Testing Laboratory
1190

FCC Test Report

According to

47 CFR Part 15 Subpart C

Equipment	:	**EDA (Enterprise Digital Assistant)**
Trade Name	:	**Symbol**
Model No.	:	**MC5574**
FCC ID	:	**H9PMC5574**
Filing Type	:	**Certification**
Applicant	:	**Symbol Technologies Inc** One Symbol Plaza Holtsville, NY 11742 -1300 United States

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- The data shown in this test report were carried out on Apr. 11, 2008 at **Sporton International Inc. LAB.**
- Report No.: FR840317A, Report Version: Rev. 01.

Roy Wu
Manager

SPORTON International Inc.
No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

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History of This Test Report

Report Issue Date: Apr. 14, 2008

Report No.	Description

1. General Description of Equipment under Test

1.1. Applicant

Symbol Technologies Inc
One Symbol Plaza Holtsville, NY 11742 -1300 United States

1.2. Manufacturer

ASKEY COMPUTER CORP
10F, No. 119, CHIENKANG RD., CHUNG-HO, TAIPEI, TAIWAN, 235, R.O.C

1.3. Basic Description of Equipment under Test

Equipment		EDA (Enterprise Digital Assistant)
Trade Name		Symbol
Model Name		MC5574
FCC ID		H9PMC5574
Sample A		1D scanner without camera
Sample B		2D scanner without camera
Sample C		1D scanner with camera
Sample D		2D scanner with camera
AC Adapter	**Brand Name**	DELTA
	Model Name	ADP-16GB
	Power Rating	I/P: 100-240Vac, 50-60Hz, 0.4A; O/P: 5.4Vdc, 3A
	AC Power Cord Type	AC: 1.8 meter non-shielded cable with ferrite core DC: 1.8 meter non-shielded cable without ferrite core
Battery	**Brand Name**	SYMBOL
	Part Number	82-107172-01 Rev A
	Power Rating	3.7Vdc, 2400mAh
	Type	Li-ion
Communication USB charge cable	**Brand Name**	SYMBOL
	Part Number	25-108022-01R Rev. 1
	Signal Line Type	1.5 meter shielded cable without ferrite core

Remark: Above EUT's information was declared by manufacturer. Please refer to specifications of manufacturer or User's Manual for more detailed features description.

1.4. Feature of Equipment under Test

Product Feature & Specification	
DUT Type :	EDA (Enterprise Digital Assistant)
Trade Name :	Symbol
Model Name :	MC5574
FCC ID :	H9PMC5574
Tx Frequency :	GSM850 : 824 MHz ~ 849 MHz GSM1900 : 1850 MHz ~1910 MHz Bluetooth : 2400 MHz ~ 2483.5 MHz WLAN : 2400 MHz ~ 2483.5 MHz
Rx Frequency :	GSM850 : 869 MHz ~ 894 MHz GSM1900 : 1930 MHz ~ 1990 MHz Bluetooth : 2400 MHz ~ 2483.5 MHz WLAN : 2400 MHz ~ 2483.5 MHz
Maximum Output Power to Antenna :	GSM850 : 32.43 dBm (GSM) / 32.41 dBm (GPRS8) / 30.62 dBm (GPRS10) / 26.87 dBm (GPRS12) / 25.94 dBm (EGPRS8) / 23.83 dBm (EGPRS10) / 19.67 dBm (EGPRS12) / GSM1900 : 29.50 dBm (GSM) / 29.39 dBm (GPRS8) / 27.55 dBm (GPRS10) / 23.79 dBm (GPRS12) / 25.06 dBm (EGPRS8) / 23.26 dBm (EGPRS10) / 19.22 dBm (EGPRS12) / Bluetooth : 4.76 dBm WLAN : 14.57 dBm (802.11b) / 15.52 dBm (802.11g)
Type of Antenna Connector :	N/A
Antenna Type :	GSM : PIFA Antenna Bluetooth : Chip antenna WLAN : PIFA Antenna
Antenna Gain :	Bluetooth : -0.94 dBi WLAN : 1.22 dBi
GPRS / EGPRS Multislot class :	12
Type of Modulation :	GSM / GPRS : GMSK EDGE : 8PSK Bluetooth : GFSK WLAN : DSSS / OFDM
DUT Stage :	Identical Prototype

2. Test Configuration of Equipment under Test

2.1. Test Manner

a. The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.
b. For spurious emission below 1 GHz, only one channel of each application was tested because it is not related to channel selection.
c. The EUT is programmed to transmit signal continuously for all tests.
d. Frequency range investigated: conduction 150 KHz to 30 MHz, radiation 30 MHz to 25000 MHz.

2.2. Test Mode

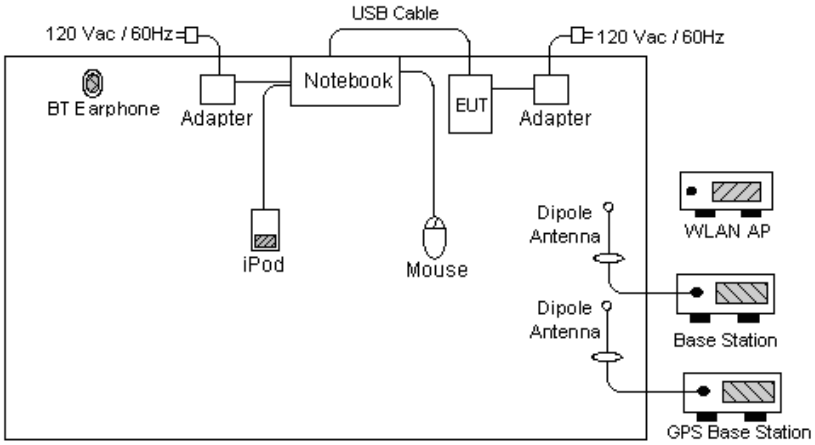
Application	Bluetooth
Radiated Emission	Mode 1: Tx_CH00_2402 MHz Mode 2: Tx_CH39_2441 MHz Mode 3: Tx_CH78_2480 MHz Mode 4: Tx_CH39_2480 MHz + 802.11g Tx_CH01_2412 MHz
Conducted Emission	Mode 1 : GSM850 Idle + BT Idle + WLAN Idle + Adapter + USB Link + GPS Rx + MPEG 4 + Camera for Sample D Mode 2 : GSM1900 Idle + BT Idle + WLAN Idle + Adapter + USB Link + GPS Rx + MPEG 4 + Scanner for Sample D Mode 3 : EDGE Idle + BT Idle + WLAN Idle + Adapter + USB Link + GPS Rx + MPEG 4 + Scanner for Sample C Mode 4 : GSM850 Idle + BT Idle + WLAN Idle + Adapter + USB Link + GPS Rx + MPEG 4 + Scanner for Sample B Mode 5 : GSM850 Idle + BT Idle + WLAN Idle + Adapter + USB Link + GPS Rx + MPEG 4 + Scanner for Sample A

2.3. Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Base Station	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	T&E	GS-50	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	SMC	SMC-100	HEDWG4005ACC	N/A	Unshielded, 1.8 m
4.	Notebook	DELL	D400	E2K24GBRL	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Bluetooth Earphone	Engotech	ET-BH111	PQY471087	N/A	N/A
6.	RS-232 Mouse	State	MS-303	DoC	Unshielded, 1.2 m	N/A
7.	i-pod	Apple	A1199	DoC	Unshielded, 1.2 m	N/A

2.4. Connection Diagram of Test System

<Conducted Emission>



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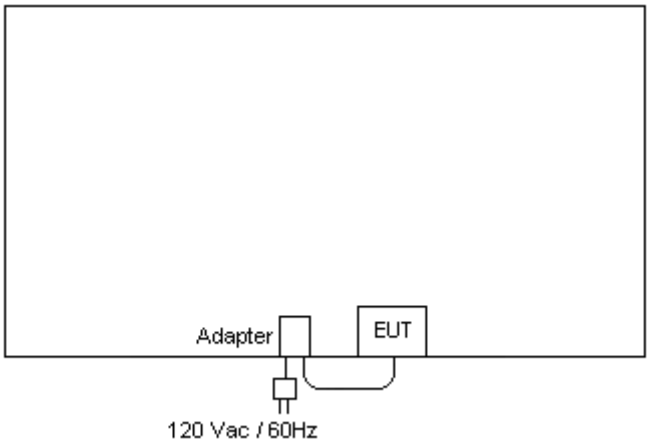


3. RF Utility

The programmed RF Utility “BTRegTest_V” is installed in EUT to provide channel selection, power level, data rate and the application type. RF Utility can send transmitting signal for all testings.

4. General Information of Test

Test Site Location	:	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-328-4978
Test Site No	:	CO01-HY, 03CH06-HY

4.1. Test Voltage

AC 120V / 60Hz

4.2. Standard for Methods of Measurement

ANSI C63.4-2003

4.3. Test Compliance

47 CFR Part 15 Subpart C

4.4. Frequency Range

a. Conduction: from 150 KHz to 30 MHz
b. Radiation: from 30 MHz to 25000MHz

4.5. Test Distance

The test distance of radiated emission from antenna to EUT is 3 m.

5. Report of Measurements and Examinations

5.3 List of Measurements and Examinations

The Emission Mode: Bluetooth

FCC Rule	Description of Test	Result
15.207	Conducted Emission	Pass
15.247(a)(1)(iii)	20dB Bandwidth	Pass
15.247(a)(1)	Hopping Channel Separation	Pass
15.247(a)(1)(iii)	Number of Hopping Frequency	Pass
15.247(a)(1)(iii)	Dwell Time of Each Frequency	Pass
15.247(b)(1)	Peak Output Power	Pass
15.247(d)	Frequency Band Edges	Pass
15.209(a) 15.247(d)	Radiated Emission	Pass
15.203 15.247(b)(4)	Antenna Requirement	Pass

5.4 Frequency Band Edges

5.2.1 Measuring Instruments

As described in chapter 6 of this test report.

5.2.2 Test Procedure

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set both RBW and VBW of spectrum analyzer to 100 KHz with suitable frequency span including 100 KHz bandwidth from band edge.
3. The band edges was measured and recorded.

5.2.3 Test Result

- Application Type : Bluetooth
- Temperature : 21~26℃
- Relative Humidity : 50~58%
- Test Engineer : Sun

Test Result in BT lower band	:	**PASS**
Test Result in BT higher band	:	**PASS**

5.2.4 Note on Band Edge Emission

CH00 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2385.05	10.84	-43.16	54.00	10.76	31.83	3.92	35.68	140	306	Average
2385.05	50.84	-23.16	74.00	50.76	31.83	3.92	35.68	100	0	Peak

Remark:

<Delta Marker>

Delta marker at 1% RBW of span = 49.67 dB

Peak band edge at 2385.05 MHz with RBW = VBW = 1MHz = 100.51 dBuV/m – 49.67 dB = 50.84 dBuV/m

Duty factor = 20 log (Package Transfer Times x Avg Hopping Channel) = 20 log (0.00303 x 3.3) = -40.00

Average band edge = Peak band edge + Duty factor = 50.84 dBuV/m + (-40.00) = 10.84 dBuV/m

CH00 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2385.81	3.40	-50.60	54.00	3.30	31.86	3.92	35.68	124	22	Average
2385.81	43.40	-30.60	74.00	43.30	31.86	3.92	35.68	100	0	Peak

Remark:

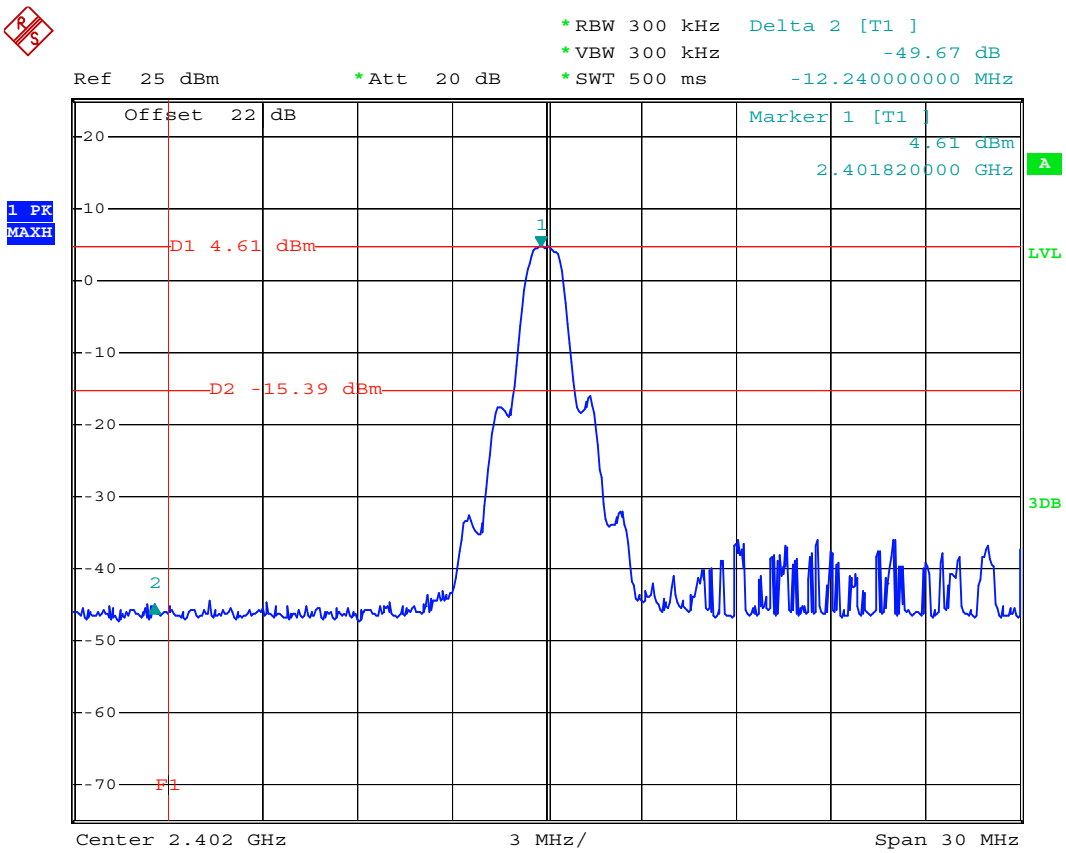
<Delta Marker>

Delta marker at 1% RBW of span = 49.67 dB

Peak band edge at 2385.81 MHz with RBW = VBW = 1MHz = 93.07 dBuV/m – 49.67 dB = 43.40 dBuV/m

Duty factor = 20 log (Package Transfer Times x Avg Hopping Channel) = 20 log (0.00303 x 3.3) = -40.00

Average band edge = Peak band edge + Duty factor = 43.40 dBuV/m + (-40.00) = 3.40 dBuV/m



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Conducted Band Edge Emission for CH00

CH78 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	11.93	-42.07	54.00	11.60	31.98	4.05	35.70	104	339	Average
2483.50	51.93	-22.07	74.00	51.60	31.98	4.05	35.70	100	0	Peak

Remark:

<Delta Marker>

Delta marker at 1% RBW of span = 47.51 dB

Peak band edge at 2483.50 MHz with RBW = VBW = 1MHz = 99.44 dBuV/m – 47.51 dB = 51.93 dBuV/m

Duty factor = 20 log (Package Transfer Times x Avg Hopping Channel) = 20 log (0.00303 x 3.3) = -40.00

Average band edge = Peak band edge + Duty factor = 51.93 dBuV/m + (-40.00) dB = 11.93 dBuV/m

CH78 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	6.00	-48.00	54.00	5.67	31.98	4.05	35.70	100	4	Average
2483.50	46.00	-28.00	74.00	45.67	31.98	4.05	35.70	100	0	Peak

Remark:

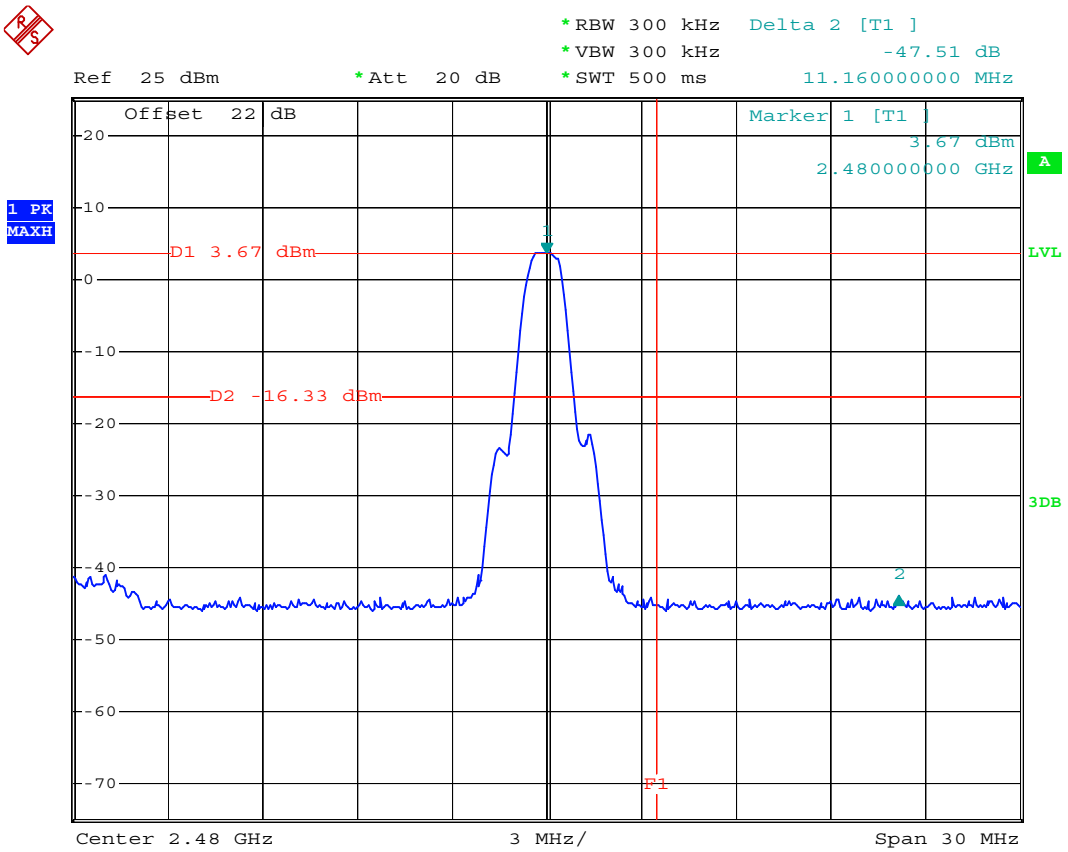
<Delta Marker>

Delta marker at 1% RBW of span = 47.51 dB

Peak band edge at 2483.50 MHz with RBW = VBW = 1MHz = 93.51 dBuV/m – 47.51 dB = 46.00 dBuV/m

Duty factor = 20 log (Package Transfer Times x Avg Hopping Channel) = 20 log (0.00303 x 3.3) = -40.00

Average band edge = Peak band edge + Duty factor = 46.00 dBuV/m + (-40.00) dB = 6.00 dBuV/m



