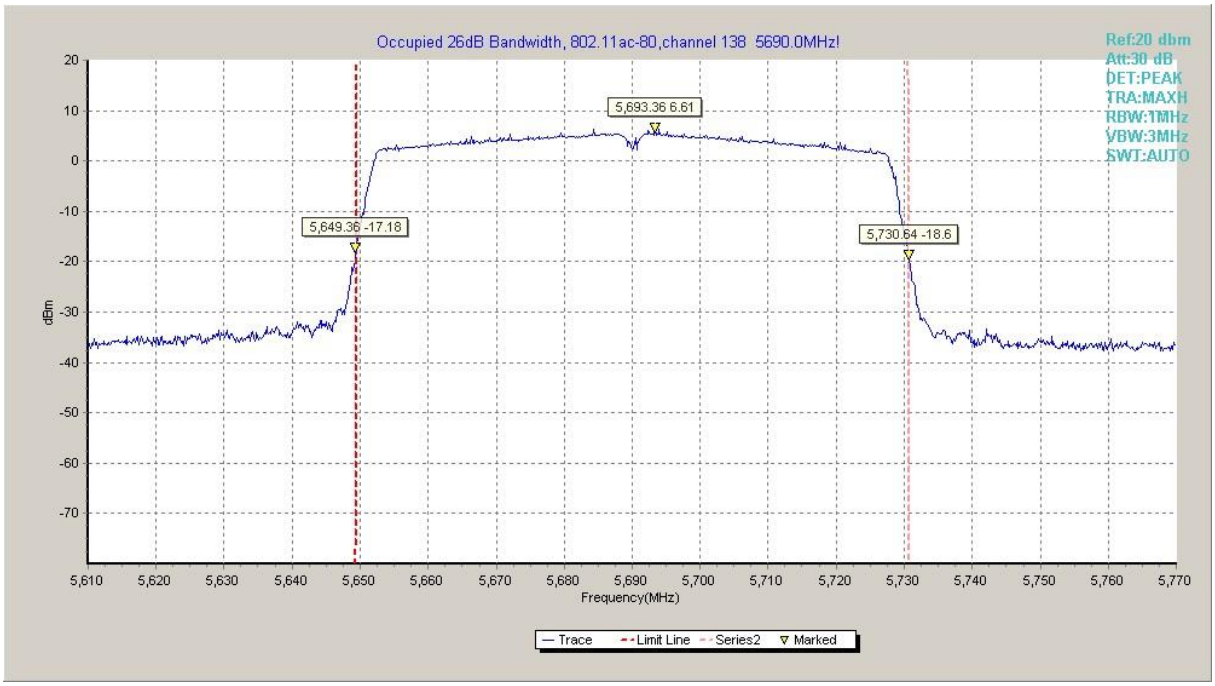

Fig.51 Occupied 26dB Bandwidth (802. 11ac-HT80, 5690MHz)

A.5. Band Edges Compliance

A5.1 Band Edges - Radiated

Measurement Limit:

Standard	Limit (dB μ V/m)	
FCC 47 CFR Part 15.209	Peak	74
	Average	54

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 (MHz)	Field strength(μV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Set up:

The typical arrangement of an unlicensed wireless device on a tabletop on a test site. Tabletop devices shall be placed on a nonconducting platform with nominal top surface dimensions 1 m by 1.5 m and the table height shall be 1.5 m.

The EUT and transmitting antenna shall be centered on the turntable.

Test Condition

The EUT shall be tested 1 near top, 1 near middle, and 1 near bottom. Set the unlicensed wireless device to operate in continuous transmit mode. For unlicensed wireless devices unable to be configured for 100% duty cycle even in test mode, configure the system for the maximum duty cycle supported.

When required for unlicensed wireless devices, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Exploratory radiated emissions measurements

Exploratory radiated measurements shall be performed at the measurement distance or at a closer distance than that specified for compliance to determine the emission characteristics of the

EUT and, if applicable, the EUT configuration that produces the maximum level of emissions. The frequencies of maximum emission may be determined by manually positioning the antenna close to the EUT, and then moving the antenna over all sides of the EUT while observing a spectral display. It is advantageous to have prior knowledge of the frequencies of emissions, although this may be determined from such a near-field scan. The near-field scan shall only be used to determine the frequency but not the amplitude of the emissions. Where exploratory measurements are not adequate to determine the worst-case operating modes and are used only to identify the frequencies of the highest emissions, additional preliminary tests can be required.
For emissions from the EUT, the maximum level shall be determined by rotating the EUT and its antenna through 0° to 360°. For each mode of operation required to be tested, the frequency spectrum (based on findings from exploratory measurements) shall be monitored.
Broadband antennas and a spectrum analyzer or a radio-noise meter with a panoramic display are often useful in this type of test. If either antenna height or EUT azimuth are not fully measured during exploratory testing, then complete testing can be required at the OATS or semi-anechoic chamber when the final full spectrum testing is performed.

Final radiated emissions measurements

The final measurements are using the orientation and equipment arrangement of the EUT based on the measurement results found during the preliminary (exploratory) measurements, the EUT arrangement, appropriate modulation, and modes of operation that produce the emissions that have the highest amplitude relative to the limit shall be selected for the final measurement.
For emissions from the EUT, the maximum level shall be determined by rotating the EUT and its antenna through 0° to 360°. Final measurements for the EUT require a measurement antenna height scan of 1 m to 4 m and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. For each mode of operation required to be tested, the frequency spectrum (based on findings from exploratory measurements) shall be monitored.
For each mode selected, record the frequency and amplitude of the highest fundamental emission (if applicable), as well as the frequency and amplitude of the six highest spurious emissions relative to the limit. Emissions more than 20 dB below the limit do not need to be reported.
This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The receiver references:

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-40000	1MHz/3MHz	20

Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.52	P
	5320 MHz	Fig.53	P
	5500 MHz	Fig.54	P
	5700 MHz	Fig.55	P
802.11n HT20	5180 MHz	Fig.56	P
	5320 MHz	Fig.57	P
	5500 MHz	Fig.58	P
	5700 MHz	Fig.59	P
802.11ac HT20	5180 MHz	Fig.60	P
	5320 MHz	Fig.61	P
	5500 MHz	Fig.62	P
	5700 MHz	Fig.63	P
802.11n HT40	5190 MHz	Fig.64	P
	5310 MHz	Fig.65	P
	5510 MHz	Fig.66	P
	5670 MHz	Fig.67	P
802.11ac HT40	5190 MHz	Fig.68	P
	5310 MHz	Fig.69	P
	5510 MHz	Fig.70	P
	5670 MHz	Fig.71	P
802.11ac HT80	5210MHz	Fig.72	P
	5290MHz	Fig.73	P
	5530MHz	Fig.74	P

Conclusion: PASS

Conclusion: PASS

Test graphs as below:

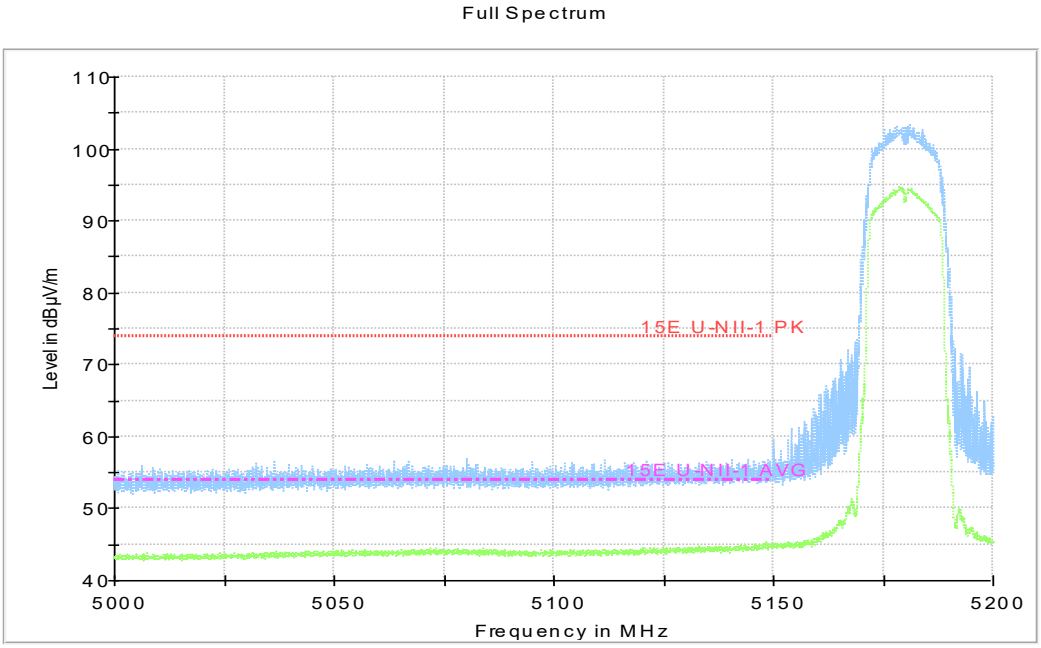

Fig.52 Band Edges (802.11a, 5180MHz)

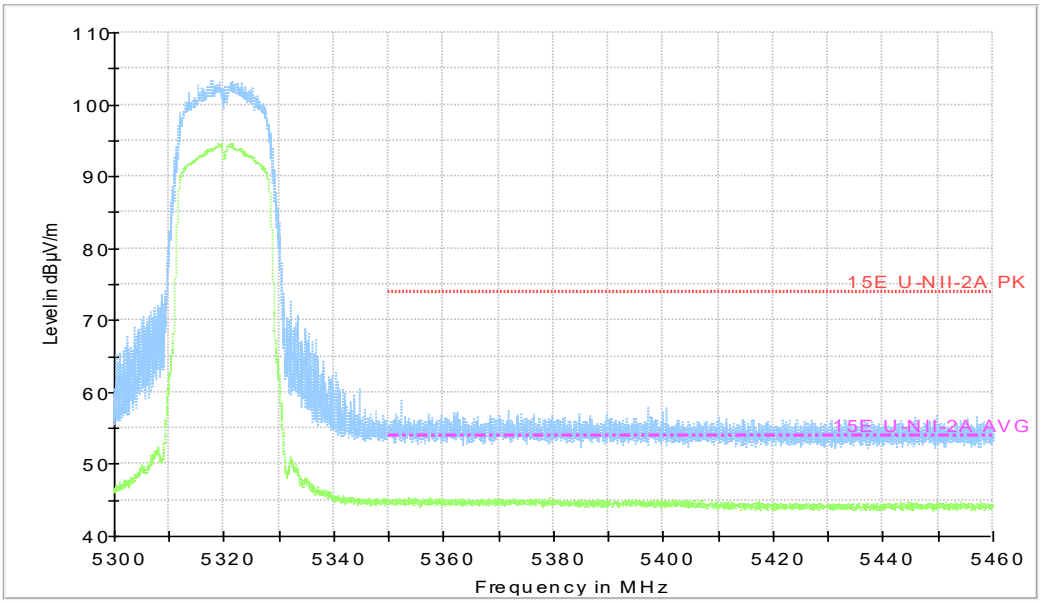

Fig.53 Band Edges (802.11a, 5320MHz)

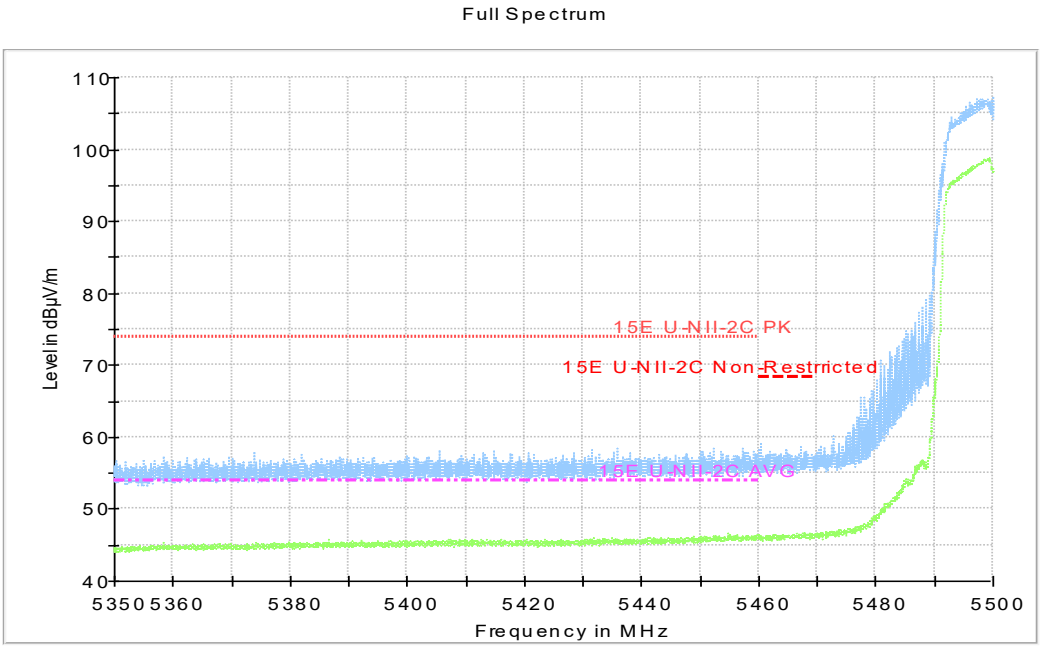

Fig.54 Band Edges (802.11a, 5500MHz)

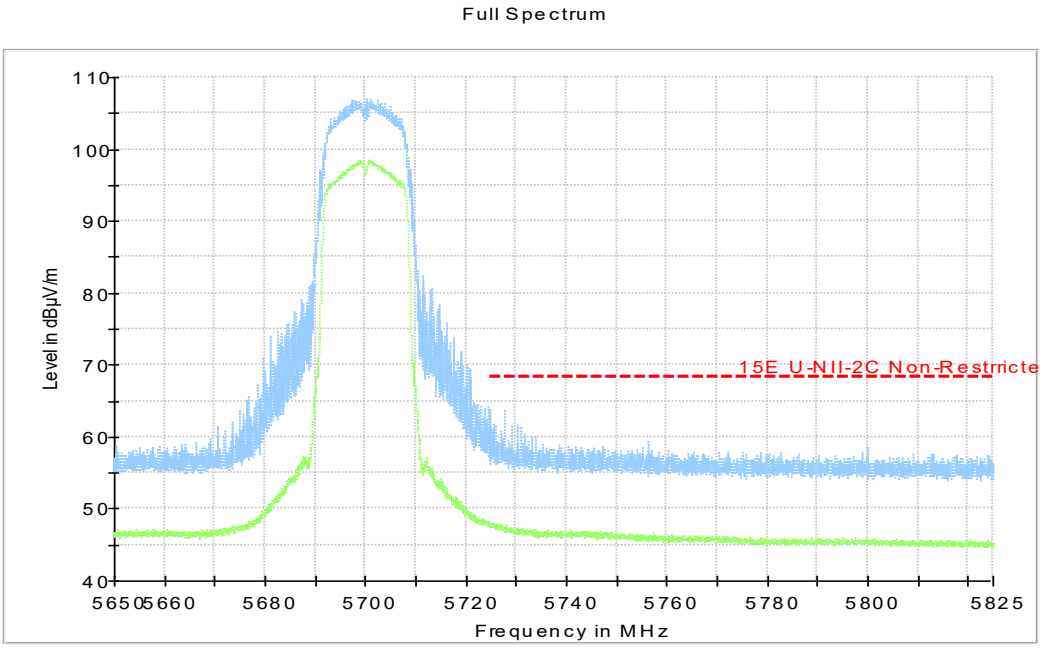

Fig.55 Band Edges (802.11a, 5700MHz)

