

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

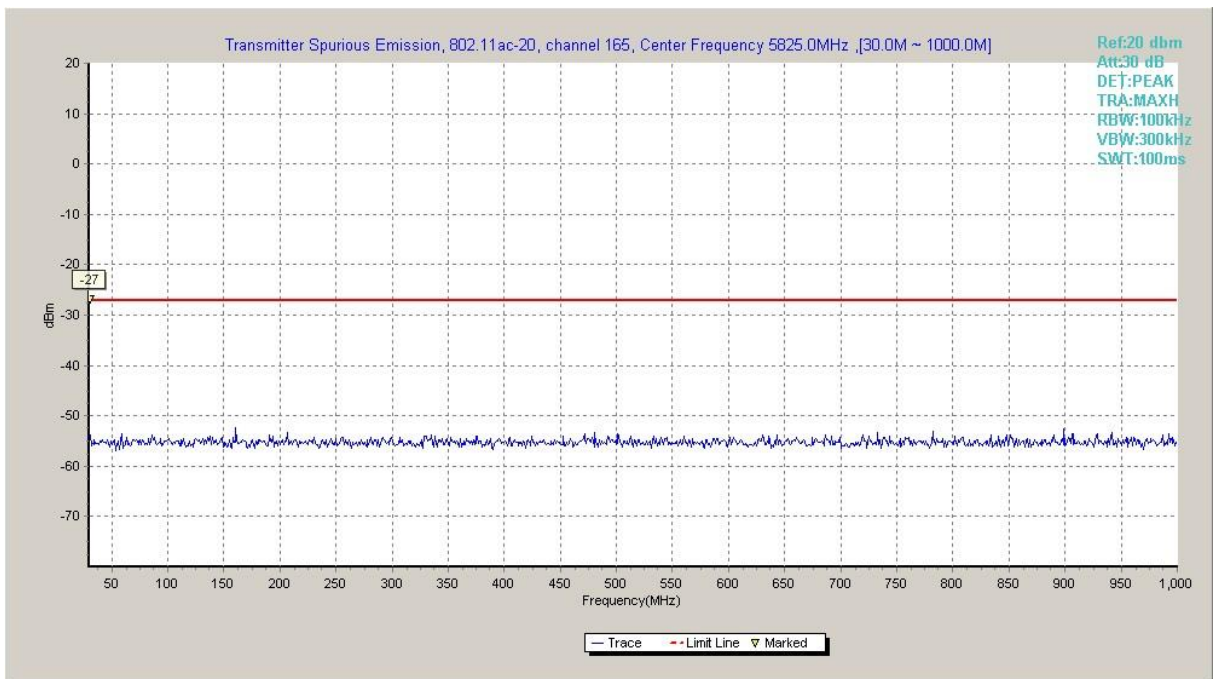


Fig. 47 Conducted Spurious Emission (802.11ac-HT20, Ch165, 30 MHz-1 GHz)

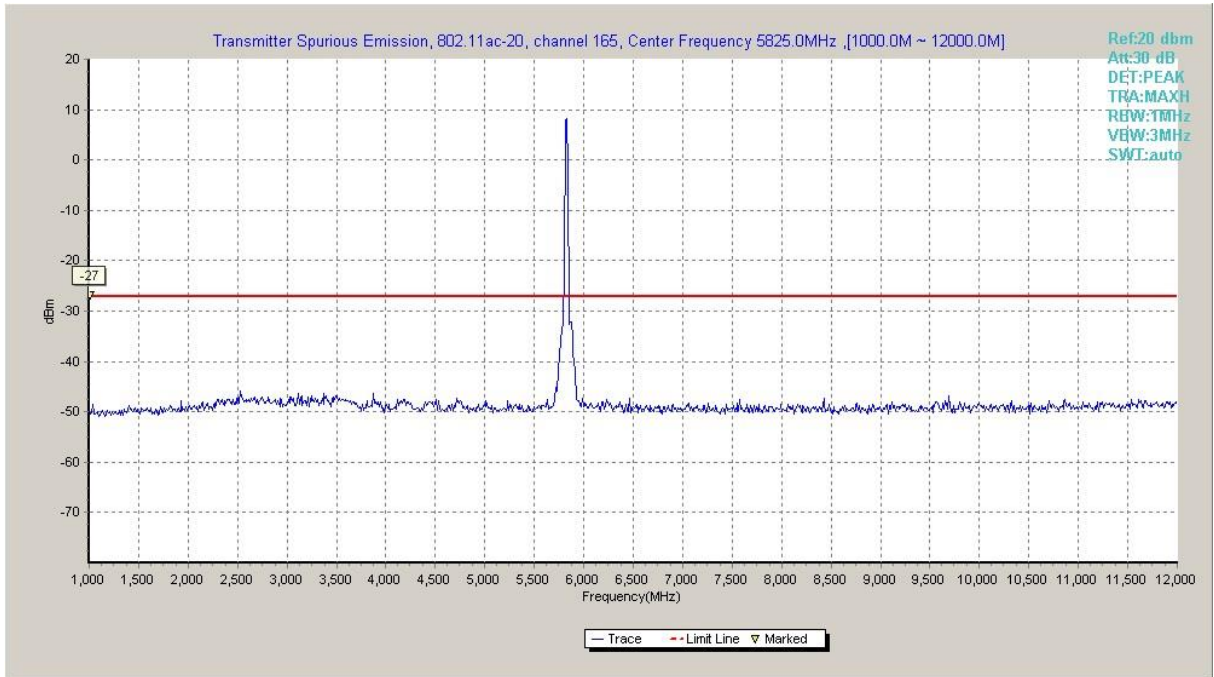


Fig. 48 Conducted Spurious Emission (802.11ac-HT20, Ch165, 1 GHz -12 GHz)

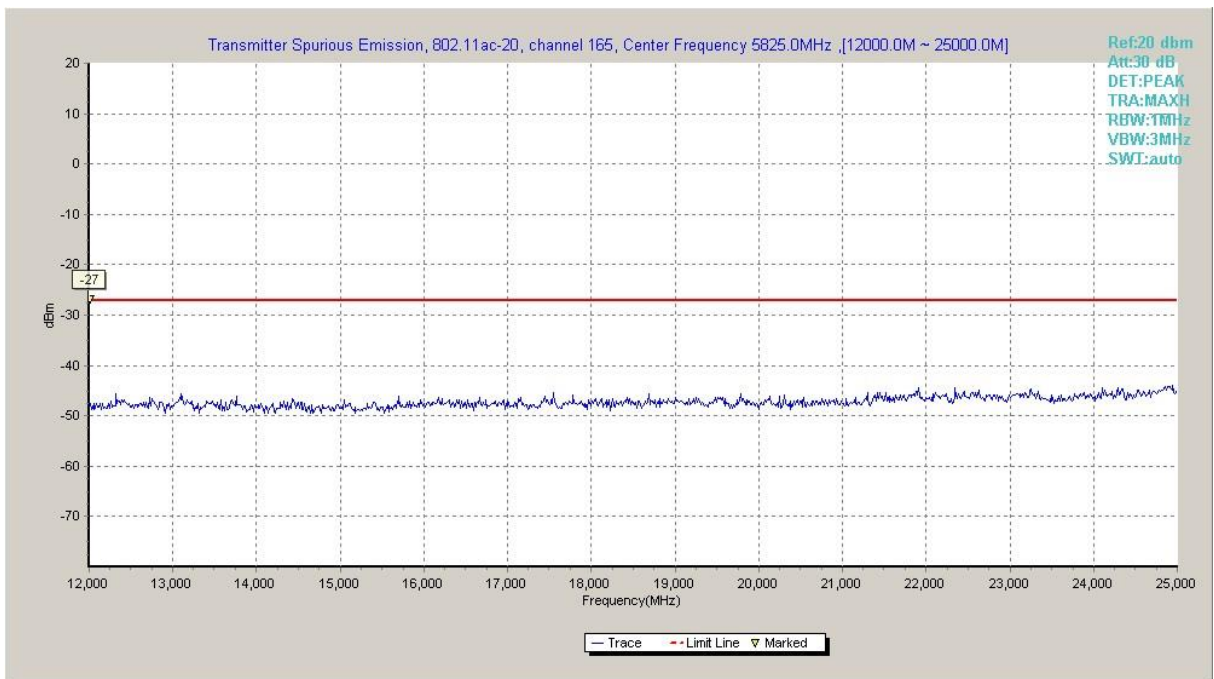


Fig. 49 Conducted Spurious Emission (802.11ac-HT20, Ch165, 12 GHz-25 GHz)

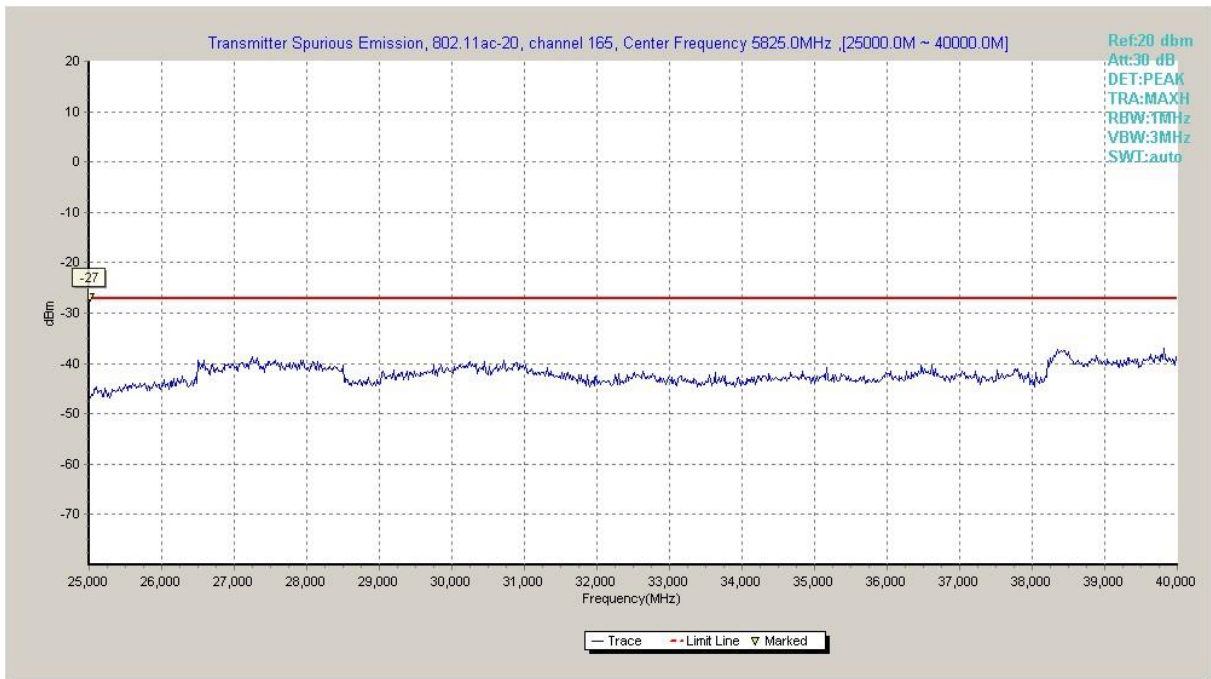


Fig. 50 Conducted Spurious Emission (802.11ac-HT20, Ch165, 25 GHz-40 GHz)

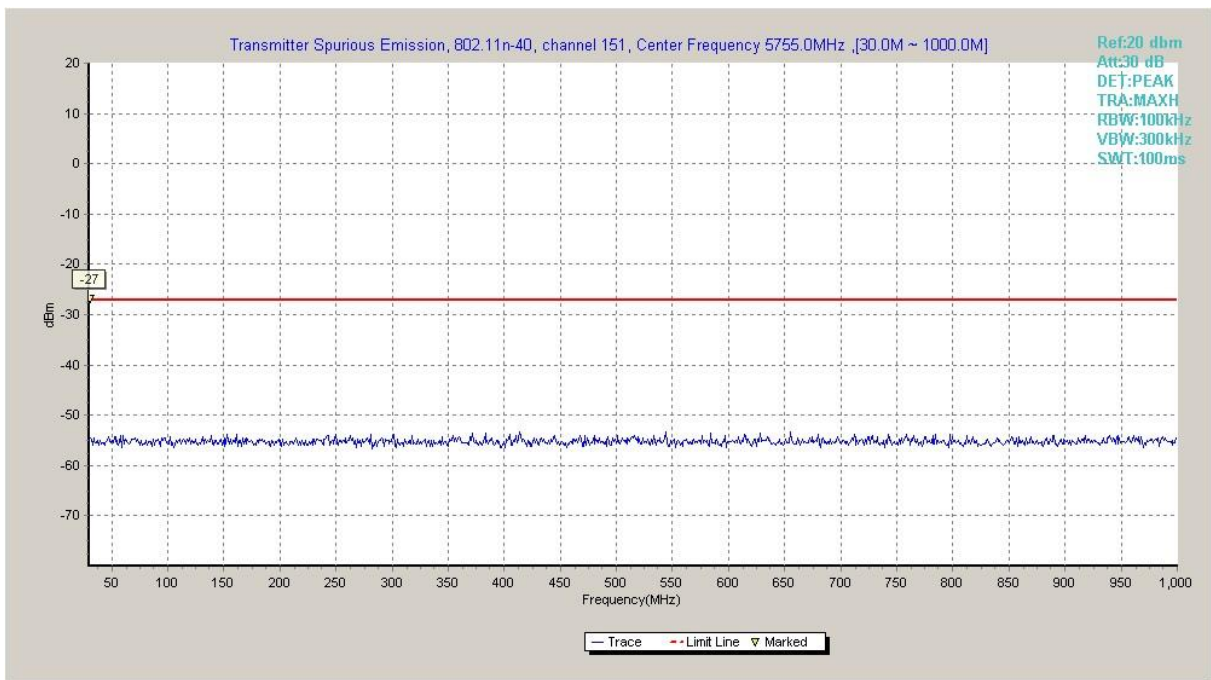


Fig. 51 Conducted Spurious Emission (802.11n-HT40, Ch151, 30 MHz-1 GHz)

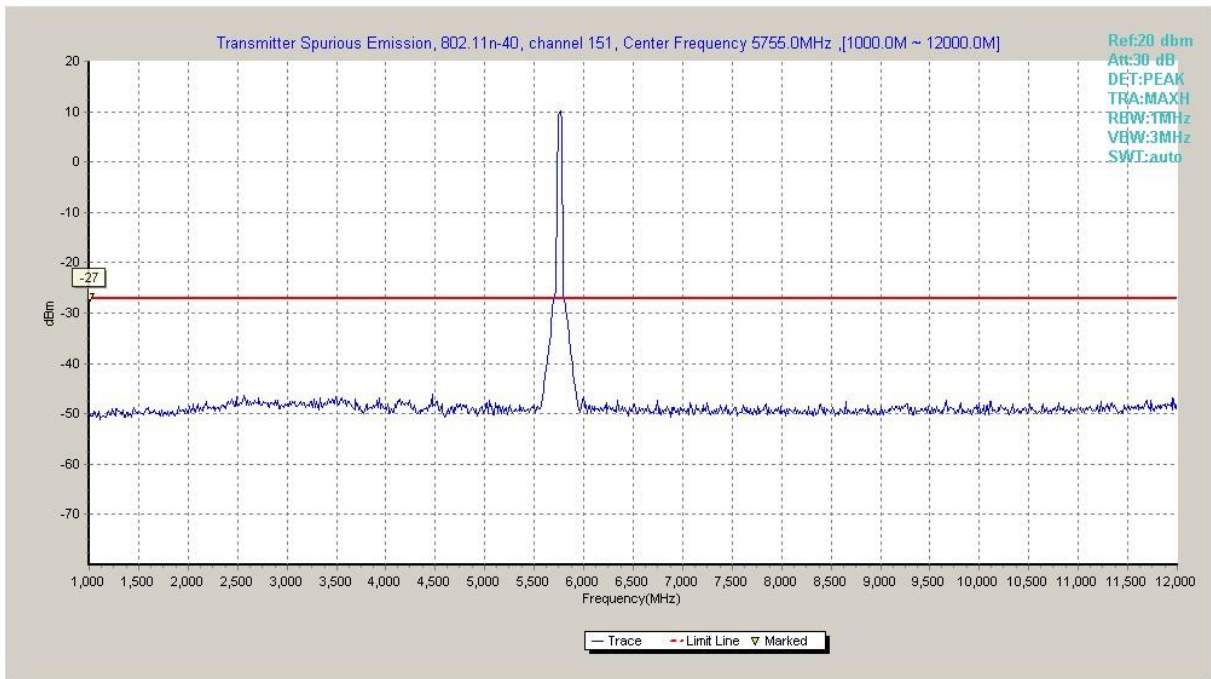


Fig. 52 Conducted Spurious Emission (802.11n-HT40, Ch151, 1 GHz -12 GHz)

