

| EUT TEST CONDITION | | MEASUREMENT DETAIL | | |
|-----------------------------|----------------------------|-------------------------|--------------------------|--|
| CHANNEL | Channel 4 | FREQUENCY RANGE | 1 ~ 25GHz | |
| MODULATION TYPE | BPSK | INPUT POWER (SYSTEM) | 120Vac, 60 Hz | |
| TRANSFER RATE | 13.5Mbps | DETECTOR FUNCTION | Peak(PK) Average (AV) | |
| ENVIRONMENTAL CONDITIONS | 22deg. C, 68%RH, 955hPa | TESTED BY | Wen Yu | |

| | ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | | | |
|-----|---|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|--|--|--|
| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) | | | |
| 1 | 2390.00 | 56.77 PK | 74.00 | -17.23 | 2.02 H | 6 | 26.37 | 30.40 | | | |
| 2 | 2390.00 | 45.12 AV | 54.00 | -8.88 | 2.02 H | 6 | 14.72 | 30.40 | | | |
| 3 | *2437.00 | 100.58 PK | | | 1.93 H | 7 | 69.97 | 30.61 | | | |
| 4 | *2437.00 | 88.97 AV | | | 1.93 H | 7 | 58.36 | 30.61 | | | |
| 5 | 2483.50 | 58.53 PK | 74.00 | -15.47 | 1.81 H | 21 | 27.71 | 30.82 | | | |
| 6 | 2483.50 | 46.25 AV | 54.00 | -7.75 | 1.81 H | 21 | 15.43 | 30.82 | | | |
| 7 | 4874.00 | 50.38 PK | 74.00 | -23.62 | 1.36 H | 334 | 14.58 | 35.80 | | | |
| 8 | 4874.00 | 43.79 AV | 54.00 | -10.21 | 1.36 H | 334 | 7.99 | 35.80 | | | |
| 9 | 7311.00 | 53.61 PK | 74.00 | -20.39 | 1.42 H | 156 | 11.09 | 42.52 | | | |
| 10 | 7311.00 | 39.83 AV | 54.00 | -14.17 | 1.42 H | 156 | -2.69 | 42.52 | | | |

| | ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | | | |
|-----|---|-----------|------------|--------|---------|----------|--------|------------|--|--|--|
| | Freq. | Emission | Limit | Margin | Antenna | Table | Raw | Correction | | | |
| No. | (MHz) | Level | (dBuV/m) | (dB) | Height | Angle | Value | Factor | | | |
| | (1011 12) | (dBuV/m) | (ubu viii) | (ub) | (m) | (Degree) | (dBuV) | (dB/m) | | | |
| 1 | 2390.00 | 68.61 PK | 74.00 | -5.39 | 1.11 V | 166 | 38.21 | 30.40 | | | |
| 2 | 2390.00 | 52.90 AV | 54.00 | -1.10 | 1.11 V | 166 | 22.50 | 30.40 | | | |
| 3 | *2437.00 | 112.10 PK | | | 1.06 V | 167 | 81.49 | 30.61 | | | |
| 4 | *2437.00 | 99.30 AV | | | 1.06 V | 167 | 68.69 | 30.61 | | | |
| 5 | 2483.50 | 70.40 PK | 74.00 | -3.60 | 1.30 V | 196 | 39.58 | 30.82 | | | |
| 6 | 2483.50 | 53.00 AV | 54.00 | -1.00 | 1.30 V | 196 | 22.18 | 30.82 | | | |
| 7 | 4874.00 | 50.70 PK | 74.00 | -23.30 | 1.25 V | 28 | 14.90 | 35.80 | | | |
| 8 | 4874.00 | 47.30 AV | 54.00 | -6.70 | 1.25 V | 28 | 11.50 | 35.80 | | | |
| 9 | 7311.00 | 52.00 PK | 74.00 | -22.00 | 1.56 V | 273 | 9.48 | 42.52 | | | |
| 10 | 7311.00 | 39.10 AV | 54.00 | -14.90 | 1.56 V | 273 | -3.42 | 42.52 | | | |

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. The limit value is defined as per 15.247.
- 6. "* ": Fundamental frequency.



| EUT TEST CONDITION | | MEASUREMENT DETAIL | | |
|-----------------------------|----------------------------|-------------------------|--------------------------|--|
| CHANNEL | Channel 7 | FREQUENCY RANGE | 1 ~ 25GHz | |
| MODULATION TYPE | BPSK | INPUT POWER (SYSTEM) | 120Vac, 60 Hz | |
| TRANSFER RATE | 13.5Mbps | DETECTOR FUNCTION | Peak(PK) Average (AV) | |
| ENVIRONMENTAL CONDITIONS | 22deg. C, 68%RH, 955hPa | TESTED BY | Wen Yu | |

| | ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | | |
|-----|---|----------|------------|--------|---------|----------|--------|------------|--|--|
| | Freq. | Emission | Limit | Margin | Antenna | Table | Raw | Correction | | |
| No. | (MHz) | Level | (dBuV/m) | (dB) | Height | Angle | Value | Factor | | |
| | (10112) | (dBuV/m) | (ubuv/iii) | (UD) | (m) | (Degree) | (dBuV) | (dB/m) | | |
| 1 | *2452.00 | 95.64 PK | | | 1.82 H | 9 | 64.97 | 30.67 | | |
| 2 | *2452.00 | 83.56 AV | | | 1.82 H | 9 | 52.89 | 30.67 | | |
| 3 | 2483.50 | 56.68 PK | 74.00 | -17.32 | 1.85 H | 17 | 25.86 | 30.82 | | |
| 4 | 2483.50 | 45.06 AV | 54.00 | -8.94 | 1.85 H | 17 | 14.24 | 30.82 | | |
| 5 | 4904.00 | 50.28 PK | 74.00 | -23.72 | 1.42 H | 306 | 14.42 | 35.86 | | |
| 6 | 4904.00 | 43.35 AV | 54.00 | -10.65 | 1.42 H | 306 | 7.49 | 35.86 | | |
| 7 | 7356.00 | 53.56 PK | 74.00 | -20.44 | 1.45 H | 182 | 10.88 | 42.68 | | |
| 8 | 7356.00 | 39.61 AV | 54.00 | -14.39 | 1.45 H | 182 | -3.07 | 42.68 | | |

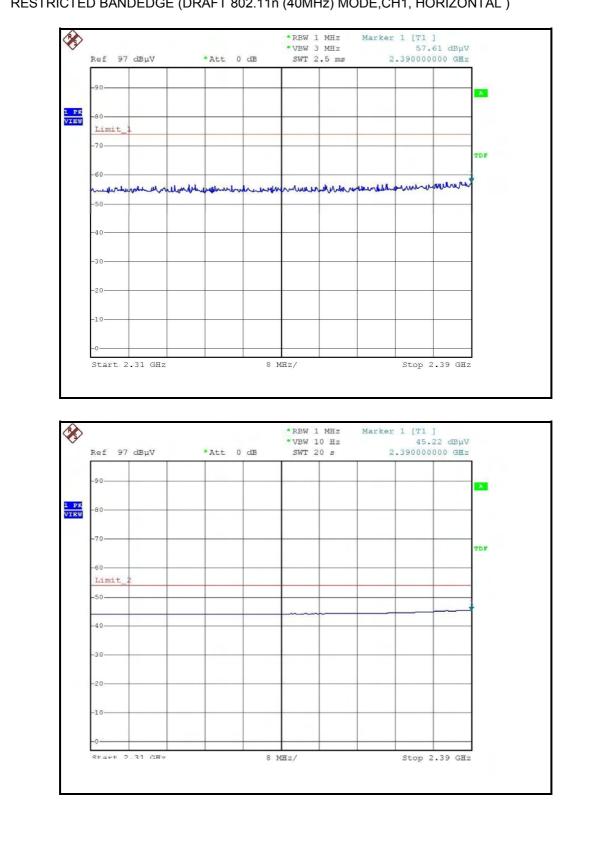
| | ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | | |
|-----|---|-----------|------------|--------|---------|----------|--------|------------|--|--|
| | Freq. | Emission | Limit | Margin | Antenna | Table | Raw | Correction | | |
| No. | (MHz) | Level | (dBuV/m) | (dB) | Height | Angle | Value | Factor | | |
| | (10112) | (dBuV/m) | (ubuv/iii) | (UD) | (m) | (Degree) | (dBuV) | (dB/m) | | |
| 1 | *2452.00 | 108.50 PK | | | 1.25 V | 190 | 77.83 | 30.67 | | |
| 2 | *2452.00 | 95.80 AV | | | 1.25 V | 190 | 65.13 | 30.67 | | |
| 3 | 2483.50 | 66.10 PK | 74.00 | -7.90 | 1.05 V | 190 | 35.28 | 30.82 | | |
| 4 | 2483.50 | 52.76 AV | 54.00 | -1.24 | 1.05 V | 190 | 21.94 | 30.82 | | |
| 5 | 4904.00 | 50.93 PK | 74.00 | -23.07 | 1.26 V | 35 | 15.07 | 35.86 | | |
| 6 | 4904.00 | 48.26 AV | 54.00 | -5.74 | 1.26 V | 35 | 12.40 | 35.86 | | |
| 7 | 7356.00 | 52.60 PK | 74.00 | -21.40 | 1.51 V | 283 | 9.92 | 42.68 | | |
| 8 | 7356.00 | 39.28 AV | 54.00 | -14.72 | 1.51 V | 283 | -3.40 | 42.68 | | |

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

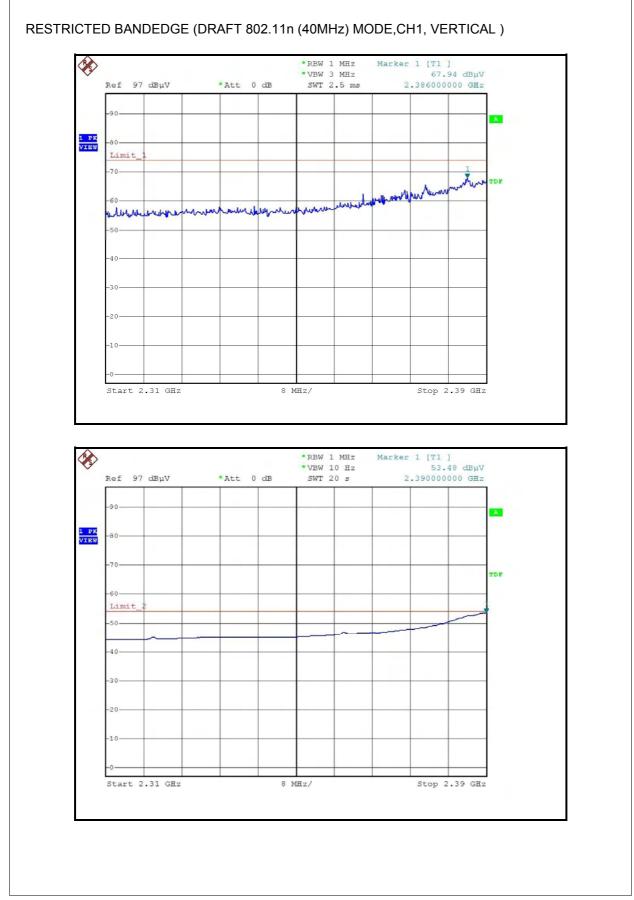
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.
- 5. The limit value is defined as per 15.247.
- 6. " * ": Fundamental frequency.



