

6.6 Frequency Stability

§15.407(g)

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



OPERATING FREQUENCY: 5,180,000,000 Hz
 CHANNEL: 36
 REFERENCE VOLTAGE: 3.85 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (° C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.85	+ 20 (Ref)	5,180,000,014	14	0.00000027
100 %		- 30	5,180,000,000	0	0.00000000
100 %		- 20	5,179,999,988	-12	-0.00000023
100 %		- 10	5,179,999,976	-24	-0.00000046
100 %		0	5,179,999,997	-3	-0.00000006
100 %		+ 10	5,180,000,024	24	0.00000046
100 %		+ 20	5,179,999,995	-5	-0.00000010
100 %		+ 30	5,180,000,018	18	0.00000035
100 %		+ 40	5,179,999,987	-13	-0.00000025
100 %		+ 50	5,179,999,979	-21	-0.00000041
115 %	4.43	+ 20	5,179,999,972	-28	-0.00000054
BATT. ENDPOINT	3.45	+ 20	5,179,999,997	-3	-0.00000006

Table 6-30. 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.

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 89 of 171	

Frequency Stability (Cont'd)
§15.407(g)

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



OPERATING FREQUENCY: 5,260,000,000 Hz
 CHANNEL: 52
 REFERENCE VOLTAGE: 3.85 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (° C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.85	+ 20 (Ref)	5,259,999,986	-14	-0.00000027
100 %		- 30	5,260,000,014	14	0.00000027
100 %		- 20	5,260,000,003	3	0.00000006
100 %		- 10	5,259,999,998	-2	-0.00000004
100 %		0	5,260,000,001	1	0.00000002
100 %		+ 10	5,260,000,028	28	0.00000053
100 %		+ 20	5,259,999,992	-8	-0.00000015
100 %		+ 30	5,259,999,991	-9	-0.00000017
100 %		+ 40	5,260,000,000	0	0.00000000
100 %		+ 50	5,260,000,010	10	0.00000019
115 %		4.43	+ 20	5,259,999,970	-30
BATT. ENDPOINT	3.45	+ 20	5,260,000,009	9	0.00000017

Table 6-31. 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.

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 90 of 171	

Frequency Stability (Cont'd)

§15.407(g)

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



OPERATING FREQUENCY: 5,500,000,000 Hz
 CHANNEL: 100
 REFERENCE VOLTAGE: 3.85 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (° C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.85	+ 20 (Ref)	5,499,999,981	-19	-0.00000035
100 %		- 30	5,500,000,010	10	0.00000018
100 %		- 20	5,500,000,005	5	0.00000009
100 %		- 10	5,499,999,975	-25	-0.00000045
100 %		0	5,499,999,977	-23	-0.00000042
100 %		+ 10	5,499,999,999	-1	-0.00000002
100 %		+ 20	5,499,999,980	-20	-0.00000036
100 %		+ 30	5,500,000,023	23	0.00000042
100 %		+ 40	5,499,999,985	-15	-0.00000027
100 %		+ 50	5,500,000,001	1	0.00000002
115 %		4.43	+ 20	5,499,999,998	-2
BATT. ENDPOINT	3.45	+ 20	5,499,999,985	-15	-0.00000027

Table 6-32. 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.

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 91 of 171	

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), 802.11n (40MHz BW) and 802.11ac (80MHz 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 6-33 per Section 15.209.

Frequency	Field Strength [μ V/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 6-33. 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

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 92 of 171	

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.

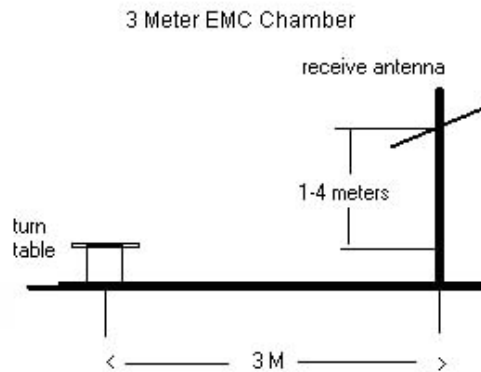




Figure 6-5. Test Instrument & Measurement Setup

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 93 of 171	

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 6-33.
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. Data was recorded with worst case configuration.
5. The EUT is supplied with a new/fully-recharged battery. The battery for this model EB-BG900BBI contains an embedded NFC antenna.
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.
9. Significant radiated spurious emissions levels were not found for MIMO test configurations.

Sample Calculations



Determining Spurious Emissions Levels

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

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

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 94 of 171	

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: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
10360.00	-125.00	Peak	H	46.44	0.00	28.44	68.20	-39.76
* 15540.00	-135.00	Average	H	51.12	0.00	23.12	53.98	-30.86
* 15540.00	-125.00	Peak	H	51.12	0.00	33.12	73.98	-40.86
* 20720.00	-107.60	Average	H	44.00	-9.54	33.86	53.98	-20.12
* 20720.00	-98.32	Peak	H	44.00	-9.54	43.14	73.98	-30.84
25900.00	-125.00	Peak	H	44.87	0.00	26.87	68.20	-41.33

Table 6-34. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5200MHz
 Channel: 40

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
10400.00	-125.00	Peak	H	46.65	0.00	28.65	68.20	-39.55
* 15600.00	-135.00	Average	H	51.11	0.00	23.11	53.98	-30.87
* 15600.00	-125.00	Peak	H	3.79	36.17	-14.21	73.98	-88.19
* 20800.00	-111.55	Average	H	3.79	36.17	35.41	53.98	-18.57
* 20800.00	-103.50	Peak	H	4.31	36.35	44.16	73.98	-29.82
26000.00	-125.00	Peak	H	44.97	0.00	26.97	68.20	-41.23

Table 6-35. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5240MHz
 Channel: 48



Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
10480.00	-125.00	Peak	H	46.65	0.00	28.65	68.20	-39.55
* 15720.00	-135.00	Average	H	51.40	0.00	23.40	53.98	-30.58
* 15720.00	-125.00	Peak	H	51.40	0.00	33.40	73.98	-40.58
* 20960.00	-107.80	Average	H	43.90	-9.54	33.55	53.98	-20.43
* 20960.00	-98.34	Peak	H	43.90	-9.54	43.01	73.98	-30.97
26200.00	-125.00	Peak	H	44.76	0.00	26.76	68.20	-41.44

Table 6-36. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
10520.00	-125.00	Peak	H	46.71	0.00	28.71	68.20	-39.49
* 15780.00	-135.00	Average	H	51.48	0.00	23.48	53.98	-30.50
* 15780.00	-125.00	Peak	H	51.48	0.00	33.48	73.98	-40.50
* 21040.00	-105.74	Average	H	43.84	-9.54	35.56	53.98	-18.42
* 21040.00	-97.95	Peak	H	43.84	-9.54	43.35	73.98	-30.63
26300.00	-36.42	Peak	H	44.78	-9.54	105.82	68.20	37.62

Table 6-37. Radiated Measurements

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 96 of 171	

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5280MHz
 Channel: 56



Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
10560.00	-125.00	Peak	H	46.84	0.00	28.84	68.20	-39.36
* 15840.00	-135.00	Average	H	51.38	0.00	23.38	53.98	-30.60
* 15840.00	-125.00	Peak	H	51.38	0.00	33.38	73.98	-40.60
* 21120.00	-104.51	Average	H	43.74	-9.54	36.69	53.98	-17.29
* 21120.00	-97.23	Peak	H	43.74	-9.54	43.97	73.98	-30.01
26400.00	-125.00	Peak	H	44.72	0.00	26.72	68.20	-41.48

Table 6-38. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5320MHz
 Channel: 64

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
* 10640.00	-135.00	Average	H	46.94	0.00	18.94	53.98	-35.04
* 10640.00	-125.00	Peak	H	46.94	0.00	28.94	73.98	-45.04
* 15960.00	-135.00	Average	H	51.55	0.00	23.55	53.98	-30.43
* 15960.00	-125.00	Peak	H	51.55	0.00	33.55	73.98	-40.43
* 21280.00	-106.04	Average	H	43.64	-9.54	35.06	53.98	-18.92
* 21280.00	-97.62	Peak	H	43.64	-9.54	43.48	73.98	-30.50
26600.00	-125.00	Peak	H	44.51	0.00	26.51	68.20	-41.69

Table 6-39. Radiated Measurements

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 97 of 171	

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100



Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
* 11000.00	-135.00	Average	H	46.89	0.00	18.89	53.98	-35.09
* 11000.00	-125.00	Peak	H	46.89	0.00	28.89	73.98	-45.09
16500.00	-125.00	Peak	H	52.96	0.00	34.96	68.20	-33.24
22000.00	-99.63	Peak	H	43.92	-9.54	41.75	68.20	-26.45
27500.00	-125.00	Peak	H	44.65	0.00	26.65	68.20	-41.55

Table 6-40. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5580MHz
 Channel: 116

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
* 11160.00	-135.00	Average	H	47.07	0.00	19.07	53.98	-34.91
* 11160.00	-125.00	Peak	H	47.07	0.00	29.07	73.98	-44.91
16740.00	-125.00	Peak	H	53.12	0.00	35.12	68.20	-33.08
* 22320.00	-109.17	Average	H	44.40	-9.54	32.69	53.98	-21.29
* 22320.00	-99.54	Peak	H	44.40	-9.54	42.32	73.98	-31.66
27900.00	-125.00	Peak	H	43.93	0.00	25.93	68.20	-42.27



Table 6-41. Radiated Measurements

FCC ID: A3LSCL23	 PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 98 of 171	

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5700MHz
 Channel: 140

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
* 11400.00	-135.00	Average	H	47.30	0.00	19.30	53.98	-34.68
* 11400.00	-125.00	Peak	H	47.30	0.00	29.30	73.98	-44.68
17100.00	-125.00	Peak	H	53.07	0.00	35.07	68.20	-33.13
* 22800.00	-109.45	Average	H	44.39	-9.54	32.40	53.98	-21.58
* 22800.00	-99.09	Peak	H	44.39	-9.54	42.76	73.98	-31.22
28500.00	-125.00	Peak	H	43.39	0.00	25.39	68.20	-42.81

Table 6-42. Radiated Measurements

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 99 of 171	

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: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
10360.00	-125.00	Peak	H	46.44	0.00	28.44	68.20	-39.76
* 15540.00	-135.00	Average	H	51.12	0.00	23.12	53.98	-30.86
* 15540.00	-125.00	Peak	H	51.12	0.00	33.12	73.98	-40.86
* 20720.00	-105.20	Average	H	44.00	-9.54	36.26	53.98	-17.72
* 20720.00	-97.97	Peak	H	44.00	-9.54	43.49	73.98	-30.49
25900.00	-125.00	Peak	H	44.87	0.00	26.87	68.20	-41.33

Table 6-43. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5200MHz
 Channel: 40

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
10400.00	-125.00	Peak	H	46.65	0.00	28.65	68.20	-39.55
* 15600.00	-135.00	Average	H	51.11	0.00	23.11	53.98	-30.87
* 15600.00	-125.00	Peak	H	51.11	0.00	33.11	73.98	-40.87
* 20800.00	-105.69	Average	H	43.99	-9.54	35.75	53.98	-18.23
* 20800.00	-98.10	Peak	H	43.99	-9.54	43.34	73.98	-30.64
26000.00	-125.00	Peak	H	44.97	0.00	26.97	68.20	-41.23

Table 6-44. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5240MHz
 Channel: 48

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
10480.00	-125.00	Peak	H	46.65	0.00	28.65	68.20	-39.55
* 15720.00	-135.00	Average	H	51.40	0.00	23.40	53.98	-30.58
* 15720.00	-125.00	Peak	H	51.40	0.00	33.40	73.98	-40.58
* 20960.00	-106.67	Average	H	43.90	-9.54	34.68	53.98	-19.30
* 20960.00	-98.54	Peak	H	43.90	-9.54	42.81	73.98	-31.17
26200.00	-125.00	Peak	H	44.76	0.00	26.76	68.20	-41.44

Table 6-45. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
10520.00	-125.00	Peak	H	46.71	0.00	28.71	68.20	-39.49
* 15780.00	-135.00	Average	H	51.48	0.00	23.48	53.98	-30.50
* 15780.00	-125.00	Peak	H	51.48	0.00	33.48	73.98	-40.50
* 21040.00	-103.67	Average	H	43.84	-9.54	37.63	53.98	-16.35
* 21040.00	-97.90	Peak	H	43.84	-9.54	43.40	73.98	-30.58
26300.00	-125.00	Peak	H	44.78	0.00	26.78	68.20	-41.42

Table 6-46. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5280MHz
 Channel: 56



Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
10560.00	-125.00	Peak	H	46.84	0.00	28.84	68.20	-39.36
* 15840.00	-135.00	Average	H	51.38	0.00	23.38	53.98	-30.60
* 15840.00	-125.00	Peak	H	51.38	0.00	33.38	73.98	-40.60
* 21120.00	-103.17	Average	H	43.74	-9.54	38.03	53.98	-15.95
* 21120.00	-96.39	Peak	H	43.74	-9.54	44.81	73.98	-29.17
26400.00	-125.00	Peak	H	44.72	0.00	26.72	68.20	-41.48

Table 6-47. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5320MHz
 Channel: 64

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
* 10640.00	-135.00	Average	H	46.94	0.00	18.94	53.98	-35.04
* 10640.00	-125.00	Peak	H	46.94	0.00	28.94	73.98	-45.04
* 15960.00	-135.00	Average	H	51.55	0.00	23.55	53.98	-30.43
* 15960.00	-125.00	Peak	H	51.55	0.00	33.55	73.98	-40.43
* 21280.00	-103.61	Average	H	43.64	-9.54	37.49	53.98	-16.49
* 21280.00	-97.88	Peak	H	43.64	-9.54	43.22	73.98	-30.76
26600.00	-125.00	Peak	H	44.51	0.00	26.51	68.20	-41.69

Table 6-48. Radiated Measurements

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 102 of 171	

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
* 11000.00	-135.00	Average	H	46.89	0.00	18.89	53.98	-35.09
* 11000.00	-125.00	Peak	H	46.89	0.00	28.89	73.98	-45.09
16500.00	-125.00	Peak	H	52.96	0.00	34.96	68.20	-33.24
22000.00	-97.65	Peak	H	43.92	-9.54	43.73	68.20	-24.47
27500.00	-125.00	Peak	H	44.65	0.00	26.65	68.20	-41.55

Table 6-49. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5580MHz
 Channel: 116



Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
* 11160.00	-135.00	Average	H	47.07	0.00	19.07	53.98	-34.91
* 11160.00	-125.00	Peak	H	47.07	0.00	29.07	73.98	-44.91
16740.00	-125.00	Peak	H	53.12	0.00	35.12	68.20	-33.08
* 22320.00	-104.50	Average	H	44.40	-9.54	37.36	53.98	-16.62
* 22320.00	-98.37	Peak	H	44.40	-9.54	43.49	73.98	-30.49
27900.00	-125.00	Peak	H	43.93	0.00	25.93	68.20	-42.27

Table 6-50. Radiated Measurements

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5700MHz
 Channel: 140

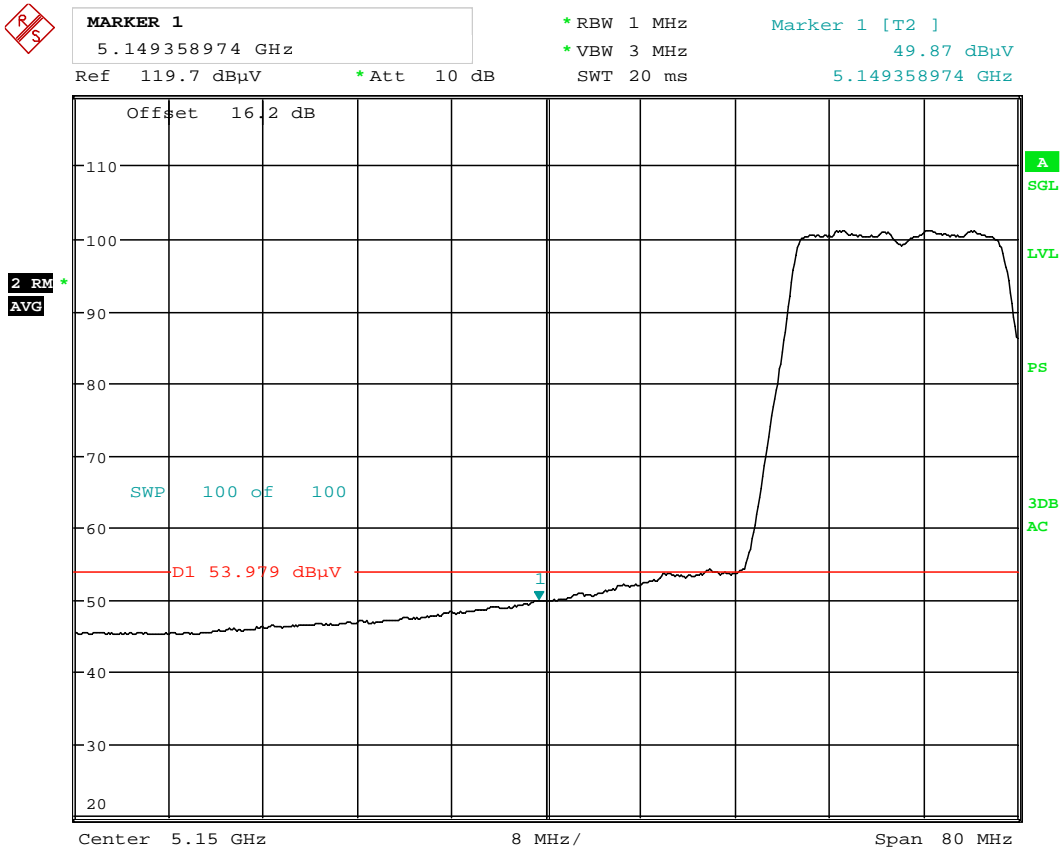
Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
* 11400.00	-135.00	Average	H	47.30	0.00	19.30	53.98	-34.68
* 11400.00	-125.00	Peak	H	47.30	0.00	29.30	73.98	-44.68
17100.00	-125.00	Peak	H	53.07	0.00	35.07	68.20	-33.13
* 22800.00	-103.72	Average	H	44.39	-9.54	38.13	53.98	-15.85
* 22800.00	-98.15	Peak	H	44.39	-9.54	43.70	73.98	-30.28
28500.00	-125.00	Peak	H	43.39	0.00	25.39	68.20	-42.81

Table 6-51. Radiated Measurements

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 104 of 171	

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



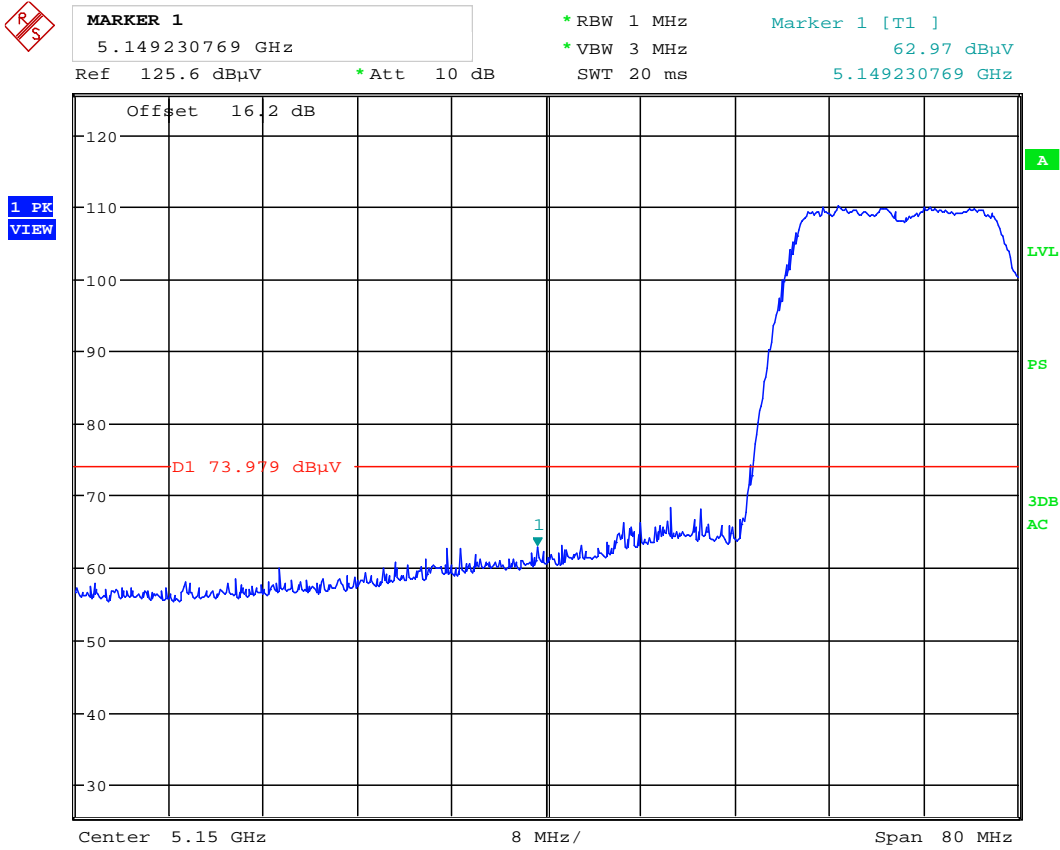
Date: 18.FEB.2014 18:29:11

Plot 6-125. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 105 of 171	

Radiated Band Edge Measurements (20MHz BW) (Cont'd)

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



Date: 18.FEB.2014 18:29:34

Plot 6-126. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 106 of 171	

Radiated Band Edge Measurements (20MHz BW) (Cont'd)

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

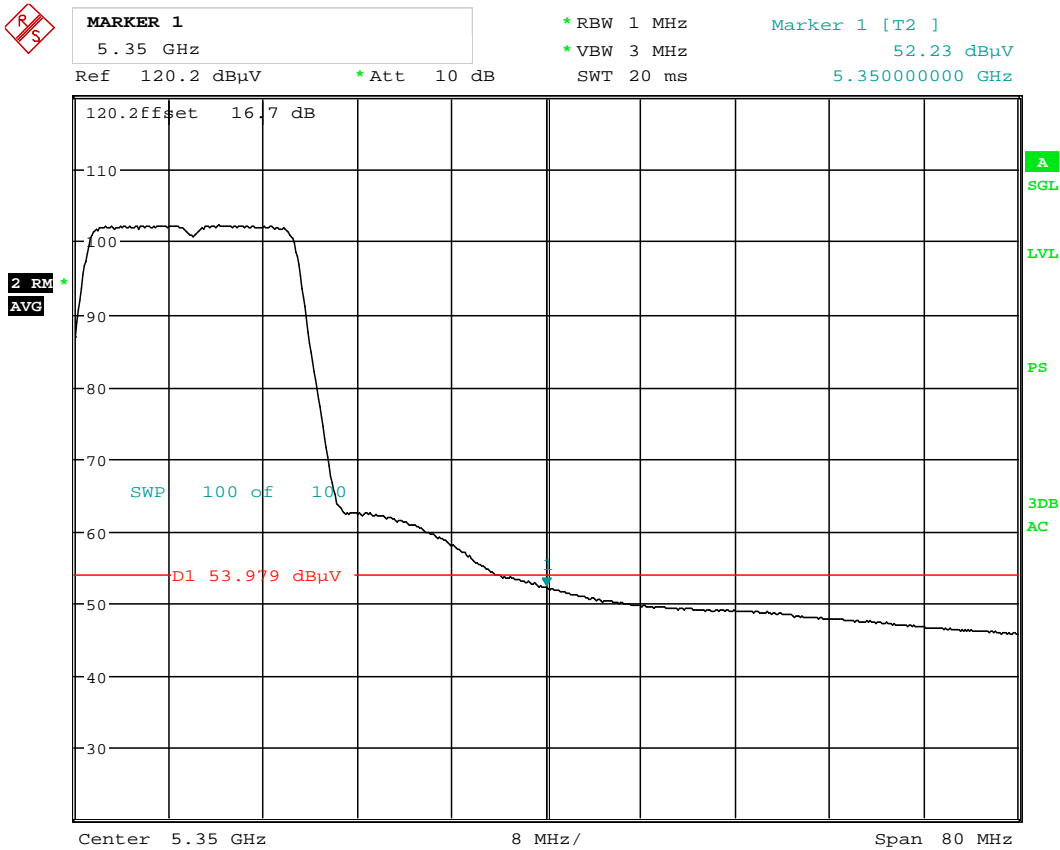
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5320MHz

Channel: 64



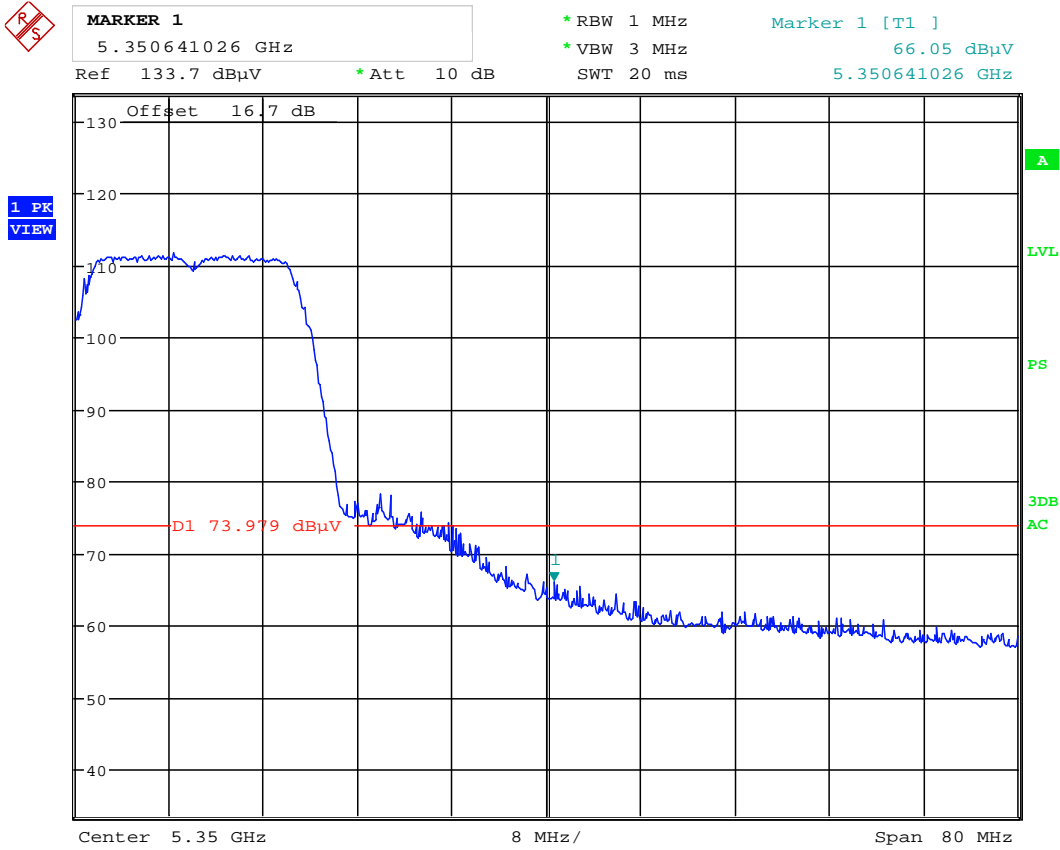
Date: 18.FEB.2014 19:14:14

Plot 6-127. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 107 of 171	

Radiated Band Edge Measurements (20MHz BW) (Cont'd)

