Appendix B. Attachment of Report for additional measurement data

EQUIPMENT: Bluetooth Headset-H3,RAZR
TRADE NAME : Motorola
MODEL NO. : H3
FCC ID: QVZ-H500
APPLICANT: Motorola Inc.
600 North US Highway 45, Room AN2, Libertyville, Illinois, 60048, U.S.A.

The test result shown in the test report is the same with that of the original one in test report no. **FR531503**, except the different printed antenna with 1dBi, shield and layout on the PCB board. All test results have been modified.

Different printed antenna with 1dBi, shield and layout on the PCB board are added to the project. All test results have been modified.

This attachment should be filed together with original test report **FR531503** for reference.

Wayne Hsu / Supervisor
Sporton International Inc.

Sporton International Inc.
6F, No. 106, Sec. 1, Hsin Tai Wu Rd.,
Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

1. Test Result

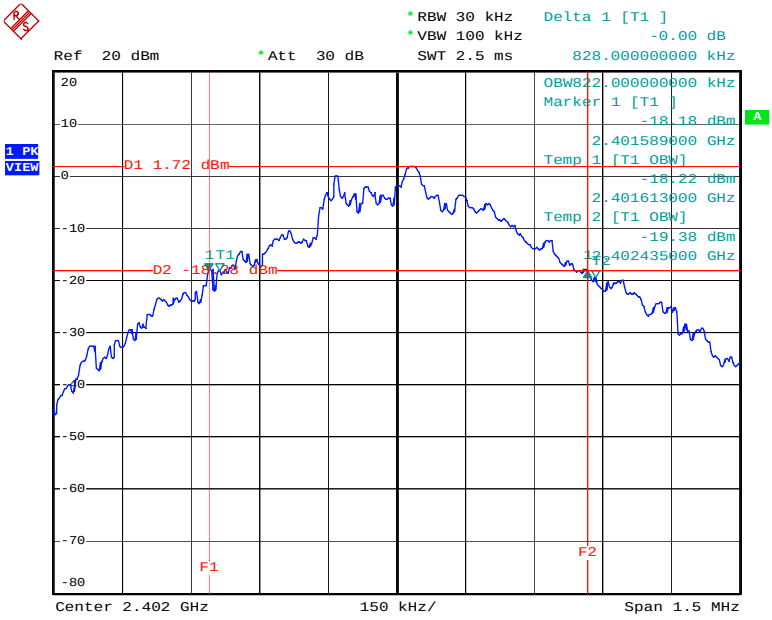
1.1. Test of Hopping Channel Bandwidth

1.1.1. Test Result

- Temperature: 26°C
- Relative Humidity: 64%
- Duty Cycle of the Equipment During the Test: 46.80%
- Test Engineer: Steven Lu

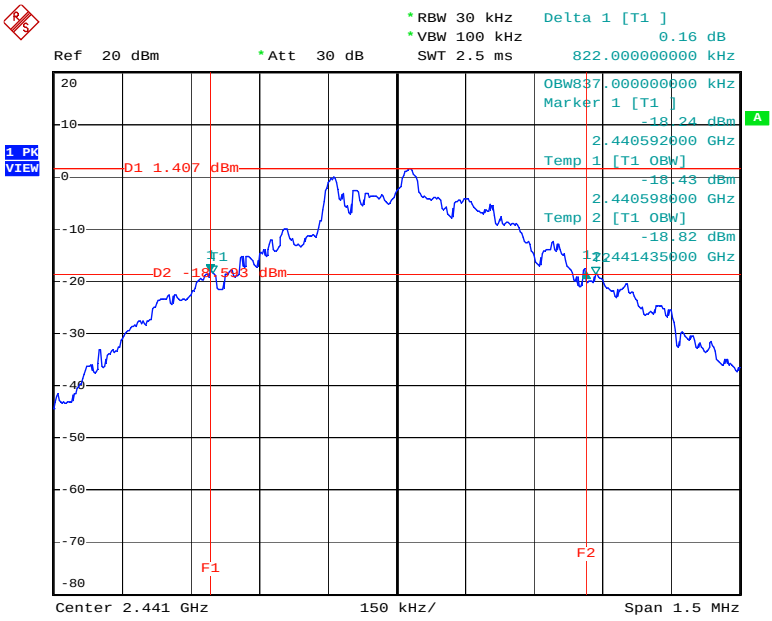
Modulation Type	Channel No.	Frequency (MHz)	20dB Bandwidth (kHz)	99% Occupied BW (kHz)	Min. Limit (kHz)
GFSK	00	2402 MHz	828.00	822.00	25
GFSK	39	2441 MHz	822.00	837.00	25
GFSK	78	2480 MHz	852.00	831.00	25

Modulation Type: GFSK (Channel 00)：



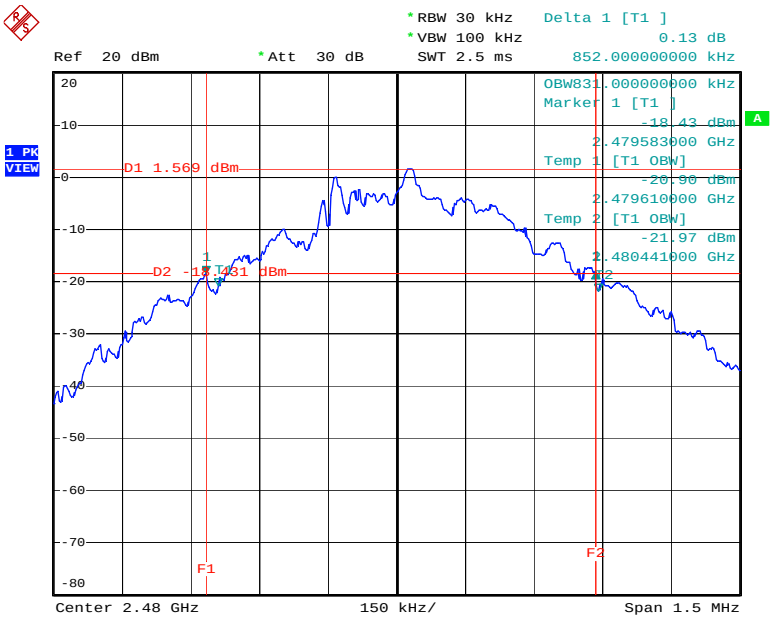
Date: 7.OCT.2005 17:43:01

Modulation Type: GFSK (Channel 39)：



Date: 7.OCT.2005 17:45:46

Modulation Type: GFSK (Channel 78)：



Date: 7.OCT.2005 17:47:19

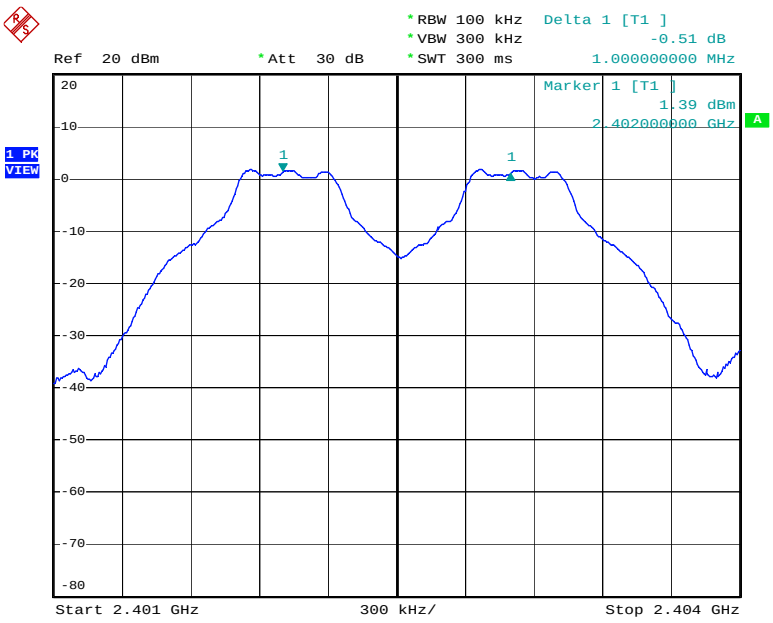
1.2. Test of Hopping Channel Separation

1.2.1. Test Result

- Temperature: 26°C
- Relative Humidity: 64%
- Duty Cycle of the Equipment During the Test: 46.80%
- Test Engineer: Steven Lu