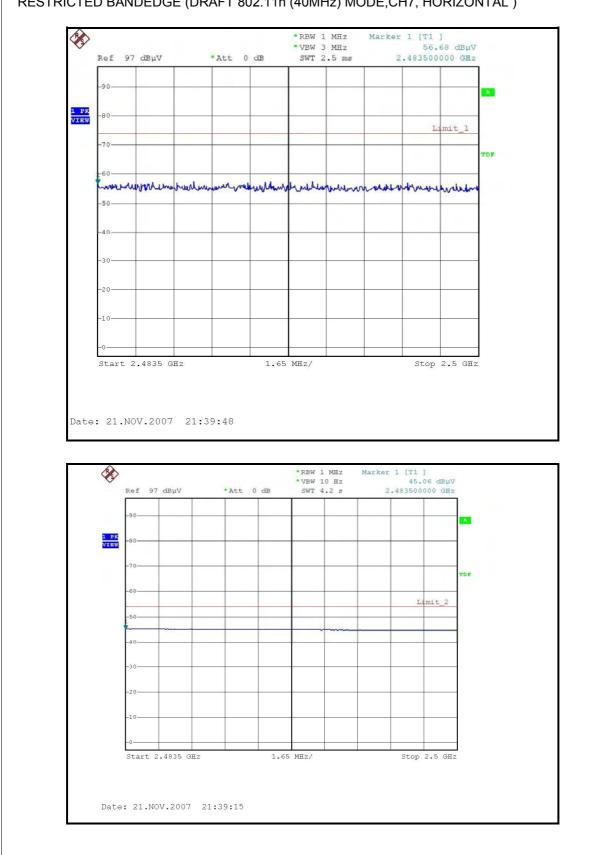


RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH1, HORIZONTAL)



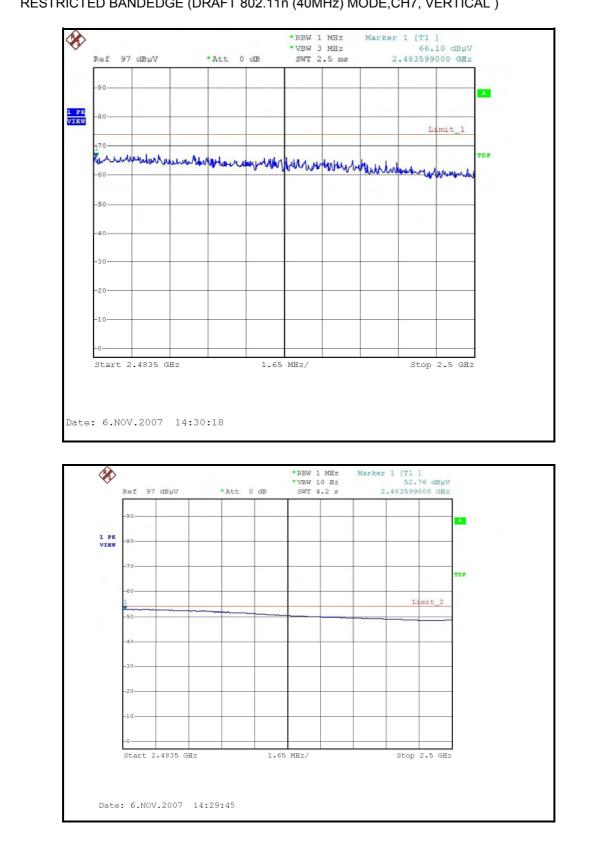






RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH7, HORIZONTAL)





RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH7, VERTICAL)



4.3 6DB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|------------|------------------|
| R&S SPECTRUM ANALYZER | FSP40 | 100037 | Nov. 08, 2007 |

NOTE:

1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



4.3.3 TEST PROCEDURE

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

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

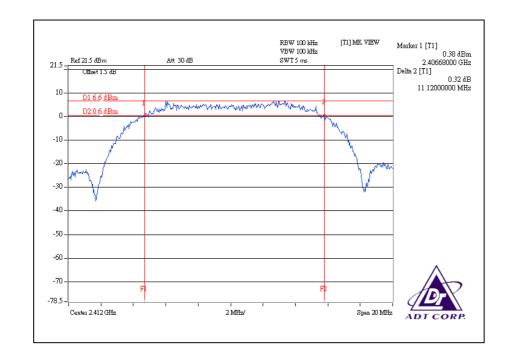


4.3.7 TEST RESULTS

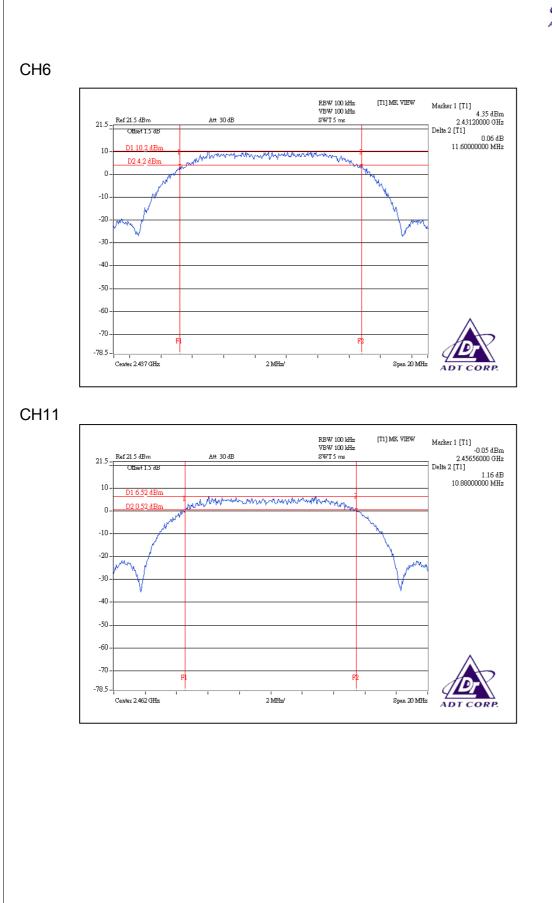
802.11b DSSS MODULATION:

| MODULATION TYPE | ССК | TRANSFER RATE | 11Mbps |
|-------------------------|---------------|-----------------------------|---------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | ENVIRONMENTAL CONDITIONS | 23deg.C, 62%RH, 955hPa |
| TESTED BY | Rex Huang | - | |

| CHANNEL | CHANNEL FREQUENCY (MHz) | 6dB BANDWIDTH (MHz) | MINIMUM LIMIT (MHz) | PASS / FAIL |
|---------|-------------------------------|------------------------|------------------------|-------------|
| 1 | 2412 | 11.12 | 0.5 | PASS |
| 6 | 2437 | 11.6 | 0.5 | PASS |
| 11 | 2462 | 10.88 | 0.5 | PASS |







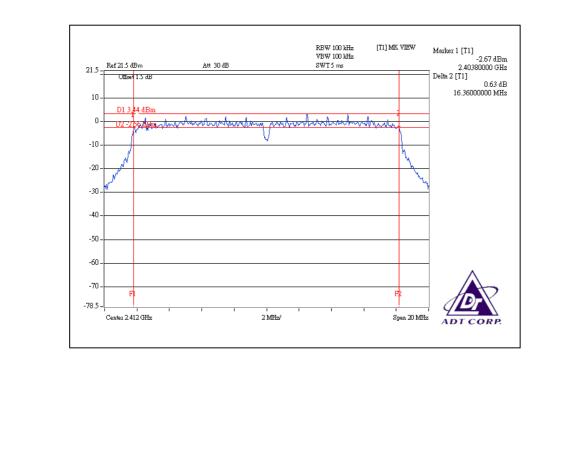


802.11g OFDM MODULATION:

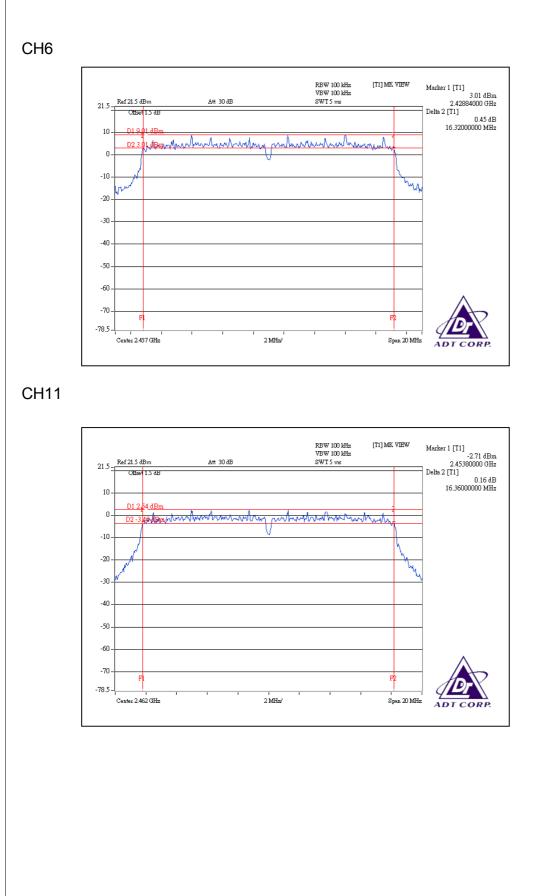
| MODULATION TYPE | BPSK | TRANSFER RATE | 6Mbps |
|-------------------------|---------------|---------------|---------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | | 26deg.C, 68%RH, 955hPa |
| TESTED BY | Phoenix Huang | | |

| CHANNEL | CHANNEL FREQUENCY (MHz) | | VIDTH (MHz) | MINIMUM LIMIT (MHz) | PASS / FAIL |
|---------|----------------------------|----------|-------------|------------------------|-------------|
| | | CHAIN(0) | CHAIN(1) |) | |
| 1 | 2412 | 16.36 | 16.4 | 0.5 | PASS |
| 6 | 2437 | 16.32 | 16.36 | 0.5 | PASS |
| 11 | 2462 | 16.36 | 13.84 | 0.5 | PASS |

