

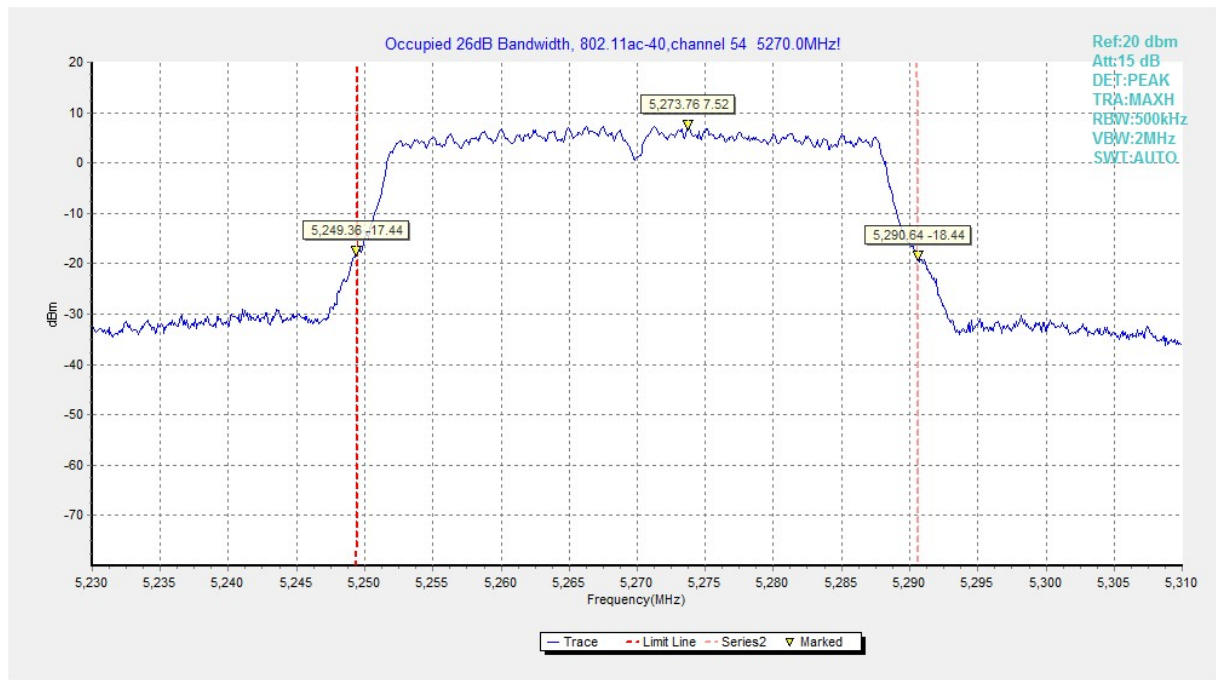


Fig.21 Occupied 26dB Bandwidth (802.11ac-HT40, 5270MHz)

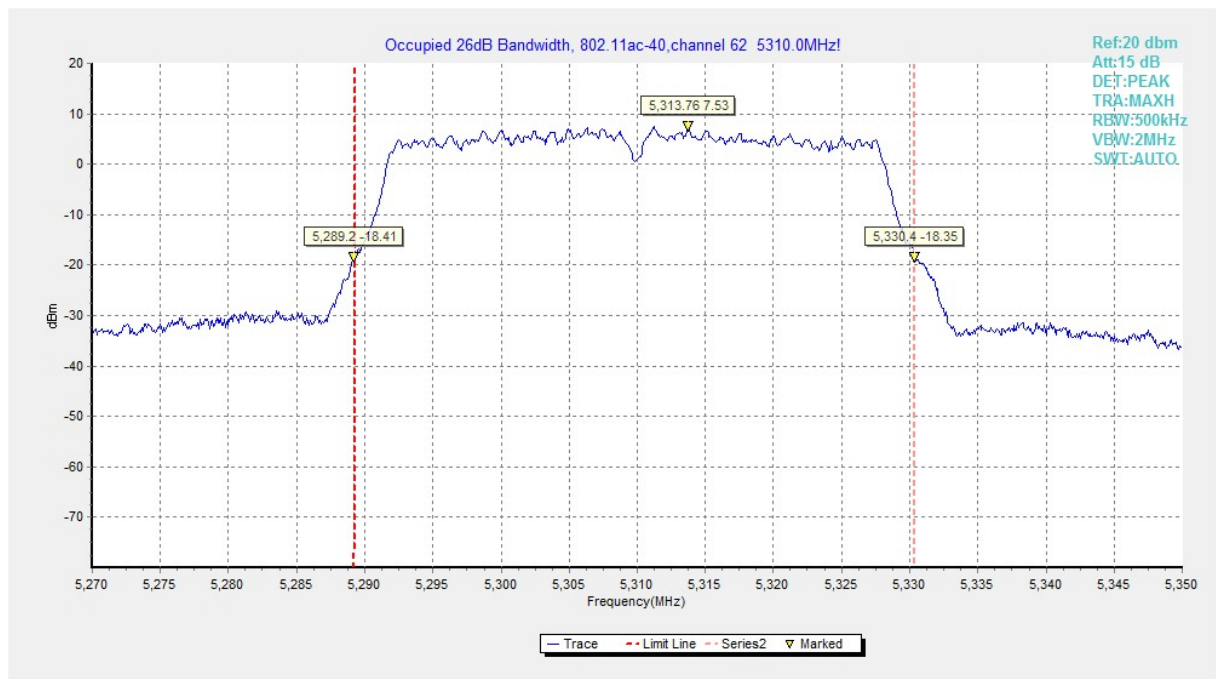


Fig.22 Occupied 26dB Bandwidth (802.11ac-HT40, 5310MHz)

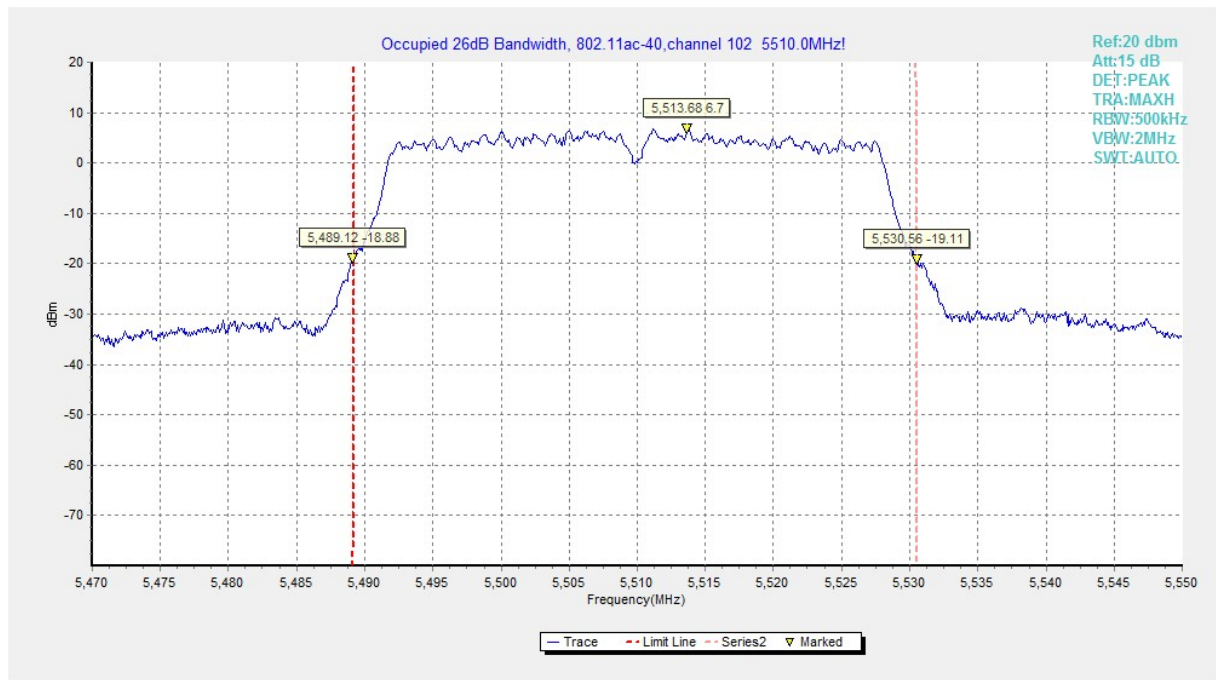


Fig.23 Occupied 26dB Bandwidth (802. 11ac-HT40, 5510MHz)

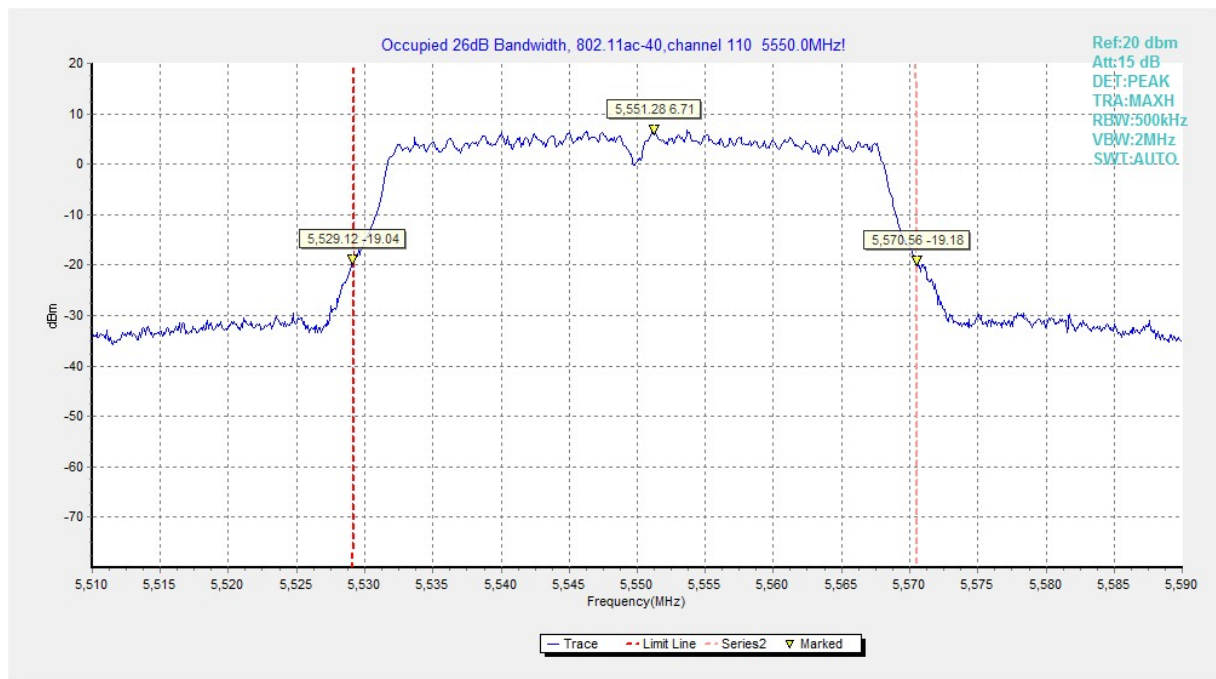


Fig.24 Occupied 26dB Bandwidth (802. 11ac-HT40, 5550MHz)

