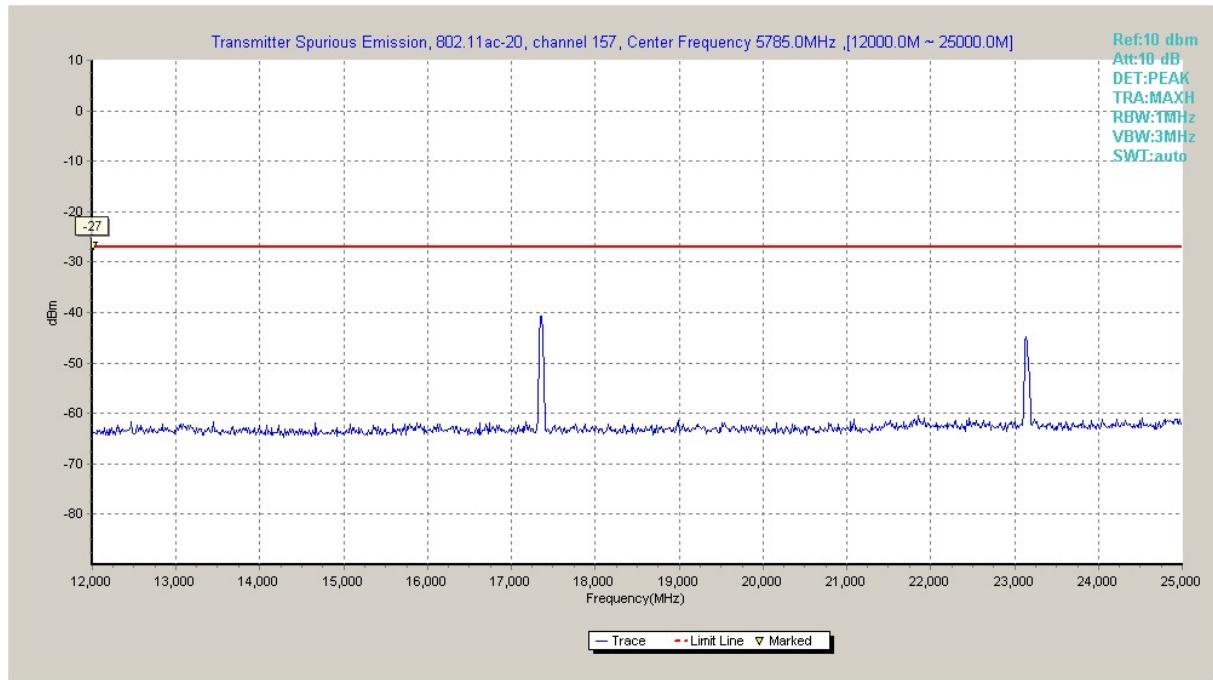
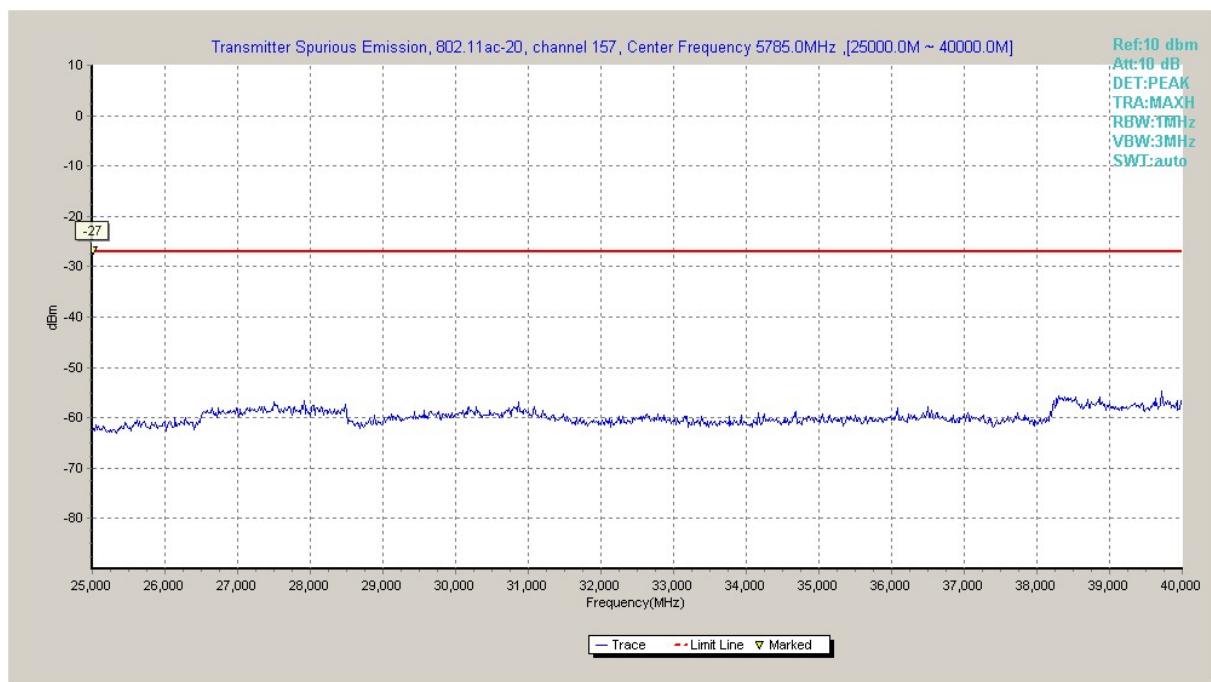


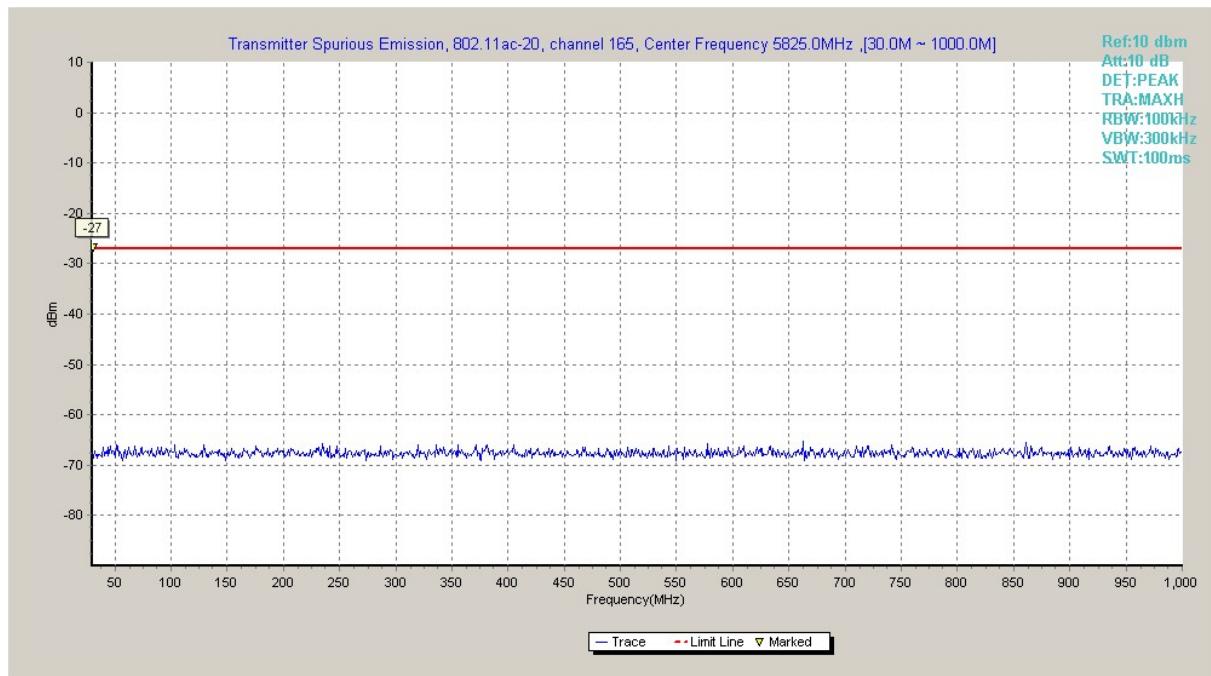
**Fig. 44 Conducted Spurious Emission (802.11ac-HT20, Ch157, 1 GHz -12 GHz)**



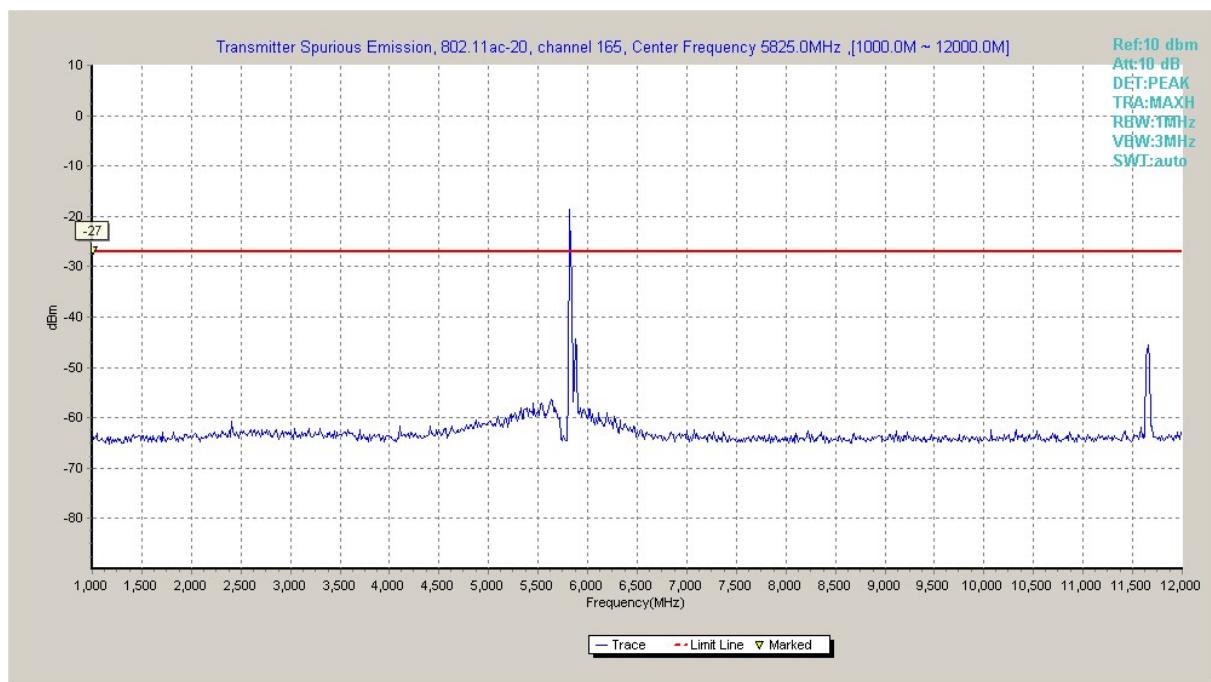
**Fig. 45 Conducted Spurious Emission (802.11ac-HT20, Ch157, 12 GHz-25 GHz)**



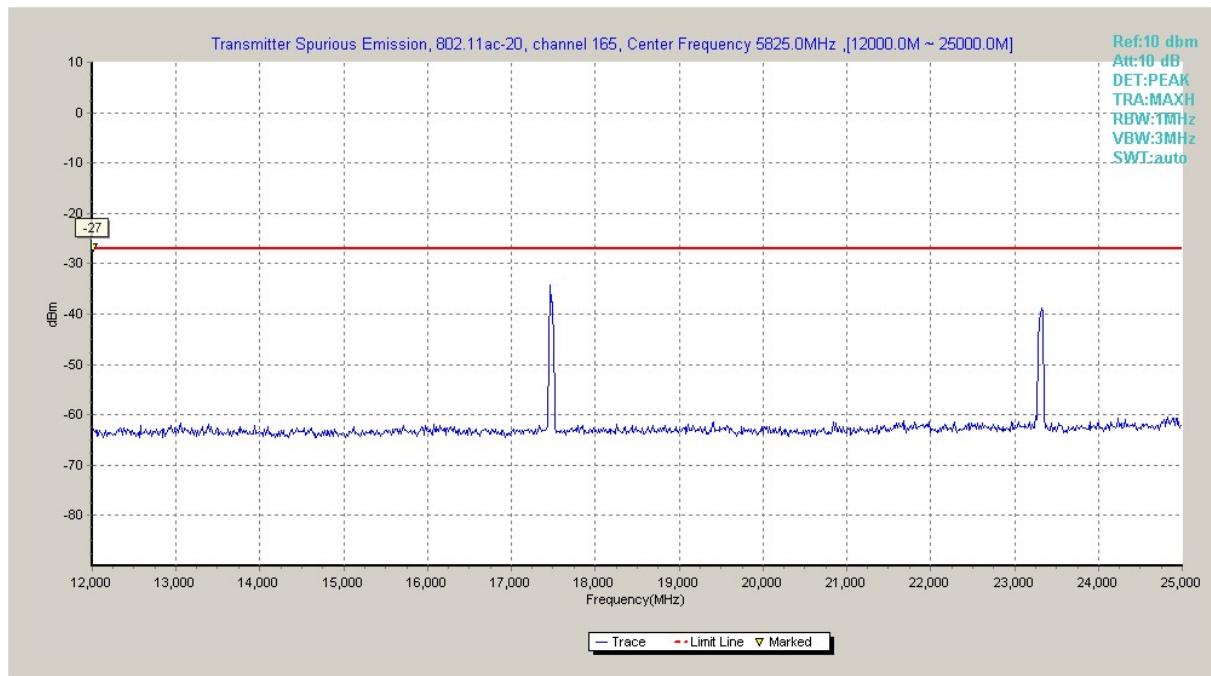
**Fig. 46 Conducted Spurious Emission (802.11ac-HT20, Ch157, 25 GHz-40 GHz)**



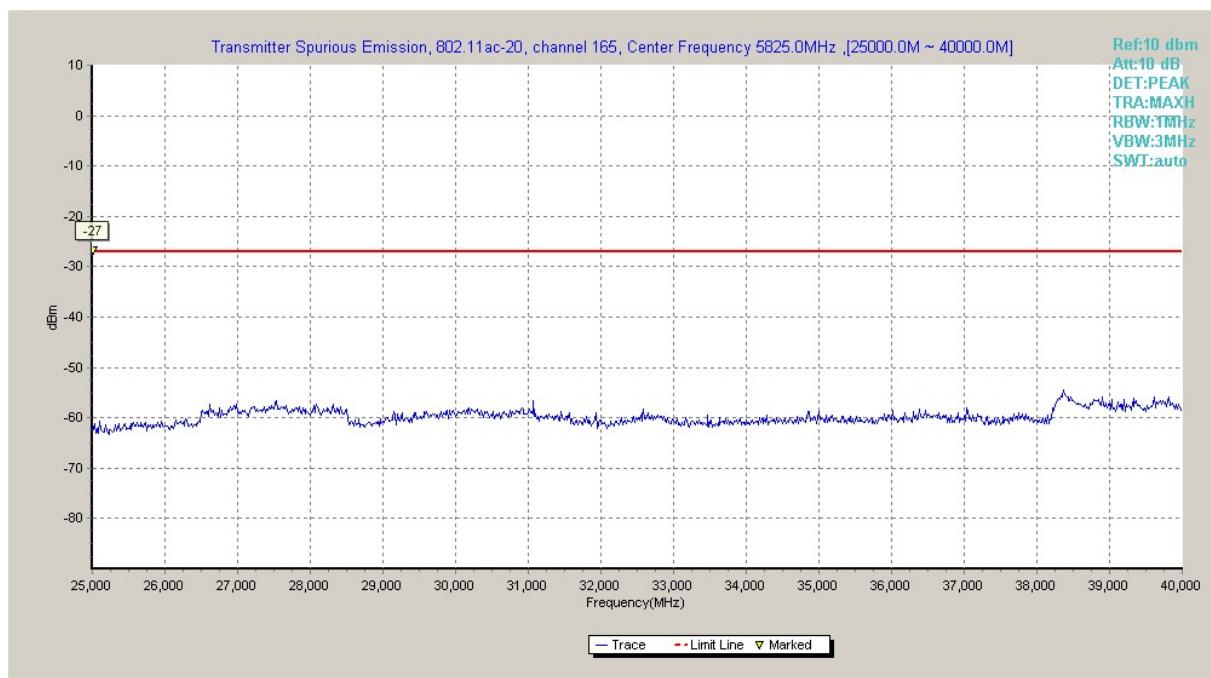
**Fig. 47 Conducted Spurious Emission (802.11ac-HT20, Ch165, 30 MHz-1 GHz)**



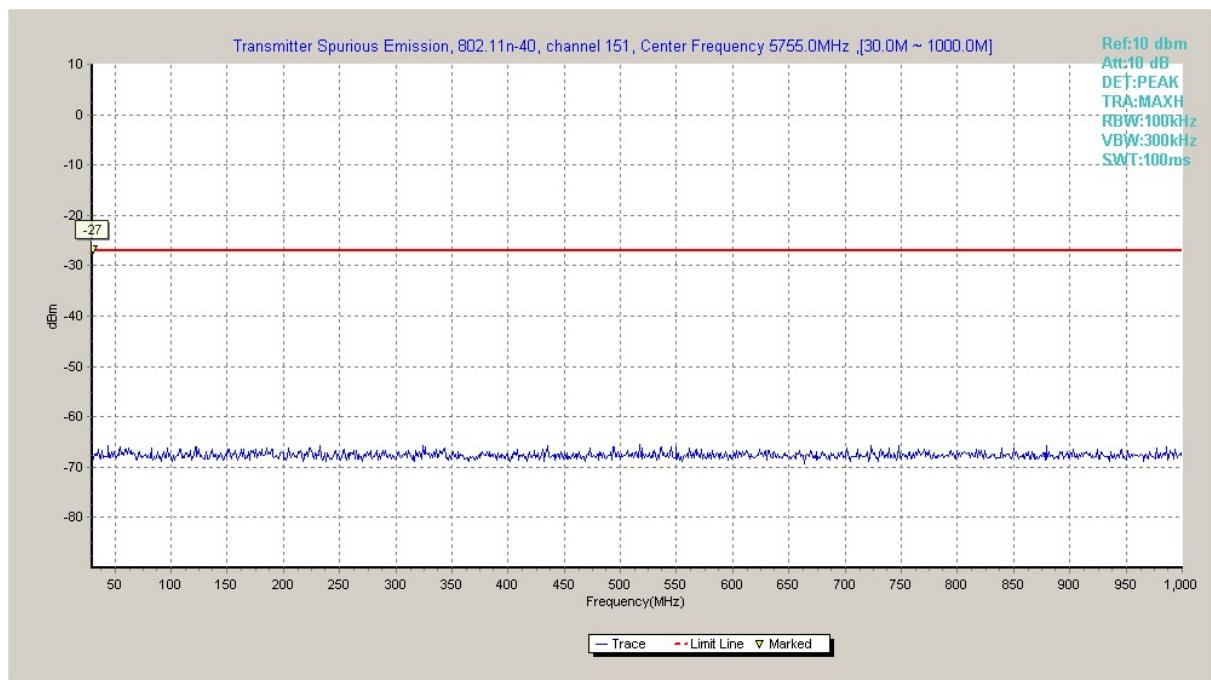
**Fig. 48 Conducted Spurious Emission (802.11ac-HT20, Ch165, 1 GHz -12 GHz)**



