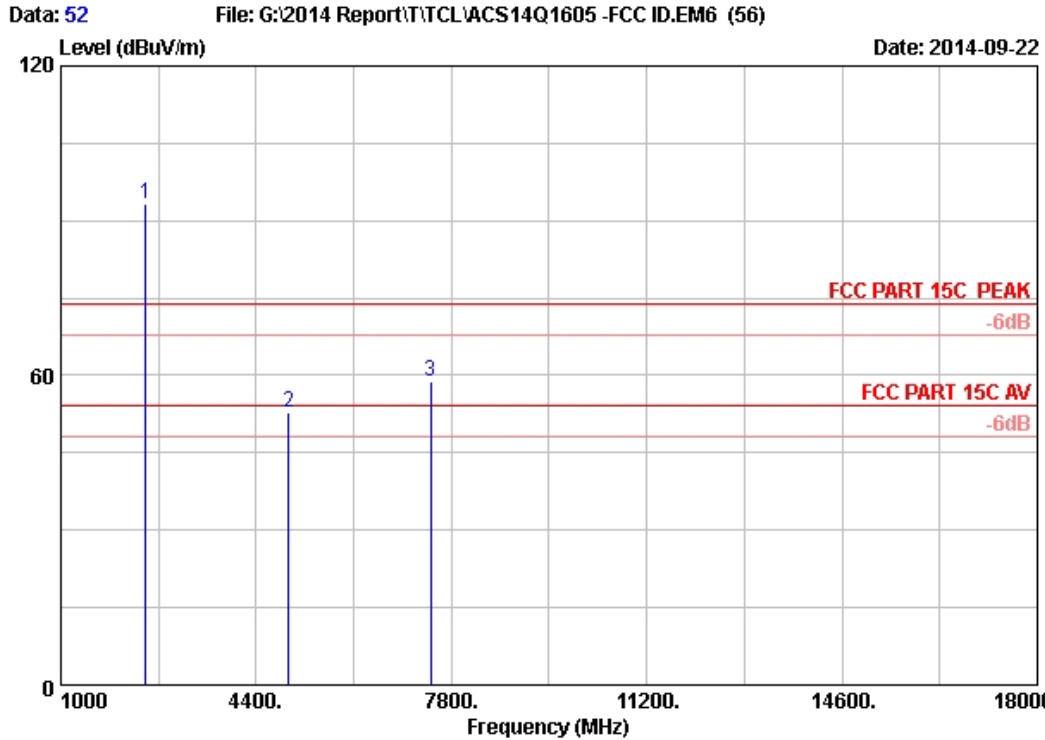


Site no.	: 3m Chamber	Data no.	: 51
Dis. / Ant.	: 3m 2014 3115 (4580)	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 24°C/56%	Engineer	: Kobe-Huang
EUT	: HOME THEATRE SYSTEM		
Power Rating	: AC 120V/60Hz		
Test Mode	: GFSK 2480MHz (BT4.0)		
M/N	: HT-XT100		



Site no. : 3m Chamber Data no. : 52  
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Kobe-Huang  
 EUT : HOME THEATRE SYSTEM  
 Power Rating : AC 120V/60Hz  
 Test Mode : GFSK 2480MHz (BT4.0)  
 M/N : HT-XT100

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2480.000	28.36	5.91	35.70	94.55	93.12	74.00	-19.12	Peak
2	4960.000	33.13	8.72	35.70	46.54	52.69	74.00	21.31	Peak
3	7440.000	36.47	11.09	35.41	46.67	58.82	74.00	15.18	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBUV/m)	Duty cycle factor (dB)	AV level (dBUV/m)	Limit(dBUV/m)	Conclusion
7440	58.82	-43.742	15.078	54	Pass

## 5. CONDUCTED SPURIOUS EMISSIONS

### 5.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	Oct.31, 13	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	Apr.24,14	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	Apr.24,14	1 Year

### 5.2. Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

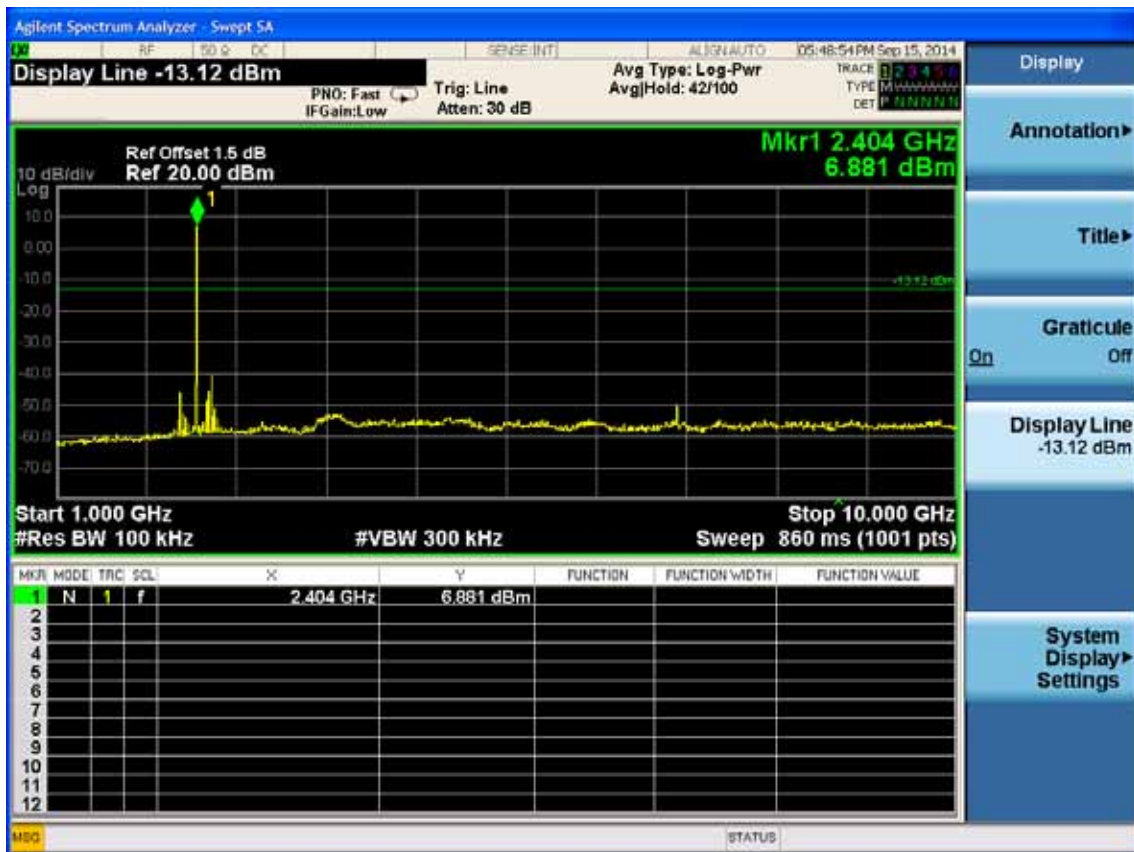
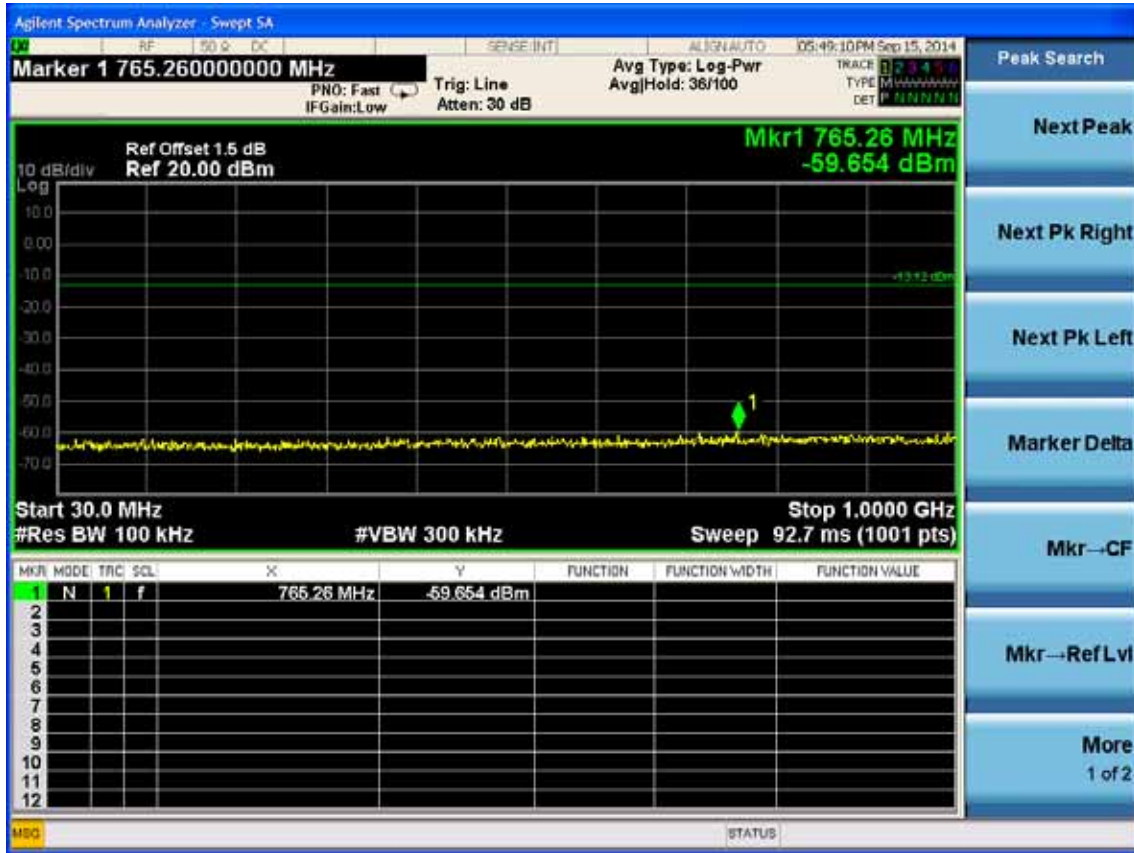
### 5.3. Test Procedure