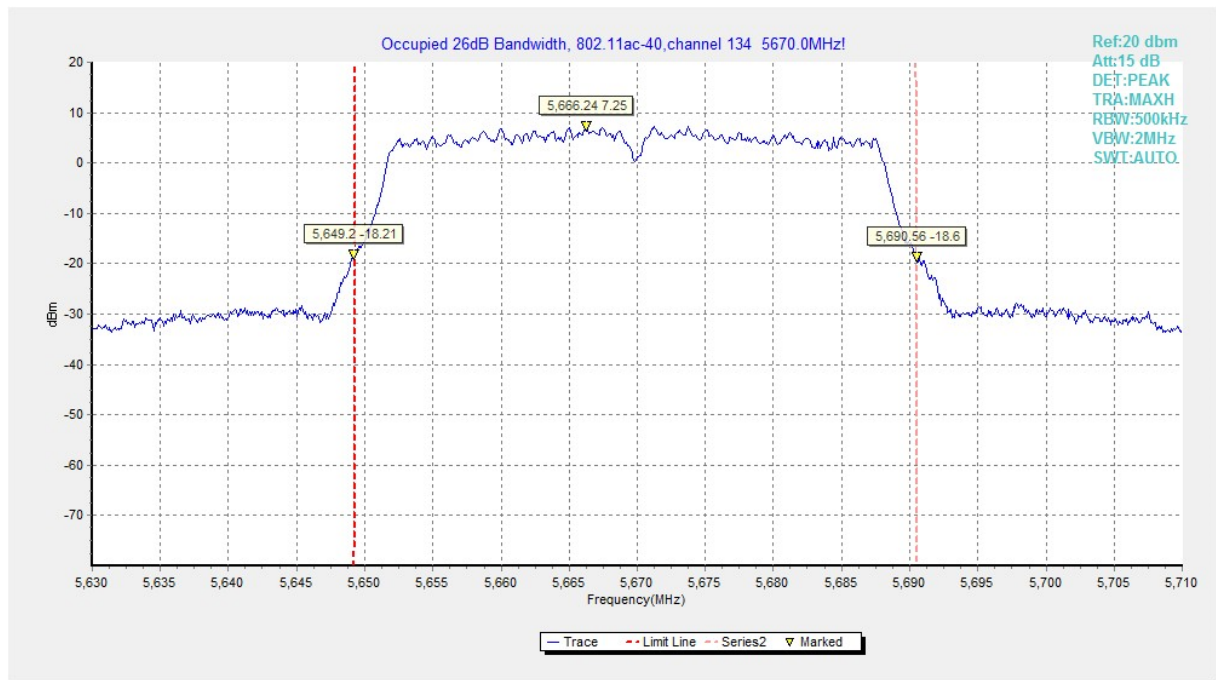


Fig.25 Occupied 26dB Bandwidth (802. 11ac-HT40, 5670MHz)

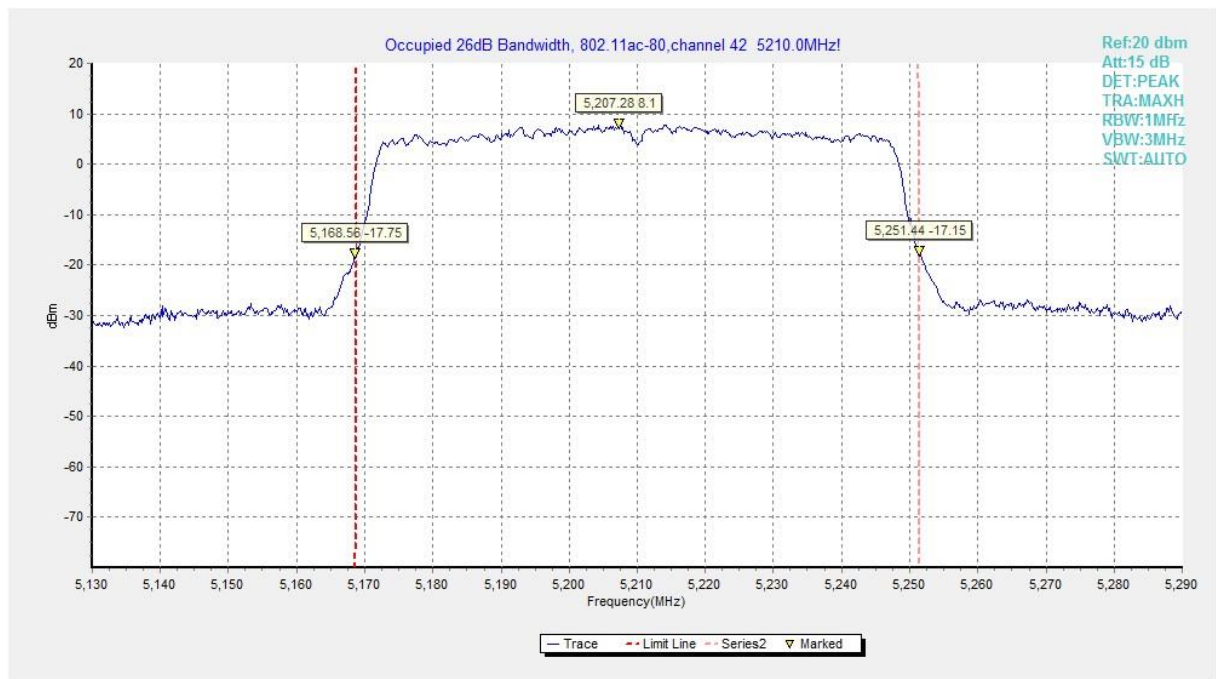


Fig.26 Occupied 26dB Bandwidth (802. 11ac-HT80, 5210MHz)

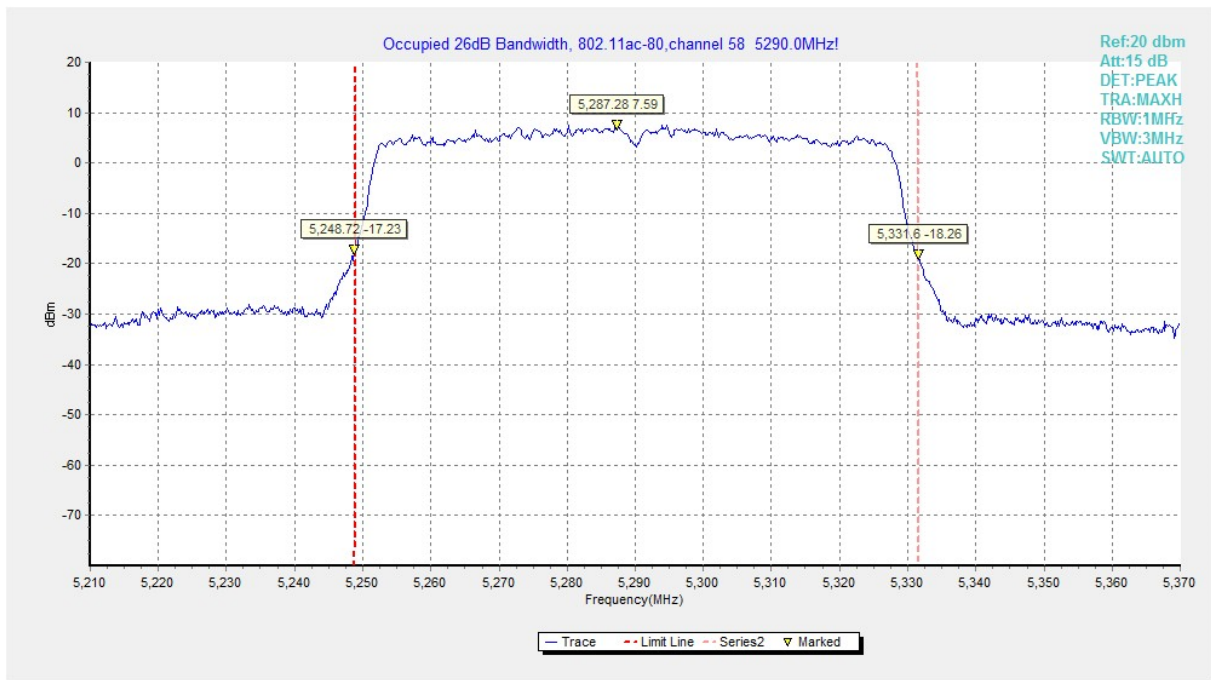


Fig.27 Occupied 26dB Bandwidth (802. 11ac-HT80, 5290MHz)

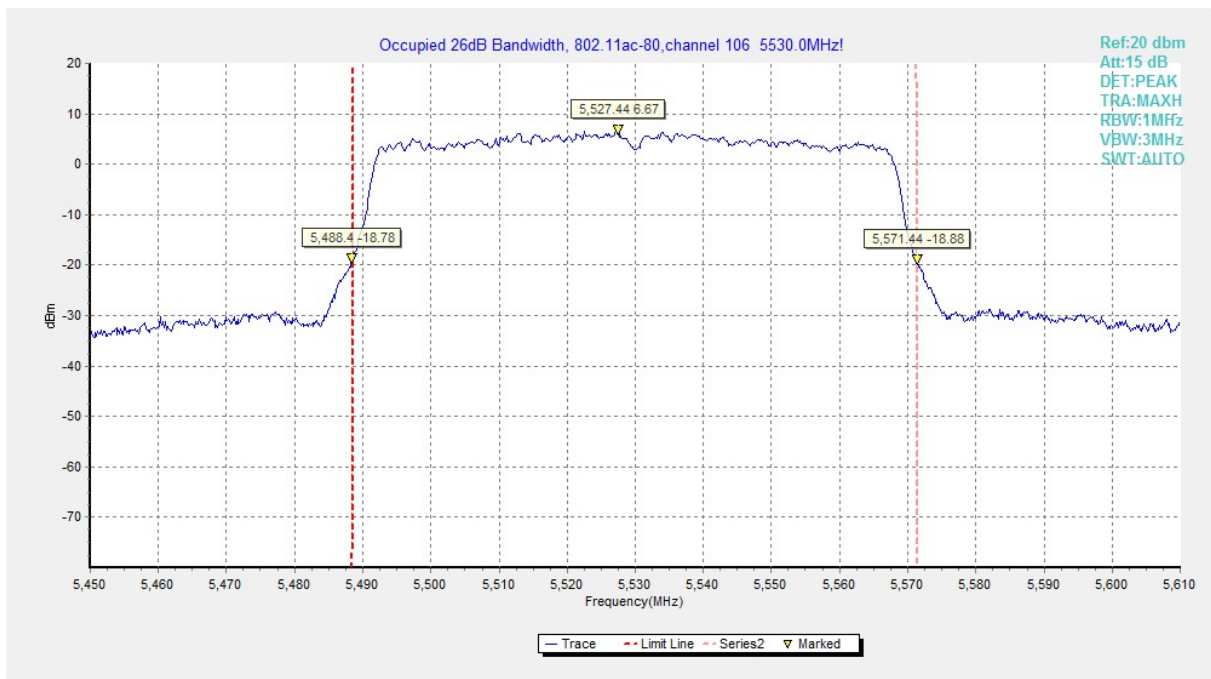


Fig.28 Occupied 26dB Bandwidth (802. 11ac-HT80, 5530MHz)

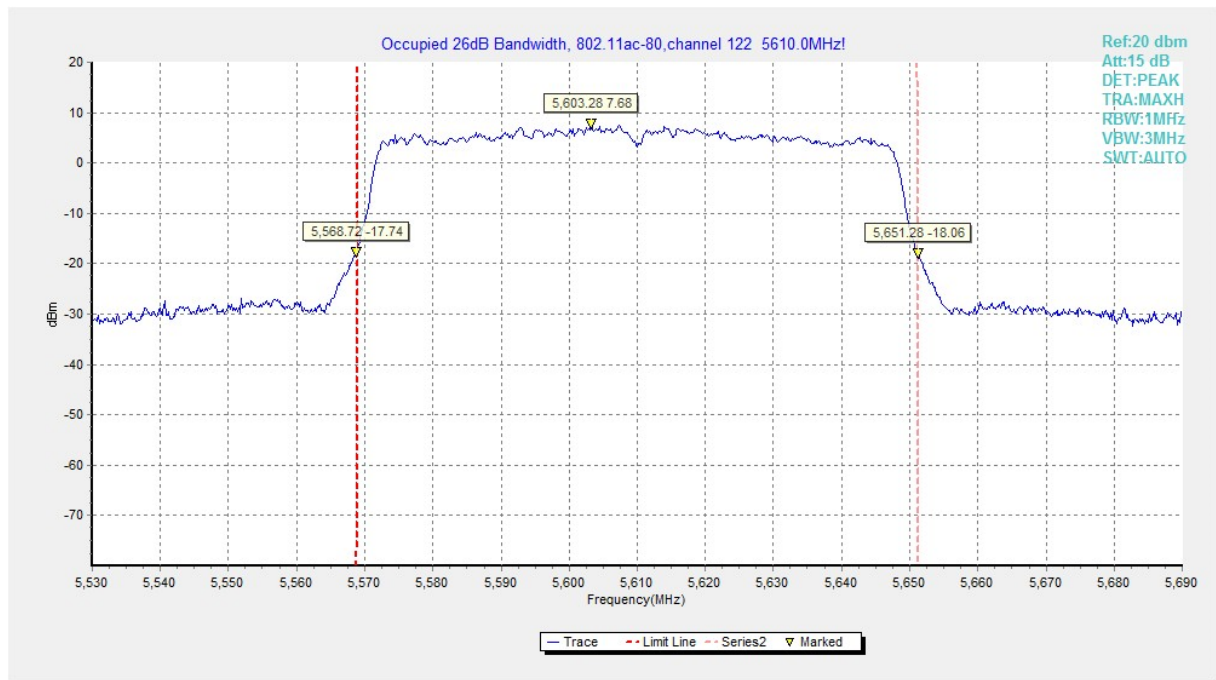


Fig.29 Occupied 26dB Bandwidth (802. 11ac-HT80, 5610MHz)

A.5. Band Edges Compliance

A5.1 Band Edges - Radiated

Measurement Limit:

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

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

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)	Measurement distance(m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The measurement is made according to ANSI C63.10-2013 and KDB 789033

Measurement Result:

Test Notes

1. The EUT is operating at its maximum duty cycle and its maximum power control level.
2. Investigation has been done on all channel, modes and modulations/data rates. Only the radiated emissions of the configurations that produced the worst case emissions are reported in this section.
3. The measurements were performed separately in Chain 1, Chain 2, and MIMO (Chain 1+2), and only the worst cases are shown in this report.