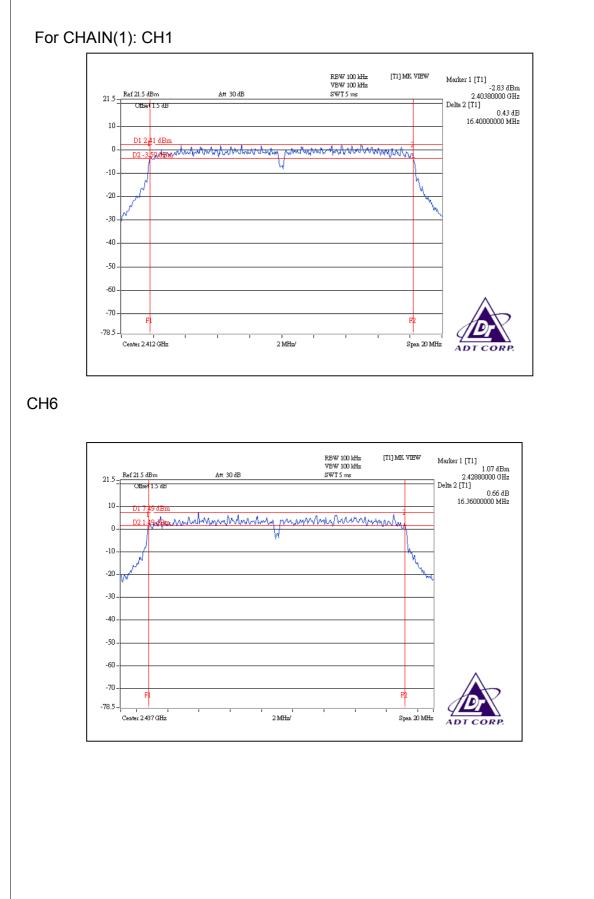
For Chain(0): CH1













CH11 RBW 100 kHz VBW 100 kHz SWT 5 ms [T1] MK VIEW Marker 1 [T1] -0.57 dBm 2.45568000 GHz Delta 2 [T1] 0.33 dB 13.84000000 MHz 21.5 ______ Ref 21.5 dBm Att 30 dB Ottset 1.5 dB 10 D1 5.53 dBm Mist <u>D2 -0 47 dBm</u> a٨ 0--10 -20 -30--40 -50 -60 --70 F F2 -78.5 Center 2.462 GHz 2 MHz/ Span 20 MHz ADT COR

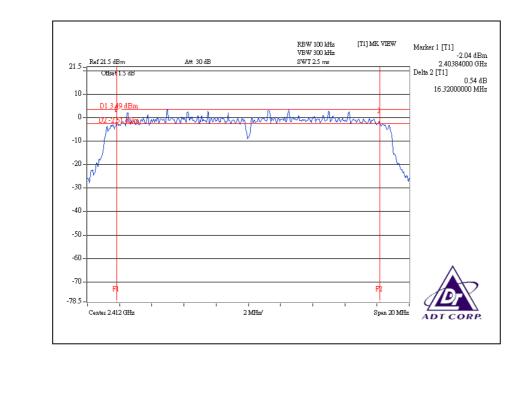


DRAFT 802.11n (20MHz) OFDM MODULATION:

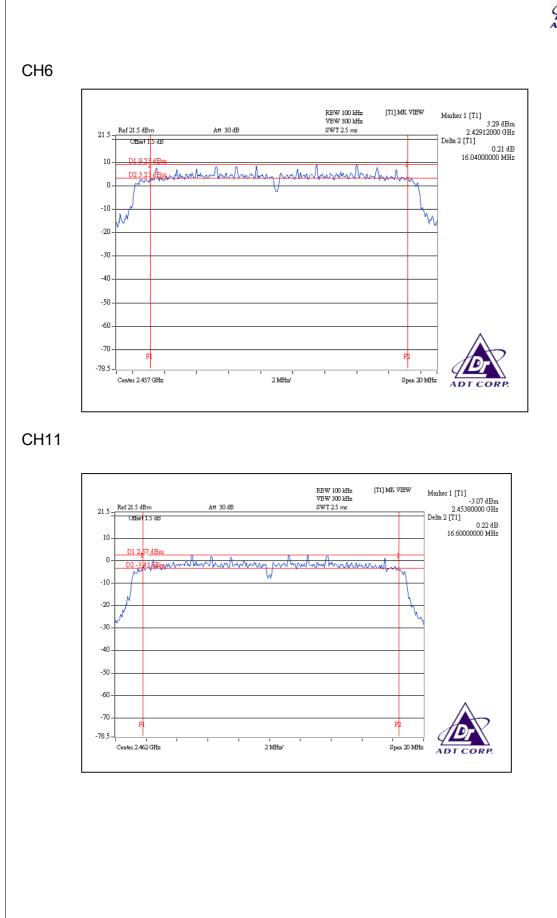
| MODULATION TYPE | BPSK | TRANSFER RATE | 6.5Mbps |
|-------------------------|---------------|-----------------------------|---------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | ENVIRONMENTAL CONDITIONS | 23deg.C, 54%RH, 955hPa |
| TESTED BY | Rex Huang | - | - |

| CHANNEL | CHANNEL FREQUENCY (MHz) | | /IDTH (MHz) | MINIMUM LIMIT (MHz) | PASS / FAIL |
|---------|----------------------------|----------|-------------|------------------------|-------------|
| | | CHAIN(0) | CHAIN(1) |) | |
| 1 | 2412 | 16.32 | 16.6 | 0.5 | PASS |
| 6 | 2437 | 16.04 | 16.4 | 0.5 | PASS |
| 11 | 2462 | 16.6 | 16.84 | 0.5 | PASS |

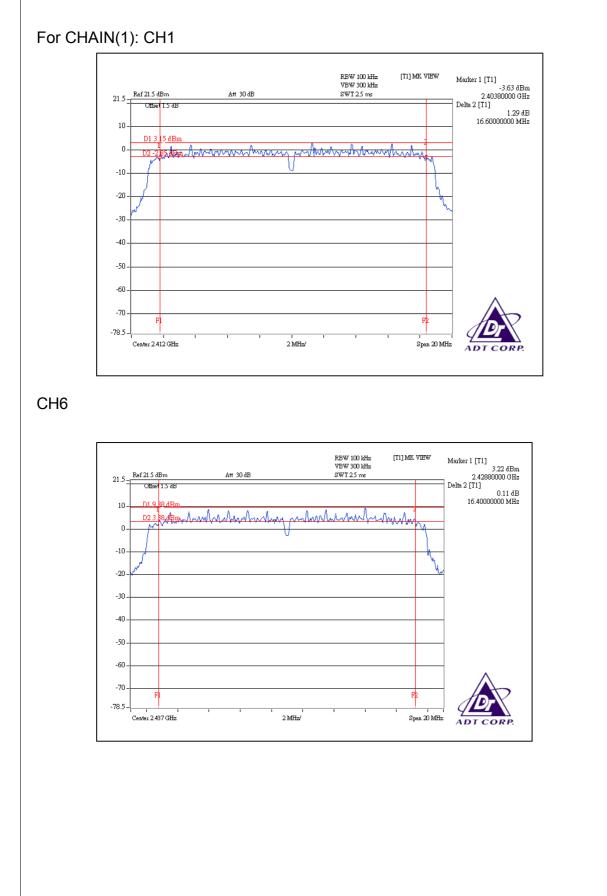
For Chain(0): CH1



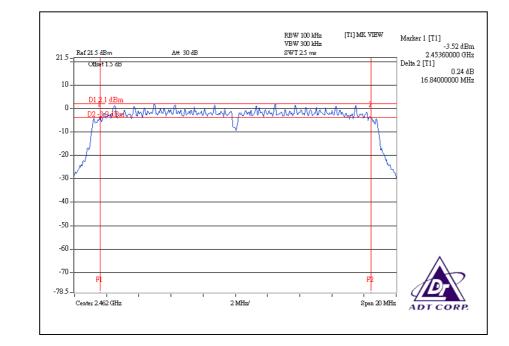












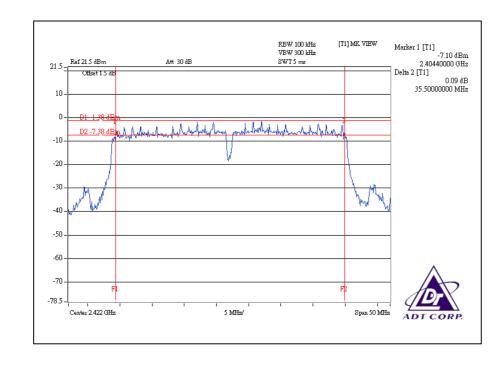


DRAFT 802.11n (40MHz) OFDM MODULATION:

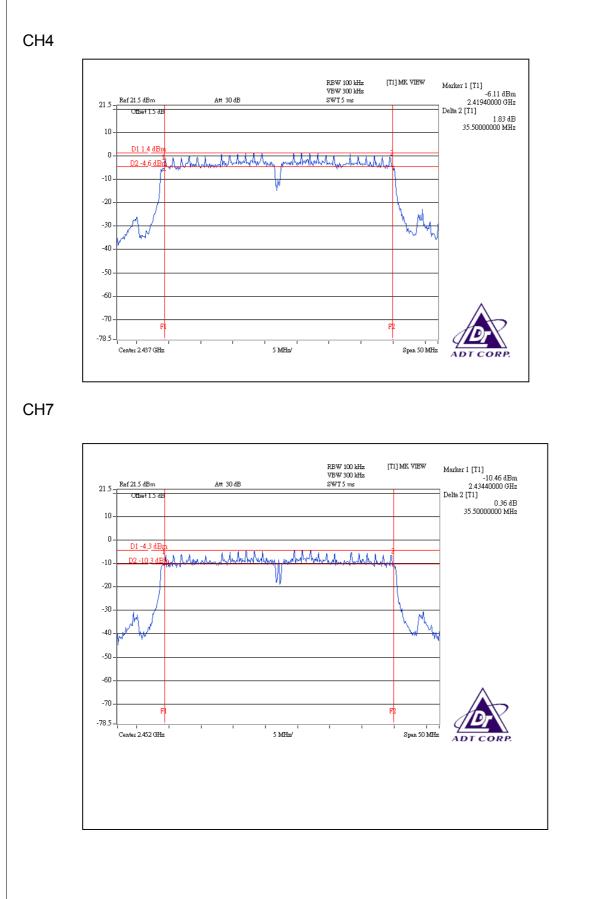
| MODULATION TYPE | BPSK | TRANSFER RATE | 13.5Mbps |
|-------------------------|---------------|---------------|---------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | | 23deg.C, 54%RH, 955hPa |
| TESTED BY | Rex Huang | - | |

| CHANNEL | CHANNEL FREQUENCY (MHz) | 6dB BANDW | /IDTH (MHz) | MINIMUM LIMIT (MHz) | PASS / FAIL | |
|---------|----------------------------|-----------|-------------|------------------------|-------------|--|
| | | CHAIN(0) | CHAIN(1) | , | | |
| 1 | 2422 | 35.5 | 35.7 | 0.5 | PASS | |
| 4 | 2437 | 35.5 | 35.7 | 0.5 | PASS | |
| 7 | 2452 | 35.5 | 35.6 | 0.5 | PASS | |

