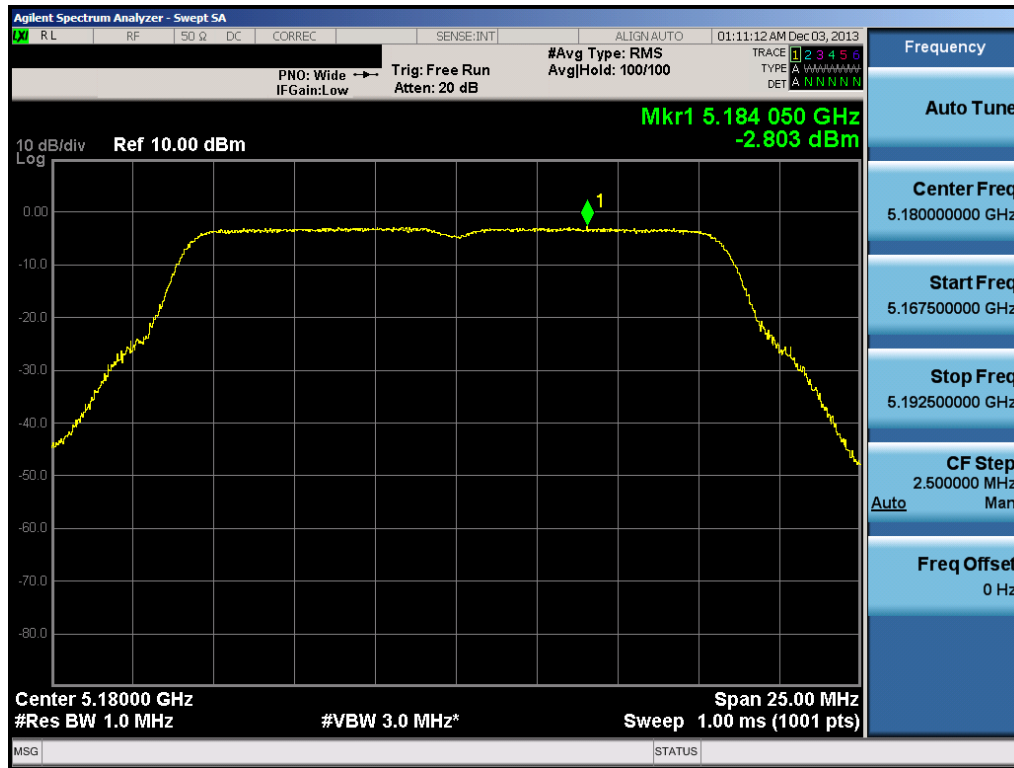


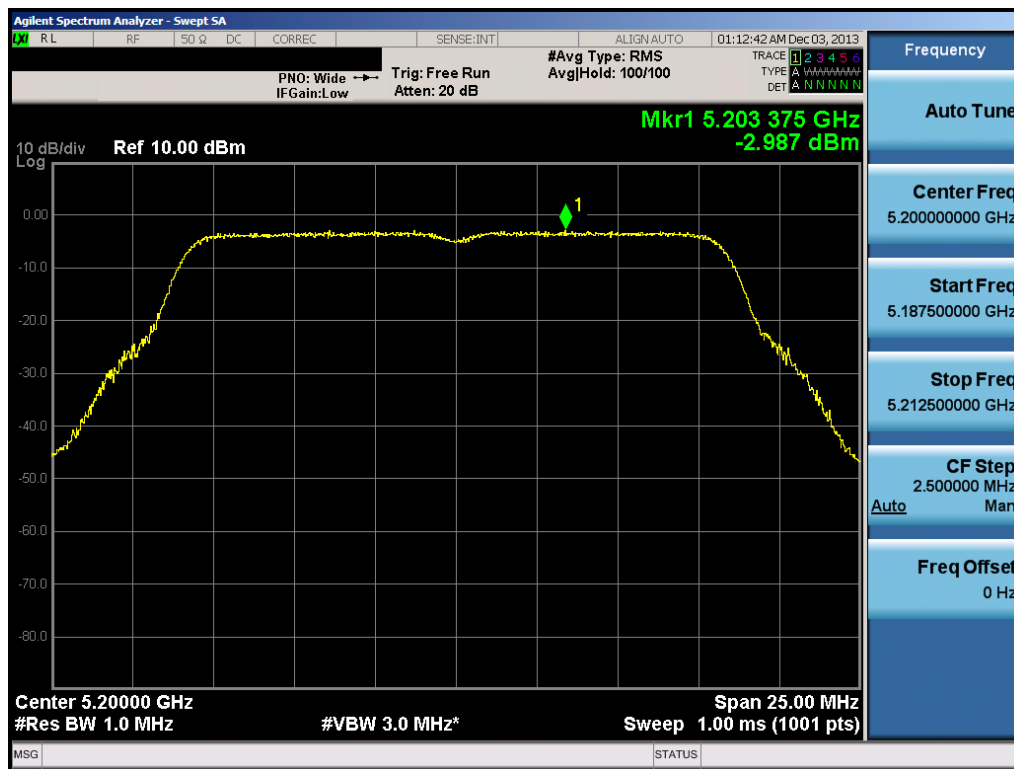
Antenna-2 Peak Power Spectral Density – 802.11a/n/a/ac

	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	a	6	-2.803	4.0	-6.80
	5200	40	a	6	-2.987	4.0	-6.99
	5240	48	a	6	-2.774	4.0	-6.77
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	-3.365	4.0	-7.37
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	-3.396	4.0	-7.40
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	-3.098	4.0	-7.10
	5190	38	n (40MHz)	13.5/15 (MCS0)	-6.064	4.0	-10.06
	5230	46	n (40MHz)	13.5/15 (MCS0)	-5.690	4.0	-9.69
	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	-9.588	4.0	-13.59
Band 2A	5260	52	a	6	-2.626	11.0	-13.63
	5280	56	a	6	-3.071	11.0	-14.07
	5320	64	a	6	-3.638	11.0	-14.64
	5260	52	n (20MHz)	6.5/7.2 (MCS0)	-2.869	11.0	-13.87
	5280	56	n (20MHz)	6.5/7.2 (MCS0)	-3.040	11.0	-14.04
	5320	64	n (20MHz)	6.5/7.2 (MCS0)	-4.098	11.0	-15.10
	5270	54	n (40MHz)	13.5/15 (MCS0)	-5.931	11.0	-16.93
	5310	62	n (40MHz)	13.5/15 (MCS0)	-6.935	11.0	-17.94
	5290	58	ac (80MHz)	29.3/32.5 (MCS0)	-8.600	11.0	-19.60
Band 2C	5500	100	a	6	-2.797	11.0	-13.80
	5580	116	a	6	-3.744	11.0	-14.74
	5700	140	a	6	-3.519	11.0	-14.52
	5500	100	n (20MHz)	6.5/7.2 (MCS0)	-4.231	11.0	-15.23
	5580	116	n (20MHz)	6.5/7.2 (MCS0)	-5.402	11.0	-16.40
	5700	140	n (20MHz)	6.5/7.2 (MCS0)	-5.225	11.0	-16.23
	5510	102	n (40MHz)	13.5/15 (MCS0)	-7.148	11.0	-18.15
	5550	110	n (40MHz)	13.5/15 (MCS0)	-7.064	11.0	-18.06
	5670	134	n (40MHz)	13.5/15 (MCS0)	-7.973	11.0	-18.97
	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	-9.074	11.0	-20.07

Table 6-12. Antenna-2 Conducted Power Spectral Density Measurements

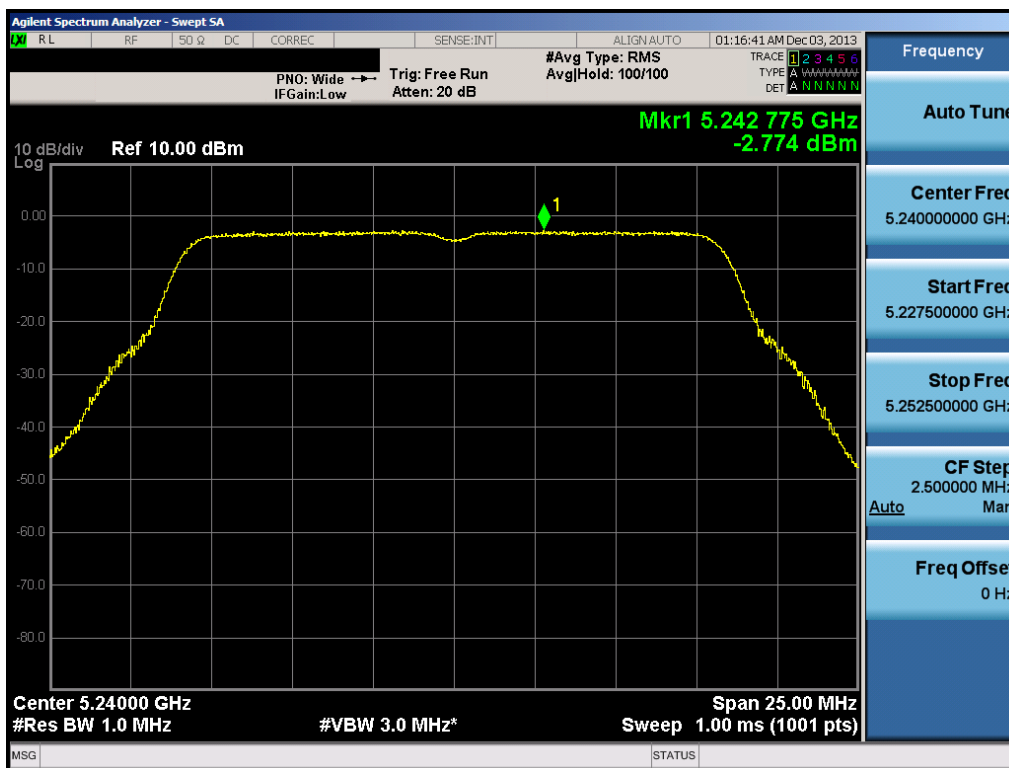


Plot 6-93. Peak Power Spectral Density Plot (802.11a (UNII Band 1) – Ch. 36)

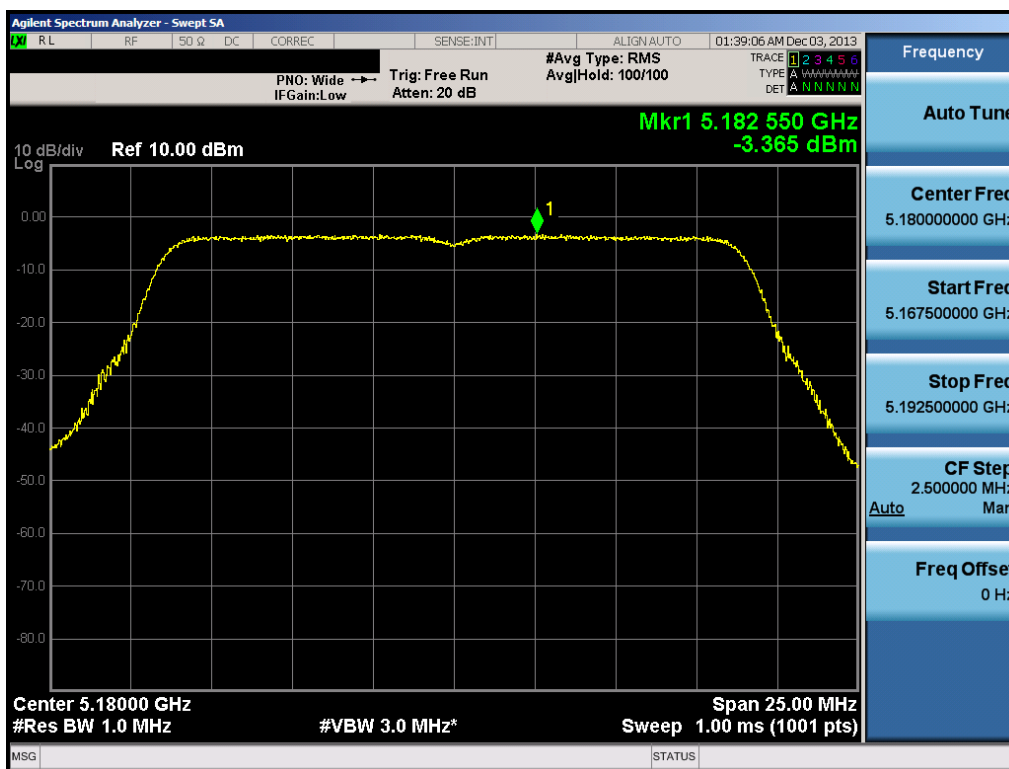


Plot 6-94. Peak Power Spectral Density Plot (802.11a (UNII Band 1) – Ch. 40)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 68 of 175

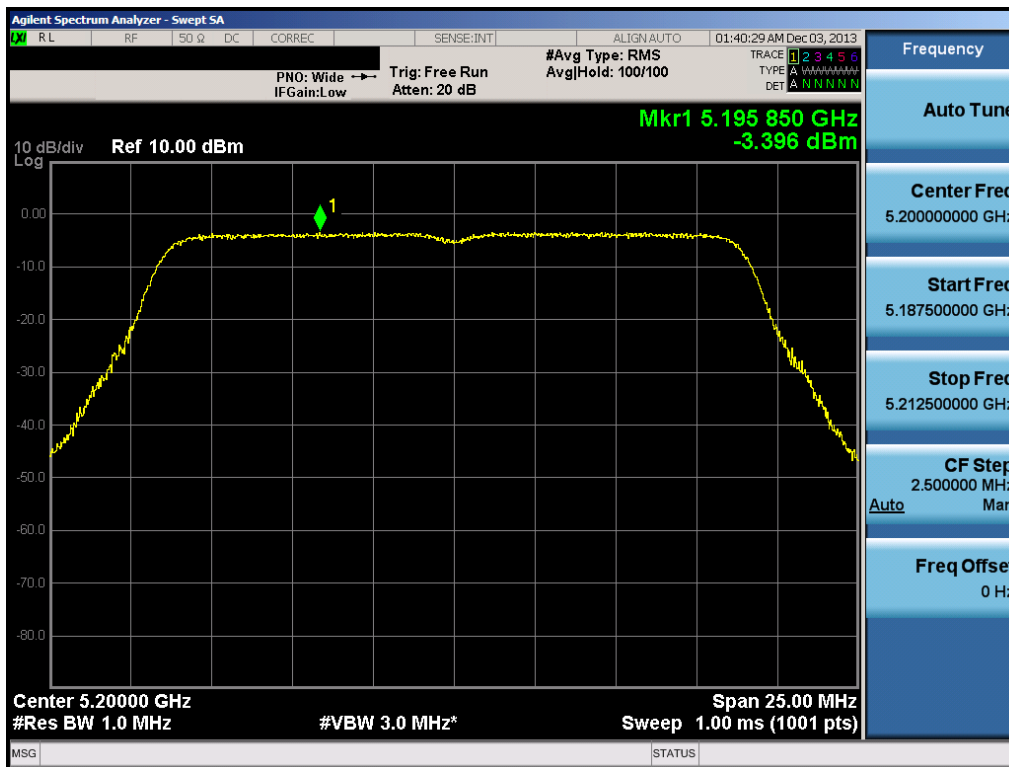


Plot 6-95. Peak Power Spectral Density Plot (802.11a (UNII Band 1) – Ch. 48)

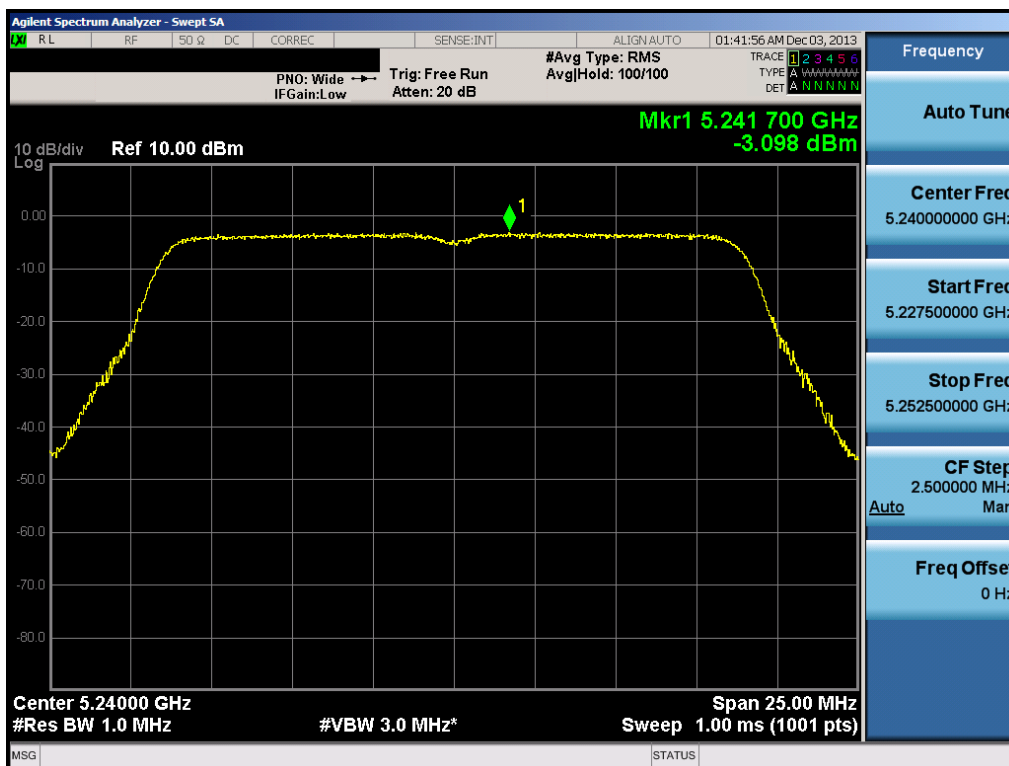


Plot 6-96. Peak Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 1) – Ch. 36)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 69 of 175

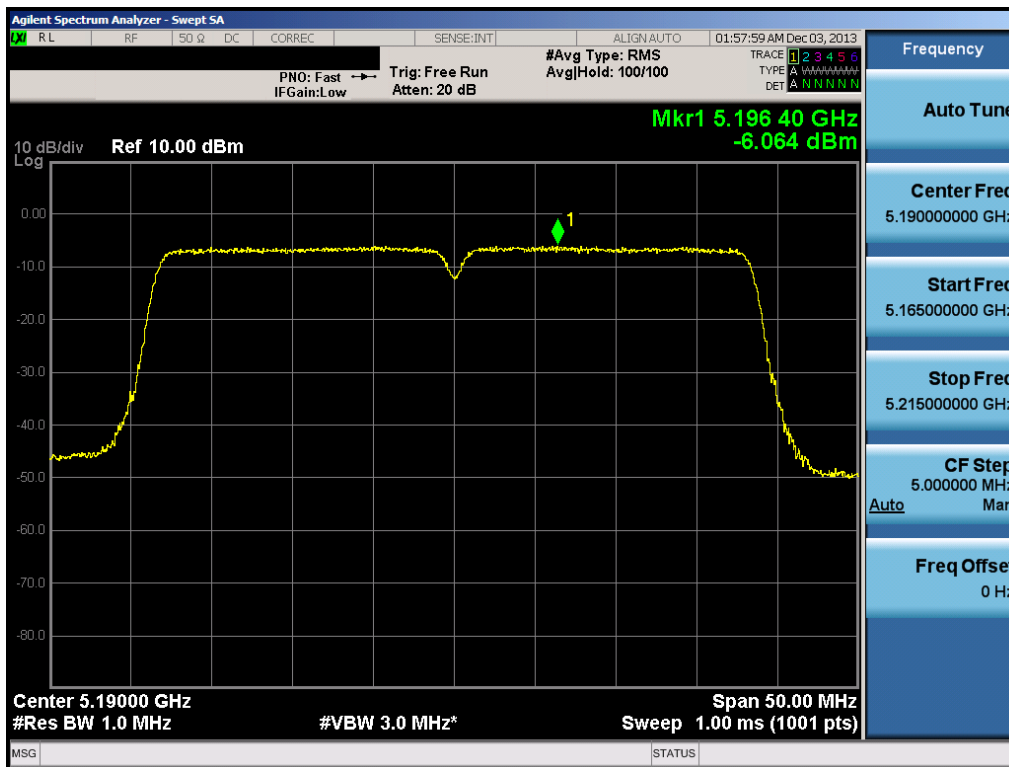


Plot 6-97. Peak Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 1) – Ch. 40)

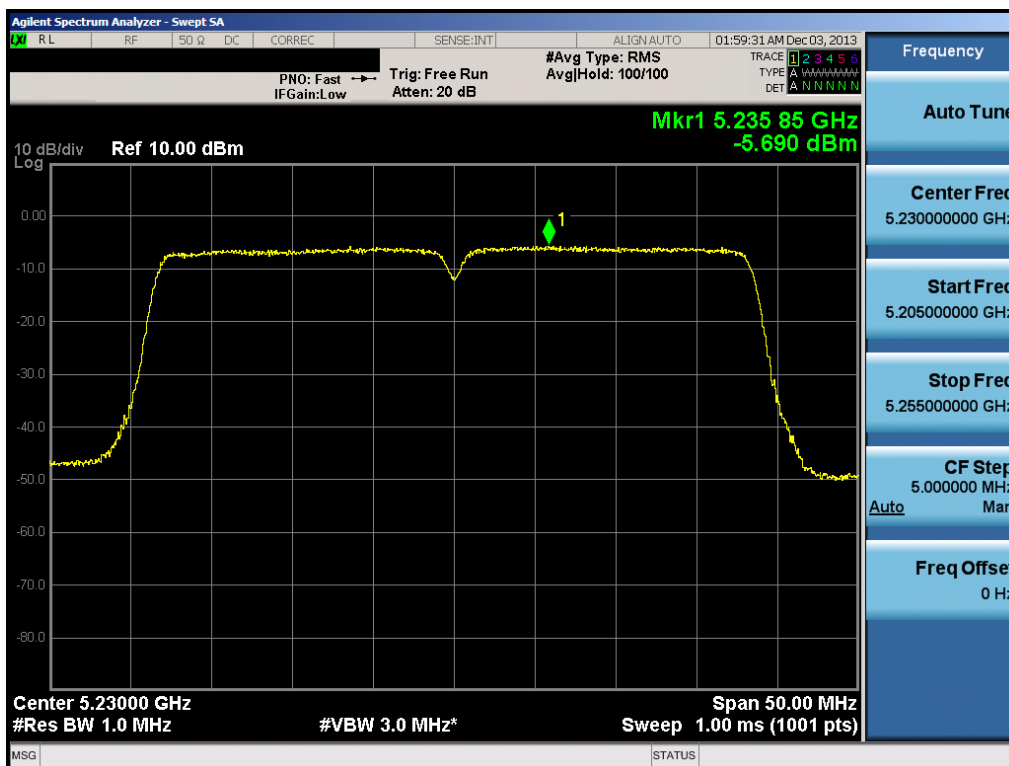


Plot 6-98. Peak Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 1) – Ch. 48)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 70 of 175

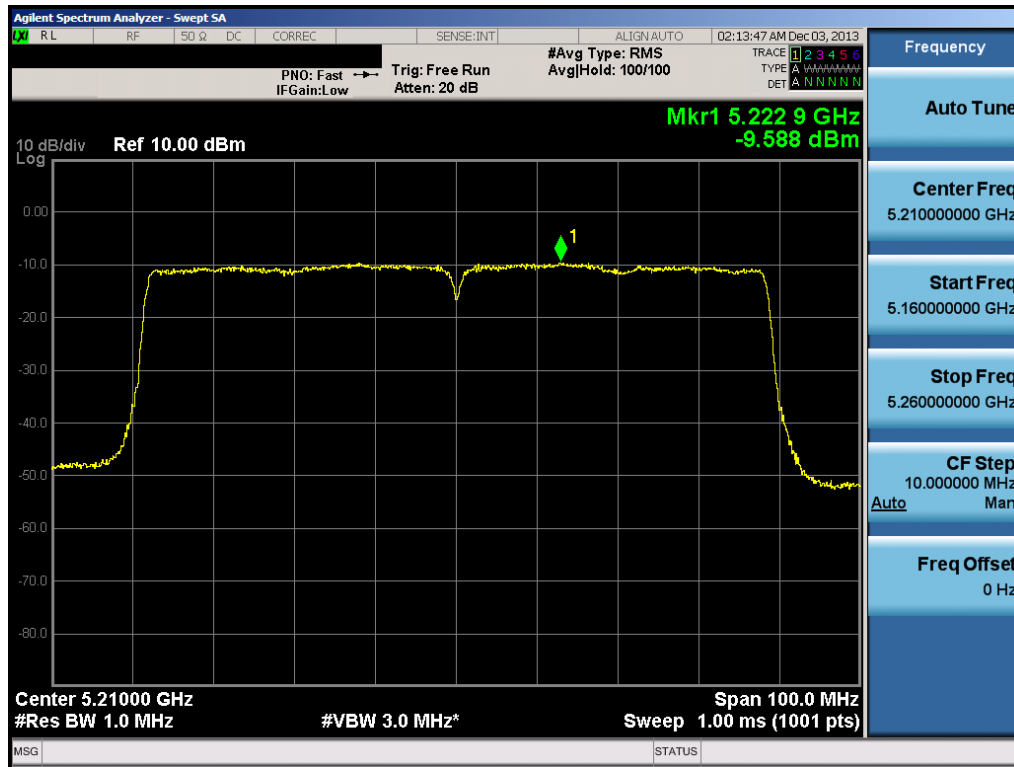


Plot 6-99. Peak Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 1) – Ch. 38)

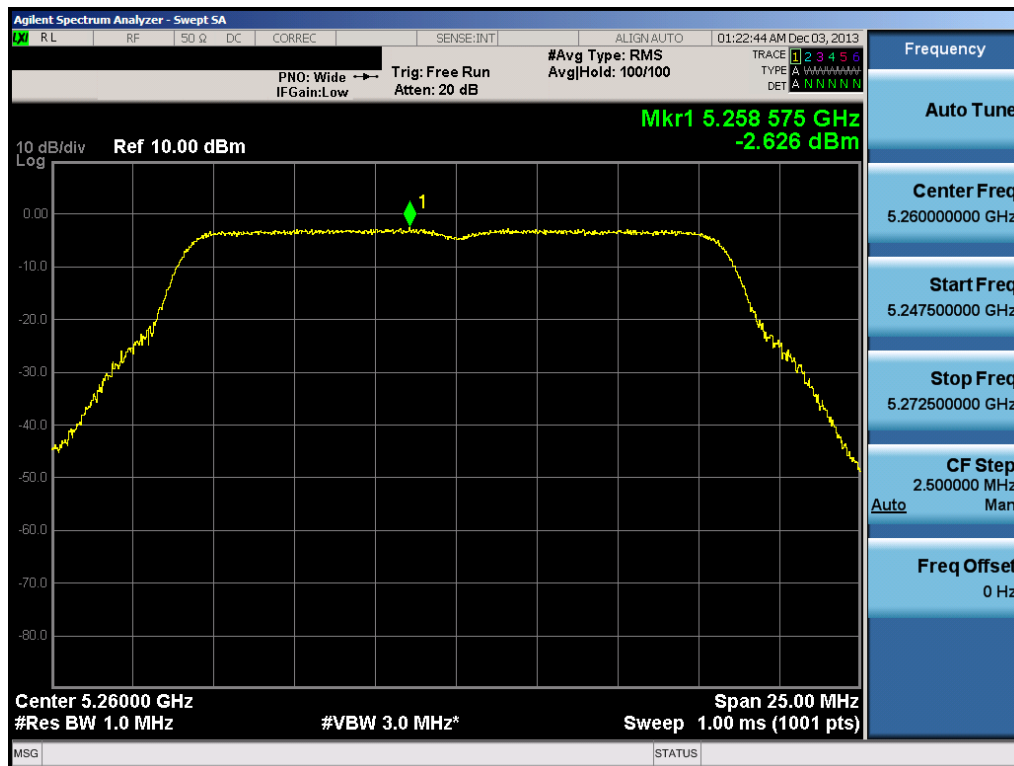


Plot 6-100. Peak Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 1) – Ch. 46)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 71 of 175

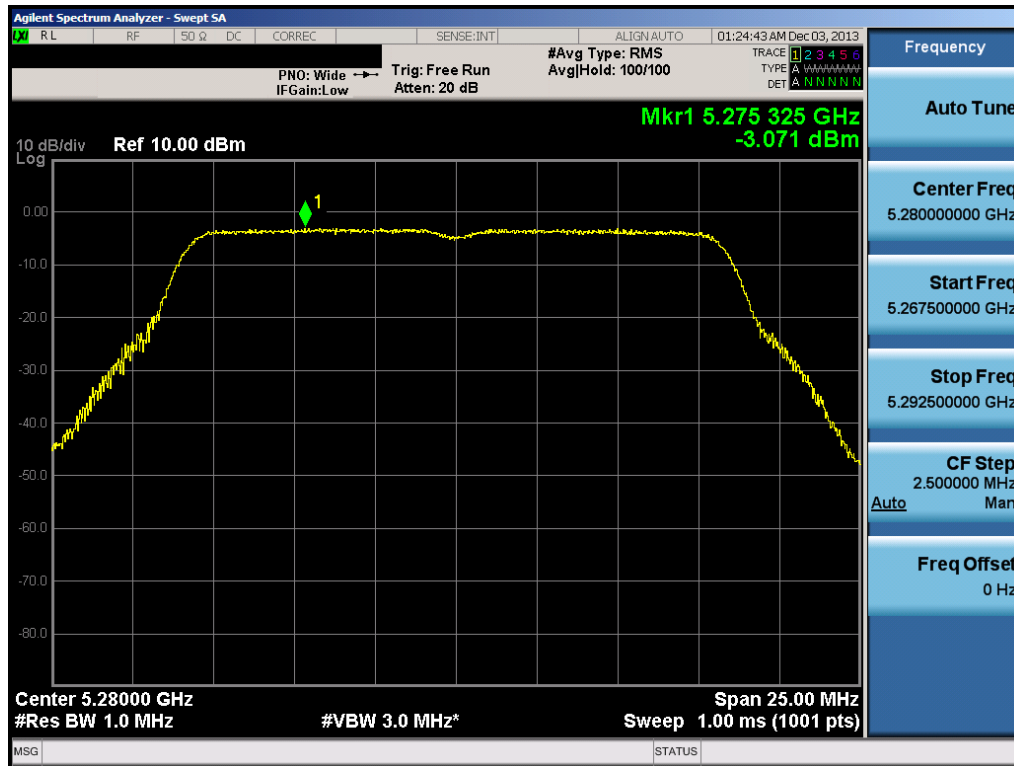


Plot 6-101. Peak Power Spectral Density Plot (80MHz BW 802.11ac (UNII Band 1) – Ch. 42)

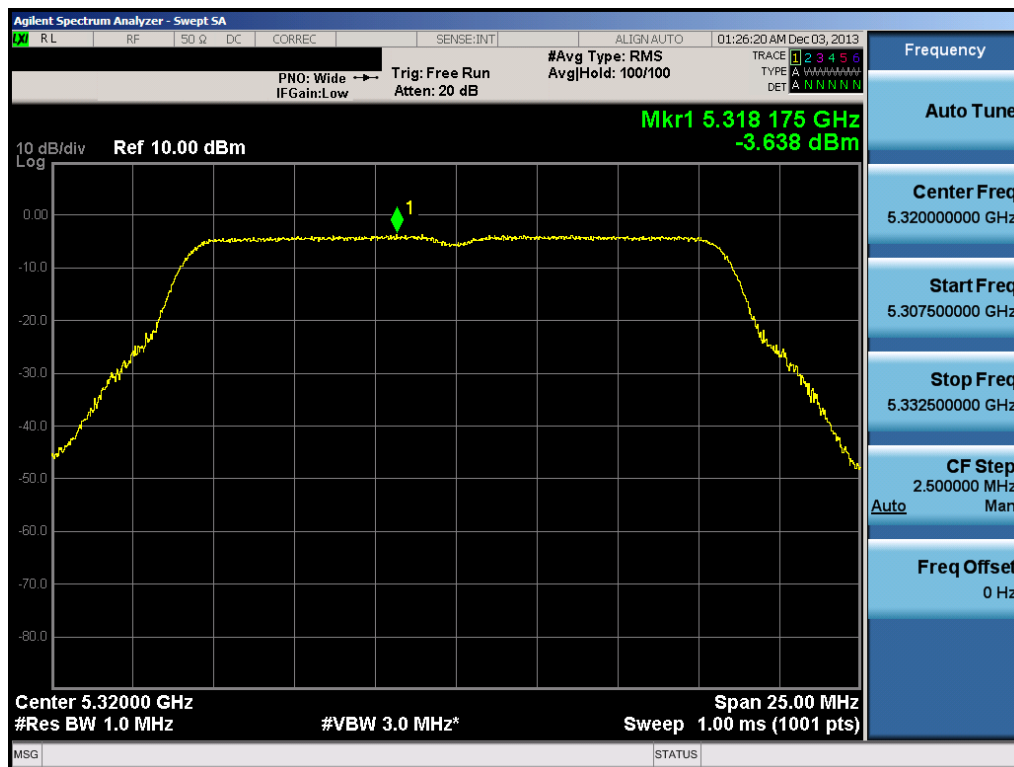


Plot 6-102. Peak Power Spectral Density Plot (802.11a (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 72 of 175

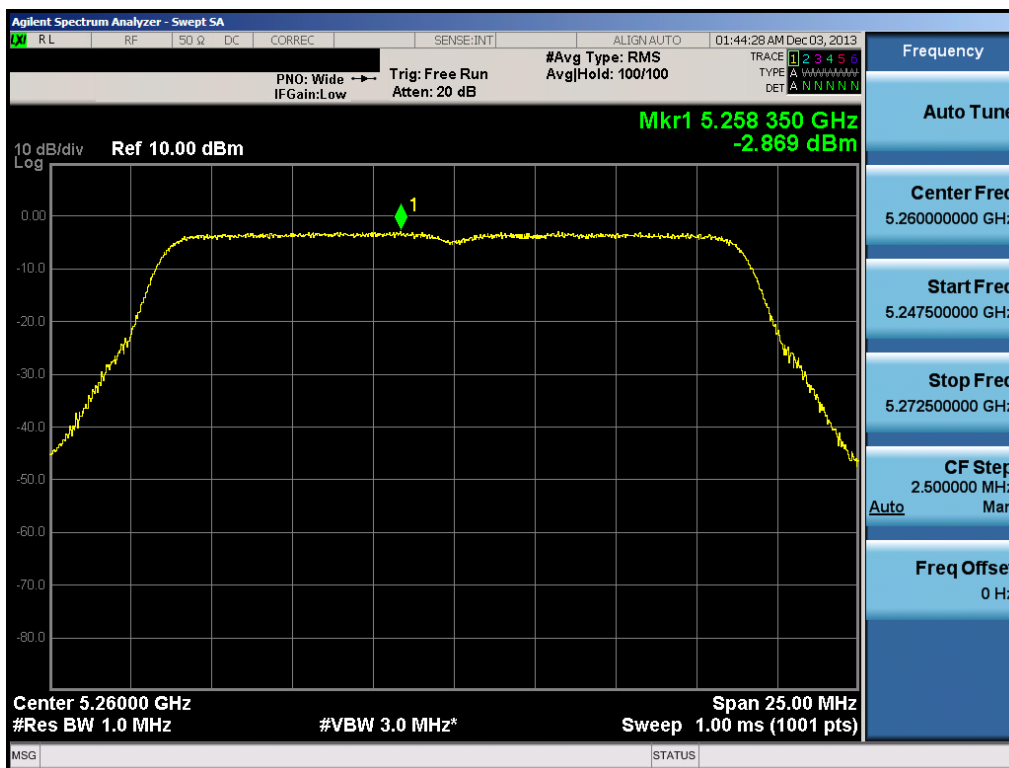


Plot 6-103. Peak Power Spectral Density Plot (802.11a (UNII Band 2A) – Ch. 56)

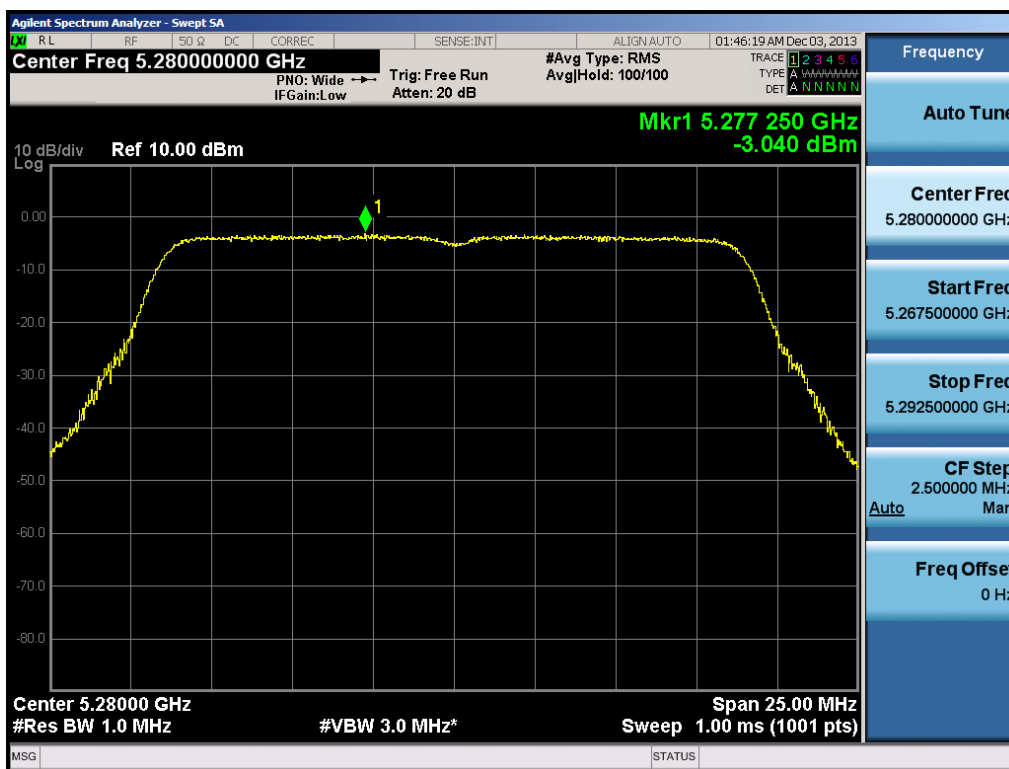


Plot 6-104. Peak Power Spectral Density Plot (802.11a (UNII Band 2A) – Ch. 64)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 73 of 175

