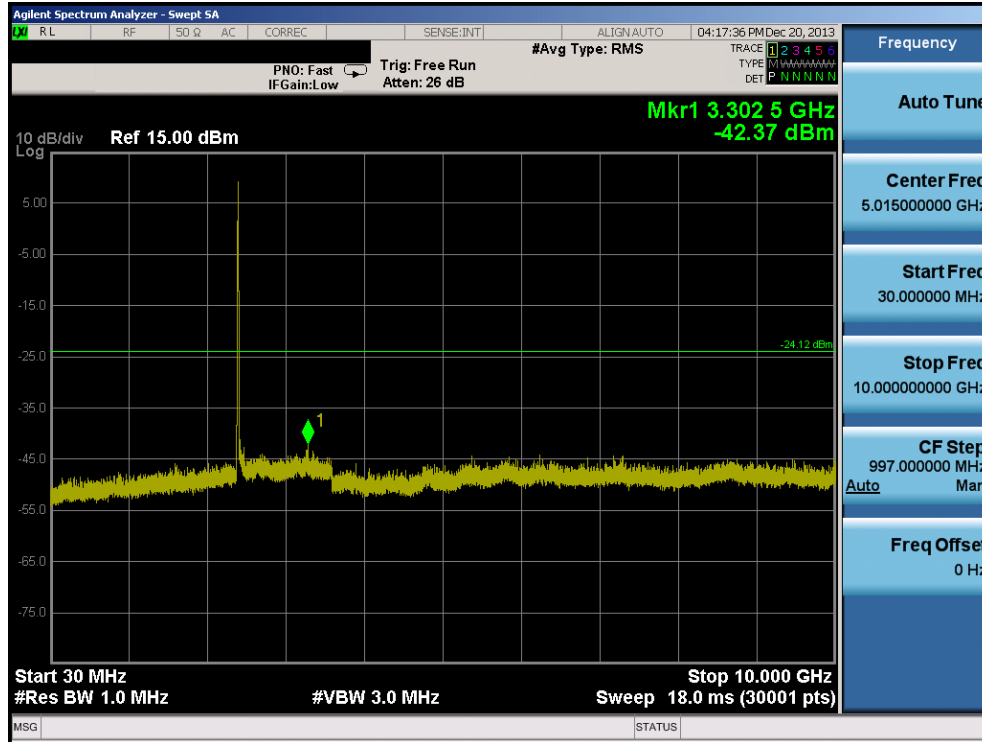
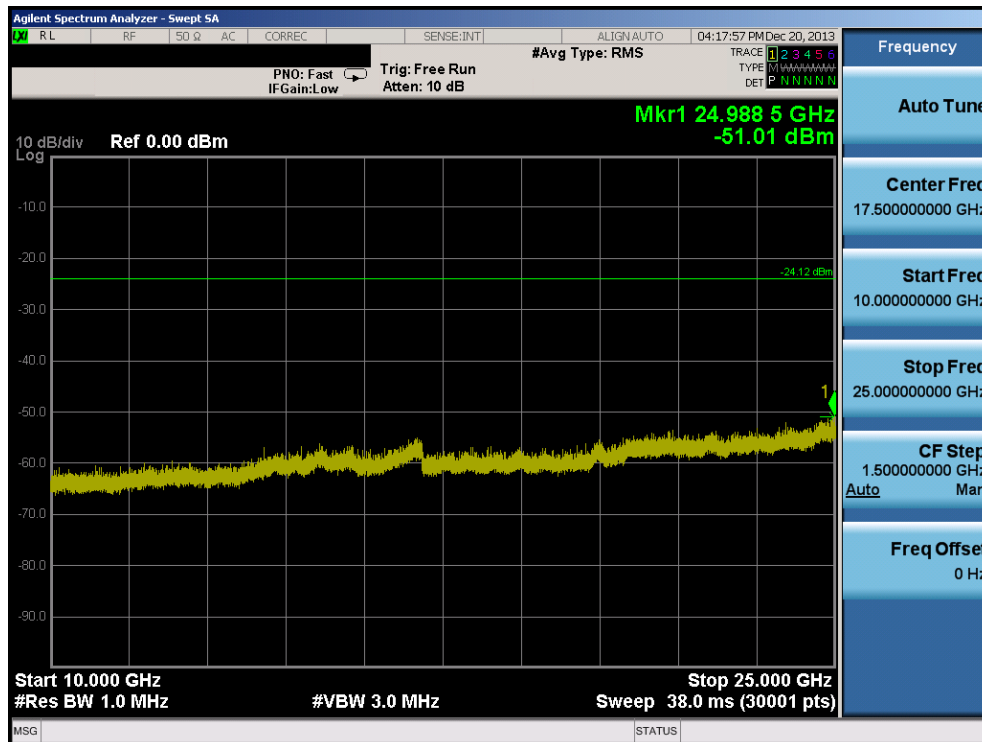


Antenna-2 Conducted Spurious Emissions

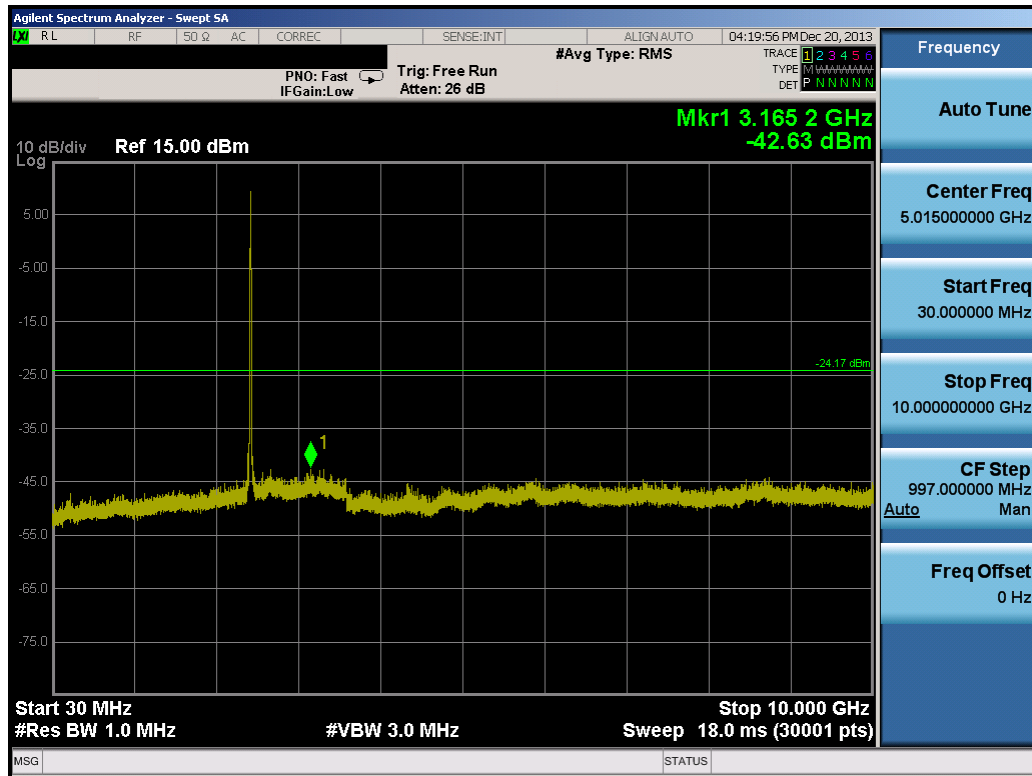


Plot 6-113. Conducted Spurious Plot (802.11b – Ch. 1)

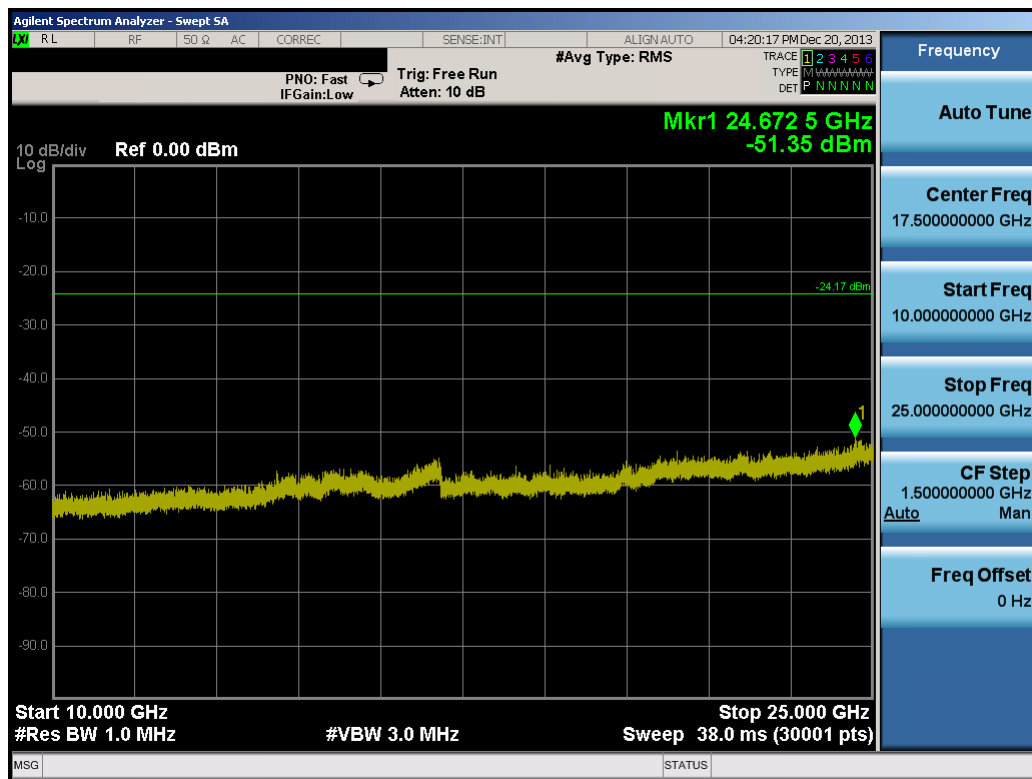


Plot 6-114. Conducted Spurious Plot (802.11b – Ch. 1)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 87 of 118

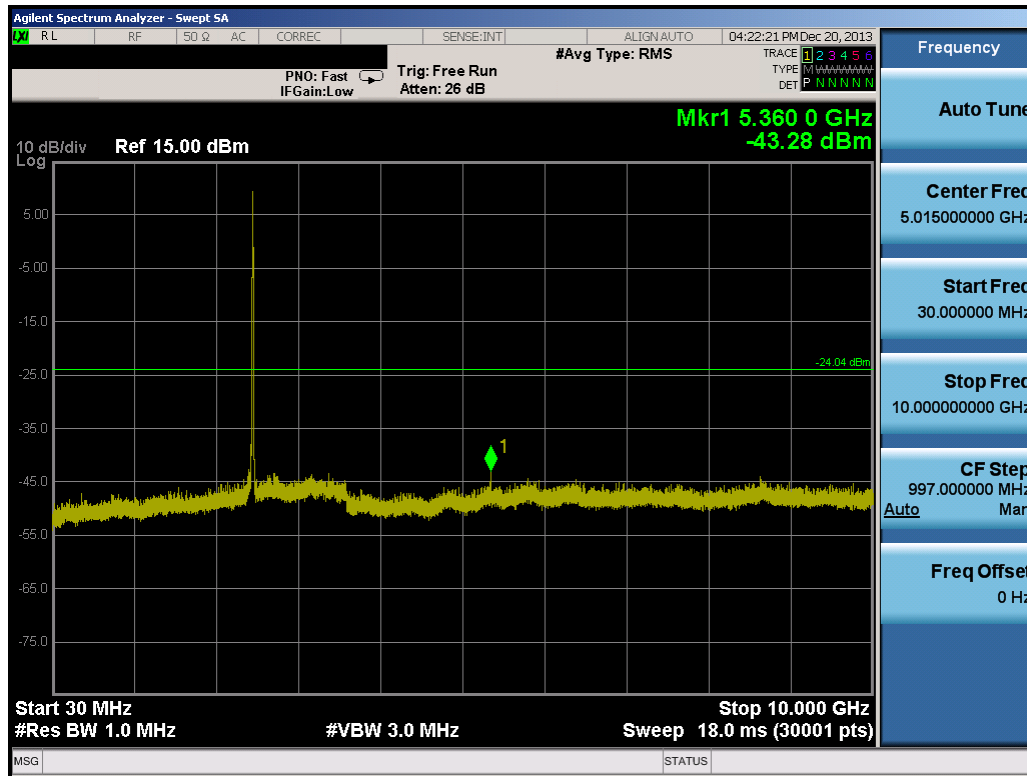


Plot 6-115. Conducted Spurious Plot (802.11b – Ch. 6)

