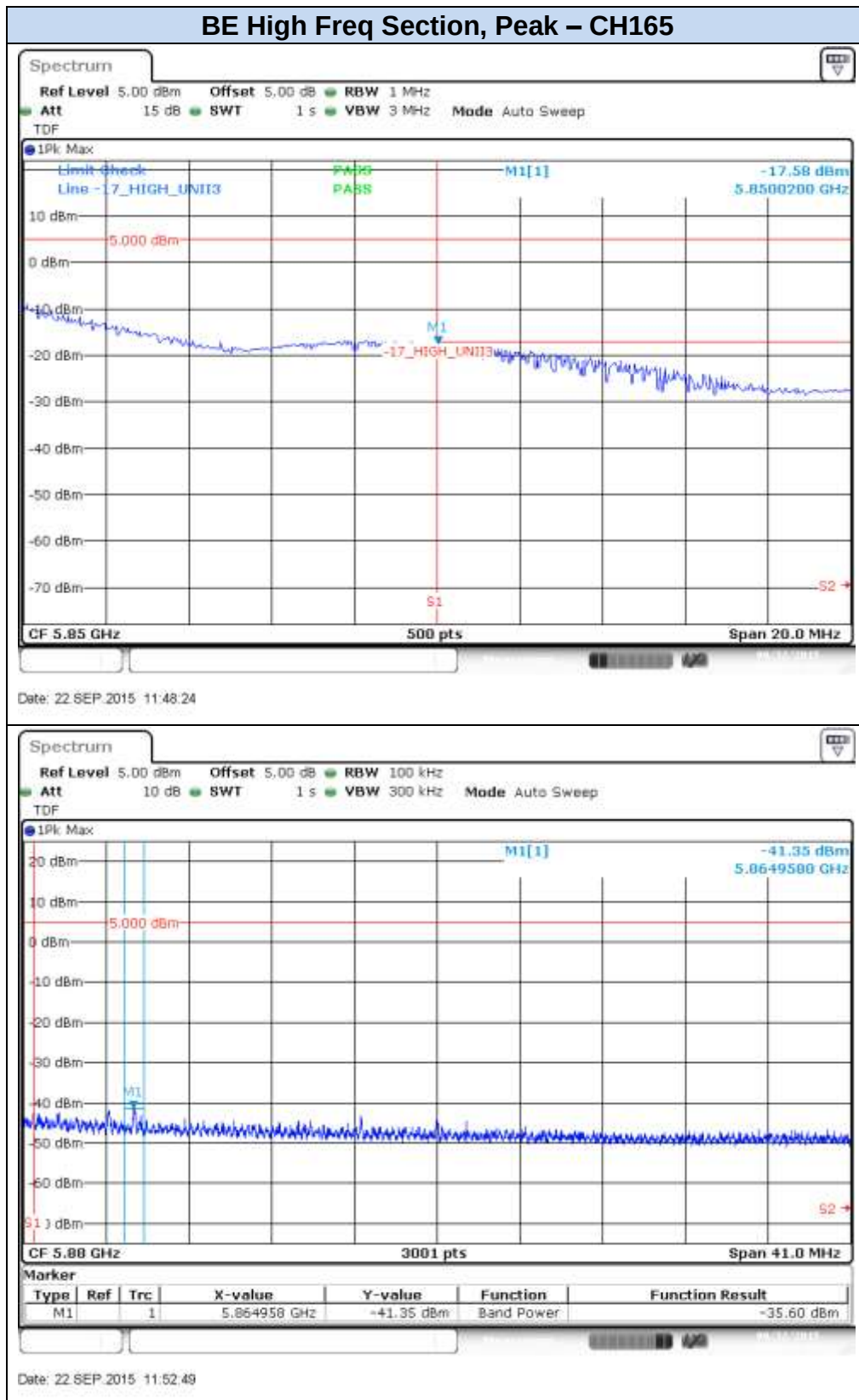
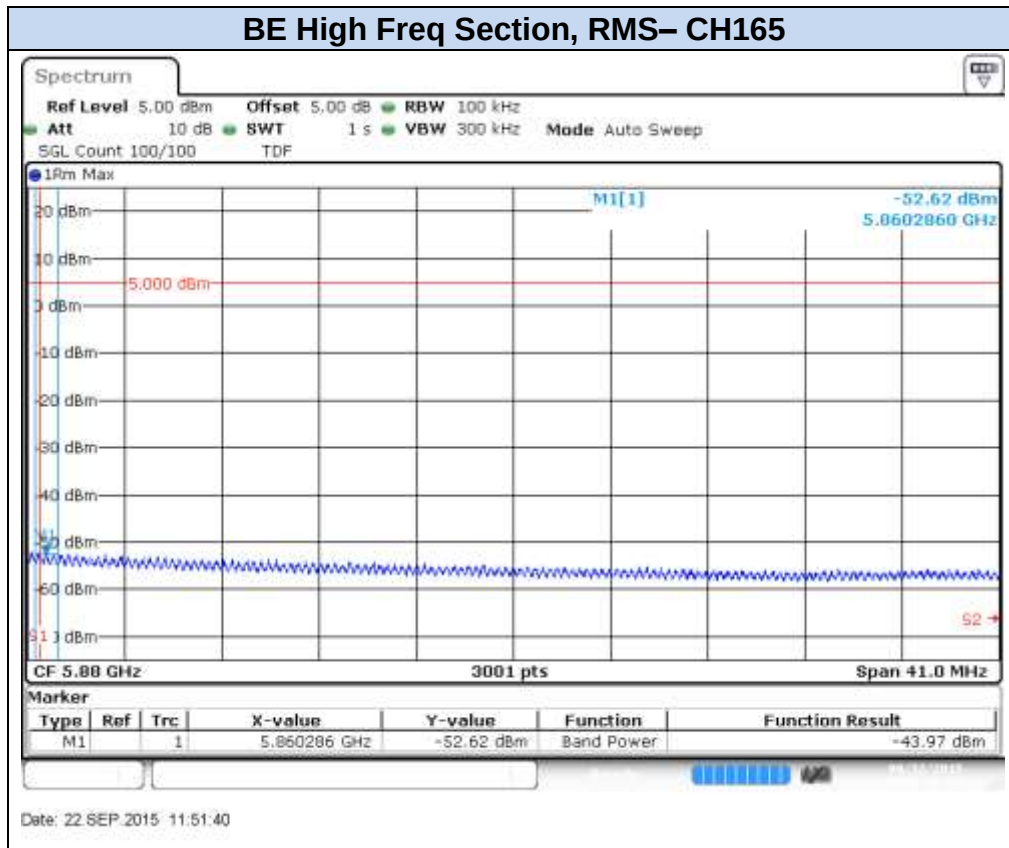
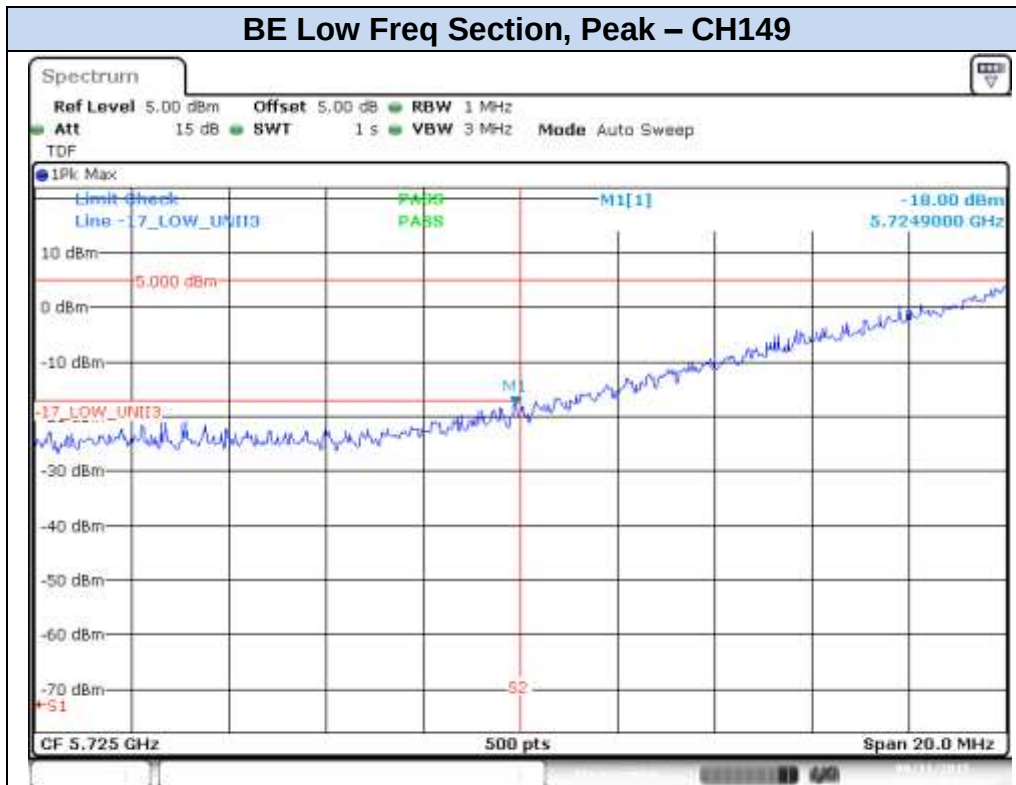




