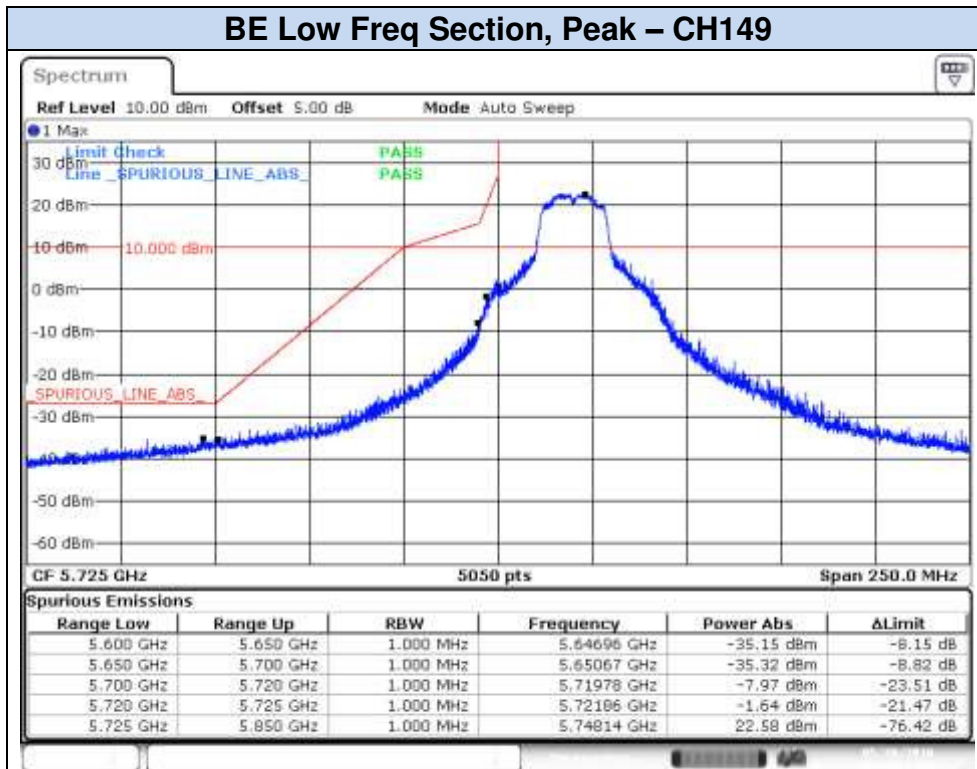
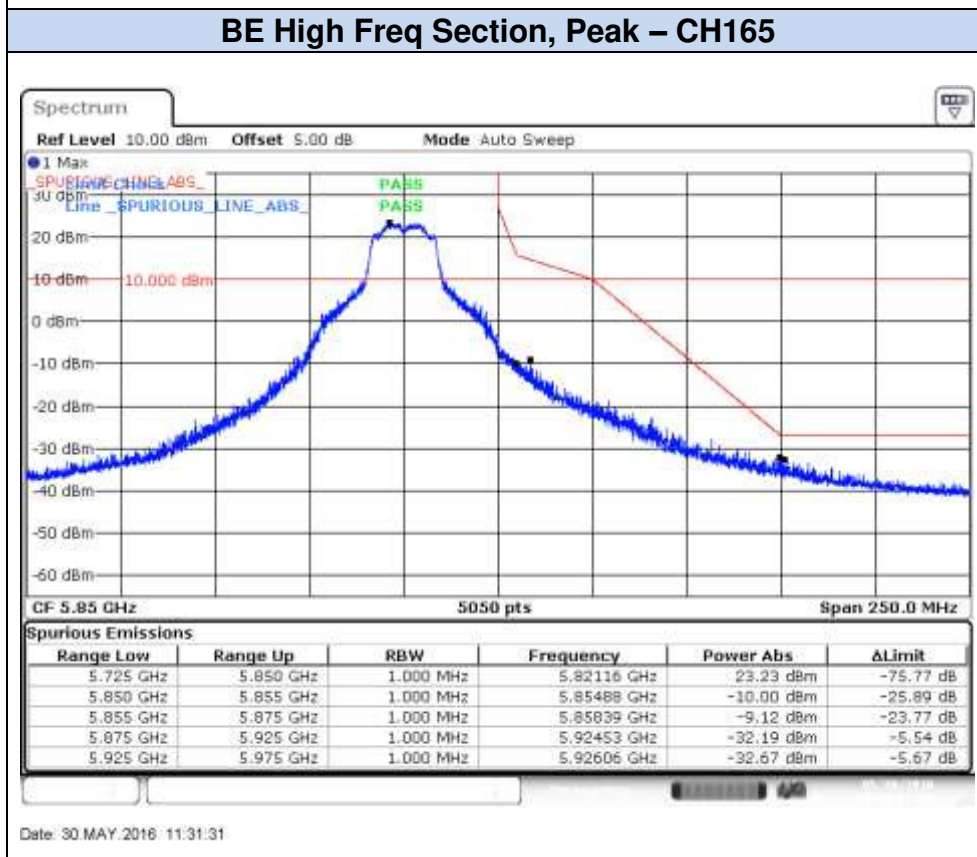


