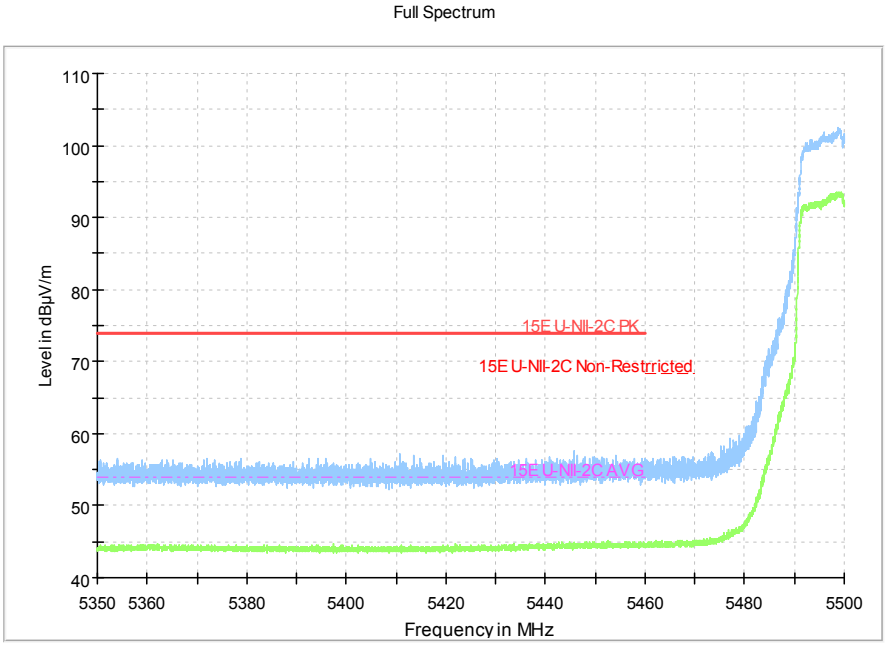

Fig.62 Band Edges (802.11ac-HT20, 5500MHz)

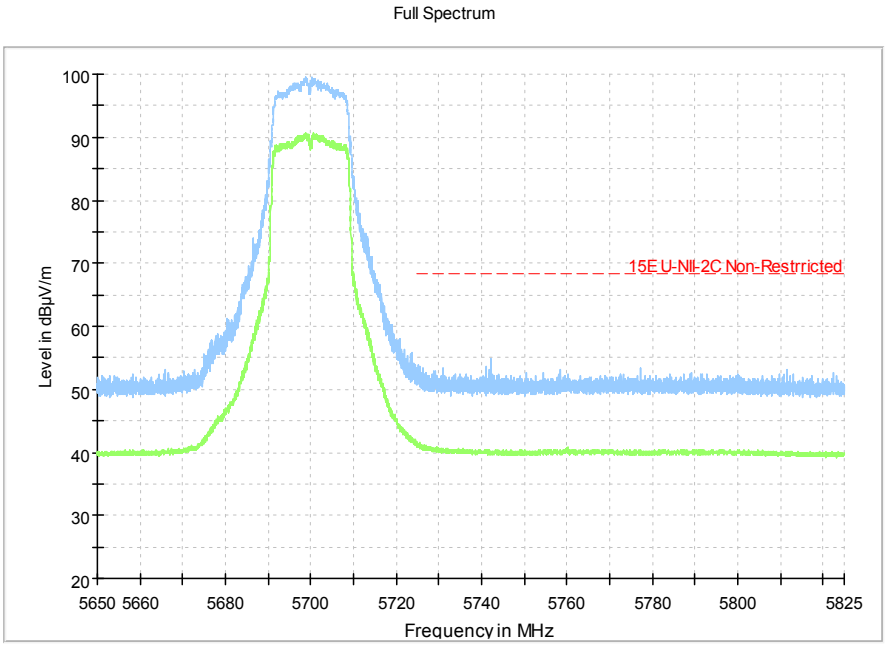

Fig.63 Band Edges (802.11ac-HT20, 5700MHz)

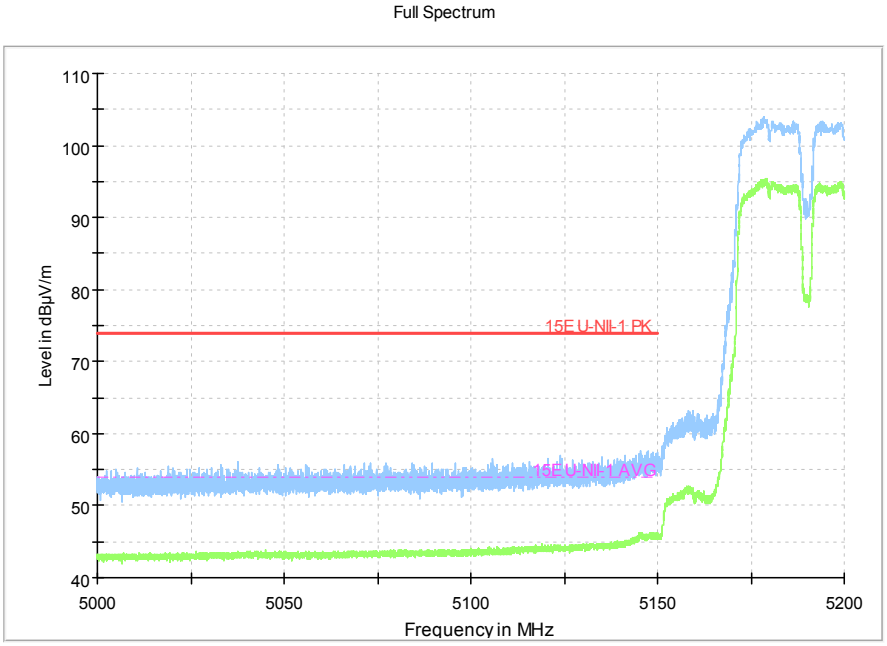

Fig.64 Band Edges (802.11n-HT40, 5190MHz)

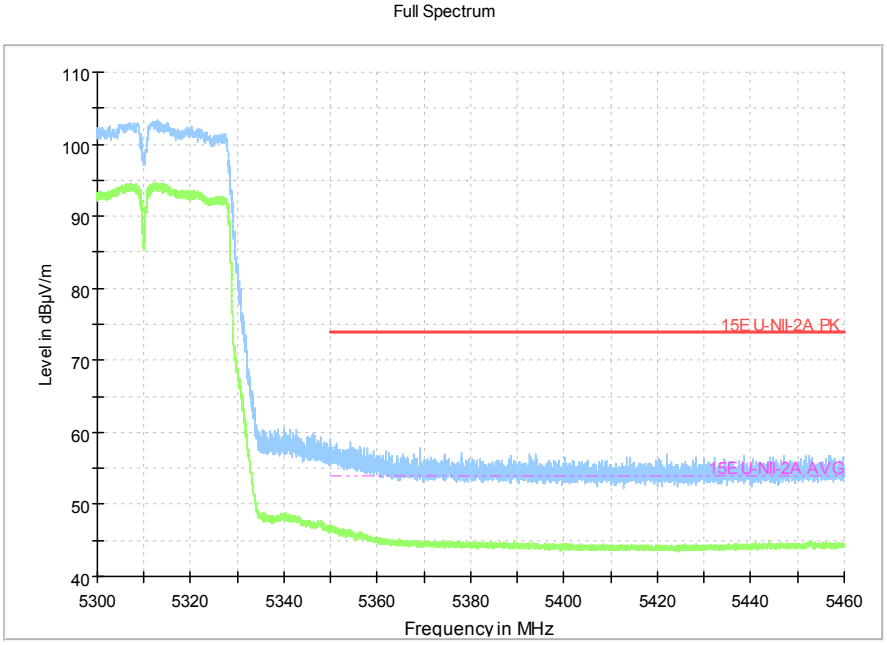

Fig.65 Band Edges (802.11n-HT40, 5310MHz)

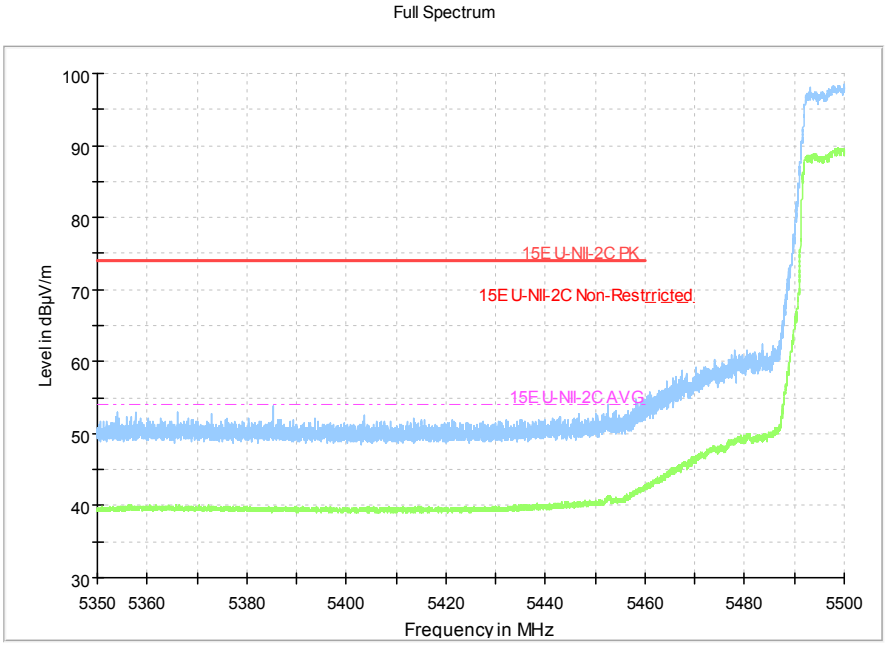

Fig.66 Band Edges (802.11n-HT40, 5510MHz)

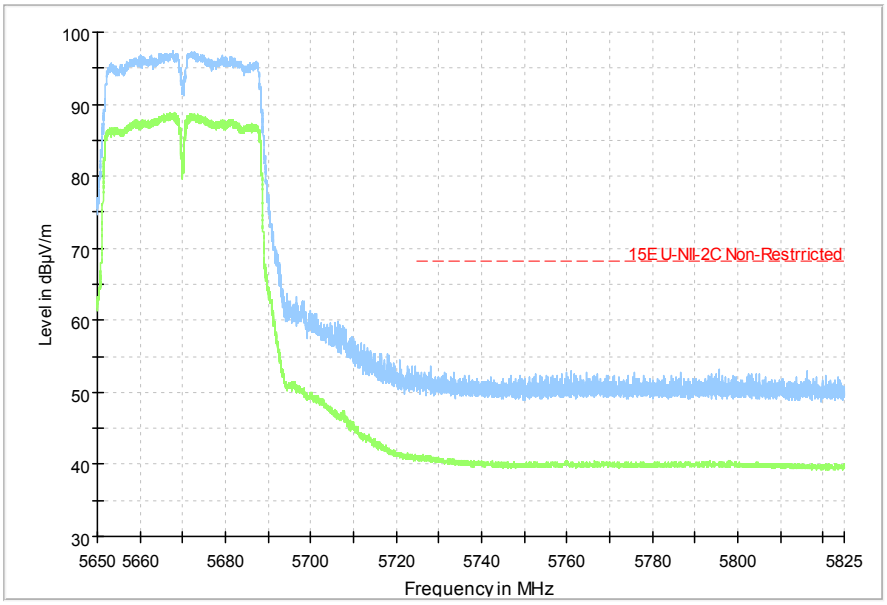

Fig.67 Band Edges (802.11n-HT40, 5670MHz)

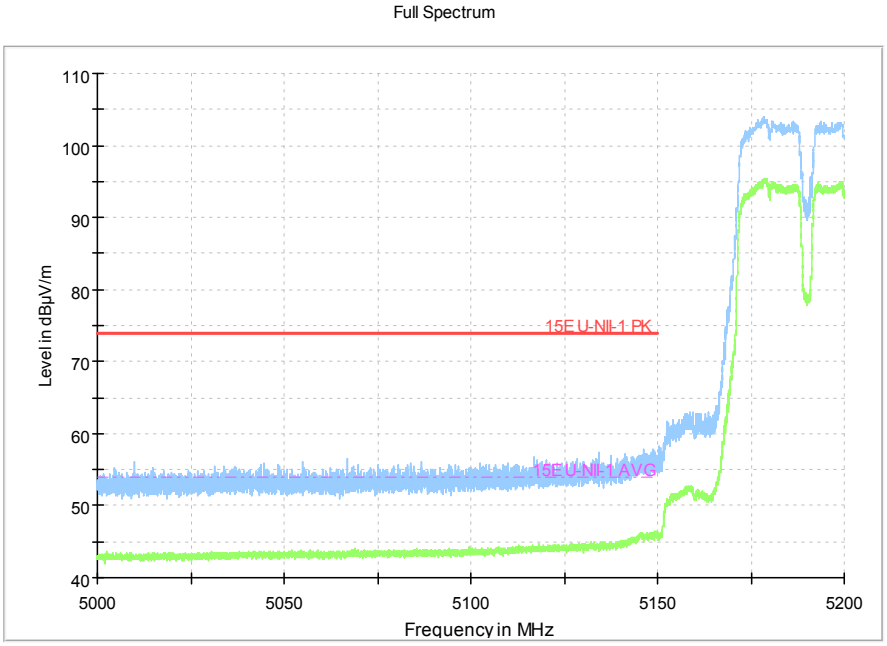

Fig.68 Band Edges (802.11ac-HT40, 5190MHz)