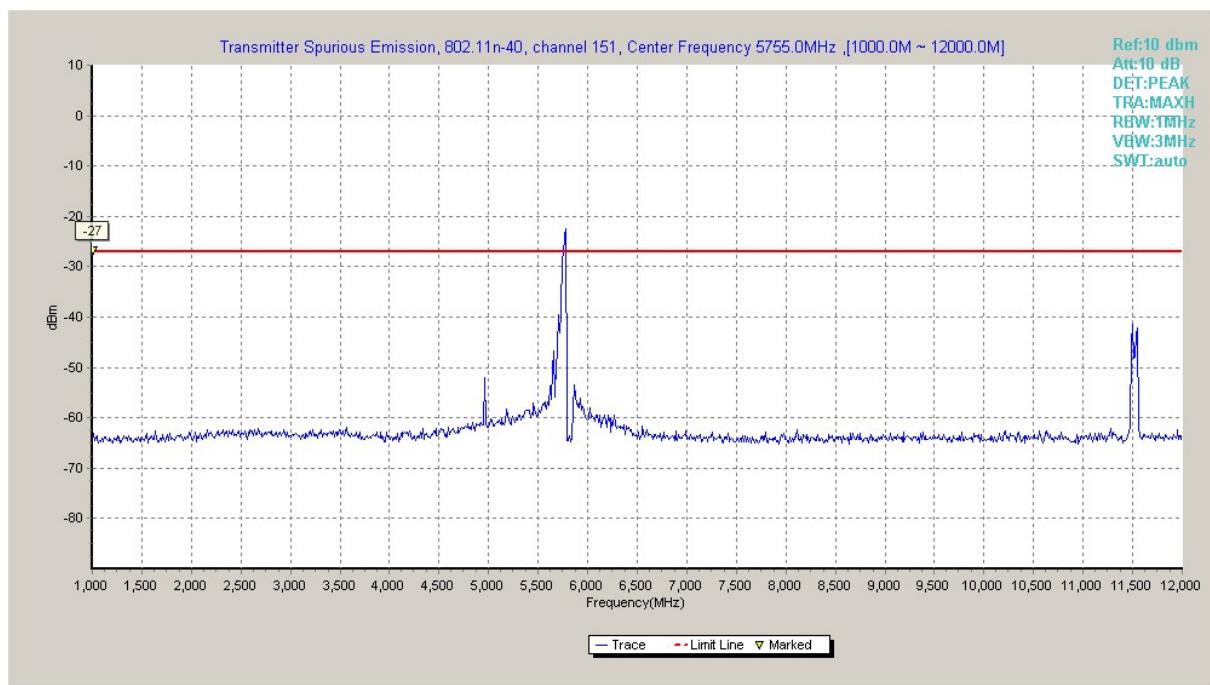
**Fig. 49 Conducted Spurious Emission (802.11ac-HT20, Ch165, 12 GHz-25 GHz)**



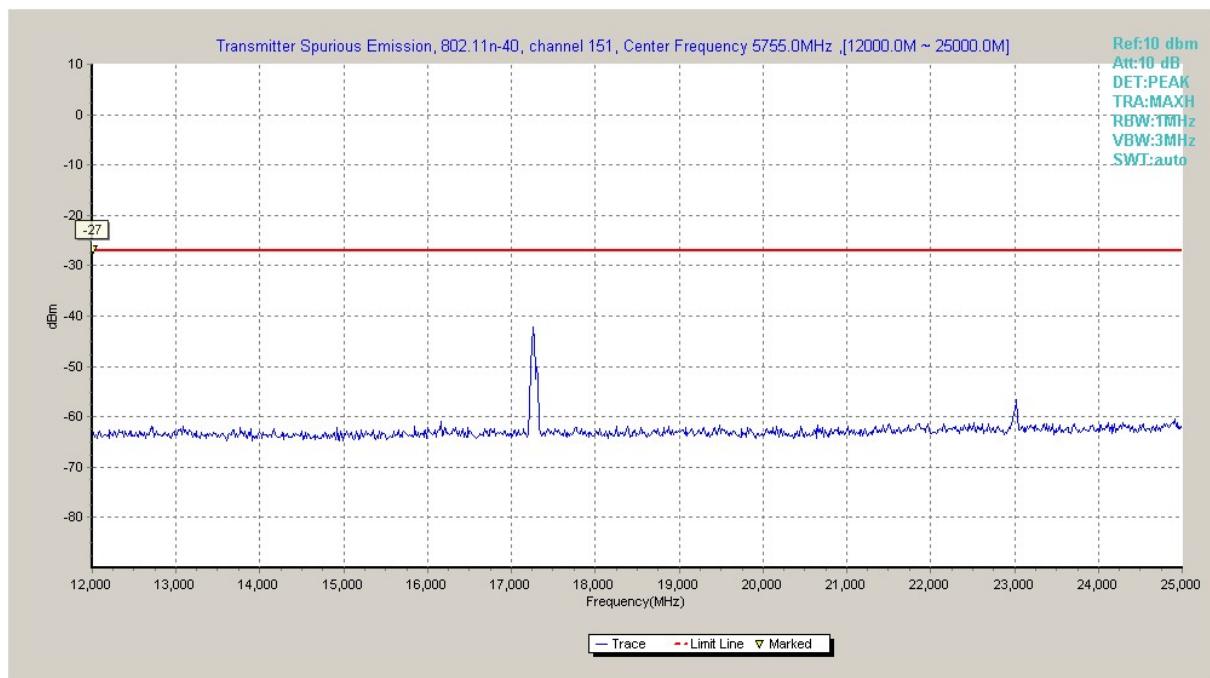
**Fig. 50 Conducted Spurious Emission (802.11ac-HT20, Ch165, 25 GHz-40 GHz)**



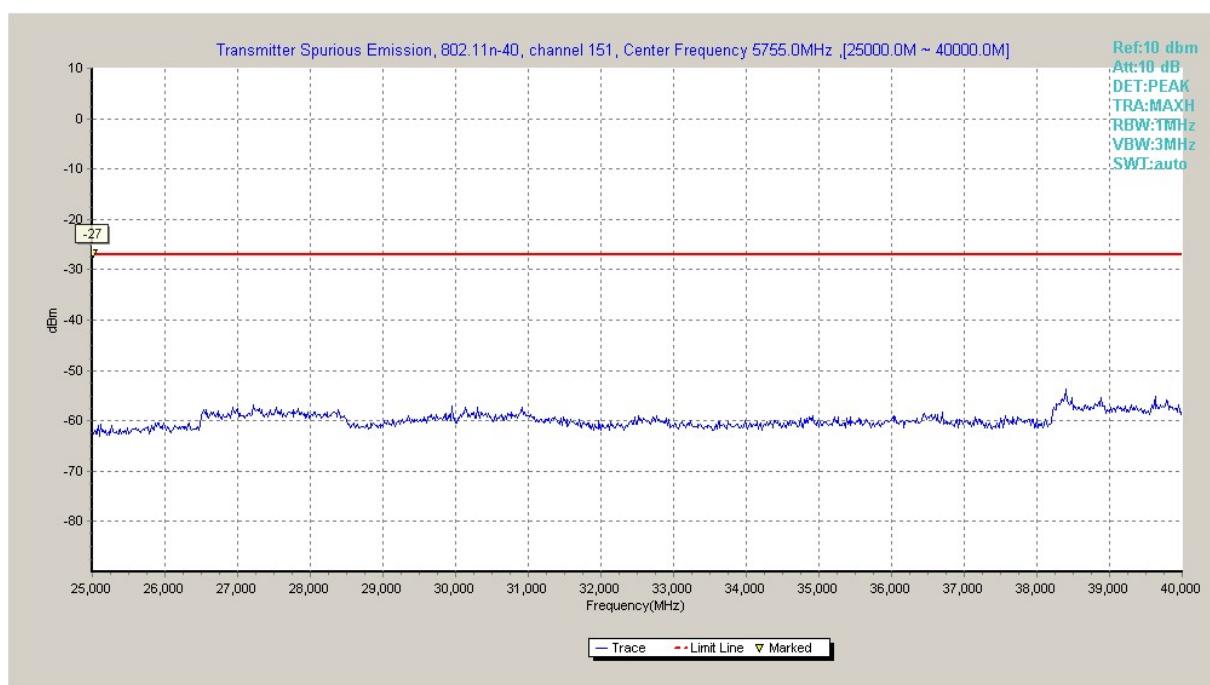
**Fig. 51 Conducted Spurious Emission (802.11n-HT40, Ch151, 30 MHz-1 GHz)**



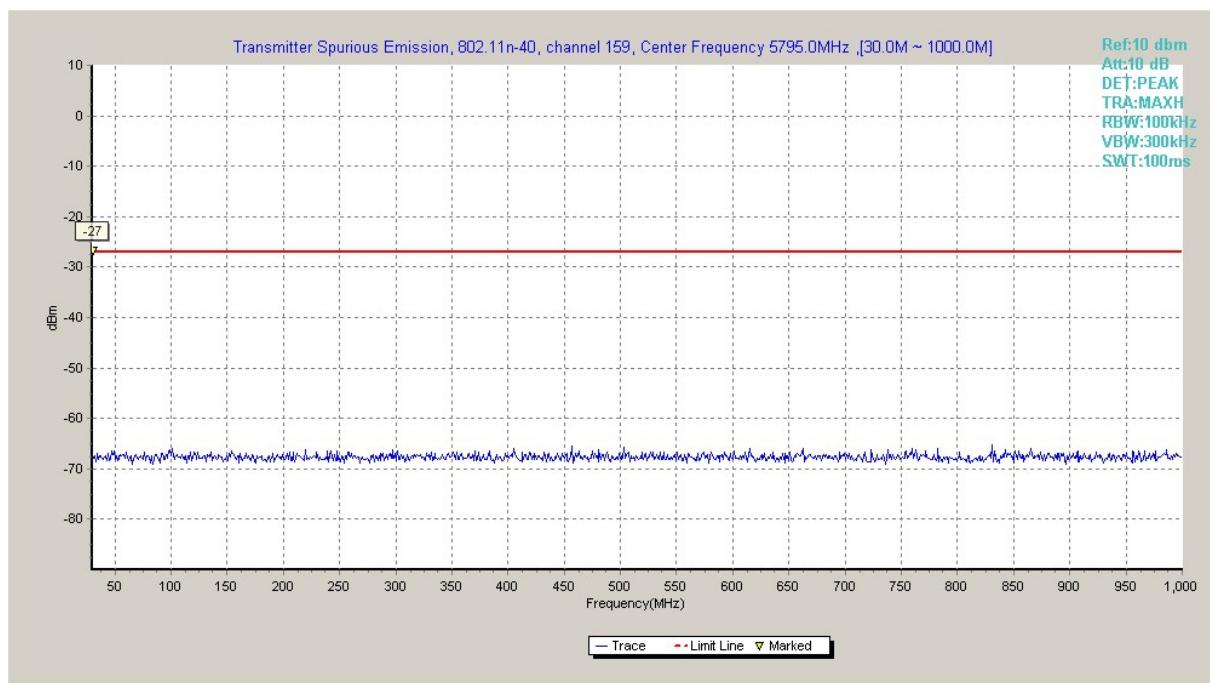
**Fig. 52 Conducted Spurious Emission (802.11n-HT40, Ch151, 1 GHz -12 GHz)**



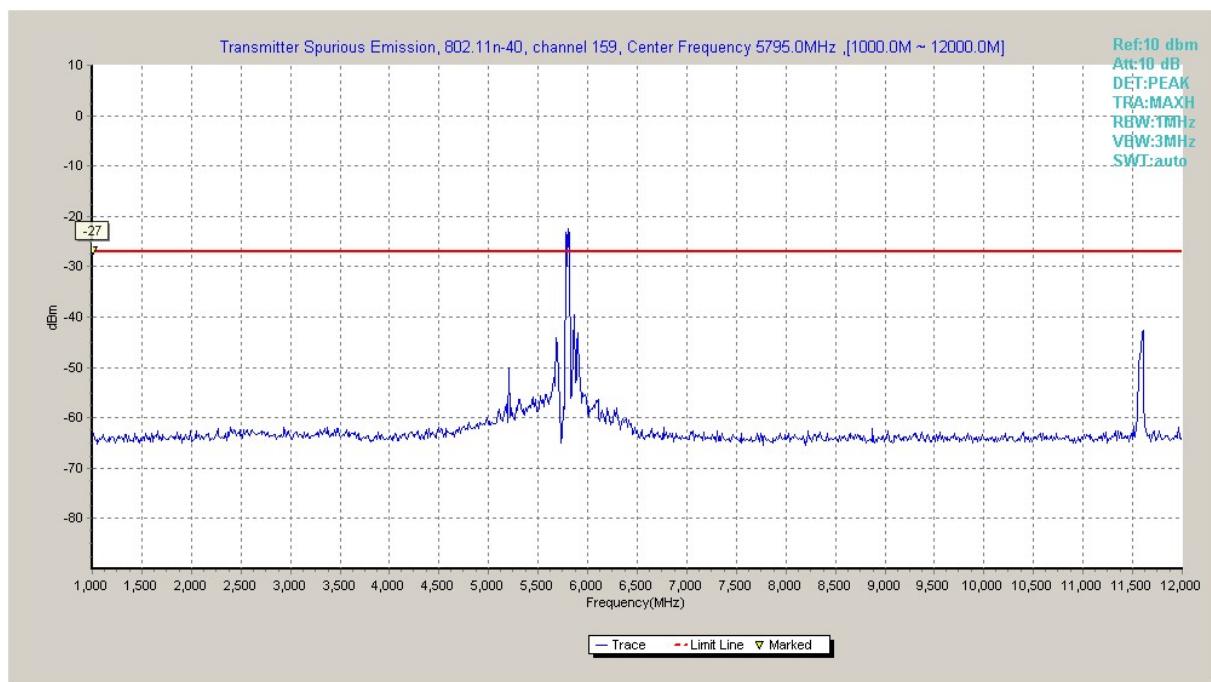
**Fig. 53 Conducted Spurious Emission (802.11n-HT40, Ch151, 12 GHz-25 GHz)**



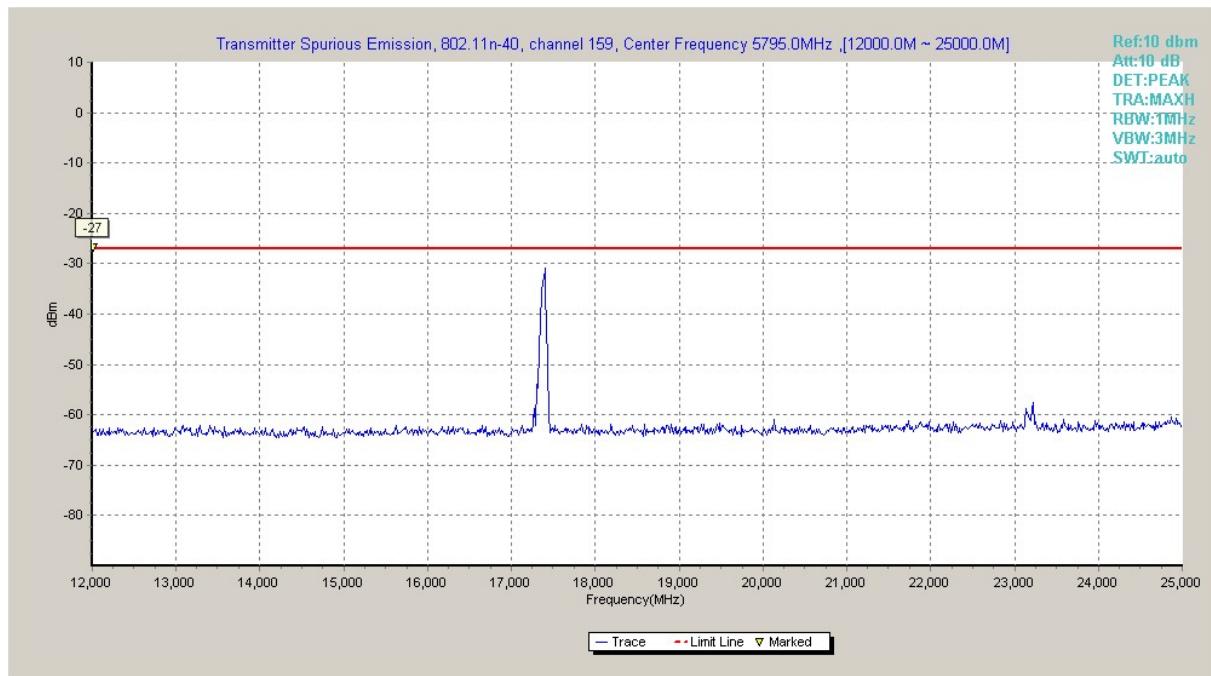
**Fig. 54 Conducted Spurious Emission (802.11n-HT40, Ch151, 25 GHz-40 GHz)**



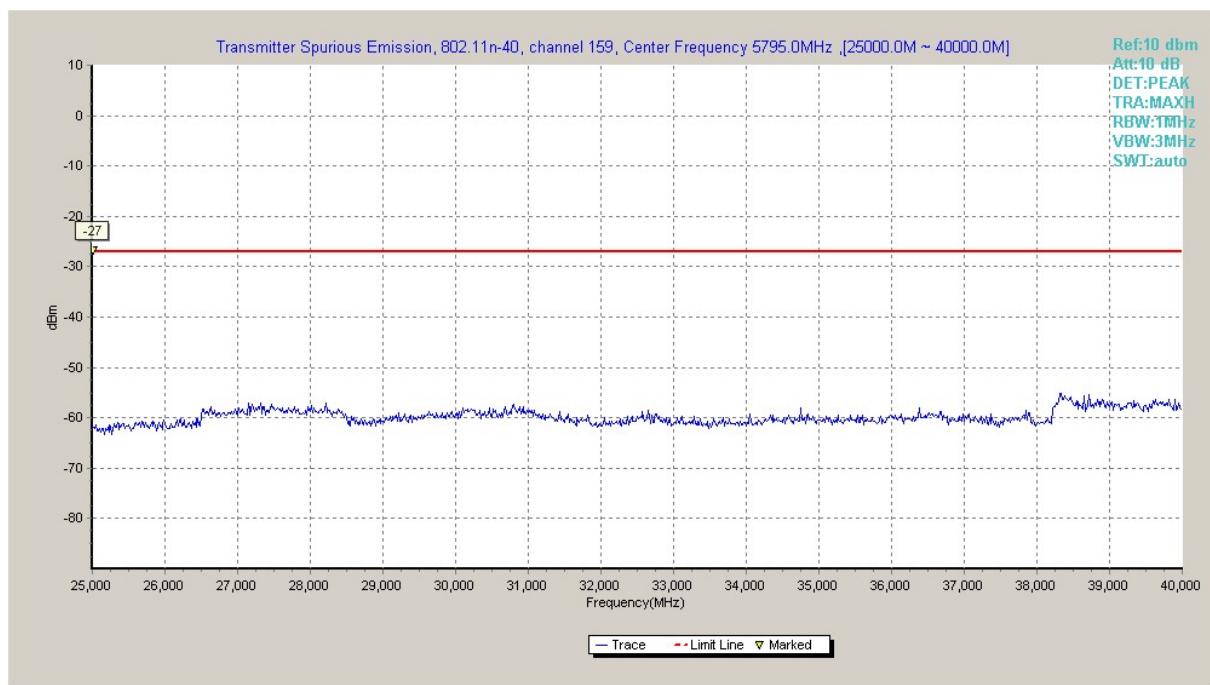
**Fig. 55 Conducted Spurious Emission (802.11n-HT40, Ch159, 30 MHz-1 GHz)**



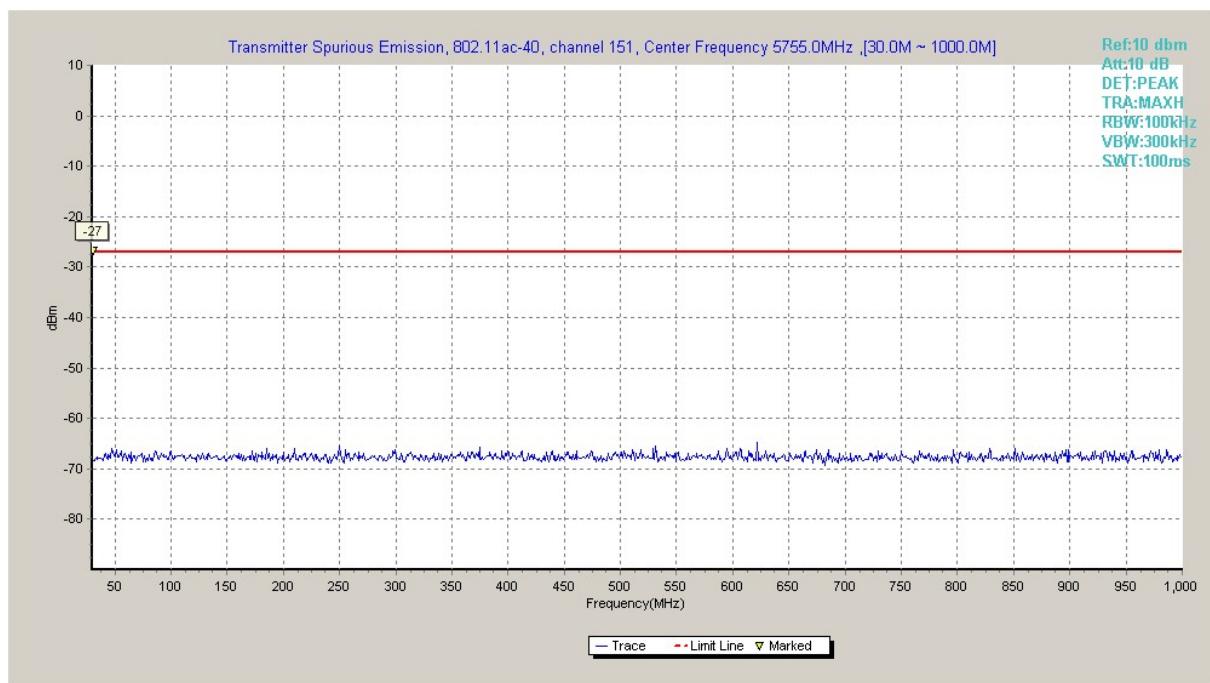
**Fig. 56 Conducted Spurious Emission (802.11n-HT40, Ch159, 1 GHz -12 GHz)**