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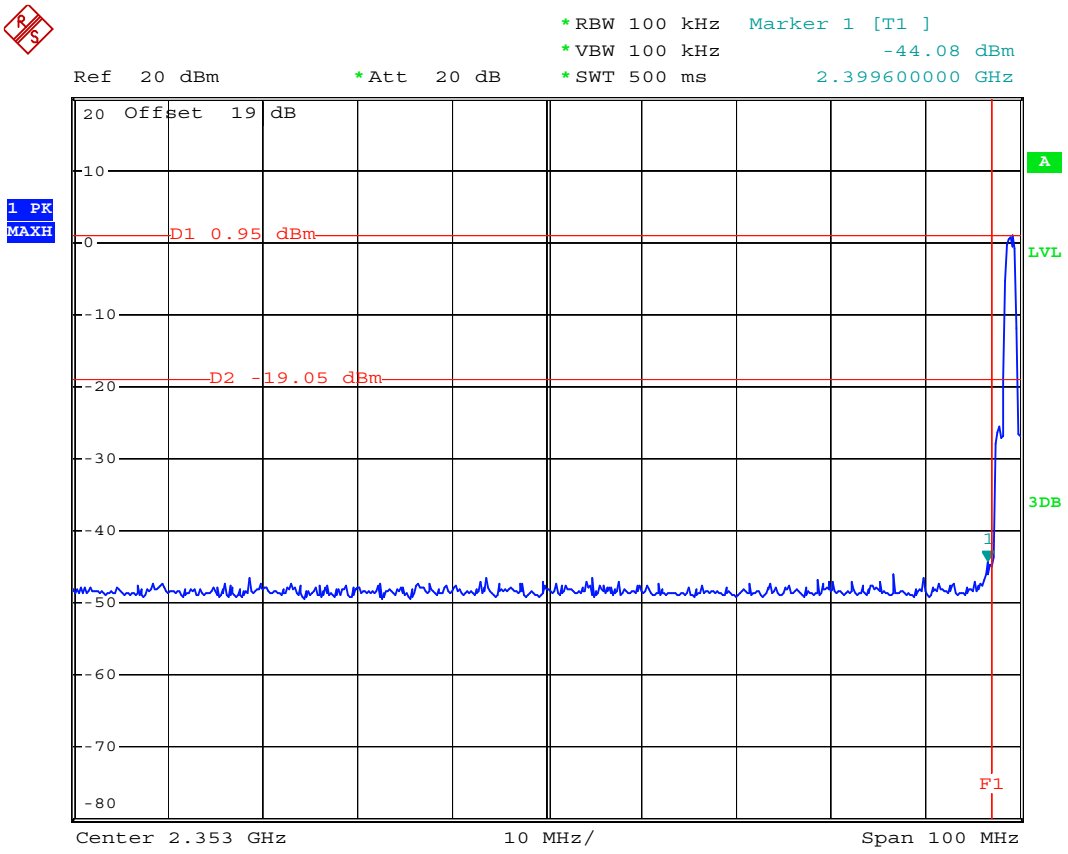
Conducted Band Edge Emission for CH78

5.2.5 20dB Band Edge

CH00



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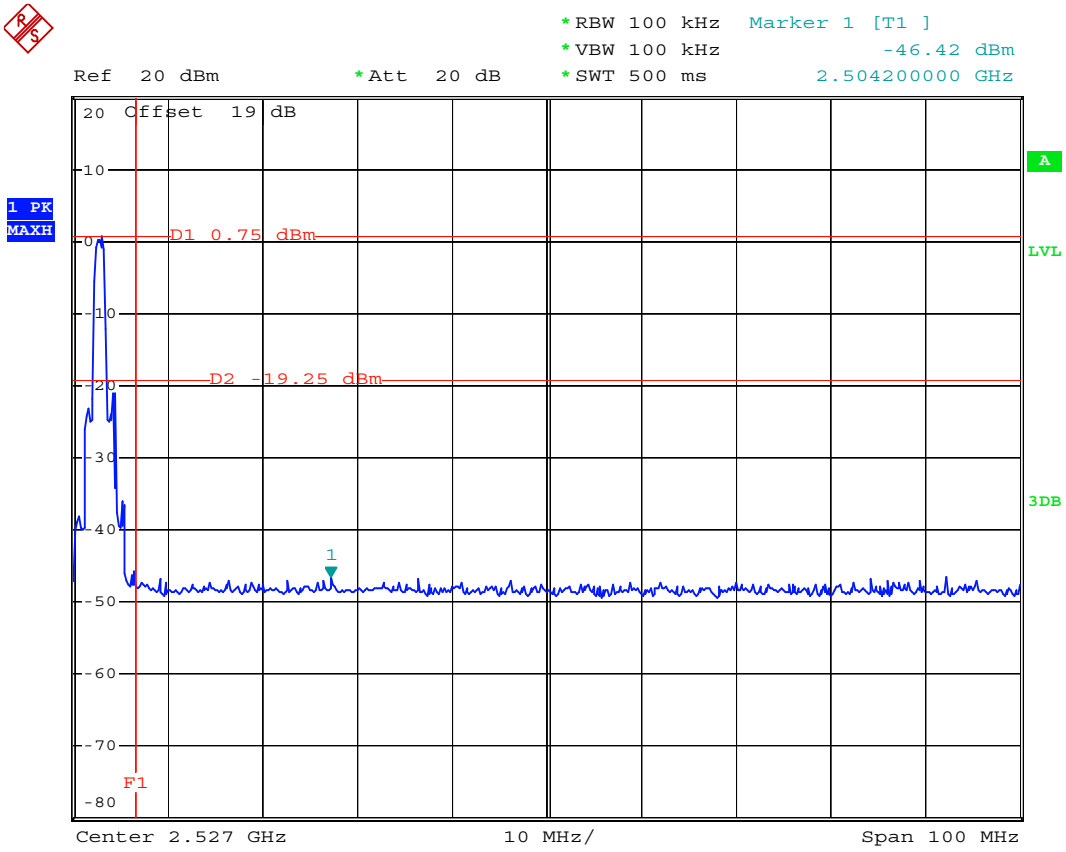
CH78



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5.5 Hopping Channel Separation

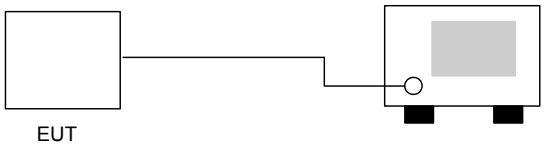
5.5.1 Measuring Instruments

As described in chapter 6 of this test report.

5.5.2 Test Procedure

a. The output of EUT was connected to the spectrum analyzer by a low loss cable..
b. Set RBW of spectrum analyzer to 30 KHz and VBW to 100 KHz.
c. The Hopping Channel Separation is defined as the channel is separated with the next channel.

5.5.3 Test Setup Layout



5.5.4 Test Result

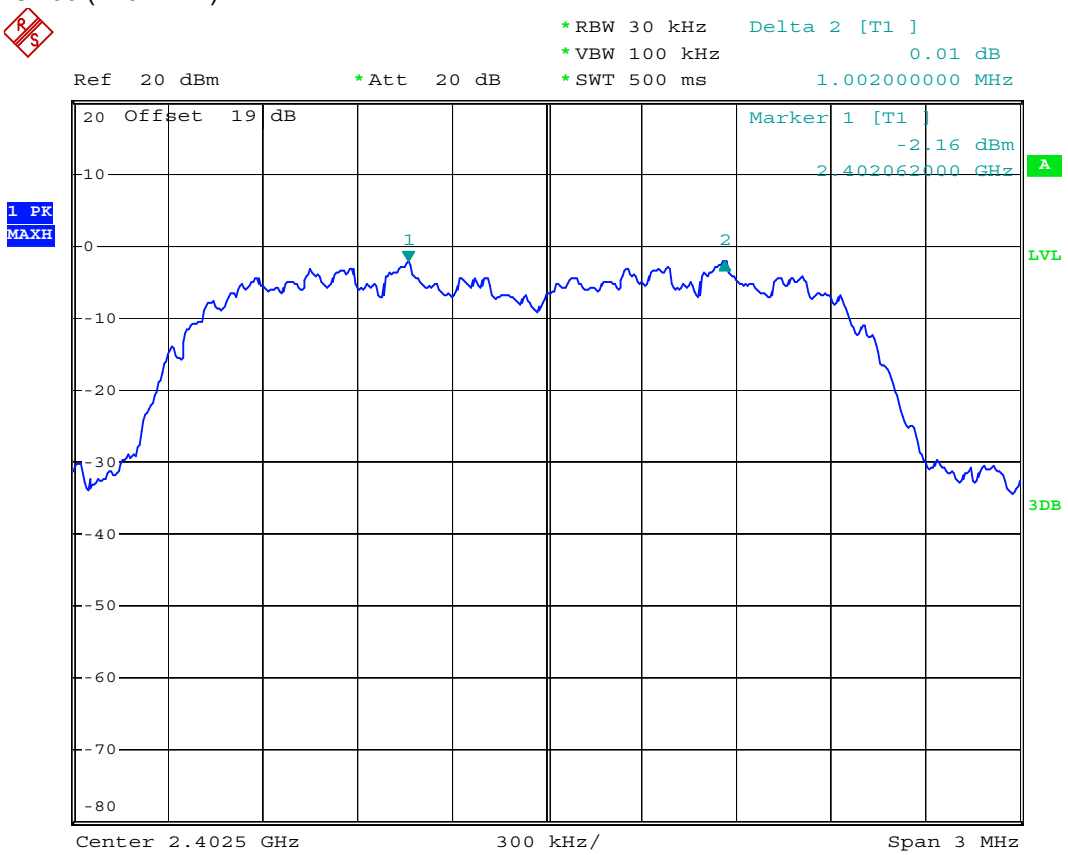
- Temperature: 21~26℃
- Relative Humidity: 50~58%
- Test Engineer: Sun

Channel	Frequency (MHz)	Carrier Frequency Separation (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	1.002	0.917	Mode 1
39	2441	1.002	0.925	Mode 2
78	2480	0.996	0.928	Mode 3

Remark: Hopping Channel Separation shall be greater 2/3 of 20dB bandwidth.

5.5.5 Hopping Channel Separation

Mode 1: CH00 (2402MHz)



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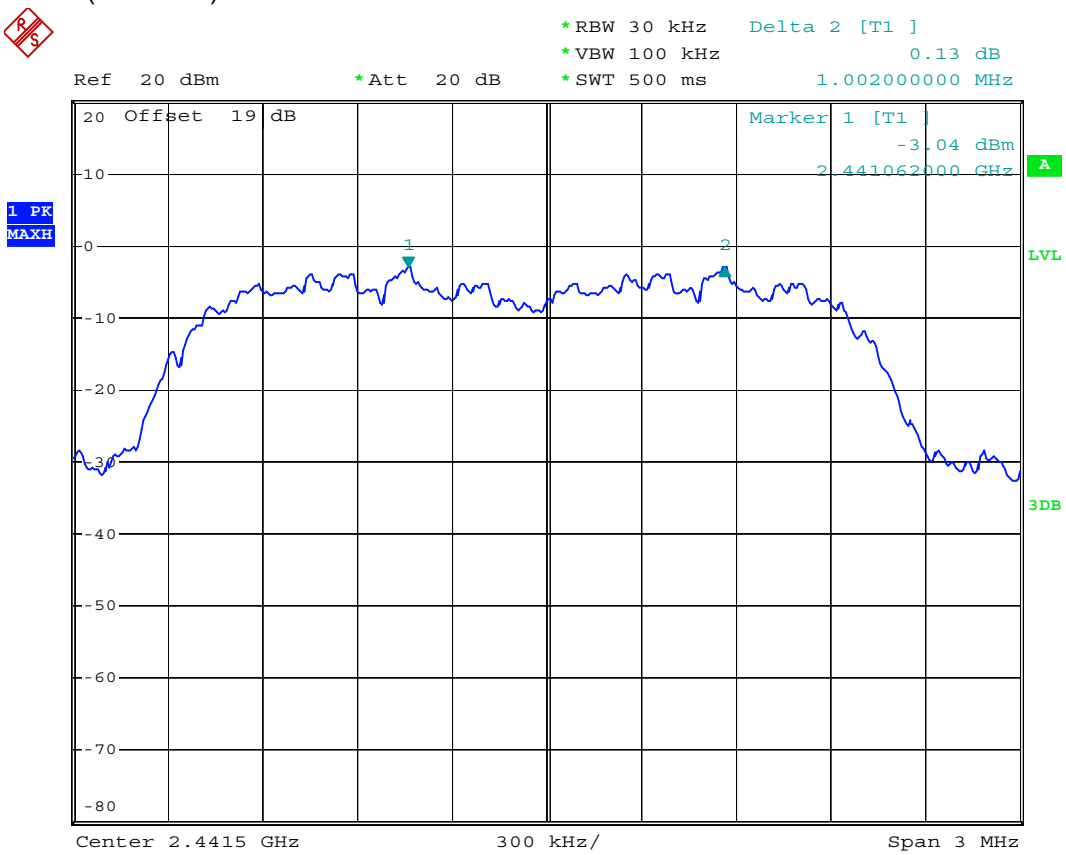
Mode 2: CH39 (2441MHz)



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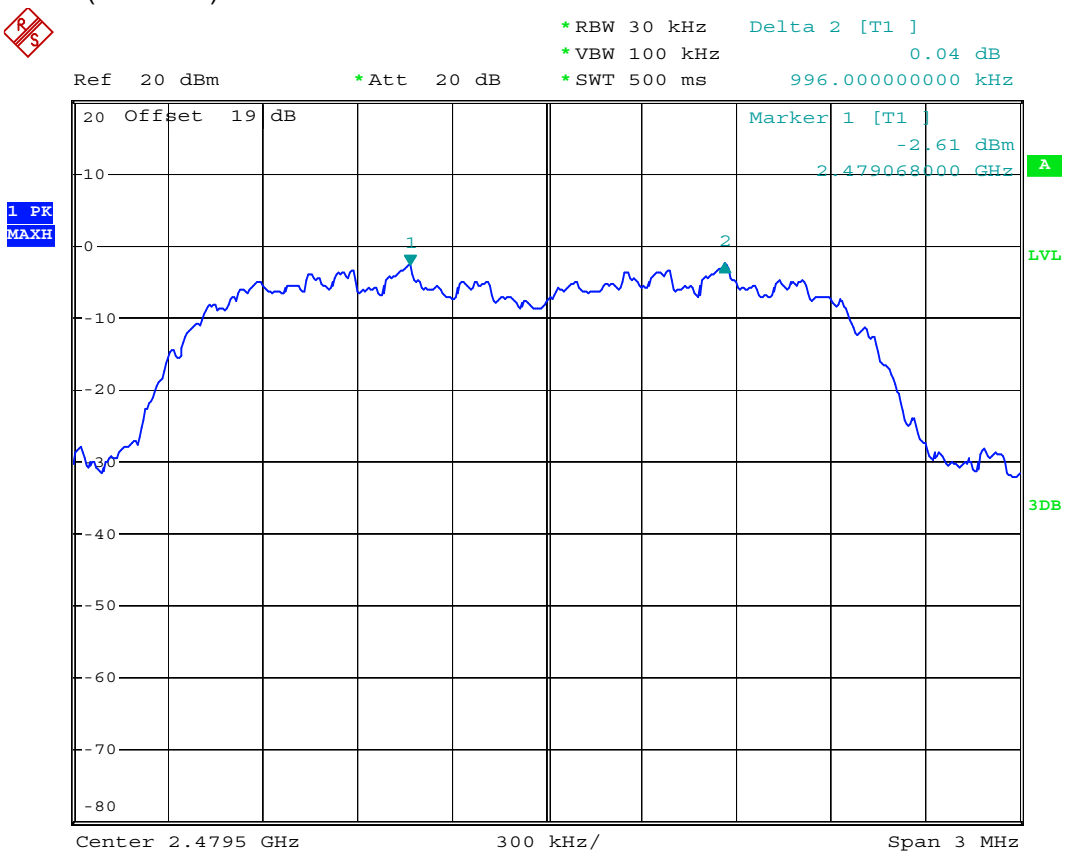
Mode 3: CH78 (2480MHz)



Date: 8.APR.2008 19:48:47

5.6 Number of Hopping Frequency

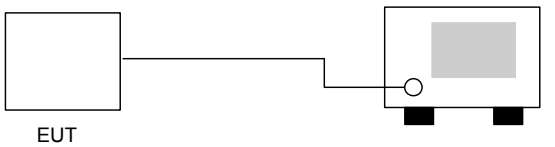
5.6.1 Measuring Instruments

As described in chapter 6 of this test report.

5.6.2 Test Procedure

a. The transmitter output was connected to the spectrum analyzer directly.
b. Set RBW of spectrum analyzer to 100 KHz and VBW to 100 KHz.
c. The number of hopping frequency used is defined as the device has the numbers of total channel.

5.6.3 Test Setup Layout

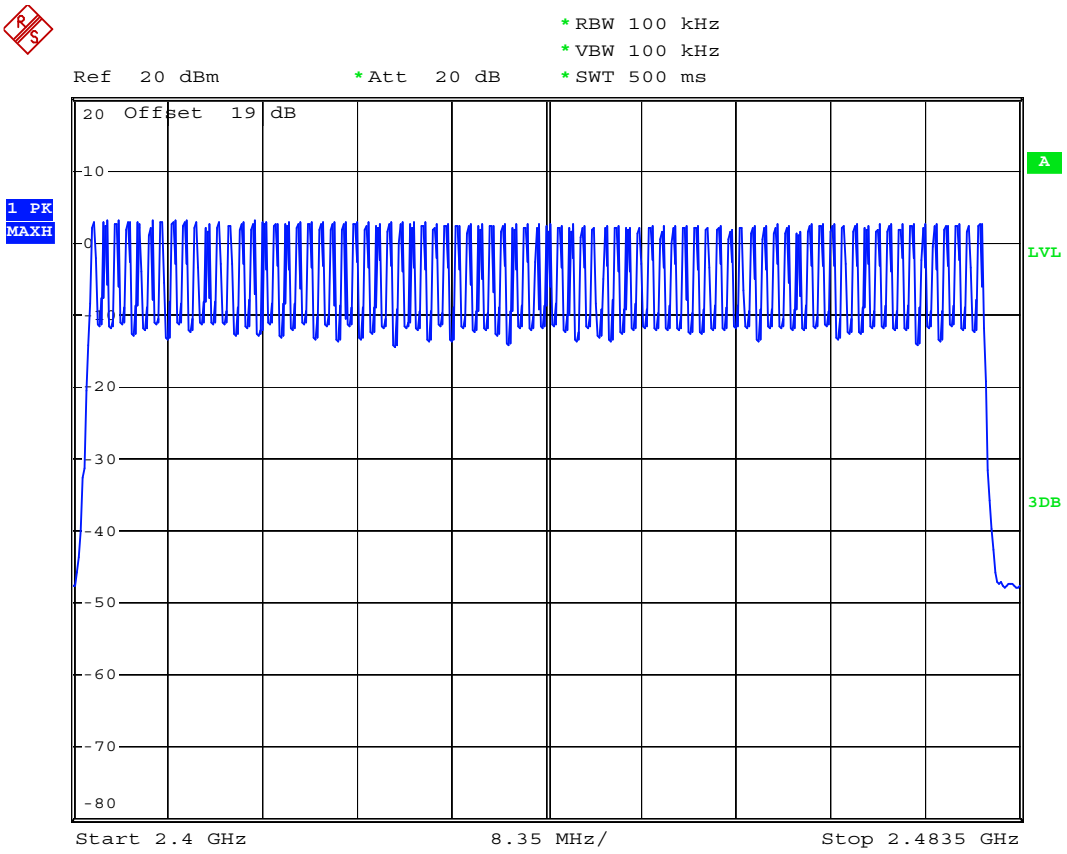


5.6.4 Test Result

- Temperature: 21~26℃
- Relative Humidity: 50~58%
- Test Engineer: Sun

Number of Hopping Frequency (Channel)	Limits (Channel)
79	15

5.6.5 Number of Hopping Frequency



Date: 8.APR.2008 20:17:58

5.7 20dB Bandwidth

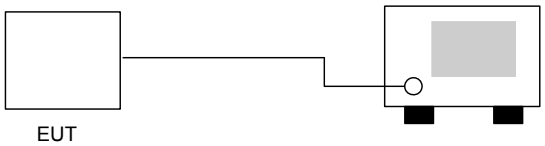
5.4.1 Measuring Instruments

As described in chapter 6 of this test report.

5.4.2 Test Procedure

a. The transmitter output was connected to the spectrum analyzer by a low loss cable.
b. Set RBW of spectrum analyzer to 30 KHz and VBW to 300 KHz.
c. The Hopping Channel bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20 dB.