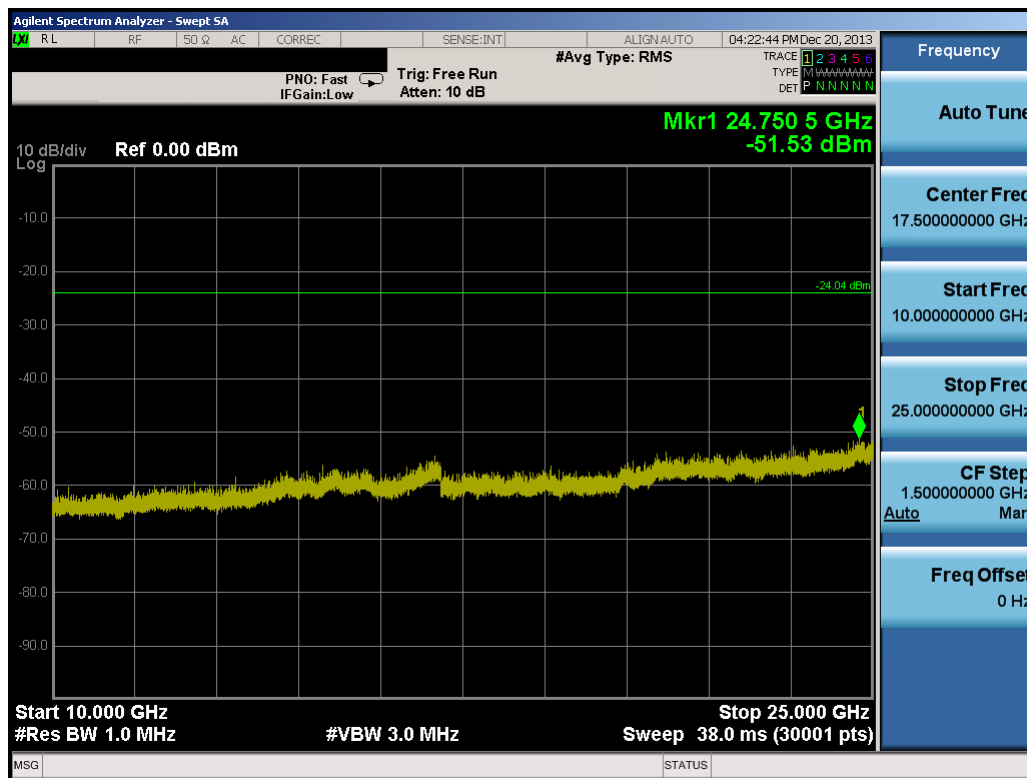


Plot 6-116. Conducted Spurious Plot (802.11b – Ch. 6)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 88 of 118

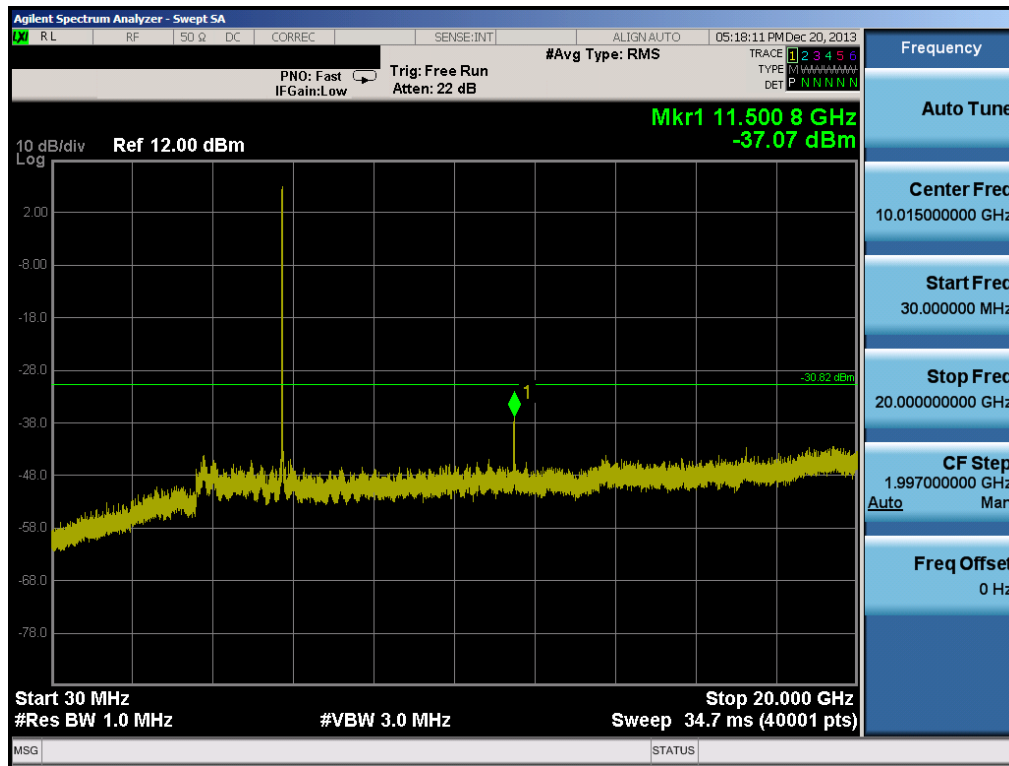


Plot 6-117. Conducted Spurious Plot (802.11b – Ch. 11)

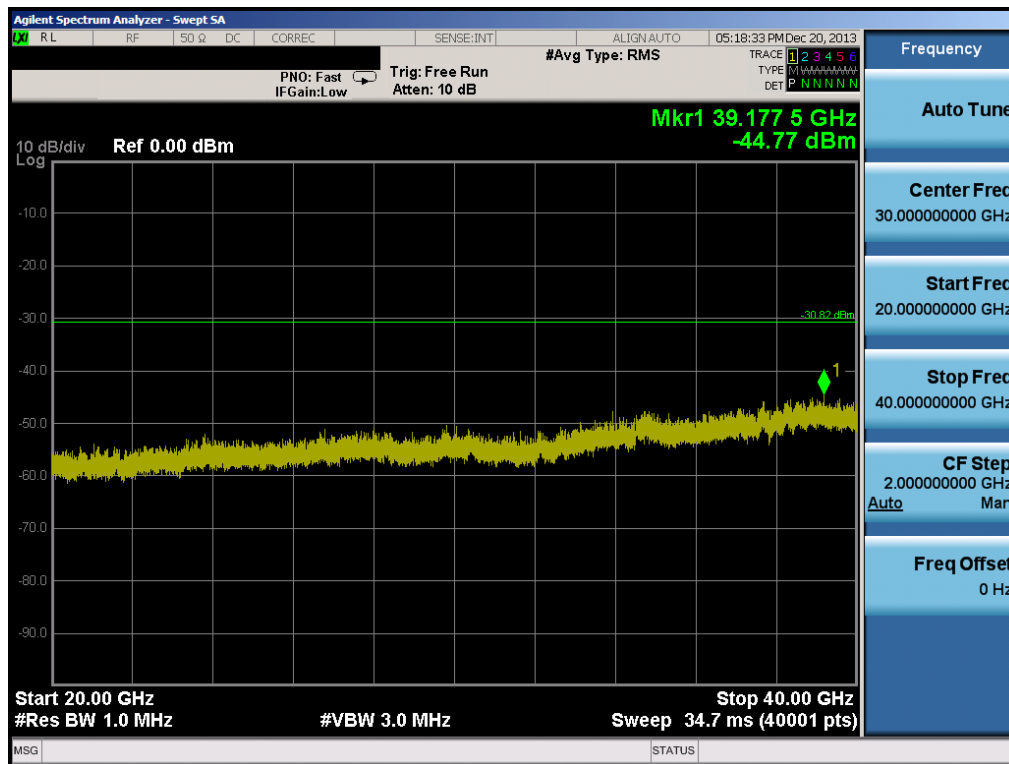


Plot 6-118. Conducted Spurious Plot (802.11b – Ch. 11)

FCC ID: A3LSMT905	 FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION) 		Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet	Page 89 of 118

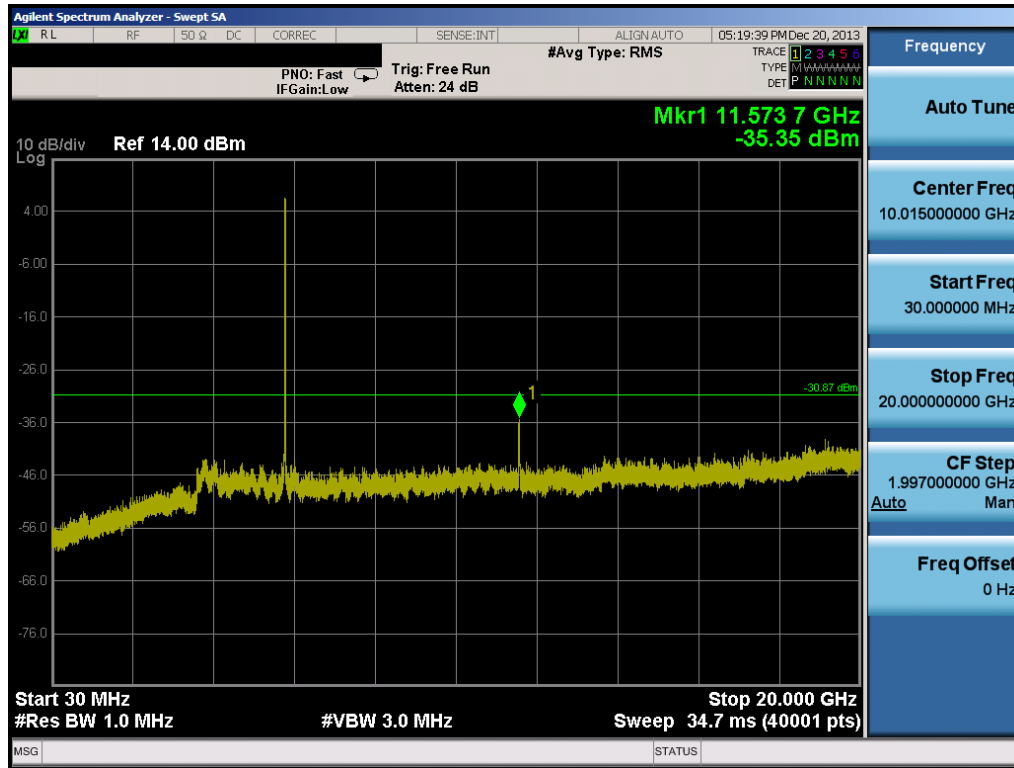


Plot 6-119. Conducted Spurious Plot (802.11a – Ch. 149)