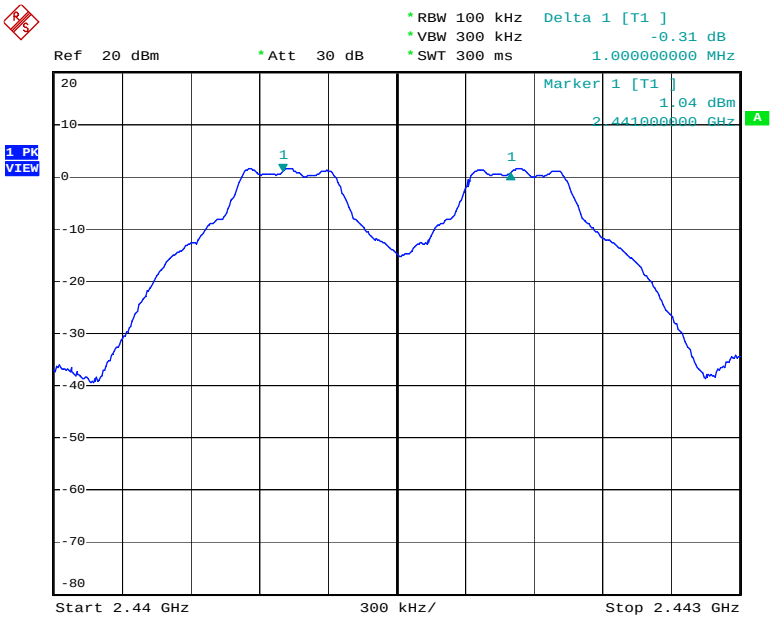
Modulation Type	Channel No.	Frequency (MHz)	Hopping Channel Separation (kHz)	Min. Limit (kHz)
GFSK	00	2402 MHz	1000	828.00
GFSK	39	2441 MHz	1000	822.00
GFSK	78	2480 MHz	1000	852.00

Modulation Type: GFSK (Channel 00)：



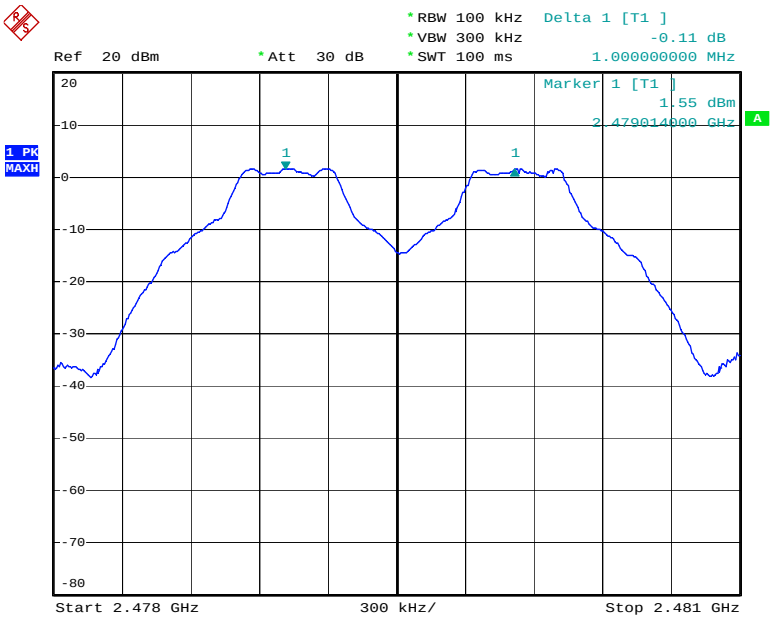
Date: 7.OCT.2005 17:42:53

Modulation Type: GFSK (Channel 39)：



Date: 7.OCT.2005 17:45:39

Modulation Type: GFSK (Channel 78)：



Date: 7.OCT.2005 17:59:57

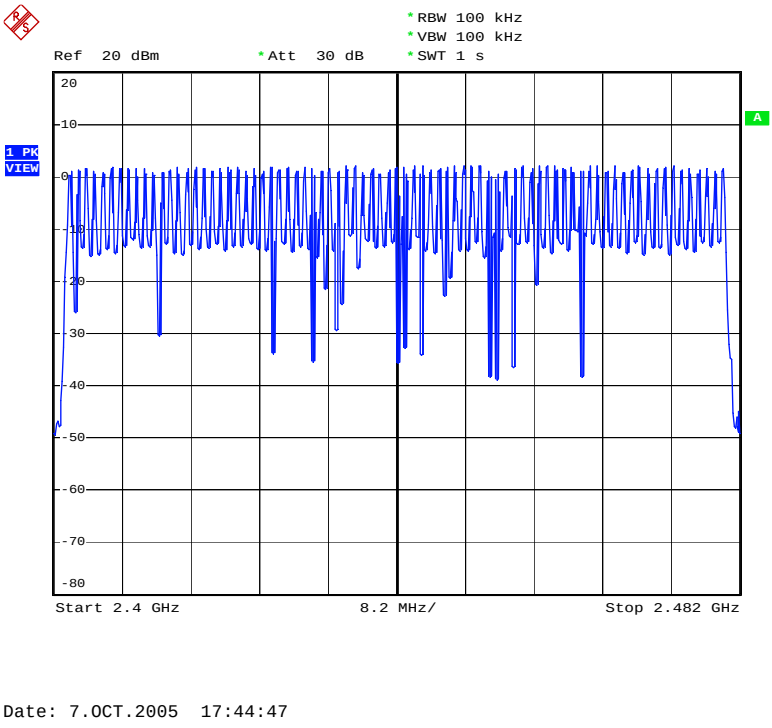
1.3. Test of Number of Hopping Frequency

1.3.1. Test Result

- Temperature: 26°C
- Relative Humidity: 64%
- Duty Cycle of the Equipment During the Test: 46.80%
- Test Engineer: Steven Lu

Modulation Type	Channel No.	Frequency (MHz)	Number of Hopping Ch. (Channels)	Min. Limit (Channels)
GFSK	00 ~ 78	2402 MHz ~ 2480 MHz	79	75