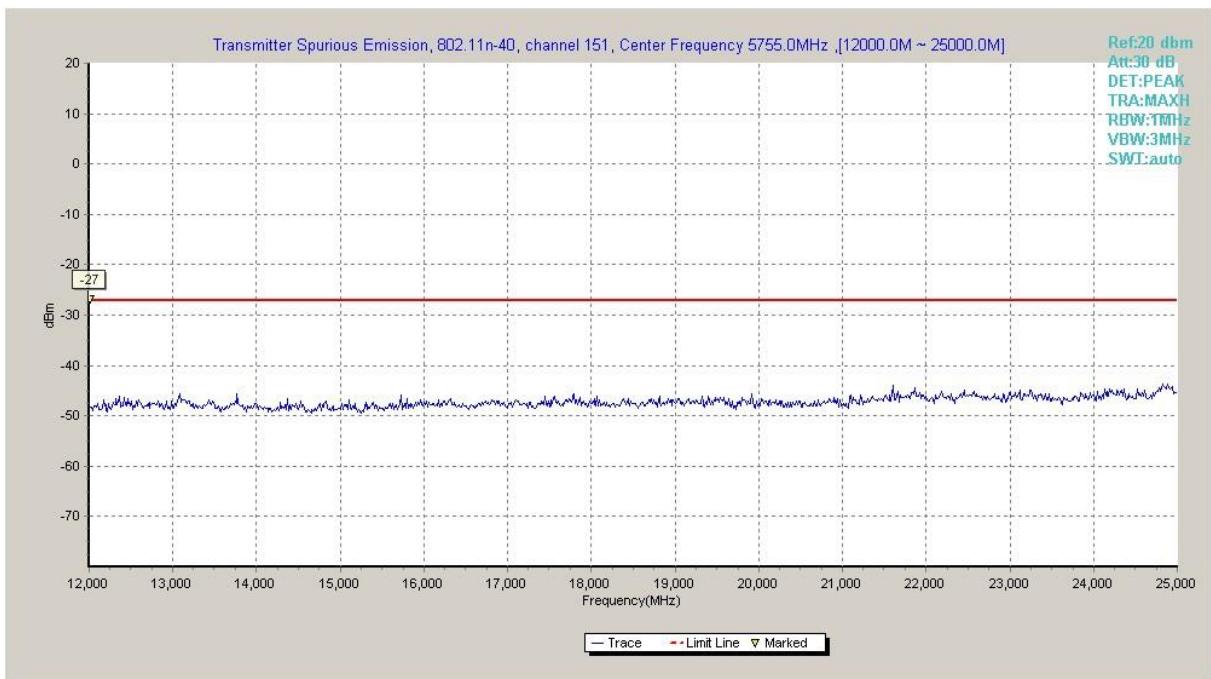


Fig. 53 Conducted Spurious Emission (802.11n-HT40, Ch151, 12 GHz-25 GHz)

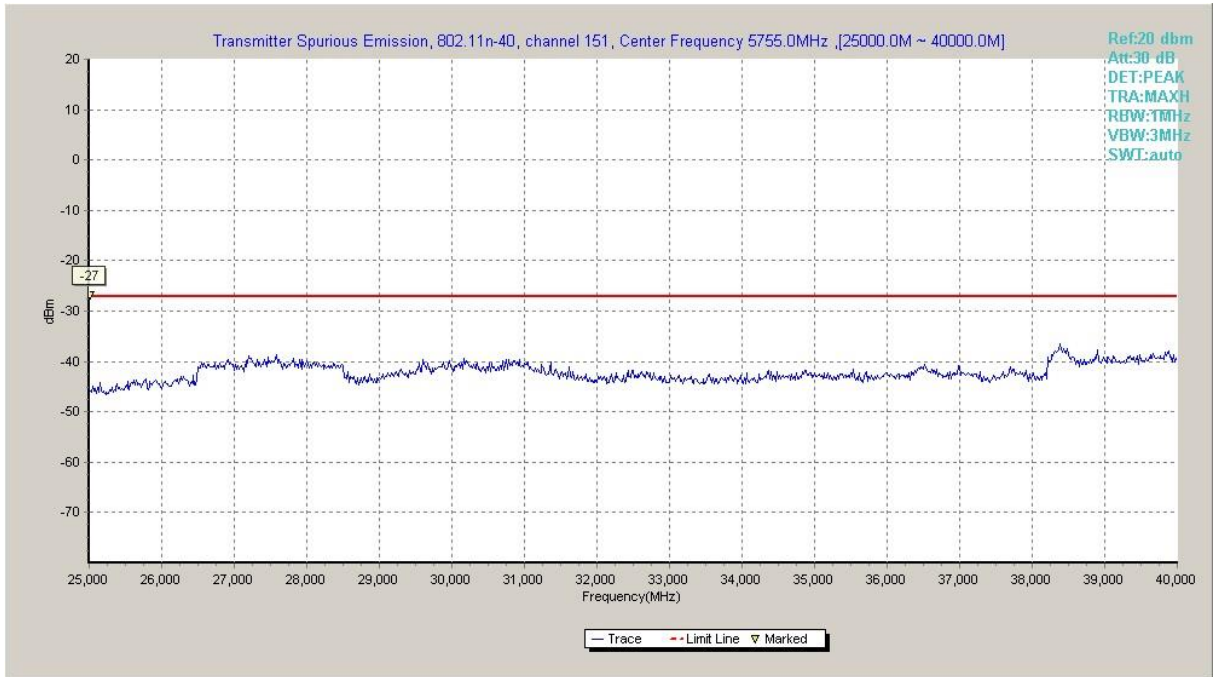


Fig. 54 Conducted Spurious Emission (802.11n-HT40, Ch151, 25 GHz-40 GHz)

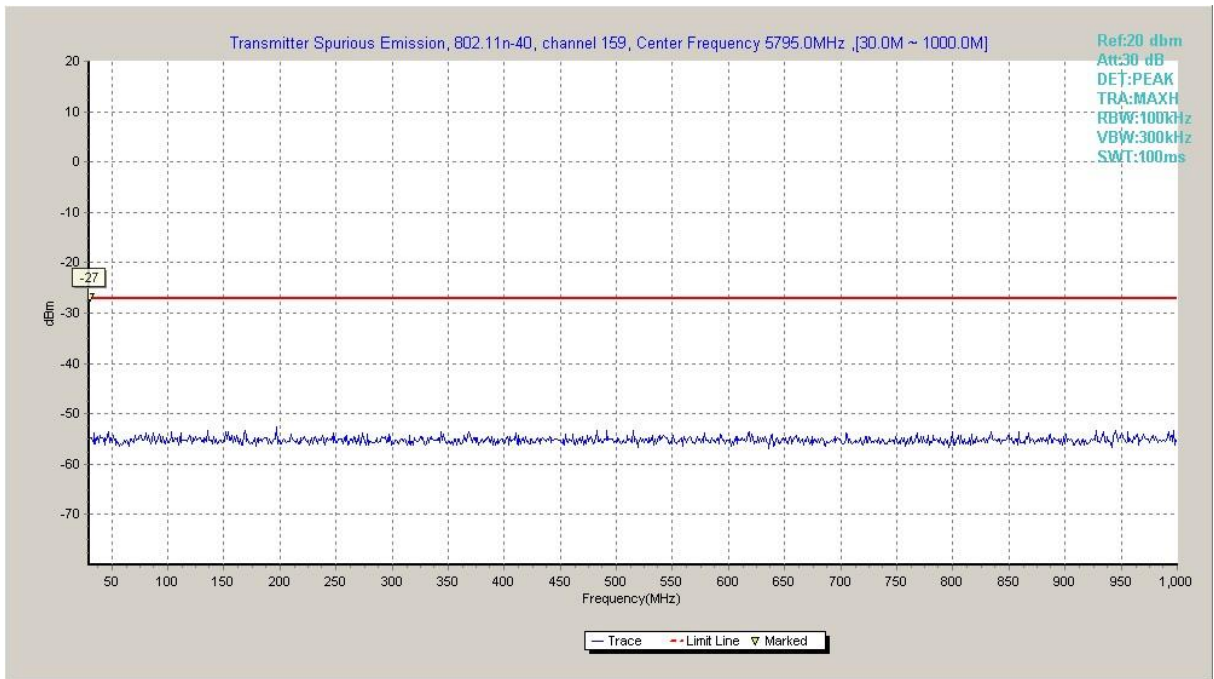


Fig. 55 Conducted Spurious Emission (802.11n-HT40, Ch159, 30 MHz-1 GHz)

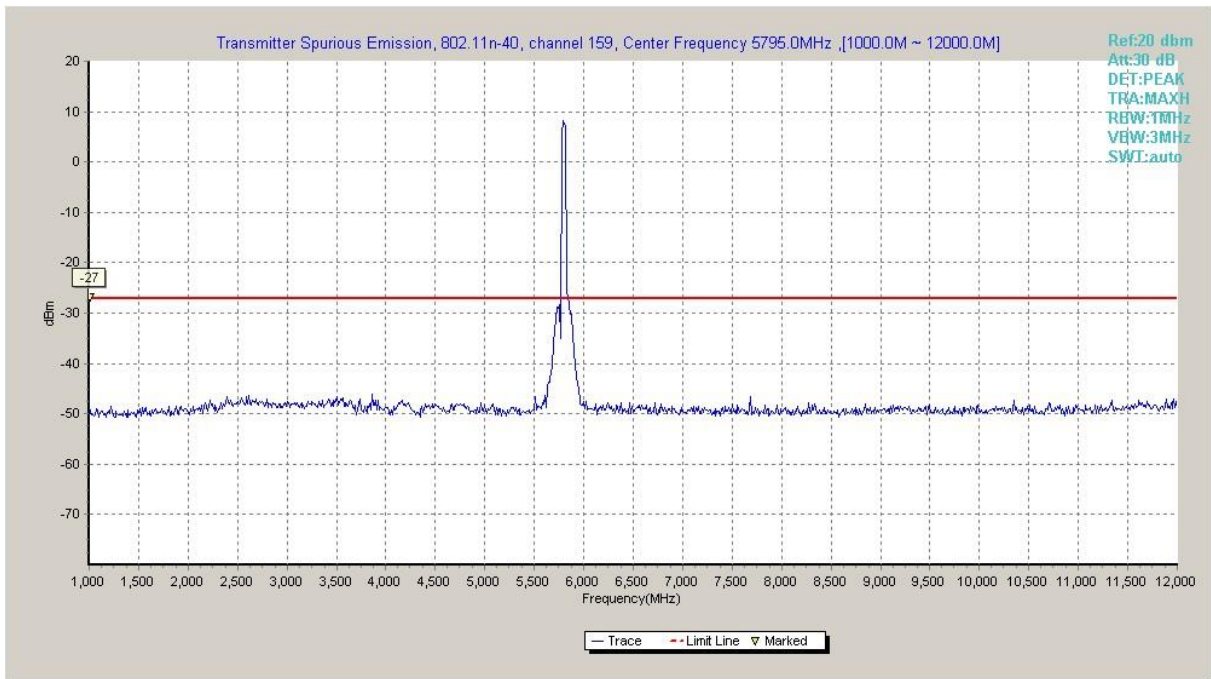


Fig. 56 Conducted Spurious Emission (802.11n-HT40, Ch159, 1 GHz -12 GHz)

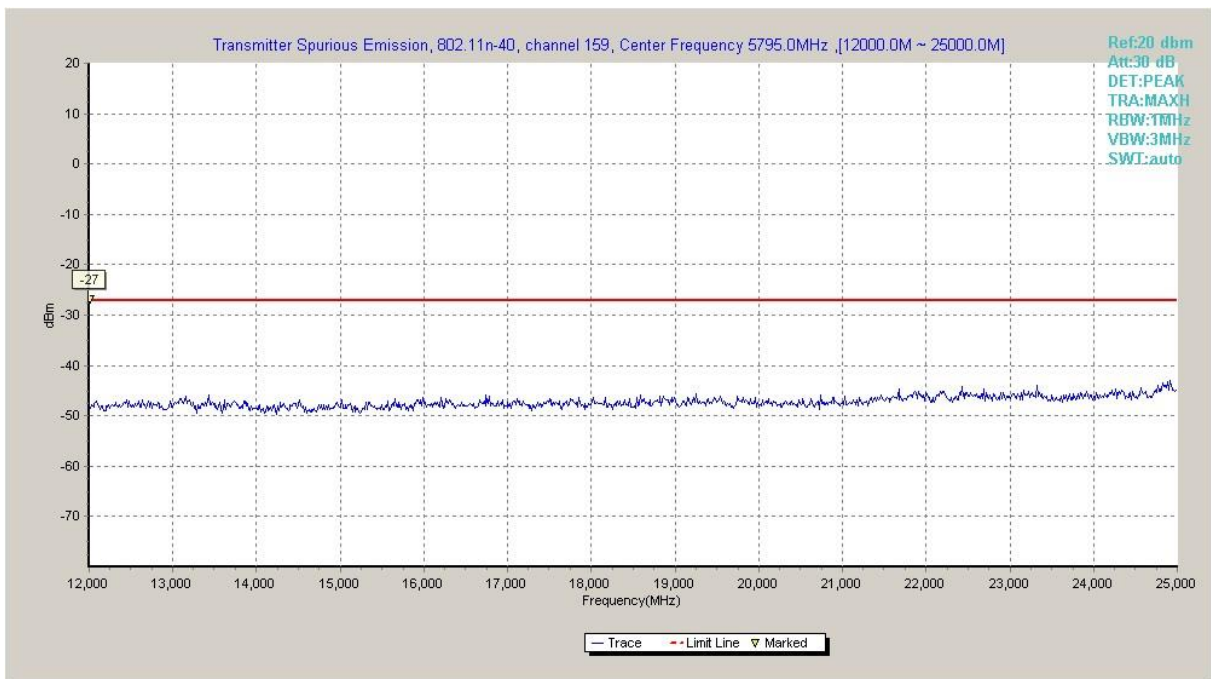


Fig. 57 Conducted Spurious Emission (802.11n-HT40, Ch159, 12 GHz-25 GHz)

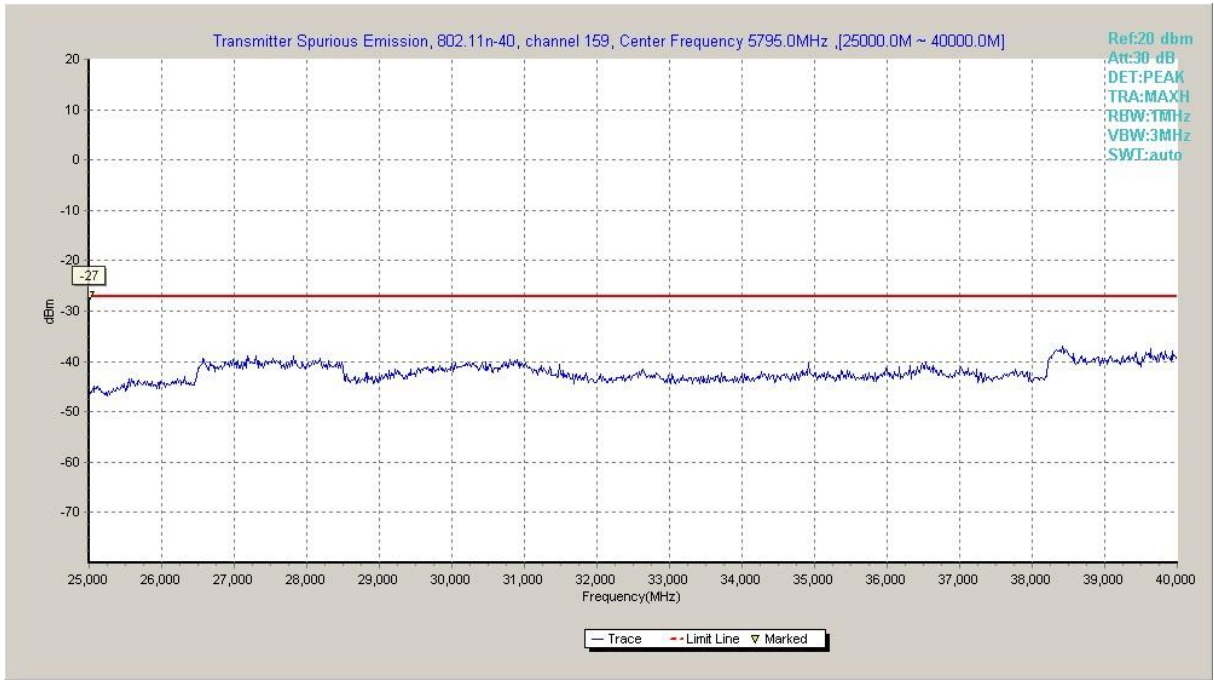


Fig. 58 Conducted Spurious Emission (802.11n-HT40, Ch159, 25 GHz-40 GHz)

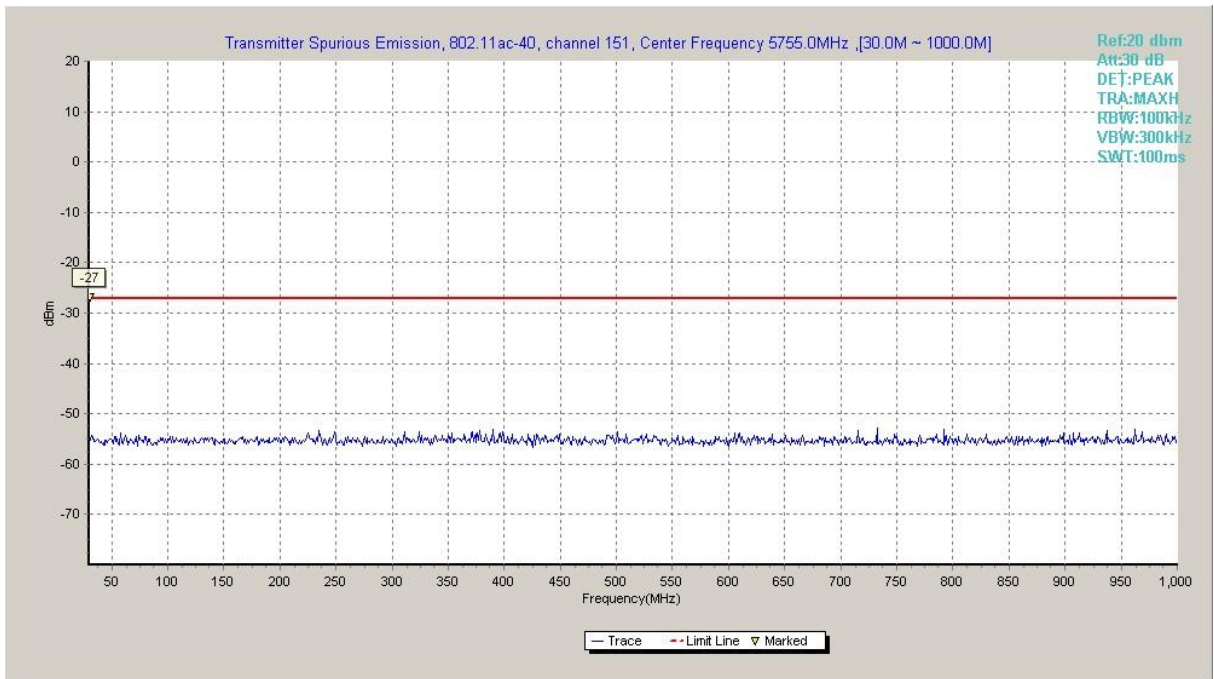


Fig. 59 Conducted Spurious Emission (802.11ac-HT40, Ch151, 30 MHz-1 GHz)

