

4.2 Bandwidth for DSSS [Section 15.247 (a)(2)]

4.2.1 Test Procedure

The Transmitter output of EUT was connected to the spectrum analyzer. The 6 dB bandwidth of the fundamental frequency was measured. The setting of spectrum analyzer is as follows

Equipment mode	Spectrum analyzer
Detector function	Peak mode
RBW	100KHz
VBW	100KHz

4.2.2 Test Setup



4.2.3 Test Data:

6dB Bandwidth

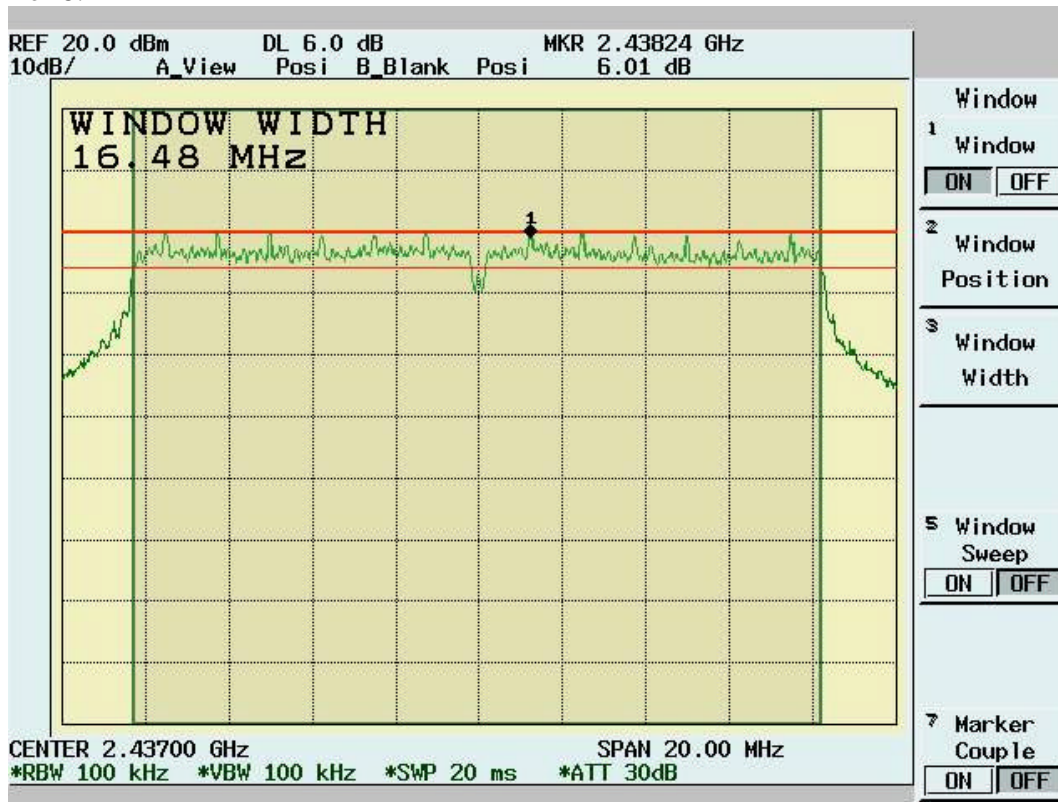
Temp. (deg. C): 25
 Humidity (%): 50
 Test Engr: Jerry Chiou

Chennel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Pass/Fail
1	2412	16.48	0.5	Pass
6	2437	16.48	0.5	Pass
11	2462	16.48	0.5	Pass

Channel 1:



Channel 6:



Channel 11:



4.3 DSSS Maximum Peak Output Power [Section 15.247 (b)(1)]

4.3.1 Test Procedure

- The Transmitter output of EUT was connected to the spectrum analyzer.
 - Equipment mode: Spectrum analyzer
 - Detector function: Channel Power
 - SPAN:20MHz
 - Channel BW:20MHz
 - RBW: 1MHz
 - VBW: 3MHz
 - Center frequency: fundamental frequency tested.
 - Sweep time= auto
 - Average times = 100.