5.4.3 Test Setup Layout



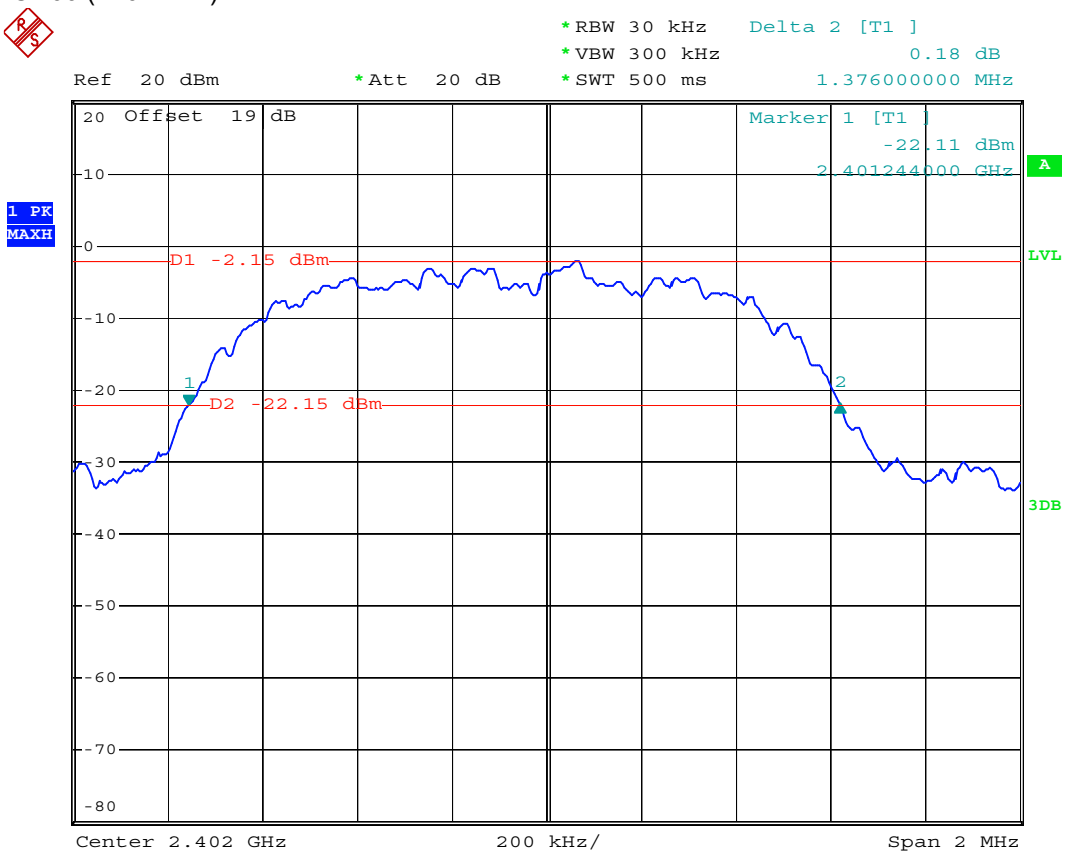
5.4.4 Test Result

- Temperature: 21~26℃
- Relative Humidity: 50~58%
- Test Engineer: Sun

Channel	Frequency (MHz)	Hopping Channel Bandwidth (MHz)	Plot Ref. No.
00	2402	1.376	Mode 1
39	2441	1.388	Mode 2
78	2480	1.392	Mode 3

5.4.5 Hopping Channel Bandwidth

Mode 1: CH00 (2402MHz)



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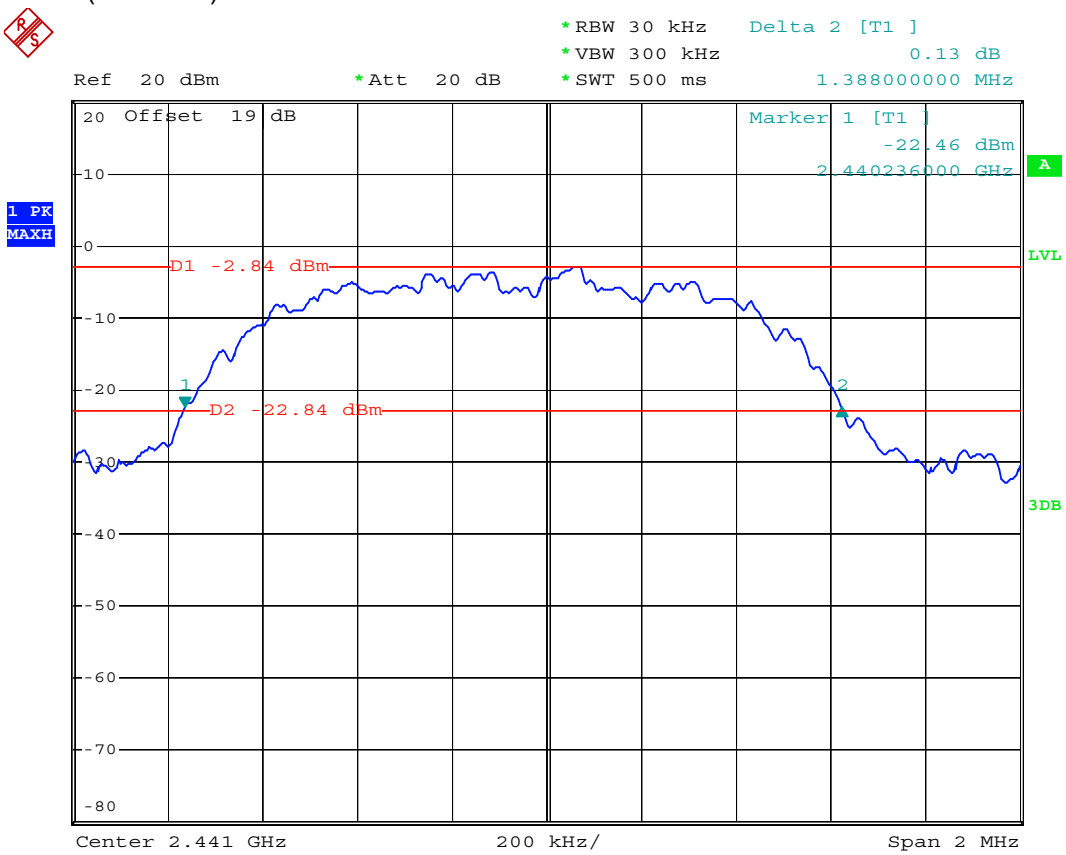
Mode 2: CH39 (2441MHz)



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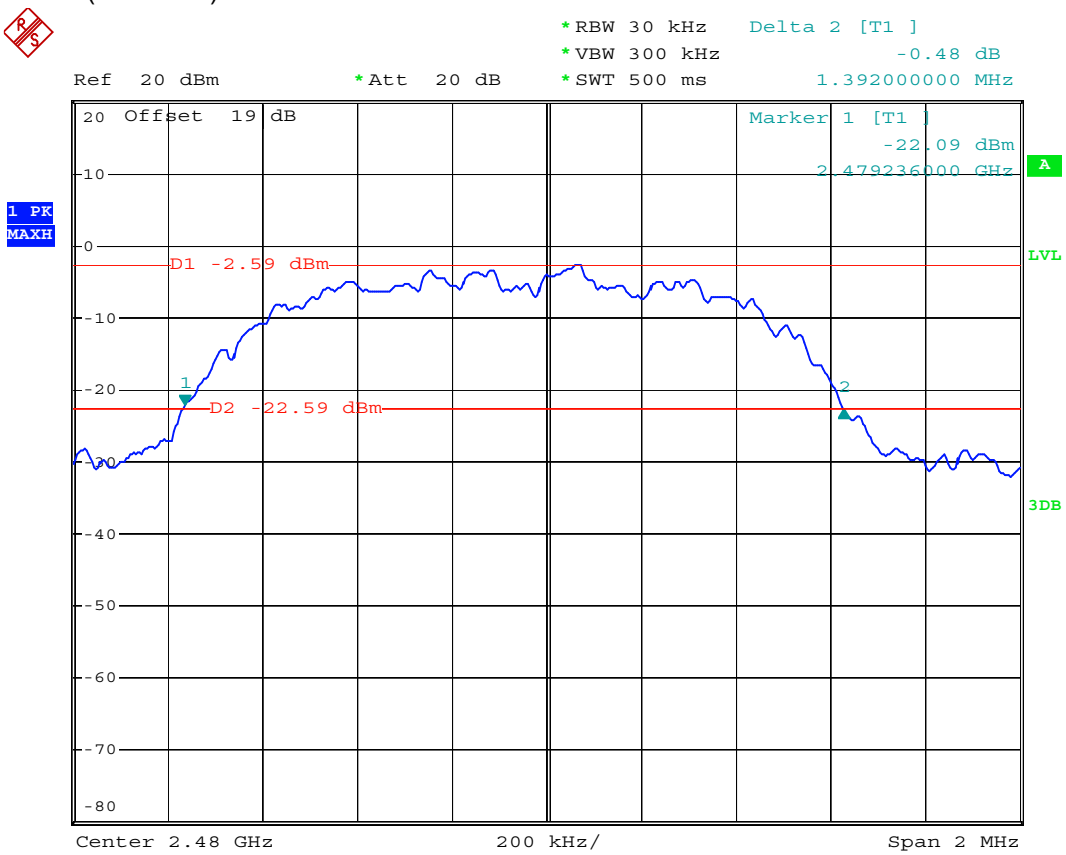
Mode 3: CH78 (2480MHz)



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5.8 Dwell Time of Each Frequency within a 30 Seconds Period

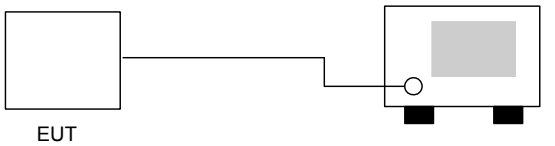
5.8.1 Measuring Instruments

As described in chapter 6 of this test report.

5.8.2 Test Procedure

a. The transmitter output was connected to the spectrum analyzer by a low loss cable.
b. Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
c. Set the center frequency on any frequency would be measure and set the frequency span to zero span.
d. The calculate =79 * 0.4 * (1600/79) * t (t = the time duration of one single pulse)

5.8.3 Test Setup Layout



5.8.4 Test Result

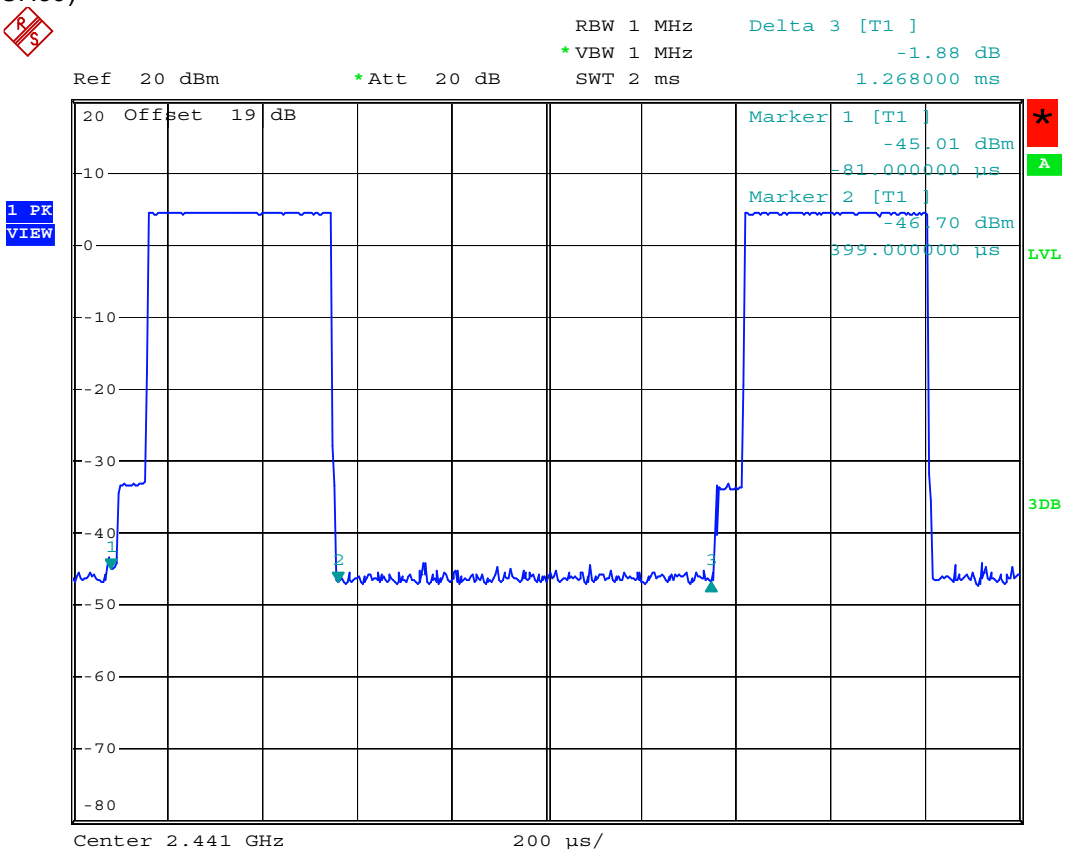
- Temperature: 21~26℃
- Relative Humidity: 50~58%
- Test Engineer: Sun

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	8.8	480	0.133	0.4
DH3	5	1770	0.280	0.4
DH5	3.3	3030	0.316	0.4

※ Remark:
1. Dwell Time=79(channels) x 0.4(s) x average hopping channel x package transfer time
2. 79 channels come from the Hopping Channel number.
3. Average Hopping Channel = hops/sweep time
4. t: Package Transfer Time(us)

5.8.5 Dwell Time

DH1 (CH39)



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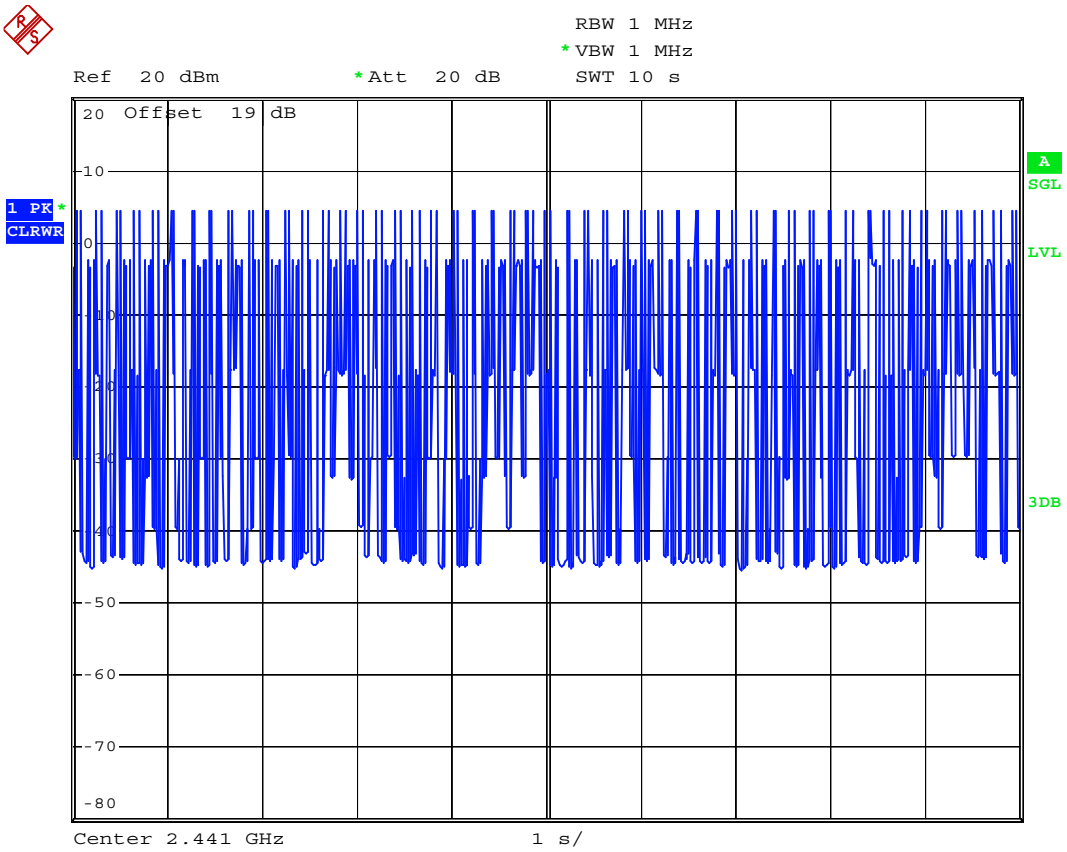

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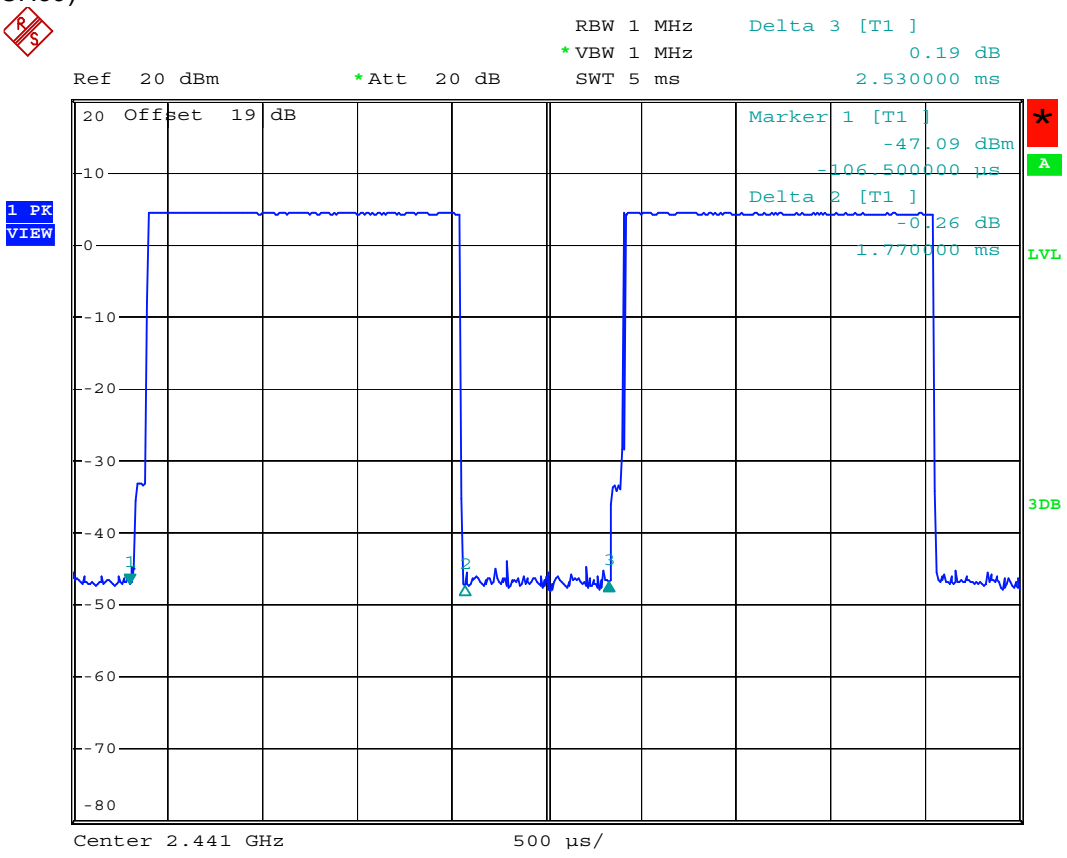
DH3 (CH39)



