

6.5 Peak Excursion Ratio – 802.11a/n §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. Method SA-1, as defined in KDB 789033, was used to generate the average signal trace and the procedure outlined in section F) was used to generate the peak signal trace. The peak and average traces are then used to determine the peak excursion. **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	7.038	13.0	-5.96
	5200	40	a	6	7.186	13.0	-5.81
	5240	48	a	6	7.094	13.0	-5.91
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	7.516	13.0	-5.48
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	7.186	13.0	-5.81
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	8.137	13.0	-4.86
	5190	38	n (40MHz)	13.5/15 (MCS0)	6.195	13.0	-6.81
	5230	46	n (40MHz)	13.5/15 (MCS0)	7.262	13.0	-5.74
Band II	5260	52	a	6	8.267	13.0	-4.73
	5280	56	a	6	7.036	13.0	-5.96
	5320	64	a	6	7.911	13.0	-5.09
	5260	52	n (20MHz)	6.5/7.2 (MCS0)	7.727	13.0	-5.27
	5280	56	n (20MHz)	6.5/7.2 (MCS0)	8.507	13.0	-4.49
	5320	64	n (20MHz)	6.5/7.2 (MCS0)	7.384	13.0	-5.62
	5270	50	n (40MHz)	13.5/15 (MCS0)	7.395	13.0	-5.61
	5310	62	n (40MHz)	13.5/15 (MCS0)	7.722	13.0	-5.28
Band III	5500	100	a	6	7.746	13.0	-5.25
	5580	116	a	6	7.304	13.0	-5.70
	5700	140	a	6	7.351	13.0	-5.65
	5500	100	n (20MHz)	6.5/7.2 (MCS0)	7.466	13.0	-5.53
	5580	116	n (20MHz)	6.5/7.2 (MCS0)	8.589	13.0	-4.41
	5700	140	n (20MHz)	6.5/7.2 (MCS0)	7.921	13.0	-5.08
	5510	102	n (40MHz)	13.5/15 (MCS0)	6.390	13.0	-6.61
	5590	118	n (40MHz)	13.5/15 (MCS0)	6.912	13.0	-6.09
	5670	134	n (40MHz)	13.5/15 (MCS0)	7.067	13.0	-5.93

Table 6-7. Conducted Peak Excursion Ratio Measurements

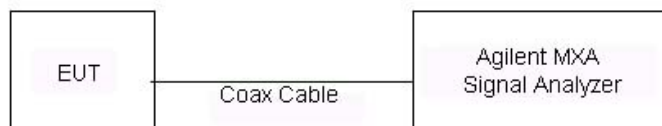
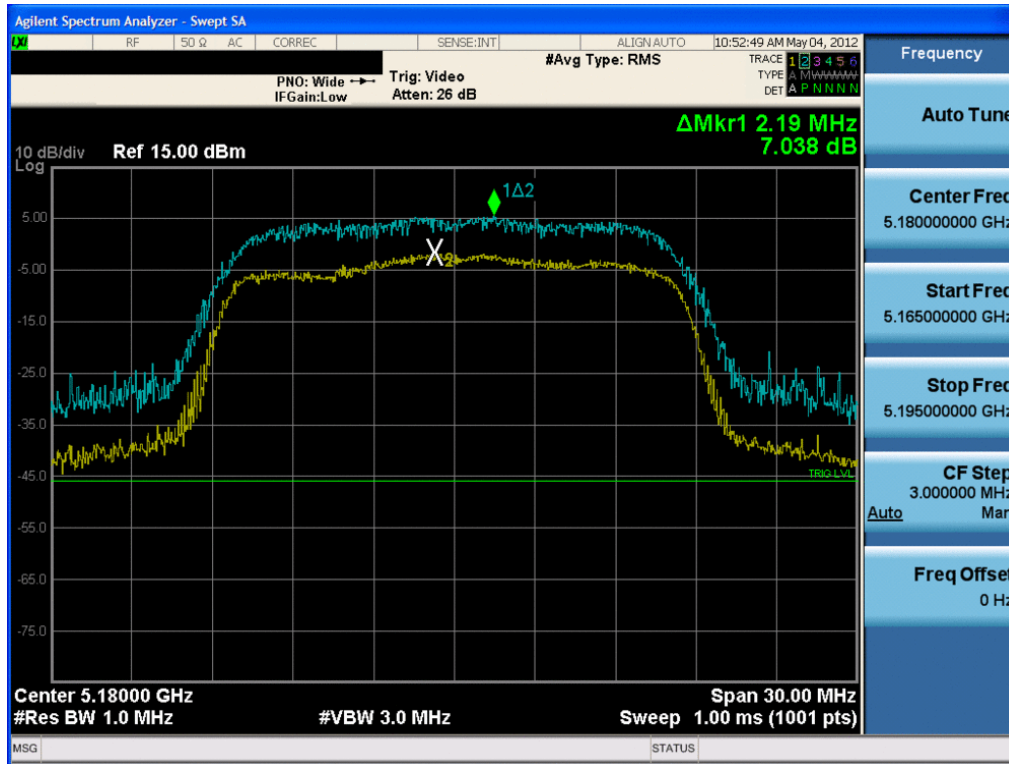
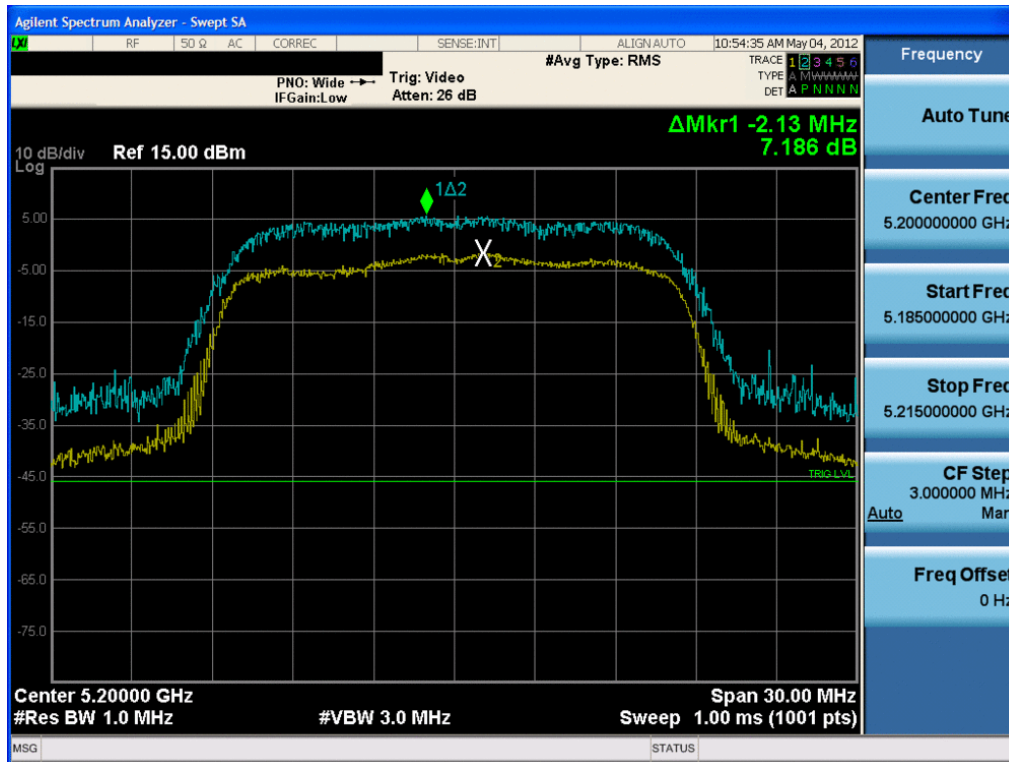


Figure 6-4. Test Instrument & Measurement Setup

FCC ID: A3LGTI9308		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 41 of 78

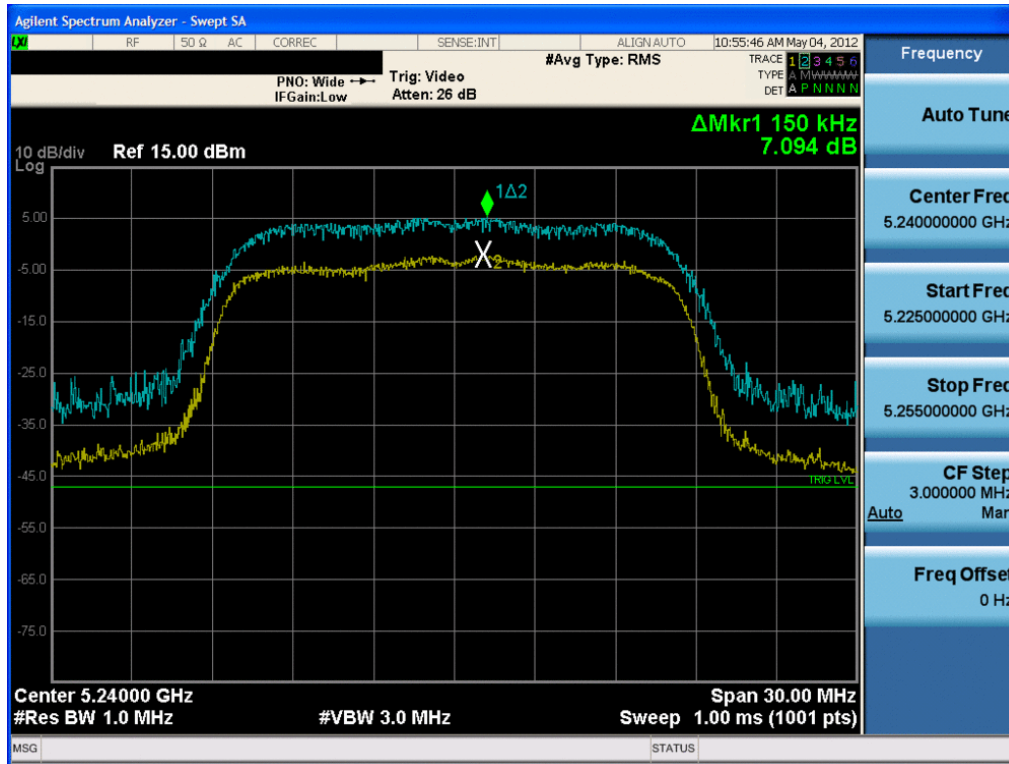


Plot 6-51. Peak Excursion Ratio Plot (802.11a (UNII Band 1) – Ch. 36)

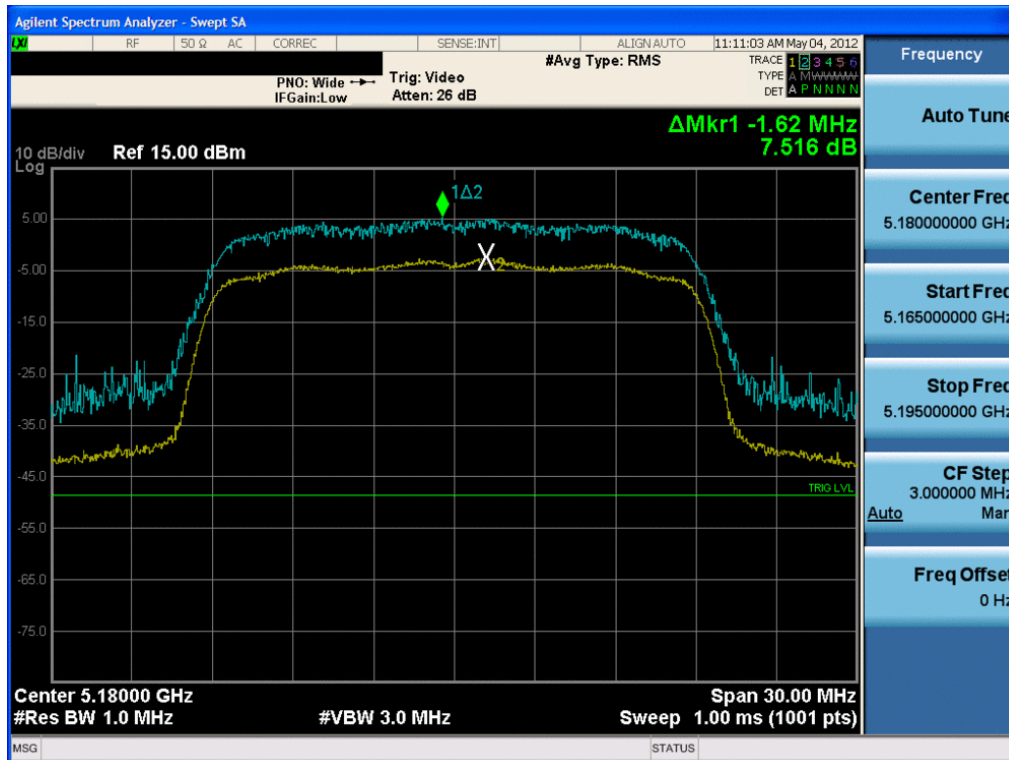


Plot 6-52. Peak Excursion Ratio Plot (802.11a (UNII Band 1) – Ch. 40)