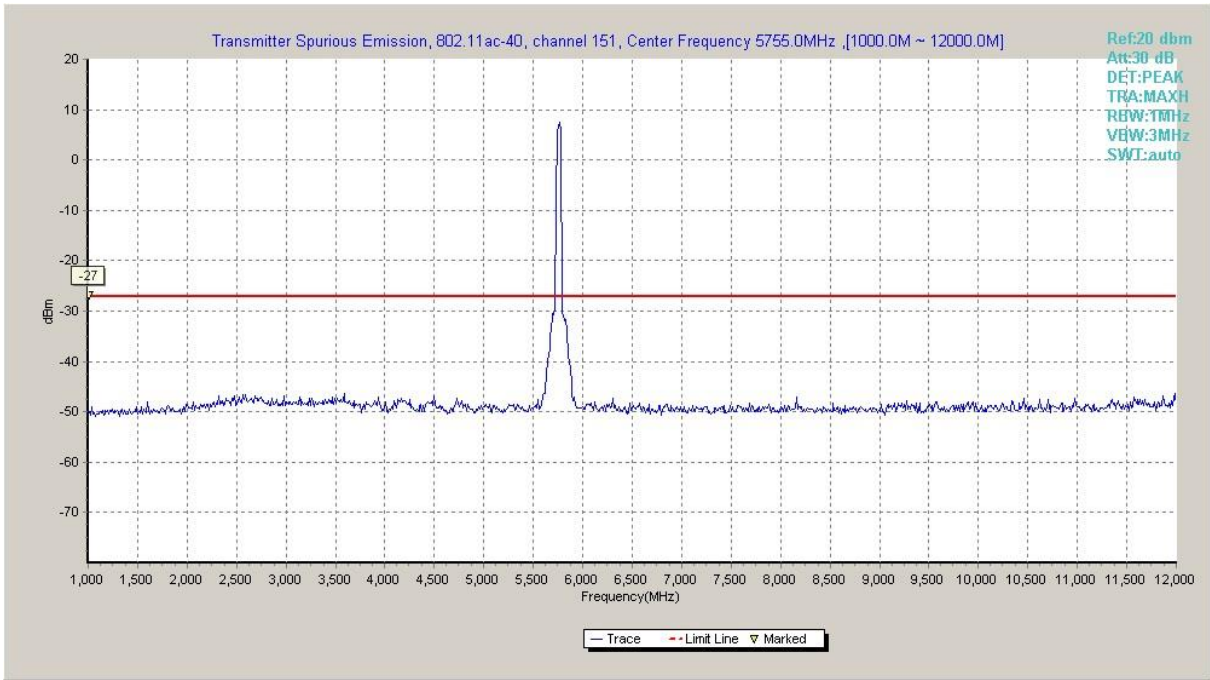


Fig. 60 Conducted Spurious Emission (802.11ac-HT40, Ch151, 1 GHz -12 GHz)

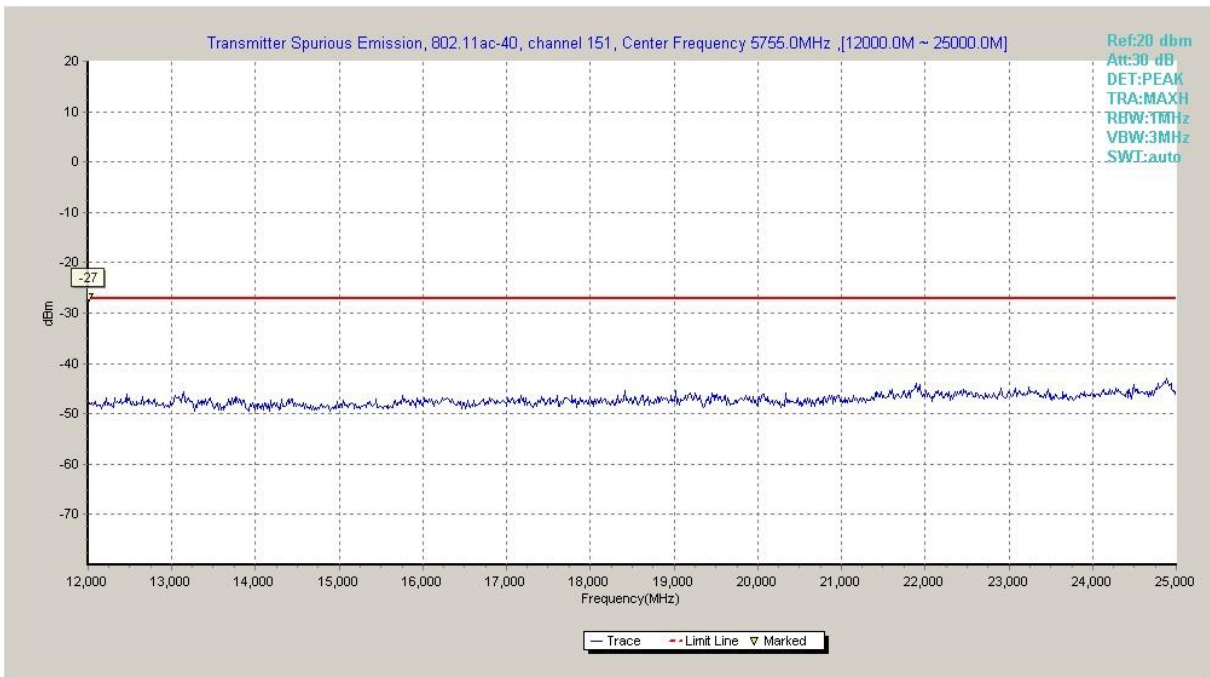


Fig. 61 Conducted Spurious Emission (802.11ac-HT40, Ch151, 12 GHz-25 GHz)

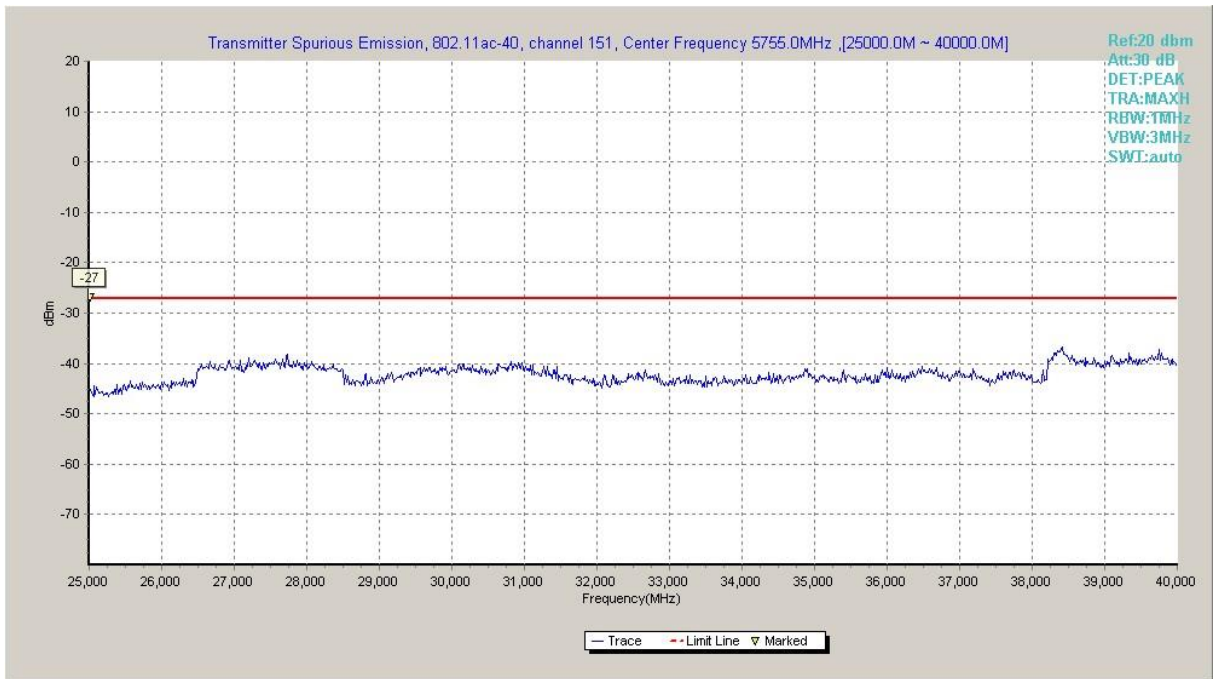


Fig. 62 Conducted Spurious Emission (802.11ac-HT40, Ch151, 25 GHz-40 GHz)

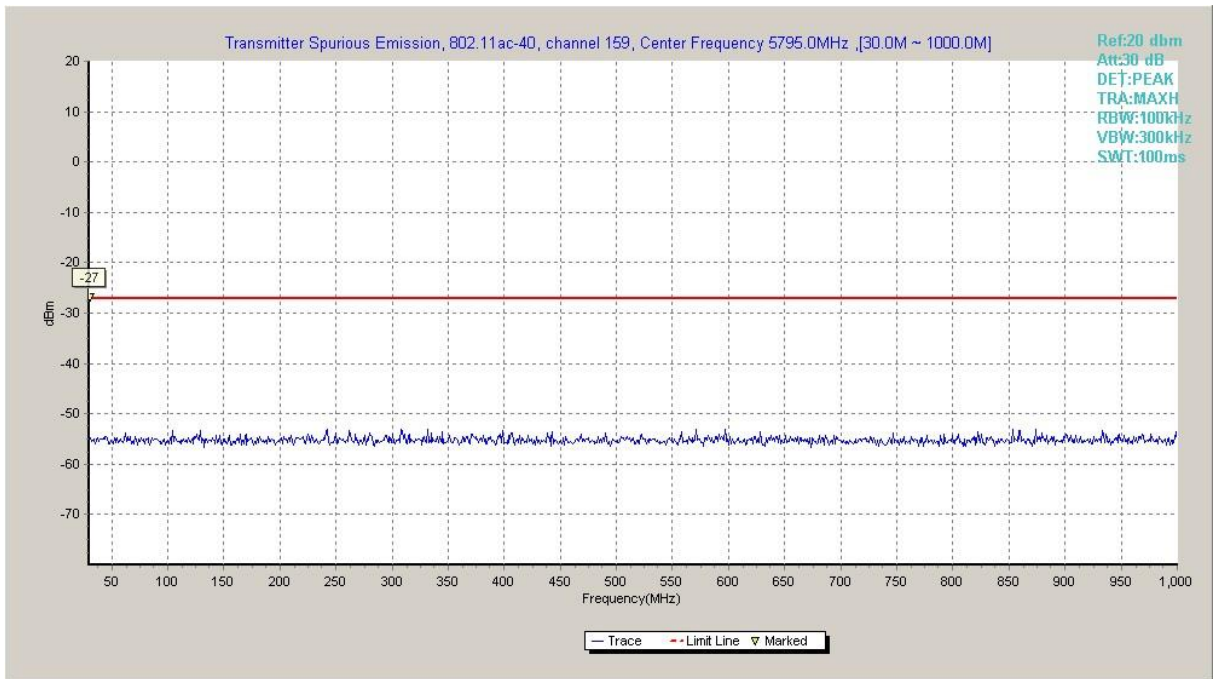


Fig. 63 Conducted Spurious Emission (802.11ac-HT40, Ch159, 30 MHz-1 GHz)

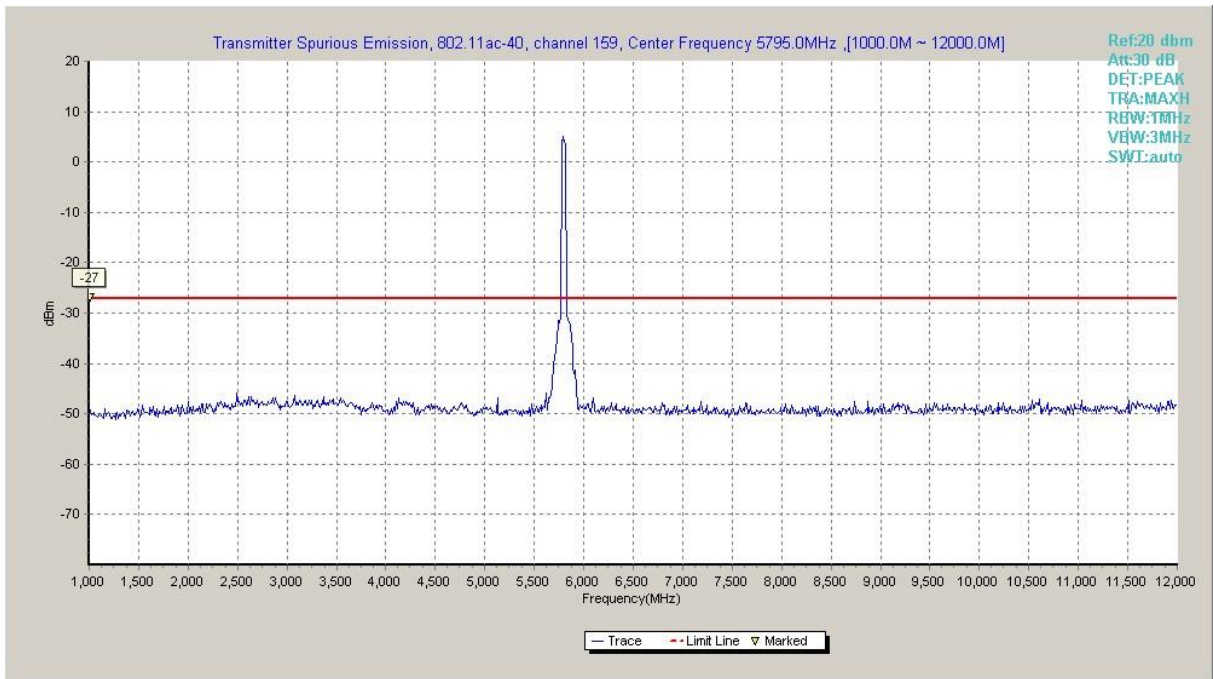


Fig. 64 Conducted Spurious Emission (802.11ac-HT40, Ch159, 1 GHz -12 GHz)

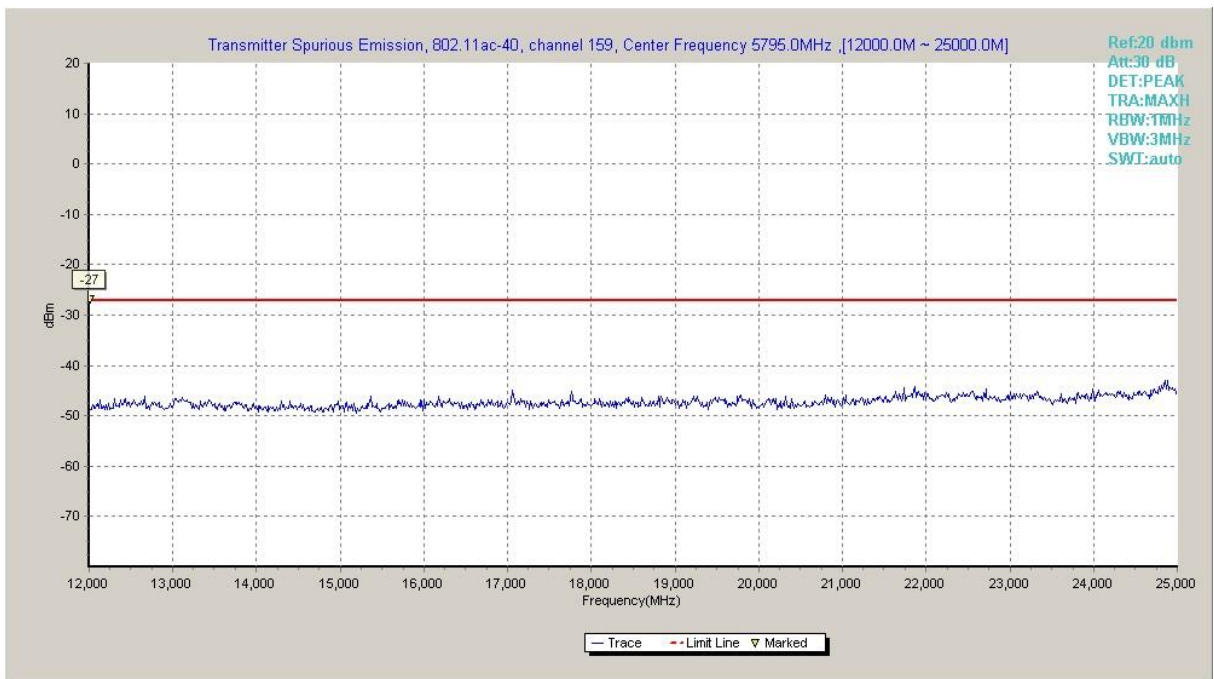


Fig. 65 Conducted Spurious Emission (802.11ac-HT40, Ch159, 12 GHz-25 GHz)

