

3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement and radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

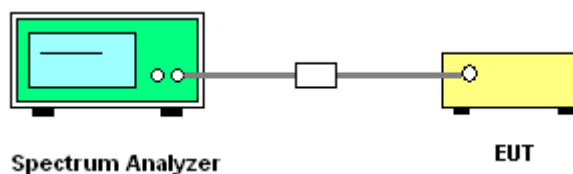
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v02.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 KHz, VBW=300 KHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.4.4 Test Setup

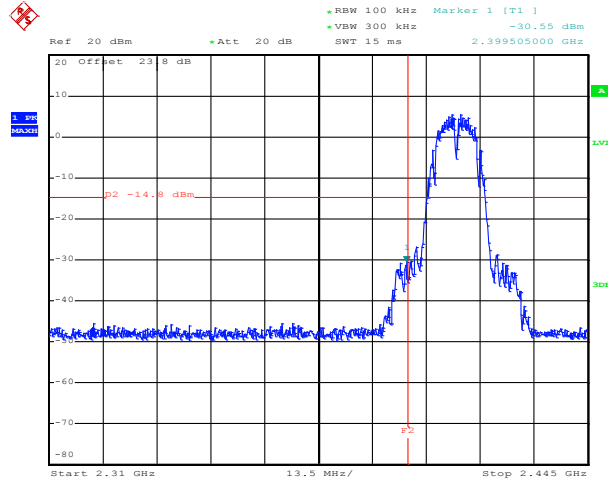


3.4.5 Test Result of Conducted Spurious at Band Edges

Test Mode :	802.11b – Ant. 1	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	01 and 11	Test Engineer :	Bill Kuo

802.11b – Ant. 1

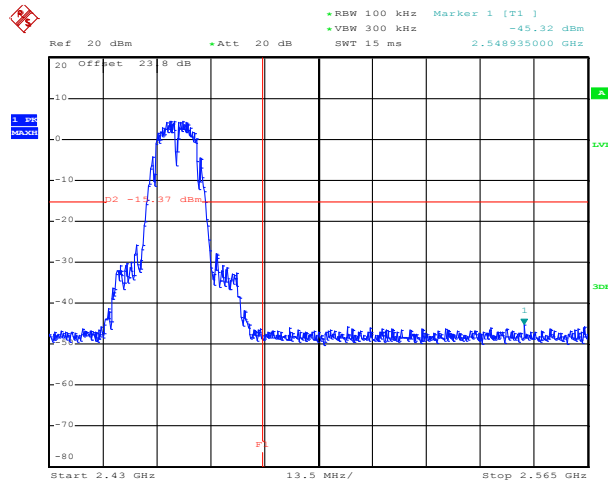
Low Band Edge Plot on Channel 01



Date: 4.MAR.2013 20:10:00

802.11b – Ant. 1

High Band Edge Plot on Channel 11



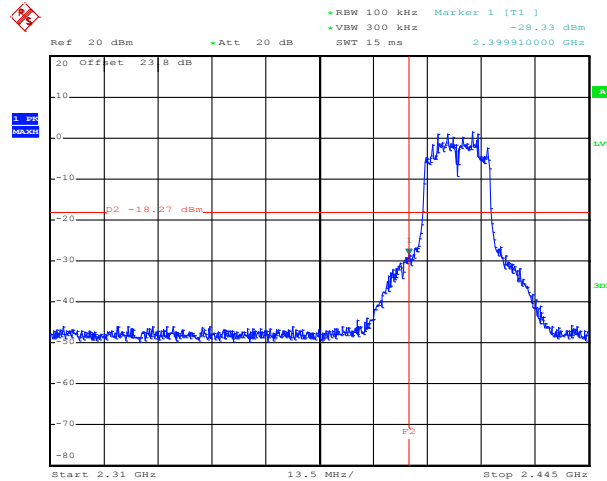
Date: 4.MAR.2013 20:31:15



Test Mode :	802.11g – Ant. 1	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	01 and 11	Test Engineer :	Bill Kuo

802.11g – Ant. 1

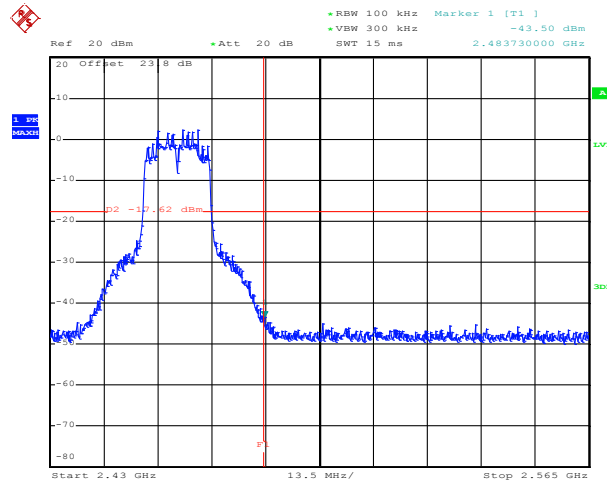
Low Band Edge Plot on Channel 01



Date: 4.MAR.2013 20:34:51

802.11g – Ant. 1

High Band Edge Plot on Channel 11



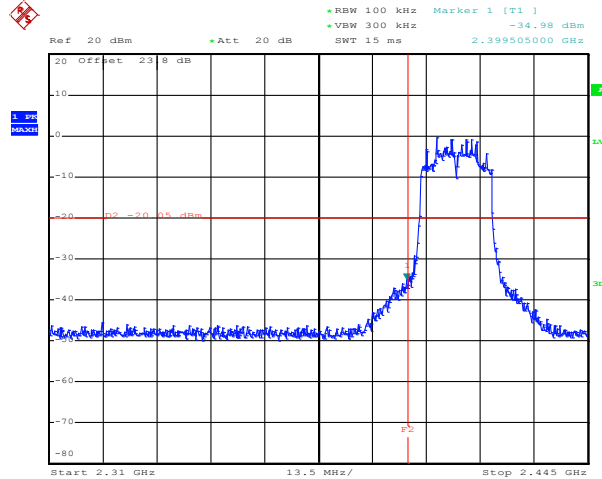
Date: 4.MAR.2013 20:42:22



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	01 and 11	Test Engineer :	Bill Kuo

802.11n HT20 – SISO Ant. 1

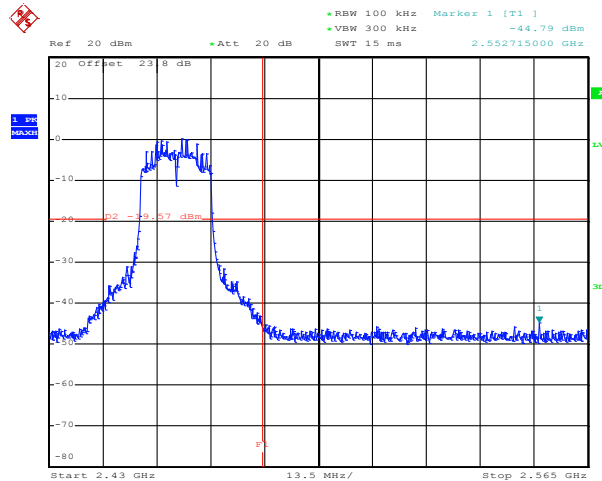
Low Band Edge Plot on Channel 01



Date: 4.MAR.2013 20:56:15

802.11n HT20 – SISO Ant. 1

High Band Edge Plot on Channel 11



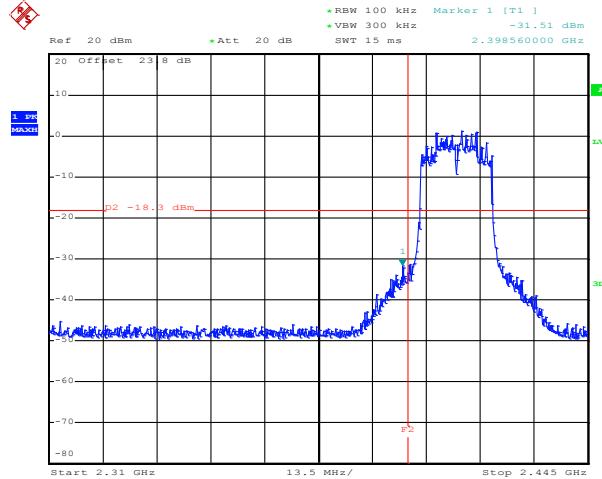
Date: 4.MAR.2013 20:45:16



Test Mode :	802.11n HT20 – MIMO Ant. 1	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	01 and 11	Test Engineer :	Bill Kuo

802.11n HT20 – MIMO Ant. 1

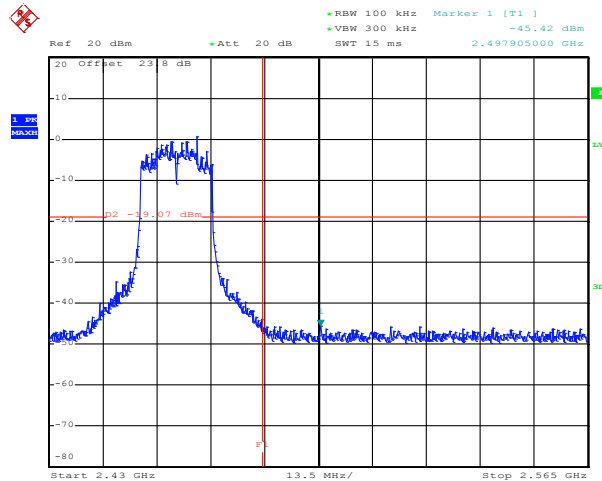
Low Band Edge Plot on Channel 01



Date: 4.MAR.2013 21:00:28

802.11n HT20 – MIMO Ant. 1

High Band Edge Plot on Channel 11



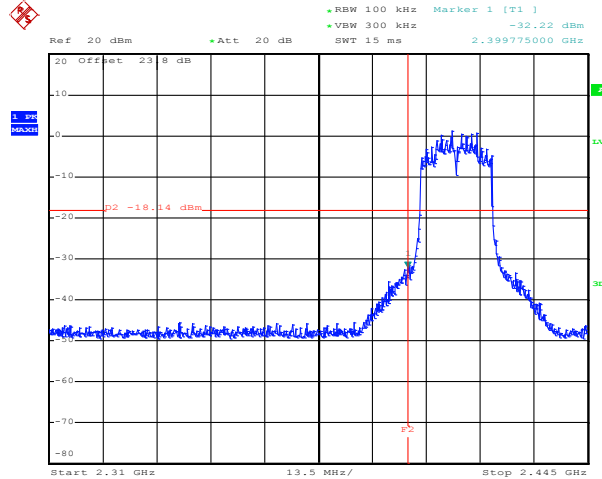
Date: 4.MAR.2013 21:15:49



Test Mode :	802.11n HT20 – MIMO Ant. 2	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	01 and 11	Test Engineer :	Bill Kuo

802.11n HT20 – MIMO Ant. 2

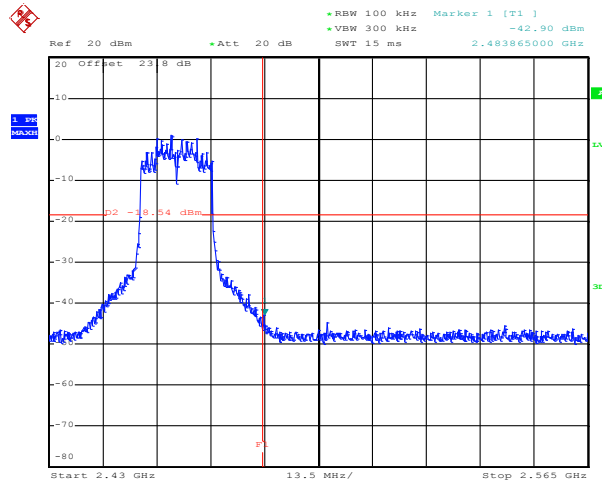
Low Band Edge Plot on Channel 01



Date: 4.MAR.2013 21:05:57

802.11n HT20 – MIMO Ant. 2

High Band Edge Plot on Channel 11



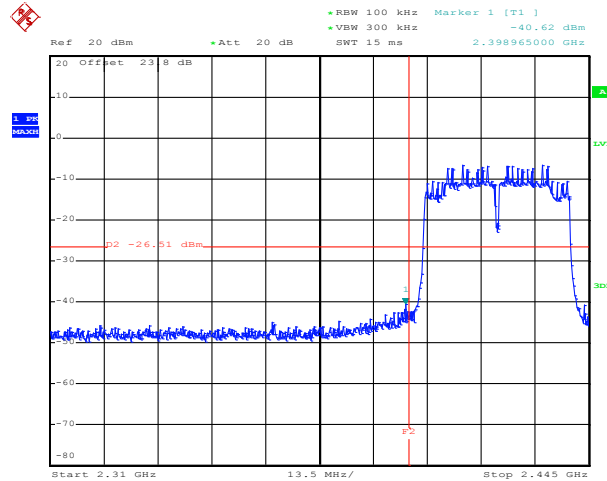
Date: 4.MAR.2013 21:20:03



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	03 and 09	Test Engineer :	Bill Kuo

802.11n HT40 – SISO Ant. 1

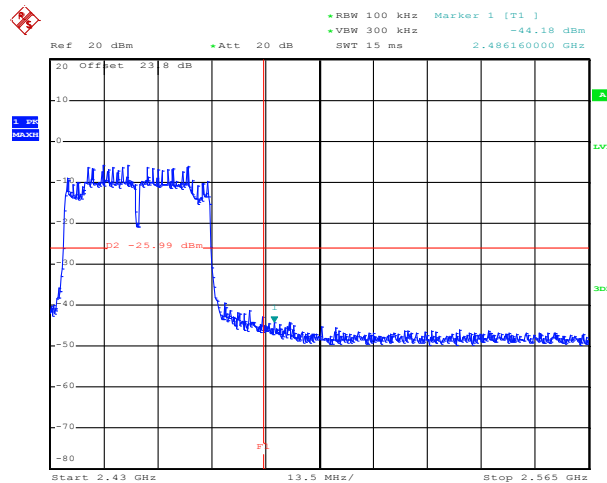
Low Band Edge Plot on Channel 03



Date: 4.MAR.2013 21:28:08

802.11n HT40 – SISO Ant. 1

High Band Edge Plot on Channel 09



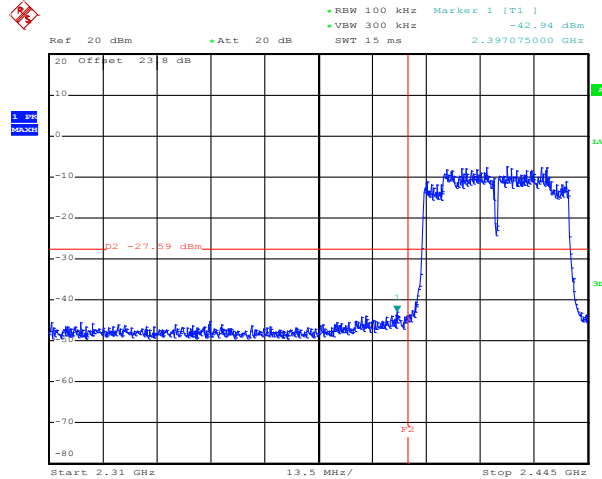
Date: 4.MAR.2013 21:33:26



Test Mode :	802.11n HT40 – MIMO Ant. 1	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	03 and 09	Test Engineer :	Bill Kuo

802.11n HT40 – MIMO Ant. 1

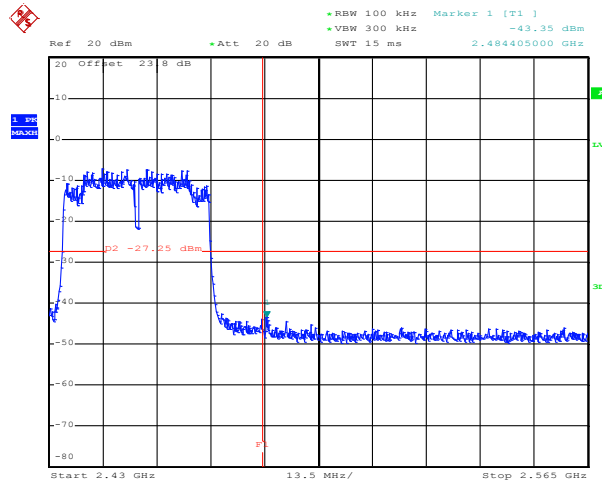
Low Band Edge Plot on Channel 03



Date: 4.MAR.2013 21:40:20

802.11n HT40 – MIMO Ant. 1

High Band Edge Plot on Channel 09



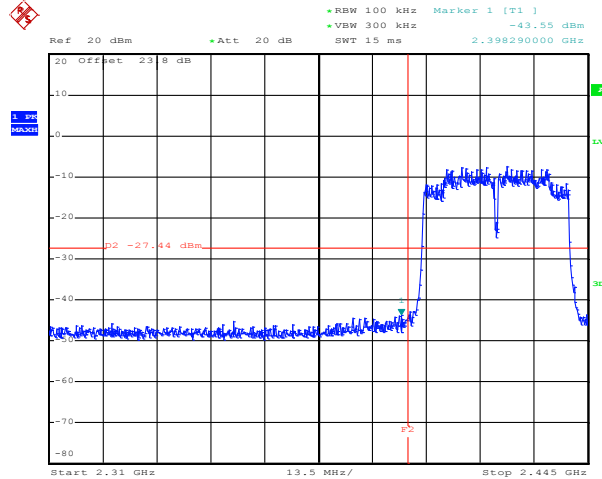
Date: 4.MAR.2013 21:52:43



Test Mode :	802.11n HT40 – MIMO Ant. 2	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	03 and 09	Test Engineer :	Bill Kuo

802.11n HT40 – MIMO Ant. 2

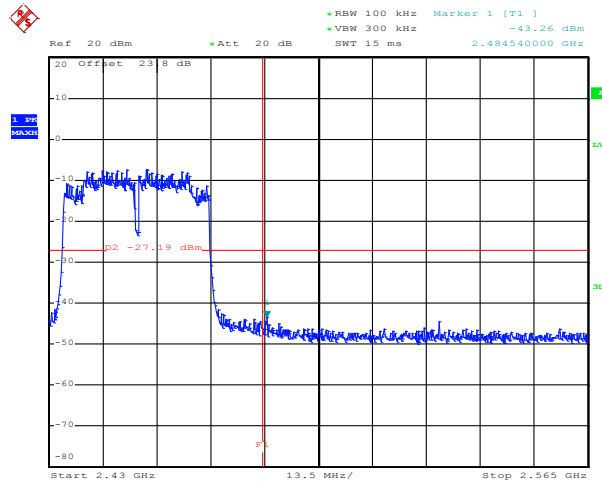
Low Band Edge Plot on Channel 03



Date: 4.MAR.2013 21:43:24

802.11n HT40 – MIMO Ant. 2

High Band Edge Plot on Channel 09



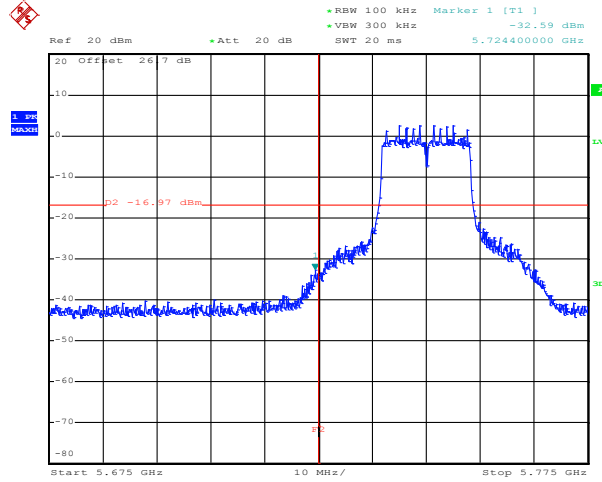
Date: 4.MAR.2013 21:56:02



Test Mode :	802.11a – Ant. 2	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	149 and 165	Test Engineer :	Bill Kuo

802.11a – Ant. 2

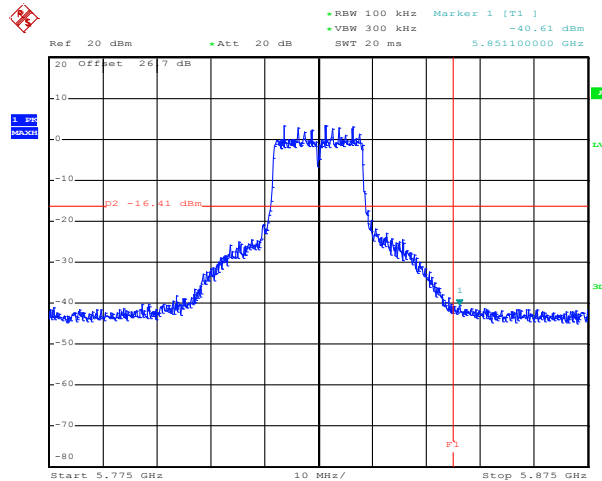
Low Band Edge Plot on Channel 149



Date: 4.MAR.2013 22:34:58

802.11a – Ant. 2

High Band Edge Plot on Channel 165



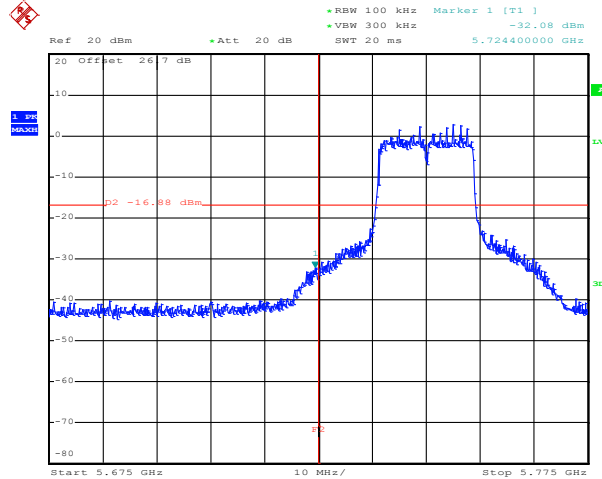
Date: 4.MAR.2013 22:43:00



Test Mode :	802.11n HT20 – SISO Ant. 2	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	149 and 165	Test Engineer :	Bill Kuo

802.11n HT20 – SISO Ant. 2

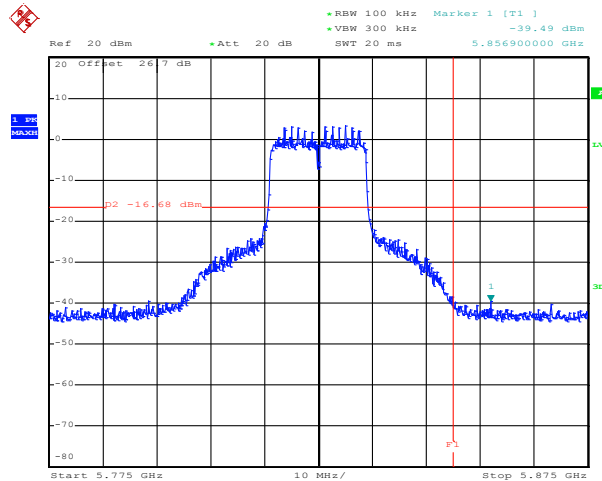
Low Band Edge Plot on Channel 149



Date: 4.MAR.2013 22:52:58

802.11n HT20 – SISO Ant. 2

High Band Edge Plot on Channel 165



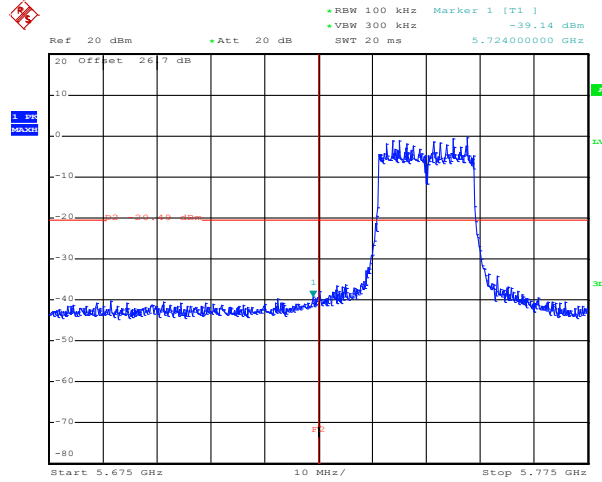
Date: 4.MAR.2013 22:47:41



Test Mode :	802.11n HT20 – MIMO Ant. 1	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	149 and 165	Test Engineer :	Bill Kuo

802.11n HT20 – MIMO Ant. 1

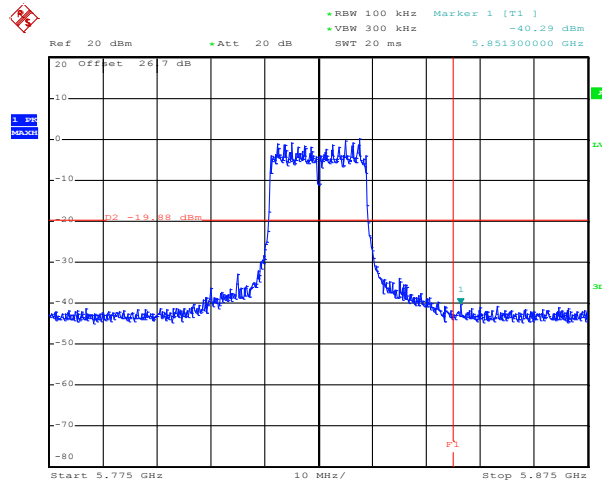
Low Band Edge Plot on Channel 149



Date: 4.MAR.2013 23:01:30

802.11n HT20 – MIMO Ant. 1

High Band Edge Plot on Channel 165



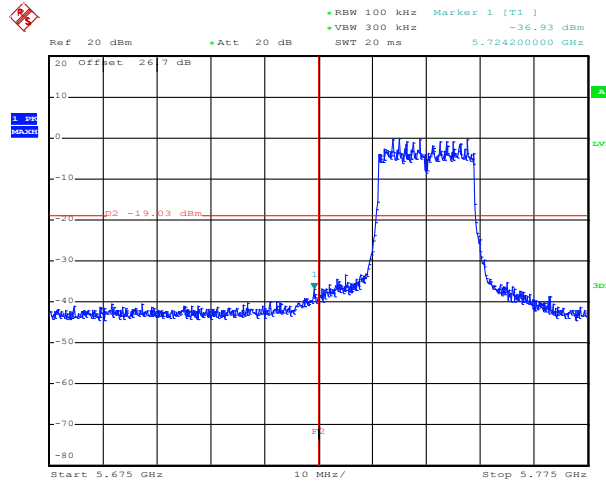
Date: 4.MAR.2013 23:12:16



Test Mode :	802.11n HT20 – MIMO Ant. 2	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	149 and 165	Test Engineer :	Bill Kuo

802.11n HT20 – MIMO Ant. 2

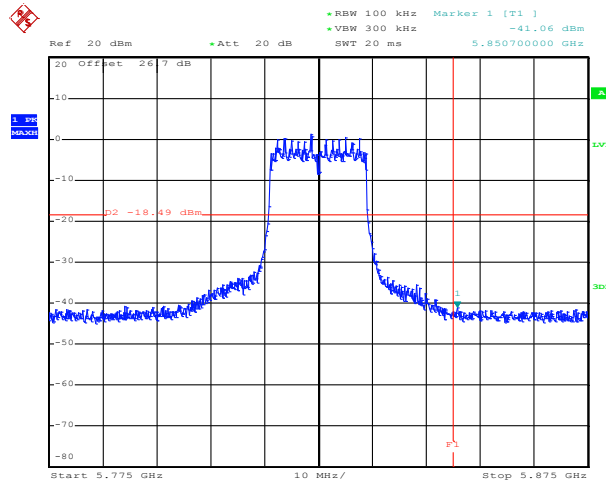
Low Band Edge Plot on Channel 149



Date: 4.MAR.2013 22:58:23

802.11n HT20 – MIMO Ant. 2

High Band Edge Plot on Channel 165



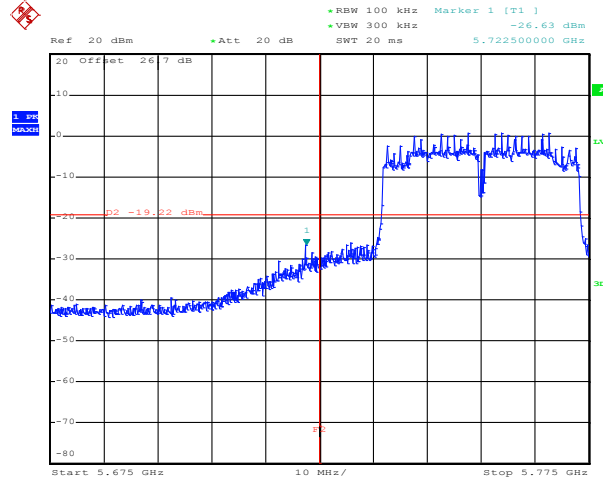
Date: 4.MAR.2013 23:09:23



Test Mode :	802.11n HT40 – SISO Ant. 2	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	151 and 159	Test Engineer :	Bill Kuo