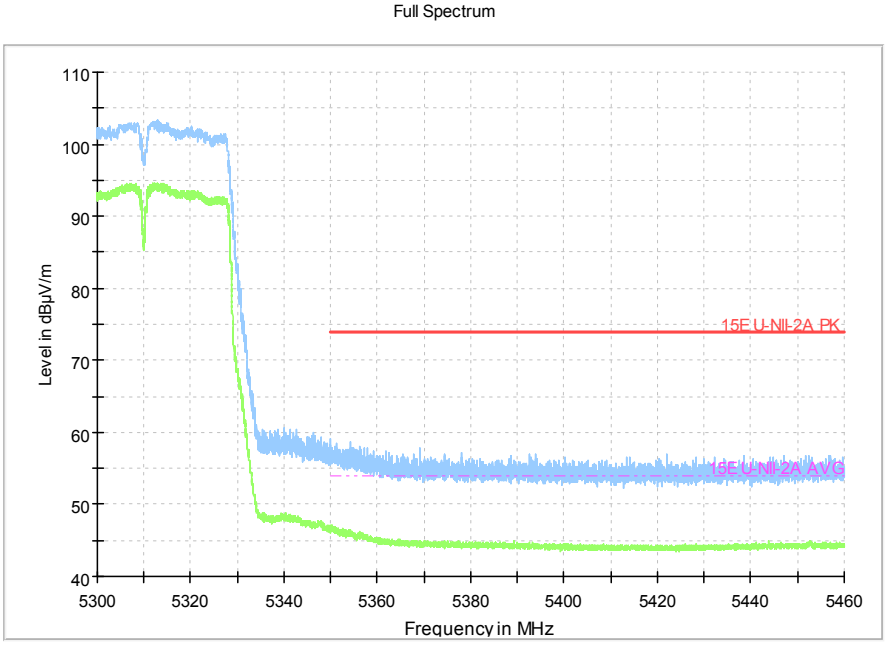

Fig.69 Band Edges (802.11ac-HT40, 5310MHz)

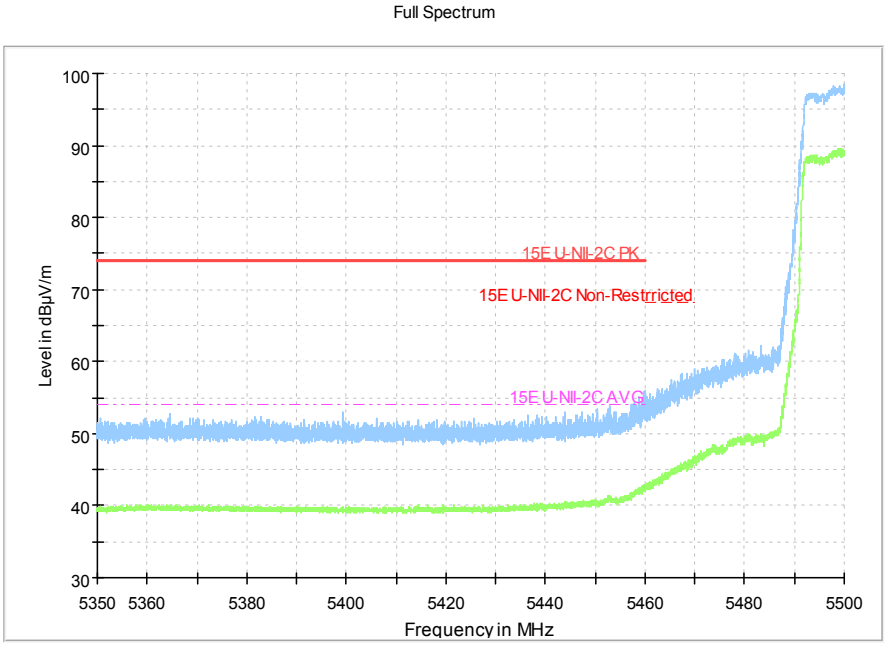

Fig.70 Band Edges (802.11ac-HT40, 5510MHz)

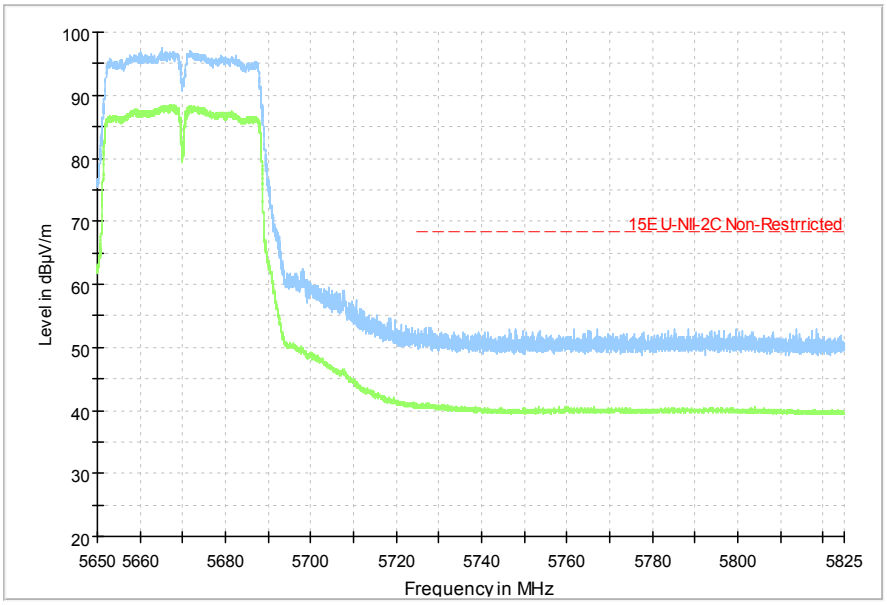

Fig.71 Band Edges (802.11ac-HT40, 5670MHz)

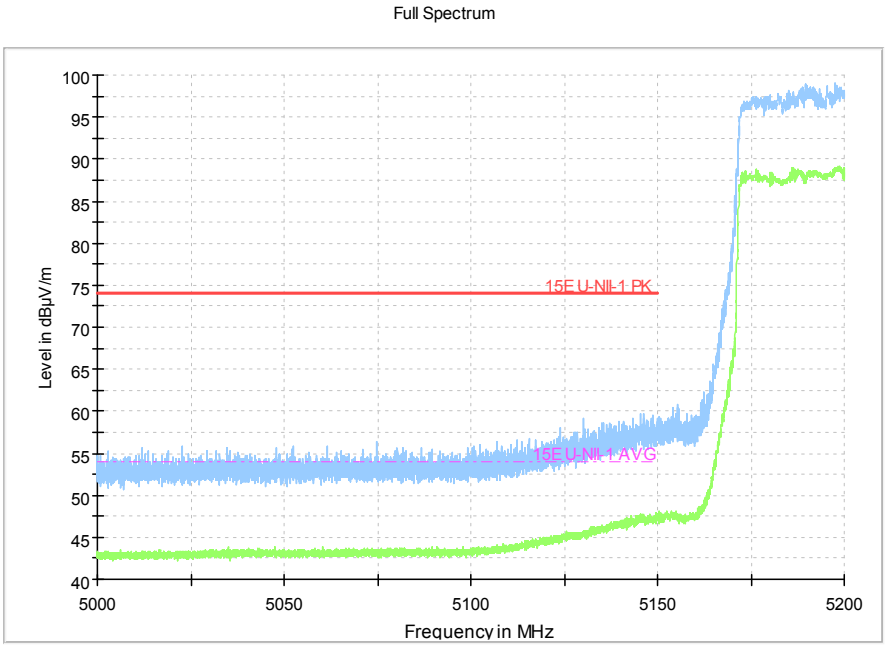

Fig.72 Band Edges (802.11ac-HT80, 5210MHz)

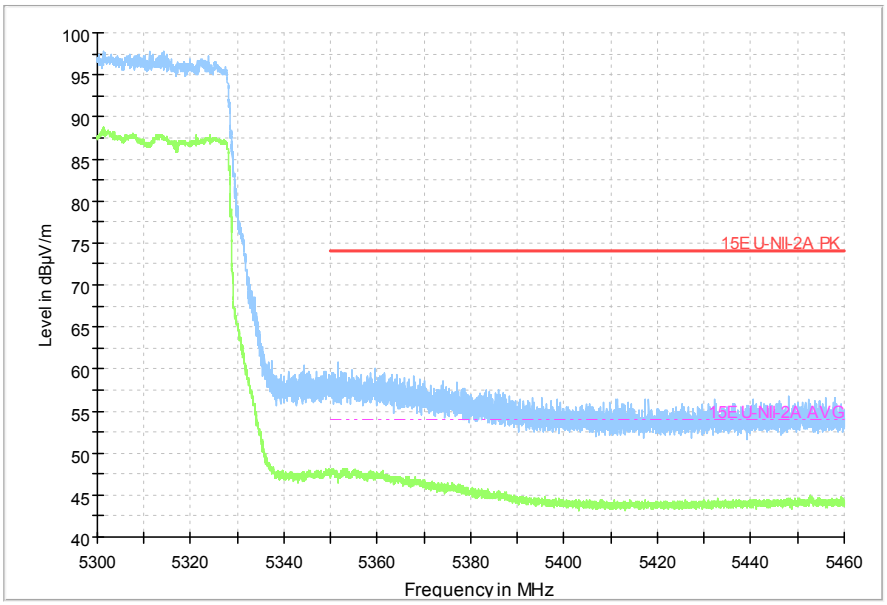

Fig.73 Band Edges (802.11ac-HT80, 5290MHz)

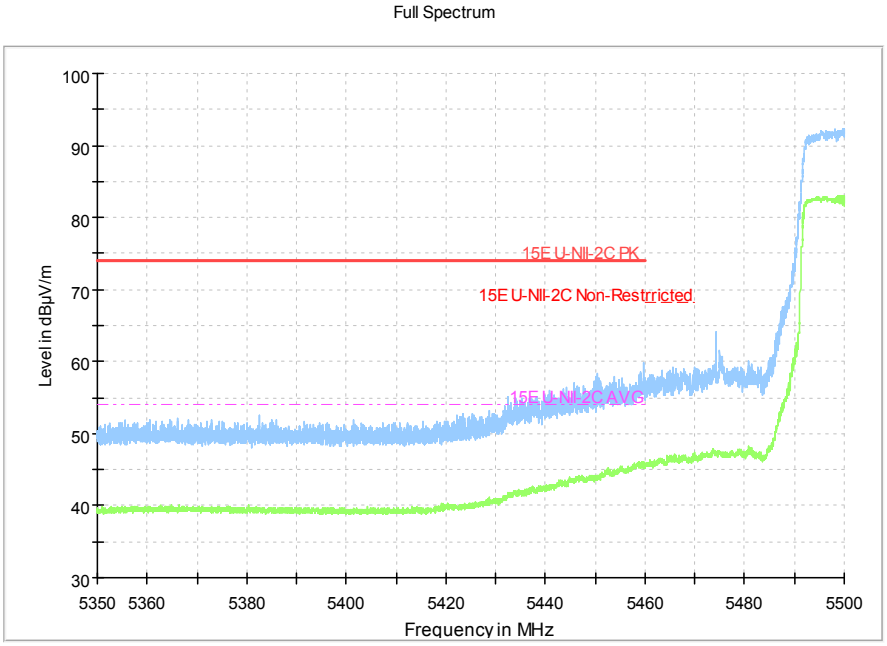

Fig.74 Band Edges (802.11ac-HT80, 5530MHz)

A.6. Transmitter Spurious Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407	-27 dBm/MHz

The measurement is made according to KDB 789033

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(dBμV/m)	Measurement distance(m)
30-88	40.0	3
88-216	43.5	3
216-960	46.0	3
Above 960	54.0	3

Note: for frequency range below 960MHz, the limit in 15.209 is defined in 10m test distance. The limit used above is calculated from 10m to 3m

Measurement Results:

Conclusion: PASS

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.

The measurement results are obtained as described below:

Result=P_{Mea}+$A_{Rpl=}$ P_{Mea}+Cable Loss+Antenna Factor

Peak

802.11a

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11a Channel 36							
17898.8	56.9	-25.5	46.7	35.7	V	74	17.1
17854.8	56.6	-25.5	46.7	35.4	V	74	17.4
17980.2	56.5	-25.5	46.7	35.3	H	74	17.5
17973.6	56.3	-25.5	46.7	35.1	H	74	17.7
17983.5	56.3	-25.5	46.7	35.1	V	74	17.7
5145.3	58	-17	33.7	41.3	H	74	16
802.11a Channel 40							
17947.2	57.5	-25.5	46.7	36.3	H	74	16.5
17940.6	57.1	-25.5	46.7	35.9	V	74	16.9
17969.2	56.7	-25.5	46.7	35.5	H	74	17.3
17946.1	56.6	-25.5	46.7	35.4	H	74	17.4
17981.3	56.6	-25.5	46.7	35.4	H	74	17.4
17939.5	56.4	-25.5	46.7	35.2	H	74	17.6
802.11a Channel 48							
17862.5	56.8	-25.5	46.7	35.6	H	74	17.2
17971.4	56.5	-25.5	46.7	35.3	H	74	17.5
17980.2	56.5	-25.5	46.7	35.3	H	74	17.5
17993.4	56.4	-25.5	46.7	35.2	V	74	17.6
17986.8	56.3	-25.5	46.7	35.1	V	74	17.7
17943.9	56.2	-25.5	46.7	35	V	74	17.8
802.11a Channel 52							
17965.9	57.4	-25.5	46.7	36.2	V	74	16.6
17953.8	57.2	-25.5	46.7	36	V	74	16.8
17964.8	57.1	-25.5	46.7	35.9	H	74	16.9
17993.4	56.9	-25.5	46.7	35.7	V	74	17.1
17973.6	56.6	-25.5	46.7	35.4	H	74	17.4
17892.2	56.4	-25.5	46.7	35.2	H	74	17.6
802.11a Channel 56							
17978	57.1	-25.5	46.7	35.9	V	74	16.9
17993.4	56.9	-25.5	46.7	35.7	H	74	17.1
17980.2	56.4	-25.5	46.7	35.2	V	74	17.6
17965.9	56.3	-25.5	46.7	35.1	V	74	17.7
17973.6	56.3	-25.5	46.7	35.1	H	74	17.7
17974.7	56.2	-25.5	46.7	35	H	74	17.8

