

### **RF - TEST REPORT**

Report Number	:	68/850.9.059.0	1	Date of Issue:	22 June 2009
Model	<u>:</u>	PC-81006N			
Product Type	<u>:</u>	Notebook			
Applicant	<u>:</u>	Wanlida Group	Co., Ltd.		
Address	<u>:</u>	No. 618 Jiahe F	Road, Wan	ilida Industry Zo	ne,
	Xiamen Fujian, China 361006				
Production Facility	: Wanlida Group Co., Ltd.				
Address	:	Wanlida Industr	y Zone, N	anjing, Fujian, C	hina 363601
Test Result	:	■ Positive	□ Negati	ve	
Total pages including Appendices	:	54			

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R	System Measurement Uncertainty	5/



## 2 Details about the Test Laboratory

## **Details about the Test Laboratory**

Company name: Jiangsu TÜV Product Service Ltd. – Shenzhen Branch

6th Floor, H Hall,

Century Craftwork Culture Square,

No. 4001, Fuqiang Road, Futian District 518048,

Shenzhen, P.R.C.

Telephone: 86 755 8828 6998 Fax: 86 755 8828 5299

Company name: China Shenzhen Academy of Metrology and Quality Inspection,

Metrology and Quality Inspection building,

Central Section of LongZhu Road,

Nan Shan, Shenzhen,

Telephone: 86 755 2694 1599 Fax: 86 755 2694 1545

Company name: Audix Technology (shenzhen) Co.,Ltd

Block Shenzhen, Science & Industry Park,

Nantou, Shenzhen,

Guangdong,

China

Telephone: 86 755 2663 9496 Fax: 86 755 2663 2877

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## 3 Description of the Equipment Under Test

## **Description of the Equipment Under Test**

Product: Notebook

Model no.: PC-81006N

Serial number: NIL

Options and accessories: NIL

Rating: DC 12V 3A, 36W

AC Adaptor:

Model: MPA-12030

Input: 100-240V ~ 50/60Hz 1A MAX

Output: +12V DC 3A

Antenna: Integral antenna inside the EUT, NOT accessible by end user

**RF** Transmission

Frequency: 2400-2483.5MHz

Description of the EUT: NIL

Auxiliary Equipment and Cable Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
LCD monitor	Lenovo	9227-AE1	V1TDB38
Keyboard	Lenovo	SK-8825 (L)	02553778
Mouse	Lenovo	MO28UOL	4418011108
Headphone	Ouyun	OH601	
USB flash drive	Kingston	Data Traveller	
SD card	Kingston	SD4/4GBFE	
VGA cable	Lenovo	Shield	140cm
AC Power cable	Lenovo	Unshield	180cm

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# 4 Summary of Test Standards

Test Standards			
FCC Part 15 Subpart C	PART 15 - RADIO FREQUENCY DEVICES		
	Subpart C - Intentional Radiators		
FCC Part 15 Subpart B	PART 15 - RADIO FREQUENCY DEVICES		
	Subpart B - Unintentional Radiators		



# **5 Summary of Test Results**

Technical Requirements								
FCC Part 15 Subpart C								
Test Condition	Pages	Test Result						
		Pass	Fail	N/A				
15.107 15.207 Conducted Emission AC Power Port	8							
15.247 (b) (1) Conducted peak output power	12							
15.247(d) Band edge compliance of RF emissions	14							
15.247(d) Spurious RF conducted emissions	21							
15.247(d) 15.209 15.109 Spurious radiated emissions	26							
15.247(a)(1) 20dB bandwidth	30							
15.247(a)(1) Carrier frequency separation	36							
15.247(a)(1)(iii) Number of hopping frequencies	42							
15.247(a)(1)(iii) Dwell Time	46							



#### **6 General Remarks**

#### Remarks

This submittal(s) (test report) is intended for FCC ID: SMFPC81006N filing to comply with Section 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C Rules.

#### **SUMMARY:**

ΑII	tests	according	to the	regulations	cited o	n page 5	were

- Performed
- ☐ **Not** Performed

The Equipment Under Test

- - Fulfills the general approval requirements.
- □ **Does not** fulfill the general approval requirements.

Sample Received Date: May 22 2009

**Testing Start Date:** May 22 2009

Testing End Date: Jun 10 2009

- Jiangsu TÜV Product Service Ltd. - Shenzhen Branch -

Reviewed by: Prepared by:

> Paul Yu **EMC Project Manager**

Ken Li **EMC Test Engineer** 



## 7 Technical Requirement

#### 7.1 Conducted Emission

#### **Test Method**

- 1 The EUT was placed on a table, which is 0.8m above ground plane
- 2 The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
- 3 Maximum procedure was performed to ensure EUT compliance
- 4 A EMI test receiver (R&S Test Receiver ESCS30) is used to test the emissions from both sides of AC line

#### Limit

Frequency	QP Limit	AV Limit
MHz	dΒμV	dΒμV
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

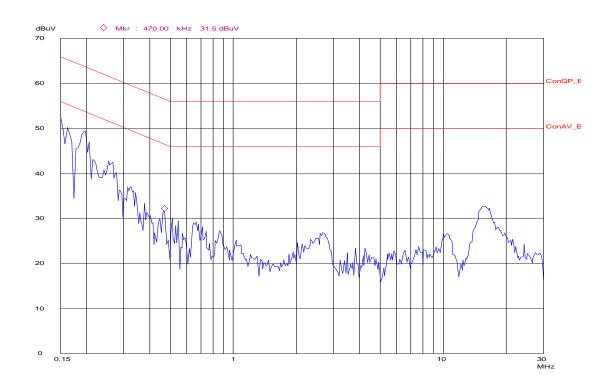
Decreasing linearly with logarithm of the frequency



