4.6 CONDUCTED OUT-BAND EMISSION MEASUREMENT

4.6.1 LIMITS OF CONDUCTED OUT-BAND EMISSION 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 DATE	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100037	Aug. 09, 2008	Aug. 08, 2009

NOTE:

1.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 RBW of spectrum analyzer to 100kHz and VBW of spectrum analyzer to 300kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (RBW = 100kHz, VBW = 300kHz) are attached on the following pages.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

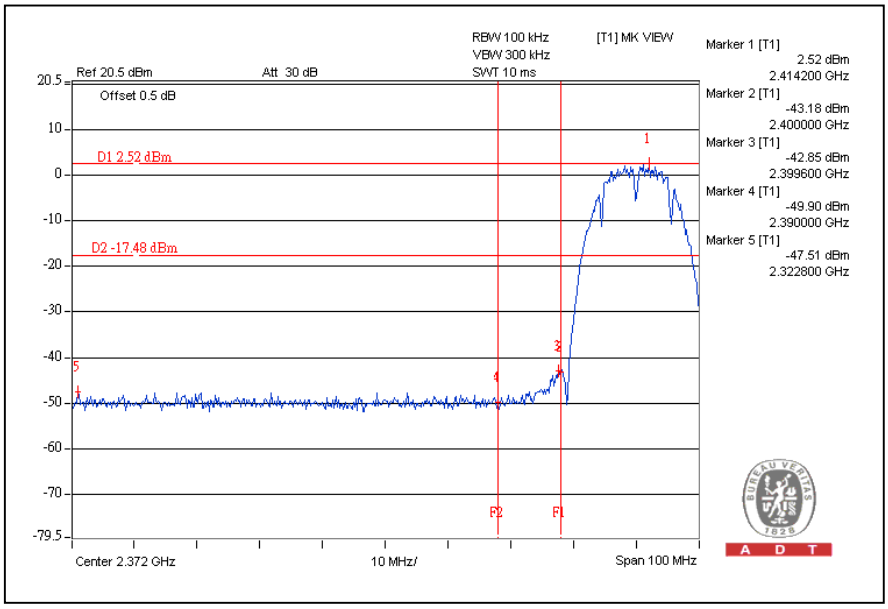
Same as Item 4.3.6

4.6.6 TEST RESULTS- ANTENNA 1

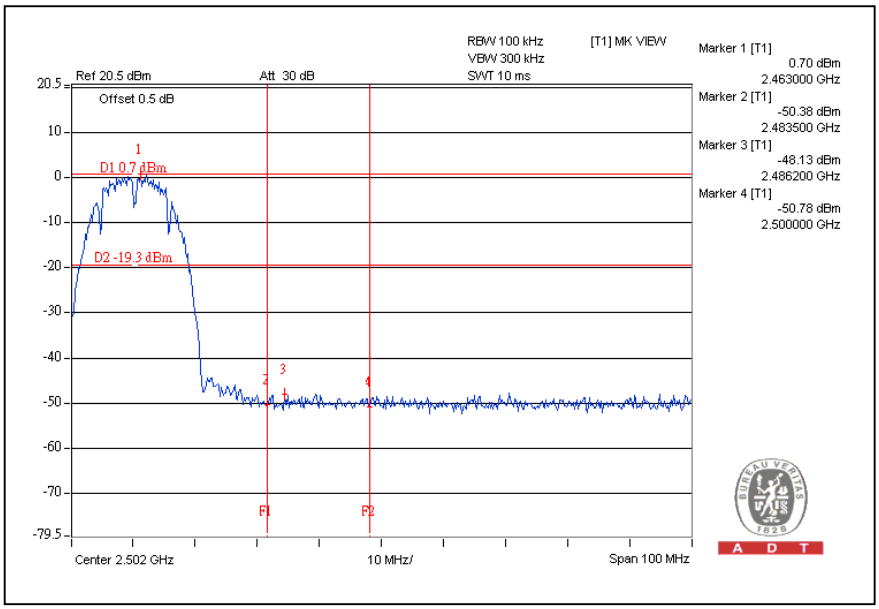
The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION:

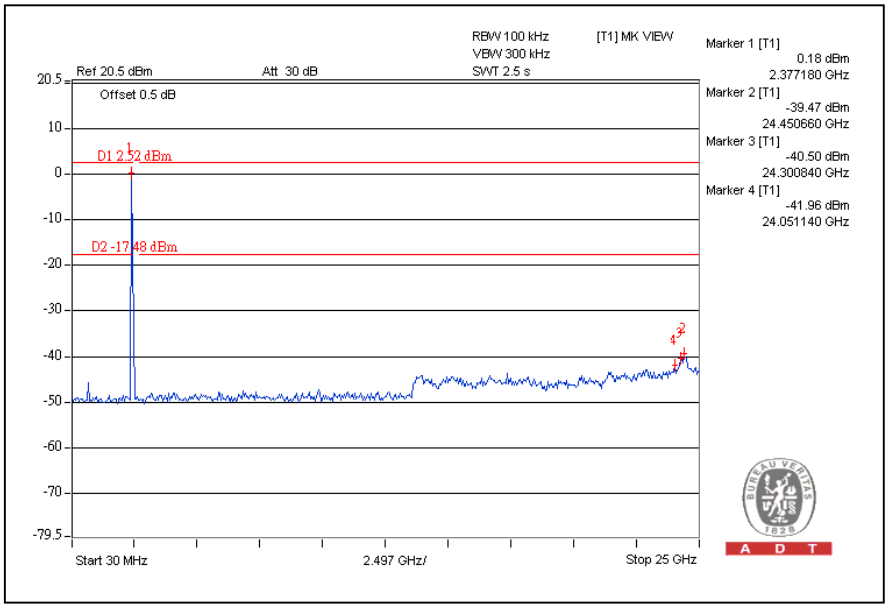
CH1



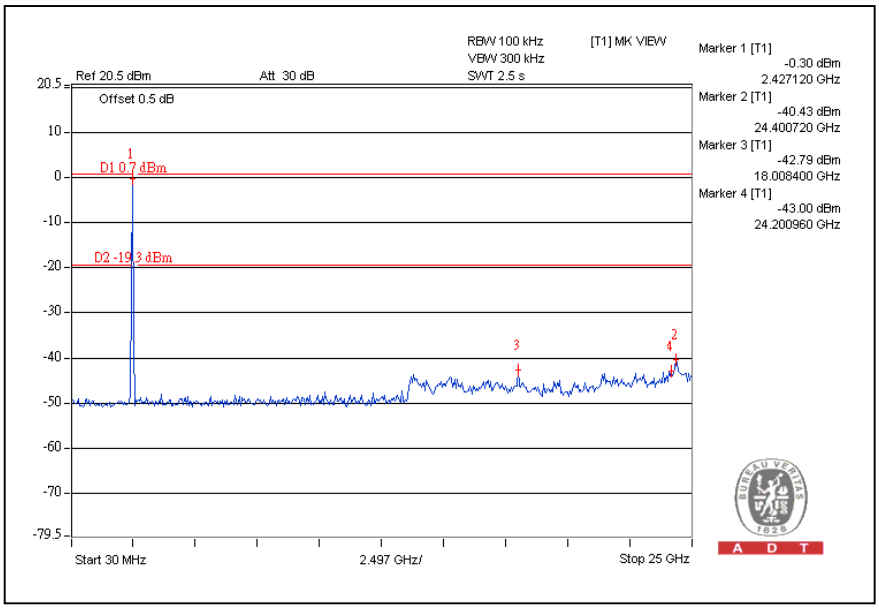
CH11



CH1

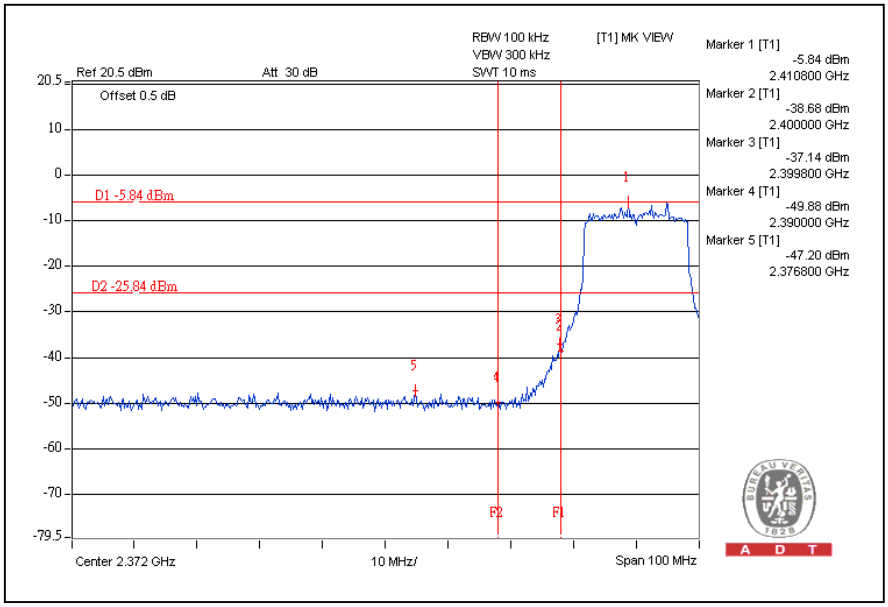

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 2.52 dBm
D2 -17.48 dBm
Marker 1 [T1]
0.18 dBm
2.377180 GHz
Marker 2 [T1]
-39.47 dBm
24.450660 GHz
Marker 3 [T1]
-40.50 dBm
24.300840 GHz
Marker 4 [T1]
-41.96 dBm
24.051140 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

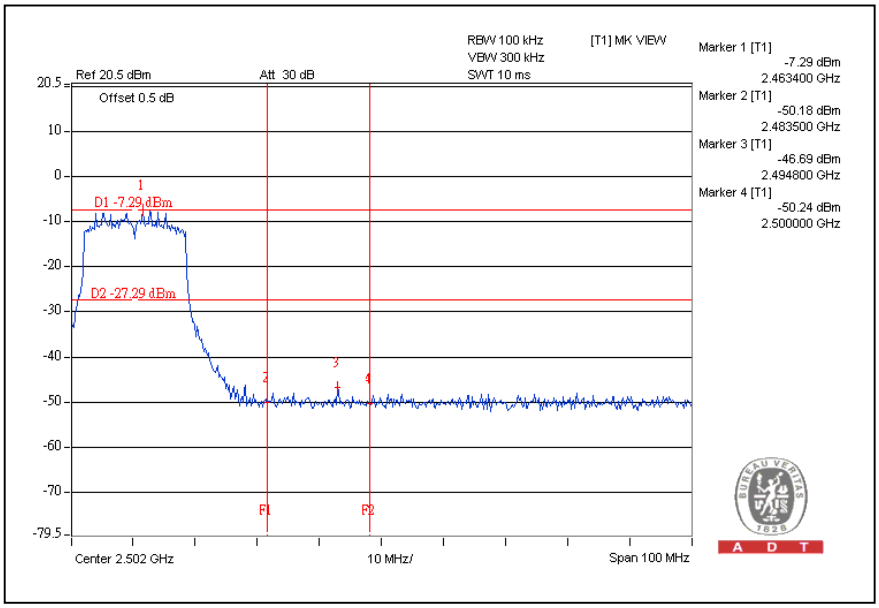

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 0.7 dBm
D2 -19.3 dBm
Marker 1 [T1]
-0.30 dBm
2.427120 GHz
Marker 2 [T1]
-40.43 dBm
24.400720 GHz
Marker 3 [T1]
-42.79 dBm
18.008400 GHz
Marker 4 [T1]
-43.00 dBm
24.200960 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION::

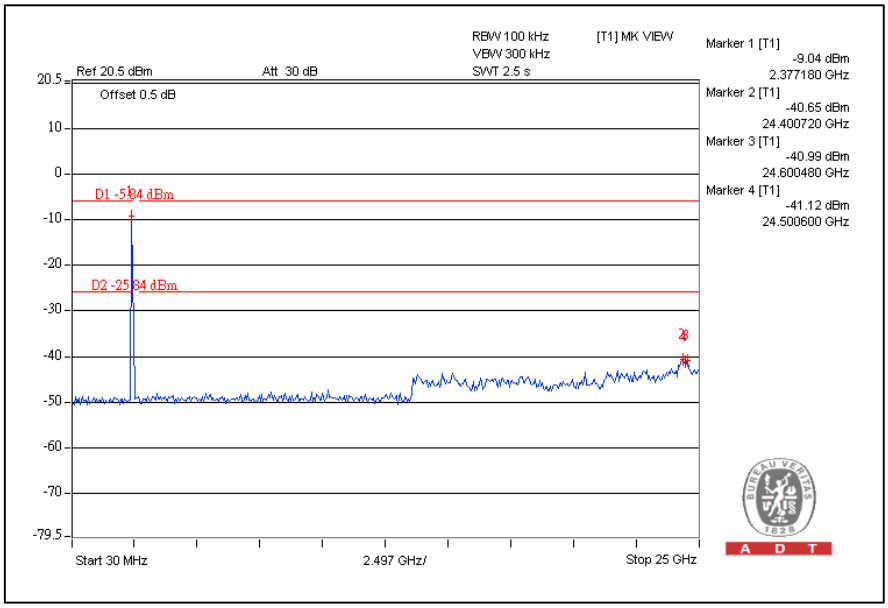
CH1



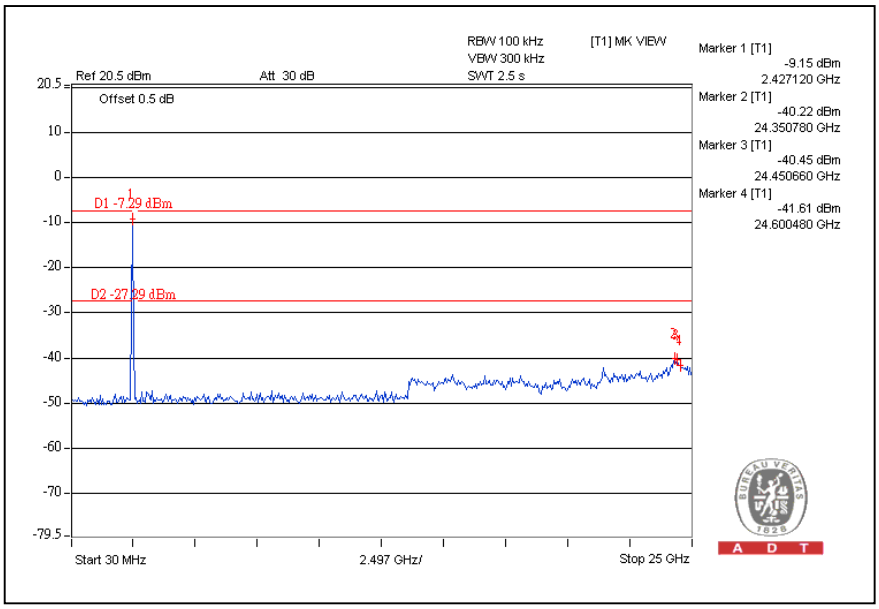
CH11



CH1

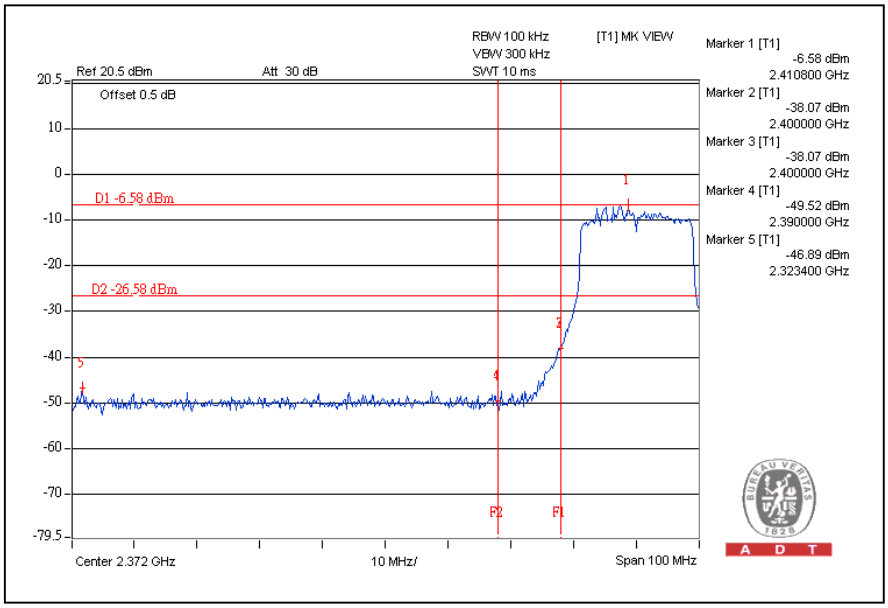

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -5.84 dBm
D2 -25.84 dBm
Marker 1 [T1]
-9.04 dBm
2.377180 GHz
Marker 2 [T1]
-40.65 dBm
24.400720 GHz
Marker 3 [T1]
-40.99 dBm
24.600480 GHz
Marker 4 [T1]
-41.12 dBm
24.500600 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

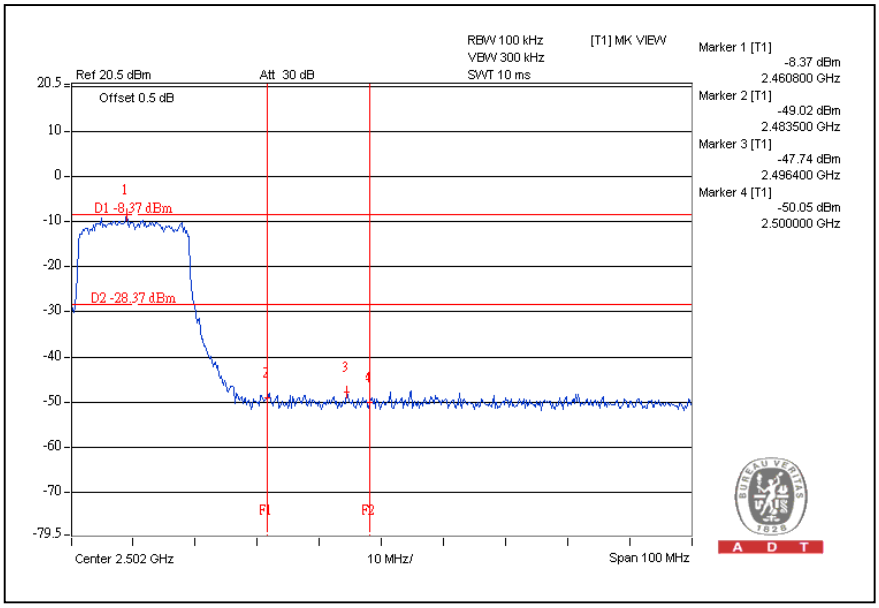

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -7.29 dBm
D2 -27.29 dBm
Marker 1 [T1]
-9.15 dBm
2.427120 GHz
Marker 2 [T1]
-40.22 dBm
24.350780 GHz
Marker 3 [T1]
-40.45 dBm
24.450660 GHz
Marker 4 [T1]
-41.61 dBm
24.600480 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

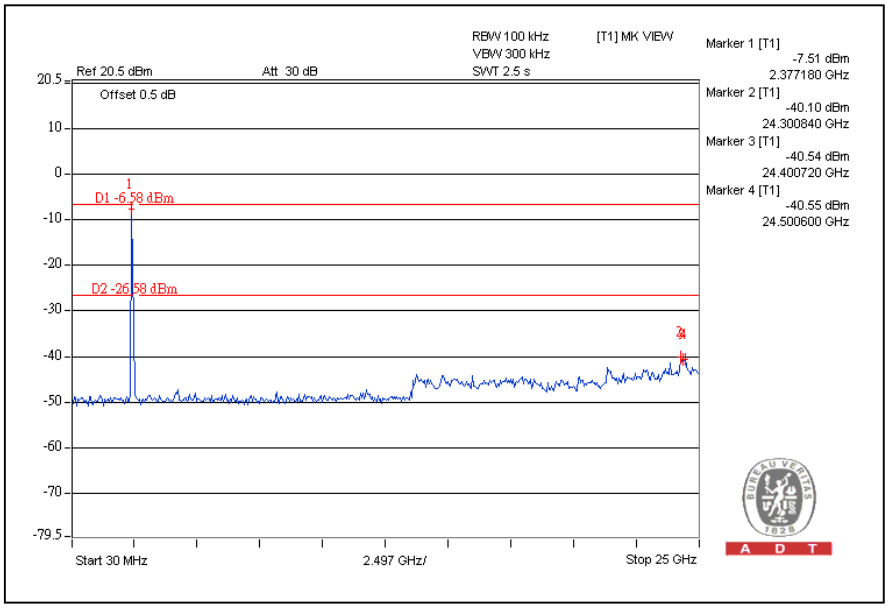
CH1



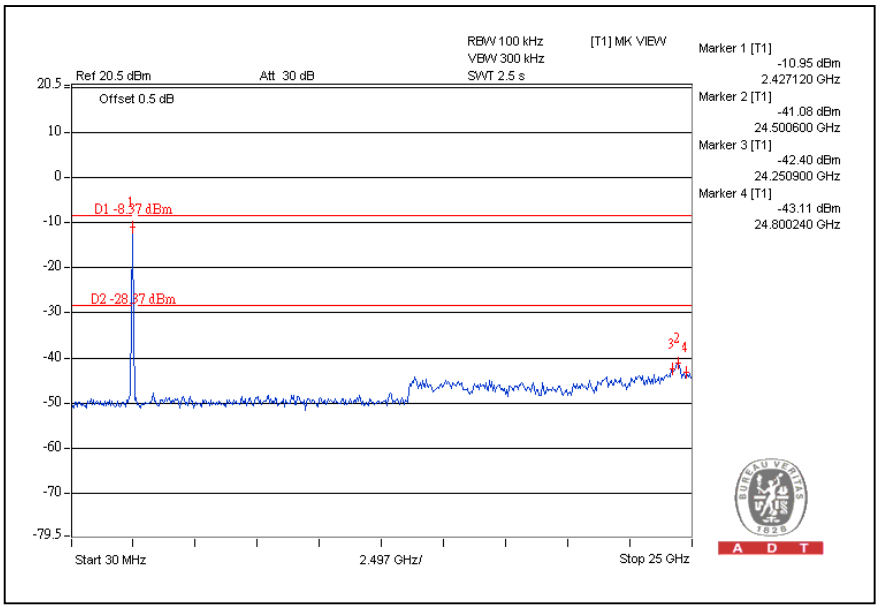
CH11



CH1

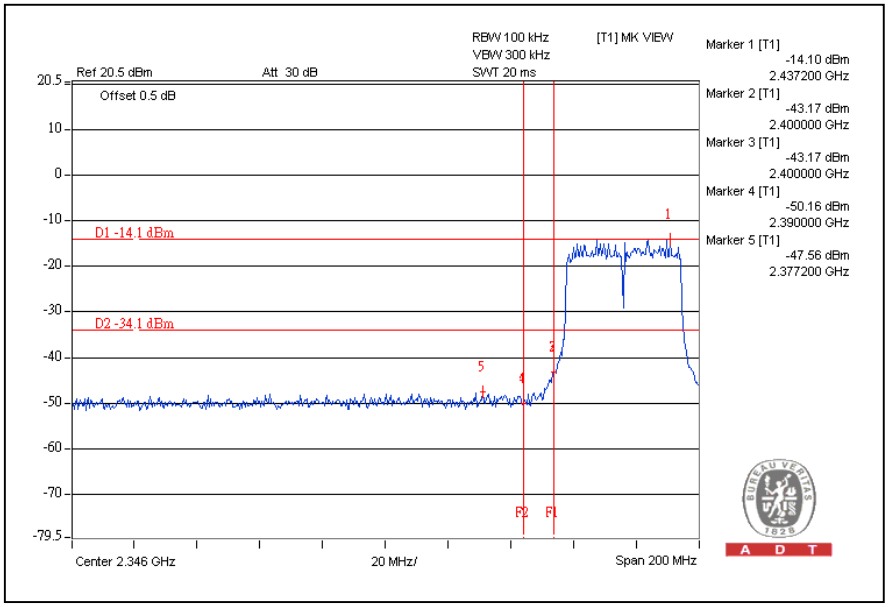

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-7.51 dBm
2.377180 GHz
Marker 2 [T1]
-40.10 dBm
24.300840 GHz
Marker 3 [T1]
-40.54 dBm
24.400720 GHz
Marker 4 [T1]
-40.55 dBm
24.500600 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -6.58 dBm
D2 -26.58 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

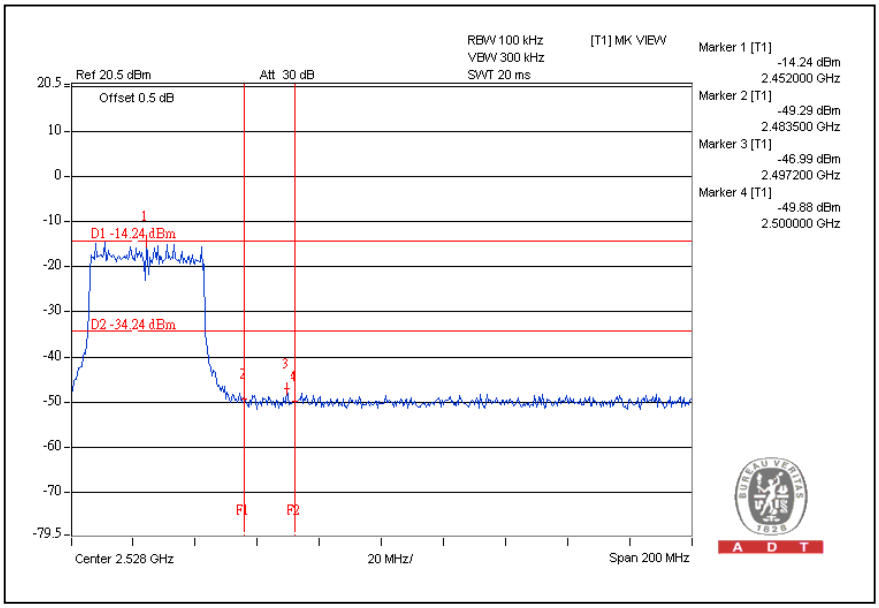

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-10.95 dBm
2.427120 GHz
Marker 2 [T1]
-41.08 dBm
24.500600 GHz
Marker 3 [T1]
-42.40 dBm
24.250900 GHz
Marker 4 [T1]
-43.11 dBm
24.800240 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -8.37 dBm
D2 -28.37 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

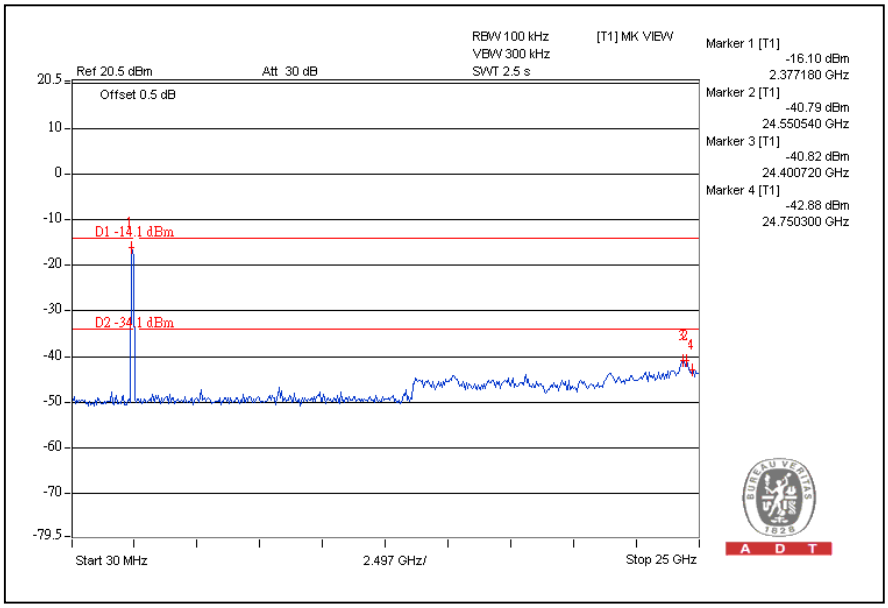
CH1



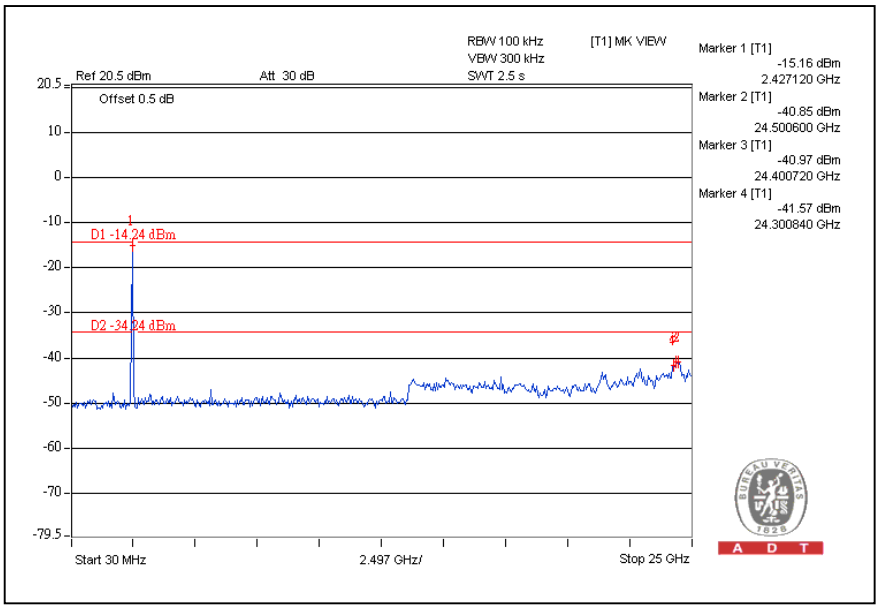
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-16.10 dBm
2.377180 GHz
Marker 2 [T1]
-40.79 dBm
24.550540 GHz
Marker 3 [T1]
-40.82 dBm
24.400720 GHz
Marker 4 [T1]
-42.88 dBm
24.750300 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -14.1 dBm
D2 -34.1 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH7

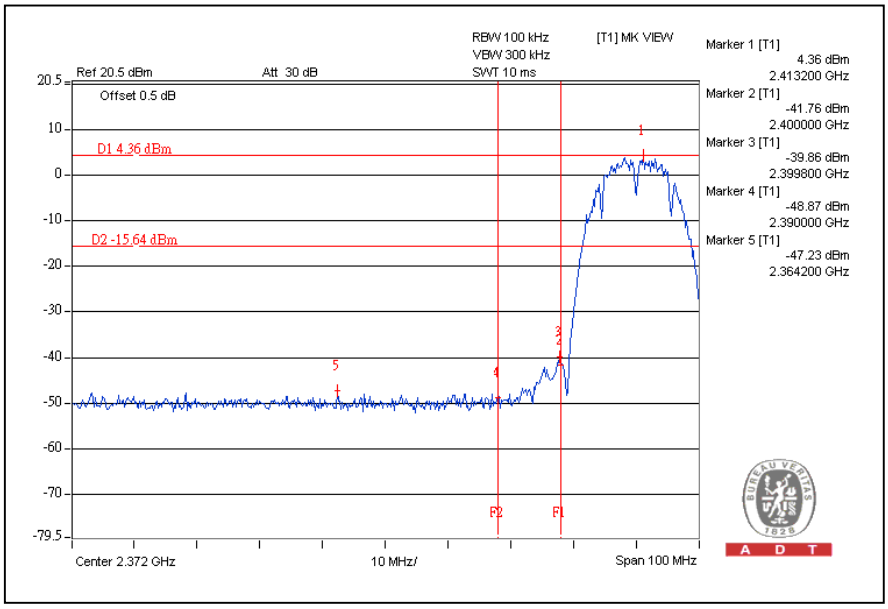

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-15.16 dBm
2.427120 GHz
Marker 2 [T1]
-40.85 dBm
24.500600 GHz
Marker 3 [T1]
-40.97 dBm
24.400720 GHz
Marker 4 [T1]
-41.57 dBm
24.300840 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -14.24 dBm
D2 -34.24 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

4.6.7 TEST RESULTS- ANTENNA 2

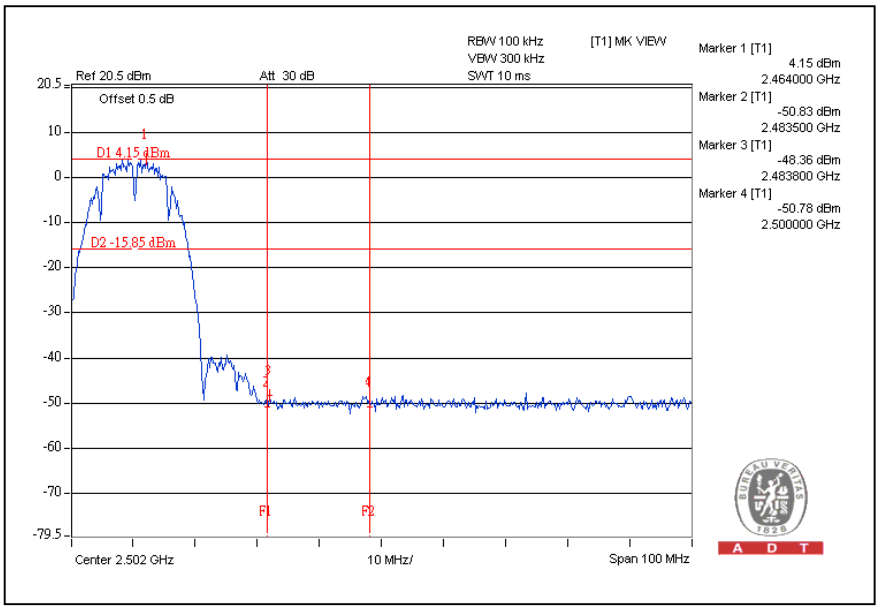
The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION:

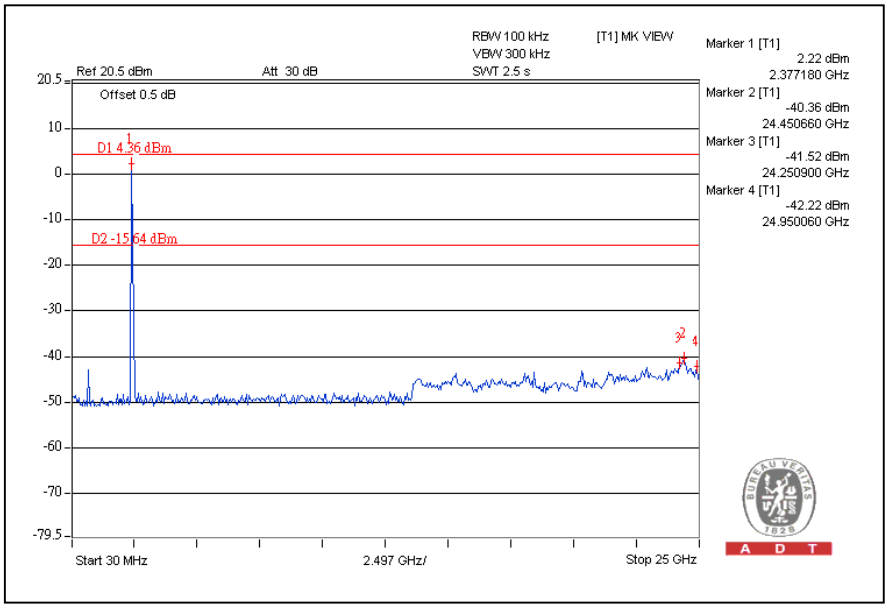
CH1



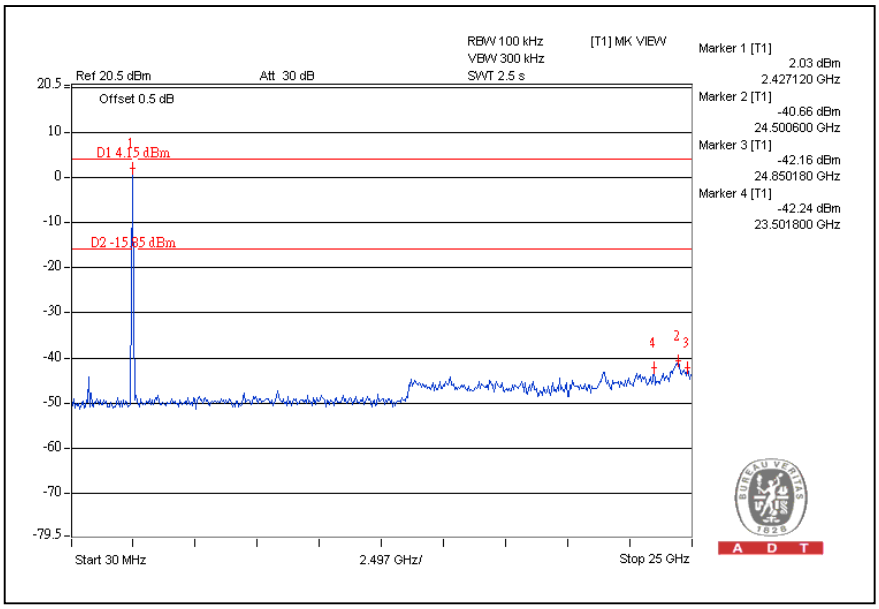
CH11



CH1

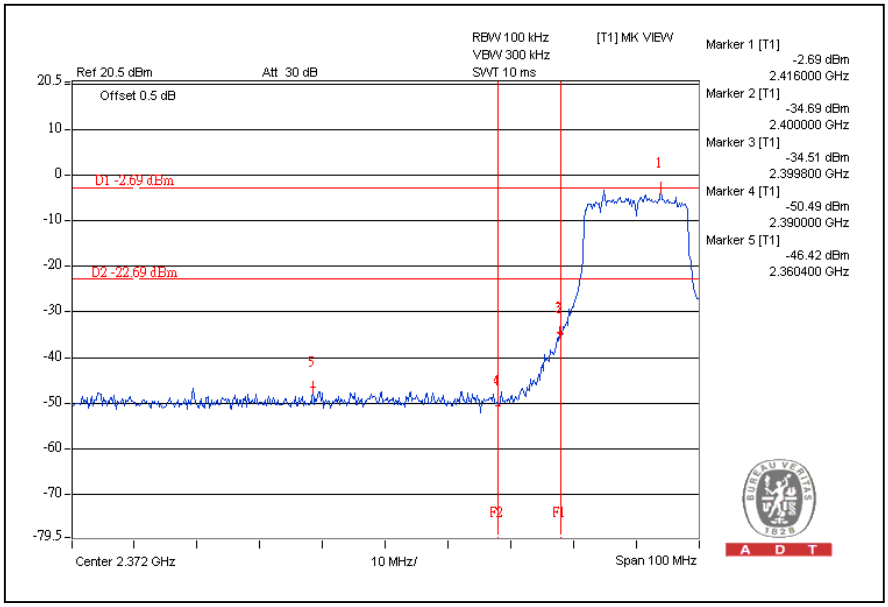

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.36 dBm
D2 -15.64 dBm
Marker 1 [T1]
2.22 dBm
2.377180 GHz
Marker 2 [T1]
-40.36 dBm
24.450660 GHz
Marker 3 [T1]
-41.52 dBm
24.250900 GHz
Marker 4 [T1]
-42.22 dBm
24.950060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