FCC ID: A3LGTI9308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 42 of 78

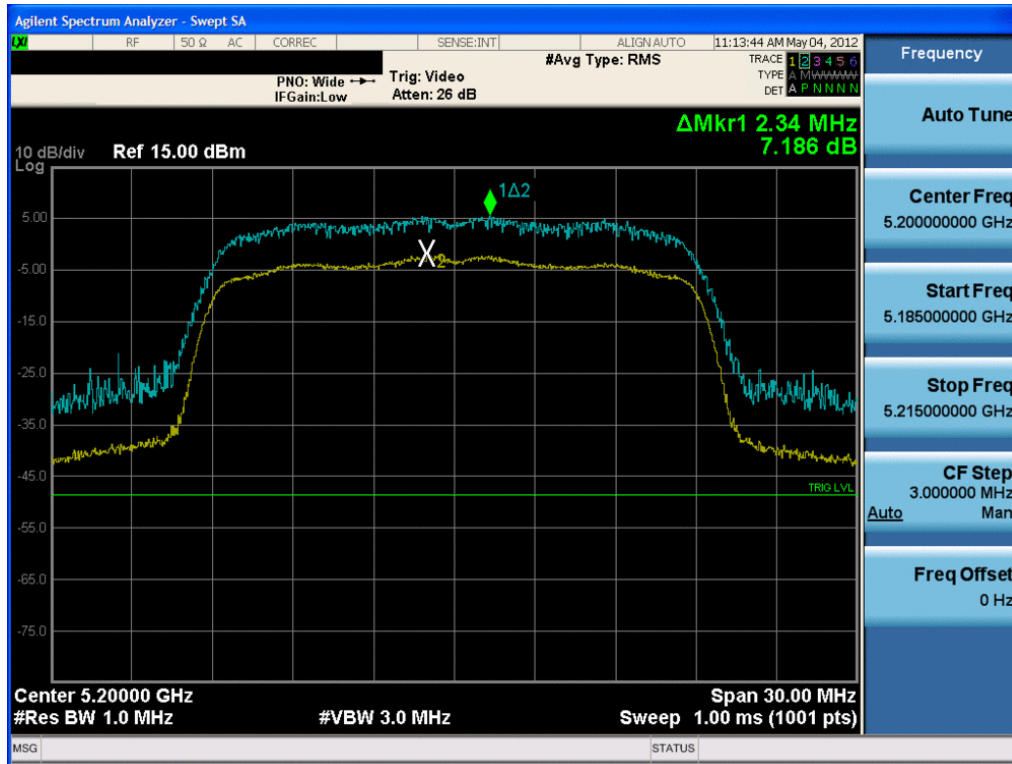


Plot 6-53. Peak Excursion Ratio Plot (802.11a (UNII Band 1) – Ch. 48)

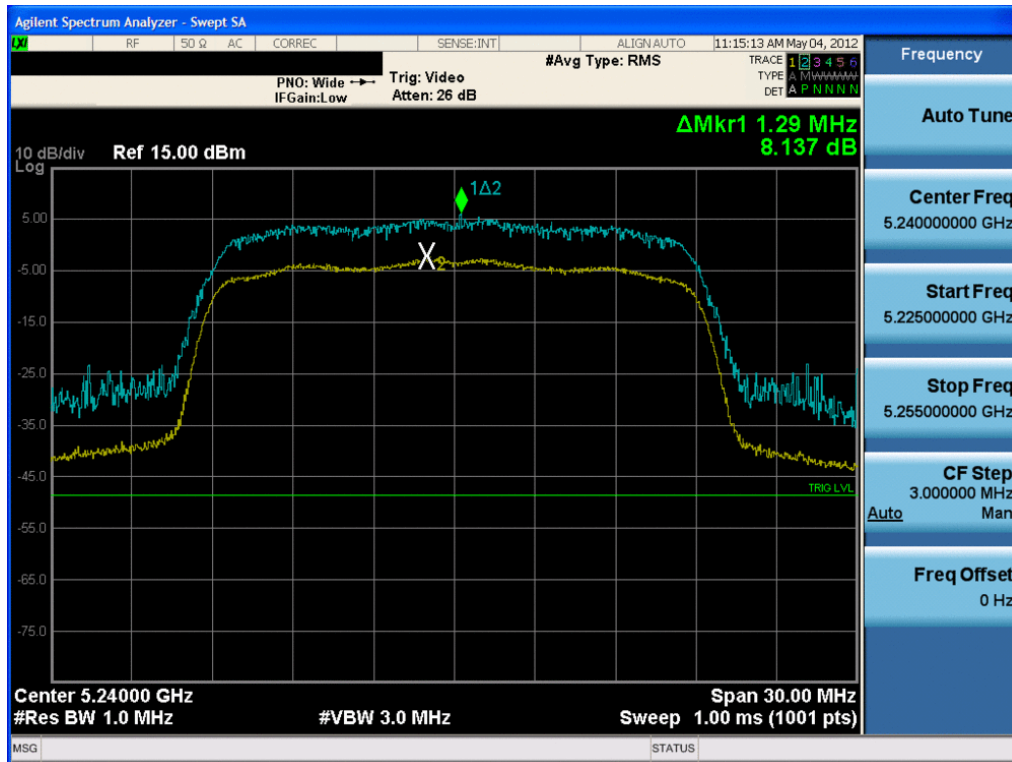


Plot 6-54. Peak Excursion Ratio Plot (802.11n – 20MHz BW (UNII Band 1) – Ch. 36)

FCC ID: A3LGT19308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 43 of 78

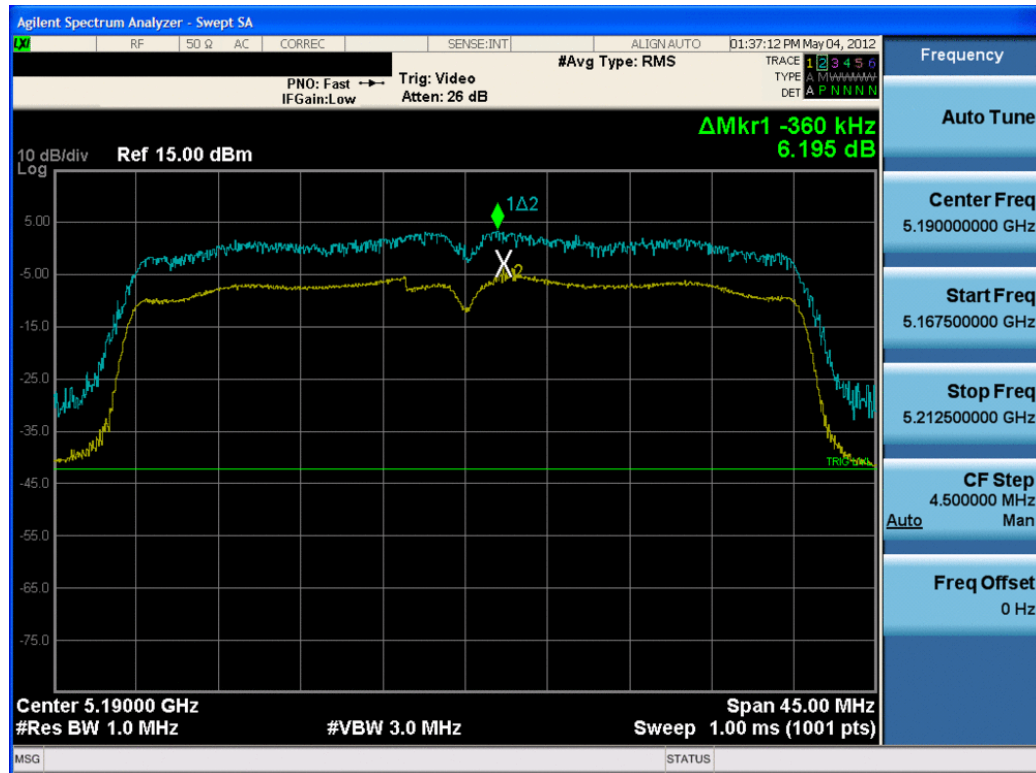


Plot 6-55. Peak Excursion Ratio Plot (802.11n – 20MHz BW (UNII Band 1) – Ch. 40)

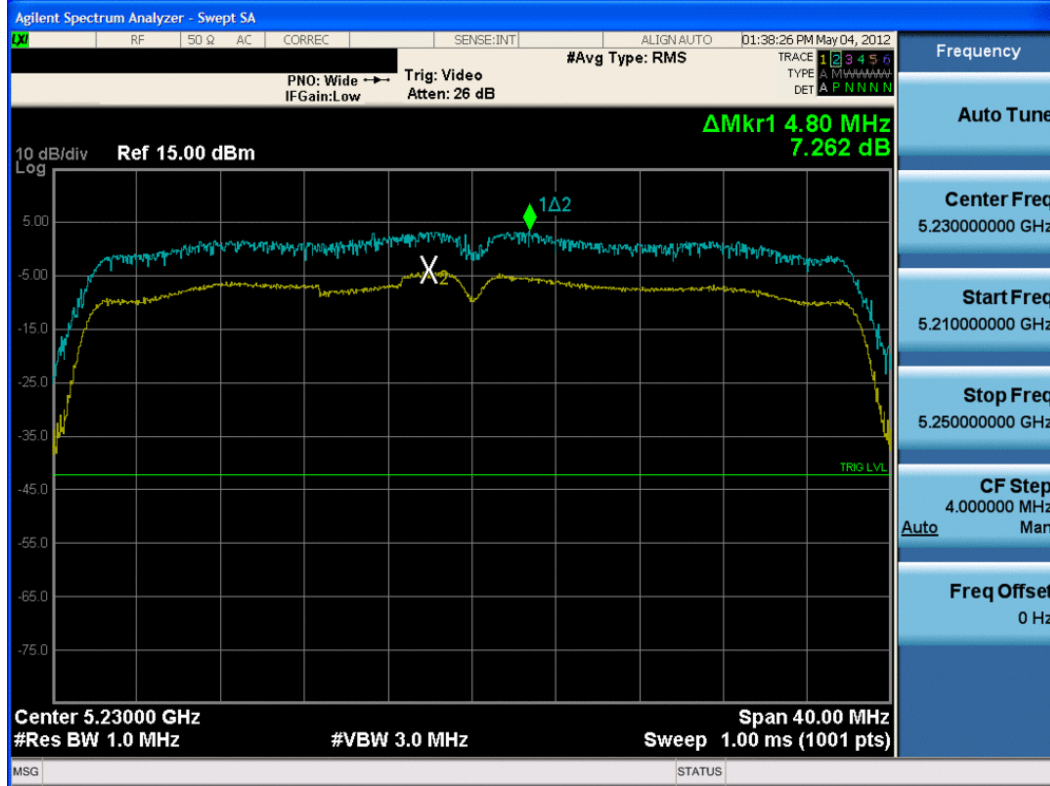


Plot 6-56. Peak Excursion Ratio Plot (802.11n – 20MHz BW (UNII Band 1) – Ch. 48)

FCC ID: A3LGT19308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 44 of 78

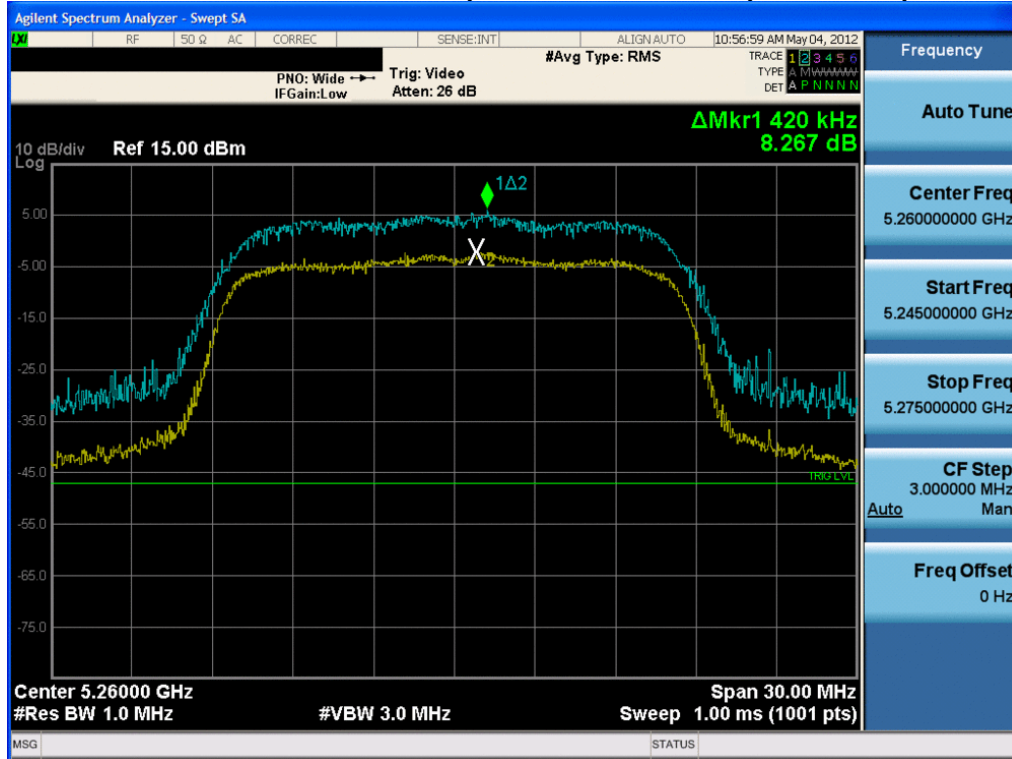


Plot 6-57. Peak Excursion Ratio Plot (802.11n – 40MHz BW (UNII Band 1) – Ch. 38)

