

6.7 Peak Excursion Ratio

§15.407(a)(6)

The spectrum analyzer was connected to the antenna terminal while the EUT was operating in the continuous transmission mode at the appropriate center frequencies. **The largest permissible difference between the modulation envelope (measured using a peak hold function) and the maximum conducted output power is 13 dBm/MHz.**

	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Peak Excursion Ratio [dBm]	Max Permissible Peak Excursion Ratio [dBm/MHz]	Margin [dB]
Band I	5180	36	a	6	7.994	13.0	-5.01
	5200	40	a	6	8.865	13.0	-4.14
	5240	48	a	6	10.047	13.0	-2.95
	5180	36	n	6.5/7.2 (MCS0)	8.481	13.0	-4.52
	5200	40	n	6.5/7.2 (MCS0)	10.293	13.0	-2.71
	5240	48	n	6.5/7.2 (MCS0)	9.783	13.0	-3.22
Band II	5260	52	a	6	9.539	13.0	-3.46
	5280	56	a	6	8.799	13.0	-4.20
	5320	64	a	6	10.307	13.0	-2.69
	5260	52	n	6.5/7.2 (MCS0)	8.427	13.0	-4.57
	5280	56	n	6.5/7.2 (MCS0)	9.082	13.0	-3.92
	5320	64	n	6.5/7.2 (MCS0)	7.607	13.0	-5.39
Band III	5500	100	a	6	9.242	13.0	-3.76
	5600	120	a	6	8.951	13.0	-4.05
	5700	140	a	6	9.234	13.0	-3.77
	5500	100	n	6.5/7.2 (MCS0)	8.089	13.0	-4.91
	5600	120	n	6.5/7.2 (MCS0)	9.114	13.0	-3.89
	5700	140	n	6.5/7.2 (MCS0)	9.643	13.0	-3.36

Table 6-10. Conducted Peak Excursion Ratio Measurements

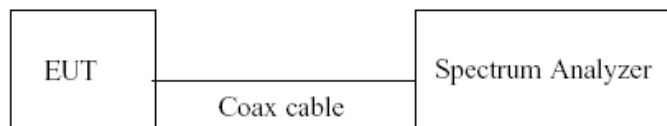
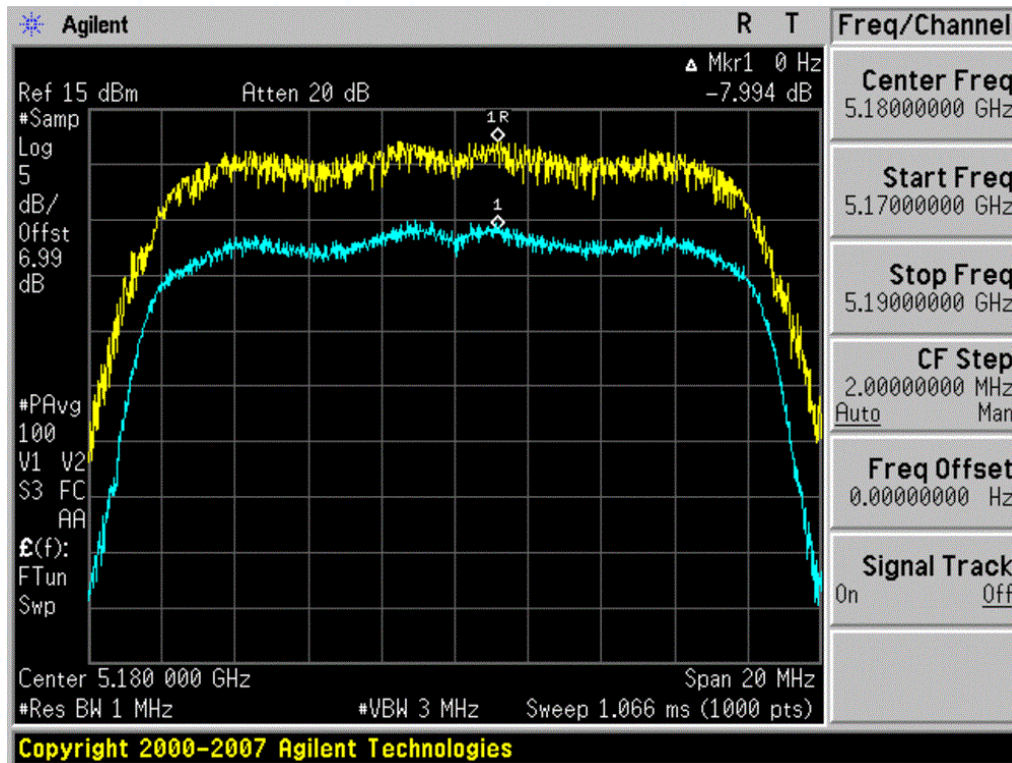
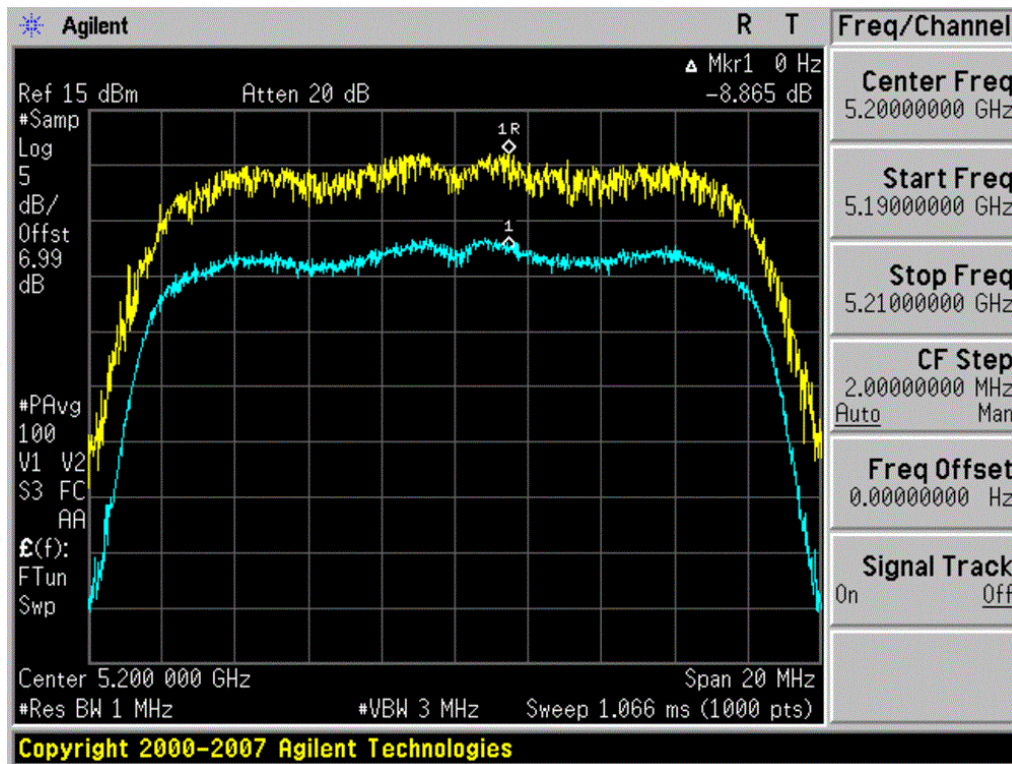


Figure 6-3. Test Instrument & Measurement Setup

FCC ID: A3LSGHI757		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 34 of 73

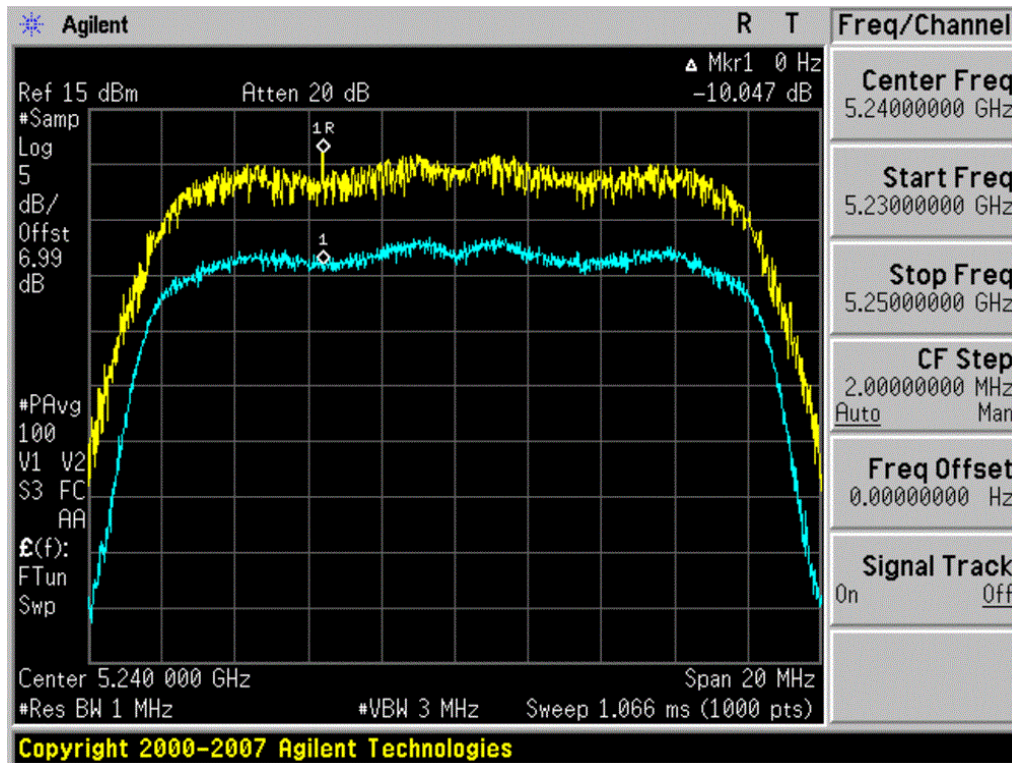


Plot 6-37. Peak Excursion Ratio Plot (802.11a (UNII Band 1) – Ch. 36)

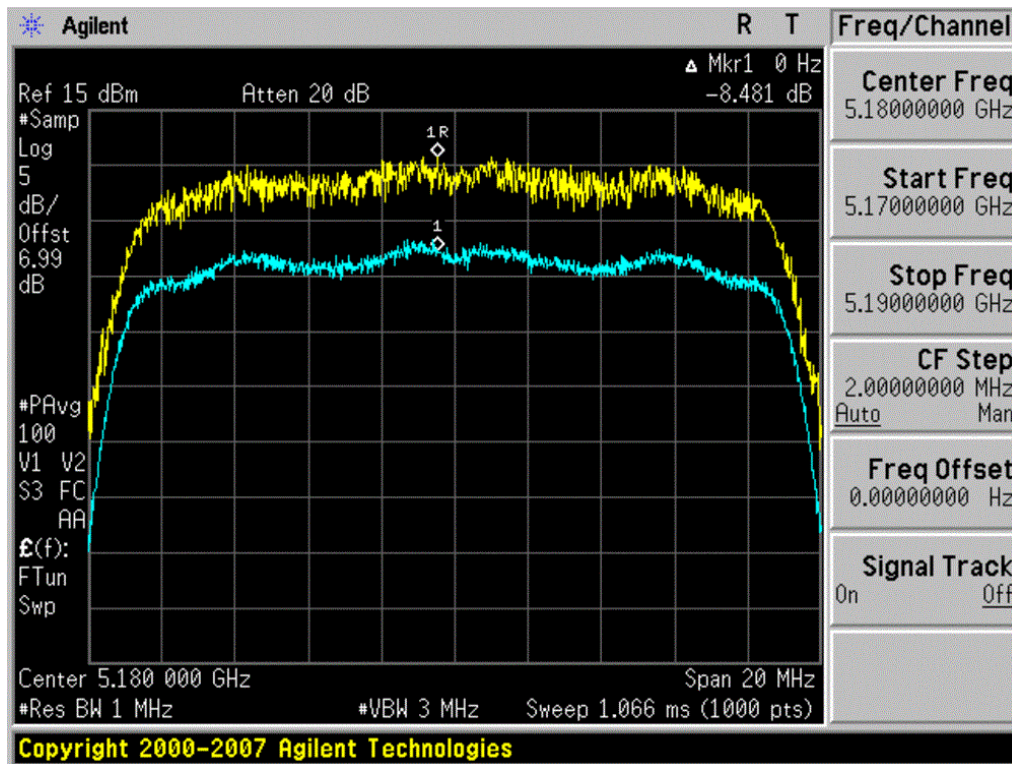


Plot 6-38. Peak Excursion Ratio Plot (802.11a (UNII Band 1) – Ch. 40)