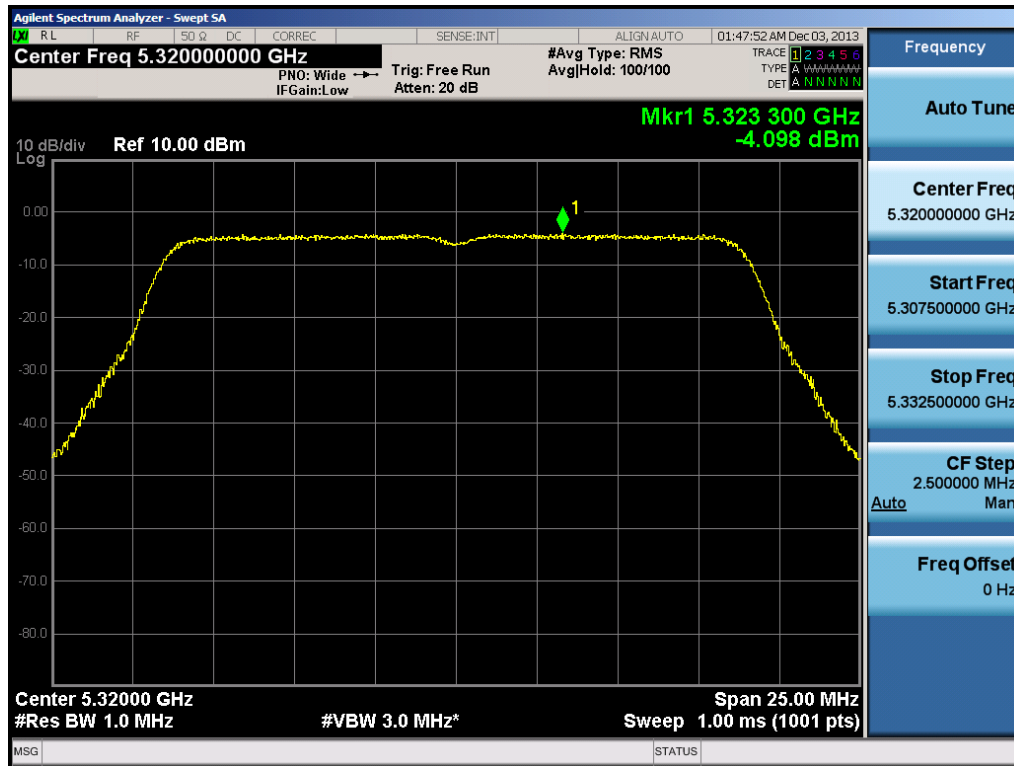


Plot 6-105. Peak Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

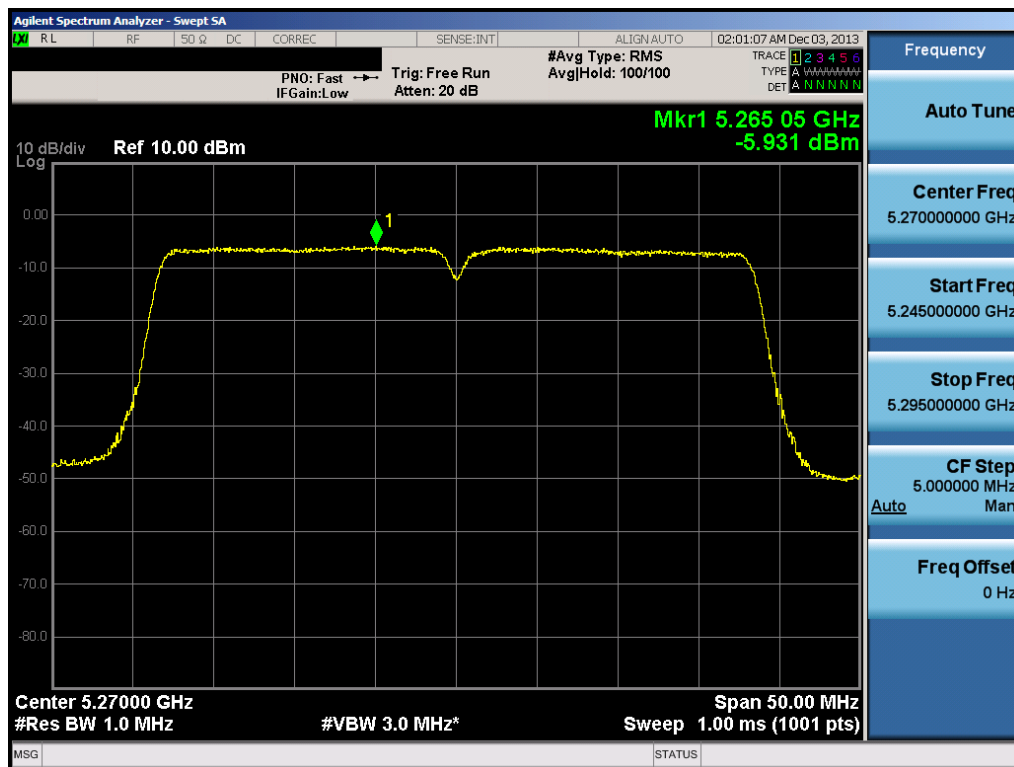


Plot 6-106. Peak Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 74 of 175

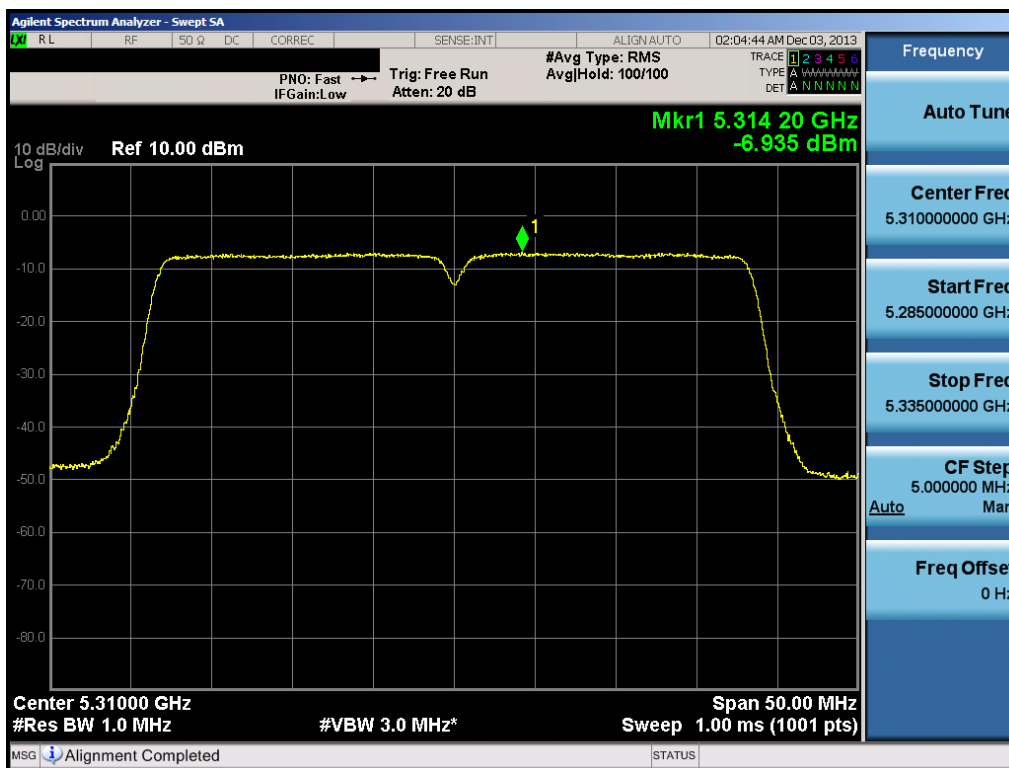


Plot 6-107. Peak Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)

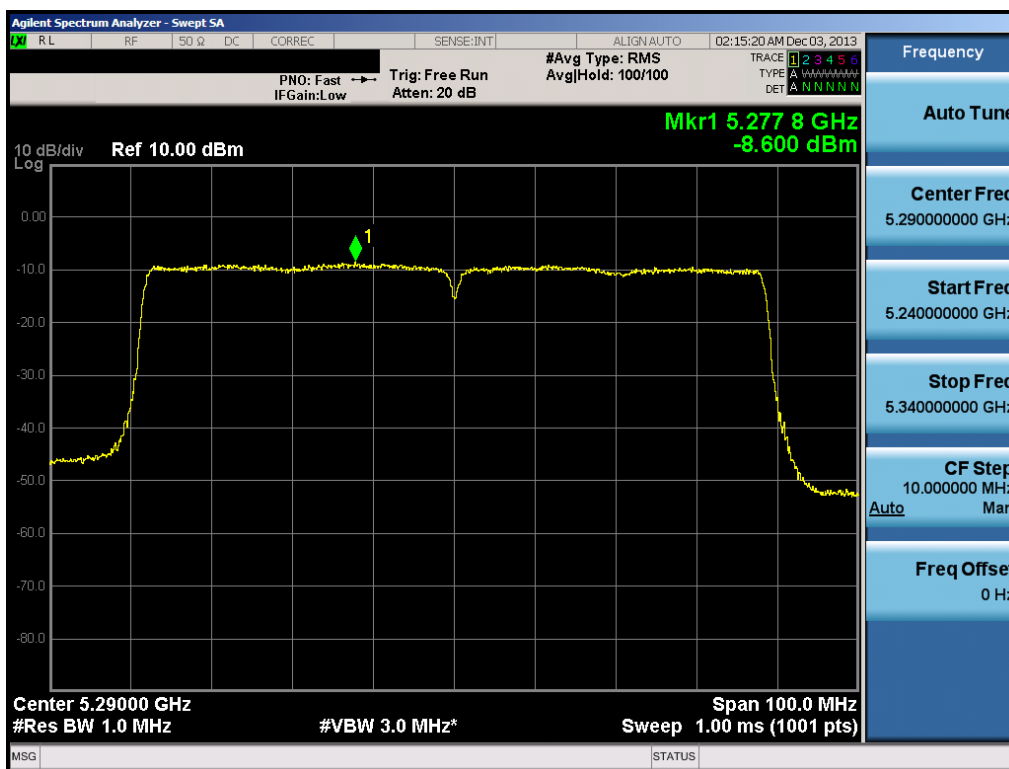


Plot 6-108. Peak Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 2A) – Ch. 54)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 75 of 175

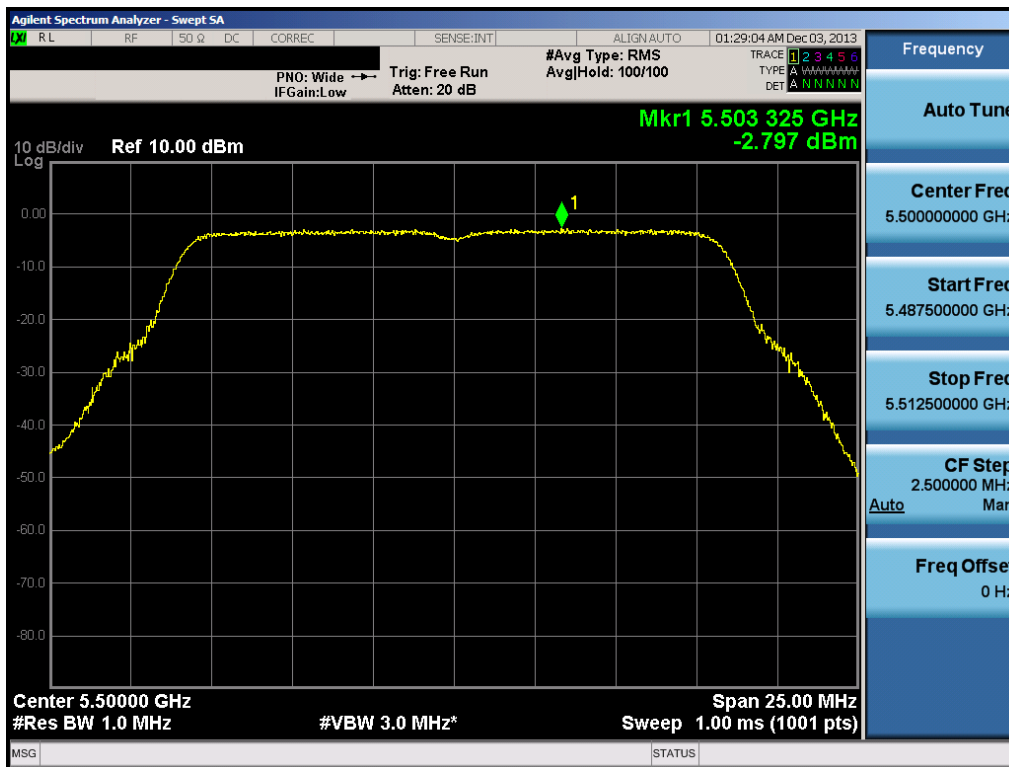


Plot 6-109. Peak Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 2A) – Ch. 62)

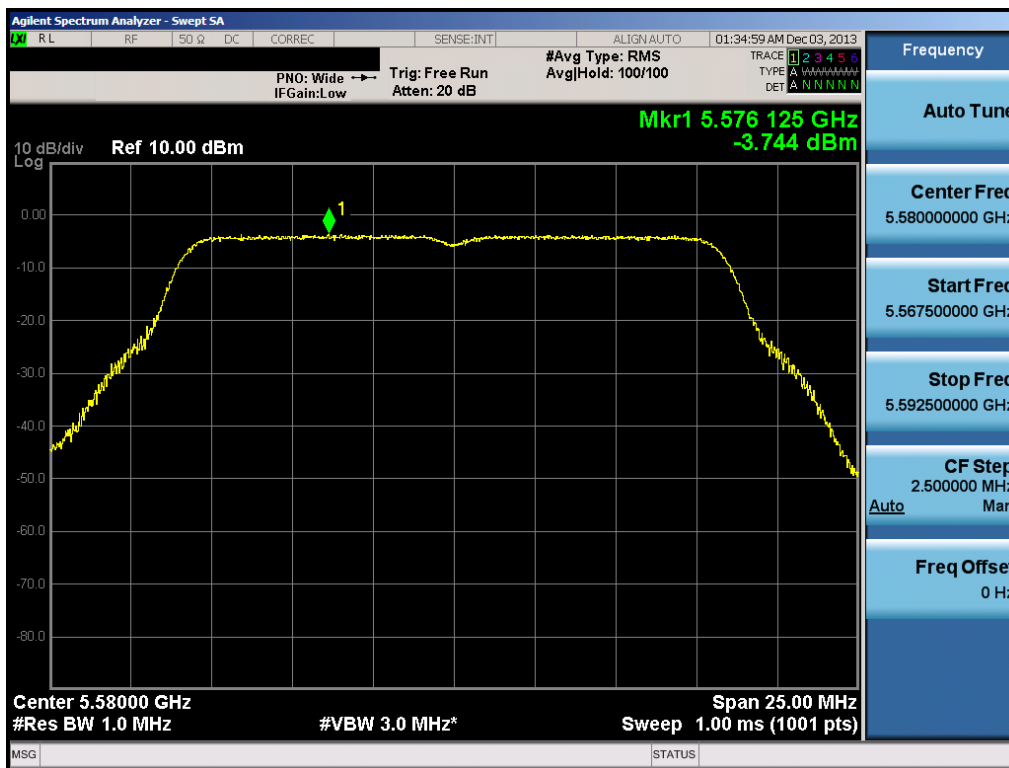


Plot 6-110. Peak Power Spectral Density Plot (80MHz BW 802.11ac (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 76 of 175

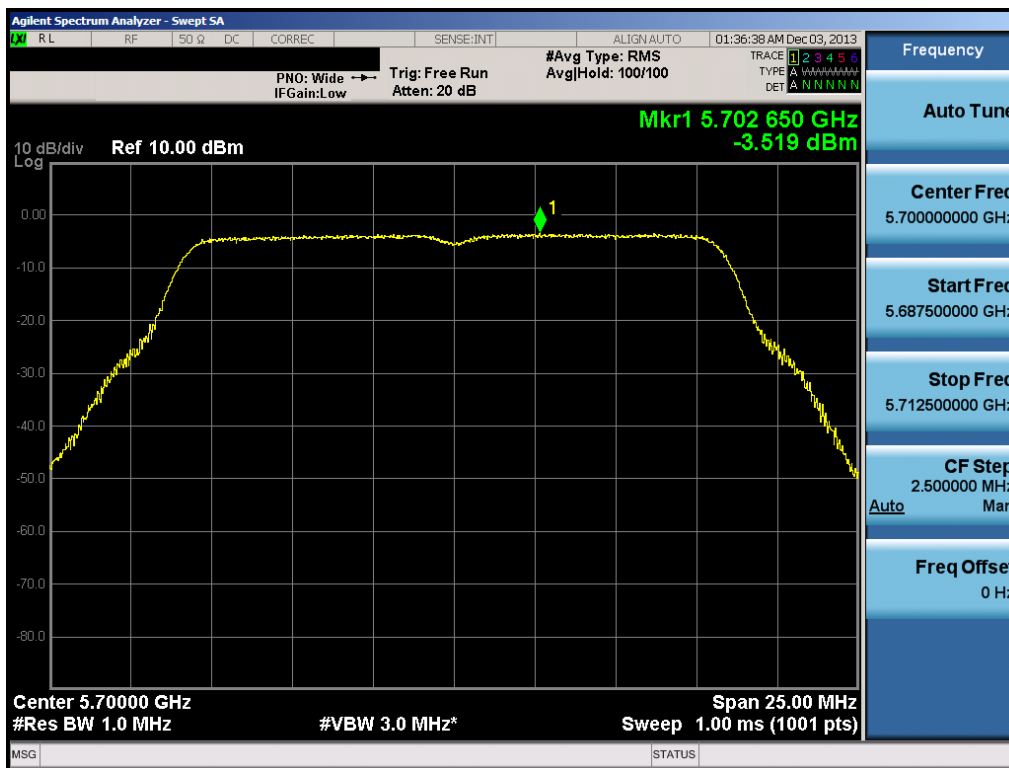


Plot 6-111. Peak Power Spectral Density Plot (802.11a (UNII Band 2C) – Ch. 100)

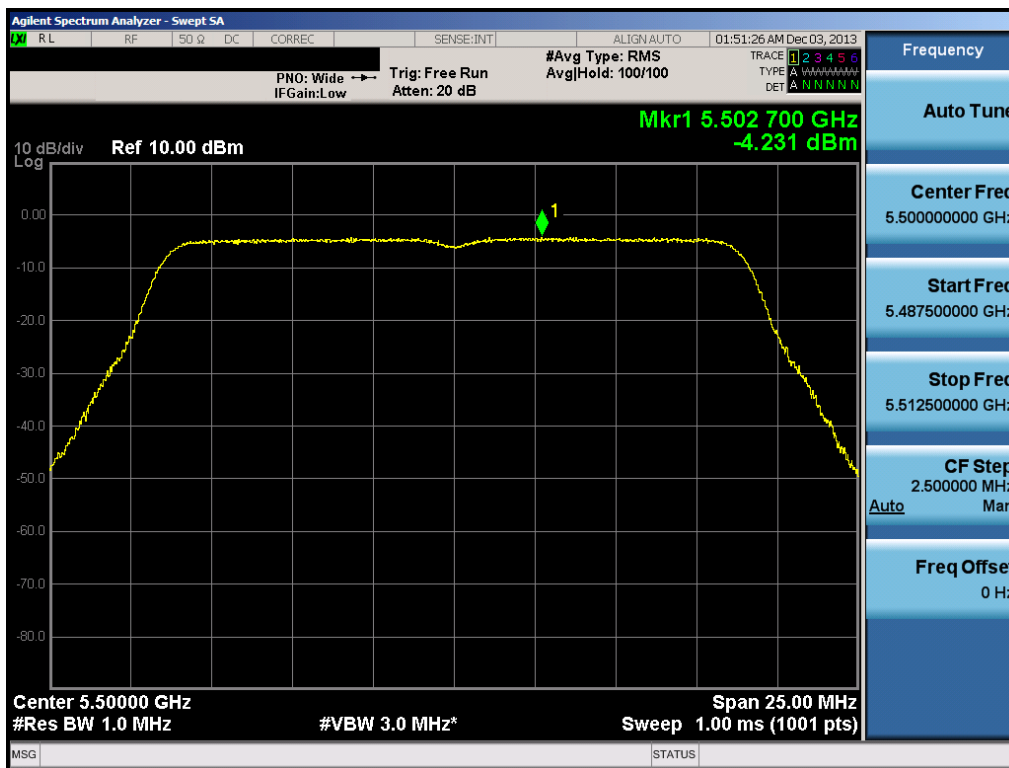


Plot 6-112. Peak Power Spectral Density Plot (802.11a (UNII Band 2C) – Ch. 116)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 77 of 175

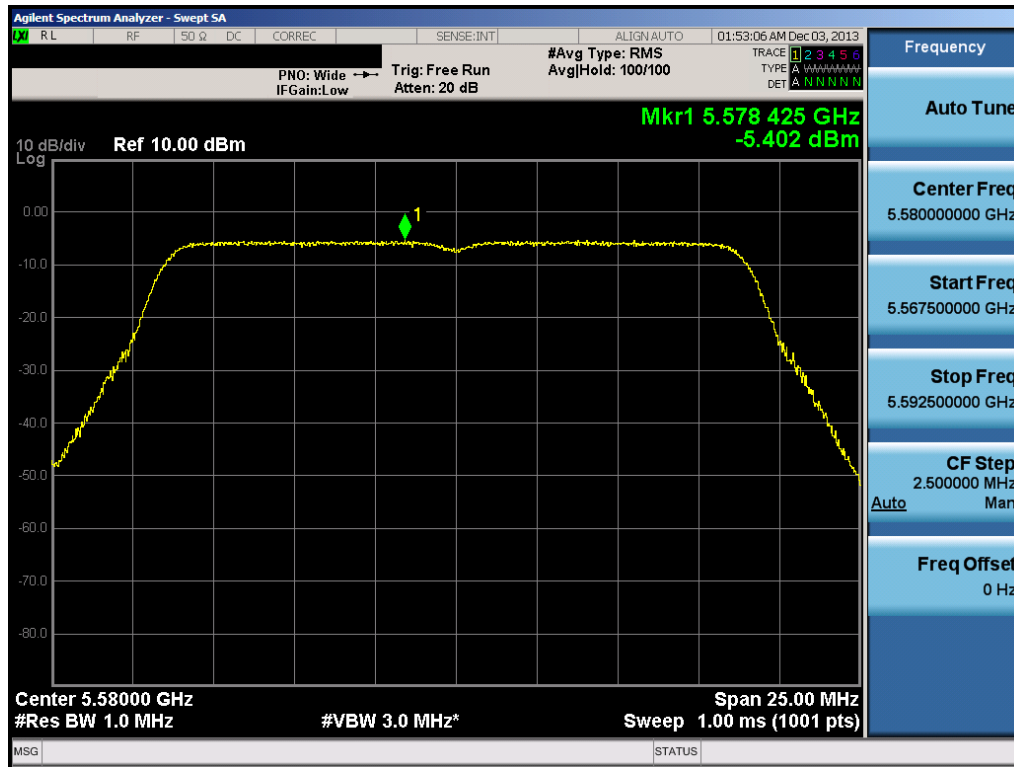


Plot 6-113. Peak Power Spectral Density Plot (802.11a (UNII Band 2C) – Ch. 140)

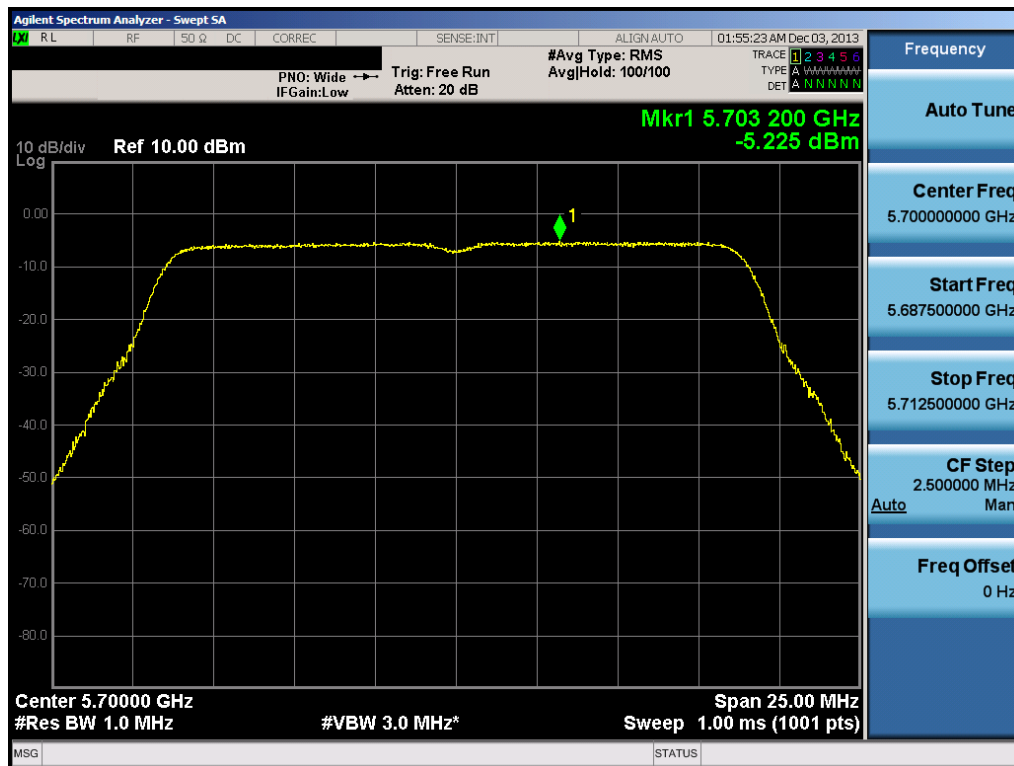


Plot 6-114. Peak Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 78 of 175

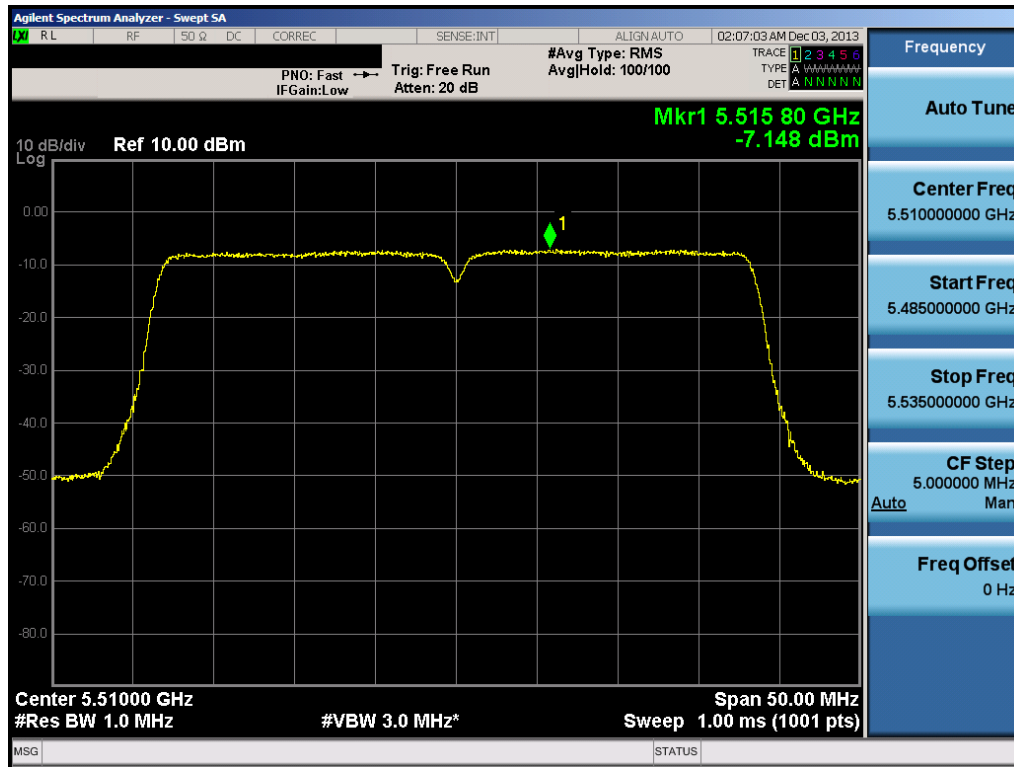


Plot 6-115. Peak Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2C) – Ch. 116)

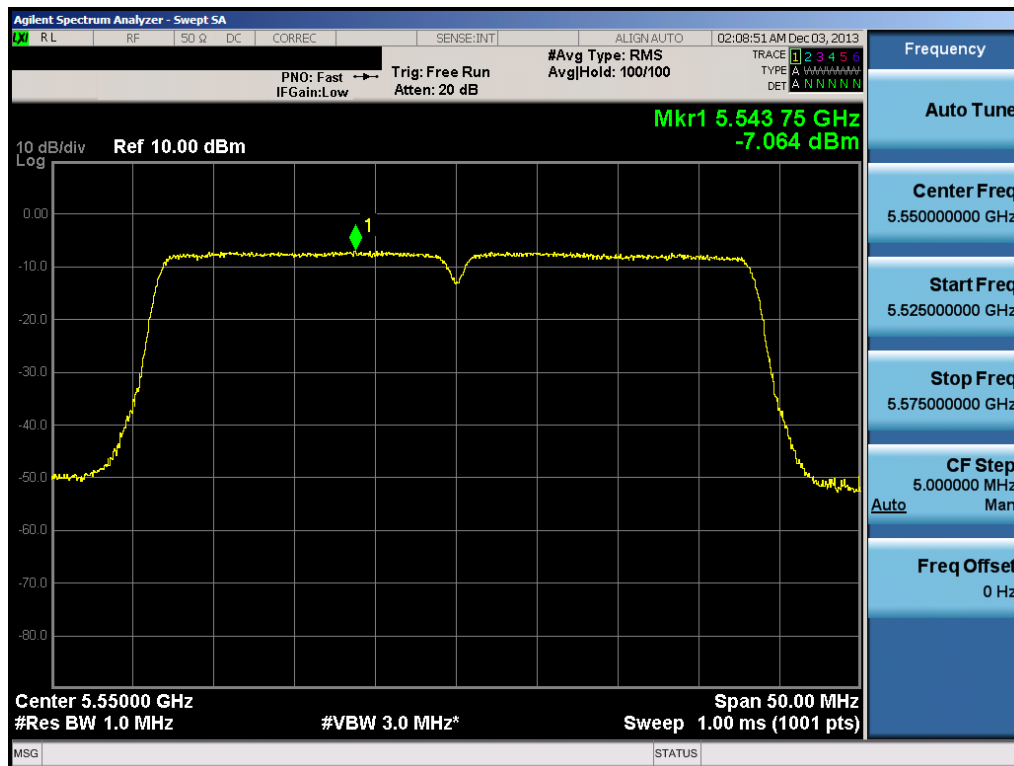


Plot 6-116. Peak Power Spectral Density Plot (20MHz BW 802.11n (UNII Band 2C) – Ch. 140)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 79 of 175

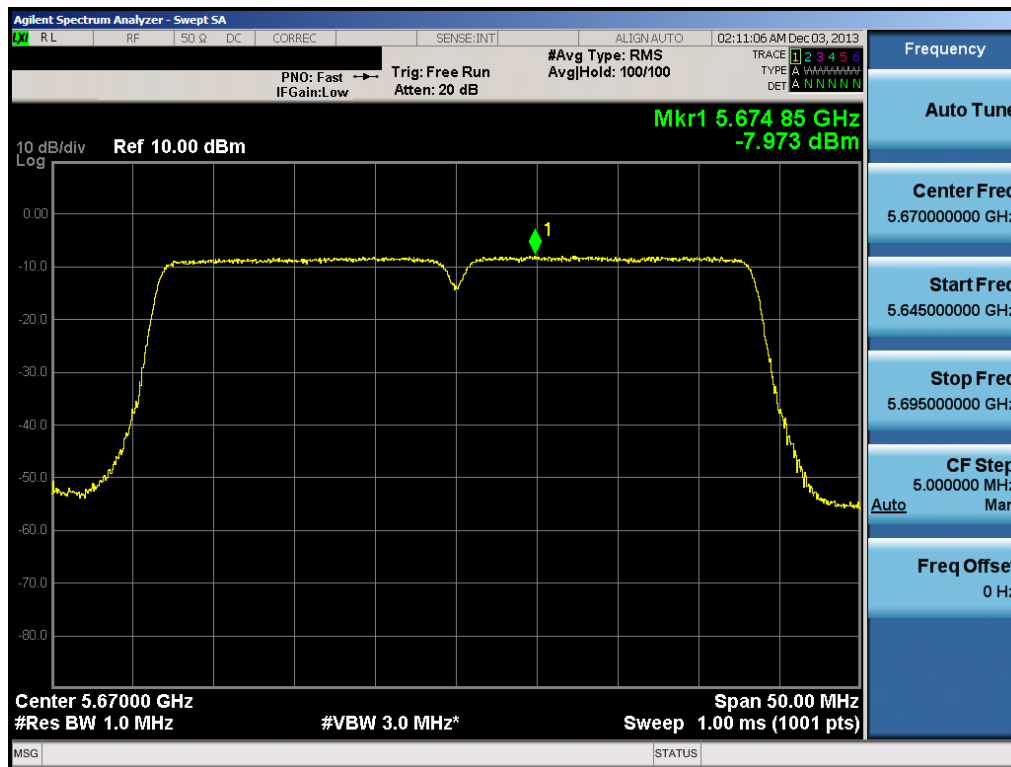


Plot 6-117. Peak Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 2C) – Ch. 102)

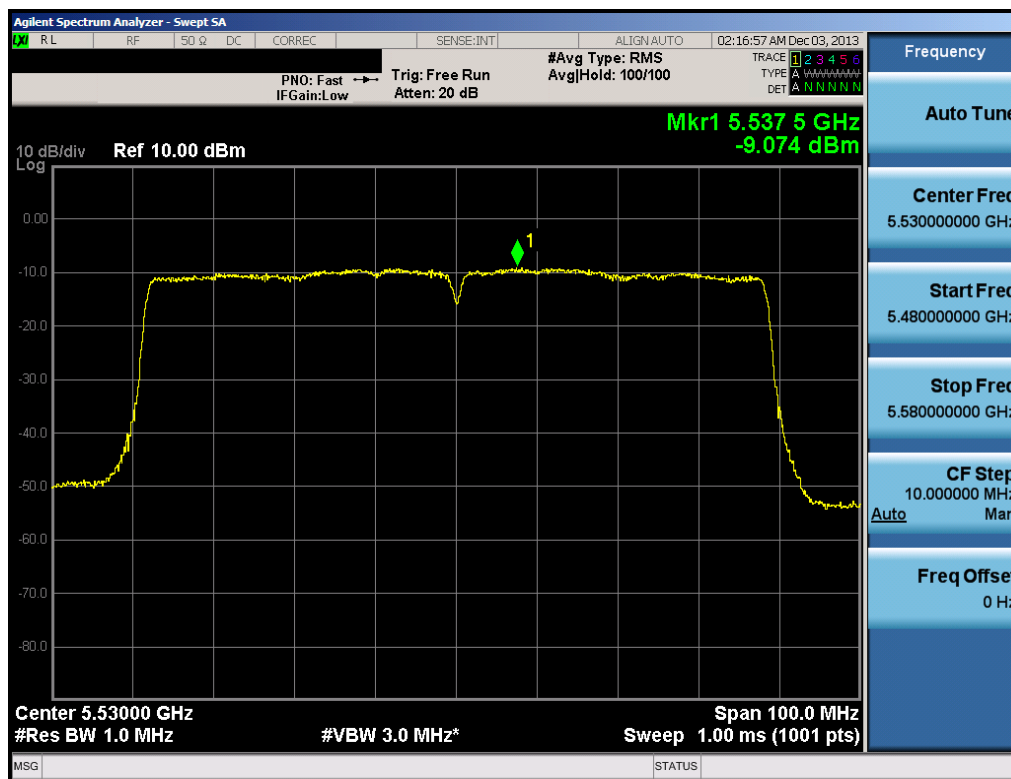


Plot 6-118. Peak Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 2C) – Ch. 110)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 80 of 175



Plot 6-119. Peak Power Spectral Density Plot (40MHz BW 802.11n (UNII Band 2C) – Ch. 134)



Plot 6-120. Peak Power Spectral Density Plot (80MHz BW 802.11ac (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 81 of 175

Summed MIMO Power Density Measurements

	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Antenn-1 Power Density [dBm]	Antenn-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Permissible Power Density [dBm/MHz]	Margin [dB]
Band 1	5180	36	n (20MHz)	6.5/7.2 (MCS0)	-3.175	-3.365	-0.259	4.0	-4.26
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	-3.526	-3.396	-0.450	4.0	-4.45
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	-2.981	-3.098	-0.029	4.0	-4.03
	5190	38	n (40MHz)	13.5/15 (MCS0)	-7.221	-6.064	-3.594	4.0	-7.59
	5230	46	n (40MHz)	13.5/15 (MCS0)	-6.637	-5.690	-3.127	4.0	-7.13
	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	-8.689	-9.588	-6.105	4.0	-10.10
Band 2A	5260	52	n (20MHz)	6.5/7.2 (MCS0)	-3.896	-2.869	-0.342	11.0	-11.34
	5280	56	n (20MHz)	6.5/7.2 (MCS0)	-4.525	-3.040	-0.709	11.0	-11.71
	5320	64	n (20MHz)	6.5/7.2 (MCS0)	-4.701	-4.098	-1.379	11.0	-12.38
	5270	54	n (40MHz)	13.5/15 (MCS0)	-6.817	-5.931	-3.341	11.0	-14.34
	5310	62	n (40MHz)	13.5/15 (MCS0)	-7.452	-6.935	-4.176	11.0	-15.18
	5290	58	ac (80MHz)	29.3/32.5 (MCS0)	-9.148	-8.600	-5.855	11.0	-16.86
Band 2C	5500	100	n (20MHz)	6.5/7.2 (MCS0)	-3.518	-4.231	-0.850	11.0	-11.85
	5580	116	n (20MHz)	6.5/7.2 (MCS0)	-4.766	-5.402	-2.062	11.0	-13.06
	5700	140	n (20MHz)	6.5/7.2 (MCS0)	-3.849	-5.225	-1.472	11.0	-12.47
	5510	102	n (40MHz)	13.5/15 (MCS0)	-6.077	-7.148	-3.569	11.0	-14.57
	5550	110	n (40MHz)	13.5/15 (MCS0)	-6.502	-7.064	-3.764	11.0	-14.76
	5670	134	n (40MHz)	13.5/15 (MCS0)	-7.038	-7.973	-4.470	11.0	-15.47
	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	-9.000	-9.074	-6.027	11.0	-17.03

Table 6-13. MIMO Conducted Power Spectral Density Measurements

6.5 Peak Excursion Ratio – 802.11a/n/ac §15.407(a)(6)

Test Overview and Limit

The spectrum analyzer was connected to the antenna terminal while the EUT was operating at its maximum duty cycle (>98%), at its maximum power control level, as defined in KDB 789033 v01r03, and at the appropriate frequencies. Method SA-1, as defined in KDB 789033 v01r03, was used to capture the average trace used to make the peak excursion measurement.