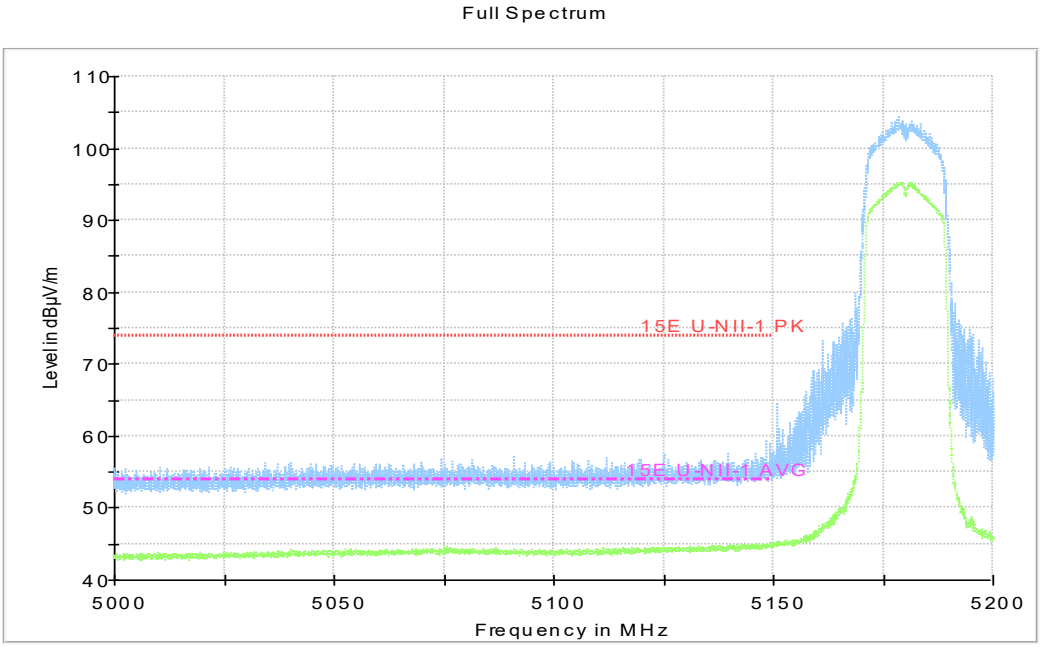

Fig.56 Band Edges (802.11n-HT20, 5180MHz)

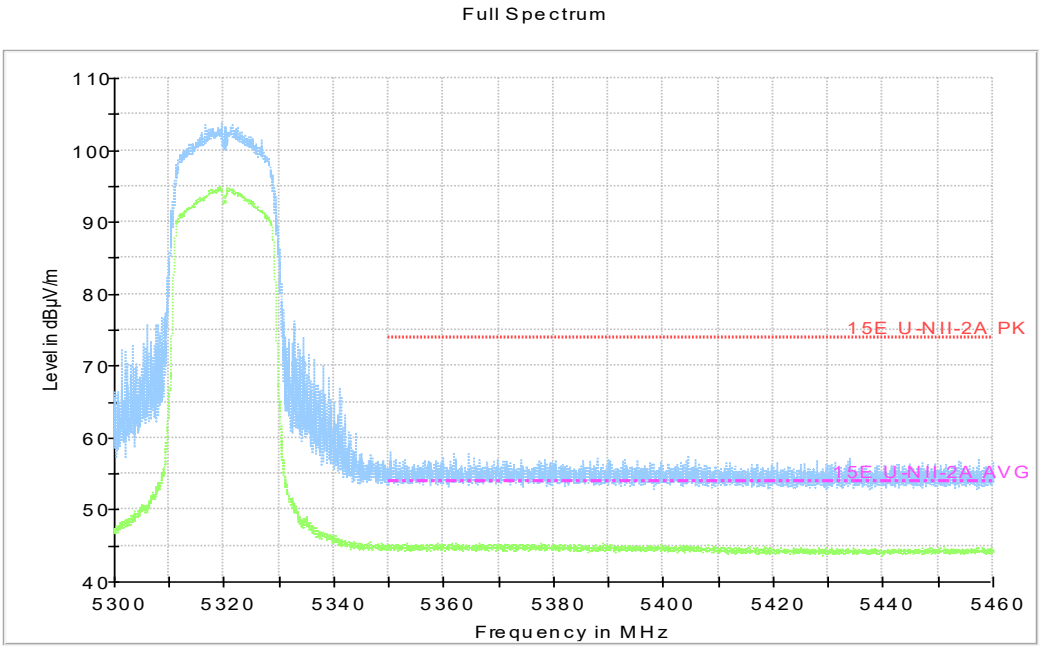

Fig.57 Band Edges (802.11n-HT20, 5320MHz)

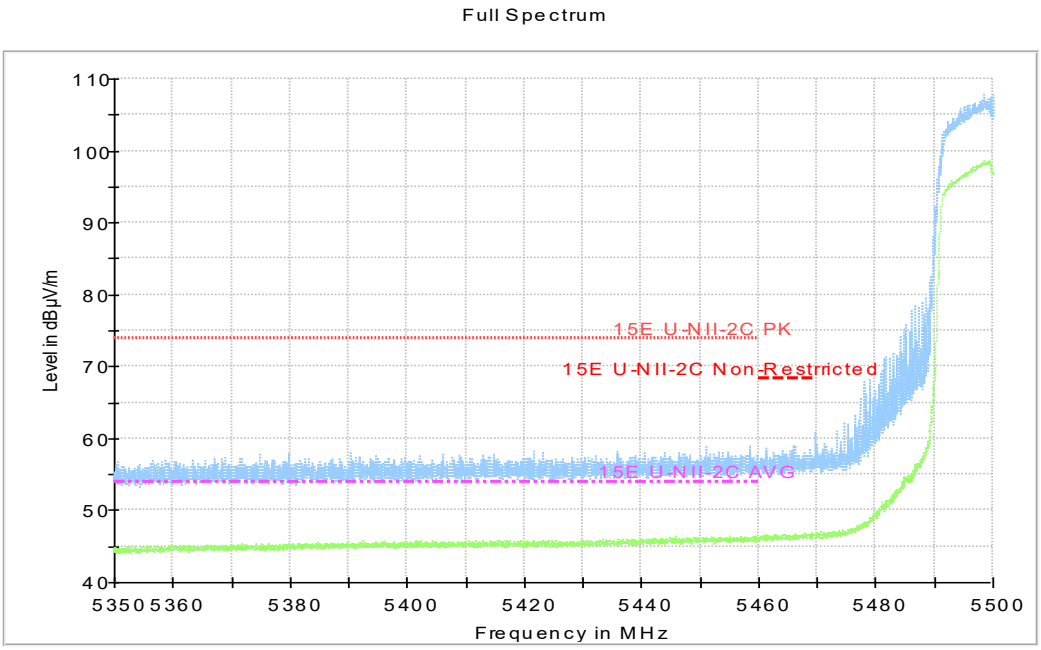

Fig.58 Band Edges (802.11n-HT20, 5500MHz)

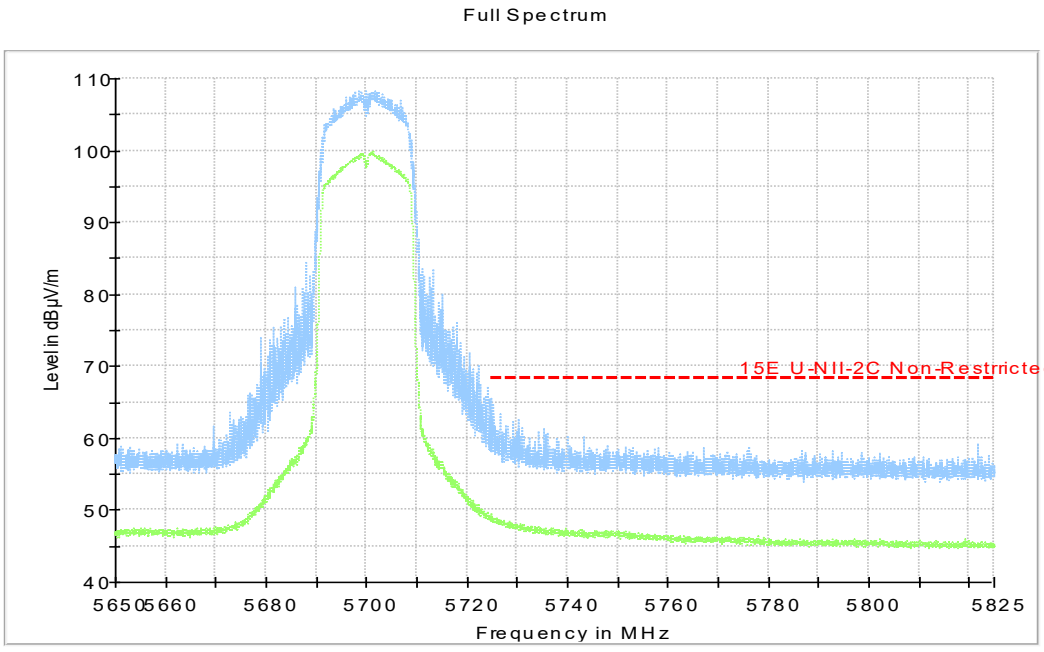

Fig.59 Band Edges (802.11n-HT20, 5700MHz)

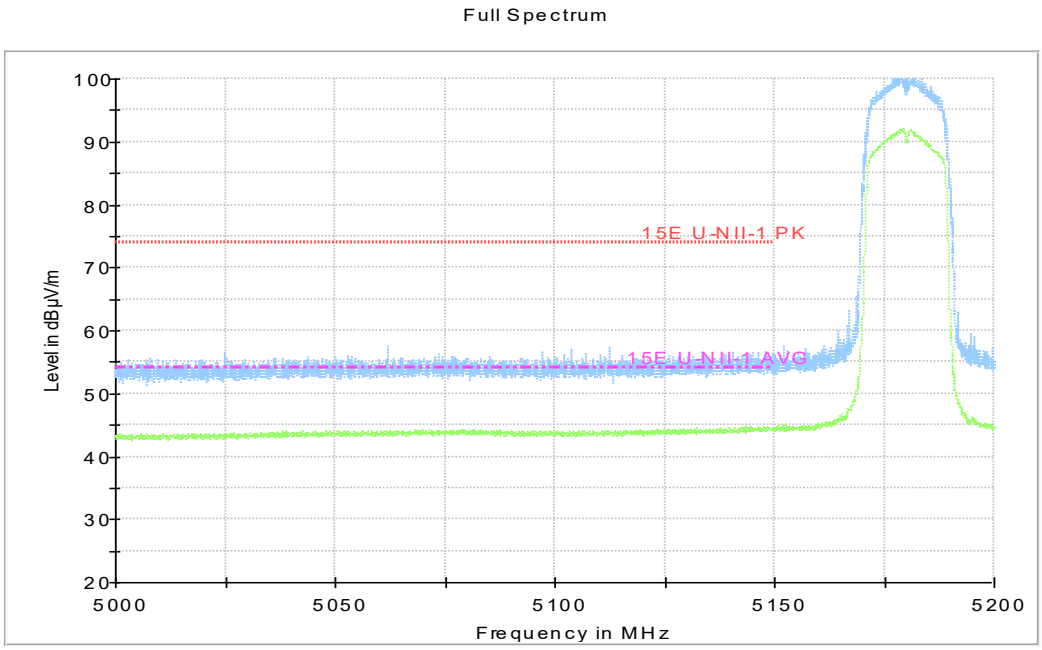

Fig.60 Band Edges (802.11ac-HT20, 5180MHz)

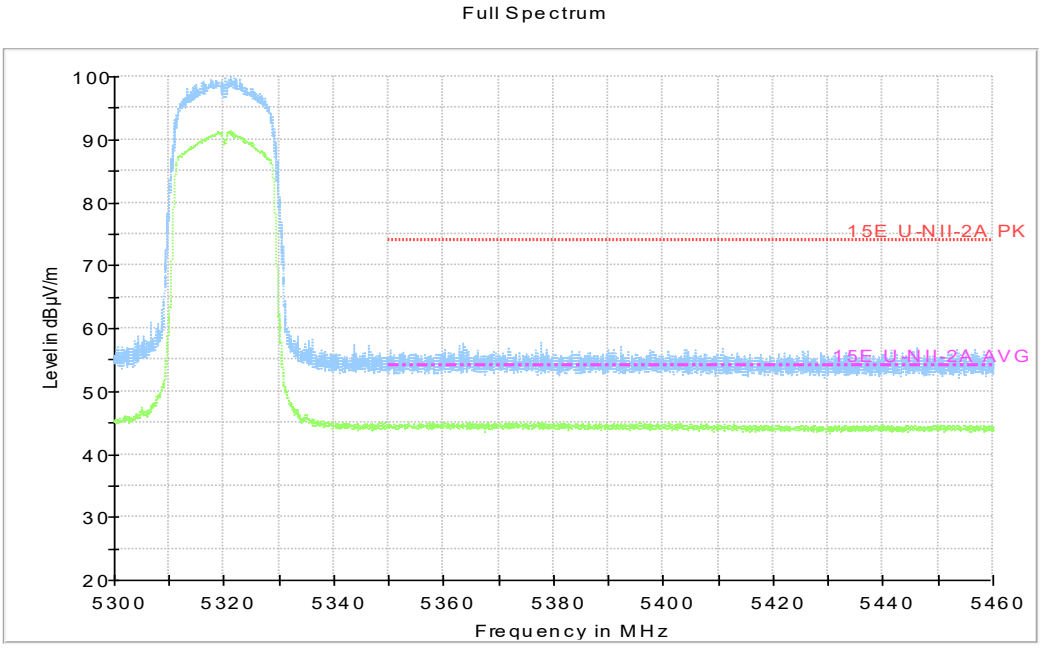

Fig.61 Band Edges (802.11ac-HT20, 5320MHz)

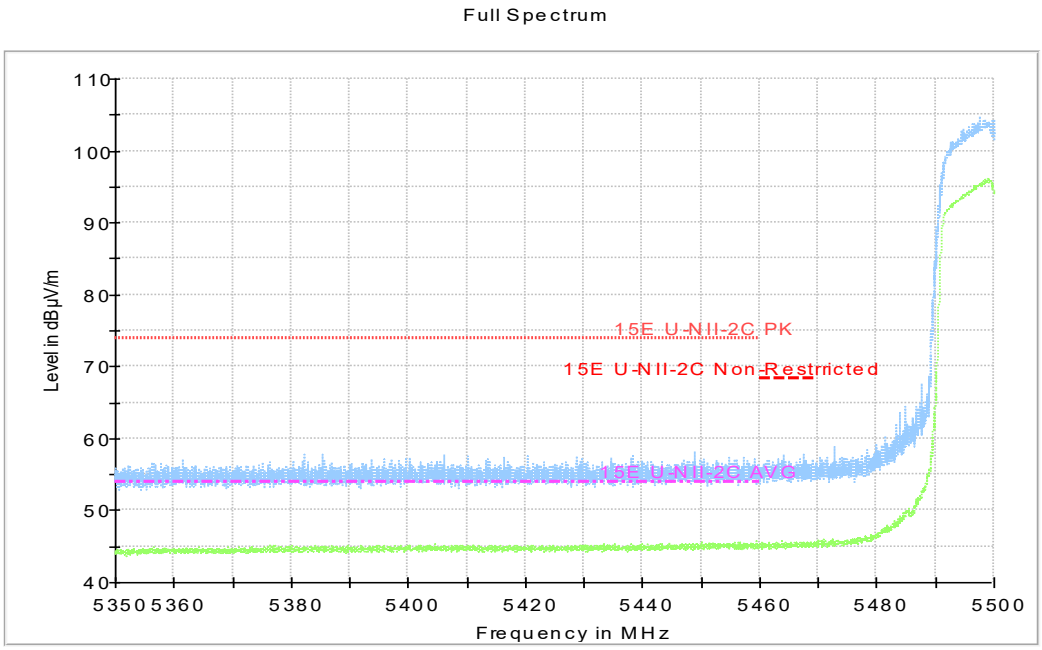

Fig.62 Band Edges (802.11ac-HT20, 5500MHz)

