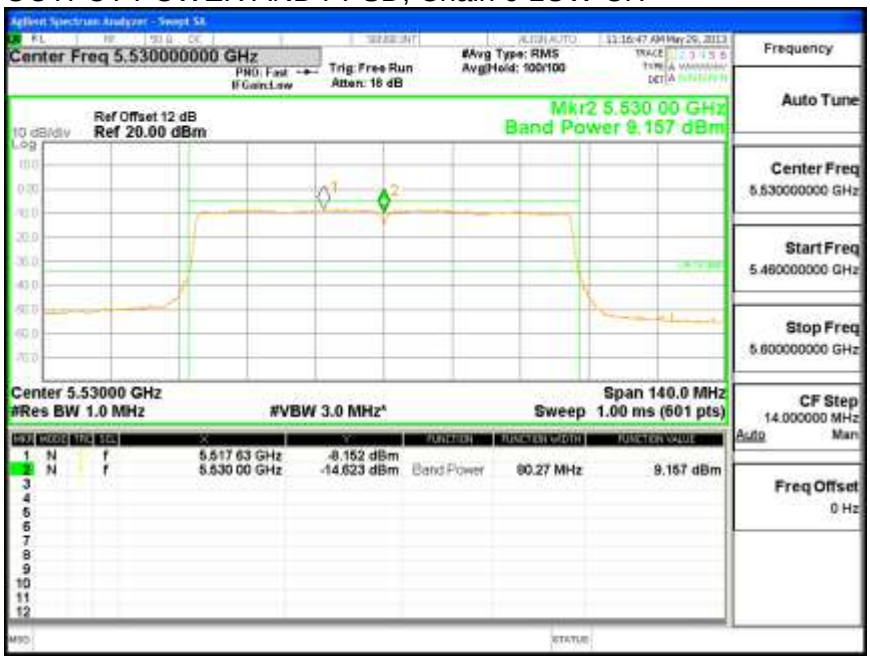
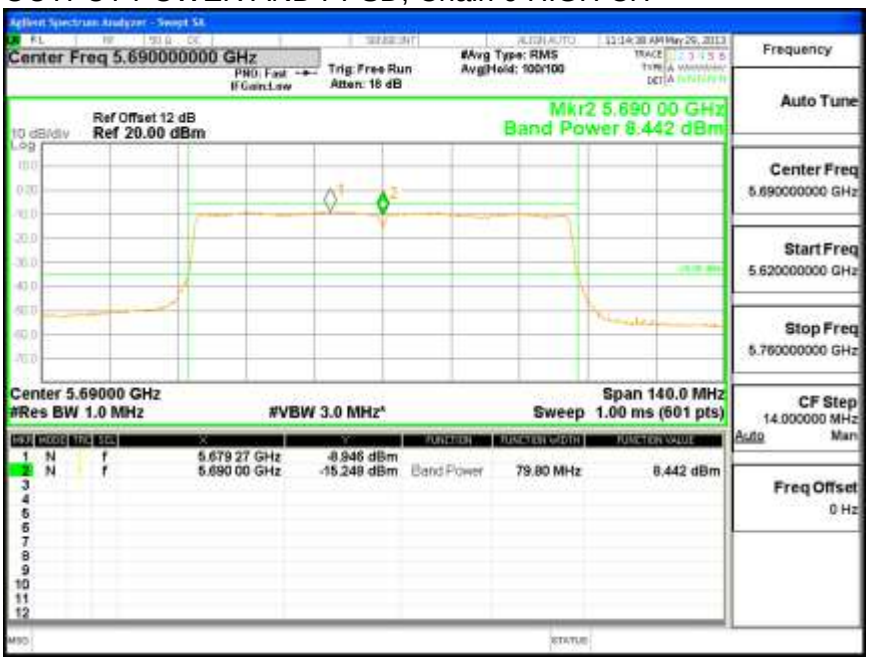
OUTPUT POWER AND PPSD, Chain 0

OUTPUT POWER AND PPSD, Chain 0 LOW CH



OUTPUT POWER AND PPSD, Chain 0 HIGH CH



9.19. 802.11a MODE IN THE 5.8 GHz BAND

9.19.1. Test Methodology

FCC KDB 644545 D02(Alternative Guidance for 802 11ac V01) was followed to test 5.8GHz DTS band under UNII band.

9.19.2. 26 dB BANDWIDTH

LIMITS

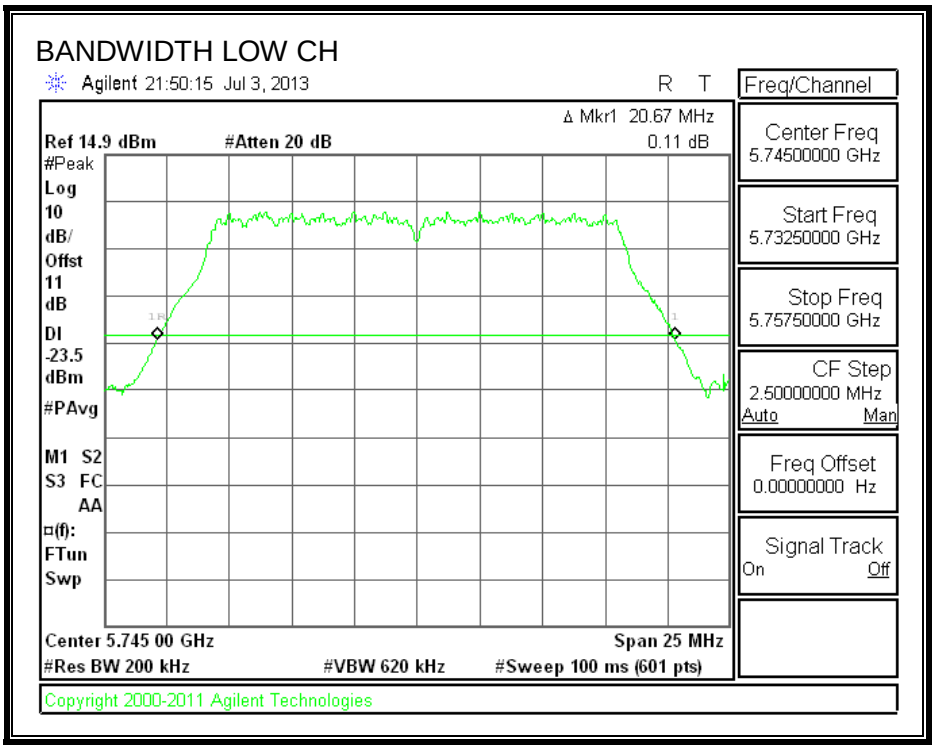
None; for reporting purposes only.

RESULTS

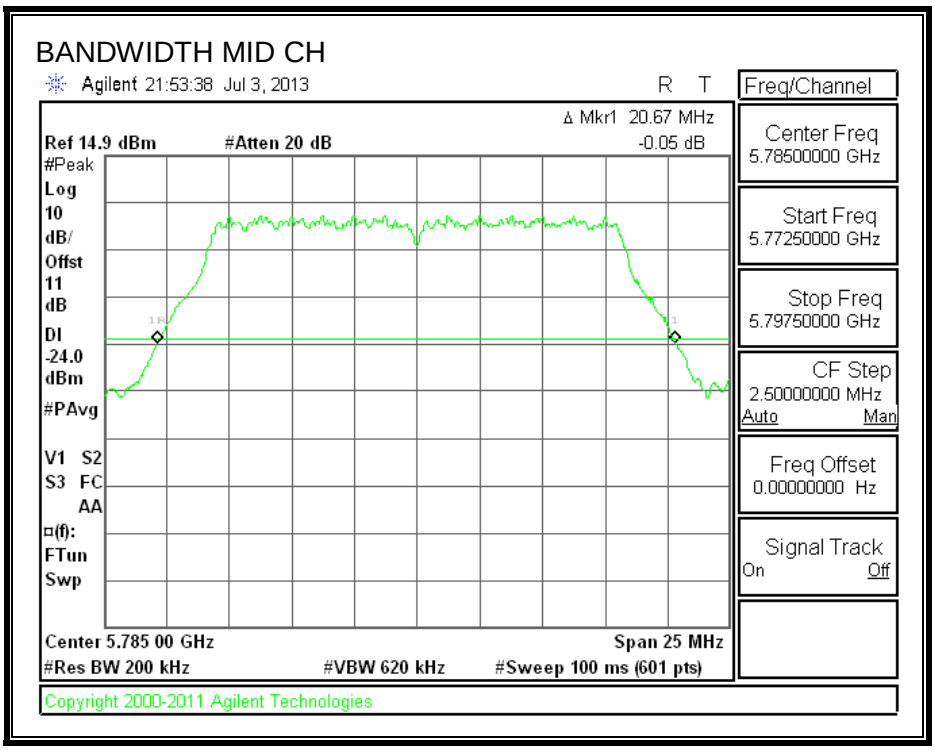
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	20.70
Mid	5785	20.70
High	5825	20.70

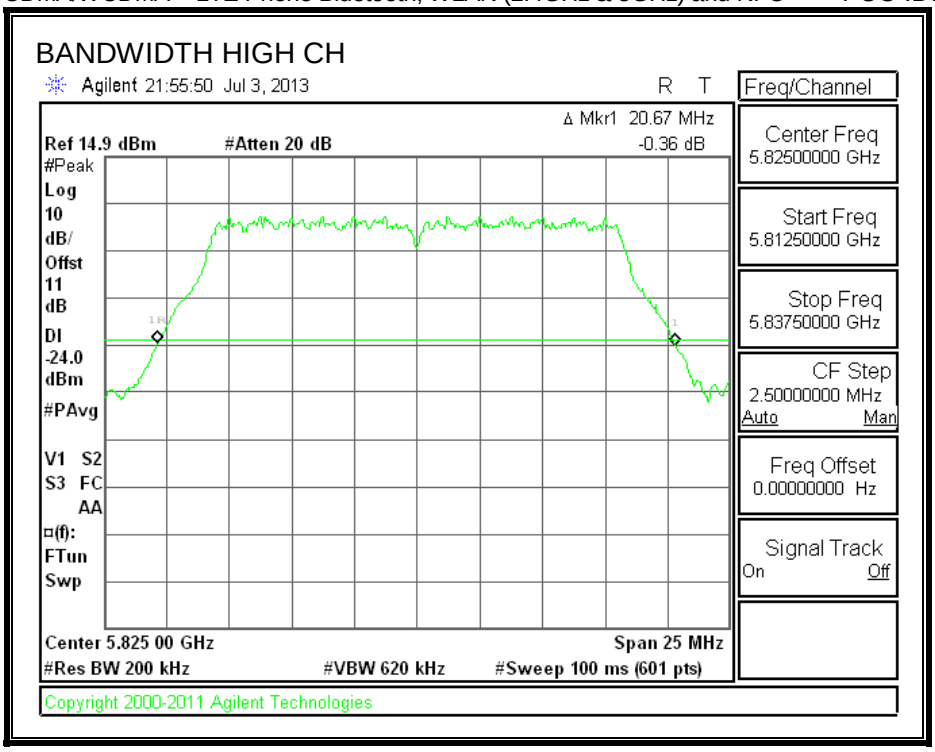
26 dB BANDWIDTH

BANDWIDTH LOW CH



BANDWIDTH MID CH





9.19.2. 99% BANDWIDTH

LIMITS

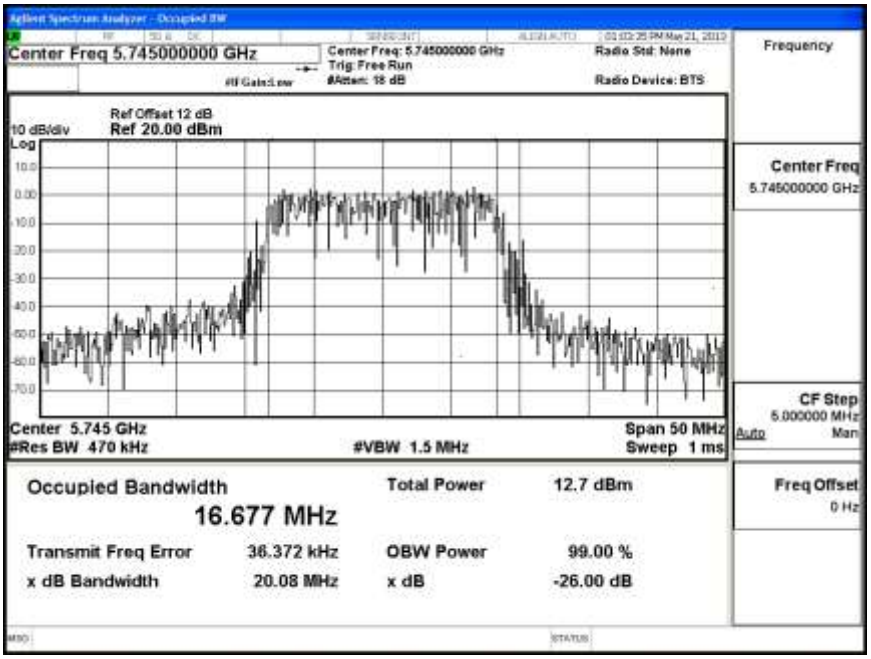
None; for reporting purposes only.

RESULTS

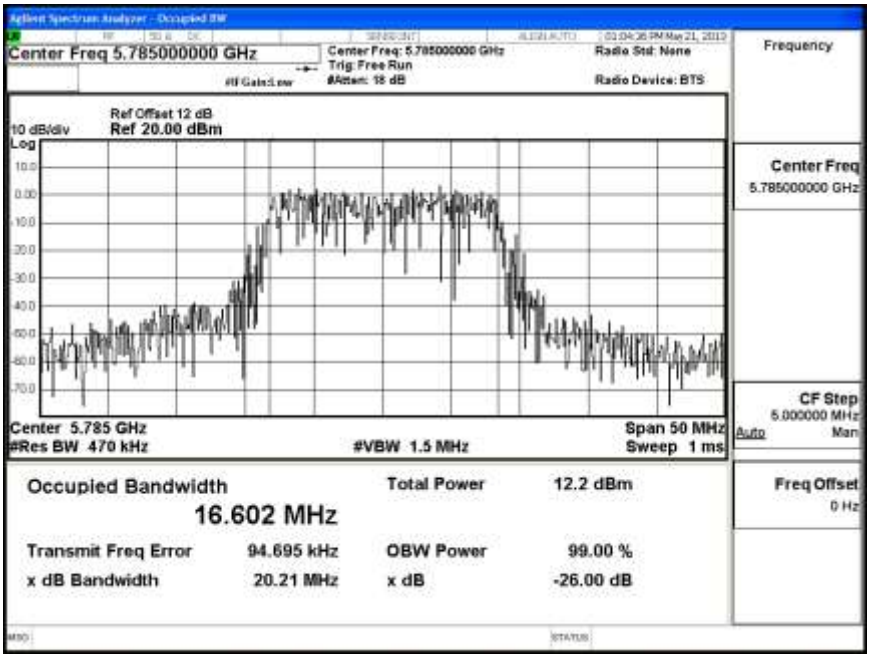
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	16.677
Mid	5785	16.602
High	5825	16.658

99% BANDWIDTH

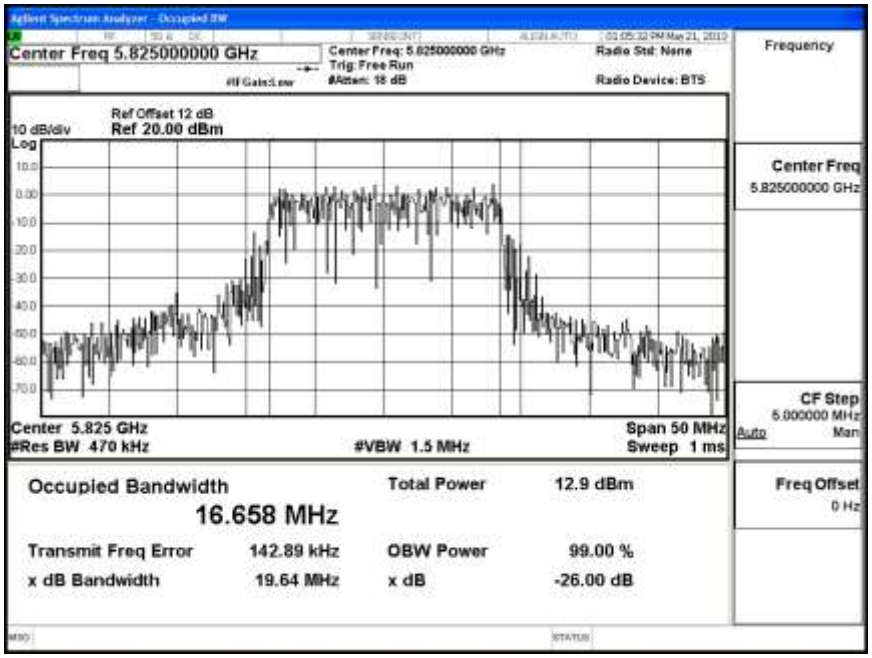
BANDWIDTH LOW CH



BANDWIDTH MID CH



BANDWIDTH HIGH CH



9.19.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5745	11.5
Mid	5785	11.3
High	5825	11.4

9.19.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.825 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26-dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain up to 23 dBi without any corresponding reduction in the transmitter peak output power or peak power spectral density. For fixed, point-to-point U-NII transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in peak transmitter power and peak power spectral density for each 1 dB of antenna gain in excess of 23 dBi would be required. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5745	20.7	16.6	-1.00
Mid	5785	20.7	16.6	-1.00
High	5825	20.7	16.6	-1.00

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	30.00	29.20	35.20	29.20	17.00	17.00	17.00
Mid	5785	30.00	29.20	35.20	29.20	17.00	17.00	17.00
High	5825	30.00	29.20	35.20	29.20	17.00	17.00	17.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd Power & PPSD

Output Power Results

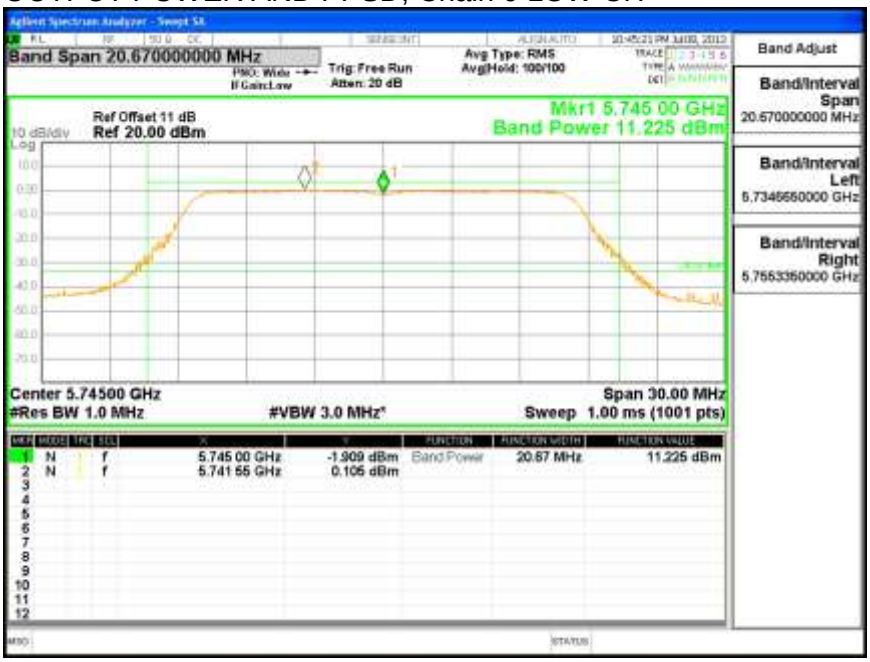
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	11.23	11.44	29.20	-17.77
Mid	5785	11.03	11.24	29.20	-17.97
High	5825	11.45	11.66	29.20	-17.54

PPSD Results

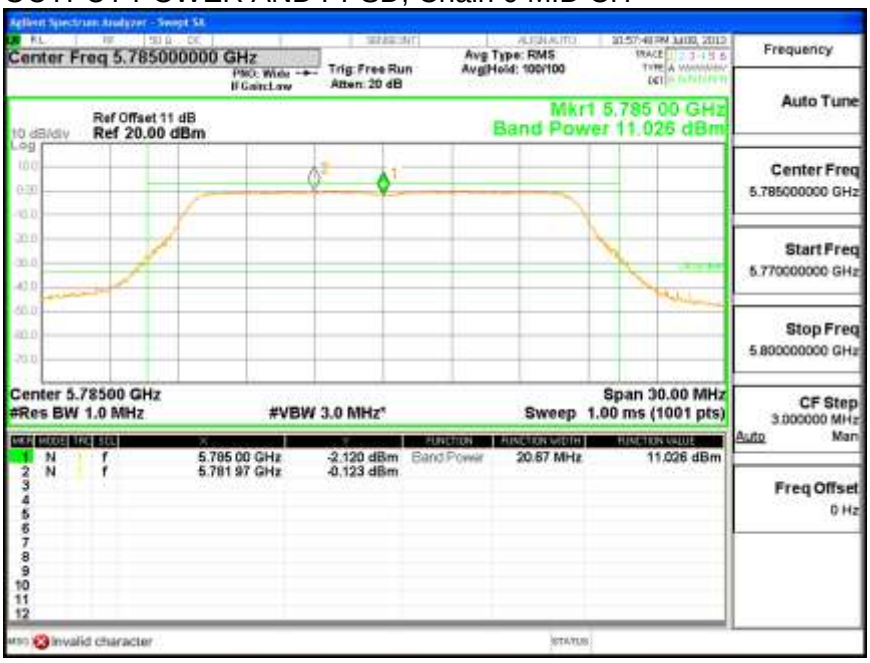
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	0.11	0.32	17.00	-16.69
Mid	5785	-0.12	0.09	17.00	-16.91
High	5825	0.41	0.62	17.00	-16.38

OUTPUT POWER AND PPSD, Chain 0

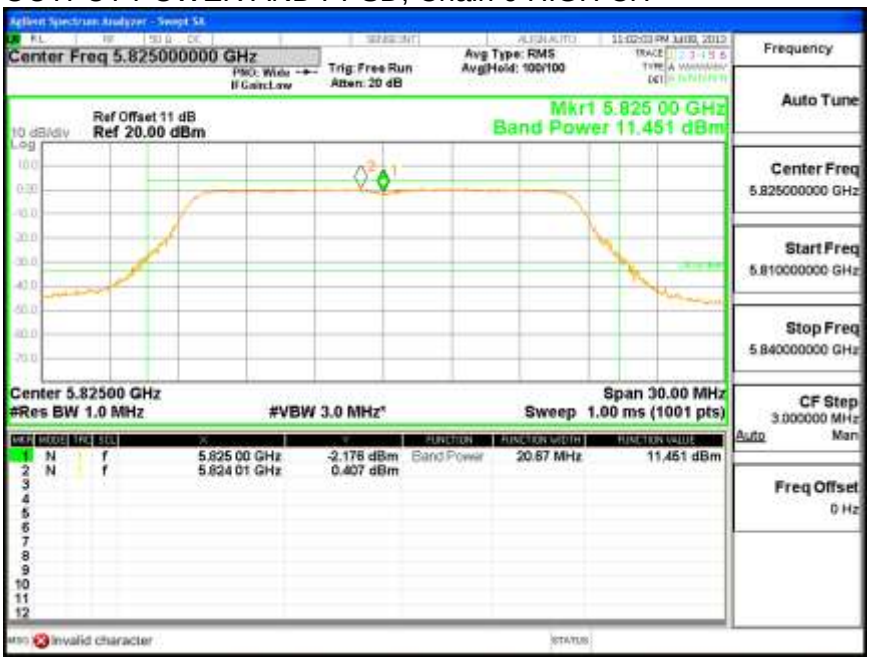
OUTPUT POWER AND PPSD, Chain 0 LOW CH



OUTPUT POWER AND PPSD, Chain 0 MID CH



OUTPUT POWER AND PPSD, Chain 0 HIGH CH



9.19.4. PEAK EXCURSION

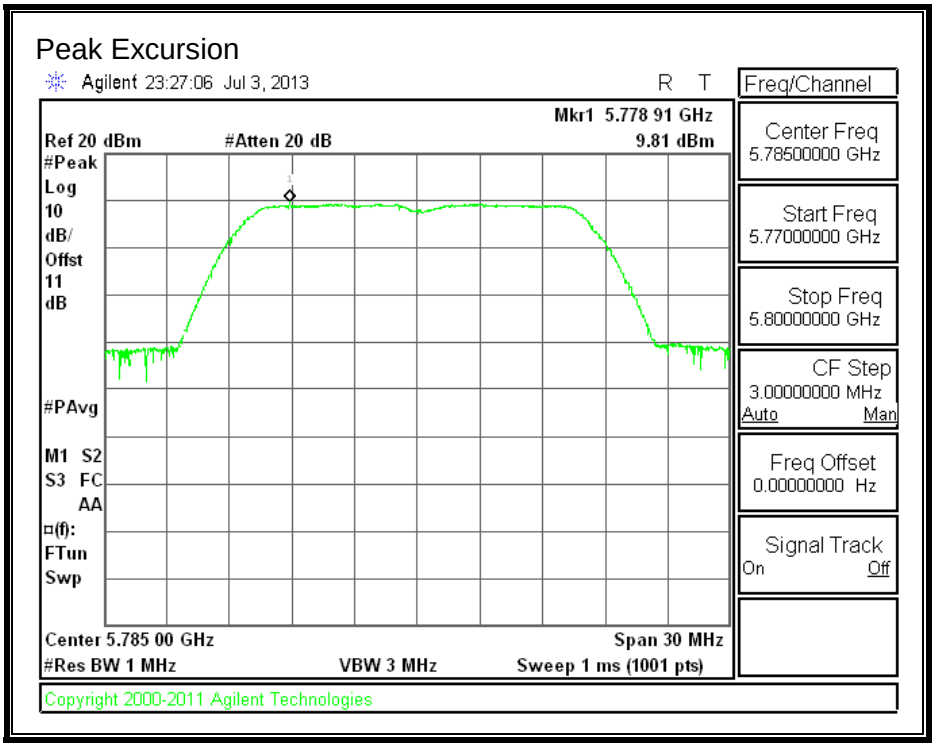
LIMITS

FCC §15.407 (a) (6)

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5785	9.810	-0.12	0.22	9.71	13	-3.29



9.20. 802.11n HT20 MODE IN THE 5.8 GHz BAND

9.20.1. Test Methodology

FCC KDB 644545 D02(Alternative Guidance for 802 11ac V01) was followed to test 5.8GHz DTS band under UNII band.

9.20.2. 26 dB BANDWIDTH

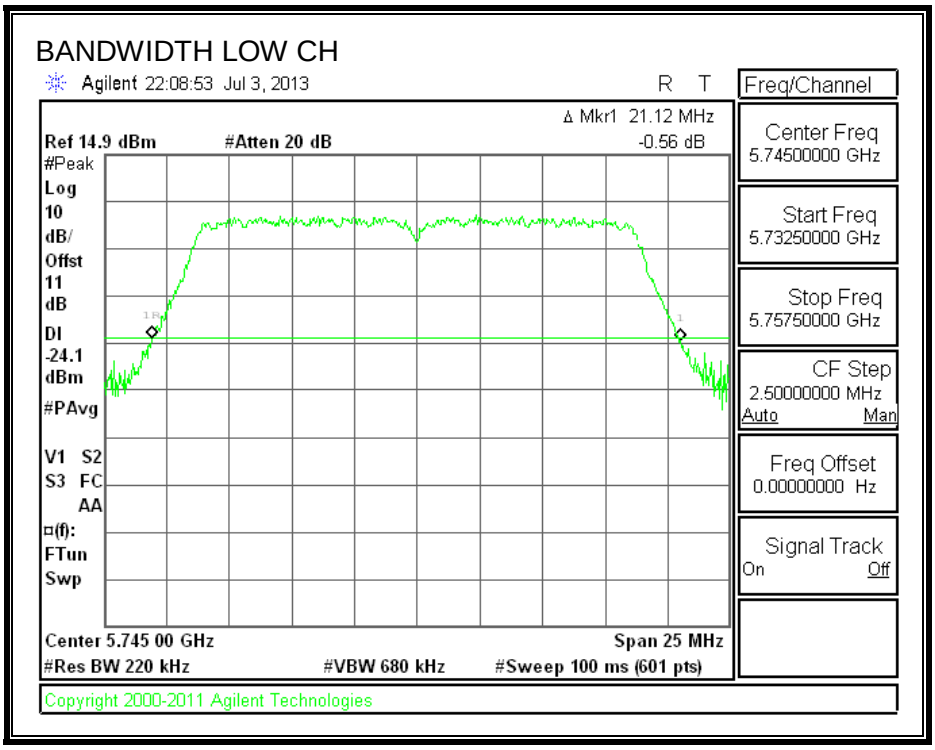
LIMITS

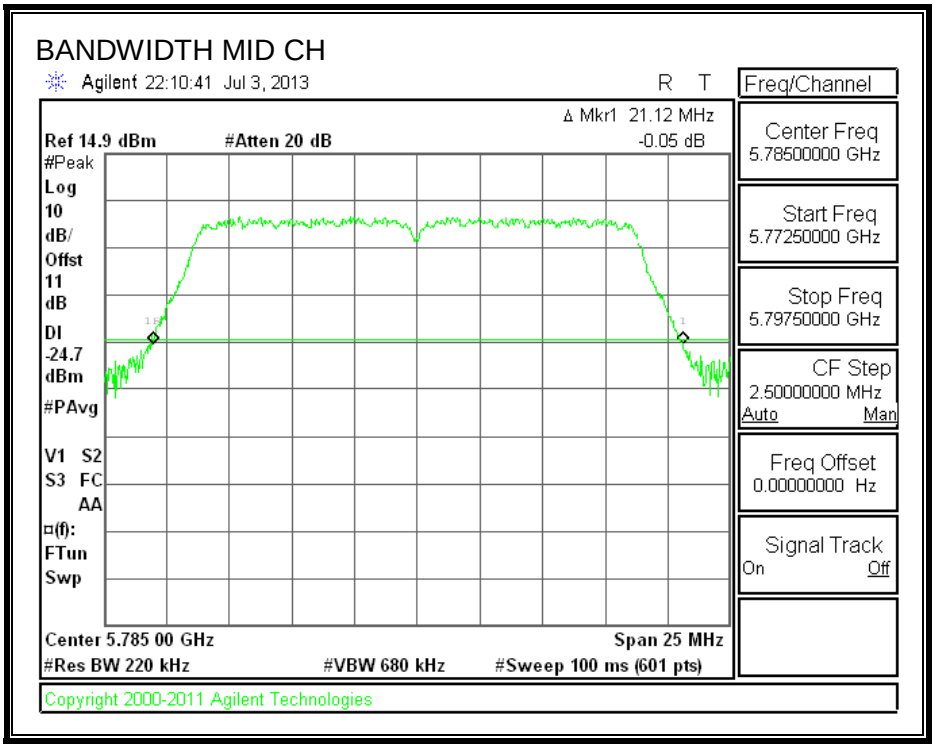
None; for reporting purposes only.

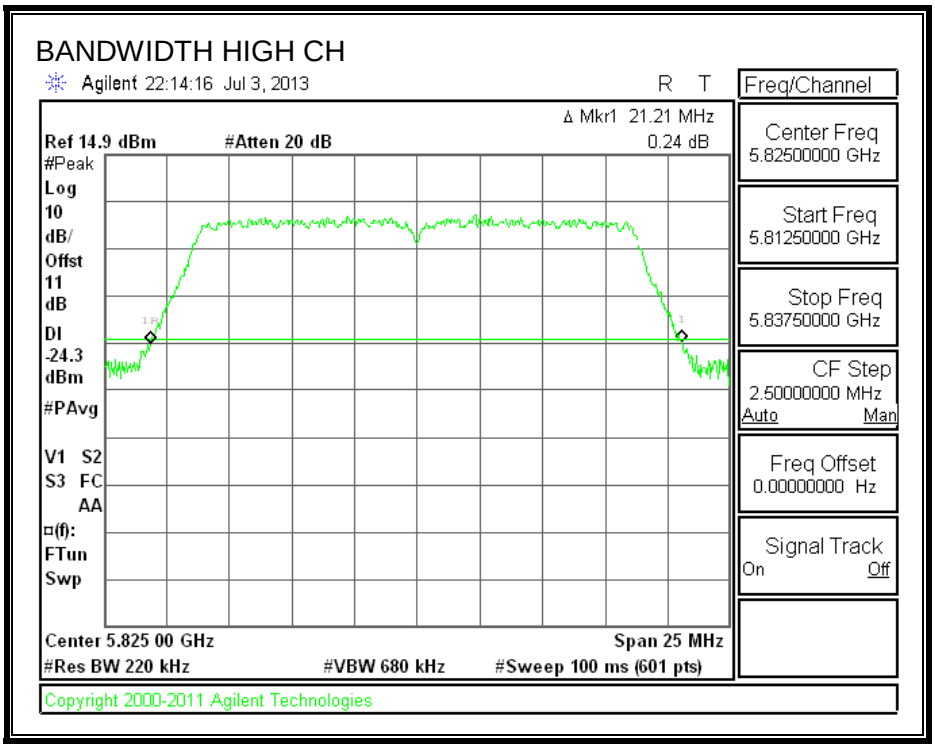
RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	21.1
Mid	5785	21.1
High	5825	21.2

26 dB BANDWIDTH







9.20.2. 99% BANDWIDTH

LIMITS

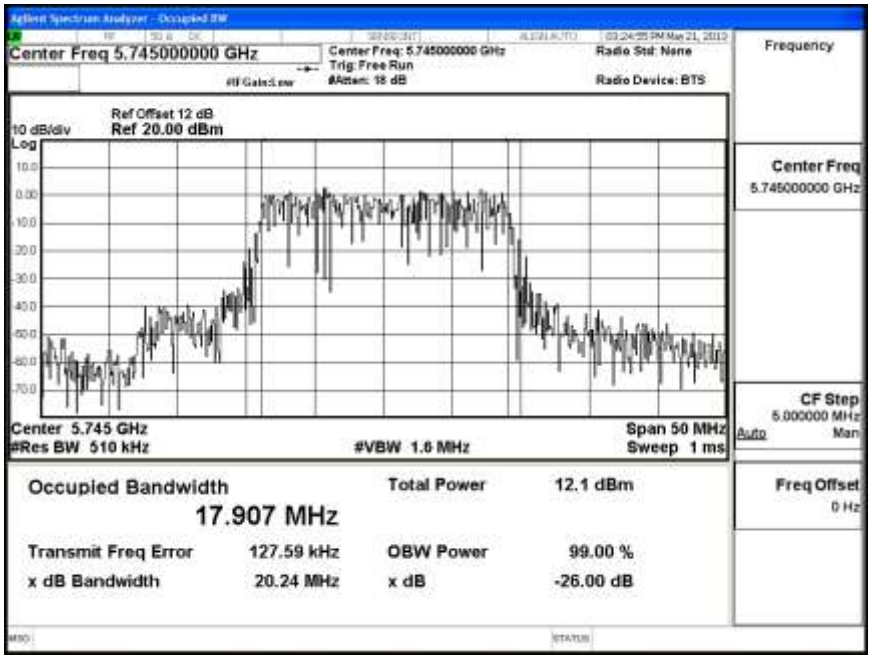
None; for reporting purposes only.

RESULTS

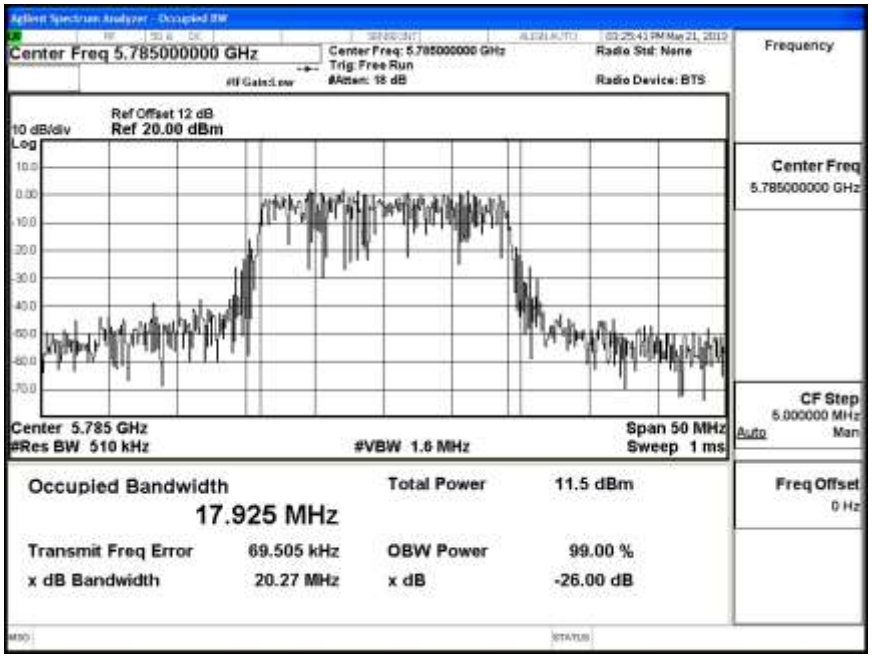
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.907
Mid	5785	17.925
High	5825	17.795

99% BANDWIDTH

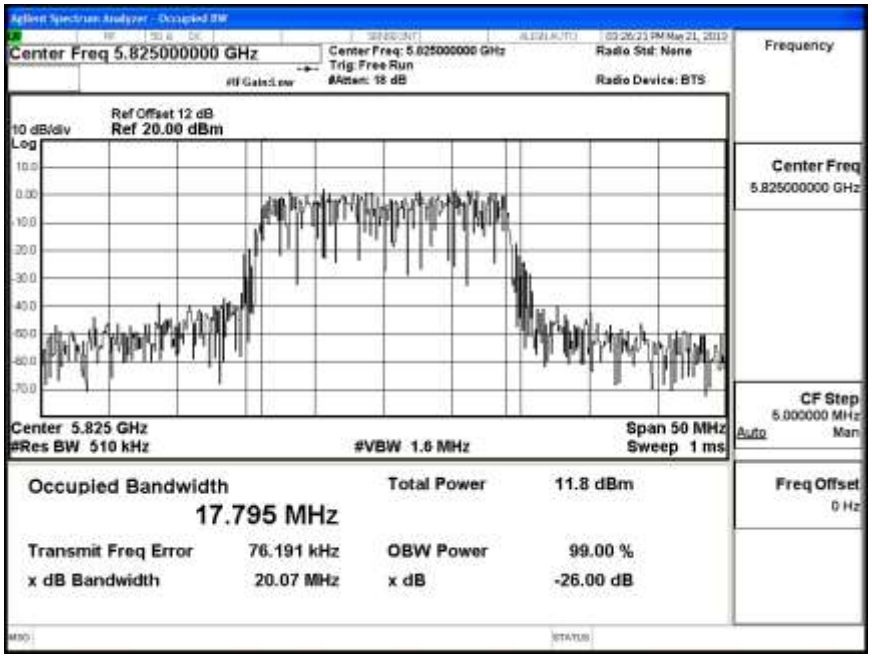
BANDWIDTH LOW CH



BANDWIDTH MID CH



BANDWIDTH HIGH CH



9.20.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5745	10.5
Mid	5785	10.4
High	5825	10.3

9.20.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.825 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26-dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain up to 23 dBi without any corresponding reduction in the transmitter peak output power or peak power spectral density. For fixed, point-to-point U-NII transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in peak transmitter power and peak power spectral density for each 1 dB of antenna gain in excess of 23 dBi would be required. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5745	21.1	17.9	-1.00
Mid	5785	21.1	17.9	-1.00
High	5825	21.1	17.9	-1.00

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	30.00	29.53	35.53	29.53	17.00	17.00	17.00
Mid	5785	30.00	29.53	35.53	29.53	17.00	17.00	17.00
High	5825	30.00	29.53	35.53	29.53	17.00	17.00	17.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd Power & PPSD

Output Power Results

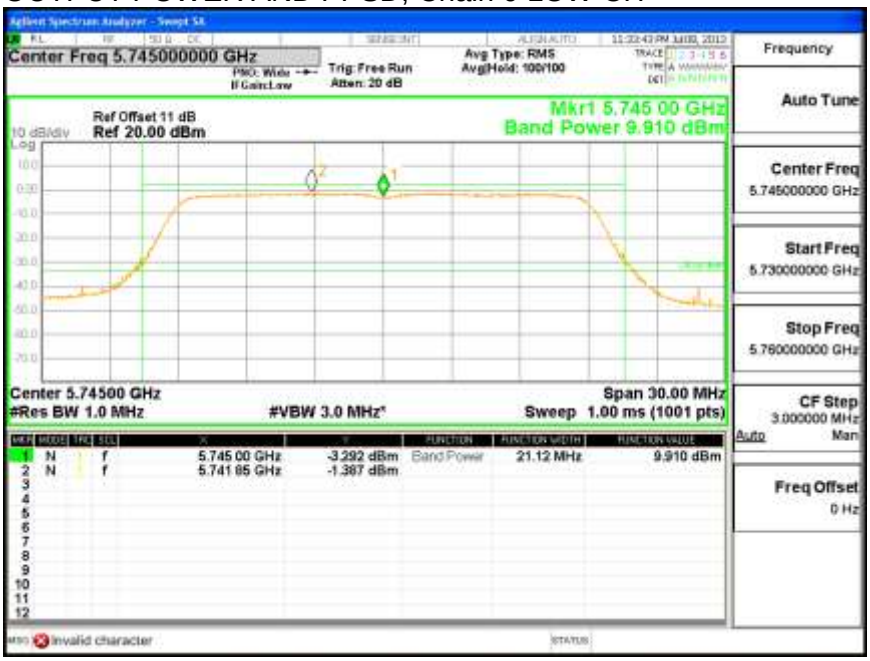
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	9.91	10.12	29.53	-19.41
Mid	5785	9.98	10.19	29.53	-19.34
High	5825	10.49	10.70	29.53	-18.83

PPSD Results

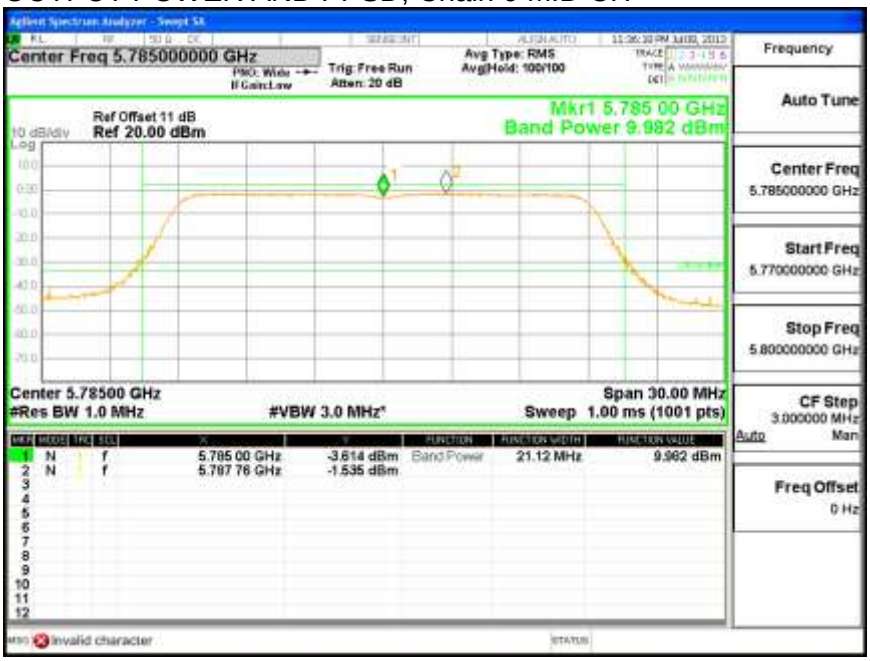
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	-1.39	-1.18	17.00	-18.18
Mid	5785	-1.54	-1.33	17.00	-18.33
High	5825	-0.84	-0.63	17.00	-17.63

OUTPUT POWER AND PPSD, Chain 0

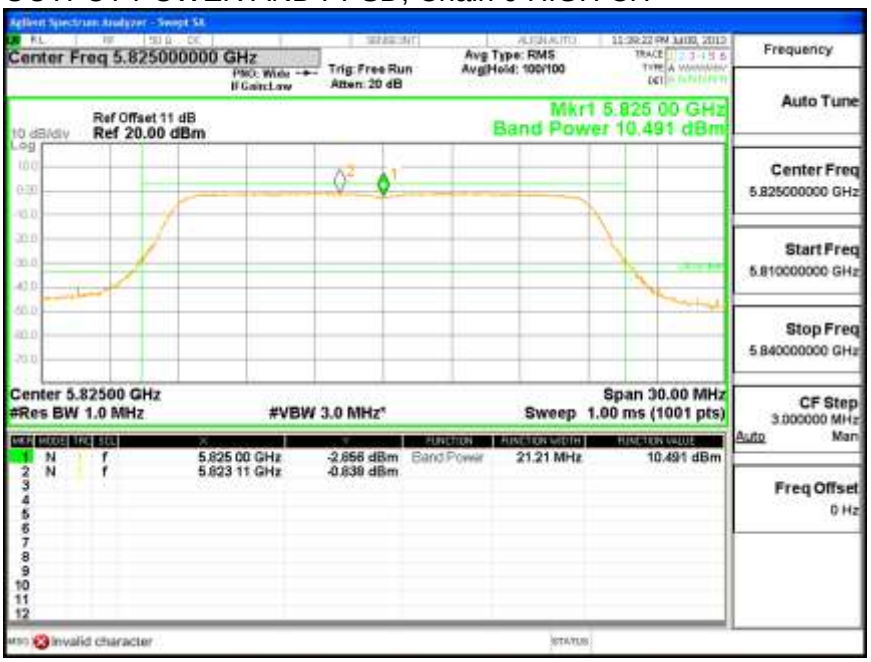
OUTPUT POWER AND PPSD, Chain 0 LOW CH



OUTPUT POWER AND PPSD, Chain 0 MID CH



OUTPUT POWER AND PPSD, Chain 0 HIGH CH



9.21. 802.11n HT40 MODE IN THE 5.8 GHz BAND

9.21.1. Test Methodology

FCC KDB 644545 D02(Alternative Guidance for 802 11ac V01) was followed to test 5.8GHz DTS band under UNII band.

9.21.2. 26 dB BANDWIDTH

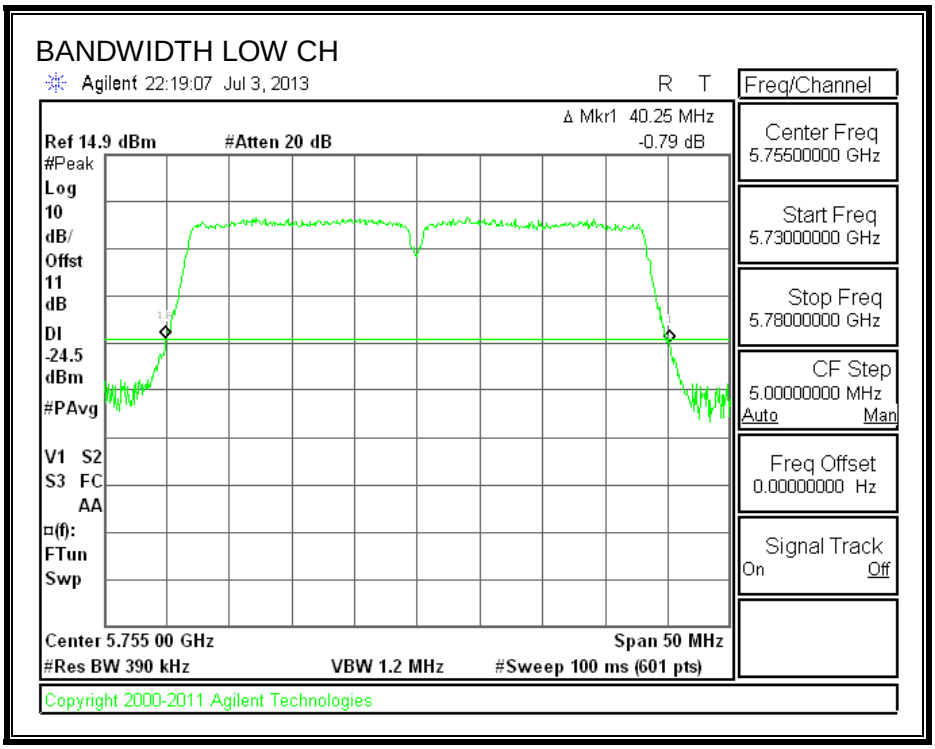
LIMITS

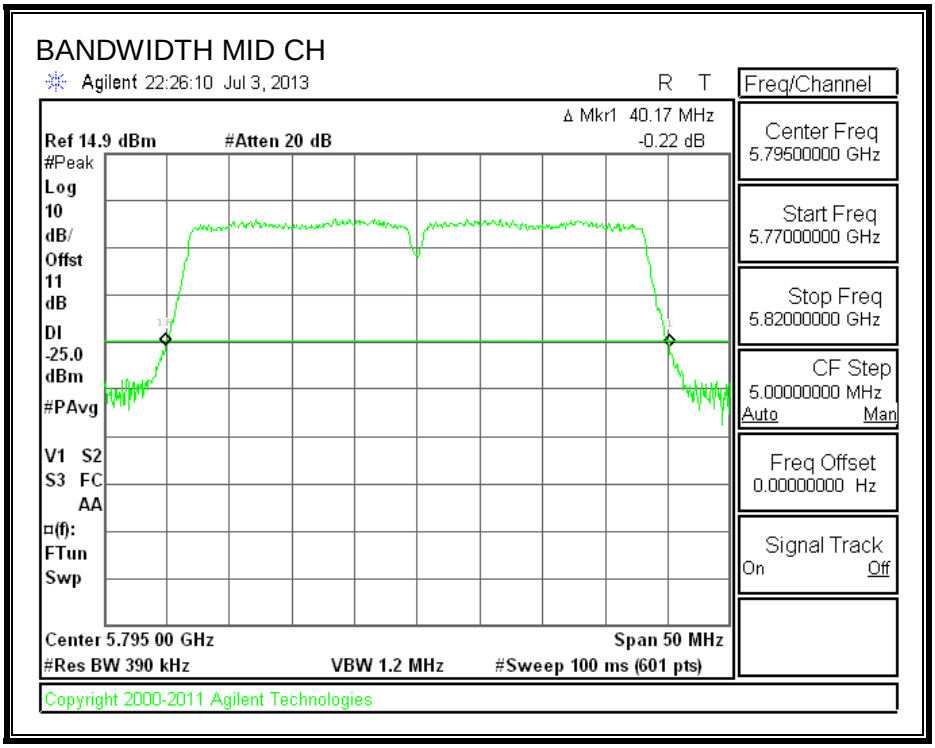
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	40.3
High	5795	40.2

26 dB BANDWIDTH





9.21.2. 99% BANDWIDTH

LIMITS

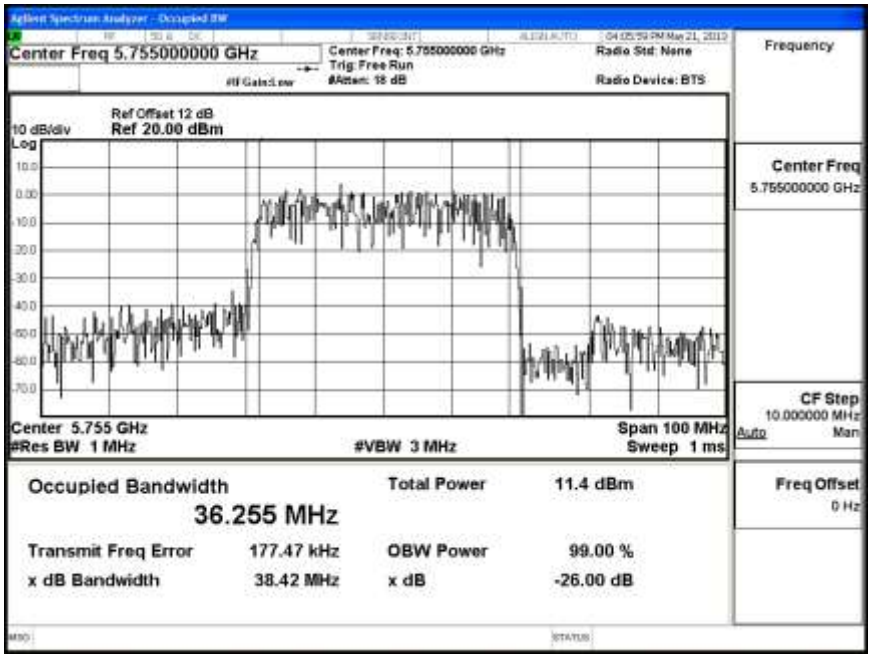
None; for reporting purposes only.

RESULTS

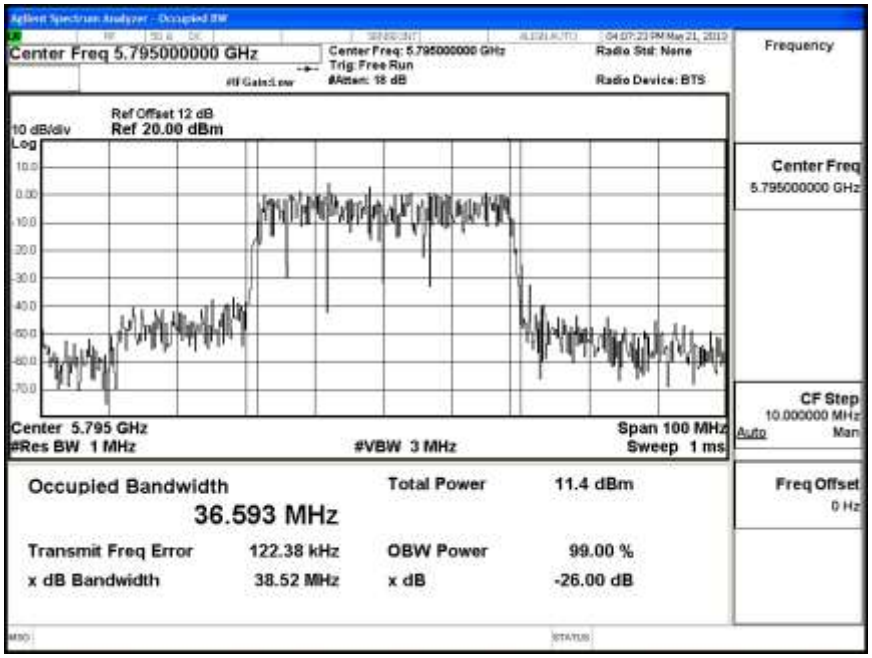
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.255
High	5795	36.593

99% BANDWIDTH

BANDWIDTH LOW CH



BANDWIDTH HIGH CH



9.21.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5755	10.4
Mid	5795	10.1

9.21.3. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.825 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26-dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain up to 23 dBi without any corresponding reduction in the transmitter peak output power or peak power spectral density. For fixed, point-to-point U-NII transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in peak transmitter power and peak power spectral density for each 1 dB of antenna gain in excess of 23 dBi would be required. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5755	40.2	36.3	-1.00
High	5795	40.2	36.3	-1.00

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5755	30.00	30.00	36.00	30.00	17.00	17.00	17.00
High	5795	30.00	30.00	36.00	30.00	17.00	17.00	17.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd Power & PPSD

Output Power Results

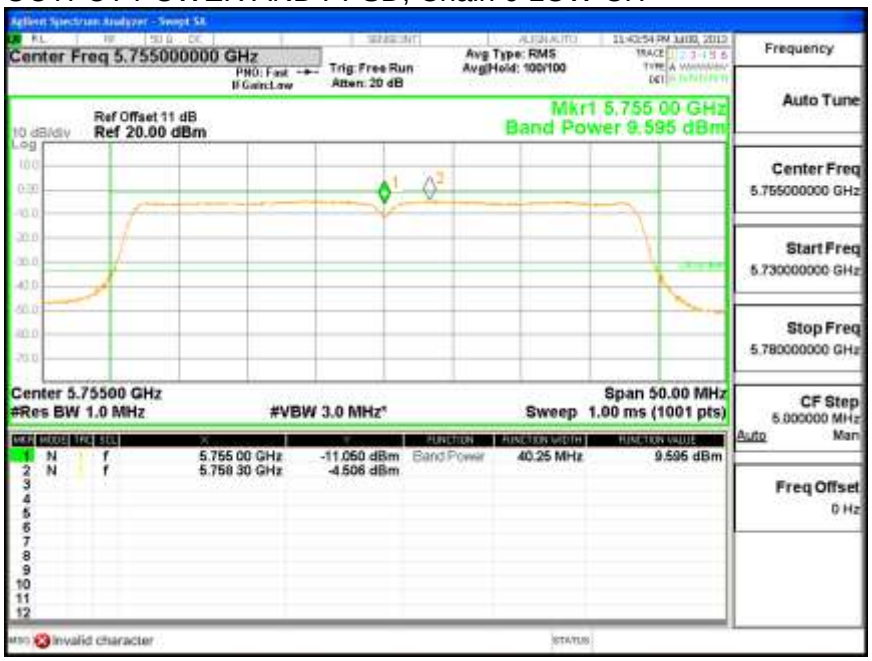
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	9.60	9.81	30.00	-20.20
High	5795	9.71	9.92	30.00	-20.09

PPSD Results

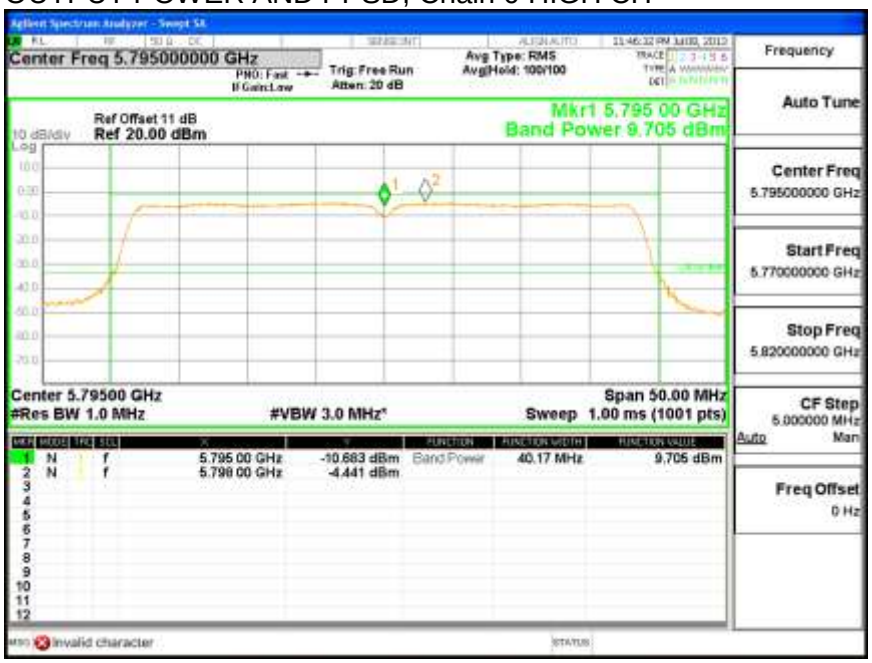
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5755	-4.51	-4.30	17.00	-21.30
High	5795	-4.44	-4.23	17.00	-21.23

OUTPUT POWER AND PPSD, Chain 0

OUTPUT POWER AND PPSD, Chain 0 LOW CH



OUTPUT POWER AND PPSD, Chain 0 HIGH CH



9.21. 802.11ac HT20 MODE IN THE 5.8 GHz BAND

9.21.1. Test Methodology

FCC KDB 644545 D02(Alternative Guidance for 802 11ac V01) was followed to test 5.8GHz DTS band under UNII band.