Modulation Type: GFSK (Channel 00 ~ Channel 78)：



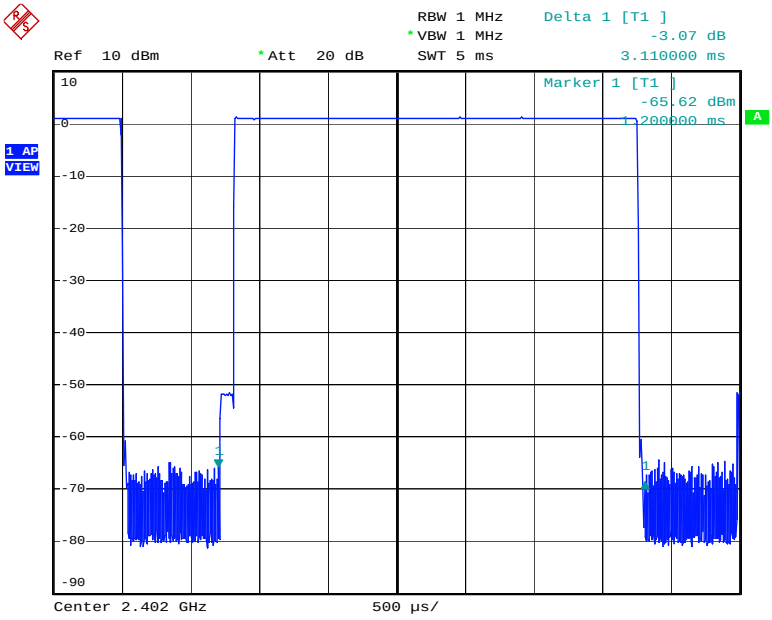
1.4. Test of Dwell Time of Each Frequency

1.4.1. Test Result

- Temperature: 26°C
- Relative Humidity: 64%
- Duty Cycle of the Equipment During the Test: 46.80%
- Test Engineer: Steven Lu

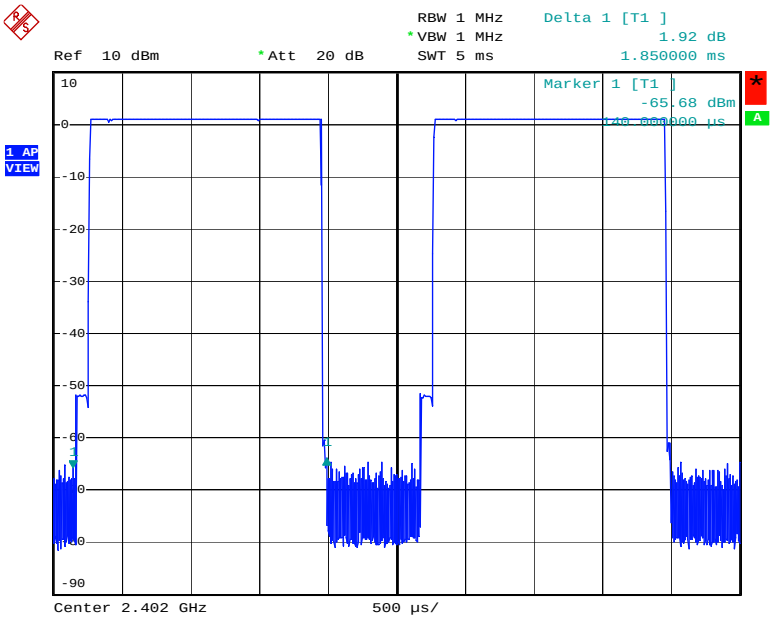
Data Packet	Frequency (MHz)	Pulse Duration (ms)	Dwell Time (s)	Limits (s)
DH5	2402 MHz	3.1000	0.3307	0.4000
DH3	2402 MHz	1.8500	0.2960	0.4000
DH1	2402 MHz	0.5800	0.1856	0.4000
DH5	2441 MHz	3.1000	0.3307	0.4000
DH3	2441 MHz	1.8500	0.2960	0.4000
DH1	2441 MHz	0.5800	0.1856	0.4000
DH5	2480 MHz	3.1000	0.3307	0.4000
DH3	2480 MHz	1.8500	0.2960	0.4000
DH1	2480 MHz	0.5850	0.1872	0.4000