4.3.2 Test Setup



4.3.3 Test Data

Maximum Peak Output Power

Temp. (deg. C): 25

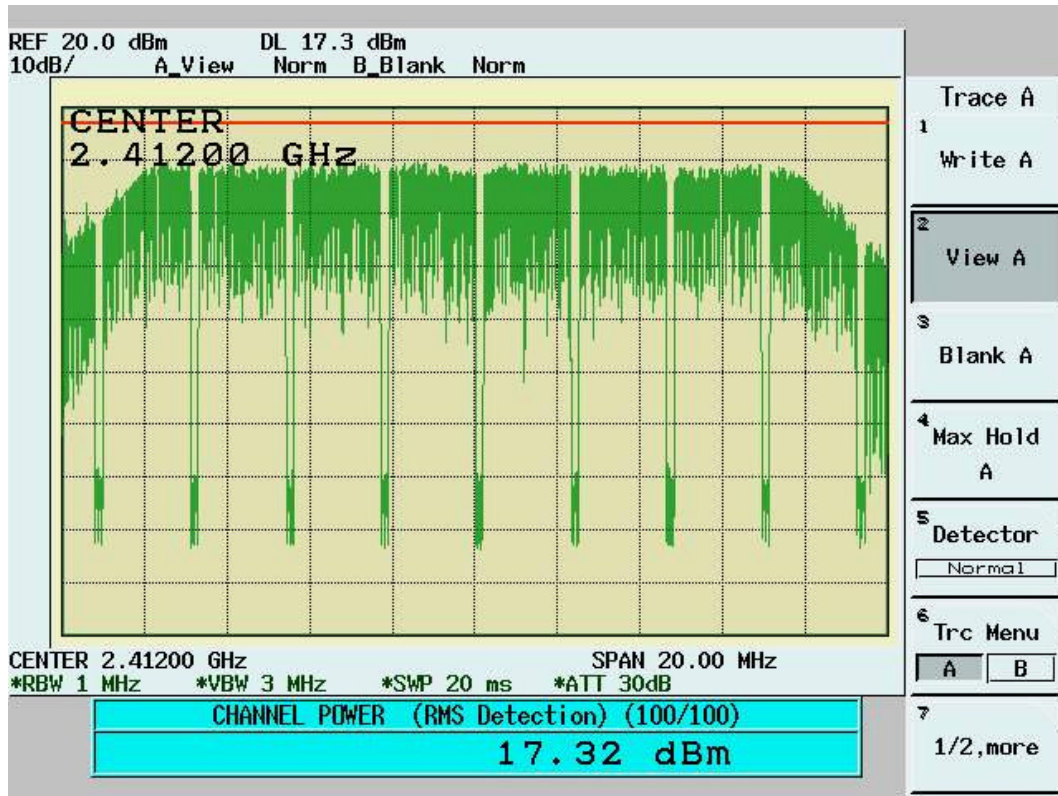
Test Engr: Jerry Chiou

Humidity (%): 50

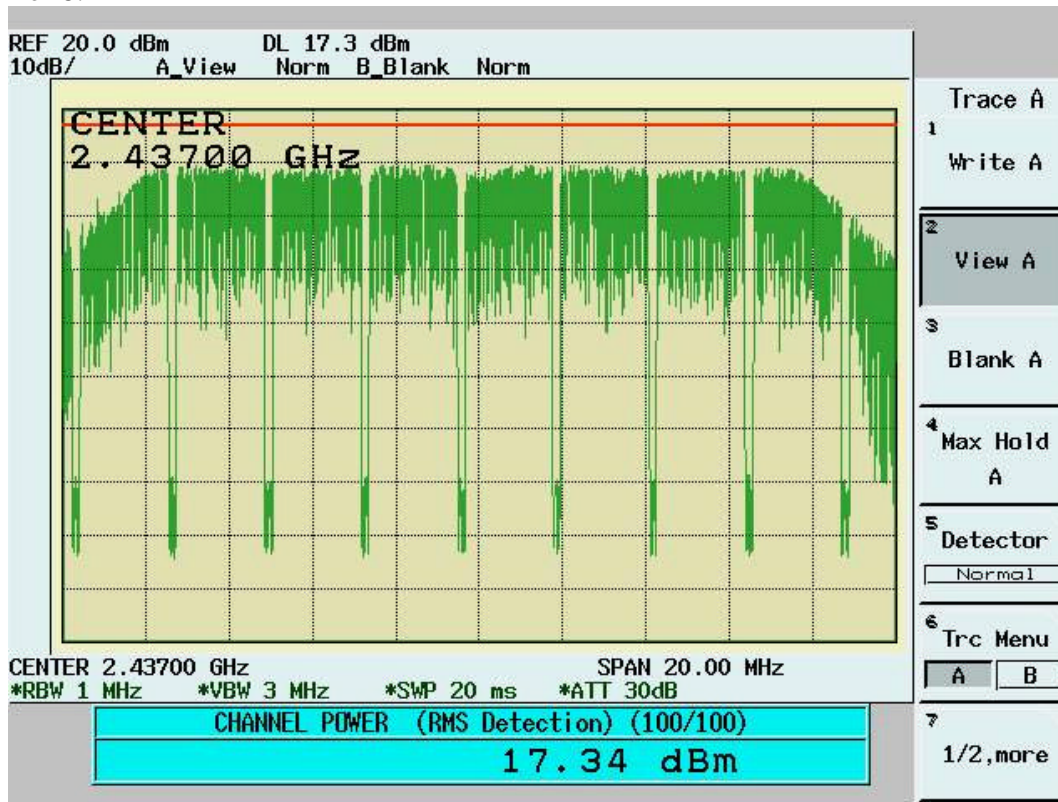
Channel	Frequency (Mhz)	Analyzer Reading (dBm)	Cable Loss (dB)	Peak Power Output (mW)	Peak Power Output (dBm)	Limit (dBm)	Pass/Fail
1	2412	17.32	1.1	69.50	18.42	30	Pass
6	2437	17.34	1.1	69.82	18.44	30	Pass
11	2462	17.47	1.1	71.94	18.57	30	Pass

Note: Two RF output(MAIN & AUX) have been test,the worse data shown above.

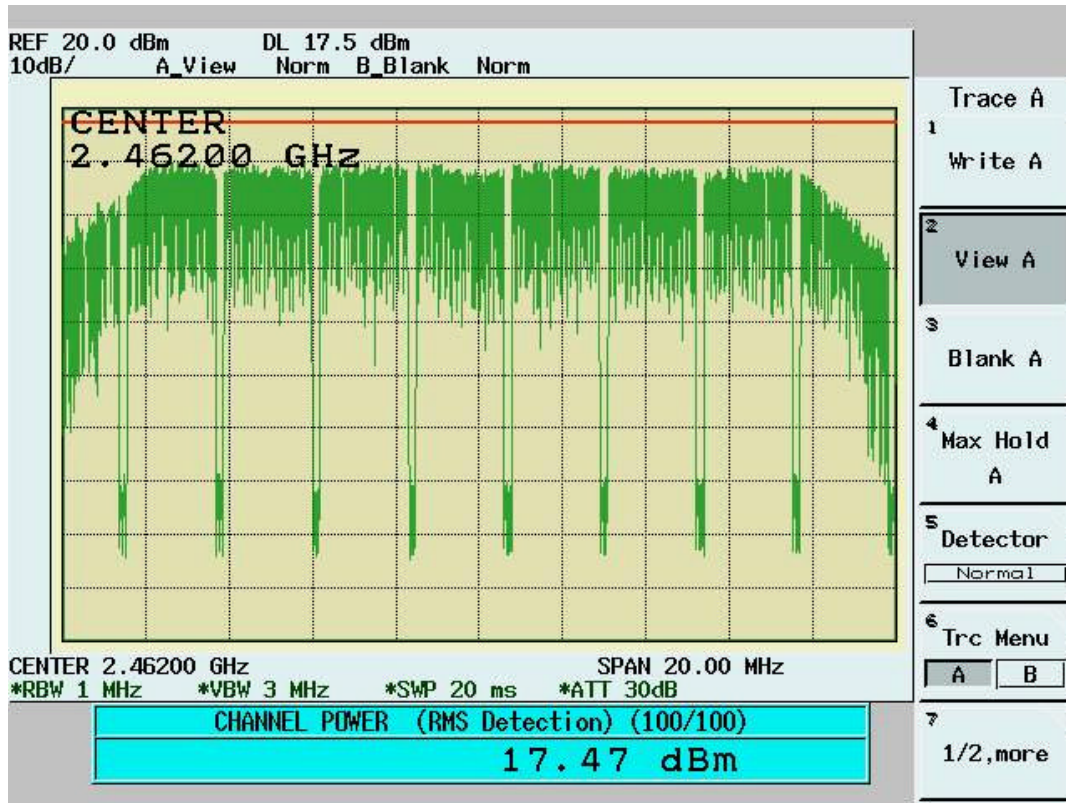
Channel 1:



Channel 6:



Channel 11:



4.4 Radiated Emission Measurement [Section [15.247(c)(4)]

4.4.1 EUT Configuration

The equipment under test was set up on the 10 meter chamber with measurement distance of 3 meters. The EUT was placed on a non-conductive table 80cm above ground.

Any changes made to the configuration, or modifications made to the EUT, during testing are noted in the following test record.

4.4.2 Test Procedure

The system was set up as described above, with the EMI diagnostic software running. We found the maximum readings by varying the height of antenna and then rotating the turntable. Both polarization of antenna, horizontal and vertical, are measured.

30M to 1GHz: The highest emissions between 30 MHz to 1000 MHz were also analyzed in details by operating the spectrum analyzer and/or EMI receiver in quasi-peak mode to determine the precise amplitude of the emissions. While doing so, the interconnecting cables and major parts of the system were moved around, the antenna height was varied between one and four meters, its polarization was varied between vertical and horizontal, and the turntable was slowly rotated, to maximize the emission.

1GHz – 25GHz: The highest emissions were also analyzed in details by operating the spectrum analyzer and/or EMI receiver in peak mode to determine the precise amplitude of the emission. While doing so, the interconnecting cables and major parts of the system were moved around, the antenna height was varied between one and four meters, its polarization was varied between vertical and horizontal, and the turntable was slowly rotated, to maximize the emission. During test the EMI receiver and spectrum was setup according to *EMI Receiver/Spectrum Analyzer Configuration*.

For the test of 2nd to 10th harmonics frequencies, the equipment setup was also refer to *EMI Receiver/Spectrum Analyzer Configuration*. The frequencies were tested using Peak mode first, if the test data is higher than the emissions limit, an additional measurement using Average mode will be performed and the average reading will be compared to the limit and record in test report.