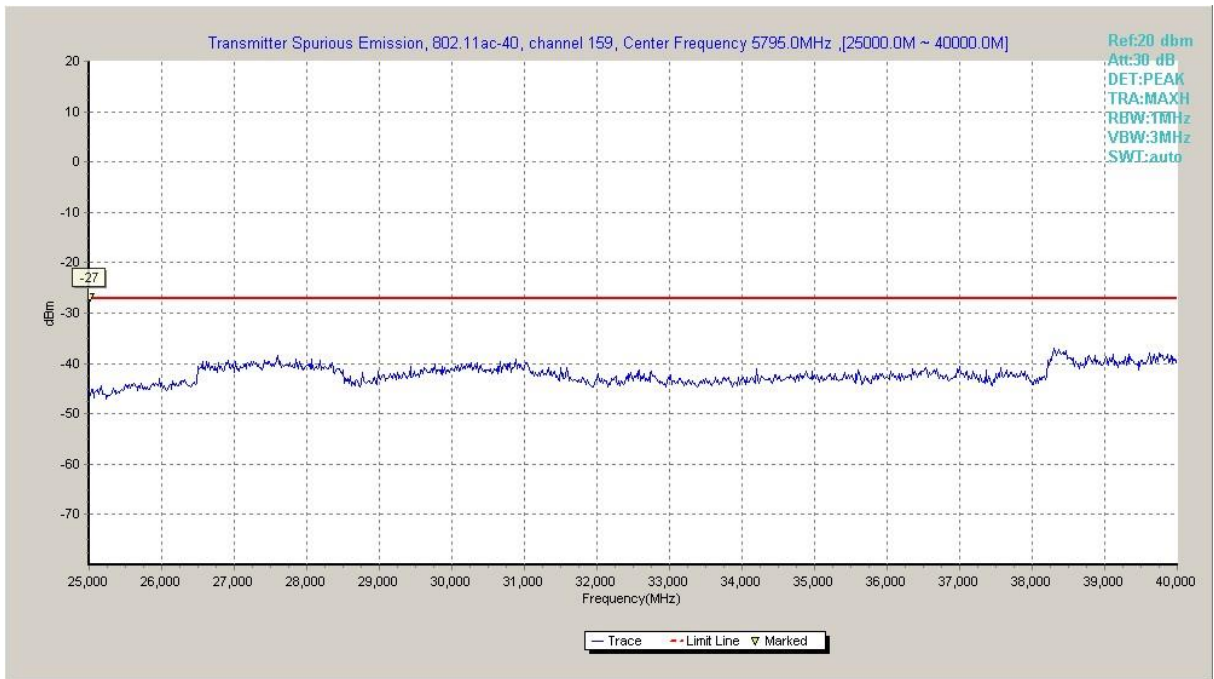


Fig. 66 Conducted Spurious Emission (802.11ac-HT40, Ch159, 25 GHz-40 GHz)

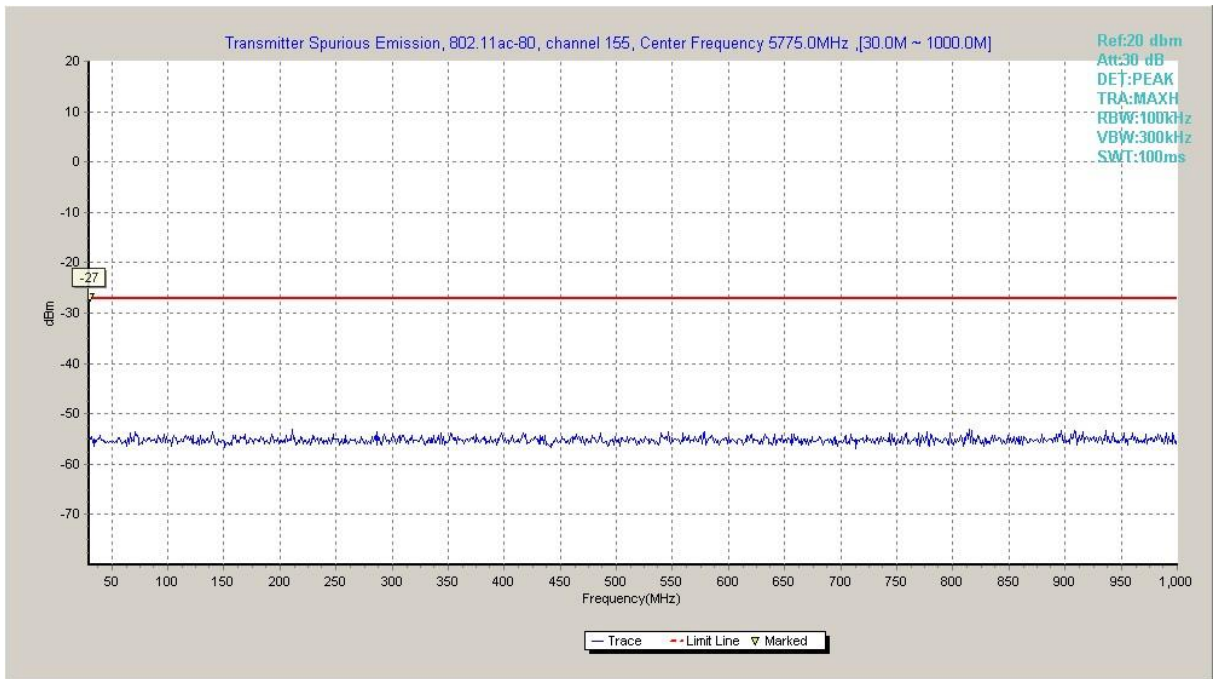


Fig. 67 Conducted Spurious Emission (802.11ac-HT80, Ch155, 30 MHz-1 GHz)

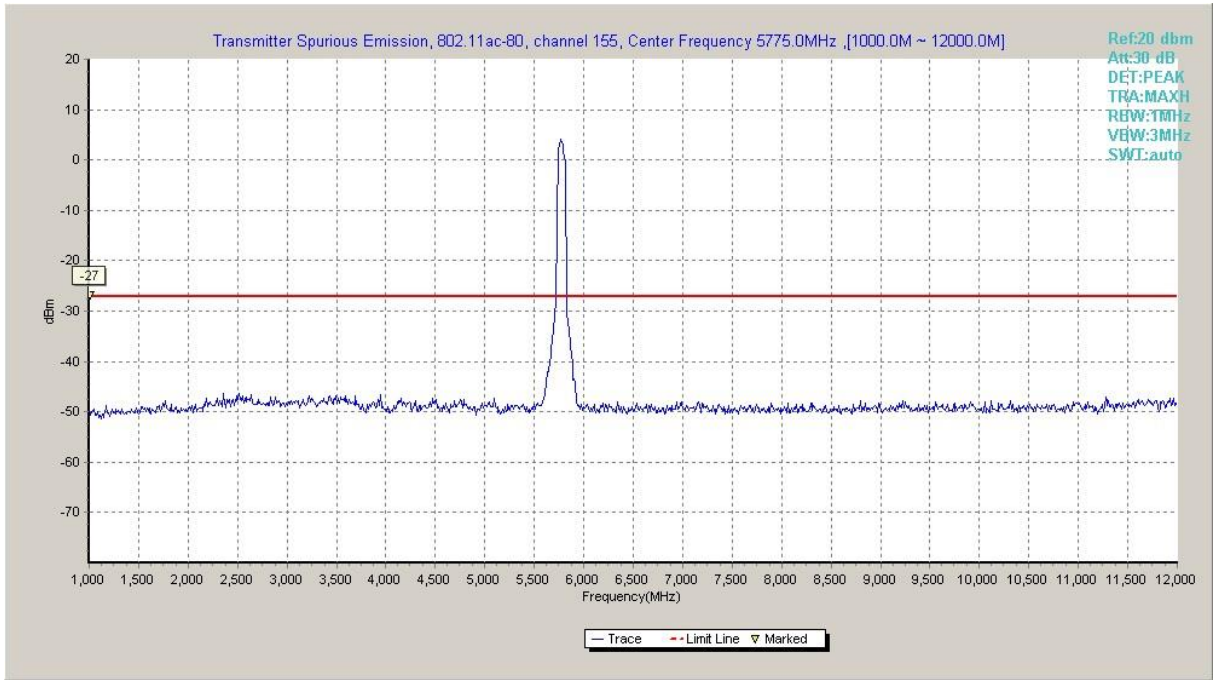


Fig. 68 Conducted Spurious Emission (802.11ac-HT80, Ch155, 1 GHz -12 GHz)

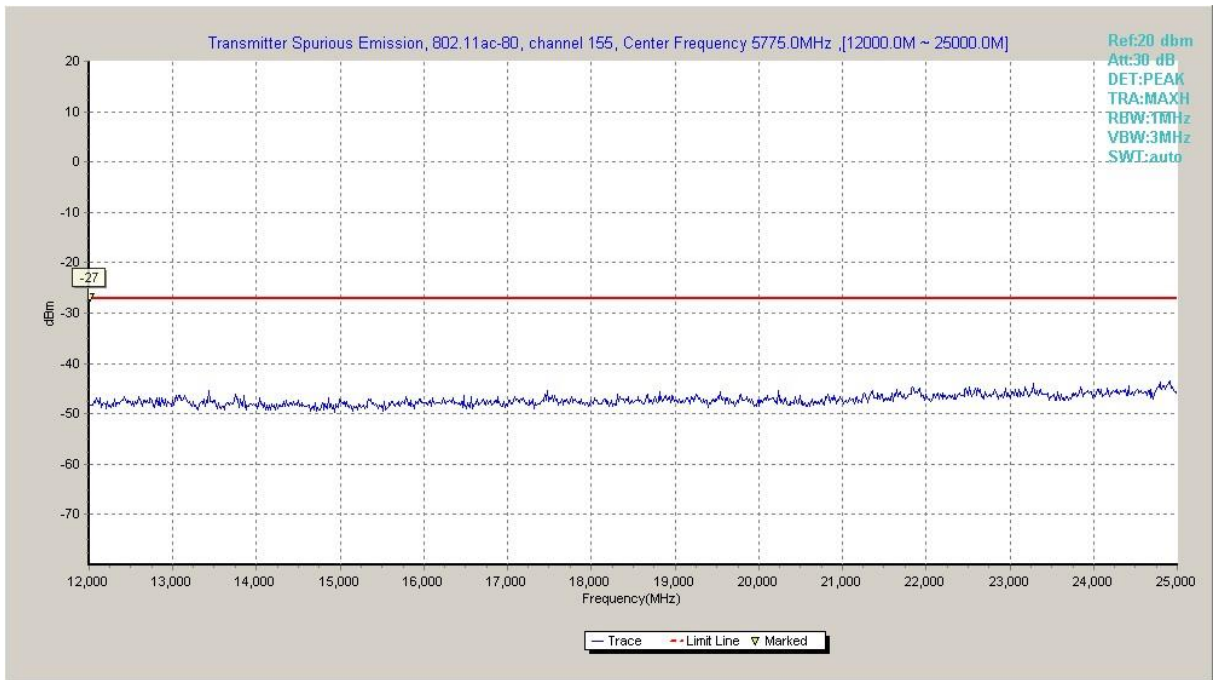


Fig. 69 Conducted Spurious Emission (802.11ac-HT80, Ch155, 12 GHz-25 GHz)

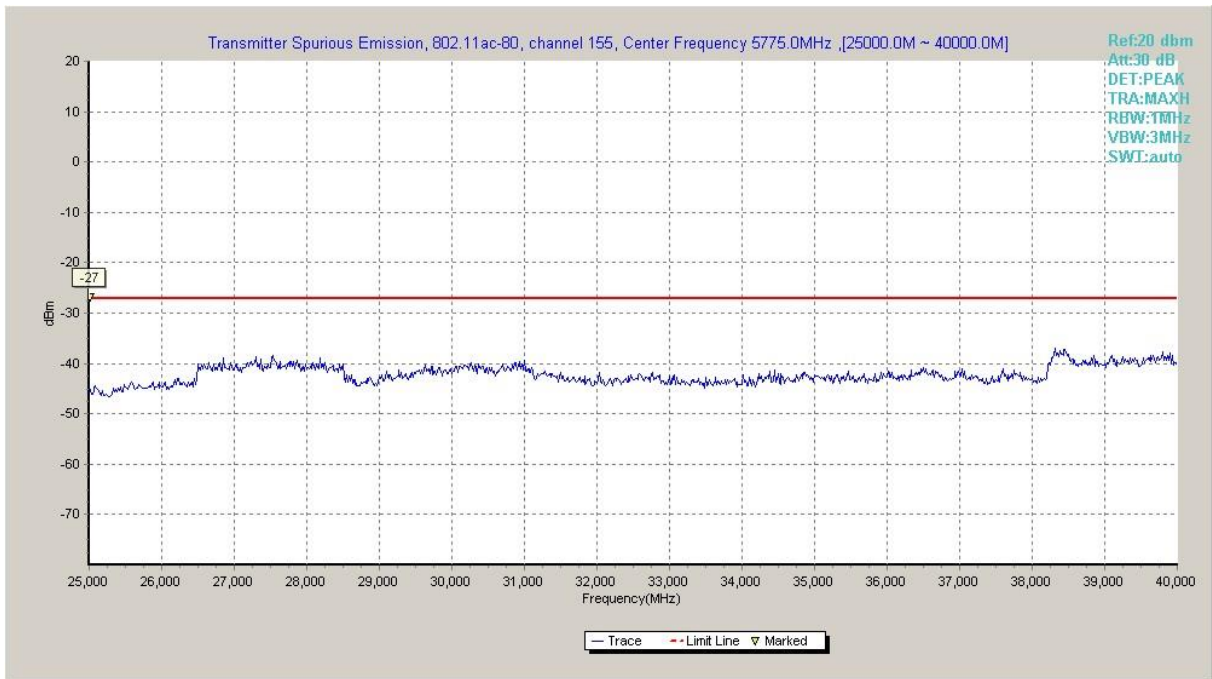


Fig. 70 Conducted Spurious Emission (802.11ac-HT80, Ch155, 25 GHz-40 GHz)

A.5.2 Transmitter Spurious Emission - Radiated

Measurement Limit:

Frequency Range	Uncertainty(dB)
$f \leq 1\text{GHz}$	3.9
$f > 1\text{GHz}$	4.3

Measurement Results:

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

Average Results:

802.11a

Ch149

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5724.000	50.3	-32.8	34.8	48.25	99.9	49.6	H
5724.800	52.0	-32.8	34.8	49.90	101.7	49.8	H
11490.400	33.5	-30.3	38.2	25.65	54.0	20.5	H
16950.400	38.3	-25.8	41.8	22.36	54.0	15.7	H
17235.200	37.4	-26.2	41.7	21.94	54.0	16.6	H
17638.400	38.6	-25.2	41.5	22.27	54.0	15.4	H

Ch157

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5745.600	38.0	-32.7	34.9	35.85	54.0	16.0	H
5823.600	38.1	-32.0	35.0	35.08	54.0	15.9	H
11570.400	33.1	-30.5	38.3	25.25	54.0	20.9	H
17355.200	37.6	-26.1	41.6	22.04	54.0	16.4	H
17653.600	38.5	-25.3	41.5	22.26	54.0	15.5	H
17960.000	38.6	-25.1	41.4	22.36	54.0	15.4	H

Ch165

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5850.000	40.8	-31.7	35.0	37.56	102.2	61.4	H
5852.000	39.7	-31.7	35.0	36.49	97.6	57.9	H
11650.400	33.2	-30.4	38.4	25.20	54.0	20.8	H
17475.200	37.7	-25.8	41.5	22.04	54.0	16.3	H
17653.600	38.5	-25.3	41.5	22.26	54.0	15.5	H
17968.000	38.7	-25.1	41.4	22.36	54.0	15.3	H

802.11n-HT20

Ch149

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5724.000	47.6	-32.8	34.8	45.51	99.9	52.3	H
5724.800	49.1	-32.8	34.8	47.02	101.7	52.7	H
11490.400	33.6	-30.3	38.2	25.74	54.0	20.4	H
16944.000	38.3	-25.8	41.8	22.34	54.0	15.7	H
17235.200	37.4	-26.2	41.7	21.97	54.0	16.6	H
17627.200	38.5	-25.2	41.5	22.17	54.0	15.5	H

Ch157

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5735.200	38.0	-32.8	34.8	35.91	54.0	16.0	H
5823.600	38.2	-32.0	35.0	35.25	54.0	15.8	H
11570.400	33.2	-30.5	38.3	25.33	54.0	20.8	H
17355.200	37.6	-26.1	41.6	22.11	54.0	16.4	H
17652.800	38.5	-25.3	41.5	22.29	54.0	15.5	H
17954.400	38.7	-25.2	41.4	22.51	54.0	15.3	H

Ch165

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5850.000	39.5	-31.7	35.0	36.27	102.2	62.7	H
5850.800	38.7	-31.7	35.0	35.44	100.4	61.7	H
11650.400	33.4	-30.4	38.4	25.33	54.0	20.6	H
17475.200	37.8	-25.8	41.5	22.08	54.0	16.2	H
17672.000	38.3	-25.4	41.5	22.21	54.0	15.7	H
17972.000	38.7	-25.1	41.4	22.34	54.0	15.3	H

802.11n-HT40

Ch151

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5724.000	52.5	-32.8	34.8	50.47	99.9	47.4	H
5724.800	52.6	-32.8	34.8	50.54	101.7	49.1	H
11510.400	33.6	-30.3	38.2	25.73	54.0	20.4	H
16944.800	38.3	-25.8	41.8	22.34	54.0	15.7	H
17264.800	37.7	-26.2	41.6	22.22	54.0	16.3	H
17650.400	38.5	-25.3	41.5	22.24	54.0	15.5	H

Ch159

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5850.000	38.3	-31.7	35.0	35.02	102.2	63.9	H
5857.200	38.0	-31.7	35.0	34.70	90.2	52.2	H
11590.400	32.9	-30.5	38.3	25.04	54.0	21.1	H
17384.800	37.8	-26.0	41.6	22.22	54.0	16.2	H
17652.800	38.5	-25.3	41.5	22.25	54.0	15.5	H
17972.800	38.6	-25.1	41.4	22.26	54.0	15.4	H