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.30	P
	5320 MHz	Fig.31	P
802.11n HT20	5180 MHz	Fig.32	P
	5320 MHz	Fig.33	P
802.11ac HT20	5180 MHz	Fig.34	P
	5320 MHz	Fig.35	P
802.11n HT40	5190 MHz	Fig.36	P
	5310 MHz	Fig.37	P
802.11ac HT40	5190 MHz	Fig.38	P
	5310 MHz	Fig.39	P
802.11ac HT80	5210MHz	Fig.40	P
	5290MHz	Fig.41	P

Conclusion: PASS

Test graphs as below:

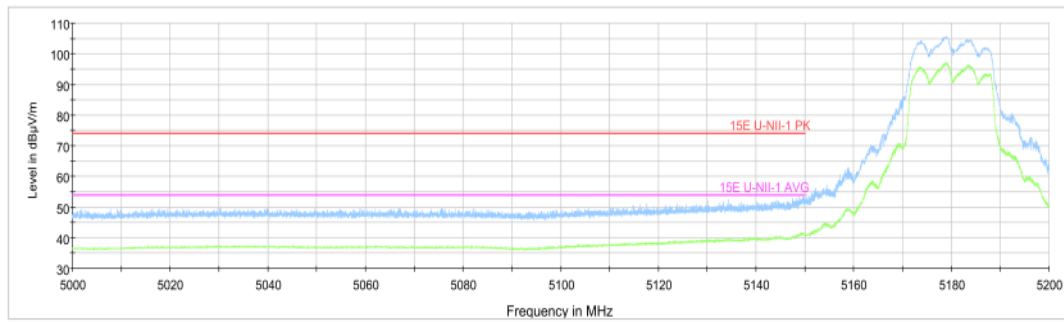


Fig.30 Band Edges (802.11a Ch36, 5180MHz)

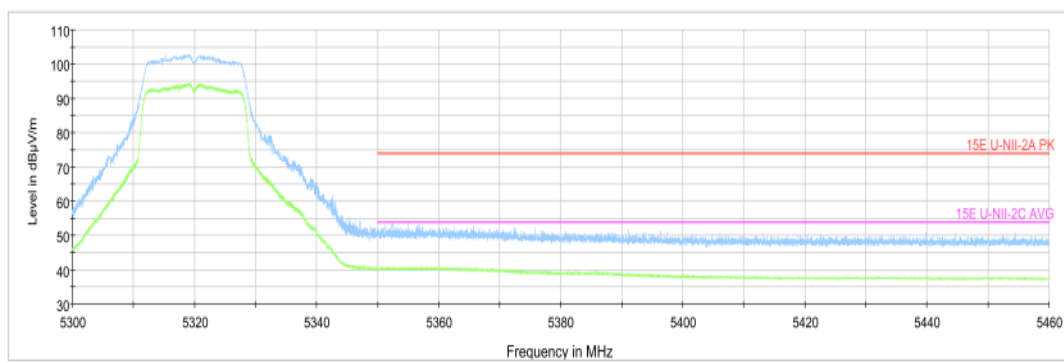


Fig.31 Band Edges (802.11a Ch64, 5320MHz)

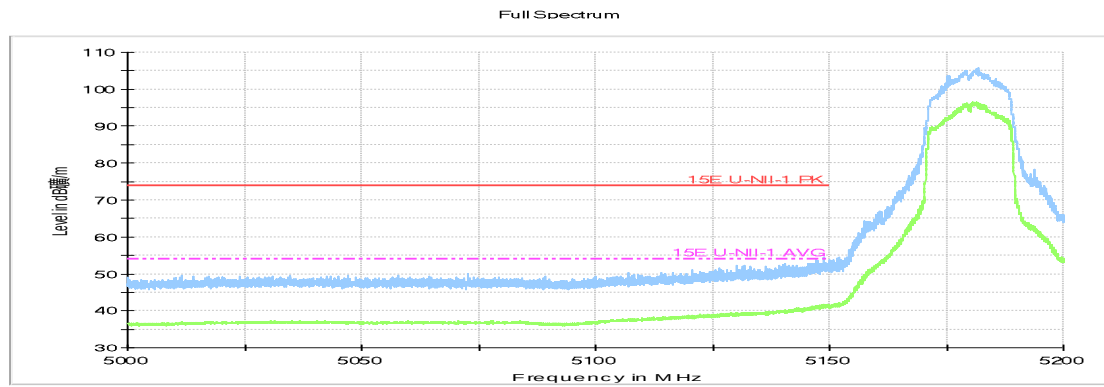


Fig.32 Band Edges (802.11n-HT20 Ch36, 5180MHz)

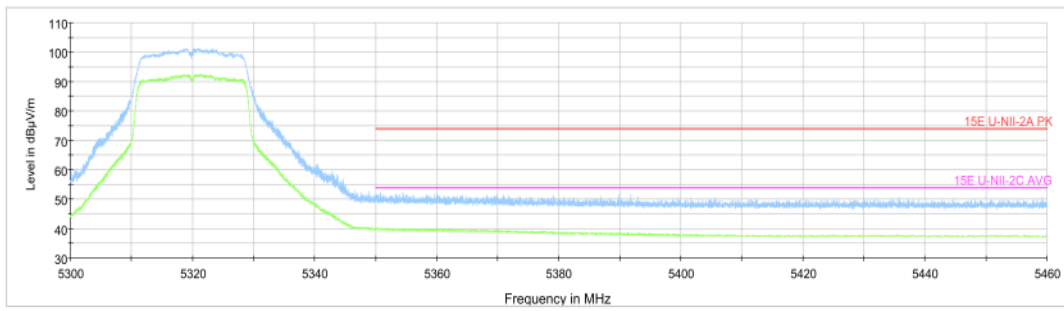


Fig.33 Band Edges (802.11n-HT20 Ch64, 5320MHz)

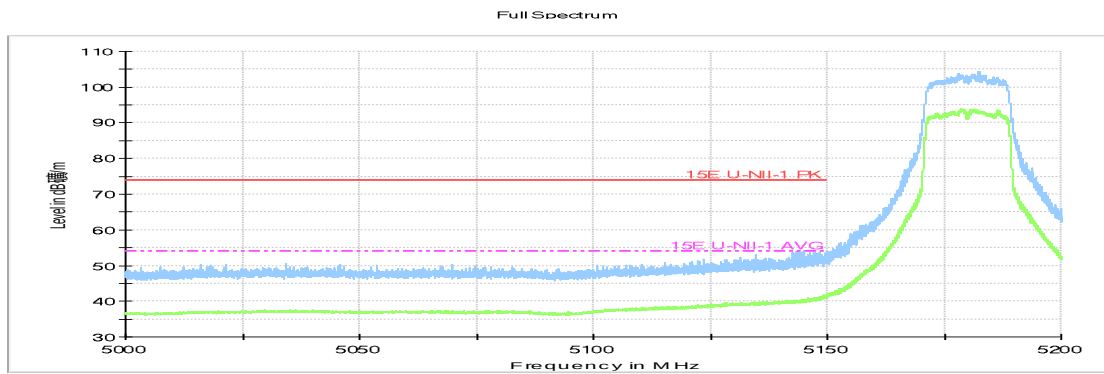


Fig.34 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

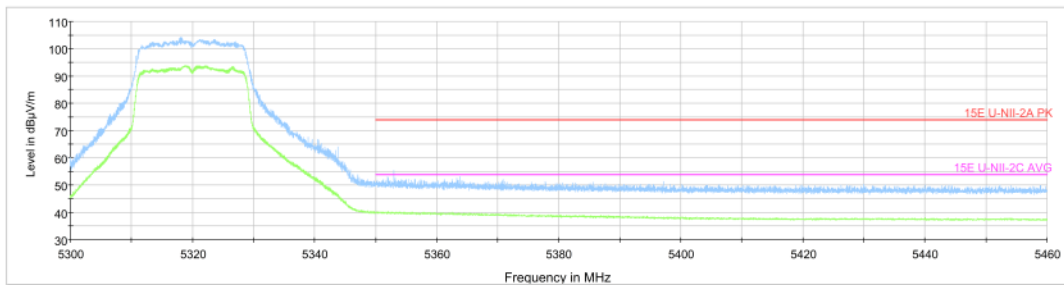


Fig.35 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

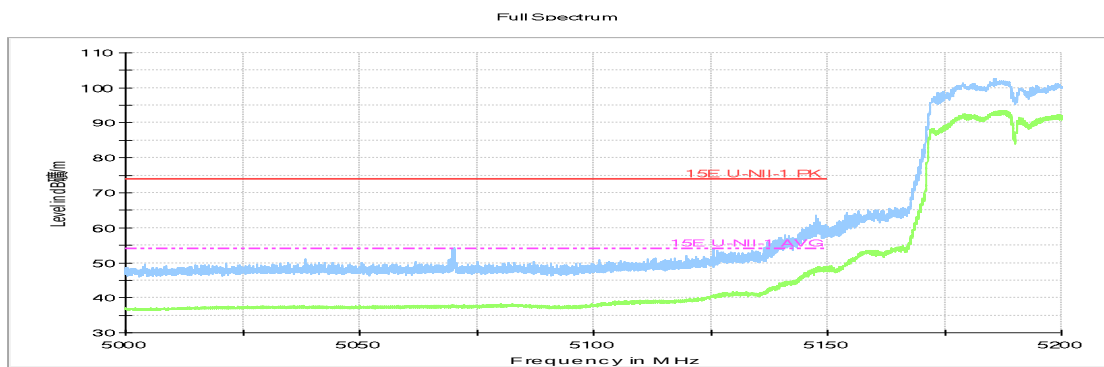


Fig.36 Band Edges (802.11n-HT40 Ch38, 5190MHz)

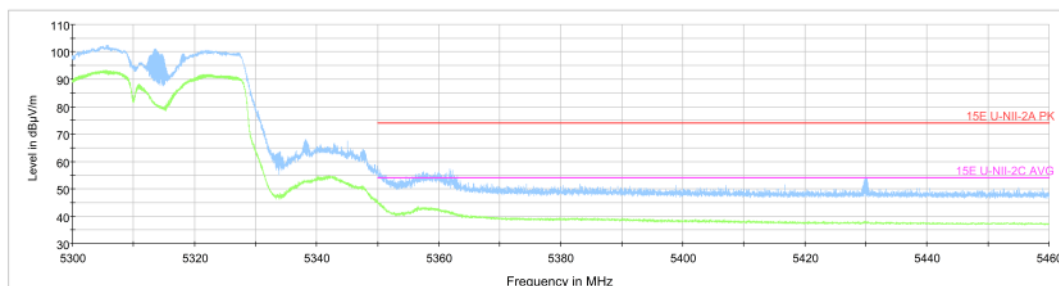


Fig.37 Band Edges (802.11n-HT40 Ch62, 5310MHz)