4.4.3 EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)

Frequency Range Tested:	30MHz~1000MHz
Detector Function:	Quasi-Peak Mode
Resolution Bandwidth (RBW):	120KHz
Video Bandwidth (VBW)	1MHz

Frequency Range Tested:	1GHz – 25 GHz
Detector Function:	Peak Mode
Resolution Bandwidth (RBW):	1MHz
Video Bandwidth (VBW)	3MHz

Frequency Range Tested:	1GHz – 25 GHz
Detector Function:	Average Mode
Resolution Bandwidth (RBW):	1MHz
Video Bandwidth (VBW)	10 Hz

4.4.4 Test Data (30MHz – 1GHz):

30M – 1GHz Open Field Radiated Emissions (Horizontal) Channel 1, 6, 11

Operator: JerryChiou

Temperature(C): 25

Humidity(%): 63

Frequency MHz	RxAmp. (dBuV)	AntFact (dB/m)	CableLoss (dB)	PreAmpGain (dB)	Corrct.Emi. (dBuV/m)	Limit (dBu V/m)	Margin (dB)	Ant.Pos (cm)	TablePos (deg)
59.1	20.05	6.72	1.33	0.00	28.10	40.00	-11.90	96.00	217.00
64.92	20.63	6.35	1.45	0.00	28.44	40.00	-11.56	96.00	243.00
89.17	19.52	8.73	1.66	0.00	29.92	43.50	-13.58	96.00	217.00
95.96	16.82	9.91	1.79	0.00	28.53	43.50	-14.97	96.00	59.00
102.75	14.56	11.10	1.93	0.00	27.58	43.50	-15.92	96.00	32.00
108.57	17.48	12.14	1.94	0.00	31.56	43.50	-11.94	96.00	32.00
111.48	16.43	12.43	1.90	0.00	30.76	43.50	-12.74	96.00	32.00
129.91	13.33	11.81	2.08	0.00	27.21	43.50	-16.29	96.00	138.00
157.07	19.58	10.13	2.34	0.00	32.05	43.50	-11.45	96.00	217.00
167.74	16.79	9.64	2.42	0.00	28.85	43.50	-14.65	96.00	217.00
334.58	12.97	14.03	3.30	0.00	30.30	46.00	-15.70	96.00	32.00
584.84	6.22	18.79	4.42	0.00	29.43	46.00	-16.57	96.00	296.00

30M – 1GHz Open Field Radiated Emissions (Vertical) Channel 1, 6, 11

Operator: JerryChiou

Temperature(C): 25

Humidity(%): 63

Frequency MHz	RxAmp. (dBuV)	AntFact (dB/m)	CableLoss (dB)	PreAmpGain (dB)	Corrct.Emi. (dBuV/m)	Limit (dBu V/m)	Margin (dB)	Ant.Pos (cm)	TablePos (deg)
59.1	19.20	6.72	1.33	0.00	27.26	40.00	-12.74	96.00	217.00
66.86	21.20	6.26	1.48	0.00	28.93	40.00	-11.07	96.00	243.00
90.14	19.67	8.92	1.66	0.00	30.26	43.50	-13.24	96.00	217.00
92.08	18.64	9.25	1.70	0.00	29.60	43.50	-13.90	96.00	217.00
95.96	16.94	9.91	1.79	0.00	28.64	43.50	-14.86	96.00	59.00
105.66	14.09	11.62	1.93	0.00	27.64	43.50	-15.86	96.00	32.00
108.57	16.52	12.14	1.94	0.00	30.59	43.50	-12.91	96.00	32.00
111.48	17.71	12.43	1.90	0.00	32.05	43.50	-11.45	96.00	32.00
140.58	13.71	11.14	2.17	0.00	27.02	43.50	-16.48	96.00	85.00
159.01	15.27	10.11	2.38	0.00	27.75	43.50	-15.75	96.00	217.00
169.68	15.19	9.52	2.45	0.00	27.16	43.50	-16.34	96.00	217.00
919.49	3.60	20.66	5.32	0.00	29.57	46.00	-16.43	96.00	322.00

NOTE:

➤ During the Pre-test, the EUT has been tested for Channel 1, 6, 11 transmit from Main and Aux antenna respectively to get all the critical emission frequencies. In the final test all the critical emission frequencies has been tested and the test data are listed above.

➤ Margin = Corrected Amplitude – Limit

Corrected Amplitude = Radiated Amplitude + Antenna Correction Factor + Cable Loss - Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit

All frequencies from 30MHz to 1GHz have been tested

4.4.5 Test Data (1GHz – 25 GHz) .

1GHz~ 25 GHz (Horizontal), Channel 1: 2412 MHz

Operator:JerryChiou

RBW:1MHz
Humidity(%):57
Temperature(C):22

Frequency MHz	Rx_R. dBuV	Ant_F. dB/m	Cab_L. dB	PreAmpl dB	Emission dBuV/m	Limit dBuV/m	Margin dB	A.Tower cm	T.Table deg
4803.7	39.79pk	34.05	5.14	27.51	51.47pk	54.00av	-2.53	100	20
7222.78	39.29pk	38.09	3.85	26.60	54.63pk	74.00pk	-19.36	101	142
7229.65	26.41av	38.09	3.85	26.60	41.75av	54.00av	-12.25	101	142
9641.86	32.11pk	38.84	3.94	24.84	50.05pk	54.00av	-3.95	102	7

1GHz~ 25 GHz (Vertical), Channel 1: 2412 MHz

Operator:JerryChiou

RBW:1MHz
Humidity(%):57
Temperature(C):22

Frequency MHz	Rx_R. dBuV	Ant_F. dB/m	Cab_L. dB	PreAmpl dB	Emission dBuV/m	Limit dBuV/m	Margin dB	A.Tower cm	T.Table deg
4818.18	40.86pk	34.11	5.14	27.49	52.62pk	54.00av	-1.38	100	18
7222.78	41.46pk	38.09	3.85	26.60	56.80pk	74.00pk	-17.2	101	142
7228.75	29.12av	38.09	3.85	26.60	44.46av	54.00av	-9.54	101	142
9627.37	39.85pk	38.87	3.93	24.85	57.80pk	74.00pk	-16.2	102	7
9631.19	28.11av	38.87	3.93	24.85	46.06av	54.00av	-7.94	102	7

Note:

- According to the standards used, Where limits are specified by agencies for both average and peak (or quasi-peak) detection , if the peak (or quasi-peak) measured value complies with the average limit , it is unnecessary to perform an average measurement.
- “ * ”: Fundamental Frequency
- “**”: Not in the restricted band, Limit level=Fundamental Emission-20dB
- “ pk”: peak mode
- “ av”: average mode
- “-”-“”: No meter reading data due to the emission level is smaller than spectrum noise level.
- The Spectrum noise level+Correction Factor < Limit - 6 dB
- Margin=Corrected Amplitude – Limit
- Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain
- A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 25 GHz have been tested.

1GHz~ 25 GHz (Horizontal) , Channel 6 : 2437 MHz

Operator:JerryChiou

RBW:1MHz
Humidity(%):57
Temperature(C):22

Frequency MHz	Rx_R. dBuV	Ant_F. dB/m	Cab_L. dB	PreAmpl dB	Emission dBuV/m	Limit dBuV/m	Margin dB	A.Tower cm	T.Table deg
4861.64	44.74pk	34.27	5.13	27.43	56.72pk	74.00pk	-17.28	100	14
4882.06	33.24av	34.27	5.13	27.43	45.22av	54.00av	-8.78	100	14
7295.2	39.20pk	38.38	3.88	26.57	54.89pk	74.00pk	-19.11	101	152
7298.1	27.76av	38.38	3.88	26.57	43.45av	54.00av	-10.55	101	152
9714.29	35.00pk	38.71	3.99	24.79	52.91pk	54.00av	-1.09	102	6

1GHz~ 25 GHz (Vertical), Channel 6 : 2437 MHz

Operator:JerryChiou

RBW:1MHz
Humidity(%):57
Temperature(C):22

Frequency MHz	Rx_R. dBuV	Ant_F. dB/m	Cab_L. dB	PreAmpl dB	Emission dBuV/m	Limit dBuV/m	Margin dB	A.Tower cm	T.Table deg
4861.64	47.22pk	34.27	5.13	27.43	59.20pk	74.00pk	-14.8	100	14
4872.30	33.56av	34.27	5.13	27.43	45.64av	54.00av	-8.46	100	14
7295.2	43.39pk	38.38	3.88	26.57	59.09pk	74.00pk	-14.91	101	152
7298.12	29.43av	38.38	3.88	26.57	45.13av	54.00av	-8.87	101	152
9728.77	41.75pk	38.69	4.00	24.78	59.65pk	74.00pk	-14.35	102	5
9728.77	27.71av	38.69	4.00	24.78	45.61av	54.00av	-8.39	102	5

Note:

- According to the standards used,Where limits are specified by agencies for both average and peak (or quasi-peak) detection , if the peak (or quasi-peak) measured value complies with the average limit , it is unnecessary to perform an average measurement.
- “ * ”: Fundamental Frequency
- “**”: Not in the restricted band, Limit level=Fundamental Emission-20dB
- “ pk”: peak mode
- “ av”: average mode
- “- -”: No meter reading data due to the emission level is smaller than spectrum noise level.
- The Spectrum noise level+Correction Factor < Limit - 6 dB
- Margin=Corrected Amplitude – Limit
- Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain
- A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 25 GHz have been tested.