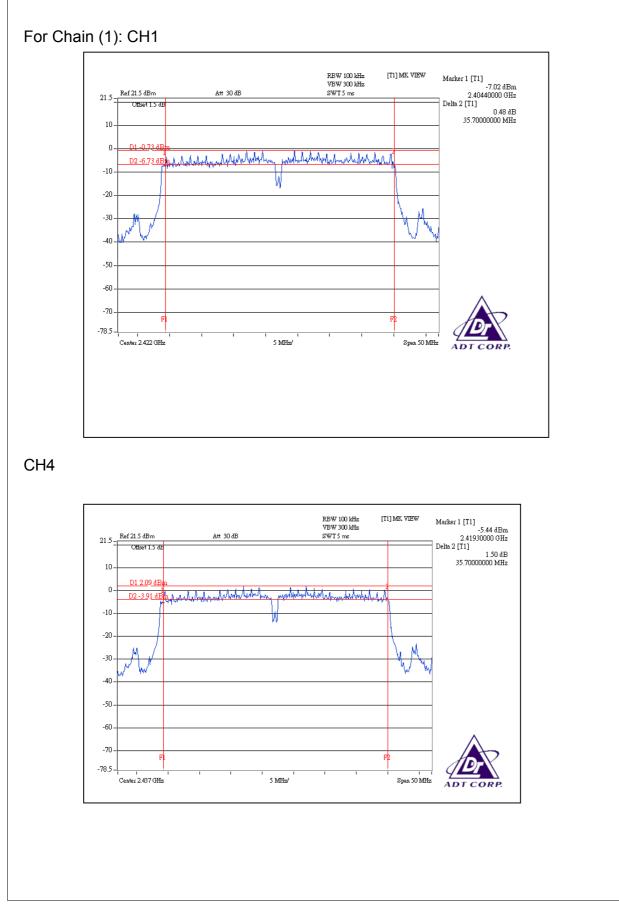
For Chain (0): CH1



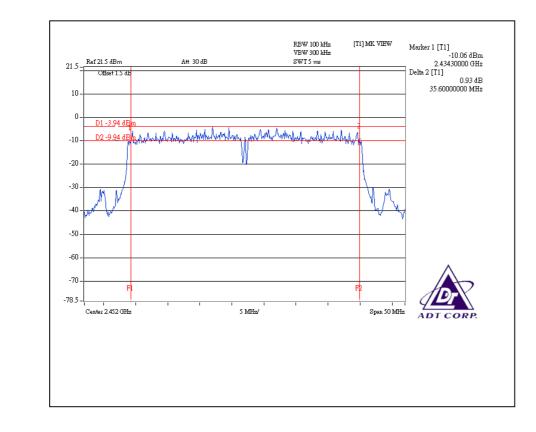














4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|------------|------------------|
| R&S SPECTRUM ANALYZER | FSP40 | 100037 | Aug. 12, 2008 |
| Agilent SIGNAL GENERATOR | E8257C | MY43320668 | Dec. 07, 2007 |
| TEKTRONIX OSCILLOSCOPE | TDS380 | B016335 | Aug. 15, 2008 |
| NARDA DETECTOR | 4503A | FSCM99899 | NA |

NOTE:

The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



4.4.3 TEST PROCEDURES

- 1. A detector was used on the output port of the EUT. An oscilloscope was used to read the response of the detector.
- 2. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
- 3. Adjusted the power to have the same reading on oscilloscope. Record the power level.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6



4.4.7 TEST RESULTS

802.11b DSSS MODULATION:

| MODULATION TYPE | ССК | TRANSFER RATE | 11Mbps |
|-------------------------|---------------|-----------------------------|---------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | ENVIRONMENTAL CONDITIONS | 23deg.C, 62%RH, 955hPa |
| TESTED BY | Rex Huang | | |

| CHANNEL | CHANNEL FREQUENCY (MHz) | PEAK POWER OUTPUT (mW) | PEAK POWER OUTPUT (dBm) | PEAK POWER LIMIT (dBm) | PASS / FAIL |
|---------|-------------------------------|---------------------------|----------------------------|---------------------------|-------------|
| 1 | 2412 | 100.00 | 20.00 | 30 | PASS |
| 6 | 2437 | 186.21 | 22.70 | 30 | PASS |
| 11 | 2462 | 89.13 | 19.50 | 30 | PASS |

802.11g OFDM MODULATION:

| MODULATION TYPE | BPSK | TRANSFER RATE | 6Mbps |
|-------------------------|---------------|-----------------------------|---------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | ENVIRONMENTAL CONDITIONS | 23deg.C, 62%RH, 955hPa |
| TESTED BY | Rex Huang | | |

| CHANNEL CHANNEL FREQUENCY | | | OUTPUT (mW) | PEAK POWER OUTPUT (dBm) | | TOTAL PEAK | TOTAL PEAK | PEAK POWER | PASS / |
|------------------------------|-------|----------|-------------|----------------------------|----------|---------------|----------------|----------------|--------|
| (MHz) | (MHz) | CHAIN(0) | CHAIN(1) | CHAIN(0) | CHAIN(1) | POWER (mW) | POWER (dBm) | LIMIT (dBm) | FAIL |
| 1 | 2412 | 93.33 | 89.13 | 19.70 | 19.50 | 182.45 | 22.6 | 30 | PASS |
| 6 | 2437 | 223.87 | 204.17 | 23.50 | 23.10 | 428.05 | 26.3 | 30 | PASS |
| 11 | 2462 | 85.70 | 100.00 | 19.33 | 20.00 | 185.70 | 22.7 | 30 | PASS |



DRAFT 802.11n (20MHz) OFDM MODULATION:

| MODULATION TYPE | BPSK | TRANSFER RATE | 6.5Mbps |
|-------------------------|---------------|---------------|---------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | | 23deg.C, 54%RH, 955hPa |
| TESTED BY | Rex Huang | | |

| CHANNEL | CHANNEL PEAK POWER OUTPUT (mW) (dBm) | | · · · | | TOTAL PEAK | TOTAL PEAK | PEAK POWER | PASS / | |
|---------|--------------------------------------|----------|----------|----------|---------------|---------------|----------------|----------------|------|
| (MHz) | (MHz) | CHAIN(0) | CHAIN(1) | CHAIN(0) | CHAIN(1) | POWER (mW) | POWER (dBm) | LIMIT (dBm) | FAIL |
| 1 | 2412 | 89.13 | 83.18 | 19.50 | 19.20 | 172.30 | 22.4 | 30 | PASS |
| 6 | 2437 | 213.80 | 218.78 | 23.30 | 23.40 | 432.57 | 26.4 | 30 | PASS |
| 11 | 2462 | 70.79 | 69.18 | 18.50 | 18.40 | 139.98 | 21.5 | 30 | PASS |

DRAFT 802.11n (40MHz) OFDM MODULATION:

| MODULATION TYPE | BPSK | TRANSFER RATE | 13.5Mbps |
|-------------------------|---------------|-----------------------------|---------------------------|
| INPUT POWER (SYSTEM) | 120V/ac 60 Hz | ENVIRONMENTAL CONDITIONS | 23deg.C, 54%RH, 955hPa |
| TESTED BY | Rex Huang | | |

| CHANNEL | CHANNEL FREQUENCY | PEAK POWER OUTPUT (mW) | | (dBm) | | TOTAL PEAK | TOTAL PEAK | PEAK POWER | PASS / |
|---------|----------------------|------------------------|----------|----------|---------------|----------------|----------------|---------------|--------|
| (MHz) | CHAIN(0) | CHAIN(1) | CHAIN(0) | CHAIN(1) | POWER (mW) | POWER (dBm) | LIMIT (dBm) | FAIL | |
| 1 | 2422 | 56.23 | 56.23 | 17.50 | 17.50 | 112.47 | 20.5 | 30 | PASS |
| 4 | 2437 | 89.13 | 93.33 | 19.50 | 19.70 | 182.45 | 22.6 | 30 | PASS |
| 7 | 2452 | 23.71 | 24.43 | 13.75 | 13.88 | 48.15 | 16.8 | 30 | PASS |



4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|------------|------------------|
| R&S SPECTRUM ANALYZER | FSP40 | 100037 | Sep. 06, 2008 |

NOTE:

1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



4.5.3 TEST PROCEDURE

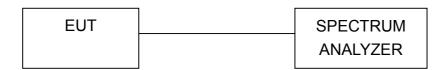
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6