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 35 of 73

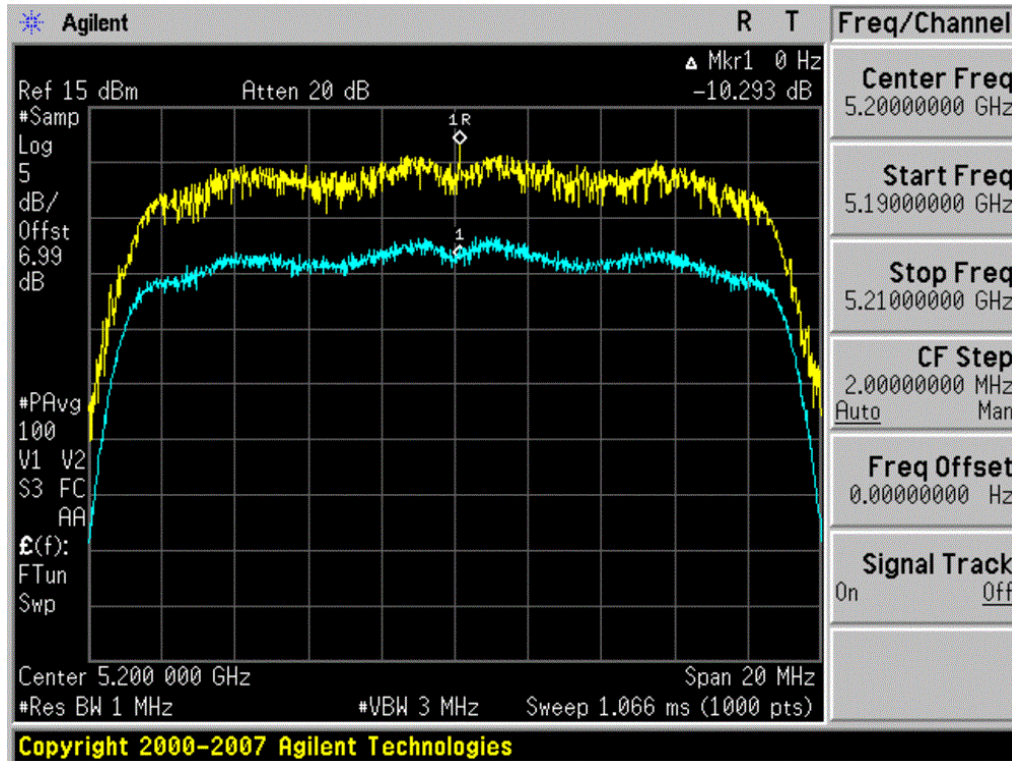


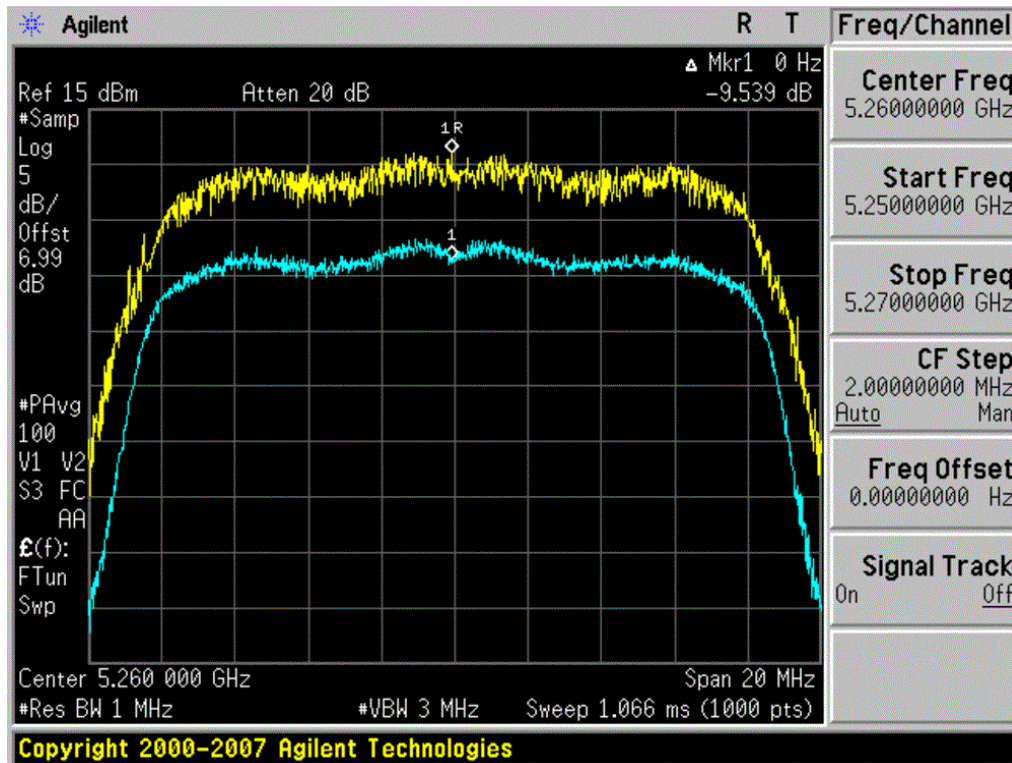
Plot 6-39. Peak Excursion Ratio Plot (802.11a (UNII Band 1) – Ch. 48)



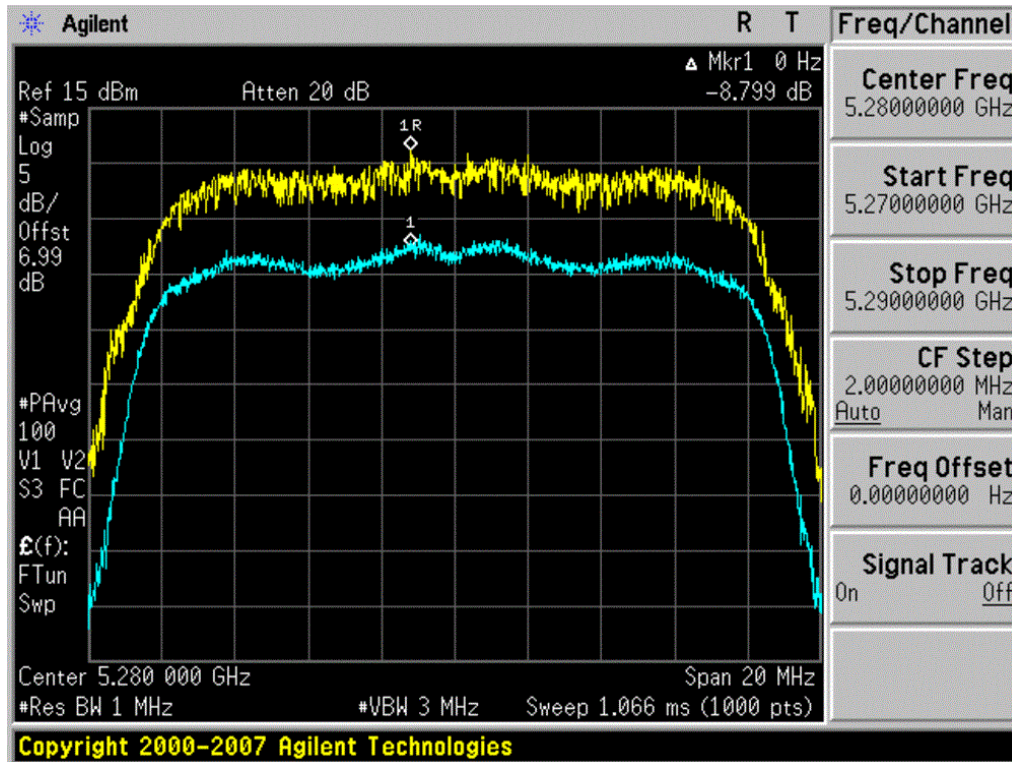
Plot 6-40. Peak Excursion Ratio Plot (802.11n (UNII Band 1) – Ch. 36)

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 36 of 73



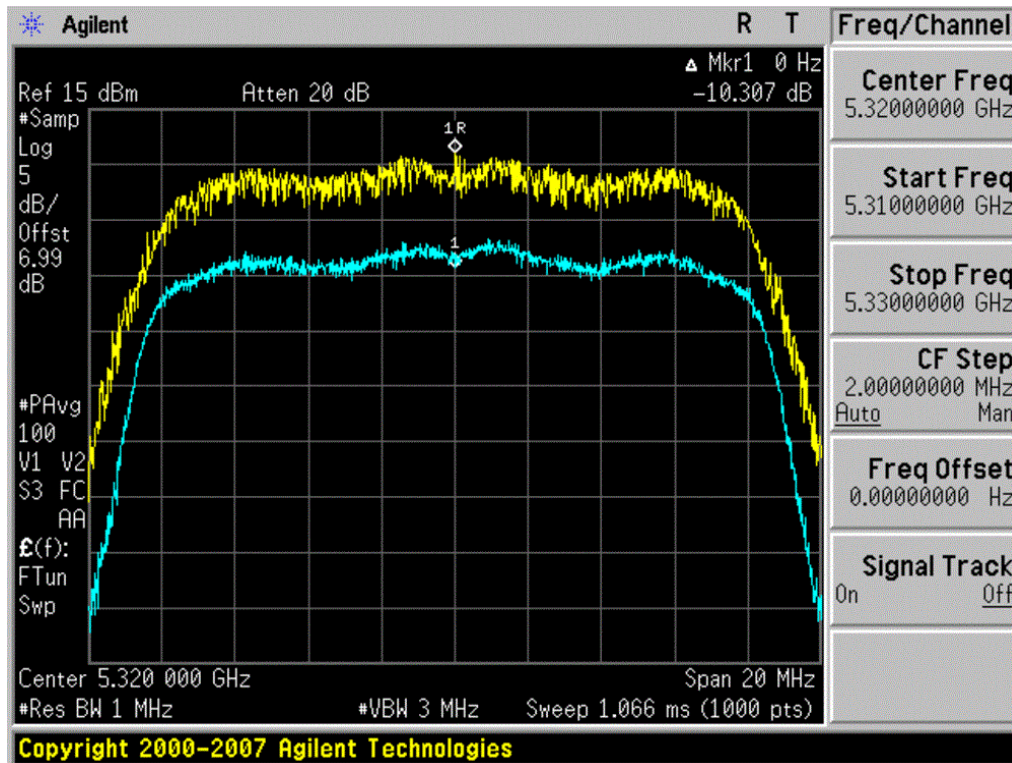


Plot 6-43. Peak Excursion Ratio Plot (802.11a (UNII Band 2) – Ch. 52)