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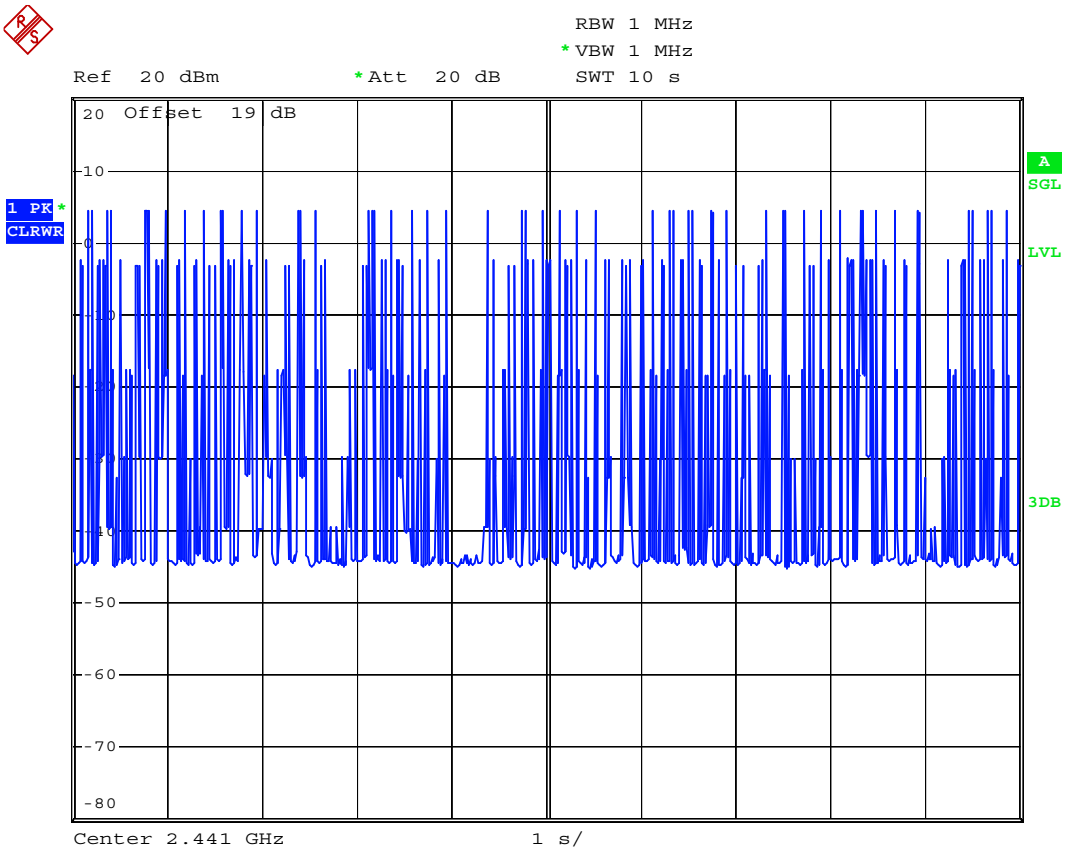

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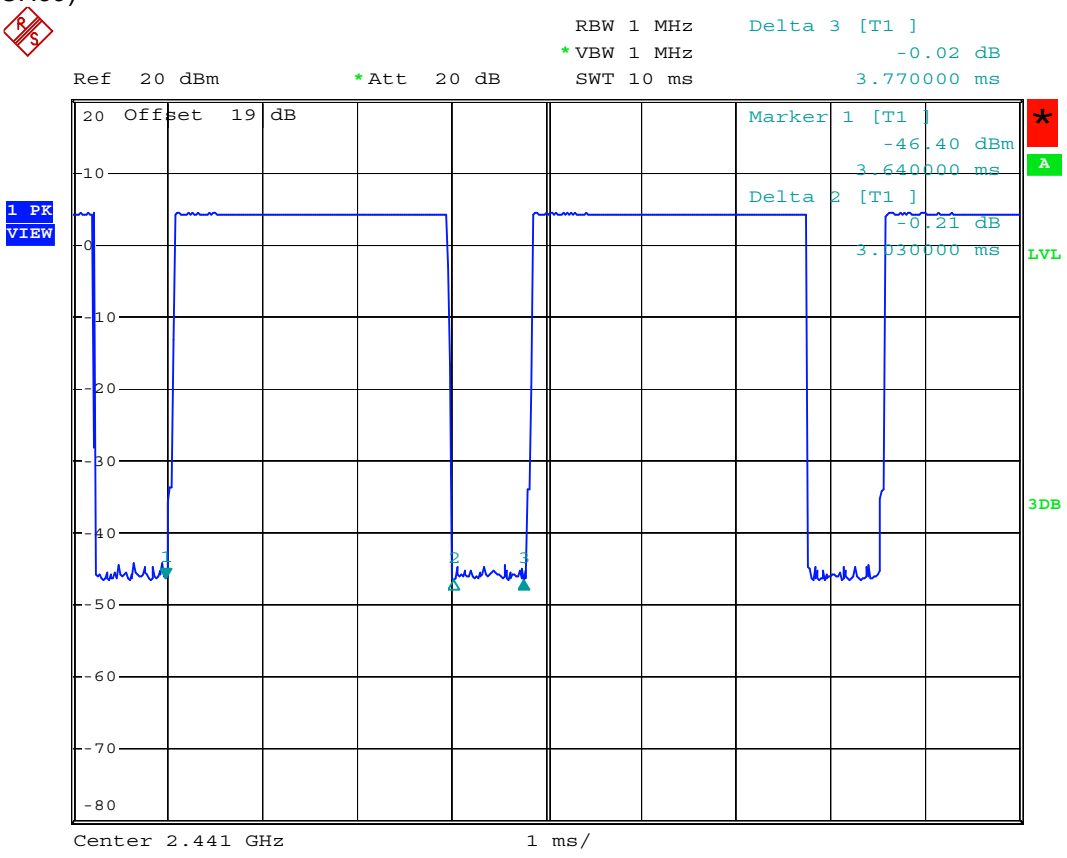
DH5 (CH39)



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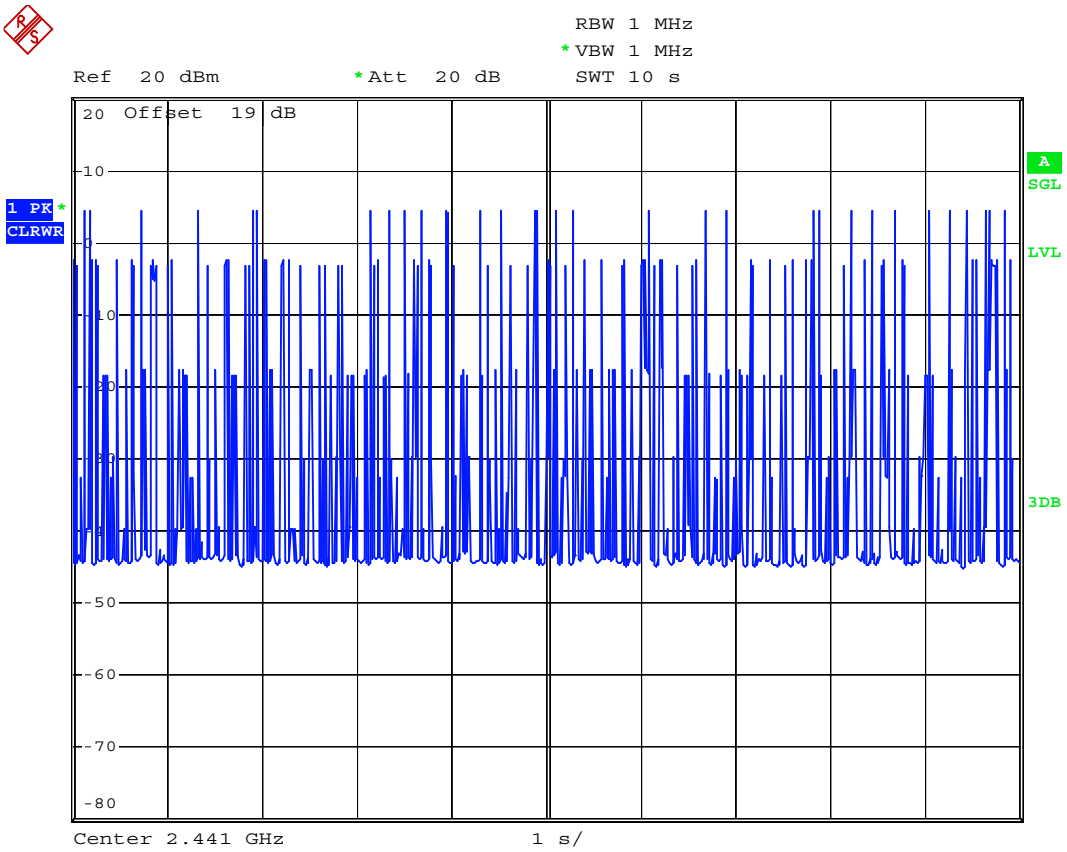


Date: 11.APR.2008 21:15:50

5.9 Peak Output Power Measurement

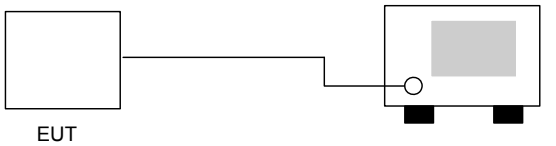
5.9.1 Measuring Instruments

As described in chapter 6 of this test report.

5.9.2 Test Procedure

The antenna port (RF output) of the EUT was connected to the input (RF input) of a spectrum analyzer for BT measurement. RBW and VBW are set to 3MHz. The cable loss has been offset before testing.

5.9.3 Test Setup Layout



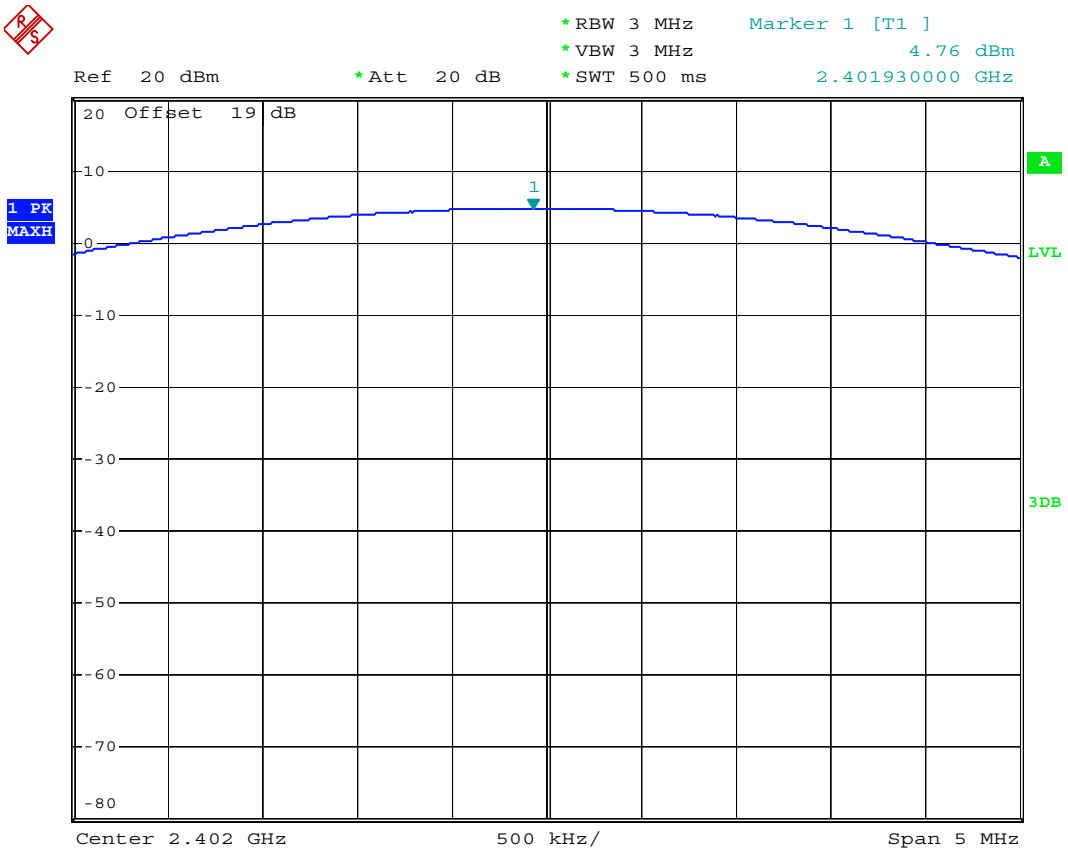
5.9.4 Test Result

- Temperature: 21~26℃
- Relative Humidity: 50~58%
- Test Engineer: Sun

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
00	2402	4.76	1W/30dBm
39	2441	3.78	1W/30dBm
78	2480	3.97	1W/30dBm

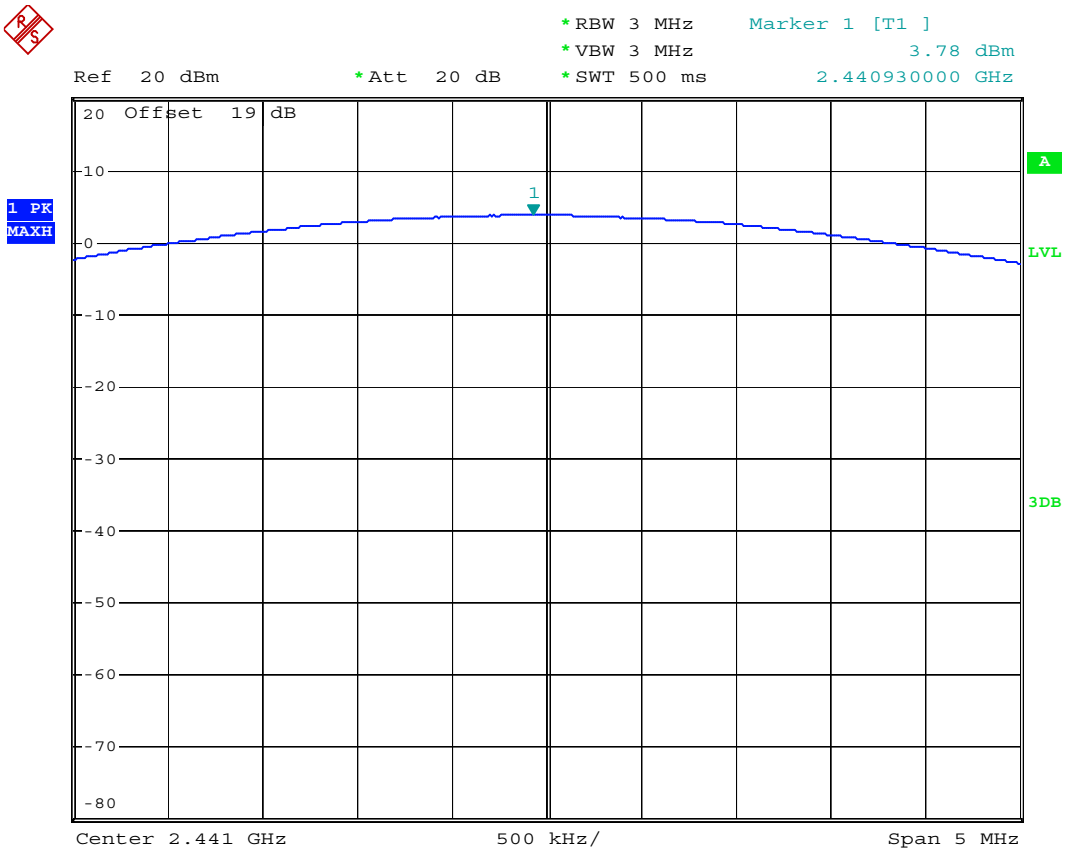
5.9.5 Output Power

Mode 1: CH00 (2402MHz)

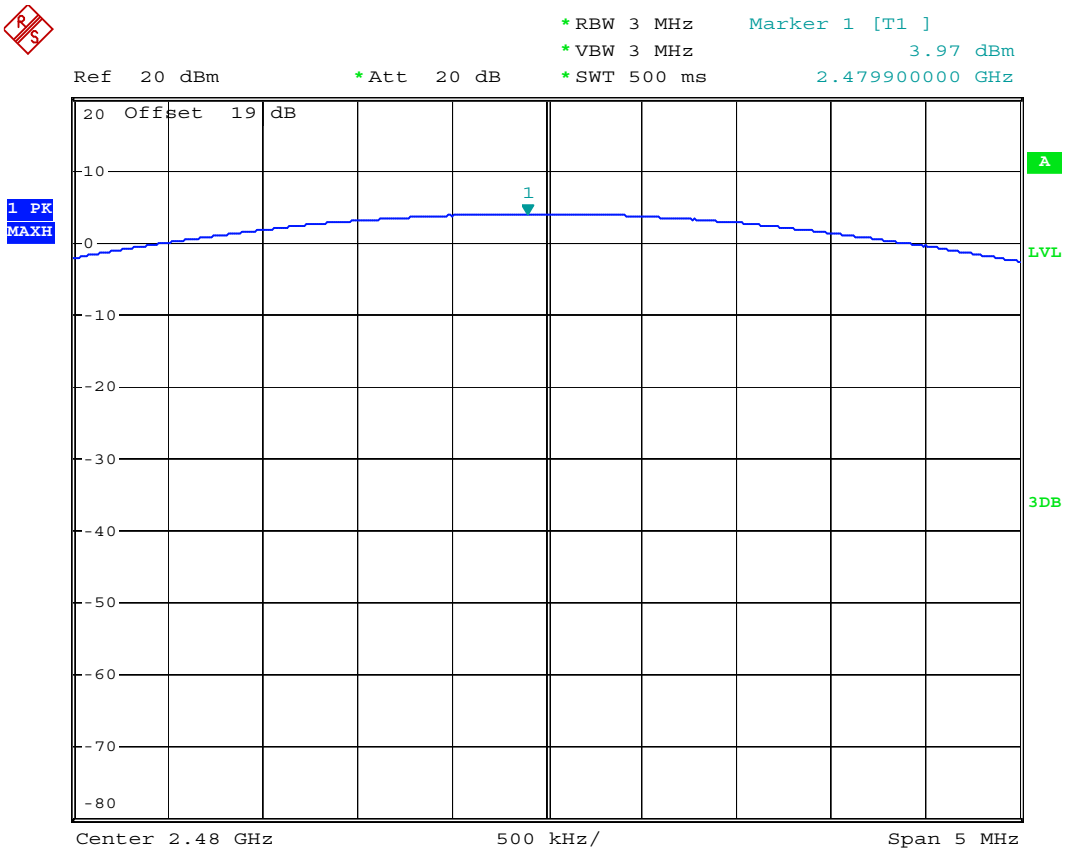


Date: 8.APR.2008 18:10:53

Mode 2: CH39 (2441MHz)



Mode 3: CH78 (2480MHz)



Date: 8.APR.2008 18:17:31

5.10 Conducted Emission

5.10.1 Measuring Instruments

As described in chapter 6 of this test Report.