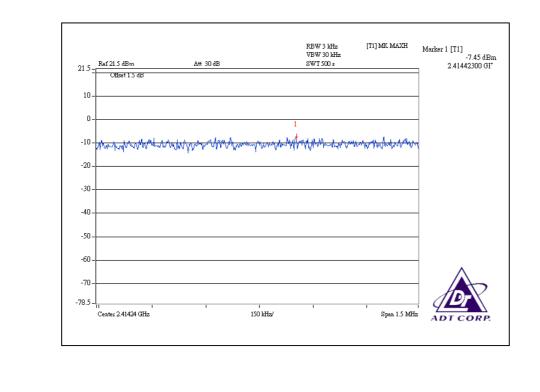


4.5.7 TEST RESULTS

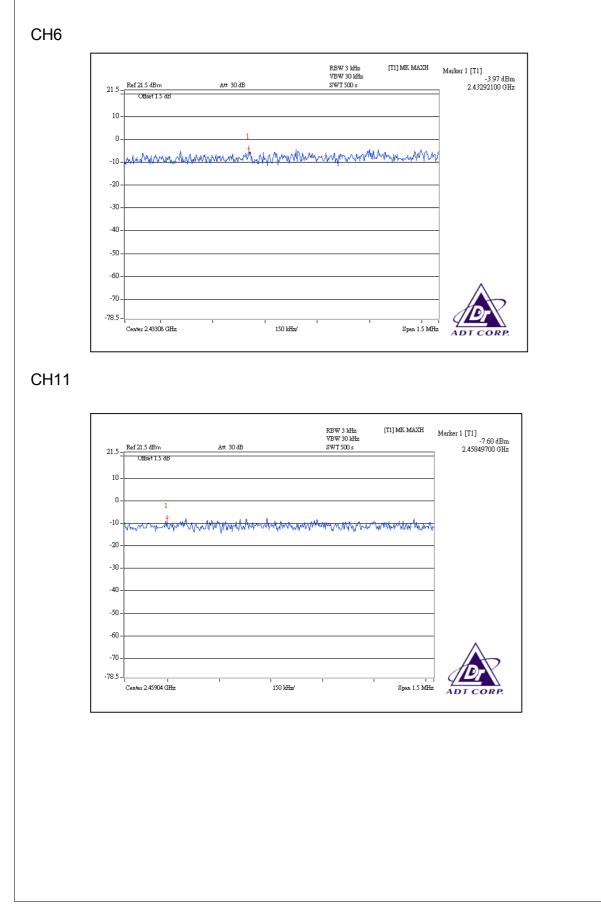
802.11b DSSS MODULATION:

| MODULATION TYPE | ССК | TRANSFER RATE | 11Mbps |
|-------------------------|---------------|---------------|---------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | | 23deg.C, 62%RH, 955hPa |
| TESTED BY | Rex Huang | | |

| CHANNEL | CHANNEL FREQUENCY (MHz) | RF POWER LEVEL IN 3kHz BW (dBm) | MAXIMUM LIMIT (dBm) | PASS / FAIL |
|---------|--------------------------------|------------------------------------|------------------------|-------------|
| 1 | 2412 | -7.45 | 8 | PASS |
| 6 | 2437 | -3.97 | 8 | PASS |
| 11 | 2462 | -7.60 | 8 | PASS |







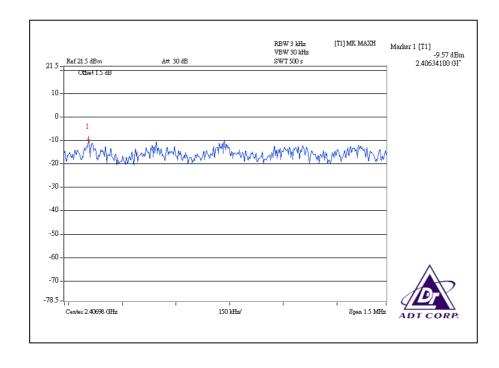


802.11g OFDM MODULATION:

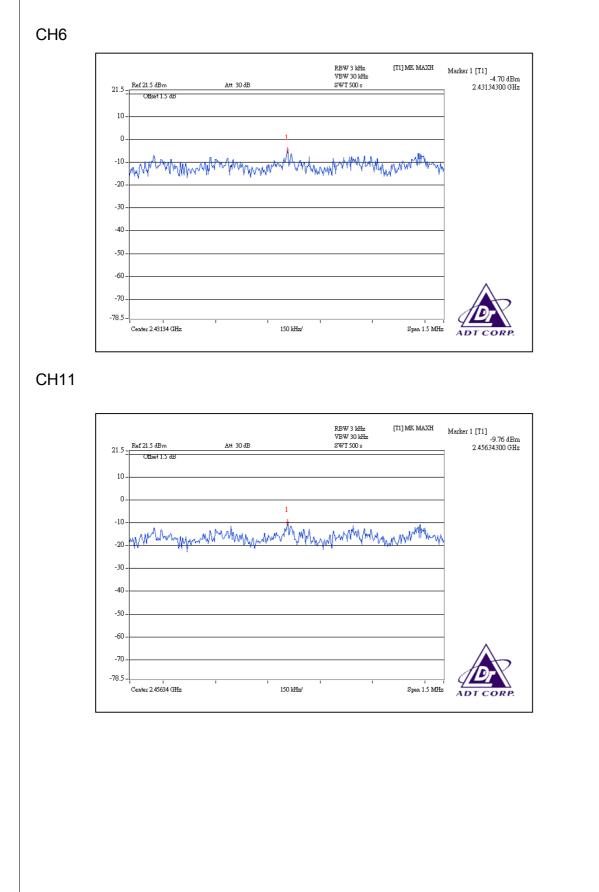
| MODULATION TYPE | BPSK | TRANSFER RATE | 6Mbps |
|-------------------------|---------------|---------------|---------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | | 23deg.C, 54%RH, 955hPa |
| TESTED BY | Rex Huang | | |

| CHANNEL | CHANNEL FREQUENCY | | EVEL IN 3kHz dBm) | MAXIMUM | |
|---------|----------------------|----------|----------------------|-------------|------|
| | (MHz) | CHAIN(0) | CHAIN(1) | LIMIT (dBm) | |
| 1 | 2412 | -9.57 | -9.46 | 8 | PASS |
| 6 | 2437 | -4.70 | -5.72 | 8 | PASS |
| 11 | 2462 | -9.76 | -10.68 | 8 | PASS |

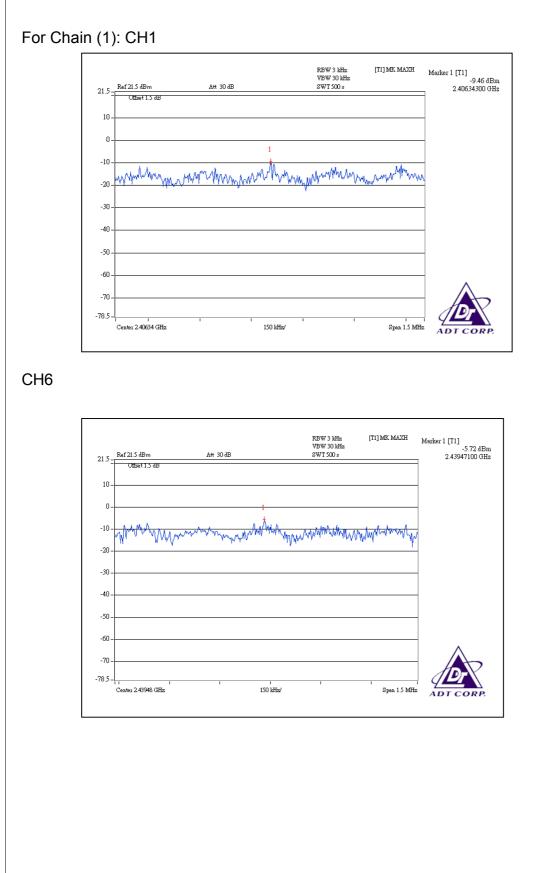
For Chain(0): CH1



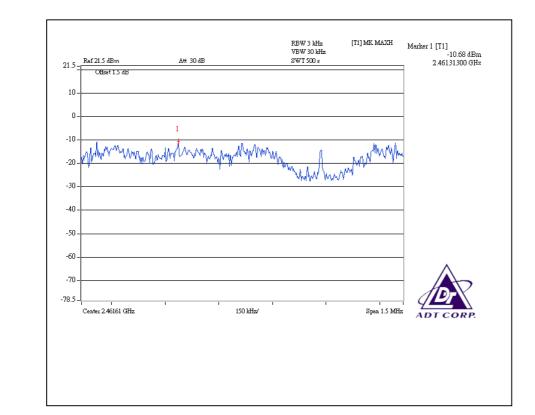












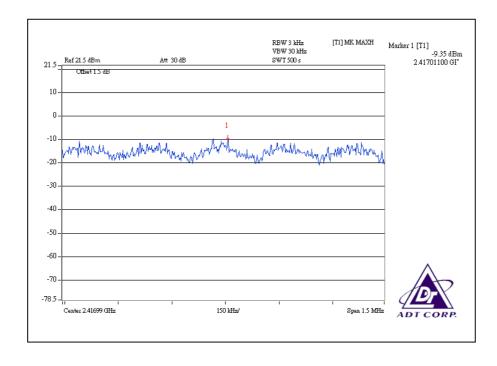


DRAFT 802.11n (20MHz) OFDM MODULATION:

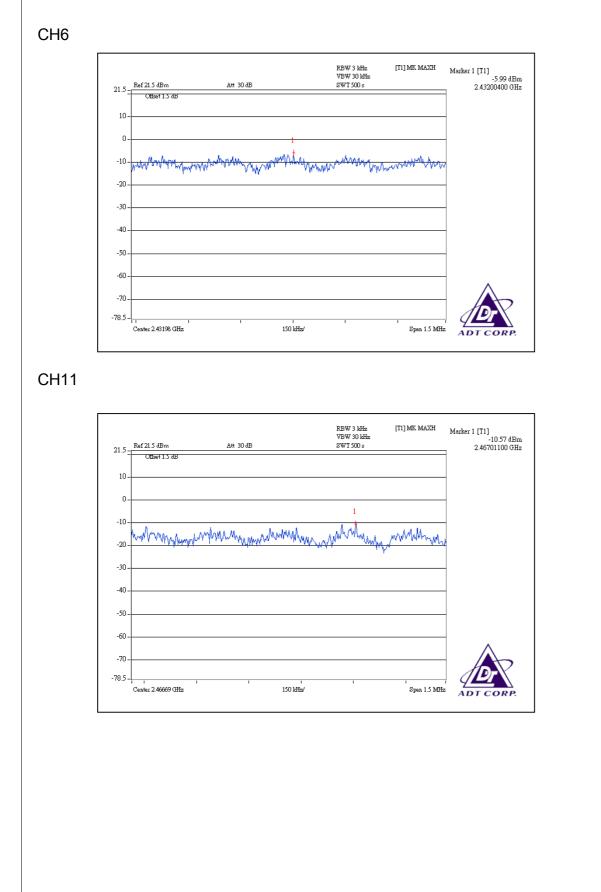
| MODULATION TYPE | BPSK | TRANSFER RATE | 6.5Mbps |
|-------------------------|---------------|---------------|----------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | | 23 deg.C, 54%RH, 955hPa |
| TESTED BY | Rex Huang | | |

| CHANNEL | CHANNEL FREQUENCY | | EVEL IN 3kHz dBm) | MAXIMUM LIMIT (dBm) PASS / FAIL | |
|---------|----------------------|----------|----------------------|------------------------------------|------|
| | (MHz) | CHAIN(0) | CHAIN(1) | LIMIT (dBm) | |
| 1 | 2412 | -9.35 | -10.29 | 8 | PASS |
| 6 | 2437 | -5.99 | -4.48 | 8 | PASS |
| 11 | 2462 | -10.57 | -10.67 | 8 | PASS |