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11a Channel 64							
17964.8	56.9	-25.5	46.7	35.7	H	74	17.1
17985.7	56.9	-25.5	46.7	35.7	H	74	17.1
17953.8	56.5	-25.5	46.7	35.3	V	74	17.5
17965.9	56.4	-25.5	46.7	35.2	V	74	17.6
17947.2	56.3	-25.5	46.7	35.1	H	74	17.7
5357.3	57.5	-16.9	34	40.4	H	74	16.5
802.11a Channel 100							
17981.3	57.2	-25.5	46.7	36	V	74	16.8
17946.1	56.8	-25.5	46.7	35.6	V	74	17.2
17913.1	56.7	-25.5	46.7	35.5	V	74	17.3
17974.7	56.5	-25.5	46.7	35.3	V	74	17.5
17949.4	56.4	-25.5	46.7	35.2	V	74	17.6
5456	56.9	-16.8	34.2	39.5	H	74	17.1
802.11a Channel 120							
17964.8	56.7	-25.5	46.7	35.5	H	74	17.3
17991.2	56.4	-25.5	46.7	35.2	V	74	17.6
17996.7	56.4	-25.5	46.7	35.2	V	74	17.6
17968.1	56.3	-25.5	46.7	35.1	H	74	17.7
17942.8	56.2	-25.5	46.7	35	H	74	17.8
17872.4	56.1	-25.5	46.7	34.9	H	74	17.9
802.11a Channel 140							
17849.3	57.3	-25.5	46.7	36.1	V	74	16.7
17993.4	56.9	-25.5	46.7	35.7	H	74	17.1
17965.9	56.8	-25.5	46.7	35.6	H	74	17.2
17986.8	56.8	-25.5	46.7	35.6	V	74	17.2
17983.5	56.7	-25.5	46.7	35.5	H	74	17.3
5737.6	52.9	-16.3	34.3	34.9	V	74	21.1
802.11a Channel 144							
17943.9	56.8	-25.5	46.7	35.6	V	74	17.2
17884.5	56.4	-25.5	46.7	35.2	V	74	17.6
17949.4	56.3	-25.5	46.7	35.1	V	74	17.7
17983.5	56.3	-25.5	46.7	35.1	H	74	17.7
17994.5	56.3	-25.5	46.7	35.1	V	74	17.7
17877.9	56.2	-25.5	46.7	35	H	74	17.8

802.11n-HT20

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11n Channel 36							
17964.8	57.7	-25.5	46.7	36.5	V	74	16.3
17939.5	56.9	-25.5	46.7	35.7	V	74	17.1
17967	56.7	-25.5	46.7	35.5	H	74	17.3
17844.9	56.4	-25.5	46.7	35.2	H	74	17.6
17898.8	56.4	-25.5	46.7	35.2	V	74	17.6
5145.6	58.4	-17	33.7	41.7	H	74	15.6
802.11n Channel 40							
17951.6	56.9	-25.5	46.7	35.7	H	74	17.1
17959.3	56.9	-25.5	46.7	35.7	V	74	17.1
17990.1	56.4	-25.5	46.7	35.2	V	74	17.6
17860.3	56.3	-25.5	46.7	35.1	H	74	17.7
17980.2	56.3	-25.5	46.7	35.1	V	74	17.7
17986.8	56.2	-25.5	46.7	35	V	74	17.8
802.11n Channel 48							
17960.4	57.1	-25.5	46.7	35.9	V	74	16.9
17965.9	56.8	-25.5	46.7	35.6	H	74	17.2
17976.9	56.5	-25.5	46.7	35.3	V	74	17.5
17971.4	56.4	-25.5	46.7	35.2	V	74	17.6
17973.6	56.4	-25.5	46.7	35.2	V	74	17.6
17986.8	56.4	-25.5	46.7	35.2	V	74	17.6
802.11n Channel 52							
17936.2	57	-25.5	46.7	35.8	H	74	17
17978	56.8	-25.5	46.7	35.6	H	74	17.2
17984.6	56.7	-25.5	46.7	35.5	V	74	17.3
17883.4	56.6	-25.5	46.7	35.4	H	74	17.4
17964.8	56.6	-25.5	46.7	35.4	V	74	17.4
17954.9	56.5	-25.5	46.7	35.3	V	74	17.5
802.11n Channel 56							
17875.7	56.5	-25.5	46.7	35.3	H	74	17.5
17983.5	56.5	-25.5	46.7	35.3	H	74	17.5
17864.7	56.4	-25.5	46.7	35.2	V	74	17.6
17991.2	56.4	-25.5	46.7	35.2	V	74	17.6
17984.6	56.3	-25.5	46.7	35.1	V	74	17.7
17995.6	56.3	-25.5	46.7	35.1	V	74	17.7

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11n Channel 64							
17976.9	57.3	-25.5	46.7	36.1	V	74	16.7
17969.2	57	-25.5	46.7	35.8	V	74	17
17996.7	56.7	-25.5	46.7	35.5	H	74	17.3
17975.8	56.5	-25.5	46.7	35.3	V	74	17.5
17983.5	56.4	-25.5	46.7	35.2	H	74	17.6
5364.3	57.7	-16.9	34	40.6	H	74	16.3
802.11n Channel 100							
17986.8	56.7	-25.5	46.7	35.5	H	74	17.3
17996.7	56.7	-25.5	46.7	35.5	V	74	17.3
17972.5	56.6	-25.5	46.7	35.4	H	74	17.4
17937.3	56.5	-25.5	46.7	35.3	H	74	17.5
17981.3	56.5	-25.5	46.7	35.3	V	74	17.5
5455.6	57.5	-16.8	34.2	40.1	H	74	16.5
802.11n Channel 120							
17990.1	56.8	-25.5	46.7	35.6	H	74	17.2
17886.7	56.7	-25.5	46.7	35.5	V	74	17.3
17972.5	56.5	-25.5	46.7	35.3	H	74	17.5
17959.3	56.4	-25.5	46.7	35.2	H	74	17.6
17978	56.4	-25.5	46.7	35.2	V	74	17.6
17904.3	56.3	-25.5	46.7	35.1	H	74	17.7
802.11n Channel 140							
17996.7	57.2	-25.5	46.7	36	V	74	16.8
17957.1	56.8	-25.5	46.7	35.6	H	74	17.2
17941.7	56.7	-25.5	46.7	35.5	V	74	17.3
17990.1	56.7	-25.5	46.7	35.5	H	74	17.3
17962.6	56.6	-25.5	46.7	35.4	V	74	17.4
5725.2	53.6	-16.3	34.3	35.6	H	74	20.4
802.11n Channel 144							
17994.5	57.2	-25.5	46.7	36	H	74	16.8
17956	56.8	-25.5	46.7	35.6	H	74	17.2
17973.6	56.8	-25.5	46.7	35.6	V	74	17.2
17872.4	56.7	-25.5	46.7	35.5	H	74	17.3
17996.7	56.7	-25.5	46.7	35.5	V	74	17.3
17952.7	56.6	-25.5	46.7	35.4	H	74	17.4

802.11ac-HT20

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11ac Channel 36							
17978	57.1	-25.5	46.7	35.9	H	74	16.9
17959.3	57	-25.5	46.7	35.8	H	74	17
17931.8	56.6	-25.5	46.7	35.4	H	74	17.4
17968.1	56.5	-25.5	46.7	35.3	V	74	17.5
17989	56.5	-25.5	46.7	35.3	V	74	17.5
5136.8	57.5	-17	33.7	40.8	H	74	16.5
802.11ac Channel 40							
17962.6	57.4	-25.5	46.7	36.2	V	74	16.6
17951.6	56.8	-25.5	46.7	35.6	H	74	17.2
17927.4	56.6	-25.5	46.7	35.4	H	74	17.4
17975.8	56.5	-25.5	46.7	35.3	H	74	17.5
17864.7	56.4	-25.5	46.7	35.2	H	74	17.6
17848.2	56.2	-25.5	46.7	35	H	74	17.8
802.11ac Channel 48							
17986.8	56.8	-25.5	46.7	35.6	H	74	17.2
17952.7	56.7	-25.5	46.7	35.5	V	74	17.3
17846	56.5	-25.5	46.7	35.3	H	74	17.5
17992.3	56.5	-25.5	46.7	35.3	H	74	17.5
17943.9	56.4	-25.5	46.7	35.2	V	74	17.6
17976.9	56.4	-25.5	46.7	35.2	H	74	17.6
802.11ac Channel 52							
17984.6	57.6	-25.5	46.7	36.4	V	74	16.4
17939.5	57.1	-25.5	46.7	35.9	V	74	16.9
17886.7	56.8	-25.5	46.7	35.6	H	74	17.2
17943.9	56.8	-25.5	46.7	35.6	V	74	17.2
17904.3	56.7	-25.5	46.7	35.5	H	74	17.3
17983.5	56.6	-25.5	46.7	35.4	V	74	17.4
802.11ac Channel 56							
17976.9	56.8	-25.5	46.7	35.6	H	74	17.2
17981.3	56.8	-25.5	46.7	35.6	V	74	17.2
17973.6	56.5	-25.5	46.7	35.3	V	74	17.5
17995.6	56.5	-25.5	46.7	35.3	H	74	17.5
17965.9	56.4	-25.5	46.7	35.2	H	74	17.6
17553.4	56.3	-26.9	45.2	37.9	H	74	17.7

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11ac Channel 64							
17982.4	57.4	-25.5	46.7	36.2	H	74	16.6
17979.1	56.9	-25.5	46.7	35.7	H	74	17.1
17953.8	56.7	-25.5	46.7	35.5	V	74	17.3
17893.3	56.5	-25.5	46.7	35.3	V	74	17.5
17892.2	56.4	-25.5	46.7	35.2	V	74	17.6
17963.7	56.4	-25.5	46.7	35.2	H	74	17.6
802.11ac Channel 100							
17992.3	57.5	-25.5	46.7	36.3	V	74	16.5
17982.4	56.4	-25.5	46.7	35.2	H	74	17.6
17985.7	56.4	-25.5	46.7	35.2	V	74	17.6
17996.7	56.3	-25.5	46.7	35.1	V	74	17.7
17946.1	56.2	-25.5	46.7	35	V	74	17.8
5454.2	57	-16.8	34.2	39.6	H	74	17
802.11ac Channel 120							
17954.9	56.8	-25.5	46.7	35.6	H	74	17.2
17976.9	56.6	-25.5	46.7	35.4	V	74	17.4
17968.1	56.5	-25.5	46.7	35.3	H	74	17.5
17985.7	56.5	-25.5	46.7	35.3	V	74	17.5
17952.7	56.4	-25.5	46.7	35.2	H	74	17.6
17982.4	56.4	-25.5	46.7	35.2	V	74	17.6
802.11ac Channel 140							
17945	57.1	-25.5	46.7	35.9	V	74	16.9
17981.3	56.9	-25.5	46.7	35.7	H	74	17.1
17946.1	56.8	-25.5	46.7	35.6	H	74	17.2
17937.3	56.3	-25.5	46.7	35.1	V	74	17.7
17895.5	56.2	-25.5	46.7	35	H	74	17.8
5742.2	54.9	-16.3	34.3	36.9	H	74	19.1
802.11ac Channel 144							
17881.2	56.9	-25.5	46.7	35.7	H	74	17.1
17981.3	56.7	-25.5	46.7	35.5	V	74	17.3
17951.6	56.5	-25.5	46.7	35.3	H	74	17.5
17985.7	56.5	-25.5	46.7	35.3	H	74	17.5
17840.5	56.4	-25.5	46.7	35.2	V	74	17.6
17926.3	56.4	-25.5	46.7	35.2	V	74	17.6

802.11n-HT40

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11n 40MHz Channel38							
17995.6	57.5	-25.5	46.7	36.3	V	74	16.5
17992.3	56.6	-25.5	46.7	35.4	V	74	17.4
17863.6	56.5	-25.5	46.7	35.3	H	74	17.5
17899.9	56.5	-25.5	46.7	35.3	H	74	17.5
17963.7	56.5	-25.5	46.7	35.3	V	74	17.5
5145.5	57.6	-17	33.7	40.9	H	74	16.4
802.11n 40MHz Channel46							
17953.8	57.4	-25.5	46.7	36.2	H	74	16.6
17996.7	57.3	-25.5	46.7	36.1	H	74	16.7
17952.7	56.7	-25.5	46.7	35.5	H	74	17.3
17942.8	56.6	-25.5	46.7	35.4	V	74	17.4
17960.4	56.5	-25.5	46.7	35.3	H	74	17.5
17978	56.5	-25.5	46.7	35.3	H	74	17.5
802.11n 40MHz Channel54							
17983.5	56.8	-25.5	46.7	35.6	V	74	17.2
17860.3	56.7	-25.5	46.7	35.5	V	74	17.3
17848.2	56.6	-25.5	46.7	35.4	V	74	17.4
17835	56.5	-25.5	46.7	35.3	V	74	17.5
17924.1	56.2	-25.5	46.7	35	V	74	17.8
17995.6	56.2	-25.5	46.7	35	V	74	17.8
802.11n 40MHz Channel62							
17972.5	56.9	-25.5	46.7	35.7	H	74	17.1
17959.3	56.6	-25.5	46.7	35.4	H	74	17.4
17981.3	56.5	-25.5	46.7	35.3	V	74	17.5
17983.5	56.5	-25.5	46.7	35.3	V	74	17.5
17939.5	56.4	-25.5	46.7	35.2	H	74	17.6
5354.6	65.1	-16.9	34	48	H	74	8.9
802.11n 40MHz Channel102							
17949.4	56.9	-25.5	46.7	35.7	V	74	17.1
17990.1	56.9	-25.5	46.7	35.7	H	74	17.1
17994.5	56.5	-25.5	46.7	35.3	V	74	17.5
17912	56.4	-25.5	46.7	35.2	V	74	17.6
17960.4	56.4	-25.5	46.7	35.2	V	74	17.6
5458	54.7	-16.8	34.2	37.3	H	74	19.3

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11n 40MHz Channel118							
17952.7	56.6	-25.5	46.7	35.4	H	74	17.4
17995.6	56.4	-25.5	46.7	35.2	V	74	17.6
17986.8	56.2	-25.5	46.7	35	V	74	17.8
17961.5	56.1	-25.5	46.7	34.9	V	74	17.9
17870.2	56	-25.5	46.7	34.8	H	74	18
17926.3	56	-25.5	46.7	34.8	H	74	18
802.11n 40MHz Channel134							
17982.4	57.5	-25.5	46.7	36.3	H	74	16.5
17992.3	57.2	-25.5	46.7	36	V	74	16.8
17941.7	56.5	-25.5	46.7	35.3	V	74	17.5
17973.6	56.5	-25.5	46.7	35.3	V	74	17.5
17971.4	56.4	-25.5	46.7	35.2	V	74	17.6
5728	53.6	-16.3	34.3	35.6	H	74	20.4
802.11n 40MHz Channel142							
17950.5	56.9	-25.5	46.7	35.7	H	74	17.1
17976.9	56.8	-25.5	46.7	35.6	V	74	17.2
17958.2	56.7	-25.5	46.7	35.5	H	74	17.3
17981.3	56.5	-25.5	46.7	35.3	V	74	17.5
17993.4	56.5	-25.5	46.7	35.3	H	74	17.5
17860.3	56.3	-25.5	46.7	35.1	H	74	17.7