The largest permissible difference between the modulation envelope (measured using a peak hold function) and the maximum power spectral density is 13 dBm/MHz.

Test Procedure Used

KDB 789033 v01r03 – Section G

Test Settings

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire emission bandwidth of the signal
3. RBW = 1MHz
4. VBW = 3MHz
5. Detector = peak
6. Trace mode = max hold
7. Trace was allowed to stabilize
8. The peak search function of the spectrum analyzer was used to find the peak of the spectrum. This level was compared to the peak power density level found from the previous section to determine the peak excursion.

Test Setup

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

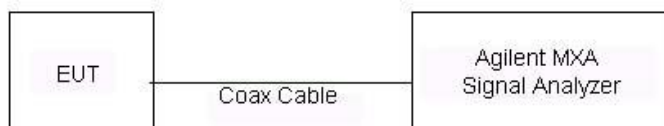


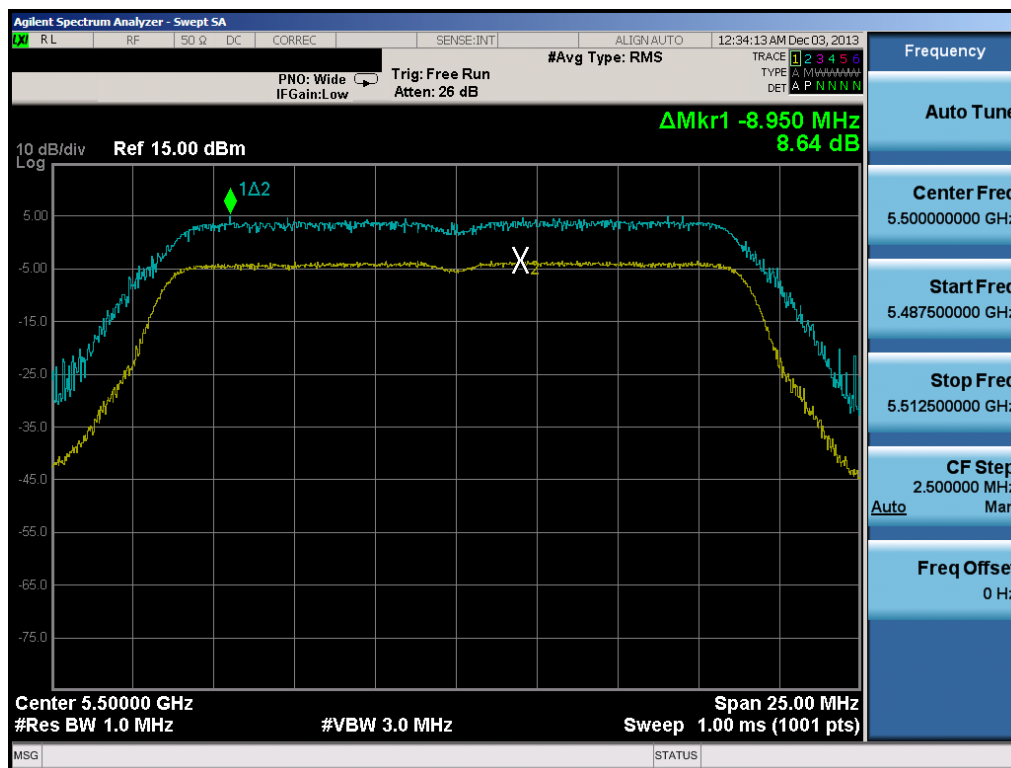
Figure 6-4. Test Instrument & Measurement Setup

Test Notes

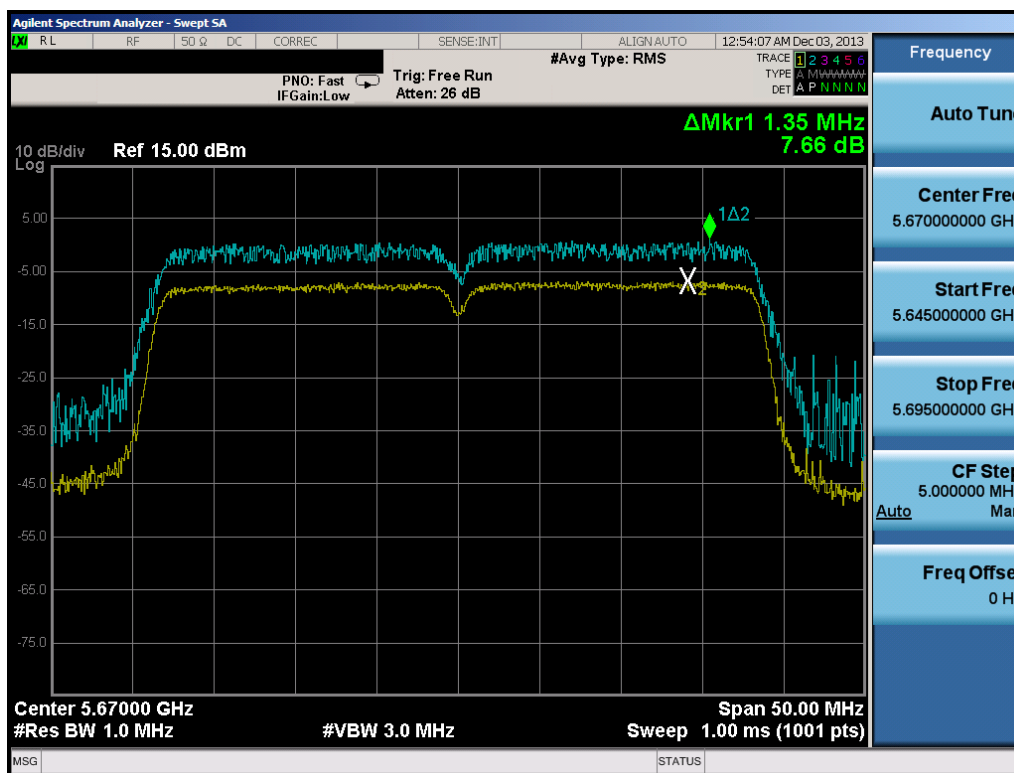
The peak excursion was investigated for all signal types, modulation types, channel bandwidths, and variations in signal parameters and the worst case data is shown below. Only the worst case modulation mode on a single channel among all bands is reported since that is sufficient to demonstrate compliance to the peak excursion requirement per KDB 789033 v01r03.

FCC ID: A3LSMP900A		802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Peak Excursion Ratio [dBm]	Max Permissible Peak Excursion Ratio [dBm/MHz]	Margin [dB]
5580	116	a	6	7.54	13.0	-5.46
5500	100	n (20MHz)	6.5/7.2 (MCS0)	8.64	13.0	-4.37
5670	134	n (40MHz)	13.5/15 (MCS0)	7.66	13.0	-5.34
5290	58	ac (80MHz)	29.3/32.5 (MCS0)	8.10	13.0	-4.90



Plot 6-122. Peak Excursion Ratio Plot (20MHz BW 802.11n)



Plot 6-123. Peak Excursion Ratio Plot (40MHz BW 802.11n)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 85 of 175

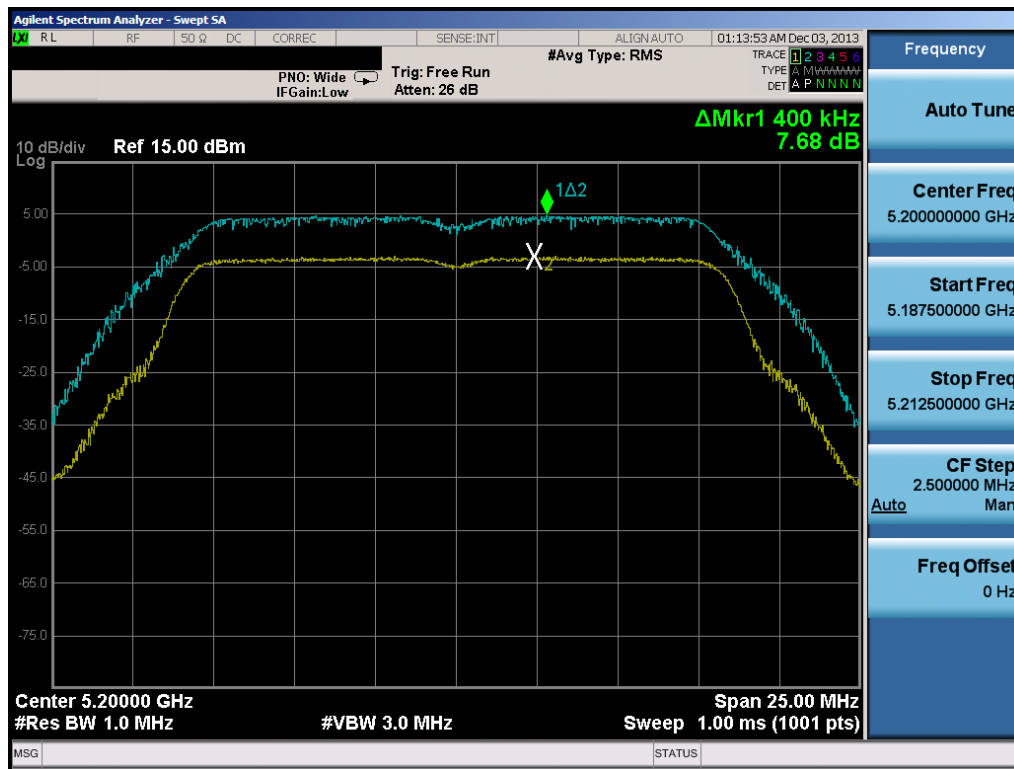


Plot 6-124. Peak Excursion Ratio Plot (80MHz BW 802.11ac)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
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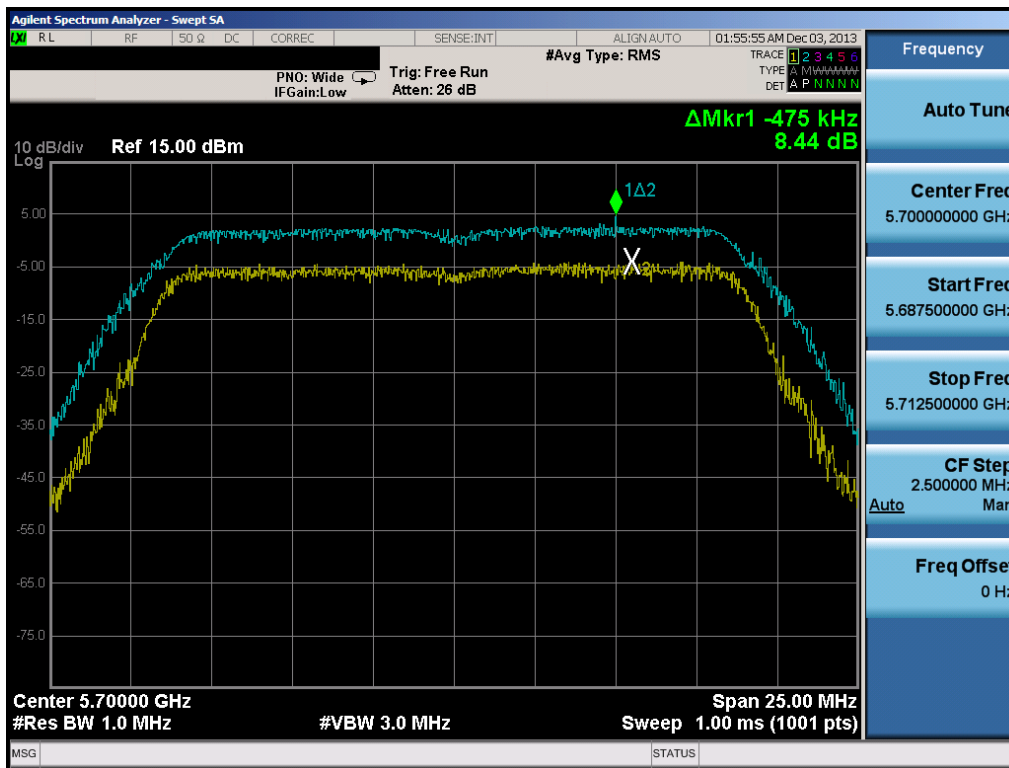
Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Peak Excursion Ratio [dBm]	Max Permissible Peak Excursion Ratio [dBm/MHz]	Margin [dB]
5200	40	a	6	7.68	13.0	-5.32
5700	140	n (20MHz)	6.5/7.2 (MCS0)	8.44	13.0	-4.56
5500	110	n (40MHz)	13.5/15 (MCS0)	8.42	13.0	-4.58
5290	58	ac (80MHz)	29.3/32.5 (MCS0)	8.08	13.0	-4.92

Table 6-15. Antenna-2 Conducted Peak Excursion Ratio Measurements

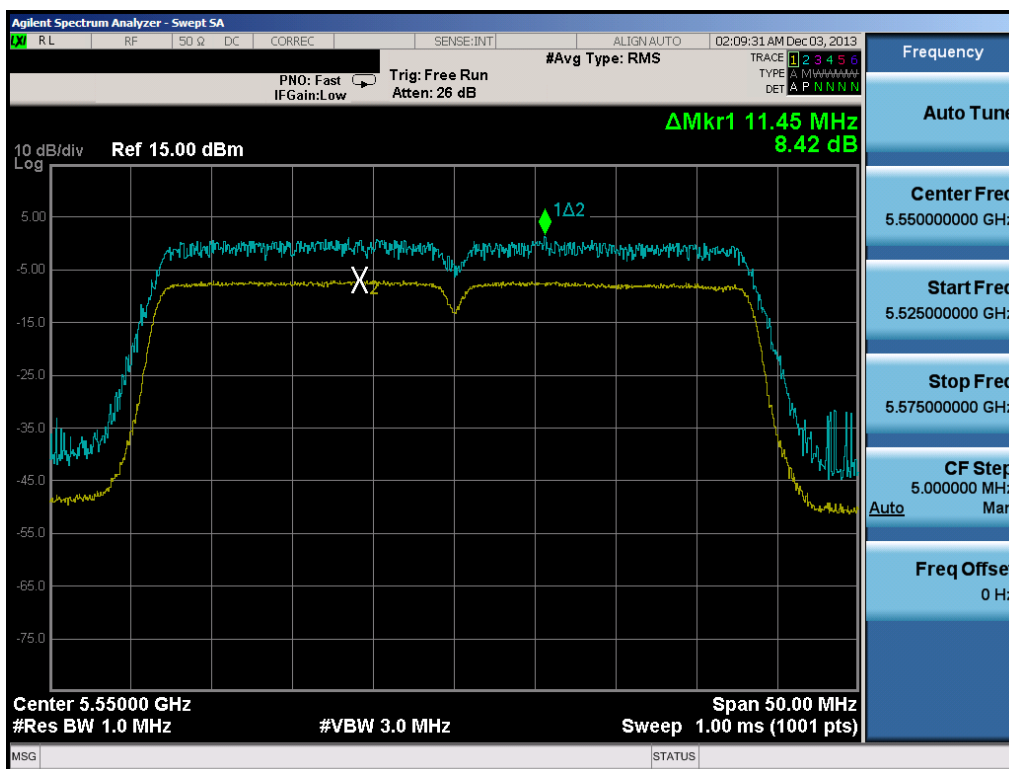


Plot 6-125. Peak Excursion Ratio Plot (802.11a)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
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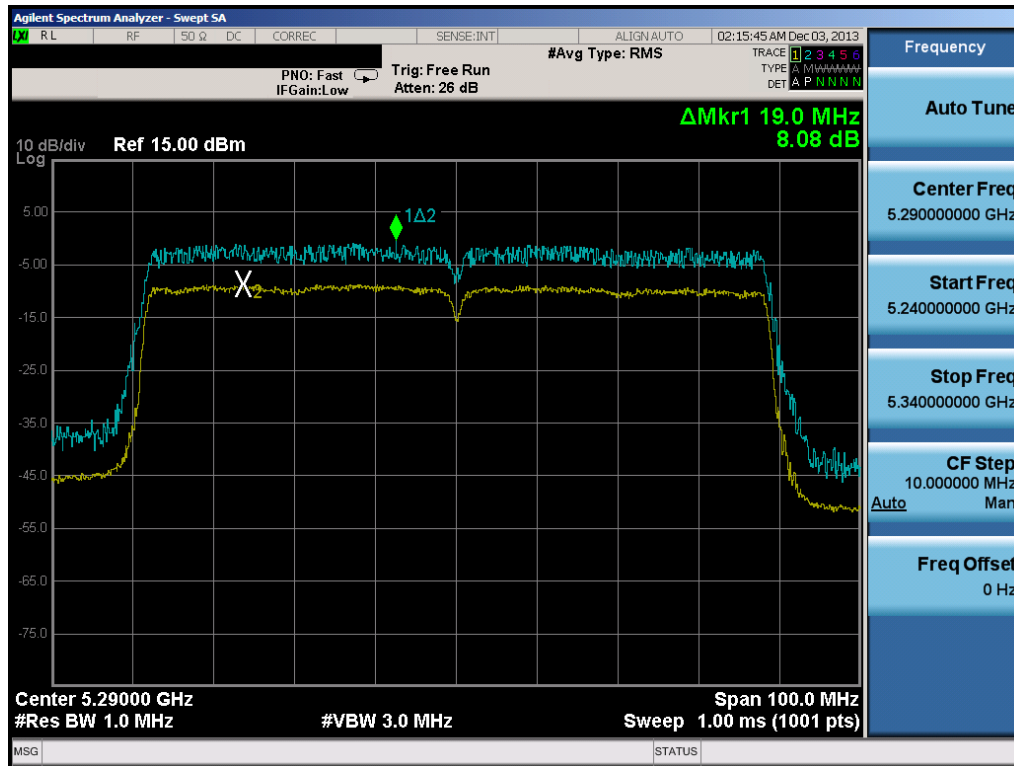


Plot 6-126. Peak Excursion Ratio Plot (20MHz BW 802.11n)



Plot 6-127. Peak Excursion Ratio Plot (40MHz BW 802.11n)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 88 of 175



Plot 6-128. Peak Excursion Ratio Plot (80MHz BW 802.11ac)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 89 of 175

6.6 Frequency Stability: Antenna-1

§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)	5,180,000,018	18	0.00000035
100 %		- 30	5,180,000,004	4	0.00000008
100 %		- 20	5,179,999,984	-16	-0.00000031
100 %		- 10	5,180,000,006	6	0.00000012
100 %		0	5,179,999,987	-13	-0.00000025
100 %		+ 10	5,179,999,993	-7	-0.00000014
100 %		+ 20	5,180,000,020	20	0.00000039
100 %		+ 30	5,179,999,990	-10	-0.00000019
100 %		+ 40	5,179,999,997	-3	-0.00000006
100 %		+ 50	5,179,999,995	-5	-0.00000010
115 %		+ 20	5,180,000,016	16	0.00000031
BATT. ENDPOINT	3.40	+ 20	5,179,999,988	-12	-0.00000023

Table 6-16. Frequency Stability Measurements for UNII Band 1 (Ch. 36)

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Frequency Stability: Antenna 1 (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)	5,259,999,989	-11	-0.00000021
100 %		- 30	5,259,999,998	-2	-0.00000004
100 %		- 20	5,260,000,008	8	0.00000015
100 %		- 10	5,260,000,002	2	0.00000004
100 %		0	5,259,999,987	-13	-0.00000025
100 %		+ 10	5,259,999,998	-2	-0.00000004
100 %		+ 20	5,260,000,016	16	0.00000030
100 %		+ 30	5,260,000,006	6	0.00000011
100 %		+ 40	5,260,000,011	11	0.00000021
100 %		+ 50	5,259,999,996	-4	-0.00000008
115 %		+ 20	5,259,999,998	-2	-0.00000004
BATT. ENDPOINT	3.40	+ 20	5,260,000,010	10	0.00000019

Table 6-17. Frequency Stability Measurements for UNII Band 2A (Ch. 52)

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Frequency Stability: Antenna-1 (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)	5,499,999,996	-4	-0.00000007
100 %		- 30	5,499,999,995	-5	-0.00000009
100 %		- 20	5,500,000,017	17	0.00000031
100 %		- 10	5,499,999,981	-19	-0.00000035
100 %		0	5,499,999,988	-12	-0.00000022
100 %		+ 10	5,499,999,984	-16	-0.00000029
100 %		+ 20	5,500,000,000	0	0.00000000
100 %		+ 30	5,500,000,008	8	0.00000015
100 %		+ 40	5,500,000,005	5	0.00000009
100 %		+ 50	5,499,999,996	-4	-0.00000007
115 %		+ 20	5,500,000,017	17	0.00000031
BATT. ENDPOINT	3.40	+ 20	5,499,999,993	-7	-0.00000013

Table 6-18. Frequency Stability Measurements for UNII Band 2C (Ch. 100)

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Frequency Stability: Antenna-2

§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)	5,179,999,995	-5	-0.00000010
100 %		- 30	5,180,000,016	16	0.00000031
100 %		- 20	5,180,000,012	12	0.00000023
100 %		- 10	5,179,999,997	-3	-0.00000006
100 %		0	5,180,000,004	4	0.00000008
100 %		+ 10	5,180,000,008	8	0.00000015
100 %		+ 20	5,179,999,988	-12	-0.00000023
100 %		+ 30	5,180,000,002	2	0.00000004
100 %		+ 40	5,180,000,009	9	0.00000017
100 %		+ 50	5,180,000,003	3	0.00000006
115 %		+ 20	5,180,000,006	6	0.00000012
BATT. ENDPOINT	3.40	+ 20	5,180,000,012	12	0.00000023

Table 6-19. Frequency Stability Measurements for UNII Band 1 (Ch. 36)

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Frequency Stability: Antenna 2 (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)	5,260,000,007	7	0.00000013
100 %		- 30	5,259,999,993	-7	-0.00000013
100 %		- 20	5,260,000,013	13	0.00000025
100 %		- 10	5,260,000,008	8	0.00000015
100 %		0	5,260,000,017	17	0.00000032
100 %		+ 10	5,259,999,982	-18	-0.00000034
100 %		+ 20	5,259,999,982	-18	-0.00000034
100 %		+ 30	5,260,000,003	3	0.00000006
100 %		+ 40	5,259,999,983	-17	-0.00000032
100 %		+ 50	5,259,999,990	-10	-0.00000019
115 %		+ 20	5,259,999,992	-8	-0.00000015
BATT. ENDPOINT	3.40	+ 20	5,259,999,987	-13	-0.00000025

Table 6-20. Frequency Stability Measurements for UNII Band 2A (Ch. 52)

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Frequency Stability: Antenna 2 (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)	5,500,000,012	12	0.00000022
100 %		- 30	5,500,000,005	5	0.00000009
100 %		- 20	5,499,999,981	-19	-0.00000035
100 %		- 10	5,500,000,003	3	0.00000005
100 %		0	5,500,000,018	18	0.00000033
100 %		+ 10	5,499,999,997	-3	-0.00000005
100 %		+ 20	5,500,000,020	20	0.00000036
100 %		+ 30	5,499,999,983	-17	-0.00000031
100 %		+ 40	5,500,000,013	13	0.00000024
100 %		+ 50	5,499,999,994	-6	-0.00000011
115 %		+ 20	5,499,999,982	-18	-0.00000033
BATT. ENDPOINT	3.40	+ 20	5,499,999,989	-11	-0.00000020

Table 6-21. Frequency Stability Measurements for UNII Band 2C (Ch. 100)

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

6.7 Radiated Spurious Emission Measurements

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

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 its maximum power control level, as defined in KDB 789033 v01r03, and at the appropriate frequencies. All channels, modes (e.g. 802.11a, 802.11n (20MHz BW) and 802.11n (40MHz BW)), and modulations/data rates were investigated among all UNII bands. 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 6-22 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 6-22. Radiated Limits

Test Procedures Used

KDB 789033 v01r03 – Section H

Test Settings

Average Measurements above 1GHz (Method AD)

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. Averaging type = power (RMS)
7. Sweep time = auto couple
8. Trace was averaged over 100 sweeps

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Peak Measurements above 1GHz

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

Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Test Setup

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

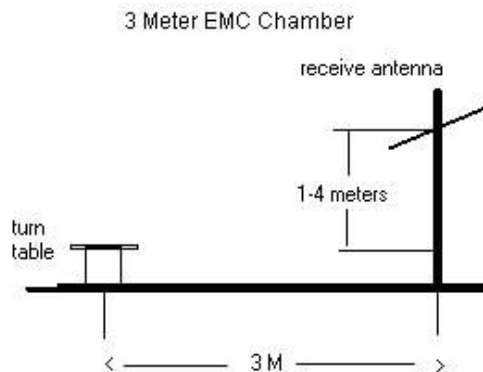


Figure 6-5. Test Instrument & Measurement Setup

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Test Notes

1. All radiated spurious emissions levels were measured in a radiated test setup per the guidance of KDB 789033 v01r03 Section H.
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 6-22.
3. All spurious emissions lying in restricted bands specified in §15.205 are below the limit shown in Table 6-11. All spurious emissions 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 dB μ V/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 68.2dB μ V/m.
4. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
5. This unit was tested with its standard battery.
6. 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.
7. 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.
8. Average levels at -135dBm and peak levels at -125dBm represent the analyzer noise floor and signify that no emission was detected.

Sample Calculations

Determining Spurious Emissions Levels

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

Radiated Band Edge Measurement Offset

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

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

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Antenna-1 Radiated Spurious Emission Measurements

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

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-125.00	Peak	H	42.37	24.37	68.20	-43.83
* 15540.00	-135.00	Average	H	43.15	15.15	53.98	-38.83
* 15540.00	-125.00	Peak	H	43.15	25.15	73.98	-48.83
* 20720.00	-135.00	Average	H	44.04	16.04	53.98	-37.94
* 20720.00	-125.00	Peak	H	44.04	26.04	73.98	-47.94
25900.00	-125.00	Peak	H	44.84	26.84	68.20	-41.36

Table 6-23. Radiated Measurements

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-125.00	Peak	H	42.33	24.33	68.20	-43.87
* 15600.00	-135.00	Average	H	42.97	14.97	53.98	-39.01
* 15600.00	-125.00	Peak	H	42.97	24.97	73.98	-49.01
* 20800.00	-135.00	Average	H	44.03	16.03	53.98	-37.95
* 20800.00	-125.00	Peak	H	44.03	26.03	73.98	-47.95
26000.00	-125.00	Peak	H	44.96	26.96	68.20	-41.24

Table 6-24. Radiated Measurements

Antenna-1 Radiated Spurious Emission Measurements (Cont'd)

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

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-125.00	Peak	H	42.38	24.38	68.20	-43.82
* 15720.00	-135.00	Average	H	42.92	14.92	53.98	-39.06
* 15720.00	-125.00	Peak	H	42.92	24.92	73.98	-49.06
* 20960.00	-135.00	Average	H	44.00	16.00	53.98	-37.98
* 20960.00	-125.00	Peak	H	44.00	26.00	73.98	-47.98
26200.00	-125.00	Peak	H	44.75	26.75	68.20	-41.45

Table 6-25. Radiated Measurements

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-125.00	Peak	H	42.42	24.42	68.20	-43.78
* 15780.00	-135.00	Average	H	42.93	14.93	53.98	-39.04
* 15780.00	-125.00	Peak	H	42.93	24.93	73.98	-49.04
* 21040.00	-135.00	Average	H	43.95	15.95	53.98	-38.03
* 21040.00	-125.00	Peak	H	43.95	25.95	73.98	-48.03
26300.00	-125.00	Peak	H	44.78	26.78	68.20	-41.42

Table 6-26. Radiated Measurements

Antenna-1 Radiated Spurious Emission Measurements (Cont'd)

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

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-125.00	Peak	H	42.45	24.45	68.20	-43.75
* 15840.00	-135.00	Average	H	42.98	14.98	53.98	-39.00
* 15840.00	-125.00	Peak	H	42.98	24.98	73.98	-49.00
* 21120.00	-135.00	Average	H	43.83	15.83	53.98	-38.15
* 21120.00	-125.00	Peak	H	43.83	25.83	73.98	-48.15
26400.00	-125.00	Peak	H	44.72	26.72	68.20	-41.48

Table 6-27. Radiated Measurements

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-135.00	Average	H	42.47	14.47	53.98	-39.51
* 10640.00	-125.00	Peak	H	42.47	24.47	73.98	-49.51
* 15960.00	-135.00	Average	H	43.14	15.14	53.98	-38.84
* 15960.00	-125.00	Peak	H	43.14	25.14	73.98	-48.84
* 21280.00	-135.00	Average	H	43.71	15.71	53.98	-38.27
* 21280.00	-125.00	Peak	H	43.71	25.71	73.98	-48.27
26600.00	-125.00	Peak	H	47.29	29.29	68.20	-38.91

Table 6-28. Radiated Measurements

Antenna-1 Radiated Spurious Emission Measurements (Cont'd)

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

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-135.00	Average	H	42.41	14.41	53.98	-39.57
*	11000.00	-125.00	Peak	H	42.41	24.41	73.98	-49.57
	16500.00	-125.00	Peak	H	44.58	26.58	68.20	-41.62
	22000.00	-125.00	Peak	H	43.95	25.95	68.20	-42.25
	27500.00	-125.00	Peak	H	48.50	30.50	68.20	-37.70

Table 6-29. Radiated Measurements

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-135.00	Average	H	42.65	14.65	53.98	-39.33
*	11160.00	-125.00	Peak	H	42.65	24.65	73.98	-49.33
	16740.00	-125.00	Peak	H	45.25	27.25	68.20	-40.95
*	22320.00	-135.00	Average	H	44.47	16.47	53.98	-37.50
*	22320.00	-125.00	Peak	H	44.47	26.47	73.98	-47.50
	27900.00	-125.00	Peak	H	48.02	30.02	68.20	-38.18

Table 6-30. Radiated Measurements

Antenna-1 Radiated Spurious Emission Measurements (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-135.00	Average	H	43.01	15.01	53.98	-38.97
*	11400.00	-125.00	Peak	H	43.01	25.01	73.98	-48.97
	17100.00	-125.00	Peak	H	47.36	29.36	68.20	-38.84
*	22800.00	-135.00	Average	H	44.47	16.47	53.98	-37.51
*	22800.00	-125.00	Peak	H	44.47	26.47	73.98	-47.51
	28500.00	-125.00	Peak	H	48.08	30.08	68.20	-38.12

Table 6-31. Radiated Measurements

Antenna-2 Radiated Spurious Emission Measurements

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

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-125.00	Peak	H	42.37	24.37	68.20	-43.83
* 15540.00	-135.00	Average	H	43.15	15.15	53.98	-38.83
* 15540.00	-125.00	Peak	H	43.15	25.15	73.98	-48.83
* 20720.00	-135.00	Average	H	44.04	16.04	53.98	-37.94
* 20720.00	-125.00	Peak	H	44.04	26.04	73.98	-47.94
25900.00	-125.00	Peak	H	44.84	26.84	68.20	-41.36

Table 6-32. Radiated Measurements

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-125.00	Peak	H	42.33	24.33	68.20	-43.87
* 15600.00	-135.00	Average	H	42.97	14.97	53.98	-39.01
* 15600.00	-125.00	Peak	H	42.97	24.97	73.98	-49.01
* 20800.00	-135.00	Average	H	44.03	16.03	53.98	-37.95
* 20800.00	-125.00	Peak	H	44.03	26.03	73.98	-47.95
26000.00	-125.00	Peak	H	44.96	26.96	68.20	-41.24

Table 6-33. Radiated Measurements

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

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

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 1 & 3 Meters
 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	-125.00	Peak	H	42.38	24.38	68.20	-43.82
* 15720.00	-135.00	Average	H	42.92	14.92	53.98	-39.06
* 15720.00	-125.00	Peak	H	42.92	24.92	73.98	-49.06
* 20960.00	-135.00	Average	H	44.00	16.00	53.98	-37.98
* 20960.00	-125.00	Peak	H	44.00	26.00	73.98	-47.98
26200.00	-125.00	Peak	H	44.75	26.75	68.20	-41.45

Table 6-34. Radiated Measurements

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 1 & 3 Meters
 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	-125.00	Peak	H	42.42	24.42	68.20	-43.78
* 15780.00	-135.00	Average	H	42.93	14.93	53.98	-39.04
* 15780.00	-125.00	Peak	H	42.93	24.93	73.98	-49.04
* 21040.00	-135.00	Average	H	43.95	15.95	53.98	-38.03
* 21040.00	-125.00	Peak	H	43.95	25.95	73.98	-48.03
26300.00	-125.00	Peak	H	44.78	26.78	68.20	-41.42

Table 6-35. Radiated Measurements

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

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

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-125.00	Peak	H	42.45	24.45	68.20	-43.75
* 15840.00	-135.00	Average	H	42.98	14.98	53.98	-39.00
* 15840.00	-125.00	Peak	H	42.98	24.98	73.98	-49.00
* 21120.00	-135.00	Average	H	43.83	15.83	53.98	-38.15
* 21120.00	-125.00	Peak	H	43.83	25.83	73.98	-48.15
26400.00	-125.00	Peak	H	44.72	26.72	68.20	-41.48

Table 6-36. Radiated Measurements

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-135.00	Average	H	42.47	14.47	53.98	-39.51
* 10640.00	-125.00	Peak	H	42.47	24.47	73.98	-49.51
* 15960.00	-135.00	Average	H	43.14	15.14	53.98	-38.84
* 15960.00	-125.00	Peak	H	43.14	25.14	73.98	-48.84
* 21280.00	-135.00	Average	H	43.71	15.71	53.98	-38.27
* 21280.00	-125.00	Peak	H	43.71	25.71	73.98	-48.27
26600.00	-125.00	Peak	H	47.29	29.29	68.20	-38.91

Table 6-37. Radiated Measurements

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

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

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MSC0
Distance of Measurements: 1 & 3 Meters
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	-135.00	Average	H	42.41	14.41	53.98	-39.57
*	11000.00	-125.00	Peak	H	42.41	24.41	73.98	-49.57
	16500.00	-125.00	Peak	H	44.58	26.58	68.20	-41.62
	22000.00	-125.00	Peak	H	43.95	25.95	68.20	-42.25
	27500.00	-125.00	Peak	H	48.50	30.50	68.20	-37.70