## **Conducted Emission**

#### Conducted Disturbance

M/N:PC-81006N Blooth L AC 120V/60Hz



Frequency MHz	Cable Loss dB	Reading dBµV	QP Test result dBµV	QP Limit dBµV	Margin dB
0.15	9.8	36.7	46.5	66	19.5
0.19	9.8	35.7	45.5	64.0	18.5

Frequency MHz	Cable Loss dB	Reading dBµV	AV Test result dBμV	AV Limit dΒμV	Margin dB
0.15	9.8	9.7	19.5	56	36.5
0.19	9.8	8.4	18.2	54	35.8

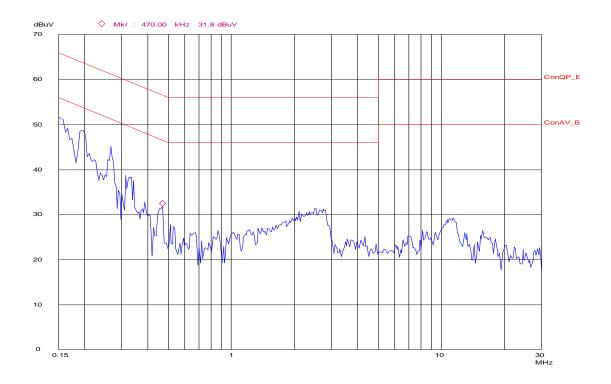
Remark: Test Result= Reading + Cable Loss



## **Conducted Emission**

#### Conducted Disturbance

M/N:PC-81006N Blooth N AC 120V/60Hz



Frequency MHz	Cable Loss dB	Reading dBµV	QP Test result dBμV	QP Limit dBµV	Margin dB
0.15	9.8	35.8	45.6	66	20.4
0.19	9.8	33.4	43.2	64.0	20.8

Frequency MHz	Cable Loss dB	Reading dBµV	AV Test result dΒμV	AV Limit dΒμV	Margin dB
0.150	9.8	9.4	19.2	56	36.8
0.190	9.8	5.5	15.3	54	38.7

Remark: Test Result= Reading + Cable Loss



# **Test Equipment List**

# **Conducted Emission Test**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL.DUE.DATE
ESPI Test Receiver	ROHDE&SCHWARZ	ESPI 3	100379	2009-12-05
TWO Line-V-NETW	ROHDE&SCHWARZ	EZH3-Z5	100253	2009-12-05



## 7.2 Conducted peak output power

#### **Test Method**

The transmitter output is connected to the Spectrum analyzer. The Spectrum analyzer is set to the peak power detection.

## Limits for conducted peak output power measurements

Frequency Range	Limit	Limit
MHz	W	dBm
2400-2483	≤1	≤30

# Conducted peak output power

## **GFSK Modulation Test Result**

Frequency MHz	Conducted Peak Output Power dBm	Result
CH1 2402MHz	1.08	Pass
CH2 2442MHz	0.27	Pass
CH3 2480MHz	-0.62	Pass

## 8DPSK Modulation Test Result

Frequency MHz	Conducted Peak Output Power dBm	Result
CH1 2402MHz	-2.54	Pass
CH2 2442MHz	1.52	Pass
CH3 2480MHz	-0.55	Pass

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# **Test Equipment**

# **Maximum transmit power Test**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL.DUE.DATE
Spectrum Analyzer	Agilent	E4446A	US44300459	2010-05-10



#### **Test Method**

The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.4 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW and VBW to 1MHz to measure the peak field strength and set RBW to 1MHz and VBW to 10Hz to measure the average radiated field strength.

The conducted RF band edge was measured by using a spectrum analyzer. Set span wide enough to capture the highest in-band emission and the emission at the band edge. Set RBW and VBW to 100kHz, to measure the conducted peak band edge.

#### Limits

According to §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in 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. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)).

Frequency	Limit Average	Limit Peak		
MHz	dBuV/m	dBuV/m		
Below 2390 Above 2483.5	54	74		

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Test Result

GFSK Modulation Carrier Field strength

•	or or moda	ilation (	Jannon i ic	na on ongn	•				
		Cable	Antenna	Reading	<b>Emission</b>				Result
	Frequency	Loss	Factor		Level	<b>Polarization</b>	Limit	Detector	
	MHz	dB	dB/m	dBuV	dBuV/m		dBuV/m		
	2402.000	5.6	28.5	52.4	86.5	Horizontal		PK	
	2402.000	5.6	28.5	43.4	77.5	Horizontal		AV	
	2402.000	5.6	28.5	45.9	80.0	Vertical		PK	
	2402.000	5.6	28.5	35.9	70.0	Vertical		AV	
	2480.000	5.6	28.5	46.9	81.0	Horizontal		PK	
	2480.000	5.6	28.5	37.2	71.3	Horizontal		AV	
	2480.000	5.6	28.5	38.8	72.9	Vertical		PK	
	2480.000	5.6	28.5	29.8	63.9	Vertical		AV	

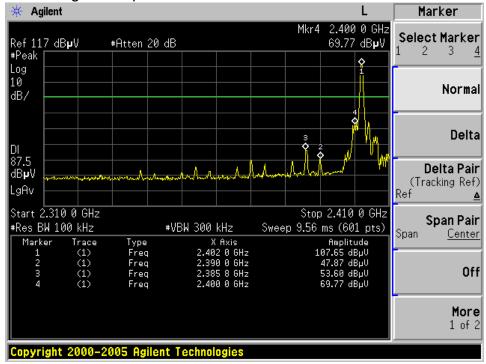
8DPSK Modulation Carrier Field strength

_	Cable	Antenna	Reading	Emission				Result
Frequency MHz	Loss dB	Factor dB/m	dBuV	Level dBuV/m	Polarization	Limit dBuV/m	Detector	
2402.000	5.6	28.5	51.1	85.2	Horizontal		PK	
2402.000	5.6	28.5	42.2	76.3	Horizontal		AV	
2402.000	5.6	28.5	40.2	74.3	Vertical		PK	
2402.000	5.6	28.5	31.3	65.3	Vertical		AV	
2480.000	5.6	28.5	43.0	77.1	Horizontal		PK	
2480.000	5.6	28.5	34.0	68.1	Horizontal		AV	
2480.000	5.6	28.5	34.1	68.2	Vertical		PK	
2480.000	5.6	28.5	25.1	59.2	Vertical		AV	