DH5 Modulation Type: GFSK (Channel 00)：



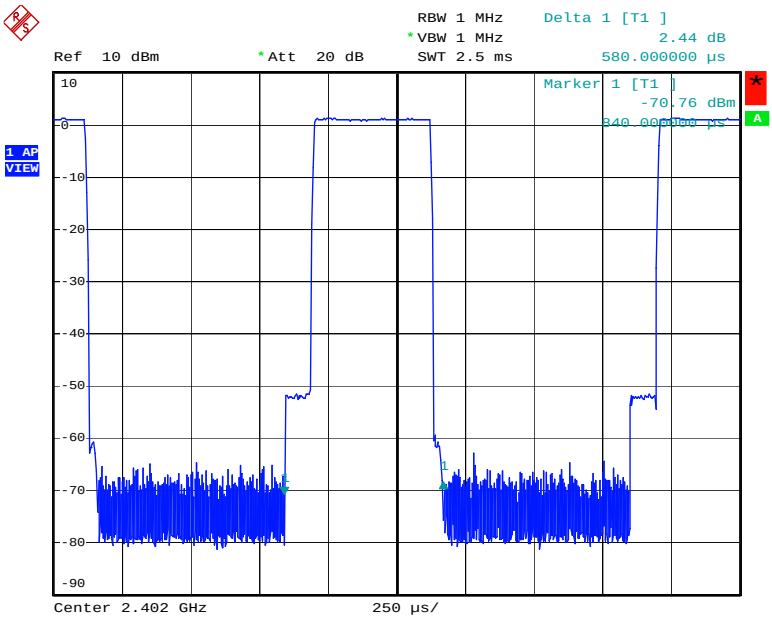
Date: 7.OCT.2005 17:55:01

DH3 Modulation Type: GFSK (Channel 00)：



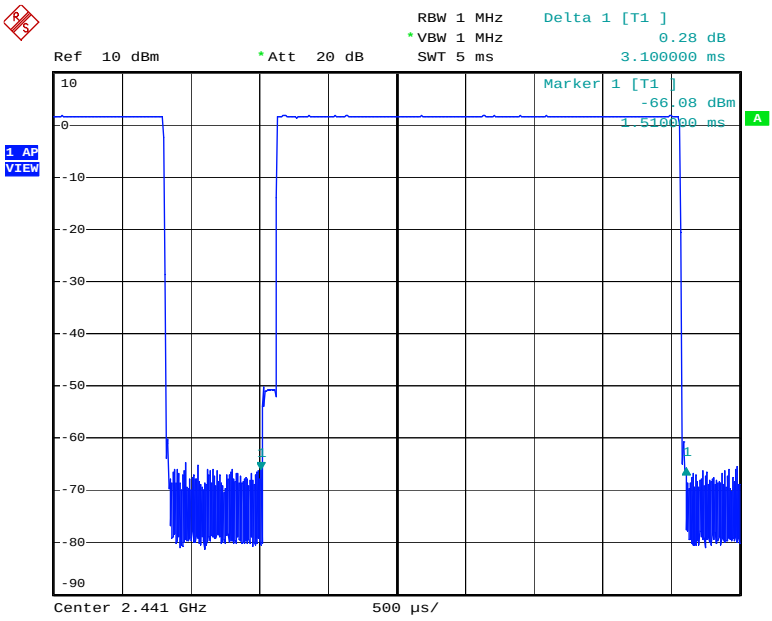
Date: 7.OCT.2005 17:52:36

DH1 Modulation Type: GFSK (Channel 00)：



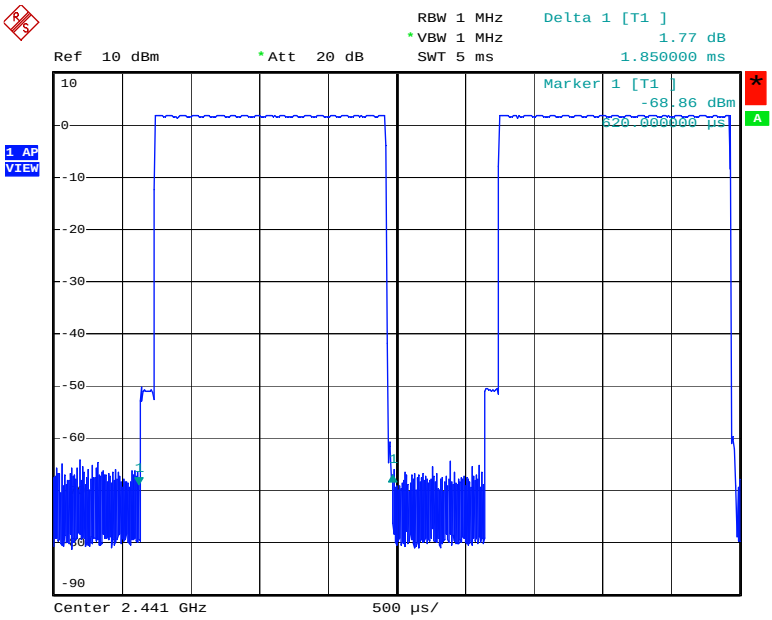
Date: 7.OCT.2005 17:52:03

DH5 Modulation Type: GFSK (Channel 39)：



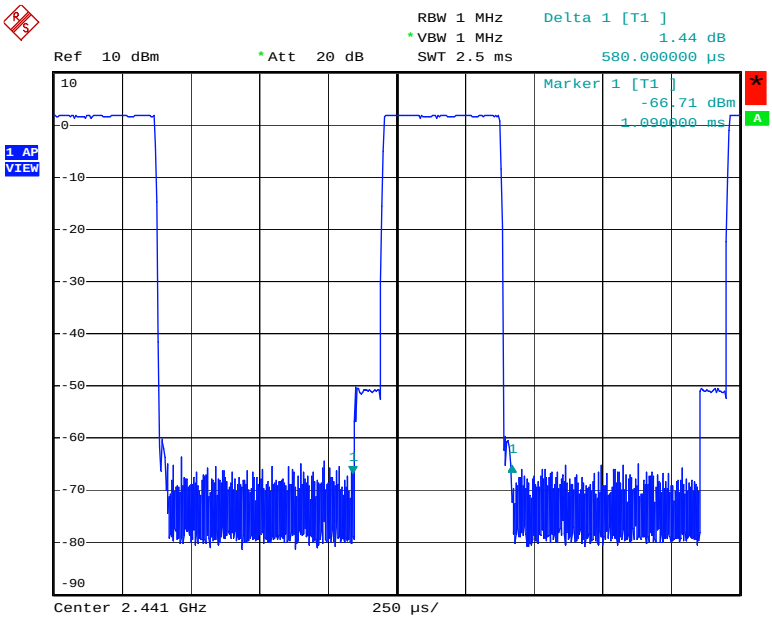
Date: 7.OCT.2005 17:54:33

DH3 Modulation Type: GFSK (Channel 39)：



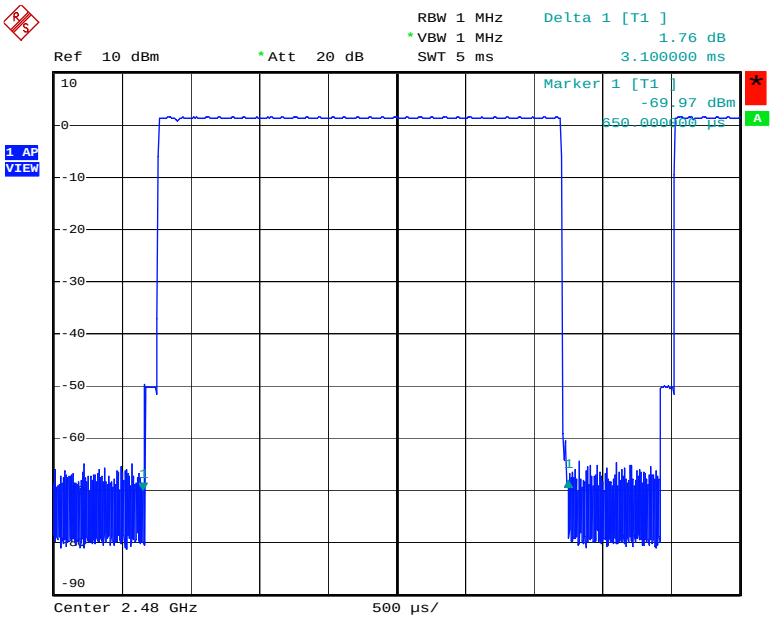
Date: 7.OCT.2005 17:53:02

DH1 Modulation Type: GFSK (Channel 39)：



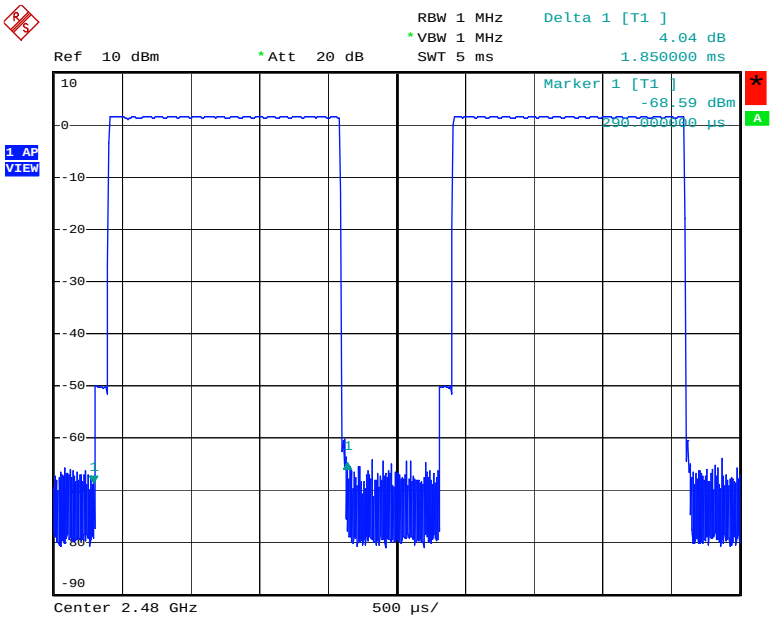
Date: 7.OCT.2005 17:51:42

DH5 Modulation Type: GFSK (Channel 78)：



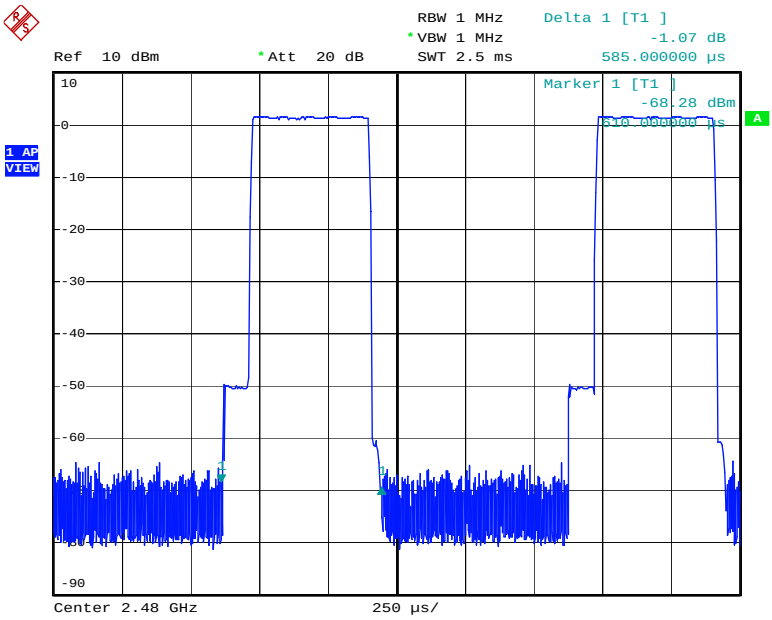
Date: 7.OCT.2005 17:54:00

DH3 Modulation Type: GFSK (Channel 78)：



Date: 7.OCT.2005 17:53:24

DH1 Modulation Type: GFSK (Channel 78)：



Date: 7.OCT.2005 17:51:20

1.5. Maximum Peak Output Power

1.5.1. Test Result of Conducted Peak Power

- Temperature: 26°C
- Relative Humidity: 64%
- Duty Cycle of the Equipment During the Test: 46.80%
- Test Engineer: Steven Lu

Modulation Type	Channel No.	Frequency (MHz)	Output Power (dBm)	Limits (dBm)