802.11ac-HT40

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11ac 40M Channel:CH38							
17973.6	56.6	-25.5	46.7	35.4	V	74	17.4
17997.8	56.6	-25.5	46.7	35.4	H	74	17.4
17986.8	56.4	-25.5	46.7	35.2	H	74	17.6
17995.6	56.4	-25.5	46.7	35.2	H	74	17.6
17942.8	56.3	-25.5	46.7	35.1	V	74	17.7
5146.2	57.9	-17	33.7	41.2	H	74	16.1
802.11ac 40M Channel:CH46							
17938.4	57.3	-25.5	46.7	36.1	H	74	16.7
17989	57	-25.5	46.7	35.8	V	74	17
17940.6	56.7	-25.5	46.7	35.5	V	74	17.3
17949.4	56.6	-25.5	46.7	35.4	H	74	17.4
17991.2	56.4	-25.5	46.7	35.2	V	74	17.6
17495.1	56.3	-26.9	45.2	37.9	V	74	17.7
802.11ac 40M Channel:CH54							
17997.8	56.8	-25.5	46.7	35.6	V	74	17.2
17958.2	56.6	-25.5	46.7	35.4	V	74	17.4
17951.6	56.5	-25.5	46.7	35.3	H	74	17.5
17954.9	56.5	-25.5	46.7	35.3	H	74	17.5
17985.7	56.5	-25.5	46.7	35.3	V	74	17.5
17978	56.4	-25.5	46.7	35.2	H	74	17.6
802.11ac 40M Channel:CH62							
17972.5	56.9	-25.5	46.7	35.7	V	74	17.1
17981.3	56.7	-25.5	46.7	35.5	V	74	17.3
17970.3	56.6	-25.5	46.7	35.4	H	74	17.4
17895.5	56.5	-25.5	46.7	35.3	V	74	17.5
17980.2	56.5	-25.5	46.7	35.3	V	74	17.5
5354.3	58.7	-16.9	34	41.6	H	74	15.3
802.11ac 40M Channel:CH102							
17960.4	57.3	-25.5	46.7	36.1	H	74	16.7
17987.9	56.8	-25.5	46.7	35.6	H	74	17.2
17947.2	56.6	-25.5	46.7	35.4	H	74	17.4
17986.8	56.6	-25.5	46.7	35.4	V	74	17.4
17962.6	56.4	-25.5	46.7	35.2	H	74	17.6
5459.6	55.7	-16.8	34.2	38.3	H	74	18.3

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11ac 40M Channel:CH118							
17984.6	57.3	-25.5	46.7	36.1	V	74	16.7
17886.7	56.9	-25.5	46.7	35.7	H	74	17.1
17964.8	56.9	-25.5	46.7	35.7	H	74	17.1
17887.8	56.8	-25.5	46.7	35.6	V	74	17.2
17968.1	56.8	-25.5	46.7	35.6	H	74	17.2
17931.8	56.5	-25.5	46.7	35.3	H	74	17.5
802.11ac 40M Channel:CH134							
17854.8	56.8	-25.5	46.7	35.6	V	74	17.2
17962.6	56.6	-25.5	46.7	35.4	V	74	17.4
17904.3	56.3	-25.5	46.7	35.1	H	74	17.7
17940.6	56.3	-25.5	46.7	35.1	H	74	17.7
17890	56.2	-25.5	46.7	35	V	74	17.8
5726.9	53.1	-16.3	34.3	35.1	H	74	20.9
802.11ac 40M Channel:CH142							
17950.5	56.9	-25.5	46.7	35.7	H	74	17.1
17976.9	56.8	-25.5	46.7	35.6	V	74	17.2
17958.2	56.7	-25.5	46.7	35.5	H	74	17.3
17981.3	56.5	-25.5	46.7	35.3	V	74	17.5
17993.4	56.5	-25.5	46.7	35.3	H	74	17.5
17860.3	56.3	-25.5	46.7	35.1	H	74	17.7

802.11ac-HT80

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11ac 80M Channel:CH42							
17989	57.5	-25.5	46.7	36.3	H	74	16.5
17945	57.4	-25.5	46.7	36.2	V	74	16.6
17992.3	57	-25.5	46.7	35.8	V	74	17
17978	56.9	-25.5	46.7	35.7	H	74	17.1
17956	56.8	-25.5	46.7	35.6	H	74	17.2
5146.4	59.7	-17	33.7	43	H	74	14.3
802.11ac 80M Channel:CH58							
17972.5	56.6	-25.5	46.7	35.4	V	74	17.4
17983.5	56.5	-25.5	46.7	35.3	H	74	17.5
17951.6	56.3	-25.5	46.7	35.1	V	74	17.7
17962.6	56.3	-25.5	46.7	35.1	H	74	17.7
17641.4	56.2	-25.7	46	36	H	74	17.8
5351.6	60.7	-16.9	34	43.6	H	74	13.3
802.11ac 80M Channel:CH106							
17994.5	57	-25.5	46.7	35.8	H	74	17
17957.1	56.8	-25.5	46.7	35.6	V	74	17.2
17951.6	56.4	-25.5	46.7	35.2	V	74	17.6
17996.7	56.4	-25.5	46.7	35.2	V	74	17.6
17985.7	56.3	-25.5	46.7	35.1	H	74	17.7
5459.8	59.8	-16.8	34.2	42.4	H	74	14.2
802.11ac 80M Channel:CH138							
17958.2	57.4	-25.5	46.7	36.2	V	74	16.6
17979.1	57.4	-25.5	46.7	36.2	H	74	16.6
17997.8	57	-25.5	46.7	35.8	V	74	17
17962.6	56.5	-25.5	46.7	35.3	H	74	17.5
17960.4	56.4	-25.5	46.7	35.2	V	74	17.6
17965.9	56.4	-25.5	46.7	35.2	H	74	17.6

Average

802.11a

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11a Channel:CH36							
17954.9	45.1	-25.5	46.7	23.9	V	54	8.9
17963.7	45.1	-25.5	46.7	23.9	H	54	8.9
17960.4	45	-25.5	46.7	23.8	V	54	9
17972.5	45	-25.5	46.7	23.8	H	54	9
17978	45	-25.5	46.7	23.8	V	54	9
5145.5	45.4	-17	33.7	28.7	H	54	8.6
802.11a Channel:CH40							
17991.2	45.4	-25.5	46.7	24.2	H	54	8.6
17939.5	45.2	-25.5	46.7	24	H	54	8.8
17987.9	45.2	-25.5	46.7	24	H	54	8.8
17950.5	45.1	-25.5	46.7	23.9	H	54	8.9
17963.7	45	-25.5	46.7	23.8	H	54	9
17964.8	45	-25.5	46.7	23.8	H	54	9
802.11a Channel:CH48							
17971.4	45.2	-25.5	46.7	24	H	54	8.8
17951.6	45.1	-25.5	46.7	23.9	H	54	8.9
17978	45.1	-25.5	46.7	23.9	V	54	8.9
17957.1	45	-25.5	46.7	23.8	V	54	9
17987.9	45	-25.5	46.7	23.8	V	54	9
17994.5	45	-25.5	46.7	23.8	V	54	9
802.11a Channel:CH52							
17956	45.1	-25.5	46.7	23.9	V	54	8.9
17967	45.1	-25.5	46.7	23.9	H	54	8.9
17993.4	45.1	-25.5	46.7	23.9	V	54	8.9
17994.5	45.1	-25.5	46.7	23.9	H	54	8.9
17978	45	-25.5	46.7	23.8	H	54	9
17979.1	45	-25.5	46.7	23.8	V	54	9
802.11a Channel:CH56							
17981.3	45.1	-25.5	46.7	23.9	H	54	8.9
17996.7	45.1	-25.5	46.7	23.9	H	54	8.9
17979.1	45	-25.5	46.7	23.8	H	54	9
17982.4	45	-25.5	46.7	23.8	H	54	9
17983.5	45	-25.5	46.7	23.8	V	54	9
17989	45	-25.5	46.7	23.8	H	54	9

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11a Channel:CH64							
17958.2	45.1	-25.5	46.7	23.9	H	54	8.9
17959.3	45.1	-25.5	46.7	23.9	V	54	8.9
17986.8	45.1	-25.5	46.7	23.9	V	54	8.9
17963.7	45	-25.5	46.7	23.8	V	54	9
17965.9	45	-25.5	46.7	23.8	V	54	9
5356.7	45	-16.9	34	27.9	H	54	9
802.11a Channel:CH100							
17974.7	45.1	-25.5	46.7	23.9	V	54	8.9
17978	45.1	-25.5	46.7	23.9	V	54	8.9
17985.7	45	-25.5	46.7	23.8	V	54	9
17993.4	45	-25.5	46.7	23.8	H	54	9
17997.8	45	-25.5	46.7	23.8	H	54	9
17949.400	44.9	-25.5	43.4	27.002	H	54	9.1
802.11a Channel:CH120							
17951.6	45.2	-25.5	46.7	24	V	54	8.8
17961.5	45.1	-25.5	46.7	23.9	V	54	8.9
17980.2	45.1	-25.5	46.7	23.9	H	54	8.9
17936.2	45	-25.5	46.7	23.8	H	54	9
17959.3	45	-25.5	46.7	23.8	V	54	9
17986.8	45	-25.5	46.7	23.8	H	54	9
802.11a Channel:CH140							
17967	45	-25.5	46.7	23.8	H	54	9
17970.3	45	-25.5	46.7	23.8	H	54	9
17976.9	45	-25.5	46.7	23.8	V	54	9
17989	45	-25.5	46.7	23.8	V	54	9
17996.7	45	-25.5	46.7	23.8	V	54	9
17986.800	44.9	-25.5	43.4	27.002	H	54	9.1
802.11a Channel:CH144							
17960.4	45.2	-25.5	46.7	24	H	54	8.8
17962.6	45.1	-25.5	46.7	23.9	H	54	8.9
17975.8	45.1	-25.5	46.7	23.9	H	54	8.9
17990.1	45.1	-25.5	46.7	23.9	H	54	8.9
17970.3	45	-25.5	46.7	23.8	V	54	9
17995.6	45	-25.5	46.7	23.8	H	54	9

802.11n-HT20

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11n Channel:CH36							
17997.8	45.2	-25.5	46.7	24	H	54	8.8
17949.4	45.1	-25.5	46.7	23.9	H	54	8.9
17991.2	45.1	-25.5	46.7	23.9	V	54	8.9
17957.1	45	-25.5	46.7	23.8	H	54	9
17959.3	45	-25.5	46.7	23.8	V	54	9
5145.5	45.6	-17	33.7	28.9	H	54	8.4
802.11n Channel:CH40							
17961.5	45.1	-25.5	46.7	23.9	V	54	8.9
17937.3	45	-25.5	46.7	23.8	V	54	9
17979.1	45	-25.5	46.7	23.8	V	54	9
17985.7	45	-25.5	46.7	23.8	H	54	9
17986.8	45	-25.5	46.7	23.8	V	54	9
17991.2	45	-25.5	46.7	23.8	V	54	9
802.11n Channel:CH48							
17940.6	45	-25.5	46.7	23.8	V	54	9
17967	45	-25.5	46.7	23.8	H	54	9
17984.6	45	-25.5	46.7	23.8	V	54	9
17939.5	44.9	-25.5	46.7	23.7	H	54	9.1
17947.2	44.9	-25.5	46.7	23.7	H	54	9.1
17950.5	44.9	-25.5	46.7	23.7	V	54	9.1
802.11n Channel:CH52							
17994.5	45.3	-25.5	46.7	24.1	V	54	8.7
17953.8	45.1	-25.5	46.7	23.9	H	54	8.9
17981.3	45.1	-25.5	46.7	23.9	H	54	8.9
17957.1	45	-25.5	46.7	23.8	H	54	9
17983.5	45	-25.5	46.7	23.8	H	54	9
17984.6	45	-25.5	46.7	23.8	V	54	9
802.11n Channel:CH56							
17954.9	45	-25.5	46.7	23.8	V	54	9
17958.2	45	-25.5	46.7	23.8	H	54	9
17975.8	45	-25.5	46.7	23.8	H	54	9
17979.1	45	-25.5	46.7	23.8	V	54	9
17984.6	45	-25.5	46.7	23.8	V	54	9
17943.9	44.9	-25.5	46.7	23.7	V	54	9.1

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11n Channel:CH64							
17980.2	45.2	-25.5	46.7	24	H	54	8.8
17994.5	45.2	-25.5	46.7	24	H	54	8.8
17960.4	45	-25.5	46.7	23.8	H	54	9
17987.9	45	-25.5	46.7	23.8	V	54	9
17995.6	45	-25.5	46.7	23.8	V	54	9
5354	45.1	-16.9	34	28	H	54	8.9
802.11n Channel:CH100							
17960.4	45.1	-25.5	46.7	23.9	V	54	8.9
17983.5	45.1	-25.5	46.7	23.9	V	54	8.9
17937.3	45	-25.5	46.7	23.8	H	54	9
17950.5	45	-25.5	46.7	23.8	H	54	9
17956	45	-25.5	46.7	23.8	H	54	9
17984.600	45.0	-25.5	43.4	27.102	H	54	9
802.11n Channel:CH120							
17992.3	45	-25.5	46.7	23.8	V	54	9
17954.9	44.9	-25.5	46.7	23.7	V	54	9.1
17964.8	44.9	-25.5	46.7	23.7	V	54	9.1
17978	44.9	-25.5	46.7	23.7	V	54	9.1
17986.8	44.9	-25.5	46.7	23.7	H	54	9.1
17996.7	44.9	-25.5	46.7	23.7	V	54	9.1
802.11n Channel:CH1440							
17962.6	45.1	-25.5	46.7	23.9	V	54	8.9
17982.4	45.1	-25.5	46.7	23.9	V	54	8.9
17947.2	45	-25.5	46.7	23.8	H	54	9
17950.5	45	-25.5	46.7	23.8	H	54	9
17963.7	45	-25.5	46.7	23.8	H	54	9
17945.000	44.9	-25.5	43.4	27.002	H	54	9.1
802.11n Channel:CH144							
17953.8	45.1	-25.5	46.7	23.9	H	54	8.9
17976.9	45.1	-25.5	46.7	23.9	H	54	8.9
17990.1	45	-25.5	46.7	23.8	H	54	9
17954.9	44.9	-25.5	46.7	23.7	V	54	9.1
17956	44.9	-25.5	46.7	23.7	H	54	9.1
17978	44.9	-25.5	46.7	23.7	V	54	9.1