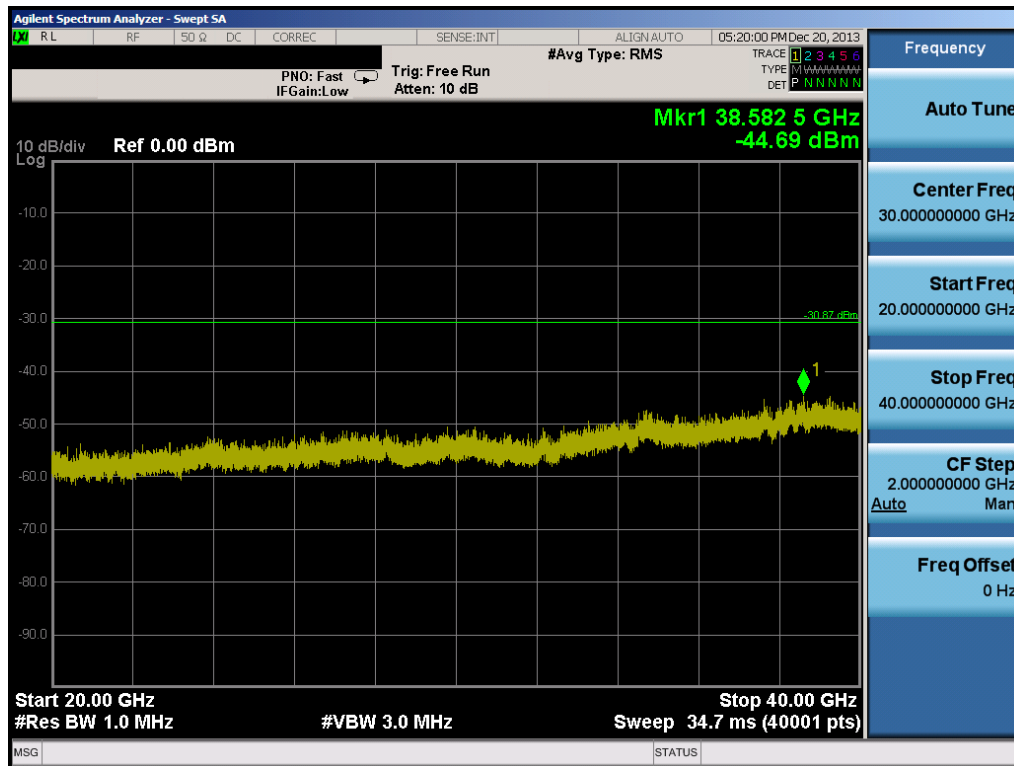


Plot 6-120. Conducted Spurious Plot (802.11a – Ch. 149)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 90 of 118

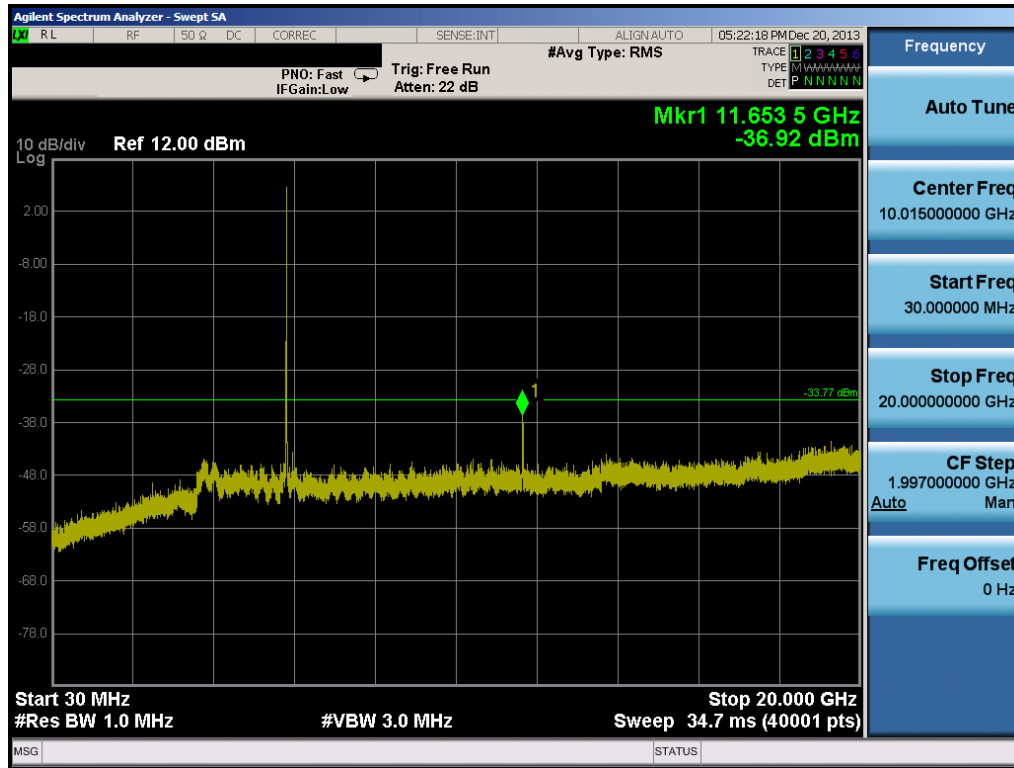


Plot 6-121. Conducted Spurious Plot (802.11a – Ch. 157)

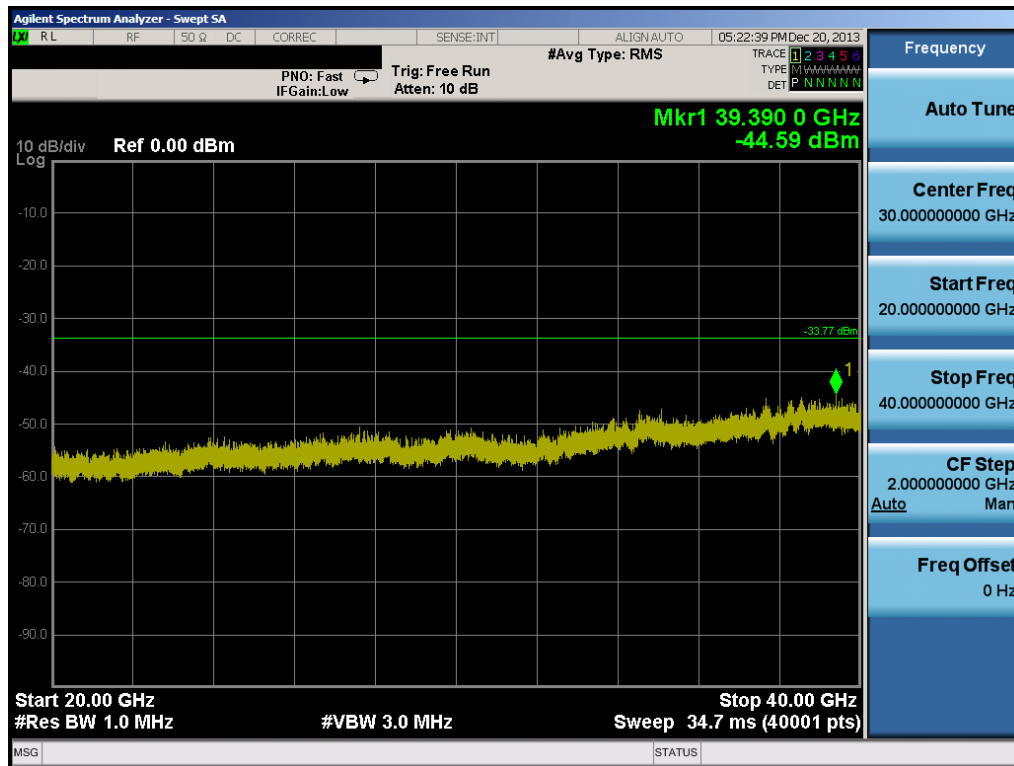


Plot 6-122. Conducted Spurious Plot (802.11a – Ch. 157)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 91 of 118



Plot 6-123. Conducted Spurious Plot (802.11a – Ch. 165)



Plot 6-124. Conducted Spurious Plot (802.11a – Ch. 165)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 92 of 118

6.7 Radiated Spurious Emission Measurements

§15.247(d) / §15.205 & §15.209; RSS-210 [A8.5]

Test Overview and Limit

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at its maximum duty cycle (>98%), at maximum power, and at the appropriate frequencies. 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 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 6-29 per Section 15.209.

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 6-29. Radiated Limits

Test Procedures Used

KDB 558074 v03r01 – Section 12.2.5 (average power measurements)

KDB 558074 v03r01 – Section 12.2.4 (peak power measurements)

Test Settings

Average Field Strength Measurements per Section 12.2.5.1 of KDB 558074 v03r01

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be $\geq 2 \times \text{span/RBW}$)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces

FCC ID: A3LSMT905		FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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Peak Field Strength Measurements per Section 12.2.4 of KDB 558074 v03r01

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

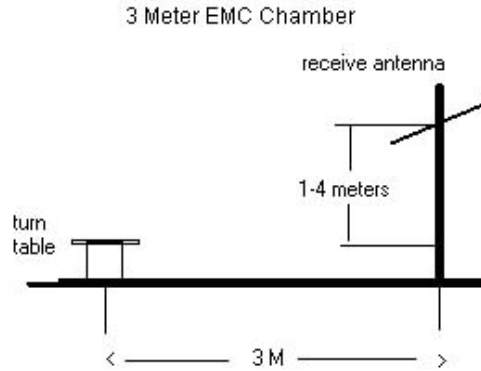


Figure 6-7. Test Instrument & Measurement Setup

FCC ID: A3LSMT905		FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 94 of 118

Test Notes

1. The optional test procedures for antenna port conducted measurements of unwanted emissions per the guidance of KDB 558074 v03r01 were not used to evaluate this device for compliance to radiated limits. All radiated spurious emissions levels were measured in a radiated test setup.
2. All emissions lying in restricted bands specified in §15.205 are below the limit shown in Table 6-10.
3. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
4. This unit was tested with its standard battery.
5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average and peak measurements were taken using linearly polarized horn antennas. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
6. Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
7. Emissions discovered in Section 6.6 (particularly 802.11a 2nd harmonic emissions) were investigated radiated and were found to be negligible.