**GFSK Modulation test result:** 

Lower Edge PK plot

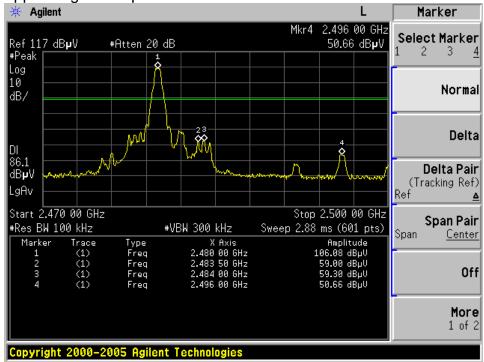


Max carrier field strength PK 86.5dBuV/m, AV 77.5dBuV/m At 2.390GHz, the deviation of PK plot is 59.8dB The field strength at 2.390GHz PK 26.7dBuV/m Which fulfill the requirement of PK 74dBuV/m, AV 54dBuV/m PK plot shows compliance with the AV limit, AV plot is omitted.



**GFSK Modulation test result:** 

Upper Edge PK plot

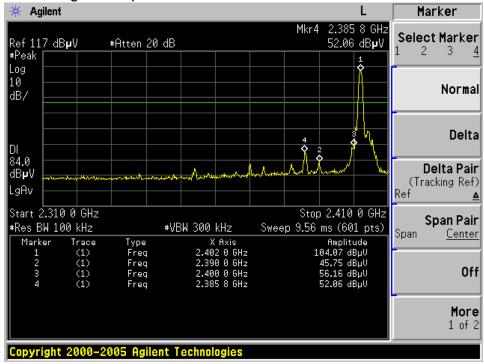


Max carrier field strength PK 81.0dBuV/m, AV 71.3dBuV/m At 2.4835GHz, the deviation of PK plot is 47.18dB, AV plot is 45.6dB The field strength at 2.4835GHz PK 33.9dBuV/m Which fulfill the requirement of PK 74dBuV/m, AV 54dBuV/m PK plot shows compliance with the AV limit, AV plot is omitted.



#### 8DPSK Modulation test result:

Lower Edge PK plot

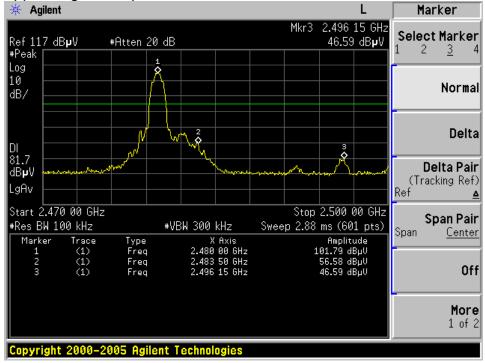


Max carrier field strength PK 85.2dBuV/m, AV 76.3dBuV/m At 2.4835GHz, the deviation of PK plot is 58.3dB The field strength at 2.4835GHz PK 26.9dBuV/m Which fulfill the requirement of PK 74dBuV/m, AV 54dBuV/m PK plot shows compliance with the AV limit, AV plot is omitted.



8DPSK Modulation test result:

PK plot Upper Edge



Max carrier field strength PK 77.1dBuV/m, AV 68.1dBuV/m At 2.4835GHz, the deviation of PK plot is 45.2dB The field strength at 2.4835GHz PK 31.9dBuV/m Which fulfill the requirement of PK 74dBuV/m, AV 54dBuV/m PK plot shows compliance with the AV limit, AV plot is omitted.



# **Test Equipment List**

# Band edge compliance of RF emissions

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL.DUE.DATE
Spectrum	Agilent	E4446A	US44300459	2010-05-10
Amp	HP	8449B	3008A02495	2010-05-24
Antenna	EMCO	3115	9607-4877	2010-05-27
HF Cable	Hubersuhne	Sucoflex104	-	2010-05-10



### 7.4 Spurious RF conducted emissions

#### **Test Method**

The transmitter output is connected to the Spectrum analyzer. The Spectrum analyzer is set to the peak power detection.

Conducted RF measurements of the transmitter output were made to confirm that the EUT antenna port conducted emissions meet the specified limit and to identify any spurious signals that require further investigation or measurements on the radiated emissions site.

The resolution bandwidth(RBW) and the video bandwidth (VBW) of the spectrum analyzer were respectively set to 100kHz and 300kHz.

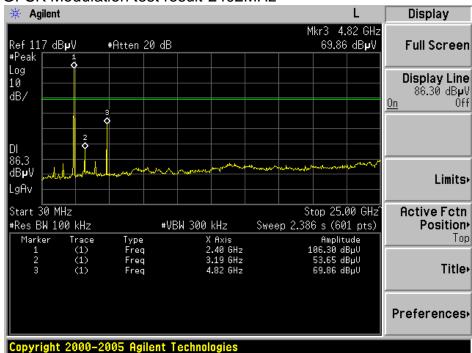
#### Limit

Frequency Range MHz	Limit (dBc)
30-25000	-20

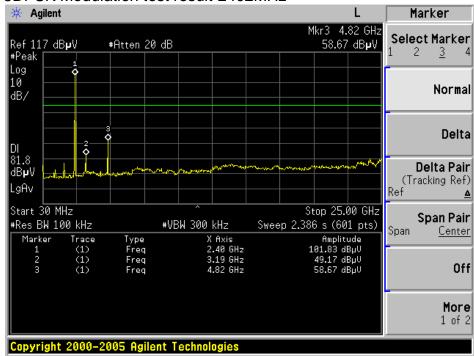


## **Spurious RF conducted emissions**

#### GFSK Modulation test result-2402MHz



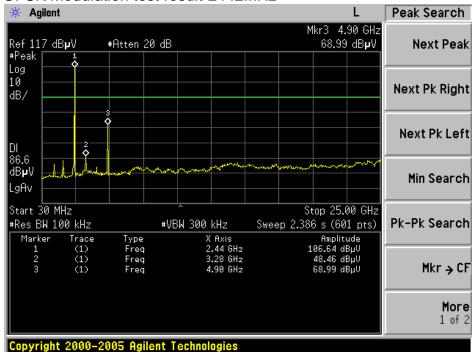
#### 8DPSK Modulation test result-2402MHz