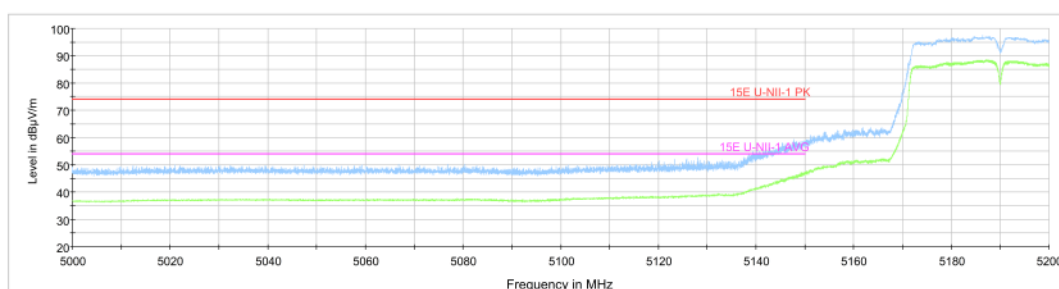


Fig.38 Band Edges (802.11ac-HT40 Ch38, 5190MHz)

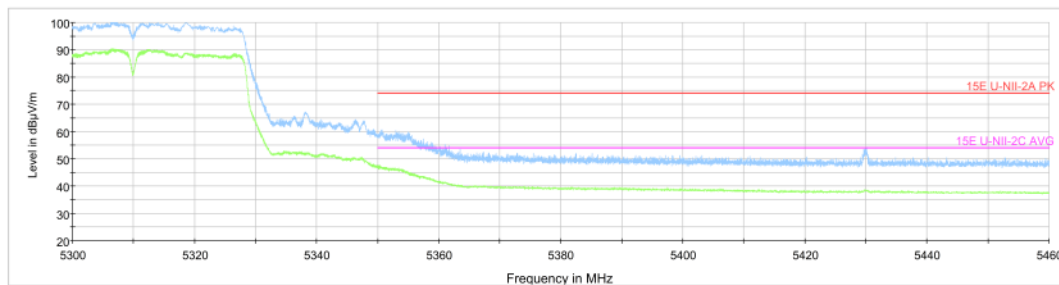


Fig.39 Band Edges (802.11ac-HT40 Ch62, 5310MHz)

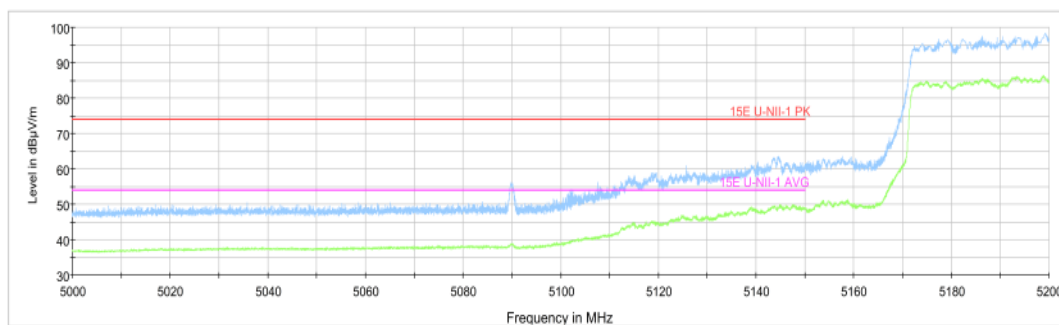


Fig.40 Band Edges (802.11ac-HT80 Ch42 , 5210MHz)

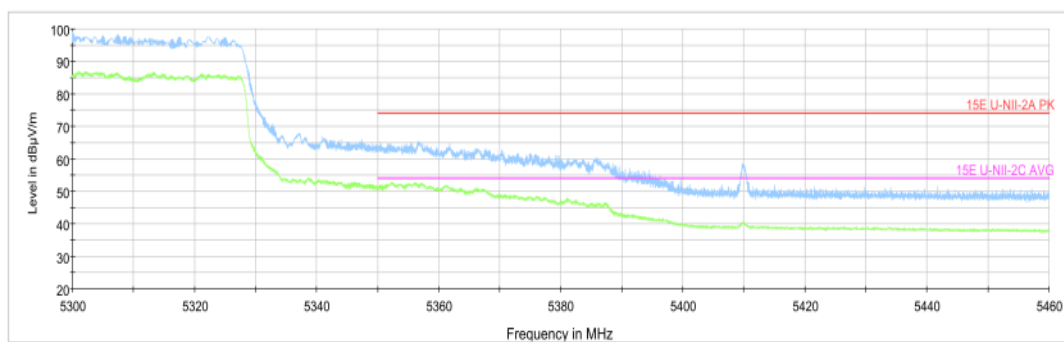


Fig.41 Band Edges (802.11ac-HT80 Ch58, 5290MHz)

A.6. Transmitter Spurious Emission

Measurement Limit:

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

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

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)	Measurement distance(m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The measurement is made according to ANSI C63.10-2013 and KDB 789033

Measurement Results:

Test Notes

1. The EUT is operating at its maximum duty cycle and its maximum power control level.
2. Investigation has been done on all channel, modes and modulations/data rates. Only the radiated emissions of the configurations that produced the worst case emissions are reported in this section.
3. The measurements were performed separately in Chain 1, Chain 2, and MIMO (Chain 1+2), and only the worst cases are shown in this report.

802.11a mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11a	36(5180MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	40(5200MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	48(5240MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	52(5260MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	56(5280MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	64(5320MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n - HT20	36(5180MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	40(5200MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	48(5240MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	52(5260MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	56(5280MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	64(5320MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n HT40	38(5190MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	46(5230MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	54(5270MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	62(5310MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P

802.11ac-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac - HT20	36(5180MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	40(5200MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	48(5240MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	52(5260MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	56(5280MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	64(5320MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11ac-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac HT40	38(5190MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	46(5230MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	54(5270MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	62(5310MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P

802.11ac-HT80 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac – HT80	42(5210MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	58(5290MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	106(5530MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	122(5610MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

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:

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

AVERAGE Results:
802.11a
Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17997.200	46.09	-25.50	46.66	24.93	54.00	7.91	H
17972.500	45.97	-25.50	46.66	24.81	54.00	8.03	H
14494.300	38.97	-28.59	42.46	25.10	54.00	15.03	V
14496.500	38.97	-28.59	42.46	25.10	54.00	15.03	H
5149.600	41.77	-27.61	33.67	35.71	54.00	12.23	H
5149.000	41.71	-27.61	33.67	35.65	54.00	12.29	H

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.700	45.77	-25.50	46.66	24.61	54.00	8.23	V
17983.500	45.74	-25.50	46.66	24.58	54.00	8.26	V
14497.000	39.24	-28.59	42.46	25.37	54.00	14.76	H
14494.300	39.21	-28.59	42.46	25.34	54.00	14.79	H
11904.900	34.59	-31.85	39.05	27.39	54.00	19.41	V
11865.300	34.46	-31.85	39.05	27.26	54.00	19.54	V

Channel 48

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.700	46.11	-25.50	46.66	24.95	54.00	7.89	V
17994.500	45.79	-25.50	46.66	24.63	54.00	8.21	H
14486.000	39.37	-28.59	42.46	25.50	54.00	14.63	H
14482.800	39.13	-28.59	42.46	25.26	54.00	14.87	V
11807.000	34.37	-31.85	39.05	27.17	54.00	19.63	H
11830.600	34.35	-31.85	39.05	27.15	54.00	19.65	V

Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17994.000	45.98	-25.50	46.66	24.82	54.00	8.02	H
17994.500	45.98	-25.50	46.66	24.82	54.00	8.02	V
14486.600	39.21	-28.59	42.46	25.34	54.00	14.79	V
14471.800	39.12	-28.59	42.46	25.25	54.00	14.88	H
11816.900	34.83	-31.85	39.05	27.63	54.00	19.17	V
11826.800	34.78	-31.85	39.05	27.58	54.00	19.22	V

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17990.700	46.38	-25.50	46.66	25.22	54.00	7.62	V
17998.900	46.10	-25.50	46.66	24.94	54.00	7.90	V
14476.700	39.01	-28.59	42.46	25.14	54.00	14.99	V
14488.200	39.00	-28.59	42.46	25.13	54.00	15.00	V
11838.400	34.75	-31.85	39.05	27.55	54.00	19.25	V
11829.000	34.68	-31.85	39.05	27.48	54.00	19.32	V

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17991.200	46.36	-25.50	46.66	25.20	54.00	7.64	V
17998.900	46.10	-25.50	46.66	24.94	54.00	7.90	H
10639.900	42.94	-32.76	38.38	37.32	54.00	11.06	V
10640.500	42.21	-32.76	38.38	36.59	54.00	11.79	V
5351.600	40.89	-27.43	34.01	34.31	54.00	13.11	H
5352.700	40.87	-27.43	34.01	34.29	54.00	13.13	H

802.11n-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17983.500	45.84	-25.50	46.66	24.68	54.00	8.16	V
17996.200	45.84	-25.50	46.66	24.68	54.00	8.16	H
14489.900	39.31	-28.59	42.46	25.44	54.00	14.69	H
14495.400	39.24	-28.59	42.46	25.37	54.00	14.76	V
5148.900	41.83	-27.61	33.67	35.77	54.00	12.17	H
5149.400	41.72	-27.61	33.67	35.66	54.00	12.28	H

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.700	46.02	-25.50	46.66	24.86	54.00	7.98	V
17996.200	45.93	-25.50	46.66	24.77	54.00	8.07	H
14493.800	39.24	-28.59	42.46	25.37	54.00	14.76	V
14497.600	39.02	-28.59	42.46	25.15	54.00	14.98	V
11809.200	34.60	-31.85	39.05	27.40	54.00	19.40	H
11820.800	34.53	-31.85	39.05	27.33	54.00	19.47	V

Channel 48

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.200	46.16	-25.50	46.66	25.00	54.00	7.84	H
17994.500	45.96	-25.50	46.66	24.80	54.00	8.04	V
14499.800	39.35	-28.59	42.46	25.48	54.00	14.65	V
14493.800	38.92	-28.59	42.46	25.05	54.00	15.08	V
11931.300	34.65	-31.48	39.09	27.04	54.00	19.35	V
11834.000	34.59	-31.85	39.05	27.39	54.00	19.41	H

Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17987.900	46.04	-25.50	46.66	24.88	54.00	7.96	V
17986.800	45.92	-25.50	46.66	24.76	54.00	8.08	H
14486.600	39.45	-28.59	42.46	25.58	54.00	14.55	H
14477.200	39.24	-28.59	42.46	25.37	54.00	14.76	H
11920.900	34.89	-31.48	39.09	27.28	54.00	19.11	V
11912.600	34.62	-31.85	39.05	27.42	54.00	19.38	V

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17990.100	45.95	-25.50	46.66	24.79	54.00	8.05	H
17979.100	45.91	-25.50	46.66	24.75	54.00	8.09	H
14488.800	39.09	-28.59	42.46	25.22	54.00	14.91	H
14492.600	39.09	-28.59	42.46	25.22	54.00	14.91	V
11809.200	34.59	-31.85	39.05	27.39	54.00	19.41	V
11833.400	34.56	-31.85	39.05	27.36	54.00	19.44	V

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17975.800	45.94	-25.50	46.66	24.78	54.00	8.06	V
17996.200	45.89	-25.50	46.66	24.73	54.00	8.11	H
10640.500	39.74	-32.76	38.38	34.12	54.00	14.26	H
10645.400	39.51	-32.76	38.38	33.89	54.00	14.49	V
5351.900	40.28	-27.43	34.01	33.70	54.00	13.72	H
5350.800	40.26	-27.43	34.01	33.68	54.00	13.74	H

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Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17989.000	45.81	-25.50	46.66	24.65	54.00	8.19	H
17983.000	45.74	-25.50	46.66	24.58	54.00	8.26	V
14488.800	39.20	-28.59	42.46	25.33	54.00	14.80	V
14483.900	39.16	-28.59	42.46	25.29	54.00	14.84	V
5149.600	48.96	-27.61	33.67	42.90	54.00	5.04	H
5148.200	48.92	-27.61	33.67	42.86	54.00	5.08	H

Channel 46

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17990.700	46.10	-25.50	46.66	24.94	54.00	7.90	H
17994.500	45.98	-25.50	46.66	24.82	54.00	8.02	H
14491.000	39.42	-28.59	42.46	25.55	54.00	14.58	H
14480.500	39.22	-28.59	42.46	25.35	54.00	14.78	V
11814.700	34.70	-31.85	39.05	27.50	54.00	19.30	V
11813.600	34.58	-31.85	39.05	27.38	54.00	19.42	V