802.11n-HT40

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11n 40MHz Channel38							
17990.1	45.2	-25.5	46.7	24	V	54	8.8
17957.1	45.1	-25.5	46.7	23.9	V	54	8.9
17996.7	45.1	-25.5	46.7	23.9	V	54	8.9
17948.3	45	-25.5	46.7	23.8	H	54	9
17965.9	45	-25.5	46.7	23.8	H	54	9
5149.8	46.3	-17	33.7	29.6	H	54	7.7
802.11n 40MHz Channel46							
17979.1	45.2	-25.5	46.7	24	V	54	8.8
17996.7	45.2	-25.5	46.7	24	H	54	8.8
17939.5	45.1	-25.5	46.7	23.9	H	54	8.9
17995.6	45.1	-25.5	46.7	23.9	H	54	8.9
17997.8	45.1	-25.5	46.7	23.9	H	54	8.9
17978	45	-25.5	46.7	23.8	H	54	9
802.11n 40MHz Channel54							
17984.6	45	-25.5	46.7	23.8	V	54	9
17993.4	45	-25.5	46.7	23.8	V	54	9
17945	44.9	-25.5	46.7	23.7	H	54	9.1
17952.7	44.9	-25.5	46.7	23.7	H	54	9.1
17954.9	44.9	-25.5	46.7	23.7	H	54	9.1
17980.2	44.9	-25.5	46.7	23.7	V	54	9.1
802.11n 40MHz Channel62							
17963.7	45	-25.5	46.7	23.8	H	54	9
17994.5	45	-25.5	46.7	23.8	V	54	9
17952.7	44.9	-25.5	46.7	23.7	H	54	9.1
17956	44.9	-25.5	46.7	23.7	V	54	9.1
17958.2	44.9	-25.5	46.7	23.7	H	54	9.1
5350.4	46.2	-16.9	34	29.1	H	54	7.8
802.11n 40MHz Channel102							
17963.7	45.2	-25.5	46.7	24	H	54	8.8
17985.7	45.2	-25.5	46.7	24	H	54	8.8
17934	44.9	-25.5	46.7	23.7	V	54	9.1
17965.9	44.9	-25.5	46.7	23.7	H	54	9.1
17987.9	44.9	-25.5	46.7	23.7	H	54	9.1
17996.700	44.8	-25.5	43.4	26.902	H	54	9.2

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11n 40MHz Channel108							
17961.5	45.1	-25.5	46.7	23.9	V	54	8.9
17975.8	45.1	-25.5	46.7	23.9	H	54	8.9
17979.1	45.1	-25.5	46.7	23.9	H	54	8.9
17980.2	45.1	-25.5	46.7	23.9	V	54	8.9
17970.3	45	-25.5	46.7	23.8	V	54	9
17984.6	45	-25.5	46.7	23.8	V	54	9
802.11n 40MHz Channel134							
17991.2	45.1	-25.5	46.7	23.9	V	54	8.9
17961.5	45	-25.5	46.7	23.8	V	54	9
17969.2	45	-25.5	46.7	23.8	V	54	9
17975.8	45	-25.5	46.7	23.8	V	54	9
17987.9	45	-25.5	46.7	23.8	H	54	9
17997.800	44.9	-25.5	43.4	27.002	H	54	9.1
802.11n 40MHz Channel142							
17987.9	45.2	-25.5	46.7	24	H	54	8.8
17968.1	45.1	-25.5	46.7	23.9	V	54	8.9
17983.5	45.1	-25.5	46.7	23.9	H	54	8.9
17950.5	45	-25.5	46.7	23.8	H	54	9
17973.6	45	-25.5	46.7	23.8	H	54	9
17981.3	45	-25.5	46.7	23.8	V	54	9

802.11ac-VHT20

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11ac Channel 36							
17963.7	45.2	-25.5	46.7	24	H	54	8.8
17959.3	45	-25.5	46.7	23.8	H	54	9
17962.6	45	-25.5	46.7	23.8	V	54	9
17994.5	45	-25.5	46.7	23.8	H	54	9
17964.8	44.9	-25.5	46.7	23.7	H	54	9.1
5145.3	45.3	-17	33.7	28.6	H	54	8.7
802.11ac Channel 40							
17941.7	45	-25.5	46.7	23.8	H	54	9
17946.1	45	-25.5	46.7	23.8	V	54	9
17951.6	45	-25.5	46.7	23.8	H	54	9
17953.8	45	-25.5	46.7	23.8	H	54	9
17965.9	45	-25.5	46.7	23.8	H	54	9
17978	45	-25.5	46.7	23.8	H	54	9
802.11ac Channel 48							
17982.4	45.3	-25.5	46.7	24.1	V	54	8.7
17954.9	45	-25.5	46.7	23.8	V	54	9
17970.3	45	-25.5	46.7	23.8	V	54	9
17983.5	45	-25.5	46.7	23.8	V	54	9
17943.9	44.9	-25.5	46.7	23.7	V	54	9.1
17967	44.9	-25.5	46.7	23.7	H	54	9.1
802.11ac Channel 52							
17984.6	45	-25.5	46.7	23.8	V	54	9
17991.2	45	-25.5	46.7	23.8	V	54	9
17993.4	45	-25.5	46.7	23.8	H	54	9
17937.3	44.9	-25.5	46.7	23.7	V	54	9.1
17943.9	44.9	-25.5	46.7	23.7	V	54	9.1
17952.7	44.9	-25.5	46.7	23.7	H	54	9.1
802.11ac Channel 56							
17981.3	45.2	-25.5	46.7	24	V	54	8.8
17965.9	45.1	-25.5	46.7	23.9	H	54	8.9
17982.4	45.1	-25.5	46.7	23.9	V	54	8.9
17991.2	45.1	-25.5	46.7	23.9	V	54	8.9
17961.5	45	-25.5	46.7	23.8	H	54	9
17975.8	45	-25.5	46.7	23.8	H	54	9

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11ac Channel 64							
17986.8	45.3	-25.5	46.7	24.1	H	54	8.7
17963.7	45.1	-25.5	46.7	23.9	H	54	8.9
17979.1	45.1	-25.5	46.7	23.9	H	54	8.9
17982.4	45.1	-25.5	46.7	23.9	H	54	8.9
17961.5	44.9	-25.5	46.7	23.7	H	54	9.1
17965.9	44.9	-25.5	46.7	23.7	H	54	9.1
802.11ac Channel 100							
17952.7	45.2	-25.5	46.7	24	V	54	8.8
17948.3	45.1	-25.5	46.7	23.9	H	54	8.9
17956	45	-25.5	46.7	23.8	H	54	9
17959.3	45	-25.5	46.7	23.8	H	54	9
17974.7	45	-25.5	46.7	23.8	V	54	9
17947.200	44.9	-25.5	43.4	27.002	H	54	9.1
802.11ac Channel 120							
17982.4	45.2	-25.5	46.7	24	V	54	8.8
17990.1	45.2	-25.5	46.7	24	V	54	8.8
17962.6	45.1	-25.5	46.7	23.9	V	54	8.9
17952.7	45	-25.5	46.7	23.8	H	54	9
17992.3	45	-25.5	46.7	23.8	H	54	9
17994.5	45	-25.5	46.7	23.8	V	54	9
802.11ac Channel 140							
17984.6	45.2	-25.5	46.7	24	V	54	8.8
17964.8	45.1	-25.5	46.7	23.9	H	54	8.9
17951.6	45	-25.5	46.7	23.8	H	54	9
17973.6	45	-25.5	46.7	23.8	V	54	9
17995.6	45	-25.5	46.7	23.8	V	54	9
17953.800	44.9	-25.5	43.4	27.002	H	54	9.1
802.11ac Channel 144							
17987.9	45.2	-25.5	46.7	24	V	54	8.8
17943.9	45	-25.5	46.7	23.8	H	54	9
17979.1	45	-25.5	46.7	23.8	H	54	9
17980.2	45	-25.5	46.7	23.8	V	54	9
17989	45	-25.5	46.7	23.8	H	54	9
17996.7	45	-25.5	46.7	23.8	H	54	9

802.11ac-HT40

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11ac 40M Channel:CH38							
17982.4	45.2	-25.5	46.7	24	H	54	8.8
17969.2	45.1	-25.5	46.7	23.9	V	54	8.9
17970.3	45	-25.5	46.7	23.8	H	54	9
17983.5	45	-25.5	46.7	23.8	H	54	9
17992.3	45	-25.5	46.7	23.8	H	54	9
5149.1	46.4	-17	33.7	29.7	H	54	7.6
802.11ac 40M Channel:CH46							
17995.6	45.1	-25.5	46.7	23.9	V	54	8.9
17958.2	45	-25.5	46.7	23.8	H	54	9
17984.6	45	-25.5	46.7	23.8	H	54	9
17961.5	44.9	-25.5	46.7	23.7	V	54	9.1
17968.1	44.9	-25.5	46.7	23.7	V	54	9.1
17975.8	44.9	-25.5	46.7	23.7	V	54	9.1
802.11ac 40M Channel:CH54							
17996.7	45.3	-25.5	46.7	24.1	H	54	8.7
17950.5	45.1	-25.5	46.7	23.9	H	54	8.9
17958.2	45	-25.5	46.7	23.8	V	54	9
17975.8	44.9	-25.5	46.7	23.7	H	54	9.1
17978	44.9	-25.5	46.7	23.7	H	54	9.1
17979.1	44.9	-25.5	46.7	23.7	H	54	9.1
802.11ac 40M Channel:CH62							
17992.3	45.2	-25.5	46.7	24	V	54	8.8
17967	45.1	-25.5	46.7	23.9	H	54	8.9
17979.1	45.1	-25.5	46.7	23.9	H	54	8.9
17989	45	-25.5	46.7	23.8	V	54	9
17996.7	45	-25.5	46.7	23.8	H	54	9
5350.3	47.2	-16.9	34	30.1	H	54	6.8
802.11ac 40M Channel:CH102							
17983.5	45.1	-25.5	46.7	23.9	V	54	8.9
17989	45.1	-25.5	46.7	23.9	V	54	8.9
17953.8	45	-25.5	46.7	23.8	H	54	9
17958.2	45	-25.5	46.7	23.8	H	54	9
17959.3	45	-25.5	46.7	23.8	H	54	9
17987.900	45.0	-25.5	43.4	27.102	H	54	9

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11ac 40M Channel:CH118							
17982.4	45.2	-25.5	46.7	24	H	54	8.8
17956	45.1	-25.5	46.7	23.9	H	54	8.9
17975.8	45.1	-25.5	46.7	23.9	V	54	8.9
17950.5	45	-25.5	46.7	23.8	V	54	9
17963.7	45	-25.5	46.7	23.8	V	54	9
17965.9	45	-25.5	46.7	23.8	H	54	9
802.11ac 40M Channel:CH134							
17957.1	45.1	-25.5	46.7	23.9	H	54	8.9
17964.8	45.1	-25.5	46.7	23.9	H	54	8.9
17950.5	45	-25.5	46.7	23.8	V	54	9
17952.7	45	-25.5	46.7	23.8	H	54	9
17953.8	45	-25.5	46.7	23.8	V	54	9
17952.700	45.0	-25.5	43.4	27.102	H	54	9
802.11ac 40M Channel:CH142							
17987.9	45.2	-25.5	46.7	24	H	54	8.8
17968.1	45.1	-25.5	46.7	23.9	V	54	8.9
17983.5	45.1	-25.5	46.7	23.9	H	54	8.9
17950.5	45	-25.5	46.7	23.8	H	54	9
17973.6	45	-25.5	46.7	23.8	H	54	9
17981.3	45	-25.5	46.7	23.8	V	54	9

802.11ac-HT80

Frequency (MHz)	Result (dBuV/m)	Cable Loss (dB)	Antenna Factor	PMea (dBuV/m)	Polarization	Limit (dBuV/m)	Magin (dBuV/m)
802.11ac 80M Channel:CH42							
17967	45.3	-25.5	46.7	24.1	H	54	8.7
17979.1	45.3	-25.5	46.7	24.1	V	54	8.7
17984.6	45.3	-25.5	46.7	24.1	H	54	8.7
17987.9	45.3	-25.5	46.7	24.1	V	54	8.7
17995.6	45.3	-25.5	46.7	24.1	H	54	8.7
5149.7	48	-17	33.7	31.3	H	54	6
802.11ac 80M Channel:CH58							
17964.8	45.3	-25.5	46.7	24.1	V	54	8.7
17958.2	45.2	-25.5	46.7	24	V	54	8.8
17963.7	45.2	-25.5	46.7	24	H	54	8.8
17982.4	45.2	-25.5	46.7	24	H	54	8.8
17997.8	45.2	-25.5	46.7	24	H	54	8.8
5350.2	48.1	-16.9	34	31	H	54	5.9
802.11ac 80M Channel:CH106							
17950.5	45.3	-25.5	46.7	24.1	H	54	8.7
17963.7	45.2	-25.5	46.7	24	H	54	8.8
17986.8	45.2	-25.5	46.7	24	V	54	8.8
17982.4	45.1	-25.5	46.7	23.9	V	54	8.9
17945	45	-25.5	46.7	23.8	V	54	9
5458.7	46	-16.8	34.2	28.6	H	54	8
802.11ac 80M Channel:CH138							
17982.4	45.5	-25.5	46.7	24.3	V	54	8.5
17984.6	45.4	-25.5	46.7	24.2	H	54	8.6
17990.1	45.3	-25.5	46.7	24.1	V	54	8.7
17991.2	45.3	-25.5	46.7	24.1	H	54	8.7
17949.4	45.2	-25.5	46.7	24	V	54	8.8
17961.5	45.1	-25.5	46.7	23.9	V	54	8.9

Sample calculation:
802.11ac 80M CH138–AV, 17982.4MHz
Result (dBμV/m) =PMea(24.3)+ Cable Loss(-25.5) +Antenna Factor(46.7) = 45.5dBuV/m

A.7. AC Powerline Conducted Emission (150kHz- 30MHz)

Test Condition:

Voltage（V）	Frequency（Hz）
110	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV) With charger 11a mode	Conclusion
0.15 to 0.5	66 to 56	Fig.75	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 (dBμV)	Result (dBμV) With charger 11a mode	Conclusion
0.15 to 0.5	56 to 46	Fig.75	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.			