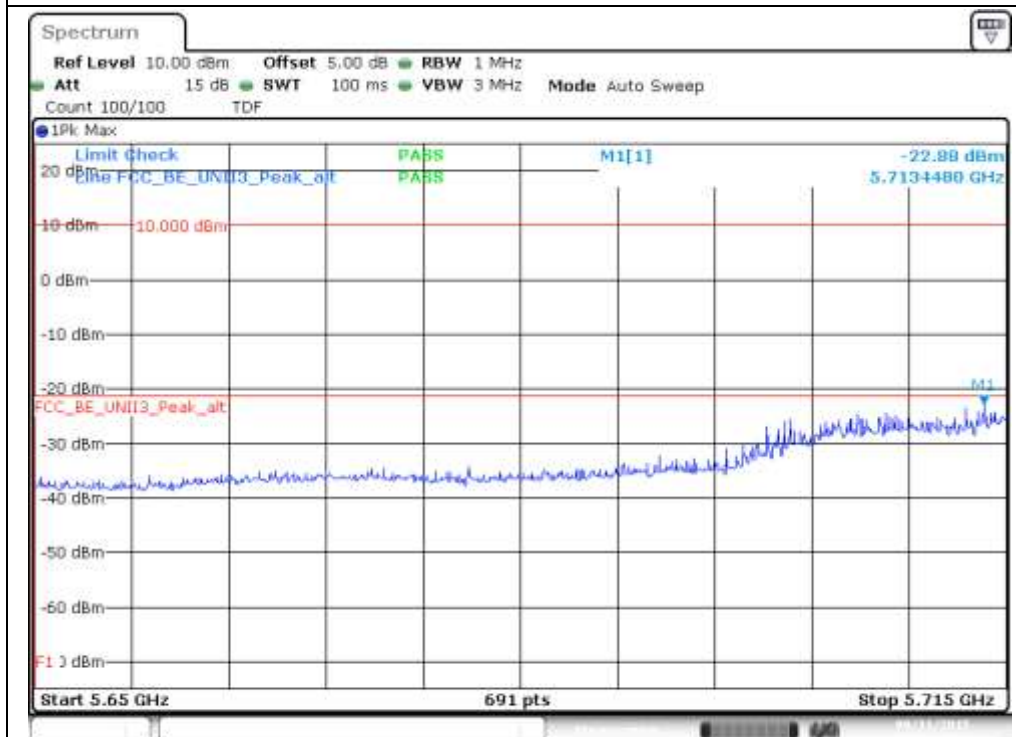


802.11a, 6Mbps – Chain B

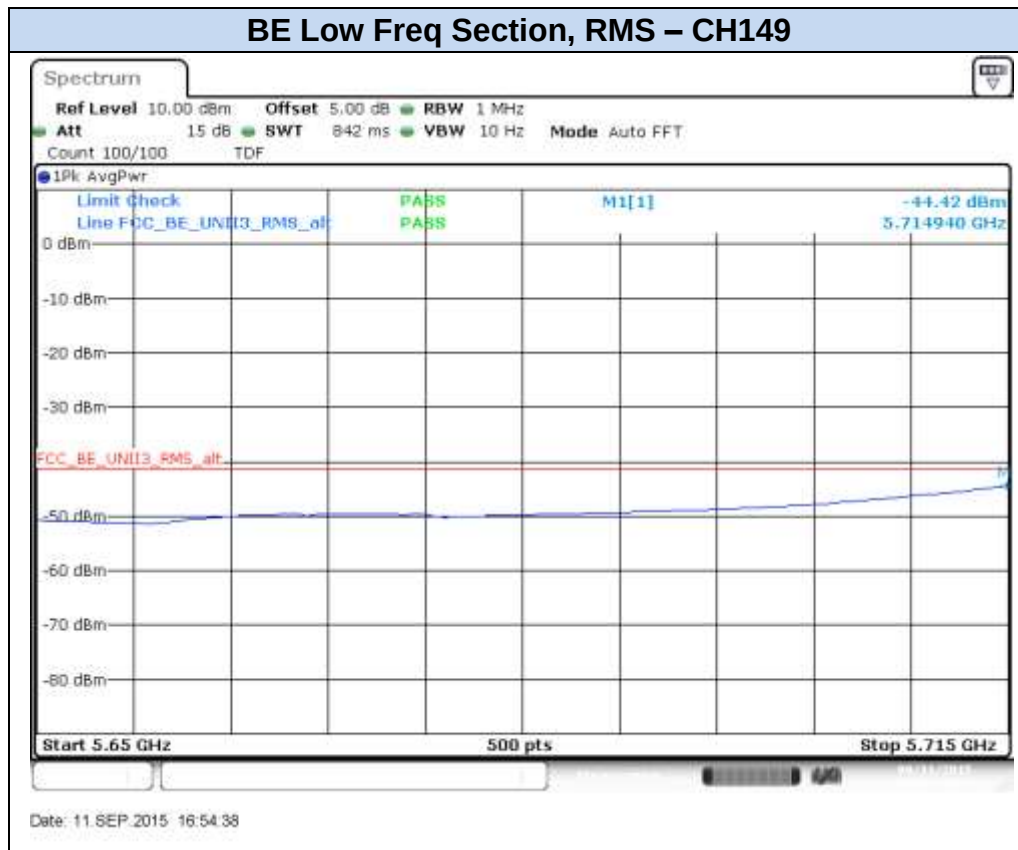
BE Low Freq Section, Peak – CH149

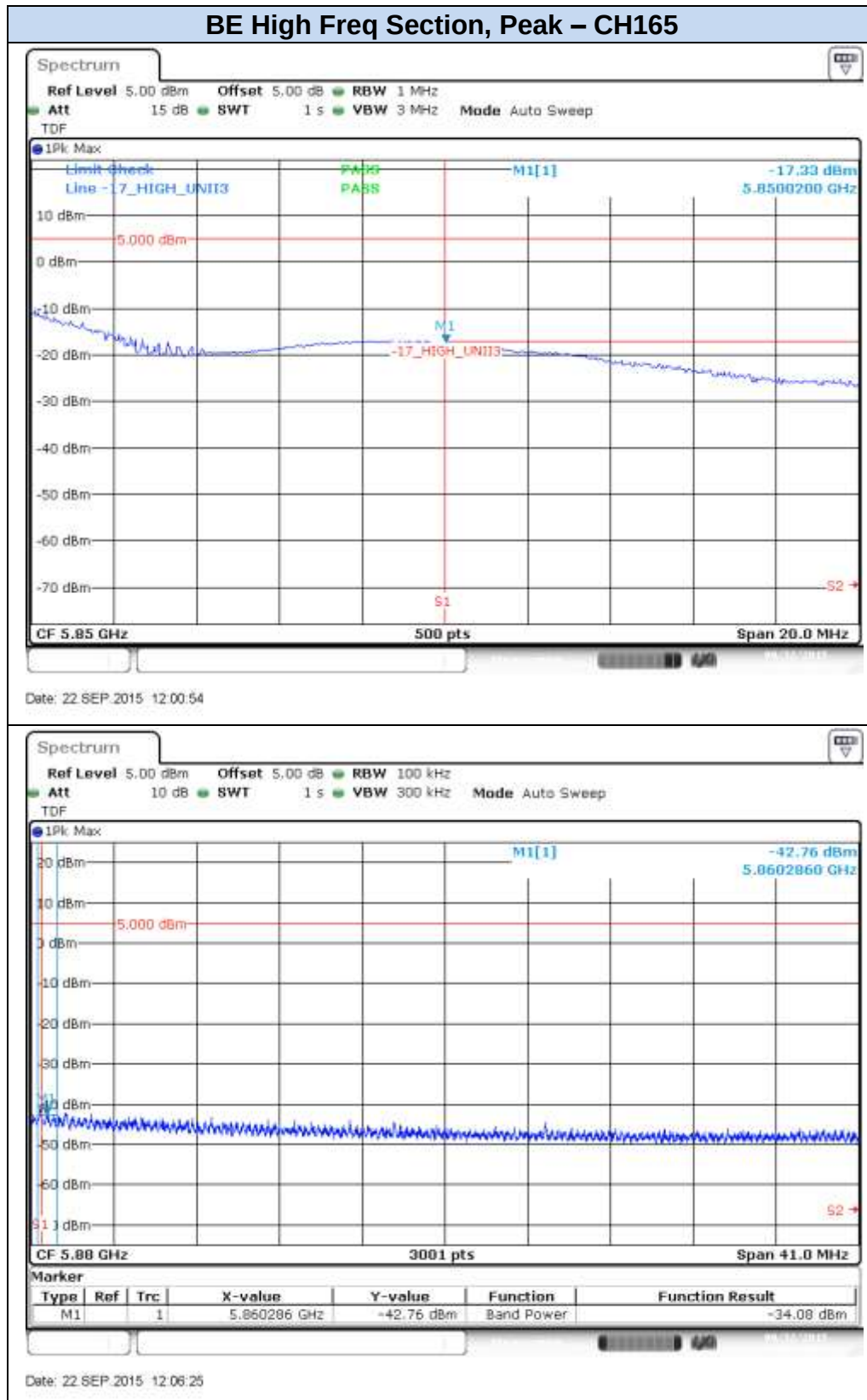


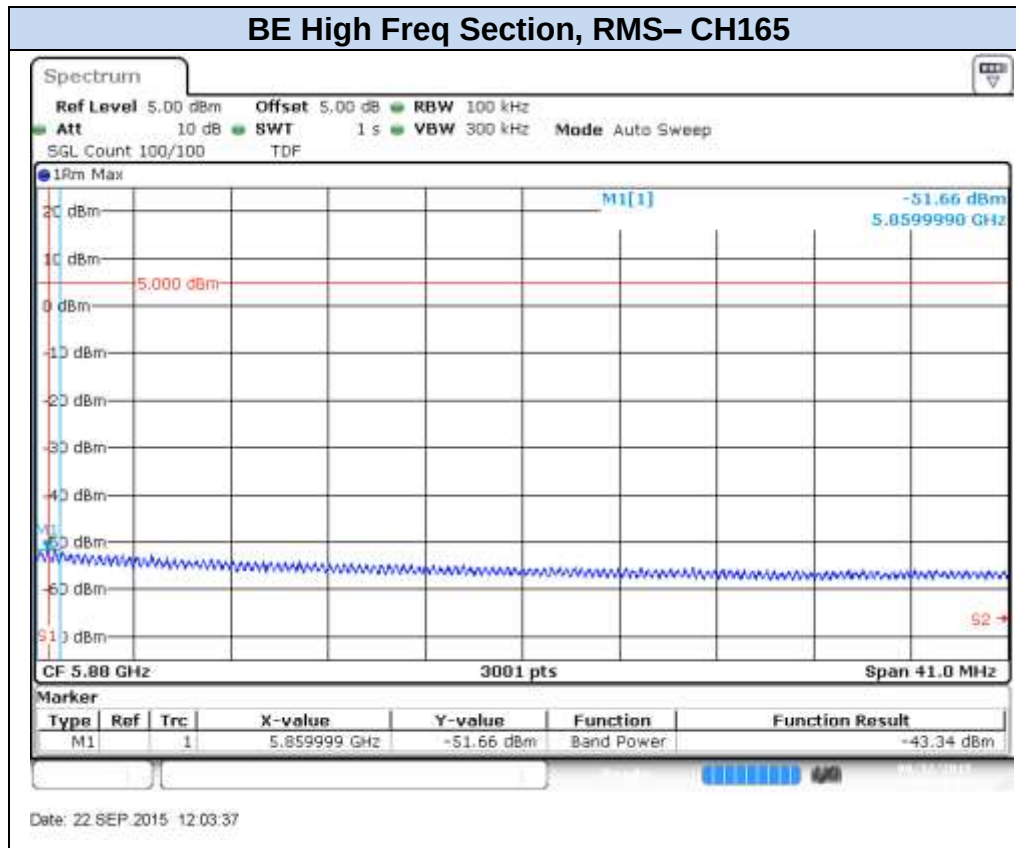
Date: 11.SEP.2015 16:48:56



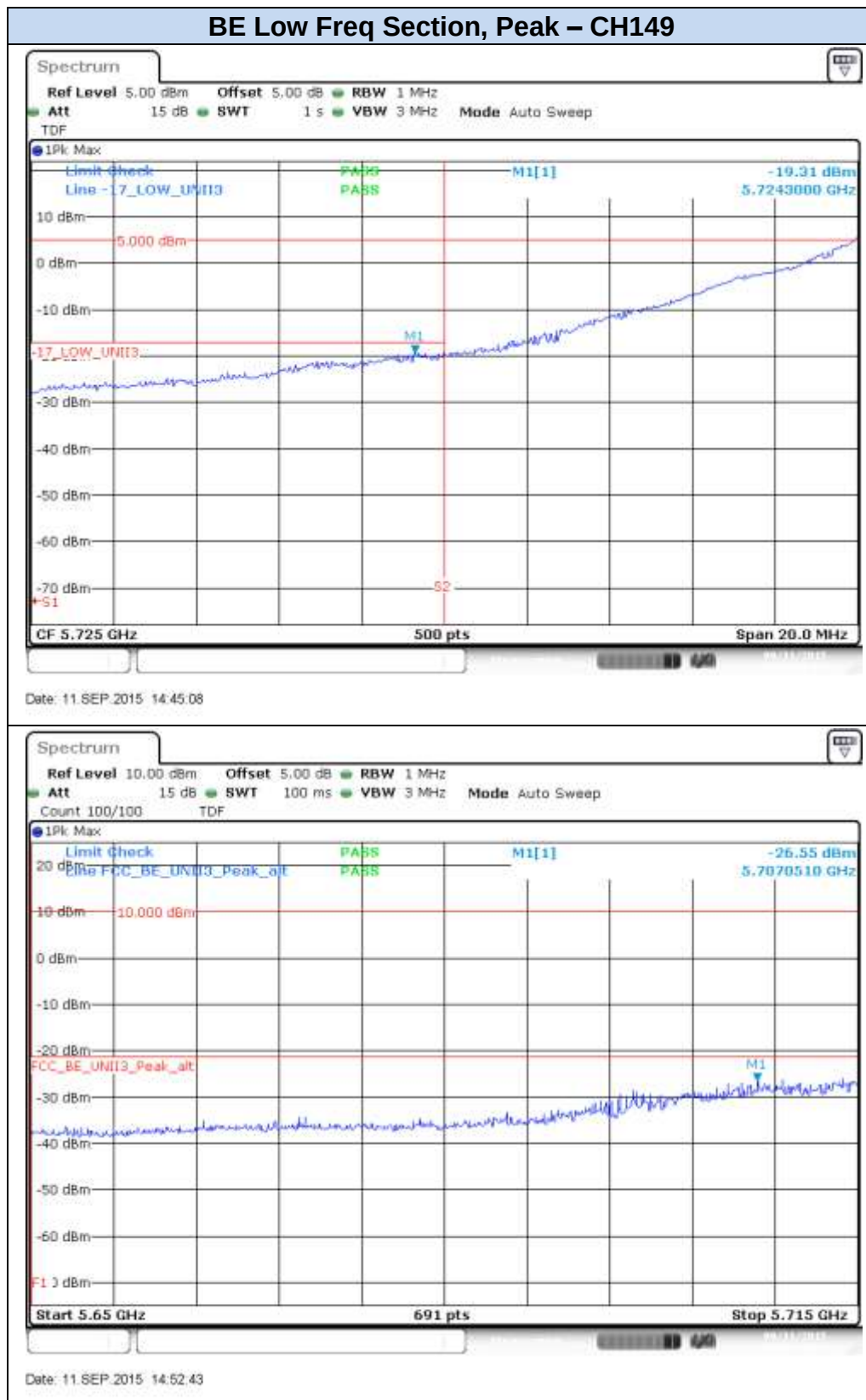
Date: 11.SEP.2015 16:55:35

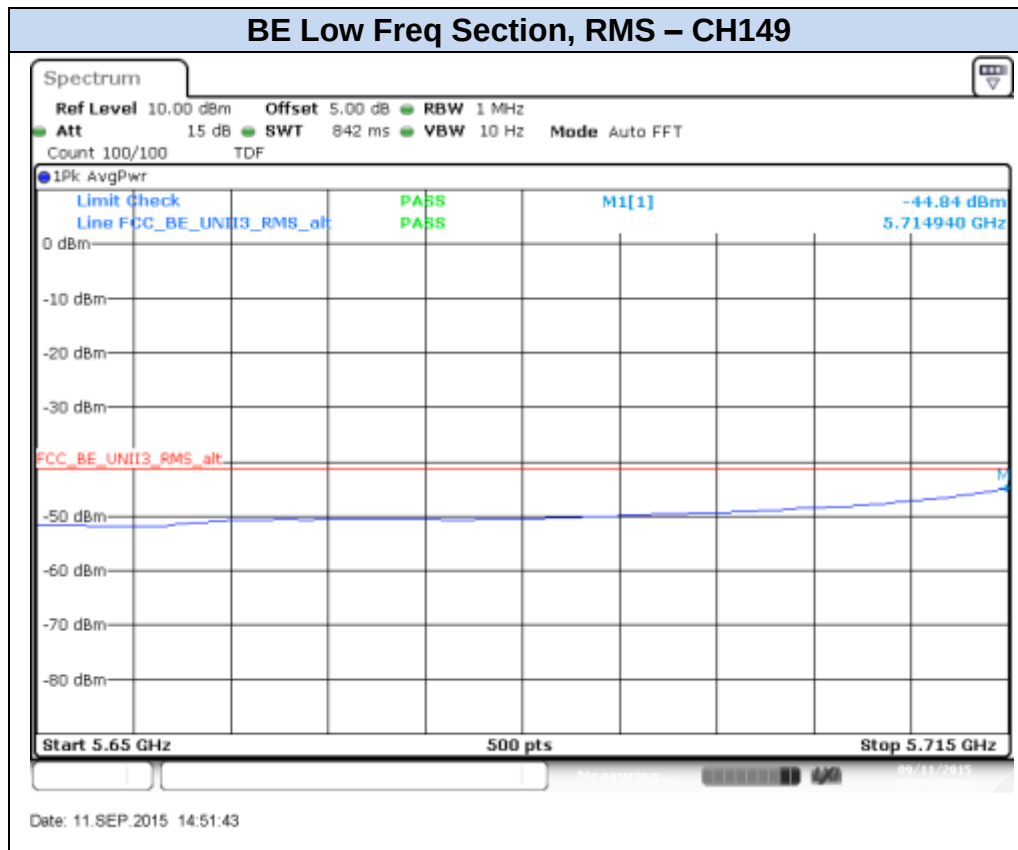




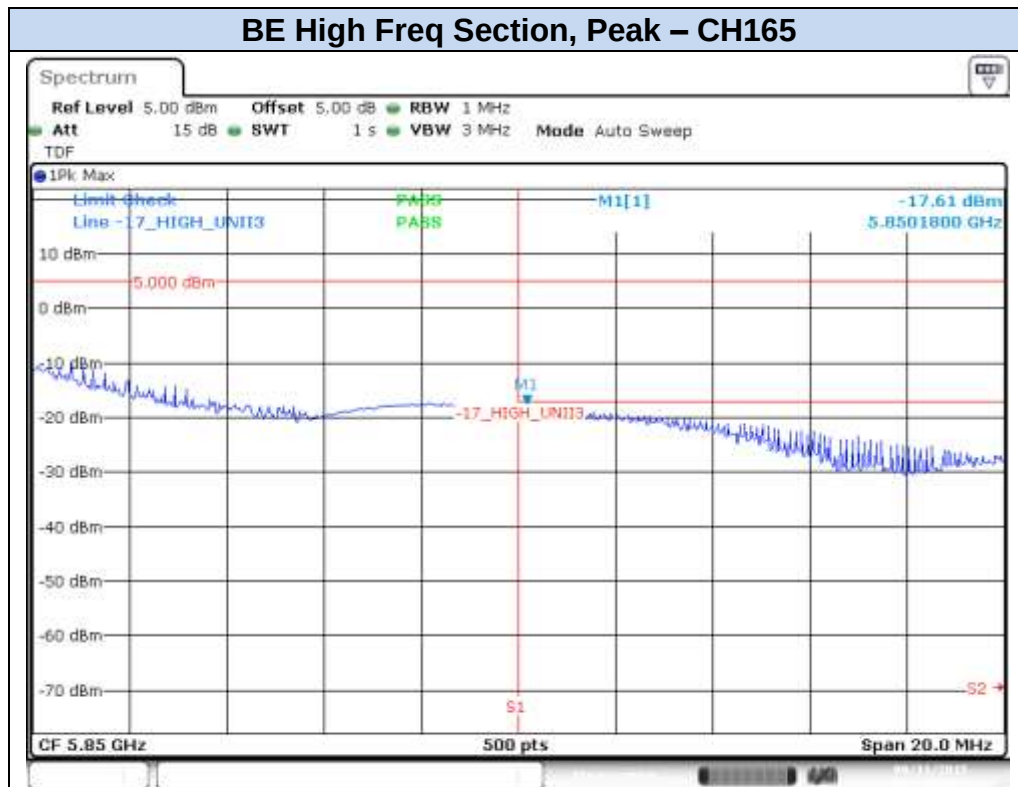


802.11n20, HT0 (SISO) – Chain A

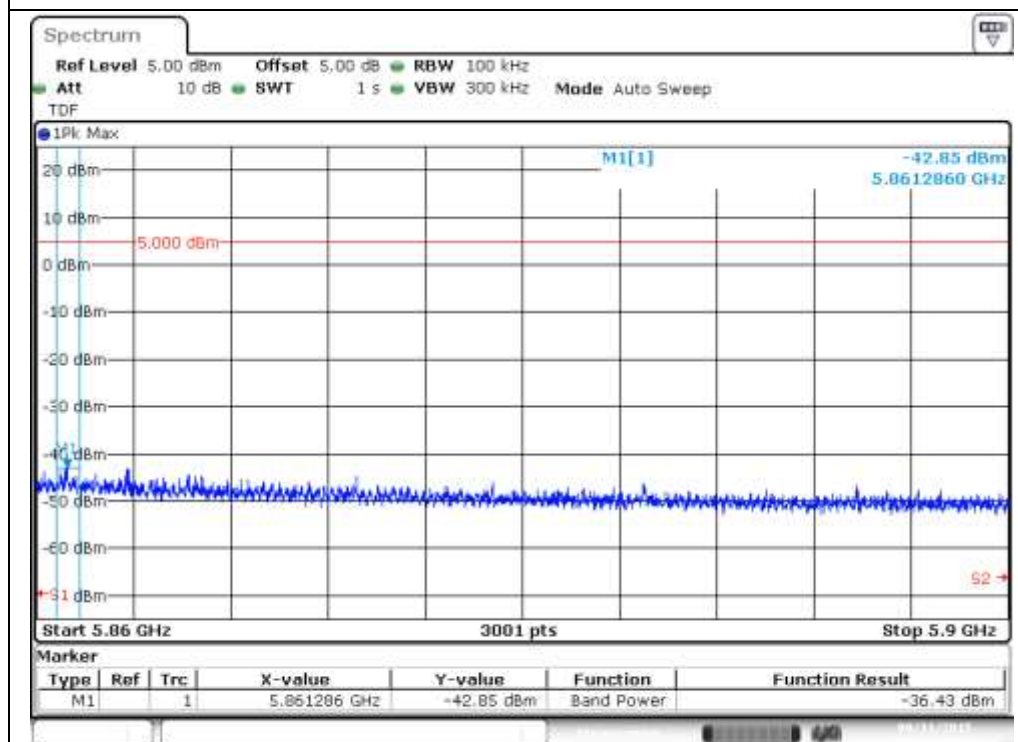




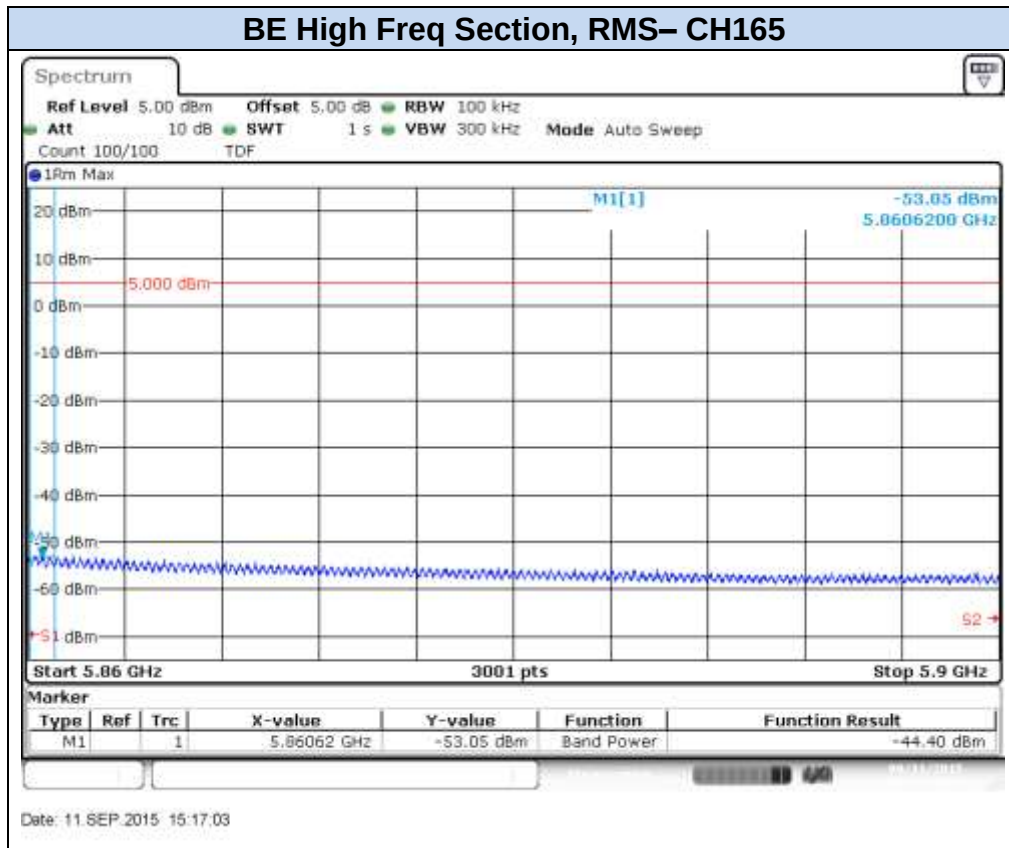
BE High Freq Section, Peak – CH165



Date: 11.SEP.2015 15:14:45

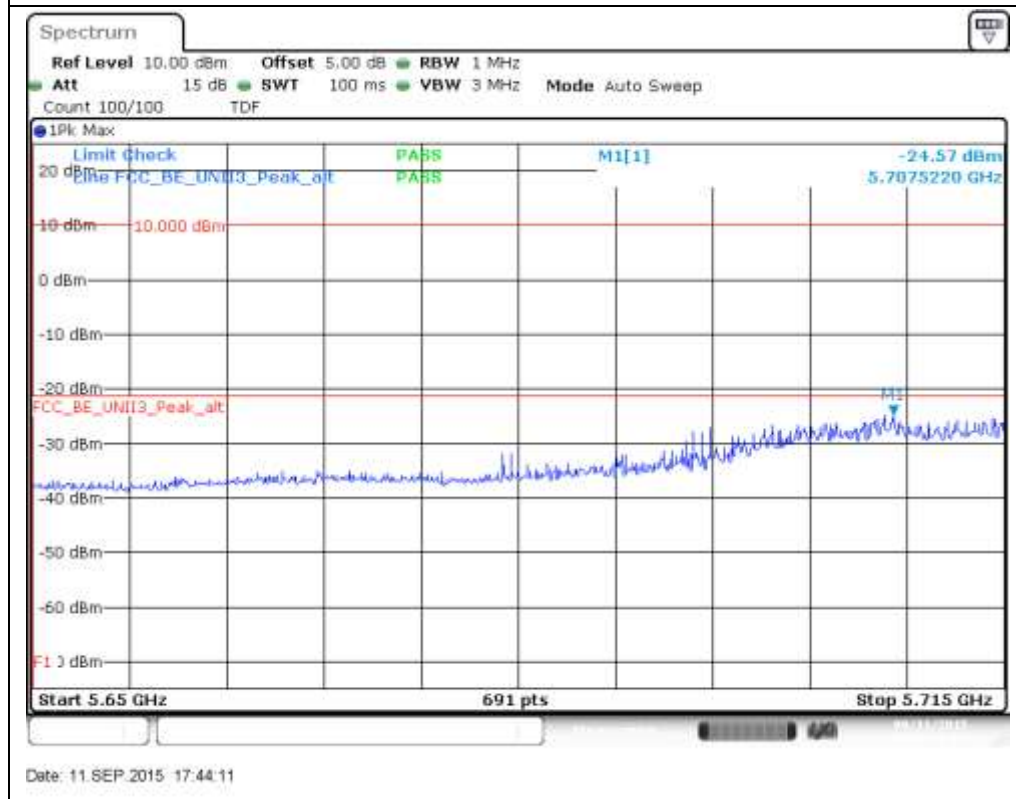
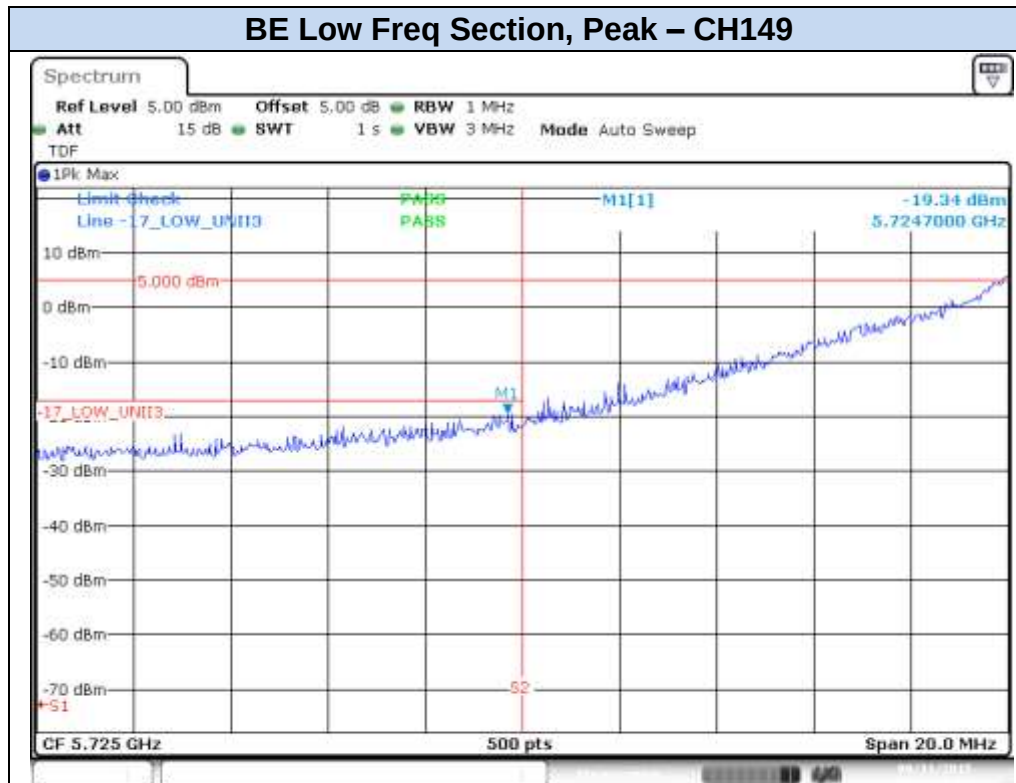


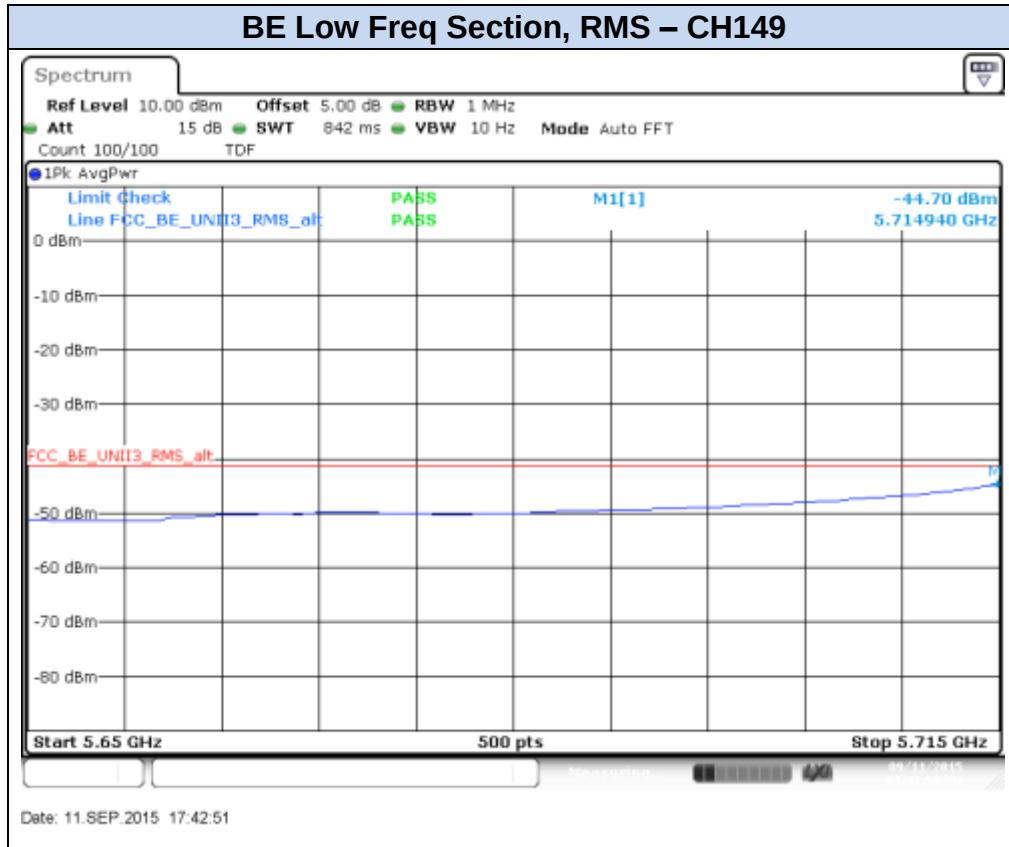
Date: 11.SEP.2015 15:17:43

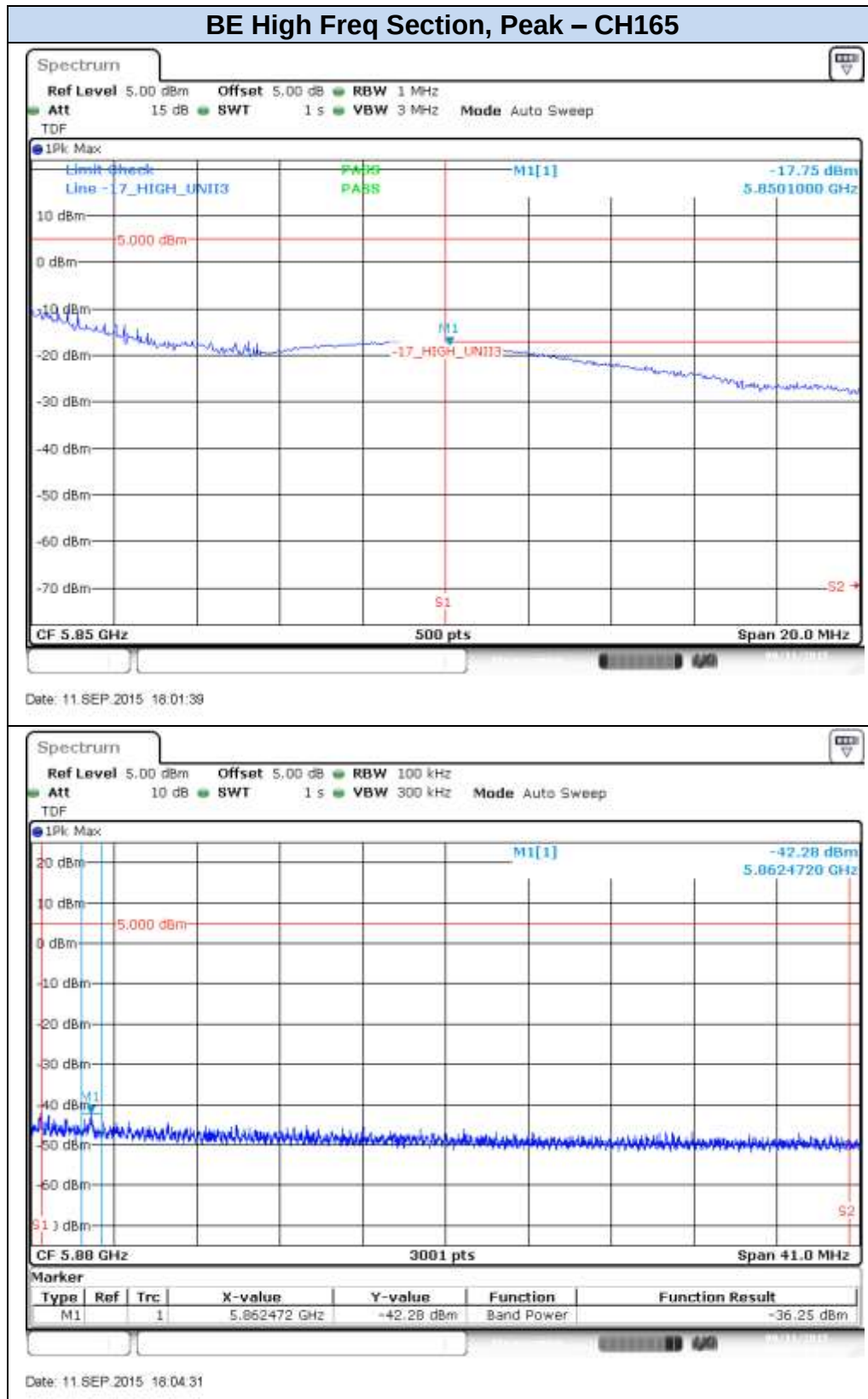


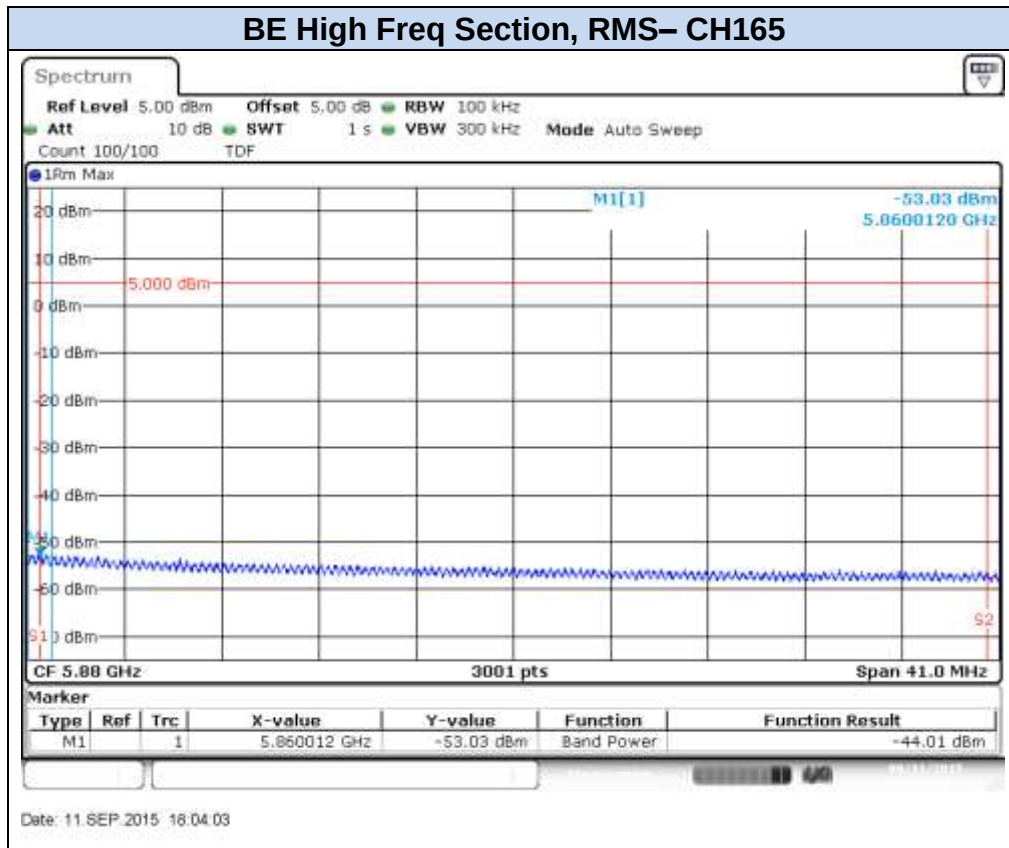
802.11n20, HT0 (SISO) – Chain B

BE Low Freq Section, Peak – CH149



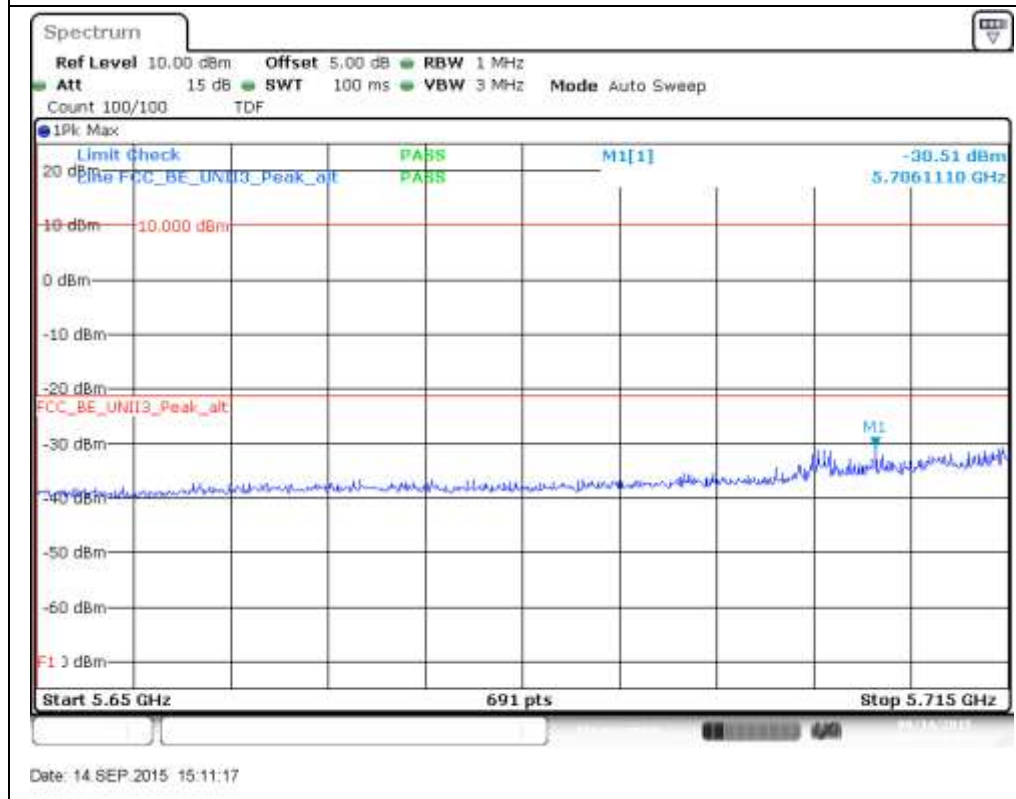
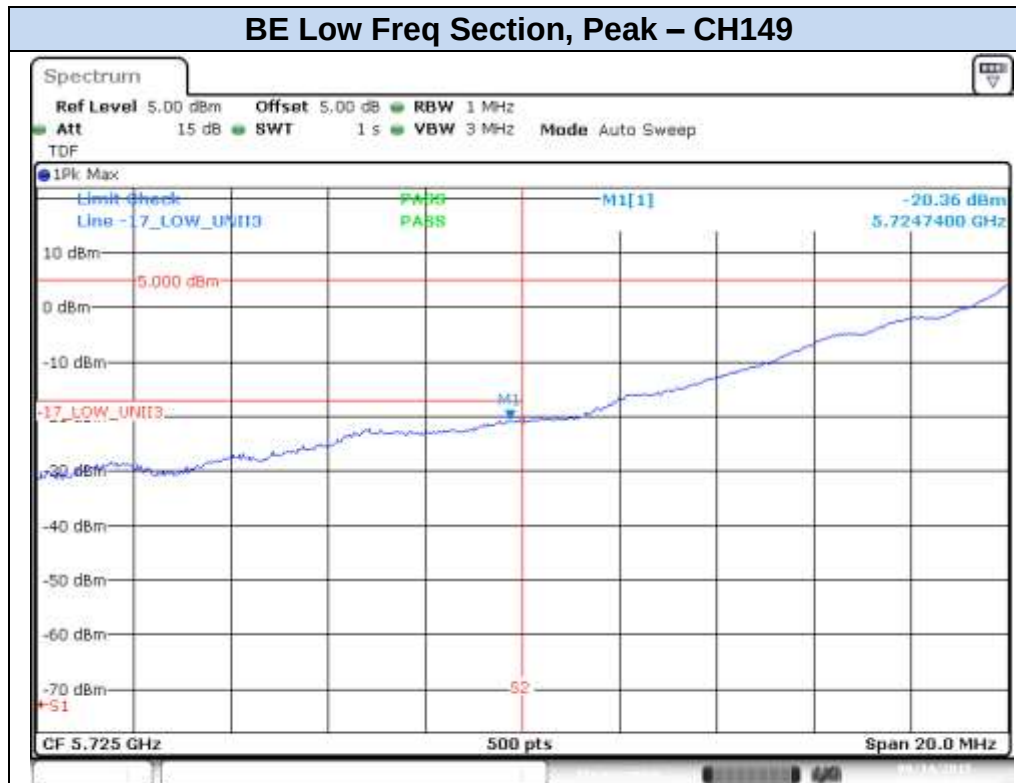