Channel 54

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17986.200	46.32	-25.50	46.66	25.16	54.00	7.68	H
17984.000	46.02	-25.50	46.66	24.86	54.00	7.98	H
14476.100	39.16	-28.59	42.46	25.29	54.00	14.84	V
14490.500	39.07	-28.59	42.46	25.20	54.00	14.93	H
11837.200	34.67	-31.85	39.05	27.47	54.00	19.33	V
11817.500	34.62	-31.85	39.05	27.42	54.00	19.38	V

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17995.600	46.29	-25.50	46.66	25.13	54.00	7.71	H
17997.200	46.28	-25.50	46.66	25.12	54.00	7.72	V
10620.100	40.23	-32.76	38.38	34.61	54.00	13.77	V
10620.600	39.83	-32.76	38.38	34.21	54.00	14.17	V
5350.000	45.35	-27.43	34.01	38.77	54.00	8.65	H
5350.100	45.27	-27.43	34.01	38.69	54.00	8.73	H

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Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17982.400	46.20	-25.50	46.66	25.04	54.00	7.80	V
17995.000	46.06	-25.50	46.66	24.90	54.00	7.94	V
14499.800	39.27	-28.59	42.46	25.40	54.00	14.73	H
14476.700	39.18	-28.59	42.46	25.31	54.00	14.82	V
5149.800	41.85	-27.61	33.67	35.79	54.00	12.15	H
5149.800	41.76	-27.61	33.67	35.70	54.00	12.24	H

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17997.200	46.04	-25.50	46.66	24.88	54.00	7.96	V
17990.700	45.93	-25.50	46.66	24.77	54.00	8.07	V
14478.900	39.05	-28.59	42.46	25.18	54.00	14.95	H
14483.300	39.04	-28.59	42.46	25.17	54.00	14.96	V
11820.800	34.85	-31.85	39.05	27.65	54.00	19.15	V
11963.200	34.52	-31.48	39.09	26.91	54.00	19.48	V

Channel 48

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17995.600	45.86	-25.50	46.66	24.70	54.00	8.14	H
17996.700	45.76	-25.50	46.66	24.60	54.00	8.24	V
14494.900	39.00	-28.59	42.46	25.13	54.00	15.00	H
14488.800	38.97	-28.59	42.46	25.10	54.00	15.03	V
11940.100	34.58	-31.48	39.09	26.97	54.00	19.42	H
11835.600	34.49	-31.85	39.05	27.29	54.00	19.51	V

Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.200	46.08	-25.50	46.66	24.92	54.00	7.92	H
17987.900	45.93	-25.50	46.66	24.77	54.00	8.07	V
14499.200	39.17	-28.59	42.46	25.30	54.00	14.83	V
14488.200	39.11	-28.59	42.46	25.24	54.00	14.89	H
11998.400	34.72	-31.48	39.09	27.11	54.00	19.28	V
11922.500	34.56	-31.48	39.09	26.95	54.00	19.44	V

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.200	46.15	-25.50	46.66	24.99	54.00	7.85	H
17985.700	46.03	-25.50	46.66	24.87	54.00	7.97	V
14497.000	39.49	-28.59	42.46	25.62	54.00	14.51	V
14485.000	39.10	-28.59	42.46	25.23	54.00	14.90	V
11915.900	34.99	-31.48	39.09	27.38	54.00	19.01	V
11835.000	34.71	-31.85	39.05	27.51	54.00	19.29	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17993.400	46.08	-25.50	46.66	24.92	54.00	7.92	H
17994.000	45.91	-25.50	46.66	24.75	54.00	8.09	H
10639.400	40.20	-32.76	38.38	34.58	54.00	13.80	H
10638.200	39.93	-32.76	38.38	34.31	54.00	14.07	H
5350.300	40.42	-27.43	34.01	33.84	54.00	13.58	H
5350.300	40.29	-27.43	34.01	33.71	54.00	13.71	H

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Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.200	46.07	-25.50	46.66	24.91	54.00	7.93	V
17994.000	45.99	-25.50	46.66	24.83	54.00	8.01	H
14481.100	39.40	-28.59	42.46	25.53	54.00	14.60	V
14498.100	39.28	-28.59	42.46	25.41	54.00	14.72	V
5149.900	47.27	-27.61	33.67	41.21	54.00	6.73	H
5149.400	47.17	-27.61	33.67	41.11	54.00	6.83	H

Channel 46

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17985.700	46.13	-25.50	46.66	24.97	54.00	7.87	V
17979.700	45.97	-25.50	46.66	24.81	54.00	8.03	V
14499.200	39.51	-28.59	42.46	25.64	54.00	14.49	V
14498.100	39.25	-28.59	42.46	25.38	54.00	14.75	V
11815.800	34.68	-31.85	39.05	27.48	54.00	19.32	V
11910.400	34.59	-31.85	39.05	27.39	54.00	19.41	V

Channel 54

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17997.800	45.88	-25.50	46.66	24.72	54.00	8.12	H
17992.800	45.87	-25.50	46.66	24.71	54.00	8.13	H
14480.000	39.30	-28.59	42.46	25.43	54.00	14.70	V
14494.900	39.04	-28.59	42.46	25.17	54.00	14.96	H
11815.800	34.83	-31.85	39.05	27.63	54.00	19.17	V
11816.400	34.55	-31.85	39.05	27.35	54.00	19.45	V

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Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.200	46.04	-25.50	46.66	24.88	54.00	7.96	V
17987.300	46.01	-25.50	46.66	24.85	54.00	7.99	V
14482.800	39.25	-28.59	42.46	25.38	54.00	14.75	V
14499.800	39.14	-28.59	42.46	25.27	54.00	14.86	H
5145.000	49.94	-27.61	33.67	43.88	54.00	4.06	H
5145.000	49.90	-27.61	33.67	43.84	54.00	4.10	H

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17977.500	46.22	-25.50	46.66	25.06	54.00	7.78	V
17983.000	46.18	-25.50	46.66	25.02	54.00	7.82	V
14487.100	39.44	-28.59	42.46	25.57	54.00	14.56	V
14481.100	39.35	-28.59	42.46	25.48	54.00	14.65	V
5352.300	52.87	-27.43	34.01	46.29	54.00	1.13	H
5352.200	52.81	-27.43	34.01	46.23	54.00	1.19	H

PEAK Results:
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Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17998.900	58.15	-25.50	46.66	36.99	74.00	15.85	H
17889.500	57.06	-25.50	46.66	35.90	74.00	16.94	V
10362.700	52.92	-33.68	38.17	48.42	68.30	15.38	V
10358.300	52.29	-33.68	38.17	47.79	68.30	16.01	V
5149.600	53.45	-27.61	33.67	47.39	74.00	20.55	H
5148.700	53.41	-27.61	33.67	47.35	74.00	20.59	H

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17994.000	57.50	-25.50	46.66	36.34	74.00	16.50	H
17902.100	57.28	-25.50	46.66	36.12	74.00	16.72	V
10402.900	53.29	-33.22	38.19	48.32	68.30	15.01	V
10397.900	51.60	-33.22	38.19	46.63	68.30	16.70	V
14335.900	51.55	-28.42	42.34	37.63	68.30	16.75	H
14378.200	51.08	-28.42	42.34	37.16	68.30	17.22	H

Channel 48

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17950.500	57.52	-25.50	46.66	36.36	74.00	16.48	V
17980.200	56.74	-25.50	46.66	35.58	74.00	17.26	H
14500.900	51.47	-28.59	42.46	37.60	68.30	16.83	V
14395.900	51.19	-28.59	42.46	37.32	68.30	17.11	H
10481.500	51.02	-32.99	38.27	45.73	68.30	17.28	V
10481.000	50.94	-32.99	38.27	45.65	68.30	17.36	H

Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17917.000	57.35	-25.50	46.66	36.19	74.00	16.65	V
17996.700	57.17	-25.50	46.66	36.01	74.00	16.83	H
14983.200	50.91	-27.85	40.21	38.55	68.30	17.39	H
14426.600	50.89	-28.59	42.46	37.02	68.30	17.41	H
10518.400	50.72	-32.99	38.27	45.43	68.30	17.58	V
10522.800	49.62	-32.99	38.27	44.33	68.30	18.68	H

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17992.300	57.46	-25.50	46.66	36.30	74.00	16.54	H
17989.000	57.36	-25.50	46.66	36.20	74.00	16.64	H
10561.800	51.87	-32.99	38.27	46.58	68.30	16.43	H
10556.300	51.69	-32.99	38.27	46.40	68.30	16.61	V
14300.100	51.52	-28.42	42.34	37.60	68.30	16.78	V
14710.500	50.98	-28.32	41.35	37.96	68.30	17.32	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17980.800	57.14	-25.50	46.66	35.98	74.00	16.86	V
17973.000	57.04	-25.50	46.66	35.88	74.00	16.96	H
10644.900	53.85	-32.76	38.38	48.23	74.00	20.15	V
10636.000	53.31	-32.76	38.38	47.69	74.00	20.69	V
5352.600	53.66	-27.43	34.01	47.08	74.00	20.34	H
5355.000	53.54	-27.43	34.01	46.96	74.00	20.46	H

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Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17992.300	57.10	-25.50	46.66	35.94	74.00	16.90	H
17994.000	56.81	-25.50	46.66	35.65	74.00	17.19	V
14460.800	51.35	-28.59	42.46	37.48	68.30	16.95	H
14614.200	50.98	-27.29	41.90	36.37	68.30	17.32	V
10517.800	50.50	-32.99	38.27	45.21	68.30	17.80	H
10518.400	49.86	-32.99	38.27	44.57	68.30	18.44	V

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17976.300	57.67	-25.50	46.66	36.51	74.00	16.33	H
17993.400	57.03	-25.50	46.66	35.87	74.00	16.97	V
10563.500	52.45	-32.99	38.27	47.16	68.30	15.85	V
10559.600	52.10	-32.99	38.27	46.81	68.30	16.20	V
14313.400	51.06	-28.42	42.34	37.14	68.30	17.24	V
14372.200	50.75	-28.42	42.34	36.83	68.30	17.55	V

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17987.900	57.82	-25.50	46.66	36.66	74.00	16.18	V
17995.000	57.65	-25.50	46.66	36.49	74.00	16.35	H
10641.000	51.93	-32.76	38.38	46.31	74.00	22.07	V
14471.200	51.67	-28.59	42.46	37.80	74.00	22.33	H
5354.500	52.40	-27.43	34.01	45.82	74.00	21.60	H
5350.800	52.15	-27.43	34.01	45.57	74.00	21.85	H

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Channel 54

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17927.400	57.51	-25.50	46.66	36.35	74.00	16.49	H
17973.600	57.50	-25.50	46.66	36.34	74.00	16.50	H
14420.000	51.53	-28.59	42.46	37.66	68.30	16.77	V
14683.000	51.27	-28.32	41.35	38.25	68.30	17.03	V
10545.300	48.79	-32.99	38.27	43.50	68.30	19.51	V
10550.800	48.35	-32.99	38.27	43.06	68.30	19.95	V

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17902.700	57.10	-25.50	46.66	35.94	74.00	16.90	V
17995.600	57.01	-25.50	46.66	35.85	74.00	16.99	H
14432.100	51.15	-28.59	42.46	37.28	68.30	17.15	V
10624.500	50.87	-32.76	38.38	45.25	74.00	23.13	V
5361.800	57.34	-27.43	34.01	50.76	74.00	16.66	H
5350.300	57.00	-27.43	34.01	50.42	74.00	17.00	H

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Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17996.200	57.55	-25.50	46.66	36.39	74.00	16.45	H
17990.700	56.90	-25.50	46.66	35.74	74.00	17.10	H
10361.000	51.73	-33.68	38.17	47.23	68.30	16.57	V
10356.600	51.57	-33.68	38.17	47.07	68.30	16.73	V
5147.000	54.39	-27.61	33.67	48.33	74.00	19.61	H
5145.000	54.34	-27.61	33.67	48.28	74.00	19.66	H