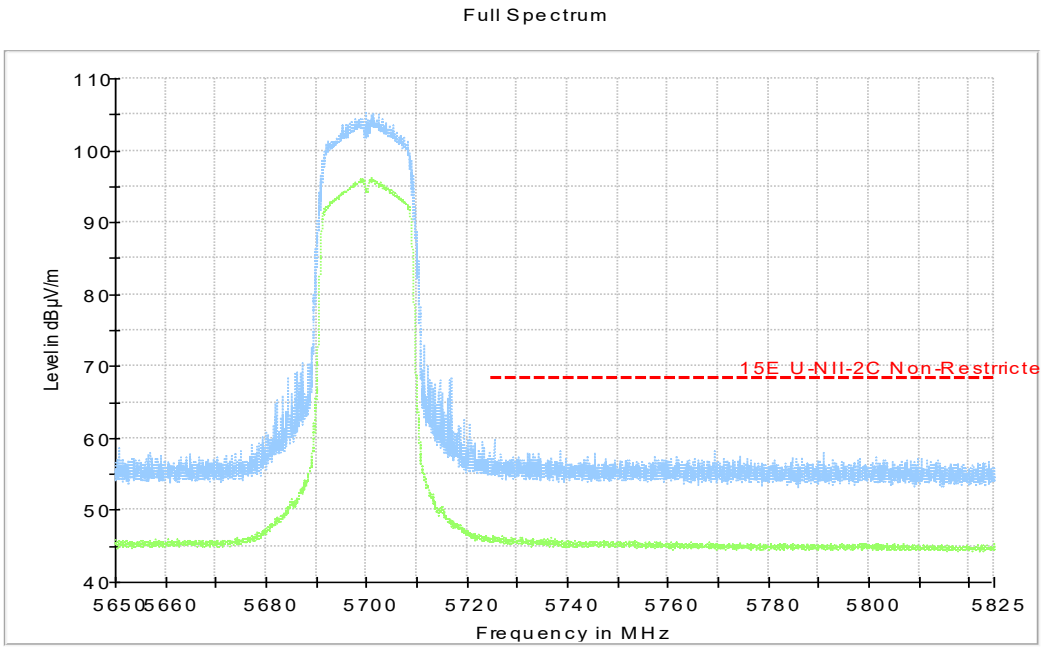

Fig.63 Band Edges (802.11ac-HT20, 5700MHz)

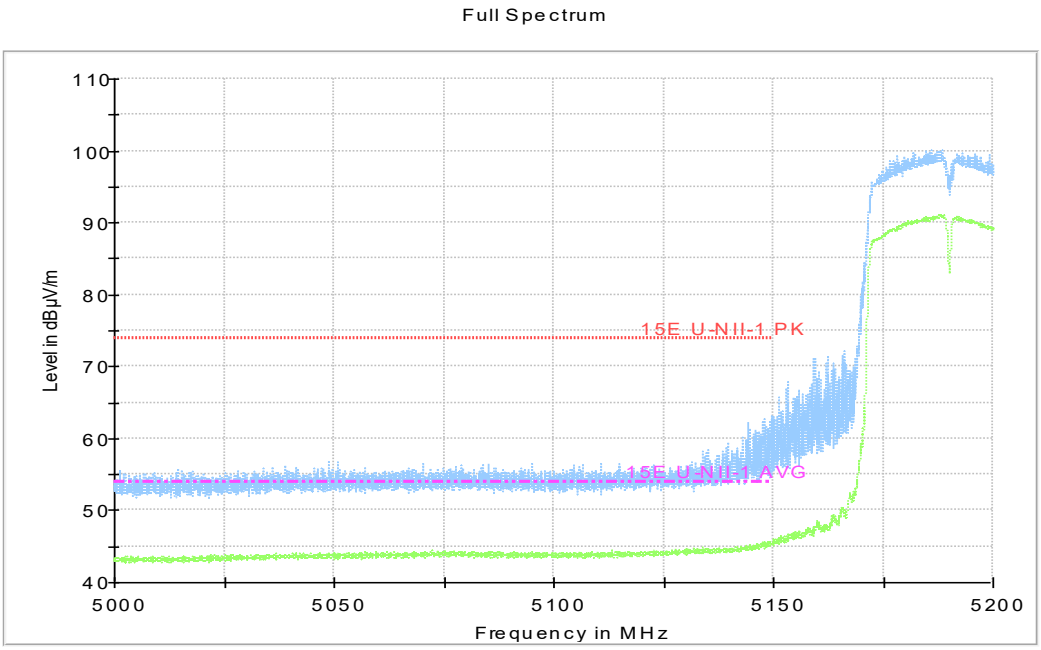

Fig.64 Band Edges (802.11n-HT40, 5190MHz)

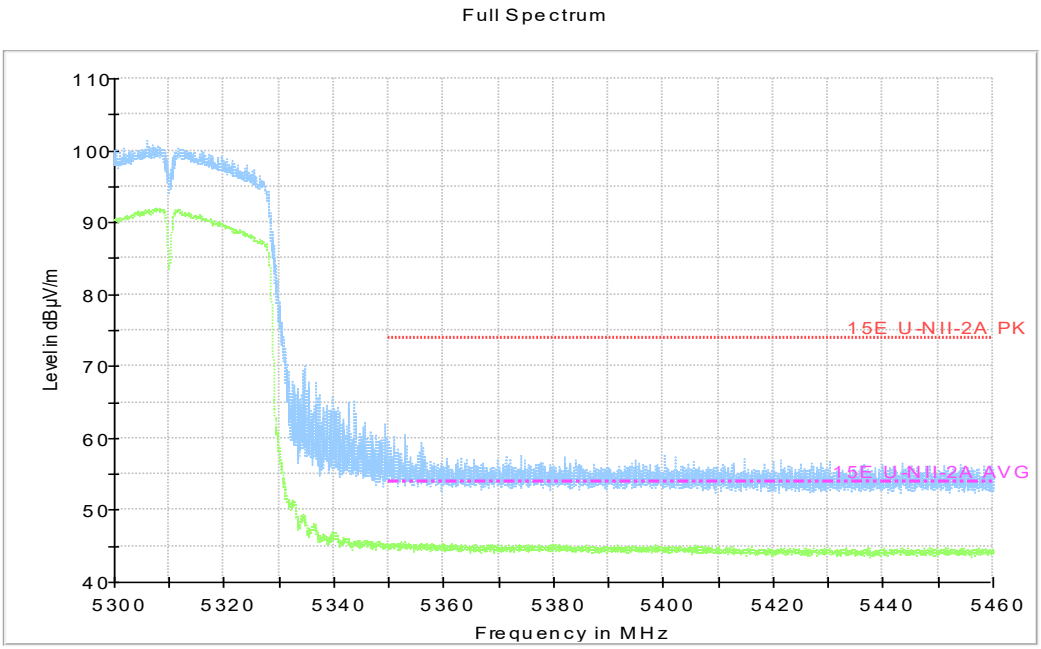

Fig.65 Band Edges (802.11n-HT40, 5310MHz)

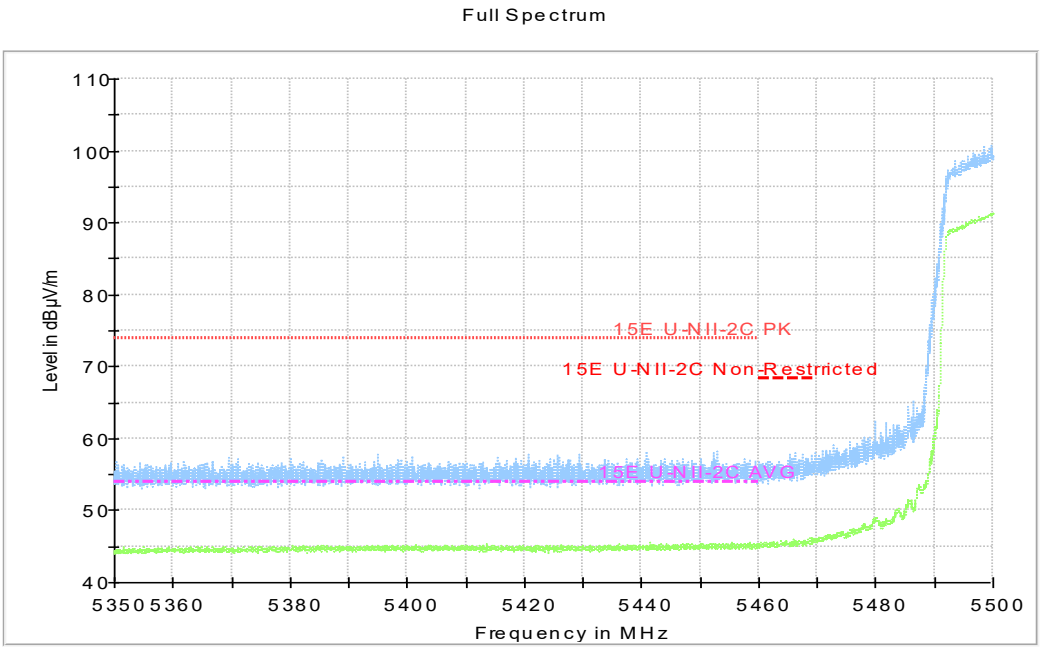

Fig.66 Band Edges (802.11n-HT40, 5510MHz)

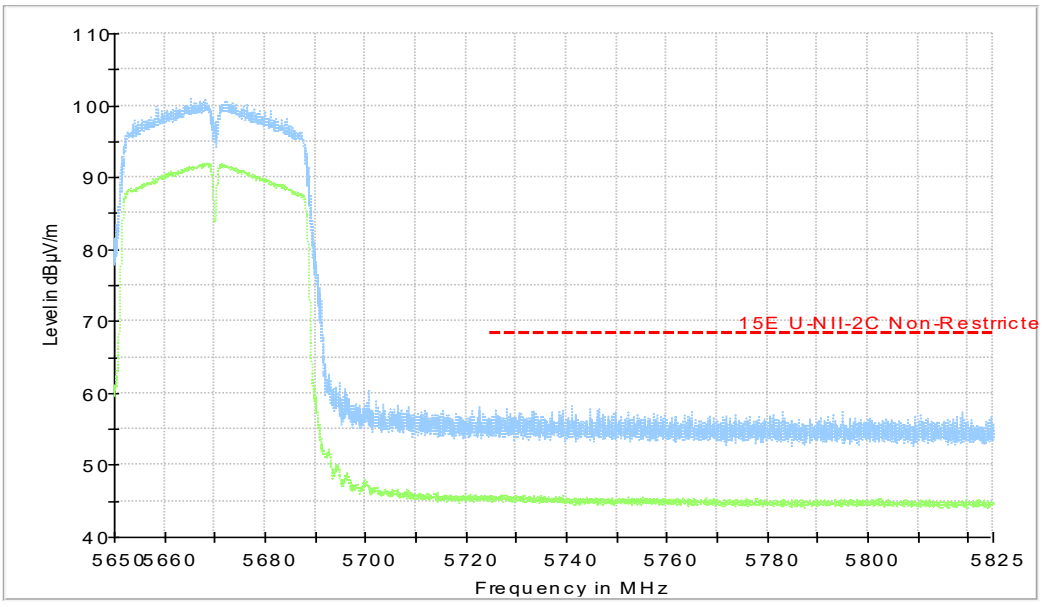

Fig.67 Band Edges (802.11n-HT40, 5670MHz)

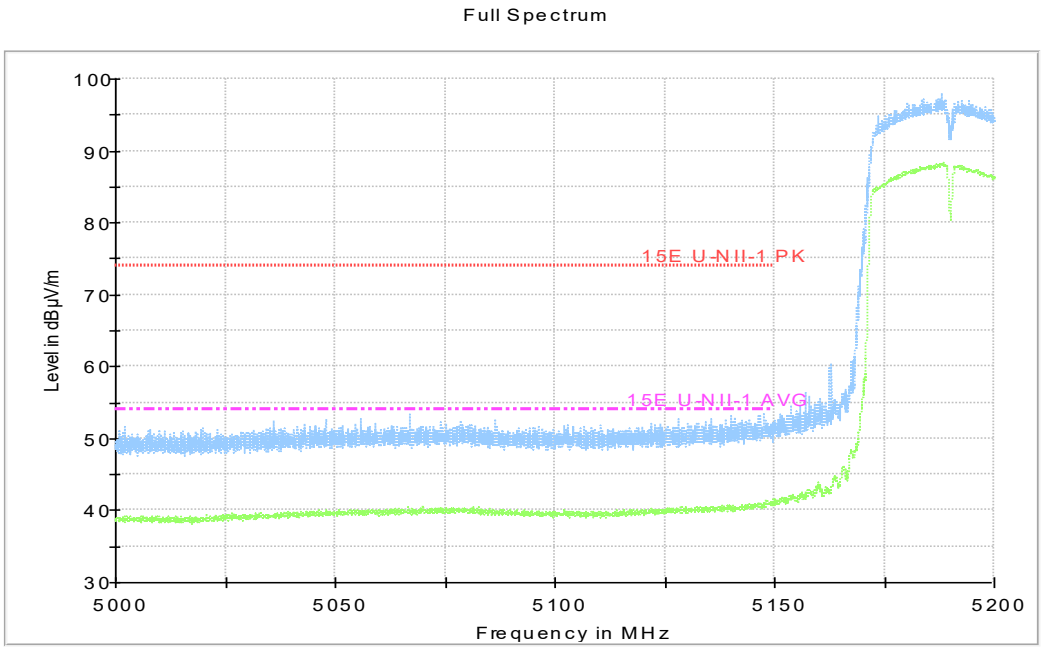

Fig.68 Band Edges (802.11ac-HT40, 5190MHz)