Sample Calculations

Determining Spurious Emissions Levels

- o Field Strength Level $_{[dB_{\mu V/m}]}$ = Analyzer Level $_{[dBm]}$ + 107 + AFCL $_{[dB/m]}$
- o AFCL $_{[dB/m]}$ = Antenna Factor $_{[dB/m]}$ + Cable Loss $_{[dB]}$
- o Margin $_{[dB]}$ = Field Strength Level $_{[dB_{\mu V/m}]}$ – Limit $_{[dB_{\mu V/m}]}$

Radiated Band Edge Measurement Offset

- o The amplitude offset shown in the radiated restricted band edge plots in Section 6.8 was calculated using the formula:

$$\text{Offset (dB)} = (\text{Antenna Factor} + \text{Cable Loss} + 10 \text{ dB Attenuator}) - \text{Preamplifier Gain}$$

FCC ID: A3LSMT905		FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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Antenna-1 Radiated Spurious Emission Measurements (Cont'd)

§15.247(d) / §15.205 & §15.209; RSS-210 [A8.5]

Worst Case Mode: 802.11b
Worst Case Transfer Rate: 1 Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2412MHz
Channel: 01

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4824.00	-103.39	Avg	H	40.71	44.32	53.98	-9.66
4824.00	-97.04	Peak	H	40.71	50.67	73.98	-23.31
12060.00	-135.00	Avg	H	51.65	23.65	53.98	-30.33
12060.00	-125.00	Peak	H	51.65	33.65	73.98	-40.33

Table 6-30. Radiated Measurements

Worst Case Mode: 802.11b
Worst Case Transfer Rate: 1 Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2437MHz
Channel: 06

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4874.00	-103.03	Avg	H	40.78	44.75	53.98	-9.23
4874.00	-97.72	Peak	H	40.78	50.06	73.98	-23.92
7311.00	-135.00	Avg	H	44.89	16.89	53.98	-37.09
7311.00	-125.00	Peak	H	44.89	26.89	73.98	-47.09
12185.00	-135.00	Avg	H	52.13	24.13	53.98	-29.85
12185.00	-125.00	Peak	H	52.13	34.13	73.98	-39.85

Table 6-31. Radiated Measurements

FCC ID: A3LSMT905		FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 96 of 118

Radiated Spurious Emission Measurements (Cont'd)

§15.247(d) / §15.205 & §15.209; RSS-210 [A8.5]

Worst Case Mode: 802.11b
 Worst Case Transfer Rate: 1 Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4924.00	-104.42	Avg	H	40.83	43.41	53.98	-10.57
4924.00	-96.44	Peak	H	40.83	51.39	73.98	-22.59
7386.00	-135.00	Avg	H	44.82	16.82	53.98	-37.16
7386.00	-125.00	Peak	H	44.82	26.82	73.98	-47.16
12310.00	-135.00	Avg	H	52.00	24.00	53.98	-29.98
12310.00	-125.00	Peak	H	52.00	34.00	73.98	-39.98

Table 6-32. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5745MHz
 Channel: 149

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
11490.00	-135.00	Avg	H	48.21	20.21	53.98	-33.77
11490.00	-125.00	Peak	H	48.21	30.21	73.98	-43.77
22980.00	-135.00	Avg	H	44.53	16.53	53.98	-37.45
22980.00	-125.00	Peak	H	44.53	26.53	73.98	-47.45

Table 6-33. Radiated Measurements

FCC ID: A3LSMT905		FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 97 of 118

Radiated Spurious Emission Measurements (Cont'd)

§15.247(d) / §15.205 & §15.209; RSS-210 [A8.5]

Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6 Mbps
Distance of Measurements: 1 & 3 Meters
Operating Frequency: 5785MHz
Channel: 157

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
11570.00	-135.00	Avg	H	48.39	20.39	53.98	-33.59
11570.00	-125.00	Peak	H	48.39	30.39	73.98	-43.59

Table 6-34. Radiated Measurements

Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6 Mbps
Distance of Measurements: 1 & 3 Meters
Operating Frequency: 5825MHz
Channel: 165

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
11650.00	-135.00	Avg	H	48.63	20.63	53.98	-33.35
11650.00	-125.00	Peak	H	48.63	30.63	73.98	-43.35

Table 6-35. Radiated Measurements

FCC ID: A3LSMT905		FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 98 of 118

Antenna-2 Radiated Spurious Emission Measurements (Cont'd)

§15.247(d) / §15.205 & §15.209; RSS-210 [A8.5]

Worst Case Mode: 802.11b
Worst Case Transfer Rate: 1 Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2412MHz
Channel: 01

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4824.00	-105.21	Avg	H	40.71	42.50	53.98	-11.48
4824.00	-100.89	Peak	H	40.71	46.82	73.98	-27.16
12060.00	-135.00	Avg	H	51.65	23.65	53.98	-30.33
12060.00	-125.00	Peak	H	51.65	33.65	73.98	-40.33

Table 6-36. Radiated Measurements

Worst Case Mode: 802.11b
Worst Case Transfer Rate: 1 Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2437MHz
Channel: 06

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4874.00	-105.29	Avg	H	40.78	42.49	53.98	-11.49
4874.00	-100.12	Peak	H	40.78	47.66	73.98	-26.32
7311.00	-135.00	Avg	H	44.89	16.89	53.98	-37.09
7311.00	-125.00	Peak	H	44.89	26.89	73.98	-47.09
12185.00	-135.00	Avg	H	52.13	24.13	53.98	-29.85
12185.00	-125.00	Peak	H	52.13	34.13	73.98	-39.85

Table 6-37. Radiated Measurements

FCC ID: A3LSMT905		FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 99 of 118

Radiated Spurious Emission Measurements (Cont'd)

§15.247(d) / §15.205 & §15.209; RSS-210 [A8.5]

Worst Case Mode: 802.11b
Worst Case Transfer Rate: 6 Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2462MHz
Channel: 11

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4924.00	-106.01	Avg	H	40.83	41.82	53.98	-12.16
4924.00	-99.47	Peak	H	40.83	48.36	73.98	-25.62
7386.00	-135.00	Avg	H	44.82	16.82	53.98	-37.16
7386.00	-125.00	Peak	H	44.82	26.82	73.98	-47.16
12310.00	-135.00	Avg	H	52.00	24.00	53.98	-29.98
12310.00	-125.00	Peak	H	52.00	34.00	73.98	-39.98

Table 6-38. Radiated Measurements

Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6 Mbps
Distance of Measurements: 1 & 3 Meters
Operating Frequency: 5745MHz
Channel: 149

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
11490.00	-135.00	Avg	H	48.21	20.21	53.98	-33.77
11490.00	-125.00	Peak	H	48.21	30.21	73.98	-43.77
22980.00	-135.00	Avg	H	44.53	16.53	53.98	-37.45
22980.00	-125.00	Peak	H	44.53	26.53	73.98	-47.45

Table 6-39. Radiated Measurements

FCC ID: A3LSMT905		FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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Radiated Spurious Emission Measurements (Cont'd)

§15.247(d) / §15.205 & §15.209; RSS-210 [A8.5]

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
11570.00	-135.00	Avg	H	48.39	20.39	53.98	-33.59
11570.00	-125.00	Peak	H	48.39	30.39	73.98	-43.59

Table 6-40. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
11650.00	-135.00	Avg	H	48.63	20.63	53.98	-33.35
11650.00	-125.00	Peak	H	48.63	30.63	73.98	-43.35

Table 6-41. Radiated Measurements

6.8 Antenna-1 Radiated Restricted Band Edge Measurements

§15.205 / §15.209; RSS-210 [A8.5]

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

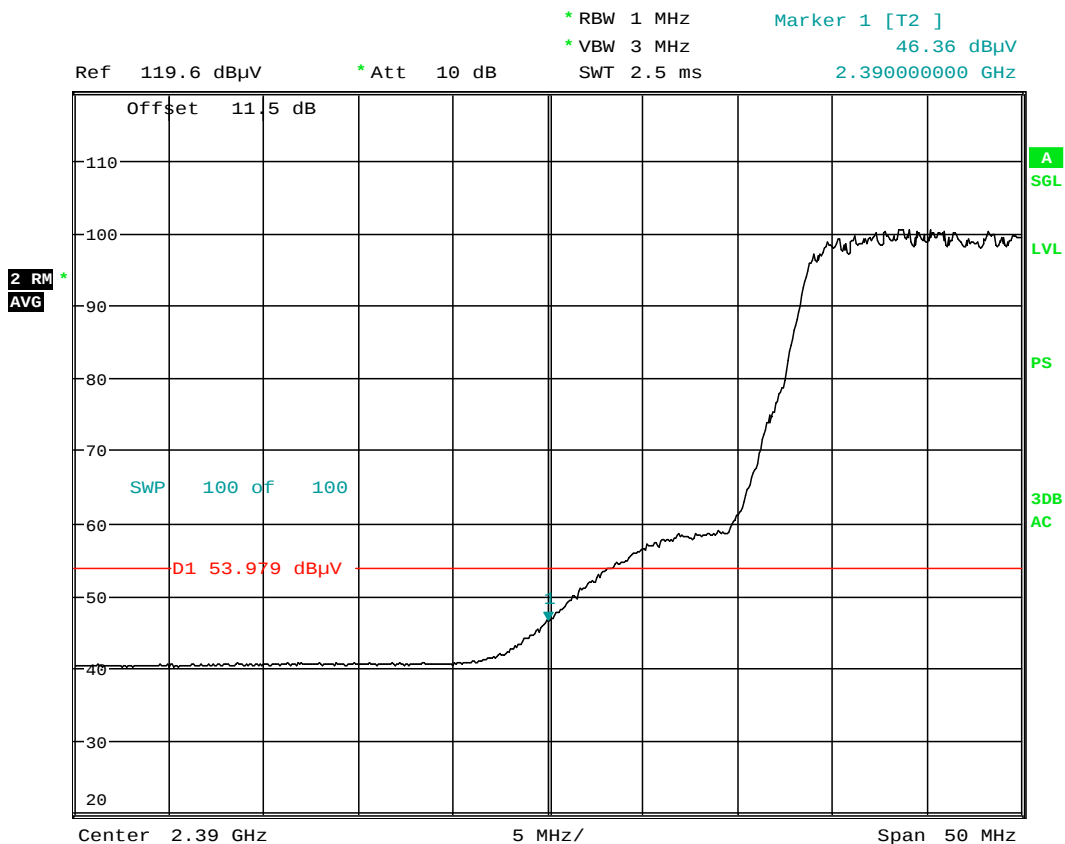
Worst Case Mode: 802.11g

Worst Case Transfer Rate: 6Mbps

Distance of Measurements: 3 Meters

Operating Frequency: 2412MHz

Channel: 1



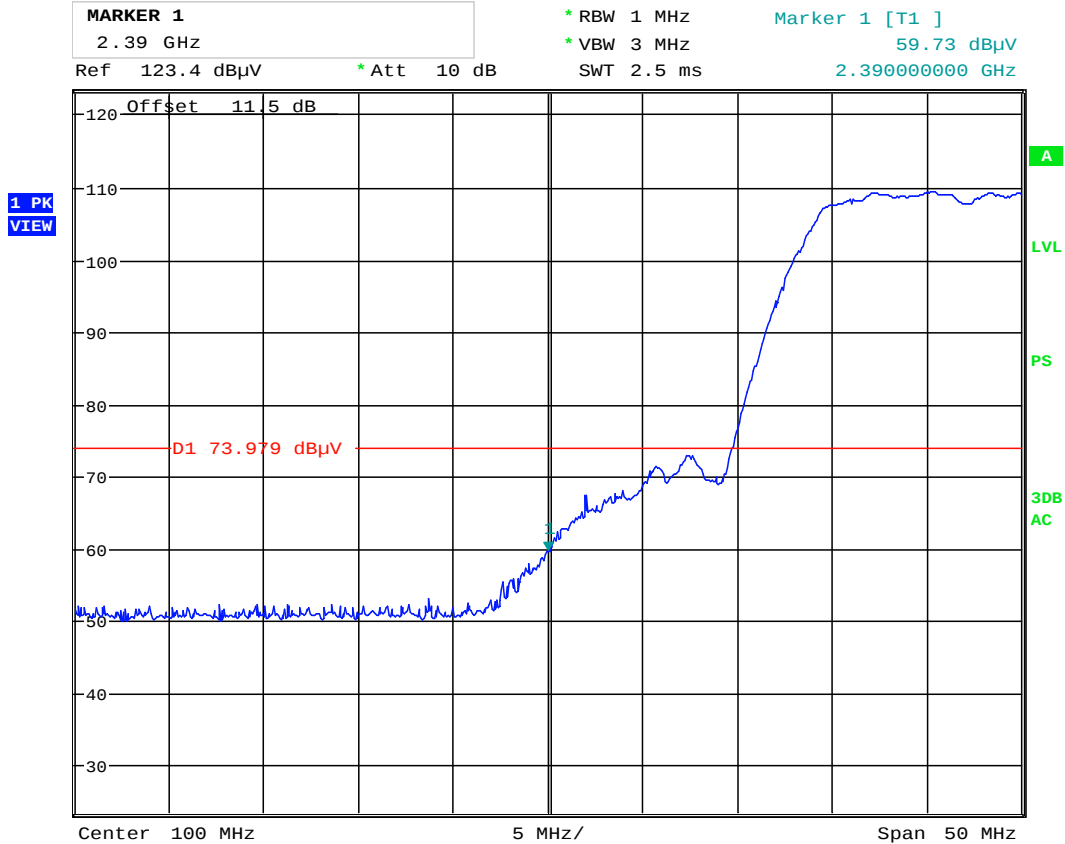
Date: 19.DEC.2013 14:34:50

Plot 6-125. Radiated Restricted Lower Band Edge Measurement (Average)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 102 of 118