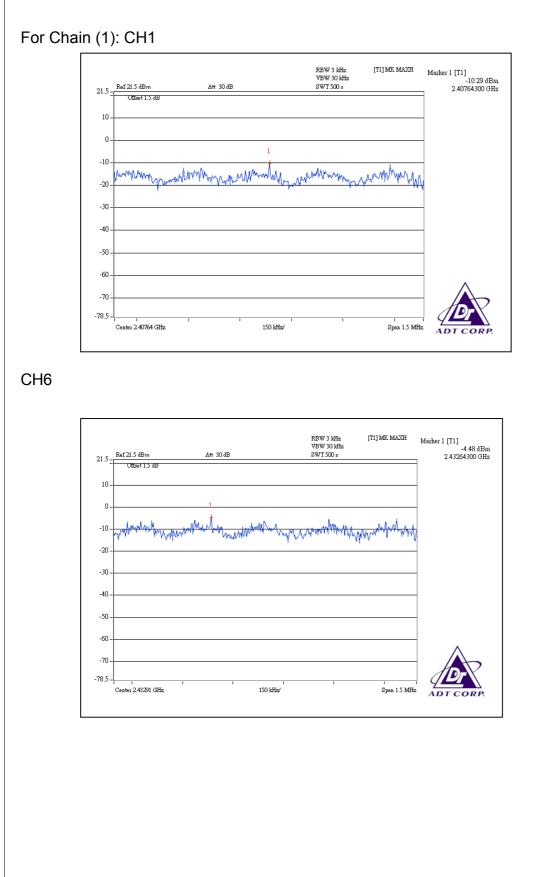
For Chain(0): CH1













CH11 RBW 3 kHz VBW 30 kHz SWT 500 s [T1] MK MAXH Marker 1 [T1] -10.67 dBm 2.45764000 GHz Ref 21.5 dBm Att 30 dB 21.5 Ottset 1.5 dB 10 0. 1 -10 when the man when the Monthing was a sound was an and the sound and the sou -20 -30 -40 -50 --60 --70 -78.5 Center 2.45791 GHz 150 kHz/ Spen 1.5 MHz AD

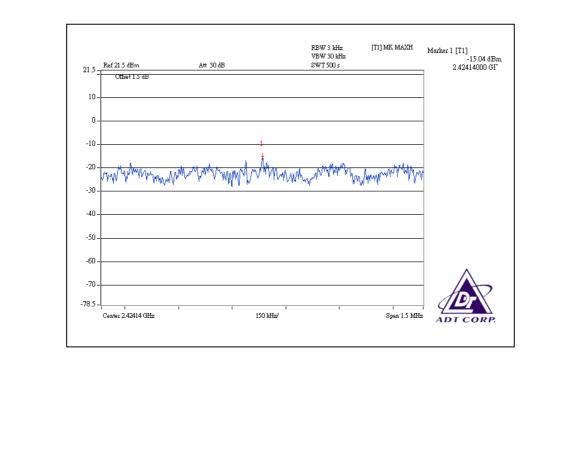


DRAFT 802.11n (40MHz) OFDM MODULATION:

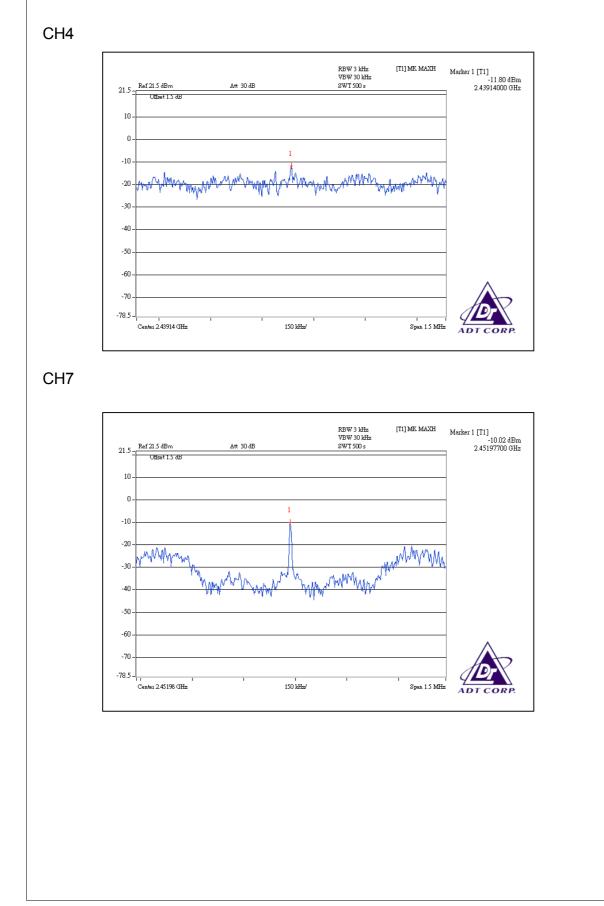
| MODULATION TYPE | BPSK | TRANSFER RATE | 13.5Mbps |
|-------------------------|---------------|-----------------------------|---------------------------|
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | ENVIRONMENTAL CONDITIONS | 23deg.C, 54%RH, 955hPa |
| TESTED BY | Rex Huang | - | |

| CHANNEL | CHANNEL FREQUENCY (MHz) | RF POWER LEVEL IN 3kHz BW (dBm) | | | PASS / FAIL |
|---------|--------------------------------|------------------------------------|----------|-------------|-------------|
| | | CHAIN(0) | CHAIN(1) | LIMIT (dBm) | |
| 1 | 2422 | -15.04 | -15.05 | 8 | PASS |
| 4 | 2437 | -11.80 | -12.87 | 8 | PASS |
| 7 | 2452 | -10.02 | -9.83 | 8 | PASS |

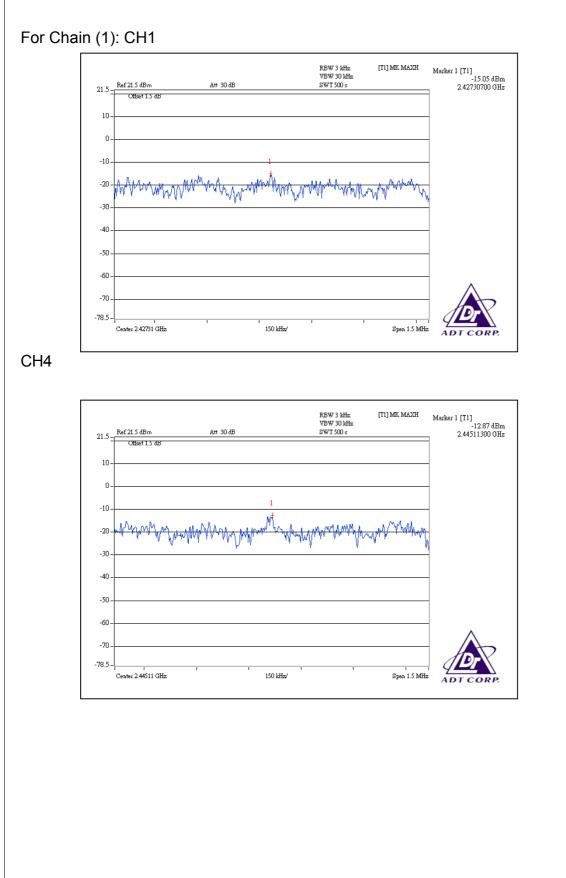
For Chain (0): CH1





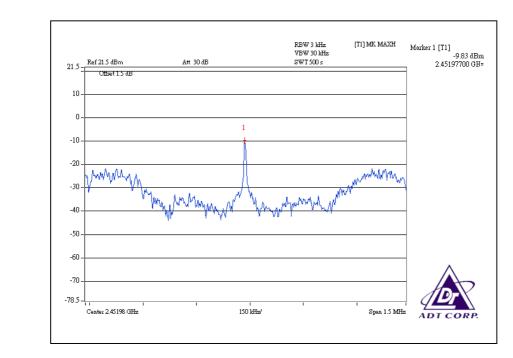








CH7





4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100KHz Resolution Bandwidth).

4.6.2 TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|------------|------------------|
| R&S SPECTRUM ANALYZER | FSP40 | 100037 | Sep. 06, 2008 |

NOTE:

1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.6.3 TEST PROCEDURE

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

The spectrum plots (RBW = VBW = 100kHz) are attached on the following pages.