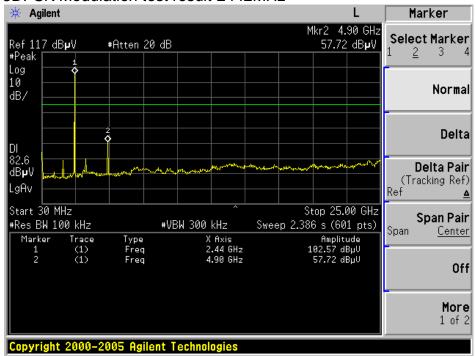


## **Spurious RF conducted emissions**

#### GFSK Modulation test result-2442MHz



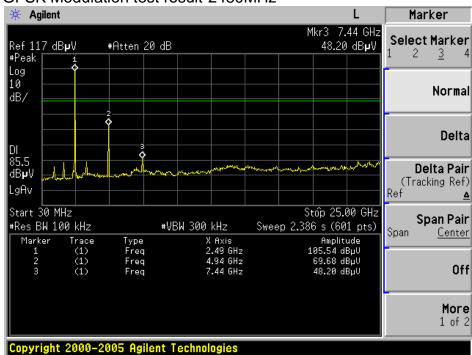
#### 8DPSK Modulation test result-2442MHz



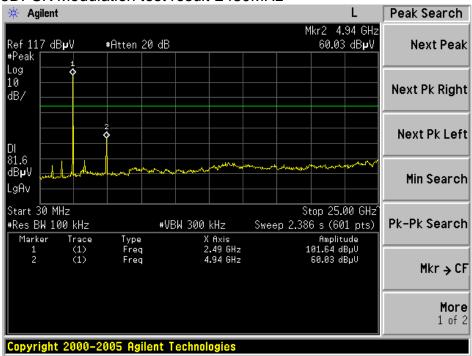


## **Spurious RF conducted emissions**

#### GFSK Modulation test result-2480MHz



#### 8DPSK Modulation test result-2480MHz





# **Test Equipment List**

## **Spurious RF conducted emissions Test**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL.DUE.DATE
Spectrum Analyzer	Agilent	E4446A	US44300459	2010-05-10



## 7.5 Spurious radiated emissions

### **Test Method**

- 1 The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2 The turntable shall be rotated for 360 degrees to determine the position of maximum emission level
- 3 EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4 Maximum procedure was performed on the six highest emissions to ensure EUT compliance. 5 each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

#### Limit

Frequency	Field Strength	Field Strength	Detector
MHz	uV/m	dBμV/m	
30-88	100	40	QP
88-216	150	43.5	QP
216-960	200	46	QP
960-1000	500	54	QP
Above 1000	500	54	AV
Above 1000	5000	74	PK



# **Spurious radiated emissions**

GFSK Modulation test result-2402MHz

Frequency MHz	Cable Loss dB	Antenna Factor dB/m	Reading dBuV	Emission Level dBuV/m	Polarization	Limit dBµV/m	Detector	Result
83.064	1.4	9.6	24.3	35.3	Horizontal	40.0	QP	Pass
172.772	2.2	10.3	19.4	31.9	Vertical	43.5	QP	Pass
4804.000	3.8	33.3	16.4	56.5	Horizontal	74	PK	Pass
4804.000	3.8	33.3	19.4	47.6	Horizontal	54	AV	Pass
4804.000	3.8	33.3	16.8	53.9	Vertical	74	PK	Pass
4804.000	3.8	33.3	6.8	43.9	Vertical	54	AV	Pass

Test Result-2442MHz

Frequency MHz	Cable Loss dB	Antenna Factor dB/m	Reading dBuV	Emission Level dBuV/m	Polarization	Limit dBµV/m	Detector	Result
4884.000	3.9	33.3	20.2	57.4	Horizontal	74	PK	Pass
4884.000	3.9	33.3	11.2	48.4	Horizontal	54	AV	Pass
4884.000	3.9	33.3	18.7	55.9	Vertical	74	PK	Pass
4884.000	3.9	33.3	9.7	46.9	Vertical	54	AV	Pass

Test Result-2480MHz

Frequency MHz	Cable Loss dB	Antenna Factor dB/m	Reading dBuV	Emission Level dBuV/m	Polarization	Limit dBµV/m	Detector	Result
4960.000	3.9	33.3	19.4	56.6	Horizontal	74	PK	Pass
4960.000	3.9	33.3	10.0	48.2	Horizontal	54	AV	Pass
4960.000	3.9	33.3	19.2	56.4	Vertical	74	PK	Pass
4960.000	3.9	33.3	10.2	47.4	Vertical	54	AV	Pass

Remark: Emission Level= Cable Loss(include amplifier factor) + Antenna Factor + Reading

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# **Spurious radiated emissions**

### 8DPSK Modulation test result-2402MHz

Frequency MHz	Cable Loss dB	Antenna Factor dB/m	Reading dBuV	Emission Level dBuV/m	Polarization	Limit dBµV/m	Detector	Result
172.466	2.2	10.1	19.9	32.2	Horizontal	43.5	QP	Pass
59.158	1.2	5.3	23.8	30.3	Vertical	40.0	QP	Pass
4804.000	3.8	33.3	17.1	54.2	Horizontal	74	PK	Pass
4804.000	3.8	33.3	18.1	45.2	Horizontal	54	AV	Pass
4804.000	3.8	33.3	17.6	54.7	Vertical	74	PK	Pass
4804.000	3.8	33.3	8.6	45.7	Vertical	54	AV	Pass