Radiated Restricted Band Edge Measurements (Cont'd)

§15.205 / §15.209; RSS-210 [A8.5]



Date: 19.DEC.2013 14:34:00

Plot 6-126. Radiated Restricted Lower Band Edge Measurement (Peak)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 103 of 118

Radiated Restricted Band Edge Measurements (Cont'd)

§15.205 / §15.209; RSS-210 [A8.5]

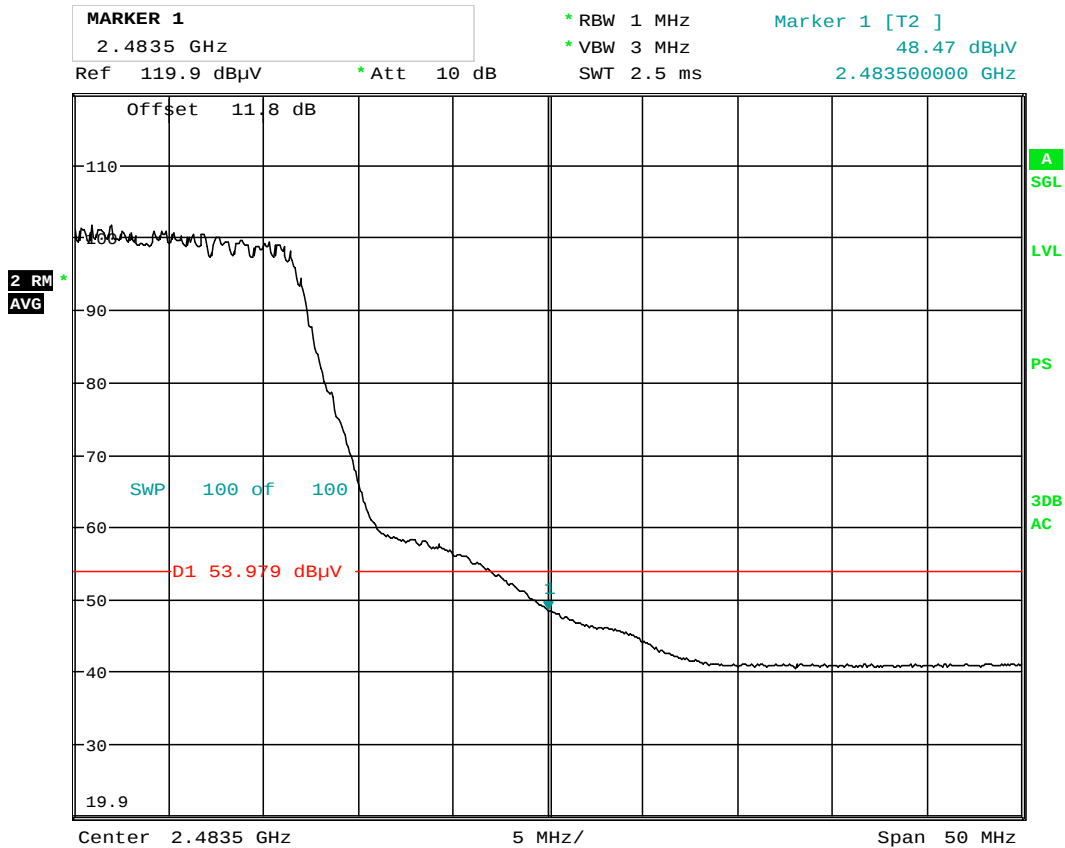
Worst Case Mode: 802.11g

Worst Case Transfer Rate: 6Mbps

Distance of Measurements: 3 Meters

Operating Frequency: 2462MHz

Channel: 11



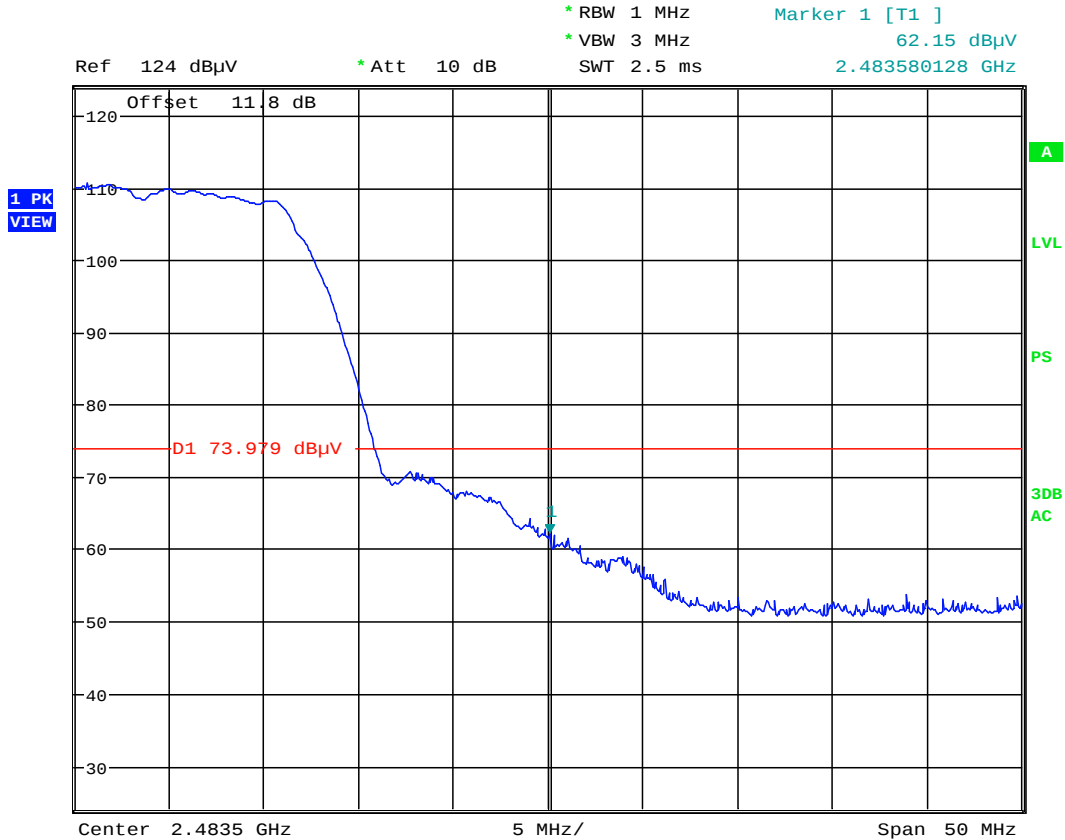
Date: 19.DEC.2013 13:55:53

Plot 6-127. Radiated Restricted Upper Band Edge Measurement (Average)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
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Radiated Restricted Band Edge Measurements (Cont'd)

§15.205 / §15.209; RSS-210 [A8.5]



Date: 19.DEC.2013 13:53:54

Plot 6-128. Radiated Restricted Upper Band Edge Measurement (Peak)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 105 of 118

6.9 Antenna-2 Radiated Restricted Band Edge Measurements

§15.205 / §15.209; RSS-210 [A8.5]