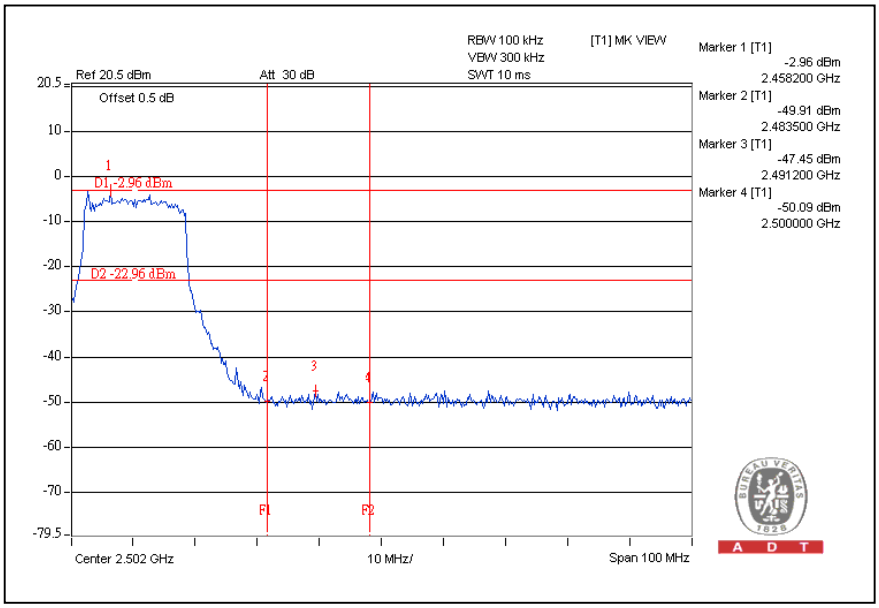

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.15 dBm
D2 -15.85 dBm
Marker 1 [T1]
2.03 dBm
2.427120 GHz
Marker 2 [T1]
-40.66 dBm
24.500600 GHz
Marker 3 [T1]
-42.16 dBm
24.850180 GHz
Marker 4 [T1]
-42.24 dBm
23.501800 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION::

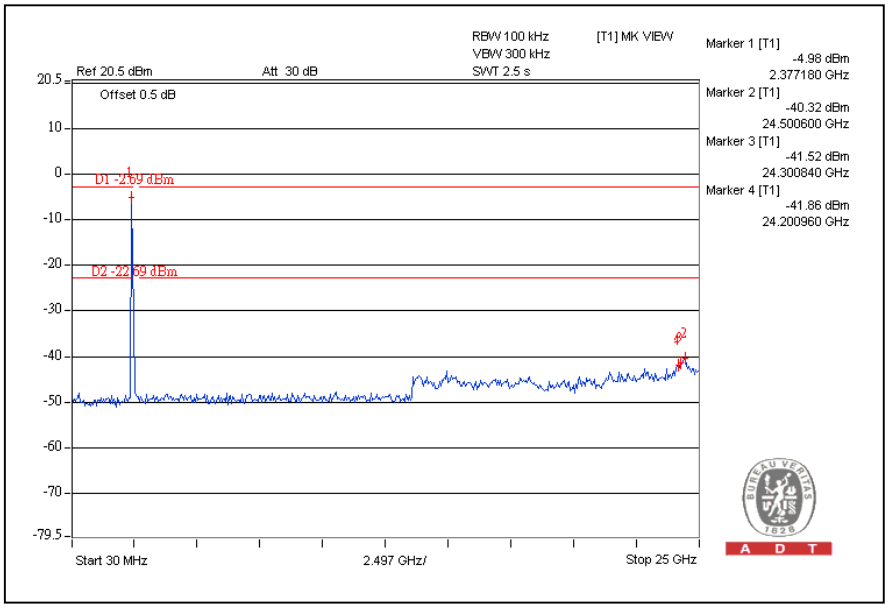
CH1



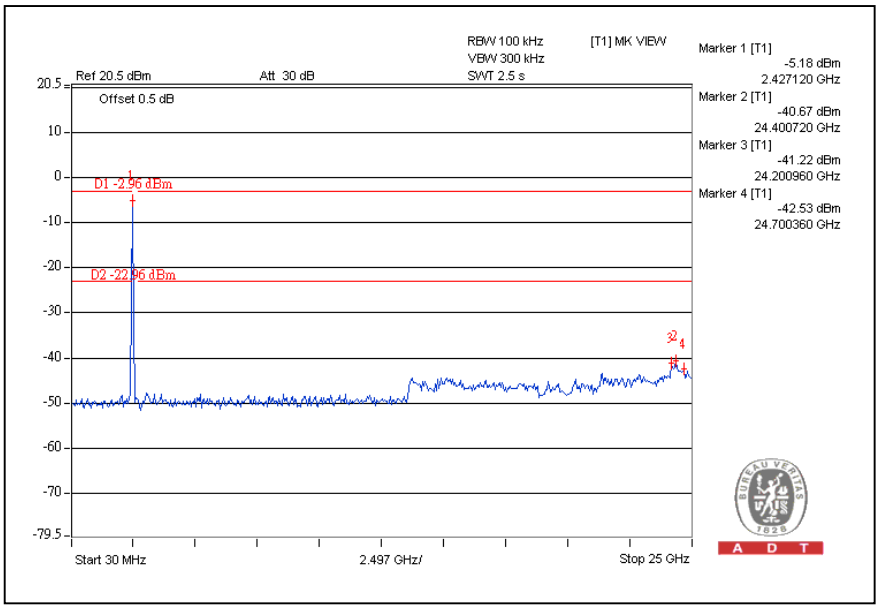
CH11



CH1

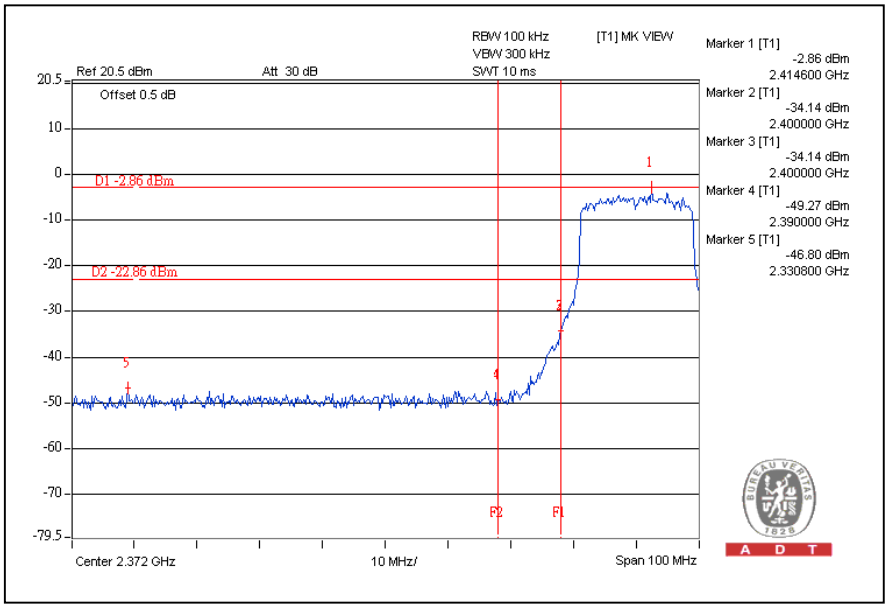

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-4.98 dBm
2.377180 GHz
Marker 2 [T1]
-40.32 dBm
24.500600 GHz
Marker 3 [T1]
-41.52 dBm
24.300840 GHz
Marker 4 [T1]
-41.86 dBm
24.200960 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -2.69 dBm
D2 -22.69 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

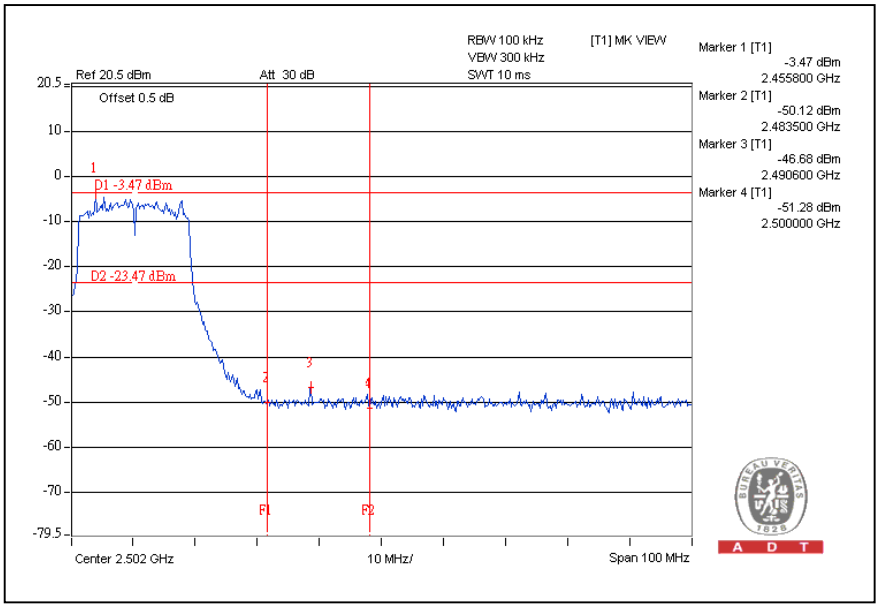

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-5.18 dBm
2.427120 GHz
Marker 2 [T1]
-40.67 dBm
24.400720 GHz
Marker 3 [T1]
-41.22 dBm
24.200960 GHz
Marker 4 [T1]
-42.53 dBm
24.700360 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -2.96 dBm
D2 -22.96 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

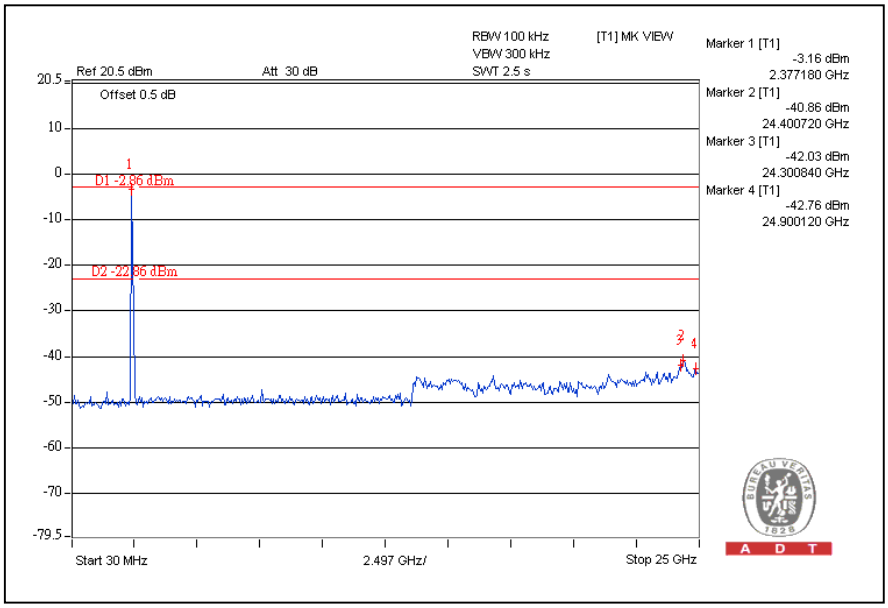
CH1



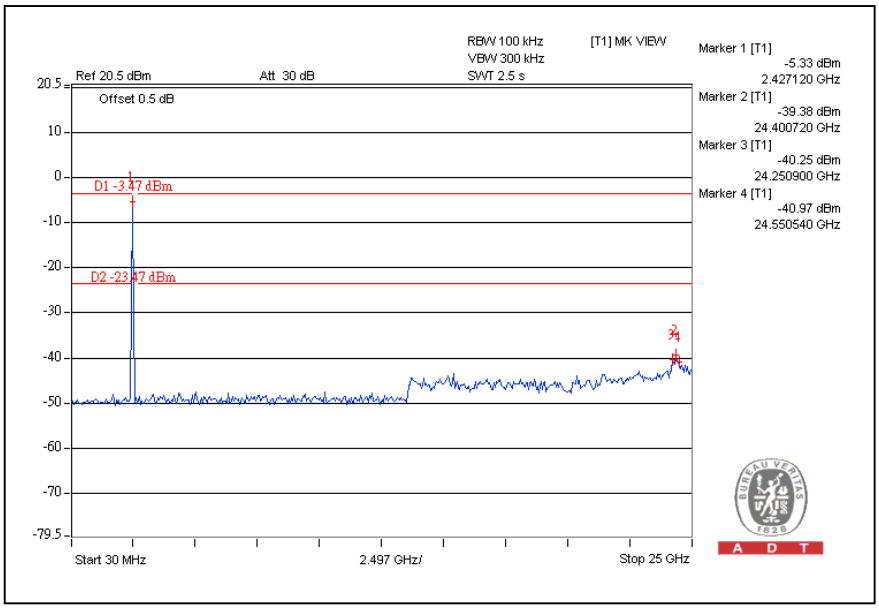
CH11



CH1

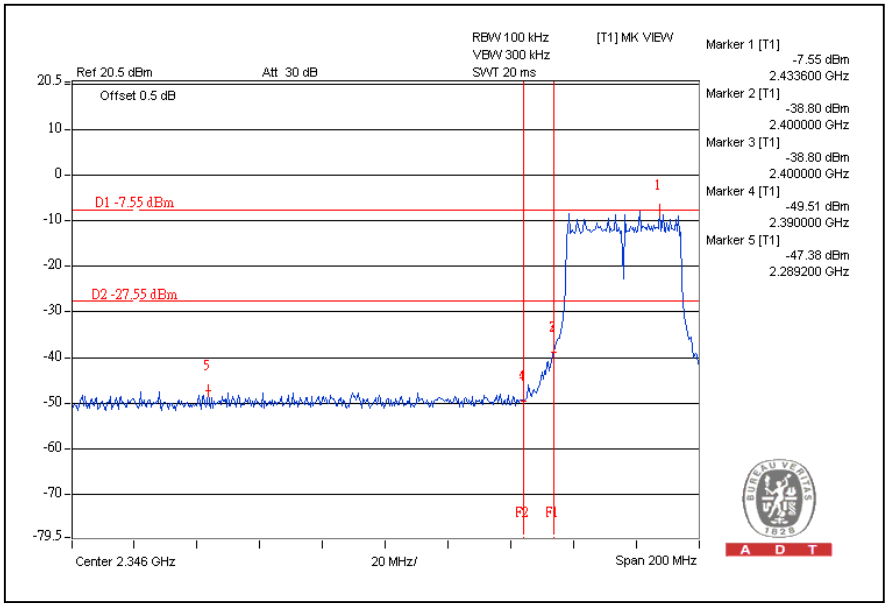

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-3.16 dBm
2.377180 GHz
Marker 2 [T1]
-40.86 dBm
24.400720 GHz
Marker 3 [T1]
-42.03 dBm
24.300840 GHz
Marker 4 [T1]
-42.76 dBm
24.900120 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -2.86 dBm
D2 -22.86 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

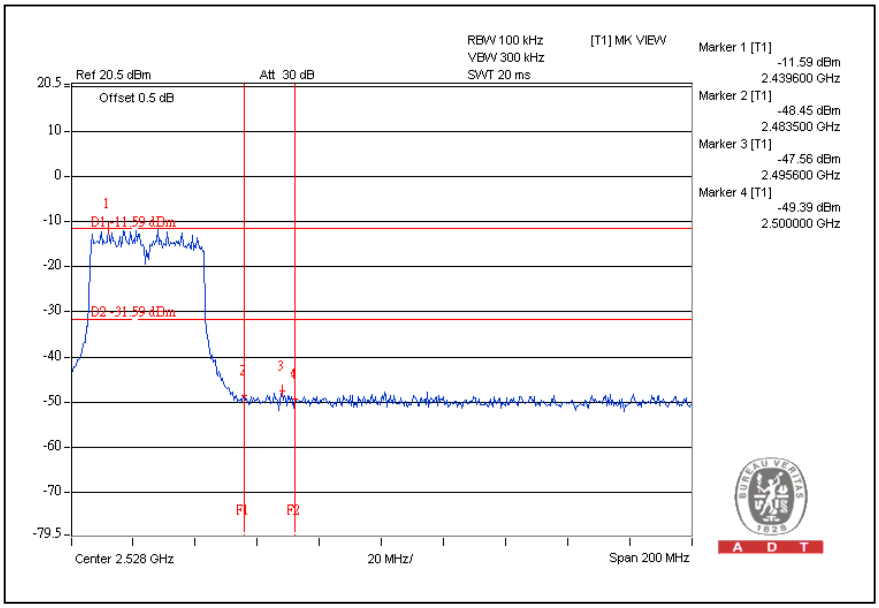

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-5.33 dBm
2.427120 GHz
Marker 2 [T1]
-39.38 dBm
24.400720 GHz
Marker 3 [T1]
-40.25 dBm
24.250900 GHz
Marker 4 [T1]
-40.97 dBm
24.550540 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -3.47 dBm
D2 -23.47 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

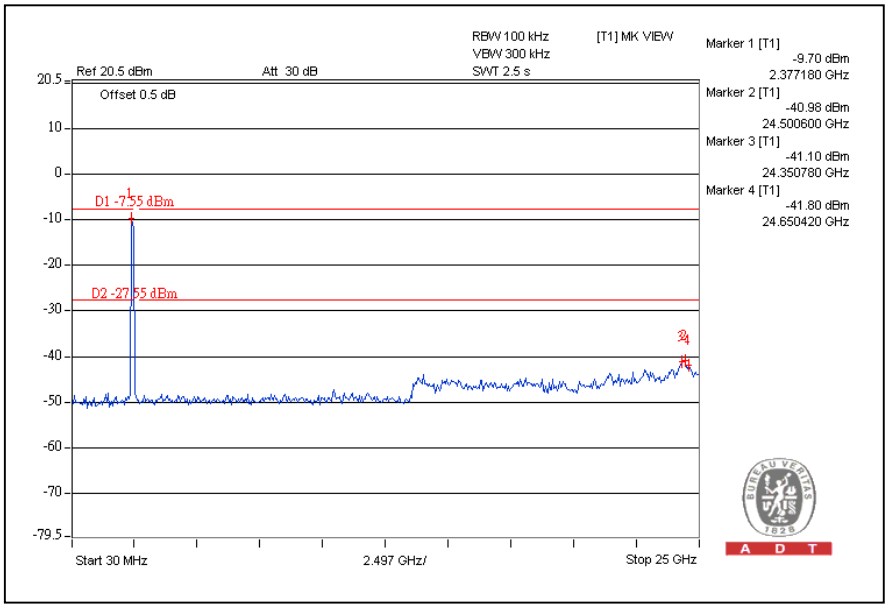
CH1



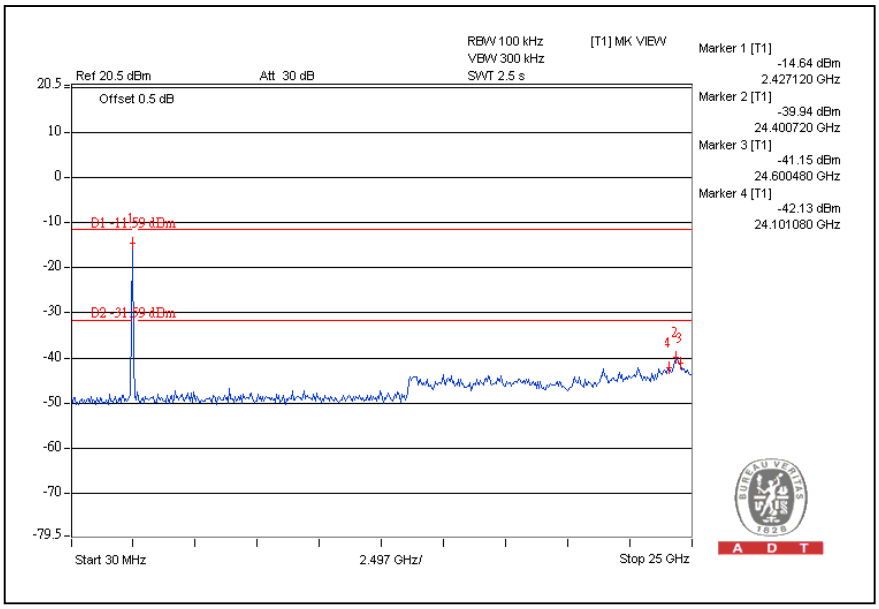
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -7.55 dBm
D2 -27.55 dBm
Marker 1 [T1]
-9.70 dBm
2.377180 GHz
Marker 2 [T1]
-40.98 dBm
24.500600 GHz
Marker 3 [T1]
-41.10 dBm
24.350780 GHz
Marker 4 [T1]
-41.80 dBm
24.650420 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH7

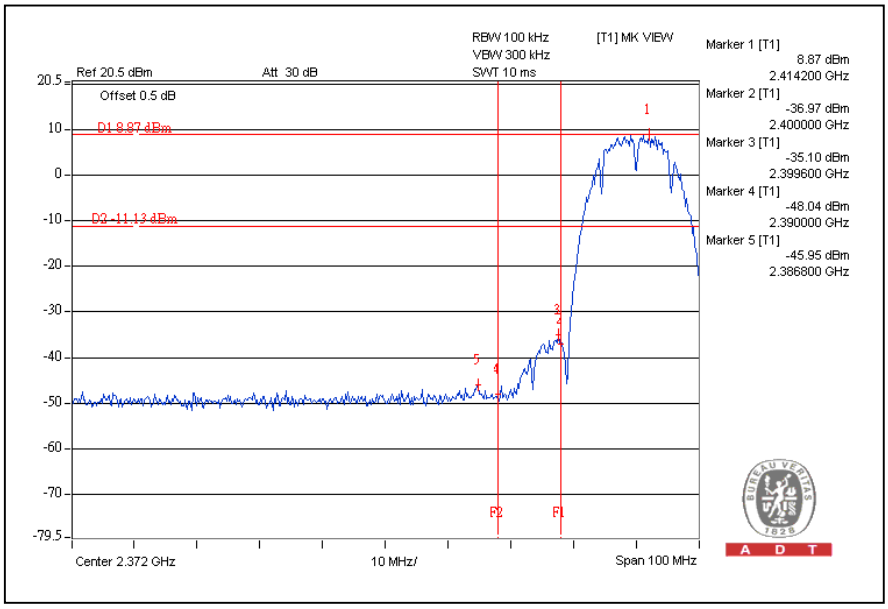

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -11.59 dBm
D2 -31.59 dBm
Marker 1 [T1]
-14.64 dBm
2.427120 GHz
Marker 2 [T1]
-39.94 dBm
24.400720 GHz
Marker 3 [T1]
-41.15 dBm
24.600480 GHz
Marker 4 [T1]
-42.13 dBm
24.101080 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

4.6.8 TEST RESULTS- ANTENNA 4

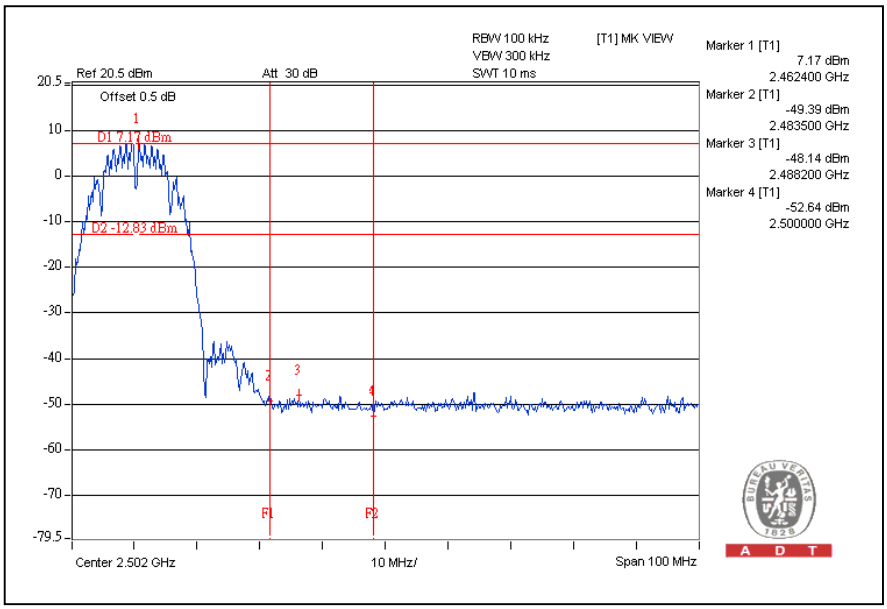
The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION:

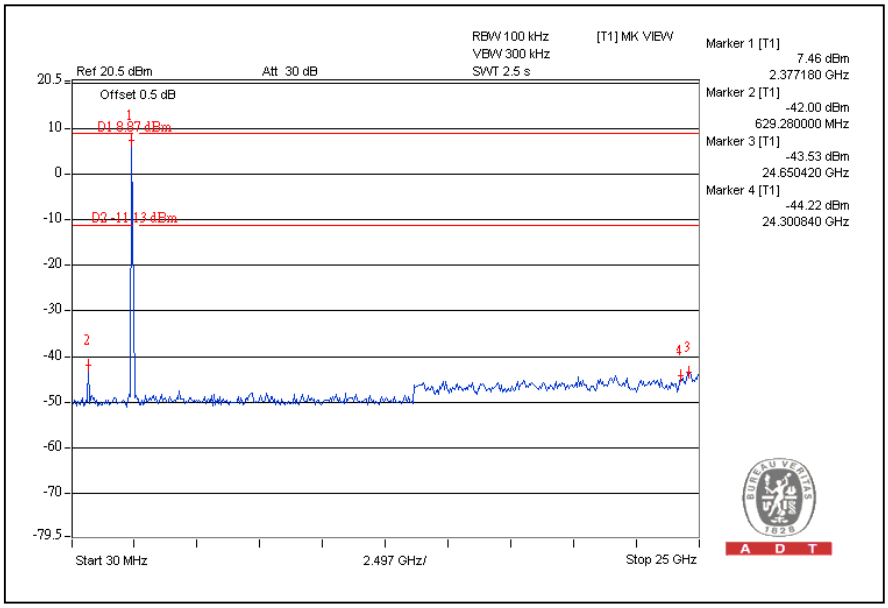
CH1



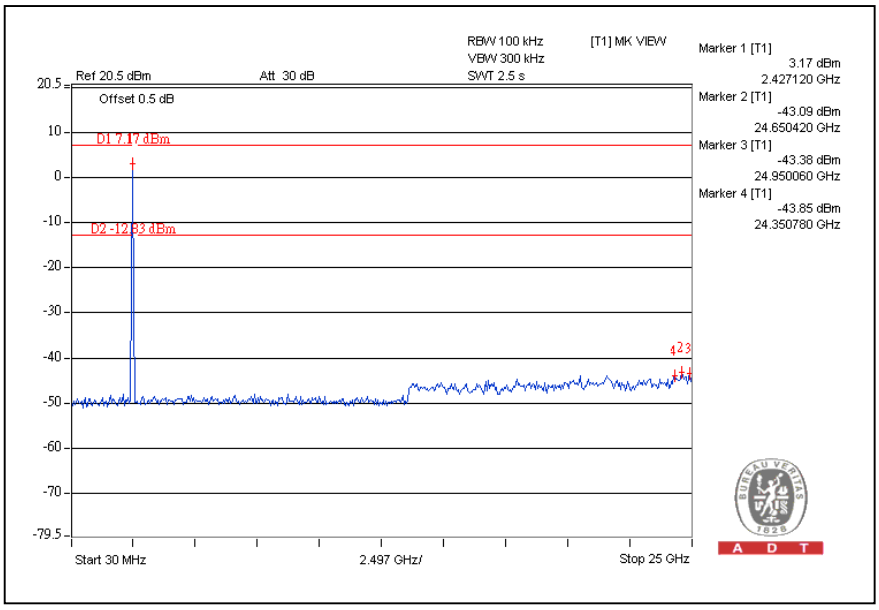
CH11



CH1

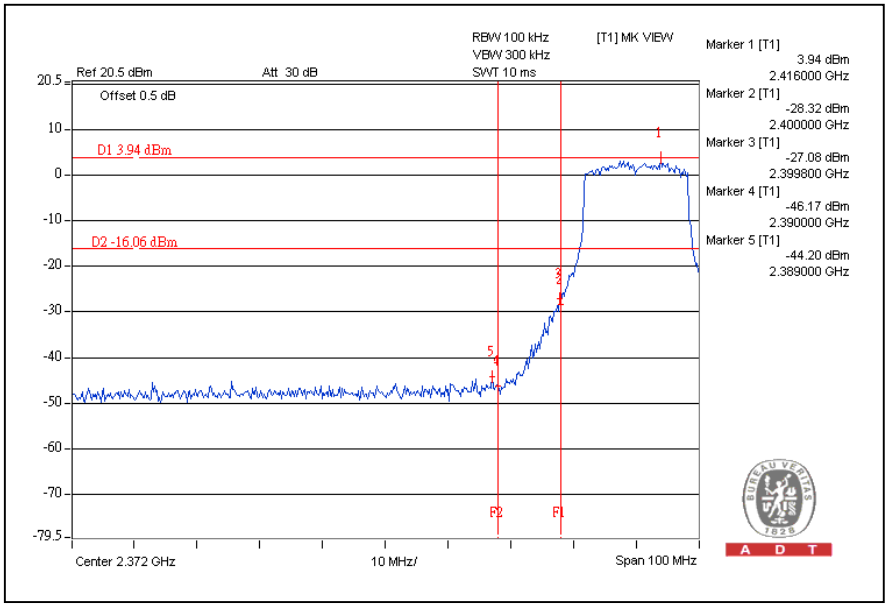

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 8.97 dBm
D2 -11.13 dBm
Marker 1 [T1]
7.46 dBm
2.377180 GHz
Marker 2 [T1]
-42.00 dBm
629.280000 MHz
Marker 3 [T1]
-43.53 dBm
24.650420 GHz
Marker 4 [T1]
-44.22 dBm
24.300840 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

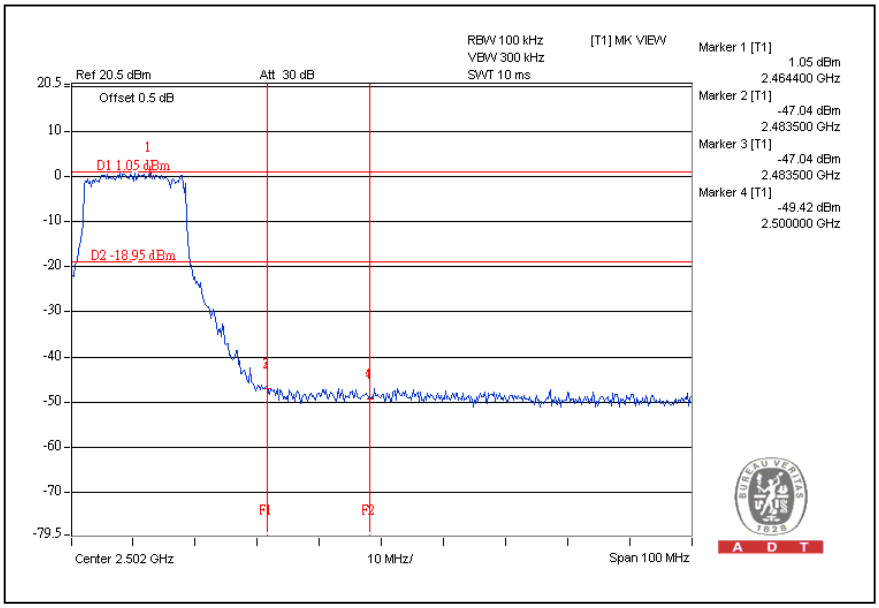

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 7.17 dBm
D2 -12.83 dBm
Marker 1 [T1]
3.17 dBm
2.427120 GHz
Marker 2 [T1]
-43.09 dBm
24.650420 GHz
Marker 3 [T1]
-43.38 dBm
24.950060 GHz
Marker 4 [T1]
-43.85 dBm
24.350780 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION::

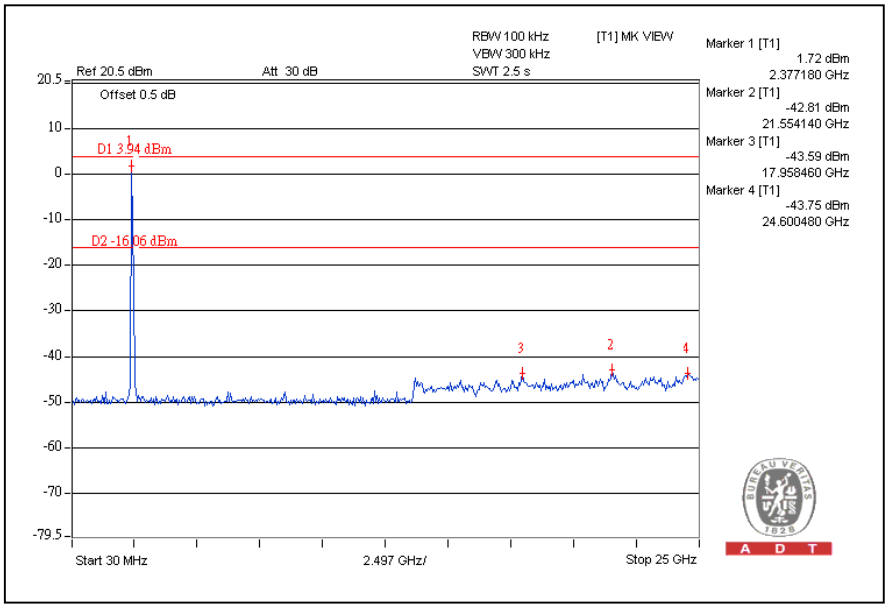
CH1



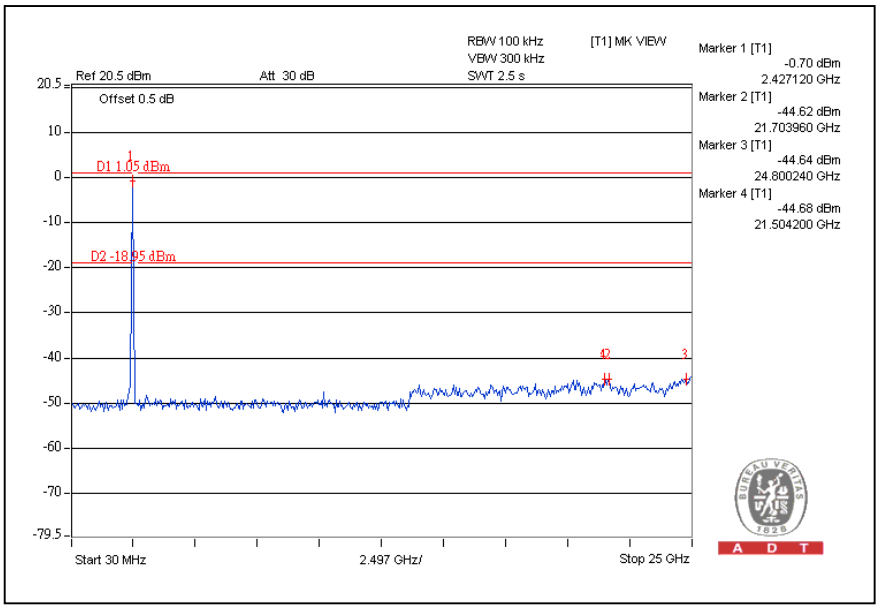
CH11



CH1

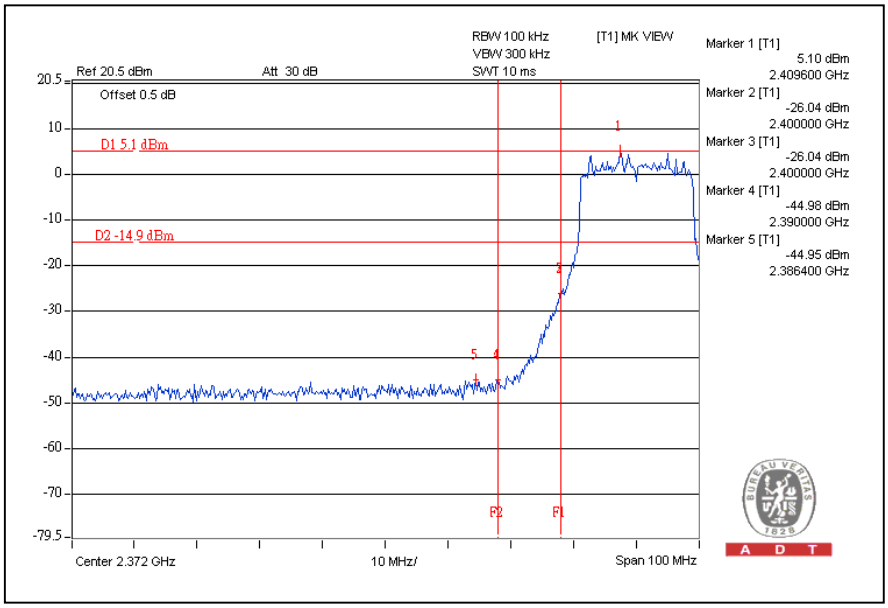

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 3.94 dBm
D2 -16.06 dBm
Marker 1 [T1]
1.72 dBm
2.377180 GHz
Marker 2 [T1]
-42.81 dBm
21.554140 GHz
Marker 3 [T1]
-43.59 dBm
17.958460 GHz
Marker 4 [T1]
-43.75 dBm
24.600480 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

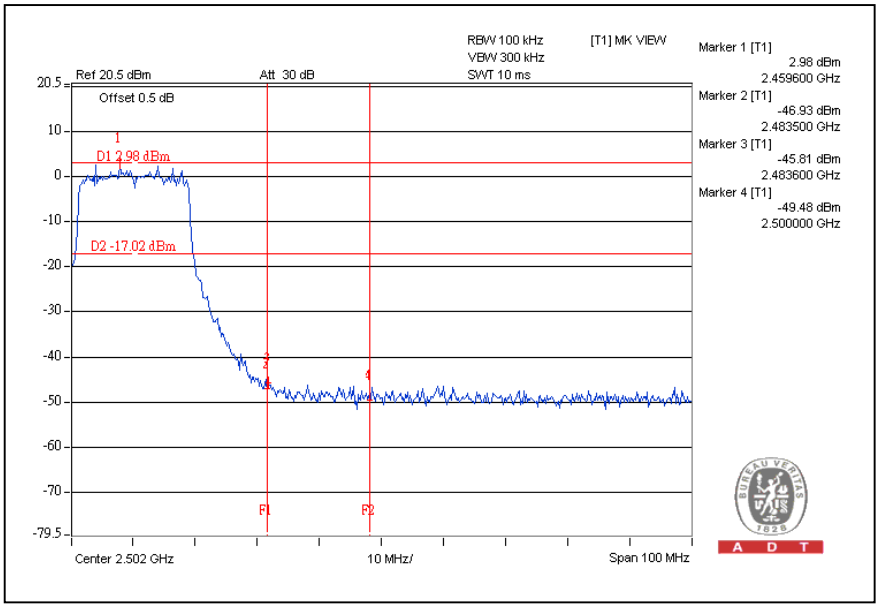

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 1.05 dBm
D2 -18.95 dBm
Marker 1 [T1]
-0.70 dBm
2.427120 GHz
Marker 2 [T1]
-44.62 dBm
21.703960 GHz
Marker 3 [T1]
-44.64 dBm
24.800240 GHz
Marker 4 [T1]
-44.68 dBm
21.504200 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