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



Date: 18.FEB.2014 19:13:51

Plot 6-128. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 108 of 171	

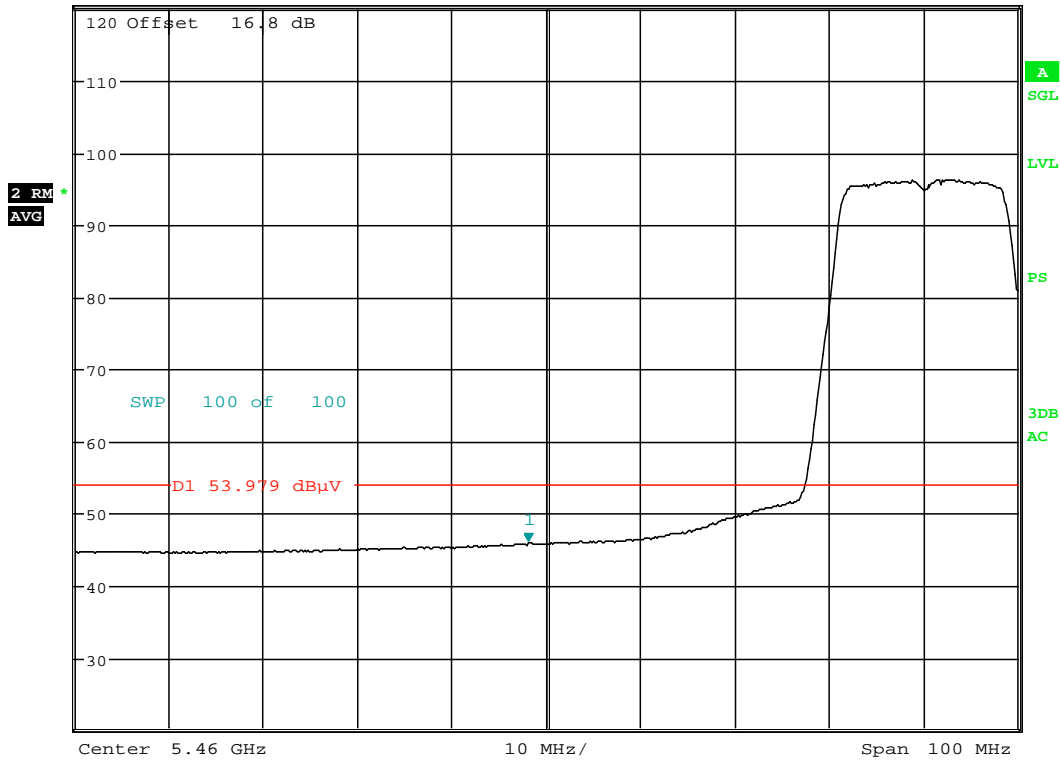
Radiated Band Edge Measurements (20MHz BW) (Cont'd)

§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



MARKER 1
 5.458076923 GHz
 Ref 120.3 dBµV * Att 10 dB SWT 20 ms
 * RBW 1 MHz * VBW 3 MHz
 Marker 1 [T2] 45.96 dBµV
 5.458076923 GHz

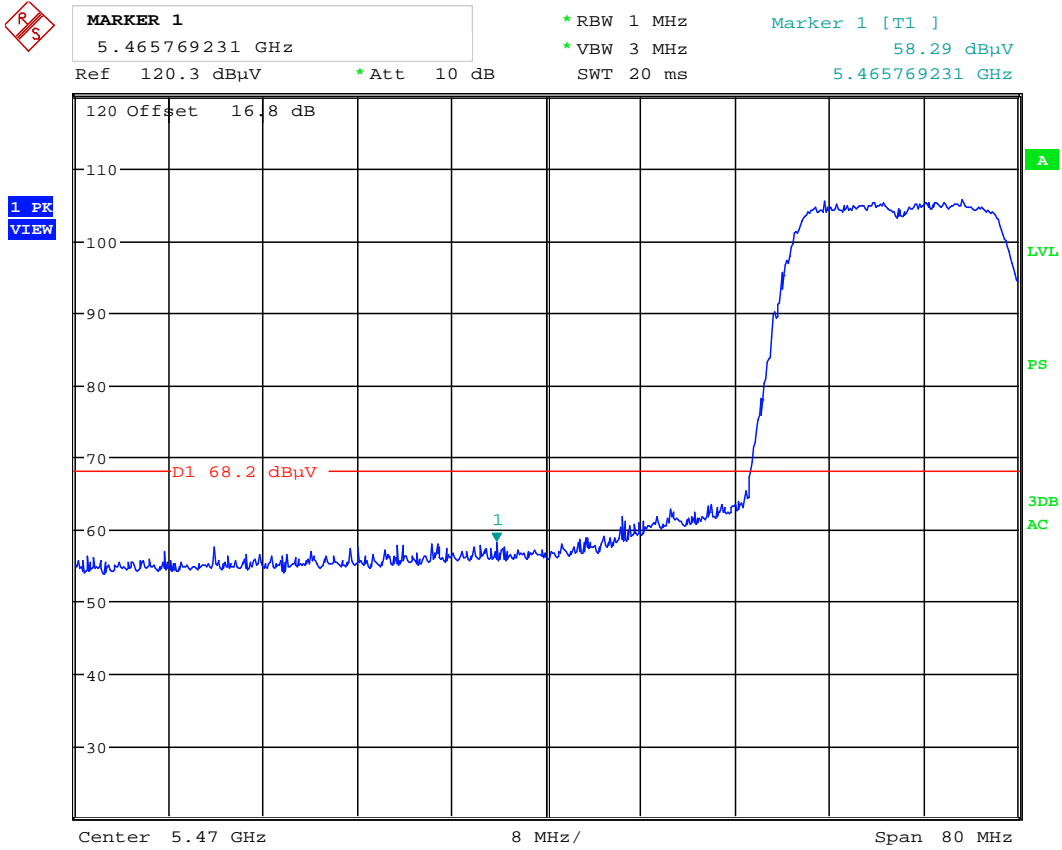


Date: 18.FEB.2014 20:33:32

Plot 6-129. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 109 of 171

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



Date: 18.FEB.2014 20:33:15

Plot 6-130. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 110 of 171	

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

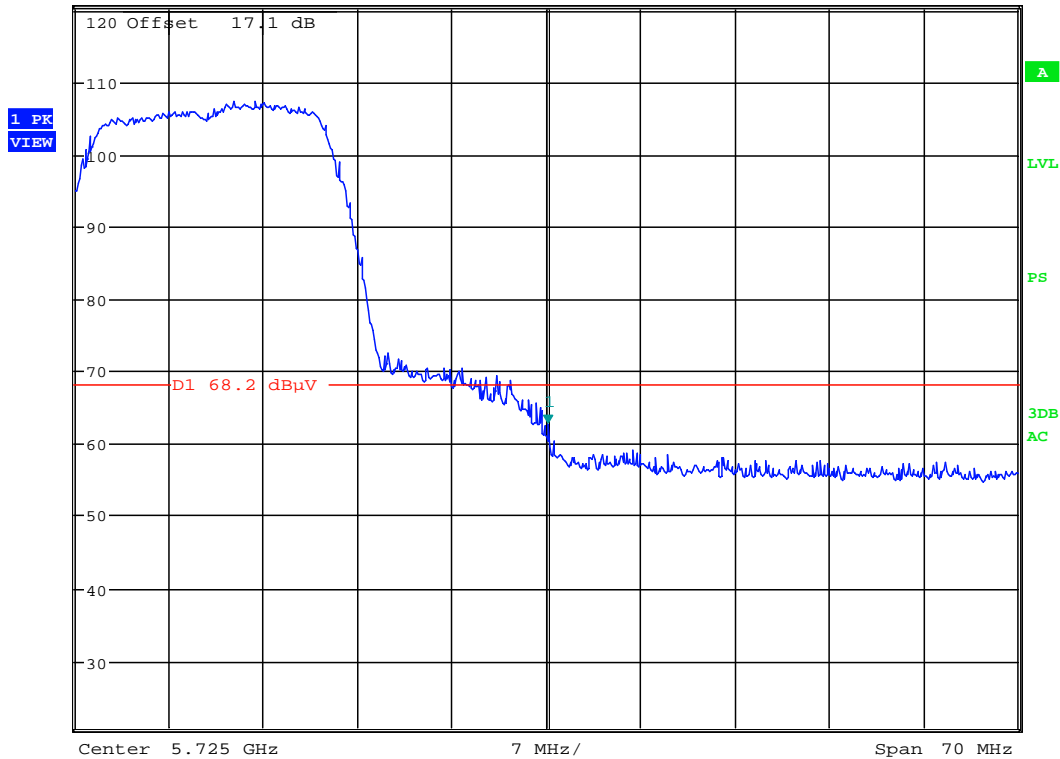
Distance of Measurements: 3 Meters

Operating Frequency: 5700MHz

Channel: 140



MARKER 1
 5.725112179 GHz
 *RBW 1 MHz
 *VBW 3 MHz
 Ref 120.6 dBµV *Att 10 dB SWT 20 ms
 Marker 1 [T1]
 62.81 dBµV
 5.725112179 GHz



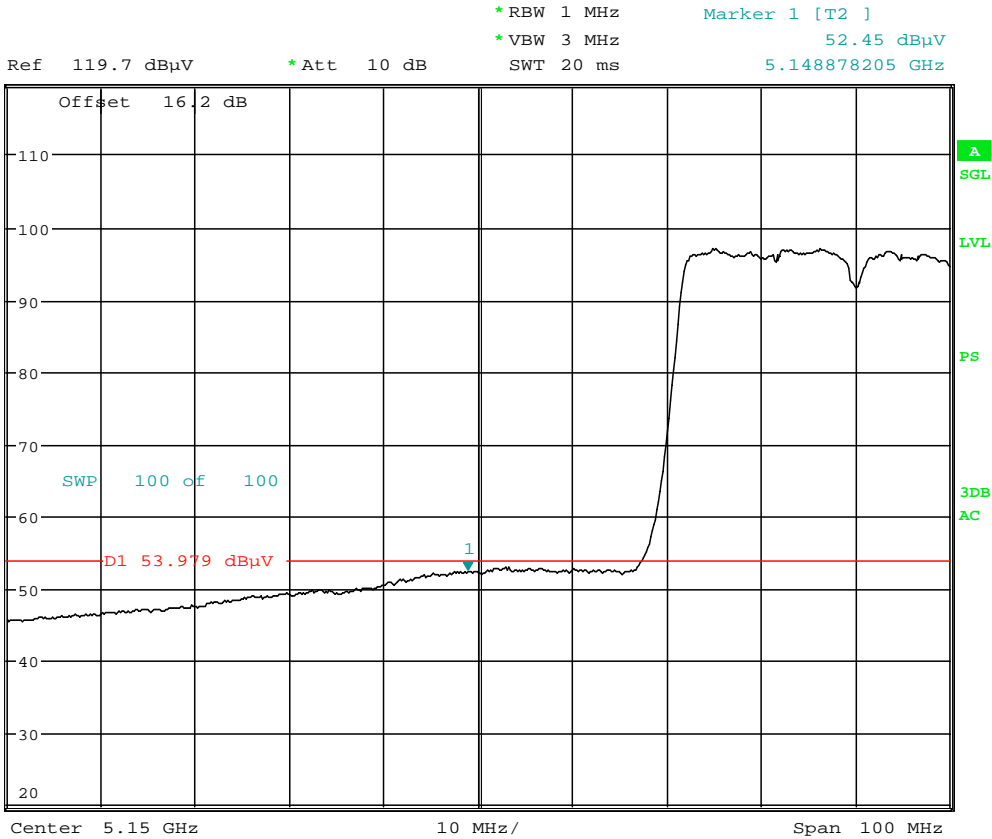
Date: 18.FEB.2014 21:00:44

Plot 6-131. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 111 of 171

6.9 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: 18.FEB.2014 18:47:27

Plot 6-132. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 112 of 171	

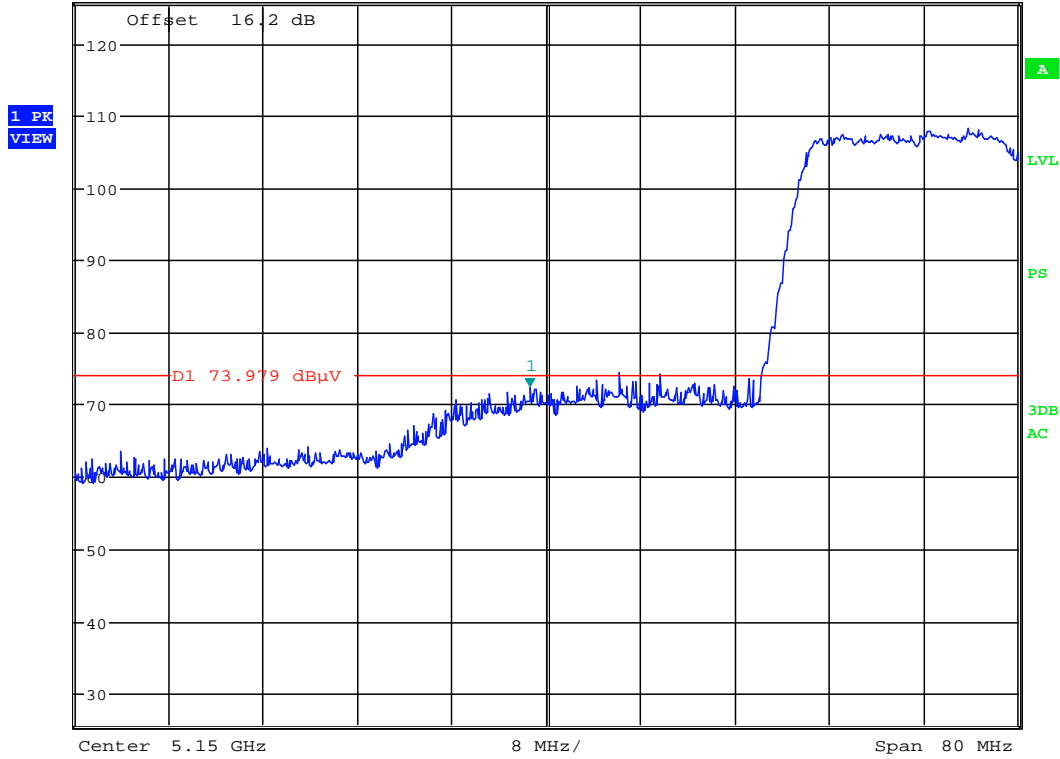
Radiated Band Edge Measurements (40MHz BW) (Cont'd)

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



MARKER 1
 5.148589744 GHz
 Ref 125.6 dBµV *Att 10 dB

*RBW 1 MHz Marker 1 [T1]
 *VBW 3 MHz 72.32 dBµV
 SWT 20 ms 5.148589744 GHz



Date: 18.FEB.2014 18:32:03

Plot 6-133. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 113 of 171

Radiated Band Edge Measurements (40MHz BW) (Cont'd)

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

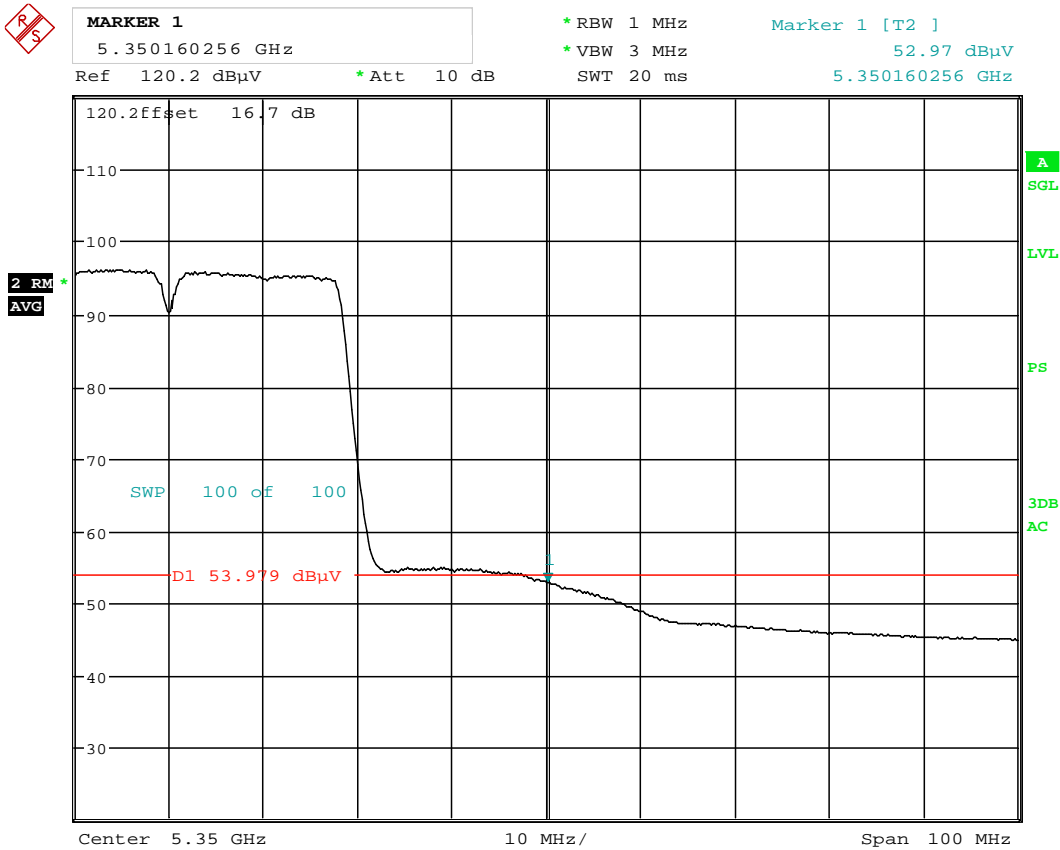
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5310MHz

Channel: 62

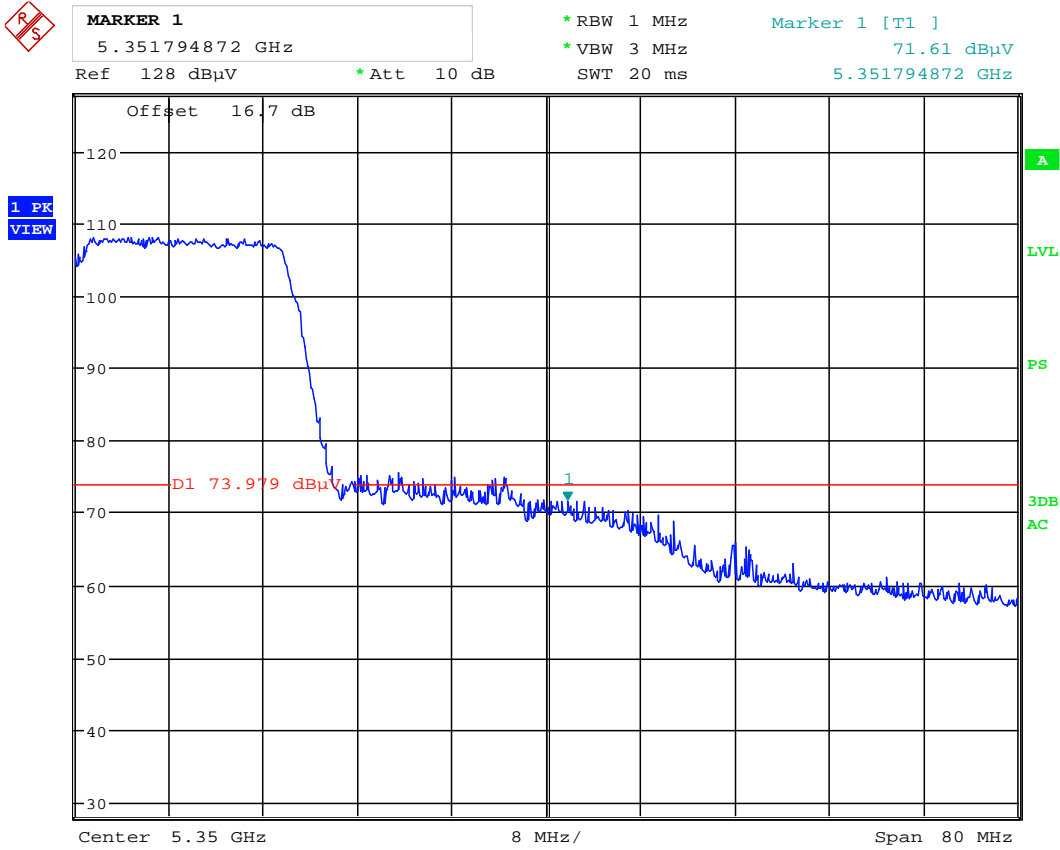


Date: 18.FEB.2014 19:19:35

Plot 6-134. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)



FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 114 of 171	

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



Date: 18.FEB.2014 19:15:42

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

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 115 of 171	

Radiated Band Edge Measurements (40MHz BW) (Cont'd)

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

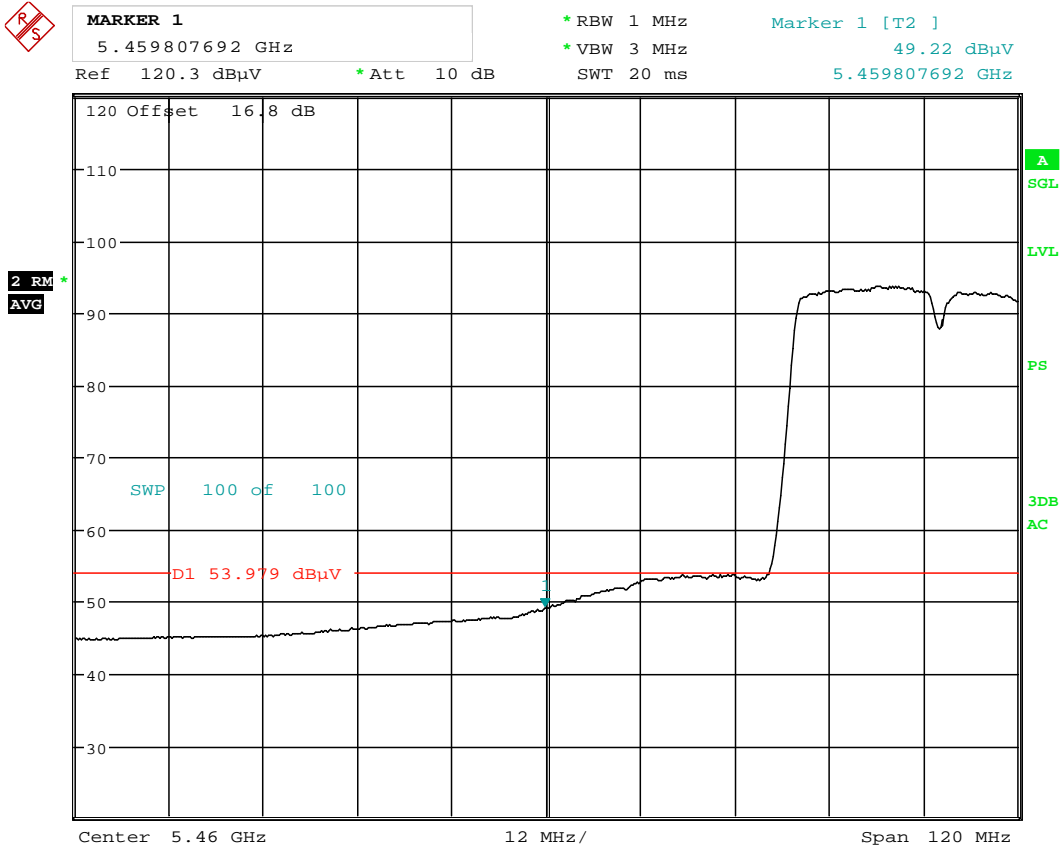
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5510MHz

Channel: 102



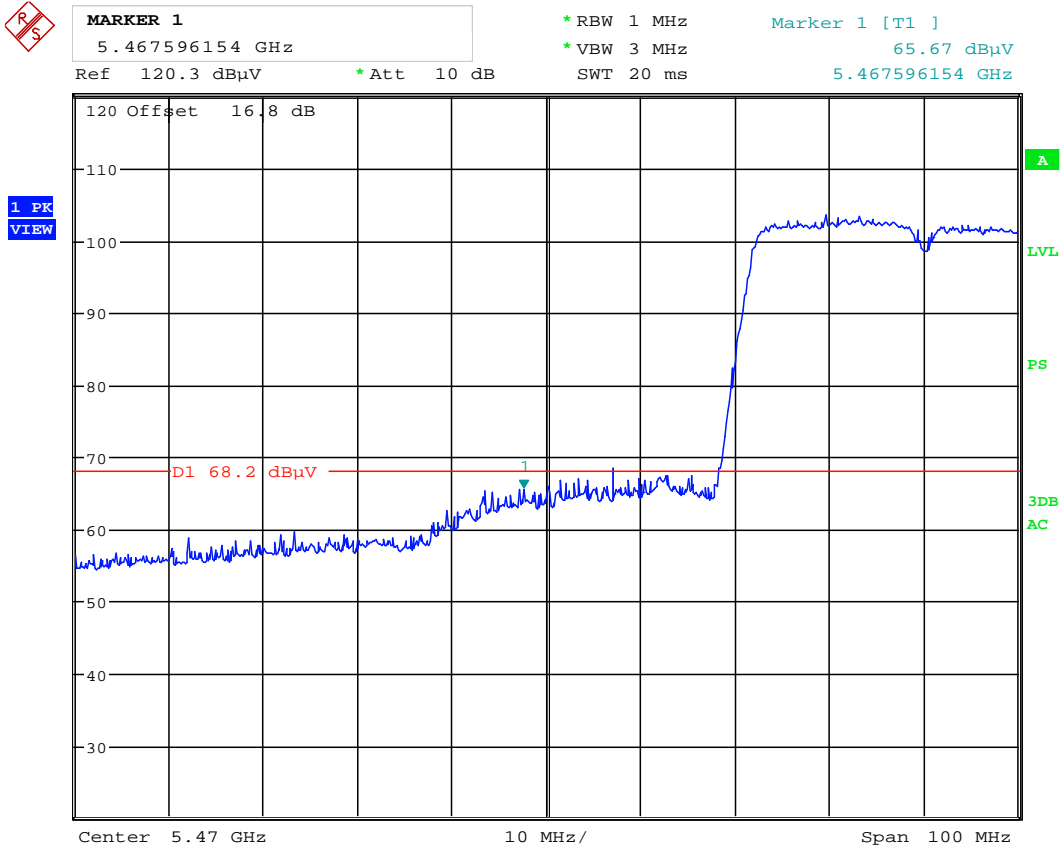
Date: 18.FEB.2014 20:38:04

Plot 6-136. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 116 of 171

Radiated Band Edge Measurements (40MHz BW) (Cont'd)