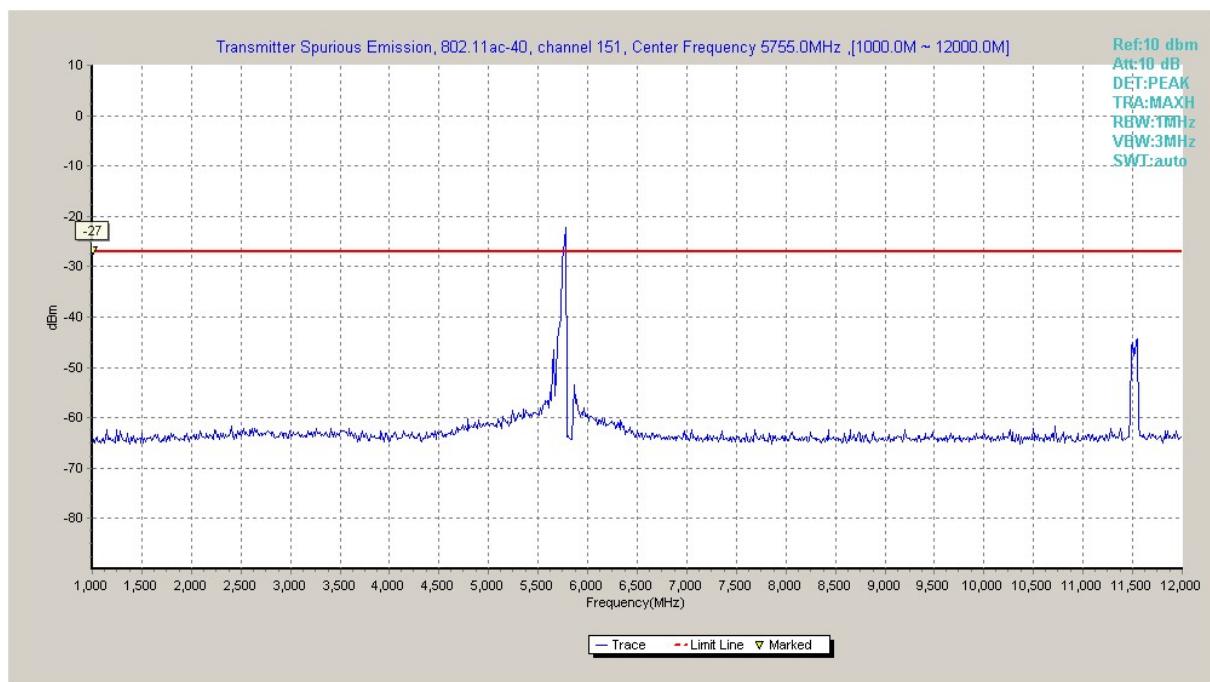
**Fig. 57 Conducted Spurious Emission (802.11n-HT40, Ch159, 12 GHz-25 GHz)**



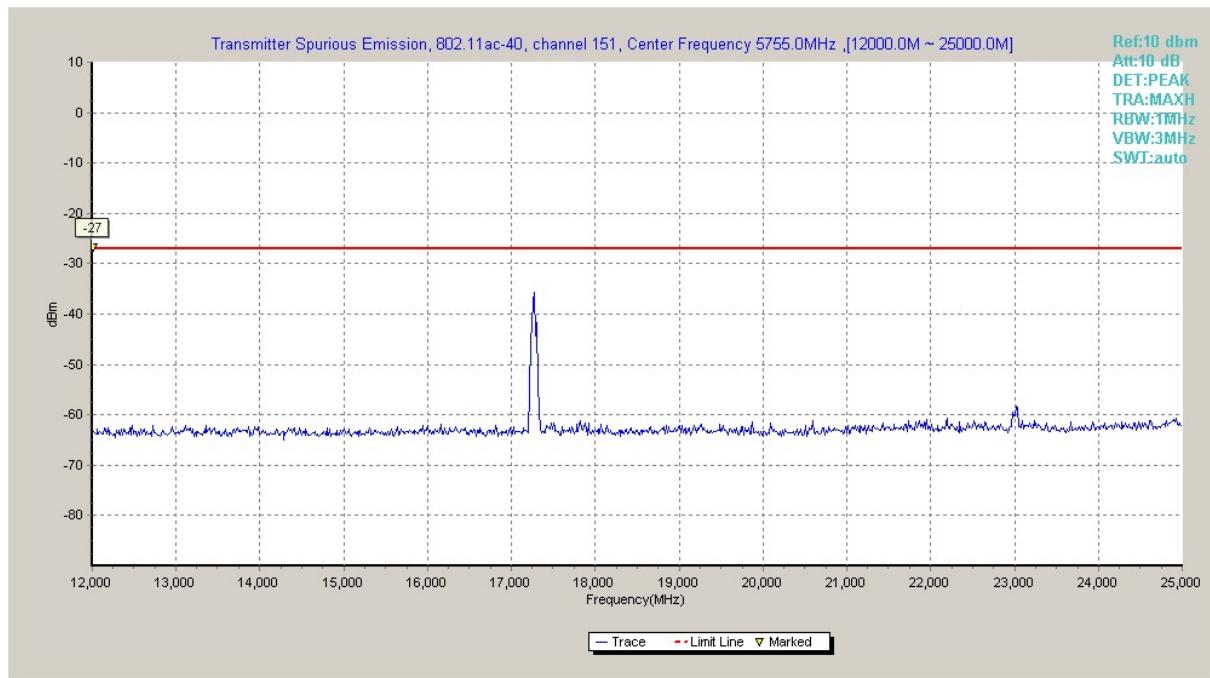
**Fig. 58 Conducted Spurious Emission (802.11n-HT40, Ch159, 25 GHz-40 GHz)**



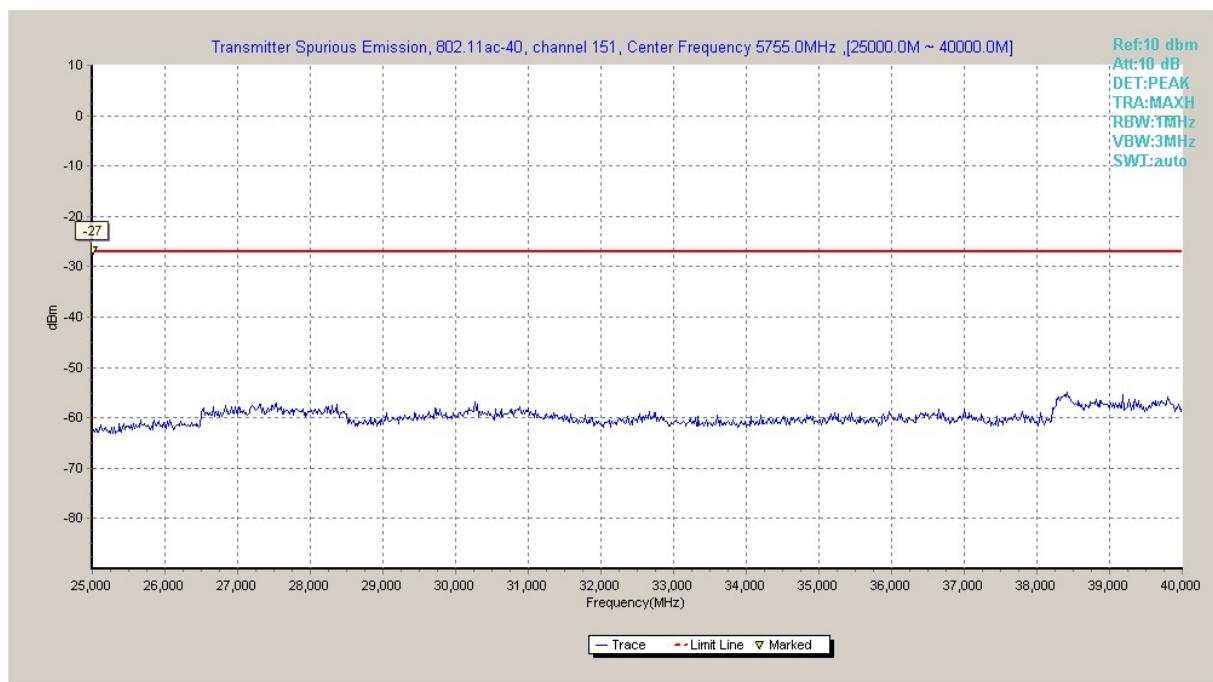
**Fig. 59 Conducted Spurious Emission (802.11ac-HT40, Ch151, 30 MHz-1 GHz)**



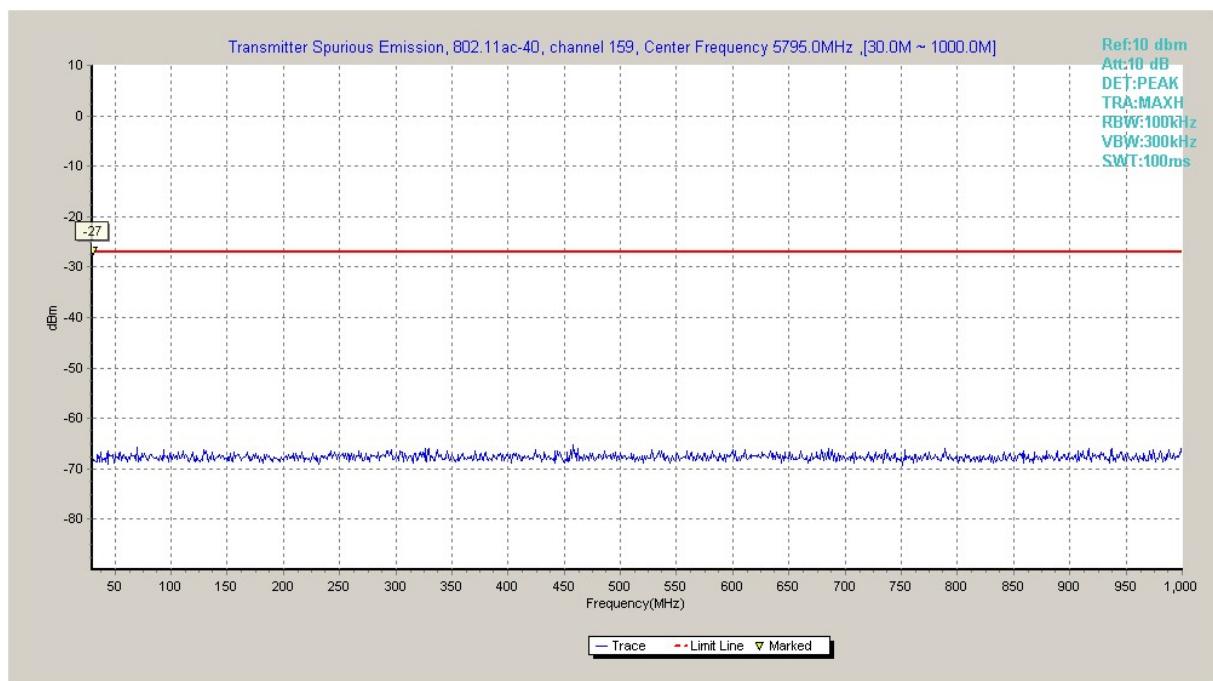
**Fig. 60 Conducted Spurious Emission (802.11ac-HT40, Ch151, 1 GHz -12 GHz)**



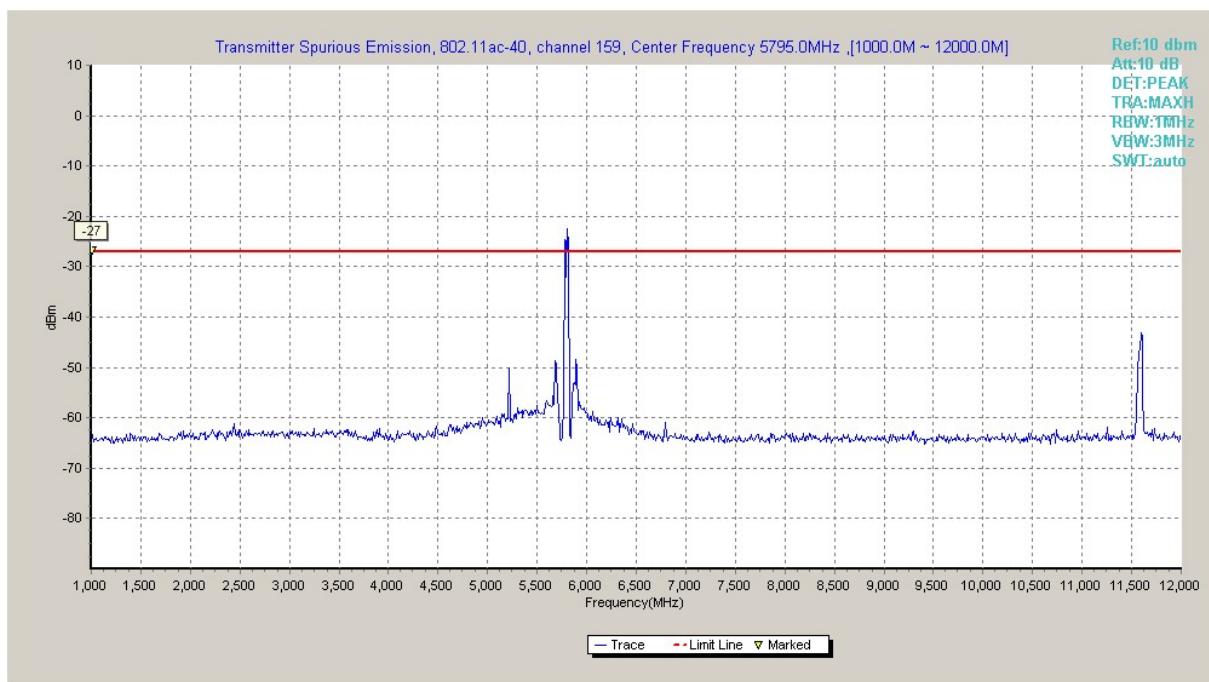
**Fig. 61 Conducted Spurious Emission (802.11ac-HT40, Ch151, 12 GHz-25 GHz)**



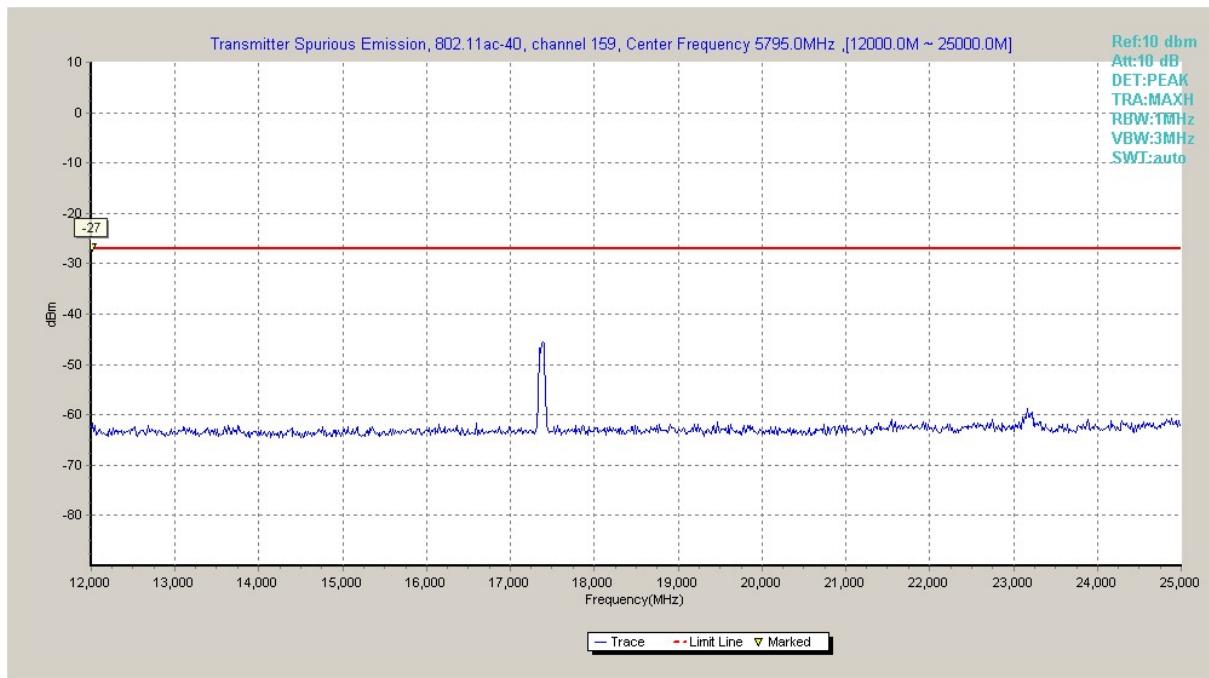
**Fig. 62 Conducted Spurious Emission (802.11ac-HT40, Ch151, 25 GHz-40 GHz)**



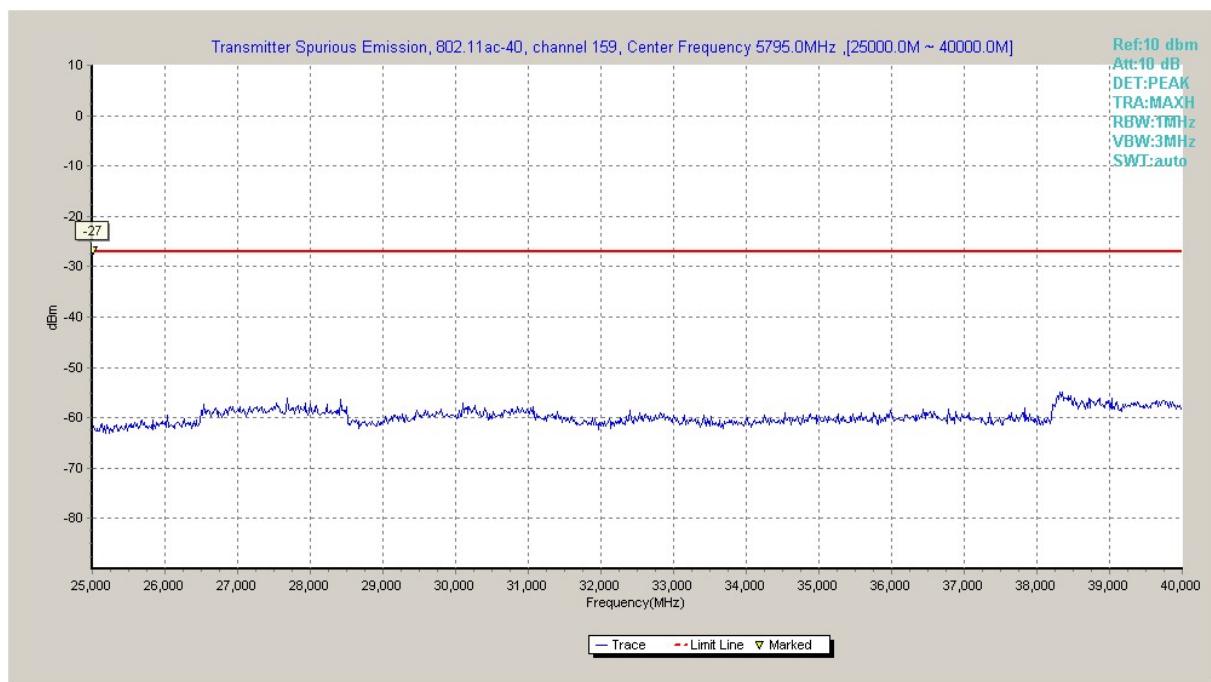
**Fig. 63 Conducted Spurious Emission (802.11ac-HT40, Ch159, 30 MHz-1 GHz)**