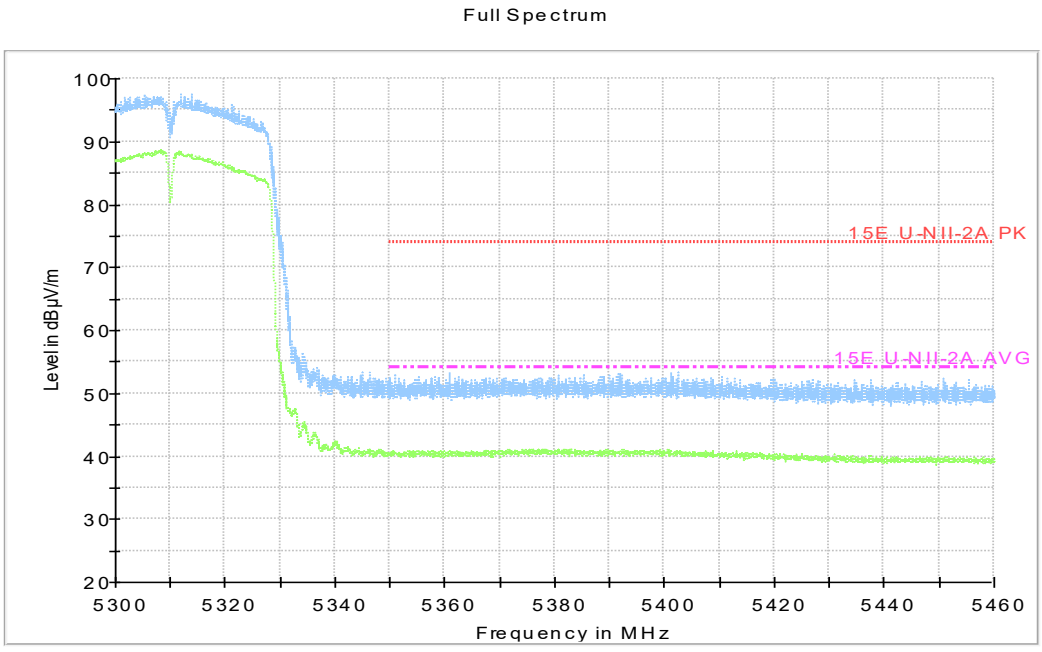

Fig.69 Band Edges (802.11ac-HT40, 5310MHz)

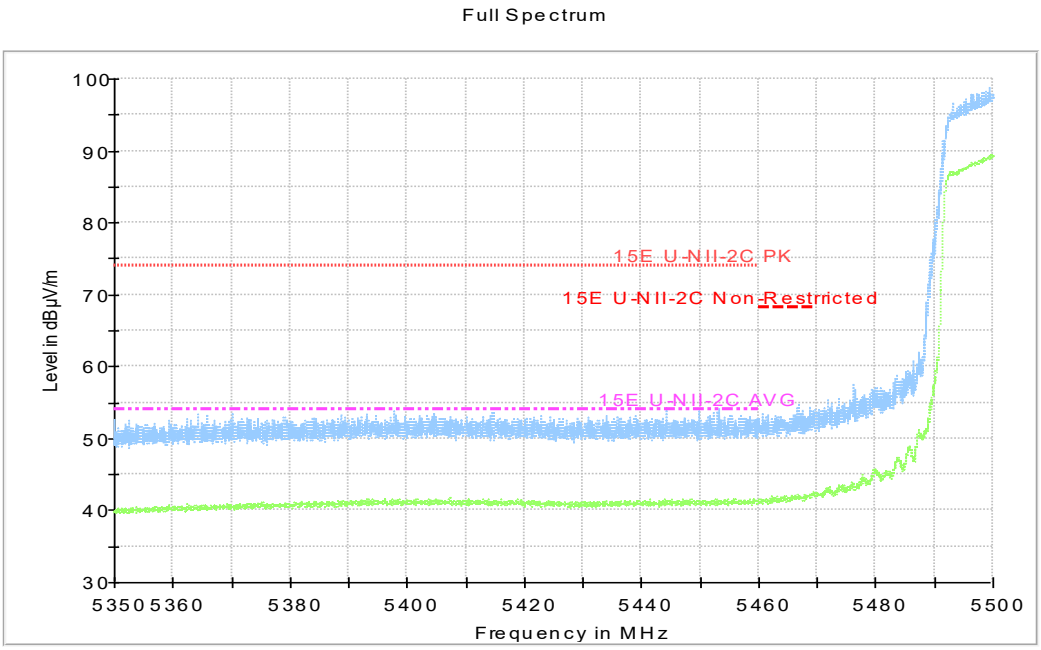

Fig.70 Band Edges (802.11ac-HT40, 5510MHz)

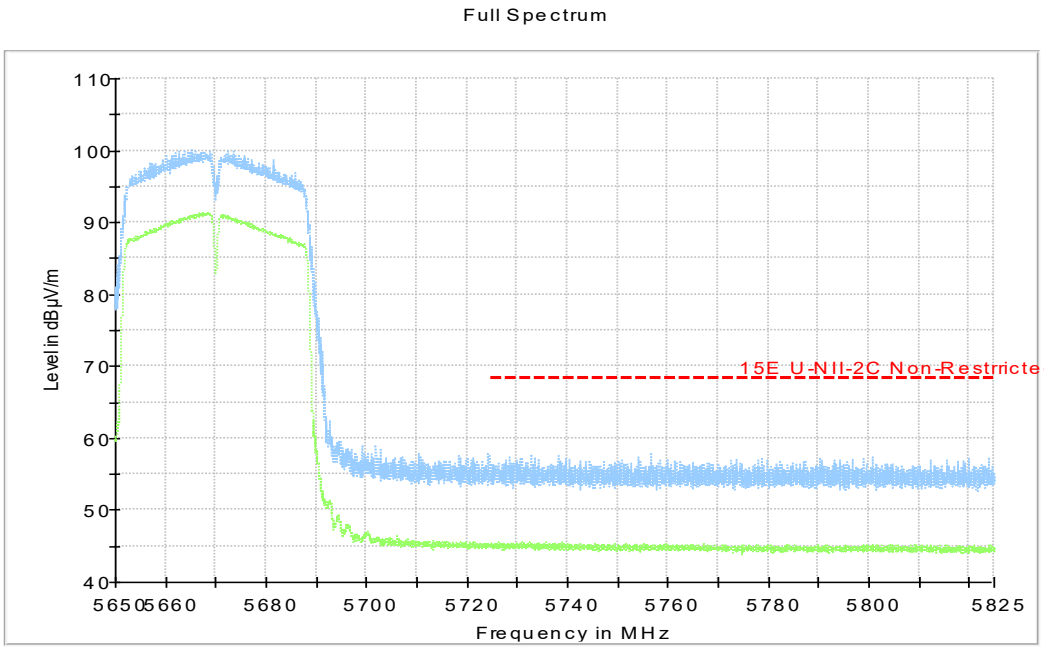

Fig.71 Band Edges (802.11ac-HT40, 5670MHz)

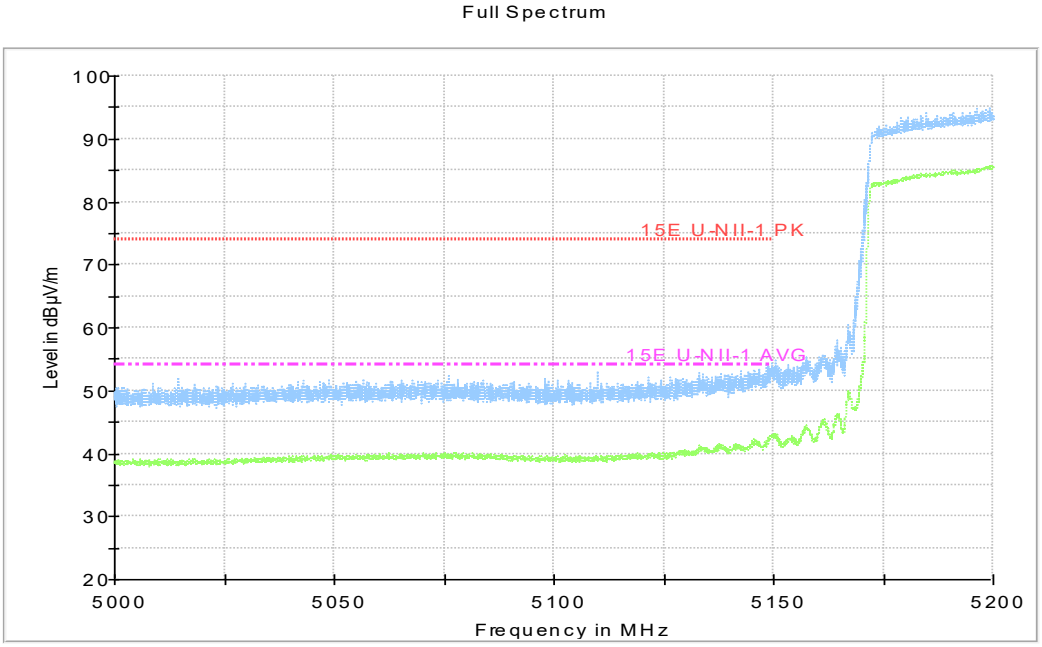

Fig.72 Band Edges (802.11ac-HT80, 5210MHz)

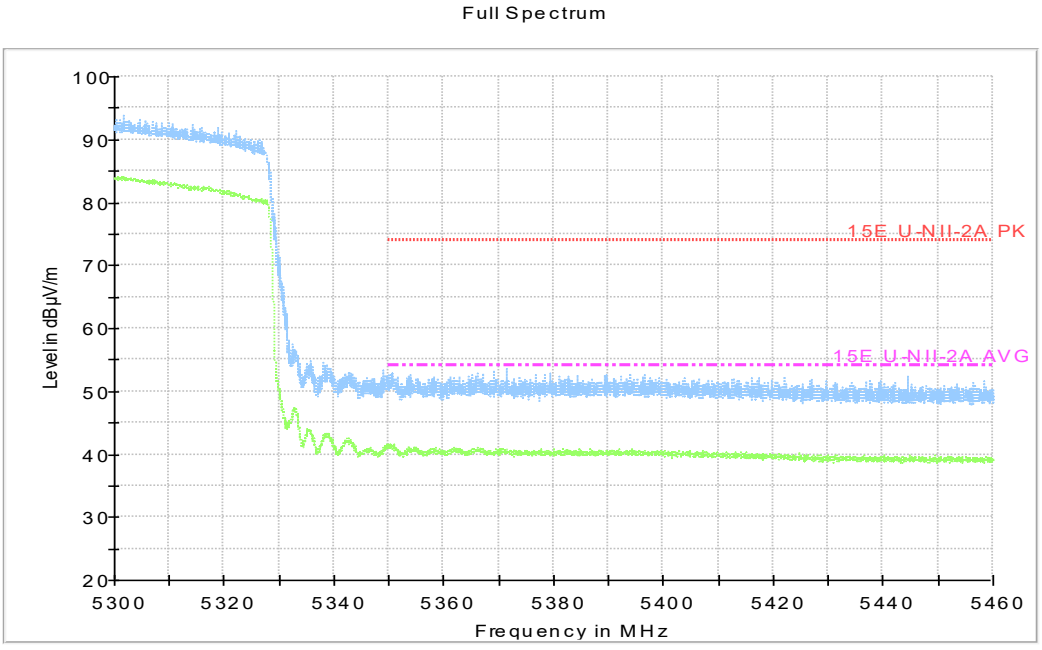

Fig.73 Band Edges (802.11ac-HT80, 5290MHz)

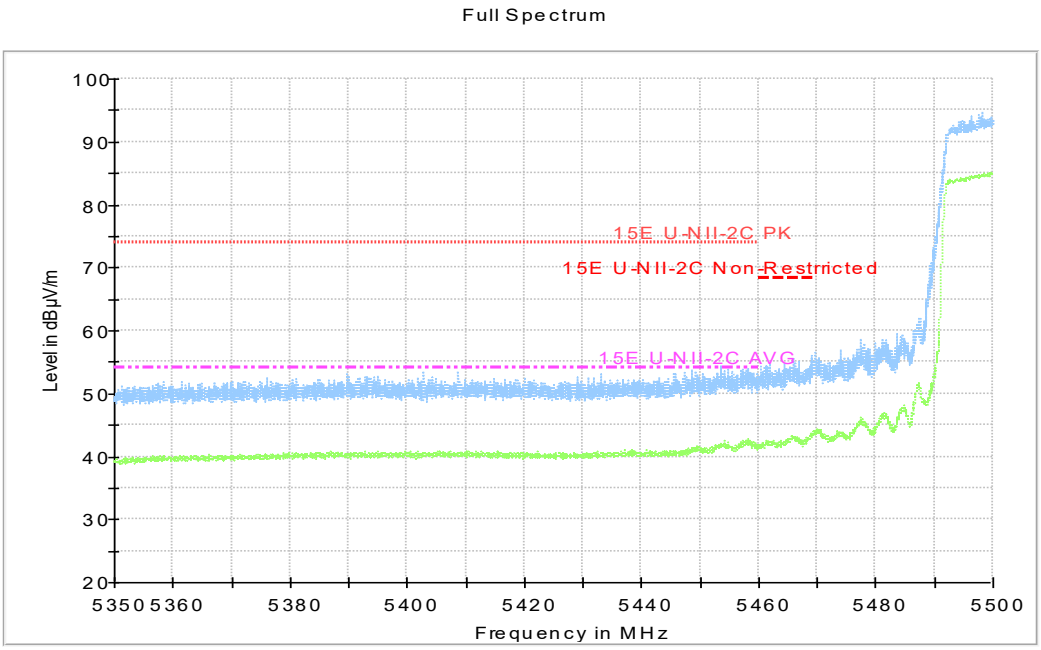

Fig.74 Band Edges (802.11ac-HT80, 5530MHz)

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 cable loss(the gain of the preamplifier), the gain of receive antenna.
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

Average

802.11a

Channel 36

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)
17992.300	45.7	-25.5	46.7	24.5	54.0	8.3	H
17993.400	45.7	-25.5	46.7	24.5	54.0	8.3	H
17997.800	45.7	-25.5	46.7	24.5	54.0	8.3	V
17989.000	45.5	-25.5	46.7	24.3	54.0	8.5	H
17994.500	45.5	-25.5	46.7	24.3	54.0	8.5	H
5148.200	45.4	-17.0	33.7	28.7	48.3	2.9	H

Channel 40

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)
17991.200	45.8	-25.5	46.7	24.6	54.0	8.2	V
17985.700	45.6	-25.5	46.7	24.4	54.0	8.4	V
17982.400	45.5	-25.5	46.7	24.3	54.0	8.5	V
17983.500	45.5	-25.5	46.7	24.3	54.0	8.5	V
17984.600	45.5	-25.5	46.7	24.3	54.0	8.5	V
17986.800	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 48

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)
17991.200	45.8	-25.5	46.7	24.6	54.0	8.2	V
17989.000	45.7	-25.5	46.7	24.5	54.0	8.3	V
17995.600	45.7	-25.5	46.7	24.5	54.0	8.3	V
17996.700	45.7	-25.5	46.7	24.5	54.0	8.3	V
17984.600	45.6	-25.5	46.7	24.4	54.0	8.4	V
17990.100	45.6	-25.5	46.7	24.4	54.0	8.4	V

Channel 52

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)
17993.4	45.9	-25.5	46.7	24.7	54.0	8.1	V
17995.6	45.7	-25.5	46.7	24.5	54.0	8.3	V
17978.0	45.5	-25.5	46.7	24.3	54.0	8.5	V
17982.4	45.5	-25.5	46.7	24.3	54.0	8.5	V
17989.0	45.5	-25.5	46.7	24.3	54.0	8.5	V
17990.1	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 56

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)
17994.5	45.8	-25.5	46.7	24.6	54.0	8.2	V
17996.7	45.8	-25.5	46.7	24.6	54.0	8.2	V
17991.2	45.7	-25.5	46.7	24.5	54.0	8.3	V
17992.3	45.6	-25.5	46.7	24.4	54.0	8.4	V
17993.4	45.6	-25.5	46.7	24.4	54.0	8.4	V
17997.8	45.6	-25.5	46.7	24.4	54.0	8.4	V