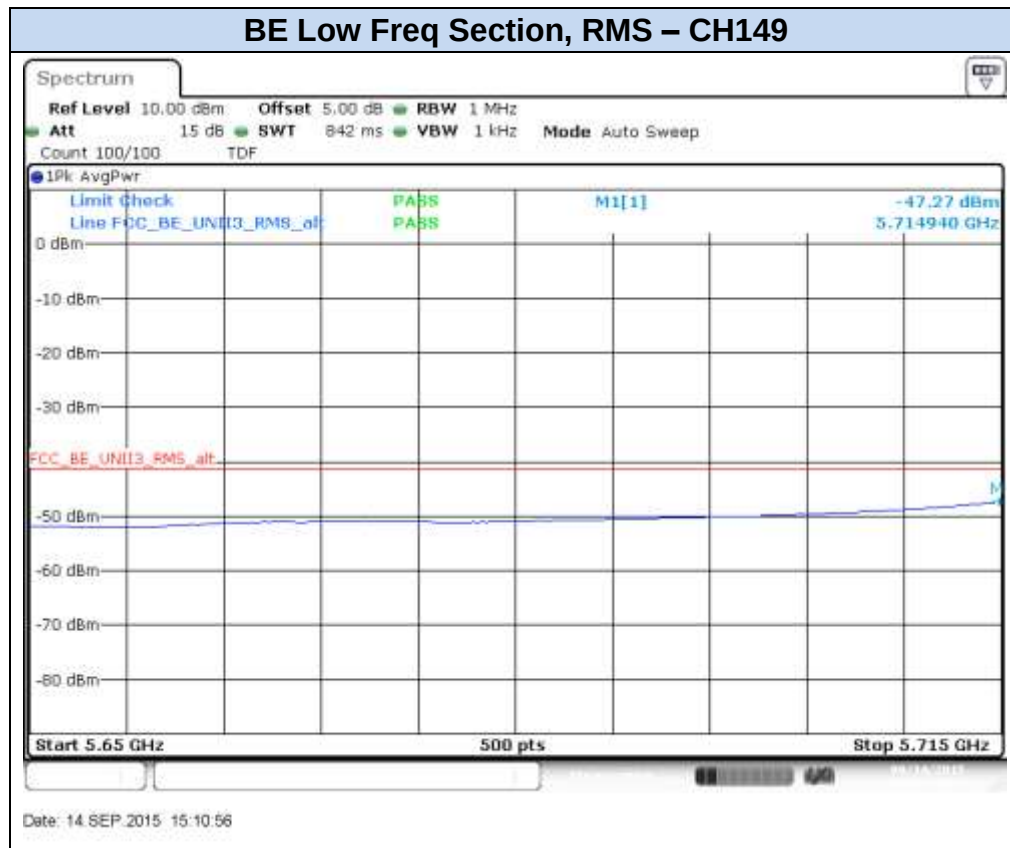


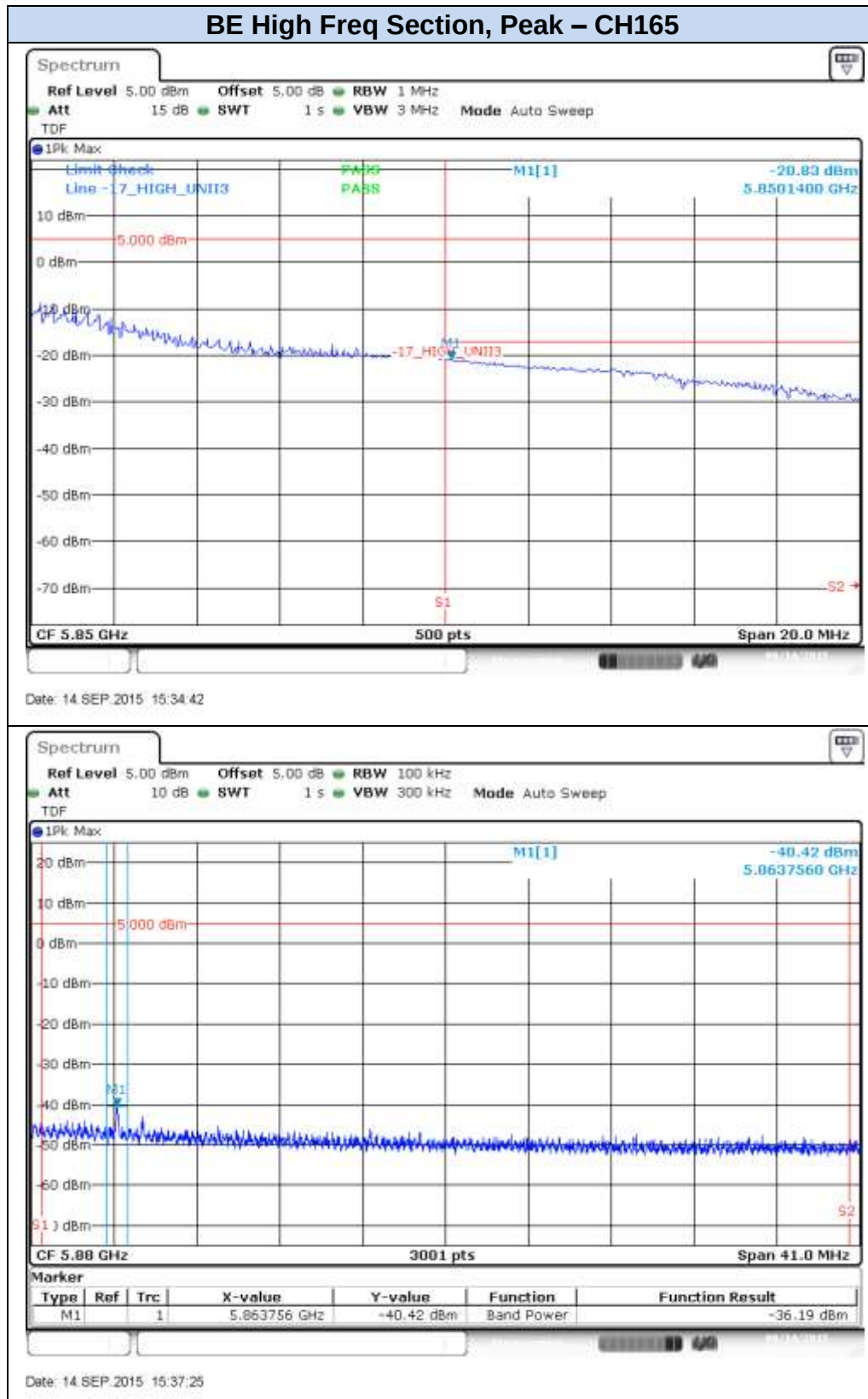


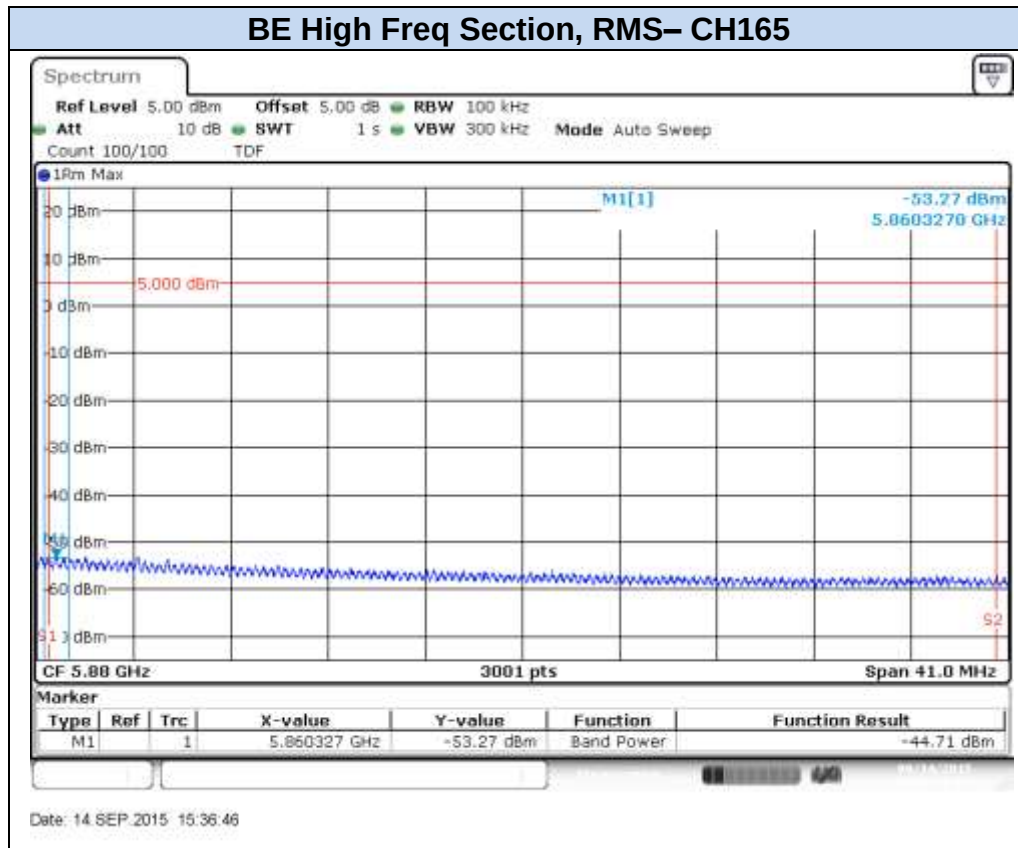
802.11n20, HT8 (MIMO) – Chain A

BE Low Freq Section, Peak – CH149



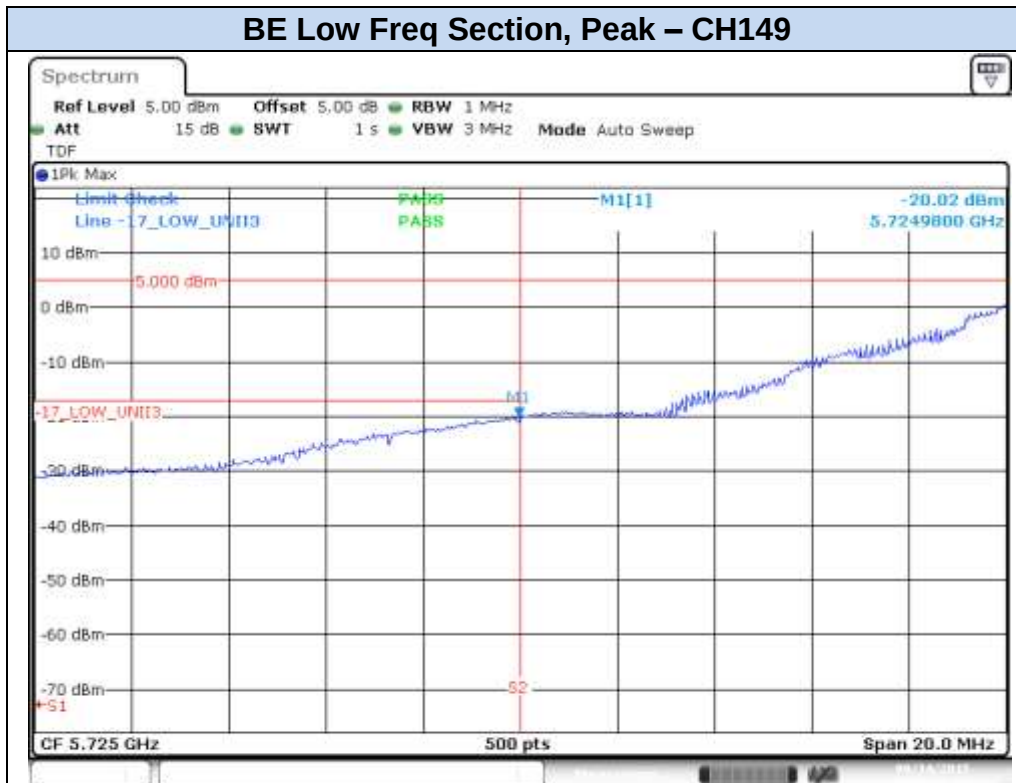




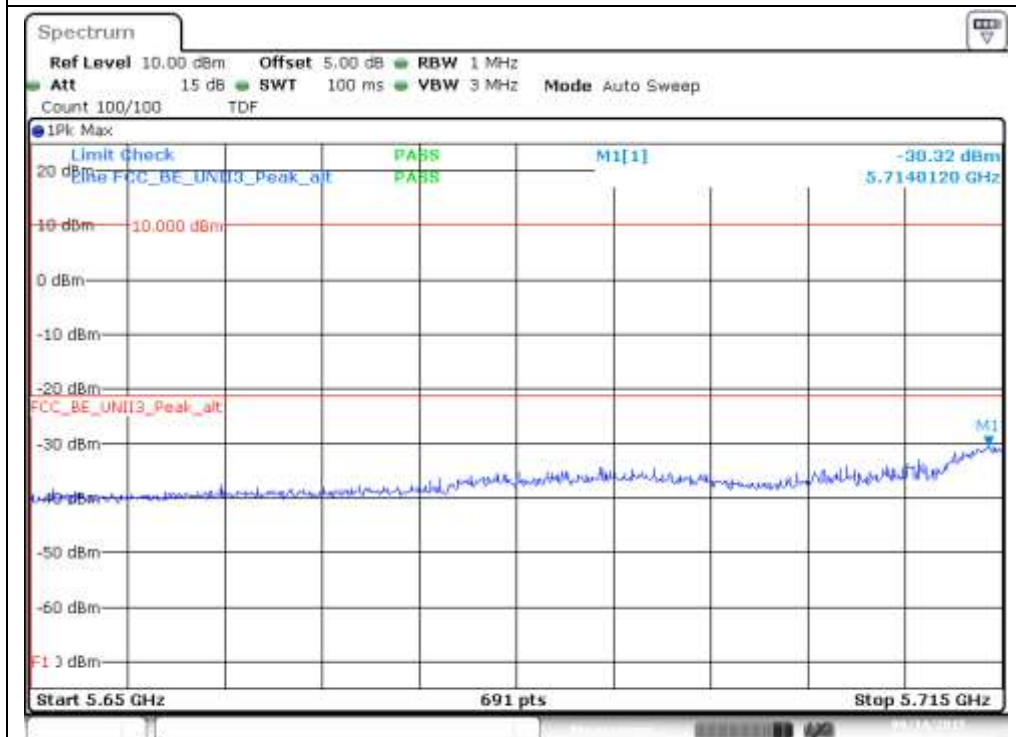


802.11n20, HT8 (MIMO) – Chain B

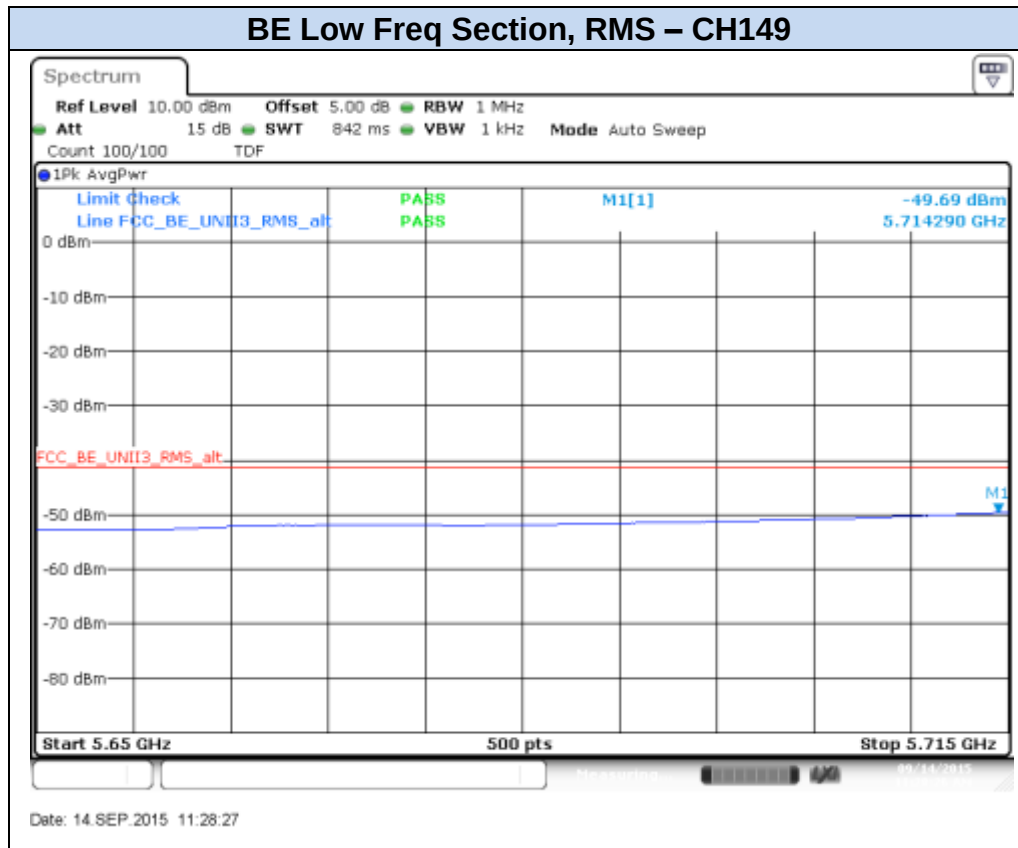
BE Low Freq Section, Peak – CH149

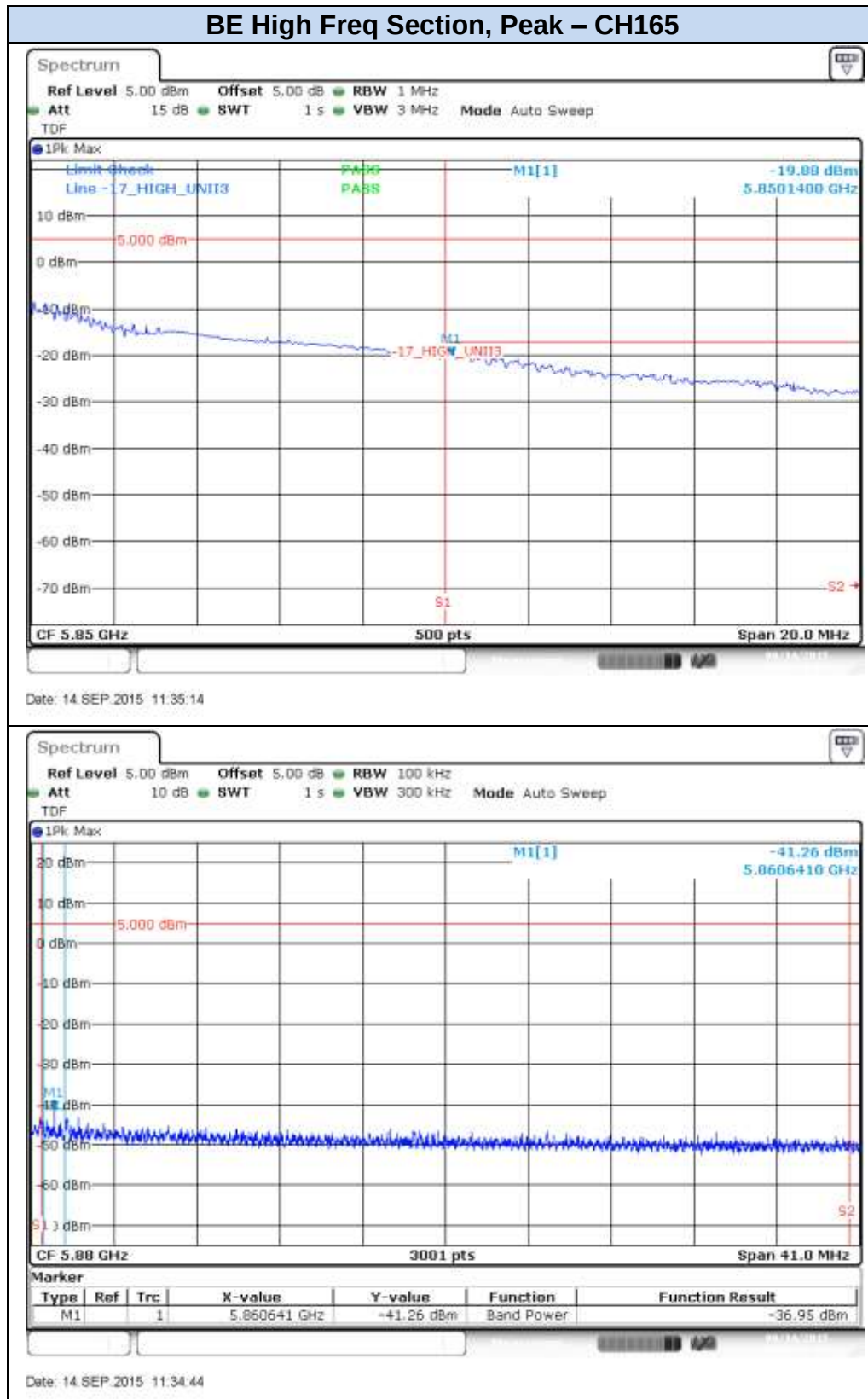


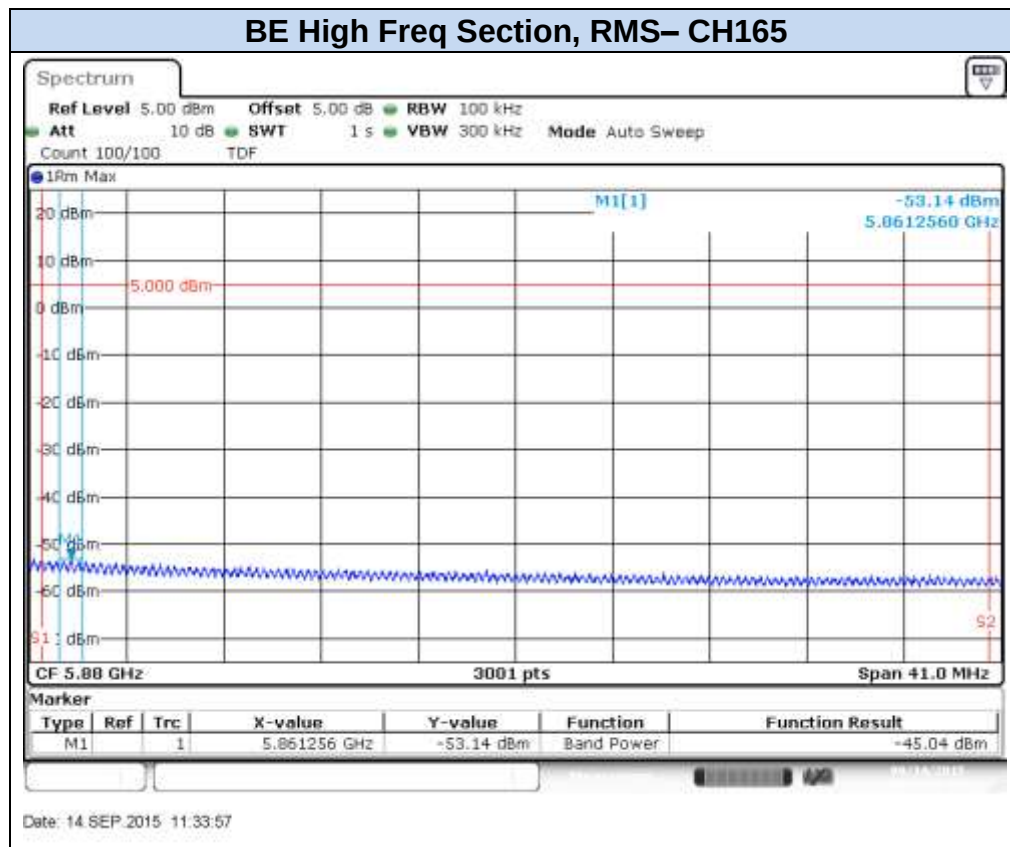
Date: 14 SEP 2015 11:26:23



Date: 14 SEP 2015 11:28:49

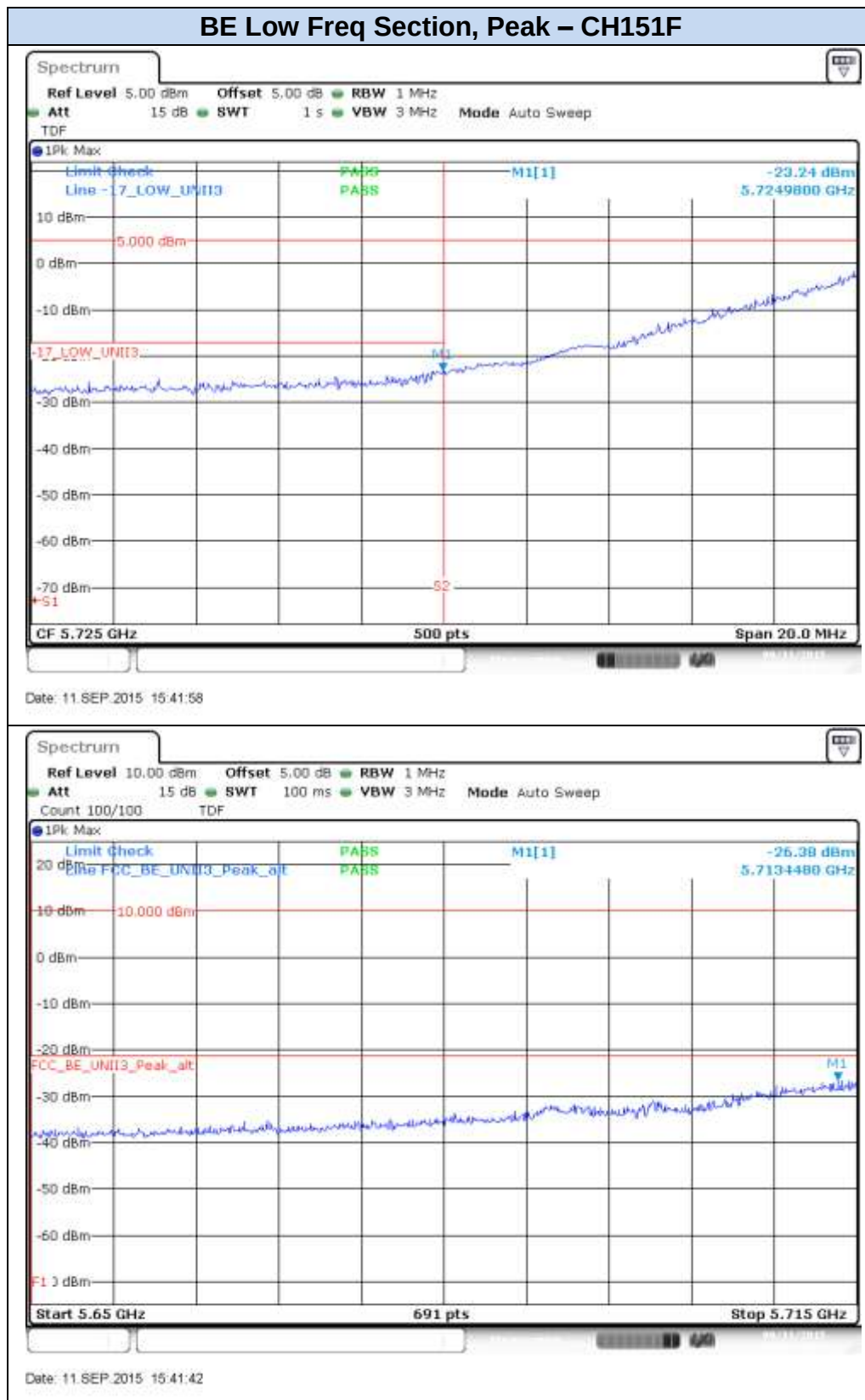