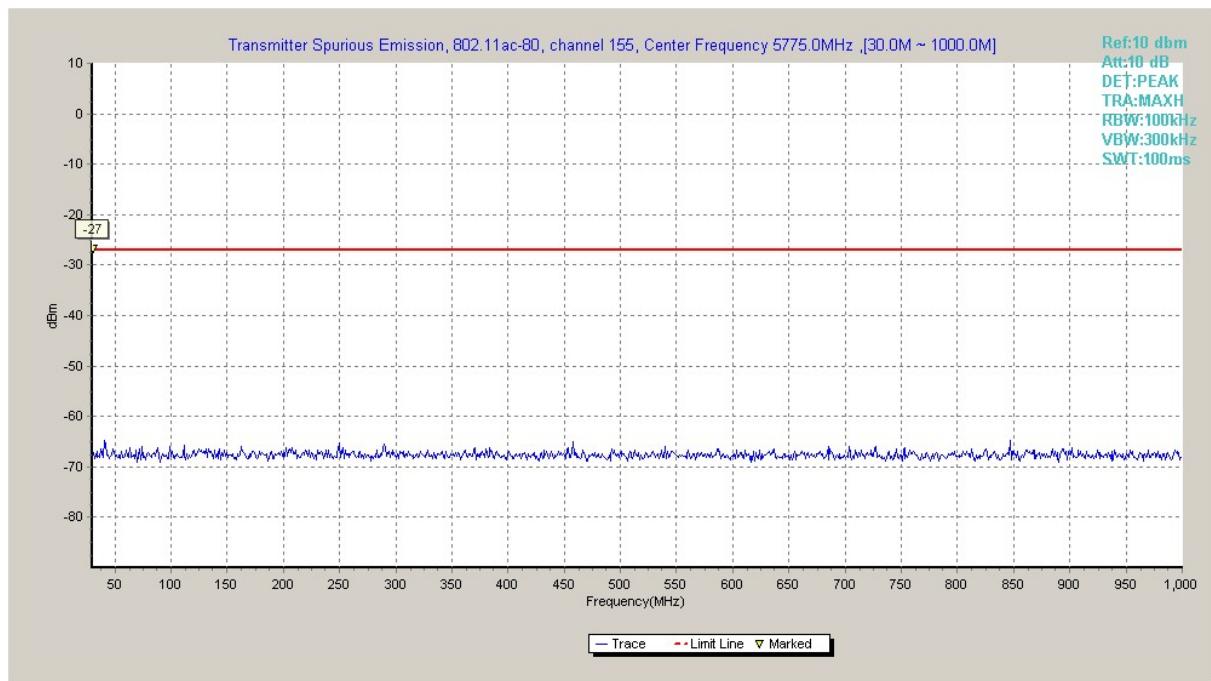
**Fig. 64 Conducted Spurious Emission (802.11ac-HT40, Ch159, 1 GHz -12 GHz)**



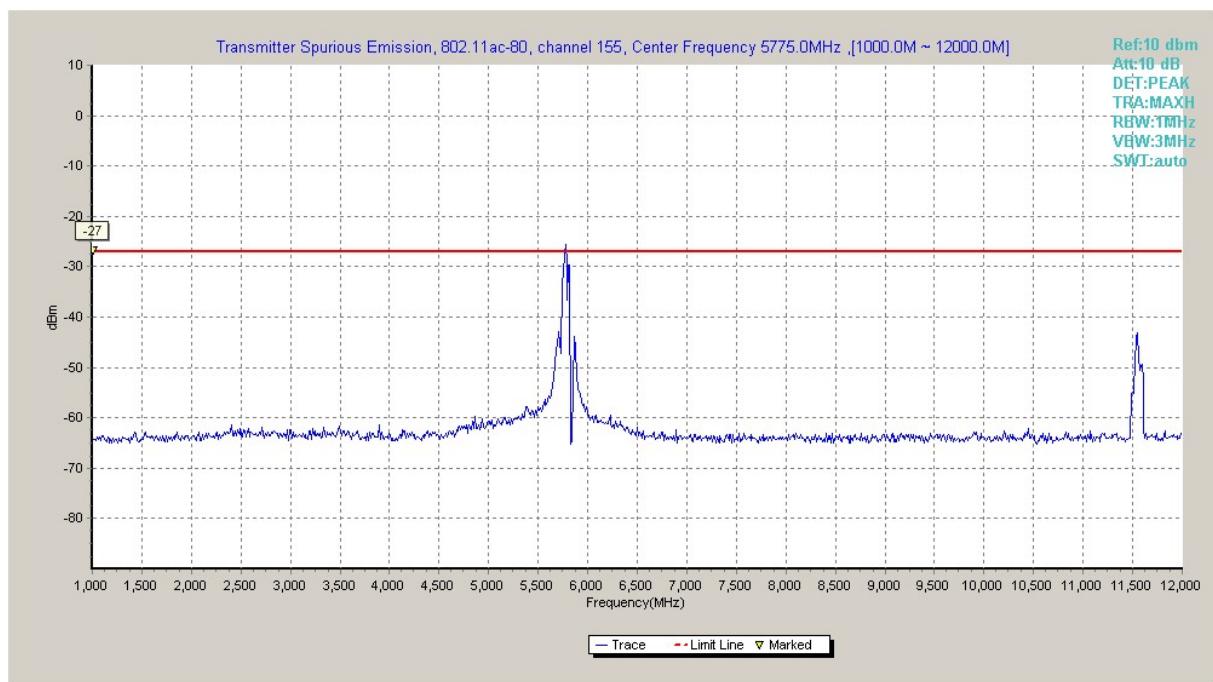
**Fig. 65 Conducted Spurious Emission (802.11ac-HT40, Ch159, 12 GHz-25 GHz)**



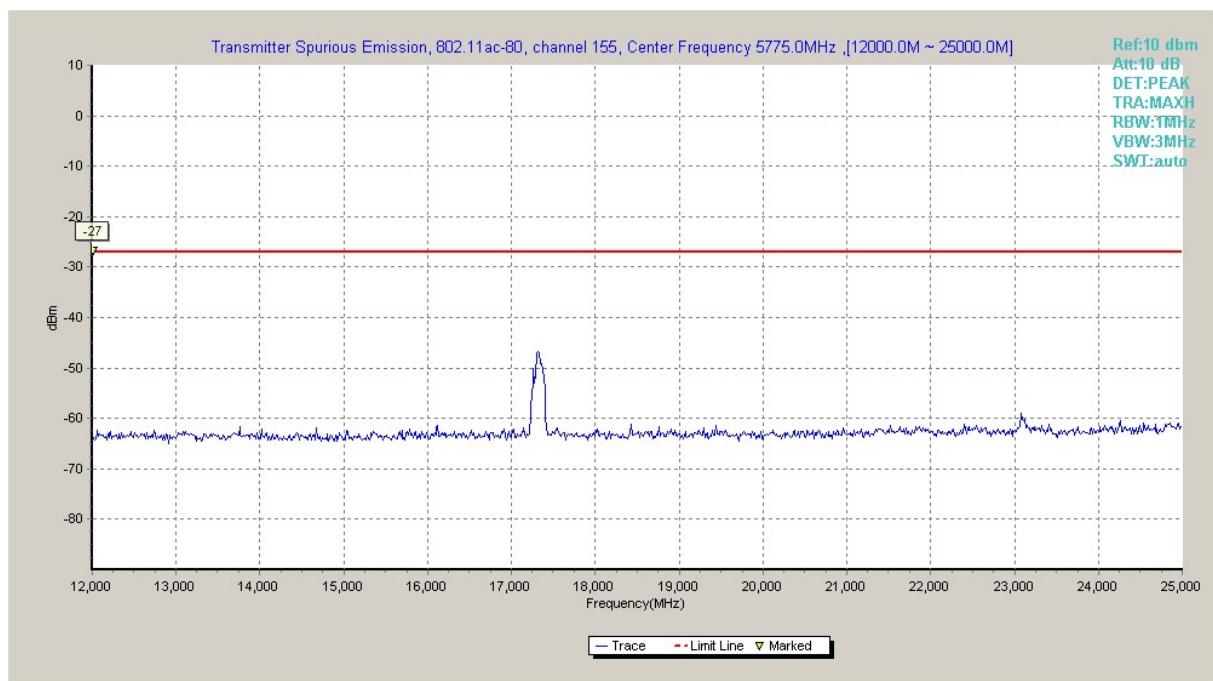
**Fig. 66 Conducted Spurious Emission (802.11ac-HT40, Ch159, 25 GHz-40 GHz)**



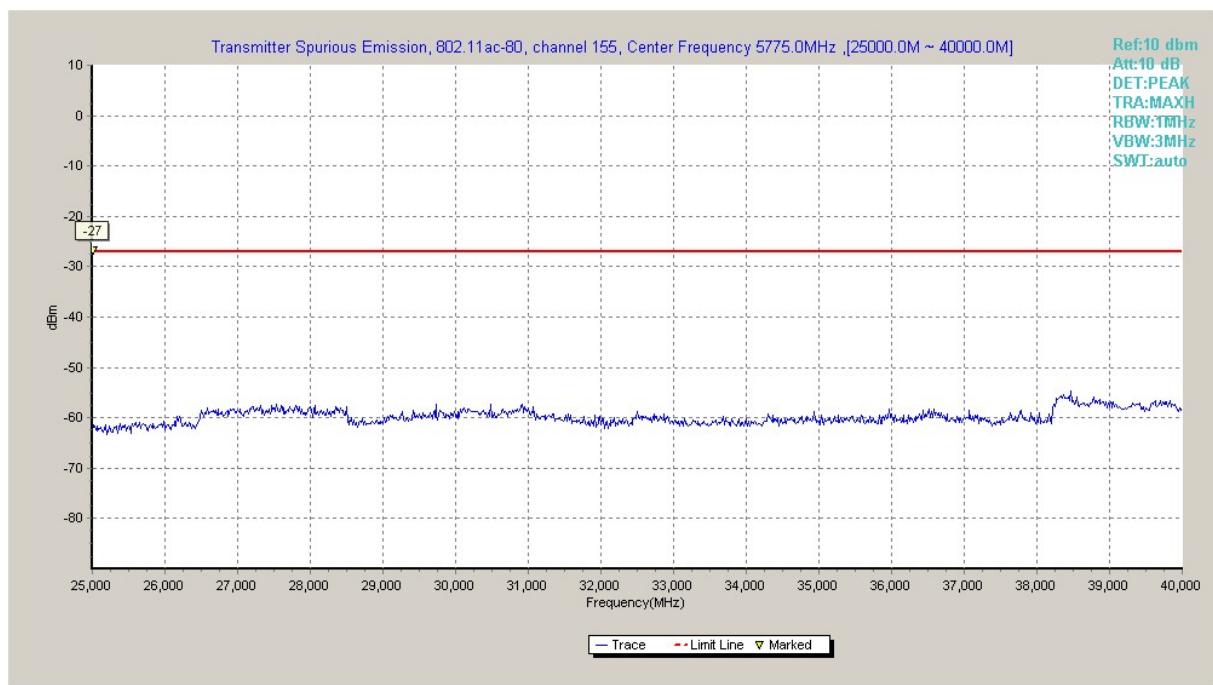
**Fig. 67 Conducted Spurious Emission (802.11ac-HT80, Ch155, 30 MHz-1 GHz)**



**Fig. 68 Conducted Spurious Emission (802.11ac-HT80, Ch155, 1 GHz -12 GHz)**



**Fig. 69 Conducted Spurious Emission (802.11ac-HT80, Ch155, 12 GHz-25 GHz)**



**Fig. 70 Conducted Spurious Emission (802.11ac-HT80, Ch155, 25 GHz-40 GHz)**

### A.5.2 Transmitter Spurious Emission - Radiated

#### Measurement Limit:

Standard	Frequency (MHz)	Limit (dBm/MHz)
FCC 47 CFR Part 15.407	5725MHz~5850MHz	< -27

The measurement is made according to ANSI C63.10 .

In addition, 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) (see § 15.205(c)).

#### Limit in restricted band:

Frequency of emission (MHz)	Field strength (uV/m)	Field strength (dBμV/m)	Measurement distance(m)
30-88	100	40.0	3
88-216	150	43.5	3
216-960	200	46.0	3
Above 960	500	54.0	3

#### Measurement Results:

##### Note:

P<sub>Mea</sub> is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result= P<sub>Mea</sub> + Cable Loss + Antenna Factor

Where:

P<sub>Mea</sub> field strength recorded from the instrument

#### Average Results:

##### 802.11a

Ch149

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17982.400	34.5	-25.5	43.4	16.6	48.3	13.8	H
17957.100	34.4	-25.5	43.4	16.5	48.3	13.9	H
17962.600	34.4	-25.5	43.4	16.5	48.3	13.9	V
17968.100	34.4	-25.5	43.4	16.5	48.3	13.9	H
17976.900	34.4	-25.5	43.4	16.5	48.3	13.9	H
5725.000	43.3	-16.3	34.2	25.4	48.3	5.0	V

Ch157

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
17975.800	34.5	-25.5	43.4	16.6	48.3	13.8	H
17978.000	34.5	-25.5	43.4	16.6	48.3	13.8	H
17983.500	34.5	-25.5	43.4	16.6	48.3	13.8	V
17997.800	34.5	-25.5	43.4	16.6	48.3	13.8	H

17958.200	34.4	-25.5	43.4	16.5	48.3	13.9	H
17965.900	34.4	-25.5	43.4	16.5	48.3	13.9	H

Ch165

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17979.100	34.9	-25.5	43.4	17.0	48.3	13.4	H
17975.800	34.8	-25.5	43.4	16.9	48.3	13.5	H
17960.400	34.7	-25.5	43.4	16.8	48.3	13.6	H
17965.900	34.6	-25.5	43.4	16.7	48.3	13.7	V
17994.500	34.6	-25.5	43.4	16.7	48.3	13.7	H
5876.900	39.1	-16.2	34.2	21.1	48.3	9.2	V

**802.11n-HT20**

Ch149

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17972.500	34.8	-25.5	43.4	16.9	48.3	13.5	H
17985.700	34.7	-25.5	43.4	16.8	48.3	13.6	H
17987.900	34.6	-25.5	43.4	16.7	48.3	13.7	V
17997.800	34.5	-25.5	43.4	16.6	48.3	13.8	H
17952.700	34.4	-25.5	43.4	16.5	48.3	13.9	H
5724.500	44.9	-16.3	34.2	27.0	48.3	3.4	V

Ch157

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17994.500	34.7	-25.5	43.4	16.8	48.3	13.6	V
17971.400	34.6	-25.5	43.4	16.7	48.3	13.7	H
17980.200	34.6	-25.5	43.4	16.7	48.3	13.7	V
17990.100	34.6	-25.5	43.4	16.7	48.3	13.7	H
17972.500	34.5	-25.5	43.4	16.6	48.3	13.8	V
17978.000	34.5	-25.5	43.4	16.6	48.3	13.8	H

Ch165

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17956.000	34.6	-25.5	43.4	16.7	48.3	13.7	H
17976.900	34.6	-25.5	43.4	16.7	48.3	13.7	H
17989.000	34.6	-25.5	43.4	16.7	48.3	13.7	H
17980.200	34.5	-25.5	43.4	16.6	48.3	13.8	H

17995.600	34.5	-25.5	43.4	16.6	48.3	13.8	H
5876.400	38.9	-16.2	34.2	20.9	48.3	9.4	V

### 802.11n-HT40

Ch151

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17993.400	34.8	-25.5	43.4	16.9	48.3	13.5	H
17958.200	34.7	-25.5	43.4	16.8	48.3	13.6	H
17963.700	34.6	-25.5	43.4	16.7	48.3	13.7	H
17984.600	34.6	-25.5	43.4	16.7	48.3	13.7	H
17995.600	34.5	-25.5	43.4	16.6	48.3	13.8	V
5724.600	41.5	-16.3	34.2	23.6	48.3	6.8	V

Ch159

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
5856.056	37.8	-33.8	35.1	36.5	49.9	10.5	H
17994.500	34.6	-17.7	45.6	6.7	48.4	13.7	H
17984.600	34.6	-17.7	45.6	6.7	48.3	13.7	V
17998.900	34.5	-17.7	45.6	6.6	48.3	13.8	H
17964.800	34.5	-17.7	45.6	6.6	48.3	13.8	H
17968.100	34.5	-17.7	45.6	6.6	48.3	13.8	H

### 802.11ac-HT20

Ch149

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17969.200	34.6	-25.5	43.4	16.7	48.3	13.7	H
17975.800	34.6	-25.5	43.4	16.7	48.3	13.7	H
17968.100	34.5	-25.5	43.4	16.6	48.3	13.8	H
17978.000	34.5	-25.5	43.4	16.6	48.3	13.8	H
17985.700	34.5	-25.5	43.4	16.6	48.3	13.8	V
5724.800	44.9	-16.3	34.2	27.0	48.3	3.4	V

Ch157

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17970.300	34.6	-25.5	43.4	16.7	48.3	13.7	V
17975.800	34.5	-25.5	43.4	16.6	48.3	13.8	H
17978.000	34.5	-25.5	43.4	16.6	48.3	13.8	V

17993.400	34.5	-25.5	43.4	16.6	48.3	13.8	H
17961.500	34.4	-25.5	43.4	16.5	48.3	13.9	H
17969.200	34.4	-25.5	43.4	16.5	48.3	13.9	V

Ch165

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17996.700	34.7	-25.5	43.4	16.8	48.3	13.6	H
17973.600	34.6	-25.5	43.4	16.7	48.3	13.7	H
17978.000	34.6	-25.5	43.4	16.7	48.3	13.7	H
17936.200	34.5	-25.5	43.4	16.6	48.3	13.8	H
17979.100	34.5	-25.5	43.4	16.6	48.3	13.8	H
5876.200	38.6	-16.2	34.2	20.6	48.3	9.7	V

**802.11ac-HT40**

Ch151

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17973.600	34.6	-25.5	43.4	16.7	48.3	13.7	H
17978.000	34.6	-25.5	43.4	16.7	48.3	13.7	H
17982.400	34.6	-25.5	43.4	16.7	48.3	13.7	H
17981.300	34.5	-25.5	43.4	16.6	48.3	13.8	V
17989.000	34.5	-25.5	43.4	16.6	48.3	13.8	H
5724.800	43.3	-16.3	34.2	25.4	48.3	5.0	V

Ch159

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
5858.488	37.2	-33.8	35.1	35.9	48.3	11.1	H
17998.900	34.2	-17.7	45.6	6.3	48.3	14.1	H
17997.800	34.0	-17.7	45.6	6.1	48.3	14.3	V
17996.700	34.4	-17.7	45.6	6.5	48.3	13.9	H
17995.600	34.6	-17.7	45.6	6.7	48.3	13.7	H
17994.500	34.3	-17.7	45.6	6.4	48.3	14.0	H

**802.11ac-HT80**

Ch155

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
5711.633	39.1	-33.8	35.1	37.8	48.3	9.2	H
17982.400	34.6	-17.7	45.6	6.7	48.3	13.7	H
17980.200	34.5	-17.7	45.6	6.6	48.3	13.8	V

17975.800	34.4	-17.7	45.6	6.5	48.3	13.9	H
17973.600	34.3	-17.7	45.6	6.4	48.3	14.0	H
17989.000	34.3	-17.7	45.6	6.4	48.3	14.0	H

**Peak Results:****802.11a**

Ch149

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17982.400	46.0	-25.5	43.4	28.1	68.3	22.3	H
17873.500	45.8	-25.5	43.4	27.9	68.3	22.5	H
17996.700	45.8	-25.5	43.4	27.9	68.3	22.5	H
17794.300	45.7	-25.5	43.4	27.8	68.3	22.6	V
17886.700	45.6	-25.5	43.4	27.7	68.3	22.7	H
5725.000	63.4	-16.3	34.2	45.5	68.3	4.9	V