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



Date: 18.FEB.2014 20:37:04

Plot 6-137. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 117 of 171	

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

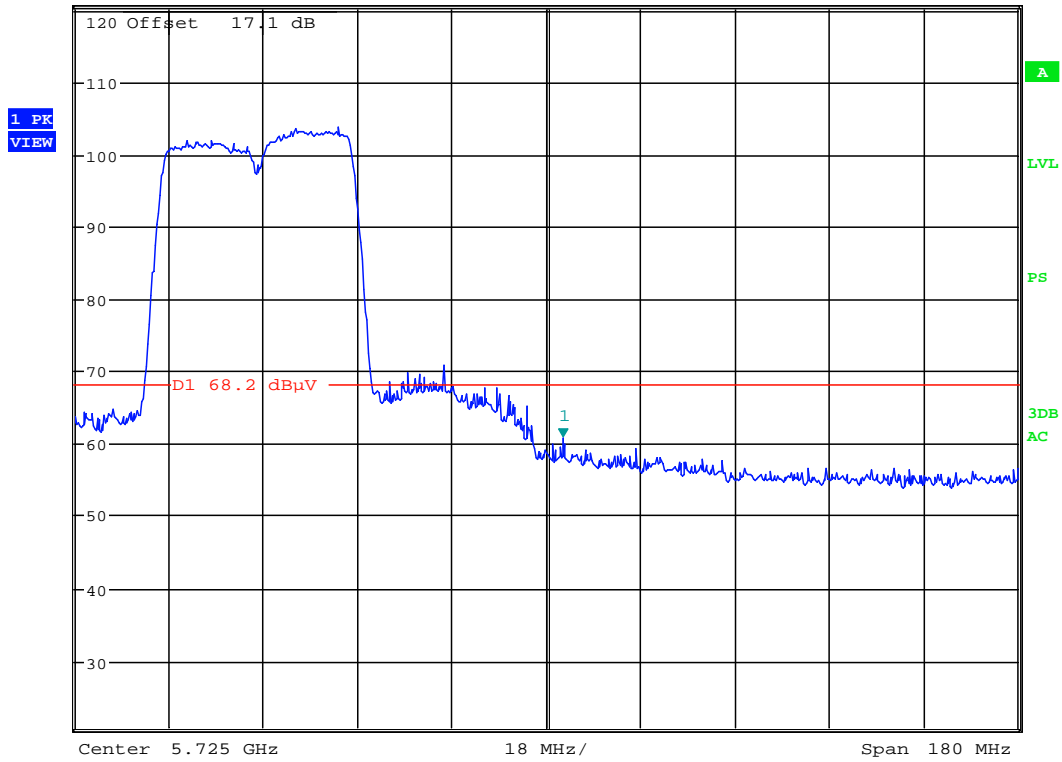
Distance of Measurements: 3 Meters

Operating Frequency: 5670MHz

Channel: 134



MARKER 1
 5.728173077 GHz
 *RBW 1 MHz
 *VBW 3 MHz
 Ref 120.6 dBµV *Att 10 dB SWT 20 ms
 Marker 1 [T1]
 60.74 dBµV
 5.728173077 GHz



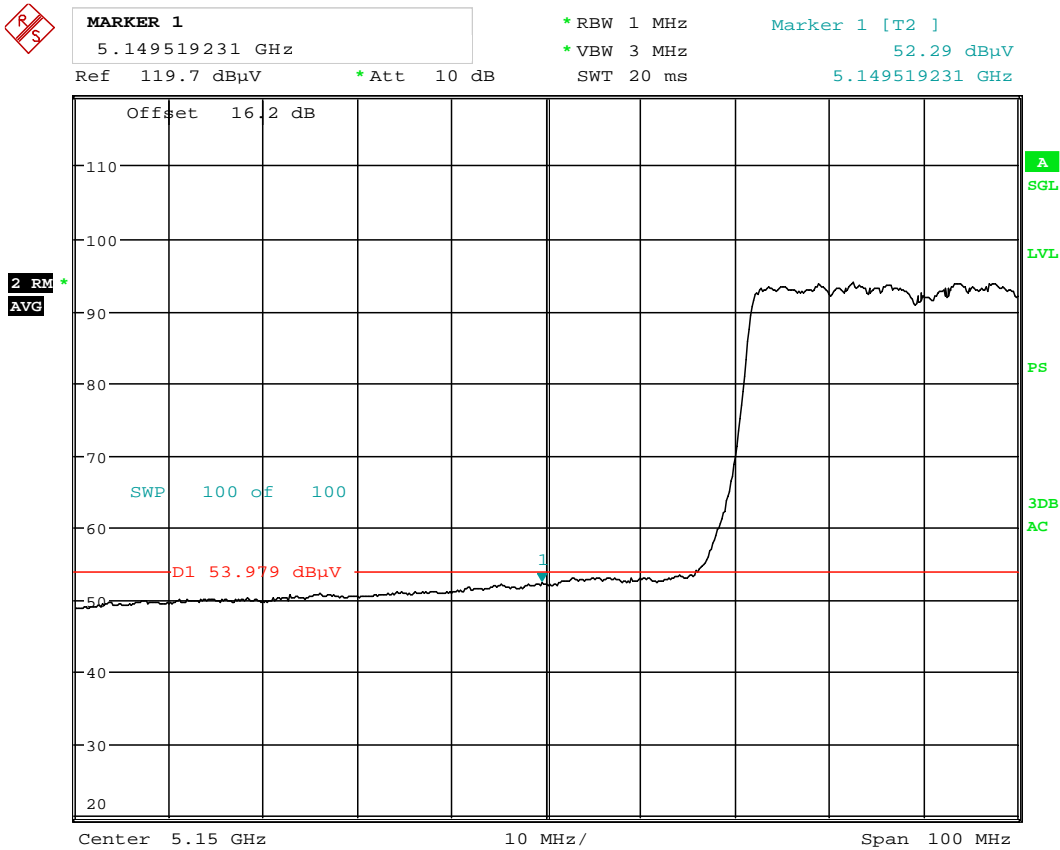
Date: 18.FEB.2014 21:01:53

Plot 6-138. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 118 of 171	

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

Worst Case Mode: 802.11n (80MHz)
 Worst Case Transfer Rate: MCS8
 Distance of Measurements: 3 Meters
 Operating Frequency: 5210MHz
 Channel: 42



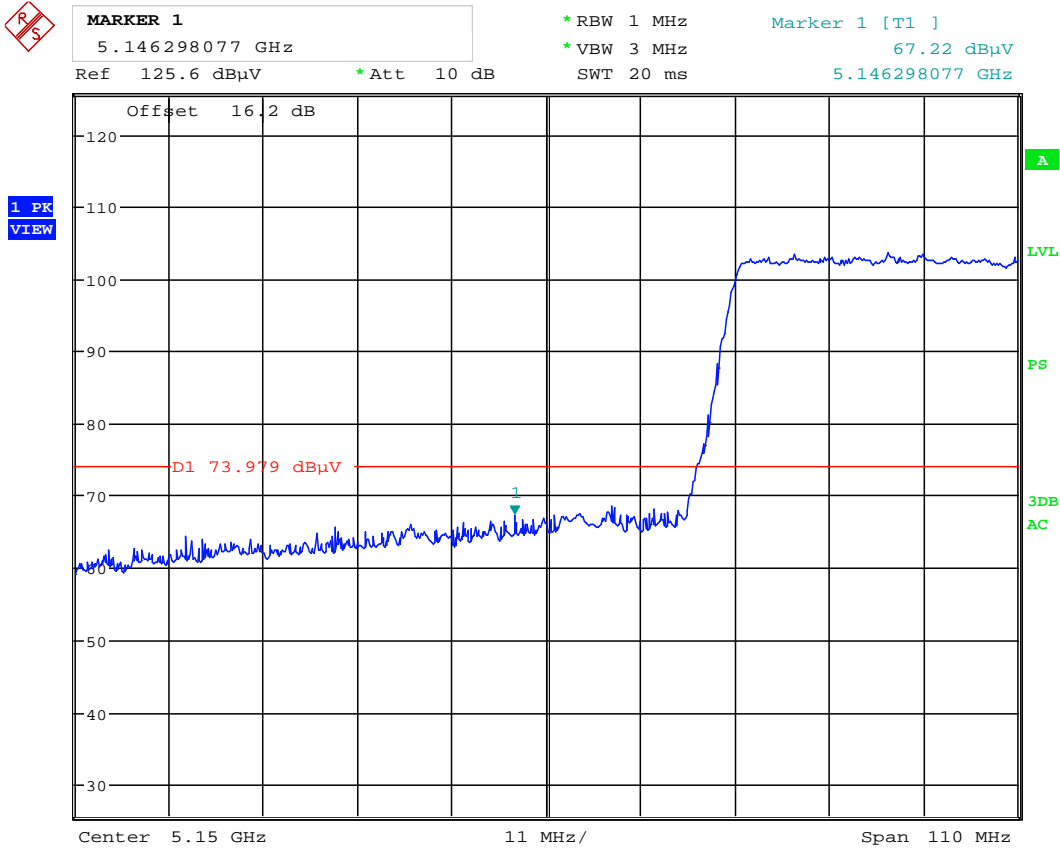
Date: 18.FEB.2014 18:44:42

Plot 6-139. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 119 of 171

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

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



Date: 18.FEB.2014 18:45:14

Plot 6-140. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 120 of 171	

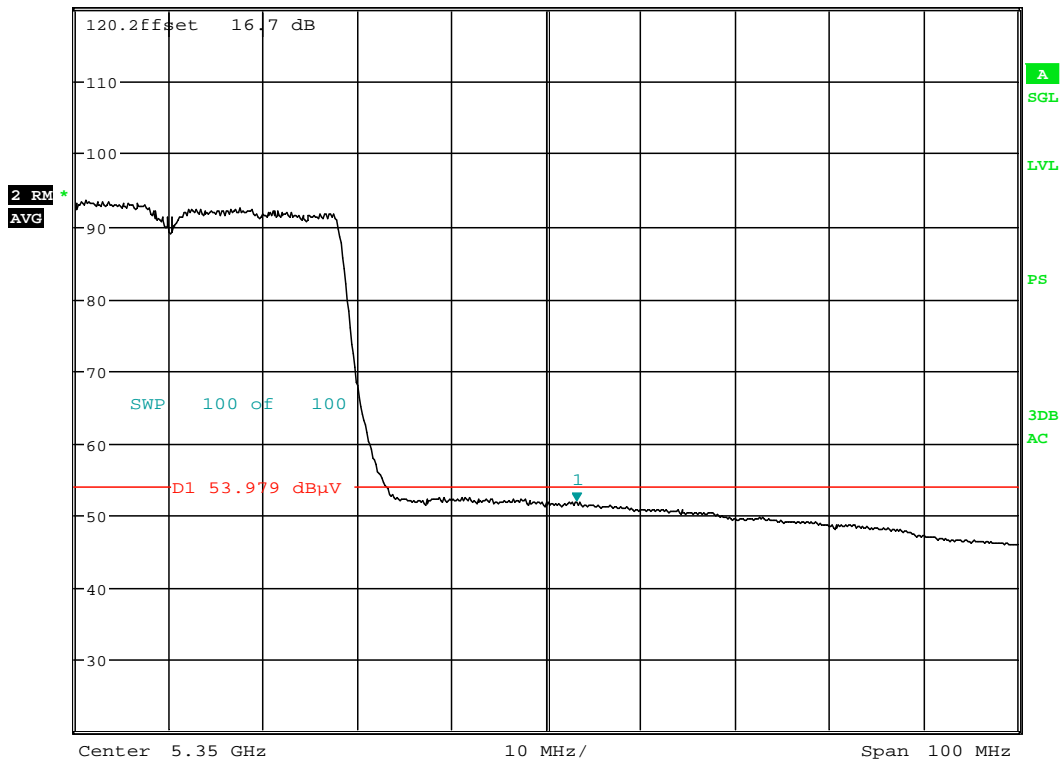
Radiated Band Edge Measurements (80MHz BW) (Cont'd)

§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



MARKER 1
 5.353205128 GHz
 Ref 120.2 dBµV * Att 10 dB SWT 20 ms
 * RBW 1 MHz * VBW 3 MHz
 Marker 1 [T2] 51.82 dBµV
 5.353205128 GHz

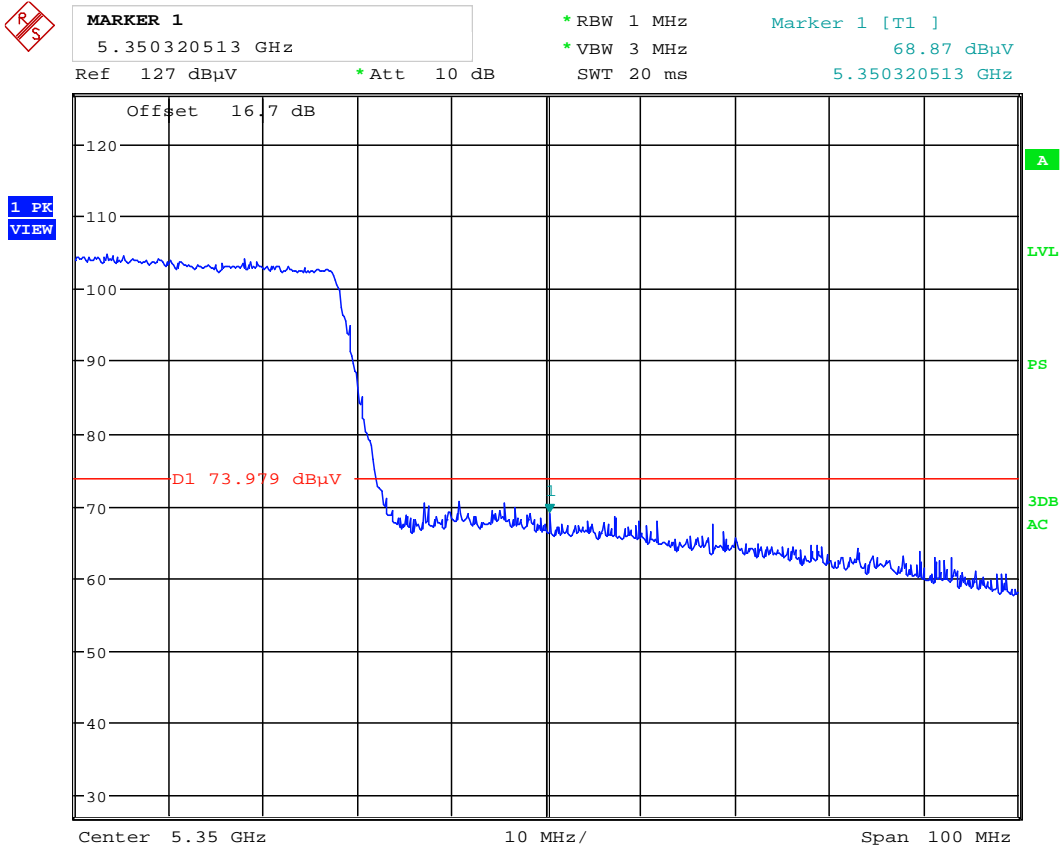


Date: 18.FEB.2014 19:26:21

Plot 6-141. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 121 of 171	

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



Date: 18.FEB.2014 19:22:01

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

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 122 of 171	

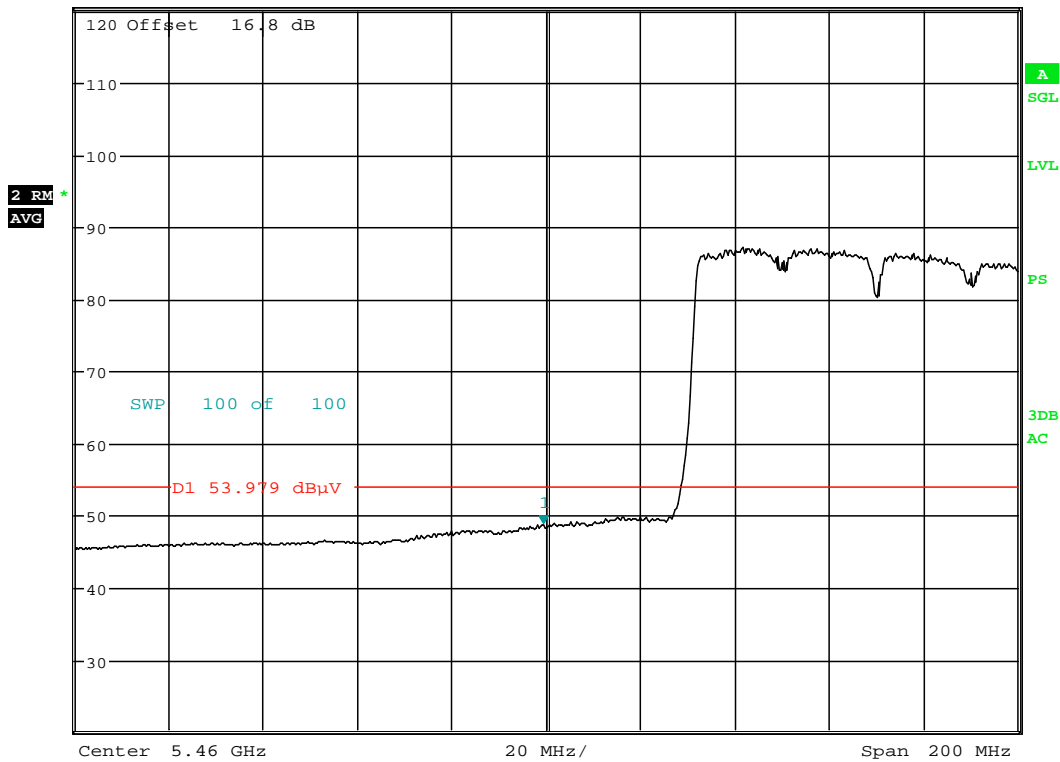
Radiated Band Edge Measurements (80MHz BW) (Cont'd)

§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



MARKER 1
 5.459358974 GHz
 Ref 120.3 dBµV * Att 10 dB SWT 20 ms
 * RBW 1 MHz Marker 1 [T2]
 * VBW 3 MHz 48.74 dBµV
 5.459358974 GHz

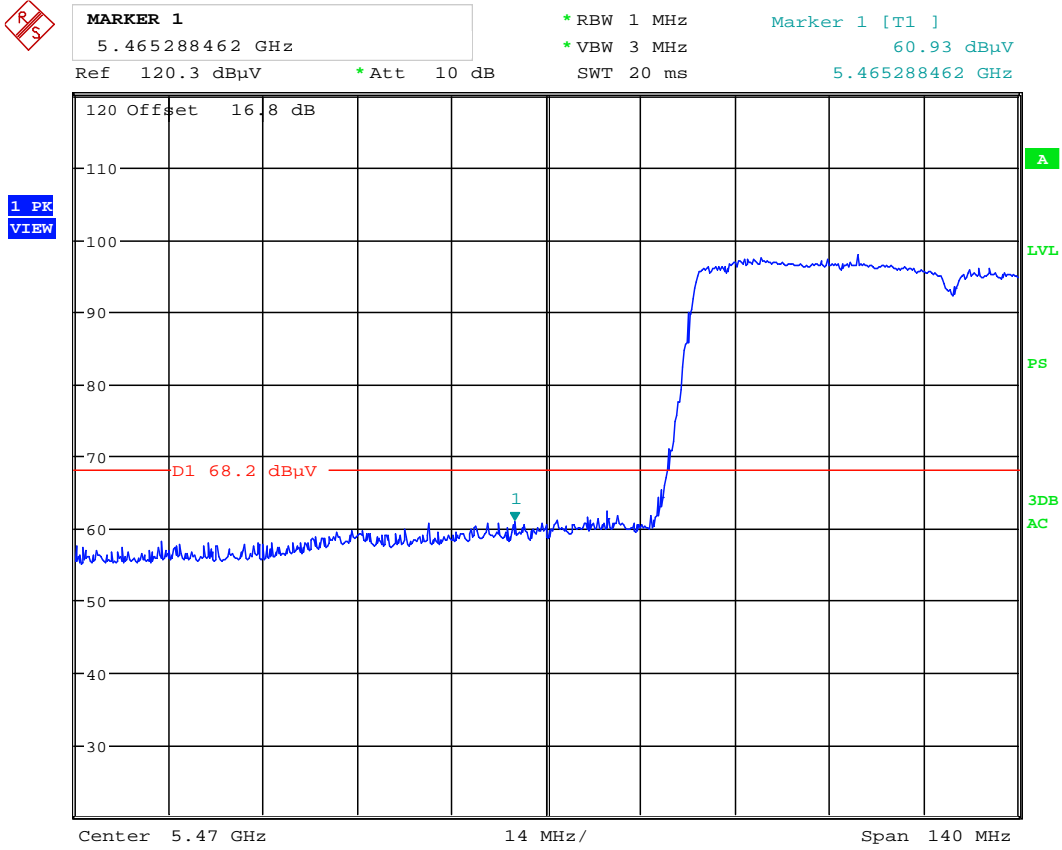


Date: 18.FEB.2014 20:40:07

Plot 6-143. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)



FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 123 of 171	

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



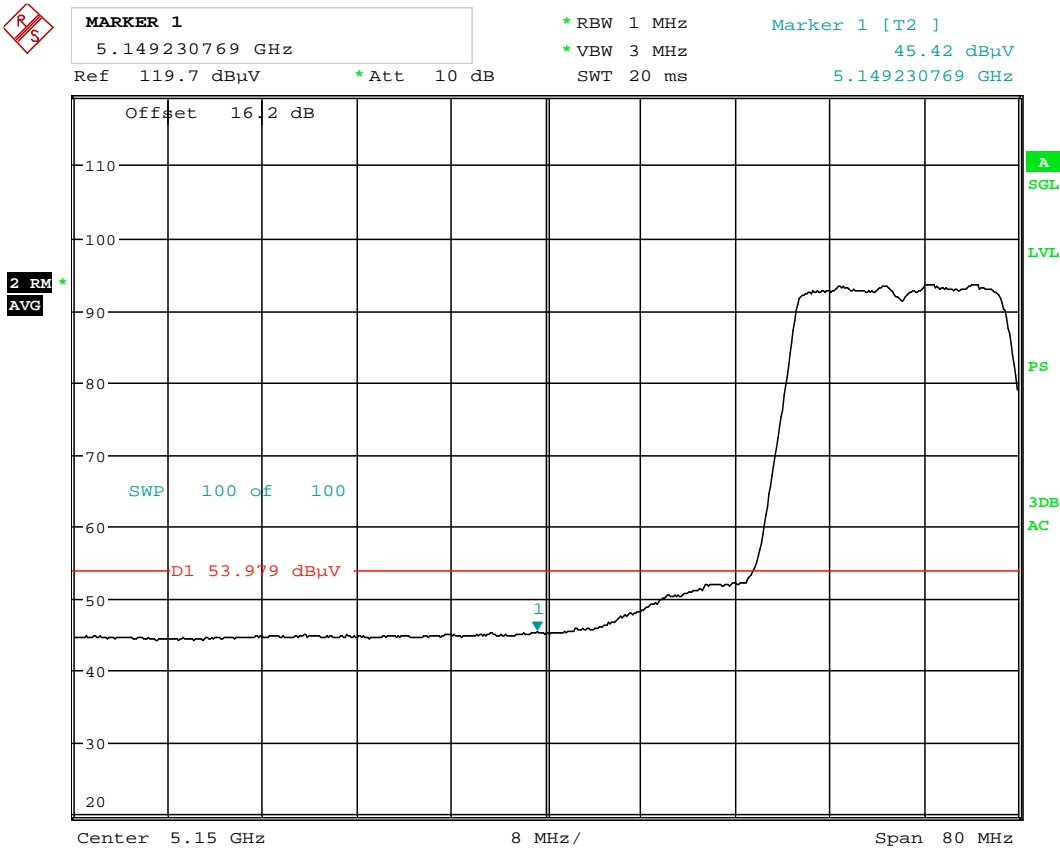
Date: 18.FEB.2014 20:39:22

Plot 6-144. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 124 of 171	

6.11 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: 18.FEB.2014 18:54:02

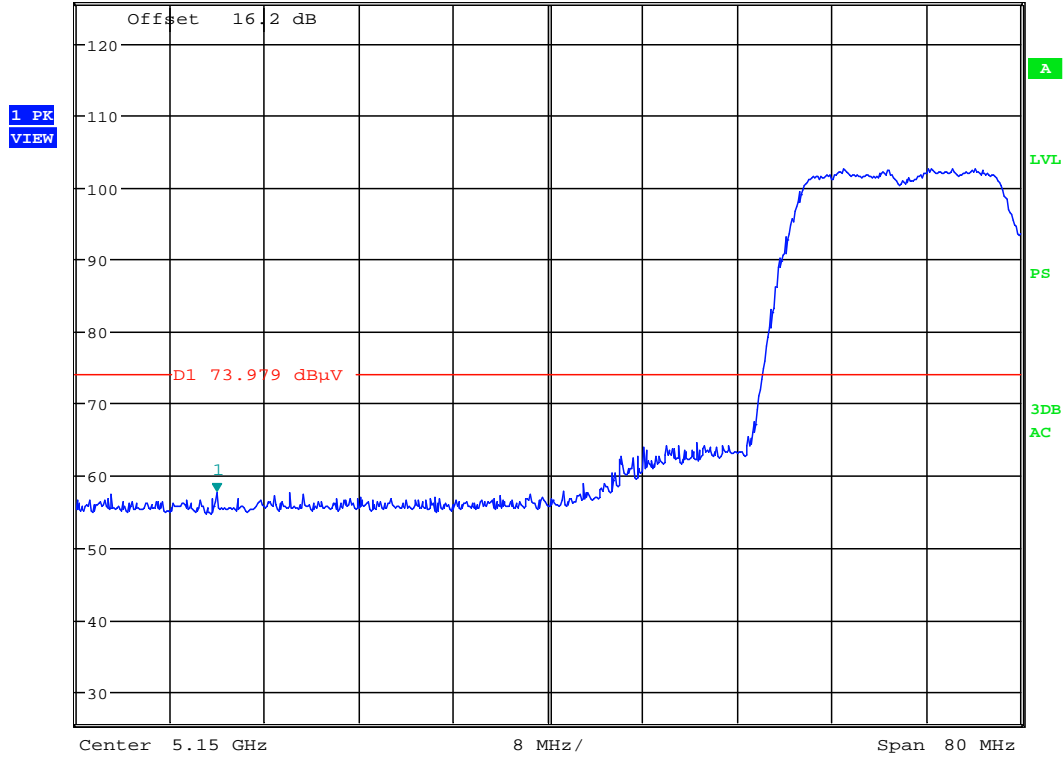
Plot 6-145. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 125 of 171