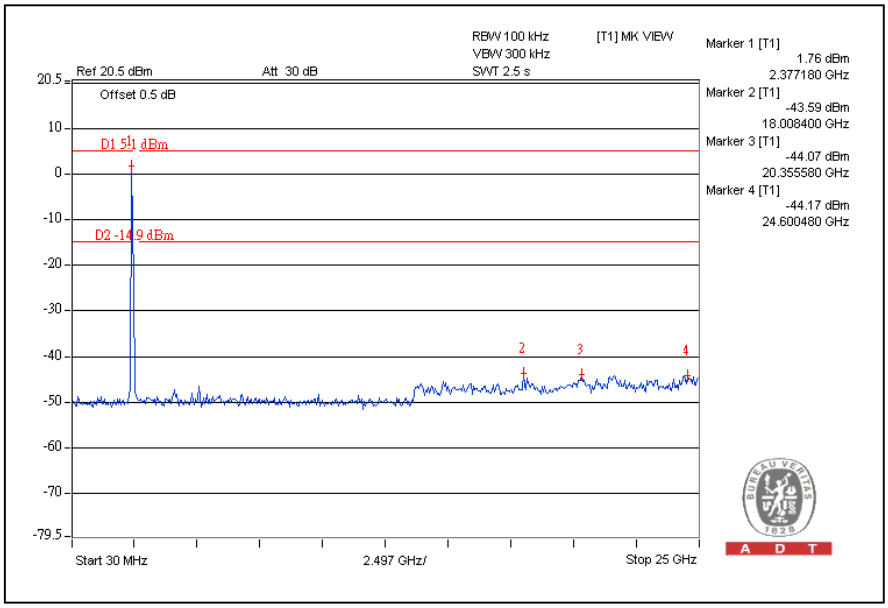
CH1



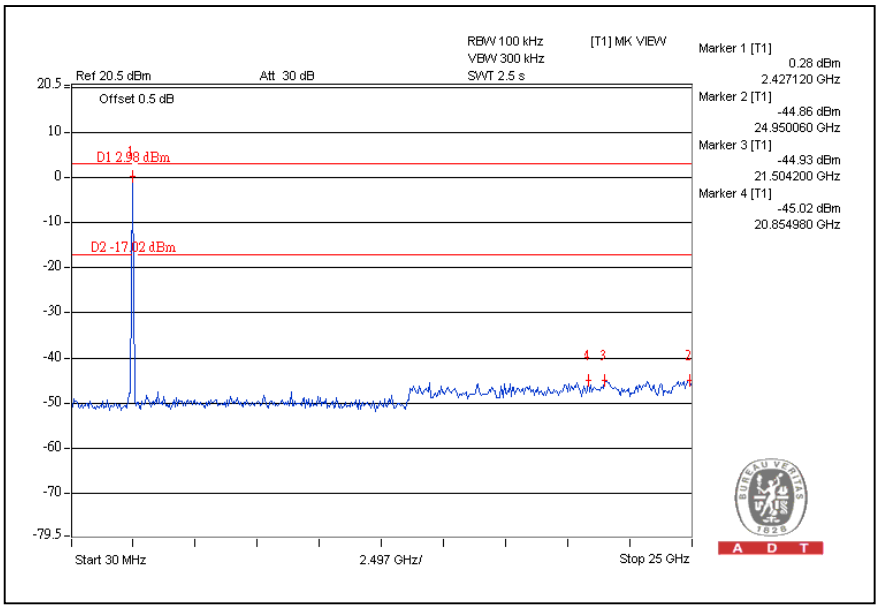
CH11



CH1

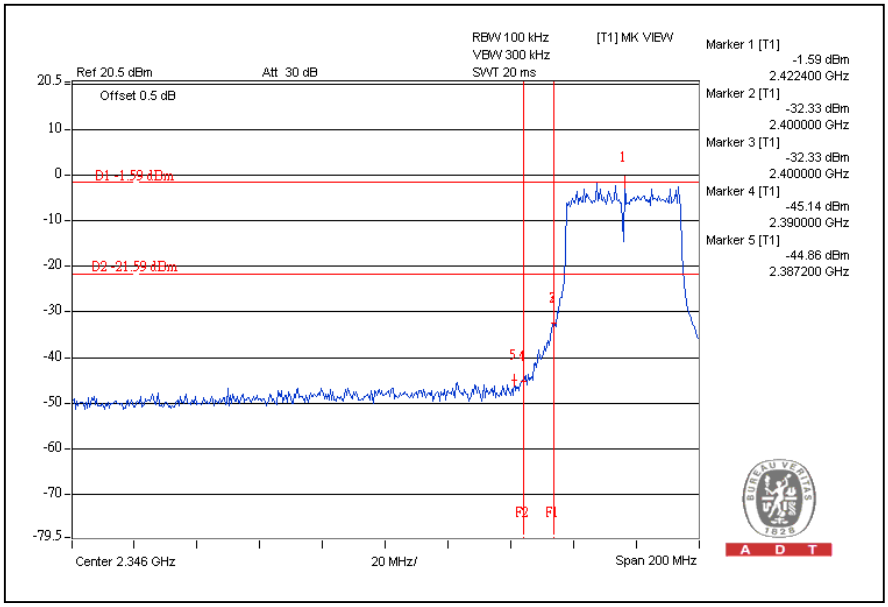

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
1.76 dBm
2.377180 GHz
Marker 2 [T1]
-43.59 dBm
18.008400 GHz
Marker 3 [T1]
-44.07 dBm
20.355580 GHz
Marker 4 [T1]
-44.17 dBm
24.600480 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 5.11 dBm
D2 -14.9 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

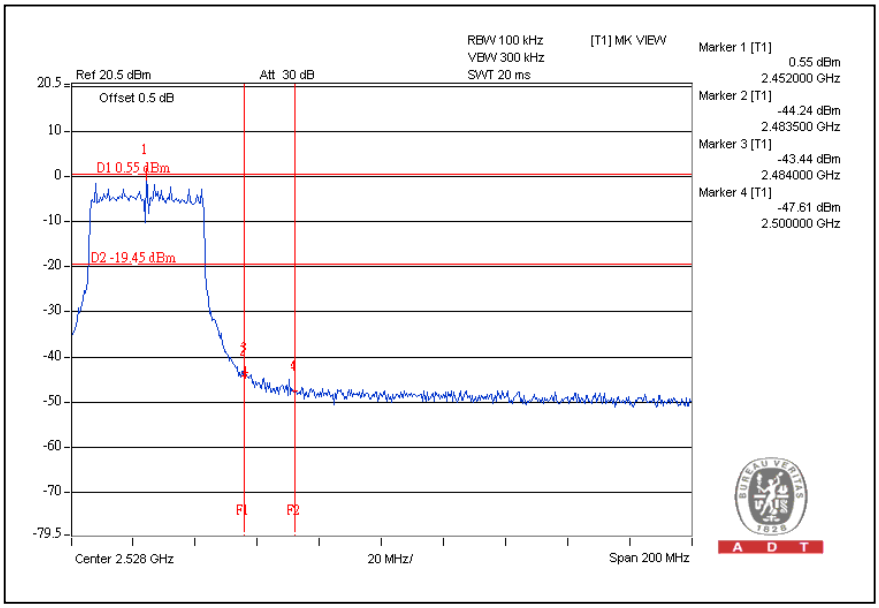

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
0.28 dBm
2.427120 GHz
Marker 2 [T1]
-44.86 dBm
24.950060 GHz
Marker 3 [T1]
-44.93 dBm
21.504200 GHz
Marker 4 [T1]
-45.02 dBm
20.854980 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 2.98 dBm
D2 -17.02 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

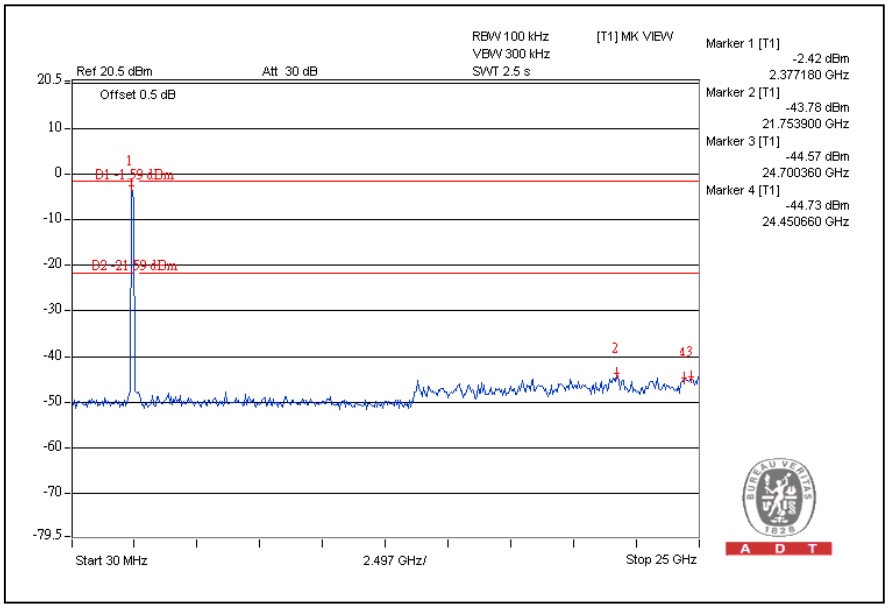
CH1



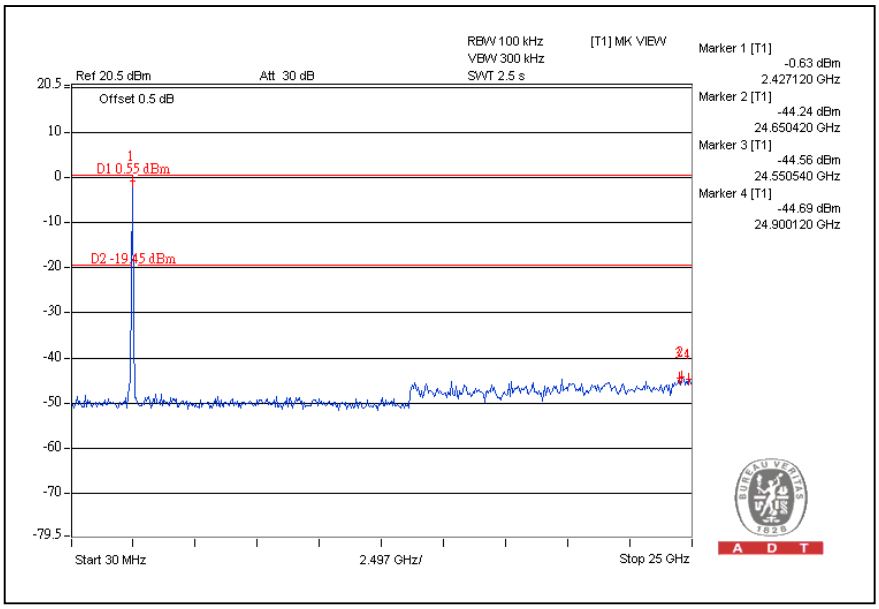
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-2.42 dBm
2.377180 GHz
Marker 2 [T1]
-43.78 dBm
21.753900 GHz
Marker 3 [T1]
-44.57 dBm
24.700360 GHz
Marker 4 [T1]
-44.73 dBm
24.450660 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -1.59 dBm
D2 -21.59 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH7

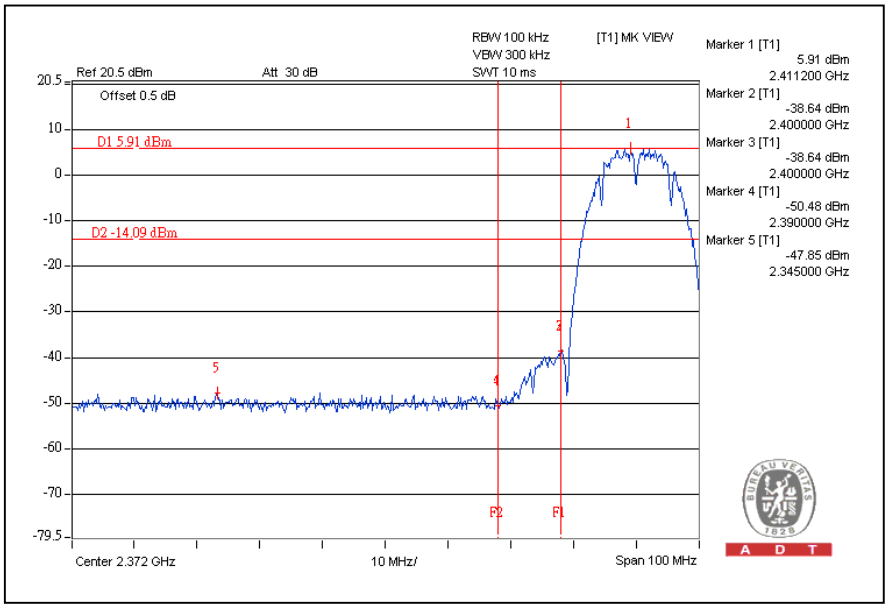

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-0.63 dBm
2.427120 GHz
Marker 2 [T1]
-44.24 dBm
24.650420 GHz
Marker 3 [T1]
-44.56 dBm
24.550540 GHz
Marker 4 [T1]
-44.69 dBm
24.900120 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 0.55 dBm
D2 -19.45 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

4.6.9 TEST RESULTS- ANTENNA 6

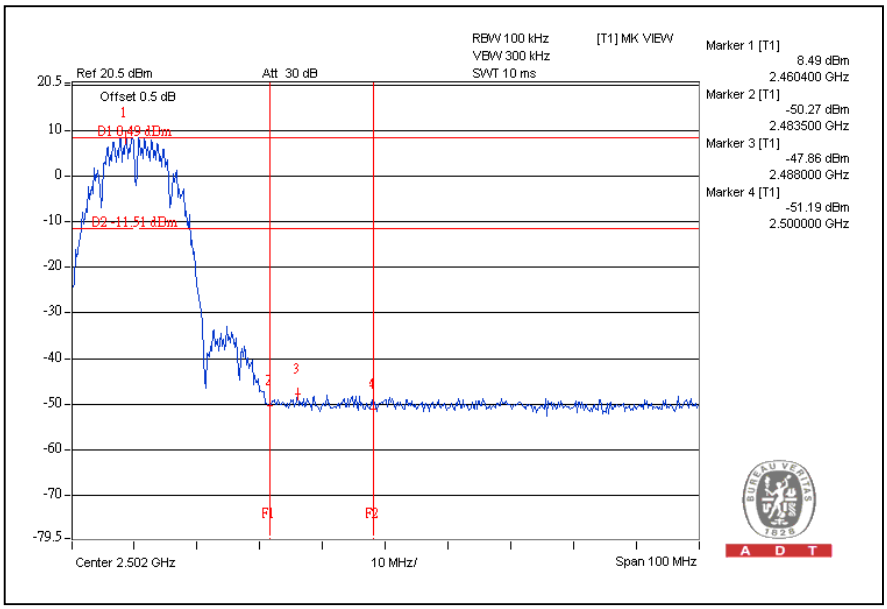
The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION:

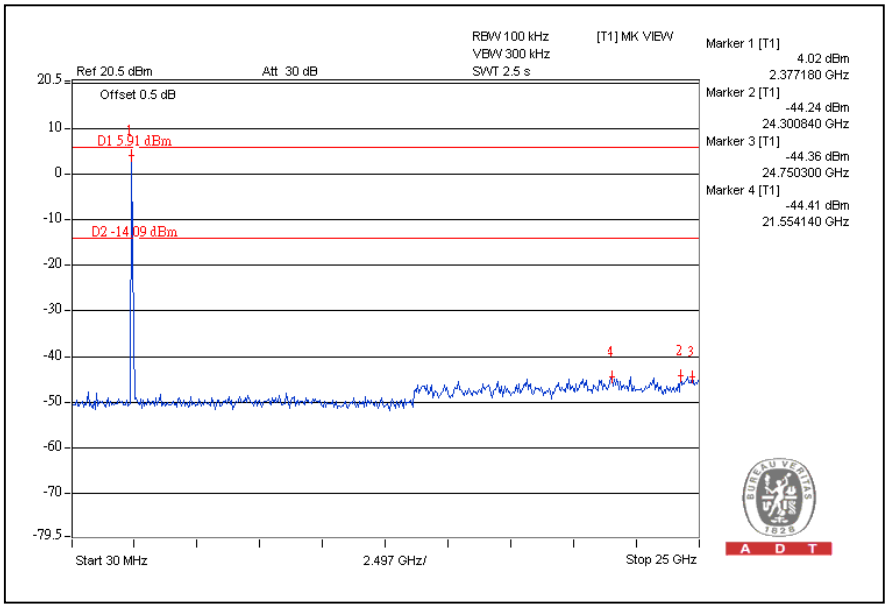
CH1



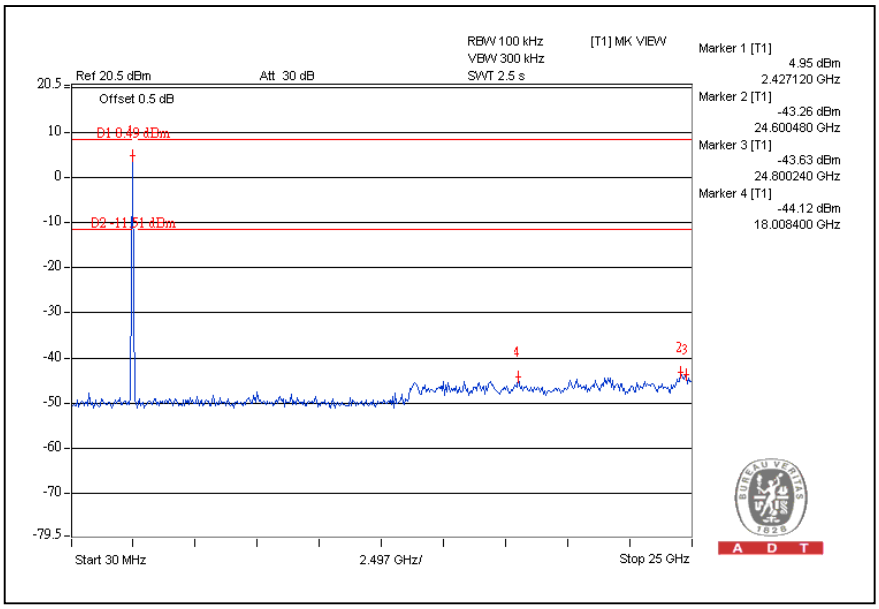
CH11



CH1

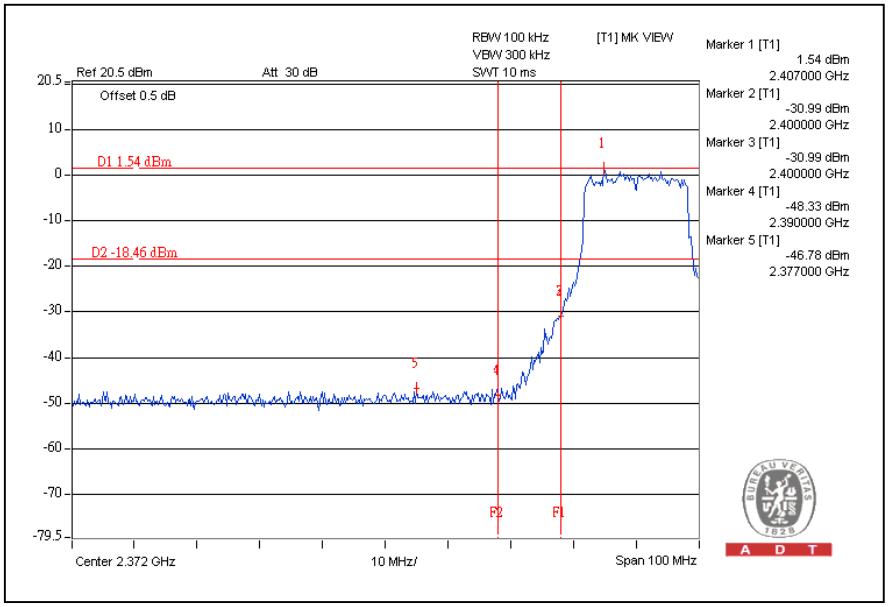

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 5.91 dBm
D2 -14.09 dBm
Marker 1 [T1]
4.02 dBm
2.377180 GHz
Marker 2 [T1]
-44.24 dBm
24.300840 GHz
Marker 3 [T1]
-44.36 dBm
24.750300 GHz
Marker 4 [T1]
-44.41 dBm
21.554140 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

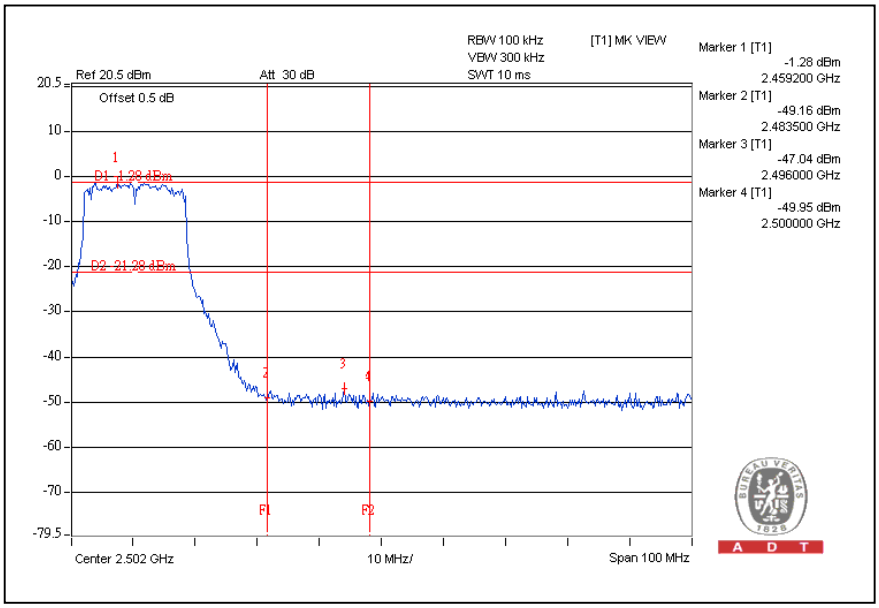

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 0.49 dBm
D2 -11.51 dBm
Marker 1 [T1]
4.95 dBm
2.427120 GHz
Marker 2 [T1]
-43.26 dBm
24.600480 GHz
Marker 3 [T1]
-43.63 dBm
24.800240 GHz
Marker 4 [T1]
-44.12 dBm
18.008400 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION::

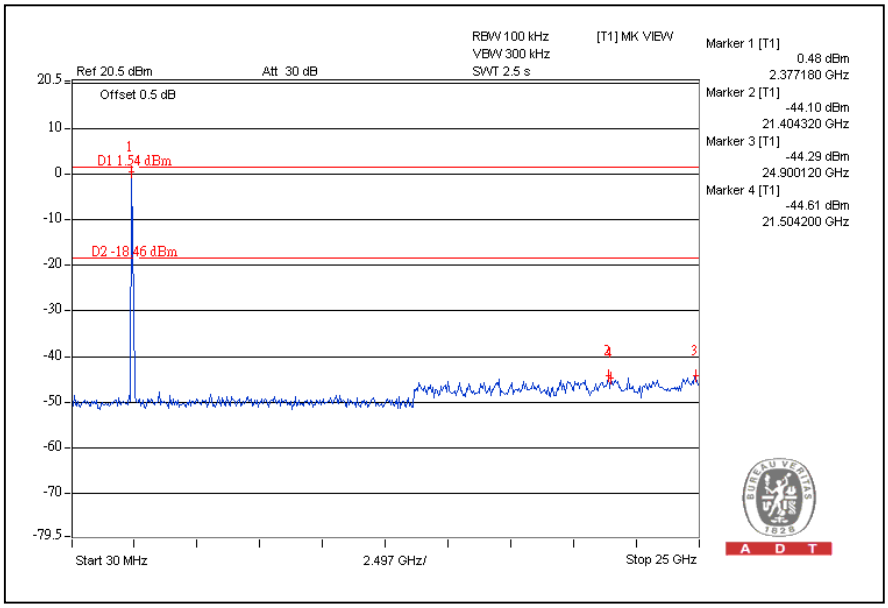
CH1



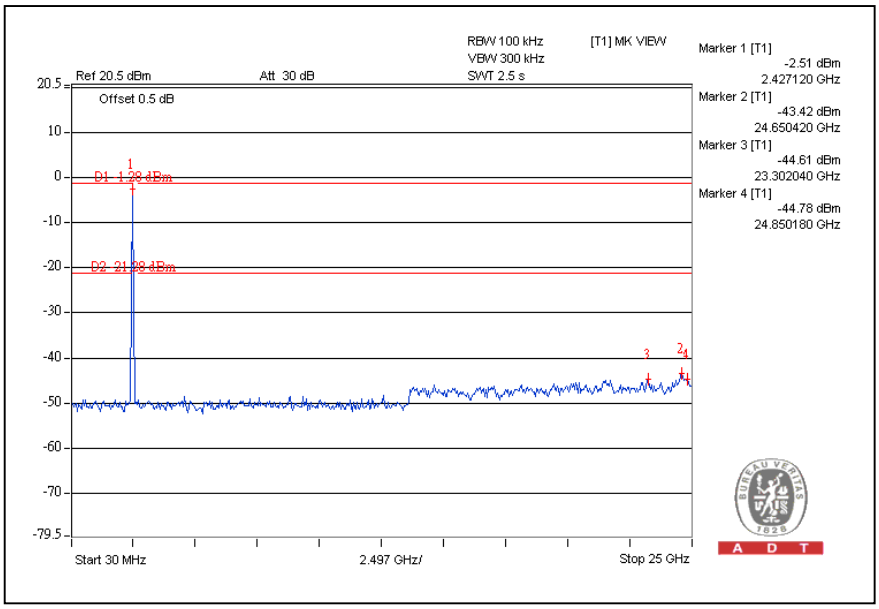
CH11



CH1

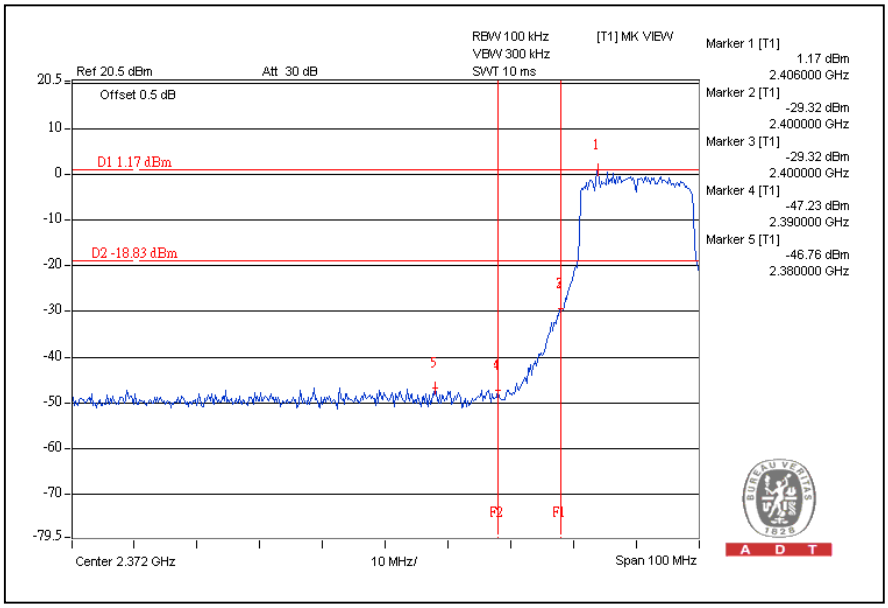

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
0.48 dBm
2.377180 GHz
Marker 2 [T1]
-44.10 dBm
21.404320 GHz
Marker 3 [T1]
-44.29 dBm
24.900120 GHz
Marker 4 [T1]
-44.61 dBm
21.504200 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 1.54 dBm
D2 -18.46 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

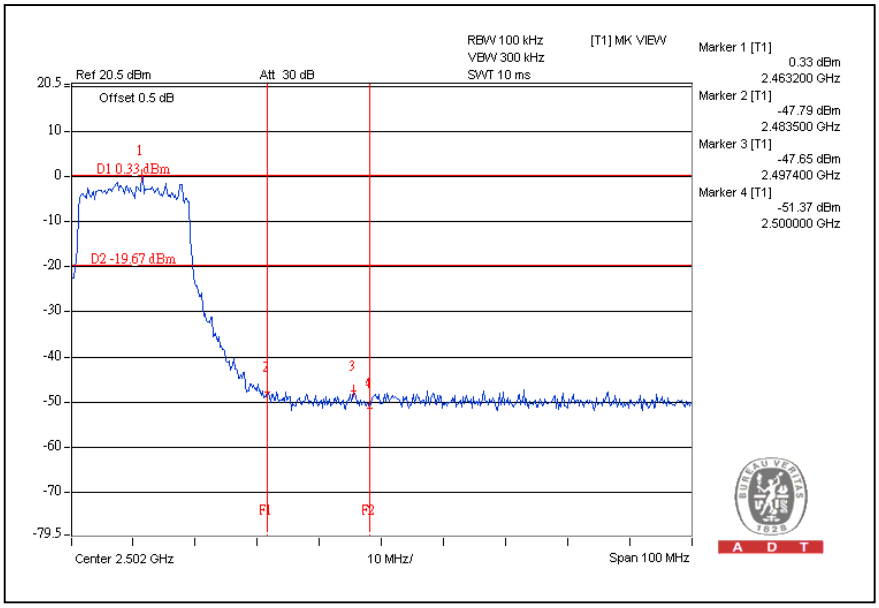

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-2.51 dBm
2.427120 GHz
Marker 2 [T1]
-43.42 dBm
24.650420 GHz
Marker 3 [T1]
-44.61 dBm
23.302040 GHz
Marker 4 [T1]
-44.78 dBm
24.850180 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 1.28 dBm
D2 -21.28 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

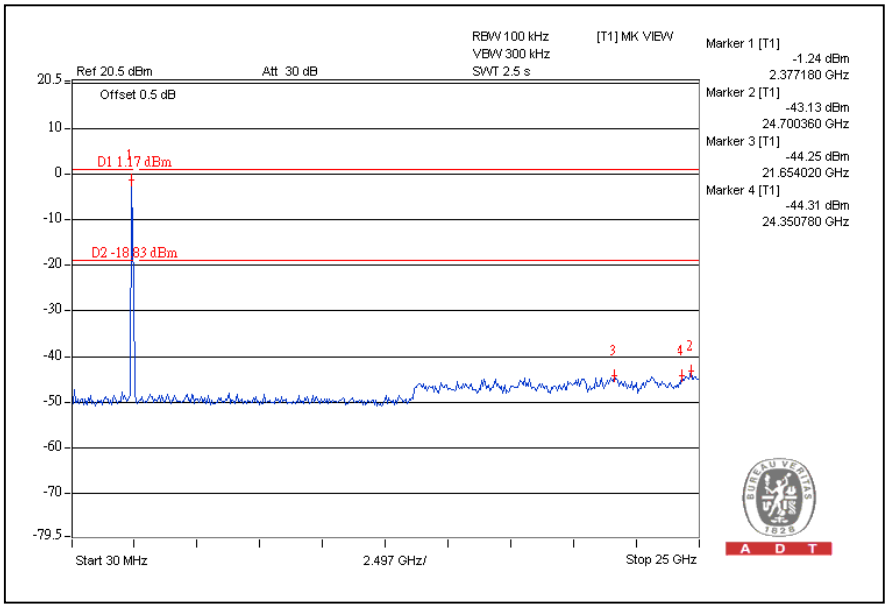
CH1



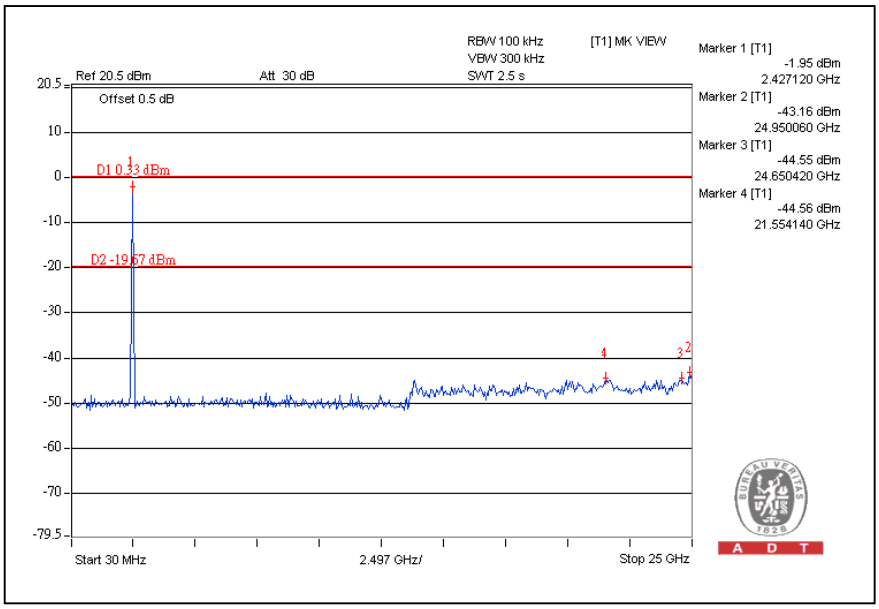
CH11



CH1

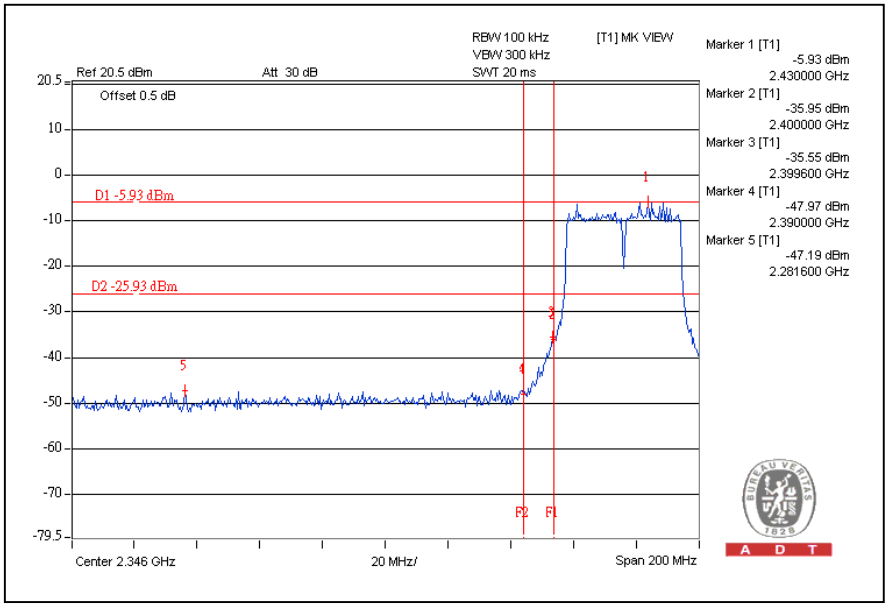

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-1.24 dBm
2.377180 GHz
Marker 2 [T1]
-43.13 dBm
24.700360 GHz
Marker 3 [T1]
-44.25 dBm
21.654020 GHz
Marker 4 [T1]
-44.31 dBm
24.350780 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 1.17 dBm
D2 -18.83 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

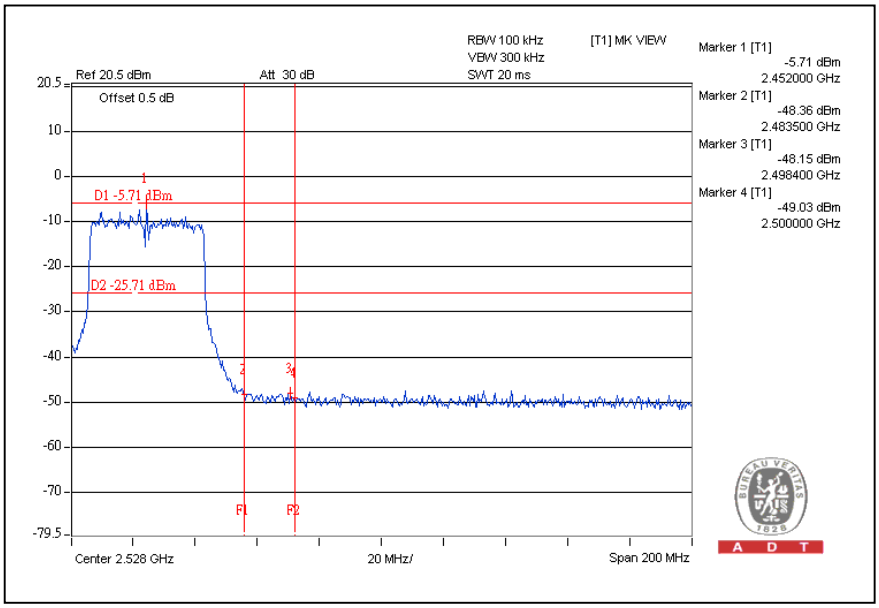

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-1.95 dBm
2.427120 GHz
Marker 2 [T1]
-43.16 dBm
24.950060 GHz
Marker 3 [T1]
-44.55 dBm
24.650420 GHz
Marker 4 [T1]
-44.56 dBm
21.554140 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 0.33 dBm
D2 -19.67 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

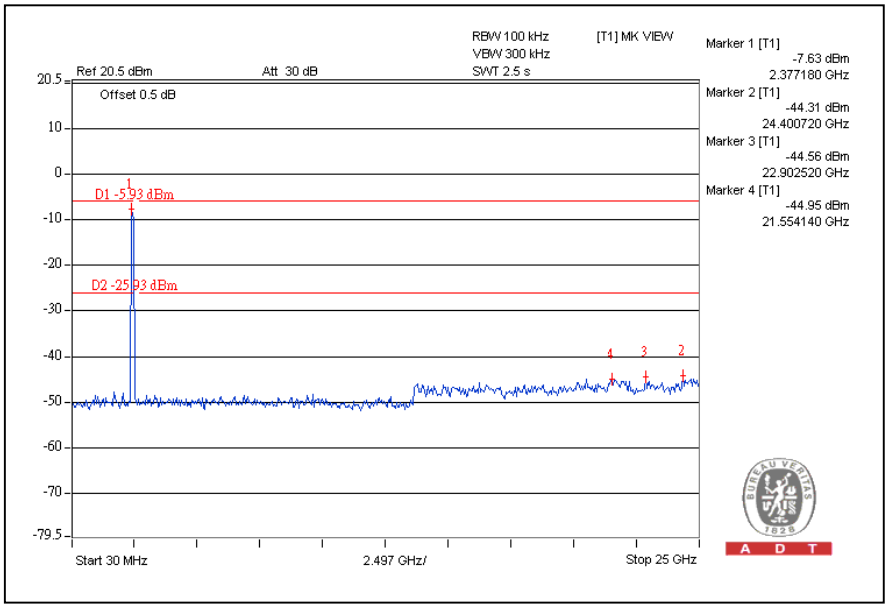
CH1



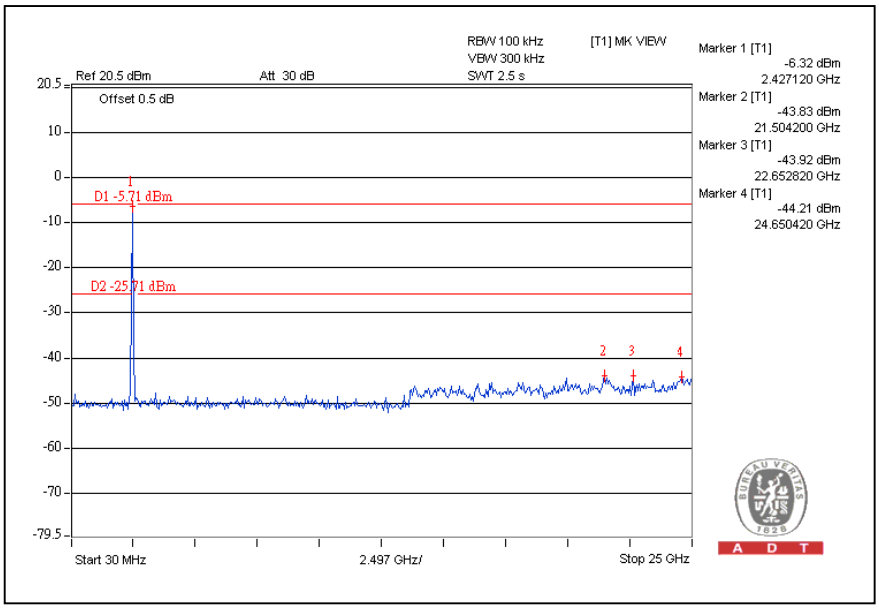
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-7.63 dBm
2.377180 GHz
Marker 2 [T1]
-44.31 dBm
24.400720 GHz
Marker 3 [T1]
-44.56 dBm
22.902520 GHz
Marker 4 [T1]
-44.95 dBm
21.554140 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -5.93 dBm
D2 -25.93 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH7