Ch157

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17991.200	46.6	-25.5	43.4	28.7	68.3	21.7	H
17992.300	46.4	-25.5	43.4	28.5	68.3	21.9	H
17993.400	46.4	-25.5	43.4	28.5	68.3	21.9	H
17859.200	46.3	-25.5	43.4	28.4	68.3	22.0	V
17994.500	46.2	-25.5	43.4	28.3	68.3	22.1	V
17989.000	46.1	-25.5	43.4	28.2	68.3	22.2	H

Ch165

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17837.200	46.0	-25.5	43.4	28.1	68.3	22.3	V
17906.500	45.9	-25.5	43.4	28.0	68.3	22.4	H
17898.800	45.8	-25.5	43.4	27.9	68.3	22.5	H
17953.800	45.8	-25.5	43.4	27.9	68.3	22.5	V
17943.900	45.7	-25.5	43.4	27.8	68.3	22.6	H
5853.800	50.7	-16.2	34.2	32.7	68.3	17.6	V

**802.11n-HT20**

Ch149

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17962.600	47.0	-25.5	43.4	29.1	68.3	21.3	V
17982.400	46.6	-25.5	43.4	28.7	68.3	21.7	V

17974.700	46.2	-25.5	43.4	28.3	68.3	22.1	H
17936.200	46.1	-25.5	43.4	28.2	68.3	22.2	H
17976.900	45.7	-25.5	43.4	27.8	68.3	22.6	V
5723.400	66.6	-16.3	34.2	48.7	68.3	1.7	V

Ch157

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17962.600	46.7	-25.5	43.4	28.8	68.3	21.6	H
17902.100	46.1	-25.5	43.4	28.2	68.3	22.2	V
17857.000	46.0	-25.5	43.4	28.1	68.3	22.3	V
17915.300	46.0	-25.5	43.4	28.1	68.3	22.3	V
17958.200	46.0	-25.5	43.4	28.1	68.3	22.3	V
17984.600	45.8	-25.5	43.4	27.9	68.3	22.5	H

Ch165

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17993.400	46.7	-25.5	43.4	28.8	68.3	21.6	V
17983.500	46.2	-25.5	43.4	28.3	68.3	22.1	H
17973.600	46.1	-25.5	43.4	28.2	68.3	22.2	V
17957.100	46.0	-25.5	43.4	28.1	68.3	22.3	V
17987.900	45.9	-25.5	43.4	28.0	68.3	22.4	V
5879.400	51.5	-16.4	34.2	33.7	68.3	16.8	H

**802.11n-HT40**

Ch151

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17986.800	46.8	-25.5	43.4	28.9	68.3	21.5	H
17949.400	45.8	-25.5	43.4	27.9	68.3	22.5	H
17953.800	45.6	-25.5	43.4	27.7	68.3	22.7	H
17970.300	45.6	-25.5	43.4	27.7	68.3	22.7	V
17973.600	45.6	-25.5	43.4	27.7	68.3	22.7	V
5724.100	61.5	-16.3	34.2	43.6	68.3	6.8	V

Ch159

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
5855.160	48.9	-33.8	35.1	47.6	69.9	19.4	H
17898.800	47.0	-18.5	45.6	19.9	69.5	21.3	H
17948.300	46.8	-17.7	45.6	18.9	68.3	21.5	H

17916.400	46.6	-17.7	45.6	18.7	68.3	21.7	V
17953.800	46.3	-17.7	45.6	18.4	68.3	22.0	V
17942.800	46.3	-17.7	45.6	18.4	68.3	22.0	H

**802.11ac-HT20**

Ch149

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17913.100	47.0	-25.5	43.4	29.1	68.3	21.3	H
17975.800	46.7	-25.5	43.4	28.8	68.3	21.6	H
17967.000	46.4	-25.5	43.4	28.5	68.3	21.9	V
17950.500	46.1	-25.5	43.4	28.2	68.3	22.2	V
17951.600	46.0	-25.5	43.4	28.1	68.3	22.3	H
5723.600	63.9	-16.3	34.2	46.0	68.3	4.4	V

Ch157

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17849.300	46.0	-25.5	43.4	28.1	68.3	22.3	H
17905.400	46.0	-25.5	43.4	28.1	68.3	22.3	H
17983.500	46.0	-25.5	43.4	28.1	68.3	22.3	V
17698.600	45.9	-25.7	43.4	28.2	68.3	22.4	H
17970.300	45.8	-25.5	43.4	27.9	68.3	22.5	V
17875.700	45.7	-25.5	43.4	27.8	68.3	22.6	H

Ch165

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17926.300	46.8	-25.5	43.4	28.9	68.3	21.5	V
17941.700	46.3	-25.5	43.4	28.4	68.3	22.0	H
17972.500	46.1	-25.5	43.4	28.2	68.3	22.2	V
17983.500	46.1	-25.5	43.4	28.2	68.3	22.2	V
17951.600	46.0	-25.5	43.4	28.1	68.3	22.3	V
5850.200	50.7	-16.2	34.2	32.7	68.3	17.6	V

**802.11ac-HT40**

Ch151

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
17986.800	46.8	-25.5	43.4	28.9	68.3	21.5	H
17949.400	45.8	-25.5	43.4	27.9	68.3	22.5	H
17953.800	45.6	-25.5	43.4	27.7	68.3	22.7	H

17970.300	45.6	-25.5	43.4	27.7	68.3	22.7	V
17973.600	45.6	-25.5	43.4	27.7	68.3	22.7	V
5724.100	61.5	-16.3	34.2	43.6	68.3	6.8	V

Ch159

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
5857.320	49.7	-33.8	35.1	48.4	68.3	18.6	H
17992.300	46.6	-17.7	45.6	18.7	68.3	21.7	H
17908.700	46.5	-18.5	45.6	19.4	68.3	21.8	V
17989.000	46.4	-17.7	45.6	18.5	68.3	21.9	H
17998.900	46.2	-17.7	45.6	18.3	68.3	22.1	H
17983.500	46.1	-17.7	45.6	18.2	68.3	22.2	H

**802.11ac-HT80**

Ch15

Frequency (MHz)	Measurement Result (dB $\mu$ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB $\mu$ V)	Limit (dB $\mu$ V/m)	Margin (dB)	Antenna Pol. (H/V)
5718.146	55.2	-33.8	35.1	53.9	68.3	13.1	H
17920.800	46.8	-17.7	45.6	18.9	68.3	21.5	H
17916.400	46.8	-17.7	45.6	18.9	68.3	21.5	V
17932.900	46.6	-17.7	45.6	18.7	68.3	21.7	H
17993.400	46.2	-17.7	45.6	18.3	68.3	22.1	H
17907.600	46.0	-18.5	45.6	18.9	68.3	22.3	H

Sample:

5718.146MHz

Result (55.2 dB $\mu$ V/m) = P<sub>Mea</sub>(53.9 dB $\mu$ V/m) + Cable Loss(-33.8 dB) + Antenna Factor(35.1 dB/m)**Conclusion: PASS**

## A.6. Band Edges Compliance

### A6.1 Band Edges - conducted

#### Measurement Limit:

Standard	Limit (dBm/MHz)
FCC 47 CFR Part 15.407(b)(4)	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.

The measurement is made according to KDB 789033 D02

#### Measurement Uncertainty:

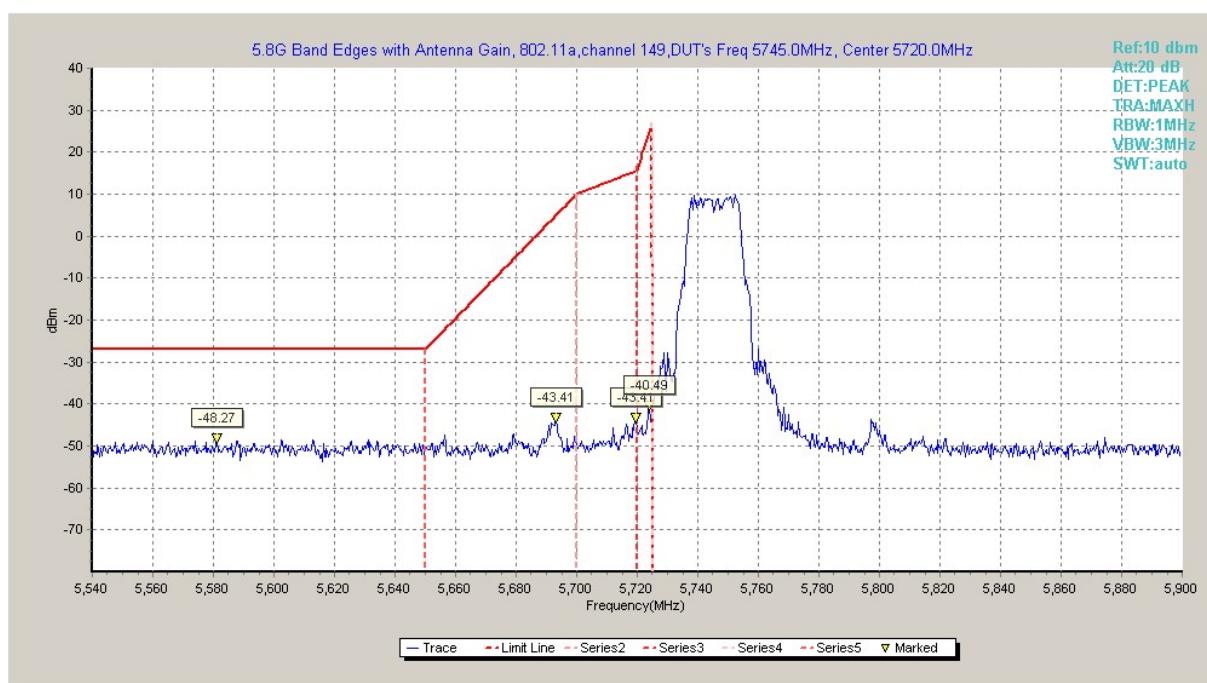
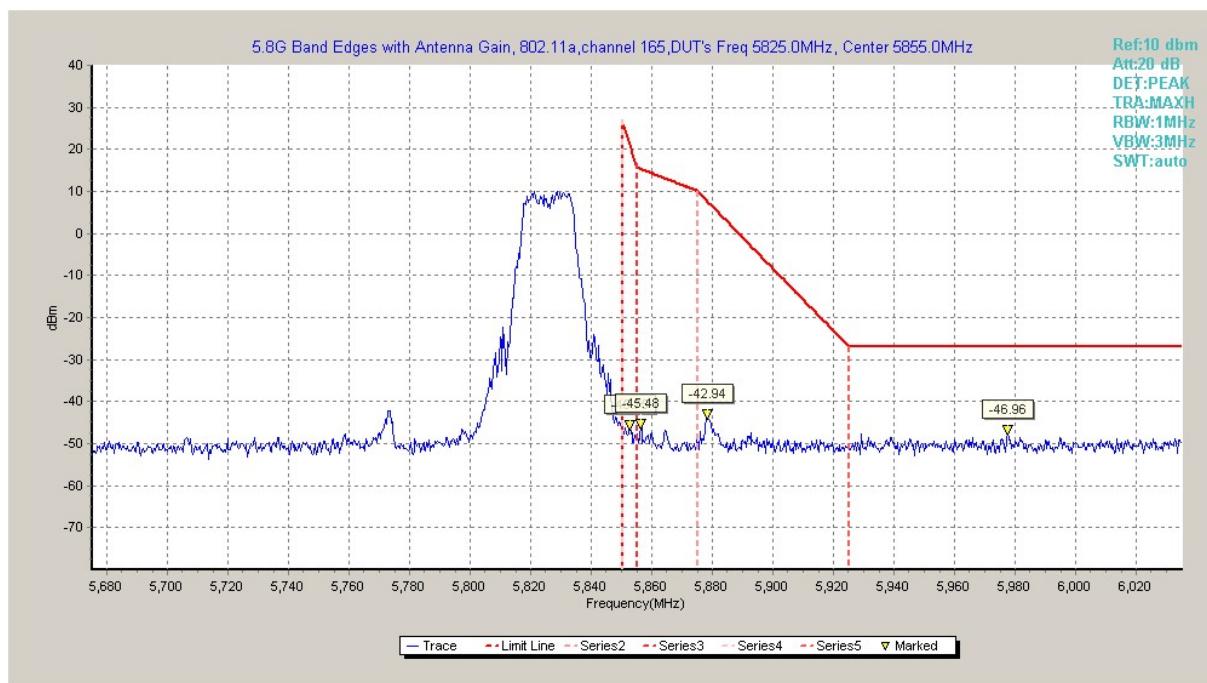
Measurement Uncertainty	0.75dB
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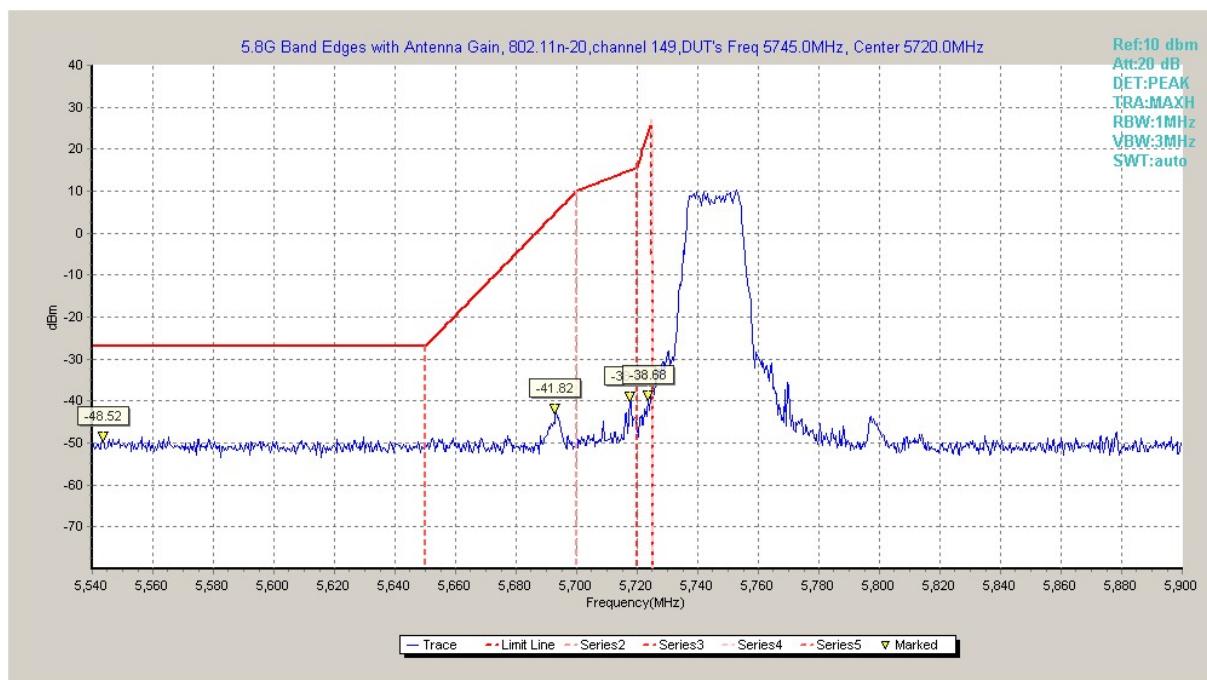
#### Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11a	5745 MHz	Fig.71	P
	5825 MHz	Fig.72	P
802.11n HT20	5745 MHz	Fig.73	P
	5825 MHz	Fig.74	P
802.11ac HT20	5745 MHz	Fig.75	P
	5825 MHz	Fig.76	P
802.11n HT40	5755 MHz	Fig.77	P
	5795 MHz	Fig.78	P
802.11ac HT40	5755 MHz	Fig.79	P
	5795 MHz	Fig.80	P
802.11ac HT80	5775 MHz	Fig.81	P
	5775 MHz	Fig.82	P