Conclusion: PASS

Test graphs as below:

Result for Traffic:

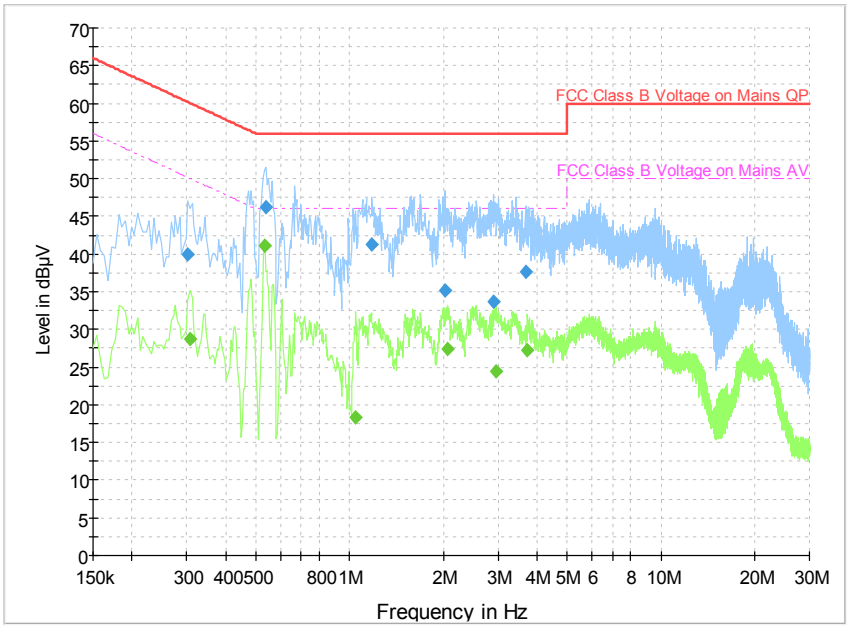

Fig.75 Conducted Emission (802.11a, Ch40, TX)

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.303000	39.9	N	19.8	20.2	60.2
0.537000	46.2	N	19.9	9.8	56.0
1.180500	41.3	N	19.9	14.7	56.0
2.022000	35.1	N	19.9	20.9	56.0
2.908500	33.6	N	20.1	22.4	56.0
3.669000	37.7	N	20.3	18.3	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.307500	28.7	N	19.8	21.3	50.0
0.532500	41.0	L1	20.1	5.0	46.0
1.045500	18.3	N	19.9	27.7	46.0
2.071500	27.4	N	19.9	18.6	46.0
2.958000	24.4	N	20.1	21.6	46.0
3.732000	27.2	N	20.3	18.8	46.0

A.8. 99% Occupied bandwidth

Method of Measurement: See ANSI C63.10-2013-clause 12.4.2.

a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shallbe more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.

d) Step a) through step c) might require iteration to adjust within the specified range.

e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% ofthe total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz

Measurement Result:

Mode	Frequency	99% Occupied bandwidth (MHz)		conclusion
802.11a	5180 MHz	Fig.76	17.20	P
	5200 MHz	Fig.77	17.12	P
	5240 MHz	Fig.78	17.11	P
802.11n HT20	5180 MHz	Fig.79	18.27	P
	5200 MHz	Fig.80	18.21	P
	5240 MHz	Fig.81	18.21	P
802.11ac HT20	5180 MHz	Fig.82	18.27	P
	5200 MHz	Fig.83	18.23	P
	5240 MHz	Fig.84	18.24	P
802.11n HT40	5190 MHz	Fig.85	36.40	P
	5230 MHz	Fig.86	36.36	P

802.11ac HT40	5190 MHz	Fig.87	36.37	P
	5230 MHz	Fig.88	36.35	P
802.11ac HT80	5210 MHz	Fig.89	75.67	P

Conclusion: PASS

Test graphs as below:

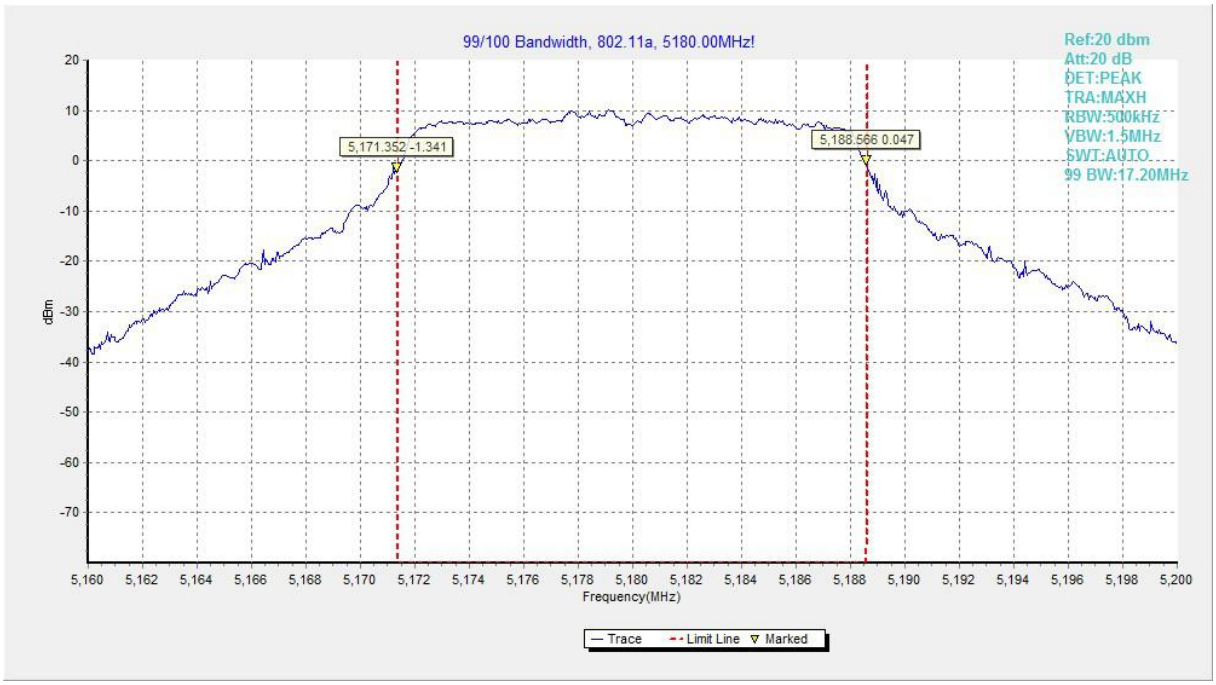

Fig.76 99% Occupied bandwidth (802.11a, 5180MHz)

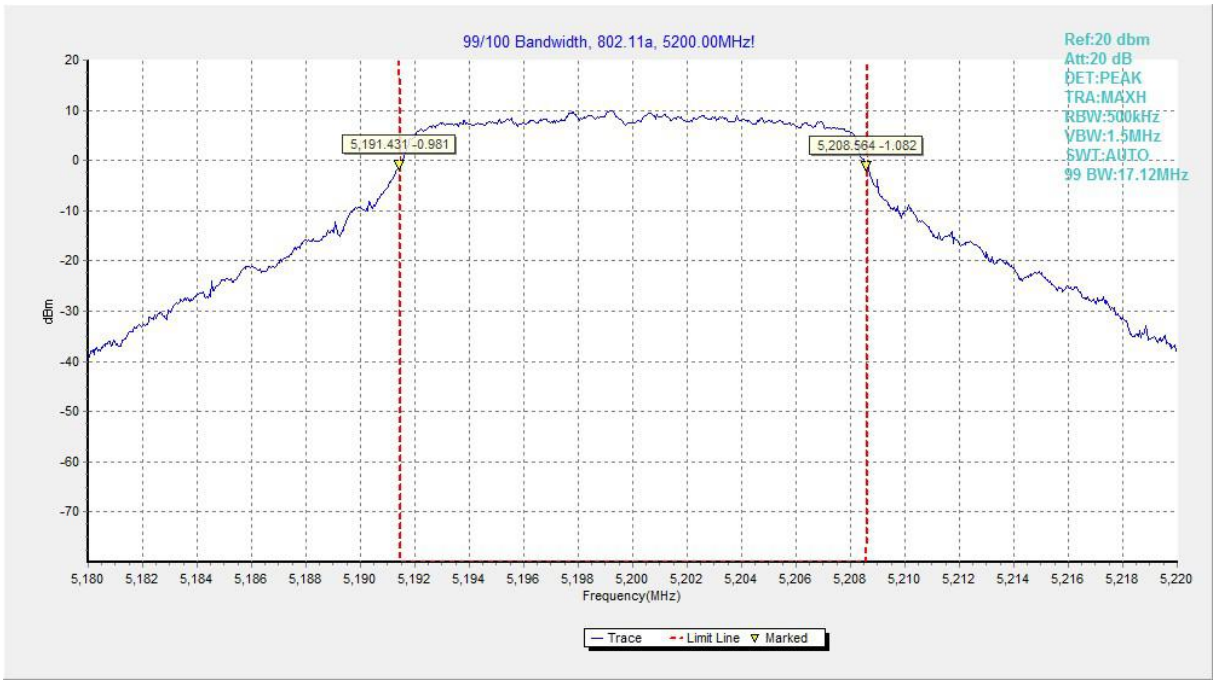

Fig.77 99% Occupied bandwidth (802.11a, 5200MHz)

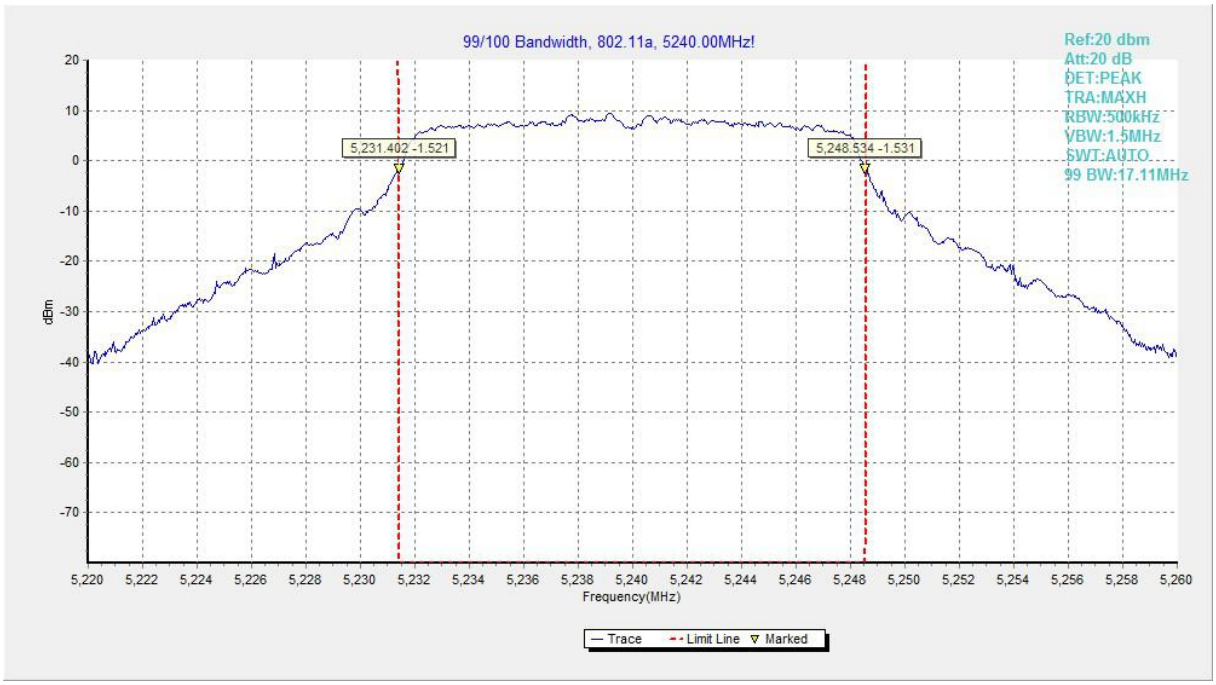

Fig.78 99% Occupied bandwidth (802.11a, 5240MHz)

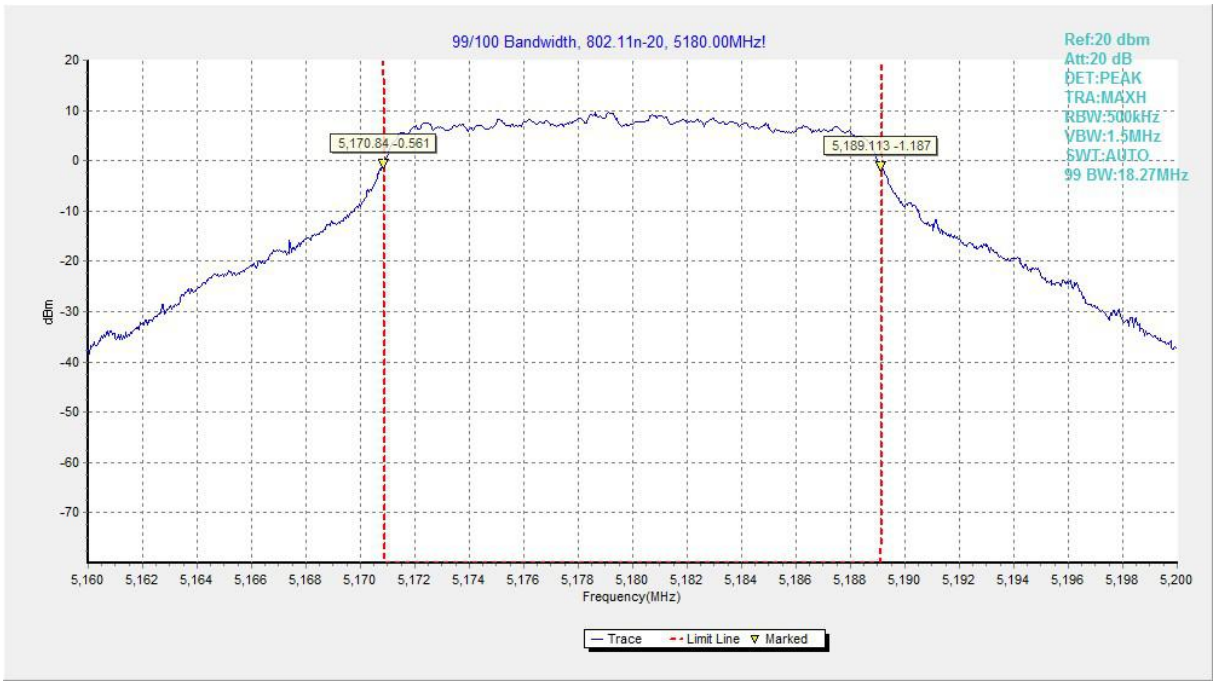

Fig.79 99% Occupied bandwidth (802.11n-HT20, 5180MHz)