802.11ac-HT20

Ch149

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5724.000	40.1	-32.8	34.8	38.07	99.9	59.8	H
5724.800	41.0	-32.8	34.8	38.98	101.7	60.7	H
11490.400	33.6	-30.3	38.2	25.70	54.0	20.4	H
16940.000	38.4	-25.8	41.8	22.43	54.0	15.6	H
17235.200	37.4	-26.2	41.7	21.89	54.0	16.6	H
17622.400	38.5	-25.2	41.5	22.21	54.0	15.5	H

Ch157

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5748.800	37.6	-32.7	34.9	35.38	54.0	16.4	H
5823.600	37.7	-32.0	35.0	34.69	54.0	16.3	H
11570.400	33.2	-30.5	38.3	25.35	54.0	20.8	H
17355.200	38.5	-26.1	41.6	22.95	54.0	15.5	H
17654.400	37.6	-25.3	41.5	21.39	54.0	16.4	H
17955.200	38.7	-25.2	41.4	22.51	54.0	15.3	H

Ch165

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5850.000	37.6	-31.7	35.0	34.31	102.2	64.6	H
5854.400	37.4	-31.7	35.0	34.19	92.2	54.7	H
11650.400	33.3	-30.4	38.4	25.27	54.0	20.7	H
17475.200	37.7	-25.8	41.5	22.04	54.0	16.3	H
17671.200	38.3	-25.4	41.5	22.23	54.0	15.7	H
17972.800	38.6	-25.1	41.4	22.28	54.0	15.4	H

802.11ac-HT40

Ch151

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5724.800	42.9	-32.8	34.8	40.88	101.7	58.8	H
5722.000	42.3	-32.7	34.8	40.26	95.4	53.0	H
11510.400	33.7	-30.3	38.2	25.78	54.0	20.3	H
16936.000	38.4	-25.8	41.8	22.43	54.0	15.6	H
17264.800	37.7	-26.2	41.6	22.22	54.0	16.3	H
17640.000	38.5	-25.2	41.5	22.21	54.0	15.5	H

Ch159

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5850.000	38.1	-31.7	35.0	34.81	102.2	64.1	H
5855.200	38.0	-31.7	35.0	34.75	90.7	52.7	H
11590.400	32.8	-30.5	38.3	24.99	54.0	21.2	H
17384.800	37.6	-26.0	41.6	22.10	54.0	16.4	H
17658.400	38.4	-25.3	41.5	22.26	54.0	15.6	H
17957.600	38.8	-25.2	41.4	22.55	54.0	15.2	H

802.11ac-HT80

Ch155

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5720.000	39.8	-32.7	34.8	37.72	90.8	51.0	H
5724.000	39.9	-32.8	34.8	37.82	99.9	60.0	H
11550.400	33.6	-30.4	38.3	25.71	54.0	20.4	H
16941.600	38.2	-25.8	41.8	22.20	54.0	15.8	H
17324.800	37.5	-26.1	41.6	22.06	54.0	16.5	H
17655.200	38.5	-25.3	41.5	22.27	54.0	15.5	H

Peak Results:

802.11a

Ch149

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5724.302	70.2	-32.8	34.8	68.13	120.6	50.4	H
5724.992	69.3	-32.8	34.8	67.27	122.2	52.9	H
11490.200	47.6	-30.3	38.2	39.67	74.0	26.4	H
16884.050	55.8	-25.9	41.7	39.96	74.0	18.2	V
17234.950	52.5	-26.2	41.7	37.06	74.0	21.5	V
17507.750	55.8	-25.7	41.5	39.98	74.0	18.2	V

Ch157

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5741.000	52.6	-32.7	34.8	50.49	74.0	21.4	V
5827.200	49.5	-31.9	35.0	46.50	74.0	24.5	H
11569.950	45.9	-30.5	38.3	38.03	74.0	28.1	V
17034.200	56.0	-26.0	41.8	40.21	74.0	18.0	V
17354.850	52.7	-26.1	41.6	37.20	74.0	21.3	H
17618.850	56.0	-25.2	41.5	39.75	74.0	18.0	V

Ch165

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5850.653	56.9	-31.7	35.0	53.65	120.7	63.8	H
5856.966	66.9	-31.7	35.0	63.66	110.2	43.3	H
11650.250	46.7	-30.4	38.4	38.66	74.0	27.3	H
17425.250	56.3	-26.0	41.5	40.76	74.0	17.7	V
17474.750	53.7	-25.8	41.5	38.04	74.0	20.3	H
17638.650	55.5	-25.2	41.5	39.20	74.0	18.5	H

802.11n-HT20

Ch149

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5724.106	65.3	-32.8	34.8	63.19	120.2	54.9	H
5724.371	65.6	-32.8	34.8	63.51	120.8	55.2	H
11490.200	45.5	-30.3	38.2	37.57	74.0	28.5	H
16503.450	55.5	-25.8	41.5	39.75	74.0	18.5	H
17234.950	52.6	-26.2	41.7	37.09	74.0	21.4	H
17956.550	55.4	-25.2	41.4	39.11	74.0	18.6	V

Ch157

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5717.600	52.6	-32.7	34.8	50.42	74.0	21.4	H
5844.600	53.2	-31.7	35.0	49.92	74.0	20.8	H
11569.950	46.3	-30.5	38.3	38.45	74.0	27.7	V
17061.700	55.7	-26.1	41.8	39.96	74.0	18.3	V
17354.850	52.0	-26.1	41.6	36.52	74.0	22.0	H
17587.500	55.6	-25.4	41.5	39.46	74.0	18.4	H

Ch165

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5853.217	56.1	-31.7	35.0	52.89	114.9	58.7	H
5856.518	56.0	-31.7	35.0	52.75	110.4	54.4	H
11650.250	45.7	-30.4	38.4	37.70	74.0	28.3	V
16749.300	55.1	-25.9	41.7	39.38	74.0	18.9	H
17474.750	52.7	-25.8	41.5	37.04	74.0	21.3	V
17956.000	56.1	-25.2	41.4	39.86	74.0	17.9	H

802.11n-HT40

Ch151

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5723.784	68.4	-32.8	34.8	66.29	119.4	51.1	H
5724.785	69.0	-32.8	34.8	66.94	121.7	52.7	V
11510.000	46.6	-30.3	38.2	38.69	74.0	27.4	H
16531.500	55.1	-25.8	41.5	39.38	74.0	18.9	V
17265.200	52.0	-26.2	41.6	36.53	74.0	22.0	V
17965.900	55.6	-25.1	41.4	39.26	74.0	18.4	V

Ch159

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5852.562	58.1	-31.7	35.0	54.86	116.4	58.2	H
5854.390	57.2	-31.7	35.0	53.91	112.2	55.0	V
11589.750	45.7	-30.5	38.3	37.88	74.0	28.3	V
16682.750	56.0	-25.9	41.6	40.33	74.0	18.0	V
16837.850	55.5	-25.9	41.7	39.68	74.0	18.5	V
17385.100	52.4	-26.0	41.6	36.83	74.0	21.6	V

802.11ac-HT20

Ch149

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5706.511	60.7	-32.5	34.8	58.45	107.0	46.3	H
5724.957	58.9	-32.8	34.8	56.89	122.1	63.2	H
11490.200	46.5	-30.3	38.2	38.56	74.0	27.5	V
16945.650	55.6	-25.8	41.8	39.66	74.0	18.4	H
17234.950	52.2	-26.2	41.7	36.73	74.0	21.8	V
17529.750	56.0	-25.6	41.5	40.08	74.0	18.0	H

Ch157

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5724.200	52.6	-32.8	34.8	50.52	74.0	21.4	H
5836.200	52.5	-31.8	35.0	49.36	74.0	21.5	H
11569.950	45.7	-30.5	38.3	37.89	74.0	28.3	H
17035.850	55.6	-26.0	41.8	39.82	74.0	18.4	V
17354.850	52.1	-26.1	41.6	36.61	74.0	21.9	V
17788.250	55.6	-25.9	41.4	40.07	74.0	18.4	H

Ch165

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5850.595	53.8	-31.7	35.0	50.51	120.8	67.1	V
5851.987	54.0	-31.7	35.0	50.70	117.7	63.7	H
11650.250	47.0	-30.4	38.4	39.00	74.0	27.0	V
16879.100	55.4	-25.9	41.7	39.57	74.0	18.6	H
17474.750	52.9	-25.8	41.5	37.25	74.0	21.1	H
17685.400	55.5	-25.4	41.5	39.48	74.0	18.5	V

802.11ac-HT40

Ch151

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5692.079	58.4	-32.3	34.8	55.94	99.3	40.9	H
5722.370	58.4	-32.7	34.8	56.35	116.2	57.8	H
11510.000	46.4	-30.3	38.2	38.55	74.0	27.6	V
16907.150	56.3	-25.8	41.7	40.37	74.0	17.7	V
17265.200	52.9	-26.2	41.6	37.42	74.0	21.1	V
17985.700	55.8	-25.0	41.4	39.39	74.0	18.2	V

Ch159

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5850.066	58.3	-31.7	35.0	55.07	122.0	63.7	H
5851.136	58.7	-31.7	35.0	55.48	119.6	60.9	H
11589.750	46.9	-30.5	38.3	39.06	74.0	27.1	H
16864.250	55.6	-25.9	41.7	39.78	74.0	18.4	V
17385.100	52.2	-26.0	41.6	36.69	74.0	21.8	V
17963.150	55.9	-25.1	41.4	39.60	74.0	18.1	V

802.11ac-HT80

Ch155

Frequency (MHz)	Meas. Result (dB μ V/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dB μ V)	Limit (dB μ V/m)	Margin (dB)	Antenna Pol. (H/V)
5721.473	58.3	-32.7	34.8	56.20	114.2	55.9	H
5723.405	57.9	-32.7	34.8	55.82	118.6	60.7	H
11550.150	47.2	-30.4	38.3	39.32	74.0	26.8	V
16852.700	55.3	-25.9	41.7	39.49	74.0	18.7	V
17325.150	52.1	-26.1	41.6	36.62	74.0	21.9	V
17987.900	55.7	-25.0	41.4	39.26	74.0	18.3	V

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:

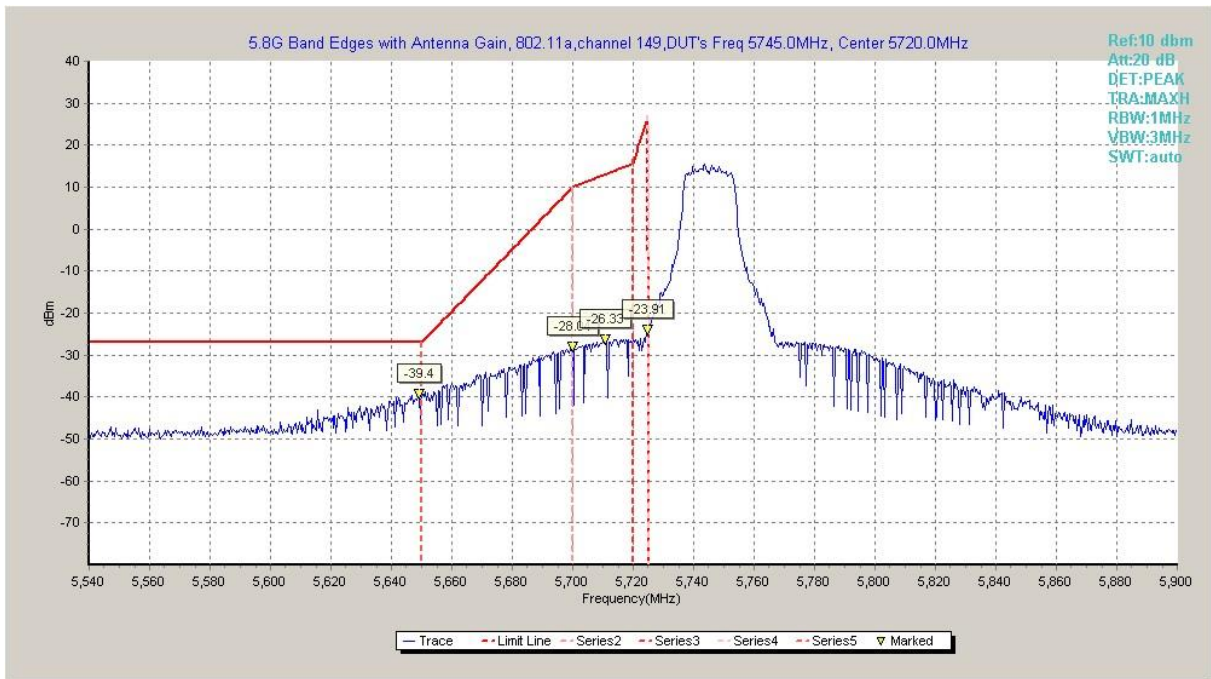


Fig. 71 Band Edges (802.11a, 5745MHz)

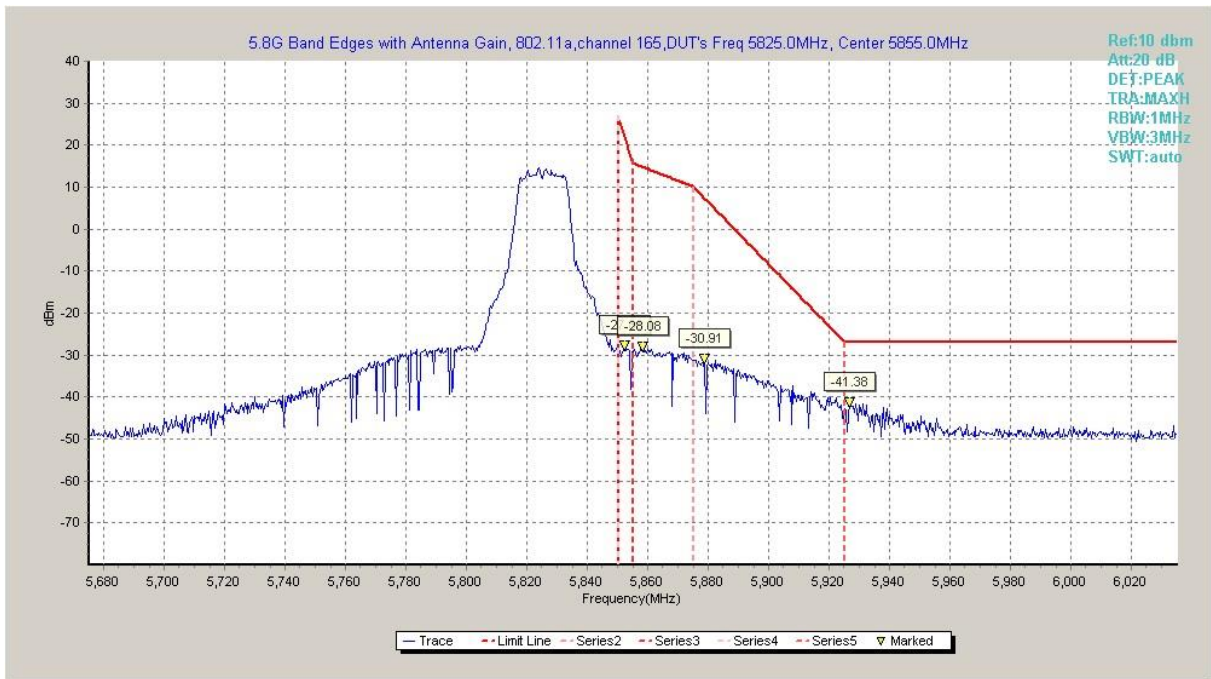


Fig. 72 Band Edges (802.11a, 5825MHz)

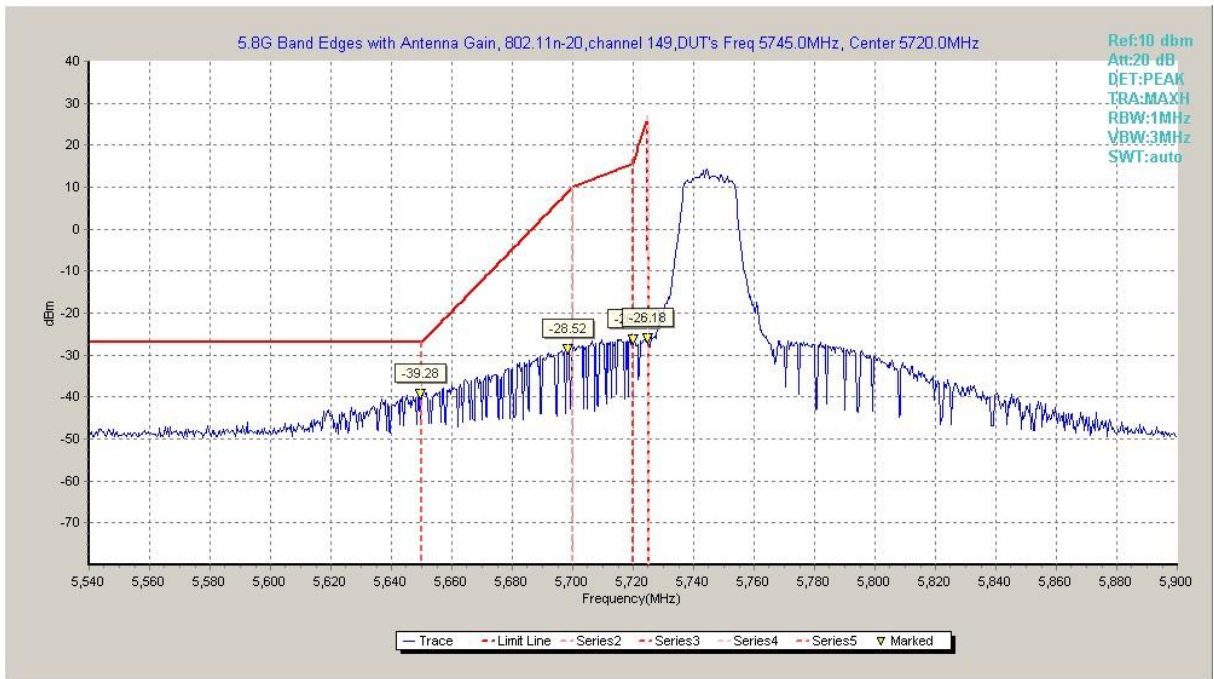


Fig. 73 Band Edges (802.11n-HT20, 5745MHz)