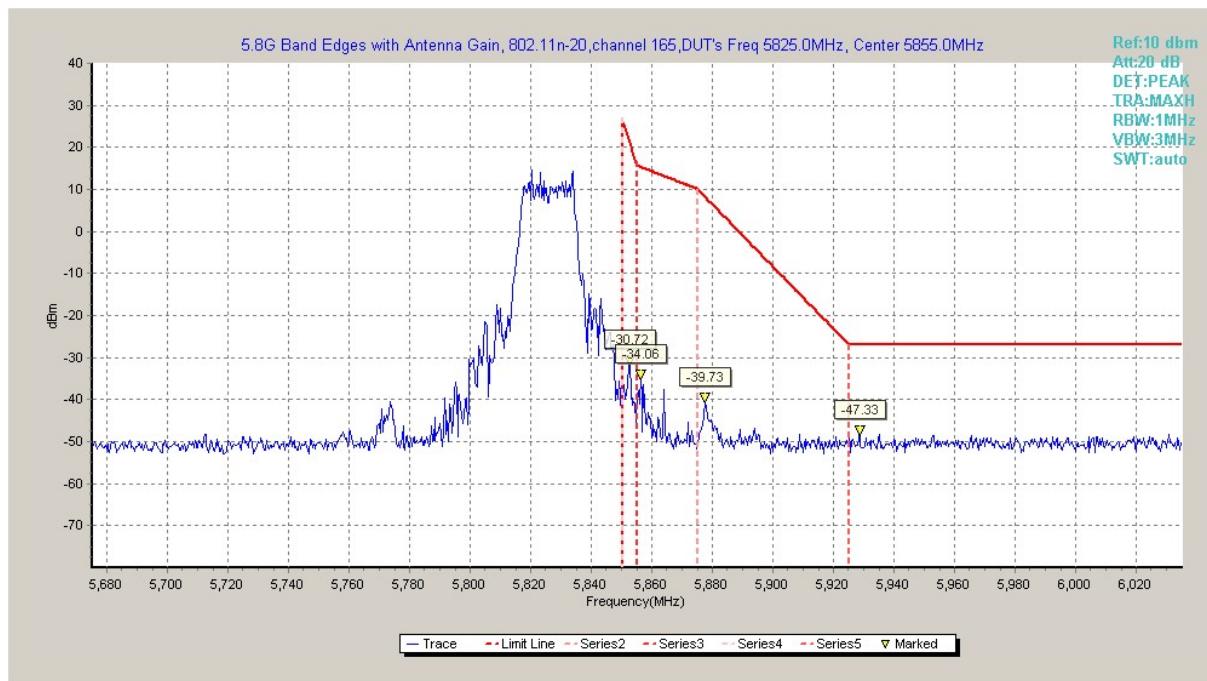
**Conclusion: PASS**

**Test graphs as below:**

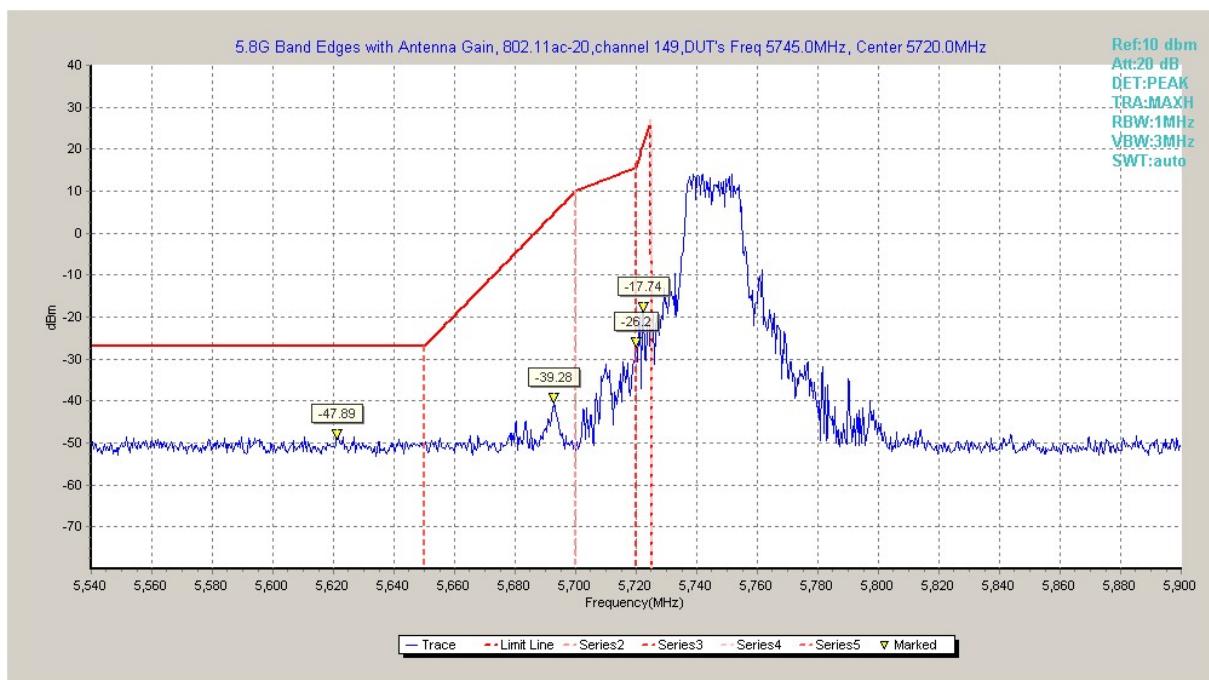

**Fig. 71 Band Edges (802.11a, 5745MHz)**

**Fig. 72 Band Edges (802.11a, 5825MHz)**



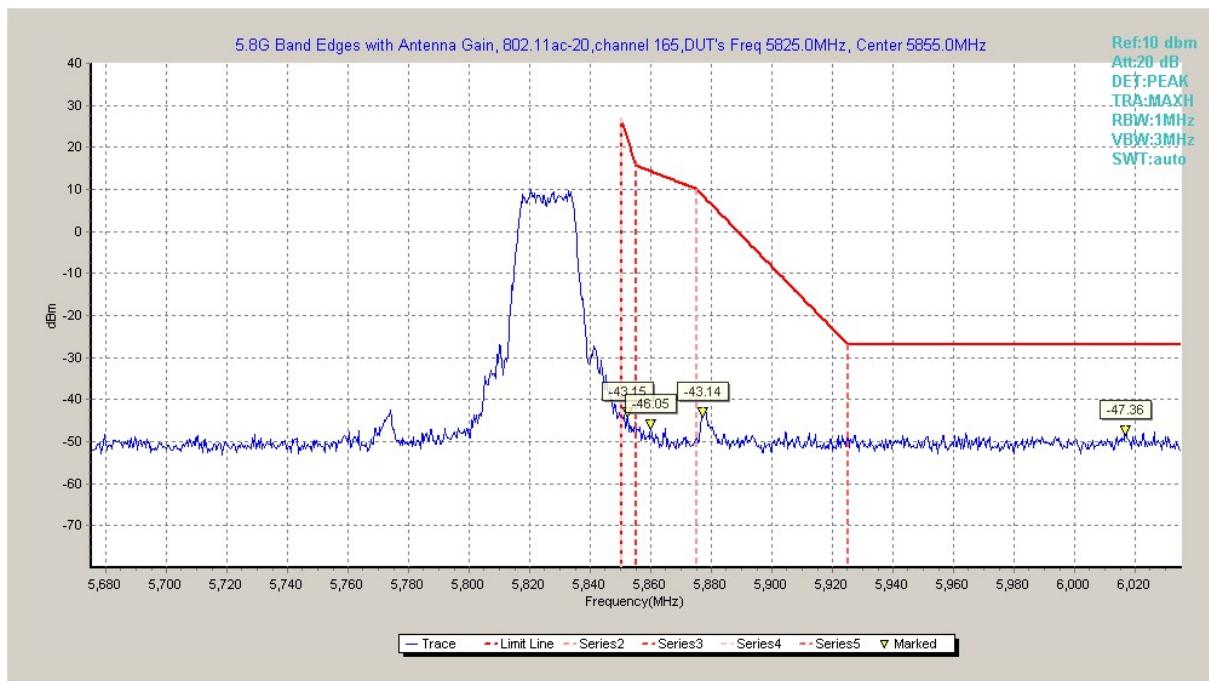
**Fig. 73 Band Edges (802.11n-HT20, 5745MHz)**



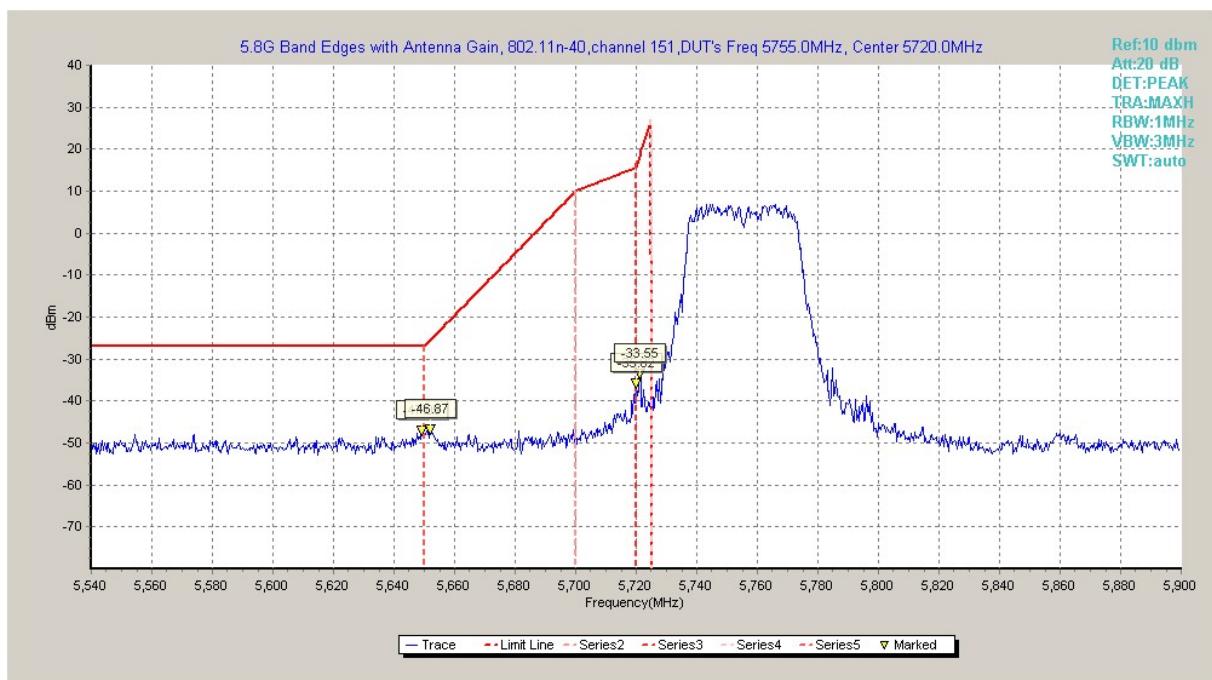
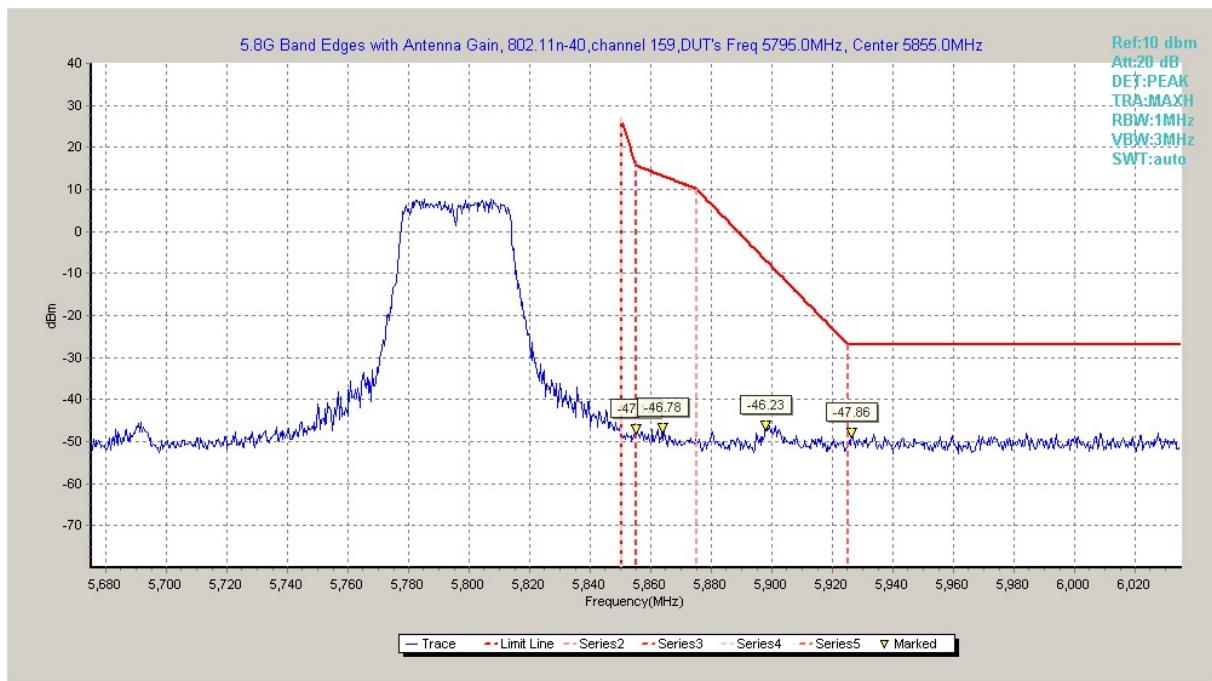
**Fig. 74 Band Edges (802.11n-HT20, 5825MHz)**

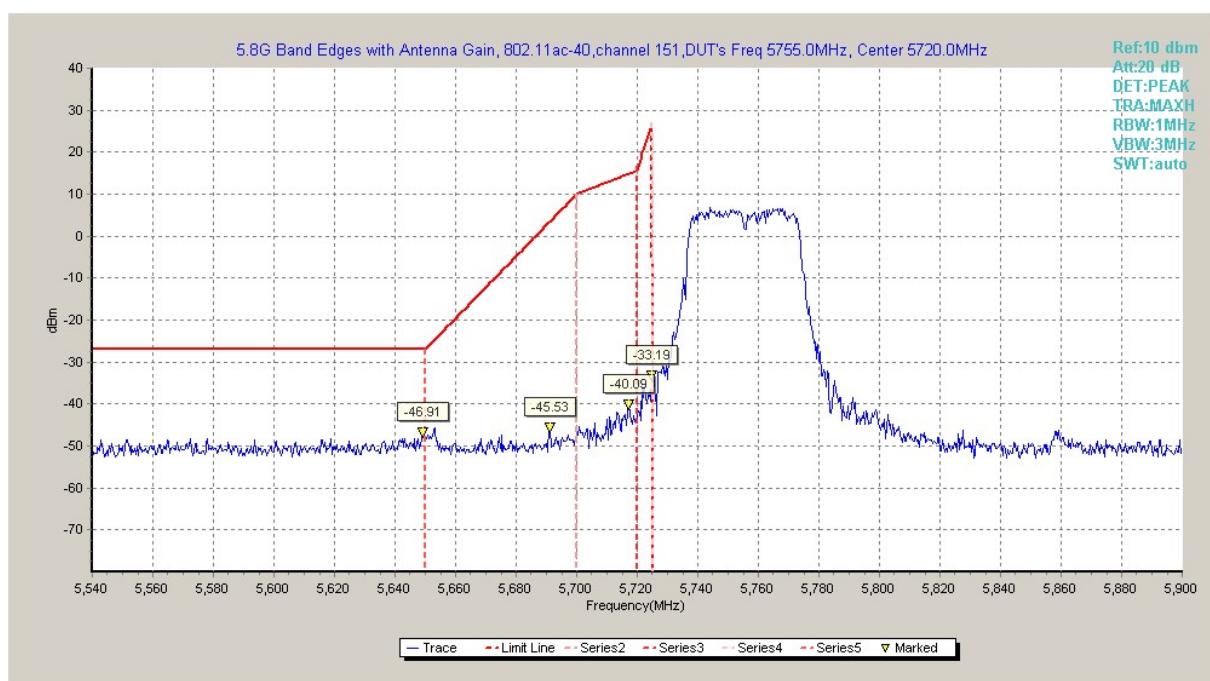


**Fig. 75 Band Edges (802.11ac-HT20, 5745MHz)**

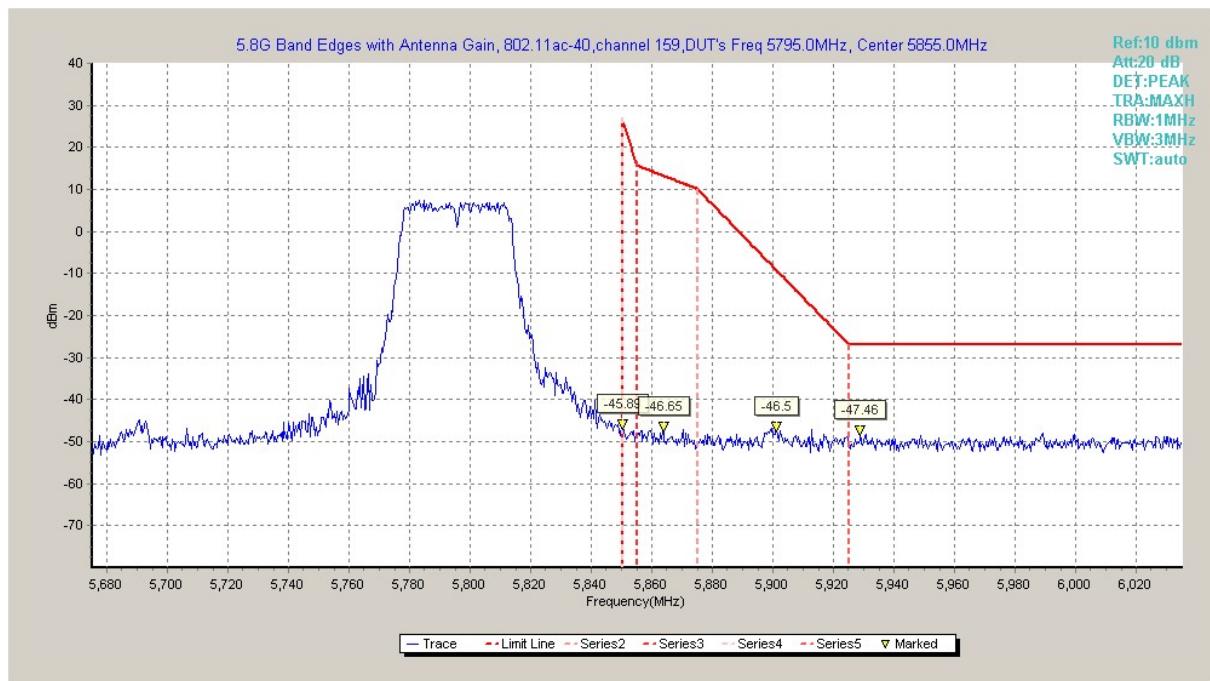


**Fig. 76 Band Edges (802.11ac-HT20, 5825MHz)**

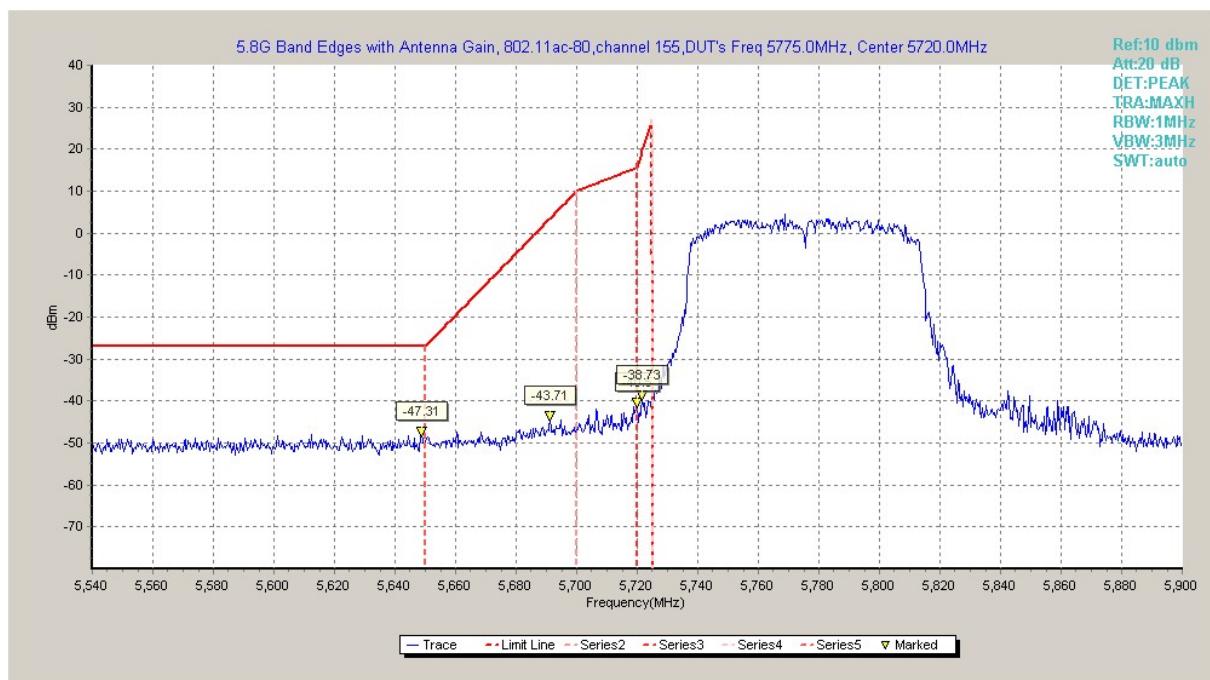

**Fig. 77 Band Edges (802.11n-HT40, 5755MHz)**

**Fig. 78 Band Edges (802.11n-HT40, 5795MHz)**



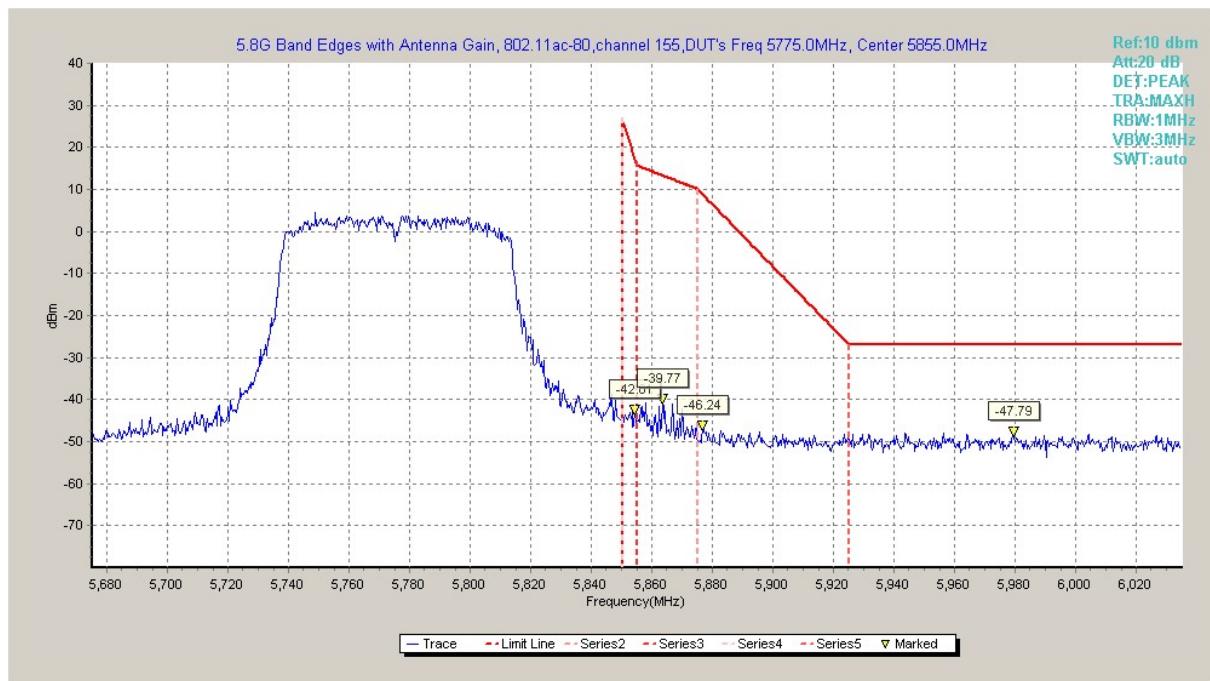
**Fig. 79 Band Edges (802.11ac-HT40, 5755MHz)**



**Fig. 80 Band Edges (802.11ac-HT40, 5795MHz)**



**Fig. 81 Band Edges (802.11ac-HT80, 5775MHz)**



**Fig. 82 Band Edges (802.11ac-HT80, 5775MHz)**

## A6.2 Band Edges - Radiated

### Measurement Limit:

Standard	Limit (dBm/MHz)	
FCC 47 CFR Part 15.407	at the band edge	27
	at 5 MHz above or below the band edge	15.6
	at 25 MHz above or below the band edge	10
	at 75 MHz or more above or below the band edge	-27
	Note: increasing linearly from point to point.	