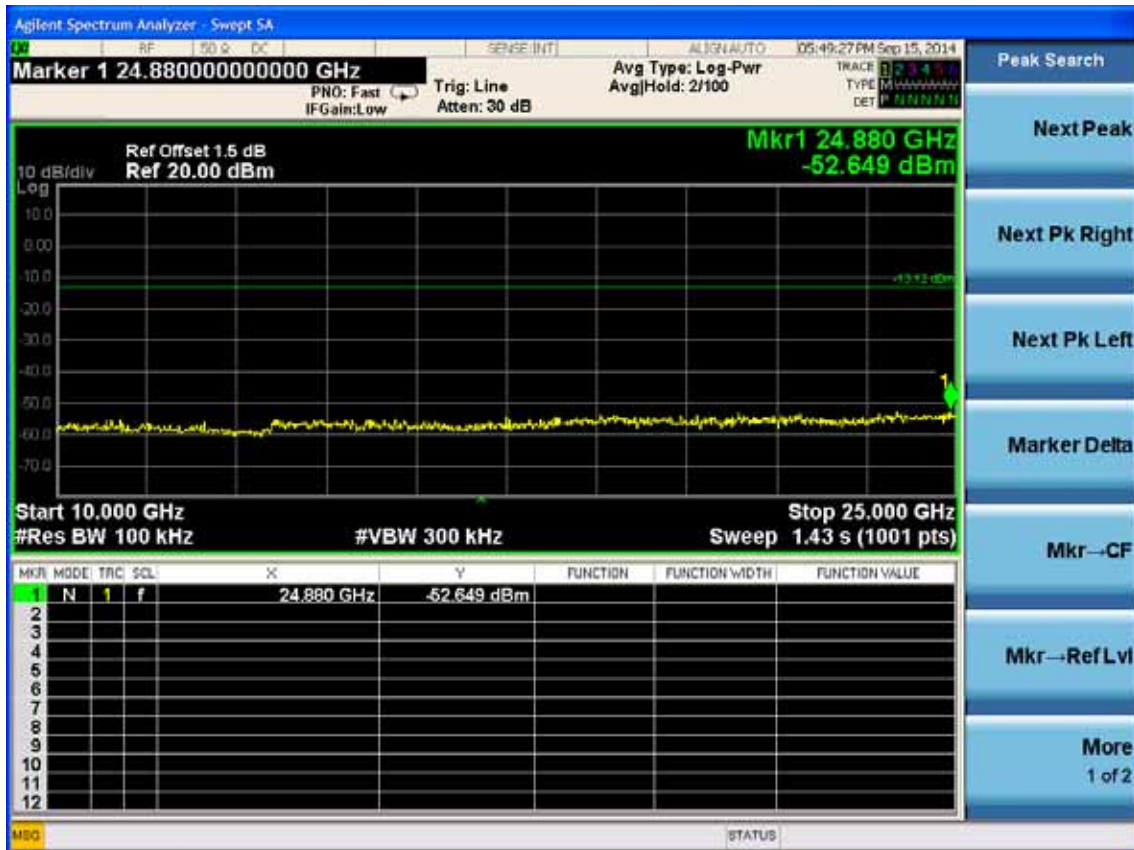
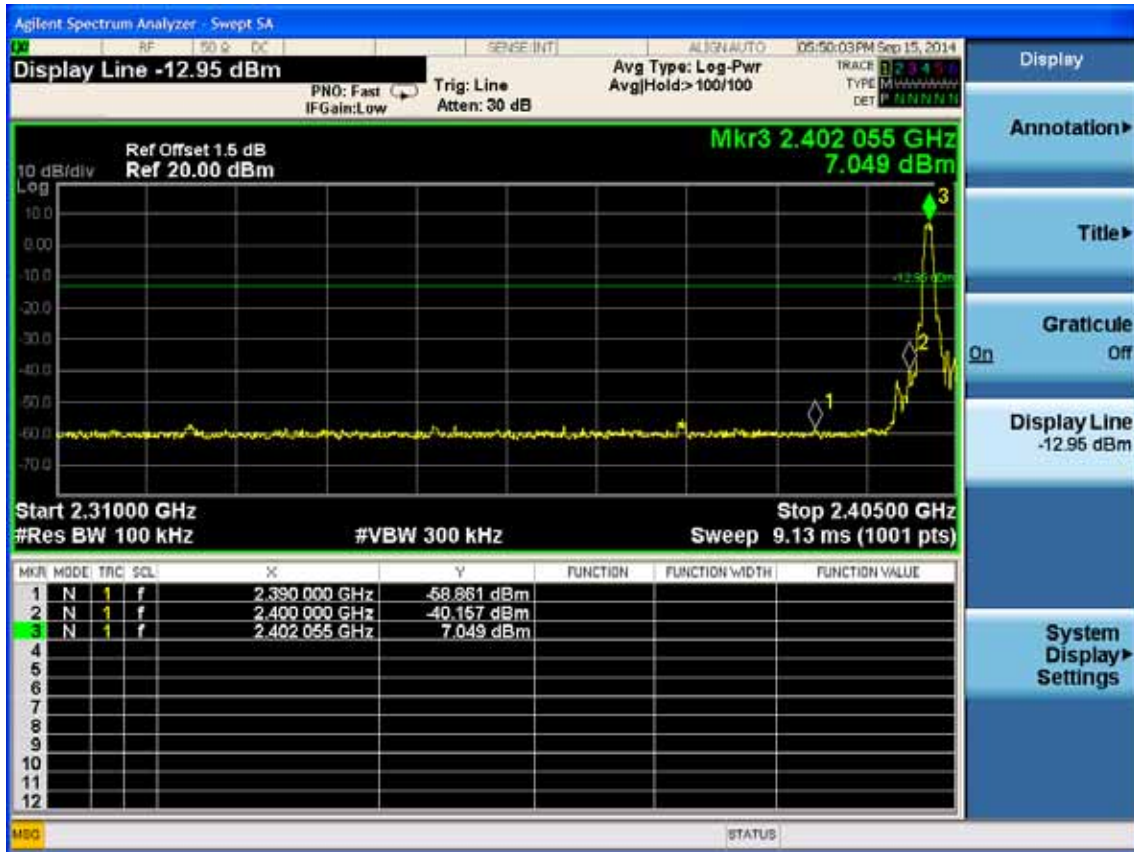
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

