l:over margin ●Reference Only

File :M619(02-07-2007)(BT EDR)\Data :#14

Page: 1

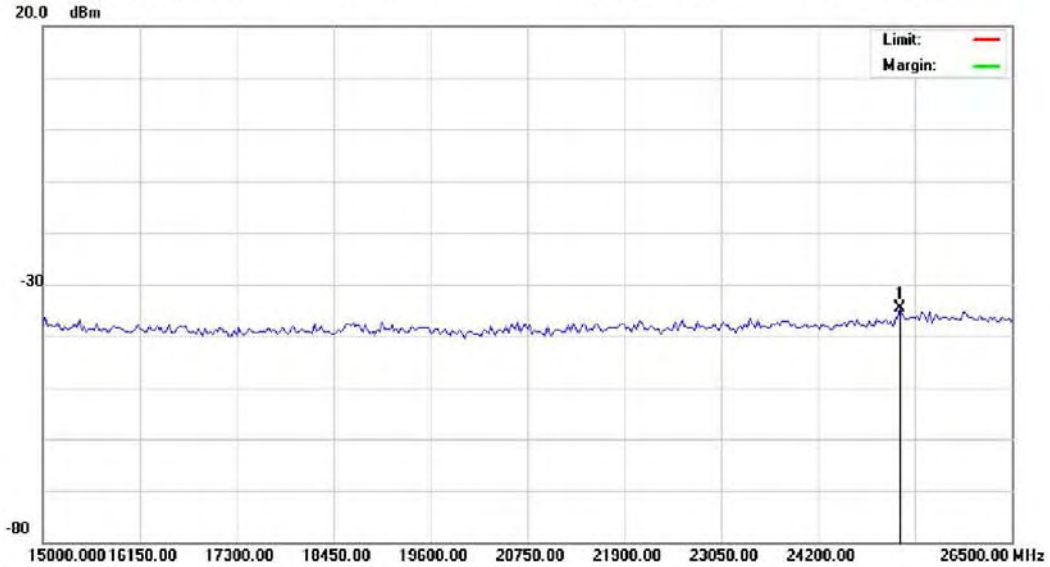
Engineer Signature:



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Radiated Emission Measurement

File :M619(02-07-2007)(BT EDR) Data :#15 Date: 2007/02/07 Time: 下午 05:21:43



Site site #1 Polarization: Temperature: 26 °C
 Limit: Power: AC 110V/60Hz Humidity: 55 %
 EUT: PDA Distance:
 M/N: M619
 Mode: BT EDR
 Note: 2480(2DH1)

No.	Mk	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	25177.50	-41.68	6.95	-34.73			peak	

*:Maximum data x:Over limit l:over margin ●Reference Only

File :M619(02-07-2007)(BT EDR)\Data :#15

Page: 1

Engineer Signature:

10. Band Edges Requirements

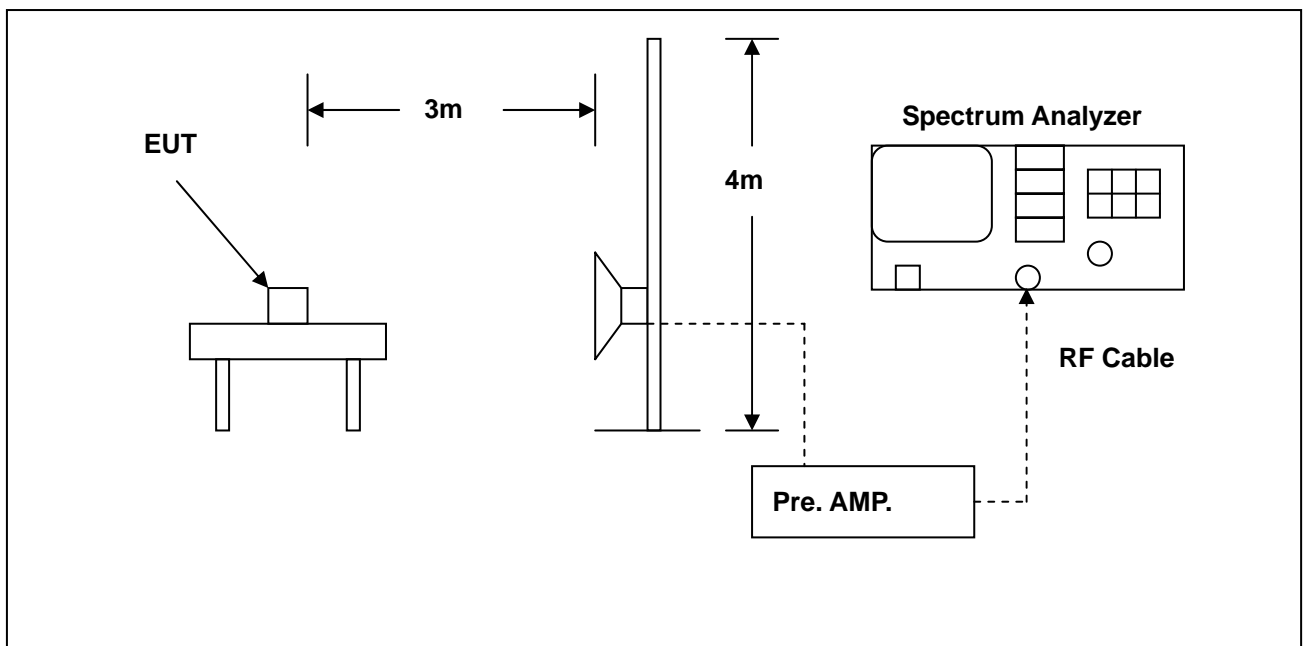
10.1 Test Condition & Setup:

The emissions on the harmonics frequencies, the limits, and the margin of compliance are presented. These tests were made when the transmitter was in full radiated power. The additional test was performed to show compliance with the requirement at the band-edge frequency 2483.5 MHz and up to 2500 MHz and at 2390.0 MHz.

The transmitter was configured with the worst case antenna and setup to transmit at the highest channel. Then the field strength was measured at 2483.5 MHz.

The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel. Then the field strength was measured at 2390.0 MHz. These tests were performed at 4 different bit rates.

10.2 Test Instruments Configuration:





10.3 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
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	Jun. 26, 2006	Jun. 25, 2007



10.4 Test Result _ Bluetooth 2.0 Mode:

Applicant : Inventec Corporation
Model No : Mercury 619
EUT : PDA PHONE
Test Mode : Low CH & High CH
Test Date : 12/21/2006

Test Graphs See next page.

Notes:

1. Margin= Amplitude - Limits
2. Height of table for EUT placed: 0.8 Meter.
3. ANT= Antenna height.
4. Duty= Duty cycle correction factor.
5. Dis= Distance extrapolation factor.
6. Amplitude= Reading Amplitude – Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
7. Actual Amp= Amplitude – Duty – Dis.



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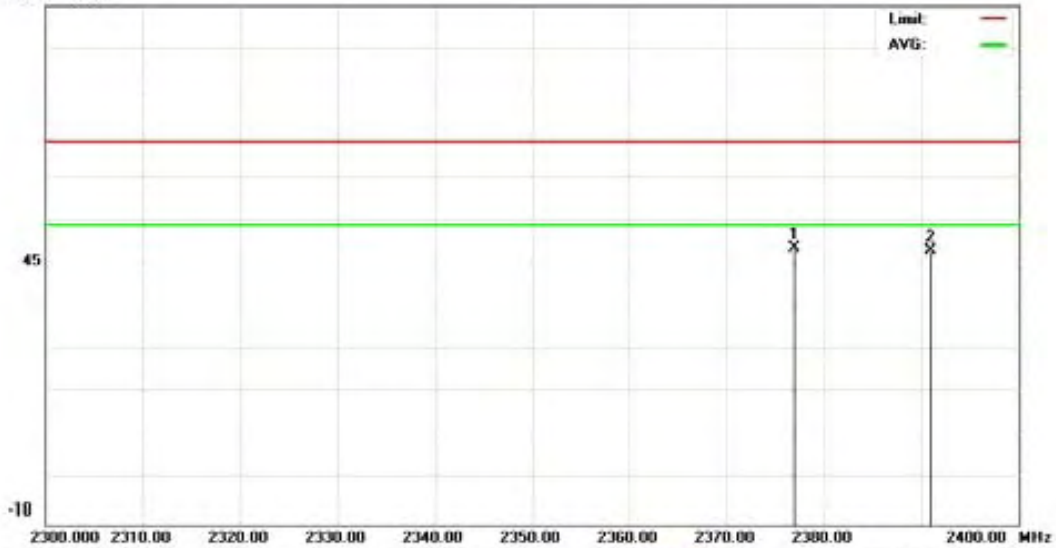
Radiated Emission Measurement