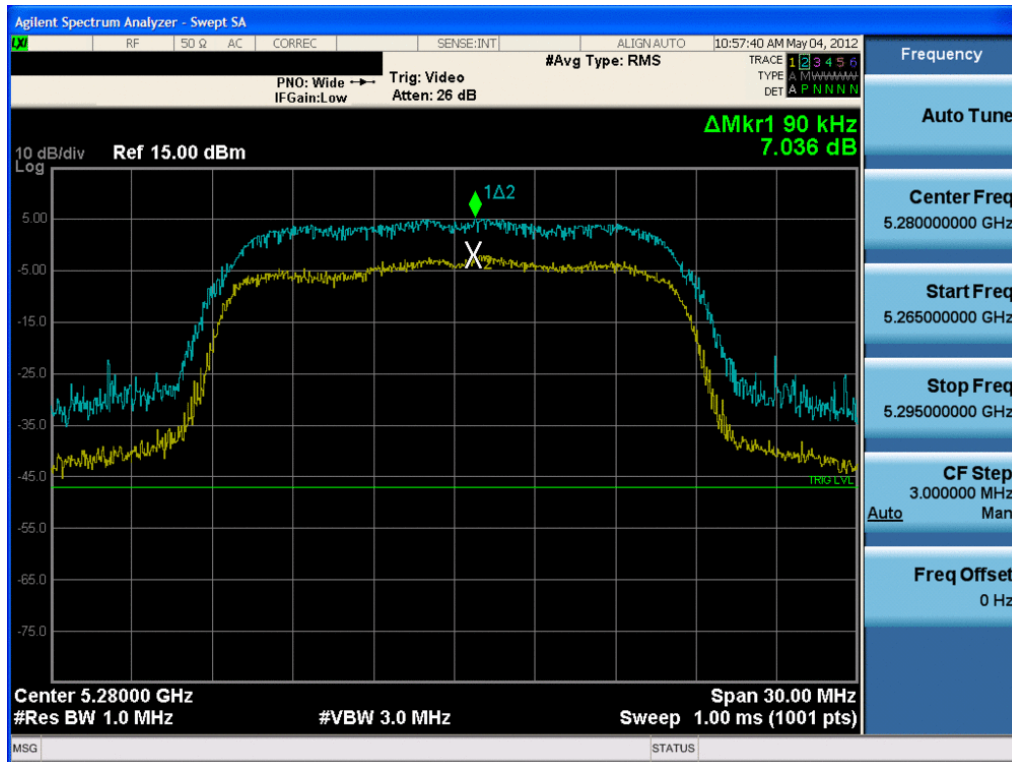


FCC ID: A3LGT19308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 45 of 78

Plot 6-58. Peak Excursion Ratio Plot (802.11n – 40MHz BW (UNII Band 1) – Ch. 46)

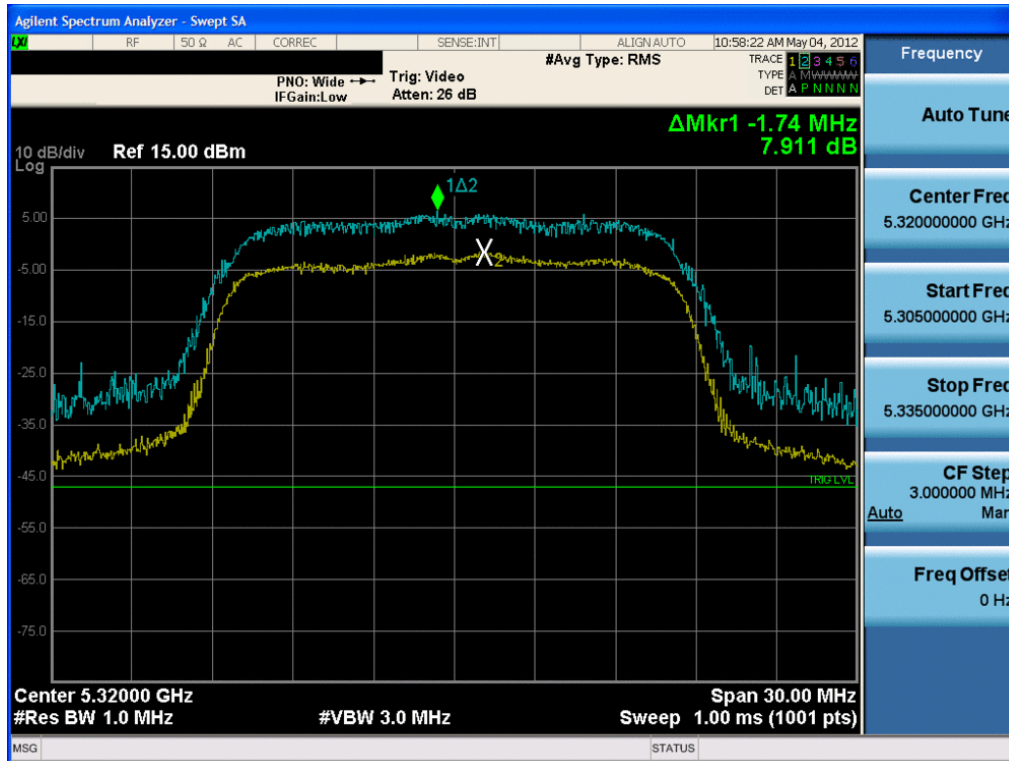


Plot 6-59. Peak Excursion Ratio Plot (802.11a (UNII Band 2) – Ch. 52)

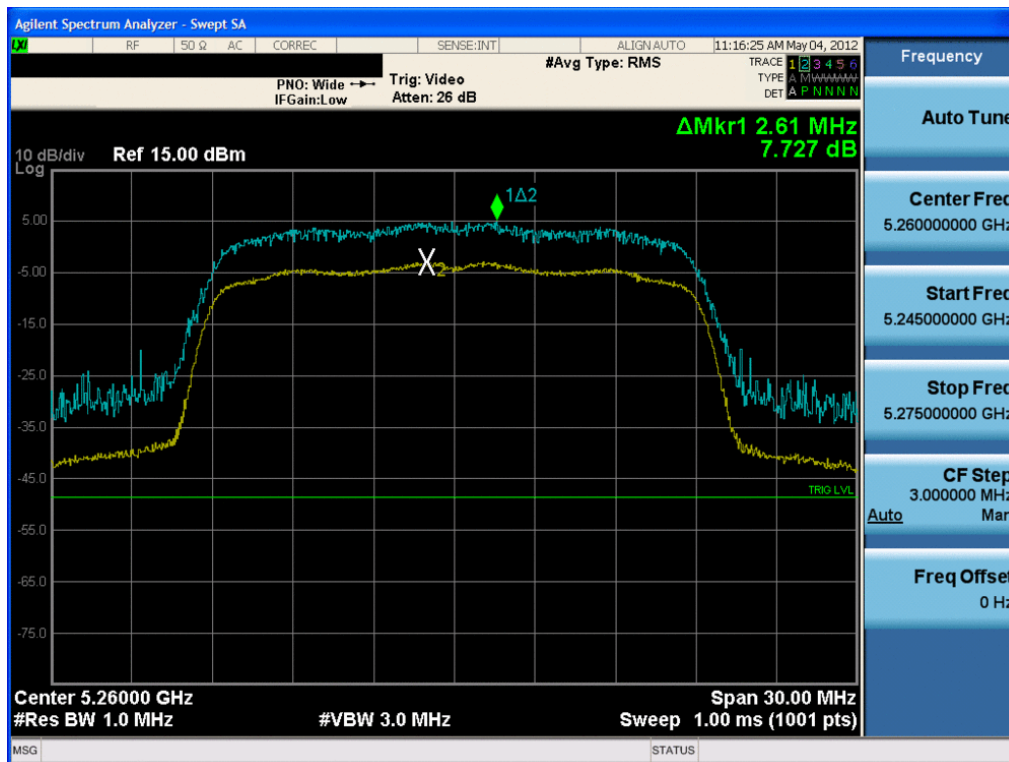


Plot 6-60. Peak Excursion Ratio Plot (802.11a (UNII Band 2) – Ch. 56)

FCC ID: A3LGT19308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 46 of 78

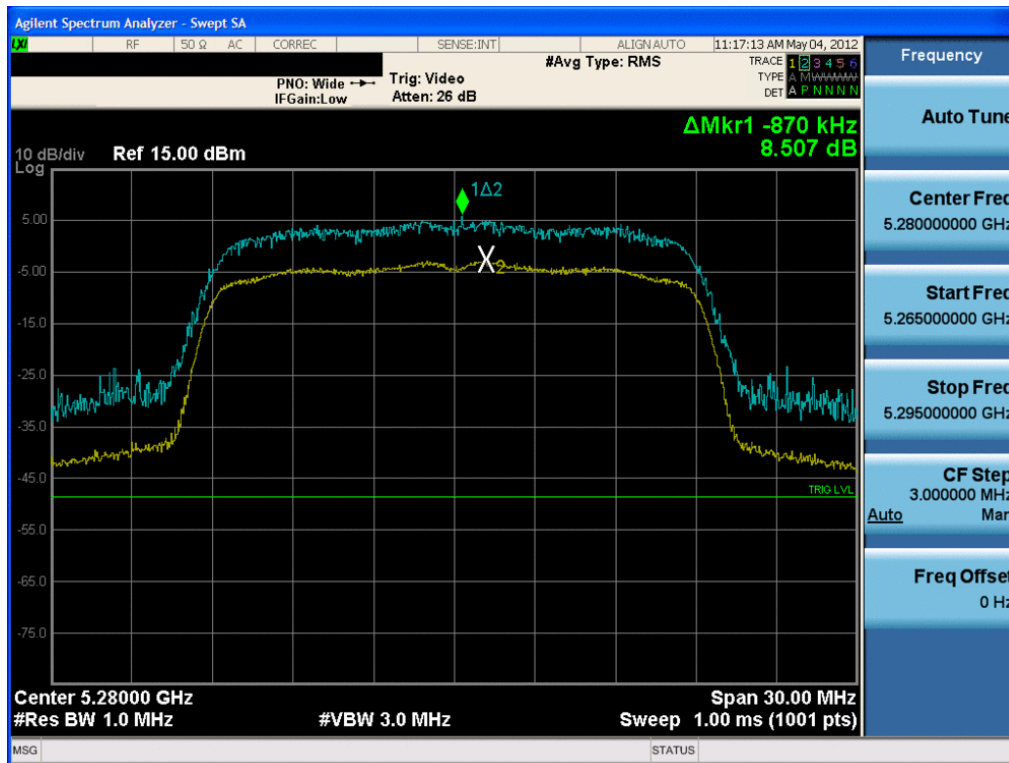


Plot 6-61. Peak Excursion Ratio Plot (802.11a (UNII Band 2) – Ch. 64)

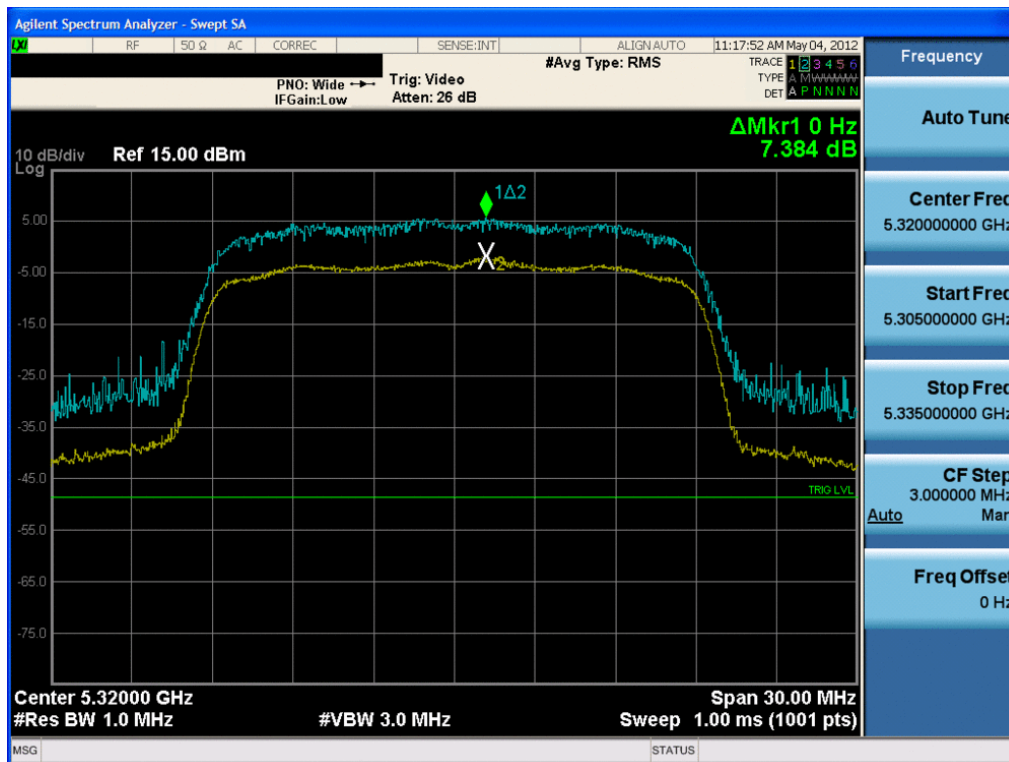


Plot 6-62. Peak Excursion Ratio Plot (802.11n – 20MHz BW (UNII Band 2) – Ch. 52)