4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6

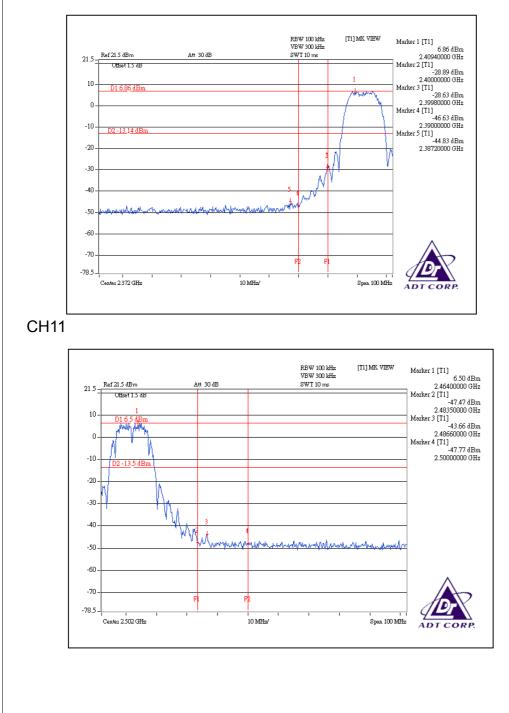
4.6.6 TEST RESULTS

The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

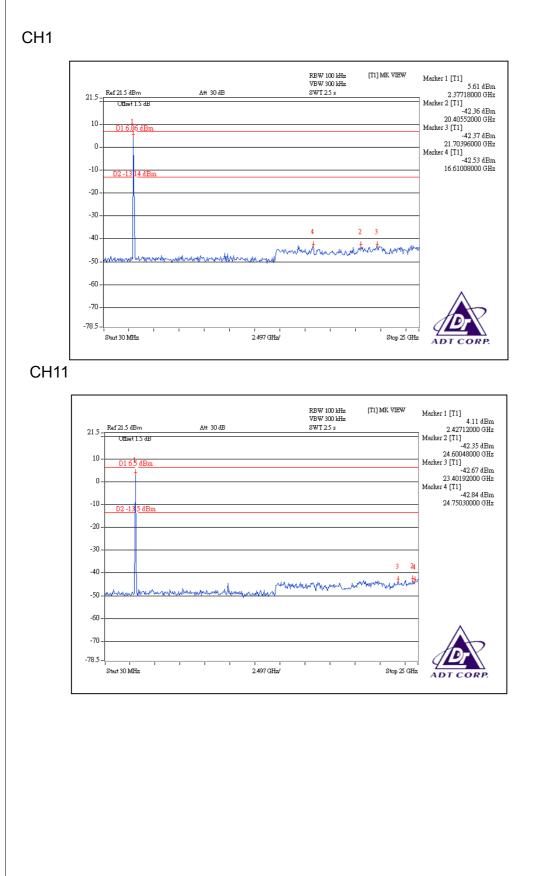


802.11b DSSS MODULATION:

CH1

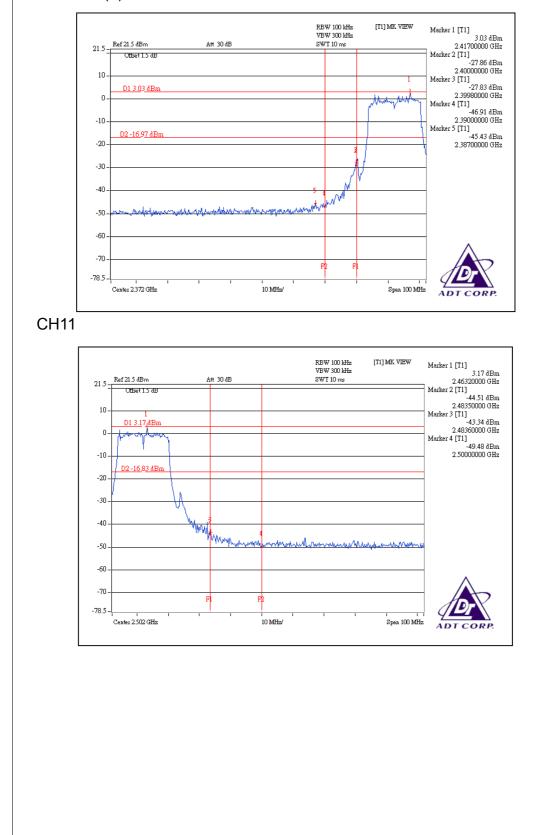




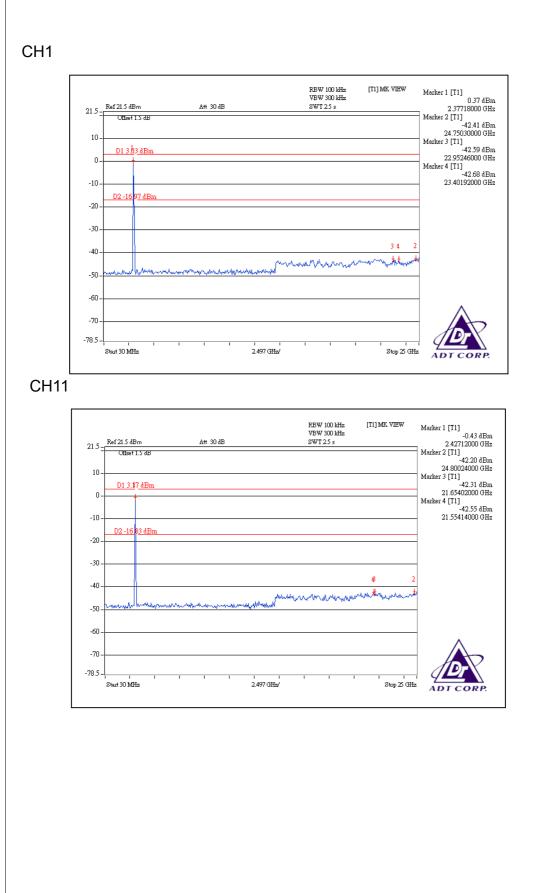




802.11g OFDM MODULATION: For Chain (0):CH1

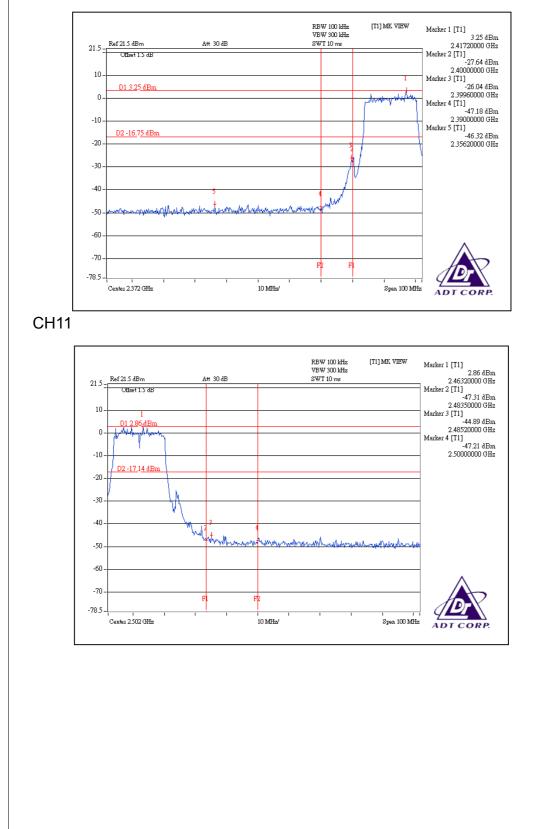




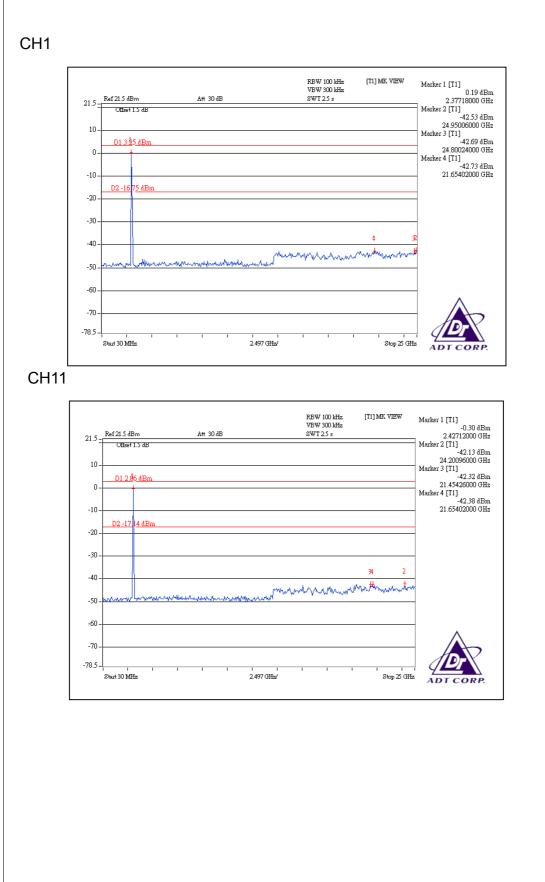




For Chain (1):CH1

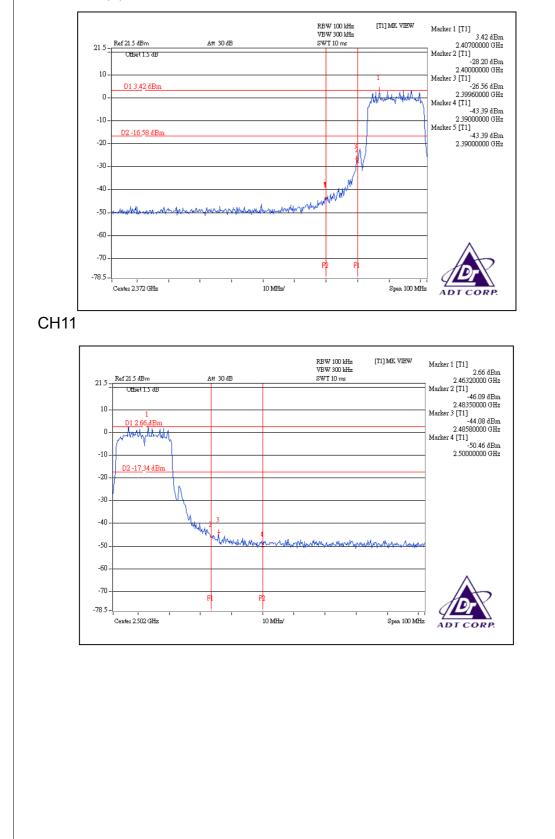




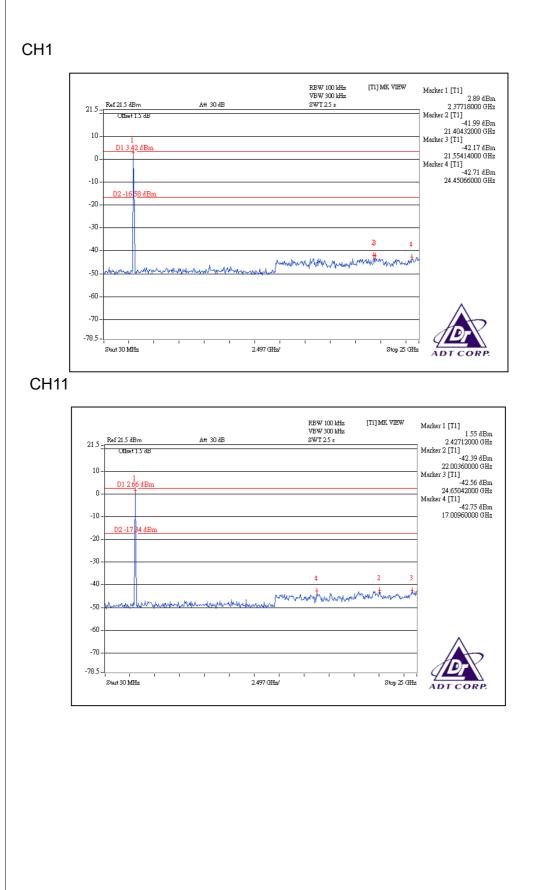




DRAFT 802.11n (20MHz) OFDM MODULATION: For Chain (0):CH1









Marker 1 [T1] 2.86 dBm 2.41340000 GHz Marker 2 [T1] -2.84 24 dBm 2.40000000 GHz Marker 3 [T1] -27 22 dBm 2.39960000 GHz Marker 4 [T1] -47 51 dBm 2.3900000 GHz Marker 5 [T1] -46 11 dBm 2.38420000 GHz