1GHz~ 25 GHz (Horizontal), Channel 11: 2462 MHz

Operator:JerryChiou

RBW:1MHz
Humidity(%):57
Temperature(C):22

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Limit	Margin	A.Tower	T.Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	cm	deg
4919.58	38.41pk	34.49	5.13	27.35	50.69pk	54.00av	-3.31	100	8
7367.63	34.44pk	38.67	3.92	26.54	50.49pk	54.00av	-3.51	101	163

1GHz~ 25 GHz (Vertical), Channel 11 : 2462 MHz

Operator:JerryChiou

RBW:1MHz
Humidity(%):57
Temperature(C):22

Frequency	Rx_R.	Ant_F.	Cab_L.	PreAmpl	Emission	Limit	Margin	A.Tower	T.Table
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	cm	deg
4919.58	42.75pk	34.49	5.13	27.35	55.02pk	74.00pk	-18.92	100	8
4924.00	27.62av	34.49	5.13	27.35	39.89av	54.00av	-14.11	100	8
7367.63	39.91pk	38.67	3.92	26.54	55.96pk	74.00pk	-18.04	101	163
7381.02	25.10av	38.67	3.92	26.54	41.15av	54.00av	-12.85	101	163
9830.17	33.78pk	38.51	4.07	24.72	51.64pk	54.00av	-2.36	101	3

Note:

- According to the standards used, Where limits are specified by agencies for both average and peak (or quasi-peak) detection , if the peak (or quasi-peak) measured value complies with the average limit , it is unnecessary to perform an average measurement.
- “ * ”: Fundamental Frequency
- “***”: Not in the restricted band, Limit level=Fundamental Emission-20dB
- “ pk”: peak mode
- “ av”: average mode
- “---”: No meter reading data due to the emission level is smaller than spectrum noise level.
- The Spectrum noise level+Correction Factor < Limit - 6 dB
- Margin=Corrected Amplitude – Limit
- Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain
- A margin of -8dB means that the emission is 8dB below the limit.

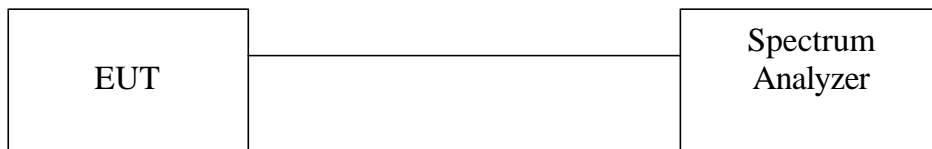
All frequencies from 1GHz to 25 GHz have been tested.

4.5 Band Edge Measurement

4.5.1 Test Procedure (Conducted)

1. The transmitter output of EUT was connected to the spectrum analyzer.
 Equipment mode: Spectrum analyzer
 Detector function: Peak mode
 SPAN: 100MHz
 RBW: 100KHz
 VBW: 100KHz
 Center frequency: 2.4GHz, 2.4835GHz.
2. Using Peak Search to read the peak power of Carrier frequencies after Maximum Hold function is completed
3. Find the next peak frequency outside the operation frequency band

4.5.2 Test Setup (Conducted)



4.5.3 Test Data:

Table: Band Edge measurement (Conducted)

Temp. (deg. C):	25
Humidity (%):	50
Test Engr:	Jerry Chiou

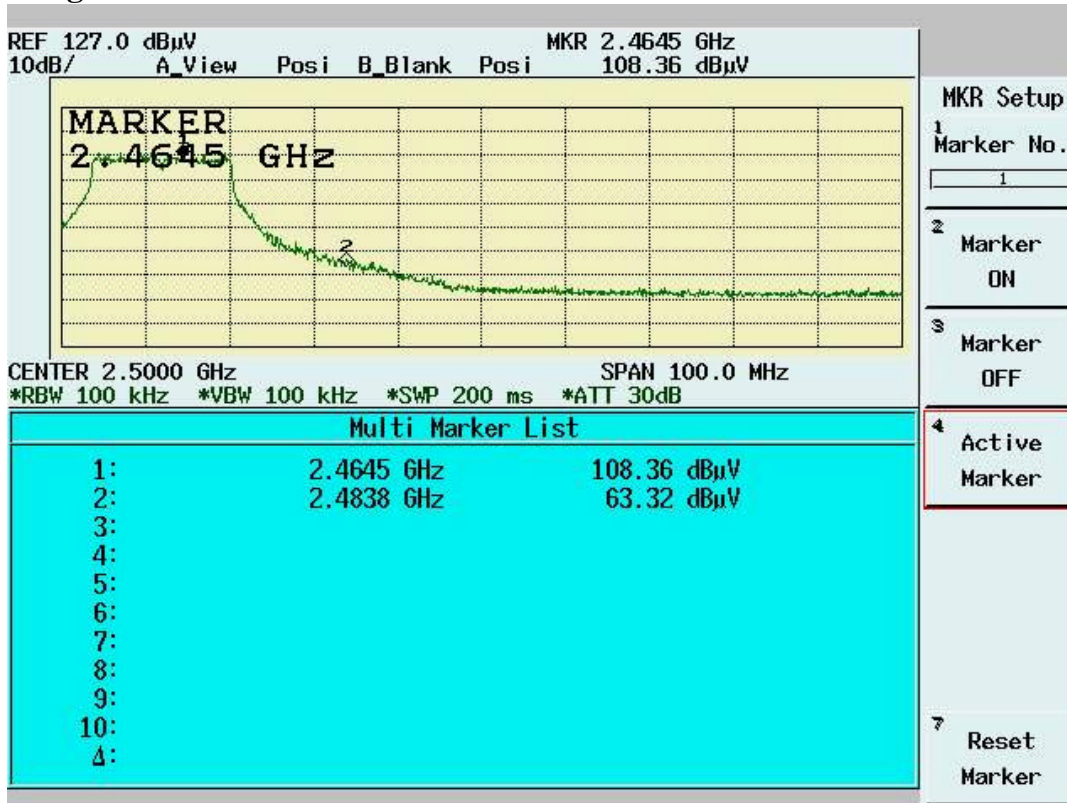
Channel	Frequency (MHz)	Spectrum Reading (dBuV)	Carrier - Outsideband Limit: >20dB (dB)	Pass/Fail
1	2414.5	108.5	---	---
Outside band	2400	76.92	31.58	Pass
11	2464.5	108.36	---	---
Outside band	2483.8	63.32	45.04	Pass

Note: Two RF output(MAIN & AUX) have been test,the worse data shown above.

Band Edge Conducted measurement



Band Edge Conducted Measurement



4.5.4 Test Procedure (Radiated)

1. Antenna and Turntable test procedure same as Radiated Emission Measurement.
Equipment mode: Spectrum analyzer
Detector function: Peak mode
SPAN: 100MHz
RBW: 1MHz
VBW: 3MHz
Center frequency: 2.395GHz, 2.48GHz.
2. Using Peak Search to read the peak power of Carrier frequencies after Maximum Hold function is completed.
3. Find the next peak frequency outside the operation frequency band
4. For peak frequency emission level measurement in Restricted Band ,
Change RBW: 1MHz
VBW: 10Hz
Span: 100MHz.
5. Get the spectrum reading after Maximum Hold function is completed.