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

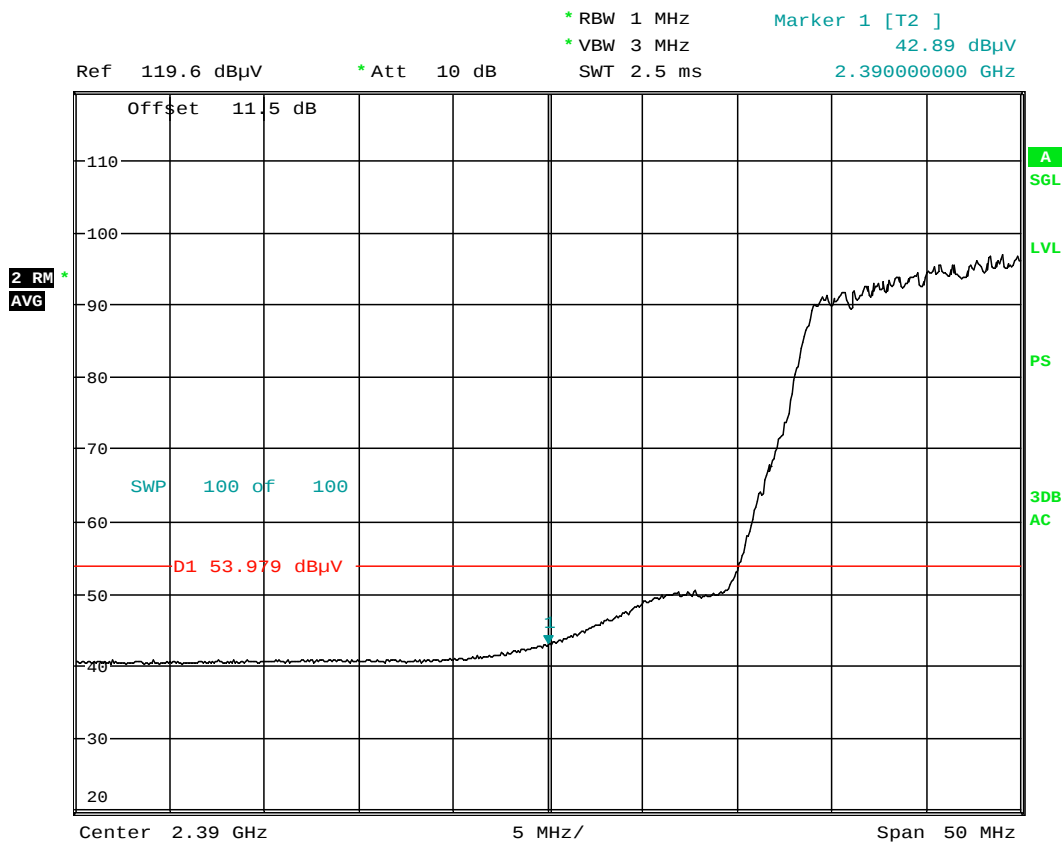
Worst Case Mode: 802.11g

Worst Case Transfer Rate: 6Mbps

Distance of Measurements: 3 Meters

Operating Frequency: 2412MHz

Channel: 1



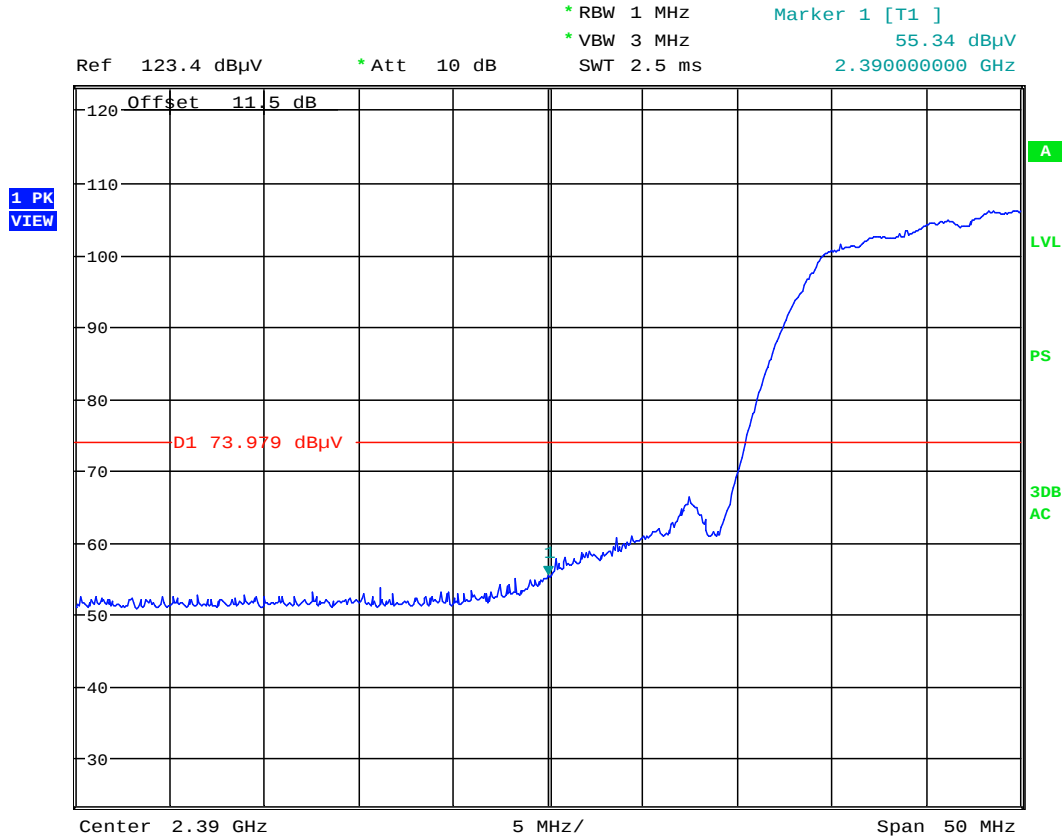
Date: 19.DEC.2013 14:38:43

Plot 6-129. Radiated Restricted Lower Band Edge Measurement (Average)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
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Radiated Restricted Band Edge Measurements (Cont'd)

§15.205 / §15.209; RSS-210 [A8.5]



Date: 19.DEC.2013 14:37:59

Plot 6-130. Radiated Restricted Lower Band Edge Measurement (Peak)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
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Radiated Restricted Band Edge Measurements (Cont'd)

§15.205 / §15.209; RSS-210 [A8.5]

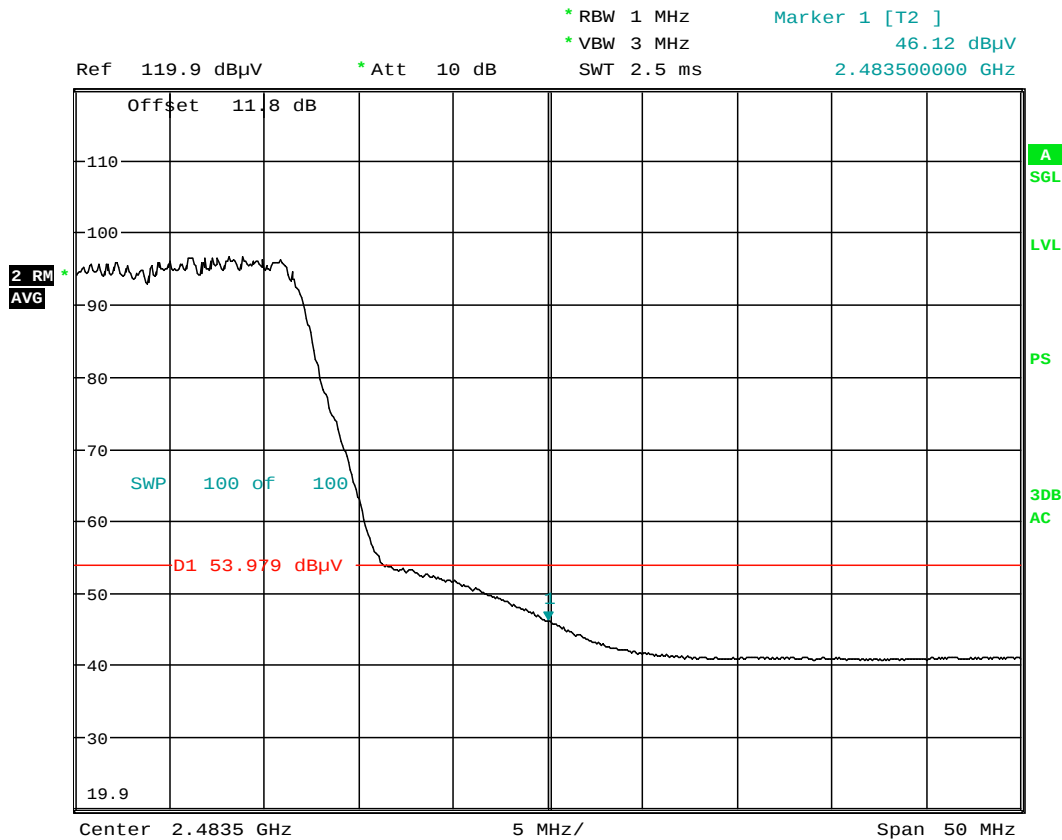
Worst Case Mode: 802.11g

Worst Case Transfer Rate: 6Mbps

Distance of Measurements: 3 Meters

Operating Frequency: 2462MHz

Channel: 11



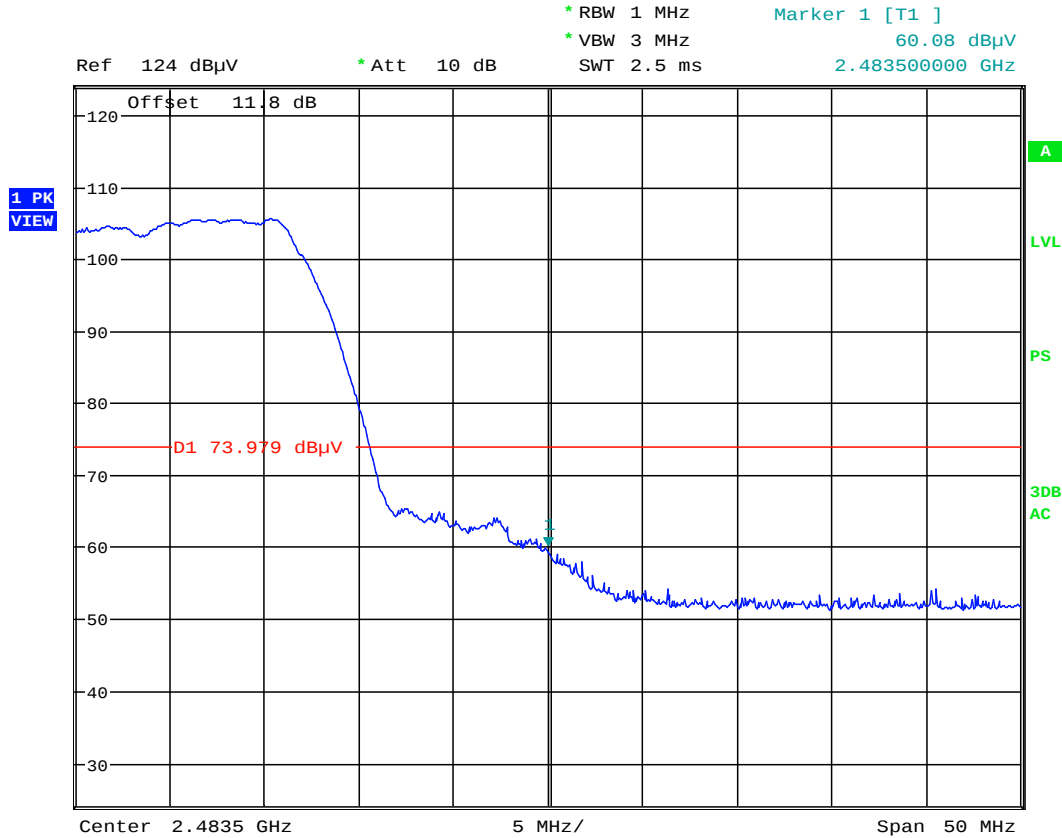
Date: 19.DEC.2013 14:06:49

Plot 6-131. Radiated Restricted Upper Band Edge Measurement (Average)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 108 of 118

Radiated Restricted Band Edge Measurements (Cont'd)

§15.205 / §15.209; RSS-210 [A8.5]



Date: 19.DEC.2013 14:06:14

Plot 6-132. Radiated Restricted Upper Band Edge Measurement (Peak)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
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6.10 MIMO Radiated Restricted Band Edge Measurements

§15.205 / §15.209; RSS-210 [A8.5]