### 5.4. Test result

**PASS** (The testing data was attached in the next pages.)

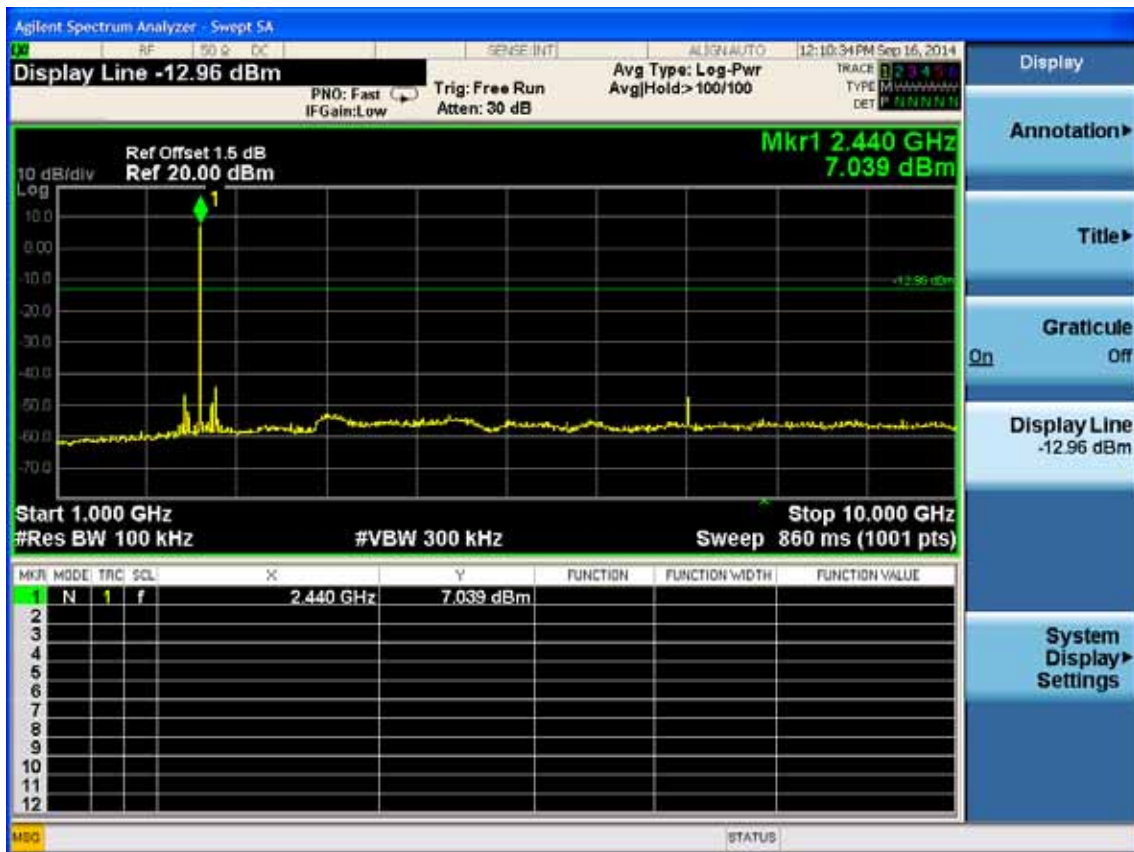
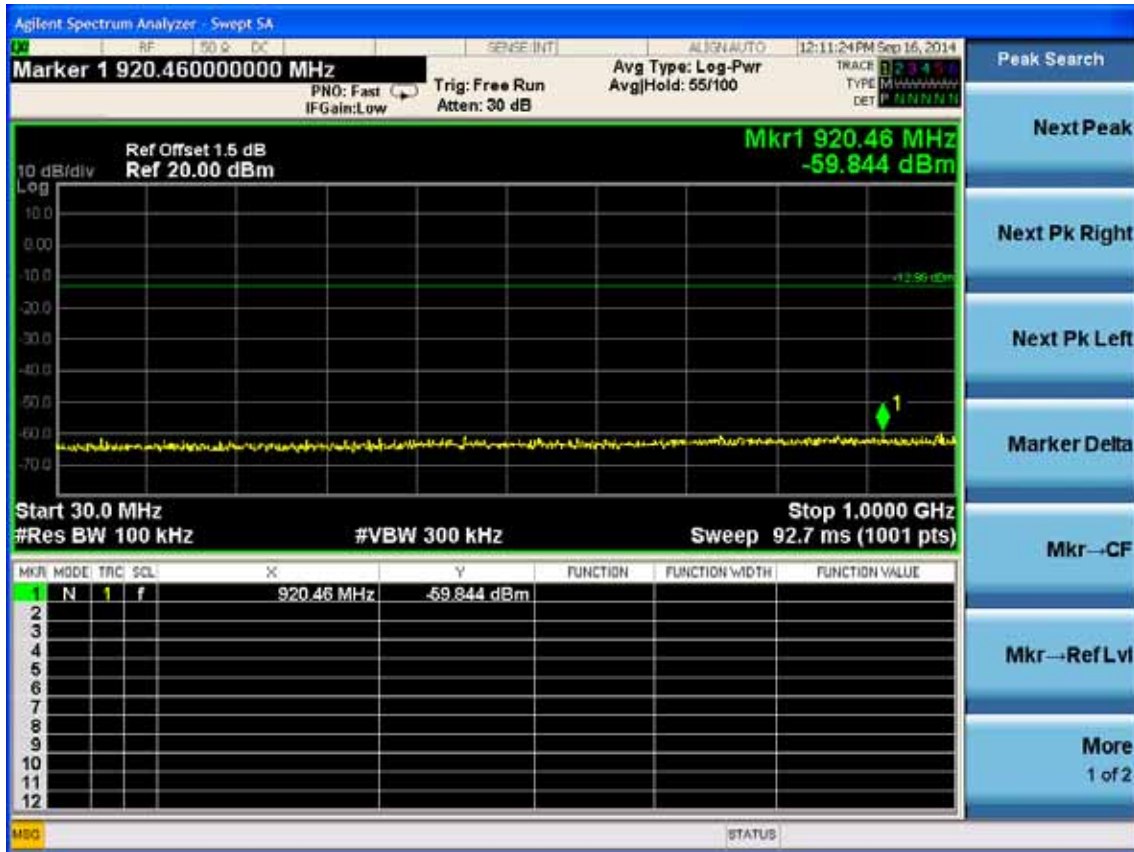
**GFSK**  
2402MHz