802.11n HT40 – SISO Ant. 2

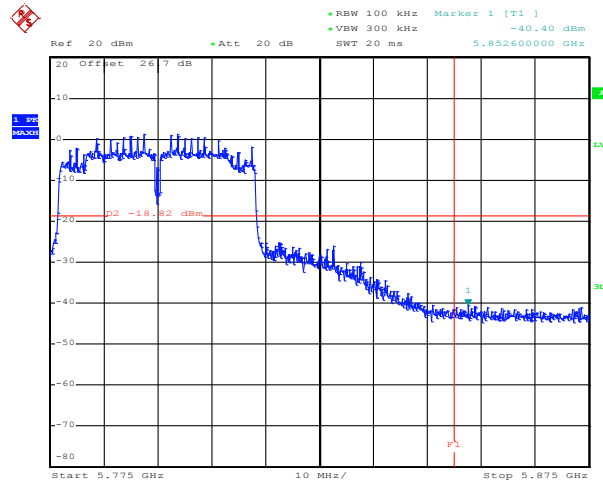
Low Band Edge Plot on Channel 151



Date: 4.MAR.2013 23:16:33

802.11n HT40 – SISO Ant. 2

High Band Edge Plot on Channel 159



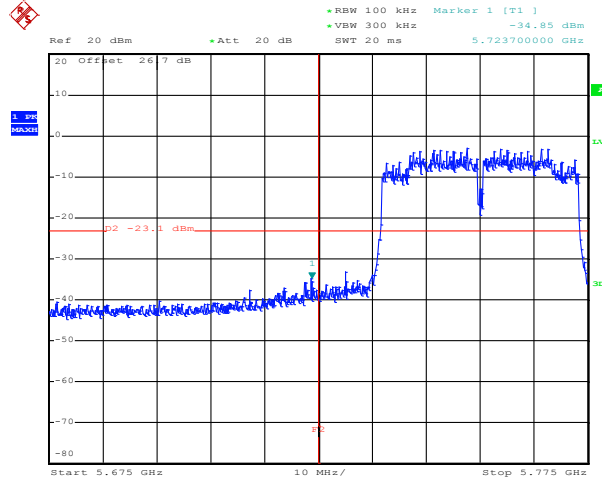
Date: 4.MAR.2013 23:19:25



Test Mode :	802.11n HT40 – MIMO Ant. 1	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	151 and 159	Test Engineer :	Bill Kuo

802.11n HT40 – MIMO Ant. 1

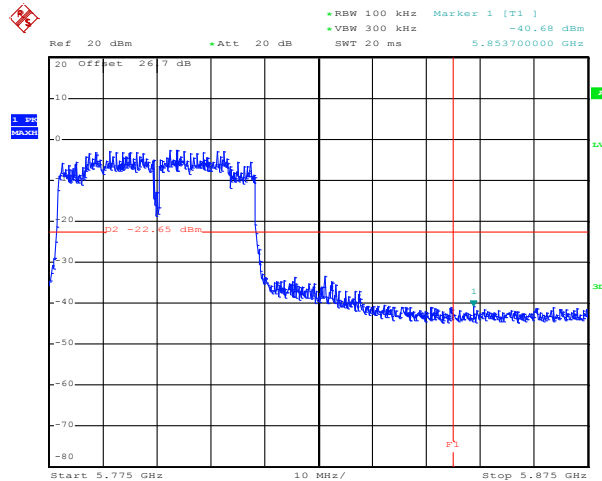
Low Band Edge Plot on Channel 151



Date: 4.MAR.2013 23:32:19

802.11n HT40 – MIMO Ant. 1

High Band Edge Plot on Channel 159



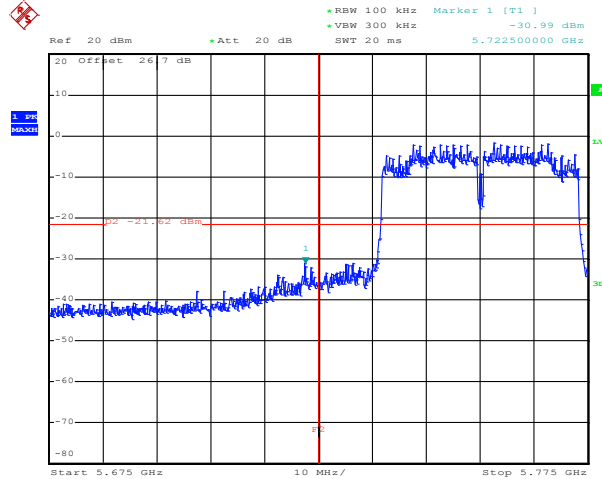
Date: 4.MAR.2013 23:28:58



Test Mode :	802.11n HT40 – MIMO Ant. 2	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	55~58%
Test Channel :	151 and 159	Test Engineer :	Bill Kuo

802.11n HT40 – MIMO Ant. 2

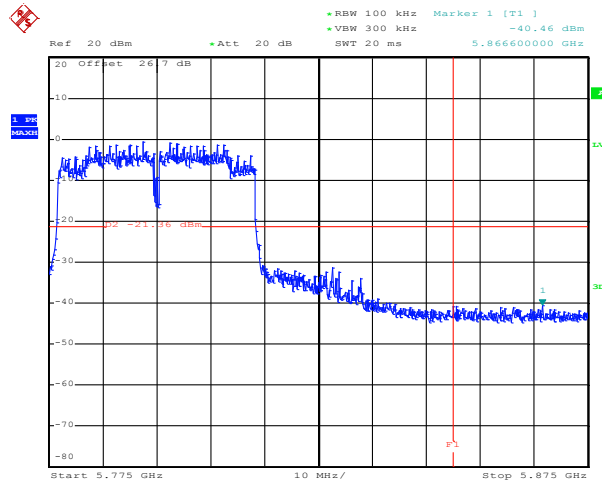
Low Band Edge Plot on Channel 151



Date: 4.MAR.2013 23:35:46

802.11n HT40 – MIMO Ant. 2

High Band Edge Plot on Channel 159



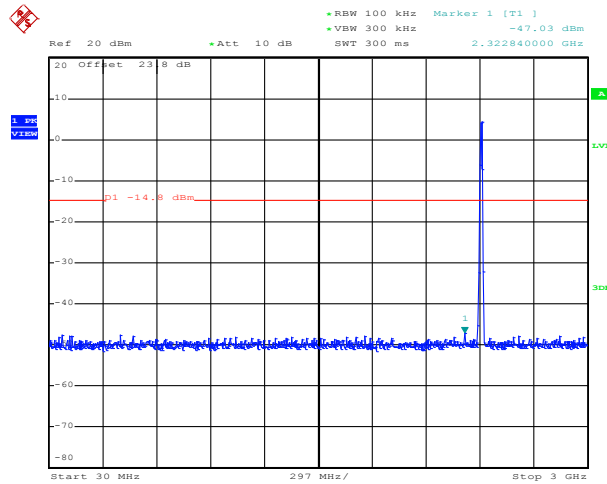
Date: 4.MAR.2013 23:26:19

3.4.5 Test Result of Conducted Spurious Emission

Test Mode :	802.11b – Ant. 1	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	55~58%
Test Channel :	01, 06, 11	Test Engineer :	Bill Kuo

802.11b 30 MHz~3 GHz – Ant. 1

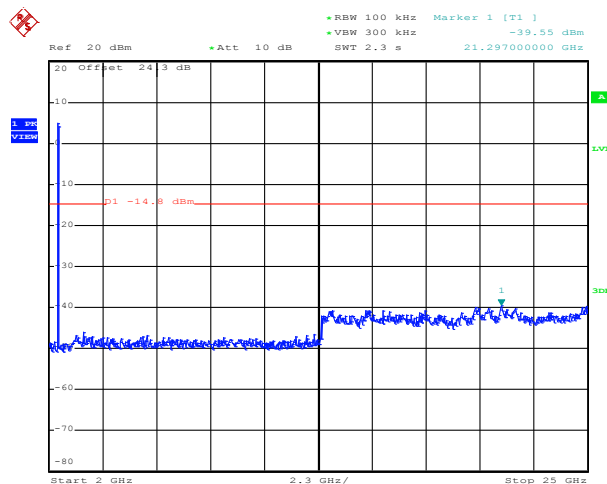
Conducted Spurious Emission Plot on Channel 01



Date: 4.MAR.2013 20:10:19

802.11b 2 GHz~25 GHz – Ant. 1

Conducted Spurious Emission Plot on Channel 01

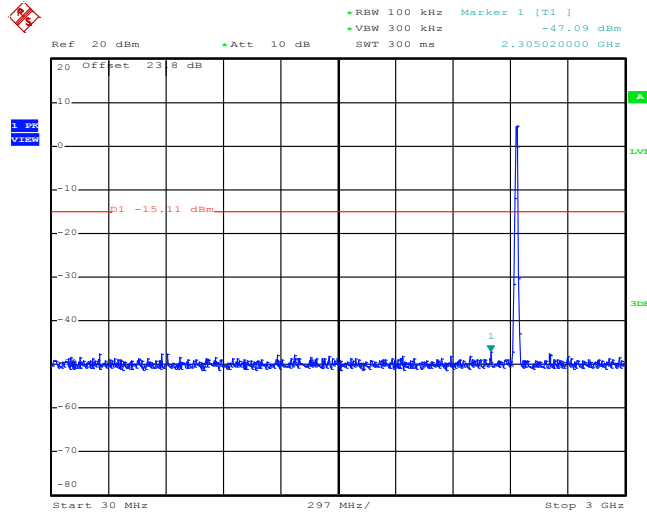


Date: 4.MAR.2013 20:10:37



802.11b 30 MHz~3 GHz – Ant. 1

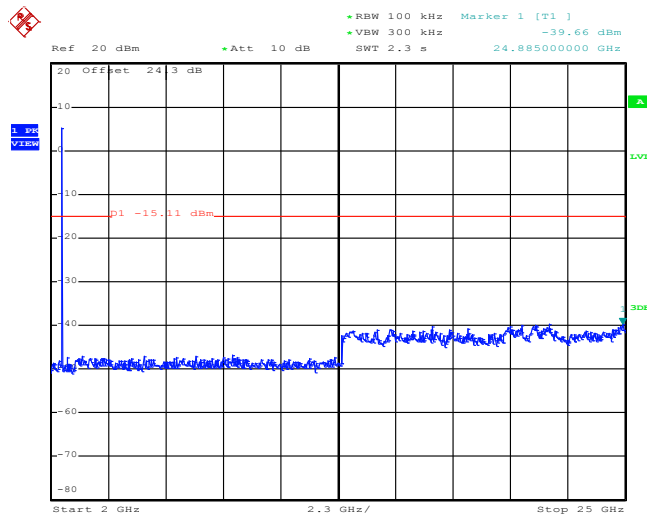
Conducted Spurious Emission Plot on Channel 06



Date: 4.MAR.2013 20:27:51

802.11b 2 GHz~25 GHz – Ant. 1

Conducted Spurious Emission Plot on Channel 06

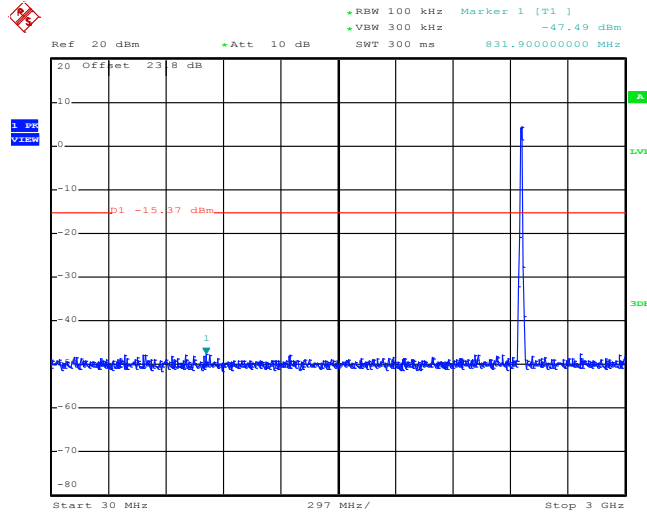


Date: 4.MAR.2013 20:28:10



802.11b 30 MHz~3 GHz – Ant. 1

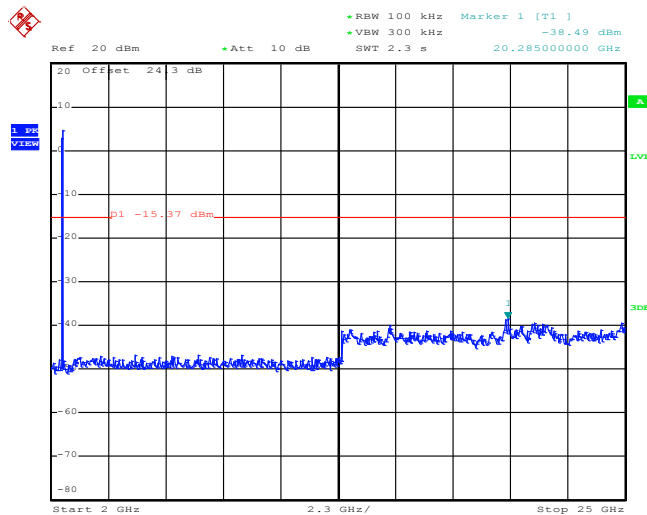
Conducted Spurious Emission Plot on Channel 11



Date: 4.MAR.2013 20:31:35

802.11b 2 GHz~25 GHz – Ant. 1

Conducted Spurious Emission Plot on Channel 11



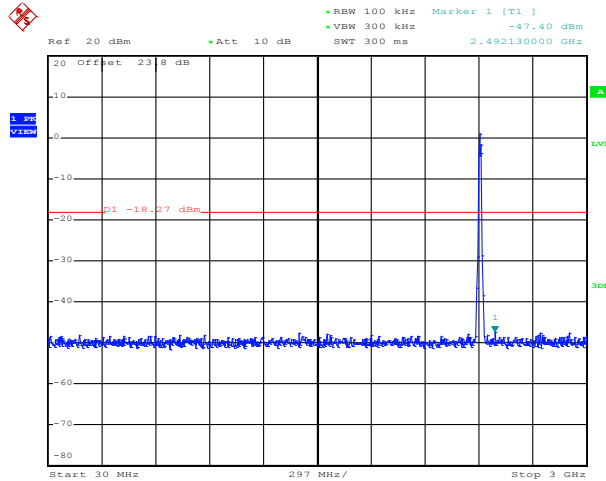
Date: 4.MAR.2013 20:31:53



Test Mode :	802.11g – Ant. 1	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	55~58%
Test Channel :	01, 06, 11	Test Engineer :	Bill Kuo

802.11g 30 MHz~3 GHz – Ant. 1

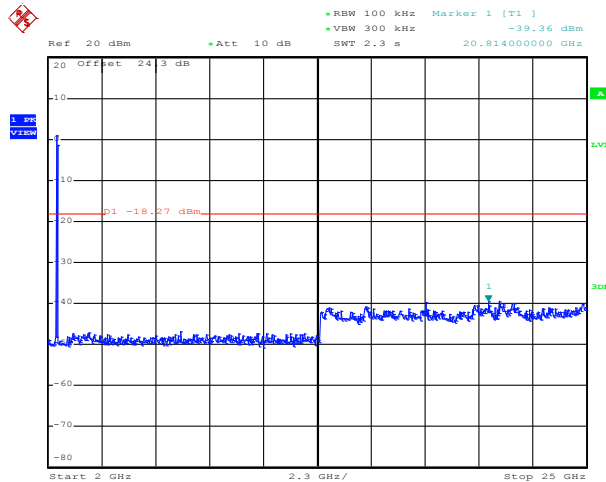
Conducted Spurious Emission Plot on Channel 01



Date: 4.MAR.2013 20:35:10

802.11g 2 GHz~25 GHz – Ant. 1

Conducted Spurious Emission Plot on Channel 01

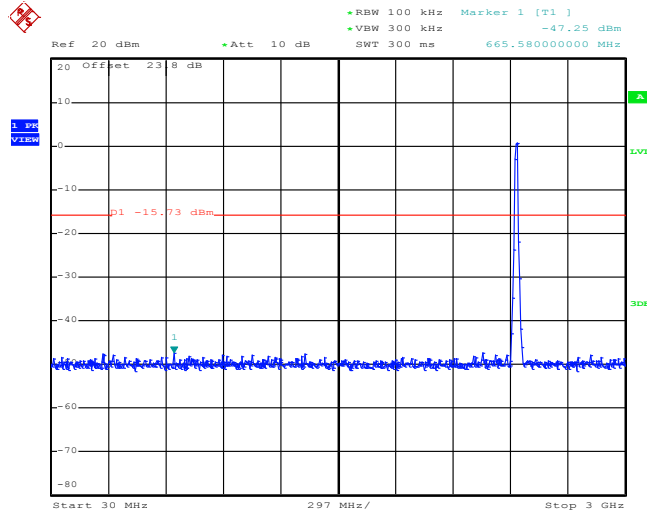


Date: 4.MAR.2013 20:35:29



802.11g 30 MHz~3 GHz – Ant. 1

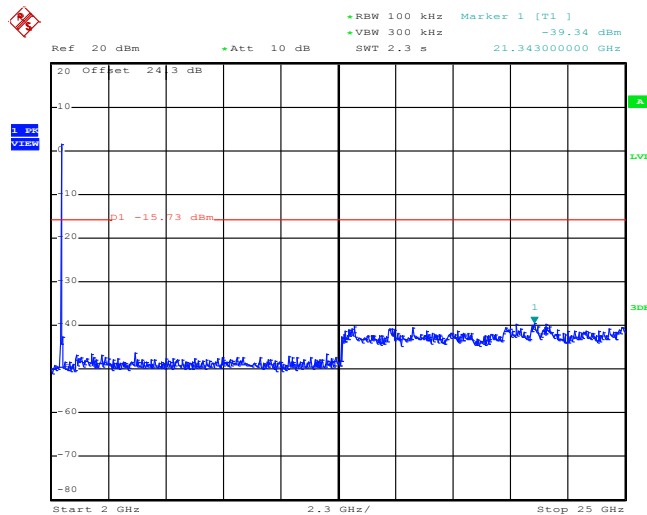
Conducted Spurious Emission Plot on Channel 06



Date: 4.MAR.2013 20:37:46

802.11g 2 GHz~25 GHz – Ant. 1

Conducted Spurious Emission Plot on Channel 06

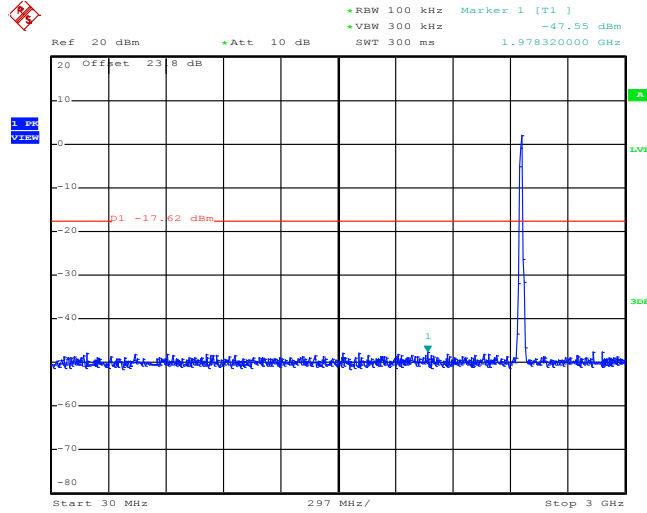


Date: 4.MAR.2013 20:38:05



802.11g 30 MHz~3 GHz – Ant. 1

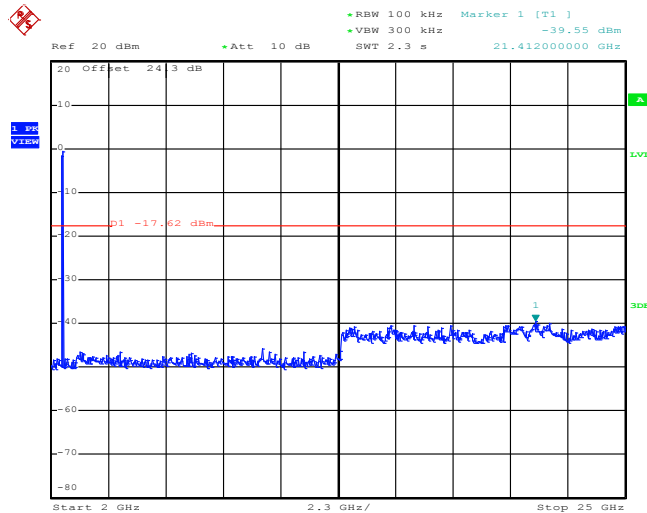
Conducted Spurious Emission Plot on Channel 11



Date: 4.MAR.2013 20:41:45

802.11g 2 GHz~25 GHz – Ant. 1

Conducted Spurious Emission Plot on Channel 11



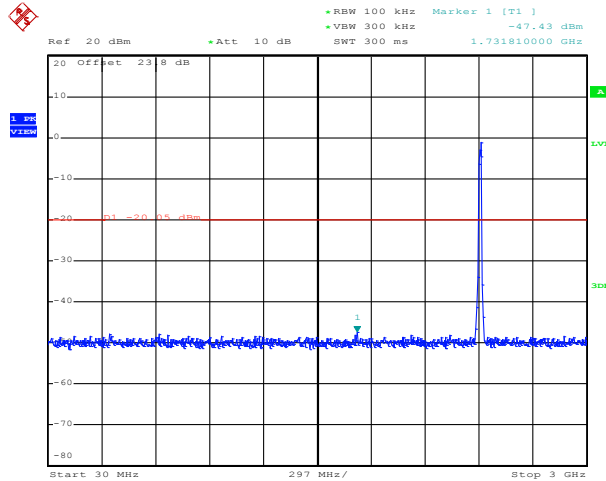
Date: 4.MAR.2013 20:42:04



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	55~58%
Test Channel :	01, 06, 11	Test Engineer :	Bill Kuo

802.11n HT20 30 MHz~3 GHz – SISO Ant. 1

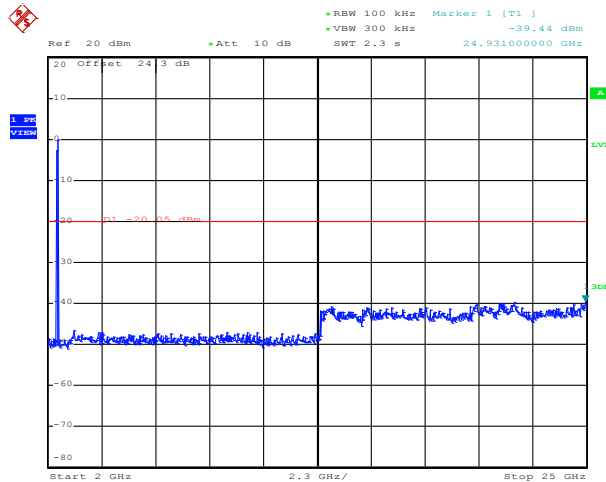
Conducted Spurious Emission Plot on Channel 01



Date: 4.MAR.2013 20:56:34

802.11n HT20 2 GHz~25 GHz – SISO Ant. 1

Conducted Spurious Emission Plot on Channel 01

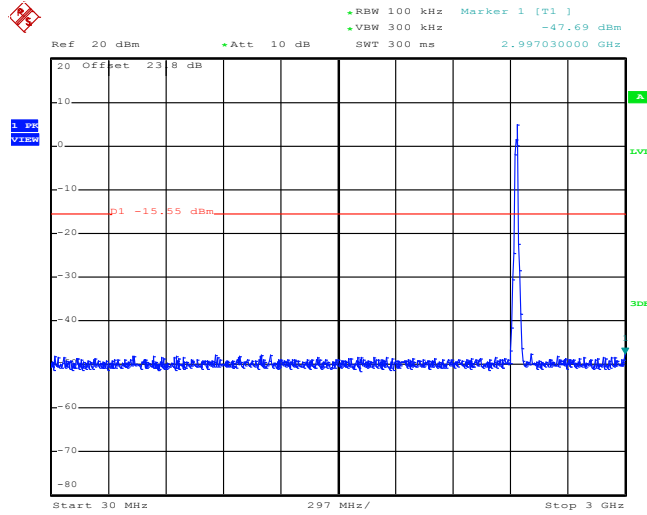


Date: 4.MAR.2013 20:56:53



802.11n HT20 30 MHz~3 GHz – SISO Ant. 1

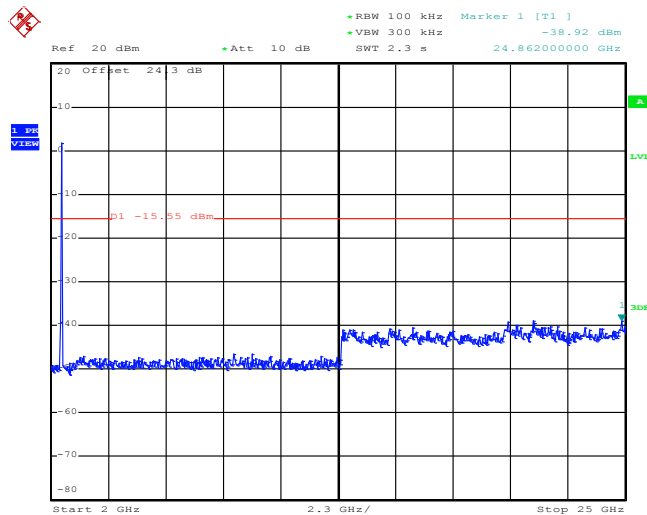
Conducted Spurious Emission Plot on Channel 06



Date: 4.MAR.2013 20:53:27

802.11n HT20 2 GHz~25 GHz – SISO Ant. 1

Conducted Spurious Emission Plot on Channel 06

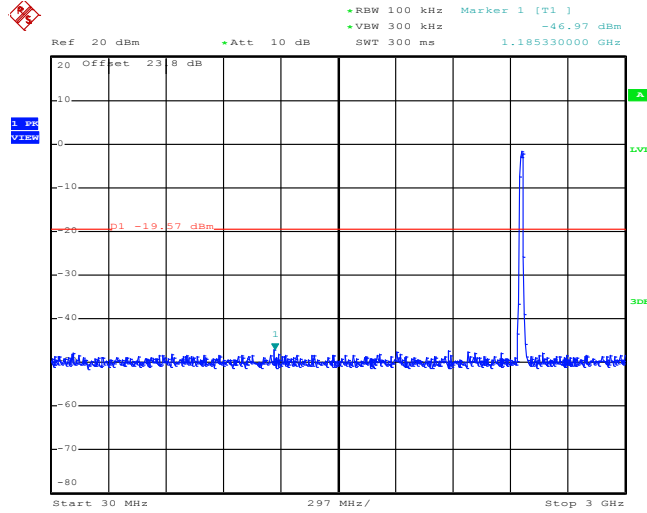


Date: 4.MAR.2013 20:53:45



802.11n HT20 30 MHz~3 GHz – SISO Ant. 1

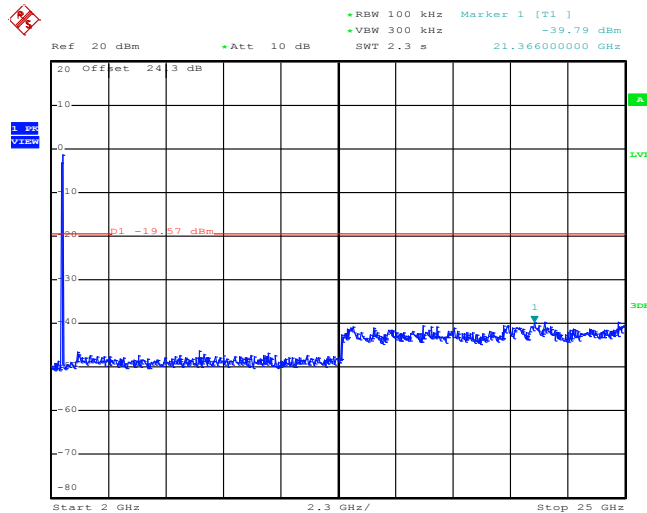
Conducted Spurious Emission Plot on Channel 11



Date: 4.MAR.2013 20:45:35

802.11n HT20 2 GHz~25 GHz – SISO Ant. 1

Conducted Spurious Emission Plot on Channel 11



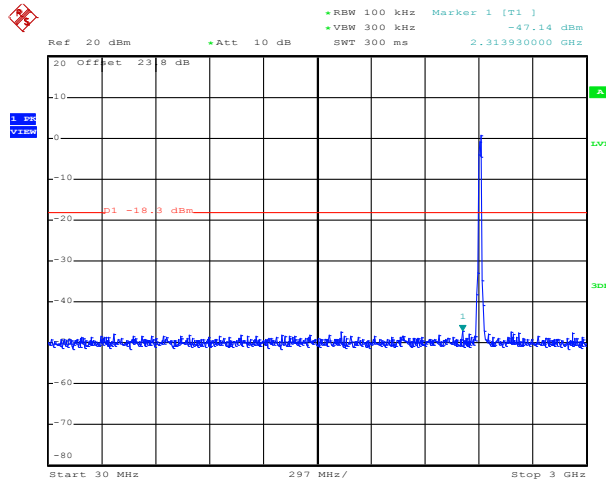
Date: 4.MAR.2013 20:45:54



Test Mode :	802.11n HT20 – MIMO Ant. 1	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	55~58%
Test Channel :	01, 06, 11	Test Engineer :	Bill Kuo