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

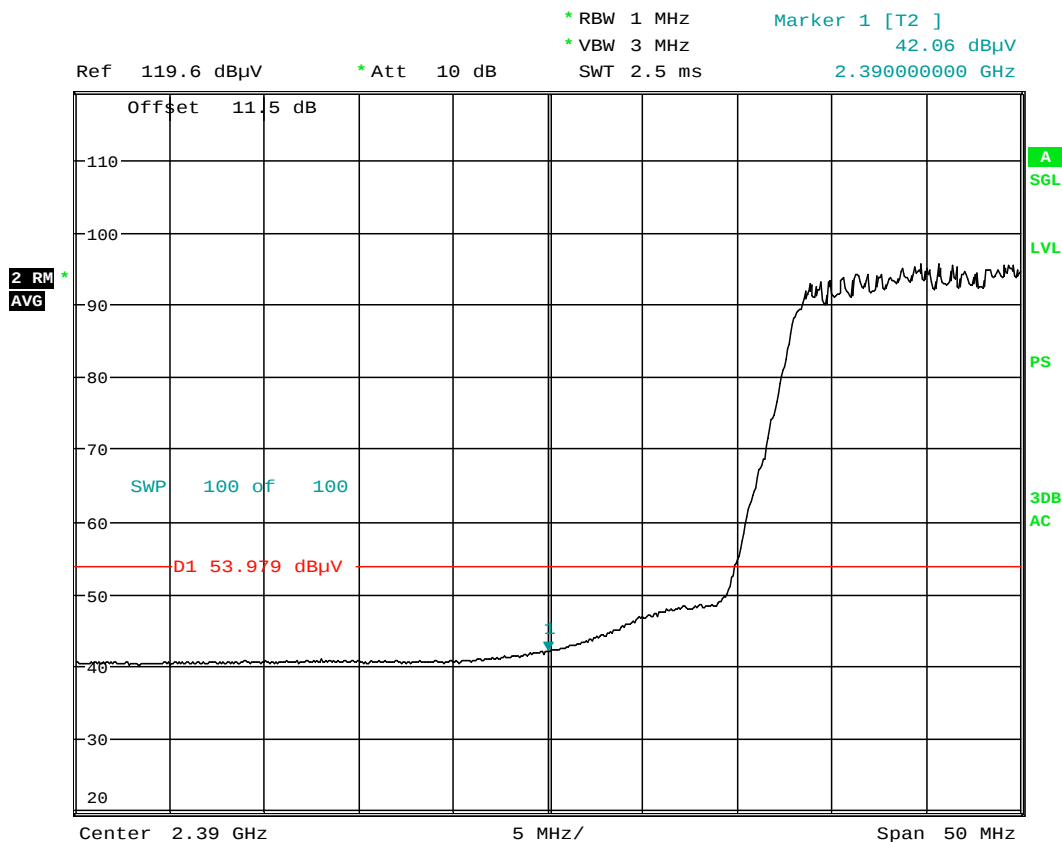
Worst Case Mode: 802.11g

Worst Case Transfer Rate: 6Mbps

Distance of Measurements: 3 Meters

Operating Frequency: 2412MHz

Channel: 1



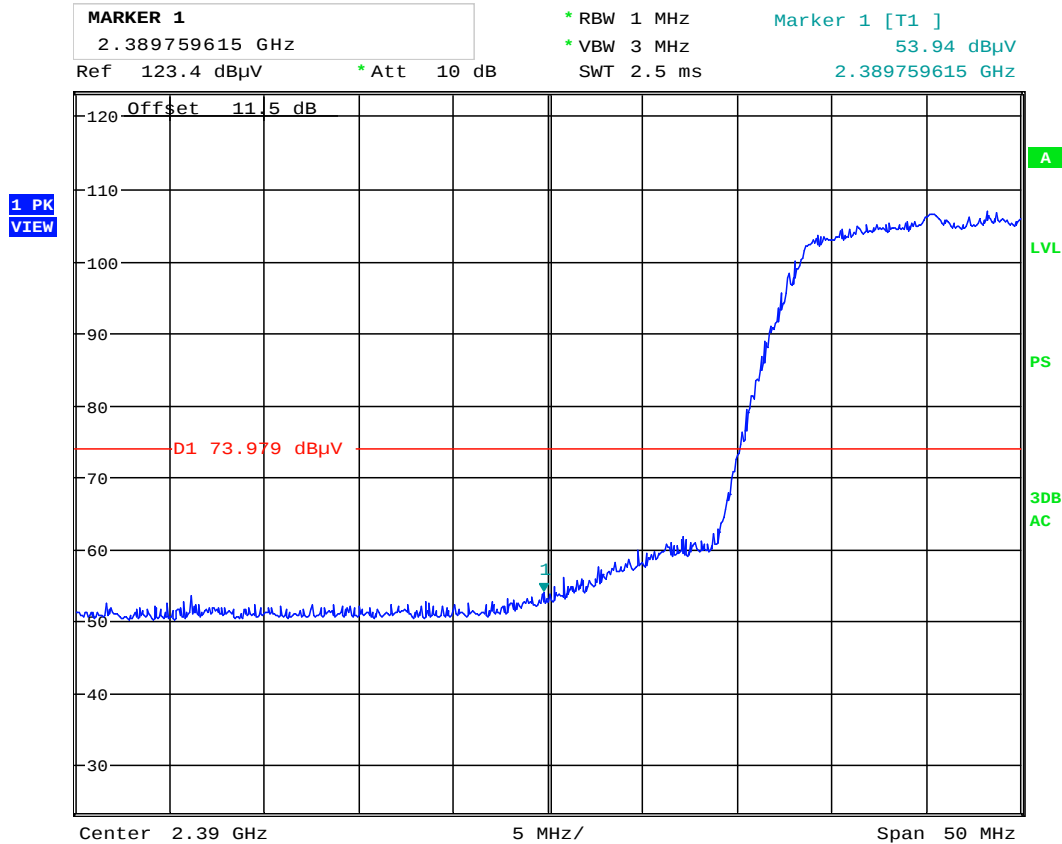
Date: 19.DEC.2013 14:28:02

Plot 6-133. Radiated Restricted Lower Band Edge Measurement (Average)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 110 of 118

Radiated Restricted Band Edge Measurements (Cont'd)

§15.205 / §15.209; RSS-210 [A8.5]



Date: 19.DEC.2013 14:27:22

Plot 6-134. Radiated Restricted Lower Band Edge Measurement (Peak)

FCC ID: A3LSMT905		FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 111 of 118

Radiated Restricted Band Edge Measurements (Cont'd)

§15.205 / §15.209; RSS-210 [A8.5]

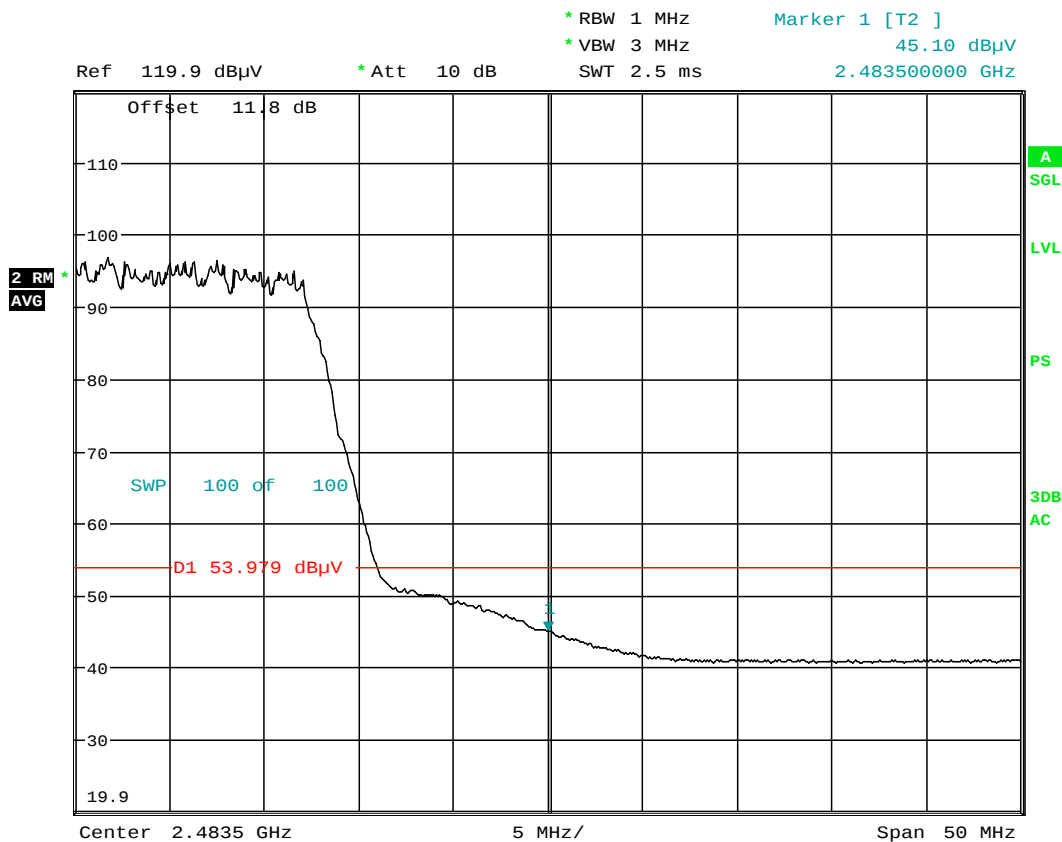
Worst Case Mode: 802.11g

Worst Case Transfer Rate: 6Mbps

Distance of Measurements: 3 Meters

Operating Frequency: 2462MHz

Channel: 11



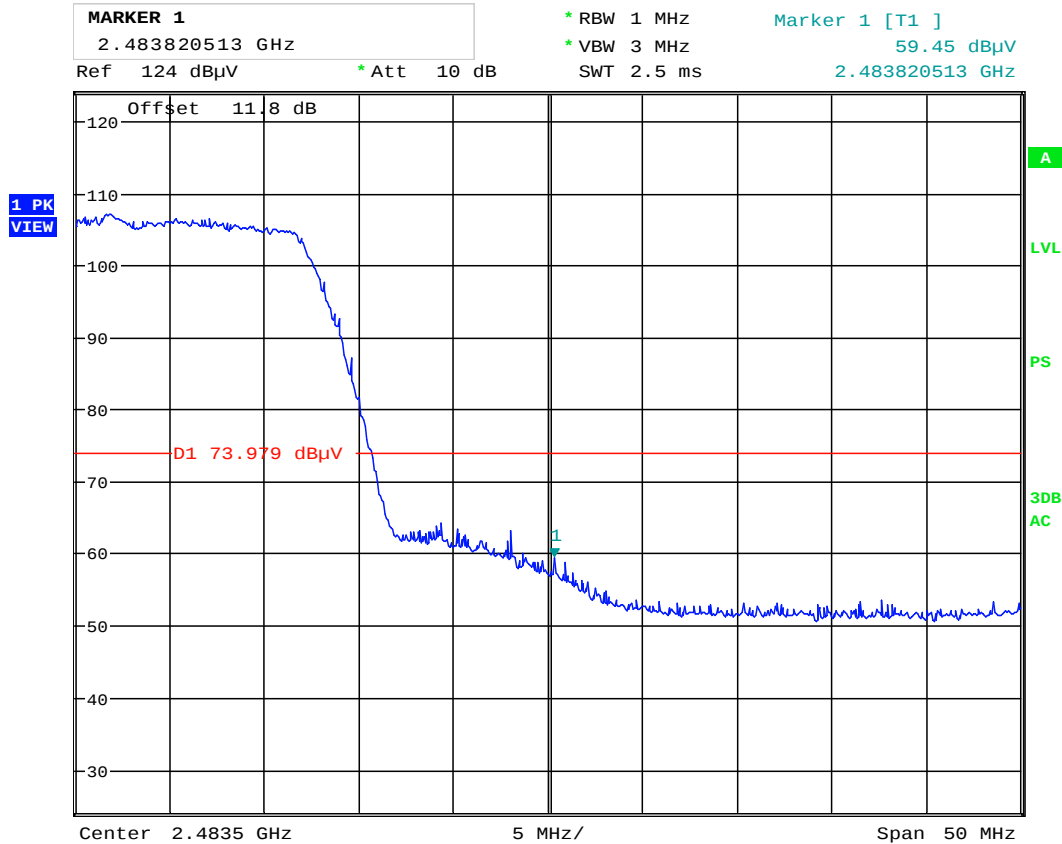
Date: 19.DEC.2013 14:21:21

Plot 6-135. Radiated Restricted Upper Band Edge Measurement (Average)

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1312172434.A3L	Test Dates: 12/19 - 12/20/13	EUT Type: Portable Tablet		Page 112 of 118

Radiated Restricted Band Edge Measurements (Cont'd)

§15.205 / §15.209; RSS-210 [A8.5]



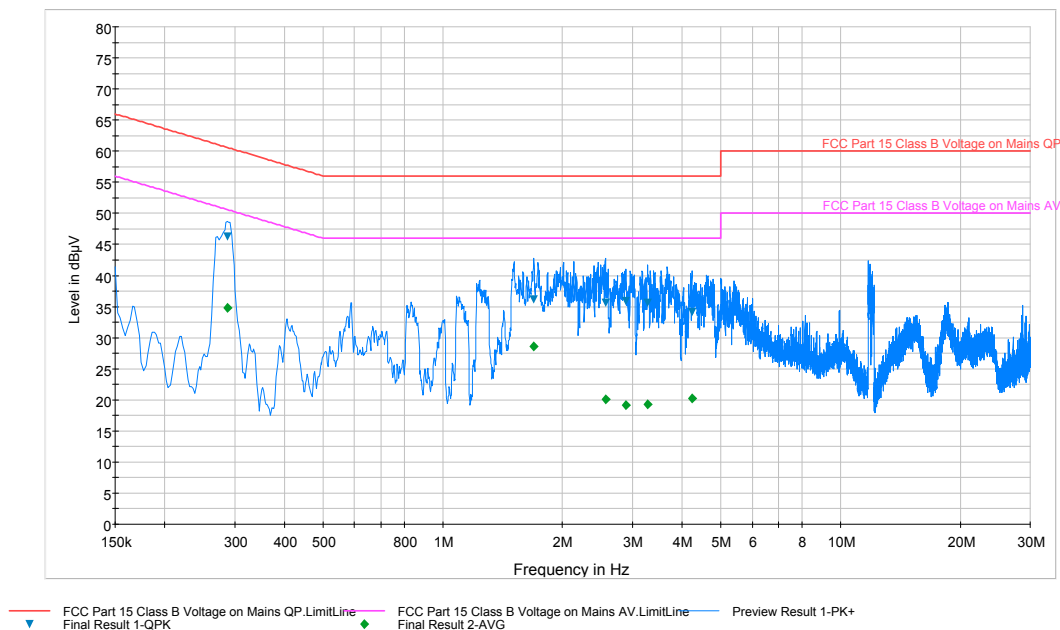
Date: 19.DEC.2013 14:20:01

Plot 6-136. Radiated Restricted Upper Band Edge Measurement (Peak)