GFSK	00	2402 MHz	0.58	30
GFSK	39	2441 MHz	0.67	30
GFSK	78	2480 MHz	-1.62	30

1.6. Test of Band Edges Emission

1.6.1. Test Result of Radiated Emission

- Test Channel: 00
- Temperature: 26°C
- Relative Humidity: 64%
- Duty Cycle of the Equipment During the Test: 46.80%
- Test Engineer: Steven Lu

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Cable Loss	Preamp Factor	Read Level	Pol/Phase	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB	dBuV		
1	2390.000	45.42	-28.58	74.00	28.13	2.00	0.00	15.29	VERTICAL	PEAK
2	2390.000	8.80	-45.20	54.00	28.13	2.00	0.00	-21.33	VERTICAL	Average

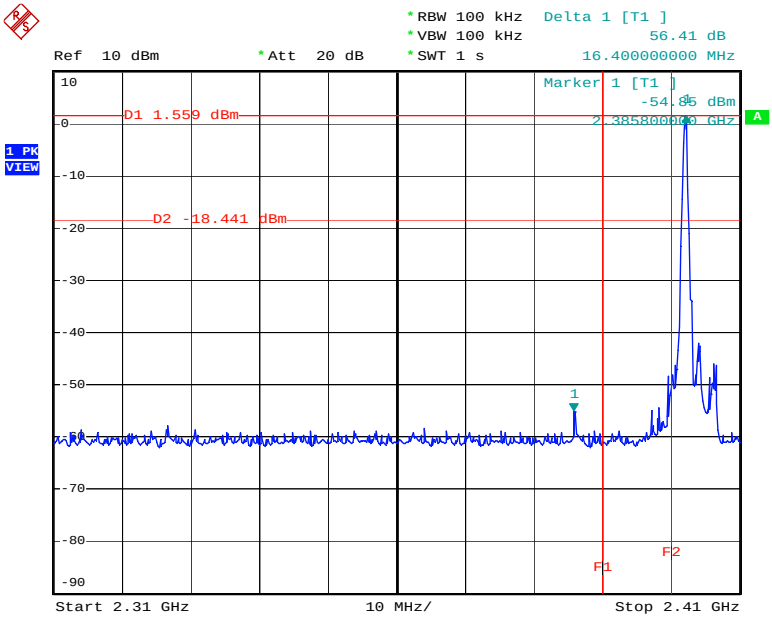
- Test Channel: 78
- Temperature: 26°C
- Relative Humidity: 64%
- Duty Cycle of the Equipment During the Test: 46.80%
- Test Engineer: Steven Lu

	Freq	Level	Over Limit	Limit Line	Antenna Factor	Cable Loss	Preamp Factor	Read Level	Pol/Phase	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB	dBuV		
1 @	2483.500	55.09	-18.91	74.00	28.36	2.04	0.00	24.69	VERTICAL	PEAK
2 @	2483.500	19.18	-34.82	54.00	28.36	2.04	0.00	-11.22	VERTICAL	Average

Level* : The max field strength in the restricted bands.