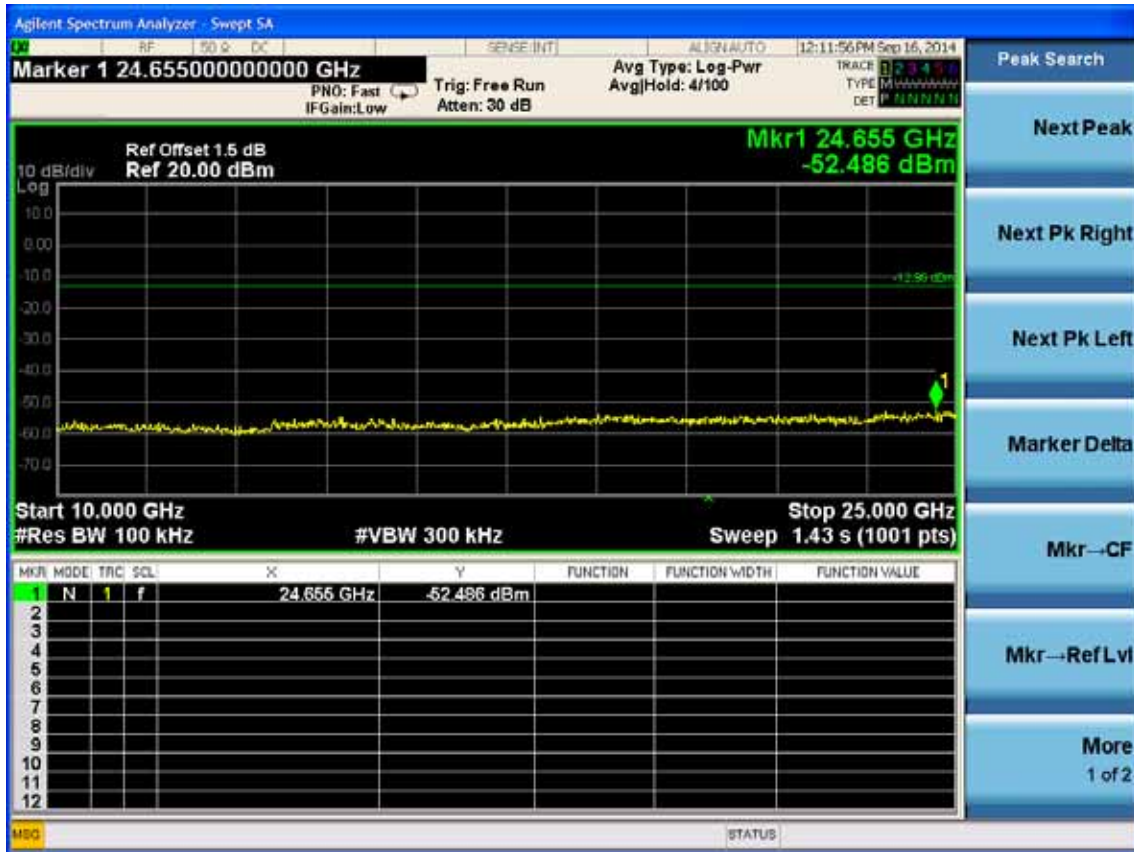




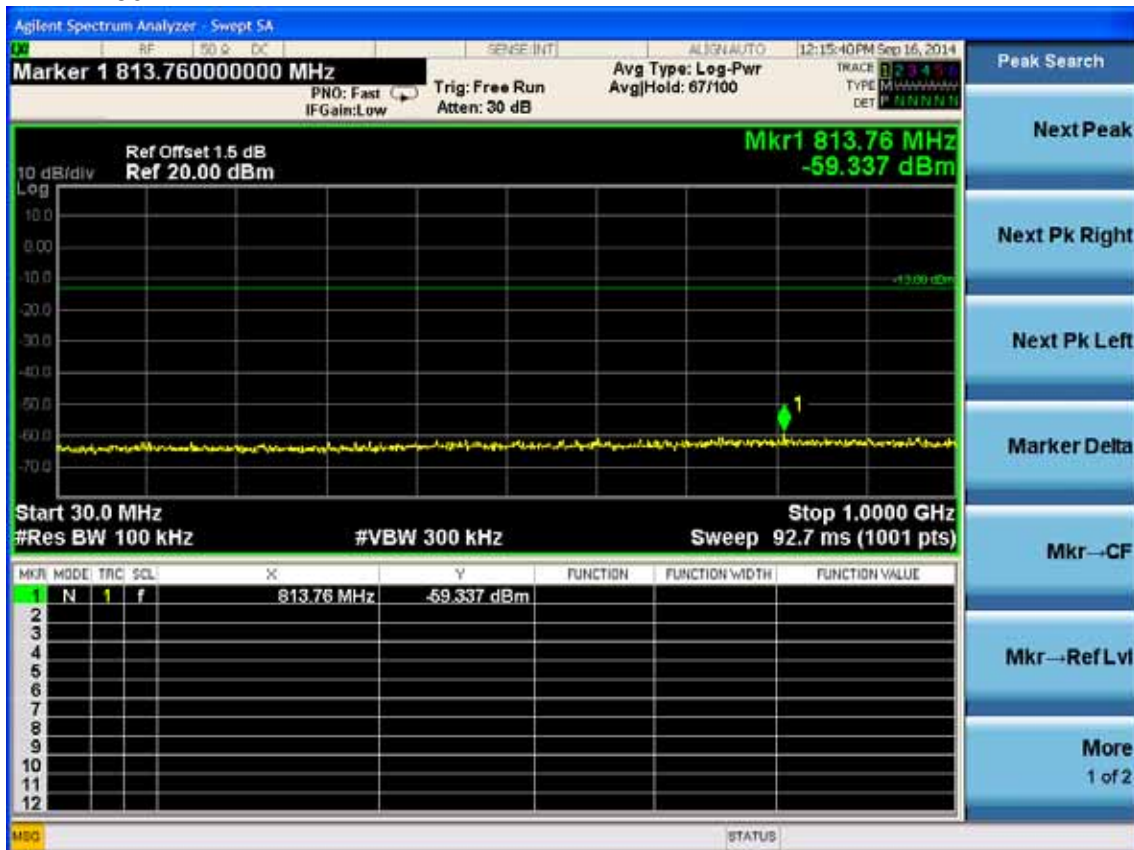


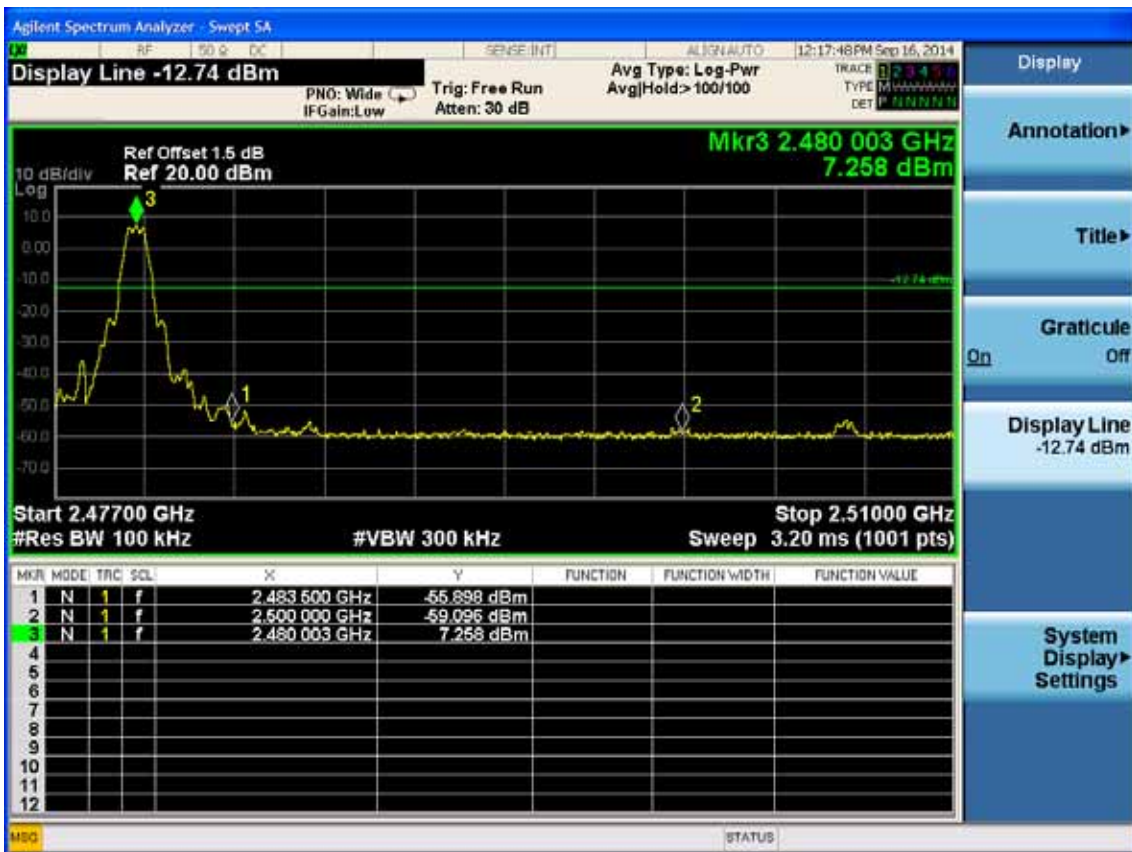
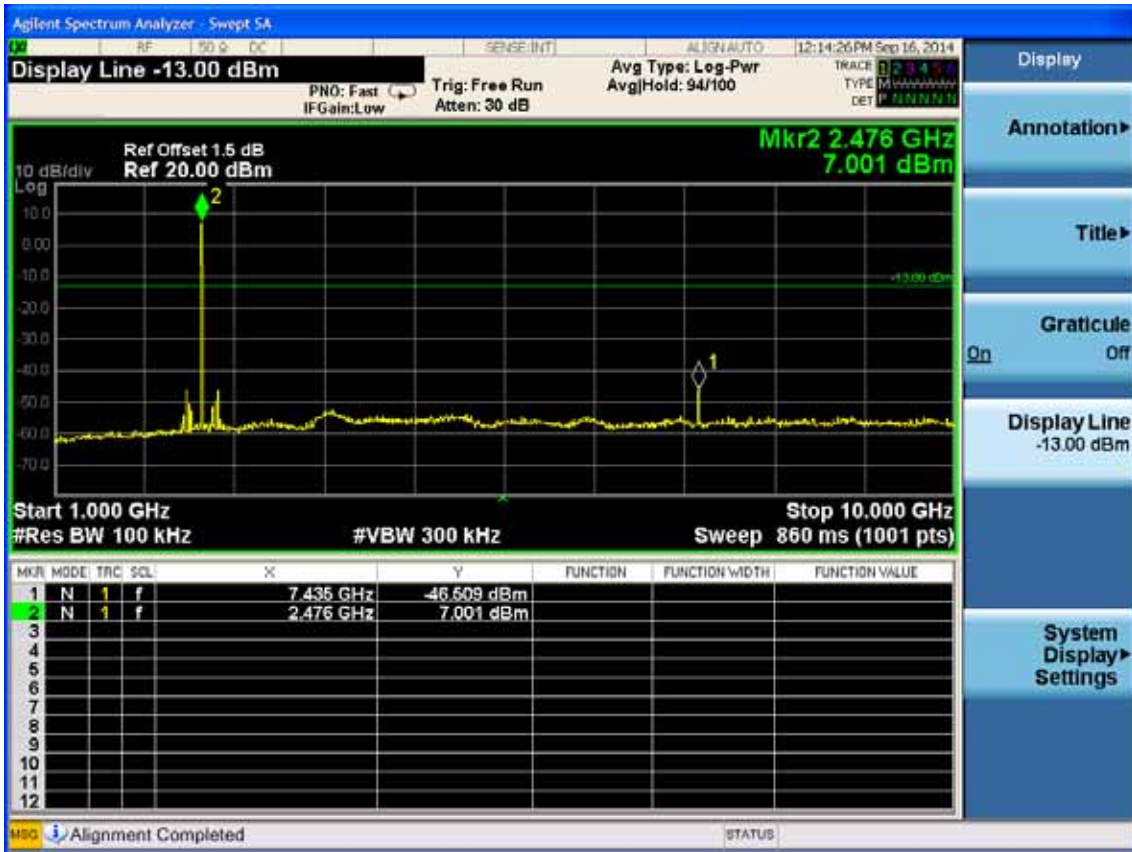
2440MHz