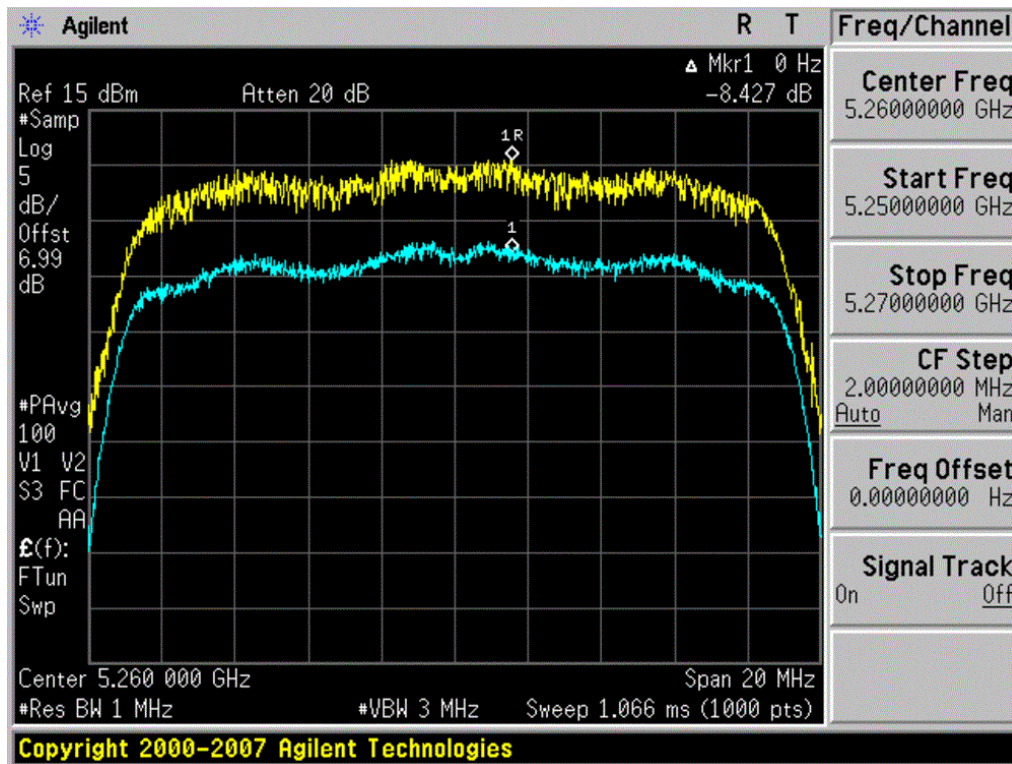


Plot 6-44. Peak Excursion Ratio Plot (802.11a (UNII Band 2) – Ch. 56)

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 38 of 73

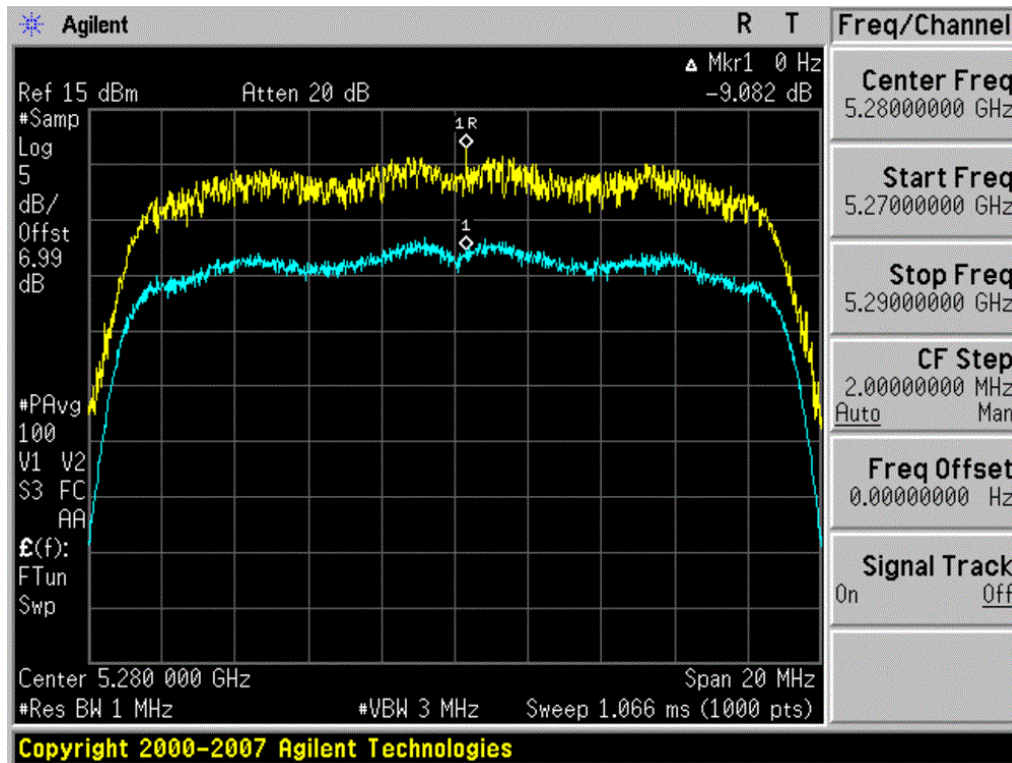


Plot 6-45. Peak Excursion Ratio Plot (802.11a (UNII Band 2) – Ch. 64)

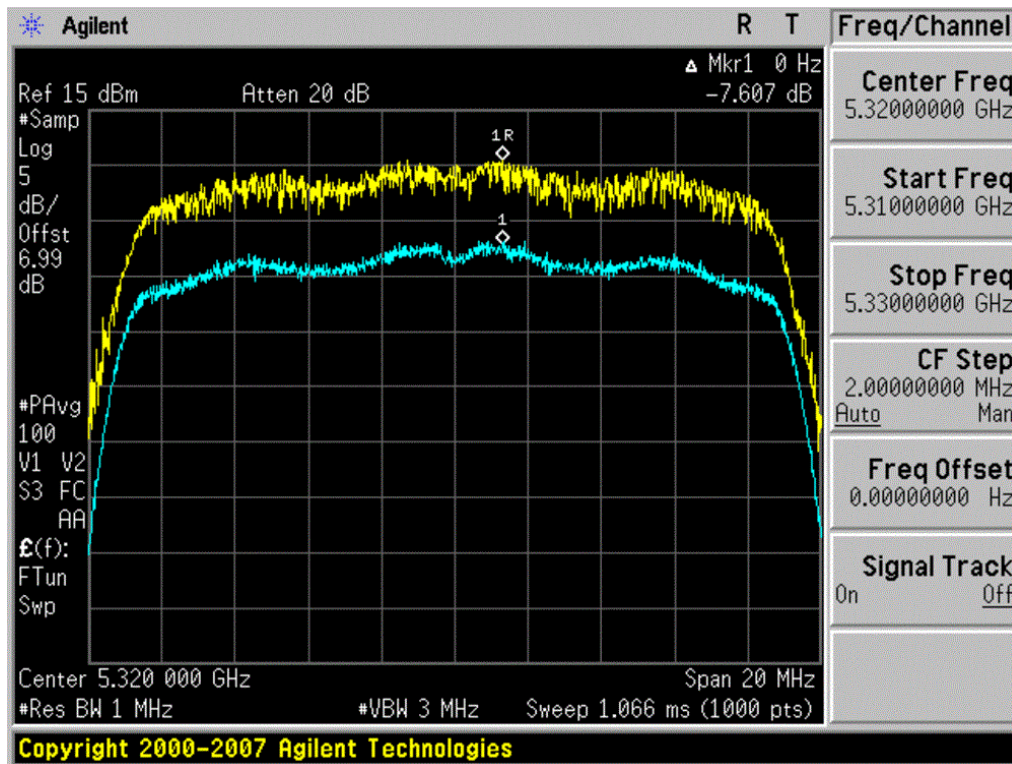


Plot 6-46. Peak Excursion Ratio Plot (802.11n (UNII Band 2) – Ch. 52)

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 39 of 73

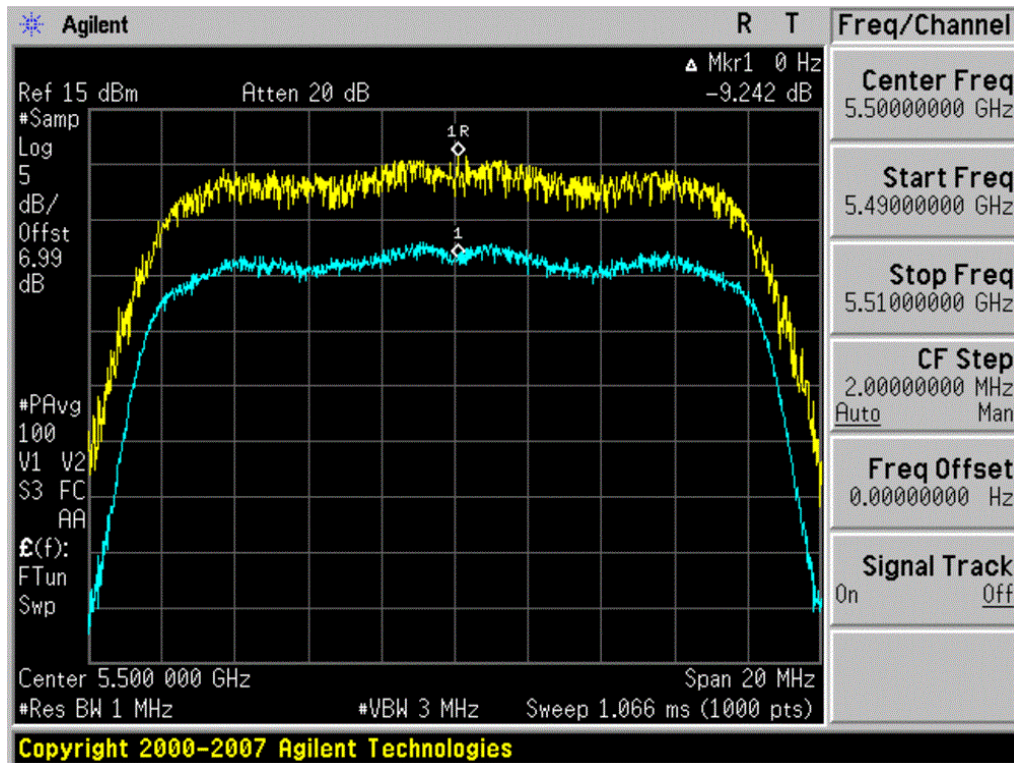


Plot 6-47. Peak Excursion Ratio Plot (802.11n (UNII Band 2) – Ch. 56)

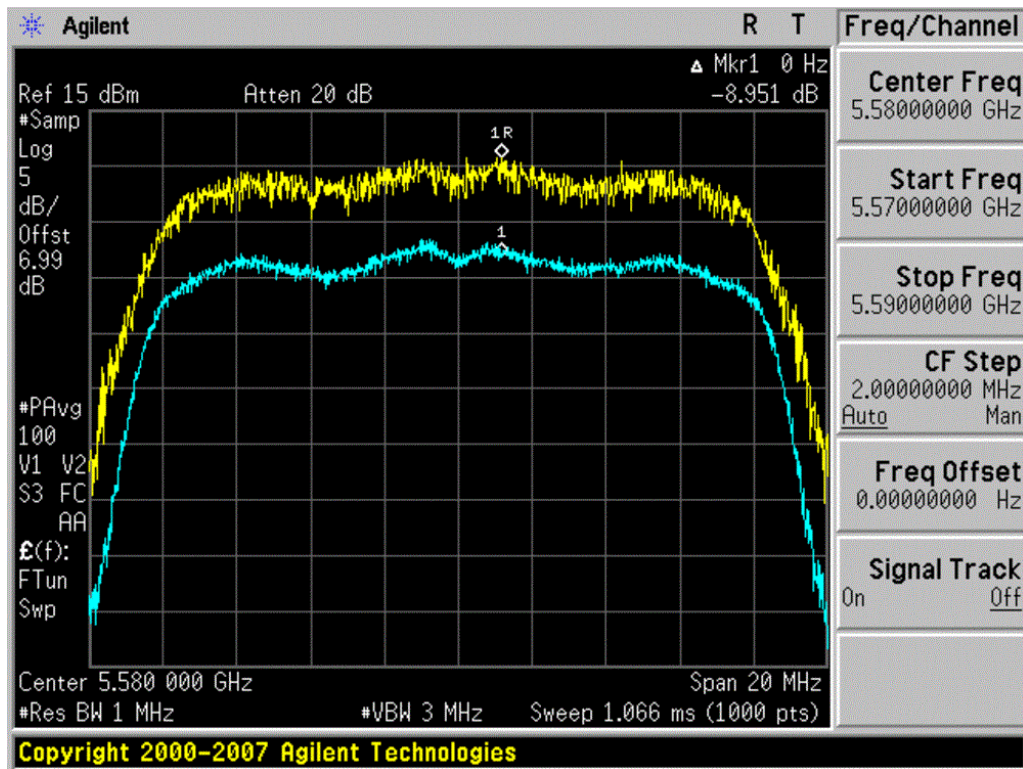


Plot 6-48. Peak Excursion Ratio Plot (802.11n (UNII Band 2) – Ch. 64)