802.11n20, HT0 (SISO) – Chain B

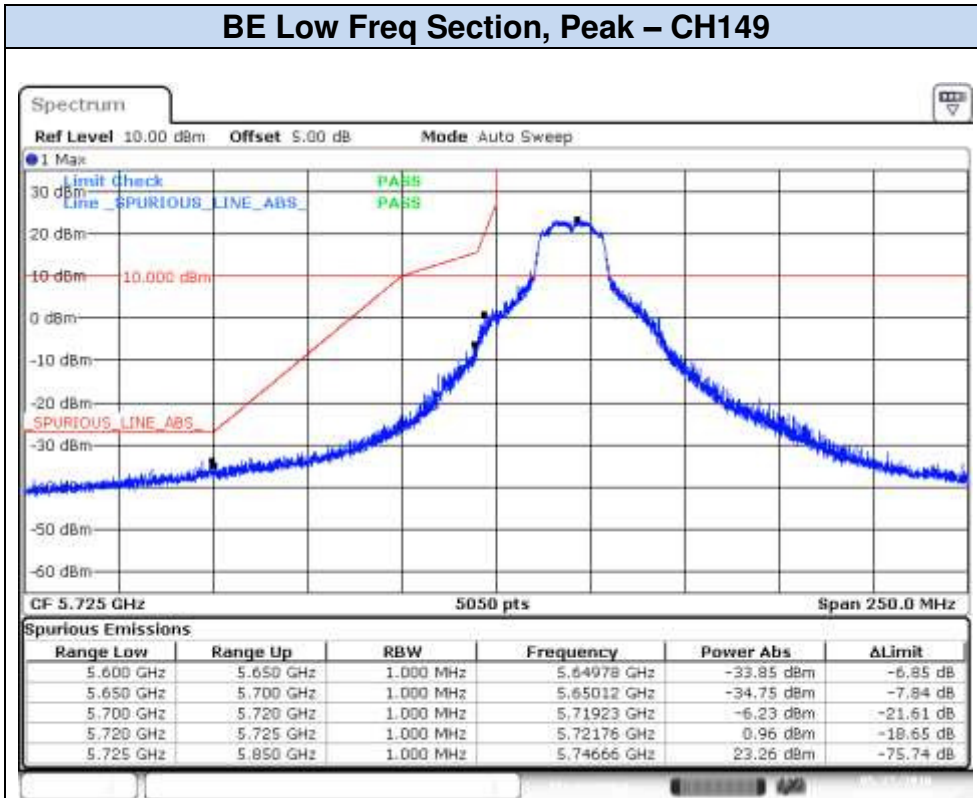


Date: 30.MAY.2016 11:14:31

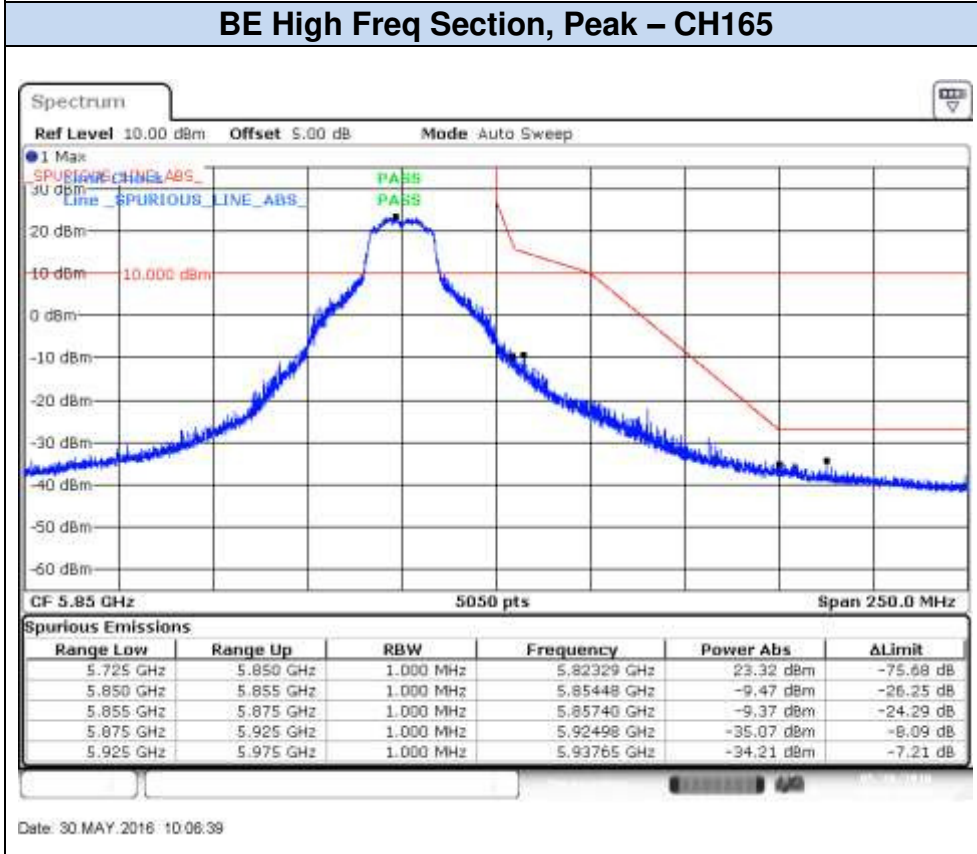


Date: 30.MAY.2016 11:31:31

802.11n20, HT8 (MIMO) – Chain A

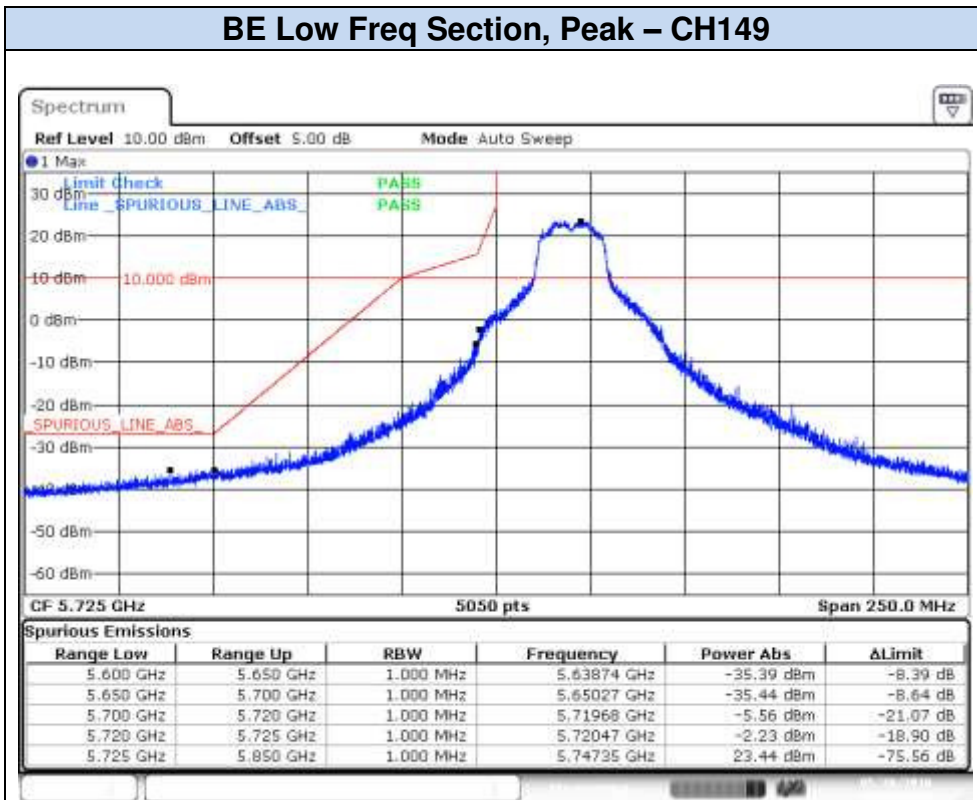


Date: 27 MAY 2016 17:27:49

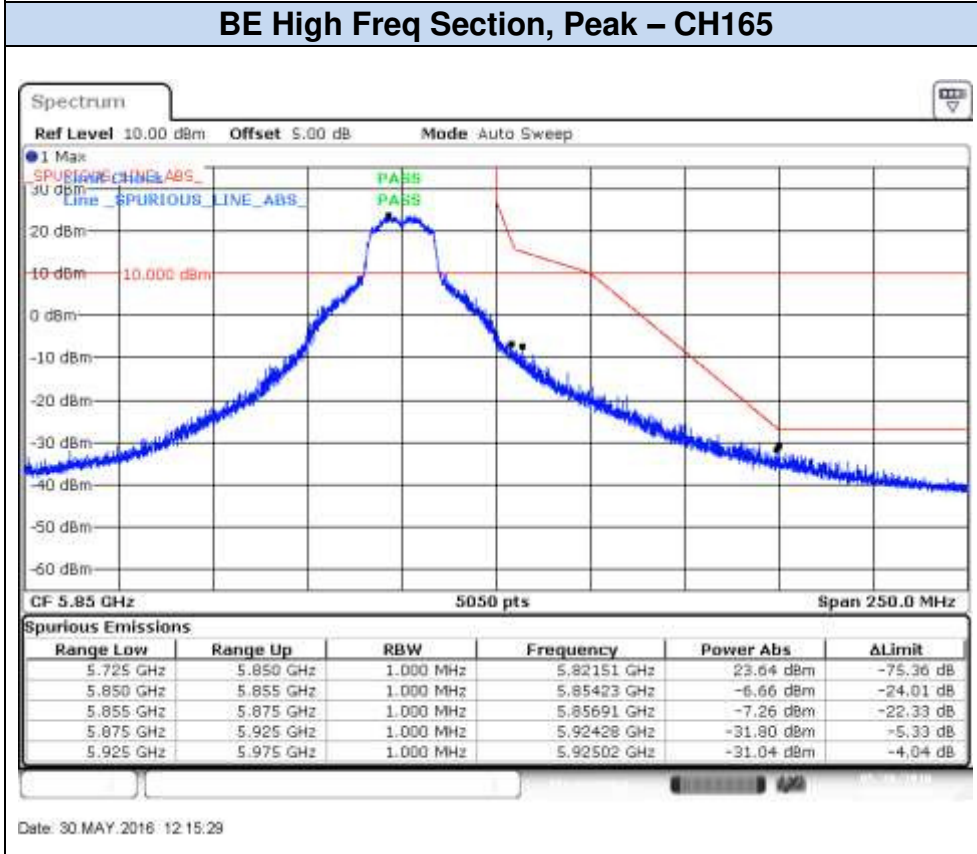


Date: 30 MAY 2016 10:08:39

802.11n20, HT8 (MIMO) – Chain B



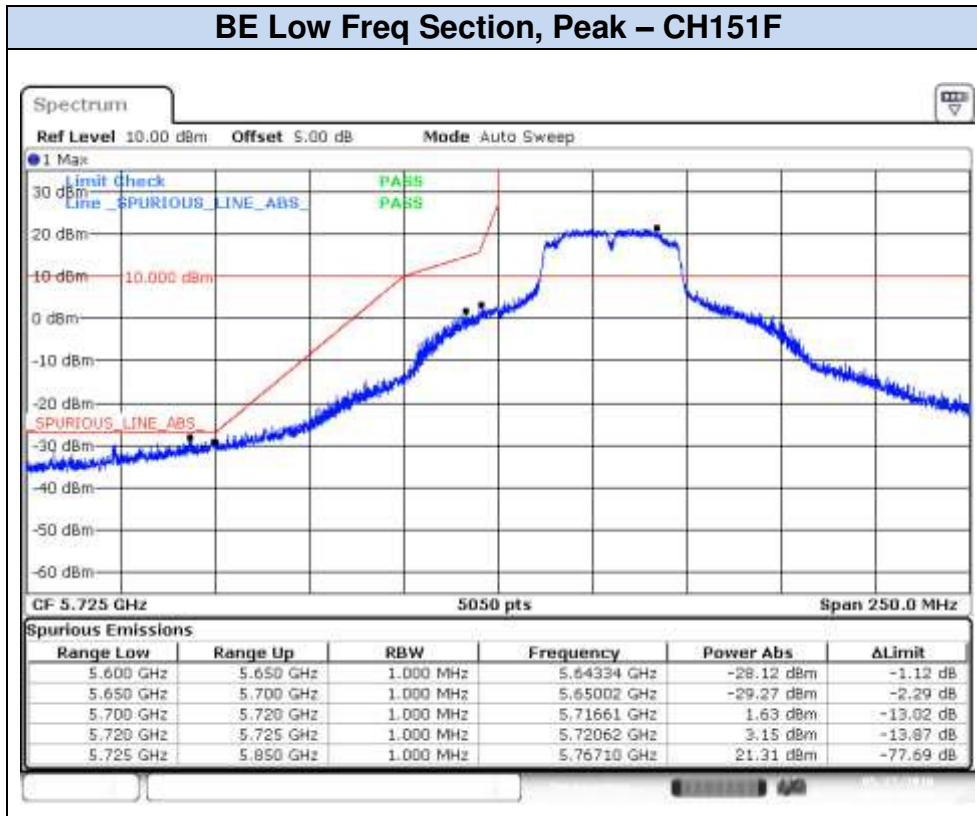
Date: 30 MAY 2016 12:05:33



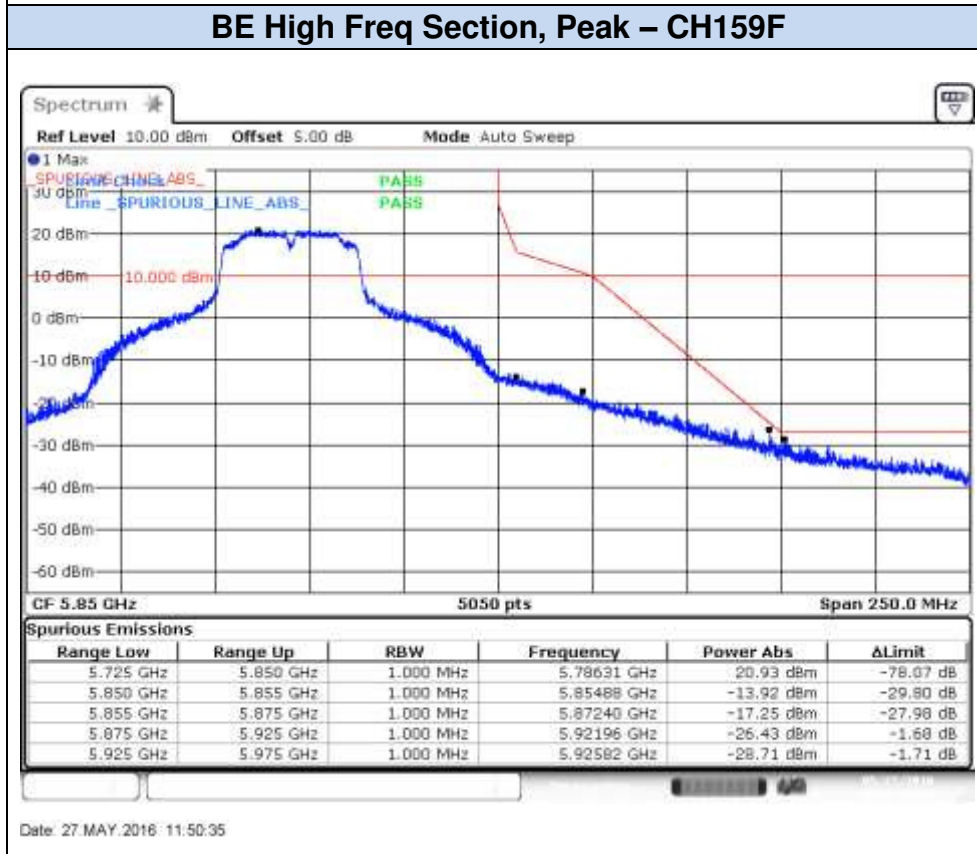
Date: 30 MAY 2016 12:15:28

802.11n40, HT0 (SISO) – Chain A

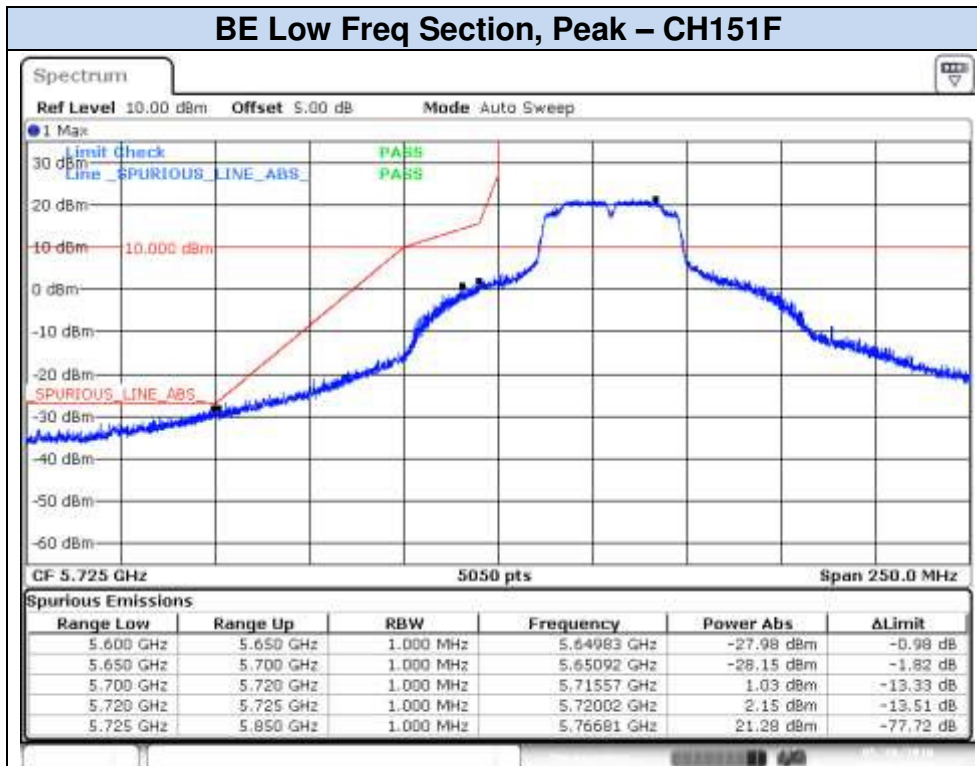
BE Low Freq Section, Peak – CH151F



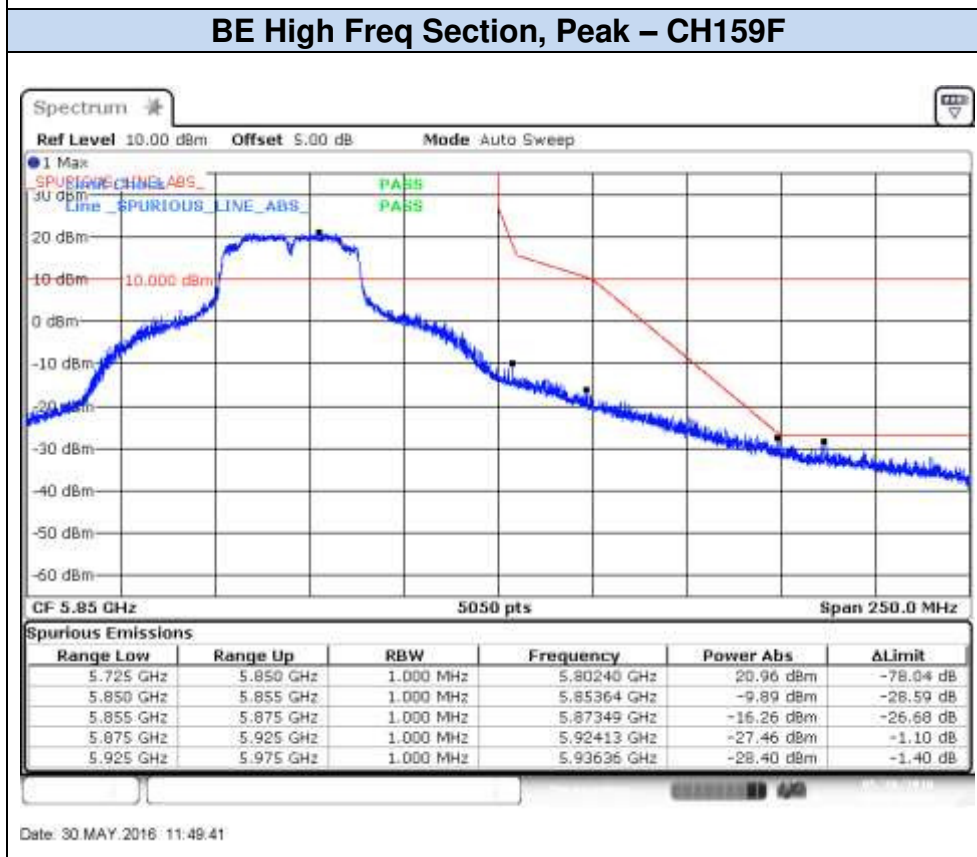
BE High Freq Section, Peak – CH159F



802.11n40, HT0 (SISO) – Chain B

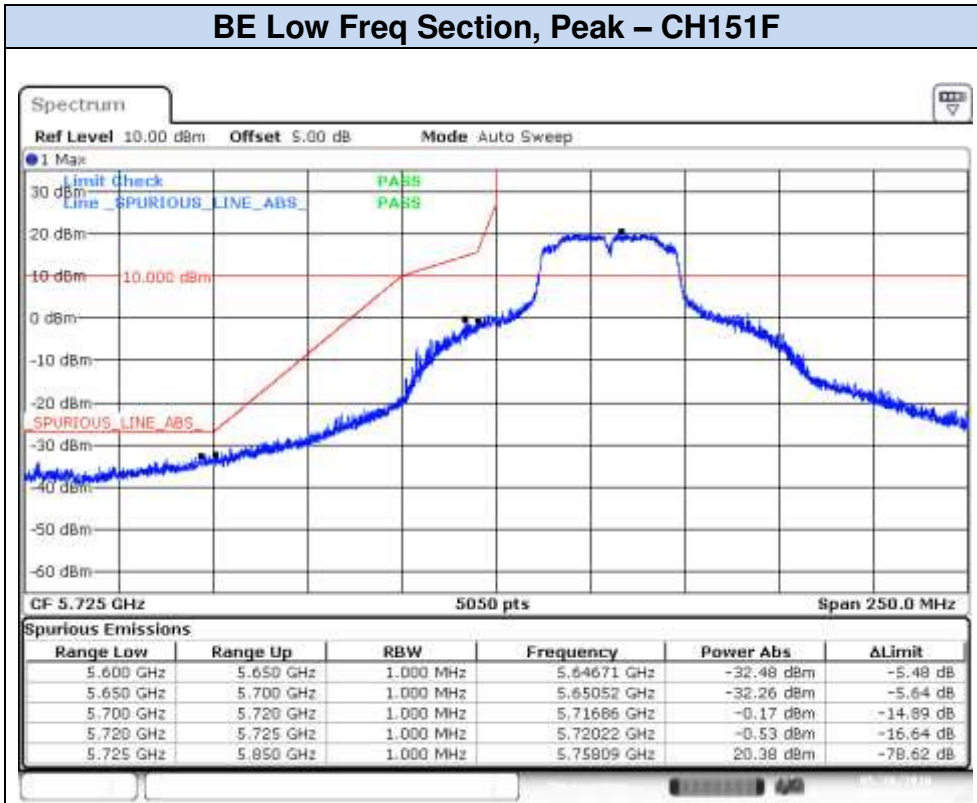


Date: 30.MAY.2016 11:37:14

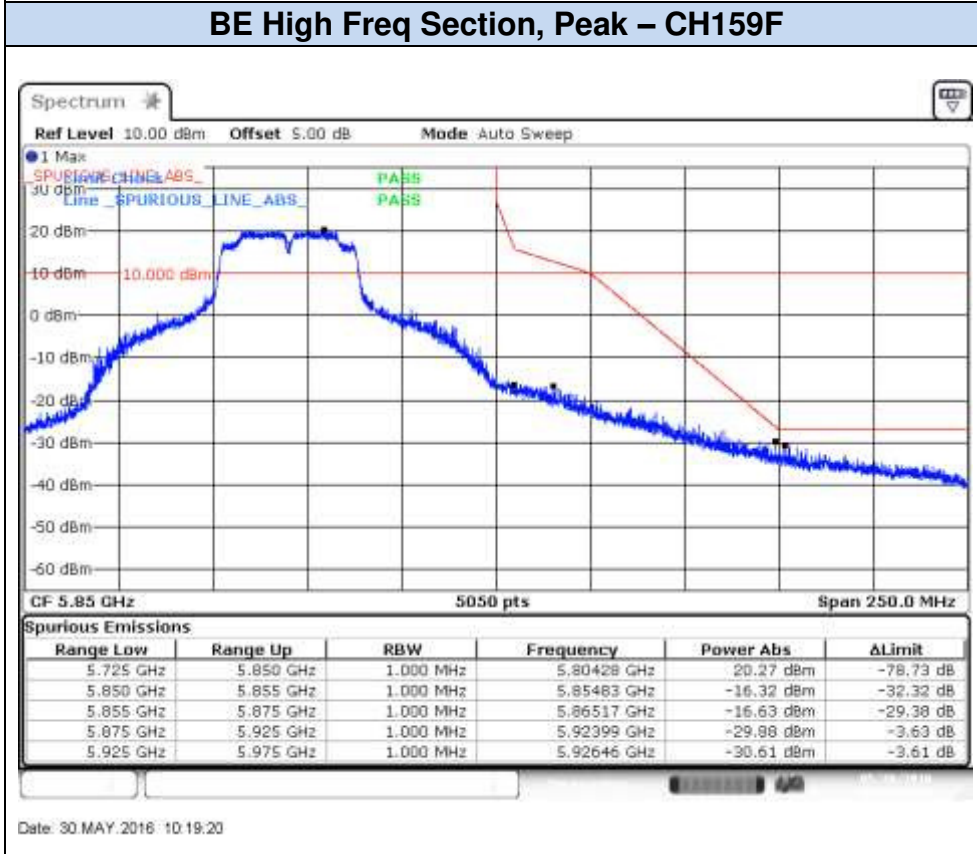


Date: 30.MAY.2016 11:48:41

802.11n40, HT8 (MIMO) – Chain A

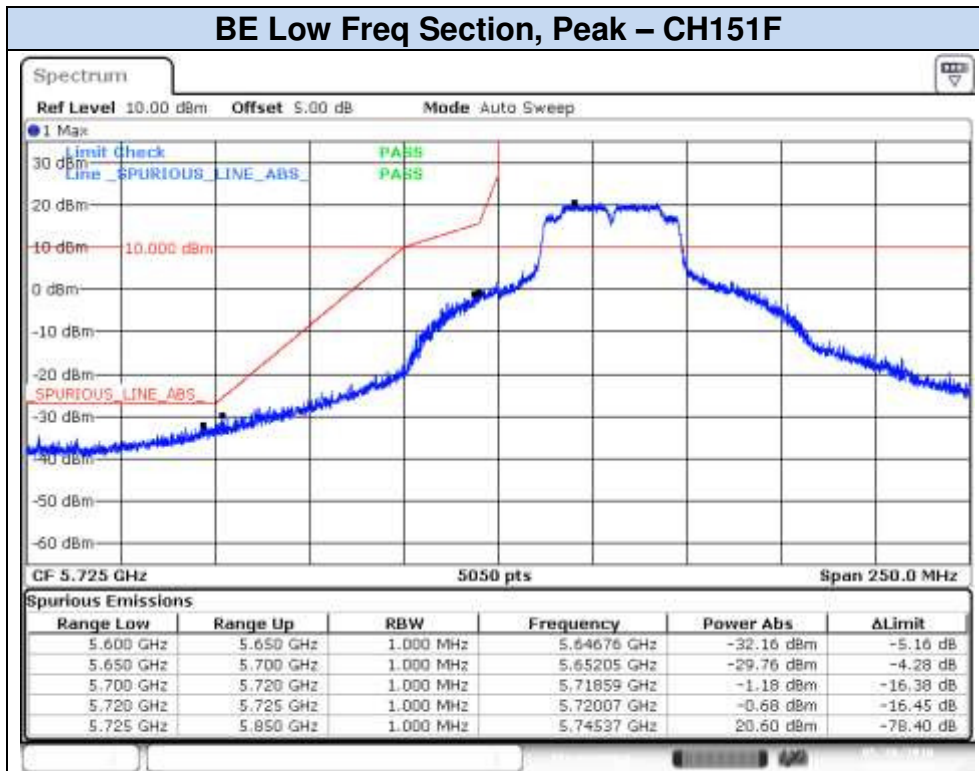