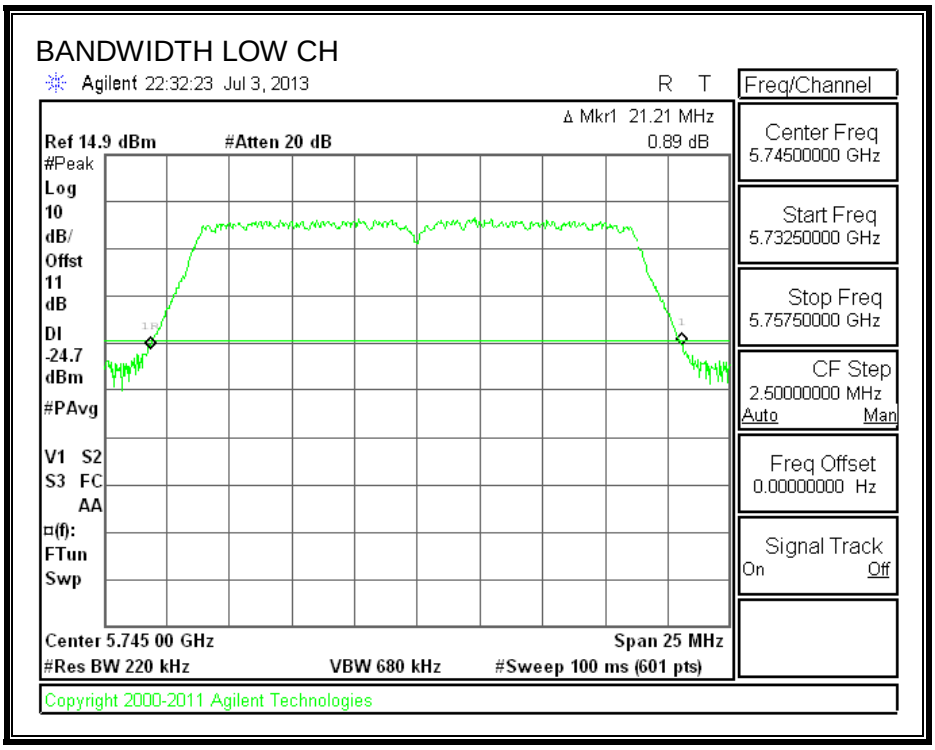
9.21.2. 26 dB BANDWIDTH

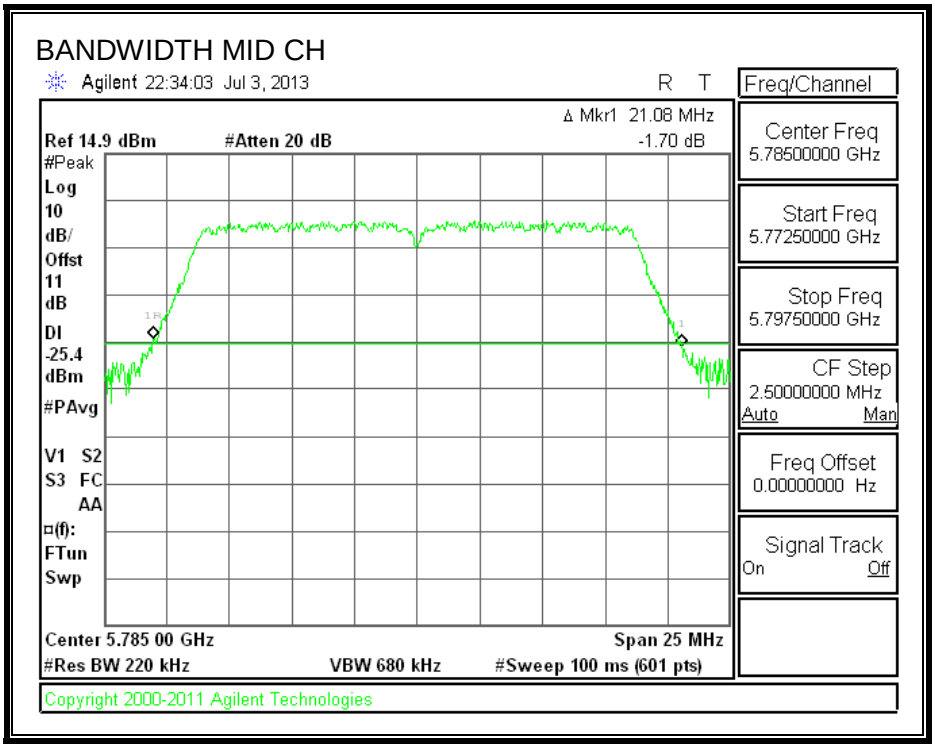
LIMITS

None; for reporting purposes only.

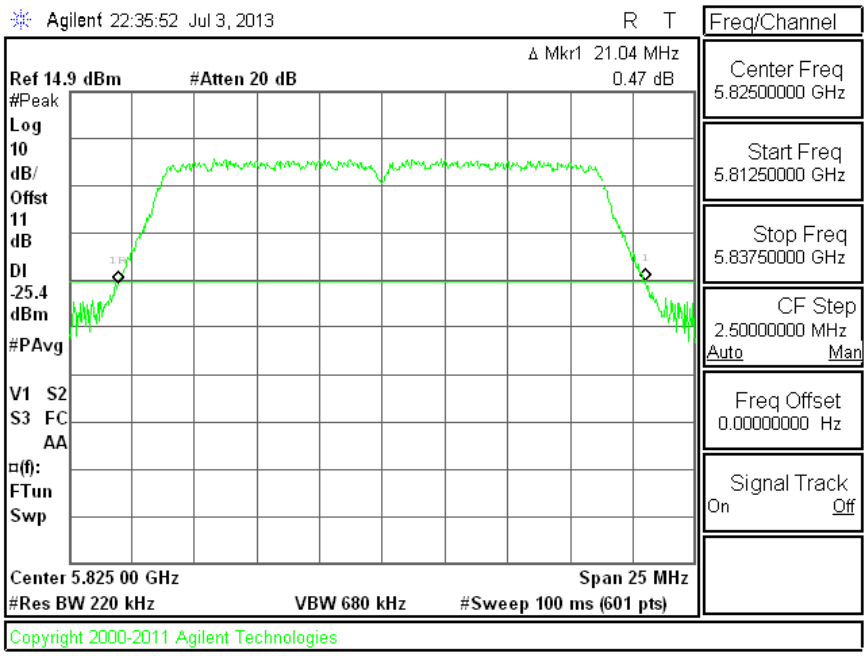
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	21.2
Mid	5785	21.1
High	5825	21.0

26 dB BANDWIDTH





BANDWIDTH HIGH CH



9.21.2. 99% BANDWIDTH

LIMITS

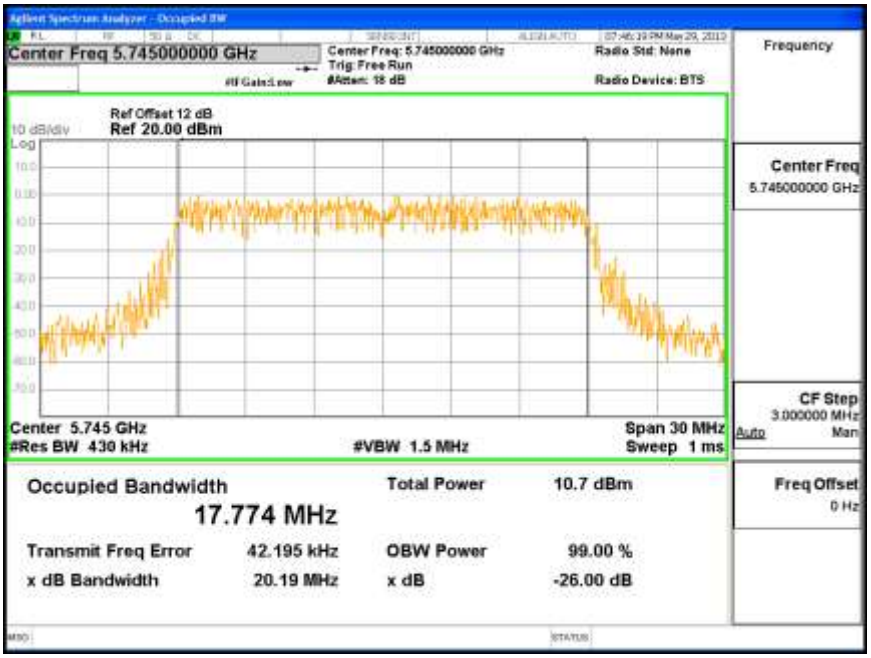
None; for reporting purposes only.

RESULTS

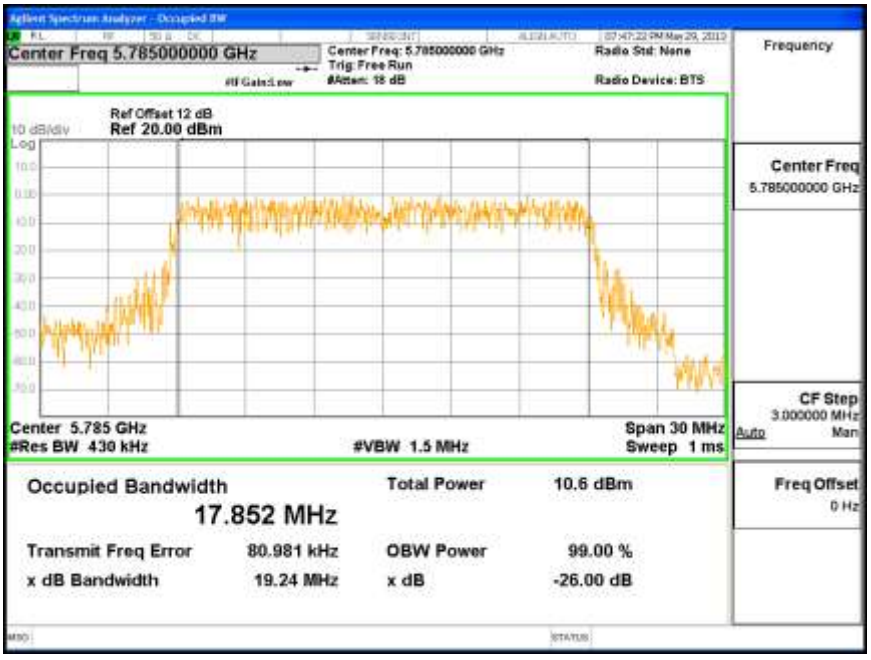
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.774
Mid	5785	17.852
High	5825	17.931

99% BANDWIDTH

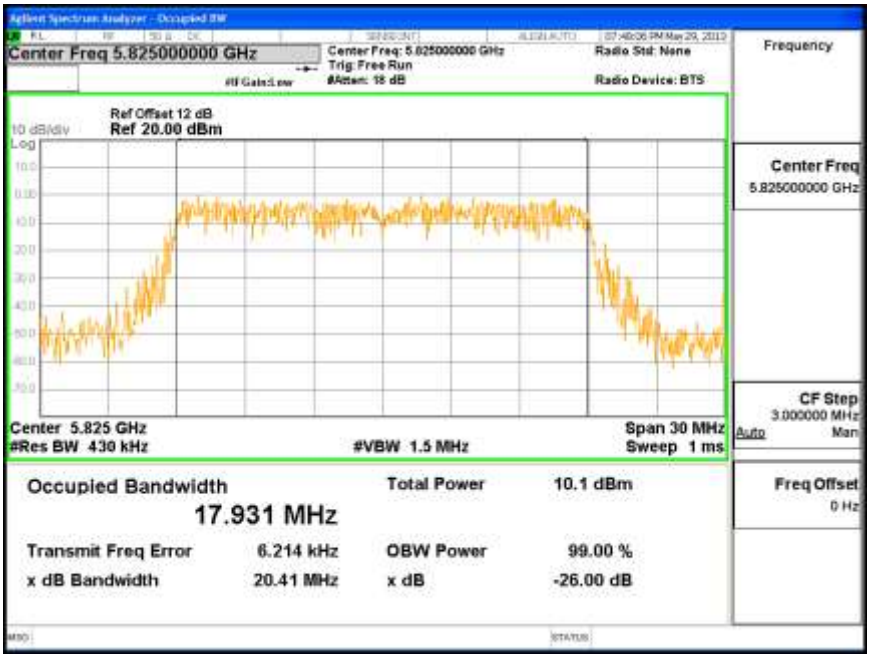
BANDWIDTH LOW CH



BANDWIDTH MID CH



BANDWIDTH HIGH CH



9.21.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5745	9.8
Mid	5785	9.7
High	5825	9.5

9.21.3. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.825 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26-dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain up to 23 dBi without any corresponding reduction in the transmitter peak output power or peak power spectral density. For fixed, point-to-point U-NII transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in peak transmitter power and peak power spectral density for each 1 dB of antenna gain in excess of 23 dBi would be required. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5745	21.0	17.8	-1.00
Mid	5785	21.0	17.8	-1.00
High	5825	21.0	17.8	-1.00

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	30.00	29.50	35.50	29.50	17.00	17.00	17.00
Mid	5785	30.00	29.50	35.50	29.50	17.00	17.00	17.00
High	5825	30.00	29.50	35.50	29.50	17.00	17.00	17.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd Power & PPSD

Output Power Results

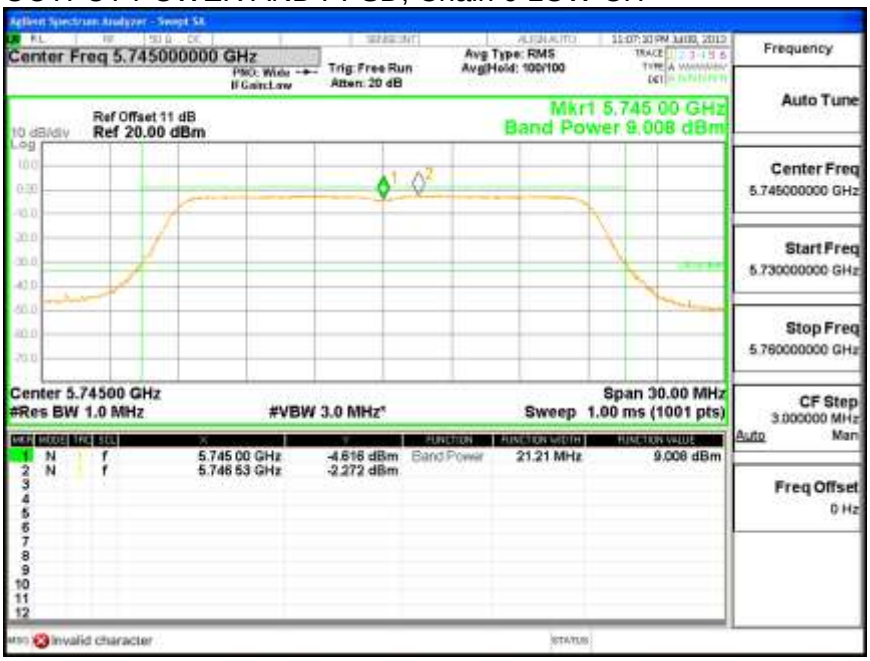
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	9.01	9.22	29.50	-20.28
Mid	5785	9.21	9.42	29.50	-20.08
High	5825	9.21	9.42	29.50	-20.08

PPSD Results

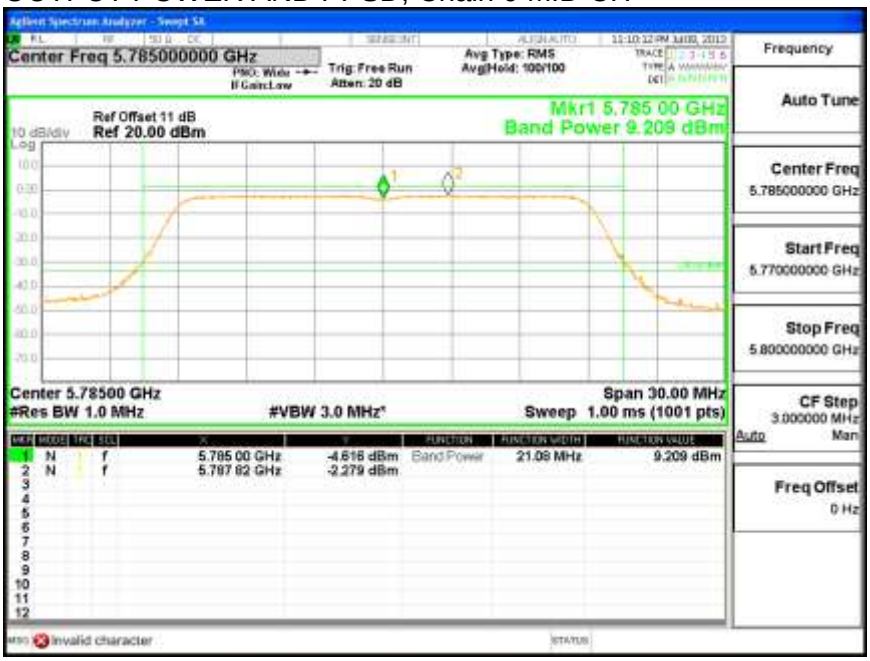
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	-2.27	-2.06	17.00	-19.06
Mid	5785	-2.28	-2.07	17.00	-19.07
High	5825	-2.28	-2.07	17.00	-19.07

OUTPUT POWER AND PPSD, Chain 0

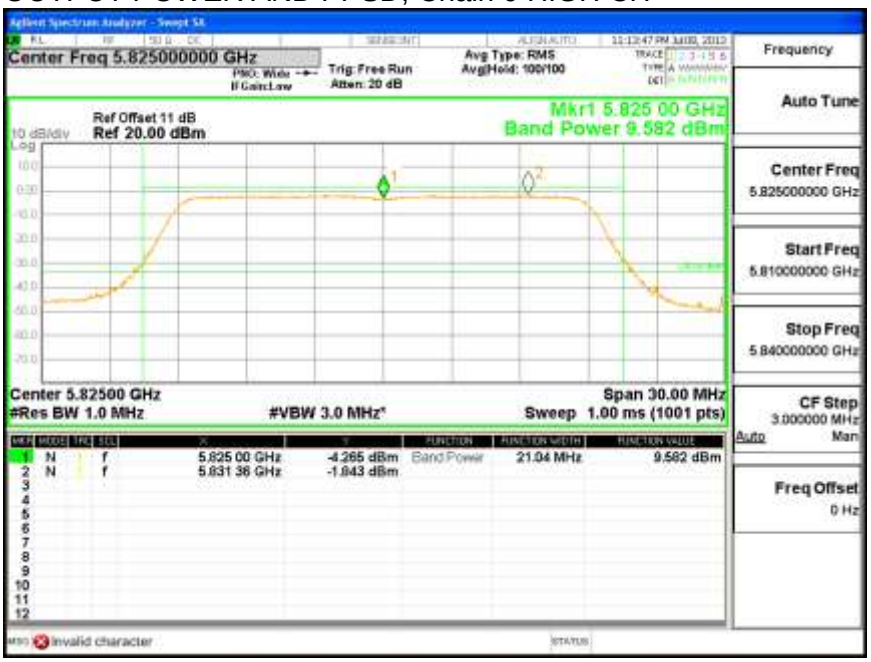
OUTPUT POWER AND PPSD, Chain 0 LOW CH



OUTPUT POWER AND PPSD, Chain 0 MID CH



OUTPUT POWER AND PPSD, Chain 0 HIGH CH



9.22. 802.11ac HT40 MODE IN THE 5.8 GHz BAND

9.22.1. Test Methodology

FCC KDB 644545 D02(Alternative Guidance for 802 11ac V01) was followed to test 5.8GHz DTS band under UNII band.

9.22.2. 26 dB BANDWIDTH

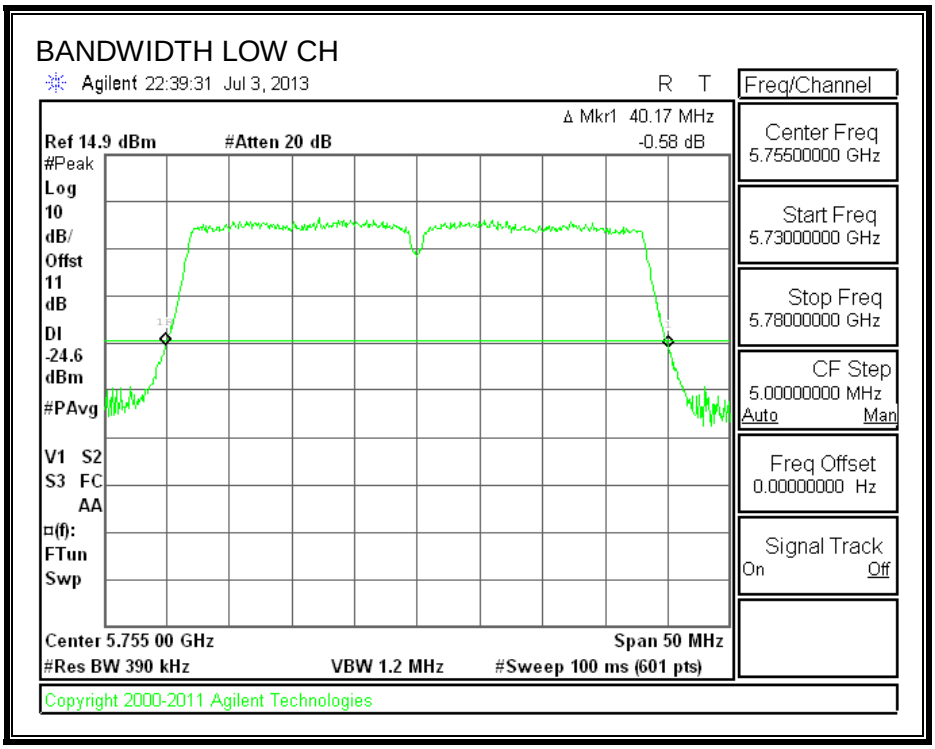
LIMITS

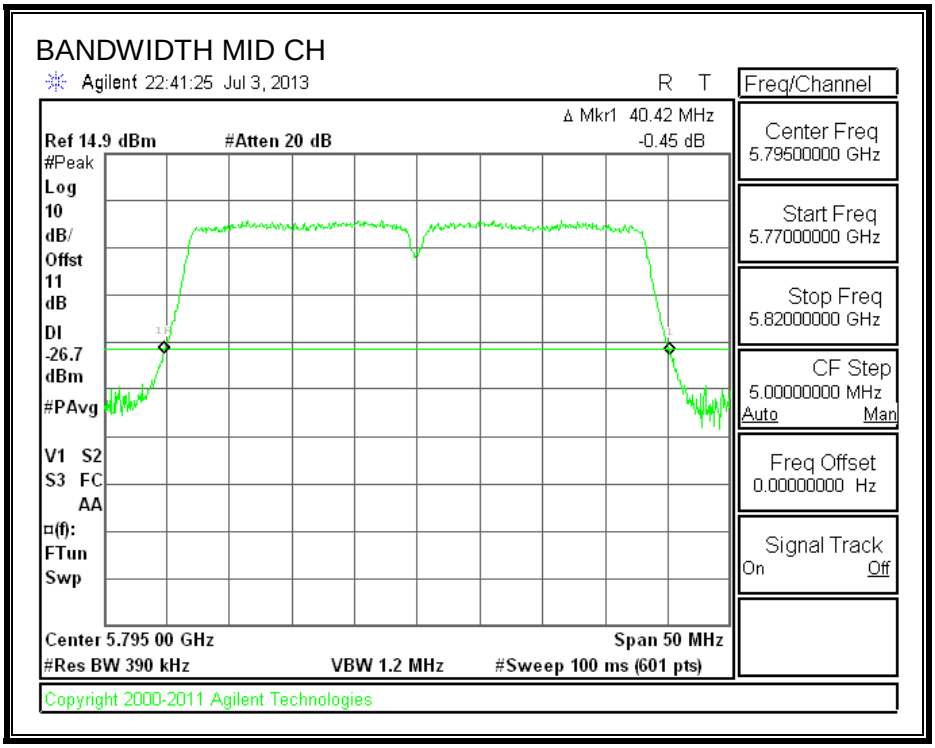
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	40.2
High	5795	40.4

26 dB BANDWIDTH





LIMITS

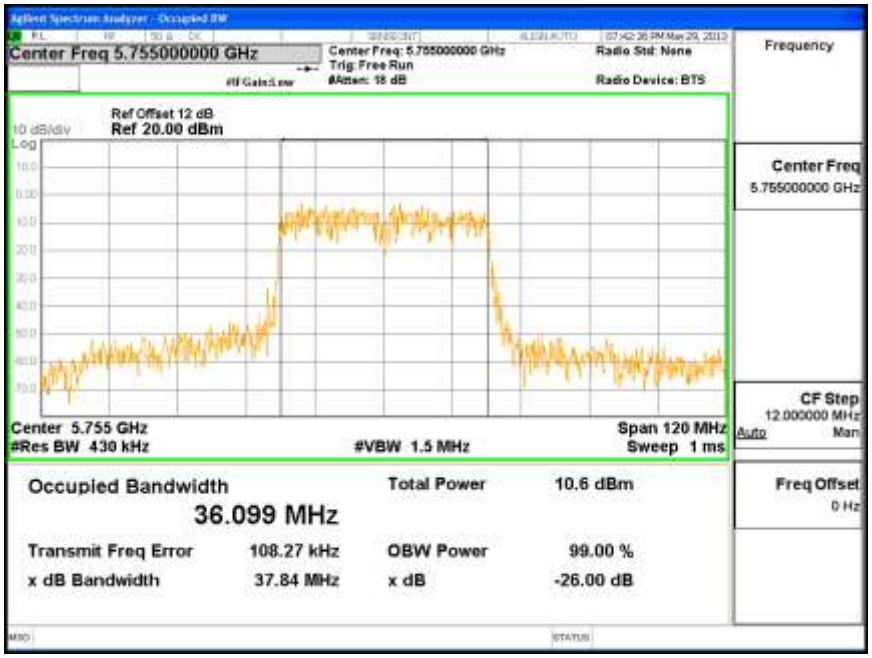
None; for reporting purposes only.

RESULTS

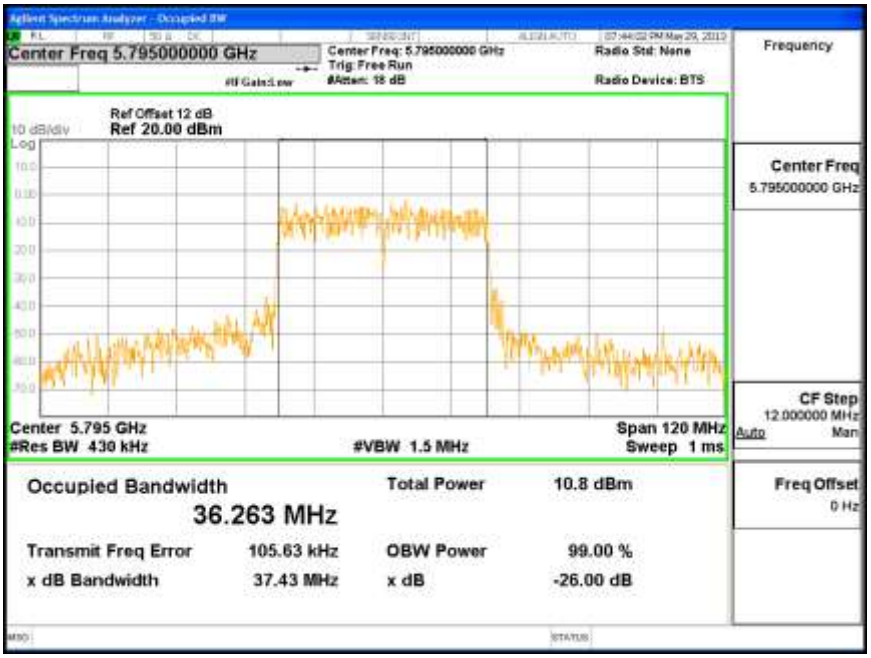
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.099
High	5795	36.593

99% BANDWIDTH

BANDWIDTH LOW CH



BANDWIDTH HIGH CH



9.22.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5755	9.7
Mid	5795	9.3

9.22.3. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.825 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26-dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain up to 23 dBi without any corresponding reduction in the transmitter peak output power or peak power spectral density. For fixed, point-to-point U-NII transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in peak transmitter power and peak power spectral density for each 1 dB of antenna gain in excess of 23 dBi would be required. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5755	40.2	36.1	-1.00
High	5795	40.2	36.1	-1.00

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5755	30.00	30.00	36.00	30.00	17.00	17.00	17.00
High	5795	30.00	30.00	36.00	30.00	17.00	17.00	17.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd Power & PPSD

Output Power Results

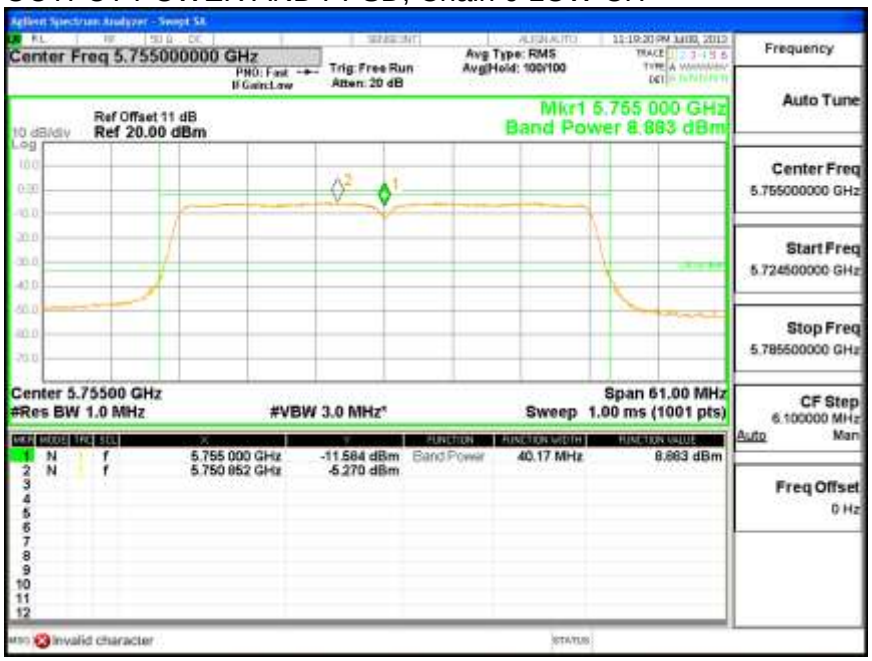
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	8.88	9.09	30.00	-20.91
High	5795	8.86	9.07	30.00	-20.93

PPSD Results

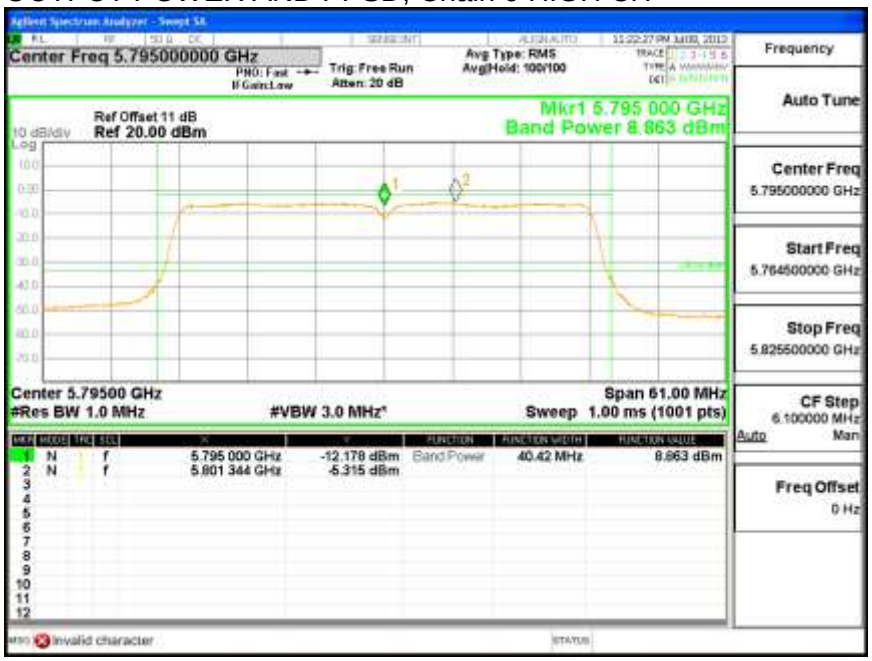
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5755	-5.27	-5.06	17.00	-22.06
High	5795	-5.32	-5.11	17.00	-22.11

OUTPUT POWER AND PPSD, Chain 0

OUTPUT POWER AND PPSD, Chain 0 LOW CH



OUTPUT POWER AND PPSD, Chain 0 HIGH CH



9.23. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

9.23.1. Test Methodology

FCC KDB 644545 D02(Alternative Guidance for 802 11ac V01) was followed to test 5.8GHz DTS band under UNII band.

9.23.2. 26 dB BANDWIDTH

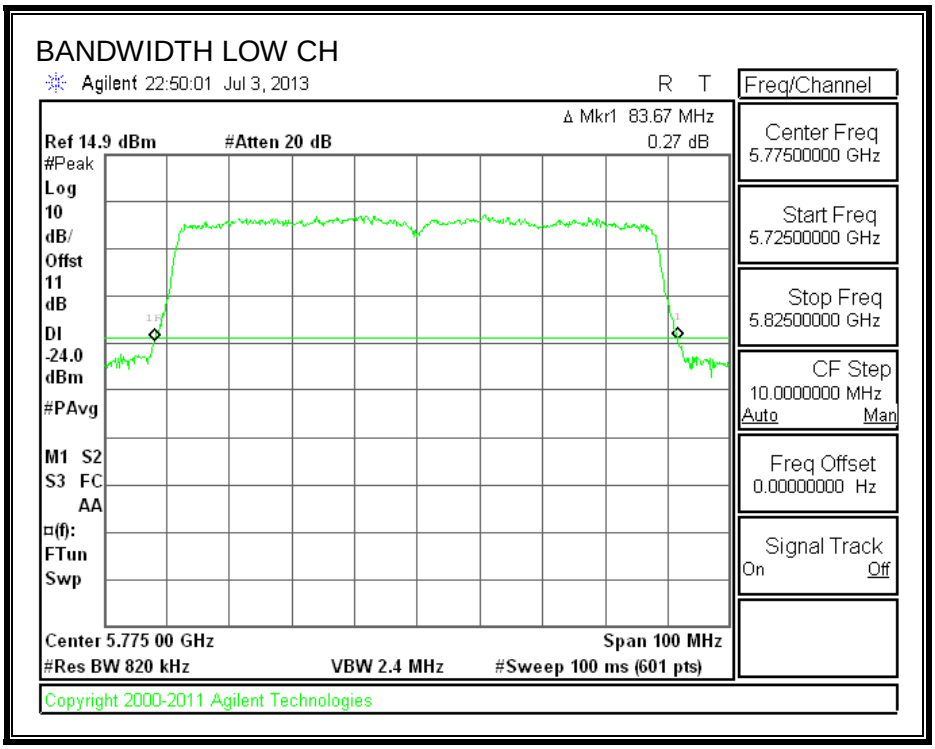
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5775	83.7

26 dB BANDWIDTH



9.23.1. 99% BANDWIDTH

LIMITS

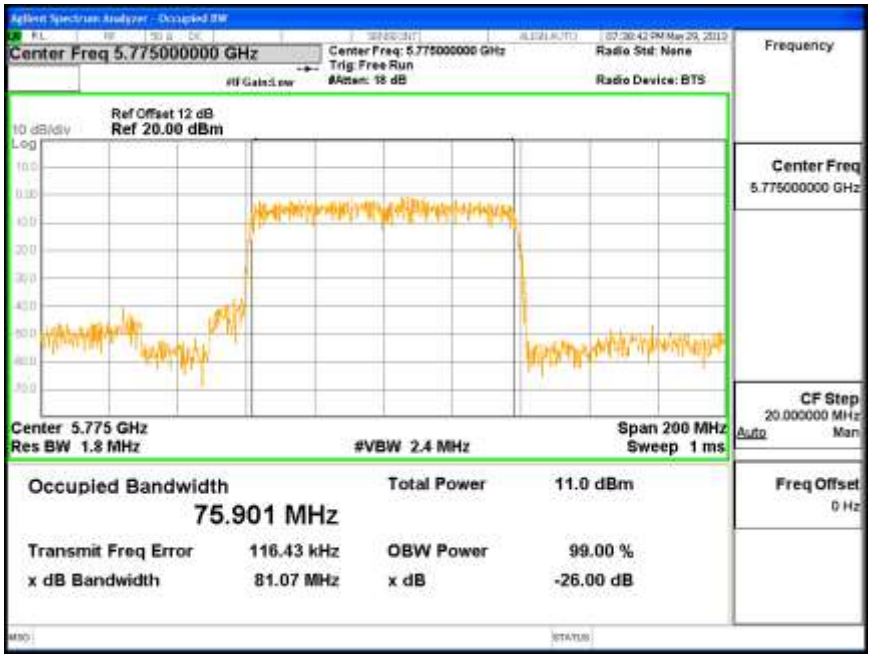
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5775	75.901

99% BANDWIDTH

BANDWIDTH LOW CH



9.23.2. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5775	9.9

9.23.3. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.825 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26-dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain up to 23 dBi without any corresponding reduction in the transmitter peak output power or peak power spectral density. For fixed, point-to-point U-NII transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in peak transmitter power and peak power spectral density for each 1 dB of antenna gain in excess of 23 dBi would be required. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5775	83.7	75.9	-1.00

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5775	30.00	30.00	36.00	30.00	17.00	17.00	17.00

Duty Cycle CF (dB)	0.21	Included in Calculations of Corr'd Power & PPSD

Output Power Results

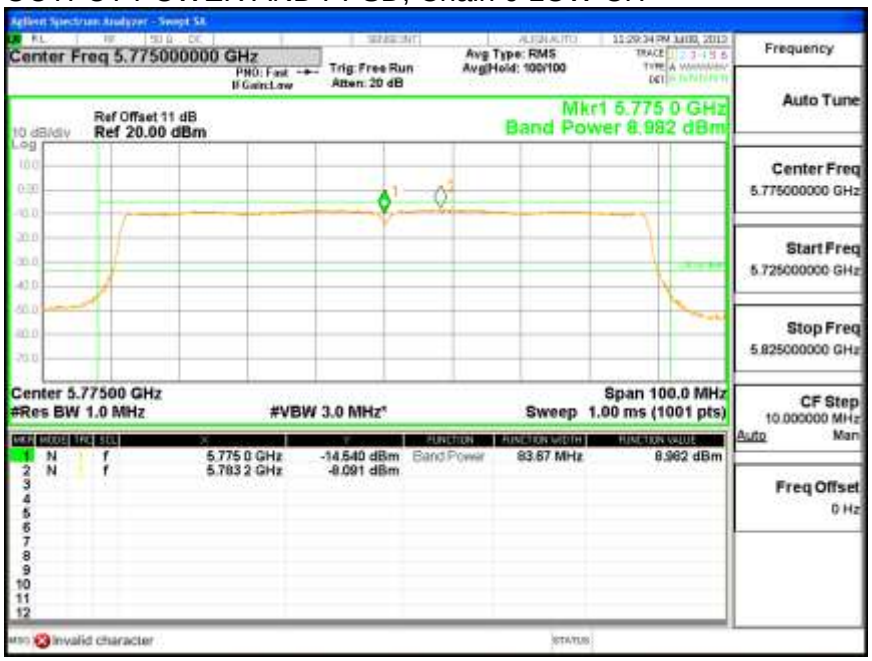
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5775	8.96	9.17	30.00	-20.83

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5775	-8.09	-7.88	17.00	-24.88

OUTPUT POWER AND PPSD, Chain 0

OUTPUT POWER AND PPSD, Chain 0 LOW CH



9.23.4. PEAK EXCURSION

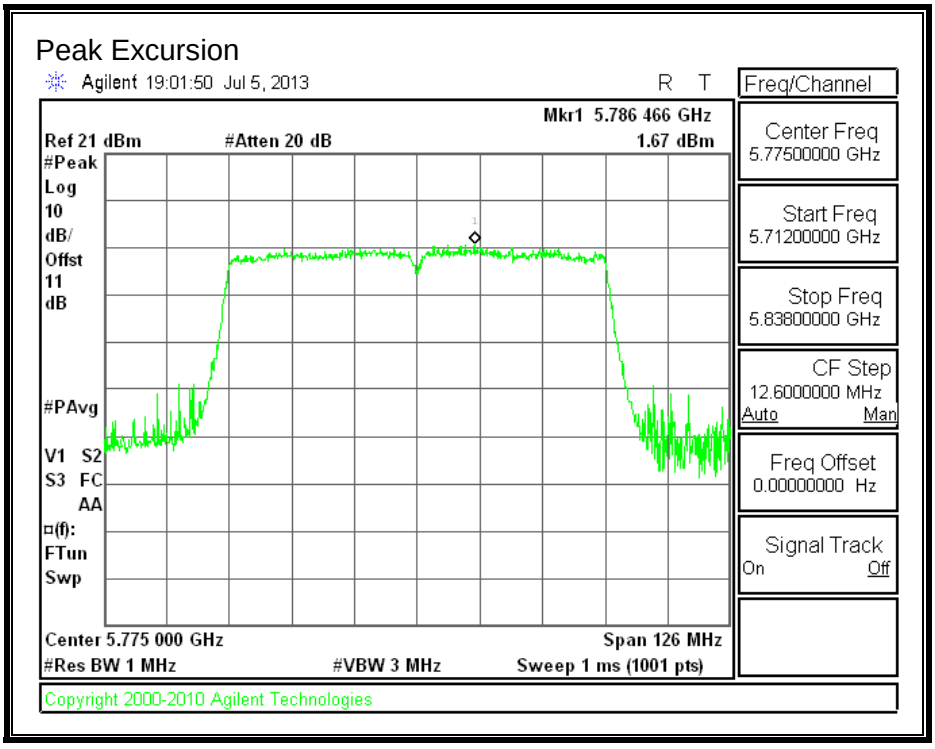
LIMITS

FCC §15.407 (a) (6)

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS

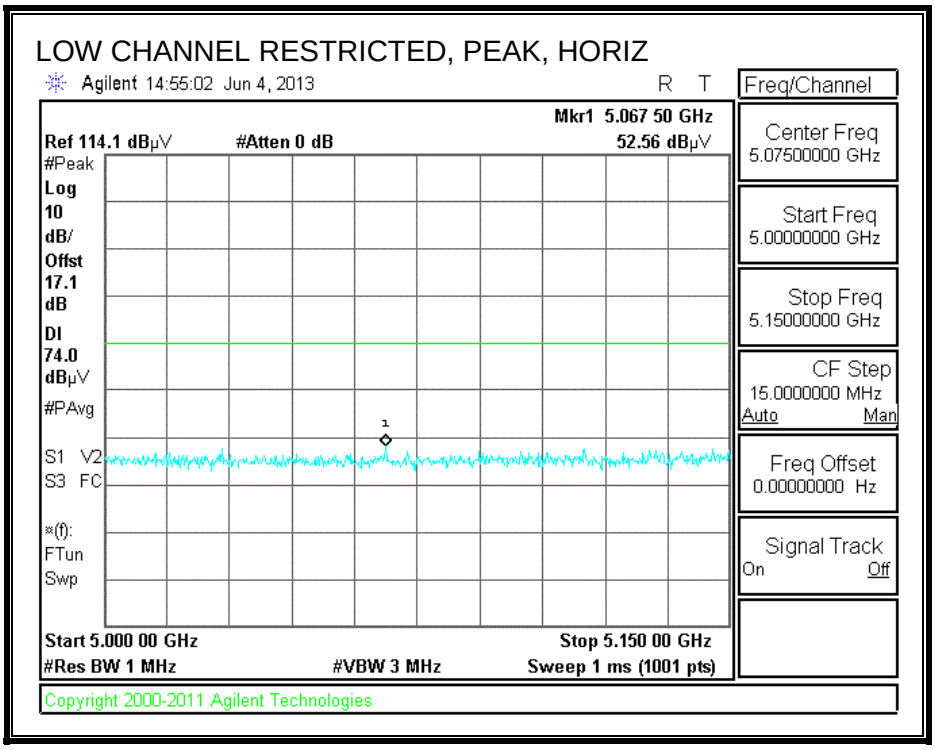
Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5775	1.670	-0.12	0.22	1.57	13	-11.43

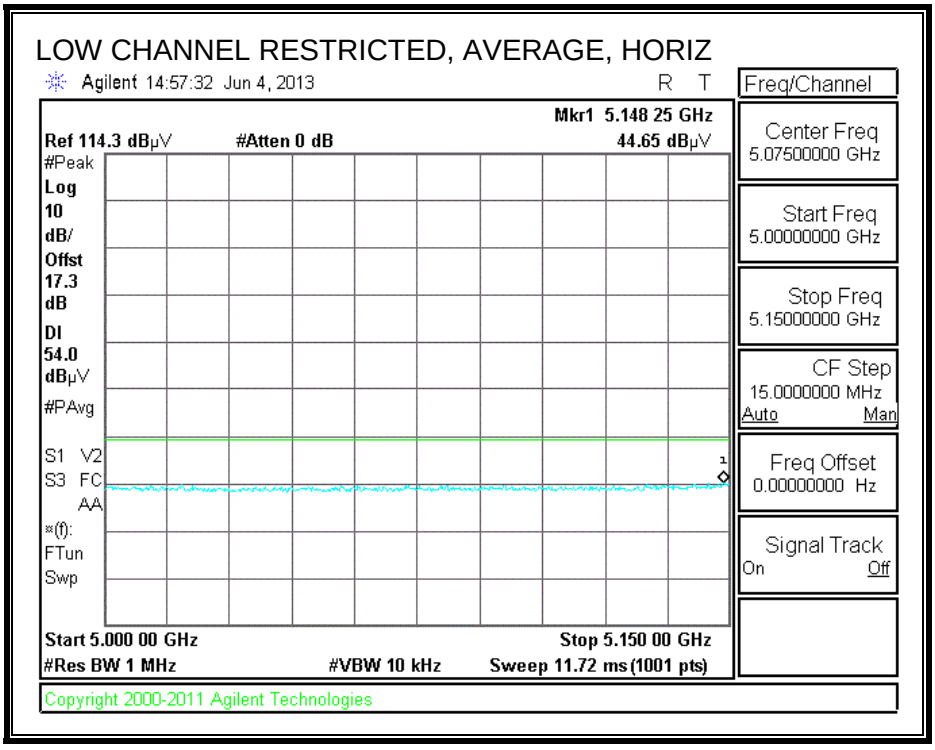


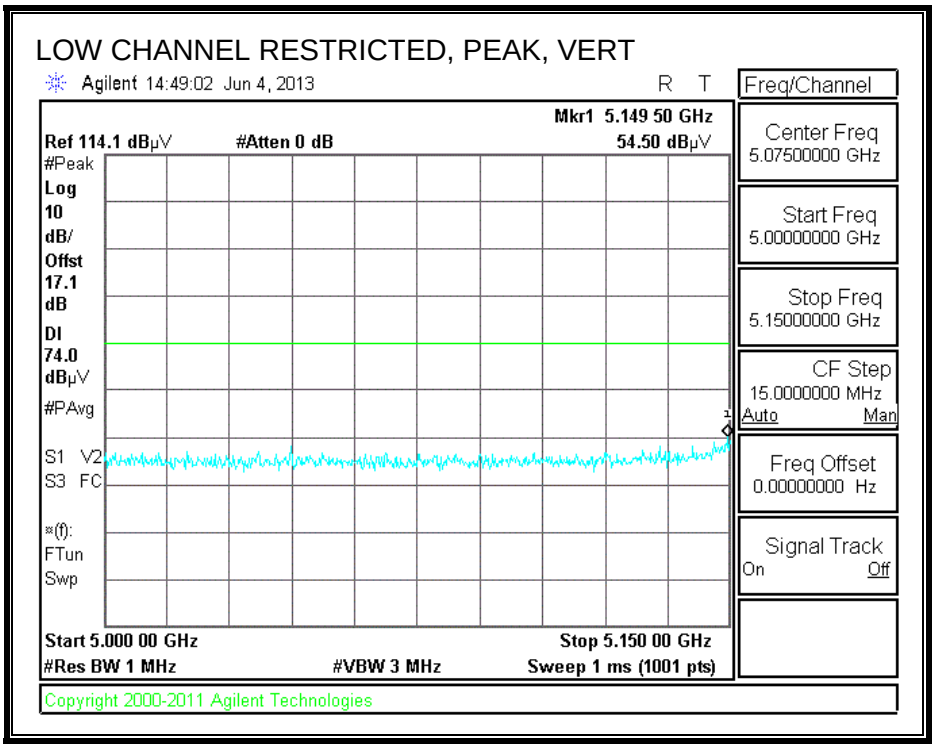
10. TRANSMITTER ABOVE 1 GHz

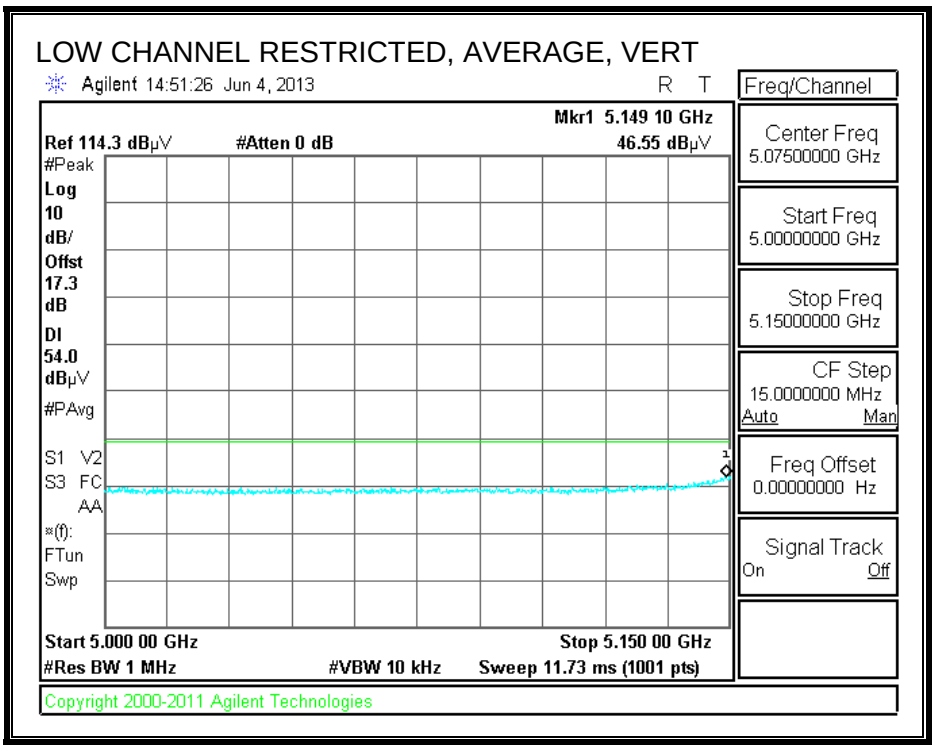
10.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



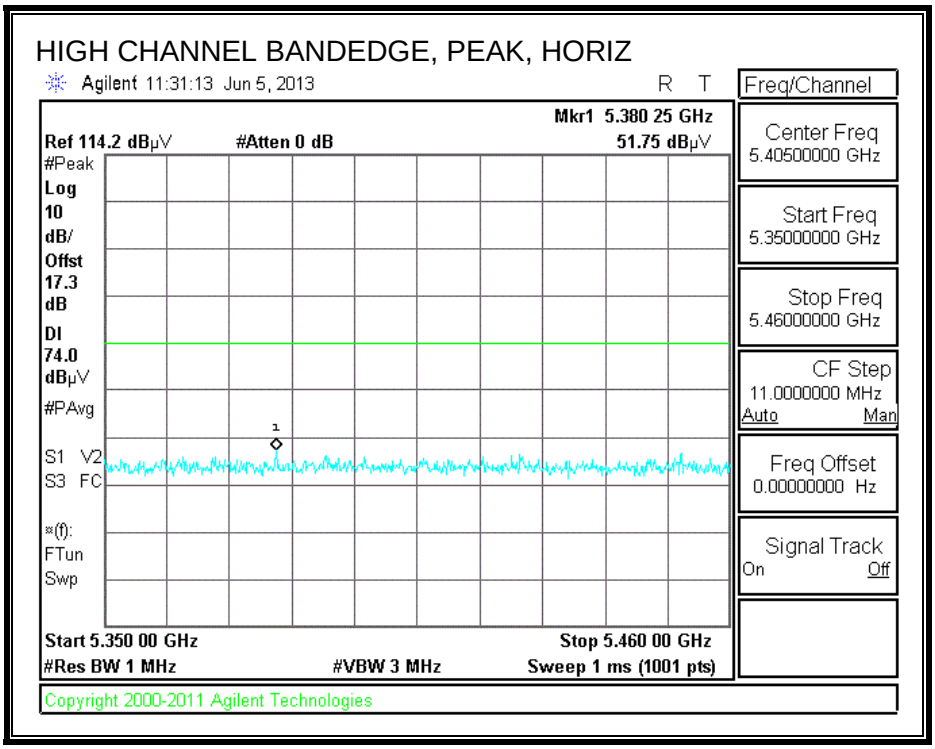




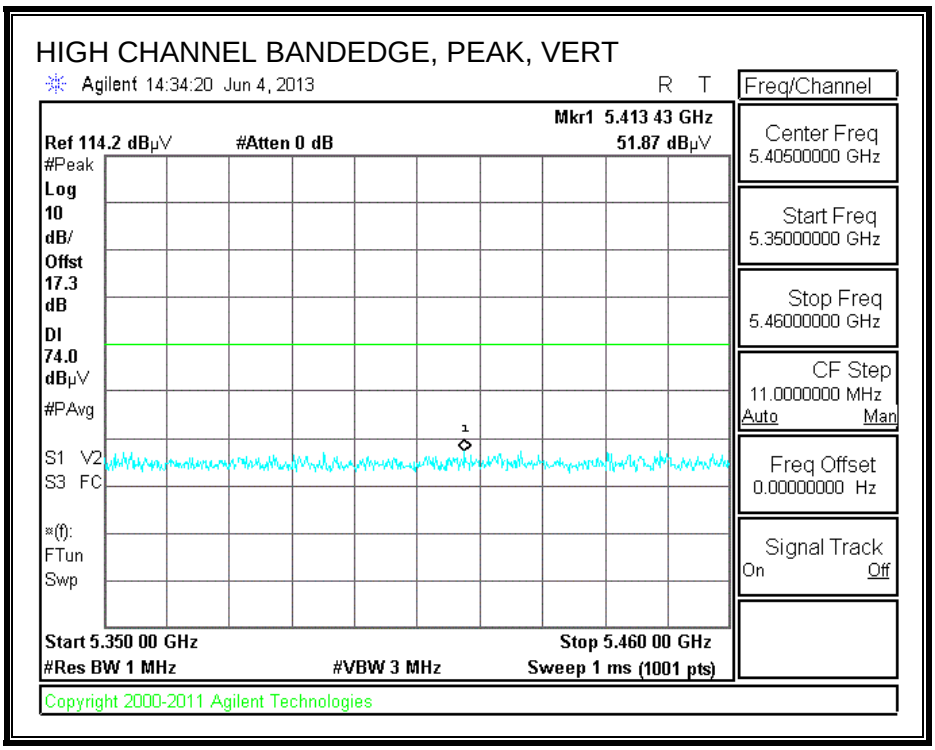


AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK, HORIZ

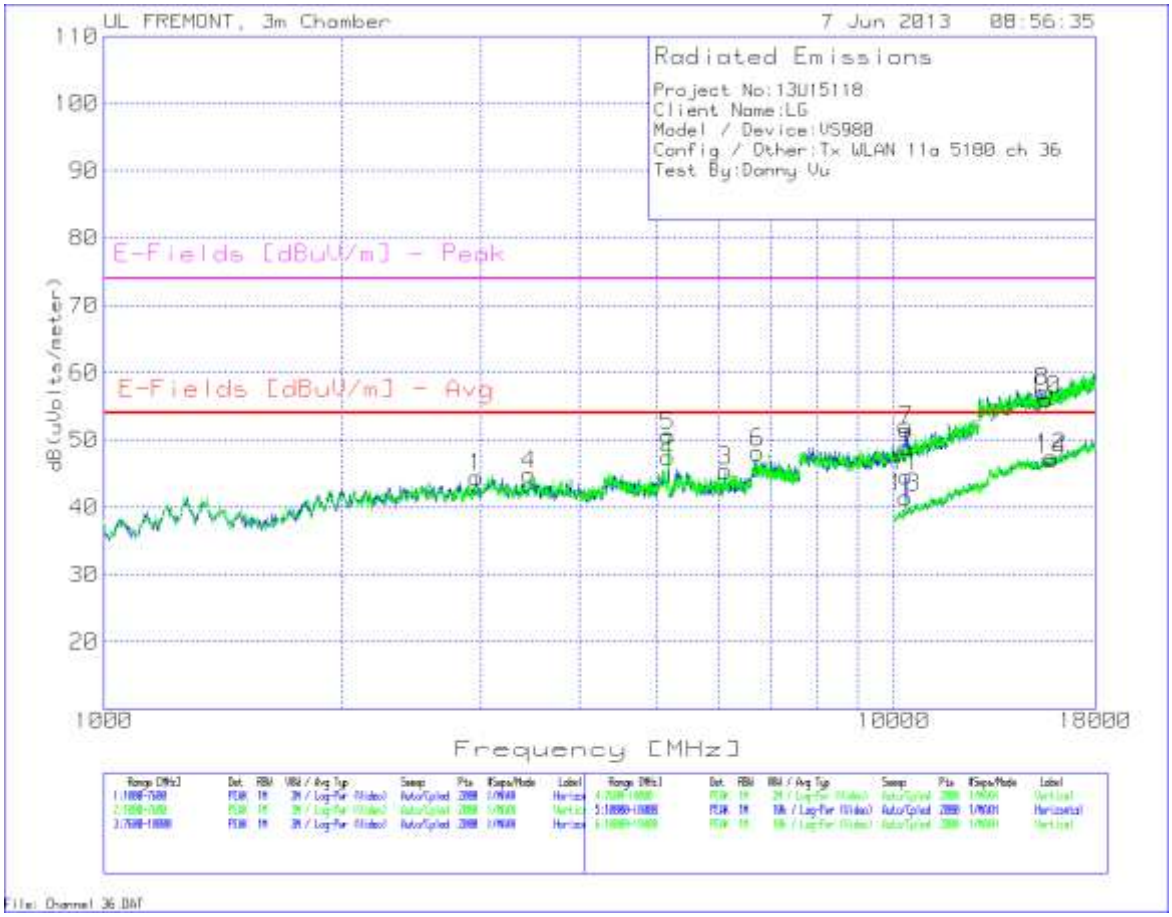


HIGH CHANNEL BANDEDGE, PEAK, VERT



HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL AND VERTCAL PLOT LOW CHANNEL