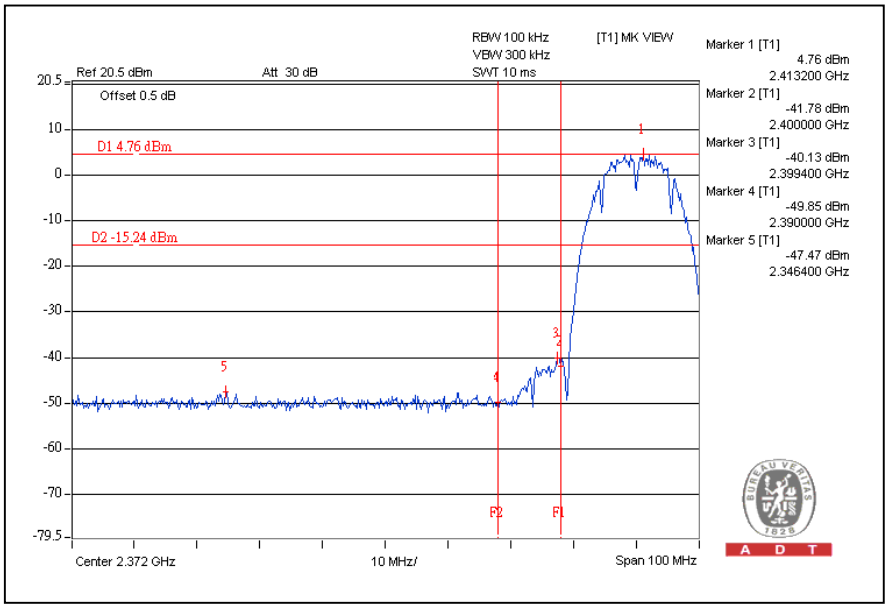

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-6.32 dBm
2.427120 GHz
Marker 2 [T1]
-43.83 dBm
21.504200 GHz
Marker 3 [T1]
-43.92 dBm
22.652820 GHz
Marker 4 [T1]
-44.21 dBm
24.650420 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -5.71 dBm
D2 -25.71 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

4.6.10 TEST RESULTS- ANTENNA 8

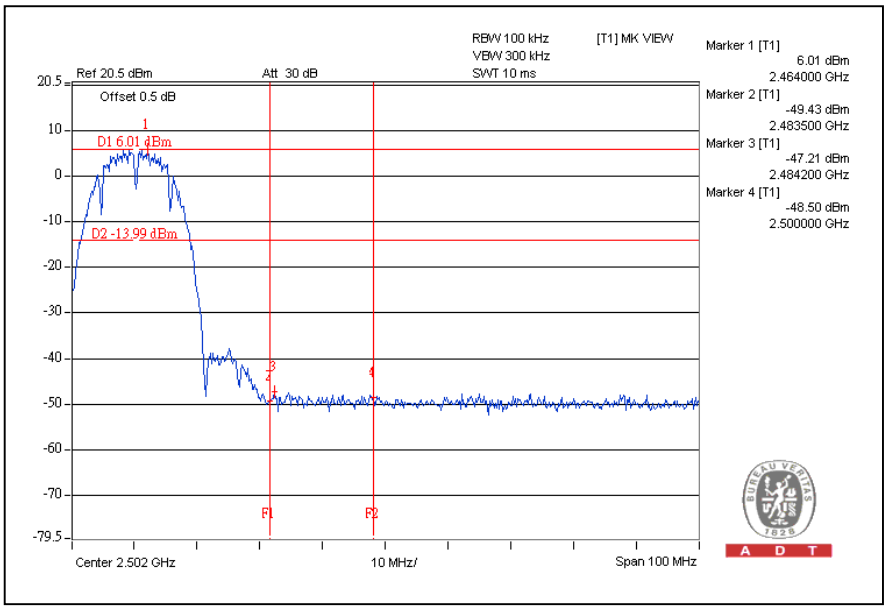
The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION:

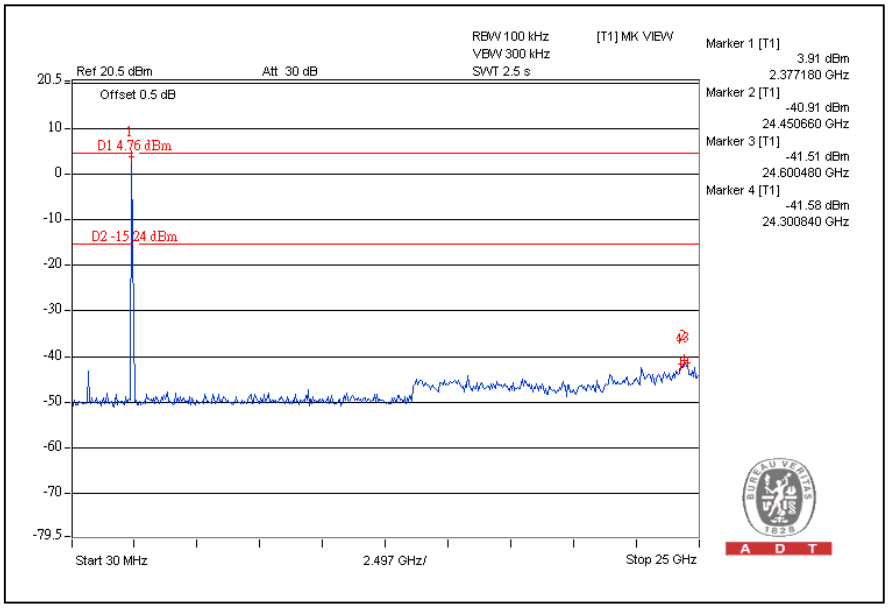
CH1



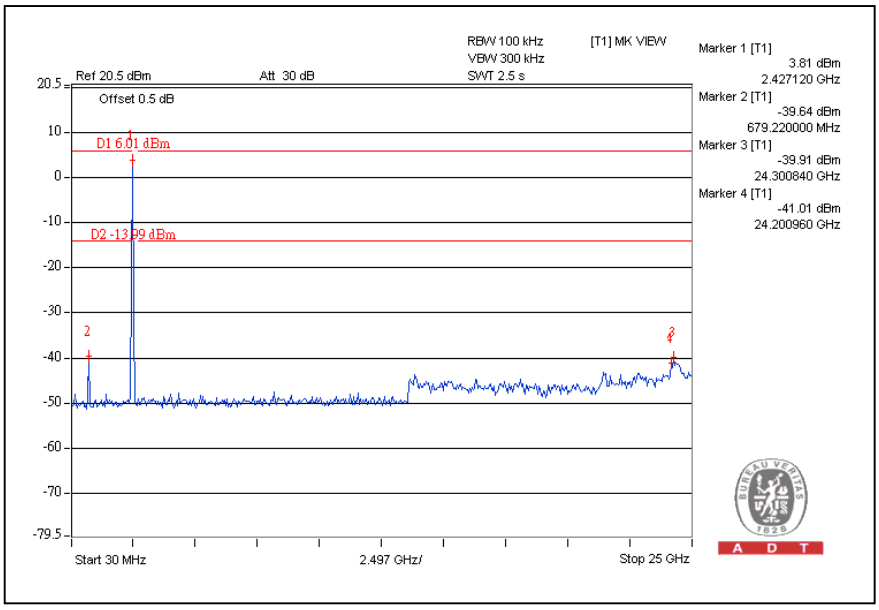
CH11



CH1

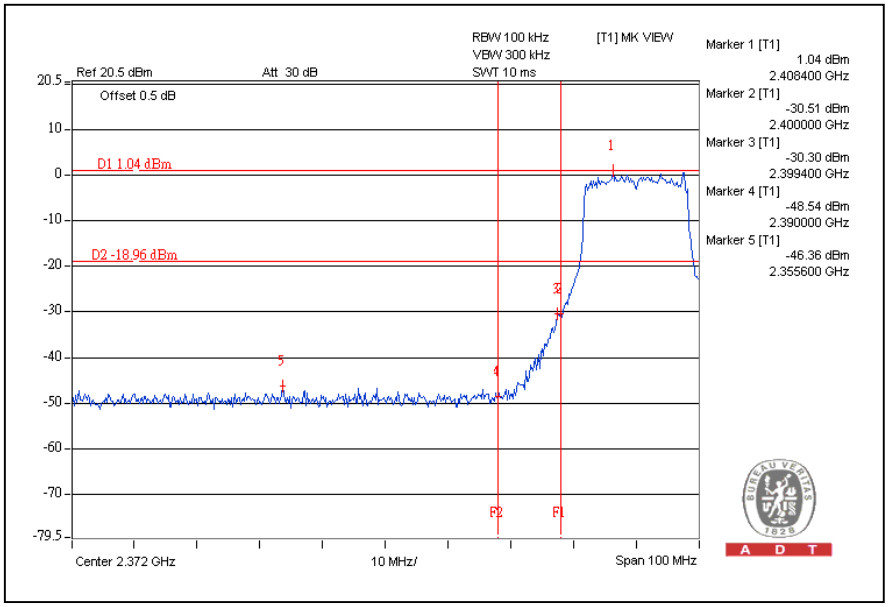

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.76 dBm
D2 -15.24 dBm
Marker 1 [T1]
3.91 dBm
2.377180 GHz
Marker 2 [T1]
-40.91 dBm
24.450660 GHz
Marker 3 [T1]
-41.51 dBm
24.600480 GHz
Marker 4 [T1]
-41.58 dBm
24.300840 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

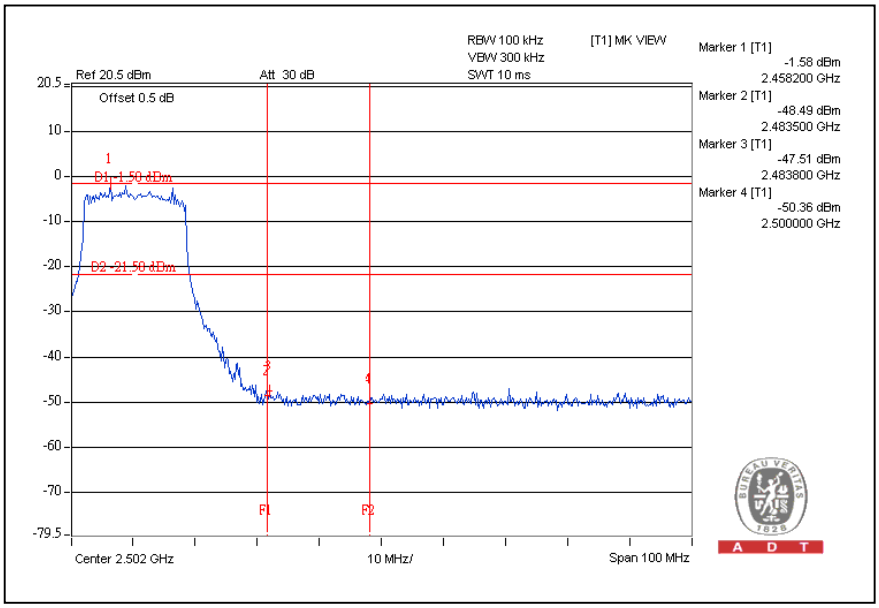

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 6.01 dBm
D2 -13.99 dBm
Marker 1 [T1]
3.81 dBm
2.427120 GHz
Marker 2 [T1]
-39.64 dBm
679.220000 MHz
Marker 3 [T1]
-39.91 dBm
24.300840 GHz
Marker 4 [T1]
-41.01 dBm
24.200960 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION:

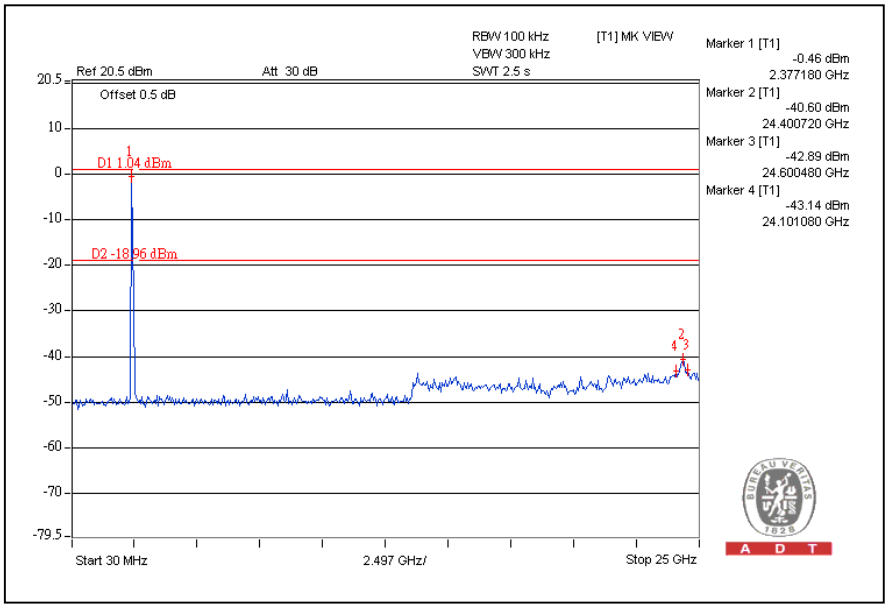
CH1



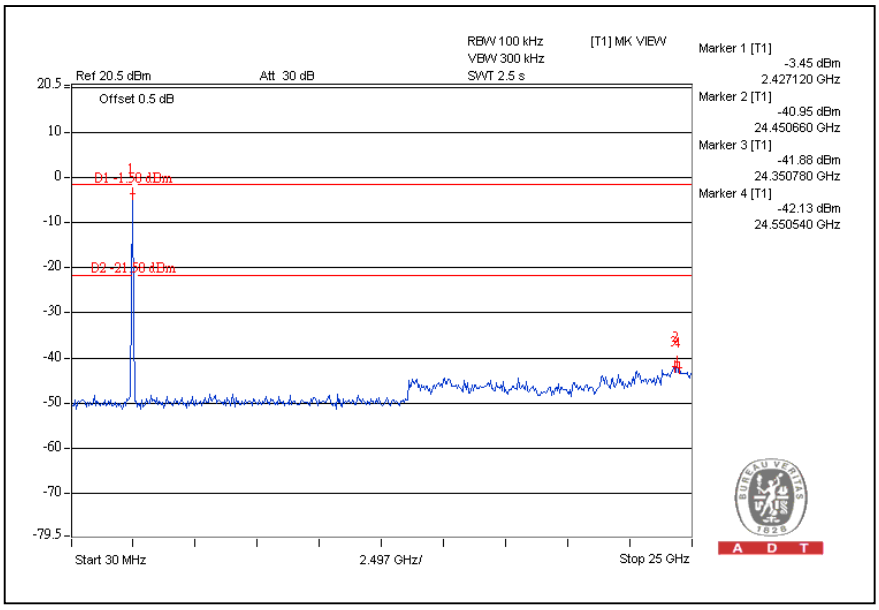
CH11



CH1

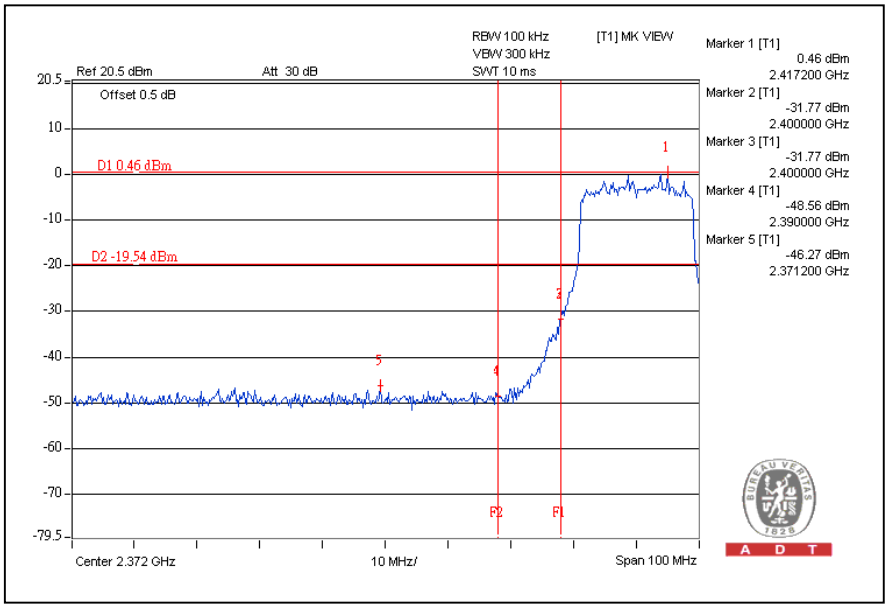

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 1.04 dBm
D2 -18.96 dBm
Marker 1 [T1]
-0.46 dBm
2.377180 GHz
Marker 2 [T1]
-40.60 dBm
24.400720 GHz
Marker 3 [T1]
-42.89 dBm
24.600480 GHz
Marker 4 [T1]
-43.14 dBm
24.101080 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

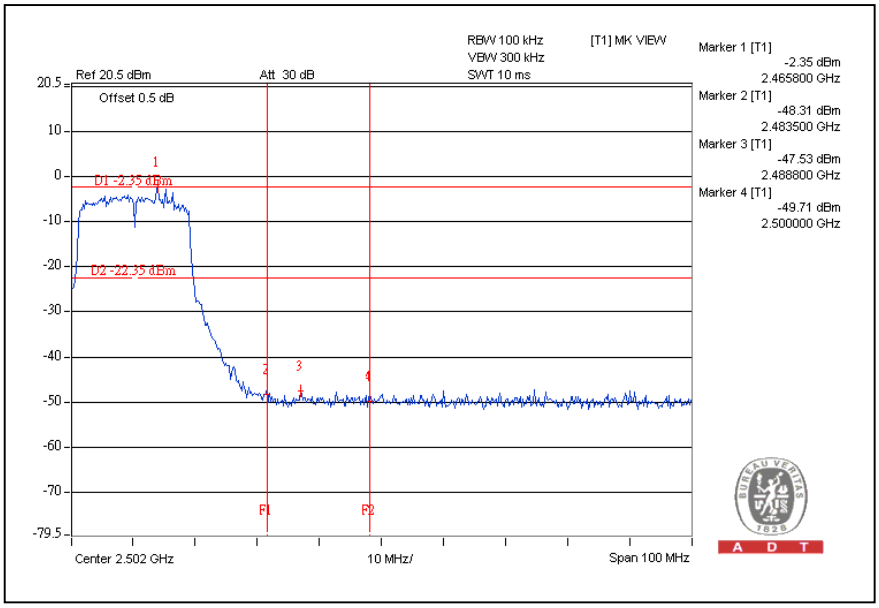

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -1.50 dBm
D2 -21.50 dBm
Marker 1 [T1]
-3.45 dBm
2.427120 GHz
Marker 2 [T1]
-40.95 dBm
24.450660 GHz
Marker 3 [T1]
-41.88 dBm
24.350780 GHz
Marker 4 [T1]
-42.13 dBm
24.550540 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

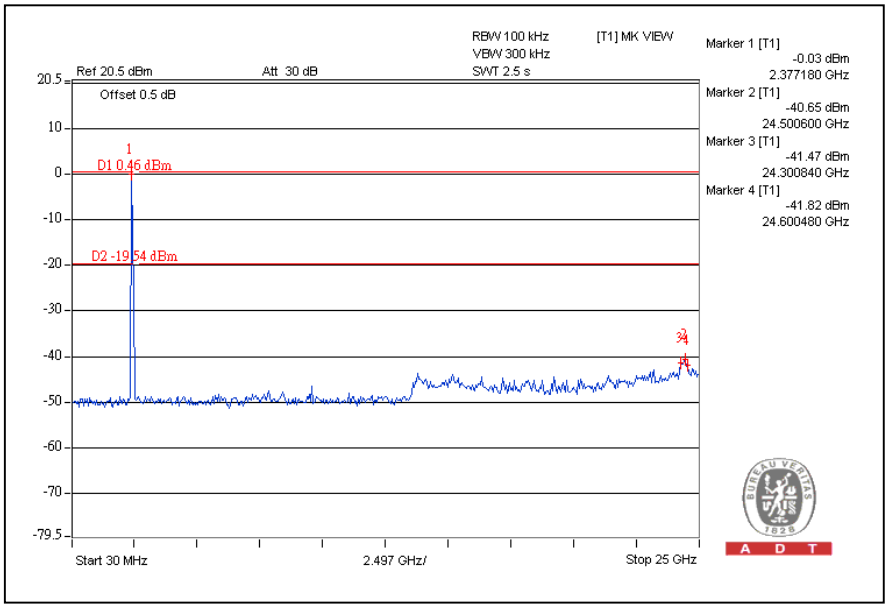
CH1



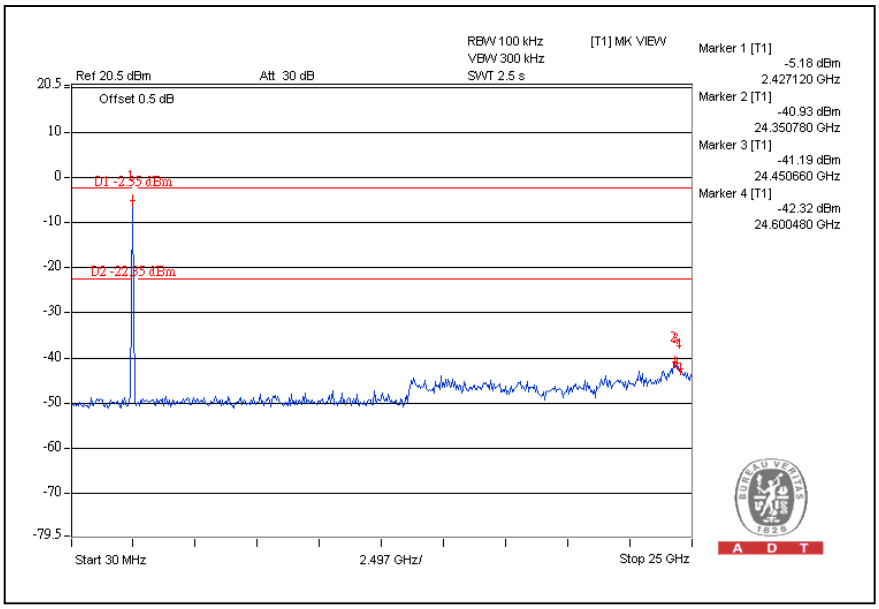
CH11



CH1

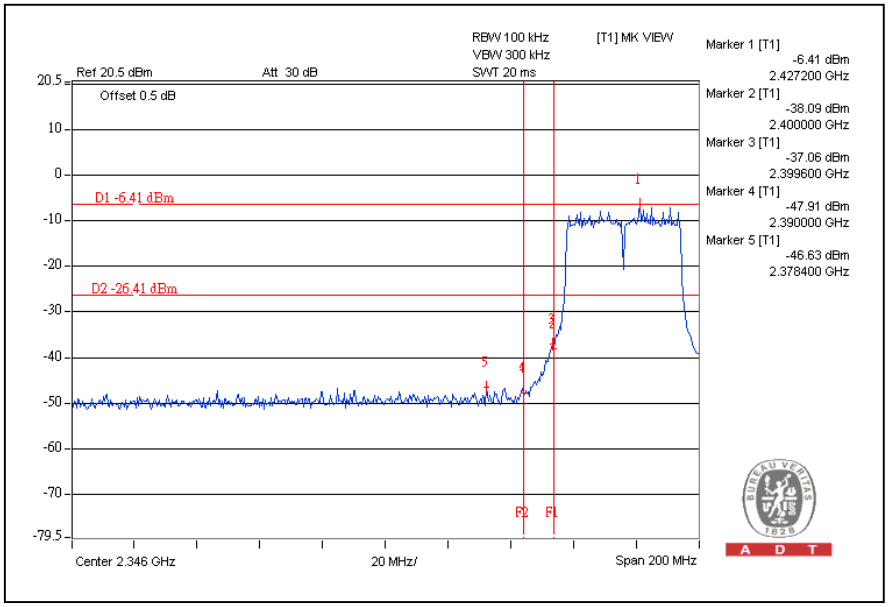

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-0.03 dBm
2.377180 GHz
Marker 2 [T1]
-40.65 dBm
24.500600 GHz
Marker 3 [T1]
-41.47 dBm
24.300840 GHz
Marker 4 [T1]
-41.82 dBm
24.600480 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 0.46 dBm
D2 -19.54 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

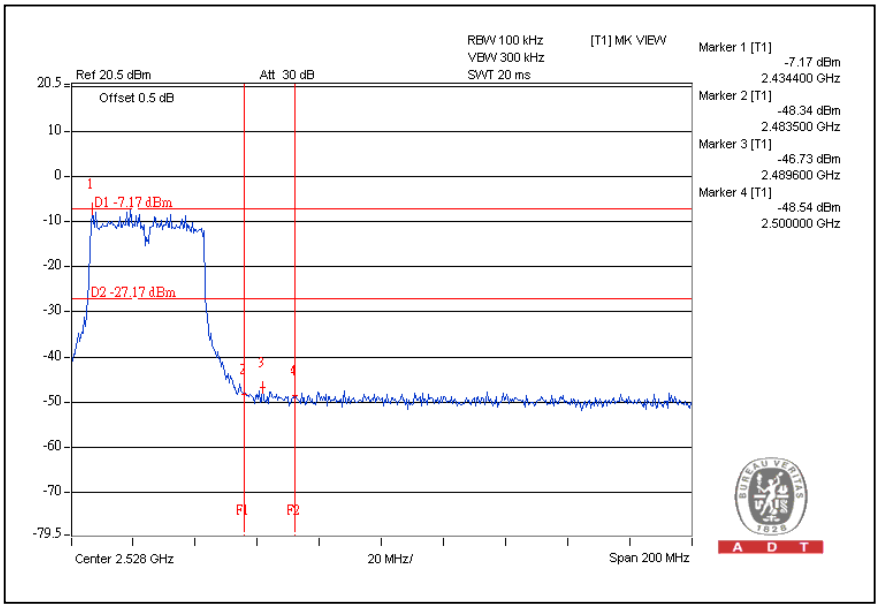

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-5.18 dBm
2.427120 GHz
Marker 2 [T1]
-40.93 dBm
24.350780 GHz
Marker 3 [T1]
-41.19 dBm
24.450660 GHz
Marker 4 [T1]
-42.32 dBm
24.600480 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -2.35 dBm
D2 -22.35 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

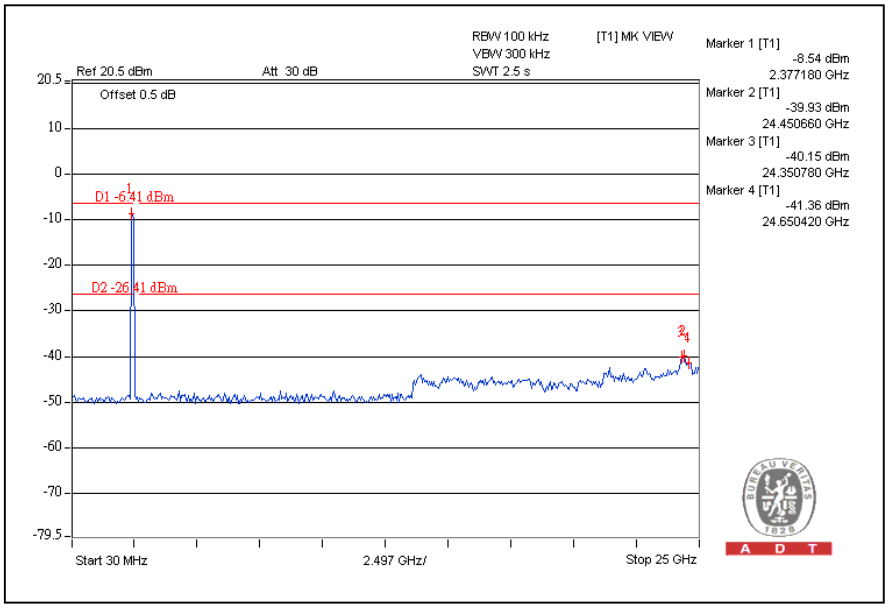
CH1



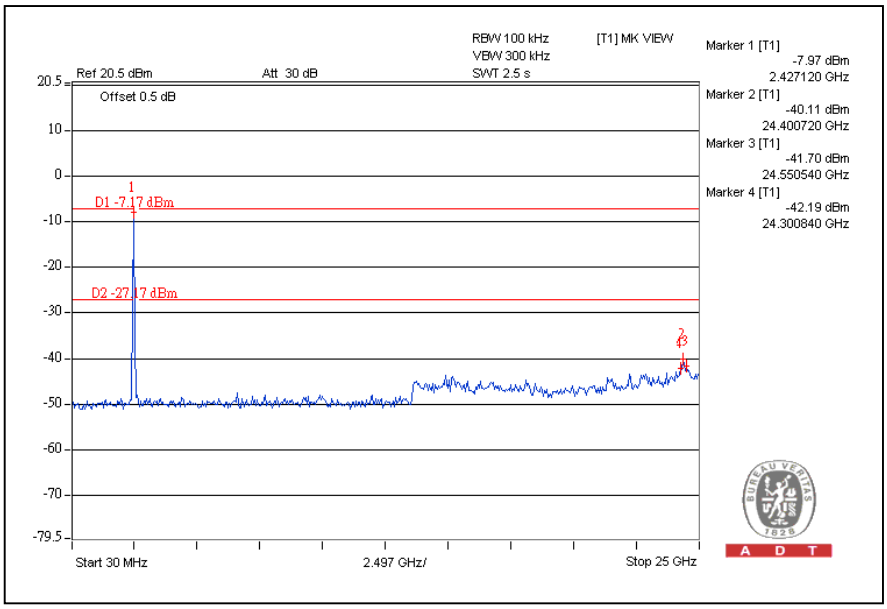
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-8.54 dBm
2.377180 GHz
Marker 2 [T1]
-39.93 dBm
24.450660 GHz
Marker 3 [T1]
-40.15 dBm
24.350780 GHz
Marker 4 [T1]
-41.36 dBm
24.650420 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -6.41 dBm
D2 -26.41 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH7

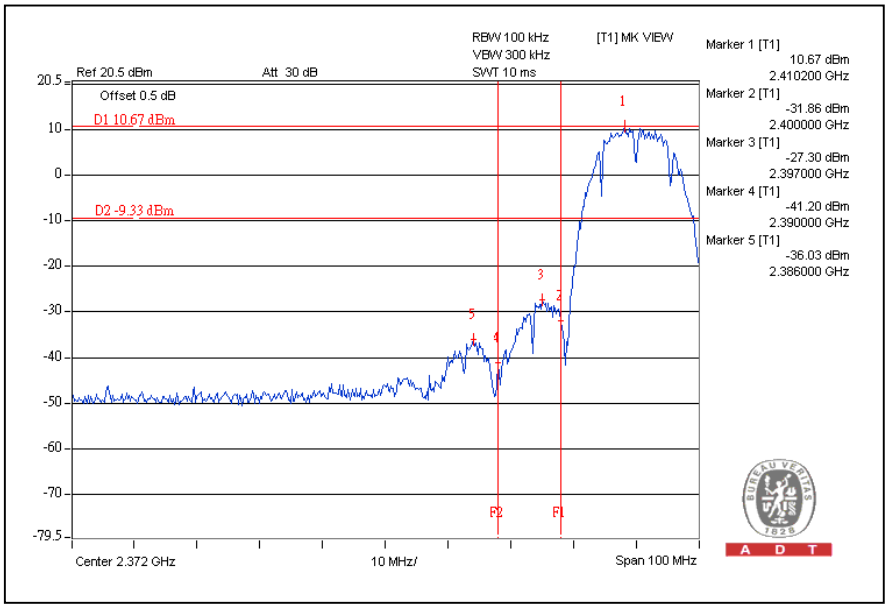

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-7.97 dBm
2.427120 GHz
Marker 2 [T1]
-40.11 dBm
24.400720 GHz
Marker 3 [T1]
-41.70 dBm
24.550540 GHz
Marker 4 [T1]
-42.19 dBm
24.300840 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -7.17 dBm
D2 -27.17 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

4.6.11 TEST RESULTS- ANTENNA 12

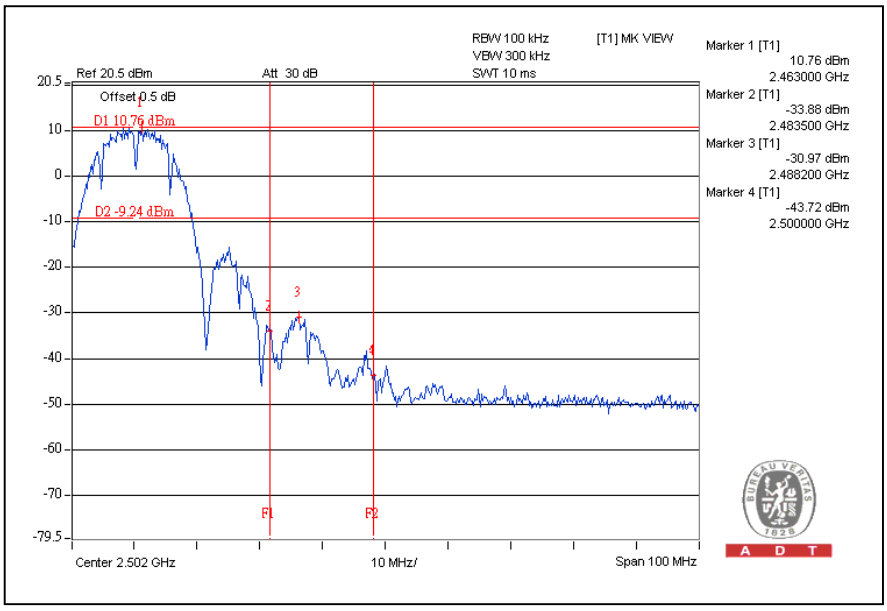
The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION:

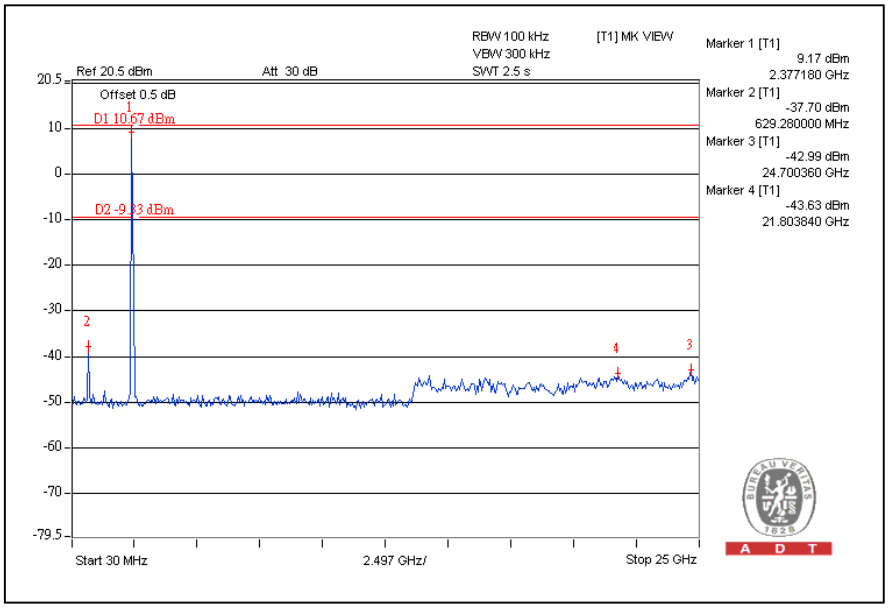
CH1



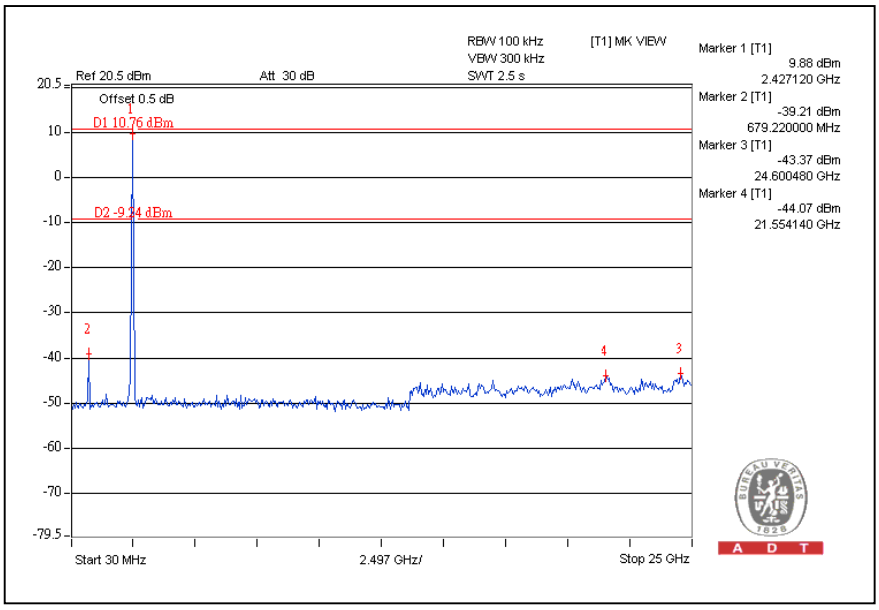
CH11



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
9.17 dBm
2.377180 GHz
Marker 2 [T1]
-37.70 dBm
629.280000 MHz
Marker 3 [T1]
-42.99 dBm
24.700360 GHz
Marker 4 [T1]
-43.63 dBm
21.803840 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 10.67 dBm
D2 -9.33 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
9.88 dBm
2.427120 GHz
Marker 2 [T1]
-39.21 dBm
679.220000 MHz
Marker 3 [T1]
-43.37 dBm
24.600480 GHz
Marker 4 [T1]
-44.07 dBm
21.554140 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 10.76 dBm
D2 -9.24 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

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

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

No	Brand	Model	Antenna Type	Connecter Type (External only)	Frequency range (MHz)	Indoor or Outdoor
1	Symbol	ML-2499-BYGA2-01R	YAGI	Type N-Female	2400~2500	Indoor
2	Symbol	ML-2499-11PNA2-01R	Panel	RP-BNC-Female	2400~2500	Indoor
3	Symbol	ML-2452-APA2-01	Dipole	RP-SMA MALE	2400-2500, 5150-5850	Indoor
4	Motolora	ML-2452-PTA2M3X3-1	Embedded	RP-SMA-Male	2400-2500, 4900-5990	Indoor
5	Symbol	ML-5299-WPNA1-01R	Panel	RP-SMA-Female	5150-5875	Indoor
6	Symbol	ML-2499-HPA3-01R	Dipole	RP-BNC FEMALE	2400-2500	Indoor
7	Symbol	ML-5299-HPA1-01R	Dipole	RP-SMA FEMALE	5150-5875	Indoor
8	Motolora	ML-2452-PTA3M3-036	Patch	RP-SMA-Male	2400-2500, 4900-5990	Indoor
9	WHA YU	ML-2452-APA6J-01	Dipole	SMA Plug Reverse	2400-2500, 4900-5990	Indoor
10	Motolora	ML-2452-PNL9M3-036	Panel	Reverse SMA	2400-2500, 5150-5875	Indoor
11	Motolora	ML-5299-BYGA15-012	YAGI	Type N Female connector	4900-5800	Indoor
12	WHA YU	M25.90002.S01	Dipole	I-PEX	2400-2500, 5150-5850	Indoor

No	Brand	Model	Gain (dBi)	Cable Loss(dB) (External only, if any)	Net Gain (dB)	Cable Length (External only, if any)
1	Symbol	ML-2499-BYGA2-01R	14.2	0.3	13.9	12 inch
2	Symbol	ML-2499-11PNA2-01R	11.2	2.7	8.5	96 inch
3	Symbol	ML-2452-APA2-01	3 / 4	N/A	3 / 4	N/A

4	Motolora	ML-2452-PTA2M3X3-1	1 / 2	N/A	1 / 2	N/A
5	Symbol	ML-5299-WPNA1-01R	14.2	1.2	13	36 inch
6	Symbol	ML-2499-HPA3-01R	4.6	1.3	3.3	48 inch
7	Symbol	ML-5299-HPA1-01R	5.9	0.84	5.06	36 inch
8	Motolora	ML-2452-PTA3M3-036	6/7	0.92 / 1.97	5.08 / 5.03	36 inch
9	WHA YU	ML-2452-APA6J-01	-6 / -6	N/A	2.4GHz Peak gain : -5.76dBi 5GHz Peak gain : band 1: -3.77dBi band 2: -3.38dBi band 3: -2.84dBi band 4: -2.94dBi	N/A
10	Motolora	ML-2452-PNL9M3-036	8 / 10.7	N/A	N/A	36 inch
11	Motolora	ML-5299-BYGA15-012	14.5	N/A	N/A	3 ft
12	WHA YU	M25.90002.S01	3.03 / 4.06	N/A	N/A	63mm

Note :

1. For Radio card 1: The antennas 1~4, 6 & 8-10 will be use, therefore antenna 1, 2, 4, 6, 8, were chosen for final test.
2. For Radio card 2: The antennas 3~5 & 7-11 will be use, therefore antenna 4, 5, 7, 8, 11, were chosen for final test.
3. For Radio card 3: The antenna 12 will be use only, therefore antenna 12 was chosen for final test.