File: FCC part15C(12-21-2006)
 107.0 dBuV

Data #1

Date: 2006/12/21

Time: 上午 08:53:23



Site site #1

Polarization: *Vertical*

Temperature: 22°C

Limit: FCC part 15 (PK)

Power:

Humidity: 60%

EUT: PDA

Distance: 3m

MN: M519

Mode:

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	2377.000	48.36	0.17	48.53	74.00	-25.47	peak	
2		2391.000	47.74	0.19	47.93	74.00	-26.07	peak	

*:Maximum data x:Over limit :lower margin

▲Reference Only

File :FCC part15C(12-21-2006)\Data :#1

Page: 1

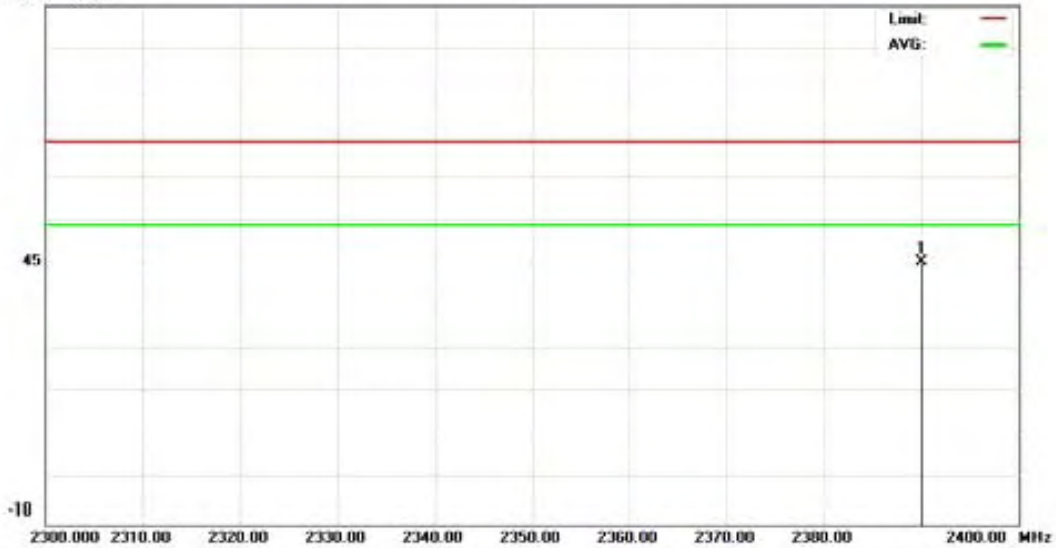
Engineer Signature:



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Radiated Emission Measurement

File :FCC part15C(12-21-2006) Data :#3 Date : 2006/12/21 Time : 上午 08:57:56
 107.0 dBuV



Site site #1 Polarization: *Horizontal* Temperature: 22°C
 Limit: FCC part 15 (PK) Power: Humidity: 60 %
 EUT: PDA Distance: 3m
 M/N: M519
 Mode:
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	2390.000	44.66	0.19	44.85	74.00	-29.15	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :FCC part15C(12-21-2006)\Data #3

Page: 1

Engineer Signature:



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Radiated Emission Measurement

File: FCC part15C(12-21-2006) Data #5 Date: 2006/12/21 Time: 上午 09:06:08
 107.0 dBuV