HORIZONTAL AND VERTCAL DATA LOW CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11a 5180 ch 36
Test By:Danny Vu

Horizontal 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	2962.519	40.17	PK	32.9	-28.6	0	0	44.47	53.97	-9.5	74	-29.53	114	Horz
2	5182.309	37.05	PK	34.2	-24.7	0.9	0	47.45	53.97	-6.52	74	-26.55	200	Horz
3	6125.637	34	PK	35.3	-24	0.1	0	45.4	53.97	-8.57	74	-28.6	114	Horz

Vertical 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3450.675	39.23	PK	32.9	-27.3	0	0	44.83	53.97	-9.14	74	-29.17	201	Vert
*5	5179.01	40.12	PK	34.2	-24.7	0.9	0	50.52	53.97	-3.45	74	-23.48	100	Vert
6	6719.34	35.85	PK	35.6	-23.4	0.1	0	48.15	53.97	-5.82	74	-25.85	201	Vert

Horizontal 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
**7	10365.017	34.87	PK	37.3	-20.9	0.2	0	51.47	53.97	-2.5	74	-22.53	201	Horz
**8	15432.484	33.26	PK	40.2	-16.4	0.2	0	57.26	53.97	3.29	74	-16.74	201	Horz

Vertical 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	10339.03	32.53	PK	37.2	-20.9	0.1	0	48.93	53.97	-5.04	74	-25.07	201	Vert
10	15598.801	31.74	PK	40.4	-16.6	0.4	0	55.94	53.97	1.97	74	-18.06	99	Vert

Horizontal 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
11	10359.82	28.09	PK	37.3	-20.9	0.1	0	44.59	53.97	-9.38	74	-29.41	201	Horz
12	15825.087	23.08	PK	40.4	-16.4	0.4	0	47.48	53.97	-6.49	74	-26.52	100	Horz

Vertical 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
13	10355.822	25.06	PK	37.2	-20.9	0.1	0	41.46	53.97	-12.51	74	-32.54	201	Vert
14	15849.075	22.72	PK	40.4	-16.4	0.3	0	47.02	53.97	-6.95	74	-26.98	99	Vert

Horizontal 7600 - 18000MHz

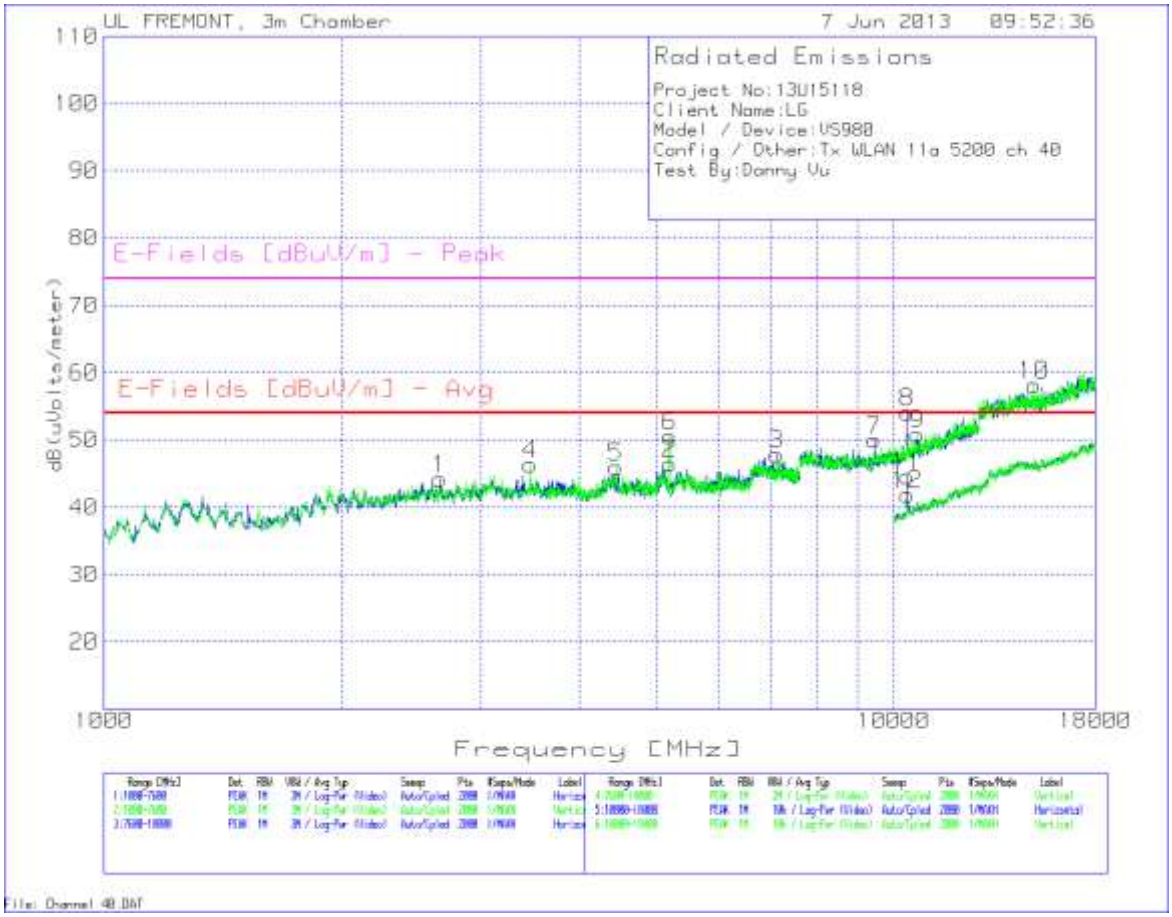
Test Frequency (MHz)	Meter Reading	Detector (dBuV)	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
10361.27	24.07	RMS	37.3	-20.9	0.2	0.2	40.87	53.97	-13.1	74	-33.13	102	387	Horz
15428.64	22.62	RMS	40.2	-16.4	0.2	0.2	46.82	53.97	-7.15	74	-27.18	48	387	Horz

Vertical 7600 - 18000MHz

Test Frequency (MHz)	Meter Reading	Detector (dBuV)	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
15603.59	22.77	RMS	40.4	-16.6	0.4	0.2	47.17	53.97	-6.8	74	-26.83	189	388	Vert

* Fundamental Frequencies
** In Restricted Band

HORIZONTAL AND VERTCAL PLOT MID CHANNEL



HORIZONTAL AND VERTCAL DATA MID CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11a 5200 ch 40
Test By:Danny Vu

Horizontal 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	2662.369	40.7	PK	32.6	-29.1	0	0	44.2	53.97	-9.77	74	-29.8	201	Horz
2	5205.397	36	PK	34.3	-24.7	0.9	0	46.5	53.97	-7.47	74	-27.5	99	Horz
3	7108.546	35.31	PK	35.6	-23.1	0.1	0	47.91	53.97	-6.06	74	-26.09	99	Horz

Vertical 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3467.166	40.63	PK	33	-27.3	0	0	46.33	53.97	-7.64	74	-27.67	100	Vert
5	4443.478	37.76	PK	33.8	-25.7	0.1	0	45.96	53.97	-8.01	74	-28.04	100	Vert
*6	5203.748	40.08	PK	34.3	-24.7	0.9	0	50.58	53.97	-3.39	74	-23.42	201	Vert

Horizontal 7600 - 18000MHz

Marker No.	Test Freque	Meter Rea	Detector	T119 Ant F	T34 Pream	T193 HPF [	DC Corr [d	dB(uVolts/	E-Fields [dB	Margin (dB)	E-Fields [dB	Margin (d	Height [cn	Polarity
***7	9455.472	34.97	PK	36.5	-21.8	0.3	0	49.97	53.97	-4	74	-24.03	201	Horz
**8	10396.202	37.32	PK	37.3	-20.8	0.3	0	54.12	53.97	0.15	74	-19.88	99	Horz

Vertical 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
***9	10713.243	32.82	PK	37.9	-20.3	0.4	0	50.82	53.97	-3.15	74	-23.18	100	Vert
***10	15073.863	33.94	PK	39.8	-16.3	0.7	0	58.14	53.97	4.17	74	-15.86	100	Vert

Horizontal 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
11	10403.798	27.72	PK	37.4	-20.7	0.2	0	44.62	53.97	-9.35	74	-29.38	99	Horz

Vertical 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
12	10399.8	25.14	PK	37.3	-20.7	0.2	0	41.94	53.97	-12.03	74	-32.06	201	Vert

Horizontal 7600 - 18000MHz

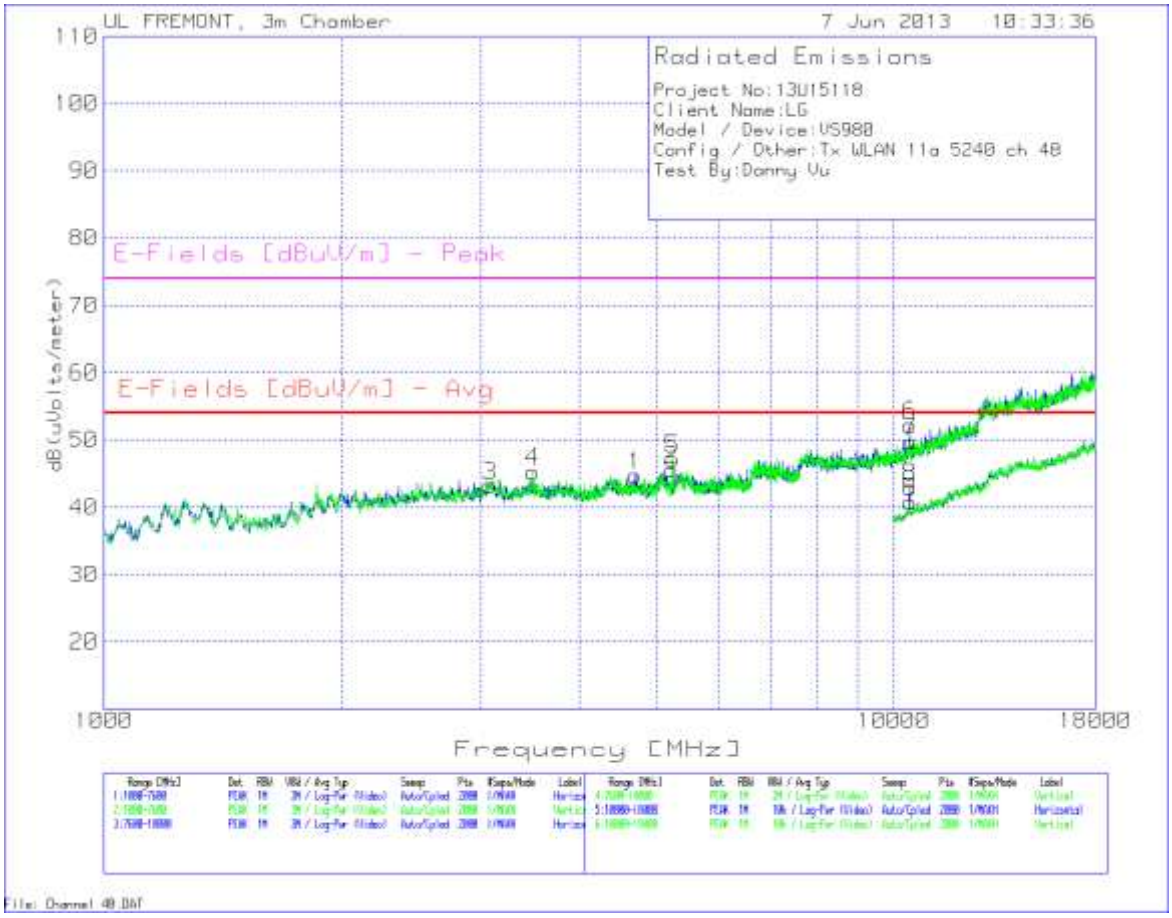
Test Frequency	Meter Reading (MHz)	Detector (dBuV)	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
9464.06	23.27	RMS	36.5	-21.8	0.3	0.2	38.47	53.97	-15.5	74	-35.53	289	388	Horz

Vertical 7600 - 18000MHz

Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
10715.14	22.21	RMS	37.9	-20.3	0.5	0.2	40.51	53.97	-13.46	74	-33.49	306	388	Vert

* Fundamental Frequencies
** Not in Restricted Band
*** In Restricted Band

HORIZONTAL AND VERTCAL PLOT HIGH CHANNEL



HORIZONTAL AND VERTCAL DATA HIGH CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11a 5240 ch 48
Test By:Danny Vu

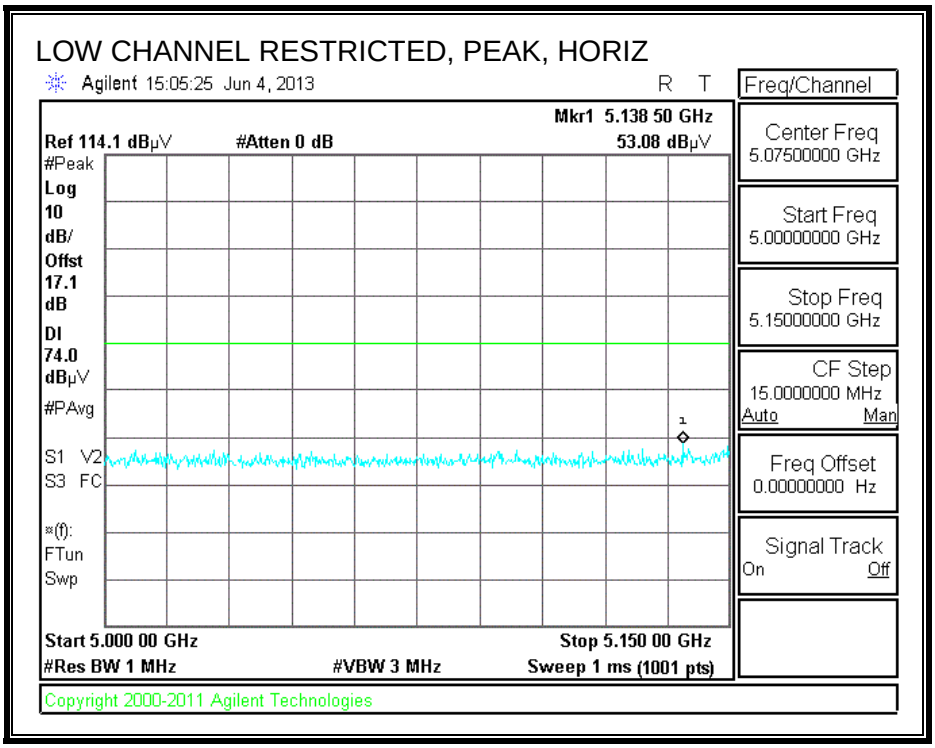
Horizontal 1000 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	4707.346	35.88	PK	34.1	-25.4	0.1	0	44.68	53.97	-9.29	74	-29.32	99	Horz
2	5238.381	35.11	PK	34.3	-24.7	0.9	0	45.61	53.97	-8.36	74	-28.39	99	Horz
3	3081.259	38.48	PK	33	-28.3	0	0	43.18	53.97	-10.79	74	-30.82	99	Horz
Vertical 1000 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3493.553	39.46	PK	33	-27.2	0	0	45.26	53.97	-8.71	74	-28.74	201	Vert
5	5248.276	36.73	PK	34.3	-24.7	0.9	0	47.23	53.97	-6.74	74	-26.77	201	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
*6	10484.558	35.14	PK	37.5	-20.6	0.2	0	52.24	53.97	-1.73	74	-21.76	99	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
*7	10479.36	32.68	PK	37.5	-20.6	0.2	0	49.78	53.97	-4.19	74	-24.22	201	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	10483.758	25.87	PK	37.5	-20.6	0.2	0	42.97	53.97	-11	74	-31.03	201	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	10483.758	23.72	PK	37.5	-20.6	0.2	0	40.82	53.97	-13.15	74	-33.18	201	Vert

* Not in Restricted Band

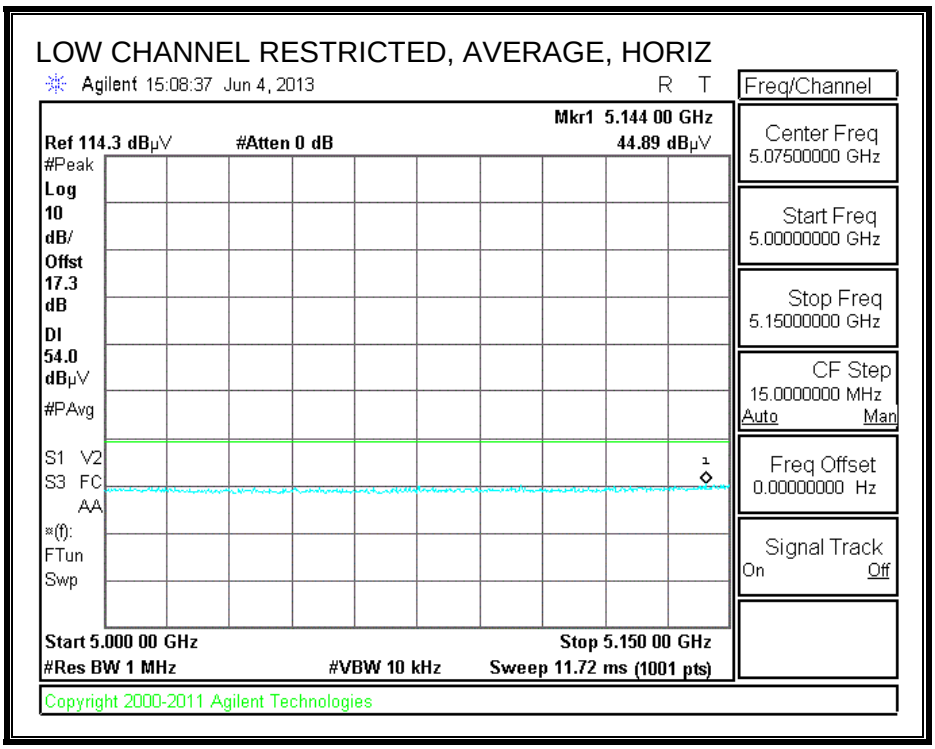
10.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

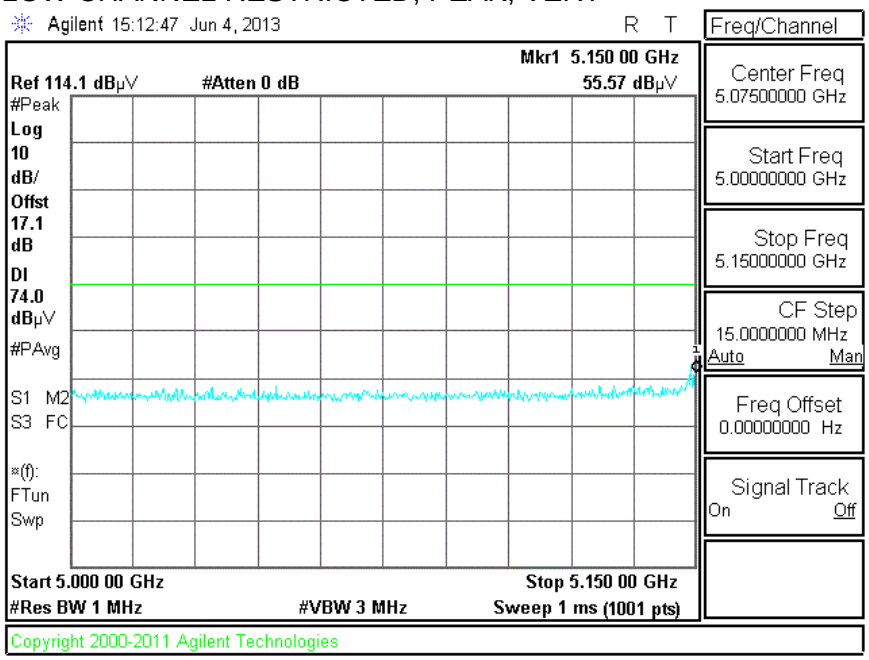
LOW CHANNEL RESTRICTED, PEAK, HORIZ



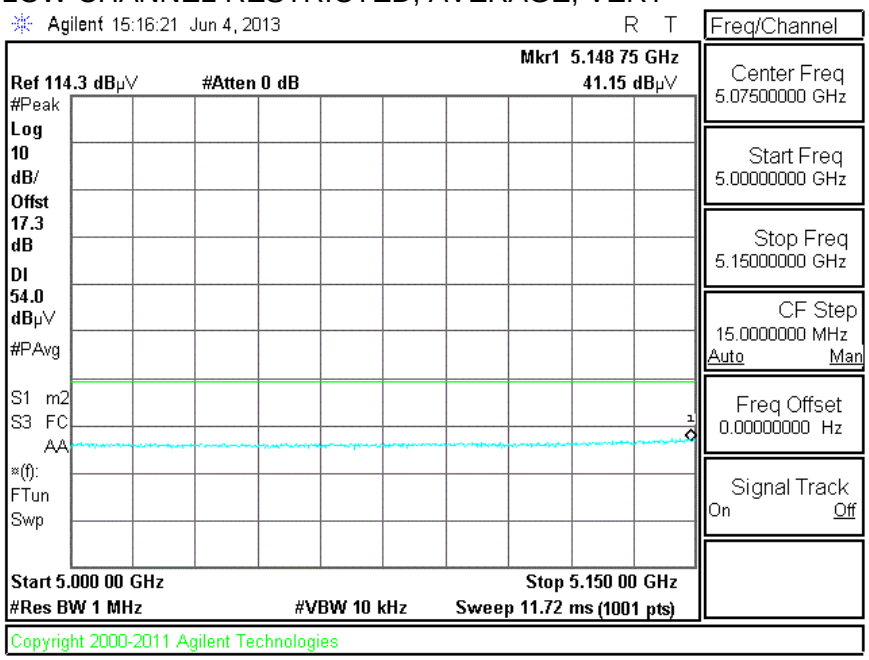
LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



LOW CHANNEL RESTRICTED, PEAK, VERT

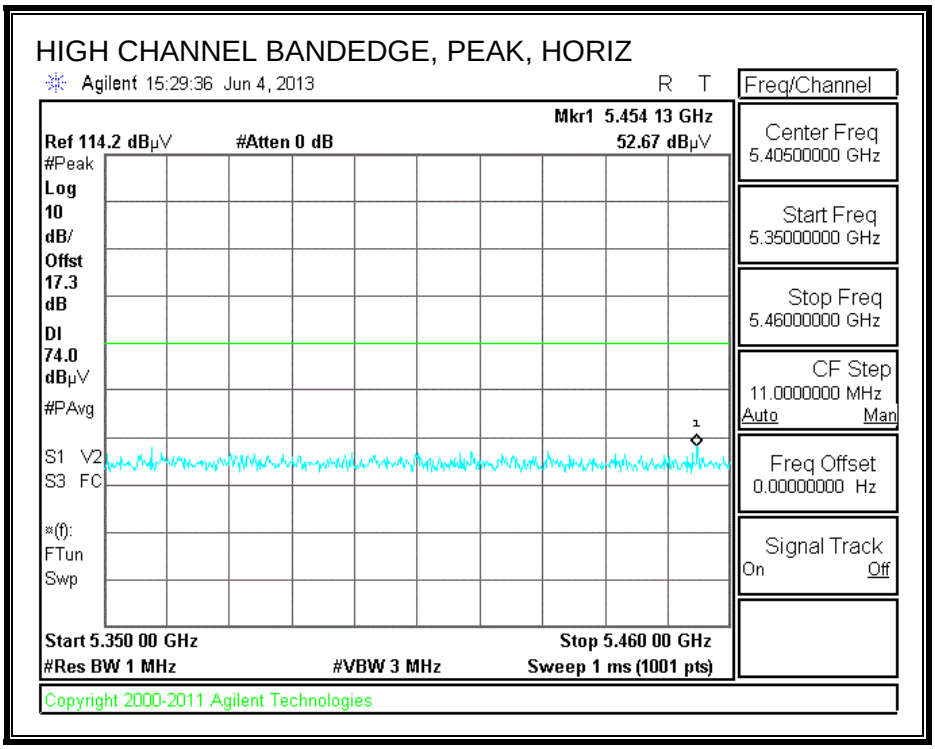


LOW CHANNEL RESTRICTED, AVERAGE, VERT

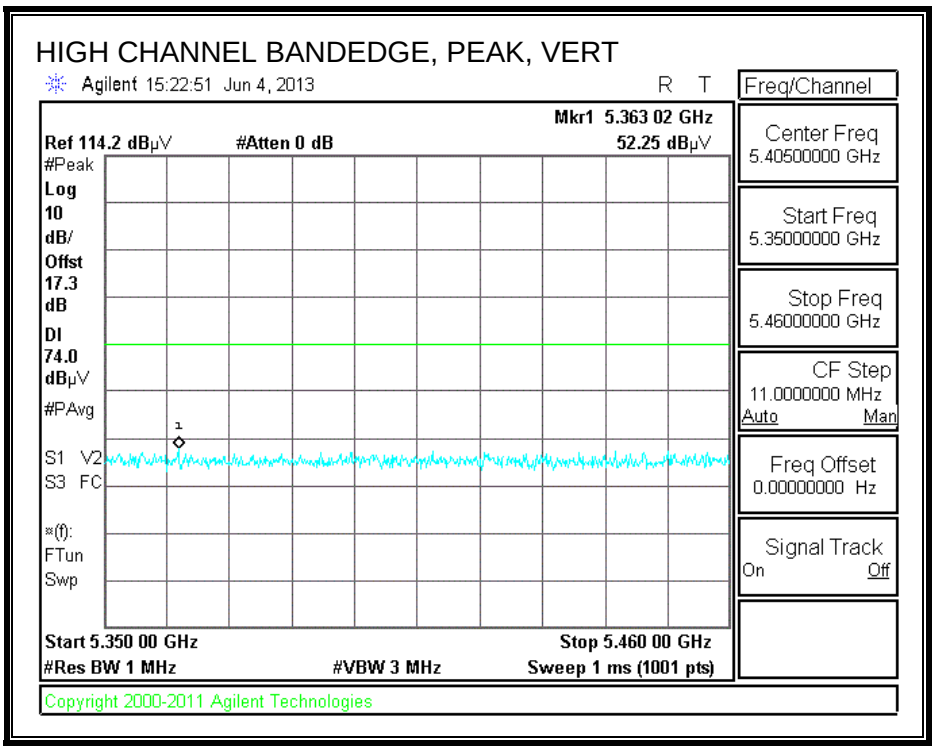


AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK, HORIZ

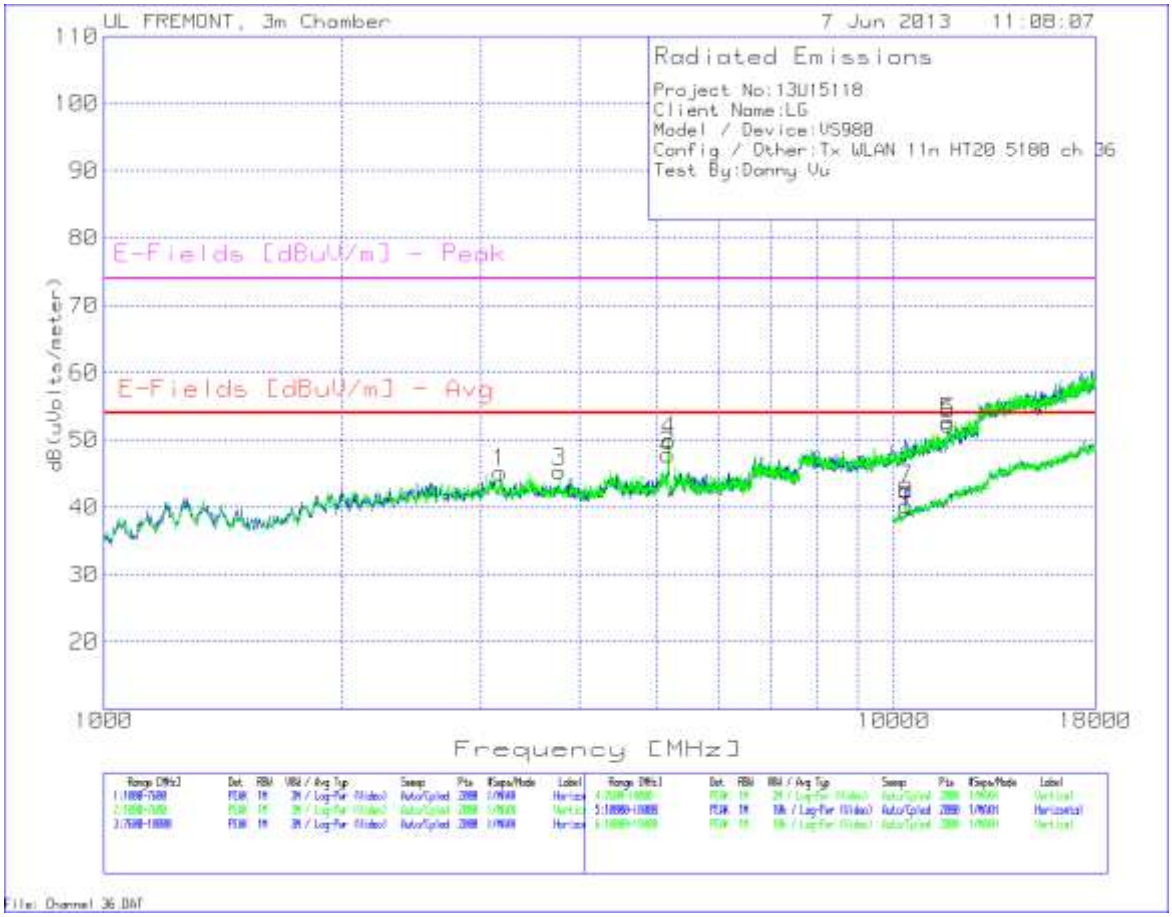


HIGH CHANNEL BANDEDGE, PEAK, VERT



HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL AND VERTICAL PLOT LOW CHANNEL



HORIZONTAL AND VERTCAL DATA LOW CHANNEL

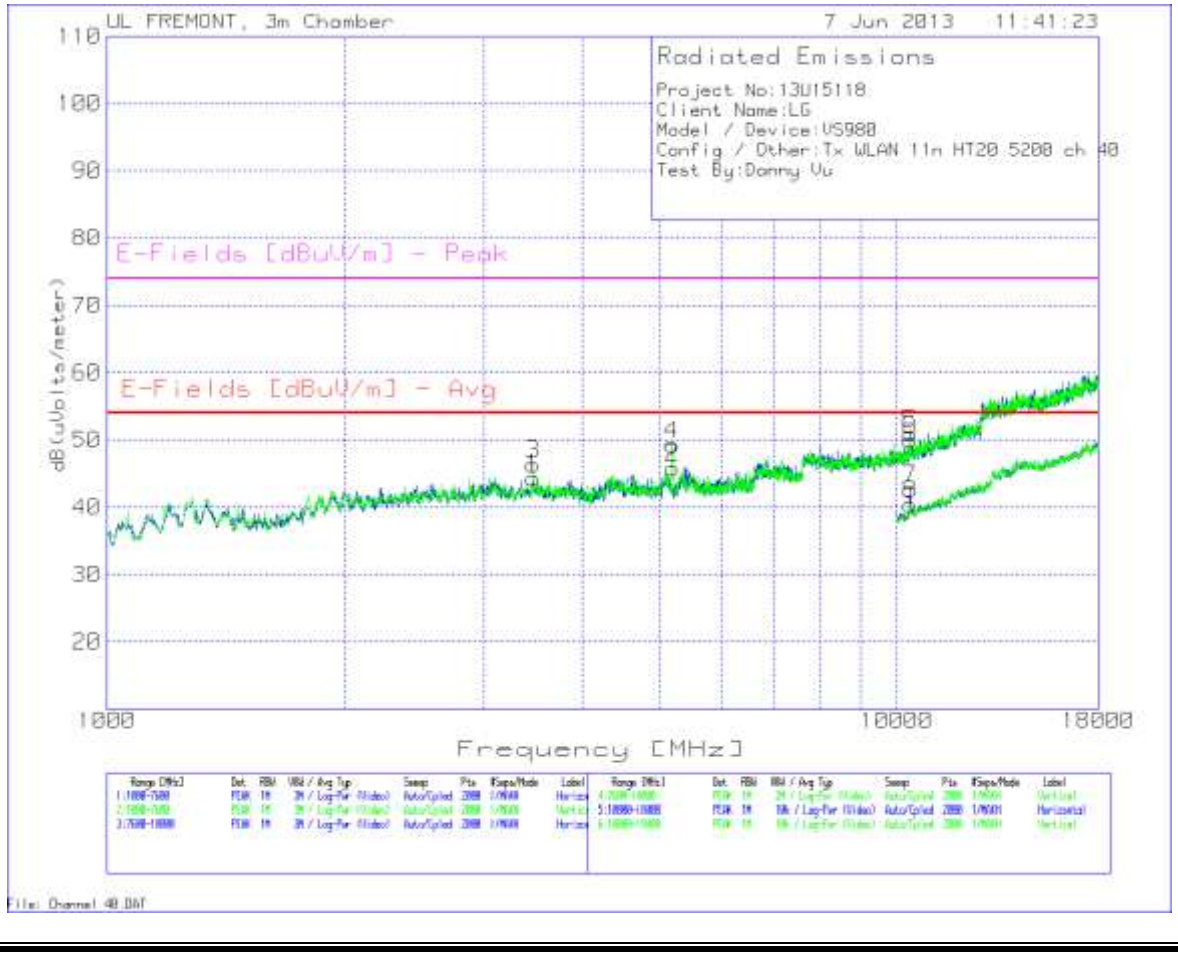
Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11n HT20 5180 ch 36
Test By:Danny Vu

Horizontal 1000 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3170.315	40.38	PK	32.9	-28.2	0.1	0	45.18	53.97	-8.79	74	-28.82	201	Horz
2	5182.309	37.4	PK	34.2	-24.7	0.9	0	47.8	53.97	-6.17	74	-26.2	201	Horz
Vertical 1000 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
3	3770.615	38.74	PK	33.2	-26.6	0	0	45.34	53.97	-8.63	74	-28.66	201	Vert
*4	5188.906	39.37	PK	34.3	-24.7	0.9	0	49.87	53.97	-4.1	74	-24.13	99	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
**5	11711.144	32.9	PK	38.7	-19.2	0.4	0	52.8	53.97	-1.17	74	-21.2	100	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
**6	11726.737	32.36	PK	38.7	-19.2	0.5	0	52.36	53.97	-1.61	74	-21.64	201	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	10363.818	26.09	PK	37.3	-20.9	0.2	0	42.69	53.97	-11.28	74	-31.31	100	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	10363.818	23.63	PK	37.3	-20.9	0.2	0	40.23	53.97	-13.74	74	-33.77	201	Vert
Horizontal 7600 - 18000MHz														
Test Frequency (MHz)	Meter Reading (dbuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
11715.61	22.13	RMS	38.7	-19.2	0.5	0.2	42.33	53.97	-11.64	74	-31.67	209	388	Horz
11727.08	22.19	RMS	38.7	-19.2	0.5	0.2	42.39	53.97	-11.58	74	-31.61	177	388	Horz

* Fundamental Frequency
** In Restricted Band

HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL AND VERTCAL PLOT MID CHANNEL



HORIZONTAL AND VERTCAL DATA MID CHANNEL

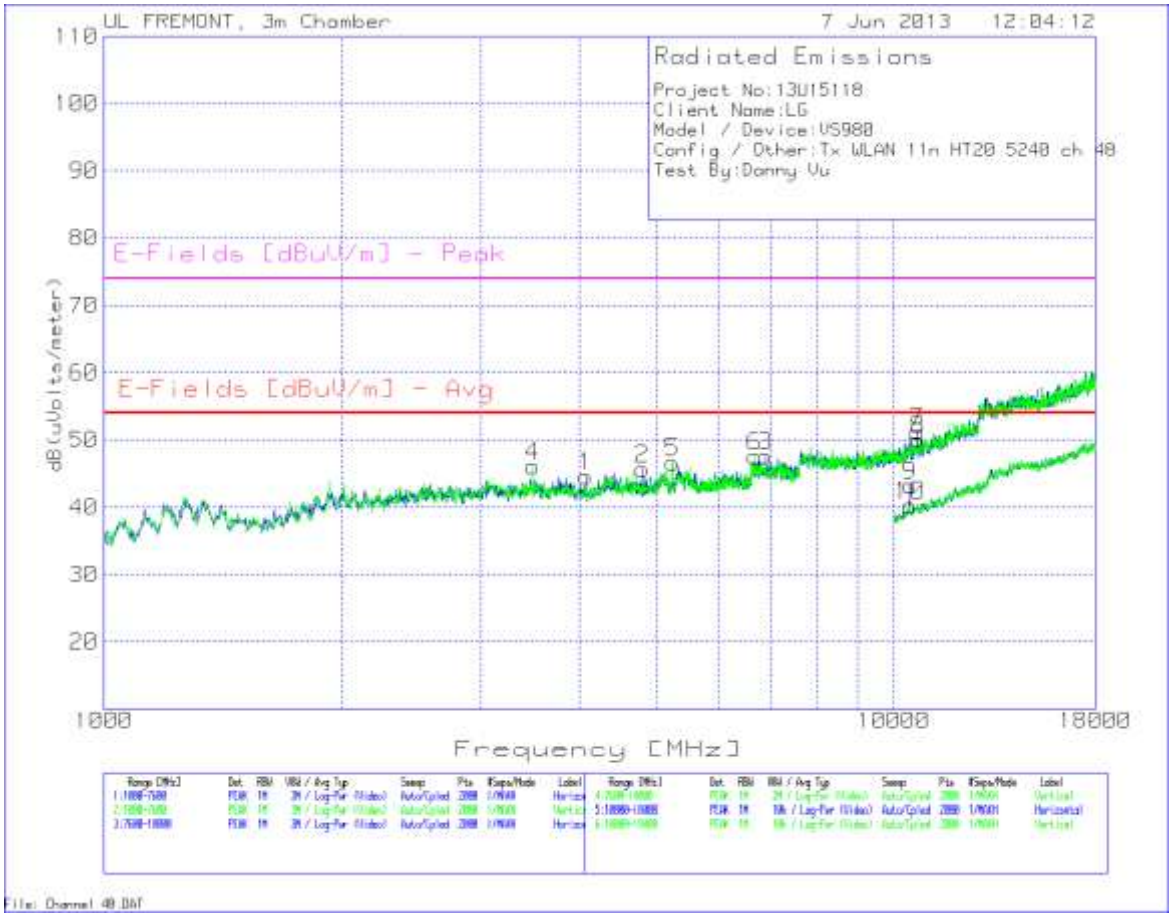
Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11n HT20 5200 ch 40
Test By:Danny Vu

Horizontal 1000 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3467.166	38.61	PK	33	-27.3	0	0	44.31	53.97	-9.66	74	-29.69	100	Horz
2	5205.397	35.28	PK	34.3	-24.7	0.9	0	45.78	53.97	-8.19	74	-28.22	100	Horz
Vertical 1000 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
3	3463.868	40.66	PK	33	-27.3	0	0	46.36	53.97	-7.61	74	-27.64	201	Vert
*4	5195.502	38.79	PK	34.3	-24.7	0.9	0	49.29	53.97	-4.68	74	-24.71	201	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
**5	10406.597	34.01	PK	37.4	-20.7	0.2	0	50.91	53.97	-3.06	74	-23.09	99	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
**6	10401.399	33.19	PK	37.3	-20.7	0.2	0	49.99	53.97	-3.98	74	-24.01	99	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	10395.802	25.93	PK	37.3	-20.8	0.3	0	42.73	53.97	-11.24	74	-31.27	201	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	10399.8	23.57	PK	37.3	-20.7	0.2	0	40.37	53.97	-13.6	74	-33.63	201	Vert
Horizontal 7600 - 18000MHz														
Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
10401.26	23.1	RMS	37.3	-20.7	0.2	0.2	40.1	53.97	-13.87	74	-33.9	14	388	Vert
10403.13	23.09	RMS	37.4	-20.7	0.2	0.2	40.19	53.97	-13.78	74	-33.81	51	388	Horz

* Fundamental Frequency
** In Restricted Band

HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL AND VERTCAL PLOT HIGH CHANNEL



HORIZONTAL AND VERTCAL DATA HIGH CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11n HT20 5240 ch 48
Test By:Danny Vu

Horizontal 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	4070.765	37.2	PK	33.5	-26.2	0.1	0	44.6	53.97	-9.37	74	-29.4	201	Horz
2	4806.297	36.66	PK	34.1	-25.2	0.1	0	45.66	53.97	-8.31	74	-28.34	201	Horz
3	6884.258	35.18	PK	35.6	-23.2	0	0	47.58	53.97	-6.39	74	-26.42	100	Horz

Vertical 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3493.553	40.32	PK	33	-27.2	0	0	46.12	53.97	-7.85	74	-27.88	201	Vert
5	5244.978	36.18	PK	34.3	-24.7	0.9	0	46.68	53.97	-7.29	74	-27.32	201	Vert
6	6669.865	35.3	PK	35.6	-23.4	0.1	0	47.6	53.97	-6.37	74	-26.4	100	Vert

Horizontal 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
*7	10713.243	33.3	PK	37.9	-20.3	0.4	0	51.3	53.97	-2.67	74	-22.7	99	Horz

Vertical 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
*8	10744.428	31.99	PK	37.9	-20.2	0.3	0	49.99	53.97	-3.98	74	-24.01	100	Vert

Horizontal 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	10483.758	26.09	PK	37.5	-20.6	0.2	0	43.19	53.97	-10.78	74	-30.81	99	Horz

Vertical 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	10487.756	23.16	PK	37.5	-20.6	0.2	0	40.26	53.97	-13.71	74	-33.74	100	Vert

Horizontal 7600 - 18000MHz

Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
10708.62	22.1	RMS	37.9	-20.3	0.4	0.2	40.3	53.97	-13.67	74	-33.7	158	388	Horz

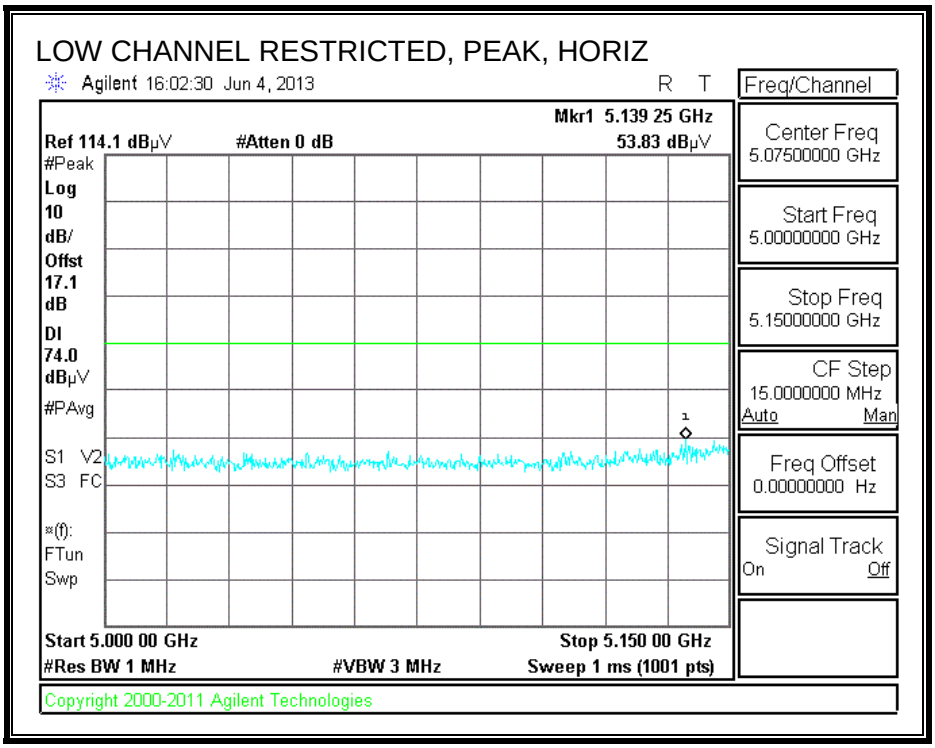
Vertical 7600 - 18000MHz

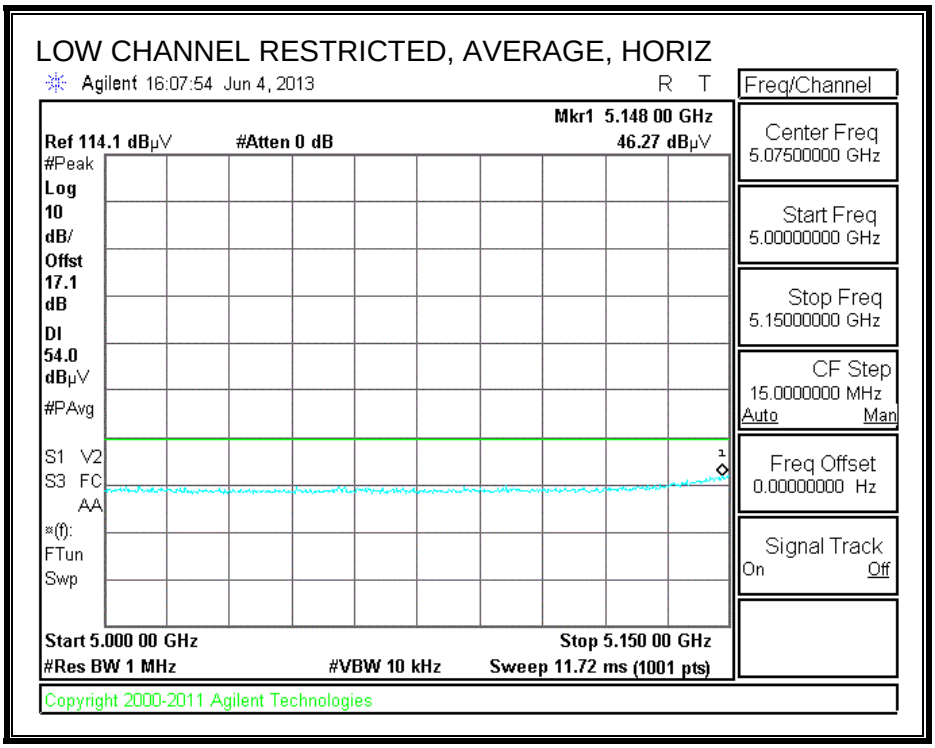
Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
10735.92	22.18	RMS	37.9	-20.3	0.5	0.2	40.48	53.97	-13.49	74	-33.52	295	388	Vert

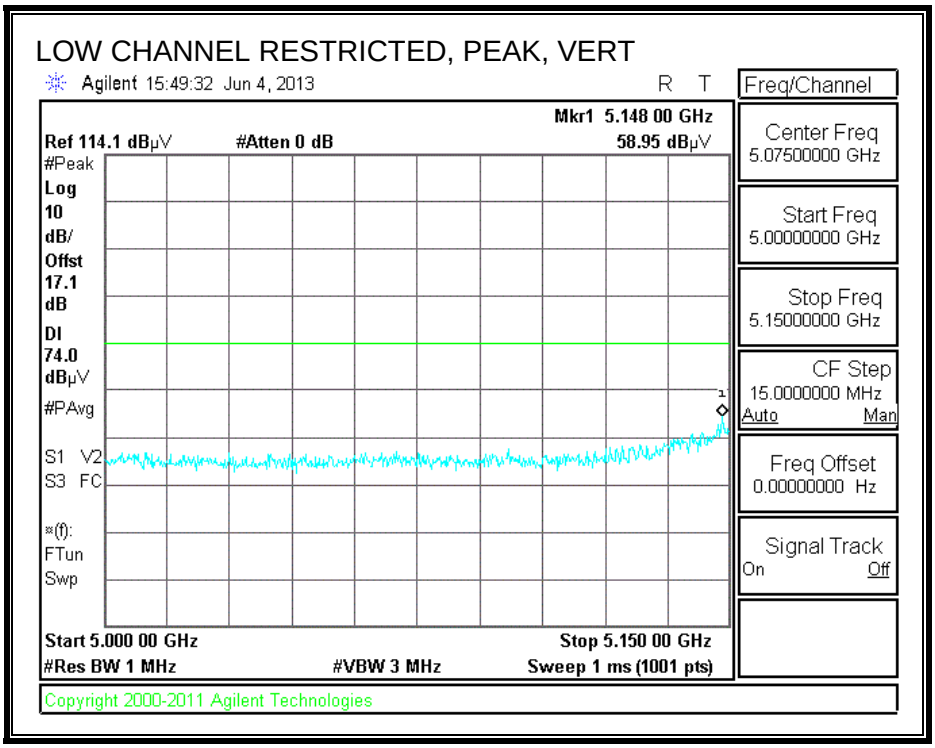
* In Restricted Band

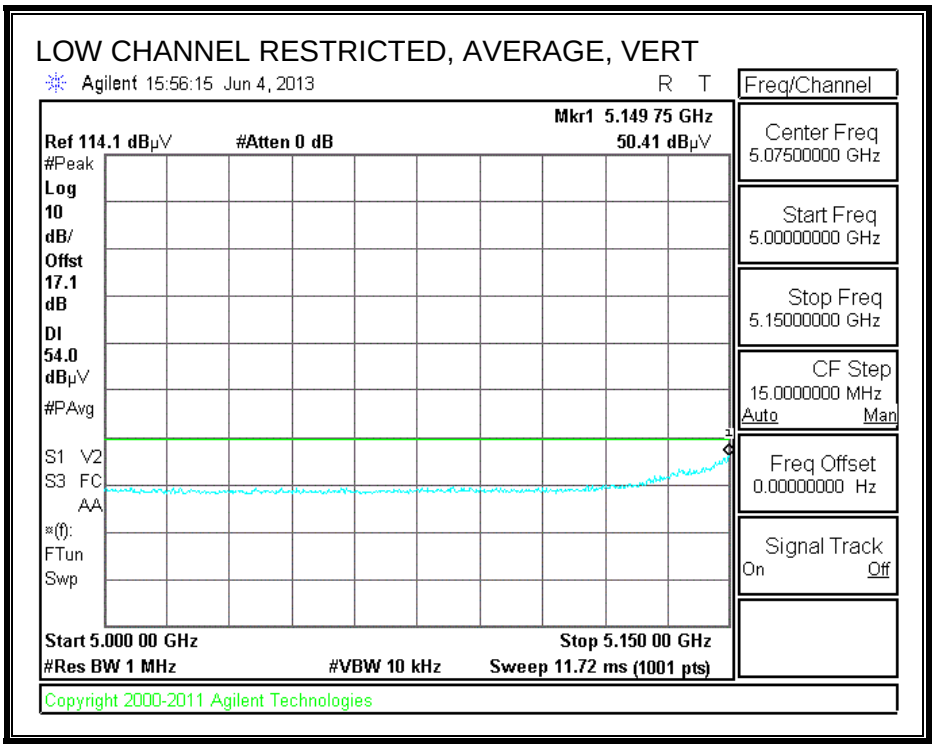
10.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)



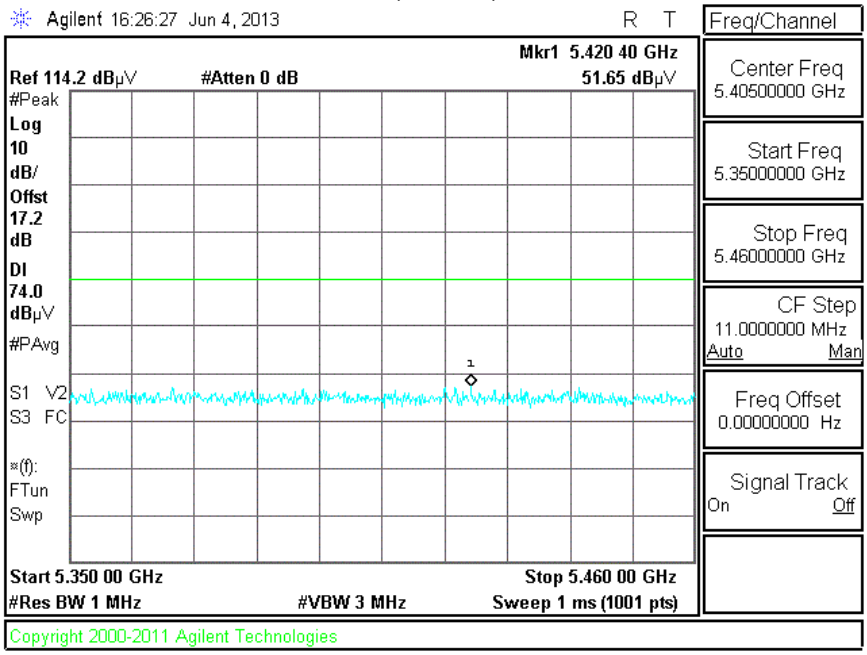




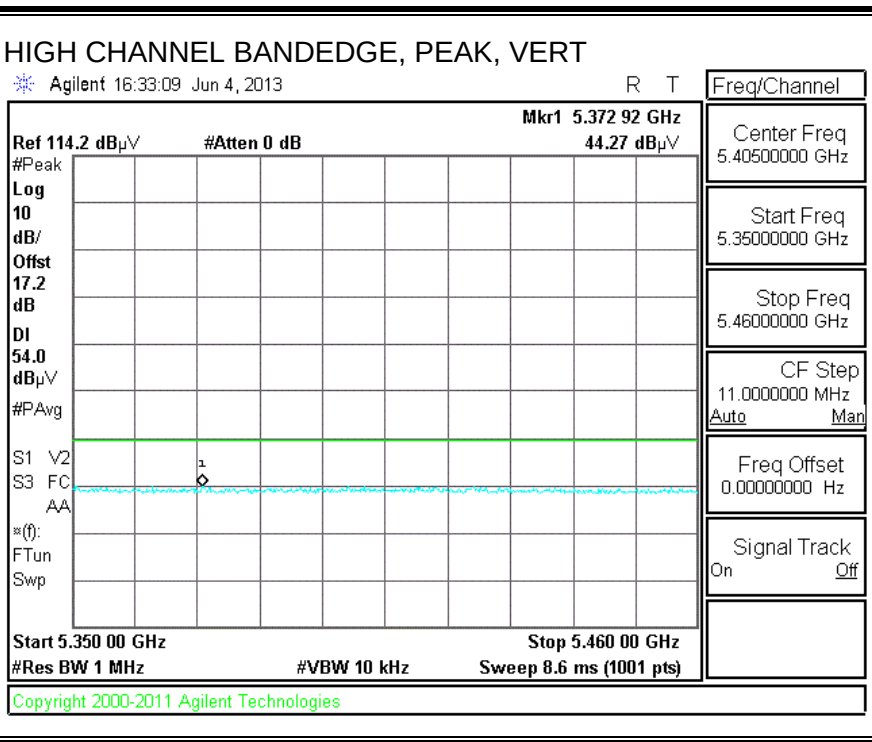


AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK, HORIZ

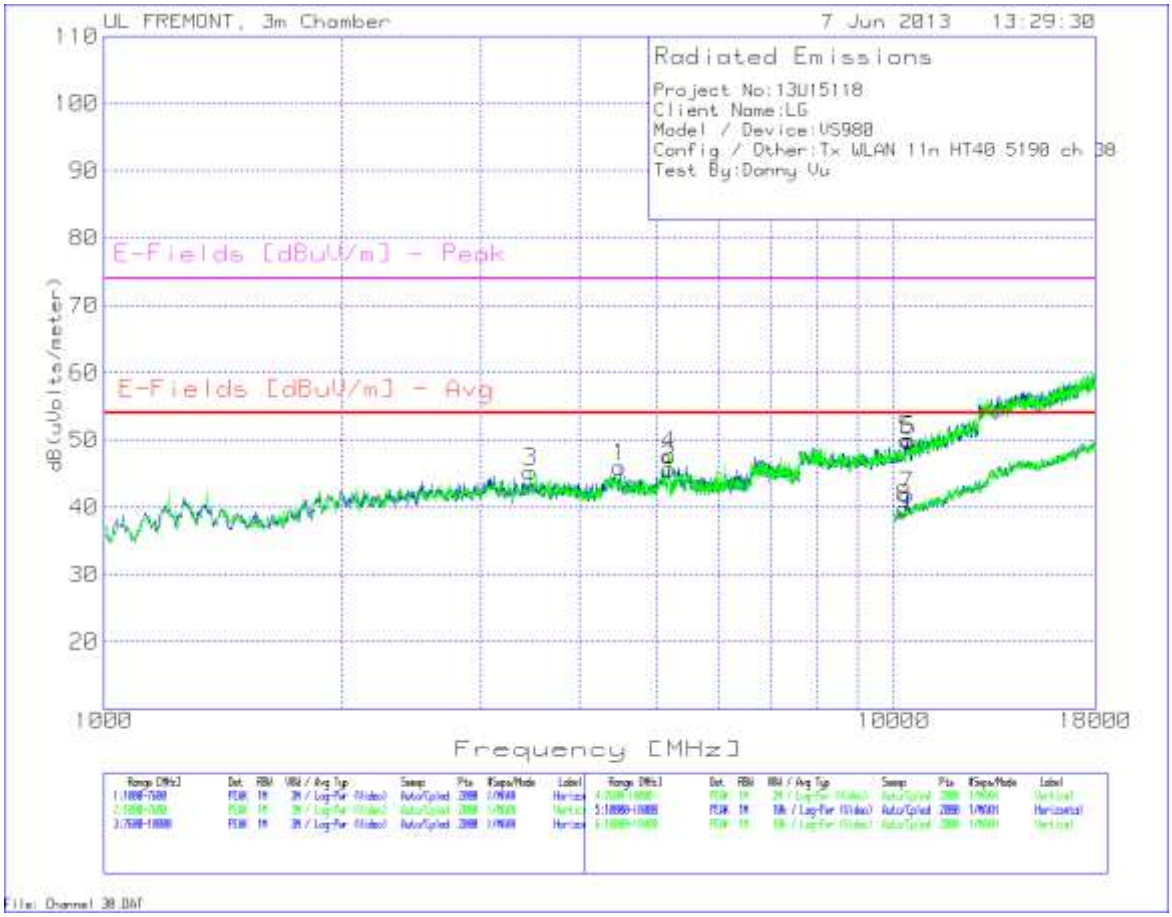


HIGH CHANNEL BANDEDGE, PEAK, VERT



HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL AND VERTCAL PLOT LOW CHANNEL