Date: 30 MAY 2016 10:12:49

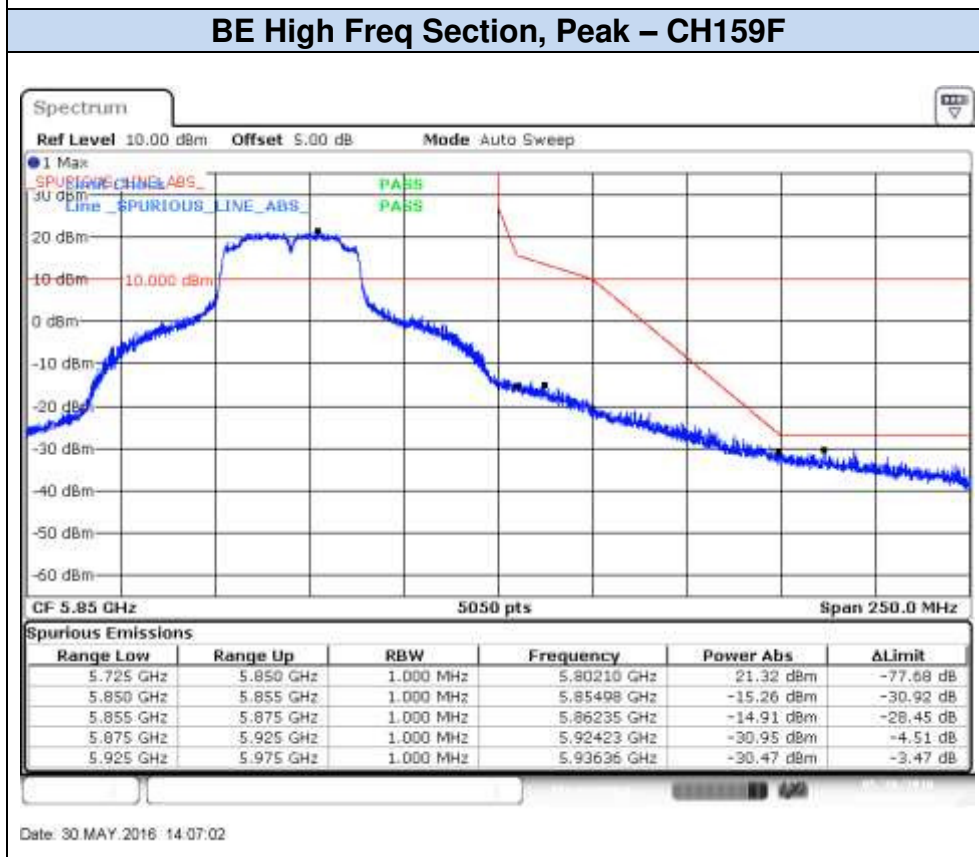


Date: 30 MAY 2016 10:19:20

802.11n40, HT8 (MIMO) – Chain B

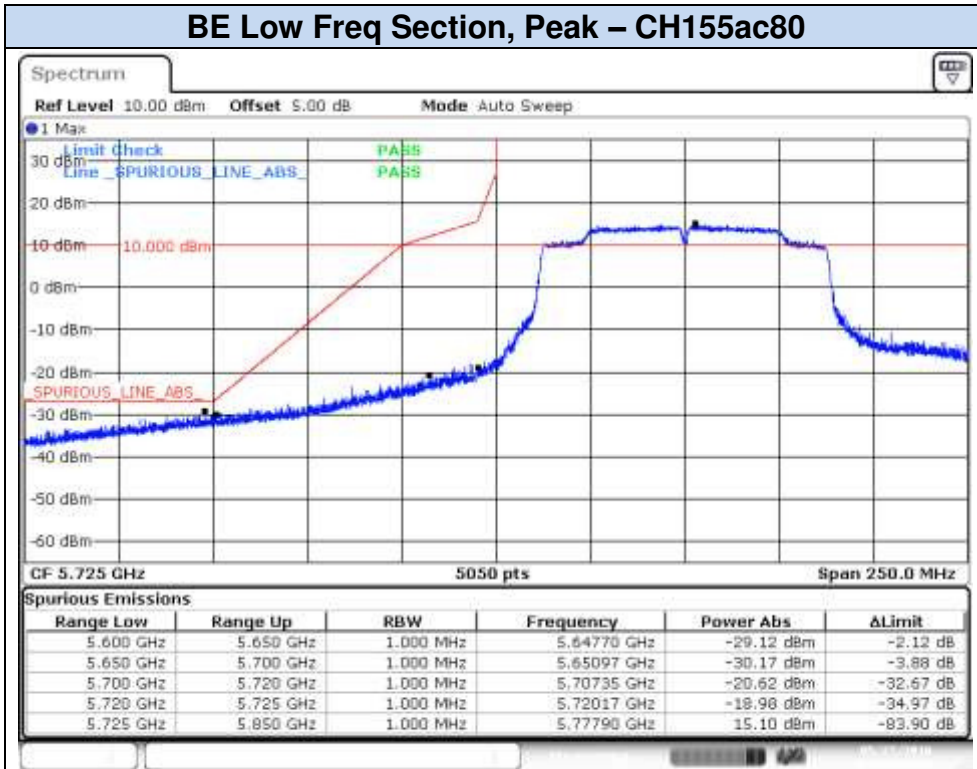


Date: 30 MAY 2016 12:19:06

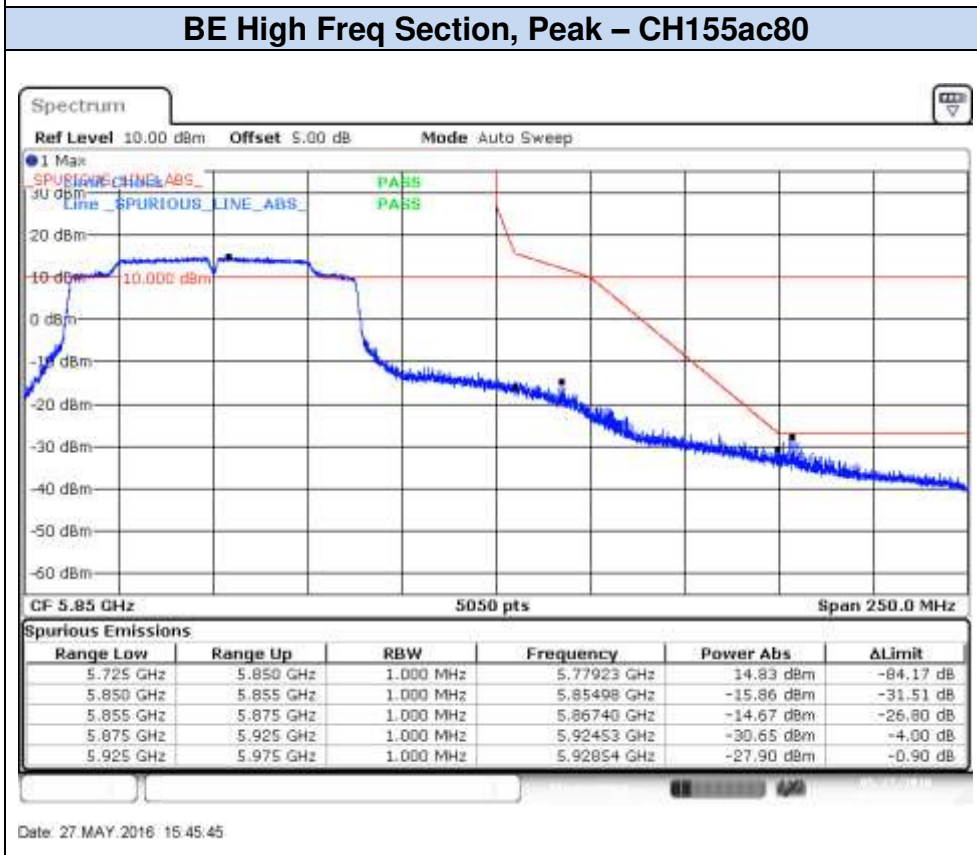


Date: 30 MAY 2016 14:07:02

802.11ac80, VHT0 (SISO)- Chain A

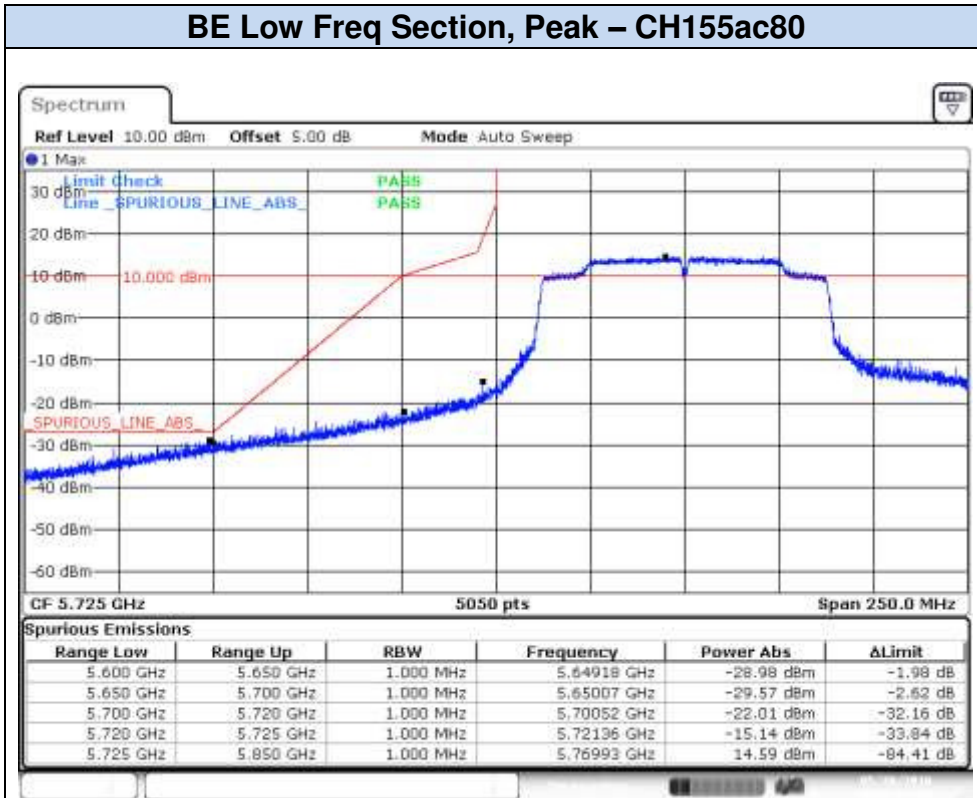


Date: 27.MAY.2016 15:48:20



Date: 27.MAY.2016 15:45:45

802.11ac80, VHT0 (SISO)- Chain B

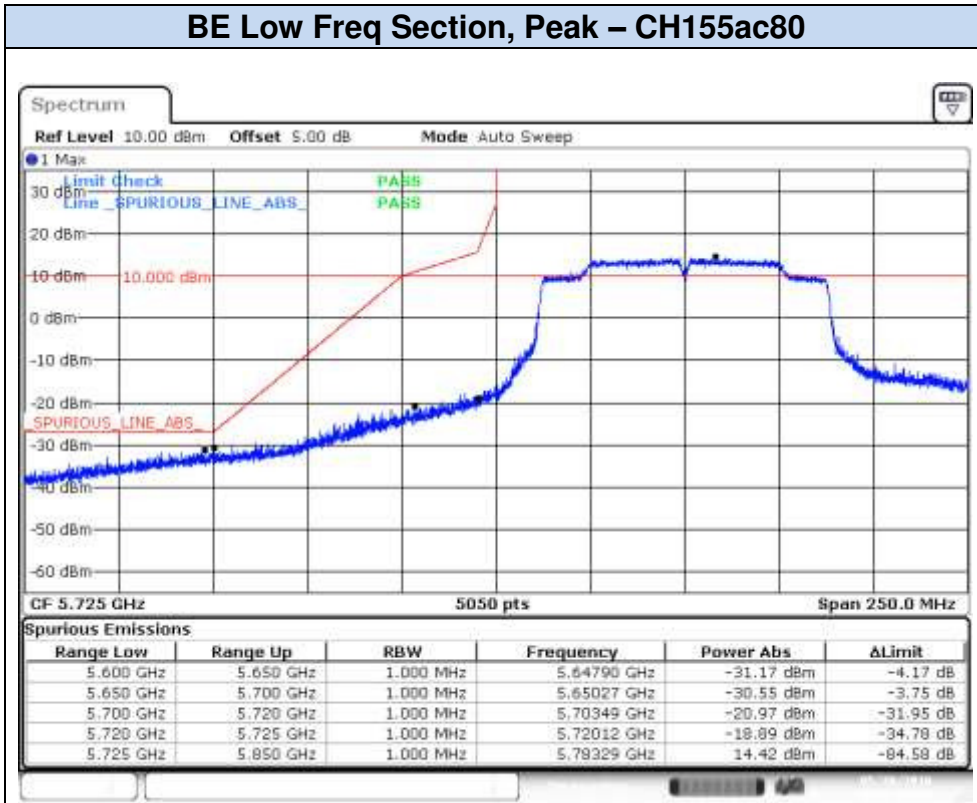


Date: 30 MAY 2016 11:58:17

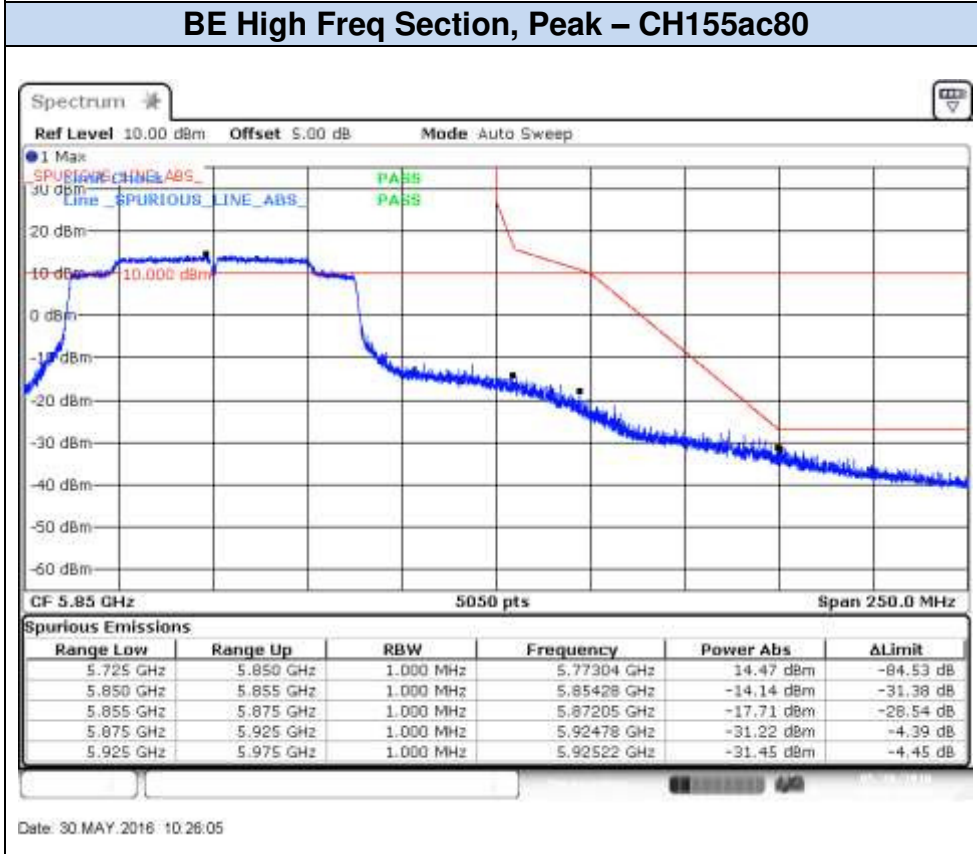


Date: 30 MAY 2016 11:55:41

802.11ac80, VHT0 (MIMO)- Chain A

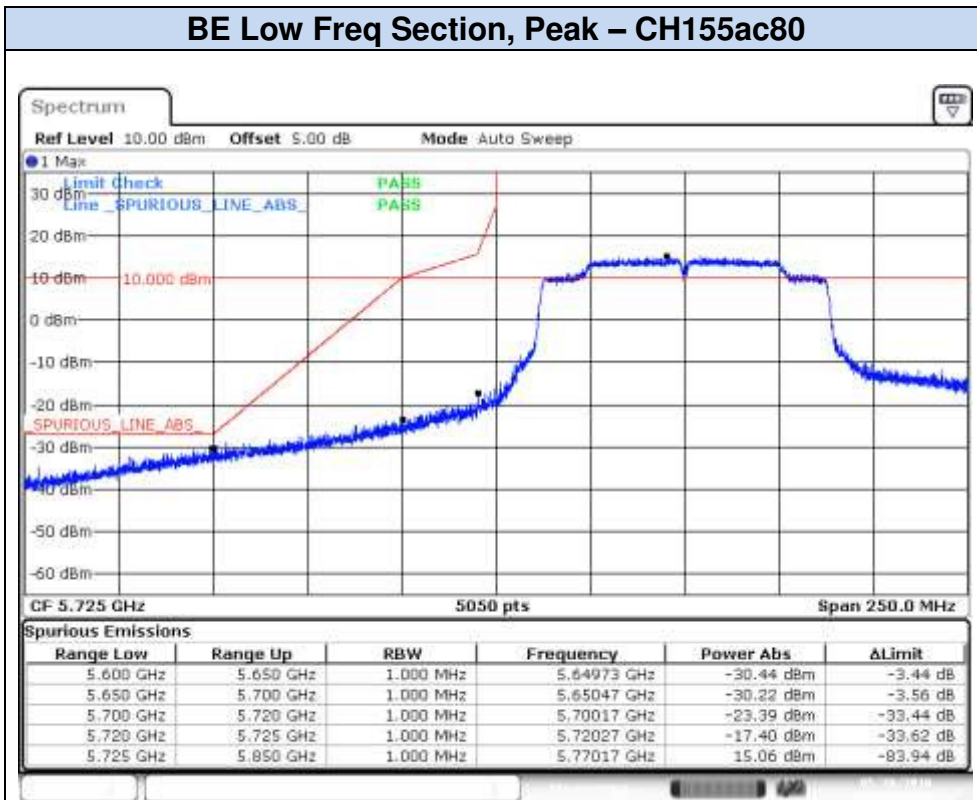


Date: 30 MAY 2016 10:28:38

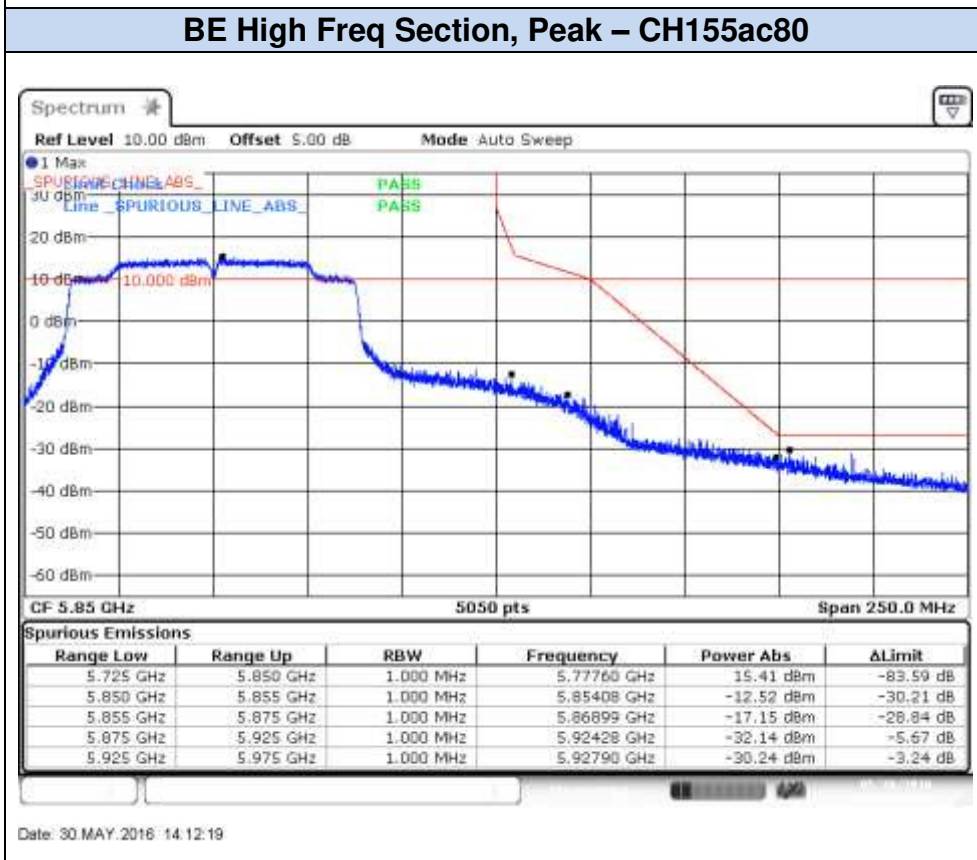


Date: 30 MAY 2016 10:28:05

802.11ac80, VHT0 (MIMO)- Chain B



Date: 30 MAY 2016 14:12:46



Date: 30 MAY 2016 14:12:19

B.4 Radiated spurious emission

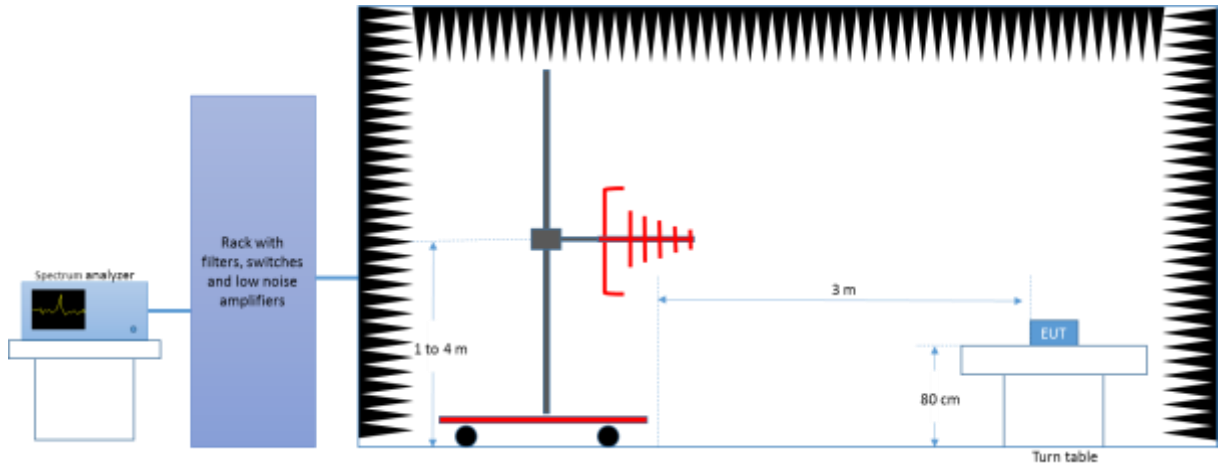
Standard references:

FCC part	Limits																																
15.407 (b) (4)	<p>(4) For transmitters operating in the 5.725-5.85 GHz band:</p> <p>(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p>																																
15.209	<p>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):</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #d9e1f2;">Freq Range (MHz)</th> <th style="background-color: #d9e1f2;">Field Strength (μV/m)</th> <th style="background-color: #d9e1f2;">Field Strength (dBμV/m)</th> <th style="background-color: #d9e1f2;">Meas. Distance (m)</th> </tr> </thead> <tbody> <tr> <td>0.009-0.490</td> <td>2400/f(kHz)</td> <td>-</td> <td>300</td> </tr> <tr> <td>0.490-1.705</td> <td>24000/f(kHz)</td> <td>-</td> <td>300</td> </tr> <tr> <td>1.705-30.0</td> <td>30</td> <td>-</td> <td>30</td> </tr> <tr> <td>30-88</td> <td>100</td> <td>40</td> <td>3</td> </tr> <tr> <td>88-216</td> <td>150</td> <td>43.5</td> <td>3</td> </tr> <tr> <td>216-960</td> <td>200</td> <td>46</td> <td>3</td> </tr> <tr> <td>Above 960</td> <td>500</td> <td>54</td> <td>3</td> </tr> </tbody> </table> <p>The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.</p> <p>For average radiated emission measurements above 1000 MHz, there is also a limit specified when measuring with peak detector function, corresponding to 20 dB above the indicated values in the table.</p>	Freq Range (MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Meas. Distance (m)	0.009-0.490	2400/f(kHz)	-	300	0.490-1.705	24000/f(kHz)	-	300	1.705-30.0	30	-	30	30-88	100	40	3	88-216	150	43.5	3	216-960	200	46	3	Above 960	500	54	3
Freq Range (MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Meas. Distance (m)																														
0.009-0.490	2400/f(kHz)	-	300																														
0.490-1.705	24000/f(kHz)	-	300																														
1.705-30.0	30	-	30																														
30-88	100	40	3																														
88-216	150	43.5	3																														
216-960	200	46	3																														
Above 960	500	54	3																														

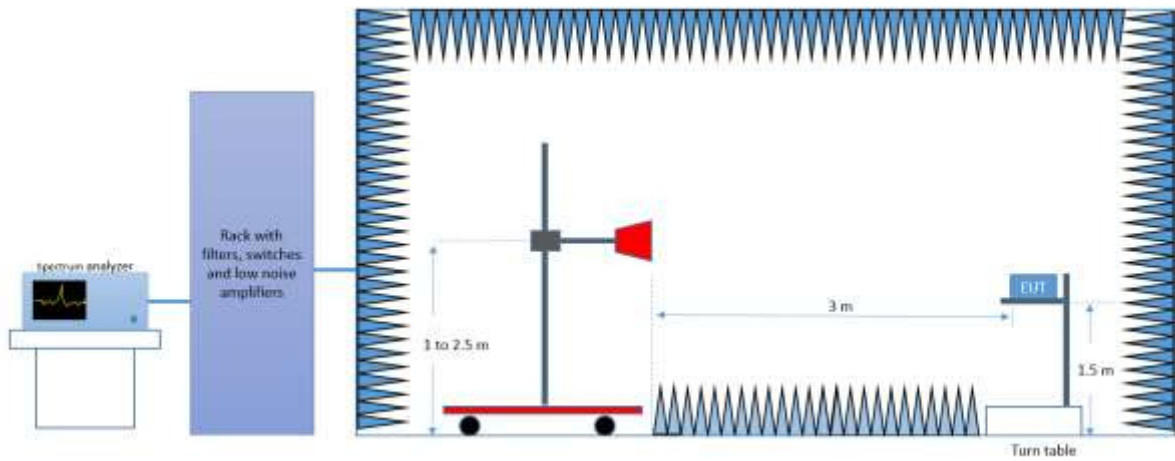
Test procedure:

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, 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 B.2 and using the lowest, middle and highest channels.

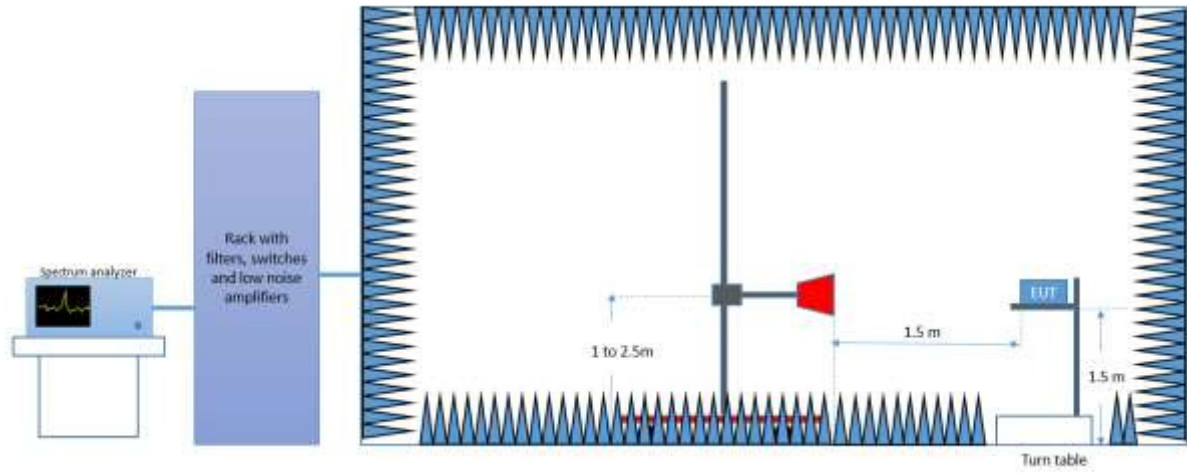
Radiated Setup < 1GHz



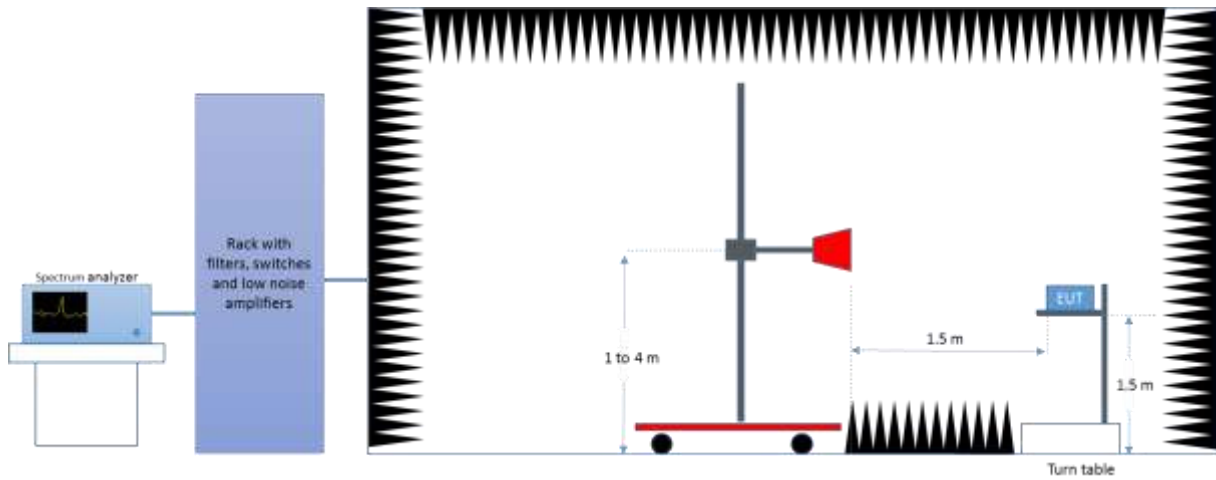
Radiated Setup 1 GHz - 18 GHz



Radiated Setup 18 GHz - 26.5 GHz



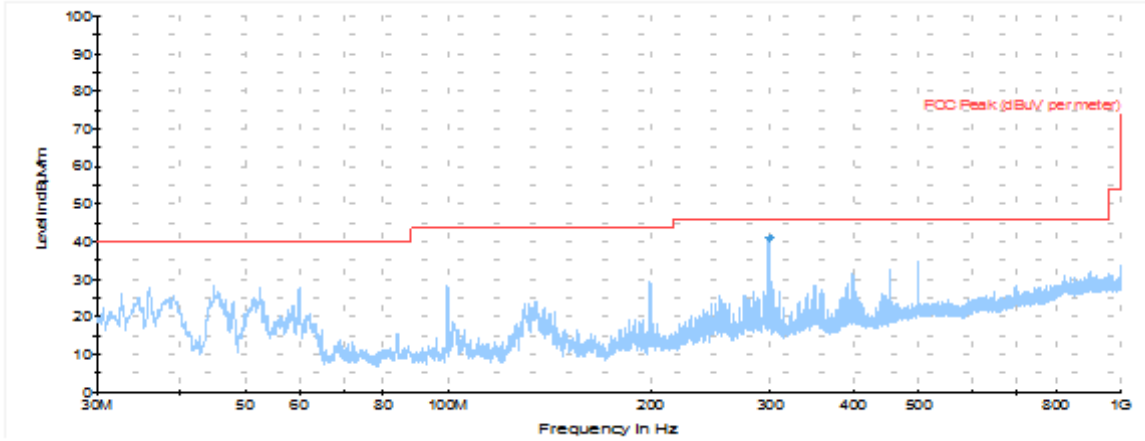
Radiated Setup > 26.5 GHz



Test Results:

30MHz – 1GHz

Radiated Spurious – All Modes



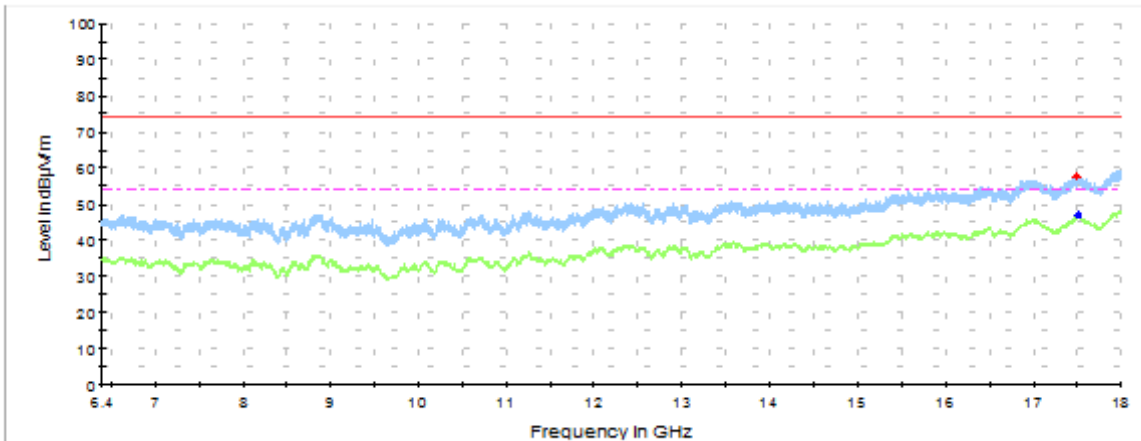
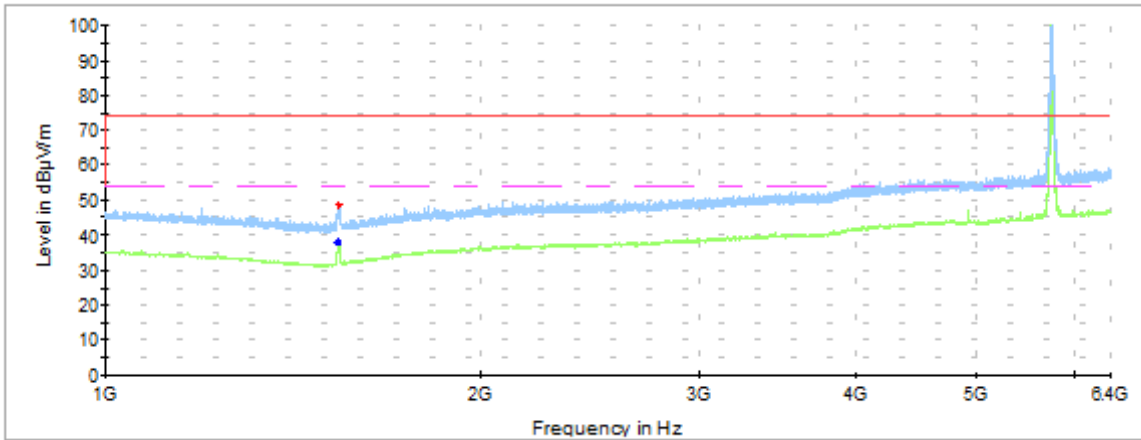
— Peak measurements — Limit FCC Peak

Frequency	Max Peak	Limit	Margin
MHz	dBuV/m	dBuV/m	dB
300	40.9	46.0	5.16

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

1 GHz – 26.5GHz, 802.11a, 6Mbps, Chain A

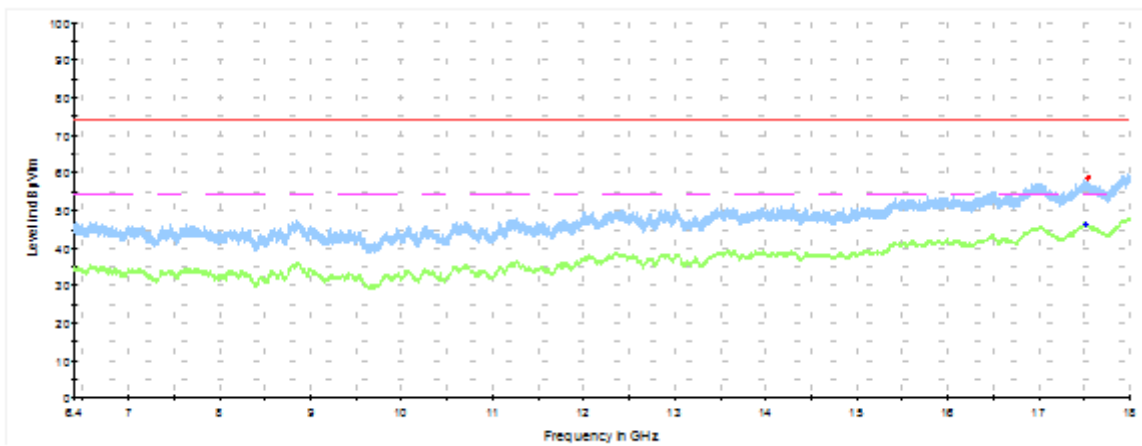
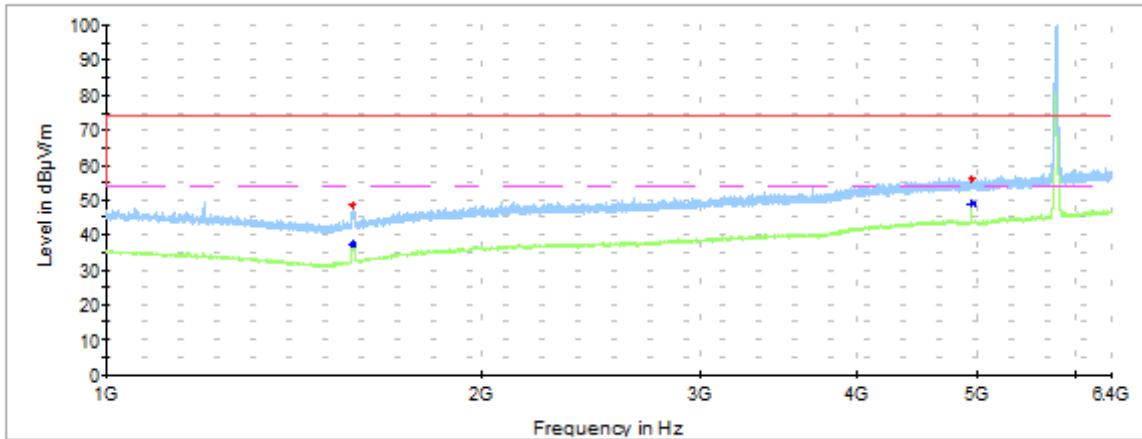
Radiated Spurious – CH149



— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1540	52.0	-	74	22.0
1540	-	39.3	54	14.7
17493	57.6	-	74	16.4
17524	-	46.8	54	7.2

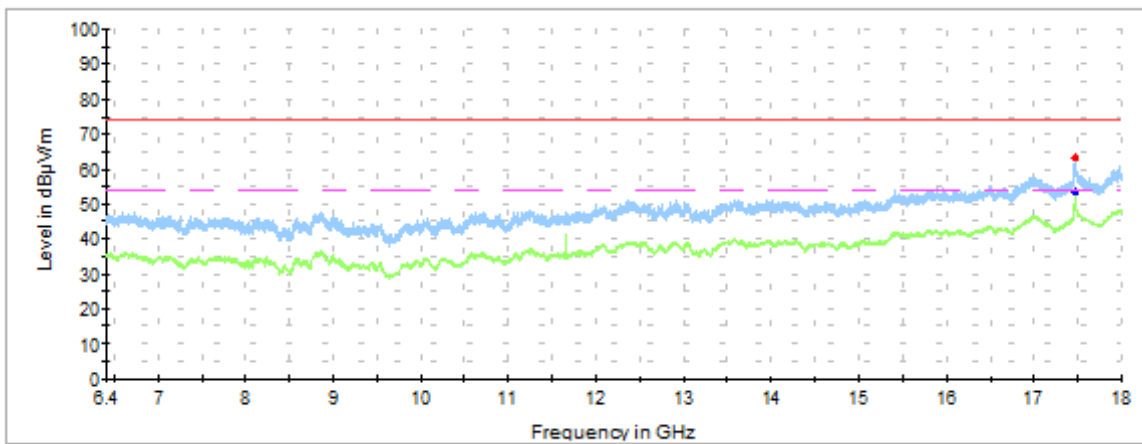
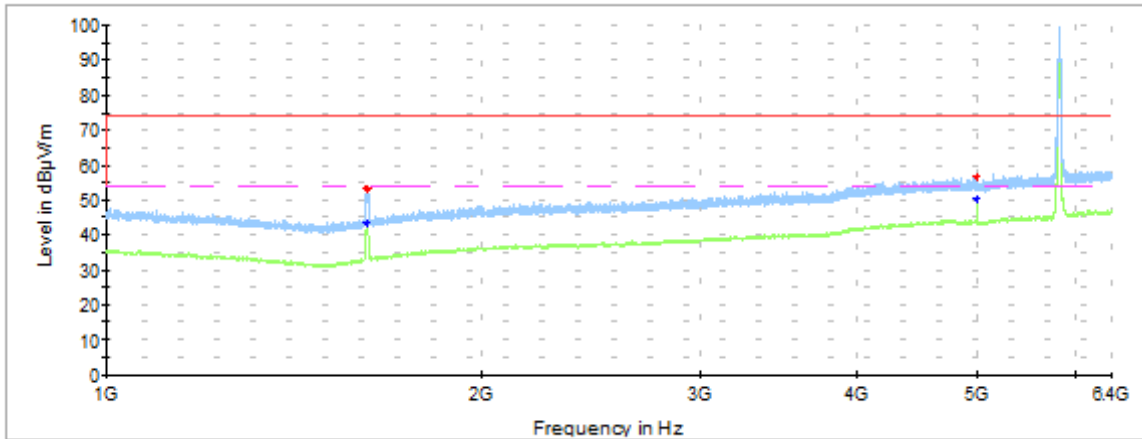
Radiated Spurious – CH157



— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency MHz	MaxPeak dBuV/m	AvG dBuV/m	Limit dBuV/m	Margin dB
1577	54.0	-	74	20.0
1577	-	41.4	54	12.6
4958	57.8	-	74	16.2
4958	-	49.1	54	4.9
17516	58.6	-	74	15.4
17544	-	46.3	54	7.7