FCC ID: A3LGTI9308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 47 of 78

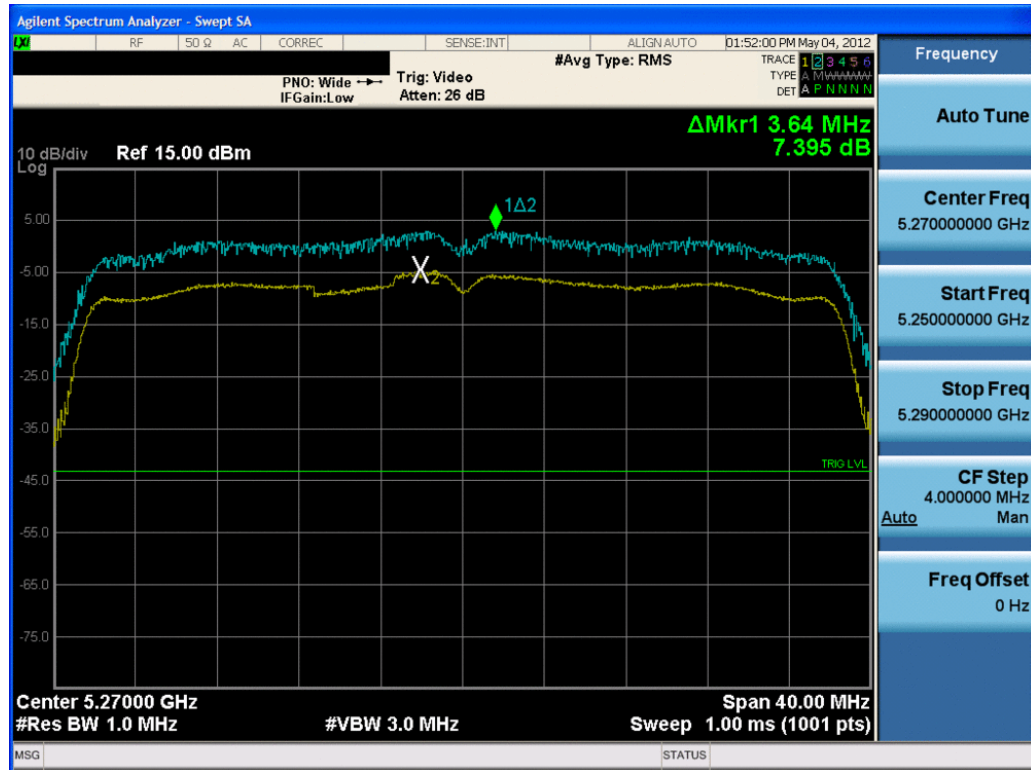


Plot 6-63. Peak Excursion Ratio Plot (802.11n – 20MHz BW (UNII Band 2) – Ch. 56)

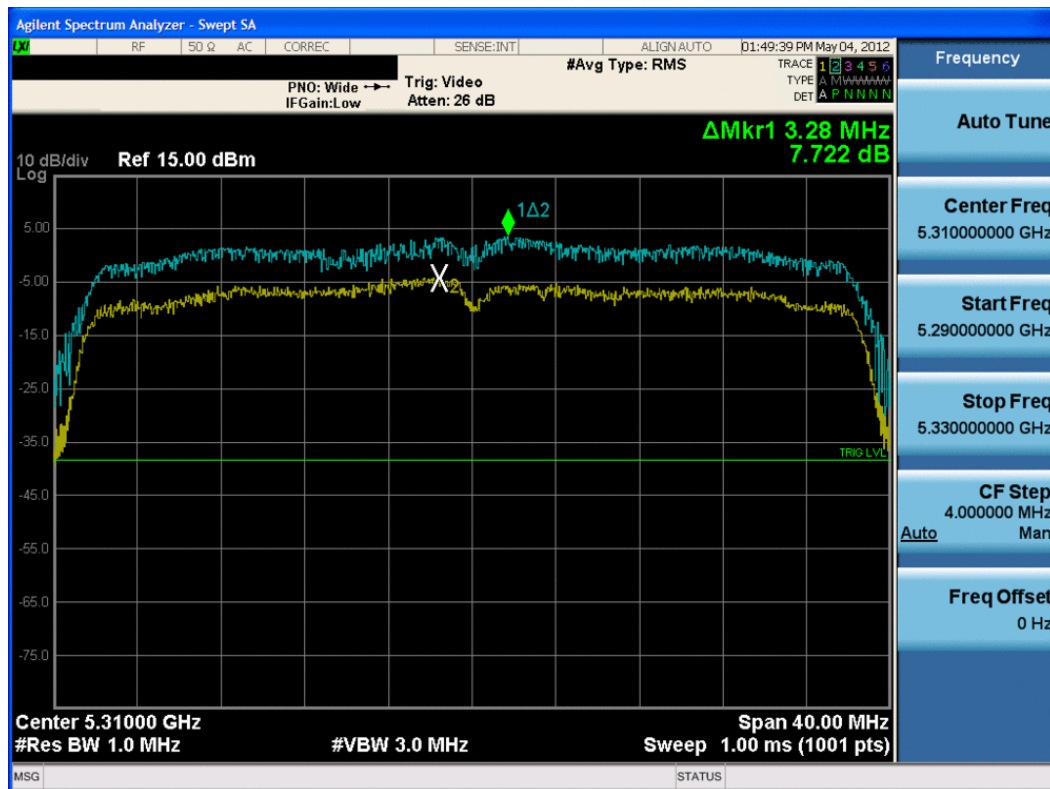


Plot 6-64. Peak Excursion Ratio Plot (802.11n – 20MHz BW (UNII Band 2) – Ch. 64)

FCC ID: A3LGT9308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 48 of 78

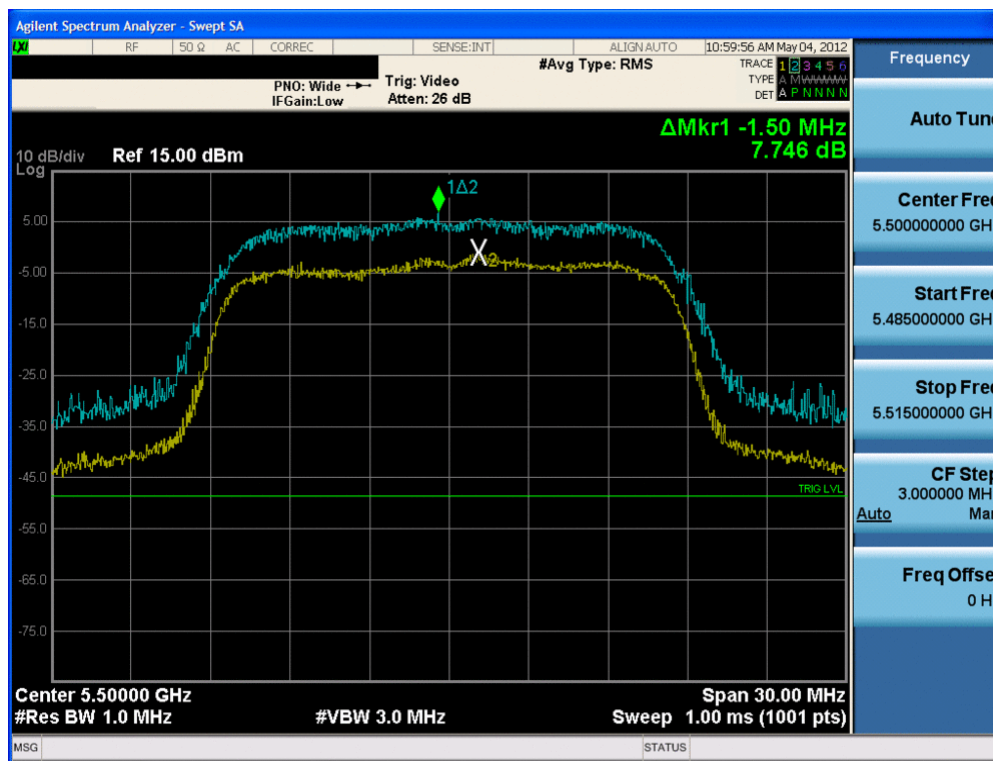


Plot 6-65. Peak Excursion Ratio Plot (802.11n – 40MHz BW (UNII Band 2) – Ch. 54)

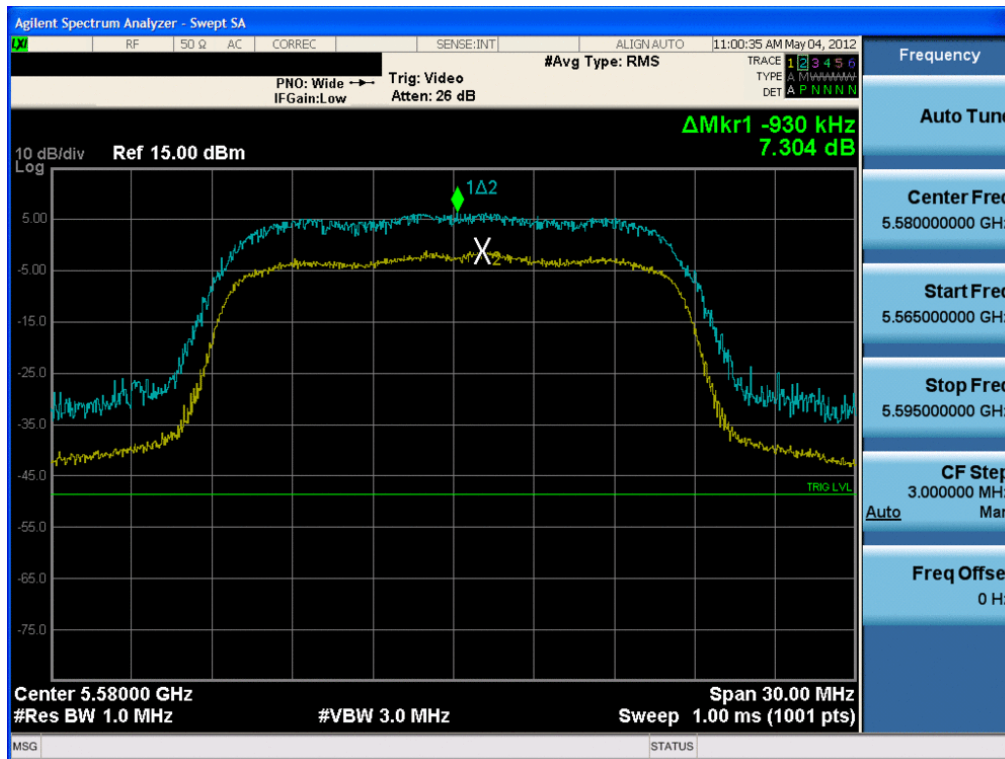


Plot 6-66. Peak Excursion Ratio Plot (802.11n – 40MHz BW (UNII Band 2) – Ch. 62)

FCC ID: A3LGT9308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 49 of 78

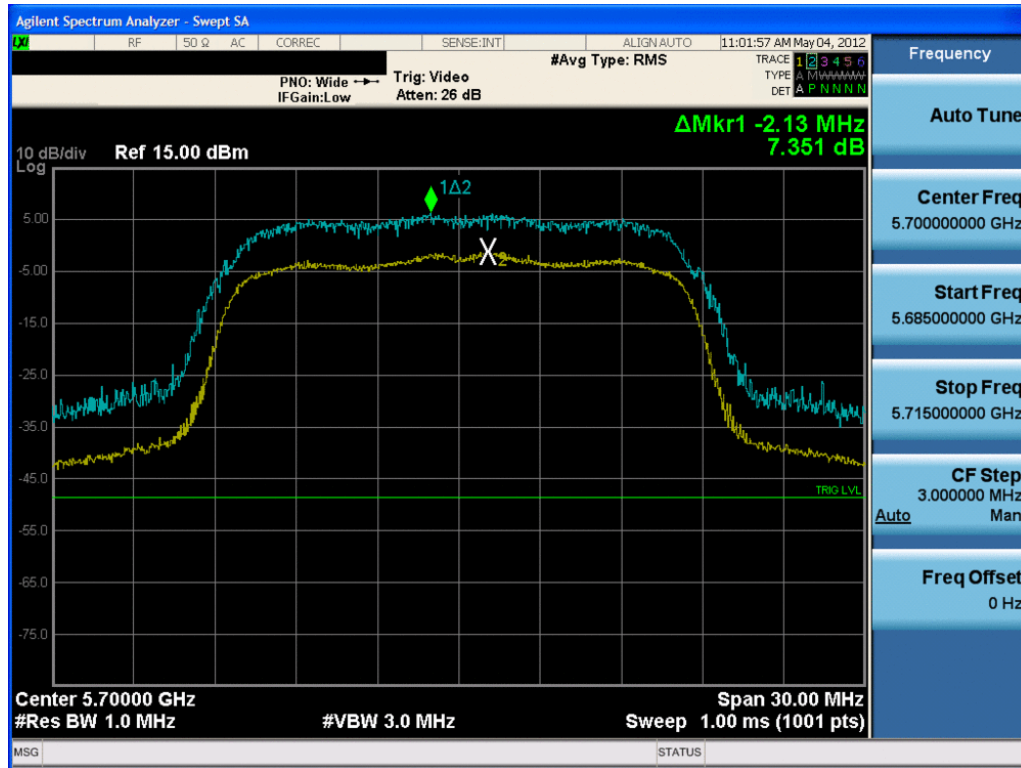


Plot 6-67. Peak Excursion Ratio Plot (802.11a (UNII Band 3) - Ch. 100)