Channel 64

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)
17990.1	46.1	-25.5	46.7	24.9	54.0	7.9	V
17982.4	45.9	-25.5	46.7	24.7	54.0	8.1	V
17991.2	45.9	-25.5	46.7	24.7	54.0	8.1	V
17986.8	45.7	-25.5	46.7	24.5	54.0	8.3	V
17996.7	45.7	-25.5	46.7	24.5	54.0	8.3	V
5353.2	45.3	-16.9	34.0	28.2	54.0	8.7	H

Channel 100

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)
17996.700	45.8	-25.5	46.7	24.6	54.0	8.2	V
17990.100	45.7	-25.5	46.7	24.5	54.0	8.3	V
17981.300	45.6	-25.5	46.7	24.4	54.0	8.4	V
17982.400	45.6	-25.5	46.7	24.4	54.0	8.4	V
17994.500	45.6	-25.5	46.7	24.4	54.0	8.4	V
18000.000	45.5	-26.5	46.4	25.6	54.0	8.5	H

Channel 120

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)
17987.900	45.6	-25.5	46.7	24.4	54.0	8.4	V
17990.100	45.6	-25.5	46.7	24.4	54.0	8.4	V
17997.800	45.6	-25.5	46.7	24.4	54.0	8.4	V
17982.400	45.5	-25.5	46.7	24.3	54.0	8.5	V
17991.200	45.5	-25.5	46.7	24.3	54.0	8.5	V
17993.400	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 140

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)
17996.700	45.8	-25.5	46.7	24.6	54.0	8.2	V
17990.100	45.7	-25.5	46.7	24.5	54.0	8.3	V
17985.700	45.6	-25.5	46.7	24.4	54.0	8.4	V
17991.200	45.6	-25.5	46.7	24.4	54.0	8.4	V
17994.500	45.6	-25.5	46.7	24.4	54.0	8.4	V
17995.600	45.6	-25.5	43.4	27.7	54.0	8.4	H

802.11n-HT20

Channel 36

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)
17982.400	45.9	-25.5	46.7	24.7	54.0	8.1	V
17986.800	45.7	-25.5	46.7	24.5	54.0	8.3	V
17990.100	45.7	-25.5	46.7	24.5	54.0	8.3	V
17993.400	45.6	-25.5	46.7	24.4	54.0	8.4	V
17984.600	45.5	-25.5	46.7	24.3	54.0	8.5	V
5149.300	45.1	-17.0	33.7	28.4	48.3	3.2	H

Channel 40

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)
17983.500	45.8	-25.5	46.7	24.6	54.0	8.2	V
17989.000	45.8	-25.5	46.7	24.6	54.0	8.2	V
17996.700	45.8	-25.5	46.7	24.6	54.0	8.2	V
17992.300	45.7	-25.5	46.7	24.5	54.0	8.3	V
17990.100	45.6	-25.5	46.7	24.4	54.0	8.4	V
17991.200	45.6	-25.5	46.7	24.4	54.0	8.4	V

Channel 48

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)
17992.300	45.9	-25.5	46.7	24.7	54.0	8.1	V
17980.200	45.8	-25.5	46.7	24.6	54.0	8.2	V
17993.400	45.7	-25.5	46.7	24.5	54.0	8.3	V
17996.700	45.7	-25.5	46.7	24.5	54.0	8.3	V
17987.900	45.6	-25.5	46.7	24.4	54.0	8.4	V
17995.600	45.6	-25.5	46.7	24.4	54.0	8.4	V

Channel 52

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)
17989.0	45.8	-25.5	46.7	24.6	54.0	8.2	V
17993.4	45.7	-25.5	46.7	24.5	54.0	8.3	V
17994.5	45.6	-25.5	46.7	24.4	54.0	8.4	V
17985.7	45.5	-25.5	46.7	24.3	54.0	8.5	V
17986.8	45.5	-25.5	46.7	24.3	54.0	8.5	V
17991.2	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 56

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)
17992.3	45.8	-25.5	46.7	24.6	54.0	8.2	V
17996.7	45.8	-25.5	46.7	24.6	54.0	8.2	V
17991.2	45.7	-25.5	46.7	24.5	54.0	8.3	V
17997.8	45.7	-25.5	46.7	24.5	54.0	8.3	V
17993.4	45.6	-25.5	46.7	24.4	54.0	8.4	V
17980.2	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 64

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)
17991.2	45.9	-25.5	46.7	24.7	54.0	8.1	V
17987.9	45.8	-25.5	46.7	24.6	54.0	8.2	V
17992.3	45.8	-25.5	46.7	24.6	54.0	8.2	V
17994.5	45.7	-25.5	46.7	24.5	54.0	8.3	V
17997.8	45.7	-25.5	46.7	24.5	54.0	8.3	V
5353.2	45.3	-16.9	34.0	28.2	54.0	8.7	H

Channel 100

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)
17983.500	45.7	-25.5	46.7	24.5	54.0	8.3	V
17991.200	45.7	-25.5	46.7	24.5	54.0	8.3	V
17993.400	45.7	-25.5	46.7	24.5	54.0	8.3	V
17997.800	45.7	-25.5	46.7	24.5	54.0	8.3	V
17989.000	45.6	-25.5	46.7	24.4	54.0	8.4	V
18000.000	45.4	-26.5	46.4	25.5	54.0	8.6	H

Channel 120

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)
17994.500	45.7	-25.5	46.7	24.5	54.0	8.3	V
17985.700	45.6	-25.5	46.7	24.4	54.0	8.4	V
17987.900	45.5	-25.5	46.7	24.3	54.0	8.5	V
17991.200	45.5	-25.5	46.7	24.3	54.0	8.5	V
17993.400	45.5	-25.5	46.7	24.3	54.0	8.5	V
17989.000	45.4	-25.5	46.7	24.2	54.0	8.6	V

Channel 140

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)
17987.900	45.8	-25.5	46.7	24.6	54.0	8.2	V
17985.700	45.7	-25.5	46.7	24.5	54.0	8.3	V
17993.400	45.7	-25.5	46.7	24.5	54.0	8.3	V
17980.200	45.5	-25.5	46.7	24.3	54.0	8.5	V
17997.800	45.5	-25.5	46.7	24.3	54.0	8.5	V
17978.000	45.4	-25.5	43.4	27.5	54.0	8.6	H

802.11n-HT40

Channel 38

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)
17991.200	45.8	-25.5	46.7	24.6	54.0	8.2	V
17983.500	45.5	-25.5	46.7	24.3	54.0	8.5	V
17987.900	45.5	-25.5	46.7	24.3	54.0	8.5	V
17993.400	45.5	-25.5	46.7	24.3	54.0	8.5	V
17994.500	45.5	-25.5	46.7	24.3	54.0	8.5	V
5148.000	45.8	-17.0	33.7	29.1	48.3	2.5	H

Channel 46

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)
17991.200	45.7	-25.5	46.7	24.5	54.0	8.3	V
17987.900	45.6	-25.5	46.7	24.4	54.0	8.4	V
17992.300	45.6	-25.5	46.7	24.4	54.0	8.4	V
17993.400	45.6	-25.5	46.7	24.4	54.0	8.4	V
17994.500	45.6	-25.5	46.7	24.4	54.0	8.4	V
17982.400	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 54

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)
17985.7	45.7	-25.5	46.7	24.5	54.0	8.3	V
17994.5	45.7	-25.5	46.7	24.5	54.0	8.3	V
17987.9	45.6	-25.5	46.7	24.4	54.0	8.4	V
17991.2	45.6	-25.5	46.7	24.4	54.0	8.4	V
17993.4	45.6	-25.5	46.7	24.4	54.0	8.4	V
17983.5	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 62

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)
17996.7	45.8	-25.5	46.7	24.6	54.0	8.2	V
17994.5	45.7	-25.5	46.7	24.5	54.0	8.3	V
17976.9	45.5	-25.5	46.7	24.3	54.0	8.5	V
17987.9	45.5	-25.5	46.7	24.3	54.0	8.5	V
17990.1	45.5	-25.5	46.7	24.3	54.0	8.5	V
5353.1	45.7	-16.9	34.0	28.6	54.0	8.3	H

Channel 102

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)
17996.700	45.9	-25.5	46.7	24.7	54.0	8.1	V
17997.800	45.8	-25.5	46.7	24.6	54.0	8.2	V
17983.500	45.6	-25.5	46.7	24.4	54.0	8.4	V
17986.800	45.6	-25.5	46.7	24.4	54.0	8.4	V
17995.600	45.6	-25.5	46.7	24.4	54.0	8.4	V
17990.100	45.5	-25.5	43.4	27.6	54.0	8.5	H

Channel 118

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)
17994.500	45.9	-25.5	46.7	24.7	54.0	8.1	V
17993.400	45.8	-25.5	46.7	24.6	54.0	8.2	V
17995.600	45.8	-25.5	46.7	24.6	54.0	8.2	V
17987.900	45.7	-25.5	46.7	24.5	54.0	8.3	V
17979.100	45.6	-25.5	46.7	24.4	54.0	8.4	V
17989.000	45.6	-25.5	46.7	24.4	54.0	8.4	V

Channel 134

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)
17987.900	45.9	-25.5	46.7	24.7	54.0	8.1	V
17994.500	45.8	-25.5	46.7	24.6	54.0	8.2	V
17991.200	45.7	-25.5	46.7	24.5	54.0	8.3	V
17992.300	45.6	-25.5	46.7	24.4	54.0	8.4	V
17997.800	45.6	-25.5	46.7	24.4	54.0	8.4	V
18000.000	45.5	-26.5	46.4	25.6	54.0	8.5	H

802.11ac-HT20

Channel 36

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)
17989.000	45.8	-25.5	46.7	24.6	54.0	8.2	V
17996.700	45.8	-25.5	46.7	24.6	54.0	8.2	V
17993.400	45.7	-25.5	46.7	24.5	54.0	8.3	V
17994.500	45.7	-25.5	46.7	24.5	54.0	8.3	V
17995.600	45.7	-25.5	46.7	24.5	54.0	8.3	V
5147.700	45.0	-17.0	33.7	28.3	48.3	3.3	H

Channel 40

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)
17983.500	45.7	-25.5	46.7	24.5	54.0	8.3	V
17985.700	45.6	-25.5	46.7	24.4	54.0	8.4	V
17992.300	45.6	-25.5	46.7	24.4	54.0	8.4	V
17995.600	45.6	-25.5	46.7	24.4	54.0	8.4	V
17989.000	45.5	-25.5	46.7	24.3	54.0	8.5	V
17991.200	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 48

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)
8383.800	46.0	-34.5	37.7	42.8	54.0	8.0	V
17985.700	45.6	-25.5	46.7	24.4	54.0	8.4	V
17992.300	45.6	-25.5	46.7	24.4	54.0	8.4	V
17995.600	45.6	-25.5	46.7	24.4	54.0	8.4	V
17983.500	45.5	-25.5	46.7	24.3	54.0	8.5	V
17989.000	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 52

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)
17985.7	45.6	-25.5	46.7	24.4	54.0	8.4	V
17986.8	45.6	-25.5	46.7	24.4	54.0	8.4	V
17989.0	45.6	-25.5	46.7	24.4	54.0	8.4	V
17990.1	45.6	-25.5	46.7	24.4	54.0	8.4	V
17992.3	45.5	-25.5	46.7	24.3	54.0	8.5	V
17994.5	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 56

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)
17987.9	45.8	-25.5	46.7	24.6	54.0	8.2	V
17994.5	45.7	-25.5	46.7	24.5	54.0	8.3	V
17979.1	45.6	-25.5	46.7	24.4	54.0	8.4	V
17984.6	45.6	-25.5	46.7	24.4	54.0	8.4	V
17989.0	45.6	-25.5	46.7	24.4	54.0	8.4	V
17990.1	45.6	-25.5	46.7	24.4	54.0	8.4	V

Channel 64

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)
17994.5	46.0	-25.5	46.7	24.8	54.0	8.0	V
17992.3	45.9	-25.5	46.7	24.7	54.0	8.1	V
17986.8	45.8	-25.5	46.7	24.6	54.0	8.2	V
17990.1	45.5	-25.5	46.7	24.3	54.0	8.5	V
17995.6	45.5	-25.5	46.7	24.3	54.0	8.5	V
5353.5	45.1	-16.9	34.0	28.0	54.0	8.9	H

Channel 100

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)
17987.900	45.8	-25.5	46.7	24.6	54.0	8.2	V
17995.600	45.7	-25.5	46.7	24.5	54.0	8.3	V
17990.100	45.6	-25.5	46.7	24.4	54.0	8.4	V
17983.500	45.5	-25.5	46.7	24.3	54.0	8.5	V
17985.700	45.5	-25.5	46.7	24.3	54.0	8.5	V
17985.700	45.5	-25.5	43.4	27.6	54.0	8.5	H

Channel 120

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)
17986.800	45.8	-25.5	46.7	24.6	54.0	8.2	V
17992.300	45.7	-25.5	46.7	24.5	54.0	8.3	V
17995.600	45.6	-25.5	46.7	24.4	54.0	8.4	V
17978.000	45.5	-25.5	46.7	24.3	54.0	8.5	V
17989.000	45.5	-25.5	46.7	24.3	54.0	8.5	V
17991.200	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 140

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)
17996.700	45.8	-25.5	46.7	24.6	54.0	8.2	V
17997.800	45.7	-25.5	46.7	24.5	54.0	8.3	V
17985.700	45.6	-25.5	46.7	24.4	54.0	8.4	V
17986.800	45.6	-25.5	46.7	24.4	54.0	8.4	V
17990.100	45.6	-25.5	46.7	24.4	54.0	8.4	V
17993.400	45.5	-25.5	43.4	27.6	54.0	8.5	H

802.11ac-HT40

Channel 38

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)
17997.800	45.8	-25.5	46.7	24.6	54.0	8.2	V
17991.200	45.7	-25.5	46.7	24.5	54.0	8.3	V
17992.300	45.6	-25.5	46.7	24.4	54.0	8.4	V
17995.600	45.6	-25.5	46.7	24.4	54.0	8.4	V
17985.700	45.5	-25.5	46.7	24.3	54.0	8.5	V
5149.900	41.6	-17.0	33.7	24.9	48.3	6.7	H

Channel 46

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)
17994.500	46.1	-25.5	46.7	24.9	54.0	7.9	V
17990.100	45.6	-25.5	46.7	24.4	54.0	8.4	V
17997.800	45.6	-25.5	46.7	24.4	54.0	8.4	V
17987.900	45.5	-25.5	46.7	24.3	54.0	8.5	V
17989.000	45.5	-25.5	46.7	24.3	54.0	8.5	V
17993.400	45.5	-25.5	46.7	24.3	54.0	8.5	V

Channel 54

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)
17991.2	45.7	-25.5	46.7	24.5	54.0	8.3	V
17993.4	45.7	-25.5	46.7	24.5	54.0	8.3	V
17995.6	45.7	-25.5	46.7	24.5	54.0	8.3	V
17992.3	45.6	-25.5	46.7	24.4	54.0	8.4	V
17987.9	45.5	-25.5	46.7	24.3	54.0	8.5	V
17976.9	45.4	-25.5	46.7	24.2	54.0	8.6	V