Site site #1 Polarization: *Vertical* Temperature: 22°C
 Limit: FCC part 15 (PK) Power: Humidity: 60 %
 EUT: PDA Distance: 3m
 MN: M519
 Mode:
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	2483.816	69.14	0.24	69.38	74.00	-4.62	peak	
2		2483.816	40.93	0.24	41.17	54.00	-12.83	AVG	

*:Maximum data x:Over limit :over margin

▲Reference Only

File :FCC part15C(12-21-2006)\Data :#5

Page: 1

Engineer Signature:



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Radiated Emission Measurement

File :FCC part15C(12-21-2006)
 107.0 dBuV

Data :#7

Date : 2006/12/21

Time : 上午 09:10:15



Site site #1

Polarization: *Horizontal*

Temperature: 22°C

Limit: FCC part 15 (PK)

Power:

Humidity: 60%

EUT: PDA

Distance: 3m

M/N: M519

Mode:

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		2483.546	59.79	0.24	60.03	74.00	-13.97	peak	
2	*	2483.546	41.44	0.24	41.68	54.00	-12.32	AVG	

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

●:Reference Only

File :FCC part15C(12-21-2006)\Data #7

Page: 1

Engineer Signature:



10.5 Test Result _ Bluetooth EDR Mode:

Applicant : Inventec Corporation
Model No : Mercury 619
EUT : PDA PHONE
Test Mode : Low CH & High CH
Test Date : 02/11/20067

Test Graphs See next page.

Notes:

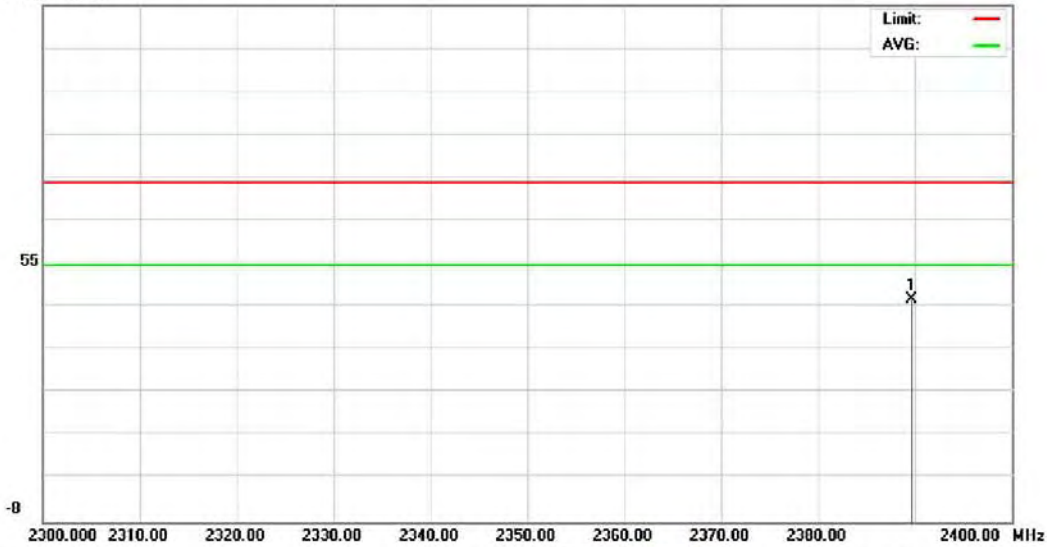
1. Margin= Amplitude - Limits
2. Height of table for EUT placed: 0.8 Meter.
3. ANT= Antenna height.
4. Duty= Duty cycle correction factor.
5. Dis= Distance extrapolation factor.
6. Amplitude= Reading Amplitude – Amplifier gain + Cable loss + Antenna factor
(Auto calculate in spectrum analyzer)
7. Actual Amp= Amplitude – Duty – Dis.