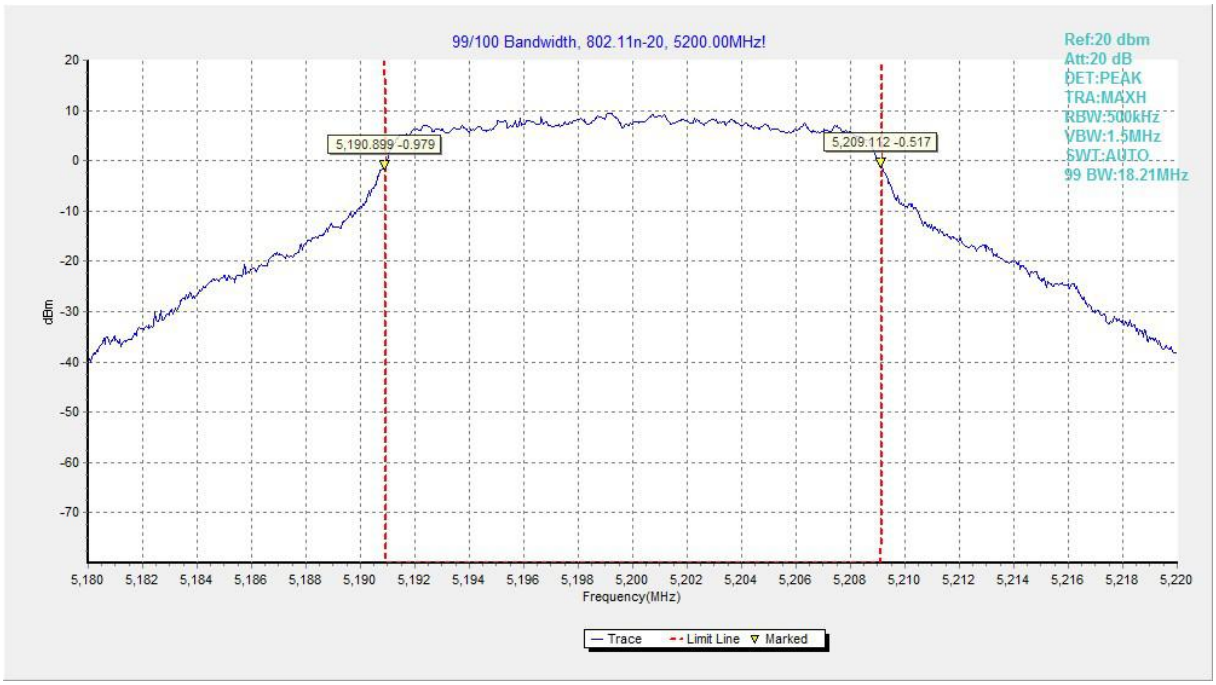

Fig.80 99% Occupied bandwidth (802.11n-HT20, 5200MHz)

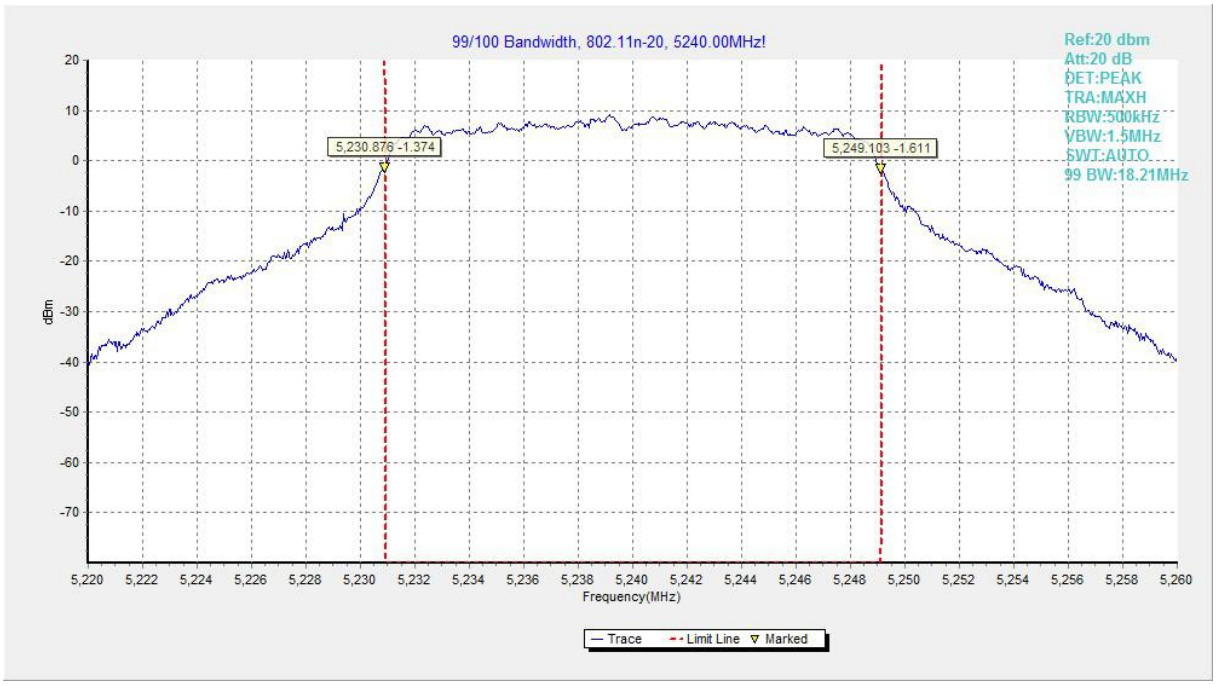

Fig.81 99% Occupied bandwidth (802.11n-HT20, 5240MHz)

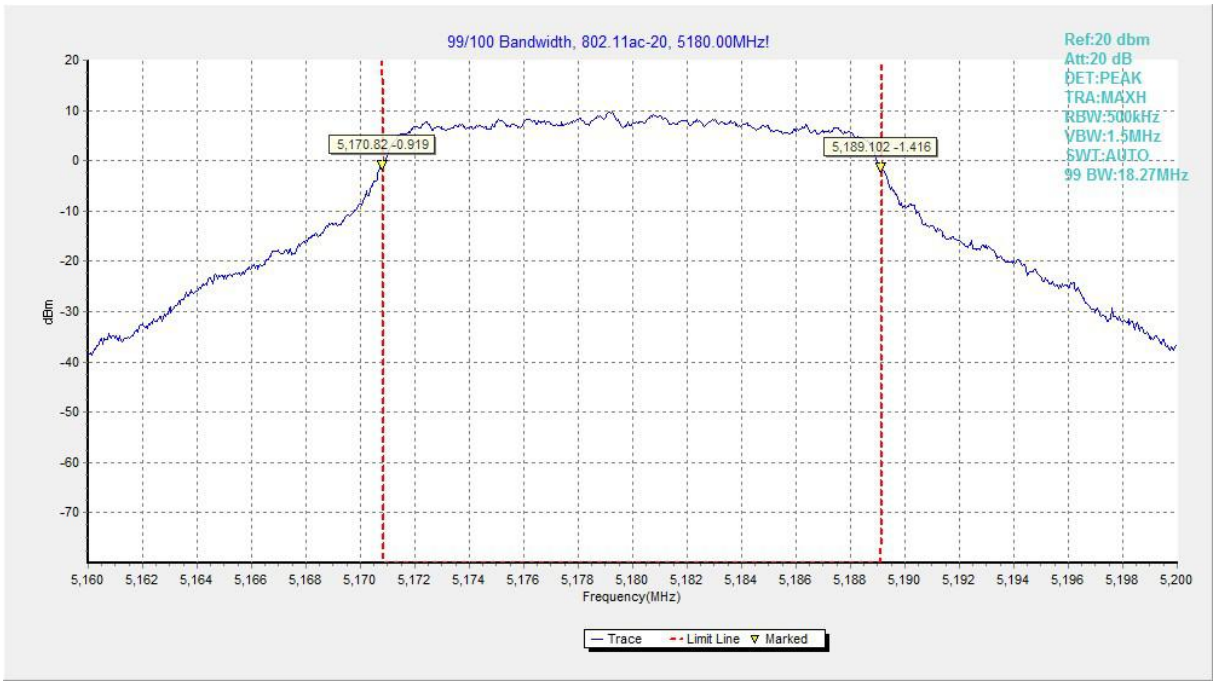

Fig.82 99% Occupied bandwidth (802.11ac-HT20, 5180MHz)

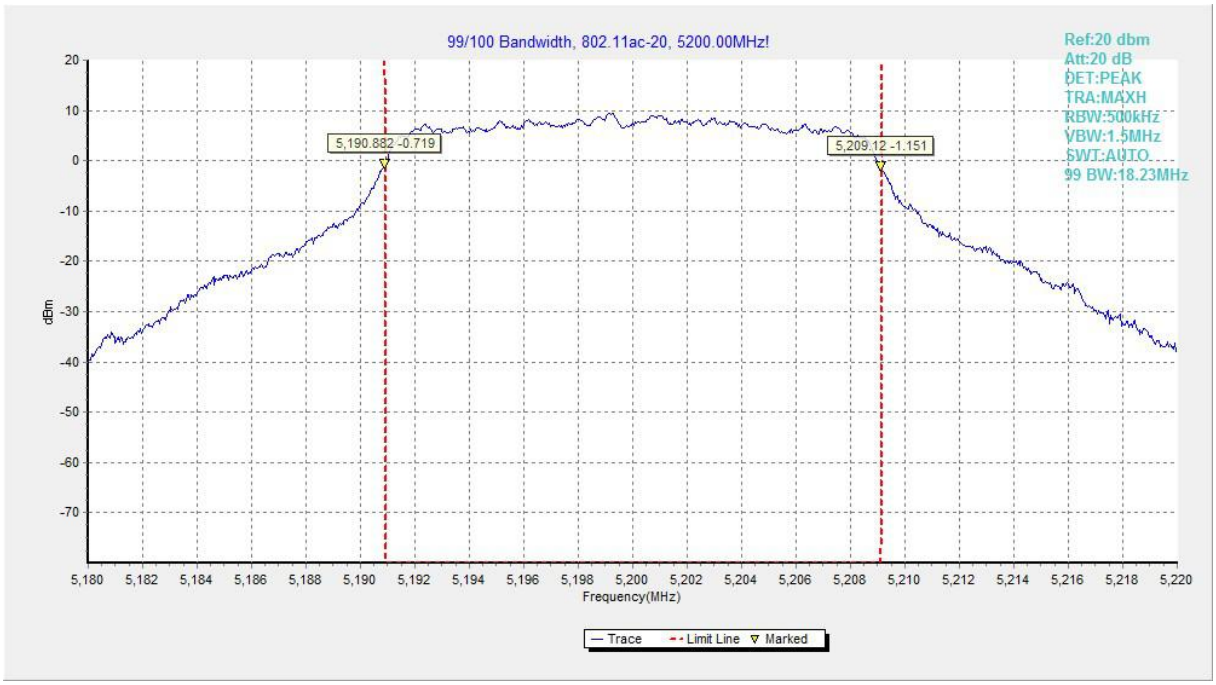

Fig.83 99% Occupied bandwidth (802.11ac-HT20, 5200MHz)

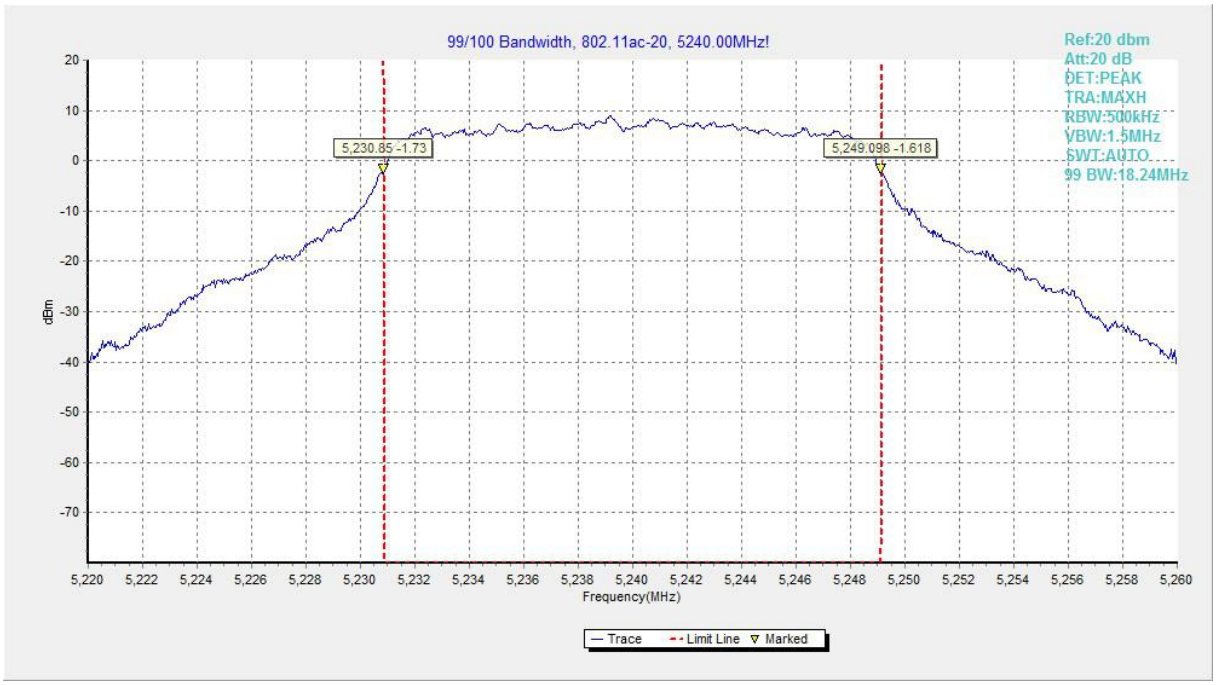

Fig.84 99% Occupied bandwidth (802.11ac-HT20, 5240MHz)