21.5 - Ref 21.5 dBm Att 30 dB Officet 1.5 dB 10 - D1 2.86 dBm 0 -

D2 -17.14 dBm

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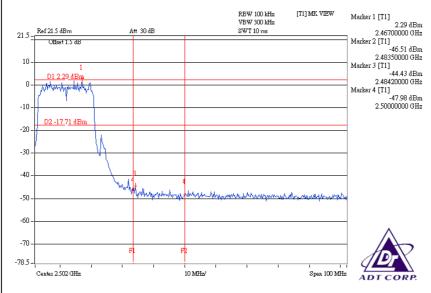
For Chain (1):CH1

-10

-20 -30

-50

-60--70--78.5-Center 2372 GHz



RBW 100 kHz VBW 300 kHz SWT 10 ms

MM

F

Span 100 MHz

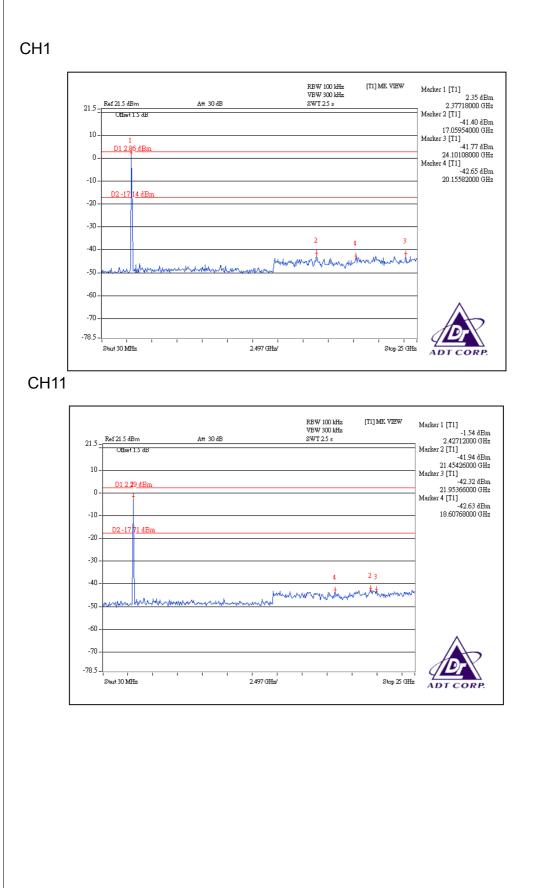
the.

. 10 MHz/ F

[T1] MK VIEW

MIM

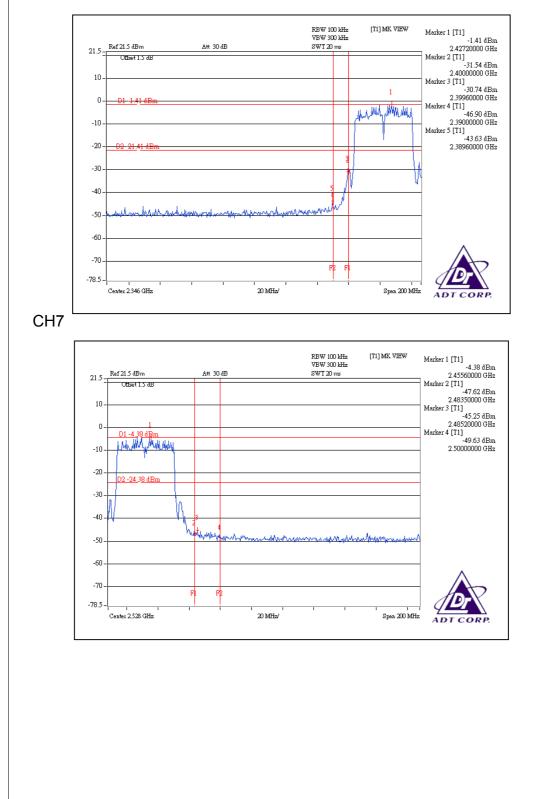




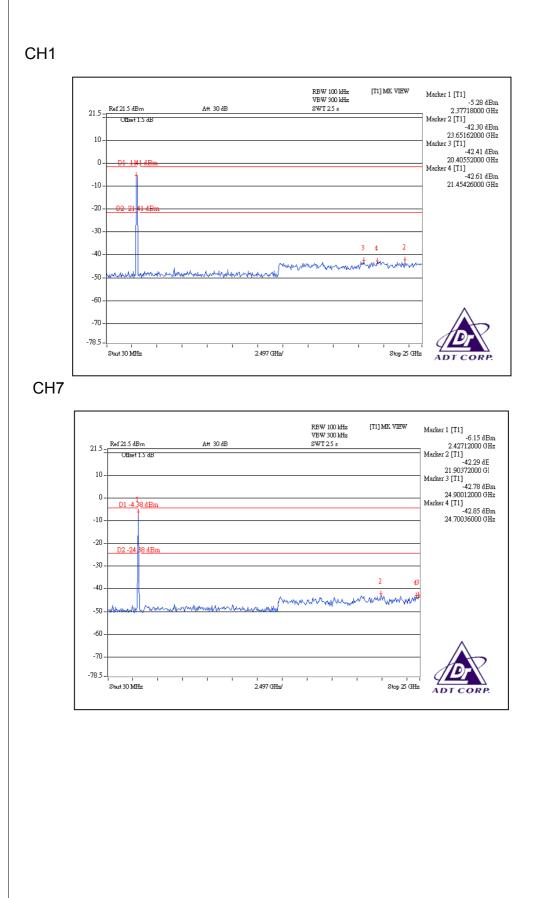


DRAFT 802.11n (40MHz) OFDM MODULATION:

For Chain (0):CH1



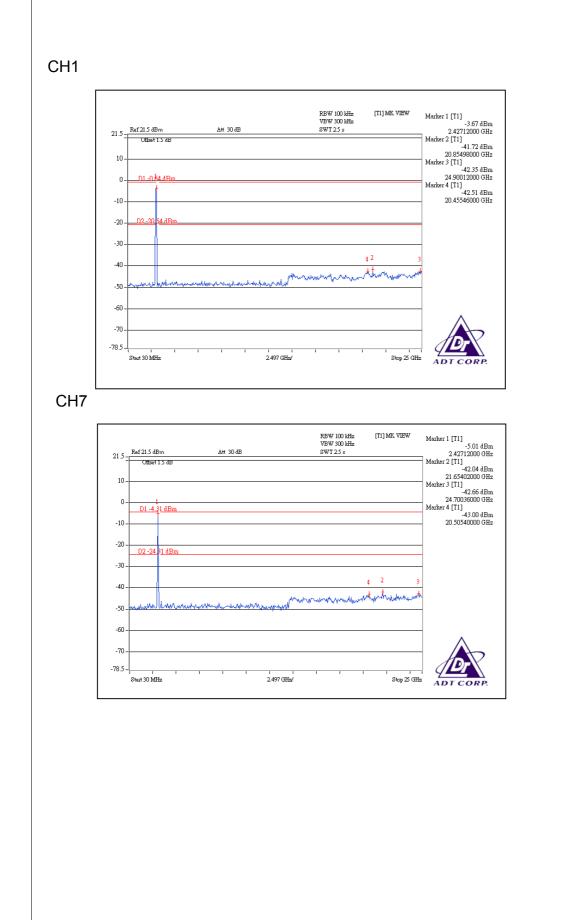






For Chain (1):CH1 Marker 1 [T1] -0.64 dBm 2.41720000 GHz Marker 2 [T1] -28 90 dBm 2.40000000 GHz Verber 2 [T1] RBW 100 kHz VBW 300 kHz SWT 20 ms [T1] MK VIEW Ref 21.5 dBm Att 30 dB 21.5 -Ottset 1.5 dB 2.4000000 GHz Marker 3 [T1] -28.10 dBm 2.39960000 GHz 47.46 dBm 2.3900000 GHz Marker 5 [T1] -44.01 dBm 2.38960000 GHz 10 1 D1-0.64.dBm 0. Jun My AMALIAN -10 -20 -D2 -20 64 dBr -30 -40 manon and shall which mound -50 -60 -70 FŻ R -78.5 Center 2.346 GHz 20 MHz/ Span 200 MHz AD CH7 RBW 100 kHz VBW 300 kHz SWT 20 ms Marker 1 [T1] -4.31 dBm 2.45680000 GHz [T1] MK VIEW Ref 21.5 dBm Att 30 dB 21.5 2.45680000 GHz Marker 2 [T1] -45.66 dBm 2.48350000 GHz Marker 3 [T1] -45.44 dBm 2.48440000 GHz Marker 4 [T1] -47.54 dBm 2.50000000 GHz Offset 1.5 dB 10 0 D1-4.31 dBm -10 -20 D2 -24.31 dBm -30 -40 -50 Marth Allan -60 -70 F F -78.5 Center 2.528 GHz 20 MHz/ Span 200 MHz AD







4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 ANTENNA CONNECTED CONSTRUCTION

| No. | Antenna Type | Antenna Connector | Gain(dBi) |
|-----|--------------|-------------------|-----------|
| 1 | PIFA | NA | 1.5 |
| 2 | PIFA | NA | 1.5 |

There are two antennas provided to this EUT, please refer to the following table:



5. INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

| USA | FCC, UL, A2LA |
|-------------|----------------------|
| Germany | TUV Rheinland |
| Japan | VCCI |
| Norway | NEMKO |
| Canada | INDUSTRY CANADA, CSA |
| R.O.C. | TAF, BSMI, NCC |
| Netherlands | Telefication |
| Singapore | GOST-ASIA(MOU) |
| Russia | CERTIS(MOU) |

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

<u>www.adt.com.tw/index.5/phtml</u>. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:

Tel: 886-2-26052180 Fax: 886-2-26052943 Hsin Chu EMC/RF Lab: Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232 Fax: 886-3-3185050

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also



6. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.