802.11n HT20 30 MHz~3 GHz – MIMO Ant. 1

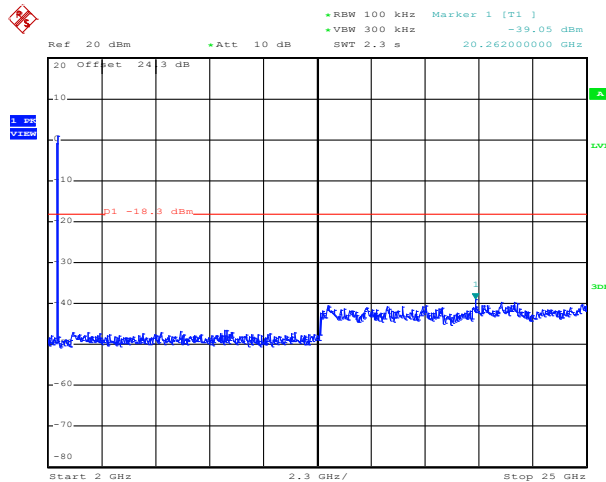
Conducted Spurious Emission Plot on Channel 01



Date: 4.MAR.2013 21:00:47

802.11n HT20 2 GHz~25 GHz – MIMO Ant. 1

Conducted Spurious Emission Plot on Channel 01

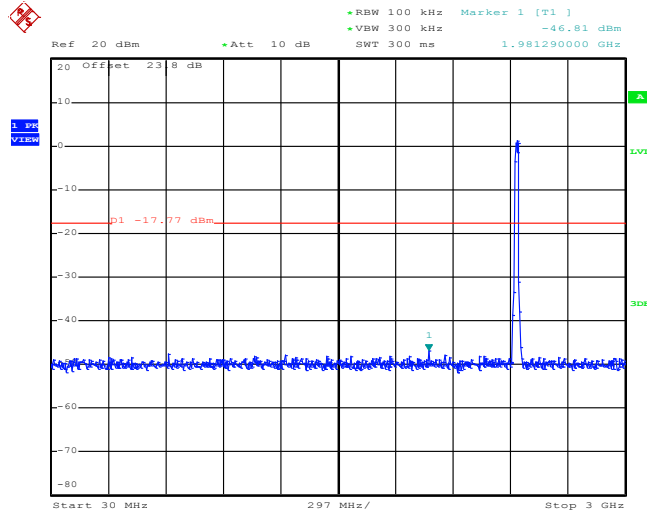


Date: 4.MAR.2013 21:01:06



802.11n HT20 30 MHz~3 GHz – MIMO Ant. 1

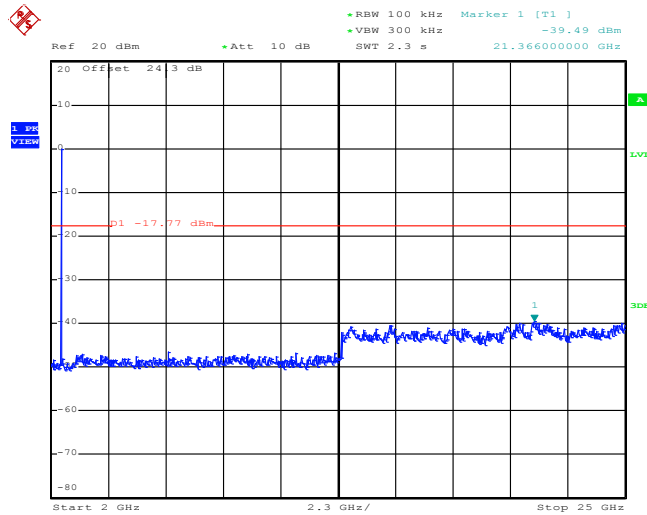
Conducted Spurious Emission Plot on Channel 06



Date: 4.MAR.2013 21:12:45

802.11n HT20 2 GHz~25 GHz – MIMO Ant. 1

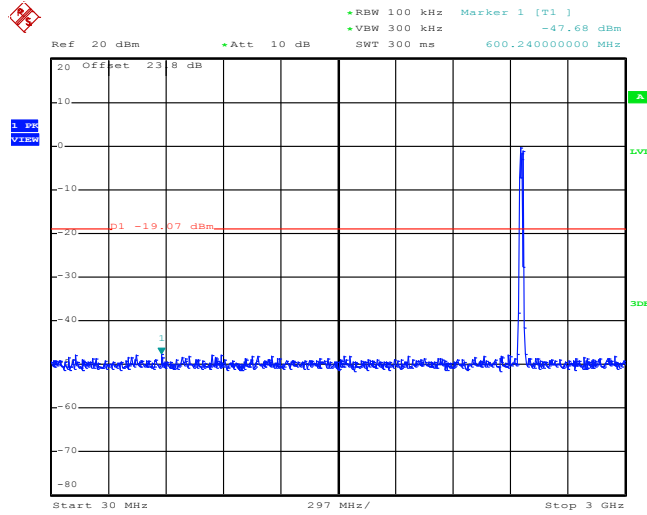
Conducted Spurious Emission Plot on Channel 06



Date: 4.MAR.2013 21:13:04

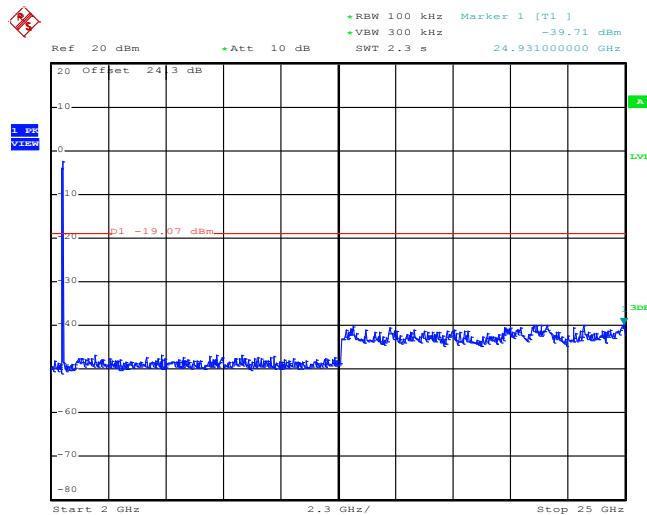


802.11n HT20 30 MHz~3 GHz – MIMO Ant. 1
Conducted Spurious Emission Plot on Channel 11



Date: 4.MAR.2013 21:16:08

802.11n HT20 2 GHz~25 GHz – MIMO Ant. 1
Conducted Spurious Emission Plot on Channel 11



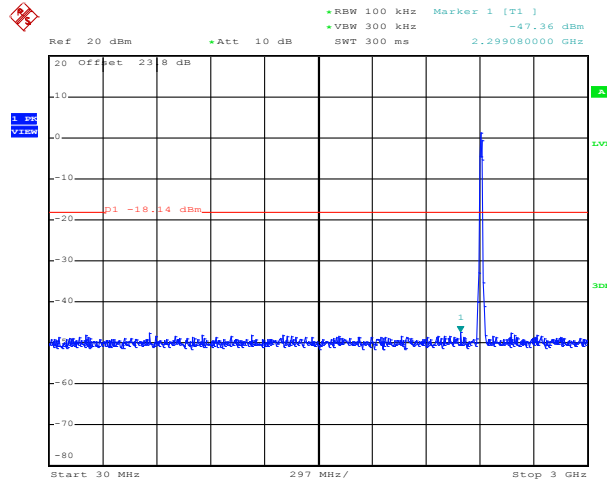
Date: 4.MAR.2013 21:16:27



Test Mode :	802.11n HT20 – MIMO Ant. 2	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	55~58%
Test Channel :	01, 06, 11	Test Engineer :	Bill Kuo

802.11n HT20 30 MHz~3 GHz – MIMO Ant. 2

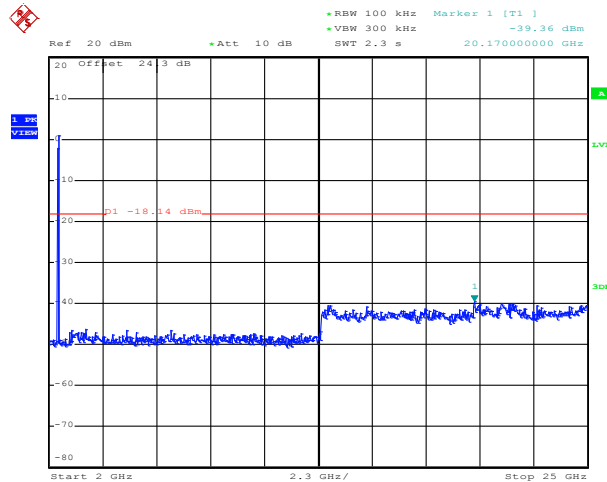
Conducted Spurious Emission Plot on Channel 01



Date: 4.MAR.2013 21:06:17

802.11n HT20 2 GHz~25 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 01

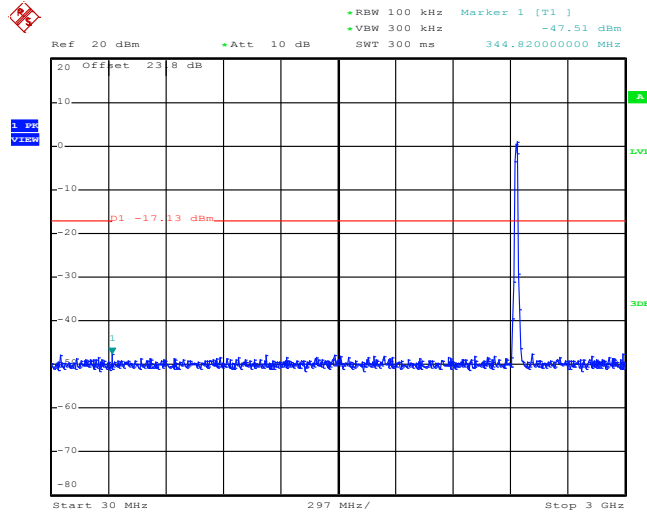


Date: 4.MAR.2013 21:06:35



802.11n HT20 30 MHz~3 GHz – MIMO Ant. 2

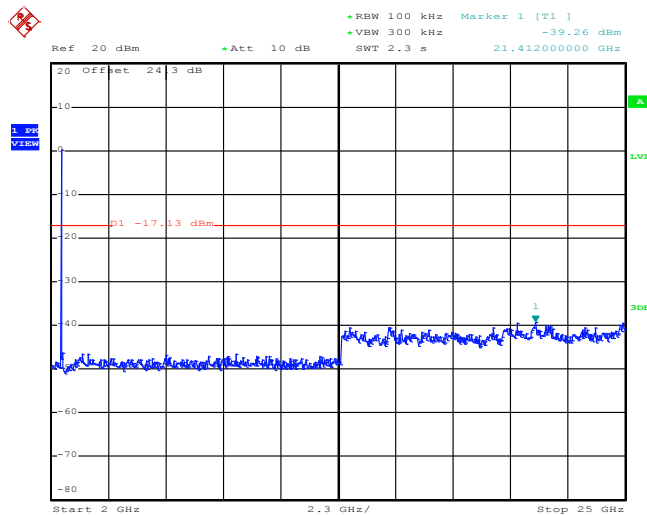
Conducted Spurious Emission Plot on Channel 06



Date: 4.MAR.2013 21:09:20

802.11n HT20 2 GHz~25 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 06

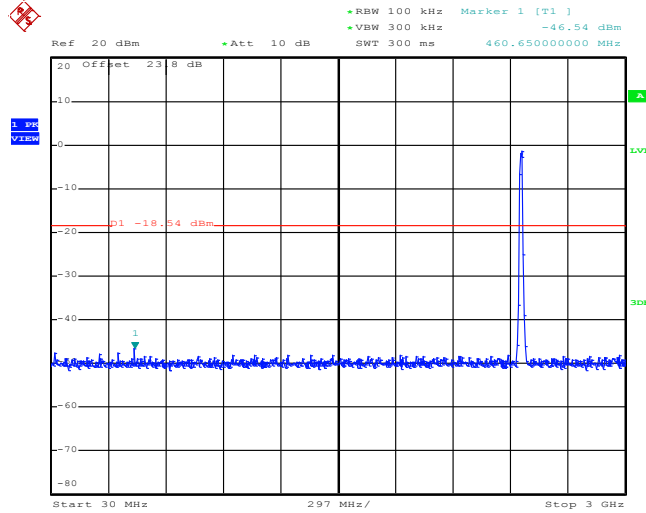


Date: 4.MAR.2013 21:09:38



802.11n HT20 30 MHz~3 GHz – MIMO Ant. 2

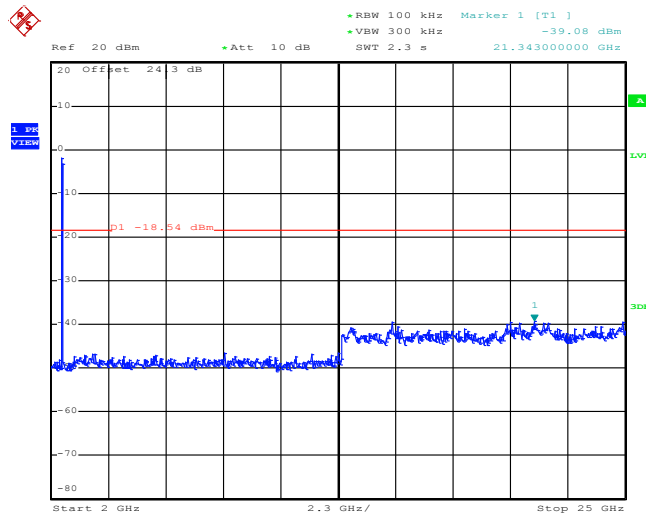
Conducted Spurious Emission Plot on Channel 11



Date: 4.MAR.2013 21:19:00

802.11n HT20 2 GHz~25 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 11



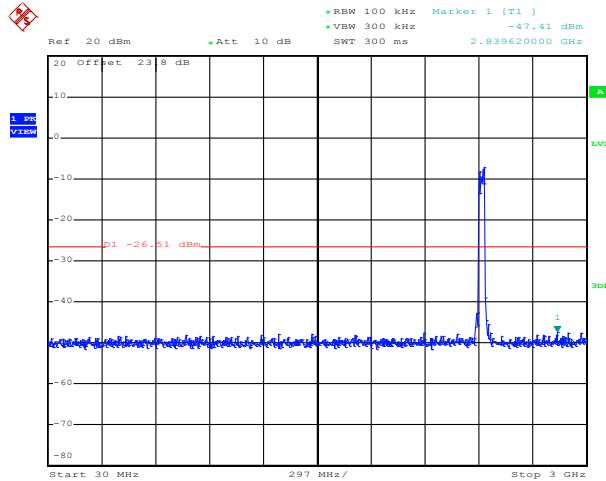
Date: 4.MAR.2013 21:19:19



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	55~58%
Test Channel :	03, 06, 09	Test Engineer :	Bill Kuo

802.11n HT40 30 MHz~3 GHz – SISO Ant. 1

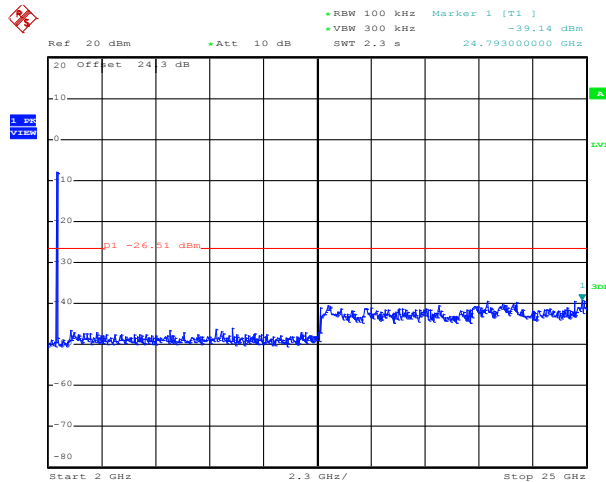
Conducted Spurious Emission Plot on Channel 03



Date: 4.MAR.2013 21:27:18

802.11n HT40 2 GHz~25 GHz – SISO Ant. 1

Conducted Spurious Emission Plot on Channel 03

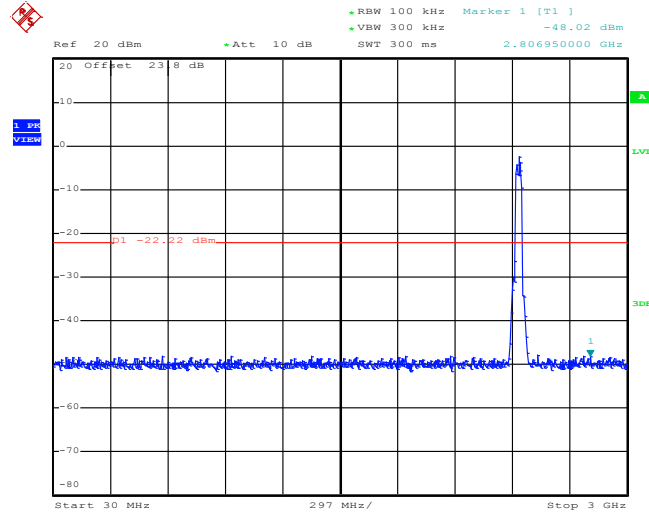


Date: 4.MAR.2013 21:27:37



802.11n HT40 30 MHz~3 GHz – SISO Ant. 1

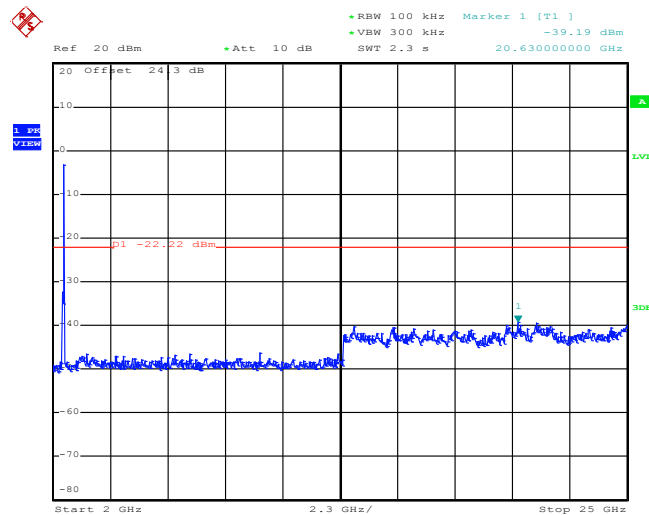
Conducted Spurious Emission Plot on Channel 06



Date: 4.MAR.2013 21:30:17

802.11n HT40 2 GHz~25 GHz – SISO Ant. 1

Conducted Spurious Emission Plot on Channel 06

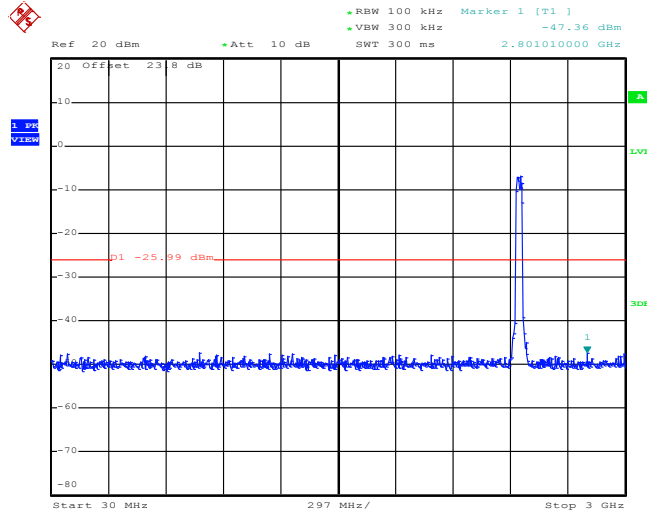


Date: 4.MAR.2013 21:30:36



802.11n HT40 30 MHz~3 GHz – SISO Ant. 1

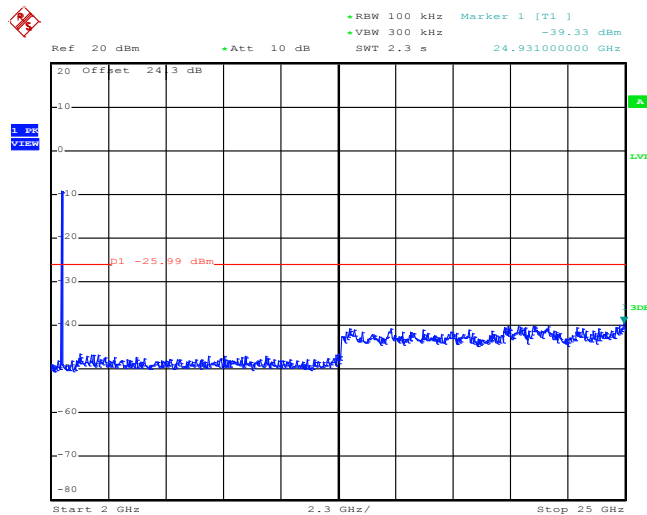
Conducted Spurious Emission Plot on Channel 09



Date: 4.MAR.2013 21:35:16

802.11n HT40 2 GHz~25 GHz – SISO Ant. 1

Conducted Spurious Emission Plot on Channel 09



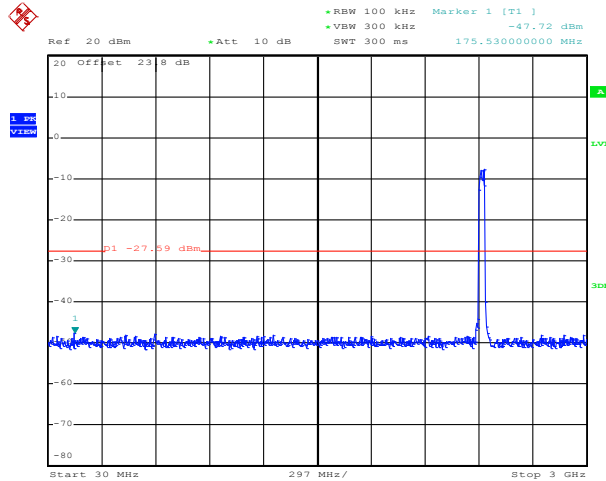
Date: 4.MAR.2013 21:35:35



Test Mode :	802.11n HT40 – MIMO Ant. 1	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	55~58%
Test Channel :	03, 06, 09	Test Engineer :	Bill Kuo

802.11n HT40 30 MHz~3 GHz – MIMO Ant. 1

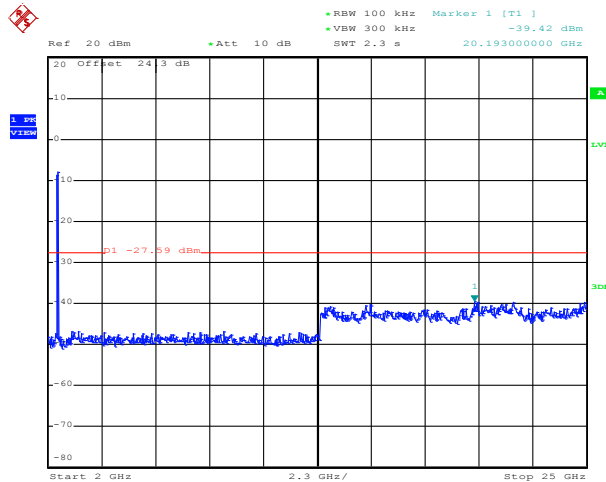
Conducted Spurious Emission Plot on Channel 03



Date: 4.MAR.2013 21:40:39

802.11n HT40 2 GHz~25 GHz – MIMO Ant. 1

Conducted Spurious Emission Plot on Channel 03

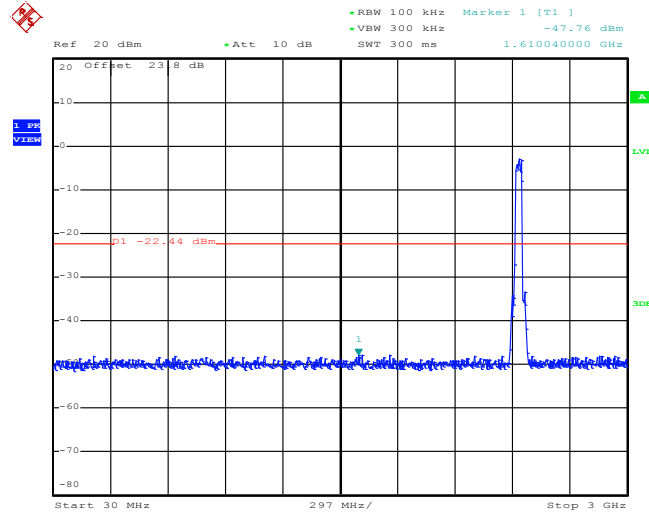


Date: 4.MAR.2013 21:40:57



802.11n HT40 30 MHz~3 GHz – MIMO Ant. 1

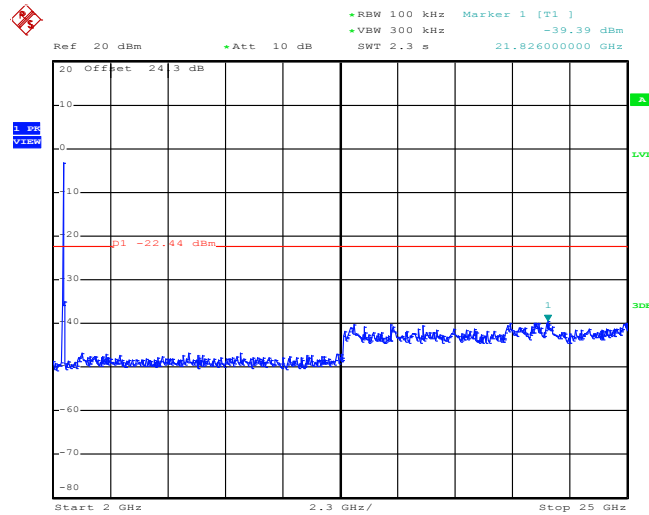
Conducted Spurious Emission Plot on Channel 06



Date: 4.MAR.2013 21:49:04

802.11n HT40 2 GHz~25 GHz – MIMO Ant. 1

Conducted Spurious Emission Plot on Channel 06

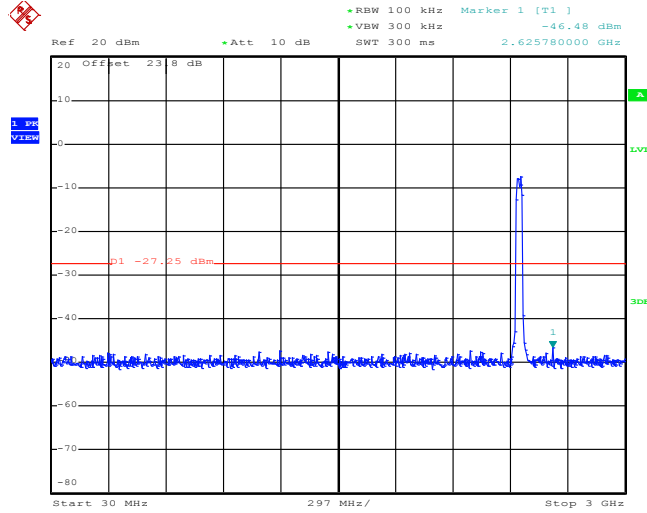


Date: 4.MAR.2013 21:49:23



802.11n HT40 30 MHz~3 GHz – MIMO Ant. 1

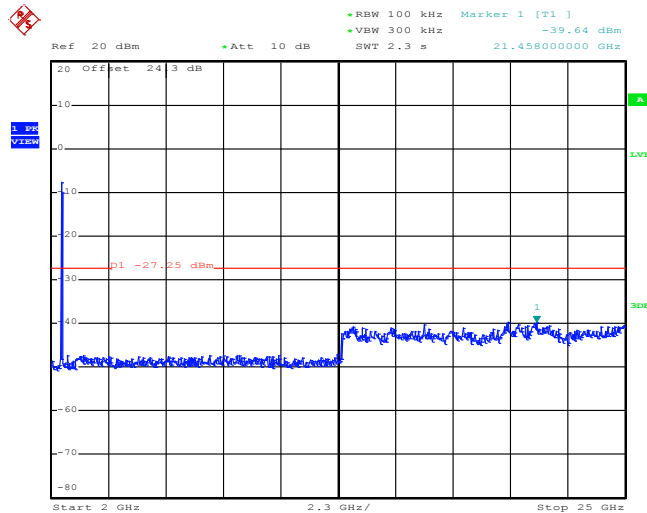
Conducted Spurious Emission Plot on Channel 09



Date: 4.MAR.2013 21:53:02

802.11n HT40 2 GHz~25 GHz – MIMO Ant. 1

Conducted Spurious Emission Plot on Channel 09



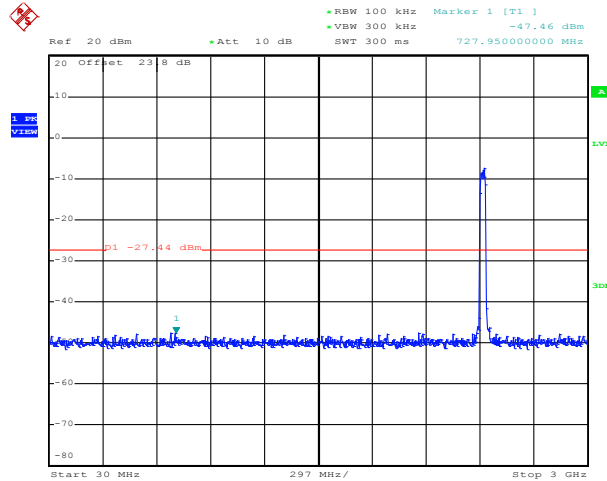
Date: 4.MAR.2013 21:53:21



Test Mode :	802.11n HT40 – MIMO Ant. 2	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	55~58%
Test Channel :	03, 06, 09	Test Engineer :	Bill Kuo