5. TEST TYPES AND RESULTS (802.11a, 5725~5850MHz Band)

5.1 CONDUCTED EMISSION MEASUREMENT

5.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

5.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver	ESCS 30	100375	Mar. 23, 2009	Mar. 22, 2010
Line-Impedance Stabilization Network(for Peripheral)	ENV-216	100071	Nov. 26, 2008	Nov. 25, 2009
Line-Impedance Stabilization Network (for EUT)	ESH3-Z5	848773/004	Nov. 05, 2008	Nov. 04, 2009
RF Cable (JYEBAO)	5DFB	COBCAB-001	Aug. 15, 2008	Aug. 14, 2009
50 ohms Terminator	50	3	Nov. 05, 2008	Nov. 04, 2009
Software	BV ADT_Cond_V7.3.7	NA	NA	NA

Note:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. B.
3. The VCCI Con B Registration No. is C-2193.

5.1.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

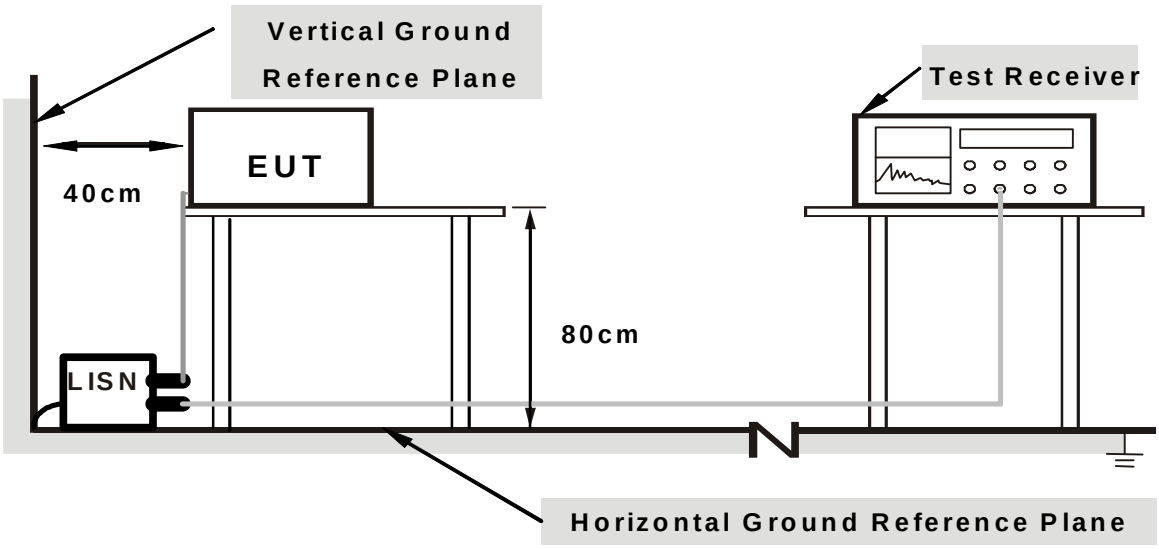
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit – 20dB) were not recorded.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation

5.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.1.6 EUT OPERATING CONDITIONS

Same as the 4.1.6

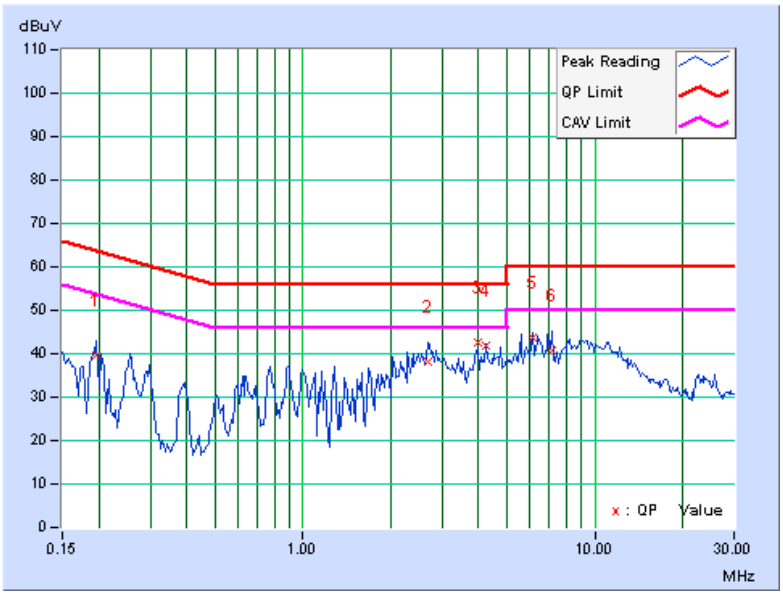
5.1.7 TEST RESULTS

802.11a M MODULATION <Radio card 3>:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	PHASE	Line (L)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6bps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25eg. C, 60RH, 965hPa	TESTED BY	Eagle Chen
TEST MODE	Radio card 3		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	0.22	39.23	-	39.45	-	63.74	53.74	-24.29	-
2	2.676	0.47	37.56	-	38.03	-	56.00	46.00	-17.97	-
+3	**3.980**	**0.58**	**41.89**	**-**	**42.47**	**-**	**56.00**	**46.00**	**-13.53**	**-**
4	4.246	0.59	41.37	-	41.96	-	56.00	46.00	-14.04	-
5	6.109	0.63	43.06	-	43.69	-	60.00	50.00	-16.31	-
6	7.172	0.65	39.98	-	40.63	-	60.00	50.00	-19.37	-

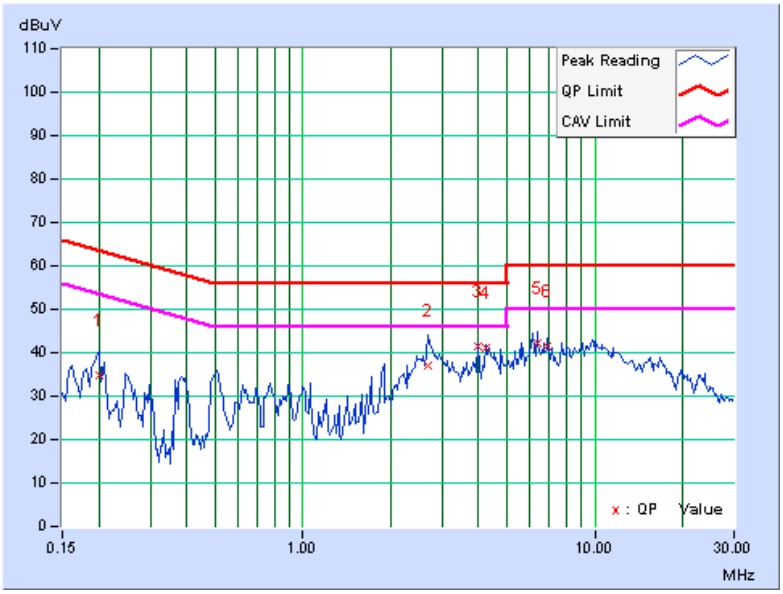
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	PHASE	Neutral (N)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6bps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25eg. C, 60RH, 965hPa	TESTED BY	Eagle Chen
TEST MODE	Radio card 3		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.201	0.15	34.68	-	34.83	-	63.58	53.58	-28.75	-
2	2.684	0.39	36.55	-	36.94	-	56.00	46.00	-19.06	-
+3	3.980	0.51	41.10	-	41.61	-	56.00	46.00	-14.39	-
4	4.250	0.51	40.59	-	41.10	-	56.00	46.00	-14.90	-
5	6.367	0.53	41.65	-	42.18	-	60.00	50.00	-17.82	-
6	6.898	0.54	40.93	-	41.47	-	60.00	50.00	-18.53	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.

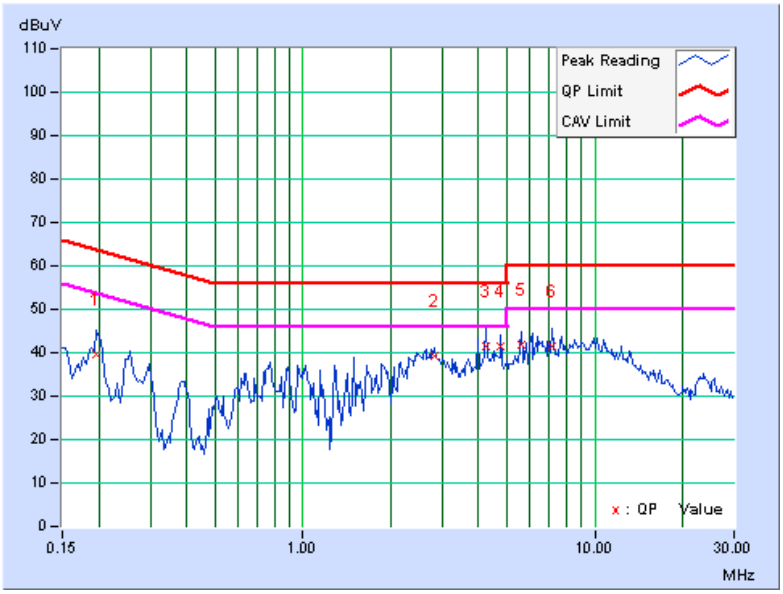


802.11a M MODULATION <Radio card 2>:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	PHASE	Line (L)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6bps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25eg. C, 60RH, 965hPa	TESTED BY	Eagle Chen
TEST MODE	Radio card 2		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	0.22	39.43	-	39.65	-	63.74	53.74	-24.09	-
2	2.836	0.48	38.65	-	39.13	-	56.00	46.00	-16.87	-
3	4.246	0.59	41.02	-	41.61	-	56.00	46.00	-14.39	-
+4	4.781	0.60	40.99	-	41.59	-	56.00	46.00	-14.41	-
5	5.578	0.61	41.42	-	42.03	-	60.00	50.00	-17.97	-
6	7.172	0.65	40.92	-	41.57	-	60.00	50.00	-18.43	-

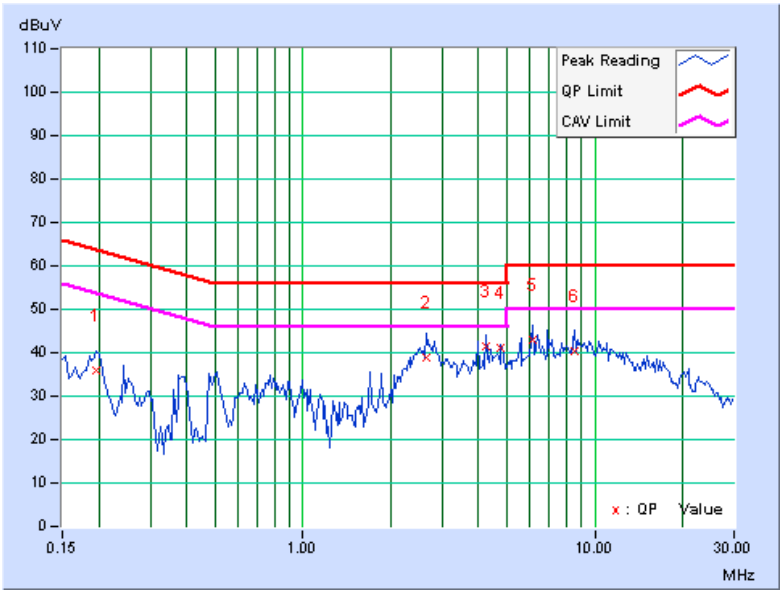
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	PHASE	Neutral (N)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6bps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25eg. C, 60RH, 965hPa	TESTED BY	Eagle Chen
TEST MODE	Radio card 2		

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	0.15	35.95	-	36.10	-	63.74	53.74	-27.64	-
2	2.652	0.39	38.54	-	38.93	-	56.00	46.00	-17.07	-
+3	4.250	0.51	40.81	-	41.32	-	56.00	46.00	-14.68	-
4	4.777	0.52	40.55	-	41.07	-	56.00	46.00	-14.93	-
5	6.109	0.53	42.45	-	42.98	-	60.00	50.00	-17.02	-
6	8.496	0.55	39.98	-	40.53	-	60.00	50.00	-19.47	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



5.2 RADIATED EMISSION MEASUREMENT

5.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

5.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
ROHDE & SCHWARZ Spectrum Analyzer	FSP40	100036	Dec. 9, 2008	Dec. 8, 2009
HP Pre_Amplifier	8449B	3008A01923	Nov. 10, 2008	Nov. 9, 2009
ROHDE & SCHWARZ Test Receiver	ESCS30	847124/029	Sep. 9, 2008	Sep. 8, 2009
SCHWARZBECK TRILOG Broadband Antenna	VULB 9168	138	April 29, 2009	April 28, 2010
Schwarzbeck Horn_Antenna	BBHA9120	D124	Dec. 09, 2008	Dec. 08, 2009
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 22, 2009	Jan. 21, 2010
RF Switches	EMH-011	08009	Oct. 07, 2008	Oct. 06, 2009
RF CABLE (Chaintek)	Sucoflex 106	28077	Aug. 15, 2008	Aug. 14, 2009
RF Cable	8DFB	STCCAB-30M-1GHz	Oct. 07, 2008	Oct. 06, 2009
Software	ADT_Radiated_V7.6.15.9.2	NA	NA	NA
CT Antenna Tower & Turn Table	NA	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna, HP preamplifier (model: 8449B) and Spectrum Analyzer (model: FSP40) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in Open Site No. C.
4. The FCC Site Registration No. is 656396.
5. The VCCI Site Registration No. is R-1626.
6. The CANADA Site Registration No. is IC 7450G-3.

5.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

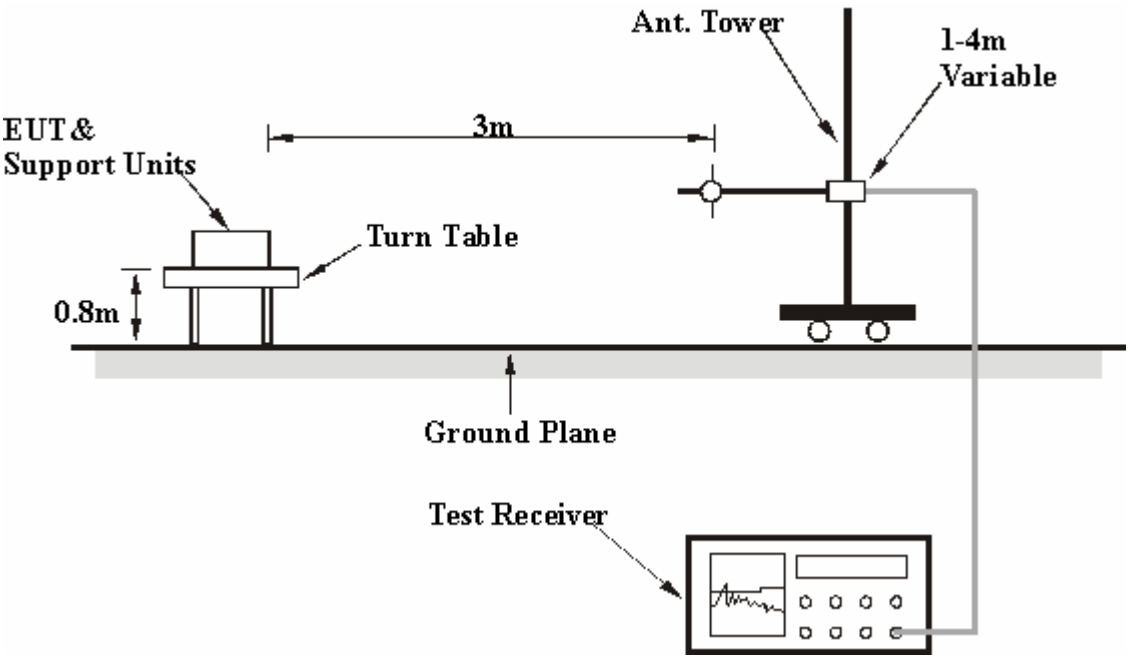
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation

5.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.2.6 EUT OPERATING CONDITIONS

Same as the 4.1.6

5.2.7 TEST RESULTS –ANTENNA 4

BELOW 1GHz WORST-CASE DATA：802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25.0deg. C, 60.0%RH 965hPa	**TESTED BY**	Eric Lee

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	125.00	27.43 QP	43.50	-16.07	1.26 H	148	14.36	13.07
2	250.00	44.75 QP	46.00	-1.25	1.22 H	276	30.50	14.25
3	375.00	38.54 QP	46.00	-7.46	1.21 H	279	19.73	18.81
4	650.00	43.76 QP	46.00	-2.24	1.21 H	256	18.23	25.53
5	750.00	35.88 QP	46.00	-10.12	1.09 H	255	8.97	26.91
6	875.00	37.12 QP	46.00	-8.88	1.00 H	123	7.83	29.29
7	1000.00	38.77 QP	54.00	-15.23	1.04 H	154	8.03	30.74
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	57.21	32.74 QP	40.00	-7.26	1.00 V	253	19.05	13.69
2	125.00	29.86 QP	43.50	-13.64	1.00 V	87	16.79	13.07
3	250.00	28.43 QP	46.00	-17.57	1.00 V	67	14.18	14.25
4	375.00	39.59 QP	46.00	-6.41	1.05 V	276	20.78	18.81
5	600.00	37.84 QP	46.00	-8.16	1.00 V	293	12.80	25.04
6	650.00	39.83 QP	46.00	-6.17	1.00 V	297	14.30	25.53

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.

802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25.0deg. C, 65.0%RH 965hPa	TESTED BY	Eric Lee

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	3830.00	43.83 PK	74.00	-30.17	1.35 H	0	9.92	33.91
2	3830.00	30.58 AV	54.00	-23.42	1.35 H	0	-3.33	33.91
3	*5745.00	119.00 PK			1.09 H	31	81.04	37.96
4	*5745.00	108.20 AV			1.09 H	31	70.24	37.96
5	7660.00	52.62 PK	74.00	-21.38	1.58 H	57	9.20	43.42
6	7660.00	39.56 AV	54.00	-14.44	1.58 H	57	-3.86	43.42
7	11490.00	64.64 PK	74.00	-9.36	1.55 H	82	17.41	47.23
8	11490.00	47.59 AV	54.00	-6.41	1.55 H	82	0.36	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	43.20 PK	74.00	-30.80	1.04 V	42	9.29	33.91
2	3830.00	30.10 AV	54.00	-23.90	1.04 V	42	-3.81	33.91
3	*5745.00	124.19 PK			1.56 V	350	86.23	37.96
4	*5745.00	113.45 AV			1.56 V	350	75.49	37.96
5	7660.00	52.44 PK	74.00	-21.56	1.04 V	21	9.02	43.42
6	7660.00	39.33 AV	54.00	-14.67	1.04 V	21	-4.09	43.42
7	11490.00	61.20 PK	74.00	-12.80	1.02 V	24	13.97	47.23
8	11490.00	47.20 AV	54.00	-6.80	1.02 V	24	-0.03	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25.0deg. C, 65.0%RH 965hPa	TESTED BY	Eric Lee

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	3856.60	43.74 PK	74.00	-30.26	1.30 H	286	9.75	33.99
2	3856.60	30.38 AV	54.00	-23.62	1.30 H	286	-3.61	33.99
3	*5785.00	117.30 PK			1.49 H	83	79.23	38.07
4	*5785.00	106.40 AV			1.49 H	83	68.33	38.07
5	7713.30	52.77 PK	74.00	-21.23	1.60 H	62	9.24	43.53
6	7713.30	39.63 AV	54.00	-14.37	1.60 H	62	-3.90	43.53
7	11570.00	61.72 PK	74.00	-12.28	1.49 H	83	14.50	47.22
8	11570.00	47.33 AV	54.00	-6.67	1.49 H	83	0.11	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	43.20 PK	74.00	-30.80	1.03 V	43	9.21	33.99
2	3856.60	30.10 AV	54.00	-23.90	1.03 V	43	-3.89	33.99
3	*5785.00	121.80 PK			1.16 V	350	83.73	38.07
4	*5785.00	111.82 AV			1.16 V	350	73.75	38.07
5	7713.30	53.40 PK	74.00	-20.60	1.04 V	4	9.87	43.53
6	7713.30	39.30 AV	54.00	-14.70	1.04 V	4	-4.23	43.53
7	11570.00	61.40 PK	74.00	-12.60	1.03 V	24	14.18	47.22
8	11570.00	47.10 AV	54.00	-6.90	1.03 V	24	-0.12	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25.0deg. C, 65.0%RH 965hPa	TESTED BY	Eric Lee

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	3883.30	43.71 PK	74.00	-30.29	1.30 H	354	9.64	34.07
2	3883.30	30.26 AV	54.00	-23.74	1.30 H	354	-3.81	34.07
3	*5825.00	116.40 PK			1.26 H	42	78.22	38.18
4	*5825.00	105.20 AV			1.26 H	42	67.02	38.18
5	11650.00	60.18 PK	74.00	-13.82	1.46 H	81	12.96	47.22
6	11650.00	46.26 AV	54.00	-7.74	1.46 H	81	-0.96	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	43.20 PK	74.00	-30.80	1.04 V	46	9.13	34.07
2	3883.30	30.10 AV	54.00	-23.90	1.04 V	46	-3.97	34.07
3	*5825.00	120.41 PK			1.16 V	352	82.23	38.18
4	*5825.00	110.29 AV			1.16 V	352	72.11	38.18
5	11650.00	57.64 PK	74.00	-16.36	1.02 V	21	10.42	47.22
6	11650.00	43.79 AV	54.00	-10.21	1.02 V	21	-3.43	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

DRAFT 802.11n (20MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26.0deg. C, 60.0%RH 965hPa	TESTED BY	Eric Lee

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	3830.00	43.94 PK	74.00	-30.06	1.35 H	356	10.03	33.91
2	3830.00	30.65 AV	54.00	-23.35	1.35 H	356	-3.26	33.91
3	*5745.00	118.40 PK			1.24 H	39	80.44	37.96
4	*5745.00	108.20 AV			1.24 H	39	70.24	37.96
5	7660.00	52.74 PK	74.00	-21.26	1.66 H	31	9.32	43.42
6	7660.00	39.63 AV	54.00	-14.37	1.66 H	31	-3.79	43.42
7	11490.00	61.54 PK	74.00	-12.46	1.58 H	288	14.31	47.23
8	11490.00	47.66 AV	54.00	-6.34	1.58 H	288	0.43	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	43.50 PK	74.00	-30.50	1.02 V	44	9.59	33.91
2	3830.00	30.20 AV	54.00	-23.80	1.02 V	44	-3.71	33.91
3	*5745.00	123.91 PK			1.30 V	358	85.95	37.96
4	*5745.00	113.45 AV			1.30 V	358	75.49	37.96
5	7660.00	52.40 PK	74.00	-21.60	1.06 V	29	8.98	43.42
6	7660.00	39.30 AV	54.00	-14.70	1.06 V	29	-4.12	43.42
7	11490.00	61.30 PK	74.00	-12.70	1.04 V	42	14.07	47.23
8	11490.00	47.40 AV	54.00	-6.60	1.04 V	42	0.17	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26.0deg. C, 60.0%RH 965hPa	TESTED BY	Eric Lee

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	3856.60	43.81 PK	74.00	-30.19	1.33 H	351	9.82	33.99
2	3856.60	30.43 AV	54.00	-23.57	1.33 H	351	-3.56	33.99
3	*5785.00	117.60 PK			1.22 H	32	79.53	38.07
4	*5785.00	106.20 AV			1.22 H	32	68.13	38.07
5	7713.30	52.83 PK	74.00	-21.17	1.62 H	58	9.30	43.53
6	7713.30	39.72 AV	54.00	-14.28	1.62 H	58	-3.81	43.53
7	11570.00	61.83 PK	74.00	-12.17	1.45 H	100	14.61	47.22
8	11570.00	47.45 AV	54.00	-6.55	1.45 H	100	0.23	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	43.20 PK	74.00	-30.80	1.04 V	42	9.21	33.99
2	3856.60	30.10 AV	54.00	-23.90	1.04 V	42	-3.89	33.99
3	*5785.00	122.24 PK			1.29 V	353	84.17	38.07
4	*5785.00	111.67 AV			1.29 V	353	73.60	38.07
5	7713.30	52.40 PK	74.00	-21.60	1.02 V	44	8.87	43.53
6	7713.30	39.20 AV	54.00	-14.80	1.02 V	44	-4.33	43.53
7	11570.00	61.30 PK	74.00	-12.70	1.01 V	31	14.08	47.22
8	11570.00	47.10 AV	54.00	-6.90	1.01 V	31	-0.12	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26.0deg. C, 60.0%RH 965hPa	TESTED BY	Eric Lee

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	3883.30	43.81 PK	74.00	-30.19	1.30 H	358	9.74	34.07
2	3883.30	30.35 AV	54.00	-23.65	1.30 H	358	-3.72	34.07
3	*5825.00	116.10 PK			1.26 H	37	77.92	38.18
4	*5825.00	105.30 AV			1.26 H	37	67.12	38.18
5	11650.00	60.28 PK	74.00	-13.72	1.44 H	92	13.06	47.22
6	11650.00	46.33 AV	54.00	-7.67	1.44 H	92	-0.89	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	43.40 PK	74.00	-30.60	1.04 V	31	9.33	34.07
2	3883.30	30.20 AV	54.00	-23.80	1.04 V	31	-3.87	34.07
3	*5825.00	121.03 PK			1.30 V	0	82.85	38.18
4	*5825.00	110.53 AV			1.30 V	0	72.35	38.18
5	11650.00	60.10 PK	74.00	-13.90	1.06 V	24	12.88	47.22
6	11650.00	46.10 AV	54.00	-7.90	1.06 V	24	-1.12	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

DRAFT 802.11n (40MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26.0deg. C, 60.0%RH 965hPa	TESTED BY	Eric Lee

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	3836.60	43.92 PK	74.00	-30.08	1.29 H	7	9.99	33.93
2	3836.60	30.66 AV	54.00	-23.34	1.29 H	7	-3.27	33.93
3	*5755.00	118.20 PK			1.26 H	43	80.22	37.98
4	*5755.00	107.30 AV			1.26 H	43	69.32	37.98
5	7673.30	52.73 PK	74.00	-21.27	1.60 H	29	9.28	43.45
6	7673.30	39.65 AV	54.00	-14.35	1.60 H	29	-3.80	43.45
7	11510.00	60.79 PK	74.00	-13.21	1.61 H	283	13.56	47.23
8	11510.00	46.63 AV	54.00	-7.37	1.61 H	283	-0.60	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3836.60	43.40 PK	74.00	-30.60	1.02 V	26	9.47	33.93
2	3836.60	30.40 AV	54.00	-23.60	1.02 V	26	-3.53	33.93
3	*5755.00	123.68 PK			1.30 V	352	85.70	37.98
4	*5755.00	112.35 AV			1.30 V	352	74.37	37.98
5	7673.30	52.30 PK	74.00	-21.70	1.04 V	42	8.85	43.45
6	7673.30	39.20 AV	54.00	-14.80	1.04 V	42	-4.25	43.45
7	11510.00	60.80 PK	74.00	-13.20	1.01 V	43	13.57	47.23
8	11510.00	46.20 AV	54.00	-7.80	1.01 V	43	-1.03	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26.0deg. C, 60.0%RH 965hPa	TESTED BY	Eric Lee

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	3863.30	43.65 PK	74.00	-30.35	1.31 H	351	9.64	34.01
2	3863.30	30.31 AV	54.00	-23.69	1.31 H	351	-3.70	34.01
3	*5795.00	115.40 PK			1.26 H	31	77.30	38.10
4	*5795.00	105.30 AV			1.26 H	31	67.20	38.10
5	7726.60	52.96 PK	74.00	-21.04	1.63 H	39	9.41	43.55
6	7726.60	39.48 AV	54.00	-14.52	1.63 H	39	-4.07	43.55
7	11590.00	60.28 PK	74.00	-13.72	1.59 H	283	13.06	47.22
8	11590.00	46.35 AV	54.00	-7.65	1.59 H	283	-0.87	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3863.30	43.20 PK	74.00	-30.80	1.02 V	62	9.19	34.01
2	3863.30	30.10 AV	54.00	-23.90	1.02 V	62	-3.91	34.01
3	*5795.00	120.77 PK			1.28 V	358	82.67	38.10
4	*5795.00	110.05 AV			1.28 V	358	71.95	38.10
5	7726.60	52.40 PK	74.00	-21.60	1.04 V	23	8.85	43.55
6	7726.60	39.20 AV	54.00	-14.80	1.04 V	23	-4.35	43.55
7	11590.00	60.10 PK	74.00	-13.90	1.03 V	44	12.88	47.22
8	11590.00	46.10 AV	54.00	-7.90	1.03 V	44	-1.12	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

5.2.8 TEST RESULTS –ANTENNA 5

BELOW 1GHz WORST-CASE DATA：802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	30.0deg. C, 55.0%RH 965hPa	**TESTED BY**	Frank Liu

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	125.00	27.29 QP	43.50	-16.21	1.14 H	138	14.22	13.07
2	250.00	34.72 QP	46.00	-11.28	1.24 H	264	20.47	14.25
3	375.00	38.72 QP	46.00	-7.28	1.04 H	284	19.91	18.81
4	650.00	43.35 QP	46.00	-2.65	1.04 H	234	17.82	25.53
5	750.00	35.81 QP	46.00	-10.19	1.02 H	264	8.90	26.91
6	875.00	37.69 QP	46.00	-8.31	1.01 H	113	8.40	29.29
7	1000.00	38.89 QP	54.00	-15.11	1.03 H	162	8.15	30.74
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	57.21	32.74 QP	40.00	-7.26	1.00 V	263	19.05	13.69
2	125.00	29.44 QP	43.50	-14.06	1.00 V	125	16.37	13.07
3	250.00	28.43 QP	46.00	-17.57	1.00 V	46	14.18	14.25
4	375.00	39.67 QP	46.00	-6.33	1.05 V	262	20.86	18.81
5	600.00	37.41 QP	46.00	-8.59	1.00 V	259	12.37	25.04
6	650.00	39.46 QP	46.00	-6.54	1.00 V	259	13.93	25.53

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.

802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3830.00	45.12 PK	74.00	-28.88	1.20 H	319	11.21	33.91
2	3830.00	40.23 AV	54.00	-13.77	1.20 H	319	6.32	33.91
3	*5745.00	114.20 PK			1.21 H	321	76.24	37.96
4	*5745.00	103.20 AV			1.21 H	321	65.24	37.96
5	7660.00	52.84 PK	74.00	-21.16	1.19 H	334	9.42	43.42
6	7660.00	42.12 AV	54.00	-11.88	1.19 H	334	-1.30	43.42
7	11490.00	57.64 PK	74.00	-16.36	1.21 H	326	10.41	47.23
8	11490.00	42.63 AV	54.00	-11.37	1.21 H	326	-4.60	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	46.99 PK	74.00	-27.01	1.29 V	3	13.08	33.91
2	3830.00	41.61 AV	54.00	-12.39	1.29 V	3	7.70	33.91
3	*5745.00	126.11 PK			1.10 V	5	88.15	37.96
4	*5745.00	114.68 AV			1.10 V	5	76.72	37.96
5	7660.00	53.24 PK	74.00	-20.76	1.41 V	4	9.82	43.42
6	7660.00	42.58 AV	54.00	-11.42	1.41 V	4	-0.84	43.42
7	11490.00	59.84 PK	74.00	-14.16	1.11 V	50	12.61	47.23
8	11490.00	45.71 AV	54.00	-8.29	1.11 V	50	-1.52	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3856.60	44.31 PK	74.00	-29.69	1.24 H	334	10.32	33.99
2	3856.60	41.52 AV	54.00	-12.48	1.24 H	334	7.53	33.99
3	*5785.00	113.10 PK			1.26 H	319	75.03	38.07
4	*5785.00	101.60 AV			1.26 H	319	63.53	38.07
5	7713.30	50.84 PK	74.00	-23.16	1.21 H	313	7.31	43.53
6	7713.30	39.60 AV	54.00	-14.40	1.21 H	313	-3.93	43.53
7	11570.00	59.20 PK	74.00	-14.80	1.20 H	332	11.98	47.22
8	11570.00	45.10 AV	54.00	-8.90	1.20 H	332	-2.12	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	45.22 PK	74.00	-28.78	1.29 V	20	11.23	33.99
2	3856.60	42.69 AV	54.00	-11.31	1.29 V	20	8.70	33.99
3	*5785.00	125.45 PK			1.08 V	4	87.38	38.07
4	*5785.00	112.99 AV			1.08 V	4	74.92	38.07
5	7713.30	51.09 PK	74.00	-22.91	1.31 V	5	7.56	43.53
6	7713.30	40.72 AV	54.00	-13.28	1.31 V	5	-2.81	43.53
7	11570.00	59.71 PK	74.00	-14.29	1.18 V	11	12.49	47.22
8	11570.00	46.22 AV	54.00	-7.78	1.18 V	11	-1.00	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3883.30	47.29 PK	74.00	-26.71	1.24 H	314	13.22	34.07
2	3883.30	43.64 AV	54.00	-10.36	1.24 H	314	9.57	34.07
3	*5825.00	112.40 PK			1.20 H	314	74.22	38.18
4	*5825.00	103.60 AV			1.20 H	314	65.42	38.18
5	11650.00	57.13 PK	74.00	-16.87	1.26 H	326	9.91	47.22
6	11650.00	44.50 AV	54.00	-9.50	1.26 H	326	-2.72	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	48.10 PK	74.00	-25.90	1.08 V	169	14.03	34.07
2	3883.30	44.14 AV	54.00	-9.86	1.08 V	169	10.07	34.07
3	*5825.00	124.83 PK			1.19 V	3	86.65	38.18
4	*5825.00	114.60 AV			1.19 V	3	76.42	38.18
5	11650.00	58.65 PK	74.00	-15.35	1.20 V	4	11.43	47.22
6	11650.00	45.22 AV	54.00	-8.78	1.20 V	4	-2.00	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

DRAFT 802.11n (20MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3830.00	43.14 PK	74.00	-30.86	1.26 H	322	9.23	33.91
2	3830.00	36.14 AV	54.00	-17.86	1.26 H	322	2.23	33.91
3	*5745.00	110.34 PK			1.31 H	319	72.38	37.96
4	*5745.00	99.20 AV			1.31 H	319	61.24	37.96
5	7660.00	53.10 PK	74.00	-20.90	1.27 H	324	9.68	43.42
6	7660.00	39.13 AV	54.00	-14.87	1.27 H	324	-4.29	43.42
7	11490.00	45.29 PK	74.00	-28.71	1.23 H	318	-1.94	47.23
8	11490.00	40.37 AV	54.00	-13.63	1.23 H	318	-6.86	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	44.20 PK	74.00	-29.80	1.18 V	11	10.29	33.91
2	3830.00	37.49 AV	54.00	-16.51	1.18 V	11	3.58	33.91
3	*5745.00	121.66 PK			1.04 V	5	83.70	37.96
4	*5745.00	109.84 AV			1.04 V	5	71.88	37.96
5	7660.00	53.22 PK	74.00	-20.78	1.19 V	6	9.80	43.42
6	7660.00	39.98 AV	54.00	-14.02	1.19 V	6	-3.44	43.42
7	11490.00	46.64 PK	74.00	-27.36	1.21 V	3	-0.59	47.23
8	11490.00	41.72 AV	54.00	-12.28	1.21 V	3	-5.51	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3856.60	44.93 PK	74.00	-29.07	1.23 H	313	10.94	33.99
2	3856.60	40.94 AV	54.00	-13.06	1.23 H	313	6.95	33.99
3	*5785.00	109.34 PK			1.20 H	314	71.27	38.07
4	*5785.00	98.40 AV			1.20 H	314	60.33	38.07
5	7713.00	50.84 PK	74.00	-23.16	1.22 H	326	7.32	43.52
6	7713.00	39.58 AV	54.00	-14.42	1.22 H	326	-3.94	43.52
7	11570.00	44.23 PK	74.00	-29.77	1.24 H	314	-2.99	47.22
8	11570.00	39.24 AV	54.00	-14.76	1.24 H	314	-7.98	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	45.20 PK	74.00	-28.80	1.19 V	6	11.21	33.99
2	3856.60	41.28 AV	54.00	-12.72	1.19 V	6	7.29	33.99
3	*5785.00	121.38 PK			1.06 V	9	83.31	38.07
4	*5785.00	108.65 AV			1.06 V	9	70.58	38.07
5	7713.30	51.69 PK	74.00	-22.31	1.20 V	359	8.16	43.53
6	7713.30	40.58 AV	54.00	-13.42	1.20 V	359	-2.95	43.53
7	11570.00	45.87 PK	74.00	-28.13	1.18 V	5	-1.35	47.22
8	11570.00	40.25 AV	54.00	-13.75	1.18 V	5	-6.97	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3882.30	46.72 PK	74.00	-27.28	1.24 H	329	12.66	34.06
2	3882.30	38.84 AV	54.00	-15.16	1.24 H	329	4.78	34.06
3	*5825.00	109.12 PK			1.24 H	318	70.94	38.18
4	*5825.00	98.10 AV			1.24 H	318	59.92	38.18
5	#7766.60	54.92 PK	89.12	-34.20	1.21 H	314	11.29	43.63
6	#7766.60	40.92 AV	78.10	-37.18	1.21 H	314	-2.71	43.63
7	11650.00	45.54 PK	74.00	-28.46	1.29 H	326	-1.68	47.22
8	11650.00	43.10 AV	54.00	-10.90	1.29 H	326	-4.12	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	47.54 PK	74.00	-26.46	1.30 V	2	13.47	34.07
2	3883.30	39.71 AV	54.00	-14.29	1.30 V	2	5.64	34.07
3	*5825.00	121.49 PK			1.07 V	4	83.31	38.18
4	*5825.00	108.14 AV			1.07 V	4	69.96	38.18
5	#7766.60	55.67 PK	101.49	-45.82	1.08 V	1	12.04	43.63
6	#7766.60	41.54 AV	88.14	-46.60	1.08 V	1	-2.09	43.63
7	11650.00	47.25 PK	74.00	-26.75	1.21 V	63	0.03	47.22
8	11650.00	43.61 AV	54.00	-10.39	1.21 V	63	-3.61	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

DRAFT 802.11n (40MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3836.60	43.24 PK	74.00	-30.76	1.24 H	339	9.31	33.93
2	3836.60	36.54 AV	54.00	-17.46	1.24 H	339	2.61	33.93
3	*5755.00	111.24 PK			1.26 H	304	73.26	37.98
4	*5755.00	100.40 AV			1.26 H	304	62.42	37.98
5	7673.30	51.77 PK	74.00	-22.23	1.23 H	313	8.32	43.45
6	7673.30	40.62 AV	54.00	-13.38	1.23 H	313	-2.83	43.45
7	11510.00	51.40 PK	74.00	-22.60	1.26 H	324	4.17	47.23
8	11510.00	42.10 AV	54.00	-11.90	1.26 H	324	-5.13	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3836.60	44.87 PK	74.00	-29.13	1.22 V	6	10.94	33.93
2	3836.60	37.29 AV	54.00	-16.71	1.22 V	6	3.36	33.93
3	*5755.00	121.19 PK			1.04 V	8	83.21	37.98
4	*5755.00	110.11 AV			1.04 V	8	72.13	37.98
5	7673.30	52.86 PK	74.00	-21.14	1.17 V	3	9.41	43.45
6	7673.30	41.25 AV	54.00	-12.75	1.17 V	3	-2.20	43.45
7	11510.00	52.43 PK	74.00	-21.57	1.19 V	20	5.20	47.23
8	11510.00	42.29 AV	54.00	-11.71	1.19 V	20	-4.94	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3863.30	46.28 PK	74.00	-27.72	1.21 H	326	12.27	34.01
2	3863.30	41.34 AV	54.00	-12.66	1.21 H	326	7.33	34.01
3	*5795.00	110.34 PK			1.24 H	351	72.24	38.10
4	*5795.00	99.83 AV			1.24 H	351	61.73	38.10
5	7726.60	50.74 PK	74.00	-23.26	1.24 H	339	7.19	43.55
6	7726.60	39.20 AV	54.00	-14.80	1.24 H	339	-4.35	43.55
7	11590.00	56.74 PK	74.00	-17.26	1.24 H	324	9.52	47.22
8	11590.00	44.24 AV	54.00	-9.76	1.24 H	324	-2.98	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3863.30	47.69 PK	74.00	-26.31	1.04 V	3	13.68	34.01
2	3863.30	42.50 AV	54.00	-11.50	1.04 V	3	8.49	34.01
3	*5795.00	121.22 PK			1.03 V	4	83.12	38.10
4	*5795.00	109.17 AV			1.03 V	4	71.07	38.10
5	7726.60	51.87 PK	74.00	-22.13	1.09 V	7	8.32	43.55
6	7726.60	40.65 AV	54.00	-13.35	1.09 V	7	-2.90	43.55
7	11590.00	57.57 PK	74.00	-16.43	1.40 V	16	10.35	47.22
8	11590.00	45.60 AV	54.00	-8.40	1.40 V	16	-1.62	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

5.2.9 TEST RESULTS –ANTENNA 7

BELOW 1GHz WORST-CASE DATA：802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	30.0deg. C, 55.0%RH 965hPa	TESTED BY	Frank Liu

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	125.00	27.64 QP	43.50	-15.86	1.33 H	156	14.57	13.07
2	250.00	34.97 QP	46.00	-11.03	1.26 H	259	20.72	14.25
3	375.00	38.67 QP	46.00	-7.33	1.02 H	325	19.86	18.81
4	650.00	43.23 QP	46.00	-2.77	1.09 H	231	17.70	25.53
5	750.00	35.73 QP	46.00	-10.27	1.06 H	247	8.82	26.91
6	875.00	37.69 QP	46.00	-8.31	1.04 H	101	8.40	29.29
7	1000.00	38.84 QP	54.00	-15.16	1.04 H	167	8.10	30.74
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	57.21	32.84 QP	40.00	-7.16	1.00 V	254	19.15	13.69
2	125.00	29.73 QP	43.50	-13.77	1.00 V	198	16.66	13.07
3	250.00	28.66 QP	46.00	-17.34	1.00 V	59	14.41	14.25
4	375.00	39.48 QP	46.00	-6.52	1.05 V	212	20.67	18.81
5	600.00	37.12 QP	46.00	-8.88	1.00 V	243	12.08	25.04
6	650.00	39.48 QP	46.00	-6.52	1.00 V	229	13.95	25.53

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.