### Test Result-2442MHz

Frequency MHz	Cable Loss dB	Antenna Factor dB/m	Reading dBuV	Emission Level dBuV/m	Polarization	Limit dBµV/m	Detector	Result
4884.000	3.9	33.3	17.8	55.0	Horizontal	74	PK	Pass
4884.000	3.9	33.3	8.8	46.0	Horizontal	54	AV	Pass
4884.000	3.9	33.3	17.8	55.0	Vertical	74	PK	Pass
4884.000	3.9	33.3	8.8	46.0	Vertical	54	AV	Pass

## Test Result-2480MHz

Frequence MHz	Cable cy Loss dB	Antenna Factor dB/m	Reading dBuV	Emission Level dBuV/m	Polarization	Limit dBµV/m	Detector	Result
4960.00	0 3.9	33.3	18.6	55.8	Horizontal	74	PK	Pass
4960.00	0 3.9	33.3	9.5	46.7	Horizontal	54	AV	Pass
4960.00	0 3.9	33.3	18.6	55.8	Vertical	74	PK	Pass
4960.00	0 3.9	33.3	9.6	46.8	Vertical	54	AV	Pass

Remark: Emission Level= Cable Loss(include amplifier factor) + Antenna Factor + Reading



# **Test Equipment List**

# **Spurious radiated emissions Test**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL.DUE.DATE
Spectrum	Agilent	E4446A	US44300459	2010-05-10
SG	HP	83723B	US34490501	2010-05-10
Amp	HP	8449B	3008A02495	2010-05-24
Antenna	EMCO	3115	9607-4877	2010-05-27



## 7.6 20 dB bandwidth

#### **Test Method**

- 1 Place the EUT on the table and set it in the transmitting mode.
- 2 Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3 Mark the peak frequency and -20dB (upper and lower) frequency.

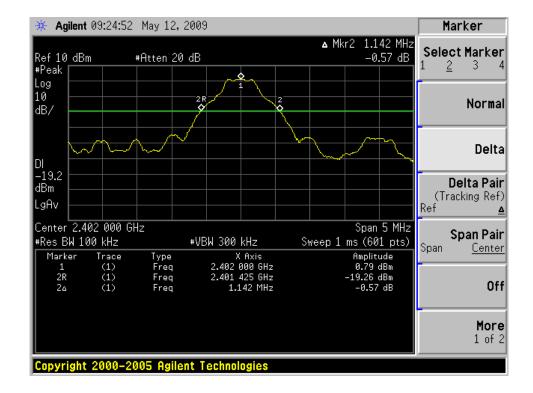
		n	n	٠
_	-1			L

Limit [kHz]	
N/A	

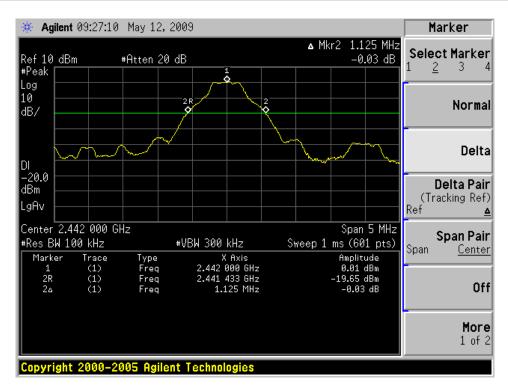


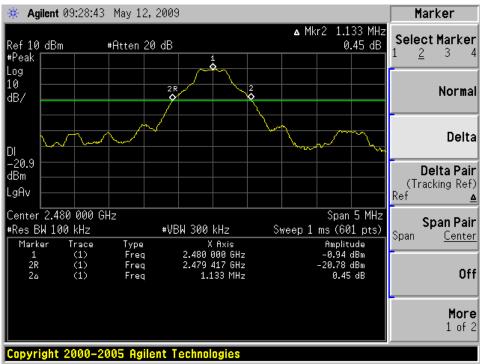
## **GFSK Modulation test result**

Frequency	Bandwidth	Result
MHz	kHz	
2402	1142	Pass
2442	1125	Pass
2480	1133	Pass





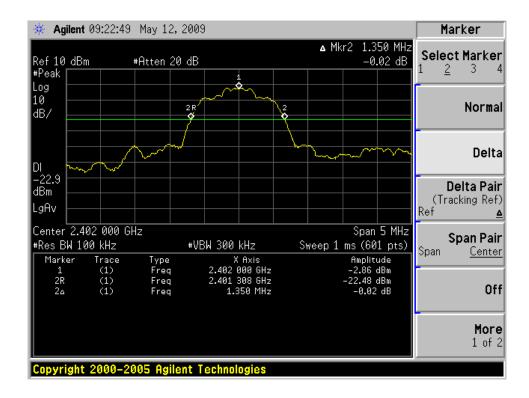




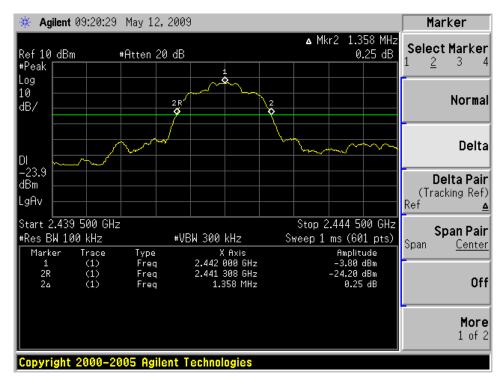


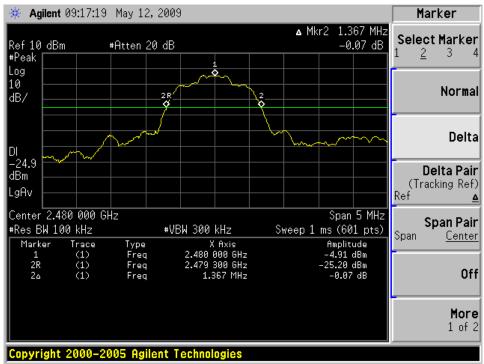
## 8DPSK Modulation test result

Frequency	Bandwidth	Result
MHz	kHz	
2402	1350	Pass
2442	1358	Pass
2480	1367	Pass











# **Test Equipment**

### 20 dB bandwidth Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL.DUE.DATE
Spectrum Analyzer	Agilent	E4446A	US44300459	2010-05-10