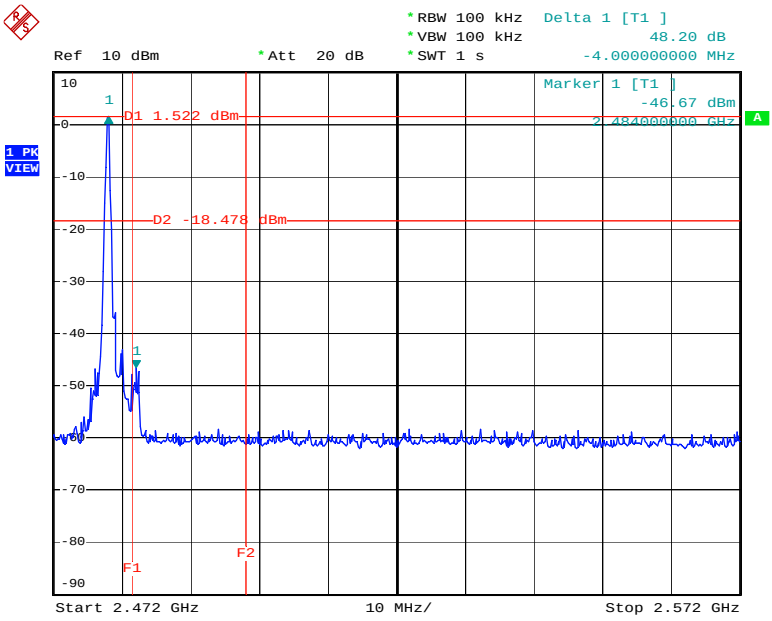
Test Result of Conducted Emission

Modulation Type: GFSK (Channel 00)：



Date: 7.OCT.2005 17:43:43

Modulation Type: GFSK (Channel 78)：



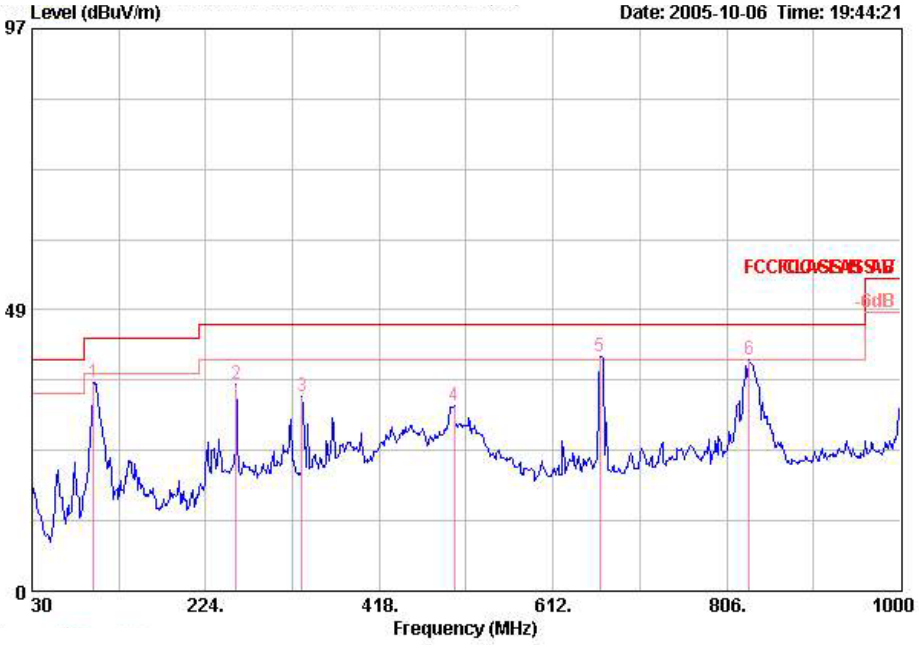
Date: 7.OCT.2005 17:48:01

1.7. Test of Spurious Radiated Emission

1.7.1. Test Results for CH 39 / 2441 MHz (for emission below 1GHz)

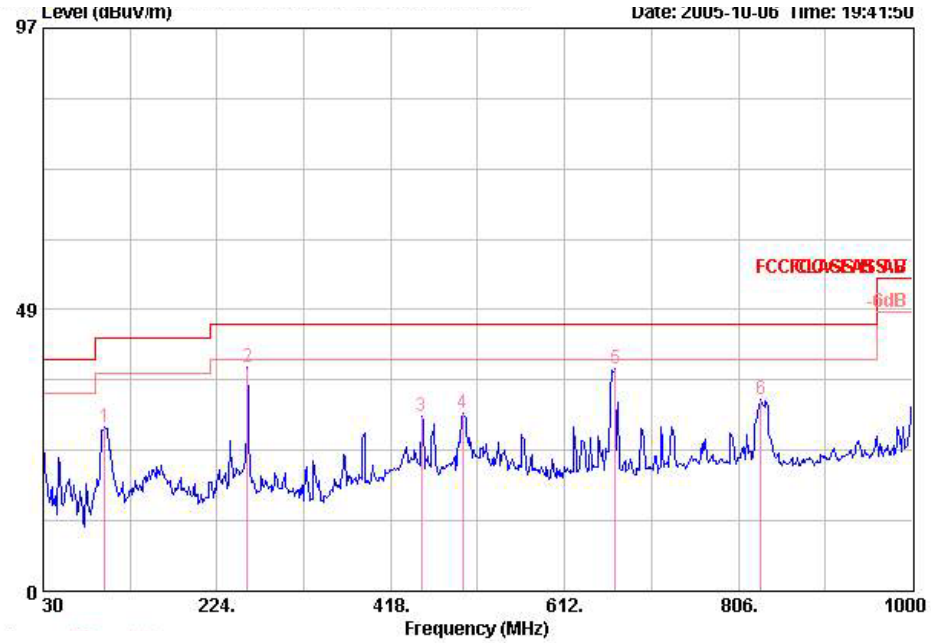
- Temperature: 24°C
- Relative Humidity: 55%
- Test Engineer: Steven Lu

(A) Polarization: Horizontal



	Freq	Level	Over Limit	Limit Line	Antenna Factor	Cable Loss	Preamp Factor	Read Level	Pol/Phase	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB	dBuV		
1	98.870	35.95	-7.55	43.50	10.35	0.70	30.10	54.99	HORIZONTAL	Peak
2	257.950	35.56	-10.44	46.00	12.72	1.01	30.09	51.93	HORIZONTAL	Peak
3	331.670	33.61	-12.39	46.00	13.90	1.25	30.51	48.98	HORIZONTAL	Peak
4	501.420	31.91	-14.09	46.00	17.42	1.54	30.52	43.48	HORIZONTAL	Peak
5 !	664.380	40.57	-5.43	46.00	18.90	1.75	30.35	50.26	HORIZONTAL	Peak
6	831.220	39.87	-6.13	46.00	20.30	1.95	30.02	47.64	HORIZONTAL	Peak

(B) Polarization: Vertical



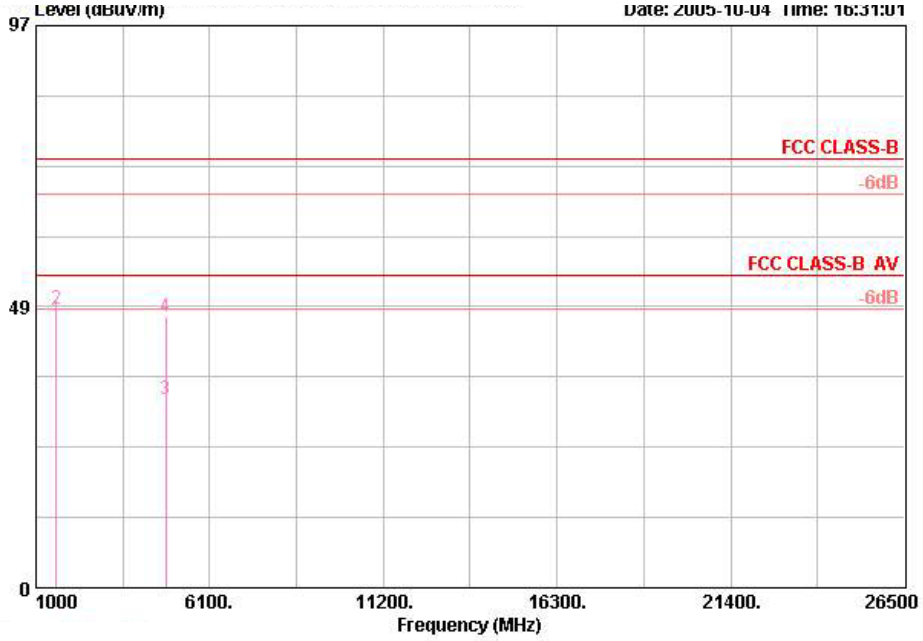
	Freq	Level	Over Limit	Limit Line	Antenna Factor	Cable Loss	Preamp Factor	Read Level	Pol/Phase	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB	dBuV		
1	98.870	28.16	-15.34	43.50	10.35	0.70	30.10	47.21	VERTICAL	Peak
2	257.950	38.52	-7.48	46.00	12.72	1.01	30.09	54.89	VERTICAL	Peak
3	451.950	30.26	-15.74	46.00	16.44	1.46	30.47	42.83	VERTICAL	Peak
4	498.510	30.77	-15.23	46.00	17.36	1.53	30.53	42.41	VERTICAL	Peak
5	668.260	38.30	-7.70	46.00	18.91	1.75	30.36	47.99	VERTICAL	Peak
6	831.220	33.10	-12.90	46.00	20.30	1.95	30.02	40.87	VERTICAL	Peak

Note:
Emission level (dBuV/m) = 20 log Emission level (uV/m)
Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