Radiated Spurious – CH165

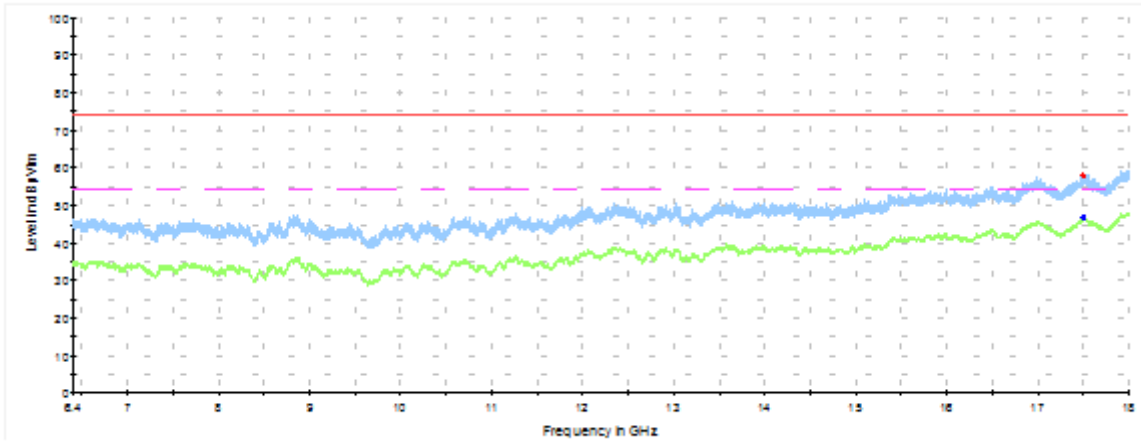
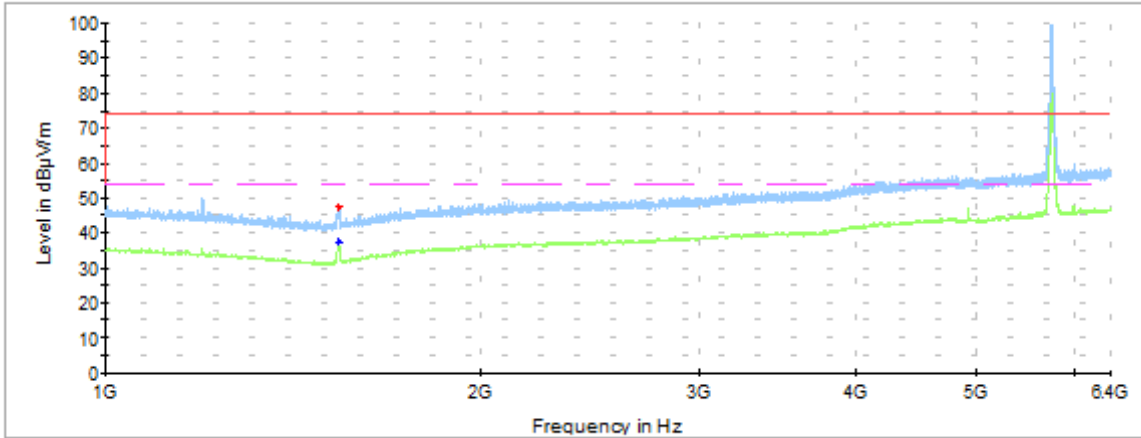


— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1619	54.9	-	74	19.1
1619	-	42.9	54	11.1
4992	58.7	-	74	15.3
4992	-	49.9	54	4.1
17472	63.3	-	74	10.7
17472	-	51.9	54	2.1

1 GHz – 18 GHz, 802.11a, 6Mbps, Chain B

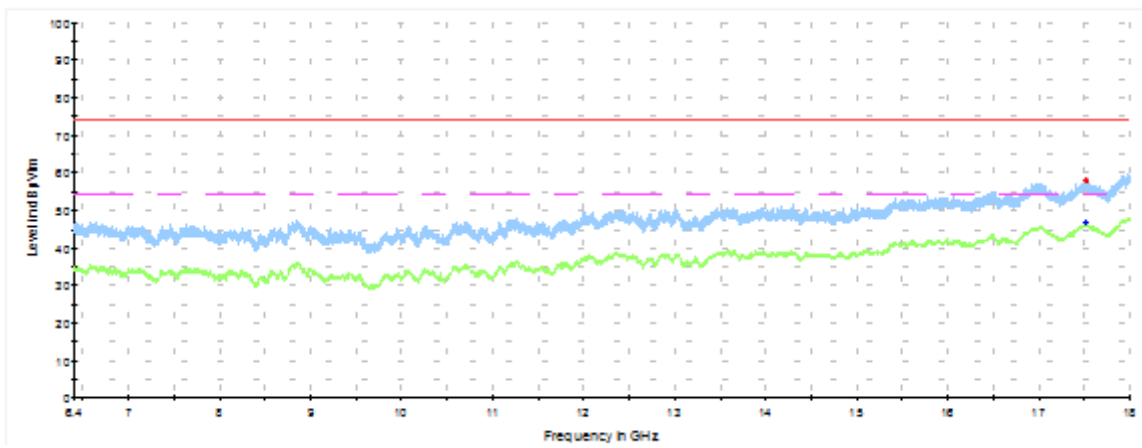
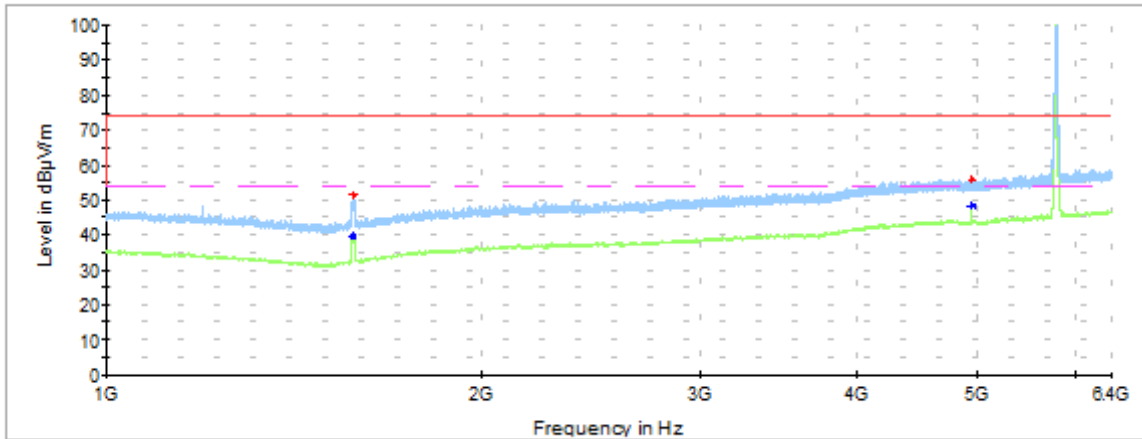
Radiated Spurious – CH149



— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1540	51.9	-	74	22.1
1540	-	40.0	54	14.0
17499	57.9	-	74	16.1
17505	-	46.8	54	7.2

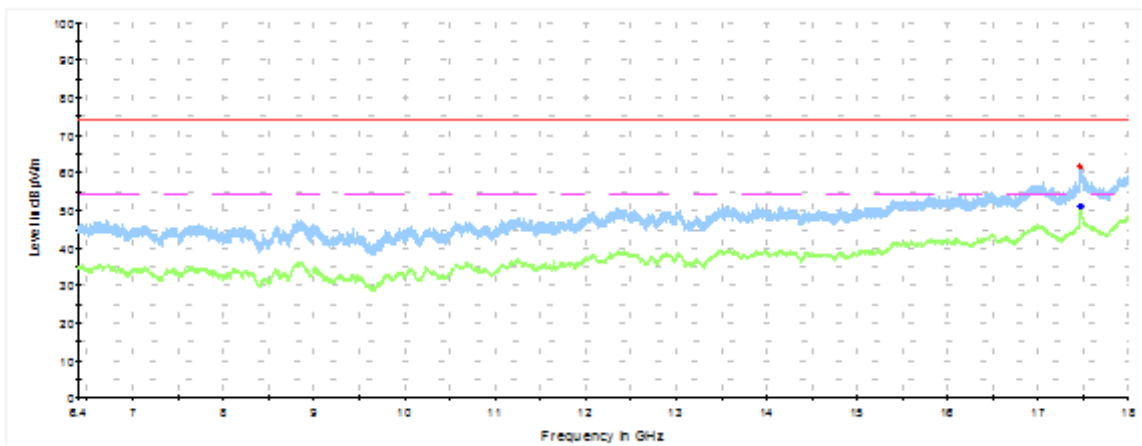
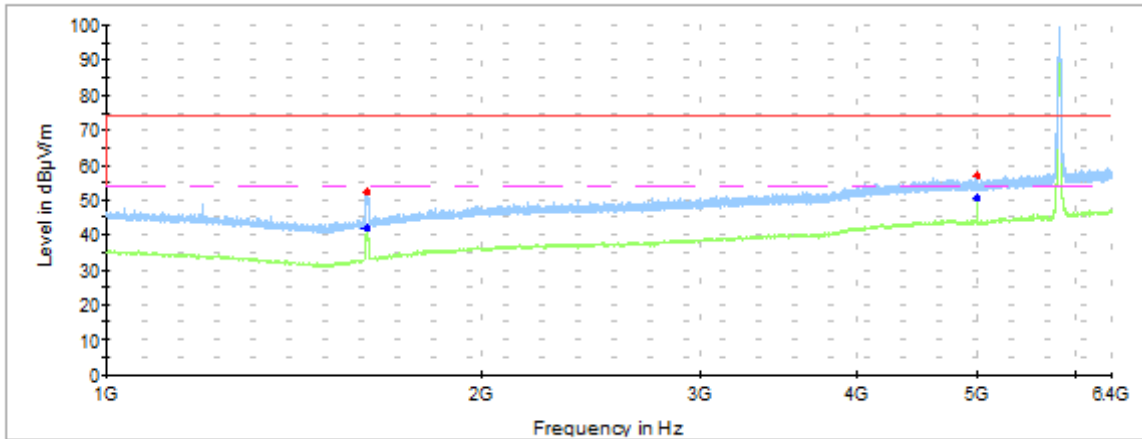
Radiated Spurious – CH157



— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency MHz	MaxPeak dBuV/m	AvG dBuV/m	Limit dBuV/m	Margin dB
1580	51.8	-	74	22.2
1580	-	37.0	54	17.0
4958	57.9	-	74	16.1
4958	-	48.1	54	5.9
17524	58.0	-	74	16.0
17527	-	46.9	54	7.1

Radiated Spurious – CH165

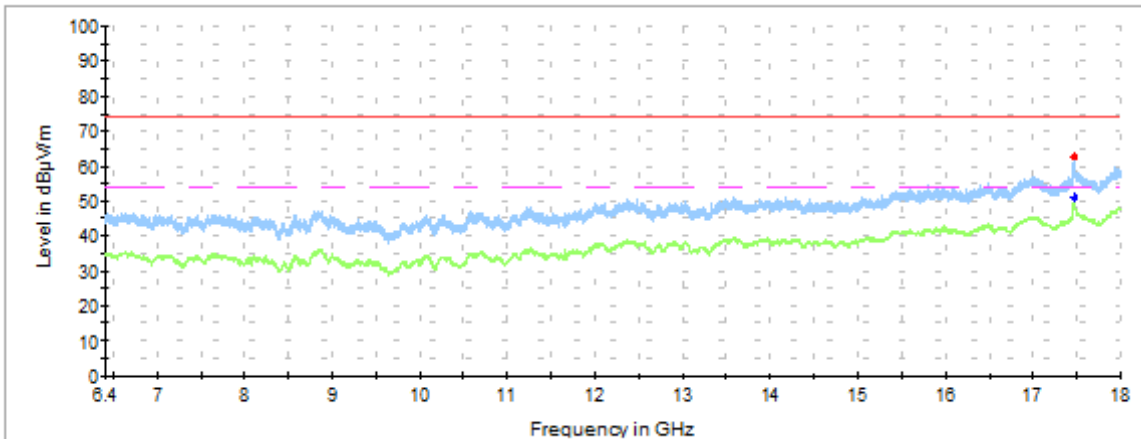
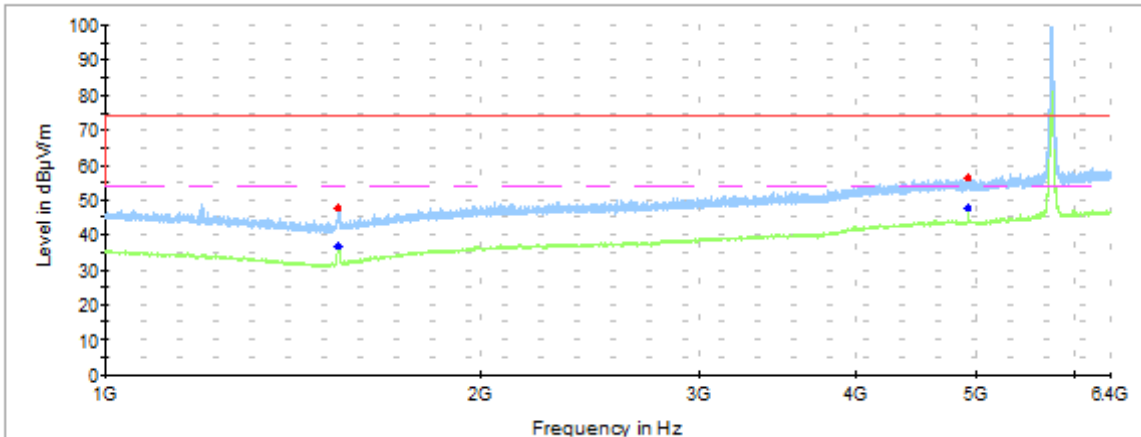


— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency MHz	MaxPeak dBuV/m	AvG dBuV/m	Limit dBuV/m	Margin dB
1619	53.7	-	74	20.3
1620	-	43.5	54	10.5
4992	59.0	-	74	15.0
4992	-	50.6	54	3.4
17469	62.6	-	74	11.4
17473	-	51.2	54	2.8

1 GHz – 18 GHz, 802.11n20, HT0, Chain A

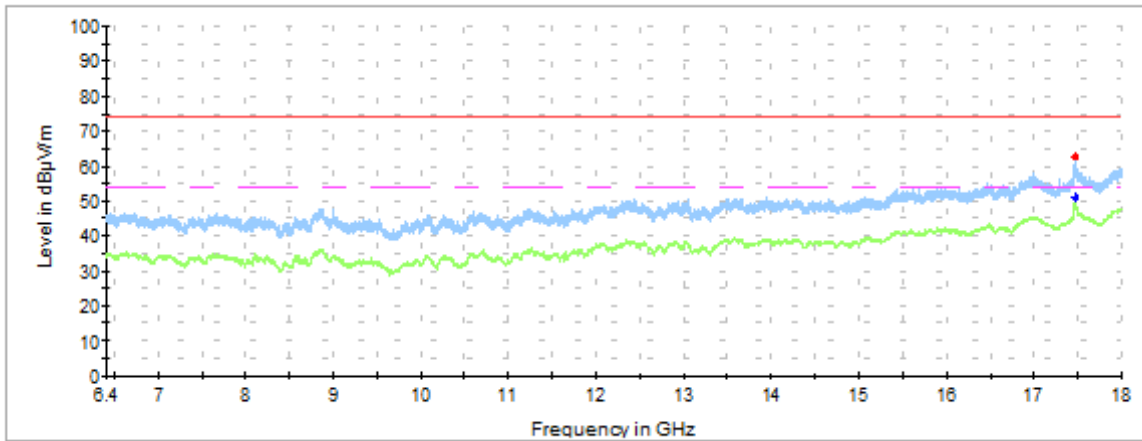
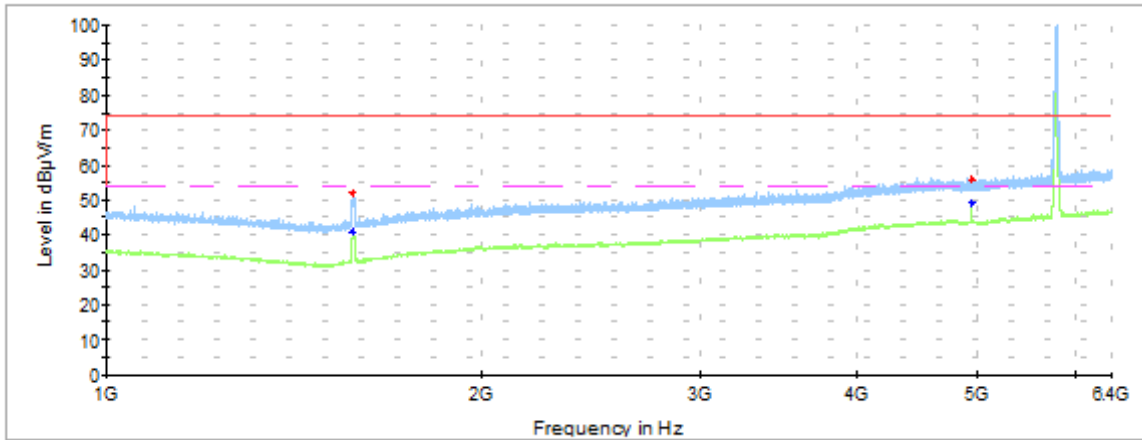
Radiated Spurious – CH149



— Peak measurements — Avg measurements — Limit FCC Peak - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1540	50.0	-	74	24.0
1540	-	40.8	54	13.2
4924	56.0	-	74	18.0
4924	-	48.1	54	5.9
17470	65.4	-	74	8.6
17470	-	50.4	54	3.6

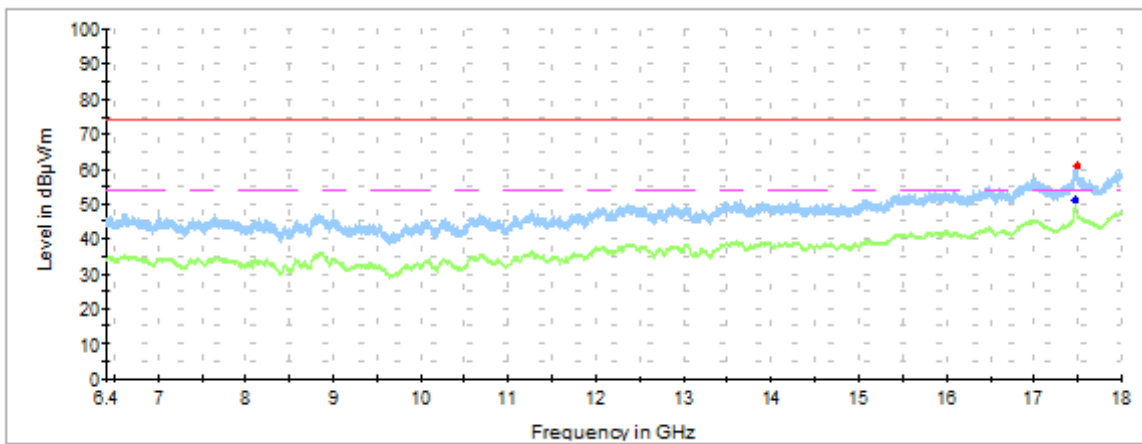
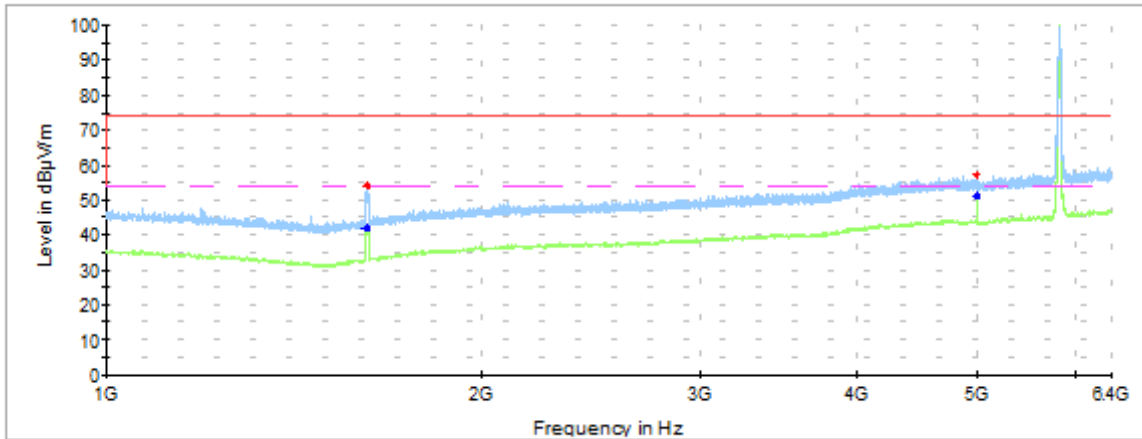
Radiated Spurious – CH157



— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1580	52.9	-	74	21.1
1580	-	40.6	54	13.4
4959	57.3	-	74	17.9
4959	-	48.8	54	5.2
17480	63.9	-	74	10.1
17480	-	51.3	54	2.7

Radiated Spurious – CH165

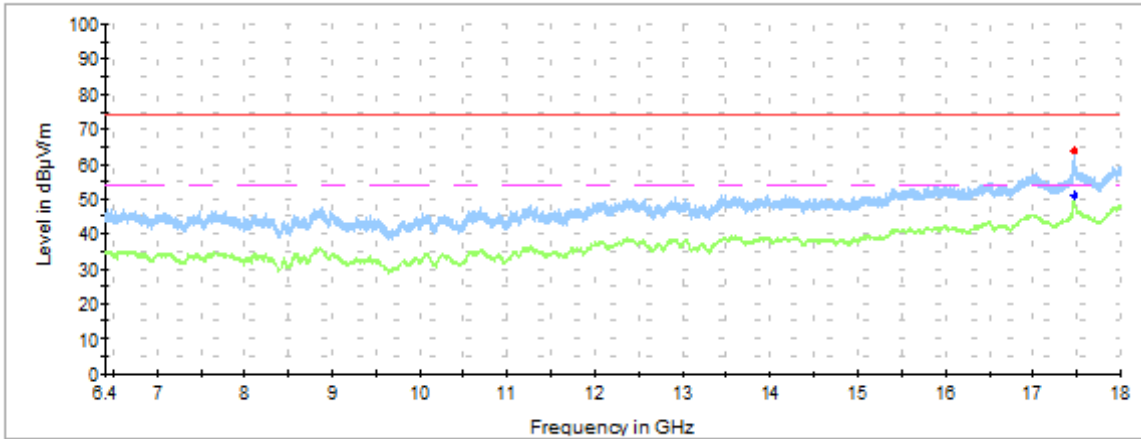
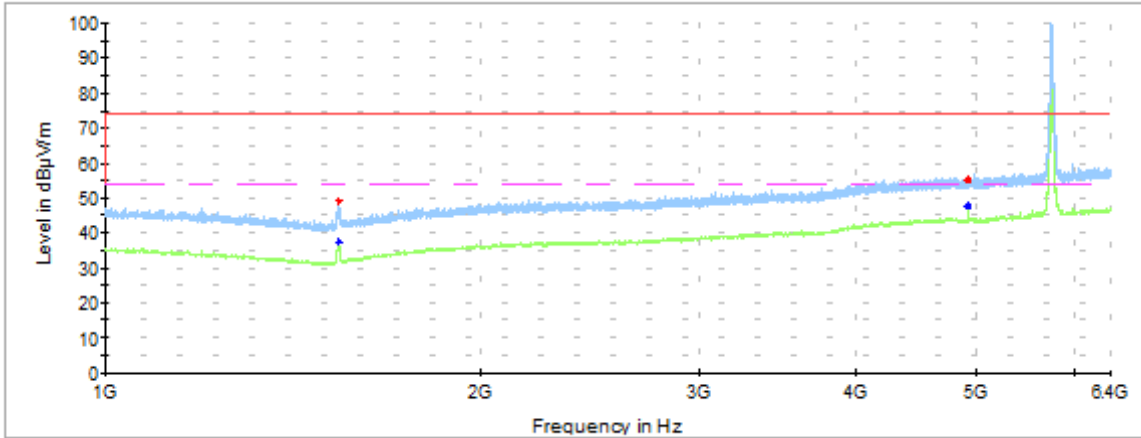


— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1619	54.1	-	74	19.9
1618	-	43.8	54	10.2
4992	57.8	-	74	16.2
4992	-	51.1	54	2.9
17473	61.5	-	74	12.5
17473	-	51.3	54	2.7

1 GHz – 18 GHz, 802.11n20, HT0, Chain B

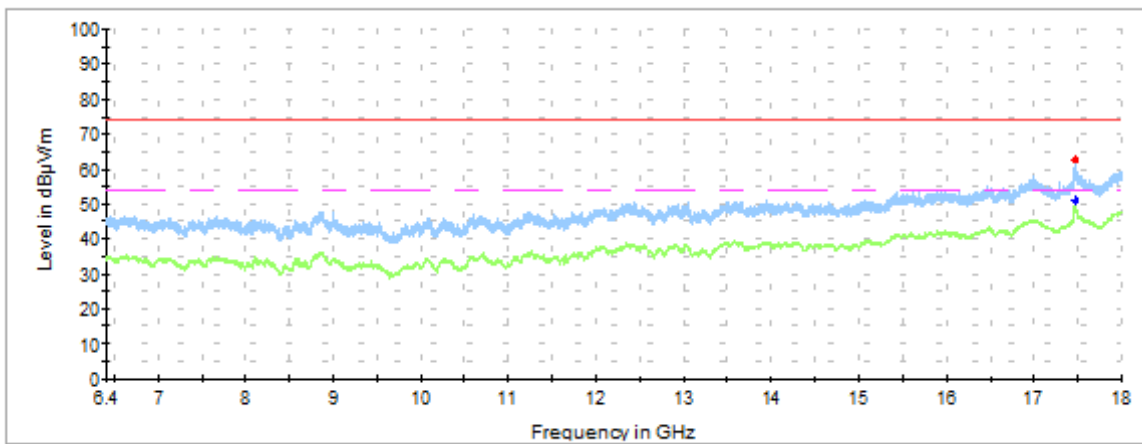
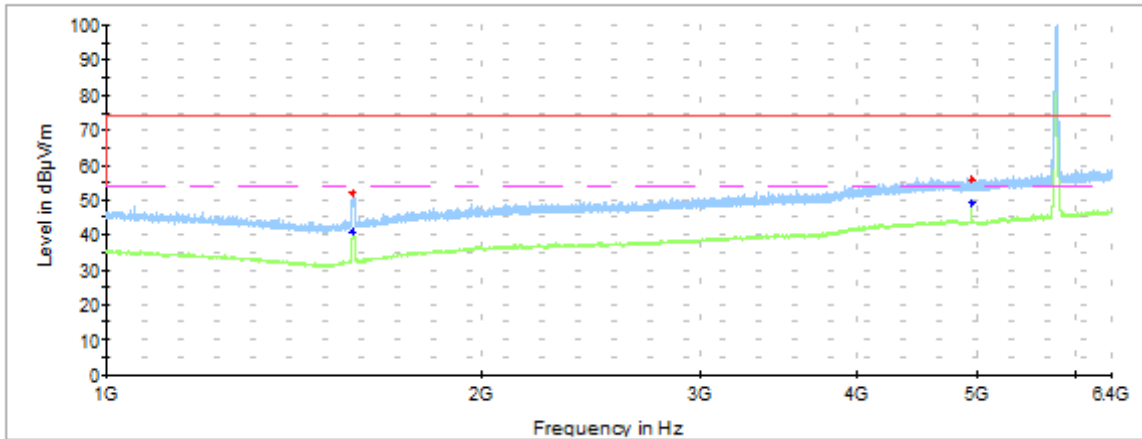
Radiated Spurious – CH149



— Peak measurements — Avg measurements — Limit FCC Peak - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1540	51.0	-	74	23.0
1540	-	35.7	54	18.3
4924	55.3	-	74	18.7
4924	-	48.5	54	5.5
17470	65.8	-	74	8.2
17470	-	52.8	54	1.2

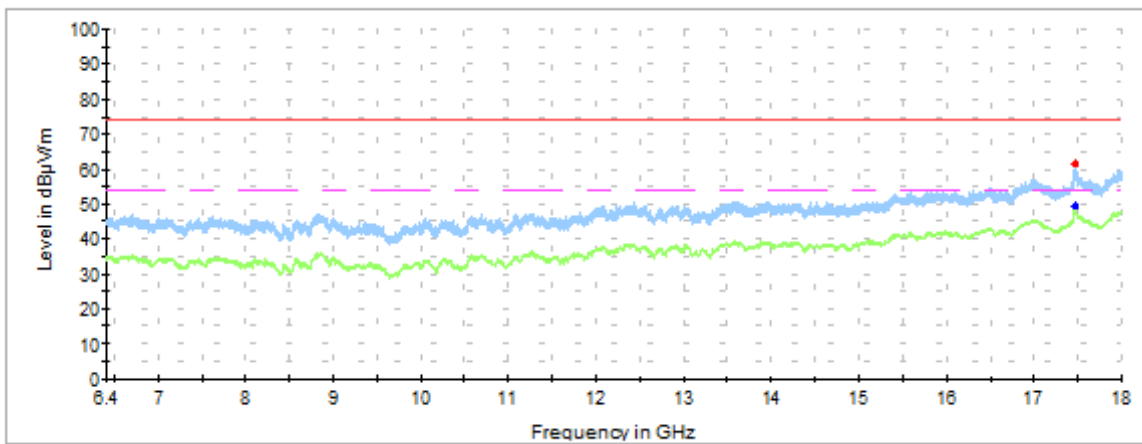
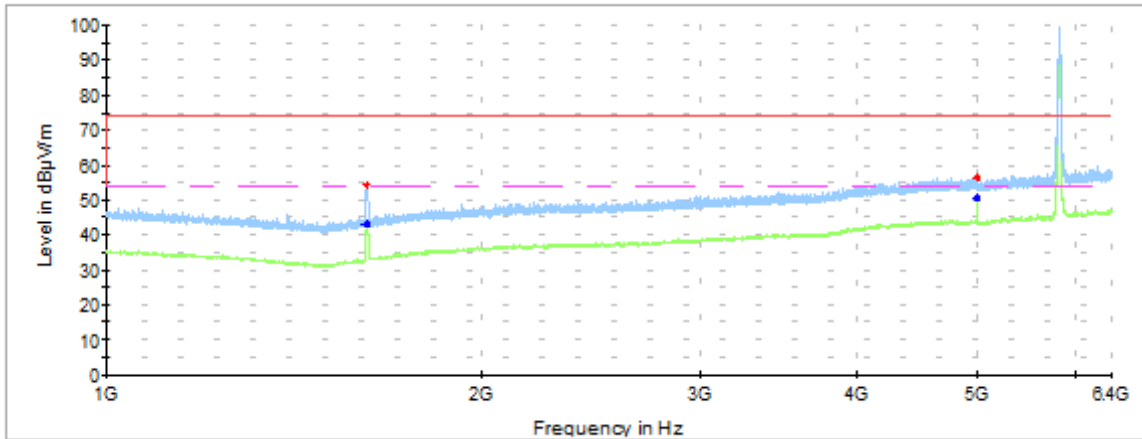
Radiated Spurious – CH157



— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency MHz	MaxPeak dBuV/m	AvG dBuV/m	Limit dBuV/m	Margin dB
1580	53.4	-	74	20.6
1580	-	40.5	54	13.5
4958	56.2	-	74	17.8
4958	-	49.8	54	4.2
17470	64.9	-	74	9.1
17470	-	52.1	54	1.9

Radiated Spurious – CH165

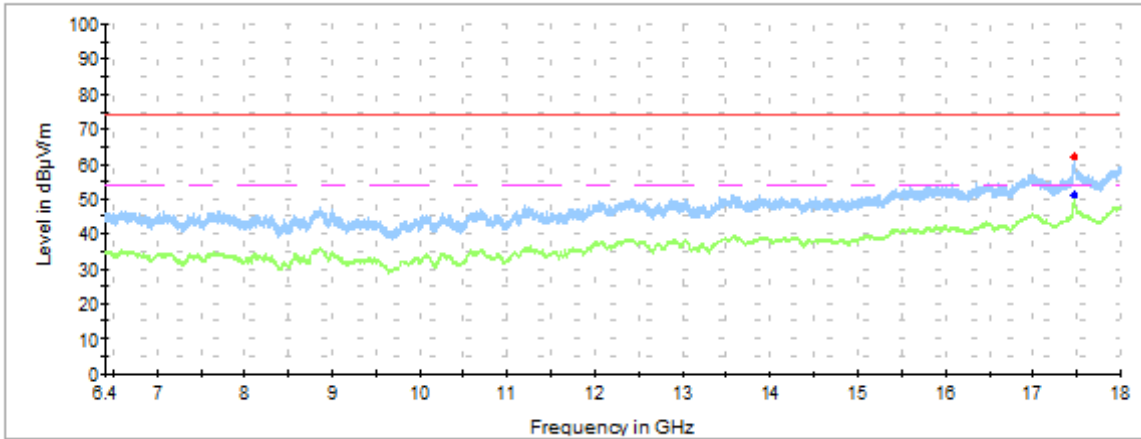
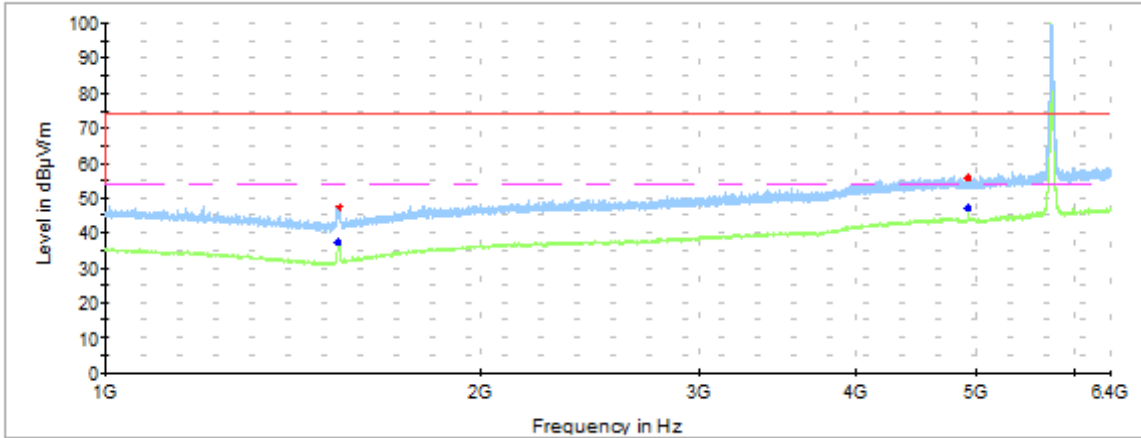


— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1619	56.0	-	74	18.0
1619	-	44.9	54	9.1
4992	58.5	-	74	15.5
4993	-	50.1	54	3.9
17468	64.9	-	74	9.1
17469	-	51.8	54	2.2

1 GHz – 18 GHz, 802.11n20, HT8, Chain A+B

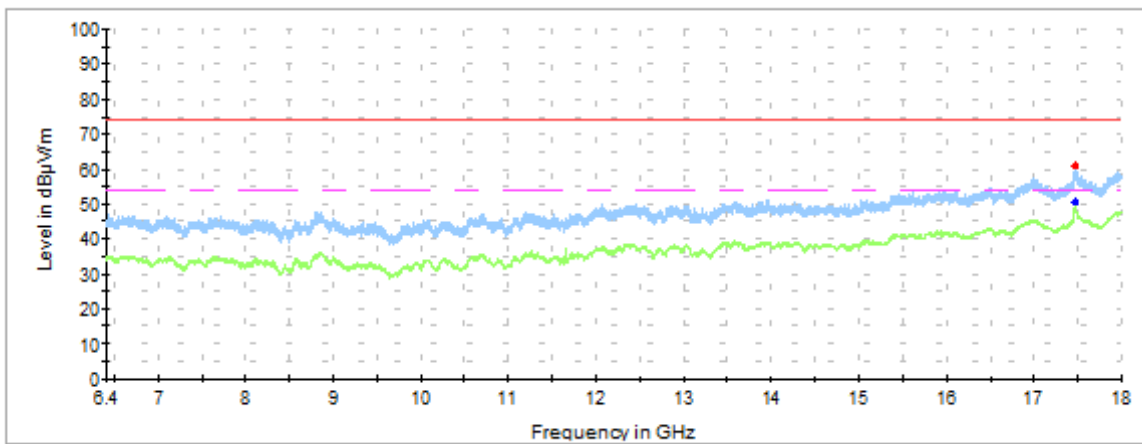
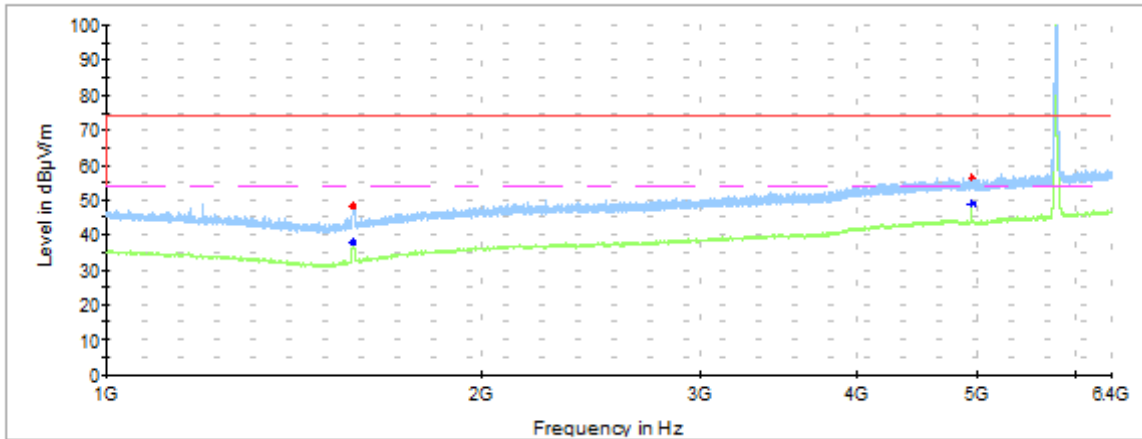
Radiated Spurious – CH149



— Peak measurements — Avg measurements — Limit FCC Peak - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1541	45.8	-	74	28.2
1541	-	39.2	54	14.8
4924	56.9	-	74	17.1
4924	-	48.0	54	6.0
17474	62.7	-	74	11.3
17474	-	53.1	54	0.9