Channel 62

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)
17990.1	45.7	-25.5	46.7	24.5	54.0	8.3	V
17994.5	45.7	-25.5	46.7	24.5	54.0	8.3	V
17983.5	45.6	-25.5	46.7	24.4	54.0	8.4	V
17984.6	45.6	-25.5	46.7	24.4	54.0	8.4	V
17991.2	45.6	-25.5	46.7	24.4	54.0	8.4	V
5371.5	41.2	-16.9	34.0	24.1	54.0	12.8	H

Channel 102

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)
17986.800	45.7	-25.5	46.7	24.5	54.0	8.3	V
17992.300	45.7	-25.5	46.7	24.5	54.0	8.3	V
17995.600	45.6	-25.5	46.7	24.4	54.0	8.4	V
17996.700	45.6	-25.5	46.7	24.4	54.0	8.4	V
17997.800	45.6	-25.5	46.7	24.4	54.0	8.4	V
17989.000	45.5	-25.5	43.4	27.6	54.0	8.5	H

Channel 118

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)
17989.000	45.9	-25.5	46.7	24.7	54.0	8.1	V
17997.800	45.9	-25.5	46.7	24.7	54.0	8.1	V
17987.900	45.7	-25.5	46.7	24.5	54.0	8.3	V
17991.200	45.7	-25.5	46.7	24.5	54.0	8.3	V
17992.300	45.7	-25.5	46.7	24.5	54.0	8.3	V
17996.700	45.7	-25.5	46.7	24.5	54.0	8.3	V

Channel 134

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)
17994.500	45.8	-25.5	46.7	24.6	54.0	8.2	V
17996.700	45.8	-25.5	46.7	24.6	54.0	8.2	V
17992.300	45.7	-25.5	46.7	24.5	54.0	8.3	V
17997.800	45.7	-25.5	46.7	24.5	54.0	8.3	V
17982.400	45.6	-25.5	46.7	24.4	54.0	8.4	V
17987.900	45.6	-25.5	43.4	27.7	54.0	8.4	H

802.11ac-HT80

Channel 42

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)
17996.7	45.8	-25.5	46.7	24.6	54.0	8.2	V
17997.8	45.7	-25.5	46.7	24.5	54.0	8.3	V
17991.2	45.6	-25.5	46.7	24.4	54.0	8.4	V
17981.3	45.5	-25.5	46.7	24.3	54.0	8.5	V
17990.1	45.5	-25.5	46.7	24.3	54.0	8.5	V
5149.5	43.1	-17.0	33.7	26.4	54.0	10.9	H

Channel 58

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)
17987.9	45.7	-25.5	46.7	24.5	54.0	8.3	V
17993.4	45.6	-25.5	46.7	24.4	54.0	8.4	V
17994.5	45.6	-25.5	46.7	24.4	54.0	8.4	V
17996.7	45.6	-25.5	46.7	24.4	54.0	8.4	V
17997.8	45.6	-25.5	46.7	24.4	54.0	8.4	V
5350.3	41.6	-16.9	34.0	24.5	54.0	12.4	H

Channel 106

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)
17995.6	45.7	-25.5	46.7	24.5	54.0	8.3	V
17991.2	45.6	-25.5	46.7	24.4	54.0	8.4	V
17992.3	45.6	-25.5	46.7	24.4	54.0	8.4	V
17997.8	45.6	-25.5	46.7	24.4	54.0	8.4	V
17985.7	45.5	-25.5	46.7	24.3	54.0	8.5	V
5457.7	42.7	-16.8	34.2	25.3	54.0	11.3	H

Peak

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Channel 36

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)
17981.300	57.2	-25.5	46.7	36.0	68.3	11.1	H
17995.600	57.2	-25.5	46.7	36.0	68.3	11.1	H
17979.100	56.8	-25.5	46.7	35.6	68.3	11.5	V
17994.500	56.8	-25.5	46.7	35.6	68.3	11.5	H
17969.200	56.7	-25.5	46.7	35.5	68.3	11.6	H
5150.000	58.3	-17.0	33.7	41.6	68.3	10.0	H

Channel 40

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)
17995.600	57.5	-25.5	46.7	36.3	68.3	10.8	V
17989.000	56.6	-25.5	46.7	35.4	68.3	11.7	V
17986.800	56.5	-25.5	46.7	35.3	68.3	11.8	V
17920.800	56.3	-25.5	46.7	35.1	68.3	12.0	V
17967.000	56.3	-25.5	46.7	35.1	68.3	12.0	V
17994.500	56.1	-25.5	46.7	34.9	68.3	12.2	V

Channel 48

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)
17978.000	57.4	-25.5	46.7	36.2	68.3	10.9	V
17992.300	57.2	-25.5	46.7	36.0	68.3	11.1	V
17996.700	57.2	-25.5	46.7	36.0	68.3	11.1	V
17990.100	56.7	-25.5	46.7	35.5	68.3	11.6	V
17984.600	56.4	-25.5	46.7	35.2	68.3	11.9	V
17991.200	56.4	-25.5	46.7	35.2	68.3	11.9	V

Channel 52

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)
17991.200	58.1	-25.5	46.7	36.9	68.3	10.2	V
17978.000	57.2	-25.5	46.7	36.0	68.3	11.1	V
17987.900	57.2	-25.5	46.7	36.0	68.3	11.1	V
17995.600	56.5	-25.5	46.7	35.3	68.3	11.8	V
17488.500	56.4	-26.9	45.2	38.0	68.3	11.9	V
17997.800	56.4	-25.5	46.7	35.2	68.3	11.9	V

Channel 56

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)
17982.400	57.0	-25.5	46.7	35.8	68.3	11.3	V
17986.800	56.6	-25.5	46.7	35.4	68.3	11.7	V
17992.300	56.6	-25.5	46.7	35.4	68.3	11.7	V
17979.100	56.3	-25.5	46.7	35.1	68.3	12.0	V
17994.500	56.3	-25.5	46.7	35.1	68.3	12.0	V
17904.300	56.2	-25.5	46.7	35.0	68.3	12.1	V

Channel 64

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)
17981.300	58.0	-25.5	46.7	36.8	68.3	10.3	V
17986.800	57.1	-25.5	46.7	35.9	68.3	11.2	V
17980.200	56.8	-25.5	46.7	35.6	68.3	11.5	V
17982.400	56.7	-25.5	46.7	35.5	68.3	11.6	V
17991.200	56.7	-25.5	46.7	35.5	68.3	11.6	V
5352.100	58.9	-16.9	34.0	41.8	68.3	9.4	H

Channel 100

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)
17995.600	57.0	-25.5	46.7	35.8	68.3	11.3	V
17997.800	57.0	-25.5	46.7	35.8	68.3	11.3	V
17989.000	56.4	-25.5	46.7	35.2	68.3	11.9	V
17992.300	56.4	-25.5	46.7	35.2	68.3	11.9	V
17994.500	56.4	-25.5	46.7	35.2	68.3	11.9	V
5452.300	58.5	-16.8	34.2	41.1	68.3	9.8	H

Channel 120

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)
17894.400	57.5	-25.5	46.7	36.3	68.3	10.8	V
17973.600	57.4	-25.5	46.7	36.2	68.3	10.9	V
17989.000	57.1	-25.5	46.7	35.9	68.3	11.2	V
17976.900	56.6	-25.5	46.7	35.4	68.3	11.7	V
17788.800	56.5	-25.5	46.7	35.3	68.3	11.8	V
17997.800	56.5	-25.5	46.7	35.3	68.3	11.8	V

Channel 140

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)
17997.800	57.5	-25.5	46.7	36.3	68.3	10.8	V
17894.400	57.3	-25.5	46.7	36.1	68.3	11.0	V
17992.300	57.0	-25.5	46.7	35.8	68.3	11.3	V
17993.400	56.9	-25.5	46.7	35.7	68.3	11.4	V
17885.600	56.6	-25.5	46.7	35.4	68.3	11.7	V
5727.800	63.8	-16.3	34.3	45.8	68.3	4.5	H

802.11n-HT20

Channel 36

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)
17888.900	57.2	-25.5	46.7	36.0	68.3	11.1	V
17976.900	57.0	-25.5	46.7	35.8	68.3	11.3	V
17884.500	56.5	-25.5	46.7	35.3	68.3	11.8	V
17715.100	56.4	-25.7	46.0	36.2	68.3	11.9	V
17993.400	56.3	-25.5	46.7	35.1	68.3	12.0	V
5148.200	59.6	-17.0	33.7	42.9	68.3	8.7	H

Channel 40

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)
17996.700	56.4	-25.5	46.7	35.2	68.3	11.9	V
17989.000	56.3	-25.5	46.7	35.1	68.3	12.0	V
17990.100	56.3	-25.5	46.7	35.1	68.3	12.0	V
17995.600	56.2	-25.5	46.7	35.0	68.3	12.1	V
17965.900	56.1	-25.5	46.7	34.9	68.3	12.2	V
17903.200	56.0	-25.5	46.7	34.8	68.3	12.3	V

Channel 48

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)
17986.800	57.5	-25.5	46.7	36.3	68.3	10.8	V
17993.400	57.4	-25.5	46.7	36.2	68.3	10.9	V
17989.000	56.4	-25.5	46.7	35.2	68.3	11.9	V
17990.100	56.3	-25.5	46.7	35.1	68.3	12.0	V
17991.200	56.2	-25.5	46.7	35.0	68.3	12.1	V
17980.200	56.0	-25.5	46.7	34.8	68.3	12.3	V

Channel 52

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)
17996.700	57.5	-25.5	46.7	36.3	68.3	10.8	V
17979.100	57.2	-25.5	46.7	36.0	68.3	11.1	V
17877.900	56.3	-25.5	46.7	35.1	68.3	12.0	V
17985.700	56.3	-25.5	46.7	35.1	68.3	12.0	V
17980.200	56.2	-25.5	46.7	35.0	68.3	12.1	V
17994.500	56.1	-25.5	46.7	34.9	68.3	12.2	V

Channel 56

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)
17973.600	57.3	-25.5	46.7	36.1	68.3	11.0	V
17950.500	56.9	-25.5	46.7	35.7	68.3	11.4	V
17975.800	56.8	-25.5	46.7	35.6	68.3	11.5	V
17909.800	56.7	-25.5	46.7	35.5	68.3	11.6	V
17982.400	56.7	-25.5	46.7	35.5	68.3	11.6	V
17978.000	56.5	-25.5	46.7	35.3	68.3	11.8	V

Channel 64

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)
17993.400	58.0	-25.5	46.7	36.8	68.3	10.3	V
17994.500	57.9	-25.5	46.7	36.7	68.3	10.4	V
17979.100	57.4	-25.5	46.7	36.2	68.3	10.9	V
17989.000	56.6	-25.5	46.7	35.4	68.3	11.7	V
17990.100	56.6	-25.5	46.7	35.4	68.3	11.7	V
5350.200	58.1	-16.9	34.0	41.0	68.3	10.2	H

Channel 100

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)
17885.600	57.0	-25.5	46.7	35.8	68.3	11.3	V
17994.500	57.0	-25.5	46.7	35.8	68.3	11.3	V
17997.800	56.9	-25.5	46.7	35.7	68.3	11.4	V
17980.200	56.7	-25.5	46.7	35.5	68.3	11.6	V
17798.700	56.6	-25.5	46.7	35.4	68.3	11.7	V
5458.400	59.0	-16.8	34.2	41.6	68.3	9.3	H

Channel 120

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)
17886.700	57.8	-25.5	46.7	36.6	68.3	10.5	V
17983.500	57.8	-25.5	46.7	36.6	68.3	10.5	V
17979.100	56.9	-25.5	46.7	35.7	68.3	11.4	V
17905.400	56.3	-25.5	46.7	35.1	68.3	12.0	V
17985.700	56.3	-25.5	46.7	35.1	68.3	12.0	V
17954.900	56.2	-25.5	46.7	35.0	68.3	12.1	V

Channel 140

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)
17896.600	57.0	-25.5	46.7	35.8	68.3	11.3	V
17989.000	56.8	-25.5	46.7	35.6	68.3	11.5	V
17869.100	56.7	-25.5	46.7	35.5	68.3	11.6	V
17892.200	56.7	-25.5	46.7	35.5	68.3	11.6	V
17902.100	56.5	-25.5	46.7	35.3	68.3	11.8	V
5725.100	64.8	-16.3	34.3	46.8	68.3	3.5	H

802.11n-HT40

Channel 38

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)
17995.600	56.2	-25.5	46.7	35.0	68.3	12.1	V
17954.900	56.1	-25.5	46.7	34.9	68.3	12.2	V
17941.700	56.0	-25.5	46.7	34.8	68.3	12.3	V
17989.000	56.0	-25.5	46.7	34.8	68.3	12.3	V
17615.000	55.9	-25.7	46.0	35.7	68.3	12.4	V
5150.000	63.3	-17.0	33.7	46.6	68.3	5.0	H

Channel 46

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)
17972.500	56.6	-25.5	46.7	35.4	68.3	11.7	V
17969.200	56.3	-25.5	46.7	35.1	68.3	12.0	V
17968.100	56.2	-25.5	46.7	35.0	68.3	12.1	V
17983.500	56.2	-25.5	46.7	35.0	68.3	12.1	V
17985.700	56.2	-25.5	46.7	35.0	68.3	12.1	V
17989.000	56.0	-25.5	46.7	34.8	68.3	12.3	V

Channel 54

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)
17929.600	57.7	-25.5	46.7	36.5	68.3	10.6	V
17991.200	57.2	-25.5	46.7	36.0	68.3	11.1	V
17980.200	56.9	-25.5	46.7	35.7	68.3	11.4	V
17974.700	56.8	-25.5	46.7	35.6	68.3	11.5	V
17981.300	56.7	-25.5	46.7	35.5	68.3	11.6	V
17994.500	56.7	-25.5	46.7	35.5	68.3	11.6	V

Channel 62

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)
17983.500	56.8	-25.5	46.7	35.6	68.3	11.5	V
17989.000	56.8	-25.5	46.7	35.6	68.3	11.5	V
17981.300	56.7	-25.5	46.7	35.5	68.3	11.6	V
17987.900	56.6	-25.5	46.7	35.4	68.3	11.7	V
17991.200	56.3	-25.5	46.7	35.1	68.3	12.0	V
5353.000	60.6	-16.9	34.0	43.5	68.3	7.7	H

Channel 102

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)
17905.400	57.0	-25.5	46.7	35.8	68.3	11.3	V
17997.800	56.9	-25.5	46.7	35.7	68.3	11.4	V
17975.800	56.7	-25.5	46.7	35.5	68.3	11.6	V
17986.800	56.5	-25.5	46.7	35.3	68.3	11.8	V
17995.600	56.5	-25.5	46.7	35.3	68.3	11.8	V
5453.000	58.3	-16.8	34.2	40.9	68.3	10.0	H

Channel 118

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)
17984.600	57.3	-25.5	46.7	36.1	68.3	11.0	V
17987.900	56.9	-25.5	46.7	35.7	68.3	11.4	V
17989.000	56.7	-25.5	46.7	35.5	68.3	11.6	V
17949.400	56.6	-25.5	46.7	35.4	68.3	11.7	V
17985.700	56.6	-25.5	46.7	35.4	68.3	11.7	V
17994.500	56.3	-25.5	46.7	35.1	68.3	12.0	V