Table 6-38. Radiated Measurements

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-135.00	Average	H	42.65	14.65	53.98	-39.33
*	11160.00	-125.00	Peak	H	42.65	24.65	73.98	-49.33
	16740.00	-125.00	Peak	H	45.25	27.25	68.20	-40.95
*	22320.00	-135.00	Average	H	44.47	16.47	53.98	-37.50
*	22320.00	-125.00	Peak	H	44.47	26.47	73.98	-47.50
	27900.00	-125.00	Peak	H	48.02	30.02	68.20	-38.18

Table 6-39. Radiated Measurements

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

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

Worst Case Mode: 802.11n
Worst Case Transfer Rate: MCS0
Distance of Measurements: 1 & 3 Meters
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	-135.00	Average	H	43.01	15.01	53.98	-38.97
*	11400.00	-125.00	Peak	H	43.01	25.01	73.98	-48.97
	17100.00	-125.00	Peak	H	47.36	29.36	68.20	-38.84
*	22800.00	-135.00	Average	H	44.47	16.47	53.98	-37.51
*	22800.00	-125.00	Peak	H	44.47	26.47	73.98	-47.51
	28500.00	-125.00	Peak	H	48.08	30.08	68.20	-38.12

Table 6-40. Radiated Measurements

6.8 Antenna-1 Radiated Band Edge Measurements (20MHz BW)

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

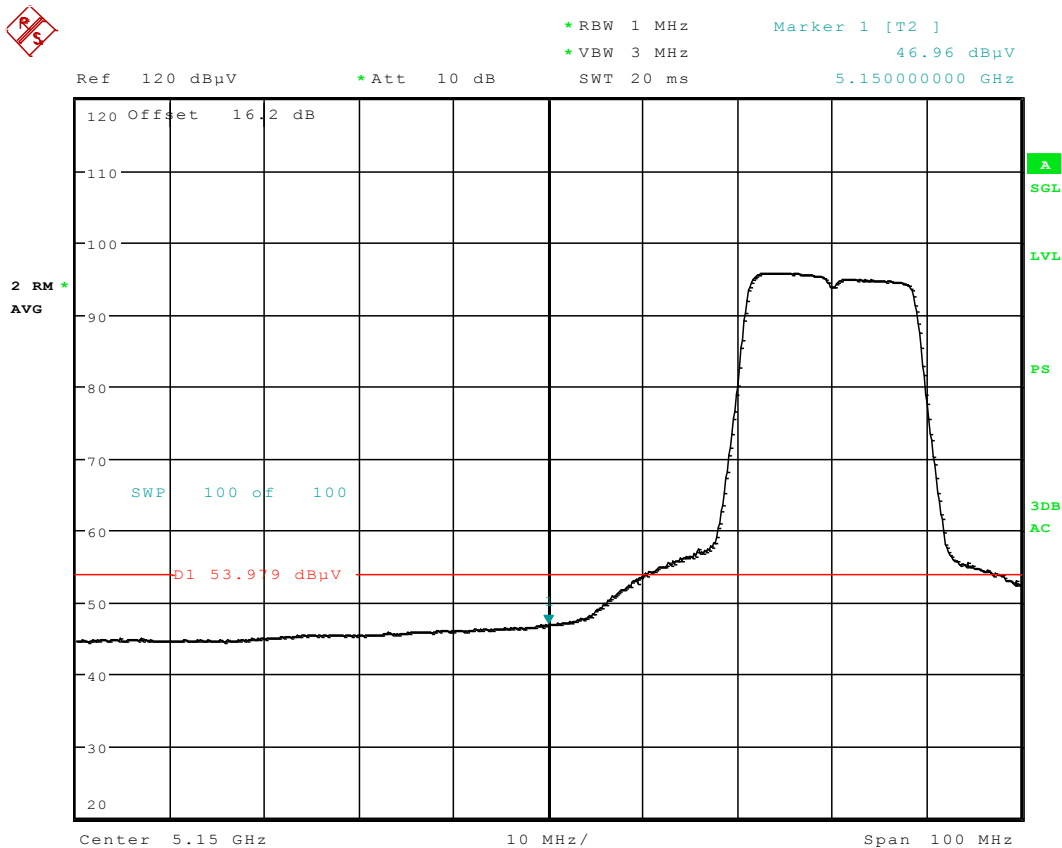
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5180MHz

Channel: 36

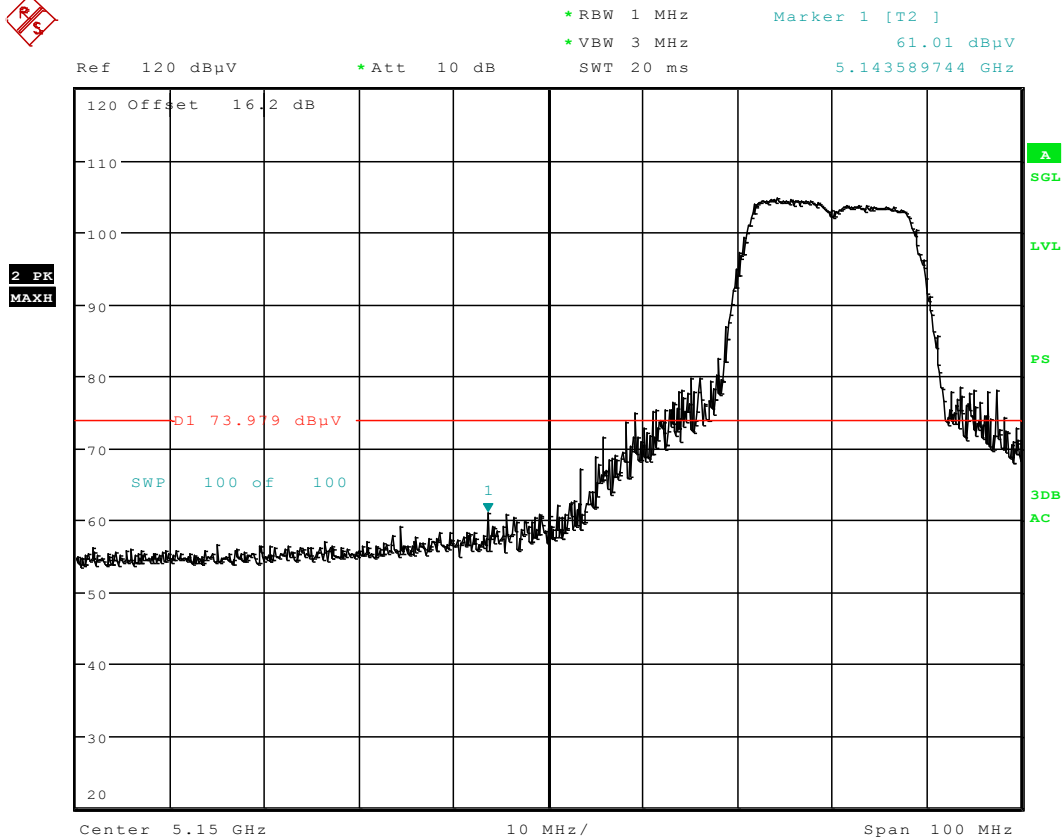


Date: 4.DEC.2013 21:08:19

Plot 6-129. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 109 of 175

Antenna-1 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 4.DEC.2013 21:09:03

Plot 6-130. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 110 of 175

Antenna-1 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

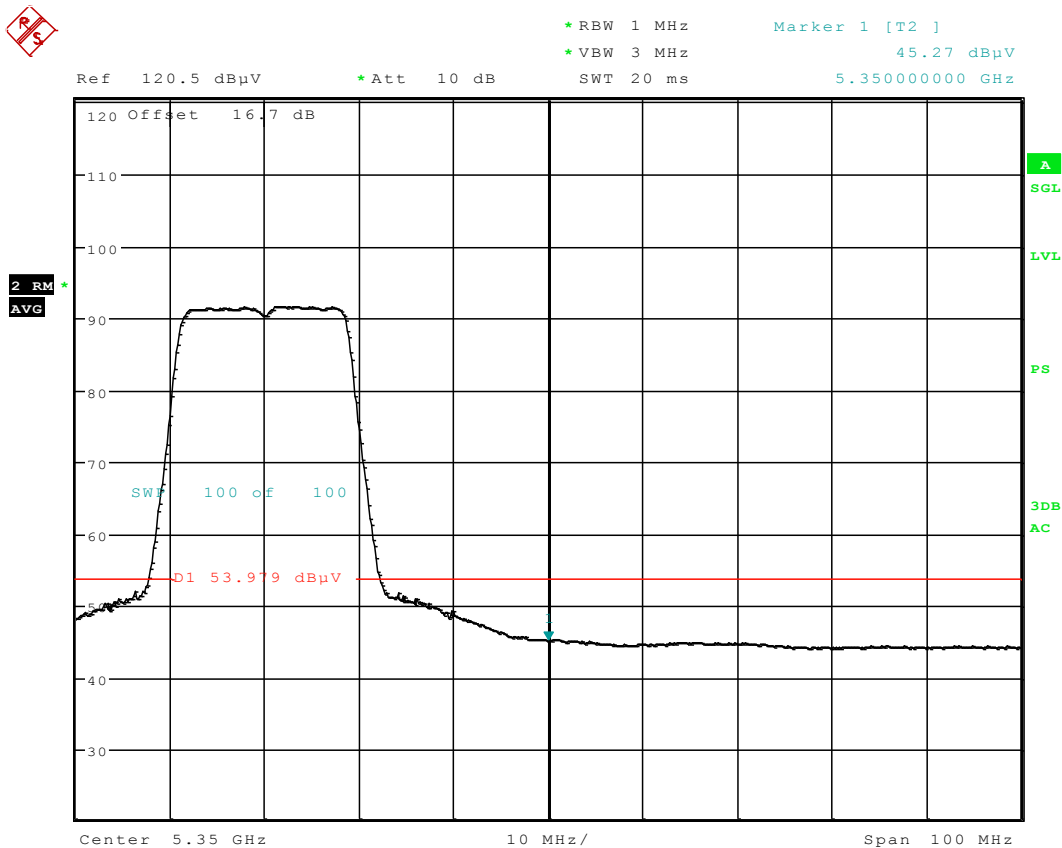
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5320MHz

Channel: 64

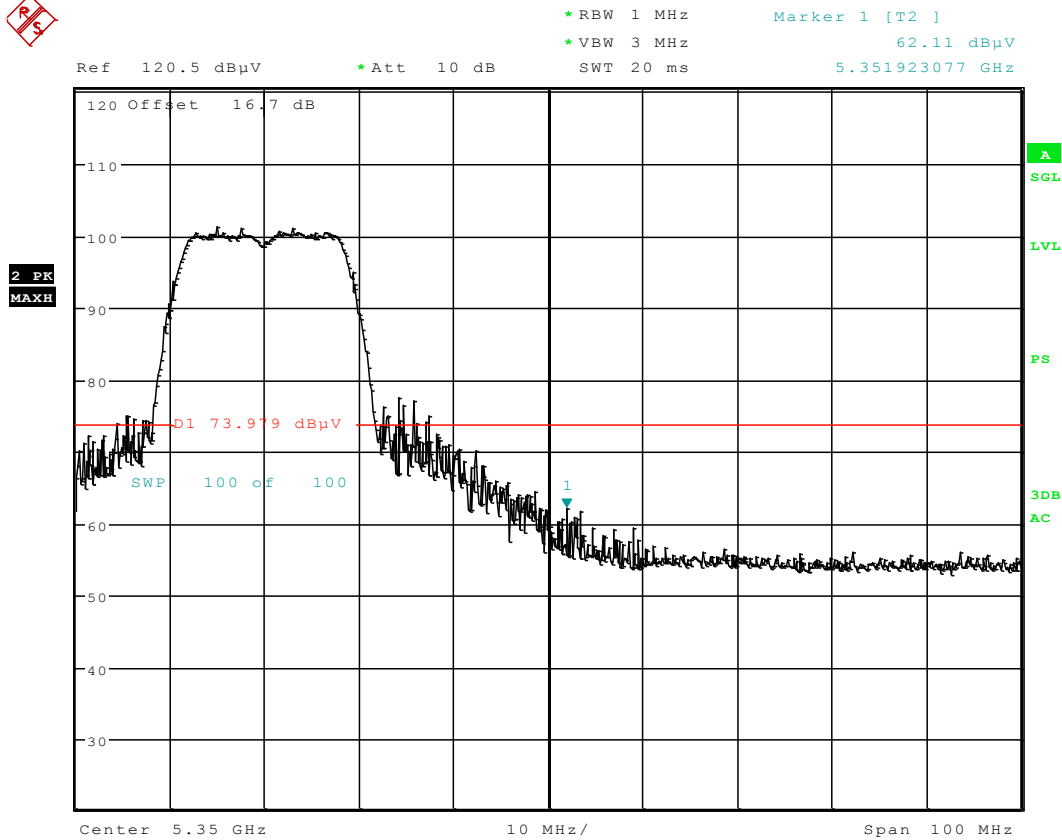


Date: 4.DEC.2013 21:13:47

Plot 6-131. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 111 of 175

Antenna-1 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 4.DEC.2013 21:15:02

Plot 6-132. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 112 of 175

Antenna-1 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

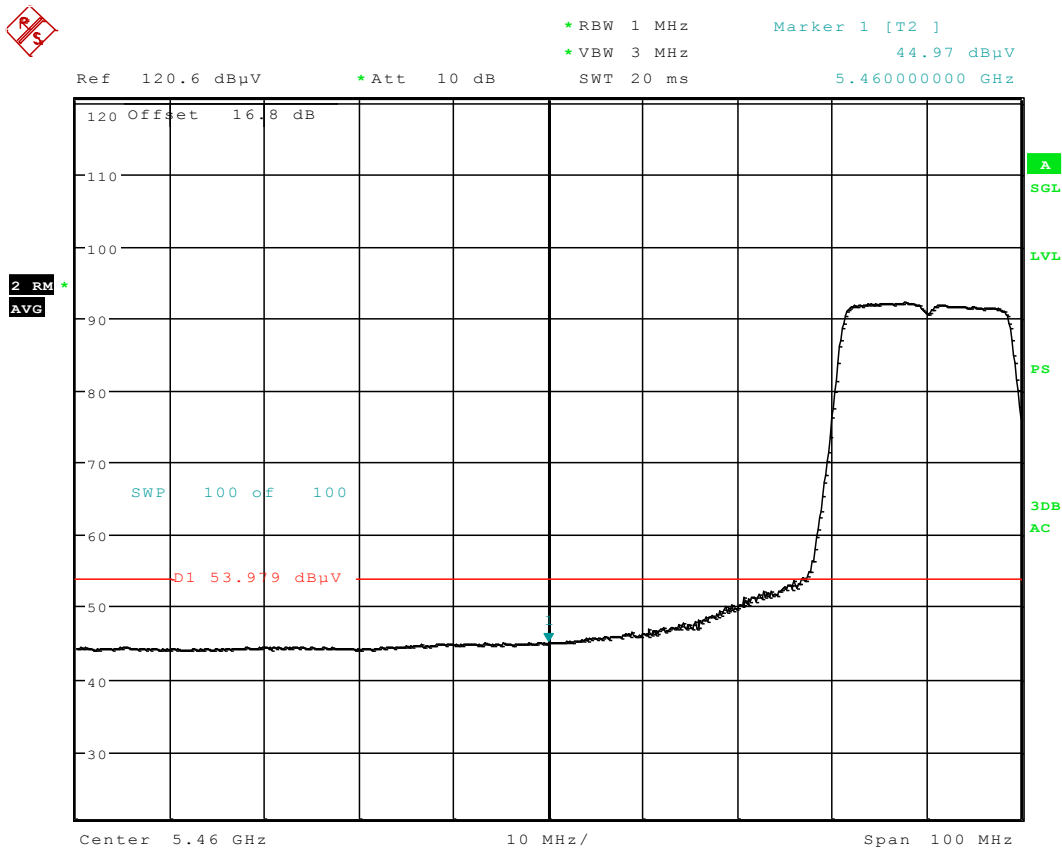
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5500MHz

Channel: 100

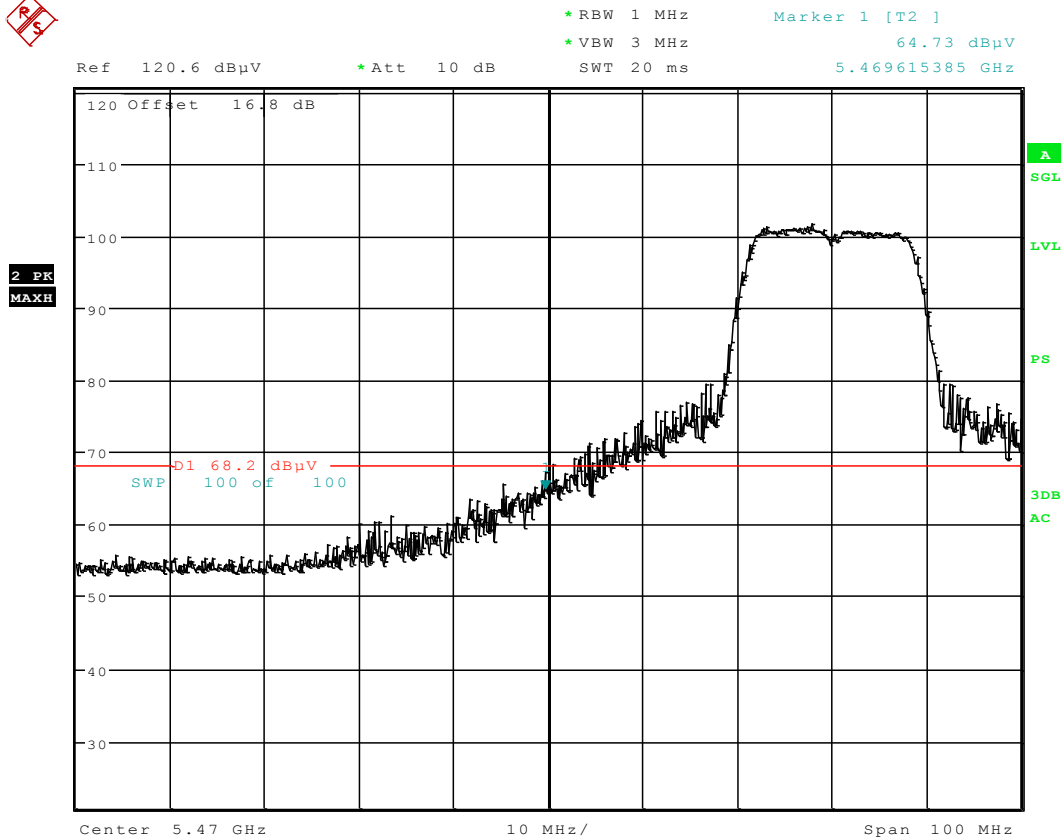


Date: 4.DEC.2013 21:18:50

Plot 6-133. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 113 of 175

Antenna-1 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 4.DEC.2013 21:20:38

Plot 6-134. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 114 of 175

Antenna-1 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

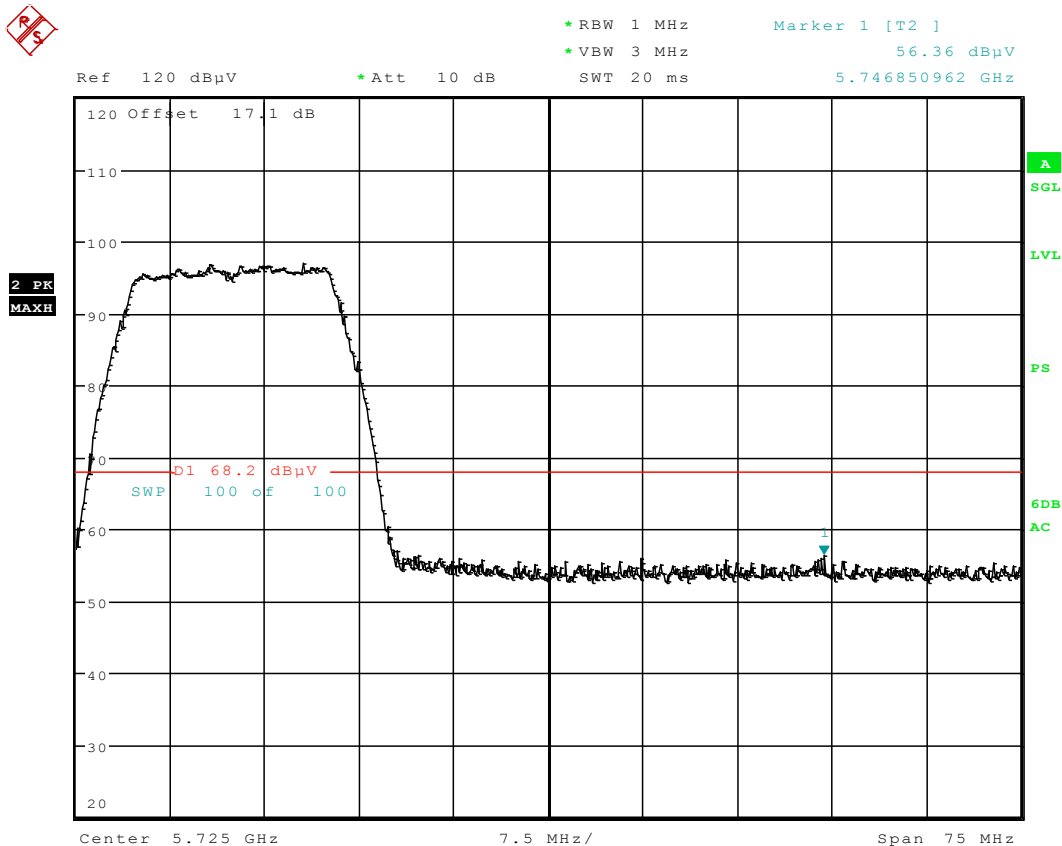
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5700MHz

Channel: 140



Date: 23.DEC.2013 20:25:17

Plot 6-135. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 115 of 175

Antenna-1 Radiated Band Edge Measurements (40MHz BW) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

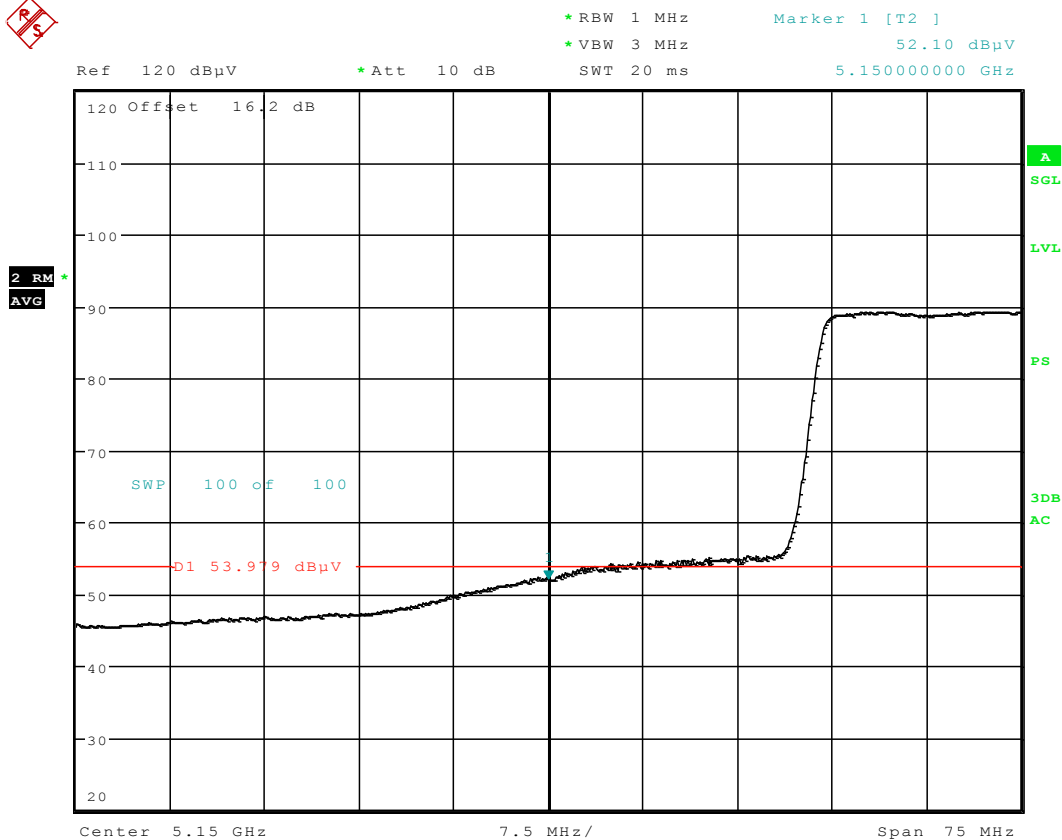
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5190MHz

Channel: 38

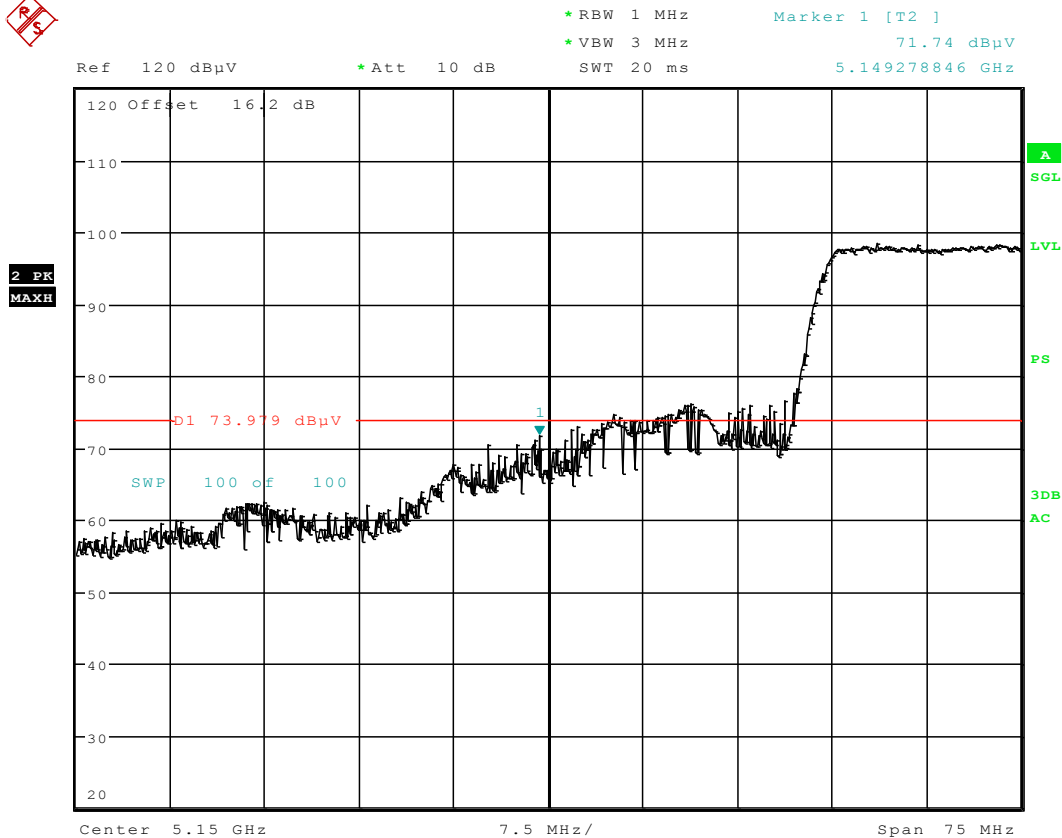


Date: 4.DEC.2013 21:30:53

Plot 6-136. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 116 of 175

Antenna-1 Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 4.DEC.2013 21:31:22

Plot 6-137. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 117 of 175

Antenna-1 Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

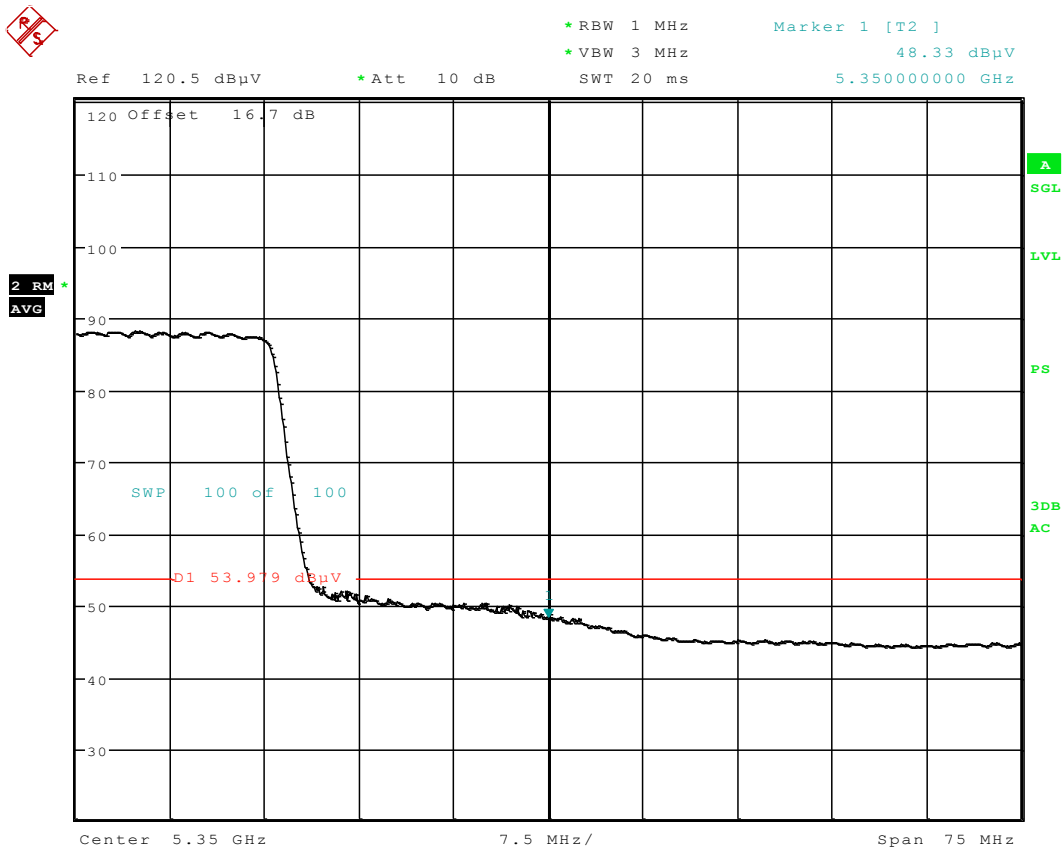
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5310MHz

Channel: 62

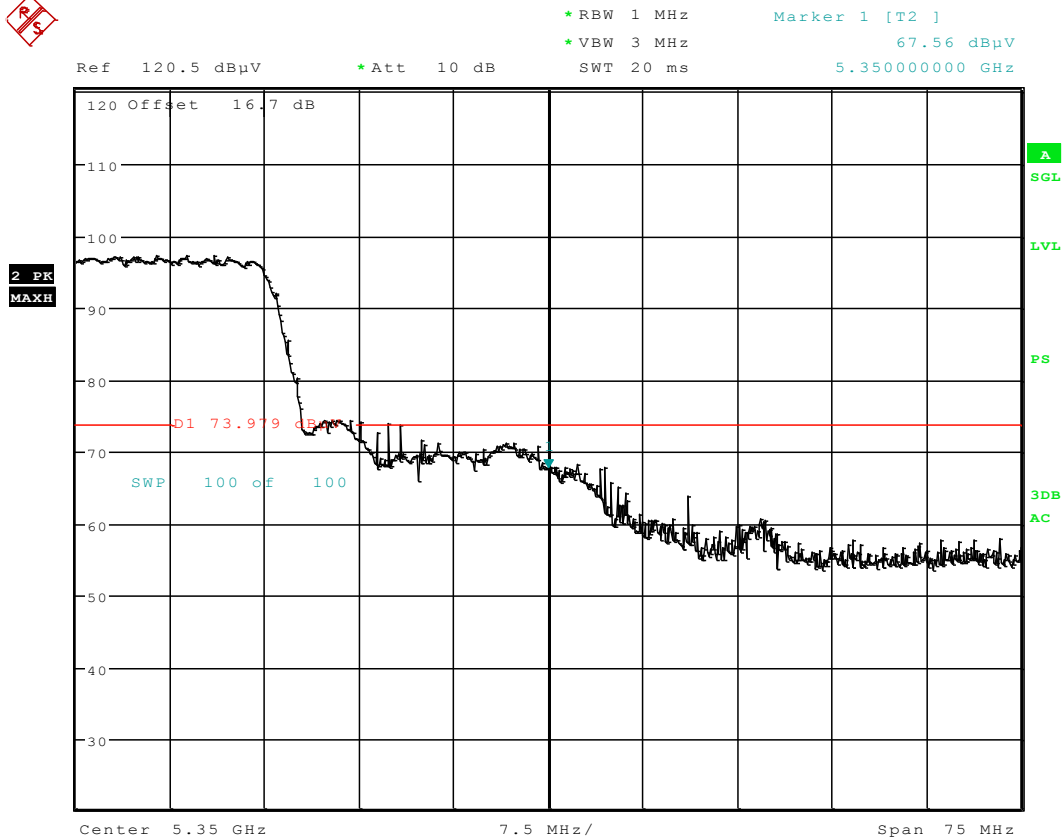


Date: 4.DEC.2013 21:35:45

Plot 6-138. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 118 of 175

Antenna-1 Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 4.DEC.2013 21:36:45

Plot 6-139. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 119 of 175

Antenna-1 Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

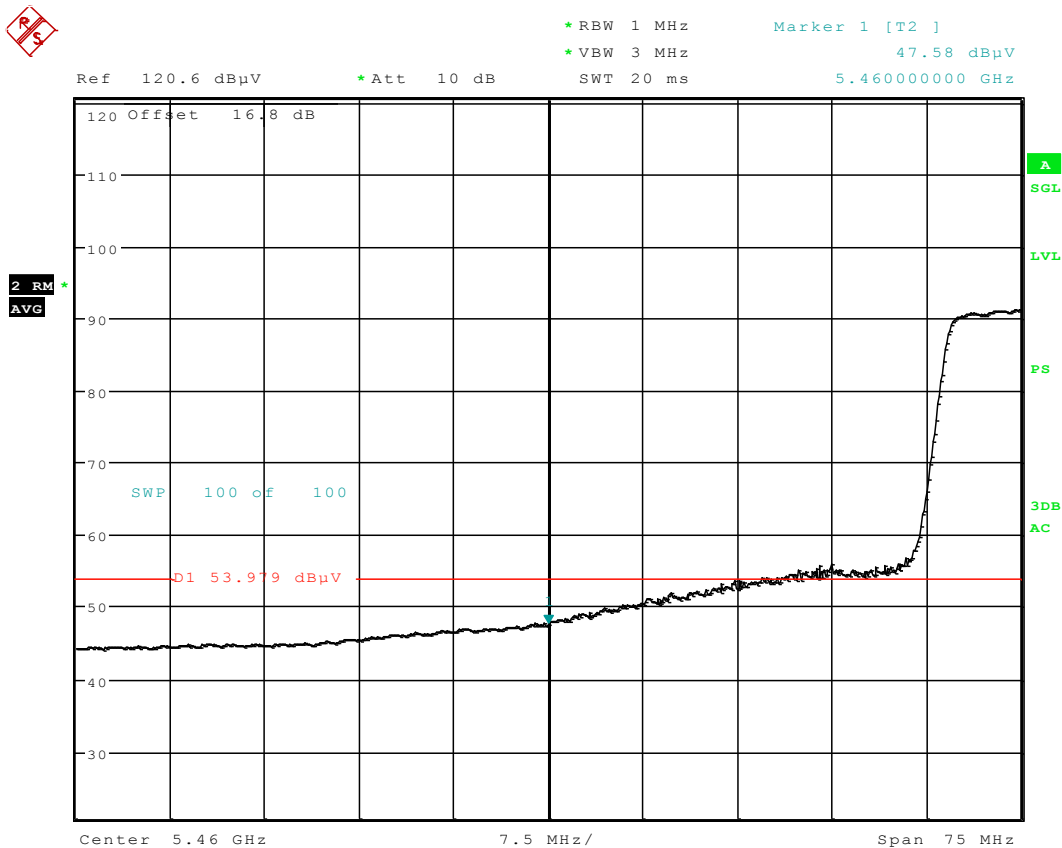
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5510MHz