1.7.2. Test Results for CH 00 / 2402 MHz (for emission above 1GHz)

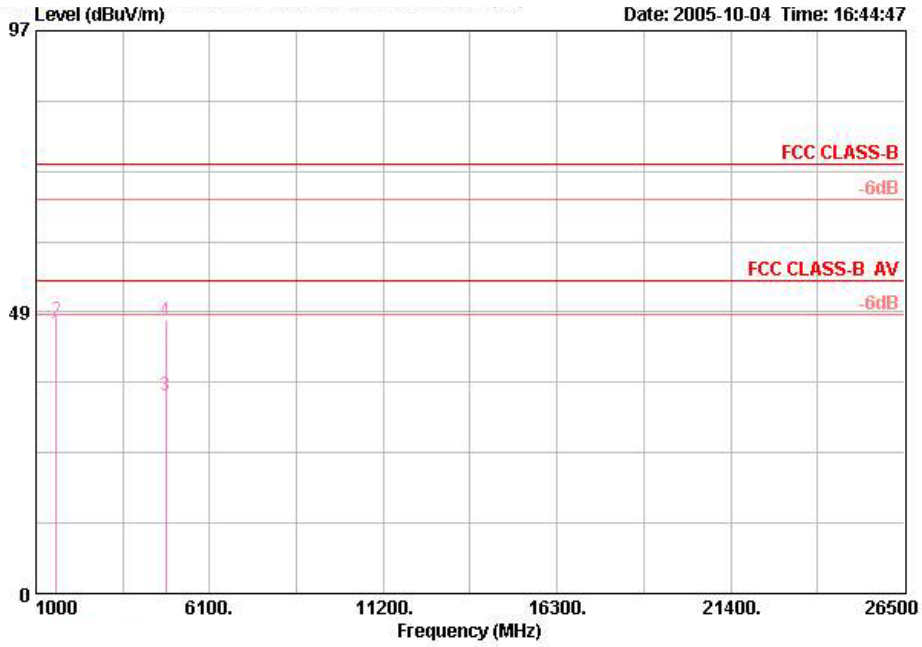
- Temperature: 24°C
- Relative Humidity: 55%
- Test Engineer: Steven Lu

(A) Polarization: Horizontal



	Freq	Level	Over Limit	Limit Line	Antenna Factor	Cable Loss	Preamp Factor	Read Level	Pol/Phase	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB	dBuV		
1	1601.960	46.23	-7.77	54.00	25.58	1.43	35.06	54.28	HORIZONTAL	AVERAGE
2	1602.000	48.16	-25.84	74.00	25.58	1.43	35.06	56.21	HORIZONTAL	PEAK
3	4803.960	32.46	-21.54	54.00	33.18	3.20	35.10	31.17	HORIZONTAL	AVERAGE
4	4803.960	46.82	-27.18	74.00	33.18	3.20	35.10	45.54	HORIZONTAL	PEAK

(B) Polarization: Vertical



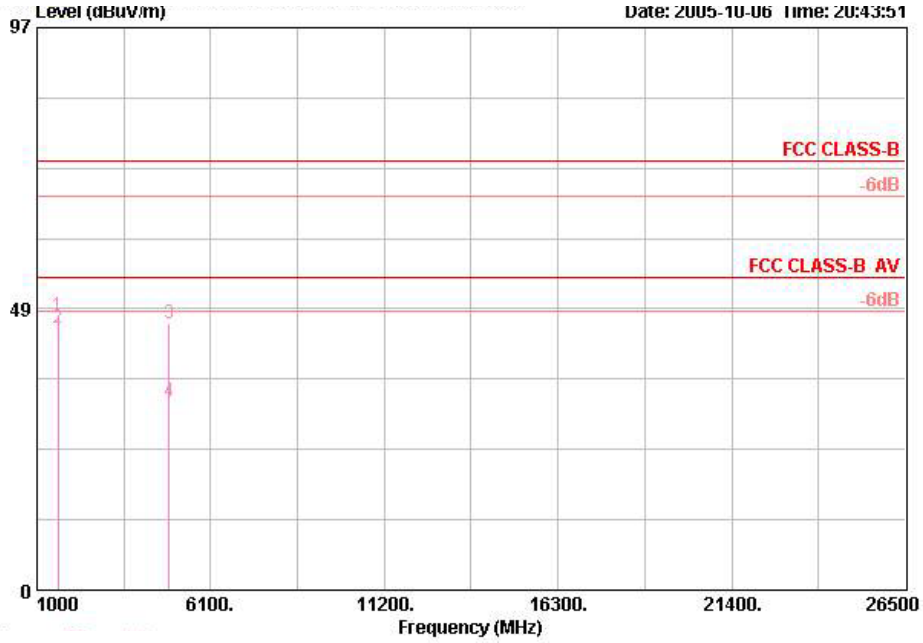
	Freq	Level	Over Limit	Limit Line	Antenna Factor	Cable Loss	Preamp Factor	Read Level	Pol/Phase	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB	dBuV		
1	1601.980	45.06	-8.94	54.00	25.58	1.43	35.06	53.10	VERTICAL	AVERAGE
2	1601.980	46.98	-27.02	74.00	25.58	1.43	35.06	55.03	VERTICAL	PEAK
3	4804.040	34.02	-19.98	54.00	33.18	3.20	35.10	32.73	VERTICAL	AVERAGE
4	4804.040	47.04	-26.96	74.00	33.18	3.20	35.10	45.76	VERTICAL	PEAK

Note:
Emission level (dBuV/m) = 20 log Emission level (uV/m)
Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

1.7.3. Test Results for CH 39 / 2441 MHz (for emission above 1GHz)

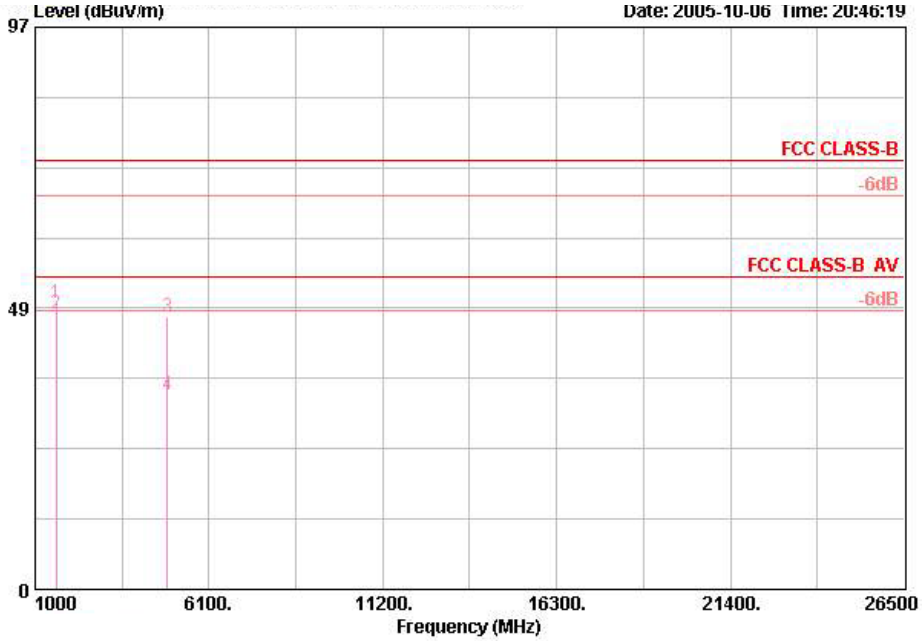
- Temperature: 24°C
- Relative Humidity: 55%
- Test Engineer: Steven Lu