802.11n HT40 30 MHz~3 GHz – MIMO Ant. 2

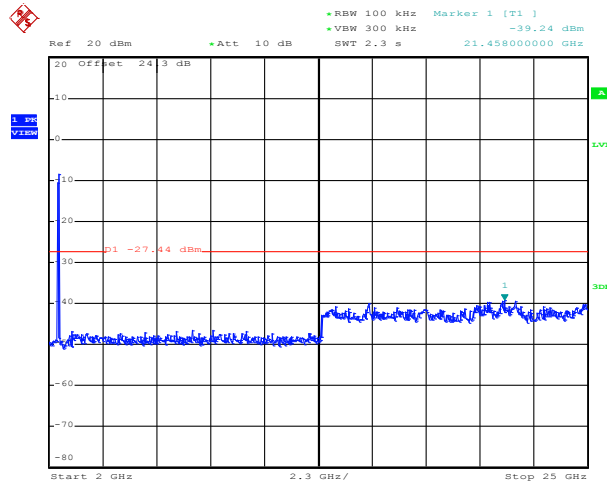
Conducted Spurious Emission Plot on Channel 03



Date: 4.MAR.2013 21:43:43

802.11n HT40 2 GHz~25 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 03

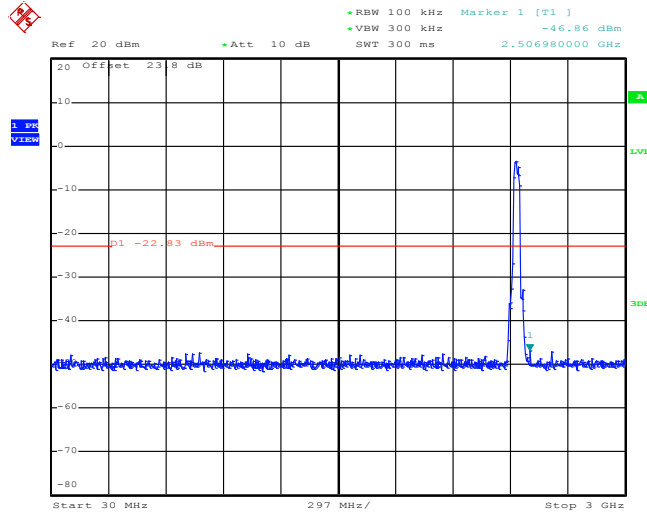


Date: 4.MAR.2013 21:44:02



802.11n HT40 30 MHz~3 GHz – MIMO Ant. 2

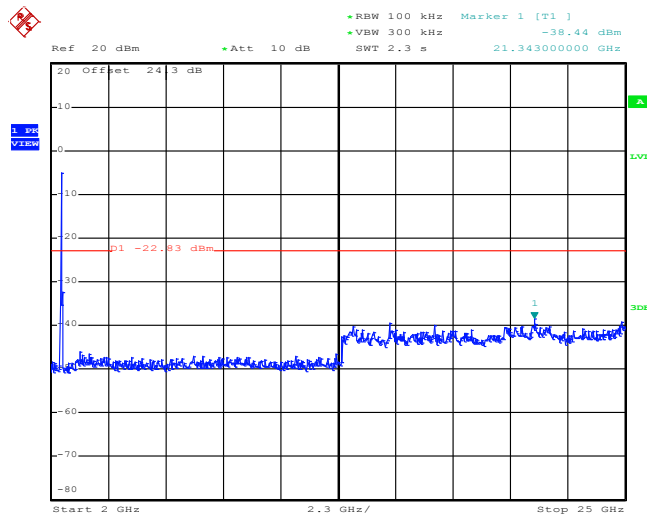
Conducted Spurious Emission Plot on Channel 06



Date: 4.MAR.2013 21:46:22

802.11n HT40 2 GHz~25 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 06

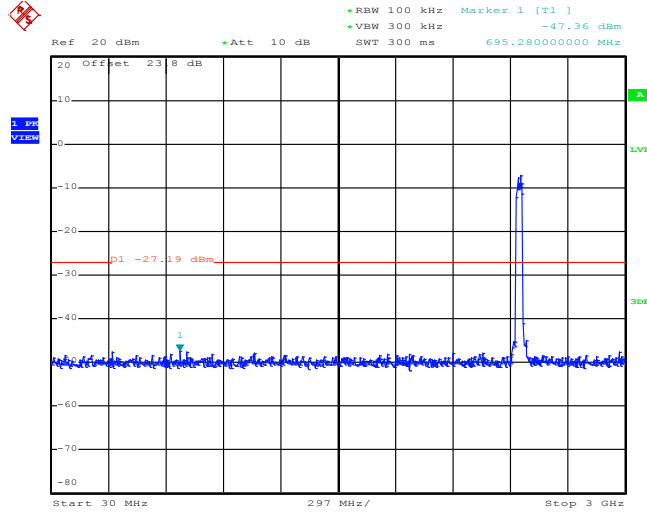


Date: 4.MAR.2013 21:46:40



802.11n HT40 30 MHz~3 GHz – MIMO Ant. 2

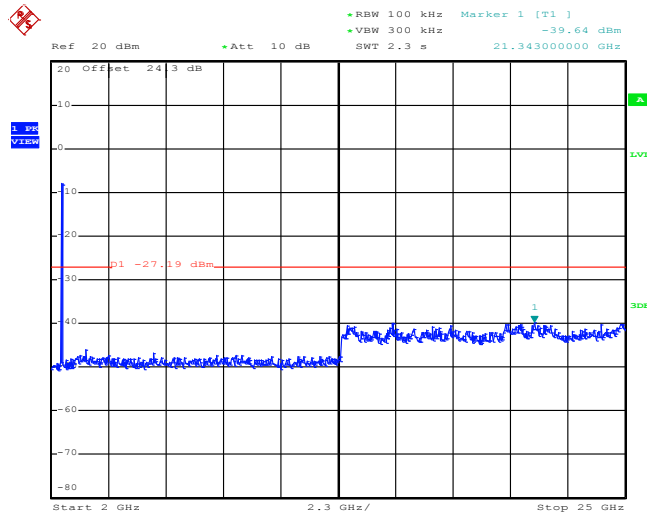
Conducted Spurious Emission Plot on Channel 09



Date: 4.MAR.2013 21:56:21

802.11n HT40 2 GHz~25 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 09



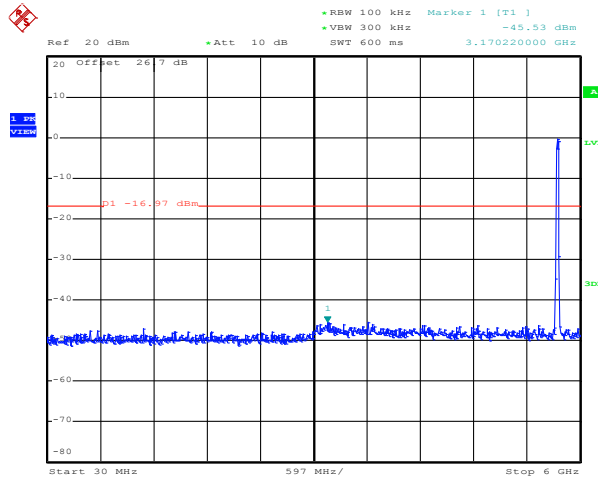
Date: 4.MAR.2013 21:56:40



Test Mode :	802.11a – Ant. 2	Temperature :	24~26°C
Test Band :	30MHz-6GHz and 5G-40GHz	Relative Humidity :	55~58%
Test Channel :	149, 157, 165	Test Engineer :	Bill Kuo

802.11a 30 MHz~6 GHz – Ant. 2

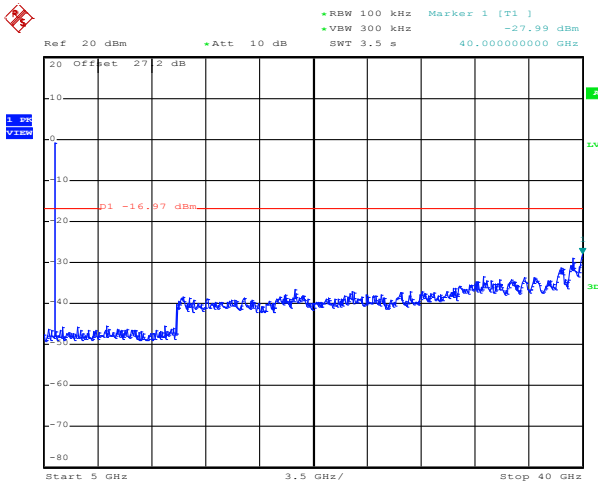
Conducted Spurious Emission Plot on Channel 149



Date: 4.MAR.2013 22:35:17

802.11a 5 GHz~40 GHz – Ant. 2

Conducted Spurious Emission Plot on Channel 149

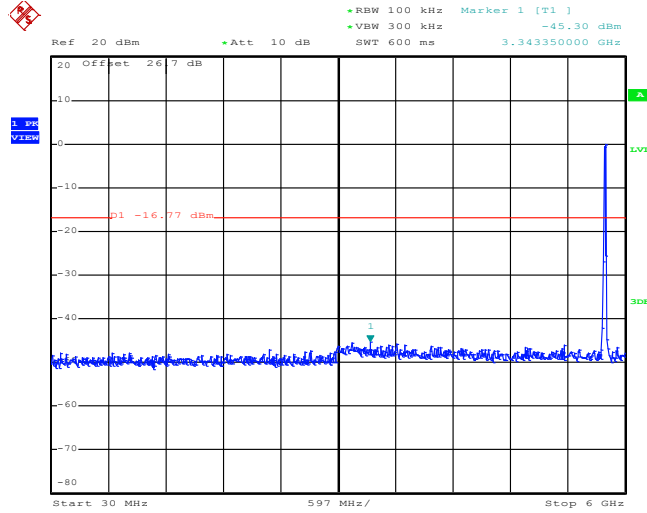


Date: 4.MAR.2013 22:35:35



802.11a 30 MHz~6 GHz – Ant. 2

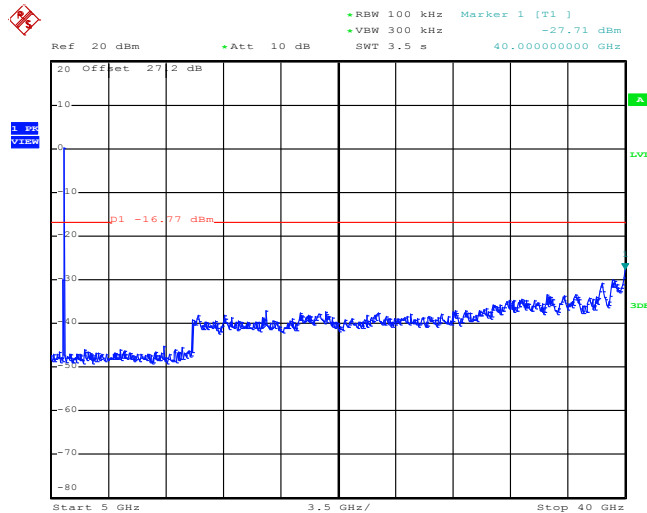
Conducted Spurious Emission Plot on Channel 157



Date: 4.MAR.2013 22:39:29

802.11a 5 GHz~40 GHz – Ant. 2

Conducted Spurious Emission Plot on Channel 157

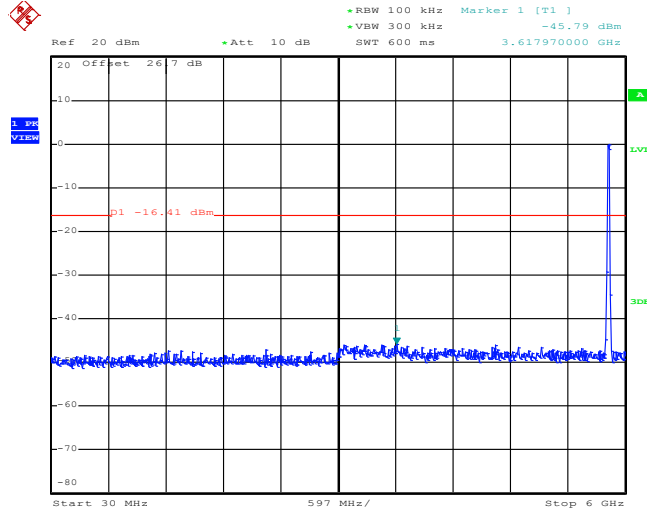


Date: 4.MAR.2013 22:39:48



802.11a 30 MHz~6 GHz – Ant. 2

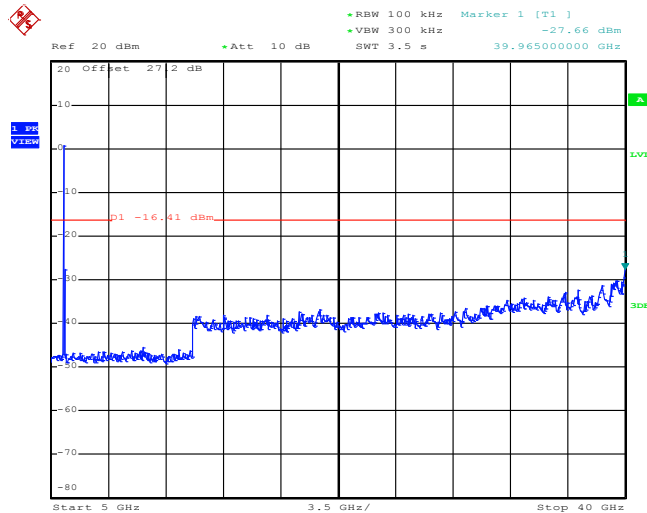
Conducted Spurious Emission Plot on Channel 165



Date: 4.MAR.2013 22:43:19

802.11a 5 GHz~40 GHz – Ant. 2

Conducted Spurious Emission Plot on Channel 165



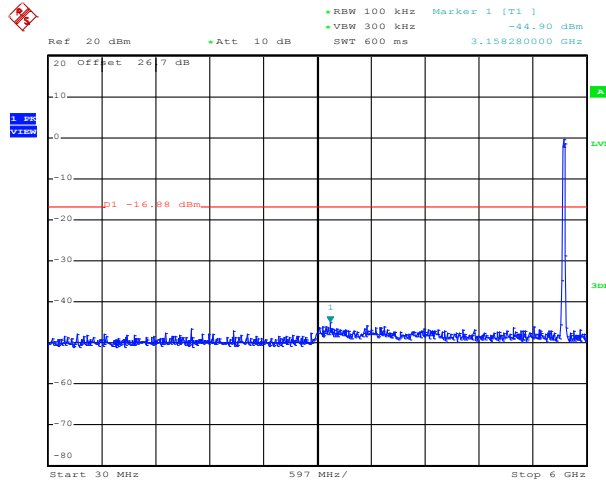
Date: 4.MAR.2013 22:43:37



Test Mode :	802.11n HT20 – SISO Ant. 2	Temperature :	24~26°C
Test Band :	30MHz-6GHz and 5G-40GHz	Relative Humidity :	55~58%
Test Channel :	149, 157, 165	Test Engineer :	Bill Kuo

802.11n HT20 30 MHz~6 GHz – SISO Ant. 2

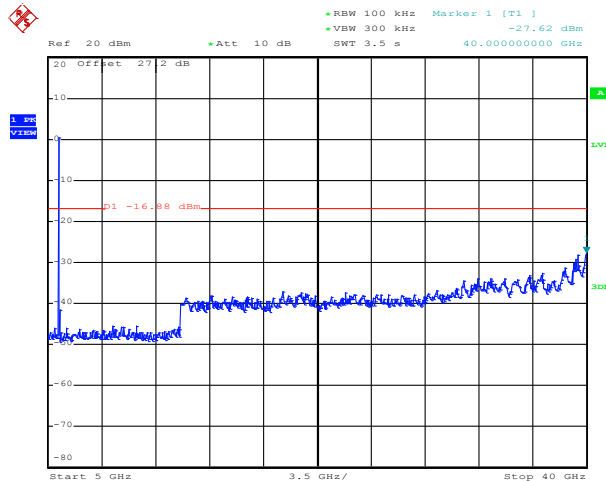
Conducted Spurious Emission Plot on Channel 149



Date: 4.MAR.2013 22:53:17

802.11n HT20 5 GHz~40 GHz – SISO Ant. 2

Conducted Spurious Emission Plot on Channel 149

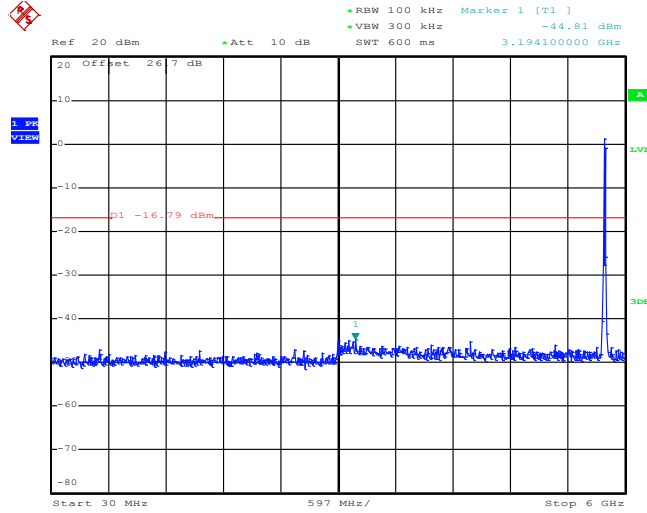


Date: 4.MAR.2013 22:53:36



802.11n HT20 30 MHz~6 GHz – SISO Ant. 2

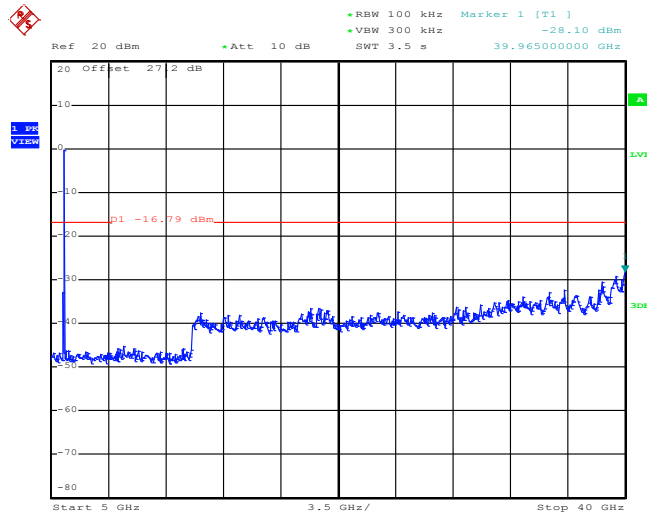
Conducted Spurious Emission Plot on Channel 157



Date: 4.MAR.2013 22:50:25

802.11n HT20 5 GHz~40 GHz – SISO Ant. 2

Conducted Spurious Emission Plot on Channel 157

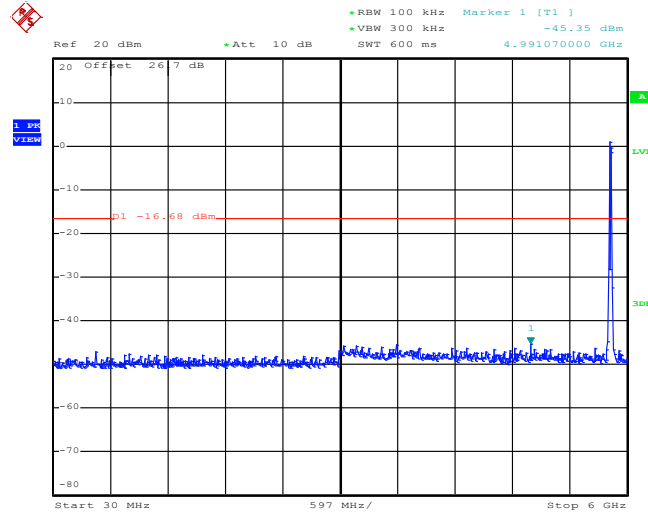


Date: 4.MAR.2013 22:50:44



802.11n HT20 30 MHz~6 GHz – SISO Ant. 2

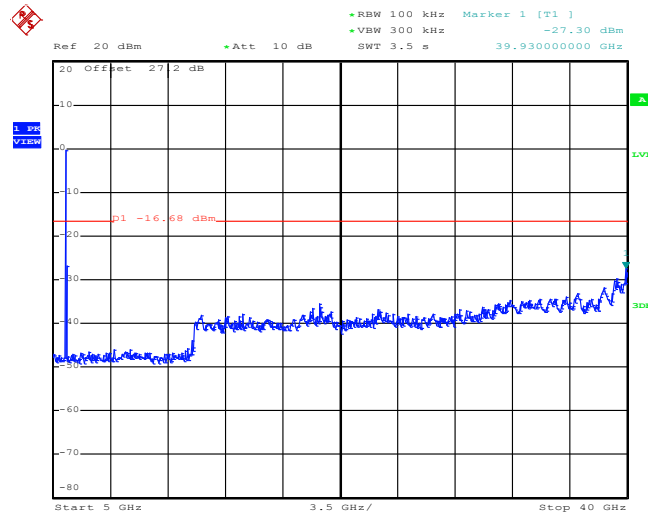
Conducted Spurious Emission Plot on Channel 165



Date: 4.MAR.2013 22:48:01

802.11n HT20 6 GHz~40 GHz – SISO Ant. 2

Conducted Spurious Emission Plot on Channel 165



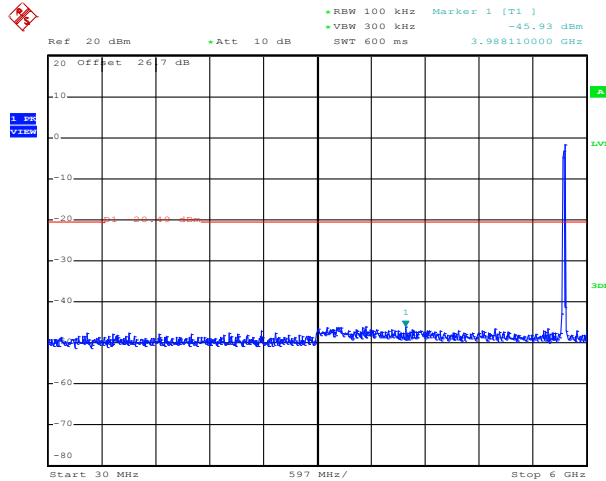
Date: 4.MAR.2013 22:48:19



Test Mode :	802.11n HT20 – MIMO Ant. 1	Temperature :	24~26°C
Test Band :	30MHz-6GHz and 5G-40GHz	Relative Humidity :	55~58%
Test Channel :	149, 157, 165	Test Engineer :	Bill Kuo

802.11n HT20 30 MHz~6 GHz – MIMO Ant. 1

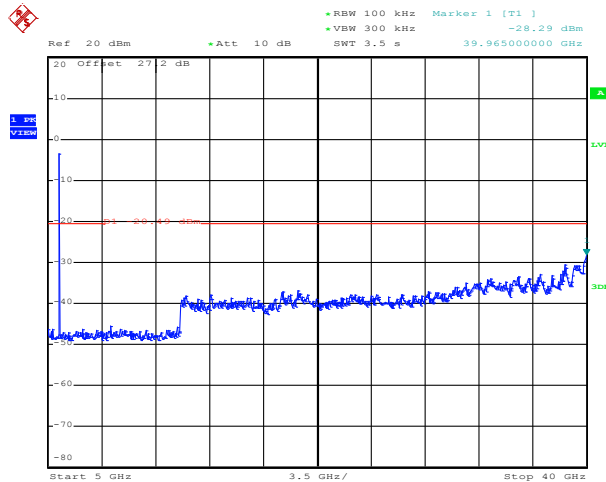
Conducted Spurious Emission Plot on Channel 149



Date: 4.MAR.2013 23:01:49

802.11n HT20 5 GHz~40 GHz – MIMO Ant. 1

Conducted Spurious Emission Plot on Channel 149

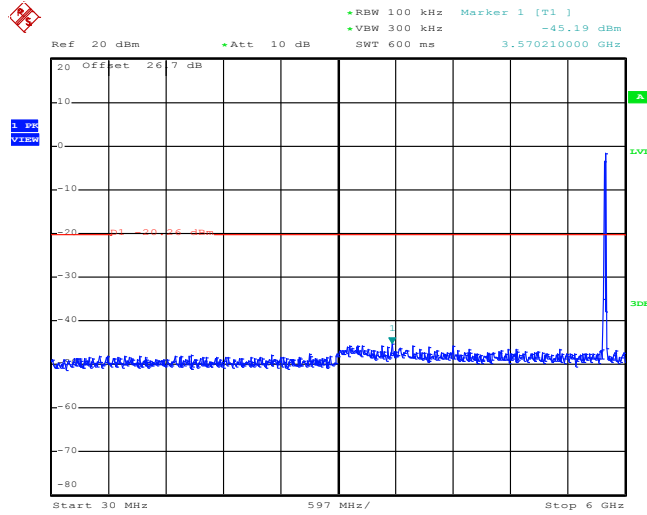


Date: 4.MAR.2013 23:02:08



802.11n HT20 30 MHz~6 GHz – MIMO Ant. 1

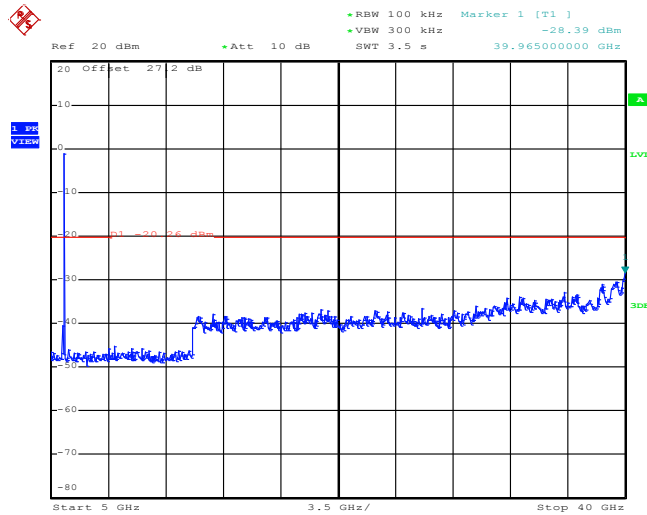
Conducted Spurious Emission Plot on Channel 157



Date: 4.MAR.2013 23:04:26

802.11n HT20 5 GHz~40 GHz – MIMO Ant. 1

Conducted Spurious Emission Plot on Channel 157

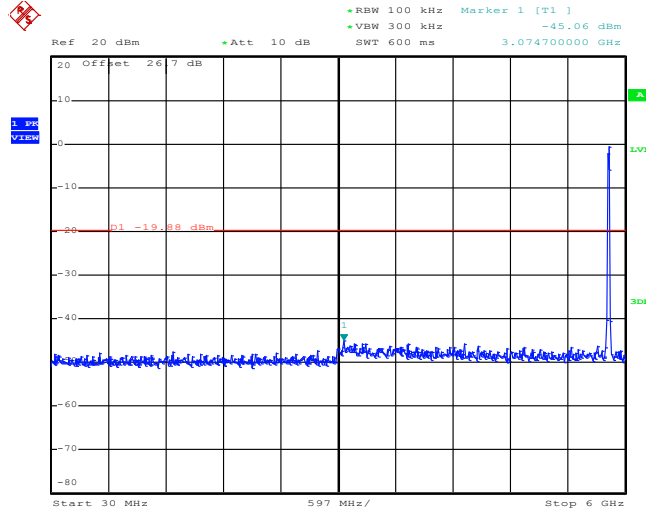


Date: 4.MAR.2013 23:04:44



802.11n HT20 30 MHz~6 GHz – MIMO Ant. 1

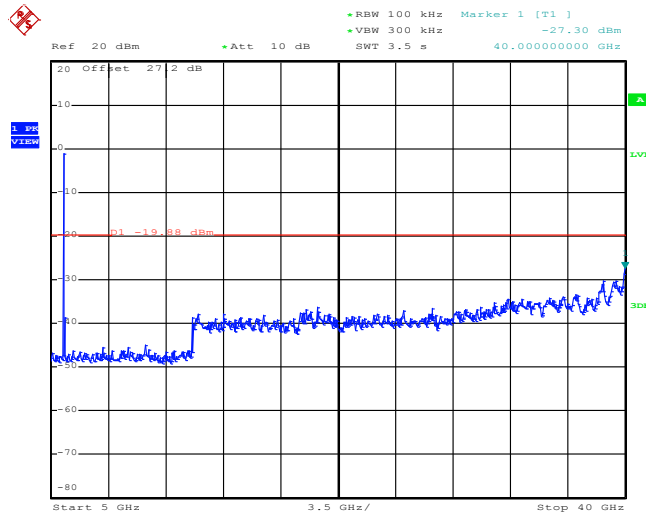
Conducted Spurious Emission Plot on Channel 165