4.5.5 Test Setup (Radiated)

Same as *Radiated Emission Measurement*

4.5.6 Test Data

Table Band Edge measurement (Radiated)

Temp. (deg. C): 25
Humidity (%): 50

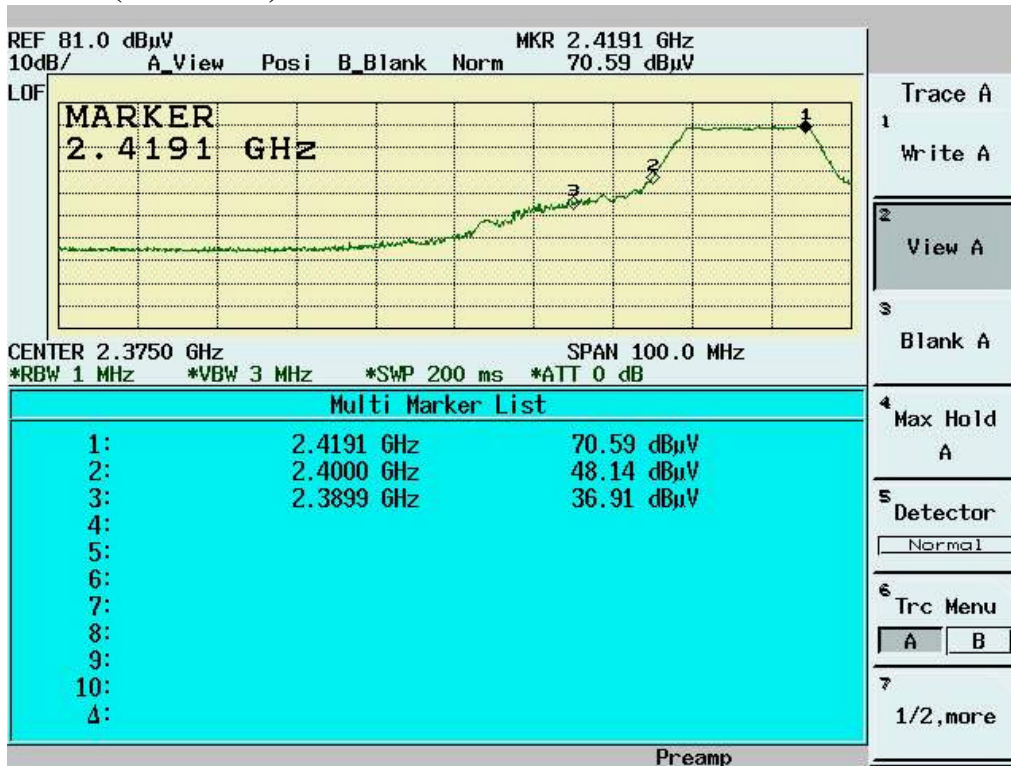
Test Engr: Jerry Chiou

Description	Frequency (MHz)	Spectrum Reading (dBuV)	Correction Factor (dB/m)	Emission Level (dBuV/m)	dBc (Limit: > 30dBc)	Limit (dBuV/m)	Equip. Setup VBW	Pass or Fail
Channel_1 (average mode)	2404.6	59.26	35.48	94.74	---	---	10Hz	---
Channel_1 (peak mode)	2419.1	70.59	35.48	106.07	---	---	3MHz	---
Outside band (average mode)	2400	26.69	35.48	62.17	32.57	---	10Hz	Pass
Channel_11 (average mode)	2463.1	56.51	35.5	92.01	---	---	10Hz	---
Channel_11 (peak mode)	2463.2	70.89	35.5	106.39	---	---	3MHz	---
Outside band (average mode)	2483.5	14.36	35.51	49.87	42.14	---	10Hz	Pass
Channel_1 Restricted band (peak mode)	2389.9	36.91	35.47	72.38	---	74	3MHz	Pass
Restricted band (average mode)	2390	14.17	35.47	49.64	---	54	10Hz	Pass
Channel_11 Restricted band (peak mode)	2483.5	33.22	35.51	68.73	---	74	3MHz	Pass
Restricted band (average mode)	2483.5	14.36	35.51	49.87	---	54	10Hz	Pass

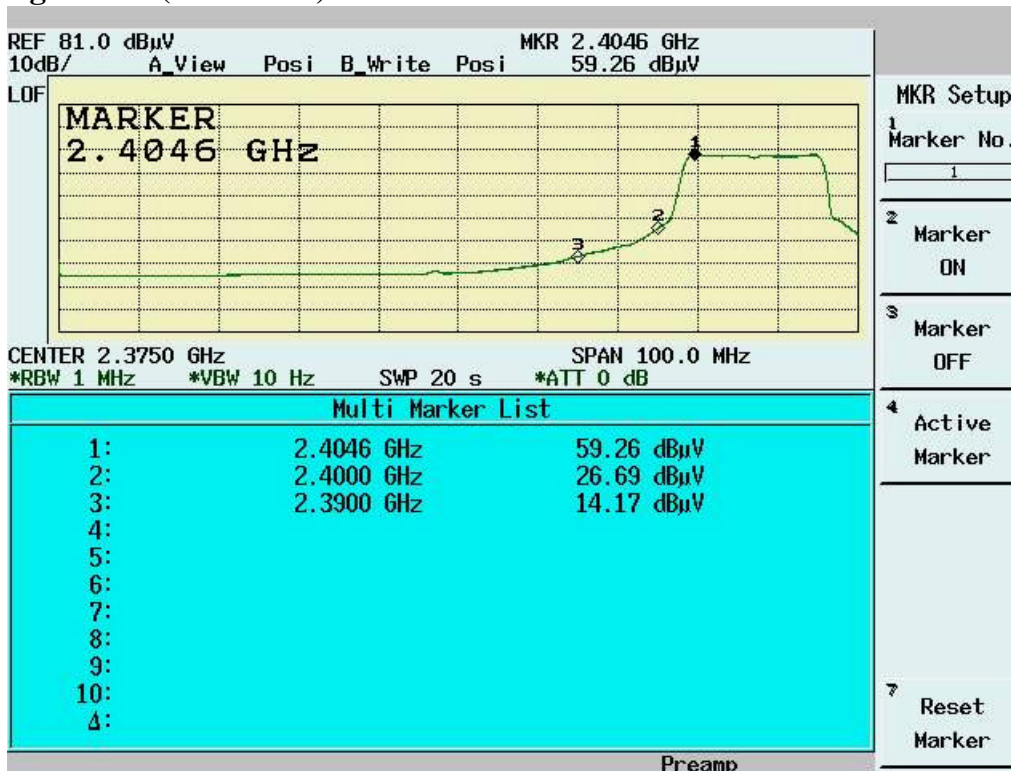
Note:

- The Spectrum plot of emission level measurement in Restricted band is attached.
- Emission Level=Spectrum Reading+Correction Factor
- Correction Factor=Antenna Factor+cable loss–amplifier gain
- Both Horizontal and Vertical polarization have been tested and the worst data is listed above.