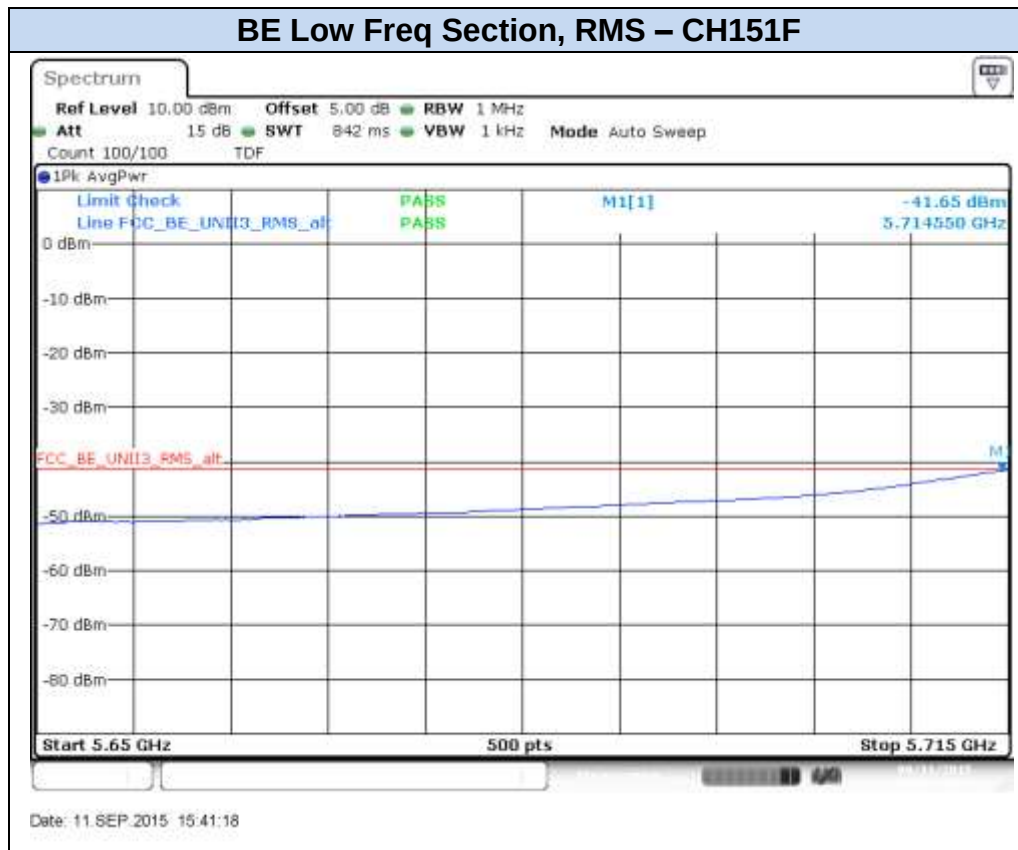


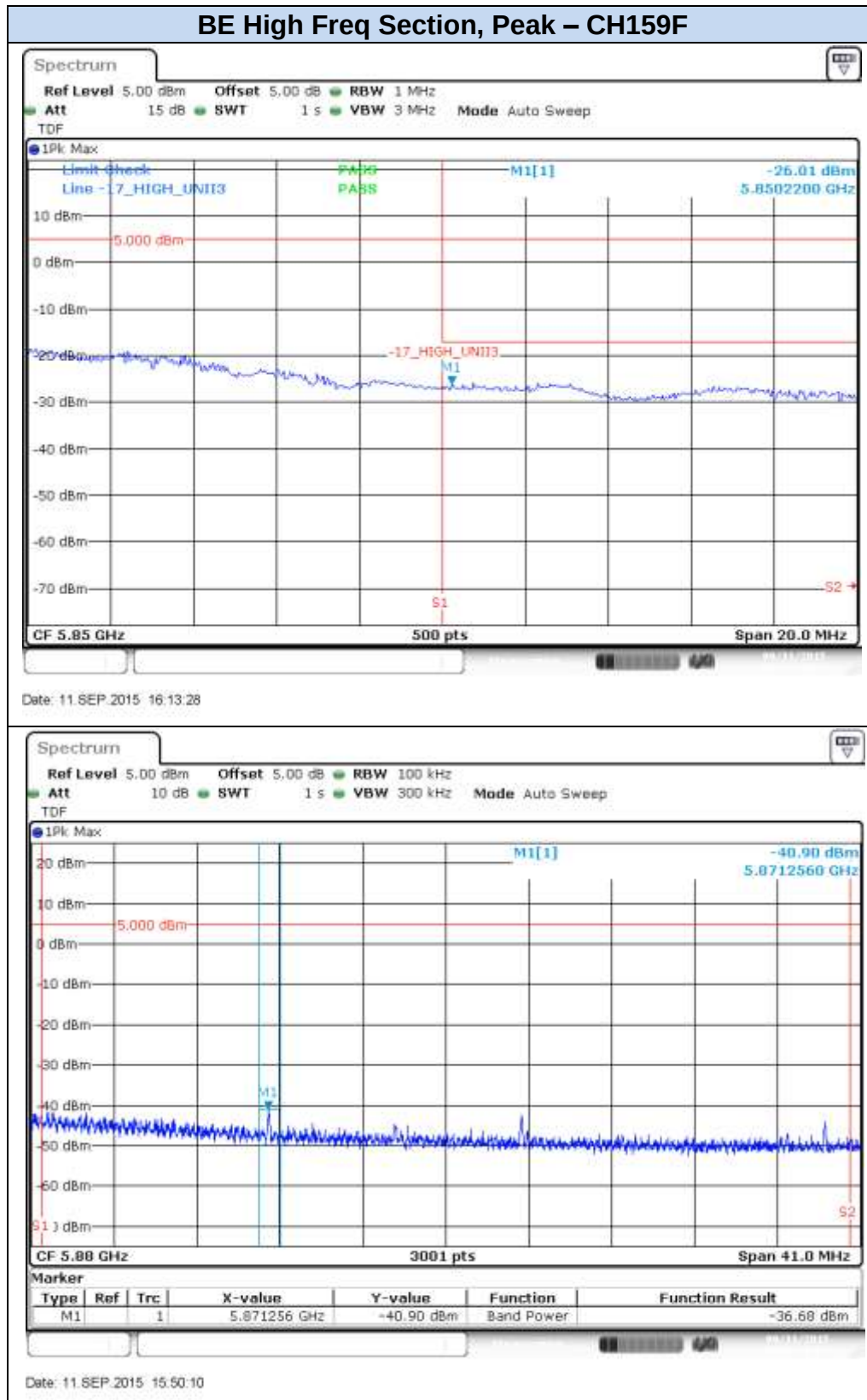


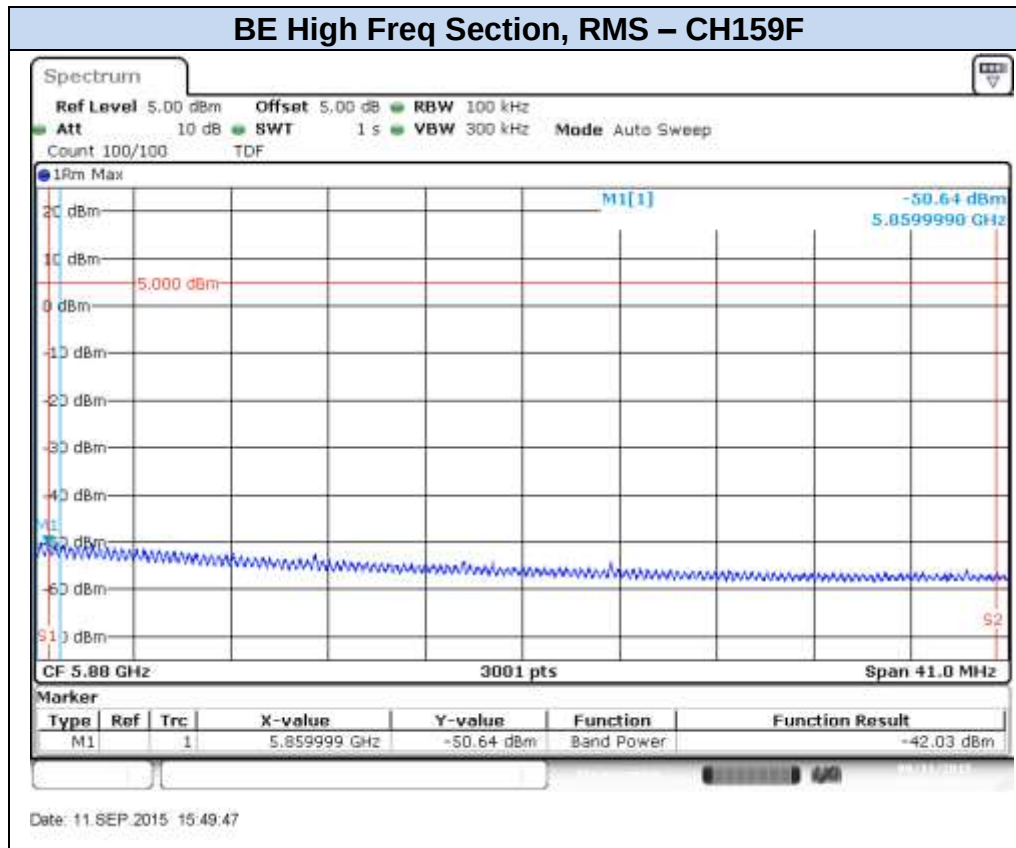
802.11n40, HT0 (SISO) – Chain A

BE Low Freq Section, Peak – CH151F

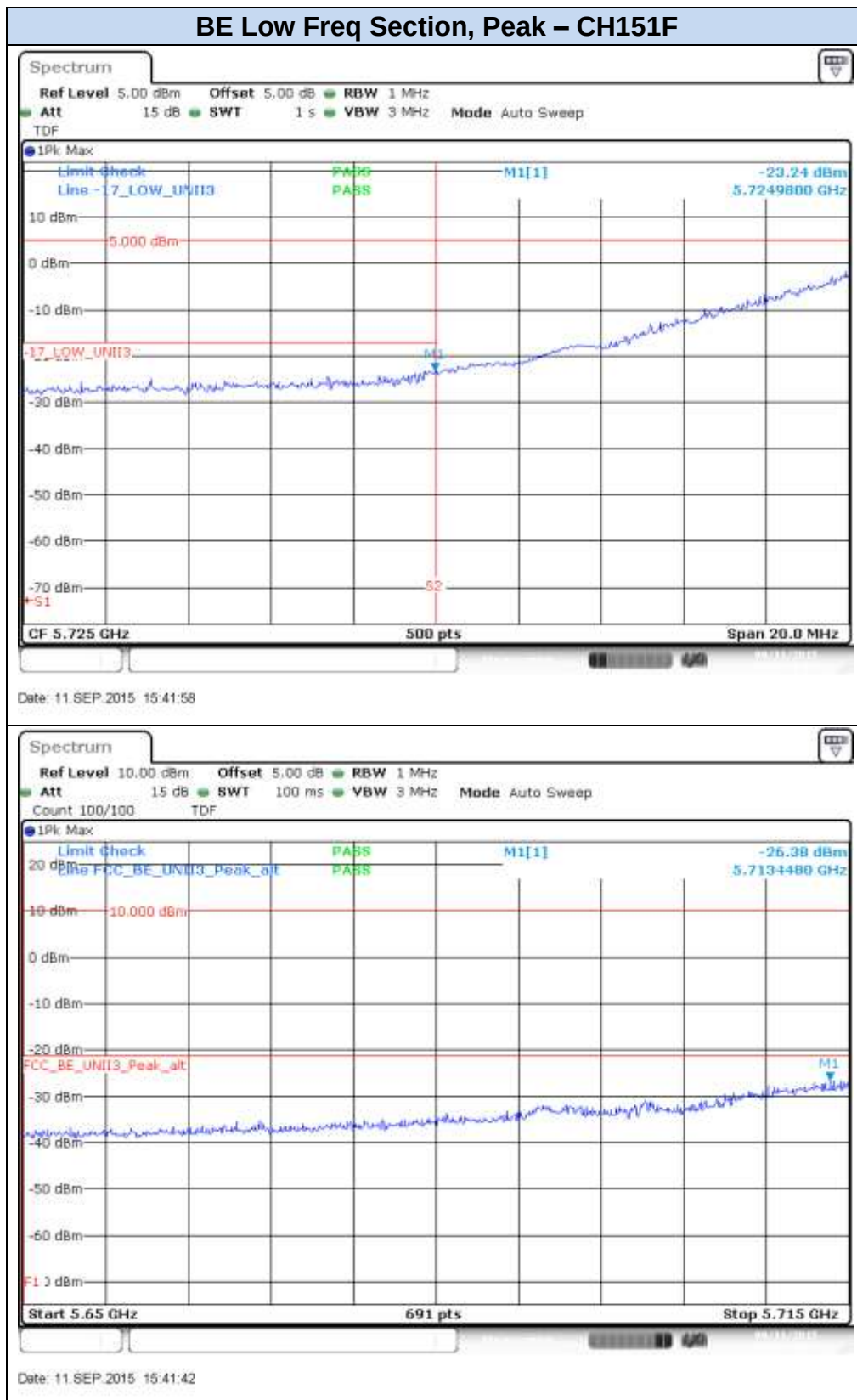


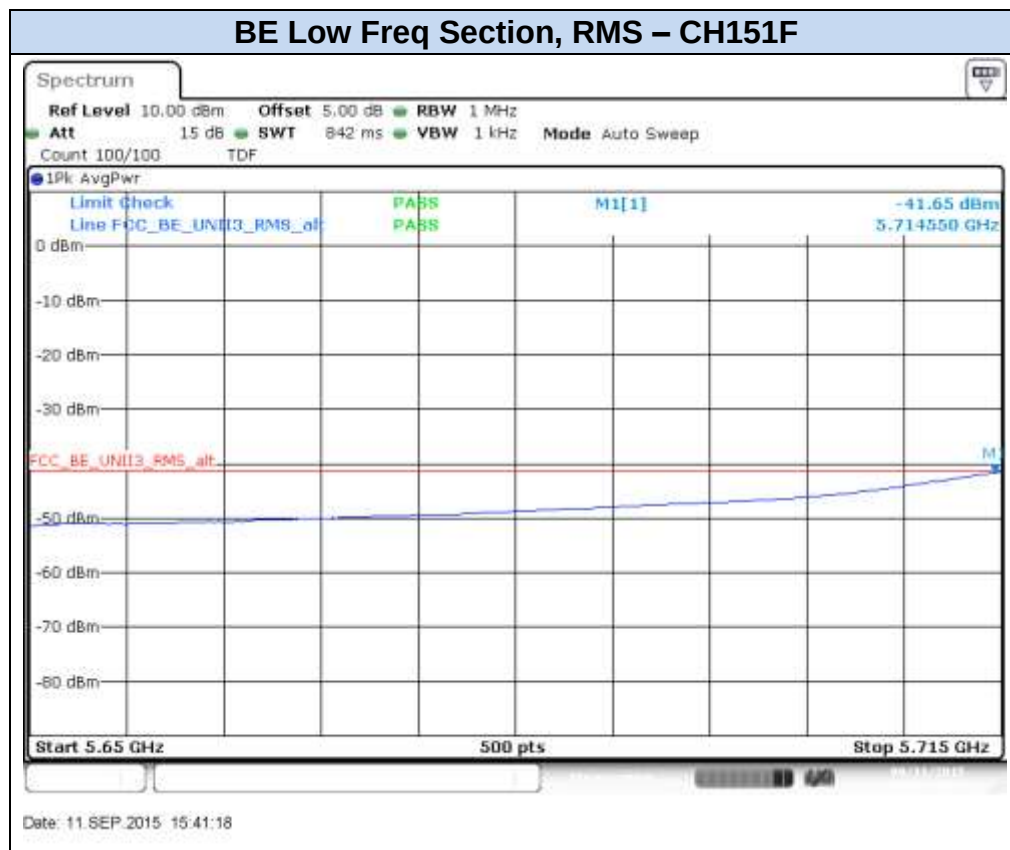


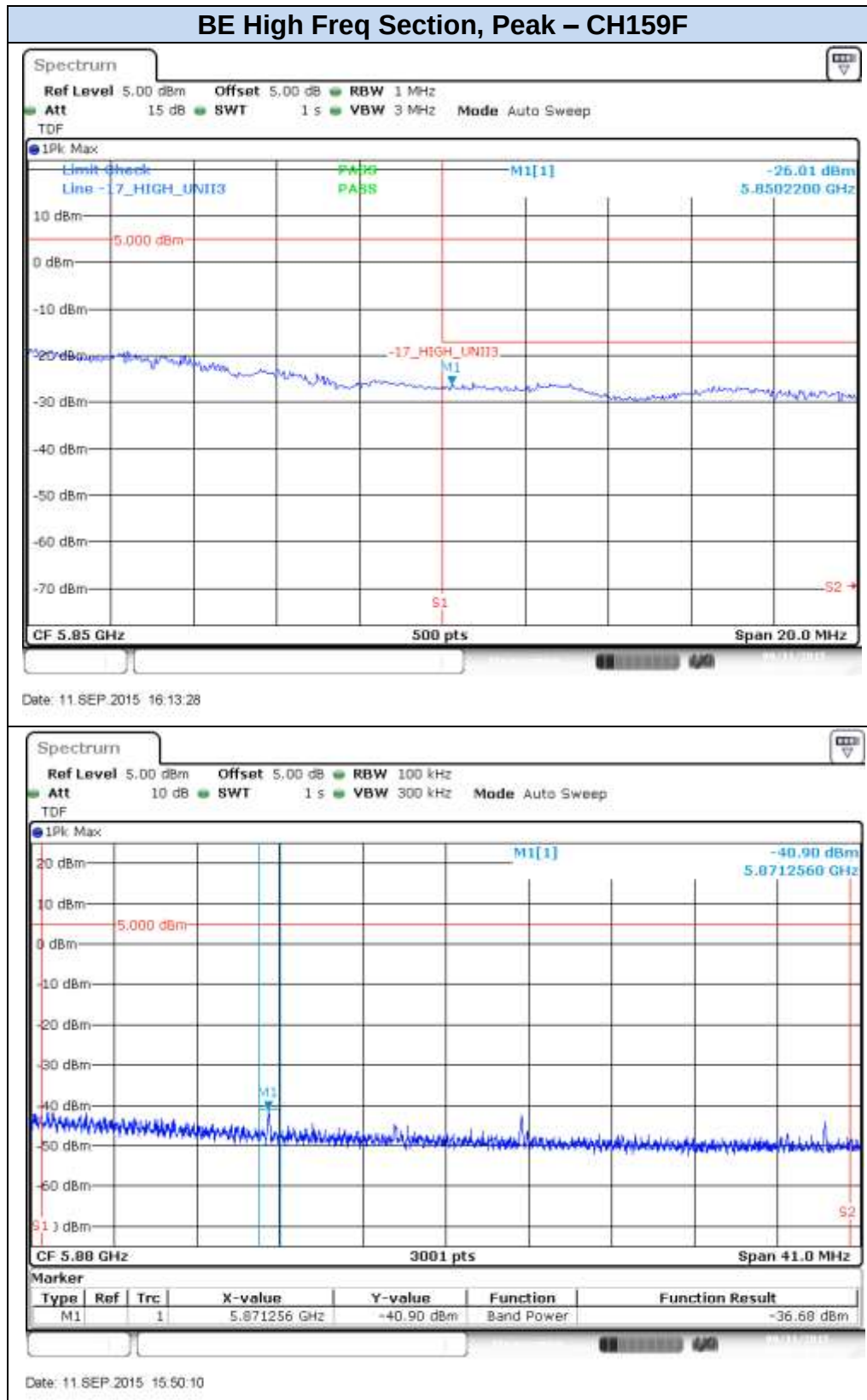


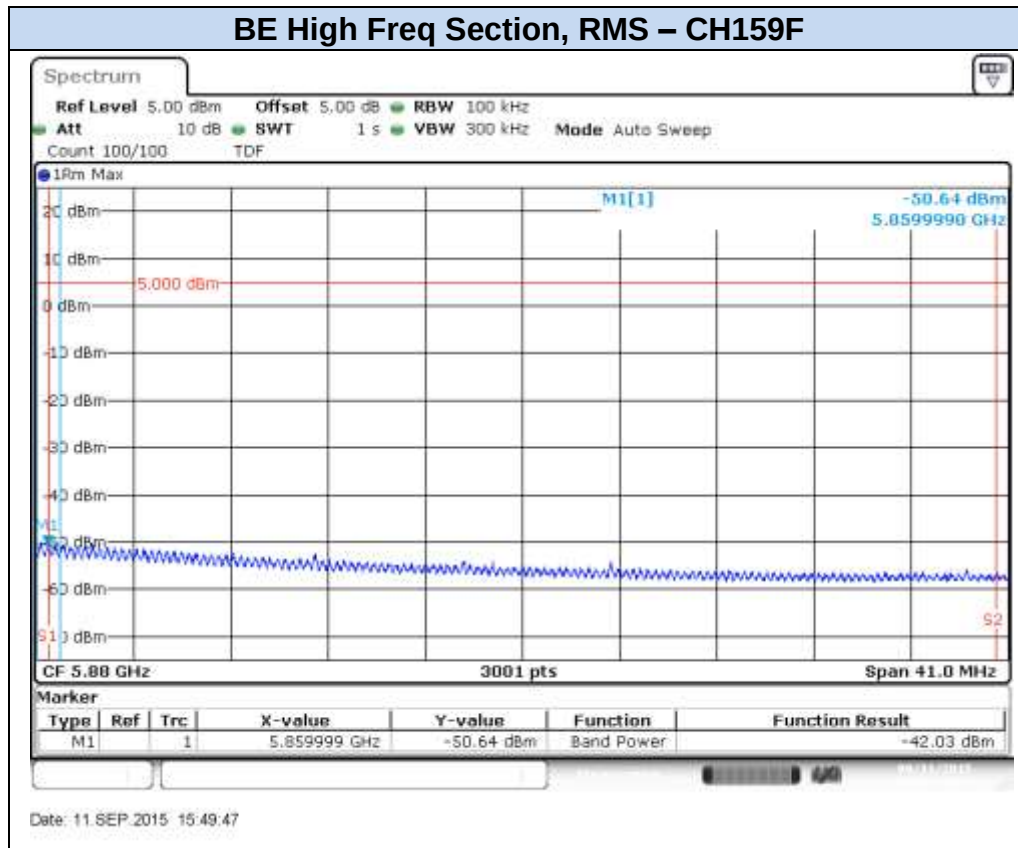


802.11n40, HT0 (SISO) – Chain B



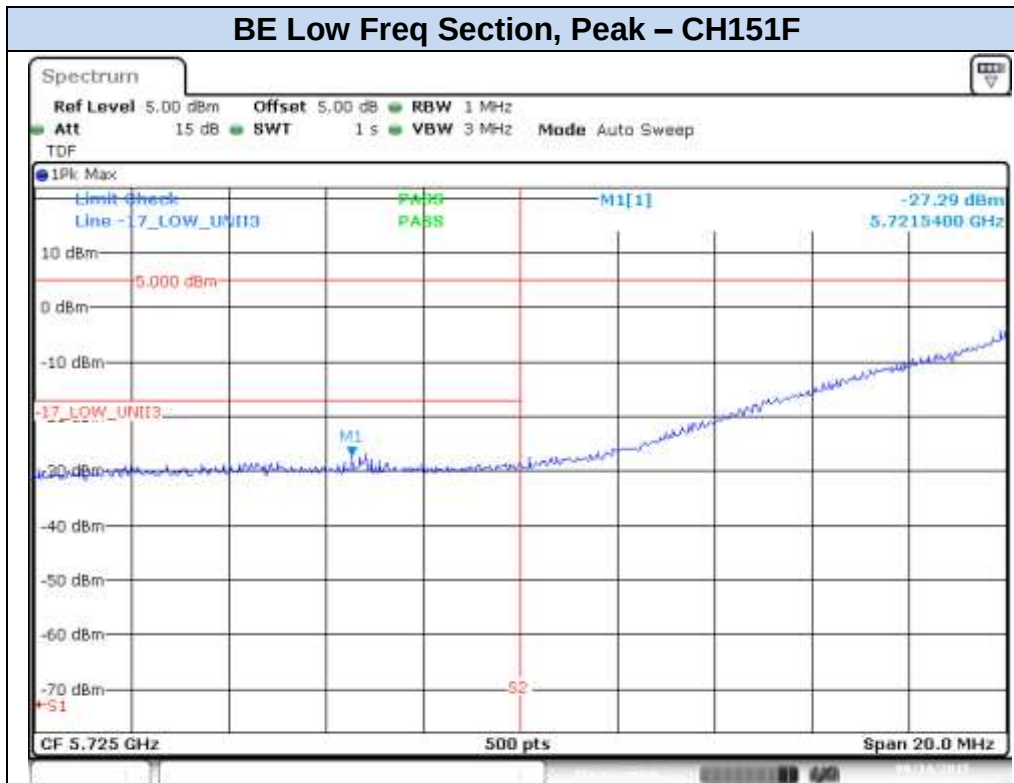




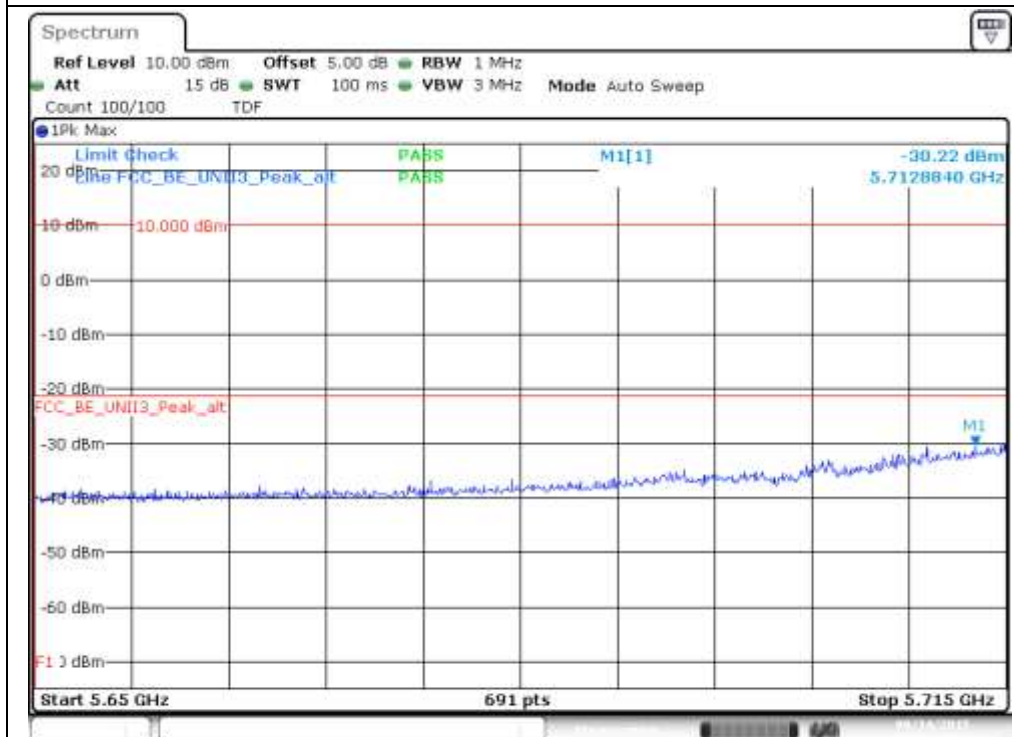


802.11n40, HT8 (MIMO) – Chain A

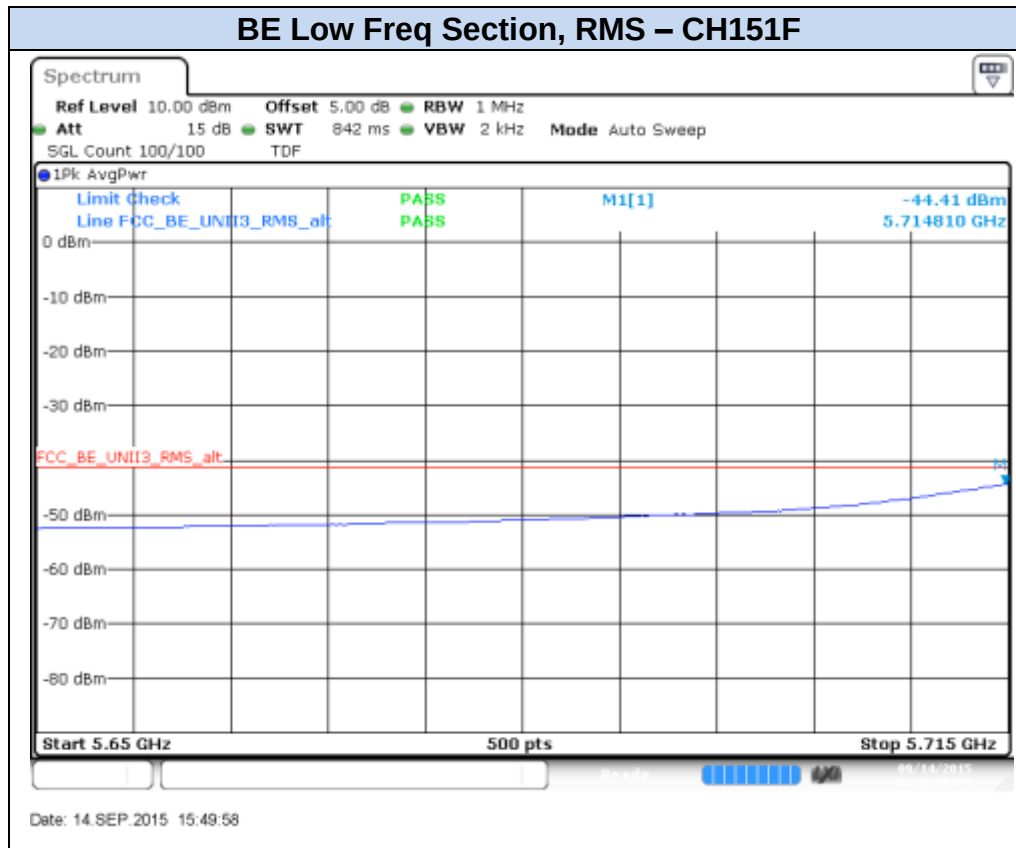