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 40 of 73

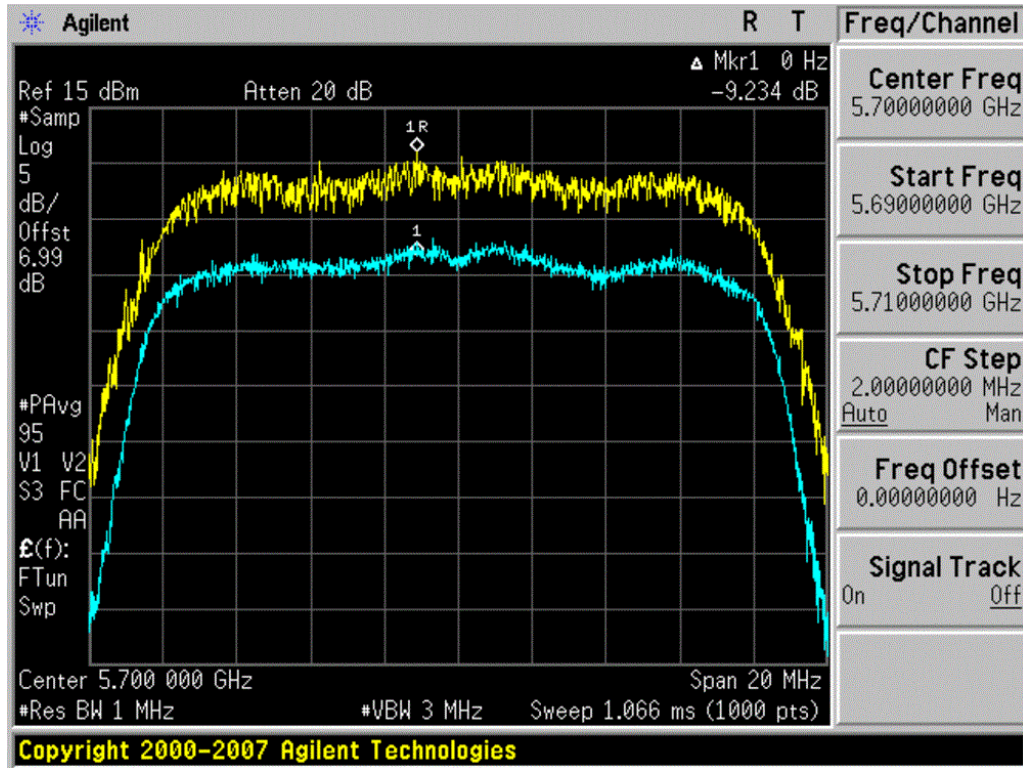


Plot 6-49. Peak Excursion Ratio Plot (802.11a (UNII Band 3) – Ch. 100)

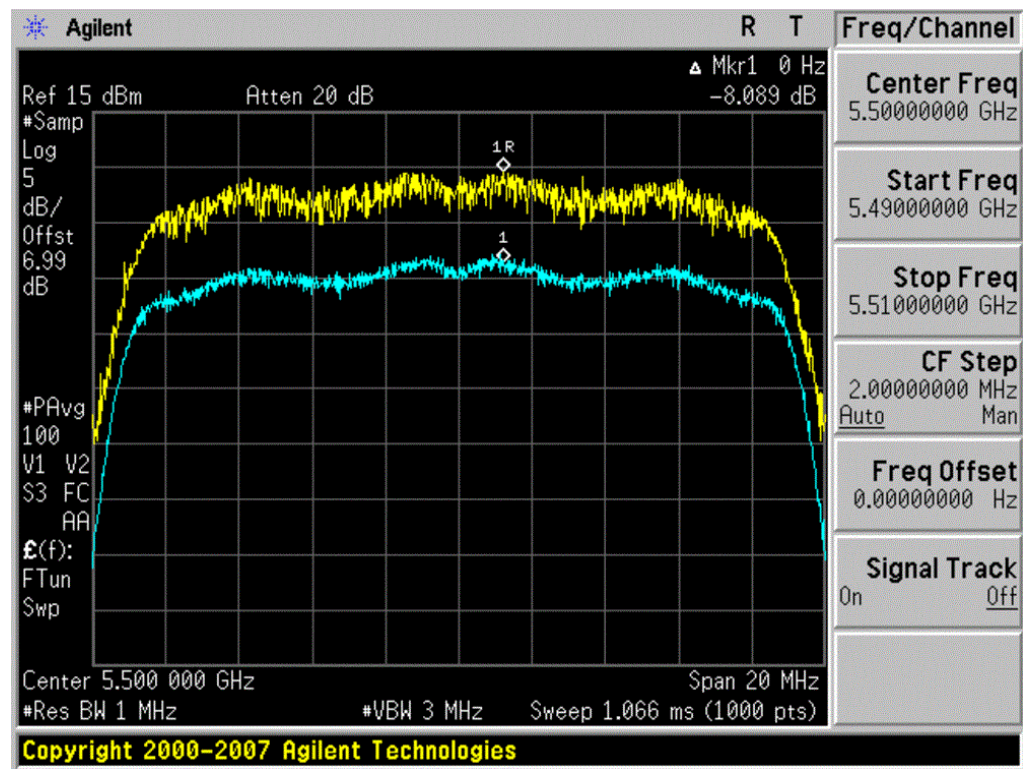


Plot 6-50. Peak Excursion Ratio Plot (802.11a (UNII Band 3) – Ch. 116)

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 41 of 73

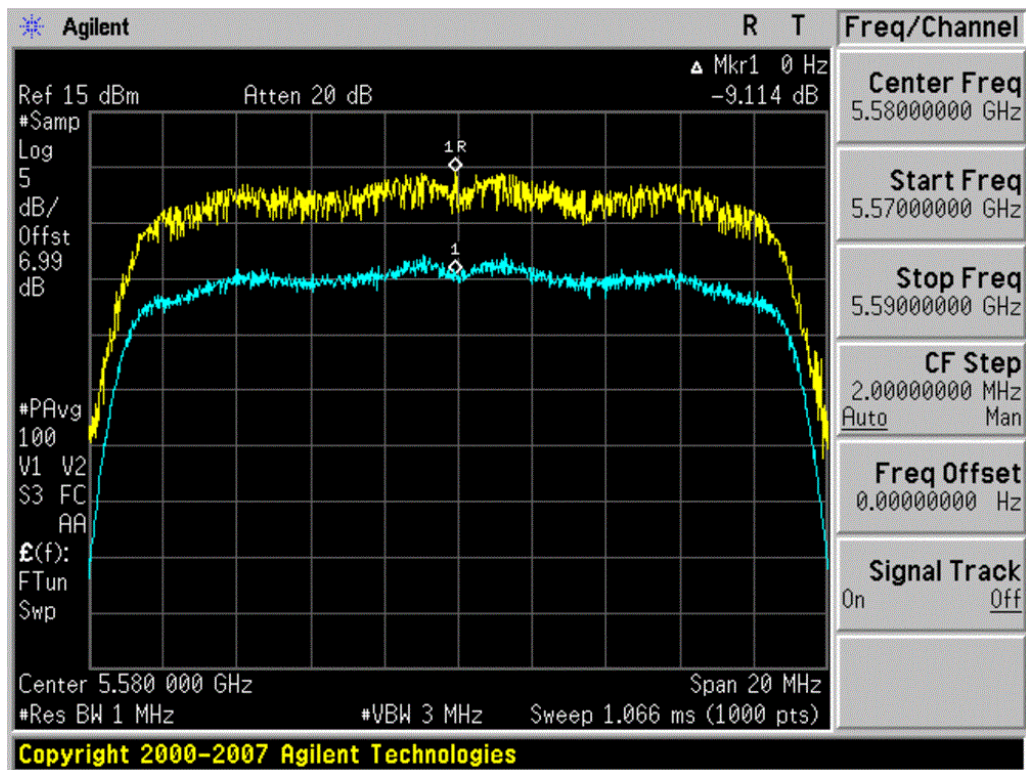


Plot 6-51. Peak Excursion Ratio Plot (802.11a (UNII Band 3) – Ch. 140)

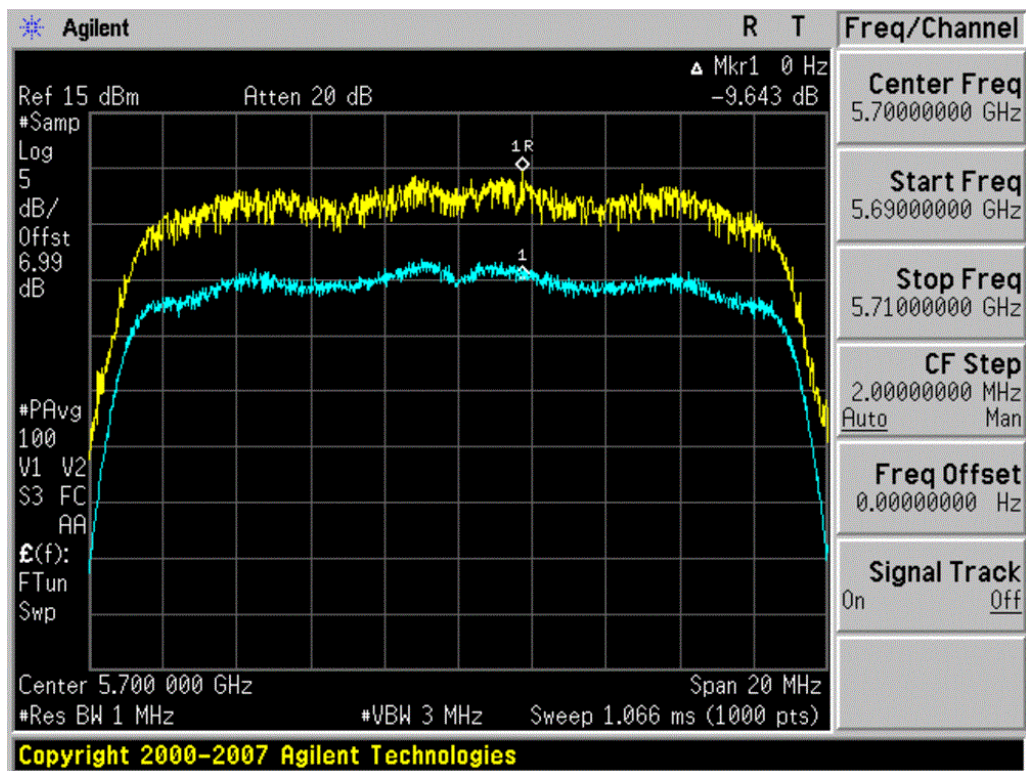


Plot 6-52. Peak Excursion Ratio Plot (802.11n (UNII Band 3) – Ch. 100)

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 42 of 73



Plot 6-53. Peak Excursion Ratio Plot (802.11n (UNII Band 3) – Ch. 116)



Plot 6-54. Peak Excursion Ratio Plot (802.11n (UNII Band 3) – Ch. 140)

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 43 of 73

6.8 Frequency Stability

§15.407(g)

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between -30°C and +50°C. The temperature was incremented by 10° intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.7 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.70	+ 20 (Ref)	5,179,999,999	-1	0.000000
100 %		- 30	5,179,999,985	-15	0.000000
100 %		- 20	5,179,999,996	-4	0.000000
100 %		- 10	5,179,999,991	-9	0.000000
100 %		0	5,179,999,983	-17	0.000000
100 %		+ 10	5,179,999,982	-18	0.000000
100 %		+ 20	5,179,999,994	-6	0.000000
100 %		+ 30	5,179,999,985	-15	0.000000
100 %		+ 40	5,179,999,987	-13	0.000000
100 %		+ 50	5,179,999,988	-12	0.000000
115 %	4.26	+ 20	5,179,999,990	-10	0.000000
BATT. ENDPOINT	3.40	+ 20	5,179,999,993	-7	0.000000