The measurement is made according to KDB 789033 D02

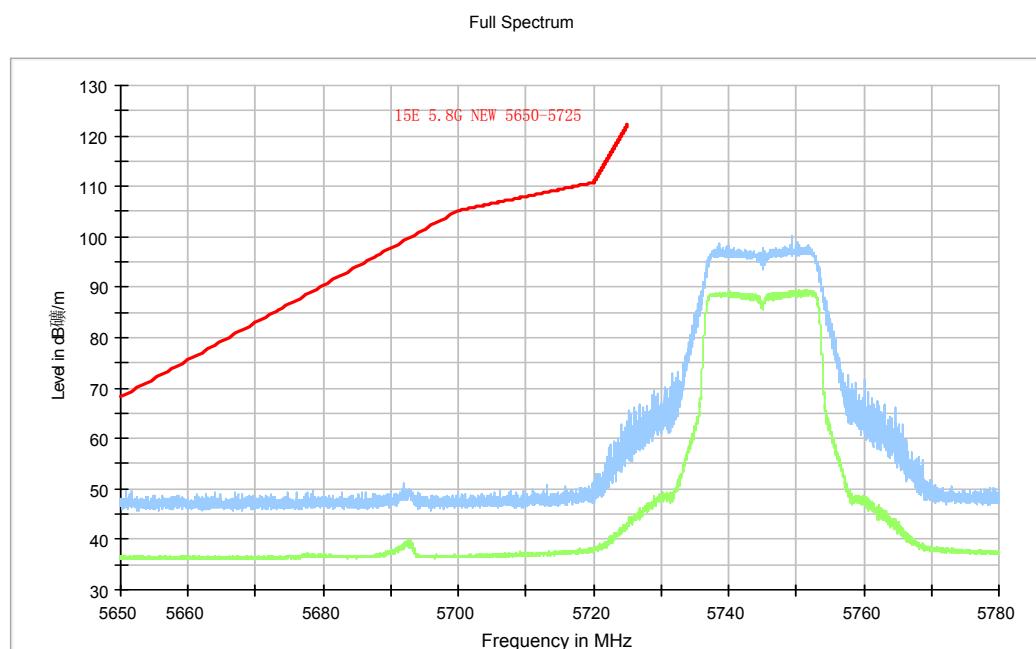
In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

### Measurement Result:

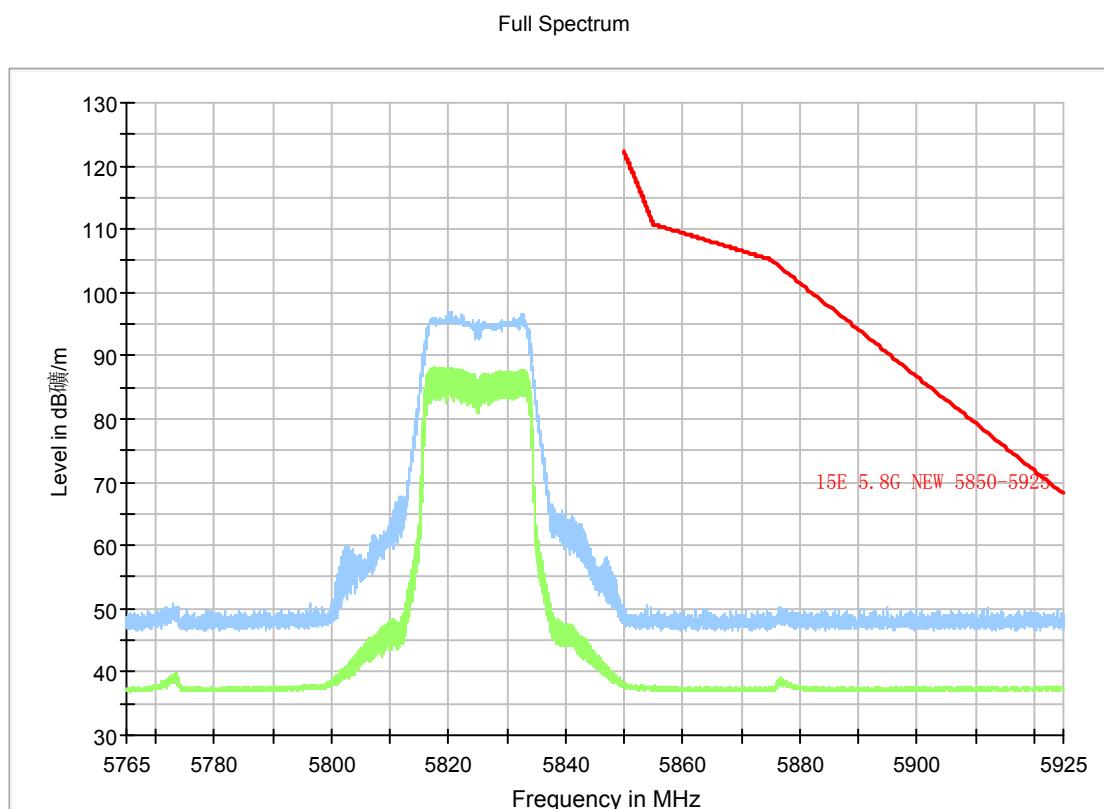
Mode	Channel	Test Results	Conclusion
802.11a	5745 MHz	Fig.83	P
	5825 MHz	Fig.84	P
802.11n HT20	5745 MHz	Fig.85	P
	5825 MHz	Fig.86	P
802.11ac HT20	5745 MHz	Fig.87	P
	5825 MHz	Fig.88	P
802.11n HT40	5755 MHz	Fig.89	P
	5795 MHz	Fig.90	P
802.11ac HT40	5755 MHz	Fig.91	P
	5795 MHz	Fig.92	P
802.11ac HT80	5775 MHz	Fig.93	P
	5775 MHz	Fig.94	P

**Conclusion: PASS**

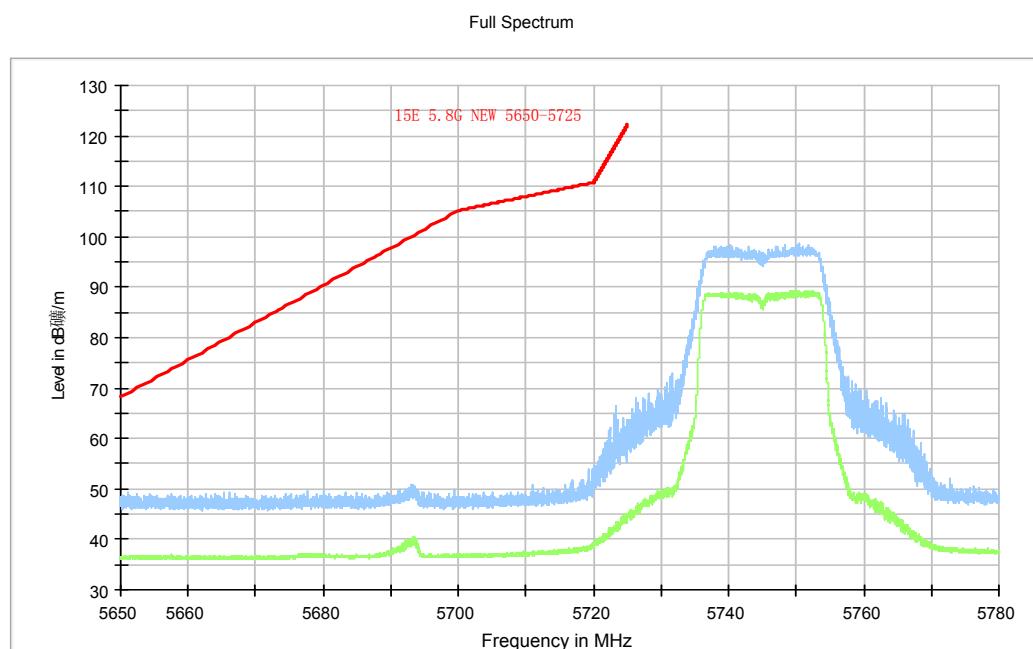
**Test graphs as below:**



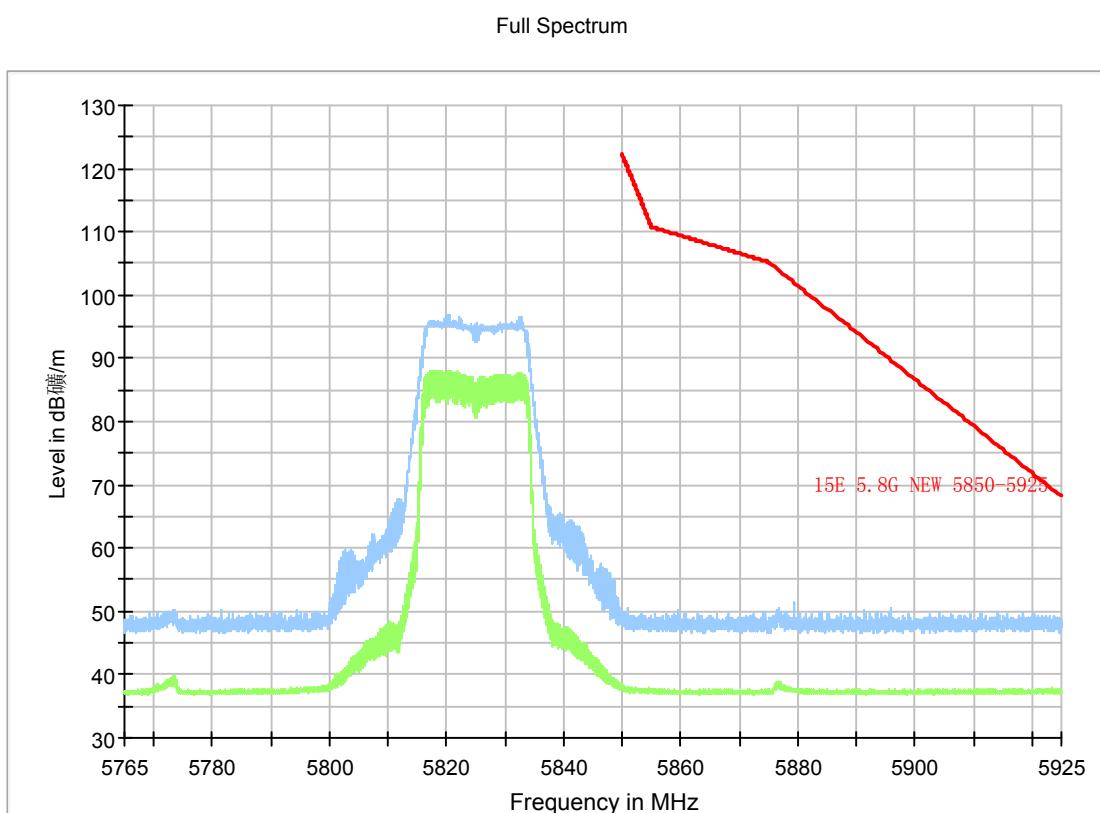
**Fig. 83 Band Edges (802.11a, 5745MHz)**



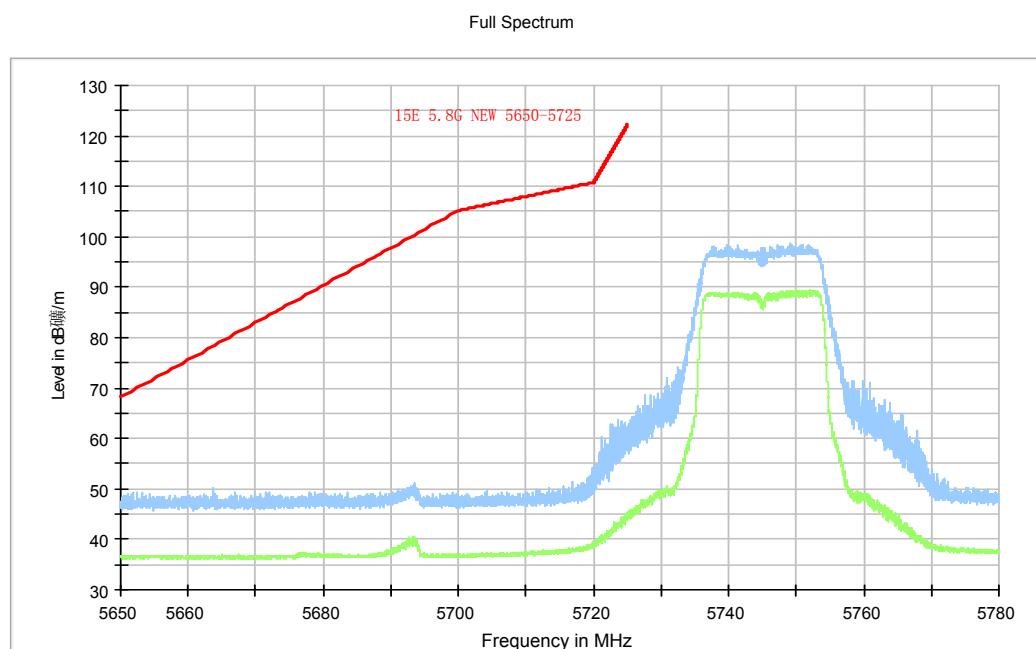
**Fig. 84 Band Edges (802.11a, 5825MHz)**



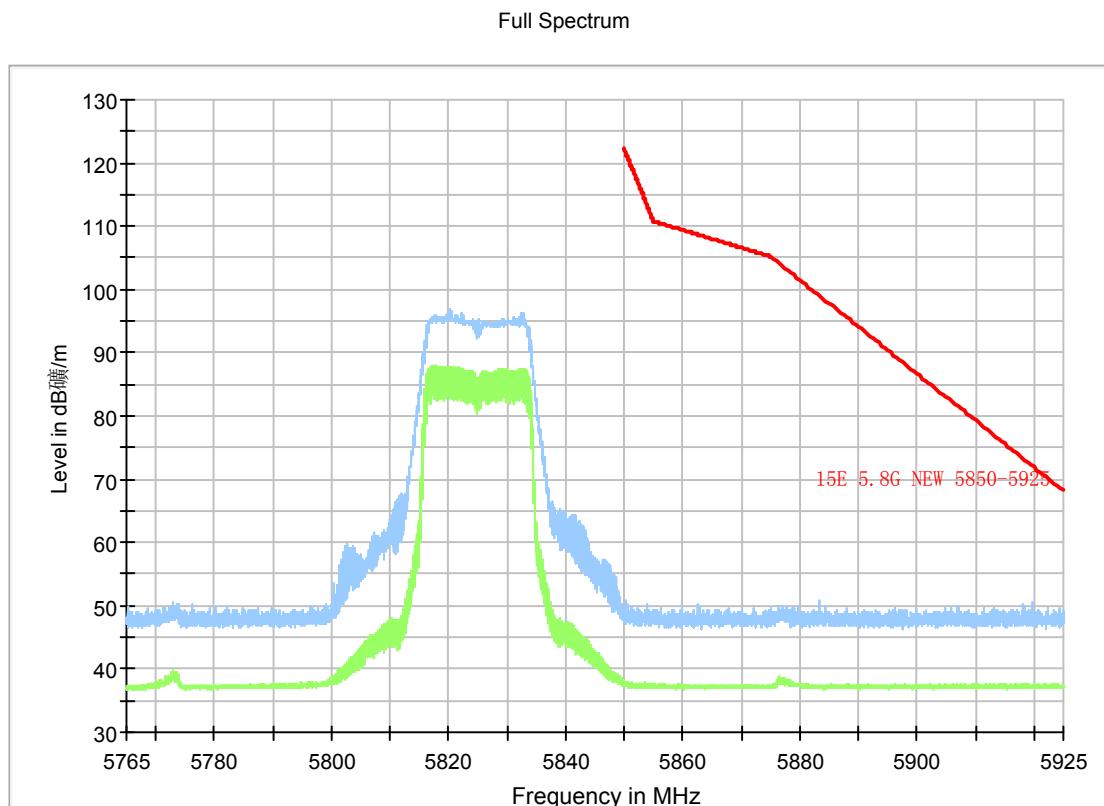
**Fig. 85 Band Edges (802.11n-HT20, 5745MHz)**



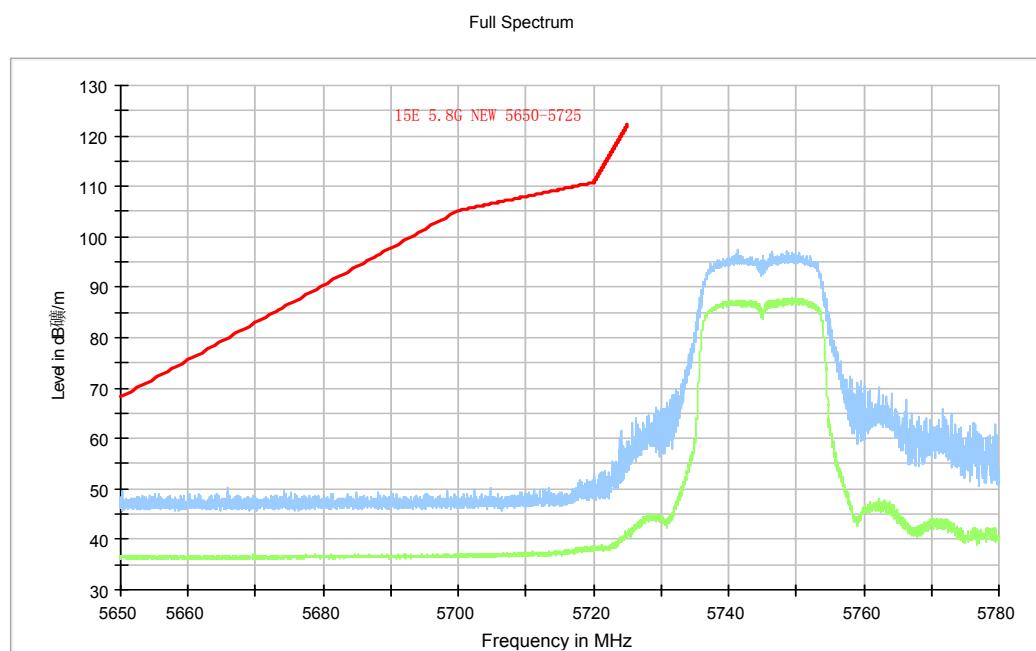
**Fig. 86 Band Edges (802.11n-HT20, 5825MHz)**