Date: 4.MAR.2013 23:12:35

802.11n HT20 5 GHz~40 GHz – MIMO Ant. 1

Conducted Spurious Emission Plot on Channel 165



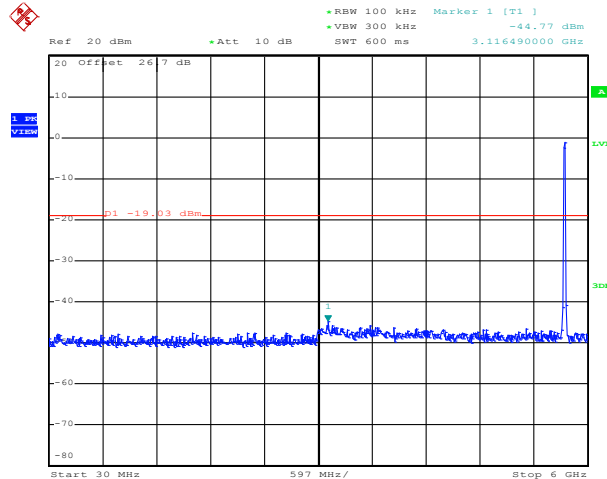
Date: 4.MAR.2013 23:12:54



Test Mode :	802.11n HT20 – MIMO Ant. 2	Temperature :	24~26°C
Test Band :	30MHz-6GHz and 5G-40GHz	Relative Humidity :	55~58%
Test Channel :	149, 157, 165	Test Engineer :	Bill Kuo

802.11n HT20 30 MHz~6 GHz – MIMO Ant. 2

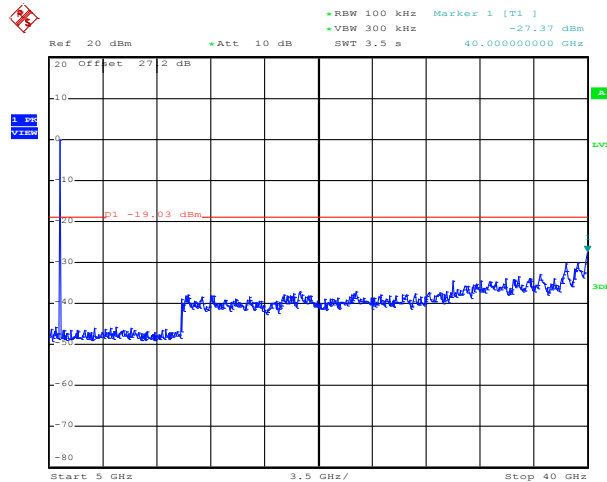
Conducted Spurious Emission Plot on Channel 149



Date: 4.MAR.2013 22:58:42

802.11n HT20 5 GHz~40 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 149

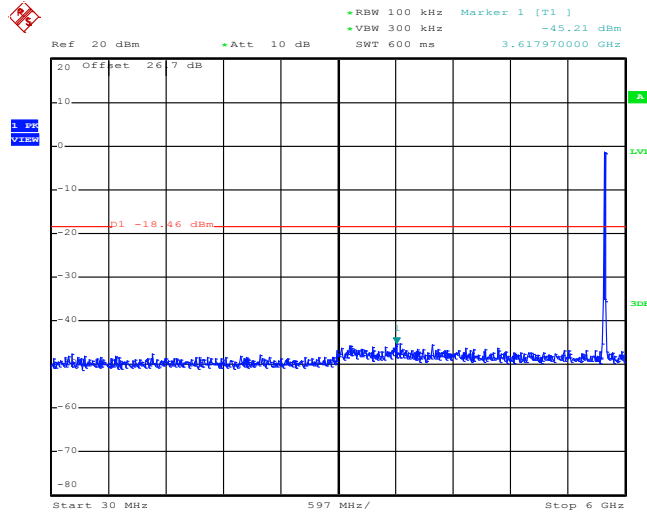


Date: 4.MAR.2013 22:59:01



802.11n HT20 30 MHz~6 GHz – MIMO Ant. 2

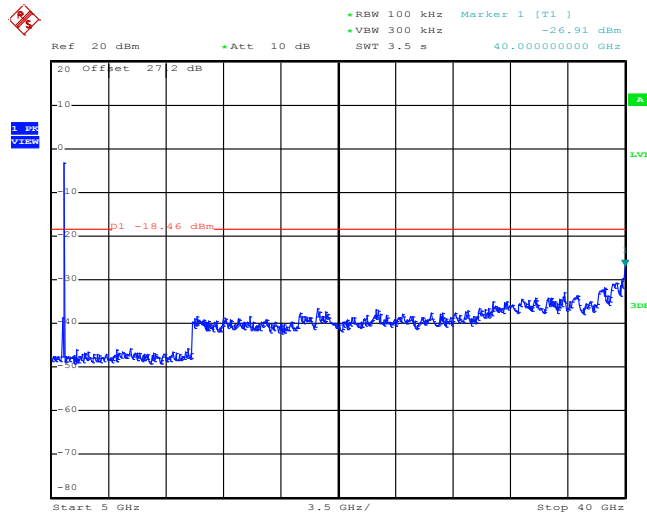
Conducted Spurious Emission Plot on Channel 157



Date: 4.MAR.2013 23:06:58

802.11n HT20 5 GHz~40 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 157

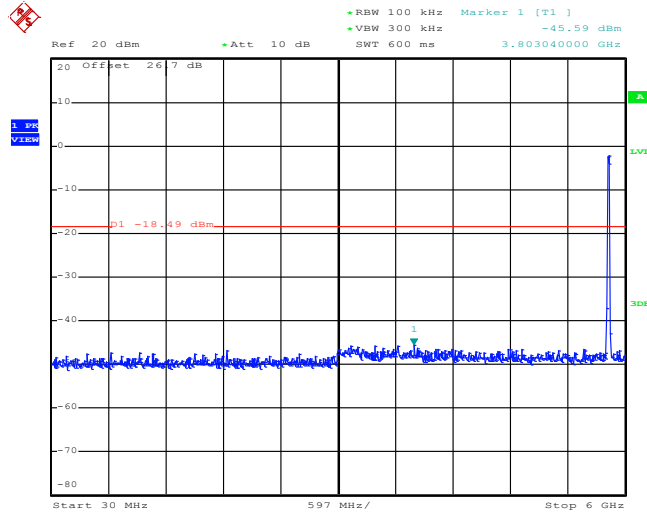


Date: 4.MAR.2013 23:07:16



802.11n HT20 30 MHz~6 GHz – MIMO Ant. 2

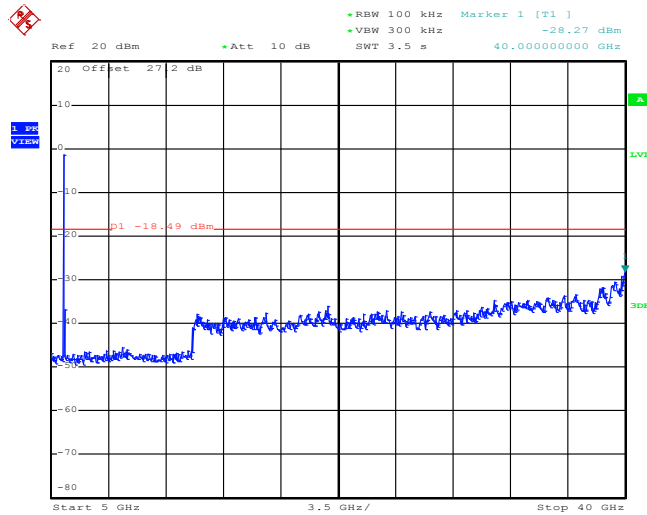
Conducted Spurious Emission Plot on Channel 165



Date: 4.MAR.2013 23:09:42

802.11n HT20 5 GHz~40 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 165



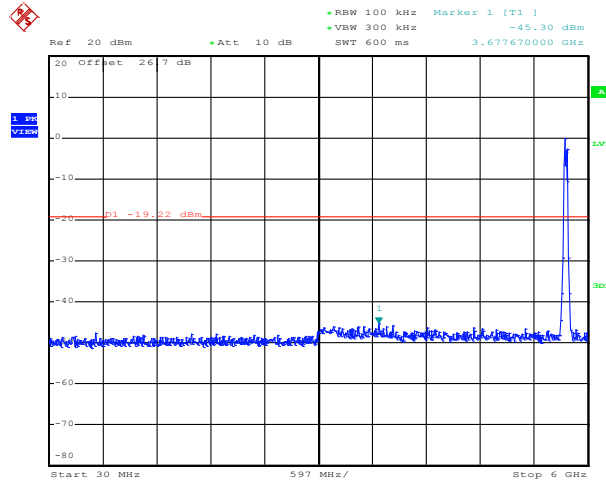
Date: 4.MAR.2013 23:10:01



Test Mode :	802.11n HT40 – SISO Ant. 2	Temperature :	24~26°C
Test Band :	30MHz-6GHz and 5G-40GHz	Relative Humidity :	55~58%
Test Channel :	151 and 159	Test Engineer :	Bill Kuo

802.11n HT40 30 MHz~6 GHz – SISO Ant. 2

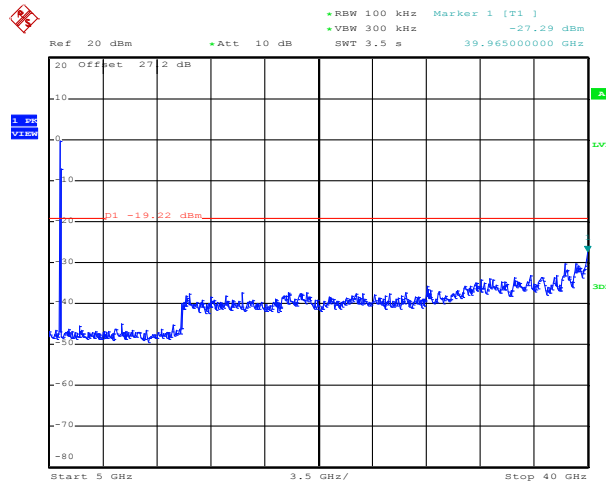
Conducted Spurious Emission Plot on Channel 151



Date: 4.MAR.2013 23:16:52

802.11n HT40 5 GHz~40 GHz – SISO Ant. 2

Conducted Spurious Emission Plot on Channel 151

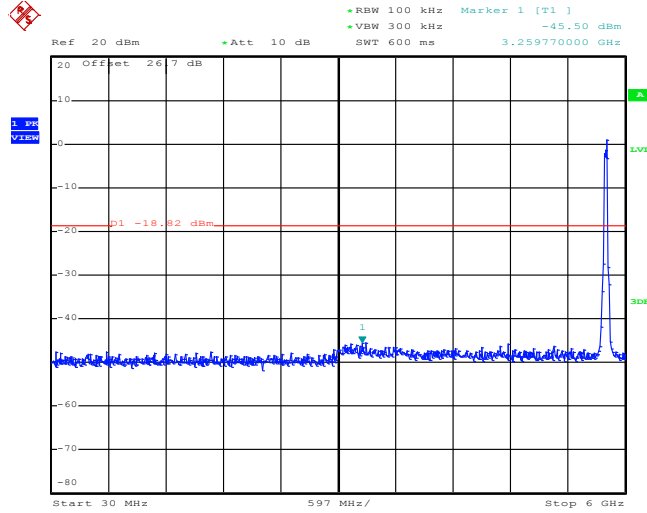


Date: 4.MAR.2013 23:17:11



802.11n HT40 30 MHz~6 GHz – SISO Ant. 2

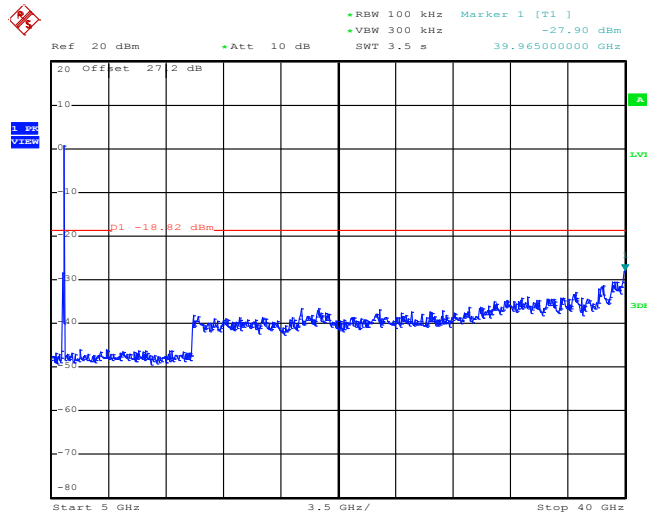
Conducted Spurious Emission Plot on Channel 159



Date: 4.MAR.2013 23:19:45

802.11n HT40 5 GHz~40 GHz – SISO Ant. 2

Conducted Spurious Emission Plot on Channel 159



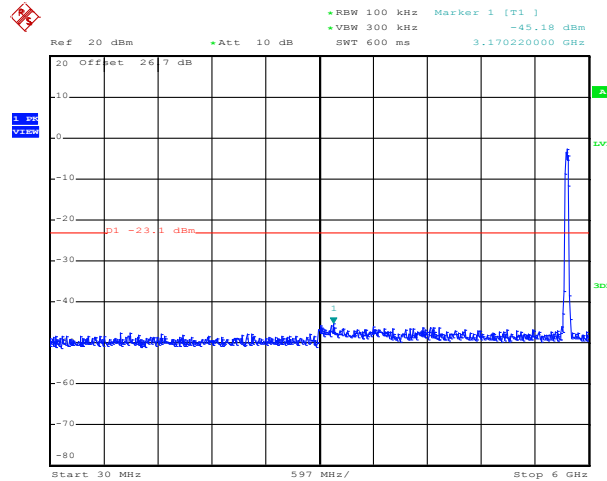
Date: 4.MAR.2013 23:20:03



Test Mode :	802.11n HT40 – MIMO Ant. 1	Temperature :	24~26°C
Test Band :	30MHz-6GHz and 5G-40GHz	Relative Humidity :	55~58%
Test Channel :	151 and 159	Test Engineer :	Bill Kuo

802.11n HT40 30 MHz~6 GHz – MIMO Ant. 1

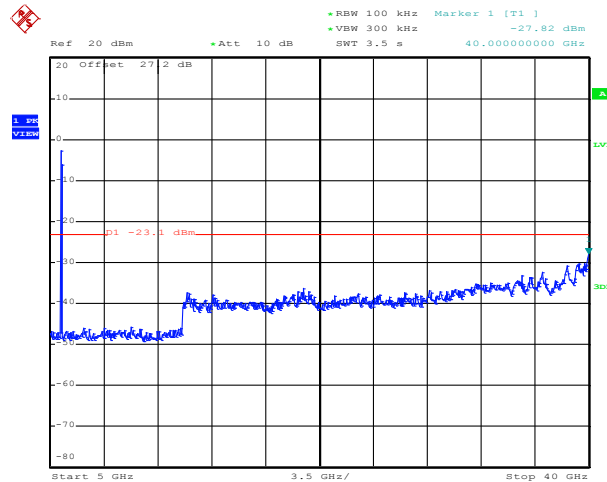
Conducted Spurious Emission Plot on Channel 151



Date: 4.MAR.2013 23:32:39

802.11n HT40 5 GHz~40 GHz – MIMO Ant. 1

Conducted Spurious Emission Plot on Channel 151

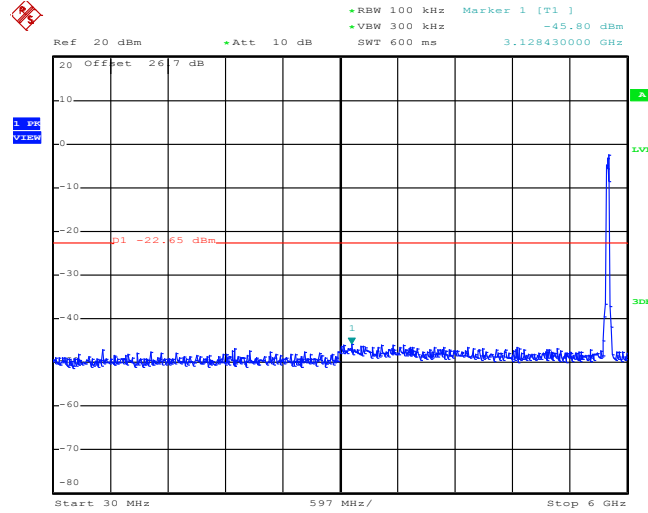


Date: 4.MAR.2013 23:32:57



802.11n HT40 30 MHz~6 GHz – MIMO Ant. 1

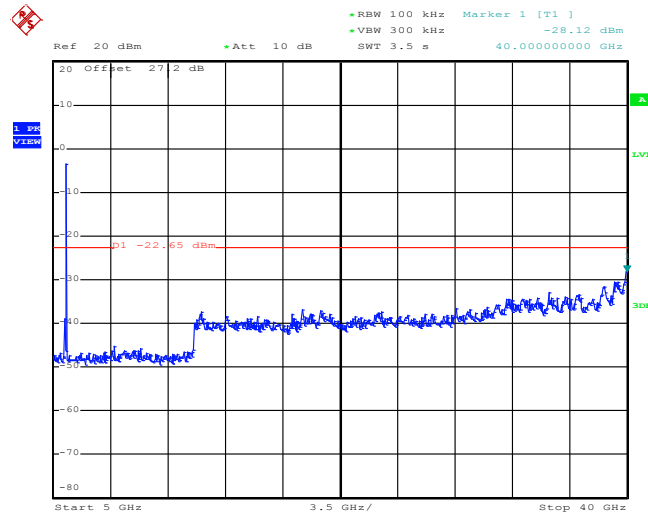
Conducted Spurious Emission Plot on Channel 159



Date: 4.MAR.2013 23:29:17

802.11n HT40 5 GHz~40 GHz – MIMO Ant. 1

Conducted Spurious Emission Plot on Channel 159



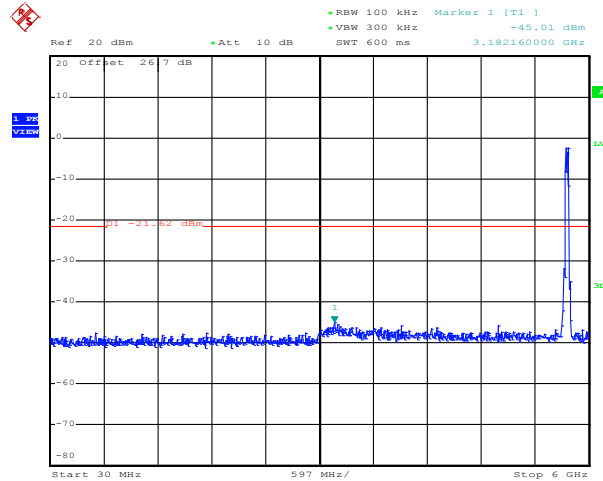
Date: 4.MAR.2013 23:29:35



Test Mode :	802.11n HT40 – MIMO Ant. 2	Temperature :	24~26°C
Test Band :	30MHz-6GHz and 5G-40GHz	Relative Humidity :	55~58%
Test Channel :	151 and 159	Test Engineer :	Bill Kuo

802.11n HT40 30 MHz~6 GHz – MIMO Ant. 2

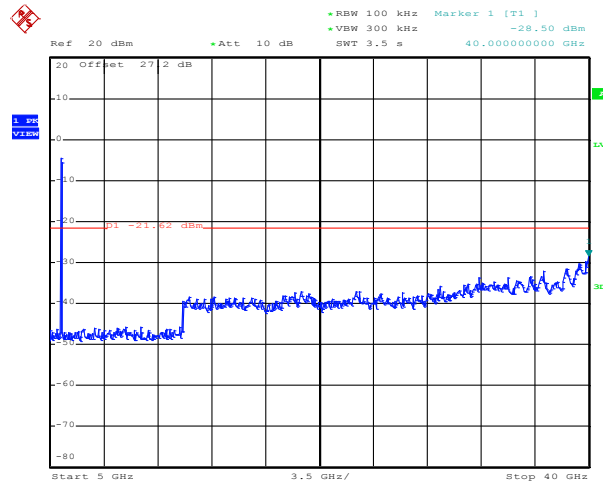
Conducted Spurious Emission Plot on Channel 151



Date: 4.MAR.2013 23:36:05

802.11n HT40 5 GHz~40 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 151

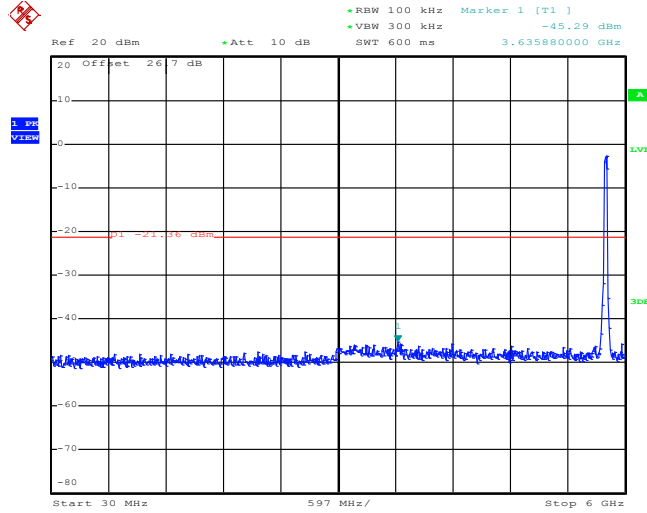


Date: 4.MAR.2013 23:36:24



802.11n HT40 30 MHz~6 GHz – MIMO Ant. 2

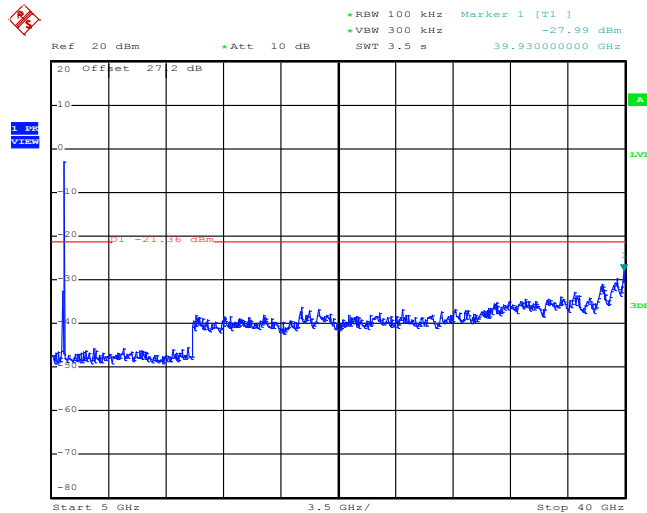
Conducted Spurious Emission Plot on Channel 159



Date: 4.MAR.2013 23:26:38

802.11n HT40 5 GHz~40 GHz – MIMO Ant. 2

Conducted Spurious Emission Plot on Channel 159



Date: 4.MAR.2013 23:26:57

3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 KHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

Frequency (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

3.5.2 Measuring Instruments

See list of measuring instruments of this test report.



3.5.3 Test Procedure

1. The testing follows the guidelines in ANSI C63.10-2009.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 KHz for $f < 1$ GHz; $VBW \geq RBW$; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.
For average measurement:
 - $VBW = 10$ Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

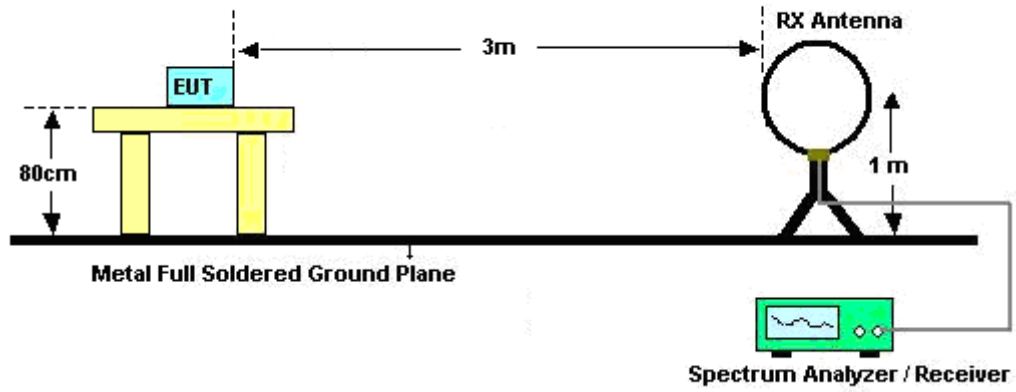


Antenna	Band	Duty Cycle(%)	T(μs)	1/T(kHz)	VBW Setting
1	802.11b	98.99	-	-	10Hz
1	802.11g	98.86	-	-	
1	2.4GHz 802.11n HT20	98.77	-	-	
2	2.4GHz 802.11n HT20	98.77	-	-	
1+2	2.4GHz 802.11n HT20 for Ant1	98.09	-	-	
1+2	2.4GHz 802.11n HT20 for Ant.2	98.11	-	-	
1	2.4GHz 802.11n HT40	97.35	952.885	1.049	3kHz
1+2	2.4GHz 802.11n HT40 for Ant.1	94.57	501.923	1.992	
1+2	2.4GHz 802.11n HT40 for Ant.2	93.97	494.231	2.023	
1	802.11a	98.48	-	-	10Hz
1	5GHz 802.11n HT20	98.61	-	-	
2	5GHz 802.11n HT20	98.61	-	-	
1+2	5GHz 802.11n HT20 for Ant.1	97.65	996.795	1.003	3kHz
1+2	5GHz 802.11n HT20 for Ant.2	97.46	994.231	1.006	
1	5GHz 802.11n HT40	97.55	957.692	1.044	
1+2	5GHz 802.11n HT40 for Ant.1	94.55	500.000	2.000	
1+2	5GHz 802.11n HT40 for Ant.2	95.39	497.115	2.012	

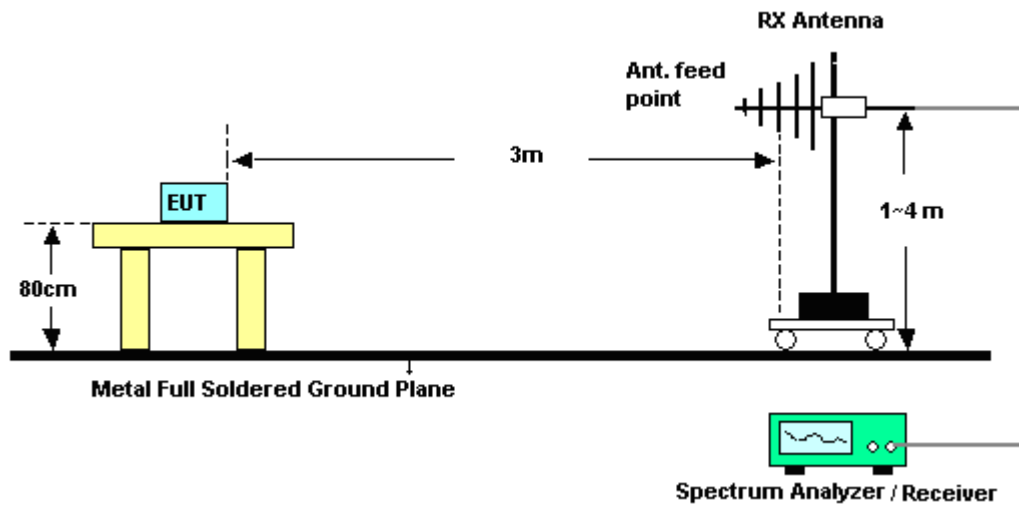
Note: For average measurement with duty cycle < 98%, use reduced VBW measurement method 4.2.3.2.3 in ANSI C63.10.

3.5.4 Test Setup

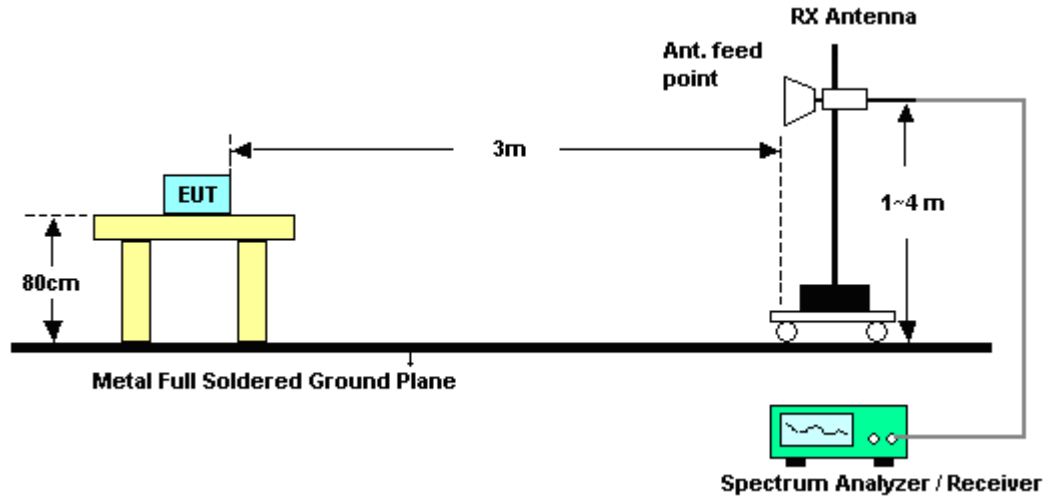
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.5.5 Test Results of Radiated Emissions (9KHz ~ 30MHz)

The low frequency, which started from 9 KHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.