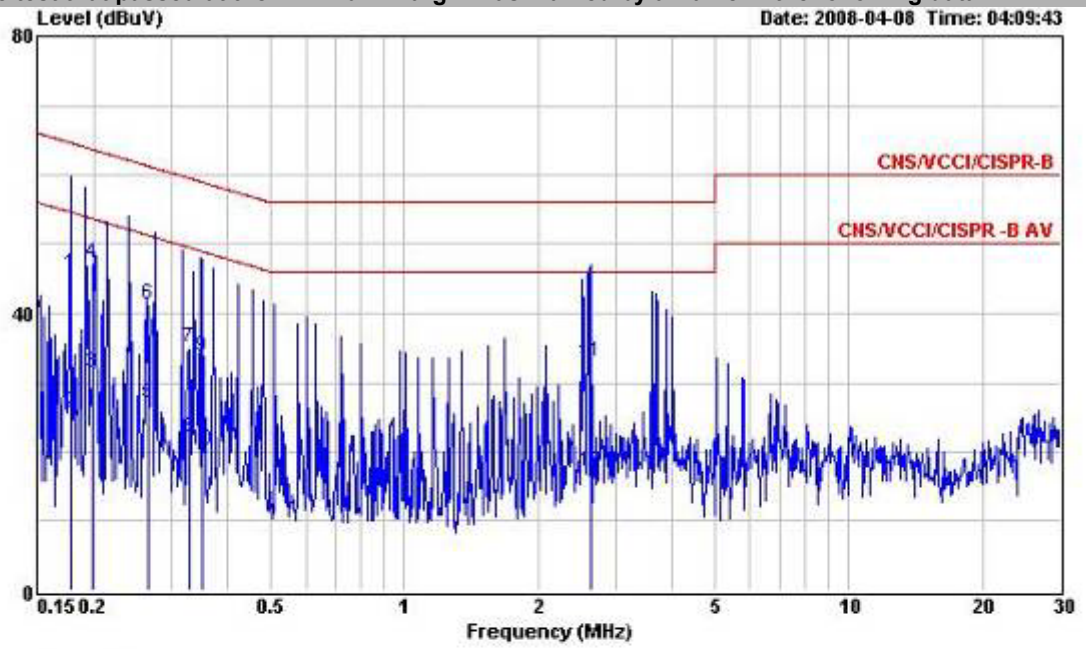
5.10.2 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power port of a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 KHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

5.10.3 Test Data

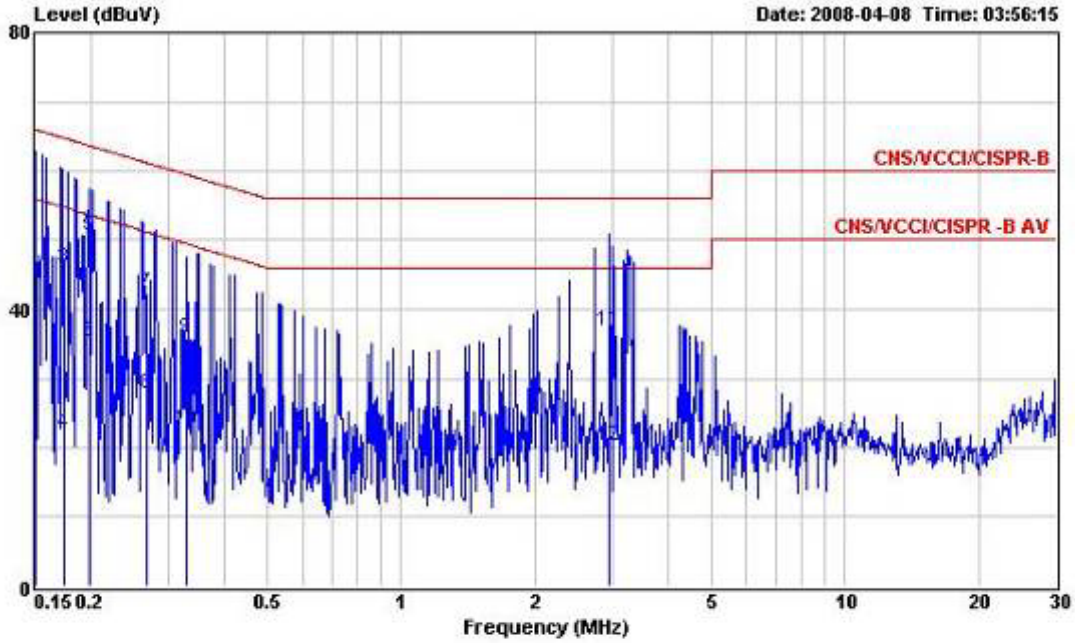
- Test Mode: Mode 1
- Frequency Range of Test: from 0.15 MHz to 30 MHz
- Temperature: 26~27℃
- Relative Humidity: 58~59%
- Test Engineer: Darren
- All emissions not reported here are more than 10 dB below the prescribed limit.

■ The test that passed at the minimum margin was marked by a frame in the following data



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
EUT : MC5574 EV1 FCC submit with 1D 2D Scanner
: and w/ camera w/o camera
Power : 120V/60Hz
Model : FD840317
Memo : GSM850 Idle+BT Idle + WLAN Idle+Adaptor
Memo : + USB Link + MPEG4 + Camera

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.178	45.61	-18.97	64.58	45.42	0.10	0.09	QP
2	0.178	25.79	-28.79	54.58	25.60	0.10	0.09	Average
3	0.199	31.46	-22.20	53.66	31.28	0.10	0.08	Average
4	0.199	47.28	-16.38	63.66	47.10	0.10	0.08	QP
5	0.264	26.89	-24.41	51.30	26.69	0.10	0.10	Average
6	0.264	41.32	-19.98	61.30	41.12	0.10	0.10	QP
7	0.330	35.13	-24.33	59.46	34.92	0.10	0.11	QP
8	0.330	22.16	-27.30	49.46	21.95	0.10	0.11	Average
9	0.352	33.67	-25.25	58.92	33.46	0.10	0.11	QP
10	0.352	20.20	-28.72	48.92	19.99	0.10	0.11	Average
11	2.628	33.01	-22.99	56.00	32.66	0.14	0.21	QP
12	2.628	17.15	-28.85	46.00	16.80	0.14	0.21	Average

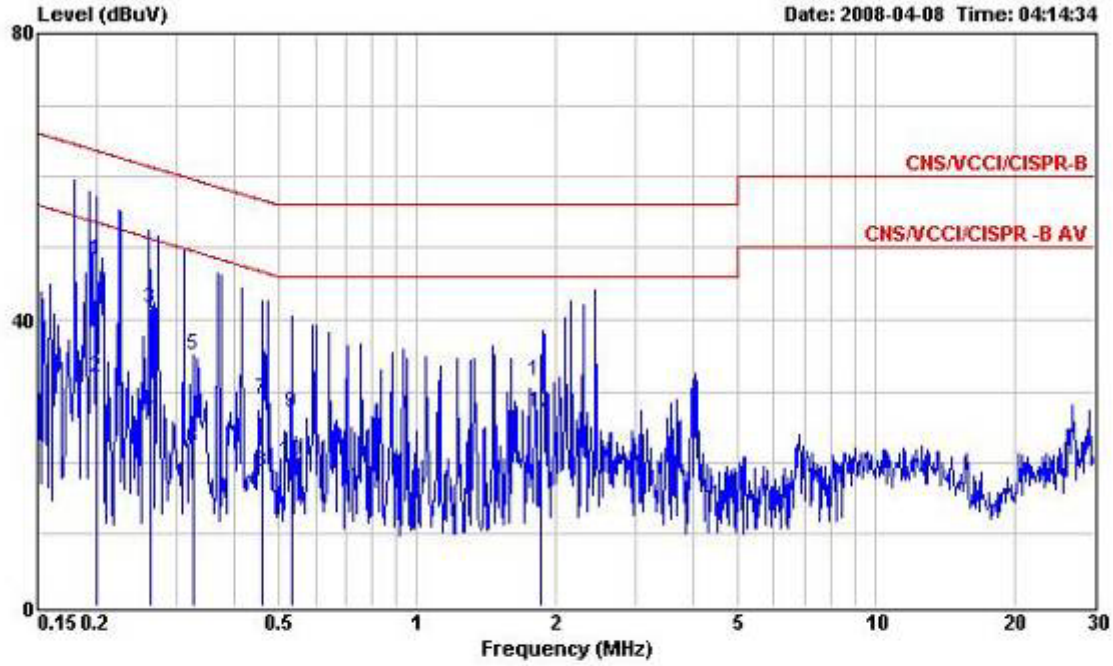


Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : MC5574 EV1 FCC submit with 1D 2D Scanner
: and w/ camera w/o camera
Power : 120V/60Hz
Model : FD840317
Memo : GSM850 Idle+BT Idle + WLAN Idle+Adaptor
Memo : + USB Link + MPEG4 + Camera

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	48.74	-17.24	65.98	48.54	0.10	0.10	QP
2	0.150	20.26	-45.72	65.98	20.06	0.10	0.10	Average
3	0.175	46.07	-18.67	64.74	45.88	0.10	0.09	QP
4	0.175	22.20	-42.54	64.74	22.01	0.10	0.09	Average
5	0.198	50.74	-12.94	63.68	50.56	0.10	0.08	QP
6	0.198	35.24	-28.44	63.68	35.06	0.10	0.08	Average
7	0.267	42.26	-18.97	61.23	42.06	0.10	0.10	QP
8	0.267	27.77	-33.46	61.23	27.57	0.10	0.10	Average
9	0.329	35.75	-23.73	59.48	35.54	0.10	0.11	QP
10	0.329	22.55	-36.93	59.48	22.34	0.10	0.11	Average
11	2.950	36.87	-19.13	56.00	36.52	0.10	0.25	QP
12	2.950	20.35	-35.65	56.00	20.00	0.10	0.25	Average

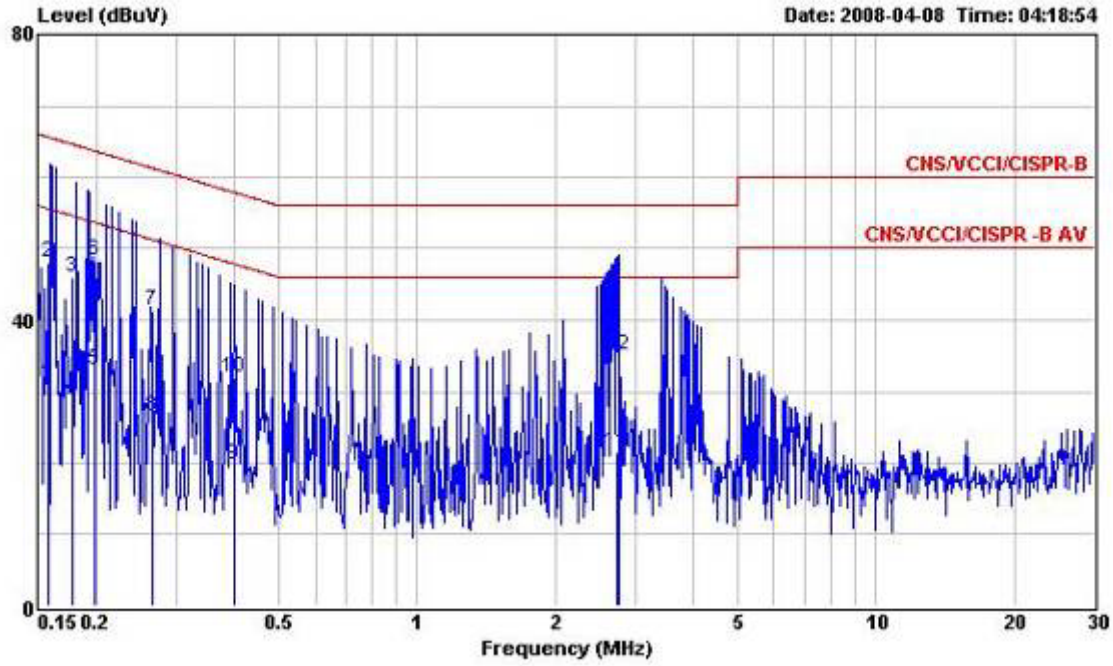
- Test Mode: Mode 2
- Frequency Range of Test: from 0.15 MHz to 30 MHz
- Temperature: 26~27℃
- Relative Humidity: 58~59%
- Test Engineer: Darren
- All emissions not reported here are more than 10 dB below the prescribed limit.

■ The test that passed at the minimum margin was marked by a frame in the following data



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
EUT : MC5574 EV1 FCC submit with 1D 2D Scanner
: and w/ camera w/o camera
Power : 120V/60Hz
Model : FD840317
Memo : PCS1900 Idle+BT Idle + WLAN Idle+Adaptor
Memo : + USB Link + MPEG4 + Scanner

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.200	48.40	-15.23	63.63	48.22	0.10	0.08	QP
2	0.200	32.06	-21.57	53.63	31.88	0.10	0.08	Average
3	0.262	41.44	-19.93	61.37	41.24	0.10	0.10	QP
4	0.262	27.02	-24.35	51.37	26.82	0.10	0.10	Average
5	0.327	34.95	-24.59	59.54	34.74	0.10	0.11	QP
6	0.327	22.05	-27.49	49.54	21.84	0.10	0.11	Average
7	0.459	28.85	-27.85	56.70	28.62	0.10	0.13	QP
8	0.459	18.75	-27.95	46.70	18.52	0.10	0.13	Average
9	0.532	26.90	-29.10	56.00	26.66	0.10	0.14	QP
10	0.532	20.14	-25.86	46.00	19.90	0.10	0.14	Average
11	1.868	31.45	-24.55	56.00	31.22	0.10	0.13	QP
12	1.868	27.05	-18.95	46.00	26.82	0.10	0.13	Average

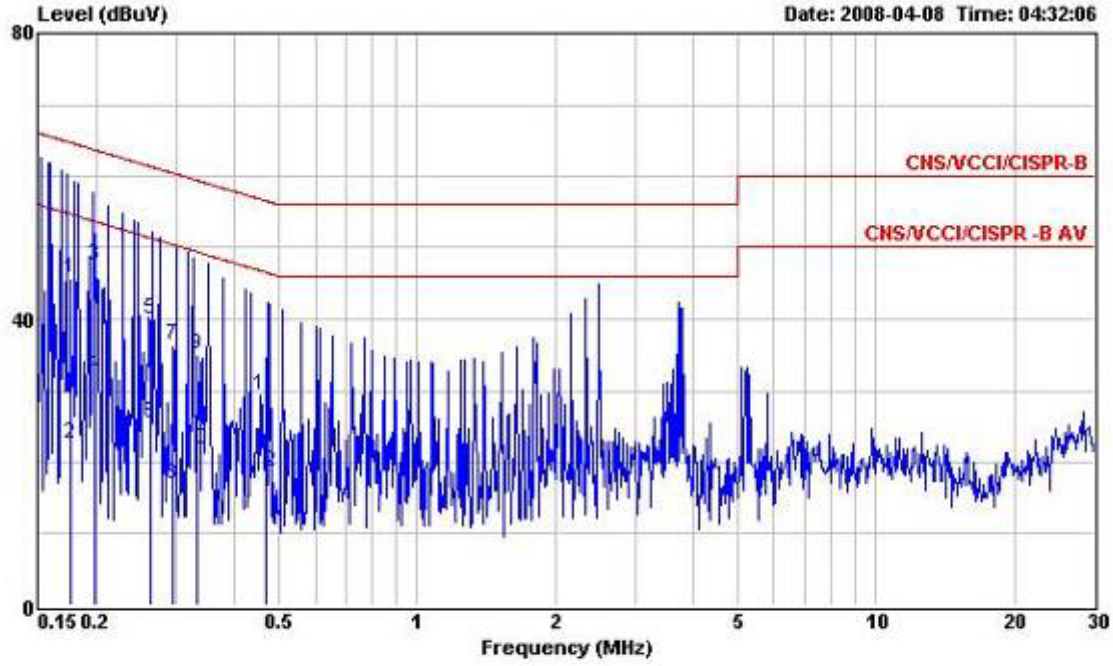


Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : MC5574 EV1 FCC submit with 1D 2D Scanner
: and w/ camera w/o camera
Power : 120V/60Hz
Model : FD840317
Memo : PCS1900 Idle+BT Idle + WLAN Idle+Adaptor
Memo : + USB Link + MPEG4 + Scanner

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.157	31.19	-24.43	55.62	31.00	0.10	0.09	Average
2	0.157	47.93	-17.67	65.60	47.74	0.10	0.09	QP
3	0.177	45.85	-18.79	64.64	45.66	0.10	0.09	QP
4	0.177	29.09	-25.54	54.63	28.90	0.10	0.09	Average
5	0.199	33.02	-20.65	53.67	32.84	0.10	0.08	Average
6	0.199	48.26	-15.41	63.67	48.08	0.10	0.08	QP
7	0.265	41.40	-19.88	61.28	41.20	0.10	0.10	QP
8	0.265	26.49	-24.79	51.28	26.29	0.10	0.10	Average
9	0.400	19.84	-28.01	47.85	19.62	0.10	0.12	Average
10	0.400	32.00	-25.85	57.85	31.78	0.10	0.12	QP
11	2.740	21.56	-24.44	46.00	21.23	0.10	0.23	Average
12	2.743	35.03	-20.97	56.00	34.70	0.10	0.23	QP

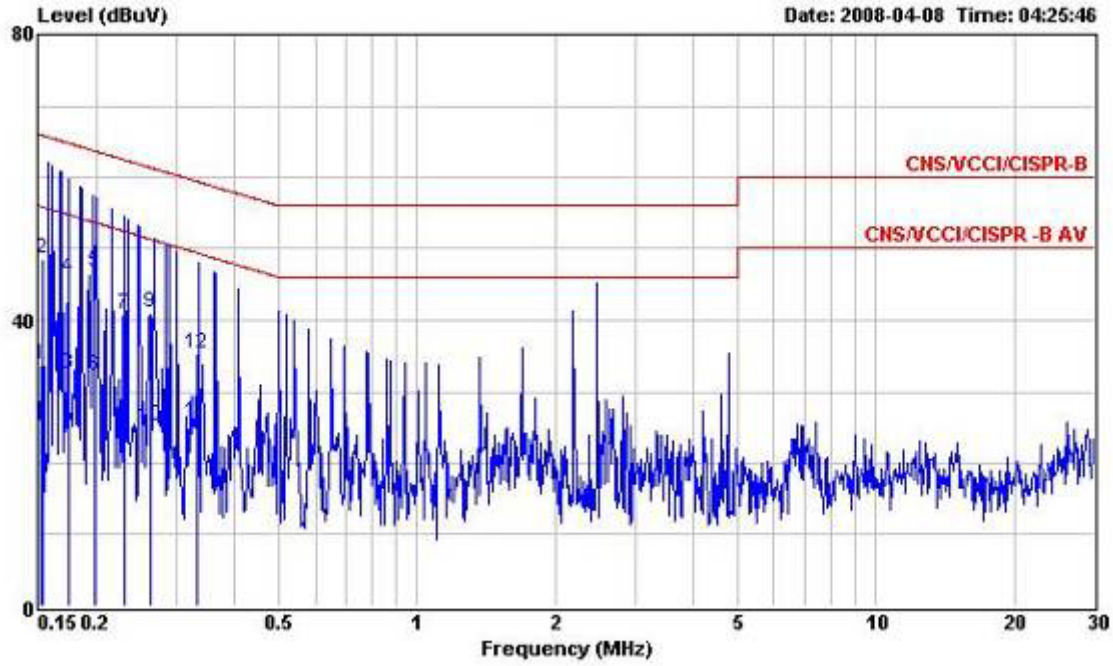
- Test Mode: Mode 3
- Frequency Range of Test: from 0.15 MHz to 30 MHz
- Temperature: 26~27℃
- Relative Humidity: 58~59%
- Test Engineer: Darren
- All emissions not reported here are more than 10 dB below the prescribed limit.