Table 6-11. Frequency Stability Measurements for UNII Band 1 (Ch. 36)

FCC ID: A3LSGHI757		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset	Page 44 of 73	

Frequency Stability (Cont'd)

§15.407(g)

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between -30°C and +50°C. The temperature was incremented by 10° intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.7 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.70	+ 20 (Ref)	5,259,999,994	-6	0.000000
100 %		- 30	5,259,999,982	-18	0.000000
100 %		- 20	5,259,999,998	-2	0.000000
100 %		- 10	5,259,999,988	-12	0.000000
100 %		0	5,259,999,986	-14	0.000000
100 %		+ 10	5,259,999,999	-1	0.000000
100 %		+ 20	5,259,999,987	-13	0.000000
100 %		+ 30	5,259,999,981	-19	0.000000
100 %		+ 40	5,259,999,986	-14	0.000000
100 %		+ 50	5,259,999,984	-16	0.000000
115 %	4.26	+ 20	5,259,999,983	-17	0.000000
BATT. ENDPOINT	3.40	+ 20	5,259,999,996	-4	0.000000

Table 6-12. Frequency Stability Measurements for UNII Band 2 (Ch. 52)

FCC ID: A3LSGHI757		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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Frequency Stability (Cont'd)

§15.407(g)

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between -30°C and +50°C. The temperature was incremented by 10° intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

OPERATING FREQUENCY: 5,500,000,000 Hz

CHANNEL: 100

REFERENCE VOLTAGE: 3.7 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.70	+ 20 (Ref)	5,499,999,995	-5	0.000000
100 %		- 30	5,499,999,991	-9	0.000000
100 %		- 20	5,499,999,989	-11	0.000000
100 %		- 10	5,499,999,990	-10	0.000000
100 %		0	5,499,999,983	-17	0.000000
100 %		+ 10	5,499,999,986	-14	0.000000
100 %		+ 20	5,499,999,984	-16	0.000000
100 %		+ 30	5,499,999,995	-5	0.000000
100 %		+ 40	5,499,999,998	-2	0.000000
100 %		+ 50	5,499,999,990	-10	0.000000
115 %	4.26	+ 20	5,499,999,991	-9	0.000000
BATT. ENDPOINT	3.40	+ 20	5,499,999,989	-11	0.000000

Table 6-13. Frequency Stability Measurements for UNII Band 3 (Ch. 100)

FCC ID: A3LSGHI757		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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6.9 Radiated Spurious Emission Measurements

§15.407(b)(1), (6), §15.205, §15.209; RSS-210 [A9.2]

The EUT was tested from 9kHz and up to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average measurements were taken using RBW = 1MHz and VBW = 10Hz. Peak measurements were taken using RBW = VBW = 1MHz and linearly polarized horn antennas. All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table 6-14 per Section 15.209.

All data rates and modes were investigated for radiated spurious emissions. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

Frequency	Field Strength [μV/m]	Measured Distance [Meters]
0.009 – 0.490 MHz	2400/F (kHz)	300
0.490 – 1.705 MHz	24000/F (kHz)	30
1.705 – 30.00 MHz	30	30
30.00 – 88.00 MHz	100	3
88.00 – 216.0 MHz	150	3
216.0 – 960.0 MHz	200	3
Above 960.0 MHz	500	3

Table 6-14. Radiated Limits

Sample Calculation

- Field Strength Level $_{[dB\mu V/m]} = \text{Analyzer Level}_{[dBm]} + 107 + AFCL_{[dB]}$

Notes:

- $AFCL = \text{Antenna Factor}_{[dB]} + \text{Cable Loss}_{[dB]}$

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Radiated Spurious Emission Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5180MHz

Channel: 36

	Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
	10360.00	-96.52	Peak	H	52.63	-9.54	53.57	68.20	-14.63
*	15540.00	-135.00	Average	H	58.79	0.00	30.79	53.98	-23.19
*	15540.00	-125.00	Peak	H	58.79	0.00	40.79	73.98	-33.19
*	20720.00	-135.00	Average	H	67.51	0.00	39.51	53.98	-14.47
*	20720.00	-125.00	Peak	H	67.51	0.00	49.51	73.98	-24.47
	25900.00	-125.00	Peak	H	69.42	0.00	51.42	68.20	-16.78

Table 6-15. Radiated Measurements @ 1 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz.
- All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 are below the limit shown in Table 6-14.
- Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
- The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
- The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
- The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
- Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
- Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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Radiated Spurious Emission Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5200MHz

Channel: 40

	Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
	10400.00	-98.09	Peak	H	52.69	-9.54	52.06	68.20	-16.14
*	15600.00	-135.00	Average	H	58.71	0.00	30.71	53.98	-23.27
*	15600.00	-125.00	Peak	H	58.71	0.00	40.71	73.98	-33.27
*	20800.00	-135.00	Average	H	67.57	0.00	39.57	53.98	-14.41
*	20800.00	-125.00	Peak	H	67.57	0.00	49.57	73.98	-24.41
	26000.00	-125.00	Peak	H	69.44	0.00	51.44	68.20	-16.76

Table 6-16. Radiated Measurements @ 1 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz.
- All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 are below the limit shown in Table 6-14.
- Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
- The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
- The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
- The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
- Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
- Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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Radiated Spurious Emission Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5240MHz

Channel: 48

	Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
	10480.00	-96.85	Peak	H	52.83	-9.54	53.44	68.20	-14.76
*	15720.00	-135.00	Average	H	58.46	0.00	30.46	53.98	-23.52
*	15720.00	-125.00	Peak	H	58.46	0.00	40.46	73.98	-33.52
*	20960.00	-135.00	Average	H	67.70	0.00	39.70	53.98	-14.28
*	20960.00	-125.00	Peak	H	67.70	0.00	49.70	73.98	-24.28
	26200.00	-125.00	Peak	H	69.40	0.00	51.40	68.20	-16.80

Table 6-17. Radiated Measurements @ 1 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz.
- All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 are below the limit shown in Table 6-14.
- Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
- The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
- The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
- The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
- Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
- Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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Radiated Spurious Emission Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5260MHz

Channel: 52

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	-97.90	Peak	H	52.87	-9.54	52.43	68.20	-15.77
* 15780.00	-135.00	Average	H	58.24	0.00	30.24	53.98	-23.74
* 15780.00	-125.00	Peak	H	58.24	0.00	40.24	73.98	-33.74
* 21040.00	-135.00	Average	H	67.76	0.00	39.76	53.98	-14.22
* 21040.00	-125.00	Peak	H	67.76	0.00	49.76	73.98	-24.22
26300.00	-125.00	Peak	H	69.38	0.00	51.38	68.20	-16.82

Table 6-18. Radiated Measurements @ 1 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz.
- All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 are below the limit shown in Table 6-14.
- Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
- The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
- The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
- The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
- Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
- Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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Radiated Spurious Emission Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5280MHz

Channel: 56

	Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
	10560.00	-96.82	Peak	H	52.89	-9.54	53.52	68.20	-14.68
*	15840.00	-135.00	Average	H	58.13	0.00	30.13	53.98	-23.85
*	15840.00	-125.00	Peak	H	58.13	0.00	40.13	73.98	-33.85
*	21120.00	-135.00	Average	H	67.81	0.00	39.81	53.98	-14.17
*	21120.00	-125.00	Peak	H	67.81	0.00	49.81	73.98	-24.17
	26400.00	-125.00	Peak	H	69.36	0.00	51.36	68.20	-16.84

Table 6-19. Radiated Measurements @ 1 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz.
- All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 are below the limit shown in Table 6-14.
- Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
- The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
- The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
- The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
- Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
- Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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Radiated Spurious Emission Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5320MHz

Channel: 64

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10640.00	-108.29	Average	H	52.92	-9.54	42.09	53.98	-11.89
10640.00	-97.06	Peak	H	52.92	-9.54	53.32	73.98	-20.66
15960.00	-135.00	Average	H	58.03	0.00	30.03	53.98	-23.95
15960.00	-125.00	Peak	H	58.03	0.00	40.03	73.98	-33.95
21280.00	-135.00	Average	H	67.90	0.00	39.90	53.98	-14.08
21280.00	-125.00	Peak	H	67.90	0.00	49.90	73.98	-24.08
26600.00	-125.00	Peak	H	69.36	0.00	51.36	68.20	-16.84

Table 6-20. Radiated Measurements @ 1 meter

NOTES:

1. All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz.
2. All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 are below the limit shown in Table 6-14.
3. Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
4. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
5. The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
6. The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
7. Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
8. Above 960MHz the limit is 500 μV/m (54dBμV/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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Radiated Spurious Emission Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5500MHz

Channel: 100

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
11000.00	-108.38	Average	H	53.60	-9.54	42.68	53.98	-11.30
11000.00	-97.46	Peak	H	53.60	-9.54	53.60	73.98	-20.38
16500.00	-125.00	Peak	H	58.38	0.00	40.38	68.20	-27.82
22000.00	-125.00	Peak	H	67.93	0.00	49.93	68.20	-18.27
27500.00	-125.00	Peak	H	69.64	0.00	51.64	68.20	-16.56

Table 6-21. Radiated Measurements @ 1 meter

NOTES:

1. All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz.
2. All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 are below the limit shown in Table 6-14.
3. Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
4. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
5. The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
6. The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
7. Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
8. Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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Radiated Spurious Emission Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5580MHz

Channel: 116

	Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
*	11160.00	-108.23	Average	H	53.67	-9.54	42.90	53.98	-11.08
*	11160.00	-97.57	Peak	H	53.67	-9.54	53.56	73.98	-20.42
	16740.00	-125.00	Peak	H	58.76	0.00	40.76	68.20	-27.44
*	22320.00	-135.00	Average	H	68.18	0.00	40.18	53.98	-13.80
*	22320.00	-125.00	Peak	H	68.18	0.00	50.18	73.98	-23.80
	27900.00	-125.00	Peak	H	69.65	0.00	51.65	68.20	-16.55

Table 6-22. Radiated Measurements @ 1 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz.
- All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 are below the limit shown in Table 6-14.
- Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
- The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
- The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
- The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
- Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
- Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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Radiated Spurious Emission Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5700MHz

Channel: 140

	Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
*	11400.00	-107.41	Average	H	53.73	-9.54	43.78	53.98	-10.20
*	11400.00	-97.11	Peak	H	53.73	-9.54	54.08	73.98	-19.90
	17100.00	-125.00	Peak	H	61.78	0.00	43.78	68.20	-24.42
*	22800.00	-135.00	Average	H	68.42	0.00	40.42	53.98	-13.56
*	22800.00	-125.00	Peak	H	68.42	0.00	50.42	73.98	-23.56
	28500.00	-125.00	Peak	H	69.45	0.00	51.45	68.20	-16.75

Table 6-23. Radiated Measurements @ 1 meter

NOTES:

1. All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz.
2. All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 are below the limit shown in Table 6-14.
3. Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
4. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
5. The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
6. The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
7. Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
8. Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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6.10 Radiated Band Edge Measurements

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5180MHz

Channel: 36

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4604.65	-100.17	Average	H	41.37	-9.54	38.65	53.98	-15.33
4604.65	-91.23	Peak	H	41.37	-9.54	47.59	73.98	-26.39
5020.65	-93.68	Average	H	42.33	-9.54	46.11	53.98	-7.87
5020.65	-83.93	Peak	H	42.33	-9.54	55.86	73.98	-18.12
5150.00	-95.76	Average	H	42.92	-9.54	44.62	53.98	-9.36
5150.00	-83.60	Peak	H	42.92	-9.54	56.78	73.98	-17.20

Table 6-24. Radiated Restricted Band Measurements at 1-meter (4.5 – 5.15GHz)

NOTES:

1. Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
2. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
3. The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
4. The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
5. Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
6. Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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Radiated Band Edge Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5320MHz

Channel: 64

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
5350.00	-99.72	Average	H	44.13	-9.54	41.87	53.98	-12.11
5350.00	-85.19	Peak	H	44.13	-9.54	56.40	73.98	-17.58
5354.07	-100.81	Average	H	44.13	-9.54	40.78	53.98	-13.20
5354.07	-86.09	Peak	H	44.13	-9.54	55.50	73.98	-18.48
5357.48	-100.88	Average	H	44.14	-9.54	40.72	53.98	-13.26
5357.48	-88.49	Peak	H	44.14	-9.54	53.11	73.98	-20.87

Table 6-25. Radiated Restricted Band Measurements at 1-meter (5.35 – 5.46GHz, 5.46 – 5.47GHz)

NOTES:

1. Emissions within 5.35 – 5.46GHz lie in a restricted band and are subject to the radiated emissions limits specified in §15.209. Emission within 5.46 – 5.47GHz are at the lower band edge of UNII Band 3 transmission and are subject to the -27dBm/MHz EIRP limit specified in §15.407.
2. Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
3. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
4. The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
5. The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
6. Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
7. Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricteds band specified in §15.205.