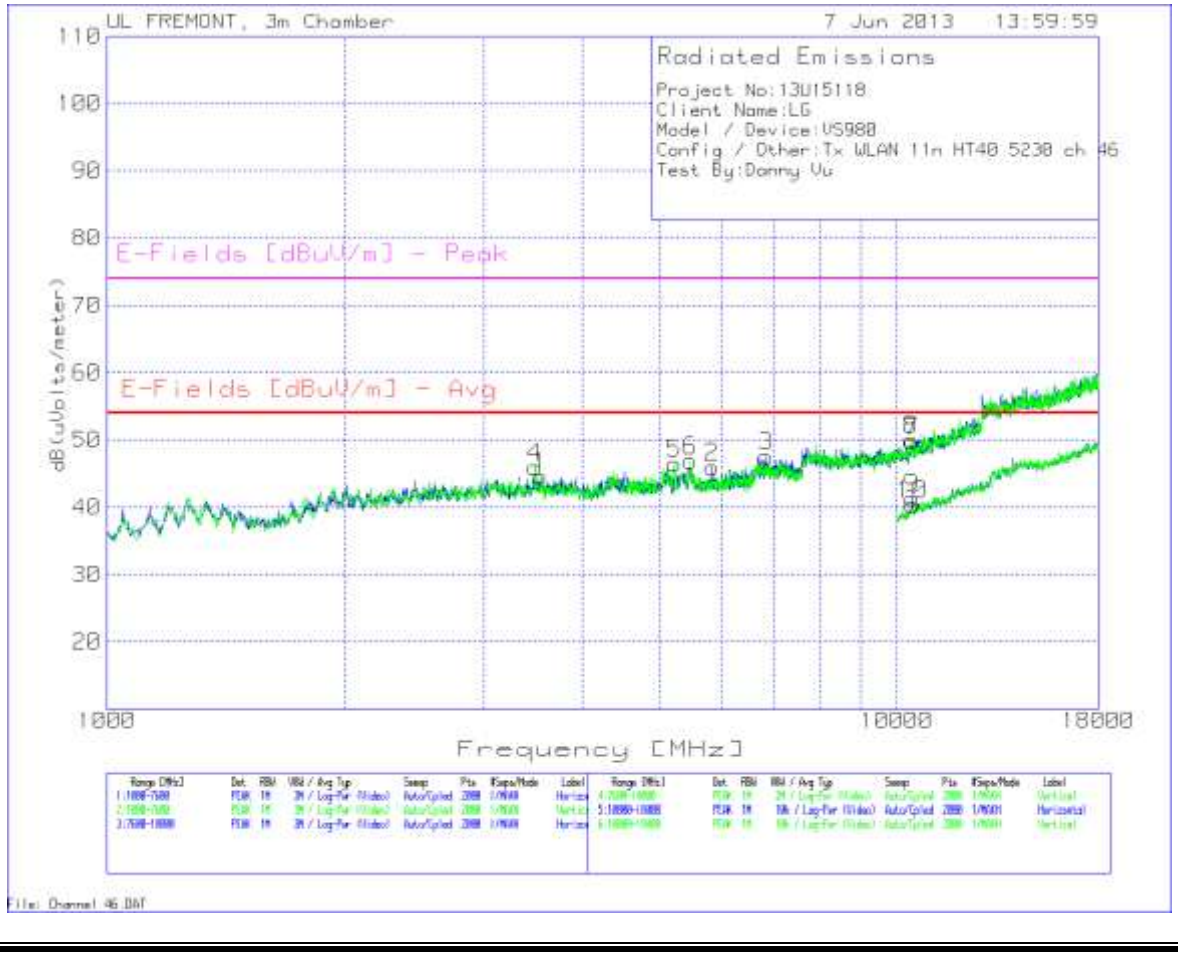
HORIZONTAL AND VERTCAL DATA LOW CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11n HT40 5190 ch 38
Test By:Danny Vu

Horizontal 1000 - 7600MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	4496.252	37.53	PK	33.9	-25.6	0.1	45.93	53.97	-8.04	74	-28.07	100	Horz
2	5185.607	35.21	PK	34.3	-24.7	0.9	45.71	53.97	-8.26	74	-28.29	201	Horz
Vertical 1000 - 7600MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
3	3460.57	39.6	PK	33	-27.3	0	45.3	53.97	-8.67	74	-28.7	201	Vert
4	5192.204	37.28	PK	34.3	-24.7	0.9	47.78	53.97	-6.19	74	-26.22	99	Vert
Horizontal 7600 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
*5	10391.004	33.19	PK	37.3	-20.8	0.3	49.99	53.97	-3.98	74	-24.01	201	Horz
Vertical 7600 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
*6	10458.571	32.91	PK	37.4	-20.6	0.2	49.91	53.97	-4.06	74	-24.09	99	Vert
Horizontal 10000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	10391.804	25.03	PK	37.3	-20.8	0.3	41.83	53.97	-12.14	74	-32.17	100	Horz
Vertical 10000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	10327.836	23.42	PK	37.2	-21	0.2	39.82	53.97	-14.15	74	-34.18	201	Vert

* Not in Restricted Band

HORIZONTAL AND VERTCAL PLOT HIGH CHANNEL



HORIZONTAL AND VERTCAL DATA HIGH CHANNEL

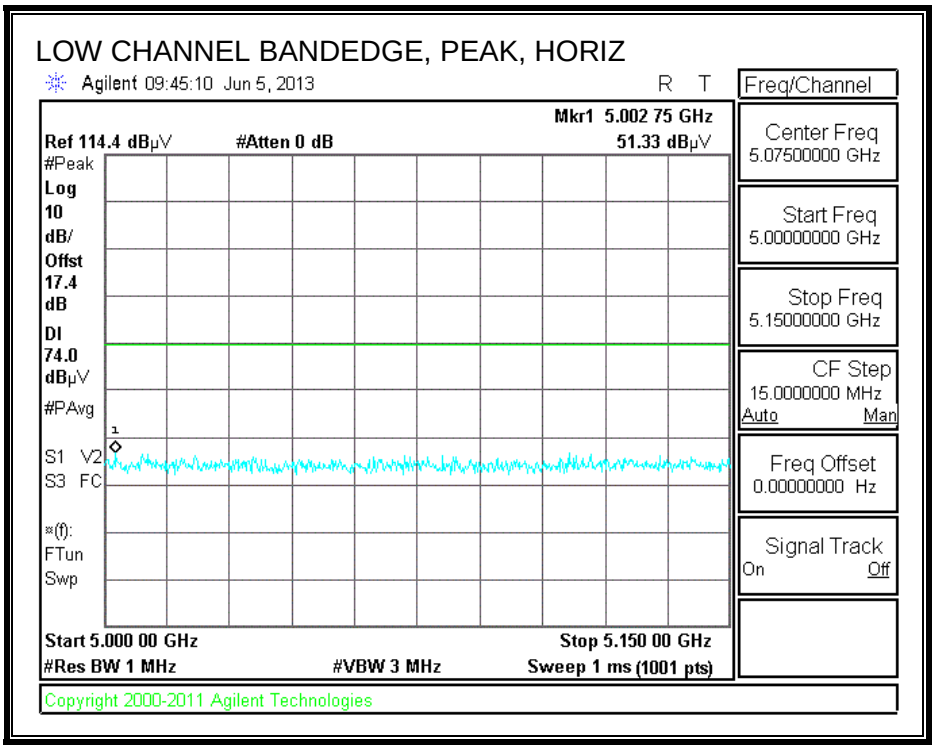
Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11n HT40 5230 ch 46
Test By:Danny Vu

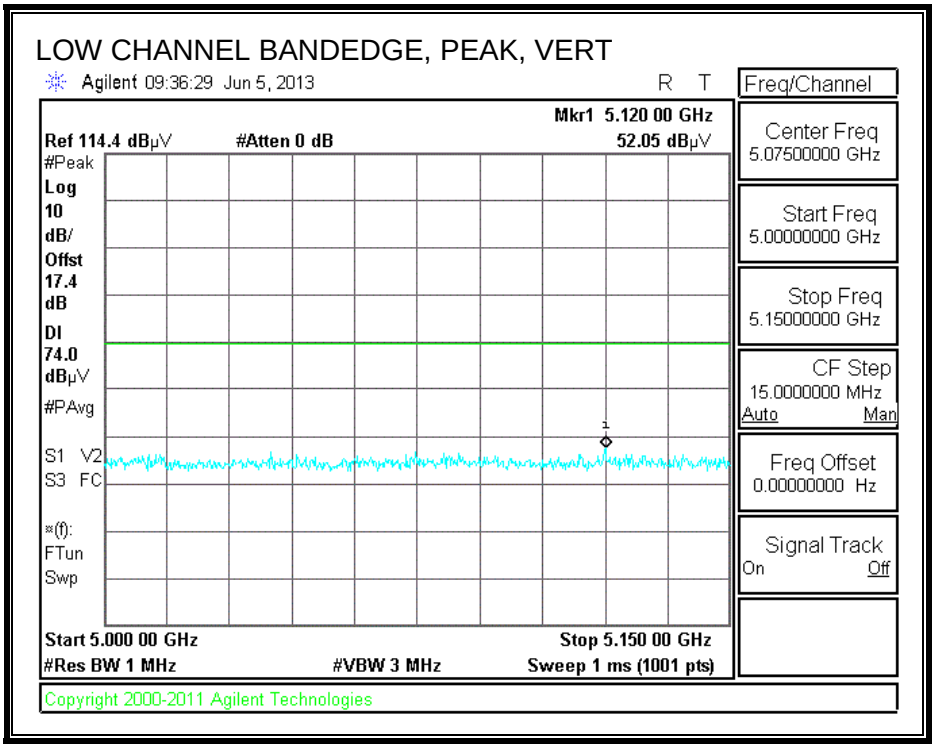
Horizontal 1000 - 7600MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3536.432	38.65	PK	33	-27.1	0	44.55	53.97	-9.42	74	-29.45	103	Horz
2	5838.681	35.15	PK	35	-24.3	0.1	45.95	53.97	-8.02	74	-28.05	103	Horz
3	6834.783	35.34	PK	35.6	-23.3	0	47.64	53.97	-6.33	74	-26.36	103	Horz
Vertical 1000 - 7600MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3483.658	40.18	PK	33	-27.2	0	45.98	53.97	-7.99	74	-28.02	201	Vert
5	5228.486	36.04	PK	34.3	-24.7	0.9	46.54	53.97	-7.43	74	-27.46	201	Vert
6	5469.265	35.75	PK	34.8	-24.5	0.9	46.95	53.97	-7.02	74	-27.05	100	Vert
Horizontal 7600 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
*7	10463.768	32.65	PK	37.5	-20.6	0.2	49.75	53.97	-4.22	74	-24.25	99	Horz
Vertical 7600 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
*8	10427.386	33.17	PK	37.4	-20.7	0.2	50.07	53.97	-3.9	74	-23.93	201	Vert
Horizontal 10000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	10467.766	24.21	PK	37.5	-20.6	0.2	41.31	53.97	-12.66	74	-32.69	201	Horz
Vertical 10000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	10455.772	23.38	PK	37.4	-20.6	0.2	40.38	53.97	-13.59	74	-33.62	201	Vert

* Not in Restricted Band

10.4. TX ABOVE 1 GHz 802.11a MODE IN THE 5.3 GHz BAND

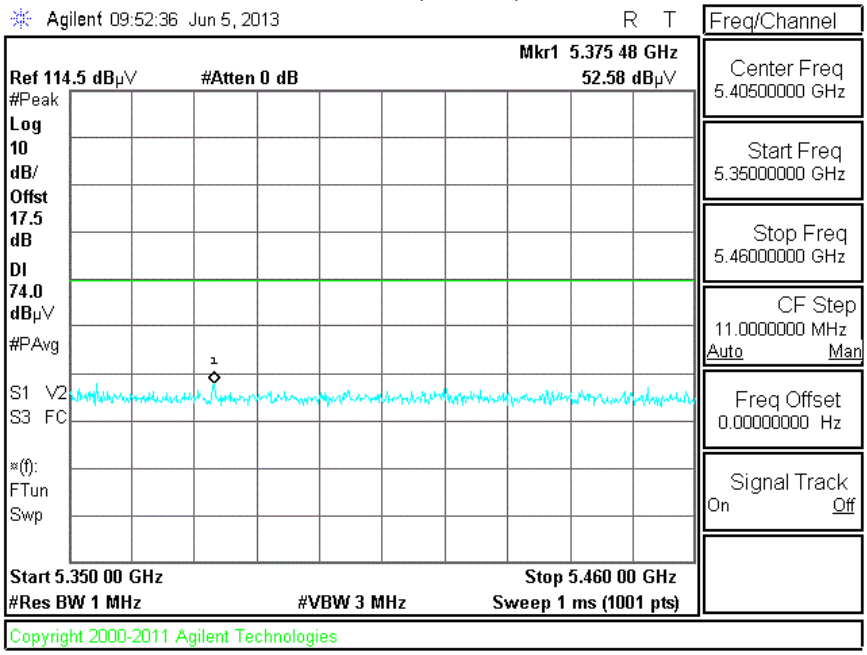
AUTHORIZED BANDEDGE (LOW CHANNEL)



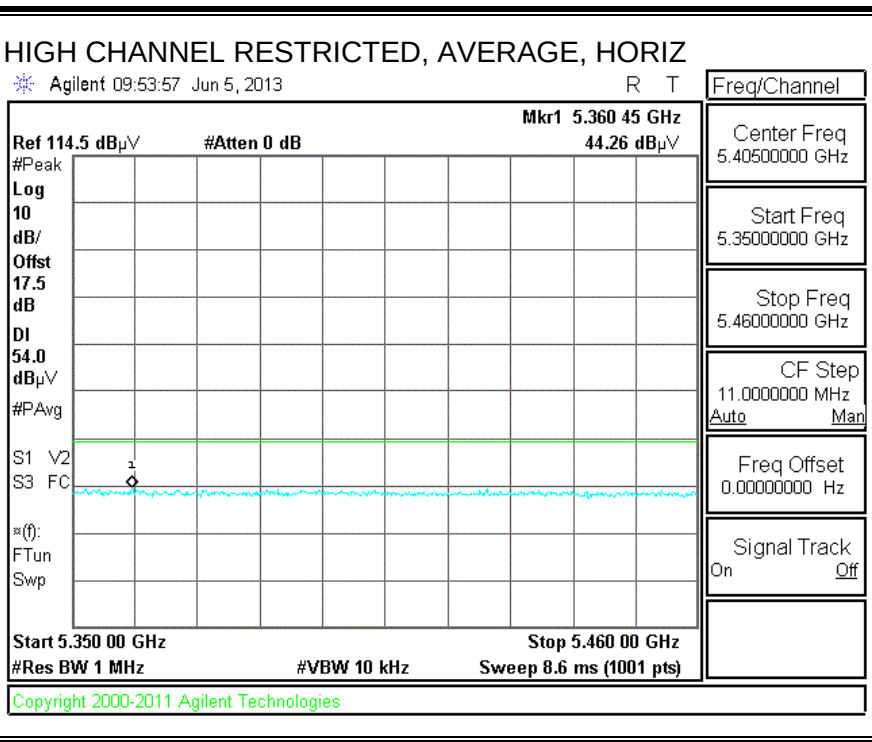


RESTRICTED BANDEDGE (HIGH CHANNEL)

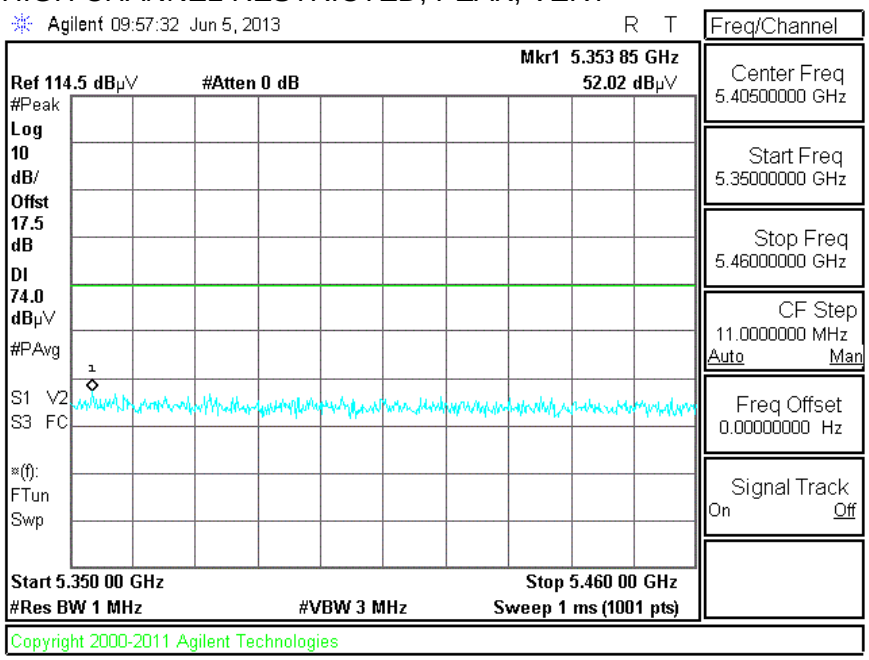
HIGH CHANNEL RESTRICTED, PEAK, HORIZ



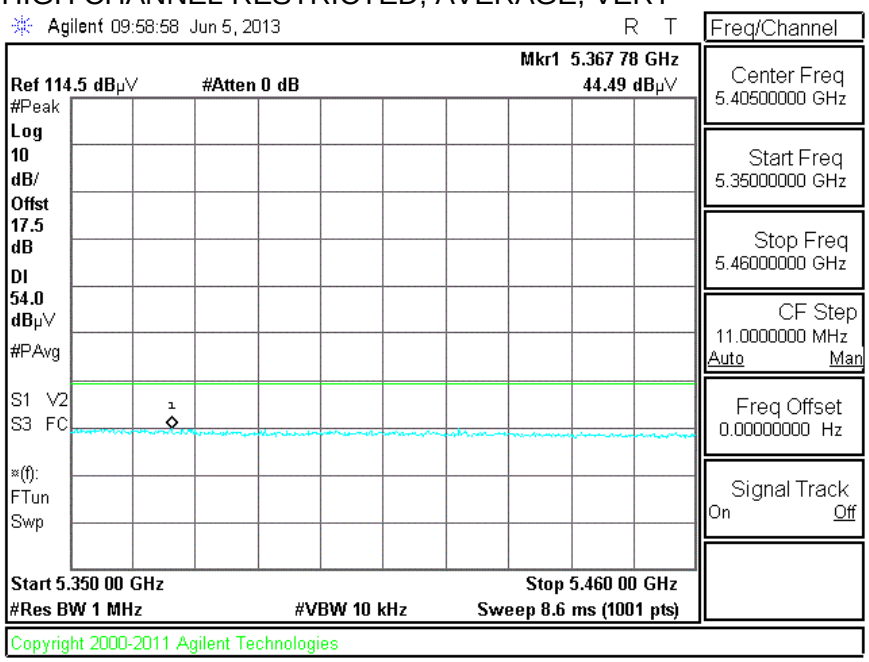
HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ



HIGH CHANNEL RESTRICTED, PEAK, VERT

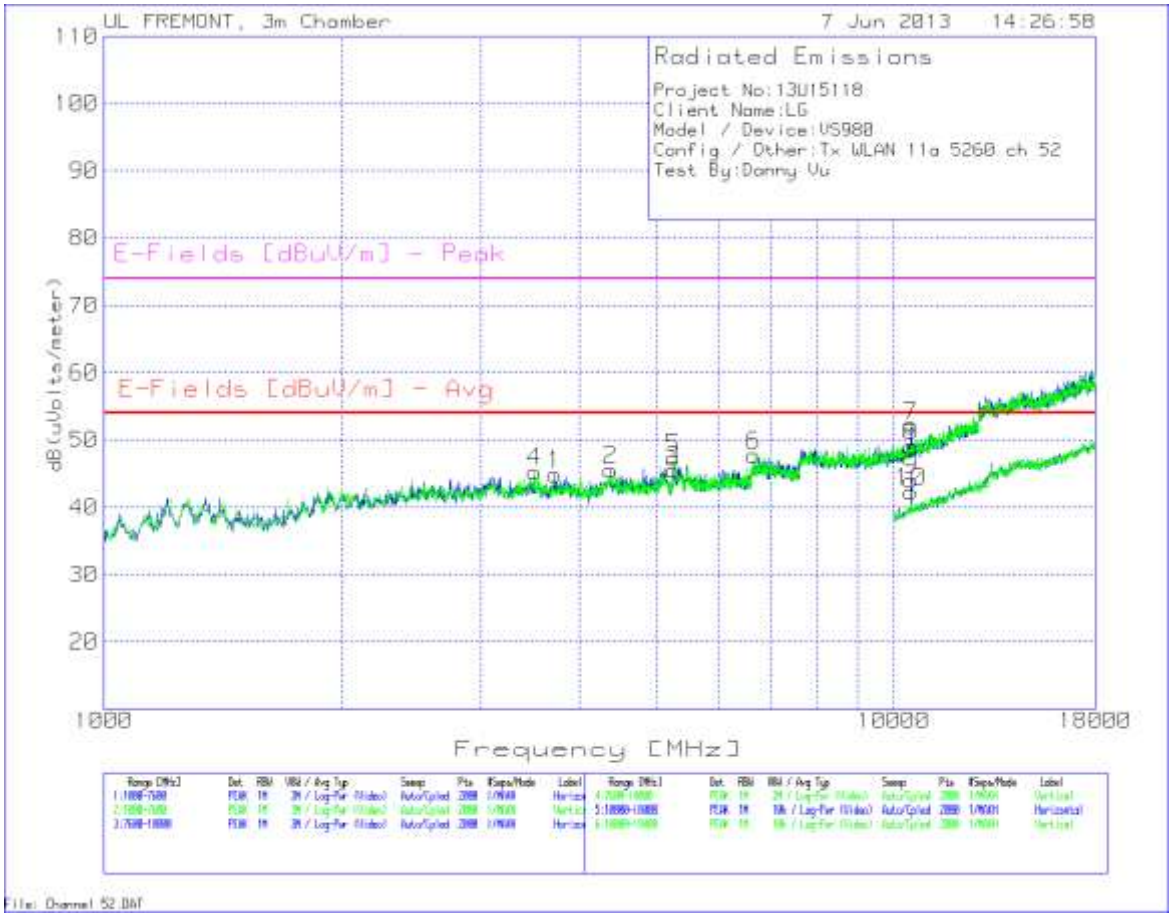


HIGH CHANNEL RESTRICTED, AVERAGE, VERT



HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL AND VERTICAL PLOT LOW CHANNEL



HORIZONTAL AND VERTICAL LOW DATA

Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11a 5260 ch 52
Test By:Danny Vu

Horizontal 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3724.438	38.4	PK	33.2	-26.7	0	44.9	53.97	-9.07	74	-29.1	100	Horz
2	4377.511	37.68	PK	33.7	-25.9	0.1	45.58	53.97	-8.39	74	-28.42	201	Horz
3	5264.768	34.95	PK	34.3	-24.6	0.9	45.55	53.97	-8.42	74	-28.45	201	Horz

Vertical 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3506.747	39.45	PK	33	-27.2	0	45.25	53.97	-8.72	74	-28.75	201	Vert
5	5261.469	36.69	PK	34.3	-24.6	0.9	47.29	53.97	-6.68	74	-26.71	201	Vert
6	6643.478	35.5	PK	35.6	-23.4	0	47.7	53.97	-6.27	74	-26.3	201	Vert

Horizontal 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
*7	10520.94	34.75	PK	37.5	-20.5	0.3	52.05	53.97	-1.92	74	-21.95	201	Horz

Vertical 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
*8	10520.94	31.78	PK	37.5	-20.5	0.3	49.08	53.97	-4.89	74	-24.92	201	Vert

Horizontal 10000 - 18000MHz

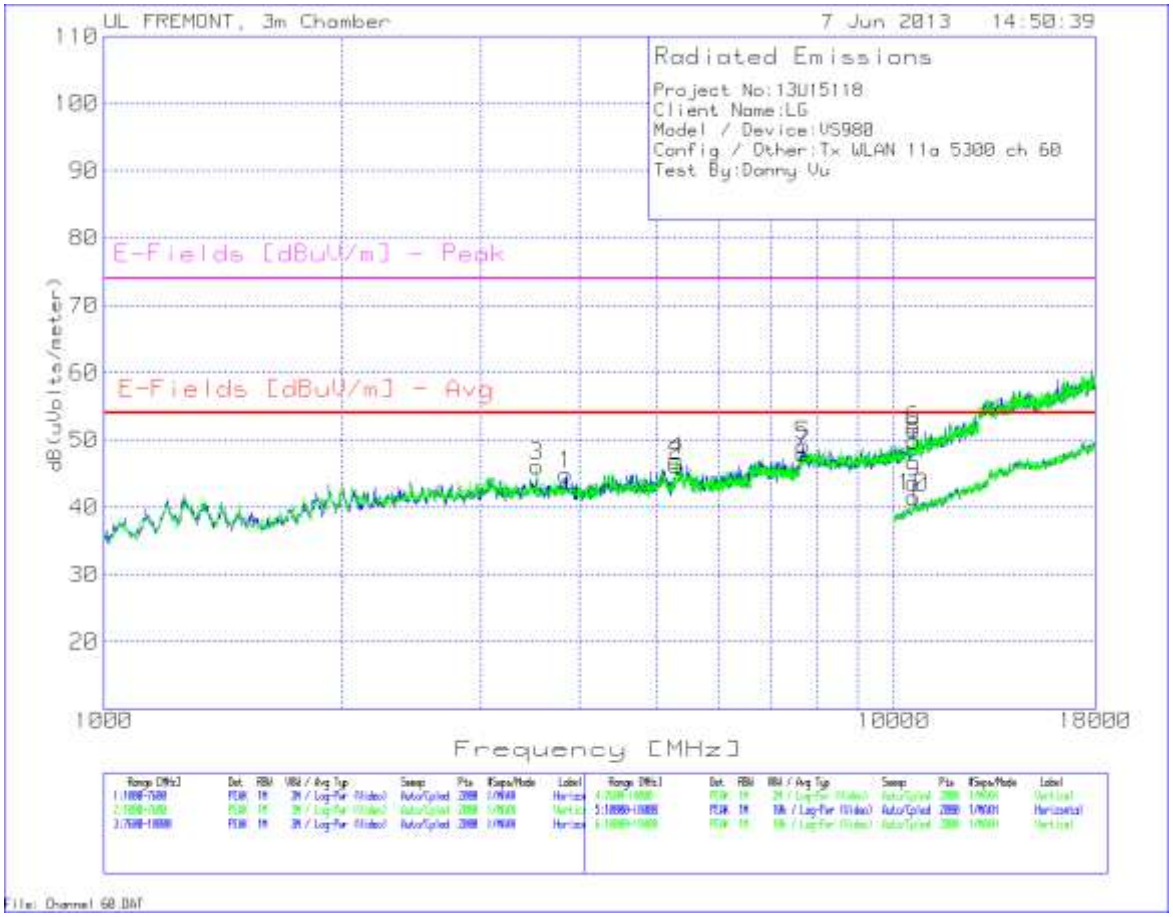
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	10519.74	26.79	PK	37.5	-20.5	0.3	44.09	53.97	-9.88	74	-29.91	201	Horz

Vertical 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	10519.74	25.01	PK	37.5	-20.5	0.3	42.31	53.97	-11.66	74	-31.69	201	Vert

* Not In Restricted Band

HORIZONTAL AND VERTICAL PLOT MID CHANNEL



HORIZONTAL AND VERTICAL PLOT MID CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11a 5300 ch 60
Test By:Danny Vu

Horizontal 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3839.88	38.2	PK	33.2	-26.5	0	44.9	53.97	-9.07	74	-29.1	201	Horz
2	5301.049	35.49	PK	34.4	-24.6	0.9	46.19	53.97	-7.78	74	-27.81	99	Horz

Vertical 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
3	3533.133	40.19	PK	33	-27.1	0	46.09	53.97	-7.88	74	-27.91	201	Vert
4	5301.049	36.19	PK	34.4	-24.6	0.9	46.89	53.97	-7.08	74	-27.11	201	Vert

Horizontal 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
5	7672.764	35.56	PK	35.8	-22.7	0.6	49.26	53.97	-4.71	74	-24.74	201	Horz
*6	10604.098	33.74	PK	37.7	-20.3	0.4	51.54	53.97	-2.43	74	-22.46	201	Horz

Vertical 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	7667.566	34.23	PK	35.8	-22.7	0.6	47.93	53.97	-6.04	74	-26.07	201	Vert
8	10593.703	32.14	PK	37.7	-20.3	0.3	49.84	53.97	-4.13	74	-24.16	201	Vert

Horizontal 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	10599.7	25.89	PK	37.7	-20.3	0.3	43.59	53.97	-10.38	74	-30.41	99	Horz

Vertical 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	10595.702	23.78	PK	37.7	-20.3	0.3	41.48	53.97	-12.49	74	-32.52	201	Vert

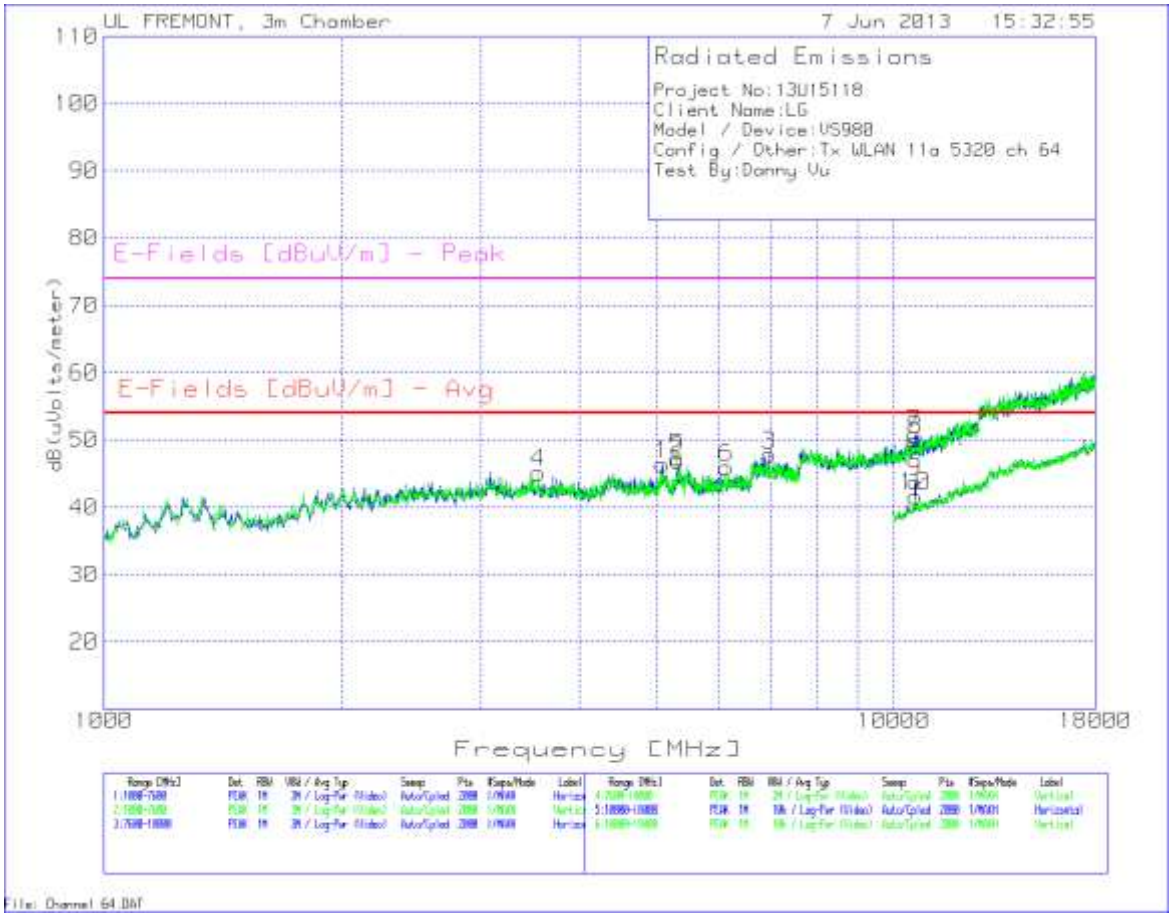
Horizontal 7600 - 18000MHz

Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
10600.44	22.32	AD1	37.7	-20.3	0.3	40.02	53.97	-13.95	74	-33.98	116	388	Horz

* In Restricted Band

PK - Peak detector
Av - Average detector

HORIZONTAL AND VERTICAL PLOT HIGH CHANNEL



HORIZONTAL AND VERTICAL DATA HIGH CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:VS980
Config / Other:Tx WLAN 11a 5320 ch 64
Test By:Danny Vu

Horizontal 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	5089.955	36.22	PK	34.2	-24.9	0.9	46.42	53.97	-7.55	74	-27.58	201	Horz
2	5324.138	36.06	PK	34.5	-24.6	0.9	46.86	53.97	-7.11	74	-27.14	201	Horz
3	6963.418	35.39	PK	35.6	-23.2	0	47.79	53.97	-6.18	74	-26.21	201	Horz

Vertical 1000 - 7600MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3546.327	39.3	PK	33	-27.1	0	45.2	53.97	-8.77	74	-28.8	201	Vert
5	5317.541	36.6	PK	34.4	-24.6	0.9	47.3	53.97	-6.67	74	-26.7	201	Vert

Horizontal 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	10635.282	33.14	PK	37.8	-20.3	0.2	50.84	53.97	-3.13	74	-23.16	201	Horz

Vertical 7600 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	10645.677	32.45	PK	37.8	-20.3	0.1	50.05	53.97	-3.92	74	-23.95	199	Vert

Horizontal 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	10639.68	26.18	PK	37.8	-20.3	0.1	43.78	53.97	-10.19	74	-30.22	199	Horz

Vertical 10000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	10643.678	24.06	PK	37.8	-20.3	0.1	41.66	53.97	-12.31	74	-32.34	199	Vert

Horizontal 7600 - 18000MHz

Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
10639.86	22.46	AD1	37.8	-20.3	0.1	40.06	53.97	-13.91	74	-33.94	126	388	Horz

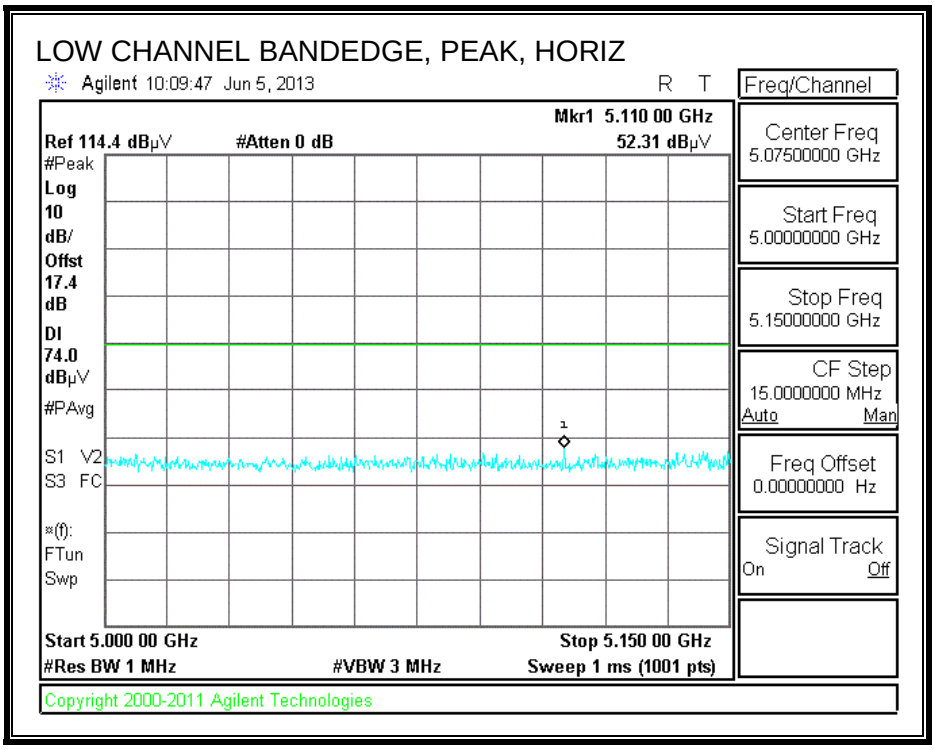
Vertical 7600 - 18000MHz

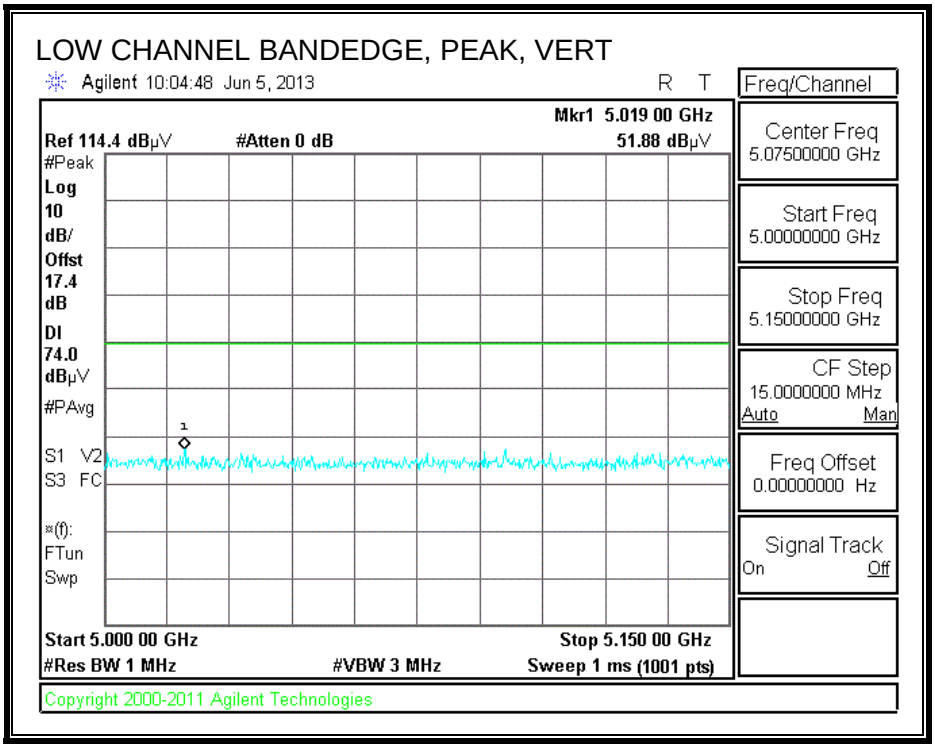
Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	dB(uVolts/meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
10650.69	22.45	AD1	37.8	-20.3	0.1	40.05	53.97	-13.92	74	-33.95	162	388	Vert

PK - Peak detector
Av - Average detector
AD1 - KDB 789033 v01r02 G)6) Method: AD Primary Power Average

10.5. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.3 GHz BAND

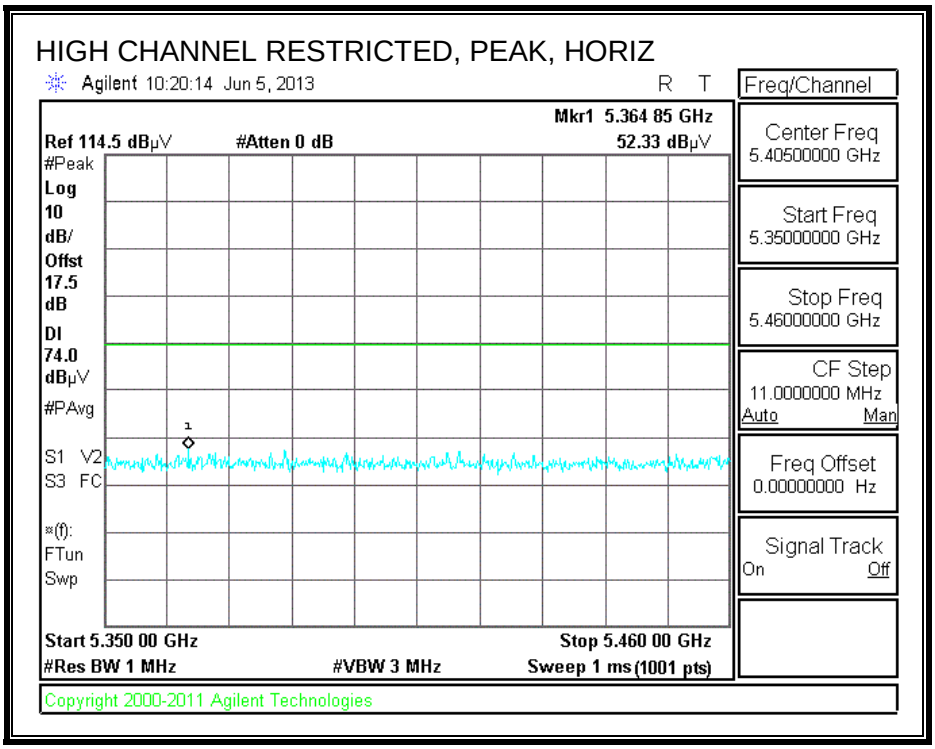
AUTHORIZED BANDEDGE (LOW CHANNEL)



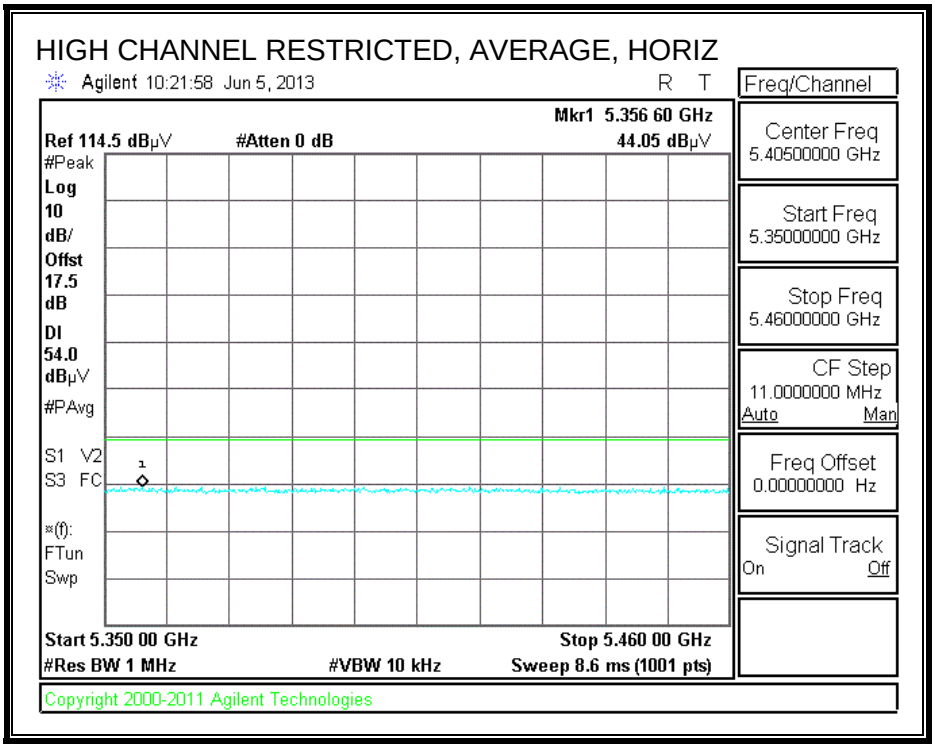


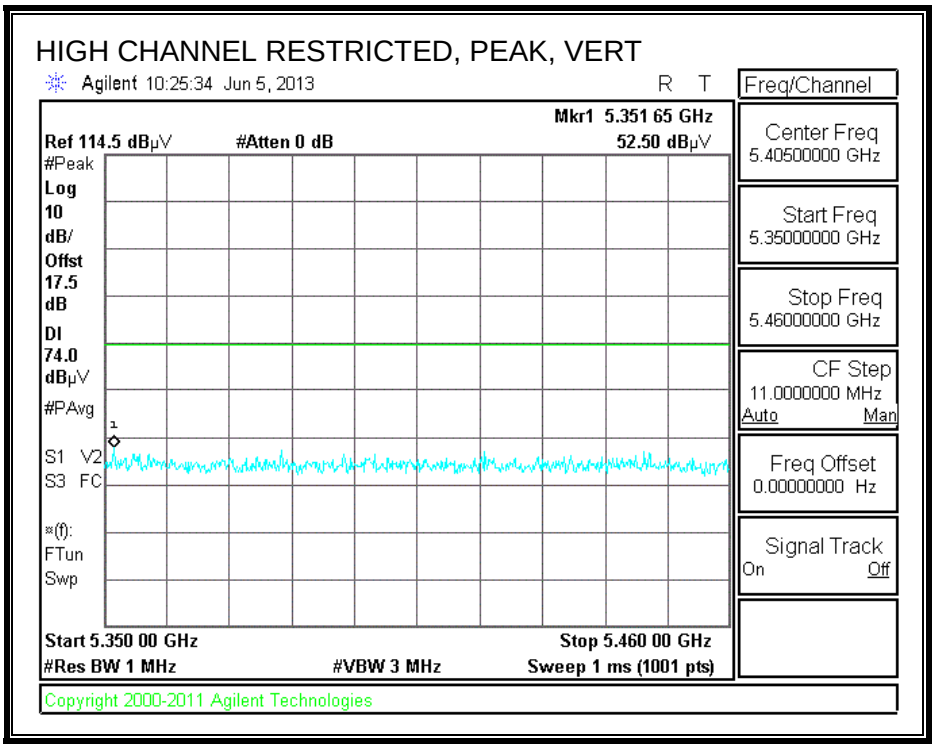
RESTRICTED BANDEDGE (HIGH CHANNEL)

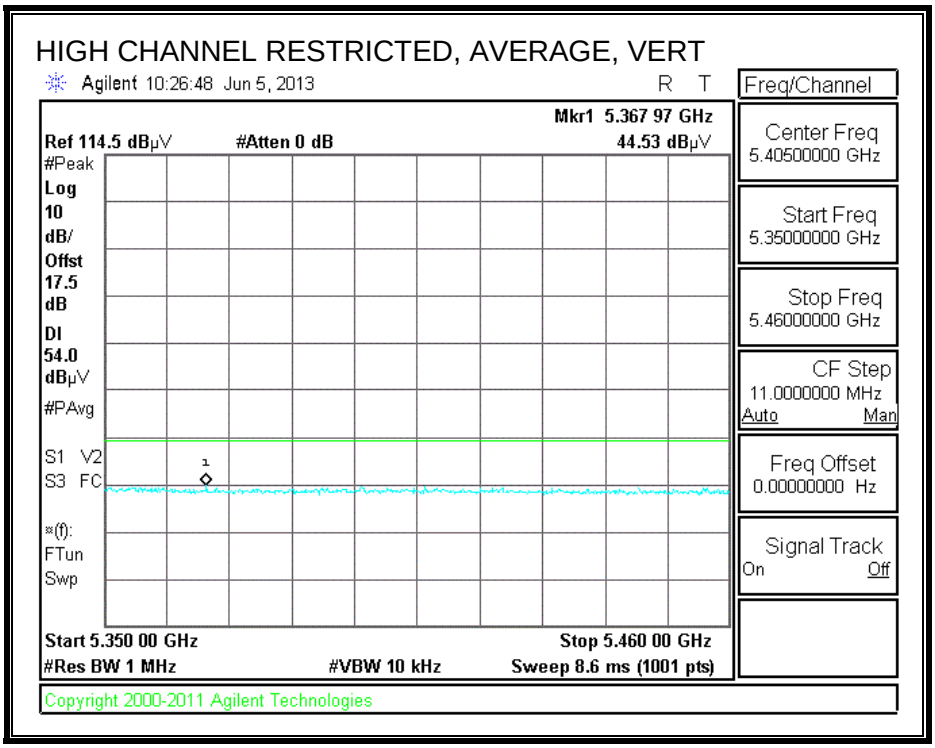
HIGH CHANNEL RESTRICTED, PEAK, HORIZ



HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ

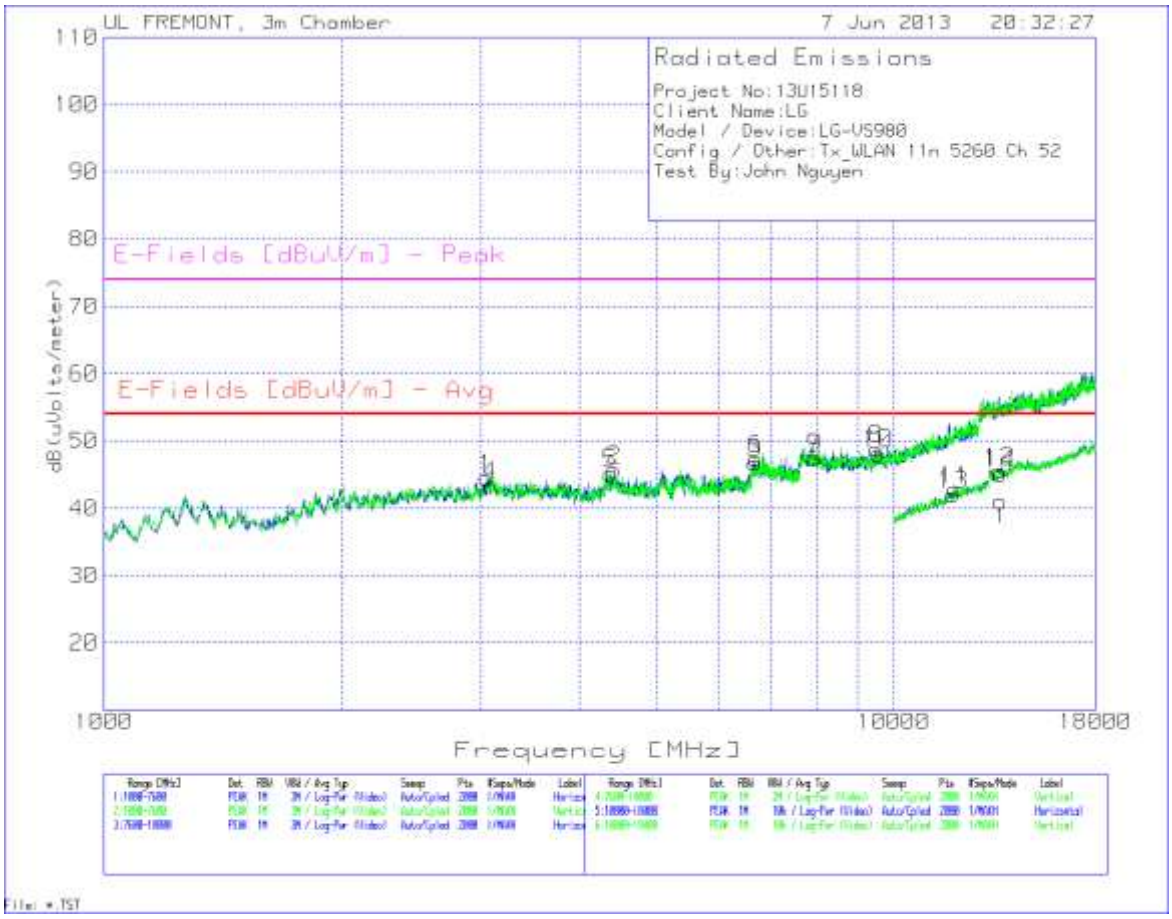






HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL AND VERTICAL PLOT LOW CHANNEL



HORIZONTAL AND VERTICAL DATA LOW CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:LG-VS980
Config / Other:Tx_WLAN 11n_HT20_5260 Ch 52
Test By:John Nguyen

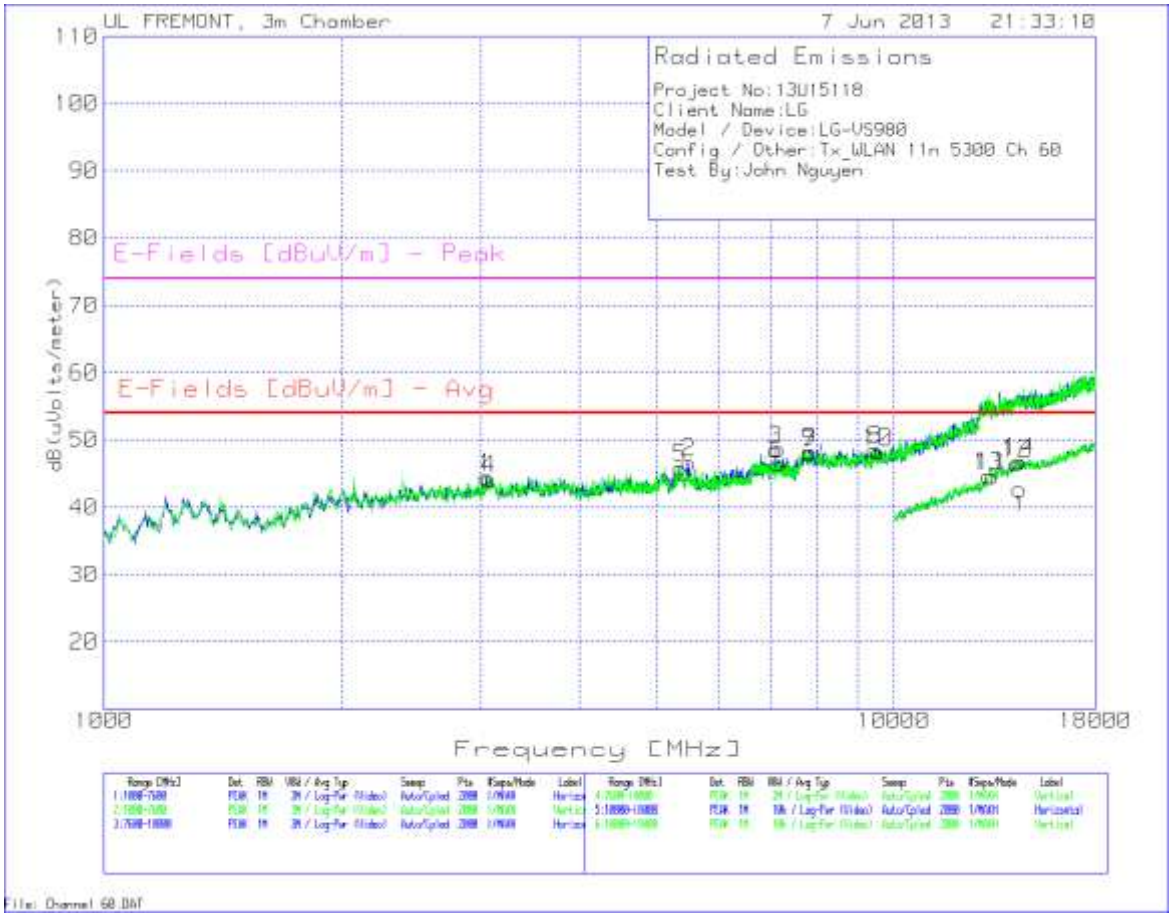
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz													
1	3048.276	39.94	PK	33	-28.4	0	44.54	53.97	-9.43	74	-29.46	201	Horz
2	4420.39	37.74	PK	33.7	-25.8	0.1	45.74	53.97	-8.23	74	-28.26	100	Horz
3	6659.97	34.43	PK	35.6	-23.4	0.1	46.73	53.97	-7.24	74	-27.27	100	Horz
Vertical 1000 - 7600MHz													
4	3084.558	38.65	PK	33	-28.3	0	43.35	53.97	-10.62	74	-30.65	99	Vert
5	4377.511	37.23	PK	33.7	-25.9	0.1	45.13	53.97	-8.84	74	-28.87	201	Vert
6	6692.954	35.04	PK	35.6	-23.4	0.1	47.34	53.97	-6.63	74	-26.66	201	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz													
7	7937.831	33.7	PK	35.8	-22.5	0.4	47.4	53.97	-6.57	74	-26.6	99	Horz
8	9491.854	33.86	PK	36.6	-21.8	0.2	48.86	53.97	-5.11	74	-25.14	99	Horz
Vertical 7600 - 18000MHz													
9	7943.028	33.71	PK	35.8	-22.5	0.4	47.41	53.97	-6.56	74	-26.59	99	Vert
10	9543.828	33.16	PK	36.6	-21.8	0.2	48.16	53.97	-5.81	74	-25.84	201	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz													
11	11947.026	22.38	PK	39	-18.9	0.3	42.78	53.97	-11.19	74	-31.22	100	Horz
12	13610.195	22.68	PK	38.9	-16.1	0	45.48	53.97	-8.49	74	-28.52	201	Horz
Vertical 10000 - 18000MHz													
13	11887.056	21.79	PK	39	-19	0.2	41.99	53.97	-11.98	74	-32.01	201	Vert
14	13658.171	22.56	PK	38.8	-16.1	-0.1	45.16	53.97	-8.81	74	-28.84	201	Vert

PK - Peak detector
QP - Quasi-Peak detector

HORIZONTAL AND VERTICAL PLOT MID CHANNEL



HORIZONTAL AND VERTICAL DATA MID CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:LG-VS980
Config / Other:Tx_WLAN 11n_HT20_5300 Ch 60
Test By:John Nguyen