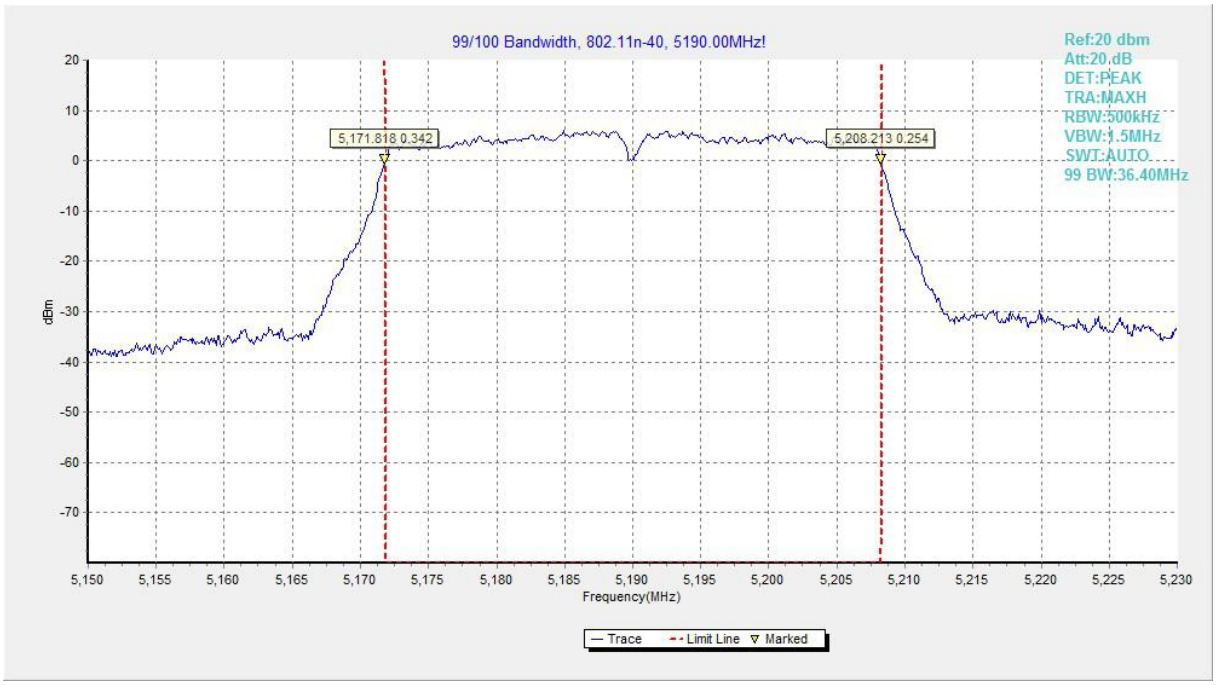

Fig.85 99% Occupied bandwidth (802.11n-HT40, 5190MHz)

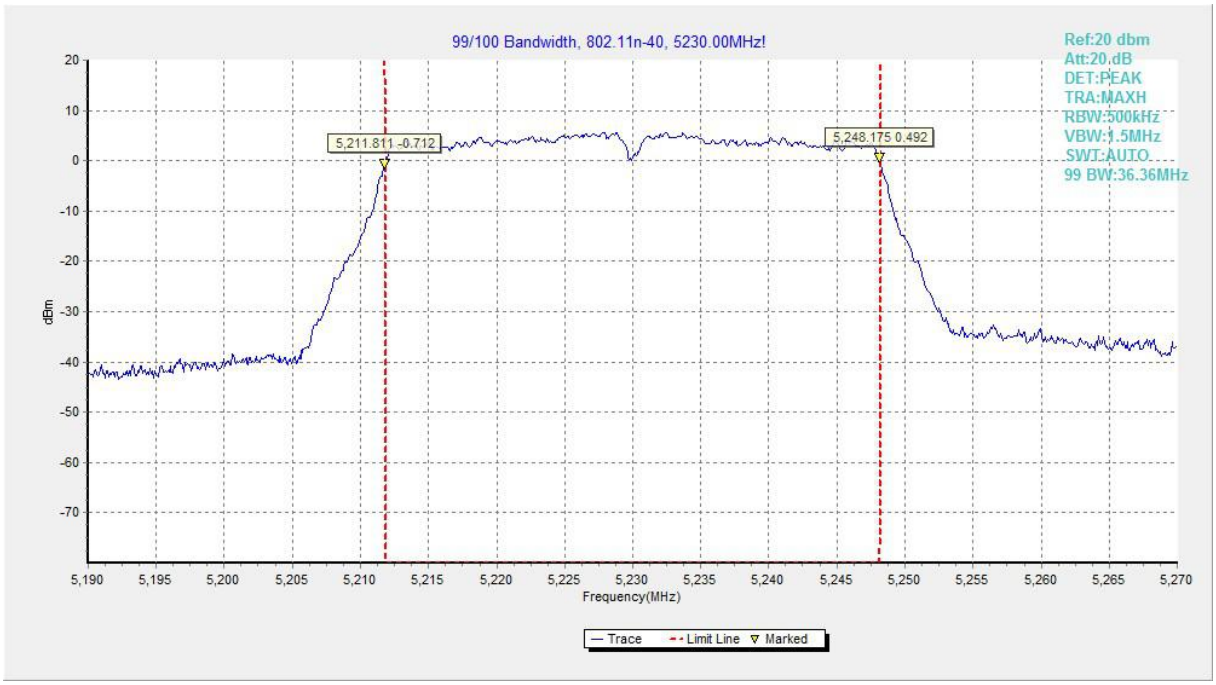

Fig.86 99% Occupied bandwidth (802.11n-HT40, 5230MHz)

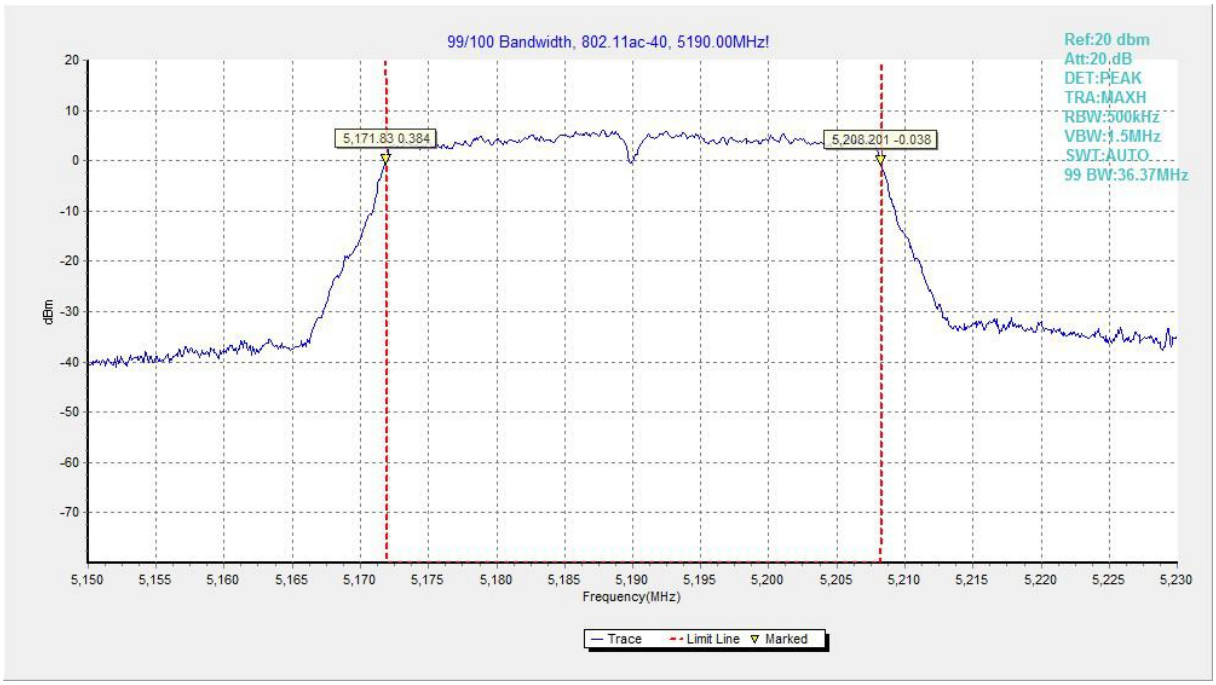

Fig.87 99% Occupied bandwidth (802.11ac-HT40, 5190MHz)

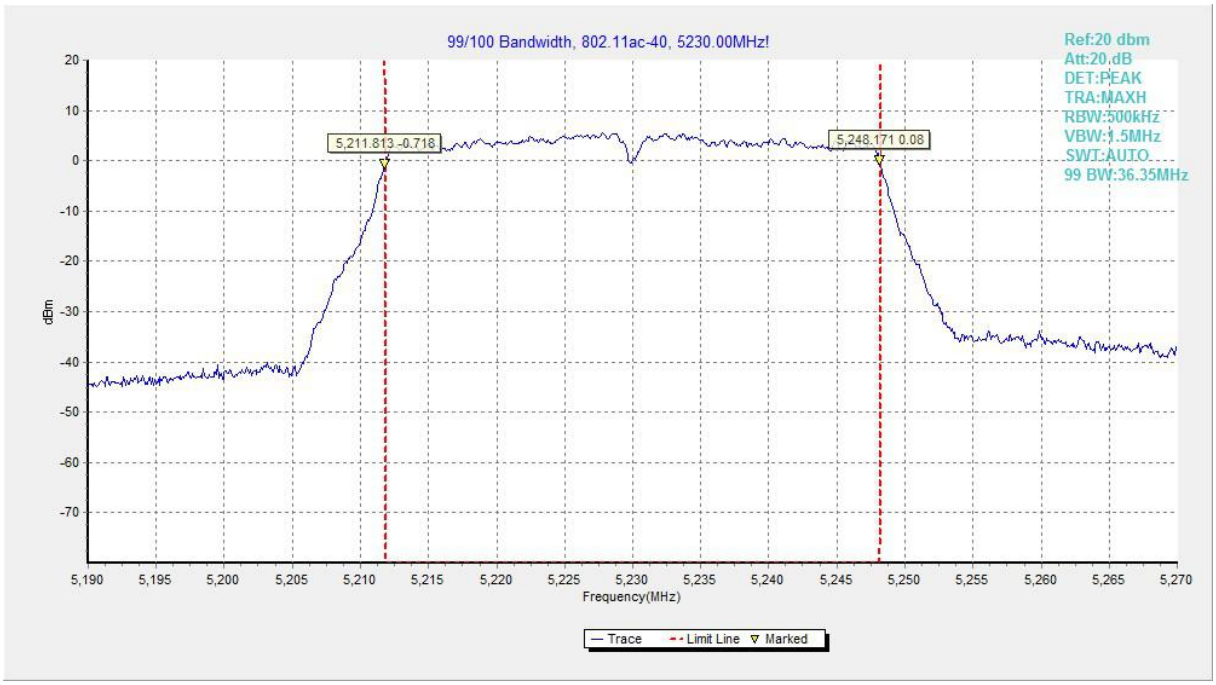

Fig.88 99% Occupied bandwidth (802.11ac-HT40, 5230MHz)

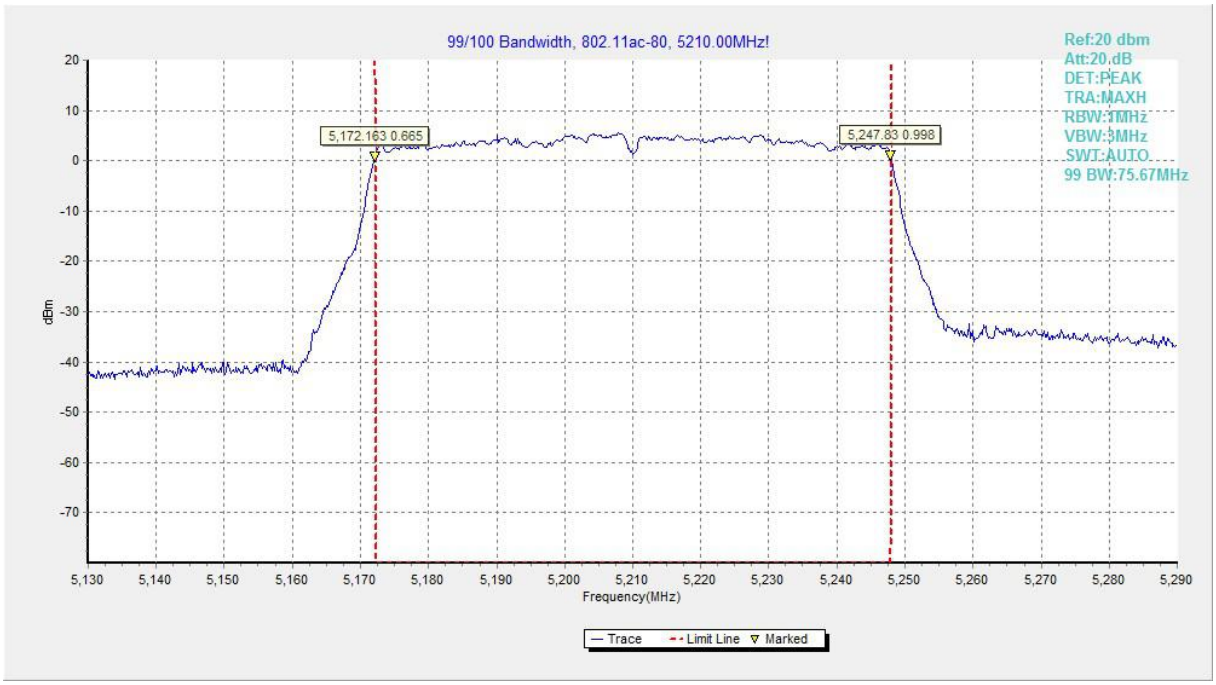

Fig.89 99% Occupied bandwidth (802.11ac-HT80, 5210MHz)

A.9. Power control

A Transmission Power Control mechanism is not required for systems with an e.i.r.p. of less than 27dBm (500 mW).

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).

2019-09-26 through 2020-09-30
Effective Dates

DEPARTMENT OF COMMERCE · UNITED STATES OF AMERICA

For the National Voluntary Laboratory Accreditation Program

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