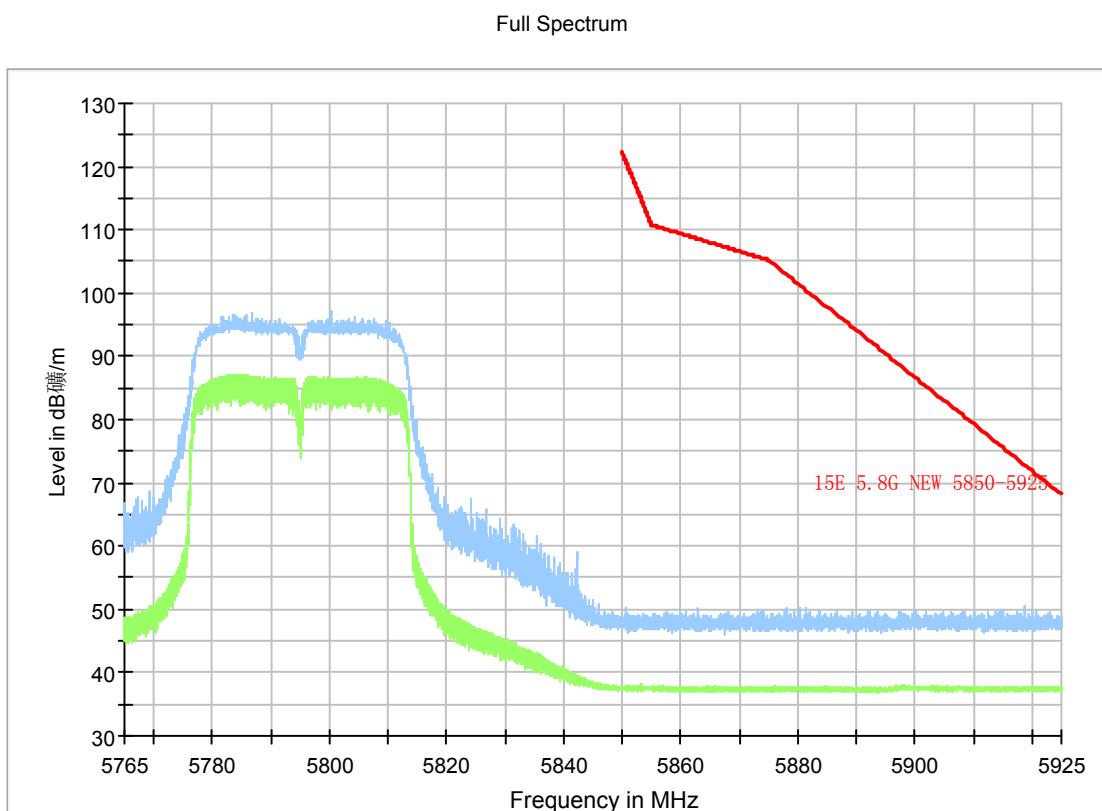
**Fig. 87 Band Edges (802.11ac-HT20, 5745MHz)**



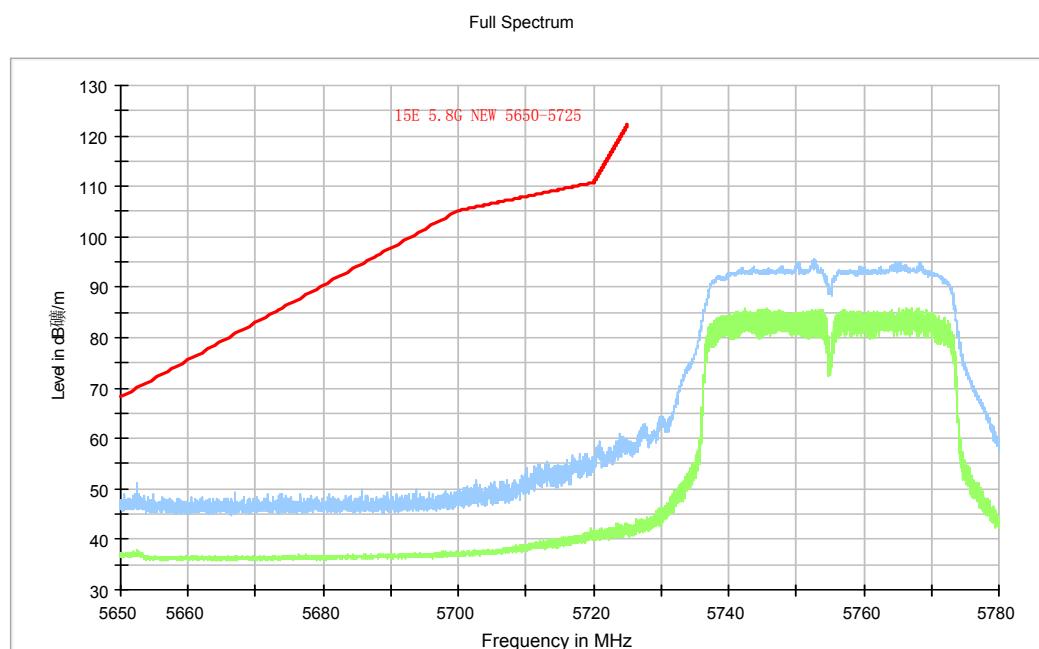
**Fig. 88 Band Edges (802.11ac-HT20, 5825MHz)**



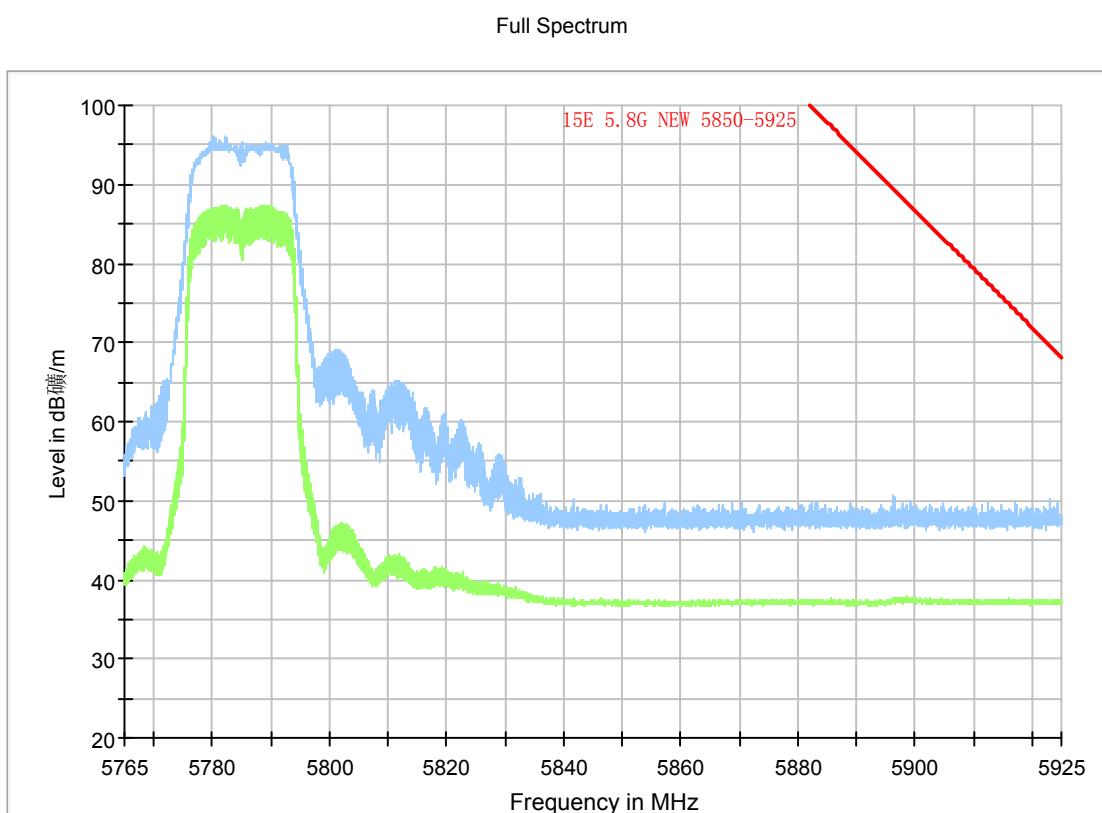
**Fig. 89 Band Edges (802.11n-HT40, 5755MHz)**



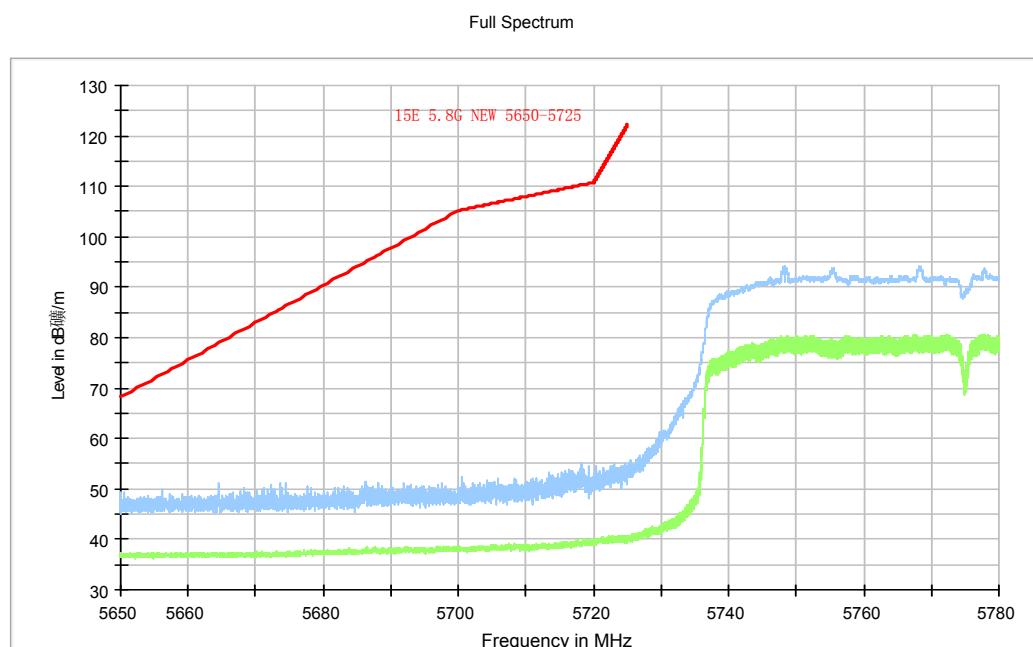
**Fig. 90 Band Edges (802.11n-HT40, 5795MHz)**



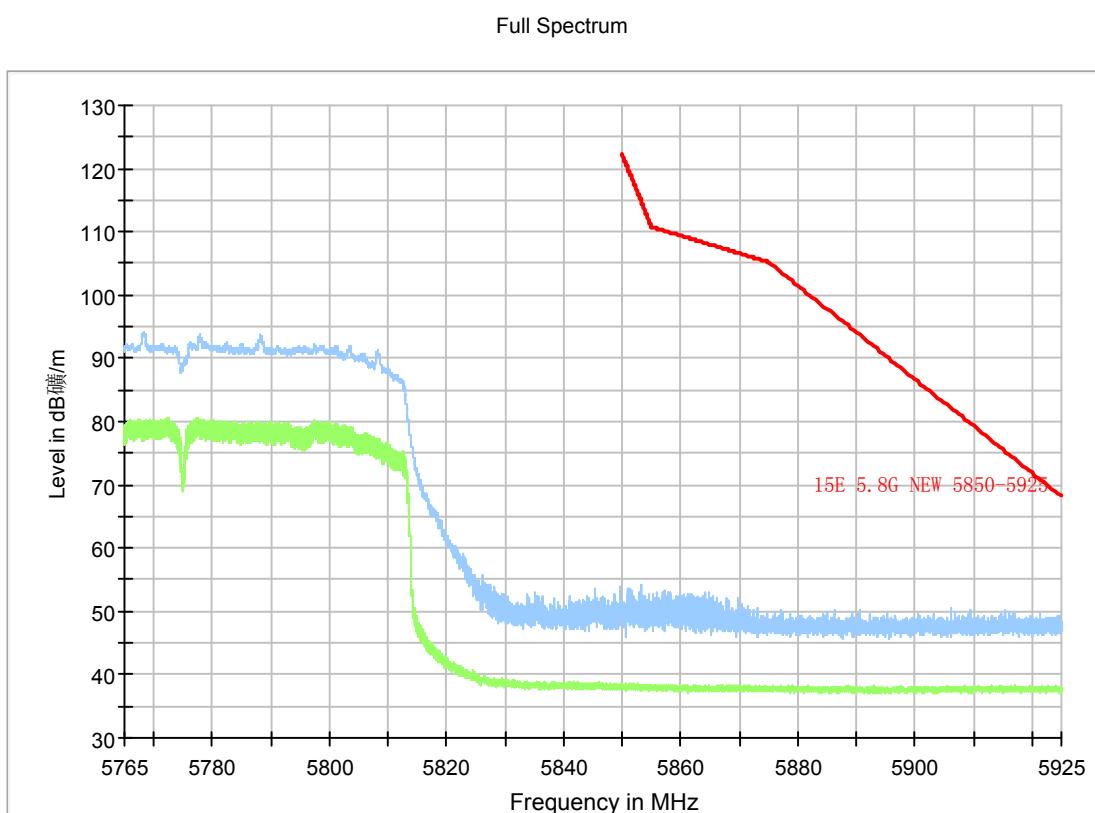
**Fig. 91 Band Edges (802.11ac-HT40, 5755MHz)**



**Fig. 92 Band Edges (802.11ac-HT40, 5795MHz)**



**Fig. 93 Band Edges (802.11ac-HT80, 5775MHz)**



**Fig. 94 Band Edges (802.11ac-HT80, 5775MHz)**

## A.7. AC Powerline Conducted Emission

### Test Condition:

Voltage (V)	Frequency (Hz)
120	60

### Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion	
		With charger			
		802.11a	Idle		
0.15 to 0.5	66 to 56	Fig. 95	Fig. 96	P	
0.5 to 5	56				
5 to 30	60				

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion	
		With charger			
		802.11a	Idle		
0.15 to 0.5	56 to 46	Fig.95	Fig.96	P	
0.5 to 5	46				
5 to 30	50				

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

The measurement is made according to ANSI C63.10 .

**Conclusion: PASS**

**Test graphs as below:**

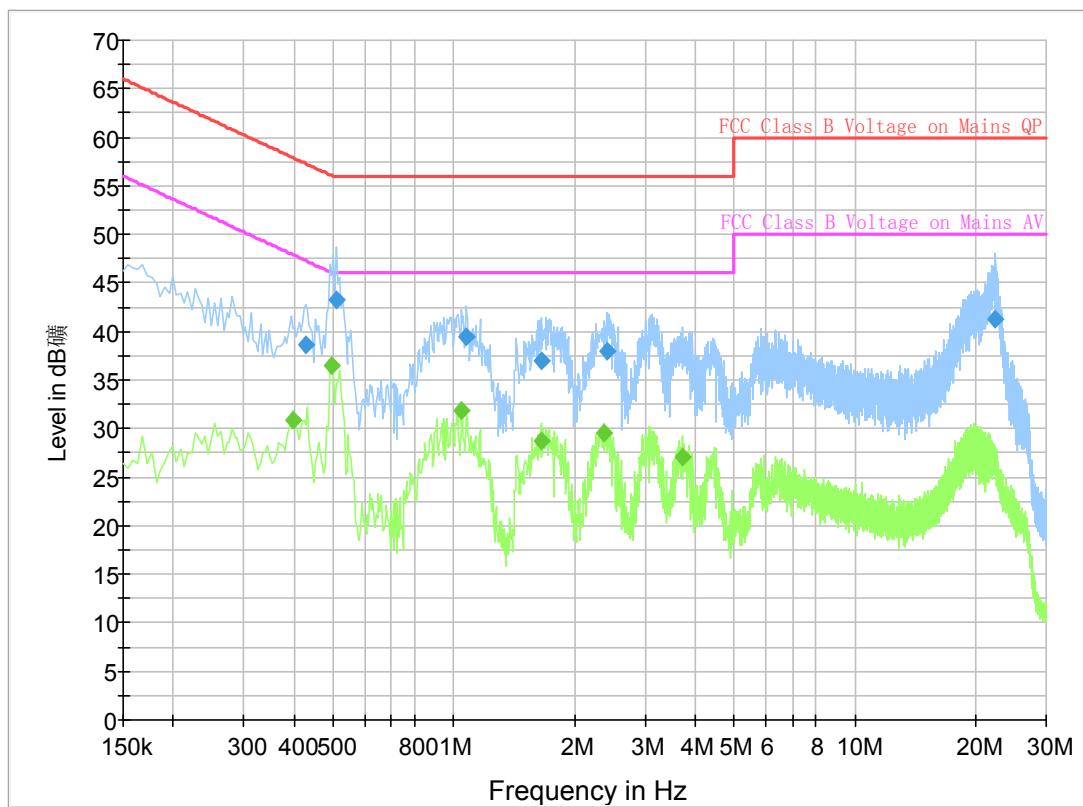


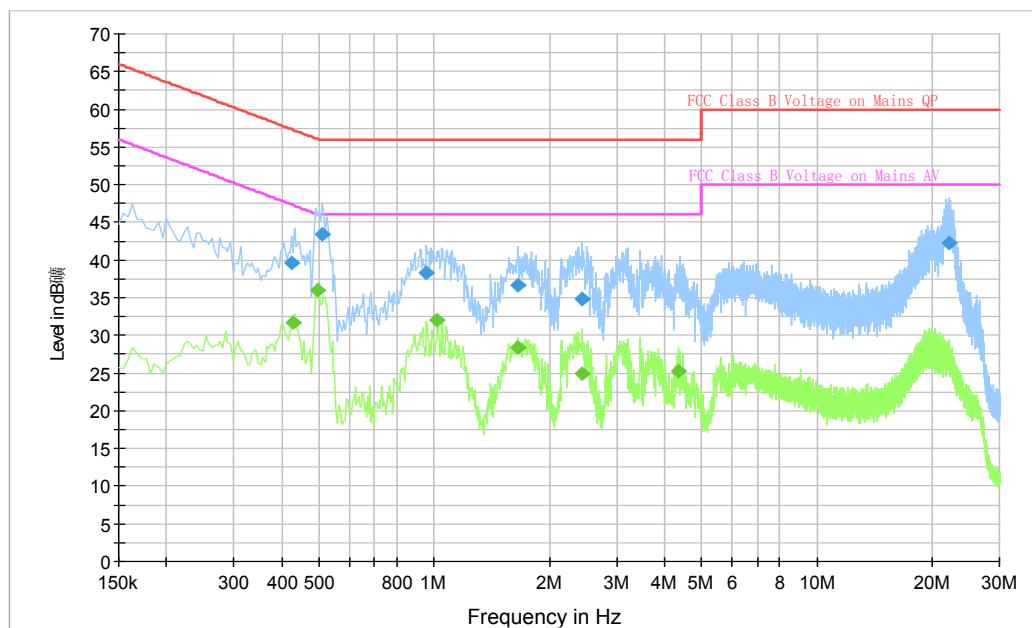
Fig. 95 AC Powerline Conducted Emission-802.11a

### Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Margin (dB)	Limit (dBµV)
0.429000	38.6	L1	18.6	57.3
0.510000	43.2	L1	12.8	56.0
1.077000	39.5	L1	16.5	56.0
1.648500	37.1	L1	19.0	56.0
2.409000	38.0	L1	18.0	56.0
22.452000	41.3	N	18.7	60.0

### Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Margin (dB)	Limit (dBµV)
0.397500	30.8	L1	17.1	47.9
0.496500	36.4	L1	9.6	46.1
1.045500	31.9	L1	14.1	46.0
1.648500	28.8	L1	17.2	46.0
2.377500	29.5	L1	16.5	46.0
3.718500	27.1	L1	18.9	46.0



**Fig. 96 AC Powerline Conducted Emission-Idle  
Final Result 1**

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Line	Margin (dB)	Limit (dB $\mu$ V)
0.424500	39.6	L1	17.8	57.4
0.510000	43.5	L1	12.5	56.0
0.955500	38.3	L1	17.7	56.0
1.653000	36.7	L1	19.3	56.0
2.431500	34.8	L1	21.2	56.0
22.195500	42.3	N	17.7	60.0

**Final Result 2**

Frequency (MHz)	Average (dB $\mu$ V)	Line	Margin (dB)	Limit (dB $\mu$ V)
0.429000	31.7	L1	15.6	47.3
0.496500	36.0	L1	10.1	46.1
1.018500	32.0	L1	14.0	46.0
1.648500	28.4	L1	17.6	46.0
2.431500	24.9	L1	21.1	46.0
4.366500	25.3	L1	20.7	46.0

## ANNEX B: Accreditation Certificate

United States Department of Commerce  
National Institute of Standards and Technology



### Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 600118-0

Telecommunication Technology Labs, CAICT

Beijing  
China

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

**Electromagnetic Compatibility & Telecommunications**

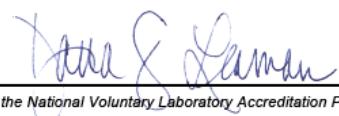
*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

2019-09-26 through 2020-09-30

*Effective Dates*



*For the National Voluntary Laboratory Accreditation Program*



\*\*\* END OF REPORT BODY \*\*\*