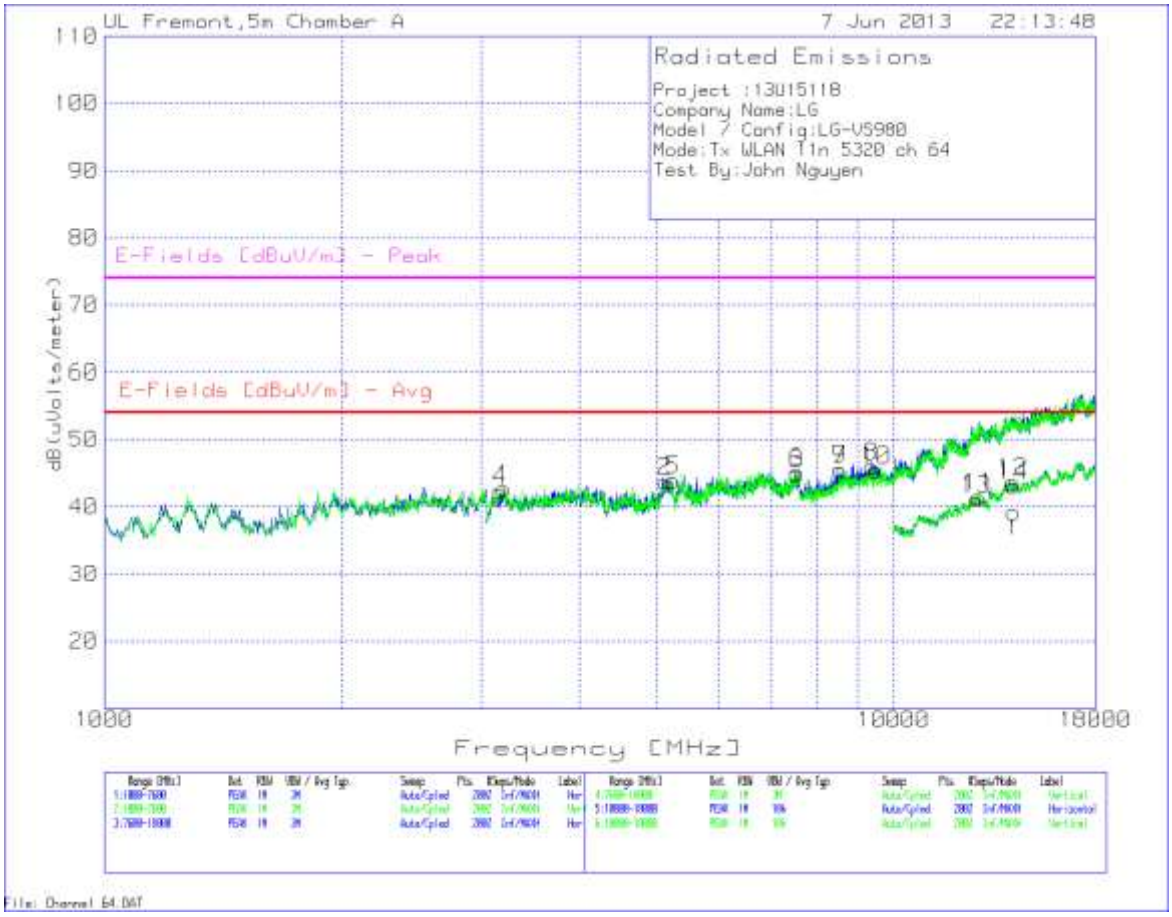
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz													
1	3048.276	39.9	PK	33	-28.4	0	44.5	53.97	-9.47	74	-29.5	201	Horz
2	5498.951	35.54	PK	34.8	-24.5	0.8	46.64	53.97	-7.33	74	-27.36	99	Horz
3	7088.756	35.98	PK	35.6	-23.1	0	48.48	53.97	-5.49	74	-25.52	99	Horz
Vertical 1000 - 7600MHz													
4	3071.364	39.64	PK	33	-28.4	0	44.24	53.97	-9.73	74	-29.76	100	Vert
5	5367.016	34.78	PK	34.6	-24.5	0.9	45.78	53.97	-8.19	74	-28.22	201	Vert
6	7141.529	34.02	PK	35.6	-23.1	0	46.52	53.97	-7.45	74	-27.48	100	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz													
7	7823.488	34.73	PK	35.8	-22.7	0.2	48.03	53.97	-5.94	74	-25.97	99	Horz
8	9471.064	33.42	PK	36.5	-21.8	0.4	48.52	53.97	-5.45	74	-25.48	99	Horz
Vertical 7600 - 18000MHz													
9	7813.093	34.9	PK	35.8	-22.7	0.3	48.3	53.97	-5.67	74	-25.7	201	Vert
10	9543.828	33.19	PK	36.6	-21.8	0.2	48.19	53.97	-5.78	74	-25.81	100	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T159 BRF [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz													
11	13322.339	22.16	PK	39.2	-16.7	-0.1	44.56	53.97	-9.41	74	-29.44	201	Horz
12	14333.833	22.69	PK	39.4	-15.8	0.2	46.49	53.97	-7.48	74	-27.51	99	Horz
Vertical 10000 - 18000MHz													
13	13198.401	22.52	PK	39	-16.8	-0.1	44.62	53.97	-9.35	74	-29.38	201	Vert
14	14441.779	23	PK	39.5	-15.9	0.2	46.8	53.97	-7.17	74	-27.2	201	Vert

PK - Peak detector
QP - Quasi-Peak detector

HORIZONTAL AND VERTICAL PLOT HIGH CHANNEL



HORIZONTAL AND VERTICAL DATA MID CHANNEL

Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11n_HT20_5320 ch 64
Test By:John Nguyen

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T159 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz														
1	3209.895	40.48	PK	33.5	-36.5	5.3	0	42.78	53.97	-11.19	74	-31.22	100	Horz
2	5137.781	37.26	PK	34.1	-35.5	7	0.9	43.76	53.97	-10.21	74	-30.24	100	Horz
3	7540.63	36.39	PK	35.4	-35.8	8.9	0	44.89	53.97	-9.08	74	-29.11	100	Horz
Vertical 1000 - 7600MHz														
4	3176.912	40.17	PK	33.4	-36.6	5.2	0.1	42.27	53.97	-11.7	74	-31.73	200	Vert
5	5258.171	37.13	PK	34.3	-35.5	7.1	0.9	43.93	53.97	-10.04	74	-30.07	200	Vert
6	7543.928	36.63	PK	35.4	-35.8	8.9	0	45.13	53.97	-8.84	74	-28.87	100	Vert

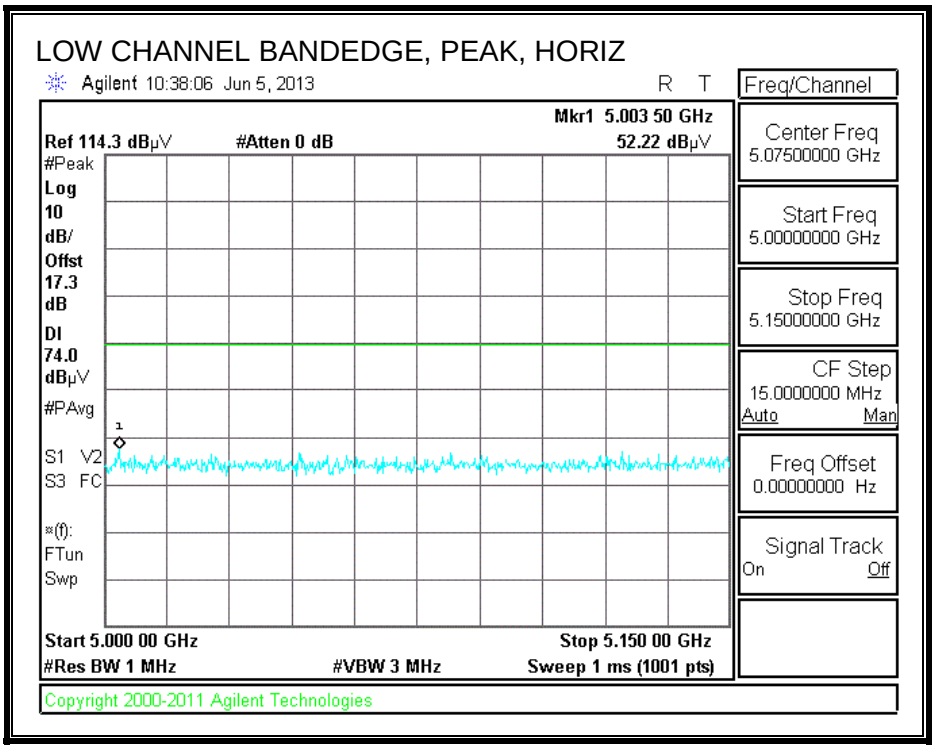
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T159 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz														
7	8535.532	36.11	PK	35.7	-36	9.5	0.3	45.61	53.97	-8.36	74	-28.39	200	Horz
8	9387.906	35.65	PK	36.4	-36.2	10	0.1	45.95	53.97	-8.02	74	-28.05	100	Horz
Vertical 7600 - 18000MHz														
9	8545.927	36.22	PK	35.7	-36	9.5	0.2	45.62	53.97	-8.35	74	-28.38	100	Vert
10	9491.854	34.67	PK	36.6	-36.2	10.1	0.2	45.37	53.97	-8.6	74	-28.63	100	Vert

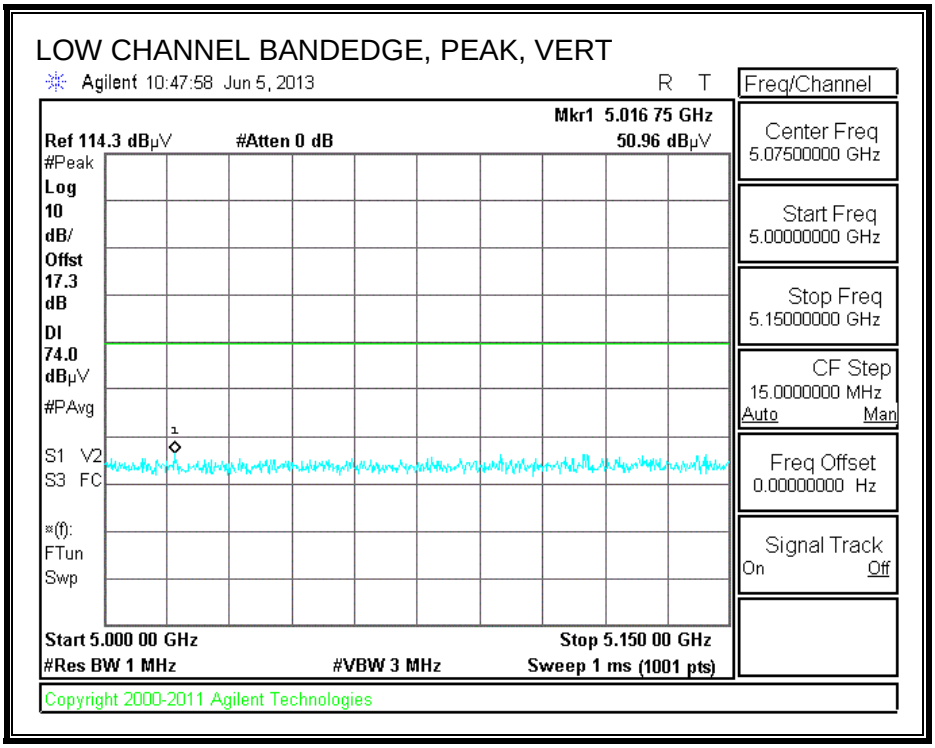
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T159 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz														
11	12826.587	24.54	PK	39.1	-34.4	11.9	0.4	41.54	53.97	-12.43	74	-32.46	100	Horz
12	14149.925	25.22	PK	39.3	-33.9	12.5	0.6	43.72	53.97	-10.25	74	-30.28	100	Horz
Vertical 10000 - 18000MHz														
13	12738.631	24.34	PK	39.2	-34.5	11.8	0.2	41.04	53.97	-12.93	74	-32.96	200	Vert
14	14181.909	24.98	PK	39.4	-34	12.5	0.3	43.18	53.97	-10.79	74	-30.82	200	Vert

PK - Peak detector
QP - Quasi-Peak detector

10.6. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.3 GHz BAND

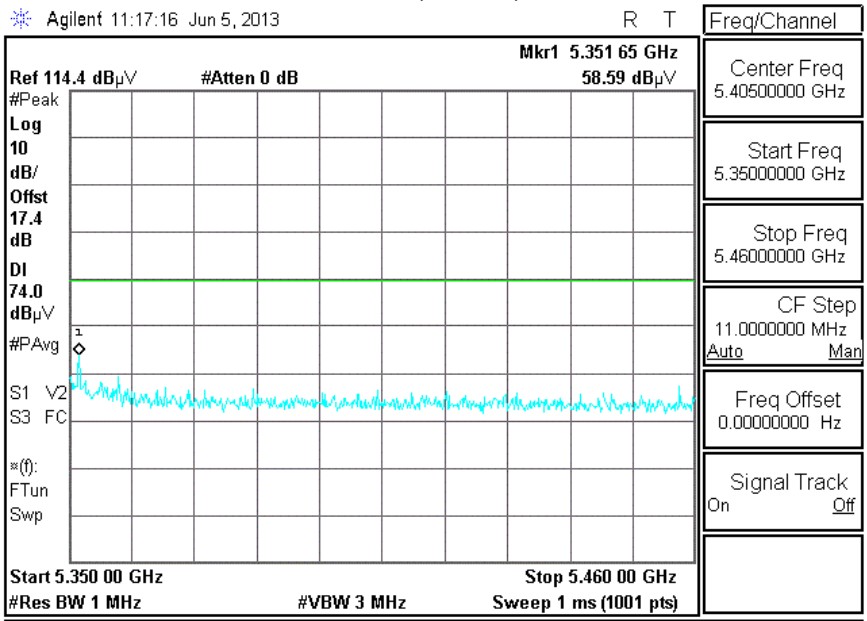
AUTHORIZED BANDEDGE (LOW CHANNEL)



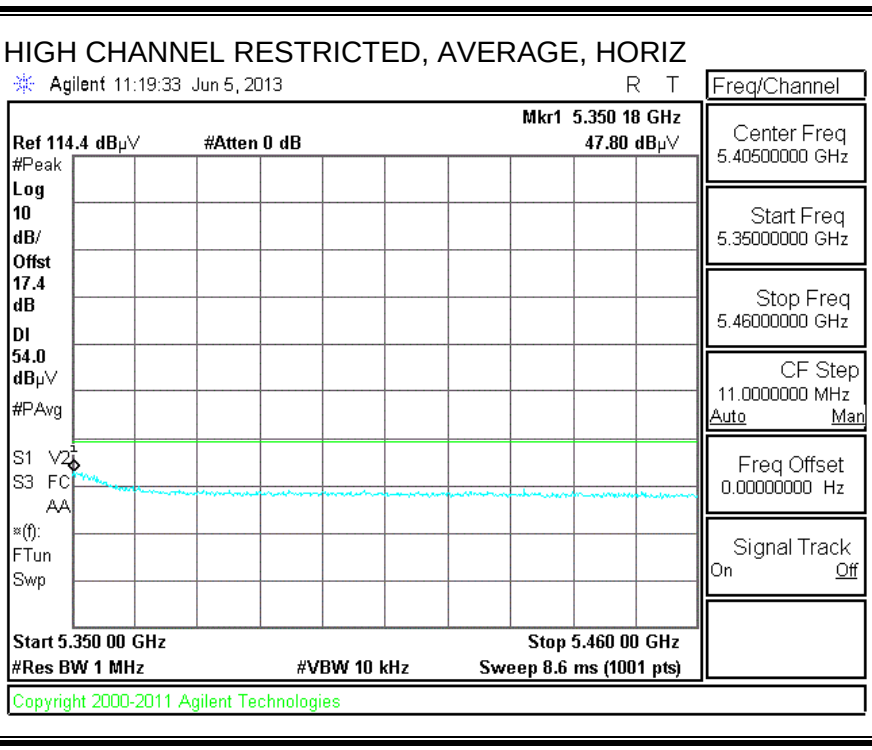


RESTRICTED BANDEDGE (HIGH CHANNEL)

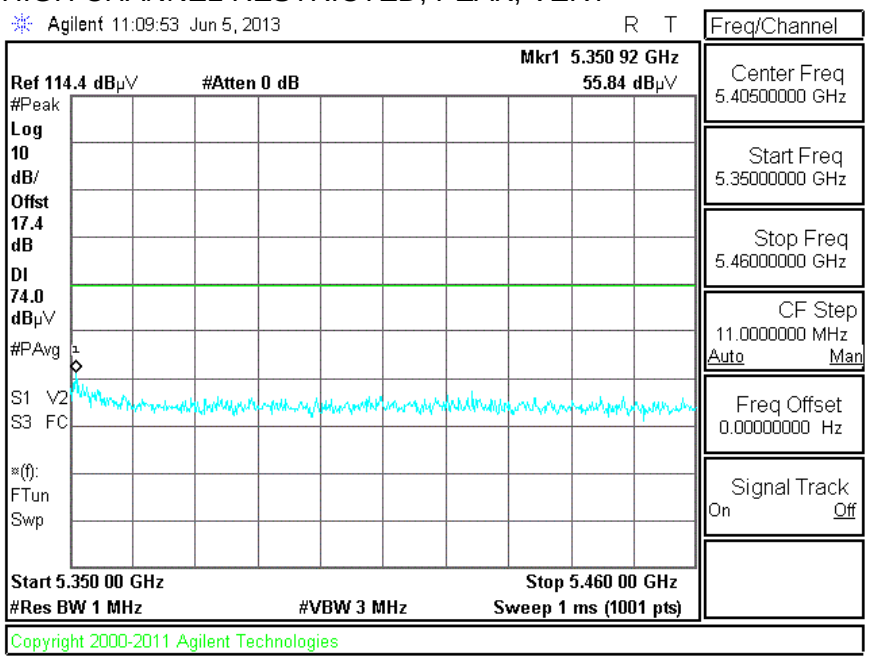
HIGH CHANNEL RESTRICTED, PEAK, HORIZ



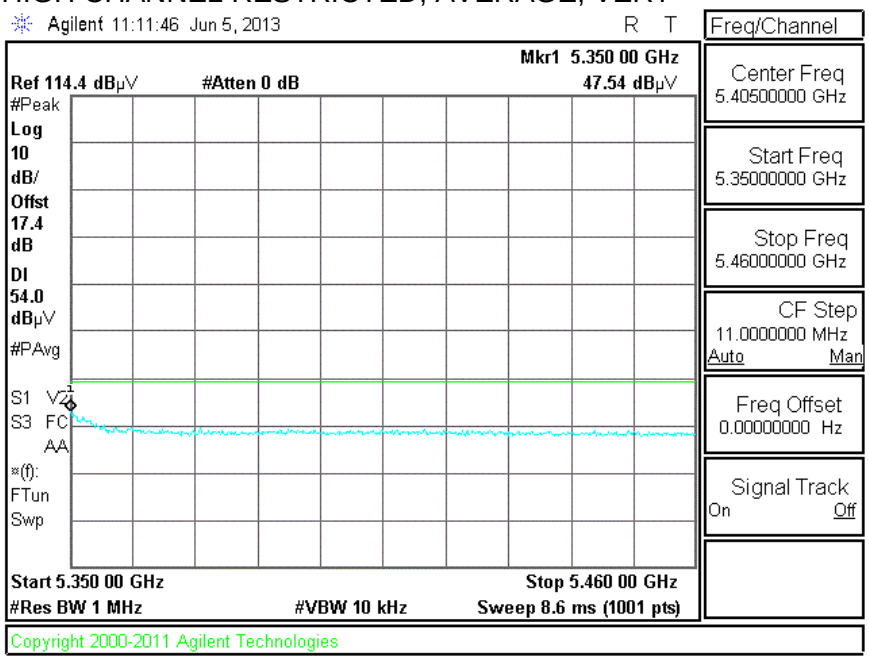
HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ



HIGH CHANNEL RESTRICTED, PEAK, VERT



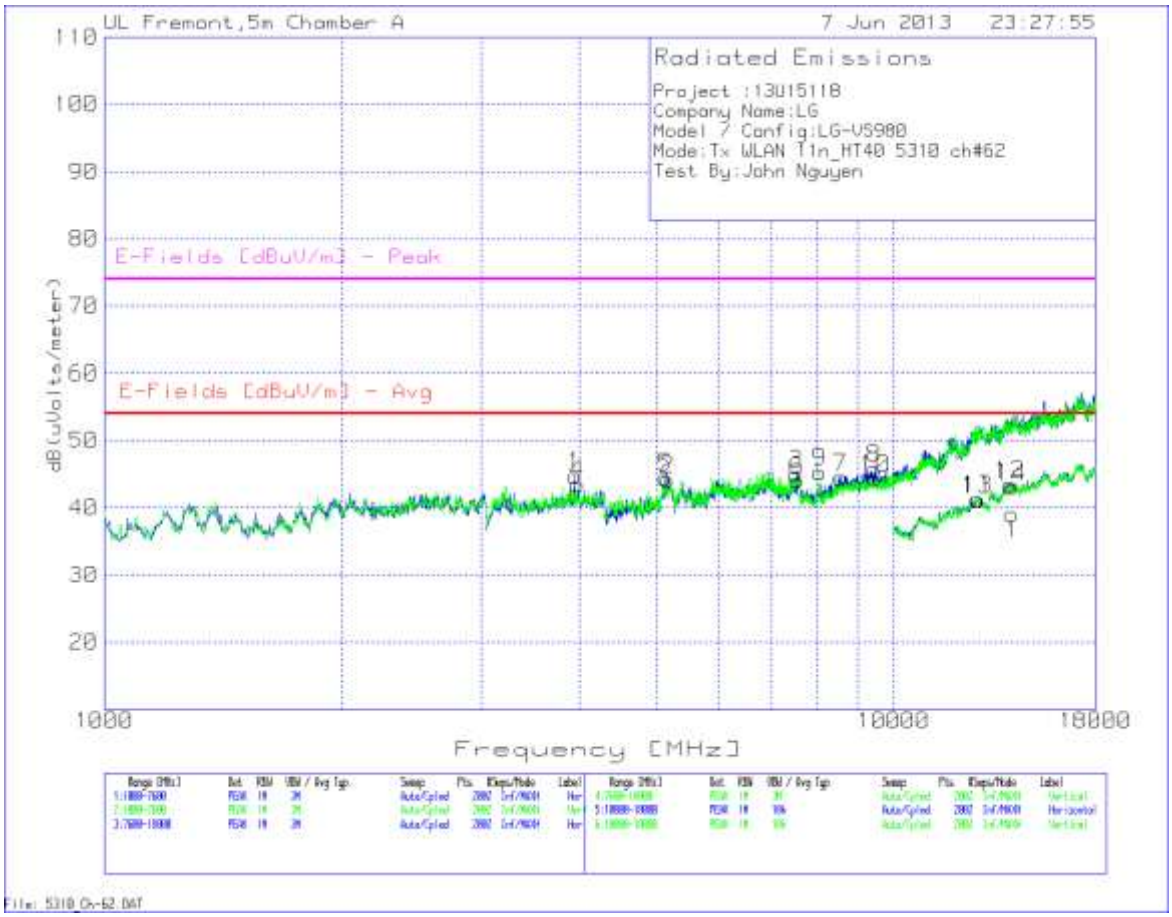
HIGH CHANNEL RESTRICTED, AVERAGE, VERT



VERTICAL AND HORIZONTRAL PLOT LOW CHANNEL

VERTICAL AND HORIZONTRAL DATA LOW CHANNEL

VERTICAL AND HORIZONTAL PLOT HIGH CHANNEL



VERTICAL AND HORIZONTAL DATA HIGH CHANNEL

Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11n_HT40 5310 ch#62
Test By:John Nguyen

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T159 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz														
1	3942.129	40.9	PK	33.7	-36	6	0.1	44.7	53.97	-9.27	74	-29.3	200	Horz
2	5179.01	37.64	PK	34.2	-35.5	7	0.9	44.24	53.97	-9.73	74	-29.76	200	Horz
3	7524.138	36.67	PK	35.4	-35.8	8.8	0	45.07	53.97	-8.9	74	-28.93	200	Horz
Vertical 1000 - 7600MHz														
4	3975.112	39.63	PK	33.8	-36	6	0.1	43.53	53.97	-10.44	74	-30.47	200	Vert
5	5136.132	37.96	PK	34.1	-35.5	7	0.9	44.46	53.97	-9.51	74	-29.54	200	Vert
6	7550.525	35.38	PK	35.5	-35.8	8.9	0.1	44.08	53.97	-9.89	74	-29.92	200	Vert

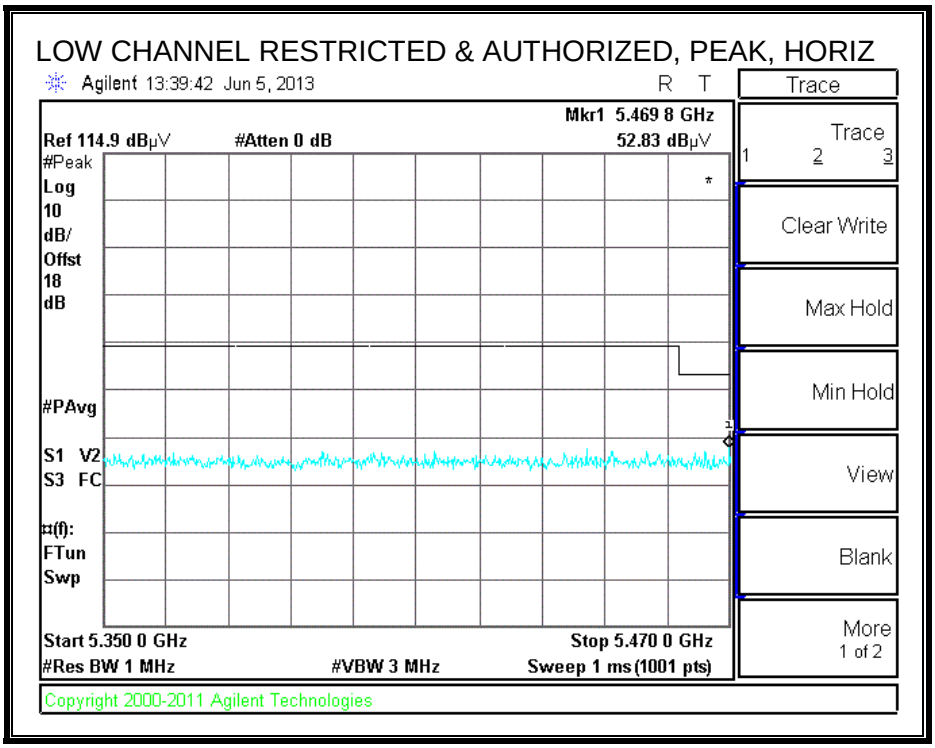
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T159 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz														
7	8577.111	35.11	PK	35.7	-36	9.5	0.2	44.51	53.97	-9.46	74	-29.49	100	Horz
8	9455.472	35.1	PK	36.5	-36.2	10.1	0.3	45.8	53.97	-8.17	74	-28.2	100	Horz
Vertical 7600 - 18000MHz														
9	8052.174	36.13	PK	35.5	-35.9	9.2	0.4	45.33	53.97	-8.64	74	-28.67	100	Vert
10	9465.867	33.63	PK	36.5	-36.2	10.1	0.3	44.33	53.97	-9.64	74	-29.67	200	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T159 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz														
11	12806.597	24.07	PK	39.1	-34.4	11.9	0.6	41.27	53.97	-12.7	74	-32.73	100	Horz
12	14037.981	24.94	PK	39.1	-33.8	12.5	0.7	43.44	53.97	-10.53	74	-30.56	100	Horz
Vertical 10000 - 18000MHz														
13	12766.617	24.74	PK	39.1	-34.5	11.8	0.1	41.24	53.97	-12.73	74	-32.76	200	Vert
14	14125.937	24.96	PK	39.3	-33.9	12.5	0.2	43.06	53.97	-10.91	74	-30.94	200	Vert

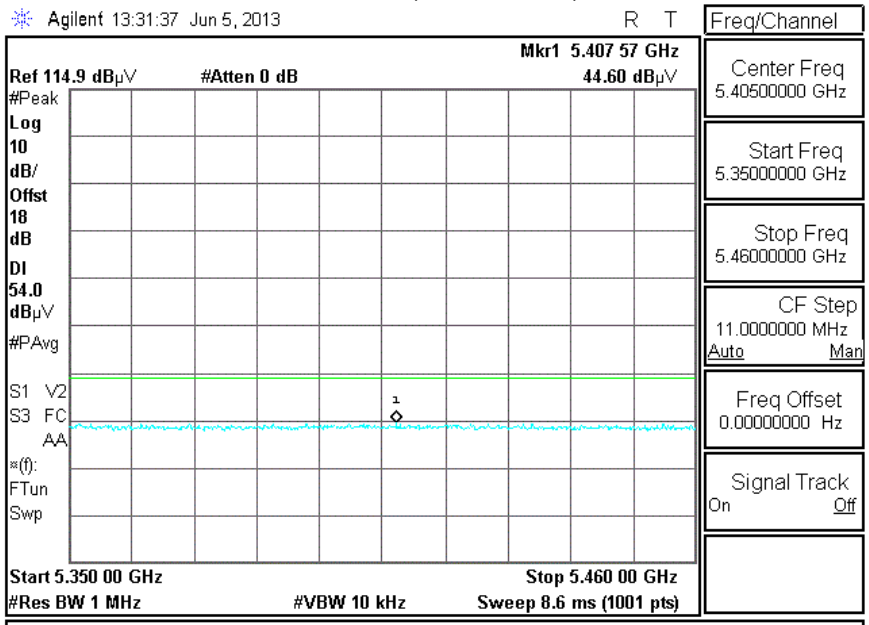
PK - Peak detector
QP - Quasi-Peak detector

10.7. TX ABOVE 1 GHz 802.11a MODE IN THE 5.6 GHz BAND

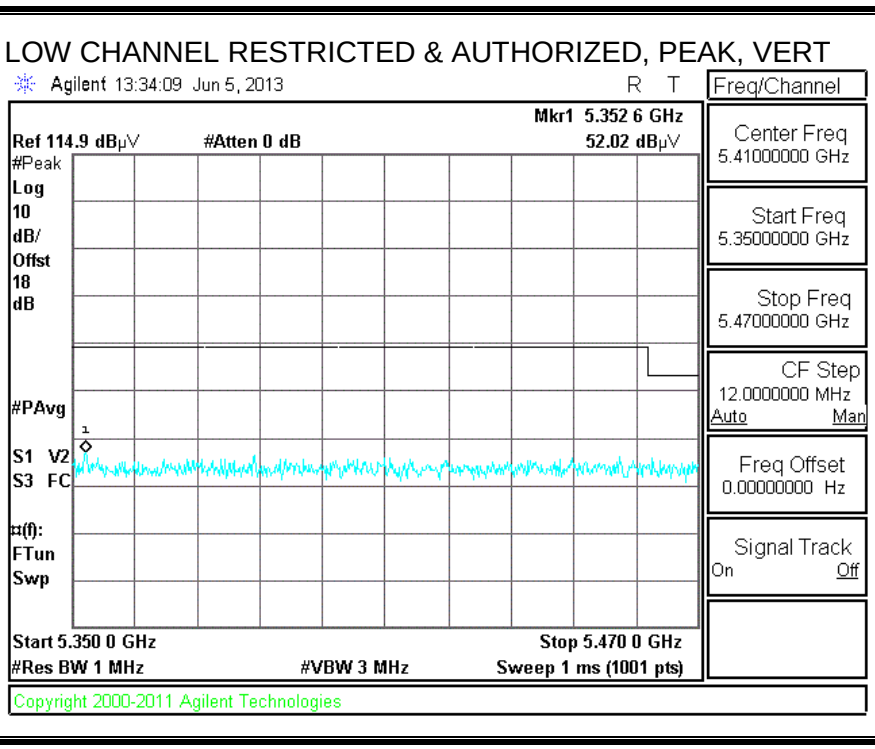
RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)

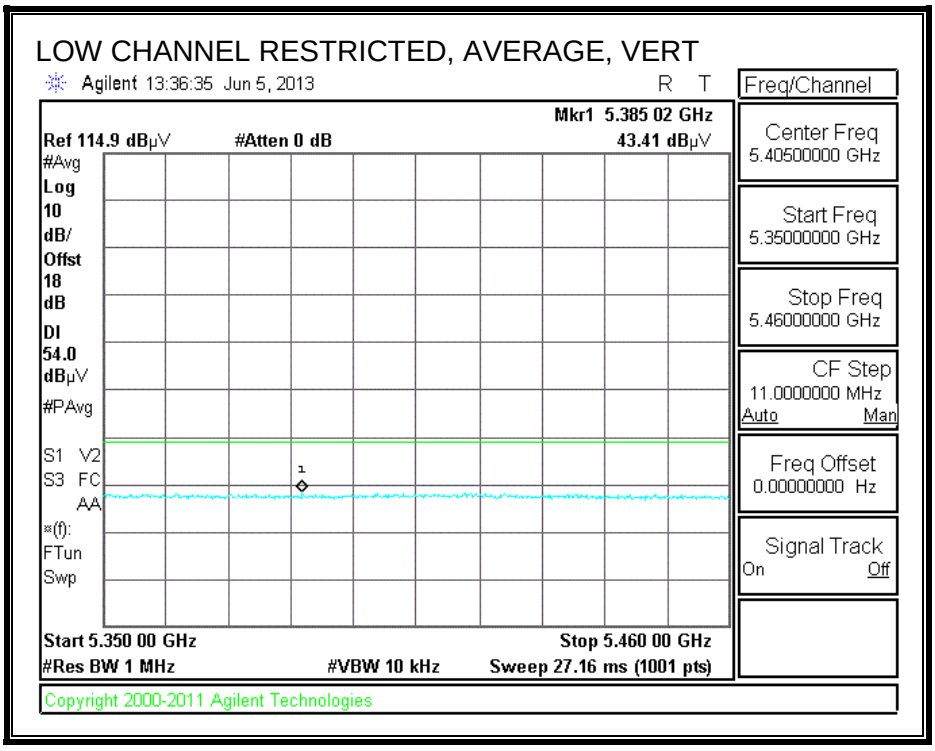


LOW CHANNEL RESTRICTED, AVERAGE, HORIZ

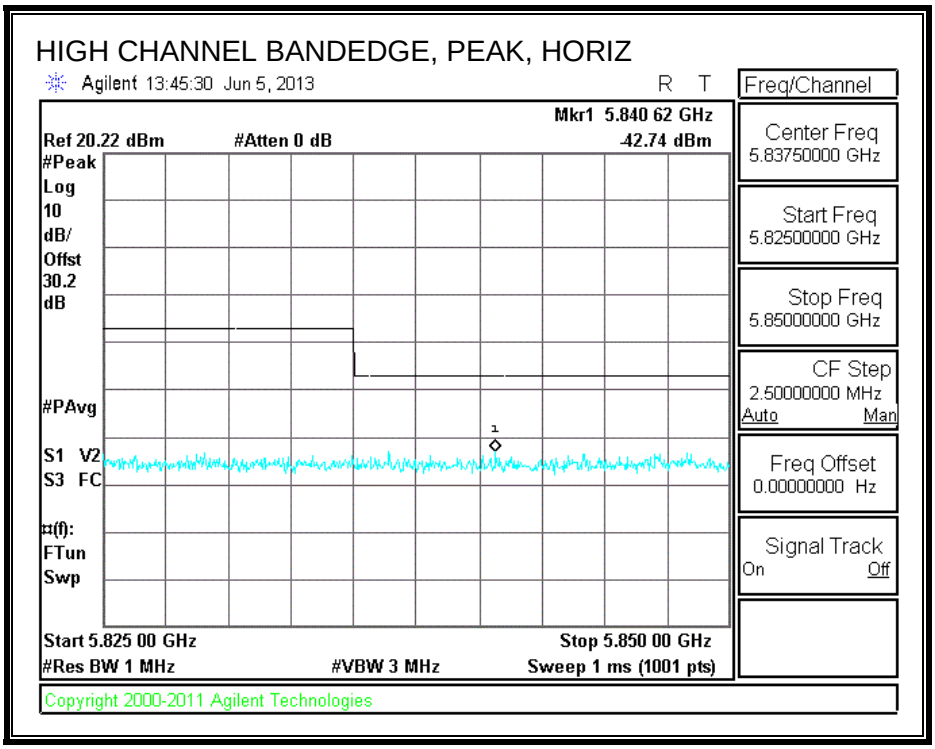


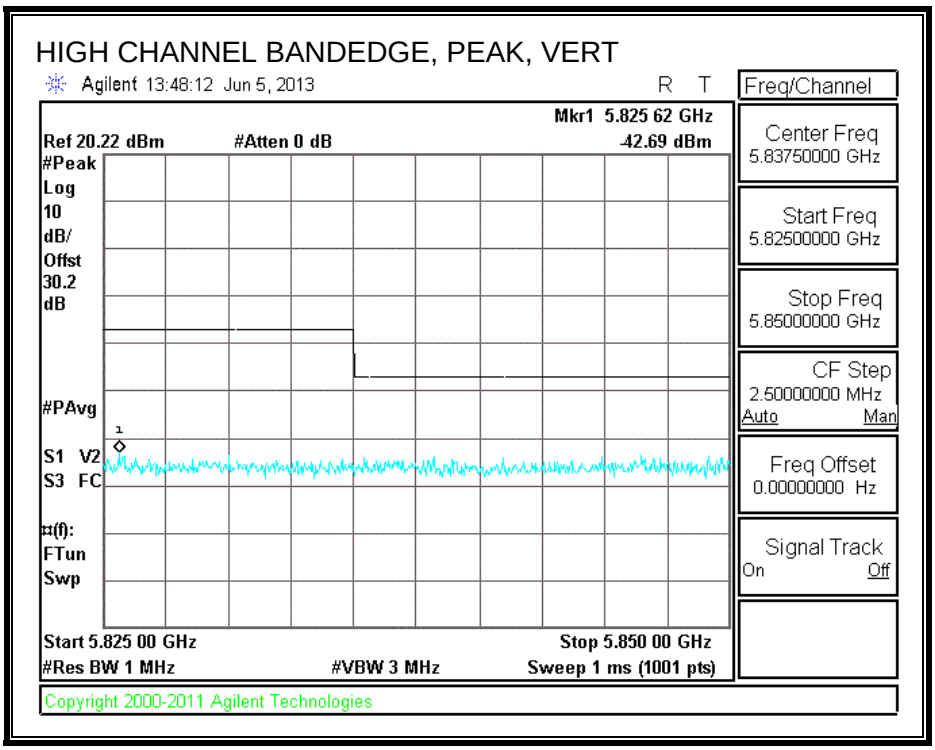
LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, VERT



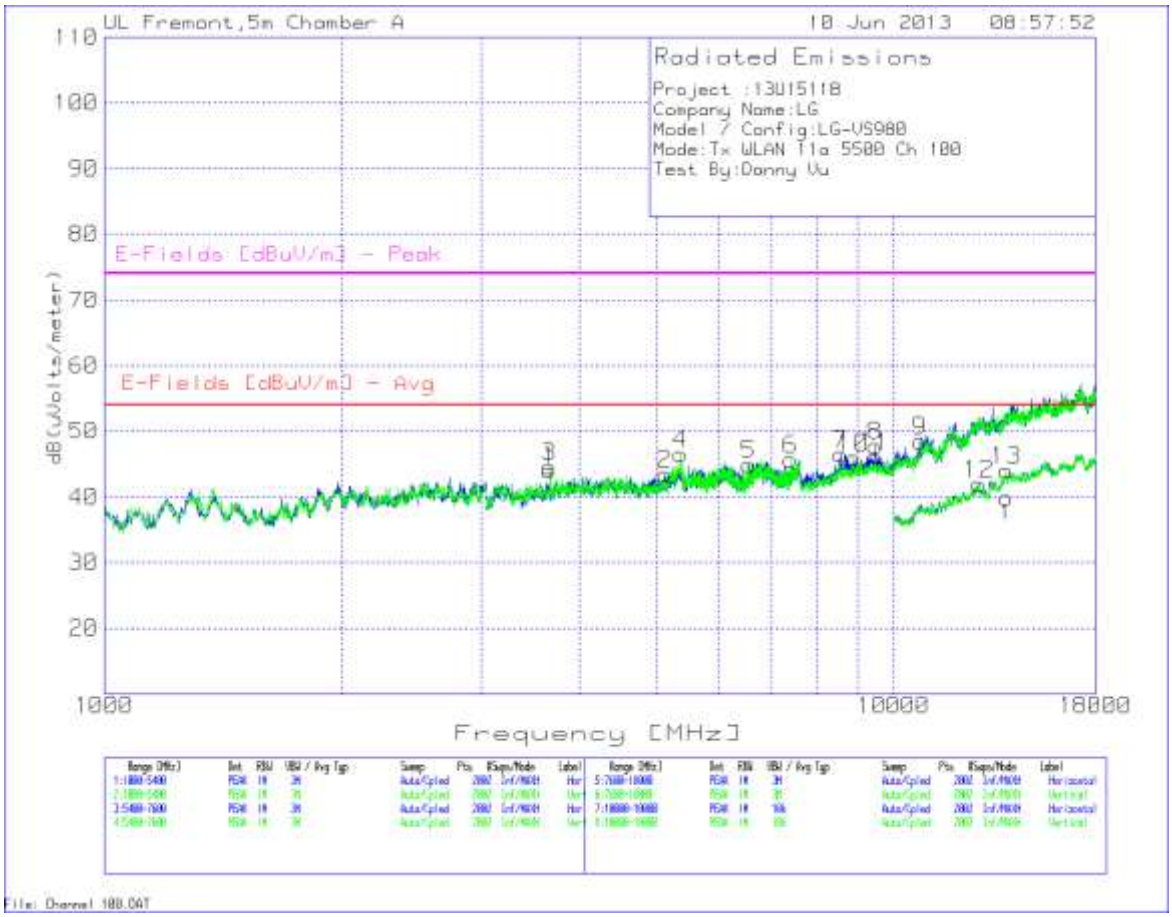


AUTHORIZED BANDEDGE (HIGH CHANNEL)





HORIZONTAL AND VERTICAL PLOT LOW CHANNEL



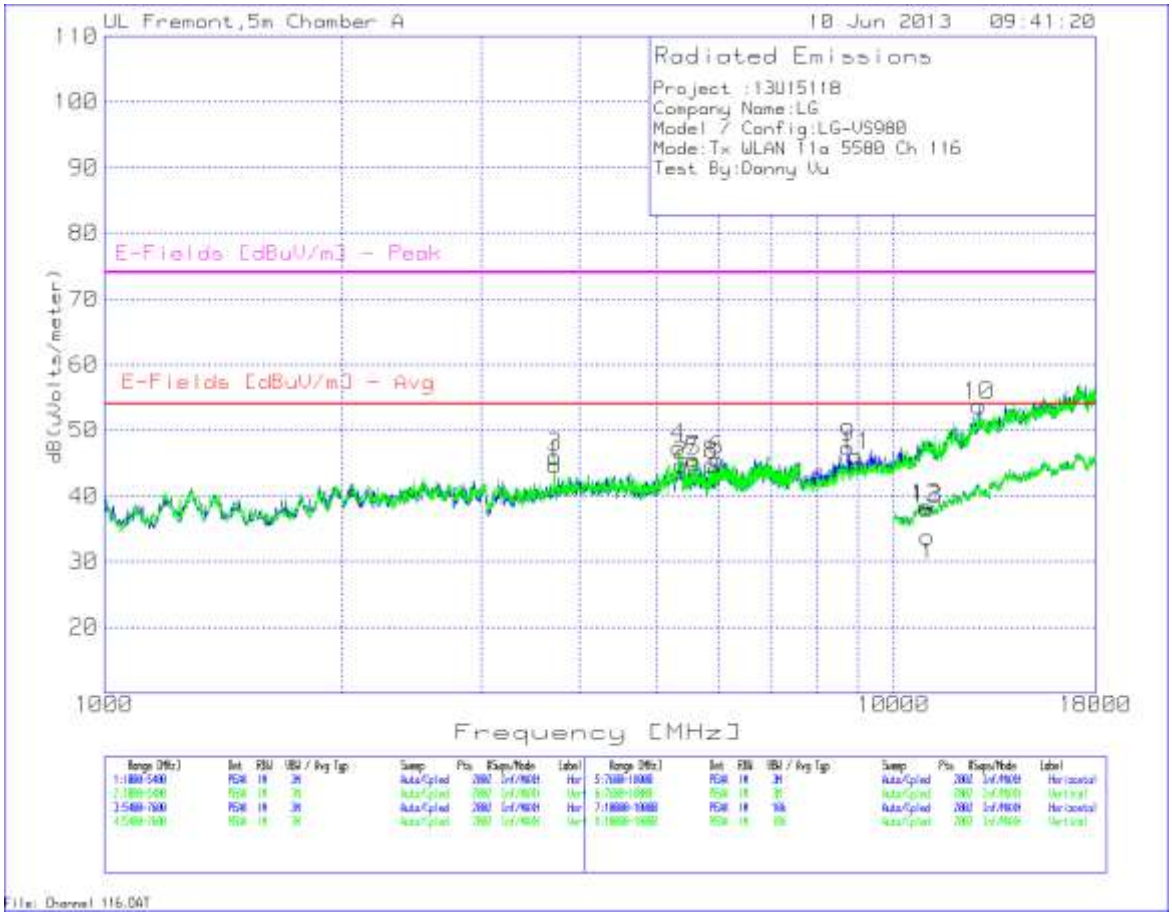
HORIZONTAL AND VERTICAL DATA LOW CHANNEL

Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11a 5500 Ch 100
Test By:Danny Vu

Horizontal 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
1	3667.266	41.23	PK	33.2	-36.2	5.7	0.1	44.03	54	-9.97	74	-29.97	200	Horz
2	5127.336	37.69	PK	34.1	-35.5	7	0.2	43.49	54	-10.51	74	-30.51	100	Horz
Vertical 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
3	3667.266	41.75	PK	33.2	-36.2	5.7	0.1	44.55	54	-9.45	74	-29.45	200	Vert
4	5373.613	39.48	PK	34.4	-35.5	7.2	1	46.58	54	-7.42	74	-27.42	100	Vert
Horizontal 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
5	6551.124	36.7	PK	35.5	-35.6	8.1	0.2	44.9	54	-9.1	74	-29.1	100	Horz
Vertical 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
6	7401	37.12	PK	35.4	-35.8	8.8	0.2	45.72	54	-8.28	74	-28.28	100	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
7	8566.717	37.12	PK	35.7	-36	9.5	0.2	46.52	54	-7.48	74	-27.48	200	Horz
8	9465.867	37.11	PK	36.5	-36.2	10.1	0.3	47.81	54	-6.19	74	-26.19	100	Horz
9	10796.402	35.34	PK	38	-35.7	10.8	0.1	48.54	54	-5.46	74	-25.46	100	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
10	8883.758	36.1	PK	35.8	-36	9.8	0.3	46	54	-8	74	-28	100	Vert
11	9481.459	35.29	PK	36.6	-36.2	10.1	0.4	46.19	54	-7.81	74	-27.81	100	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
12	12814.593	24.74	PK	39.1	-34.4	11.9	0.6	41.94	54	-12.06	74	-32.06	100	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
13	13894.053	25.98	PK	39	-33.8	12.4	0.5	44.08	54	-9.92	74	-29.92	100	Vert

PK - Peak detector
Av - Average detector

HORIZONTAL AND VERTICAL PLOT MID CHANNEL



HORIZONTAL AND VERTICAL DATA MID CHANNEL

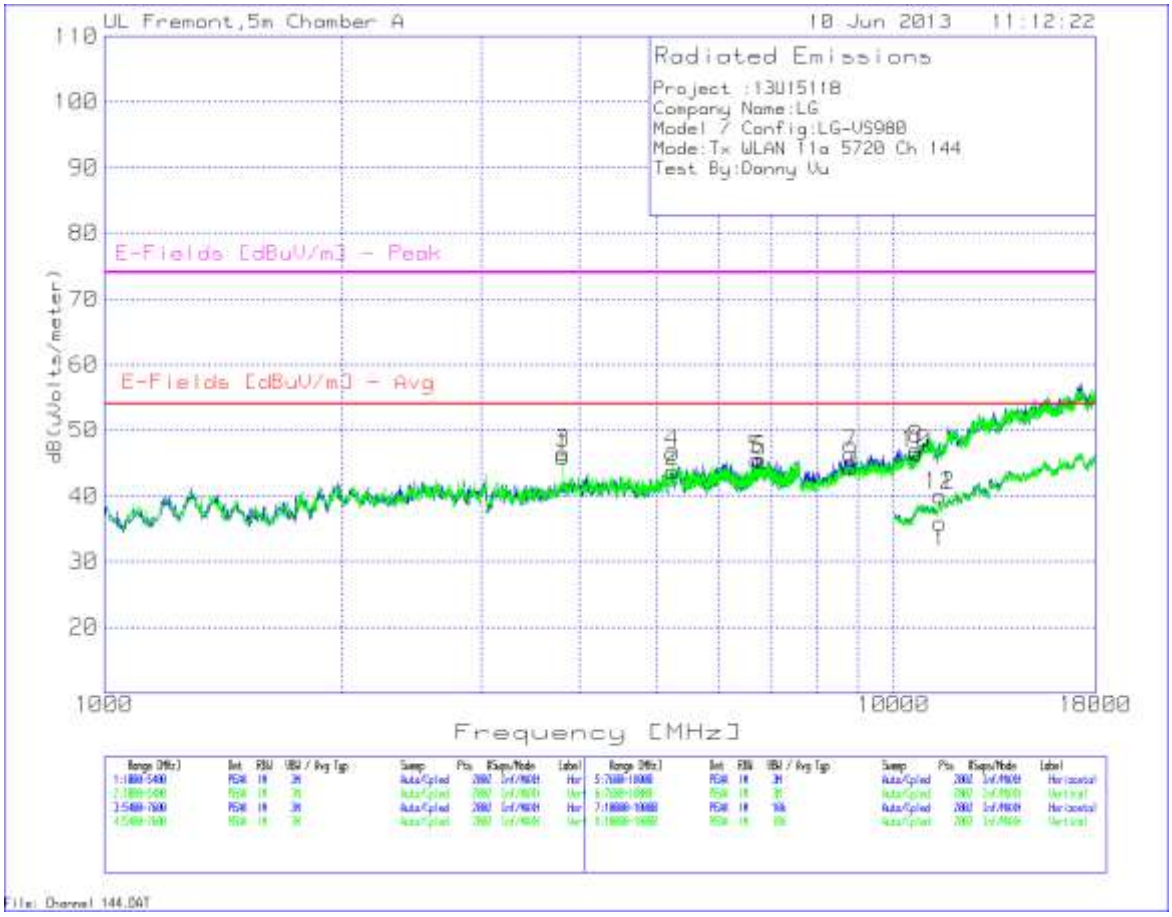
Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11a 5580 Ch 116
Test By:Danny Vu

Horizontal 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3720.04	41.85	PK	33.3	-36.2	5.8	0	44.75	54	-9.25	74	-29.25	200	Horz
2	5391.204	37.67	PK	34.4	-35.5	7.2	1	44.77	54	-9.23	74	-29.23	200	Horz
Vertical 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
3	3720.04	43.05	PK	33.3	-36.2	5.8	0	45.95	54	-8.05	74	-28.05	200	Vert
4	5347.226	40.34	PK	34.3	-35.5	7.2	1	47.34	54	-6.66	74	-26.66	100	Vert
Horizontal 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
5	5586.907	37.86	PK	34.4	-35.5	7.4	1	45.16	54	-8.84	74	-28.84	200	Horz
6	5976.112	37.8	PK	35.2	-35.6	7.7	0.4	45.5	54	-8.5	74	-28.5	100	Horz
Vertical 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	5575.912	38.28	PK	34.4	-35.5	7.4	1	45.58	54	-8.42	74	-28.42	200	Vert
8	5884.858	36.74	PK	35.1	-35.6	7.6	0.9	44.74	54	-9.26	74	-29.26	100	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	8753.823	37.68	PK	35.8	-36	9.7	0.2	47.38	54	-6.62	74	-26.62	100	Horz
*10	12812.994	36.59	PK	39.1	-34.4	11.9	0.6	53.79	54	-0.21	74	-20.21	100	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
11	8966.917	36.22	PK	35.9	-36.1	9.8	0.3	46.12	54	-7.88	74	-27.88	100	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
12	10991.504	24.9	PK	37.8	-35.6	10.9	0.3	38.3	54	-15.7	74	-35.7	200	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
13	11031.484	24.62	PK	37.8	-35.6	10.9	0.2	37.92	54	-16.08	74	-36.08	100	Vert

* Not in Restricted Band

PK - Peak detector
Av - Average detector

HORIZONTAL AND VERTICAL PLOT HIGH CHANNEL



HORIZONTAL AND VERTICAL DATA HIGH CHANNEL

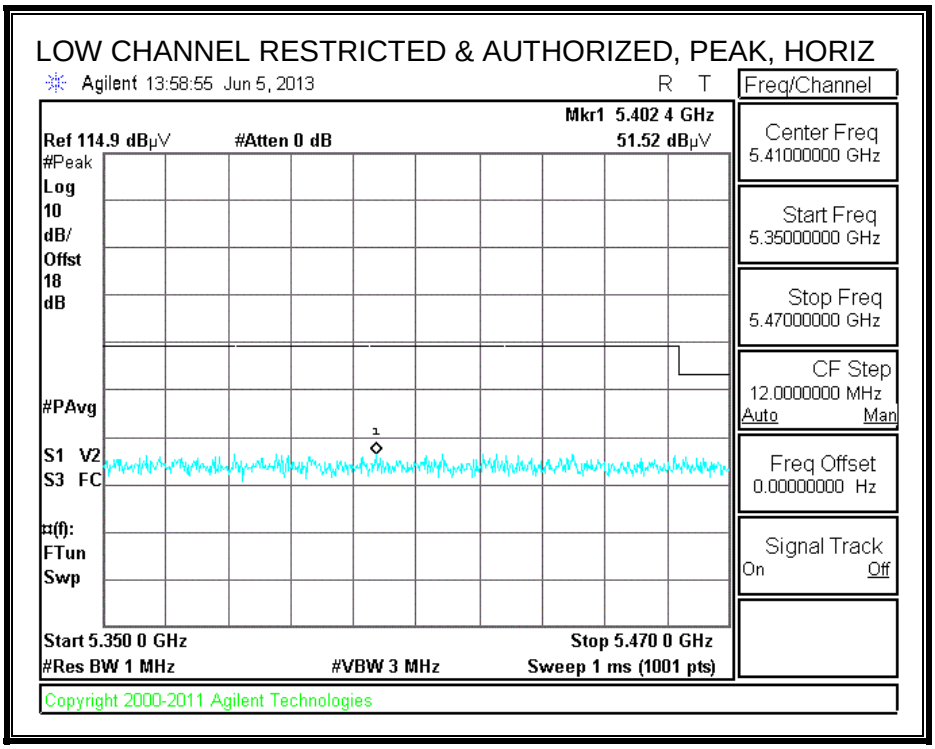
Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11a 5720 Ch 144
Test By:Danny Vu

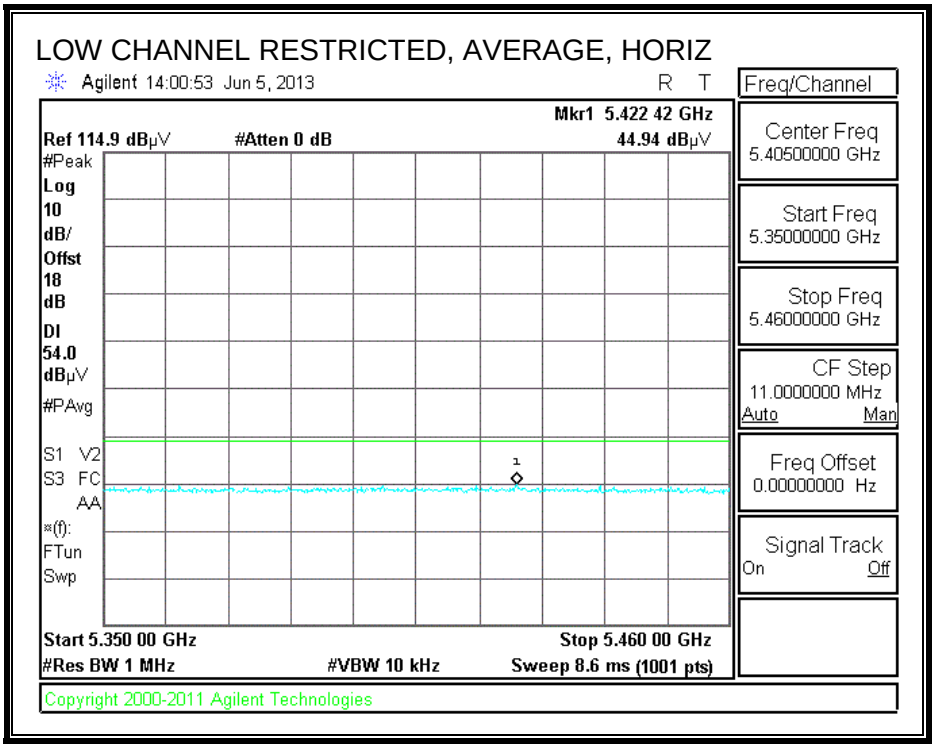
Horizontal 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3814.593	42.37	PK	33.5	-36.1	5.9	0.3	45.97	54	-8.03	74	-28.03	200	Horz
2	5250.475	37.32	PK	34.3	-35.5	7.1	0.5	43.72	54	-10.28	74	-30.28	111	Horz
Vertical 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
3	3814.593	42.9	PK	33.5	-36.1	5.9	0.3	46.5	54	-7.5	74	-27.5	200	Vert
4	5243.878	40.2	PK	34.2	-35.5	7.1	0.5	46.5	54	-7.5	74	-27.5	100	Vert
Horizontal 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
5	6703.948	37.3	PK	35.4	-35.6	8.3	0.2	45.6	54	-8.4	74	-28.4	200	Horz
Vertical 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
6	6774.313	37.13	PK	35.4	-35.6	8.3	0.2	45.43	54	-8.57	74	-28.57	200	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	8826.587	36.61	PK	35.8	-36	9.7	0.3	46.41	54	-7.59	74	-27.59	100	Horz
8	10676.862	34.15	PK	37.9	-35.8	10.7	0.2	47.15	54	-6.85	74	-26.85	100	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	8831.784	34.75	PK	35.8	-36	9.7	0.2	44.45	54	-9.55	74	-29.55	100	Vert
10	10676.862	33.47	PK	37.9	-35.8	10.7	0.2	46.47	54	-7.53	74	-27.53	200	Vert
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
11	11439.28	25.77	PK	38.2	-35.6	11.1	0.5	39.97	54	-14.03	74	-34.03	100	Vert
12	11439.28	25.77	PK	38.2	-35.6	11.1	0.5	39.97	54	-14.03	74	-34.03	100	Vert