Channel: 102

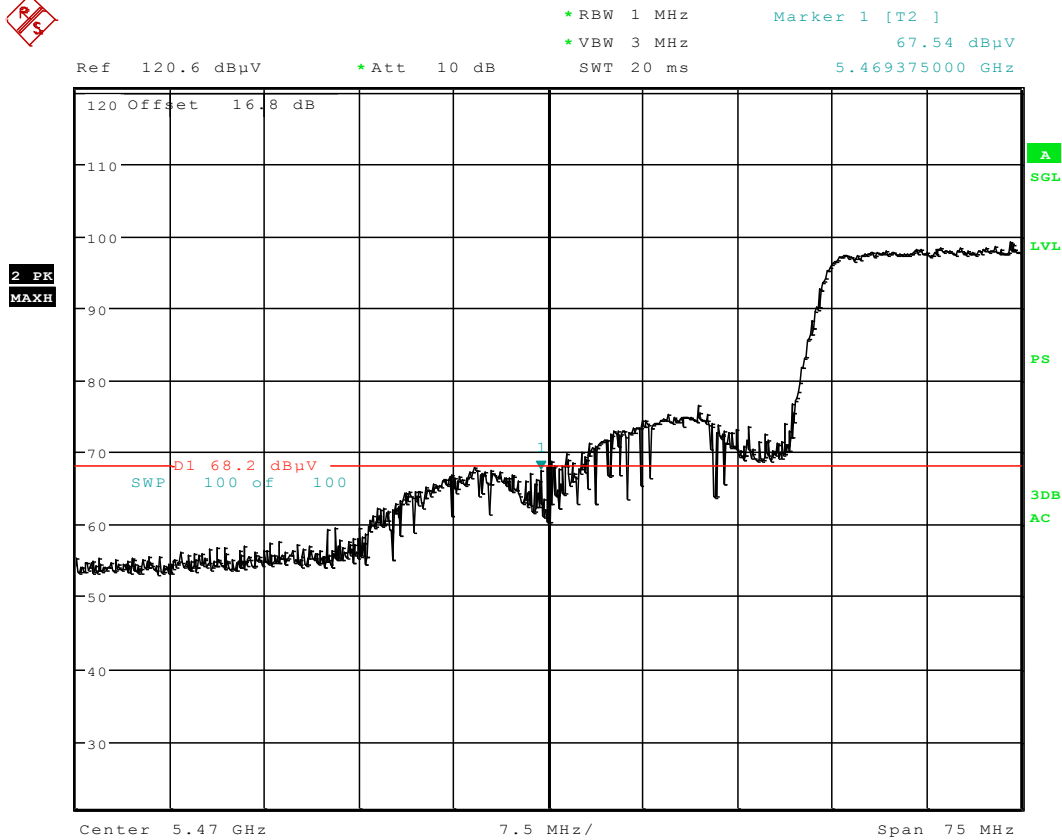


Date: 4.DEC.2013 21:41:06

Plot 6-140. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 120 of 175

Antenna-1 Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



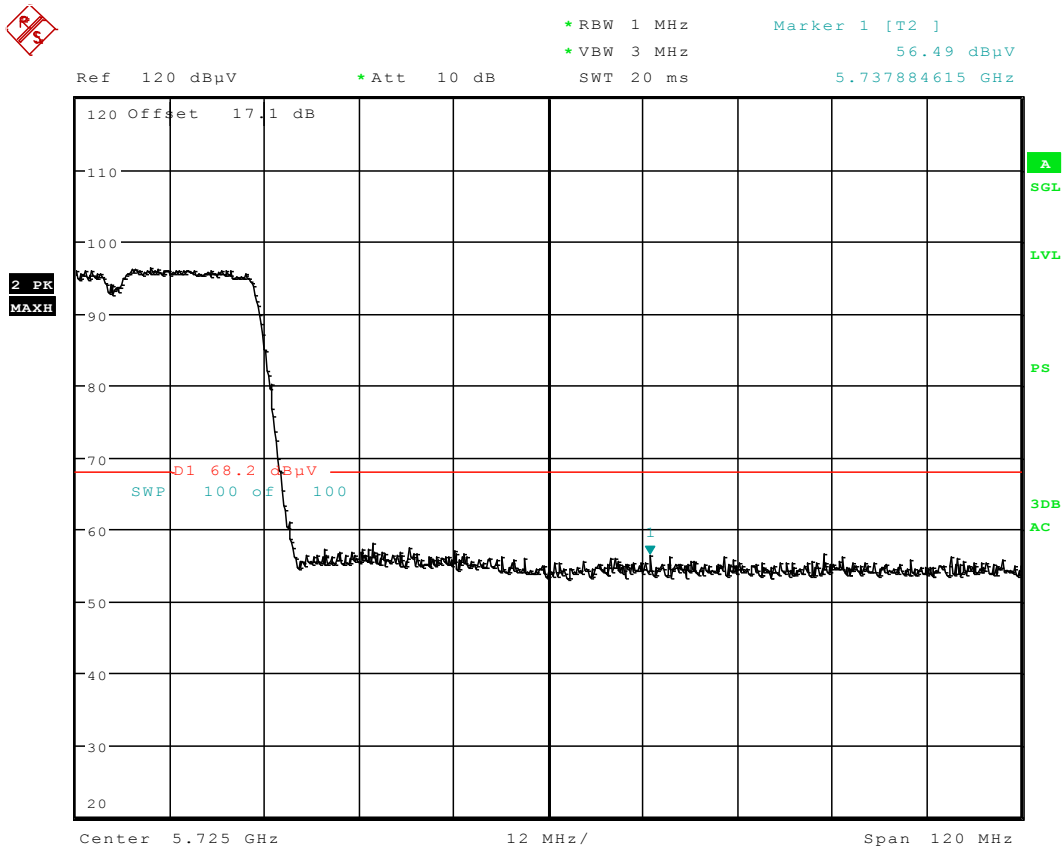
Date: 4.DEC.2013 21:52:39

Plot 6-141. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 121 of 175

Antenna-1 Radiated Band Edge Measurements (40MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11n (40MHz)
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5670MHz
Channel: 134



Date: 23.DEC.2013 19:56:44

Plot 6-142. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 122 of 175

Radiated Band Edge Measurements (80MHz BW) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

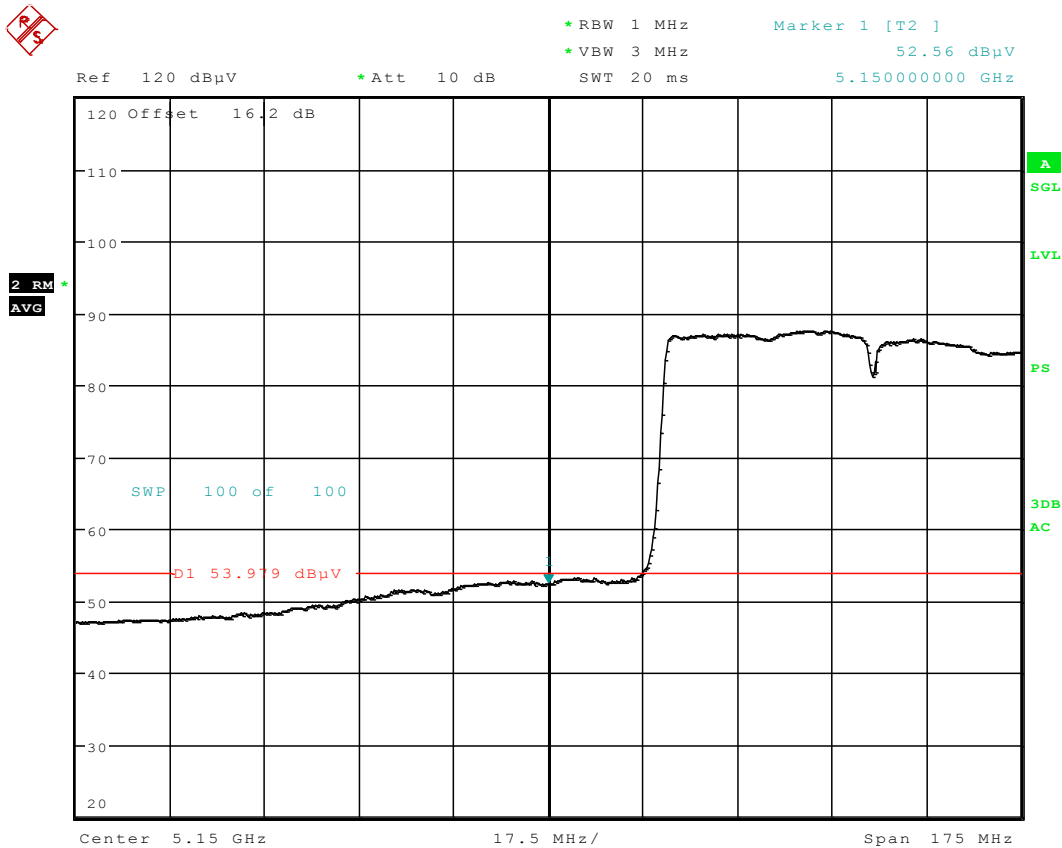
Worst Case Mode: 802.11ac (80MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5210MHz

Channel: 42



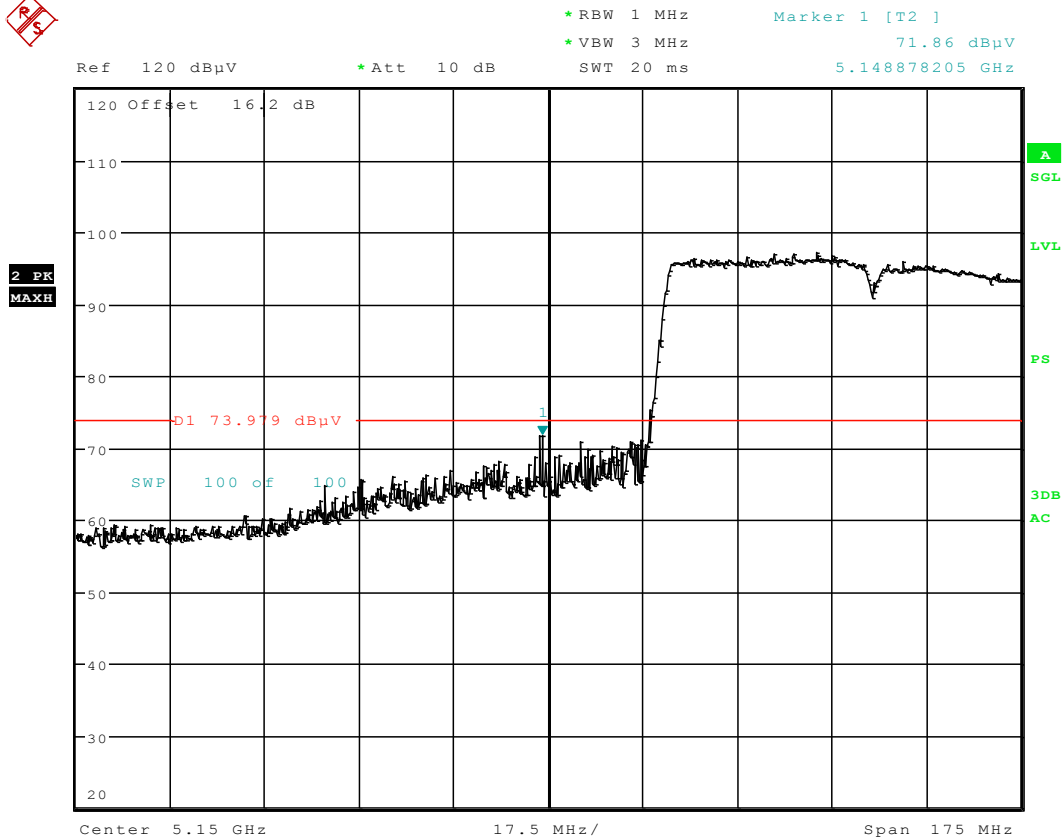
Date: 4.DEC.2013 22:09:23

Plot 6-143. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 123 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd)

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



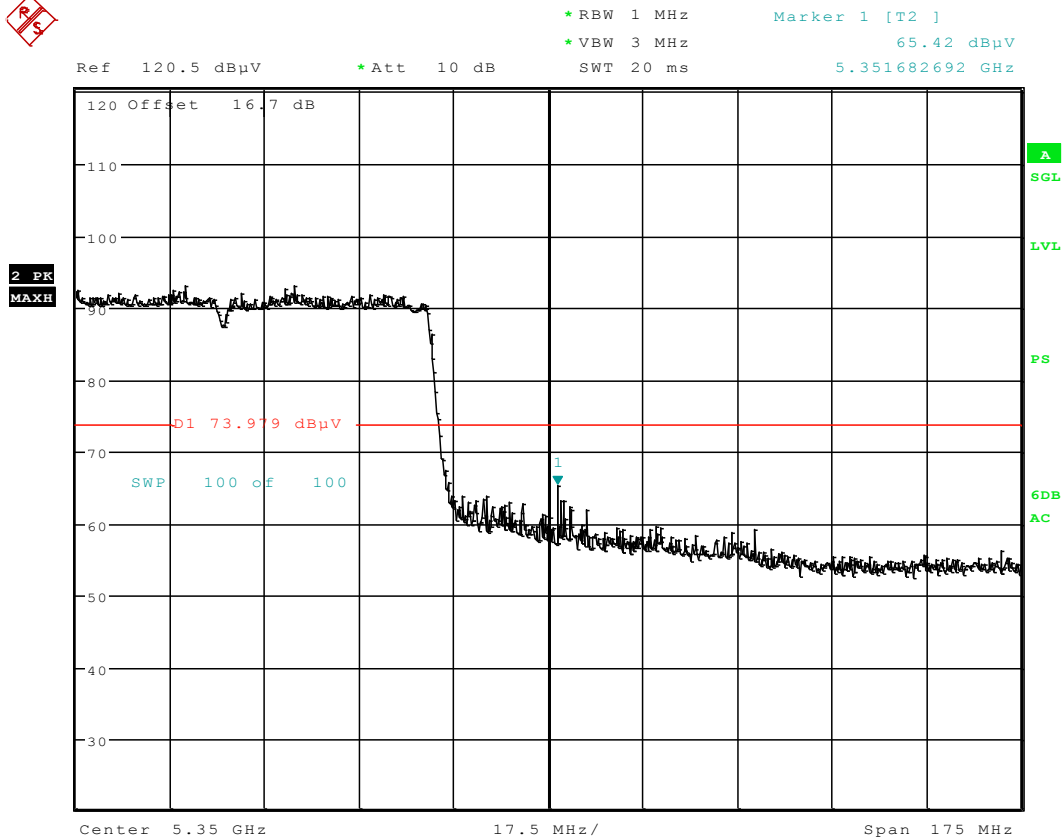
Date: 4.DEC.2013 22:10:19

Plot 6-144. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 124 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd)

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



Date: 4.DEC.2013 22:23:00

Plot 6-146. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 126 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

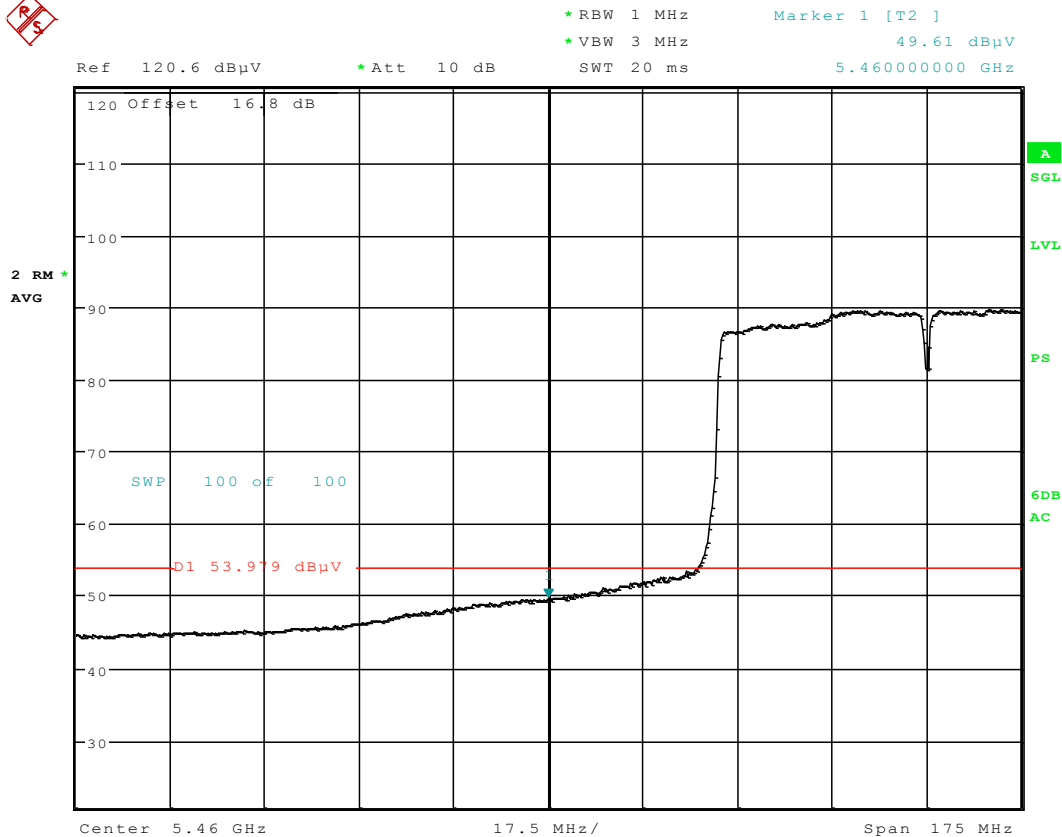
Worst Case Mode: 802.11ac (80MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5530MHz

Channel: 106



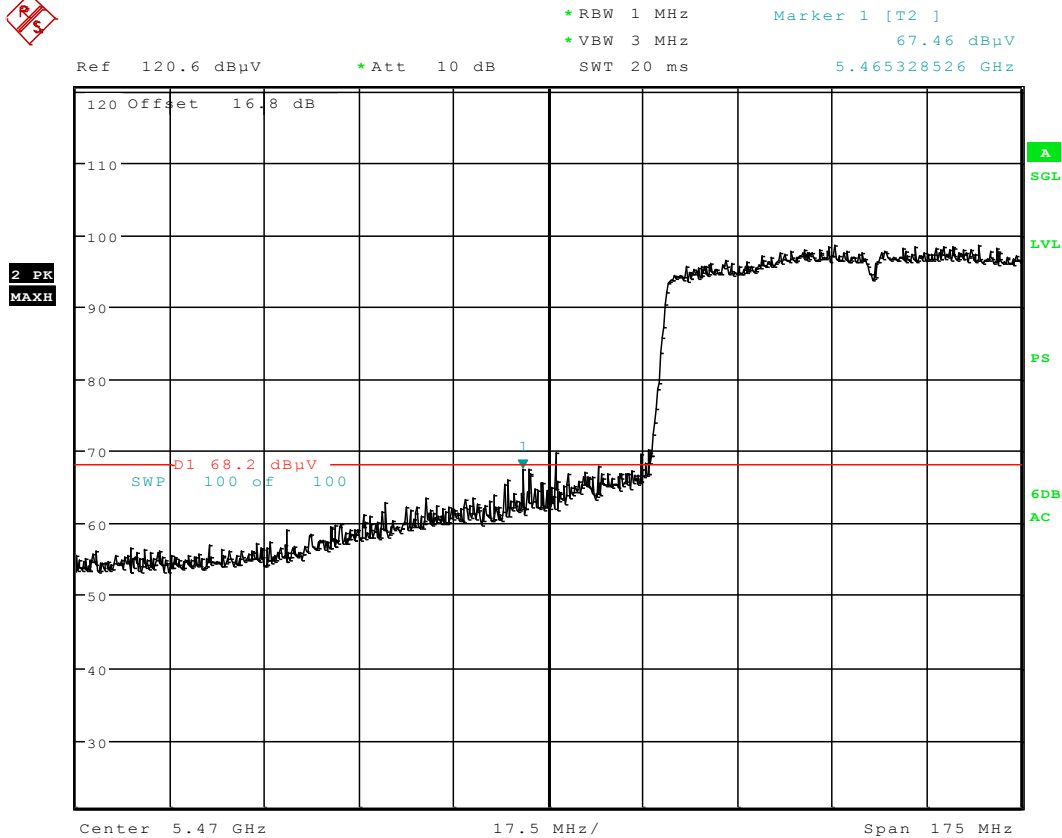
Date: 4.DEC.2013 22:28:17

Plot 6-147. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 127 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd)

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



Date: 4.DEC.2013 22:29:22

Plot 6-148. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 128 of 175

6.9 Antenna-2 Radiated Band Edge Measurements (20MHz BW)

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

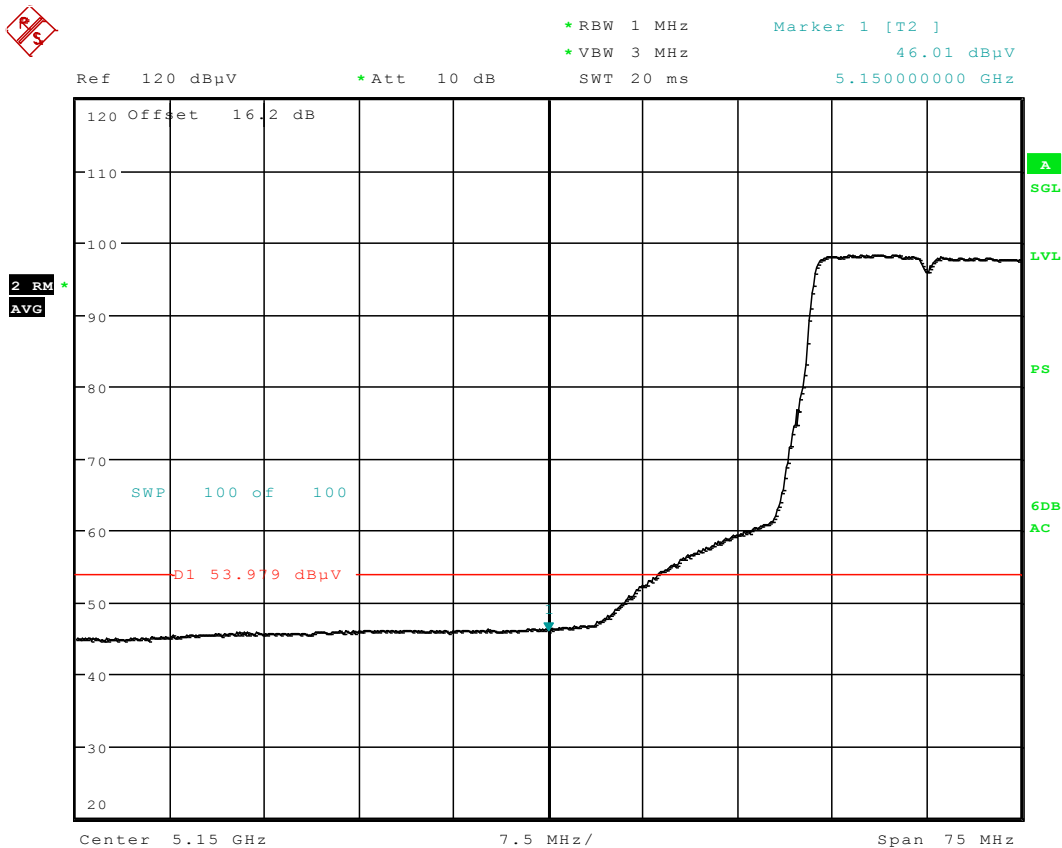
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5180MHz

Channel: 36

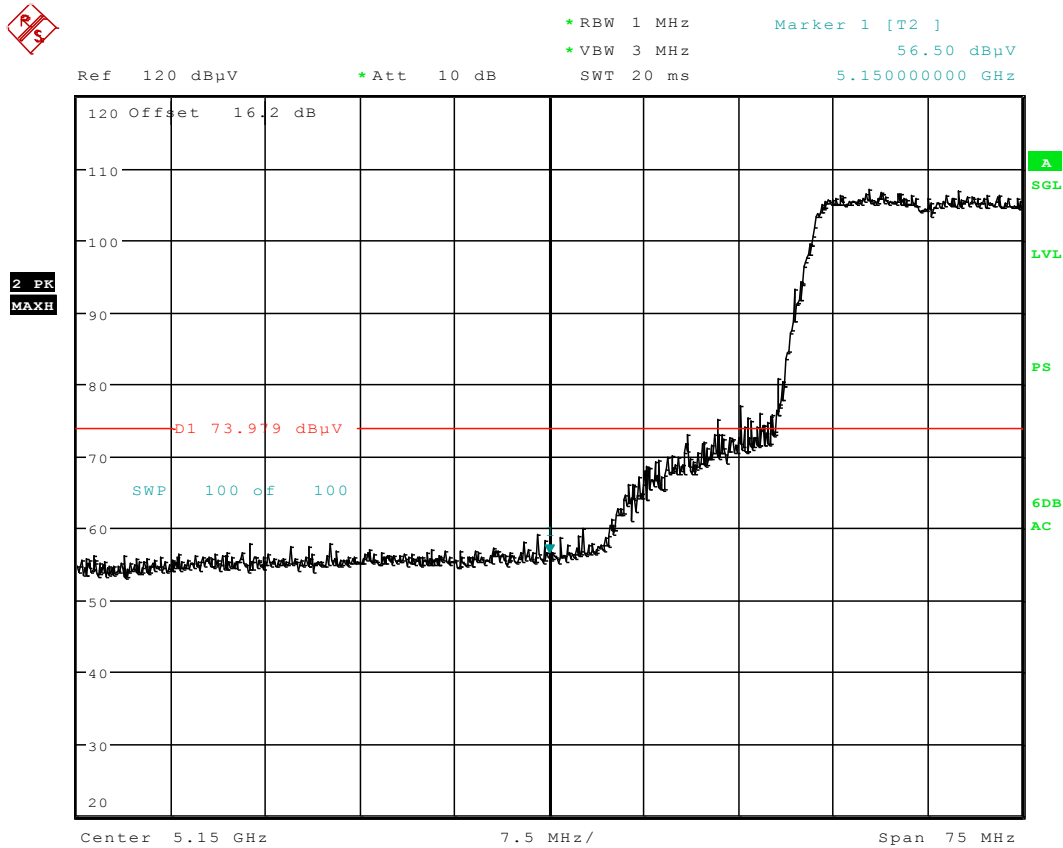


Date: 4.DEC.2013 23:13:30

Plot 6-149. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet	Page 129 of 175	

Antenna-2 Radiated Band Edge Measurements (20MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



Date: 4.DEC.2013 23:13:56

Plot 6-150. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

Antenna-2 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

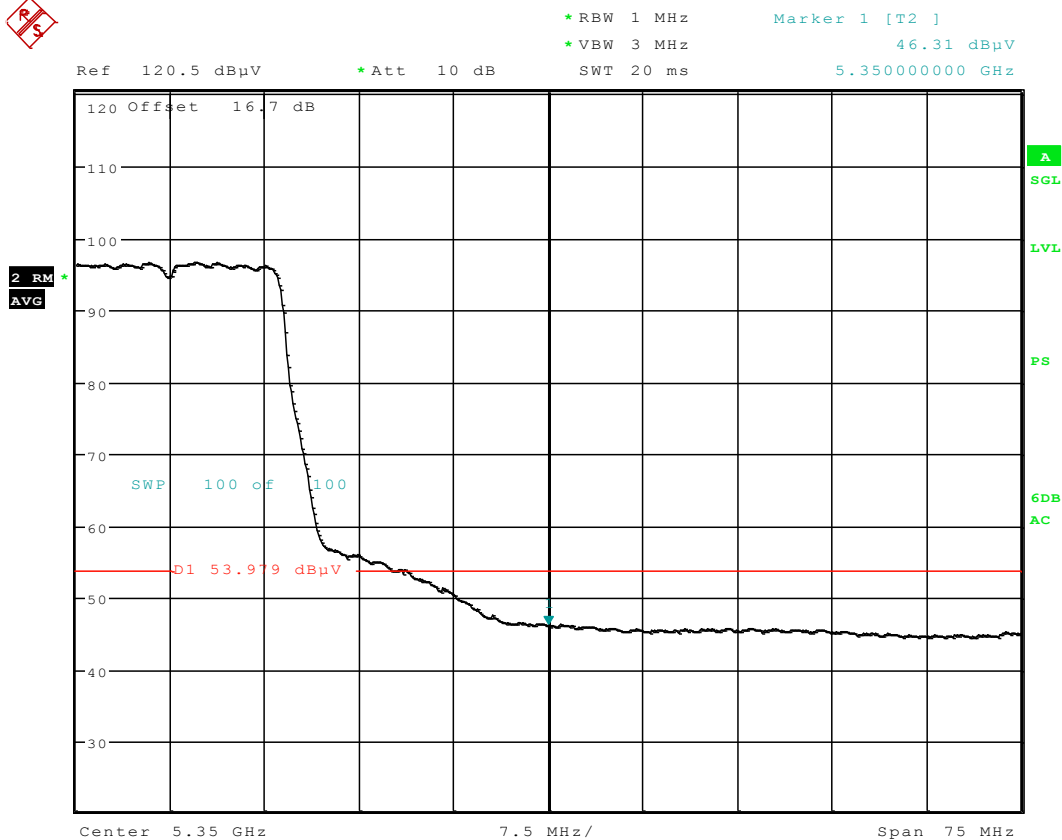
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5320MHz

Channel: 64

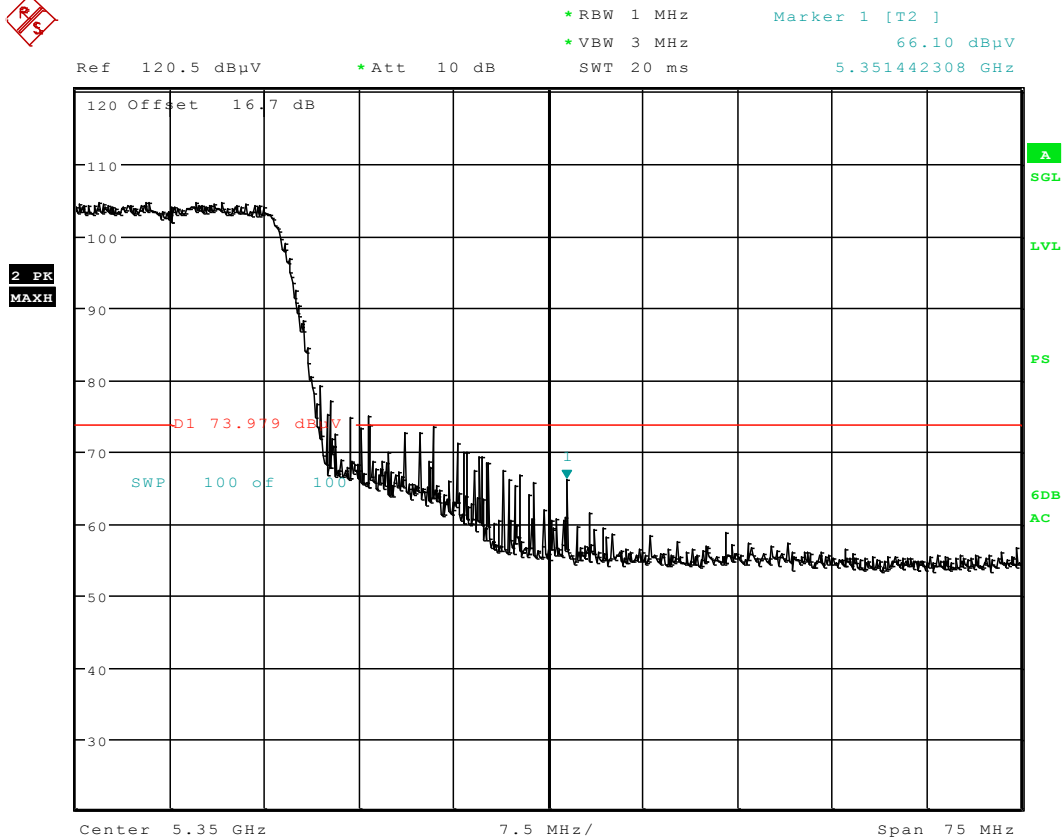


Date: 4.DEC.2013 23:16:50

Plot 6-151. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 131 of 175

Antenna-2 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 4.DEC.2013 23:17:26

Plot 6-152. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 132 of 175

Antenna-2 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

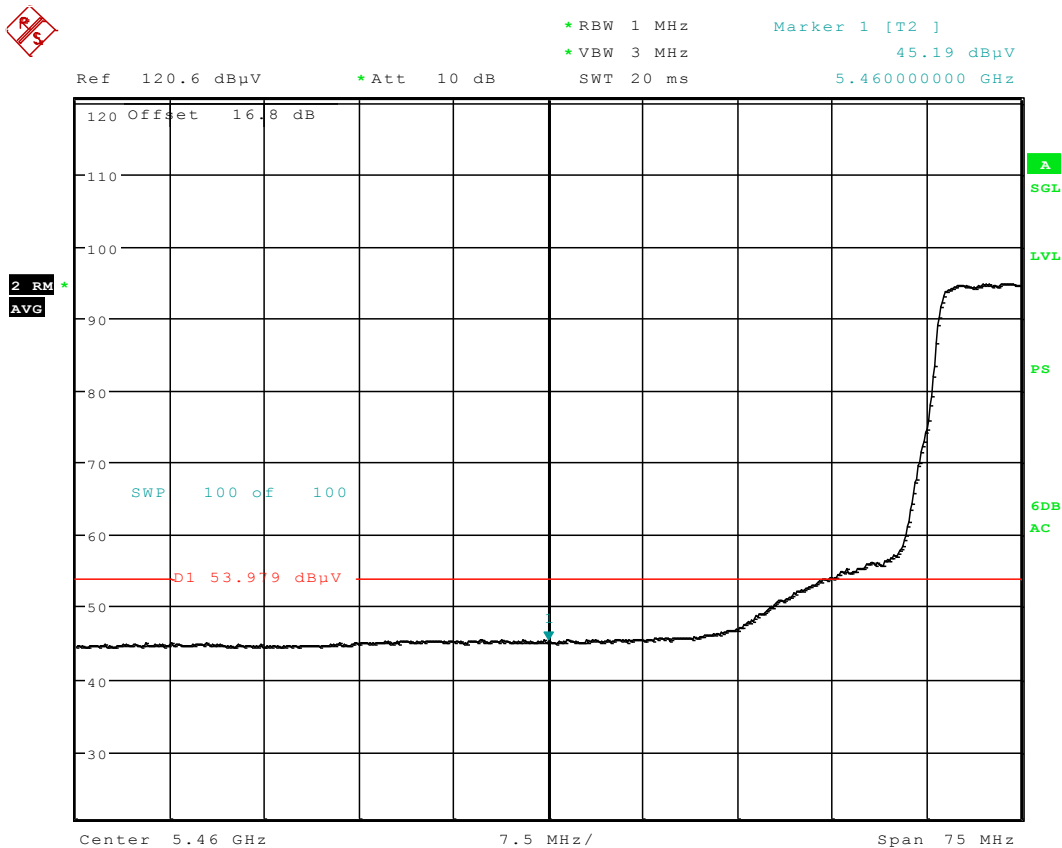
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5500MHz

Channel: 100

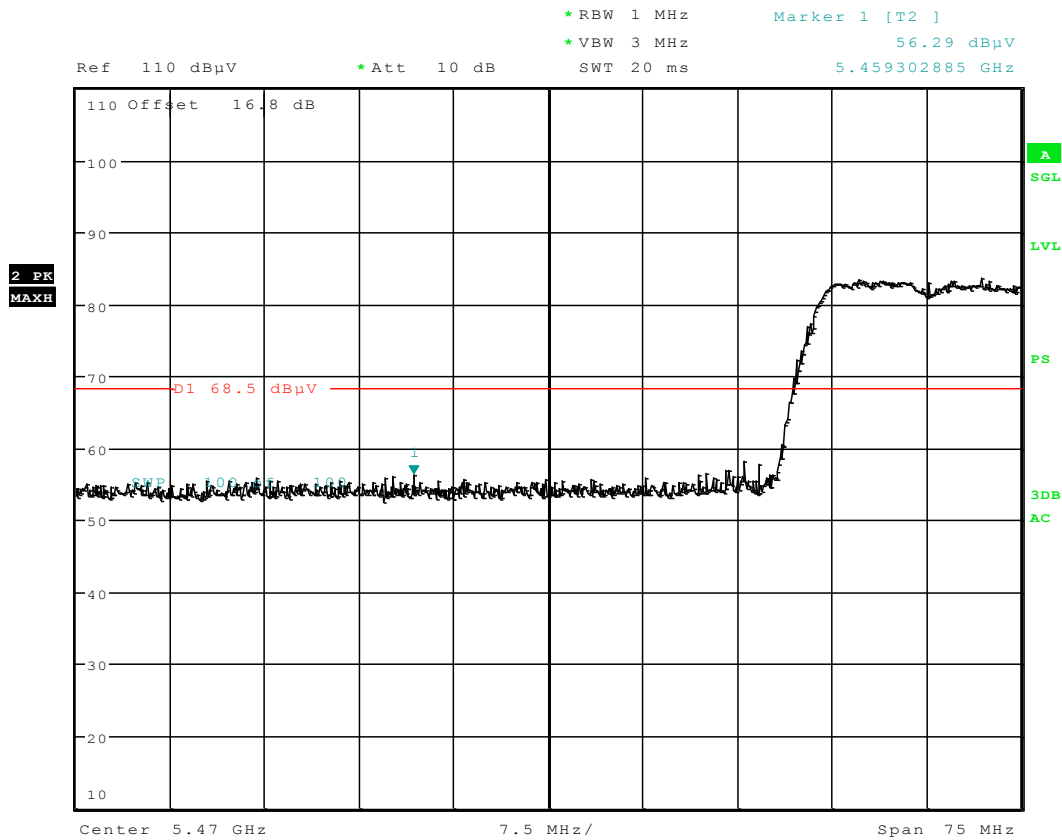


Date: 4.DEC.2013 23:19:35

Plot 6-153. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 133 of 175

Antenna-2 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 12.DEC.2013 02:00:22