3.5.6 Test Result of Radiated Spurious at Band Edges

Test Mode :	802.11b – Ant. 1	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	01	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2390.00	63.33	-10.67	74	59.08	32.36	6.45	34.56	104	204	Peak
2389.29	42.73	-11.27	54	38.48	32.36	6.45	34.56	104	204	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2388.48	59.92	-14.08	74	55.67	32.36	6.45	34.56	113	182	Peak
2389.29	40.38	-13.62	54	36.13	32.36	6.45	34.56	113	182	Average

Test Mode :	802.11b – Ant. 1	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	11	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2487.58	64.06	-9.94	74	59.52	32.5	6.59	34.55	104	203	Peak
2483.5	43.86	-10.14	54	39.34	32.48	6.59	34.55	104	203	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2483.71	59.58	-14.42	74	55.06	32.48	6.59	34.55	113	145	Peak
2483.5	40.39	-13.61	54	35.87	32.48	6.59	34.55	113	145	Average



Test Mode :	802.11g – Ant. 1	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	01	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2388.57	73.43	-0.57	74	69.18	32.36	6.45	34.56	105	203	Peak
2390	51.06	-2.94	54	46.81	32.36	6.45	34.56	105	203	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2389.65	67.02	-6.98	74	62.77	32.36	6.45	34.56	113	183	Peak
2390	47.1	-6.9	54	42.85	32.36	6.45	34.56	113	183	Average

Test Mode :	802.11g – Ant. 1	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	11	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2483.56	70.46	-3.54	74	65.94	32.48	6.59	34.55	101	214	Peak
2483.5	48.89	-5.11	54	44.37	32.48	6.59	34.55	101	214	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2483.71	65.47	-8.53	74	60.95	32.48	6.59	34.55	113	149	Peak
2483.5	44.59	-9.41	54	40.07	32.48	6.59	34.55	113	149	Average



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	01	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2389.9	73.54	-0.46	74	69.29	32.36	6.45	34.56	103	205	Peak
2390	50.63	-3.37	54	46.38	32.36	6.45	34.56	103	205	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2389.92	69.67	-4.33	74	65.42	32.36	6.45	34.56	113	182	Peak
2390	47.12	-6.88	54	42.87	32.36	6.45	34.56	113	182	Average

Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	11	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2485.66	67.48	-6.52	74	62.96	32.48	6.59	34.55	103	204	Peak
2483.5	49.12	-4.88	54	44.6	32.48	6.59	34.55	103	204	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2485.06	65	-9	74	60.48	32.48	6.59	34.55	113	149	Peak
2483.5	45.49	-8.51	54	40.97	32.48	6.59	34.55	113	149	Average



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	01	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2390	70.36	-3.64	74	66.11	32.36	6.45	34.56	102	218	Peak
2390	51.09	-2.91	54	46.84	32.36	6.45	34.56	102	218	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2390	65.41	-8.59	74	61.16	32.36	6.45	34.56	171	170	Peak
2390	46.48	-7.52	54	42.23	32.36	6.45	34.56	171	170	Average

Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	11	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2483.77	66.43	-7.57	74	61.91	32.48	6.59	34.55	101	216	Peak
2483.5	46.28	-7.72	54	41.76	32.48	6.59	34.55	101	216	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2483.53	62.85	-11.15	74	58.33	32.48	6.59	34.55	200	170	Peak
2483.5	43.51	-10.49	54	38.99	32.48	6.59	34.55	200	170	Average



Test Mode :	802.11n HT20 – SISO Ant. 2	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	01	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2389.92	62.8	-11.2	74	58.55	32.36	6.45	34.56	101	168	Peak
2390	40.24	-13.76	54	35.99	32.36	6.45	34.56	101	168	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2389.38	60.1	-13.9	74	55.85	32.36	6.45	34.56	177	89	Peak
2390	39.91	-14.09	54	35.66	32.36	6.45	34.56	177	89	Average



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	03	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2389.83	72.7	-1.3	74	68.45	32.36	6.45	34.56	104	217	Peak
2389.29	52.72	-1.28	54	48.47	32.36	6.45	34.56	104	217	Average
2487.79	51.95	-22.05	74	47.41	32.5	6.59	34.55	104	217	Peak
2483.71	39.39	-14.61	54	34.87	32.48	6.59	34.55	104	217	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2388.66	71.03	-2.97	74	66.78	32.36	6.45	34.56	113	171	Peak
2390	49.04	-4.96	54	44.79	32.36	6.45	34.56	113	171	Average
2483.86	51.07	-22.93	74	46.55	32.48	6.59	34.55	113	171	Peak
2484.97	38.83	-15.17	54	34.31	32.48	6.59	34.55	113	171	Average



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	09	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2357.52	51.31	-22.69	74	47.14	32.31	6.42	34.56	104	204	Peak
2384.79	39.86	-14.14	54	35.64	32.33	6.45	34.56	104	204	Average
2485.33	73.04	-0.96	74	68.52	32.48	6.59	34.55	104	204	Peak
2483.65	53.03	-0.97	54	48.51	32.48	6.59	34.55	104	204	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2389.56	50.47	-23.53	74	46.22	32.36	6.45	34.56	113	154	Peak
2389.38	39.01	-14.99	54	34.76	32.36	6.45	34.56	113	154	Average
2483.74	71.58	-2.42	74	67.06	32.48	6.59	34.55	113	154	Peak
2483.5	51.03	-2.97	54	46.51	32.48	6.59	34.55	113	154	Average



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	03	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2389.29	67.45	-6.55	74	63.2	32.36	6.45	34.56	103	213	Peak
2389.74	48.45	-5.55	54	44.2	32.36	6.45	34.56	103	213	Average
2486.86	50.01	-23.99	74	45.49	32.48	6.59	34.55	103	213	Peak
2484.34	38.9	-15.1	54	34.38	32.48	6.59	34.55	103	213	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2390	61.58	-12.42	74	57.33	32.36	6.45	34.56	200	150	Peak
2389.38	44.48	-9.52	54	40.23	32.36	6.45	34.56	200	150	Average
2486.02	49.75	-24.25	74	45.23	32.48	6.59	34.55	200	150	Peak
2497	38.73	-15.27	54	34.19	32.5	6.59	34.55	200	150	Average



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	09	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2385.6	49.88	-24.12	74	45.63	32.36	6.45	34.56	103	206	Peak
2389.56	38.94	-15.06	54	34.69	32.36	6.45	34.56	103	206	Average
2484.49	64.26	-9.74	74	59.74	32.48	6.59	34.55	103	206	Peak
2484.52	47.87	-6.13	54	43.35	32.48	6.59	34.55	103	206	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2379.66	49.77	-24.23	74	45.58	32.33	6.42	34.56	200	156	Peak
2365.53	38.49	-15.51	54	34.32	32.31	6.42	34.56	200	156	Average
2484.7	62.19	-11.81	74	57.67	32.48	6.59	34.55	200	156	Peak
2483.5	46.39	-7.61	54	41.87	32.48	6.59	34.55	200	156	Average



Test Mode :	802.11a – Ant. 1	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	149	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	81.61	-7.38	88.99	68.7	35.41	11.34	33.84	141	259	Peak
5746	97.77	-	-	84.83	35.44	11.34	33.84	141	259	Average
5746	108.99	-	-	96.05	35.44	11.34	33.84	141	259	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	80.86	-9.28	90.14	67.95	35.41	11.34	33.84	101	242	Peak
5746	98.84	-	-	85.85	35.44	11.39	33.84	101	242	Average
5746	110.14	-	-	97.15	35.44	11.39	33.84	101	242	Peak

Remark: 5725 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. For example, 108.99 dBµV/m - 20dB = 88.99 dBµV/m.



Test Mode :	802.11a – Ant. 1	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	165	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5824	96.63	-	-	83.4	35.56	11.51	33.84	138	268	Average
5824	107.9	-	-	94.67	35.56	11.51	33.84	138	268	Peak
5850	67.16	-20.74	87.9	53.86	35.58	11.56	33.84	138	268	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5826	98.21	-	-	84.98	35.56	11.51	33.84	109	243	Average
5826	108.76	-	-	95.53	35.56	11.51	33.84	109	243	Peak
5850	69.29	-19.47	88.76	55.99	35.58	11.56	33.84	109	243	Peak

Remark: 5850 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level.



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	149	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	84.31	-4.05	88.36	71.4	35.41	11.34	33.84	140	259	Peak
5748	97.19	-	-	84.2	35.44	11.39	33.84	140	259	Average
5748	108.36	-	-	95.37	35.44	11.39	33.84	140	259	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	82.97	-6.49	89.46	70.06	35.41	11.34	33.84	100	250	Peak
5746	98.25	-	-	85.26	35.44	11.39	33.84	100	250	Average
5746	109.46	-	-	96.47	35.44	11.39	33.84	100	250	Peak

Remark: 5725 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level.



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	165	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5824	95.26	-	-	82.06	35.53	11.51	33.84	141	248	Average
5824	106.44	-	-	93.24	35.53	11.51	33.84	141	248	Peak
5850	71.98	-14.46	86.44	58.68	35.58	11.56	33.84	141	248	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5826	97.37	-	-	84.14	35.56	11.51	33.84	100	249	Average
5826	108.3	-	-	95.07	35.56	11.51	33.84	100	249	Peak
5850	72.19	-16.11	88.3	58.89	35.58	11.56	33.84	100	249	Peak

Remark: 5850 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level.



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	149	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	71.48	-16.18	87.66	58.57	35.41	11.34	33.84	128	260	Peak
5744	96.91	-	-	83.92	35.44	11.39	33.84	128	260	Average
5744	107.66	-	-	94.67	35.44	11.39	33.84	128	260	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	71.54	-16.42	87.96	58.63	35.41	11.34	33.84	100	250	Peak
5747	96.99	-	-	84	35.44	11.39	33.84	100	250	Average
5747	107.96	-	-	94.97	35.44	11.39	33.84	100	250	Peak

Remark: 5725 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level.



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	165	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5829	95.32	-	-	82.09	35.56	11.51	33.84	128	255	Average
5829	105.68	-	-	92.45	35.56	11.51	33.84	128	255	Peak
5850	57.23	-28.45	85.68	43.93	35.58	11.56	33.84	128	255	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5823	95.83	-	-	82.6	35.56	11.51	33.84	120	247	Average
5823	106.45	-	-	93.22	35.56	11.51	33.84	120	247	Peak
5850	61.73	-24.72	86.45	48.43	35.58	11.56	33.84	120	247	Peak

Remark: 5850 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level.



Test Mode :	802.11n HT20 – SISO Ant. 2	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	149	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	83.7	-6.26	89.96	70.79	35.41	11.34	33.84	100	218	Peak
5746	98.75	-	-	85.76	35.44	11.39	33.84	100	218	Average
5746	109.96	-	-	96.97	35.44	11.39	33.84	100	218	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	83.23	-4.88	88.11	70.32	35.41	11.34	33.84	100	269	Peak
5747	96.75	-	-	83.76	35.44	11.39	33.84	100	269	Average
5747	108.11	-	-	95.1	35.46	11.39	33.84	100	269	Peak

Remark: 5725 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level.



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	151	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	81.12	-5.43	86.55	68.21	35.41	11.34	33.84	129	258	Peak
5757	96.97	-	-	83.96	35.46	11.39	33.84	129	258	Average
5757	106.55	-	-	93.54	35.46	11.39	33.84	129	258	Peak
5850	52.15	-34.4	86.55	38.85	35.58	11.56	33.84	129	258	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	81.72	-5.16	86.88	68.81	35.41	11.34	33.84	100	251	Peak
5758	98.1	-	-	85.09	35.46	11.39	33.84	100	251	Average
5758	106.88	-	-	93.87	35.46	11.39	33.84	100	251	Peak
5850	52.87	-34.01	86.88	39.57	35.58	11.56	33.84	100	251	Peak

Remark: 5725 MHz and 5850 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level.



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	159	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	55.75	-29.09	84.84	42.84	35.41	11.34	33.84	140	256	Peak
5798	94.99	-	-	81.85	35.51	11.47	33.84	140	256	Average
5798	104.84	-	-	91.7	35.51	11.47	33.84	140	256	Peak
5850	63.02	-21.82	84.84	49.72	35.58	11.56	33.84	140	256	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	56.01	-30.44	86.45	43.1	35.41	11.34	33.84	100	239	Peak
5798	96.57	-	-	83.43	35.51	11.47	33.84	100	239	Average
5798	106.45	-	-	93.31	35.51	11.47	33.84	100	239	Peak
5850	64.84	-21.61	86.45	51.54	35.58	11.56	33.84	100	239	Peak

Remark: 5725 MHz and 5850 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level.



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	151	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	75.46	-10.78	86.24	62.55	35.41	11.34	33.84	117	256	Peak
5753	95.9	-	-	82.89	35.46	11.39	33.84	117	256	Average
5753	106.24	-	-	93.23	35.46	11.39	33.84	117	256	Peak
5850	53.16	-33.08	86.24	39.86	35.58	11.56	33.84	117	256	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	76.03	-11.86	87.89	63.12	35.41	11.34	33.84	121	244	Peak
5752	96.39	-	-	83.38	35.46	11.39	33.84	121	244	Average
5752	107.89	-	-	94.88	35.46	11.39	33.84	121	244	Peak
5850	51.79	-36.1	87.89	38.49	35.58	11.56	33.84	121	244	Peak

Remark: 5725 MHz and 5850 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level.



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	159	Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	57.52	-26.72	84.24	44.61	35.41	11.34	33.84	135	271	Peak
5798	93.92	-	-	80.78	35.51	11.47	33.84	135	271	Average
5798	104.24	-	-	91.1	35.51	11.47	33.84	135	271	Peak
5850	57.11	-27.13	84.24	43.81	35.58	11.56	33.84	135	271	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
5725	54.58	-30.2	84.78	41.67	35.41	11.34	33.84	122	250	Peak
5796	94.16	-	-	81.02	35.51	11.47	33.84	122	250	Average
5796	104.78	-	-	91.64	35.51	11.47	33.84	122	250	Peak
5850	57.32	-27.46	84.78	44.02	35.58	11.56	33.84	122	250	Peak

Remark: 5725 MHz and 5850 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level.

3.5.7 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Test Mode :	802.11b – Ant. 1	Temperature :	26~27°C
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 3195 MHz and 7239 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. For example, 111.78 dBμV/m - 20dB = 91.78 dBμV/m. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	31.3	-22.7	54	32.64	28.6	4.95	34.89	104	204	Average
1598	53.16	-20.84	74	54.5	28.6	4.95	34.89	104	204	Peak
2412	105.73	-	-	101.42	32.38	6.49	34.56	104	204	Average
2412	111.78	-	-	107.47	32.38	6.49	34.56	104	204	Peak
3195	54.6	-37.18	91.78	67.78	33.1	7.76	54.04	100	0	Peak
4824	49.08	-24.92	74	59.63	34.87	10.17	55.59	100	0	Peak
7239	49.49	-42.29	91.78	58.8	36.15	10.96	56.42	100	0	Peak



Test Mode :	802.11b – Ant. 1	Temperature :	26~27°C
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2412 MHz is Fundamental signal which can be ignored. 2. 3195 MHz and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	29.13	-24.87	54	30.47	28.6	4.95	34.89	113	182	Average
1598	51.24	-22.76	74	52.58	28.6	4.95	34.89	113	182	Peak
2412	100.72	-	-	96.41	32.38	6.49	34.56	113	182	Average
2412	106.54	-	-	102.23	32.38	6.49	34.56	113	182	Peak
3195	56.58	-29.96	86.54	69.76	33.1	7.76	54.04	100	0	Peak
4824	48.62	-25.38	74	59.17	34.87	10.17	55.59	100	0	Peak
7236	49.88	-36.66	86.54	59.19	36.15	10.96	56.42	100	0	Peak



Test Mode :	802.11b – Ant. 1	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2436 MHz is Fundamental signal which can be ignored. 2. 3192 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	32.67	-21.33	54	34.01	28.6	4.95	34.89	104	201	Average
1598	54.76	-19.24	74	56.1	28.6	4.95	34.89	104	201	Peak
2436	107.75	-	-	103.39	32.4	6.52	34.56	104	201	Average
2436	113.79	-	-	109.43	32.4	6.52	34.56	104	201	Peak
3192	55.27	-38.52	93.79	68.45	33.1	7.76	54.04	100	0	Peak
4875	48.19	-25.81	74	58.84	34.85	10.18	55.68	100	0	Peak
7311	49.12	-24.88	74	58.32	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11b – Ant. 1	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2439 MHz is Fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	29.82	-24.18	54	31.16	28.6	4.95	34.89	113	182	Average
1598	51.84	-22.16	74	53.18	28.6	4.95	34.89	113	182	Peak
2439	102.18	-	-	97.79	32.43	6.52	34.56	113	182	Average
2439	108.31	-	-	103.92	32.43	6.52	34.56	113	182	Peak
3195	55.71	-32.6	88.31	68.89	33.1	7.76	54.04	100	0	Peak
4875	49.24	-24.76	74	59.89	34.85	10.18	55.68	100	0	Peak
7311	49.5	-24.5	74	58.7	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11b – Ant. 1	Temperature :	26~27°C
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2464 MHz is fundamental signal which can be ignored. 2. 3186 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
96.15	25.89	-17.61	43.5	46.44	10.04	1.08	31.67	-	-	Peak
217.11	35.73	-10.27	46	56.65	9.1	1.64	31.66	-	-	Peak
239.52	37.34	-8.66	46	55.98	11.3	1.71	31.65	-	-	Peak
304.2	36.63	-9.37	46	53.08	13.29	1.92	31.66	-	-	Peak
799.8	35.73	-10.27	46	44.8	19.8	3.1	31.97	-	-	Peak
865.6	37.66	-8.34	46	45.91	20.35	3.21	31.81	100	246	Peak
1600	32.23	-21.77	54	33.55	28.6	4.95	34.87	104	203	Average
1600	54.33	-19.67	74	55.65	28.6	4.95	34.87	104	203	Peak
2464	107.5	-	-	103.05	32.45	6.56	34.56	104	203	Average
2464	113.56	-	-	109.11	32.45	6.56	34.56	104	203	Peak
3186	54.9	-38.66	93.56	68.08	33.1	7.76	54.04	100	0	Peak
4923	48.4	-25.6	74	59.15	34.83	10.2	55.78	100	0	Peak
7386	50.42	-23.58	74	59.49	36.12	10.92	56.11	100	0	Peak



Test Mode :	802.11b – Ant. 1	Temperature :	26~27°C
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.84	-3.16	40	49.06	18.9	0.6	31.72	100	34	Peak
161.76	30.13	-13.37	43.5	50.32	10	1.46	31.65	-	-	Peak
239.25	36.91	-9.09	46	55.55	11.3	1.71	31.65	-	-	Peak
538.7	36.34	-9.66	46	46.96	18.67	2.57	31.86	-	-	Peak
646.5	38.04	-7.96	46	48.02	19.2	2.8	31.98	-	-	Peak
757.8	37.56	-8.44	46	46.89	19.73	3.03	32.09	-	-	Peak
1600	30.42	-23.58	54	31.74	28.6	4.95	34.87	113	145	Average
1600	52.45	-21.55	74	53.77	28.6	4.95	34.87	113	145	Peak
2462	101.36	-	-	96.91	32.45	6.56	34.56	113	145	Average
2462	107.3	-	-	102.85	32.45	6.56	34.56	113	145	Peak
3195	55.65	-25.71	81.36	68.83	33.1	7.76	54.04	100	0	Peak
4923	47.83	-26.17	74	58.58	34.83	10.2	55.78	100	0	Peak
7386	50.43	-23.57	74	59.5	36.12	10.92	56.11	100	0	Peak



Test Mode :	802.11g – Ant. 1	Temperature :	26~27°C
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2414 MHz is fundamental signal which can be ignored. 2. 3195 MHz and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
95.61	25.75	-17.75	43.5	46.3	10.04	1.08	31.67	-	-	Peak
216.57	35.55	-10.45	46	56.48	9.1	1.63	31.66	-	-	Peak
239.79	36.79	-9.21	46	55.43	11.3	1.71	31.65	-	-	Peak
302.1	36.51	-9.49	46	53.01	13.25	1.91	31.66	-	-	Peak
862.1	38.18	-7.82	46	46.42	20.38	3.21	31.83	100	135	Peak
920.2	37.24	-8.76	46	44.69	20.7	3.26	31.41	-	-	Peak
1598	31.47	-22.53	54	32.81	28.6	4.95	34.89	105	203	Average
1598	53.59	-20.41	74	54.93	28.6	4.95	34.89	105	203	Peak
2414	101.32	-	-	97.01	32.38	6.49	34.56	105	203	Average
2414	112.67	-	-	108.36	32.38	6.49	34.56	105	203	Peak
3195	54.68	-37.99	92.67	67.86	33.1	7.76	54.04	100	0	Peak
4824	48.32	-25.68	74	58.87	34.87	10.17	55.59	100	0	Peak
7236	48.84	-43.83	92.67	58.15	36.15	10.96	56.42	100	0	Peak



Test Mode :	802.11g – Ant. 1	Temperature :	26~27°C
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2410 MHz is fundamental signal which can be ignored. 2. 3195 MHz and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.76	-3.24	40	48.98	18.9	0.6	31.72	100	289	Peak
162.03	29.81	-13.69	43.5	50.01	10	1.46	31.66	-	-	Peak
239.52	37.72	-8.28	46	56.36	11.3	1.71	31.65	-	-	Peak
538.7	36.13	-9.87	46	46.75	18.67	2.57	31.86	-	-	Peak
649.3	38.53	-7.47	46	48.5	19.2	2.8	31.97	-	-	Peak
757.8	37.73	-8.27	46	47.06	19.73	3.03	32.09	-	-	Peak
1598	29.36	-24.64	54	30.7	28.6	4.95	34.89	113	183	Average
1598	51.45	-22.55	74	52.79	28.6	4.95	34.89	113	183	Peak
2410	95.9	-	-	91.59	32.38	6.49	34.56	113	183	Average
2410	107.13	-	-	102.82	32.38	6.49	34.56	113	183	Peak
3195	54.97	-32.16	87.13	68.15	33.1	7.76	54.04	100	0	Peak
4824	47.87	-26.13	74	58.42	34.87	10.17	55.59	100	0	Peak
7236	48.92	-38.21	87.13	58.23	36.15	10.96	56.42	100	0	Peak



Test Mode :	802.11g – Ant. 1	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2436 MHz is fundamental signal which can be ignored. 2. 3186 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	30.85	-23.15	54	32.19	28.6	4.95	34.89	103	210	Average
1598	52.99	-21.01	74	54.33	28.6	4.95	34.89	103	210	Peak
2436	102.6	-	-	98.24	32.4	6.52	34.56	103	210	Average
2436	113.78	-	-	109.42	32.4	6.52	34.56	103	210	Peak
3186	55.62	-38.16	93.78	68.8	33.1	7.76	54.04	100	0	Peak
4875	48.24	-25.76	74	58.89	34.85	10.18	55.68	100	0	Peak
7311	48.45	-25.55	74	57.65	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11g – Ant. 1	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2438 MHz is fundamental signal which can be ignored. 2. 3198 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1596	29.35	-24.65	54	30.69	28.6	4.95	34.89	113	181	Average
1596	51.05	-22.95	74	52.39	28.6	4.95	34.89	113	181	Peak
2438	98.77	-	-	94.38	32.43	6.52	34.56	113	181	Average
2438	109.45	-	-	105.06	32.43	6.52	34.56	113	181	Peak
3198	56.62	-32.83	89.45	69.78	33.1	7.78	54.04	100	0	Peak
4875	48.34	-25.66	74	58.99	34.85	10.18	55.68	100	0	Peak
7311	48.75	-25.25	74	57.95	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11g – Ant. 1	Temperature :	26~27°C
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2464 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	32.42	-21.58	54	33.76	28.6	4.95	34.89	101	214	Average
1598	54.56	-19.44	74	55.9	28.6	4.95	34.89	101	214	Peak
2464	99.78	-	-	95.33	32.45	6.56	34.56	101	214	Average
2464	111.3	-	-	106.85	32.45	6.56	34.56	101	214	Peak
3195	57.29	-34.01	91.3	70.47	33.1	7.76	54.04	100	0	Peak
4923	47.17	-26.83	74	57.92	34.83	10.2	55.78	100	0	Peak
7386	48.9	-25.1	74	57.97	36.12	10.92	56.11	100	0	Peak