PK - Peak detector
Av - Average detector

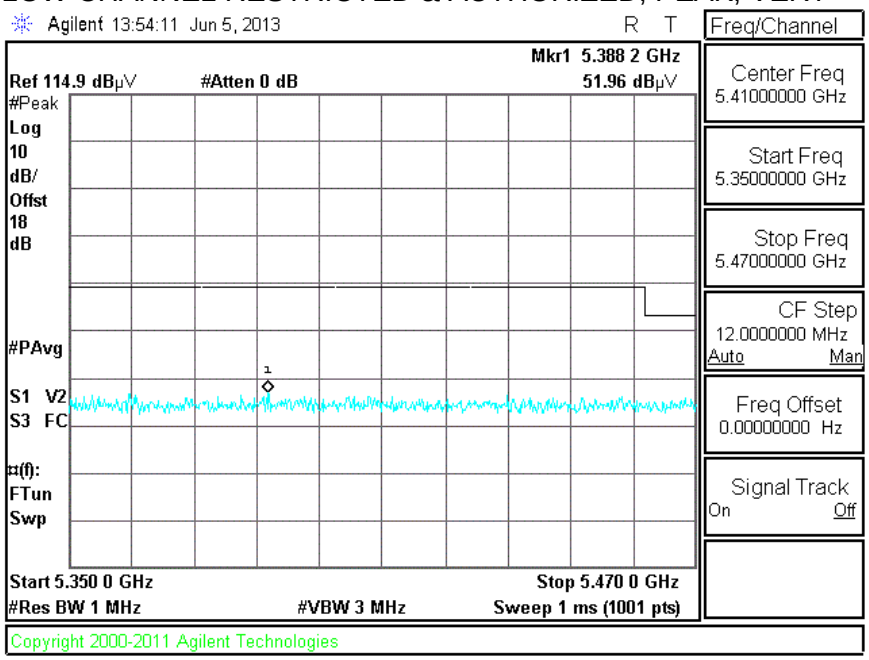
10.8. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.6 GHz BAND

RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)

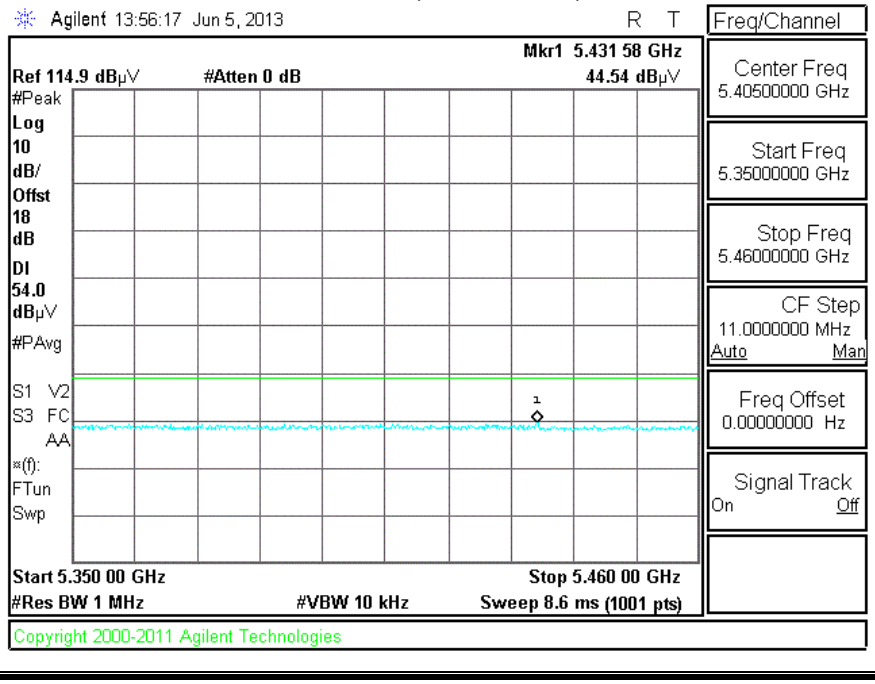




LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, VERT

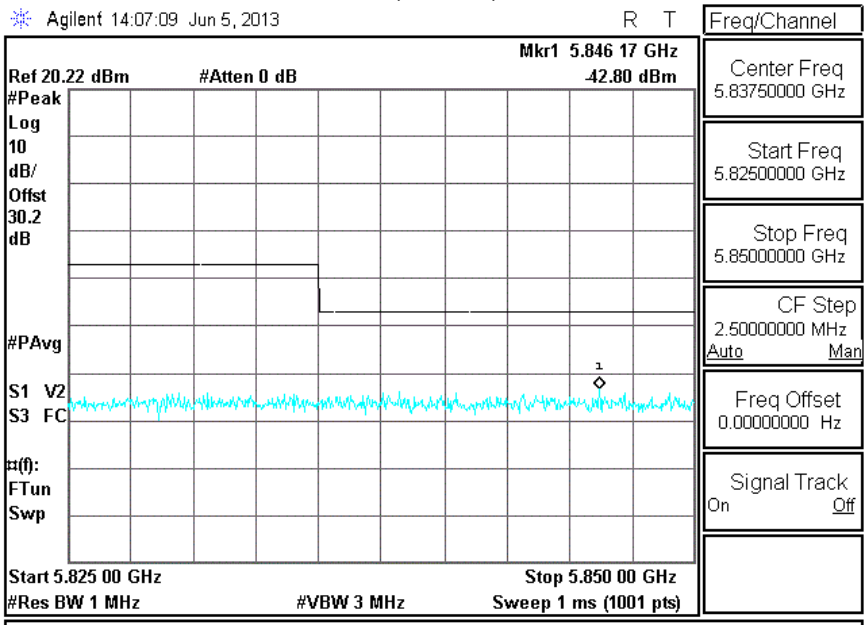


LOW CHANNEL RESTRICTED, AVERAGE, VERT

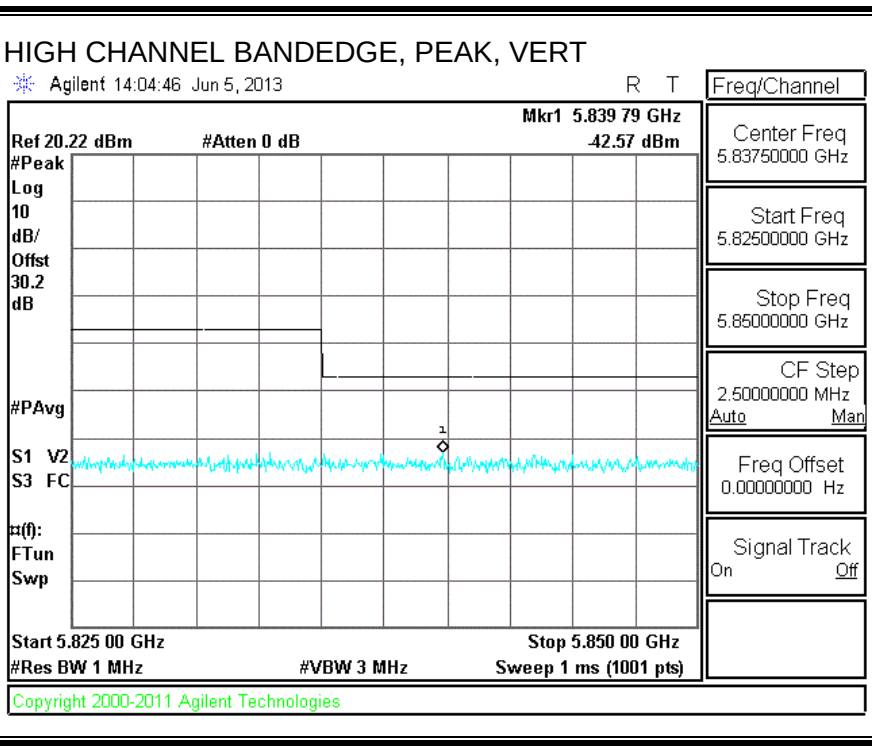


AUTHORIZED BANDEDGE (HIGH CHANNEL)

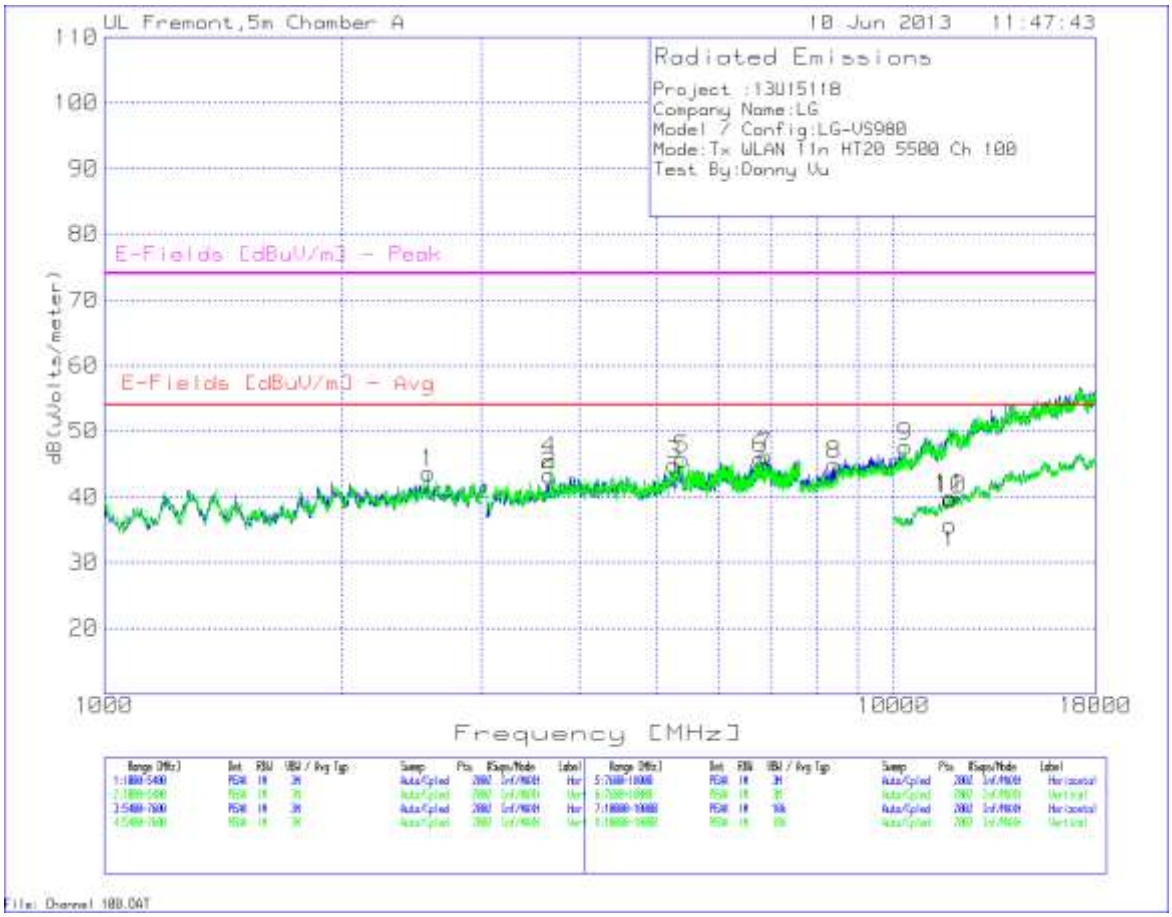
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT



HORIZONTAL AND VERTICAL PLOT LOW CHANNEL



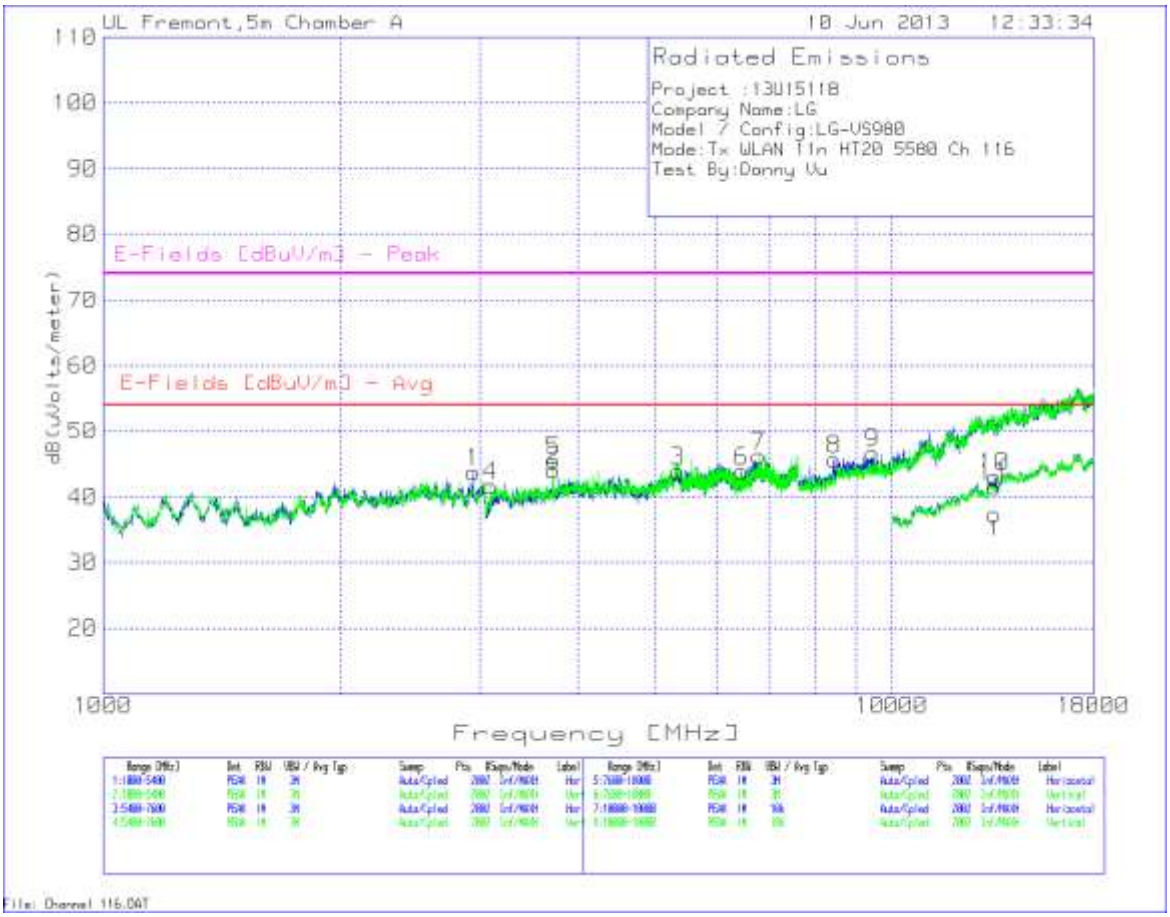
HORIZONTAL AND VERTICAL DATA LOW CHANNEL

Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11n HT20 5500 Ch 100
Test By:Danny Vu

Horizontal 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	2574.413	42.95	PK	32.7	-36.8	4.6	0.2	43.65	54	-10.35	74	-30.35	200	Horz
2	3667.266	40.49	PK	33.2	-36.2	5.7	0.1	43.29	54	-10.71	74	-30.71	200	Horz
3	5270.265	38.4	PK	34.3	-35.5	7.1	0.6	44.9	54	-9.1	74	-29.1	200	Horz
Vertical 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3667.266	42.8	PK	33.2	-36.2	5.7	0.1	45.6	54	-8.4	74	-28.4	200	Vert
5	5395.602	38.55	PK	34.4	-35.5	7.2	1	45.65	54	-8.35	74	-28.35	200	Vert
Horizontal 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
6	6788.606	37.5	PK	35.4	-35.6	8.3	0.2	45.8	54	-8.2	74	-28.2	100	Horz
Vertical 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	6876.562	37.86	PK	35.4	-35.6	8.4	0.2	46.26	54	-7.74	74	-27.74	200	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	8400.4	35.46	PK	35.7	-36	9.4	0.3	44.86	54	-9.14	74	-29.14	100	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	10344.228	35.8	PK	37.3	-36.1	10.6	0.1	47.7	54	-6.3	74	-26.3	100	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	11819.09	25.23	PK	38.6	-35.7	11.3	0.2	39.63	54	-14.37	74	-34.37	200	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
11	11767.116	25.36	PK	38.6	-35.7	11.3	0.3	39.86	54	-14.14	74	-34.14	200	Vert

PK - Peak detector
Av - Average detector

HORIZONTAL AND VERTICAL PLOT MID CHANNEL



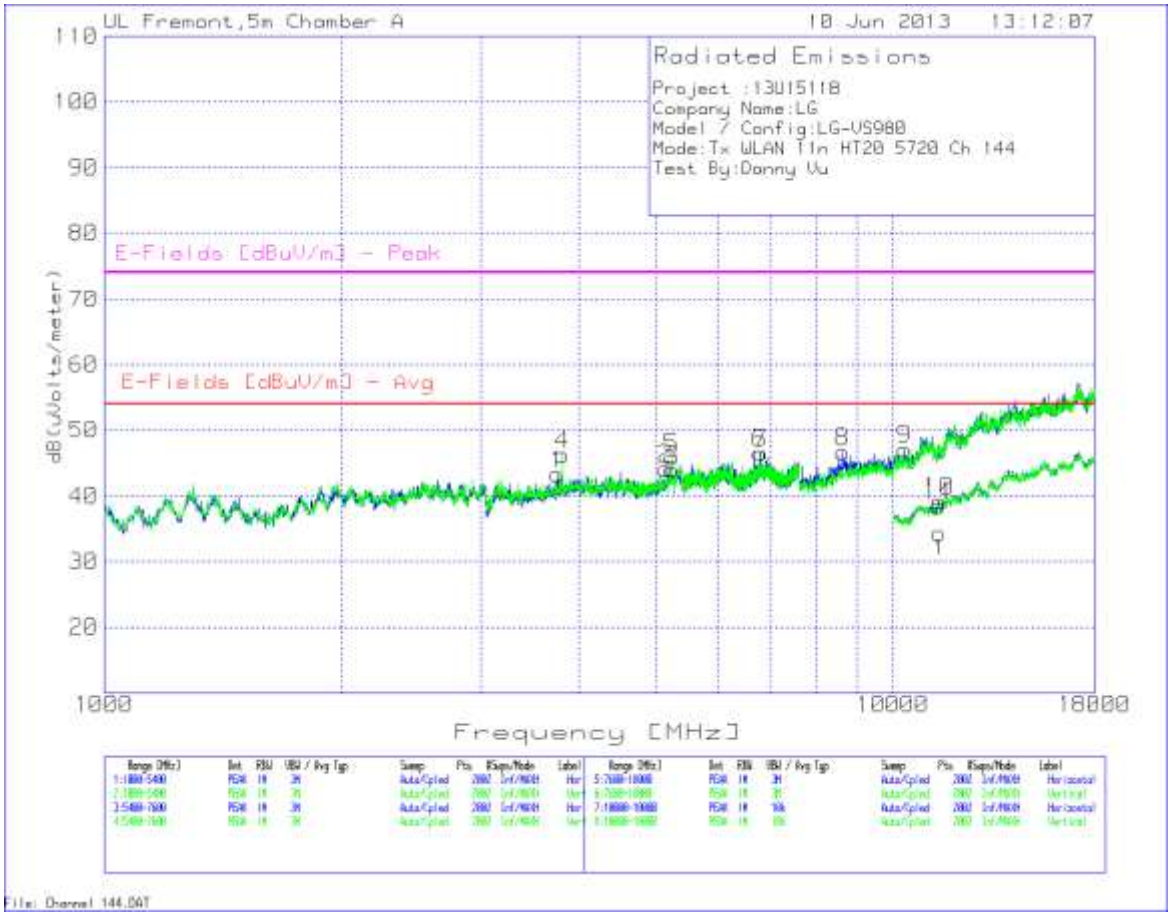
HORIZONTAL AND VERTICAL DATA MID CHANNEL

Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11n HT20 5580 Ch 116
Test By:Danny Vu

Horizontal 1000 - 5400MHz														
Marker No.	Test Frequency MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	2948.226	42.85	PK	32.5	-36.7	5	0.1	43.75	54	-10.25	74	-30.25	100	Horz
2	3720.04	41.17	PK	33.3	-36.2	5.8	0	44.07	54	-9.93	74	-29.93	200	Horz
3	5349.425	36.89	PK	34.3	-35.5	7.2	1	43.89	54	-10.11	74	-30.11	100	Horz
Vertical 1000 - 5400MHz														
Marker No.	Test Frequency MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3097.751	40.32	PK	32.8	-36.6	5.1	0.1	41.72	54	-12.28	74	-32.28	100	Vert
5	3720.04	42.61	PK	33.3	-36.2	5.8	0	45.51	54	-8.49	74	-28.49	200	Vert
Horizontal 5400 - 7600MHz														
Marker No.	Test Frequency MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
6	6444.478	35.86	PK	35.5	-35.6	8.1	0.1	43.96	54	-10.04	74	-30.04	200	Horz
Vertical 5400 - 7600MHz														
Marker No.	Test Frequency MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	6784.208	38	PK	35.4	-35.6	8.3	0.2	46.3	54	-7.7	74	-27.7	200	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	8447.176	36.24	PK	35.7	-36	9.5	0.3	45.74	54	-8.26	74	-28.26	100	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	9450.275	36.02	PK	36.5	-36.2	10.1	0.2	46.62	54	-7.38	74	-27.38	200	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	13478.261	26.01	PK	38.9	-34	12.2	0	43.11	54	-10.89	74	-30.89	100	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts/ meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
11	13498.251	24.35	PK	38.9	-34	12.2	0.1	41.55	54	-12.45	74	-32.45	100	Vert

PK - Peak detector
Av - Average detector

HORIZONTAL AND VERTICAL PLOT HIGH CHANNEL



HORIZONTAL AND VERTICAL PLOT HIGH CHANNEL

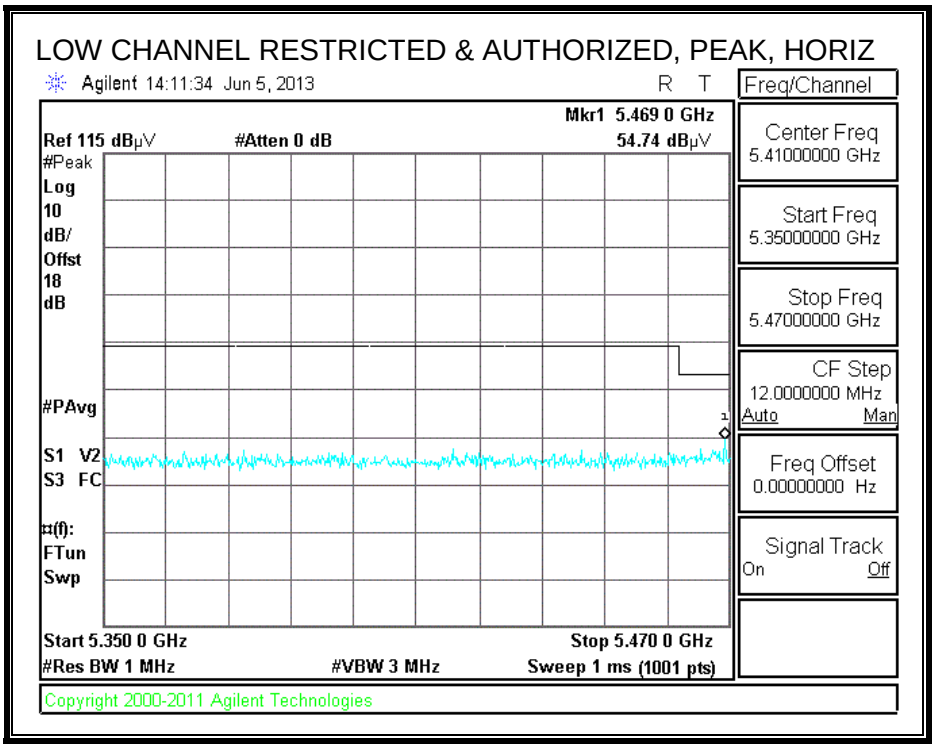
Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11n HT20 5720 Ch 144
Test By:Danny Vu

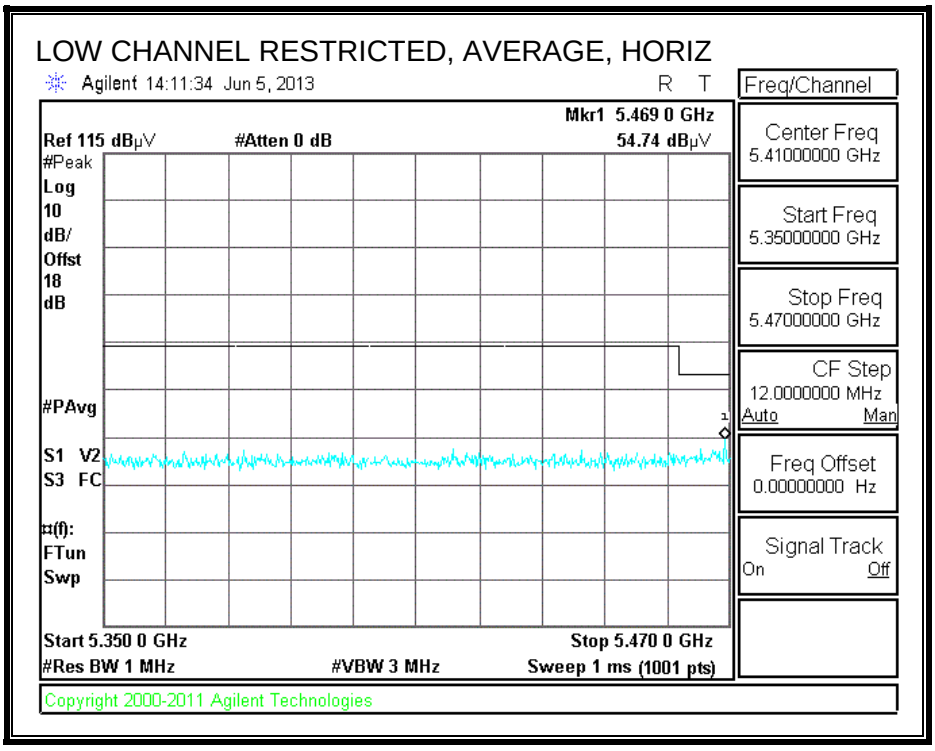
Horizontal 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3748.626	40.19	PK	33.4	-36.1	5.8	0	43.29	54	-10.71	74	-30.71	200	Horz
2	5151.524	38.26	PK	34.1	-35.5	7	0.3	44.16	54	-9.84	74	-29.84	100	Horz
3	5243.878	37.73	PK	34.2	-35.5	7.1	0.5	44.03	54	-9.97	74	-29.97	200	Horz
Vertical 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3814.593	42.66	PK	33.5	-36.1	5.9	0.3	46.26	54	-7.74	74	-27.74	200	Vert
5	5243.878	39.61	PK	34.2	-35.5	7.1	0.5	45.91	54	-8.09	74	-28.09	100	Vert
Horizontal 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
6	6783.108	38.29	PK	35.4	-35.6	8.3	0.2	46.59	54	-7.41	74	-27.41	100	Horz
Vertical 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	6807.296	38.19	PK	35.4	-35.6	8.3	0.2	46.49	54	-7.51	74	-27.51	100	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	8639.48	37.13	PK	35.7	-36	9.6	0.3	46.73	54	-7.27	74	-27.27	100	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	10349.425	35.15	PK	37.3	-36.1	10.6	0.1	47.05	54	-6.95	74	-26.95	100	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	11439.28	24.99	PK	38.2	-35.6	11.1	0.5	39.19	54	-14.81	74	-34.81	100	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading(dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
11	11447.276	24.39	PK	38.2	-35.6	11.1	0.4	38.49	54	-15.51	74	-35.51	100	Vert

PK - Peak detector
Av - Average detector

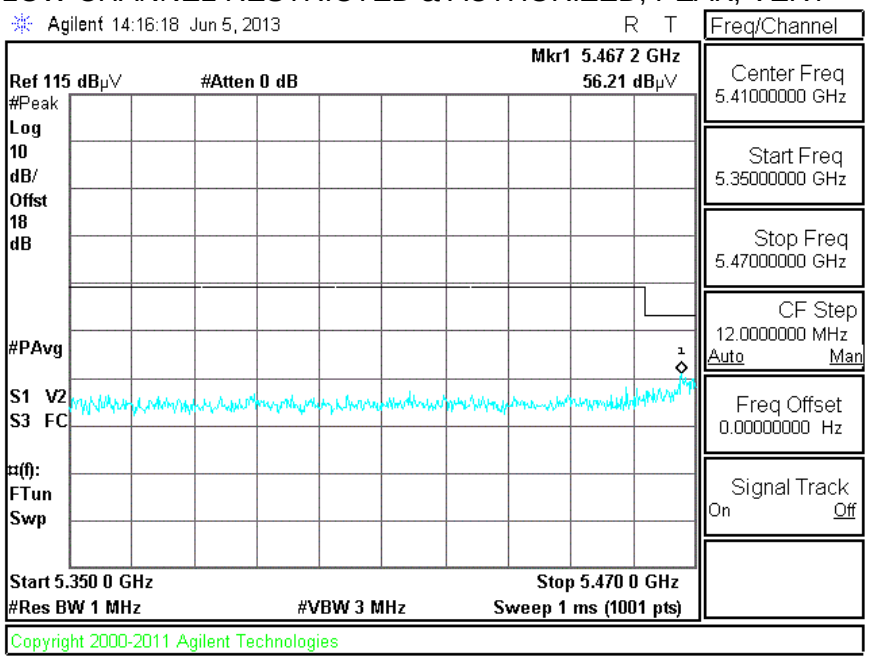
10.9. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.6 GHz BAND

RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)

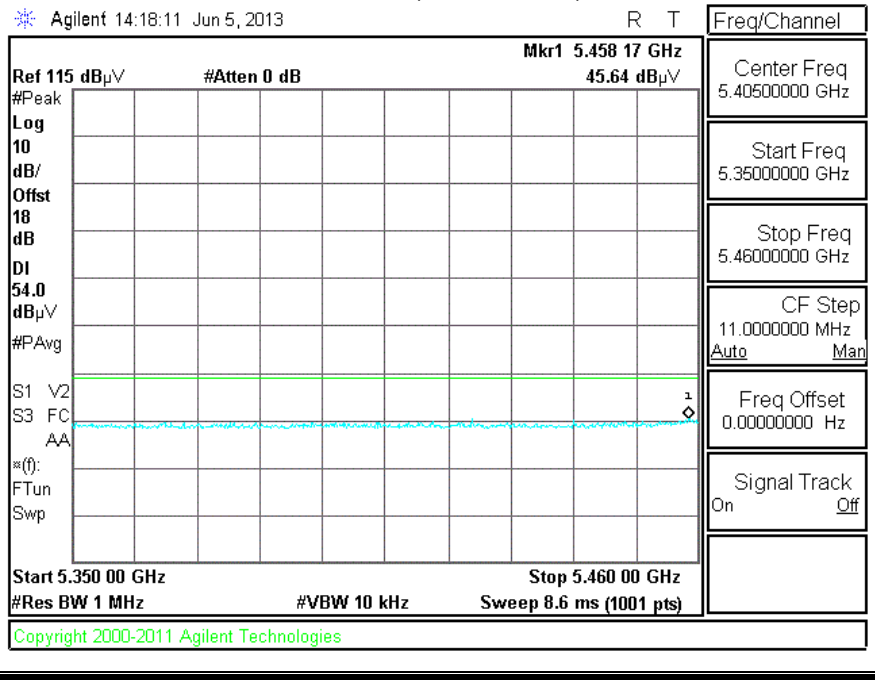




LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, VERT

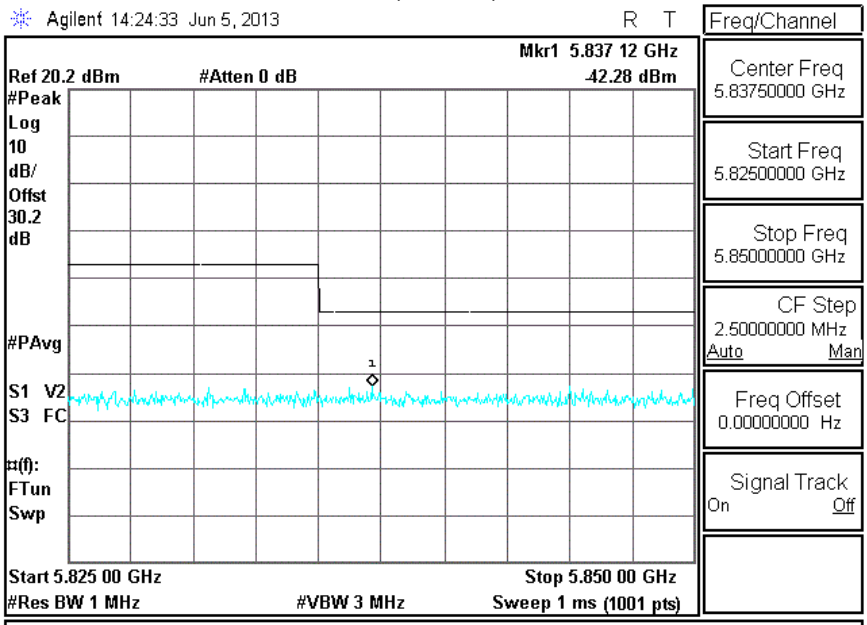


LOW CHANNEL RESTRICTED, AVERAGE, VERT

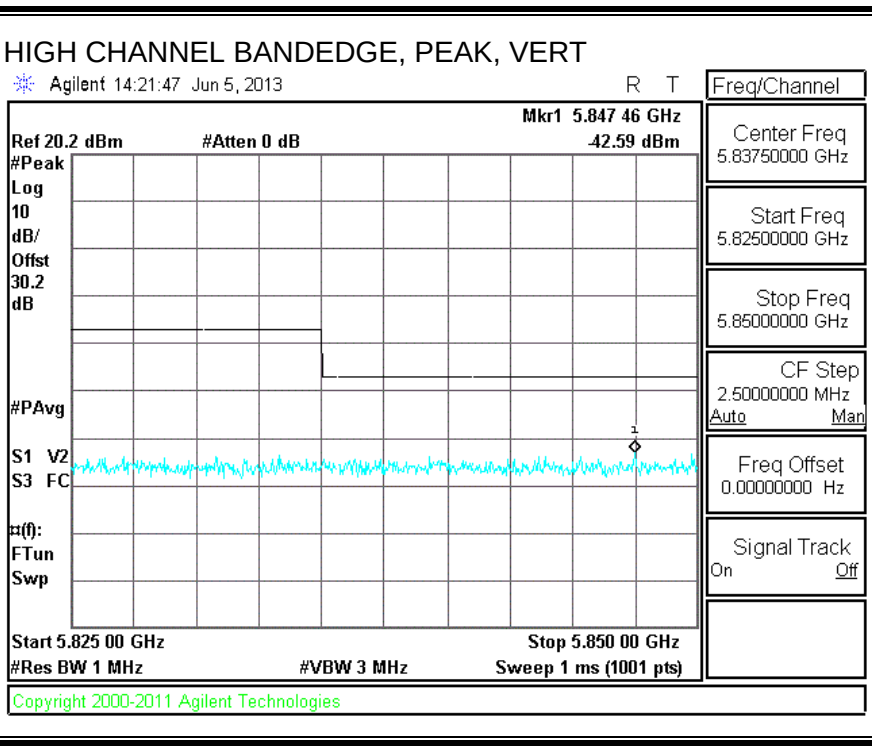


AUTHORIZED BANDEDGE (HIGH CHANNEL)

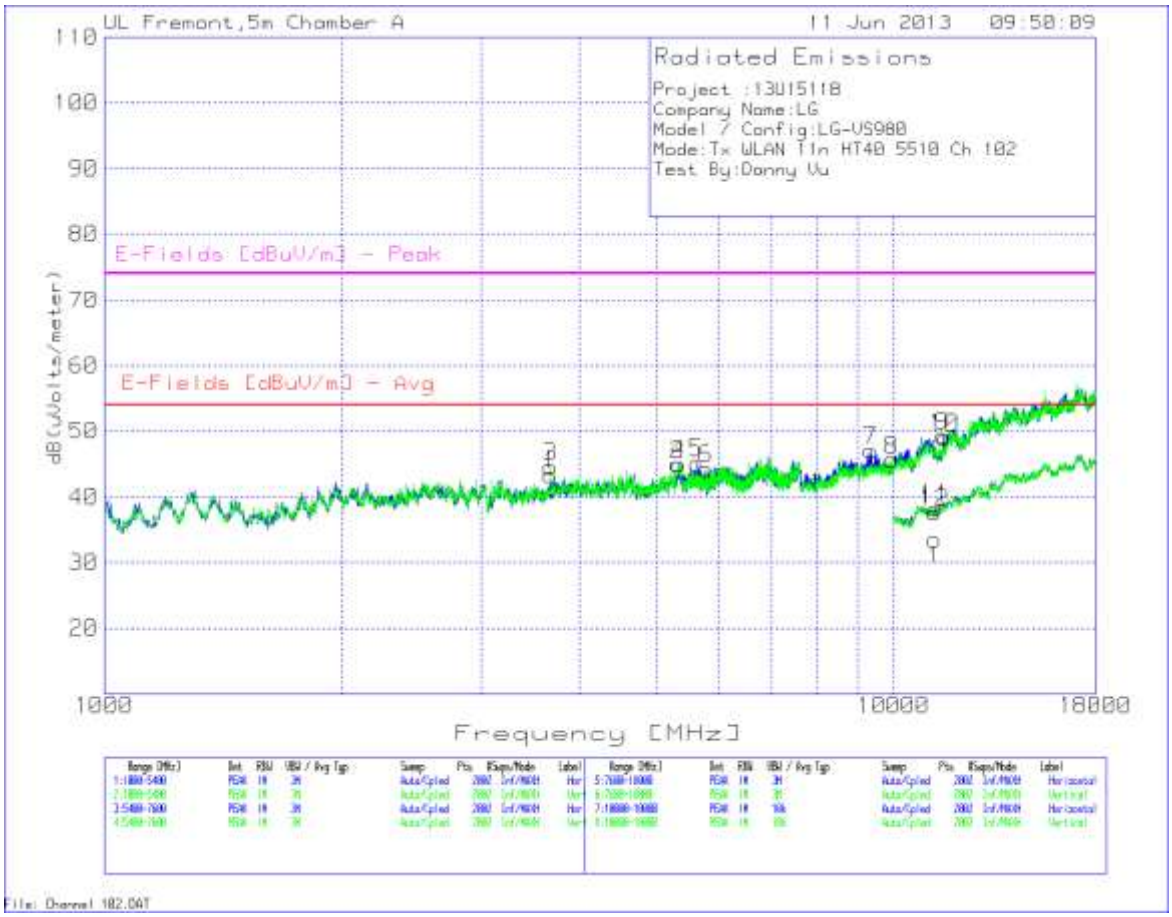
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT



HORIZONTAL AND VERTICAL PLOT LOW CHANNEL



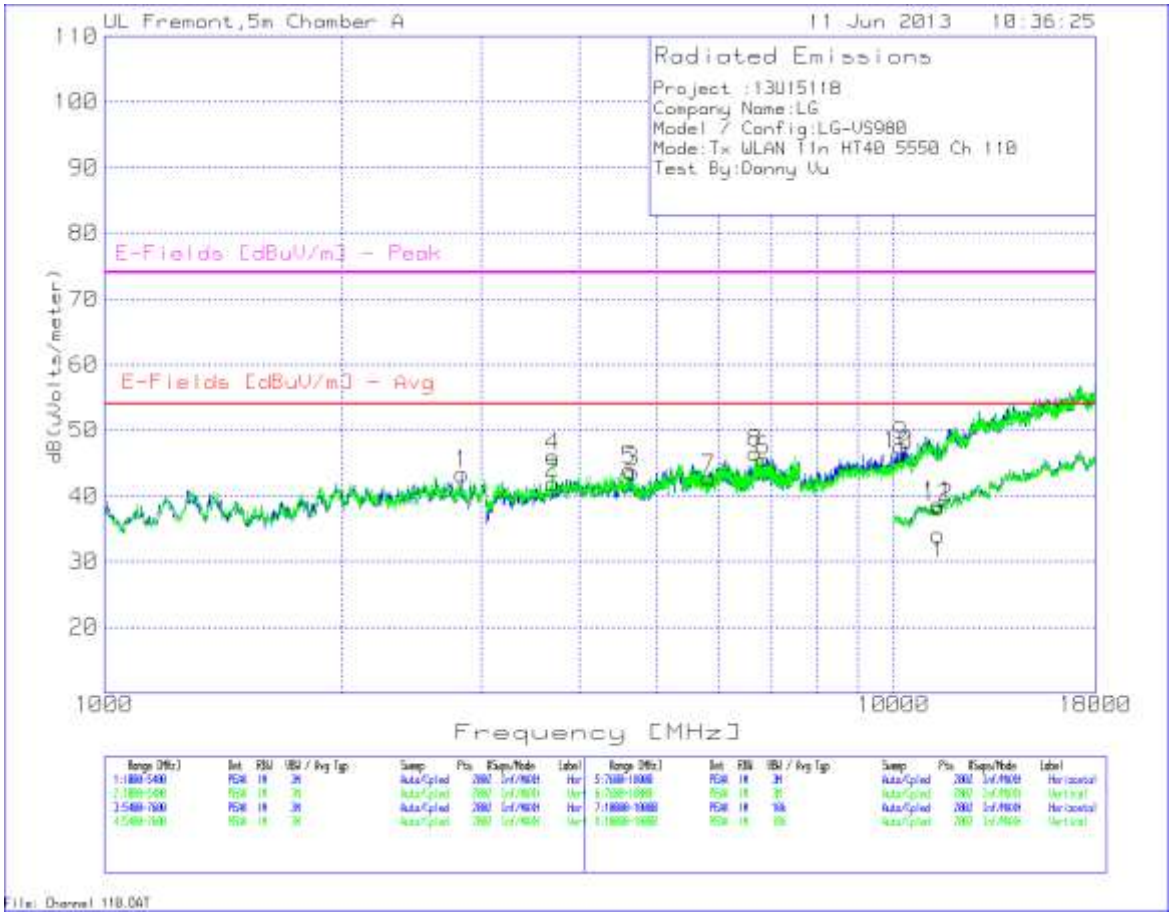
HORIZONTAL AND VERTICAL DATA LOW CHANNEL

Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11n HT40 5510 Ch 102
Test By:Danny Vu

Horizontal 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	3673.863	40.53	PK	33.2	-36.2	5.7	0.1	43.33	54	-10.67	74	-30.67	200	Horz
2	5334.033	37.95	PK	34.3	-35.5	7.2	1	44.95	54	-9.05	74	-29.05	100	Horz
Vertical 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
3	3673.863	41.84	PK	33.2	-36.2	5.7	0.1	44.64	54	-9.36	74	-29.36	200	Vert
4	5342.829	37.98	PK	34.3	-35.5	7.2	1	44.98	54	-9.02	74	-29.02	100	Vert
Horizontal 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
5	5625.387	37.7	PK	34.5	-35.5	7.4	1	45.1	54	-8.9	74	-28.9	100	Horz
Vertical 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
6	5779.31	36.49	PK	34.8	-35.5	7.5	1	44.29	54	-9.71	74	-29.71	200	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	9361.919	36.59	PK	36.4	-36.2	10	0.3	47.09	54	-6.91	74	-26.91	100	Horz
9	11544.828	35.05	PK	38.3	-35.6	11.2	0.3	49.25	54	-4.75	74	-24.75	200	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	9944.028	34.44	PK	37.1	-36.4	10.3	0.2	45.64	54	-8.36	74	-28.36	100	Vert
10	11601.999	34.58	PK	38.4	-35.6	11.2	0.5	49.08	54	-4.92	74	-24.92	200	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
11	11279.36	24.39	PK	38	-35.6	11.1	0.3	38.19	54	-15.81	74	-35.81	100	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
12	11263.368	23.81	PK	38	-35.6	11	0.4	37.61	54	-16.39	74	-36.39	100	Vert

PK - Peak detector
Av - Average detector

HORIZONTAL AND VERTICAL PLOT MID CHANNEL



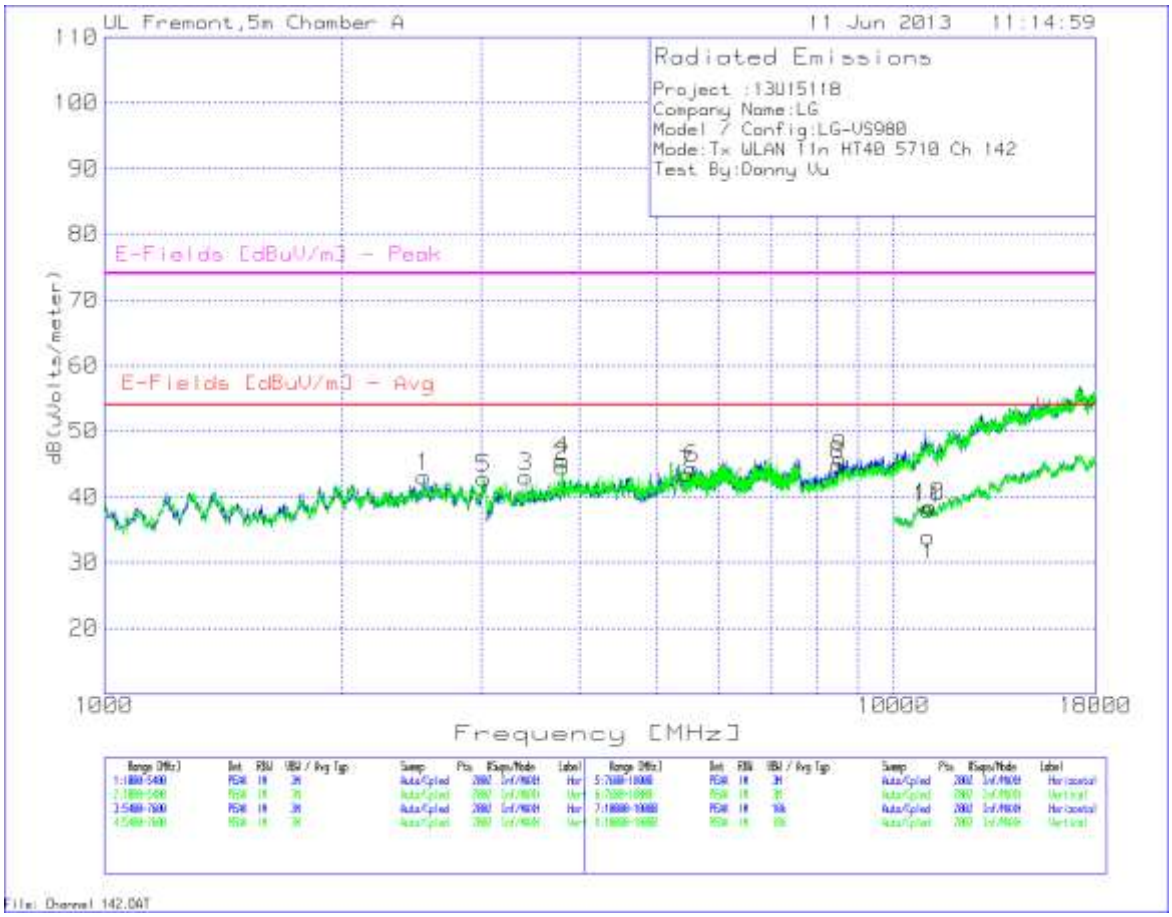
HORIZONTAL AND VERTICAL DATA MID CHANNEL

Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11n HT40 5550 Ch 110
Test By:Danny Vu

Horizontal 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	2840.48	42.61	PK	32.5	-36.7	4.9	0.1	43.41	54	-10.59	74	-30.59	100	Horz
2	3700.25	39.09	PK	33.3	-36.2	5.8	0	41.99	54	-12.01	74	-32.01	200	Horz
3	4661.169	38.63	PK	33.9	-35.8	6.6	0.3	43.63	54	-10.37	74	-30.37	100	Horz
Vertical 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
4	3700.25	43.15	PK	33.3	-36.2	5.8	0	46.05	54	-7.95	74	-27.95	100	Vert
5	4625.987	39.05	PK	33.9	-35.8	6.6	0.2	43.95	54	-10.05	74	-30.05	100	Vert
Horizontal 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
6	6839.18	37.1	PK	35.4	-35.6	8.4	0.2	45.5	54	-8.5	74	-28.5	100	Horz
7	5823.288	34.73	PK	34.9	-35.5	7.6	1	42.73	54	-11.27	74	-31.27	100	Horz
Vertical 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	6669.865	38.3	PK	35.4	-35.6	8.2	0.2	46.5	54	-7.5	74	-27.5	200	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	10209.095	36.01	PK	37.2	-36.2	10.5	0.2	47.71	54	-6.29	74	-26.29	100	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	10141.529	34.74	PK	37.2	-36.3	10.4	0.2	46.24	54	-7.76	74	-27.76	100	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
11	11387.306	24.62	PK	38.2	-35.6	11.1	0.3	38.62	54	-15.38	74	-35.38	100	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
12	11387.306	24.23	PK	38.2	-35.6	11.1	0.3	38.23	54	-15.77	74	-35.77	100	Vert

PK - Peak detector
Av - Average detector

HORIZONTAL AND VERTICAL PLOT HIGH CHANNEL



HORIZONTAL AND VERTICAL DATA HIGH CHANNEL

Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx WLAN 11n HT40 5710 Ch 142
Test By:Danny Vu

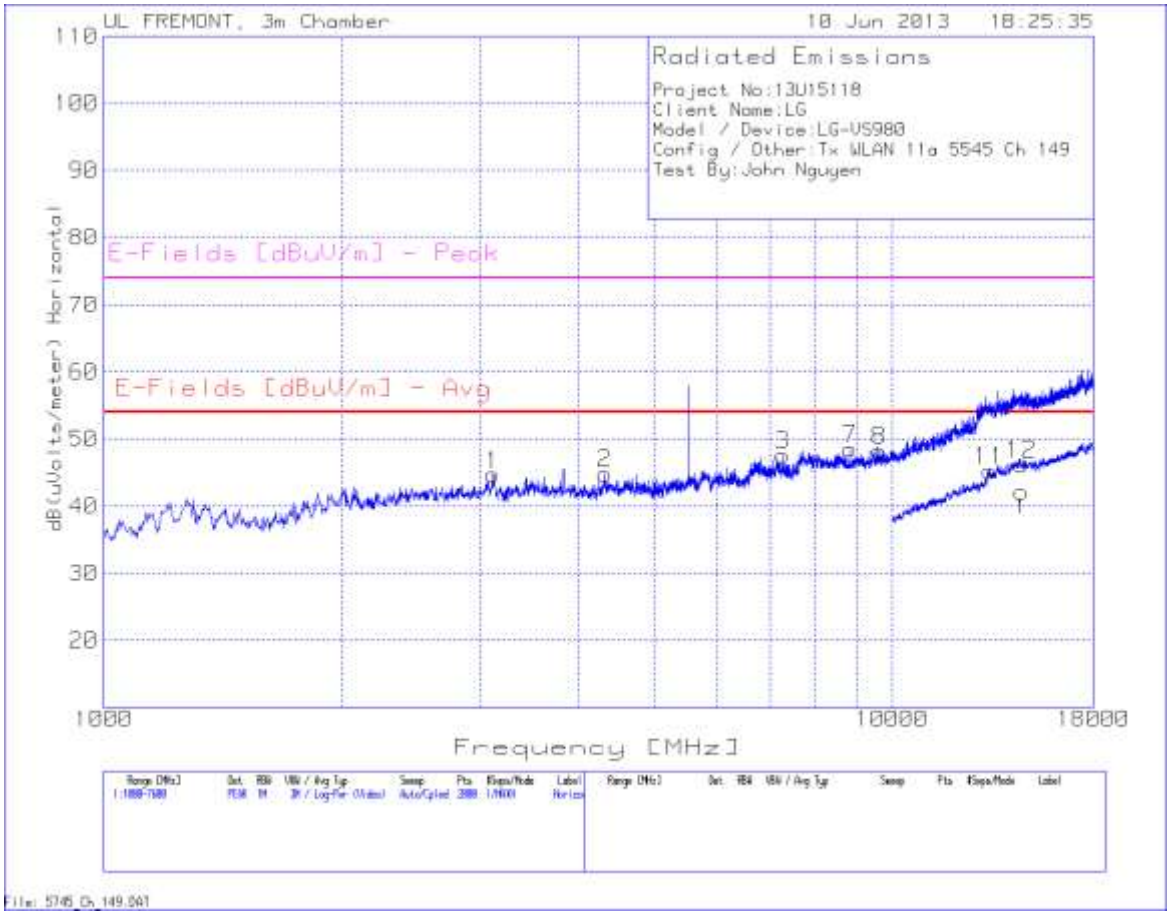
Horizontal 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
1	2541.429	42.64	PK	32.6	-36.8	4.6	0.1	43.14	54	-10.86	74	-30.86	200	Horz
2	3807.996	41.04	PK	33.5	-36.1	5.9	0.3	44.64	54	-9.36	74	-29.36	200	Horz
Vertical 1000 - 5400MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
3	3420.99	40.85	PK	33	-36.4	5.5	0.1	43.05	54	-10.95	74	-30.95	100	Vert
4	3807.996	41.99	PK	33.5	-36.1	5.9	0.3	45.59	54	-8.41	74	-28.41	200	Vert
5	3027.386	41.61	PK	32.7	-36.7	5.1	0.1	42.81	54	-11.19	74	-31.19	100	Vert
Horizontal 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
6	5562.719	37.09	PK	34.4	-35.5	7.3	1	44.29	54	-9.71	74	-29.71	100	Horz
Vertical 5400 - 7600MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
7	5465.967	36.25	PK	34.4	-35.5	7.3	1	43.45	54	-10.55	74	-30.55	200	Vert
Horizontal 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
8	8488.756	35.52	PK	35.7	-36	9.5	0.2	44.92	54	-9.08	74	-29.08	100	Horz
Vertical 7600 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
9	8556.322	36.48	PK	35.7	-36	9.5	0.2	45.88	54	-8.12	74	-28.12	200	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
10	11115.442	24.95	PK	37.8	-35.6	11	0.3	38.45	54	-15.55	74	-35.55	200	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 Ant Factor [dB/m]	T144 Preamp Gain [dB]	Cable Factor [dB]	T161 BRF [dB]	Corrected Reading dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
11	11063.468	24.55	PK	37.8	-35.6	10.9	0.4	38.05	54	-15.95	74	-35.95	200	Vert

PK - Peak detector
Av - Average detector

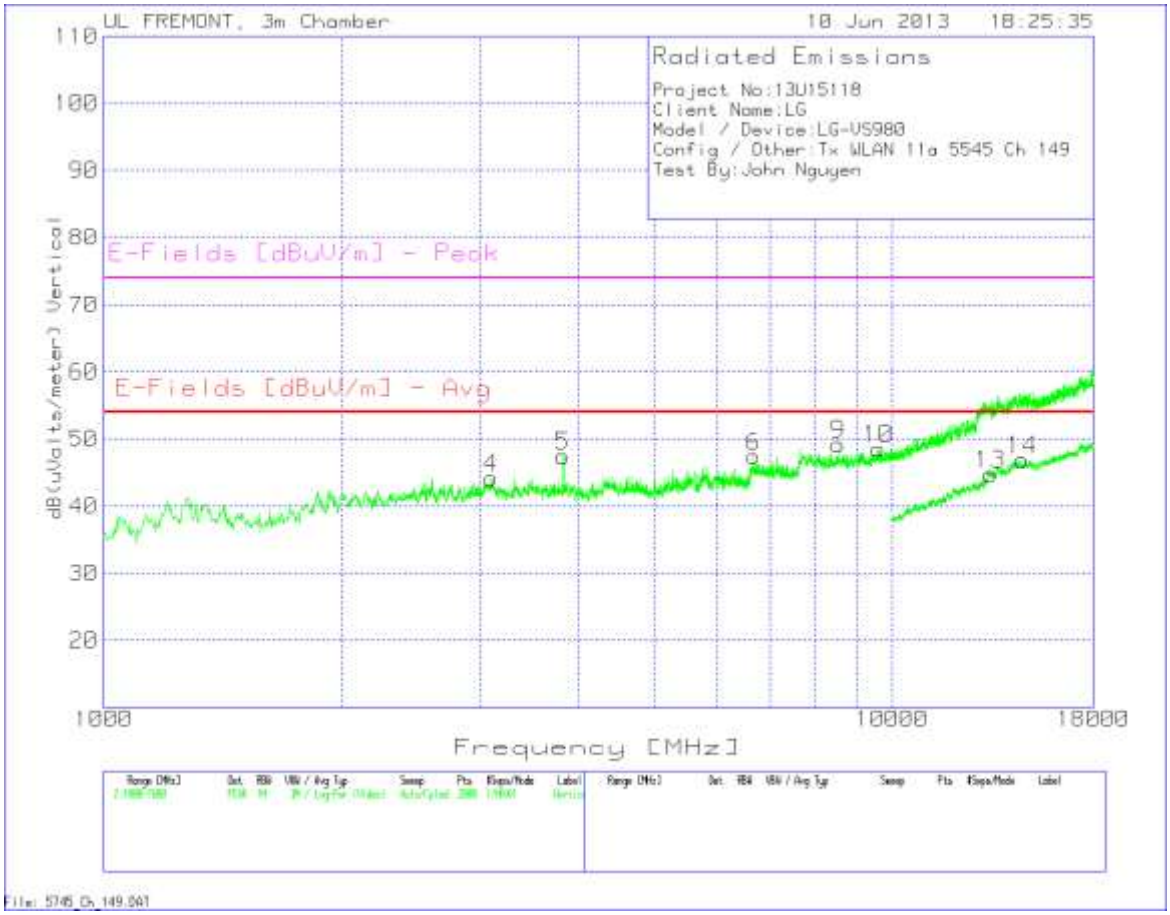
10.1. TX ABOVE 1 GHz 802.11a HT20 MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL PLOT LOW CHANNEL



VERTICAL PLOT LOW CHANNEL



HORIZONTAL AND VERTICAL DATA LOW CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:LG-VS980
Config / Other:Tx WLAN 11a 5545 Ch 149
Test By:John Nguyen