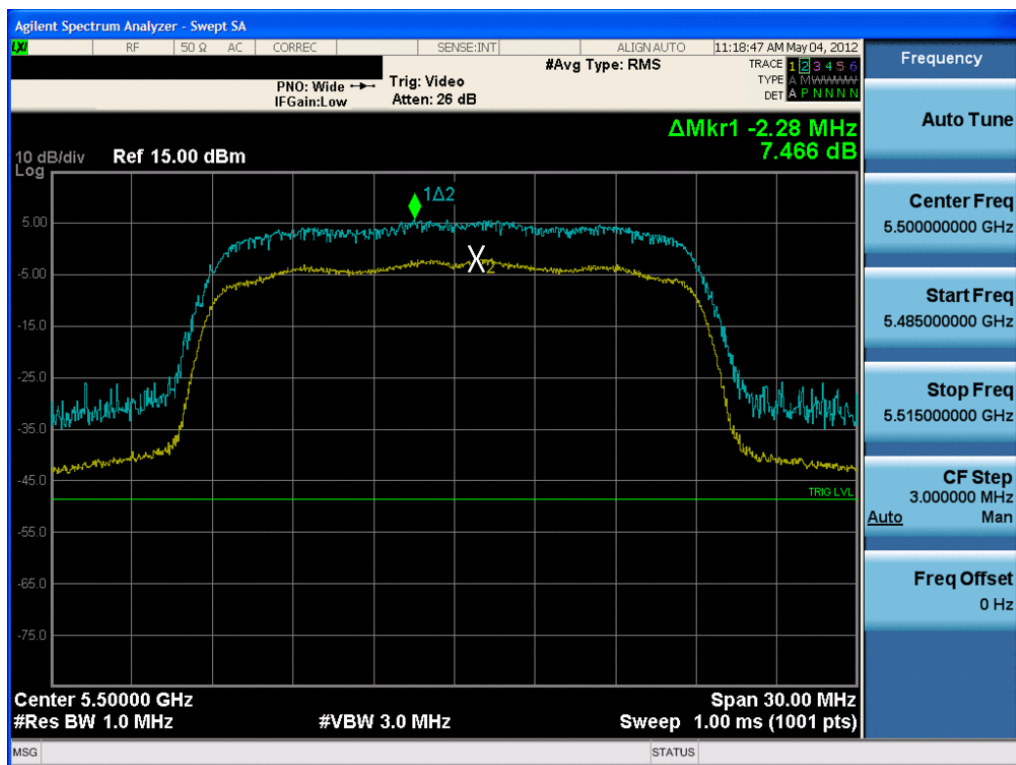


Plot 6-68. Peak Excursion Ratio Plot (802.11a (UNII Band 3) - Ch. 116)

FCC ID: A3LGT19308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 50 of 78

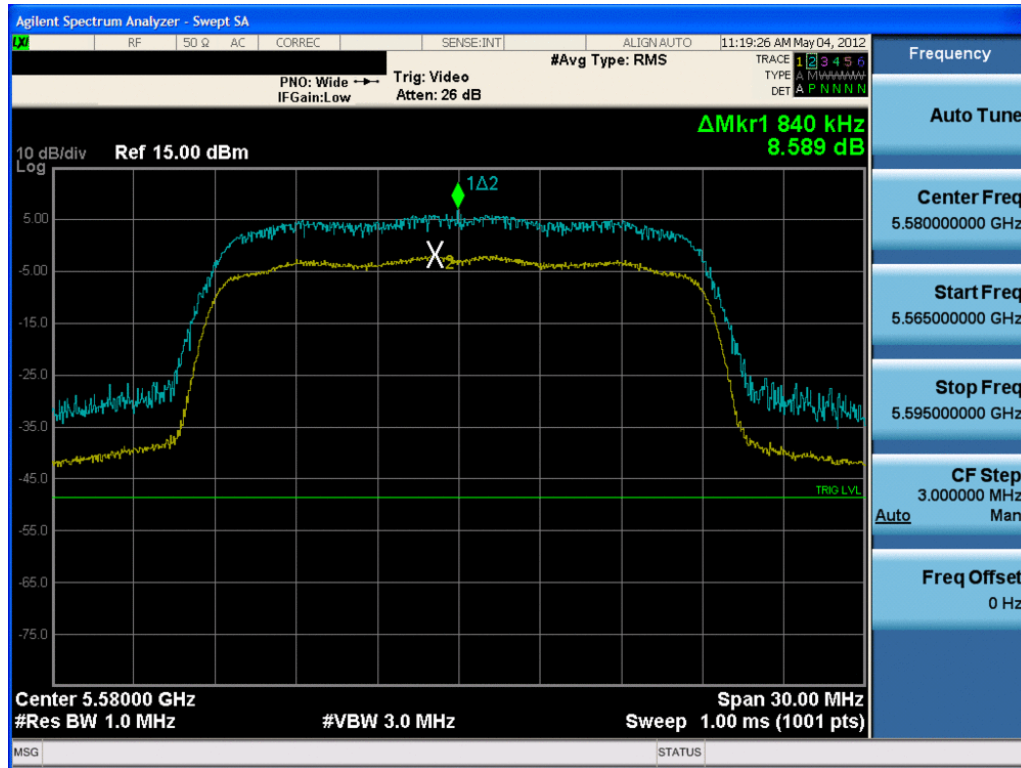


Plot 6-69. Peak Excursion Ratio Plot (802.11a (UNII Band 3) – Ch. 140)

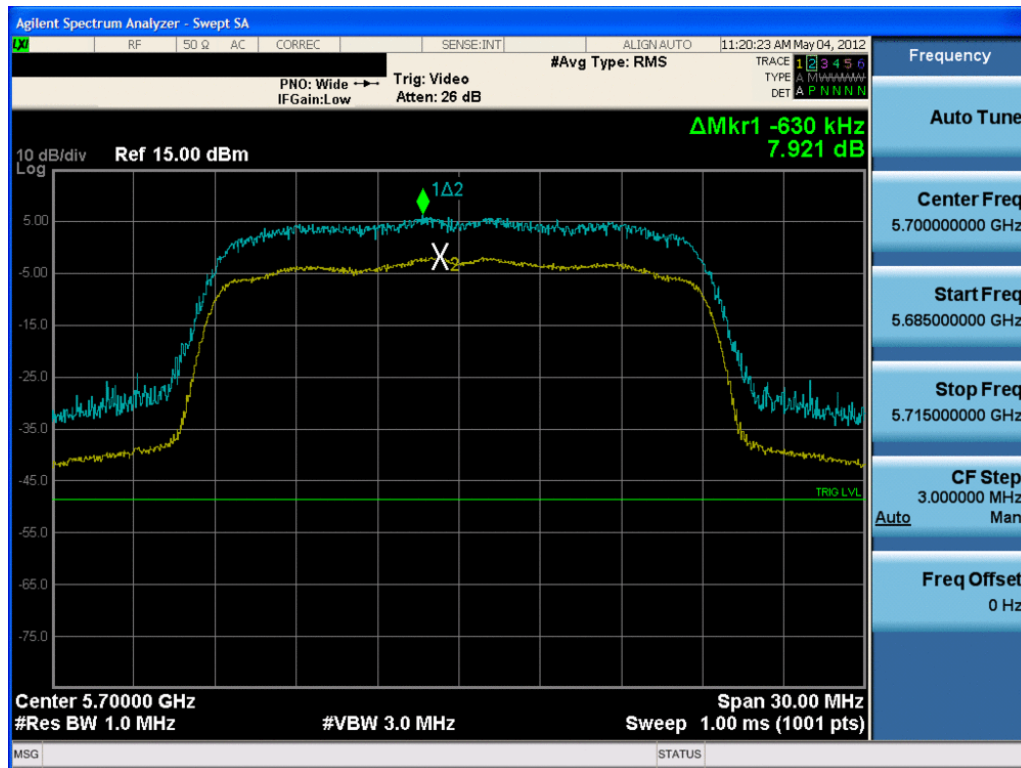


Plot 6-70. Peak Excursion Ratio Plot (802.11n - 20MHz BW (UNII Band 3) – Ch. 100)

FCC ID: A3LGT19308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 51 of 78

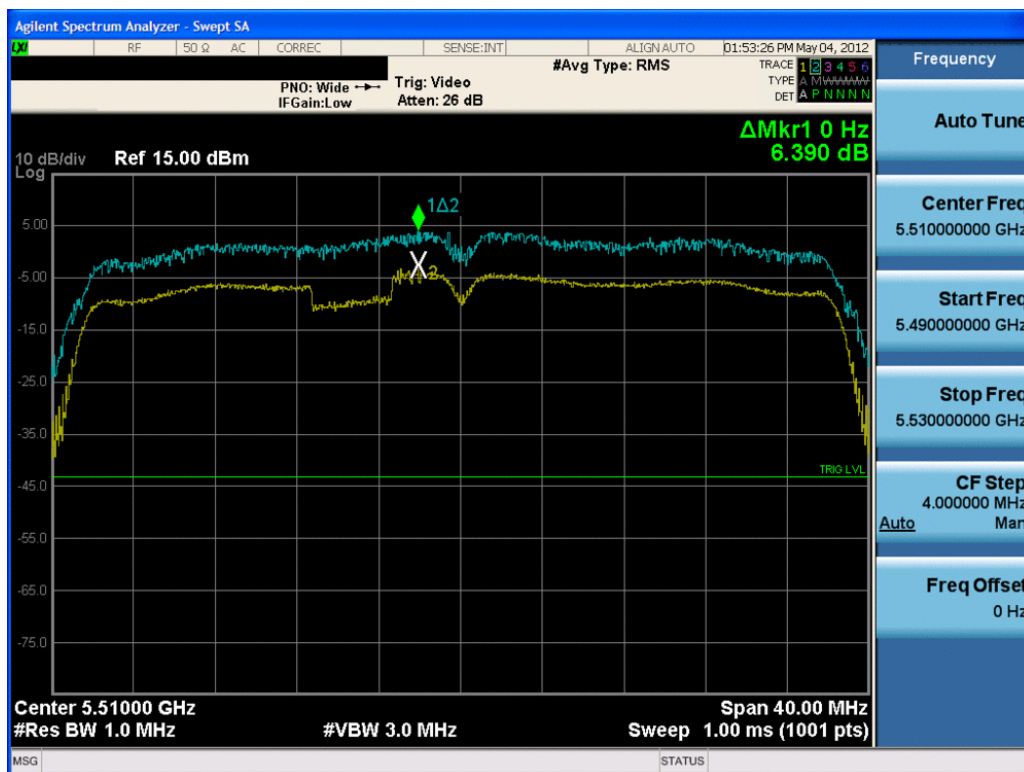


Plot 6-71. Peak Excursion Ratio Plot (802.11n – 20MHz BW (UNII Band 3) – Ch. 116)

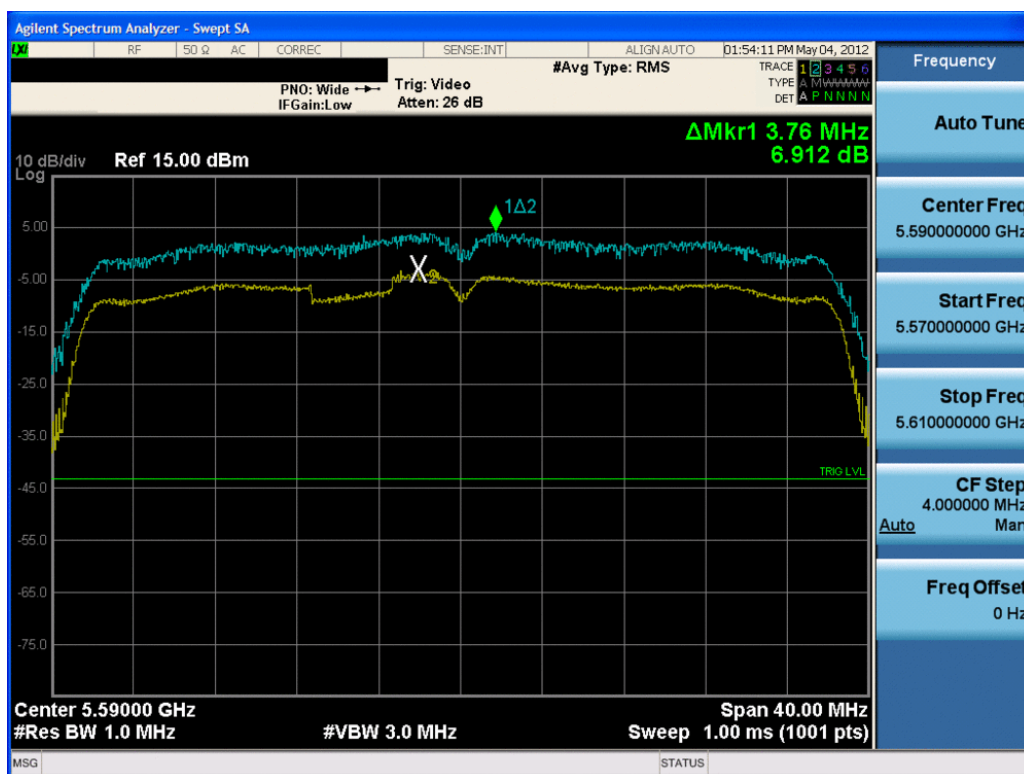


Plot 6-72. Peak Excursion Ratio Plot (802.11n – 20MHz BW (UNII Band 3) – Ch. 140)