## 7.7 Carrier Frequency Separation

#### **Test Method**

1. Connect EUT antenna terminal to the spectrum analyzer with a low loss cable.

Equipment mode: Spectrum analyzer

RBW: 100KHz; VBW: 300KHz; SPAN:3MHz

- 2. By using the Max-Hold function record the separation of two adjacent channels.
- 3. Measure the frequency difference of these two adjacent channels by spectrum analyzer Marker function.
- 4. Repeat above procedures until all frequencies measured were complete.

### Limit

Limit
kHz
>25 or 2/3 of the 20 dB handwidth which is greater

#### **GFSK Modulation Limit**

Frequency	2/3 of 20 dB Bandwidth
MHz	kHz
2402	761
2442	750
2480	755

### **8DPSK Modulation Limit**

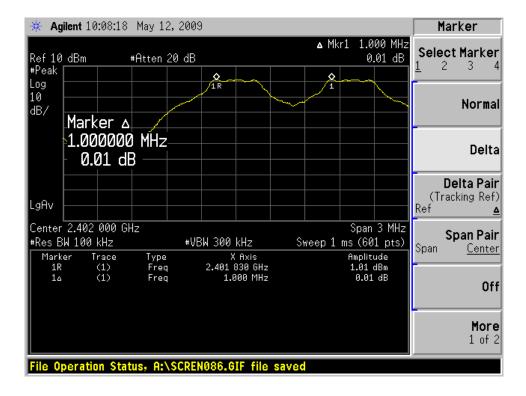
Frequency	2/3 of 20 dB Bandwidth
MHz	kHz
2402	900
2442	905
2480	911

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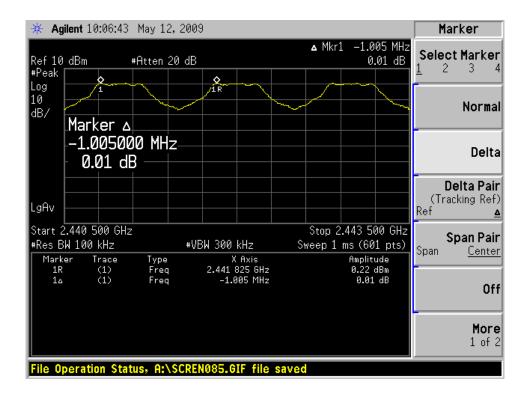


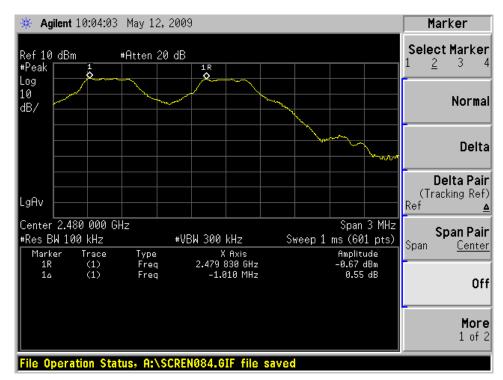
#### **GFSK Modulation test result**

Frequency	Carrier Frequency Separation	Result
MHz	kHz	
2402	1000	Pass
2442	1005	Pass
2480	1000	Pass





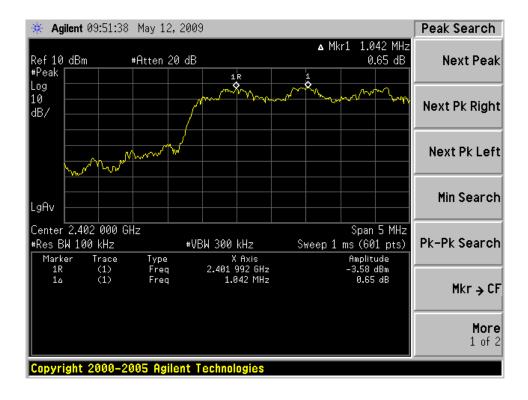




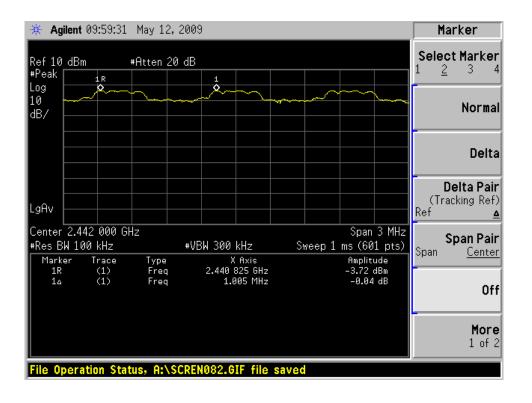


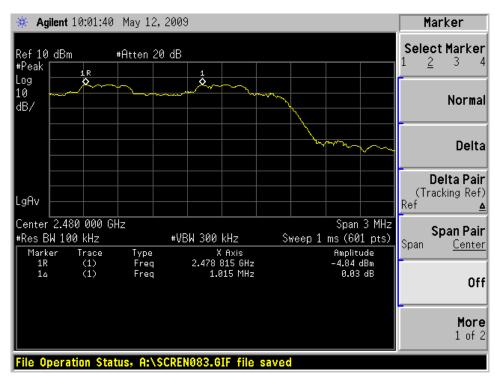
### 8DPSK Modulation test result

Frequency	Carrier Frequency Separation	Result
MHz	kHz	
2402	1042	Pass
2442	1005	Pass
2480	1015	Pass