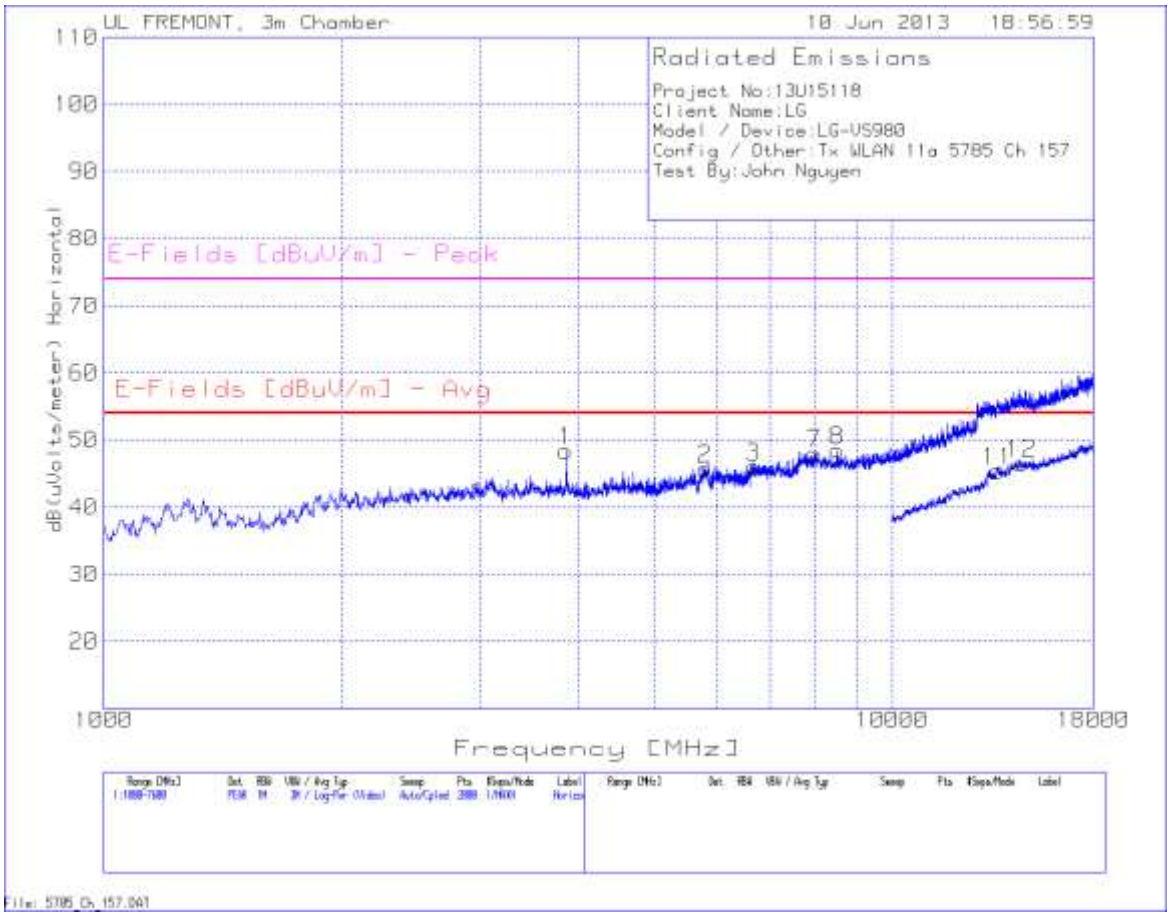
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T163 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz														
1	3114.243	39.77	PK	33	-28.3	0.2	0	44.67	53.97	-9.3	74	-29.33	201	Horz
2	4324.738	36.95	PK	33.6	-25.9	0.2	0	44.85	53.97	-9.12	74	-29.15	101	Horz
3	7253.673	34.86	PK	35.6	-23.1	0.2	0	47.56	53.97	-6.41	74	-26.44	201	Horz
Vertical 1000 - 7600MHz														
4	3101.049	39.25	PK	33.1	-28.3	0.2	0	44.25	53.97	-9.72	74	-29.75	100	Vert
5	3826.687	40.54	PK	33.2	-26.5	0.2	0	47.44	53.97	-6.53	74	-26.56	201	Vert
6	6676.462	34.99	PK	35.6	-23.4	0.2	0	47.39	53.97	-6.58	74	-26.61	100	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz														
7	8836.982	34.33	PK	36	-22	0.2	0	48.53	53.97	-5.44	74	-25.47	201	Horz
8	9616.592	33.02	PK	36.7	-21.8	0.4	0	48.32	53.97	-5.65	74	-25.68	99	Horz
Vertical 7600 - 18000MHz														
9	8545.927	35.3	PK	35.8	-22.1	0.2	0	49.2	53.97	-4.77	74	-24.8	100	Vert
10	9595.802	33.34	PK	36.7	-21.8	0.3	0	48.54	53.97	-5.43	74	-25.46	201	Vert

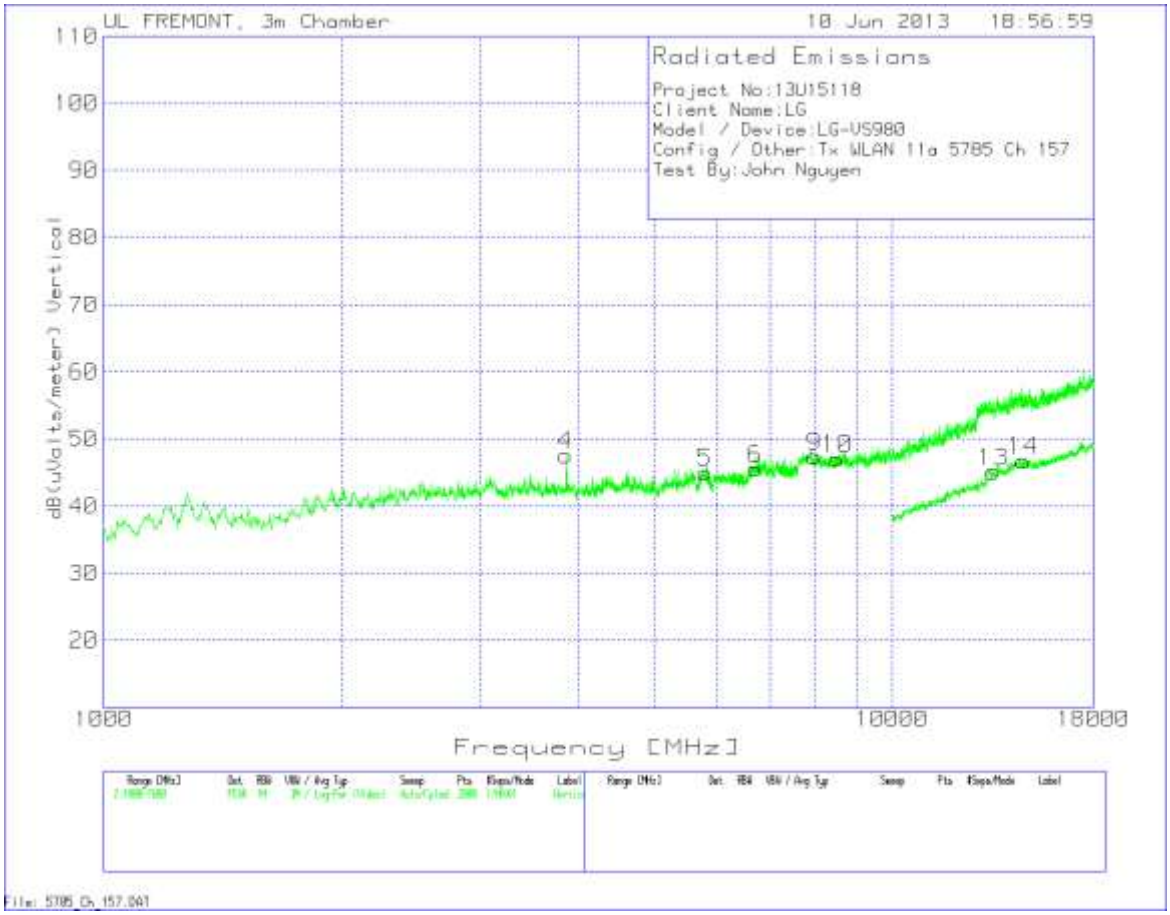
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz														
11	13282.359	22.2	PK	39.1	-16.7	0.7	0	45.3	53.97	-8.67	74	-28.7	100	Horz
12	14585.707	22.32	PK	39.7	-16.1	0.3	0	46.22	53.97	-7.75	74	-27.78	100	Horz
Vertical 10000 - 18000MHz														
13	13326.337	22.31	PK	39.2	-16.7	-0.1	0	44.71	53.97	-9.26	74	-29.29	100	Vert
14	14625.687	22.66	PK	39.7	-16.1	0.6	0	46.86	53.97	-7.11	74	-27.14	100	Vert

PK - Peak detector
QP - Quasi-Peak detector

HORIZONTAL PLOT MID CHANNEL



VERTICAL PLOT MID CHANNEL



HORIZONTAL AND VERTICAL DATA MID CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:LG-VS980
Config / Other:Tx WLAN 11a 5785 Ch 157
Test By:John Nguyen

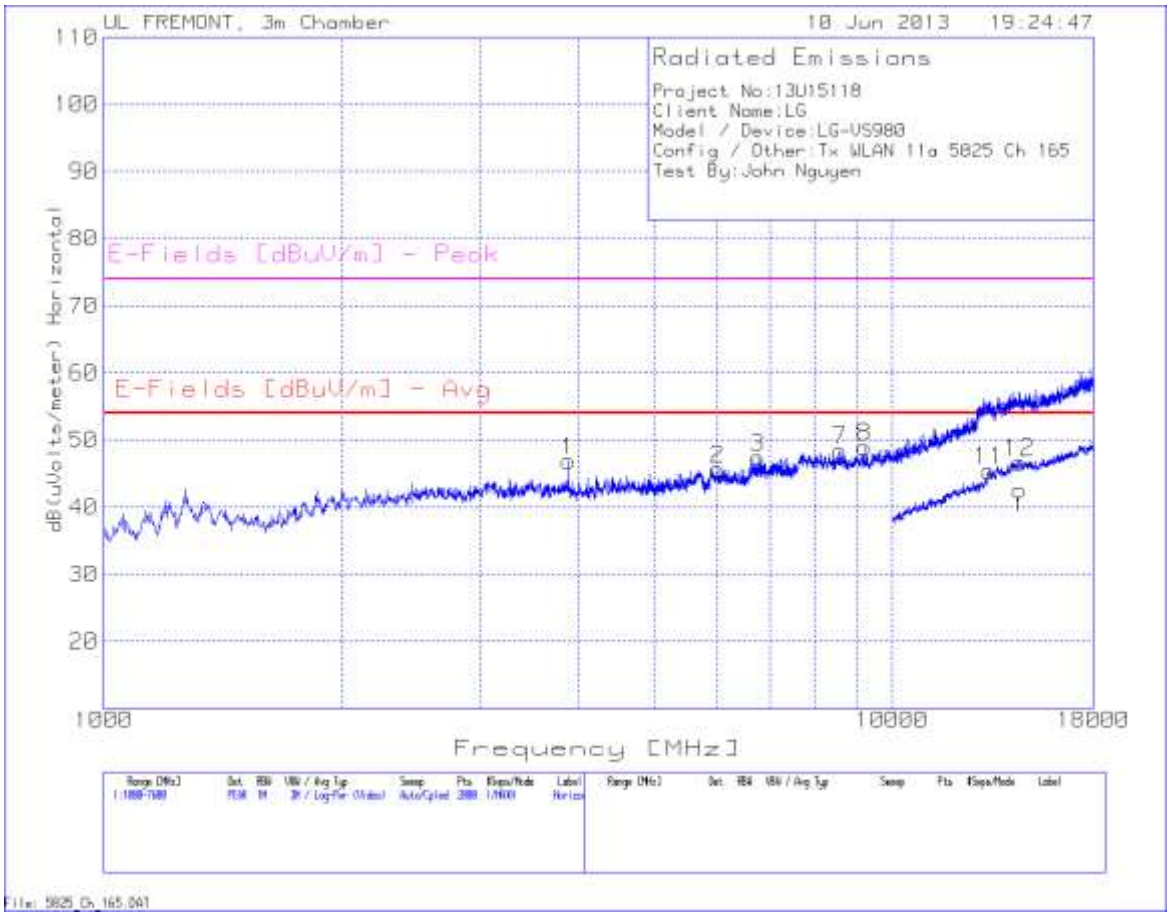
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T163 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz														
1	3856.372	41.55	PK	33.2	-26.5	0.1	0	48.35	53.97	-5.62	74	-25.65	201	Horz
2	5795.802	34.21	PK	34.9	-24.3	0.9	0	45.71	53.97	-8.26	74	-28.29	99	Horz
3	6659.97	33.54	PK	35.6	-23.4	0.2	0	45.94	53.97	-8.03	74	-28.06	201	Horz
Vertical 1000 - 7600MHz														
4	3856.372	40.74	PK	33.2	-26.5	0.1	0	47.54	53.97	-6.43	74	-26.46	201	Vert
5	5785.907	33.53	PK	34.9	-24.3	0.9	0	45.03	53.97	-8.94	74	-28.97	201	Vert
6	6699.55	33.13	PK	35.6	-23.4	0.2	0	45.53	53.97	-8.44	74	-28.47	100	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz														
7	7979.41	34.63	PK	35.7	-22.4	0.1	0	48.03	53.97	-5.94	74	-25.97	201	Horz
8	8509.545	34.56	PK	35.8	-22.1	0.2	0	48.46	53.97	-5.51	74	-25.54	201	Horz
Vertical 7600 - 18000MHz														
9	7979.41	33.98	PK	35.7	-22.4	0.1	0	47.38	53.97	-6.59	74	-26.62	201	Vert
10	8519.94	33.1	PK	35.8	-22.1	0.3	0	47.1	53.97	-6.87	74	-26.9	99	Vert

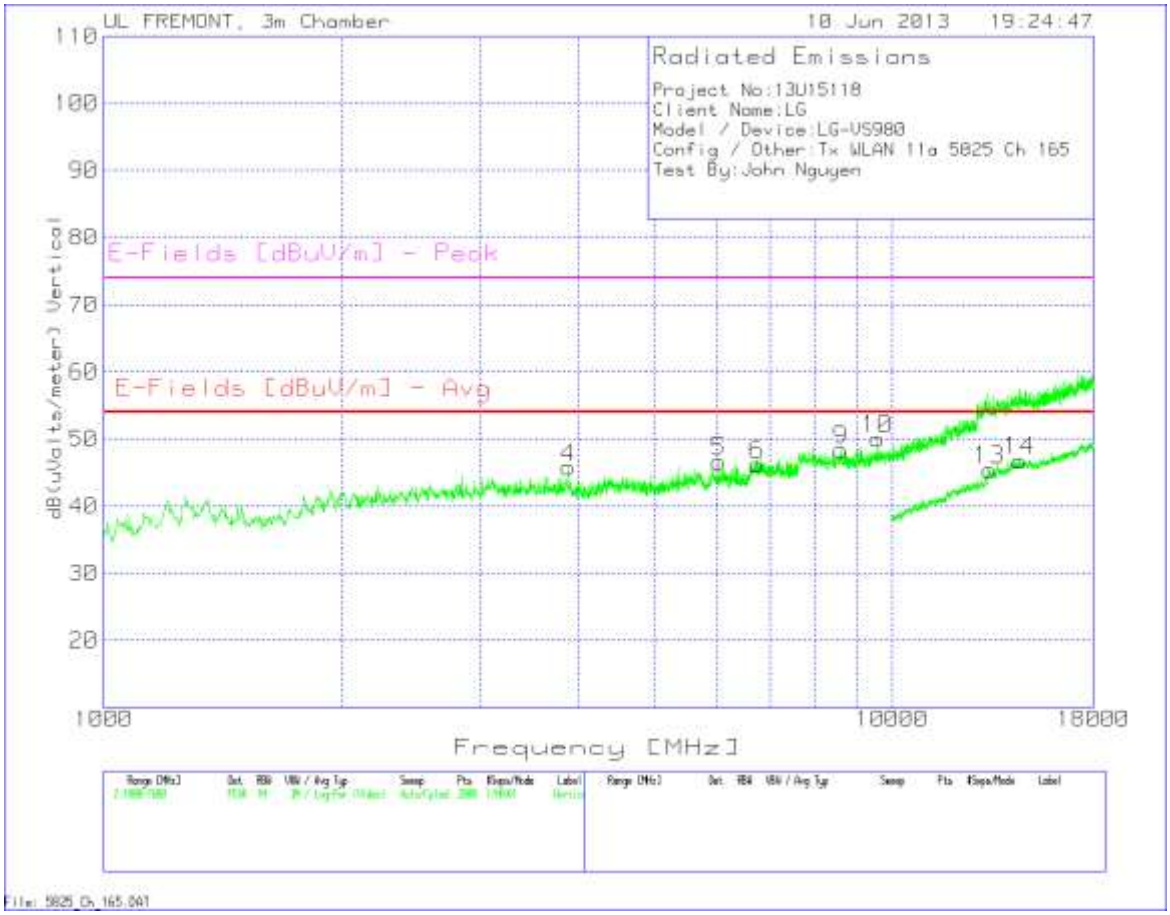
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz														
11	13610.195	22.56	PK	38.9	-16.1	0	0	45.36	53.97	-8.61	74	-28.64	201	Horz
12	14601.699	22.39	PK	39.7	-16.1	0.5	0	46.49	53.97	-7.48	74	-27.51	99	Horz
Vertical 10000 - 18000MHz														
13	13426.287	22.09	PK	39.1	-16.6	0.5	0	45.09	53.97	-8.88	74	-28.91	100	Vert
14	14673.663	23.26	PK	39.7	-16.1	-0.1	0	46.76	53.97	-7.21	74	-27.24	201	Vert

PK - Peak detector
QP - Quasi-Peak detector

HORIZONTAL PLOT HIGH CHANNEL



VERTICAL PLOT HIGH CHANNEL



HORIZONTAL AND VERTICAL DATA HIGH CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:LG-VS980
Config / Other:Tx WLAN 11a 5825 Ch 165
Test By:John Nguyen

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T163 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz														
1	3882.759	40.05	PK	33.2	-26.5	0.1	0	46.85	53.97	-7.12	74	-27.15	201	Horz
2	6003.598	33.63	PK	35.3	-24.2	0.9	0	45.63	53.97	-8.34	74	-28.37	99	Horz
3	6755.622	34.89	PK	35.6	-23.3	0.2	0	47.39	53.97	-6.58	74	-26.61	201	Horz
Vertical 1000 - 7600MHz														
4	3882.759	38.96	PK	33.2	-26.5	0.1	0	45.76	53.97	-8.21	74	-28.24	201	Vert
5	6023.388	34.74	PK	35.3	-24.2	0.8	0	46.64	53.97	-7.33	74	-27.36	201	Vert
6	6732.534	33.74	PK	35.6	-23.3	0.2	0	46.24	53.97	-7.73	74	-27.76	201	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz														
7	8577.111	34.49	PK	35.8	-22.1	0.2	0	48.39	53.97	-5.58	74	-25.61	201	Horz
8	9216.392	34.31	PK	36.3	-21.9	0.2	0	48.91	53.97	-5.06	74	-25.09	100	Horz
Vertical 7600 - 18000MHz														
9	8618.691	34.44	PK	35.8	-22.1	0.3	0	48.44	53.97	-5.53	74	-25.56	201	Vert
10	9575.012	35.01	PK	36.7	-21.8	0.1	0	50.01	53.97	-3.96	74	-23.99	99	Vert

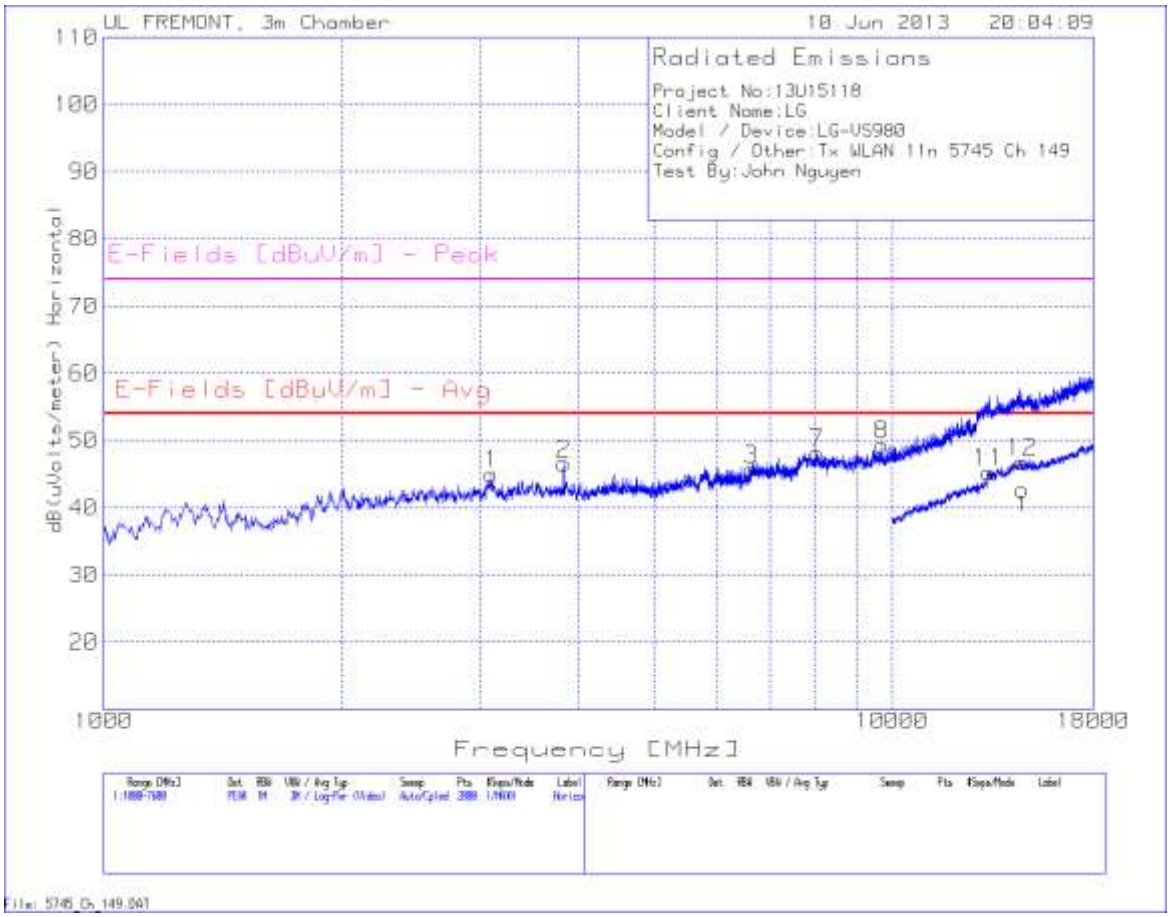
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz														
11	13270.365	22.47	PK	39.1	-16.7	0.6	0	45.47	53.97	-8.5	74	-28.53	200	Horz
12	14505.747	22.72	PK	39.6	-16	0.3	0	46.62	53.97	-7.35	74	-27.38	200	Horz
Vertical 10000 - 18000MHz														
13	13282.359	22.32	PK	39.1	-16.7	0.7	0	45.42	53.97	-8.55	74	-28.58	100	Vert
14	14513.743	23.1	PK	39.6	-16	0.1	0	46.8	53.97	-7.17	74	-27.2	201	Vert

PK - Peak detector
QP - Quasi-Peak detector

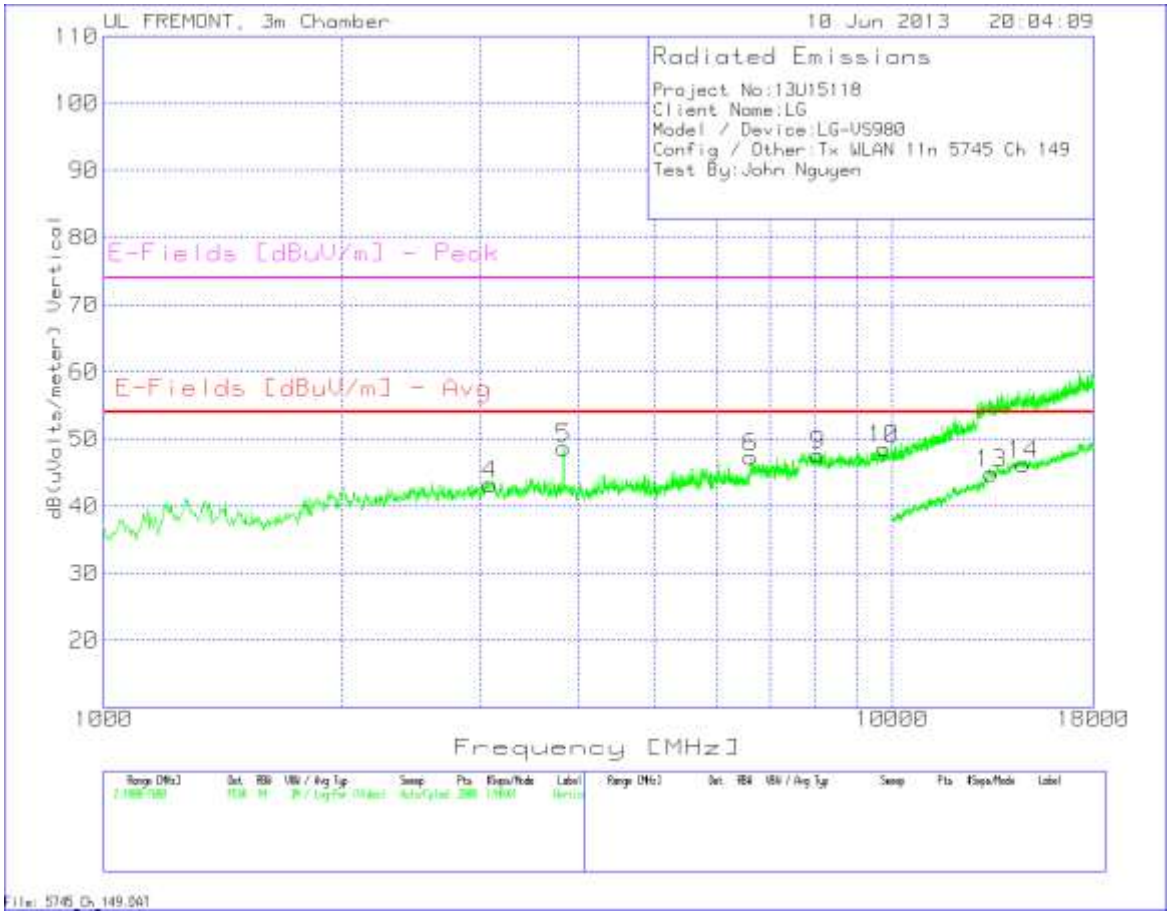
10.1. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL PLOT LOW CHANNEL



VERTICAL PLOT LOW CHANNEL



HORIZONTAL AND VERTICAL DATA LOW CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:LG-VS980
Config / Other:Tx WLAN 11n 5745 Ch 149
Test By:John Nguyen

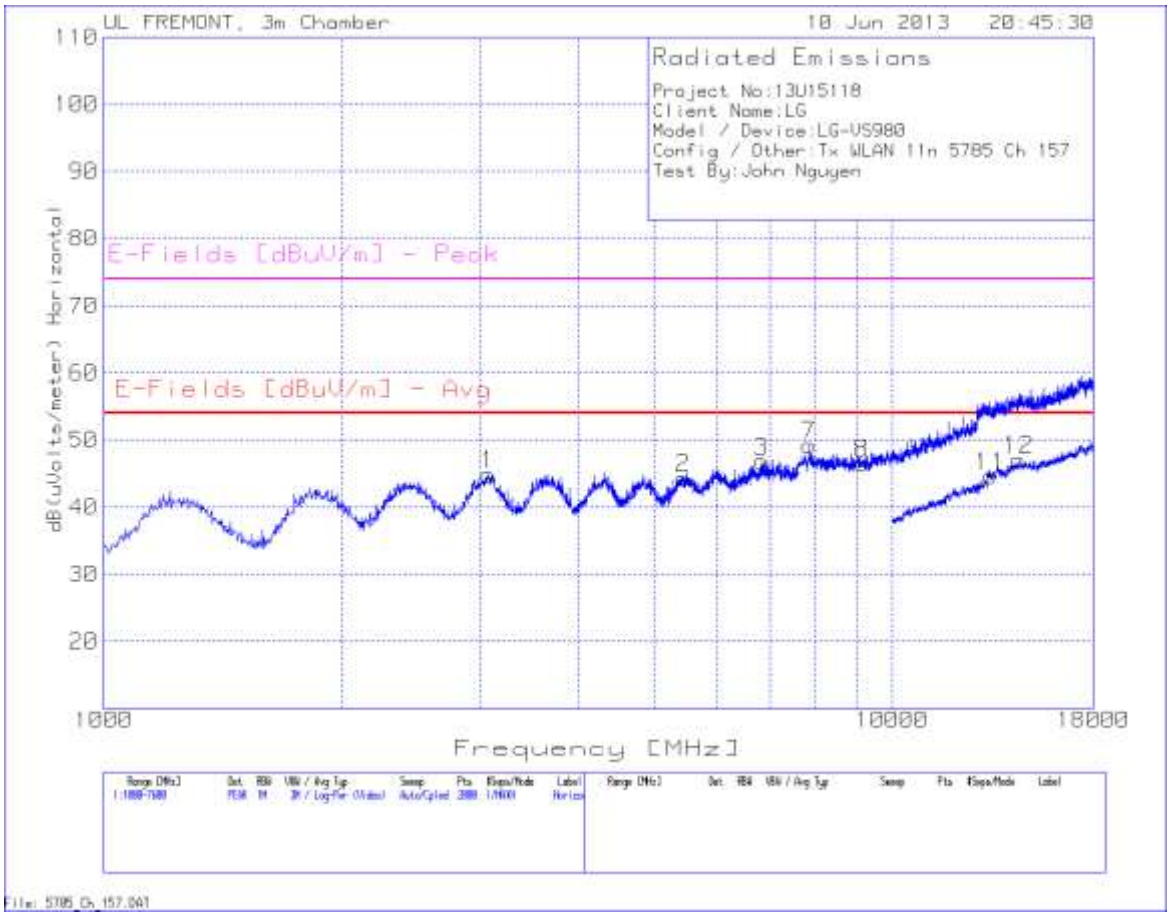
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T163 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz														
1	3101.049	39.97	PK	33.1	-28.3	0.2	0	44.97	53.97	-9	74	-29.03	201	Horz
2	3829.985	39.67	PK	33.2	-26.5	0.2	0	46.57	53.97	-7.4	74	-27.43	201	Horz
3	6636.882	33.35	PK	35.6	-23.4	0.2	0	45.75	53.97	-8.22	74	-28.25	201	Horz
Vertical 1000 - 7600MHz														
4	3091.154	38.39	PK	33.1	-28.3	0.1	0	43.29	53.97	-10.68	74	-30.71	100	Vert
5	3829.985	41.73	PK	33.2	-26.5	0.2	0	48.63	53.97	-5.34	74	-25.37	201	Vert
6	6617.091	34.87	PK	35.6	-23.4	0.2	0	47.27	53.97	-6.7	74	-26.73	201	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz														
7	8041.779	34.58	PK	35.7	-22.4	0.3	0	48.18	53.97	-5.79	74	-25.82	201	Horz
8	9694.553	34.1	PK	36.8	-21.7	0.2	0	49.4	53.97	-4.57	74	-24.6	201	Horz
Vertical 7600 - 18000MHz														
9	8052.174	33.89	PK	35.7	-22.4	0.4	0	47.59	53.97	-6.38	74	-26.41	99	Vert
10	9762.119	32.83	PK	36.9	-21.6	0.4	0	48.53	53.97	-5.44	74	-25.47	99	Vert

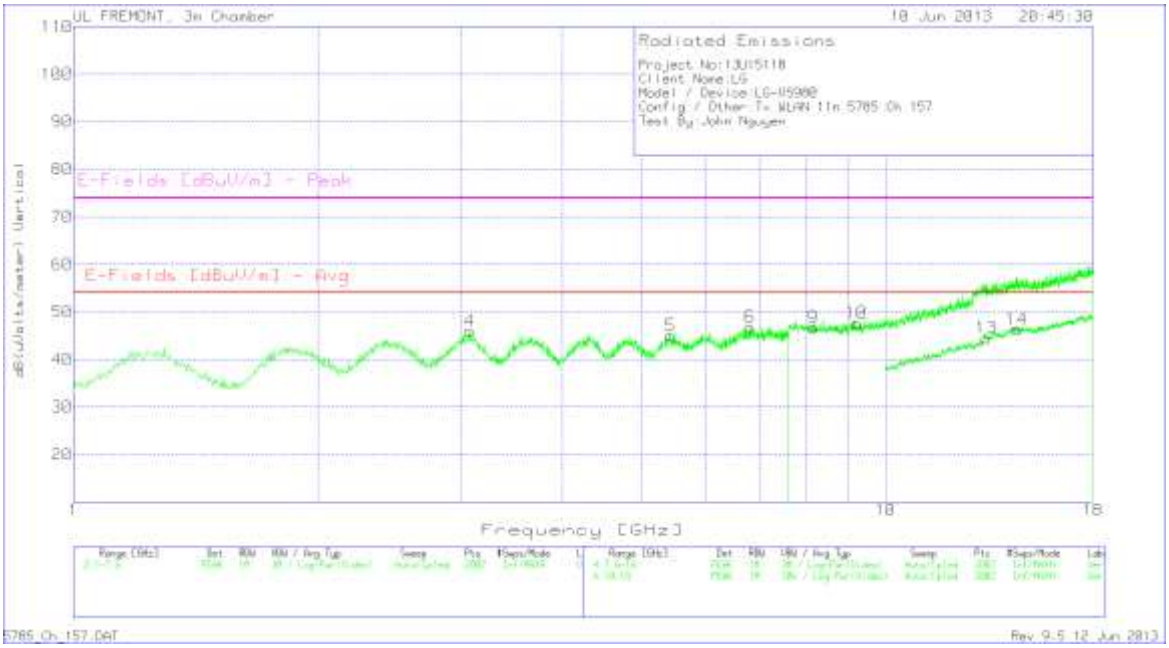
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - Avg	Margin (dB)	E-Fields [dBuV/m] - Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz														
11	13266.367	22.37	PK	39.1	-16.7	0.5	0	45.27	53.97	-8.7	74	-28.73	99	Horz
12	14637.681	22.7	PK	39.7	-16.1	0.5	0	46.8	53.97	-7.17	74	-27.2	99	Horz
Vertical 10000 - 18000MHz														
13	13358.321	22.13	PK	39.2	-16.7	0.2	0	44.83	53.97	-9.14	74	-29.17	99	Vert
14	14657.671	22.55	PK	39.7	-16.1	0.1	0	46.25	53.97	-7.72	74	-27.75	99	Vert

PK - Peak detector
QP - Quasi-Peak detector

HORIZONTAL PLOT MID CHANNEL



VERTICAL PLOT MID CHANNEL



HORIZONTAL AND VERTICAL DATA MID CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:LG-VS980
Config / Other:Tx WLAN 11n 5785 Ch 157
Test By:John Nguyen

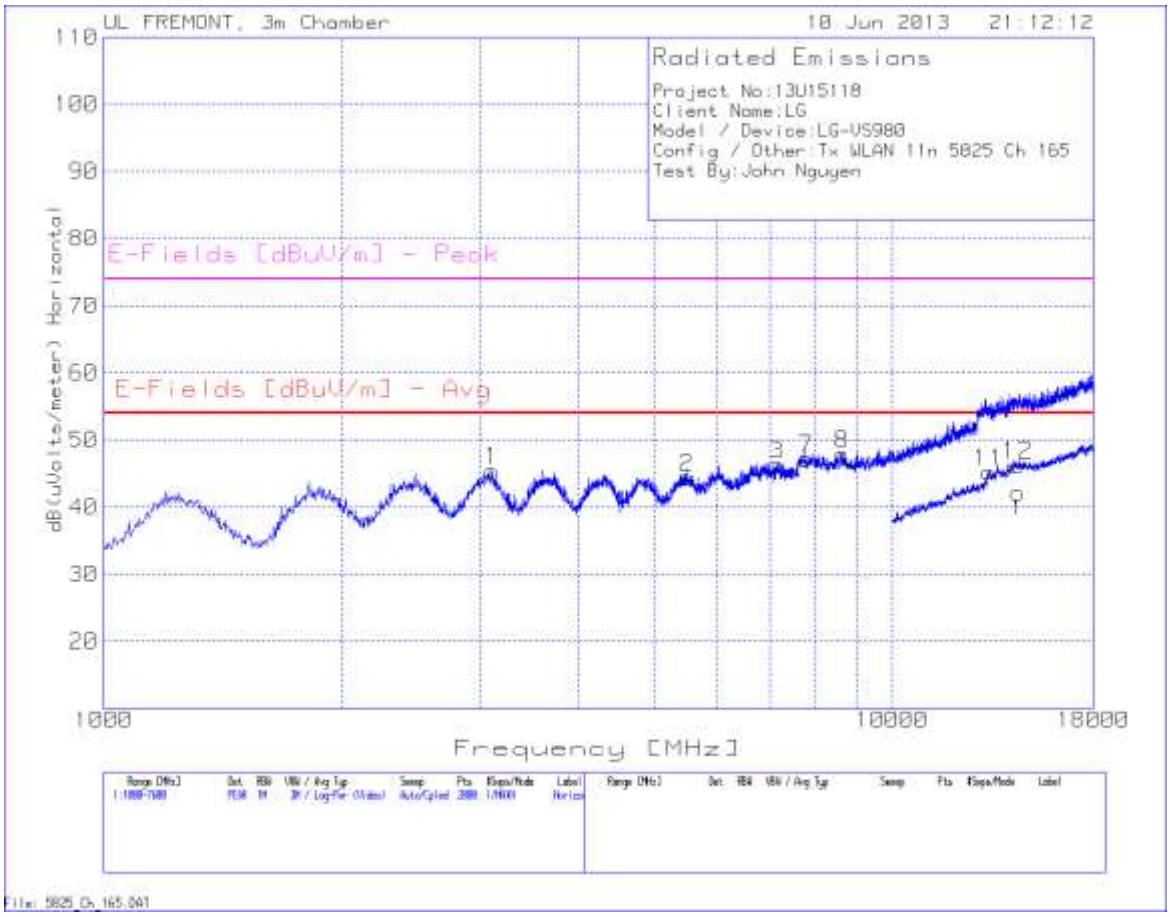
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T163 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz														
1	3071.364	40.11	PK	33	-28.4	0.2	0	44.91	53.97	-9.06	74	-29.09	201	Horz
2	5426.387	33.88	PK	34.7	-24.5	0.3	0	44.38	53.97	-9.59	74	-29.62	100	Horz
3	6834.783	34.34	PK	35.6	-23.3	0.2	0	46.84	53.97	-7.13	74	-27.16	100	Horz
Vertical 1000 - 7600MHz														
4	3077.961	41.14	PK	33	-28.3	0.1	0	45.94	53.97	-8.03	74	-28.06	201	Vert
5	5432.984	34.47	PK	34.7	-24.5	0.3	0	44.97	53.97	-9	74	-29.03	100	Vert
6	6808.396	34.27	PK	35.6	-23.3	0.2	0	46.77	53.97	-7.2	74	-27.23	201	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz														
7	7849.475	35.83	PK	35.8	-22.7	0.3	0	49.23	53.97	-4.74	74	-24.77	99	Horz
8	9143.628	32.04	PK	36.2	-22	0.3	0	46.54	53.97	-7.43	74	-27.46	99	Horz
Vertical 7600 - 18000MHz														
9	8140.53	32.84	PK	35.7	-22.3	0.4	0	46.64	53.97	-7.33	74	-27.36	201	Vert
10	9211.194	32.97	PK	36.3	-21.9	0.2	0	47.57	53.97	-6.4	74	-26.43	99	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz														
11	13338.331	22.06	PK	39.2	-16.7	0	0	44.56	53.97	-9.41	74	-29.44	100	Horz
12	14465.767	22.97	PK	39.6	-15.9	0.4	0	47.07	53.97	-6.9	74	-26.93	201	Horz
Vertical 10000 - 18000MHz														
13	13314.343	21.99	PK	39.2	-16.7	0	0	44.49	53.97	-9.48	74	-29.51	99	Vert
14	14505.747	22.4	PK	39.6	-16	0.3	0	46.3	53.97	-7.67	74	-27.7	201	Vert

PK - Peak detector
QP - Quasi-Peak detector

HORIZONTAL PLOT HIGH CHANNEL



VERTICAL PLOT HIGH CHANNEL

HORIZONTAL AND VERTICAL DATA HIGH CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:LG-VS980
Config / Other:Tx WLAN 11n 5825 Ch 165
Test By:John Nguyen

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T163 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz														
1	3107.646	40.41	PK	33.1	-28.3	0.2	0	45.41	53.97	-8.56	74	-28.59	201	Horz
2	5485.757	33.61	PK	34.8	-24.5	0.5	0	44.41	53.97	-9.56	74	-29.59	201	Horz
3	7141.529	33.7	PK	35.6	-23.1	0.1	0	46.3	53.97	-7.67	74	-27.7	201	Horz
Vertical 1000 - 7600MHz														
4	3091.154	40.43	PK	33.1	-28.3	0.1	0	45.33	53.97	-8.64	74	-28.67	201	Vert
5	5367.016	35.41	PK	34.6	-24.5	0.3	0	45.81	53.97	-8.16	74	-28.19	99	Vert
6	7217.391	32.82	PK	35.6	-23.1	0.1	0	45.42	53.97	-8.55	74	-28.58	201	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz														
7	7771.514	33.66	PK	35.8	-22.7	0.4	0	47.16	53.97	-6.81	74	-26.84	201	Horz
8	8644.678	33.96	PK	35.8	-22.1	0.2	0	47.86	53.97	-6.11	74	-26.14	201	Horz
Vertical 7600 - 18000MHz														
9	7709.145	35.03	PK	35.8	-22.7	0.4	0	48.53	53.97	-5.44	74	-25.47	99	Vert
10	8597.901	33.07	PK	35.8	-22.1	0.2	0	46.97	53.97	-7	74	-27.03	99	Vert

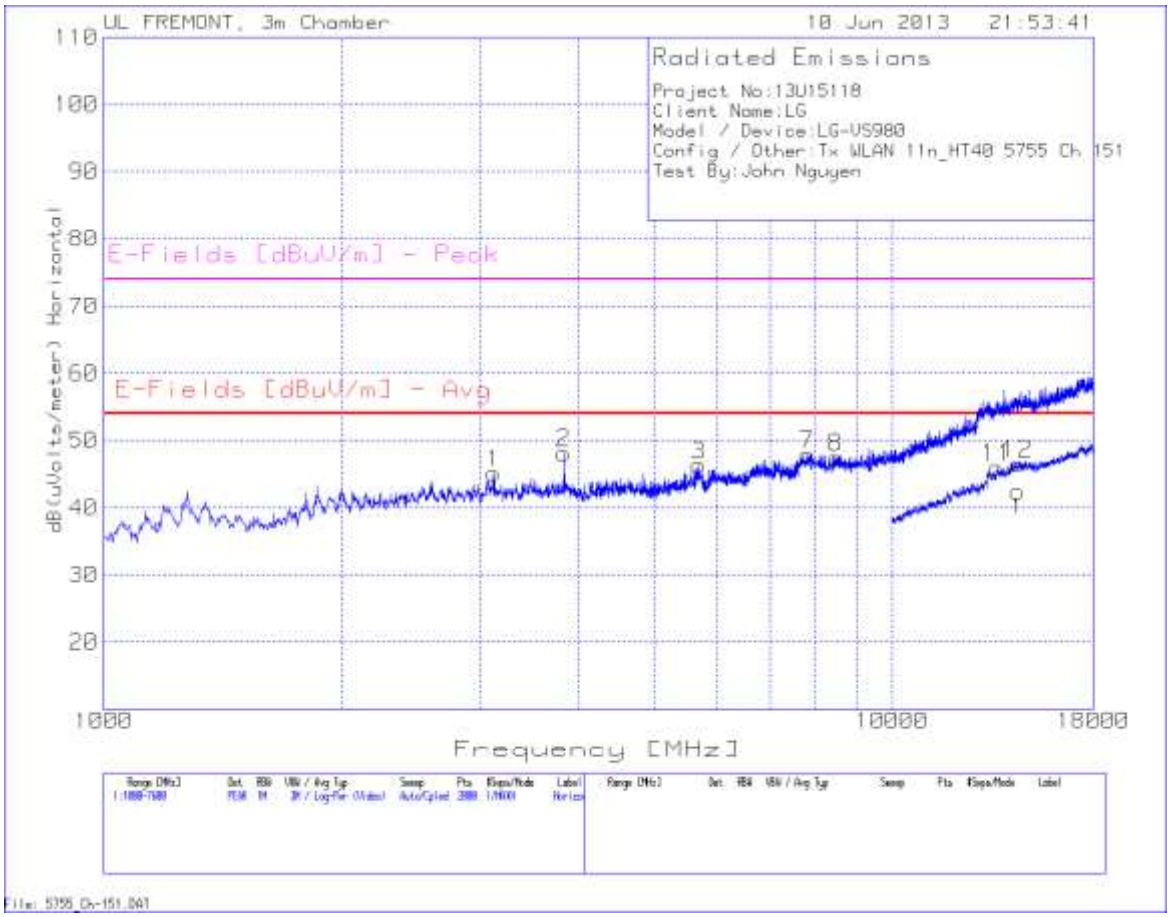
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz														
11	13254.373	22.62	PK	39.1	-16.7	0.2	0	45.22	53.97	-8.75	74	-28.78	201	Horz
12	14433.783	22.4	PK	39.5	-15.9	0.2	0	46.2	53.97	-7.77	74	-27.8	99	Horz
Vertical 10000 - 18000MHz														
13	13278.361	22.38	PK	39.1	-16.7	0.7	0	45.48	53.97	-8.49	74	-28.52	100	Vert
14	14365.817	22.61	PK	39.4	-15.8	0.2	0	46.41	53.97	-7.56	74	-27.59	201	Vert

PK - Peak detector
QP - Quasi-Peak detector

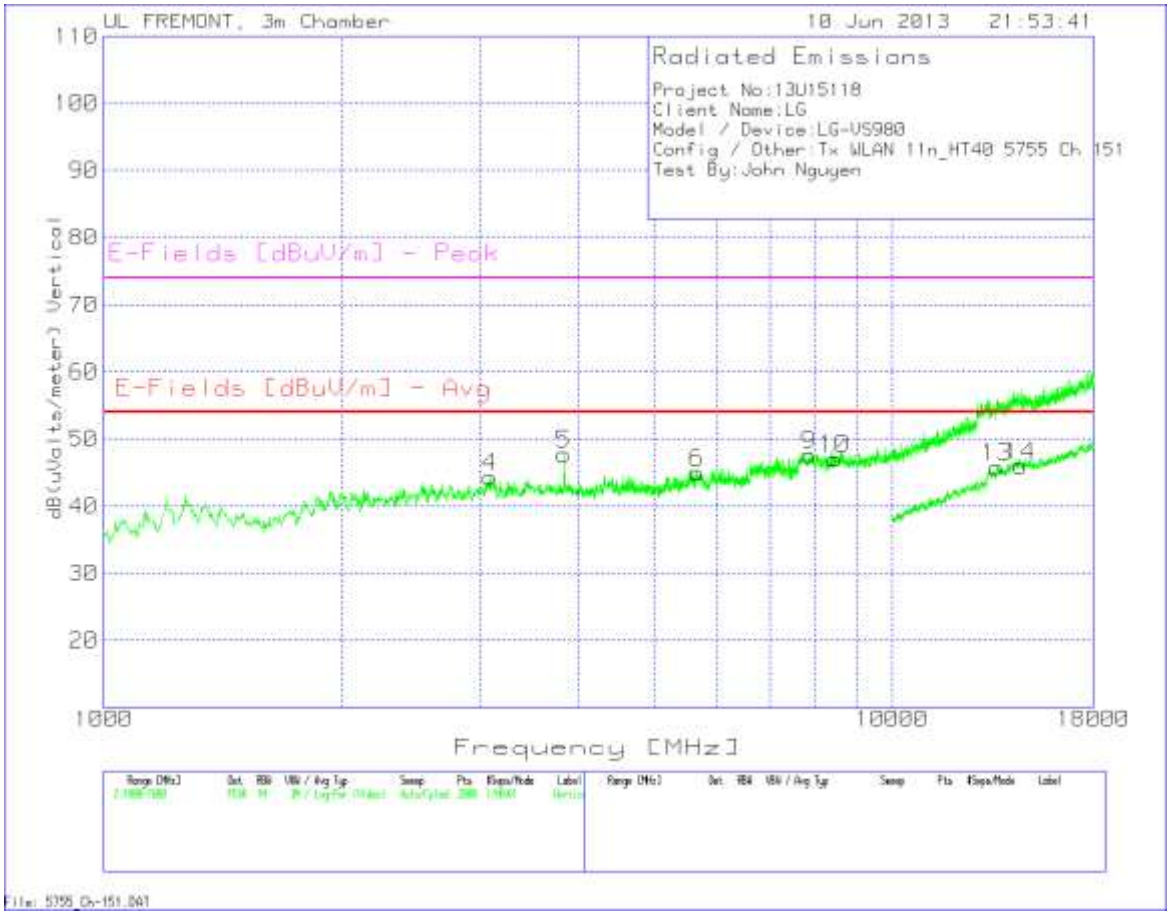
10.1. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL PLOT LOW CHANNEL



VERTICAL PLOT LOW CHANNEL



HORIZONTAL AND VERTICAL DATA LOW CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:LG-VS980
Config / Other:Tx WLAN 11n_HT40 5755 Ch 151
Test By:John Nguyen

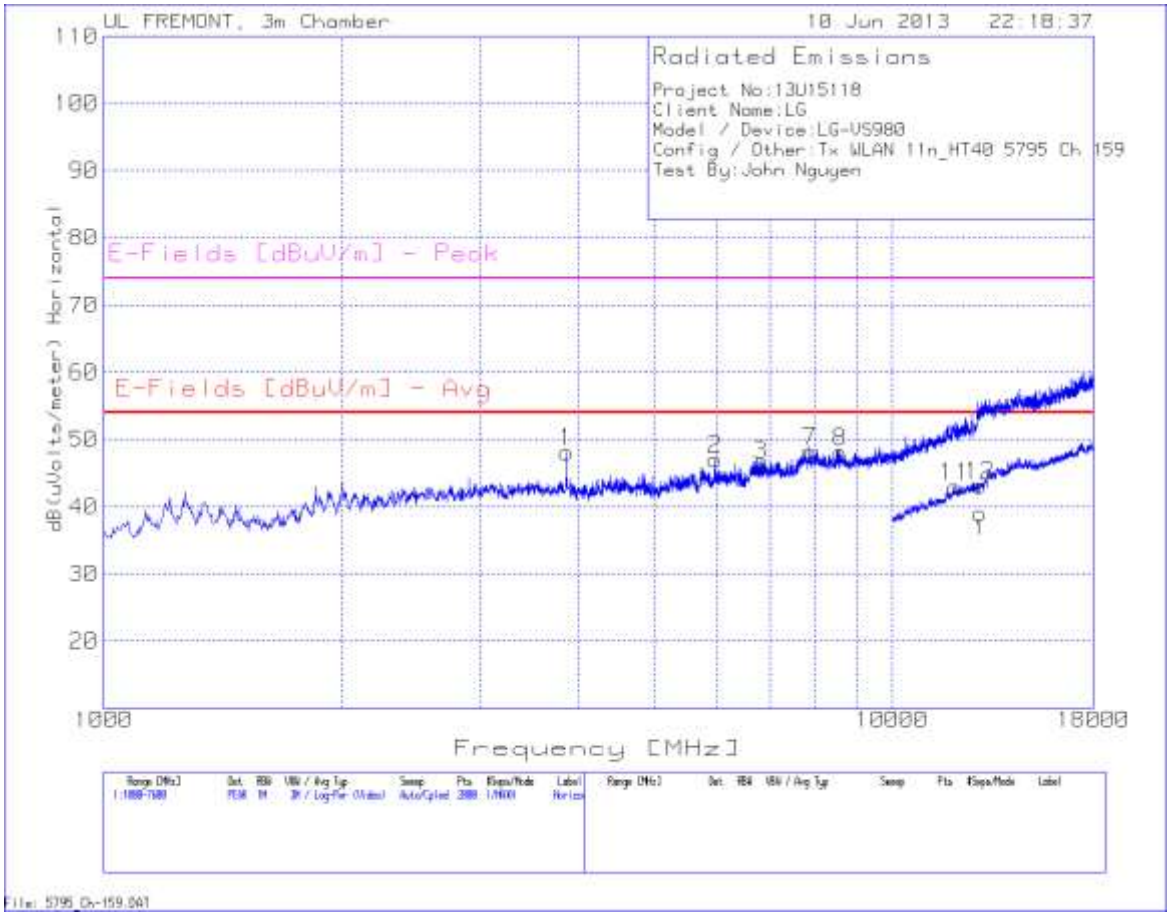
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T163 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz														
1	3124.138	40.09	PK	33	-28.2	0.2	0	45.09	53.97	-8.88	74	-28.91	201	Horz
2	3836.582	41.28	PK	33.2	-26.5	0.2	0	48.18	53.97	-5.79	74	-25.82	201	Horz
3	5680.36	34.9	PK	34.8	-24.3	0.9	0	46.3	53.97	-7.67	74	-27.7	99	Horz
Vertical 1000 - 7600MHz														
4	3087.856	39.41	PK	33.1	-28.3	0.1	0	44.31	53.97	-9.66	74	-29.69	201	Vert
5	3836.582	40.87	PK	33.2	-26.5	0.2	0	47.77	53.97	-6.2	74	-26.23	100	Vert
6	5650.675	33.83	PK	34.7	-24.4	0.9	0	45.03	53.97	-8.94	74	-28.97	201	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz														
7	7802.699	34.49	PK	35.8	-22.7	0.3	0	47.89	53.97	-6.08	74	-26.11	100	Horz
8	8462.769	33.43	PK	35.8	-22.1	0.3	0	47.43	53.97	-6.54	74	-26.57	201	Horz
Vertical 7600 - 18000MHz														
9	7844.278	34.17	PK	35.8	-22.7	0.3	0	47.57	53.97	-6.4	74	-26.43	99	Vert
10	8441.979	33.2	PK	35.8	-22.1	0.2	0	47.1	53.97	-6.87	74	-26.9	99	Vert

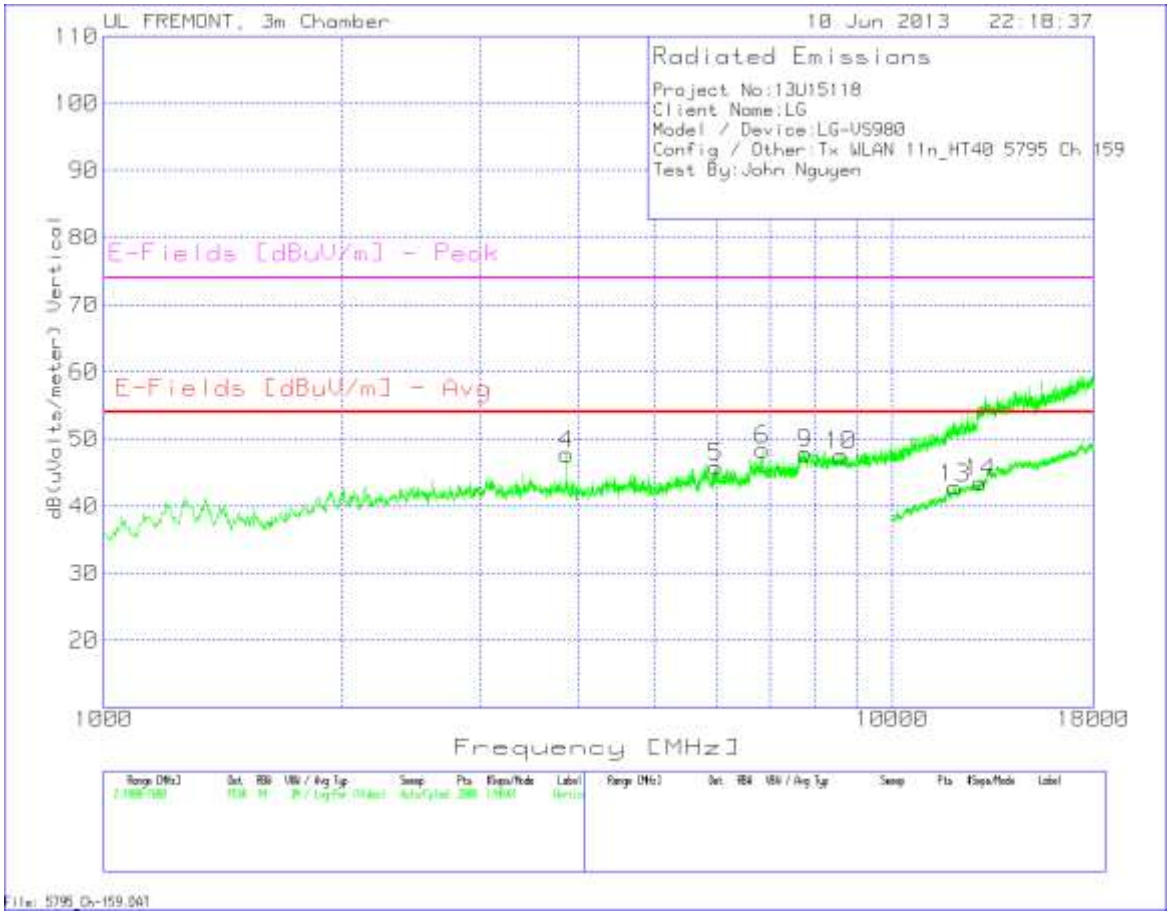
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz														
11	13566.217	22.6	PK	38.9	-16.2	0.7	0	46	53.97	-7.97	74	-28	99	Horz
12	14429.785	22.81	PK	39.5	-15.9	0.1	0	46.51	53.97	-7.46	74	-27.49	201	Horz
Vertical 10000 - 18000MHz														
13	13578.211	22.41	PK	38.9	-16.2	0.7	0	45.81	53.97	-8.16	74	-28.19	99	Vert
14	14557.721	22.23	PK	39.7	-16	0	0	45.93	53.97	-8.04	74	-28.07	99	Vert

PK - Peak detector
QP - Quasi-Peak detector

HORIZONTAL PLOT HIGH CHANNEL



VERTICAL PLOT HIGH CHANNEL



HORIZONTAL AND VERTICAL DATA HIGH CHANNEL

Project No:13U15118
Client Name:LG
Model / Device:LG-VS980
Config / Other:Tx WLAN 11n_HT40 5795 Ch 159
Test By:John Nguyen

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T163 BRF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 1000 - 7600MHz														
1	3862.969	41.33	PK	33.2	-26.5	0.1	0	48.13	53.97	-5.84	74	-25.87	201	Horz
2	5957.421	35.18	PK	35.2	-24.2	0.9	0	47.08	53.97	-6.89	74	-26.92	201	Horz
3	6818.291	33.74	PK	35.6	-23.3	0.2	0	46.24	53.97	-7.73	74	-27.76	100	Horz
Vertical 1000 - 7600MHz														
4	3862.969	40.97	PK	33.2	-26.5	0.1	0	47.77	53.97	-6.2	74	-26.23	201	Vert
5	5983.808	33.84	PK	35.3	-24.2	0.9	0	45.84	53.97	-8.13	74	-28.16	201	Vert
6	6841.379	35.86	PK	35.6	-23.3	0.2	0	48.36	53.97	-5.61	74	-25.64	201	Vert