Plot 6-154. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 134 of 175

Antenna-2 Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

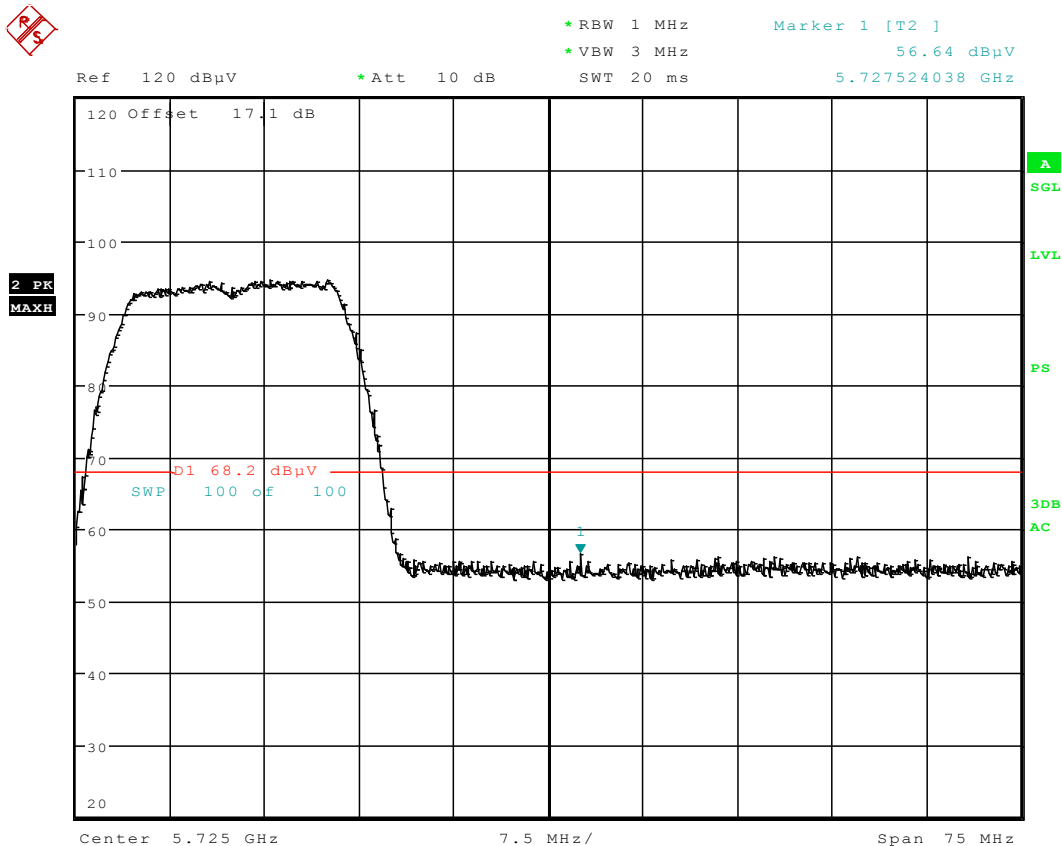
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5700MHz

Channel: 140



Date: 23.DEC.2013 20:04:41

Plot 6-155. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 135 of 175

Antenna-2 Radiated Band Edge Measurements (40MHz BW) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

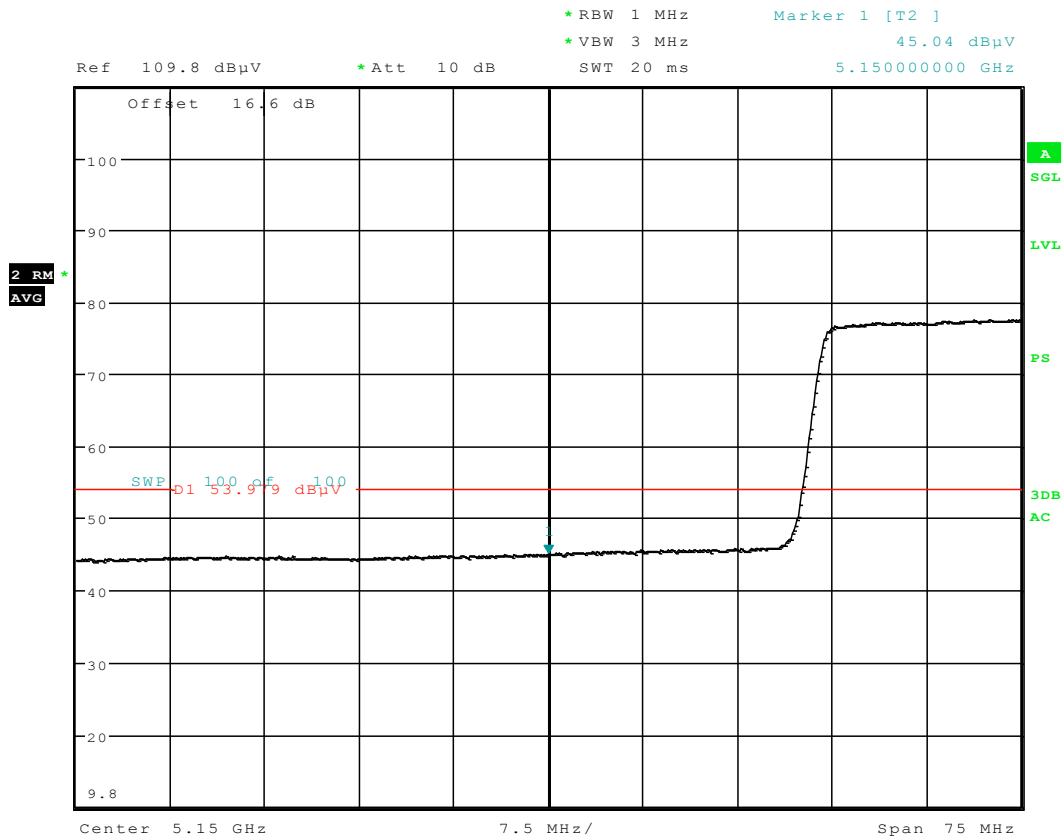
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5190MHz

Channel: 38

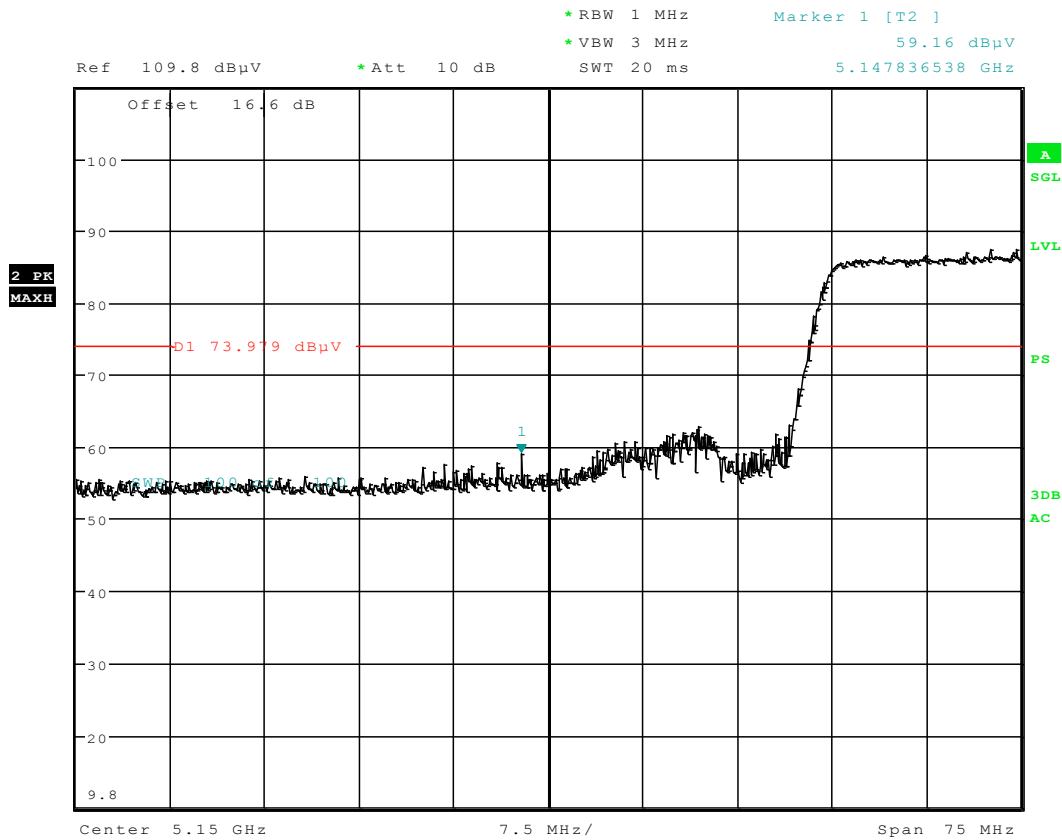


Date: 12.DEC.2013 02:09:37

Plot 6-156. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 136 of 175

Antenna-2 Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 12.DEC.2013 02:10:10

Plot 6-157. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 137 of 175

Antenna-2 Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

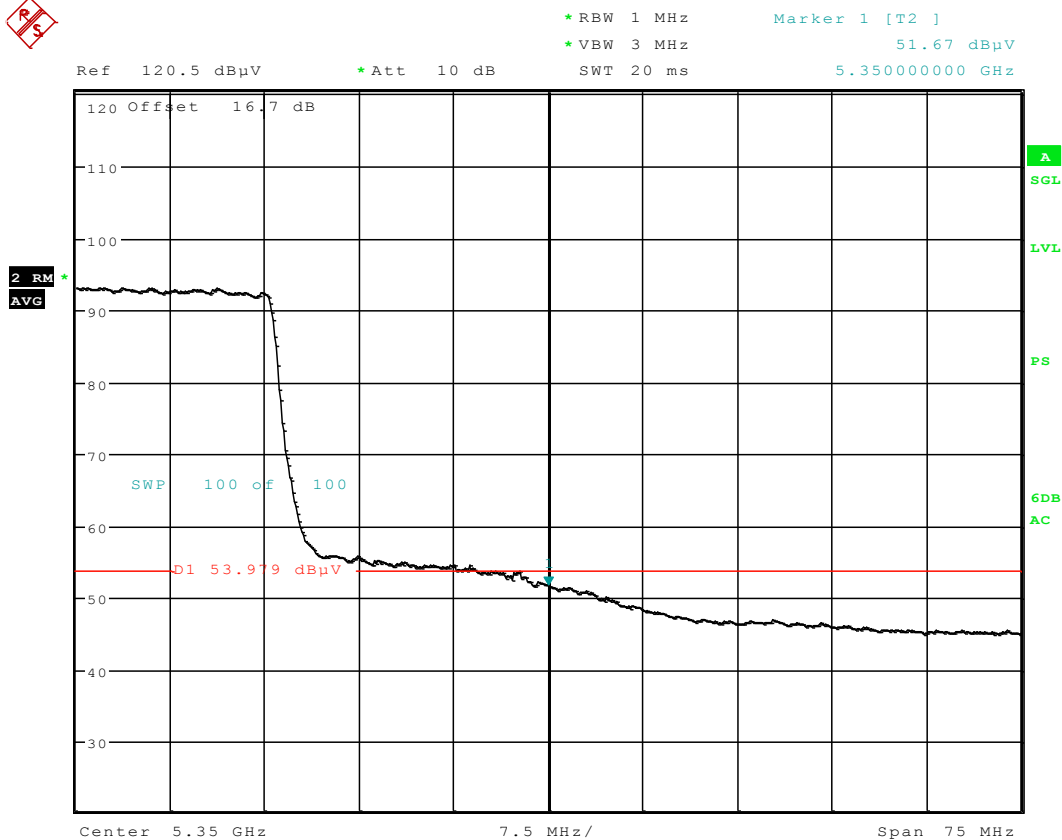
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5310MHz

Channel: 62

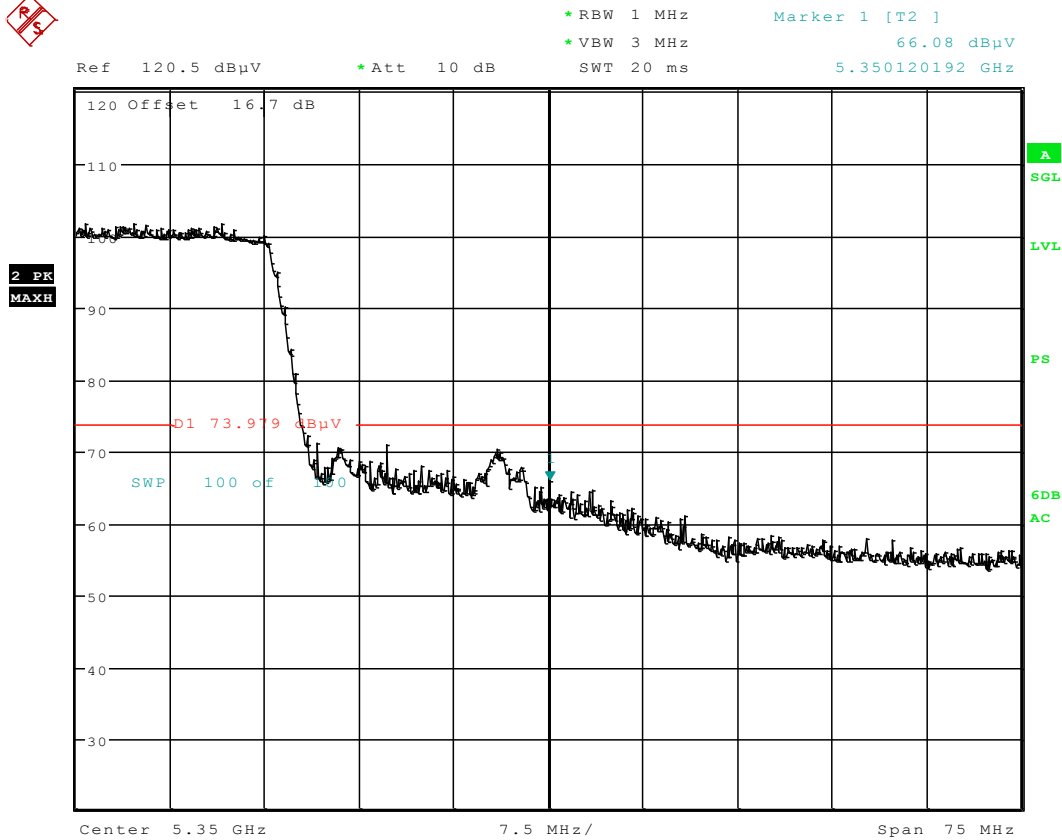


Date: 4.DEC.2013 23:36:36

Plot 6-158. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 138 of 175

Antenna-2 Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 4.DEC.2013 23:37:14

Plot 6-159. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 139 of 175

Antenna-2 Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

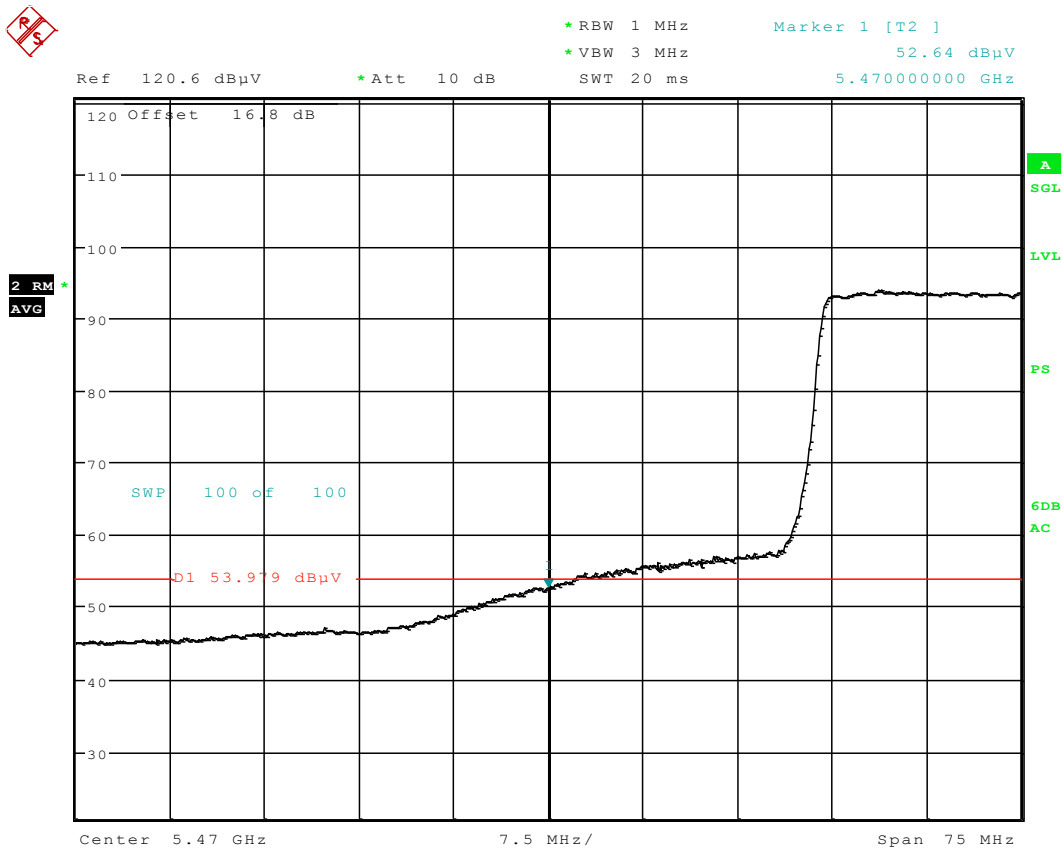
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5510MHz

Channel: 102



Date: 4.DEC.2013 23:46:54

Plot 6-160. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 140 of 175

Antenna-2 Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

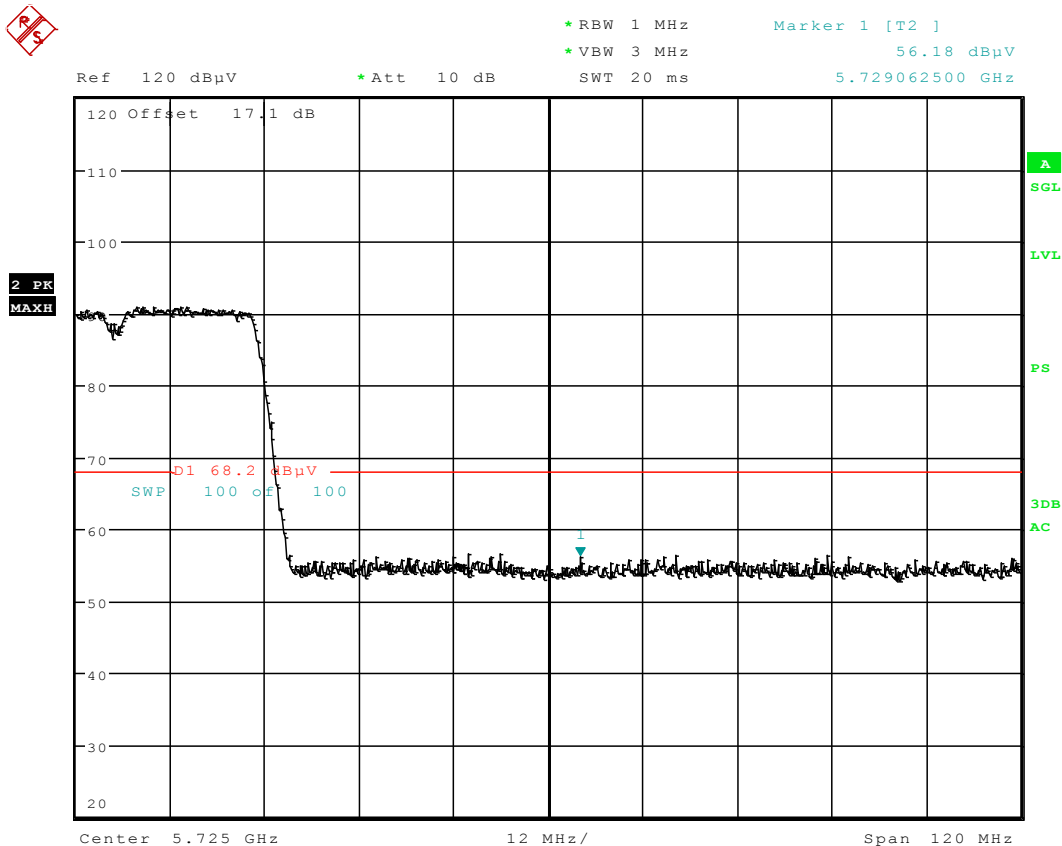
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5670MHz

Channel: 134



Date: 23.DEC.2013 20:13:12

Plot 6-162. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 142 of 175

Radiated Band Edge Measurements (80MHz BW)

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

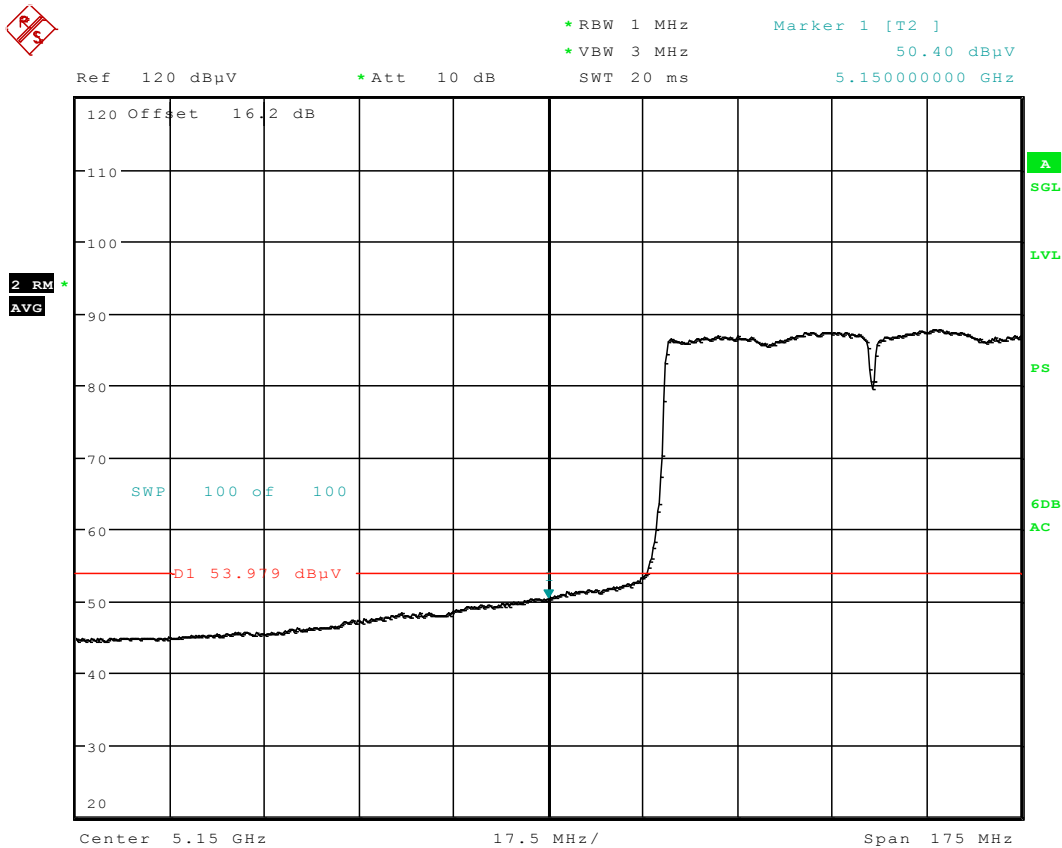
Worst Case Mode: 802.11ac (80MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5210MHz

Channel: 42



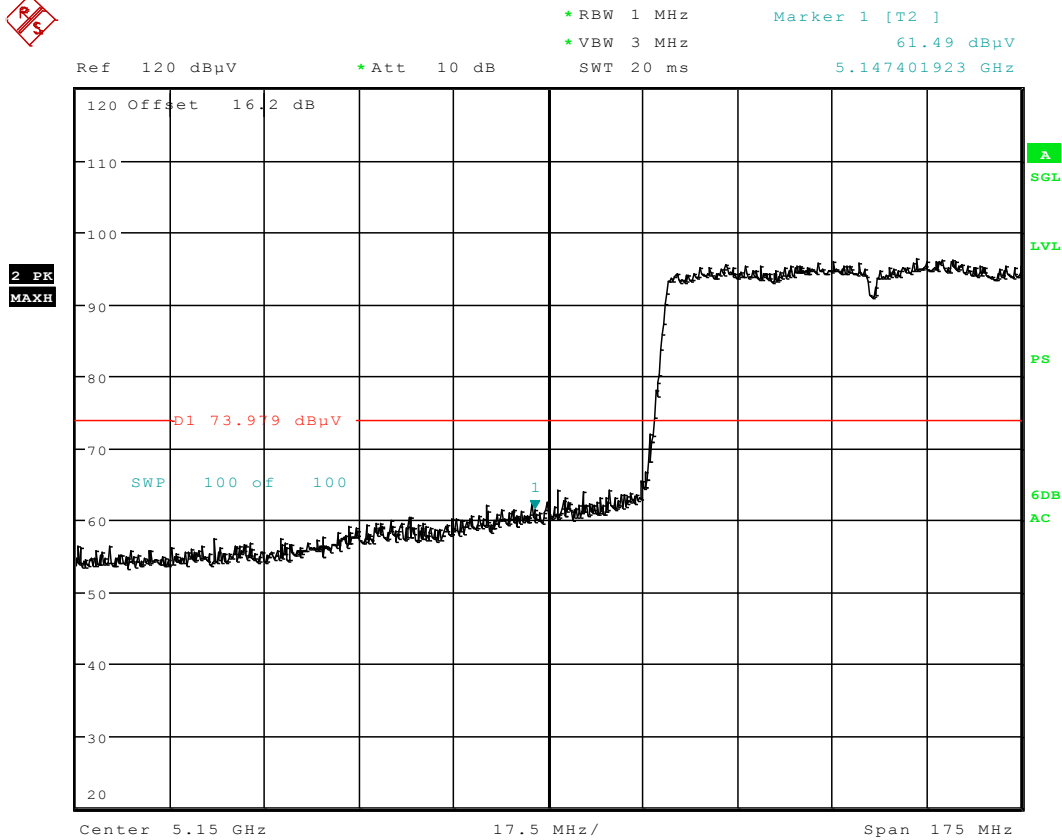
Date: 5.DEC.2013 00:54:39

Plot 6-163. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 143 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd)

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



Date: 5.DEC.2013 00:55:36

Plot 6-164. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 144 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

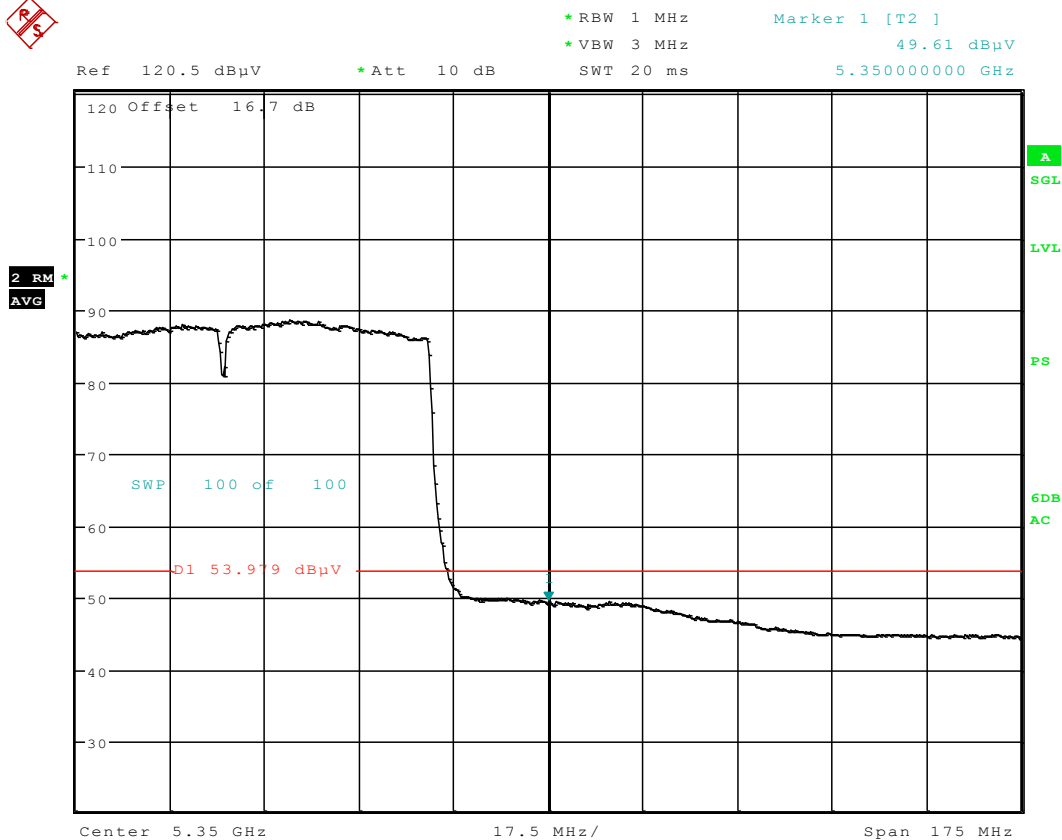
Worst Case Mode: 802.11ac (80MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5290MHz

Channel: 58



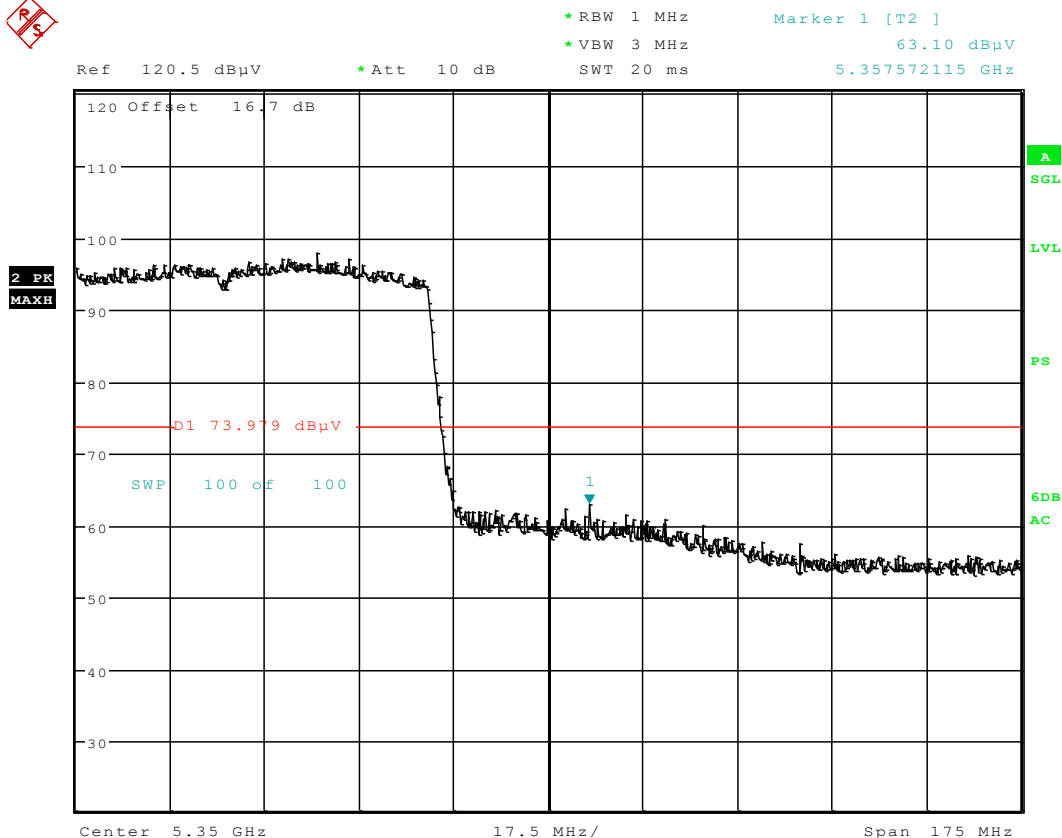
Date: 5.DEC.2013 00:58:19

Plot 6-165. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 145 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd)

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



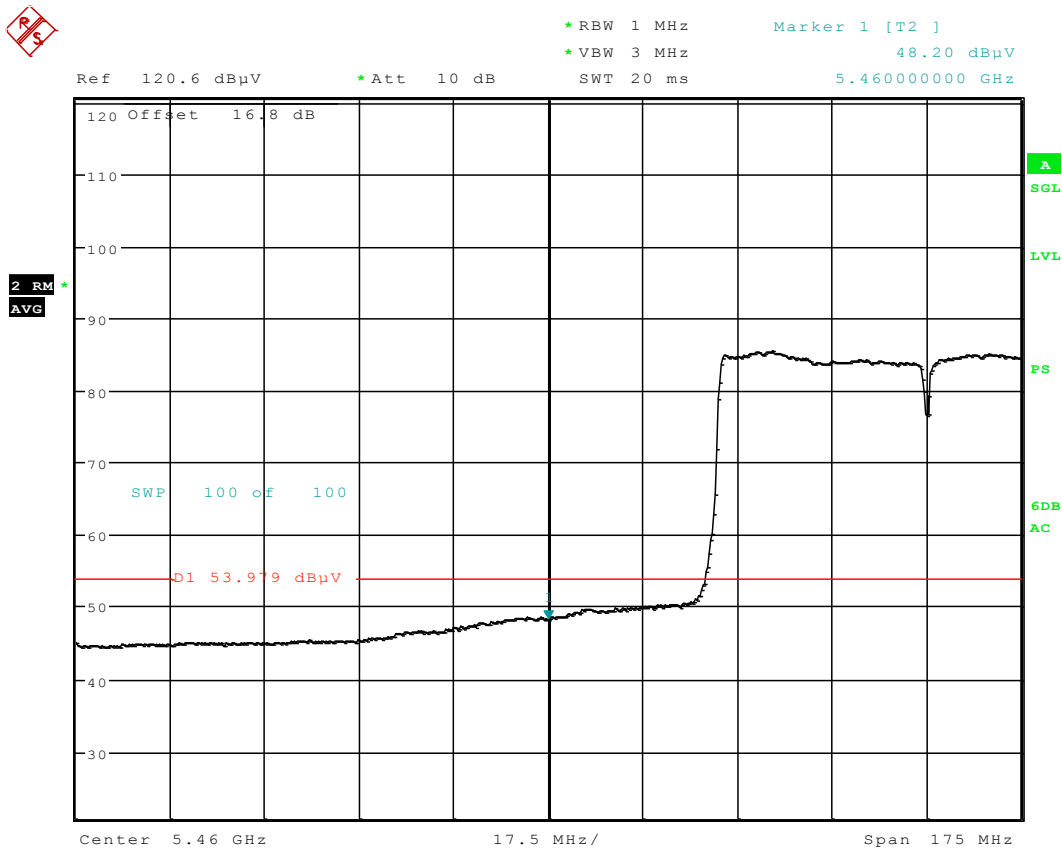
Date: 5.DEC.2013 00:58:56

Plot 6-166. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 146 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11ac (80MHz)
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5530MHz
Channel: 106

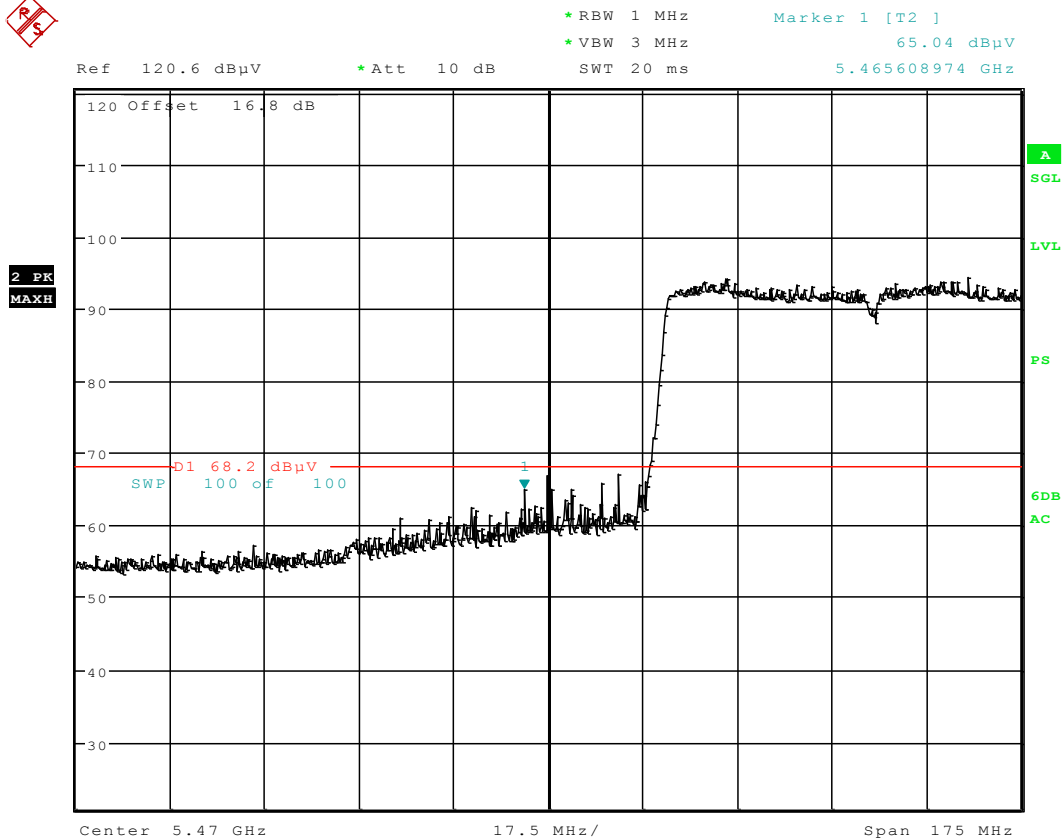


Date: 5.DEC.2013 01:01:46

Plot 6-167. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 147 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