802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3830.00	44.20 PK	74.00	-29.80	1.00 H	101	10.29	33.91
2	3830.00	34.10 AV	54.00	-19.90	1.00 H	101	0.19	33.91
3	*5745.00	116.40 PK			1.00 H	33	78.44	37.96
4	*5745.00	106.80 AV			1.00 H	33	68.84	37.96
5	7660.00	53.30 PK	74.00	-20.70	1.00 H	107	9.88	43.42
6	7660.00	43.20 AV	54.00	-10.80	1.00 H	107	-0.22	43.42
7	11490.00	62.84 PK	74.00	-11.16	1.00 H	109	15.61	47.23
8	11490.00	48.70 AV	54.00	-5.30	1.00 H	109	1.47	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	44.52 PK	74.00	-29.48	1.00 V	38	10.61	33.91
2	3830.00	34.48 AV	54.00	-19.52	1.00 V	38	0.57	33.91
3	*5745.00	123.99 PK			1.00 V	318	86.03	37.96
4	*5745.00	113.94 AV			1.00 V	318	75.98	37.96
5	7660.00	53.64 PK	74.00	-20.36	1.00 V	34	10.22	43.42
6	7660.00	43.85 AV	54.00	-10.15	1.00 V	34	0.43	43.42
7	11490.00	62.81 PK	74.00	-11.19	1.00 V	37	15.58	47.23
8	11490.00	49.02 AV	54.00	-4.98	1.00 V	37	1.79	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3856.60	45.10 PK	74.00	-28.90	1.00 H	104	11.11	33.99
2	3856.60	35.40 AV	54.00	-18.60	1.00 H	104	1.41	33.99
3	*5785.00	116.10 PK			1.00 H	37	78.03	38.07
4	*5785.00	106.20 AV			1.00 H	37	68.13	38.07
5	7713.30	53.20 PK	74.00	-20.80	1.00 H	108	9.67	43.53
6	7713.30	43.33 AV	54.00	-10.67	1.00 H	108	-0.20	43.53
7	11570.00	63.20 PK	74.00	-10.80	1.00 H	108	15.98	47.22
8	11570.00	49.40 AV	54.00	-4.60	1.00 H	108	2.18	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	45.17 PK	74.00	-28.83	1.00 V	16	11.18	33.99
2	3856.60	35.88 AV	54.00	-18.12	1.00 V	16	1.89	33.99
3	*5785.00	123.30 PK			1.00 V	318	85.23	38.07
4	*5785.00	112.99 AV			1.00 V	318	74.92	38.07
5	7713.30	53.51 PK	74.00	-20.49	1.00 V	31	9.98	43.53
6	7713.30	43.66 AV	54.00	-10.34	1.00 V	31	0.13	43.53
7	11570.00	63.98 PK	74.00	-10.02	1.00 V	36	16.76	47.22
8	11570.00	49.79 AV	54.00	-4.21	1.00 V	36	2.57	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3883.30	46.12 PK	74.00	-27.88	1.00 H	106	12.05	34.07
2	3883.30	37.23 AV	54.00	-16.77	1.00 H	106	3.16	34.07
3	*5825.00	114.20 PK			1.00 H	36	76.02	38.18
4	*5825.00	104.20 AV			1.00 H	36	66.02	38.18
5	11650.00	63.34 PK	74.00	-10.66	1.00 H	102	16.12	47.22
6	11650.00	49.20 AV	54.00	-4.80	1.00 H	102	1.98	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	46.52 PK	74.00	-27.48	1.00 V	27	12.45	34.07
2	3883.30	37.89 AV	54.00	-16.11	1.00 V	27	3.82	34.07
3	*5825.00	121.42 PK			1.00 V	317	83.24	38.18
4	*5825.00	111.41 AV			1.00 V	317	73.23	38.18
5	11650.00	63.64 PK	74.00	-10.36	1.00 V	48	16.42	47.22
6	11650.00	49.73 AV	54.00	-4.27	1.00 V	48	2.51	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

DRAFT 802.11n (20MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3830.00	43.90 PK	74.00	-30.10	1.00 H	107	9.99	33.91
2	3830.00	34.10 AV	54.00	-19.90	1.00 H	107	0.19	33.91
3	*5745.00	117.60 PK			1.02 H	36	79.64	37.96
4	*5745.00	106.20 AV			1.02 H	36	68.24	37.96
5	7660.00	53.24 PK	74.00	-20.76	1.03 H	113	9.82	43.42
6	7660.00	43.13 AV	54.00	-10.87	1.03 H	113	-0.29	43.42
7	11490.00	62.64 PK	74.00	-11.36	1.04 H	104	15.41	47.23
8	11490.00	48.74 AV	54.00	-5.26	1.04 H	104	1.51	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	44.63 PK	74.00	-29.37	1.00 V	0	10.72	33.91
2	3830.00	34.57 AV	54.00	-19.43	1.00 V	0	0.66	33.91
3	*5745.00	124.17 PK			1.00 V	318	86.21	37.96
4	*5745.00	113.35 AV			1.00 V	318	75.39	37.96
5	7660.00	53.73 PK	74.00	-20.27	1.00 V	28	10.31	43.42
6	7660.00	43.96 AV	54.00	-10.04	1.00 V	28	0.54	43.42
7	11490.00	62.89 PK	74.00	-11.11	1.00 V	51	15.66	47.23
8	11490.00	49.15 AV	54.00	-4.85	1.00 V	51	1.92	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3856.60	44.83 PK	74.00	-29.17	1.02 H	104	10.84	33.99
2	3856.60	35.24 AV	54.00	-18.76	1.02 H	104	1.25	33.99
3	*5785.00	116.30 PK			1.03 H	39	78.23	38.07
4	*5785.00	105.40 AV			1.03 H	39	67.33	38.07
5	7713.30	53.10 PK	74.00	-20.90	1.01 H	112	9.57	43.53
6	7713.30	43.40 AV	54.00	-10.60	1.01 H	112	-0.13	43.53
7	11570.00	63.74 PK	74.00	-10.26	1.01 H	102	16.52	47.22
8	11570.00	49.52 AV	54.00	-4.48	1.01 H	102	2.30	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	45.26 PK	74.00	-28.74	1.00 V	1	11.27	33.99
2	3856.60	35.91 AV	54.00	-18.09	1.00 V	1	1.92	33.99
3	*5785.00	123.07 PK			1.00 V	316	85.00	38.07
4	*5785.00	112.50 AV			1.00 V	316	74.43	38.07
5	7713.30	53.63 PK	74.00	-20.37	1.00 V	27	10.10	43.53
6	7713.30	43.71 AV	54.00	-10.29	1.00 V	27	0.18	43.53
7	11570.00	64.18 PK	74.00	-9.82	1.00 V	46	16.96	47.22
8	11570.00	49.93 AV	54.00	-4.07	1.00 V	46	2.71	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3883.30	46.30 PK	74.00	-27.70	1.04 H	101	12.23	34.07
2	3883.30	37.20 AV	54.00	-16.80	1.04 H	101	3.13	34.07
3	*5825.00	115.20 PK			1.04 H	43	77.02	38.18
4	*5825.00	104.20 AV			1.04 H	43	66.02	38.18
5	11650.00	63.12 PK	74.00	-10.88	1.02 H	102	15.90	47.22
6	11650.00	49.22 AV	54.00	-4.78	1.02 H	102	2.00	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	46.67 PK	74.00	-27.33	1.00 V	0	12.60	34.07
2	3883.30	37.91 AV	54.00	-16.09	1.00 V	0	3.84	34.07
3	*5825.00	122.04 PK			1.00 V	317	83.86	38.18
4	*5825.00	111.36 AV			1.00 V	317	73.18	38.18
5	11650.00	63.77 PK	74.00	-10.23	1.00 V	51	16.55	47.22
6	11650.00	49.86 AV	54.00	-4.14	1.00 V	51	2.64	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

DRAFT 802.11n (40MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3836.60	44.12 PK	74.00	-29.88	1.04 H	101	10.19	33.93
2	3836.60	34.20 AV	54.00	-19.80	1.04 H	101	0.27	33.93
3	*5755.00	116.20 PK			1.04 H	43	78.22	37.98
4	*5755.00	105.40 AV			1.04 H	43	67.42	37.98
5	7673.30	53.24 PK	74.00	-20.76	1.01 H	103	9.79	43.45
6	7673.30	43.29 AV	54.00	-10.71	1.01 H	103	-0.16	43.45
7	11510.00	62.40 PK	74.00	-11.60	1.02 H	104	15.17	47.23
8	11510.00	48.70 AV	54.00	-5.30	1.02 H	104	1.47	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3836.60	44.63 PK	74.00	-29.37	1.00 V	9	10.70	33.93
2	3836.60	34.52 AV	54.00	-19.48	1.00 V	9	0.59	33.93
3	*5755.00	123.59 PK			1.00 V	318	85.61	37.98
4	*5755.00	112.64 AV			1.00 V	318	74.66	37.98
5	7673.30	53.77 PK	74.00	-20.23	1.00 V	31	10.32	43.45
6	7673.30	43.97 AV	54.00	-10.03	1.00 V	31	0.52	43.45
7	11510.00	62.88 PK	74.00	-11.12	1.00 V	58	15.65	47.23
8	11510.00	49.11 AV	54.00	-4.89	1.00 V	58	1.88	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3863.30	45.10 PK	74.00	-28.90	1.02 H	102	11.09	34.01
2	3863.30	35.30 AV	54.00	-18.70	1.02 H	102	1.29	34.01
3	*5795.00	115.40 PK			1.01 H	42	77.30	38.10
4	*5795.00	105.30 AV			1.01 H	42	67.20	38.10
5	7726.60	53.12 PK	74.00	-20.88	1.01 H	104	9.57	43.55
6	7726.60	43.24 AV	54.00	-10.76	1.01 H	104	-0.31	43.55
7	11590.00	63.44 PK	74.00	-10.56	1.04 H	109	16.22	47.22
8	11590.00	49.24 AV	54.00	-4.76	1.04 H	109	2.02	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3863.30	45.28 PK	74.00	-28.72	1.00 V	7	11.27	34.01
2	3863.30	35.92 AV	54.00	-18.08	1.00 V	7	1.91	34.01
3	*5795.00	122.84 PK			1.00 V	317	84.74	38.10
4	*5795.00	112.03 AV			1.00 V	317	73.93	38.10
5	7726.60	53.63 PK	74.00	-20.37	1.00 V	22	10.08	43.55
6	7726.60	43.63 AV	54.00	-10.37	1.00 V	22	0.08	43.55
7	11590.00	63.99 PK	74.00	-10.01	1.00 V	49	16.77	47.22
8	11590.00	49.86 AV	54.00	-4.14	1.00 V	49	2.64	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

5.2.10 TEST RESULTS –ANTENNA 8

BELOW 1GHz WORST-CASE DATA：802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	30.0deg. C, 55.0%RH 965hPa	**TESTED BY**	Frank Liu

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	125.00	27.32 QP	43.50	-16.18	1.46 H	149	14.25	13.07
2	250.00	34.56 QP	46.00	-11.44	1.20 H	251	20.31	14.25
3	375.00	38.43 QP	46.00	-7.57	1.04 H	319	19.62	18.81
4	650.00	43.72 QP	46.00	-2.28	1.03 H	249	18.19	25.53
5	750.00	35.61 QP	46.00	-10.39	1.04 H	239	8.70	26.91
6	875.00	37.84 QP	46.00	-8.16	1.09 H	93	8.55	29.29
7	1000.00	38.74 QP	54.00	-15.26	1.00 H	164	8.00	30.74
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	57.21	32.51 QP	40.00	-7.49	1.00 V	245	18.82	13.69
2	125.00	29.62 QP	43.50	-13.88	1.00 V	123	16.55	13.07
3	250.00	28.34 QP	46.00	-17.66	1.00 V	79	14.09	14.25
4	375.00	39.68 QP	46.00	-6.32	1.05 V	272	20.87	18.81
5	600.00	37.89 QP	46.00	-8.11	1.00 V	200	12.85	25.04
6	650.00	39.84 QP	46.00	-6.16	1.00 V	258	14.31	25.53

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.

802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3830.00	44.01 PK	74.00	-29.99	1.47 H	318	10.10	33.91
2	3830.00	34.03 AV	54.00	-19.97	1.47 H	318	0.12	33.91
3	*5745.00	124.80 PK			1.22 H	313	86.84	37.96
4	*5745.00	114.80 AV			1.22 H	313	76.84	37.96
5	7660.00	54.04 PK	74.00	-19.96	1.17 H	318	10.62	43.42
6	7660.00	43.07 AV	54.00	-10.93	1.17 H	318	-0.35	43.42
7	11490.00	67.05 PK	74.00	-6.95	1.40 H	293	19.82	47.23
8	11490.00	53.23 AV	54.00	-0.77	1.40 H	293	6.00	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	43.84 PK	74.00	-30.16	1.03 V	193	9.93	33.91
2	3830.00	33.13 AV	54.00	-20.87	1.03 V	193	-0.78	33.91
3	*5745.00	116.24 PK			1.64 V	231	78.28	37.96
4	*5745.00	105.93 AV			1.64 V	231	67.97	37.96
5	7660.00	53.72 PK	74.00	-20.28	1.03 V	193	10.30	43.42
6	7660.00	42.62 AV	54.00	-11.38	1.03 V	193	-0.80	43.42
7	11490.00	67.23 PK	74.00	-6.77	1.04 V	182	20.00	47.23
8	11490.00	52.84 AV	54.00	-1.16	1.04 V	182	5.61	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3856.60	45.02 PK	74.00	-28.98	1.47 H	318	11.03	33.99
2	3856.60	35.71 AV	54.00	-18.29	1.47 H	318	1.72	33.99
3	*5785.00	123.96 PK			1.22 H	314	85.89	38.07
4	*5785.00	113.90 AV			1.22 H	314	75.83	38.07
5	7713.30	53.17 PK	74.00	-20.83	1.25 H	318	9.64	43.53
6	7713.30	40.87 AV	54.00	-13.13	1.25 H	318	-2.66	43.53
7	11570.00	65.77 PK	74.00	-8.23	1.21 H	293	18.55	47.22
8	11570.00	51.26 AV	54.00	-2.74	1.21 H	293	4.04	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	44.27 PK	74.00	-29.73	1.04 V	184	10.28	33.99
2	3856.60	34.53 AV	54.00	-19.47	1.04 V	184	0.54	33.99
3	*5785.00	115.23 PK			1.64 V	231	77.16	38.07
4	*5785.00	104.87 AV			1.64 V	231	66.80	38.07
5	7713.30	52.84 PK	74.00	-21.16	1.02 V	196	9.31	43.53
6	7713.30	39.73 AV	54.00	-14.27	1.02 V	196	-3.80	43.53
7	11570.00	64.23 PK	74.00	-9.77	1.01 V	182	17.01	47.22
8	11570.00	49.08 AV	54.00	-4.92	1.01 V	182	1.86	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3883.30	46.38 PK	74.00	-27.62	1.46 H	319	12.31	34.07
2	3883.30	37.77 AV	54.00	-16.23	1.46 H	319	3.70	34.07
3	*5825.00	123.88 PK			1.24 H	315	85.70	38.18
4	*5825.00	113.40 AV			1.24 H	315	75.22	38.18
5	11650.00	66.25 PK	74.00	-7.75	1.22 H	294	19.03	47.22
6	11650.00	51.71 AV	54.00	-2.29	1.22 H	294	4.49	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	45.13 PK	74.00	-28.87	1.02 V	184	11.06	34.07
2	3883.30	36.24 AV	54.00	-17.76	1.02 V	184	2.17	34.07
3	*5825.00	115.01 PK			1.62 V	213	76.83	38.18
4	*5825.00	104.27 AV			1.62 V	213	66.09	38.18
5	11650.00	65.22 PK	74.00	-8.78	1.01 V	181	18.00	47.22
6	11650.00	49.76 AV	54.00	-4.24	1.01 V	181	2.54	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

DRAFT 802.11n (20MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3830.00	44.06 PK	74.00	-29.94	1.48 H	318	10.15	33.91
2	3830.00	34.08 AV	54.00	-19.92	1.48 H	318	0.17	33.91
3	*5745.00	124.05 PK			1.29 H	308	86.09	37.96
4	*5745.00	113.75 AV			1.29 H	308	75.79	37.96
5	7660.00	54.16 PK	74.00	-19.84	1.16 H	320	10.74	43.42
6	7660.00	43.11 AV	54.00	-10.89	1.16 H	320	-0.31	43.42
7	11490.00	67.11 PK	74.00	-6.89	1.41 H	294	19.88	47.23
8	**11490.00**	**53.41 AV**	**54.00**	**-0.59**	**1.41 H**	**294**	**6.18**	**47.23**
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	43.80 PK	74.00	-30.20	1.01 V	180	9.89	33.91
2	3830.00	33.24 AV	54.00	-20.76	1.01 V	180	-0.67	33.91
3	*5745.00	115.20 PK			1.62 V	240	77.24	37.96
4	*5745.00	105.40 AV			1.62 V	240	67.44	37.96
5	7660.00	53.86 PK	74.00	-20.14	1.04 V	174	10.44	43.42
6	7660.00	42.73 AV	54.00	-11.27	1.04 V	174	-0.69	43.42
7	11490.00	66.93 PK	74.00	-7.07	1.02 V	181	19.70	47.23
8	11490.00	52.93 AV	54.00	-1.07	1.02 V	181	5.70	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3856.60	45.11 PK	74.00	-28.89	1.48 H	320	11.12	33.99
2	3856.60	35.79 AV	54.00	-18.21	1.48 H	320	1.80	33.99
3	*5785.00	122.84 PK			1.30 H	307	84.77	38.07
4	*5785.00	112.46 AV			1.30 H	307	74.39	38.07
5	7713.30	53.26 PK	74.00	-20.74	1.26 H	319	9.73	43.53
6	7713.30	40.92 AV	54.00	-13.08	1.26 H	319	-2.61	43.53
7	11570.00	65.83 PK	74.00	-8.17	1.22 H	292	18.61	47.22
8	11570.00	51.46 AV	54.00	-2.54	1.22 H	292	4.24	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	44.82 PK	74.00	-29.18	1.04 V	193	10.83	33.99
2	3856.60	34.23 AV	54.00	-19.77	1.04 V	193	0.24	33.99
3	*5785.00	113.70 PK			1.61 V	233	75.63	38.07
4	*5785.00	104.60 AV			1.61 V	233	66.53	38.07
5	7713.30	52.80 PK	74.00	-21.20	1.03 V	184	9.27	43.53
6	7713.30	40.13 AV	54.00	-13.87	1.03 V	184	-3.40	43.53
7	11570.00	64.72 PK	74.00	-9.28	1.02 V	182	17.50	47.22
8	11570.00	50.24 AV	54.00	-3.76	1.02 V	182	3.02	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3883.30	46.44 PK	74.00	-27.56	1.44 H	320	12.37	34.07
2	3883.30	37.81 AV	54.00	-16.19	1.44 H	320	3.74	34.07
3	*5825.00	122.66 PK			1.28 H	309	84.48	38.18
4	*5825.00	112.43 AV			1.28 H	309	74.25	38.18
5	11650.00	66.38 PK	74.00	-7.62	1.23 H	295	19.16	47.22
6	11650.00	51.86 AV	54.00	-2.14	1.23 H	295	4.64	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	45.30 PK	74.00	-28.70	1.04 V	184	11.23	34.07
2	3883.30	37.20 AV	54.00	-16.80	1.04 V	184	3.13	34.07
3	*5825.00	113.24 PK			1.60 V	241	75.06	38.18
4	*5825.00	104.30 AV			1.60 V	241	66.12	38.18
5	11650.00	65.13 PK	74.00	-8.87	1.02 V	182	17.91	47.22
6	11650.00	50.73 AV	54.00	-3.27	1.02 V	182	3.51	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

DRAFT 802.11n (40MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3836.60	44.26 PK	74.00	-29.74	1.47 H	319	10.33	33.93
2	3836.60	34.18 AV	54.00	-19.82	1.47 H	319	0.25	33.93
3	*5755.00	123.18 PK			1.32 H	308	85.20	37.98
4	*5755.00	111.28 AV			1.32 H	308	73.30	37.98
5	7673.30	54.18 PK	74.00	-19.82	1.16 H	316	10.73	43.45
6	7673.30	43.19 AV	54.00	-10.81	1.16 H	316	-0.26	43.45
7	11510.00	64.41 PK	74.00	-9.59	1.40 H	293	17.18	47.23
8	11510.00	51.28 AV	54.00	-2.72	1.40 H	293	4.05	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3836.60	43.80 PK	74.00	-30.20	1.04 V	184	9.87	33.93
2	3836.60	33.20 AV	54.00	-20.80	1.04 V	184	-0.73	33.93
3	*5755.00	111.40 PK			1.62 V	244	73.42	37.98
4	*5755.00	101.30 AV			1.62 V	244	63.32	37.98
5	7673.30	53.20 PK	74.00	-20.80	1.03 V	181	9.75	43.45
6	7673.30	42.30 AV	54.00	-11.70	1.03 V	181	-1.15	43.45
7	11510.00	63.20 PK	74.00	-10.80	1.01 V	183	15.97	47.23
8	11510.00	50.30 AV	54.00	-3.70	1.01 V	183	3.07	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3863.30	45.13 PK	74.00	-28.87	1.48 H	319	11.12	34.01
2	3863.30	35.83 AV	54.00	-18.17	1.48 H	319	1.82	34.01
3	*5795.00	122.37 PK			1.28 H	312	84.27	38.10
4	*5795.00	110.75 AV			1.28 H	312	72.65	38.10
5	7726.60	53.28 PK	74.00	-20.72	1.25 H	320	9.73	43.55
6	7726.60	40.96 AV	54.00	-13.04	1.25 H	320	-2.59	43.55
7	11590.00	62.68 PK	74.00	-11.32	1.39 H	295	15.46	47.22
8	11590.00	50.01 AV	54.00	-3.99	1.39 H	295	2.79	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3863.30	44.27 PK	74.00	-29.73	1.01 V	183	10.26	34.01
2	3863.30	35.24 AV	54.00	-18.76	1.01 V	183	1.23	34.01
3	*5795.00	110.20 PK			1.61 V	251	72.10	38.10
4	*5795.00	100.40 AV			1.61 V	251	62.30	38.10
5	7726.60	52.93 PK	74.00	-21.07	1.04 V	184	9.38	43.55
6	7726.60	39.84 AV	54.00	-14.16	1.04 V	184	-3.71	43.55
7	11590.00	62.70 PK	74.00	-11.30	1.02 V	182	15.48	47.22
8	11590.00	49.40 AV	54.00	-4.60	1.02 V	182	2.18	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

5.2.11 TEST RESULTS –ANTENNA 11

BELOW 1GHz WORST-CASE DATA：802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	30.0deg. C, 55.0%RH 965hPa	TESTED BY	Frank Liu

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	125.00	27.63 QP	43.50	-15.87	1.31 H	164	14.56	13.07
2	250.00	34.23 QP	46.00	-11.77	1.05 H	234	19.98	14.25
3	375.00	38.42 QP	46.00	-7.58	1.16 H	227	19.61	18.81
4	650.00	43.25 QP	46.00	-2.75	1.21 H	229	17.72	25.53
5	750.00	35.67 QP	46.00	-10.33	1.03 H	222	8.76	26.91
6	875.00	37.61 QP	46.00	-8.39	1.03 H	129	8.32	29.29
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	57.21	32.83 QP	40.00	-7.17	1.00 V	264	19.14	13.69
2	125.00	29.64 QP	43.50	-13.86	1.00 V	93	16.57	13.07
3	250.00	28.29 QP	46.00	-17.71	1.00 V	37	14.04	14.25
4	375.00	39.41 QP	46.00	-6.59	1.06 V	213	20.60	18.81
5	600.00	37.74 QP	46.00	-8.26	1.00 V	268	12.70	25.04
6	650.00	39.76 QP	46.00	-6.24	1.00 V	268	14.23	25.53

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.

802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3830.00	44.30 PK	74.00	-29.70	1.01 H	1	10.39	33.91
2	3830.00	37.40 AV	54.00	-16.60	1.01 H	1	3.49	33.91
3	*5745.00	120.20 PK			1.26 H	9	82.24	37.96
4	*5745.00	110.30 AV			1.26 H	9	72.34	37.96
5	7660.00	53.10 PK	74.00	-20.90	1.02 H	24	9.68	43.42
6	7660.00	40.80 AV	54.00	-13.20	1.02 H	24	-2.62	43.42
7	11490.00	58.20 PK	74.00	-15.80	1.02 H	27	10.97	47.23
8	11490.00	44.60 AV	54.00	-9.40	1.02 H	27	-2.63	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	45.72 PK	74.00	-28.28	1.25 V	4	11.81	33.91
2	3830.00	38.26 AV	54.00	-15.74	1.25 V	4	4.35	33.91
3	*5745.00	124.55 PK			1.23 V	1	86.59	37.96
4	*5745.00	114.24 AV			1.23 V	1	76.28	37.96
5	7660.00	53.46 PK	74.00	-20.54	1.04 V	5	10.04	43.42
6	7660.00	41.97 AV	54.00	-12.03	1.04 V	5	-1.45	43.42
7	11490.00	59.76 PK	74.00	-14.24	1.08 V	46	12.53	47.23
8	11490.00	45.71 AV	54.00	-8.29	1.08 V	46	-1.52	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3856.60	45.30 PK	74.00	-28.70	1.06 H	26	11.31	33.99
2	3856.60	40.60 AV	54.00	-13.40	1.06 H	26	6.61	33.99
3	*5785.00	119.30 PK			1.21 H	24	81.23	38.07
4	*5785.00	108.40 AV			1.21 H	24	70.33	38.07
5	7713.30	51.90 PK	74.00	-22.10	1.01 H	5	8.37	43.53
6	7713.30	40.80 AV	54.00	-13.20	1.01 H	5	-2.73	43.53
7	11570.00	57.40 PK	74.00	-16.60	1.04 H	2	10.18	47.22
8	11570.00	44.20 AV	54.00	-9.80	1.04 H	2	-3.02	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	46.92 PK	74.00	-27.08	1.28 V	2	12.93	33.99
2	3856.60	41.23 AV	54.00	-12.77	1.28 V	2	7.24	33.99
3	*5785.00	123.09 PK			1.19 V	2	85.02	38.07
4	*5785.00	112.61 AV			1.19 V	2	74.54	38.07
5	7713.30	52.83 PK	74.00	-21.17	1.07 V	1	9.30	43.53
6	7713.30	41.68 AV	54.00	-12.32	1.07 V	1	-1.85	43.53
7	11570.00	58.15 PK	74.00	-15.85	1.24 V	32	10.93	47.22
8	11570.00	45.39 AV	54.00	-8.61	1.24 V	32	-1.83	47.22

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. " * ": Fundamental frequency.

6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3883.30	47.30 PK	74.00	-26.70	1.04 H	3	13.23	34.07
2	3883.30	42.90 AV	54.00	-11.10	1.04 H	3	8.83	34.07
3	*5825.00	119.70 PK			1.24 H	3	81.52	38.18
4	*5825.00	108.60 AV			1.24 H	3	70.42	38.18
5	11650.00	58.40 PK	74.00	-15.60	1.02 H	4	11.18	47.22
6	11650.00	45.60 AV	54.00	-8.40	1.02 H	4	-1.62	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	48.26 PK	74.00	-25.74	1.25 V	358	14.19	34.07
2	3883.30	43.66 AV	54.00	-10.34	1.25 V	358	9.59	34.07
3	*5825.00	123.99 PK			1.19 V	358	85.81	38.18
4	*5825.00	113.50 AV			1.19 V	358	75.32	38.18
5	11650.00	59.32 PK	74.00	-14.68	1.06 V	35	12.10	47.22
6	11650.00	46.16 AV	54.00	-7.84	1.06 V	35	-1.06	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

DRAFT 802.11n (20MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3830.00	44.30 PK	74.00	-29.70	1.01 H	12	10.39	33.91
2	3830.00	37.90 AV	54.00	-16.10	1.01 H	12	3.99	33.91
3	*5745.00	119.40 PK			1.20 H	8	81.44	37.96
4	*5745.00	108.40 AV			1.20 H	8	70.44	37.96
5	7660.00	53.10 PK	74.00	-20.90	1.02 H	26	9.68	43.42
6	7660.00	41.30 AV	54.00	-12.70	1.02 H	26	-2.12	43.42
7	11490.00	54.60 PK	74.00	-19.40	1.04 H	21	7.37	47.23
8	11490.00	42.40 AV	54.00	-11.60	1.04 H	21	-4.83	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	45.60 PK	74.00	-28.40	1.19 V	357	11.69	33.91
2	3830.00	38.20 AV	54.00	-15.80	1.19 V	357	4.29	33.91
3	*5745.00	123.63 PK			1.20 V	5	85.67	37.96
4	*5745.00	112.83 AV			1.20 V	5	74.87	37.96
5	7660.00	53.38 PK	74.00	-20.62	1.04 V	5	9.96	43.42
6	7660.00	41.91 AV	54.00	-12.09	1.04 V	5	-1.51	43.42
7	11490.00	55.76 PK	74.00	-18.24	1.20 V	357	8.53	47.23
8	11490.00	42.83 AV	54.00	-11.17	1.20 V	357	-4.40	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3856.60	46.40 PK	74.00	-27.60	1.01 H	19	12.41	33.99
2	3856.60	41.10 AV	54.00	-12.90	1.01 H	19	7.11	33.99
3	*5785.00	118.20 PK			1.24 H	7	80.13	38.07
4	*5785.00	107.20 AV			1.24 H	7	69.13	38.07
5	7713.30	53.60 PK	74.00	-20.40	1.04 H	26	10.07	43.53
6	7713.30	41.40 AV	54.00	-12.60	1.04 H	26	-2.13	43.53
7	11570.00	56.80 PK	74.00	-17.20	1.00 H	12	9.58	47.22
8	11570.00	43.10 AV	54.00	-10.90	1.00 H	12	-4.12	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	46.97 PK	74.00	-27.03	1.18 V	357	12.98	33.99
2	3856.60	41.30 AV	54.00	-12.70	1.18 V	357	7.31	33.99
3	*5785.00	122.64 PK			1.09 V	359	84.57	38.07
4	*5785.00	111.87 AV			1.09 V	359	73.80	38.07
5	7713.30	52.70 PK	74.00	-21.30	1.04 V	6	9.17	43.53
6	7713.30	41.54 AV	54.00	-12.46	1.04 V	6	-1.99	43.53
7	11570.00	57.08 PK	74.00	-16.92	1.22 V	0	9.86	47.22
8	11570.00	43.24 AV	54.00	-10.76	1.22 V	0	-3.98	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3883.30	47.60 PK	74.00	-26.40	1.06 H	24	13.53	34.07
2	3883.30	43.10 AV	54.00	-10.90	1.06 H	24	9.03	34.07
3	*5825.00	118.40 PK			1.26 H	4	80.22	38.18
4	*5825.00	108.10 AV			1.26 H	4	69.92	38.18
5	11650.00	56.20 PK	74.00	-17.80	1.04 H	21	8.98	47.22
6	11650.00	42.40 AV	54.00	-11.60	1.04 H	21	-4.82	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	48.12 PK	74.00	-25.88	1.16 V	7	14.05	34.07
2	3883.30	43.58 AV	54.00	-10.42	1.16 V	7	9.51	34.07
3	*5825.00	122.84 PK			1.19 V	359	84.66	38.18
4	*5825.00	112.24 AV			1.19 V	359	74.06	38.18
5	11650.00	56.53 PK	74.00	-17.47	1.20 V	0	9.31	47.22
6	11650.00	42.89 AV	54.00	-11.11	1.20 V	0	-4.33	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

DRAFT 802.11n (40MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3836.60	45.20 PK	74.00	-28.80	1.04 H	31	11.27	33.93
2	3836.60	38.10 AV	54.00	-15.90	1.04 H	31	4.17	33.93
3	*5755.00	115.30 PK			1.30 H	5	77.32	37.98
4	*5755.00	105.20 AV			1.30 H	5	67.22	37.98
5	7673.30	53.40 PK	74.00	-20.60	1.02 H	42	9.95	43.45
6	7673.30	42.30 AV	54.00	-11.70	1.02 H	42	-1.15	43.45
7	11510.00	59.30 PK	74.00	-14.70	1.02 H	29	12.07	47.23
8	11510.00	45.40 AV	54.00	-8.60	1.02 H	29	-1.83	47.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3836.60	45.86 PK	74.00	-28.14	1.22 V	356	11.93	33.93
2	3836.60	38.41 AV	54.00	-15.59	1.22 V	356	4.48	33.93
3	*5755.00	119.96 PK			1.19 V	2	81.98	37.98
4	*5755.00	109.11 AV			1.19 V	2	71.13	37.98
5	7673.30	53.66 PK	74.00	-20.34	1.05 V	4	10.21	43.45
6	7673.30	42.12 AV	54.00	-11.88	1.05 V	4	-1.33	43.45
7	11510.00	59.96 PK	74.00	-14.04	1.21 V	350	12.73	47.23
8	11510.00	45.99 AV	54.00	-8.01	1.21 V	350	-1.24	47.23

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 68.0%RH 965hPa	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	3863.30	48.10 PK	74.00	-25.90	1.04 H	29	14.09	34.01
2	3863.30	43.40 AV	54.00	-10.60	1.04 H	29	9.39	34.01
3	*5795.00	115.10 PK			1.26 H	7	77.00	38.10
4	*5795.00	104.80 AV			1.26 H	7	66.70	38.10
5	7726.60	52.30 PK	74.00	-21.70	1.02 H	30	8.75	43.55
6	7726.60	41.20 AV	54.00	-12.80	1.02 H	30	-2.35	43.55
7	11590.00	58.10 PK	74.00	-15.90	1.01 H	26	10.88	47.22
8	11590.00	46.20 AV	54.00	-7.80	1.01 H	26	-1.02	47.22
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3863.30	48.38 PK	74.00	-25.62	1.25 V	6	14.37	34.01
2	3863.30	43.71 AV	54.00	-10.29	1.25 V	6	9.70	34.01
3	*5795.00	119.52 PK			1.20 V	0	81.42	38.10
4	*5795.00	109.03 AV			1.20 V	0	70.93	38.10
5	7726.60	52.96 PK	74.00	-21.04	1.07 V	5	9.41	43.55
6	7726.60	41.77 AV	54.00	-12.23	1.07 V	5	-1.78	43.55
7	11590.00	58.66 PK	74.00	-15.34	1.21 V	355	11.44	47.22
8	11590.00	46.45 AV	54.00	-7.55	1.21 V	355	-0.77	47.22

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

5.2.12 TEST RESULTS –ANTENNA 12

BELOW 1GHz WORST-CASE DATA：802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25.0deg. C, 60.0%RH 965hPa	**TESTED BY**	Eric Lee

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	125.00	31.64 QP	43.50	-11.86	2.13 H	173	4.48	27.16
2	250.00	43.23 QP	46.00	-2.77	1.06 H	211	16.07	27.16
3	274.00	39.19 QP	46.00	-6.81	1.00 H	12	12.03	27.16
4	375.00	39.84 QP	46.00	-6.16	1.00 H	142	12.68	27.16
5	649.99	43.92 QP	46.00	-2.08	1.00 H	164	16.76	27.16
6	749.99	41.85 QP	46.00	-4.15	1.00 H	153	14.69	27.16
7	999.98	37.44 QP	54.00	-16.56	1.10 H	212	10.28	27.16
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	57.21	32.16 QP	40.00	-7.84	1.00 V	254	5.00	27.16
2	125.00	29.81 QP	43.50	-13.69	1.00 V	43	2.65	27.16
3	250.00	29.57 QP	46.00	-16.43	1.00 V	62	2.41	27.16
4	375.00	40.84 QP	46.00	-5.16	1.09 V	271	13.68	27.16
5	500.00	34.84 QP	46.00	-11.16	1.00 V	262	7.68	27.16
6	600.00	37.18 QP	46.00	-8.82	1.00 V	62	10.02	27.16
7	650.00	39.71 QP	46.00	-6.29	1.00 V	264	12.55	27.16

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.