Test Mode :	802.11g – Ant. 1	Temperature :	26~27°C
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2460 MHz is fundamental signal which can be ignored. 2. 3186 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2460	95.6	-	-	91.15	32.45	6.56	34.56	113	149	Average
2460	107.03	-	-	102.58	32.45	6.56	34.56	113	149	Peak
3186	55.66	-31.37	87.03	68.84	33.1	7.76	54.04	100	0	Peak
4923	46.94	-27.06	74	57.69	34.83	10.2	55.78	100	0	Peak
7386	49.03	-24.97	74	58.1	36.12	10.92	56.11	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2410 MHz is fundamental signal which can be ignored. 2. 3186 MHz and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
215.49	35.19	-8.31	43.5	56.11	9.1	1.63	31.65	100	139	Peak
239.25	37.38	-8.62	46	56.02	11.3	1.71	31.65	-	-	Peak
299.19	34.01	-11.99	46	50.58	13.2	1.9	31.67	-	-	Peak
307	37.17	-8.83	46	53.54	13.35	1.93	31.65	-	-	Peak
799.8	35.39	-10.61	46	44.46	19.8	3.1	31.97	-	-	Peak
865.6	37.61	-8.39	46	45.86	20.35	3.21	31.81	-	-	Peak
1598	32.67	-21.33	54	34.01	28.6	4.95	34.89	103	205	Average
1598	54.79	-19.21	74	56.13	28.6	4.95	34.89	103	205	Peak
2410	100.35	-	-	96.04	32.38	6.49	34.56	103	205	Average
2410	111.87	-	-	107.56	32.38	6.49	34.56	103	205	Peak
3186	56.73	-35.14	91.87	69.91	33.1	7.76	54.04	100	0	Peak
4824	46.8	-27.2	74	57.35	34.87	10.17	55.59	100	0	Peak
7236	49.04	-42.83	91.87	58.35	36.15	10.96	56.42	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2410 MHz is fundamental signal which can be ignored. 2. 3195 MHz and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.02	-3.98	40	48.24	18.9	0.6	31.72	100	121	Peak
162.3	30.19	-13.31	43.5	50.39	10	1.46	31.66	-	-	Peak
239.52	36.5	-9.5	46	55.14	11.3	1.71	31.65	-	-	Peak
538.7	35.32	-10.68	46	45.94	18.67	2.57	31.86	-	-	Peak
649.3	38	-8	46	47.97	19.2	2.8	31.97	-	-	Peak
754.3	37.04	-8.96	46	46.37	19.75	3.02	32.1	-	-	Peak
1594	29.82	-24.18	54	31.16	28.6	4.95	34.89	113	182	Average
1594	51.88	-22.12	74	53.22	28.6	4.95	34.89	113	182	Peak
2410	93.62	-	-	89.31	32.38	6.49	34.56	113	182	Average
2410	105.1	-	-	100.79	32.38	6.49	34.56	113	182	Peak
3195	57.41	-27.69	85.1	70.59	33.1	7.76	54.04	100	0	Peak
4824	47.44	-26.56	74	57.99	34.87	10.17	55.59	100	0	Peak
7236	49.36	-35.74	85.1	58.67	36.15	10.96	56.42	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2436 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1600	31.25	-22.75	54	32.57	28.6	4.95	34.87	103	204	Average
1600	53.44	-20.56	74	54.76	28.6	4.95	34.87	103	204	Peak
2436	103.92	-	-	99.56	32.4	6.52	34.56	103	204	Average
2436	115.4	-	-	111.04	32.4	6.52	34.56	103	204	Peak
3195	53.7	-41.7	95.4	66.88	33.1	7.76	54.04	100	0	Peak
4875	48.92	-25.08	74	59.57	34.85	10.18	55.68	100	0	Peak
7311	48.83	-25.17	74	58.03	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2439 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1596	30.65	-23.35	54	31.99	28.6	4.95	34.89	113	183	Average
1596	52.7	-21.3	74	54.04	28.6	4.95	34.89	113	183	Peak
2439	98.6	-	-	94.21	32.43	6.52	34.56	113	183	Average
2439	109.86	-	-	105.47	32.43	6.52	34.56	113	183	Peak
3195	54.04	-35.82	89.86	67.22	33.1	7.76	54.04	100	0	Peak
4875	47.96	-26.04	74	58.61	34.85	10.18	55.68	100	0	Peak
7311	49.19	-24.81	74	58.39	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2463 MHz is fundamental signal which can be ignored. 2. 3189 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	31.45	-22.55	54	32.79	28.6	4.95	34.89	103	204	Average
1598	53.55	-20.45	74	54.89	28.6	4.95	34.89	103	204	Peak
2463	101.08	-	-	96.63	32.45	6.56	34.56	103	204	Average
2463	112.51	-	-	108.06	32.45	6.56	34.56	103	204	Peak
3189	54.53	-37.98	92.51	67.71	33.1	7.76	54.04	100	0	Peak
4923	47.74	-26.26	74	58.49	34.83	10.2	55.78	100	0	Peak
7386	49.21	-24.79	74	58.28	36.12	10.92	56.11	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2461 MHz is fundamental signal which can be ignored. 2. 3192 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2461	94	-	-	89.55	32.45	6.56	34.56	113	149	Average
2461	105.66	-	-	101.21	32.45	6.56	34.56	113	149	Peak
3192	56.14	-29.52	85.66	69.32	33.1	7.76	54.04	100	0	Peak
4923	47.6	-26.4	74	58.35	34.83	10.2	55.78	100	0	Peak
7386	48.38	-25.62	74	57.45	36.12	10.92	56.11	100	0	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2414 MHz is fundamental signal which can be ignored. 2. 3186 MHz and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
96.15	26.35	-17.15	43.5	46.9	10.04	1.08	31.67	-	-	Peak
239.79	38.18	-7.82	46	56.82	11.3	1.71	31.65	139	219	Peak
298.92	34.84	-11.16	46	51.43	13.18	1.9	31.67	-	-	Peak
306.3	36.13	-9.87	46	52.53	13.33	1.92	31.65	-	-	Peak
865.6	36.91	-9.09	46	45.16	20.35	3.21	31.81	-	-	Peak
926.5	37.39	-8.61	46	44.77	20.7	3.26	31.34	-	-	Peak
1596	33.75	-20.25	54	35.09	28.6	4.95	34.89	181	344	Average
1596	51.19	-22.81	74	52.53	28.6	4.95	34.89	181	344	Peak
2414	96.88	-	-	92.57	32.38	6.49	34.56	102	218	Average
2414	109.7	-	-	105.39	32.38	6.49	34.56	102	218	Peak
3186	55.15	-34.55	89.7	68.33	33.1	7.76	54.04	100	0	Peak
4824	48.01	-25.99	74	58.56	34.87	10.17	55.59	100	0	Peak
7236	49.4	-40.3	89.7	58.71	36.15	10.96	56.42	100	0	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2414 MHz is fundamental signal which can be ignored. 2. 3192 MHz and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.15	-3.85	40	48.37	18.9	0.6	31.72	100	169	Peak
162.03	30.69	-12.81	43.5	50.89	10	1.46	31.66	-	-	Peak
240.06	38.33	-7.67	46	56.88	11.4	1.71	31.66	-	-	Peak
538.7	36.73	-9.27	46	47.35	18.67	2.57	31.86	-	-	Peak
649.3	37.33	-8.67	46	47.3	19.2	2.8	31.97	-	-	Peak
757.8	37.42	-8.58	46	46.75	19.73	3.03	32.09	-	-	Peak
2414	93.42	-	-	89.11	32.38	6.49	34.56	171	170	Average
2414	106.25	-	-	101.94	32.38	6.49	34.56	171	170	Peak
3192	57.09	-29.16	86.25	70.27	33.1	7.76	54.04	100	0	Peak
4824	47.09	-26.91	74	57.64	34.87	10.17	55.59	100	0	Peak
7236	48.93	-37.32	86.25	58.24	36.15	10.96	56.42	100	0	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2436 MHz is fundamental signal which can be ignored. 2. 3189 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1594	49.52	-24.48	74	50.86	28.6	4.95	34.89	100	0	Peak
2436	97.03	-	-	92.67	32.4	6.52	34.56	104	212	Average
2436	110.69	-	-	106.33	32.4	6.52	34.56	104	212	Peak
3189	55.89	-34.8	90.69	69.07	33.1	7.76	54.04	100	0	Peak
4875	49	-25	74	59.65	34.85	10.18	55.68	100	0	Peak
7311	48.49	-25.51	74	57.69	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2438 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	48.47	-25.53	74	49.81	28.6	4.95	34.89	100	0	Peak
2438	92.92	-	-	88.53	32.43	6.52	34.56	200	152	Average
2438	105.87	-	-	101.48	32.43	6.52	34.56	200	152	Peak
3195	58.78	-27.09	85.87	71.96	33.1	7.76	54.04	100	0	Peak
4875	48.63	-25.37	74	59.28	34.85	10.18	55.68	100	0	Peak
7311	48.78	-25.22	74	57.98	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2460 MHz is fundamental signal which can be ignored. 2. 3186 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2460	95.96	-	-	91.51	32.45	6.56	34.56	101	216	Average
2460	109.01	-	-	104.56	32.45	6.56	34.56	101	216	Peak
3186	56.48	-32.53	89.01	69.66	33.1	7.76	54.04	100	0	Peak
4923	47.64	-26.36	74	58.39	34.83	10.2	55.78	100	0	Peak
7386	50.53	-23.47	74	59.6	36.12	10.92	56.11	100	0	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	<ol style="list-style-type: none"> 2464 MHz is fundamental signal which can be ignored. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. Average measurement was not performed if peak level went lower than the average limit. 		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2464	91.43	-	-	86.98	32.45	6.56	34.56	200	170	Average
2464	104.15	-	-	99.7	32.45	6.56	34.56	200	170	Peak
3195	58.28	-25.87	84.15	71.46	33.1	7.76	54.04	100	0	Peak
4923	47.14	-26.86	74	57.89	34.83	10.2	55.78	100	0	Peak
7386	48.85	-25.15	74	57.92	36.12	10.92	56.11	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 2	Temperature :	26~27°C
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2414 MHz is fundamental signal which can be ignored. 2. 3186 MHz and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
97.77	33.39	-10.11	43.5	53.46	10.52	1.09	31.68	-	-	Peak
165.27	35.62	-7.88	43.5	55.81	10	1.47	31.66	-	-	Peak
216.3	37.1	-8.9	46	58.03	9.1	1.63	31.66	-	-	Peak
315.4	35.09	-10.91	46	51.31	13.45	1.95	31.62	-	-	Peak
799.8	38.49	-7.51	46	47.56	19.8	3.1	31.97	-	-	Peak
913.2	39.58	-6.42	46	47.16	20.64	3.25	31.47	100	159	Peak
1594	31.92	-22.08	54	33.26	28.6	4.95	34.89	101	168	Average
1594	53.89	-20.11	74	55.23	28.6	4.95	34.89	101	168	Peak
2414	89.56	-	-	85.25	32.38	6.49	34.56	101	168	Average
2414	101.22	-	-	96.91	32.38	6.49	34.56	101	168	Peak
3186	56.4	-24.82	81.22	69.58	33.1	7.76	54.04	100	0	Peak
4824	48.48	-25.52	74	59.03	34.87	10.17	55.59	100	0	Peak
7236	49.16	-32.06	81.22	58.47	36.15	10.96	56.42	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 2	Temperature :	26~27°C
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2413 MHz is fundamental signal which can be ignored. 2. 3189 MHz and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.86	-3.14	40	49.08	18.9	0.6	31.72	100	269	Peak
153.66	35.1	-8.4	43.5	55.16	10.2	1.42	31.68	-	-	Peak
216.3	38.75	-7.25	46	59.68	9.1	1.63	31.66	-	-	Peak
538.7	36.54	-9.46	46	47.16	18.67	2.57	31.86	-	-	Peak
646.5	42.11	-3.89	46	52.09	19.2	2.8	31.98	-	-	Peak
901.3	38.77	-7.23	46	46.51	20.6	3.24	31.58	-	-	Peak
1598	46.3	-27.7	74	47.64	28.6	4.95	34.89	177	89	Peak
2413	87.32	-	-	83.01	32.38	6.49	34.56	177	89	Average
2413	98.84	-	-	94.53	32.38	6.49	34.56	177	89	Peak
3189	55.66	-23.18	78.84	68.84	33.1	7.76	54.04	100	0	Peak
4824	47.75	-26.25	74	58.3	34.87	10.17	55.59	100	0	Peak
7236	49.92	-28.92	78.84	59.23	36.15	10.96	56.42	100	0	Peak



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	03	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2420 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1592	37.56	-16.44	54	38.9	28.6	4.95	34.89	104	217	Average
1592	54.54	-19.46	74	55.88	28.6	4.95	34.89	104	217	Peak
2420	94.37	-	-	90.04	32.4	6.49	34.56	104	217	Average
2420	104.37	-	-	100.04	32.4	6.49	34.56	104	217	Peak
3195	58.89	-25.48	84.37	72.07	33.1	7.76	54.04	100	0	Peak
4845	47.43	-26.57	74	58.02	34.86	10.17	55.62	100	0	Peak
7266	49.23	-24.77	74	58.49	36.14	10.95	56.35	100	0	Peak



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	03	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2425 MHz is fundamental signal which can be ignored. 2. 3198 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1596	36.47	-17.53	54	37.81	28.6	4.95	34.89	113	171	Average
1596	53.25	-20.75	74	54.59	28.6	4.95	34.89	113	171	Peak
2425	90.04	-	-	85.71	32.4	6.49	34.56	113	171	Average
2425	100.06	-	-	95.75	32.38	6.49	34.56	113	171	Peak
3198	56.06	-24	80.06	69.22	33.1	7.78	54.04	100	0	Peak
4845	48.39	-25.61	74	58.98	34.86	10.17	55.62	100	0	Peak
7266	48.92	-25.08	74	58.18	36.14	10.95	56.35	100	0	Peak



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2435 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1600	38.05	-15.95	54	39.37	28.6	4.95	34.87	104	202	Average
1600	54.8	-19.2	74	56.12	28.6	4.95	34.87	104	202	Peak
2435	98.6	-	-	94.24	32.4	6.52	34.56	104	202	Average
2435	108.63	-	-	104.27	32.4	6.52	34.56	104	202	Peak
3195	54.23	-34.4	88.63	67.41	33.1	7.76	54.04	100	0	Peak
4875	47.97	-26.03	74	58.62	34.85	10.18	55.68	100	0	Peak
7311	50.07	-23.93	74	59.27	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2440 MHz is fundamental signal which can be ignored. 2. 3186 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1596	34.55	-19.45	54	35.89	28.6	4.95	34.89	113	181	Average
1596	51.42	-22.58	74	52.76	28.6	4.95	34.89	113	181	Peak
2440	93.89	-	-	89.5	32.43	6.52	34.56	113	181	Average
2440	103.91	-	-	99.52	32.43	6.52	34.56	113	181	Peak
3186	56.47	-27.44	83.91	69.65	33.1	7.76	54.04	100	0	Peak
4875	47.89	-26.11	74	58.54	34.85	10.18	55.68	100	0	Peak
7311	48.85	-25.15	74	58.05	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	09	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2454 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
213.06	35.41	-8.09	43.5	56.33	9.1	1.62	31.64	-	-	Peak
239.52	37.22	-8.78	46	55.86	11.3	1.71	31.65	-	-	Peak
299.73	34.26	-11.74	46	50.83	13.2	1.9	31.67	-	-	Peak
307.7	36.81	-9.19	46	53.18	13.35	1.93	31.65	-	-	Peak
865.6	37.37	-8.63	46	45.62	20.35	3.21	31.81	-	-	Peak
927.2	38.38	-7.62	46	45.76	20.7	3.26	31.34	106	216	Peak
1598	35.85	-18.15	54	37.19	28.6	4.95	34.89	104	204	Average
1598	52.79	-21.21	74	54.13	28.6	4.95	34.89	104	204	Peak
2454	96.84	-	-	92.39	32.45	6.56	34.56	104	204	Average
2454	106.87	-	-	102.42	32.45	6.56	34.56	104	204	Peak
3195	56.42	-30.45	86.87	69.6	33.1	7.76	54.04	100	0	Peak
4905	48.09	-25.91	74	58.8	34.83	10.2	55.74	100	0	Peak
7356	48.5	-25.5	74	57.63	36.13	10.92	56.18	100	0	Peak



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	09	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2456 MHz is fundamental signal which can be ignored. 2. 3198 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.46	-3.54	40	48.68	18.9	0.6	31.72	100	296	Peak
215.76	33.36	-10.14	43.5	54.29	9.1	1.63	31.66	-	-	Peak
239.52	37.61	-8.39	46	56.25	11.3	1.71	31.65	-	-	Peak
649.3	39.15	-6.85	46	49.12	19.2	2.8	31.97	-	-	Peak
754.3	36.48	-9.52	46	45.81	19.75	3.02	32.1	-	-	Peak
797	36.16	-9.84	46	45.25	19.8	3.09	31.98	-	-	Peak
2456	91.07	-	-	86.62	32.45	6.56	34.56	113	154	Average
2456	101.16	-	-	96.71	32.45	6.56	34.56	113	154	Peak
3198	56.74	-24.42	81.16	69.9	33.1	7.78	54.04	100	0	Peak
4905	47.94	-26.06	74	58.65	34.83	10.2	55.74	100	0	Peak
7356	48.97	-25.03	74	58.1	36.13	10.92	56.18	100	0	Peak



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	03	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2421 MHz is fundamental signal which can be ignored. 2. 3186 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	23.07	-16.93	40	35.29	18.9	0.6	31.72	-	-	Peak
216.3	36.44	-9.56	46	57.37	9.1	1.63	31.66	-	-	Peak
239.79	36.3	-9.7	46	54.94	11.3	1.71	31.65	-	-	Peak
799.8	35.63	-10.37	46	44.7	19.8	3.1	31.97	-	-	Peak
865.6	36.83	-9.17	46	45.08	20.35	3.21	31.81	-	-	Peak
920.9	38.37	-7.63	46	45.81	20.7	3.26	31.4	100	134	Peak
1600	35.15	-18.85	54	36.47	28.6	4.95	34.87	100	12	Average
1600	50.86	-23.14	74	52.18	28.6	4.95	34.87	100	12	Peak
2421	91.27	-	-	86.91	32.4	6.52	34.56	103	213	Average
2421	101.59	-	-	97.23	32.4	6.52	34.56	103	213	Peak
3186	56.42	-25.17	81.59	69.6	33.1	7.76	54.04	100	0	Peak
4845	47.32	-26.68	74	57.91	34.86	10.17	55.62	100	0	Peak
7266	49.12	-24.88	74	58.38	36.14	10.95	56.35	100	0	Peak



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	03	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2424 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.22	-3.78	40	48.44	18.9	0.6	31.72	100	169	Peak
216.03	34.81	-11.19	46	55.74	9.1	1.63	31.66	-	-	Peak
238.44	34.58	-11.42	46	53.34	11.18	1.71	31.65	-	-	Peak
757.8	37.12	-8.88	46	46.45	19.73	3.03	32.09	-	-	Peak
797	36.35	-9.65	46	45.44	19.8	3.09	31.98	-	-	Peak
862.1	36.4	-9.6	46	44.64	20.38	3.21	31.83	-	-	Peak
1596	47.88	-26.12	74	49.22	28.6	4.95	34.89	100	0	Peak
2424	86.8	-	-	82.44	32.4	6.52	34.56	200	150	Average
2424	96.52	-	-	92.16	32.4	6.52	34.56	200	150	Peak
3195	57.87	-18.65	76.52	71.05	33.1	7.76	54.04	100	0	Peak
4845	47.68	-26.32	74	58.27	34.86	10.17	55.62	100	0	Peak
7266	49.32	-24.68	74	58.58	36.14	10.95	56.35	100	0	Peak



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2438 MHz is fundamental signal which can be ignored. 2. 3189 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1594	35.24	-18.76	54	36.58	28.6	4.95	34.89	100	10	Average
1594	53.64	-20.36	74	54.98	28.6	4.95	34.89	100	10	Peak
2438	95.84	-	-	91.48	32.4	6.52	34.56	103	214	Average
2438	106.25	-	-	101.89	32.4	6.52	34.56	103	214	Peak
3189	55.95	-30.3	86.25	69.13	33.1	7.76	54.04	100	0	Peak
4875	48	-26	74	58.65	34.85	10.18	55.68	100	0	Peak
7311	48.91	-25.09	74	58.11	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2438 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2438	90.47	-	-	86.08	32.43	6.52	34.56	200	164	Average
2438	101.88	-	-	97.49	32.43	6.52	34.56	200	164	Peak
3195	59.26	-22.62	81.88	72.44	33.1	7.76	54.04	100	0	Peak
4875	48.77	-25.23	74	59.42	34.85	10.18	55.68	100	0	Peak
7311	49.24	-24.76	74	58.44	36.14	10.94	56.28	100	0	Peak



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	09	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 2454 MHz is fundamental signal which can be ignored. 2. 3189 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	37.11	-16.89	54	38.45	28.6	4.95	34.89	100	354	Average
1598	53.53	-20.47	74	54.87	28.6	4.95	34.89	103	206	Peak
2454	91.53	-	-	87.08	32.45	6.56	34.56	103	206	Average
2454	101.66	-	-	97.21	32.45	6.56	34.56	103	206	Peak
3189	56.45	-25.21	81.66	69.63	33.1	7.76	54.04	100	0	Peak
4905	46.84	-27.16	74	57.55	34.83	10.2	55.74	100	0	Peak
7356	48.47	-25.53	74	57.6	36.13	10.92	56.18	100	0	Peak



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	09	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 2450 MHz is fundamental signal which can be ignored. 2. 3195 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
2450	88.12	-	-	83.67	32.45	6.56	34.56	200	156	Average
2450	98.44	-	-	93.99	32.45	6.56	34.56	200	156	Peak
3195	55.4	-23.04	78.44	68.58	33.1	7.76	54.04	100	0	Peak
4905	47.45	-26.55	74	58.16	34.83	10.2	55.74	100	0	Peak
7356	48.86	-25.14	74	57.99	36.13	10.92	56.18	100	0	Peak



Test Mode :	802.11a – Ant. 1	Temperature :	26~27°C
Test Channel :	149	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5746 MHz is fundamental signal which can be ignored. 2. 3186 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
97.23	32.91	-10.59	43.5	53.21	10.28	1.09	31.67	-	-	Peak
166.89	34.5	-9	43.5	54.77	9.92	1.47	31.66	-	-	Peak
222.78	38.18	-7.82	46	58.77	9.4	1.66	31.65	-	-	Peak
311.2	37.11	-8.89	46	53.4	13.41	1.94	31.64	-	-	Peak
799.8	38.36	-7.64	46	47.43	19.8	3.1	31.97	-	-	Peak
926.5	42.34	-3.66	46	49.72	20.7	3.26	31.34	100	132	Peak
1596	34.07	-19.93	54	54.44	28.6	4.95	53.92	123	257	Average
1596	56.21	-17.79	74	76.58	28.6	4.95	53.92	123	257	Peak
3186	56.68	-32.31	88.99	69.86	33.1	7.76	54.04	100	0	Peak
5746	97.77	-	-	84.83	35.44	11.34	33.84	141	259	Average
5746	108.99	-	-	96.05	35.44	11.34	33.84	141	259	Peak
11490	50.97	-23.03	74	55.37	38.39	11.04	53.83	100	0	Peak



Test Mode :	802.11a – Ant. 1	Temperature :	26~27°C
Test Channel :	149	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5746 MHz is fundamental signal which can be ignored. 2. 2398 MHz and 3198 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.54	-3.46	40	48.76	18.9	0.6	31.72	-	-	Peak
153.39	36.31	-7.19	43.5	56.37	10.2	1.42	31.68	-	-	Peak
216.3	39.34	-6.66	46	60.27	9.1	1.63	31.66	-	-	Peak
600.3	35.56	-10.44	46	46.17	18.8	2.72	32.13	-	-	Peak
649.3	42.82	-3.18	46	52.79	19.2	2.8	31.97	100	136	Peak
916	38.21	-7.79	46	45.75	20.65	3.25	31.44	-	-	Peak
1598	33.76	-20.24	54	54.13	28.6	4.95	53.92	100	248	Average
1598	55.85	-18.15	74	76.22	28.6	4.95	53.92	100	248	Peak
2398	53.02	-37.12	90.14	68.13	32.36	6.45	53.92	100	0	Peak
3198	59.31	-30.83	90.14	72.47	33.1	7.78	54.04	100	0	Peak
5746	98.84	-	-	85.85	35.44	11.39	33.84	101	242	Average
5746	110.14	-	-	97.15	35.44	11.39	33.84	101	242	Peak
11490	50.39	-23.61	74	54.79	38.39	11.04	53.83	100	0	Peak



Test Mode :	802.11a – Ant. 1	Temperature :	26~27°C
Test Channel :	157	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5786 MHz is fundamental signal which can be ignored. 2. 3198 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	34.85	-19.15	54	55.22	28.6	4.95	53.92	121	268	Average
1598	56.98	-17.02	74	77.35	28.6	4.95	53.92	121	268	Peak
3198	56.52	-31.2	87.72	69.68	33.1	7.78	54.04	100	0	Peak
5786	96.89	-	-	83.75	35.51	11.47	33.84	139	269	Average
5786	107.72	-	-	94.58	35.51	11.47	33.84	139	269	Peak
11570	50.5	-23.5	74	54.66	38.51	11.09	53.76	100	0	Peak



Test Mode :	802.11a – Ant. 1	Temperature :	26~27°C
Test Channel :	157	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5784 MHz is fundamental signal which can be ignored. 2. 2394 MHz and 3198 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1594	32.78	-21.22	54	53.15	28.6	4.95	53.92	100	284	Average
1594	54.96	-19.04	74	75.33	28.6	4.95	53.92	100	284	Peak
2394	54.16	-34.28	88.44	69.27	32.36	6.45	53.92	100	0	Peak
3198	59.53	-28.91	88.44	72.69	33.1	7.78	54.04	100	0	Peak
5784	97.45	-	-	84.37	35.49	11.43	33.84	100	240	Average
5784	108.44	-	-	95.36	35.49	11.43	33.84	100	240	Peak
11570	50.7	-23.3	74	54.86	38.51	11.09	53.76	100	0	Peak



Test Mode :	802.11a – Ant. 1	Temperature :	26~27°C
Test Channel :	165	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5824 MHz is fundamental signal which can be ignored. 2. 2398 MHz and 3186 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1596	34.19	-19.81	54	54.56	28.6	4.95	53.92	124	296	Average
1596	56.39	-17.61	74	76.76	28.6	4.95	53.92	124	296	Peak
2398	51.64	-36.26	87.9	66.75	32.36	6.45	53.92	100	0	Peak
3186	56.52	-31.38	87.9	69.7	33.1	7.76	54.04	100	0	Peak
5824	96.63	-	-	83.4	35.56	11.51	33.84	138	268	Average
5824	107.9	-	-	94.67	35.56	11.51	33.84	138	268	Peak
11650	50.7	-23.3	74	54.66	38.62	11.14	53.72	100	0	Peak



Test Mode :	802.11a – Ant. 1	Temperature :	26~27°C
Test Channel :	165	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5826 MHz is fundamental signal which can be ignored. 2. 2396 MHz and 3196 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	33.04	-20.96	54	53.41	28.6	4.95	53.92	100	283	Average
1598	55.18	-18.82	74	75.55	28.6	4.95	53.92	100	283	Peak
2396	51.52	-37.24	88.76	66.63	32.36	6.45	53.92	100	0	Peak
3196	61.02	-27.74	88.76	74.18	33.1	7.78	54.04	100	0	Peak
5826	98.21	-	-	84.98	35.56	11.51	33.84	109	243	Average
5826	108.76	-	-	95.53	35.56	11.51	33.84	109	243	Peak
11650	50.61	-23.39	74	54.57	38.62	11.14	53.72	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	149	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5748 MHz is fundamental signal which can be ignored. 2. 2398 MHz and 3188 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
96.96	32.75	-10.75	43.5	53.05	10.28	1.09	31.67	-	-	Peak
161.76	34.5	-9	43.5	54.69	10	1.46	31.65	-	-	Peak
217.38	38.34	-7.66	46	59.26	9.1	1.64	31.66	-	-	Peak
308.4	35.5	-10.5	46	51.85	13.36	1.93	31.64	-	-	Peak
799.8	40.19	-5.81	46	49.26	19.8	3.1	31.97	109	219	Peak
918.1	39.15	-6.85	46	46.63	20.68	3.26	31.42	-	-	Peak
1596	32.21	-21.79	54	52.58	28.6	4.95	53.92	132	246	Average
1596	54.27	-19.73	74	74.64	28.6	4.95	53.92	132	246	Peak
2398	53.24	-35.12	88.36	68.35	32.36	6.45	53.92	100	0	Peak
3188	56.41	-31.95	88.36	69.59	33.1	7.76	54.04	100	0	Peak
5748	97.19	-	-	84.2	35.44	11.39	33.84	140	259	Average
5748	108.36	-	-	95.37	35.44	11.39	33.84	140	259	Peak
11490	50.67	-23.33	74	55.07	38.39	11.04	53.83	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	149	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5746 MHz is fundamental signal which can be ignored. 2. 2400 MHz and 3196 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.18	-3.82	40	48.4	18.9	0.6	31.72	-	-	Peak
153.66	35.9	-7.6	43.5	55.96	10.2	1.42	31.68	-	-	Peak
215.49	39.16	-4.34	43.5	60.08	9.1	1.63	31.65	-	-	Peak
539.4	35.94	-10.06	46	46.49	18.74	2.57	31.86	-	-	Peak
649.3	42.47	-3.53	46	52.44	19.2	2.8	31.97	100	269	Peak
754.3	35.78	-10.22	46	45.11	19.75	3.02	32.1	-	-	Peak
1596	34.03	-19.97	54	54.4	28.6	4.95	53.92	100	236	Average
1596	56.23	-17.77	74	76.6	28.6	4.95	53.92	100	236	Peak
2400	53.19	-36.27	89.46	68.3	32.36	6.45	53.92	100	0	Peak
3196	59.59	-29.87	89.46	72.75	33.1	7.78	54.04	100	0	Peak
5746	98.25	-	-	85.26	35.44	11.39	33.84	100	250	Average
5746	109.46	-	-	96.47	35.44	11.39	33.84	100	250	Peak
11490	50.96	-23.04	74	55.12	38.51	11.09	53.76	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	157	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5788 MHz is fundamental signal which can be ignored. 2. 2398 MHz and 3188 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1592	34.18	-19.82	54	54.55	28.6	4.95	53.92	131	249	Average
1592	56.28	-17.72	74	76.65	28.6	4.95	53.92	131	249	Peak
2398	55.18	-31.8	86.98	70.29	32.36	6.45	53.92	100	0	Peak
3188	56.39	-30.59	86.98	69.57	33.1	7.76	54.04	100	0	Peak
5788	96.21	-	-	83.07	35.51	11.47	33.84	139	270	Average
5788	106.98	-	-	93.84	35.51	11.47	33.84	139	270	Peak
11570	49.68	-24.32	74	53.84	38.51	11.09	53.76	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	157	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5788 MHz is fundamental signal which can be ignored. 2. 2398 MHz and 3196 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	33.81	-20.19	54	54.18	28.6	4.95	53.92	100	269	Average
1598	55.94	-18.06	74	76.31	28.6	4.95	53.92	100	269	Peak
2398	52.35	-35.52	87.87	67.46	32.36	6.45	53.92	100	0	Peak
3196	58.48	-29.39	87.87	71.64	33.1	7.78	54.04	100	0	Peak
5788	96.72	-	-	83.58	35.51	11.47	33.84	100	244	Average
5788	107.87	-	-	94.73	35.51	11.47	33.84	100	244	Peak
11570	50.96	-23.04	74	55.12	38.51	11.09	53.76	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	165	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5824 MHz is fundamental signal which can be ignored. 2. 2402 MHz and 3186 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1596	34.26	-19.74	54	54.63	28.6	4.95	53.92	124	263	Average
1596	56.36	-17.64	74	76.73	28.6	4.95	53.92	124	263	Peak
2402	52.05	-34.39	86.44	67.16	32.36	6.45	53.92	100	0	Peak
3186	56.28	-30.16	86.44	69.46	33.1	7.76	54.04	100	0	Peak
5824	95.26	-	-	82.06	35.53	11.51	33.84	141	248	Average
5824	106.44	-	-	93.24	35.53	11.51	33.84	141	248	Peak
11650	49.78	-24.22	74	53.74	38.62	11.14	53.72	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	165	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5826 MHz is fundamental signal which can be ignored. 2. 2394 MHz and 3198 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1594	32.27	-21.73	54	52.64	28.6	4.95	53.92	100	253	Average
1594	54.34	-19.66	74	74.71	28.6	4.95	53.92	100	253	Peak
2394	53.66	-34.64	88.3	68.77	32.36	6.45	53.92	100	0	Peak
3198	58.68	-29.62	88.3	71.84	33.1	7.78	54.04	100	0	Peak
5826	97.37	-	-	84.14	35.56	11.51	33.84	100	249	Average
5826	108.3	-	-	95.07	35.56	11.51	33.84	100	249	Peak
11650	50.68	-23.32	74	54.64	38.62	11.14	53.72	100	0	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	149	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5744 MHz is fundamental signal which can be ignored. 2. 2394 MHz and 3188 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
95.61	32.57	-10.93	43.5	53.12	10.04	1.08	31.67	-	-	Peak
167.97	35.21	-8.29	43.5	55.52	9.88	1.48	31.67	-	-	Peak
216.57	36.93	-9.07	46	57.86	9.1	1.63	31.66	-	-	Peak
301.4	34.78	-11.22	46	51.3	13.24	1.91	31.67	-	-	Peak
799.8	39.78	-6.22	46	48.85	19.8	3.1	31.97	100	249	Peak
946.8	39.69	-6.31	46	46.7	20.87	3.28	31.16	-	-	Peak
1600	38.64	-15.36	54	59.01	28.6	4.95	53.92	124	264	Average
1600	55.56	-18.44	74	75.93	28.6	4.95	53.92	124	264	Peak
2394	53.69	-33.97	87.66	68.8	32.36	6.45	53.92	100	0	Peak
3188	56.71	-30.95	87.66	69.89	33.1	7.76	54.04	100	0	Peak
5744	96.91	-	-	83.92	35.44	11.39	33.84	128	260	Average
5744	107.66	-	-	94.67	35.44	11.39	33.84	128	260	Peak
11490	50.72	-23.28	74	55.12	38.39	11.04	53.83	100	0	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	149	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5747 MHz is fundamental signal which can be ignored. 2. 2394 MHz and 3190 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.89	-3.11	40	49.11	18.9	0.6	31.72	100	149	Peak
153.93	35.52	-7.98	43.5	55.58	10.2	1.42	31.68	-	-	Peak
215.76	39.25	-4.25	43.5	60.18	9.1	1.63	31.66	-	-	Peak
540.8	35.61	-10.39	46	46.06	18.83	2.58	31.86	-	-	Peak
649.3	41.42	-4.58	46	51.39	19.2	2.8	31.97	-	-	Peak
755.7	35.95	-10.05	46	45.27	19.75	3.03	32.1	-	-	Peak
1596	38.52	-15.48	54	58.89	28.6	4.95	53.92	100	293	Average
1596	55.47	-18.53	74	75.84	28.6	4.95	53.92	100	293	Peak
2394	54.29	-33.67	87.96	69.4	32.36	6.45	53.92	100	0	Peak
3190	57.51	-30.45	87.96	70.69	33.1	7.76	54.04	100	0	Peak
5747	96.99	-	-	84	35.44	11.39	33.84	100	250	Average
5747	107.96	-	-	94.97	35.44	11.39	33.84	100	250	Peak
11490	45.75	-8.25	54	50.15	38.39	11.04	53.83	114	90	Average
11490	57.22	-16.78	74	61.62	38.39	11.04	53.83	114	90	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	157	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5788 MHz is fundamental signal which can be ignored. 2. 2396 MHz and 3188 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1594	38.35	-15.65	54	58.72	28.6	4.95	53.92	136	219	Average
1594	55.3	-18.7	74	75.67	28.6	4.95	53.92	136	219	Peak
2396	52.73	-34.37	87.1	67.84	32.36	6.45	53.92	100	0	Peak
3188	56.65	-30.45	87.1	69.83	33.1	7.76	54.04	100	0	Peak
5788	96.09	-	-	82.95	35.51	11.47	33.84	129	255	Average
5788	107.1	-	-	93.96	35.51	11.47	33.84	129	255	Peak
11570	50.11	-23.89	74	54.27	38.51	11.09	53.76	100	0	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	157	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5788 MHz is fundamental signal which can be ignored. 2. 2400 MHz and 3196 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	38.68	-15.32	54	59.05	28.6	4.95	53.92	100	268	Average
1598	55.54	-18.46	74	75.91	28.6	4.95	53.92	100	268	Peak
2400	53.31	-33.98	87.29	68.42	32.36	6.45	53.92	100	0	Peak
3196	59.6	-27.69	87.29	72.76	33.1	7.78	54.04	100	0	Peak
5788	96.15	-	-	83.01	35.51	11.47	33.84	100	224	Average
5788	107.29	-	-	94.15	35.51	11.47	33.84	100	224	Peak
11570	45.02	-8.98	54	49.17	38.51	11.1	53.76	119	93	Average
11570	54.08	-19.92	74	58.23	38.51	11.1	53.76	119	93	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	165	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5829 MHz is fundamental signal which can be ignored. 2. 2398 MHz and 3186 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	39.79	-14.21	54	60.16	28.6	4.95	53.92	116	258	Average
1598	56.64	-17.36	74	77.01	28.6	4.95	53.92	116	258	Peak
2398	53.09	-32.59	85.68	68.2	32.36	6.45	53.92	100	0	Peak
3186	56.38	-29.3	85.68	69.56	33.1	7.76	54.04	100	0	Peak
5829	95.32	-	-	82.09	35.56	11.51	33.84	128	255	Average
5829	105.68	-	-	92.45	35.56	11.51	33.84	128	255	Peak
11650	50.8	-23.2	74	54.76	38.62	11.14	53.72	100	0	Peak