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



MARKER 1
 5.121923077 GHz
 Ref 125.6 dBµV *Att 10 dB SWT 20 ms
 *RBW 1 MHz Marker 1 [T1] 57.71 dBµV
 *VBW 3 MHz 5.121923077 GHz



Date: 18.FEB.2014 18:54:28

Plot 6-146. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 126 of 171	

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

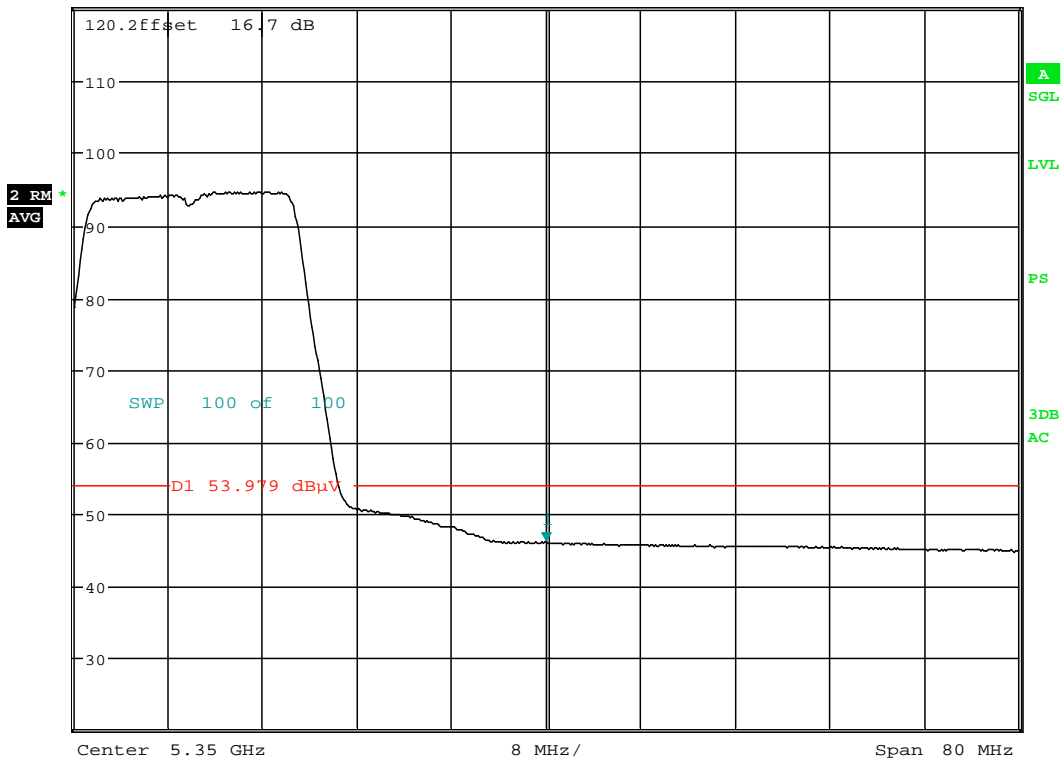
Operating Frequency: 5320MHz

Channel: 64



MARKER 1
 5.35 GHz
 Ref 120.2 dBµV * Att 10 dB SWT 20 ms

* RBW 1 MHz
 * VBW 3 MHz
 Marker 1 [T2]
 46.07 dBµV
 5.35000000 GHz

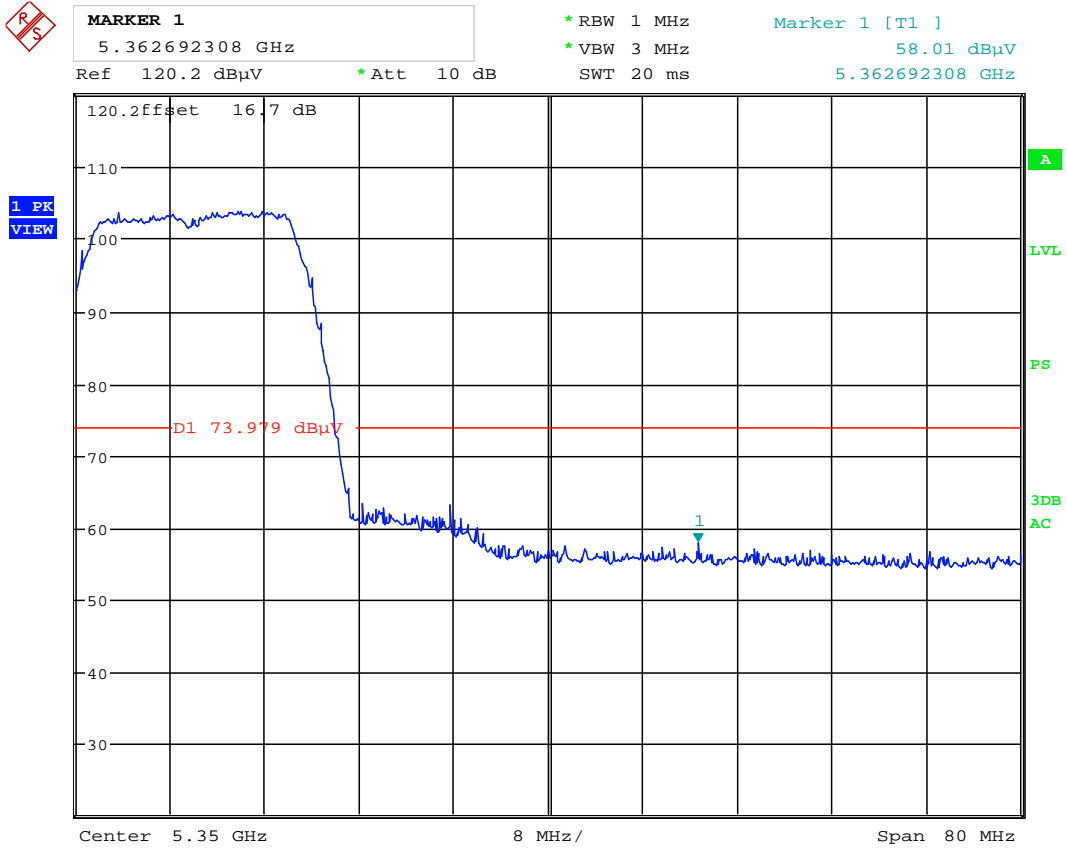


Date: 18.FEB.2014 19:31:34

Plot 6-147. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)



FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 127 of 171	

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



Date: 18.FEB.2014 19:31:11

Plot 6-148. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 128 of 171	

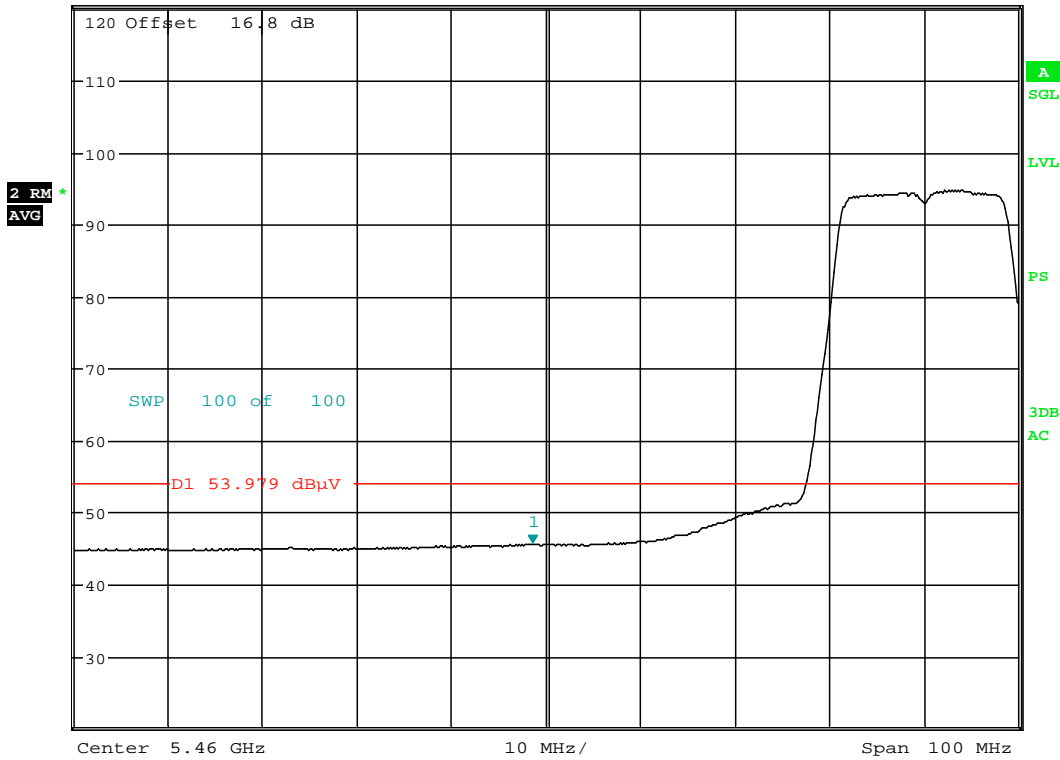
Radiated Band Edge Measurements (20MHz BW) (Cont'd)

§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



MARKER 1
 5.458557692 GHz
 Ref 120.3 dBµV * Att 10 dB SWT 20 ms
 * RBW 1 MHz * VBW 3 MHz
 Marker 1 [T2] 45.69 dBµV
 5.458557692 GHz



Date: 18.FEB.2014 20:43:53

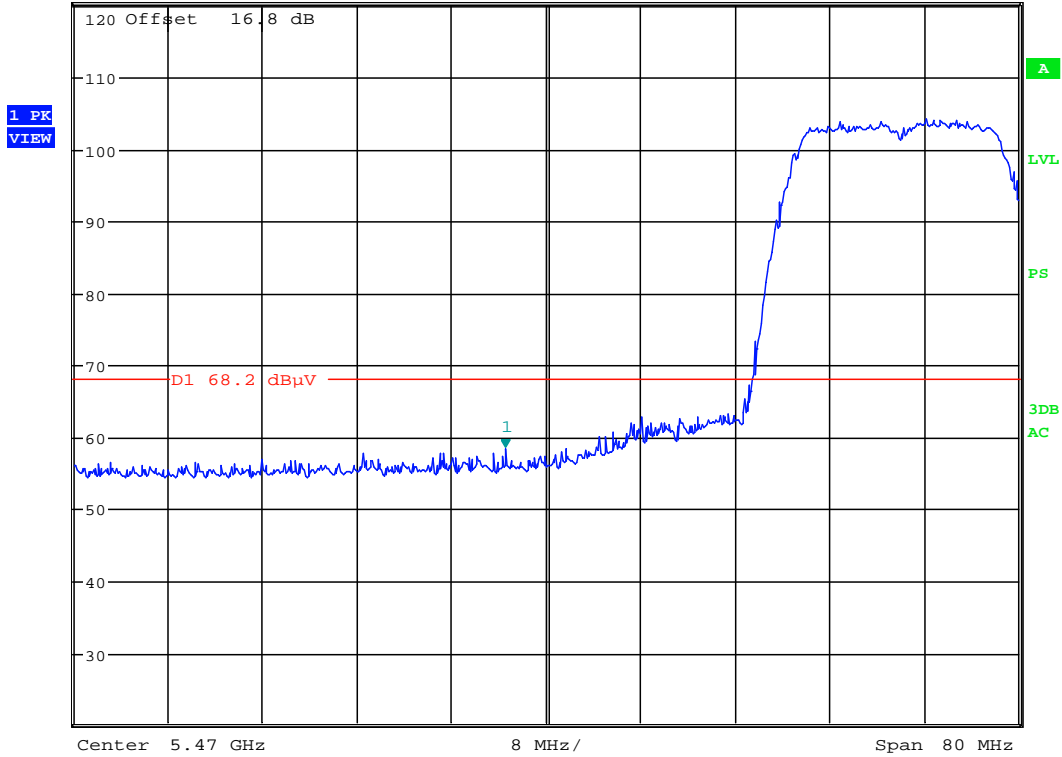
Plot 6-149. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 129 of 171	

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



MARKER 1
5.466538462 GHz
Ref 120.3 dBµV *Att 10 dB SWT 20 ms
*RBW 1 MHz *VBW 3 MHz
Marker 1 [T1] 58.41 dBµV
5.466538462 GHz



Date: 18.FEB.2014 20:43:33

Plot 6-150. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 130 of 171	

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

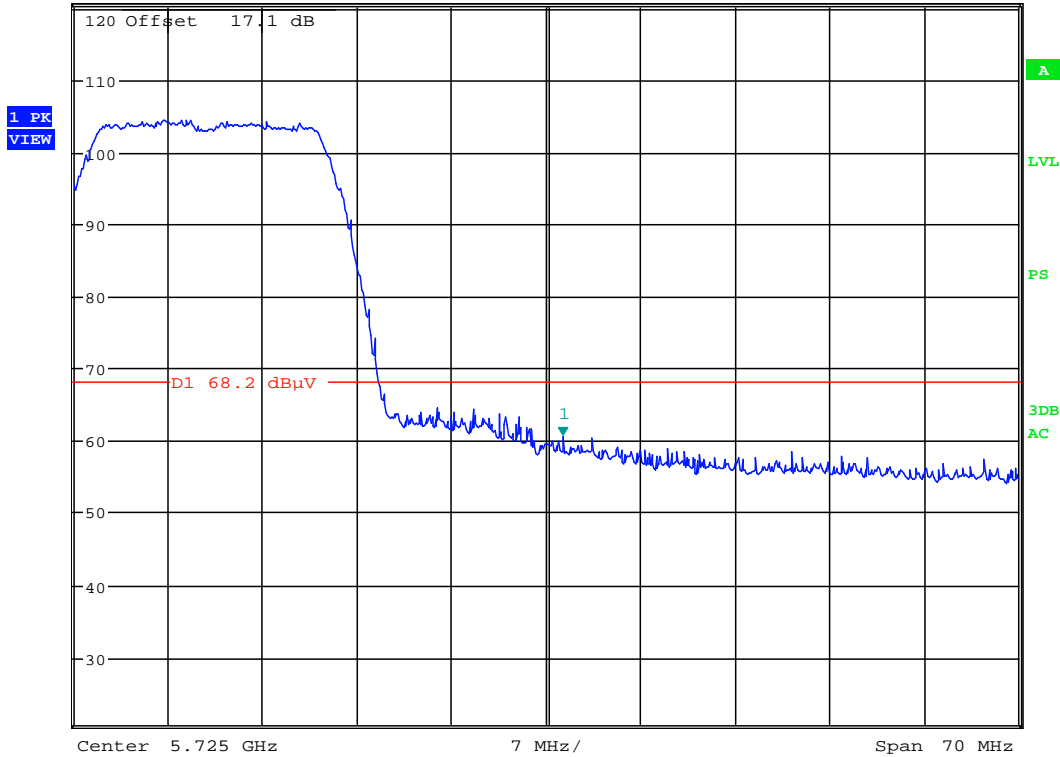
Distance of Measurements: 3 Meters

Operating Frequency: 5700MHz

Channel: 140



MARKER 1		* RBW 1 MHz	Marker 1 [T1]
5.726233974 GHz		* VBW 3 MHz	60.57 dBµV
Ref 120.6 dBµV	* Att 10 dB	SWT 20 ms	5.726233974 GHz



Date: 18.FEB.2014 21:06:11

Plot 6-151. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

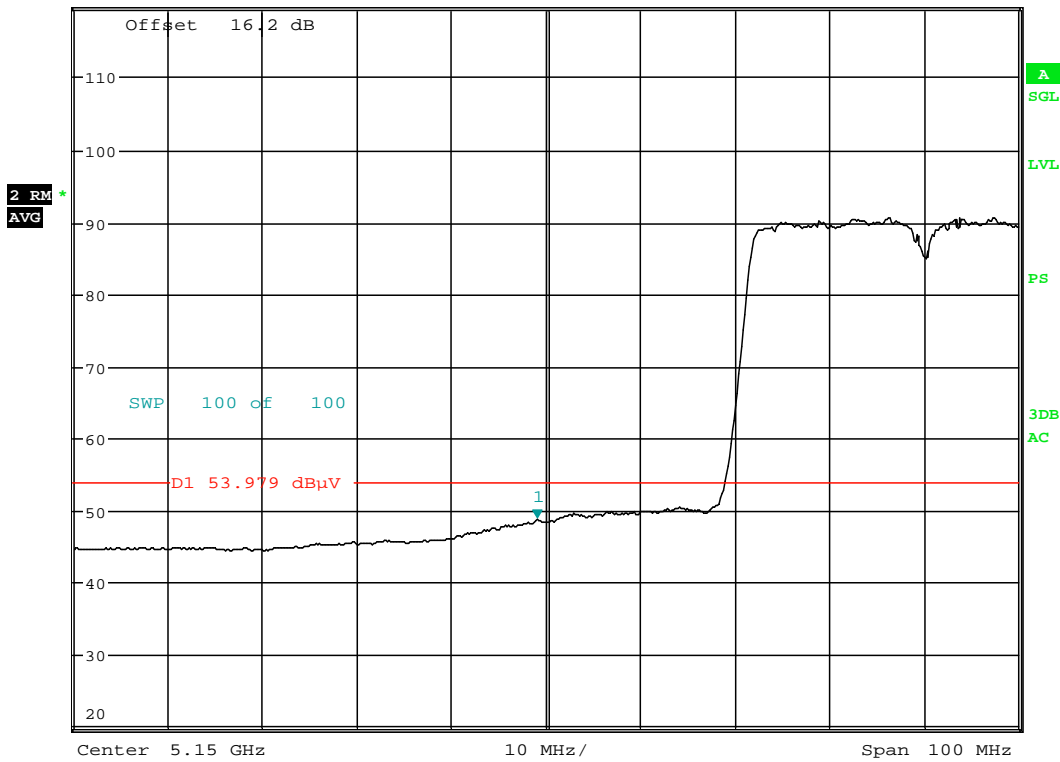
FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 131 of 171	

6.12 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



MARKER 1
 5.149038462 GHz
 Ref 119.7 dBµV * Att 10 dB SWT 20 ms
 * RBW 1 MHz * VBW 3 MHz
 Marker 1 [T2] 48.70 dBµV
 5.149038462 GHz



Date: 18.FEB.2014 18:57:41

Plot 6-152. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

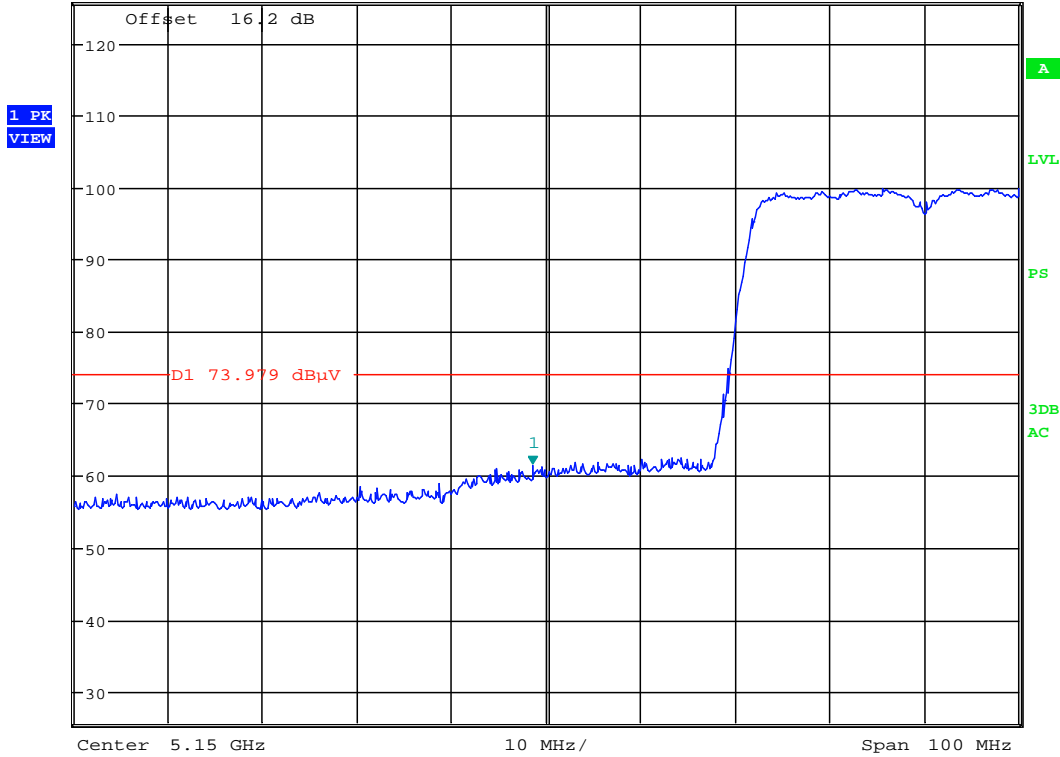
FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 132 of 171	

Radiated Band Edge Measurements (40MHz BW) (Cont'd)

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



MARKER 1		* RBW 1 MHz	Marker 1 [T1]
5.148557692 GHz		* VBW 3 MHz	61.50 dBµV
Ref 125.6 dBµV	* Att 10 dB	SWT 20 ms	5.148557692 GHz



Date: 18.FEB.2014 18:57:10

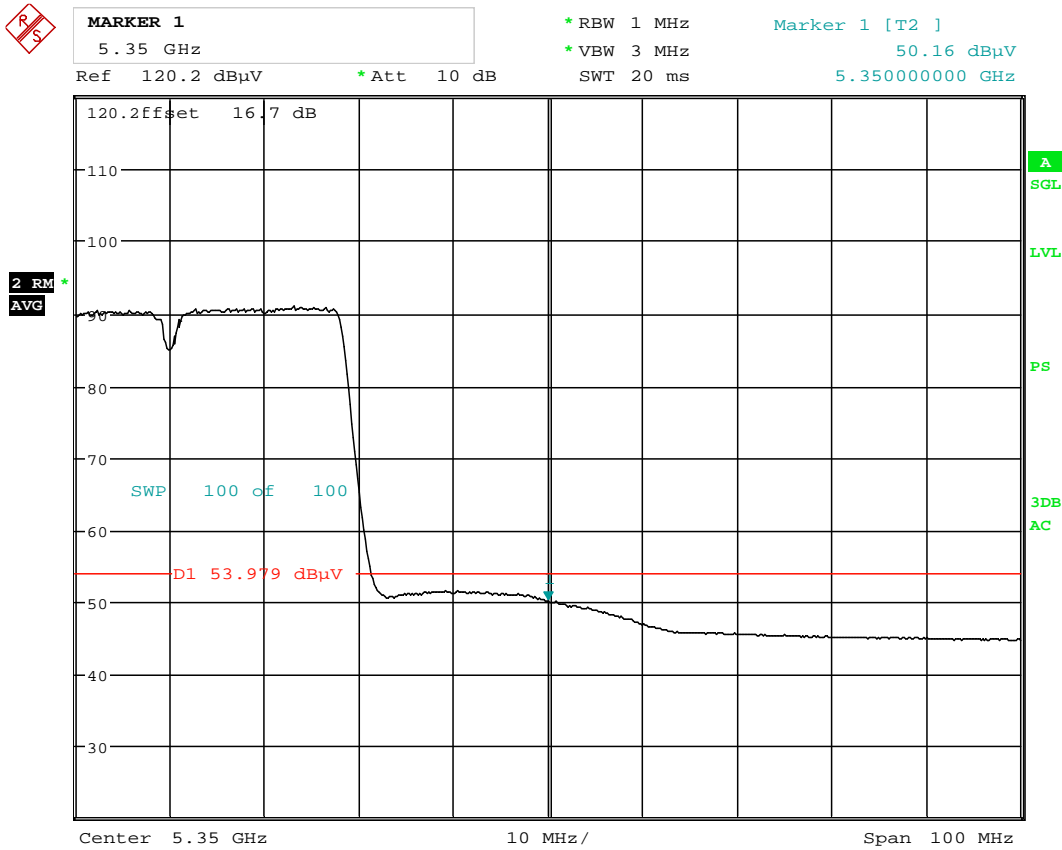
Plot 6-153. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 133 of 171	

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: 18.FEB.2014 19:33:17

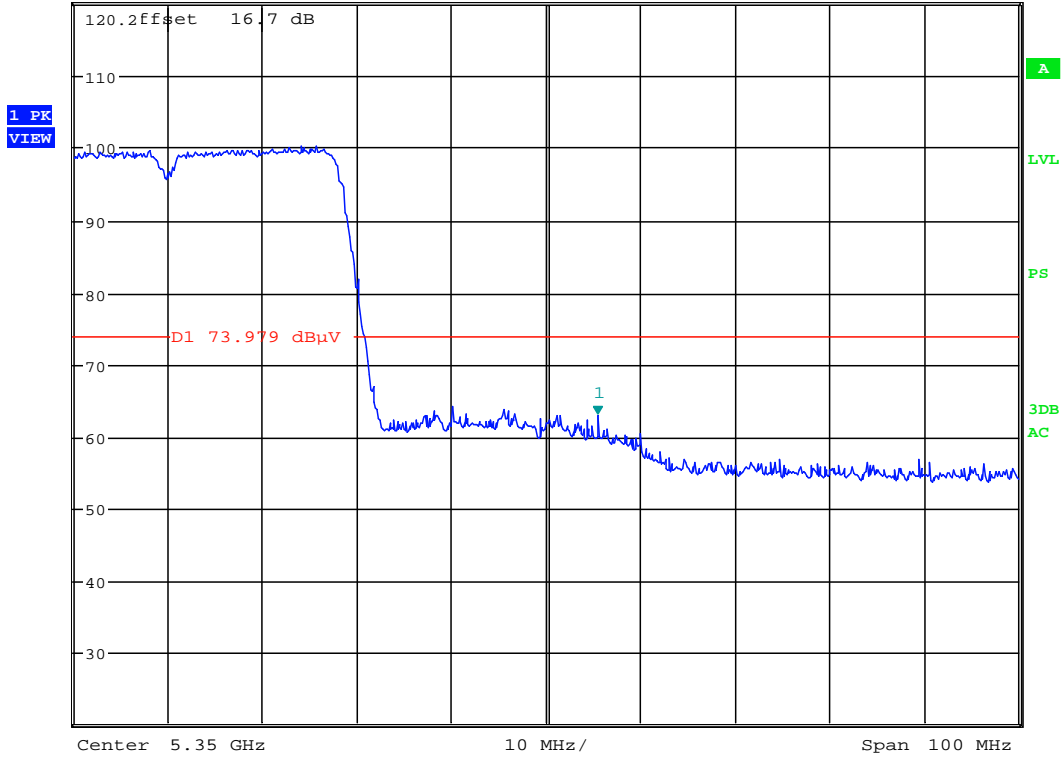
Plot 6-154. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 134 of 171	