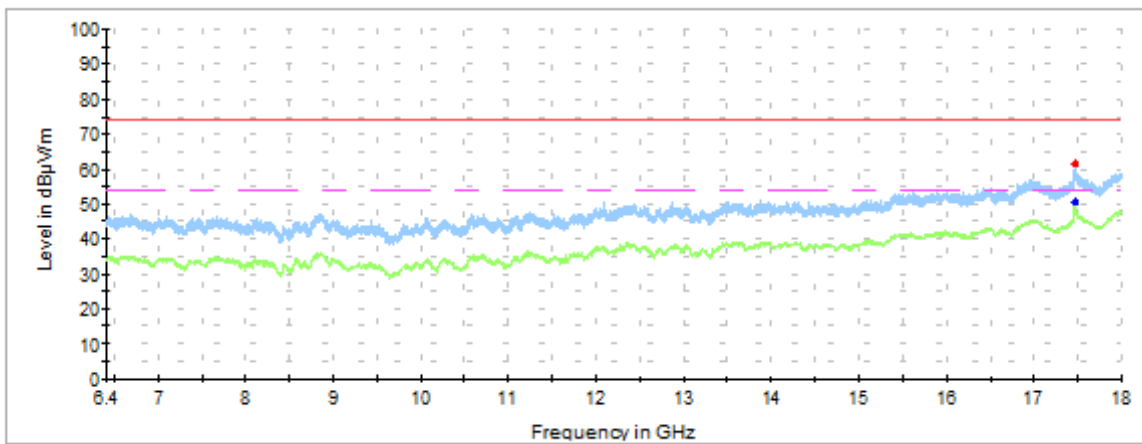
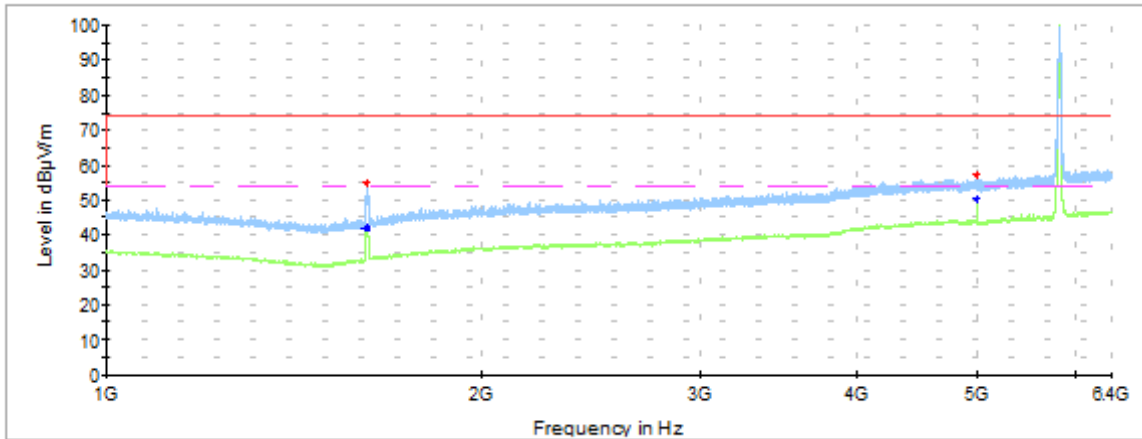
Radiated Spurious – CH157



— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1578	53.5	-	74	20.5
1578	-	41.3	54	12.7
4958	57.9	-	74	16.1
4958	-	47.3	54	6.7
17471	64.2	-	74	9.8
17471	-	52.7	54	1.3

Radiated Spurious – CH165

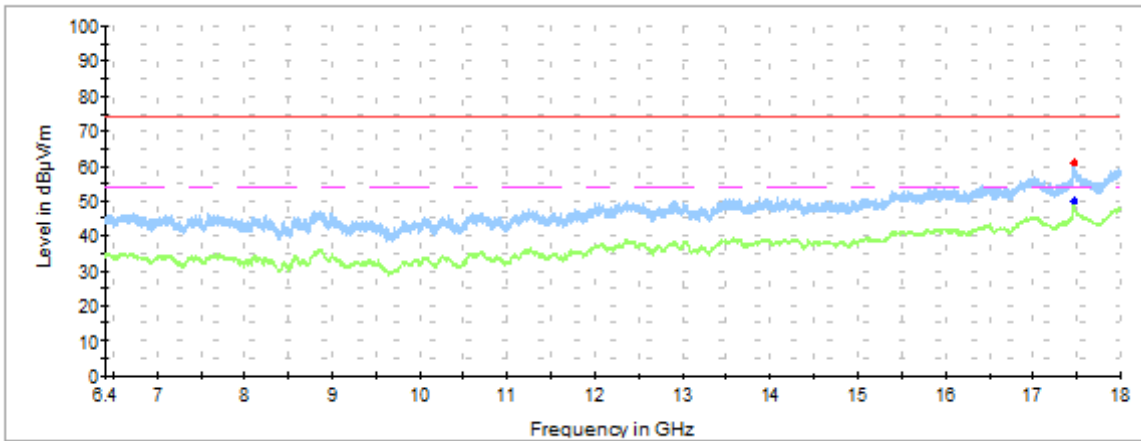
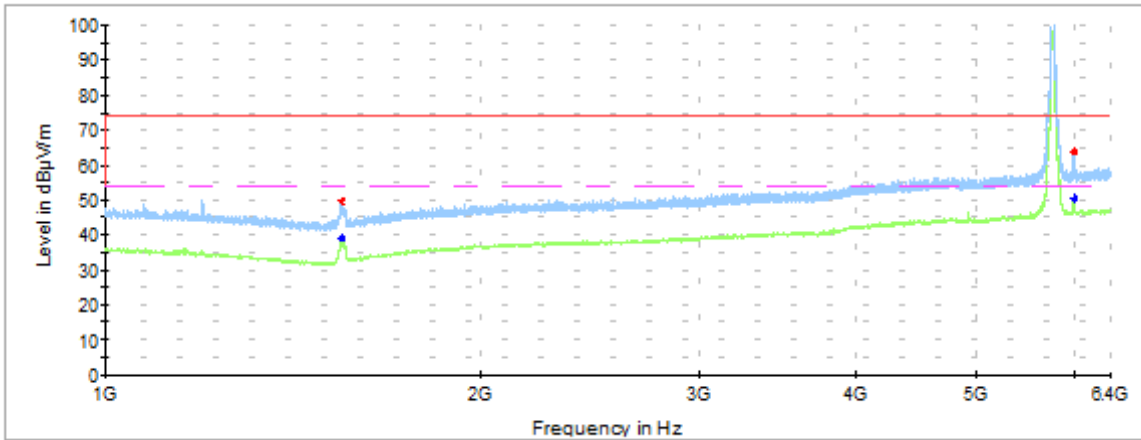


— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1619	57.2	-	74	16.8
1620	-	45.0	54	9.0
4992	58.9	-	74	15.1
4992	-	49.1	54	4.9
17471	62.9	-	74	11.1
17471	-	52.5	54	1.5

1 GHz – 18 GHz, 802.11n40, HT0, Chain A

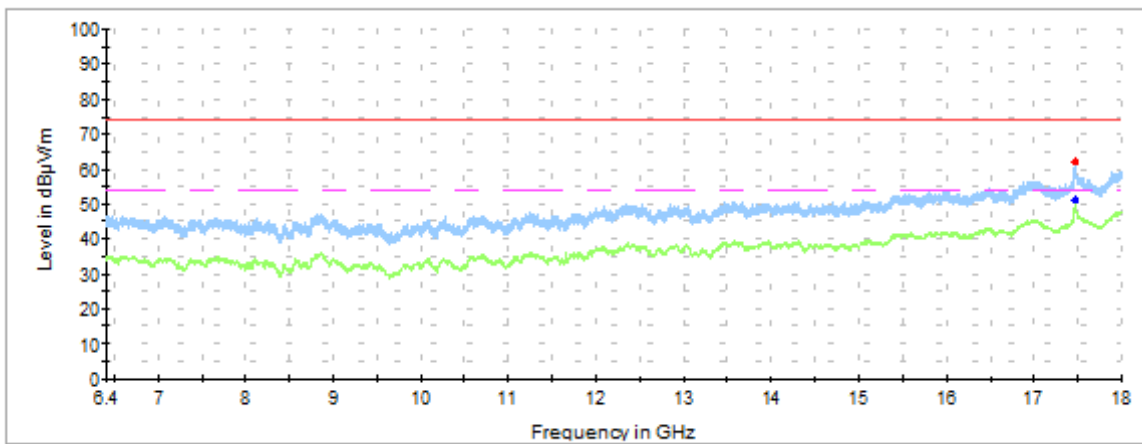
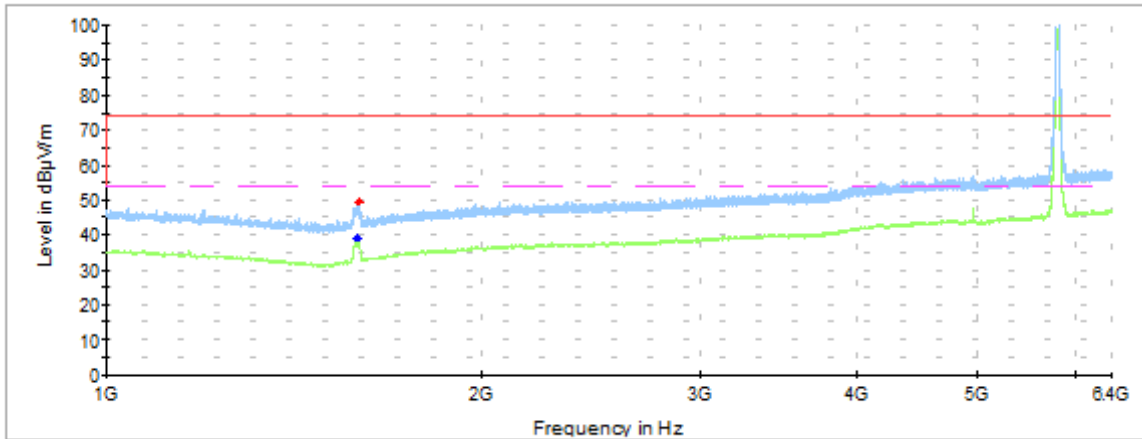
Radiated Spurious – CH151F



— Peak measurements — Avg measurements — Limit FCC Peak - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1549	51.1	-	74	22.9
1550	-	36.3	54	18.7
5994	58.1	-	74	15.9
5994	-	46.6	54	7.4
17471	64.9	-	74	9.1
17469	-	50.8	54	3.2

Radiated Spurious – CH159F

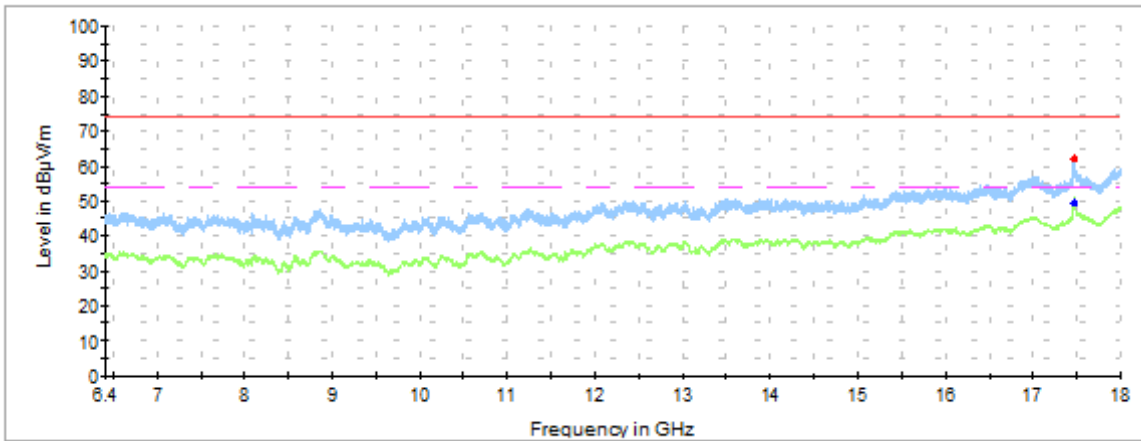
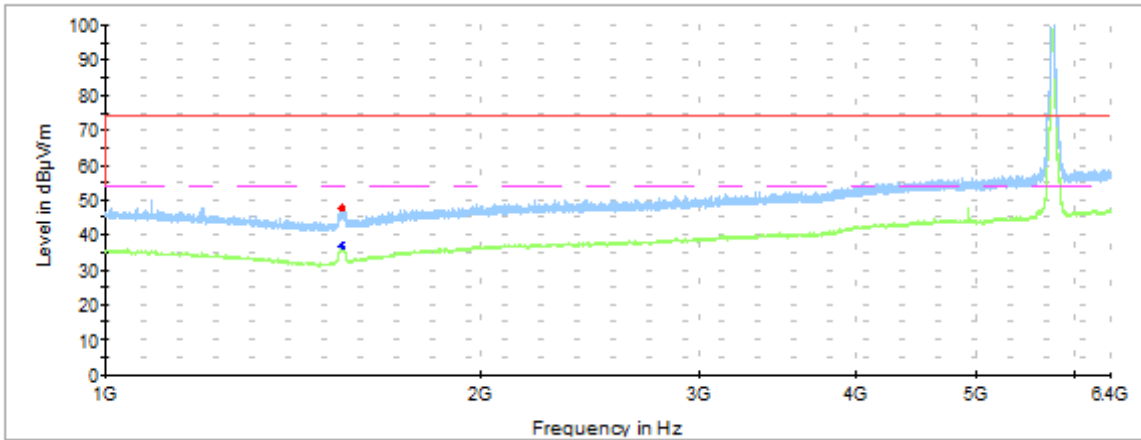


— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1593	48.9	-	74	25.1
1600	-	36.3	54	17.7
17475	62.1	-	74	11.9
17478	-	50.7	54	3.3

1 GHz – 18 GHz, 802.11n40, HT0, Chain B

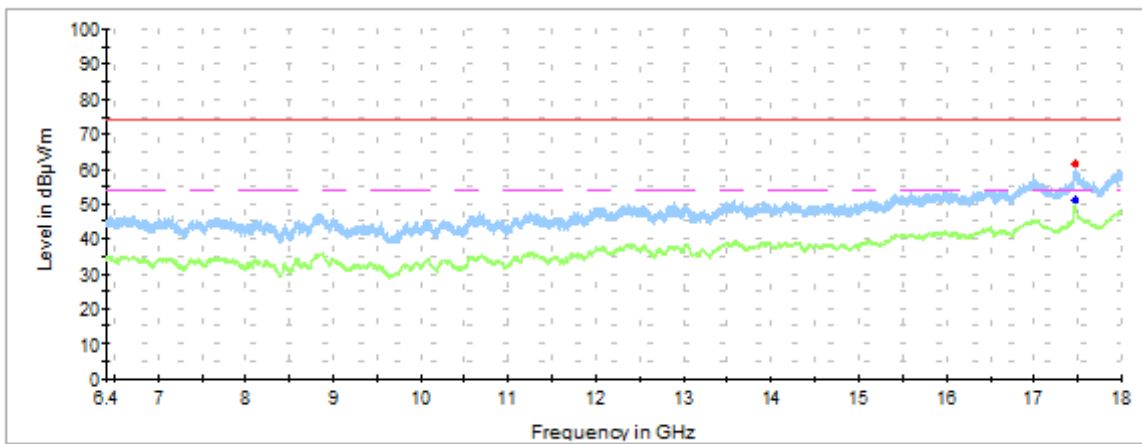
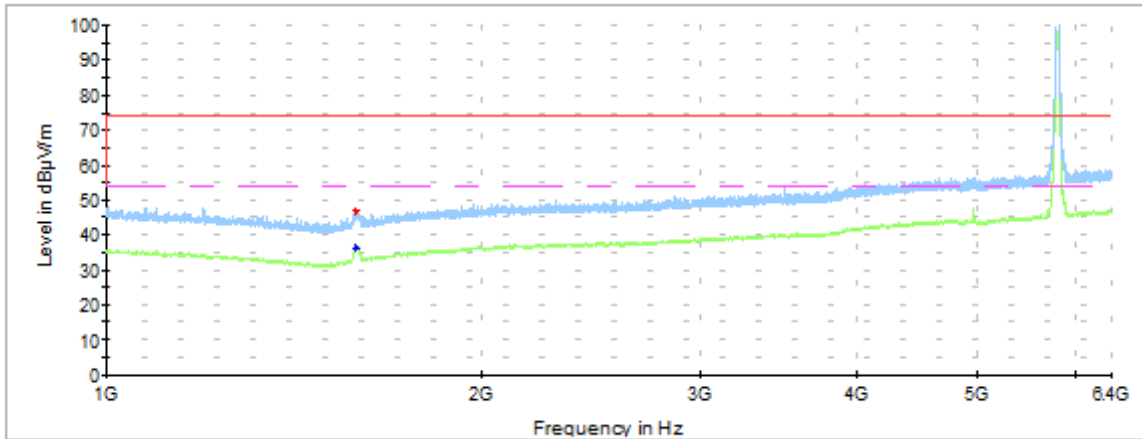
Radiated Spurious – CH151F



— Peak measurements — Avg measurements — Limit FCC Peak - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1549	49.2	-	74	24.8
1550	-	39.7	54	14.3
17472	63.6	-	74	10.4
17472	-	51.8	54	2.2

Radiated Spurious – CH159F

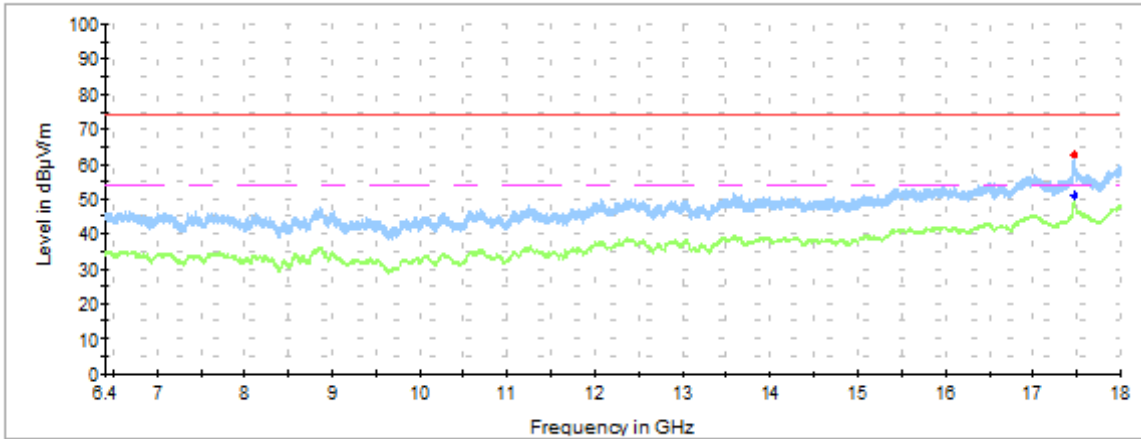
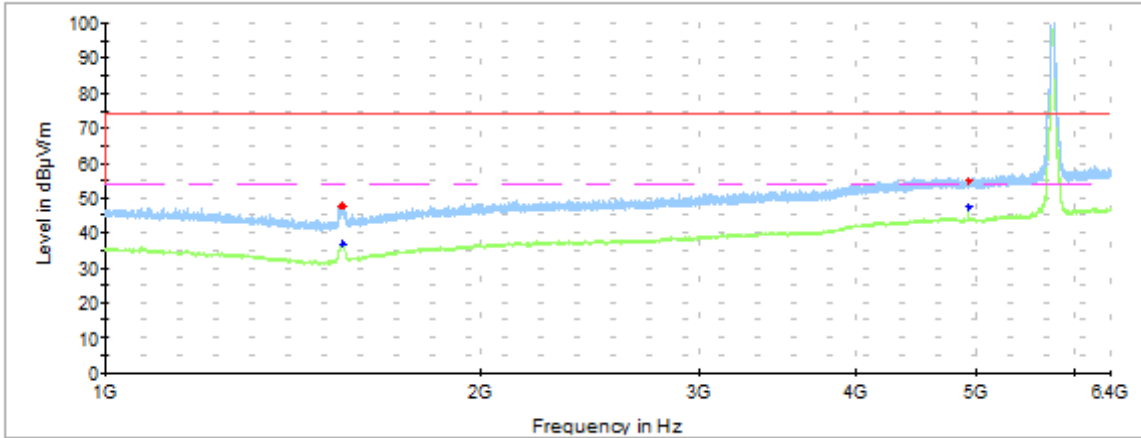


— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1586	50.8	-	74	23.2
1588	-	40.2	54	13.8
17473	63.3	-	74	10.7
17473	-	52.3	54	1.7

1 GHz – 18 GHz, 802.11n40, HT8, Chain A+B

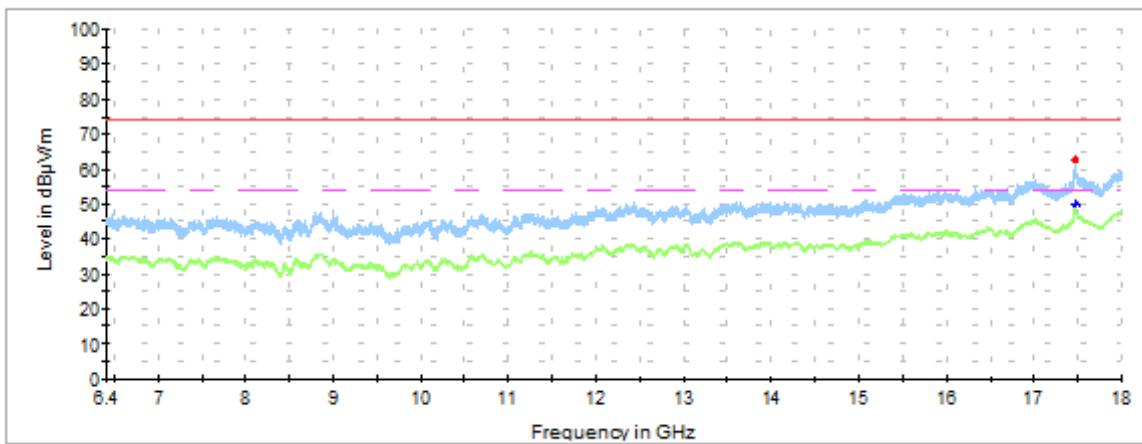
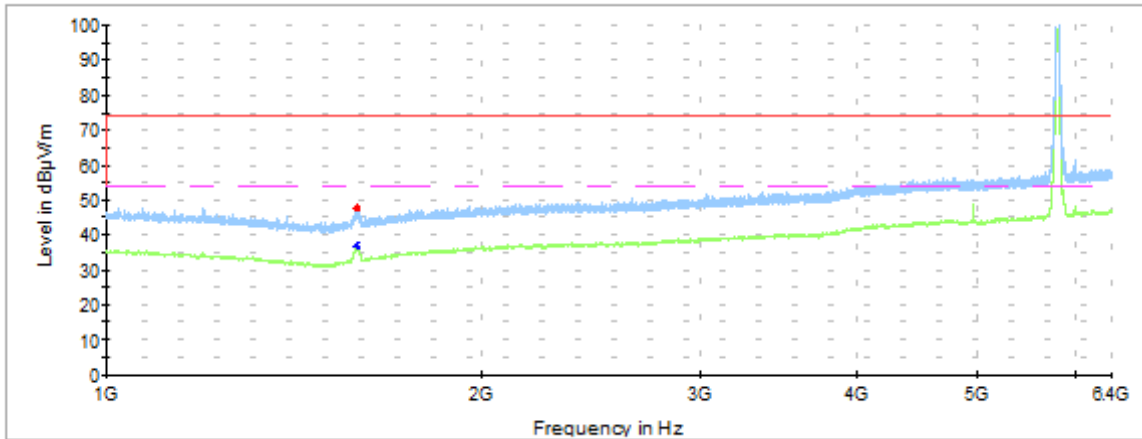
Radiated Spurious – CH151F



— Peak measurements — Avg measurements — Limit FCC Peak - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1551	47.2	-	74	26.8
1551	-	39.1	54	14.9
4932	57.3	-	74	16.7
4932	-	46.1	54	7.9
17470	64.6	-	74	9.5
17470	-	52.3	54	1.7

Radiated Spurious – CH159F

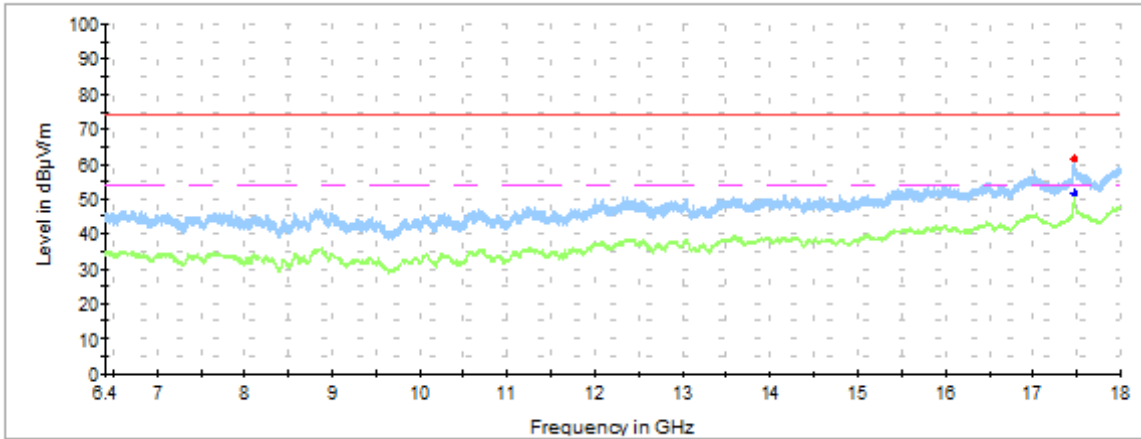
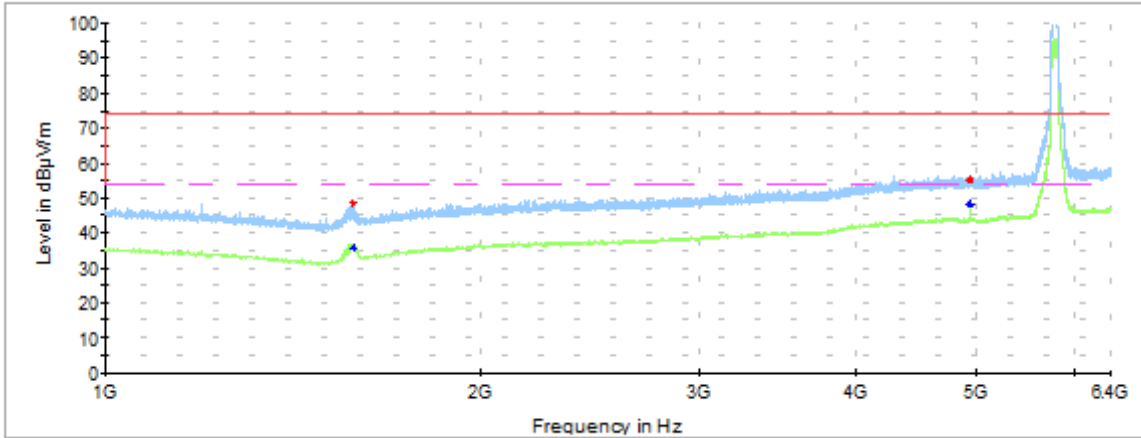


— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1591	51.4	-	74	22.6
1591	-	40.3	54	13.7
17474	63.4	-	74	10.6
17474	-	50.6	54	3.4

1 GHz – 18 GHz, 802.11ac80, HT0, Chain A

Radiated Spurious – CH155ac80

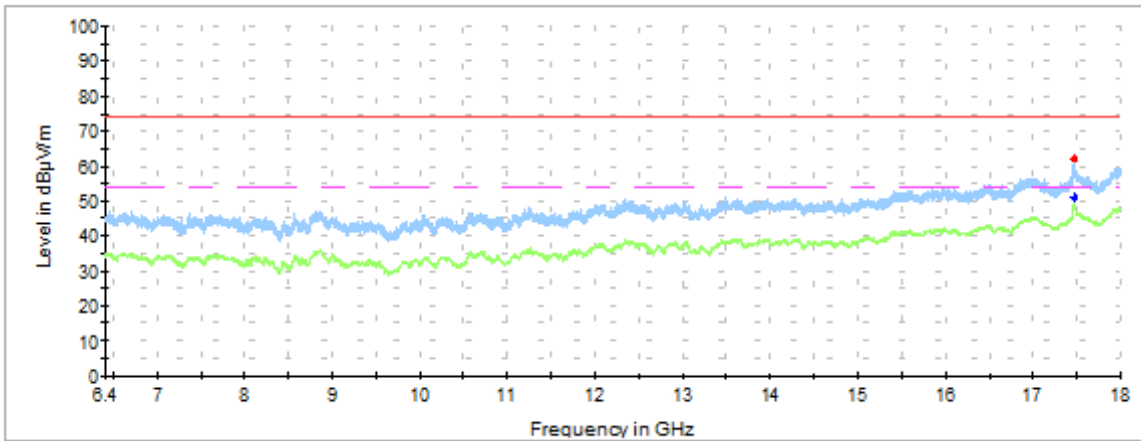
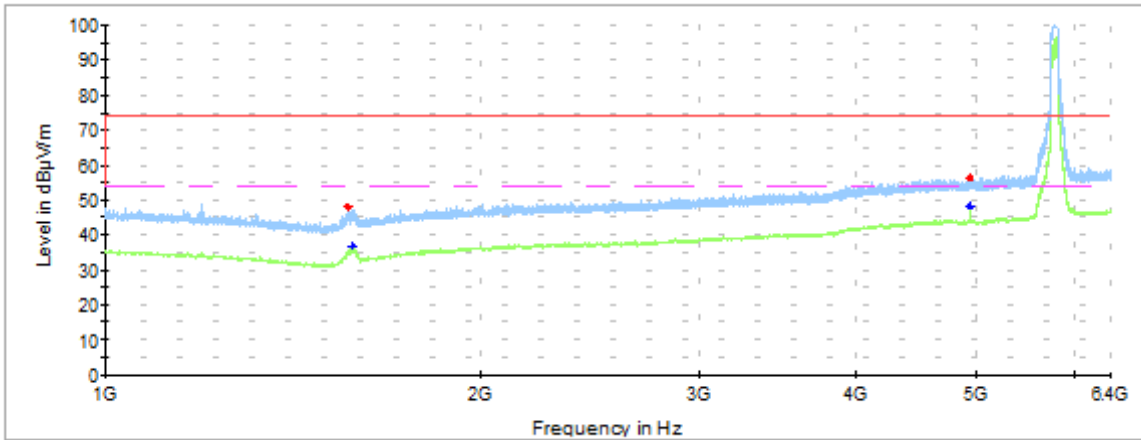


— Peak measurements — Avg measurements — Limit FCC Peak - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1580	49.0	-	74	25.0
1580	-	37.3	54	16.7
4950	57.8	-	74	16.3
4950	-	48.6	54	5.4
17472	65.1	-	74	9
17472	-	51.4	54	2.6

1 GHz – 18 GHz, 802.11ac80, HT0, Chain B

Radiated Spurious – CH155ac80

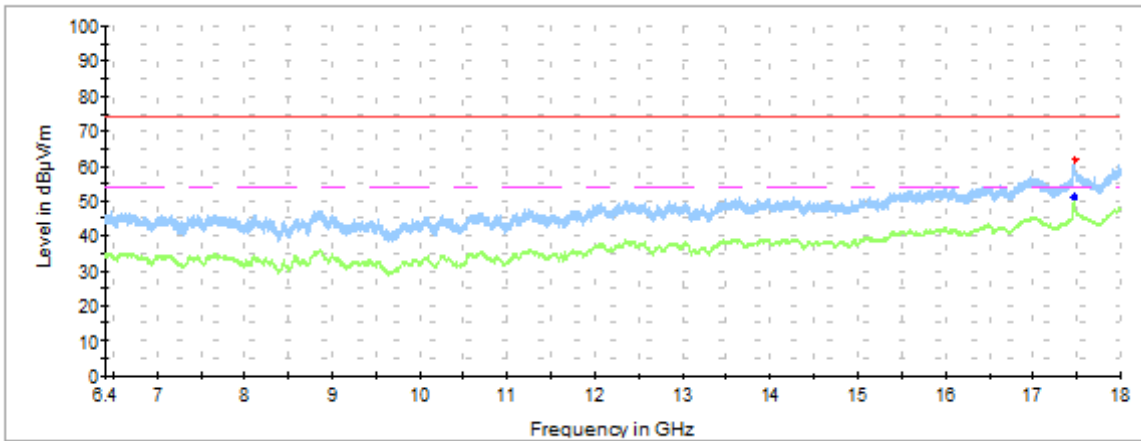
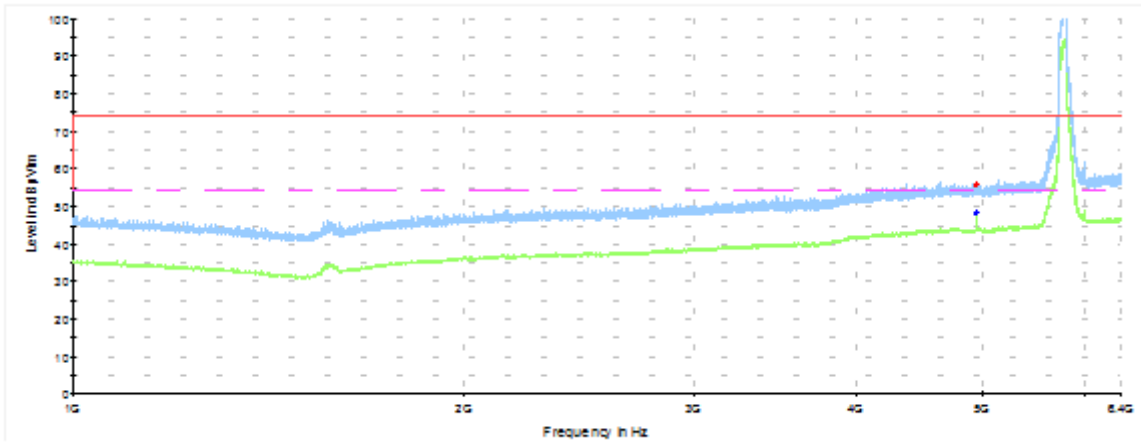


— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
1569	48.6	-	74	25.5
1580	-	37.5	54	16.5
4949	57.1	-	74	16.9
4949	-	48.5	54	5.5
17470	65.1	-	74	8.9
17470	-	52.4	54	1.6

1 GHz – 18 GHz, 802.11ac80, HT8, Chain A+B

Radiated Spurious – CH155ac80

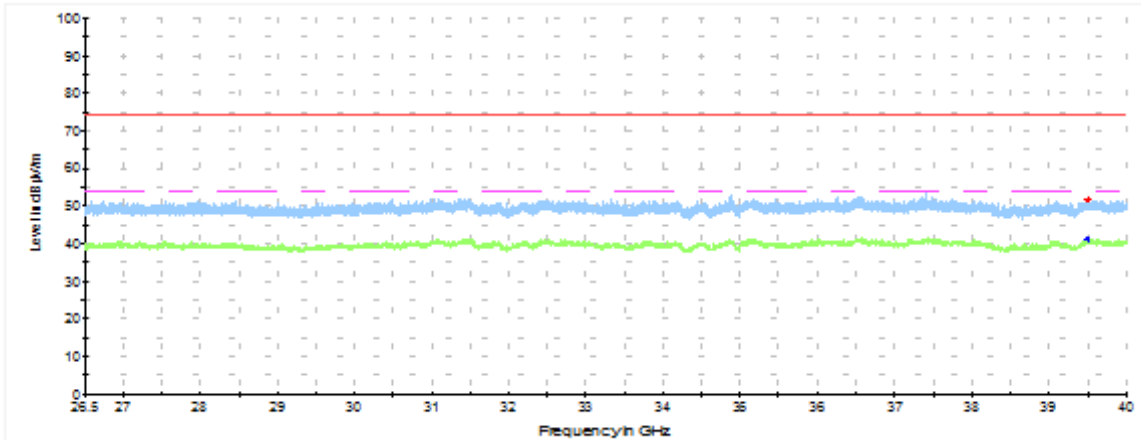
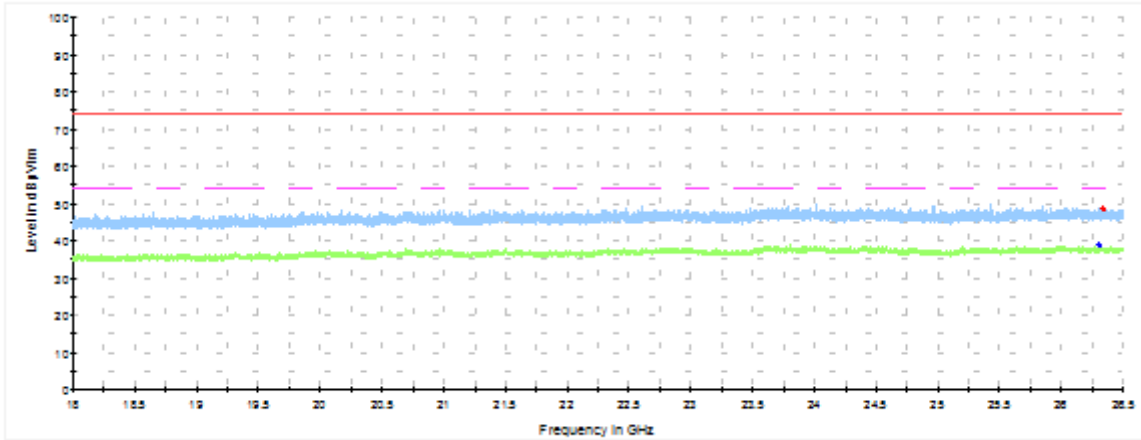


— Peak measurements — Avg measurements — Limit FCC Peak - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
4950	55.9	-	74	18.1
4950	-	48.4	54	5.6
17473	60.7	-	74	13.3
17473	-	52.9	54	1.1

18GHz – 40GHz

Radiated Spurious – All modes



— Peak measurements
 — Avg measurements
 — Limit FCC Peak
 - - - Limit FCC Avg

Frequency	MaxPeak	AvG	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
26308	48.4	-	74	25.6
26335	-	38.8	54	15.2
39501	51.6	-	74	22.4
39501	-	41.1	54	12.9

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