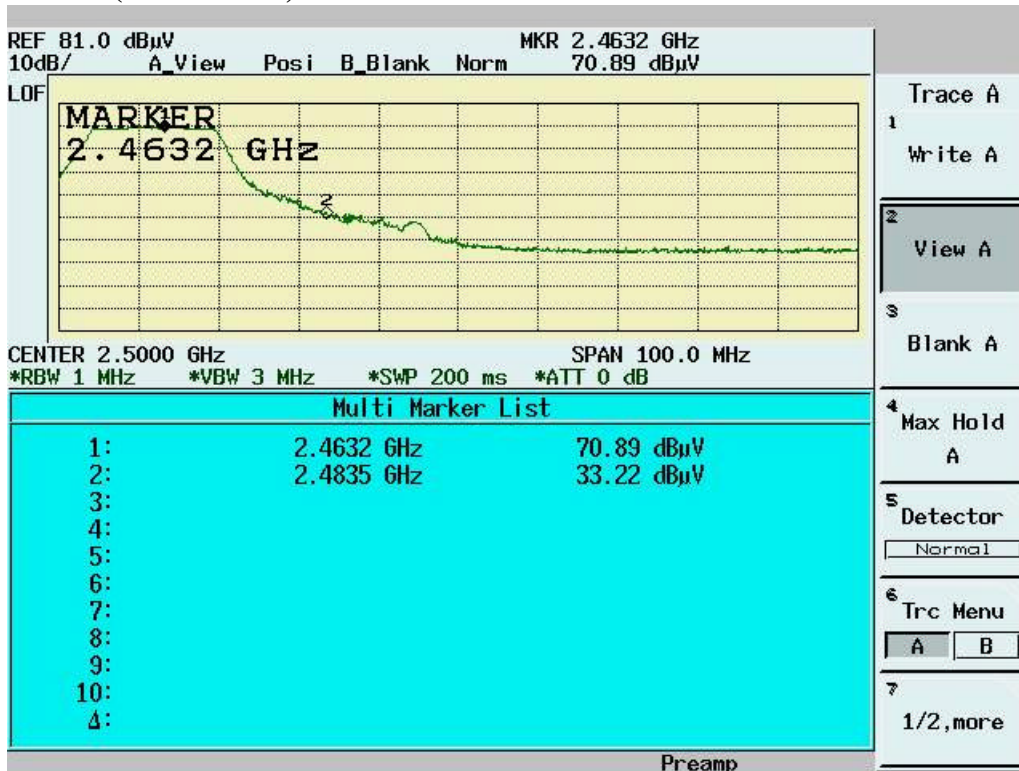
Band Edge measurement for radiated emission in Restricted Band(Radiated) Peak Mode (Channel 1)



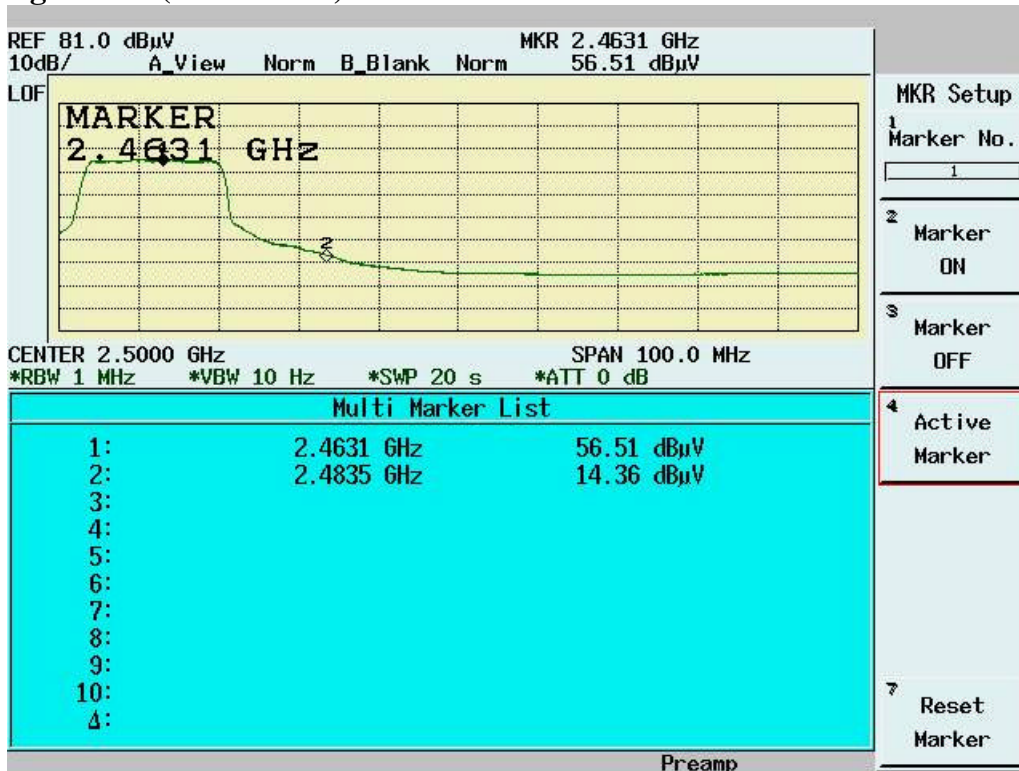
Band Edge measurement for radiated emission in Restricted Band(Radiated) Average Mode (Channel 1)



Band Edge measurement for radiated emission in Restricted Band(Radiated) Peak Mode (Channel 11)



Band Edge measurement for radiated emission in Restricted Band(Radiated) Average Mode (Channel 11)



4.6 RF Exposure Measurement [Section 15.247(b)(4) & 1.1307(b)]

See SAR report

4.7 DSSS Peak Power Spectral Density [Section 15.247(d)]

4.7.1 Test Procedure

1. The Transmitter output of EUT was connected to the spectrum analyzer.
Equipment mode: Spectrum analyzer
Detector function: Peak mode
SPAN:1.5MHz
RBW: 3KHz
VBW: 30KHz
Center frequency: fundamental frequency tested.
Sweep time= 500 sec.
2. Using Peak Search to read the peak power after Maximum Hold function is completed.