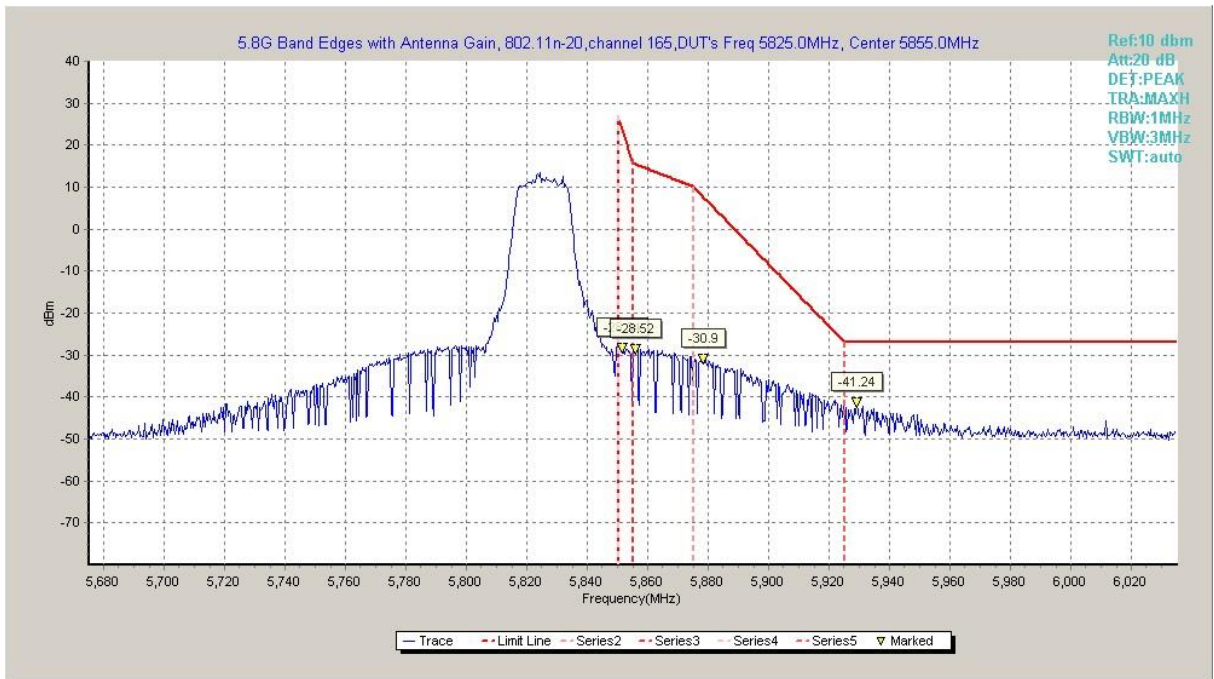


Fig. 74 Band Edges (802.11n-HT20, 5825MHz)

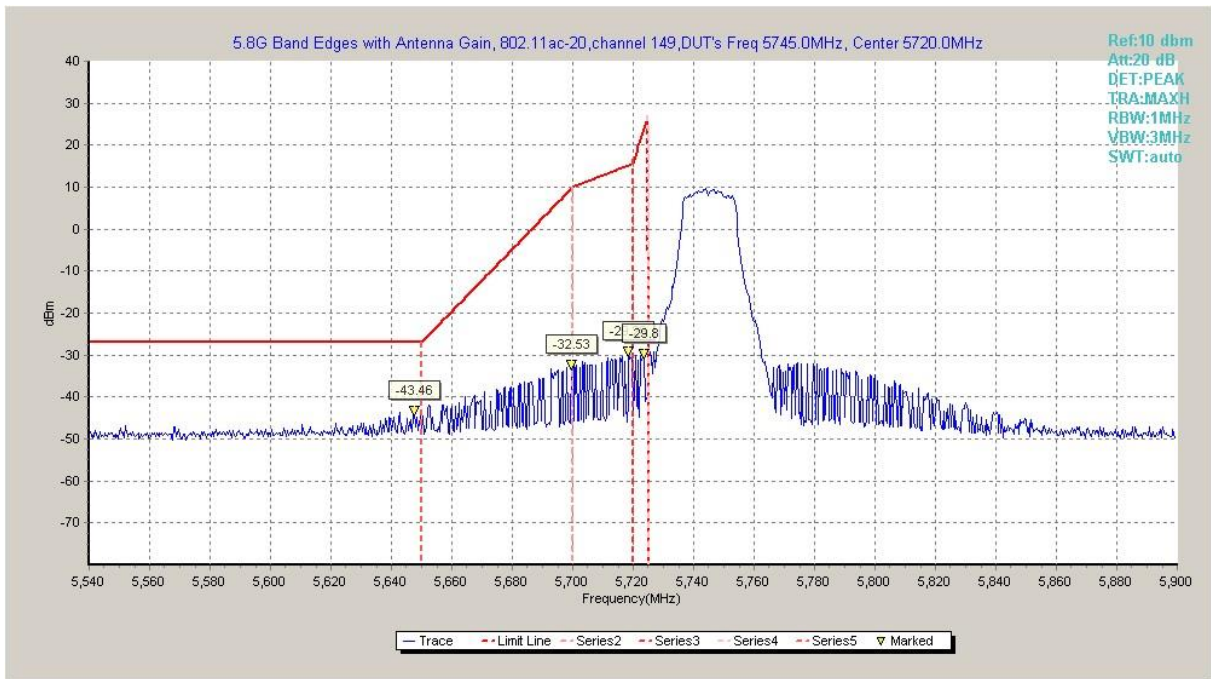


Fig. 75 Band Edges (802.11ac-HT20, 5745MHz)

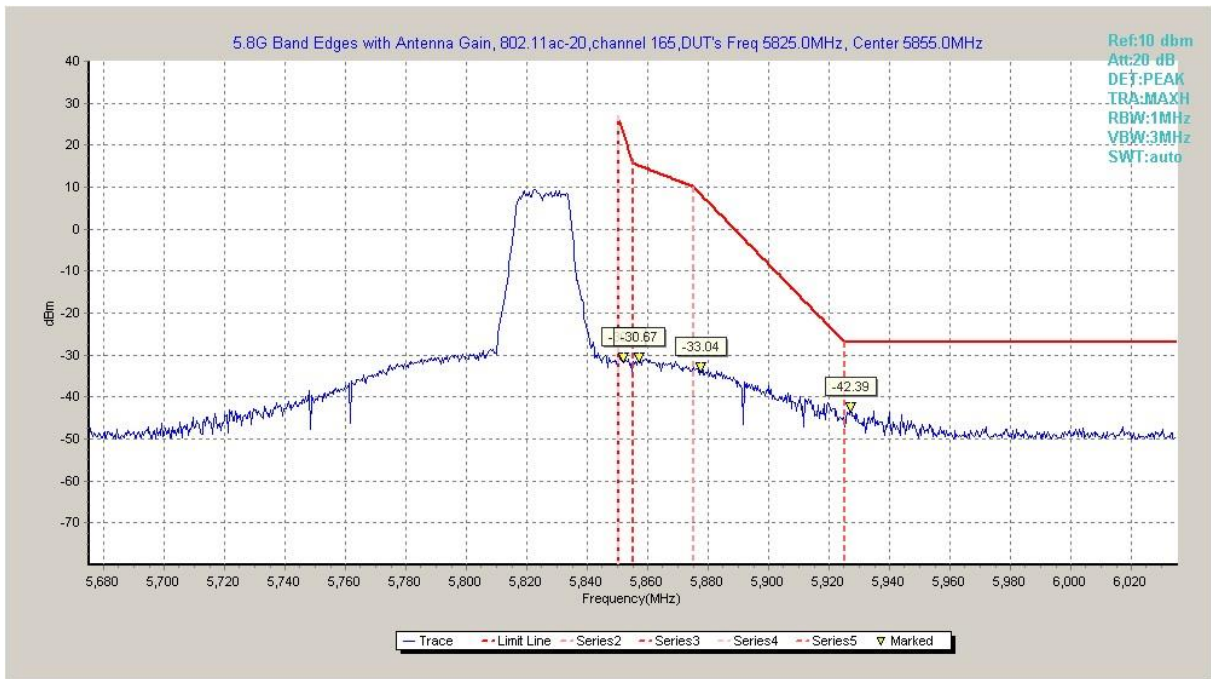


Fig. 76 Band Edges (802.11ac-HT20, 5825MHz)

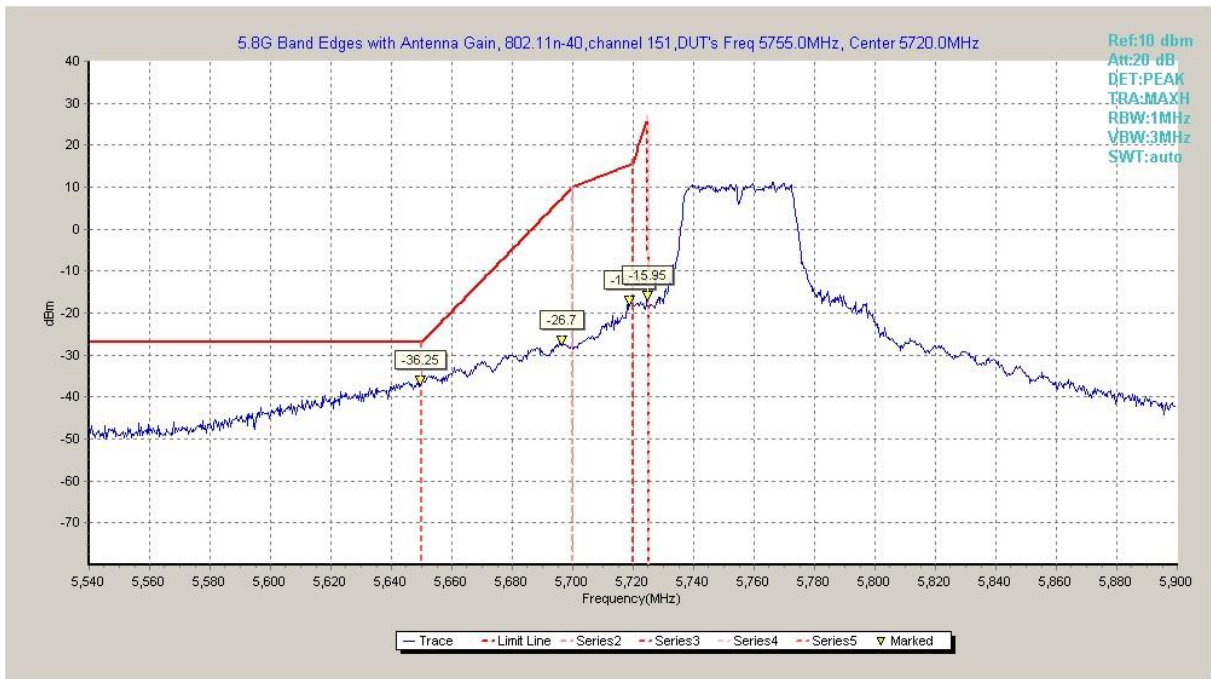


Fig. 77 Band Edges (802.11n-HT40, 5755MHz)

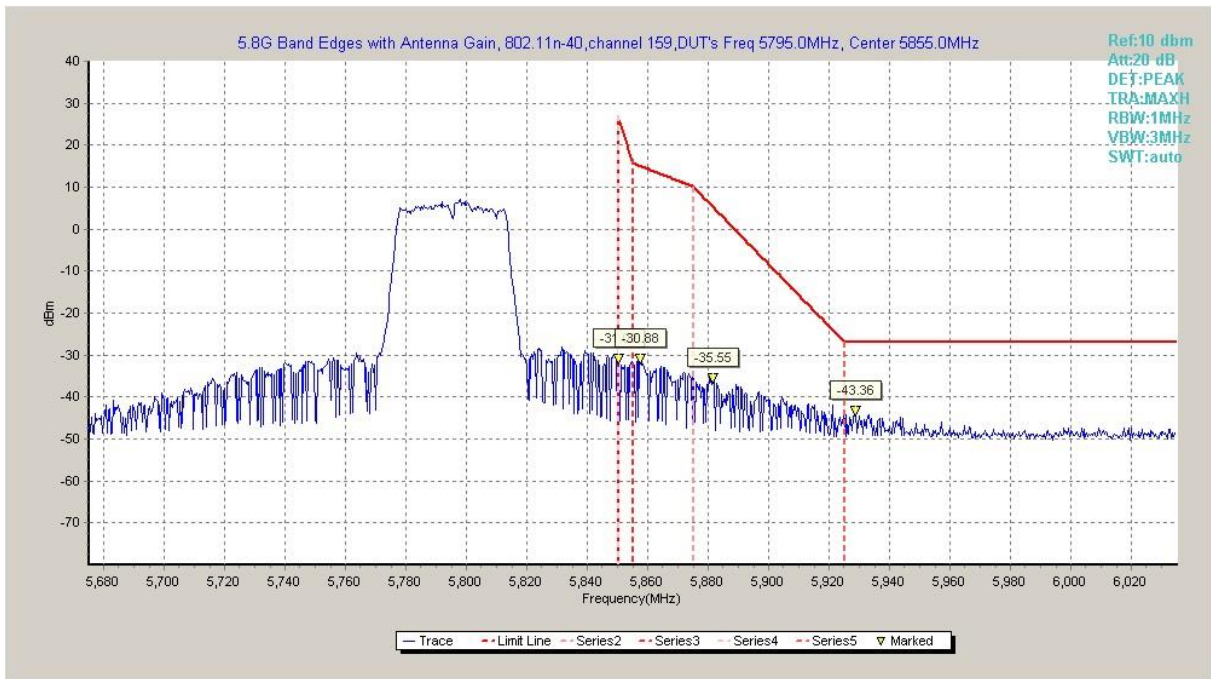


Fig. 78 Band Edges (802.11n-HT40, 5795MHz)

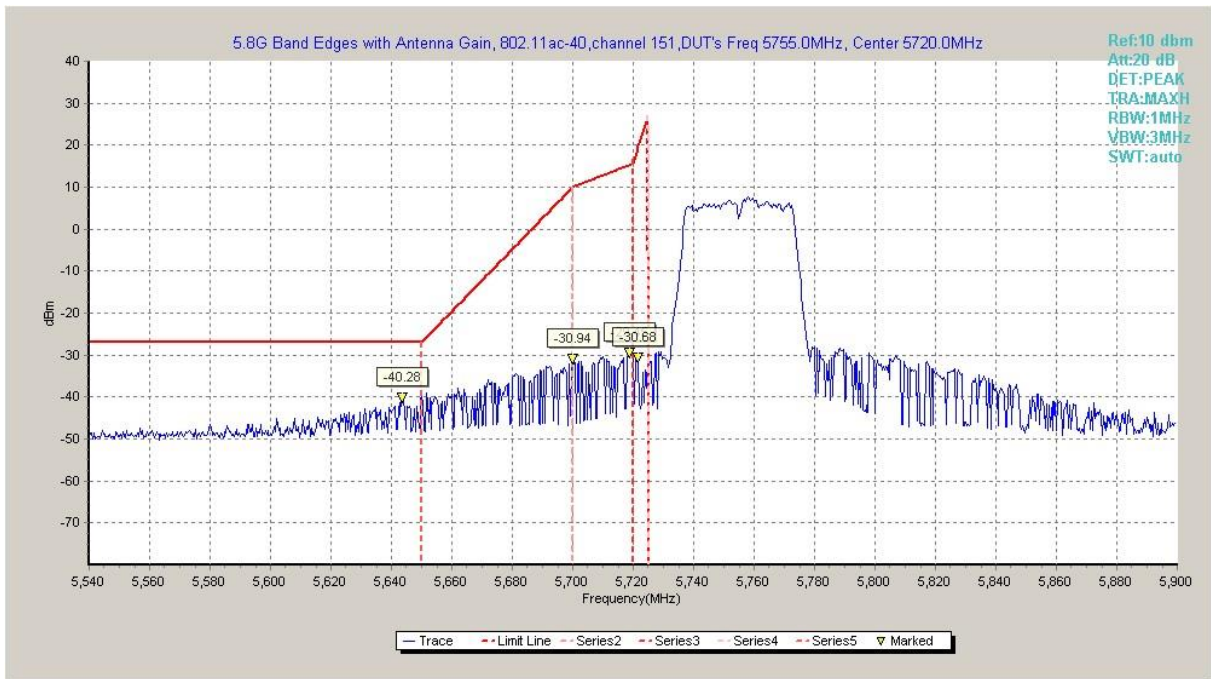


Fig. 79 Band Edges (802.11ac-HT40, 5755MHz)