Channel 134

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)
17908.700	57.6	-25.5	46.7	36.4	68.3	10.7	V
17990.100	57.3	-25.5	46.7	36.1	68.3	11.0	V
17981.300	56.6	-25.5	46.7	35.4	68.3	11.7	V
17991.200	56.6	-25.5	46.7	35.4	68.3	11.7	V
17891.100	56.5	-25.5	46.7	35.3	68.3	11.8	V
5741.000	58.2	-16.3	34.3	40.2	68.3	10.1	H

802.11ac-HT20

Channel 36

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)
17993.400	57.7	-25.5	46.7	36.5	68.3	10.6	V
17995.600	57.1	-25.5	46.7	35.9	68.3	11.2	V
17997.800	57.0	-25.5	46.7	35.8	68.3	11.3	V
17984.600	56.8	-25.5	46.7	35.6	68.3	11.5	V
17883.400	56.3	-25.5	46.7	35.1	68.3	12.0	V
5133.300	56.8	-17.0	33.7	40.1	68.3	11.5	H

Channel 40

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)
17985.700	57.0	-25.5	46.7	35.8	68.3	11.3	V
17820.700	56.7	-25.5	46.7	35.5	68.3	11.6	V
17992.300	56.5	-25.5	46.7	35.3	68.3	11.8	V
17892.200	56.3	-25.5	46.7	35.1	68.3	12.0	V
17980.200	56.2	-25.5	46.7	35.0	68.3	12.1	V
17879.000	56.0	-25.5	46.7	34.8	68.3	12.3	V

Channel 48

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)
17990.100	57.1	-25.5	46.7	35.9	68.3	11.2	V
17973.600	57.0	-25.5	46.7	35.8	68.3	11.3	V
17978.000	56.9	-25.5	46.7	35.7	68.3	11.4	V
17991.200	56.7	-25.5	46.7	35.5	68.3	11.6	V
17986.800	56.2	-25.5	46.7	35.0	68.3	12.1	V
17969.200	56.1	-25.5	46.7	34.9	68.3	12.2	V

Channel 52

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)
17997.800	57.1	-25.5	46.7	35.9	68.3	11.2	V
17987.900	56.9	-25.5	46.7	35.7	68.3	11.4	V
17990.100	56.8	-25.5	46.7	35.6	68.3	11.5	V
17602.900	56.7	-25.7	46.0	36.5	68.3	11.6	V
17996.700	56.5	-25.5	46.7	35.3	68.3	11.8	V
17923.000	56.4	-25.5	46.7	35.2	68.3	11.9	V

Channel 56

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)
17936.200	57.2	-25.5	46.7	36.0	68.3	11.1	V
17989.000	56.8	-25.5	46.7	35.6	68.3	11.5	V
17978.000	56.6	-25.5	46.7	35.4	68.3	11.7	V
17993.400	56.6	-25.5	46.7	35.4	68.3	11.7	V
17994.500	56.6	-25.5	46.7	35.4	68.3	11.7	V
17995.600	56.5	-25.5	46.7	35.3	68.3	11.8	V

Channel 64

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)
17985.700	57.5	-25.5	46.7	36.3	68.3	10.8	V
17989.000	57.1	-25.5	46.7	35.9	68.3	11.2	V
17967.000	56.9	-25.5	46.7	35.7	68.3	11.4	V
17984.600	56.9	-25.5	46.7	35.7	68.3	11.4	V
17861.400	56.6	-25.5	46.7	35.4	68.3	11.7	V
5363.500	57.7	-16.9	34.0	40.6	68.3	10.6	H

Channel 100

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)
17997.800	56.7	-25.5	46.7	35.5	68.3	11.6	V
17983.500	56.6	-25.5	46.7	35.4	68.3	11.7	V
17989.000	56.6	-25.5	46.7	35.4	68.3	11.7	V
17991.200	56.5	-25.5	46.7	35.3	68.3	11.8	V
17987.900	56.4	-25.5	46.7	35.2	68.3	11.9	V
5454.600	57.4	-16.8	34.2	40.0	68.3	10.9	H

Channel 120

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)
17995.600	56.8	-25.5	46.7	35.6	68.3	11.5	V
17985.700	56.6	-25.5	46.7	35.4	68.3	11.7	V
17894.400	56.5	-25.5	46.7	35.3	68.3	11.8	V
17991.200	56.5	-25.5	46.7	35.3	68.3	11.8	V
17996.700	56.5	-25.5	46.7	35.3	68.3	11.8	V
17964.800	56.4	-25.5	46.7	35.2	68.3	11.9	V

Channel 140

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)
17989.000	57.8	-25.5	46.7	36.6	68.3	10.5	V
17981.300	56.9	-25.5	46.7	35.7	68.3	11.4	V
17976.900	56.6	-25.5	46.7	35.4	68.3	11.7	V
17993.400	56.5	-25.5	46.7	35.3	68.3	11.8	V
17995.600	56.4	-25.5	46.7	35.2	68.3	11.9	V
5725.400	59.9	-16.3	34.3	41.9	68.3	8.4	H

802.11ac-HT40

Channel 38

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)
17986.800	57.1	-25.5	46.7	35.9	68.3	11.2	V
17992.300	56.2	-25.5	46.7	35.0	68.3	12.1	V
17993.400	55.9	-25.5	46.7	34.7	68.3	12.4	V
17985.700	55.8	-25.5	46.7	34.6	68.3	12.5	V
17984.600	55.7	-25.5	46.7	34.5	68.3	12.6	V
5147.300	53.7	-17.0	33.7	37.0	68.3	14.6	H

Channel 46

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)
17981.300	56.7	-25.5	46.7	35.5	68.3	11.6	V
17993.400	56.5	-25.5	46.7	35.3	68.3	11.8	V
17970.300	56.4	-25.5	46.7	35.2	68.3	11.9	V
17903.200	56.2	-25.5	46.7	35.0	68.3	12.1	V
17974.700	56.2	-25.5	46.7	35.0	68.3	12.1	V
17980.200	56.2	-25.5	46.7	35.0	68.3	12.1	V

Channel 54

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)
17785.500	57.2	-25.5	46.7	36.0	68.3	11.1	V
17996.700	57.0	-25.5	46.7	35.8	68.3	11.3	V
17997.800	56.7	-25.5	46.7	35.5	68.3	11.6	V
17893.300	56.4	-25.5	46.7	35.2	68.3	11.9	V
17986.800	56.4	-25.5	46.7	35.2	68.3	11.9	V
17990.100	56.4	-25.5	46.7	35.2	68.3	11.9	V

Channel 62

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)
17984.600	57.2	-25.5	46.7	36.0	68.3	11.1	V
17985.700	57.2	-25.5	46.7	36.0	68.3	11.1	V
17970.300	56.7	-25.5	46.7	35.5	68.3	11.6	V
17991.200	56.6	-25.5	46.7	35.4	68.3	11.7	V
17986.800	56.5	-25.5	46.7	35.3	68.3	11.8	V
5360.800	53.4	-16.9	34.0	36.3	68.3	14.9	H

Channel 102

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)
17894.400	57.0	-25.5	46.7	35.8	68.3	11.3	V
17973.600	57.0	-25.5	46.7	35.8	68.3	11.3	V
17995.600	57.0	-25.5	46.7	35.8	68.3	11.3	V
17993.400	56.7	-25.5	46.7	35.5	68.3	11.6	V
17962.600	56.5	-25.5	46.7	35.3	68.3	11.8	V
5453.300	54.2	-16.8	34.2	36.8	68.3	14.1	H

Channel 118

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)
17985.700	57.0	-25.5	46.7	35.8	68.3	11.3	V
17997.800	56.9	-25.5	46.7	35.7	68.3	11.4	V
17978.000	56.6	-25.5	46.7	35.4	68.3	11.7	V
17984.600	56.5	-25.5	46.7	35.3	68.3	11.8	V
17995.600	56.5	-25.5	46.7	35.3	68.3	11.8	V
17990.100	56.4	-25.5	46.7	35.2	68.3	11.9	V

Channel 134

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)
17984.600	57.3	-25.5	46.7	36.1	68.3	11.0	V
17992.300	57.3	-25.5	46.7	36.1	68.3	11.0	V
17983.500	57.0	-25.5	46.7	35.8	68.3	11.3	V
17997.800	56.9	-25.5	46.7	35.7	68.3	11.4	V
17962.600	56.5	-25.5	46.7	35.3	68.3	11.8	V
5732.700	57.8	-16.3	34.3	39.8	68.3	10.5	H

802.11ac-HT80

Channel 42

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)
17991.200	58.1	-25.5	46.7	36.9	68.3	10.2	V
17881.200	57.3	-25.5	46.7	36.1	68.3	11.0	V
17993.400	57.0	-25.5	46.7	35.8	68.3	11.3	V
17978.000	56.6	-25.5	46.7	35.4	68.3	11.7	V
17968.100	56.5	-25.5	46.7	35.3	68.3	11.8	V
5149.400	54.5	-17.0	33.7	37.8	68.3	13.8	H

Channel 58

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)
17991.200	57.6	-25.5	46.7	36.4	68.3	10.7	V
17989.000	57.1	-25.5	46.7	35.9	68.3	11.2	V
17984.600	57.0	-25.5	46.7	35.8	68.3	11.3	V
17903.200	56.9	-25.5	46.7	35.7	68.3	11.4	V
17960.400	56.7	-25.5	46.7	35.5	68.3	11.6	V
5371.500	53.6	-16.9	34.0	36.5	68.3	14.7	H

Channel 106

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)
17983.500	57.6	-25.5	46.7	36.4	68.3	10.7	V
17990.100	56.8	-25.5	46.7	35.6	68.3	11.5	V
17908.700	56.6	-25.5	46.7	35.4	68.3	11.7	V
17979.100	56.4	-25.5	46.7	35.2	68.3	11.9	V
17896.600	56.3	-25.5	46.7	35.1	68.3	12.0	V
5453.400	54.3	-16.8	34.2	36.9	68.3	14.0	H

Sample calculation:

Peak ERP(dBuV/m) = P_{Mea}(36.4dBuV/m) + Cable Loss(-25.5) + Antenna Factor(46.7) = 57.6 dBuV/m

Conclusion: PASS

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

Test Condition:

Voltage（V）	Frequency（Hz）
110	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)

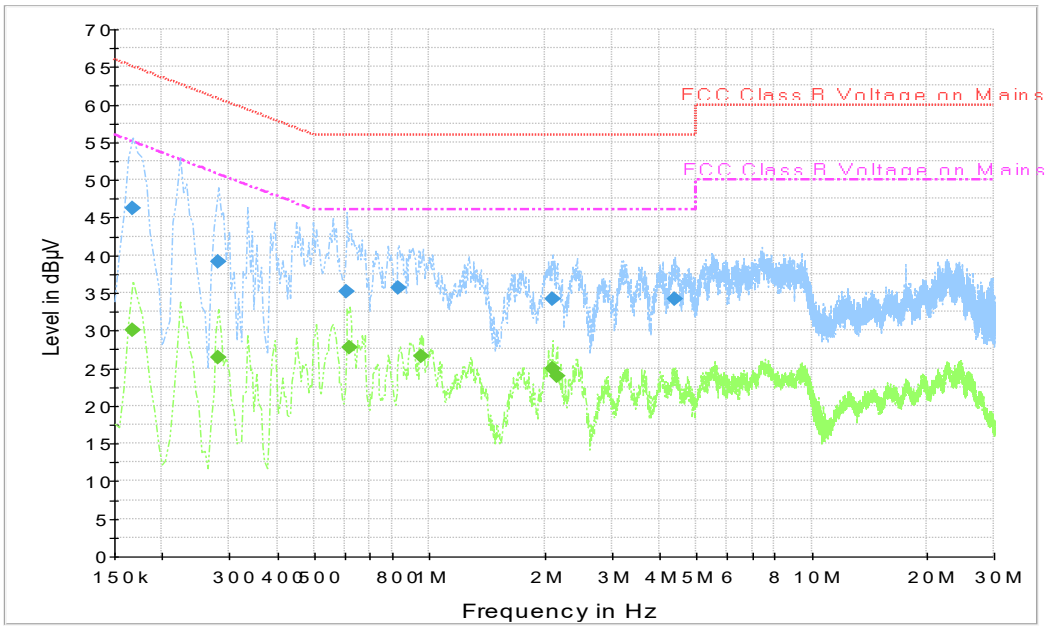
Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	66 to 56	Fig.75	Fig.76	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	56 to 46	Fig.75	Fig.76	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:



Measurement Result:

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.168000	46.3	L1	20.1	18.8	65.1
0.280500	39.1	L1	20.0	21.7	60.8
0.609000	35.2	L1	20.1	20.8	56.0
0.829500	35.6	L1	20.0	20.4	56.0
2.094000	34.2	N	19.9	21.8	56.0
4.371000	34.2	N	20.4	21.8	56.0

Measurement Result:

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.168000	30.1	L1	20.1	25.0	55.1
0.280500	26.4	L1	20.0	24.4	50.8
0.618000	27.7	L1	20.1	18.3	46.0
0.951000	26.6	L1	19.8	19.4	46.0
2.094000	24.9	L1	20.1	21.1	46.0
2.152500	23.9	L1	20.1	22.1	46.0

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

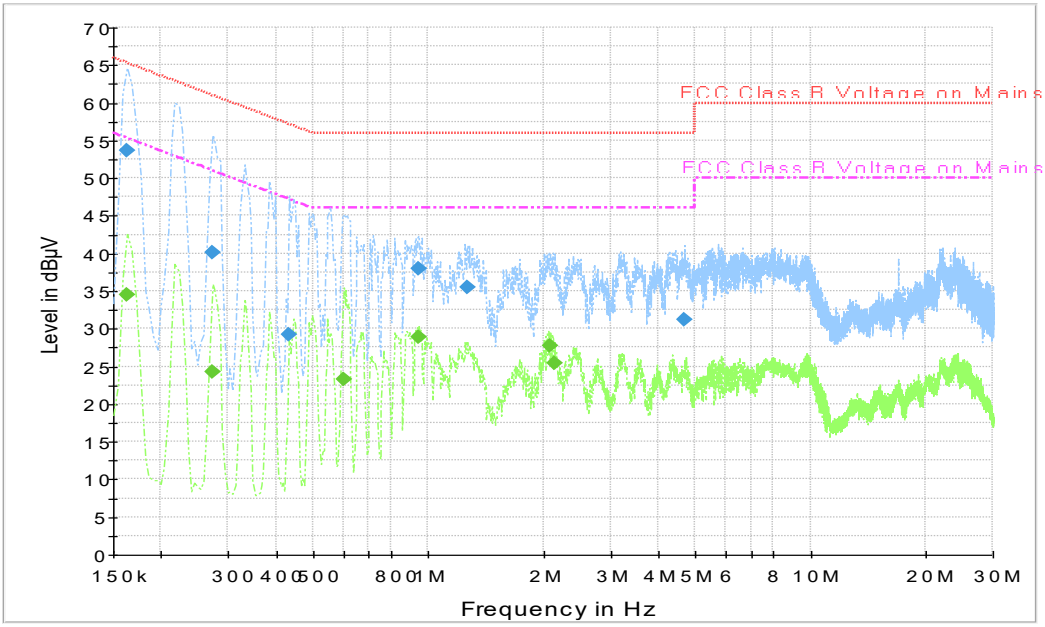


Fig.76 Conducted Emission(802.11a, IDLE)

Measurement Result:

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.163500	53.7	L1	20.2	11.6	65.3
0.271500	40.2	L1	20.0	20.9	61.1
0.433500	29.2	L1	20.1	27.9	57.2
0.942000	38.0	L1	19.8	18.0	56.0
1.266000	35.5	N	19.9	20.5	56.0
4.668000	31.2	N	20.5	24.8	56.0

Measurement Result:

Frequency (MHz)	QuasiPeak (dBµV)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.163500	34.5	L1	20.2	20.7	55.3
0.271500	24.3	L1	20.0	26.7	51.1
0.600000	23.3	L1	20.1	22.7	46.0
0.946500	28.9	N	19.9	17.1	46.0
2.089500	27.7	N	19.9	18.3	46.0
2.143500	25.5	N	19.9	20.5	46.0

Note: The measurement results showed here are worst cases of the combinations of different USB cables.