Test Mode :	802.11n HT20 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	165	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5823 MHz is fundamental signal which can be ignored. 2. 2392 MHz and 3194 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	38.64	-15.36	54	59.01	28.6	4.95	53.92	100	269	Average
1598	55.53	-18.47	74	75.9	28.6	4.95	53.92	100	269	Peak
2392	53.74	-32.71	86.45	68.85	32.36	6.45	53.92	100	0	Peak
3194	58.81	-27.64	86.45	71.99	33.1	7.76	54.04	100	0	Peak
5823	95.83	-	-	82.6	35.56	11.51	33.84	120	247	Average
5823	106.45	-	-	93.22	35.56	11.51	33.84	120	247	Peak
11650	44.65	-9.35	54	48.57	38.65	11.14	53.71	117	82	Average
11650	53.37	-20.63	74	57.29	38.65	11.14	53.71	117	82	Peak



Test Mode :	802.11n HT20 – SISO Ant. 2	Temperature :	26~27°C
Test Channel :	149	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5746 MHz is fundamental signal which can be ignored. 2. 2400 MHz and 3194 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
97.77	33.68	-9.82	43.5	53.75	10.52	1.09	31.68	-	-	Peak
167.16	35.86	-7.64	43.5	56.13	9.92	1.47	31.66	-	-	Peak
216.3	37.96	-8.04	46	58.89	9.1	1.63	31.66	-	-	Peak
799.8	39.25	-6.75	46	48.32	19.8	3.1	31.97	-	-	Peak
881	39.66	-6.34	46	47.66	20.5	3.22	31.72	100	215	Peak
909	39.64	-6.36	46	47.3	20.6	3.25	31.51	-	-	Peak
1598	33.23	-20.77	54	53.6	28.6	4.95	53.92	135	215	Average
1598	55.29	-18.71	74	75.66	28.6	4.95	53.92	135	215	Peak
2400	50.87	-39.09	89.96	65.98	32.36	6.45	53.92	100	0	Peak
3194	58.52	-31.44	89.96	71.7	33.1	7.76	54.04	100	0	Peak
5746	98.75	-	-	85.76	35.44	11.39	33.84	100	218	Average
5746	109.96	-	-	96.97	35.44	11.39	33.84	100	218	Peak
11490	49.99	-24.01	74	54.39	38.39	11.04	53.83	100	0	Peak



Test Mode :	802.11n HT20 – SISO Ant. 2	Temperature :	26~27°C
Test Channel :	149	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5747 MHz is fundamental signal which can be ignored. 2. 2394 MHz and 3194 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.79	-3.21	40	49.01	18.9	0.6	31.72	100	299	Peak
153.93	35.99	-7.51	43.5	56.05	10.2	1.42	31.68	-	-	Peak
215.76	39.03	-4.47	43.5	59.96	9.1	1.63	31.66	-	-	Peak
538.7	36	-10	46	46.62	18.67	2.57	31.86	-	-	Peak
649.3	42.27	-3.73	46	52.24	19.2	2.8	31.97	-	-	Peak
926.5	35.45	-10.55	46	42.83	20.7	3.26	31.34	-	-	Peak
1598	34.71	-19.29	54	55.08	28.6	4.95	53.92	100	139	Average
1598	56.84	-17.16	74	77.21	28.6	4.95	53.92	100	139	Peak
2394	55.09	-33.02	88.11	70.2	32.36	6.45	53.92	100	0	Peak
3194	60.7	-27.41	88.11	73.88	33.1	7.76	54.04	100	0	Peak
5747	96.75	-	-	83.76	35.44	11.39	33.84	100	269	Average
5747	108.11	-	-	95.1	35.46	11.39	33.84	100	269	Peak
11490	50.12	-23.88	74	54.52	38.39	11.04	53.83	100	0	Peak



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	151	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5757 MHz is fundamental signal which can be ignored. 2. 2402 MHz and 3188 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
96.42	33.27	-10.23	43.5	53.82	10.04	1.08	31.67	-	-	Peak
162.3	34.88	-8.62	43.5	55.08	10	1.46	31.66	-	-	Peak
214.14	37.5	-6	43.5	58.41	9.1	1.63	31.64	100	249	Peak
302.1	35.04	-10.96	46	51.54	13.25	1.91	31.66	-	-	Peak
646.5	33.89	-12.11	46	43.87	19.2	2.8	31.98	-	-	Peak
799.8	38.82	-7.18	46	47.89	19.8	3.1	31.97	-	-	Peak
1594	40.16	-13.84	54	60.53	28.6	4.95	53.92	138	204	Average
1594	57.05	-16.95	74	77.42	28.6	4.95	53.92	138	204	Peak
2402	51.87	-34.68	86.55	66.98	32.36	6.45	53.92	100	0	Peak
3188	56.37	-30.18	86.55	69.55	33.1	7.76	54.04	100	0	Peak
5757	96.97	-	-	83.96	35.46	11.39	33.84	129	258	Average
5757	106.55	-	-	93.54	35.46	11.39	33.84	129	258	Peak
11511	50.11	-23.89	74	54.45	38.4	11.06	53.8	100	0	Peak



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	151	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5758 MHz is fundamental signal which can be ignored. 2. 2394 MHz and 3196 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.62	-3.38	40	48.84	18.9	0.6	31.72	100	139	Peak
95.88	34.23	-9.27	43.5	54.78	10.04	1.08	31.67	-	-	Peak
215.76	39.42	-4.08	43.5	60.35	9.1	1.63	31.66	-	-	Peak
646.5	41.88	-4.12	46	51.86	19.2	2.8	31.98	-	-	Peak
700.4	36.88	-9.12	46	47.07	18.9	2.92	32.01	-	-	Peak
757.8	36.05	-9.95	46	45.38	19.73	3.03	32.09	-	-	Peak
1600	39.38	-14.62	54	59.75	28.6	4.95	53.92	100	216	Average
1600	56.33	-17.67	74	76.7	28.6	4.95	53.92	100	216	Peak
2394	52.78	-34.1	86.88	67.89	32.36	6.45	53.92	100	0	Peak
3196	59.95	-26.93	86.88	73.11	33.1	7.78	54.04	100	0	Peak
5758	98.1	-	-	85.09	35.46	11.39	33.84	100	251	Average
5758	106.88	-	-	93.87	35.46	11.39	33.84	100	251	Peak
11511	50.21	-23.79	74	54.55	38.4	11.06	53.8	100	0	Peak



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	159	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5798 MHz is fundamental signal which can be ignored. 2. 2402 MHz and 3188 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1592	38.85	-15.15	54	59.22	28.6	4.95	53.92	132	204	Average
1592	55.71	-18.29	74	76.08	28.6	4.95	53.92	132	204	Peak
2402	52.83	-32.01	84.84	67.94	32.36	6.45	53.92	100	0	Peak
3188	56.57	-28.27	84.84	69.75	33.1	7.76	54.04	100	0	Peak
5798	94.99	-	-	81.85	35.51	11.47	33.84	140	256	Average
5798	104.84	-	-	91.7	35.51	11.47	33.84	140	256	Peak
11590	50.24	-23.76	74	54.35	38.54	11.1	53.75	100	0	Peak



Test Mode :	802.11n HT40 – SISO Ant. 1	Temperature :	26~27°C
Test Channel :	159	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5798 MHz is fundamental signal which can be ignored. 2. 2396 MHz and 3190 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	37.41	-16.59	54	57.78	28.6	4.95	53.92	100	249	Average
1598	54.36	-19.64	74	74.73	28.6	4.95	53.92	100	249	Peak
2396	53.44	-33.01	86.45	68.55	32.36	6.45	53.92	100	0	Peak
3190	58.23	-28.22	86.45	71.41	33.1	7.76	54.04	100	0	Peak
5798	96.57	-	-	83.43	35.51	11.47	33.84	100	239	Average
5798	106.45	-	-	93.31	35.51	11.47	33.84	100	239	Peak
11590	50.35	-23.65	74	54.46	38.54	11.1	53.75	100	0	Peak



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	151	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5753 MHz is fundamental signal which can be ignored. 2. 2394 MHz and 3188 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
95.61	32.6	-10.9	43.5	53.15	10.04	1.08	31.67	-	-	Peak
167.97	35.32	-8.18	43.5	55.63	9.88	1.48	31.67	-	-	Peak
216.03	38.75	-7.25	46	59.68	9.1	1.63	31.66	-	-	Peak
301.4	34.95	-11.05	46	51.47	13.24	1.91	31.67	-	-	Peak
797	39.23	-6.77	46	48.32	19.8	3.09	31.98	-	-	Peak
929.3	39.29	-6.71	46	46.65	20.7	3.26	31.32	100	139	Peak
1594	41.66	-12.34	54	62.03	28.6	4.95	53.92	132	139	Average
1594	58.58	-15.42	74	78.95	28.6	4.95	53.92	132	139	Peak
2394	49.94	-36.3	86.24	65.05	32.36	6.45	53.92	100	0	Peak
3188	58.59	-27.65	86.24	71.77	33.1	7.76	54.04	100	0	Peak
5753	95.9	-	-	82.89	35.46	11.39	33.84	117	256	Average
5753	106.24	-	-	93.23	35.46	11.39	33.84	117	256	Peak
11510	50.25	-23.75	74	54.59	38.4	11.06	53.8	100	0	Peak



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	151	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5752 MHz is fundamental signal which can be ignored. 2. 2392 MHz and 3198 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
30	36.33	-3.67	40	48.55	18.9	0.6	31.72	-	-	Peak
153.66	35.25	-8.25	43.5	55.31	10.2	1.42	31.68	-	-	Peak
216.57	39.44	-6.56	46	60.37	9.1	1.63	31.66	-	-	Peak
538.7	37.21	-8.79	46	47.83	18.67	2.57	31.86	-	-	Peak
600.3	36.86	-9.14	46	47.47	18.8	2.72	32.13	-	-	Peak
649.3	42.39	-3.61	46	52.36	19.2	2.8	31.97	100	159	Peak
1600	38.55	-15.45	54	58.92	28.6	4.95	53.92	100	279	Average
1600	55.4	-18.6	74	75.77	28.6	4.95	53.92	100	279	Peak
2392	52.04	-35.85	87.89	67.15	32.36	6.45	53.92	100	0	Peak
3198	59.24	-28.65	87.89	72.4	33.1	7.78	54.04	100	0	Peak
5752	96.39	-	-	83.38	35.46	11.39	33.84	121	244	Average
5752	107.89	-	-	94.88	35.46	11.39	33.84	121	244	Peak
11510	45.11	-8.89	54	49.45	38.4	11.06	53.8	114	90	Average
11510	54.6	-19.4	74	58.94	38.4	11.06	53.8	114	90	Peak



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	159	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Horizontal
Remark :	1. 5798 MHz is fundamental signal which can be ignored. 2. 2402 MHz and 3190 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	38.25	-15.75	54	58.62	28.6	4.95	53.92	132	268	Average
1598	55.19	-18.81	74	75.56	28.6	4.95	53.92	132	268	Peak
2402	52.32	-31.92	84.24	67.43	32.36	6.45	53.92	100	0	Peak
3190	57.2	-27.04	84.24	70.38	33.1	7.76	54.04	100	0	Peak
5798	93.92	-	-	80.78	35.51	11.47	33.84	135	271	Average
5798	104.24	-	-	91.1	35.51	11.47	33.84	135	271	Peak
11590	50.56	-23.44	74	54.67	38.54	11.1	53.75	100	0	Peak



Test Mode :	802.11n HT40 – MIMO Ant. 1+2	Temperature :	26~27°C
Test Channel :	159	Relative Humidity :	46~47%
Test Engineer :	Kai Wang, Timberland Lin, and Hayden Wu	Polarization :	Vertical
Remark :	1. 5796 MHz is fundamental signal which can be ignored. 2. 2394 MHz and 3192 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant. Pos (cm)	Table Pos (deg)	Remark
1598	39.07	-14.93	54	59.44	28.6	4.95	53.92	100	296	Average
1598	55.96	-18.04	74	76.33	28.6	4.95	53.92	100	296	Peak
2394	53.25	-31.53	84.78	68.36	32.36	6.45	53.92	100	0	Peak
3192	60.19	-24.59	84.78	73.37	33.1	7.76	54.04	100	0	Peak
5796	94.16	-	-	81.02	35.51	11.47	33.84	122	250	Average
5796	104.78	-	-	91.64	35.51	11.47	33.84	122	250	Peak
11590	45.04	-8.96	54	49.15	38.54	11.1	53.75	119	99	Average
11590	55.24	-18.76	74	59.35	38.54	11.1	53.75	119	99	Peak

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 KHz to 30 MHz shall not exceed the limits in the following table.

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

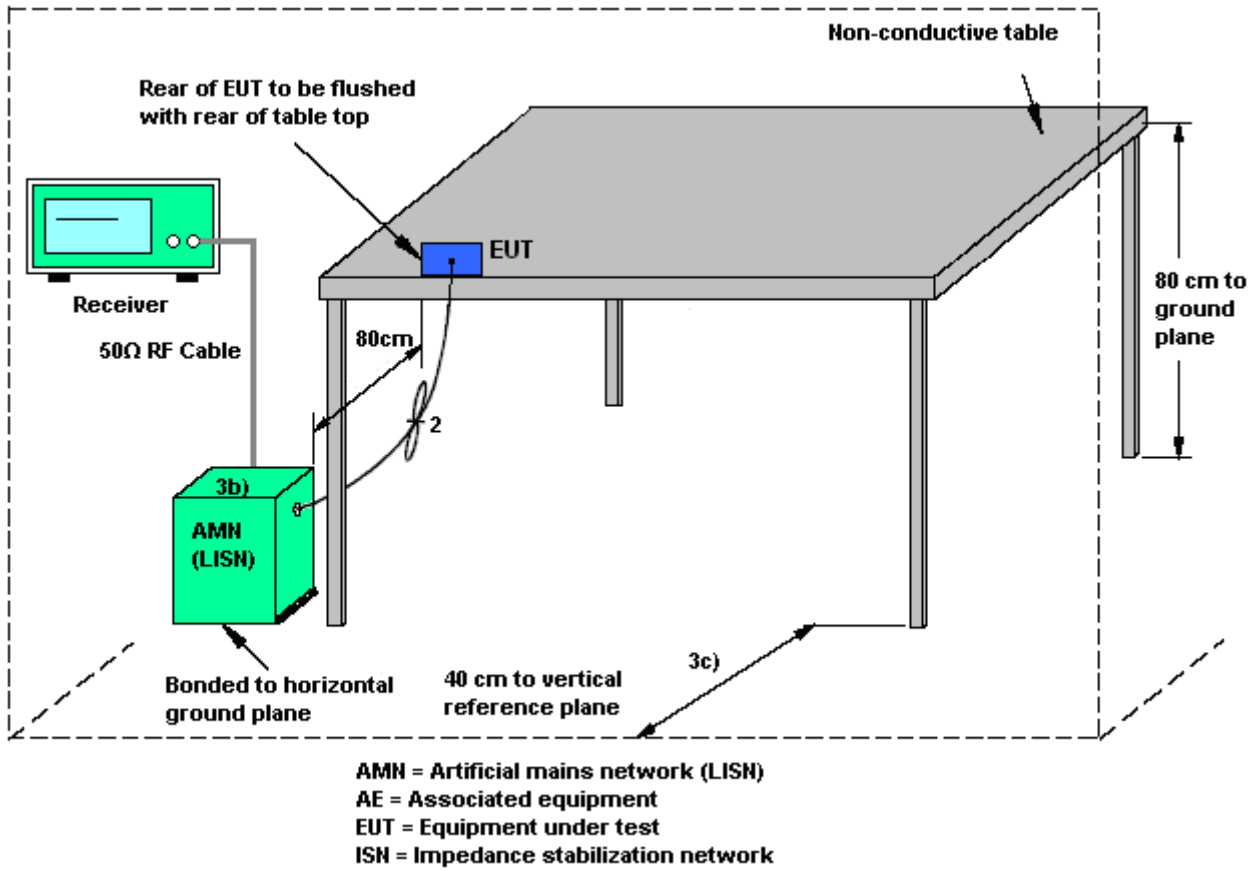
3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

3.6.3 Test Procedures

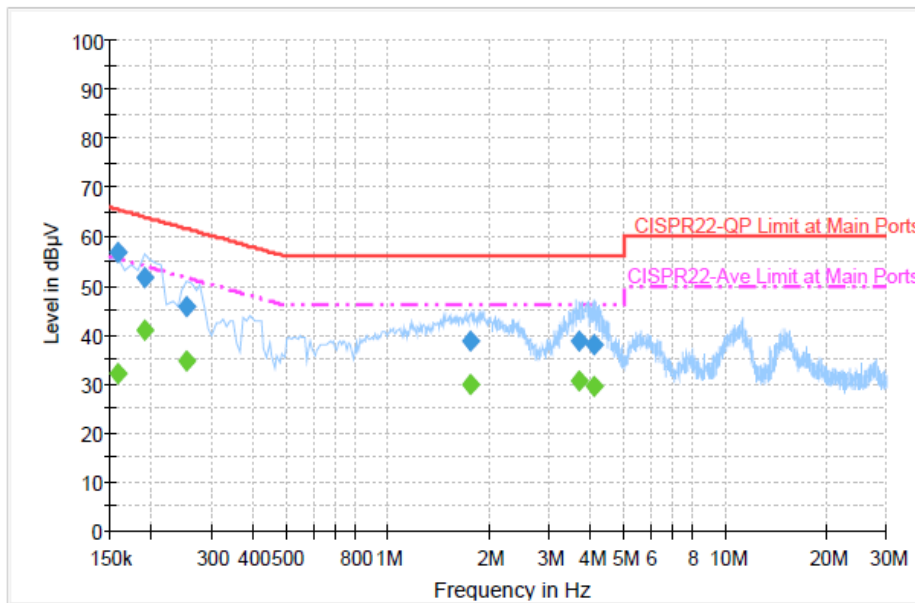
1. The testing follows the guidelines in ANSI C63.10-2009.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN).
4. All the support units are connecting to the other LISN.
5. The LISN provides 50 ohm coupling impedance for the measuring instrument.
6. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
7. Both sides of AC line were checked for maximum conducted interference.
8. The frequency range from 150 KHz to 30 MHz was searched.
9. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	20~22°C
Test Engineer :	Slash Huang	Relative Humidity :	45~47%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WLAN (5G) Link +Bluetooth Link + Camera + H Pattern + MPEG4 + Adapter + RJ-45 + USB 3.0 HD + SD Card + Earphne		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



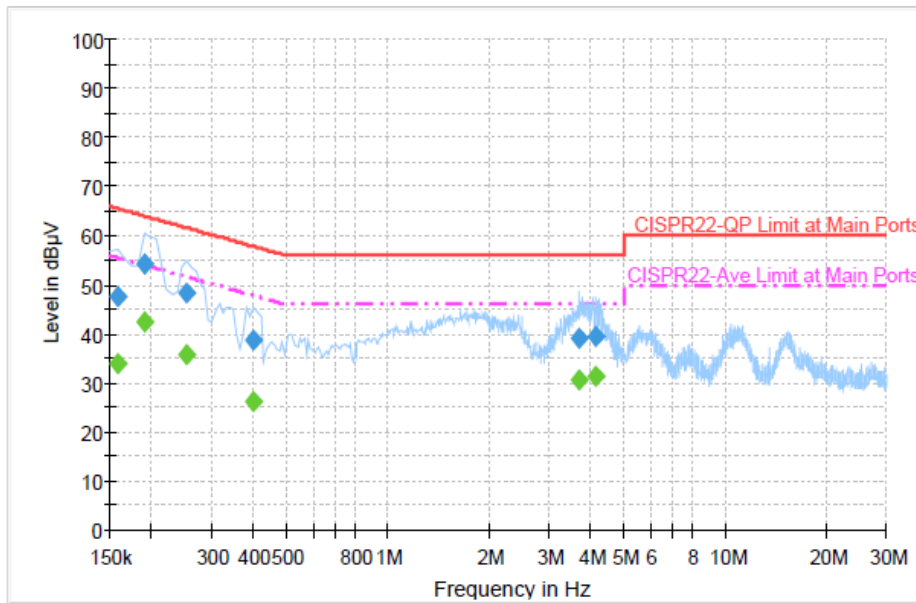
Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	56.7	Off	L1	19.4	8.9	65.6
0.190000	51.7	Off	L1	19.4	12.3	64.0
0.254000	45.8	Off	L1	19.4	15.8	61.6
1.750000	38.9	Off	L1	19.5	17.1	56.0
3.678000	38.9	Off	L1	19.6	17.1	56.0
4.062000	37.9	Off	L1	19.6	18.1	56.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	32.0	Off	L1	19.4	23.6	55.6
0.190000	41.1	Off	L1	19.4	12.9	54.0
0.254000	34.8	Off	L1	19.4	16.8	51.6
1.750000	30.0	Off	L1	19.5	16.0	46.0
3.678000	30.6	Off	L1	19.6	15.4	46.0
4.062000	29.7	Off	L1	19.6	16.3	46.0

Test Mode :	Mode 2	Temperature :	20~22°C
Test Engineer :	Slash Huang	Relative Humidity :	45~47%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WLAN (5G) Link +Bluetooth Link + Camera + H Pattern + MPEG4 + Adapter + RJ-45 + USB 3.0 HD + SD Card + Earphne		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	47.6	Off	N	19.4	18.0	65.6
0.190000	54.4	Off	N	19.4	9.6	64.0
0.254000	48.3	Off	N	19.4	13.3	61.6
0.398000	38.6	Off	N	19.5	19.3	57.9
3.678000	39.0	Off	N	19.6	17.0	56.0
4.118000	39.4	Off	N	19.6	16.6	56.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	33.9	Off	N	19.4	21.7	55.6
0.190000	42.3	Off	N	19.4	11.7	54.0
0.254000	35.8	Off	N	19.4	15.8	51.6
0.398000	26.3	Off	N	19.5	21.6	47.9
3.678000	30.8	Off	N	19.6	15.2	46.0
4.118000	31.4	Off	N	19.6	14.6	46.0

3.7 Antenna Requirements

3.7.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the Antenna exceeds 6 dBi. The use of a permanently attached Antenna or of an Antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

3.7.2 Antenna Connected Construction

Non-standard connector is used.

3.7.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit. The EUT supports MIMO mode. The composite antenna gain is as following table.

	2.4GHz	5GHz
Composite gain (dBi)	1.91	1.94
PSD Array gain (dBi)	0.00	0.00
Power limit reduction	0.00	0.00
PSD limit reduction	0.00	0.00

Power limit reduction = Composite gain – 6dBi, (min = 0)

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, (min = 0)

FCC KDB 662911 D01 Multiple Transmitter Output v01r02

For CDD transmissions, directional gain is calculated as

Directional gain = $G_{ANT} + \text{Array Gain}$, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log((N_{ANT}/N_{SS})=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100055	9kHz~40GHz	Jun. 06, 2012	Feb. 20, 2013~ Mar. 04, 2013	Jun. 05, 2013	Conducted (TH02-HY)
Power Meter	Anritsu	ML2495A	1036004	300MHz~40GHz	Sep. 08, 2012	Feb. 20, 2013~ Mar. 04, 2013	Sep. 07, 2013	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	1027253	300MHz~40GHz	Sep. 08, 2012	Feb. 20, 2013~ Mar. 04, 2013	Sep. 07, 2013	Conducted (TH02-HY)
Spectrum Analyzer	R&S	FSP30	101352	9KHz~30GHz	Nov. 07, 2012	Feb. 23, 2013~ Mar. 01, 2013	Nov. 06, 2013	Radiation (03CH06-HY)
Spectrum Analyzer	Agilent	E4408B	MY442110 30	9KHz ~ 26.5GHz	Nov. 26, 2012	Feb. 23, 2013~ Mar. 01, 2013	Nov. 25, 2013	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESVS10	834468/00 03	20MHz ~ 1000MHz	May 04, 2012	Feb. 23, 2013~ Mar. 01, 2013	May 03, 2013	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz ~ 2GHz	Oct. 06, 2012	Feb. 23, 2013~ Mar. 01, 2013	Oct. 05, 2013	Radiation (03CH06-HY)
Double Ridge Horn Antenna	EMCO	3117	00066583	1GHz ~ 18GHz	Aug. 01, 2012	Feb. 23, 2013~ Mar. 01, 2013	Jul. 31, 2013	Radiation (03CH06-HY)
Double Ridge Horn Antenna	COM-POWER	AH-118	071025	1GHz~18GHz	Aug. 09, 2012	Feb. 23, 2013~ Mar. 01, 2013	Aug. 08, 2013	Radiation (03CH06-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170 251	15GHz ~ 40GHz	Sep. 28, 2012	Feb. 23, 2013~ Mar. 01, 2013	Sep. 27, 2013	Radiation (03CH06-HY)
Preamplifier	Agilent	8449B	3008A019 17	1GHz ~ 26.5GHz	Apr. 13, 2012	Feb. 23, 2013~ Mar. 01, 2013	Apr. 12, 2013	Radiation (03CH06-HY)
Amplifier	Agilent	310N	186713	9KHz ~ 1GHz	Apr. 11, 2012	Feb. 23, 2013~ Mar. 01, 2013	Apr. 10, 2013	Radiation (03CH06-HY)
Pre Amplifier	EMCI	EMC051845	SN980048	1GHz ~ 18GHz	Jul. 21, 2012	Feb. 23, 2013~ Mar. 01, 2013	Jul. 20, 2013	Radiation (03CH06-HY)
Pre Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	159087	1GHz~18GHz	Feb. 27, 2012	Feb. 23, 2013~ Feb. 25, 2013	Feb. 26, 2013	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	159087	1GHz~18GHz	Feb. 26, 2013	Feb. 26, 2013~ Mar. 01, 2013	Feb. 25, 2014	Radiation (03CH06-HY)
Loop Antenna	R&S	HFH2-Z2	860004/00 1	9KHz ~ 30MHz	Jul. 03, 2012	Feb. 23, 2013~ Mar. 01, 2013	Jul. 02, 2013	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100356	9KHz ~ 2.75GHz	Nov. 13, 2012	Feb. 28, 2013	Nov. 12, 2013	Conduction (CO05-HY)
Two-LISN	Rohde & Schwarz	ENV216	100081	9KHz ~ 30MHz	Dec. 12, 2012	Feb. 28, 2013	Dec. 11, 2013	Conduction (CO05-HY)
Two-LISN	Rohde & Schwarz	ENV216	100080	9KHz ~ 30MHz	Dec. 06, 2012	Feb. 28, 2013	Dec. 05, 2013	Conduction (CO05-HY)
AC Power Source	APC	APC-1000W	N/A	N/A	N/A	Feb. 28, 2013	N/A	Conduction (CO05-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.26
---	------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.54
---	------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.72
---	------



Appendix A. Photographs of EUT

Please refer to Sporton report number EP322001 as below.