FCC ID: A3LGT19308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 52 of 78

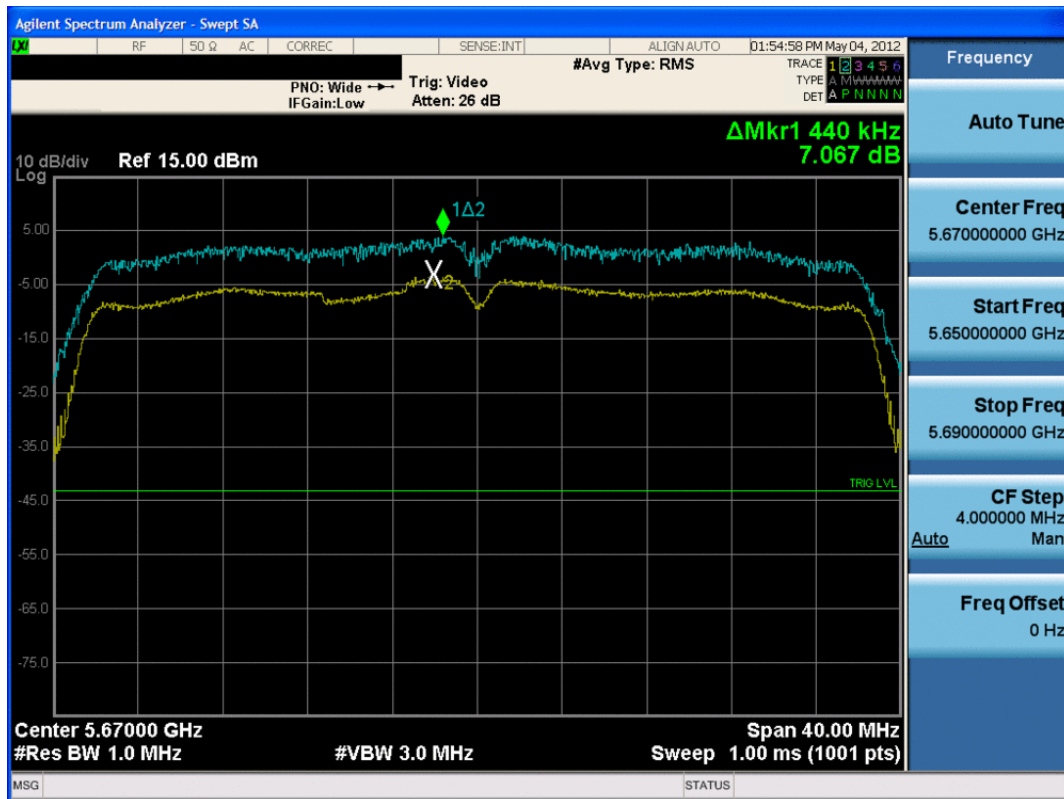


Plot 6-73. Peak Excursion Ratio Plot (802.11n – 40MHz BW (UNII Band 3) – Ch. 102)



Plot 6-74. Peak Excursion Ratio Plot (802.11n – 40MHz BW (UNII Band 3) – Ch. 118)

FCC ID: A3LGT19308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 53 of 78



Plot 6-75. Peak Excursion Ratio Plot (802.11n - 40MHz BW (UNII Band 3) - Ch. 134)

FCC ID: A3LGTI9308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset		Page 54 of 78

6.6 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. Data for the worst case channel is shown below.

OPERATING FREQUENCY: 5,180,000,000 Hz

CHANNEL: 36

REFERENCE VOLTAGE: 3.8 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	+ 20 (Ref)	5,179,999,994	-6	-0.0000001
100 %		- 30	5,179,999,985	-15	-0.0000003
100 %		- 20	5,179,999,995	-5	-0.0000001
100 %		- 10	5,179,999,984	-16	-0.0000003
100 %		0	5,179,999,991	-9	-0.0000002
100 %		+ 10	5,179,999,997	-3	-0.0000001
100 %		+ 20	5,179,999,994	-6	-0.0000001
100 %		+ 30	5,179,999,996	-4	-0.0000001
100 %		+ 40	5,179,999,999	-1	0.0000000
100 %		+ 50	5,179,999,984	-16	-0.0000003
115 %	4.37	+ 20	5,179,999,986	-14	-0.0000003
BATT. ENDPOINT	3.40	+ 20	5,179,999,986	-14	-0.0000003

Table 6-8. Frequency Stability Measurements for UNII Band 1 (Ch. 36)

FCC ID: A3LGTI9308		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1204260594.A3L	Test Dates: 05/04/12 - 05/15/12	EUT Type: Portable Handset	Page 55 of 78	

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. Data for the worst case channel is shown below.

OPERATING FREQUENCY: 5,260,000,000 Hz

CHANNEL: 52

REFERENCE VOLTAGE: 3.8 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	+ 20 (Ref)	5,259,999,991	-9	-0.0000002
100 %		- 30	5,259,999,999	-1	0.0000000
100 %		- 20	5,259,999,987	-13	-0.0000002
100 %		- 10	5,259,999,990	-10	-0.0000002
100 %		0	5,259,999,988	-12	-0.0000002
100 %		+ 10	5,259,999,991	-9	-0.0000002
100 %		+ 20	5,259,999,981	-19	-0.0000004
100 %		+ 30	5,259,999,985	-15	-0.0000003
100 %		+ 40	5,259,999,981	-19	-0.0000004
100 %		+ 50	5,259,999,992	-8	-0.0000001
115 %	4.37	+ 20	5,259,999,982	-18	-0.0000003
BATT. ENDPOINT	3.40	+ 20	5,259,999,980	-20	-0.0000004

Table 6-9. Frequency Stability Measurements for UNII Band 2 (Ch. 52)

FCC ID: A3LGTI9308		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. Data for the worst case channel is shown below.

OPERATING FREQUENCY: 5,500,000,000 Hz

CHANNEL: 100

REFERENCE VOLTAGE: 3.8 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	+ 20 (Ref)	5,499,999,994	-6	-0.0000001
100 %		- 30	5,499,999,988	-12	-0.0000002
100 %		- 20	5,499,999,992	-8	-0.0000002
100 %		- 10	5,499,999,985	-15	-0.0000003
100 %		0	5,499,999,998	-2	0.0000000
100 %		+ 10	5,499,999,991	-9	-0.0000002
100 %		+ 20	5,499,999,987	-13	-0.0000002
100 %		+ 30	5,499,999,981	-19	-0.0000003
100 %		+ 40	5,499,999,999	-1	0.0000000
100 %		+ 50	5,499,999,981	-19	-0.0000003
115 %	4.37	+ 20	5,499,999,993	-7	-0.0000001
BATT. ENDPOINT	3.40	+ 20	5,499,999,983	-17	-0.0000003

Table 6-10. Frequency Stability Measurements for UNII Band 3 (Ch. 100)

FCC ID: A3LGTI9308		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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6.7 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 6-11 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. All measurements shown in this section were obtained using traditional radiated test methods as defined in C63.4-2003. The optional test procedures for antenna port conducted measurements of unwanted emissions per the guidance of KDB 789033 were not used to evaluate this device.

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 6-11. Radiated Limits

Sample Calculation

- o Field Strength Level [dBμV/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- o AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- o Margin [dB] = Field Strength Level [dBμV/m] – Limit [dBμV/m]

FCC ID: A3LGTI9308		FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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Radiated Spurious Emission Measurements (Cont'd)

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

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5180MHz

Channel: 36

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10360.00	-93.06	Peak	H	45.40	59.34	68.20	-8.86
* 15540.00	-135.00	Average	H	55.99	27.99	53.98	-25.99
* 15540.00	-125.00	Peak	H	55.99	37.99	73.98	-35.99
* 20720.00	-135.00	Average	H	42.21	14.21	53.98	-39.77
* 20720.00	-125.00	Peak	H	42.21	24.21	73.98	-49.77
25900.00	-125.00	Peak	H	42.77	24.77	68.20	-43.43

Table 6-12. Radiated Measurements @ 3 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.
- 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 6-11.
- For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
- 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 (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]

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5200MHz

Channel: 40

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10400.00	-92.48	Peak	H	45.42	59.94	68.20	-8.26
* 15600.00	-135.00	Average	H	56.13	28.13	53.98	-25.85
* 15600.00	-125.00	Peak	H	56.13	38.13	73.98	-35.85
* 20800.00	-135.00	Average	H	42.12	14.12	53.98	-39.85
* 20800.00	-125.00	Peak	H	42.12	24.12	73.98	-49.85
26000.00	-125.00	Peak	H	42.81	24.81	68.20	-43.39

Table 6-13. Radiated Measurements @ 3 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz (68.2dBμV/m).
- 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 6-11.
- For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
- 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 (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]

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5240MHz

Channel: 48

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10480.00	-93.69	Peak	H	45.42	58.73	68.20	-9.47
* 15720.00	-135.00	Average	H	56.36	28.36	53.98	-25.61
* 15720.00	-125.00	Peak	H	56.36	38.36	73.98	-35.61
* 20960.00	-135.00	Average	H	41.95	13.95	53.98	-40.03
* 20960.00	-125.00	Peak	H	41.95	23.95	73.98	-50.03
26200.00	-125.00	Peak	H	42.70	24.70	68.20	-43.50

Table 6-14. Radiated Measurements @ 3 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz (68.2dBμV/m).
- 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 6-11.
- For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
- 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 (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]

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5260MHz

Channel: 52

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	-93.57	Peak	H	45.50	58.93	68.20	-9.27
* 15780.00	-135.00	Average	H	56.56	28.56	53.98	-25.42
* 15780.00	-125.00	Peak	H	56.56	38.56	73.98	-35.42
* 21040.00	-135.00	Average	H	42.01	14.01	53.98	-39.97
* 21040.00	-125.00	Peak	H	42.01	24.01	73.98	-49.97
26300.00	-125.00	Peak	H	42.74	24.74	68.20	-43.46

Table 6-15. Radiated Measurements @ 3 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz (68.2dBμV/m).
- 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 6-11.
- For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
- 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 (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]

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5280MHz

Channel: 56

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10560.00	-93.70	Peak	H	45.50	58.80	68.20	-9.40
* 15840.00	-135.00	Average	H	56.67	28.67	53.98	-25.31
* 15840.00	-125.00	Peak	H	56.67	38.67	73.98	-35.31
* 21120.00	-135.00	Average	H	42.01	14.01	53.98	-39.97
* 21120.00	-125.00	Peak	H	42.01	24.01	73.98	-49.97
26400.00	-125.00	Peak	H	42.69	24.69	68.20	-43.51

Table 6-16. Radiated Measurements @ 3 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz (68.2dBμV/m).
- 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 6-11.
- For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
- 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 (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]

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5320MHz

Channel: 64

	Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
*	10640.00	-103.76	Average	H	45.59	48.83	53.98	-5.15
*	10640.00	-92.44	Peak	H	45.59	60.15	73.98	-13.83
*	15960.00	-156.57	Average	H	57.15	7.58	53.98	-46.40
*	15960.00	-166.57	Peak	H	57.15	-2.42	73.98	-76.40
*	21280.00	-161.31	Average	H	42.03	-12.29	53.98	-66.27
*	21280.00	-171.31	Peak	H	42.03	-22.29	73.98	-96.27
	26600.00	-171.79	Peak	H	42.63	-22.16	68.20	-90.36

Table 6-17. Radiated Measurements @ 3 meter

NOTES:

1. All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz (68.2dBμV/m).
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 6-11.
3. For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
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]

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5500MHz

Channel: 100

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11000.00	-104.27	Average	H	45.50	48.23	53.98	-5.75
* 11000.00	-93.37	Peak	H	45.50	59.13	73.98	-14.85
16500.00	-125.00	Peak	H	56.56	38.56	68.20	-29.64
22000.00	-125.00	Peak	H	42.01	24.01	68.20	-44.19
27500.00	-125.00	Peak	H	42.74	24.74	68.20	-43.46

Table 6-18. Radiated Measurements @ 3 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz (68.2dBμV/m).
- 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 6-11.
- For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
- 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 (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]

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5580MHz

Channel: 116

	Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
*	11160.00	-103.59	Average	H	45.50	48.91	53.98	-5.07
*	11160.00	-92.81	Peak	H	45.50	59.69	73.98	-14.29
	16740.00	-125.00	Peak	H	56.67	38.67	68.20	-29.53
*	22320.00	-135.00	Average	H	42.01	14.01	53.98	-39.97
*	22320.00	-125.00	Peak	H	42.01	24.01	73.98	-49.97
	27900.00	-125.00	Peak	H	42.69	24.69	68.20	-43.51

Table 6-19. Radiated Measurements @ 3 meter

NOTES:

- All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz (68.2dBμV/m).
- 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 6-11.
- For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
- 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 (54dBμV/m) at 3 meters radiated for emissions that lie in restricted bands specified in §15.205.