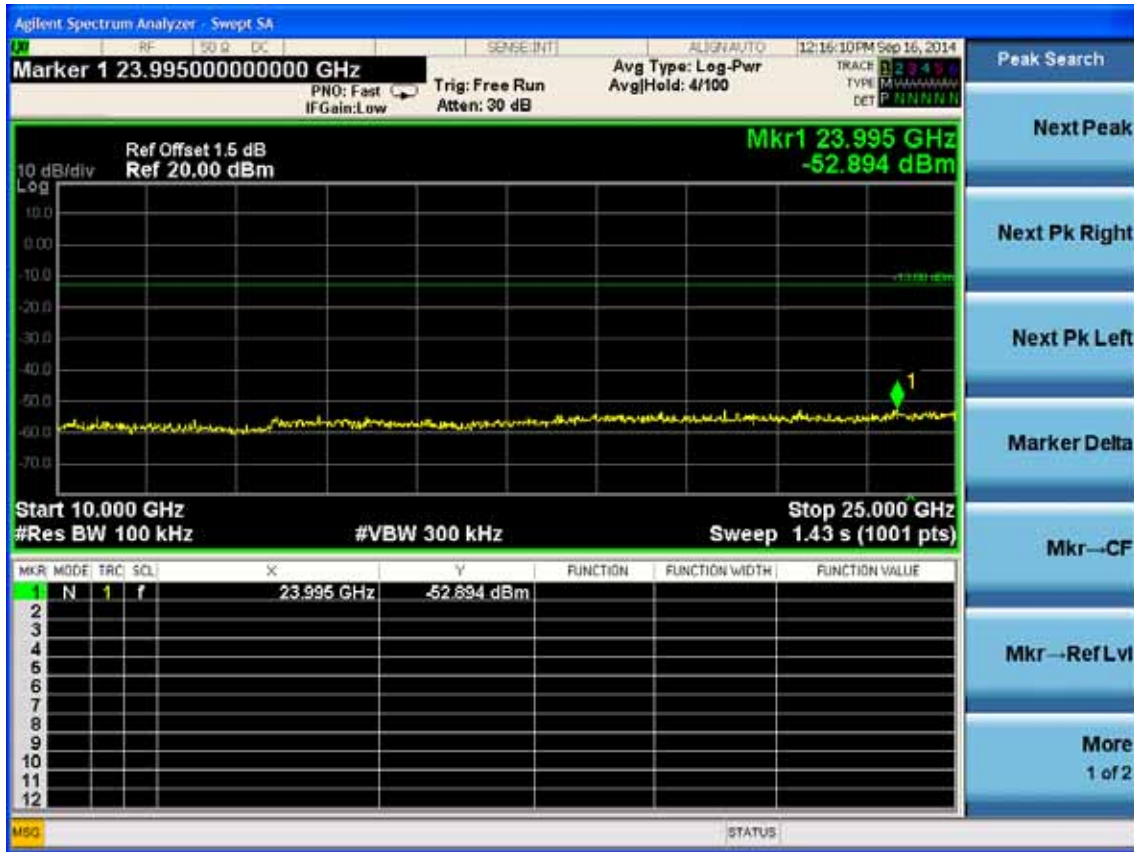


2480MHz









## 6. 6dB BANDWIDTH TEST

### 6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.31, 13	1Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,14	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	Apr. 28,14	1 Year

### 6.2. Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

### 6.3. Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

### 6.4. Test Results

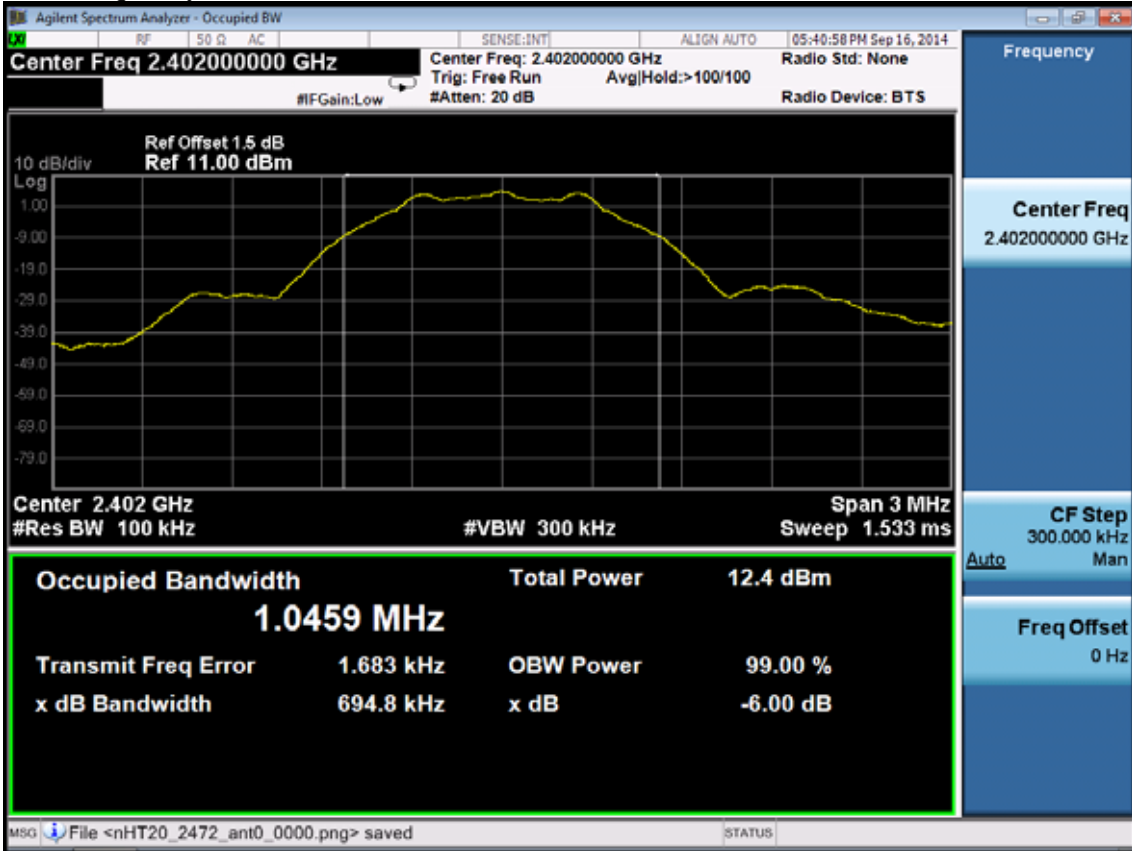
EUT: HOME THEATRE SYSTEM		
M/N: HT-XT100		
Test date: 2014-09-15	Pressure: 101.4±1.0 kpa	Humidity: 53.5±1.0%
Tested by: Kobe-Huang	Test site: RF site	Temperature:22.6±1.0°C

Test Mode	Frequency (MHz)	-6dB bandwidth (KHz)	Limit (KHz)
GFSK	2402	694.8	>500
	2440	688.4	>500
	2480	693.8	>500