802.11a OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25.0deg. C, 66.0%RH 965hPa	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	3830.00	44.41 PK	74.00	-29.59	1.41 H	220	11.24	33.17
2	3830.00	30.24 AV	54.00	-23.76	1.41 H	220	-2.93	33.17
3	*5745.00	103.46 PK			1.00 H	32	66.25	37.21
4	*5745.00	93.27 AV			1.00 H	32	56.06	37.21
5	7660.00	52.30 PK	74.00	-21.70	1.00 H	84	9.54	42.76
6	7660.00	42.30 AV	54.00	-11.70	1.00 H	84	-0.46	42.76
7	11490.00	58.24 PK	74.00	-15.76	1.04 H	84	11.21	47.03
8	11490.00	45.13 AV	54.00	-8.87	1.04 H	84	-1.90	47.03
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3830.00	44.73 PK	74.00	-29.27	1.58 V	161	11.56	33.17
2	3830.00	30.46 AV	54.00	-23.54	1.58 V	161	-2.71	33.17
3	*5745.00	118.90 PK			1.00 V	276	81.69	37.21
4	*5745.00	108.43 AV			1.00 V	276	71.22	37.21
5	7660.00	54.19 PK	74.00	-19.81	1.00 V	332	11.43	42.76
6	7660.00	44.81 AV	54.00	-9.19	1.00 V	332	2.05	42.76
7	11490.00	61.48 PK	74.00	-12.52	2.11 V	3	14.45	47.03
8	11490.00	47.83 AV	54.00	-6.17	2.11 V	3	0.80	47.03

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25.0deg. C, 66.0%RH 965hPa	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	3856.60	44.31 PK	74.00	-29.69	1.39 H	216	11.07	33.24
2	3856.60	30.40 AV	54.00	-23.60	1.39 H	216	-2.84	33.24
3	*5785.00	108.40 PK			1.00 H	47	71.09	37.31
4	*5785.00	99.62 AV			1.00 H	47	62.31	37.31
5	7713.30	52.10 PK	74.00	-21.90	1.00 H	72	9.26	42.84
6	7713.30	41.23 AV	54.00	-12.77	1.00 H	72	-1.61	42.84
7	11570.00	59.23 PK	74.00	-14.77	1.09 H	62	12.26	46.97
8	11570.00	46.70 AV	54.00	-7.30	1.09 H	62	-0.27	46.97
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3856.60	44.55 PK	74.00	-29.45	1.55 V	131	11.31	33.24
2	3856.60	30.28 AV	54.00	-23.72	1.55 V	131	-2.96	33.24
3	*5785.00	119.62 PK			1.00 V	292	82.31	37.31
4	*5785.00	109.36 AV			1.00 V	292	72.05	37.31
5	7713.00	52.41 PK	74.00	-21.59	1.00 V	330	9.57	42.84
6	7713.00	41.66 AV	54.00	-12.34	1.00 V	330	-1.18	42.84
7	11570.00	59.86 PK	74.00	-14.14	1.89 V	359	12.89	46.97
8	11570.00	46.28 AV	54.00	-7.72	1.89 V	359	-0.69	46.97

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25.0deg. C, 66.0%RH 965hPa	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	3883.30	44.20 PK	74.00	-29.80	1.42 H	234	10.89	33.31
2	3883.30	30.10 AV	54.00	-23.90	1.42 H	234	-3.21	33.31
3	*5825.00	110.34 PK			1.00 H	62	72.92	37.42
4	*5825.00	100.24 AV			1.00 H	62	62.82	37.42
5	11650.00	59.48 PK	74.00	-14.52	1.06 H	24	12.58	46.90
6	11650.00	45.40 AV	54.00	-8.60	1.06 H	24	-1.50	46.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL 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	3883.30	44.68 PK	74.00	-29.32	1.60 V	122	11.37	33.31
2	3883.30	30.69 AV	54.00	-23.31	1.60 V	122	-2.62	33.31
3	*5825.00	121.61 PK			1.00 V	301	84.19	37.42
4	*5825.00	110.47 AV			1.00 V	301	73.05	37.42
5	11650.00	59.94 PK	74.00	-14.06	1.85 V	1	13.04	46.90
6	11650.00	45.90 AV	54.00	-8.10	1.85 V	1	-1.00	46.90

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. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.

5.3 6dB BANDWIDTH MEASUREMENT

5.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

5.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100037	Aug. 09, 2008	Aug. 08, 2009

NOTE:

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

5.3.3 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.

5.3.4 DEVIATION FROM TEST STANDARD

No deviation

5.3.5 TEST SETUP

5.3.6 EUT OPERATING CONDITIONS

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

5.3.7 TEST RESULTS –ANTENNA 4

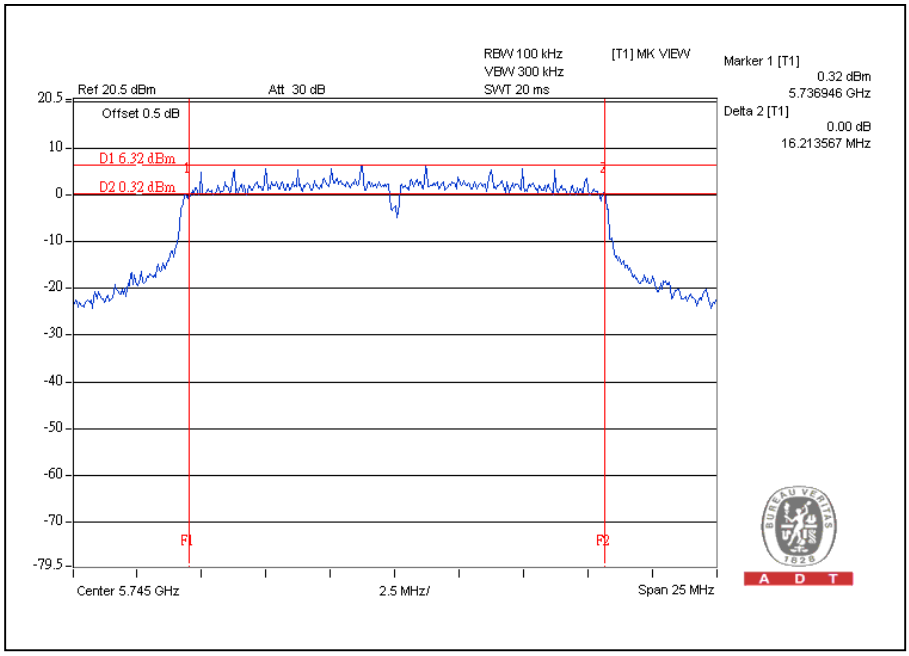
802.11a OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 63%RH, 965hPa
TESTED BY	Wen Yu		

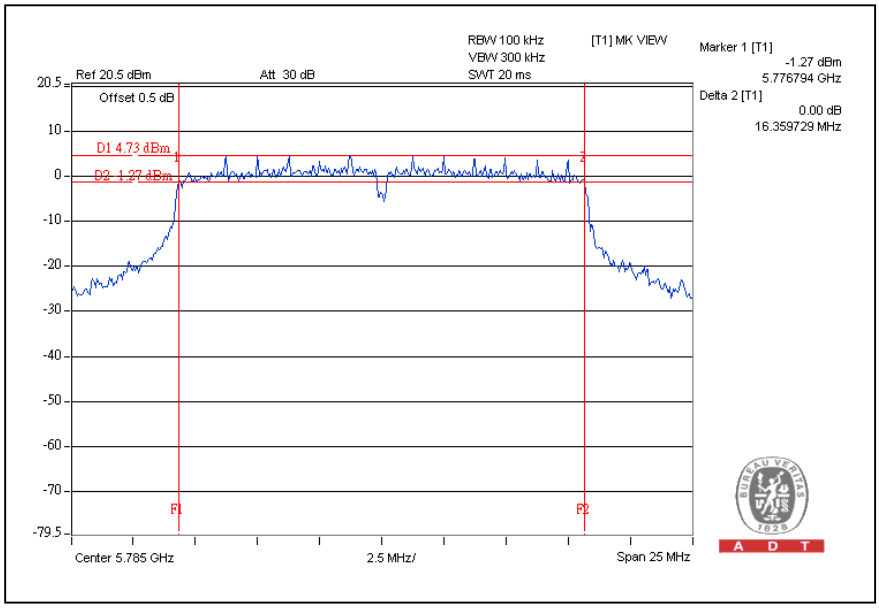
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	16.21	0.5	PASS
3	5785	16.36	0.5	PASS
5	5825	16.37	0.5	PASS

Chain 0

CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-1.27 dBm
5.776794 GHz
Delta 2 [T1]
0.00 dB
16.359729 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.73 dBm
D2 -1.27 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-1.21 dBm
5.816789 GHz
Delta 2 [T1]
0.00 dB
16.366779 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.79 dBm
D2 -1.21 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz

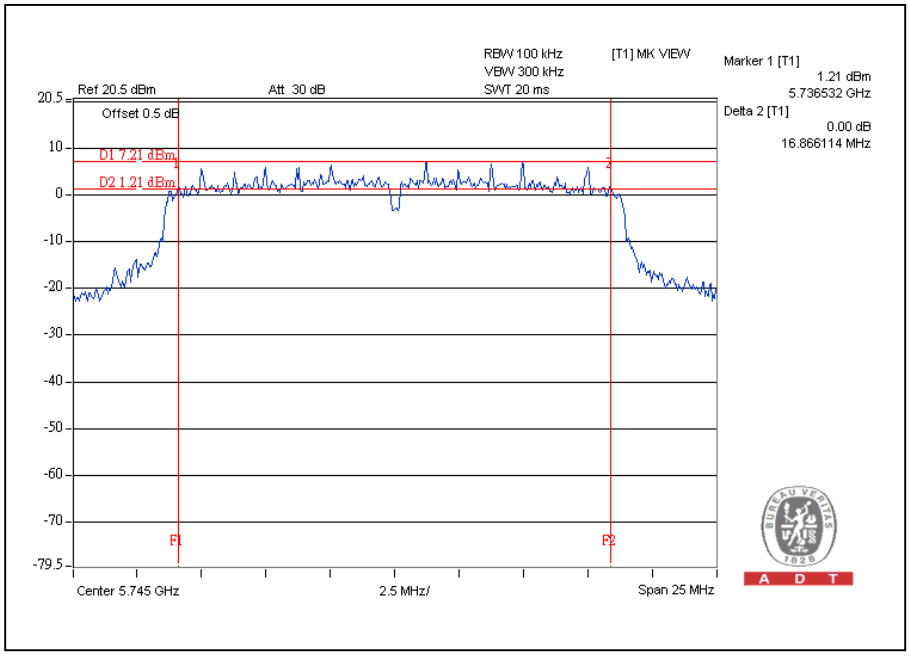
DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	6.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 60%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	16.87	0.5	PASS
3	5785	16.85	0.5	PASS
5	5825	16.86	0.5	PASS

Chain 0

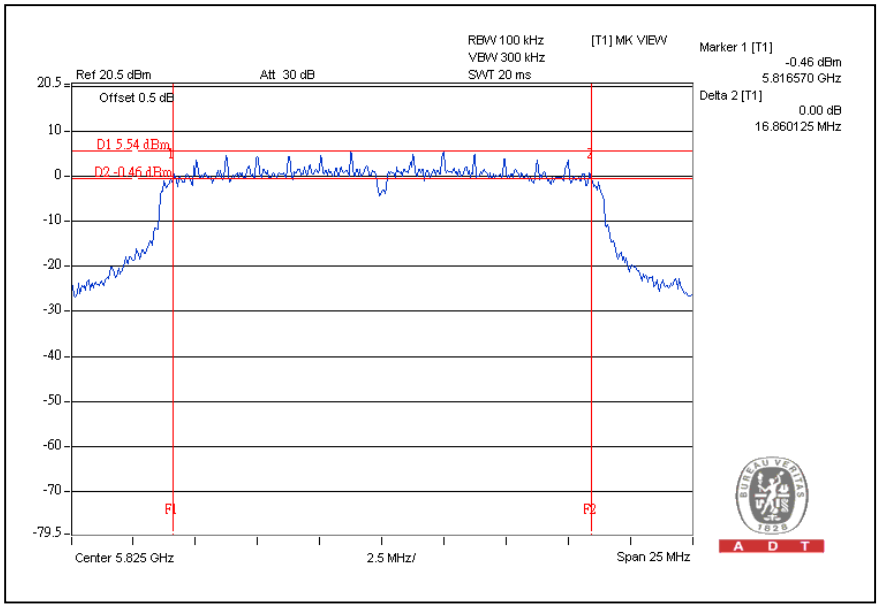
CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
0.75 dBm
5.776554 GHz
Delta 2 [T1]
0.00 dB
16.853364 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 6.75 dBm
D2 0.75 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-0.46 dBm
5.816570 GHz
Delta 2 [T1]
0.00 dB
16.860125 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 5.54 dBm
D2 -0.46 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz

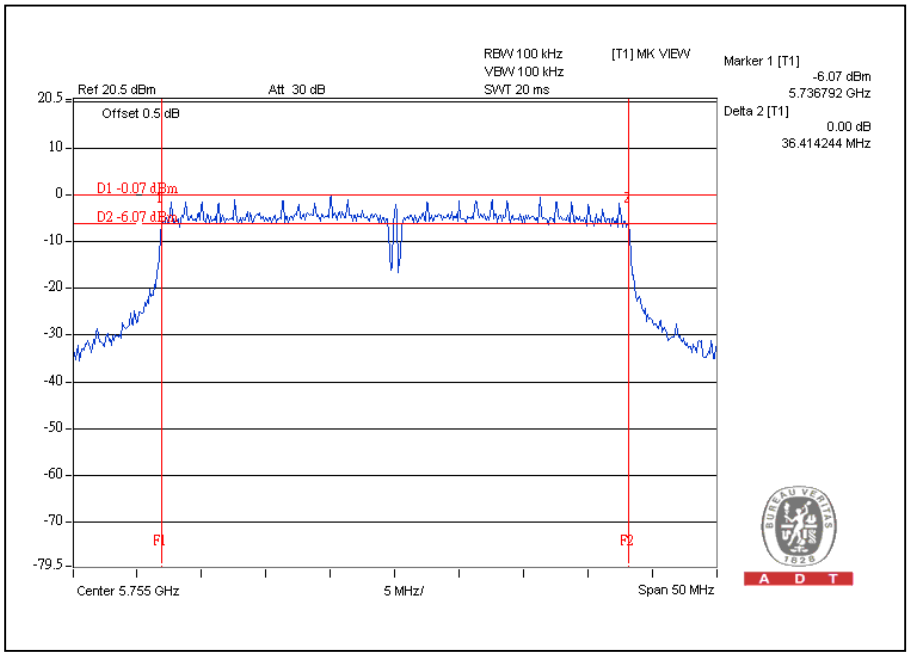
DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 60%RH, 965hPa
TESTED BY	Wen Yu		

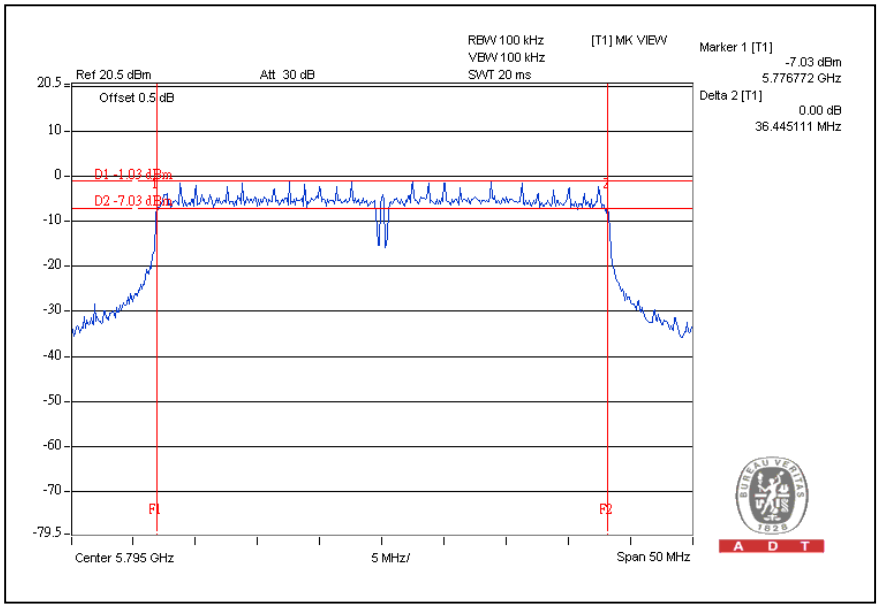
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5755	36.41	0.5	PASS
2	5795	36.45	0.5	PASS

Chain 0

CH1



CH2


RBW 100 kHz
VBW 100 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-7.03 dBm
5.776772 GHz
Delta 2 [T1]
0.00 dB
36.445111 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -1.03 dBm
D2 -7.03 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.795 GHz
5 MHz/
Span 50 MHz

5.3.8 TEST RESULTS –ANTENNA 5

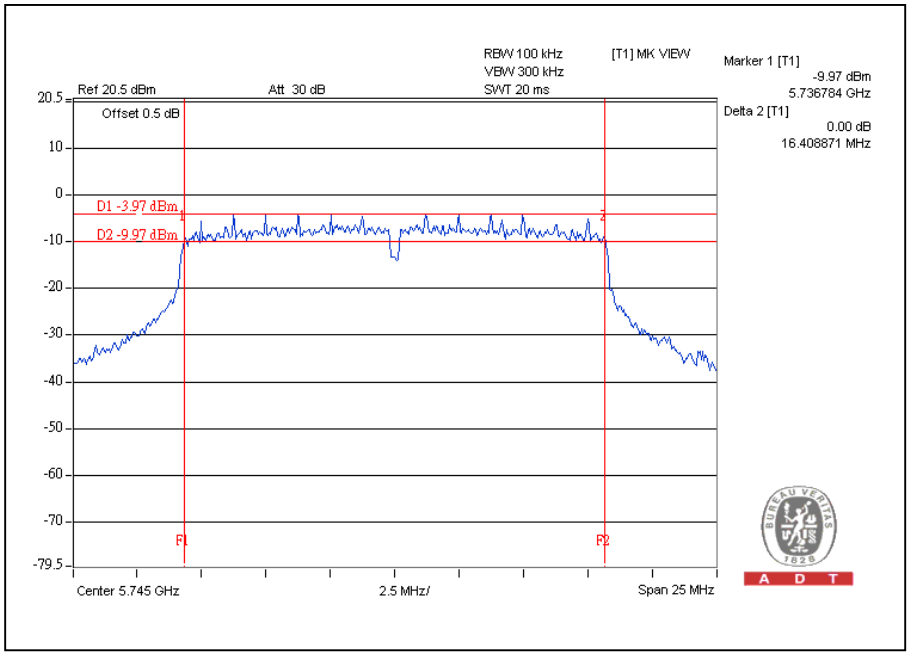
802.11a OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 63%RH, 965hPa
TESTED BY	Wen Yu		

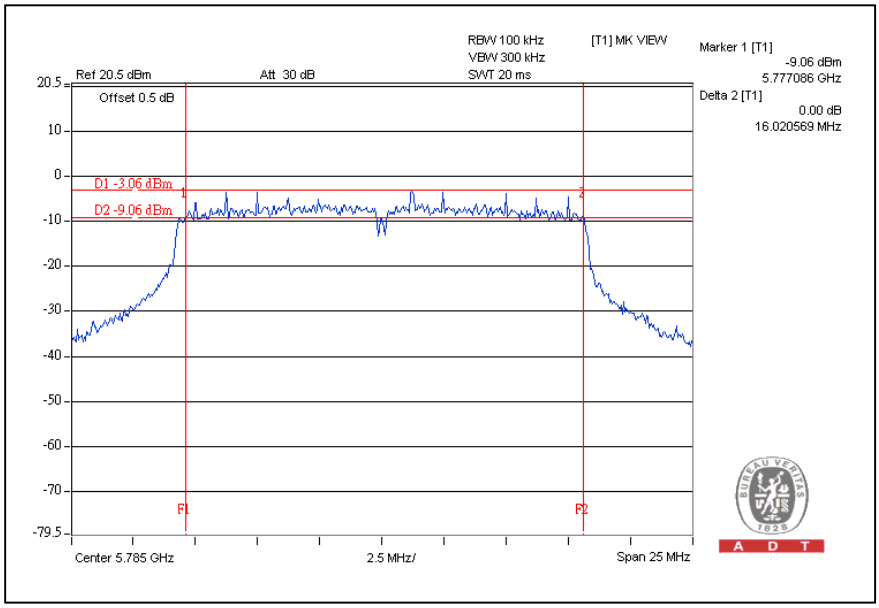
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	16.41	0.5	PASS
3	5785	16.02	0.5	PASS
5	5825	16.38	0.5	PASS

Chain 0

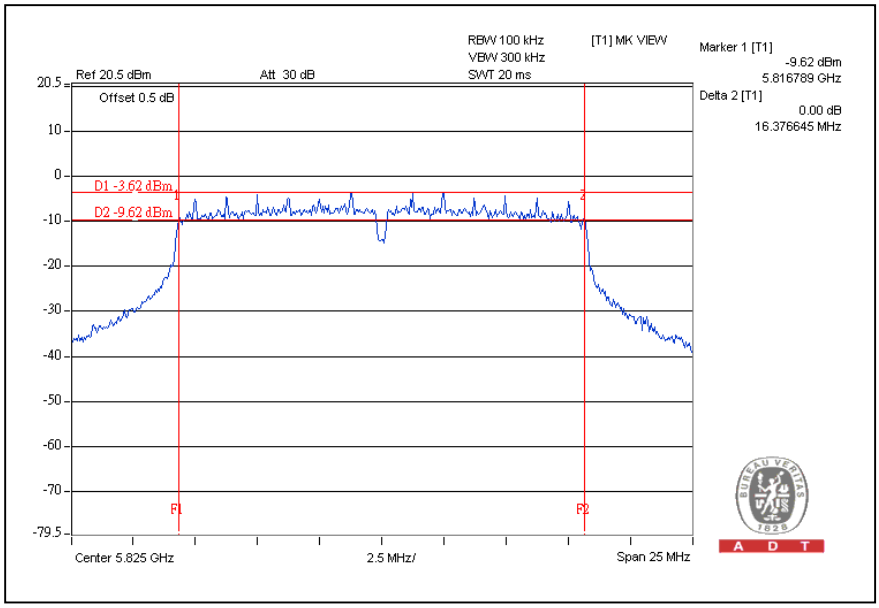
CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-9.06 dBm
5.777086 GHz
Delta 2 [T1]
0.00 dB
16.020569 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -3.06 dBm
D2 -9.06 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-9.62 dBm
5.816789 GHz
Delta 2 [T1]
0.00 dB
16.376645 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -3.62 dBm
D2 -9.62 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz

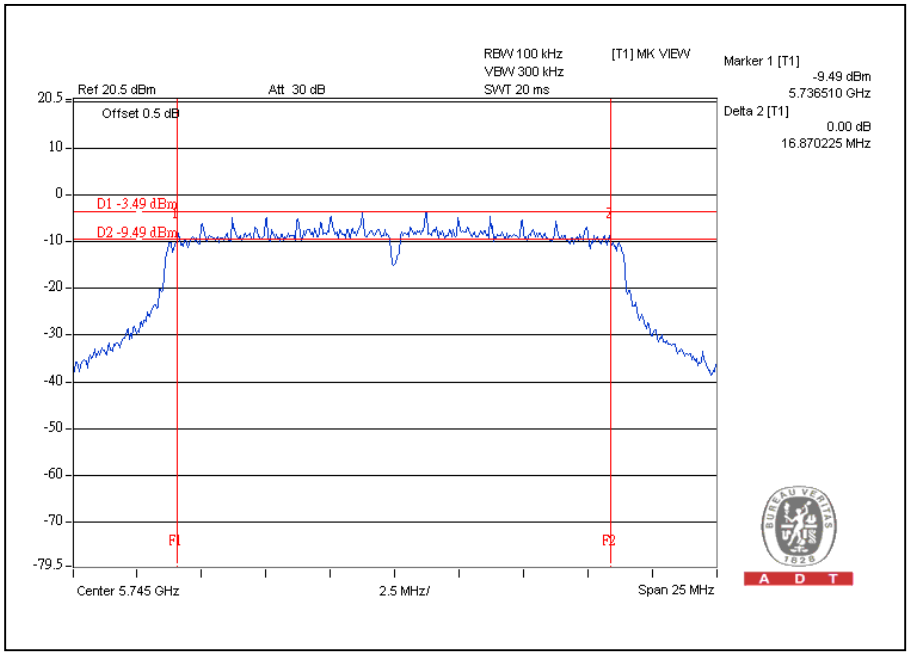
DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	6.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63%RH, 965hPa
TESTED BY	Wen Yu		

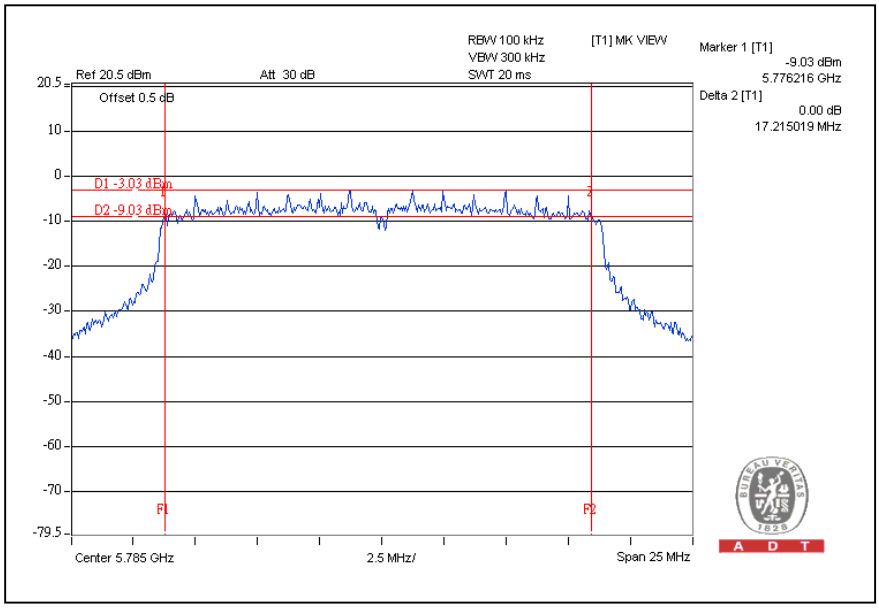
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	16.87	0.5	PASS
3	5785	17.22	0.5	PASS
5	5825	16.89	0.5	PASS

Chain 0

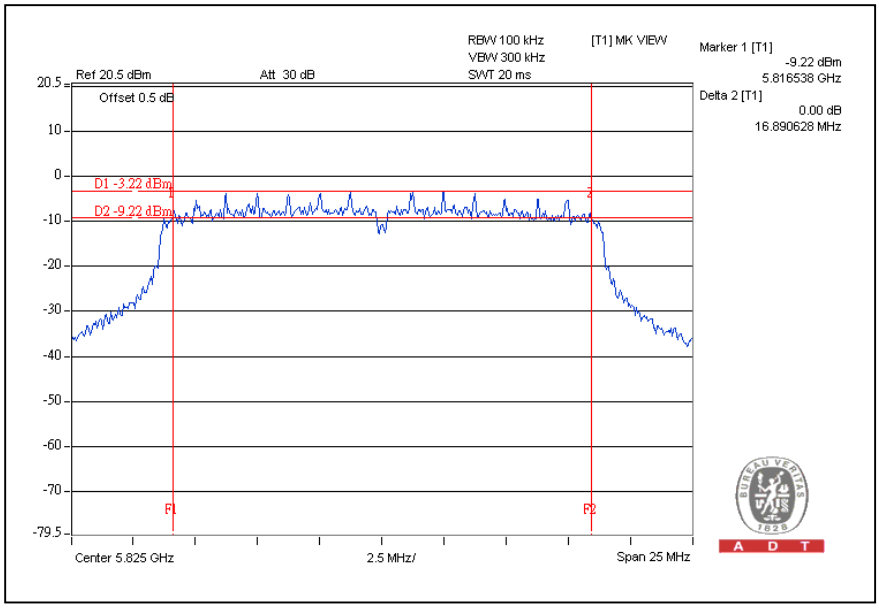
CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-9.03 dBm
5.776216 GHz
Delta 2 [T1]
0.00 dB
17.215019 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -3.03 dBm
D2 -9.03 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-9.22 dBm
5.816538 GHz
Delta 2 [T1]
0.00 dB
16.890628 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -3.22 dBm
D2 -9.22 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz

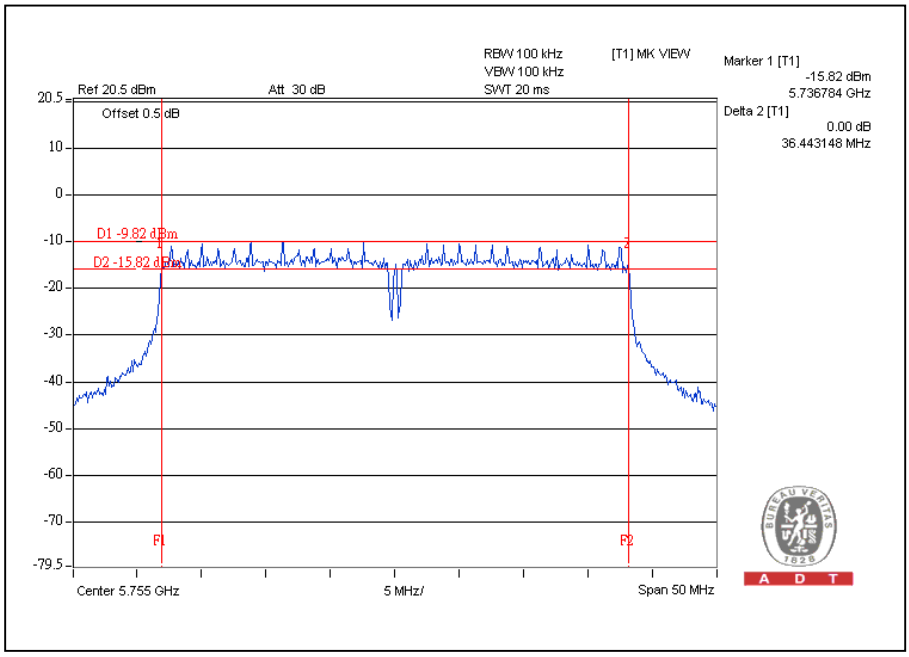
DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 60%RH, 965hPa
TESTED BY	Wen Yu		

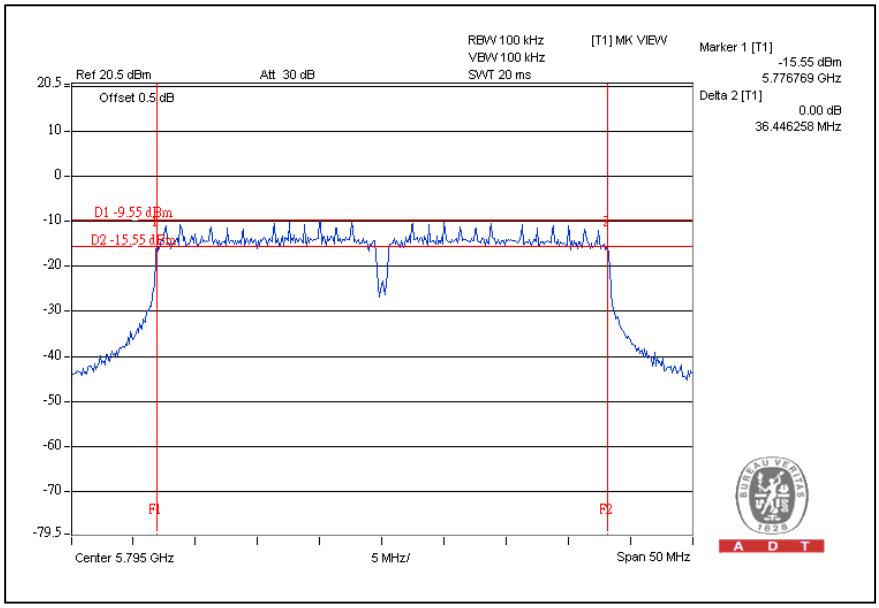
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5755	36.44	0.5	PASS
2	5795	36.45	0.5	PASS

Chain 0

CH1



CH2


RBW 100 kHz
VBW 100 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-15.55 dBm
5.776769 GHz
Delta 2 [T1]
0.00 dB
36.446258 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -9.55 dBm
D2 -15.55 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.795 GHz
5 MHz/
Span 50 MHz

5.3.9 TEST RESULTS –ANTENNA 7

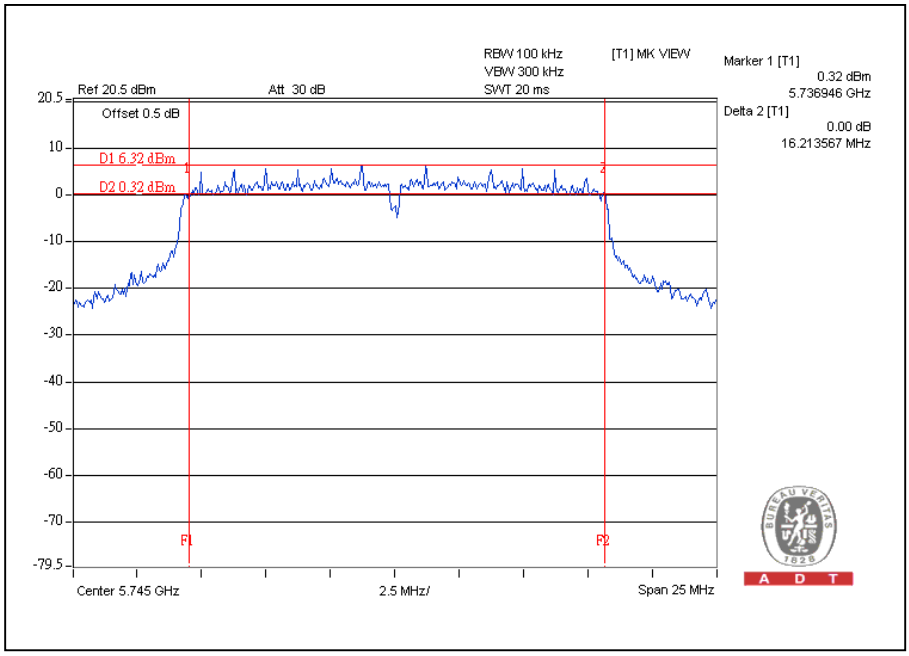
802.11a OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 63%RH, 965hPa
TESTED BY	Wen Yu		

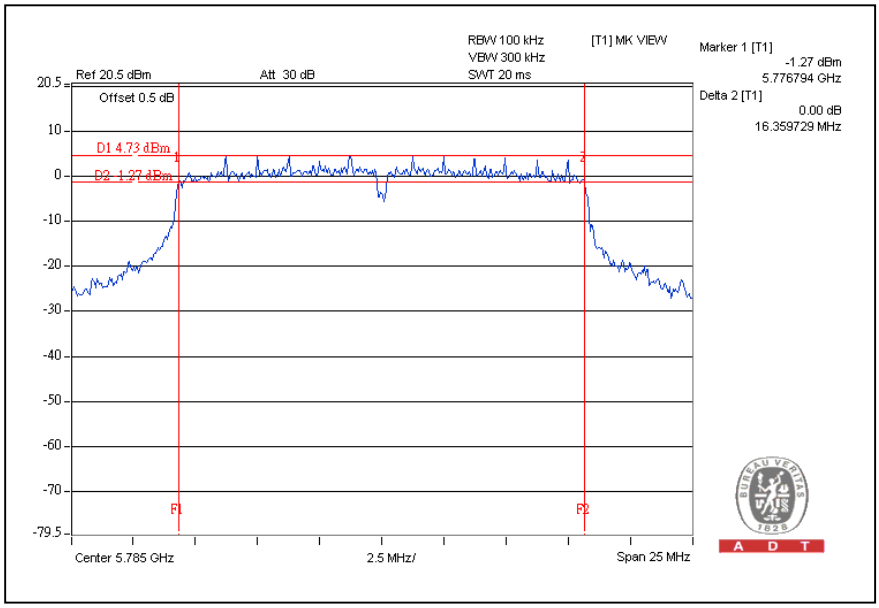
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	16.21	0.5	PASS
3	5785	16.36	0.5	PASS
5	5825	16.37	0.5	PASS

Chain 0

CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-1.27 dBm
5.776794 GHz
Delta 2 [T1]
0.00 dB
16.359729 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.73 dBm
D2 -1.27 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-1.21 dBm
5.816789 GHz
Delta 2 [T1]
0.00 dB
16.366779 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.79 dBm
D2 -1.21 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz

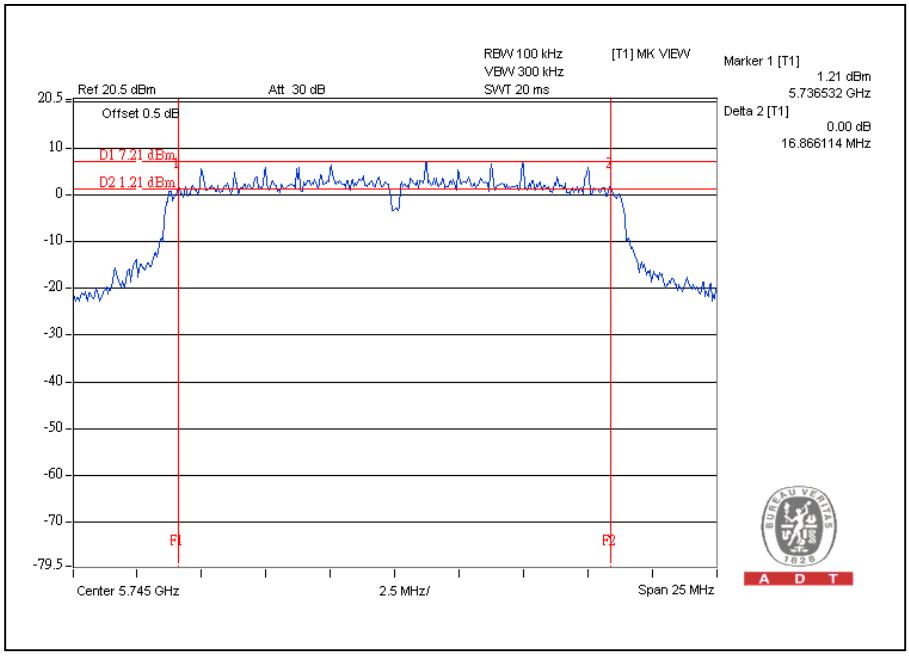
DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	6.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	16.87	0.5	PASS
3	5785	16.85	0.5	PASS
5	5825	16.86	0.5	PASS