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Radiated Band Edge Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5500MHz

Channel: 100

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
5420.18	-102.90	Average	H	44.27	-9.54	38.83	53.98	-15.15
5420.18	-90.78	Peak	H	44.27	-9.54	50.95	73.98	-23.03
5458.00	-101.34	Average	H	44.38	-9.54	40.49	53.98	-13.49
5458.00	-91.22	Peak	H	44.38	-9.54	50.61	73.98	-23.37
5469.65	-80.19	Peak	H	44.41	-9.54	61.68	68.20	-6.52

Table 6-26. Radiated Restricted Band Measurements at 1-meter (5.35 – 5.46GHz, 5.46 – 5.47GHz)

NOTES:

1. Emissions within 5.35 – 5.46GHz lie in a restricted band and are subject to the radiated emissions limits specified in §15.209. Emission within 5.46 – 5.47GHz are at the lower band edge of UNII Band 3 transmission and are subject to the -27dBm/MHz EIRP limit specified in §15.407.
2. Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
3. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
4. The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
5. The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
6. Levels at -135 dBm represent the analyzer noise floor and signify that no emission was detected.
7. Above 960MHz the limit is 500 µV/m (54dBµ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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Radiated Band Edge Measurements (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Mode: 802.11a

Transfer Rate: 6 Mbps

Distance of Measurements: 1 Meter

Operating Frequency: 5700MHz

Channel: 140

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
5726.73	-85.88	Peak	H	44.46	-9.54	56.04	68.20	-12.16
5729.83	-88.22	Peak	H	44.46	-9.54	53.70	68.20	-14.50
5726.20	-89.95	Peak	H	44.45	-9.54	51.96	68.20	-16.24

Table 6-27. Radiated Restricted Band Measurements at 1-meter

NOTES:

1. Average measurements > 1GHz using RBW = 1MHz and VBW = 10Hz. Peak measurements > 1GHz using RBW = VBW = 1MHz.
2. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
3. The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
4. The spectrum is measured from 9kHz to 40GHz and the worst-case emissions are reported. No significant emissions were found beyond the fifth harmonic for this device.
5. Levels at - 135 dBm represent the analyzer noise floor and signify that no emission was detected.
6. Above 960MHz the limit is 500 μV/m (54dBμ/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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6.11 Line-Conducted Test Data

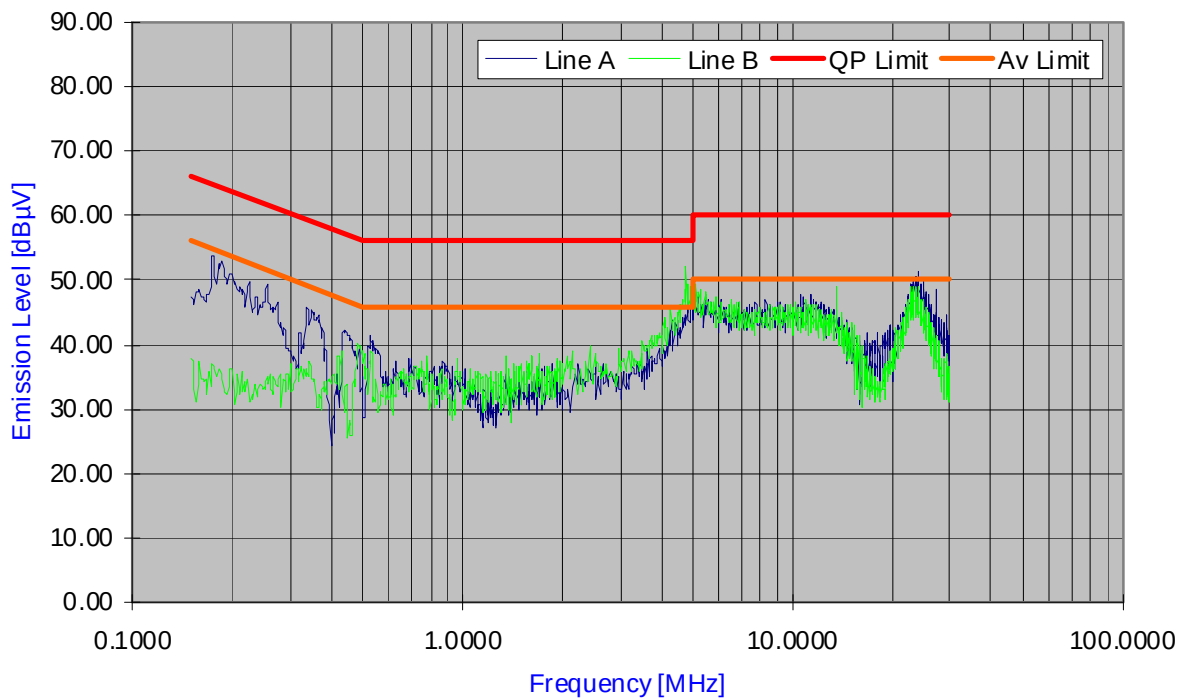
§15.207; RSS-Gen [7.2.2]

PCTEST Engineering Laboratory Inc.

Company : Samsung Electronics, Co. Ltd.
Model Number : SGH-I757
FCC ID Code : A3LSGHI757
Standard : FCC Part 15C, 15.207

Power Source : AC120V/60Hz
Tested Date : 01/06/2012
Note : Tested with 802.11a
UNII Band 1 ON

Conducted Emission Measurement



Ver.1.1 ©PCTEST 2006.08

Plot 6-55. Line Conducted Plot with 802.11a (UNII Band 1)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]

No.	Line	Frequency [MHz]	Factor [dB]	QP [dBμV]	Limit [dBμV]	Margin [dB]	Average [dBμV]	Limit [dBμV]	Margin [dB]
1	A	4.830	7.40	41.06	56.00	-14.94	31.80	46.00	-14.20
2	A	4.956	7.41	41.59	56.00	-14.41	32.00	46.00	-14.00
3	A	22.807	8.82	43.03	60.00	-16.97	33.59	50.00	-16.41
4	A	23.392	8.89	44.22	60.00	-15.78	34.83	50.00	-15.17
5	A	23.527	8.90	44.18	60.00	-15.82	35.21	50.00	-14.79
6	A	23.846	8.94	43.97	60.00	-16.03	35.05	50.00	-14.95
7	A	23.909	8.95	43.93	60.00	-16.07	35.23	50.00	-14.77
8	A	24.246	8.98	42.88	60.00	-17.12	34.95	50.00	-15.05
9	A	24.332	8.99	42.84	60.00	-17.16	34.92	50.00	-15.08
10	A	24.900	9.05	41.89	60.00	-18.11	34.32	50.00	-15.68
11	B	4.317	7.38	38.06	56.00	-17.94	29.03	46.00	-16.97
12	B	4.753	7.41	41.77	56.00	-14.23	32.87	46.00	-13.13
13	B	5.078	7.43	42.47	60.00	-17.53	33.03	50.00	-16.97
14	B	5.201	7.44	42.01	60.00	-17.99	32.60	50.00	-17.40
15	B	13.563	7.99	44.87	60.00	-15.13	34.45	50.00	-15.55
16	B	22.868	8.95	41.52	60.00	-18.48	31.35	50.00	-18.65
17	B	23.422	9.02	42.28	60.00	-17.72	31.90	50.00	-18.10
18	B	23.427	9.02	42.07	60.00	-17.93	31.86	50.00	-18.14
19	B	23.762	9.06	42.31	60.00	-17.69	32.14	50.00	-17.86
20	B	24.096	9.11	41.25	60.00	-18.75	31.97	50.00	-18.03

Table 6-28. Line Conducted Data with 802.11a (UNII Band 1)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 62 of 73

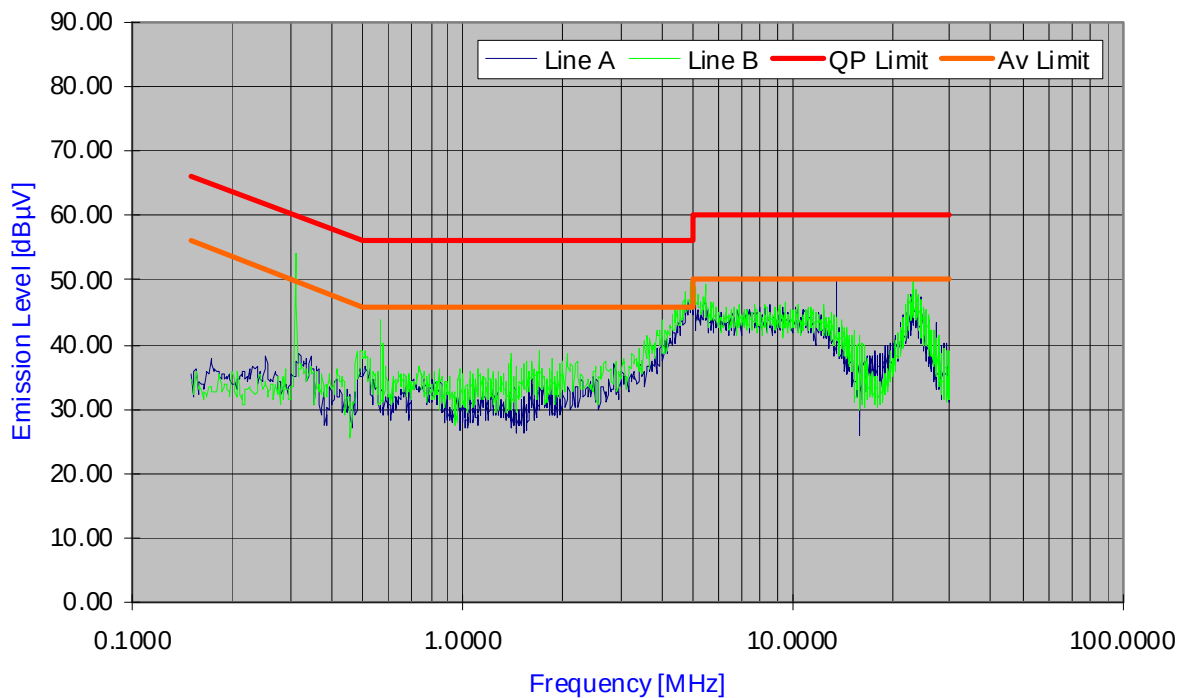
Line-Conducted Test Data (Cont'd)
§15.207; RSS-Gen [7.2.2]

PCTEST Engineering Laboratory Inc.