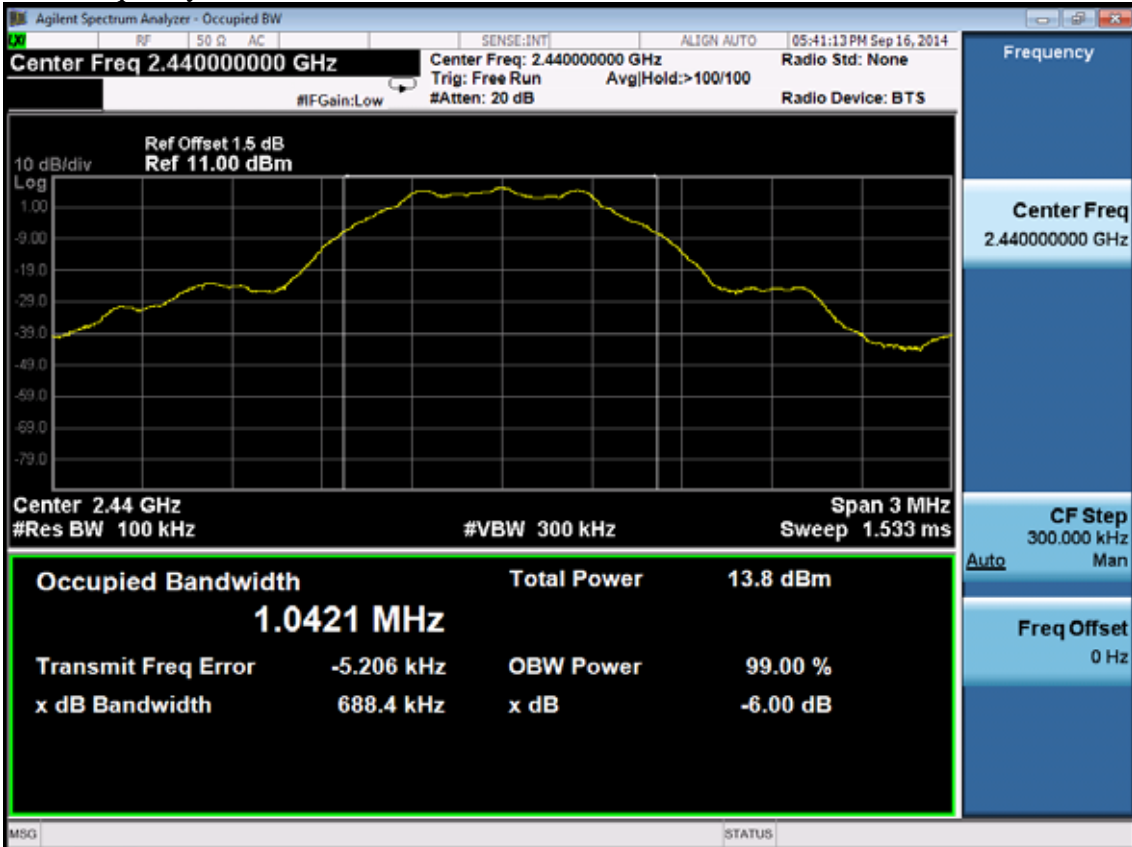
Conclusion : PASS

**GFSK**

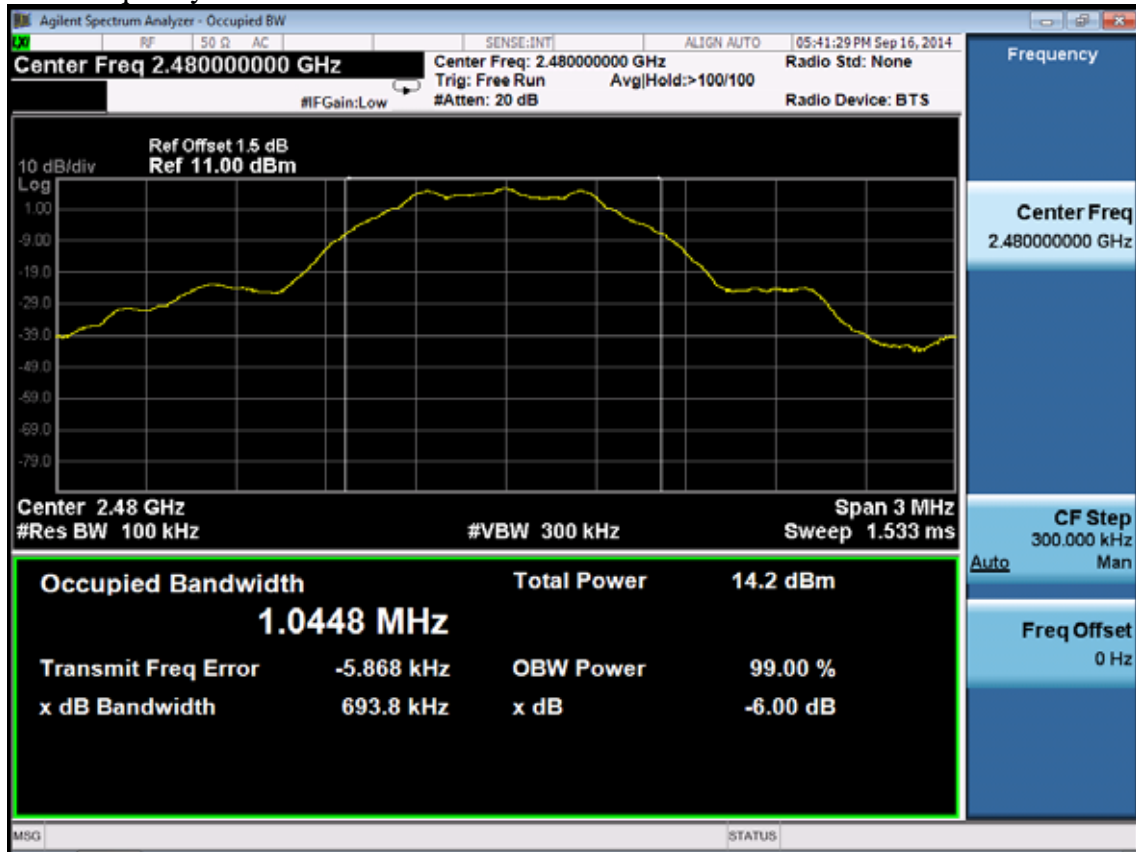
Test Frequency: 2402MHz



Test Frequency: 2440MHz



Test Frequency: 2480MHz





## 7. MAXIMUM PEAK OUTPUT POWER TEST

### 7.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.31, 13	1Year
2.	Power meter	Anritsu	ML2487A	6K00002472	Apr. 28,14	1Year
3.	Power sensor	Anritsu	MA2491A	0033005	Apr. 28,14	1Year
4.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,14	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	Apr. 28,14	1 Year

### 7.2. Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

### 7.3. Test Procedure

Connected the EUT's antenna port to Power Sensor, and use power meter to test peak output power.

### 7.4. Test Results

EUT: HOME THEATRE SYSTEM			
M/N: HT-XT100			
Test date: 2014-09-15		Pressure: 101.6±1.0kpa	Humidity: 53.4±1.0%
Tested by: Kobe-Huang		Test site: RF site	Temperature:22.6±1.0°C
Test Mode	Frequency (MHz)	Peak output Power (dBm)	Limit (dBm)
GFSK	2402	7.298	30
	2440	8.545	30
	2480	8.579	30
Conclusion: PASS			

## 8. BAND EDGE COMPLIANCE TEST

### 8.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Amp	HP	8449B	3008A02495	Apr. 28,14	1 Year
2.	Horn Antenna	ETS	3115	9510-4580	Jun. 06, 14	1 Year
3.	HF Cable	Hubersuhner	Sucoflex104	274094/4	Apr. 28,14	1 Year
4.	RF Cable	Hubersuhner	Sucoflex102	28610/2	Apr. 28,14	1 Year

### 8.2. Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

### 8.3. Test Produce

For upper band emissions that are up to two bandwidths(2MHz) away (2483.5MHz to 2485.5MHz) from the band-edge use below produce:

1. Choose a spectrum analyzer span that encompasses both the peak of the fundamental emission and the band-edge emission under investigation. Set the analyzer RBW to 100KHz and with a video bandwidth 300KHz. Record the peak levels of the fundamental emission and the relevant band-edge emission, Observe the stored trace and measure the amplitude delta between the peak of the fundamental and the peak of the band-edge emission. This is not a field strength measurement, it is only a relative measurement to determine the amount by which the emission drops at the band edge relative to the highest fundamental emission level.
2. Subtract the delta measured in step (1) from the maximum field strengths measured in clause 4 .The resultant field strengths are then used to determine band-edge compliance as required by Section 15.205

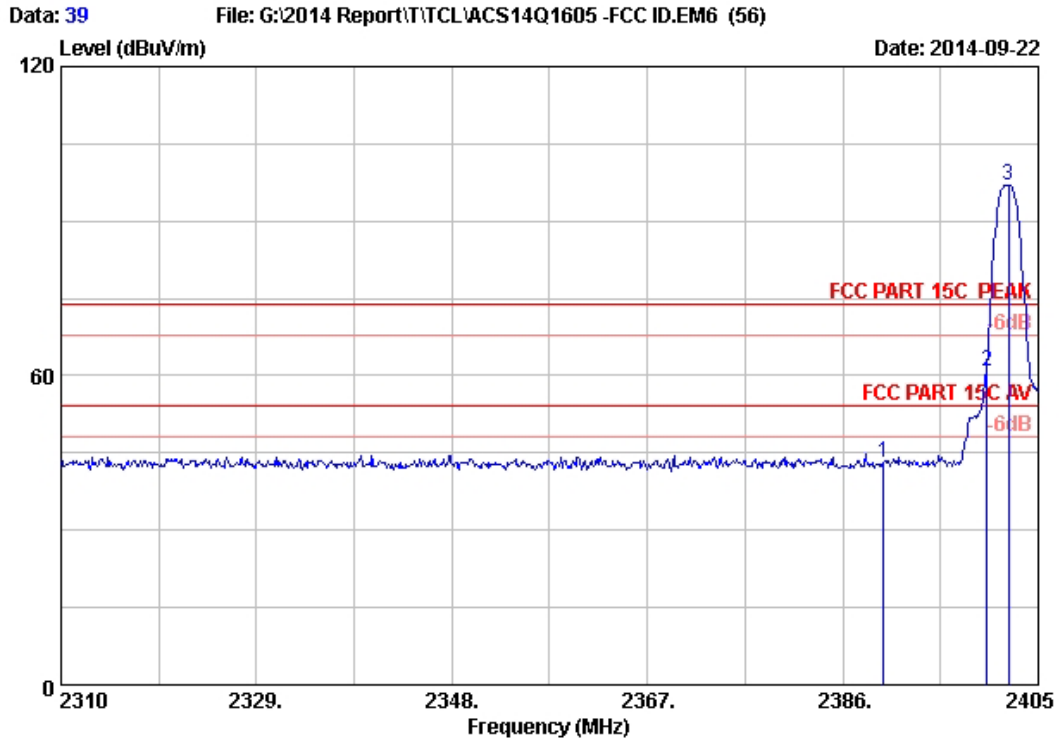
For emissions above two bandwidths away from the band-edge use below produce:

- 1). The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
- 2). The turntable was 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 emission.
- 4). Set the spectrum analyzer in the following setting in order to capture the lower and upperband-edges of the emission:
  - (a) PEAK: RBW=1MHz ;VBW=3MHz, PK detector, Sweep Time=AUTO
  - (b) AV: RBW=1MHz, VBW= 10Hz, Sweep Time=AUTO

### 8.4. Test Results

Pass (The testing data was attached in the next pages.)