■ The test that passed at the minimum margin was marked by a frame in the following data



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
EUT : MC5574 EV1 FCC submit with 1D 2D Scanner
: and w/ camera w/o camera
Power : 120V/60Hz
Model : FD840317
Memo : EDGE Idle+BT Idle +WLAN Idle+Adaptor
Memo : + USB Link + MPEG4 + Scanner

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.176	45.75	-18.90	64.65	45.56	0.10	0.09	QP
2	0.176	22.64	-32.01	54.65	22.45	0.10	0.09	Average
3	0.199	47.44	-16.23	63.67	47.26	0.10	0.08	QP
4	0.199	32.21	-21.46	53.67	32.03	0.10	0.08	Average
5	0.264	39.90	-21.42	61.32	39.70	0.10	0.10	QP
6	0.264	25.46	-25.86	51.32	25.26	0.10	0.10	Average
7	0.294	36.42	-24.00	60.42	36.22	0.10	0.10	QP
8	0.294	17.00	-33.42	50.42	16.80	0.10	0.10	Average
9	0.332	34.99	-24.40	59.39	34.78	0.10	0.11	QP
10	0.332	21.70	-27.69	49.39	21.49	0.10	0.11	Average
11	0.467	29.27	-27.30	56.57	29.04	0.10	0.13	QP
12	0.467	18.66	-27.91	46.57	18.43	0.10	0.13	Average

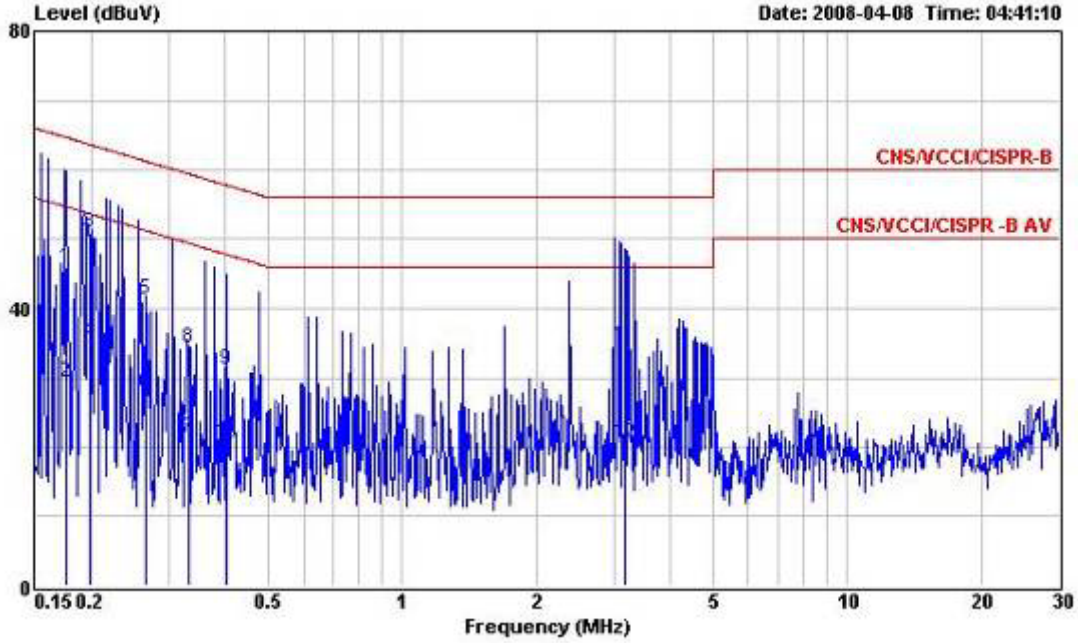


Site : CO01-HV
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : MC5574 EV1 FCC submit with 1D 2D Scanner
: and w/ camera w/o camera
Power : 120V/60Hz
Model : FD840317
Memo : EDGE Idle+BT Idle +WLAN Idle+Adaptor
Memo : + USB Link + MPEG4 + Scanner

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.152	33.85	-22.04	55.89	33.65	0.10	0.10	Average
2	0.152	48.48	-17.39	65.87	48.28	0.10	0.10	QP
3	0.174	32.48	-22.29	54.77	32.29	0.10	0.09	Average
4	0.174	46.03	-18.73	64.76	45.84	0.10	0.09	QP
5	0.199	46.80	-16.84	63.64	46.62	0.10	0.08	QP
6	0.199	32.21	-21.43	53.64	32.03	0.10	0.08	Average
7	0.231	40.67	-21.76	62.43	40.48	0.10	0.09	QP
8	0.231	24.84	-27.57	52.41	24.65	0.10	0.09	Average
9	0.264	41.04	-20.28	61.32	40.84	0.10	0.10	QP
10	0.264	25.31	-26.01	51.32	25.11	0.10	0.10	Average
11	0.332	25.84	-23.56	49.40	25.63	0.10	0.11	Average
12	0.332	35.43	-23.97	59.40	35.22	0.10	0.11	QP

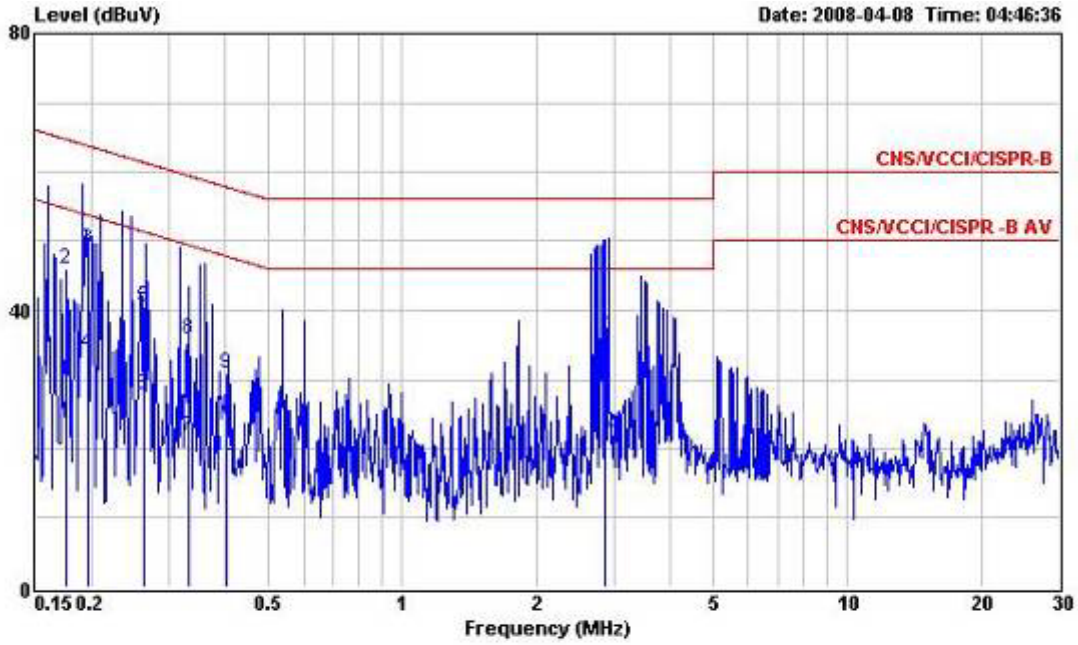
- Test Mode: Mode 4
- Frequency Range of Test: from 0.15 MHz to 30 MHz
- Temperature: 26~27℃
- Relative Humidity: 58~59%
- Test Engineer: Darren
- All emissions not reported here are more than 10 dB below the prescribed limit.

■ The test that passed at the minimum margin was marked by a frame in the following data



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
EUT : MC5574 EV1 FCC submit with 1D 2D Scanner
: and w/ camera w/o camera
Power : 120V/60Hz
Model : FD840317
Memo : GSM850 Idle+BT Link + WLAN Link+Adaptor
Memo : + USB Link + MPEG4 + Scanner

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.175	45.91	-18.81	64.72	45.72	0.10	0.09	QP
2	0.175	29.31	-25.41	54.72	29.12	0.10	0.09	Average
3	0.198	50.84	-12.84	63.68	50.66	0.10	0.08	QP
4	0.198	35.14	-18.54	53.68	34.96	0.10	0.08	Average
5	0.266	41.22	-20.02	61.24	41.02	0.10	0.10	QP
6	0.266	27.77	-23.47	51.24	27.57	0.10	0.10	Average
7	0.333	21.33	-28.05	49.38	21.12	0.10	0.11	Average
8	0.333	34.25	-25.13	59.38	34.04	0.10	0.11	QP
9	0.403	31.28	-26.51	57.79	31.06	0.10	0.12	QP
10	0.403	20.42	-27.37	47.79	20.20	0.10	0.12	Average
11	3.170	34.50	-21.50	56.00	34.06	0.17	0.27	QP
12	3.170	20.44	-25.56	46.00	20.00	0.17	0.27	Average

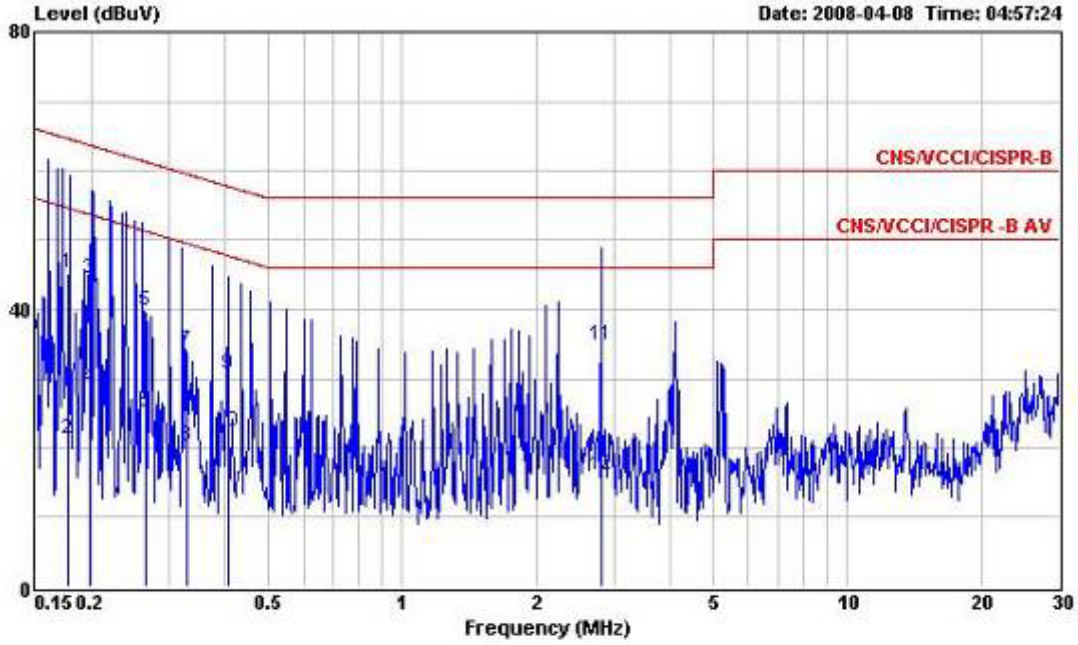


Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : MC5574 EV1 FCC submit with 1D 2D Scanner
: and w/ camera w/o camera
Power : 120V/60Hz
Model : FD840317
Memo : GSM850 Idle+BT Link + WLAN Link+Adaptor
Memo : + USB Link + MPEG4 + Scanner

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.175	29.88	-24.84	54.72	29.69	0.10	0.09	Average
2	0.175	45.93	-18.79	64.72	45.74	0.10	0.09	QP
3	0.196	48.74	-15.03	63.77	48.56	0.10	0.08	QP
4	0.196	33.71	-20.06	53.77	33.53	0.10	0.08	Average
5	0.263	40.56	-20.79	61.35	40.36	0.10	0.10	QP
6	0.263	27.89	-23.46	51.35	27.69	0.10	0.10	Average
7	0.332	21.88	-27.53	49.41	21.67	0.10	0.11	Average
8	0.332	35.75	-23.66	59.41	35.54	0.10	0.11	QP
9	0.403	31.02	-26.78	57.80	30.80	0.10	0.12	QP
10	0.403	18.90	-28.90	47.80	18.68	0.10	0.12	Average
11	2.850	36.32	-19.68	56.00	35.98	0.10	0.24	QP
12	2.850	22.47	-23.53	46.00	22.13	0.10	0.24	Average

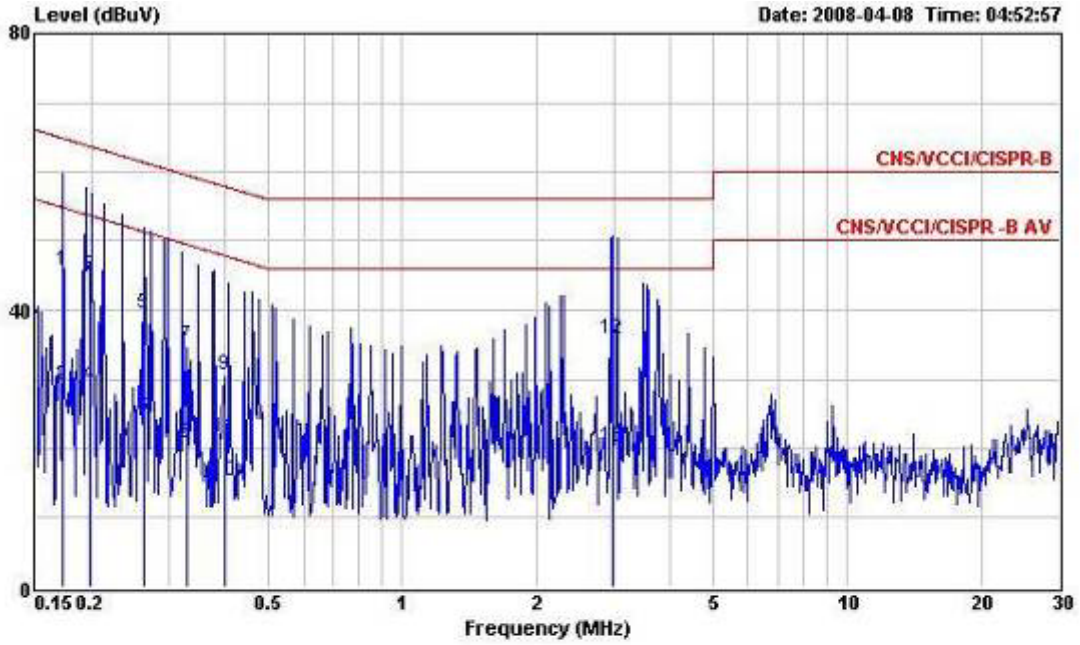
- Test Mode: Mode 5
- Frequency Range of Test: from 0.15 MHz to 30 MHz
- Temperature: 26~27℃
- Relative Humidity: 58~59%
- Test Engineer: Darren
- All emissions not reported here are more than 10 dB below the prescribed limit.

■ The test that passed at the minimum margin was marked by a frame in the following data



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
EUT : MC5574 EV1 FCC submit with 1D 2D Scanner
: and w/ camera w/o camera
Power : 120V/60Hz
Model : FD840317
Memo : GSM850 Idle+BT Link + WLAN Link+Adaptor
Memo : + USB Link + MPEG4 + Scanner

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.178	45.27	-19.33	64.60	45.08	0.10	0.09	QP
2	0.178	21.31	-33.29	54.60	21.12	0.10	0.09	Average
3	0.199	44.54	-19.13	63.67	44.36	0.10	0.08	QP
4	0.199	28.49	-25.18	53.67	28.31	0.10	0.08	Average
5	0.265	39.70	-21.59	61.29	39.50	0.10	0.10	QP
6	0.265	25.15	-26.14	51.29	24.95	0.10	0.10	Average
7	0.329	34.09	-25.39	59.48	33.88	0.10	0.11	QP
8	0.329	20.27	-29.21	49.48	20.06	0.10	0.11	Average
9	0.407	30.58	-27.14	57.72	30.36	0.10	0.12	QP
10	0.407	22.32	-25.39	47.71	22.10	0.10	0.12	Average
11	2.801	34.70	-21.30	56.00	34.32	0.15	0.23	QP
12	2.801	16.08	-29.92	46.00	15.70	0.15	0.23	Average



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : MC5574 EV1 FCC submit with 1D 2D Scanner
: and w/ camera w/o camera
Power : 120V/60Hz
Model : FD840317
Memo : GSM850 Idle+BT Link + WLAN Link+Adaptor
Memo : + USB Link + MPEG4 + Scanner

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.173	45.75	-19.07	64.82	45.56	0.10	0.09	QP
2	0.173	29.16	-25.66	54.82	28.97	0.10	0.09	Average
3	0.198	44.94	-18.75	63.69	44.76	0.10	0.08	QP
4	0.198	29.02	-24.67	53.69	28.84	0.10	0.08	Average
5	0.263	39.36	-21.98	61.34	39.16	0.10	0.10	QP
6	0.263	24.74	-26.60	51.34	24.54	0.10	0.10	Average
7	0.330	34.81	-24.65	59.46	34.60	0.10	0.11	QP
8	0.330	20.75	-28.71	49.46	20.54	0.10	0.11	Average
9	0.398	30.56	-27.34	57.90	30.34	0.10	0.12	QP
10	0.398	15.38	-32.52	47.90	15.16	0.10	0.12	Average
11	2.979	35.95	-20.05	56.00	35.60	0.10	0.25	QP
12	2.980	20.33	-25.67	46.00	19.98	0.10	0.25	Average

5.11 Radiated Emission Measurement

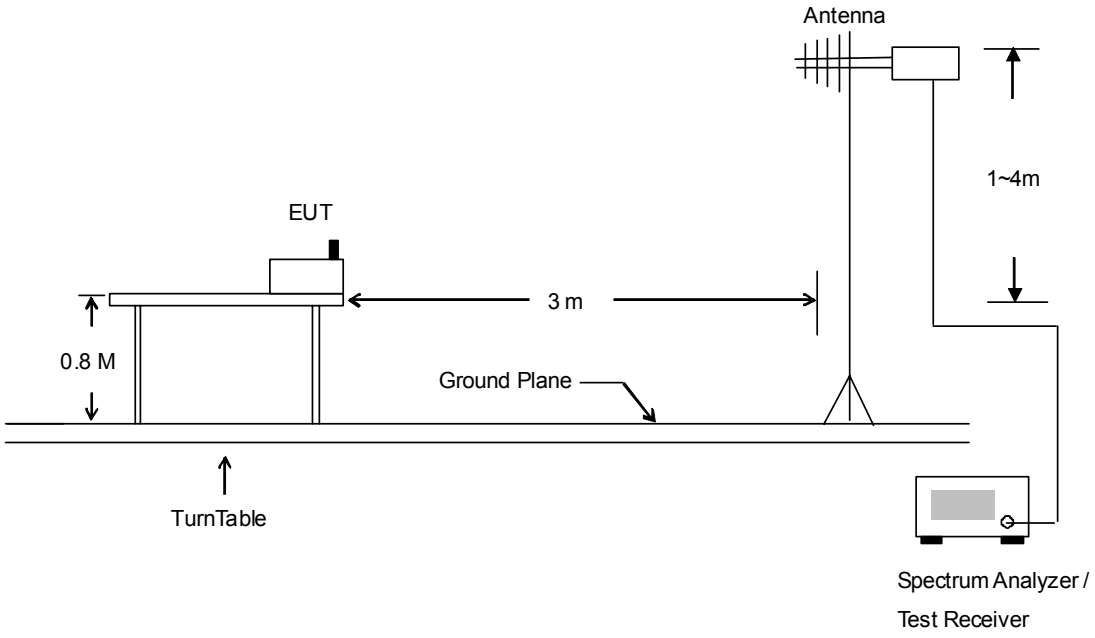
5.11.1 Measuring Instruments

As described in chapter 6 of this Report.

5.11.2 Test Procedures

1. The EUT was placed on a rotatable table top 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
7. For testing below 1GHz, If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the quasi-peak method and reported.
8. 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 average 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.

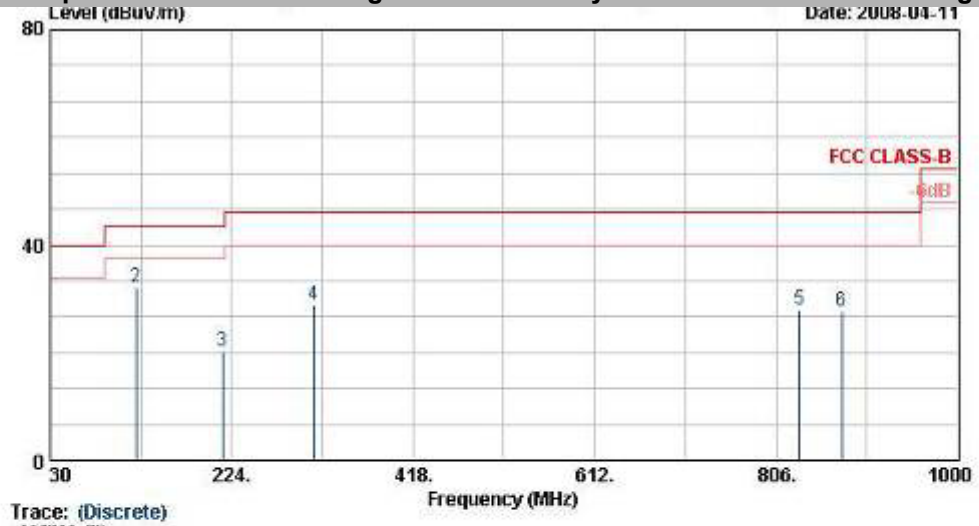
5.11.3 Typical Test Setup Layout of Radiated Emission



5.11.4Test Data

- Temperature : 21~26℃
- Relating Humidity : 50~58%
- Test Engineer : Sun
- Test Mode : Mode 1
- Polarization : Horizontal (30MHz-1GHz)

■ **The test that passed at minimum margin was marked by the boldface in the following table.**



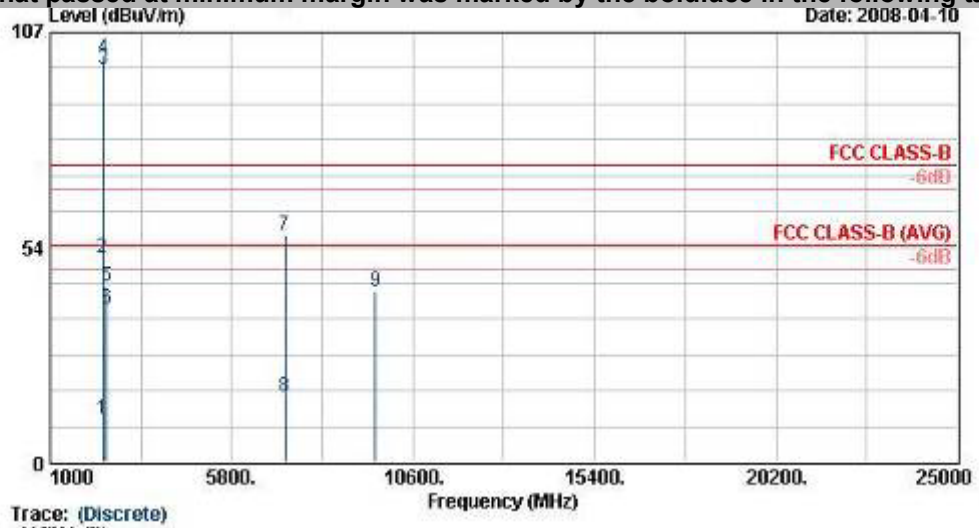
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC_CLASS-B 3m LF-ANT(951121) HORIZONTAL
EUT : MC5574 EVI FCC submit with ID 2D Scanner
: Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : BT_Tx Ch00_2402MHz + Adaptor
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	20.13	-19.87	40.00	33.67	19.66	0.30	33.50	---	---	Peak
2	121.53	32.18	-11.32	43.50	52.46	12.60	0.50	33.38	100	146	Peak
3	214.14	20.20	-23.30	43.50	42.91	10.16	0.64	33.50	---	---	Peak
4	311.90	28.94	-17.06	46.00	47.91	13.53	0.80	33.30	---	---	Peak
5	831.30	28.01	-17.99	46.00	39.40	20.04	1.20	32.63	---	---	Peak
6	876.80	27.60	-18.40	46.00	38.68	20.36	1.30	32.74	---	---	Peak

- Polarization : Horizontal (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.