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

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5700MHz

Channel: 140

	Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
*	11400.00	-103.11	Average	H	45.59	49.48	53.98	-4.50
*	11400.00	-94.05	Peak	H	45.59	58.54	73.98	-15.44
	17100.00	-125.00	Peak	H	57.15	39.15	68.20	-29.05
*	22800.00	-135.00	Average	H	42.03	14.03	53.98	-39.95
*	22800.00	-125.00	Peak	H	42.03	24.03	73.98	-49.95
	28500.00	-125.00	Peak	H	42.63	24.63	68.20	-43.57

Table 6-20. Radiated Measurements @ 3 meter

NOTES:

1. All harmonics that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz (68.2dBμV/m).
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 6-11.
3. For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
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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6.8 Radiated Band Edge Measurements

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

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5180MHz

Channel: 36

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
5072.65	-102.77	Average	H	39.04	43.27	53.98	-10.71
5072.65	-90.06	Peak	H	39.04	55.98	73.98	-18.00
5105.80	-99.64	Average	H	39.08	46.44	53.98	-7.54
5105.80	-90.18	Peak	H	39.08	55.90	73.98	-18.08
5150.00	-100.97	Average	H	39.20	45.23	53.98	-8.75
5150.00	-89.92	Peak	H	39.20	56.28	73.98	-17.70

Table 6-21. Radiated Restricted Band Measurements at 3-meter (4.5 – 5.15GHz)

NOTES:

- For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
- 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 Band Edge Measurements (Cont'd)

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

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5320MHz

Channel: 64

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
5350.00	-101.77	Average	H	39.60	44.84	53.98	-9.14
5350.00	-86.62	Peak	H	39.60	59.99	73.98	-13.99
5353.96	-102.59	Average	H	39.61	44.02	53.98	-9.96
5353.96	-89.79	Peak	H	39.61	56.82	73.98	-17.16
5394.77	-100.69	Average	H	39.69	46.00	53.98	-7.98
5394.77	-91.22	Peak	H	39.69	55.47	73.98	-18.51

Table 6-22. Radiated Restricted Band Measurements at 3-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 (68.2dBμV/m) EIRP limit specified in §15.407.
2. For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
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 (54dBμV/m) at 3 meters radiated for emissions that lie in restricted 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]

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5500MHz

Channel: 100

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
5419.19	-99.25	Average	H	39.75	47.51	53.98	-6.47
5419.19	-90.70	Peak	H	39.75	56.06	73.98	-17.92
5445.92	-101.87	Average	H	39.80	44.93	53.98	-9.05
5445.92	-90.41	Peak	H	39.80	56.39	73.98	-17.59
5466.75	-95.29	Peak	H	39.84	51.55	68.20	-16.65

Table 6-23. Radiated Restricted Band Measurements at 3-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 (68.2dBμV/m) EIRP limit specified in §15.407.
2. For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
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 (54dBμV/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]

Worst Case Mode: 802.11a

Worst Case Transfer Rate: 6 Mbps

Distance of Measurements: 3 Meter

Operating Frequency: 5700MHz

Channel: 140

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
5725.00	-91.38	Peak	H	40.10	55.72	68.20	-12.48
5726.53	-93.43	Peak	H	40.10	53.67	68.20	-14.53
5728.18	-92.92	Peak	H	40.10	54.19	68.20	-14.01

Table 6-24. Radiated Restricted Band Measurements at 3-meter

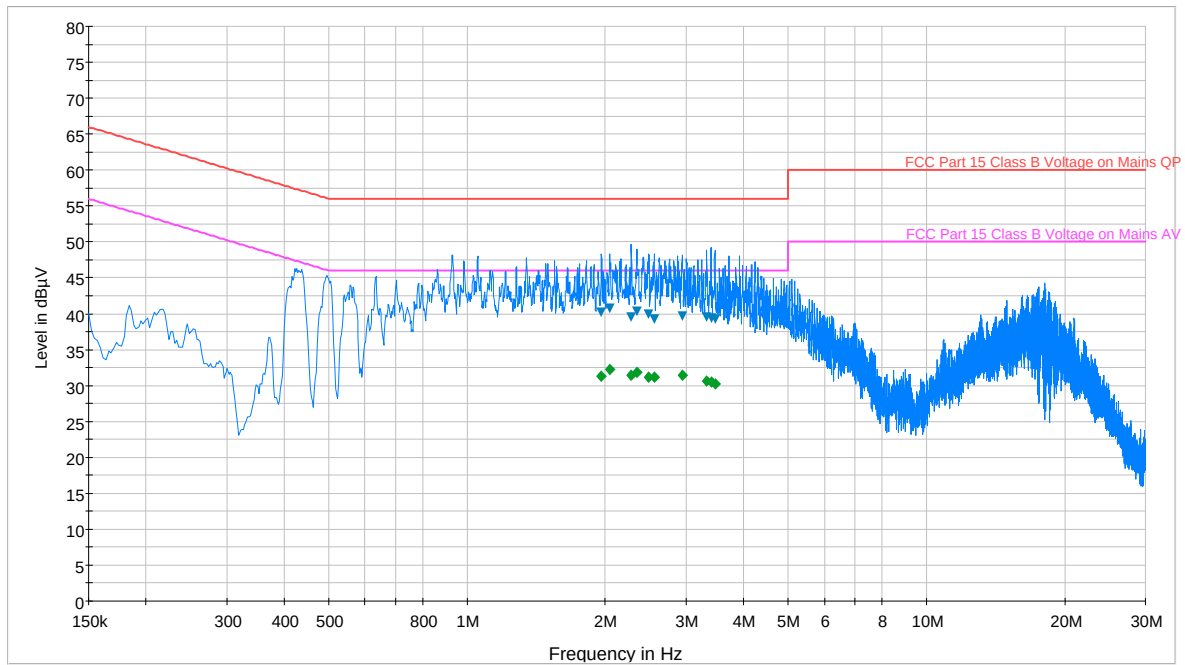
NOTES:

- For frequencies above 1GHz, peak emissions are measured using RBW = 1MHz and VBW = 3MHz. Average emissions are measured using RBW = 1MHz and VBW = 10Hz ("Method VB") per KDB 789033.
- 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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6.9 Line-Conducted Test Data

§15.207; RSS-Gen [7.2.2]



Plot 6-76. Line Conducted Plot with 802.11a (UNII Band 1) (L1)

Frequency MHz	Line	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
1.961	L1	40.20	56.00	15.80	31.30	46.00	14.70
2.047	L1	40.70	56.00	15.30	32.20	46.00	13.80
2.279	L1	39.50	56.00	16.50	31.50	46.00	14.50
2.344	L1	40.30	56.00	15.70	31.80	46.00	14.20
2.490	L1	39.90	56.00	16.10	31.20	46.00	14.80
2.558	L1	39.20	56.00	16.80	31.10	46.00	14.90
2.940	L1	39.70	56.00	16.30	31.40	46.00	14.60
3.329	L1	39.60	56.00	16.40	30.70	46.00	15.30
3.399	L1	39.30	56.00	16.70	30.50	46.00	15.50
3.467	L1	39.30	56.00	16.70	30.20	46.00	15.80

Table 6-25. Line Conducted Data with 802.11a (UNII Band 1) (L1)

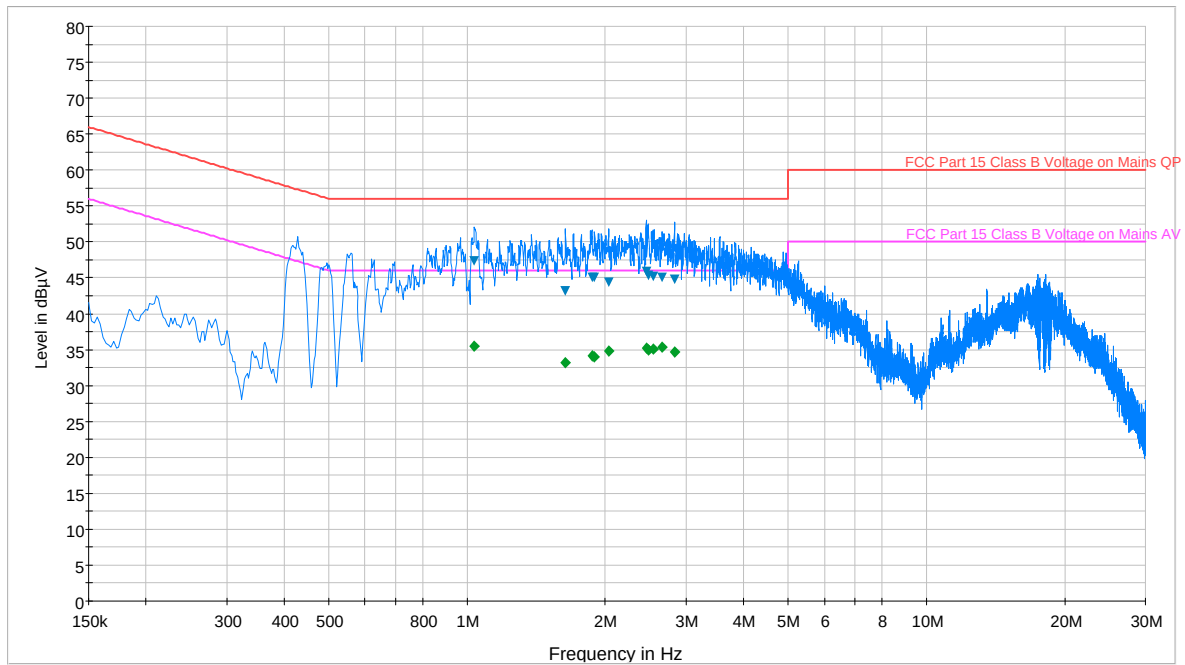
Notes:

- All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 36. The emissions found were not affected by the choice of channel used during testing.
- The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
- Line A = Phase; Line B = Neutral
- Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Factor (dB)
- Margin (dB) = Limit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.
- Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



— FCC Part 15 Class B Voltage on Mains QP.LimitLine — FCC Part 15 Class B Voltage on Mains AV.LimitLine — Preview Result 1-PK+
▼ Final Result 1-QPK ◆ Final Result 2-AVG

Plot 6-77. Line Conducted Plot with 802.11a (UNII Band 1) (LN)

Frequency MHz	Line	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
1.039	N	47.30	56.00	8.70	35.50	46.00	10.50
1.637	N	43.20	56.00	12.80	33.10	46.00	12.90
1.871	N	45.00	56.00	11.00	34.20	46.00	11.80
1.896	N	45.00	56.00	11.00	34.00	46.00	12.00
2.036	N	44.40	56.00	11.60	34.80	46.00	11.20
2.456	N	45.80	56.00	10.20	35.30	46.00	10.70
2.488	N	45.40	56.00	10.60	34.90	46.00	11.10
2.540	N	45.20	56.00	10.80	35.10	46.00	10.90
2.661	N	45.00	56.00	11.00	35.30	46.00	10.70
2.828	N	44.70	56.00	11.30	34.70	46.00	11.30

Table 6-26. Line Conducted Data with 802.11a (UNII Band 1) (LN)

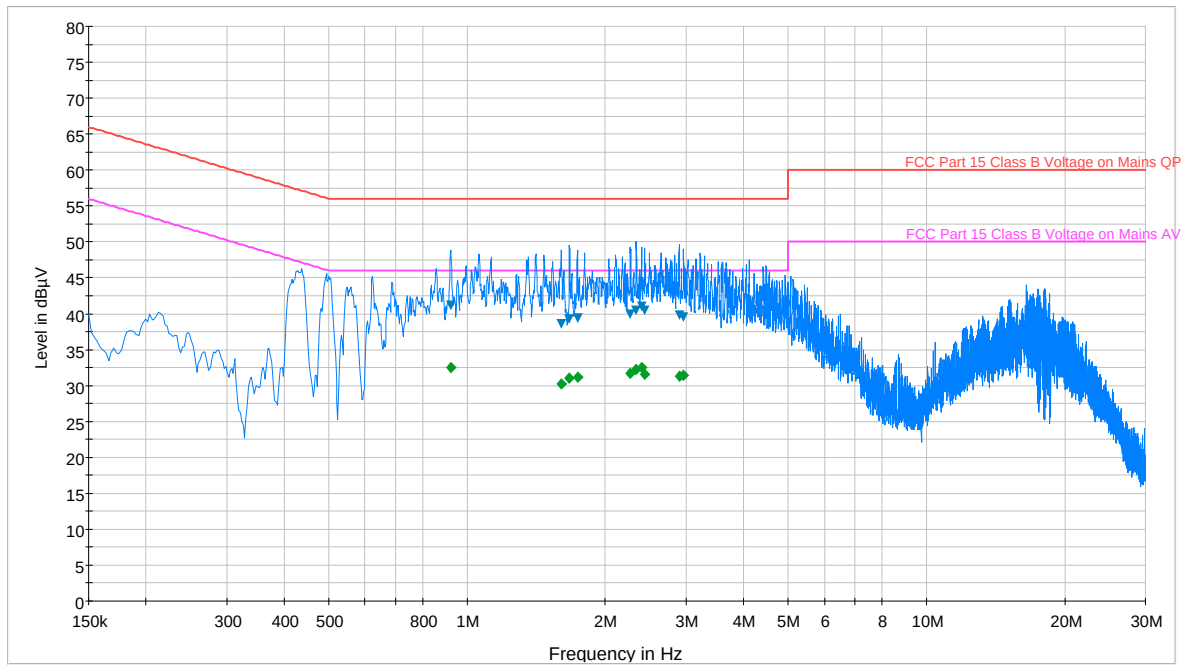
Notes:

1. All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 36. The emissions found were not affected by the choice of channel used during testing.
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. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
5. QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Factor (dB)
6. Margin (dB) = Limit (dBµV) - QP/AV Level (dBµV)
7. Traces shown in plot are made using a peak detector.
8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



— FCC Part 15 Class B Voltage on Mains QP.LimitLine — FCC Part 15 Class B Voltage on Mains AV.LimitLine — Preview Result 1-PK+
▼ Final Result 1-QPK ◆ Final Result 2-AVG

Plot 6-78. Line Conducted Plot with 802.11a (UNII Band 2) (L1)