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



MARKER 1
5.355448718 GHz
Ref 120.2 dBµV *Att 10 dB
*RBW 1 MHz *VBW 3 MHz SWT 20 ms
Marker 1 [T1] 63.05 dBµV
5.355448718 GHz



Date: 18.FEB.2014 19:32:49

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

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 135 of 171	

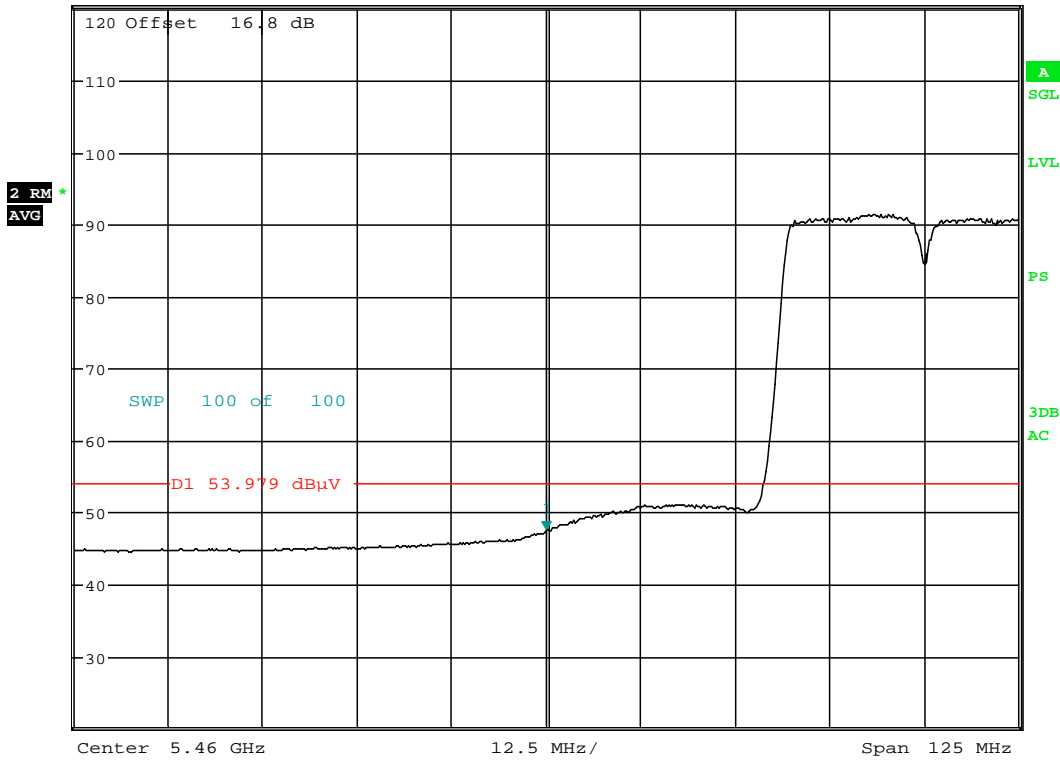
Radiated Band Edge Measurements (40MHz BW) (Cont'd)

§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



MARKER 1
 5.46 GHz
 Ref 120.3 dBµV * Att 10 dB SWT 20 ms
 * RBW 1 MHz * VBW 3 MHz
 Marker 1 [T2] 47.48 dBµV
 5.460000000 GHz



Date: 18.FEB.2014 20:45:41

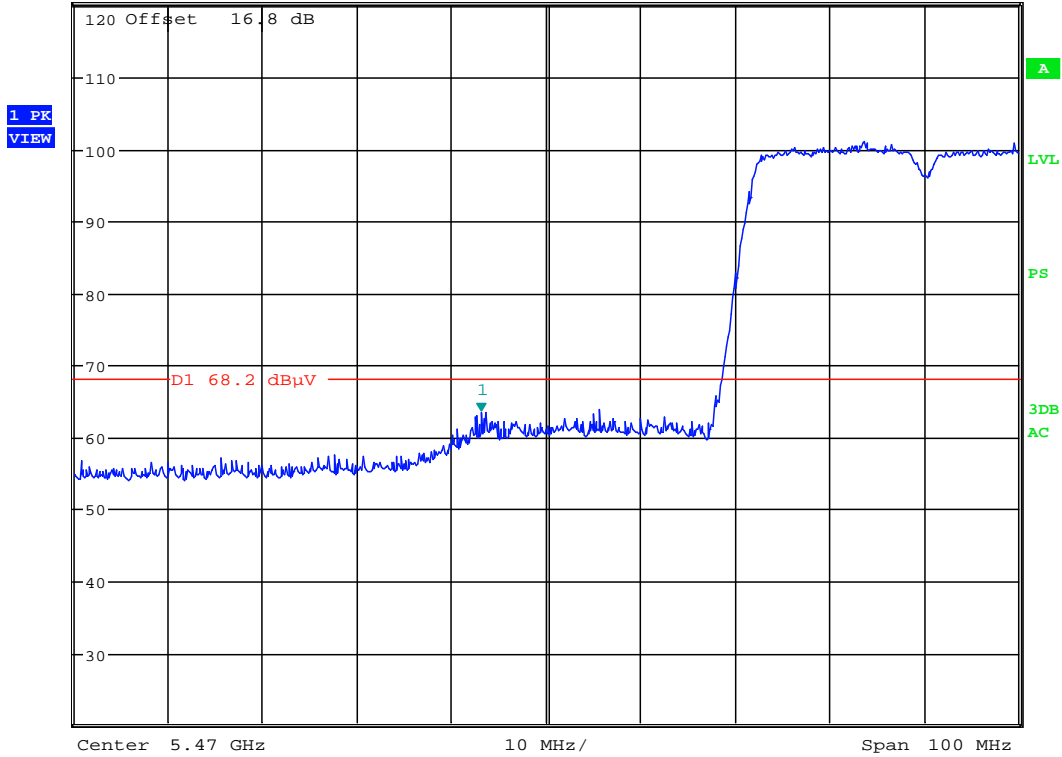
Plot 6-156. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 136 of 171

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



MARKER 1
5.463108974 GHz
Ref 120.3 dBµV *Att 10 dB SWT 20 ms
*RBW 1 MHz *VBW 3 MHz
Marker 1 [T1] 63.41 dBµV
5.463108974 GHz



Date: 18.FEB.2014 20:45:21

Plot 6-157. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

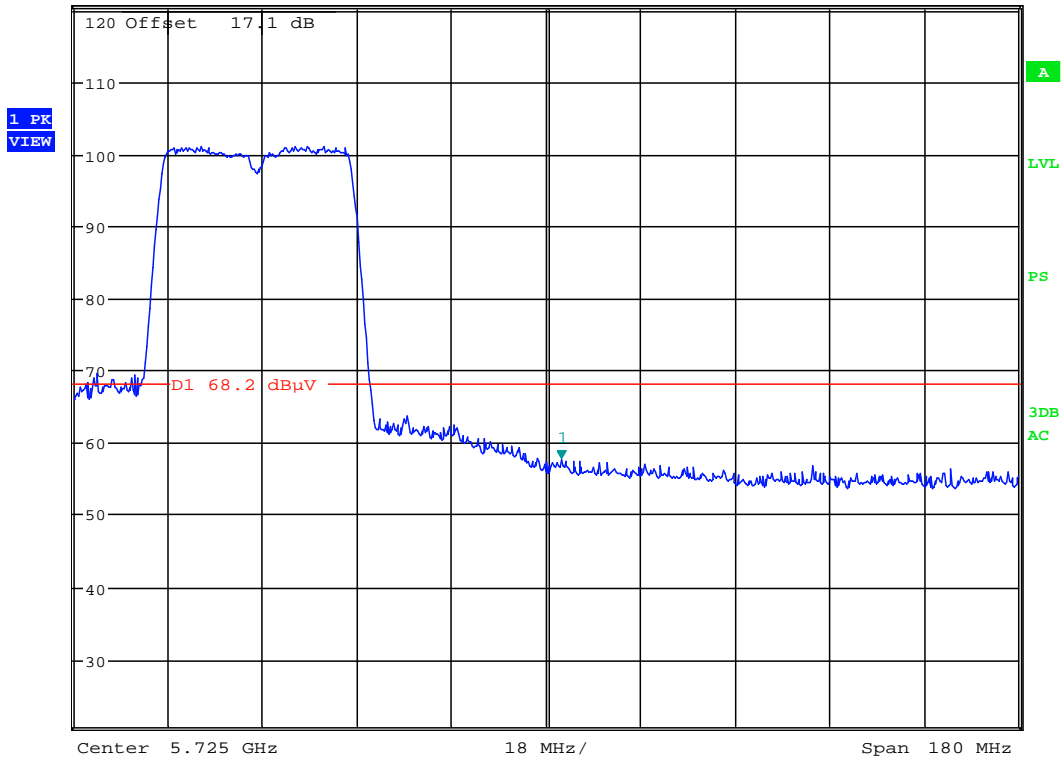
FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 137 of 171	

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



MARKER 1
 5.727884615 GHz
 Ref 120.6 dBµV *Att 10 dB SWT 20 ms
 *RBW 1 MHz *VBW 3 MHz
 Marker 1 [T1] 57.62 dBµV
 5.727884615 GHz



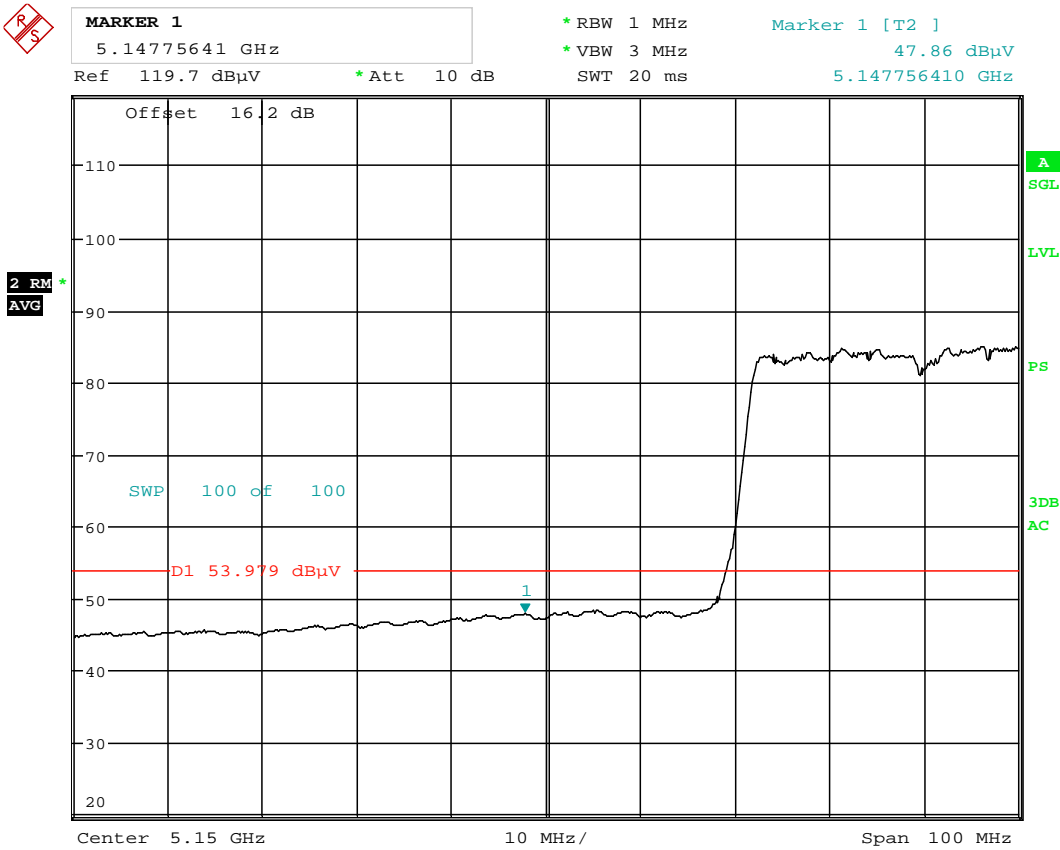
Date: 18.FEB.2014 21:07:37

Plot 6-158. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 138 of 171	

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

Worst Case Mode: 802.11n (80MHz)
 Worst Case Transfer Rate: MCS8
 Distance of Measurements: 3 Meters
 Operating Frequency: 5210MHz
 Channel: 42



Date: 18.FEB.2014 19:00:25

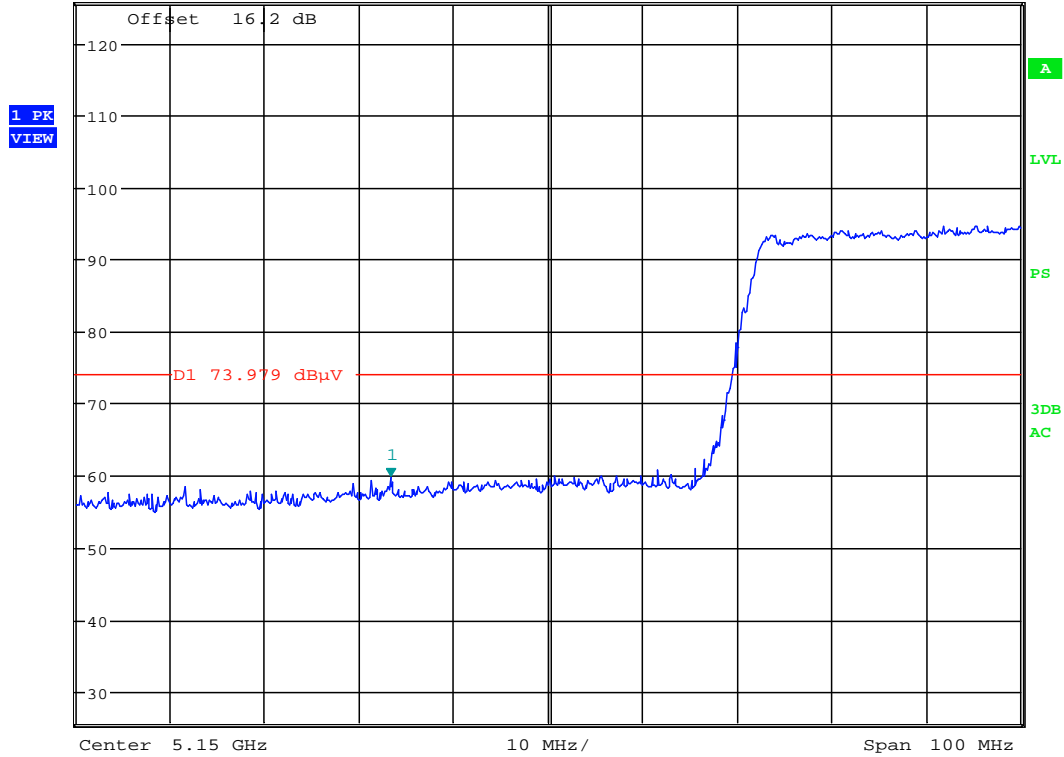
Plot 6-159. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 139 of 171

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



MARKER 1		* RBW 1 MHz	Marker 1 [T1]
5.133333333 GHz		* VBW 3 MHz	59.82 dBµV
Ref 125.6 dBµV	* Att 10 dB	SWT 20 ms	5.133333333 GHz



Date: 18.FEB.2014 19:01:01

Plot 6-160. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 140 of 171	

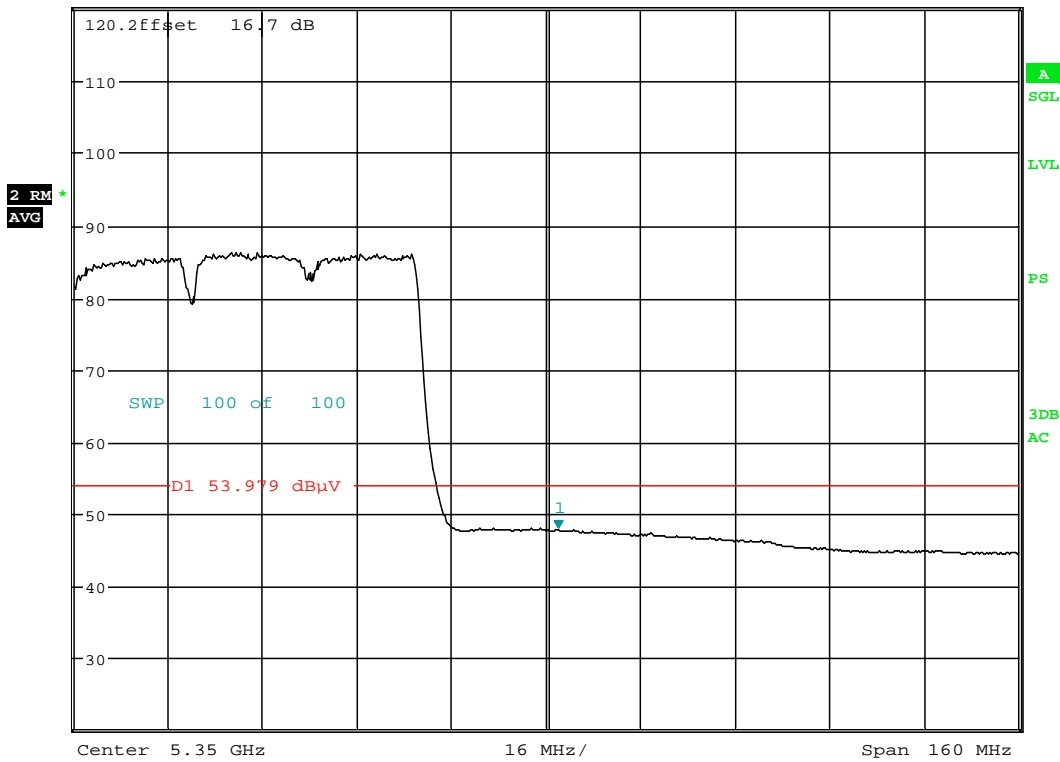
Radiated Band Edge Measurements (80MHz BW) (Cont'd)

§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



MARKER 1
 5.352051282 GHz
 Ref 120.2 dBµV * Att 10 dB SWT 20 ms
 * RBW 1 MHz Marker 1 [T2]
 * VBW 3 MHz 47.86 dBµV
 5.352051282 GHz

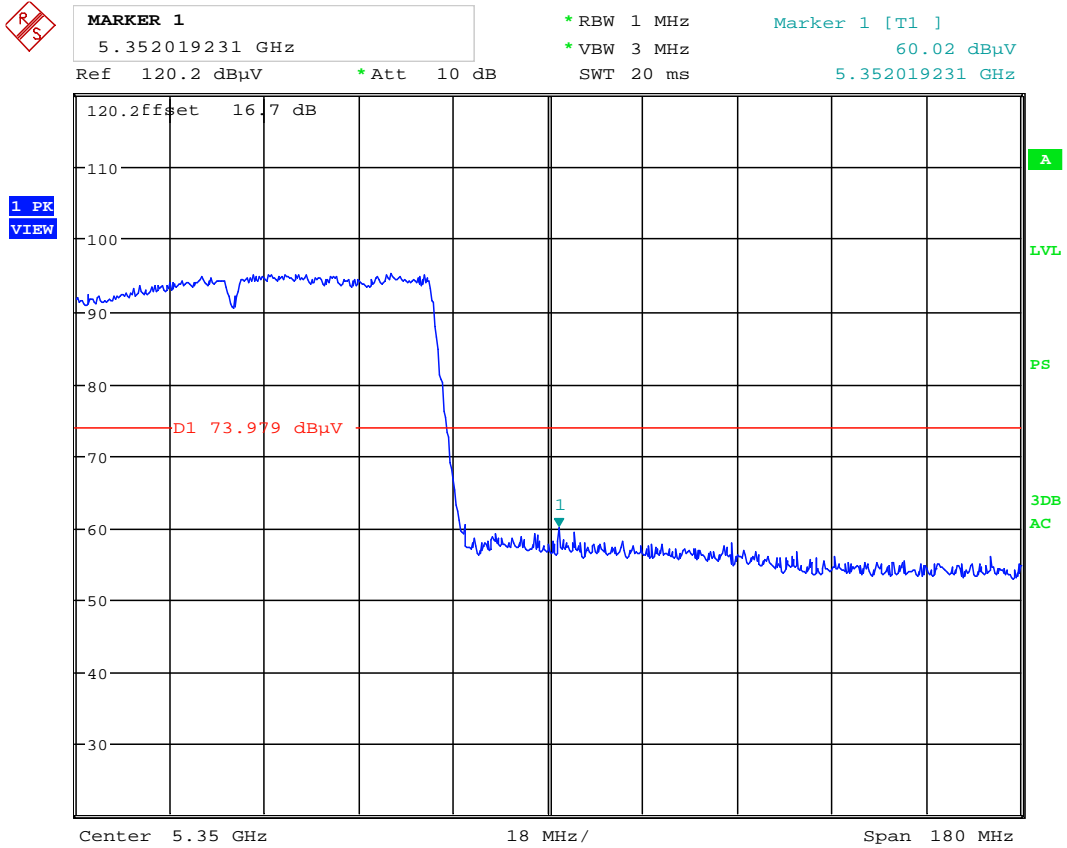


Date: 18.FEB.2014 20:13:19

Plot 6-161. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 141 of 171	

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



Date: 18.FEB.2014 19:35:00

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

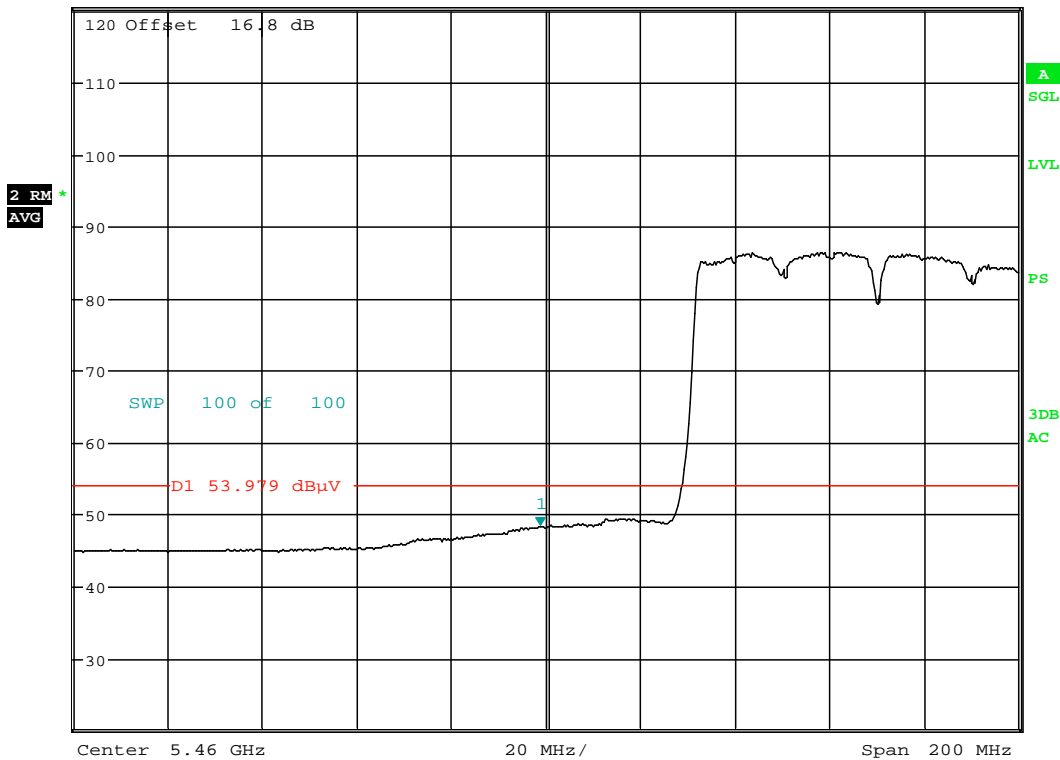
FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 142 of 171	

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



MARKER 1
 5.458717949 GHz
 Ref 120.3 dBµV * Att 10 dB SWT 20 ms
 * RBW 1 MHz * VBW 3 MHz
 Marker 1 [T2] 48.36 dBµV
 5.458717949 GHz



Date: 18.FEB.2014 20:48:01

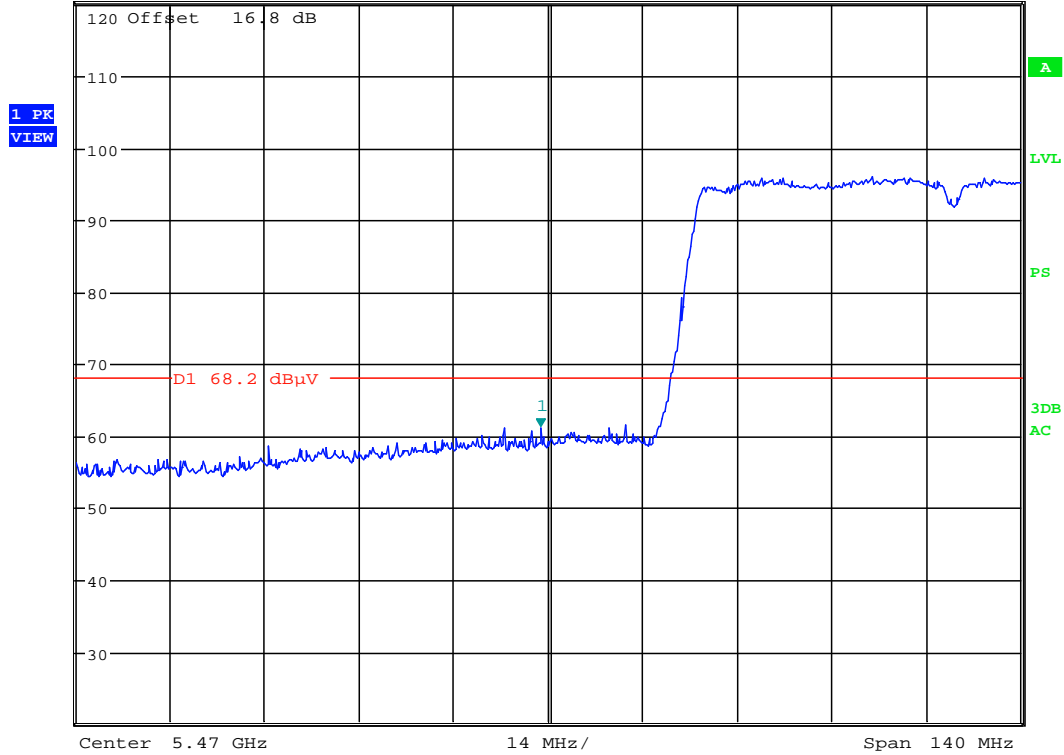
Plot 6-163. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 143 of 171	