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Radiated Emission Measurement

File :M619 Bandedge(02-11-2007 Data :#1 Date: 2007/02/11 Time: 14:48:59
 117.0 dBuV



Site 966半電波暗室 Polarization: **Vertical** Temperature: 22 °C
 Limit: FCC part 15 (PK) Power: AC 110V/60Hz Humidity: 60 %
 EUT: PDA Distance: 3m RBW: 1000 KHz
 M/N: M619 VBW: 1000 KHz Sweep Time: 500 ms
 Mode: BT EDR
 Note: 2402(115m)

No.	Mk	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	cm	degree	Comment
1	*	2389.600	45.60	0.19	45.79	74.00	-28.21	peak		

*:Maximum data x:Over limit l:over margin ●For Report

Receiver: ESCI_1 Spectrum Analyzer: ESCI
 Antenna: BBHA9120D(1G-18G) Engineer Signature:
 Amplifier:

File :M619 Bandedge(02-11-2007)Data :#1 Page: 1



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Radiated Emission Measurement

File :M619 Bandedge(02-11-2007) Data :#5 Date: 2007/02/11 Time: 15:02:16
 117.0 dBuV



Site 966半電波暗室 Polarization: **Horizontal** Temperature: 22 °C
 Limit: FCC part 15 (PK) Power: AC 110V/60Hz Humidity: 60 %
 EUT: PDA Distance: 3m RBW: 1000 KHz
 M/N: M619 VBW: 1000 KHz Sweep Time: 500 ms
 Mode: BT EDR
 Note: 2402(130m)

No.	Mk	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	cm	degree	Comment
1	*	2389.800	44.25	0.19	44.44	74.00	-29.56	peak		

*:Maximum data x:Over limit !:over margin ●For Report

Receiver: ESCI_1 Spectrum Analyzer: ESCI
 Antenna: BBHA9120D(1G-18G) Engineer Signature:
 Amplifier:

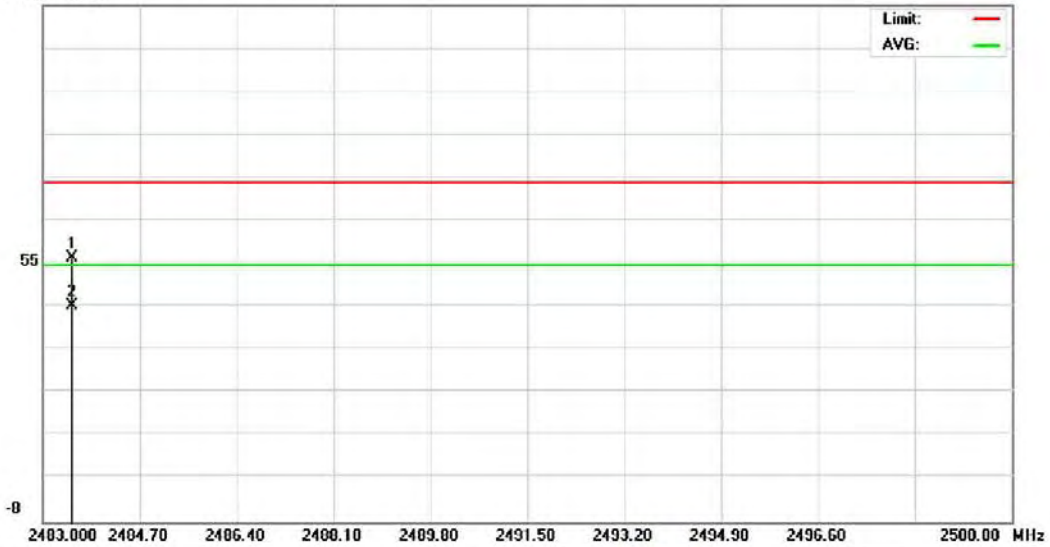
File :M619 Bandedge(02-11-2007)Data :#5 Page: 1



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Radiated Emission Measurement

File :M619 Bandedge(02-11-2007 Data :#3 Date: 2007/02/11 Time: 14:54:05
 117.0 dBuV



Site 966半電波暗室 Polarization: **Vertical** Temperature: 22 °C
 Limit: FCC part 15 (PK) Power: AC 110V/60Hz Humidity: 60 %
 EUT: PDA Distance: 3m RBW: 1000 KHz
 M/N: M619 VBW: 1000 KHz Sweep Time: 500 ms
 Mode: BT EDR
 Note: 2480(115m)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	cm	degree	Comment
1		2483.510	55.82	0.24	56.06	74.00	-17.94	peak		
2	*	2483.510	44.20	0.24	44.44	54.00	-9.56	AVG		