Chain 0

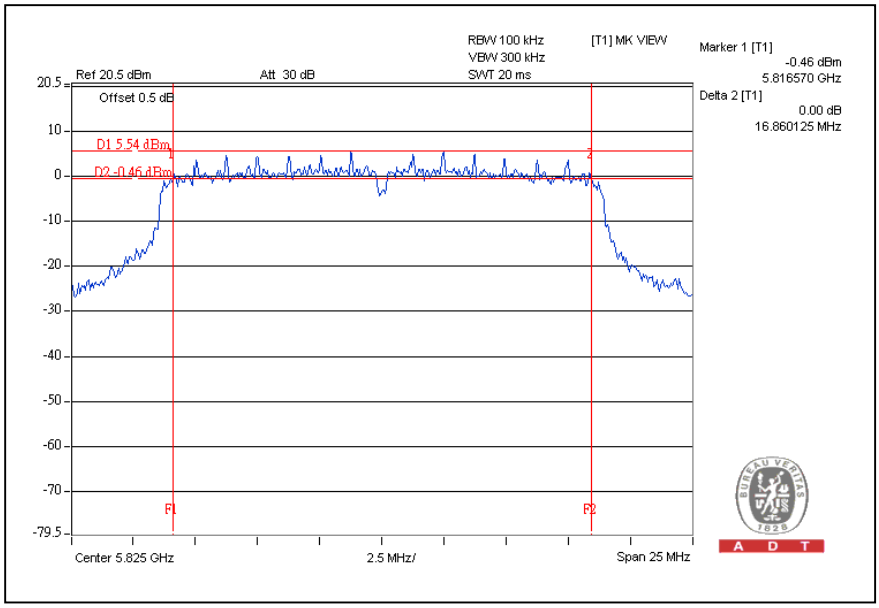
CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
0.75 dBm
5.776554 GHz
Delta 2 [T1]
0.00 dB
16.853364 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 6.75 dBm
D2 0.75 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-0.46 dBm
5.816570 GHz
Delta 2 [T1]
0.00 dB
16.860125 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 5.54 dBm
D2 -0.46 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz

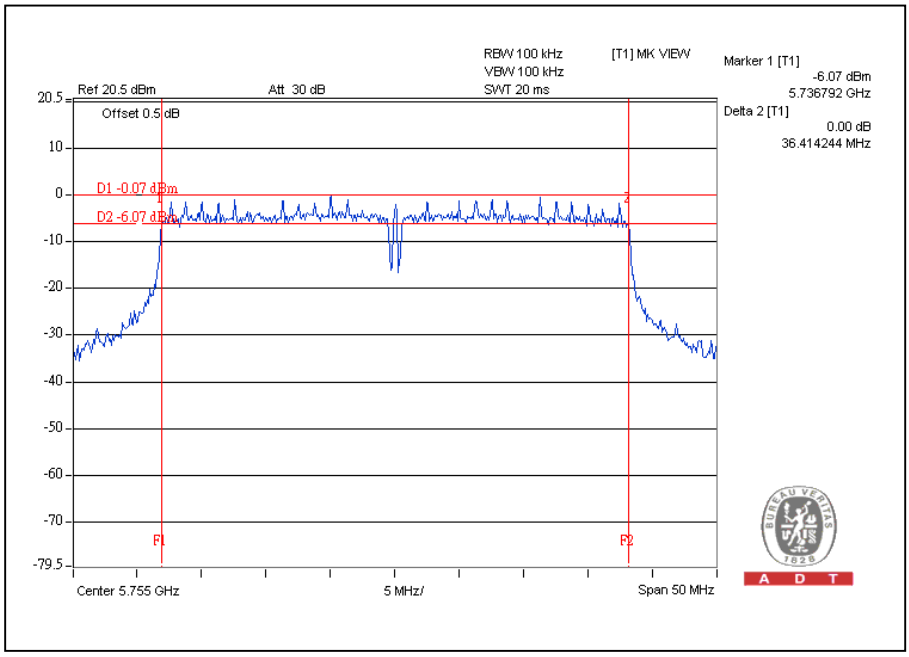
DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 60%RH, 965hPa
TESTED BY	Wen Yu		

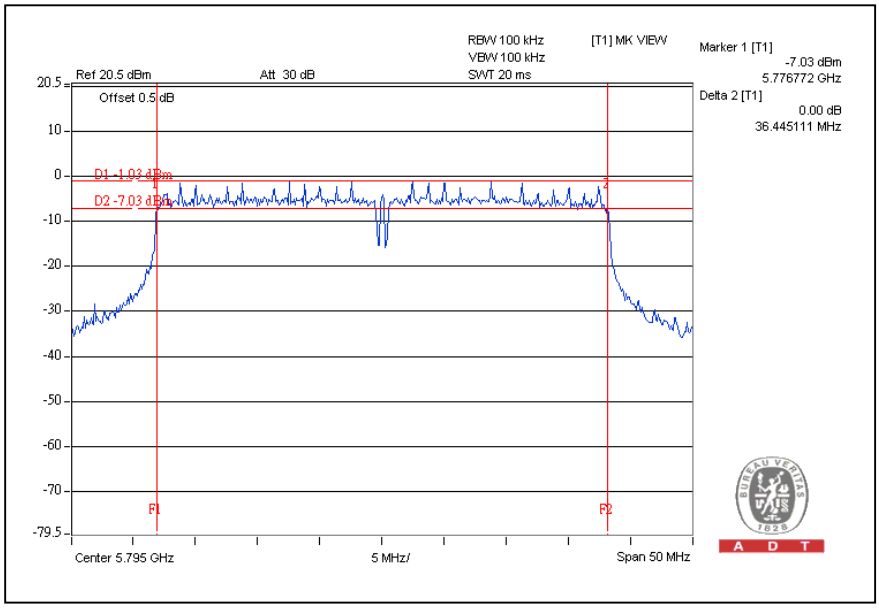
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5755	36.41	0.5	PASS
2	5795	36.45	0.5	PASS

Chain 0

CH1



CH2


RBW 100 kHz
VBW 100 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-7.03 dBm
5.776772 GHz
Delta 2 [T1]
0.00 dB
36.445111 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -1.03 dBm
D2 -7.03 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.795 GHz
5 MHz/
Span 50 MHz

5.3.10 TEST RESULTS –ANTENNA 8

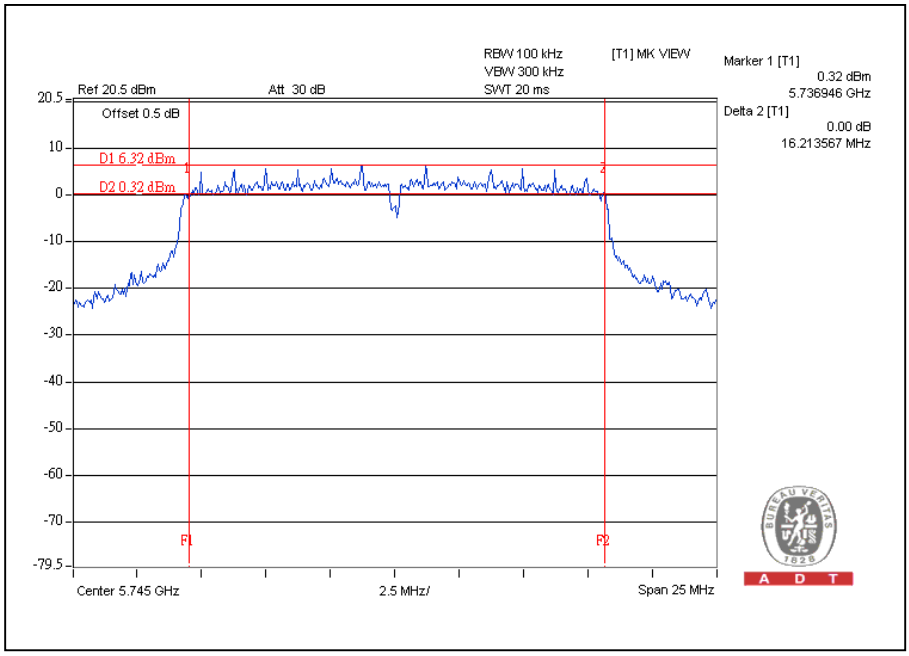
802.11a OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 63%RH, 965hPa
TESTED BY	Wen Yu		

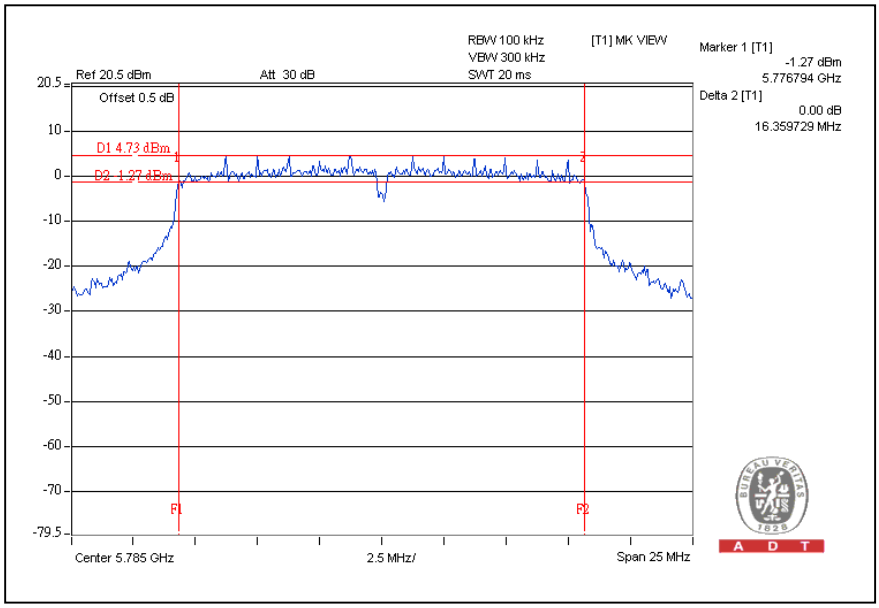
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	16.21	0.5	PASS
3	5785	16.36	0.5	PASS
5	5825	16.37	0.5	PASS

Chain 0

CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-1.27 dBm
5.776794 GHz
Delta 2 [T1]
0.00 dB
16.359729 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.73 dBm
D2 -1.27 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-1.21 dBm
5.816789 GHz
Delta 2 [T1]
0.00 dB
16.366779 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.79 dBm
D2 -1.21 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz

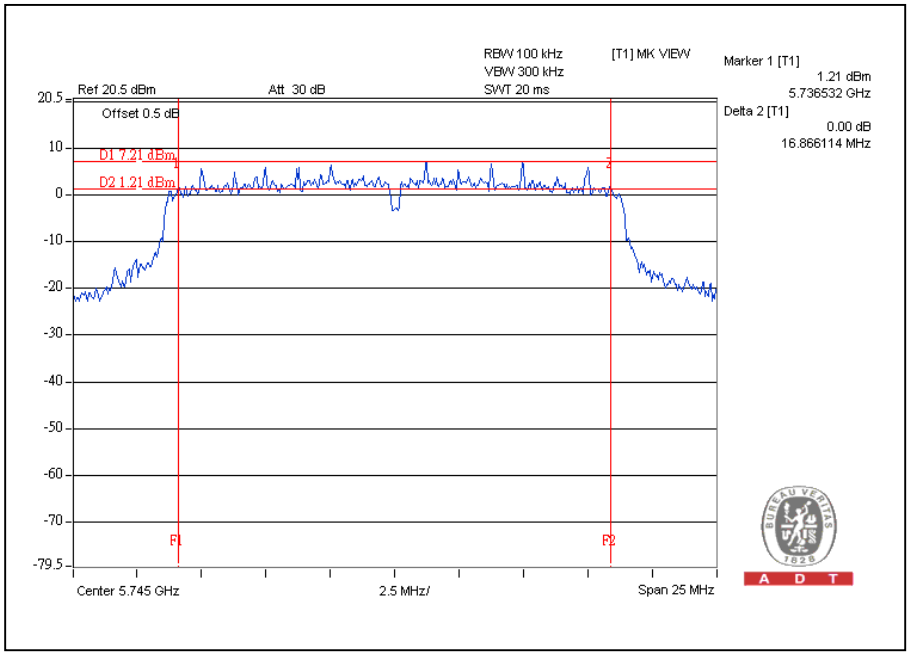
DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	6.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	16.87	0.5	PASS
3	5785	16.85	0.5	PASS
5	5825	16.86	0.5	PASS

Chain 0

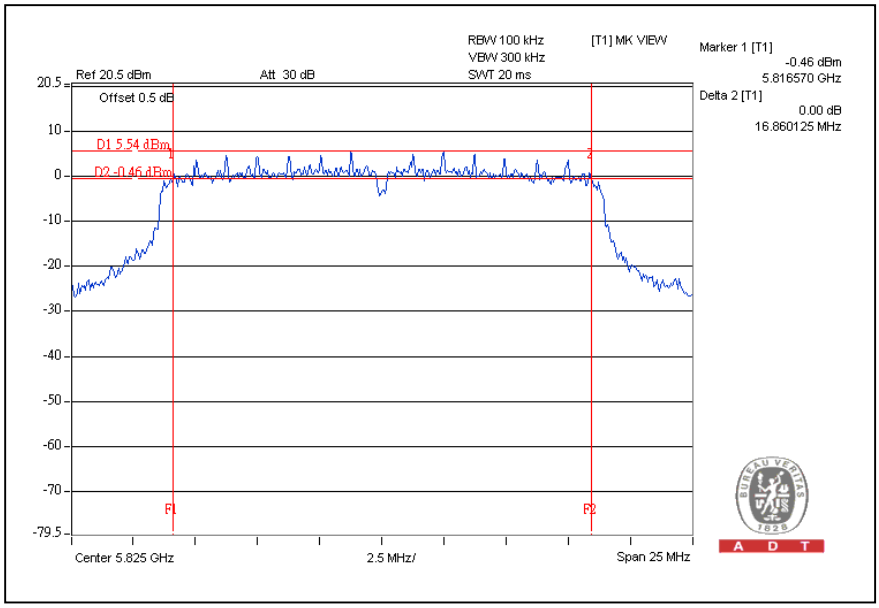
CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
0.75 dBm
5.776554 GHz
Delta 2 [T1]
0.00 dB
16.853364 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 6.75 dBm
D2 0.75 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-0.46 dBm
5.816570 GHz
Delta 2 [T1]
0.00 dB
16.860125 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 5.54 dBm
D2 -0.46 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz

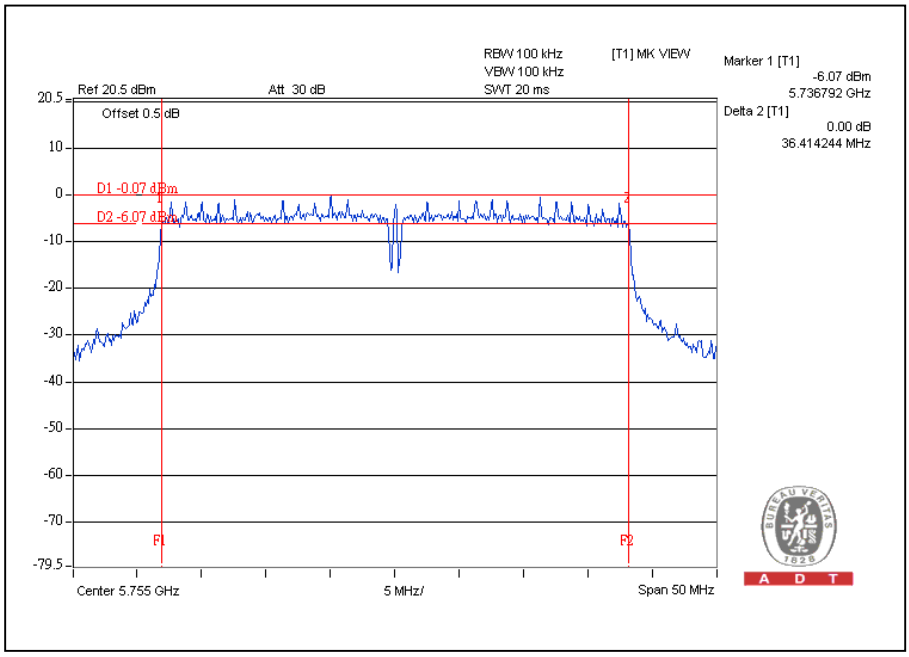
DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 60%RH, 965hPa
TESTED BY	Wen Yu		

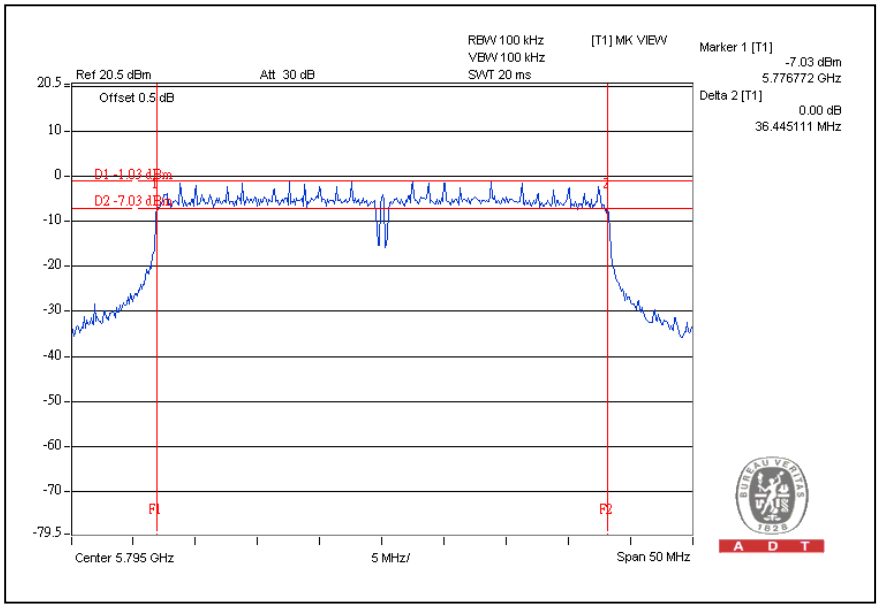
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5755	36.41	0.5	PASS
2	5795	36.45	0.5	PASS

Chain 0

CH1



CH2


RBW 100 kHz
VBW 100 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-7.03 dBm
5.776772 GHz
Delta 2 [T1]
0.00 dB
36.445111 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -1.03 dBm
D2 -7.03 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.795 GHz
5 MHz/
Span 50 MHz

5.3.11 TEST RESULTS –ANTENNA 11

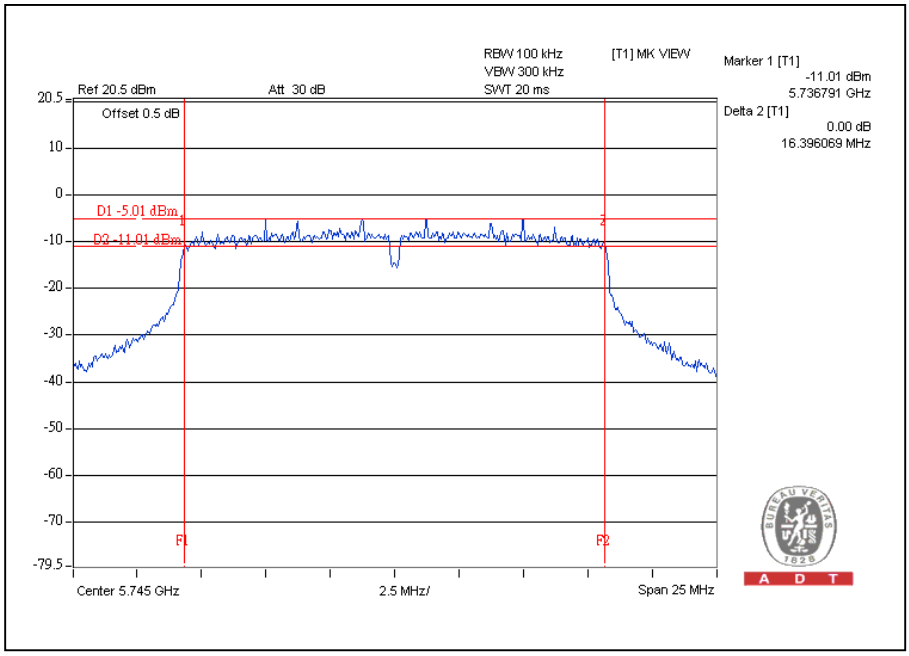
802.11a OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 63%RH, 965hPa
TESTED BY	Wen Yu		

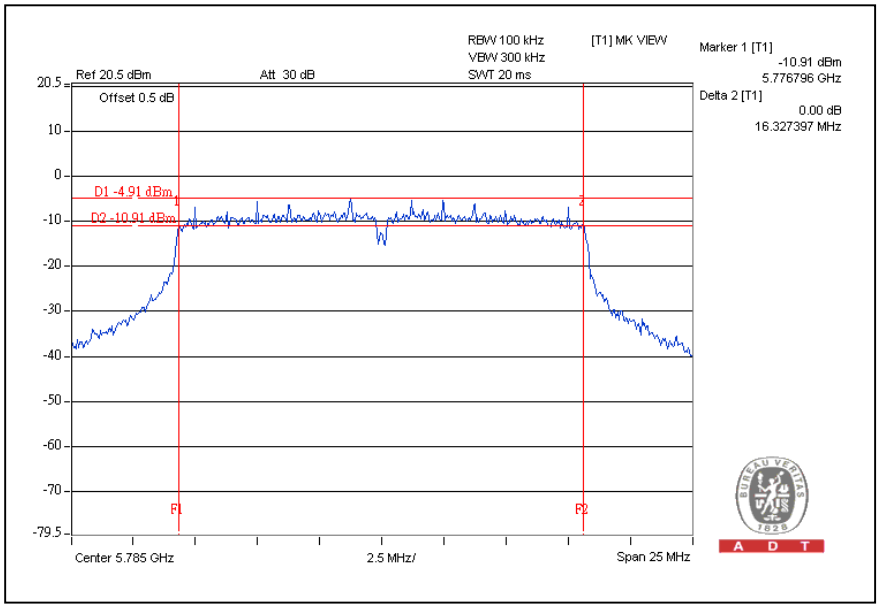
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	16.40	0.5	PASS
3	5785	16.33	0.5	PASS
5	5825	16.39	0.5	PASS

Chain 0

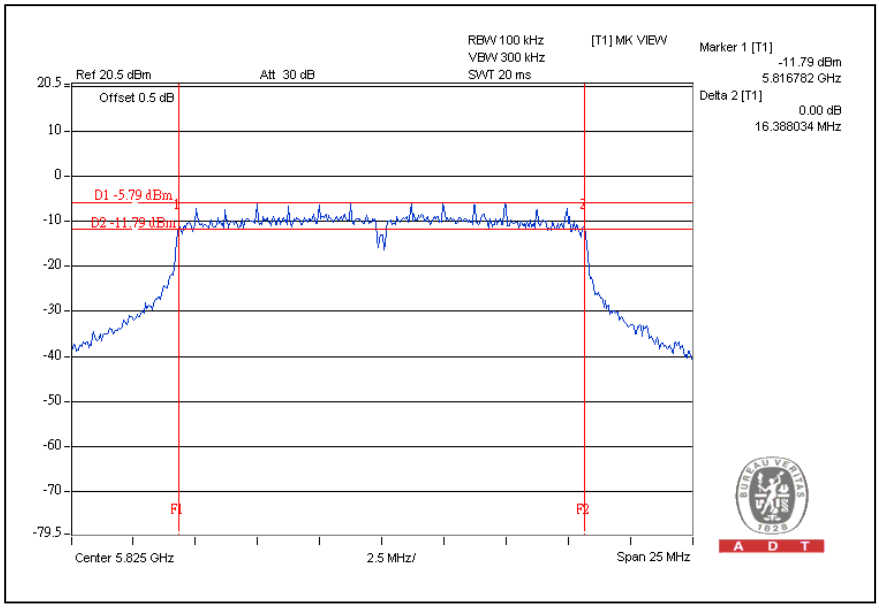
CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-10.91 dBm
5.776796 GHz
Delta 2 [T1]
0.00 dB
16.327397 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -4.91 dBm
D2 -10.91 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-11.79 dBm
5.816782 GHz
Delta 2 [T1]
0.00 dB
16.388034 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -5.79 dBm
D2 -11.79 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz

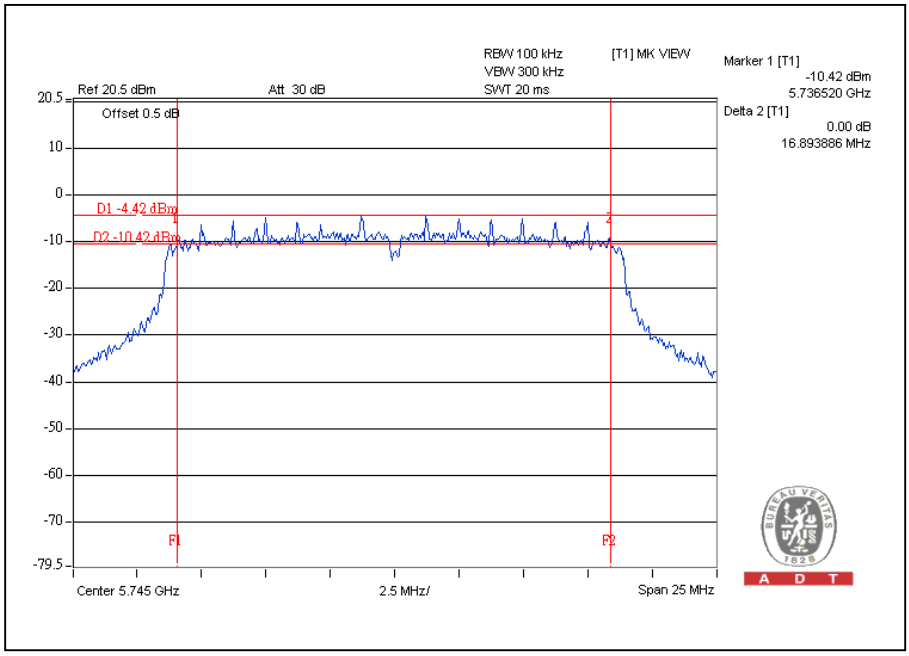
DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	6.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63%RH, 965hPa
TESTED BY	Wen Yu		

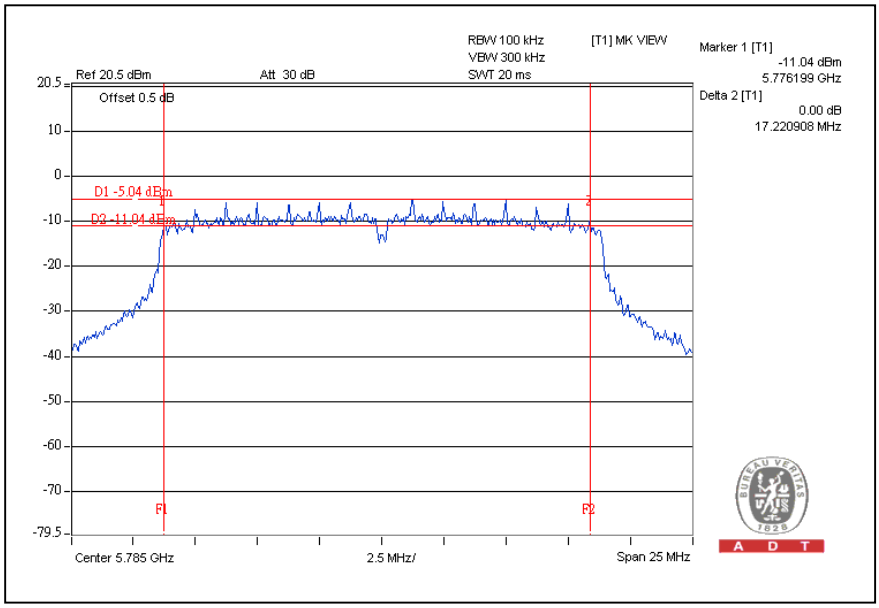
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	16.89	0.5	PASS
3	5785	17.22	0.5	PASS
5	5825	16.86	0.5	PASS

Chain 0

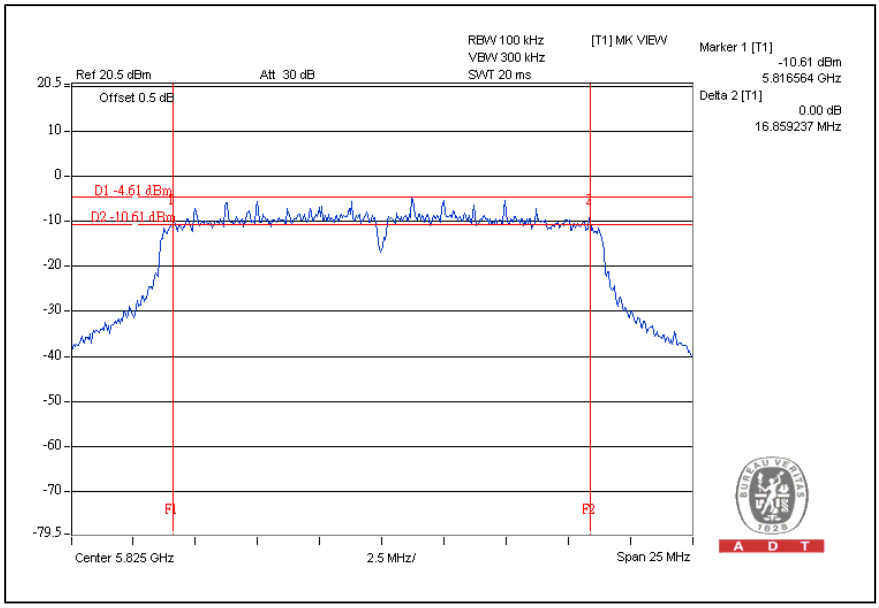
CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-11.04 dBm
5.776199 GHz
Delta 2 [T1]
0.00 dB
17.220908 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -5.04 dBm
D2 -11.04 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-10.61 dBm
5.816564 GHz
Delta 2 [T1]
0.00 dB
16.859237 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -4.61 dBm
D2 -10.61 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz

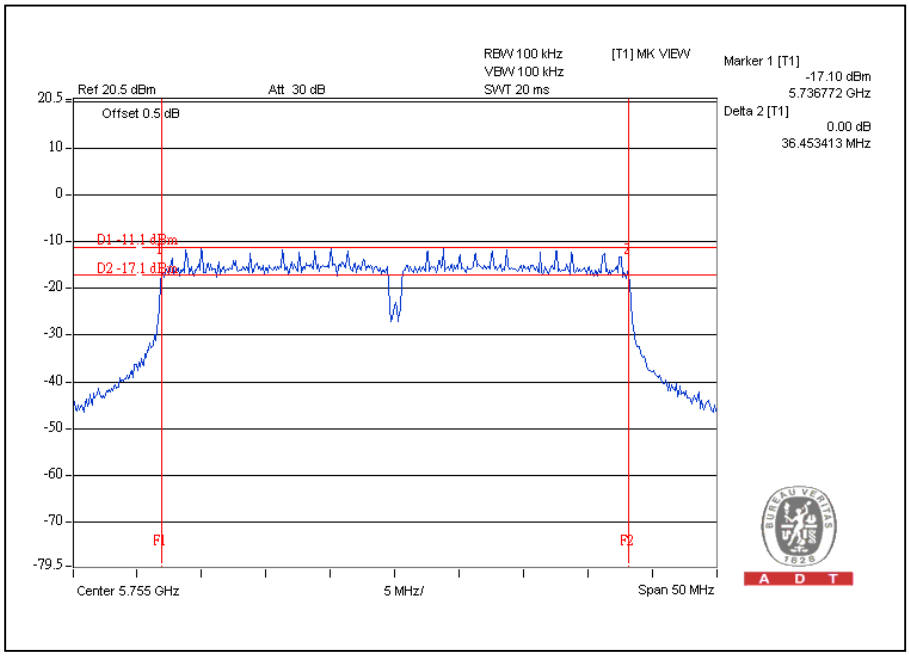
DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 60%RH, 965hPa
TESTED BY	Wen Yu		

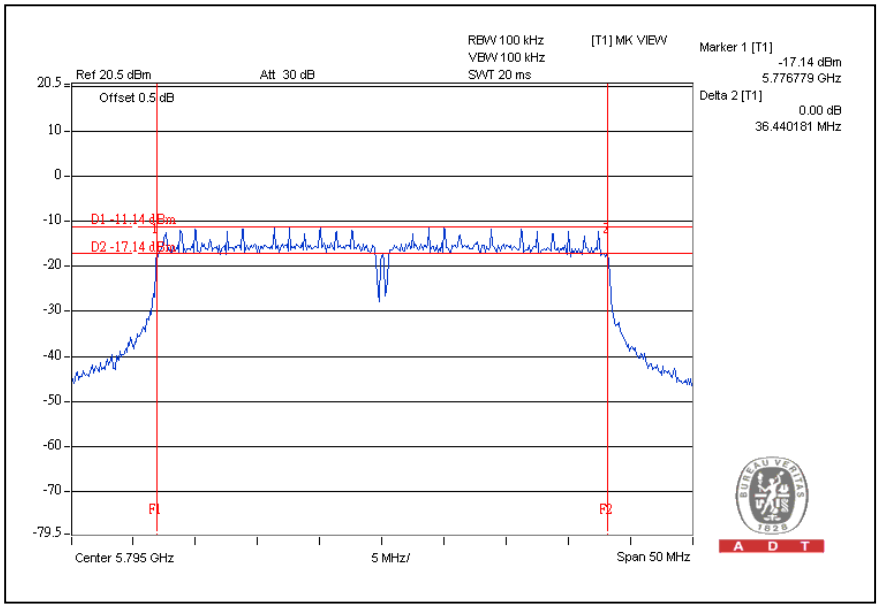
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5755	36.45	0.5	PASS
2	5795	36.44	0.5	PASS

Chain 0

CH1



CH2


RBW 100 kHz
VBW 100 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-17.14 dBm
5.776779 GHz
Delta 2 [T1]
0.00 dB
36.440181 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
D1 -11.14 dBm
D2 -17.14 dBm
F1
F2
Center 5.795 GHz
5 MHz/
Span 50 MHz

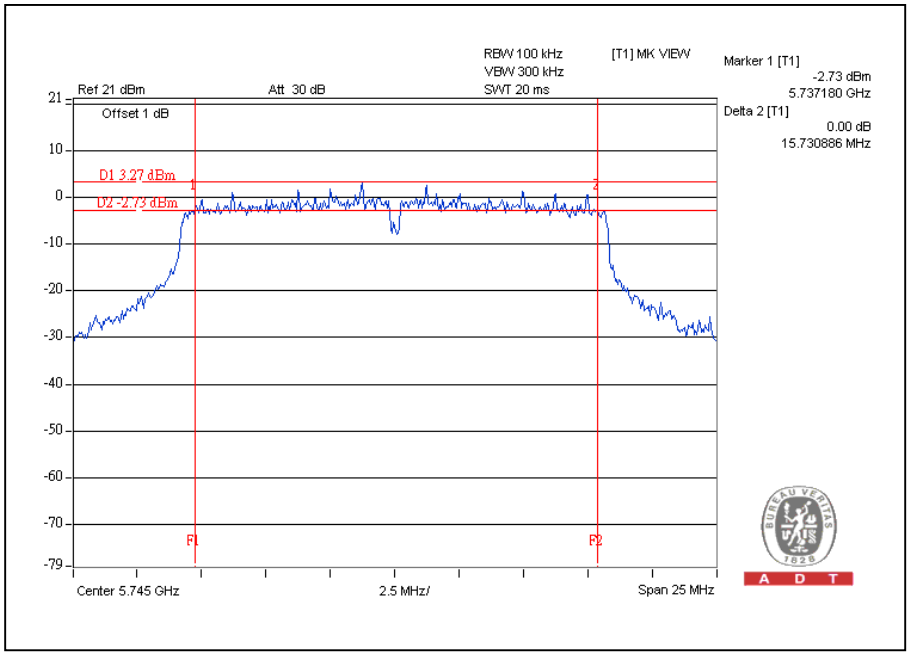
5.3.12 TEST RESULTS –ANTENNA 12

802.11a OFDM MODULATION:

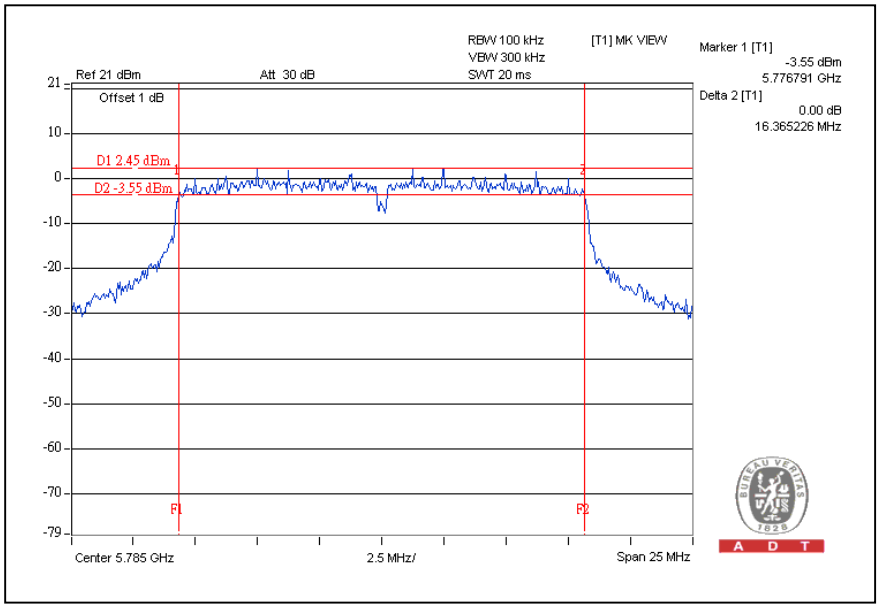
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg. C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	5745	15.73	0.5	PASS
3	5785	16.37	0.5	PASS
5	5825	16.42	0.5	PASS

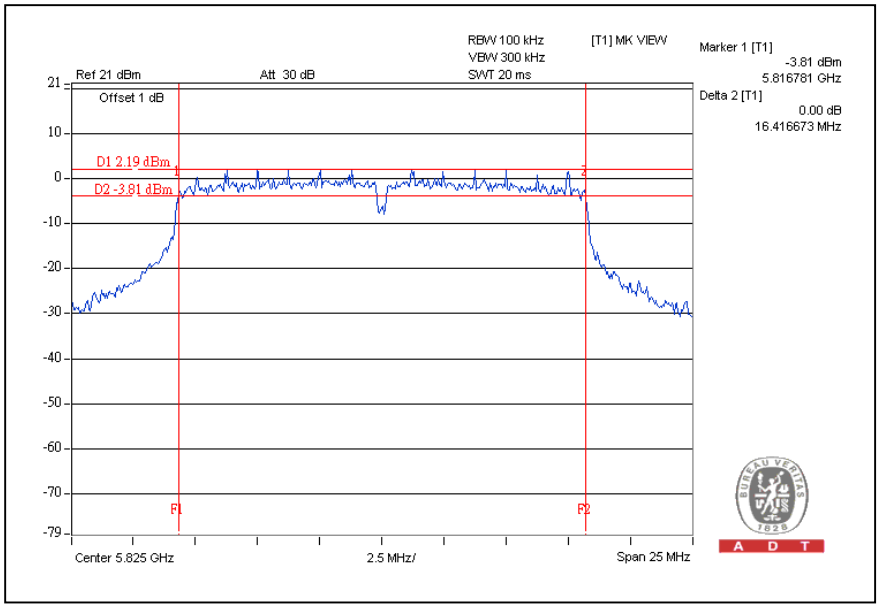
CH1



CH3


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-3.55 dBm
5.776791 GHz
Delta 2 [T1]
0.00 dB
16.365226 MHz
Ref 21 dBm
Att 30 dB
Offset 1 dB
D1 2.45 dBm
D2 -3.55 dBm
21
10
0
-10
-20
-30
-40
-50
-60
-70
-79
F1
F2
Center 5.785 GHz
2.5 MHz/
Span 25 MHz

CH5


RBW 100 kHz
VBW 300 kHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
-3.81 dBm
5.816781 GHz
Delta 2 [T1]
0.00 dB
16.416673 MHz
Ref 21 dBm
Att 30 dB
Offset 1 dB
D1 2.19 dBm
D2 -3.81 dBm
21
10
0
-10
-20
-30
-40
-50
-60
-70
-79
F1
F2
Center 5.825 GHz
2.5 MHz/
Span 25 MHz