# **Test Equipment**

# **Carrier Frequency Separation Test**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL.DUE.DATE
Spectrum Analyzer	Agilent	E4446A	US44300459	2010-05-10



# 7.8 Number of hopping frequencies

#### **Test Method**

1. Connect EUT antenna terminal to the spectrum analyzer with a low loss cable.

Equipment mode: Spectrum analyzer

RBW: 300KHz; VBW: 1MHz

2. Set the spectrum analyzer on Max-Hold Mode, and then keep the EUT in hopping mode. Record all the signals from each channel until each one has been recorded.

3. Repeat above procedures until all frequencies measured were complete.

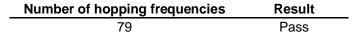
#### Limit

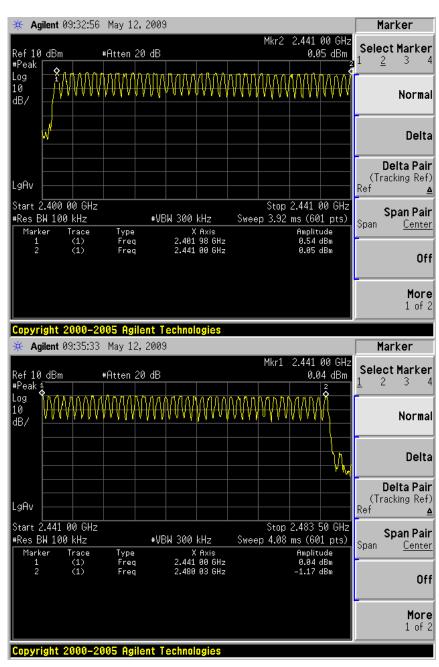
Limit
 number
≥ 15



## Number of hopping frequencies

**GFSK Modulation test result:** 

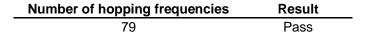


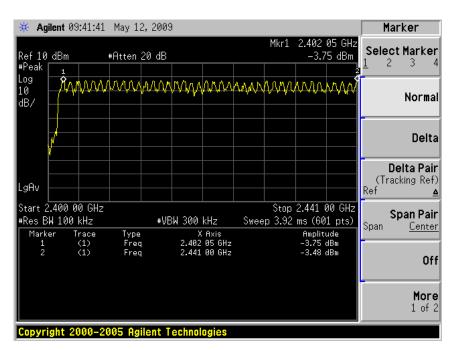


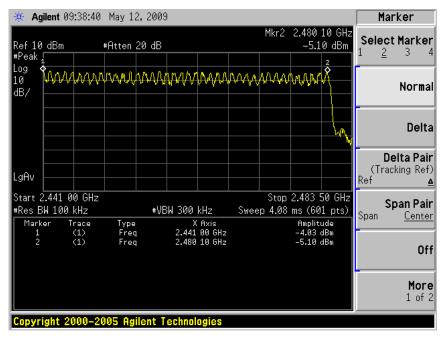


## Number of hopping frequencies

8DPSK Modulation test result:









# **Test Equipment**

# **Number of hopping frequencies Test**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL.DUE.DATE
Spectrum Analyzer	Agilent	E4446A	US44300459	2010-05-10



#### 7.9 Dwell Time

#### **Test Method**

1. Connect EUT antenna terminal to the spectrum analyzer with a low loss cable.

Equipment mode: Spectrum analyzer

RBW: 1MHz; VBW: 1MHz; SPAN: Zero Span

- 2. Adjust the center frequency of spectrum analyzer on any frequency be measured.
- 3. Measure the Dwell Time by spectrum analyzer Marker function.
- 4. Repeat above procedures until all frequencies measured were complete.

#### Limit

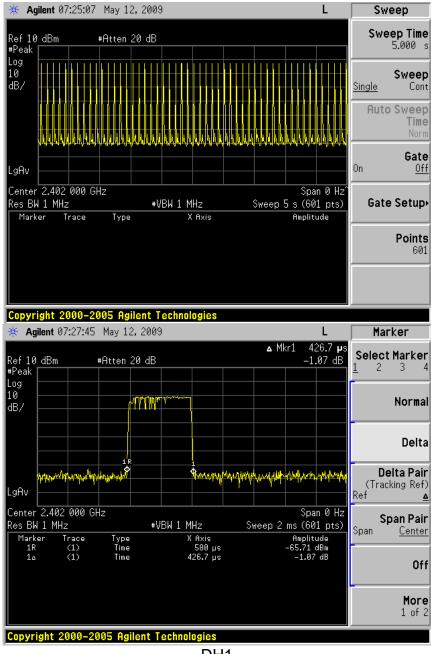
The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.