4.7.2 Test Setup



4.7.3 Test Data

Maximum Peak Output Power Density

Temp. (deg. C): 25

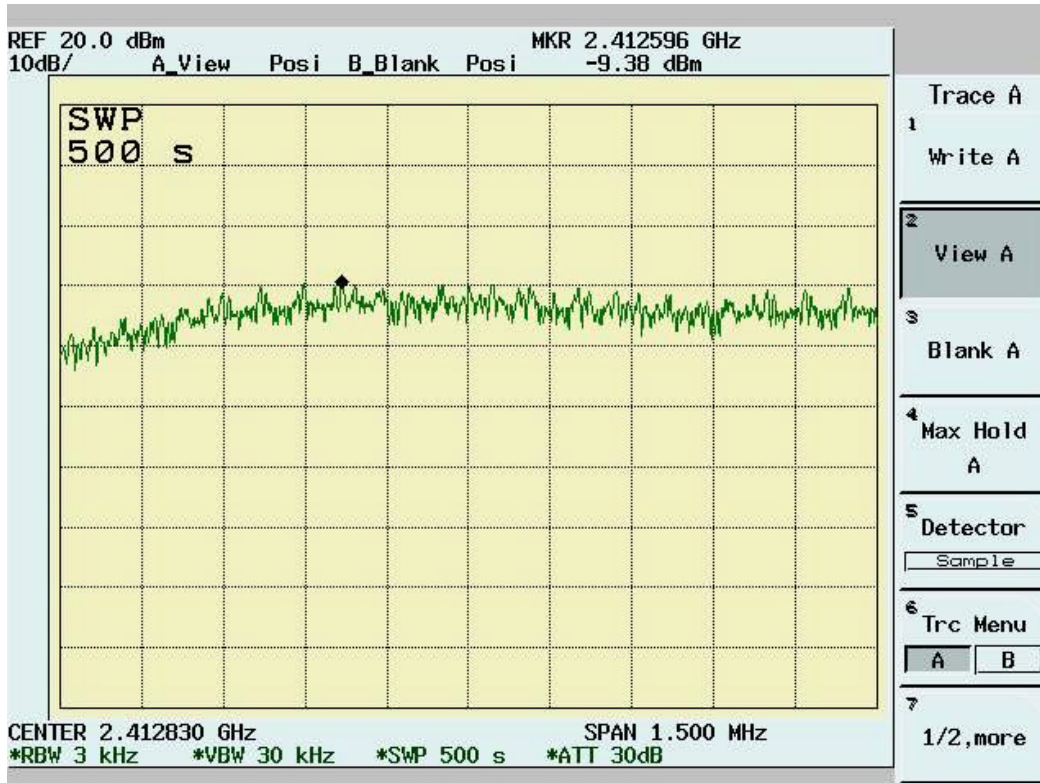
Test Engr: Jerry Chiou

Humidity (%): 50

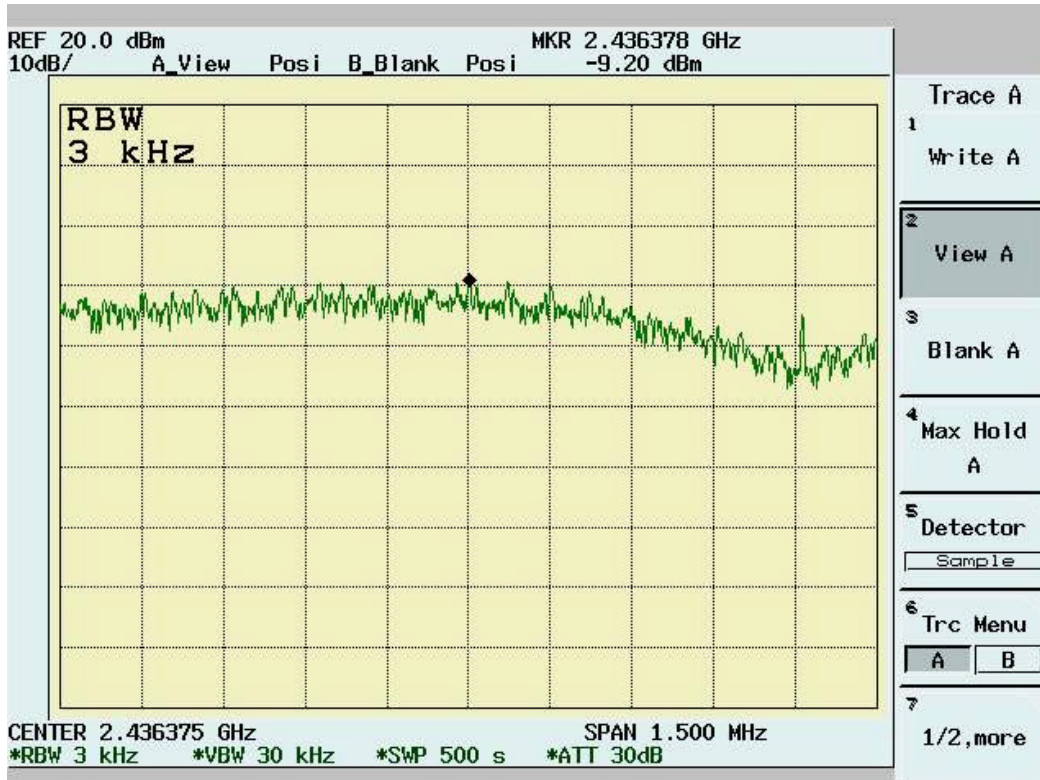
Chennel	Frequency (MHz)	Spectrum Reading (dBm/3KHz)	Cable Loss (dB)	Peak Power Output (dBm/3KHz)	Limit (dBm/3KHz)	Pass/Fail
1	2412	-9.38	1.1	-8.28	8	Pass
6	2437	-9.2	1.1	-8.1	8	Pass
11	2462	-9.41	1.1	-8.31	8	Pass

Note: Two RF output(MAIN & AUX) have been test,the worse data shown above.

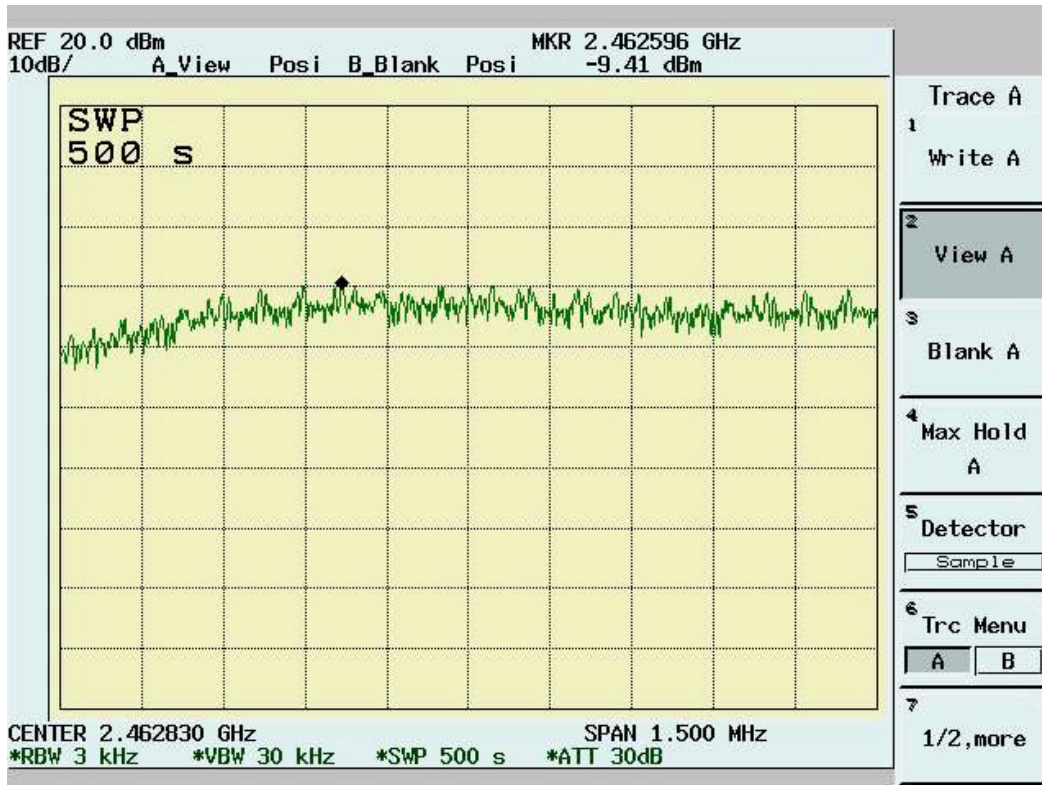
Channel 1



Channel 6



Channel 11



5. TEST RESULTS (802.11a 5725MHz-5850MHz)

5.1 Powerline Conducted Emissions [Section 15.207]

5.1.1 EUT Configuration

The EUT was set up on the non-conductive table that is 1.0 by 1.5 meter, 80cm above ground. The wall of the shielded room was located 40cm to the rear of the EUT.

Power to the EUT was provided through the LISN. The impedance vs. frequency characteristic of the LISN is complied with the limit used.

Both lines (neutral and hot) were connected to the LISN in series at testing. A coaxial-type connector which provides one 50 ohms terminating impedance was provided for connecting the test instrument. The excess length of the power cord was folded back and forth at the center of the lead so as to form a bundle not exceeding 40cm in length.

Any changes made to the configuration, or modifications made to the EUT, during testing are noted in the following test record.

If the EUT is a Personal Computer or a peripheral of personal computer, and the personal computer has an auxiliary AC outlet which can be used for providing power to an external monitor, then all measurements will be made with the monitor power from first the computer-mounted AC outlet and then a floor-mounted AC outlet.

5.1.2 Test Procedure

The system was set up as described above, with the EMI diagnostic software running. The main power line conducted EMI tests were run on the hot and neutral conductors of the power cord and the results were recorded. The effect of varying the position of the interface cables has been investigated to find the configuration that produces maximum emission.

At the frequencies where the peak values of the emissions were higher than 6dB below the applicable limits, the emissions were also measured with the quasi-peak detectors. At the frequencies where the quasi-peak values of the emissions were higher than 6dB below the applicable average limits, the emissions were also measured with the average detectors.