*:Maximum data x:Over limit l:over margin ●For Report

Receiver: ESCI_1 Spectrum Analyzer: ESCI
 Antenna: BBHA9120D(1G-18G) Engineer Signature:
 Amplifier:

File :M619 Bandedge(02-11-2007)Data :#3 Page: 1



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Radiated Emission Measurement

File :M619 Bandedge(02-11-2007 Data :#7 Date: 2007/02/11 Time: 15:06:40
 117.0 dBuV



Site 966半電波暗室 Polarization: **Horizontal** Temperature: 22 °C
 Limit: FCC part 15 (PK) Power: AC 110V/60Hz Humidity: 60 %
 EUT: PDA Distance: 3m RBW: 1000 KHz
 M/N: M619 VBW: 1000 KHz Sweep Time: 500 ms
 Mode: BT EDR
 Note: 2480(130m)

No.	Mk	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	cm	degree	Comment
1		2483.510	52.22	0.24	52.46	74.00	-21.54	peak		
2	*	2483.510	42.10	0.24	42.34	54.00	-11.66	AVG		

*:Maximum data x:Over limit l:over margin ●For Report

Receiver: ESCI_1 Spectrum Analyzer: ESCI
 Antenna: BBHA9120D(1G-18G) Engineer Signature:
 Amplifier:

File :M619 Bandedge(02-11-2007)Data :#7 Page: 1



11. Antenna Requirements

11.1 Standard Applicable:

For intentional device, according to 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.

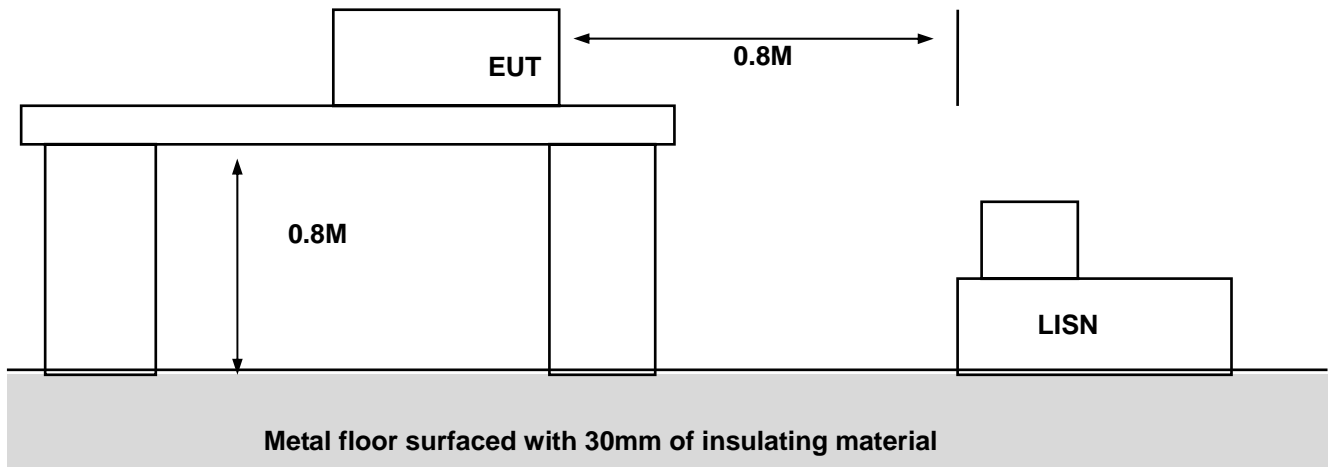
And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2 Antenna Connector Construction

The antenna used in this product is internal antenna. And the maximum Gain of this antenna is only 2.03 dBi.

Appendix A - EUT Test SETUP

MEASUREMENT OF POWER LINE CONDUCTED RFI VOLTAGE



Appendix B - EUT Test SETUP

MEASUREMENT OF RADIATED EMISSION