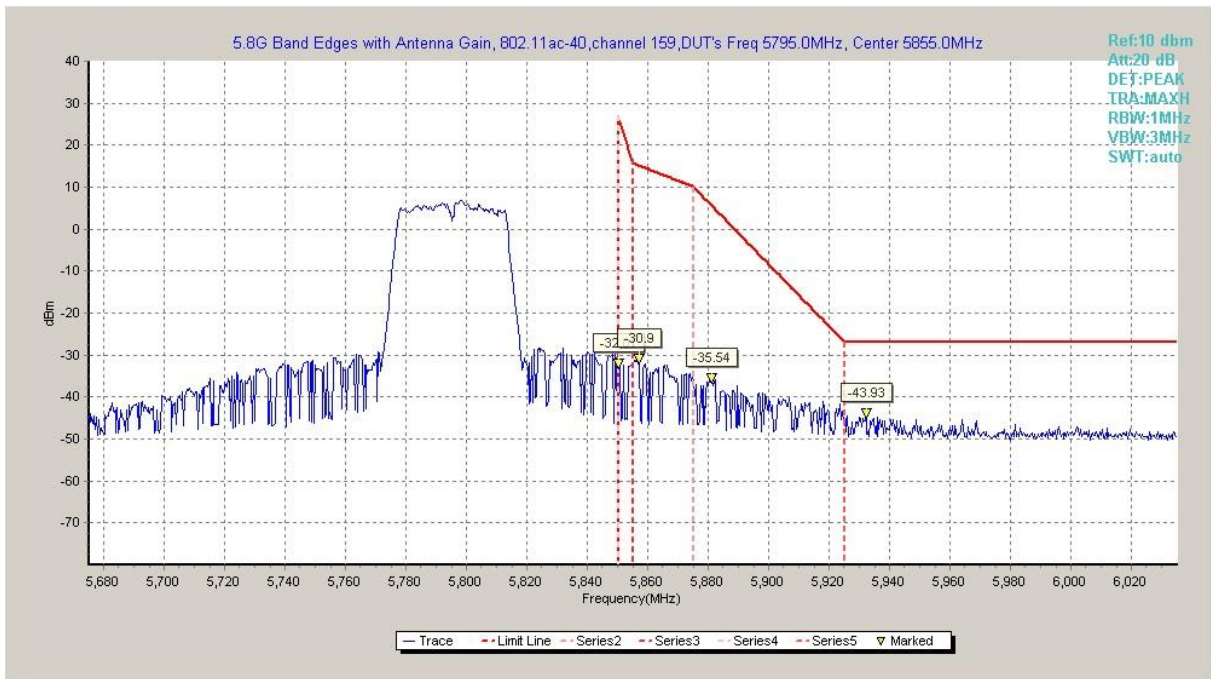


Fig. 80 Band Edges (802.11ac-HT40, 5795MHz)

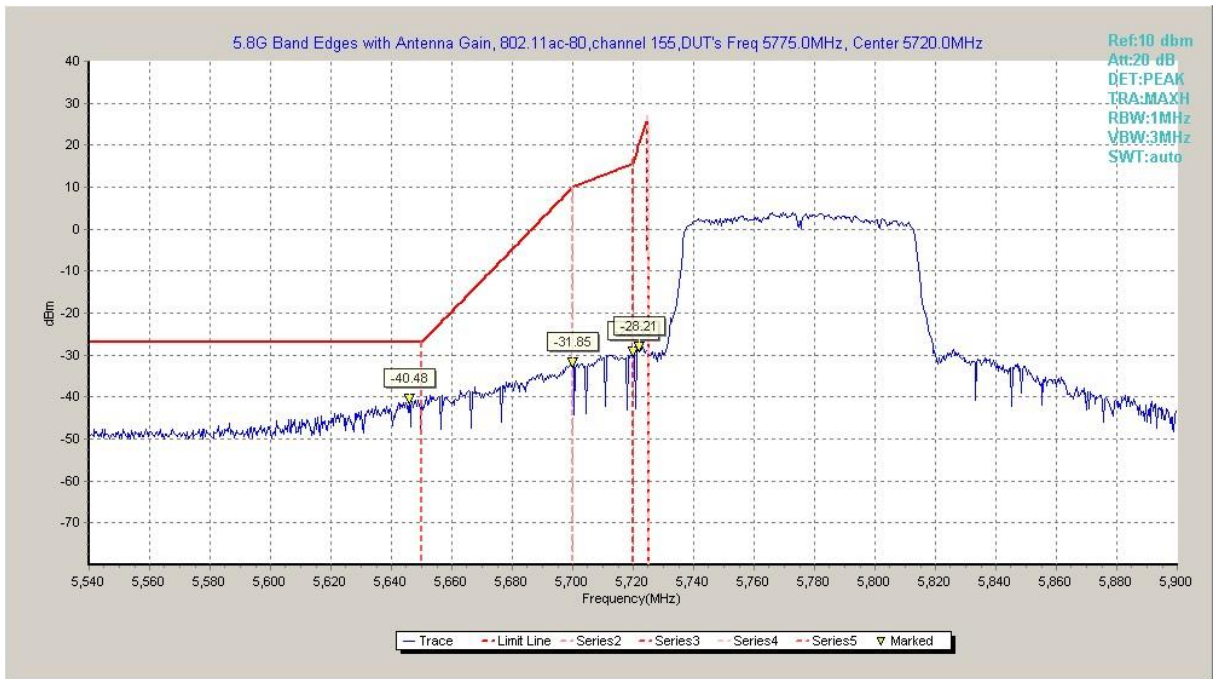


Fig. 81 Band Edges (802.11ac-HT80, 5775MHz)



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.	

Measurement Uncertainty:

Measurement Uncertainty	0.75dB
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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
802.11n HT40	5755 MHz	Fig.87	P
	5795 MHz	Fig.88	P
802.11ac HT20	5745 MHz	Fig.89	P
	5825 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

Conclusion: PASS

Test graphs as below:

RE - Power-5.650GHz-5.765GHz

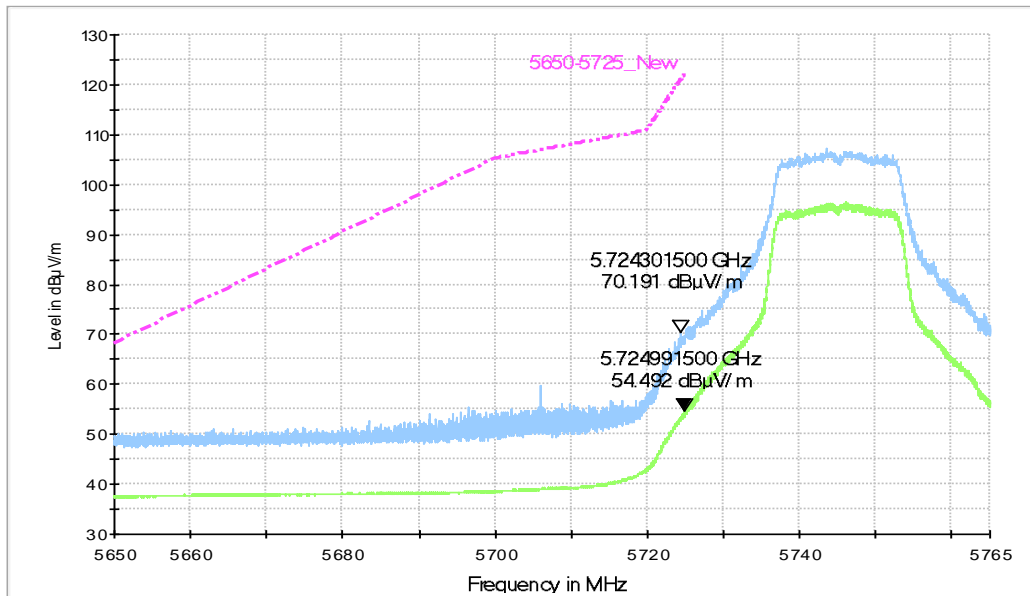


Fig. 83 Band Edges (802.11a, 5745MHz)

RE - Power-5.810GHz-5.925GHz

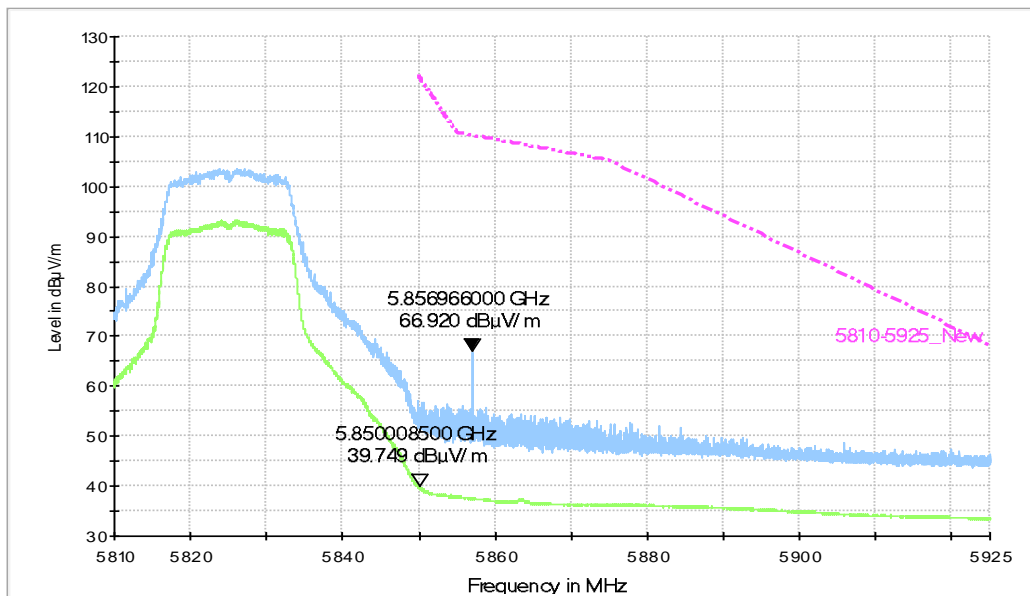


Fig. 84 Band Edges (802.11a, 5825MHz)

RE - Power-5.650GHz-5.765GHz

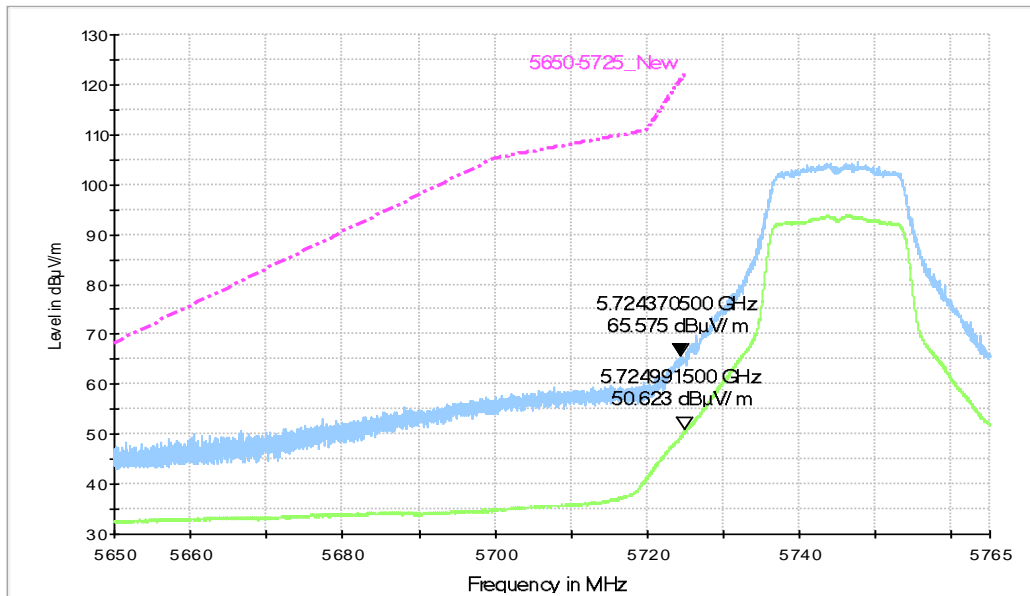


Fig. 85 Band Edges (802.11n-HT20, 5745MHz)

RE - Power-5.810GHz-5.925GHz

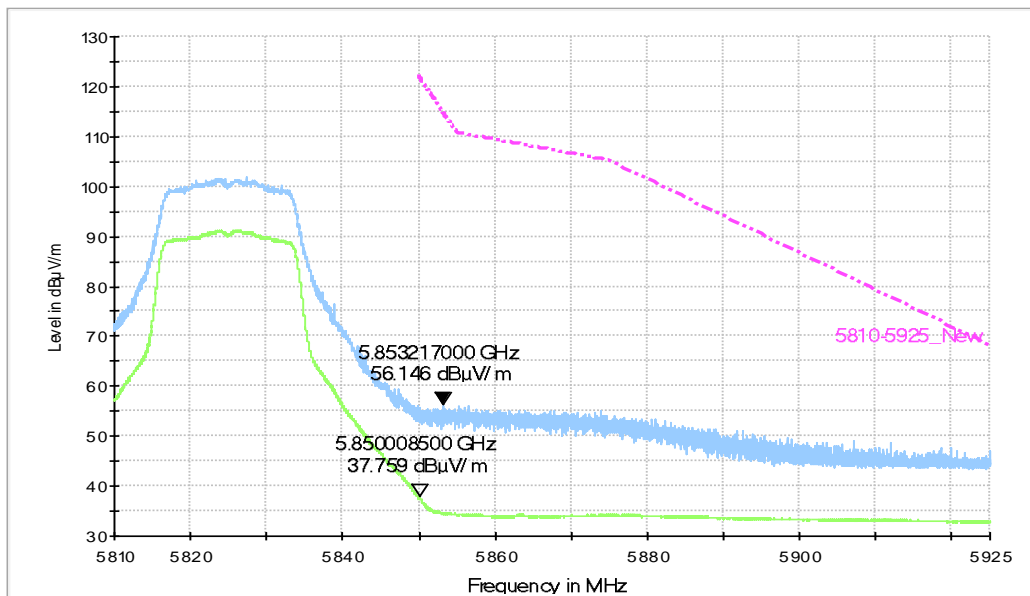


Fig. 86 Band Edges (802.11n-HT20, 5825MHz)

RE - Power-5.650GHz-5.765GHz

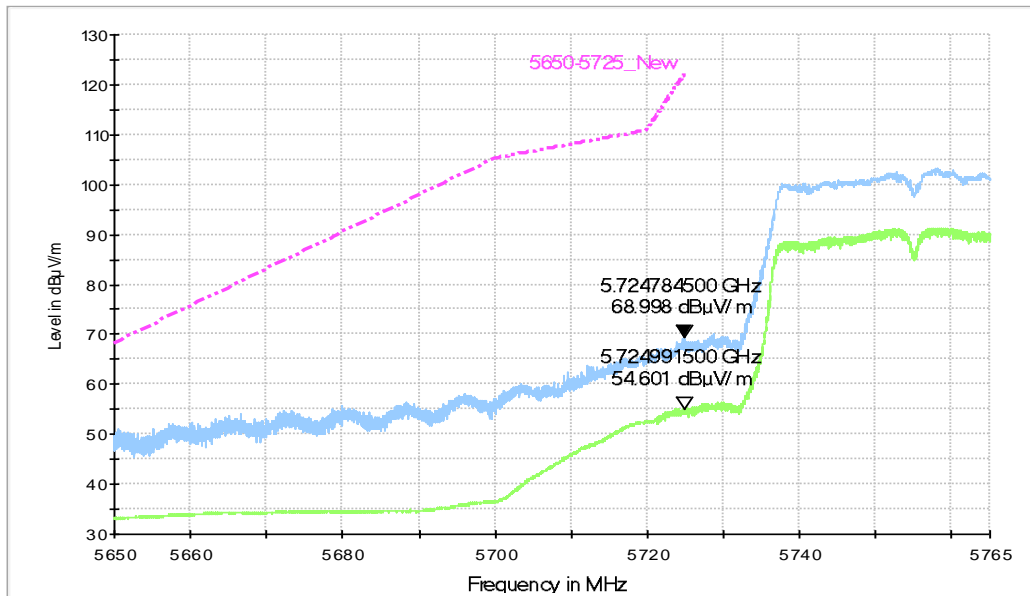


Fig. 87 Band Edges (802.11n-HT40, 5755MHz)

RE - Power-5.810GHz-5.925GHz

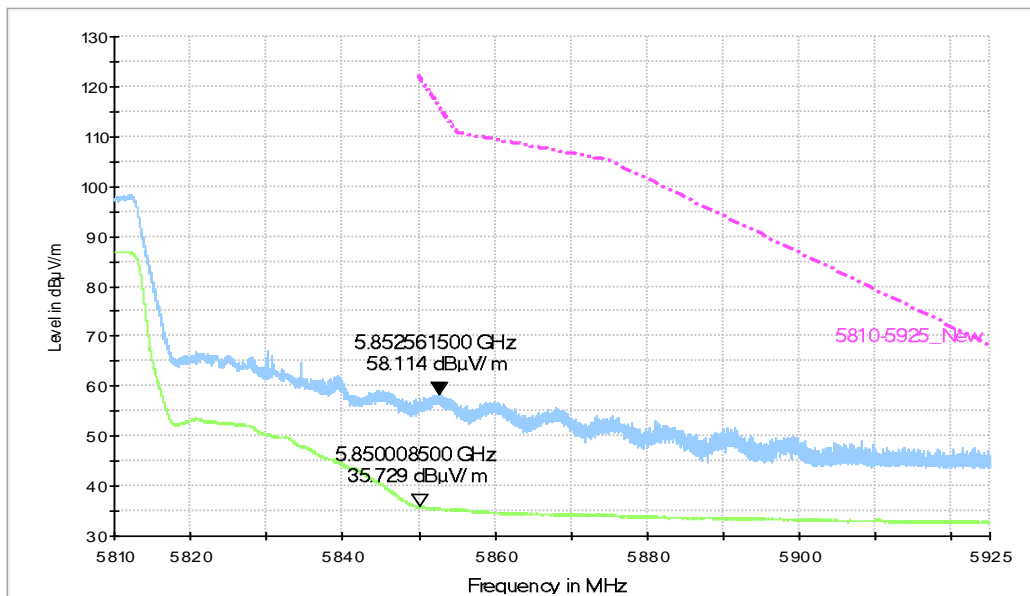


Fig. 88 Band Edges (802.11n-HT40, 5795MHz)