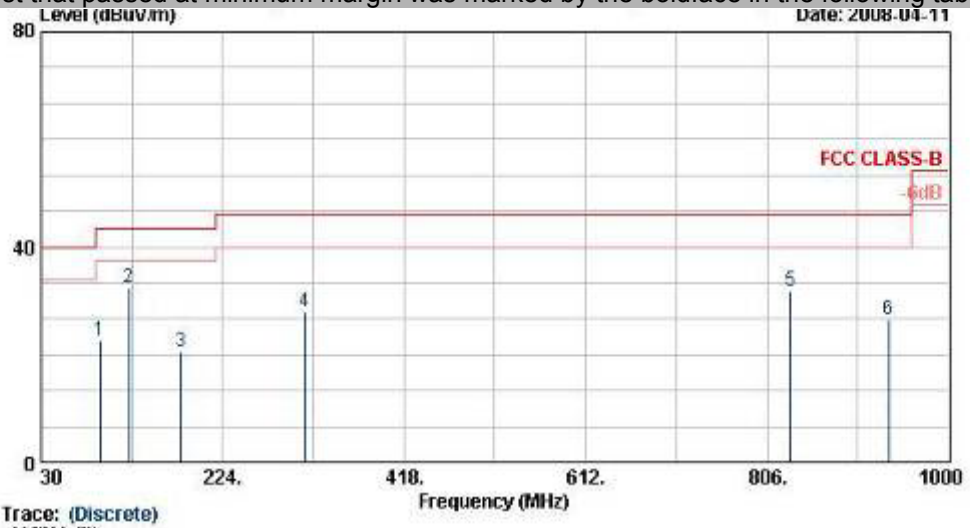


Site : 03CH00-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : MC5574 EVT FCC submit with ID 2D Scanner
: Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FP 840317
Mode : BT_Tx Ch00_2402MHz + Adaptor
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2385.05	10.84	-43.16	54.00	10.76	31.83	3.92	35.68	140	306	Average
2	2385.05	50.84	-23.16	74.00	50.76	31.83	3.92	35.68	100	0	Peak
3 @	2402.00	97.66			97.56	31.86	3.92	35.68	140	306	Average
4 X	2402.00	100.51			100.41	31.86	3.92	35.68	100	0	Peak
5	2500.00	43.65	-30.35	74.00	43.30	32.00	4.05	35.70	100	0	Peak
6	2500.00	38.14	-15.86	54.00	37.79	32.00	4.05	35.70	140	306	Average
7	7206.00	56.45	-17.55	74.00	49.65	35.72	7.17	36.08	100	0	Peak
8	7206.00	16.45	-37.55	54.00	9.65	35.72	7.17	36.08	100	198	Average
9	9606.00	42.52	-31.48	74.00	81.47	-10.16	7.93	36.72	100	0	Peak

Remark: #3 and #4 are Fundamental Signals.

- Polarization : Vertical (30MHz-1GHz)
- ■ The test that passed at minimum margin was marked by the boldface in the following table.



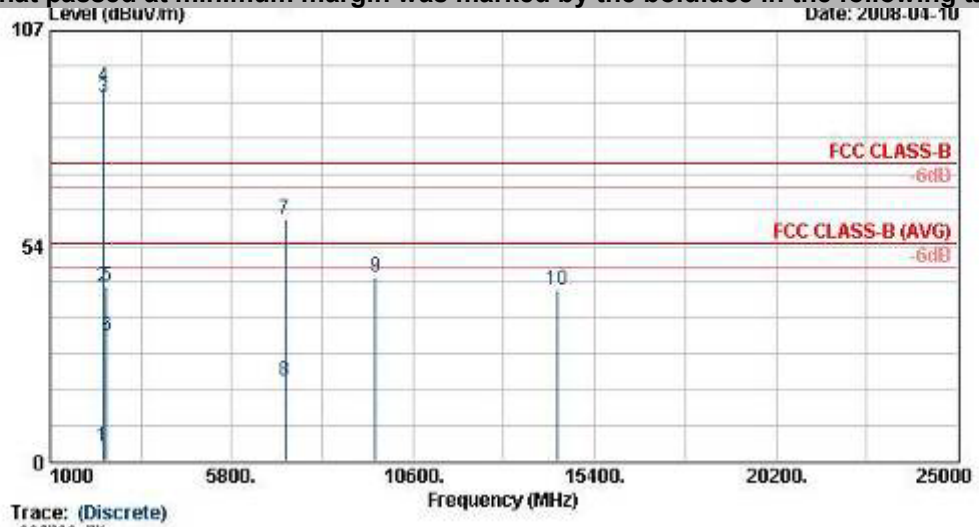
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) VERTICAL
EUT : MC5574 EVT FCC submit with ID 2D Scanner
: Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : BT_Tx Ch00_2402MHz + Adaptor
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	92.64	22.53	-20.97	43.50	45.75	9.62	0.50	33.33	---	---	Peak
2	123.69	32.38	-11.12	43.50	52.57	12.64	0.50	33.34	100	234	Peak
3	179.58	20.57	-22.93	43.50	43.77	9.50	0.60	33.30	---	---	Peak
4	311.90	27.91	-18.09	46.00	46.88	13.53	0.80	33.30	---	---	Peak
5	831.30	31.72	-14.28	46.00	43.11	20.04	1.20	32.63	---	---	Peak
6	936.30	26.40	-19.60	46.00	36.96	20.79	1.20	32.54	---	---	Peak

- Polarization : Vertical (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



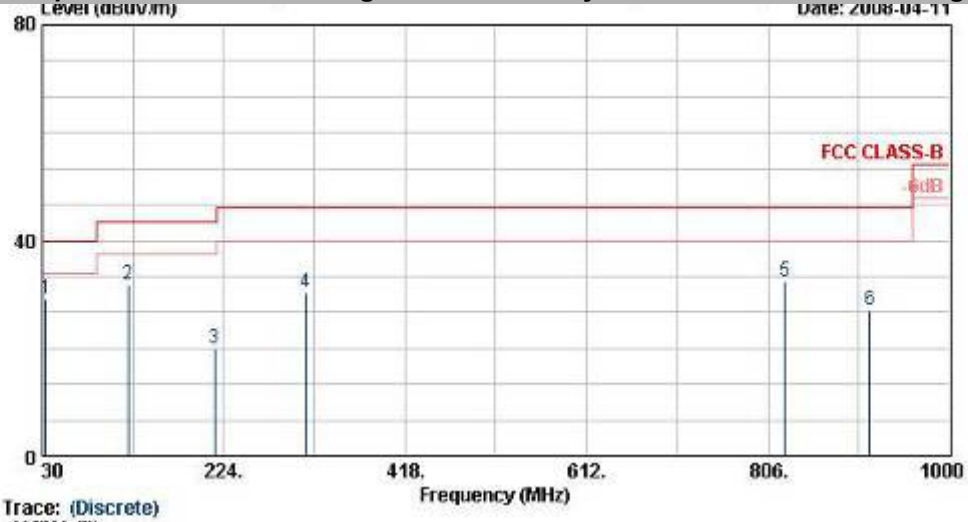
Site : 03CH06-HV
Condition : FCC_CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : MC5574 EVT FCC submit with ID 2D Scanner
: Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : BT_Tx Ch00_2402MHz + Adaptor
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2385.81	3.40	-50.60	54.00	3.30	31.86	3.92	35.68	124	22	Average
2	2385.81	43.40	-30.60	74.00	43.30	31.86	3.92	35.68	100	0	Peak
3 @	2402.00	90.22			90.12	31.86	3.92	35.68	124	22	Average
4 X	2402.00	93.07			92.97	31.86	3.92	35.68	100	0	Peak
5	2492.00	43.50	-30.50	74.00	43.15	32.00	4.05	35.70	100	0	Peak
6	2492.00	30.87	-23.13	54.00	30.52	32.00	4.05	35.70	124	22	Average
7	7206.00	59.90	-14.10	74.00	53.09	35.72	7.17	36.08	100	0	Peak
8	7206.00	19.90	-34.10	54.00	13.10	35.72	7.17	36.08	100	165	Average
9	9608.00	45.87	-28.13	74.00	84.82	-10.16	7.93	36.72	100	0	Peak
10	14409.00	42.72	-31.28	74.00	74.60	-6.51	9.72	35.09	100	0	Peak

Remark: #3 and #4 are Fundamental Signals.

- Test Mode : Mode 2
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.

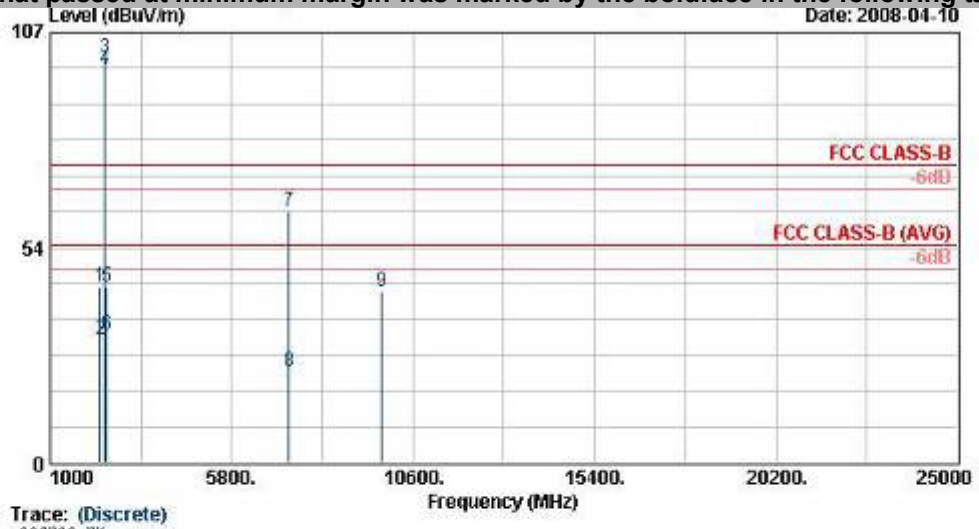


Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(9511121) HORIZONTAL
EUT : MC5574 EVT FCC submit with ID 2D Scanner
: Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : BT_Tx Ch39_2441MHz + Adaptor
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	33.78	29.03	-10.97	40.00	45.23	16.84	0.30	33.34	100	113	Peak
2	122.34	31.89	-11.61	43.50	52.14	12.61	0.50	33.36	---	---	Peak
3	214.14	19.89	-23.61	43.50	42.59	10.16	0.64	33.50	---	---	Peak
4	311.90	30.26	-15.74	46.00	49.23	13.53	0.80	33.30	---	---	Peak
5	824.30	32.30	-13.70	46.00	43.72	19.99	1.20	32.62	---	---	Peak
6	915.30	27.05	-18.95	46.00	37.85	20.64	1.25	32.69	---	---	Peak

- Polarization : Horizontal (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.

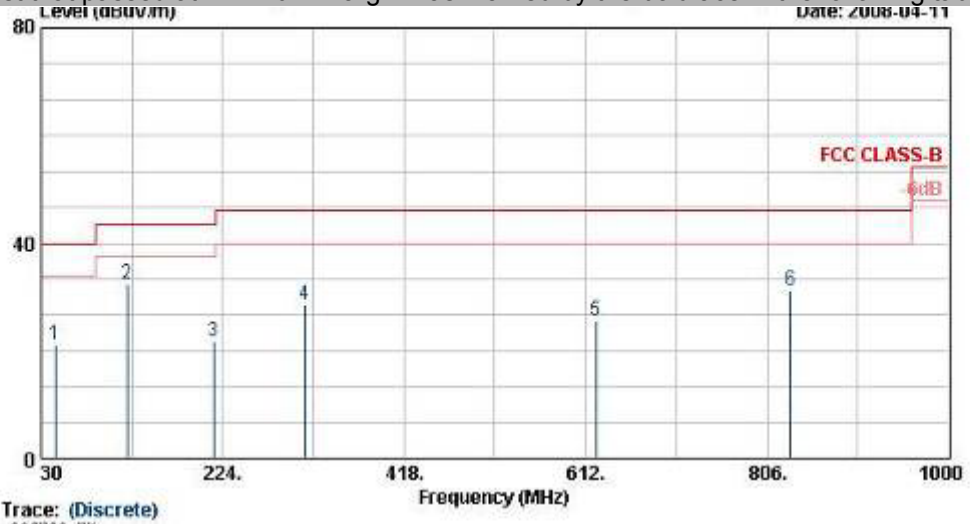


Site : 03CH06-HY
Condition : FCC CLASS-B 3m SWF-ENF HORN HORIZONTAL
EUT : MC5574 EVT FCC submit with ID 2D Scanner
: Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : BT_Tx Ch39_2441MHz + Adaptor
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2318.00	43.95	-30.05	74.00	44.03	31.76	3.82	35.67	100	0	Peak
2	2318.00	30.71	-23.29	54.00	30.79	31.76	3.82	35.67	132	311	Average
3 X	2441.00	100.58			100.36	31.93	3.99	35.69	100	0	Peak
4 @	2441.00	97.72			97.50	31.93	3.99	35.69	132	311	Average
5	2484.00	43.75	-30.25	74.00	43.42	31.98	4.05	35.70	100	0	Peak
6	2484.00	31.70	-22.30	54.00	31.37	31.98	4.05	35.70	132	311	Average
7	7317.00	62.58	-11.42	74.00	55.84	35.67	7.20	36.13	100	0	Peak
8	7317.00	22.58	-31.42	54.00	15.84	35.67	7.20	36.13	100	107	Average
9	9762.00	42.64	-31.36	74.00	81.23	-9.83	8.00	36.76	100	0	Peak

Remark: #3 and #4 are Fundamental Signals.

- Polarization : Vertical (30MHz-1GHz)
- ■ The test that passed at minimum margin was marked by the boldface in the following table.



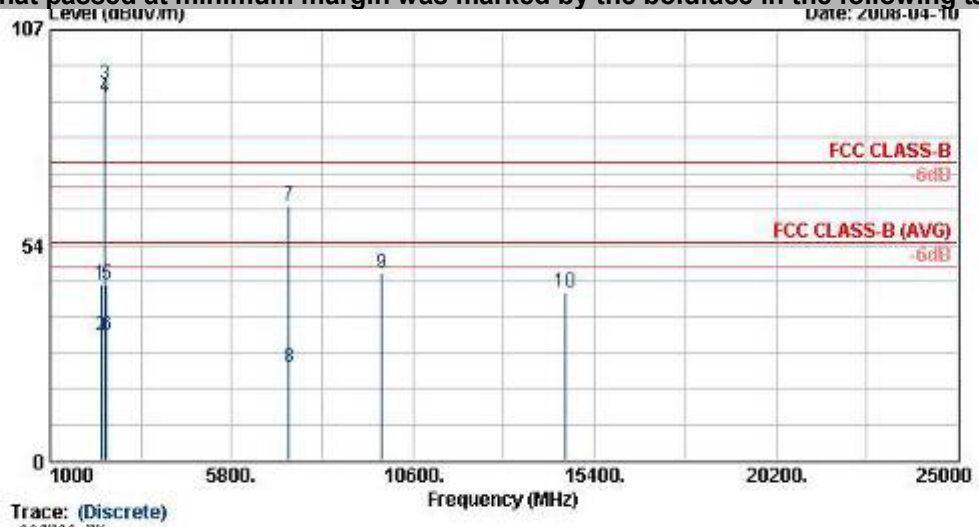
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(9511121) VERTICAL
EUT : MC5574 EVI FCC submit with ID 2D Scanner
: Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : BT_Tx Ch39_2441MHz + Adaptor
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	45.39	20.99	-19.01	40.00	43.28	10.53	0.30	33.12	---	---	Peak
2	121.53	32.34	-11.16	43.50	52.62	12.60	0.50	33.38	100	219	Peak
3	214.14	21.77	-21.73	43.50	44.47	10.16	0.64	33.50	---	---	Peak
4	311.90	28.49	-17.51	46.00	47.46	13.53	0.80	33.30	---	---	Peak
5	623.40	25.54	-20.46	46.00	38.84	18.57	1.06	32.93	---	---	Peak
6	831.30	31.26	-14.74	46.00	42.65	20.04	1.20	32.63	---	---	Peak

- Polarization : Vertical (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Trace: (Discrete)

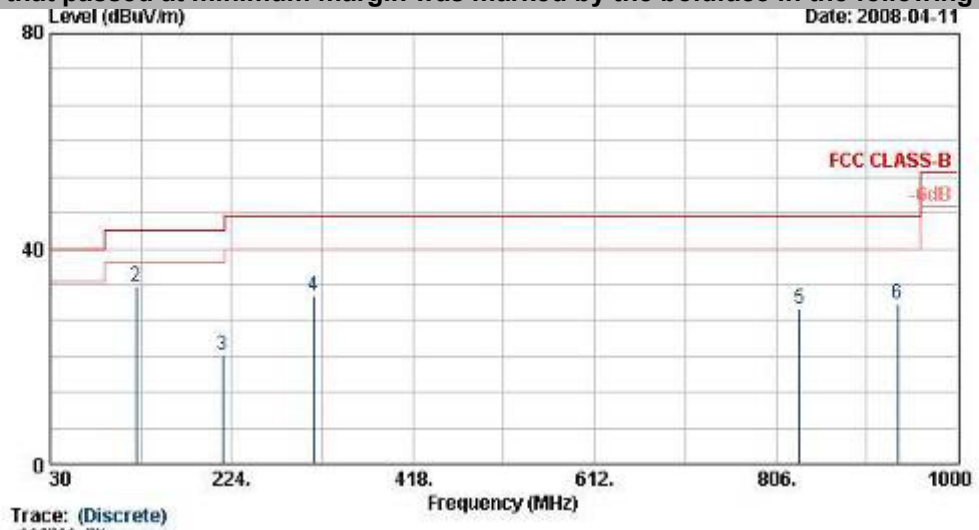
Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : MC5574 EVI FCC submit with ID 2D Scanner
: Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : BT_Tx Ch39_2441MHz + Adaptor
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dB		uV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2350.00	43.80	-30.20	74.00	43.83	31.78	3.86	35.67	100	0	Peak
2	2350.00	30.94	-23.06	54.00	30.97	31.78	3.86	35.67	100	53	Average
3 X	2441.00	93.37			93.14	31.93	3.99	35.69	100	0	Peak
4 @	2441.00	90.48			90.26	31.93	3.99	35.69	100	53	Average
5	2484.00	43.63	-30.37	74.00	43.30	31.98	4.05	35.70	100	0	Peak
6	2484.00	31.16	-22.84	54.00	30.83	31.98	4.05	35.70	100	53	Average
7	7317.00	63.11	-10.89	74.00	56.37	35.67	7.20	36.13	100	0	Peak
8	7317.00	23.11	-30.89	54.00	16.37	35.67	7.20	36.13	100	290	Average
9	9762.00	46.50	-27.50	74.00	85.09	-9.83	8.00	36.76	100	0	Peak
10	14646.00	41.68	-32.32	74.00	73.99	-6.48	9.52	35.35	100	0	Peak

Remark: #3 and #4 are Fundamental Signals.