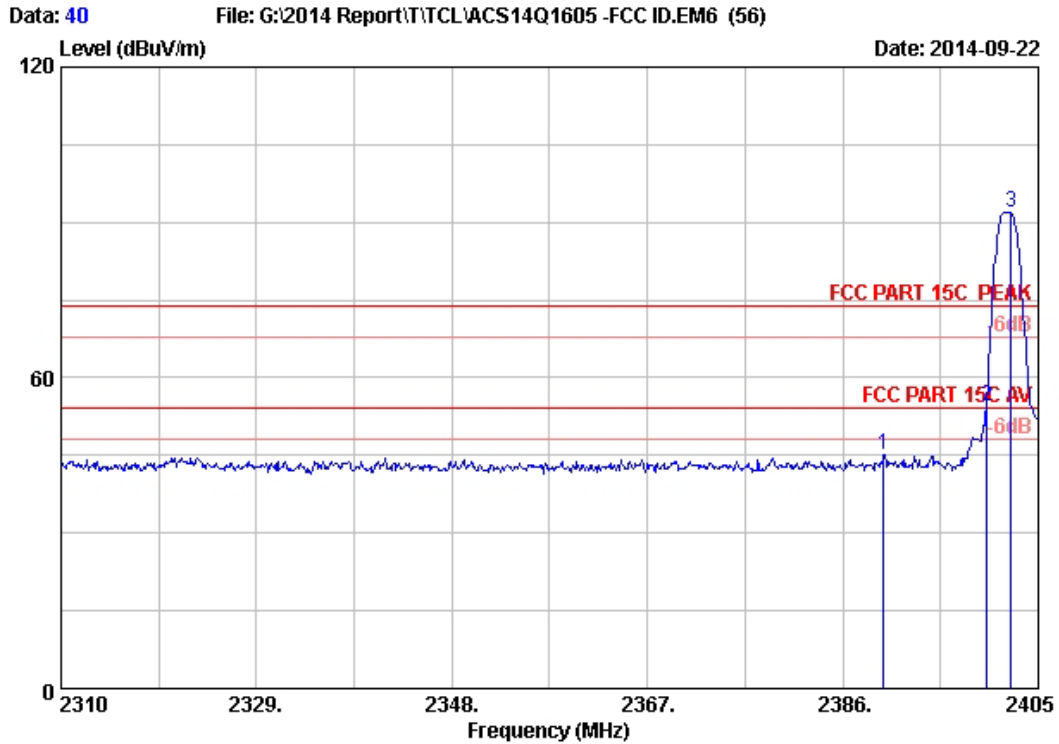
Note: If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.



Site no. : 3m Chamber Data no. : 39  
 Dis. / Ant. : 3m 2014 3115 (4580) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Kobe-Huang  
 EUT : HOME THEATRE SYSTEM  
 Power Rating : AC 120V/60Hz  
 Test Mode : GFSK 2402MHz (BT4.0)  
 M/N : HT-XT100

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission			Remark
						Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	2390.000	28.16	5.78	35.70	44.72	42.96	74.00	31.04	Peak
2	2400.000	28.18	5.80	35.70	62.64	60.92	74.00	13.08	Peak
3	2402.150	28.18	5.80	35.70	98.71	96.99	74.00	-22.99	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Amp Factor  
 2. The emission levels that are 20dB below the official  
 limit are not reported.

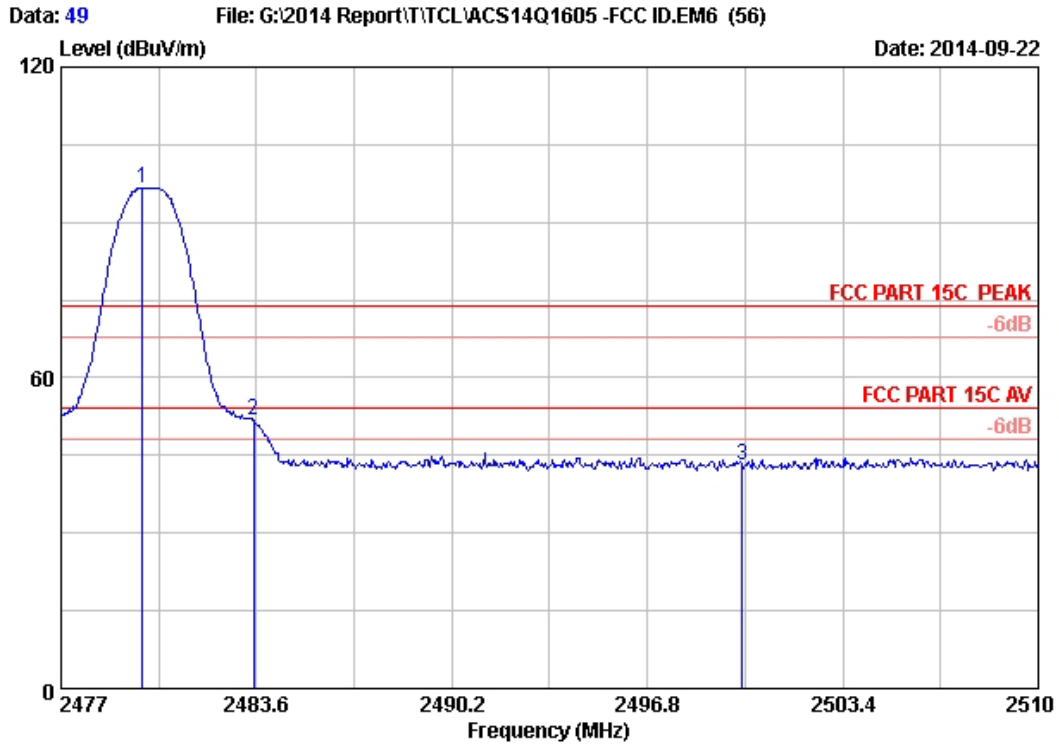


Site no.	: 3m Chamber	Data no.	: 40
Dis. / Ant.	: 3m 2014 3115 (4580)	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 24°C/56%	Engineer	: Kobe-Huang
EUT	: HOME THEATRE SYSTEM		
Power Rating	: AC 120V/60Hz		
Test Mode	: GFSK 2402MHz (BT4.0)		
M/N	: HT-XT100		

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission			Remark
						Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	2390.000	28.16	5.78	35.70	46.80	45.04	74.00	28.96	Peak
2	2400.000	28.18	5.80	35.70	56.35	54.63	74.00	19.37	Peak
3	2402.340	28.19	5.80	35.70	93.67	91.96	74.00	-17.96	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.

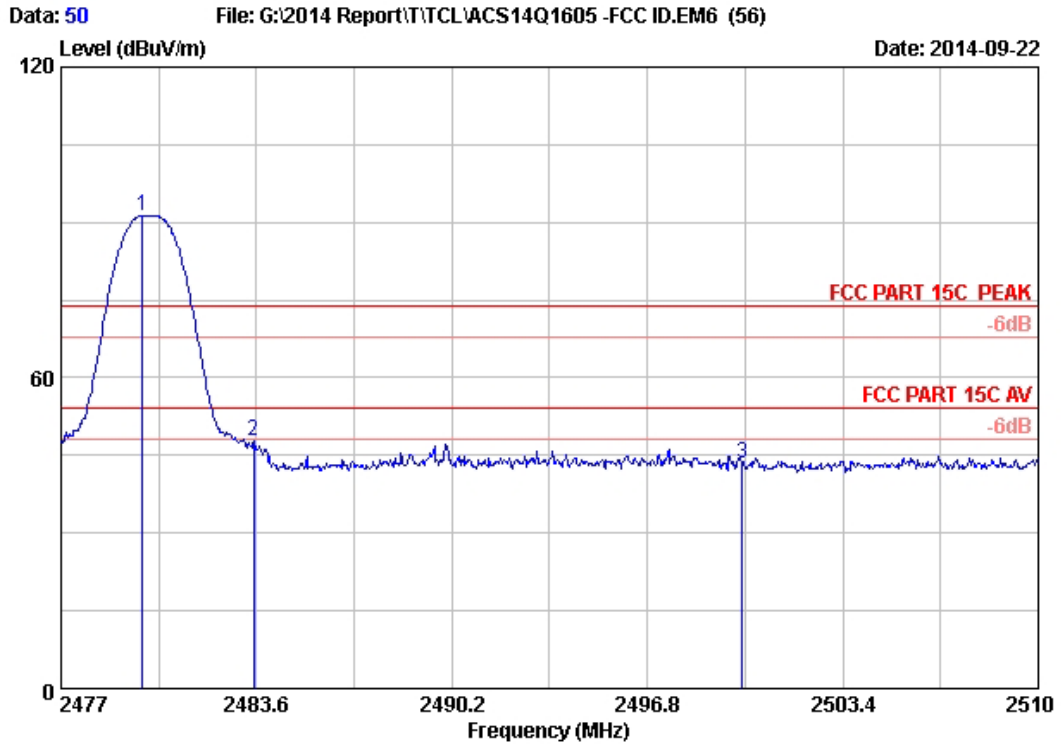




Site no.	: 3m Chamber	Data no.	: 49
Dis. / Ant.	: 3m 2014 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 24°C/56%	Engineer	: Kobe-Huang
EUT	: HOME THEATRE SYSTEM		
Power Rating	: AC 120V/60Hz		
Test Mode	: GFSK 2480MHz (BT4.0)		
M/N	: HT-XT100		