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17978.500	57.41	-25.50	46.66	36.25	74.00	16.59	V
17989.500	57.24	-25.50	46.66	36.08	74.00	16.76	V
10401.200	51.76	-33.22	38.19	46.79	68.30	16.54	V
14498.100	51.25	-28.59	42.46	37.38	74.00	22.75	V
14397.000	51.14	-28.59	42.46	37.27	68.30	17.16	H
10403.400	50.85	-33.22	38.19	45.88	68.30	17.45	V

Channel 48

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17995.000	58.23	-25.50	46.66	37.07	74.00	15.77	V
17977.500	57.58	-25.50	46.66	36.42	74.00	16.42	H
14418.400	51.42	-28.59	42.46	37.55	68.30	16.88	V
14291.900	51.21	-28.42	42.34	37.29	68.30	17.09	V
10481.500	50.69	-32.99	38.27	45.40	68.30	17.61	V
10478.800	50.06	-32.99	38.27	44.77	68.30	18.24	H

Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17998.300	57.23	-25.50	46.66	36.07	74.00	16.77	V
17972.500	57.20	-25.50	46.66	36.04	74.00	16.80	H
10517.200	52.19	-32.99	38.27	46.90	68.30	16.11	V
14295.200	51.97	-28.42	42.34	38.05	68.30	16.33	H
14334.800	51.79	-28.42	42.34	37.87	68.30	16.51	V
10519.500	49.68	-32.99	38.27	44.39	68.30	18.62	V

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17997.800	57.49	-25.50	46.66	36.33	74.00	16.51	V
17965.900	57.46	-25.50	46.66	36.30	74.00	16.54	V
14504.200	51.80	-28.59	42.46	37.93	68.30	16.50	V
10558.000	51.66	-32.99	38.27	46.37	68.30	16.64	V
10561.200	51.46	-32.99	38.27	46.17	68.30	16.84	V

14409.000	50.67	-28.59	42.46	36.80	68.30	17.63	H
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Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17886.700	57.33	-25.50	46.66	36.17	74.00	16.67	V
17972.500	57.23	-25.50	46.66	36.07	74.00	16.77	V
10637.700	52.33	-32.76	38.38	46.71	74.00	21.67	V
14684.600	51.46	-28.32	41.35	38.44	68.30	16.84	H
5353.000	55.31	-27.43	34.01	48.73	74.00	18.69	H
5352.000	53.22	-27.43	34.01	46.64	74.00	20.78	H

802.11ac-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17885.000	57.31	-25.50	46.66	36.15	74.00	16.69	V
17987.900	57.08	-25.50	46.66	35.92	74.00	16.92	H
14496.500	51.13	-28.59	42.46	37.26	74.00	22.87	V
14619.700	51.06	-27.29	41.90	36.45	68.30	17.24	H
5147.700	59.27	-27.61	33.67	53.21	74.00	14.73	H
5149.700	58.77	-27.61	33.67	52.71	74.00	15.23	H

Channel 46

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17989.000	57.53	-25.50	46.66	36.37	74.00	16.47	V
17910.900	57.22	-25.50	46.66	36.06	74.00	16.78	V
14418.400	51.38	-28.59	42.46	37.51	68.30	16.92	H
14435.500	51.24	-28.59	42.46	37.37	68.30	17.06	H
10462.200	48.15	-33.22	38.19	43.18	68.30	20.15	V
10459.500	47.98	-33.22	38.19	43.01	68.30	20.32	V

Channel 54

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17920.200	57.15	-25.50	46.66	35.99	74.00	16.85	V
17989.000	56.86	-25.50	46.66	35.70	74.00	17.14	H
14500.400	51.47	-28.59	42.46	37.60	68.30	16.83	H
14469.000	51.33	-28.59	42.46	37.46	68.30	16.97	H
10544.800	48.79	-32.99	38.27	43.50	68.30	19.51	V

10539.800	48.75	-32.99	38.27	43.46	68.30	19.55	V
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802.11ac-HT80

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17985.200	58.38	-25.50	46.66	37.22	74.00	15.62	V
17979.700	57.49	-25.50	46.66	36.33	74.00	16.51	V
14292.500	51.45	-28.42	42.34	37.53	68.30	16.85	V
14614.200	51.33	-27.29	41.90	36.72	68.30	16.97	H
5144.600	63.58	-27.61	33.67	57.52	74.00	10.42	H
5144.600	63.42	-27.61	33.67	57.36	74.00	10.58	H

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17992.800	57.58	-25.50	46.66	36.42	74.00	16.42	V
17952.200	57.55	-25.50	46.66	36.39	74.00	16.45	H
14511.400	51.31	-28.59	42.46	37.44	68.30	16.99	H
14405.200	51.29	-28.59	42.46	37.42	68.30	17.01	H
5356.600	65.34	-27.43	34.01	58.76	74.00	8.66	H
5356.800	65.20	-27.43	34.01	58.62	74.00	8.80	H

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

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement uncertainty:

Expanded measurement uncertainty for this test item is U =3.10dB, k=2.

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger AE5		
		802.11a	Idle	
0.15 to 0.5	66 to 56	Fig.42	Fig.43	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 AE5		
		802.11a	Idle	
0.15 to 0.5	67 56 to 46	Fig.42	Fig.43	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:

Traffic:

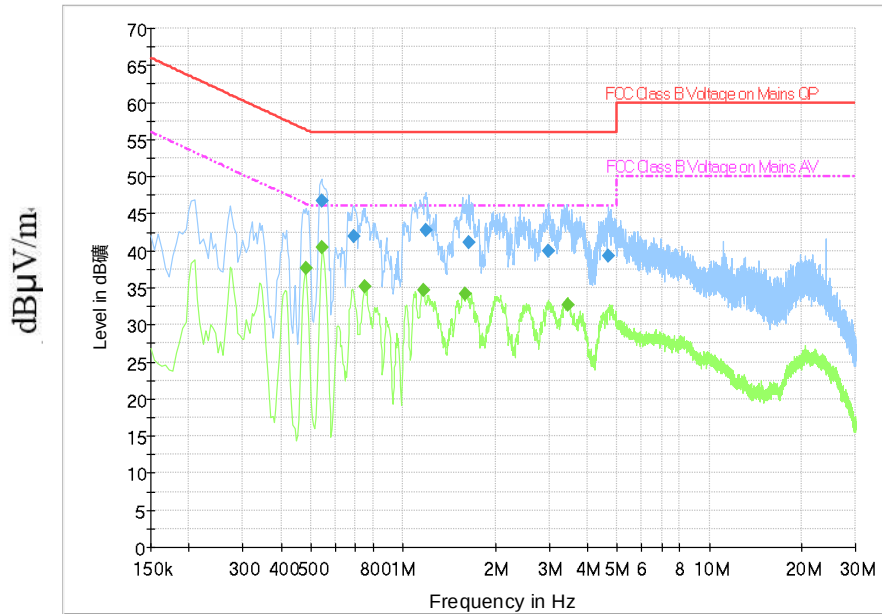


Fig.42 Conducted Emission (802.11a, Ch36, TX)

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.541500	46.6	GND	L1	10.0	9.4	56.0
0.690000	42.0	GND	N	10.0	14.0	56.0
1.185000	42.8	GND	L1	10.0	13.2	56.0
1.644000	41.2	GND	N	10.0	14.8	56.0
2.976000	40.0	GND	L1	10.0	16.0	56.0
4.686000	39.2	GND	L1	10.2	16.8	56.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.483000	37.6	GND	N	10.0	8.7	46.3
0.546000	40.4	GND	L1	10.0	5.6	46.0
0.753000	35.1	GND	L1	10.0	10.9	46.0
1.162500	34.6	GND	N	10.0	11.4	46.0
1.599000	34.2	GND	L1	10.0	11.8	46.0
3.457500	32.6	GND	L1	10.1	13.4	46.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

Idle:

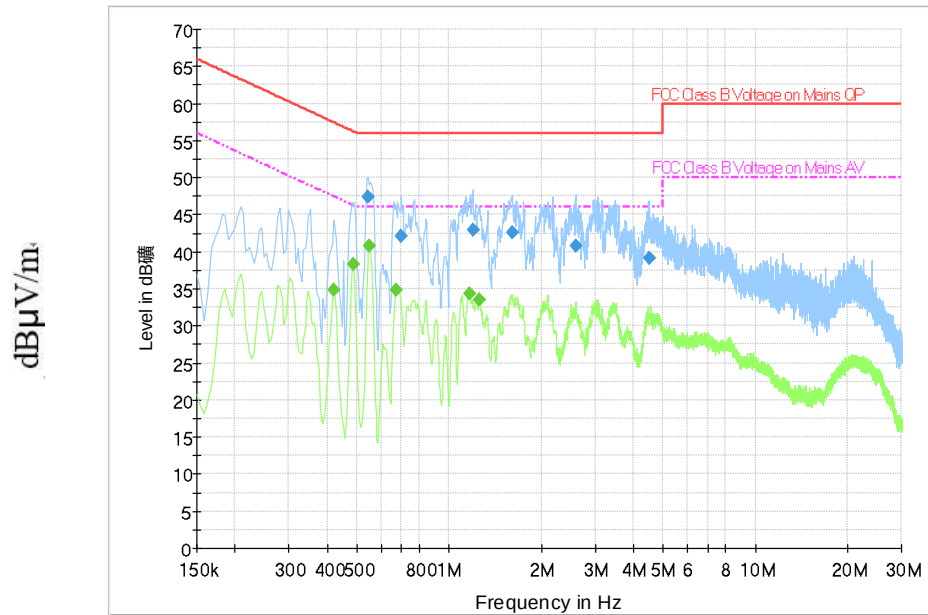


Fig.43 Conducted Emission(802.11a, IDLE)

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.546000	47.4	GND	N	10.0	8.6	56.0
0.699000	42.1	GND	L1	10.0	13.9	56.0
1.194000	43.0	GND	N	10.0	13.0	56.0
1.608000	42.5	GND	L1	10.0	13.5	56.0
2.589000	40.8	GND	L1	10.1	15.2	56.0
4.492500	39.2	GND	L1	10.1	16.8	56.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.420000	34.8	GND	L1	9.9	12.6	47.4
0.487500	38.3	GND	N	10.0	7.9	46.2
0.550500	40.9	GND	L1	10.0	5.1	46.0
0.672000	34.9	GND	N	9.9	11.1	46.0
1.162500	34.4	GND	L1	10.0	11.6	46.0
1.257000	33.5	GND	N	10.0	12.5	46.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

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% of the 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
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Measurement Result:

Test Notes

The measurements were performed separately in Chain 1, Chain 2, and MIMO (Chain 1+2), and only the worst cases are shown in this report.