FCC ID: A3LSMT905		FCC Pt. 15.247 802.11a/b/g/n/ac MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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6.11 Line-Conducted Test Data

§15.207; RSS-Gen [7.2.2]



Plot 6-137. Line Conducted Plot with 802.11b (L1)

Frequency MHz	Line	Corr. dB	QuasiPeak dBμV	Limit dBμV	Margin dB	Average dBμV	Limit dBμV	Margin dB
0.287	L1	0.1	46.30	60.60	14.30	34.80	50.60	15.80
1.694	L1	0.2	36.10	56.00	19.90	28.50	46.00	17.50
2.564	L1	0.2	35.70	56.00	20.30	20.10	46.00	25.90
2.888	L1	0.2	35.90	56.00	20.10	19.20	46.00	26.80
3.278	L1	0.2	35.60	56.00	20.40	19.20	46.00	26.80
4.232	L1	0.3	34.10	56.00	21.90	20.30	46.00	25.70

Table 6-42. Line Conducted Data with 802.11b (L1)

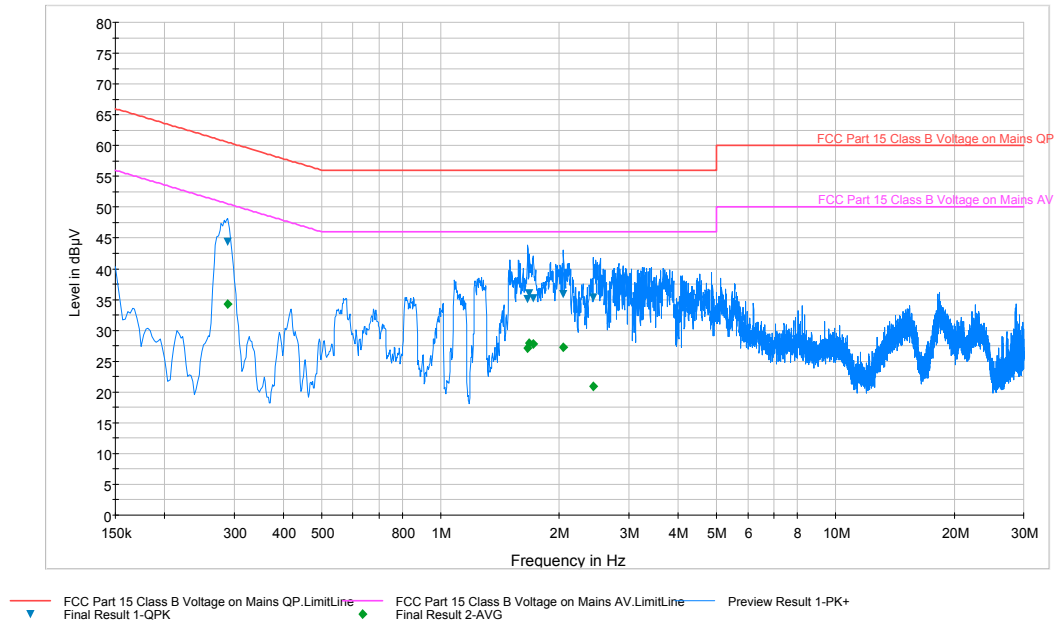
Notes:

1. All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11b mode using 1Mbps on Channel 6. 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. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
4. QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Factor (dB)
5. Margin (dB) = QP/AV Limit (dBμV) – QP/AV Level (dBμV)
6. Traces shown in plot are made using a peak detector.
7. Deviations to the Specifications: None.

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac 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]



Plot 6-138. Line Conducted Plot with 802.11b (N)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.290	N	0.1	44.40	60.50	16.10	34.20	50.50	16.30
1.662	N	0.2	35.10	56.00	20.90	27.10	46.00	18.90
1.680	N	0.2	36.00	56.00	20.00	28.00	46.00	18.00
1.714	N	0.2	35.20	56.00	20.80	27.80	46.00	18.20
2.047	N	0.2	35.90	56.00	20.10	27.20	46.00	18.80
2.438	N	0.2	35.30	56.00	20.70	20.90	46.00	25.10

Table 6-43. Line Conducted Data with 802.11b (N)

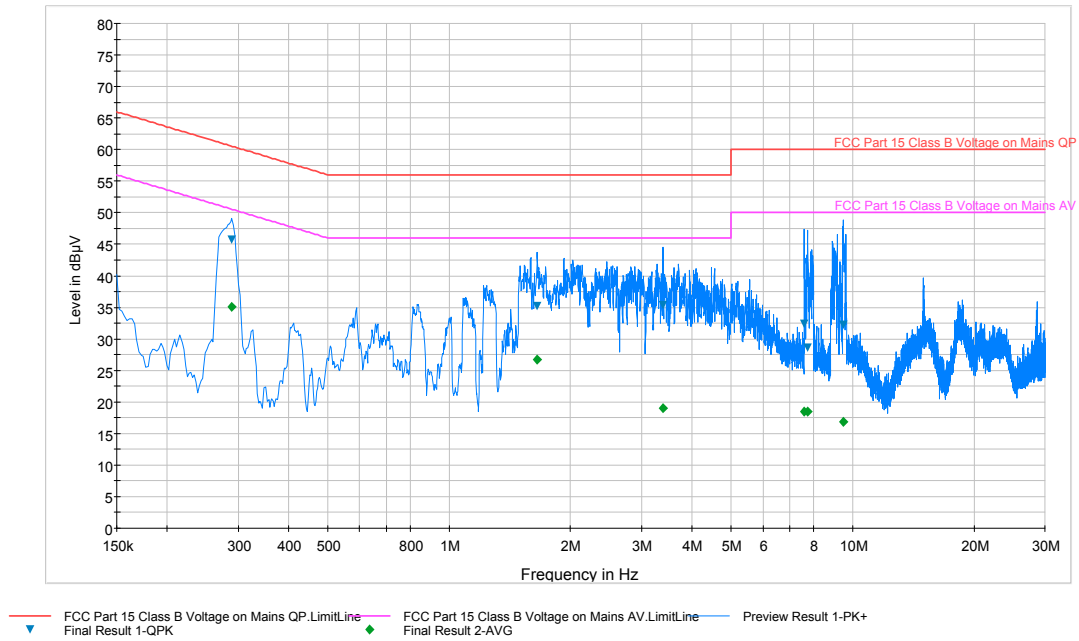
Notes:

1. All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11b mode using 1Mbps on Channel 6. 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. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
4. QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Factor (dB)
5. Margin (dB) = QP/AV Limit (dBµV) – QP/AV Level (dBµV)
6. Traces shown in plot are made using a peak detector.
7. Deviations to the Specifications: None.

FCC ID: A3LSMT905	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.247 802.11a/b/g/n/ac 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]



Plot 6-139. Line Conducted Plot with 802.11a (L1)

Frequency	Line	Corr.	QuasiPeak	Limit	Margin	Average	Limit	Margin
MHz		dB	dBμV	dBμV	dB	dBμV	dBμV	dB
0.290	L1	0.1	45.70	60.50	14.80	35.00	50.50	15.50
1.653	L1	0.2	35.20	56.00	20.80	26.70	46.00	19.30
3.390	L1	0.2	35.40	56.00	20.60	19.10	46.00	26.90
7.595	L1	0.4	32.40	60.00	27.60	18.50	50.00	31.50
7.748	L1	0.4	28.60	60.00	31.40	18.50	50.00	31.50
9.503	L1	0.6	32.20	60.00	27.80	16.90	50.00	33.10

Table 6-44. Line Conducted Data with 802.11a (L1)

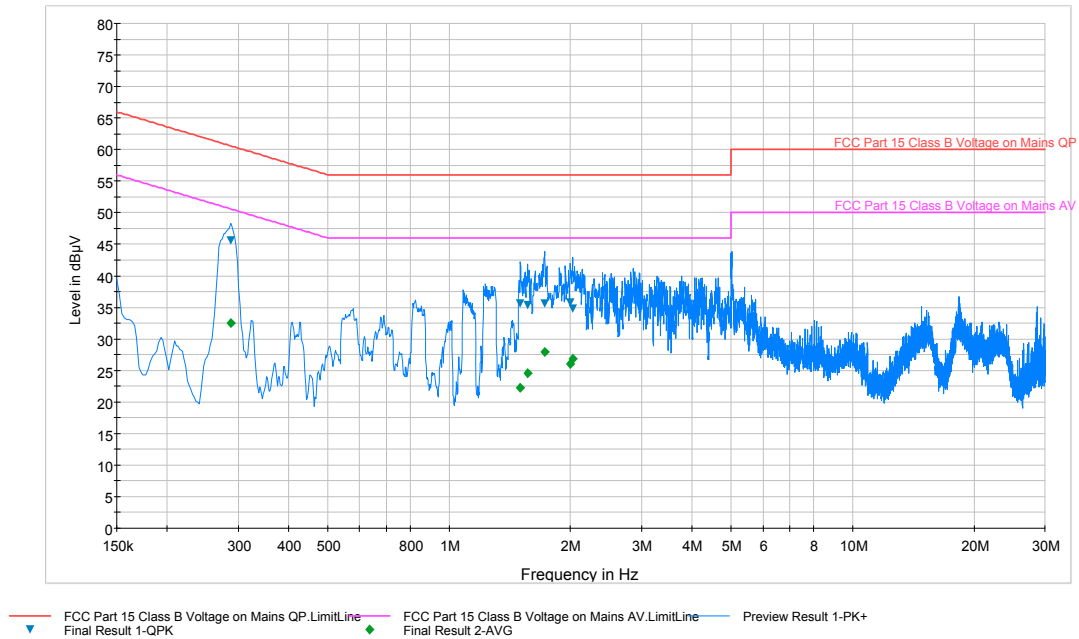
Notes:

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 157. 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. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
4. QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Factor (dB)
5. Margin (dB) = QP/AV Limit (dBμV) – QP/AV Level (dBμV)
6. Traces shown in plot are made using a peak detector.
7. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



Plot 6-140. Line Conducted Plot with 802.11a (N)

Frequency	Line	Corr.	QuasiPeak	Limit	Margin	Average	Limit	Margin
MHz		dB	dBµV	dBµV	dB	dBµV	dBµV	dB
0.287	N	0.1	45.60	60.60	15.00	32.50	50.60	18.10
1.502	N	0.2	35.60	56.00	20.40	22.30	46.00	23.70
1.568	N	0.2	35.40	56.00	20.60	24.60	46.00	21.40
1.727	N	0.2	35.60	56.00	20.40	27.90	46.00	18.10
1.997	N	0.2	35.70	56.00	20.30	26.10	46.00	19.90
2.024	N	0.2	34.80	56.00	21.20	26.80	46.00	19.20

Table 6-45. Line Conducted Data with 802.11a (N)

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 157. 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. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
4. QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Factor (dB)
5. Margin (dB) = QP/AV Limit (dBµV) – QP/AV Level (dBµV)
6. Traces shown in plot are made using a peak detector.
7. 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 Tablet FCC ID: A3LSMT905** is in compliance with Part 15.247 of the FCC Rules.

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