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission			Remark
						Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	2479.739	28.36	5.91	35.70	98.08	96.65	74.00	-22.65	Peak
2	2483.500	28.36	5.92	35.70	53.06	51.64	74.00	22.36	Peak
3	2500.000	28.40	5.94	35.70	44.57	43.21	74.00	30.79	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber	Data no. : 50
Dis. / Ant. : 3m 2014 3115 (4580)	Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK	
Env. / Ins. : 24°C/56%	Engineer : Kobe-Huang
EUT : HOME THEATRE SYSTEM	
Power Rating : AC 120V/60Hz	
Test Mode : GFSK 2480MHz (BT4.0)	
M/N : HT-XT100	

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission			Remark
						Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	2479.739	28.36	5.91	35.70	92.69	91.26	74.00	-17.26	Peak
2	2483.500	28.36	5.92	35.70	49.18	47.76	74.00	26.24	Peak
3	2500.000	28.40	5.94	35.70	44.81	43.45	74.00	30.55	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.

## 9. POWER SPECTRAL DENSITY TEST

### 9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.31, 13	1Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr. 28,14	1 Year
3	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	Apr. 28,14	1 Year

### 9.2. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

### 9.3. Test Procedure

1. Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.
2. Set the test frequency as center frequency, Set RBW=3KHz,VBW=10KHz,Span large enough capture the entire frequency, Read out maximum peak level frequency
3. Set the frequency read from produce 2 as center frequency, then set the span=300KHz, Sweep time=Span/RBW, Then Max hold, read out each mode and each chain's Power density.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude

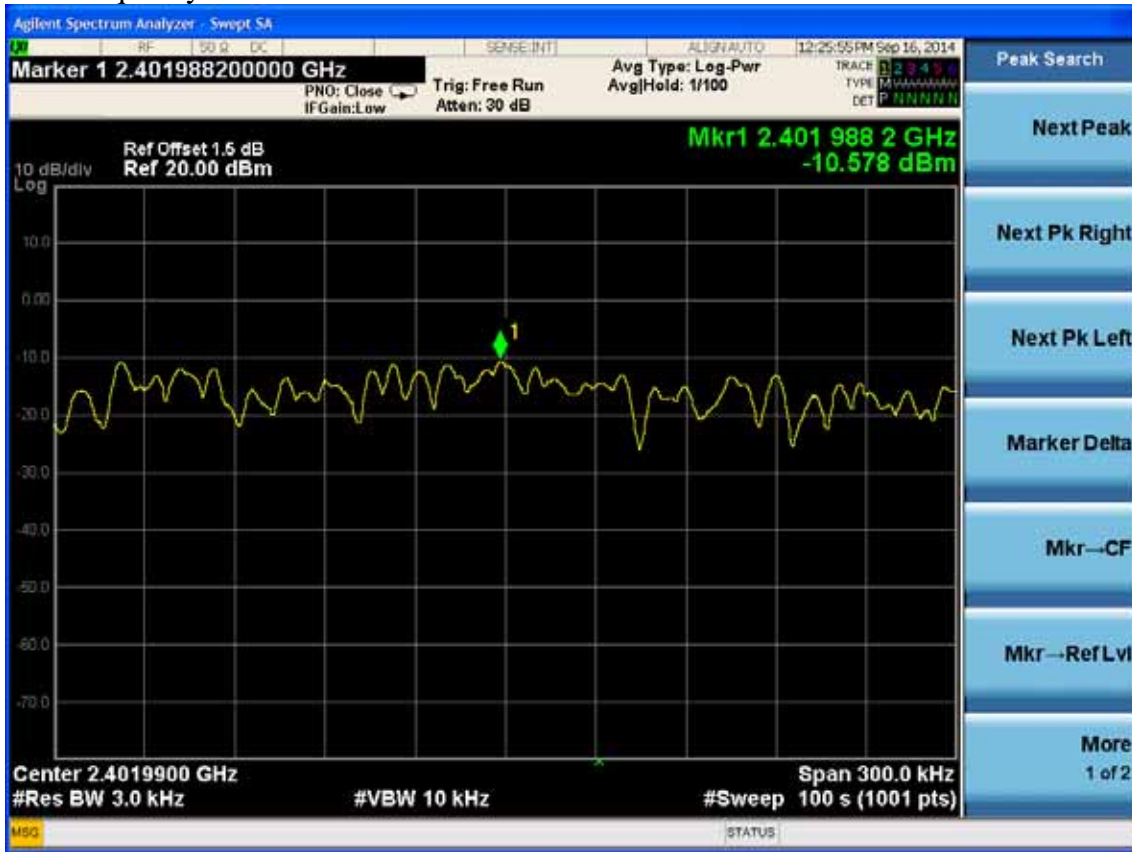
## 9.4. Test Results

EUT: HOME THEATRE SYSTEM		
M/N: HT-XT100		
Test date: 2014-09-15	Pressure: 101.6±1.0kpa	Humidity: 53.5±3.0%
Tested by: Kobe-Huang	Test site: RF site	Temperature: 22.3±0.6°C

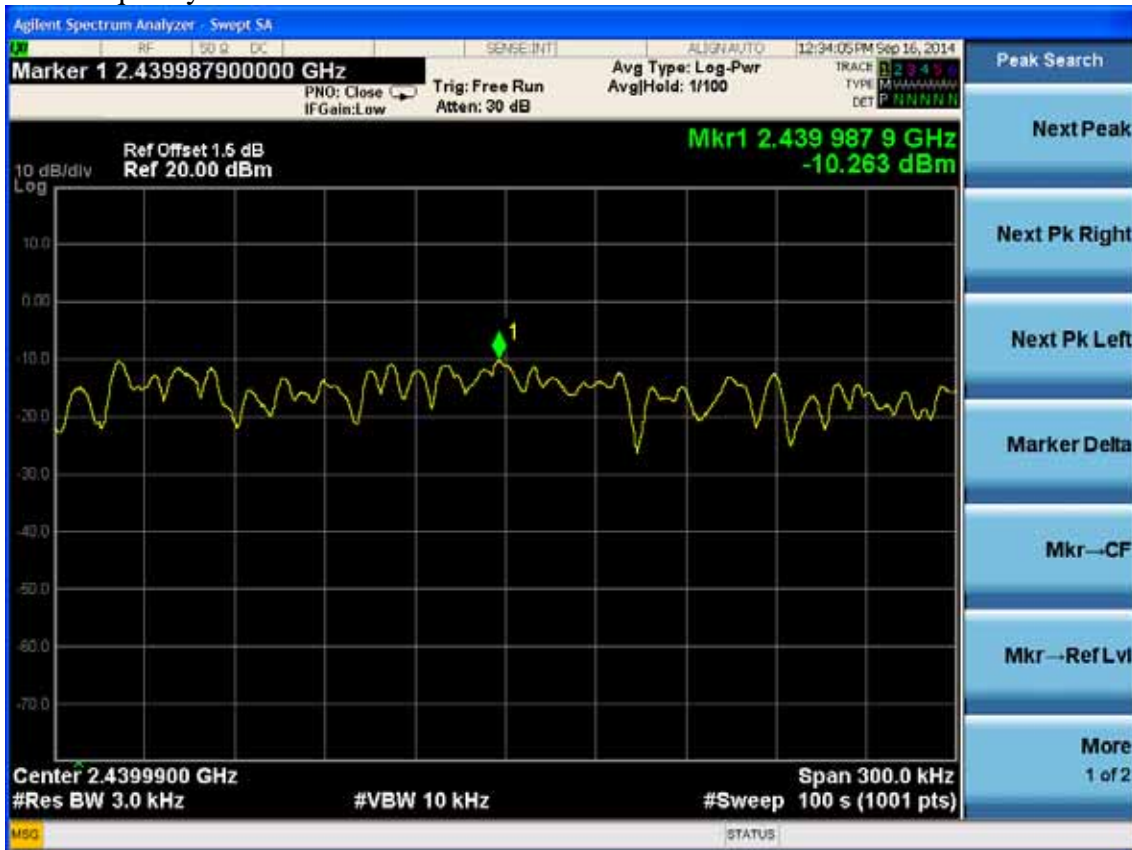
Test Mode	Frequency (MHz)	Power density ( dBm/3KHz )	Limit (dBm/3KHz)
GFSK	2402	-10.578	≥ 8
	2440	-10.263	≥ 8
	2480	-10.055	≥ 8
Conclusion : PASS			



Test Frequency: 2402MHz



Test Frequency: 2440MHz



Test Frequency: 2480MHz



## 10. DEVIATION TO TEST SPECIFICATIONS

[NONE]