- Test Mode : Mode 3
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



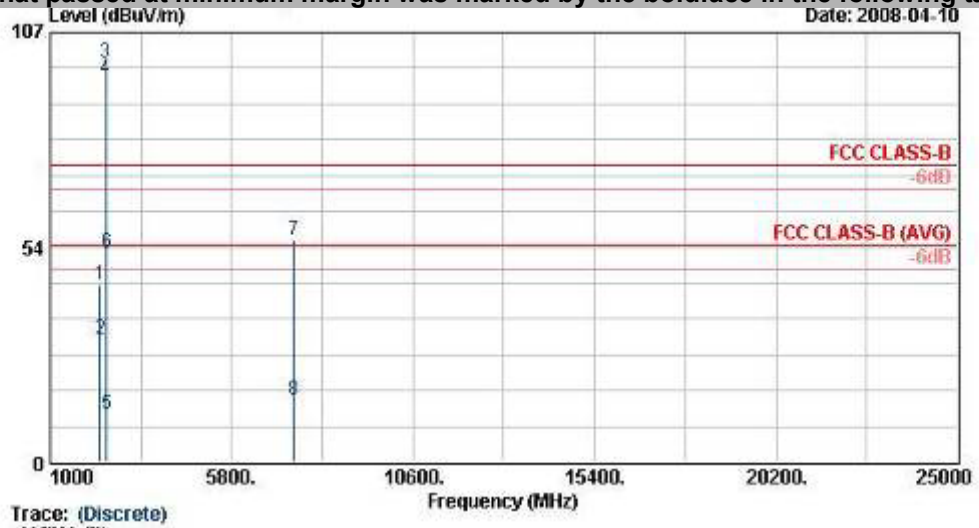
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC_CLASS-B 3m LF-ANT(9511121) HORIZONTAL
EUT : MC557d RVI FCC submit with ID 2D Scanner
: Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : BT_Tx Ch78_2460MHz + Adaptor
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	20.85	-19.15	40.00	34.39	19.66	0.30	33.50	---	---	Peak
2	122.34	33.07	-10.43	43.50	53.32	12.61	0.50	33.36	100	95	Peak
3	214.14	20.12	-23.38	43.50	42.82	10.16	0.64	33.50	---	---	Peak
4	311.90	31.29	-14.71	46.00	50.26	13.53	0.80	33.30	---	---	Peak
5	831.30	28.81	-17.19	46.00	40.20	20.04	1.20	32.63	---	---	Peak
6	936.30	29.83	-16.17	46.00	40.38	20.79	1.20	32.54	---	---	Peak

- Polarization : Horizontal (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



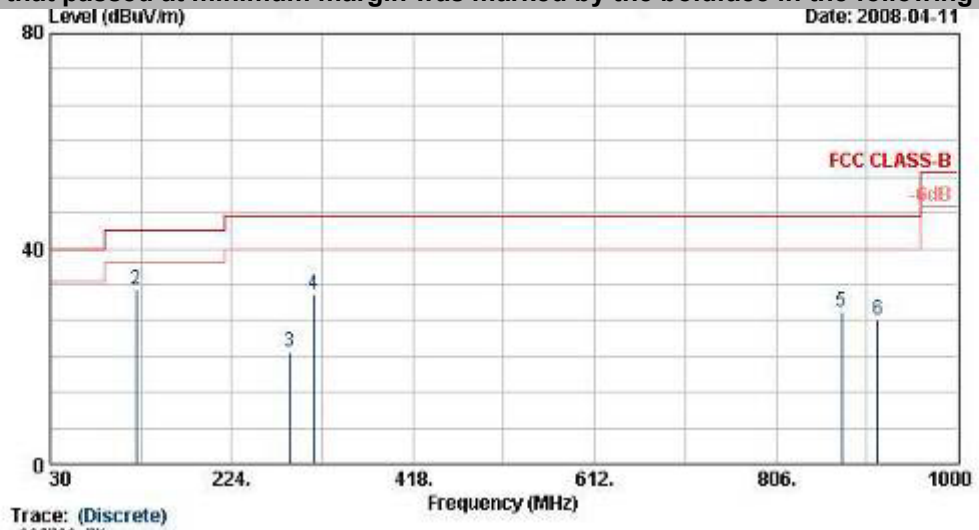
Site : 03CH00-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : MC5574 EVI FCC submit with ID 2D Scanner
: Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : BT_Tx Ch76_2480MHz + Adaptor
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2332.00	44.04	-29.96	74.00	44.09	31.76	3.86	35.67	100	0	Peak
2	2332.00	30.68	-23.32	54.00	30.73	31.76	3.86	35.67	104	339	Average
3 X	2480.00	99.44			99.11	31.98	4.05	35.70	100	0	Peak
4 @	2480.00	95.65			95.32	31.98	4.05	35.70	104	339	Average
5	2483.50	11.93	-42.07	54.00	11.60	31.98	4.05	35.70	104	339	Average
6	2483.50	51.93	-22.07	74.00	51.60	31.98	4.05	35.70	100	0	Peak
7	7437.00	55.45	-18.55	74.00	48.75	35.62	7.24	36.17	100	0	Peak
8	7437.00	15.45	-38.55	54.00	8.76	35.62	7.24	36.17	100	126	Average

Remark: #3 and #4 are Fundamental Signals.

- Test Mode : Mode 4
- Polarization : Horizontal (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



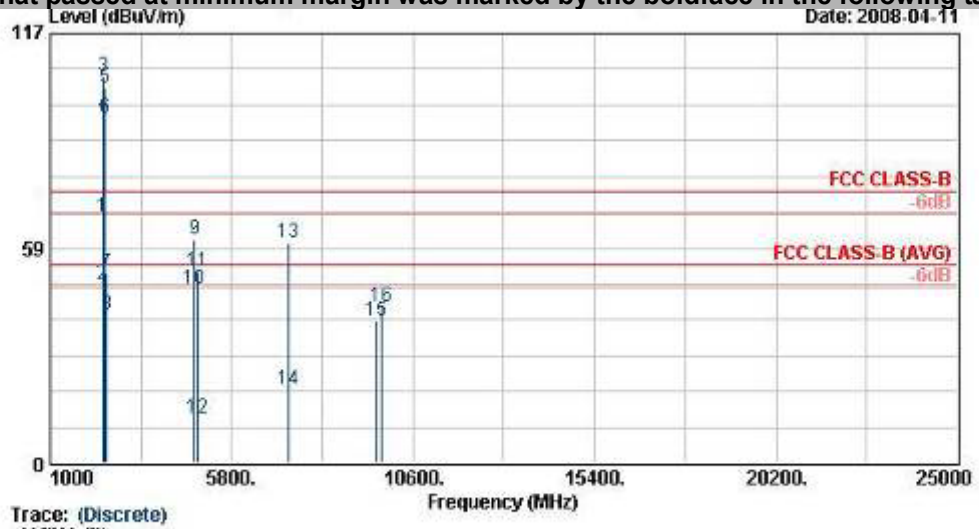
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC_CLASS-B 3m LF-ANT(9511121) HORIZONTAL
EUT : MC557d EVI FCC submit with ID 2D Scanner
: and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : 11g Tx_Ch01 ; 2412MHz
: +BT_Tx Ch39_2441MHz + Adaptor
Plane : H

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	20.81	-19.19	40.00	34.35	19.66	0.30	33.50	---	---	Peak
2	121.53	32.27	-11.23	43.50	52.55	12.60	0.50	33.38	100	130	Peak
3	286.23	20.76	-25.24	46.00	40.48	12.95	0.70	33.37	---	---	Peak
4	311.90	31.60	-14.40	46.00	50.57	13.53	0.80	33.30	---	---	Peak
5	876.80	28.37	-17.63	46.00	39.45	20.36	1.30	32.74	---	---	Peak
6	915.30	26.67	-19.33	46.00	37.47	20.64	1.25	32.69	---	---	Peak

- Polarization : Horizontal (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



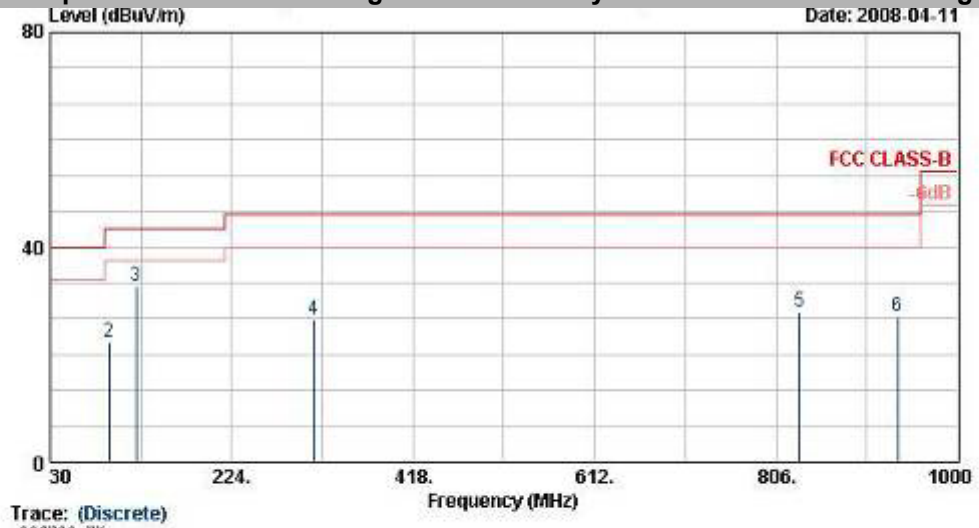
Site : 03CH00-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : MC5574 EVI FCC submit with ID 2D Scanner
: and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : 11g Tx_Ch01 ; 2412MHz
: +BT_Tx Ch39_2441MHz + Adaptor
Plane : H

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2389.99	67.08	-6.92	74.00	66.98	31.86	3.92	35.68	100	0	Peak
2 !	2389.99	48.65	-5.35	54.00	48.55	31.86	3.92	35.68	140	20	Average
3 X	2412.00	105.07			104.92	31.88	3.95	35.68	100	0	Peak
4 @	2412.00	94.83			94.68	31.88	3.95	35.68	140	20	Average
5 X	2441.00	102.30			102.08	31.93	3.99	35.69	100	0	Peak
6 @	2441.00	94.15			93.93	31.93	3.99	35.69	122	332	Average
7	2483.85	51.85	-22.15	74.00	51.50	32.00	4.05	35.70	100	0	Peak
8	2483.85	40.37	-13.63	54.00	40.04	31.98	4.05	35.70	122	332	Average
9	4812.00	60.72	-13.28	74.00	56.51	34.12	5.77	35.68	100	0	Peak
10	4812.00	47.57	-6.43	54.00	43.36	34.12	5.77	35.68	100	117	Average
11	4881.00	52.37	-21.63	74.00	48.05	34.15	5.82	35.65	100	0	Peak
12	4881.00	12.37	-41.63	54.00	8.05	34.15	5.82	35.65	100	21	Average
13	7317.00	60.18	-13.82	74.00	53.44	35.67	7.20	36.13	100	0	Peak
14	7317.00	20.18	-33.82	54.00	13.44	35.67	7.20	36.13	100	160	Average
15	9651.00	38.74	-35.26	74.00	77.60	-10.07	7.94	36.73	100	0	Peak
16	9762.00	42.72	-31.28	74.00	81.30	-9.83	8.00	36.76	100	0	Peak

Remark: #3, #4, #5, and #6 are Fundamental Signals.

- Polarization : Vertical (30MHz-1GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



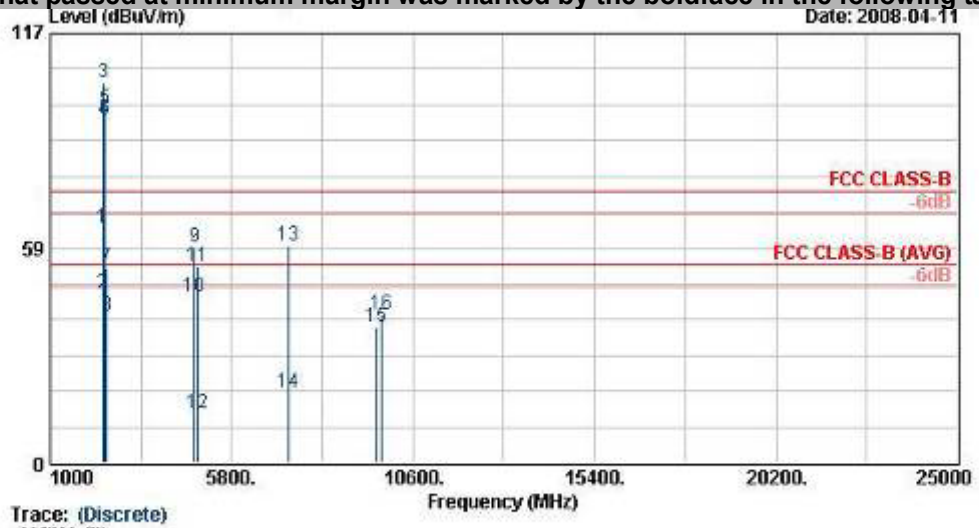
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(9511121) VERTICAL
EUT : MC5574 EVI FCC submit with ID 2D Scanner and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : 11g Tx_Ch01 ; 2412MHz +BT_Tx Ch39_2441MHz + Adaptor
Plane : H

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	21.31	-18.69	40.00	34.85	19.66	0.30	33.50	---	---	Peak
2	92.64	22.45	-21.05	43.50	45.66	9.62	0.50	33.33	---	---	Peak
3	121.53	32.60	-10.90	43.50	52.88	12.60	0.50	33.38	100	244	Peak
4	311.90	26.46	-19.54	46.00	45.43	13.53	0.80	33.30	---	---	Peak
5	831.30	27.94	-18.06	46.00	39.33	20.04	1.20	32.63	---	---	Peak
6	936.30	27.17	-18.83	46.00	37.73	20.79	1.20	32.54	---	---	Peak

- Polarization : Vertical (1GHz-25GHz)

■ The test that passed at minimum margin was marked by the boldface in the following table.



Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : MC5574 EVI FCC submit with ID 2D Scanner
: and w/ camera w/o camera
Power : 120Vac/60Hz
Model : FR 840317
Mode : 11g Tx_Ch01 ; 2412MHz
: +BT_Tx Ch39_2441MHz + Adaptor
Plane : H

		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1		2389.99	63.81	-10.19	74.00	63.71	31.86	3.92	35.68	100	0	Peak
2		2389.99	46.02	-7.98	54.00	45.92	31.86	3.92	35.68	123	33	Average
3	X	2412.00	103.71			103.56	31.88	3.95	35.68	100	0	Peak
4	X	2412.00	93.47			93.32	31.88	3.95	35.68	123	33	Average
5	X	2441.00	96.41			96.18	31.93	3.99	35.69	100	0	Peak
6	@	2441.00	93.49			93.27	31.93	3.99	35.69	100	233	Average
7		2499.81	52.97	-21.03	74.00	52.64	31.98	4.05	35.70	100	0	Peak
8		2499.81	40.01	-13.99	54.00	39.66	32.00	4.05	35.70	123	33	Average
9		4821.00	58.77	-15.23	74.00	54.54	34.13	5.77	35.67	100	0	Peak
10		4821.00	45.12	-8.88	54.00	40.89	34.13	5.77	35.67	100	179	Average
11		4881.00	53.30	-20.70	74.00	48.98	34.15	5.82	35.65	100	0	Peak
12		4881.00	13.30	-40.70	54.00	8.98	34.15	5.82	35.65	100	5	Average
13		7326.00	59.17	-14.83	74.00	52.42	35.67	7.21	36.13	100	0	Peak
14		7326.00	19.17	-34.83	54.00	12.42	35.67	7.21	36.13	100	321	Average
15		9651.00	36.97	-37.03	74.00	75.83	-10.07	7.94	36.73	100	0	Peak
16		9762.00	40.64	-33.36	74.00	79.23	-9.83	8.00	36.76	100	0	Peak

Remark: #3, #4, #5, and #6 are Fundamental Signals.

5.12 Antenna Requirements

5.12.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no other antenna except assembled by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi.

5.12.2 Antenna Connected Construction

The antenna used in this product is Chip antenna for Bluetooth without connecter and it is considered to meet antenna requirement of FCC.

5.12.3 Antenna Gain

The antenna gain of EUT is less than 6dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

6 List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
EMC Receiver	R&S	ESCS 30	100132	9kHz – 2.75GHz	Jul. 14, 2007	Jul. 13, 2008	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001/004	9kHz – 30MHz	Mar. 24, 2008	Mar. 23, 2009	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001/009	9kHz – 30MHz	Mar. 13, 2008	Mar. 12, 2009	Conduction (CO01-HY)
EMI Filter	LINDGREN	LRE-2060	1004	< 450Hz	N/A	N/A	Conduction (CO01-HY)
EMI Filter	LINDGREN	N6006	201052	0 – 60Hz	N/A	N/A	Conduction (CO01-HY)
RF Cable-CON	Suhner Switzerland	RG223/U	CB029	9kHz – 30MHz	Dec. 03, 2007	Dec. 02, 2008	Conduction (CO01-HY)
Isolation Transformer	Erika Fiedler OHG	D-65396 Walluf	58	45MHz-2.15GHz	N/A	N/A	Conduction (CO01-HY)
Impedance Stabilization	SCHAFFNER	ST08	22589	150kHz – 230MHz	Mar. 03, 2008	Feb. 14, 2009	Conduction (CO01-HY)
Impedance Stabilization	SCHAFFNER	T400	21653	150kHz – 230MHz	May. 09, 2007	May 08, 2008	Conduction (CO01-HY)
Impedance Stabilization	SCHAFFNER	T800	23342	150kHz – 230MHz	Mar. 03, 2008	Mar. 04, 2009	Conduction (CO01-HY)
Spectrum Analyzer	Agilent	E4408B	MY44211028	9KHz-26.5GHz	Oct. 17, 2007	Oct. 16, 2008	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 26, 2007	Jul. 25, 2008	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Dec. 01, 2007	Nov. 30, 2008	Radiation (03CH06-HY)
Double Ridge Horn Antenna	Com-Power	AH118	071025	1G~18G	Jun. 04, 2007	Jun. 03, 2008	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-251	14G - 40G	Oct. 17, 2007	Oct. 16, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 22, 2007	Nov. 21, 2008	Radiation (03CH06-HY)
Pre Amplifier	EMEC	PA303	PA303-SMA-059	100K~3GHz	Nov. 26, 2007	Nov. 25, 2008	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	103937	Third-Band	Oct. 19, 2007	Oct. 18, 2008	Radiation (03CH06-HY)

7 Uncertainty Evaluation

Uncertainty of Conducted Emission Measurement (150 KHz ~ 30 MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.10	Normal(k=2)	0.05
Cable loss	0.10	Normal(k=2)	0.05
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.39	Rectangular	0.80
Mismatch	+0.34/-0.35	U-shape	0.24
Combined standard uncertainty Uc(y)	**1.13**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**2.26**		

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.11	Normal(k=2)	0.06
Antenna factor calibration	0.91	Normal(k=2)	0.46
Cable loss calibration	0.12	Normal(k=2)	0.06
Pre Amplifier Gain calibration	0.15	Normal(k=2)	0.08
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.52	Rectangular	0.88
Mismatch	+0.45/-0.48	U-shaped	0.33
Combined standard uncertainty Uc(y)	**1.30**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**2.60**		

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Contribution	Uncertainty of x_i		$u(x_i)$	Ci	$Ci*u(x_i)$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR Γ1= 0.197 Antenna VSWR Γ2= 0.194 Uncertainty=20log(1-Γ1*Γ2*Γ3)	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty Uc(y)	**2.36**				
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**4.72**				

The measured result is ：y dBuV ± U dB
for a level of confidence of approximately 95%，(k= 2)