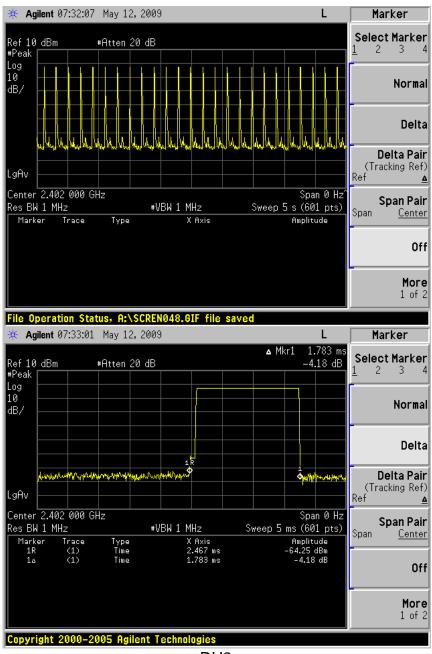
#### **GFSK Modulation test result:**

### **Test Result**

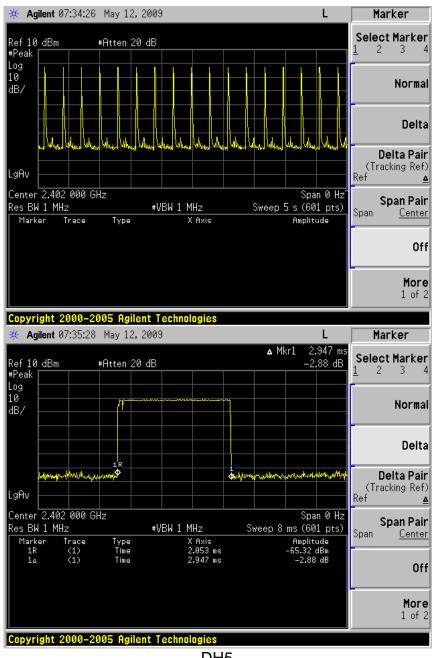
Mode	Reading (µs)	Test Result (ms)	Limit (ms)	Result
DH1	426	137.53	< 400	Pass
DH3	1783	281.70	< 400	Pass
DH5	2947	319.53	< 400	Pass











DH<sub>5</sub>

A period time=79x0.4(s)=31.6(s)

DH1	time slot= $51(times)/5(s)$ *426.7 (µs) *31.6(s)= 137.53 (ms)
DH3	time slot= $25(times)/5(s) *1783 (\mu s) *31.6(s)= 281.70 (ms)$
DH5	time slot= $17(times)/5(s) *2974 (\mu s) *31.6(s)= 319.53 (ms)$

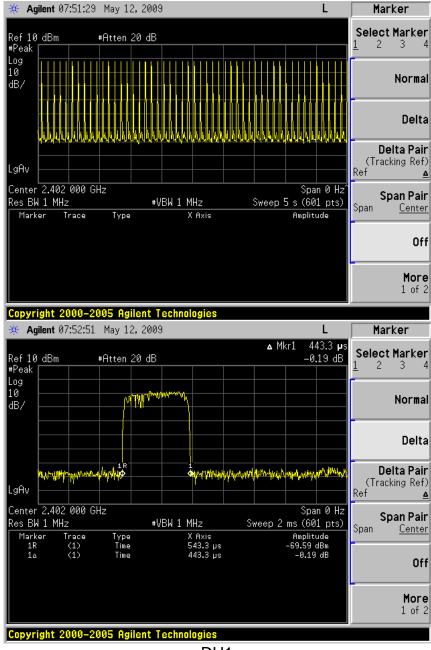
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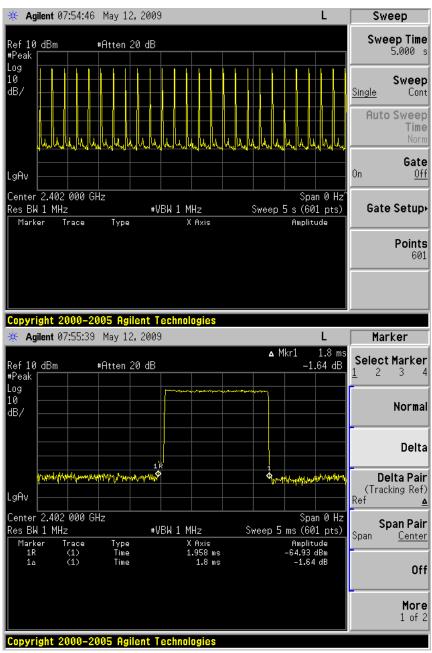
#### 8DPSK Modulation test result:

### **Test Result**

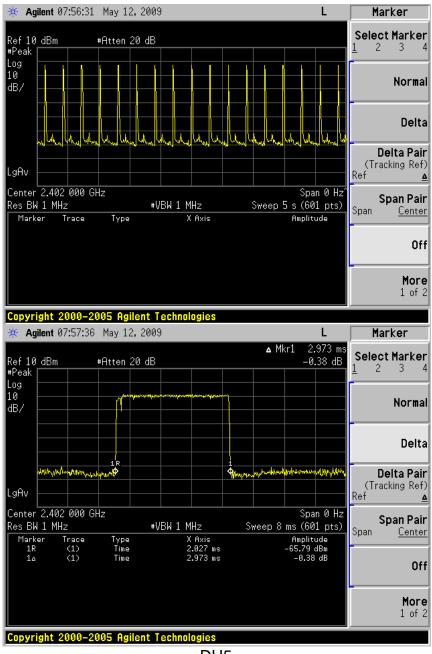
Mode	Reading (µs)	Test Result (ms)	Limit (ms)	Result
DH1	443	142.88	< 400	Pass
DH3	1800	295.78	< 400	Pass
DH5	2973	319.42	< 400	Pass











DH<sub>5</sub>

#### Note:

A period time=79x0.4(s)=31.6(s)

DH1	time slot= $51(times)/5(s) *443.3 (\mu s) *31.6(s) = 142.88 (ms)$
DH3	time slot= $26(times)/5(s)$ *1800 (µs) *31.6(s)= 295.78 (ms)
DH5	time slot= $17(times)/5(s)$ *2973 (µs) *31.6(s)= 319.42 (ms)



# **Test Equipment**

# **Dwell Time Test**

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL.DUE.DATE
Spectrum Analyzer	Agilent	E4446A	US44300459	2010-05-10



# **8 System Measurement Uncertainty**

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

**System Measurement Uncertainty** 

	Items	Extended Uncertainty
RE	Field strength (dBµV/m)	U=4.6dB; k=2(30MHz-1GHz)
CE	Disturbance Voltage (dBμV)	U=3.3dB; k=2