Company : Samsung Electronics, Co. Ltd.
Model Number : SGH-I757
FCC ID Code : A3LSGHI757
Standard : FCC Part 15C, 15.207

Power Source : AC120V/60Hz
Tested Date : 01/06/2012
Note : Tested with 802.11a
UNII Band 2 ON

Conducted Emission Measurement



Ver.1.1 ©PCTEST 2006.08

Plot 6-56. Line Conducted Plot with 802.11a (UNII Band 2)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 63 of 73

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]

No.	Line	Frequency [MHz]	Factor [dB]	QP [dBμV]	Limit [dBμV]	Margin [dB]	Average [dBμV]	Limit [dBμV]	Margin [dB]
1	A	4.917	7.40	41.06	56.00	-14.94	31.17	46.00	-14.83
2	A	5.353	7.43	39.84	60.00	-20.16	30.35	50.00	-19.65
3	A	13.562	7.94	44.36	60.00	-15.64	32.19	50.00	-17.81
4	A	22.817	8.82	40.41	60.00	-19.59	30.95	50.00	-19.05
5	A	23.121	8.86	40.78	60.00	-19.22	31.44	50.00	-18.56
6	A	23.124	8.86	40.83	60.00	-19.17	31.12	50.00	-18.88
7	A	23.744	8.93	39.69	60.00	-20.31	31.02	50.00	-18.98
8	A	24.269	8.99	39.15	60.00	-20.85	30.32	50.00	-19.68
9	A	24.325	8.99	39.42	60.00	-20.58	30.42	50.00	-19.58
10	A	24.443	9.00	38.95	60.00	-21.05	30.35	50.00	-19.65
11	B	0.320	6.92	33.97	59.71	-25.74	22.85	49.71	-26.86
12	B	4.525	7.40	39.85	56.00	-16.15	30.32	46.00	-15.68
13	B	4.928	7.42	42.03	56.00	-13.97	32.89	46.00	-13.11
14	B	5.349	7.45	41.31	60.00	-18.69	31.80	50.00	-18.20
15	B	23.333	9.01	41.81	60.00	-18.19	31.05	50.00	-18.95
16	B	23.334	9.01	41.73	60.00	-18.27	31.05	50.00	-18.95
17	B	23.374	9.02	41.78	60.00	-18.22	31.12	50.00	-18.88
18	B	23.732	9.06	41.76	60.00	-18.24	31.23	50.00	-18.77
19	B	23.829	9.07	41.37	60.00	-18.63	31.10	50.00	-18.90
20	B	24.189	9.12	40.46	60.00	-19.54	30.90	50.00	-19.10

Table 6-29. Line Conducted Data with 802.11a (UNII Band 2)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 64 of 73

Line-Conducted Test Data (Cont'd)

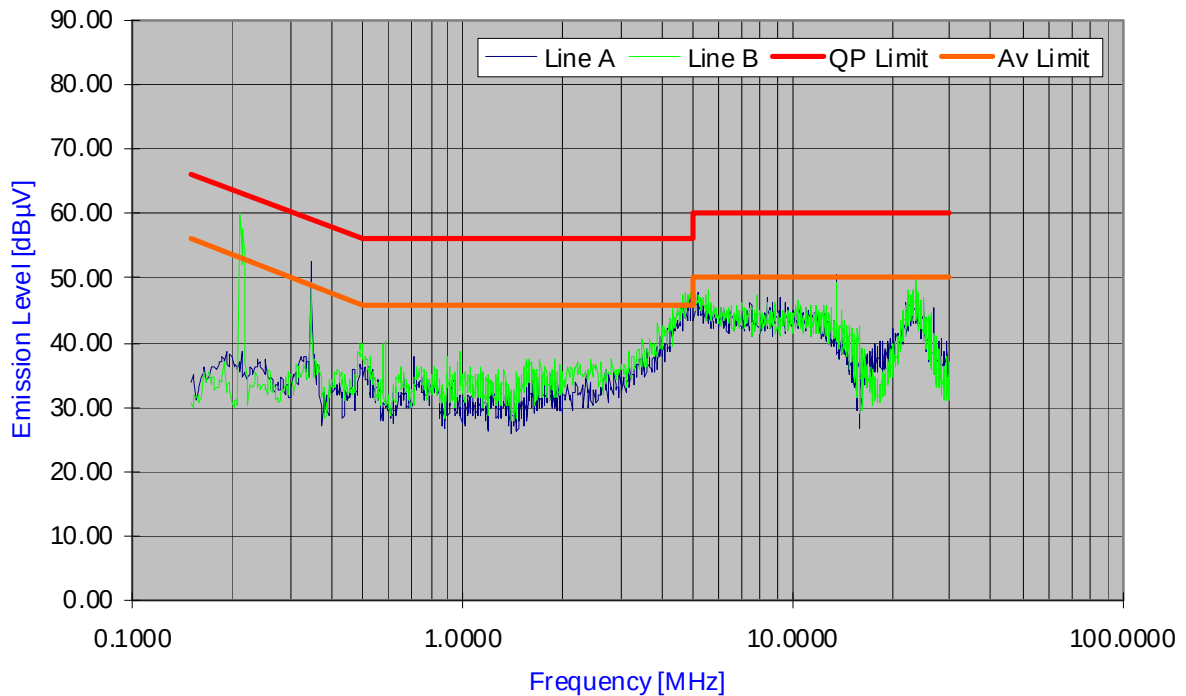
§15.207; RSS-Gen [7.2.2]

PCTEST Engineering Laboratory Inc.

Company : Samsung Electronics, Co. Ltd.
Model Number : SGH-I757
FCC ID Code : A3LSGHI757
Standard : FCC Part 15C, 15.207

Power Source : AC120V/60Hz
Tested Date : 01/06/2012
Note : Tested with 802.11a
UNII Band 3 ON

Conducted Emission Measurement



Ver.1.1 ©PCTEST 2006.08

Plot 6-57. Line Conducted Plot with 802.11a (UNII Band 3)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 65 of 73

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]

No.	Line	Frequency [MHz]	Factor [dB]	QP [dBμV]	Limit [dBμV]	Margin [dB]	Average [dBμV]	Limit [dBμV]	Margin [dB]
1	A	0.330	6.92	33.32	59.45	-26.13	21.46	49.45	-27.99
2	A	4.918	7.40	40.92	56.00	-15.08	31.16	46.00	-14.84
3	A	4.937	7.41	40.95	56.00	-15.05	31.32	46.00	-14.68
4	A	5.208	7.42	40.78	60.00	-19.22	31.01	50.00	-18.99
5	A	13.563	7.94	44.90	60.00	-15.10	33.40	50.00	-16.60
6	A	23.112	8.86	41.19	60.00	-18.81	31.66	50.00	-18.34
7	A	23.512	8.90	40.70	60.00	-19.30	31.84	50.00	-18.16
8	A	23.574	8.91	40.74	60.00	-19.26	31.69	50.00	-18.31
9	A	23.727	8.93	40.58	60.00	-19.42	31.36	50.00	-18.64
10	A	23.945	8.95	40.33	60.00	-19.67	31.66	50.00	-18.34
11	B	0.194	6.87	41.81	63.87	-22.06	27.95	53.87	-25.92
12	B	0.330	6.92	32.80	59.46	-26.66	23.32	49.46	-26.14
13	B	4.733	7.41	41.14	56.00	-14.86	31.91	46.00	-14.09
14	B	4.934	7.42	41.98	56.00	-14.02	32.87	46.00	-13.13
15	B	5.469	7.45	40.88	60.00	-19.12	31.59	50.00	-18.41
16	B	13.562	7.99	45.45	60.00	-14.55	33.30	50.00	-16.70
17	B	22.488	8.90	40.76	60.00	-19.24	30.31	50.00	-19.69
18	B	23.039	8.97	41.71	60.00	-18.29	31.19	50.00	-18.81
19	B	23.509	9.03	41.11	60.00	-18.89	31.33	50.00	-18.67
20	B	23.718	9.06	40.66	60.00	-19.34	31.28	50.00	-18.72

Table 6-30. Line Conducted Data with 802.11a (UNII Band 3)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 66 of 73

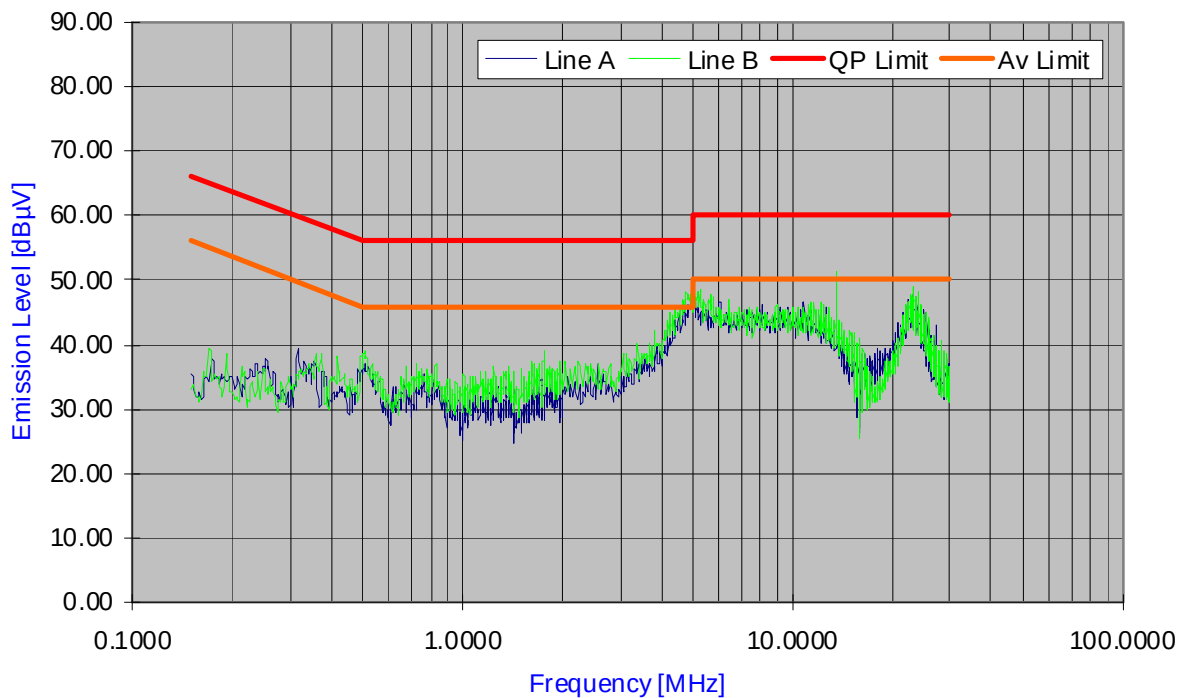
Line-Conducted Test Data (Cont'd)
§15.207; RSS-Gen [7.2.2]

PCTEST Engineering Laboratory Inc.

Company : Samsung Electronics, Co. Ltd.
Model Number : SGH-I757
FCC ID Code : A3LSGHI757
Standard : FCC Part 15C, 15.207

Power Source : AC120V/60Hz
Tested Date : 01/06/2012
Note : Tested with 802.11n
UNII Band 1 ON

Conducted Emission Measurement



Ver.1.1 ©PCTEST 2006.08

Plot 6-58. Line Conducted Plot with 802.11n (UNII Band 1)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6.5Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 67 of 73

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]

No.	Line	Frequency [MHz]	Factor [dB]	QP [dBμV]	Limit [dBμV]	Margin [dB]	Average [dBμV]	Limit [dBμV]	Margin [dB]
1	A	4.929	7.41	40.91	56.00	-15.09	31.22	46.00	-14.78
2	A	13.562	7.94	44.41	60.00	-15.59	32.54	50.00	-17.46
3	A	22.352	8.77	39.65	60.00	-20.35	30.11	50.00	-19.89
4	A	22.700	8.81	40.44	60.00	-19.56	30.67	50.00	-19.33
5	A	22.807	8.82	40.40	60.00	-19.60	31.05	50.00	-18.95
6	A	22.861	8.83	40.66	60.00	-19.34	31.26	50.00	-18.74
7	A	23.032	8.85	41.65	60.00	-18.35	31.07	50.00	-18.93
8	A	23.181	8.86	40.74	60.00	-19.26	31.20	50.00	-18.80
9	A	23.456	8.89	40.52	60.00	-19.48	31.18	50.00	-18.82
10	A	23.629	8.91	39.99	60.00	-20.01	31.16	50.00	-18.84
11	B	4.770	7.41	41.68	56.00	-14.32	32.58	46.00	-13.42
12	B	5.152	7.43	41.81	60.00	-18.19	32.60	50.00	-17.40
13	B	5.574	7.46	40.59	60.00	-19.41	31.36	50.00	-18.64
14	B	5.702	7.47	40.29	60.00	-19.71	31.24	50.00	-18.76
15	B	13.563	7.99	45.21	60.00	-14.79	34.15	50.00	-15.85
16	B	22.650	8.92	41.13	60.00	-18.87	30.17	50.00	-19.83
17	B	22.892	8.95	41.32	60.00	-18.68	30.54	50.00	-19.46
18	B	23.350	9.01	41.61	60.00	-18.39	30.76	50.00	-19.24
19	B	23.495	9.03	40.87	60.00	-19.13	31.14	50.00	-18.86
20	B	23.886	9.08	39.88	60.00	-20.12	30.61	50.00	-19.39