(A) Polarization: Horizontal



	Freq	Level	Over Limit	Limit Line	Antenna Factor	Cable Loss	Preamp Factor	Read Level	Pol/Phase	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB	dBuV		
1	1627.890	47.19	-26.81	74.00	25.71	1.46	35.05	55.06	HORIZONTAL	PEAK
2	1628.000	45.28	-8.72	54.00	25.71	1.46	35.05	53.16	HORIZONTAL	AVERAGE
3	4882.100	46.00	-28.00	74.00	33.33	3.23	35.10	44.53	HORIZONTAL	PEAK
4	4882.100	32.48	-21.52	54.00	33.33	3.23	35.10	31.01	HORIZONTAL	Average

(B) Polarization: Vertical



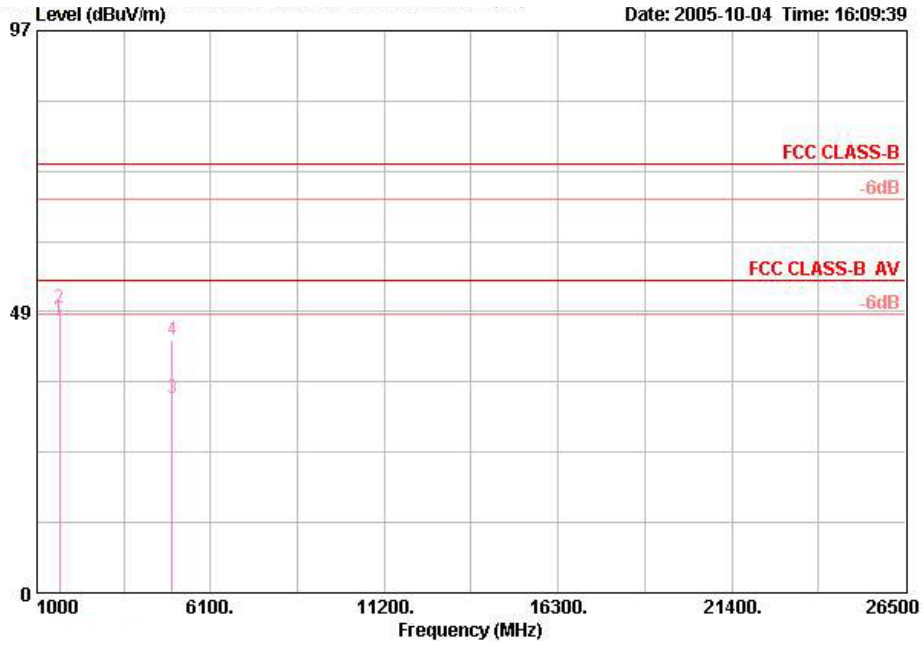
	Freq	Level	Over Limit	Limit Line	Antenna Factor	Cable Loss	Preamp Factor	Read Level	Pol/Phase	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB	dBuV		
1	1628.000	49.33	-24.67	74.00	25.71	1.46	35.05	57.21	VERTICAL	PEAK
2	1628.000	47.69	-6.31	54.00	25.71	1.46	35.05	55.56	VERTICAL	AVERAGE
3	4882.350	46.99	-27.01	74.00	33.33	3.23	35.10	45.52	VERTICAL	Peak
4	4882.350	33.58	-20.42	54.00	33.33	3.23	35.10	32.11	VERTICAL	Average

Note:
Emission level (dBuV/m) = 20 log Emission level (uV/m)
Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

1.7.4. Test Results for CH 79 / 2480 MHz (for emission above 1GHz)

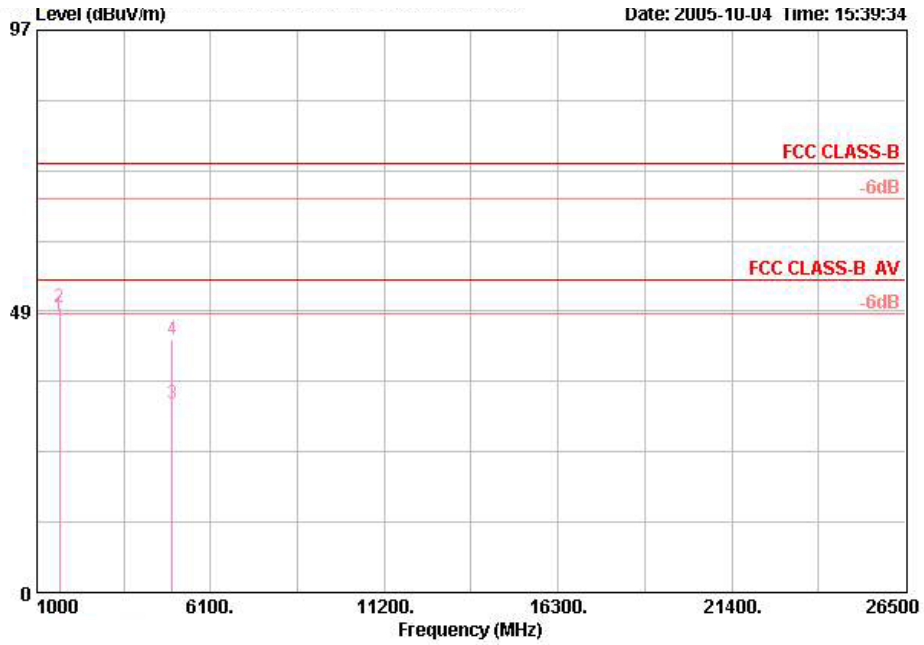
- Temperature: 24°C
- Relative Humidity: 55%
- Test Engineer: Steven Lu

(A) Polarization: Horizontal



	Freq	Level	Over Limit	Limit Line	Antenna Factor	Cable Loss	Preamp Factor	Read Level	Pol/Phase	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB	dBuV		
1	1654.000	47.31	-6.69	54.00	25.77	1.50	35.04	55.08	HORIZONTAL	AVERAGE
2	1654.010	49.08	-24.92	74.00	25.77	1.50	35.04	56.85	HORIZONTAL	PEAK
3	4959.940	33.57	-20.43	54.00	33.52	3.26	35.10	31.88	HORIZONTAL	AVERAGE
4	4959.940	43.59	-30.41	74.00	33.52	3.26	35.10	41.90	HORIZONTAL	PEAK

(B) Polarization: Vertical



	Freq	Level	Over Limit	Limit Line	Antenna Factor	Cable Loss	Preamp Factor	Read Level	Pol/Phase	Remark
	MHz	dBuV/m	dB	dBuV/m	dB/m	dB	dB	dBuV		
1	1654.000	47.78	-6.22	54.00	25.77	1.50	35.04	55.55	VERTICAL	AVERAGE
2	1654.000	49.14	-24.86	74.00	25.77	1.50	35.04	56.91	VERTICAL	PEAK
3	4959.880	32.47	-21.53	54.00	33.52	3.26	35.10	30.78	VERTICAL	AVERAGE
4	4959.880	43.72	-30.28	74.00	33.52	3.26	35.10	42.03	VERTICAL	PEAK

Note:
Emission level (dBuV/m) = 20 log Emission level (uV/m)
Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

1.7.5. Photographs of Radiated Emission Test Configuration

FRONT VIEW

REAR VIEW