Frequency MHz	Line	QuasiPeak dBμV	Limit dBμV	Margin dB	Average dBμV	Limit dBμV	Margin dB
0.922	L1	41.10	56.00	14.90	32.50	46.00	13.50
1.604	L1	38.60	56.00	17.40	30.20	46.00	15.80
1.671	L1	39.20	56.00	16.80	31.00	46.00	15.00
1.739	L1	39.40	56.00	16.60	31.20	46.00	14.80
2.267	L1	39.90	56.00	16.10	31.80	46.00	14.20
2.335	L1	40.40	56.00	15.60	32.20	46.00	13.80
2.400	L1	41.00	56.00	15.00	32.50	46.00	13.50
2.434	L1	40.50	56.00	15.50	31.60	46.00	14.40
2.895	L1	39.80	56.00	16.20	31.30	46.00	14.70
2.960	L1	39.50	56.00	16.50	31.40	46.00	14.60

Table 6-27. Line Conducted Data with 802.11a (UNII Band 2) (L1)

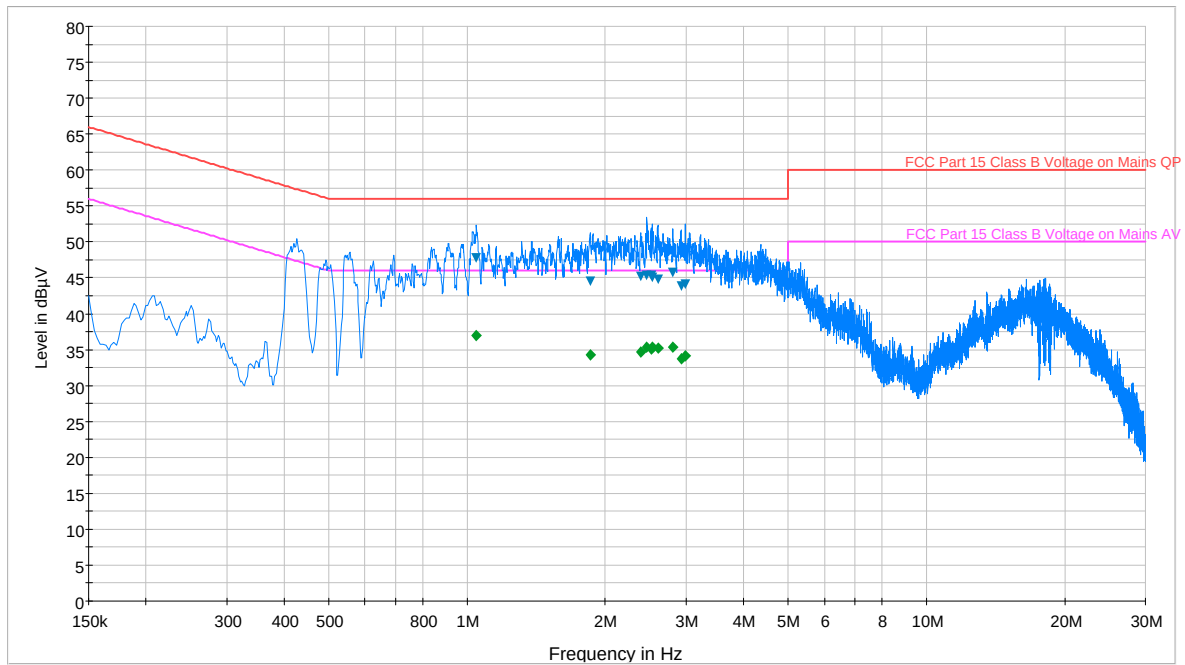
Notes:

1. All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 36. The emissions found were not affected by the choice of channel used during testing.
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. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
5. QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Factor (dB)
6. Margin (dB) = Limit (dBμV) - QP/AV Level (dBμV)
7. Traces shown in plot are made using a peak detector.
8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



— FCC Part 15 Class B Voltage on Mains QP.LimitLine — FCC Part 15 Class B Voltage on Mains AV.LimitLine — Preview Result 1-PK+
▼ Final Result 1-QPK ◆ Final Result 2-AVG

Plot 6-79. Line Conducted Plot with 802.11a (UNII Band 2) (LN)

Frequency MHz	Line	QuasiPeak dBμV	Limit dBμV	Margin dB	Average dBμV	Limit dBμV	Margin dB
1.048	N	47.70	56.00	8.30	36.90	46.00	9.10
1.853	N	44.60	56.00	11.40	34.20	46.00	11.80
2.384	N	45.20	56.00	10.80	34.70	46.00	11.30
2.465	N	45.40	56.00	10.60	35.40	46.00	10.60
2.515	N	45.40	56.00	10.60	35.10	46.00	10.90
2.533	N	45.00	56.00	11.00	35.30	46.00	10.70
2.603	N	44.80	56.00	11.20	35.20	46.00	10.80
2.807	N	45.70	56.00	10.30	35.40	46.00	10.60
2.924	N	43.80	56.00	12.20	33.70	46.00	12.30
2.987	N	44.10	56.00	11.90	34.10	46.00	11.90

Table 6-28. Line Conducted Data with 802.11a (UNII Band 2) (LN)

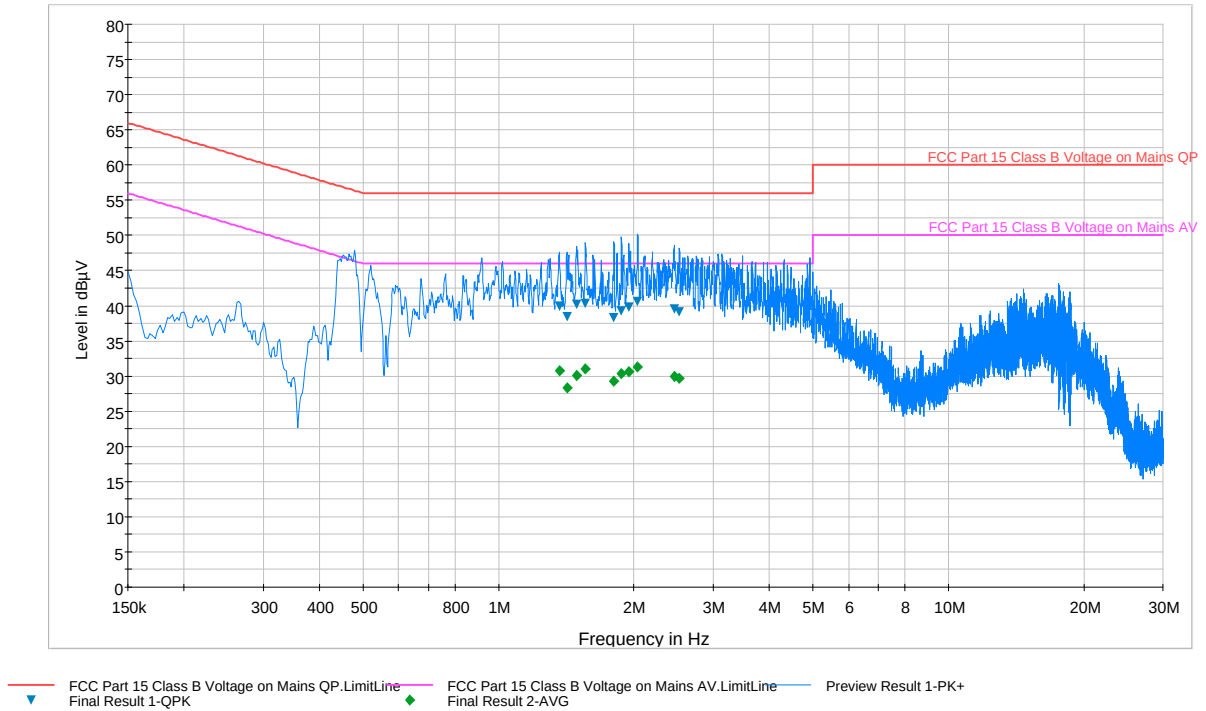
Notes:

1. All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 36. The emissions found were not affected by the choice of channel used during testing.
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. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
5. QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Factor (dB)
6. Margin (dB) = Limit (dBμV) - QP/AV Level (dBμV)
7. Traces shown in plot are made using a peak detector.
8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



Plot 6-80. Line Conducted Plot with 802.11a (UNII Band 3) (L1)

Frequency MHz	Line	QuasiPeak dBμV	Limit dBμV	Margin dB	Average dBμV	Limit dBμV	Margin dB
1.365	L1	39.90	56.00	16.10	30.80	46.00	15.20
1.419	L1	38.40	56.00	17.60	28.30	46.00	17.70
1.491	L1	40.20	56.00	15.80	30.00	46.00	16.00
1.561	L1	40.30	56.00	15.70	31.00	46.00	15.00
1.806	L1	38.30	56.00	17.70	29.30	46.00	16.70
1.878	L1	39.20	56.00	16.80	30.40	46.00	15.60
1.948	L1	39.80	56.00	16.20	30.60	46.00	15.40
2.040	L1	40.70	56.00	15.30	31.30	46.00	14.70
2.459	L1	39.50	56.00	16.50	29.90	46.00	16.10
2.526	L1	39.20	56.00	16.80	29.70	46.00	16.30

Table 6-29. Line Conducted Data with 802.11a (UNII Band 3) (L1)

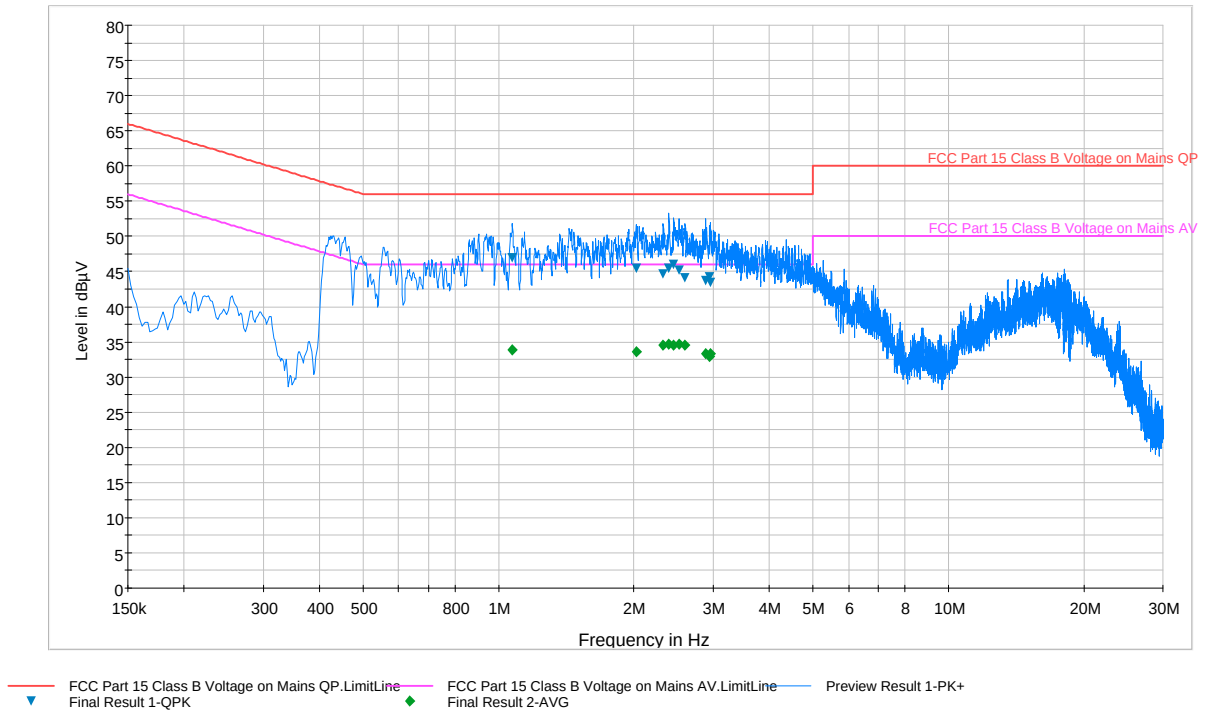
Notes:

1. All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 36. The emissions found were not affected by the choice of channel used during testing.
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. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
5. QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Factor (dB)
6. Margin (dB) = Limit (dBμV) - QP/AV Level (dBμV)
7. Traces shown in plot are made using a peak detector.
8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



Plot 6-81. Line Conducted Plot with 802.11a (UNII Band 3) (LN)

Frequency MHz	Line	QuasiPeak dBμV	Limit dBμV	Margin dB	Average dBμV	Limit dBμV	Margin dB
1.073	N	47.00	56.00	9.00	33.80	46.00	12.20
2.022	N	45.40	56.00	10.60	33.60	46.00	12.40
2.326	N	44.60	56.00	11.40	34.50	46.00	11.50
2.391	N	45.50	56.00	10.50	34.60	46.00	11.40
2.454	N	46.00	56.00	10.00	34.60	46.00	11.40
2.519	N	45.20	56.00	10.80	34.70	46.00	11.30
2.600	N	44.10	56.00	11.90	34.60	46.00	11.40
2.888	N	43.70	56.00	12.30	33.30	46.00	12.70
2.942	N	44.30	56.00	11.70	32.90	46.00	13.10
2.958	N	43.50	56.00	12.50	33.30	46.00	12.70

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

Notes:

1. All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 36. The emissions found were not affected by the choice of channel used during testing.
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. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
5. QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Factor (dB)
6. Margin (dB) = Limit (dBμV) - QP/AV Level (dBμV)
7. Traces shown in plot are made using a peak detector.
8. Deviations to the Specifications: None.

FCC ID: A3LGTI9308	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
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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: A3LGTI9308** is in compliance with Part 15E of the FCC Rules and RSS-210 of the Industry Canada Rules..

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