RE - Power-5.650GHz-5.765GHz

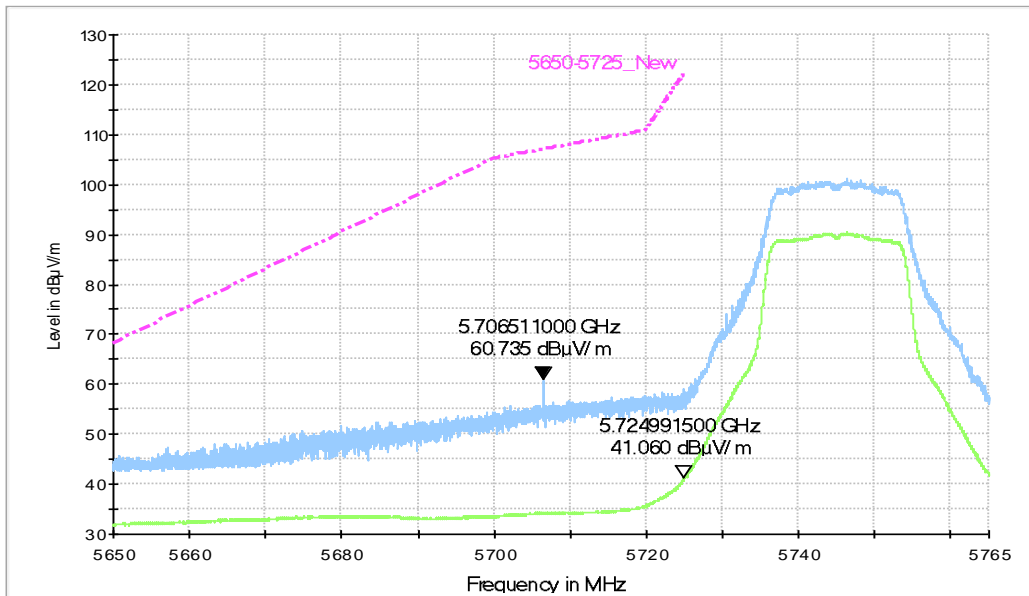


Fig. 89 Band Edges (802.11ac-HT20, 5745MHz)

RE - Power-5.810GHz-5.925GHz

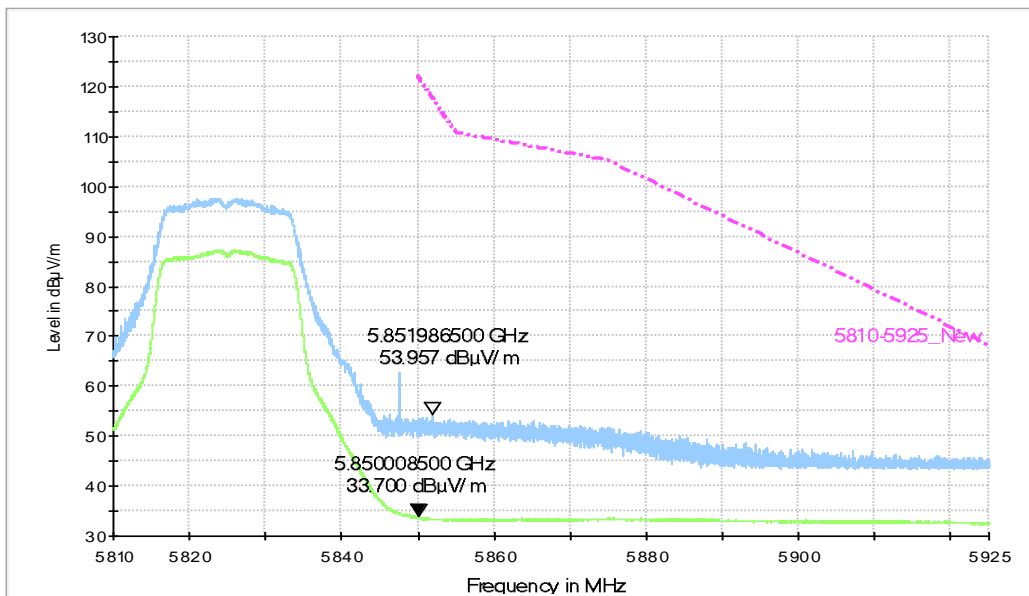


Fig. 90 Band Edges (802.11ac-HT20, 5825MHz)

RE - Power-5.650GHz-5.765GHz

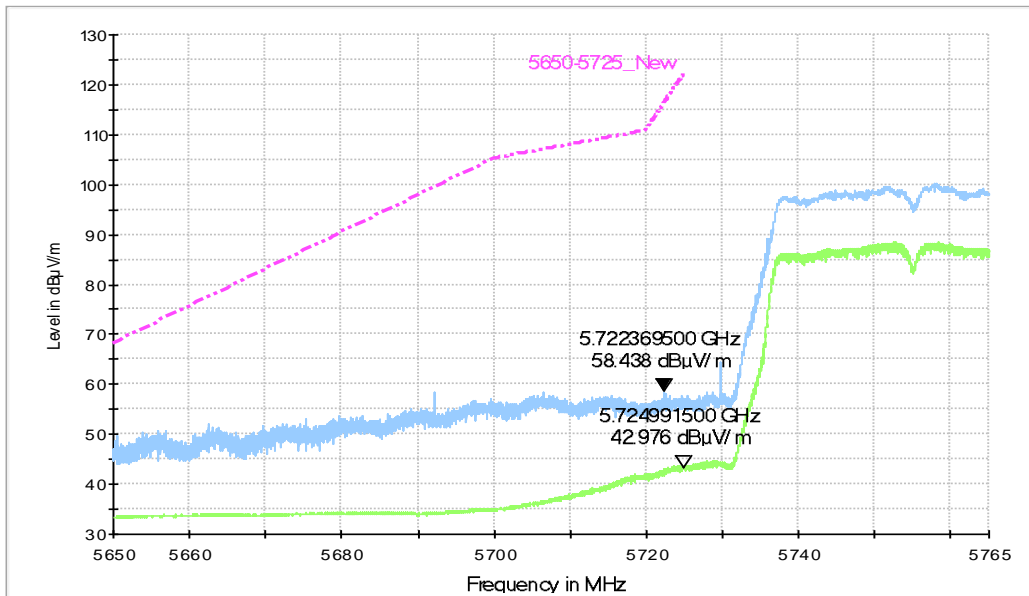


Fig. 91 Band Edges (802.11ac-HT40, 5755MHz)

RE - Power-5.810GHz-5.925GHz

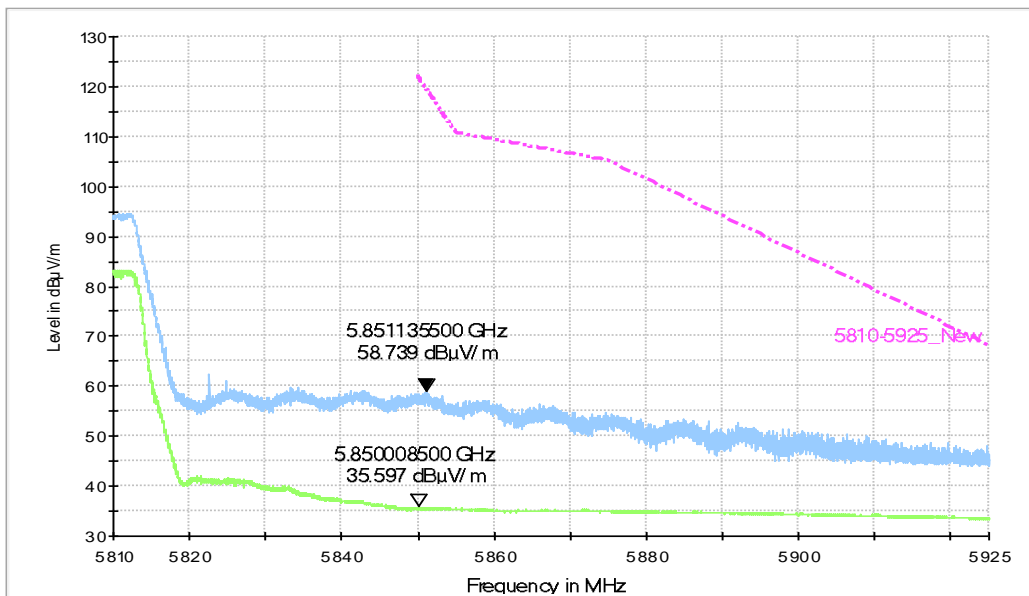


Fig. 92 Band Edges (802.11ac-HT40, 5795MHz)

RE - Power-5.650GHz-5.765GHz

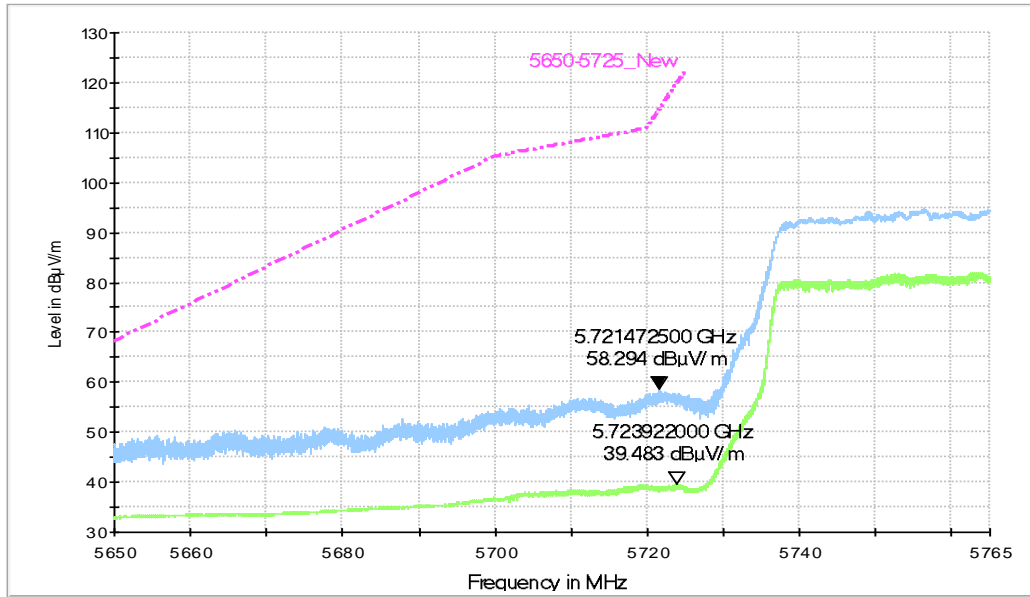


Fig. 93 Band Edges (802.11ac-HT80, 5775MHz)

A.7. AC Powerline Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)
110	60

Measurement uncertainty:

Expanded measurement uncertainty for this test item is $U = 3.2\text{dB}$, $k=2$.

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11a	Idle	
0.15 to 0.5	66 to 56	Fig.94	Fig.95	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 μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11a	Idle	
0.15 to 0.5	56 to 46	Fig.94	Fig.95	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:

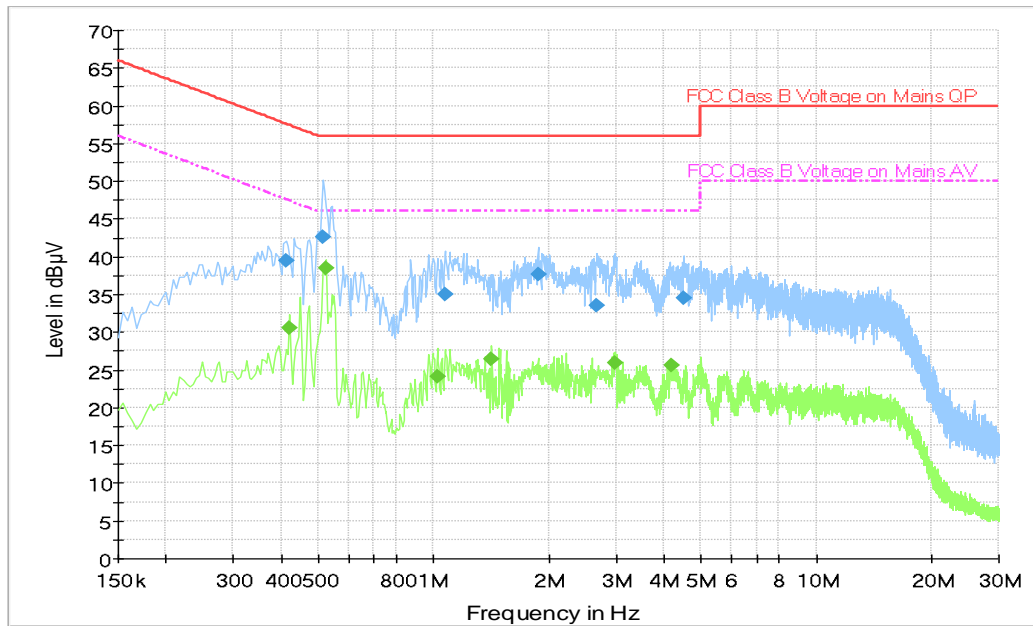


Fig. 94 AC Powerline Conducted Emission-802.11a

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.411000	39.5	2000.0	9.000	On	L1	19.9	18.2	57.6
0.514500	42.6	2000.0	9.000	On	L1	19.9	13.4	56.0
1.072500	35.1	2000.0	9.000	On	L1	19.6	20.9	56.0
1.878000	37.6	2000.0	9.000	On	L1	19.7	18.4	56.0
2.665500	33.5	2000.0	9.000	On	L1	19.7	22.5	56.0
4.501500	34.5	2000.0	9.000	On	L1	19.6	21.5	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.420000	30.5	2000.0	9.000	On	N	19.9	17.0	47.4
0.523500	38.5	2000.0	9.000	On	N	19.9	7.5	46.0
1.023000	24.1	2000.0	9.000	On	L1	19.6	21.9	46.0
1.419000	26.4	2000.0	9.000	On	N	19.6	19.6	46.0
2.994000	25.9	2000.0	9.000	On	L1	19.7	20.1	46.0
4.195500	25.6	2000.0	9.000	On	L1	19.6	20.4	46.0

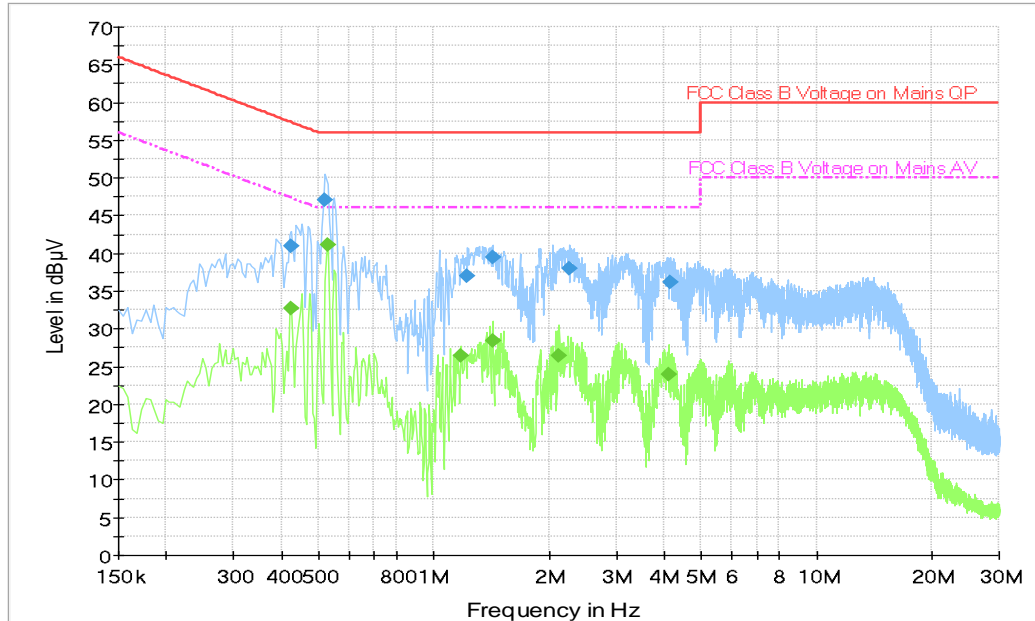


Fig. 95 AC Powerline Conducted Emission-Idle

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.424500	41.0	2000.0	9.000	On	L1	19.9	16.3	57.4
0.519000	47.1	2000.0	9.000	On	L1	19.9	8.9	56.0
1.225500	37.1	2000.0	9.000	On	L1	19.6	18.9	56.0
1.423500	39.4	2000.0	9.000	On	L1	19.6	16.6	56.0
2.265000	37.9	2000.0	9.000	On	L1	19.7	18.1	56.0
4.164000	36.2	2000.0	9.000	On	L1	19.6	19.8	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.424500	32.7	2000.0	9.000	On	L1	19.9	14.7	47.4
0.528000	41.1	2000.0	9.000	On	L1	19.9	4.9	46.0
1.180500	26.5	2000.0	9.000	On	L1	19.6	19.5	46.0
1.423500	28.4	2000.0	9.000	On	L1	19.6	17.6	46.0
2.130000	26.3	2000.0	9.000	On	L1	19.7	19.7	46.0
4.101000	23.9	2000.0	9.000	On	L1	19.6	22.1	46.0

ANNEX B: Accreditation Certificate

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 600118-0


Telecommunication Technology Labs, CAICT
Beijing
China

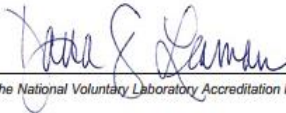
*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

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 Communique dated January 2009).*

2017-08-22 through 2018-09-30
Effective Dates




For the National Voluntary Laboratory Accreditation Program

*** END OF REPORT BODY ***