Date: 5.DEC.2013 01:03:26

Plot 6-168. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 148 of 175

6.10 MIMO Radiated Band Edge Measurements (20MHz BW)

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

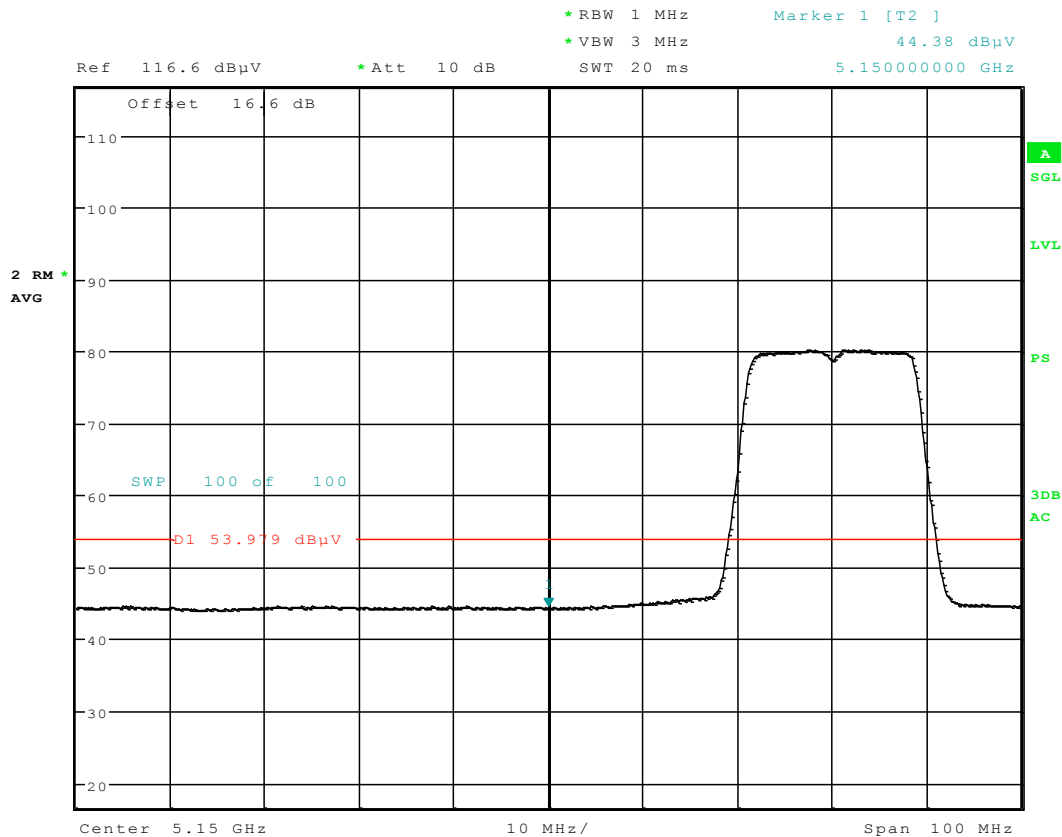
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5180MHz

Channel: 36

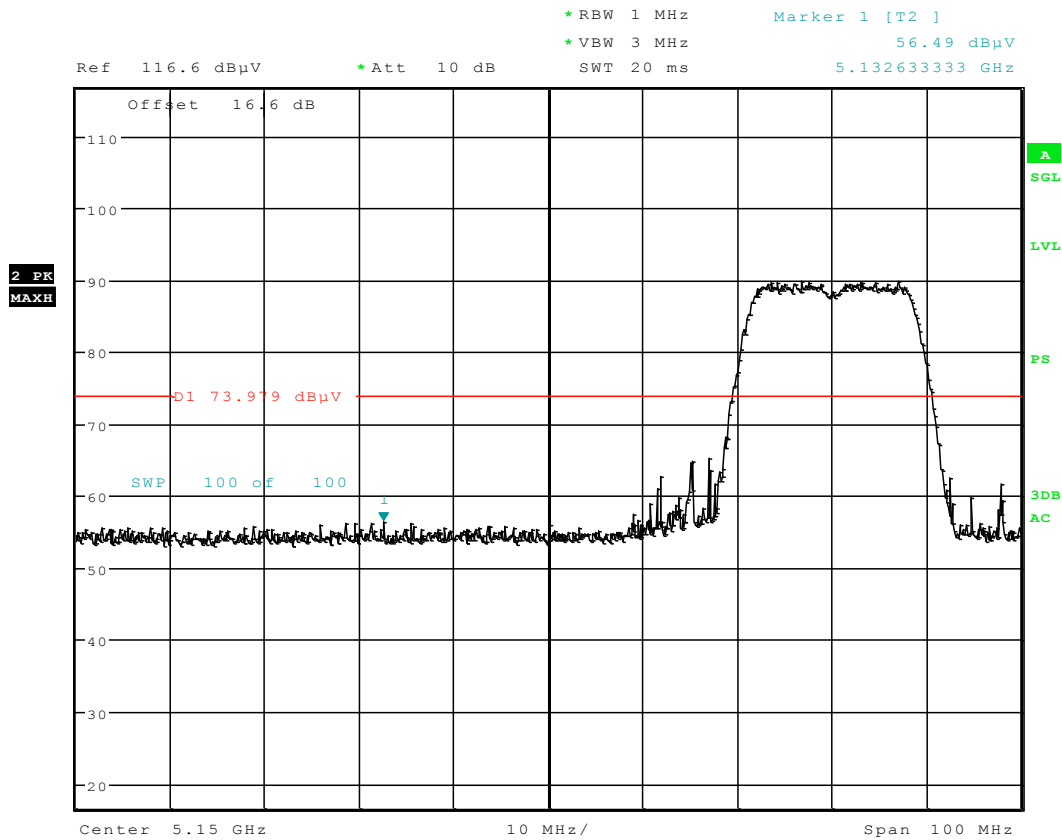


Date: 11.DEC.2013 22:23:47

Plot 6-169. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 149 of 175

MIMO Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 11.DEC.2013 22:24:48

Plot 6-170. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 150 of 175

MIMO Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

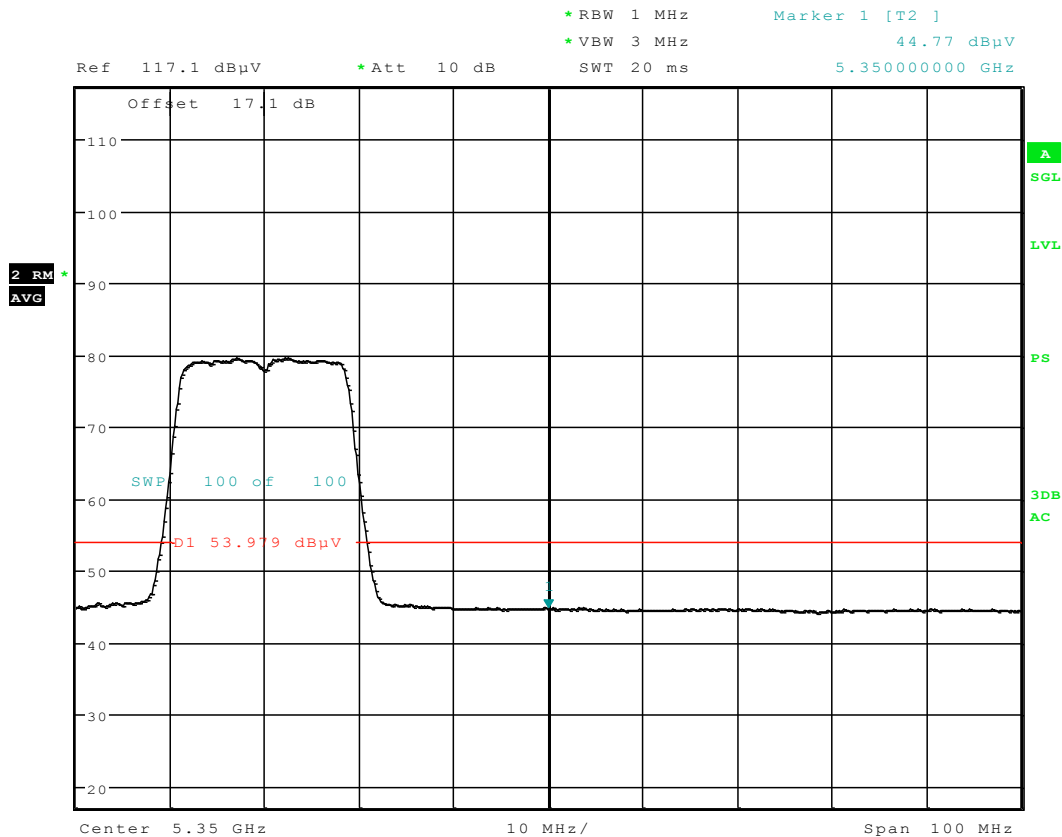
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5320MHz

Channel: 64

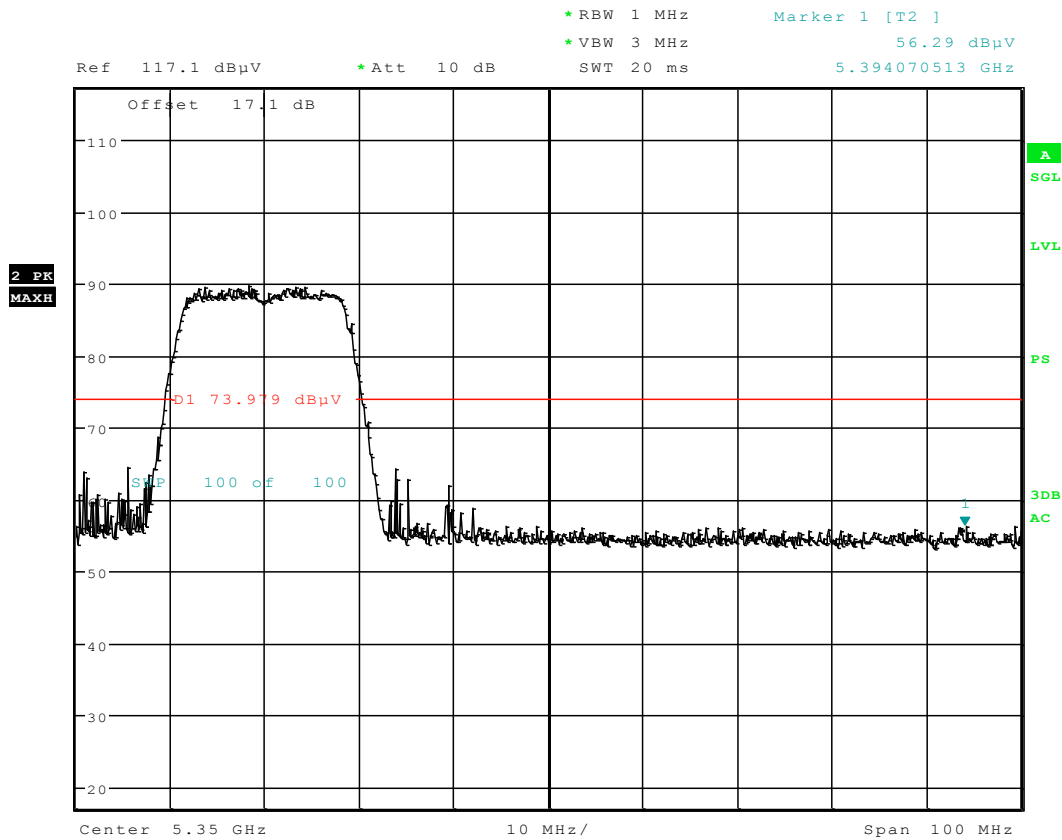


Date: 11.DEC.2013 22:27:51

Plot 6-171. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 151 of 175

MIMO Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 11.DEC.2013 22:28:50

Plot 6-172. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 152 of 175

MIMO Radiated Band Edge Measurements (20MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

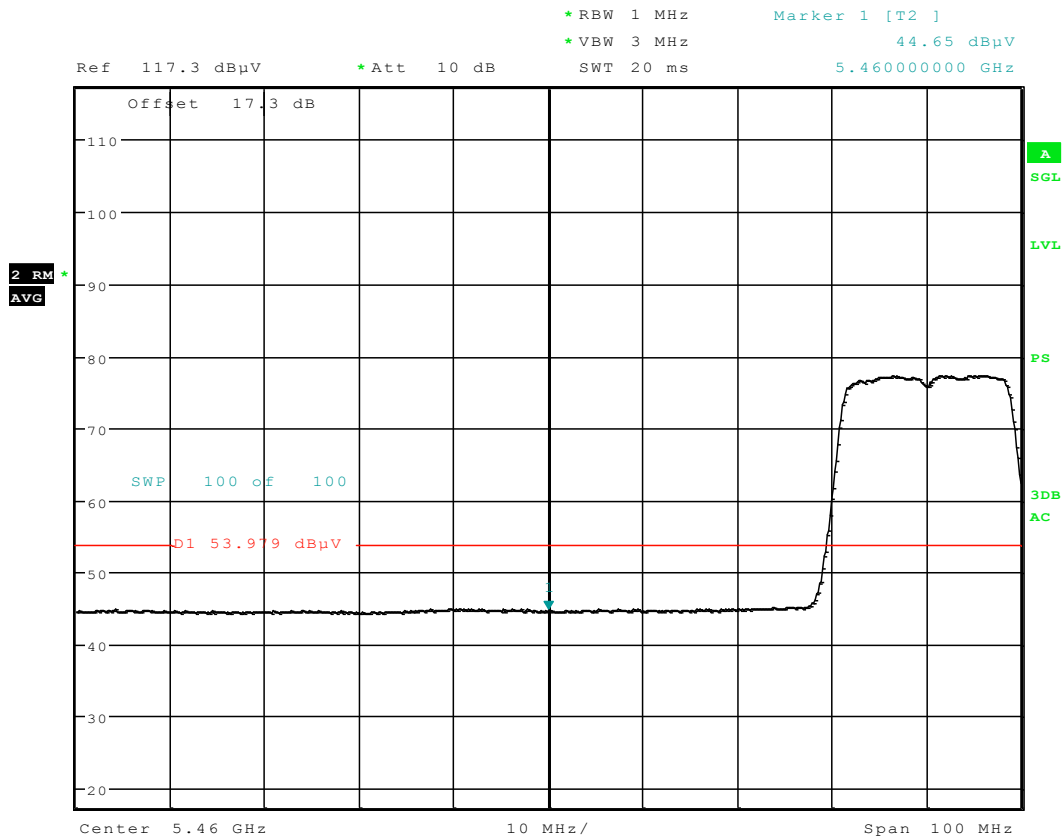
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5500MHz

Channel: 100

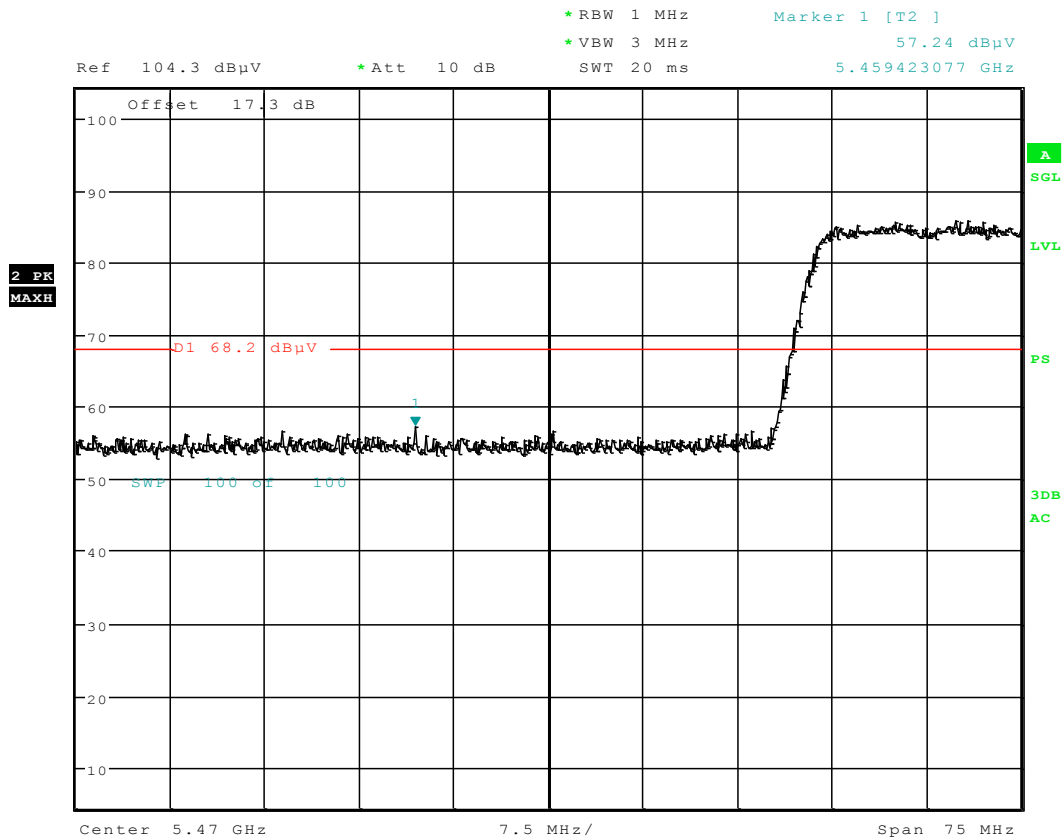


Date: 11.DEC.2013 22:34:06

Plot 6-173. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 153 of 175

MIMO Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 12.DEC.2013 02:54:43

Plot 6-174. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 154 of 175

MIMO Radiated Band Edge Measurements (20MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**

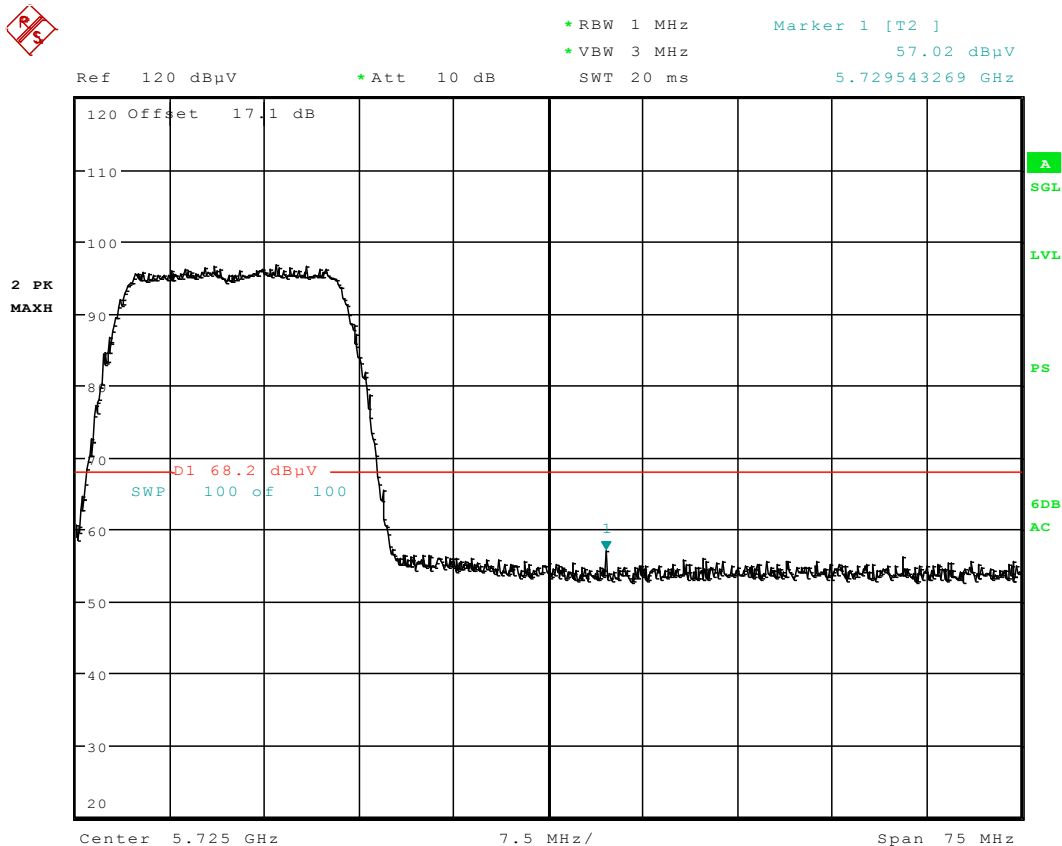
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5700MHz

Channel: 140



Date: 23.DEC.2013 20:18:19

Plot 6-175. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 155 of 175

MIMO Radiated Band Edge Measurements (40MHz BW) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

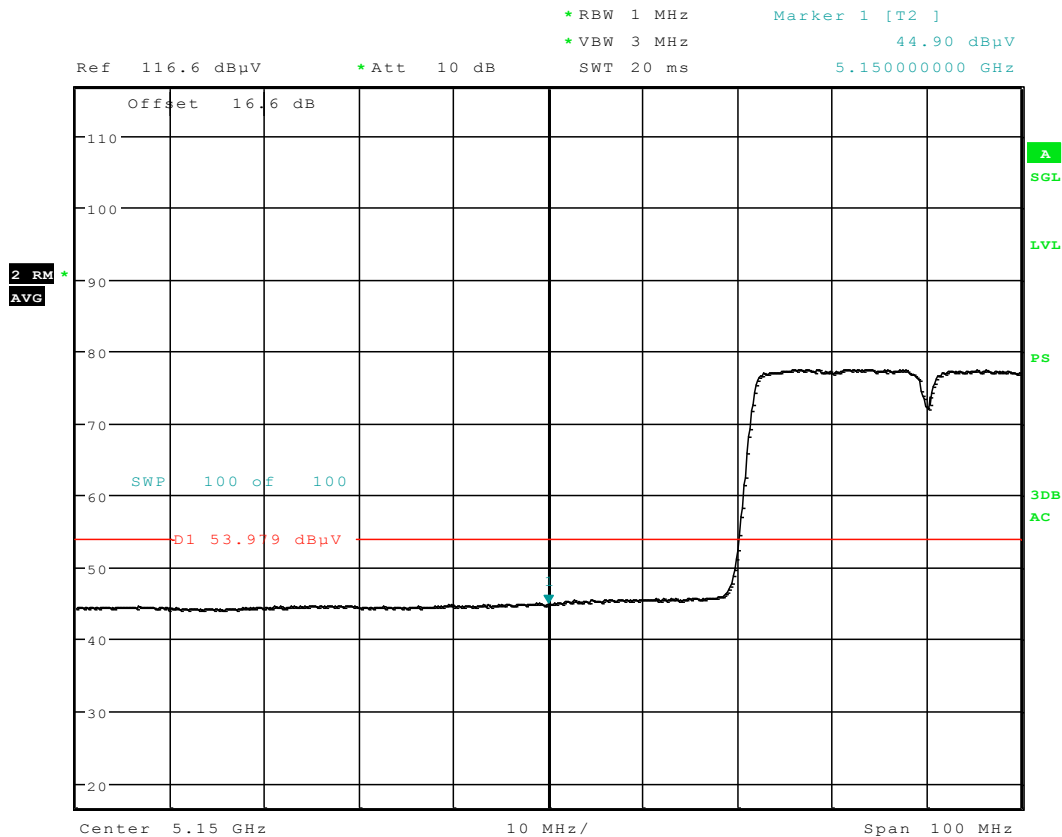
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5190MHz

Channel: 38

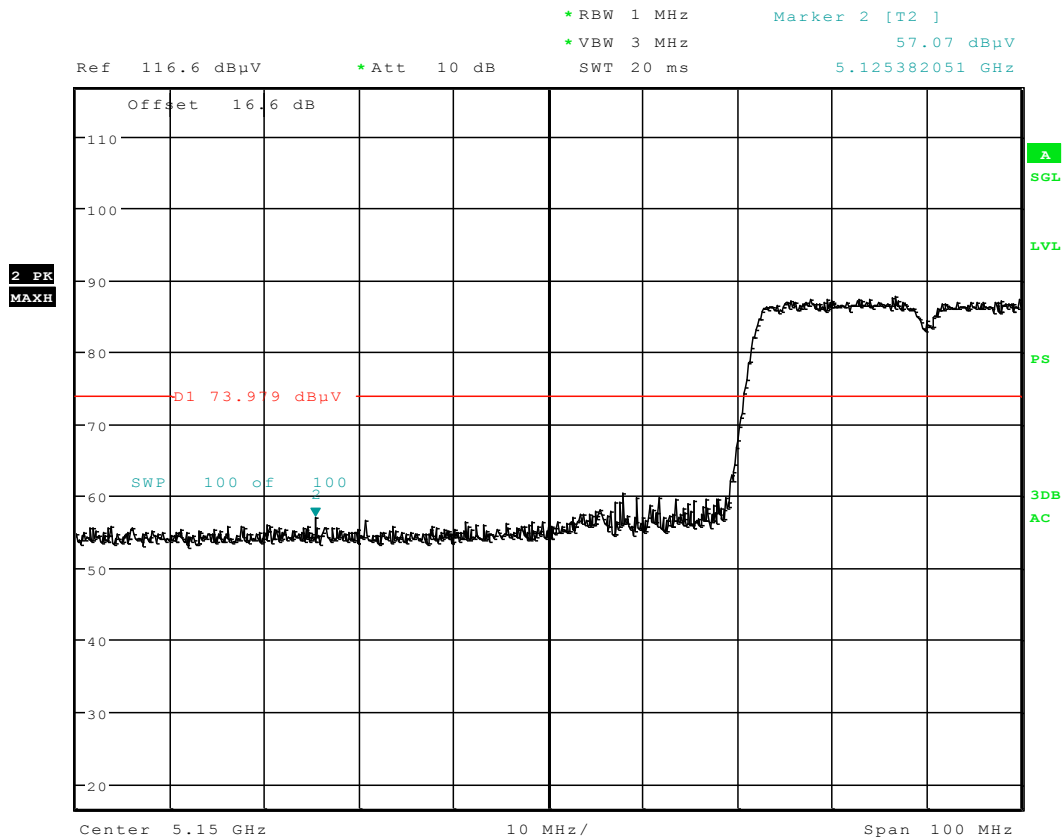


Date: 11.DEC.2013 22:43:00

Plot 6-176. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 156 of 175

MIMO Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 11.DEC.2013 22:43:56

Plot 6-177. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 157 of 175

MIMO Radiated Band Edge Measurements (40MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

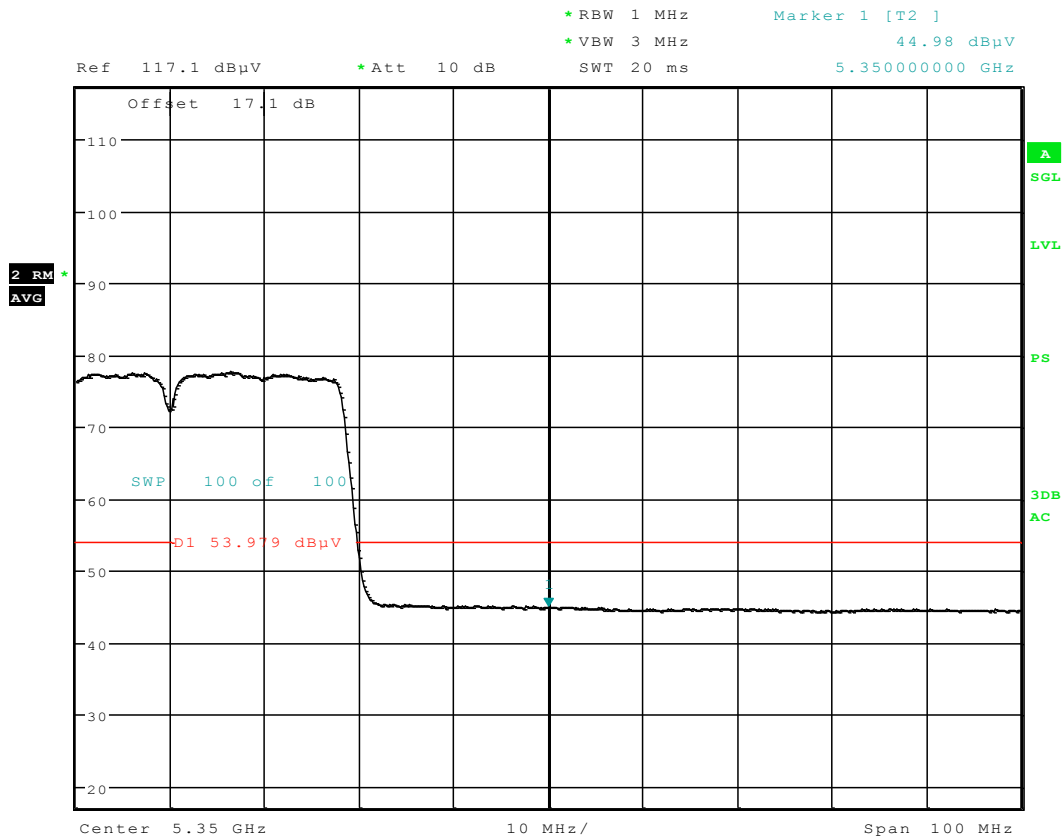
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5310MHz

Channel: 62

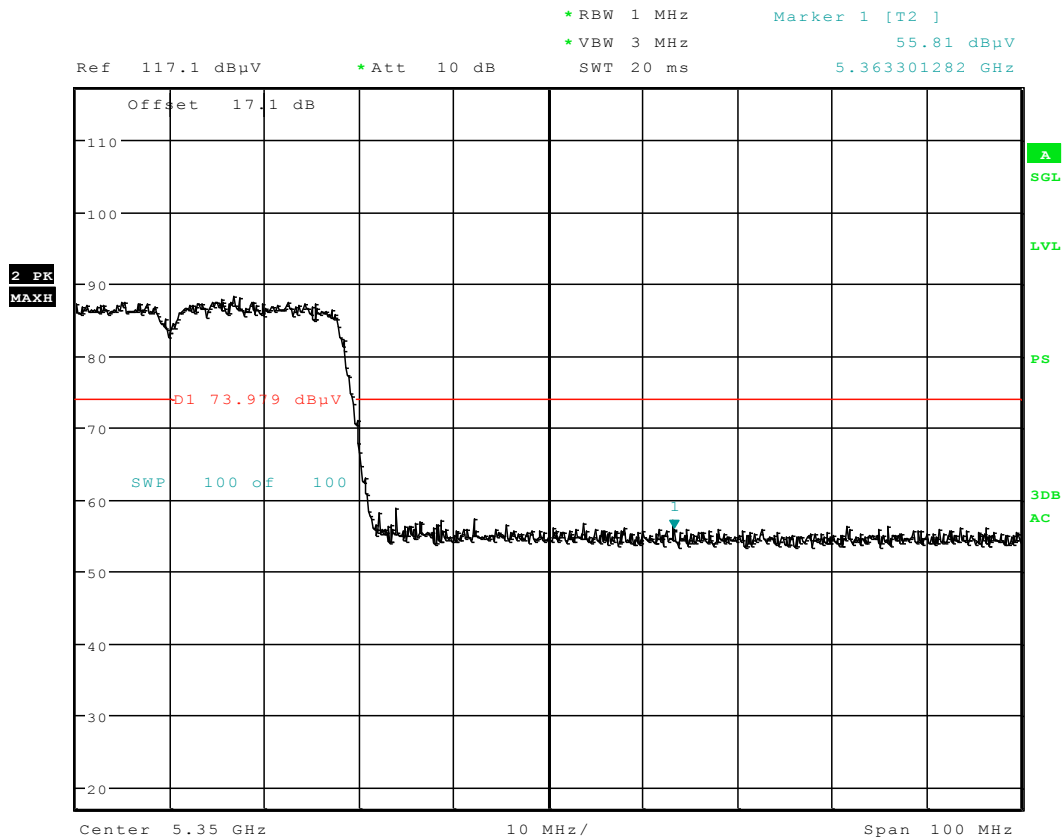


Date: 11.DEC.2013 22:45:36

Plot 6-178. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 158 of 175

MIMO Radiated Band Edge Measurements (40MHz BW) (Cont'd) **§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]**



Date: 11.DEC.2013 22:46:08

Plot 6-178. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 159 of 175

MIMO Radiated Band Edge Measurements (40MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

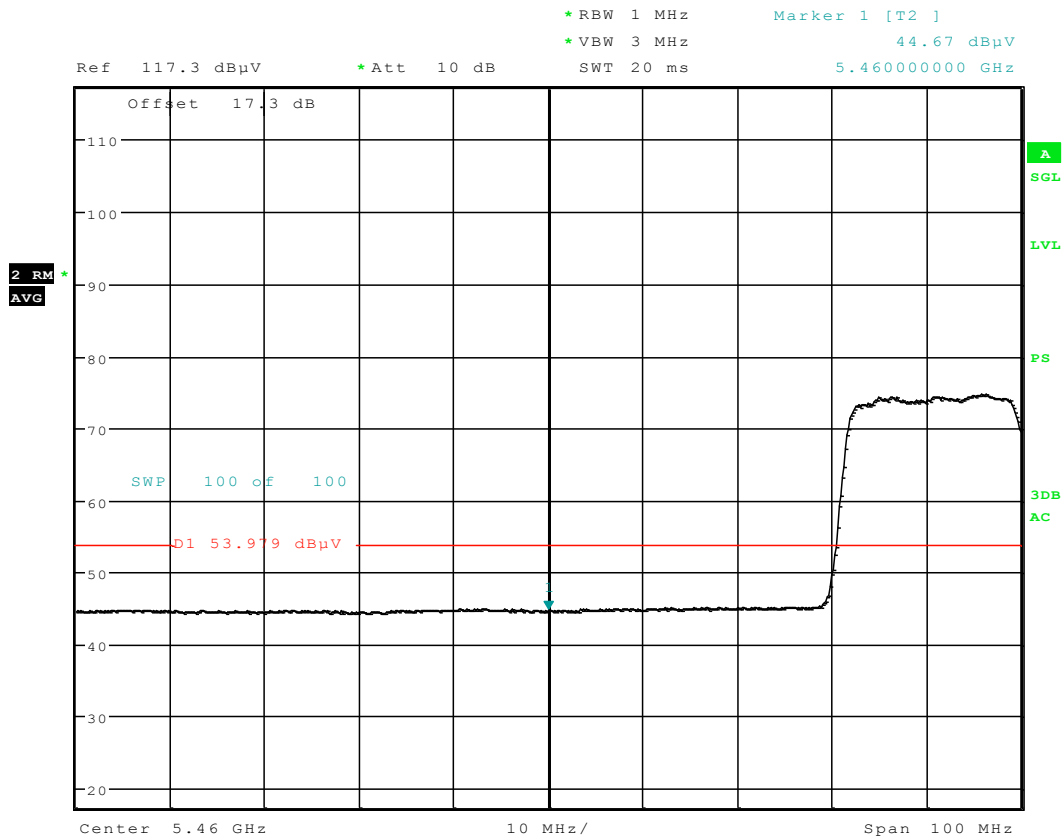
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5510MHz

Channel: 102

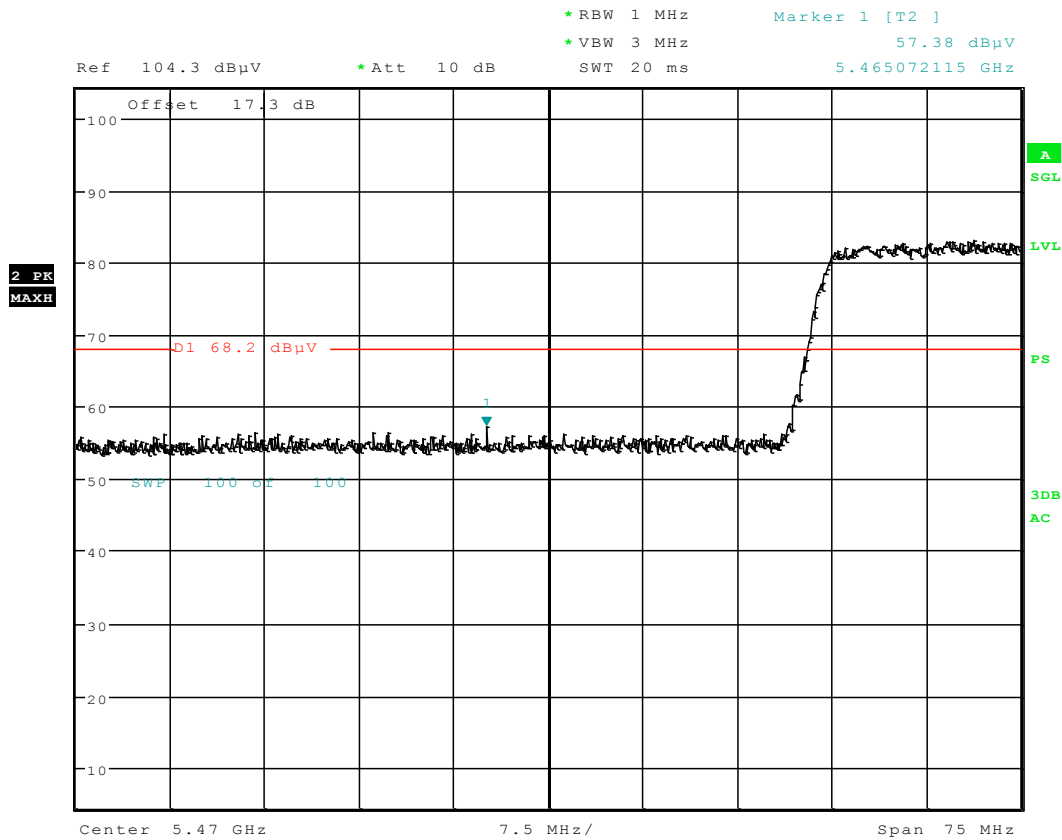


Date: 11.DEC.2013 22:50:00

Plot 6-180. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 160 of 175

MIMO Radiated Band Edge Measurements (40MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