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 shall be 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.77	17.36	P
	5200 MHz	Fig.78	17.52	P
	5240 MHz	Fig.79	17.48	P
802.11n HT20	5180 MHz	Fig.80	18.20	P
	5200 MHz	Fig.81	18.28	P
	5240 MHz	Fig.82	18.16	P
802.11ac HT20	5180 MHz	Fig.83	18.20	P
	5200 MHz	Fig.84	18.20	P
	5240 MHz	Fig.85	18.16	P
802.11n HT40	5190 MHz	Fig.86	36.16	P
	5230 MHz	Fig.87	36.24	P
802.11ac	5190 MHz	Fig.88	36.24	P

HT40	5230 MHz	Fig.89	36.16	P
802.11ac HT80	5210 MHz	Fig.90	75.20	P

Conclusion: PASS

Test graphs as below:

Fig.77 99% Occupied bandwidth (802.11a, 5180MHz)

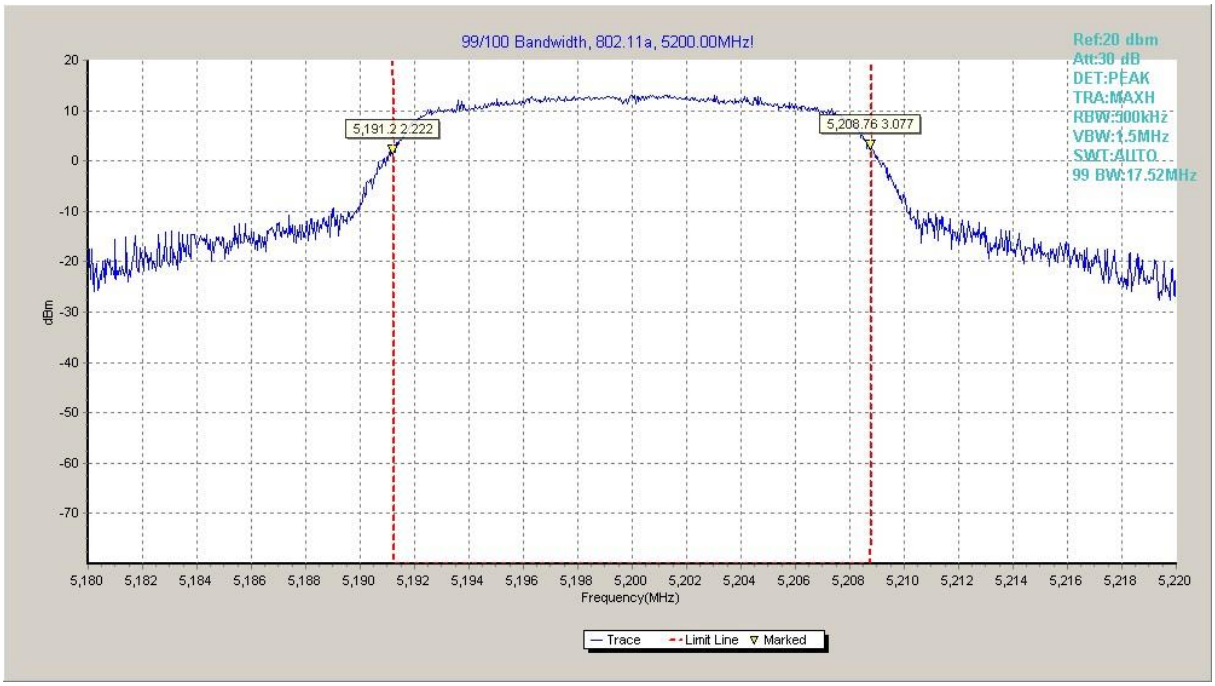


Fig.78 99% Occupied bandwidth (802.11a, 5200MHz)

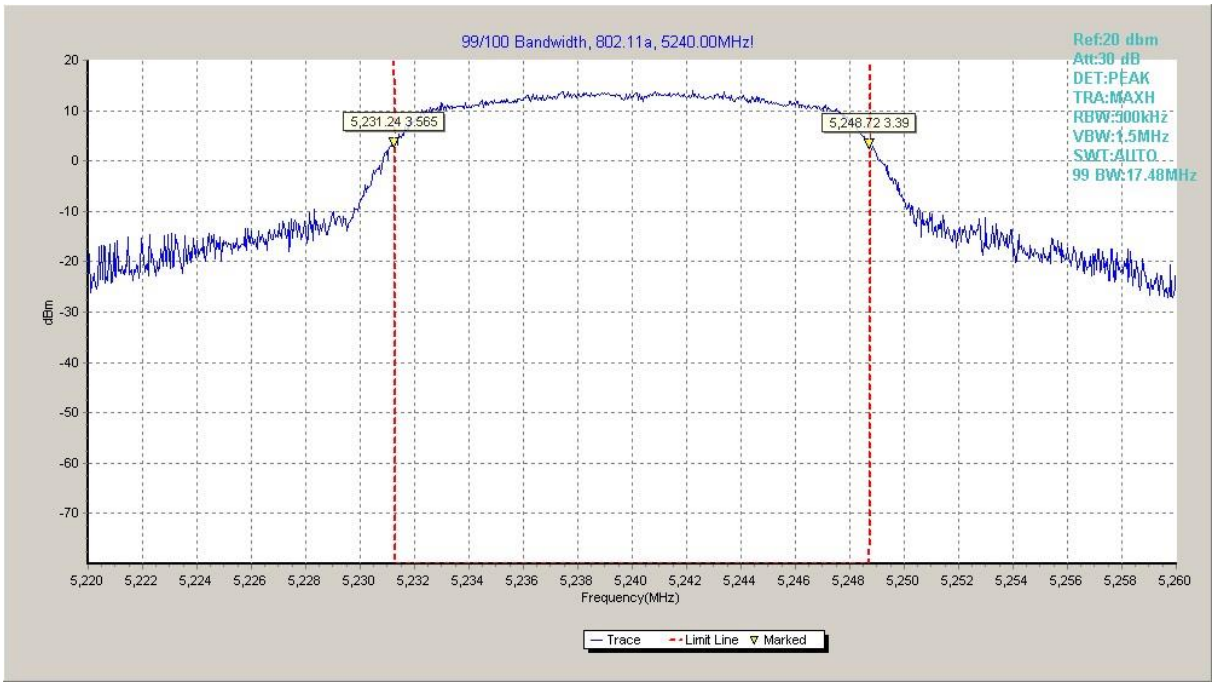


Fig.79 99% Occupied bandwidth (802.11a, 5240MHz)

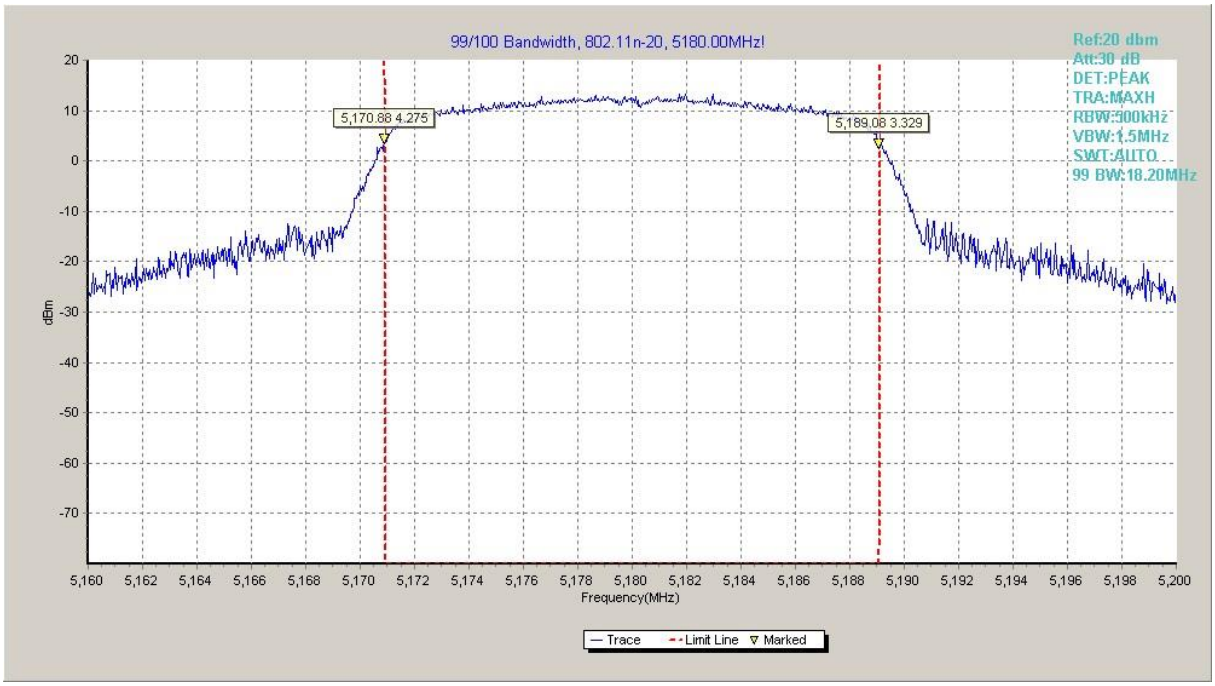


Fig.80 99% Occupied bandwidth (802.11n-HT20, 5180MHz)

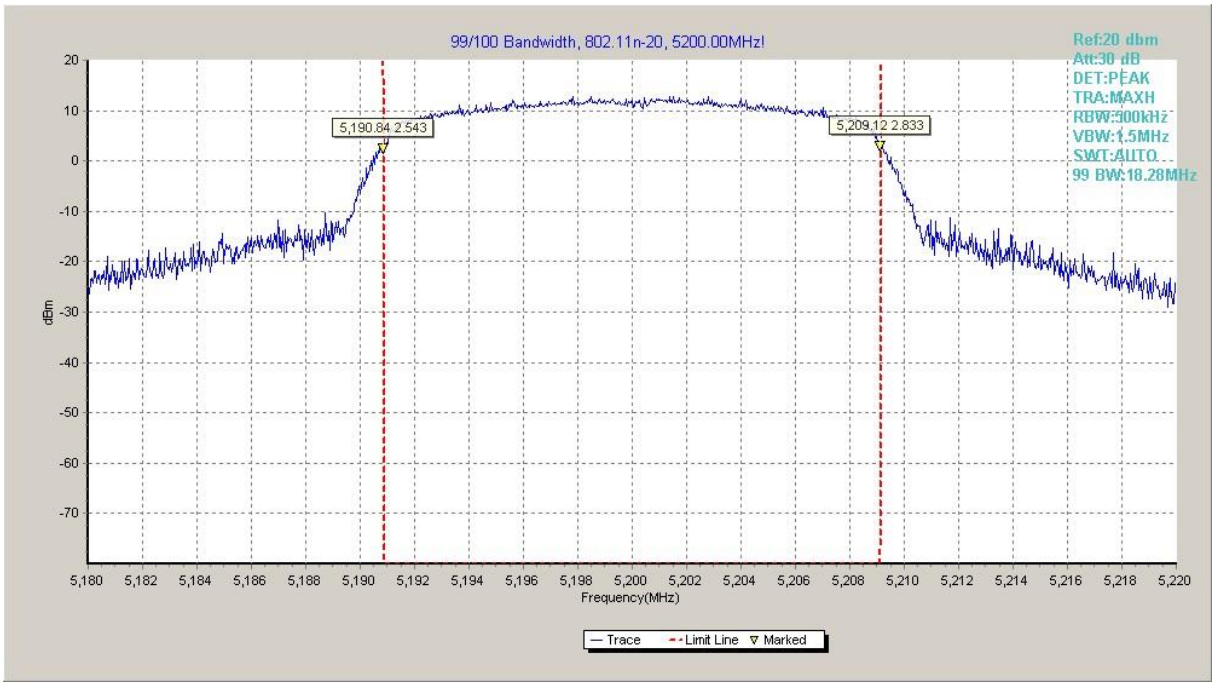


Fig.81 99% Occupied bandwidth (802.11n-HT20, 5200MHz)

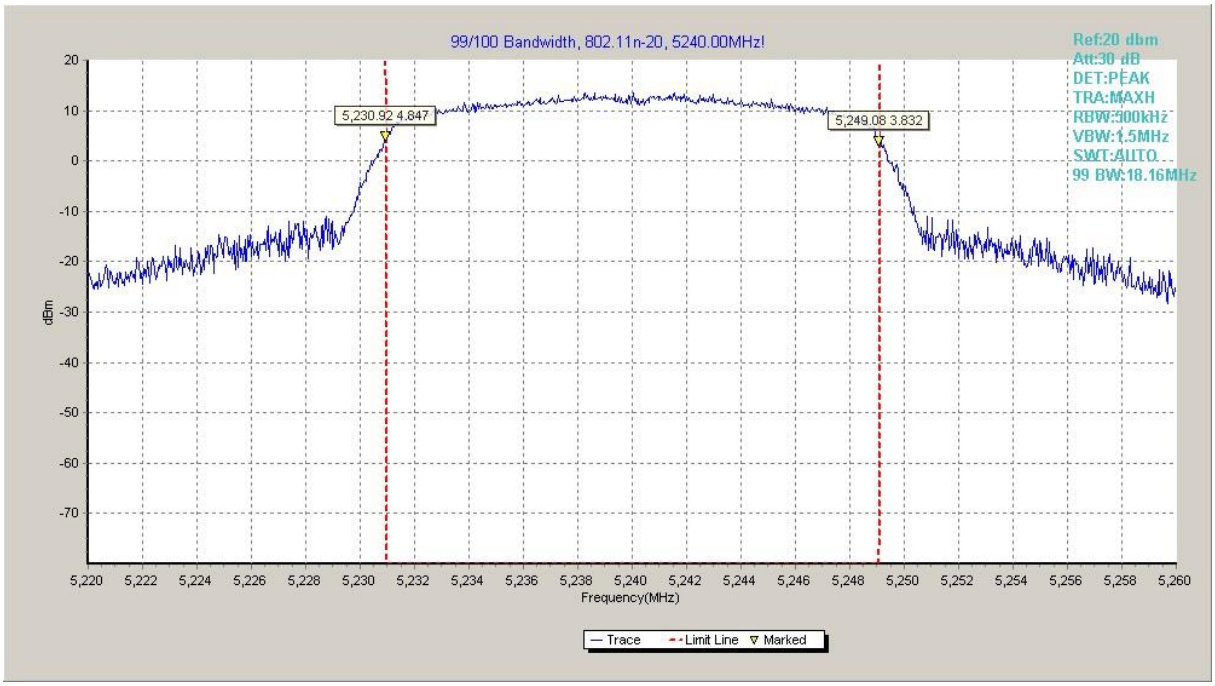


Fig.82 99% Occupied bandwidth (802.11n-HT20, 5240MHz)