Mode	Frequency	99% Occupied bandwidth (MHz)		conclusion
802.11a	5180 MHz	Fig.44	17.00	P
	5200 MHz	Fig.45	17.04	P
	5240 MHz	Fig.46	16.96	P
802.11ac HT20	5180 MHz	Fig.47	18.16	P
	5200 MHz	Fig.48	18.12	P
	5240 MHz	Fig.49	18.12	P
802.11ac HT40	5190 MHz	Fig.50	36.24	P
	5230 MHz	Fig.51	36.16	P

802.11ac HT80	5210 MHz	Fig.52	75.68	P
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Conclusion: PASS

Test graphs as below:

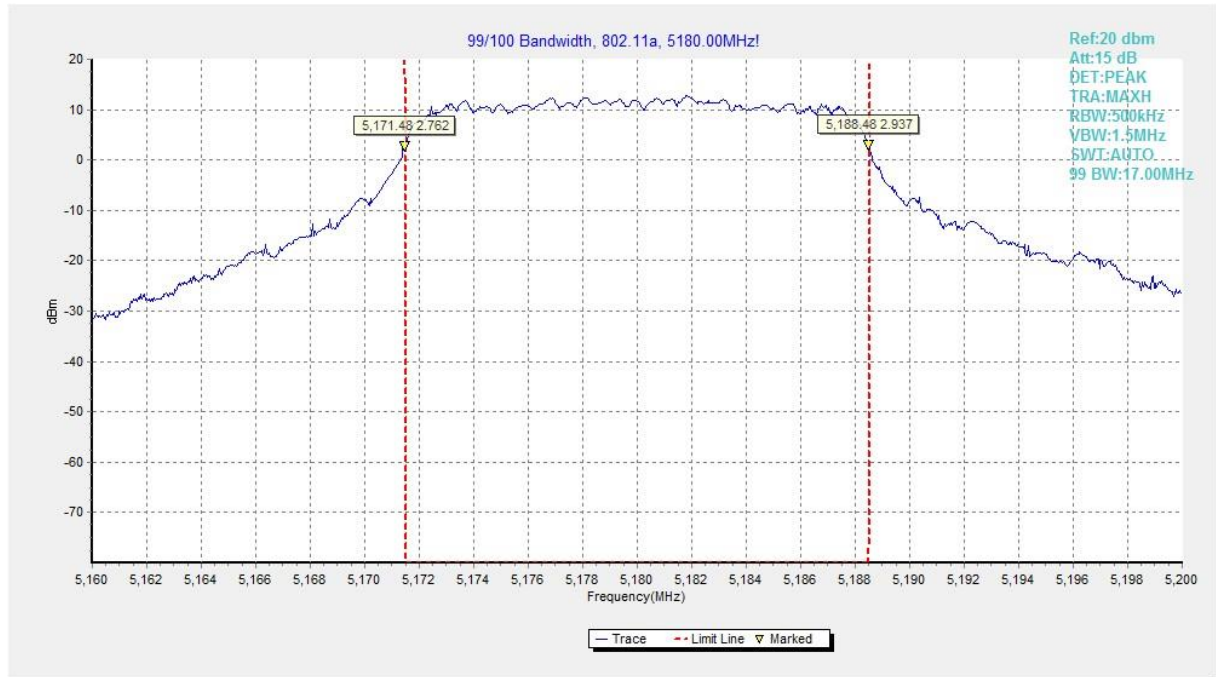


Fig.44 99% Occupied bandwidth (802.11a, 5180MHz)

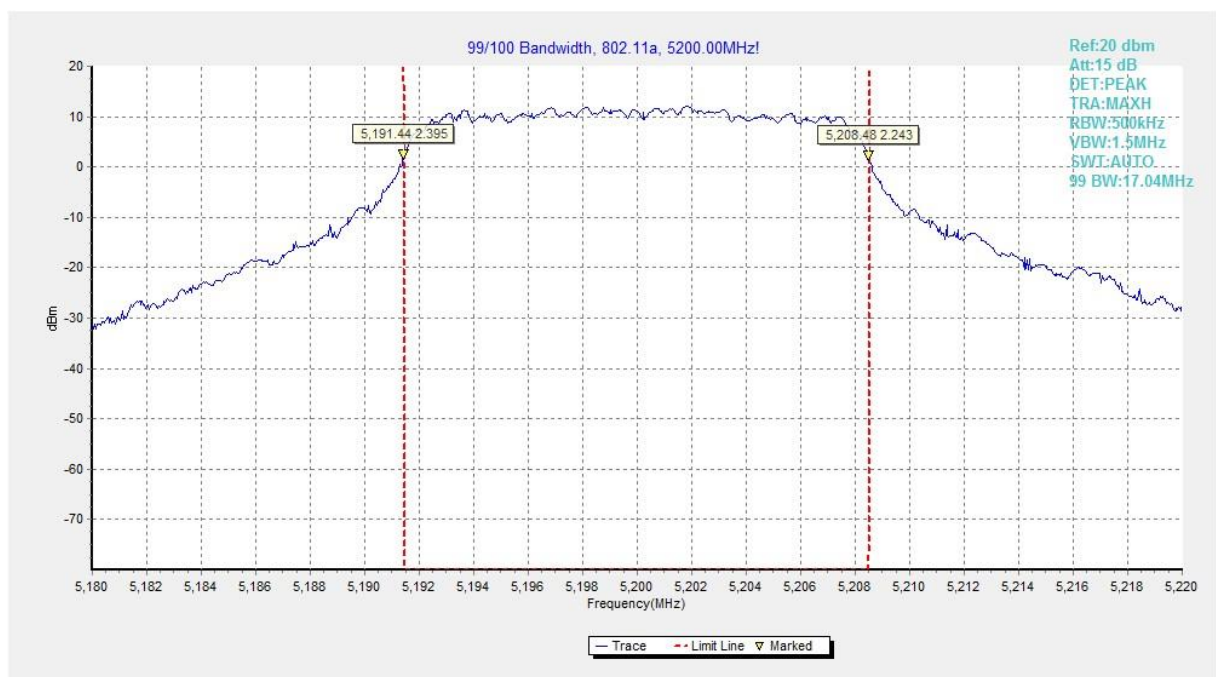


Fig.45 99% Occupied bandwidth (802.11a, 5200MHz)

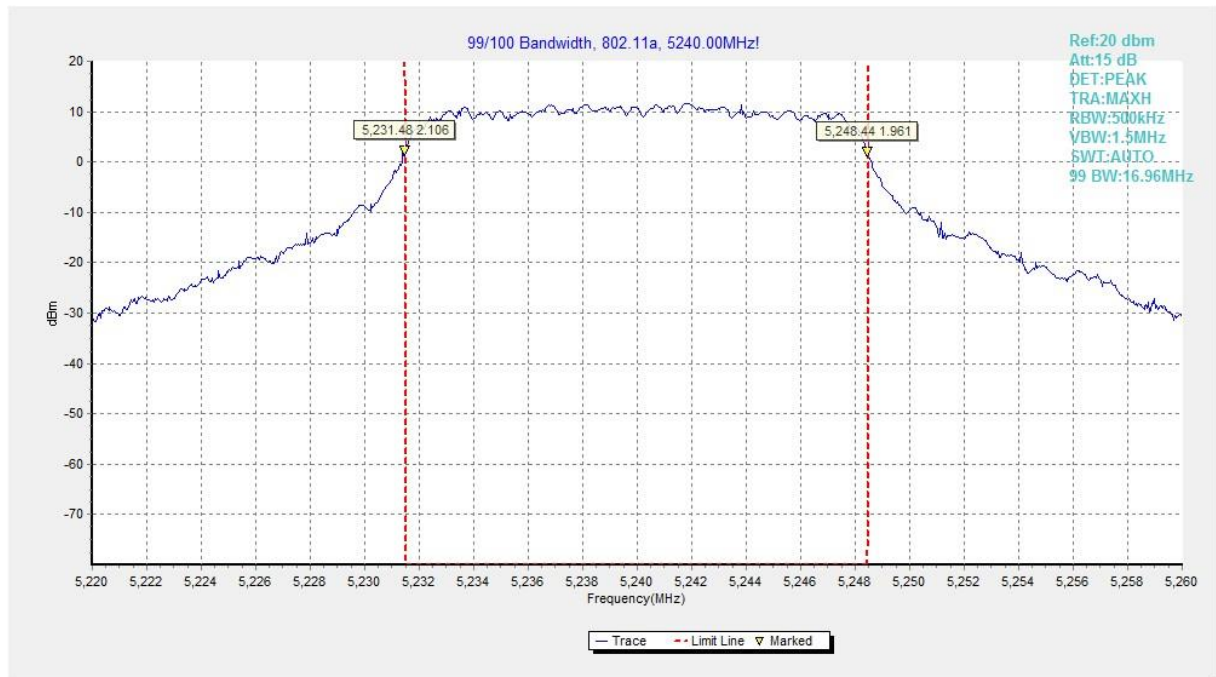


Fig.46 99% Occupied bandwidth (802.11a, 5240MHz)

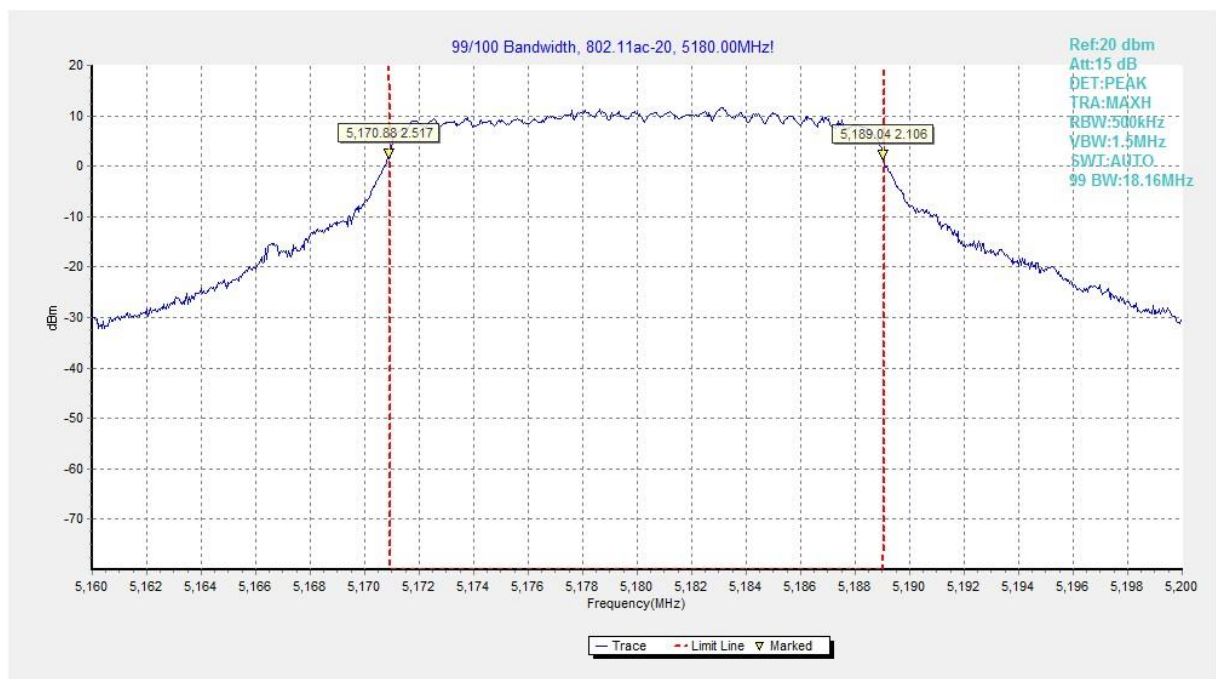


Fig.47 99% Occupied bandwidth (802.11ac-HT20, 5180MHz)

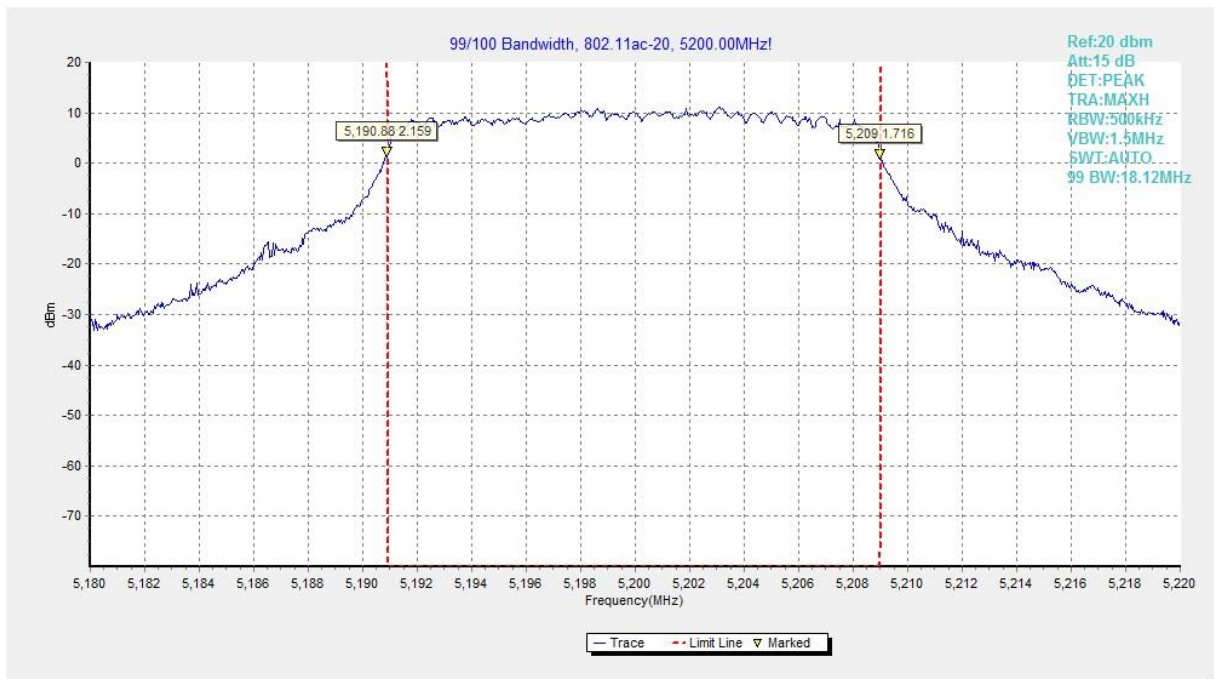


Fig.48 99% Occupied bandwidth (802.11ac-HT20, 5200MHz)