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



MARKER 1
 5.468878205 GHz
 Ref 120.3 dBµV * Att 10 dB SWT 20 ms
 * RBW 1 MHz Marker 1 [T1] 61.15 dBµV
 * VBW 3 MHz 5.468878205 GHz



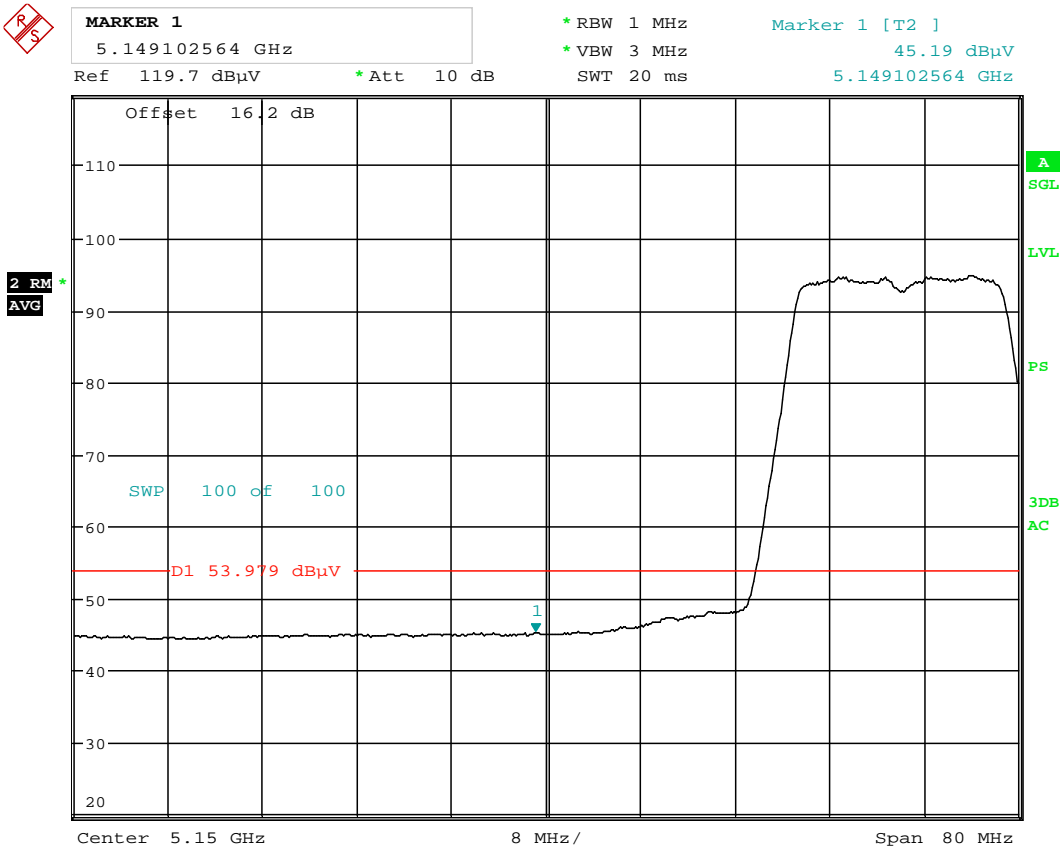
Date: 18.FEB.2014 20:47:01

Plot 6-164. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 144 of 171	

6.14 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: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36



Date: 18.FEB.2014 19:06:00

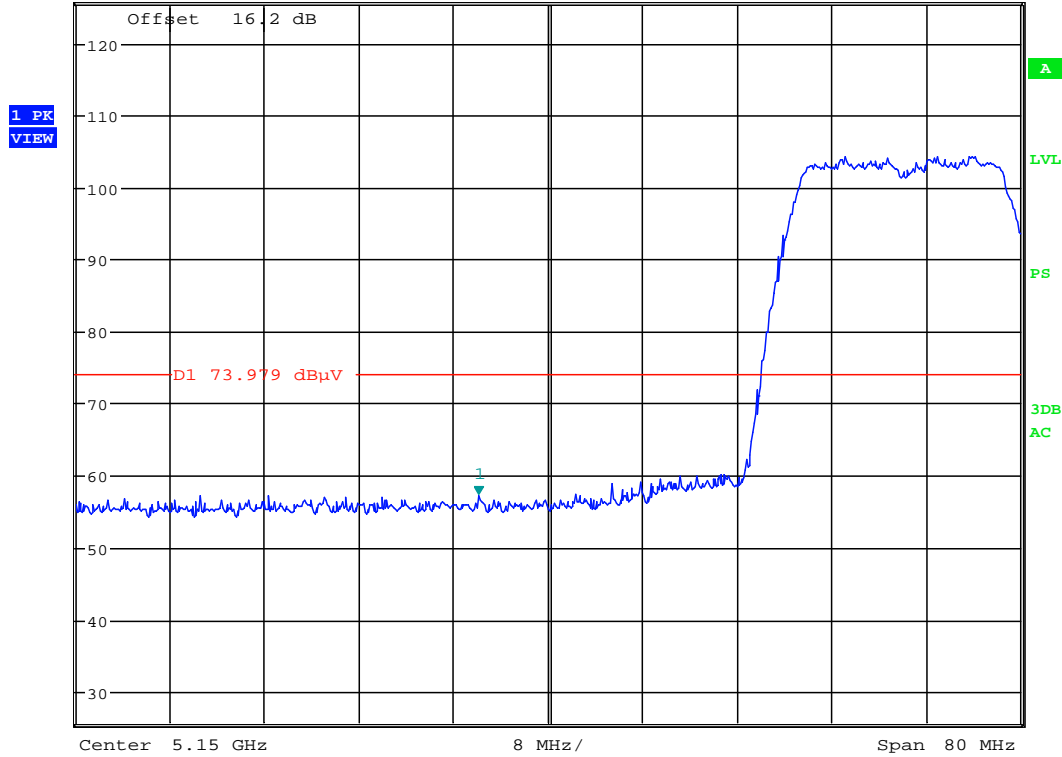
Plot 6-165. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 145 of 171

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



MARKER 1		* RBW 1 MHz	Marker 1 [T1]
5.144102564 GHz		* VBW 3 MHz	57.23 dBµV
Ref 125.6 dBµV	* Att 10 dB	SWT 20 ms	5.144102564 GHz



Date: 18.FEB.2014 19:05:39

Plot 6-166. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 146 of 171

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



MARKER 1
5.350051282 GHz

* RBW 1 MHz

Marker 1 [T2]

* VBW 3 MHz

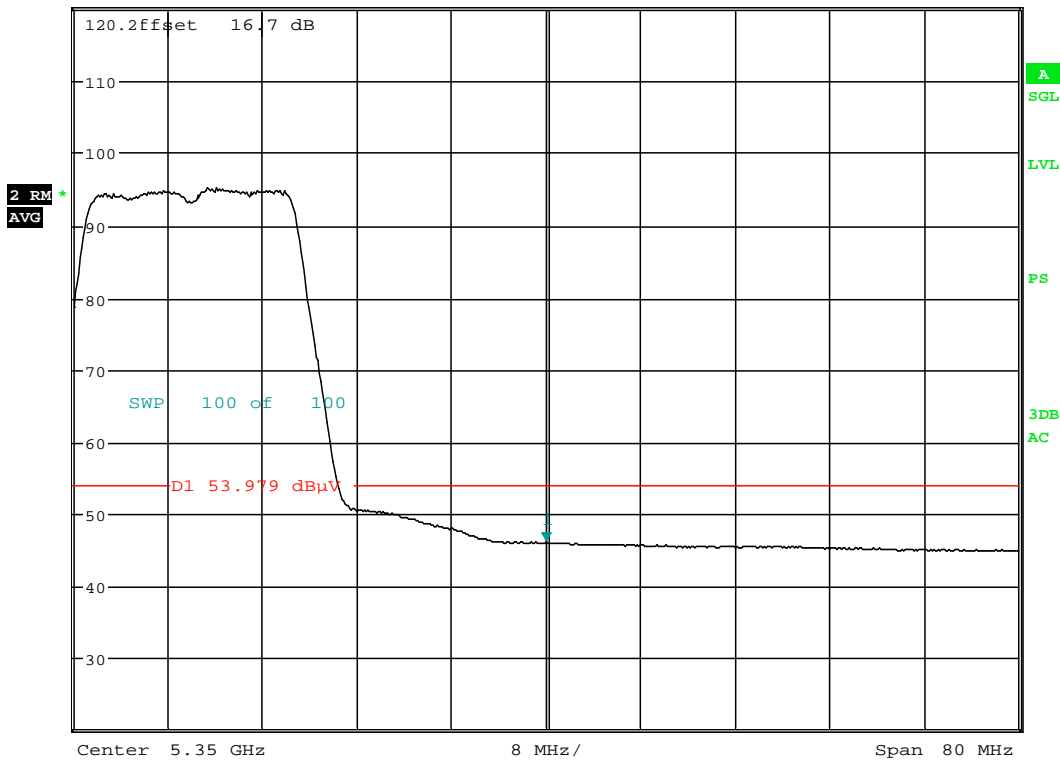
46.04 dBµV

Ref 120.2 dBµV

* Att 10 dB

SWT 20 ms

5.350051282 GHz

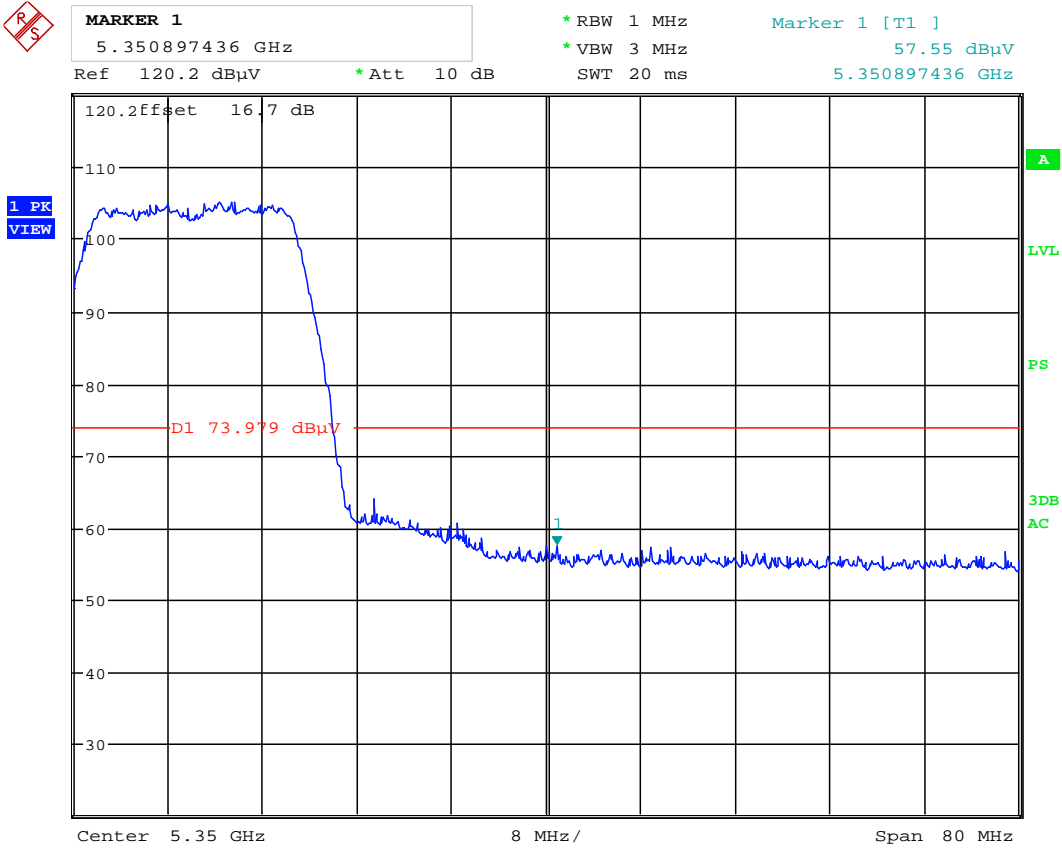


Date: 18.FEB.2014 20:21:33

Plot 6-167. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 147 of 171

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



Date: 18.FEB.2014 20:21:08

Plot 6-168. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 148 of 171	

Radiated Band Edge Measurements (20MHz BW) (Cont'd)

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

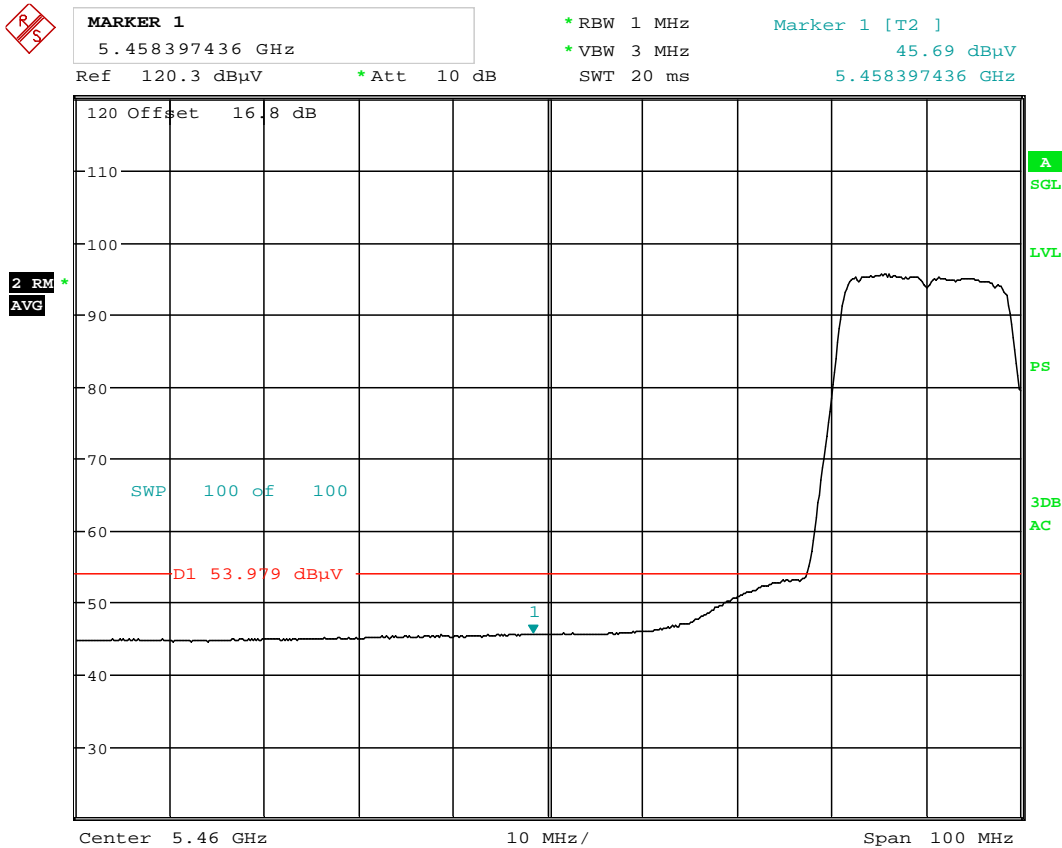
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5500MHz

Channel: 100



Date: 18.FEB.2014 20:50:52

Plot 6-169. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

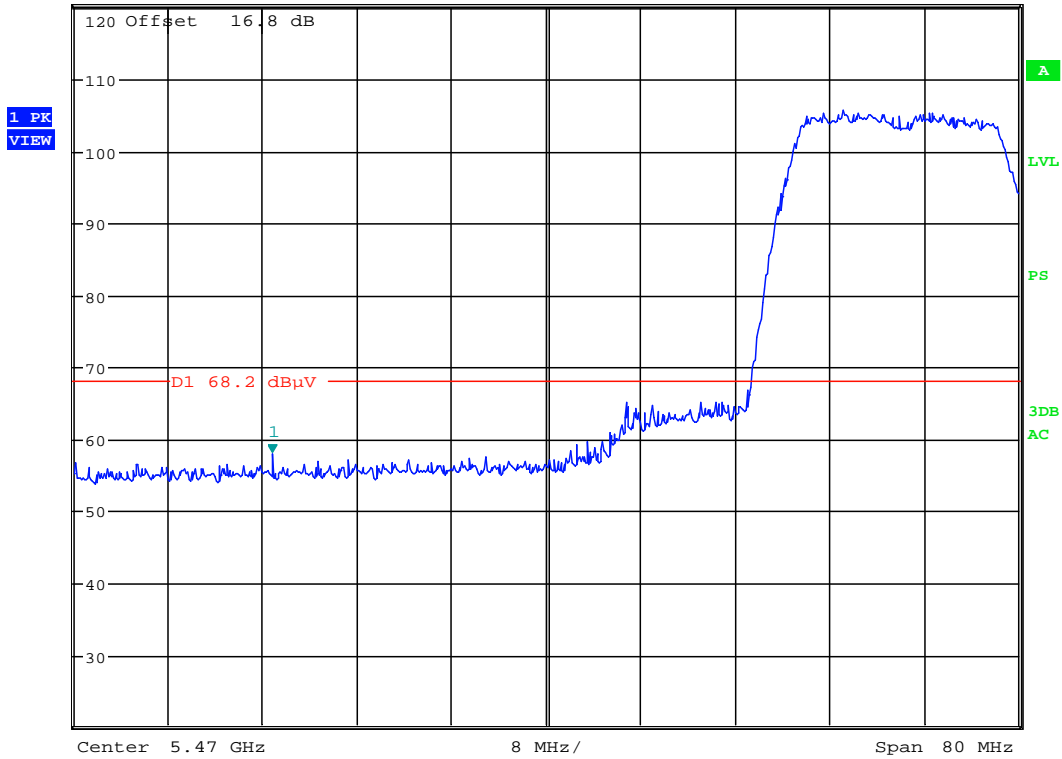
FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 149 of 171	

Radiated Band Edge Measurements (20MHz BW) (Cont'd)

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



MARKER 1		* RBW 1 MHz	Marker 1 [T1]
5.446794872 GHz		* VBW 3 MHz	57.99 dBµV
Ref 120.3 dBµV	* Att 10 dB	SWT 20 ms	5.446794872 GHz



Date: 18.FEB.2014 20:50:34

Plot 6-170. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 150 of 171	

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

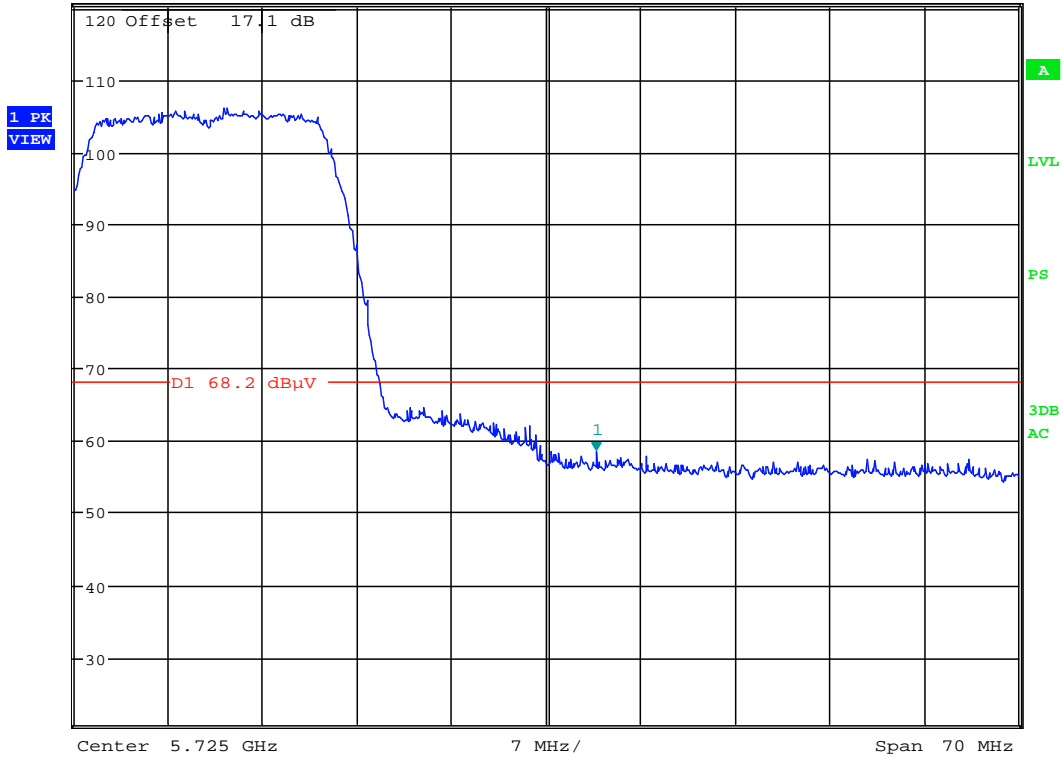
Operating Frequency: 5700MHz

Channel: 140



MARKER 1
 5.728701923 GHz
 Ref 120.6 dBµV *Att 10 dB SWT 20 ms

*RBW 1 MHz
 *VBW 3 MHz
 Marker 1 [T1]
 58.56 dBµV
 5.728701923 GHz



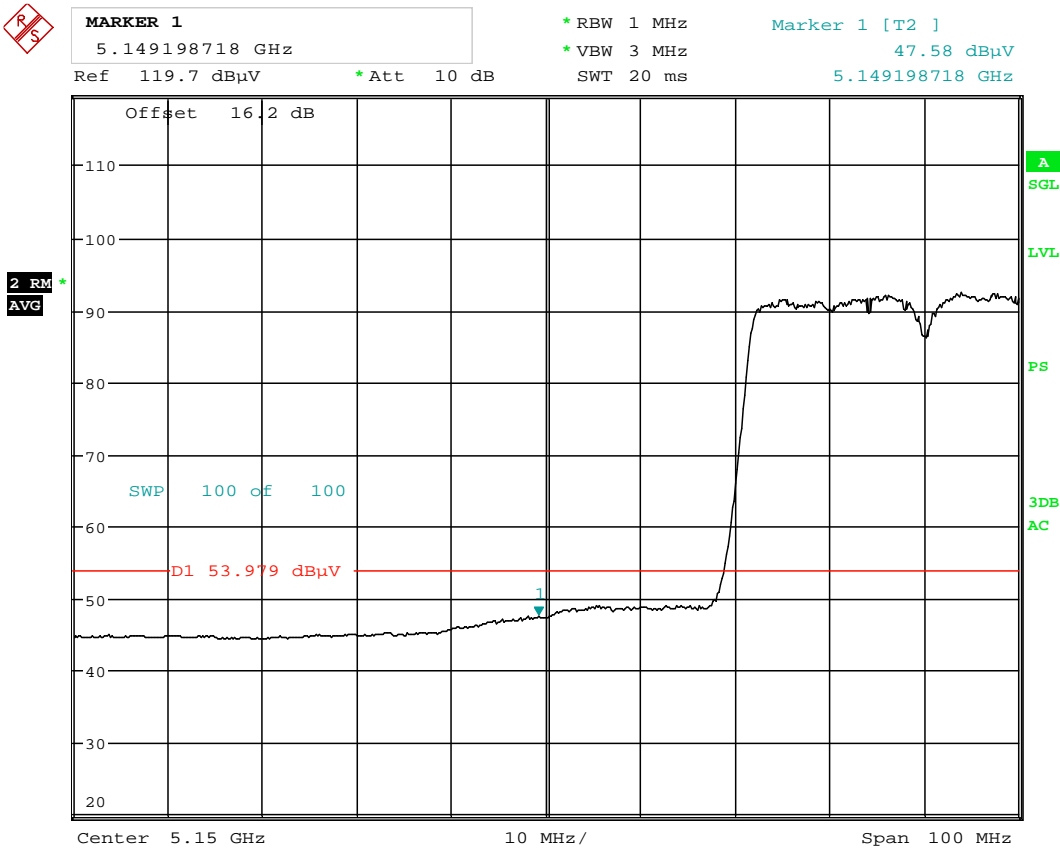
Date: 18.FEB.2014 21:10:31

Plot 6-171. Radiated Upper Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 151 of 171	

6.15 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: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5190MHz
 Channel: 38



Date: 18.FEB.2014 19:07:23

Plot 6-172. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

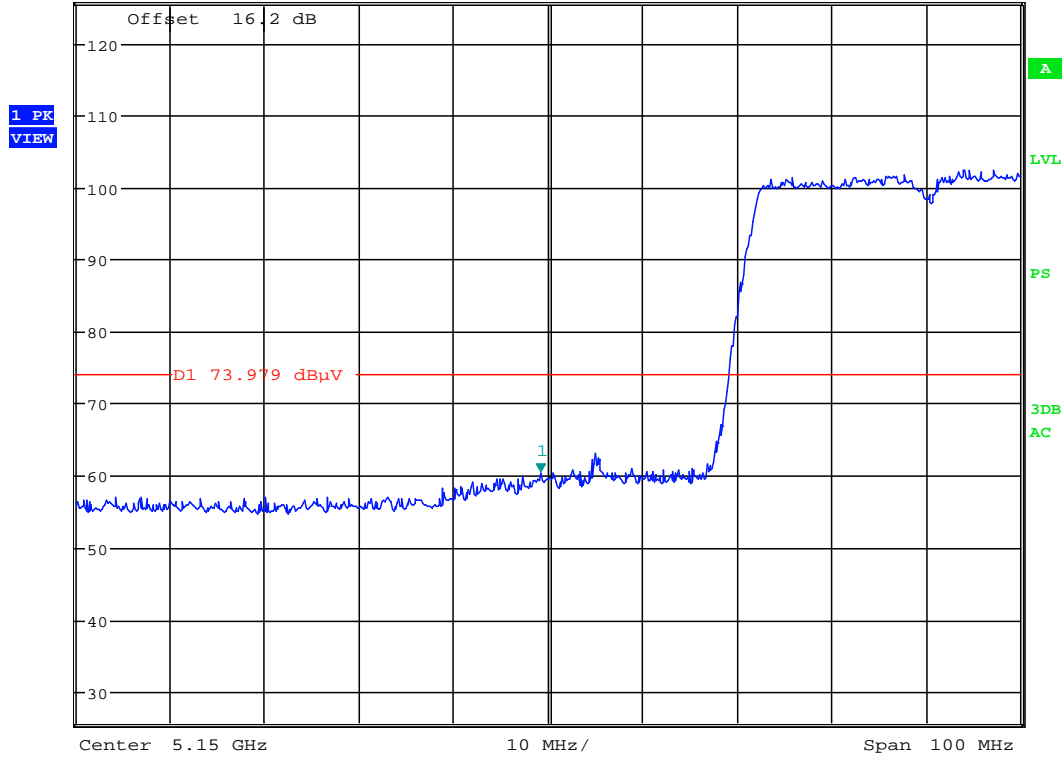
FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 152 of 171