BE Low Freq Section, Peak – CH151F

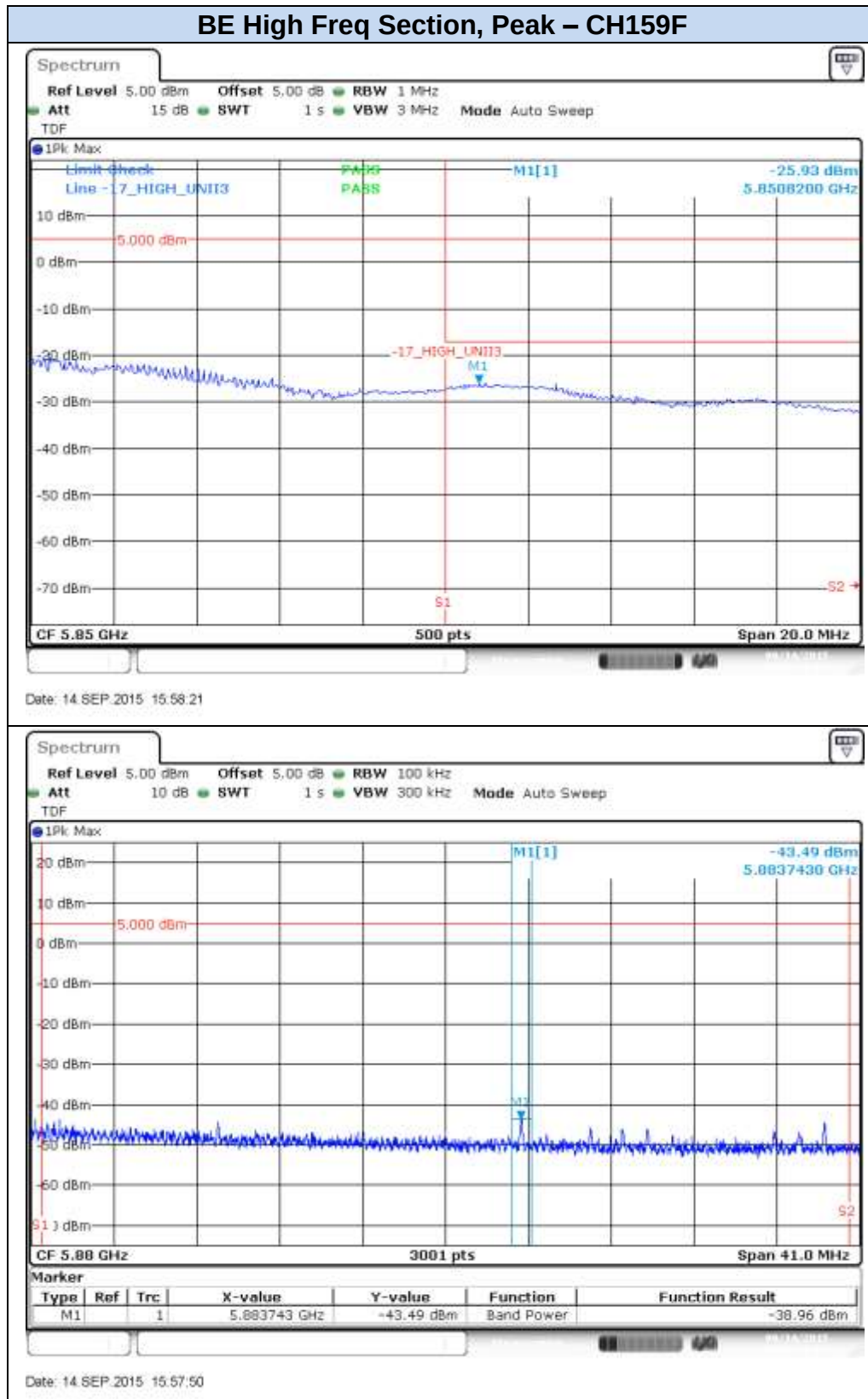


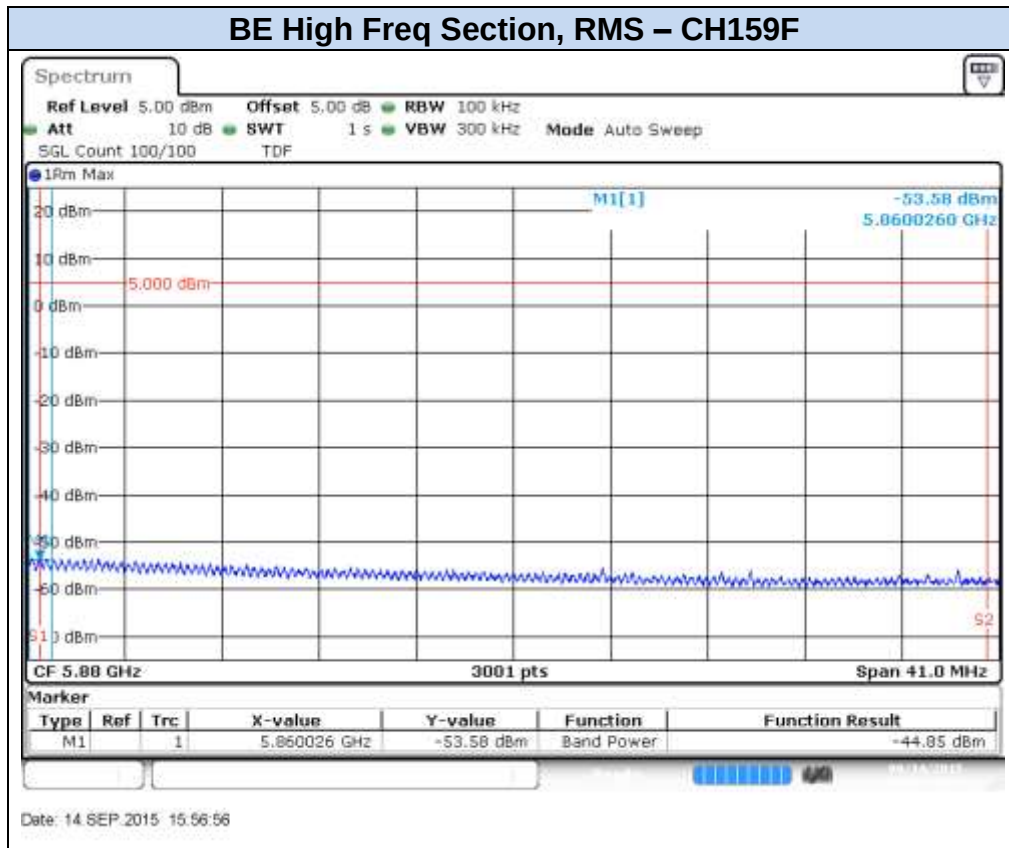
Date: 14 SEP.2015 15:50:43



Date: 14 SEP.2015 15:50:24

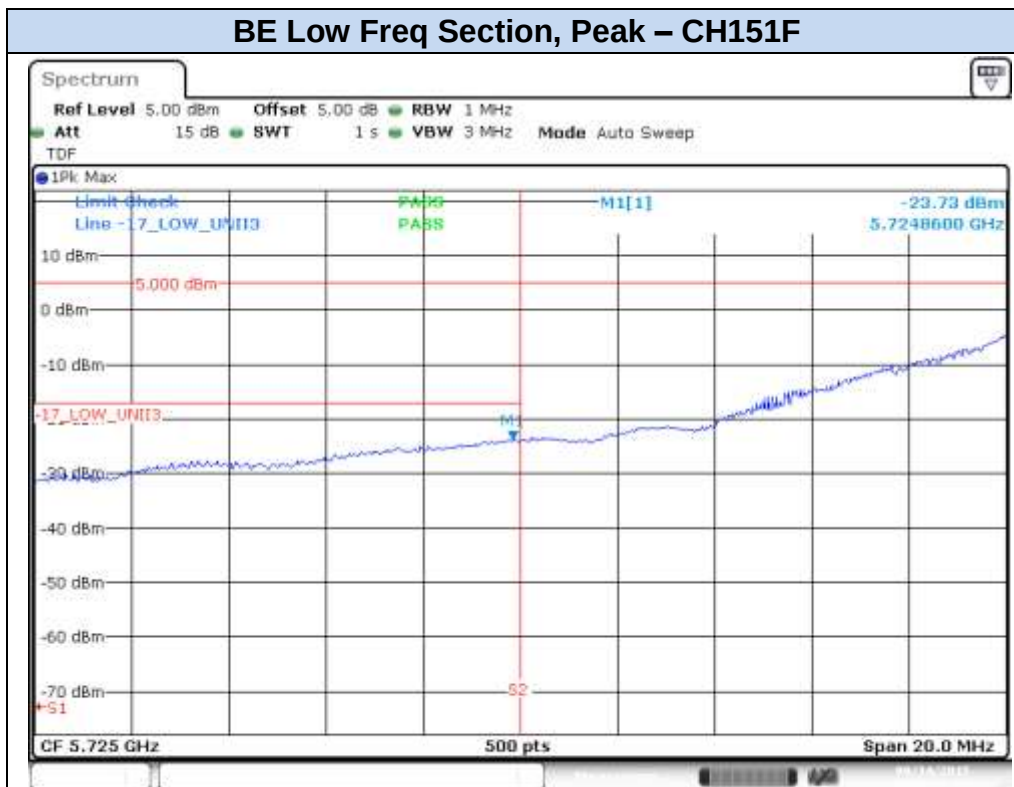




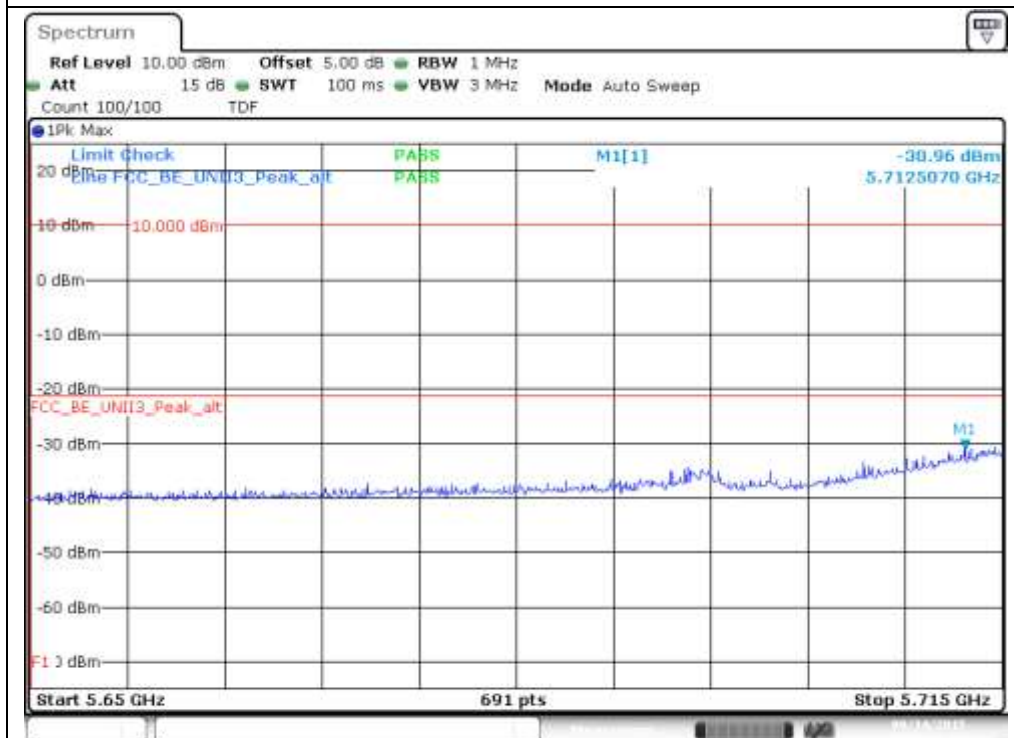


802.11n40, HT8 (MIMO) – Chain B

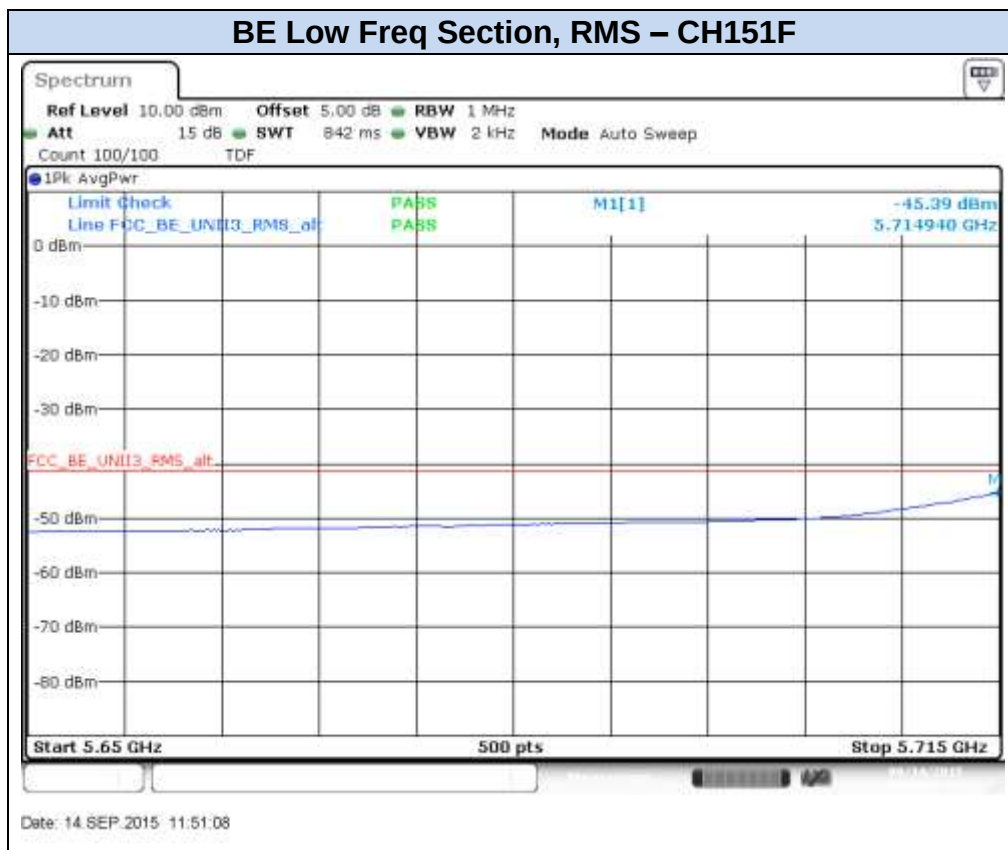
BE Low Freq Section, Peak – CH151F

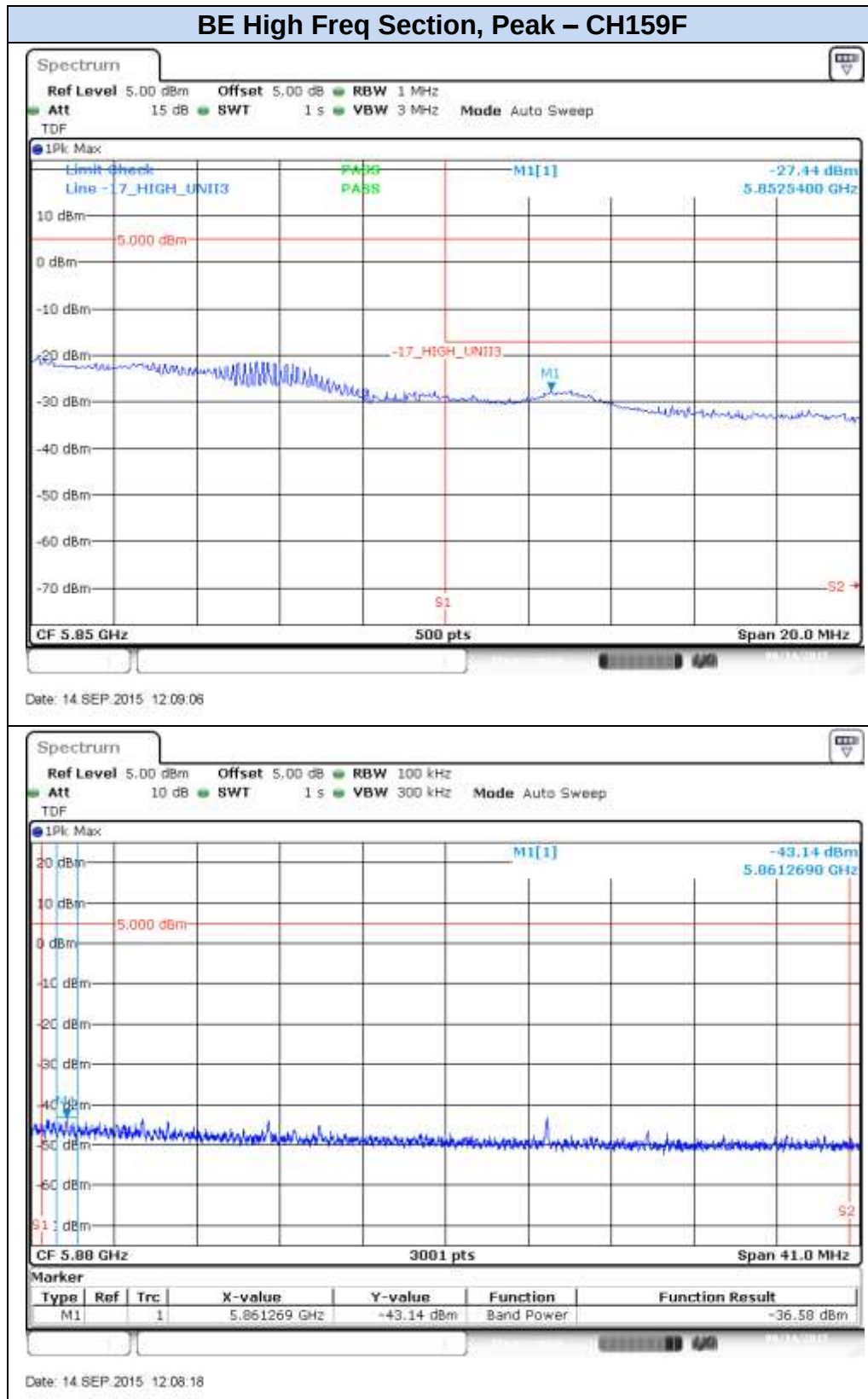


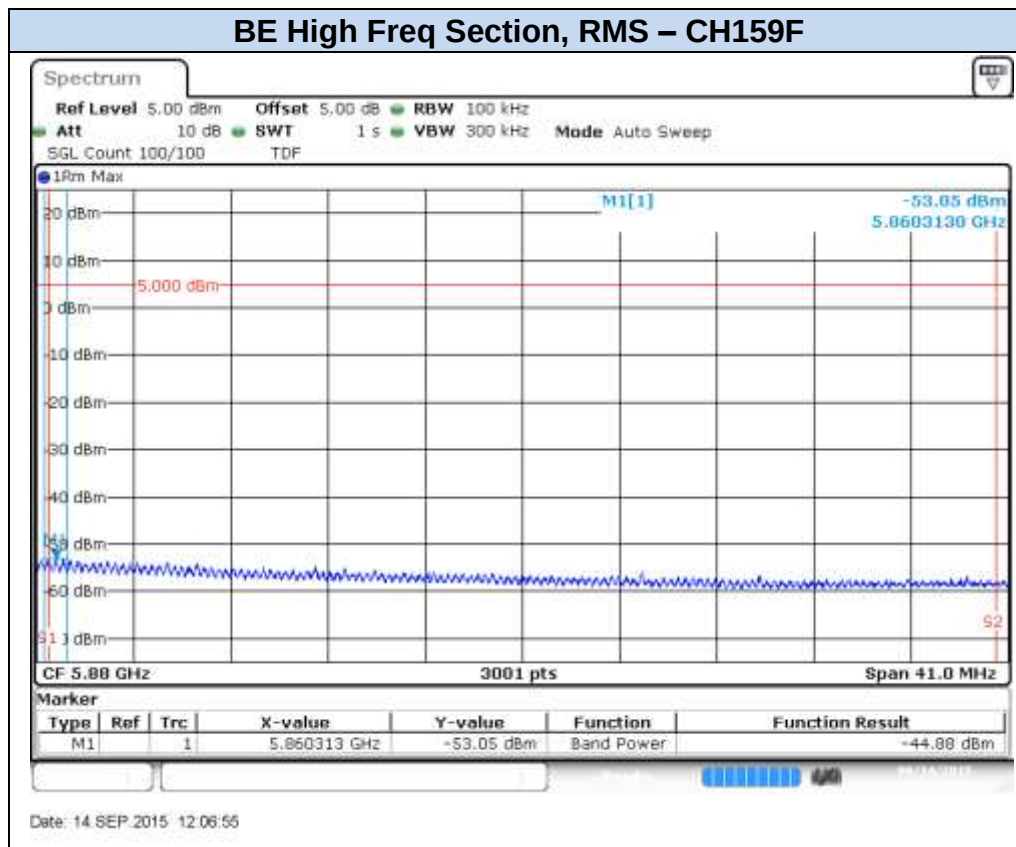
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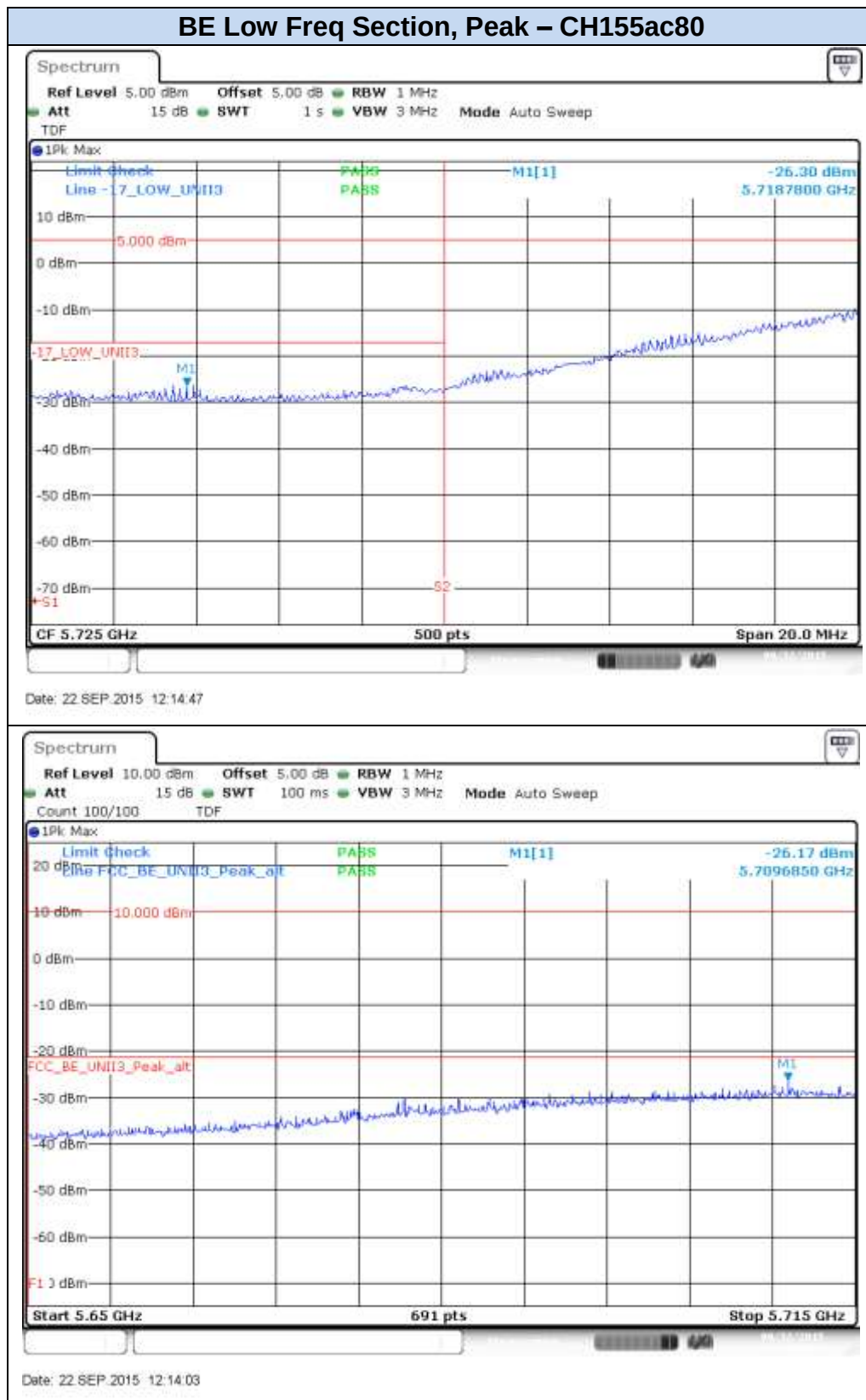
Date: 14 SEP.2015 11:52:45