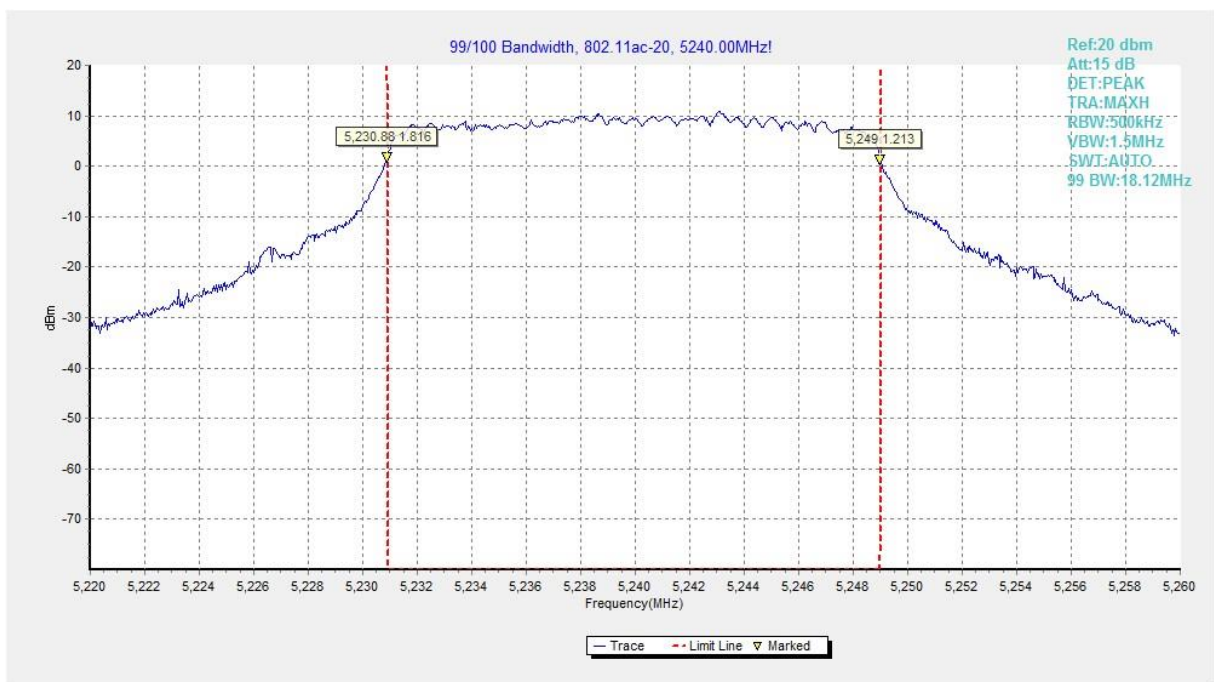


Fig.49 99% Occupied bandwidth (802.11ac-HT20, 5240MHz)

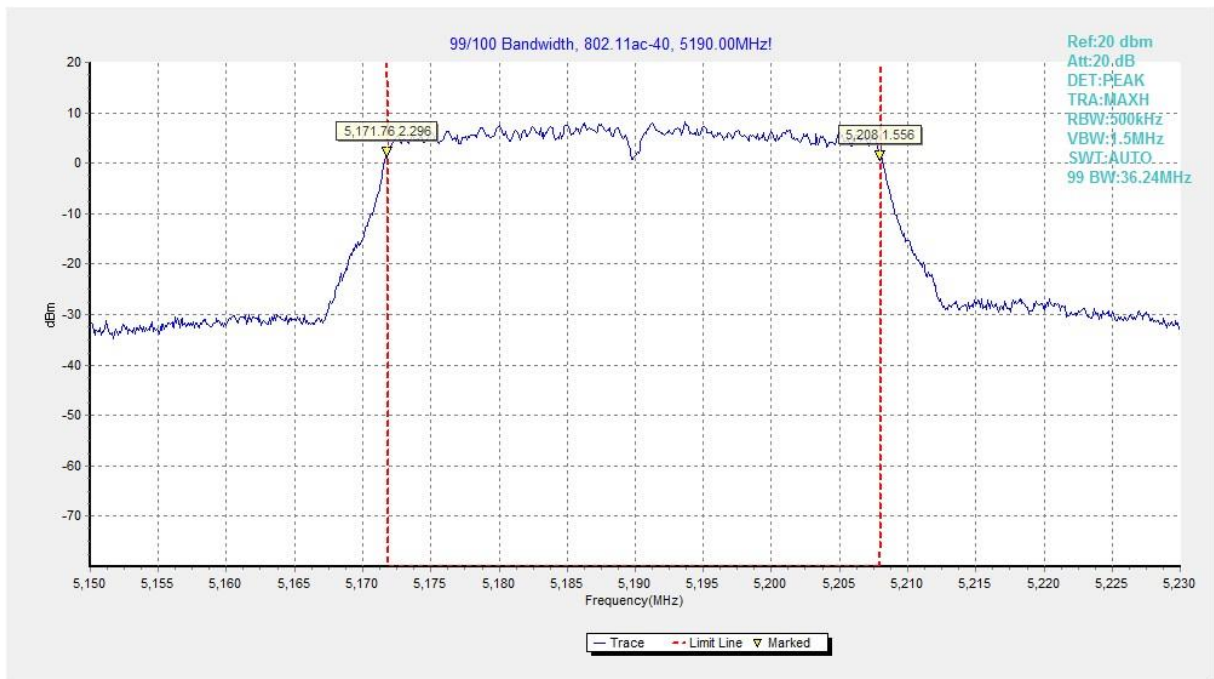


Fig.50 99% Occupied bandwidth (802.11ac-HT40, 5190MHz)

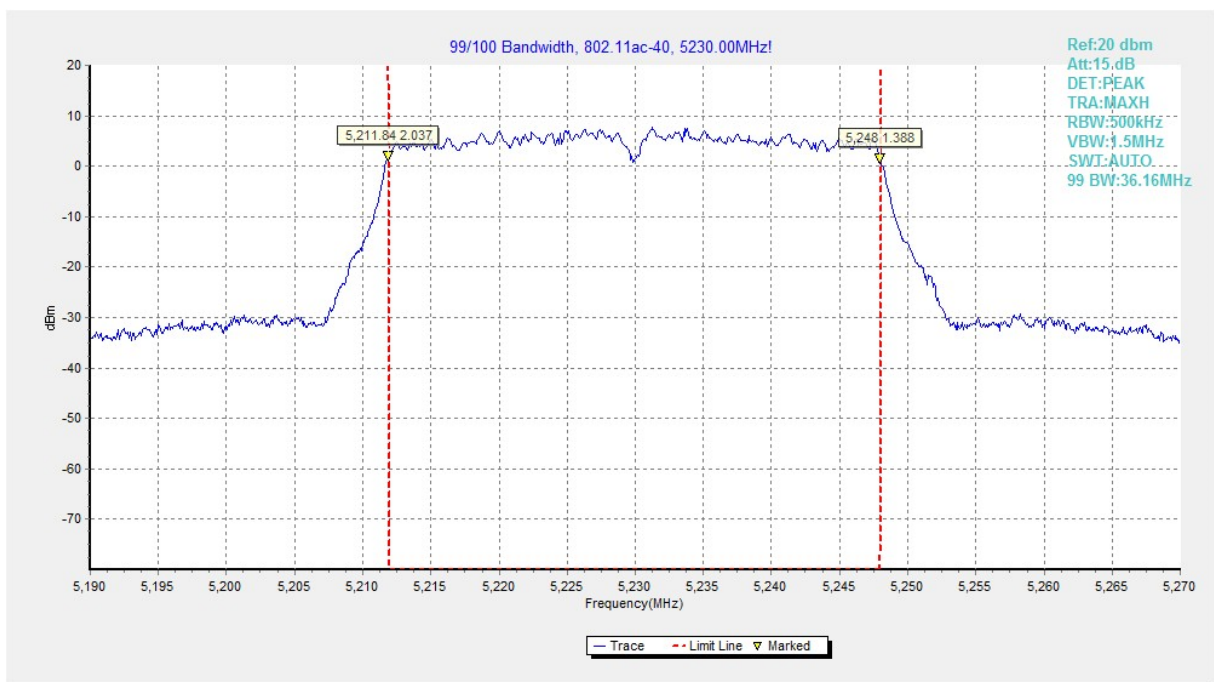


Fig.51 99% Occupied bandwidth (802.11ac-HT40, 5230MHz)

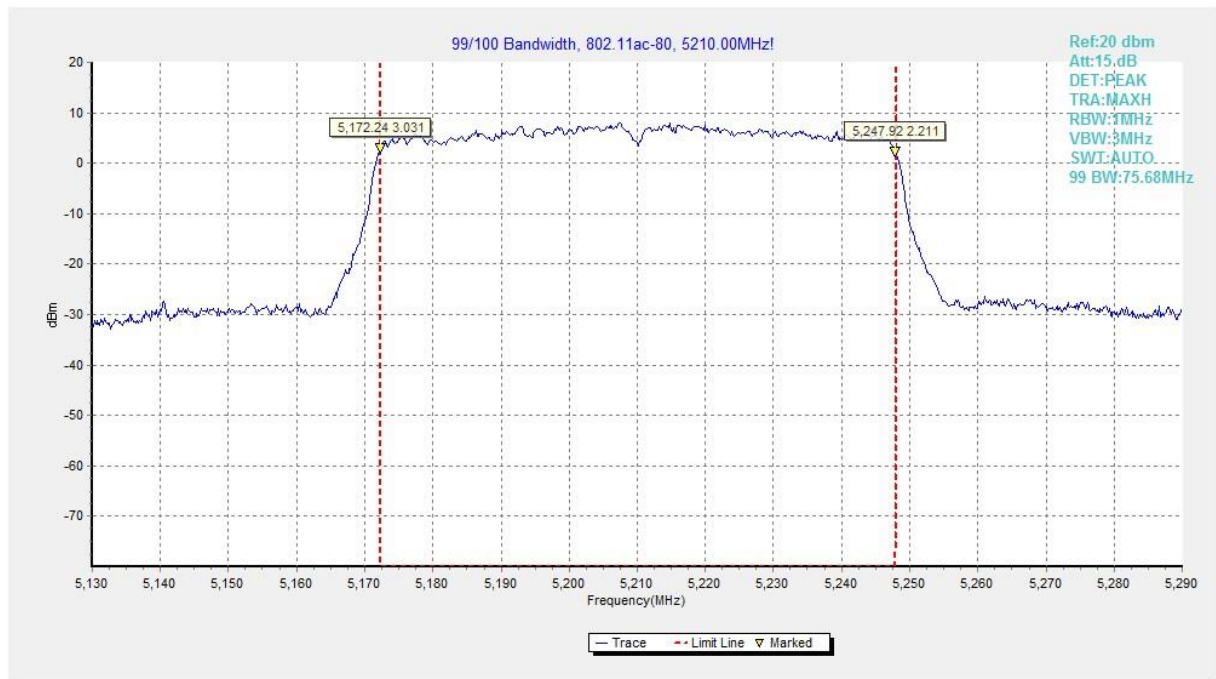


Fig.52 99% Occupied bandwidth (802.11ac-HT80, 5210MHz)

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: EUT parameters

Disclaimer: The worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX C: Accreditation Certificate

United States Department of Commerce National Institute of Standards and Technology NVLAP[®]  ILAC-MRA Certificate of Accreditation to ISO/IEC 17025:2017 NVLAP LAB CODE: 600118-0 Telecommunication Technology Labs, CAICT Beijing China <i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i> Electromagnetic Compatibility & Telecommunications <i>This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. 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).</i> 2020-09-29 through 2021-09-30 <i>Effective Dates</i>  Dana S. Laman <i>For the National Voluntary Laboratory Accreditation Program</i>	
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*** END OF REPORT BODY ***