Radiated Band Edge Measurements (40MHz BW) (Cont'd)

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



MARKER 1		* RBW 1 MHz	Marker 1 [T1]
5.149198718 GHz		* VBW 3 MHz	60.35 dBµV
Ref 125.6 dBµV	* Att 10 dB	SWT 20 ms	5.149198718 GHz



Date: 18.FEB.2014 19:07:04

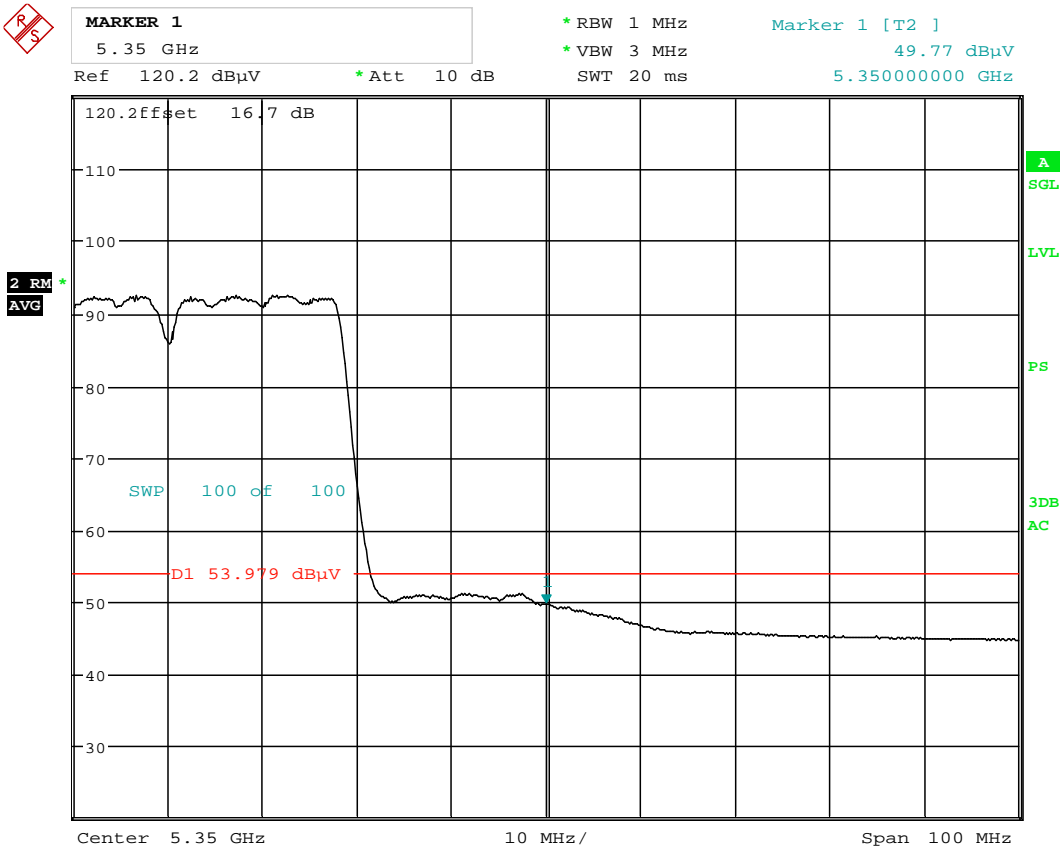
Plot 6-173. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 153 of 171	

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



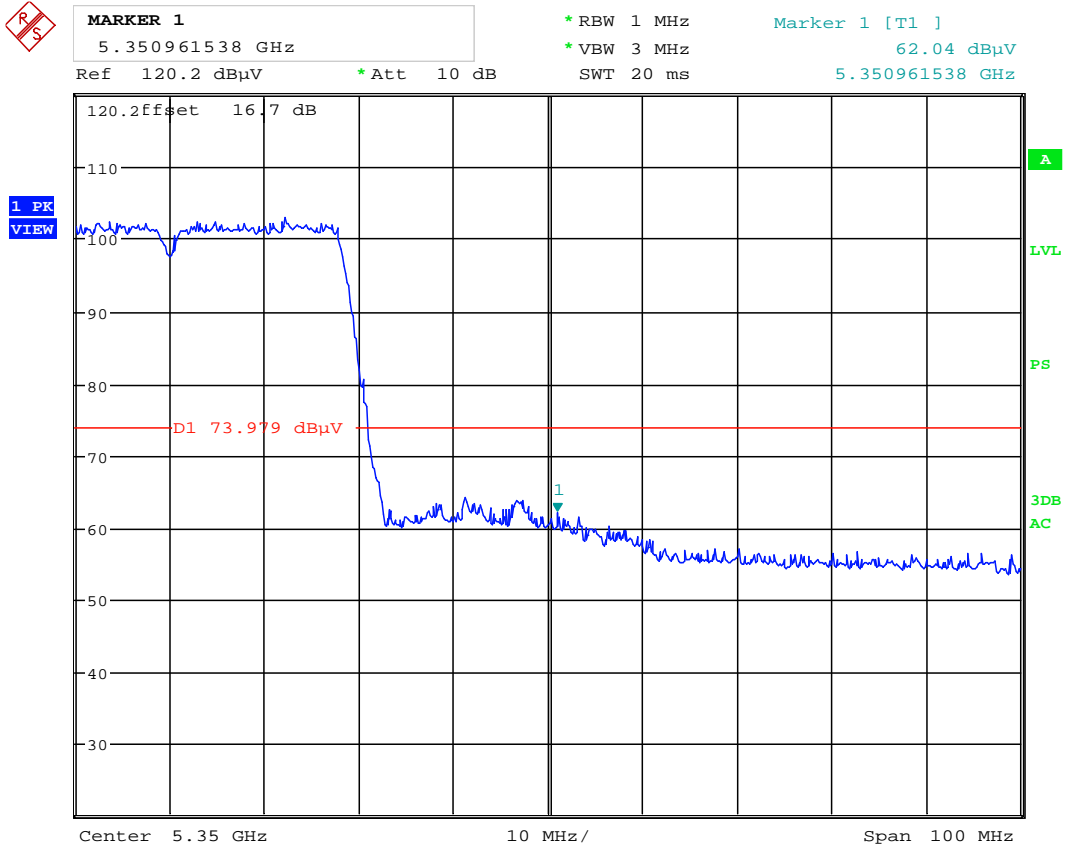
Date: 18.FEB.2014 20:23:20

Plot 6-174. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 154 of 171

Radiated Band Edge Measurements (40MHz BW) (Cont'd)

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



Date: 18.FEB.2014 20:22:59

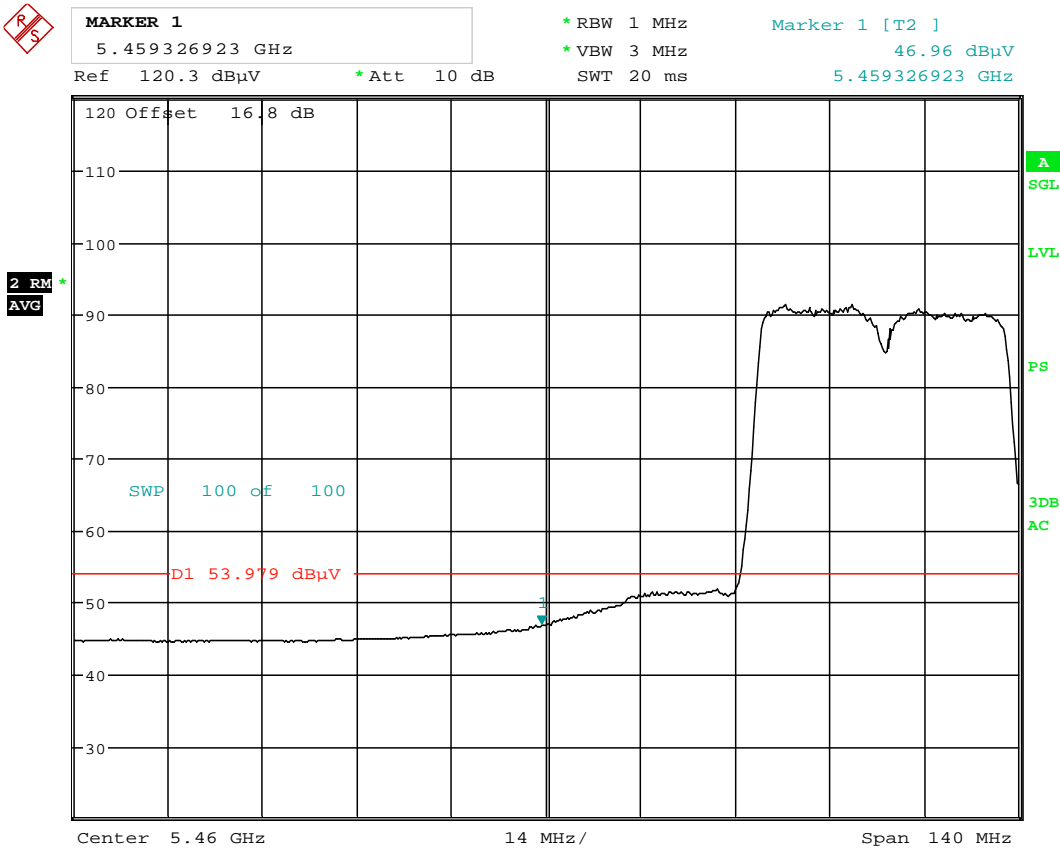
Plot 6-175. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 155 of 171	

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: 18.FEB.2014 20:52:19

Plot 6-176. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

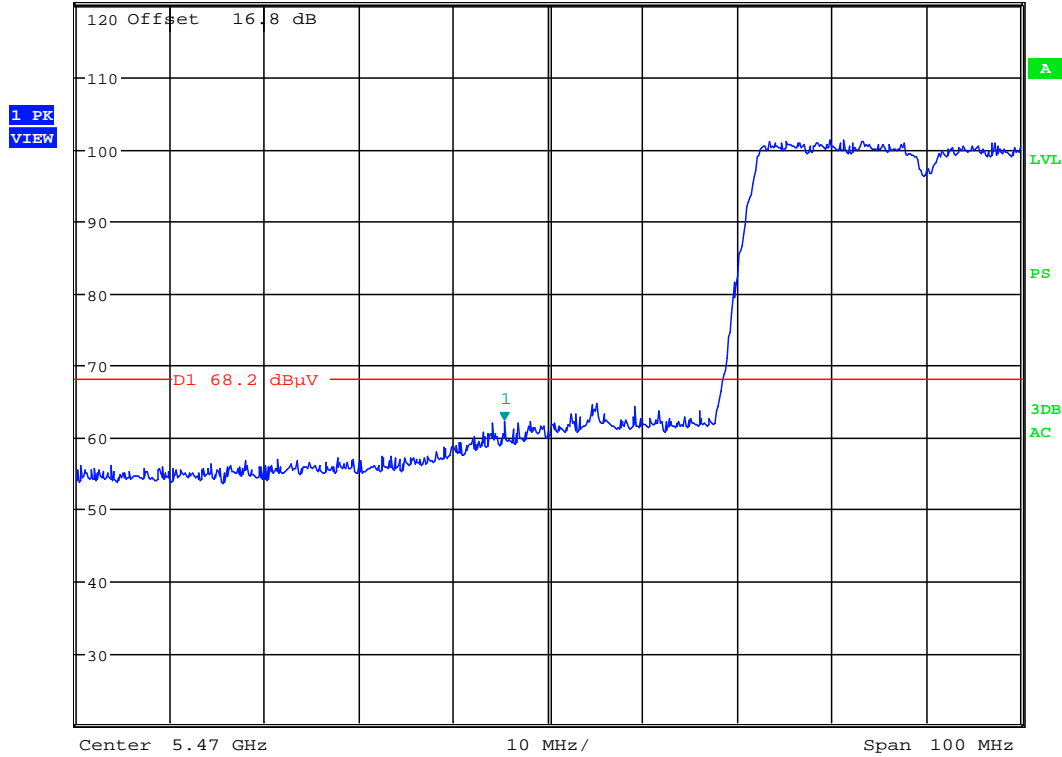
FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 156 of 171	

Radiated Band Edge Measurements (40MHz BW) (Cont'd)

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



MARKER 1
 5.465352564 GHz
 Ref 120.3 dBµV *Att 10 dB
 *RBW 1 MHz Marker 1 [T1]
 *VBW 3 MHz 62.29 dBµV
 SWT 20 ms 5.465352564 GHz



Date: 18.FEB.2014 20:51:59

Plot 6-177. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 157 of 171	

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

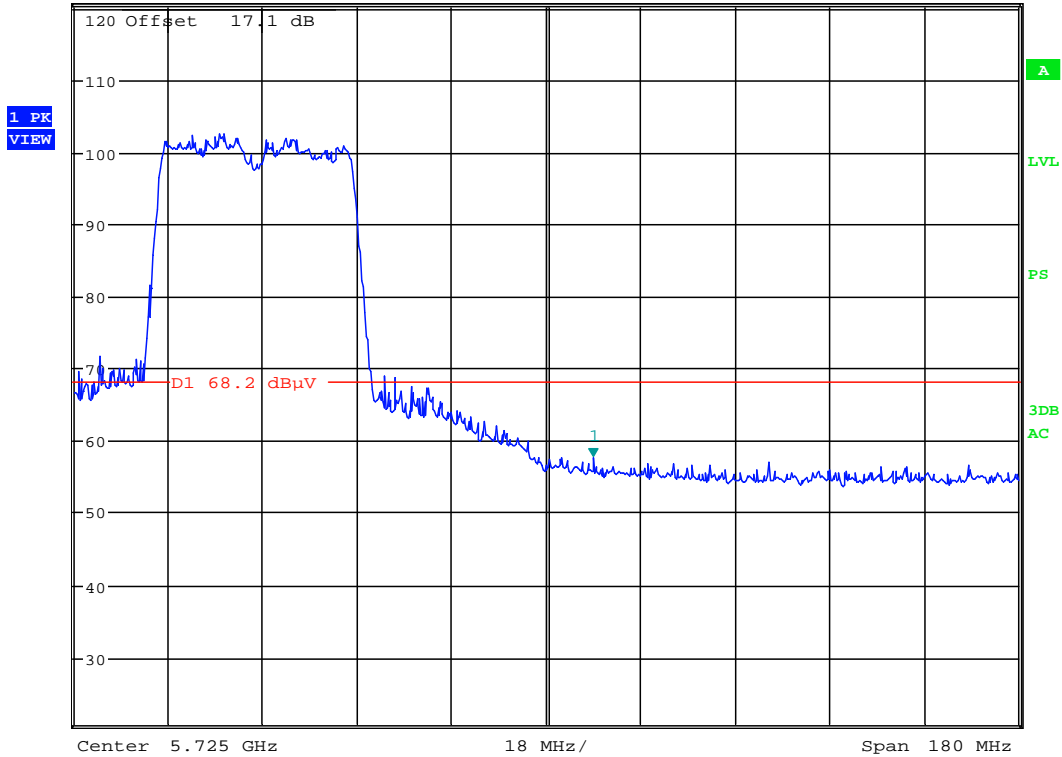
Distance of Measurements: 3 Meters

Operating Frequency: 5670MHz

Channel: 134



MARKER 1
 5.733942308 GHz
 * RBW 1 MHz
 * VBW 3 MHz
 Ref 120.6 dBµV *Att 10 dB SWT 20 ms
 Marker 1 [T1]
 57.69 dBµV
 5.733942308 GHz



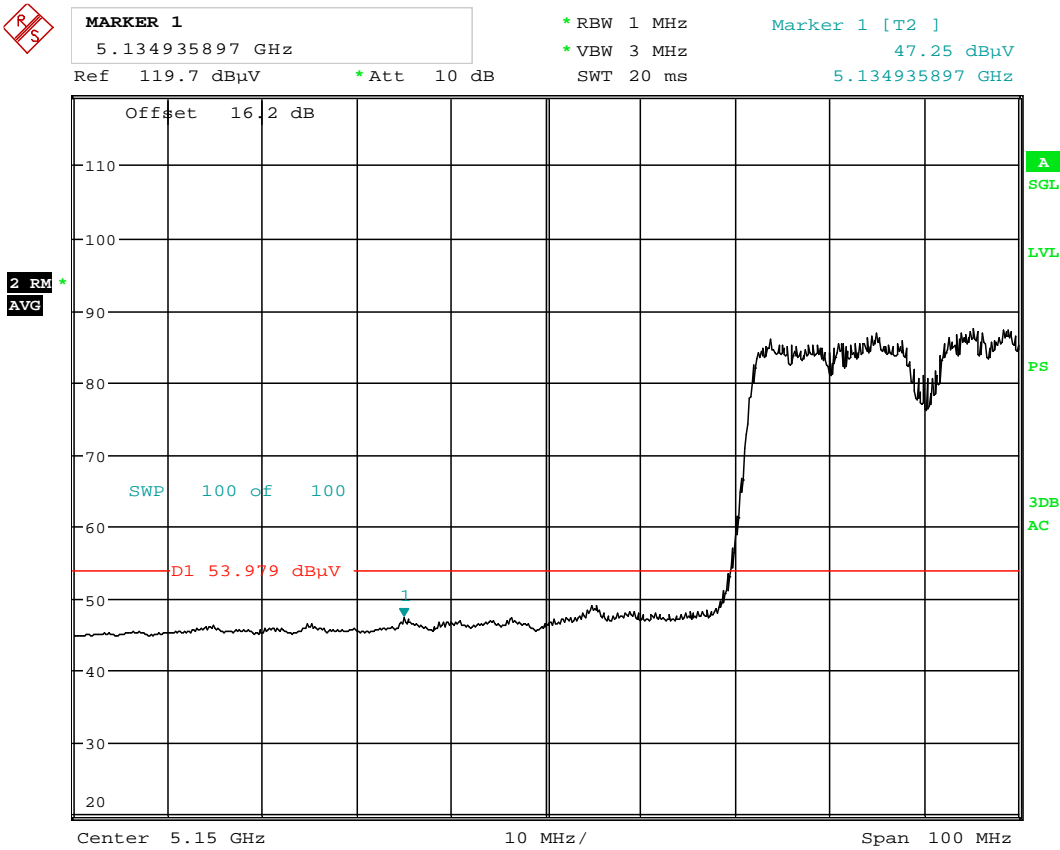
Date: 18.FEB.2014 21:11:33

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

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 158 of 171	

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

Worst Case Mode: 802.11n (80MHz)
 Worst Case Transfer Rate: MCS8
 Distance of Measurements: 3 Meters
 Operating Frequency: 5210MHz
 Channel: 42



Date: 18.FEB.2014 19:09:45

Plot 6-179. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

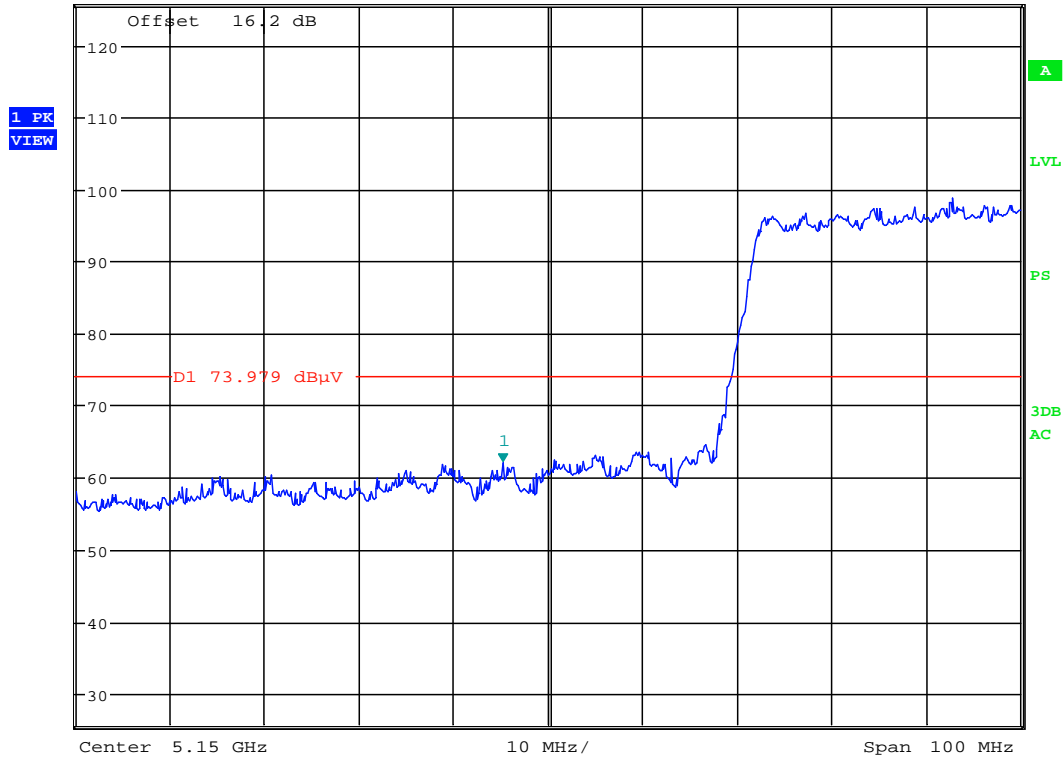
FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 159 of 171	

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

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



MARKER 1		* RBW 1 MHz	Marker 1 [T1]
5.145192308 GHz		* VBW 3 MHz	62.05 dBµV
Ref 125.6 dBµV	* Att 10 dB	SWT 20 ms	5.145192308 GHz



Date: 18.FEB.2014 19:09:12

Plot 6-180. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 160 of 171	

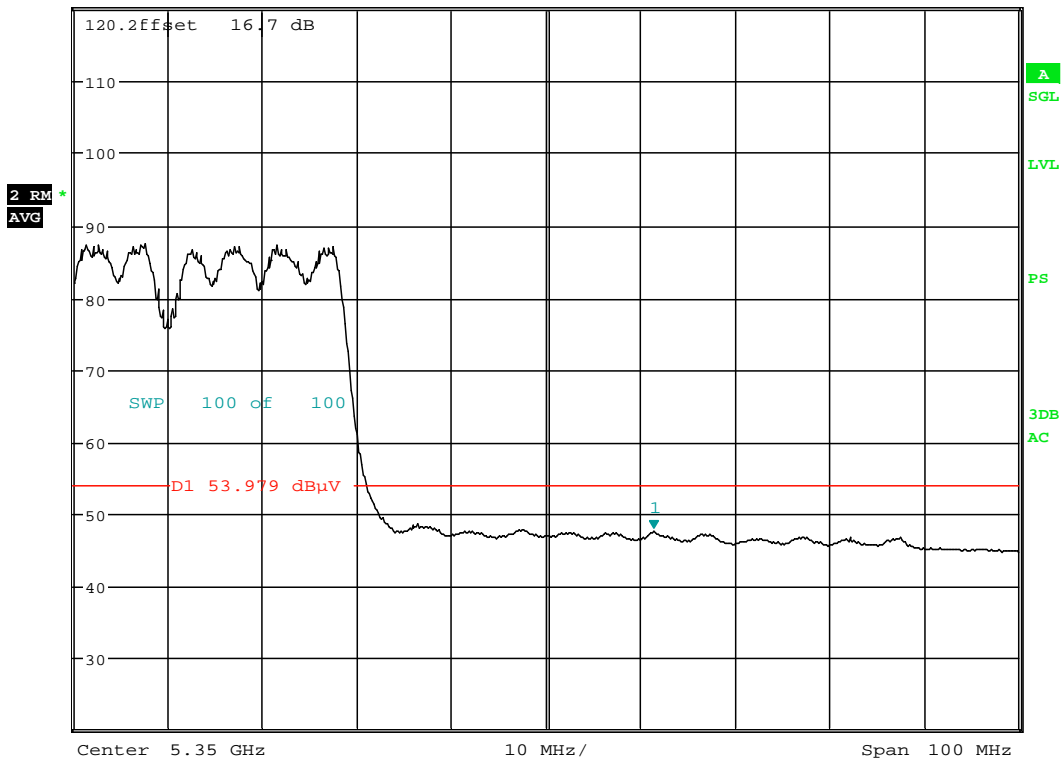
Radiated Band Edge Measurements (80MHz BW) (Cont'd)

§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



MARKER 1
 5.361378205 GHz
 Ref 120.2 dBµV * Att 10 dB SWT 20 ms
 * RBW 1 MHz * VBW 3 MHz
 Marker 1 [T2] 47.75 dBµV
 5.361378205 GHz