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 7600 - 18000MHz														
7	7865.067	34.67	PK	35.8	-22.6	0.4	0	48.27	53.97	-5.7	74	-25.73	99	Horz
8	8597.901	34.28	PK	35.8	-22.1	0.2	0	48.18	53.97	-5.79	74	-25.82	201	Horz
Vertical 7600 - 18000MHz														
9	7750.725	34.5	PK	35.8	-22.7	0.3	0	47.9	53.97	-6.07	74	-26.1	99	Vert
10	8618.691	33.62	PK	35.8	-22.1	0.3	0	47.62	53.97	-6.35	74	-26.38	99	Vert

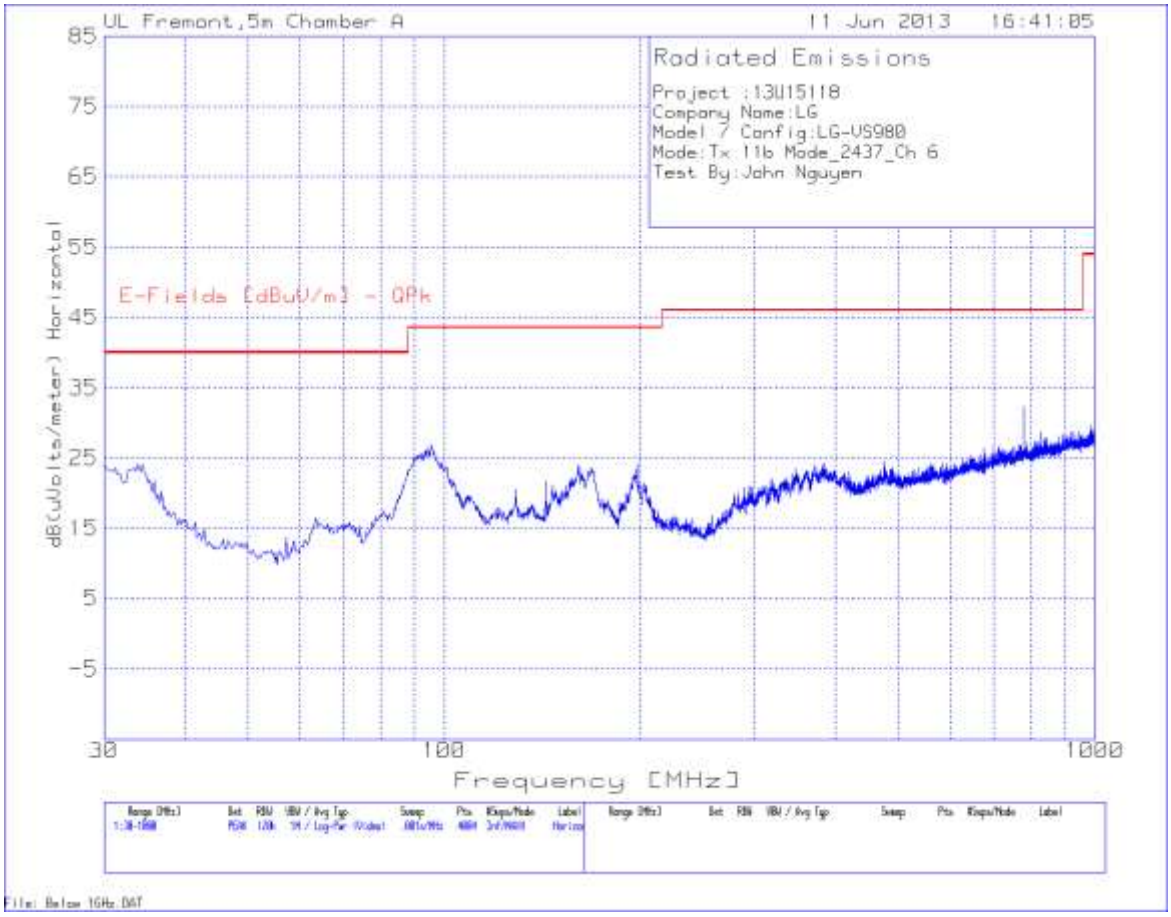
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 Ant Factor [dB/m]	T34 Preamp/ Cable Loss [dB]	T193 HPF [dB]	DC Corr [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] Avg	Margin (dB)	E-Fields [dBuV/m] Peak	Margin (dB)	Height [cm]	Polarity
Horizontal 10000 - 18000MHz														
11	12002.999	22.65	PK	39.1	-18.9	0.1	0	42.95	53.97	-11.02	74	-31.05	100	Horz
12	12922.539	21.07	PK	39.1	-17.3	0.2	0	43.07	53.97	-10.9	74	-30.93	100	Horz
Vertical 10000 - 18000MHz														
13	12022.989	22.37	PK	39.1	-18.9	0.2	0	42.77	53.97	-11.2	74	-31.23	99	Vert
14	12950.525	21.31	PK	39.1	-17.2	0.3	0	43.51	53.97	-10.46	74	-30.49	200	Vert

PK - Peak detector
QP - Quasi-Peak detector

10.2. WORST-CASE BELOW 1 GHz

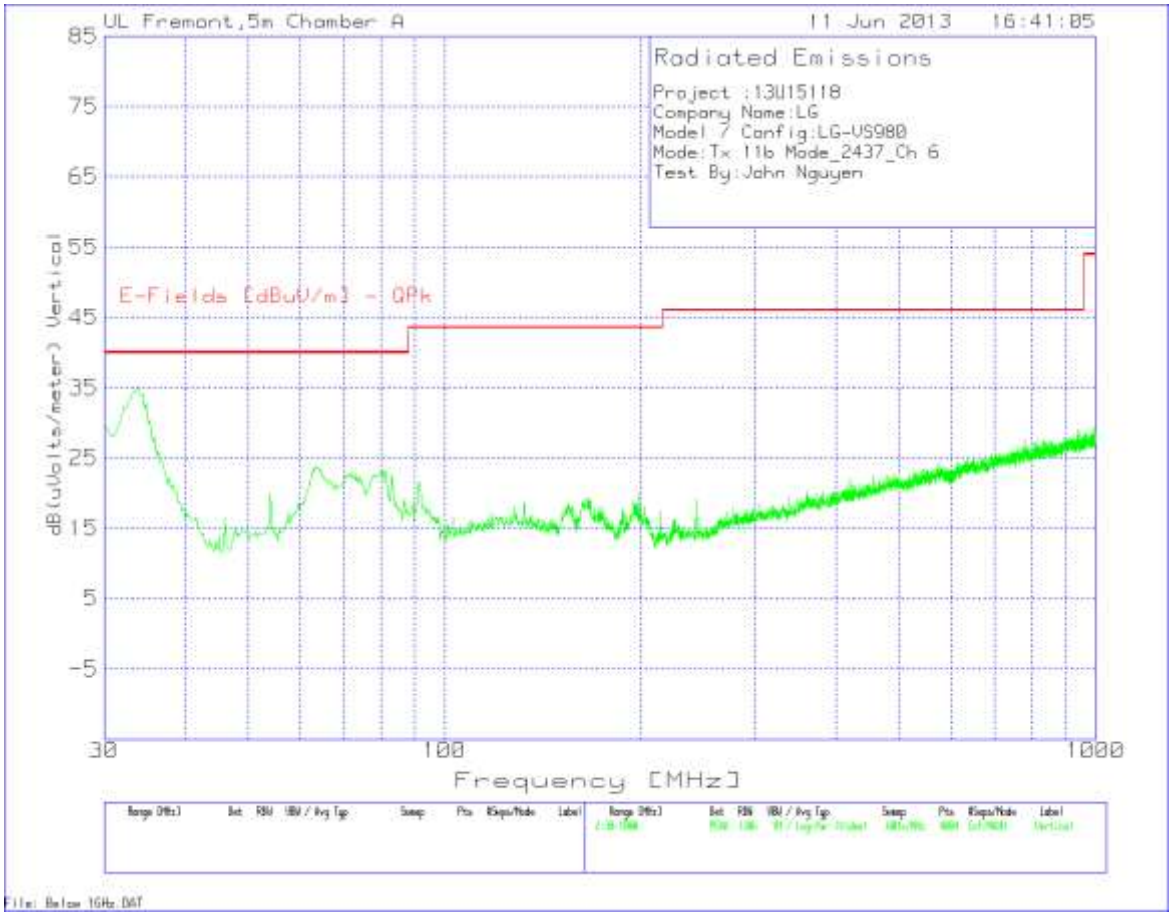
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

Project :13U15118
Company Name:LG
Model / Config:LG-VS980
Mode:Tx 11b Mode_2437_Ch 6
Test By:John Nguyen

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T185 Antenna Factor dB/m	T64 preamp/ cable loss [dB]	dB(uVolts /meter)	E-Fields [dBuV/m] - QPk	Margin (dB)	Height [cm]	Polarity
Horizontal 30 - 1000MHz										
1	95.4259	45.04	PK	8.9	-27	26.94	43.52	-16.58	200	Horz
2	198.1689	38.31	PK	12	-26.2	24.11	43.52	-19.41	200	Horz
3	778.0365	33.99	PK	21.1	-22.8	32.29	46.02	-13.73	100	Horz
Vertical 30 - 1000MHz										
4	33.8771	44.19	PK	18.3	-27.6	34.89	40	-5.11	200	Vert
5	63.1976	43.82	PK	7.4	-27.3	23.92	40	-16.08	200	Vert
6	780.4597	28.07	PK	21.2	-22.6	26.67	46.02	-19.35	200	Vert

PK - Peak detector
QP - Quasi-Peak detector

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	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.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

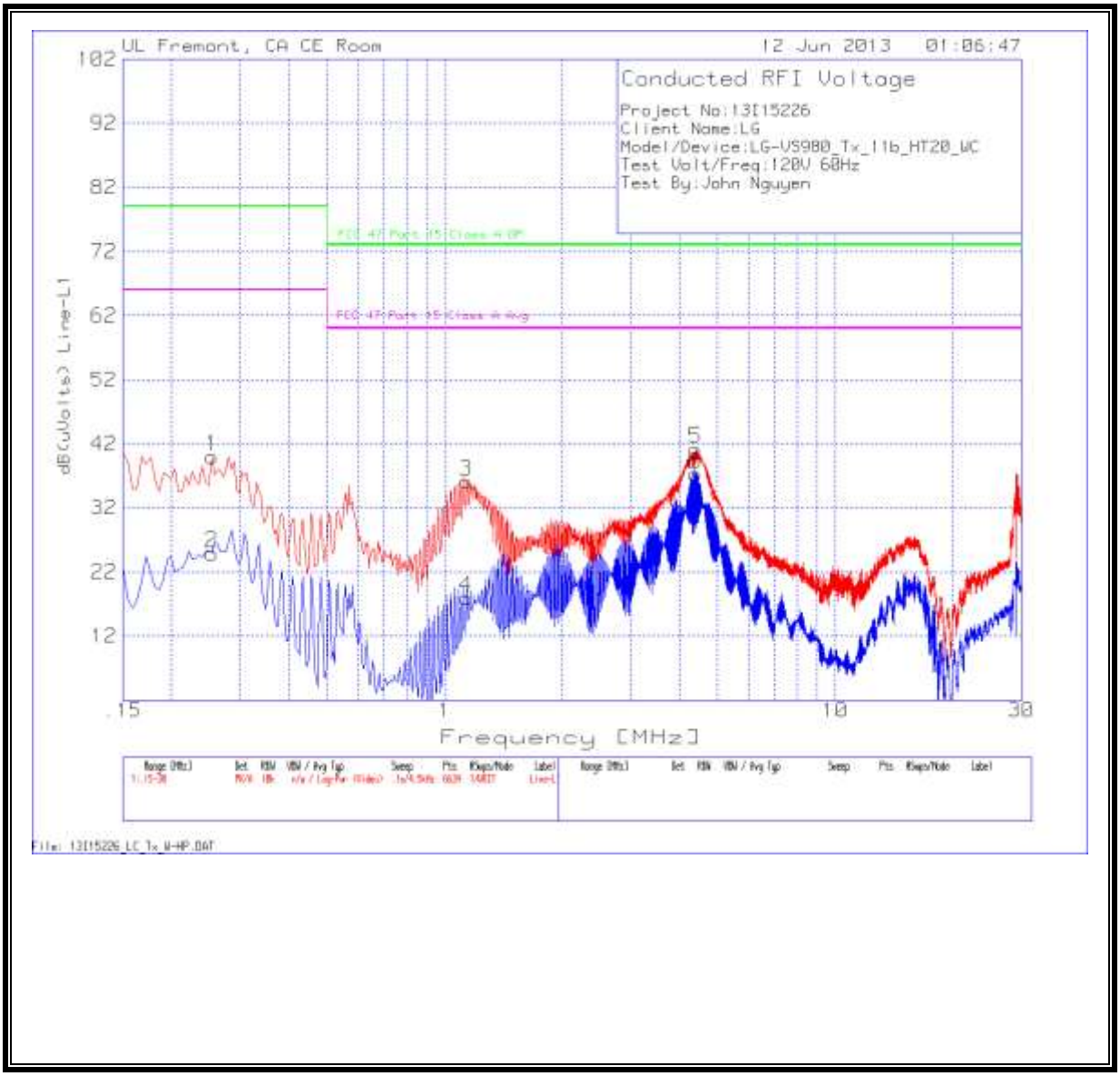
6 WORST EMISSIONS

Project No:13I15226
Client Name:LG
Model/Device:LG-VS980_Tx_11b_HT20_W/HP
Test Volt/Freq:120V 60Hz
Test By:John Nguyen

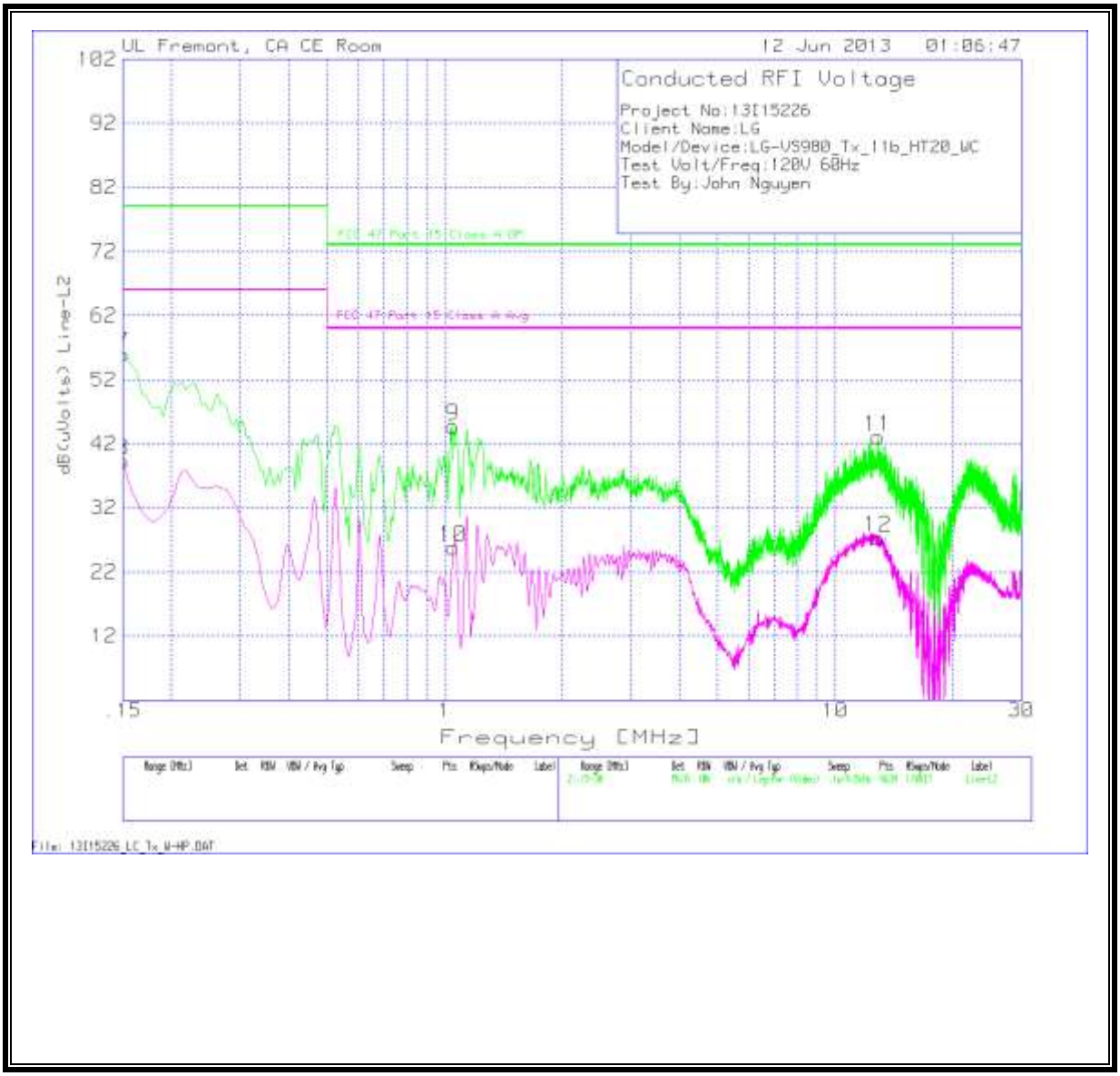
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T24 IL L1.TXT	LC Cables 1&3.TXT	dB(uVolts)	FCC 47 Part 15 Class A QP	Margin	FCC 47 Part 15 Class A Avg	Margin
Line-L1 .15 - 30MHz										
1	0.2535	39.86	PK	0.1	0	39.96	79	-39.04	66	-26.04
2	0.2535	24.79	Av	0.1	0	24.89	79	-54.11	66	-41.11
3	1.1355	36.08	PK	0.1	0	36.18	73	-36.82	60	-23.82
4	1.1355	17.82	Av	0.1	0	17.92	73	-55.08	60	-42.08
5	4.3935	40.98	PK	0.1	0.1	41.18	73	-31.82	60	-18.82
6	4.3935	37.13	Av	0.1	0.1	37.33	73	-35.67	60	-22.67
Line-L2 .15 - 30MHz										
7	0.15	55.83	PK	0.1	0	55.93	79	-23.07	66	-10.07
8	0.15	39.3	Av	0.1	0	39.4	79	-39.6	66	-26.6
9	1.05	44.65	PK	0.1	0	44.75	73	-28.25	60	-15.25
10	1.05	25.71	Av	0.1	0	25.81	73	-47.19	60	-34.19
11	12.8805	42.67	PK	0.2	0.2	43.07	73	-29.93	60	-16.93
12	12.8805	26.99	Av	0.2	0.2	27.39	73	-45.61	60	-32.61

PK - Peak detector
QP - Quasi-Peak detector

LINE 1 RESULTS



LINE 2 RESULTS



12. DYNAMIC FREQUENCY SELECTION

12.1. OVERVIEW

12.1.1. LIMITS

INDUSTRY CANADA

IC RSS-210 is closely harmonized with FCC Part 15 DFS rules. The deviations are as follows:

RSS-210 Issue 7 A9.4 (b) (ii) **Channel Availability Check Time:** …

Additional requirements for the band 5600-5650 MHz: Until further notice, devices subject to this Section shall not be capable of transmitting in the band 5600-5650 MHz, so that Environment Canada weather radars operating in this band are protected.

RSS-210 Issue 7 A9.4 (b) (iv) **Channel closing time:** the maximum channel closing time is 260 ms.

FCC

§15.407 (h) and FCC 06-96 APPENDIX “COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVCIES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION”.

Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Master	Client (without radar detection)	Client (with radar detection)
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
Uniform Spreading	Yes	Not required	Not required

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	Client **(without DFS)**	Client **(with DFS)**
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds
Channel Closing Transmission Time	200 milliseconds + approx. 60 milliseconds over remaining 10 second period
The instant that the *Channel Move Time* and the *Channel Closing Transmission Time* begins is as follows: For the Short pulse radar Test Signals this instant is the end of the *Burst*. For the Frequency Hopping radar Test Signal, this instant is the end of the last radar burst generated. For the Long Pulse radar Test Signal this instant is the end of the 12 second period defining the radar transmission. The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate channel changes (an aggregate of approximately 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.	

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (Microseconds)	PRI (Microseconds)	Pulses	Minimum Percentage of Successful Detection	Minimum Trials
1	1	1428	18	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

Table 6 – Long Pulse Radar Test Signal

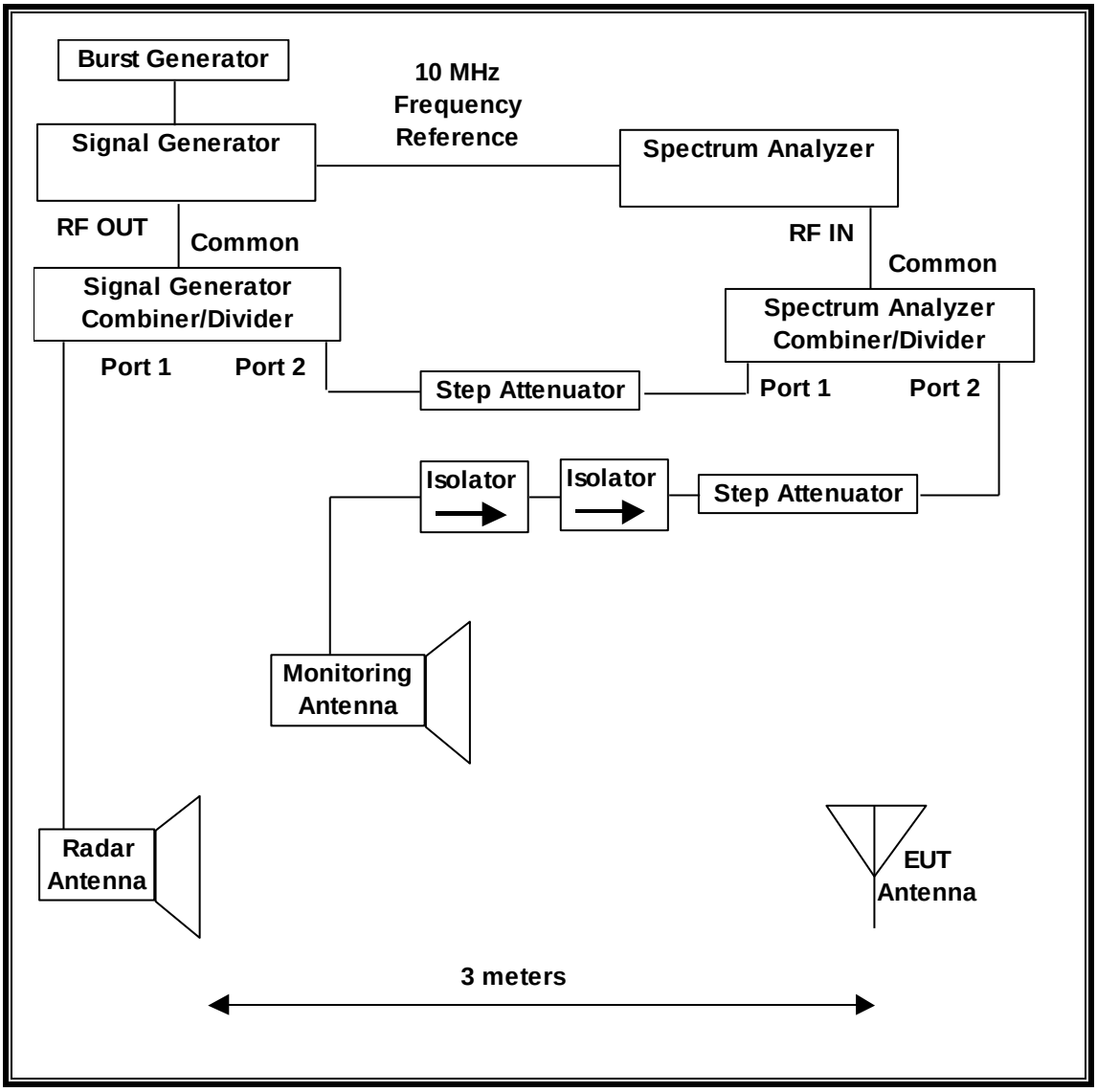
Radar Waveform	Bursts	Pulses per Burst	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Minimum Percentage of Successful Detection	Minimum Trials
5	8-20	1-3	50-100	5-20	1000-2000	80%	30

Table 7 – Frequency Hopping Radar Test Signal

Radar Waveform	Pulse Width (µsec)	PRI (µsec)	Burst Length (ms)	Pulses per Hop	Hopping Rate (kHz)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	300	9	.333	70%	30

12.1.2. TEST AND MEASUREMENT SYSTEM

RADIATED METHOD SYSTEM BLOCK DIAGRAM



SYSTEM OVERVIEW

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Freqeuncy Hopping Radar Waveform Generating Subsystem of FCC 06-96 APPENDIX. The frequency of the signal generator is incremented in 1 MHz steps from F_L to F_H for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold.

SYSTEM CALIBRATION

A 50-ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to a horn antenna via a coaxial cable, with the reference level offset set to (horn antenna gain – coaxial cable loss). The signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of –64 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. The Reference Level Offset of the spectrum analyzer is adjusted so that the displayed amplitude of the signal is –64 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –64 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Slave and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Slave devices. The video test file is streamed to generate WLAN traffic. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

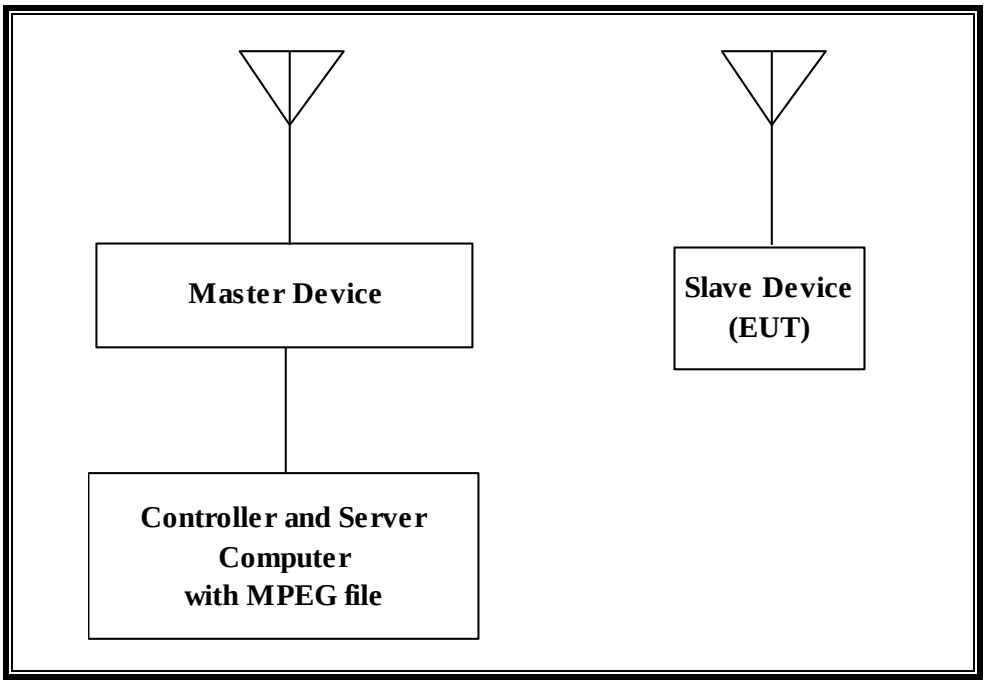
TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the DFS tests documented in this report:

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset Number**	**Cal Due**
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01178	08/18/13
Vector Signal Generator, 20GHz	Agilent / HP	E8267C	C01066	11/20/13

12.1.3. SETUP OF EUT

RADIATED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the DFS tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Wireless Access Point	Cisco	AIR-AP1252AG-A-K9	FTX120690N2	LDK102061
AC Adapter (AP)	Delta Electronics	EADP-45BB B	DTH112490BD	DoC
Notebook PC (Controller/Server)	Dell	PP18L	10657517725	DoC
AC Adapter (Controller/Server PC)	Dell	LA65SN0-00	CN-ODF263-71615-6AU-1019	DoC

12.1.4. DESCRIPTION OF EUT

The EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges.

The EUT is a Slave Device without Radar Detection.

The highest power level within these bands is (12.51 + Antenna Gain) dBm EIRP in the 5250-5350 MHz band and (12.16 + Antennna Gain) dBm EIRP in the 5470-5725 MHz band.

The only antenna assembly utilized with the EUT has a gain of -1.00 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides margin to the limit.

The EUT uses one transmitter/receiver chain connected to an antenna to perform radiated tests.

WLAN traffic is generated by streaming the video file TestFile.mp2 “6 ½ Magic Hours” from the Master to the Slave in full motion video mode using Mobo Player version 1.3.269_Universal media player..

TPC is not required since the maximum EIRP is less than 500 mW (27 dBm).

The EUT utilizes the 802.11a/n architecture. Three nominal channel bandwidths are implemented: 20 MHz, 40 MHz and 80 MHz.

The software installed in the access point is revision 12.4(25d)JA1

UNIFORM CHANNEL SPREADING

This requirement is not applicable to Slave radio devices.

OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS

The Master Device is a Cisco Access Point, FCC ID: LDK102061. The minimum antenna gain for the Master Device is 3.5 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides margin to the limit.

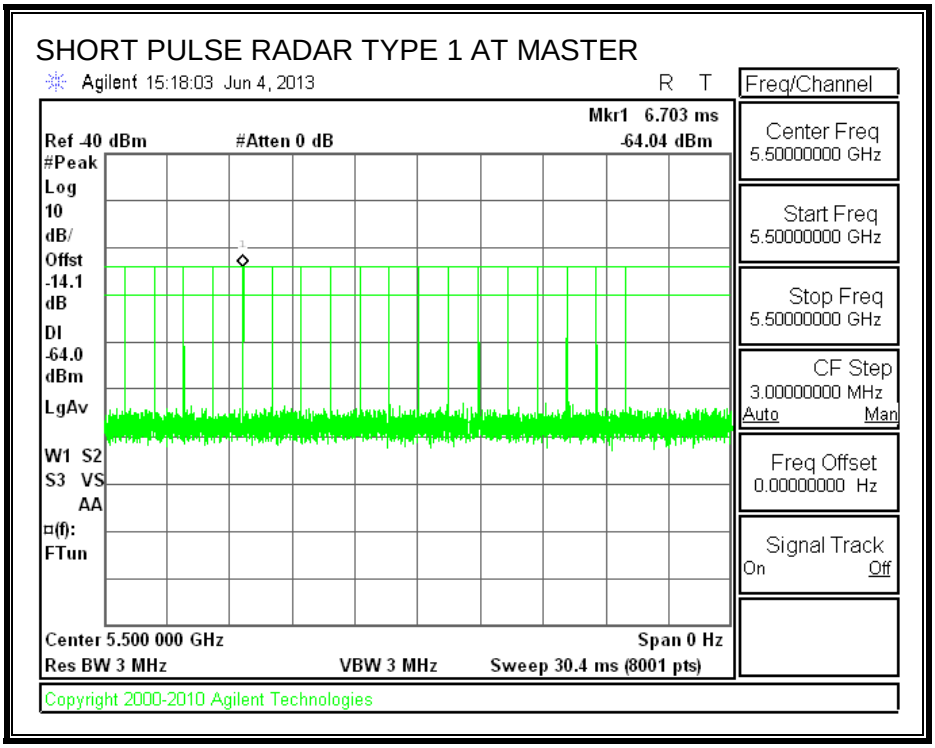
12.2. RESULTS FOR 20 MHz BANDWIDTH

12.2.1. TEST CHANNEL

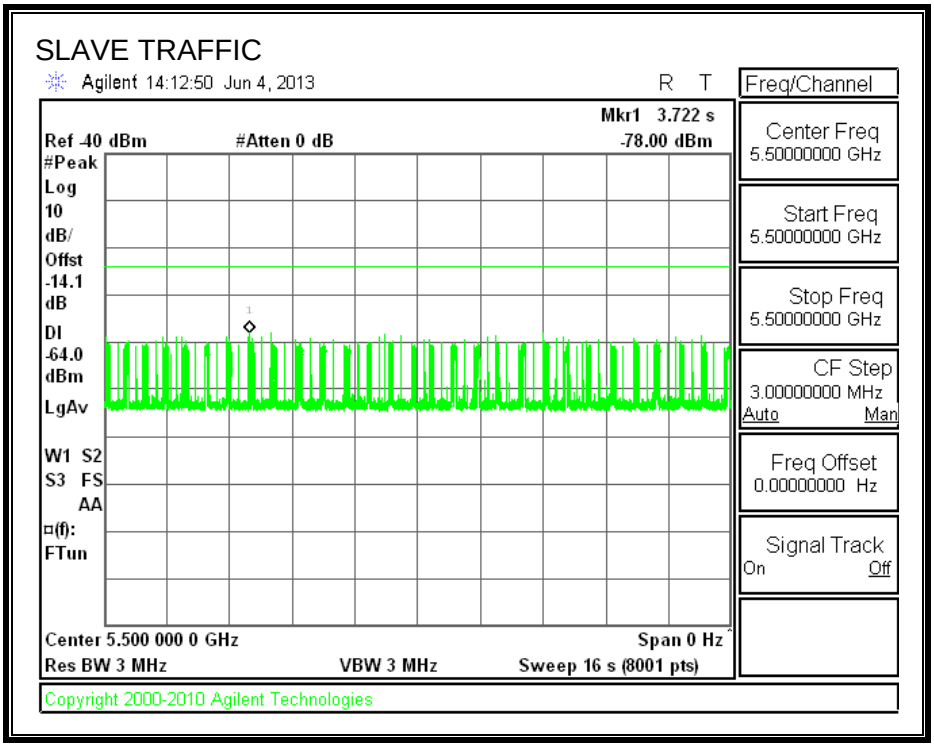
All tests were performed at a channel center frequency of 5500 MHz.

12.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



12.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

12.2.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the FCC aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

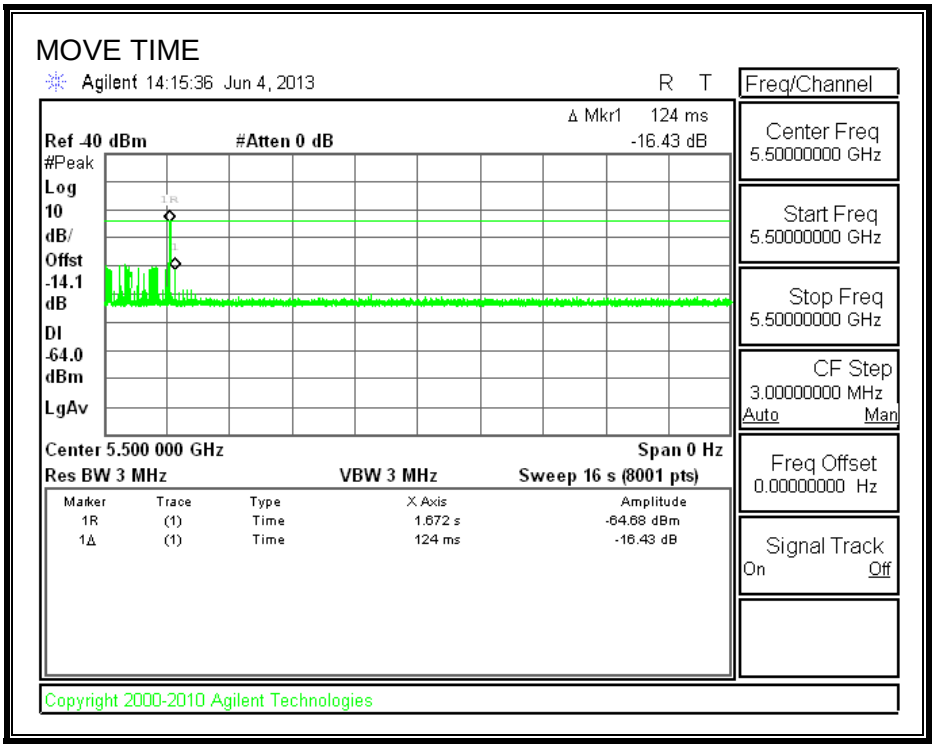
The observation period over which the IC aggregate time is calculated begins at (Reference Marker) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

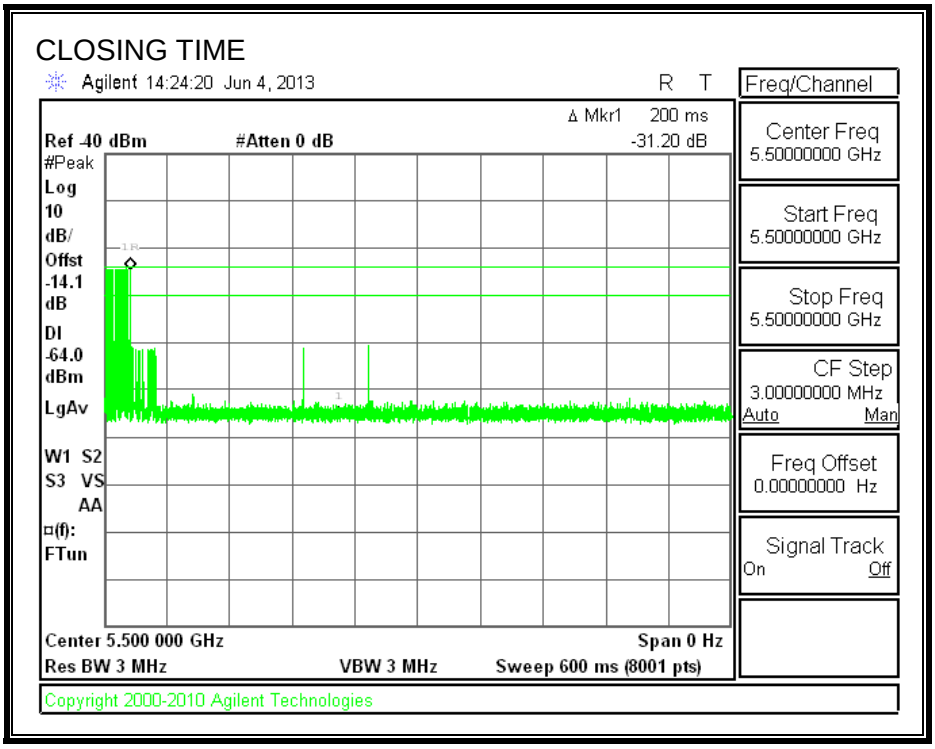
Agency	Channel Move Time (sec)	Limit (sec)
FCC / IC	0.124	10

Agency	Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
FCC	0.0	60
IC	2.0	260

MOVE TIME



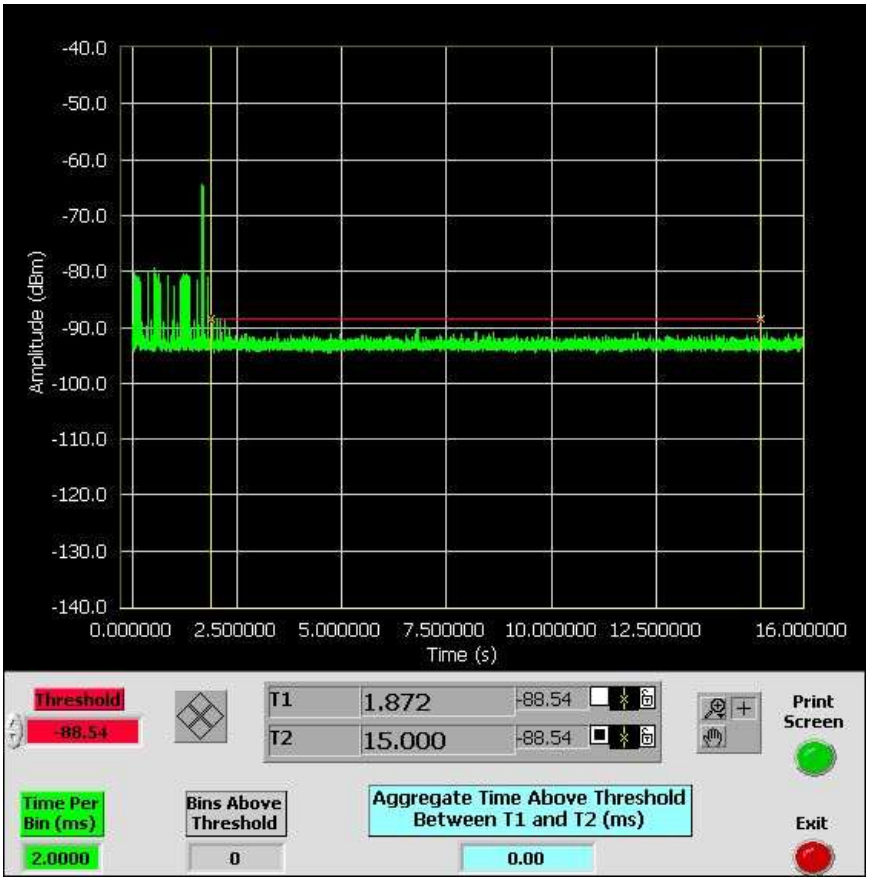
CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

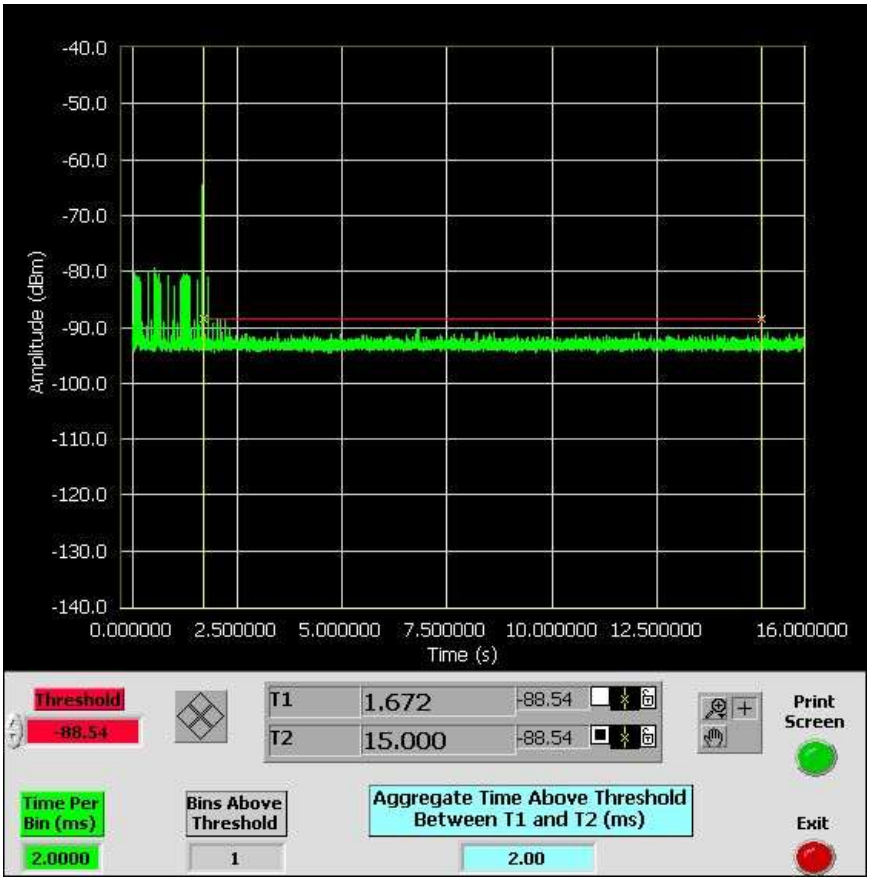
No transmissions are observed during the FCC aggregate monitoring period.

FCC AGGREGATE CLOSING TIME



Only intermittent transmissions are observed during the IC aggregate monitoring period.

IC AGGREGATE CLOSING TIME



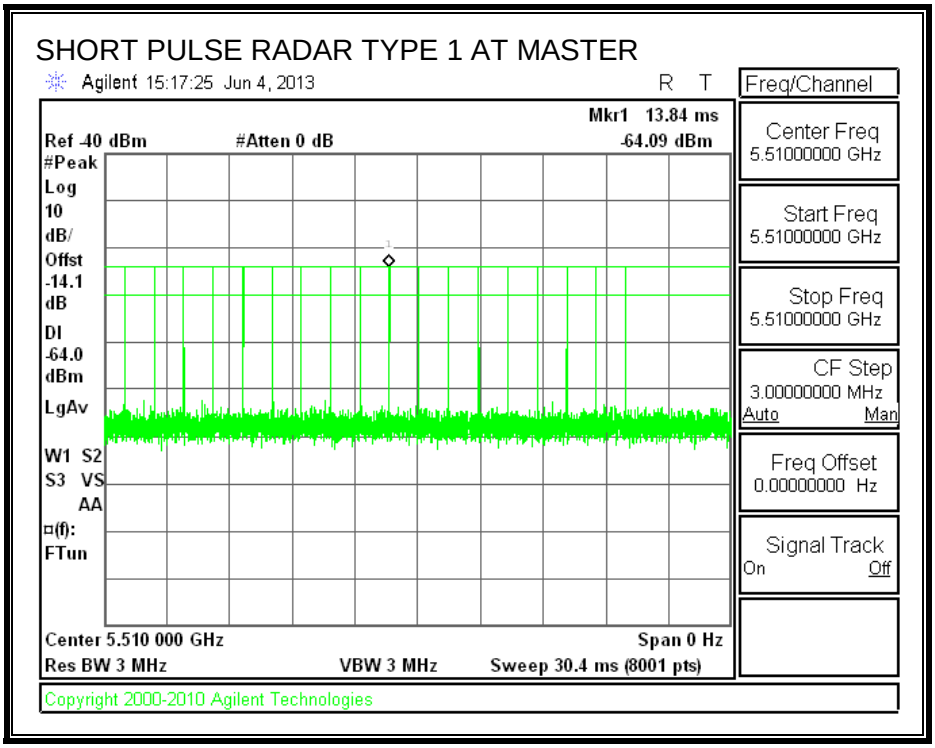
12.3. RESULTS FOR 40 MHz BANDWIDTH

12.3.1. TEST CHANNEL

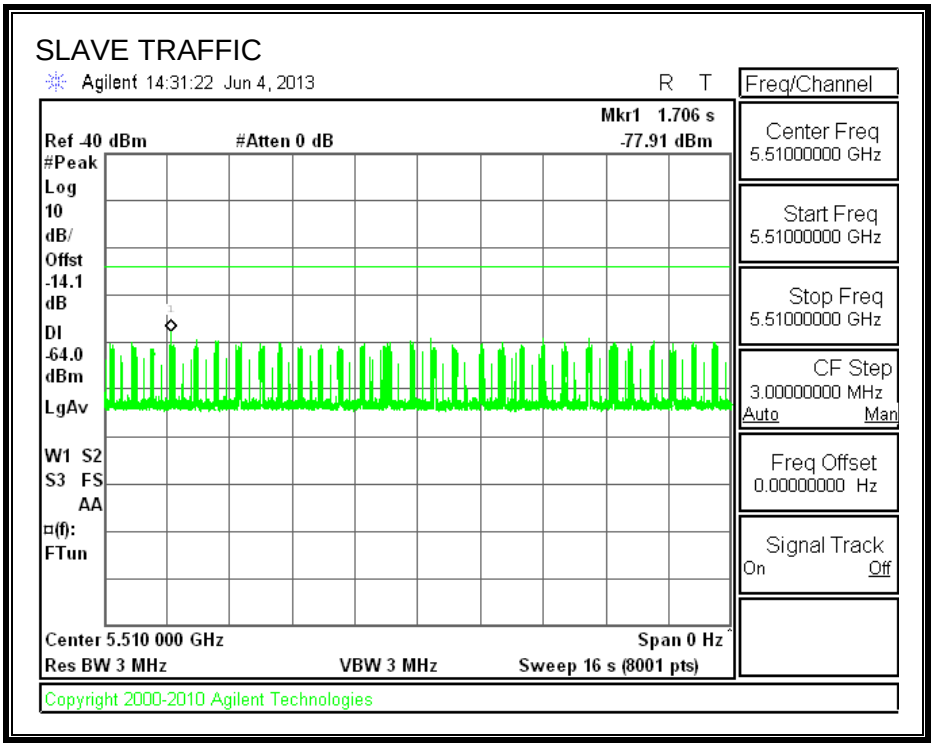
All tests were performed at a channel center frequency of 5510 MHz.

12.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



12.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

12.3.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the FCC aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

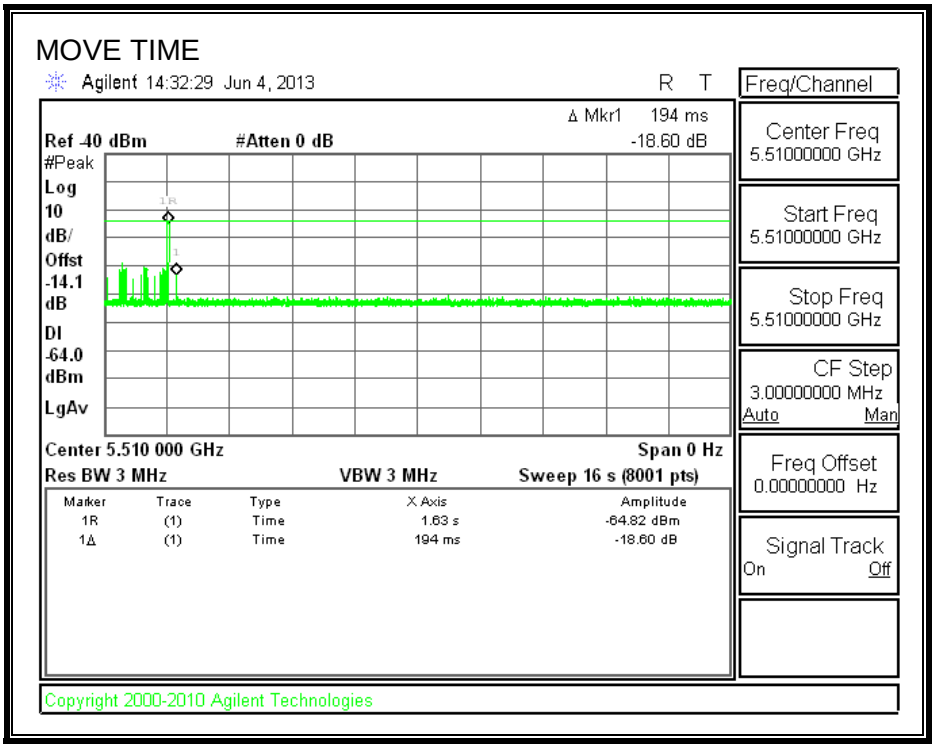
The observation period over which the IC aggregate time is calculated begins at (Reference Marker) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

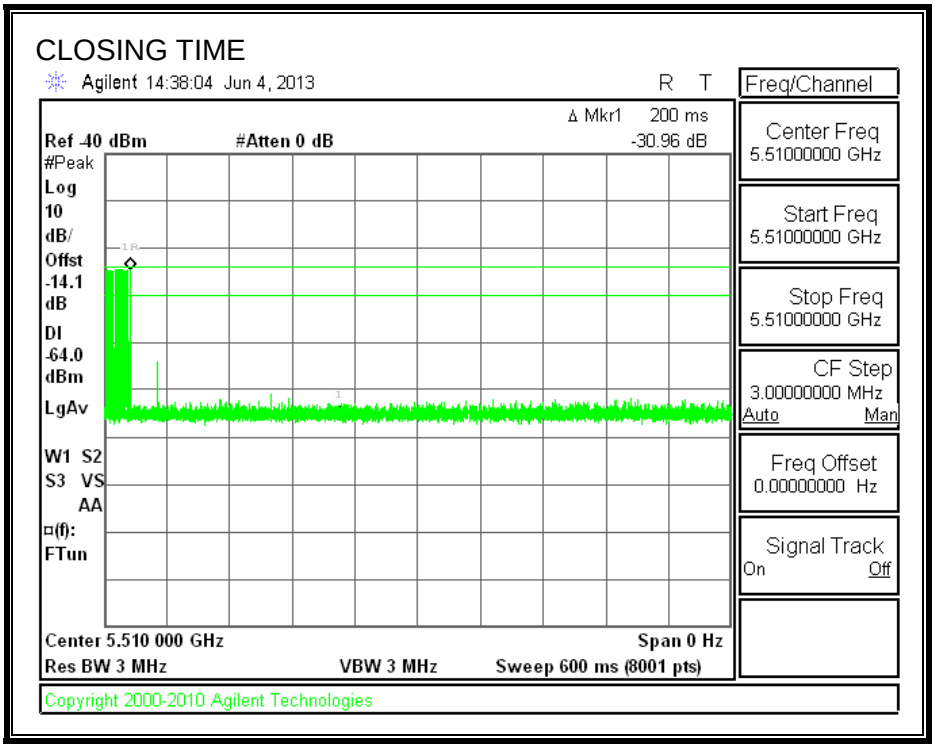
Agency	Channel Move Time (sec)	Limit (sec)
FCC / IC	0.194	10

Agency	Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
FCC	0.0	60
IC	2.0	260

MOVE TIME

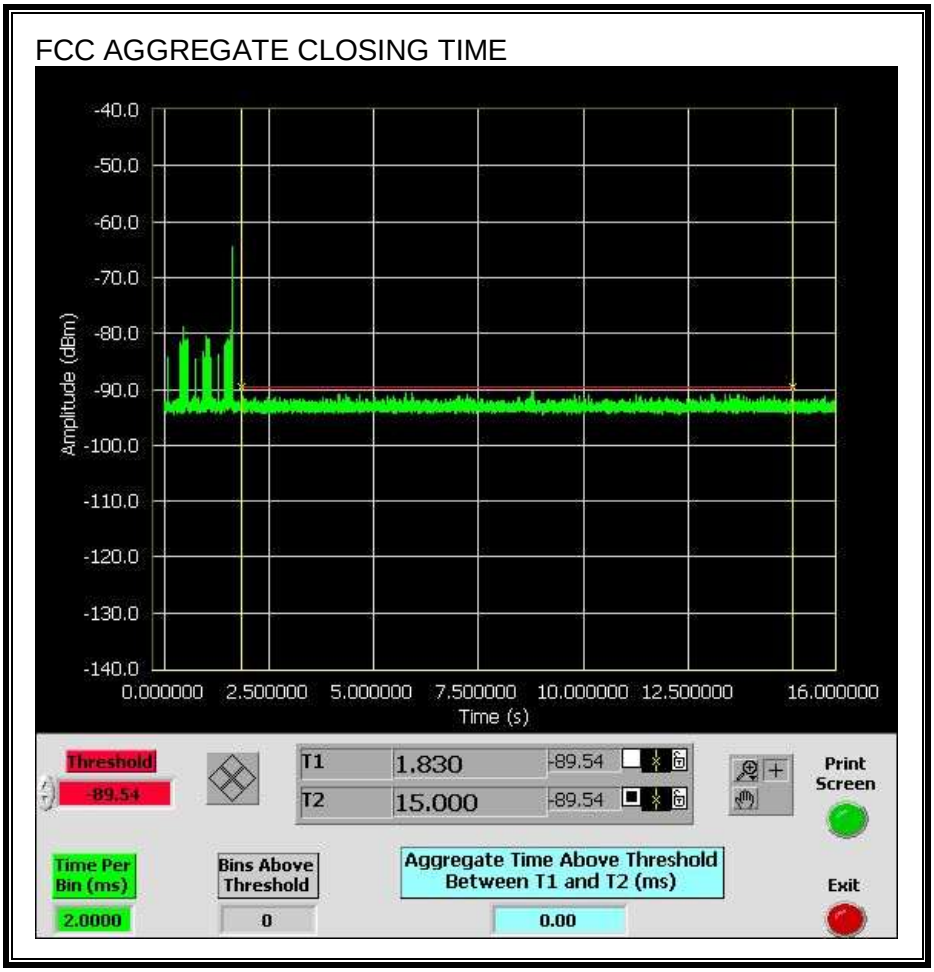


CHANNEL CLOSING TIME



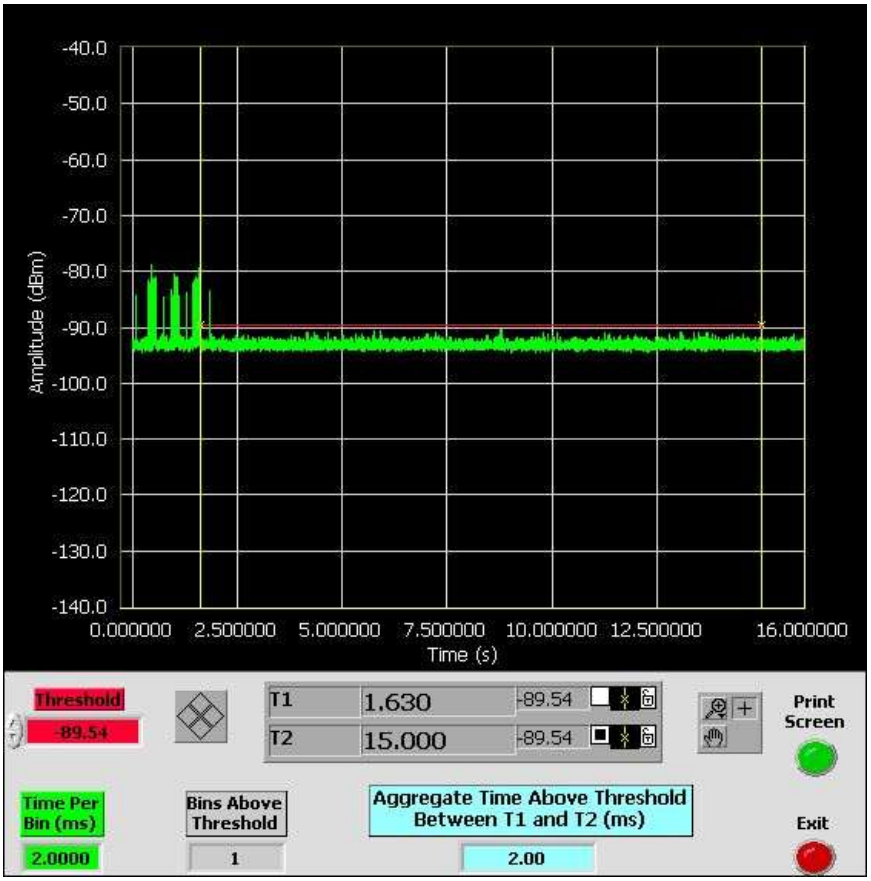
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the FCC aggregate monitoring period.



Only intermittent transmissions are observed during the IC aggregate monitoring period.

IC AGGREGATE CLOSING TIME



12.3.5. NON-OCCUPANCY PERIOD

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time