Table 6-31. Line Conducted Data with 802.11n (UNII Band 1)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6.5Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 68 of 73

Line-Conducted Test Data (Cont'd)

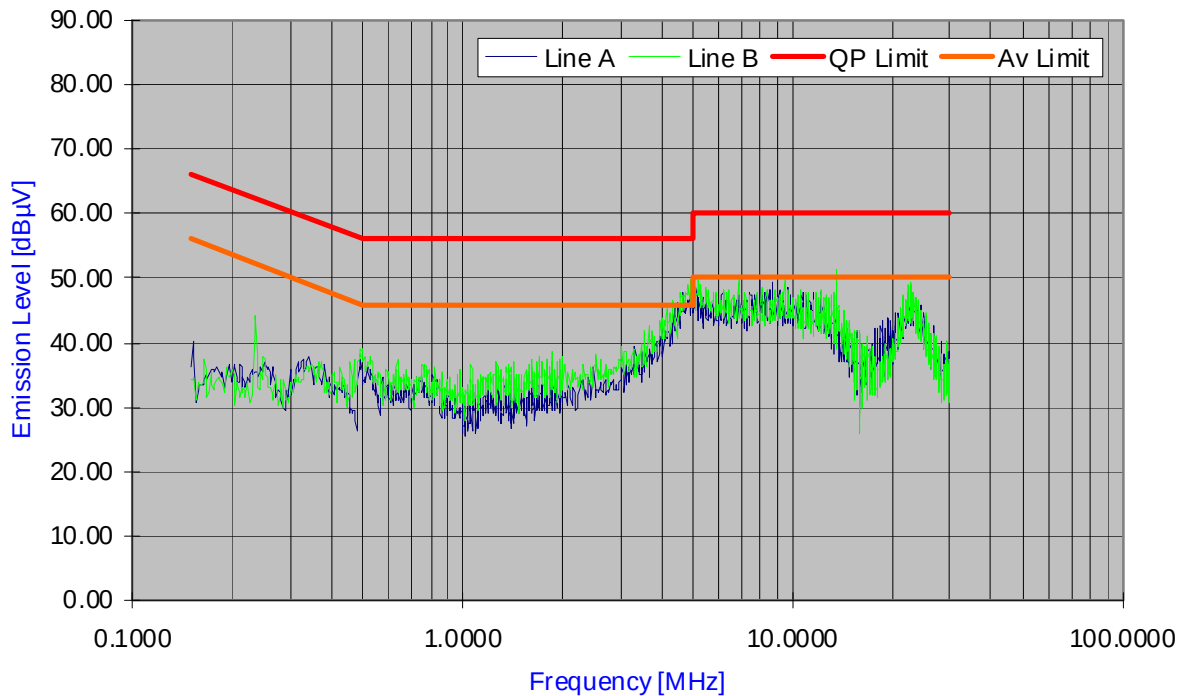
§15.207; RSS-Gen [7.2.2]

PCTEST Engineering Laboratory Inc.

Company : Samsung Electronics, Co. Ltd.
Model Number : SGH-I757
FCC ID Code : A3LSGHI757
Standard : FCC Part 15C, 15.207

Power Source : AC120V/60Hz
Tested Date : 01/06/2012
Note : Tested with 802.11n
UNII Band 2 ON

Conducted Emission Measurement



Ver.1.1 ©PCTEST 2006.08

Plot 6-59. Line Conducted Plot with 802.11n (UNII Band 2)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6.5Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 69 of 73

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]

No.	Line	Frequency [MHz]	Factor [dB]	QP [dBμV]	Limit [dBμV]	Margin [dB]	Average [dBμV]	Limit [dBμV]	Margin [dB]
1	A	4.466	7.38	39.07	56.00	-16.93	28.64	46.00	-17.36
2	A	4.683	7.39	40.87	56.00	-15.13	30.19	46.00	-15.81
3	A	5.130	7.42	41.60	60.00	-18.40	31.70	50.00	-18.30
4	A	7.899	7.54	41.06	60.00	-18.94	30.54	50.00	-19.46
5	A	8.480	7.56	41.42	60.00	-18.58	30.68	50.00	-19.32
6	A	8.663	7.56	41.14	60.00	-18.86	30.78	50.00	-19.22
7	A	9.724	7.60	41.40	60.00	-18.60	30.70	50.00	-19.30
8	A	11.568	7.73	40.11	60.00	-19.89	29.96	50.00	-20.04
9	A	13.563	7.94	44.57	60.00	-15.43	32.21	50.00	-17.79
10	A	22.969	8.84	40.95	60.00	-19.05	31.38	50.00	-18.62
11	B	4.212	7.37	38.31	56.00	-17.69	27.85	46.00	-18.15
12	B	4.330	7.38	39.09	56.00	-16.91	28.71	46.00	-17.29
13	B	4.440	7.39	40.09	56.00	-15.91	29.70	46.00	-16.30
14	B	4.997	7.43	43.38	56.00	-12.62	33.21	46.00	-12.79
15	B	6.774	7.52	41.75	60.00	-18.25	31.53	50.00	-18.47
16	B	9.472	7.62	41.95	60.00	-18.05	31.19	50.00	-18.81
17	B	13.563	7.99	45.50	60.00	-14.50	34.64	50.00	-15.36
18	B	22.538	8.91	41.77	60.00	-18.23	30.84	50.00	-19.16
19	B	22.824	8.94	41.55	60.00	-18.45	31.19	50.00	-18.81
20	B	22.871	8.95	41.32	60.00	-18.68	31.27	50.00	-18.73

Table 6-32. Line Conducted Data with 802.11n (UNII Band 2)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6.5Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 70 of 73

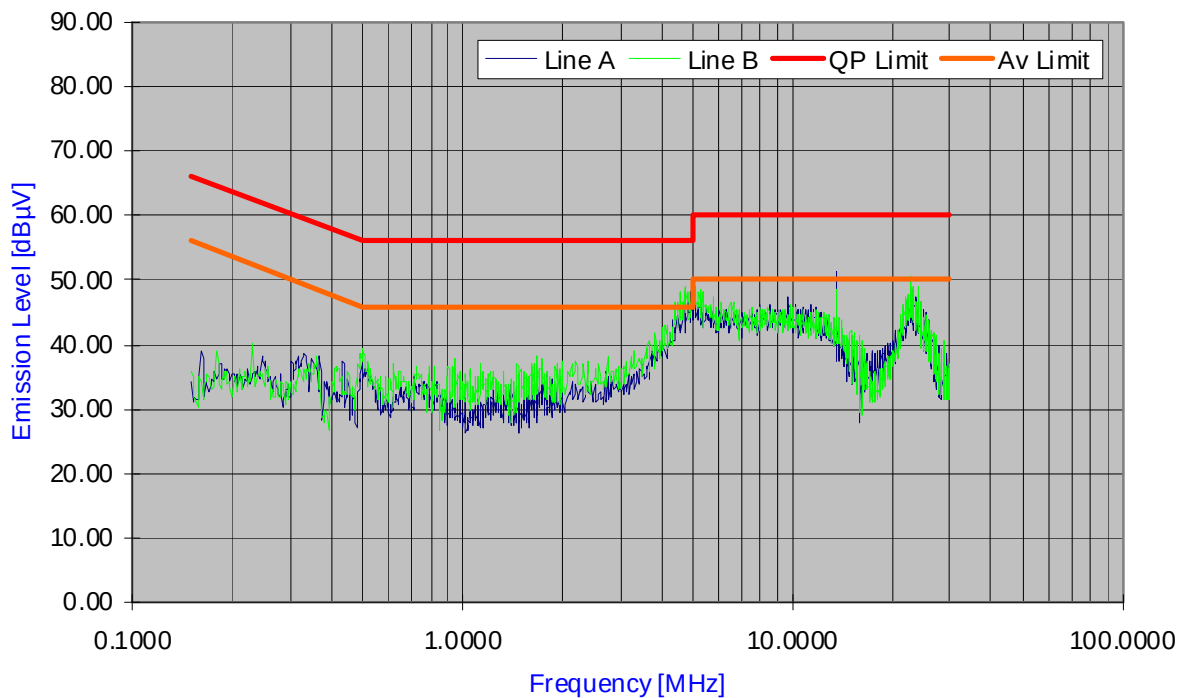
Line-Conducted Test Data (Cont'd)
§15.207; RSS-Gen [7.2.2]

PCTEST Engineering Laboratory Inc.

Company : Samsung Electronics, Co. Ltd.
Model Number : SGH-I757
FCC ID Code : A3LSGHI757
Standard : FCC Part 15C, 15.207

Power Source : AC120V/60Hz
Tested Date : 01/06/2012
Note : Tested with 802.11n
UNII Band 3 ON

Conducted Emission Measurement



Ver.1.1 ©PCTEST 2006.08

Plot 6-60. Line Conducted Plot with 802.11n (UNII Band 3)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6.5Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

FCC ID: A3LSGHI757	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 71 of 73

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]

No.	Line	Frequency [MHz]	Factor [dB]	QP [dBμV]	Limit [dBμV]	Margin [dB]	Average [dBμV]	Limit [dBμV]	Margin [dB]
1	A	4.364	7.37	37.10	56.00	-18.90	27.64	46.00	-18.36
2	A	4.805	7.40	40.62	56.00	-15.38	30.40	46.00	-15.60
3	A	4.914	7.40	41.19	56.00	-14.81	31.40	46.00	-14.60
4	A	4.949	7.41	41.09	56.00	-14.91	31.21	46.00	-14.79
5	A	9.629	7.59	39.40	60.00	-20.60	29.99	50.00	-20.01
6	A	13.562	7.94	44.40	60.00	-15.60	32.60	50.00	-17.40
7	A	22.577	8.79	40.93	60.00	-19.07	31.23	50.00	-18.77
8	A	22.783	8.82	41.16	60.00	-18.84	31.52	50.00	-18.48
9	A	23.066	8.85	41.03	60.00	-18.97	31.41	50.00	-18.59
10	A	23.729	8.93	39.96	60.00	-20.04	31.58	50.00	-18.42
11	B	4.481	7.39	38.99	56.00	-17.01	29.80	46.00	-16.20
12	B	4.557	7.40	39.95	56.00	-16.05	30.51	46.00	-15.49
13	B	4.709	7.41	41.40	56.00	-14.60	32.40	46.00	-13.60
14	B	4.942	7.42	42.30	56.00	-13.70	32.93	46.00	-13.07
15	B	5.154	7.43	41.90	60.00	-18.10	32.56	50.00	-17.44
16	B	5.189	7.44	41.62	60.00	-18.38	32.41	50.00	-17.59
17	B	13.562	7.99	44.92	60.00	-15.08	34.12	50.00	-15.88
18	B	22.835	8.95	41.49	60.00	-18.51	31.15	50.00	-18.85
19	B	23.121	8.98	41.01	60.00	-18.99	31.16	50.00	-18.84
20	B	23.873	9.08	39.62	60.00	-20.38	30.85	50.00	-19.15

Table 6-33. Line Conducted Data with 802.11n (UNII Band 3)

Notes:

1. All Modes of operation were investigated and the worst-case emissions are reported using 6.5Mbps.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Line A = Phase; Line B = Neutral
4. Traces shown in plot made using a peak detector.
5. Deviations to the Specifications: None.

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7.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSGHI757** is in compliance with Part 15E of the FCC Rules and RSS-210 of the Industry Canada Rules..

FCC ID: A3LSGHI757		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1201060039.A3L	Test Dates: 01/06/12 - 01/16/12	EUT Type: Portable Handset		Page 73 of 73