Date: 12.DEC.2013 02:57:24

Plot 6-181. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 161 of 175

MIMO Radiated Band Edge Measurements (40MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

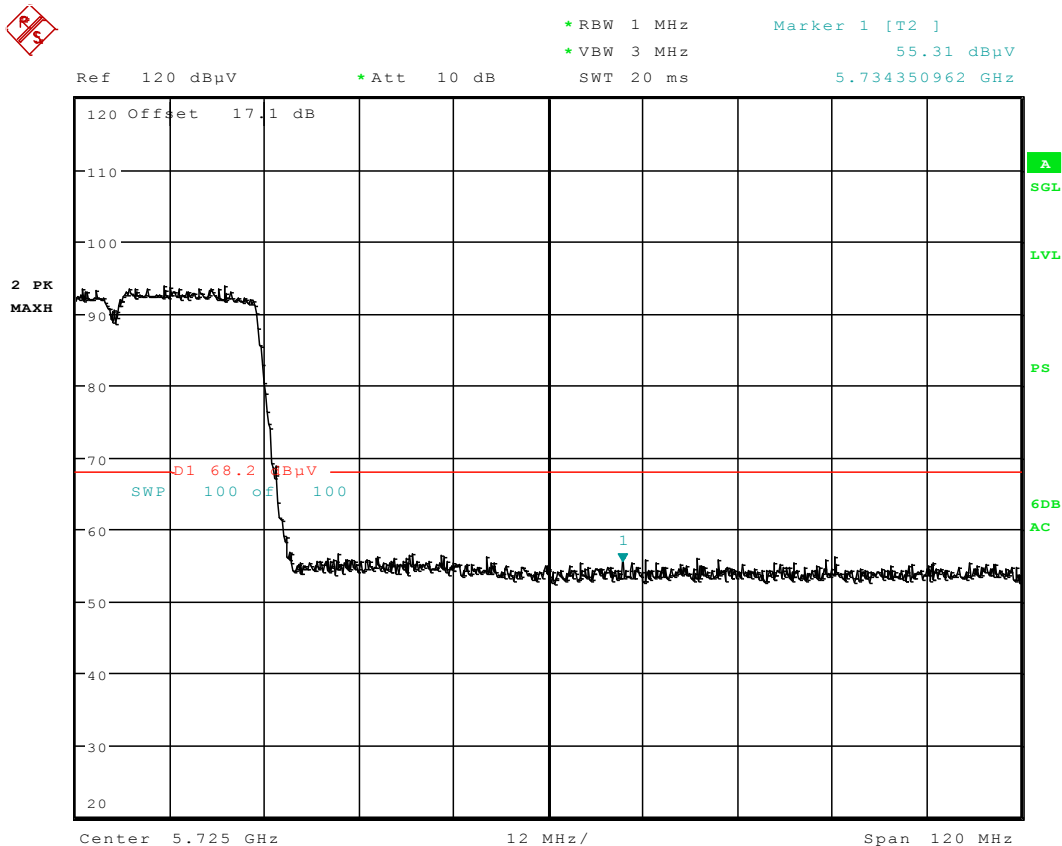
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MSCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5670MHz

Channel: 134



Date: 23.DEC.2013 20:20:07

Plot 6-182. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 162 of 175

MIMO Radiated Band Edge Measurements (80MHz BW) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

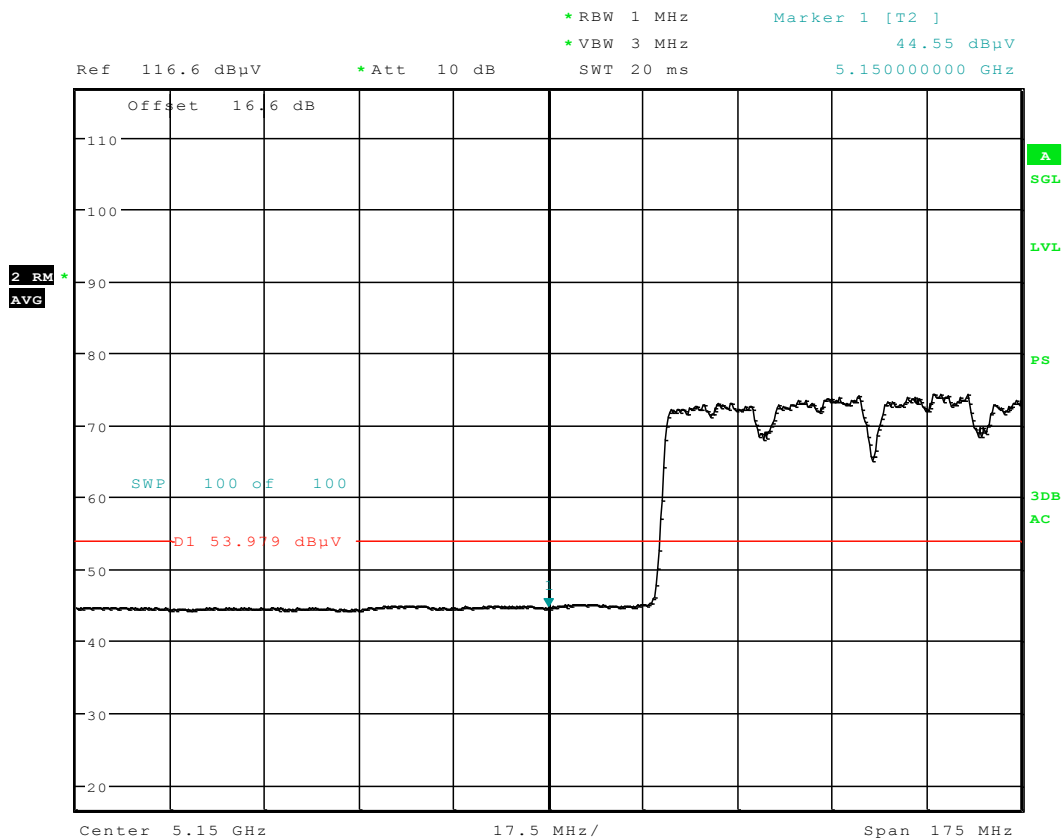
Worst Case Mode: 802.11ac (80MHz)

Worst Case Transfer Rate: MCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5210MHz

Channel: 42



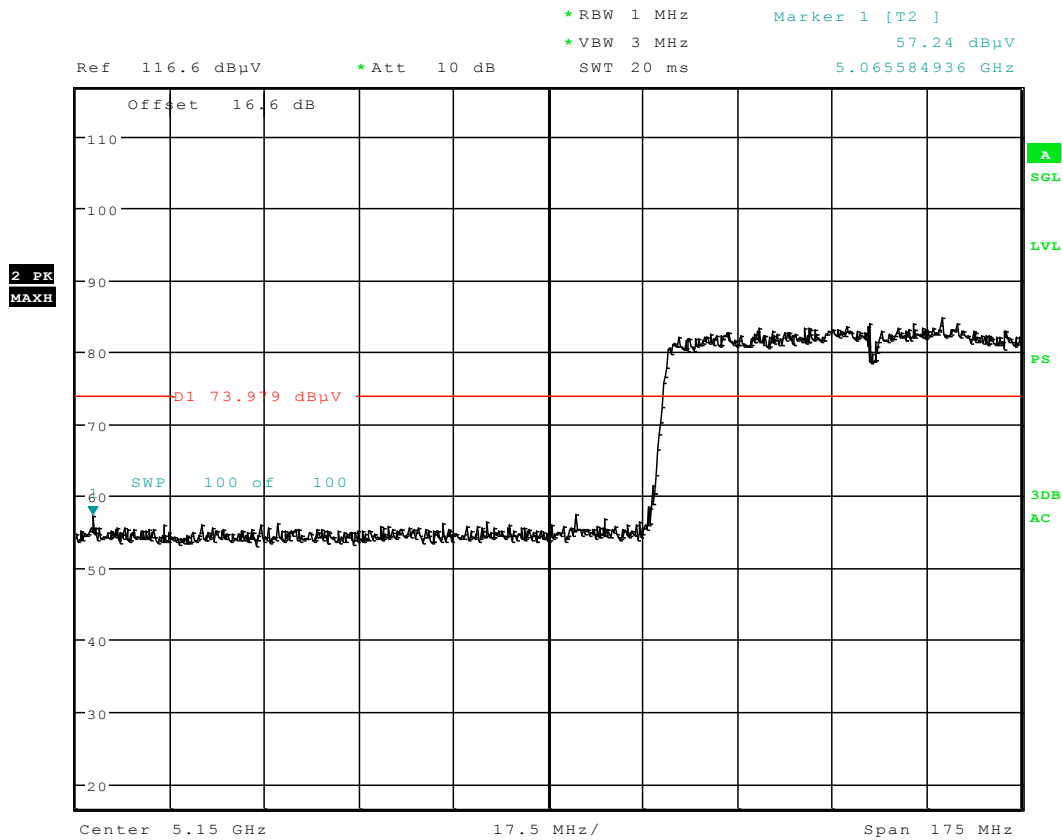
Date: 11.DEC.2013 22:54:47

Plot 6-183. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 163 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd)

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



Date: 11.DEC.2013 22:55:27

Plot 6-184. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 164 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

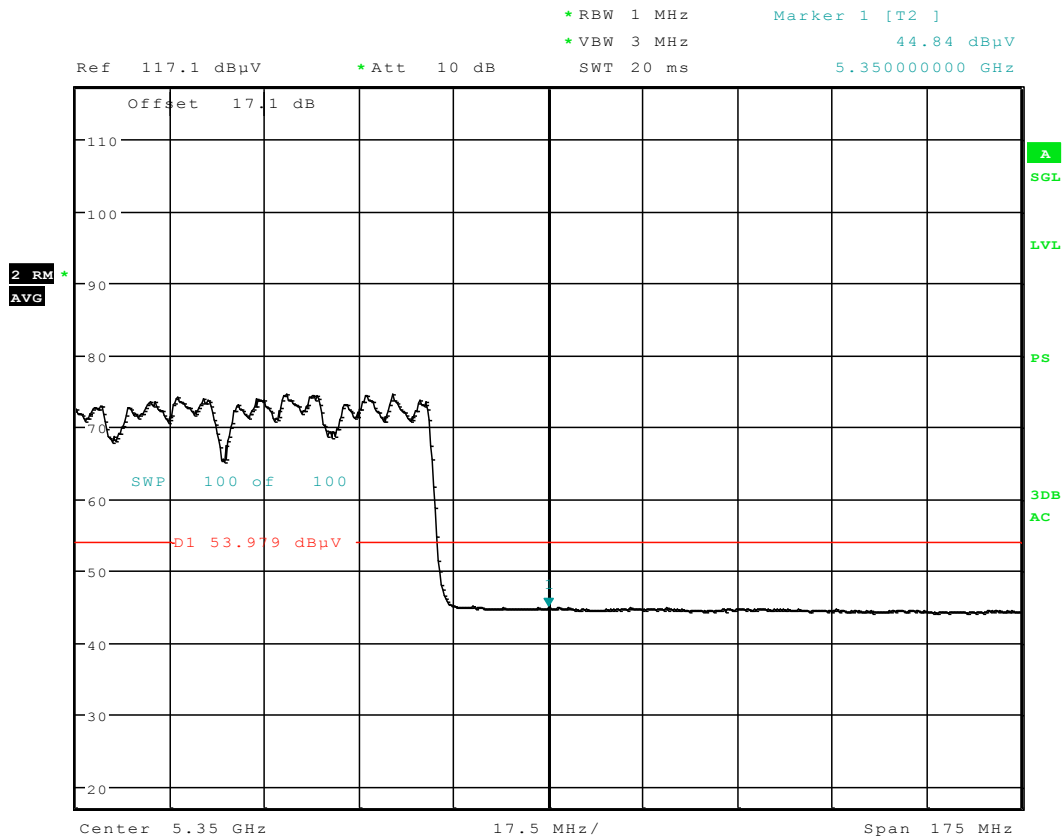
Worst Case Mode: 802.11ac (80MHz)

Worst Case Transfer Rate: MCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5290MHz

Channel: 58

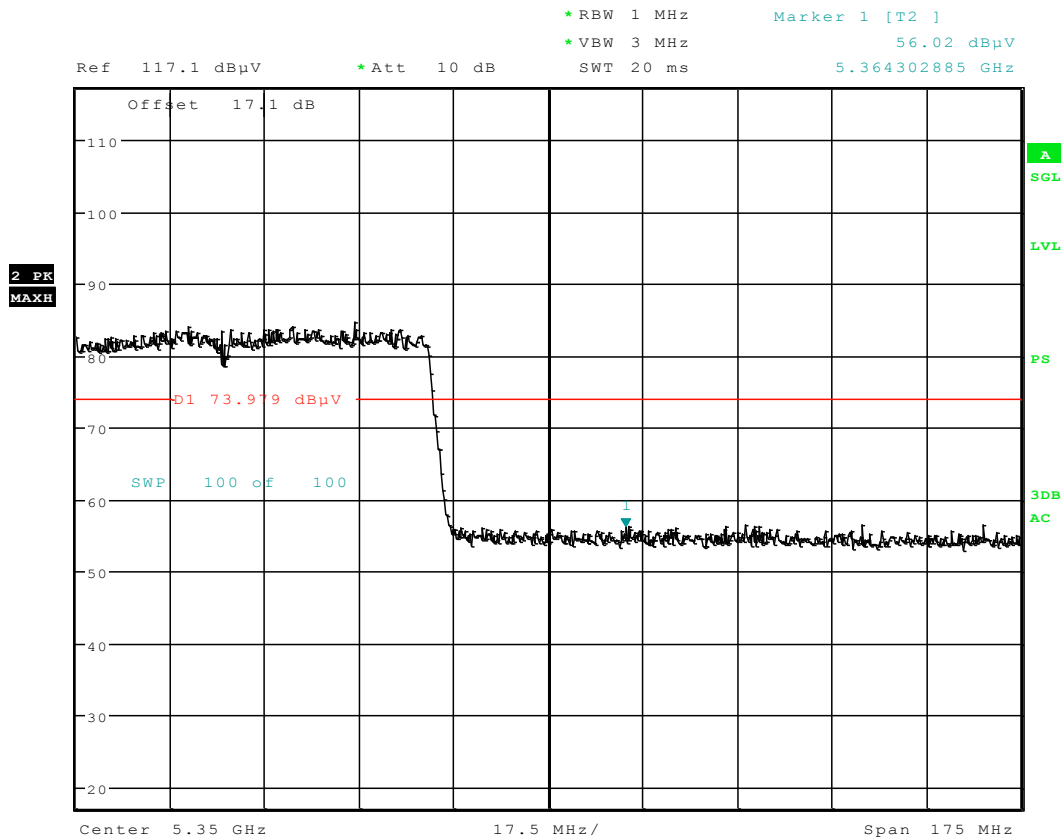


Date: 11.DEC.2013 22:56:57

Plot 6-185. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 165 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



Date: 11.DEC.2013 22:57:43

Plot 6-186. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

Radiated Band Edge Measurements (80MHz BW) (Cont'd) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

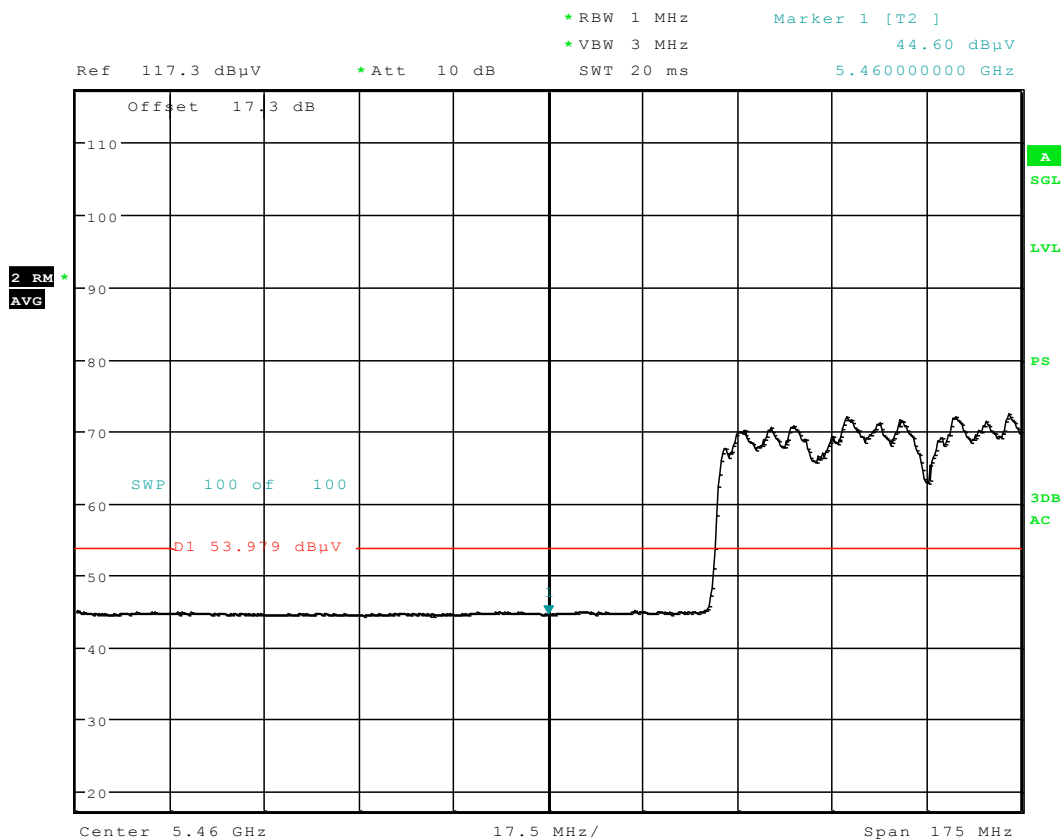
Worst Case Mode: 802.11ac (80MHz)

Worst Case Transfer Rate: MCS8

Distance of Measurements: 3 Meters

Operating Frequency: 5530MHz

Channel: 106



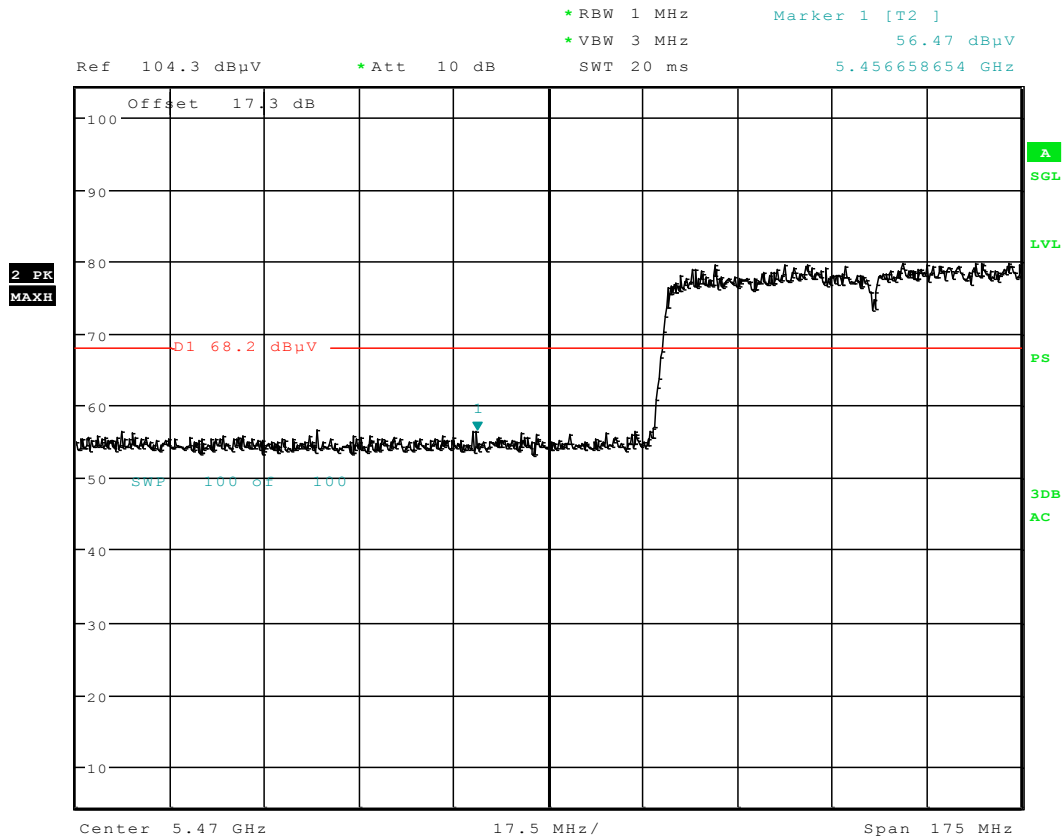
Date: 11.DEC.2013 22:59:46

Plot 6-187. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 167 of 175

Radiated Band Edge Measurements (80MHz BW) (Cont'd)

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



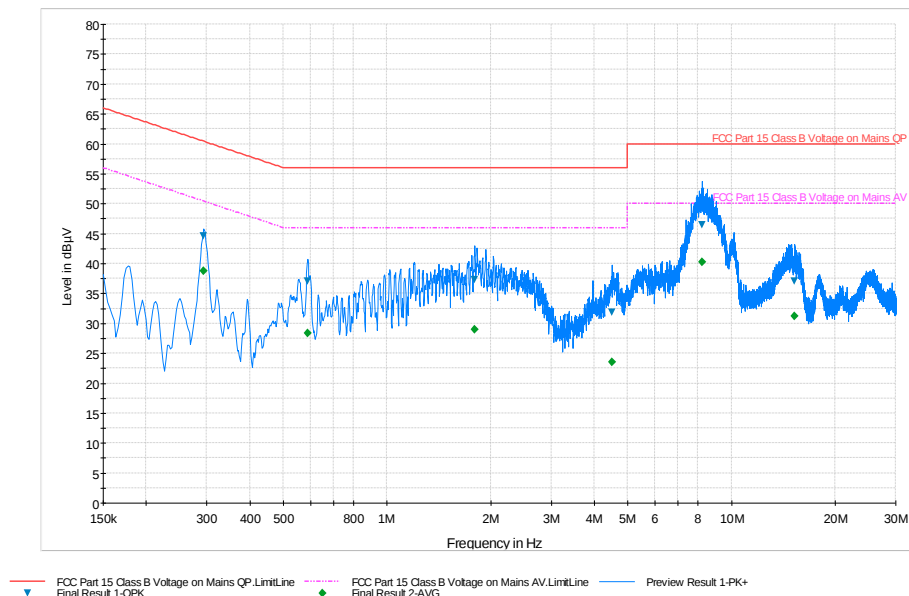
Date: 12.DEC.2013 03:00:00

Plot 6-188. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 168 of 175

6.11 Antenna-1 Line-Conducted Test Data

§15.207; RSS-Gen [7.2.2]



Plot 6-189. Line Conducted Plot with 802.11a UNII Band 1 (L1)

Frequency MHz	Line	Corr. dB	QuasiPeak dBμV	Limit dBμV	Margin dB	Average dBμV	Limit dBμV	Margin dB
0.294	L1	0.1	44.60	60.40	15.80	38.80	50.40	11.60
0.589	L1	0.0	37.10	56.00	18.90	28.40	46.00	17.60
1.799	L1	0.2	37.30	56.00	18.70	29.00	46.00	17.00
4.508	L1	0.3	31.90	56.00	24.10	23.50	46.00	22.50
8.210	L1	0.5	46.40	60.00	13.60	40.30	50.00	9.70
15.288	L1	0.9	37.00	60.00	23.00	31.20	50.00	18.80

Table 6-41. Line Conducted Data with 802.11a UNII Band 1 (L1)

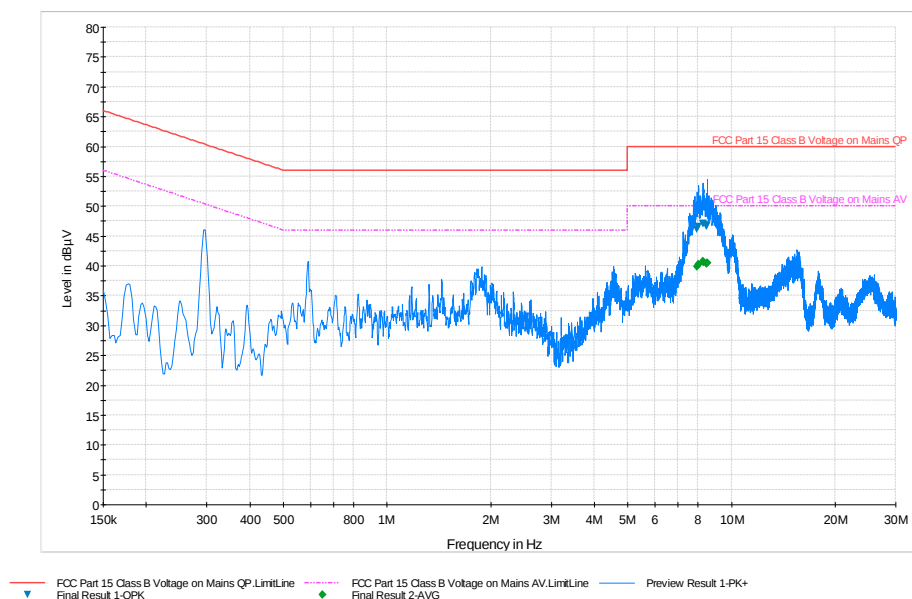
Notes:

- 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.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (dBμV) - QP/AV Level (dBμV)
- Traces shown in plot are made using a peak detector.
- Deviations to the Specifications: None.

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 169 of 175	

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



Plot 6-190. Line Conducted Plot with 802.11a UNII Band 1 (N)

Frequency MHz	Line	Corr. dB	QuasiPeak dBμV	Limit dBμV	Margin dB	Average dBμV	Limit dBμV	Margin dB
7.962	N	0.5	46.10	60.00	13.90	39.90	50.00	10.10
8.034	N	0.5	46.60	60.00	13.40	40.20	50.00	9.80
8.259	N	0.5	47.10	60.00	12.90	40.80	50.00	9.20
8.304	N	0.5	47.00	60.00	13.00	40.60	50.00	9.40
8.484	N	0.5	46.50	60.00	13.50	40.40	50.00	9.60
8.525	N	0.5	46.80	60.00	13.20	40.50	50.00	9.50

Table 6-42. Line Conducted Data with 802.11a UNII Band 1 (N)

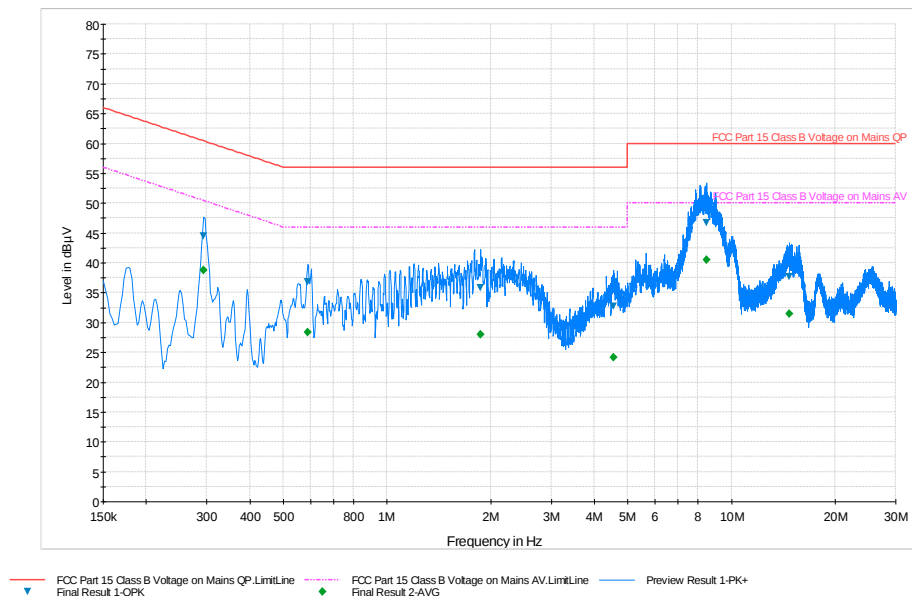
Notes:

- 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.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (dBμV) - QP/AV Level (dBμV)
- Traces shown in plot are made using a peak detector.
- Deviations to the Specifications: None.

FCC ID: A3LSMP900A	PCTEST ENGINEERING LABORATORY, INC.	802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1311272243.A3L	Test Dates: 12/2-12/17/2013	EUT Type: Portable Tablet		Page 170 of 175	

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



Plot 6-191. Line Conducted Plot with 802.11a UNII Band 2A (L1)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.294	L1	0.1	44.50	60.40	15.90	38.80	50.40	11.60
0.589	L1	0.0	36.80	56.00	19.20	28.40	46.00	17.60
1.869	L1	0.2	35.80	56.00	20.20	28.00	46.00	18.00
4.549	L1	0.3	32.70	56.00	23.30	24.20	46.00	21.80
8.480	L1	0.5	46.70	60.00	13.30	40.50	50.00	9.50
14.746	L1	0.9	37.70	60.00	22.30	31.40	50.00	18.60

Table 6-43. Line Conducted Data with 802.11a UNII Band 2A (L1)

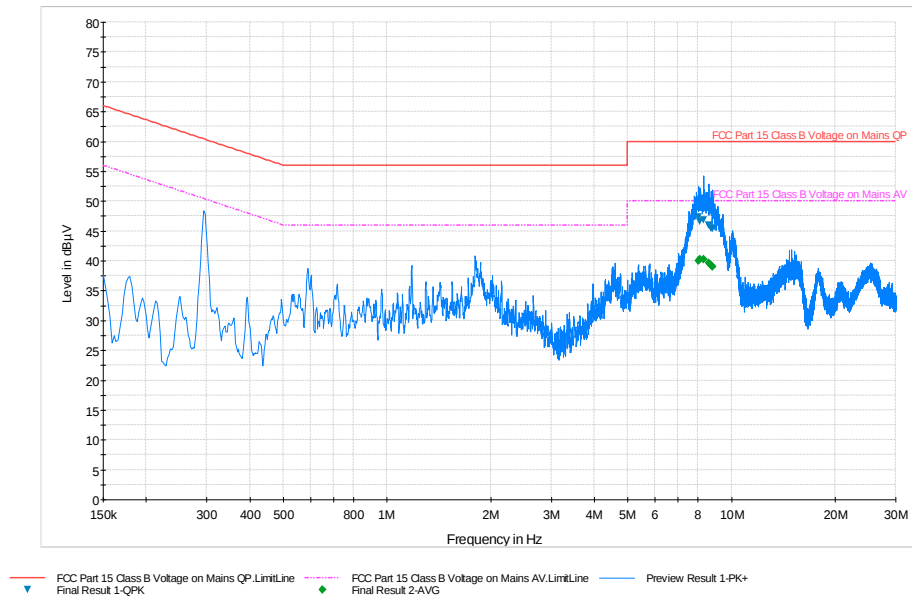
Notes:

- 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 52. 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.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (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)

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Plot 6-192. Line Conducted Plot with 802.11a UNII Band 2A (N)

Frequency MHz	Line	Corr. dB	QuasiPeak dBμV	Limit dBμV	Margin dB	Average dBμV	Limit dBμV	Margin dB
8.045	N	0.5	47.30	60.00	12.70	40.00	50.00	10.00
8.126	N	0.5	46.60	60.00	13.40	40.20	50.00	9.80
8.318	N	0.5	46.80	60.00	13.20	40.30	50.00	9.70
8.594	N	0.5	46.00	60.00	14.00	39.60	50.00	10.40
8.736	N	0.5	45.50	60.00	14.50	39.30	50.00	10.70
8.804	N	0.5	45.40	60.00	14.60	39.00	50.00	11.00

Table 6-44. Line Conducted Data with 802.11a UNII Band 2A (N)

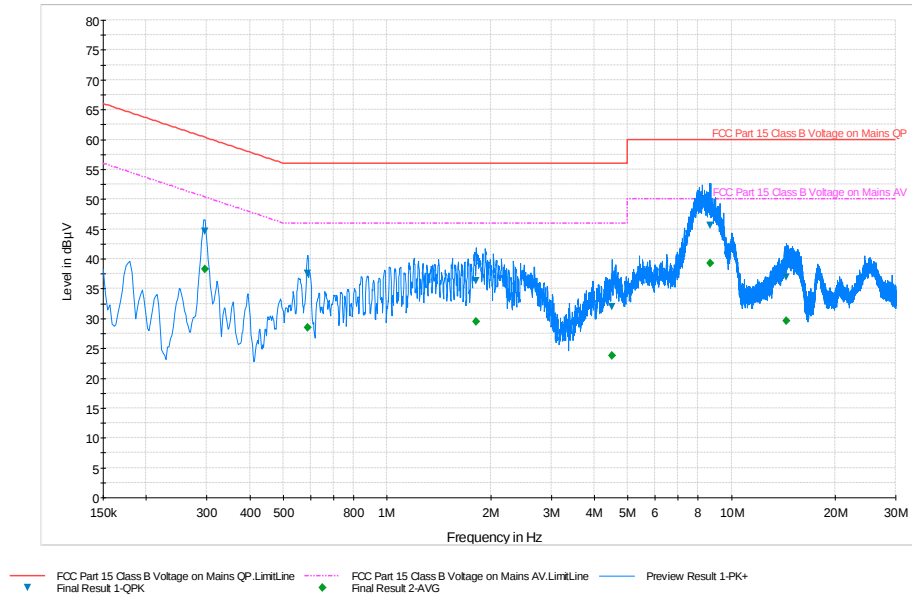
Notes:

- 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 52. 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.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (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)

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Plot 6-193. Line Conducted Plot with 802.11a UNII Band 2C (L1)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.296	L1	0.1	44.60	60.30	15.70	38.30	50.30	12.00
0.589	L1	0.0	37.50	56.00	18.50	28.50	46.00	17.50
1.817	L1	0.2	36.30	56.00	19.70	29.40	46.00	16.60
4.499	L1	0.3	31.90	56.00	24.10	23.80	46.00	22.20
8.707	L1	0.5	45.60	60.00	14.40	39.30	50.00	10.70
14.467	L1	0.9	36.90	60.00	23.10	29.60	50.00	20.40

Table 6-45. Line Conducted Plot with 802.11a UNII Band 2C (L1)

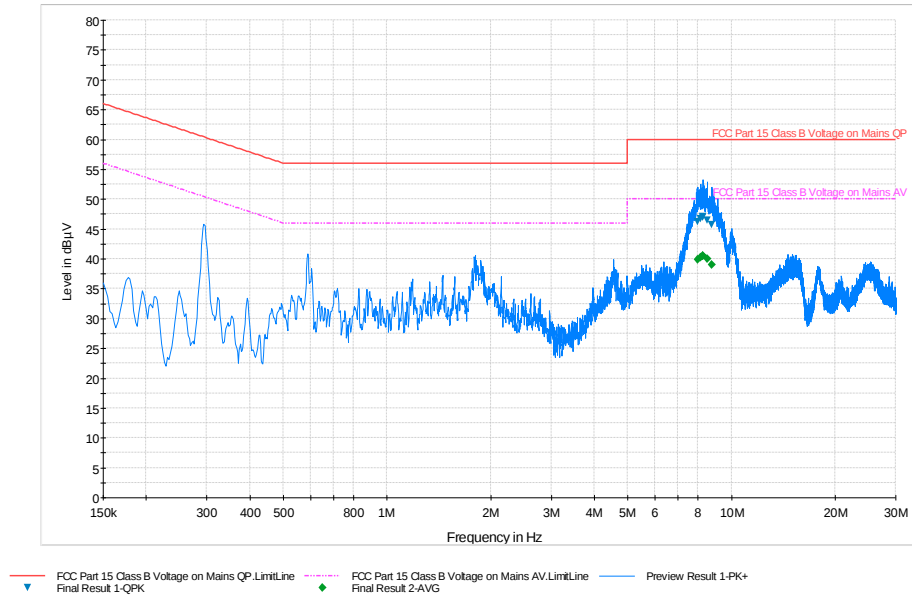
Notes:

- 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 100. 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.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.
- Deviations to the Specifications: None.

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Plot 6-194. Line Conducted Plot with 802.11a UNII Band 2C (N)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
7.987	N	0.5	46.20	60.00	13.80	39.90	50.00	10.10
8.138	N	0.5	46.70	60.00	13.30	40.30	50.00	9.70
8.252	N	0.5	46.90	60.00	13.10	40.40	50.00	9.60
8.279	N	0.5	47.00	60.00	13.00	40.40	50.00	9.60
8.518	N	0.5	46.40	60.00	13.60	40.00	50.00	10.00
8.792	N	0.5	45.60	60.00	14.40	39.10	50.00	10.90

Table 6-46. Line Conducted Data with 802.11a UNII Band 2C (N)

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 100. 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.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.
- 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: A3LSMP900A** is in compliance with Part 15E of the FCC Rules and RSS-210 of the Industry Canada Rules.

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