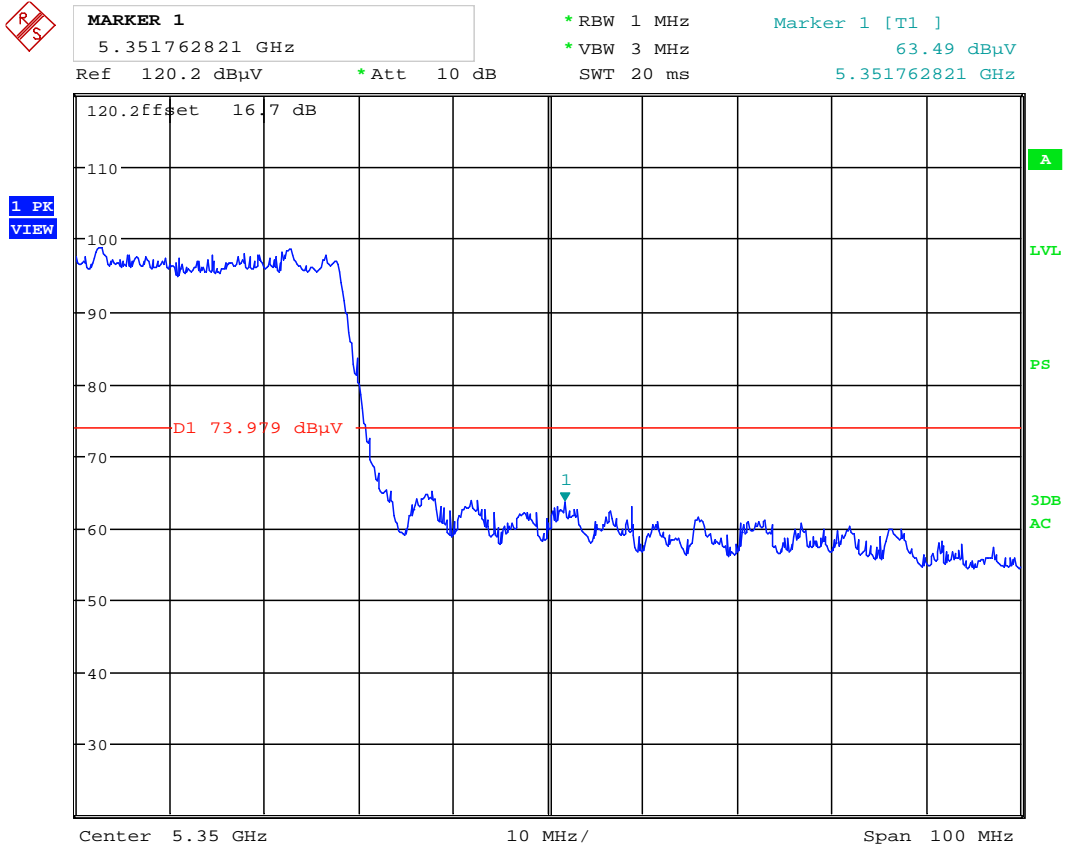


Date: 18.FEB.2014 20:25:13

Plot 6-181. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2A)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 161 of 171	

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



Date: 18.FEB.2014 20:24:40

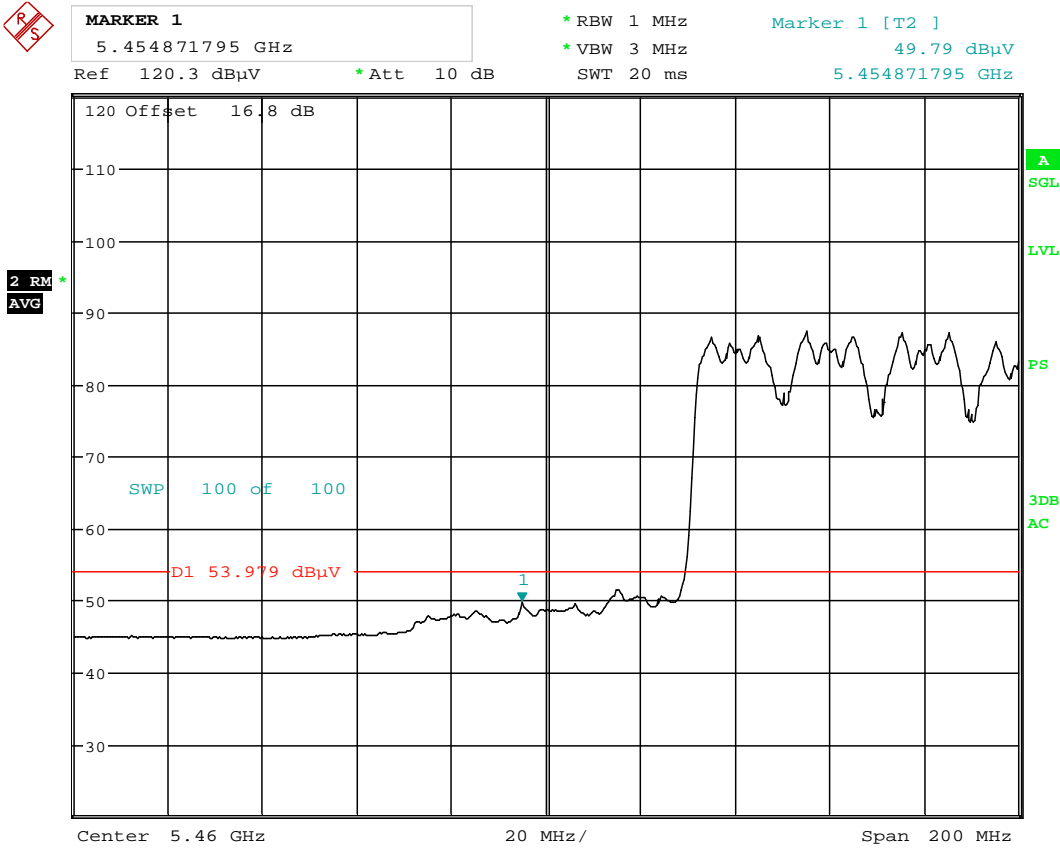
Plot 6-182. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2A)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 162 of 171	

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: 18.FEB.2014 20:54:10

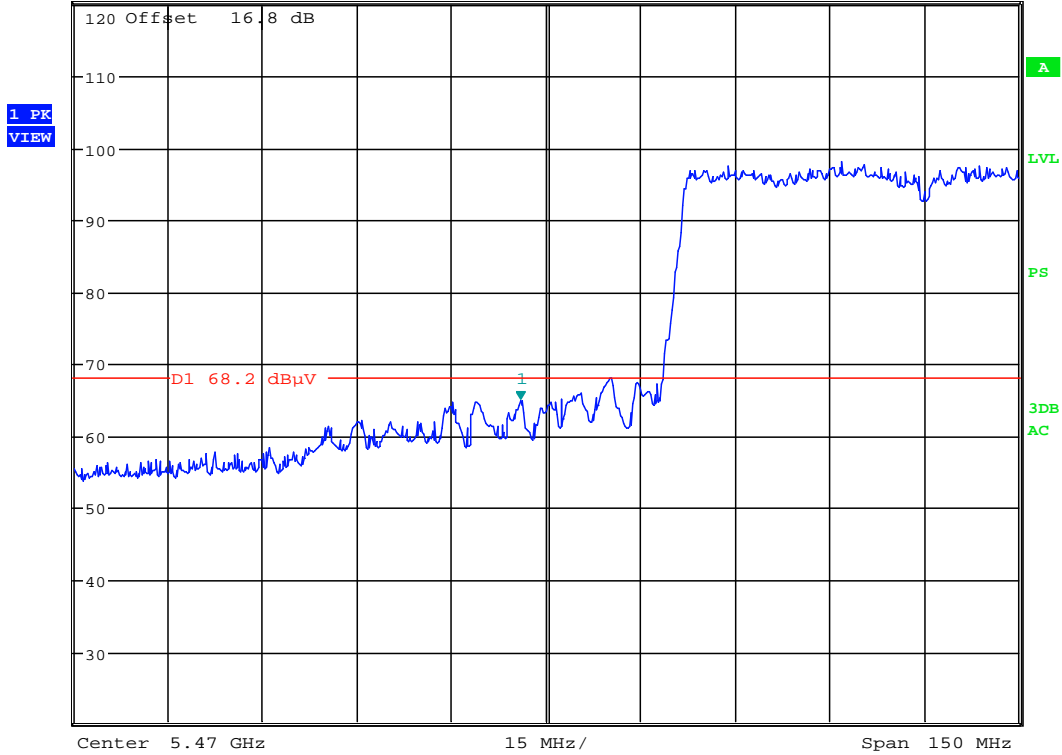
Plot 6-183. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 163 of 171	

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



MARKER 1
5.465913462 GHz
Ref 120.3 dBµV *Att 10 dB SWT 20 ms
*RBW 1 MHz Marker 1 [T1] 64.97 dBµV
*VBW 3 MHz 5.465913462 GHz



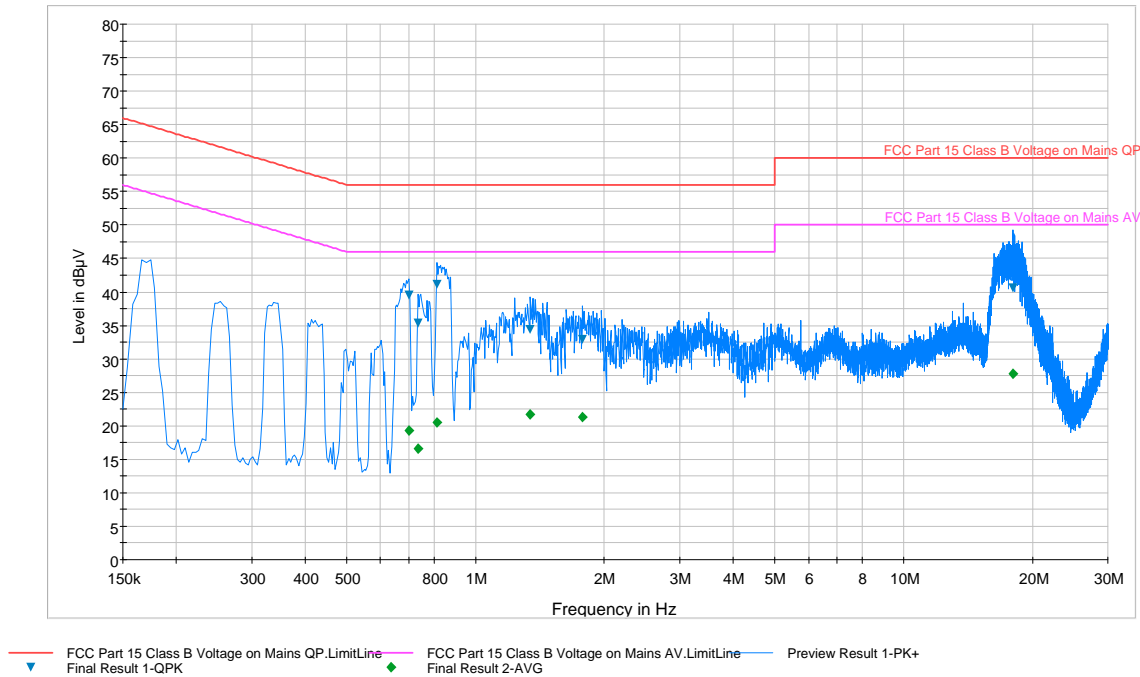
Date: 18.FEB.2014 20:53:37

Plot 6-184. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 2C)

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset	Page 164 of 171	

6.17 Line-Conducted Test Data

§15.207; RSS-Gen [7.2.2]



Plot 6-185. 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
0.698	L1	0.1	39.50	56.00	16.50	19.30	46.00	26.70
0.734	L1	0.1	35.30	56.00	20.70	16.60	46.00	29.40
0.814	L1	0.1	41.20	56.00	14.80	20.50	46.00	25.50
1.342	L1	0.1	34.50	56.00	21.50	21.80	46.00	24.20
1.778	L1	0.1	33.00	56.00	23.00	21.30	46.00	24.70
17.982	L1	0.6	40.50	60.00	19.50	27.80	50.00	22.20

Table 6-52. Line Conducted Data with 802.11a UNII Band 1 (L1)

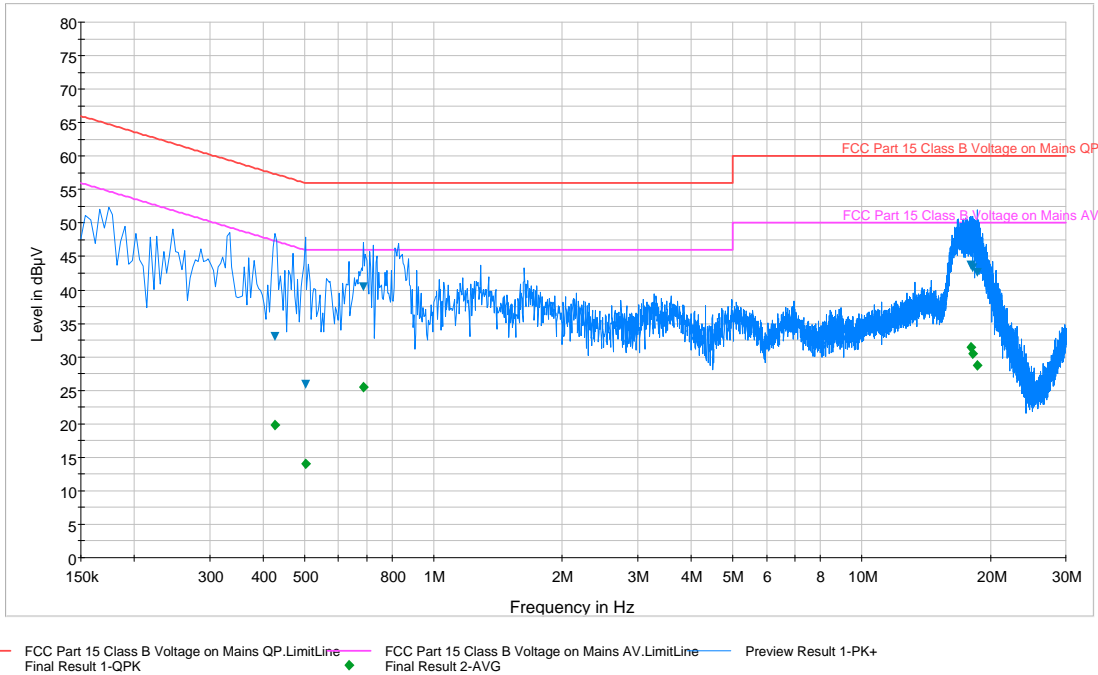
Notes:

- 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/AV Limit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.
- Deviations to the Specifications: None.

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 165 of 171

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



Plot 6-186. 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
0.426	N	0.1	33.10	57.30	24.20	19.90	47.30	27.40
0.502	N	0.1	25.90	56.00	30.10	14.10	46.00	31.90
0.686	N	0.1	40.50	56.00	15.50	25.50	46.00	20.50
17.986	N	0.6	43.70	60.00	16.30	31.40	50.00	18.60
18.190	N	0.6	43.20	60.00	16.80	30.50	50.00	19.50
18.650	N	0.6	42.60	60.00	17.40	28.70	50.00	21.30

Table 6-53. Line Conducted Data with 802.11a UNII Band 1 (N)

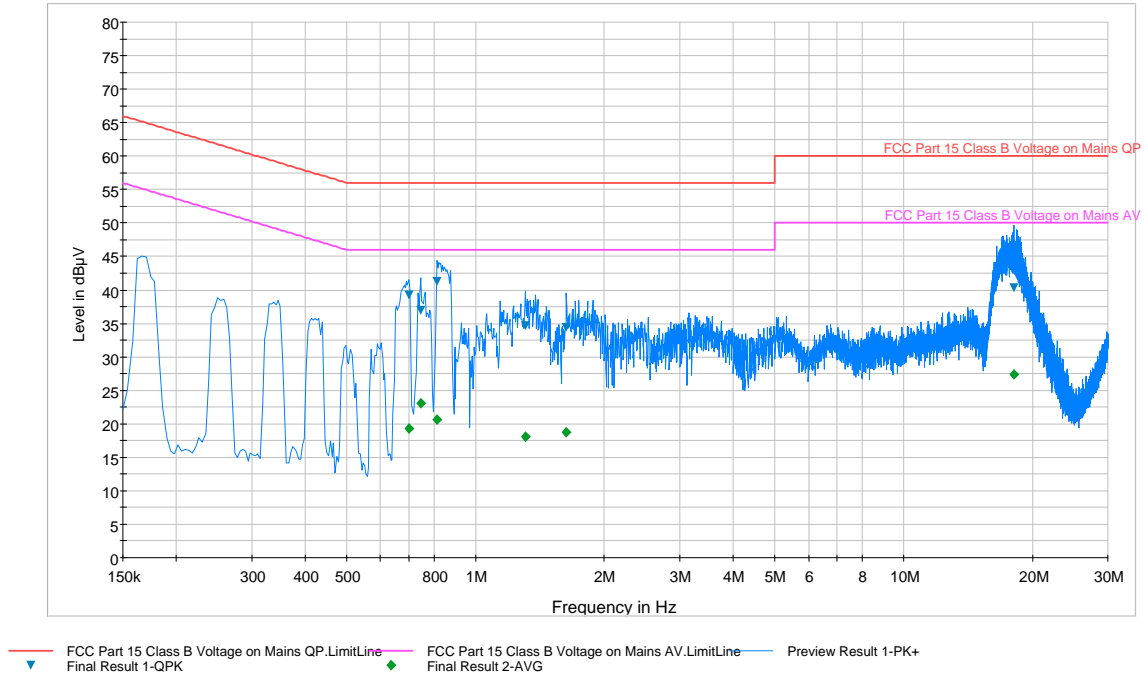
Notes:

- 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: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 166 of 171

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



Plot 6-187. 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
0.698	L1	0.1	39.30	56.00	16.70	19.30	46.00	26.70
0.746	L1	0.1	36.90	56.00	19.10	23.00	46.00	23.00
0.814	L1	0.1	41.30	56.00	14.70	20.60	46.00	25.40
1.306	L1	0.1	34.70	56.00	21.30	18.10	46.00	27.90
1.630	L1	0.1	34.40	56.00	21.60	18.80	46.00	27.20
18.134	L1	0.6	40.30	60.00	19.70	27.40	50.00	22.60

Table 6-54. Line Conducted Data with 802.11a UNII Band 2A (L1)

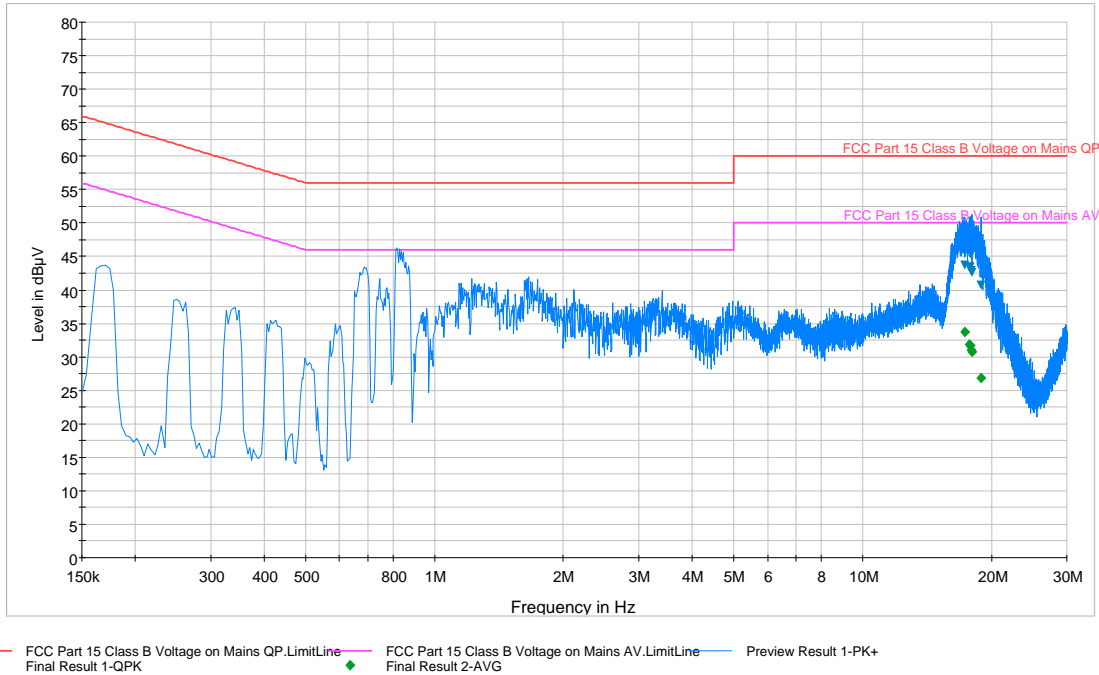
Notes:

- 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.

FCC ID: A3LSCL23	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 167 of 171

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



Plot 6-188. 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
17.330	N	0.6	43.80	60.00	16.20	33.70	50.00	16.30
17.798	N	0.6	43.40	60.00	16.60	31.80	50.00	18.20
17.822	N	0.6	43.50	60.00	16.50	31.60	50.00	18.40
17.930	N	0.6	42.90	60.00	17.10	31.00	50.00	19.00
17.982	N	0.6	42.60	60.00	17.40	30.70	50.00	19.30
18.882	N	0.6	40.80	60.00	19.20	26.90	50.00	23.10

Table 6-55. Line Conducted Data with 802.11a UNII Band 2A (N)

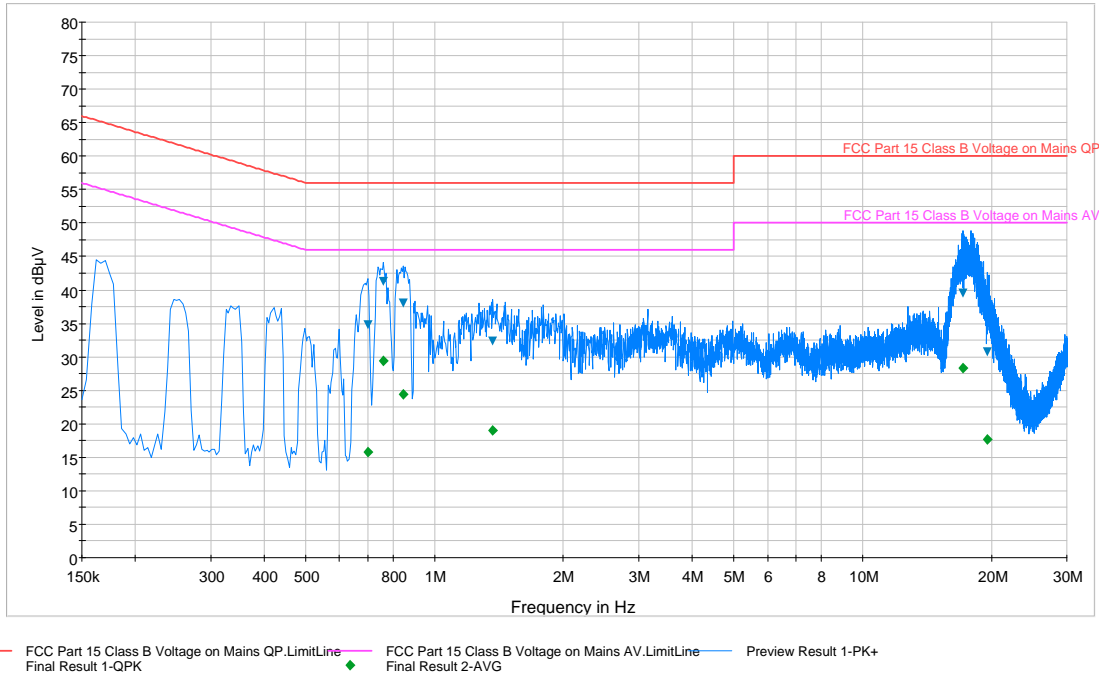
Notes:

- 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/AV Limit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.
- Deviations to the Specifications: None.

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 168 of 171

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



Plot 6-189. 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
0.698	L1	0.1	34.80	56.00	21.20	15.80	46.00	30.20
0.758	L1	0.1	41.30	56.00	14.70	29.50	46.00	16.50
0.846	L1	0.1	38.00	56.00	18.00	24.40	46.00	21.60
1.370	L1	0.1	32.30	56.00	23.70	19.00	46.00	27.00
17.178	L1	0.5	39.50	60.00	20.50	28.30	50.00	21.70
19.558	L1	0.6	30.70	60.00	29.30	17.70	50.00	32.30

Table 6-56. Line Conducted Plot with 802.11a UNII Band 2C (L1)

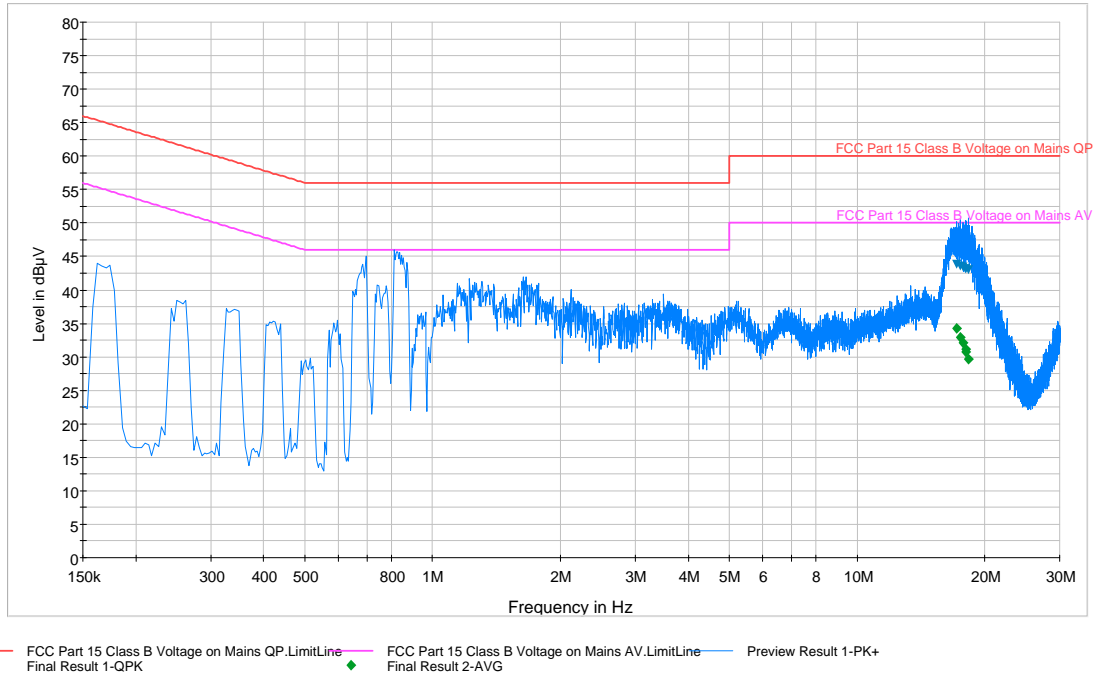
Notes:

- 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.

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 169 of 171

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



Plot 6-190. 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
17.198	N	0.6	43.90	60.00	16.10	34.20	50.00	15.80
17.506	N	0.6	43.60	60.00	16.40	33.00	50.00	17.00
17.742	N	0.6	43.50	60.00	16.50	32.10	50.00	17.90
17.990	N	0.6	43.20	60.00	16.80	31.10	50.00	18.90
18.034	N	0.6	43.20	60.00	16.80	30.80	50.00	19.20
18.282	N	0.6	43.00	60.00	17.00	29.70	50.00	20.30

Table 6-57. 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/AV Limit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.
- Deviations to the Specifications: None.

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 170 of 171

7.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSCL23** is in compliance with Part 15E of the FCC Rules.

FCC ID: A3LSCL23		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1402110368.A3L	Test Dates: 02/17 - 02/24/14	EUT Type: Portable Handset		Page 171 of 171