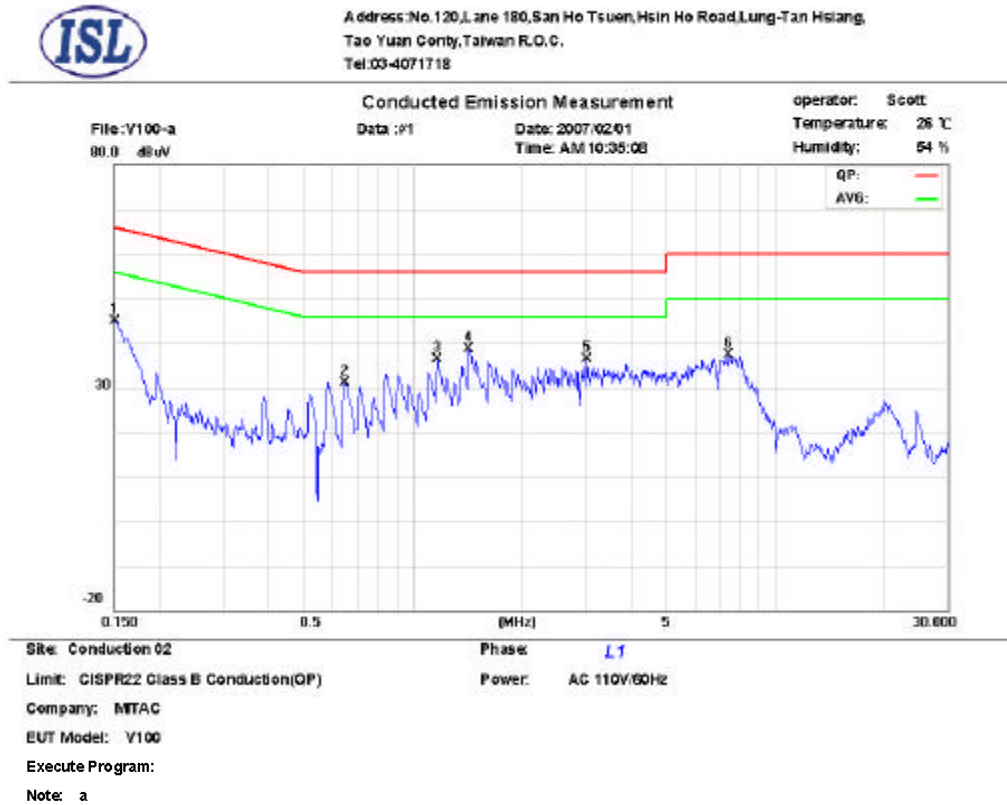
The highest emissions were analyzed in details by operating the spectrum analyzer in fixed tuned mode to determine the nature of the emissions and to provide information which could be useful in reducing their amplitude.

5.1.3 EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)

Frequency Range	150 KHz--30MHz
Detector Function	Quasi-Peak/Average
Bandwidth (RBW)	9KHz

5.1.4 Test Data:

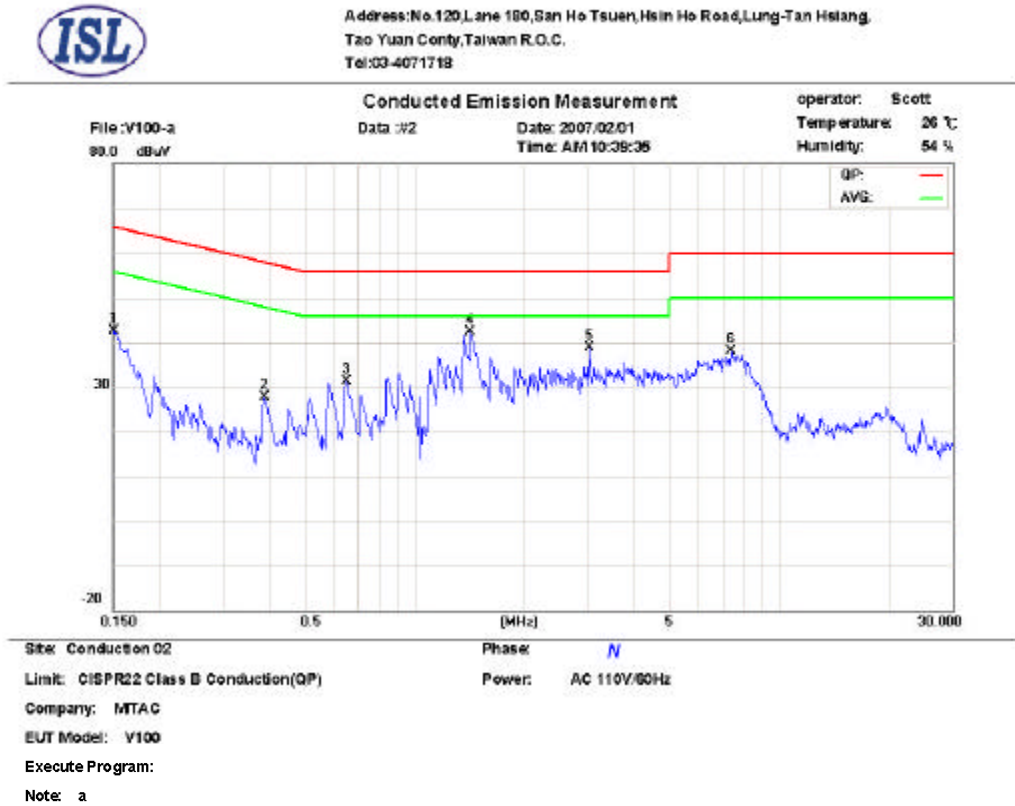
Power Line Conducted Emissions (Hot)



Frequency MHz	LISN Loss dB	Cable Loss dB	QP Correct dBuV	QP Limit dBuV	QP Margin dB	AVG Correct dBuV	AVG Limit dBuV	AVG Margin dB	Note
0.1500	0.1	0.02	43.20	66.0	-22.8	40.00	56.0	-16.0	
0.6474	0.2	0.07	34.30	56.0	-21.7	31.90	46.0	-14.1	
1.1657	0.2	0.07	38.00	56.0	-18.0	34.70	46.0	-11.3	
* 1.4257	0.2	0.08	42.00	56.0	-14.0	37.20	46.0	-8.80	
3.0253	0.3	0.12	26.20	56.0	-29.8	22.20	46.0	-23.8	
7.4465	0.46	0.18	37.80	60.0	-22.2	36.30	50.0	-13.7	

*:Maximum data x:Overlimit

Power Line Conducted Emissions (Neutral)



Frequency MHz	LISN Loss dB	Cable Loss dB	QP Correct dBuV	QP Limit dBuV	QP Margin dB	AVG Correct dBuV	AVG Limit dBuV	AVG Margin dB	Note
0.1500	0.1	0.02	42.60	66.0	-23.4	39.60	56.0	-16.4	
0.3893	0.19	0.09	28.70	58.0	-29.3	26.90	48.0	-21.1	
0.6543	0.2	0.07	24.00	56.0	-32.0	19.90	46.0	-26.1	
* 1.4257	0.2	0.08	44.10	56.0	-11.9	40.40	46.0	-5.60	
3.0253	0.2	0.12	26.10	56.0	-29.9	22.40	46.0	-23.6	
7.3680	0.31	0.18	35.40	60.0	-24.6	30.60	50.0	-19.4	

*Maximum data x:Over limit

* NOTE: Margin = Amplitude + Insertion Loss- Limit
A margin of -8dB means that the emission is 8dB below the limit

5.2 Bandwidth for DSSS [Section 15.247 (a)(2)]

5.2.1 Test Procedure

The Transmitter output of EUT was connected to the spectrum analyzer. The 6 dB bandwidth of the fundamental frequency was measured. The setting of spectrum analyzer is as follows

Equipment mode	Spectrum analyzer
Detector function	Peak mode
RBW	100KHz
VBW	100KHz

5.2.2 Test Setup



5.2.3 Test Data:

6dB Bandwidth

Temp. (deg. C): 25
 Humidity (%): 50
 Test Engr: Jerry Chiou

Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Pass/Fail
5745	16.62	0.5	Pass
5785	16.62	0.5	Pass
5825	16.62	0.5	Pass