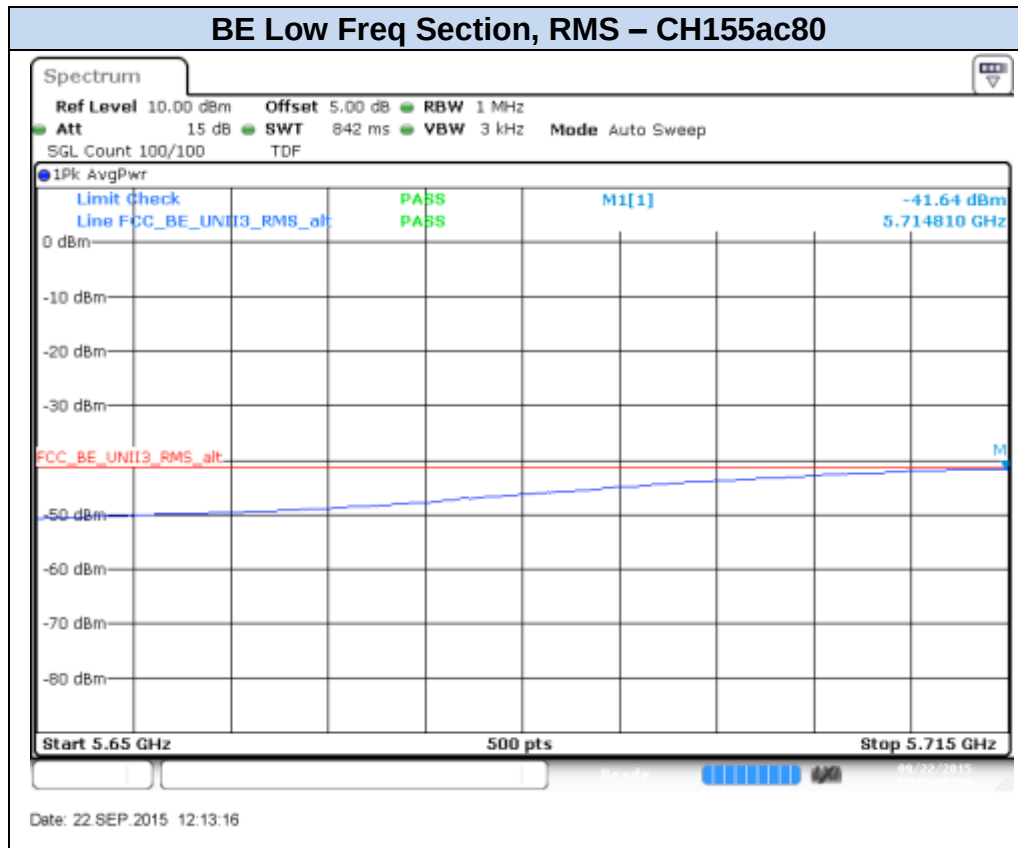


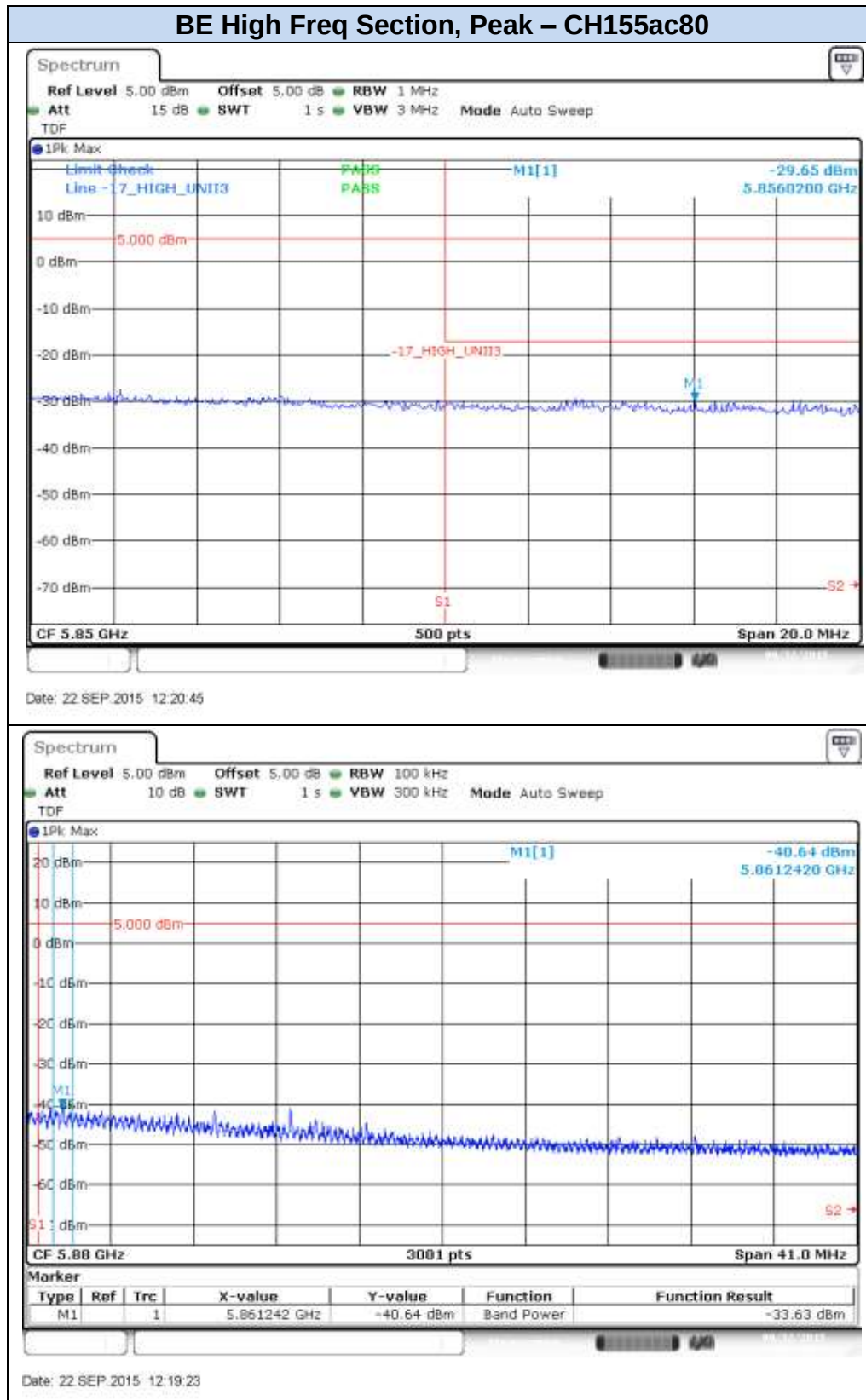


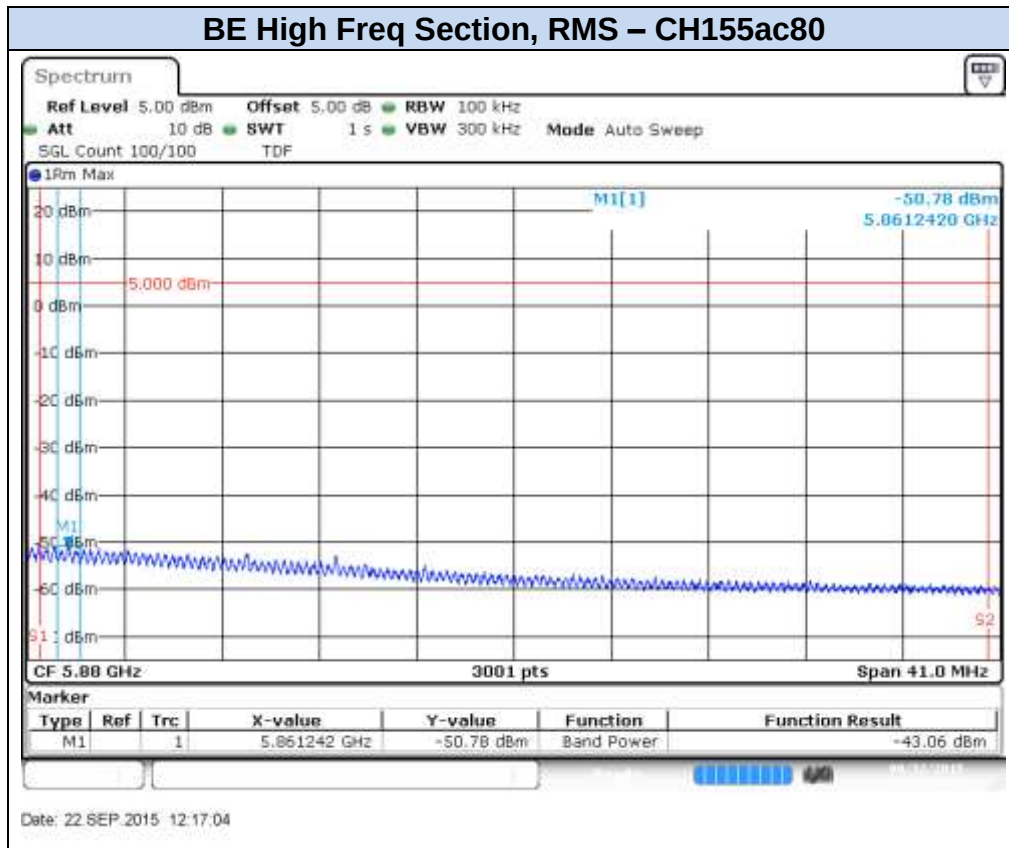


802.11ac80, VHT0 (SISO)- Chain A

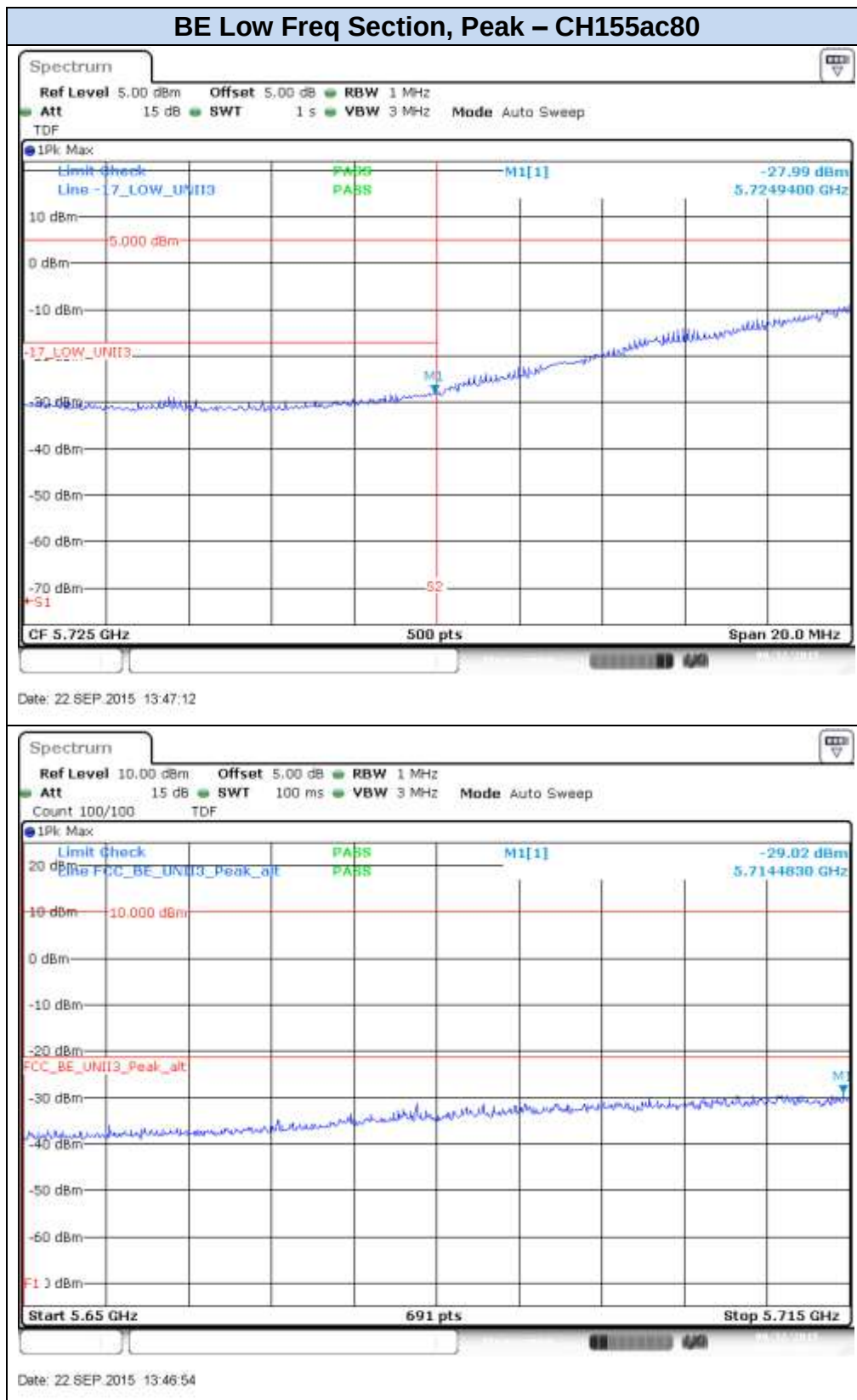


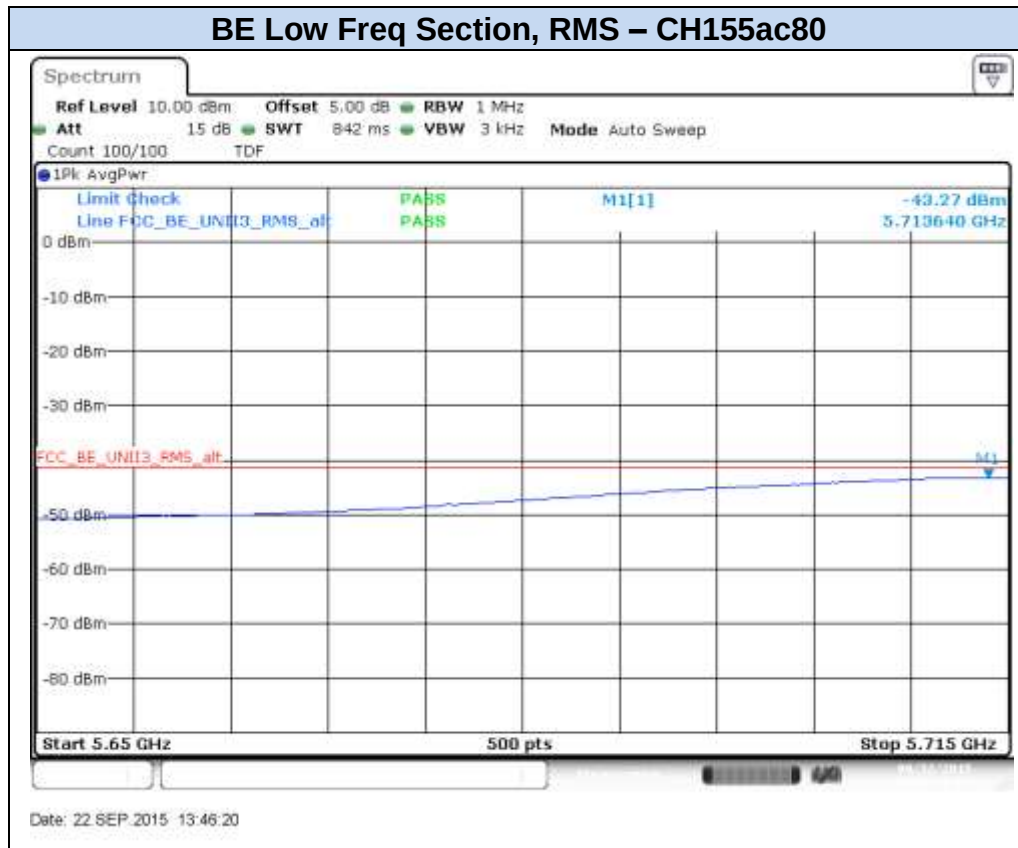


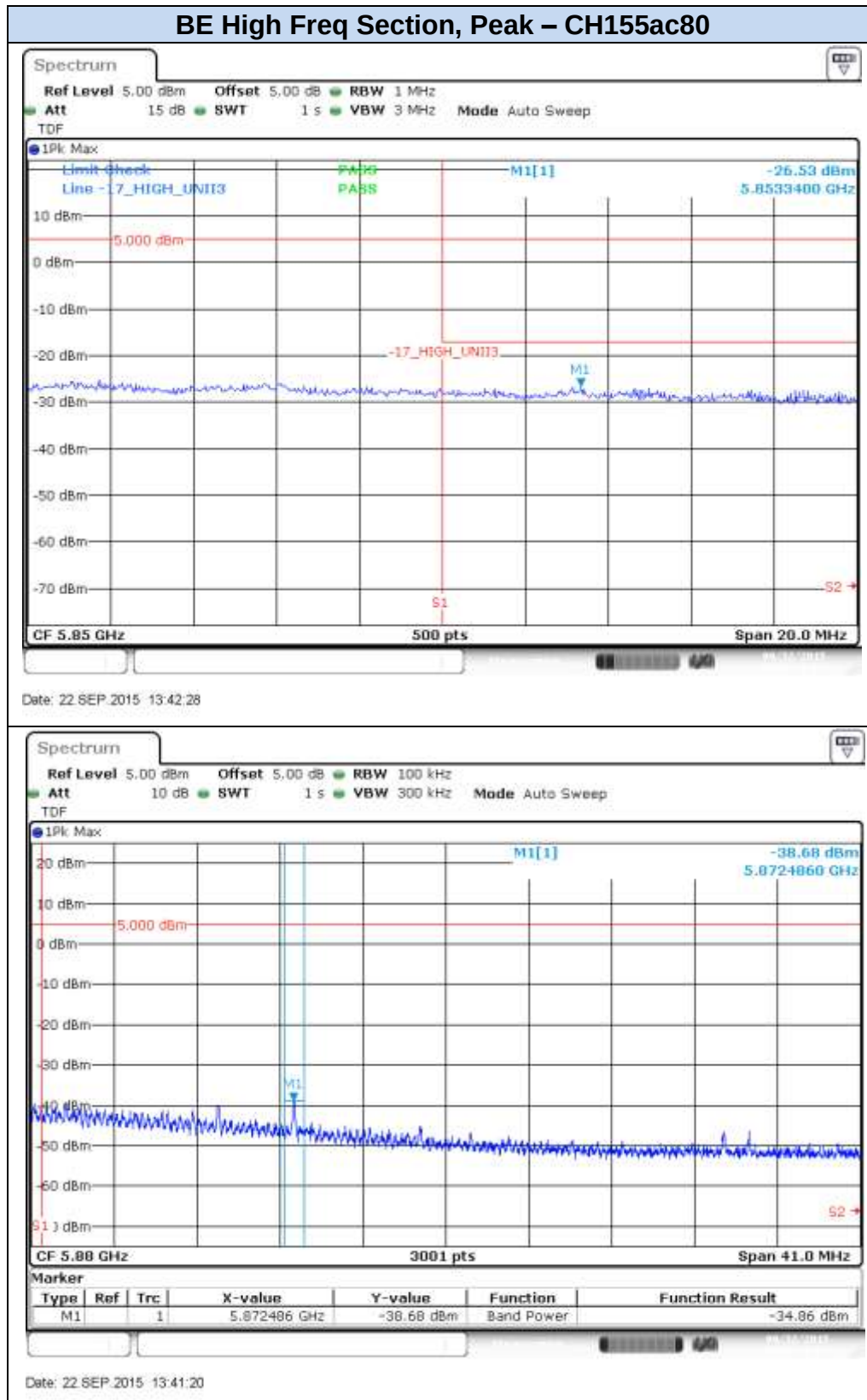


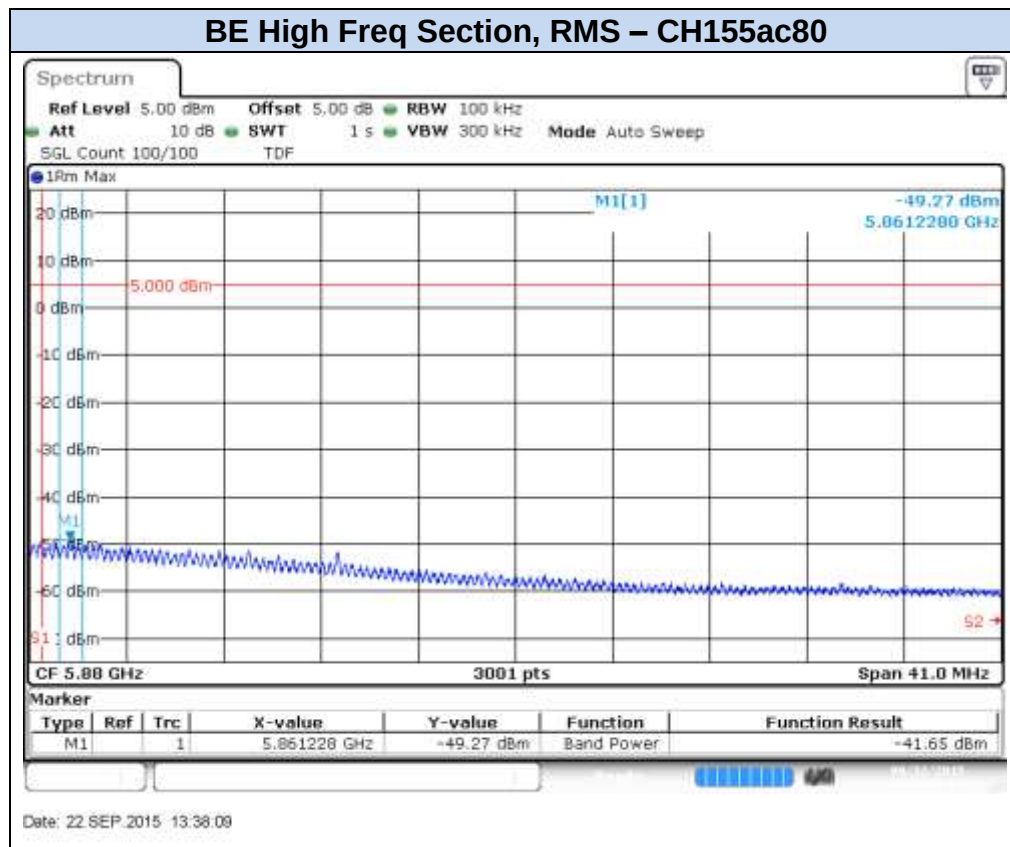


802.11ac80, VHT0 (SISO)- Chain B

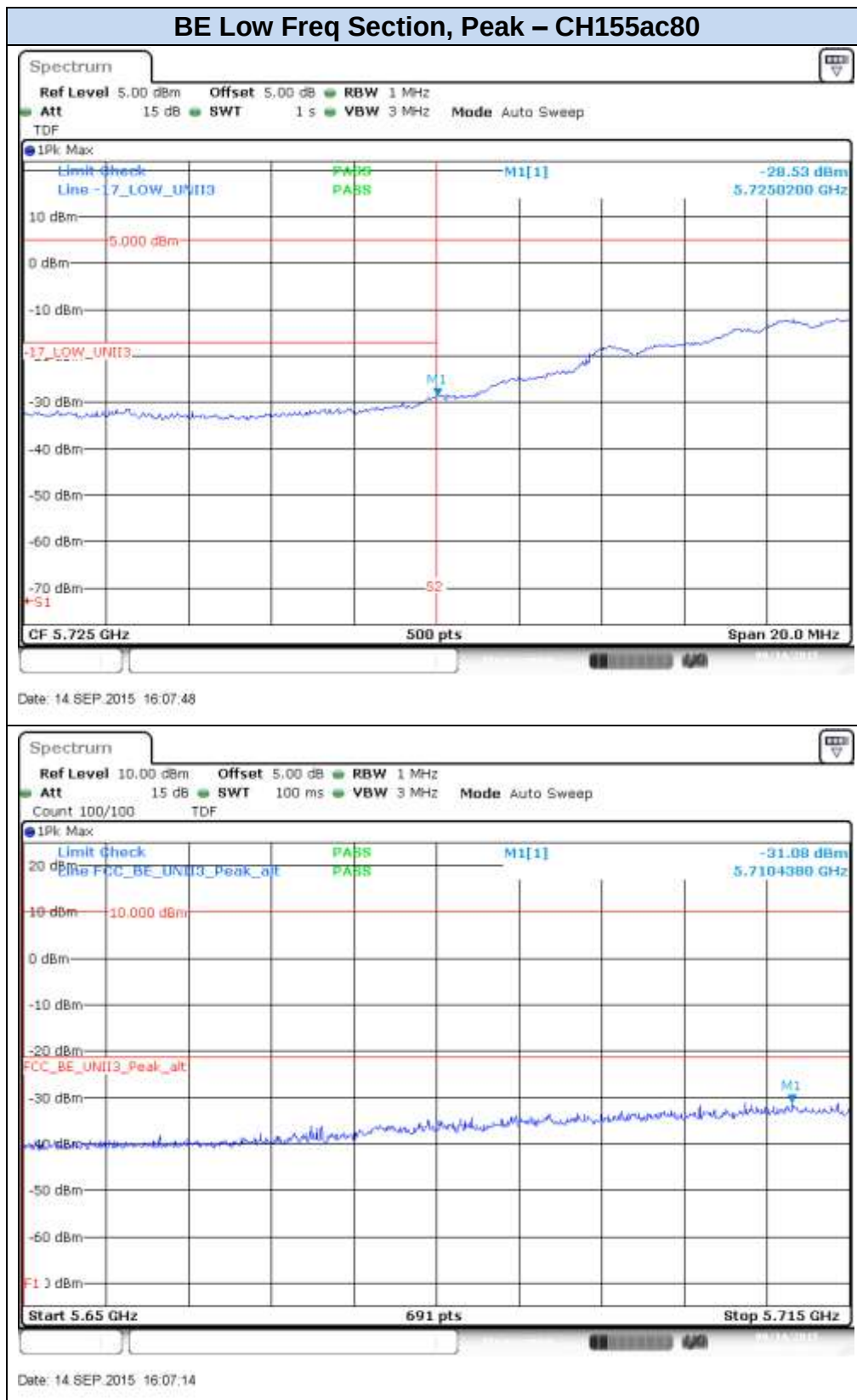


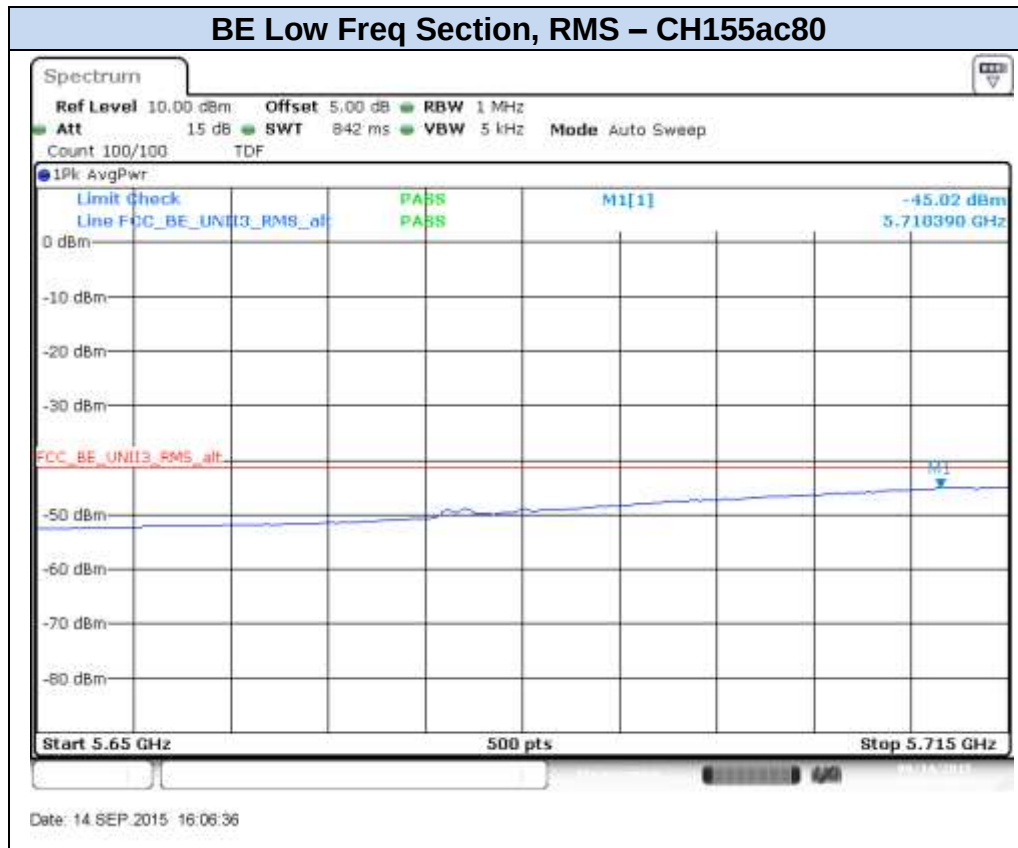


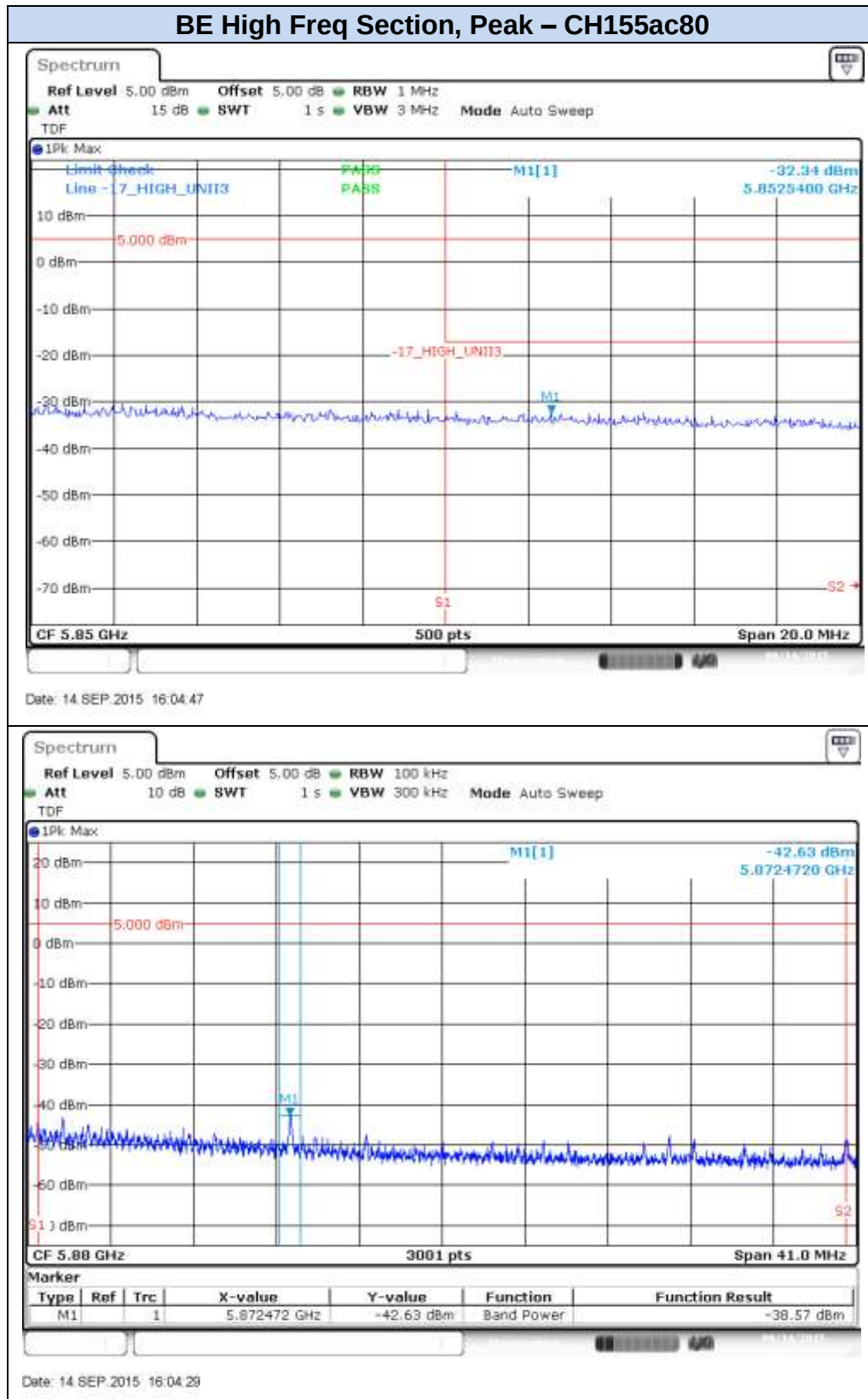


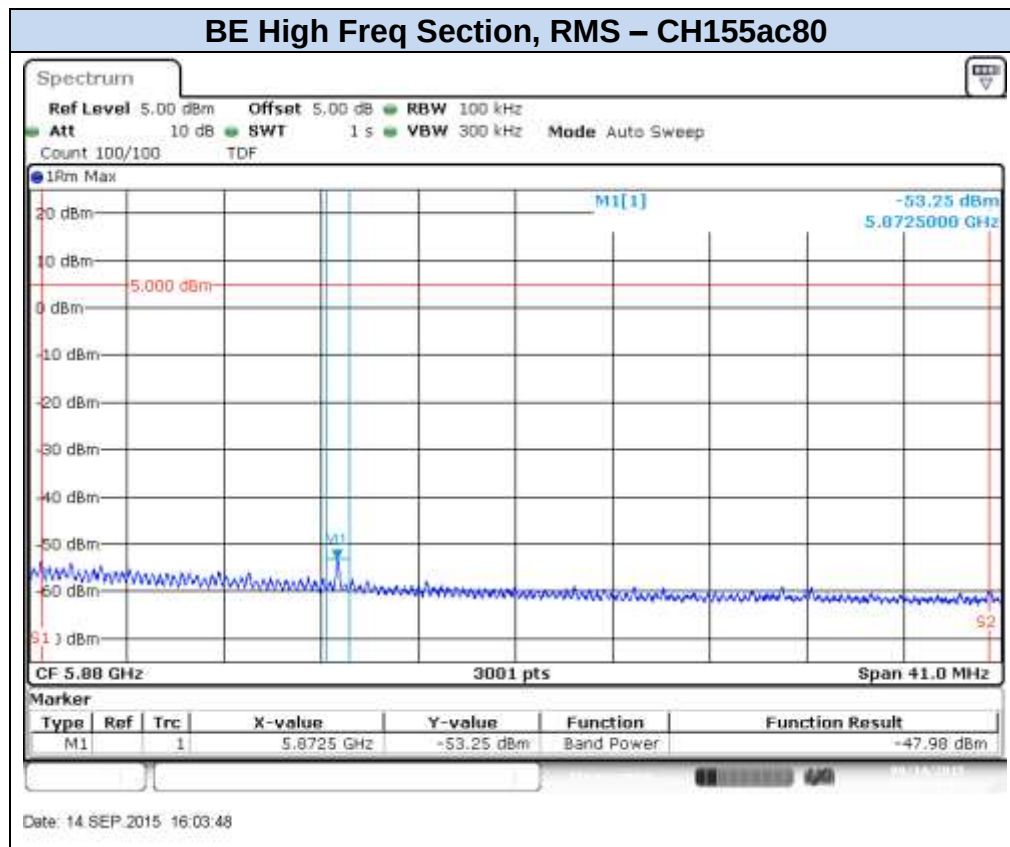


802.11ac80, VHT0 (MIMO)- Chain A



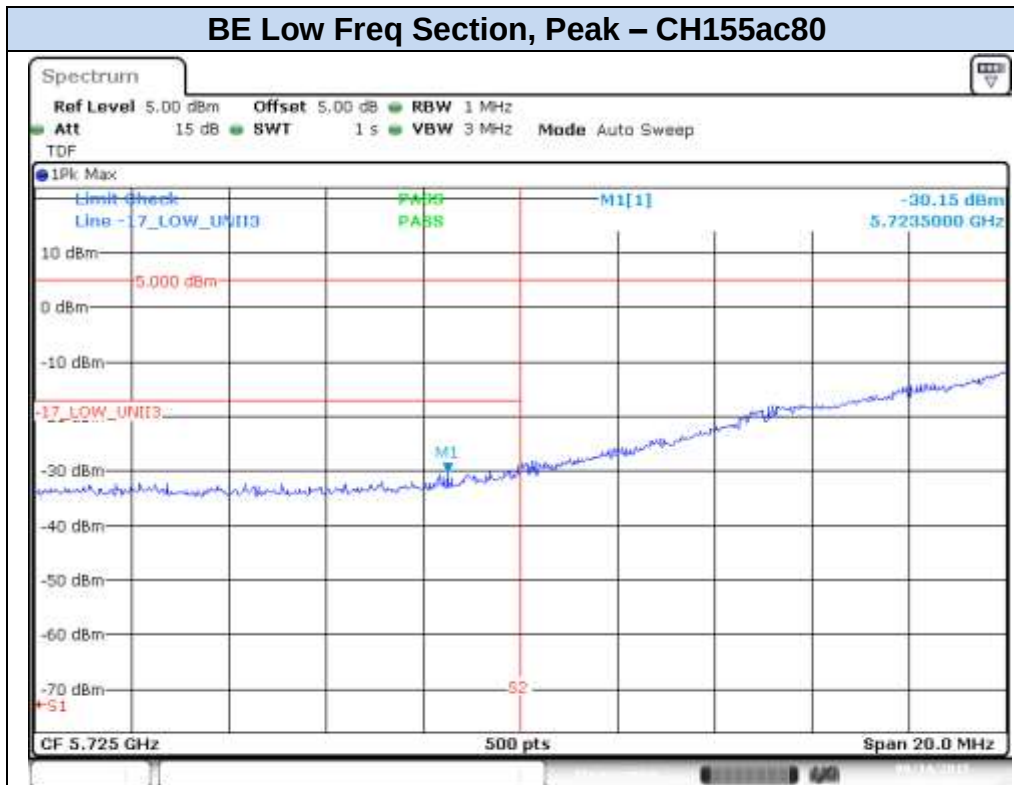




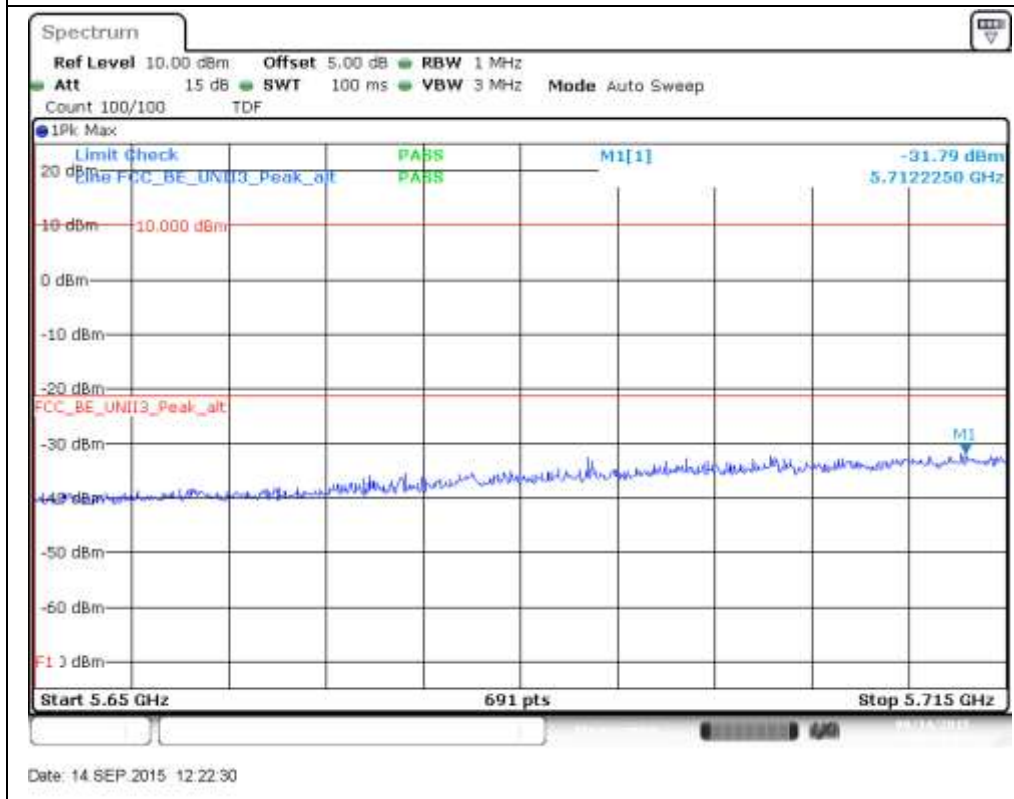


802.11ac80, VHT0 (MIMO)- Chain B

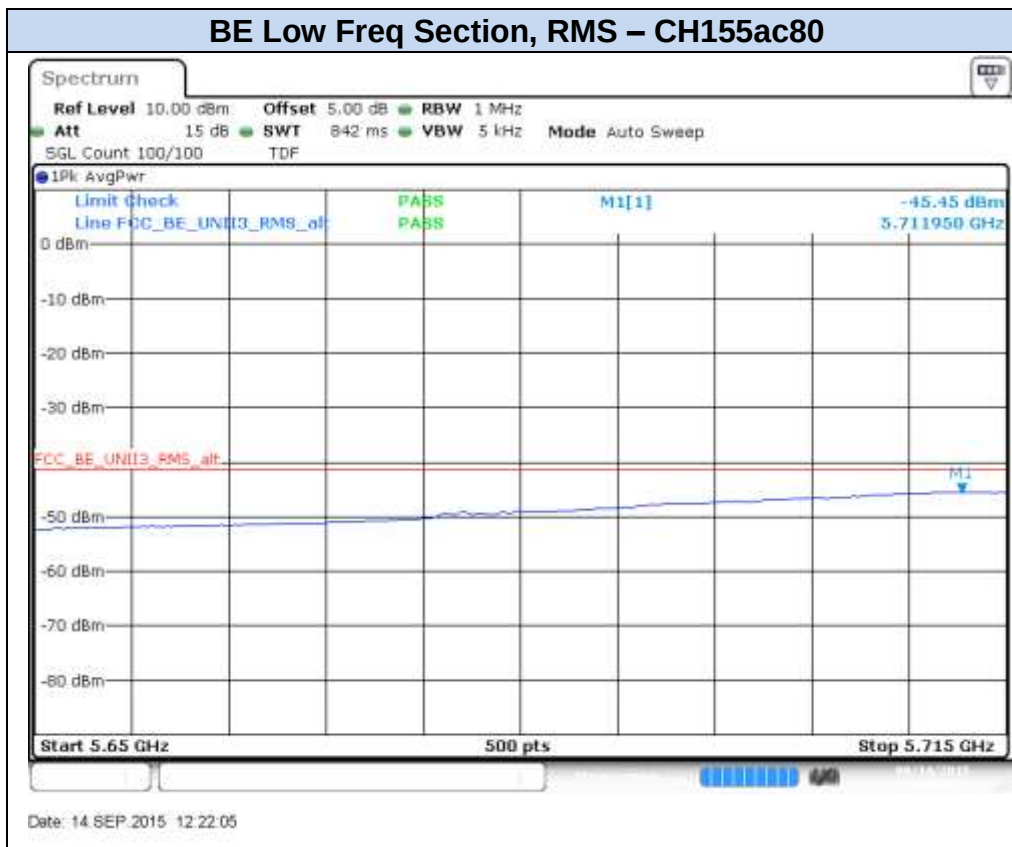
BE Low Freq Section, Peak – CH155ac80

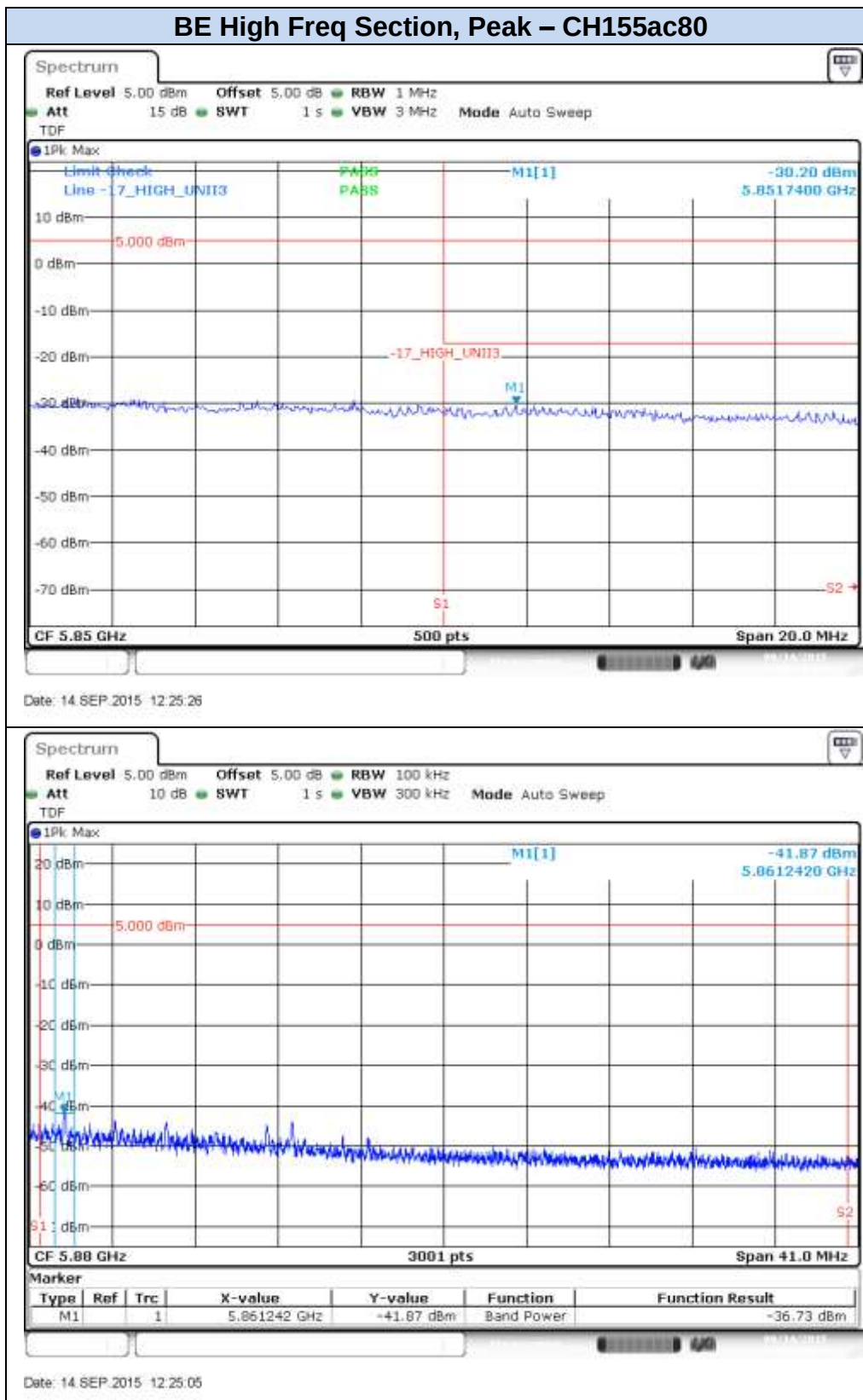


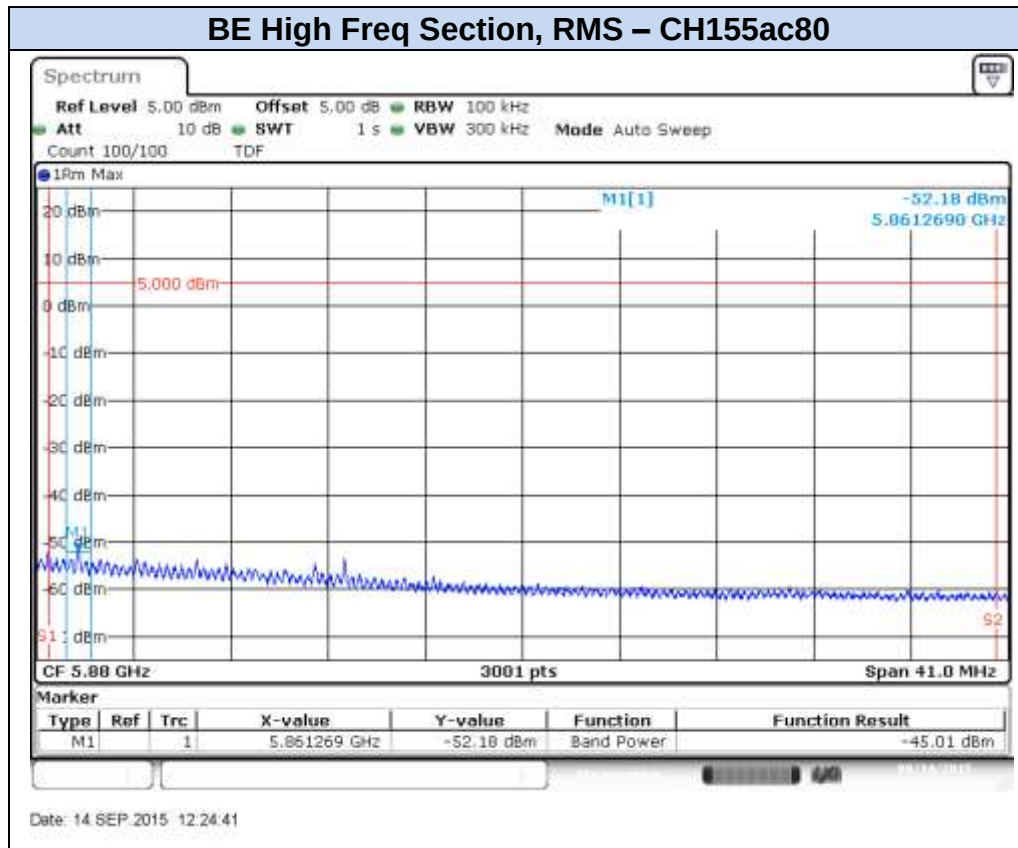
Date: 14 SEP.2015 12:22:46



Date: 14 SEP.2015 12:22:30







E.4 Radiated spurious emission

Standard references:

FCC part	RSS part	Limits
15.407 (b) (4) 15.209	RSS-247 Clause 6.2.4 (2)	Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a):

Test procedure:

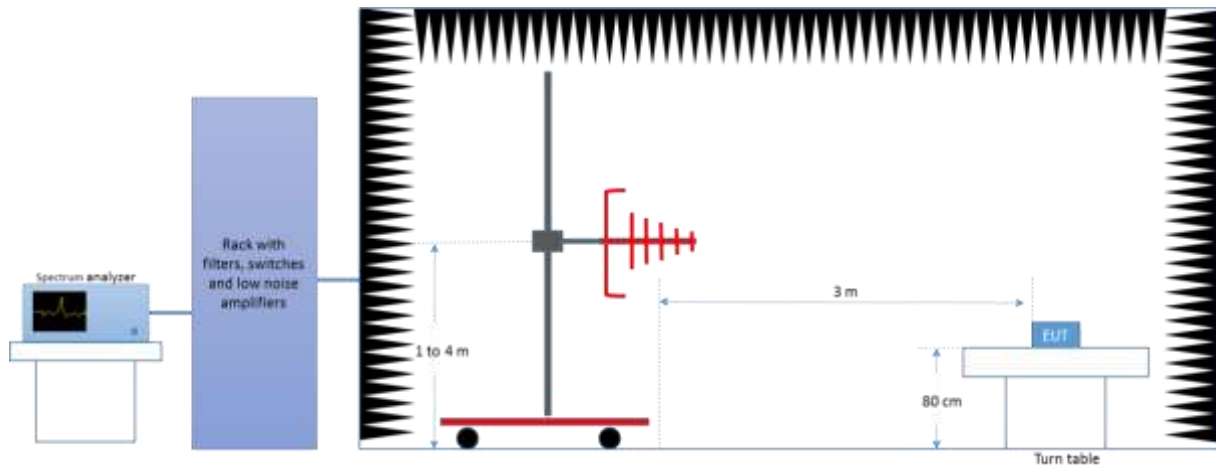
The below setups were used to measure the radiated spurious emissions.

Depending of the frequency range and bands being tested, different antennas and filters were used.

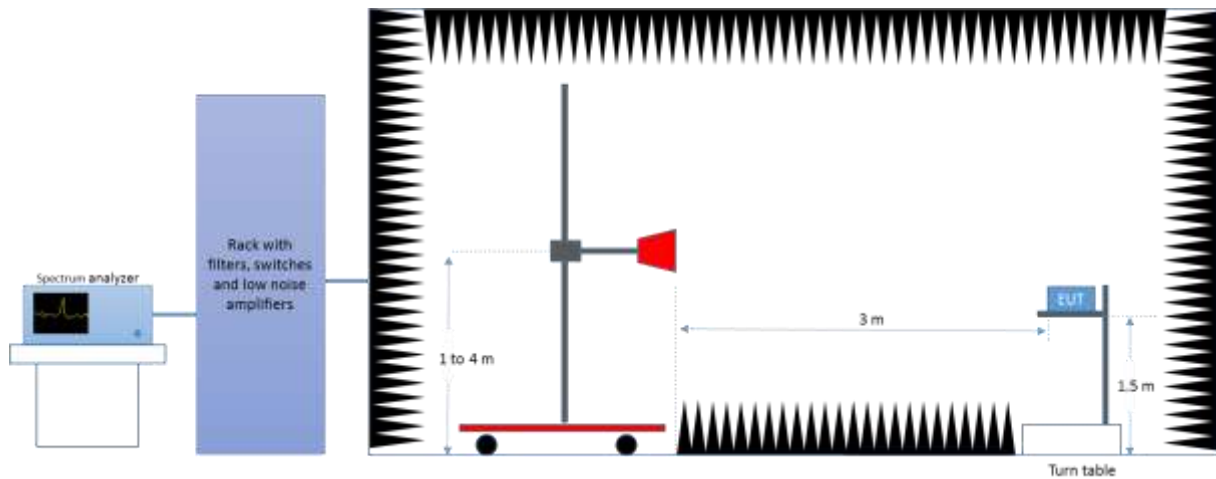
The final measurement is done by varying the antenna height from 1 to 4 meters, the EUT azimuth over 360° and for both Vertical and Horizontal polarizations.

The radiated spurious emissions were measured on the worst case configuration selected from the chapter *E.2 Power Limits. Maximum Output power & Peak power spectral density* and using the lowest, middle and highest channels.

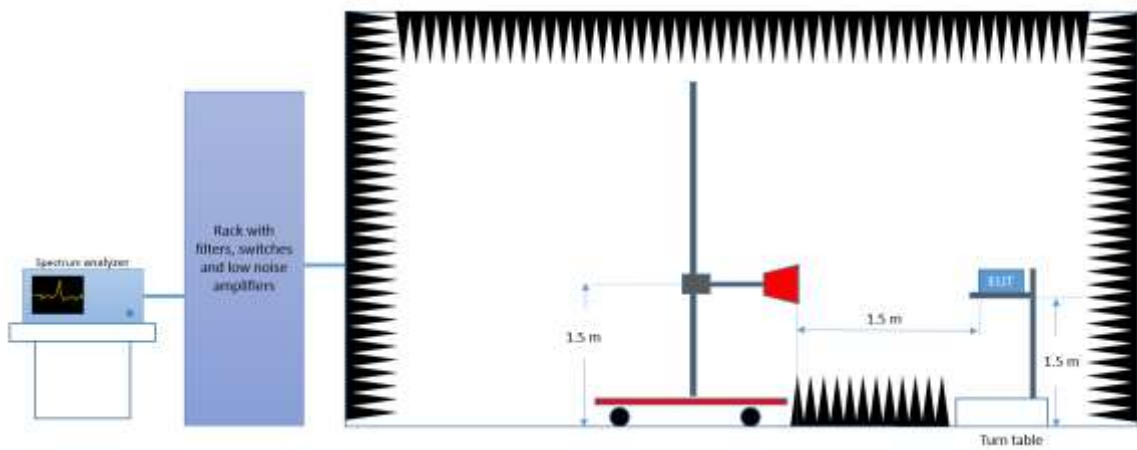
Radiated Setup < 1GHz

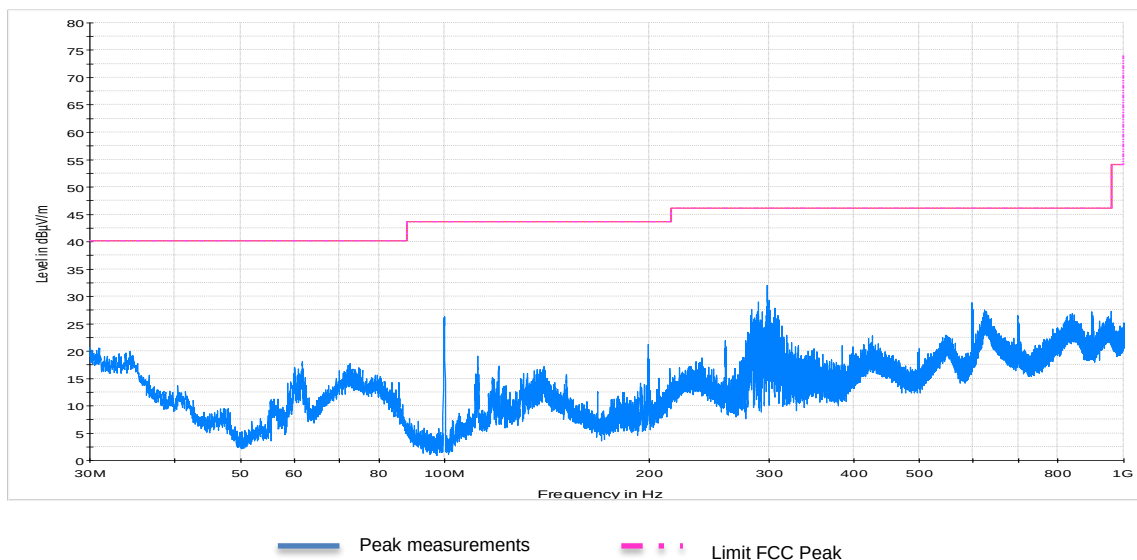


Radiated Setup 1 GHz - 18 GHz



Radiated Setup > 18 GHz



Test Results:**All modes****Radiated Spurious – 30MHz – 1GHz**

Frequency	MaxPeak	Limit	Margin
MHz	dBµV/m	dBµV/m	dB
99	25.5	43.5	18
298	30.5	46	15.5
598	26.1	46	19.9

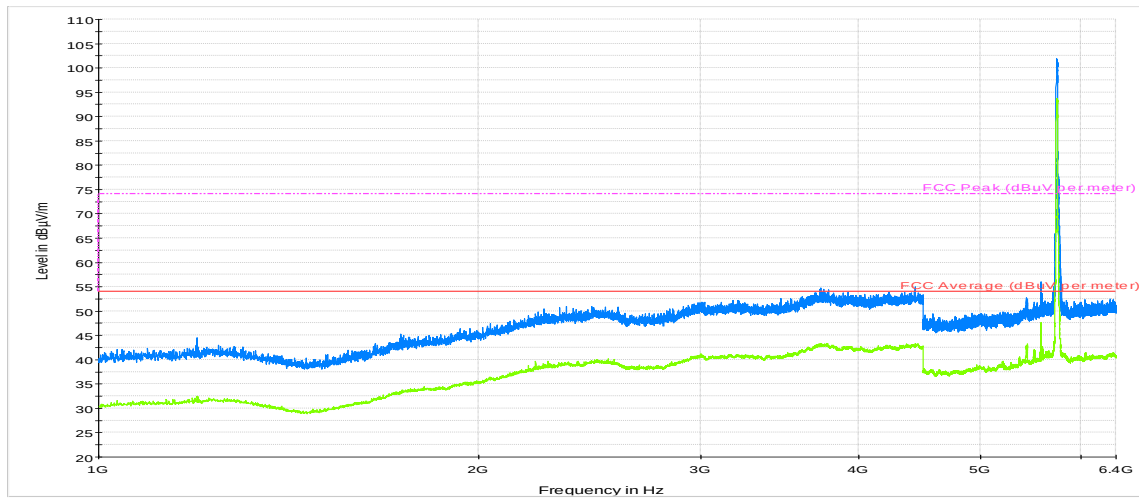
Note 1: The spurious signals detected do not depend on either the operating channel or the modulation mode.

Note 2: No spurious signals were found in all modulations and channels tested.

Note 3: This plot is valid for both SISO and MIMO modes.

802.11a, 6Mbps, Chain A

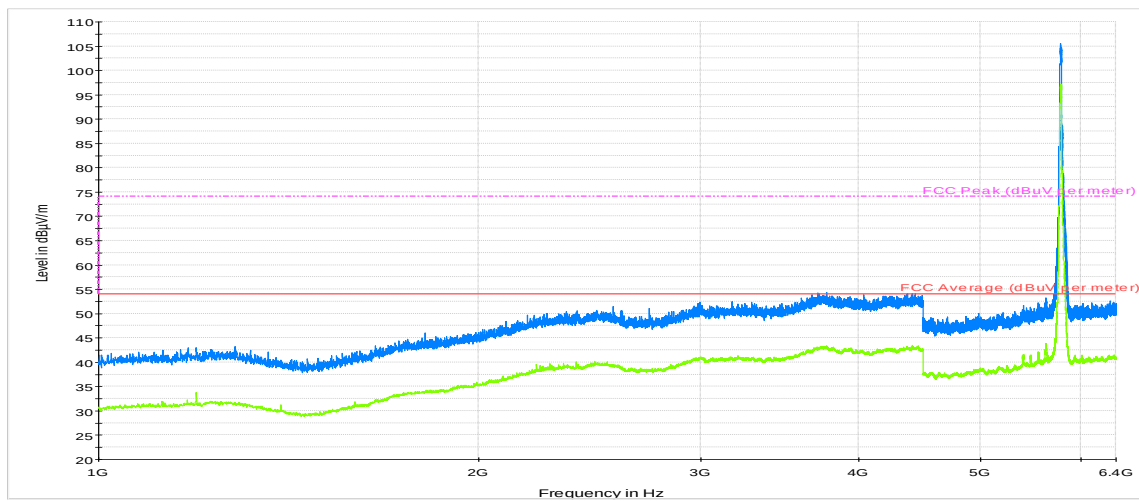
Radiated Spurious – 1GHz – 6.4GHz–CH149



— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
4435	54.4	---	74	19.6
4435	---	42.9	54	11.1

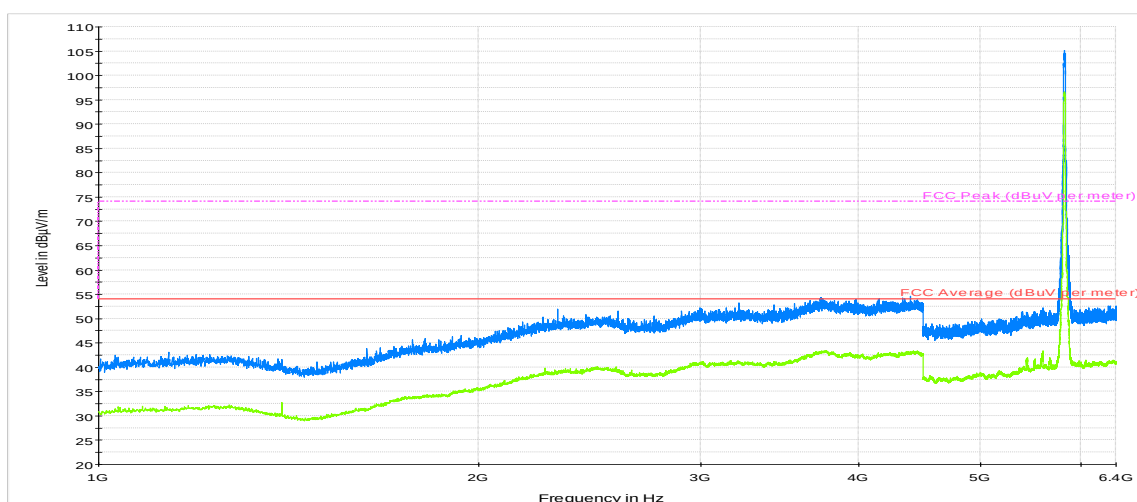
Radiated Spurious – 1GHz – 6.4GHz–CH157



— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
4436	54.1	---	74	19.9
4436	---	43.3	54	10.7

Radiated Spurious – 1GHz – 6.4GHz–CH165

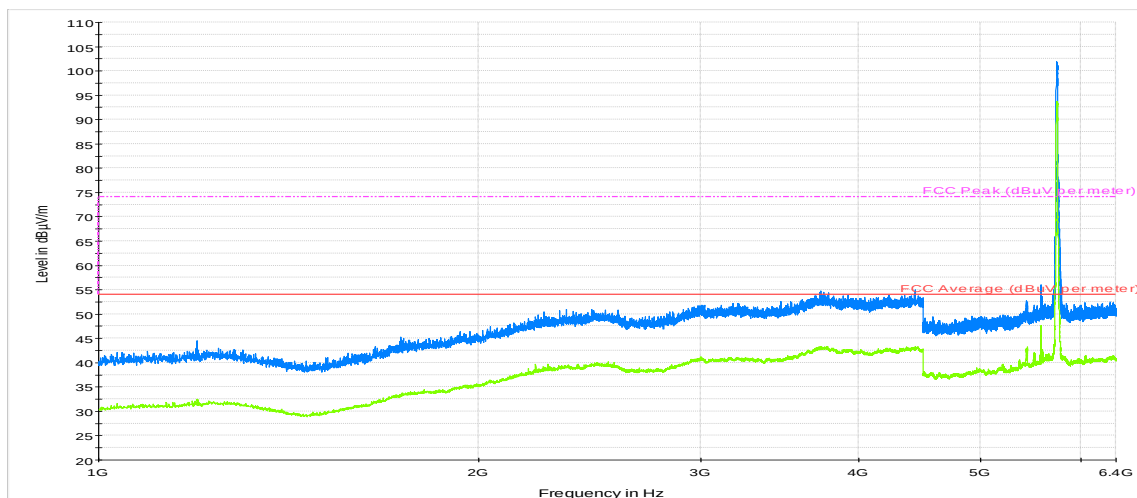


— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
3729	54.3	---	74	19.7
3729	---	43.2	54	10.8

802.11a, 6Mbps, Chain B

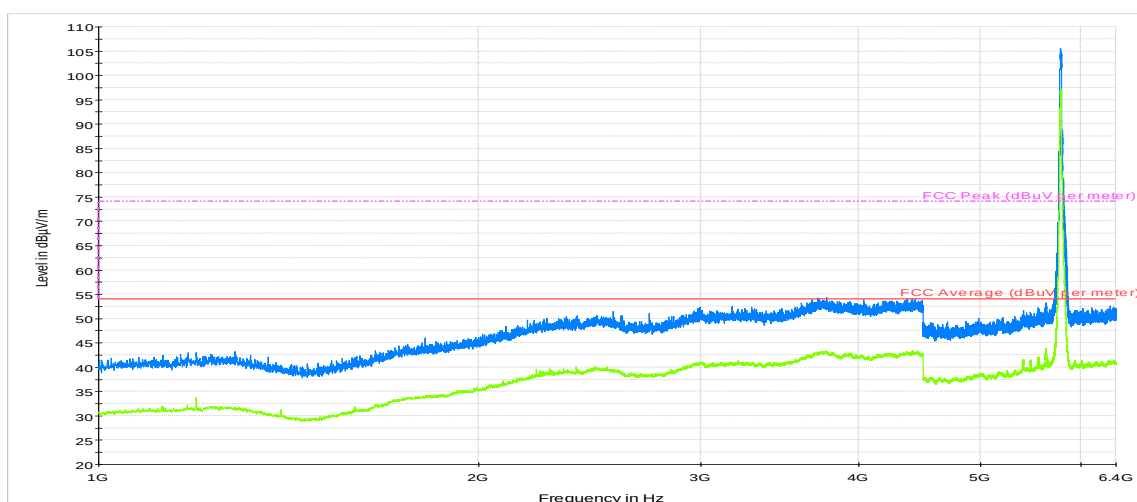
Radiated Spurious – 1GHz – 6.4GHz–CH149



— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
4447	53.5	---	74	20.5
4447	---	43.2	54	10.8

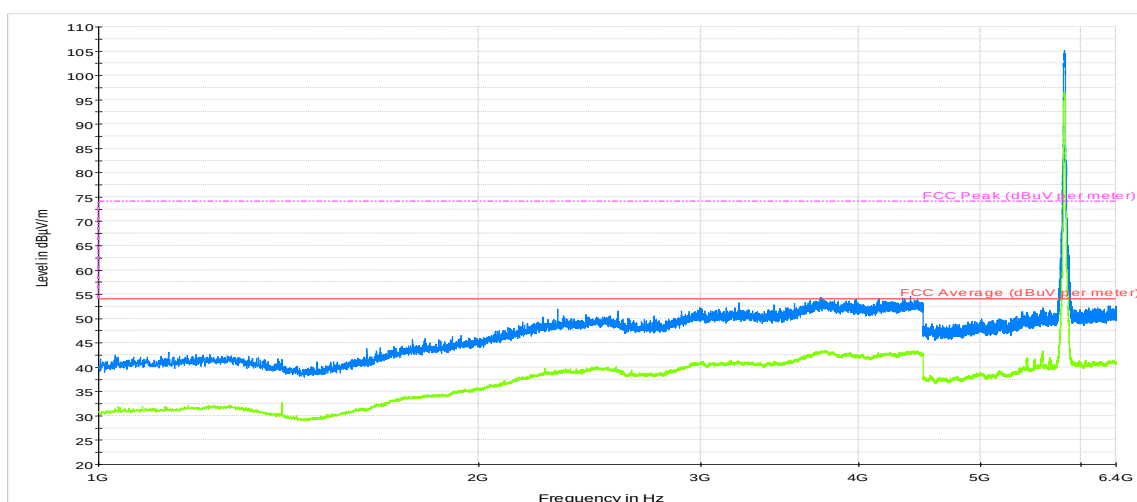
Radiated Spurious – 1GHz – 6.4GHz–CH157



— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
3736	54.8	---	74	19.2
3736	---	43.3	54	10.7

Radiated Spurious – 1GHz – 6.4GHz–CH165

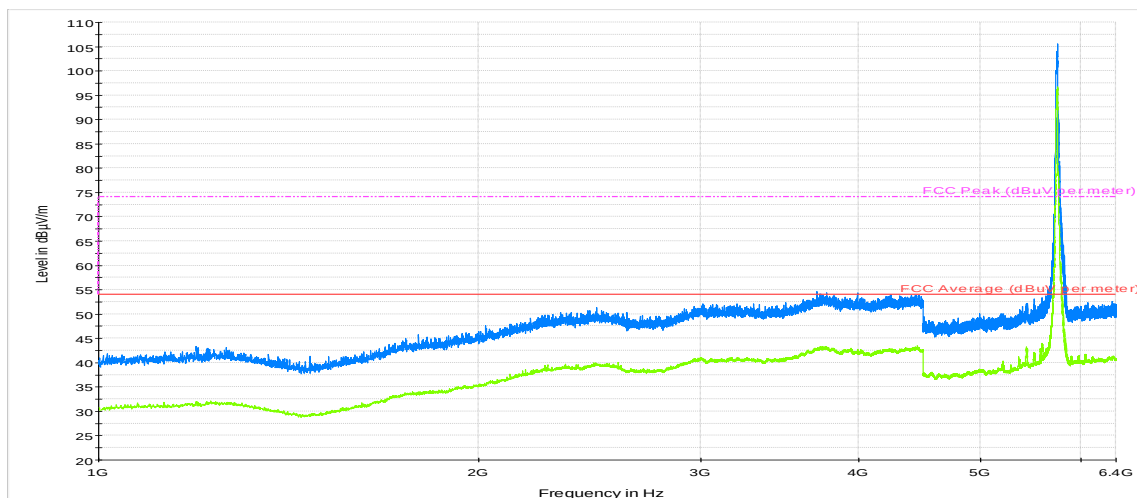


— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
3770	53.3	---	74	20.7
3770	---	43.2	54	10.8

802.11n20, HT0 (SISO), Chain A

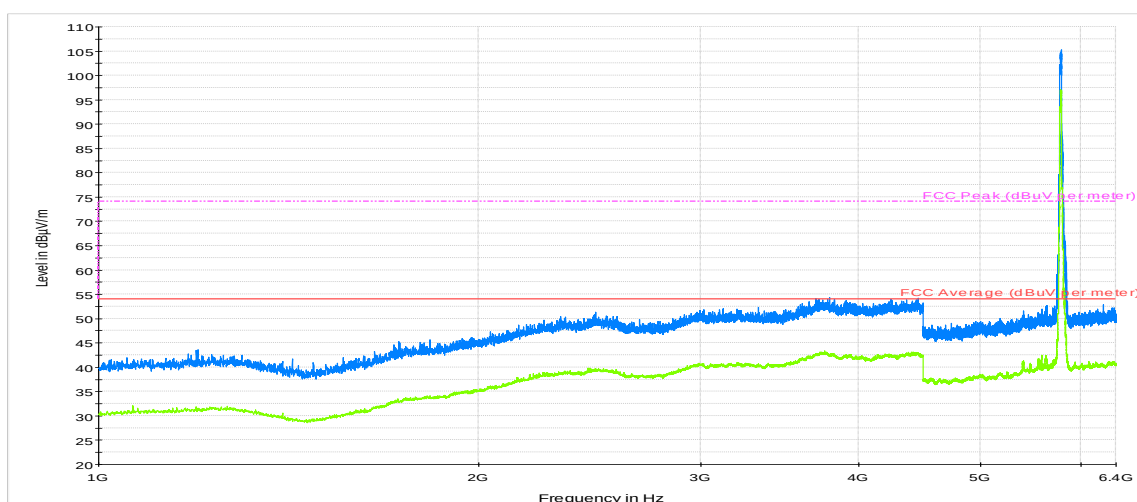
Radiated Spurious – 1GHz – 6.4GHz–CH149



Peak measurements AVG measurements Limit FCC AVG Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
3770	54.4	---	74	19.6
3770	---	43.0	54	11

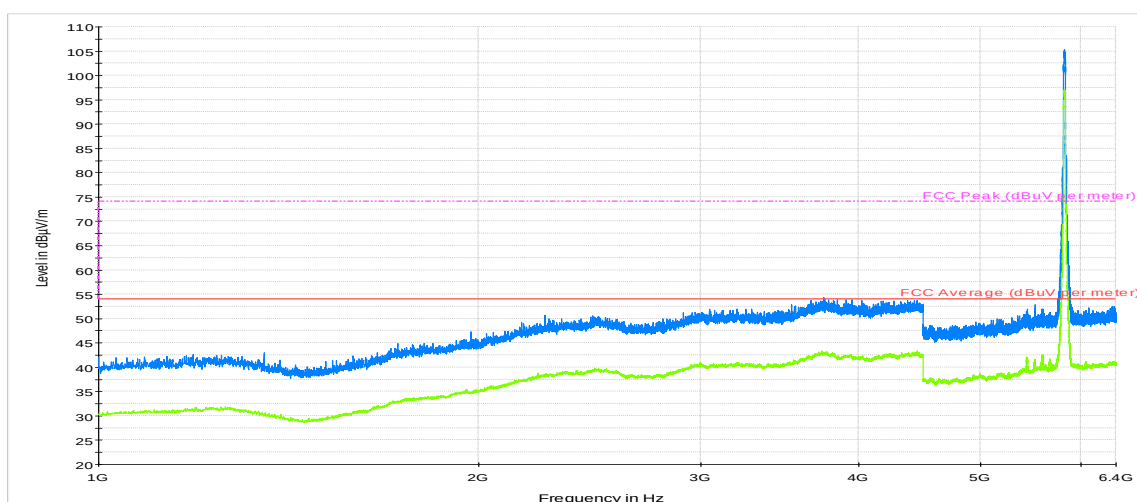
Radiated Spurious – 1GHz – 6.4GHz–CH157



— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 — Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
3720	54.5	---	74	19.5
3720	---	42.4	54	11.6

Radiated Spurious – 1GHz – 6.4GHz–CH165

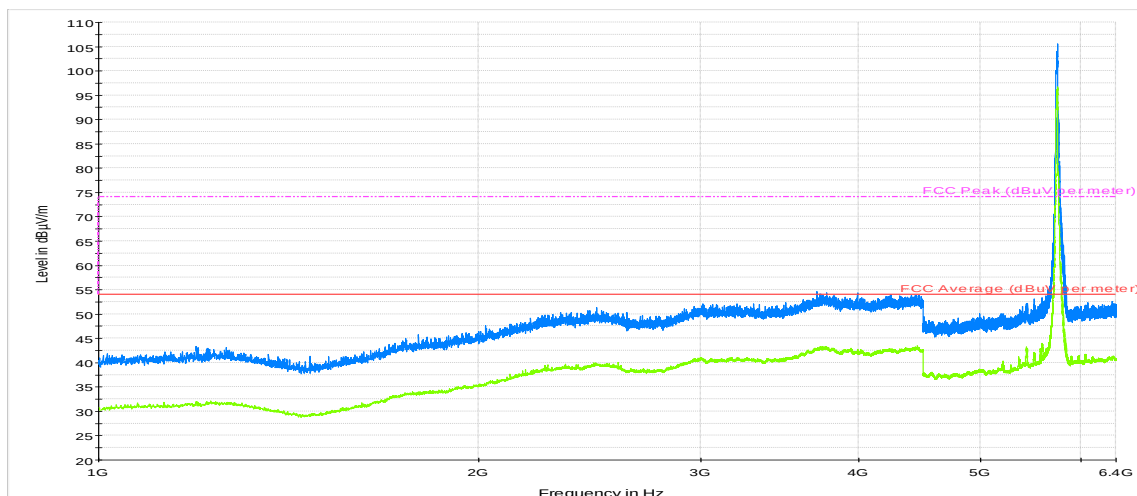


— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
3753	54.4	---	74	19.6
3753	---	43.2	54	10.8

802.11n20, HT0 (SISO), Chain B

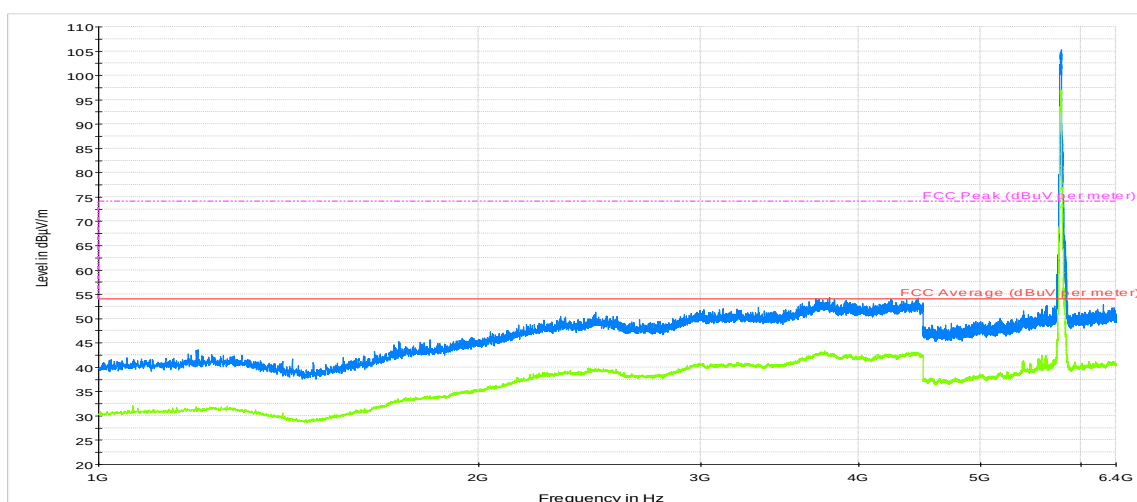
Radiated Spurious – 1GHz – 6.4GHz–CH149



— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
3780	54.7	---	74	19.3
3780	---	43.1	54	10.9

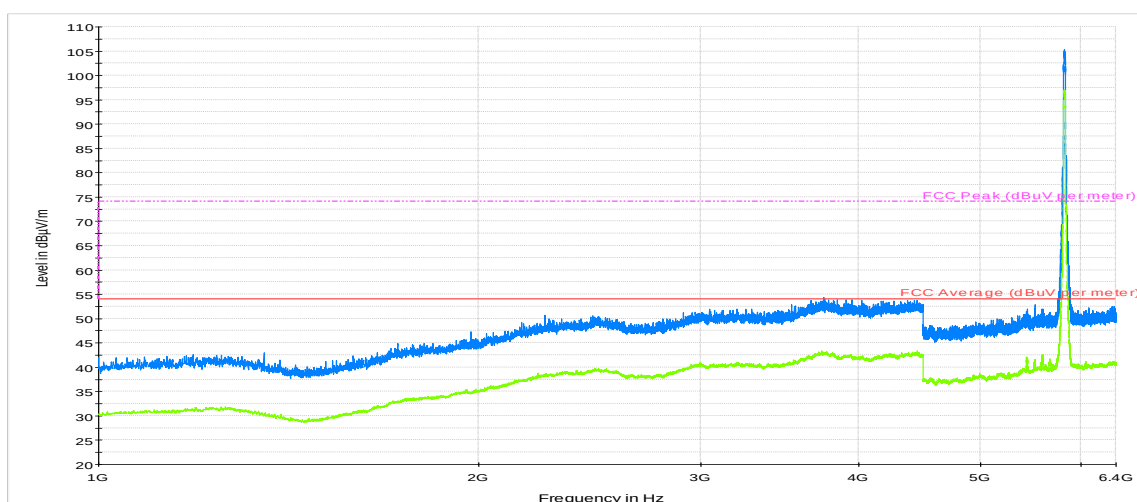
Radiated Spurious – 1GHz – 6.4GHz–CH157



— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
3720	54.5	---	74	19.5
3720	---	42.4	54	11.6

Radiated Spurious – 1GHz – 6.4GHz–CH165

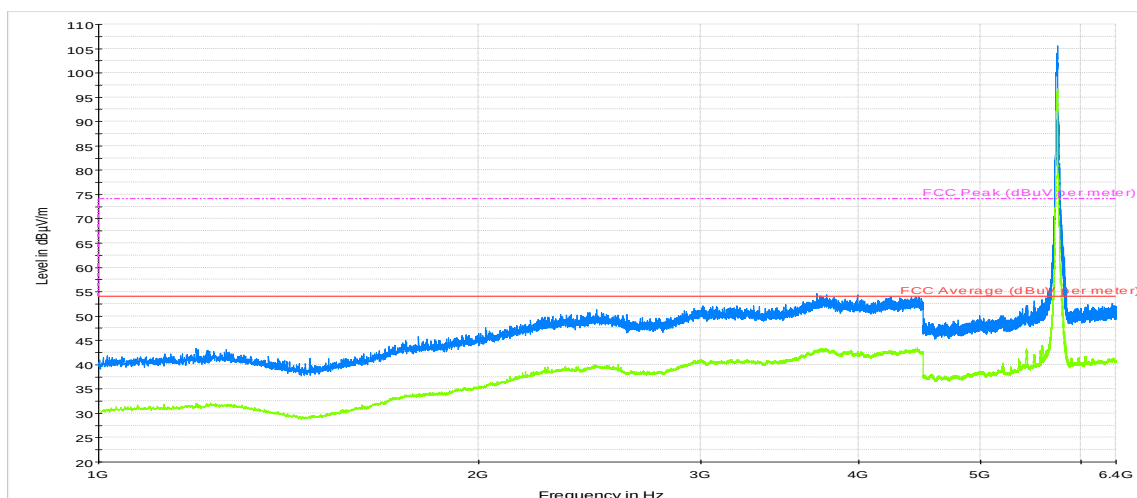


— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
3729	54.2	---	74	19.8
3729	---	43.1	54	10.9

802.11n20, HT0 (MIMO), Chain A+B

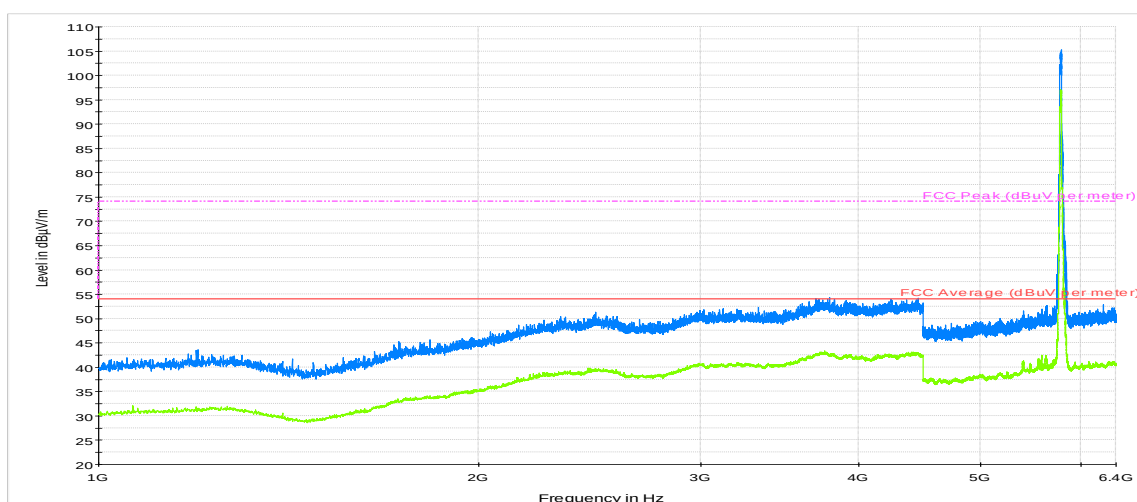
Radiated Spurious – 1GHz – 6.4GHz–CH149



— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
4453	53.6	---	74	20.4
4453	---	42.7	54	11.3

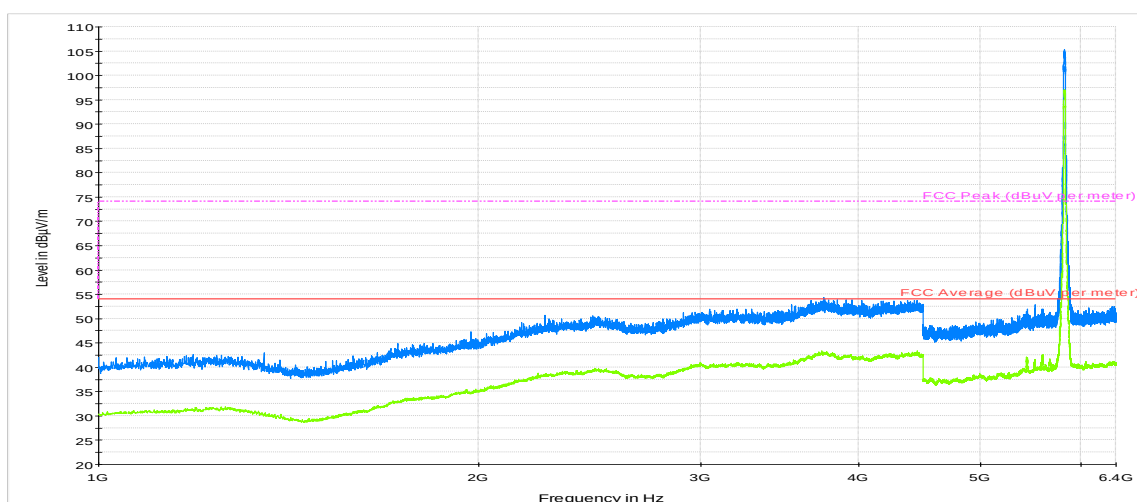
Radiated Spurious – 1GHz – 6.4GHz–CH157



— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
3738	53.0	---	74	21
3738	---	43.0	54	11

Radiated Spurious – 1GHz – 6.4GHz–CH165

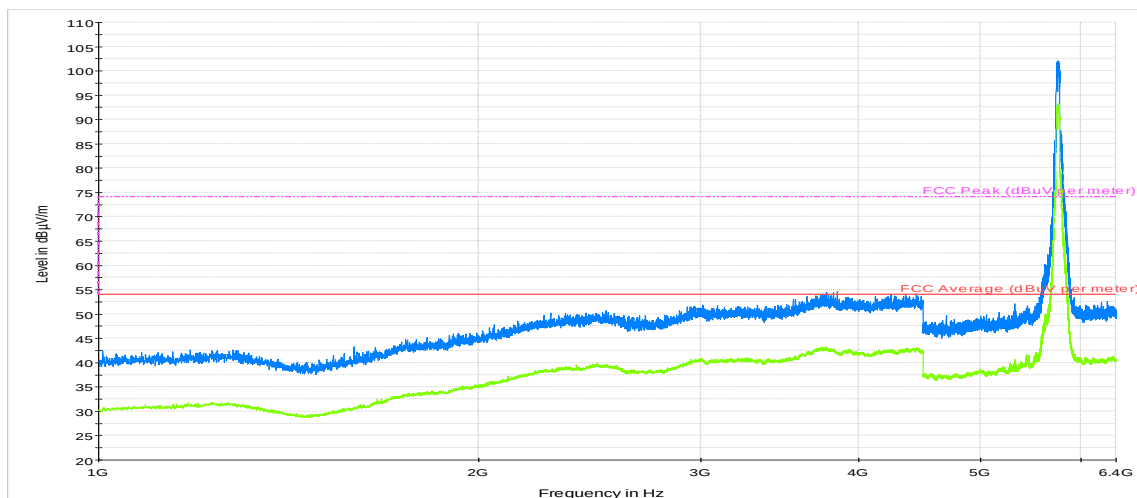


— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
3737	54.3	---	74	19.7
3737	---	43.1	54	10.9

802.11n40, HT0 (SISO), Chain A

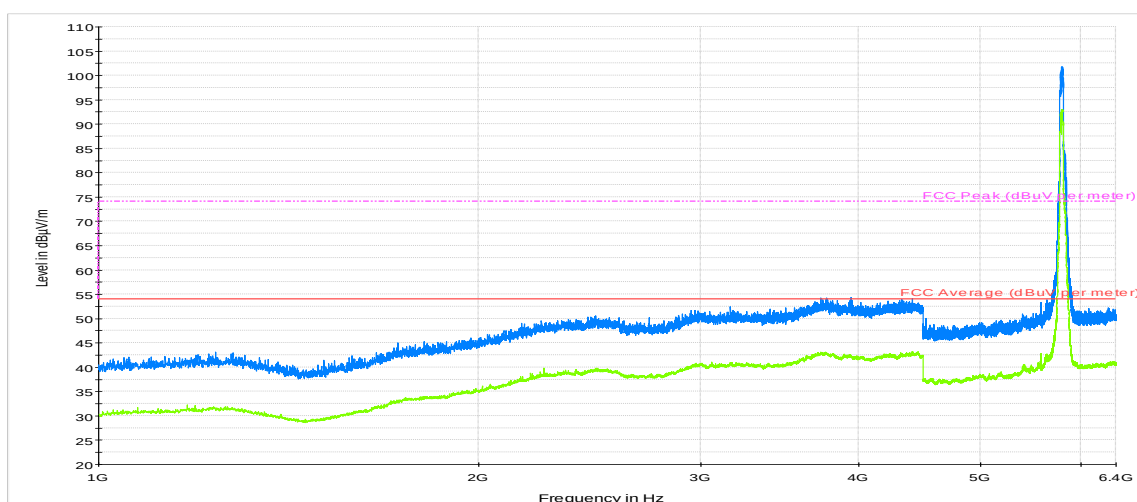
Radiated Spurious – 1GHz – 6.4GHz–CH151F



— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
3740	54.4	---	74	19.6
3740	---	43.0	54	11

Radiated Spurious – 1GHz – 6.4GHz–CH159F

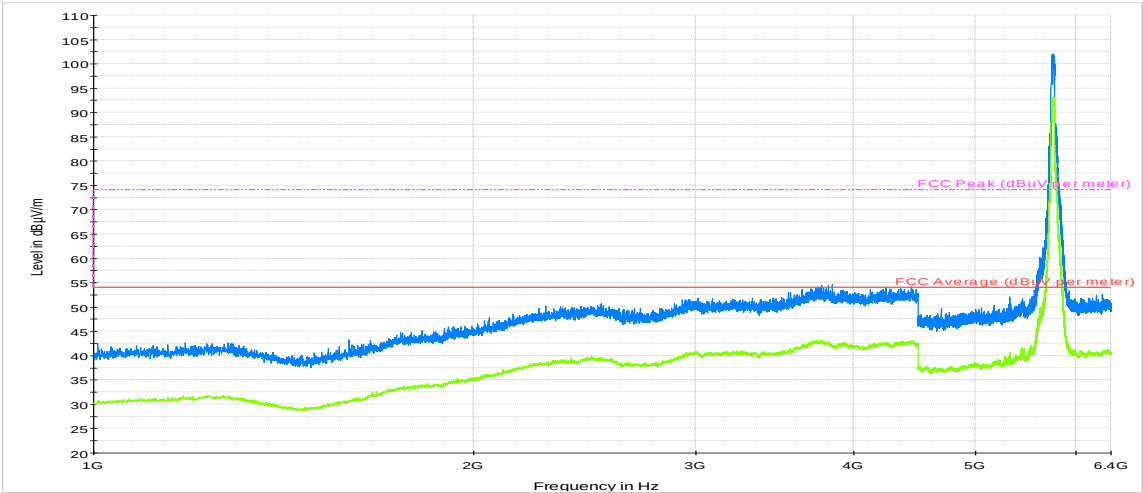


— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
3751	53.0	---	74	21
3751	---	42.5	54	11.5

802.11n40, HT0(SISO), Chain B

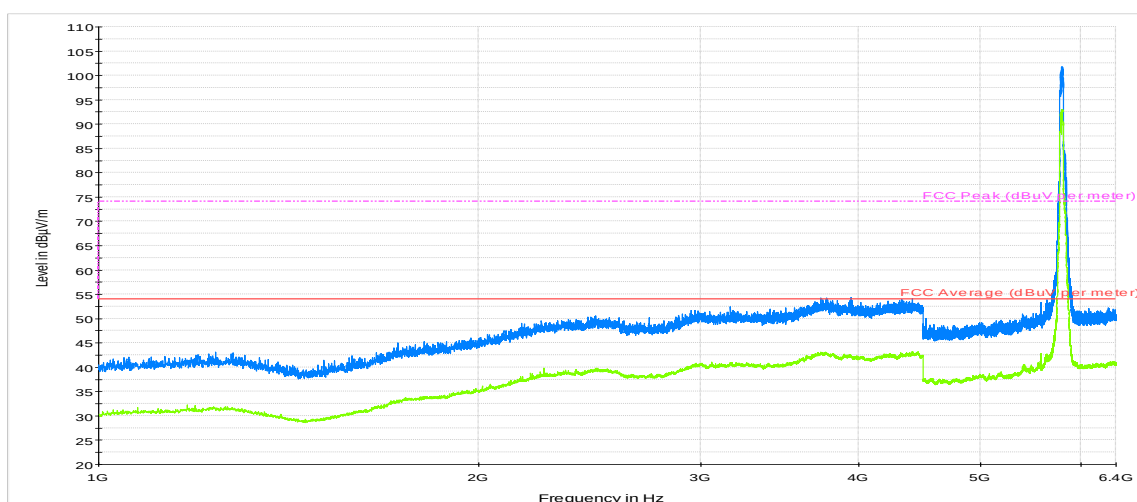
Radiated Spurious – 1GHz – 6.4GHz–CH151F



Peak measurements AVG measurements Limit FCC AVG Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
3734	54.3	---	74	19.7
3734	---	43.1	54	10.9

Radiated Spurious – 1GHz – 6.4GHz–CH159F

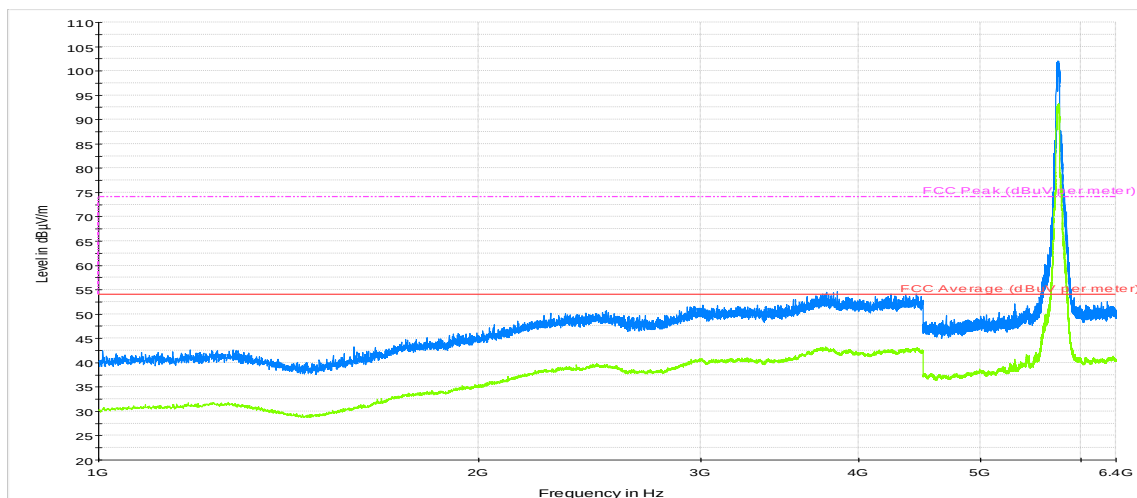


— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 — Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
3751	54.7	---	74	19.4
3751	---	43.1	54	10.9

802.11n40, HT8 (MIMO), Chain A+B

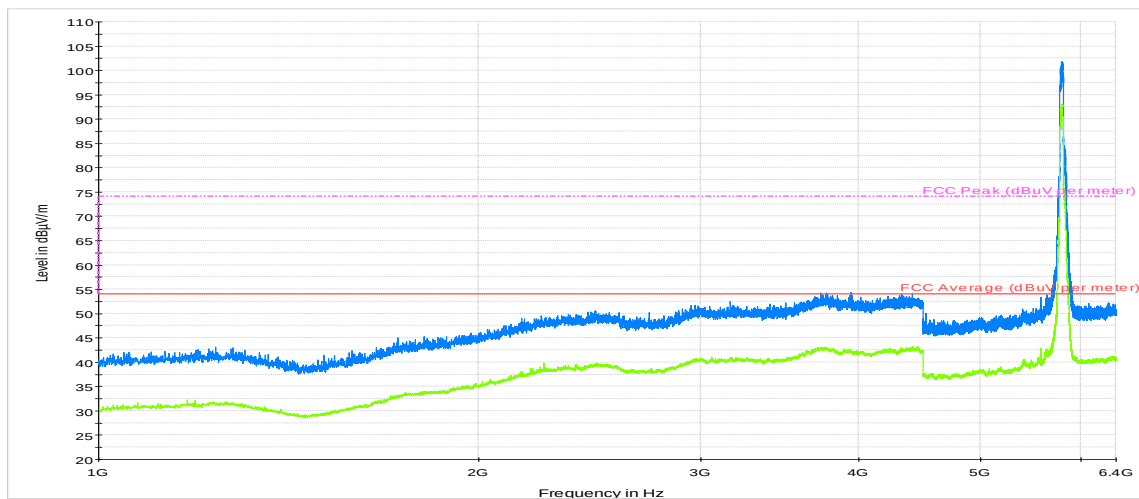
Radiated Spurious – 1GHz – 6.4GHz–CH151F



Peak measurements AVG measurements Limit FCC AVG Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
3743	53.8	---	74	20.2
3743	---	43.2	54	10.8

Radiated Spurious – 1GHz – 6.4GHz–CH159F

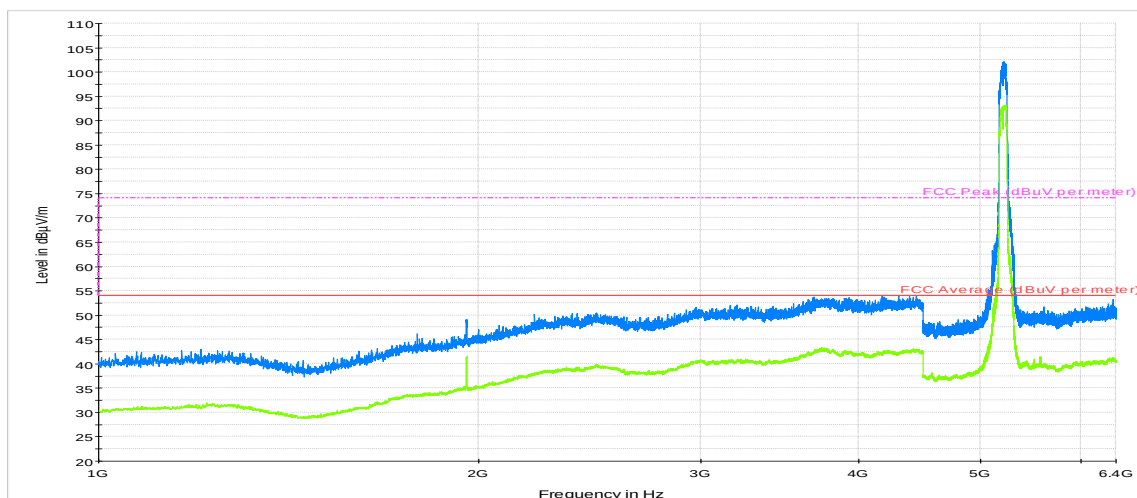


— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
4437	52.5	---	74	21.5
4437	---	42.6	54	11.4

802.11ac80, VHT0 (SISO), Chain A

Radiated Spurious – 1GHz – 6.4GHz–CH155ac80

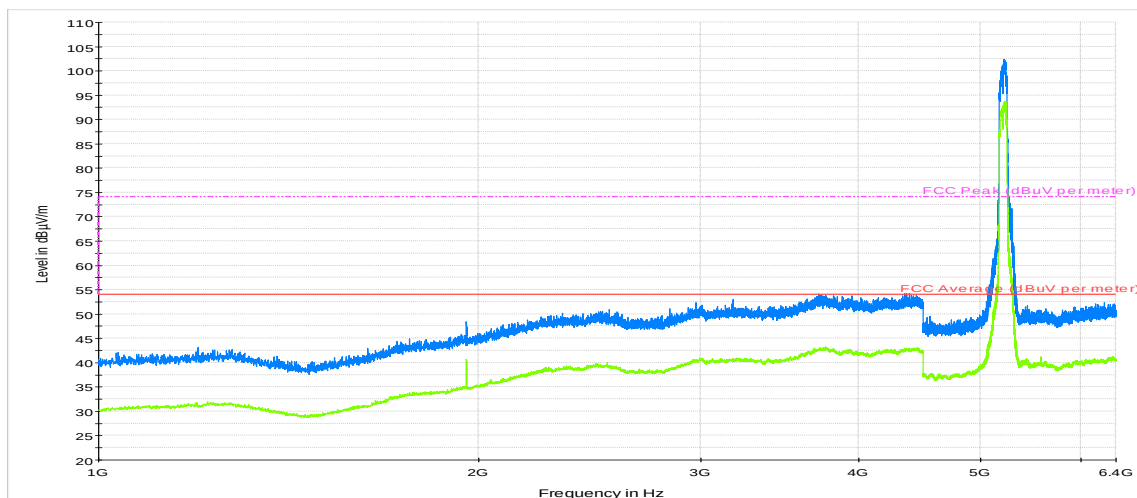


— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
1956	48.4	---	74	25.6
1956	---	40.3	54	13.7
3736	53.0	---	74	11
3736	---	42.7	54	11.3

802.11ac80, VHT0 (SISO), Chain B

Radiated Spurious – 1GHz – 6.4GHz–CH155ac80

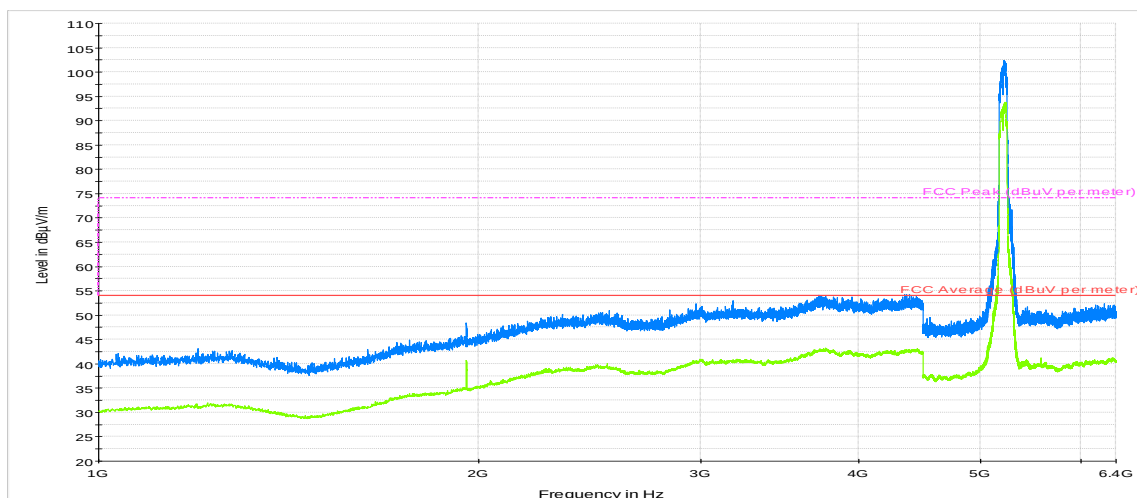


Peak measurements AVG measurements Limit FCC AVG Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
1956	48.4	---	74	25.6
1956	---	40.3	54	13.7
3762	54.2	---	74	19.7
3762	---	43.1	54	10.9

802.11ac80, VHT0 (MIMO), Chain A+B

Radiated Spurious – 1GHz – 6.4GHz–CH155ac80

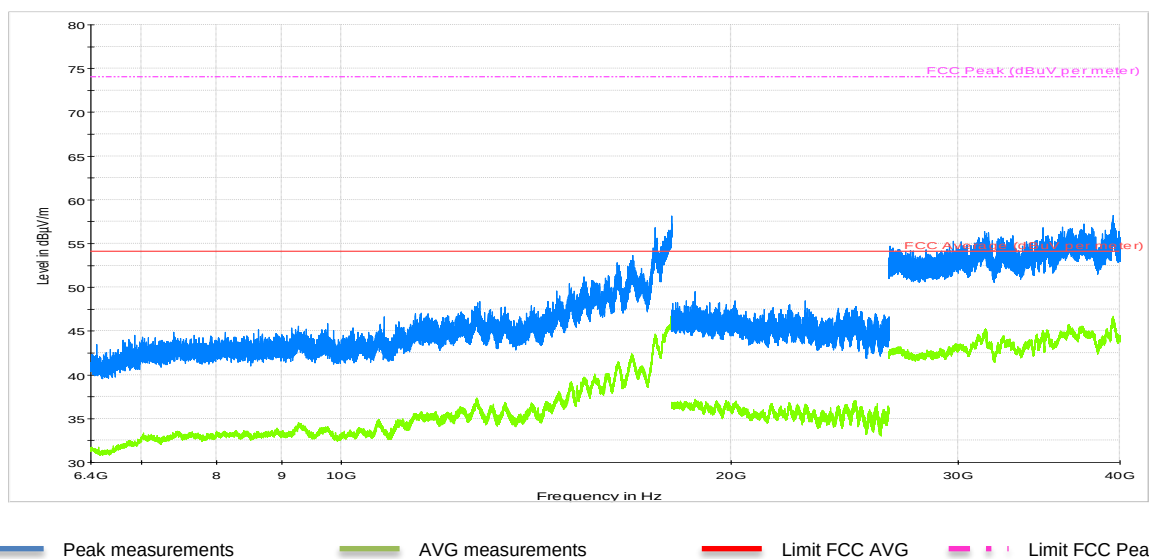


— Peak measurements
 — AVG measurements
 — Limit FCC AVG
 - - - Limit FCC Peak

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBµV/m	dBµV/m	dBµV/m	dB
1956	48.4	---	74	25.6
1956	---	40.3	54	13.7
3800	52.9	---	74	21.1
3800	---	42.2	54	11.8

Radiated Spurious – 6.4GHz to 40GHz

Radiated Spurious – All modes



Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBμV/m	dBμV/m	dBμV/m	dB
18000	58.4	---	74	15.6
18000	---	47.2	54	6.8
31300	56.9	--	74	17.1
31300	--	44.6	54	9.4
39500	57.7	---	74	16.3
39500	---	46.5	54	7.5

Note 1: The spurious signals detected do not depend on either the operating channel or the modulation mode.

Note 2: This plot is valid for both SISO and MIMO modes.